United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 210
Main Post Area

NJDEP UST Registration No. 081533-8
NJDEP Closure Approval No. C-93-2610

Volume 2 of 2
Appendix G

February 1996

SMITH
ENVIRONMENTAL TECHNOLOGIES CORPORATION

Appendix G

SMITH
ENVIRONMENTAL TECHNOLOGIES CORPORATION

SMITH

APPENDIX G

GROUNDWATER ANALYTICAL DATA PACKAGE

DEPARTMENT OF THE ARMY
Headquarters, U.S. Army Garrison Fort Monmouth
Fort Monmouth, New Jersey 07703 - 5101

FEB 1996

REPLY TO
ATTENTION OF

Directorate of Public Works

N.J. Dept of Environmental Protection
Division of Responsible Party Site Remediation
Bureau of Federal Case Management- CN029
401 East State Street - 5th Floor
Trenton, N.J. 08625-0028
Attn: Ian Curtis - Case Manager

Dear Mr. Curtis:

Enclosed please find UST Closure and Site Investigation Reports for the following Fort Monmouth Sites:

Building 108 - 0090010-7	Building 411 - 0090010-28	Building 682 - 0081533-106
Building 114 - 0081533-1	Building 423 - 0090010-39	Building 161 - 0090010- 14
Building 443 - 0090010-49	Building 702 - 0081533-114	Building 167 - 0090010-18
Building 563 - 0081533-82	Building 789 - 0081533-126	Building 206 - 0081533-4
Building 608 - 0081533-86	Building 1106 - 0081533-166	Building 210 - 0081533-8
Building 620 - 0081533-93	Building 1122 - 0081533-199	Building 293 - 0081533-67
Building 625 - 0081533-96	Building 3027 - 0192486-28	Building 296 - 0081533-69
Building 659 - 0081533-101	Building 9002 - 0192468-1	Building 9017 - 0090029-6
Building 9049 - 0090029-20	Building 697 - 0081533-194	Building 2500 - 0081515-52
Building 9090 - 0090029-30	thru 196	thru 56

If the information provided in this enclosure is inadequate or you require further information with regard to these documents please contact Mr. Appleby at (908) 532-6224.

Sincerely,

James Ott
Director of Public Works

onmental
rials
stos

y
Office &
ratory
on Avenue
, NJ 08108
4800

Street
, NJ 08108
9573

lton Road
ay, NJ 08854
1-0550

ehenge Lane
ce, NY 11514
7251

swell Street, SE
e
GA 30080
83-6066

lams Avenue
ne, FL 32935
53-4224

n
Wagner Road
or, MI 48103
68-6810

. Amphlett Boulevard
80
teo, CA 94402
70-5401

ANALYTICAL DATA REPORT
FOR
U.S. ARMY, FORT MONMOUTH
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

PROJECT : **94125091300**

EMSL Project: # 9508318

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1835.1 Bldg. 210, MW1-2931792	**95-23342**	**Aqueous**	**5/19/95 @ 1042**	**5/22/95**
Trip Blank	**95-23340**	**Aqueous**	**5/19/95 @ 0615**	**5/22/95**
Field Blank	**95-23341**	**Aqueous**	**5/19/95 @ 1533**	**5/22/95**

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: 06-27-95

EMSL

TABLE OF CONTENTS

EMSL

SAMPLE DATA SUMMARY PACKAGE

Date of Report: 06/26/95
Project Number: 09508318
Lab ID: 95-0023342
Date Collected: 05/19/95 10:42
Collected By: Client
Date Received: 05/22/95 07:00

ttention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 94125091300

Client Designation: Bldg.210 MW1-2931792

	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

9523342B

05

Lab Name. EMSL ANALYTICAL Contract

Project No. Site Location Group:

Matrix (soil/water) WATER Lab Sample ID 9523342B

Sample wt/vol. 1000 0 (g/mL ML Lab File ID B7813 D

Level (low/med) Date Received: 5/22/95

% Moisture decanted (Y/N) N Date Extracted. 5/26/95

Concentrated Extract Volume 1000 (uL) Date Analyzed. 6/3/95

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

9523342B

06

Lab Name EMSL ANALYTICAL Contract

Project No. Site Location: Group

Matrix (soil/water) WATER Lab Sample ID. 9523342B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B7813 D

Level (low/med) Date Received 5/22/95

% Moisture decanted (Y/N) N Date Extracted 5/26/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/3/95

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

US Army [illegible]

1F

SAMPLE NO

9523342B

Bldg 216 MW1-293/782

07

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name. EMSL ANALYTICAL Contract

Project No. Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9523342B

Sample wt/vol 1000.0 (g/mL) ML Lab File ID B7813 D

Level: (low/med) Date Received 5/22/95

% Moisture 0 decanted (Y/N) N Date Extracted 5/26/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/3/95

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	29 86	4	J
2				
3				
4				
5				
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29				
30				

US Army Ft. Monmouth N.J. 08

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETL # 1835.1

Bldg 210 AMXI-295172

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523342
Lab File ID: C8333.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.2	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

US ARMY Ft. Monmouth N.J. 09

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET FMETL # 1835,1
EPA 524.2

Bldg 210 MW-293752

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523342
Lab File ID: C8333.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

BLDG.#: 210 MW#: 1 NJDEPE WELL ID # 2931792 10

U.S. ARMY FORT MONMOUTH

MONITORING WELL SAMPLING DATASHEET

DATE: 5-19-95

IJO#95-0091

SAMPLING CONTRACTOR: EMSL Analytical Services Inc.

LABORATORY: EMSL Analytical Services, NJDEP CERT #:

SAMPLERS NAMES: Tom Baxter Susan Palilonis

WEATHER CONDITIONS: Cool, breezy damp

ELEVATION OF CASING SURVEY MARK: ____.____

TOTAL DEPTH OF WELL FROM TOP OF SURVEYORS MARK: 15.07 FT

DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT

LENGTH OF SCREENED SECTION: ____FT.

DEPTH TO WATER PRIOR TO PURGING AND SAMPLING: 6.52 FT

ELEVATION OF GW PRIOR TO PURGING: ____.___FT

THICKNESS OF LNAPL PRIOR TO PURGING : ____.___FT

PID/Hnu READING IMMEDIATELY AFTER THE WELL CAP IS REMOVED: 5.4 PPM 9:17 am DO 3.7 ppm.

pH: 6.62 TEMP: 59.1 Fe, SPECIFIC CONDUCTIVITY: ~~413~~ 413 µs/cm

DEPTH OF WELL: ____.___FT

HEIGHT OF WATER: ____.____FT

EVACUATED GAL. H2O: 17 GAL (8.55 X .65 X 3 = 16.6725

PURGING START TIME: 924 END TIME: 1020

PURGE METHOD: (FLOW RATE OF <0.5 GPM TO >5.0 GPM) Pump

PURGE RATE (<0.5 GPM): 2 GPM

TOTAL VOLUME PURGED: 17 GAL.

DEPTH TO WATER AFTER PURGING AND BEFORE SAMPLING: 8.71 FT

DISSOLVED OXYGEN: 3.5 ppm pH: 5.87 TEMP: 56.1 °F

SPECIFIC CONDUCTIVITY: 356 µs/cm

SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON® BAILER

START TIME OF SAMPLING: 1036 END TIME: 1042

DISSOLVED OXYGEN: 4.0 ppm pH: 6.45 TEMP: 57.0 °F

SPECIFIC CONDUCTIVITY: 326 µs/cm

COMMENTS: on site 1235 pm *Remains on Ground to site for Construction ask skin recharge clear no odor

check in site

EMSL

Date of Report: 06/26/95
Project Number: 09508317
Lab ID: 95-0023340
Date Collected: 05/19/95 16 31
Collected By Client
Date Received: 05/22/95 07.00

tention Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 94518093636

Client Designation: Trip Blank

	Conc.	Unit
RGANIC		
Volatiles		
Volatiles by 524 2 w/ Library Search	see attached	ug/l

US ARMY Ft. Monmouth N.J.

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETL #1835,2
BLG,210
TRIP BLANK

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523340
Lab File ID: C8331.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis 1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.80	
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

J= Not Detected

US Army Ft. Monmouth N.J.

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETC #1835,2
Bldg 210
TRIP BLANK

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523340
Lab File ID: C8331.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.60	
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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U- Not Detected

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.
Bldg 210
9523341B
Field Blank

15

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix. (soil/water) WATER Lab Sample ID: 9523341B

Sample wt/vol: 1000 0 (g/mL ML Lab File ID. B7812 D

Level (low/med) _____ Date Received 5/22/95

% Moisture _____ decanted: (Y/N): N Date Extracted. 5/26/95

Concentrated Extract Volume· 1000 (uL) Date Analyzed. 6/3/95

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

Blds 210
9523341B
Field Blank

16

Lab Name EMSL ANALYTICAL Contract

Project No. Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9523341B

Sample wt/vol: 1000 0 (g/mL ML Lab File ID: B7812.D

Level (low/med) Date Received. 5/22/95

% Moisture: decanted: (Y/N). N Date Extracted 5/26/95

Concentrated Extract Volume 1000 (uL) Date Analyzed. 6/3/95

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
Bldg 210
9523341B
Field Blank

17

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group.

Matrix. (soil/water) WATER Lab Sample ID. 9523341B

Sample wt/vol. 1000 0 (g/mL) ML Lab File ID: B7812.D

Level: (low/med) Date Received: 5/22/95

% Moisture: 0 decanted. (Y/N) N Date Extracted 5/26/95

Concentrated Extract Volume 1000 (uL) Date Analyzed: 6/3/95

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	29 88	7	J
2				
3.				
4				
5				
6.				
7				
8				
9				
10				
11				
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30				

US Army Ft. Monmouth N.J.

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FMETC #1835.3
Bldg 210
Field Blank

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523341
Lab File ID: C8332.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

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

CAS NO.	COMPOUND		COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

US Army Ft. Monmouth N.J.

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

FM ETLH 1835.2
Bldg 210
Field Blank

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523341
Lab File ID: C8332.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

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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 USEP CLP	X
12	Non-Conformance Summary	X

Paul Tanaig

Laboratory Manager or Environmental Consultant's Signature

06-27-05

Date

EMSL

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
28-29	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
30	11	A list of all parameters (constituents and conditions) for which the analyses were performed
3-19	12	Sample results and corresponding units for each parameter

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CHAIN OF CUSTODY AND PRESERVATION CHECKLIST

U.S. ARMY FORT MONMOUTH

C1508318

P.O. #: IJO # 95-0091 / SAIC

Chain of Custody

Project #: 941250913.00

Sampler: EMSL (Baxter)

Date / Time: 5/19/95 | 1042

Analysis Parameters

Start:

Finish:

Customer: Harris Aerospace SECOM-RES-SV

Site Name: Bldg 210

Phone: 908-544-6204

MW Sampling

Lab Sample ID Number	Date/Time	Customer Sample Location/ID Number	Sample Matrix	# of Bottles	VOA 524.2 + Xylene	BNA's (with 625)						Preservation Method	Remarks
1835:1	5/19/95 1047	Bldg 210 MW1-2931792	Aq	5	X	X		23346					Samples Kept < 4°C
1835:2	5/19/95 615 am	Trip Blank	Aq.	3	X			23310					
1835:3	5/19/95 1533	Field Blank	Aq	5	X	X		23341					

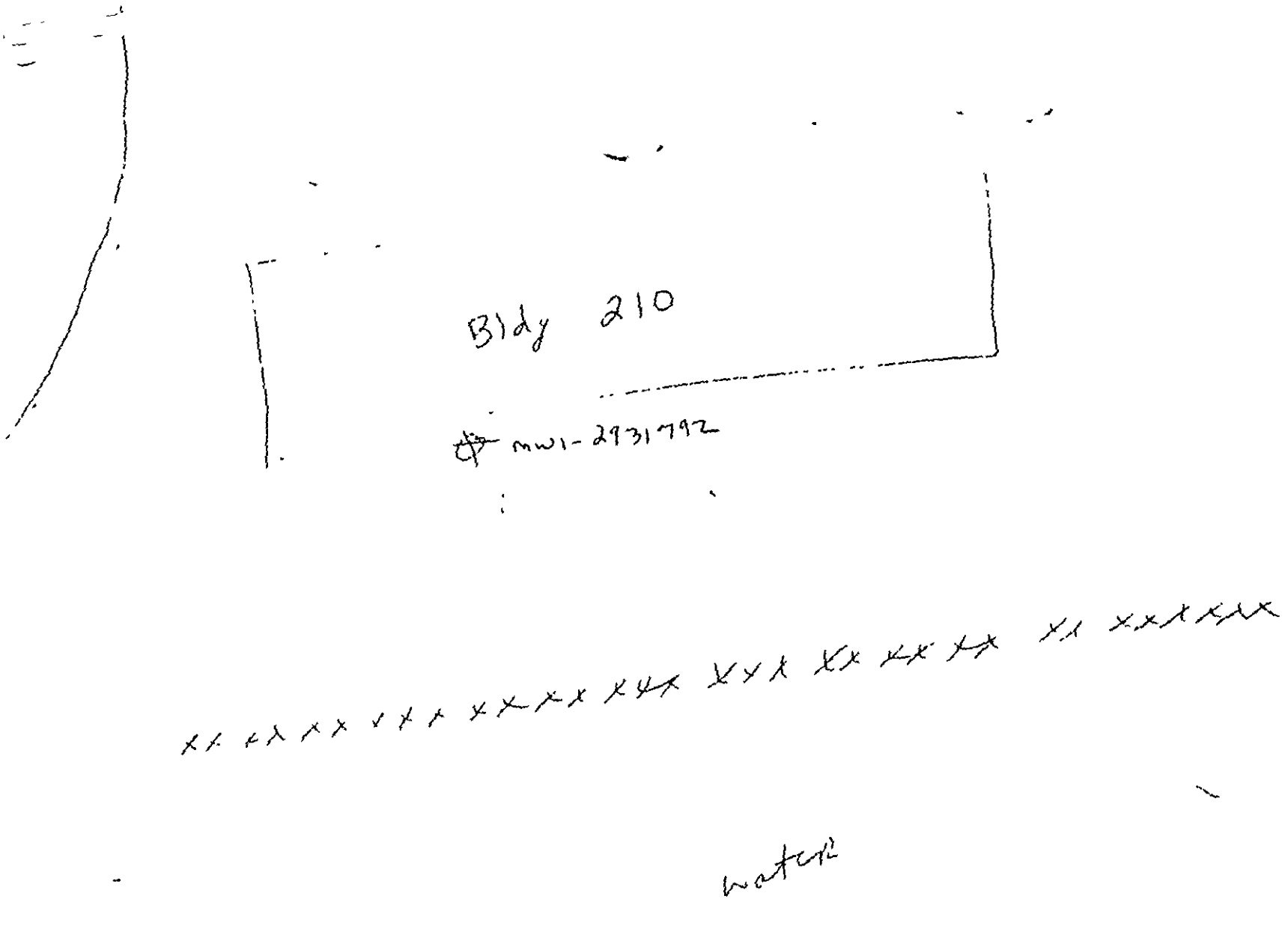
Relinquished By (signature) | Date / Time: 5/19/95 | 1705 | Received By (signature) | Shipped By: EMSL

Relinquished By (signature) | Date / Time: 5/19/95 | 19:25 | Received for Lab by (signature): | Date / Time: 5/22 | 07:00

Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. (on Back)

QI-ENV COC Form 01 Page 1 of 1 Pages Rev. A Date: 02 Apr 93

Enviornmental Laboratory


Bldg 210
MW1-2931792
water

To be completed upon sample receipt

[illegible]

[illegible] an X in box if okay.
[illegible] actual pH if outside
[illegible] range
[illegible] temperature of cool blank
[illegible] 'NO' if samples are cooled.
[illegible] corrective action in remarks.

				pH≤2								>9	≥12	deg.C	SAMPLES	
MHT	TKN	TOX	VOA*	PHENOL	TOC	PHC	O&G	METALS	HARD	TPO4	NO2&3	SO2	TCN	TEMP	EMSL #	REMARKS
[illegible]	[illegible]	H2SO4	HCL	H2SO4	H2SO4	H2SO4	H2SO4	HNO3	HNO3	H2SO4	H2SO4	NaOH ZNAC	NaOH			
			X											4	233491	

EMSL ANALYTICAL, INC

INTERNAL CHAIN OF CUSTODY

EMSL LAB ID NO 95-23340 to 95-23342 PROJECT NO 9508318

SAMPLE CONTAINERS PARAMETERS

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
5/26/95		BN Extraction Prep	Charles Bartolcie	Charles Bartolome

INTERNAL CUSTODY

Project # 9508318

Lab ID #'s 95-23340 to 95-2334

Analyst

	Name (please print)	Signature	Date
1 Base/Neutrals	Scott Van Etten	SV	6/3/95
2 Acids			
3. Pesticides			
4 Herbicides			
5. PCB's			
6. Metals:			
Flame			
Furnace			
ICP			
7. Volatiles.			
GC			
GC/MS	Scott Kessler	S. Kessler	6/2/95
8 TOC			
9. TOX			
10. Phenols (Total)			
11. Cyanide (Total)			
12. TPH -IR			
13. Mercury			
14 Other			
15. Other			
16 Other			

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

EMSL

LABORATORY CHRONICLE

Lab ID **95-23340 to 95-23342** Client **U.S. Army, Fort Monmouth**

		I DATE	II	Hold Time
Date Sampled	5/19/95			
Receipt/Refrigeration	5/22/95			
Extractions				
1. Semivolatile Organics	5/26/95			7 days
Analyses				
1. Volatile Organics	6/2/95			14 days
2. Semivolatile Organics	6/3/95			40 days

QC Supervisor
Review & Approval

(Signature) Paul Torai for
(Printed Name) Peter B Panton
(Date) 06-27-95

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 4.7 ppb.**		
	b B/N Fraction		
	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 **Methylene Chloride MS/MSD 69%/70%; Xylene (para & meta) MS 65% RPD 32; Xylene (ortho) MS 70% RPD 30; Styrene MS/MSD 21%/39% RPD 62; 1,1,2,2-Tetrachloroethane MS/MSD 122%/124%.**		
	b B/N Fraction		
	c Acid Fraction		
9	Internal Standard Area/Retention Time Shift Meet Criteria		X

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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

		No	Yes
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 Fonaig Date 06-27-95

EMSL

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: C8236.D BFB Injection Date: 05/26/95

Instrument ID: 5972-INSTRUMENT-1 BFB Injection Time: 0953

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	21.8
75	30.0 - 60 0% of mass 95	52 3
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	Greater than 50.0% of mass 95	57 2
175	5 0 - 9 0% of mass 174	4.2 (7 4)1
176	95.0 - 101.0% of mass 174	55.4 (96.9)1
177	5.0 - 9.0% of mass 176	3 2 (5.8)2

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

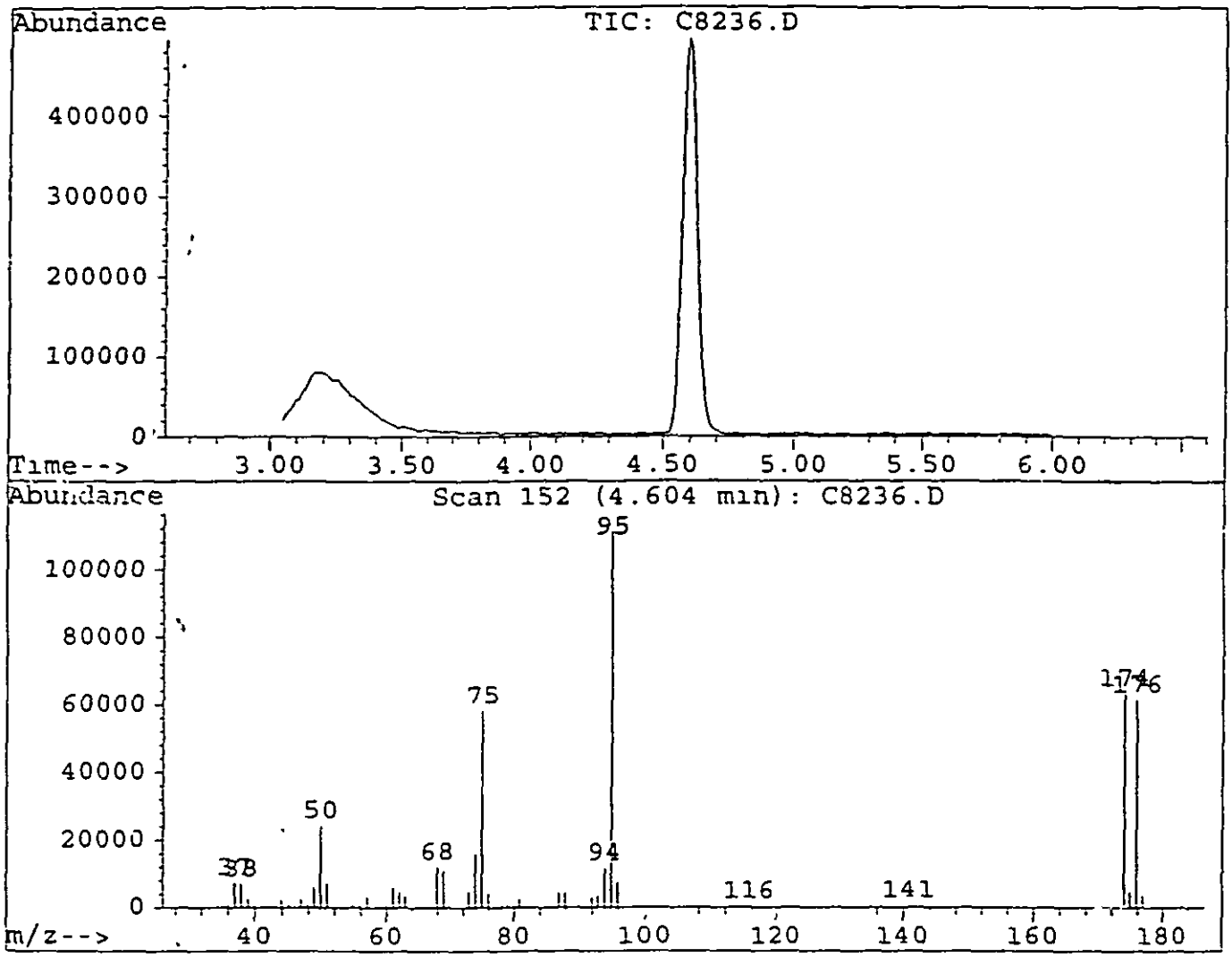
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		4 PPB STANDARD	C8237 D	05/26/95	1035
02		10 PPB STANDARD	C8238.D	05/26/95	1117
03		20 PPB STANDARD	C8239 D	05/26/95	1151
04		30 PPB STANDARD	C8240 D	05/26/95	1226
05		40 PPB STANDARD	C8241 D	05/26/95	1300
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C8236.D
Acq On : 26 May 95 9:53 am
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: 152

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	24232	PASS
75	95	30	60	52.3	58152	PASS
95	95	100	100	100.0	111200	PASS
96	95	5	9	6.8	7580	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	57 2	63568	PASS
175	174	5	9	7.4	4678	PASS
176	174	95	101	96 9	61624	PASS
177	176	5	9	5.8	3577	PASS

n 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	1948	50.95	7307	72.95	4912	92.05	2865
37.00	7455	54.75	959	73.95	15989	92.95	3574
38.00	7055	55.95	1728	74.95	58152	93.95	11832
39.00	2560	57.00	3162	75.95	4270	94.95	111200
40.00	629	59.90	1118	76.95	625	95.95	7580
43.90	2201	61.00	6169	78.00	812	115.75	506
45.00	1268	62.00	4780	78.90	2214	140.90	844
46.95	2491	62.90	3458	79.90	782	142.80	807
47.95	1002	67.95	12140	80.80	2619	173.95	63568
48.95	6125	68.95	11009	86.90	4356	174.85	4678
49.95	24232	69.95	836	87.95	4439	175.85	61624

n 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.85	3577						

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

Calibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha	0.410	0.422	0.387	0.385	0.379	0.396	4.69
3)	M	Chloromethane	0.227	0.249	0.227	0.232	0.232	0.233	3.89
4)	M	Vinyl chloride	0.262	0.275	0.259	0.260	0.259	0.263	2.58
5)	M	Bromomethane	0.193	0.197	0.170	0.166	0.164	0.178	8.95
6)	M	Chloroethane	0.164	0.171	0.161	0.152	0.122	0.154	12.48
7)	M	Trichlorofluoromethan	0.583	0.600	0.585	0.589	0.581	0.588	1.25
8)	M	1,1-Dichloroethene	0.255	0.266	0.258	0.257	0.254	0.258	1.92
9)	M	Methylene chloride		0.352	0.271	0.240	0.232	0.274	19.95
10)	M	trans-1,2-Dichloroeth	0.274	0.279	0.270	0.271	0.270	0.273	1.39
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.547	0.545	0.539	0.543	0.552	0.545	0.89
13)	M	2,2-Dichloropropane	0.561	0.546	0.527	0.525	0.514	0.534	3.50
14)	M	cis-1,2-Dichloroethen	0.263	0.262	0.253	0.251	0.256	0.257	2.11
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.089	0.088	0.089	0.089	0.094	0.090	2.82
17)	M	Chloroform	0.511	0.509	0.507	0.507	0.524	0.512	1.38
18)	M	1,1,1-Trichloroethane	0.573	0.566	0.561	0.564	0.567	0.566	0.77
19)	M	Carbon tetrachloride	0.537	0.520	0.520	0.526	0.526	0.526	1.35
20)	M	1,1-Dichloropropene	0.498	0.506	0.486	0.494	0.488	0.495	1.59
21)	M	Benzene	0.874	0.885	0.858	0.866	0.870	0.871	1.14
22)	M	1,2-Dichloroethane	0.206	0.210	0.214	0.214	0.225	0.214	3.36
23)	M	Trichloroethene	0.387	0.388	0.383	0.386	0.386	0.386	0.51
24)	M	1,2-Dichloropropane	0.282	0.281	0.283	0.286	0.293	0.285	1.76
25)	M	Dibromomethane	0.112	0.113	0.112	0.117	0.124	0.115	4.28
26)	M	Bromodichloromethane	0.388	0.385	0.398	0.397	0.412	0.396	2.72
27)	M	cis-1,3-Dichloroprope	0.338	0.335	0.343	0 340	0.356	0.342	2.38
28)	M	Toluene	0.646	0.605	0.610	0.613	0.619	0.619	2.61
29)	M	trans-1,3-Dichloropro	0.226	0.229	0.236	0.239	0.252	0.236	4.31
30)	M	1,1,2-Trichloroethane	0.107	0.107	0.109	0.110	0.118	0.110	4.12
31)	M	Tetrachloroethene	0.395	0.386	0.380	0.388	0.389	0.388	1 40
32)	M	1,3-Dichloropropane	0.217	0.213	0.221	0.218	0 226	0.219	2.24
33)	M	Dibromochloromethane	0.208	0.205	0.215	0.216	0.231	0.215	4 72
34)	M	1,2-Dibromomethane	0.145	0.145	0.153	0 153	0 166	0.152	5.54
35)	M	Chlorobenzene	0.650	0 638	0.636	0.640	0.657	0 644	1.38
36)	M	1,1,1,2-Tetrachloroet	0.256	0.247	0.253	0 257	0.265	0.256	2 62
37)	M	Ethylbenzene	1.316	1.279	1.288	1.308	1.320	1.302	1.38
38)	M	Xylene (para & meta)	0.479	0.463	0.465	0 465	0.466	0.468	1 38
39)	M	Xylene (Ortho)	0.417	0.409	0.412	0.413	0.418	0 414	0.93
40)	M	Styrene	0.634	0 626	0.639	0 643	0.663	0.641	2 12
41)	M	Bromoform	0 098	0.099	0.107	0.106	0.117	0.105	7.26
42)	M	Isopropylbenzene	1.330	1.302	1.317	1 350	1.352	1.330	1 60
43)	S	4-Bromofluorobenzene	0.498	0.480	0.493	0 500	0 522	0 499	3 05

#) = Out of Range

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

Calibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
1)	M	Bromobenzene	0.236	0.232	0.239	0.242	0.251	0.240	3.08
45)	M	1,1,2,2-Tetrachloroet	0.110	0.112	0.121	0.120	0.127	0.118	6.04
5)	M	1,2,3-Trichloropropan	0.143	0.138	0.144	0.141	0.150	0.143	2.93
7)	M	n-Propylbenzene	1.736	1.684	1.719	1.754	1.761	1.731	1.79
48)	M	2-Chlorotoluene	0.967	0.923	0.956	0.968	0.988	0.960	2 50
9)	M	4-Chlorotoluene	1.153	1.113	1.108	1.151	1.176	1.140	2.54
0)	M	1,3,5-Trimethylbenzen	1.107	1.066	1.095	1.117	1.122	1.101	2.04
1)	M	tert-Butylbenzene	1.149	1.111	1.135	1.158	1.157	1.142	1.71
52)	M	1,2,4-Trimethylbenzen	1.012	0.993	1.014	1.002	1.025	1.009	1.21
3)	M	sec-Butylbenzene	1.707	1.634	1.688	1.722	1.715	1.693	2.10
4)	M	1,3-Dichlorobenzene	0.481	0.468	0.490	0.495	0.511	0.489	3.28
55)	M	4-Isopropyltoluene	1.257	1.228	1.267	1.280	1.290	1.264	1.88
6)	M	1,4-Dichlorobenzene	0.483	0.464	0.482	0.487	0.510	0.485	3.39
7)	S	1,2-Dichlorobenzene-d	0.223	0.219	0.228	0.230	0.238	0.228	3.15
58)	M	1,2-Dichlorobenzene	0.371	0.351	0.359	0.366	0.374	0.364	2.53
9)	M	n-Butylbenzene	1.362	1.297	1.353	1.381	1.382	1.355	2.55
0)	M	1,2-Dibromo-3-chlorop	0.027	0.027	0.030	0 031	0.034	0.030	10.29
1)	M	1,2,4-Trichlorobenzen	0.254	0.256	0.266	0.271	0.293	0.268	5.88
62)	M	Hexachlorobutadiene	0.317	0.304	0.330	0.331	0.334	0.323	3.81
3)	M	Naphthalene	0.219	0.220	0.225	0.233	0.262	0.232	7.66
4)	M	1,2,3-Trichlorobenzen	0.183	0.175	0.184	0.186	0.207	0.187	6.31
65)		Methyl-tert butyl eth	0.289	0.286	0.292	0.288	0.306	0.292	2.82
6)		tert-Butyl Alcohol		0.004	0.005	0.005	0.005	0.004	8.73

#) = Out of Range

Quantitation Report

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.84	96	695393	5.00 ug/L	-0.09
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.10	95	138448	2.12 ug/L	42.31%
57) 1,2-Dichlorobenzene-d4	21.88	152	62134	1.72 ug/L	34.47%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.28	85	227954	3.55 ug/L	92
3) Chloromethane	3.65	50	126260	3.35 ug/L	100
4) Vinyl chloride	3.86	62	145560	3.46 ug/L	97
5) Bromomethane	4.54	94	107256	3.74 ug/L	100
6) Chloroethane	4.76	64	91319	3.57 ug/L	90
7) Trichlorofluoromethane	5.35	101	324396	3.90 ug/L	91
8) 1,1-Dichloroethene	6.42	96	141941	3.68 ug/L	98
9) Methylene chloride	7.41	84	319236	9.50 ug/L	100
10) trans-1,2-Dichloroethene	7.97	96	152530	3.73 ug/L	94
12) 1,1-Dichloroethane	8.76	63	304419	3.74 ug/L	95
13) 2,2-Dichloropropane	9.82	77	311983	4.42 ug/L	99
14) cis-1,2-Dichloroethene	9.82	96	146539	3.80 ug/L	99
16) Bromochloromethane	10.24	128	49545	3.27 ug/L	88
17) Chloroform	10.40	83	284036	3.95 ug/L	99
18) 1,1,1-Trichloroethane	10.73	97	318569	4.20 ug/L	98
19) Carbon tetrachloride	11.03	117	299000	4.01 ug/L	97
20) 1,1-Dichloropropene	11.01	75	277299	3.91 ug/L	96
21) Benzene	11.35	78	486262	3.81 ug/L	99
22) 1,2-Dichloroethane	11.36	62	114527	4.02 ug/L	98
23) Trichloroethene	12.48	95	215417	3.81 ug/L	92
24) 1,2-Dichloropropane	12.83	63	156823	3.58 ug/L	99
25) Dibromomethane	13.02	93	62165	3.54 ug/L	95
26) Bromodichloromethane	13.30	83	215761	3.85 ug/L	95
27) cis-1,3-Dichloropropene	14.06	75	187920	3.78 ug/L	99
28) Toluene	14.64	92	359379	4.19 ug/L	98
29) trans-1,3-Dichloropropene	14.99	75	125469	3.72 ug/L	96
30) 1,1,2-Trichloroethane	15.30	83	59496	3.61 ug/L	98
31) Tetrachloroethene	15.60	166	219930	3.61 ug/L	90
32) 1,3-Dichloropropane	15 58	76	120535	3.72 ug/L	100
33) Dibromochloromethane	15.99	129	115733	3.36 ug/L	99
34) 1,2-Dibromomethane	16.19	107	80701	3.46 ug/L	99
35) Chlorobenzene	17.07	112	361810	3 72 ug/L	96
36) 1,1,1,2-Tetrachloroethane	17.20	131	142326	3.50 ug/L	95
37) Ethylbenzene	17.26	91	732369	4.06 ug/L	98
38) Xylene (para & meta)	17 47	106	533017	7 95 ug/L	92
39) Xylene (Ortho)	18.17	106	231743	3.89 ug/L	90
40) Styrene	18.18	104	352838	3 78 ug/L	87

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

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.51	173	54547	3.31 ug/L	97
42) Isopropylbenzene	18.83	105	739665	3.93 ug/L	89
44) Bromobenzene	19.38	156	131056	3.44 ug/L #	86
45) 1,1,2,2-Tetrachloroethane	19.32	83	61247	3.65 ug/L	98
46) 1,2,3-Trichloropropane	19.40	75	79406	3.74 ug/L	97
47) n-Propylbenzene	19.56	91	965762	4.01 ug/L	99
48) 2-Chlorotoluene	19.73	91	538039	4.23 ug/L	92
49) 4-Chlorotoluene	19.91	91	641340	4.20 ug/L m	96
50) 1,3,5-Trimethylbenzene	19.88	105	616118	4.04 ug/L	96
51) tert-Butylbenzene	20.48	119	639160	3.80 ug/L	88
52) 1,2,4-Trimethylbenzene	20.57	105	562733	3.89 ug/L	91
53) sec-Butylbenzene	20.88	105	949602	3.96 ug/L	97
54) 1,3-Dichlorobenzene	21.08	146	267522	3.41 ug/L	98
55) 4-Isopropyltoluene	21.14	119	699174	3.73 ug/L	95
56) 1,4-Dichlorobenzene	21.23	146	268966	3.43 ug/L m	96
58) 1,2-Dichlorobenzene	21.91	146	206476	3.45 ug/L	95
59) n-Butylbenzene	21.89	91	757856	3.95 ug/L	95
60) 1,2-Dibromo-3-chloropropan	23.32	75	15013	3.81 ug/L	81
61) 1,2,4-Trichlorobenzene	24.89	180	141353	3.40 ug/L	93
62) Hexachlorobutadiene	25.23	225	176270	4.13 ug/L	97
63) Naphthalene	25.35	128	122077	3.12 ug/L	100
64) 1,2,3-Trichlorobenzene	25.82	180	101707	3.60 ug/L	99
65) Methyl-tert butyl ether	8.01	73	160639	4.38 ug/L #	100
66) tert-Butyl Alcohol	7.72	59	2491	0.68 ug/L m	100

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

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	770985	5.00	ug/L	-0.09
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.09	95	370331	5.10	ug/L	102.07%
57) 1,2-Dichlorobenzene-d4	21.88	152	169129	4.23	ug/L	84.62%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.28	85	650612	9.13	ug/L	100
3) Chloromethane	3.64	50	383966	9.18	ug/L	96
4) Vinyl chloride	3.87	62	423851	9.09	ug/L	98
5) Bromomethane	4.52	94	303978	9.57	ug/L	93
6) Chloroethane	4.76	64	264421	9.32	ug/L	94
7) Trichlorofluoromethane	5.34	101	924458	10.04	ug/L	100
8) 1,1-Dichloroethene	6.42	96	410654	9.60	ug/L	96
9) Methylene chloride	7.41	84	542259	14.55	ug/L m	99
10) trans-1,2-Dichloroethene	7.97	96	429522	9.48	ug/L	100
12) 1,1-Dichloroethane	8.76	63	840489	9.32	ug/L	97
13) 2,2-Dichloropropane	9.83	77	841576	10.74	ug/L	96
14) cis-1,2-Dichloroethene	9.83	96	403406	9.42	ug/L	98
16) Bromochloromethane	10.24	128	135650	8.08	ug/L #	88
17) Chloroform	10.40	83	785334	9.85	ug/L	99
18) 1,1,1-Trichloroethane	10.73	97	873470	10.39	ug/L	99
19) Carbon tetrachloride	11.03	117	801421	9.70	ug/L	100
20) 1,1-Dichloropropene	11.01	75	780145	9.93	ug/L	96
21) Benzene	11.35	78	1364187	9.64	ug/L	99
22) 1,2-Dichloroethane	11.36	62	323971	10.26	ug/L	99
23) Trichloroethene	12.48	95	597831	9.52	ug/L	92
24) 1,2-Dichloropropane	12.83	63	432807	8.91	ug/L	99
25) Dibromomethane	13.03	93	174304	8.95	ug/L	99
26) Bromodichloromethane	13.29	83	593524	9.55	ug/L	96
27) cis-1,3-Dichloropropene	14.06	75	516054	9.37	ug/L	96
28) Toluene	14.64	92	932739	9.81	ug/L	100
29) trans-1,3-Dichloropropene	14.98	75	353858	9.46	ug/L	95
30) 1,1,2-Trichloroethane	15.30	83	165554	9.05	ug/L	98
31) Tetrachloroethene	15.61	166	594723	8.81	ug/L	97
32) 1,3-Dichloropropane	15.58	76	328378	9.15	ug/L	99
33) Dibromochloromethane	15.99	129	315396	8.25	ug/L	98
34) 1,2-Dibromomethane	16.19	107	223316	8.62	ug/L	93
35) Chlorobenzene	17.07	112	983363	9.11	ug/L	94
36) 1,1,1,2-Tetrachloroethane	17.20	131	380569	8.45	ug/L m	0
37) Ethylbenzene	17.26	91	1971808	9.86	ug/L	99
38) Xylene (para & meta)	17.47	106	1428718	19.21	ug/L	96
39) Xylene (Ortho)	18.17	106	630244	9.53	ug/L	96
40) Styrene	18.19	104	965656	9.34	ug/L	94

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

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41) Bromoform	18.51	173	153005	8.38	ug/L	m	0
42) Isopropylbenzene	18.83	105	2008385	9.63	ug/L	m	45
44) Bromobenzene	19.38	156	357587	8.46	ug/L		94
45) 1,1,2,2-Tetrachloroethane	19.32	83	171968	9.24	ug/L		97
46) 1,2,3-Trichloropropane	19.40	75	213285	9.05	ug/L		98
47) n-Propylbenzene	19.57	91	2596029	9.72	ug/L		97
48) 2-Chlorotoluene	19.73	91	1422833	10.08	ug/L		95
49) 4-Chlorotoluene	19.91	91	1716410	10.14	ug/L	m	98
50) 1,3,5-Trimethylbenzene	19.89	105	1643038	9.71	ug/L		98
51) tert-Butylbenzene	20.48	119	1713787	9.19	ug/L		90
52) 1,2,4-Trimethylbenzene	20.56	105	1530473	9.54	ug/L		94
53) sec-Butylbenzene	20.88	105	2518935	9.48	ug/L		98
54) 1,3-Dichlorobenzene	21.08	146	722076	8.30	ug/L		96
55) 4-Isopropyltoluene	21.14	119	1893823	9.12	ug/L		95
56) 1,4-Dichlorobenzene	21.24	146	715067	8.22	ug/L	m	94
58) 1,2-Dichlorobenzene	21.91	146	541575	8.16	ug/L		95
59) n-Butylbenzene	21.89	91	2000405	9.41	ug/L		96
60) 1,2-Dibromo-3-chloropropan	23.31	75	41781	9.56	ug/L		95
61) 1,2,4-Trichlorobenzene	24.89	180	394479	8.55	ug/L		99
62) Hexachlorobutadiene	25.23	225	469504	9.93	ug/L		98
63) Naphthalene	25.34	128	339645	7.82	ug/L		100
64) 1,2,3-Trichlorobenzene	25.81	180	269640	8.61	ug/L		95
65) Methyl-tert butyl ether	7.99	73	440628	10.83	ug/L	#	100
66) tert-Butyl Alcohol	7.72	59	12035	2.96	ug/L		100

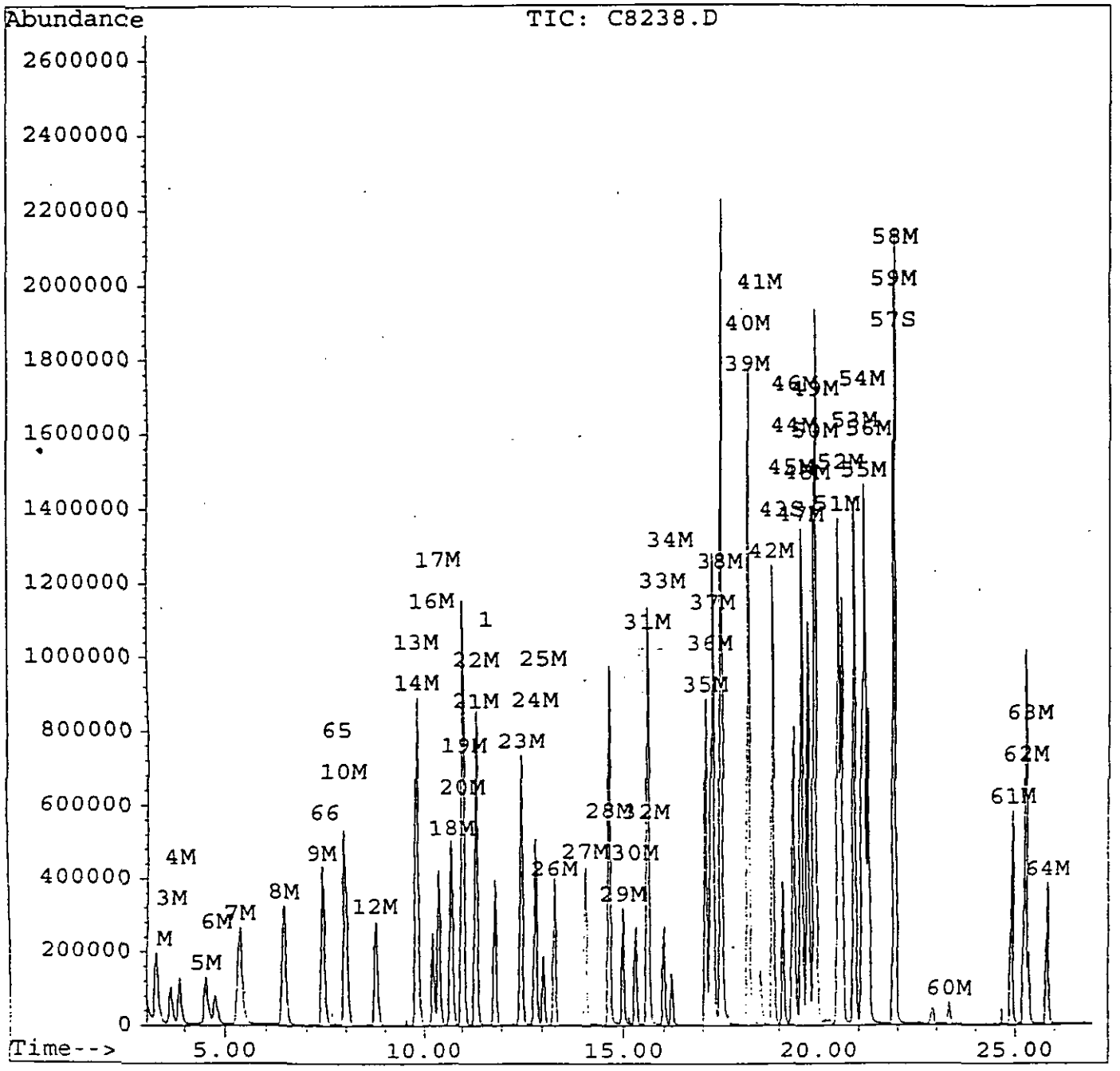
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	715239	5.00	ug/L		-0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	705539	10.48	ug/L		209.62%
57) 1,2-Dichlorobenzene-d4	21.88	152	325789	8.79	ug/L		175.71%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	1105977	16.74	ug/L		99
3) Chloromethane	3.66	50	650013	16.75	ug/L		99
4) Vinyl chloride	3.89	62	740002	17.11	ug/L		100
5) Bromomethane	4.52	94	485674	16.48	ug/L		93
6) Chloroethane	4.74	64	459311	17.45	ug/L		92
7) Trichlorofluoromethane	5.35	101	1674654	19.60	ug/L		95
8) 1,1-Dichloroethene	6.43	96	738739	18.61	ug/L		98
9) Methylene chloride	7.40	84	775969	22.45	ug/L		96
10) trans-1,2-Dichloroethene	7.98	96	771488	18.36	ug/L		100
12) 1,1-Dichloroethane	8.76	63	1541660	18.42	ug/L		99
13) 2,2-Dichloropropane	9.84	77	1507599	20.74	ug/L		95
14) cis-1,2-Dichloroethene	9.83	96	723609	18.22	ug/L		95
16) Bromochloromethane	10.24	128	255840	16.43	ug/L	#	87
17) Chloroform	10.40	83	1450799	19.62	ug/L	m	0
18) 1,1,1-Trichloroethane	10.72	97	1604334	20.57	ug/L	m	0
19) Carbon tetrachloride	11.03	117	1488607	19.42	ug/L		99
20) 1,1-Dichloropropene	11.01	75	1391827	19.09	ug/L		99
21) Benzene	11.36	78	2454890	18.69	ug/L		98
22) 1,2-Dichloroethane	11.36	62	611769	20.89	ug/L		98
23) Trichloroethene	12.48	95	1094910	18.80	ug/L		90
24) 1,2-Dichloropropane	12.84	63	809803	17.96	ug/L		99
25) Dibromomethane	13.03	93	321601	17.80	ug/L		98
26) Bromodichloromethane	13.30	83	1137821	19.73	ug/L		96
27) cis-1,3-Dichloropropene	14.05	75	981011	19.20	ug/L		95
28) Toluene	14.64	92	1745202	19.79	ug/L		98
29) trans-1,3-Dichloropropene	14.98	75	675693	19.48	ug/L	m	53
30) 1,1,2-Trichloroethane	15.30	83	312764	18.44	ug/L		95
31) Tetrachloroethene	15.61	166	1088014	17.38	ug/L		97
32) 1,3-Dichloropropane	15.59	76	630863	18.95	ug/L		96
33) Dibromochloromethane	16.00	129	614117	17.31	ug/L		97
34) 1,2-Dibromomethane	16.20	107	438464	18.25	ug/L		97
35) Chlorobenzene	17.06	112	1819994	18.18	ug/L		94
36) 1,1,1,2-Tetrachloroethane	17.20	131	725017	17.35	ug/L	m	0
37) Ethylbenzene	17.26	91	3685485	19.86	ug/L		98
38) Xylene (para & meta)	17.47	106	2660124	38.56	ug/L		90
39) Xylene (Ortho)	18.17	106	1177400	19.20	ug/L		88
40) Styrene	18.19	104	1828264	19.06	ug/L		91

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

EMSL

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er vironmental
naterials
as bestos

New Jersey

Corporate Office &
Main Laboratory
100 Haddon Avenue
Westmont, NJ 08108
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300 Piper Street
Westmont, NJ 08108
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100 Stelton Road
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2 S. Wagner Road
Ann Arbor, MI 48103
(313) 668-6810

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1720 S. Amphlett Boulevard
Suite 130
San Mateo, CA 94402
(415) 570-5401

ANALYTICAL DATA REPORT
FOR
U.S. ARMY, FORT MONMOUTH
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

PROJECT : **94125091300**

EMSL Project: # 9508318

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1835.1 Bldg. 210, MW1-2931792	**95-23342**	**Aqueous**	**5/19/95 @ 1042**	**5/22/95**
Trip Blank	**95-23340**	**Aqueous**	**5/19/95 @ 0615**	**5/22/95**
Field Blank	**95-23341**	**Aqueous**	**5/19/95 @ 1533**	**5/22/95**

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: 06-27-95

Quantitation Report

45

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41) Bromoform	18.50	173	304765	18.00	ug/L	m	0
42) Isopropylbenzene	18.83	105	3768696	19.48	ug/L	m	45
44) Bromobenzene	19.37	156	682381	17.40	ug/L	#	89
45) 1,1,2,2-Tetrachloroethane	19.32	83	345604	20.02	ug/L		97
46) 1,2,3-Trichloropropane	19.39	75	411958	18.84	ug/L		97
47) n-Propylbenzene	19.57	91	4919179	19.86	ug/L		98
48) 2-Chlorotoluene	19.72	91	2734593	20.88	ug/L		93
49) 4-Chlorotoluene	19.91	91	3170150	20.18	ug/L		92
50) 1,3,5-Trimethylbenzene	19.89	105	3133027	19.95	ug/L		97
51) tert-Butylbenzene	20.48	119	3247650	18.76	ug/L		89
52) 1,2,4-Trimethylbenzene	20.56	105	2901790	19.49	ug/L		97
53) sec-Butylbenzene	20.88	105	4827977	19.58	ug/L		99
54) 1,3-Dichlorobenzene	21.08	146	1403188	17.40	ug/L		97
55) 4-Isopropyltoluene	21.15	119	3624786	18.82	ug/L		95
56) 1,4-Dichlorobenzene	21.24	146	1378003	17.08	ug/L	m	96
58) 1,2-Dichlorobenzene	21.91	146	1028245	16.71	ug/L		97
59) n-Butylbenzene	21.89	91	3870404	19.62	ug/L		97
60) 1,2-Dibromo-3-chloropropan	23.31	75	87006	21.47	ug/L		87
61) 1,2,4-Trichlorobenzene	24.89	180	759956	17.76	ug/L		99
62) Hexachlorobutadiene	25.23	225	943039	21.49	ug/L		97
63) Naphthalene	25.33	128	643210	15.97	ug/L		100
64) 1,2,3-Trichlorobenzene	25.81	180	527272	18.16	ug/L		99
65) Methyl-tert butyl ether	8.01	73	836258	22.17	ug/L	#	100
66) tert-Butyl Alcohol	7.73	59	26154	6.93	ug/L		100

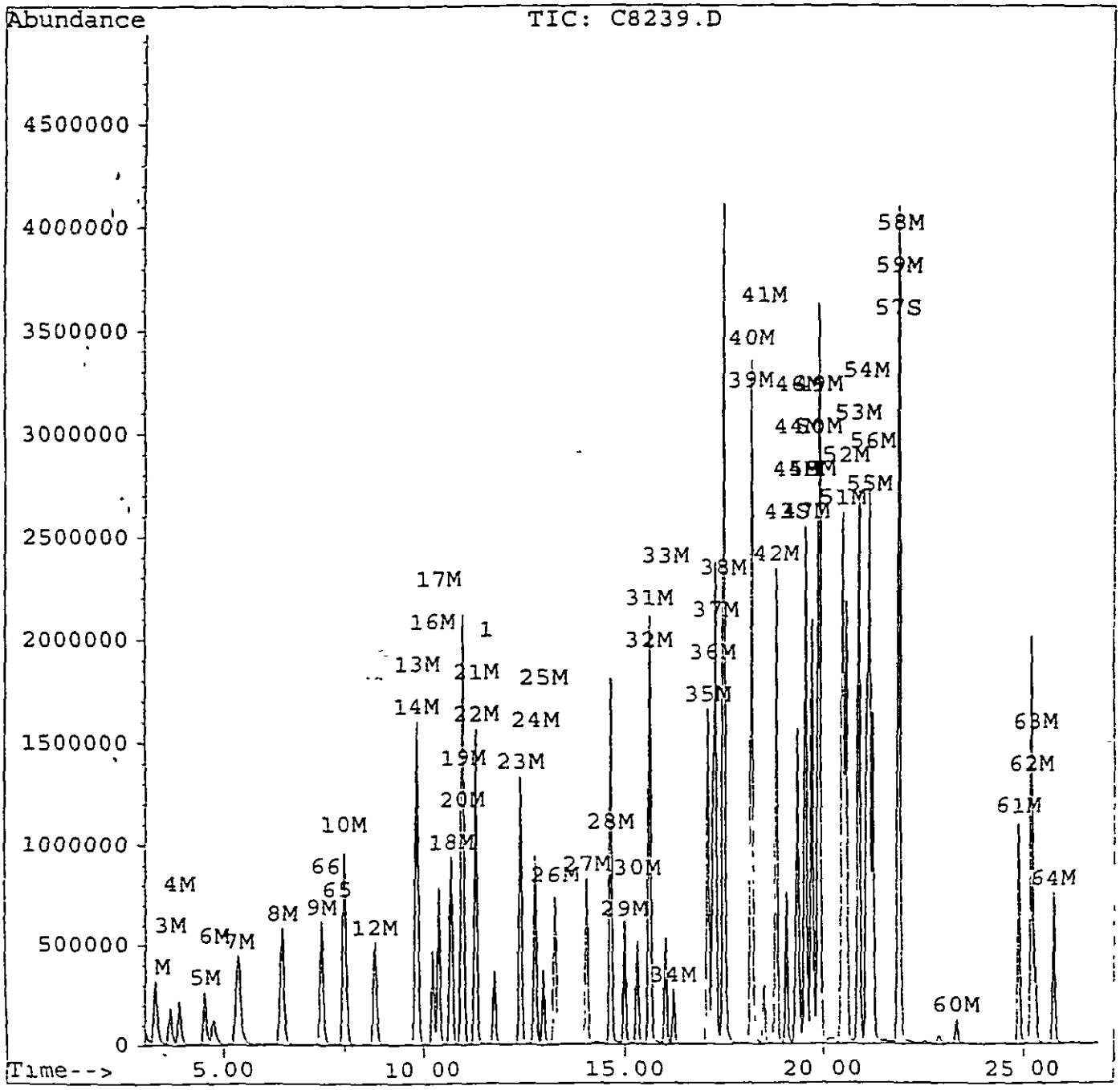
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

47

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.83	96	707858	5.00	ug/L		-0.10
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.09	95	1062620	15.95	ug/L		319.00%
57) 1,2-Dichlorobenzene-d4	21.88	152	489408	13.34	ug/L		266.70%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	1634270	24.99	ug/L		98
3) Chloromethane	3.66	50	984170	25.63	ug/L		100
4) Vinyl chloride	3.88	62	1106079	25.84	ug/L		100
5) Bromomethane	4.50	94	702972	24.10	ug/L		92
6) Chloroethane	4.72	64	647108	24.84	ug/L		99
7) Trichlorofluoromethane	5.32	101	2502534	29.59	ug/L		99
8) 1,1-Dichloroethene	6.42	96	1092314	27.81	ug/L		94
9) Methylene chloride	7.40	84	1020488	29.83	ug/L		97
10) trans-1,2-Dichloroethene	7.96	96	1150685	27.67	ug/L		95
12) 1,1-Dichloroethane	8.76	63	2307375	27.86	ug/L		98
13) 2,2-Dichloropropane	9.83	77	2228288	30.98	ug/L		97
14) cis-1,2-Dichloroethene	9.83	96	1065313	27.11	ug/L		93
16) Bromochloromethane	10.24	128	379255	24.61	ug/L	#	82
17) Chloroform	10.40	83	2154764	29.45	ug/L		99
18) 1,1,1-Trichloroethane	10.72	97	2396695	31.05	ug/L		99
19) Carbon tetrachloride	11.03	117	2233730	29.45	ug/L		100
20) 1,1-Dichloropropene	11.02	75	2098843	29.09	ug/L		98
21) Benzene	11.36	78	3677001	28.29	ug/L		99
22) 1,2-Dichloroethane	11.37	62	906868	31.29	ug/L		98
23) Trichloroethene	12.48	95	1640085	28.46	ug/L		91
24) 1,2-Dichloropropane	12.83	63	1214345	27.22	ug/L		100
25) Dibromomethane	13.03	93	494826	27.67	ug/L		97
26) Bromodichloromethane	13.30	83	1685621	29.53	ug/L	m	66
27) cis-1,3-Dichloropropene	14.06	75	1443936	28.55	ug/L	m	0
28) Toluene	14.64	92	2604382	29.84	ug/L		97
29) trans-1,3-Dichloropropene	14.98	75	1013926	29.53	ug/L		98
30) 1,1,2-Trichloroethane	15.30	83	468063	27.88	ug/L		99
31) Tetrachloroethene	15.60	166	1648174	26.60	ug/L		97
32) 1,3-Dichloropropane	15.58	76	925183	28.08	ug/L		100
33) Dibromochloromethane	16.00	129	918828	26.18	ug/L		99
34) 1,2-Dibromomethane	16.19	107	650390	27.36	ug/L		94
35) Chlorobenzene	17 07	112	2720037	27.45	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17 20	131	1093624	26.44	ug/L	m	0
37) Ethylbenzene	17.26	91	5555166	30.24	ug/L		97
38) Xylene (para & meta)	17.47	106	3951154	57.87	ug/L		91
39) Xylene (Ortho)	18.17	106	1755270	28.92	ug/L		92
40) Styrene	18 18	104	2731131	28 76	ug/L		87

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

Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18.50	173	450885	26.90 ug/L m	0
42)	Isopropylbenzene	18.83	105	5734485	29.95 ug/L m	45
44)	Bromobenzene	19.37	156	1026534	26.45 ug/L #	88
45)	1,1,2,2-Tetrachloroethane	19.33	83	508409	29.75 ug/L m	0
46)	1,2,3-Trichloropropane	19.39	75	599222	27.69 ug/L #	57
47)	n-Propylbenzene	19.57	91	7449042	30.39 ug/L	99
48)	2-Chlorotoluene	19.73	91	4112354	31.73 ug/L	93
49)	4-Chlorotoluene	19.91	91	4889333	31.45 ug/L m	98
50)	1,3,5-Trimethylbenzene	19.88	105	4744702	30.53 ug/L	95
51)	tert-Butylbenzene	20.48	119	4918253	28.71 ug/L	86
52)	1,2,4-Trimethylbenzene	20.56	105	4256753	28.89 ug/L	95
53)	sec-Butylbenzene	20.88	105	7312067	29.96 ug/L	99
54)	1,3-Dichlorobenzene	21.08	146	2102035	26.33 ug/L	97
55)	4-Isopropyltoluene	21.14	119	5435557	28.52 ug/L	94
56)	1,4-Dichlorobenzene	21.23	146	2067871	25.90 ug/L m	96
58)	1,2-Dichlorobenzene	21.91	146	1555987	25.55 ug/L m	44
59)	n-Butylbenzene	21.89	91	5865257	30.04 ug/L	97
60)	1,2-Dibromo-3-chloropropan	23.32	75	130755	32.60 ug/L	85
61)	1,2,4-Trichlorobenzene	24.89	180	1151444	27.19 ug/L	97
62)	Hexachlorobutadiene	25.22	225	1405948	32.37 ug/L	97
63)	Naphthalene	25.34	128	988735	24.80 ug/L	100
64)	1,2,3-Trichlorobenzene	25.81	180	788297	27.43 ug/L	97
65)	Methyl-tert butyl ether	8.01	73	1221403	32.71 ug/L #	100
66)	tert-Butyl Alcohol	7.76	59	39667	10.62 ug/L	100

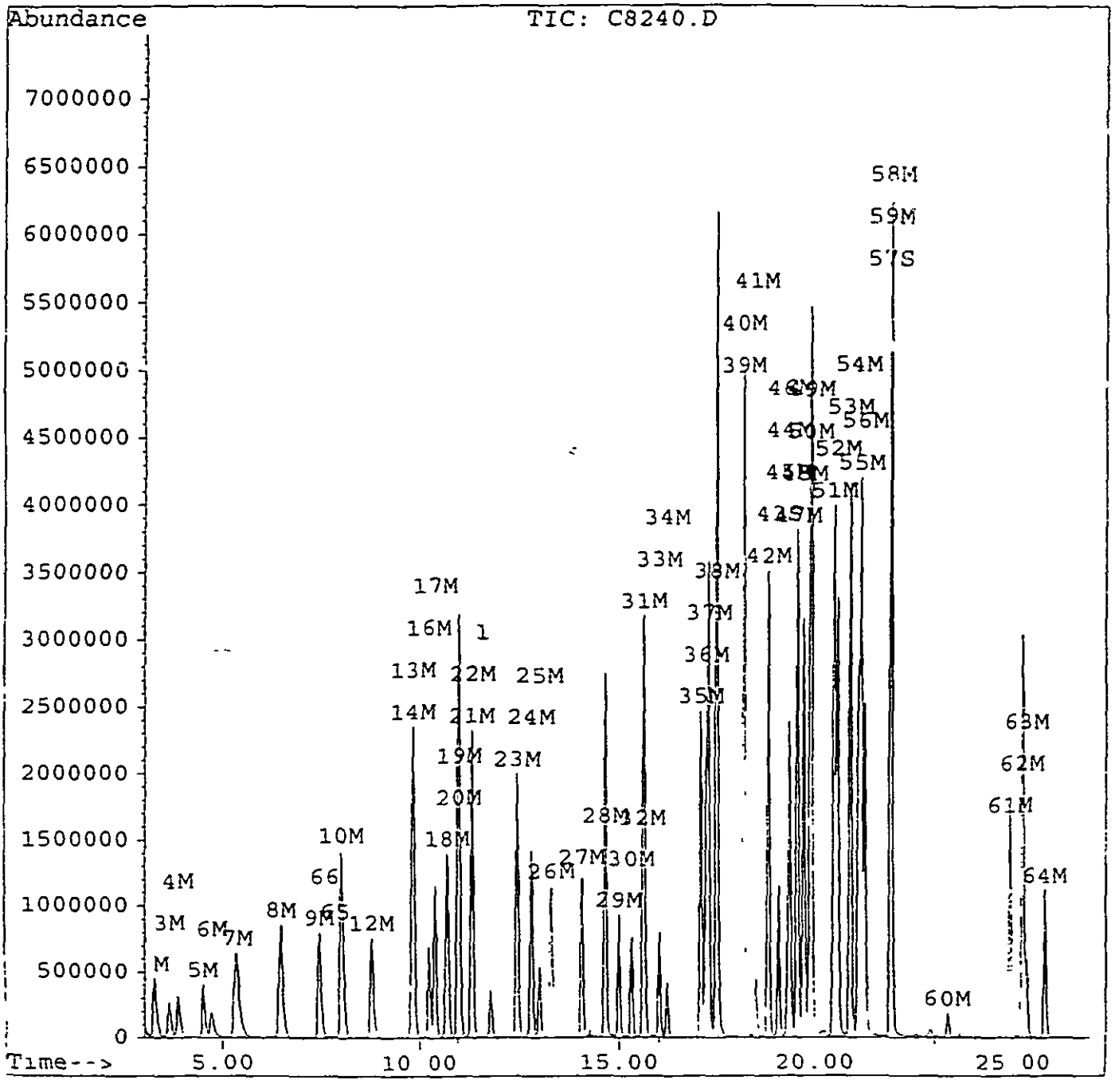
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

50

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.83	96	677208	5.00	ug/L		-0.10
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	1414597	22.19	ug/L		443.88%
57) 1,2-Dichlorobenzene-d4	21.88	152	645268	18.38	ug/L		367.55%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	2050828	32.77	ug/L		99
3) Chloromethane	3.66	50	1255453	34.18	ug/L		98
4) Vinyl chloride	3.88	62	1403518	34.27	ug/L		99
5) Bromomethane	4.50	94	887089	31.79	ug/L		95
6) Chloroethane	4.68	64	660776	26.52	ug/L		99
7) Trichlorofluoromethane	5.29	101	3146458	38.89	ug/L		98
8) 1,1-Dichloroethene	6.40	96	1373656	36.56	ug/L		94
9) Methylene chloride	7.39	84	1256580	38.40	ug/L		93
10) trans-1,2-Dichloroethene	7.96	96	1461616	36.74	ug/L	m	0
12) 1,1-Dichloroethane	8.74	63	2990291	37.74	ug/L	m	0
13) 2,2-Dichloropropane	9.82	77	2784319	40.46	ug/L		96
14) cis-1,2-Dichloroethene	9.83	96	1387660	36.91	ug/L		95
16) Bromochloromethane	10.23	128	511825	34.71	ug/L	#	88
17) Chloroform	10.39	83	2839115	40.56	ug/L		100
18) 1,1,1-Trichloroethane	10.71	97	3074057	41.62	ug/L		100
19) Carbon tetrachloride	11.02	117	2848789	39.26	ug/L		100
20) 1,1-Dichloropropene	11.00	75	2646146	38.33	ug/L		97
21) Benzene	11.35	78	4715775	37.92	ug/L		98
22) 1,2-Dichloroethane	11.36	62	1219926	43.99	ug/L		100
23) Trichloroethene	12.48	95	2092020	37.94	ug/L		92
24) 1,2-Dichloropropane	12.83	63	1588792	37.22	ug/L		100
25) Dibromomethane	13.02	93	670030	39.16	ug/L		97
26) Bromodichloromethane	13.30	83	2234626	40.92	ug/L	m	85
27) cis-1,3-Dichloropropene	14.05	75	1927356	39.84	ug/L		97
28) Toluene	14.64	92	3353871	40 17	ug/L		99
29) trans-1,3-Dichloropropene	14.98	75	1365218	41.56	ug/L		97
30) 1,1,2-Trichloroethane	15.30	83	640167	39.86	ug/L		96
31) Tetrachloroethene	15.60	166	2106507	35 54	ug/L		98
32) 1,3-Dichloropropane	15.58	76	1225150	38.86	ug/L		98
33) Dibromochloromethane	15.99	129	1250833	37.25	ug/L		99
34) 1,2-Dibromomethane	16 19	107	896884	39.43	ug/L		97
35) Chlorobenzene	17 07	112	3558221	37 53	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.20	131	1437465	36.33	ug/L	m	0
37) Ethylbenzene	17 26	91	7148780	40 68	ug/L		98
38) Xylene (para & meta)	17.47	106	5046126	77.25	ug/L		90
39) Xylene (Ortho)	18.17	106	2266726	39 03	ug/L		90
40) Styrene	18 19	104	3590160	39.52	ug/L		90

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

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.51	173	635283	39.62 ug/L m	0
42) Isopropylbenzene	18.83	105	7325849	39.99 ug/L m	45
44) Bromobenzene	19.37	156	1361555	36.68 ug/L #	90
45) 1,1,2,2-Tetrachloroethane	19.32	83	689989	42.21 ug/L m	0
46) 1,2,3-Trichloropropane	19.40	75	810580	39.16 ug/L	97
47) n-Propylbenzene	19.57	91	9540387	40.68 ug/L	98
48) 2-Chlorotoluene	19.73	91	5352127	43.16 ug/L	92
49) 4-Chlorotoluene	19.92	91	6372870	42.85 ug/L m	98
50) 1,3,5-Trimethylbenzene	19.89	105	6077505	40.88 ug/L	95
51) tert-Butylbenzene	20.48	119	6270377	38.26 ug/L	87
52) 1,2,4-Trimethylbenzene	20.56	105	5551247	39.38 ug/L	93
53) sec-Butylbenzene	20.88	105	9291157	39.79 ug/L	97
54) 1,3-Dichlorobenzene	21.08	146	2769985	36.27 ug/L	96
55) 4-Isopropyltoluene	21.15	119	6986951	38.31 ug/L	95
56) 1,4-Dichlorobenzene	21.08	146	2761726	36.15 ug/L	96
58) 1,2-Dichlorobenzene	21.91	146	2026169	34.77 ug/L	97
59) n-Butylbenzene	21.89	91	7484823	40.07 ug/L	96
60) 1,2-Dibromo-3-chloropropan	23.31	75	186592	48.63 ug/L	86
61) 1,2,4-Trichlorobenzene	24.88	180	1588732	39.22 ug/L	98
62) Hexachlorobutadiene	25.23	225	1808777	43.53 ug/L	98
63) Naphthalene	25.32	128	1420685	37.25 ug/L	100
64) 1,2,3-Trichlorobenzene	25.81	180	1119071	40.70 ug/L	100
65) Methyl-tert butyl ether	8.00	73	1658962	46.44 ug/L #	100
66) tert-Butyl Alcohol	7 77	59	51615	14.45 ug/L	100

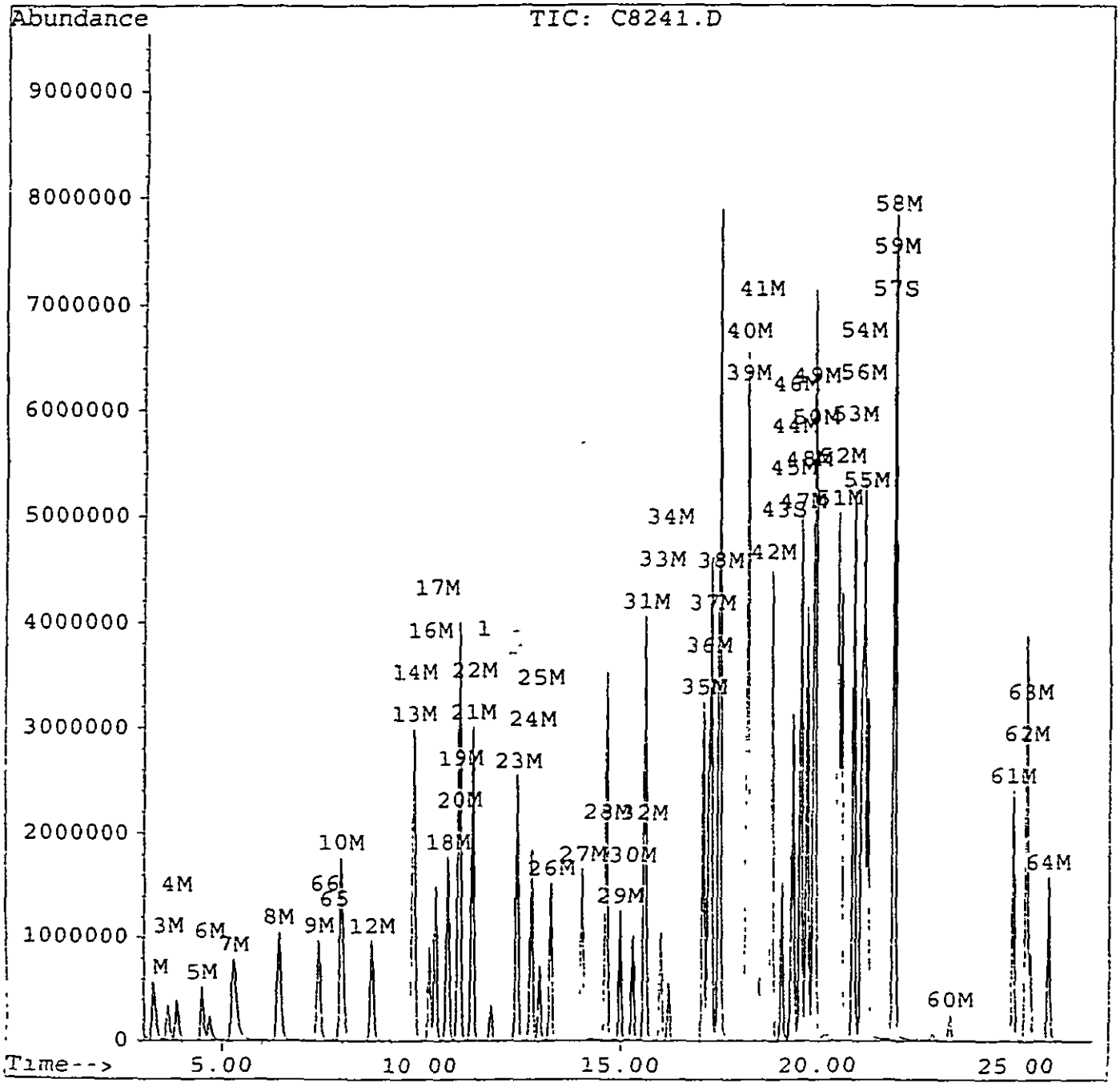
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 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 : Fri May 26 16:05:53 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. C8326.D BFB Injection Date· 6/2/95

Instrument ID 5972-INSTRUMENT 1 BFB Injection Time. 1424

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	21 6
75	30 0 - 66 0% of mass 95	51 5
95	Base peak, 100% relative abundance	100 0
96	5 0 - 9 0% of mass 95	6 7
173	Less than 2 0% of mass 174	0 0 (0 0)1
174	50 0 - 120 0% of mass 95	54 0
175	4 0 - 9 0% of mass 174	3.3 (6 2)1
176	93.0 - 101 0% of mass 174	52.2 (96 7)1
177	5 0 - 9 0% of mass 176	3 6 (6 8)2

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

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

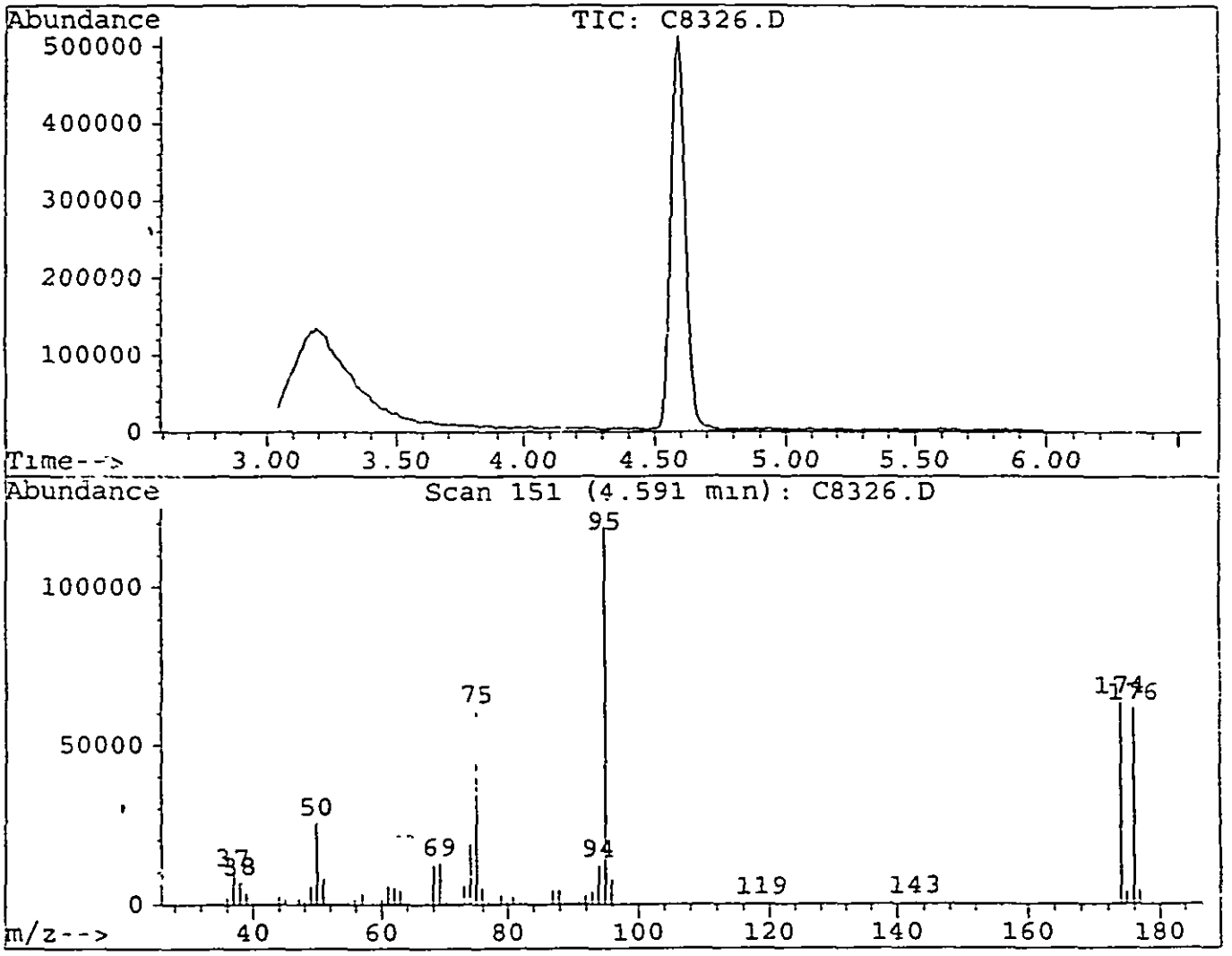
	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C8327 D	6/2/95	1438
02	1PPB STD	1PPB STD	C8328 D	6/2/95	1514
03	VBLK01	M BLANK	C8329 D	6/2/95	1550
04	9523339V	9523339V	C8330 D	6/2/95	1626
05	9523340V	9523340V	C8331 D	6/2/95	1703
06	9523341V	9523341V	C8332 D	6/2/95	1739
07	9523342V	9523342V	C8333 D	6/2/95	1817
08	9523343V	9523343V	C8334 D	6/2/95	1853
09	9523163V	9523163V	C8335 D	6/2/95	1929
10	9523167V	9523167V	C8336 D	6/2/95	2004
11	9523166V	9523166V	C8337 D	6/2/95	2040
12	9523343MS	23343MS	C8338 D	6/2/95	2115
13	9523343MSD	23343MSD	C8339 D	6/2/95	2150
14	10PPBQCS	10PPBQCS	C8340 D	6/2/95	2224
15					
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C8326.D
Acq On : 2 Jun 95 2:24 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: 151

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21 6	25664	PASS
75	95	30	60	51 5	61280	PASS
95	95	100	100	100.0	119064	PASS
96	95	5	9	6 7	8035	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	54.0	64304	PASS
175	174	5	9	6 2	3986	PASS
176	174	95	101	96.7	62160	PASS
177	176	5	9	6.8	4228	PASS

:a 151 (4.591 min): C8326.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2197	49.05	5823	66.95	698	80.80	2447
37.00	9510	49.95	25664	68 05	12370	81.90	588
38.00	7050	50.95	8205	69.05	12960	86.90	4512
39.00	3463	54.85	746	70.05	1017	87.95	4569
40.00	810	55.85	1680	72.95	6031	90.85	578
41.00	531	57.00	3447	73.95	18848	91.95	2776
42.90	532	60.00	1515	74.95	61280	92.95	4108
44.00	2522	61.00	5803	75.95	5237	93.95	12292
44.90	1537	62.00	5273	76.95	1207	94.95	119064
47.05	1979	62.90	4419	78 90	3035	95.95	8035
47.95	1137	64.00	533	79.90	971	118.85	671

:an 151 (4.591 min): C8326.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
140.90	632						
142.80	775						
173.95	64304						
174.85	3986						
175.95	62160						
176.85	4228						

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name EMSL ANALYTICAL Contract

Project No. Site Location. Group

Instrument ID 5972-INSTRUMENT I Calibration Date 6/2/95 Time 1438

Lab File ID C8327 D Init Calib Date(s) 5/26/95

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
Dichlorodifluoromethane	0 396	0 380		4 0	30 0
Chloromethane	0 233	0 232		0 4	30 0
Vinyl chloride	0 263	0 264		-0 4	30 0
Bromomethane	0 178	0 192		-7 9	30 0
Chloroethane	0 154	0 167		-8 4	30 0
Trichlorofluoromethane	0 588	0 573		2 6	30 0
1,1-Dichloroethene	0 258	0 256		0 8	30 0
Methylene chloride	0 274	0 320		-16 8	30 0
trans-1,2-Dichloroethene	0 273	0 275		-0 7	30 0
1,1-Dichloroethane	0 545	0 556		-2.0	30.0
2,2-Dichloropropane	0 534	0 534		0 0	30.0
cis-1,2-Dichloroethene	0 257	0 253		1 6	30 0
Bromochloromethane	0 090	0 082		8 9	30 0
Chloroform	0 512	0.502		2 0	30 0
1,1,1-Trichloroethane	0 566	0 553		2 3	30 0
Carbon tetrachloride	0 526	0 494		6 1	30 0
1,1-Dichloropropene	0 495	0 499		-0 8	30 0
Benzene	0 871	0 866		0 6	30 0
1,2-Dichloroethane	0 214	0 200		6 5	30 0
Trichloroethene	0 386	0 376		2 6	30.0
1,2-Dichloropropane	0 285	0 286		-0 4	30 0
Dibromomethane	0 115	0 109		5 2	30 0
Bromodichloromethane	0 396	0 380		4 0	30 0
cis-1,3-Dichloropropene	0 342	0 328		4 1	30 0
Toluene	0 619	0 623		-0 6	30 0
trans-1,3-Dichloropropene	0 236	0 227		3 8	30 0
1,1,2-Trichloroethane	0 110	0 105		4 5	30 0
Tetrachloroethene	0 388	0 364		6 2	30 0
1,3-Dichloropropane	0 219	0 212		3 2	30 0
Dibromochloromethane	0 215	0 197		8 4	30 0
1,2-Dibromomethane	0 152	0 144		5 3	30 0
Chlorobenzene	0 644	0 620		3 7	30 0
1,1,1,2-Tetrachloroethane	0 256	0 240		6 3	30 0
Ethylbenzene	1 302	1 285		1 3	30 0
Xylene (para & meta)	0 468	0 461		1 5	30 0
Xylene (Ortho)	0 414	0 402		2 9	30 0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name. EMSL ANALYTICAL Contract

Project No Site Location Group

Instrument ID 5972-INSTRUMENT 1 Calibration Date 6/2/95 Time 1438

Lab File ID: C8327 D Init. Calib Date(s) 5/26/95

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	0 641	0 610		4 8	30 0
Bromoform	0 105	0 094		10 5	30 0
Isopropylbenzene	1 330	1 288		3 2	30 0
Bromobenzene	0 240	0 224		6 7	30 0
1,1,2,2-Tetrachloroethane	0 118	0 120		-1 7	30 0
1,2,3-Trichloropropane	0 143	0 134		6.3	30 0
n-Propylbenzene	1 731	1 721		0.6	30 0
2-Chlorotoluene	0 960	0 928		3 3	30 0
4-Chlorotoluene	1 140	1 086		4 7	30 0
1,3,5-Trimethylbenzene	1 101	1 070		2 8	30 0
tert-Butylbenzene	1 142	1 106		3 2	30 0
1,2,4-Trimethylbenzene	1 009	0 994		1.5	30 0
sec-Butylbenzene	1 693	1 641		3 1	30 0
1,3-Dichlorobenzene	0 489	0 456		6.7	30 0
4-Isopropyltoluene	1 264	1 234		2 4	30 0
1,4-Dichlorobenzene	0 485	0 442		8 9	30 0
1,2-Dichlorobenzene	0 364	0 339		6 9	30 0
n-Butylbenzene	1 355	1 360		-0 4	30 0
1,2-Dibromo-3-chloropropane	0 030	0 028		6 7	30 0
1,2,4-Trichlorobenzene	0 268	0 237		11 6	30 0
Hexachlorobutadiene	0 323	0 287		11 1	30 0
Naphthalene	0 232	0 203		12.5	30 0
1,2,3-Trichlorobenzene	0 187	0 170		9 1	30 0
4-Bromofluorobenzene	0 499	0 488		2 2	30 0
1,2-Dichlorobenzene-d4	0 228	0 224		1 8	30 0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C8327.D
Acq On : 2 Jun 95 2:38 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 May 30 13:15:19 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)
		Fluorobenzene	1.000	1.000	0.0	99	0.00
2	M	Dichlorodifluoromethane	0.396	0.380	4.0	90	0 02
	M	Chloromethane	0.233	0.232	0.4	93	0.03
	M	Vinyl chloride	0.263	0.264	-0.6	96	0 02
	M	Bromomethane	0.178	0.192	-7.7	97	0.04
6	M	Chloroethane	0.154	0.167	-8.3	97	0 02
	M	Trichlorofluoromethane	0.588	0.573	2.5	95	0.02
	M	1,1-Dichloroethene	0.258	0.256	0.8	96	0.03
9	M	Methylene chloride	0.274	0.320	-16.7	90	0.00
1	M	trans-1,2-Dichloroethene	0.273	0.275	-0.9	98	0.00
1		Hexane	0.000	0.000#	0.0	0#	-9.46#
12	M	1,1-Dichloroethane	0.545	0.556	-2.1	102	0.00
1	M	2,2-Dichloropropane	0.534	0.534	0.1	97	0.00
1	M	cis-1,2-Dichloroethene	0.257	0.253	1.5	96	0.00
1		2-Butanone	0.000	0.000#	0.0	0#	0.04
16	M	Bromochloromethane	0.090	0.082	9.1	93	0.01
1	M	Chloroform	0.512	0.502	1.9	98	0 02
1	M	1,1,1-Trichloroethane	0.566	0 553	2.4	97	0.00
19	M	Carbon tetrachloride	0.526	0.494	6.0	95	0.00
2	M	1,1-Dichloropropene	0.495	0.499	-0.9	98	0.00
2	M	Benzene	0.871	0.866	0.5	97	0.01
22	M	1,2-Dichloroethane	0.214	0.200	6.5	95	0 00
2	M	Trichloroethene	0.386	0.376	2.7	96	0 01
2	M	1,2-Dichloropropane	0.285	0.286	-0.4	101	0 01
2	M	Dibromomethane	0.115	0.109	5.9	96	0 00
26	M	Bromodichloromethane	0.396	0.380	4.0	98	0.00
2	M	cis-1,3-Dichloropropene	0.342	0.328	4.1	98	0.01
2	M	Toluene	0.619	0.623	-0.8	103	0.01
29	M	trans-1,3-Dichloropropene	0.236	0.227	4.0	98	0.00
3	M	1,1,2-Trichloroethane	0.110	0.105	4 7	98	0 00
	M	Tetrachloroethene	0.388	0.364	6.1	94	0 00
32	M	1,3-Dichloropropane	0.219	0 212	3.3	99	0 01
33	M	Dibromochloromethane	0.215	0.197	8.4	96	0.01
	M	1,2-Dibromomethane	0.152	0.144	5.6	99	0.00
3	M	Chlorobenzene	0.644	0 620	3.7	97	0.00
36	M	1,1,1,2-Tetrachloroethane	0.256	0.240	6 4	97	0 01
	M	Ethylbenzene	1.302	1.285	1.3	100	0 00
	M	Xylene (para & meta)	0.468	0.461	1.5	99	0 00
39	M	Xylene (Ortho)	0.414	0.402	2.8	98	0 00
	M	Styrene	0.641	0.610	4 8	97	0 00
	4	Bromoform	0.105	0.094	10.4	95	-0.01
42	M	Isopropylbenzene	1.330	1.288	3.2	98	0 00

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C8327.D
Acq On : 2 Jun 95 2:38 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 May 30 13:15:19 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	0.499	0.488	2.2	101	0.01
44	M	Bromobenzene	0.240	0.224	6.8	96	0.00
4	M	1,1,2,2-Tetrachloroethane	0.118	0.120	-2.1	107	-0.01
4	M	1,2,3-Trichloropropane	0.143	0.134	6.5	96	-0.01
47	M	n-Propylbenzene	1.731	1.721	0.6	102	0.00
4	M	2-Chlorotoluene	0.960	0.928	3.4	100	0.00
4	M	4-Chlorotoluene	1.140	1.086	4.7	97	0.00
50	M	1,3,5-Trimethylbenzene	1.101	1.070	2.9	100	-0.01
5	M	tert-Butylbenzene	1.142	1.106	3.2	99	0.00
5	M	1,2,4-Trimethylbenzene	1.009	0.994	1.5	100	0.00
53	M	sec-Butylbenzene	1.693	1.641	3.1	100	0.00
54	M	1,3-Dichlorobenzene	0.489	0.456	6 8	97	0.00
5	M	4-Isopropyltoluene	1.264	1 234	2.4	100	0.01
5	M	1,4-Dichlorobenzene	0.485	0.442	8.8	95	-0.01
57	S	1,2-Dichlorobenzene-d4	0.228	0.224	1.7	102	-0 01
5	M	1,2-Dichlorobenzene	0.364	0.339	7.1	96	0.00
5	M	n-Butylbenzene	1.355	1.360	-0.3	104	0.00
60	M	1,2-Dibromo-3-chloropropane	0.030	0 028	4.9	105	0.01
6	M	1,2,4-Trichlorobenzene	0.268	0.237	11.4	92	0.00
6	M	Hexachlorobutadiene	0.323	0.287	11.1	94	0.00
63	M	Naphthalene	0.232	0.203	12.6	92	0.00
64	M	1,2,3-Trichlorobenzene	0.187	0.170	9.1	97	0.00
6		Methyl-tert butyl ether	0.292	0 285	2.3	99	0.02
6		tert-Butyl Alcohol	0.004	0.004	13.3	99	-0.01

Quantitation Report

Data File : d:\hpchem\1\data\c8327.d
Acq On : 2 Jun 95 2:38 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 18 10:56 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	767042	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	374057	4.89	ug/L		97.77%
57) 1,2-Dichlorobenzene-d4	21.87	152	171801	4.92	ug/L		98.31%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.30	85	583501	9.60	ug/L		98
3) Chloromethane	3.67	50	356438	9.96	ug/L		94
4) Vinyl chloride	3.89	62	405685	10.06	ug/L		99
5) Bromomethane	4.56	94	293817	10.77	ug/L		95
6) Chloroethane	4.78	64	255912	10.83	ug/L		100
7) Trichlorofluoromethane	5.36	101	878729	9.75	ug/L		99
8) 1,1-Dichloroethene	6.45	96	392865	9.92	ug/L		93
9) Methylene chloride	7.42	84	490296	11.67	ug/L	m	98
10) trans-1,2-Dichloroethene	7.97	96	422170	10 09	ug/L		96
12) 1,1-Dichloroethane	8.77	63	853713	10.21	ug/L		94
13) 2,2-Dichloropropane	9.83	77	818786	9.99	ug/L		99
14) cis-1,2-Dichloroethene	9.83	96	388232	9.85	ug/L		95
16) Bromochloromethane	10.25	128	125536	9.09	ug/L		95
17) Chloroform	10.41	83	769901	9 81	ug/L		100
18) 1,1,1-Trichloroethane	10.72	97	847947	9.76	ug/L		98
19) Carbon tetrachloride	11.03	117	758452	9.40	ug/L		99
20) 1,1-Dichloropropene	11.01	75	765585	10.09	ug/L		100
21) Benzene	11.36	78	1329023	9 95	ug/L		99
22) 1,2-Dichloroethane	11.36	62	306504	9.35	ug/L		98
23) Trichloroethene	12.49	95	576242	9 73	ug/L		99
24) 1,2-Dichloropropane	12.84	63	439106	10.04	ug/L		99
25) Dibromomethane	13.03	93	166758	9.41	ug/L		96
26) Bromodichloromethane	13.30	83	583419	9.60	ug/L		99
27) cis-1,3-Dichloropropene	14 07	75	503699	9.59	ug/L		98
28) Toluene	14.65	92	956341	10.08	ug/L		97
29) trans-1,3-Dichloropropene	14.99	75	348125	9 60	ug/L		99
30) 1,1,2-Trichloroethane	15.30	83	161436	9.53	ug/L		94
31) Tetrachloroethene	15.61	166	558578	9 39	ug/L		97
32) 1,3-Dichloropropane	15 59	76	324642	9 67	ug/L		98
33) Dibromochloromethane	16 00	129	301927	9.16	ug/L		94
34) 1,2-Dibromomethane	16.19	107	220690	9.44	ug/L		99
35) Chlorobenzene	17 07	112	951369	9 63	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.21	131	367447	9.36	ug/L		96
37) Ethylbenzene	17.26	91	1971802	9 87	ug/L		97
38) Xylene (para & meta)	17.47	106	1413580	19.71	ug/L		100
39) Xylene (Ortho)	18.17	106	617126	9.72	ug/L		89
40) Styrene	18 19	104	936258	9 52	ug/L		100

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

Data File : d:\hpchem\1\data\c8327.d
Acq On : 2 Jun 95 2:38 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 18 10:56 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.50	173	144872	8.96 ug/L	88
42) Isopropylbenzene	18.83	105	1975228	9.68 ug/L m	0
44) Bromobenzene	19.38	156	342999	9.32 ug/L	92
45) 1,1,2,2-Tetrachloroethane	19.31	83	184638	10.21 ug/L	98
46) 1,2,3-Trichloropropane	19.39	75	205309	9 35 ug/L #	46
47) n-Propylbenzene	19.57	91	2639604	9.94 ug/L	100
48) 2-Chlorotoluene	19.73	91	1423366	9.66 ug/L	97
49) 4-Chlorotoluene	19.91	91	1666752	9.53 ug/L	84
50) 1,3,5-Trimethylbenzene	19.88	105	1640914	9.71 ug/L	96
51) tert-Butylbenzene	20.48	119	1696559	9.68 ug/L	96
52) 1,2,4-Trimethylbenzene	20.56	105	1524127	9.85 ug/L	98
53) sec-Butylbenzene	20.88	105	2517372	9.69 ug/L	99
54) 1,3-Dichlorobenzene	21.08	146	699189	9.32 ug/L	98
55) 4-Isopropyltoluene	21.15	119	1892941	9.76 ug/L	97
56) 1,4-Dichlorobenzene	21.23	146	678761	9.12 ug/L	91
58) 1,2-Dichlorobenzene	21.91	146	519547	9.29 ug/L	97
59) n-Butylbenzene	21.89	91	2085804	10.03 ug/L	99
60) 1,2-Dibromo-3-chloropropan	23.32	75	43673	9.51 ug/L	87
61) 1,2,4-Trichlorobenzene	24.89	180	364226	8.86 ug/L	99
62) Hexachlorobutadiene	25.23	225	440816	8.89 ug/L	100
63) Naphthalene	25.33	128	311057	8.74 ug/L	100
64) 1,2,3-Trichlorobenzene	25.81	180	260555	9.09 ug/L	94
65) Methyl-tert butyl ether	8.01	73	437846	9 77 ug/L	93
66) tert-Butyl Alcohol	7.71	59	11905	17.33 ug/L	100

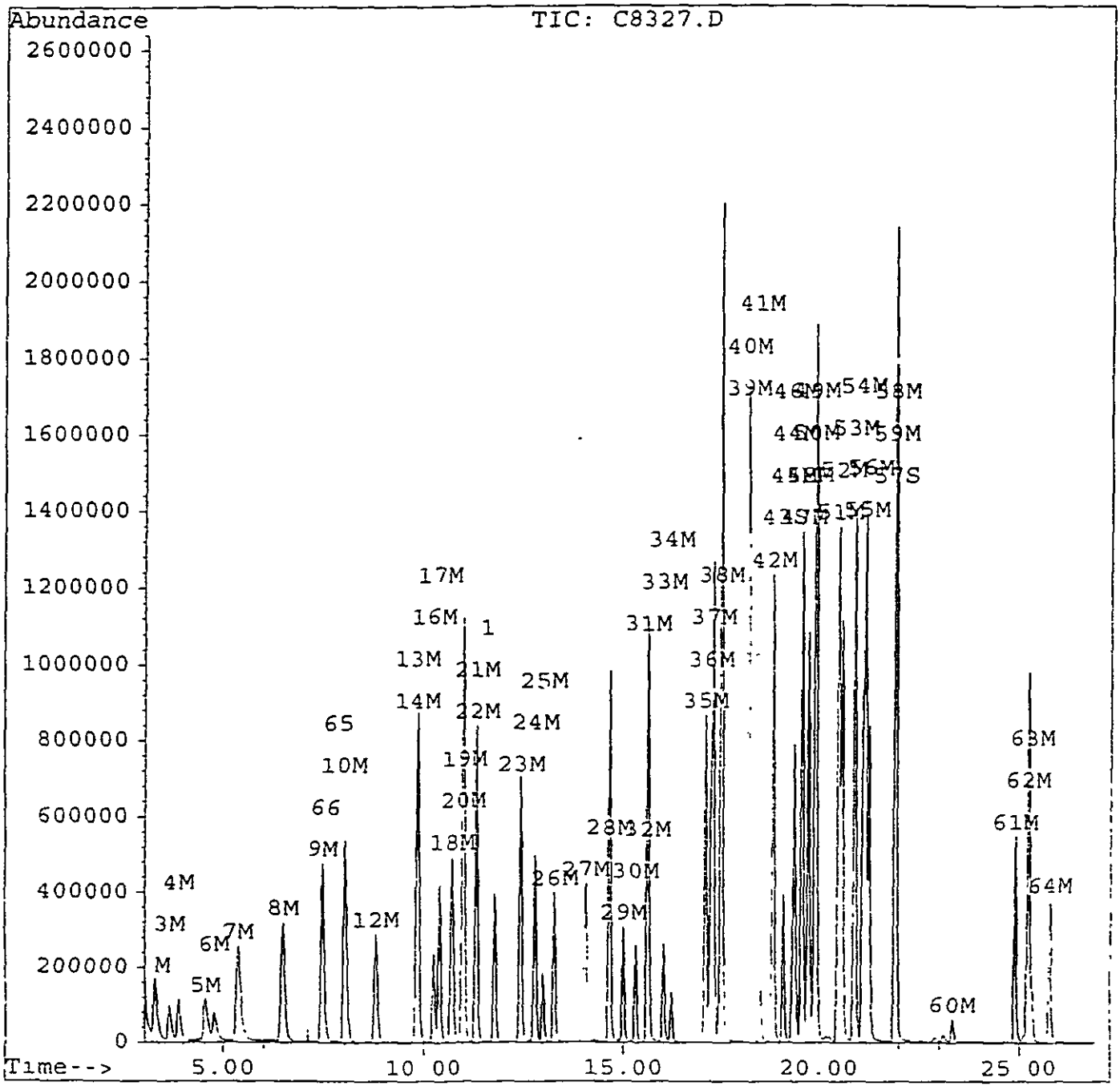
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8327.d
Acq On : 2 Jun 95 2:38 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 18 10:56 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8328.d
Acq On : 2 Jun 95 3:14 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 2 15:42 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	701997	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
42) 4-Bromofluorobenzene	19.10	95	392100	5.60	ug/L		111.98%
57) 1,2-Dichlorobenzene-d4	21.88	152	188735	5.90	ug/L		118.00%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.31	85	57067	1.03	ug/L		95
3) Chloromethane	3.68	50	33627	1.03	ug/L		81
4) Vinyl chloride	3.89	62	37514	1.02	ug/L		82
5) Bromomethane	4.55	94	31476	1.26	ug/L		99
6) Chloroethane	4.78	64	22965	1.06	ug/L		95
7) Trichlorofluoromethane	5.37	101	81182	0.98	ug/L		89
8) 1,1-Dichloroethene	6.46	96	35879	0.99	ug/L	#	82
9) Methylene chloride	7.42	84	288375	7.50	ug/L		98
10) trans-1,2-Dichloroethene	7.98	96	38379	1.00	ug/L		94
12) 1,1-Dichloroethane	8.78	63	83513	1.09	ug/L		96
13) 2,2-Dichloropropane	9.83	77	77701	1.04	ug/L		97
14) cis-1,2-Dichloroethene	9.84	96	37729	1.05	ug/L		92
16) Bromochloromethane	10.25	128	14427	1.14	ug/L		90
17) Chloroform	10.41	83	80218	1.12	ug/L		94
18) 1,1,1-Trichloroethane	10.73	97	79180	1.00	ug/L		97
19) Carbon tetrachloride	11.03	117	70373	0.95	ug/L		97
20) 1,1-Dichloropropene	11.02	75	70922	1.02	ug/L		96
21) Benzene	11.36	78	133400	1.09	ug/L		99
22) 1,2-Dichloroethane	11.36	62	34735	1.16	ug/L		99
23) Trichloroethene	12.49	95	57891	1.07	ug/L		93
24) 1,2-Dichloropropane	12.83	63	48388	1.21	ug/L		89
25) Dibromomethane	13.03	93	19457	1.20	ug/L	#	82
26) Bromodichloromethane	13.30	83	62965	1.13	ug/L		95
27) cis-1,3-Dichloropropene	14.06	75	53234	1.11	ug/L		98
28) Toluene	14.64	92	100393	1.16	ug/L		99
29) trans-1,3-Dichloropropene	14.99	75	36216	1.09	ug/L		96
30) 1,1,2-Trichloroethane	15.29	83	17810	1.15	ug/L		86
31) Tetrachloroethene	15.61	166	54046	0.99	ug/L		91
32) 1,3-Dichloropropane	15.59	76	38148	1.24	ug/L		97
33) Dibromochloromethane	16.00	129	32067	1.06	ug/L		99
34) 1,2-Dibromomethane	16.19	107	24684	1.15	ug/L		94
35) Chlorobenzene	17.07	112	98460	1.09	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.20	131	39264	1.09	ug/L		87
37) Ethylbenzene	17.26	91	192542	1.05	ug/L		100
38) Xylene (para & meta)	17.46	106	139158	2.12	ug/L		88
39) Xylene (Ortho)	18.17	106	62542	1.08	ug/L		93
40) Styrene	18.18	104	96581	1.07	ug/L		94

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

Quantitation Report

Data File : d:\hpchem\1\data\c8328.d
Acq On : 2 Jun 95 3:14 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 2 15:42 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41) Bromoform	18.50	173	18185	1.23 ug/L		83
42) Isopropylbenzene	18.83	105	190069	1.02 ug/L		92
44) Bromobenzene	19.37	156	38075	1.13 ug/L		95
45) 1,1,2,2-Tetrachloroethane	19.32	83	21192	1.28 ug/L		94
46) 1,2,3-Trichloropropane	19.40	75	26851	1.34 ug/L	#	78
47) n-Propylbenzene	19.57	91	258094	1.06 ug/L		96
48) 2-Chlorotoluene	19.72	91	155848	1.16 ug/L		99
49) 4-Chlorotoluene	19.91	91	181185	1.13 ug/L		79
50) 1,3,5-Trimethylbenzene	19.89	105	160790	1.04 ug/L		98
51) tert-Butylbenzene	20.48	119	168154	1.05 ug/L		99
52) 1,2,4-Trimethylbenzene	20.56	105	158808	1.12 ug/L		97
53) sec-Butylbenzene	20.87	105	253326	1.07 ug/L		99
54) 1,3-Dichlorobenzene	21.08	146	79249	1.15 ug/L		93
55) 4-Isopropyltoluene	21.14	119	187231	1.05 ug/L		97
56) 1,4-Dichlorobenzene	21.23	146	79905	1 17 ug/L		92
58) 1,2-Dichlorobenzene	21.91	146	59283	1.16 ug/L		91
59) n-Butylbenzene	21.89	91	208059	1.09 ug/L		98
60) 1,2-Dibromo-3-chloropropan	23.31	75	5339	1.27 ug/L	#	75
61) 1,2,4-Trichlorobenzene	24.89	180	46194	1.23 ug/L		97
62) Hexachlorobutadiene	25.23	225	47903	1.06 ug/L		96
63) Naphthalene	25.34	128	45226	1.39 ug/L		100
64) 1,2,3-Trichlorobenzene	25.81	180	37447	1.43 ug/L		90
65) Methyl-tert butyl ether	8.01	73	56568	1.38 ug/L		91

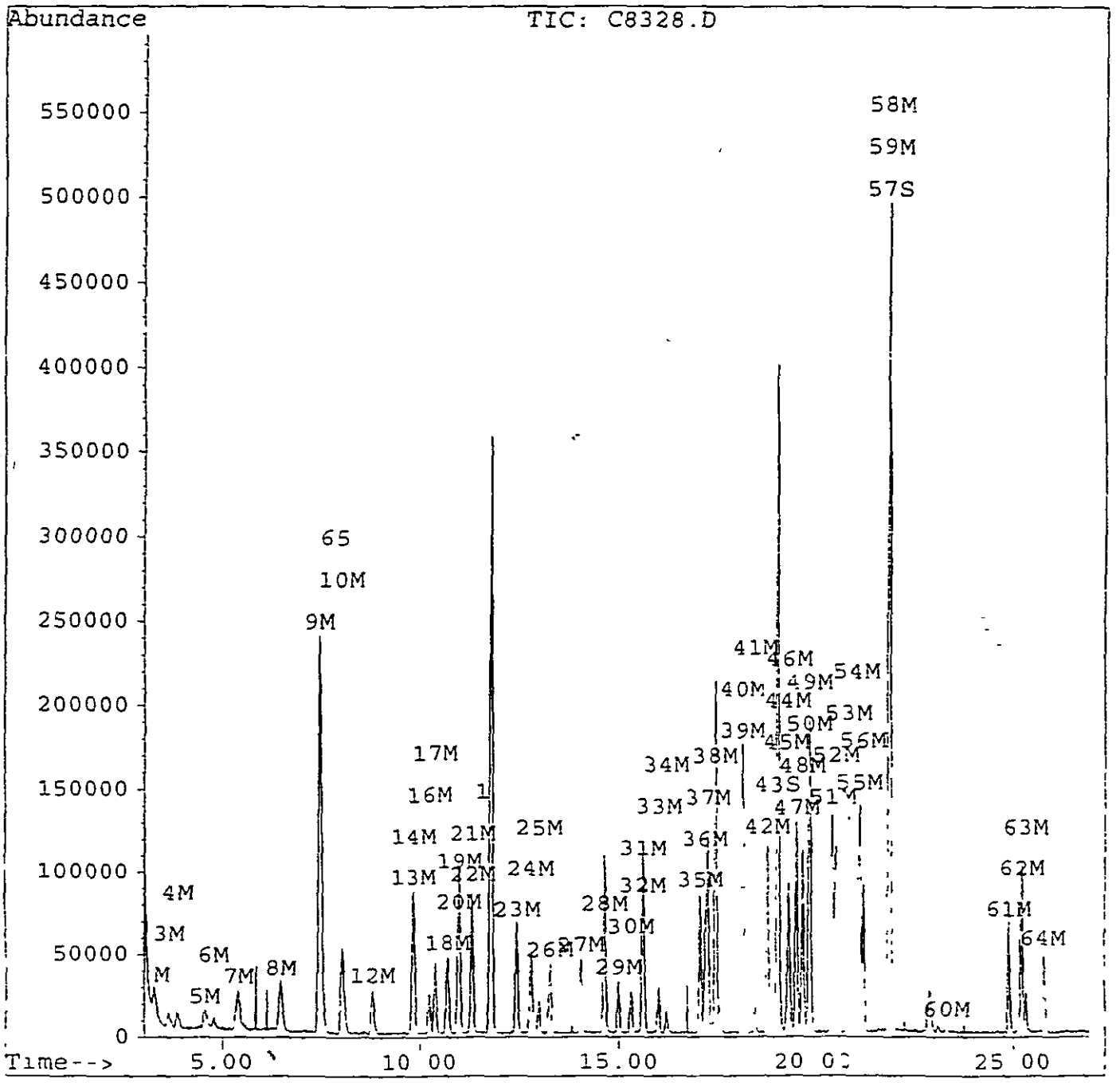
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8328.d
Acq On : 2 Jun 95 3:14 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 2 15:42 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8340.d
Acq On : 2 Jun 95 10:24 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 18 11:14 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.86	96	672699	5.00 ug/L	0 02
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.11	95	343138	5.11 ug/L	102.27%
57) 1,2-Dichlorobenzene-d4	21.90	152	159135	5.19 ug/L	103.83%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.31	85	373874	7.01 ug/L	96
3) Chloromethane	3.68	50	242950	7.74 ug/L	97
4) Vinyl chloride	3.89	62	304858	8.62 ug/L	92
5) Bromomethane	4.55	94	223328	9.34 ug/L	96
6) Chloroethane	4.79	64	195151	9.41 ug/L	97
7) Trichlorofluoromethane	5.36	101	738479	9.34 ug/L	97
8) 1,1-Dichloroethene	6.46	96	329465	9.49 ug/L	95
9) Methylene chloride	7.43	84	474810	12.89 ug/L	96
10) trans-1,2-Dichloroethene	7.99	96	359156	9.79 ug/L	98
12) 1,1-Dichloroethane	8.78	63	749063	10.21 ug/L	97
13) 2,2-Dichloropropane	9.85	77	562813	7.83 ug/L	98
14) cis-1,2-Dichloroethene	9.85	96	337128	9.75 ug/L	98
16) Bromochloromethane	10.26	128	124511	10.28 ug/L	98
17) Chloroform	10.42	83	698552	10.15 ug/L	97
18) 1,1,1-Trichloroethane	10.74	97	754191	9.90 ug/L	98
19) Carbon tetrachloride	11.05	117	686973	9.71 ug/L	97
20) 1,1-Dichloropropene	11.03	75	655965	9.86 ug/L	97
21) Benzene	11.39	78	1139374	9.73 ug/L	99
22) 1,2-Dichloroethane	11.39	62	298197	10.37 ug/L	96
23) Trichloroethene	12.50	95	501167	9.65 ug/L	98
24) 1,2-Dichloropropane	12.85	63	397241	10 36 ug/L	100
25) Dibromomethane	13.05	93	161828	10.42 ug/L	98
26) Bromodichloromethane	13.32	83	559683	10.51 ug/L	98
27) cis-1,3-Dichloropropene	14.08	75	438904	9 53 ug/L	99
28) Toluene	14.66	92	819426	9.85 ug/L	98
29) trans-1,3-Dichloropropene	15.00	75	311680	9 80 ug/L	98
30) 1,1,2-Trichloroethane	15.32	83	152649	10.28 ug/L	99
31) Tetrachloroethene	15.62	166	490520	9.41 ug/L	96
32) 1,3-Dichloropropane	15.60	76	305203	10.37 ug/L	100
33) Dibromochloromethane	16.01	129	296590	10.26 ug/L	96
34) 1,2-Dibromomethane	16 21	107	207953	10 14 ug/L	94
35) Chlorobenzene	17.09	112	877680	10.13 ug/L	98
36) 1,1,1,2-Tetrachloroethane	17 22	131	338926	9.85 ug/L	92
37) Ethylbenzene	17.28	91	1722310	9 83 ug/L	100
38) Xylene (para & meta)	17 49	106	1228905	19 53 ug/L	93
39) Xylene (Ortho)	18 19	106	559418	10.05 ug/L	98
40) Styrene	18.20	104	840320	9 74 ug/L	95

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

Quantitation Report

Data File : d:\hpchem\1\data\c8340.d
Acq On : 2 Jun 95 10:24 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 18 11:14 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Compound	R T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.52	173	149526	10.54 ug/L	86
42) Isopropylbenzene	18.85	105	1770301	9.89 ug/L	91
44) Bromobenzene	19.39	156	325111	10.08 ug/L	94
45) 1,1,2,2-Tetrachloroethane	19.33	83	173819	10.96 ug/L	92
46) 1,2,3-Trichloropropane	19.41	75	195899	10.17 ug/L #	59
47) n-Propylbenzene	19.58	91	2250521	9.66 ug/L	99
48) 2-Chlorotoluene	19.74	91	1385729	10.72 ug/L	98
49) 4-Chlorotoluene	19.93	91	1503669	9.80 ug/L	84
50) 1,3,5-Trimethylbenzene	19.90	105	1384988	9.35 ug/L	100
51) tert-Butylbenzene	20.50	119	1501089	9.77 ug/L	100
52) 1,2,4-Trimethylbenzene	20.58	105	1369962	10.09 ug/L	99
53) sec-Butylbenzene	20.90	105	2149114	9.44 ug/L	100
54) 1,3-Dichlorobenzene	21.10	146	648339	9.85 ug/L	97
55) 4-Isopropyltoluene	21.16	119	1594504	9.37 ug/L	98
56) 1,4-Dichlorobenzene	21.25	146	660068	10.11 ug/L	91
58) 1,2-Dichlorobenzene	21.93	146	511792	10.44 ug/L	97
59) n-Butylbenzene	21.91	91	1685715	9.25 ug/L	99
60) 1,2-Dibromo-3-chloropropan	23.35	75	43634	10.83 ug/L	94
61) 1,2,4-Trichlorobenzene	24.91	180	365459	10.14 ug/L	93
62) Hexachlorobutadiene	25.25	225	401437	9.23 ug/L	99
63) Naphthalene	25.36	128	346845	11.12 ug/L	100
64) 1,2,3-Trichlorobenzene	25.83	180	262367	10.44 ug/L	91

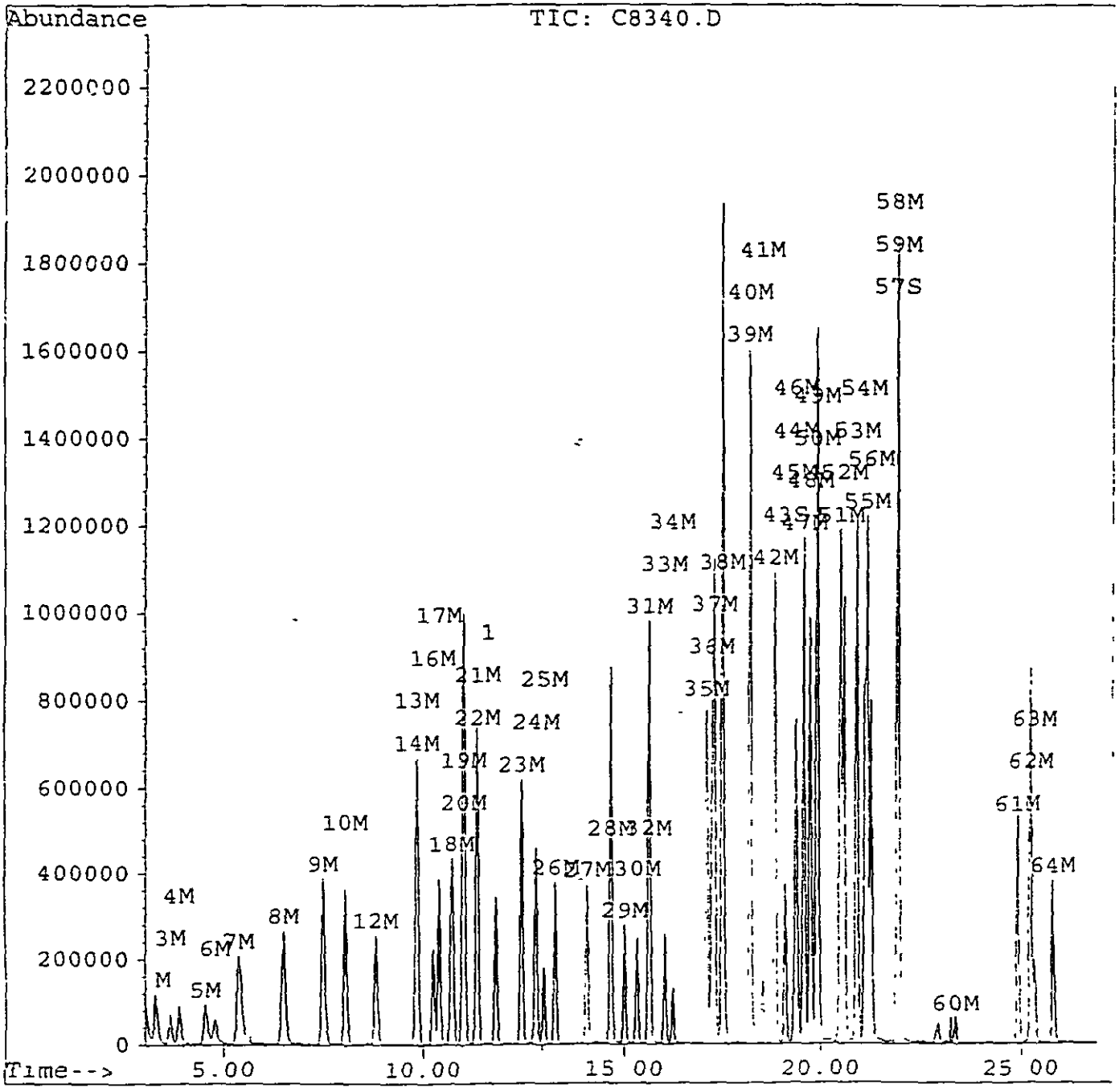
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8340.d
Acq On : 2 Jun 95 10:24 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 18 11:14 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID (Standard). C8327 D Date Analyzed 6/2/95

Instrument ID 5972-INSTRUMENT 1 Time Analyzed 1438

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	767042	11 84				
	UPPER LIMIT	1534084	12 34				
	LOWER LIMIT-	383521	11.34				
	SAMPLE NO						
01	1PPB STD	701997	11 84				
02	VBLK01	689722	11 84				
03	9523339V	691197	11 84				
04	9523340V	590801	11 84				
05	9523341V	685338	11 84				
06	9523342V	725874	11 84				
07	9523343V	693564	11 84				
08	9523163V	708098	11 84				
09	9523167V	674824	11 85				
10	9523166V	688621	11 84				
11	9523343MS	668860	11 85				
12	9523343MSD	671183	11 85				
13	10PPBQCS	672699	11 86				
14							
15							
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 ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523340 73
Lab File ID: C8331.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.4	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1 1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.80	
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene(total)	50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: _EMSL ANALYTICAL_____ Lab Sample ID: _9523340 TB_____
Matrix (soil/water): _WATER_____ Lab File ID: ___C8331.D_____
Sample wt/vol: _25_mL_____ Date Received: _05/22/95_____
Level (low/med): _LOW_____ Date Analyzed: _06/02/95_____
% Moisture: not dec.: _NA_____ Dilution Factor: __1_____
GC Column: _DB-624 x 75m_ ID: _0.53mm_ Soil Aliquot Volume: ____NA____
Soil Extract Volume: ___NA____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _ug/L__	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	.50	U
95-49-8	2-Chlorotoluene	.60	
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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO: 9523340V TB

Lab Name. EMSL ANALYTICAL Contract

Project No Site Location Group.

Matrix (soil/water) WATER Lab Sample ID 9523340V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8331 D

Level (low/med) LOW Date Received 5/22/95

% Moisture: not dec. NA Date Analyzed 6/2/95

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 1 *Concentration Units* (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est Conc	Q
1	Column Bleed	22 87	1	J
2				
3				
4				
5				
6				
7				
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9				
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27				
28				
29				
30				

Quantitation Report

Data File : d:\hpchem\1\data\c8331.d
Acq On : 2 Jun 95 5:03 pm
Sample : 9523340
Misc : 25 ML
Quant Time: Jun 3 14:13 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.84	96	590801	5.00 ug/L	0.00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.09	95	304161	5.16 ug/L	103.22%
57) 1,2-Dichlorobenzene-d4	21.88	152	144866	5.38 ug/L	107.62%
Target Compounds					Qvalue
9) Methylene chloride	7.42	84	207678	6.42 ug/L	99
28) Toluene	14.66	92	56756	0.78 ug/L	91
48) 2-Chlorotoluene	19.73	91	72162	0.64 ug/L	92

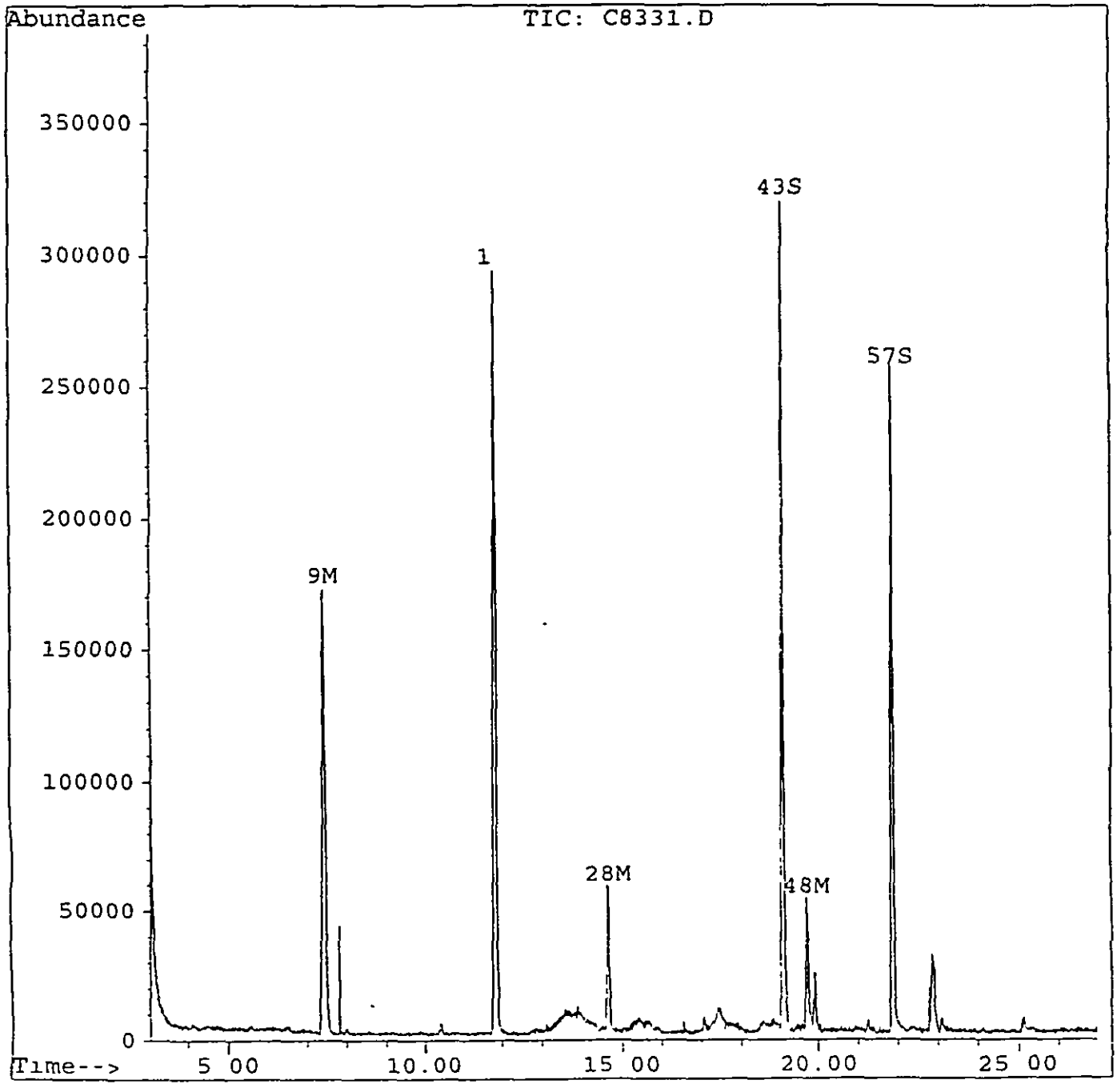
(#) = qualifier out of range (m) = manual integration

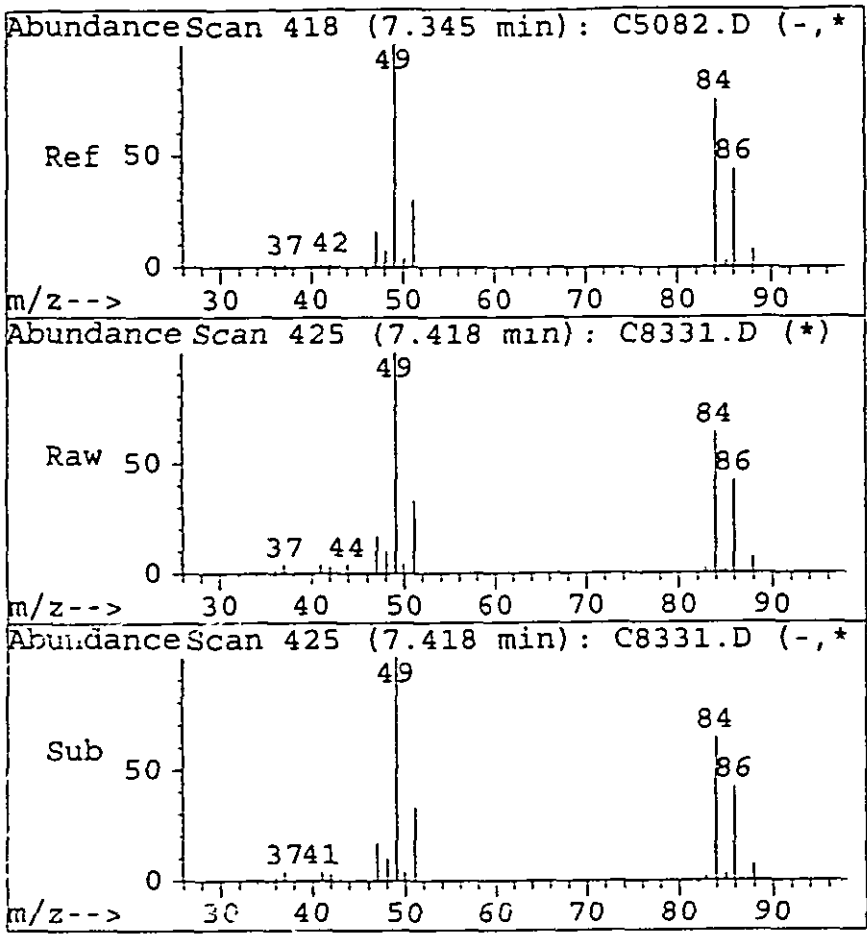
Quantitation Report

Data File : d:\hpchem\1\data\c8331.d
Acq On : 2 Jun 95 5:03 pm
Sample : 9523340
Misc : 25 ML
Quant Time: Jun 3 14:13 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

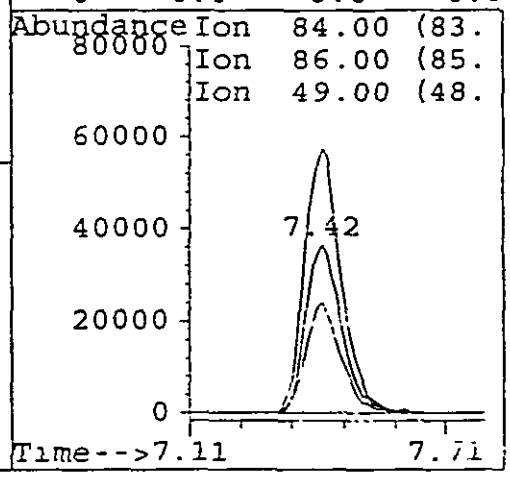


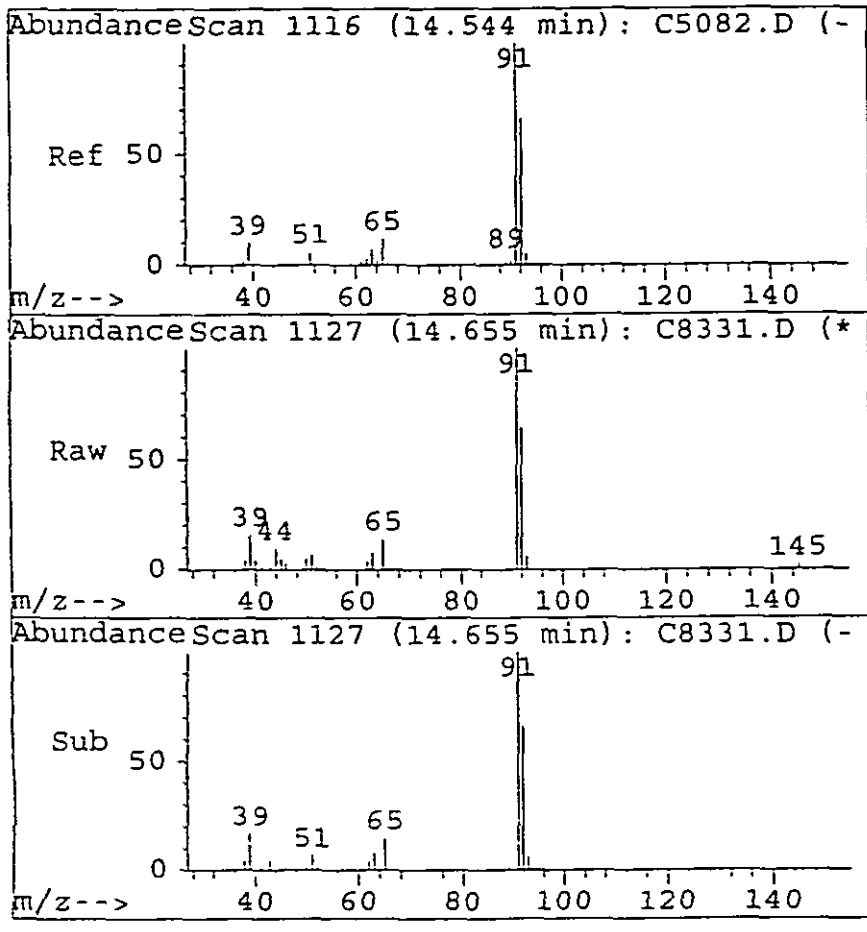


#9
Methylene chloride
Concen: 6.42 ug/L
RT: 7.42 min Scan# 425
Delta R.T. 0.01 min
Lab File: c8331.d
Acq: 2 Jun 95 5:03 pm

Tgt Ion:84 Resp: 207678

Ion	Ratio	Lower	Upper
84	100		
86	65.6	43.1	83.1
49	156.6	136.3	176.3
0	0.0	0.0	0.0

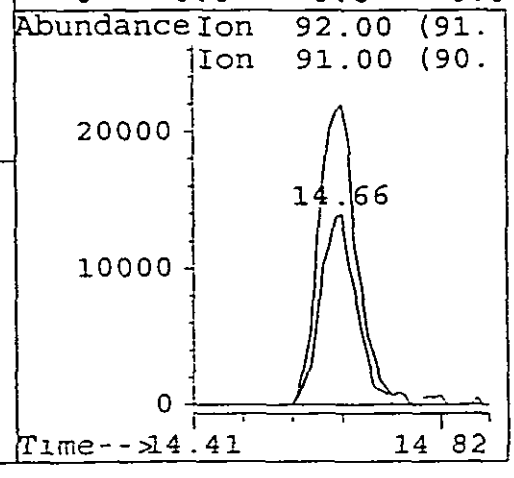


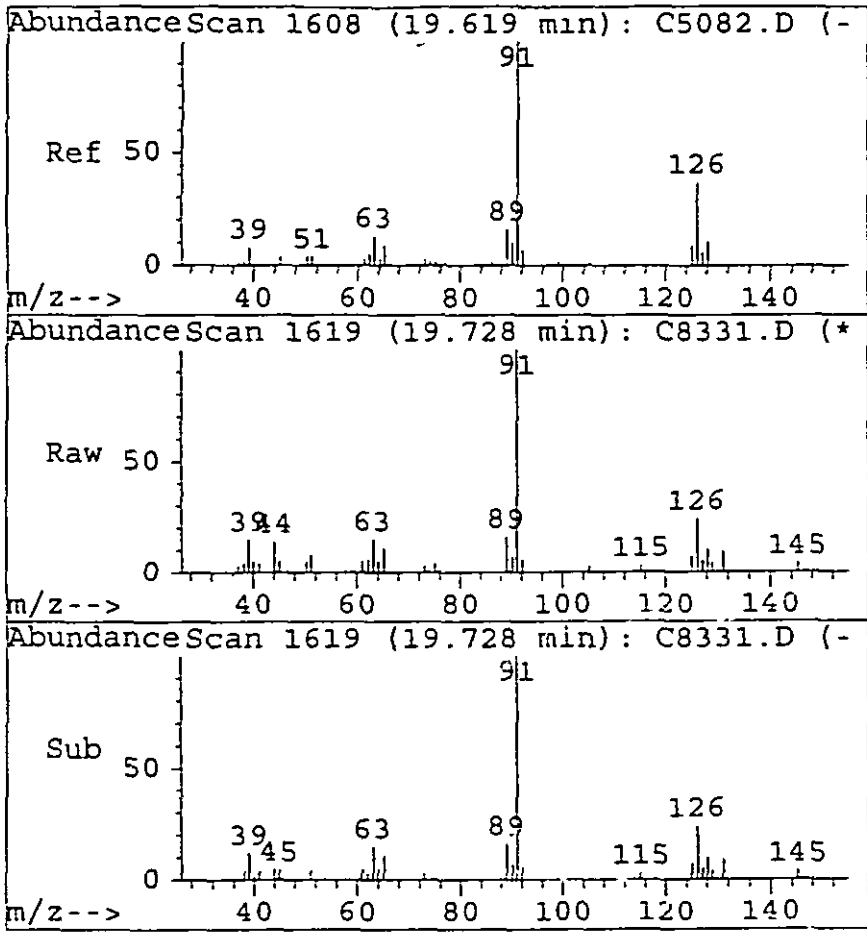


#28
Toluene
Concen: 0.78 ug/L
RT: 14.66 min Scan# 1127
Delta R.T. 0.01 min
Lab File: c8331.d
Acq: 2 Jun 95 5.03 pm

Tgt Ion.92 Resp: 56756

Ion	Ratio	Lower	Upper
92	100		
91	157.0	149.4	189.4
0	0.0	0.0	0.0
0	0.0	0.0	0.0

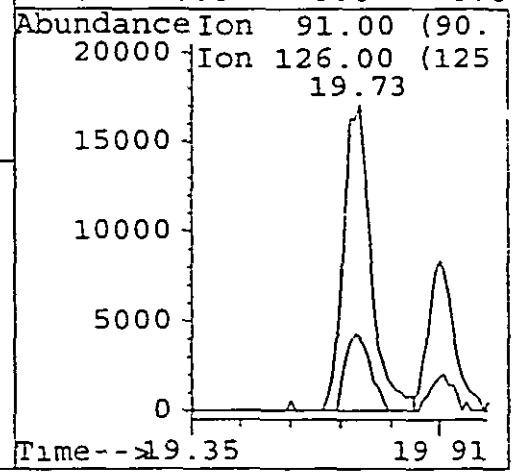




#48
2-Chlorotoluene
Concen: 0.64 ug/L
RT: 19.73 min Scan# 1619
Delta R.T. 0.00 min
Lab File: c8331.d
Acq: 2 Jun 95 5:03 pm

Tgt Ion:91 Resp: 72162

Ion	Ratio	Lower	Upper
91	100		
126	23.9	8.1	48.1
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search/Compound Report

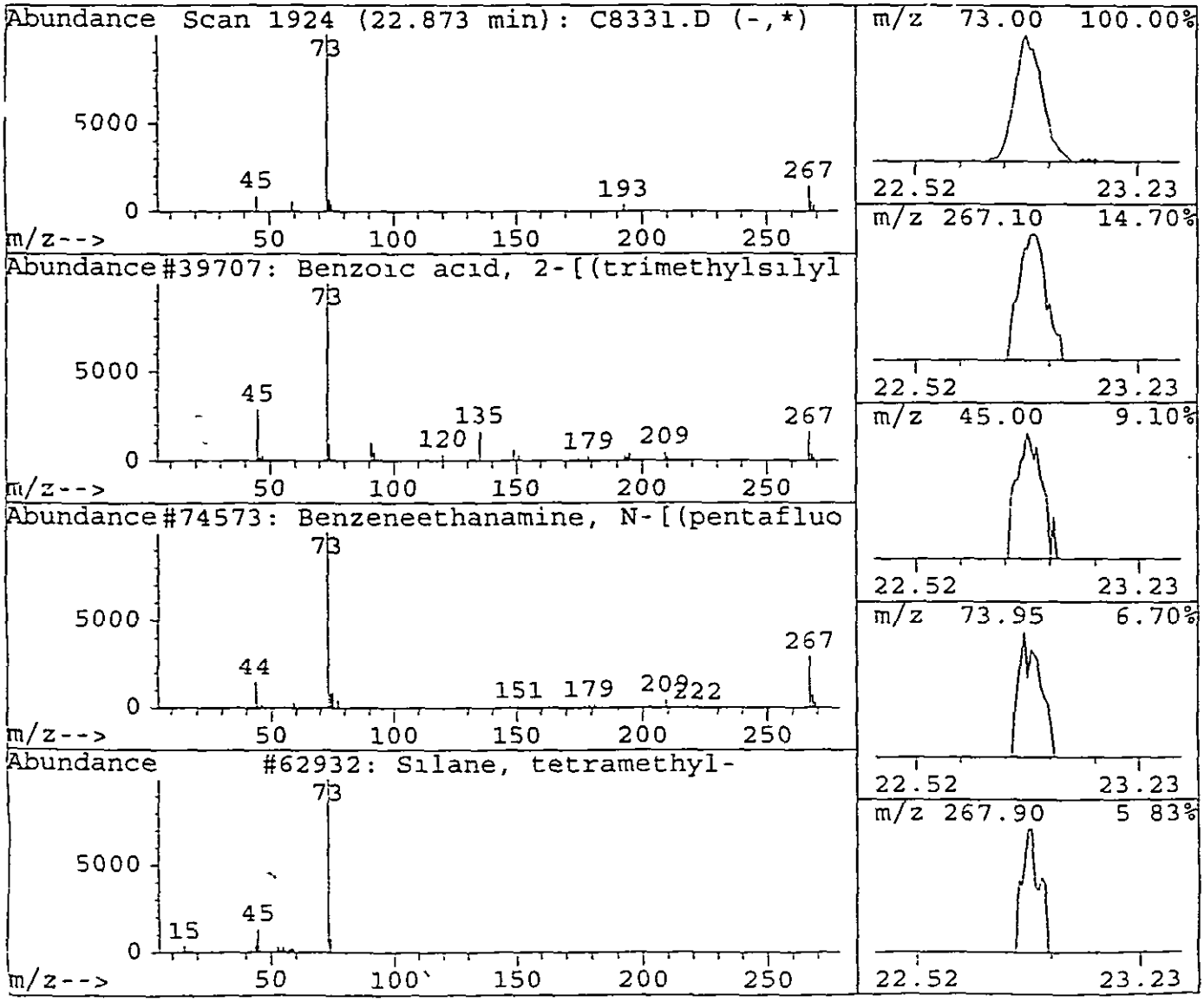
Data File : d:\hpchem\1\data\c8331.d
Acq On : 2 Jun 95 5:03 pm
Sample : 9523340
Misc : 25 ML

Vial: 6
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.
22.87	0.60 ug/L	161877	Fluorobenzene	11.84

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	9
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	4
3	Silane, tetramethyl-	62932	000075-76-3	2
4	N-Ethylformamide	292	000627-45-2	4
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	2



1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523341 FB
Lab File ID: C8332.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	6.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: _EMSL ANALYTICAL_____ Lab Sample ID: _9523341 FB_____
Matrix (soil/water): _WATER_____ Lab File ID: ___C8332.D_____
Sample wt/vol: _25_mL_____ Date Received: _05/22/95_____
Level (low/med): _LOW_____ Date Analyzed: _06/02/95_____
% Moisture: not dec.: _NA_____ Dilution Factor: __1_____
GC Column: _DB-624 x 75m_ ID: _0.53mm_ Soil Aliquot Volume: ____NA____
Soil Extract Volume: ___NA____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _ug/L__	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
9523341V
FB

80

Lab Name: EMSL ANALYTICAL Contract

Project No. Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9523341V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8332 D

Level (low/med) LOW Date Received 5/22/95

% Moisture. not dec NA Date Analyzed 6/2/95

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 1 Concentration Units (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est Conc	Q
1.	Column Bleed	22.87	1	J
2				
3				
4				
5				
6				
7				
8				
9.				
10				
11				
12				
13				
14.				
15				
16				
17				
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19				
20				
21				
22				
23				
24.				
25				
26				
27				
28				
29				
30				

Quantitation Report

81

Data File : d:\hpchem\1\data\c8332.d
Acq On : 2 Jun 95 5:39 pm
Sample : 9523341
Misc : 25 ML
Quant Time: Jun 3 14:14 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	685338	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.09	95	354996	5.19	ug/L	103.85%
57) 1,2-Dichlorobenzene-d4	21.87	152	175930	5.63	ug/L	112.67%
Target Compounds						Qvalue
9) Methylene chloride	7.41	84	236338	6.30	ug/L	97

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

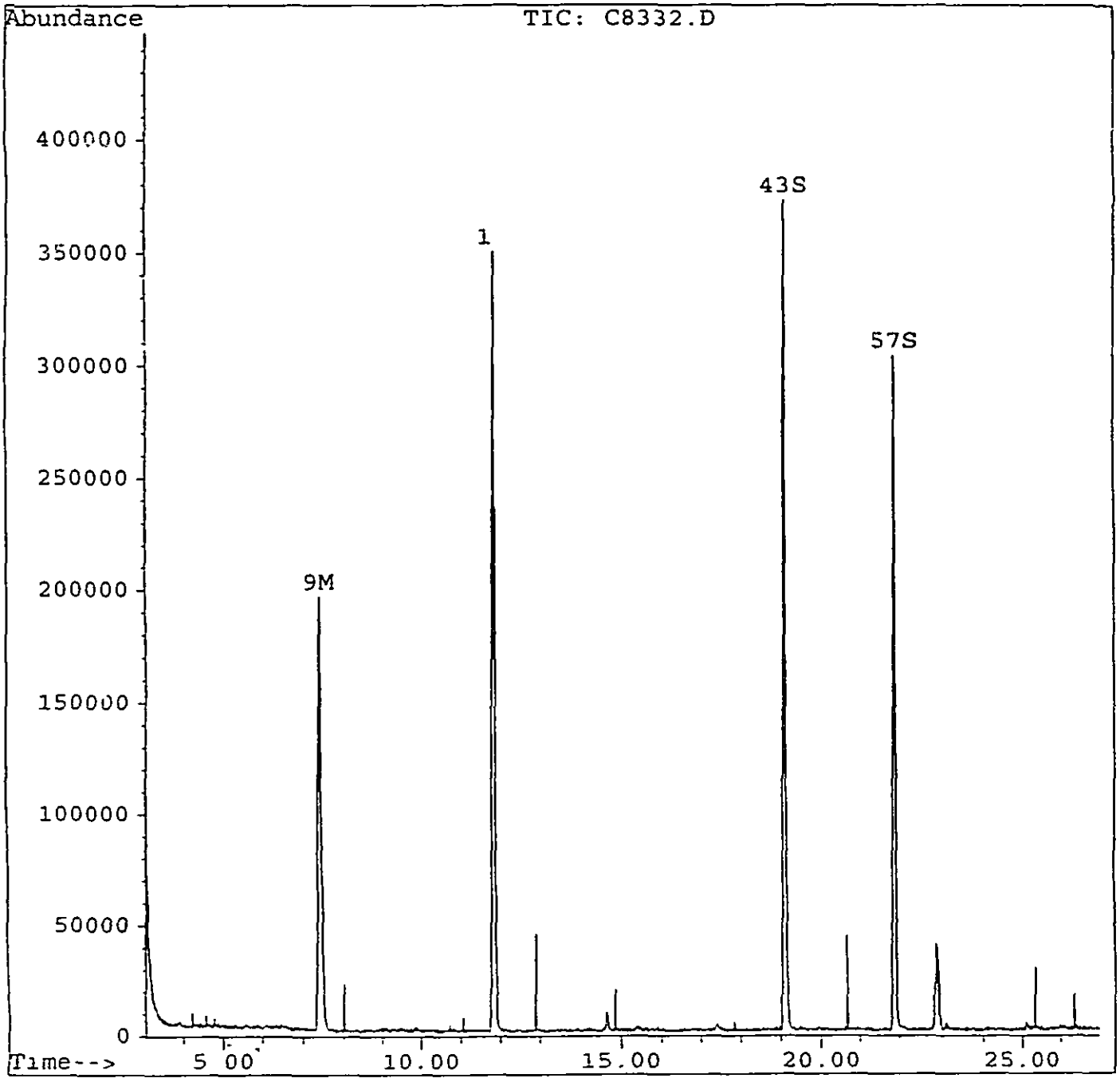
Quantitation Report

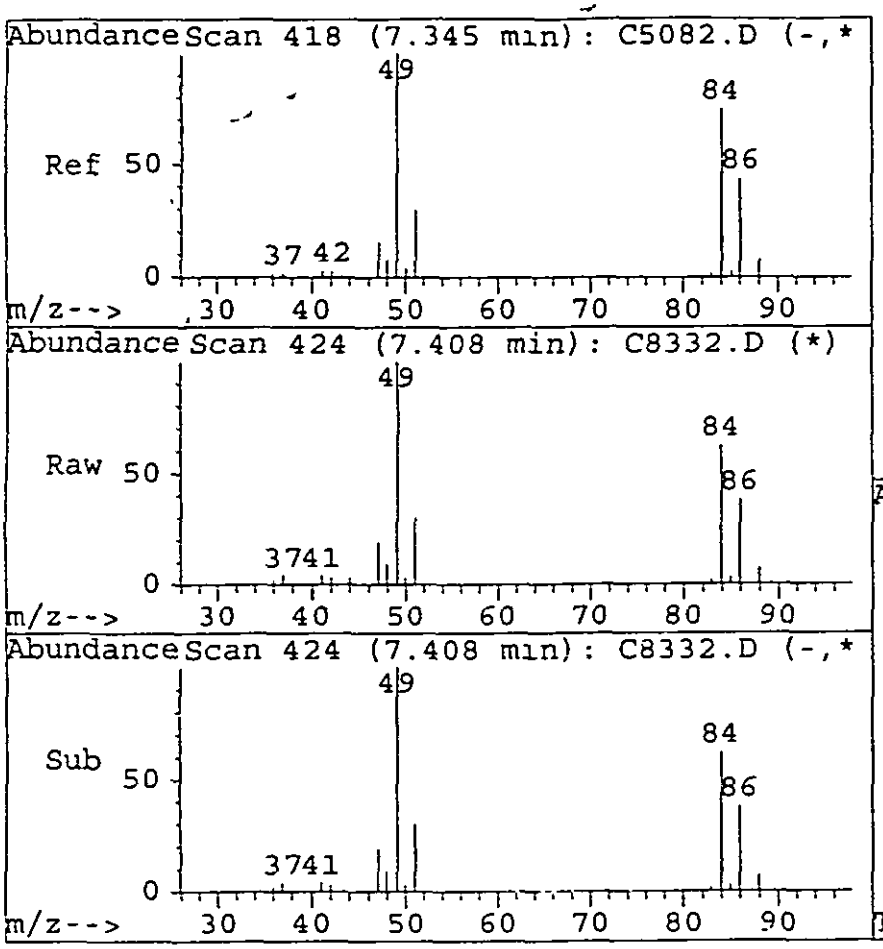
82

Data File : d:\hpchem\1\data\c8332.d
Acq On : 2 Jun 95 5:39 pm
Sample : 9523341
Misc : 25 ML
Quant Time: Jun 3 14:14 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

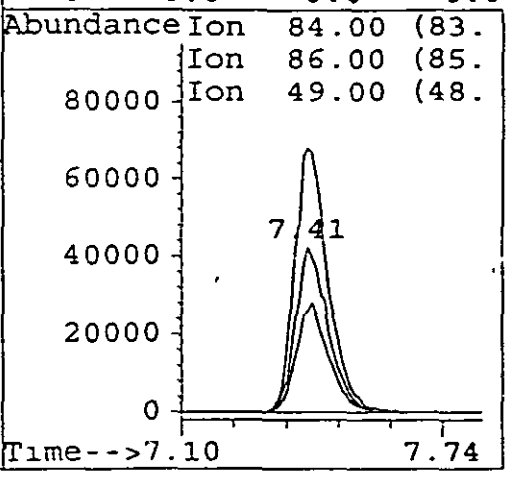




#9
Methylene chloride
Concen: 6.30 ug/L
RT: 7.41 min Scan# 424
Delta R.T. 0.00 min
Lab File: c8332.d
Acq: 2 Jun 95 5:39 pm

Tgt Ion:84 Resp: 236338

Ion	Ratio	Lower	Upper
84	100		
86	61.2	43.1	83.1
49	160.2	136.3	176.3
0	0.0	0.0	0.0



1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0 53mm
Soil Extract Volume: NA

Lab Sample ID: 9523342 Thwl-2931792
Lab File ID: C8333.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.2	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name. EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9523342 MW1-293/792
Lab File ID: C8333.D
Date Received: 05/22/95
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

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

CAS NO.	COMPOUND		COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
9523342V
TAQ1-253/792

86

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9523342V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8333 D

Level (low/med) LOW Date Received 5/22/95

% Moisture not dec NA Date Analyzed 6/2/95

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				
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7				
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30				

Quantitation Report

87

Data File : d:\hpchem\1\data\c8333.d
Acq On : 2 Jun 95 6:17 pm
Sample : 9523342
Misc : 25 ML
Quant Time: Jun 3 14:17 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 May 30 13:15.19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.84	96	725874	5 00 ug/L	0.00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.09	95	377112	5.21 ug/L	104 16%
57) 1,2-Dichlorobenzene-d4	21.87	152	180021	5.44 ug/L	108 85%
Target Compounds					Qvalue
9) Methylene chloride	7 40	84	87147	2.19 ug/L	96

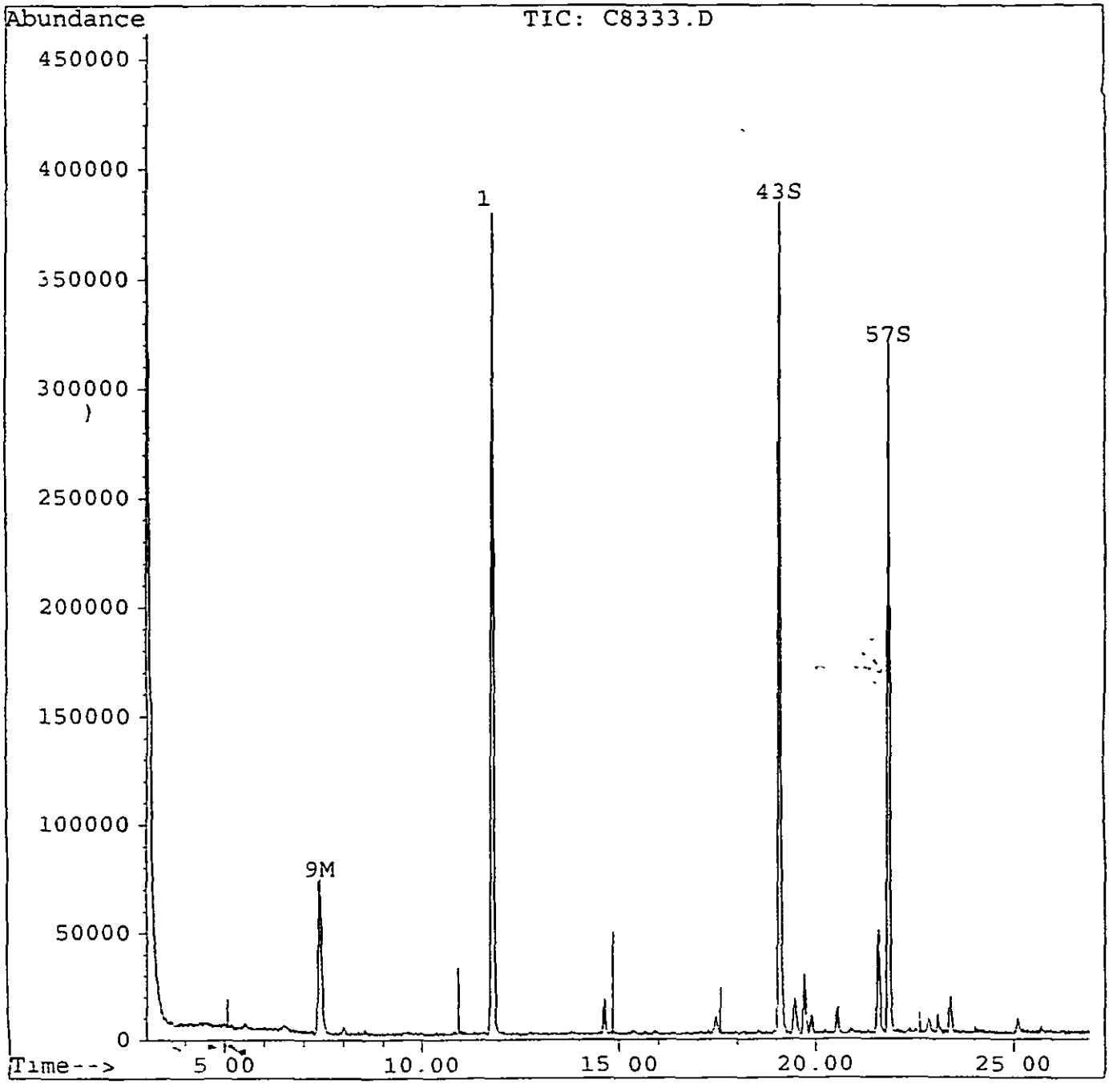
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8333.d
Acq On : 2 Jun 95 6:17 pm
Sample : 9523342
Misc : 25 ML
Quant Time: Jun 3 14:17 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



2A

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	1PPB STD	112	118			
02	VBLK01	106	112			
03	9523339V	108	115			
04	9523340V	103	108			
05	9523341V	104	113			
06	9523342V	104	109			
07	9523343V	103	111			
08	9523163V	104	112			
09	9523167V	107	104			
10	9523166V	105	113			
11	9523343MS	105	109			
12	9523343MSD	108	114			
13	10PPBQCS	102	104			
14						
15						
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19						
20						
21						
22						
23						
24						
25						
26						
27						
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

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 91

VBLK01

Lab Name. EMSL ANALYTICAL Contract:

Project No · Site. Location Group

Lab File ID C8329 D Lab Sample ID M. BLANK

Date Analyzed 6/2/95 Time Analyzed 1550

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	1PPB STD	1PPB STD	C8328 D	1514
02	9523339V	9523339V	C8330 D	1626
03	9523340V	9523340V	C8331 D	1703
04	9523341V	9523341V	C8332 D	1739
05	9523342V	9523342V	C8333 D	1817
06	9523343V	9523343V	C8334 D	1853
07	9523163V	9523163V	C8335 D	1929
08	9523167V	9523167V	C8336 D	2004
09	9523166V	9523166V	C8337 D	2040
10	9523343MS	23343MS	C8338 D	2115
11	9523343MSD	23343MSD	C8339 D	2150
12	10PPBQCS	10PPBQCS	C8340 D	2224
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COMMENTS

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: METHOD BLANK
Lab File ID: C8329.D
Date Received: NA
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	4.7	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene(total)	50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: METHOD BLANK
Lab File ID: C8329.D
Date Received: NA
Date Analyzed: 06/02/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

1E

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: C8329 D

Level (low/med) LOW Date Received NA

% Moisture: not dec NA Date Analyzed. 6/2/95

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				
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30				

Quantitation Report

Data File : d:\hpchem\1\data\c8329.d
Acq On : 2 Jun 95 3:50 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 3 14:08 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.84	96	689722	5.00 ug/L	0.00
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.10	95	364668	5.30 ug/L	106.00%
57) 1,2-Dichlorobenzene-d4	21.88	152	176494	5.62 ug/L	112.32%
Target Compounds					Qvalue
9) Methylene chloride	7.42	84	178459	4.73 ug/L	96

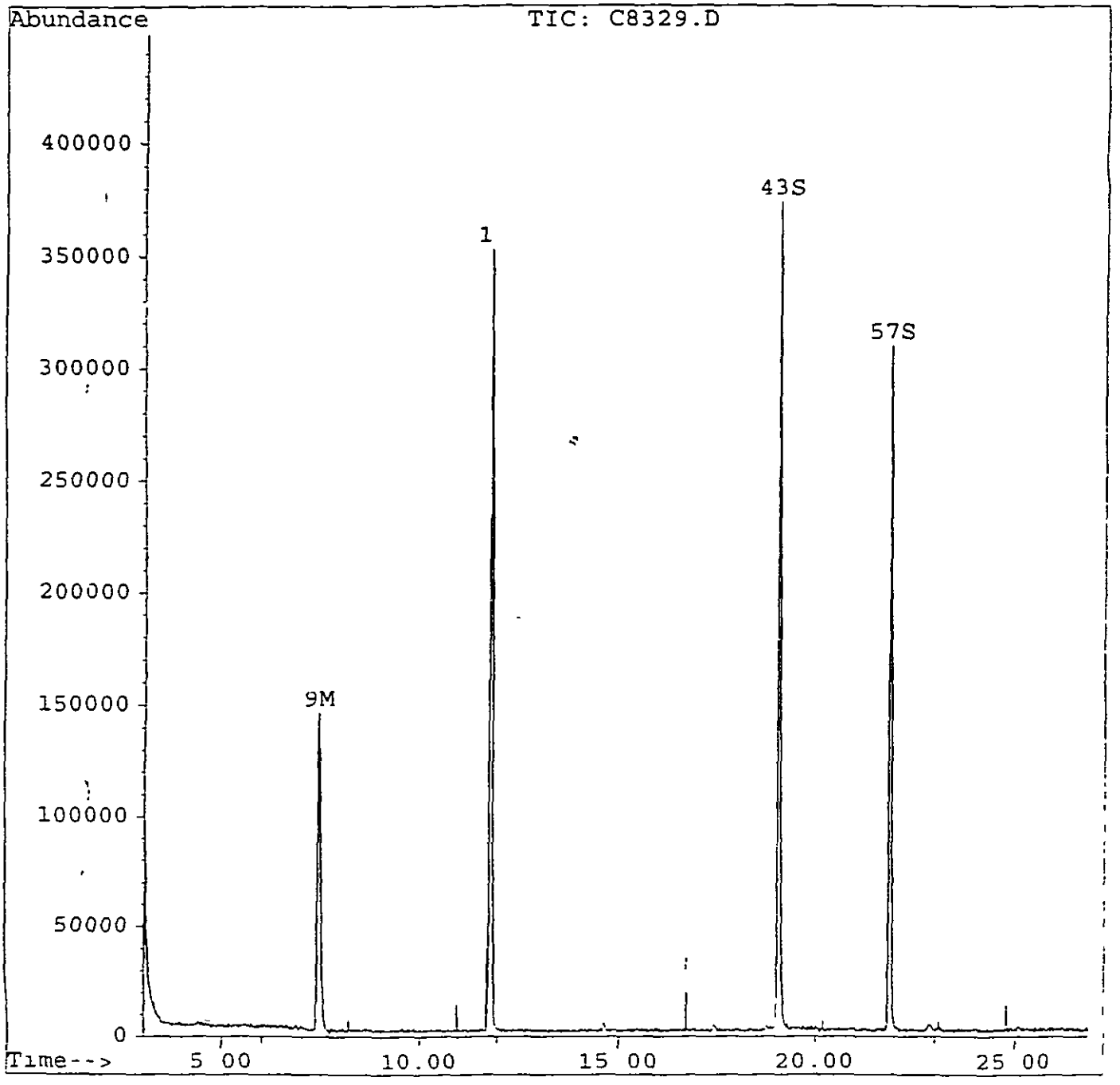
(#) = qualifier out of range (m) = manual integration

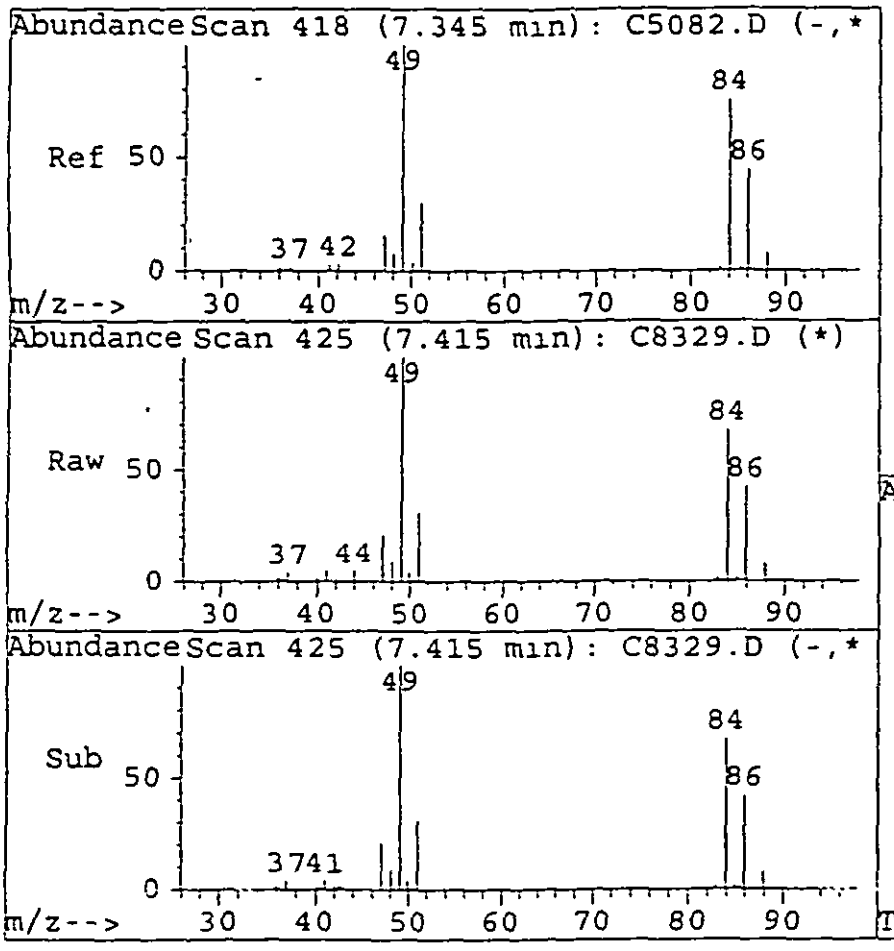
Quantitation Report

Data File : d:\hpchem\1\data\c8329.d
Acq On : 2 Jun 95 3:50 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 3 14:08 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

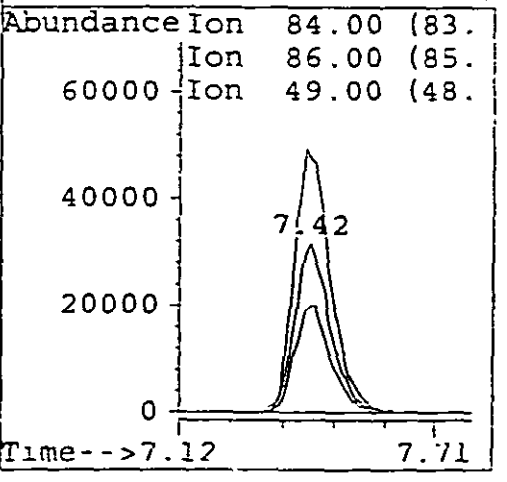




#9
Methylene chloride
Concen: 4.73 ug/L
RT: 7.42 min Scan# 425
Delta R.T. 0.01 min
Lab File: c8329.d
Acq: 2 Jun 95 3:50 pm

Tgt Ion:84 Resp: 178459

Ion	Ratio	Lower	Upper
84	100		
86	63.3	43.1	83.1
49	149.6	136.3	176.3
0	0.0	0.0	0.0



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Initial Calibration

Non-Spiked Sample: C8334.D

	Spike Sample	Spike Duplicate Sample
File ID :	C8338.D	C8339.D
Sample :	9523343 MS	9523343 MSD
Acq Time:	2 Jun 95 9:15 pm	2 Jun 95 9:50 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Dichlorodifluorometh	0.0	10	10	10	96	97	1	25	80-120
Chloromethane	0.0	10	10	10	101	98	3	25	80-120
Vinyl chloride	0.0	10	9	10	93	96	6	25	80-120
Bromomethane	0.0	10	10	10	101	103	2	25	80-120
Chloroethane	0.0	10	11	11	107	105	2	25	80-120
Trichlorofluorometha	0.0	10	10	10	98	101	2	25	80-120
1,1-Dichloroethene	0.0	10	9	9	87	94	8	25	80-120
Methylene chloride	1.4	10	8	8	69#	70#	1	25	80-120
Trans-1,2-Dichloroet	0.0	10	10	10	95	99	4	25	80-120
1,1-Dichloroethane	0.0	10	10	10	102	103	1	25	80-120
2,2-Dichloropropane	0.0	10	8	8	81	82	2	25	80-120
Cis-1,2-Dichloroethe	0.0	10	10	10	100	102	3	25	80-120
Bromochloromethane	0.0	10	10	11	101	107	5	25	80-120
Chloroform	0.0	10	10	10	101	103	2	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	102	101	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	97	101	4	25	80-120
1,1-Dichloropropene	0.0	10	9	10	86	97	12	25	80-120
Benzene	0.0	10	10	10	99	101	2	25	80-120
1,2-Dichloroethane	0.0	10	10	11	104	107	2	25	80-120
Trichloroethene	0.0	10	10	10	98	99	1	25	80-120
1,2-Dichloropropane	0.0	10	10	10	105	105	0	25	80-120
Dibromomethane	0.0	10	10	11	102	108	5	25	80-120
Bromodichloromethane	0.0	10	10	11	99	105	6	25	80-120
Cis-1,3-Dichloroprop	0.0	10	10	10	97	102	5	25	80-120
Toluene	0.0	10	10	10	95	99	4	25	80-120
Trans-1,3-Dichloropr	0.0	10	10	10	96	104	8	25	80-120
1,1,2-Trichloroethan	0.0	10	11	11	106	108	3	25	80-120
Tetrachloroethene	0.0	10	10	10	98	100	2	25	80-120
1,3-Dichloropropane	0.0	10	11	11	105	108	3	25	80-120
Dibromochloromethane	0.0	10	10	11	104	105	2	25	80-120
1,2-Dibromomethane	0.0	10	10	11	105	109	4	25	80-120
Chlorobenzene	0.0	10	10	10	102	104	2	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	11	11	113	105	7	25	80-120
Ethylbenzene	0.0	10	9	10	87	98	12	25	80-120
Xylene (para & meta)	0.0	20	13	18	65#	90	32#	25	80-120
Xylene (Ortho)	0.0	10	7	9	70#	94	30#	25	80-120
Styrene	0.0	10	2	4	21#	39#	62#	25	80-120
Bromoform	0.0	10	10	11	99	105	6	25	80-120
Isopropylbenzene	0.0	10	9	10	93	98	6	25	80-120
Bromobenzene	0.0	10	10	11	103	107	3	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	12	12	122#	124#	1	25	80-120
1,2,3-Trichloropropa	0.0	10	11	12	107	118	10	25	80-120

Quantitation Report

Data File : d:\hpchem\1\data\c8338.d
Acq On : 2 Jun 95 9:15 pm
Sample : 9523343 MS
Misc : 25 ML
Quant Time: Jun 18 11:08 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.85	96	668860	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.11	95	350931	5.26	ug/L		105.19%
57) 1,2-Dichlorobenzene-d4	21.89	152	166698	5.47	ug/L		109 39%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.30	85	506687	9.56	ug/L		99
3) Chloromethane	3.67	50	315932	10.12	ug/L		93
4) Vinyl chloride	3.89	62	326875	9.29	ug/L		96
5) Bromomethane	4.55	94	240023	10.09	ug/L		99
6) Chloroethane	4.79	64	221059	10.72	ug/L		90
7) Trichlorofluoromethane	5.36	101	772924	9.83	ug/L		99
8) 1,1-Dichloroethene	6.45	96	301226	8.73	ug/L	#	85
9) Methylene chloride	7.43	84	303995	8.30	ug/L		99
10) trans-1,2-Dichloroethene	7.97	96	346768	9.51	ug/L		96
12) 1,1-Dichloroethane	8.78	63	742577	10.18	ug/L		95
13) 2,2-Dichloropropane	9.84	77	577515	8.08	ug/L		99
14) cis-1,2-Dichloroethene	9.84	96	342923	9.98	ug/L		95
16) Bromochloromethane	10.26	128	121916	10.12	ug/L		95
17) Chloroform	10.41	83	695548	10.16	ug/L		99
18) 1,1,1-Trichloroethane	10.74	97	773283	10.21	ug/L		99
19) Carbon tetrachloride	11.05	117	680258	9.67	ug/L		99
20) 1,1-Dichloropropene	11.02	75	569965	8.61	ug/L		95
21) Benzene	11.37	78	1151235	9.88	ug/L		95
22) 1,2-Dichloroethane	11.37	62	300143	10.50	ug/L		96
23) Trichloroethene	12.49	95	504205	9.76	ug/L		99
24) 1,2-Dichloropropane	12.84	63	399285	10.47	ug/L		100
25) Dibromomethane	13.05	93	158049	10.23	ug/L		98
26) Bromodichloromethane	13.32	83	526552	9.94	ug/L		99
27) cis-1,3-Dichloropropene	14.08	75	441899	9.65	ug/L		97
28) Toluene	14.65	92	793802	9.59	ug/L		97
29) trans-1,3-Dichloropropene	15.00	75	304361	9.63	ug/L		94
30) 1,1,2-Trichloroethane	15.30	83	156077	10.57	ug/L		96
31) Tetrachloroethene	15.62	166	509635	9.83	ug/L		98
32) 1,3-Dichloropropane	15.60	76	308567	10.54	ug/L		98
33) Dibromochloromethane	16.00	129	298279	10.38	ug/L		99
34) 1,2-Dibromomethane	16.20	107	213188	10.46	ug/L		97
35) Chlorobenzene	17.08	112	879010	10.20	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17 21	131	387142	11.31	ug/L		96
37) Ethylbenzene	17 27	91	1525869	8.76	ug/L		95
38) Xylene (para & meta)	17.48	106	809779	12 95	ug/L		95
39) Xylene (Ortho)	18.18	106	384862	6 95	ug/L		95
40) Styrene	18 19	104	177099	2.07	ug/L	#	67

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

100

Data File : d:\hpchem\1\data\c8338.d
Acq On : 2 Jun 95 9:15 pm
Sample : 9523343 MS
Misc : 25 ML
Quant Time: Jun 18 11:08 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	140076	9.93	ug/L		88
42)	Isopropylbenzene	18.84	105	1649700	9.27	ug/L	m	45
44)	Bromobenzene	19.38	156	331886	10.35	ug/L	#	91
45)	1,1,2,2-Tetrachloroethane	19.33	83	193031	12.24	ug/L		96
46)	1,2,3-Trichloropropane	19.40	75	204110	10.66	ug/L	#	53
47)	n-Propylbenzene	19.58	91	2079546	8.98	ug/L		99
48)	2-Chlorotoluene	19.74	91	1387983	10.80	ug/L		100
49)	4-Chlorotoluene	19.92	91	1404670	9.21	ug/L		85
50)	1,3,5-Trimethylbenzene	19.90	105	573100	3.89	ug/L		96
51)	tert-Butylbenzene	20.49	119	1507256	9.86	ug/L		96
52)	1,2,4-Trimethylbenzene	20.57	105	534017	3.96	ug/L		98
53)	sec-Butylbenzene	20.89	105	2145893	9.48	ug/L		99
54)	1,3-Dichlorobenzene	21.09	146	690338	10.55	ug/L		100
55)	4-Isopropyltoluene	21.15	119	1220351	7.22	ug/L		98
56)	1,4-Dichlorobenzene	21.24	146	685885	10.57	ug/L		92
58)	1,2-Dichlorobenzene	21.92	146	524499	10.76	ug/L		98
59)	n-Butylbenzene	21.90	91	1648408	9.09	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.32	75	41948	10.47	ug/L		90
61)	1,2,4-Trichlorobenzene	24.89	180	395288	11.03	ug/L		96
62)	Hexachlorobutadiene	25.23	225	446035	10.32	ug/L		97
63)	Naphthalene	25.35	128	359109	11.58	ug/L		100
64)	1,2,3-Trichlorobenzene	25.82	180	284412	11.38	ug/L		95
65)	Methyl-tert butyl ether	8.01	73	398581	10.20	ug/L		93
66)	tert-Butyl Alcohol	7.76	59	12669	21.16	ug/L		100

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

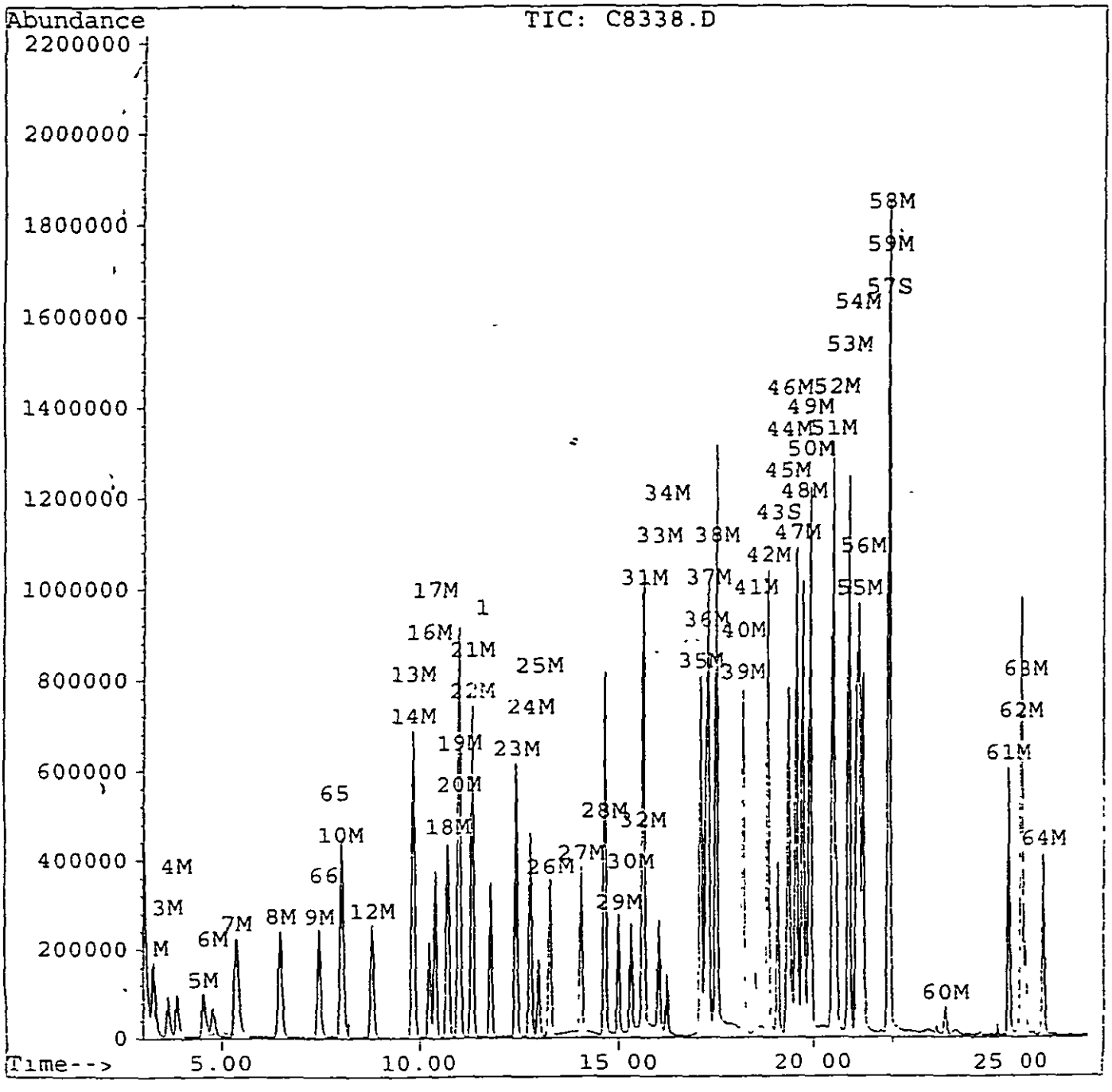
Quantitation Report

101

Data File : d:\hpchem\1\data\c8338.d
Acq On : 2 Jun 95 9:15 pm
Sample : 9523343 MS
Misc : 25 ML
Quant Time: Jun 18 11:08 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8339.d
Acq On : 2 Jun 95 9:50 pm
Sample : 9523343 MSD
Misc : 25 ML
Quant Time: Jun 2 22:17 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.85	96	671183	5.00 ug/L	0.01
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.10	95	363013	5.42 ug/L	108.44%
57) 1,2-Dichlorobenzene-d4	21.89	152	174022	5.69 ug/L	113.80%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.30	85	514610	9.67 ug/L	95
3) Chloromethane	3.68	50	307626	9.82 ug/L	98
4) Vinyl chloride	3.90	62	347134	9.84 ug/L	98
5) Bromomethane	4.55	94	244863	10.26 ug/L	98
6) Chloroethane	4.78	64	217226	10.50 ug/L	99
7) Trichlorofluoromethane	5.37	101	794300	10.07 ug/L	100
8) 1,1-Dichloroethene	6.45	96	326026	9.41 ug/L	93
9) Methylene chloride	7.42	84	307771	8.37 ug/L	96
10) trans-1,2-Dichloroethene	8.00	96	363849	9.94 ug/L	96
12) 1,1-Dichloroethane	8.77	63	753547	10.29 ug/L	95
13) 2,2-Dichloropropane	9.84	77	591780	8.25 ug/L	95
14) cis-1,2-Dichloroethene	9.85	96	353277	10.24 ug/L	100
16) Bromochloromethane	10.26	128	128809	10.66 ug/L #	86
17) Chloroform	10.42	83	709486	10.33 ug/L	98
18) 1,1,1-Trichloroethane	10.74	97	767323	10.09 ug/L	98
19) Carbon tetrachloride	11.05	117	712622	10.10 ug/L	97
20) 1,1-Dichloropropene	11.03	75	645965	9.73 ug/L	98
21) Benzene	11.38	78	1177103	10.07 ug/L	98
22) 1,2-Dichloroethane	11.38	62	308090	10.74 ug/L	94
23) Trichloroethene	12.49	95	512750	9.90 ug/L	98
24) 1,2-Dichloropropane	12.85	63	401590	10.50 ug/L	99
25) Dibromomethane	13.05	93	166737	10.76 ug/L	97
26) Bromodichloromethane	13.32	83	559898	10.53 ug/L	97
27) cis-1,3-Dichloropropene	14.07	75	468363	10.20 ug/L	100
28) Toluene	14 66	92	826190	9.95 ug/L	96
29) trans-1,3-Dichloropropene	15.00	75	329303	10.38 ug/L	98
30) 1,1,2-Trichloroethane	15.32	83	160754	10.85 ug/L	94
31) Tetrachloroethene	15.63	166	521708	10.03 ug/L	99
32) 1,3-Dichloropropane	15.60	76	317842	10.82 ug/L	98
33) Dibromochloromethane	16 01	129	303964	10.54 ug/L	99
34) 1,2-Dibromomethane	16.20	107	222064	10.86 ug/L	97
35) Chlorobenzene	17.08	112	898884	10.39 ug/L	99
36) 1,1,1,2-Tetrachloroethane	17 22	131	361598	10.53 ug/L	98
37) Ethylbenzene	17.27	91	1723486	9 86 ug/L	99
38) Xylene (para & meta)	17 48	106	1124706	17.92 ug/L	90
39) Xylene (Ortho)	18.18	106	524326	9 44 ug/L	96
40) Styrene	18 20	104	338953	3.94 ug/L	98

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

Quantitation Report

Data File : d:\hpchem\1\data\c8339.d
Acq On : 2 Jun 95 9:50 pm
Sample : 9523343 MSD
Misc : 25 ML
Quant Time: Jun 2 22:17 1995

Vial: 14 103
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41) Bromoform	18.52	173	148876	10.52	ug/L		90
42) Isopropylbenzene	18.84	105	1755979	9.83	ug/L		90
44) Bromobenzene	19.38	156	343805	10.68	ug/L	#	89
45) 1,1,2,2-Tetrachloroethane	19.34	83	195543	12.36	ug/L		98
46) 1,2,3-Trichloropropane	19.41	75	226162	11.77	ug/L		90
47) n-Propylbenzene	19.57	91	2297109	9.89	ug/L		99
48) 2-Chlorotoluene	19.74	91	1404422	10.89	ug/L		100
49) 4-Chlorotoluene	19.92	91	1519434	9.93	ug/L		83
50) 1,3,5-Trimethylbenzene	19.89	105	1127211	7.62	ug/L		97
51) tert-Butylbenzene	20.49	119	1533078	10.00	ug/L		96
52) 1,2,4-Trimethylbenzene	20.57	105	874755	6.46	ug/L		98
53) sec-Butylbenzene	20.89	105	2237152	9.84	ug/L		99
54) 1,3-Dichlorobenzene	21.09	146	692686	10.55	ug/L		97
55) 4-Isopropyltoluene	21.15	119	1588304	9.36	ug/L		100
56) 1,4-Dichlorobenzene	21.24	146	693155	10.64	ug/L		91
58) 1,2-Dichlorobenzene	21.92	146	536739	10.97	ug/L		98
59) n-Butylbenzene	21.90	91	1829900	10.06	ug/L		98
60) 1,2-Dibromo-3-chloropropan	23.33	75	44811	11.15	ug/L		87
61) 1,2,4-Trichlorobenzene	24.90	180	403043	11.20	ug/L		99
62) Hexachlorobutadiene	25.24	225	430915	9.93	ug/L		98
63) Naphthalene	25.35	128	369223	11.86	ug/L		100
64) 1,2,3-Trichlorobenzene	25.82	180	297987	11.88	ug/L		99
65) Methyl-tert butyl ether	8.02	73	424237	10.82	ug/L		97
66) tert-Butyl Alcohol	7.72	59	12194	20.29	ug/L		100

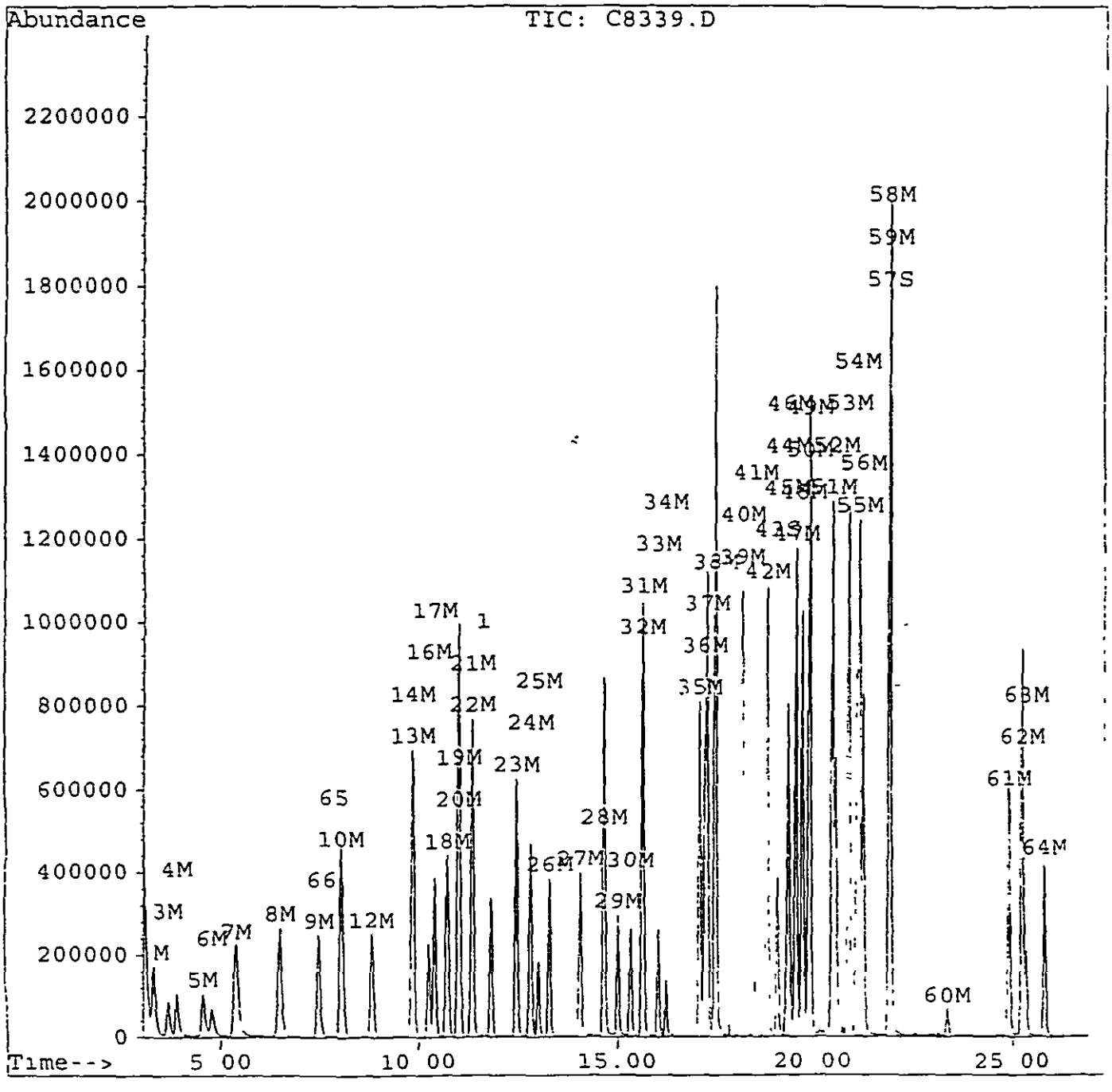
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8339.d
Acq On : 2 Jun 95 9:50 pm
Sample : 9523343 MSD
Misc : 25 ML
Quant Time: Jun 2 22:17 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



EMSL

GC/MS SEMIVOLATILE DATA PACKAGE

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Nam EMSL Analytical Contract· _____

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

Lab File ID: B7750.D DFTPP Injection Date. 05/30/95

Instrument ID: ABNA DFTPP Injection Time. 0914

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30 0 - 80.0% of mass 198	51.3		
68	Less than 2.0% of mass 69	0 0	0.0	)1
69	Mass 69 relative abundance	61.1		
70	Less than 2.0% of mass 69	0 3	0.6	)1
127	25.0 - 75.0% of mass 198	44.4		
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	7 5		
275	10.0 - 30.0% of mass 198	23 1		
365	Greater than 0.75% of mass 198	2 8		
441	Present, but less than mass 443	9 3		
442	40.0 - 110.0% of mass 198	64.3		
443	15.0 - 24 0% of mass 442	13 1	20.3	)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	B7751.D	05/30/95	0944
#		50 STANDARD	B7752 D	05/30/95	1035
#		80 STANDARD	B7753.D	05/30/95	1127
#		120 STANDARD	B7754 D	05/30/95	1220
#		160 STANDARD	B7755.D	05/30/95	1312
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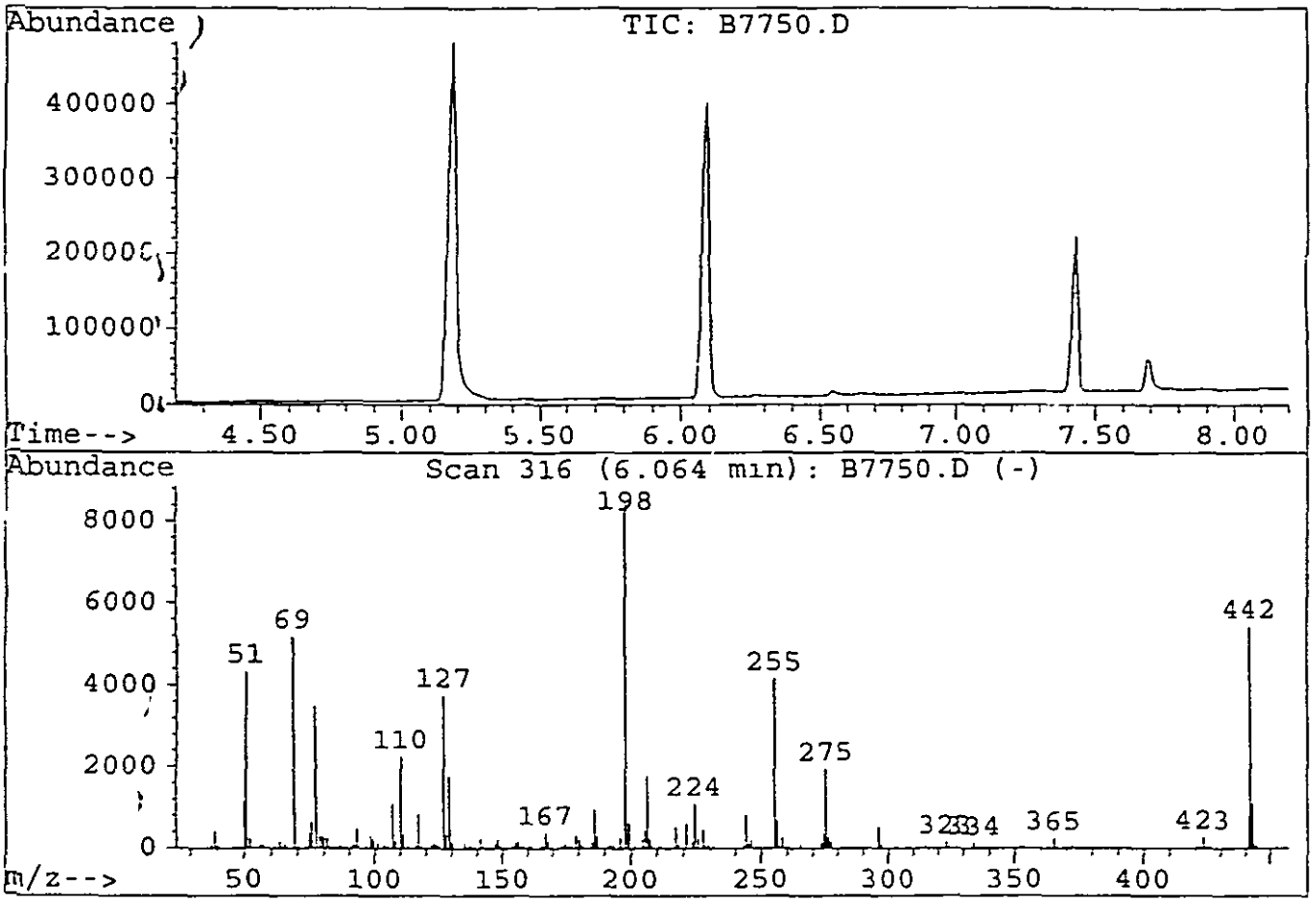
Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

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



Peak Apex is scan: 330

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.3	4339	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	61 1	5169	PASS
70	69	0	2	0 6	29	PASS
127	198	40	60	44.4	3758	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	8456	PASS
199	198	5	9	7 5	631	PASS
275	198	10	30	23.1	1951	PASS
365	198	1	100	2 8	238	PASS
441	443	0	100	71.3	788	PASS
442	198	40	100	64.3	5436	PASS
443	442	17	23	20.3	1105	PASS

c 1 316 (6.064 min): B7750.D

c ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	111	58.05	13	78.05	284	96.05	58
39.05	417	61.15	74	79.05	332	97.05	35
40.10	59	63.05	154	79.95	245	98.05	313
50.05	1128	64.05	37	81.05	252	99.05	224
51.00	4339	65.05	105	82.05	44	100.95	120
52.05	241	68.95	5169	83.10	16	103.15	68
53.00	10	70.05	29	86.15	75	103.95	87
54.05	4	73.05	43	91.05	88	105.05	85
55.05	32	74.05	376	91.95	98	107.05	1091
56.05	93	75.05	636	92.95	482	107.95	178
57.05	94	77.00	3509	94.05	48	110.05	2258

can 316 (6.064 min): B7750.D

c ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.05	347	128.00	343	154.10	63	168.00	172
112.15	17	129.00	1776	155.00	140	169.10	54
113.05	65	130.00	152	156.00	177	173.00	40
116.15	81	135.00	123	157.10	46	173.90	77
117.05	837	136.00	50	157.80	35	175.00	147
118.05	55	137.10	72	158.00	32	176.10	56
121.90	87	141.00	242	160.00	52	177.10	85
123.00	132	142.00	80	161.10	108	179.00	311
124.00	82	147.00	121	165.00	75	180.10	207
124.90	49	148.00	213	166.20	66	181.10	81
127.00	3758	148.90	57	167.00	382	182.10	5

n 316 (6.064 min): B7750.D

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
185.10	155	205.05	451	222.95	151	249.05	34
186.10	970	206.05	1785	224.05	1088	255.05	4157
187.10	295	207.05	238	225.05	239	256.05	688
192.00	75	207.95	66	227.05	470	256.95	53
193.10	96	210.25	50	227.95	86	257.95	257
196.00	270	211.05	79	229.05	93	265.05	108
198.00	8456	211.65	38	230.95	42	273.05	139
199.00	631	215.35	52	243.05	75	274.05	352
201.35	77	216.95	525	244.05	828	275.05	1951
202.85	45	217.95	89	245.05	118	276.05	266
204.05	257	220.95	629	246.05	185	277.05	157

Scan 316 (6.064 min): B7750.D

ified:subtracted

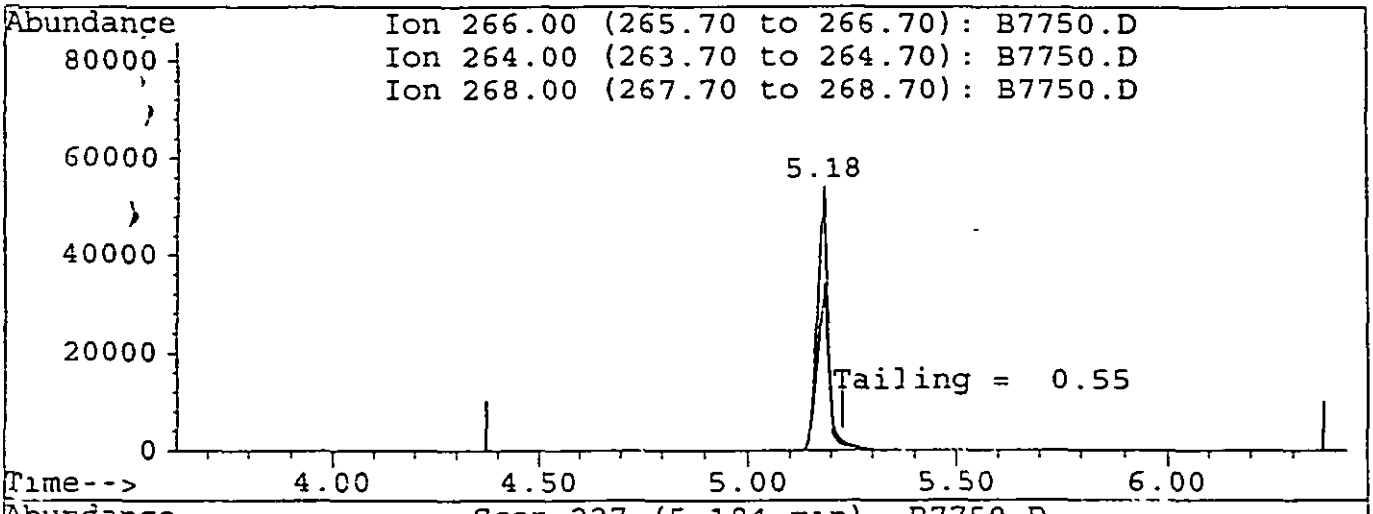
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
293.00	31	364.95	238				
296.00	527	372.05	89				
297.00	89	403.05	44				
303.00	67	420.95	40				
314.00	27	423.05	267				
314.90	61	424.05	52				
323.10	148	441.10	788				
324.10	39	442.00	5436				
334.00	124	443.00	1105				
352.10	49	444.10	101				
353.10	51						

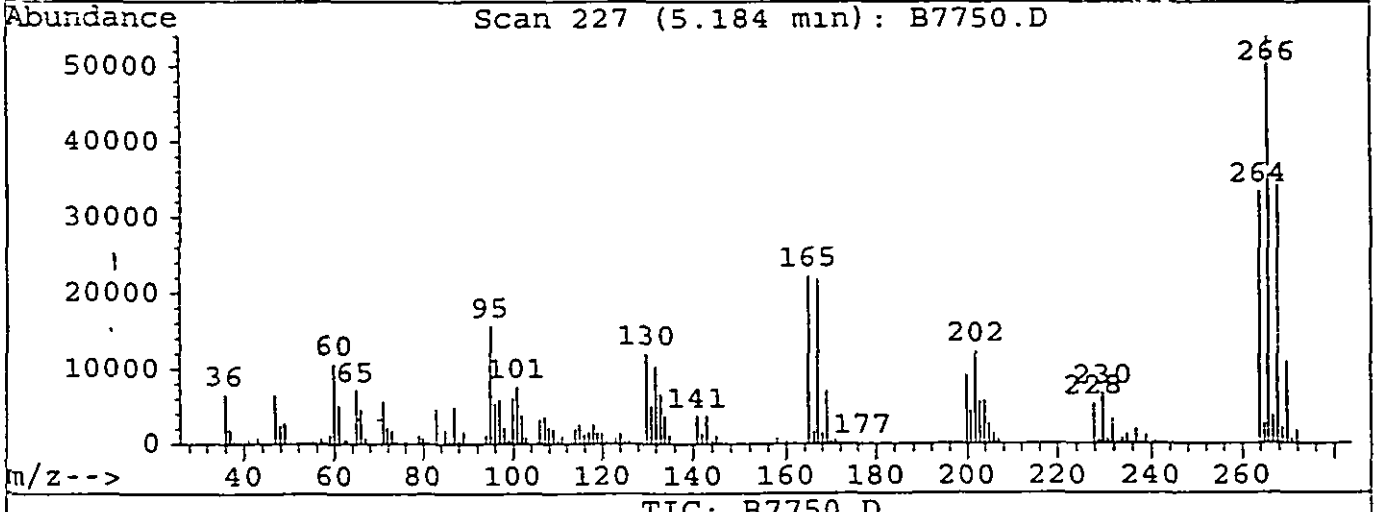
Quantitation Report

Data File . C:\HPCHEM\1\DATA2\B7750.D
Acq On : 30 May 95 9:14 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: May 30 8:29 1995

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

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration





TIC: B7750.D

(1) Pentachlorophenol (CM)

5.18min 321.74ug/mL

response 106272

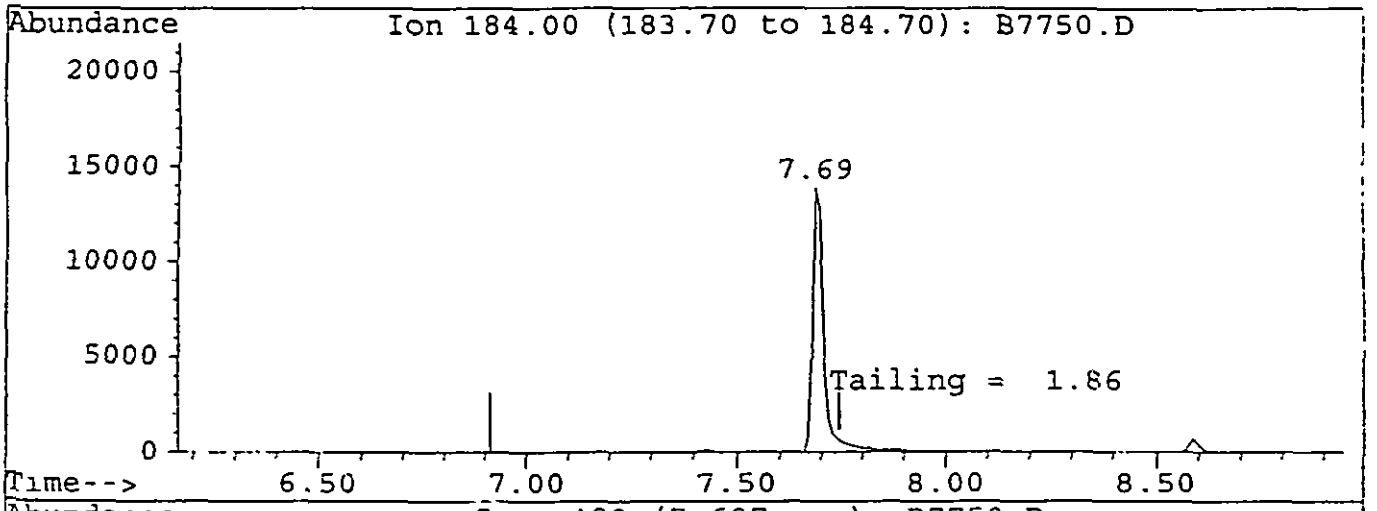
Ion	Exp%	Act%
266.00	100	100
264.00	64 30	62.02
268.00	64.70	63.47
0.00	0.00	0.00

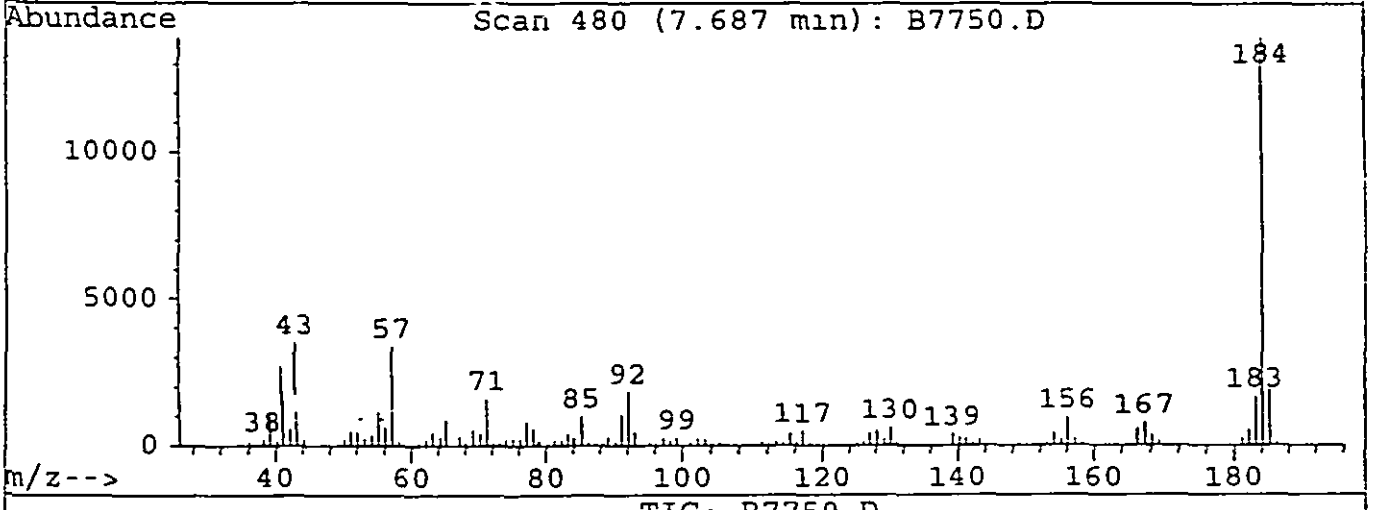
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7750.D
Acq On : 30 May 95 9:14 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: May 30 8·29 1995

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

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration





TIC: B7750.D

(2) Benzidine
7.69min 86.22ug/ml
response 26489

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 May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
1)	I	1,4-Dichlorobenzene-d	ISTD						
2)	S	2-Fluorophenol	1.046	1.205	1.170	1.071	1.165	1.131	6.09
3)	S	Phenol-d5	1.808	2.019	1.924	1.724	1.888	1.873	6.00
4)	M	N-nitrosodimethylamin	0.599	0.546	0.436	0.731		0.578	21 22
5)		Pyridine	0.424	0.364	0.429	0.496		0.428	12.65
6)	CM	Phenol	1.442	1.792	1.686	1.698	1.721	1.668	7.94
7)	MT	bis(2-Chloroethyl)eth	1.893	2.032	2.104	2.042	2.008	2.026	4.10
8)	M	2-Chlorophenol	1.138	1.284	1.307	1.245	1.372	1.269	6.83
9)	MT	1,3-Dichlorobenzene	1.295	1.401	1.490	1.416	1.320	1.385	5.65
10)	CM	1,4-Dichlorobenzene	1.318	1.468	1.512	1.469	1.379	1.429	5.51
11)	M	1,2-Dichlorobenzene	1.255	1.391	1.452	1.374	1.315	1.357	5.54
12)	T	2-Methylphenol	1.109	1.268	1.262	1.164	1.220	1.204	5.61
13)	M	bis(2-chloroisopropyl	1.886	1.860	1.988	1.730	1.878	1.868	4.92
14)	T	4-Methylphenol	1.216	1.432	1.310	1.310	1.320	1.322	5.82
15)	PM	N-Nitroso-Di-n-propyl	1.289	1.444	1.471	1.267	1.257	1.346	7.68
16)	M	Hexachloroethane	0.691	0.756	0.792	0.747	0.701	0.737	5.65
17)	I	Naphthalene-d8	ISTD						
18)	S	Nitrobenzene-d5	0.437	0.466	0.478	0.437	0.460	0.456	4.02
19)	M	Nitrobenzene	0.398	0.409	0.461	0.436	0.416	0.424	5.86
20)	M	Isophorone	0.776	0 850	0.875	0.817	1.149	0.893	16.52
21)	MC	2-Nitrophenol	0.189	0.225	0.225	0.200	0.213	0.210	7.50
22)	M	2,4-Dimethylphenol	0.362	0.429	0.388	0.382	0.407	0.394	6.49
23)	M	bis(2-Chloroethoxy)me	0.441	0.448	0.467	0.455	0.469	0.456	2.57
24)	MC	2,4-Dichlorophenol	0.271	0.299	0.307	0.292	0.322	0.298	6.39
25)	M	1,2,4-Trichlorobenzen	0.293	0.318	0.326	0.322	0.326	0.317	4.42
26)	M	Naphthalene	0.922	0.948	1 039	0.963	1.023	0.979	5.12
27)	T	4-Chloroaniline	0.455	0.465	0.471	0.468	0.457	0.463	1.47
28)	MC	Hexachlorobutadiene	0.175	0.186	0.189	0.186	0.190	0.185	3.26
29)	MC	4-Chloro-3-methylphen	0.355	0.396	0.398	0.385	0.385	0 384	4 45
30)	M	2-Chloronaphthalene	0.672	0.680	0.719	0.700	0.709	0.696	2.81
31)	T	2-Methylnaphthalene	0.890	0.985	0.640	0.702	0.711	0.786	18.46
32)	I	Acenaphthene-d10	ISTD						
33)	P	Hexachlorocyclopentad	0.294	0.303	0.302	0.258	0.233	0.278	11.19
34)	MC	2,4,6-Trichlorophenol	0.470	0.452	0.413	0.381	0.361	0.415	11.10
35)	T	2,4,5-Trichlorophenol	0.221	0.317	0.348	0.370	0.365	0.324	18.94
36)	S	2-Fluorobiphenyl	1.163	1.254	1.230	1.178	1.174	1.200	3.30
37)	T	2-Nitroaniline	0.527	0.566	0.592	0.578	0.483	0.549	8.04
38)	M	Dimethylphthalate	1.233	1.348	1.373	1.295	1.248	1 299	4.68
39)	M	Acenaphthylene	1.606	1.717	1.805	1.711	1.683	1.704	4 20
40)	M	2,6-Dinitrotoluene	0.295	0 312	0 346	0.327	0 271	0.310	9.34
41)	T	3-Nitroaniline	0.279	0 370	0.403	0.363	0 315	0 346	14.10

( ) = Out of Range

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
--J)	CM	Acenaphthene	0.982	1.056	1.036	1.024	1.028	1.025	2 65
43)	MP	2,4-Dinitrophenol	0.189	0.213	0.198	0.155	0.107	0.172	24 56
( )	PM	4-Nitrophenol	0.151	0.178	0.188	0.168	0.142	0.166	11.52
›)	T	Dibenzofuran	1 475	1.700	1.686	1.669	1.512	1.609	6.62
46)	M	2,4-Dinitrotoluene	1.132	1.243	1.193	1.143	1.125	1.167	4.29
-7)	M	Diethylphthalate	1.274	1.533	1.576	1.452	1.379	1.443	8 38
3)	M	Fluorene	1.222	1.333	1.295	1.228	1.216	1.259	4 17
49)	M	4-Chlorophenyl-phenyl	0.554	0.608	0.613	0.591	0.615	0.596	4.25
›)		Phenanthrene-d10	----------ISTD----------						
--1)	T	4-Nitroaniline	0.131	0.151	0.160	0.214	0.175	0.166	18.75
52)	MC	4,6-Dinitro-2-methylp	0.141	0.142	0.151	0.129	0.096	0.132	16.20
3)	T	n-Nitrosodiphenylamin	0.458	0.524	0.531	0.530	0.499	0.508	6 15
4)	S	2,4,6-Tribromophenol	0.098	0.113	0.112	0.106	0.111	0.108	5.77
55)		1,2-Diphenylhydrazine	1.065	1.251	1.281	1.312	1.147	1.211	8.48
--)	M	4-Bromophenyl-phenyle	0.186	0.198	0.212	0.220	0.213	0.206	6.61
)	M	Hexachlorobenzene	0.138	0.231	0.244	0.228	0.233	0.215	20.20
58)	CM	Pentachlorophenol	0.131	0.150	0.154	0.133	0.119	0.137	10.26
59)	M	Phenanthrene	0.983	1.142	1.181	1.095	1.071	1.094	6.87
))	M	Anthracene	0.809	1.021	1.128	1.028	1.059	1.009	11.85
-1)		Carbazole	0 656	1.051	1.106	0.964	0.941	0.944	18.43
62)	M	Di-n-butylphthalate	1.441	1.645	1.749	1.638	1.559	1.606	7 11
3)	MC	Fluoranthene	0.922	0.947	1.162	1.124	1.019	1.035	10.22
64)	I	Chrysene-d12	----------ISTD----------						
-5)		Benzidine	0.569	0.427	0.364	0.399	0.428	0.437	17.86
6)	M	Pyrene	1.857	1.452	1.658	1.267	1.273	1.502	16.98
67)	S	Terphenyl-d14	1.355	1.039	1.124	0.880	0.911	1.062	17.99
68)	M	Butylbenzylphthalate	1 130	0.958	1.080	0.843	0.796	0.962	1=.08
9)	M	Benzo[a]anthracene	1.813	1.529	1.731	1.342	1.163	1.516	17.74
0)	M	3,3'-Dichlorobenzidin	0.345	0.347	0.471	0.353	0.416	0.386	14.47
71)	M	Chrysene	0.661	0.691	1.035	0.768	1.060	0.843	22.65
2)	M	bis(2-Ethylhexyl)phth	1.536	1.331	1.560	1 243	1.151	1.364	13.17
73)	I	Perylene-d12	----------ISTD----------						
-4)	MC	Di-n-octylphthalate	4.287	5.460	5.911	4.718		5.094	14 31
5)	M	Benzo[b]fluoranthene	2.445	2.215	2.794	2.522	2.357	2.467	8.75
76)	m	Benzo[k]fluoranthene	1.248	0.961	1.258	1.108	1.376	1.190	13.40
77)	mc	Benzo[a]pyrene	1 114	0.945	1.269	1.355	1.450	1.227	16.33
8)	m	Indeno[1,2,3-cd]pyren	0.493	0.521	0.450	0.417	0.381	0.452	12 46
9)	m	Dibenz[a,h]anthracene	0 471	0.517	0.454	0 365	0.371	0.436	15.14
80)	M	Benzo[g,h,i]perylene	0 385	0.372	0.381	0.326	0.314	0.356	9.28
1)		1-Methyl naphthalene						0.000#	-1 00
2)		7,12-Dimethylbenz(a)a						0.000#	-1 00

) = Out of Range

Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	25556	40 00	ug/mL	-0 26
17) Naphthalene-d8	12.74	136	103257	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.06	164	74029	40.00	ug/mL	-0.32
50) Phenanthrene-d10	22.53	188	123712	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	101227	40.00	ug/mL	-0.44
73) Perylene-d12	34.60	264	55866	40.00	ug/mL	-0.44
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	37223	52.40	ug/mL	52.40%
3) Phenol-d5	8.39	99	60299	61.22	ug/mL	61.22%
18) Nitrobenzene-d5	10.70	82	59323	55.23	ug/mL	55.23%
36) 2-Fluorobiphenyl	16.21	172	108666	45.06	ug/mL	45.06%
54) 2,4,6-Tribromophenol	20.47	330	17160	50.11	ug/mL	50.11%
67) Terphenyl-d14	27.65	244	115295	44.07	ug/mL	44.07%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.68	74	11819	64.09	ug/mlm	0
6) Phenol	8.41	94	21988	23.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	25656	25.13	ug/mL	94
8) 2-Chlorophenol	8.45	128	17535	22.70	ug/mL	91
9) 1,3-Dichlorobenzene	8.84	146	16873	19.30	ug/mL	95
10) 1,4-Dichlorobenzene	9.09	146	17619	19.90	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	16808	18.80	ug/mL	99
12) 2-Methylphenol	10.13	108	15585	20.61	ug/mLm	62
13) bis(2-chloroisopropyl)ethe	10.13	45	23996	14.64	ug/mL#	8
14) 4-Methylphenol	10.63	108	16867	20.62	ug/mL	96
15) N-Nitroso-Di-n-propylamine	10.47	70	16063	19.56	ug/mL	95
16) Hexachloroethane	10.43	117	8960	16.89	ug/mL	93
19) Nitrobenzene	10.74	77	21469	22.12	ug/mL#	73
20) Isophorone	10.70	82	59319	34.39	ug/mL#	68
21) 2-Nitrophenol	11.70	139	11002	19.97	ug/mL	97
22) 2,4-Dimethylphenol	10.63	107	20989	21.66	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	24189	20.63	ug/mL#	42
24) 2,4-Dichlorophenol	12.47	162	16624	20.82	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.65	180	16825	18.32	ug/mL	99
26) Naphthalene	12.80	128	52795	20.11	ug/mL#	89
27) 4-Chloroaniline	13.15	127	23600	19.35	ug/mL	98
28) Hexachlorobutadiene	13.32	225	9812	16.62	ug/mL	99
29) 4-Chloro-3-methylphenol	14.86	107	19868	19.58	ug/mL	90
30) 2-Chloronaphthalene	16 38	162	36612	17.42	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	36729	19.16	ug/mL	98
33) Hexachlorocyclopentadiene	15.48	237	8635	12.84	ug/mL	99
34) 2,4,6-Trichlorophenol	15.92	196	13356	18.21	ug/mL	96
35) 2,4,5-Trichlorophenol	16.02	196	13494	17.54	ug/mL	98

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time. May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 2-Nitroaniline	16.85	65	17876	21.08	ug/mL#	100
38) Dimethylphthalate	17.62	163	46196	21.25	ug/mL	100
39) Acenaphthylene	17.58	152	62290	16.75	ug/mL	98
40) 2,6-Dinitrotoluene	17.69	165	10022	19.61	ug/mL	99
41) 3-Nitroaniline	18.12	138	11669	15.38	ug/mL	98
42) Acenaphthene	18.14	153	38044	16.56	ug/mL	99
43) 2,4-Dinitrophenol	18.44	184	3955	15.55	ug/mLm	95
44) 4-Nitrophenol	18.93	109	5206	21.05	ug/mL	91
45) Dibenzofuran	18 69	168	55975	17.19	ug/mL	98
46) 2,4-Dinitrotoluene	19.73	165	41635	17.45	ug/mL#	34
47) Diethylphthalate	19.83	149	51035	19.15	ug/mL	99
48) Fluorene	19.73	166	45015	17.98	ug/mL	98
49) 4-Chlorophenyl-phenylether	19.93	204	22774	18.71	ug/mL	94
51) 4-Nitroaniline	19 95	138	10837	22.35	ug/mL	97
52) 4,6-Dinitro-2-methylphenol	20.06	198	5946	17.19	ug/mL	100
53) n-Nitrosodiphenylamine	20.33	169	30841	25.02	ug/mL#	1
55) 1,2-Diphenylhydrazine (as	20.39	77	70933	22.38	ug/ml	100
56) 4-Bromophenyl-phenylether	21.37	248	13195	20.03	ug/mL#	89
57) Hexachlorobenzene	21.35	284	14382	18.78	ug/mL#	51
58) Pentachlorophenol	22.07	266	7390	16.37	ug/mL	99
59) Phenanthrene	22.61	178	66272	19.37	ug/mL	98
60) Anthracene	22.74	178	65476	19.46	ug/mLm	97
61) Carbazole	23.40	167	58205	18.79	ug/ml	100
62) Di-n-butylphthalate	24.92	149	96445	16.33	ug/mL	99
63) Fluoranthene	26.19	202	63031	16.63	ug/mLm	93
65) Benzidine	26.88	184	21650	24.83	ug/mlm	100
66) Pyrene	26.83	202	64445	15.73	ug/mL#	87
68) Butylbenzylphthalate	29.43	149	40290	16.46	ug/mL	90
69) Benzo[a]anthracene	30.57	228	58860	18.72	ug/mL	99
70) 3,3'-Dichlorobenzidine	30.72	252	21074	24.51	ug/mL	98
71) Chrysene	30.57	228	53653	19.46	ug/mLm	98
72) bis(2-Ethylhexyl)phthalate	31.40	149	58259	15.97	ug/mL	100
74) Di-n-octylphthalate	33.31	149	92370	9.30	ug/mL	98
75) Benzo[b]fluoranthene	33.62	252	65848	26.94	ug/mLm	98
76) Benzo[k]fluoranthene	33.70	252	38434	16.42	ug/mLm	91
77) Benzo[a]pyrene	34.45	252	40502	24.28	ug/mLm	97
78) Indeno[1,2,3-cd]pyrene	37.16	276	10646	15.19	ug/mL#	85
79) Dibenz[a,h]anthracene	37.27	278	10355	16.78	ug/mL#	91
80) Benzo[g,h,i]perylene	37.74	276	8780	14.39	ug/mLm	97

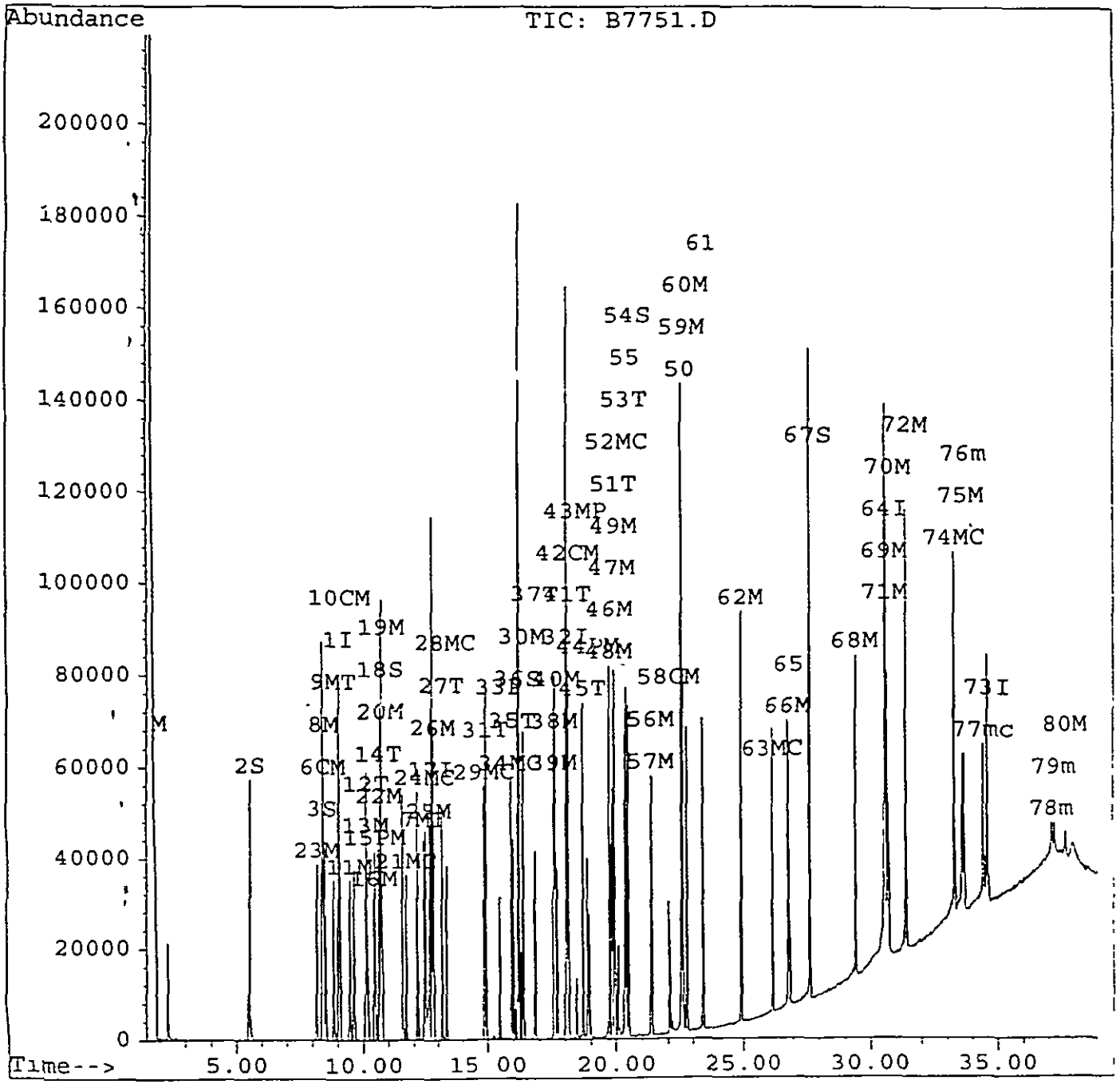
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d
Acq On : 30 May 95 9:44 am
Sample : 20 STD..... Converted from RTE d
Misc :
Quant Time: May 31 10:03 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 May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d Vial: 3
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	29664	40.00	ug/mL	-0.27
17) Naphthalene-d8	12.75	136	124059	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	81773	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.52	188	131721	40.00	ug/ml	-0.37
64) Chrysene-d12	30.58	240	118287	40.00	ug/mL	-0.45
73) Perylene-d12	34.60	264	45275	40.00	ug/mL	-0 45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	39705	48.15	ug/mL	48.15%
3) Phenol-d5	8.39	99	63940	55.92	ug/mL	55.92%
18) Nitrobenzene-d5	10.71	82	67799	52.53	ug/mL	52.53%
36) 2-Fluorobiphenyl	16.20	172	120432	45.21	ug/mL	45.21%
54) 2,4,6-Tribromophenol	20.46	330	17504	48.01	ug/mL	48.01%
67) Terphenyl-d14	27.65	244	130090	42.56	ug/mL	42.56%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.70	74	27115	126.68	ug/mlm	0
6) Phenol	8.43	94	62958	57.46	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	75709	63.88	ug/mL	99
8) 2-Chlorophenol	8.45	128	46179	51.50	ug/mL#	84
9) 1,3-Dichlorobenzene	8.84	146	52488	51.73	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	54452	52.99	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	50964	49.12	ug/mL	99
12) 2-Methylphenol	10.13	108	43177	49.20	ug/mLm	65
13) bis(2-chloroisopropyl)ethe	10.09	45	64159	33.73	ug/mL#	67
14) 4-Methylphenol	10.63	108	48583	51.18	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.49	70	46969	49.27	ug/mL	99
16) Hexachloroethane	10.42	117	27701	44.99	ug/mL#	69
19) Nitrobenzene	10.76	77	67644	58.02	ug/mL	89
20) Isophorone	11.57	82	126657	61.12	ug/mL	97
21) 2-Nitrophenol	11.69	139	31019	46 87	ug/mL	88
22) 2,4-Dimethylphenol	10.63	107	59303	50.95	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	70617	50.13	ug/mL#	42
24) 2,4-Dichlorophenol	12.48	162	45218	47.12	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.65	180	49933	45.25	ug/mL	98
26) Naphthalene	12.81	128	149358	47.34	ug/mL#	91
27) 4-Chloroaniline	13.15	127	72575	49.52	ug/mL	100
28) Hexachlorobutadiene	13.33	225	28798	40.59	ug/mL	98
29) 4-Chloro-3-methylphenol	14.87	107	59715	48.98	ug/mL	99
30) 2-Chloronaphthalene	16 37	162	108511	42.96	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	108935	47 31	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	26413	35.57	ug/mL	98
34) 2,4,6-Trichlorophenol	15.91	196	38933	48 06	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	37853	44 55	ug/mL	100

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d
Acq On : 30 May 95 10:35 am
Sample : 50 STD ..... Converted from RTE d
Misc :
Quant Time: May 31 10:04 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 May 30 08:17:48 1995
Response via : Multiple Level Calibration

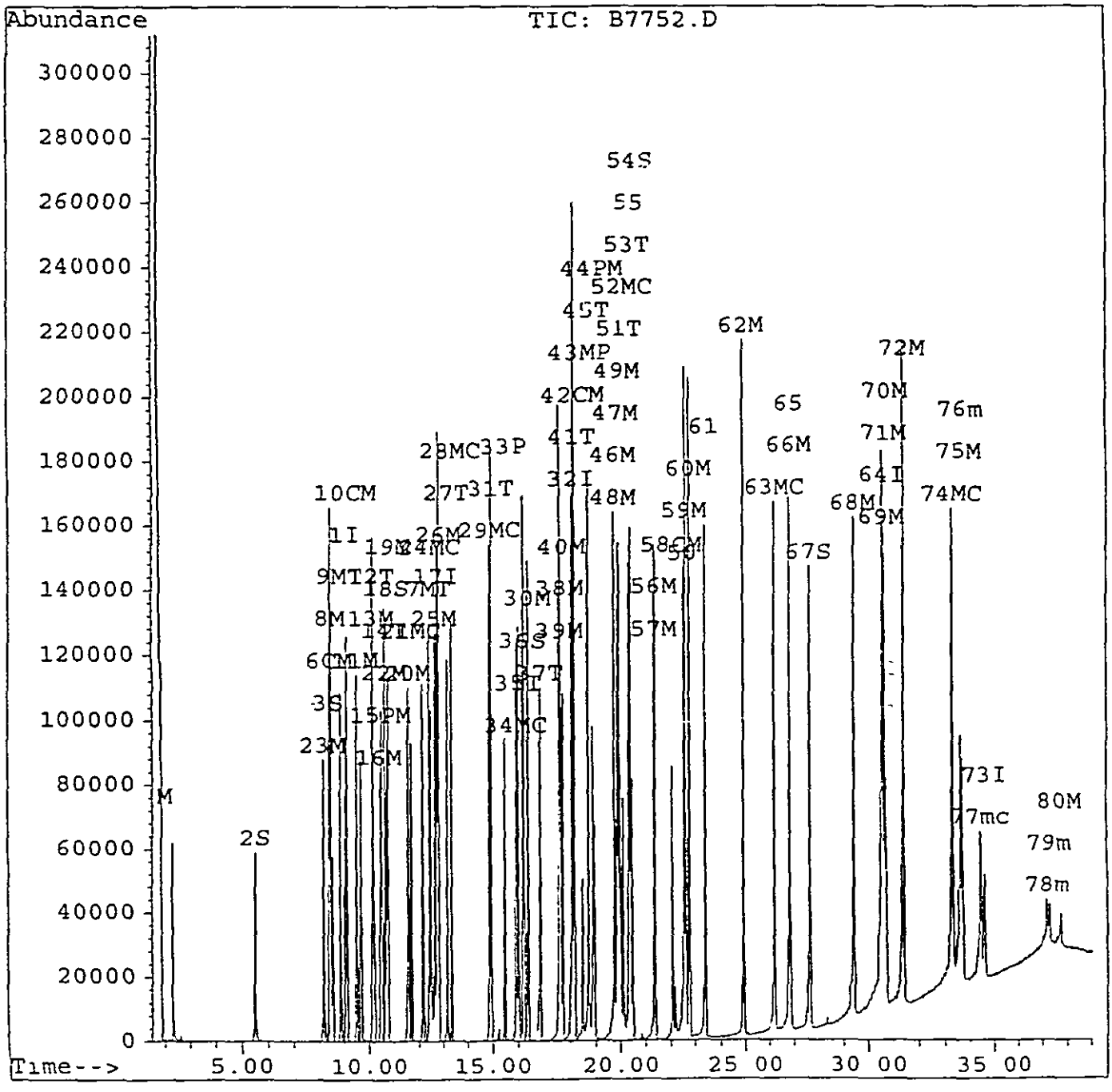
	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.85	65	59044	63.04	ug/mL#	100
38)	Dimethylphthalate	17.62	163	132350	55.11	ug/mL	99
39)	Acenaphthylene	17.58	152	174919	42.58	ug/mL	99
40)	2,6-Dinitrotoluene	17.70	165	33402	59.16	ug/mL	98
41)	3-Nitroaniline	18.12	138	37075	44.25	ug/mL	98
42)	Acenaphthene	18.14	153	104702	41.25	ug/mL	100
43)	2,4-Dinitrophenol	18.45	184	15812	56.30	ug/mL#	91
44)	4-Nitrophenol	18.93	109	17219	63.03	ug/mL#	83
45)	Dibenzofuran	18.70	168	170626	47.45	ug/mL	97
46)	2,4-Dinitrotoluene	19.72	165	116800	44.33	ug/mL#	32
47)	Diethylphthalate	19.86	149	148456	50.42	ug/mL	98
48)	Fluorene	19.72	166	125476	45.36	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.92	204	60420	44.93	ug/mL	95
51)	4-Nitroaniline	19.99	138	35220	68.23	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.09	198	21308	57.84	ug/mL	100
53)	n-Nitrosodiphenylamine	20.32	169	87310	66.53	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.38	77	216080	64.04	ug/ml	100
56)	4-Bromophenyl-phenylether	21.36	248	36244	51.67	ug/mL#	89
57)	Hexachlorobenzene	21.34	284	37570	46.07	ug/mL#	76
58)	Pentachlorophenol	22.06	266	21962	45.70	ug/mL	98
59)	Phenanthrene	22.60	178	180287	49.49	ug/mL	100
60)	Anthracene	22.75	178	169255	47.24	ug/mLm	99
61)	Carbazole	23.39	167	158797	48.15	ug/ml	99
62)	Di-n-butylphthalate	24.91	149	269738	42.89	ug/mL	100
63)	Fluoranthene	26.20	202	185037	45.86	ug/mLm	81
65)	Benzidine	26.87	184	58973	57.88	ug/mlm	100
66)	Pyrene	26.84	202	187374	39.15	ug/mL	97
68)	Butylbenzylphthalate	29.42	149	124656	43.57	ug/mL	91
69)	Benzo[a]anthracene	30.56	228	198412	54.00	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.71	252	52146	51.91	ug/mL	98
71)	Chrysene	30.66	228	113518	35.24	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.39	149	183732	43.10	ug/mL	99
74)	Di-n-octylphthalate	33.30	149	267010	33.18	ug/mL	98
75)	Benzo[b]fluoranthene	33.63	252	142718	72.04	ug/mL	98
76)	Benzo[k]fluoranthene	33.71	252	62677	33.05	ug/mLm	95
77)	Benzo[a]pyrene	34.44	252	76698	56.74	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	37.16	276	23591	41.53	ug/mLm	96
79)	Dibenz[a,h]anthracene	37.28	278	20678	41.35	ug/mL	96
80)	Benzo[g,h,i]perylene	37.74	276	18451	37 32	ug/mL	95

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d Vial. 3
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1 00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c \hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May-95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	29814	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.75	136	126317	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	87574	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.54	188	151522	40.00	ug/ml	-0.35
64) Chrysene-d12	30.60	240	106944	40.00	ug/mL	-0.42
73) Perylene-d12	34.60	264	39840	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	43593	52.60	ug/mL	52.60%
3) Phenol-d5	8.41	99	71703	62.40	ug/mL	62.40%
18) Nitrobenzene-d5	10.72	82	75552	57.49	ug/mL	57.49%
36) 2-Fluorobiphenyl	16.22	172	134602	47.18	ug/mL	47.18%
54) 2,4,6-Tribromophenol	20.48	330	21167	50.47	ug/mL	50.47%
67) Terphenyl-d14	27.65	244	150199	54.35	ug/mL	54.35%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.62	74	25992	120.82	ug/ml	100
6) Phenol	8.45	94	100529	91.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	125480	105.34	ug/mL	99
8) 2-Chlorophenol	8.45	128	77924	86.47	ug/mL#	89
9) 1,3-Dichlorobenzene	8.86	146	88850	87.12	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	90142	87.29	ug/mL	98
11) 1,2-Dichlorobenzene	9.49	146	86576	83.03	ug/mL	99
12) 2-Methylphenol	10.15	108	75232	85.29	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	118548	62.01	ug/mL#	81
14) 4-Methylphenol	10.65	108	79296	83.11	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	87737	91.57	ug/mL	94
16) Hexachloroethane	10.44	117	47246	76.35	ug/mL	93
19) Nitrobenzene	10.78	77	116413	98.06	ug/mL#	86
20) Isophorone	11.61	82	221062	104.76	ug/mL	99
21) 2-Nitrophenol	11.71	139	56797	84.29	ug/mL	91
22) 2,4-Dimethylphenol	10.65	107	97981	82.67	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	117962	82.25	ug/mL#	42
24) 2,4-Dichlorophenol	12.50	162	77661	79.49	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.65	180	82424	73.37	ug/mL	100
26) Naphthalene	12.83	128	262498	81.72	ug/mL#	92
27) 4-Chloroaniline	13.17	127	118867	79.65	ug/mL	99
28) Hexachlorobutadiene	13.33	225	47670	66.00	ug/mL	96
29) 4-Chloro-3-methylphenol	14.87	107	100652	81.09	ug/mL	90
30) 2-Chloronaphthalene	16.39	162	181668	70.65	ug/ml	100
31) 2-Methylnaphthalene	14 94	142	161698	68.97	ug/mL	98
33) Hexachlorocyclopentadiene	15 46	237	52969	66.60	ug/mL	100
34) 2,4,6-Trichlorophenol	15.93	196	72387	83.44	ug/mL	98
35) 2,4,5-Trichlorophenol	16.00	196	60973	67.01	ug/mL	98

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

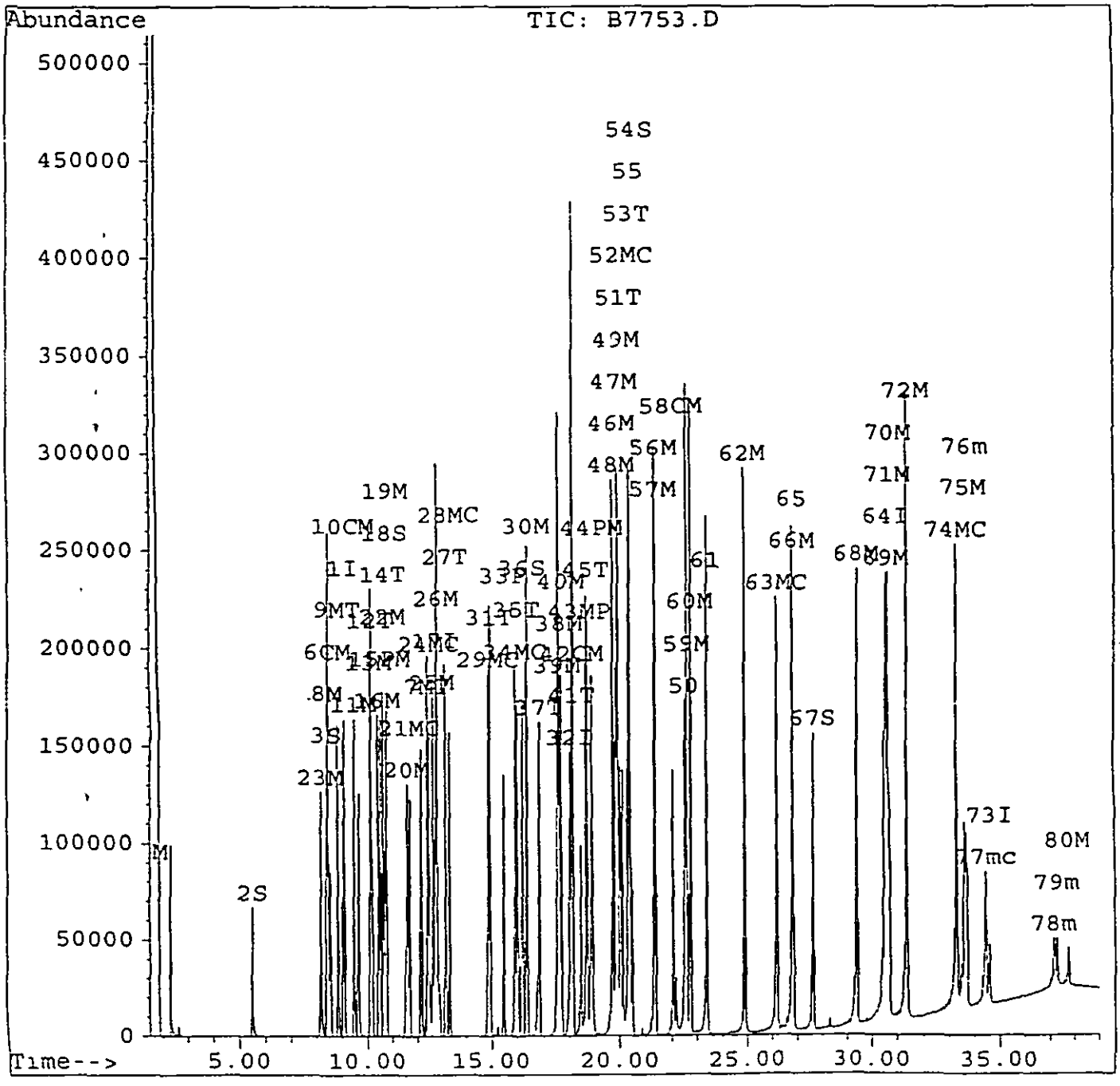
Method : c:\HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration
Last Update : Tue May 30 08.17:48 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37) 2-Nitroaniline	16.87	65	103690	103.37 ug/mL#	100
38) Dimethylphthalate	17.66	163	240471	93.49 ug/mL#	99
39) Acenaphthylene	17.60	152	316138	71.86 ug/mL	99
40) 2,6-Dinitrotoluene	17.74	165	60631	100.28 ug/mL	92
41) 3-Nitroaniline	18.16	138	70580	78.65 ug/mL	92
42) Acenaphthene	18.16	153	181405	66.74 ug/mL	99
43) 2,4-Dinitrophenol	18.47	184	34630	115.13 ug/mL	93
44) 4-Nitrophenol	18.95	109	33002	112.80 ug/mL	86
45) Dibenzofuran	18.70	168	295374	76.70 ug/mL	95
46) 2,4-Dinitrotoluene	19.74	165	209002	74.07 ug/mL#	32
47) Diethylphthalate	19.86	149	275990	87.53 ug/mL	98
48) Fluorene	19.74	166	226899	76.60 ug/mL	99
49) 4-Chlorophenyl-phenylether	19.94	204	107387	74.57 ug/mL	95
51) 4-Nitroaniline	20.02	138	48638	81.91 ug/mL	96
52) 4,6-Dinitro-2-methylphenol	20.11	198	45736	107.93 ug/mL	100
53) n-Nitrosodiphenylamine	20.34	169	161028	106.67 ug/mL#	1
55) 1,2-Diphenylhydrazine (as	20.40	77	388272	100.03 ug/ml	100
56) 4-Bromophenyl-phenylether	21.38	248	64383	79.79 ug/mL	94
57) Hexachlorobenzene	21.37	284	73929	78.80 ug/mL#	70
58) Pentachlorophenol	22.06	266	46630	84.35 ug/mL	97
59) Phenanthrene	22.62	178	357765	85.38 ug/mL	99
60) Anthracene	22.77	178	341982	82.98 ug/mLm	98
61) Carbazole	23.41	167	335154	88.34 ug/ml	99
62) Di-n-butylphthalate	24.91	149	529878	73.24 ug/mL	99
63) Fluoranthene	26.20	202	352244	75.89 ug/mLm	91
65) Benzidine	26.88	184	77859	84.53 ug/ml	100
66) Pyrene	26.84	202	354638	81.96 ug/mL#	89
68) Butylbenzylphthalate	29.42	149	231051	89.32 ug/mL	95
69) Benzo[a]anthracene	30.58	228	370214	111.44 ug/mL	99
70) 3,3'-Dichlorobenzidine	30.72	252	100778	110.96 ug/mL	98
71) Chrysene	30.68	228	221302	75.99 ug/mLm	98
72) bis(2-Ethylhexyl)phthalate	31.39	149	333704	86.58 ug/mL	97
74) Di-n-octylphthalate	33.30	149	471006	66.51 ug/mL	99
75) Benzo[b]fluoranthene	33 63	252	222662	127 72 ug/mL	97
76) Benzo[k]fluoranthene	33.71	252	100220	60.05 ug/mLm	94
77) Benzo[a]pyrene	34 44	252	101126	85.01 ug/mLm	99
78) Indeno[1,2,3-cd]pyrene	37.17	276	35858	71.73 ug/mL	88
79) Dibenz[a,h]anthracene	37.28	278	36175	82.20 ug/mL	94
80) Benzo[g,h,i]perylene	37 75	276	30352	69.77 ug/mLm	99

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

Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	27011	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.77	136	112346	40.00	ug/mL	-0.26
32) Acenaphthene-d10	18.05	164	74142	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.53	188	133454	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	102268	40.00	ug/mL	-0.43
73) Perylene-d12	34.61	264	30843	40.00	ug/mL	-0.44
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	40691	54.19	ug/mL	54.19%
3) Phenol-d5	8.41	99	68173	65.48	ug/mL	65.48%
18) Nitrobenzene-d5	10.73	82	65499	56.04	ug/mL	56.04%
36) 2-Fluorobiphenyl	16.22	172	116201	48.11	ug/mL	48.11%
54) 2,4,6-Tribromophenol	20.48	330	18886	51.13	ug/mL	51.13%
67) Terphenyl-d14	27.64	244	132840	50.26	ug/mL	50.26%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.64	74	44263	227.10	ug/ml	100
6) Phenol	8.47	94	145178	145.51	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	168732	156.34	ug/mL	98
8) 2-Chlorophenol	8.47	128	104043	127.43	ug/mL#	87
9) 1,3-Dichlorobenzene	8.86	146	113739	123.10	ug/mL	98
10) 1,4-Dichlorobenzene	9.11	146	118937	127.12	ug/mL	99
11) 1,2-Dichlorobenzene	9.49	146	112702	119.30	ug/mL	98
12) 2-Methylphenol	10.17	108	102718	128.54	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	150752	87.04	ug/mL#	79
14) 4-Methylphenol	10.67	108	116050	134.26	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	117037	134.82	ug/mL	99
16) Hexachloroethane	10.44	117	61265	109.28	ug/mL#	81
19) Nitrobenzene	10.78	77	137726	130.44	ug/mL#	79
20) Isophorone	11.63	82	286449	152.63	ug/mL	100
21) 2-Nitrophenol	11.73	139	75814	126.50	ug/mL	95
22) 2,4-Dimethylphenol	10.67	107	144674	137.24	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	151120	118.47	ug/mL#	42
24) 2,4-Dichlorophenol	12.52	162	100762	115.96	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.67	180	107106	107.19	ug/mL	98
26) Naphthalene	12.83	128	319371	111.79	ug/mL#	91
27) 4-Chloroaniline	13.17	127	156643	118.02	ug/mL	98
28) Hexachlorobutadiene	13.35	225	62689	97.58	ug/mL	98
29) 4-Chloro-3-methylphenol	14.89	107	133371	120.81	ug/mL#	86
30) 2-Chloronaphthalene	16.39	162	229152	100.19	ug/ml	100
31) 2-Methylnaphthalene	14.96	142	331843	159.13	ug/mL	97
33) Hexachlorocyclopentadiene	15.46	237	67420	100.13	ug/mL	97
34) 2,4,6-Trichlorophenol	15.93	196	100492	136.82	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	70403	91.40	ug/mL	99

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

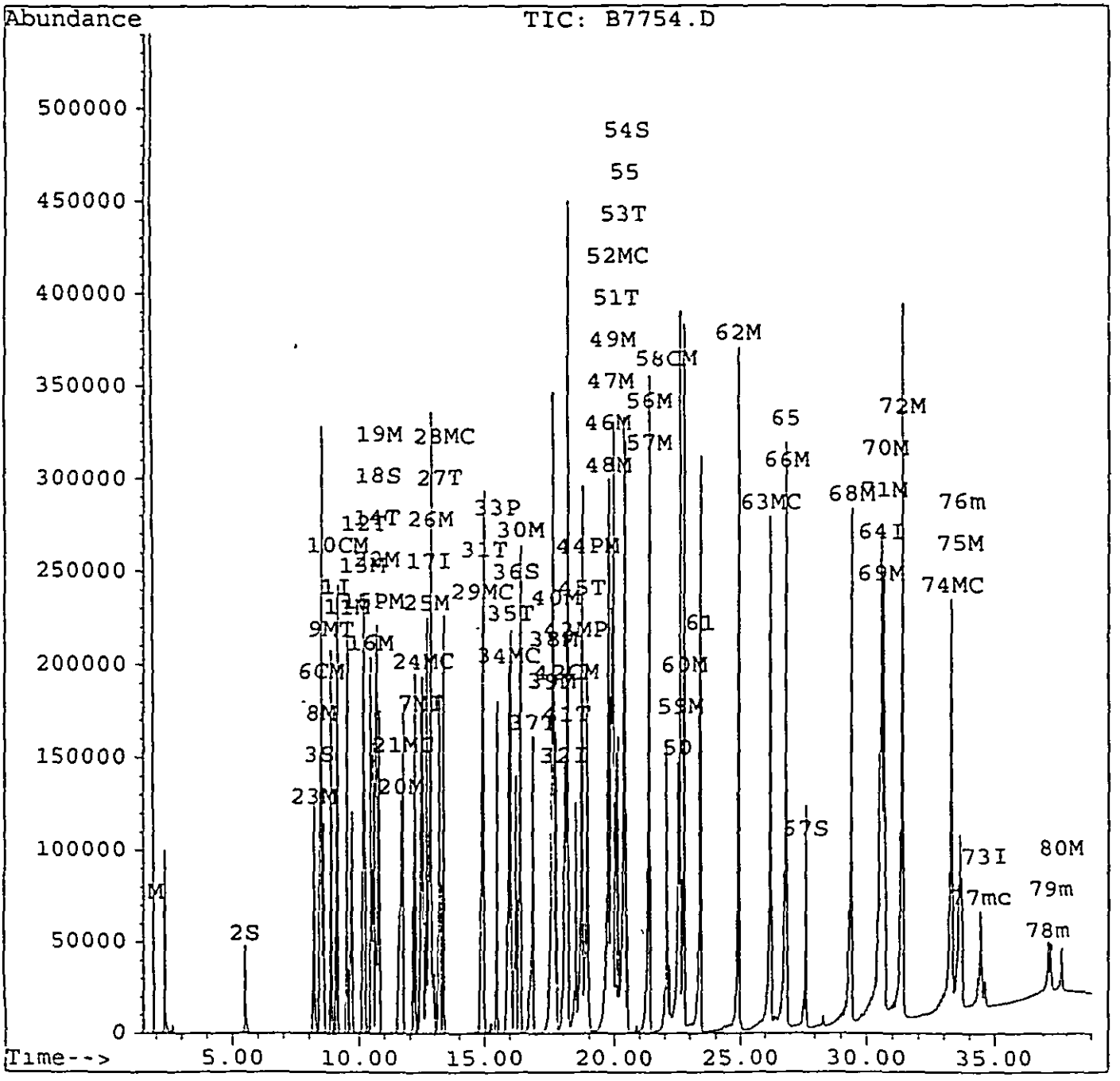
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	2-Nitroaniline	16.87	65	125966	148.33 ug/mL#	100
38)	Dimethylphthalate	17.66	163	299887	137.71 ug/mL	99
39)	Acenaphthylene	17.61	152	381978	102.55 ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	69446	135.67 ug/mLm	93
41)	3-Nitroaniline	18.16	138	82189	108.18 ug/mL	95
42)	Acenaphthene	18.16	153	234884	102.07 ug/mL	99
43)	2,4-Dinitrophenol	18.49	184	47322	185.83 ug/mL	87
44)	4-Nitrophenol	18.96	109	39654	160.09 ug/mL	90
45)	Dibenzofuran	18.72	168	378169	115.99 ug/mL	98
46)	2,4-Dinitrotoluene	19.75	165	276442	115.72 ug/mL#	32
47)	Diethylphthalate	19.86	149	341020	127.75 ug/mL	99
48)	Fluorene	19.75	166	296520	118.24 ug/mL	98
49)	4-Chlorophenyl-phenylether	19.94	204	135159	110.86 ug/mL	94
51)	4-Nitroaniline	20.06	138	60415	115.52 ug/mL	95
52)	4,6-Dinitro-2-methylphenol	20.13	198	56816	152.23 ug/mLm	100
53)	n-Nitrosodiphenylamine	20.35	169	209653	157.68 ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.40	77	500723	146.47 ug/ml	100
56)	4-Bromophenyl-phenylether	21.39	248	79413	111.75 ug/mL	95
57)	Hexachlorobenzene	21.37	284	92449	111.89 ug/mL#	68
58)	Pentachlorophenol	22.06	266	59890	123.01 ug/mL	99
59)	Phenanthrene	22.62	178	457295	123.90 ug/mL	99
60)	Anthracene	22.78	178	408657	112.58 ug/mLm	99
61)	Carbazole	23.41	167	420878	125.96 ug/ml	99
62)	Di-n-butylphthalate	24.92	149	658579	103.35 ug/mL	100
63)	Fluoranthene	26.21	202	379190	92.76 ug/mLm-	91
65)	Benzidine	26.87	184	131098	148.83 ug/mlm-	100
66)	Pyrene	26.85	202	445627	107.70 ug/mL#	89
68)	Butylbenzylphthalate	29.43	149	293901	118.82 ug/mL	93
69)	Benzo[a]anthracene	30.57	228	469239	147.71 ug/mL	99
70)	3,3'-Dichlorobenzidine	30.73	252	106370	122.47 ug/mL#	97
71)	Chrysene	30.67	228	211972	76.11 ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.40	149	408257	110.77 ug/mL	98
74)	Di-n-octylphthalate	33.31	149	505170	92.14 ug/mL	100
75)	Benzo[b]fluoranthene	33.64	252	204971	151.87 ug/mLm	97
76)	Benzo[k]fluoranthene	33.72	252	88924	68.83 ug/mLm	96
77)	Benzo[a]pyrene	34.45	252	87415	94.92 ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.18	276	48224	124 60 ug/mL#	81
79)	Dibenz[a,h]anthracene	37.31	278	47851	140.44 ug/mL	98
80)	Benzo[g,h,i]perylene	37.76	276	34423	102.21 ug/mLm	95

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name EMSL ANALYTICAL Contract: _____

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

Lab File ID B7802 D DFTPP Injection Date: 6/3/95

Instrument ID ABNA DFTPP Injection Time 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30 0 - 80.0% of mass 198	53 6
68	Less than 2 0% of mass 69	0 0 (0 0)1
69	Mass 69 relative abundance	60 9
70	Less than 2 0% of mass 69	0 0 (0 0)1
127	25 0 - 75 0% of mass 198	47 3
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 2
275	10 0 - 30 0% of mass 198	22 9
365	Greater than 0 75% of mass 198	2 8
441	Present, but less than mass 443	11 1
442	40 0 - 110 0% of mass 198	70 8
443	15.0 - 24 0% of mass 442	14 0 (19 8)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	B7803.D	6/3/95	1013
02	SBLK01	BLANK1	B7804.D	6/3/95	1104
03	9521072B	9521072B	B7805 D	6/3/95	1154
04	9521073B	9521073B	B7806.D	6/3/95	1244
05	SBLK02	BLANK2	B7807.D	6/3/95	1334
06	9522265B	9522265B	B7808.D	6/3/95	1424
07	9522845B	9522845B	B7809.D	6/3/95	1515
08	SBLK03	BLANK3	B7810.D	6/3/95	1606
09	9523339B	9523339B	B7811.D	6/3/95	1656
10	9523341B	9523341B	B7812.D	6/3/95	1747
11	9523342B	9523342B	B7813 D	6/3/95	1838
12	9523343B	9523343B	B7814.D	6/3/95	1928
13	9523530B	9523530B	B7815 D	6/3/95	2018
14	9523531B	9523531B	B7816.D	6/3/95	2108
15	9523533B	9523533B	B7817.D	6/3/95	2158
16	9523534B	9523534B	B7818.D	6/3/95	2248
17	9523535B	9523535B	B7819.D	6/3/95	2337
18	9523536B	9523536B	B7820 D	6/4/95	0027
19	SBLK04	BLANK4	B7821.D	6/4/95	0117
20	9523789B	9523789B	B7822.D	6/4/95	0206
21	9523792B	9523792B	B7823.D	6/4/95	0256
22	9523787B	9523787B	B7824 D	6/4/95	0346

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: B7802.D DFTPP Injection Date: 6/3/95

Instrument ID: ABNA DFTPP Injection Time: 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53.6
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	25.0 - 75.0% of mass 198	47.3
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	7.2
275	10.0 - 30.0% of mass 198	22.9
365	Greater than 0.75% of mass 198	2.8
441	Present, but less than mass 443	11.1
442	40.0 - 110.0% of mass 198	70.8
443	15.0 - 24.0% of mass 442	14.0 (19.8)2

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

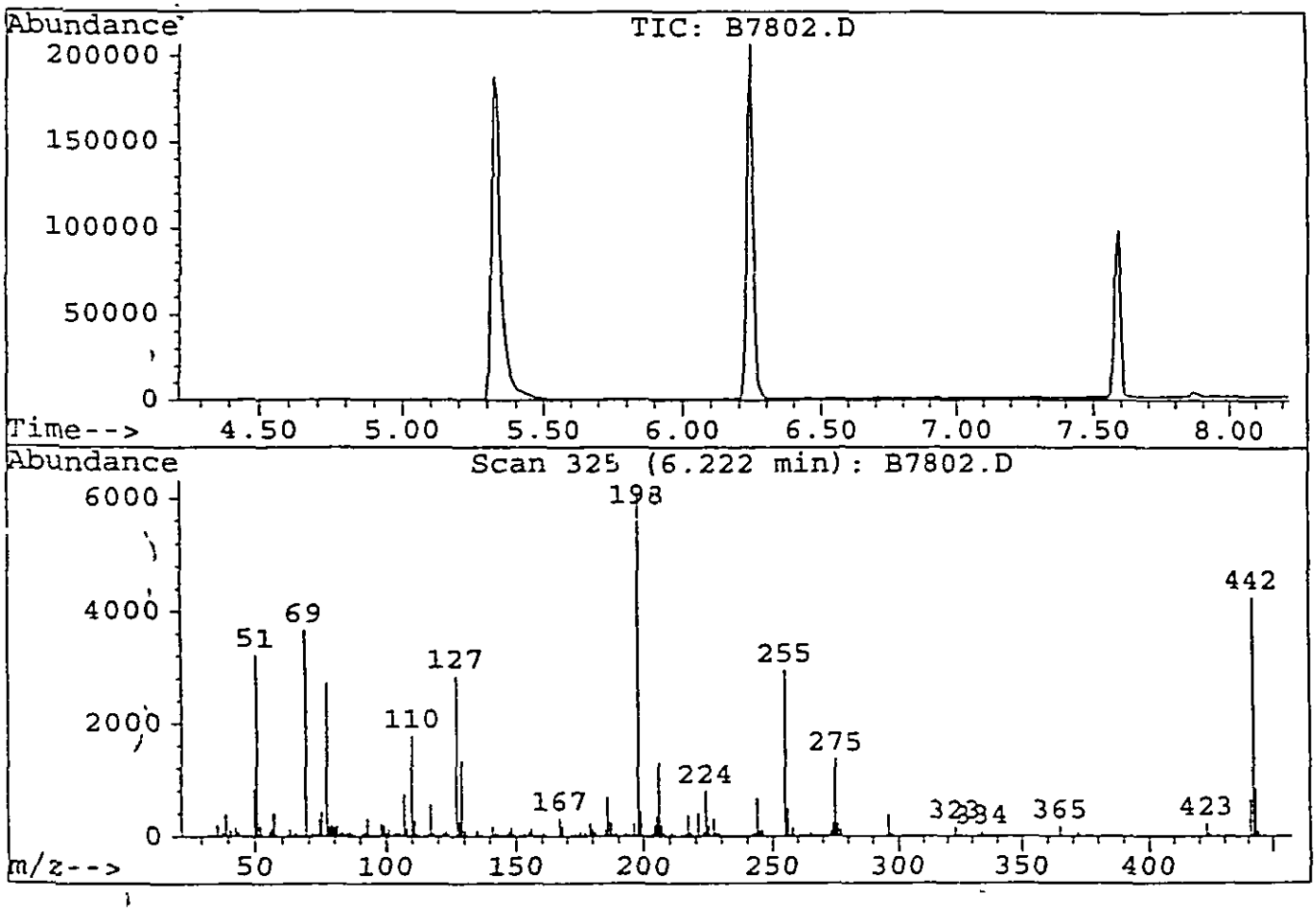
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SBLK05	BLANK5	B7825.D	6/4/95	0435
02	22654MS	22654MS	B7826.D	6/4/95	0525
03	22654MSD	22654MSD	B7827.D	6/4/95	0615
04	22659MS	22659MS	B7828.D	6/4/95	0704
05	22659MSD	22659MSD	B7829.D	6/4/95	0754
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : C:\HPCHEM\1\DATA2\B7802.D
Acq On : 3 Jun 95 9:53 am
Sample : DFTPP..... Converted from RTE d
Misc :

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: 325

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.6	3226	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	60.9	3667	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	47.3	2846	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	6021	PASS
199	198	5	9	7.2	434	PASS
275	198	10	30	22.9	1379	PASS
365	198	1	100	2.8	170	PASS
441	443	0	100	79.3	669	PASS
442	198	40	100	70.8	4261	PASS
443	442	17	23	19.8	844	PASS

r 325 (6.222 min): B7802.D
E..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
6.10	195	57.05	413	79.95	160	99.05	186
37.90	74	63.05	134	81.05	193	100.05	51
9.10	386	65.05	66	81.95	54	100.95	118
1.05	94	68.95	3667	82.95	76	102.95	50
43.05	140	71.15	74	85.05	67	103.95	70
73.95	71	73.05	38	85.95	78	105.05	69
0.05	844	74.05	294	87.05	29	106.15	34
91.05	3226	74.95	427	90.95	51	107.05	746
52.05	179	77.05	2720	92.05	75	107.95	136
5.15	74	78.05	169	92.95	316	109.95	1785
5.95	133	79.05	215	98.05	224	111.05	275

n 325 (6.222 min): B7802.D
I ..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
11.85	36	134.90	114	160.00	39	186.00	683
6.05	42	140.90	173	161.00	63	187.00	242
17.05	564	142.10	53	167.00	318	188.90	51
118.05	51	142.90	34	168.00	162	193.00	70
1.90	66	145.90	30	173.00	42	196.10	225
3.00	89	147.00	83	175.00	88	198.00	6021
123.90	35	147.90	160	177.00	64	199.00	434
7.00	2846	149.00	36	179.00	216	201.65	29
8.10	250	152.90	50	180.00	127	202.95	41
128.90	1336	155.00	69	180.90	71	203.95	197
30.10	102	156.00	130	185.00	110	205.05	353

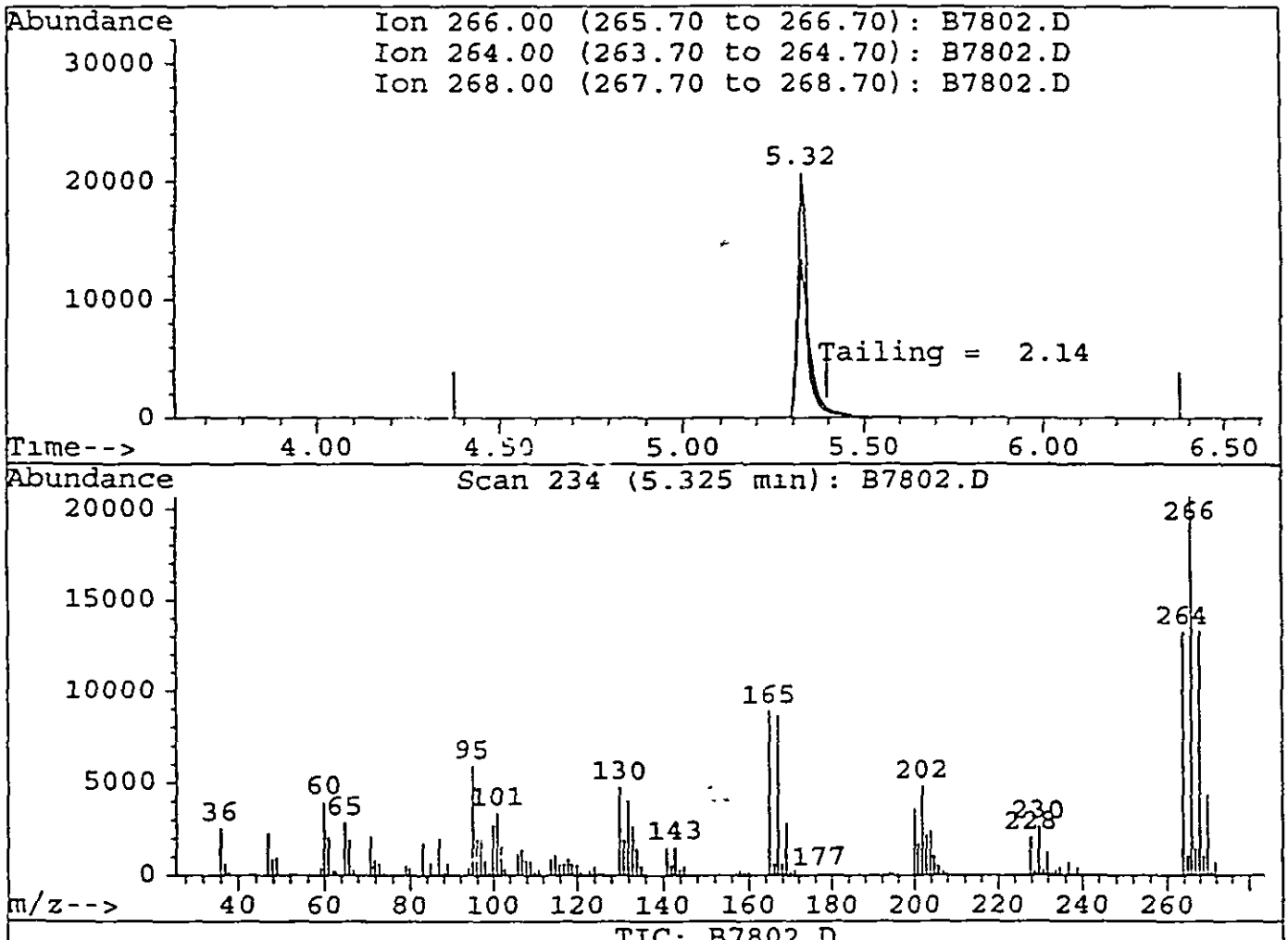
a 325 (6.222 min): B7802.D
Ee..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
06.05	1320	224.95	192	255.95	487	334.00	73
207.05	189	226.95	305	258.05	143	364.95	170
07.95	55	227.95	55	264.95	68	372.05	67
10.15	33	228.85	61	272.95	102	423.05	224
211.05	66	231.05	37	274.05	239	423.95	49
216.15	46	242.05	44	275.05	1379	441.00	669
16.95	373	243.05	52	276.05	219	442.00	4261
217.95	69	244.05	676	277.05	109	443.00	844
220.95	411	245.05	91	296.00	378	444.00	72
22.95	81	245.95	117	297.00	45		
224.05	802	255.05	2950	323.10	156		

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7802.D Vial: 1
Acq On : 3 Jun 95 9:53 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 3 9:06 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



TIC: B7802.D

(1) Pentachlorophenol (CM)

5.32min 133.02ug/mL

response 43936

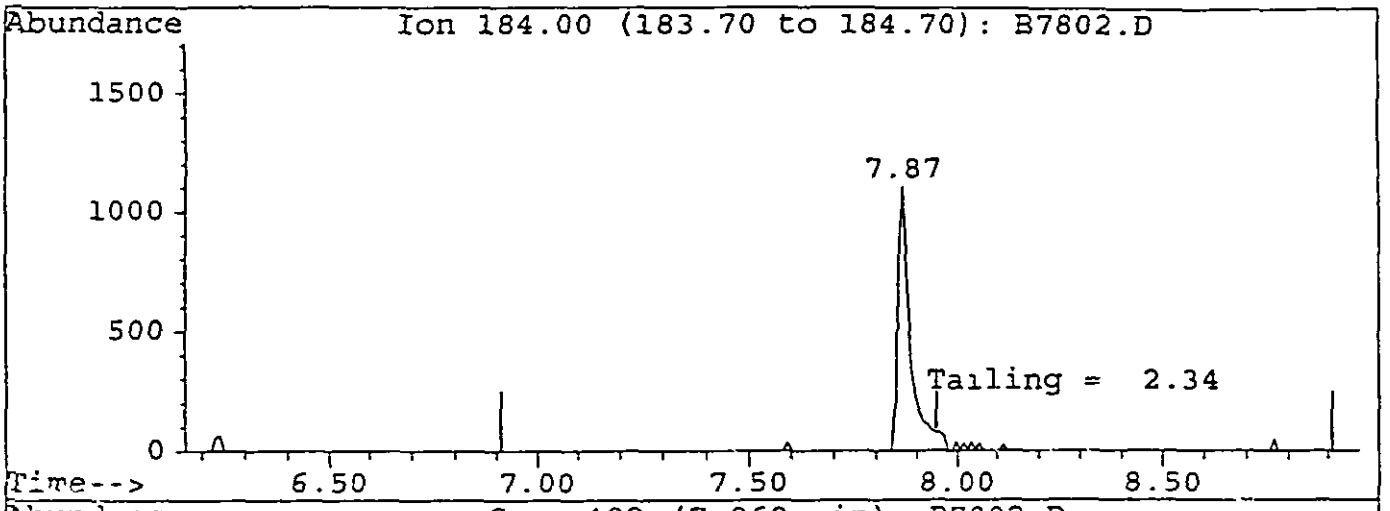
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	64.30
268.00	64.70	64.53
0.00	0.00	0.00

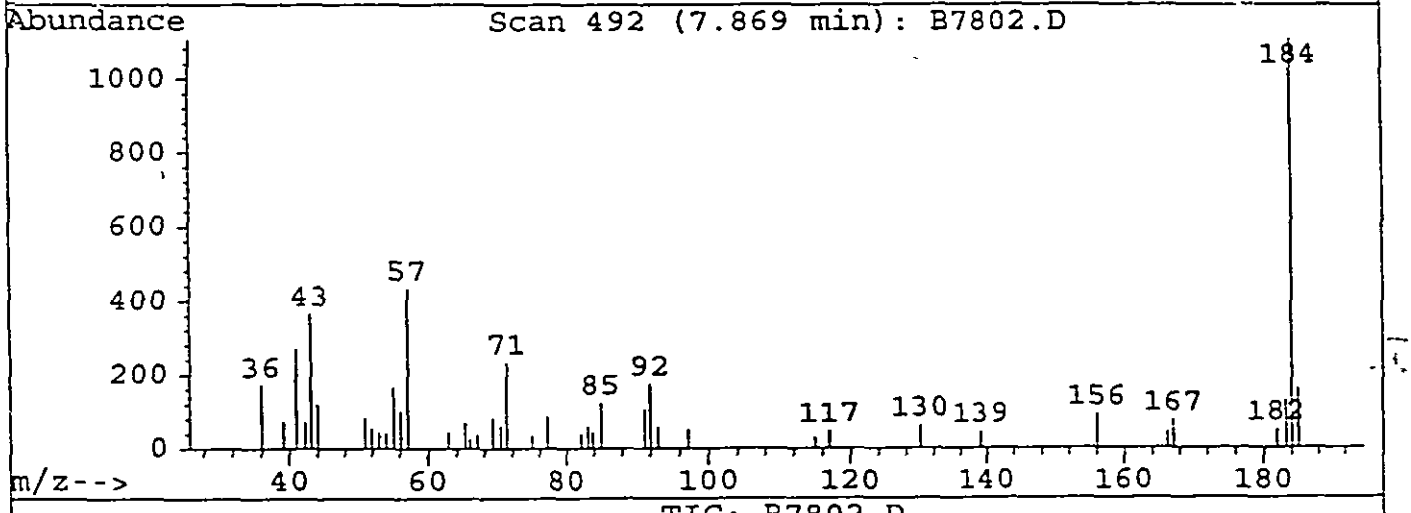
Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7802.D
Acq On : 3 Jun 95 9:53 am
Sample : DFTPP..... Converted from RTE d
Misc :
Quant Time: Jun 3 9:06 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 May 31 10:06:36 1995
Response via : Multiple Level Calibration





TIC: B7802.D

(2) Benzidine
7.87min 7.97ug/ml
response 2449

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

7B

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name EMSL ANALYTICAL Contract

Project No Site Location: Group:

Instrument ID ABNA Calibration Date 6/3/95 Time. 1013

Lab File'ID B7803 D Init Calib Date(s) 6/3/95 1/0/00

Init Calib. Times 1013 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	2 026	2 027		0 0	
1,3-Dichlorobenzene	1 385	1 449		-4 6	
1,4-Dichlorobenzene	1 429	1 500		-5 0	30 0
1,2-Dichlorobenzene	1.357	1 424		-4 9	
bis(2-chloroisopropyl)ether	1 868	1 769		5 3	
N-Nitroso-Di-n-propylamine	1 346	1 315	0 050	2 3	
Hexachloroethane	0.737	0.736		0.1	
Nitrobenzene	0 424	0 446		-5 2	
Isophorone	0 893	0 814		8 8	
b.s(2-Chloroethoxy)methane	0.456	0 453		0.7	
1,2,4-Trichlorobenzene	0.317	0 332		-4 7	
Naphthalene	0 979	1 023		-4 5	
4-Chloroaniline	0.463	0 464		-0 2	
Hexachlorobutadiene	0.185	0.191		-3 2	30.0
2-Methylnaphthalene	0 786	0.742		5.6	
Hexachlorocyclopentadiene	0 278	0 250	0 050	10 1	
2-Chloronaphthalene	0 696	0 716		-2.9	
2-Nitroaniline	0.549	0 487		11 3	
Dimethylphthalate	1 299	1 277		1.7	
Acenaphthylene	1 704	1 652		3 1	
2,6-Dinitrotoluene	0 310	0 301		2 9	
3-Nitroaniline	0.346	0 344		0 6	
Acenaphthene	1 025	1.040		-1 5	30 0
Dibenzofuran	1 609	1 625		-1 0	
2,4-Dinitrotoluene	1 167	1 125		3 6	
Diethylphthalate	1.443	1 376		4 6	
Fluorene	1 259	1 219		3 2	
4-Chlorophenyl-phenylether	0 596	0 628		-5 4	
4-Nitroaniline	0 166	0 194		-16 9	
n-Nitrosodiphenylamine	0 508	0 502		1 2	
4-Bromophenyl-phenylether	0 206	0 219		-6 3	
Hexachlorobenzene	0 215	0 232		-7.9	
Phenanthrene	1 094	1 129		-3 2	
Anthracene	1 009	1 064		-5 5	
Carbazole	0 944	1 015		-7 5	
Di-n-butylphthalate	1 606	1 633		-1 7	
Fluoranthene	1 035	1 139		-10 0	30 0

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 6/3/95 Time: 1013

Lab File ID: B7803 D Init. Calib Date(s). 6/3/95 1/0/00

Init. Calib. Times. 1013 0000

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Pyrene	1.502	1 240		17 4	
Butylbenzylphthalate	0 962	0 769		20 1	
Benzo[a]anthracene	1 516	1 300		14 2	
3,3'-Dichlorobenzidine	0 386	0 357		7 5	
Chrysene	0 843	0 806		4 4	
bis(2-Ethylhexyl)phthalate	1 364	1 148		15 8	
Di-n-octylphthalate	5.094	4 570		10 3	30 0
Benzo[b]fluoranthene	2 467	2.153		12.7	
Benzo[k]fluoranthene	1 190	1 273		-7 0	
Benzo[a]pyrene	1 227	1 266		-3.2	30 0
Indeno[1,2,3-cd]pyrene	0 452	0 458		-1.3	
Dibenz[a,h]anthracene	0 436	0 384		11 9	
Benzo[g,h,i]perylene	0 356	0.291		18 3	
Nitrobenzene-d5	0 456	0 443		2 9	
2-Fluorobiphenyl	1 200	1 187		1 1	
Terphenyl-d14	1 062	0 881		17 0	

All other compounds must meet a minimum RRF of 0 010

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2 136
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV SU
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 May 31 10:06:36 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)
	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.18
	S	2-Fluorophenol	1.131	1.044	7.7	96	0.16
3	S	Phenol-d5	1.873	1.712	8.6	98	0.14
	M	N-nitrosodimethylamine	0.578	0.585	-1.1	79	-0.10
		Pyridine	0.428	0.000#	100.0#	0#	-1.62#
6	CM	Phenol	1.668	1.607	3.7	93	0.14
	MT	bis(2-Chloroethyl)ether	2.026	2.027	-0.1	98	0.18
	M	2-Chlorophenol	1.269	1.290	-1.6	102	0.16
9	MT	1,3-Dichlorobenzene	1.385	1.449	-4.6	101	0.18
10	CM	1,4-Dichlorobenzene	1.429	1.500	-5.0	101	0.18
1	M	1,2-Dichlorobenzene	1.357	1.424	-4.9	102	0.18
1	T	2-Methylphenol	1.204	1.299	-7.9	110	0.66#
13	M	bis(2-chloroisopropyl)ether	1.868	1.769	5.3	101	0.20
	T	4-Methylphenol	1.322	1.299	1.7	98	0.16
1	PM	N-Nitroso-Di-n-propylamine	1.346	1.315	2.3	102	0.18
16	M	Hexachloroethane	0.737	0.736	0.1	97	0.19
1	I	Naphthalene-d8	1.000	1.000	0.0	94	0.18
18	S	Nitrobenzene-d5	0.456	0.443	2.8	96	0.18
19	M	Nitrobenzene	0.424	0.446	-5.2	96	0.18
	M	Isophorone	0.893	0.814	8.8	94	0.16
	MC	2-Nitrophenol	0.210	0.202	4.2	95	0.20
22	M	2,4-Dimethylphenol	0.394	0.392	0.4	97	0.16
	M	bis(2-Chloroethoxy)methane	0.456	0.453	0.7	94	0.16
	MC	2,4-Dichlorophenol	0.298	0.301	-0.8	97	0.18
25	M	1,2,4-Trichlorobenzene	0.317	0.332	-4.7	97	0.18
	M	Naphthalene	0.979	1.023	-4.5	100	0.20
	T	4-Chloroaniline	0.463	0.464	-0.1	93	0.20
28	MC	Hexachlorobutadiene	0.185	0.191	-3.3	97	0.18
29	MC	4-Chloro-3-methylphenol	0.384	0.376	2.0	92	0.18
	M	2-Chloronaphthalene	0.696	0.716	-2.8	96	0.21
	T	2-Methylnaphthalene	0.786	0.742	5.5	100	0.19
	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.21
	P	Hexachlorocyclopentadiene	0.278	0.250	10.3	95	0.19
34	MC	2,4,6-Trichlorophenol	0.415	0.353	15.0	91	0.20
	T	2,4,5-Trichlorophenol	0.324	0.384	-18.4	102	0.19
	S	2-Fluorobiphenyl	1 200	1.187	1.1	99	0.19
37	T	2-Nitroaniline	0.549	0.487	11.3	83	0.19
	M	Dimethylphthalate	1 299	1.277	1.8	97	0.19
	M	Acenaphthylene	1.704	1.652	3.1	95	0.21
40	M	2,6-Dinitrotoluene	0.310	0.301	2.8	91	0.21

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am 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 May 31 10:06:36 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	0.346	0.344	0.6	94	0.21
42	CM	Acenaphthene	1.025	1.040	-1.5	100	0.21
43	MP	2,4-Dinitrophenol	0.172	0.164	4.8	104	0.21
44	PM	4-Nitrophenol	0.166	0.160	3.5	94	0.19
45	T	Dibenzofuran	1.609	1.625	-1.0	96	0.21
46	M	2,4-Dinitrotoluene	1.167	1.125	3.6	97	0.23
47	M	Diethylphthalate	1.443	1.376	4.6	93	0.21
48	M	Fluorene	1.259	1.219	3.2	98	0.23
49	M	4-Chlorophenyl-phenylether	0.596	0.628	-5.4	105	0.23
50		Phenanthrene-d10	1.000	1.000	0.0	102	0.25
51	T	4-Nitroaniline	0.166	0.194	-16.9	93	0.21
52	MC	4,6-Dinitro-2-methylphenol	0.132	0.139	-5.1	109	0.21
53	T	n-Nitrosodiphenylamine	0.508	0.502	1.2	96	0.23
54	S	2,4,6-Tribromophenol	0.108	0.110	-2.0	106	0.23
55	*	1,2-Diphenylhydrazine (as a	1.211	1.189	1.8	92	0.23
56	M	4-Bromophenyl-phenylether	0.206	0.219	-6.2	101	0.23
57	M	Hexachlorobenzene	0.215	0.232	-8.2	104	0.23
58	CM	Pentachlorophenol	0.137	0.160	-16.2	122	0.23
59	M	Phenanthrene	1.094	1.129	-3.2	105	0.25
60	M	Anthracene	1.009	1.064	-5.5	105	0.25
61		Carbazole	0.944	1.015	-7.5	107	0.25
62	M	Di-n-butylphthalate	1.606	1.633	-1.6	102	0.23
63	MC	Fluoranthene	1.035	1.139	-10.1	103	0.27
64	I	Chrysene-d12	1.000	1.000	0.0	110	0.31
65		Benzidine	0.437	0.361	17.5	99	0.27
66	M	Pyrene	1.502	1.240	17.4	107	0.27
67	S	Terphenyl-d14	1.062	0.881	17.1	110	0.27
68	M	Butylbenzylphthalate	0.962	0.769	20.0	100	0.27
69	M	Benzo[a]anthracene	1.516	1.300	14.2	106	0.31
70	M	3,3'-Dichlorobenzidine	0.386	0.357	7.5	111	0.29
71	M	Chrysene	0.843	0.806	4.4	115	0.31
72	M	bis(2-Ethylhexyl)phthalate	1.364	1.148	15.8	101	0.27
73	I	Perylene-d12	1.000	1.000	0.0	206#	0.30
74	MC	Di-n-octylphthalate	5.094	4.570	10.3	200#	0.27
75	M	Benzo[b]fluoranthene	2.467	2.153	12.7	176#	0.30
76	m	Benzo[k]fluoranthene	1.190	1.273	-7.0	237#	0.31
77	mc	Benzo[a]pyrene	1.227	1.266	-3.2	193#	-0.51#
78	m	Indeno[1,2,3-cd]pyrene	0.452	0.458	-1.1	227#	0.26
79	m	Dibenz[a,h]anthracene	0.436	0.384	11.8	217#	0.26

#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 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 : Wed May 31 10:06:36 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	0.356	0.291	18.1	185#	0.26
81		1-Methyl naphthalene	0.000	0.000#	0.0	0#	-13.33#
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	191#	0.30
83		Quinoline	0.000	0.000#	0.0	95	0.20
84		Thiophenol	0.000	0.000#	0.0	72	0.17
85		4-Methyl chrysene	0.000	0.000#	0.0	118	0.31
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	131	0.27
87		Indene	0.000	0.000#	0.0	94	0.18

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

Quantitation Report

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Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.21	152	29236	40.00	ug/mL	0.18
17) Naphthalene-d8	12.92	136	116999	40.00	ug/mL	0.18
32) Acenaphthene-d10	18.26	164	80656	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	134208	40.00	ug/ml	0.25
64) Chrysene-d12	30.89	240	129676	40.00	ug/mL	0.31
73) Perylene-d12	34.90	264	93467	40.00	ug/mL	0.30
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.63	112	38146	46.13	ug/mL	46.13%
3) Phenol-d5	8.53	99	62550	45.70	ug/mL	45.70%
18) Nitrobenzene-d5	10.88	82	64784	48.60	ug/mL	48.60%
36) 2-Fluorobiphenyl	16.39	172	119643	49.45	ug/mL	49.45%
54) 2,4,6-Tribromophenol	20.69	330	18489	51.01	ug/mL	51.01%
67) Terphenyl-d14	27.91	244	142742	41.47	ug/mL	41.47%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.85	74	21365	50.56	ug/mlm	100
6) Phenol	8.57	94	58717	48.17	ug/mL	100
7) bis(2-Chloroethyl)ether	12.60	93	74087	50.04	ug/mL	96
8) 2-Chlorophenol	8.61	128	47149	50.82	ug/mL	95
9) 1,3-Dichlorobenzene	9.01	146	52942	52.30	ug/mL	98
10) 1,4-Dichlorobenzene	9.26	146	54825	52.49	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	52051	52.46	ug/mL	98
12) 2-Methylphenol	10.79	108	47472	53.93	ug/mL	65
13) bis(2-chloroisopropyl)ethe	10.28	45	64632	47.33	ug/mL#	1
14) 4-Methylphenol	10.79	108	47472	49.15	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.67	70	48058	48.86	ug/mL	91
16) Hexachloroethane	10.61	117	26915	49.93	ug/mL	99
19) Nitrobenzene	10.94	77	65242	52.61	ug/mL#	89
20) Isophorone	11.73	82	119099	45.58	ug/mL	96
21) 2-Nitrophenol	11.88	139	29485	47.92	ug/mL	98
22) 2,4-Dimethylphenol	10.79	107	57307	49.78	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.32	93	66255	49.66	ug/mL#	42
24) 2,4-Dichlorophenol	12.65	162	43957	50.41	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.83	180	48531	52.36	ug/mL	98
26) Naphthalene	13.00	128	149571	52.24	ug/mL#	91
27) 4-Chloroaniline	13.35	127	67787	50.05	ug/mL	98
28) Hexachlorobutadiene	13.50	225	27957	51.65	ug/mL	96
29) 4-Chloro-3-methylphenol	15.04	107	55034	49.01	ug/mL	100
30) 2-Chloronaphthalene	16.58	162	104679	51.41	ug/ml	99
31) 2-Methylnaphthalene	15.14	142	108545	47.23	ug/mL	100
33) Hexachlorocyclopentadiene	15.66	237	25173	44.85	ug/mL	96
34) 2,4,6-Trichlorophenol	16.10	196	35610	42.51	ug/mL	99
35) 2,4,5-Trichlorophenol	16.20	196	38697	59.22	ug/mL	100

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	17.05	65	49104	44.34	ug/mL#	100
38)	Dimethylphthalate	17.82	163	128716	49.12	ug/mL	99
39)	Acenaphthylene	17.80	152	166597	48.47	ug/mL	99
40)	2,6-Dinitrotoluene	17.91	165	30393	48.59	ug/mL	97
41)	3-Nitroaniline	18.34	138	34672	49.71	ug/mL	95
42)	Acenaphthene	18.36	153	104858	50.73	ug/mL	100
43)	2,4-Dinitrophenol	18.66	184	16518	47.58	ug/mL	99
44)	4-Nitrophenol	19.13	109	16116	48.25	ug/mL	89
45)	Dibenzofuran	18.92	168	163832	50.51	ug/mL	95
46)	2,4-Dinitrotoluene	19.96	165	113430	48.20	ug/mL#	32
47)	Diethylphthalate	20.07	149	138770	47.70	ug/mL	100
48)	Fluorene	19.96	166	122870	48.41	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	63340	52.68	ug/mL	93
51)	4-Nitroaniline	20.21	138	32609	58.46	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.30	198	23243	52.57	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	84236	49.39	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.61	77	199476	49.08	ug/ml	100
56)	4-Bromophenyl-phenylether	21.59	248	36733	53.12	ug/mL#	89
57)	Hexachlorobenzene	21.58	284	38977	54.11	ug/mL	91
58)	Pentachlorophenol	22.29	266	26808	58.11	ug/mL	98
59)	Phenanthrene	22.85	178	189424	51.58	ug/mL	100
60)	Anthracene	23.00	178	178492	52.73	ug/mLm	99
61)	Carbazole	23.64	167	170215	53.76	ug/ml	100
62)	Di-n-butylphthalate	25.14	149	273873	50.81	ug/mL	99
63)	Fluoranthene	26.47	202	191126	55.04	ug/mLm	95
65)	Benzidine	27.14	184	58486	41.24	ug/mlm	100
66)	Pyrene	27.10	202	200950	41.28	ug/mLm	87
68)	Butylbenzylphthalate	29.69	149	124639	39.98	ug/mL	95
69)	Benzo[a]anthracene	30.87	228	210709	42.89	ug/mLm	99
70)	3,3'-Dichlorobenzidine	31.00	252	57942	46.26	ug/mL	99
71)	Chrysene	30.96	228	130675	47.82	ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	186121	42.09	ug/mL	99
74)	Di-n-octylphthalate	33.57	149	533971	44.86	ug/mLm	99
75)	Benzo[b]fluoranthene	33.93	252	251584	43.65	ug/mLm	99
76)	Benzo[k]fluoranthene	34.01	252	148737	53.49	ug/mLm	94
77)	Benzo[a]pyrene	33.93	252	147880	51.60	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.43	276	53465	50.57	ug/mLm	89
79)	Dibenz[a,h]anthracene	37.54	278	44917	44.12	ug/mL	98
80)	Benzo[g,h,i]perylene	38.01	276	34048	40.97	ug/mLm	98

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

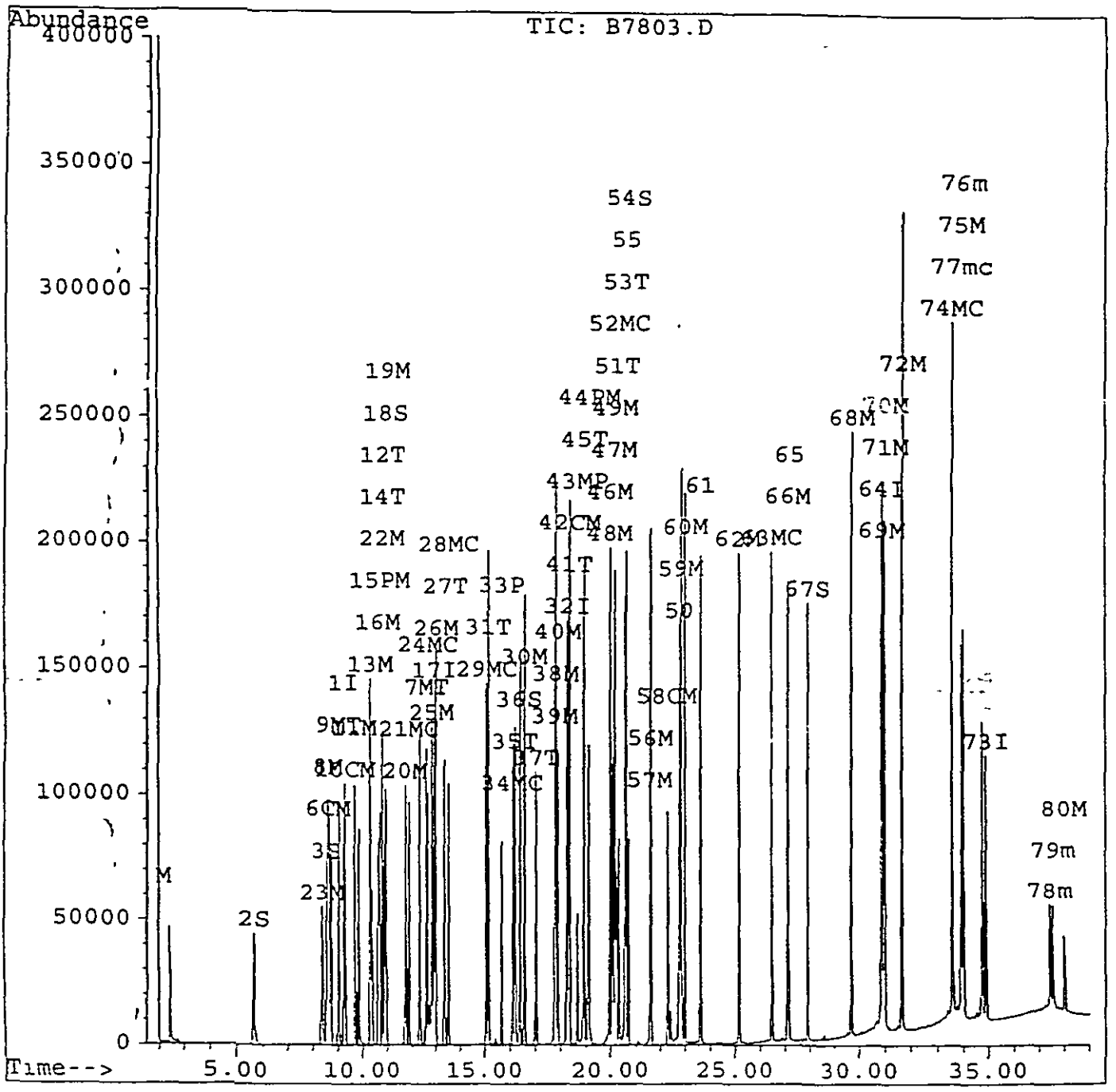
Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d
Acq On : 3 Jun 95 10:13 am
Sample : 50 STD.....
Misc :
Quant Time: Jun 7 9:32 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 : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name EMSL ANALYTICAL Contract

Project No : Site Location Group

Lab File ID (Standard) B7803 D Date Analyzed 6/3/95

Instrument ID. ABNA Time Analyzed 1013

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	29236	9 21	116999	12 92	80656	18 26
	UPPER LIMIT	58472	9 71	233998	13 42	161312	18 76
	LOWER LIMIT	14618	8 71	58500	12 42	40328	17.76
	SAMPLE NO.						
01	SBLK01	29342	9 21	113640	12 92	77393	18 25
02	9521072B	43362	9 20	172473	12 92	120771	18 25
03	9521073B	49674	9 20	207002	12 94	136613	18 27
04	SBLK02	45568	9 20	183778	12 92	124916	18 27
05	9522265B	38448	9 21	156239	12 92	104790	18 25
06	9522645B	34293	9 20	139874	12 92	94484	18 25
07	SBLK03	31802	9 20	131302	12 92	86836	18 27
08	9523339B	31877	9 20	132687	12 92	87914	18 25
09	9523341B	37996	9 20	159444	12.94	104434	18.27
10	9523342B	34168	9.20	146228	12.94	97312	18.27
11	9523343B	33809	9 20	139851	12 92	93023	18 27
12	9523530B	34840	9 20	145007	12 92	98737	18 25
13	9523531B	35055	9 20	145276	12 92	99265	18 27
14	9523533B	36725	9 20	152052	12.92	102907	18 27
15	9523534B	37321	9 29	127658	13 06	64338	18.50
16	9523535B	36905	9 21	144207	12 92	97310	18 26
17	9523536B	36125	9 20	148482	12 92	99681	18 27
18	SBLK04	38489	9.20	152333	12 92	104920	18 25
19	9523789B	39839	9.20	162610	12 92	110929	18.27
20	9523792B	36962	9 20	155161	12 92	105988	18.27
21	9523787B	38496	9 20	159554	12 92	108441	18 27
22	SBLK05	43303	9 20	177127	12 92	122916	18 27

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) B7803 D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed 1013

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	29236	9 21	116999	12 92	80656	18 26
	UPPER LIMIT	58472	9.71	233998	13 42	161312	18 76
	LOWER LIMIT	14618	8.71	58500	12 42	40328	17 76
	SAMPLE NO.						
01	22654MS	33780	9 20	129967	12 94	93254	18 26
02	22654MSD	35303	9 20	144937	12 94	99611	18 26
03	22659MS	28616	9 20	119812	12 94	81829	18 26
04	22659MSD	30456	9.21	121585	12 94	84364	18 26
05							
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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

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name EMSL ANALYTICAL Contract

Project No · Site Location Group

Lab File ID (Standard) B7803 D Date Analyzed 6/3/95

Instrument ID ABNA Time Analyzed 1013

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	134208	22 77	129676	30 89	93467	34.90
	UPPER LIMIT	268416	23.27	259352	31 39	186934	35.40
	LOWER LIMIT	67104	22 27	64838	30.39	46734	34.40
	SAMPLE NO.						
01	SBLK01	127774	22 76	144639	30 86	143369	34.89
02	9521072B	201946	22 77	208937	30 89	160791	34 90
03	9521073B	222787	22.77	231737	30 89	165808	34.90
04	SBLK02	200423	22 77	227269	30 88	184816	34 91
05	9522265B	172502	22 78	184570	30 88	122938	34.91
06	9522845B	149864	22 78	156654	30 88	124082	34.91
07	SBLK03	142609	22 77	151919	30 88	122270	34.91
08	9523339B	145640	22.78	157437	30 89	128975	34.92
09	9523341B	172617	22 77	198222	30.90	166777	34 93
10	9523342B	156213	22.77	174808	30 88	147217	34.91
11	9523343B	149747	22.77	162481	30 88	137109	34.91
12	9523530B	159922	22.78	179407	30 88	152667	34 91
13	9523531B	164218	22 77	179435	30 88	151215	34.91
14	9523533B	167089	22 77	185071	30 88	155624	34 91
15	9523534B	126172	22 95	162548	30 91	85072	34 88
16	9523535B	153052	22 76	160811	30 89	134801	34 89
17	9523536B	149413	22 77	158425	30 88	129419	34 91
18	SBLK04	168411	22 78	175380	30 88	148566	34 91
19	9523789B	183194	22 77	209328	30 88	181543	34.91
20	9523792B	175832	22.77	198461	30 88	168915	34.91
21	9523787B	177208	22 77	191680	30 88	155077	34 91
22	SBLK05	199698	22 77	216974	30 88	174620	34 91

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): B7803 D Date Analyzed 6/3/95

Instrument ID ABNA Time Analyzed 1013

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	134208	22 77	129676	30 89	93467	34 90
	UPPER LIMIT	268416	23.27	259352	31 39	186934	35.40
	LOWER LIMIT	67104	22 27	64838	30.39	46734	34 40
	SAMPLE NO.						
01	22654MS	155903	22 77	148922	30 91	65345	34 91
02	22654MSD	164759	22.77	152801	30 91	66464	34.91
03	22659MS	135678	22 77	133913	30 90	64806	34 89
04	22659MSD	145091	22.77	140877	30 90	65773	34 90
05							
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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 146

9523341B FB

Lab Name: EMSL ANALYTICAL Contract

Project No. Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9523341B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B7812 D

Level (low/med) Date Received 5/22/95

% Moisture decanted: (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume 1000 (uL) Date Analyzed: 6/3/95

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9523341B FB

147

Lab Name EMSL ANALYTICAL Contract. _____

Project No _____ Site _____ Location. _____ Group _____

Matrix (soil/water) WATER Lab Sample ID 9523341B

Sample wt/vol: 1000 0 (g/mL ML Lab File ID B7812 D

Level. (low/med) _____ Date Received: 5/22/95

% Moisture. _____ decanted. (Y/N) N Date Extracted. 5/26/95

Concentrated Extract Volume. 1000 (uL) Date Analyzed 6/3/95

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
9523341B
FB

148

Lab Name EMSL ANALYTICAL Contract

Project No · Site Location Group·

Matrix· (soil/water) WATER Lab Sample ID 9523341B

Sample wt/vol 1000 0 (g/mL) ML Lab File ID. B7812 D

Level. (low/med) Date Received. 5/22/95

% Moisture· 0 decanted (Y/N) N Date Extracted 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed· 6/3/95

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	29 88	7	J
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30				

Quantitation Report

149

Data File : c:\hpchem\1\data2\b7812.d Vial: 11
Acq On : 3 Jun 95 5:47 pm Operator: SCOTTV
Sample : 23341..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:46 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	37996	40.00 ug/mL	0.17
17) Naphthalene-d8	12.94	136	159444	40.00 ug/mL	0.19
32) Acenaphthene-d10	18.27	164	104434	40.00 ug/mL	0.22
50) Phenanthrene-d10	22.77	188	172617	40.00 ug/ml	0.25
64) Chrysene-d12	30.90	240	198222	40.00 ug/mL	0.32
73) Perylene-d12	34.93	264	166777	40.00 ug/mL	0.33
System Monitoring Compounds					%Recovery
2) 2-Fluorophenol	0.00	112	0	0.00 ug/mL	0.00%
3) Phenol-d5	9.22	99	398	0.22 ug/mL	0.22%
18) Nitrobenzene-d5	10.88	82	110053	60.58 ug/mL	60.58%
36) 2-Fluorobiphenyl	16.40	172	187875	59.97 ug/mL	59.97%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00 ug/mL	0.00%
67) Terphenyl-d14	27.95	244	330666	62.85 ug/ml	62.85%

Target Compounds Qvalue

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

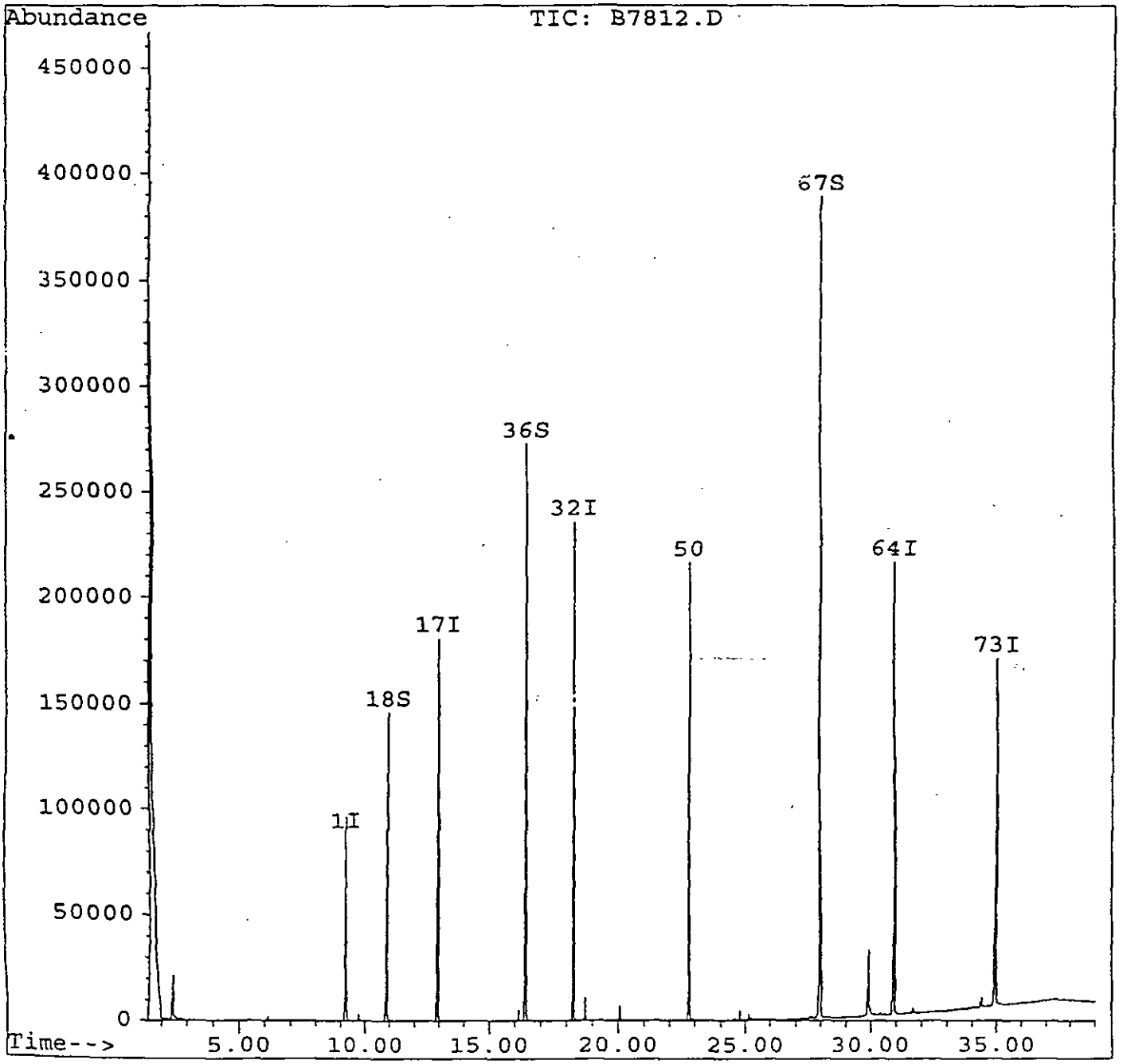
Quantitation Report

Data File : c:\hpchem\1\data2\b7812.d
Acq On : 3 Jun 95 5:47 pm
Sample : 23341.....
Misc :
Quant Time: Jun 5 15:46 1995

Converted from RTE d

Vial: 11
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

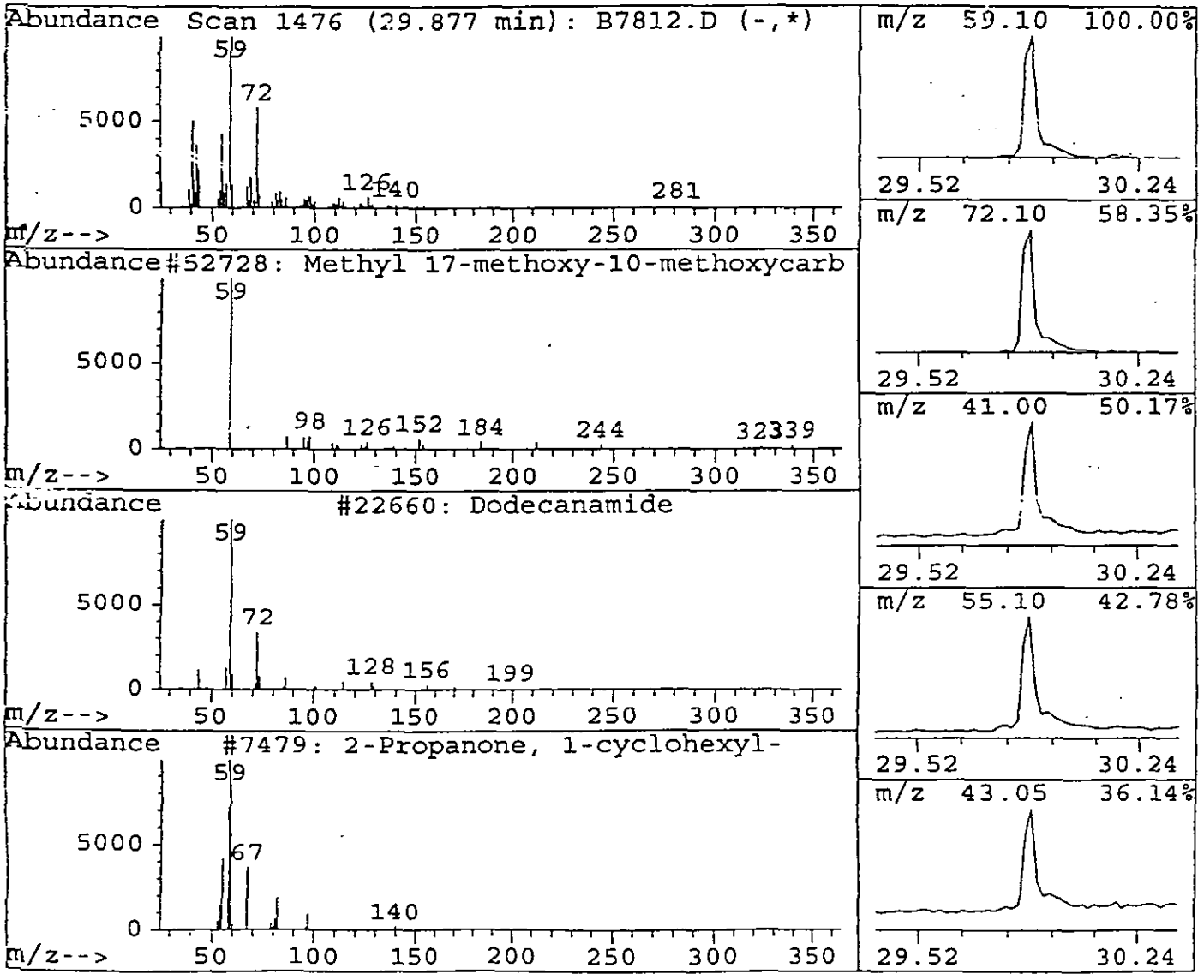


Data File : c:\hpchem\1\data2\b7812.d Vial: 11
Acq On : 3 Jun 95 5:47 pm Operator: SCOTTV
Sample : 23341..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

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.
29.88	6.60 ug/ml	95507	Chrysene-d12	30.90

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Methyl 17-methoxy-10-methoxycarbony	52728	000000-00-0	43
2	Dodecanamide	22660	001120-16-7	40
3	2-Propanone, 1-cyclohexyl-	7479	000103-78-6	38
4	Hydrazine, 1,1-dimethyl-2-(1-methyl	5486	075267-97-9	38
5	Pentanamide, 4-methyl-	3136	001119-29-5	37



1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

9523342B

MW1-293192

152

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9523342B

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7813.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

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

9523342B

MW1-293792

153

Lab Name. EMSL ANALYTICAL Contract

Project No Site. Location· Group

Matrix. (soil/water) WATER Lab Sample ID· 9523342B

Sample wt/vol 1000 0 (g/mL ML Lab File ID. B7813 D

Level: (low/med) Date Received 5/22/95

% Moisture: decanted (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume 1000 (uL) Date Analyzed: 6/3/95

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. 154

9523342B
MW1-293192

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: 9523342B

Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B7813.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: 0 decanted: (Y/N) N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

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	29.86	4	J
2.				
3.				
4.				
5.				
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Quantitation Report

Data File : c:\hpchem\1\data2\b7813.d Vial: 12
Acq On : 3 Jun 95 6:38 pm Operator: SCOTTV
Sample : 23342..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:50 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	34168	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	146228	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.27	164	97312	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	156213	40.00	ug/ml	0.26
64) Chrysene-d12	30.88	240	174808	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	147217	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.64	112	38	0.04	ug/mL	0.04%
3) Phenol-d5	9.20	99	382	0.24	ug/mL	0.24%
18) Nitrobenzene-d5	10.88	82	123895	74.37	ug/mL	74.37%
36) 2-Fluorobiphenyl	16.40	172	203808	69.82	ug/mL	69.82%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.95	244	31[illegible]07	67.70	ug/mL	67.70%
Target Compounds						Qvalue

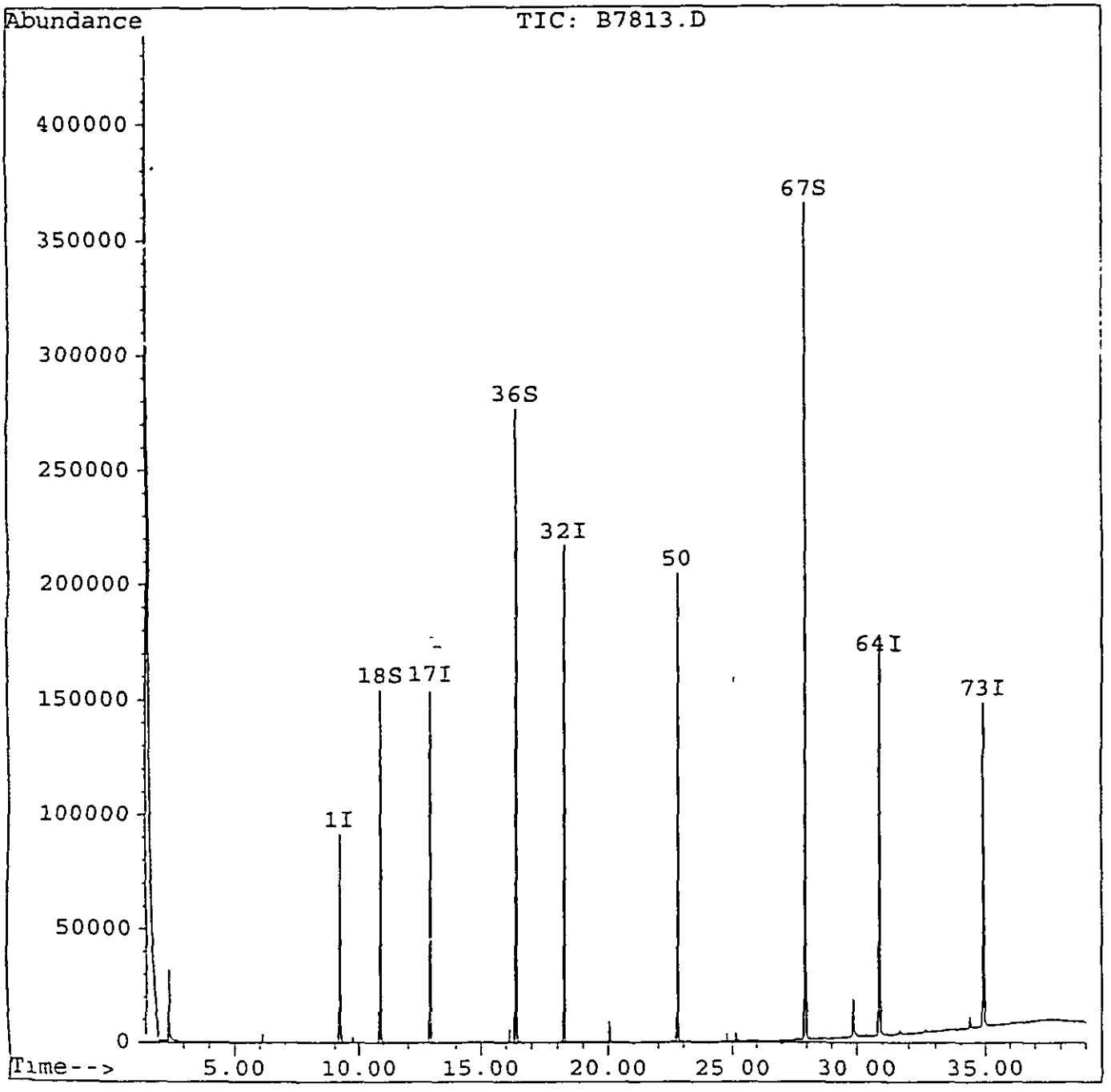
(#) = qualifier out of range (m) = manual integration

Quantitation Report

156

Data File : c:\hpchem\1\data2\b7813.d Vial: 12
Acq On : 3 Jun 95 6:38 pm Operator: SCOTTV
Sample : 23342..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:50 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Library Search Compound Report

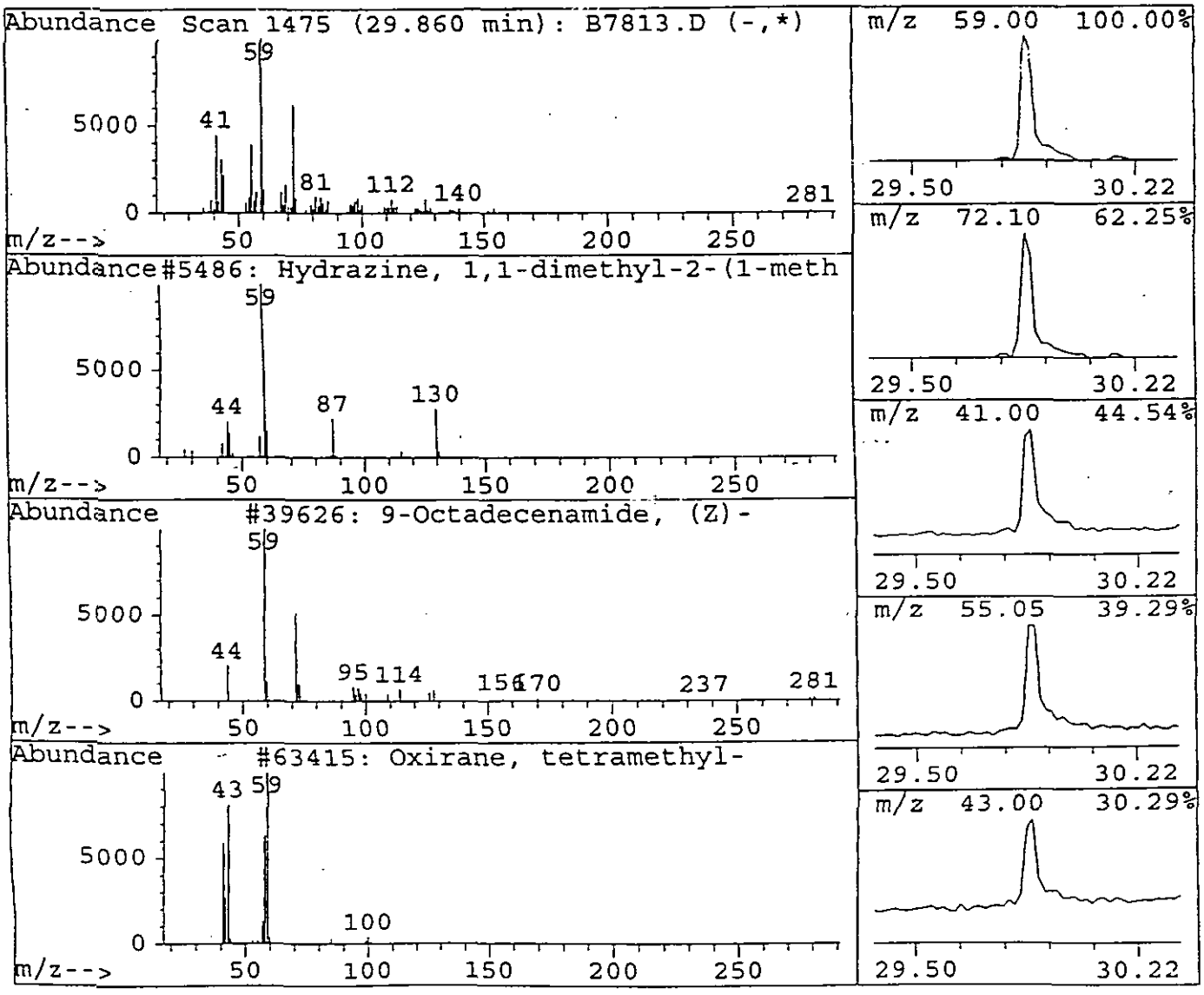
Data File : c:\hpchem\1\data2\b7813.d
Acq On : 3 Jun 95 6:38 pm
Sample : 23342..... Converted from RTE d
Misc :

Vial: 12
Operator: SCOTTV
Inst : ABNA
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.
29.86	4.23 ug/ml	54854	Chrysene-d12	30.88

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Hydrazine, 1,1-dimethyl-2-(1-methyl	5486	075267-97-9	38
2	9-Octadecenamide, (Z)-	39626	000301-02-0	38
3	Oxirane, tetramethyl-	63415	005076-20-0	38
4	Octanal, 7-hydroxy-3,7-dimethyl-	68361	000107-75-5	35
5	7-Octen-2-ol, 2,6-dimethyl-	11588	018479-58-8	35



2C

WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

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

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK02	29	23	38						
02	9522265B	44	37	66						
03	9522845B	60	49	73						
04	SBLK03	68	67	89						
05	9523339B	73	69	60						
06	9523341B	61	60	63						
07	9523342B	74	70	68						
08	9523343B	64	62	72						
09	9523530B	64	61	65						
10	9523531B	73	67	69						
11	9523533B	40	39	64						
12	9523534B	81	67	76						
13	9523535B	70	69	68						
14	9523536B	62	65	68						
15	SBLK04	62	61	68						
16	9523789B	57	61	72						
17	9523792B	60	64	70						
18	9523787B	39	43	63						
19	SBLK05	57	55	63						
20	22654MS	91	63	82						
21	22654MSD	74	61	72						
22	22659MS	75	67	80						
23	22659MSD	78	65	78						
24										
25										
26										
27										
28										
29										
30										

	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

4B

SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

SBLK03

159

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B7810.D Lab Sample ID: BLANK3

Instrument ID: ABNA Date Extracted: 5/26/95

Matrix: (soil/water) WATER Date Analyzed: 6/3/95

Level: (low/med) _____ Time Analyzed: 1606

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9523339B	9523339B	B7811.D	06/03/95
02	9523341B	9523341B	B7812.D	06/03/95
03	9523342B	9523342B	B7813.D	06/03/95
04	9523343B	9523343B	B7814.D	06/03/95
05	9523530B	9523530B	B7815.D	06/03/95
06	9523531B	9523531B	B7816.D	06/03/95
07	9523533B	9523533B	B7817.D	06/03/95
08	9523534B	9523534B	B7818.D	06/03/95
09	9523535B	9523535B	B7819.D	06/03/95
10	9523536B	9523536B	B7820.D	06/04/95
11				
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK03

160

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: BLANK3

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7810.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK03

161

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: BLANK3

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7810.D

Level: (low/med) _____ Date Received: 5/22/95

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/3/95

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.
SBLK03

162

Lab Name: EMSL ANALYTICAL Contract:

Project No · Site: Location. Group:

Matrix. (soil/water) WATER Lab Sample ID· BLANK3

Sample wt/vol: 1000 0 (g/mL) ML Lab File ID B7810 D

Level: (low/med) Date Received: 5/22/95

% Moisture: 0 decanted. (Y/N) N Date Extracted 5/26/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed 6/3/95

Injection Volume. 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

CAS Number	Compound Name	RT	Est Conc	Q
1.	Unknown	29 86	8	J
2	Unknown	34 37	5	J
3.				
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Quantitation Report

Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:43 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

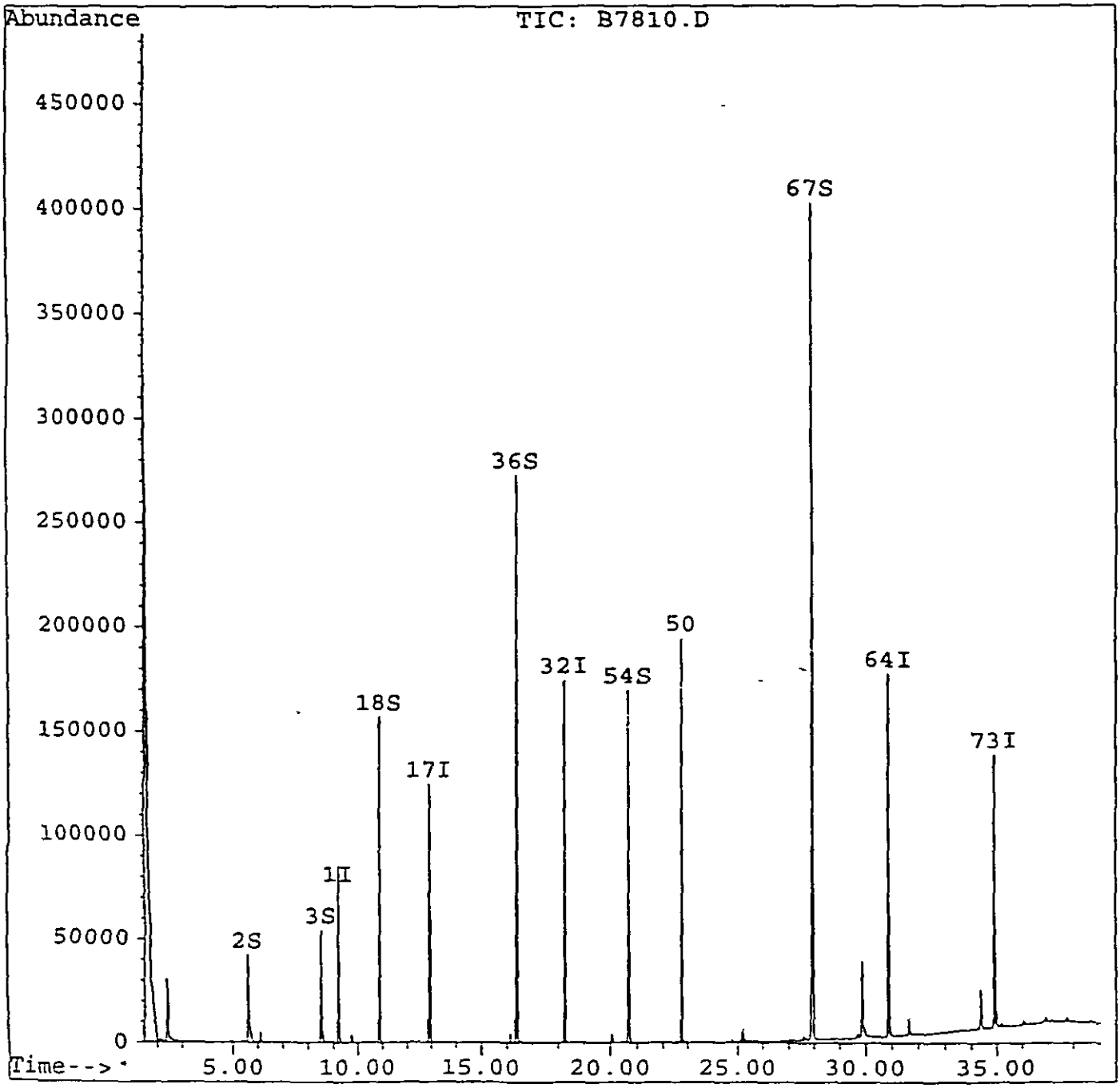
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	31802	40.00	ug/mL	0.17
17) Naphthalene-d8	12.92	136	131302	40.00	ug/mL	0.17
32) Acenaphthene-d10	18.27	164	86836	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	142609	40.00	ug/ml	0.25
64) Chrysene-d12	30.88	240	151919	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	122270	40.00	ug/mL	0.31
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.62	112	39963	44.43	ug/mL	44.43%
3) Phenol-d5	8.53	99	41380	27.79	ug/mL	27.79%
18) Nitrobenzene-d5	10.88	82	101686	67.97	ug/mL	67.97%
36) 2-Fluorobiphenyl	16.40	172	173985	66.80	ug/mL	66.80%
54) 2,4,6-Tribromophenol	20.69	330	34408	89.34	ug/mL	89.34%
67) Terphenyl-d14	27.95	244	360667	89.45	ug/mL	89.45%
Target Compounds						**Qvalue**

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 15:43 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



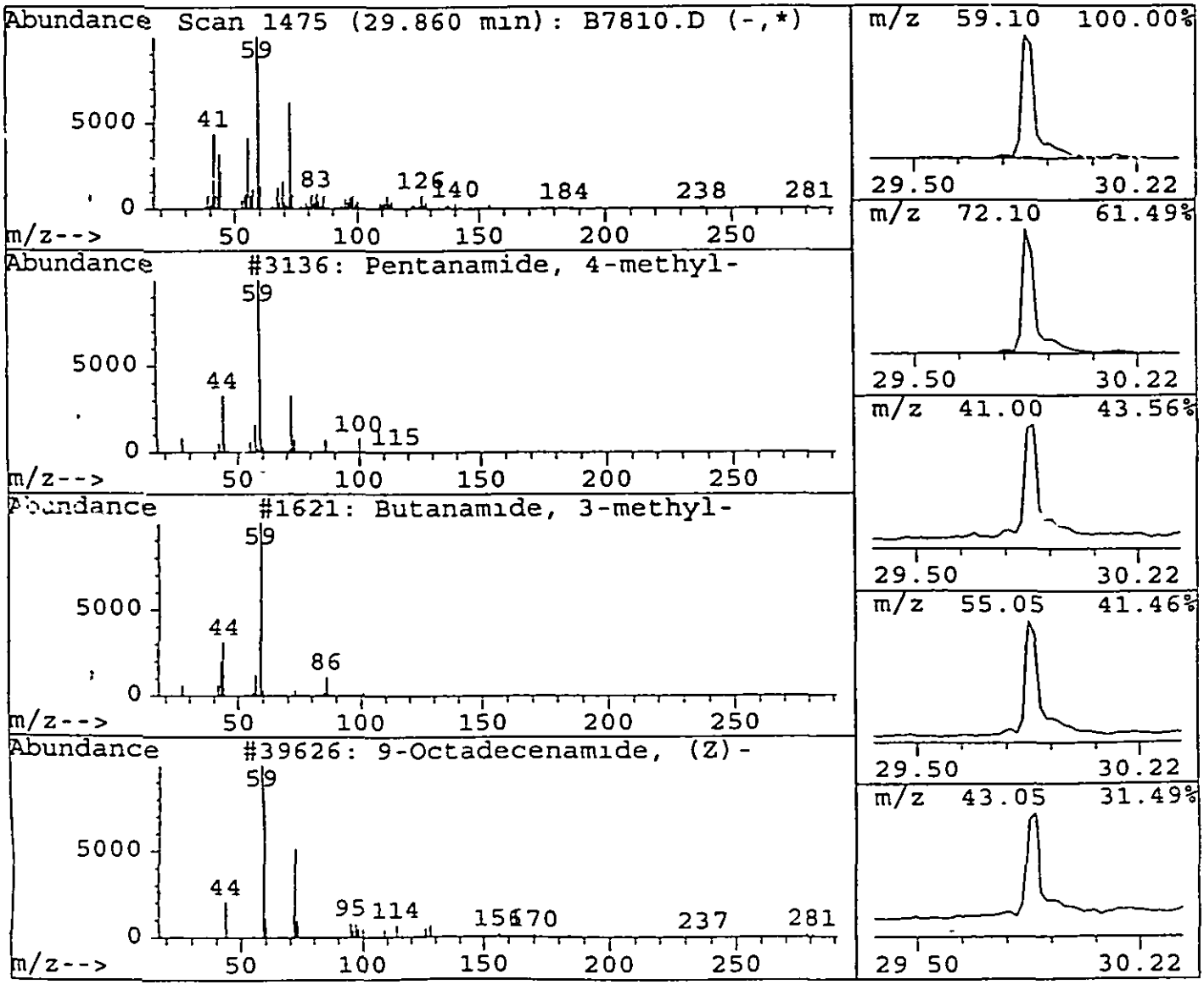
Library Search Compound Report

Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 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. -
29.86	8.47 ug/ml	96921	Chrysene-d12	30.88

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Pentanamide, 4-methyl-	3136	001119-29-5	50
2	Butanamide, 3-methyl-	1621	000541-46-8	47
3	9-Octadecenamide, (Z)-	39626	000301-02-0	43
4	2,3-Dimethyl-4-penten-2-ol	3046	019781-52-3	38
5	Hydrazine, 1,1-dimethyl-2-(1-methyl	5486	075267-97-9	38

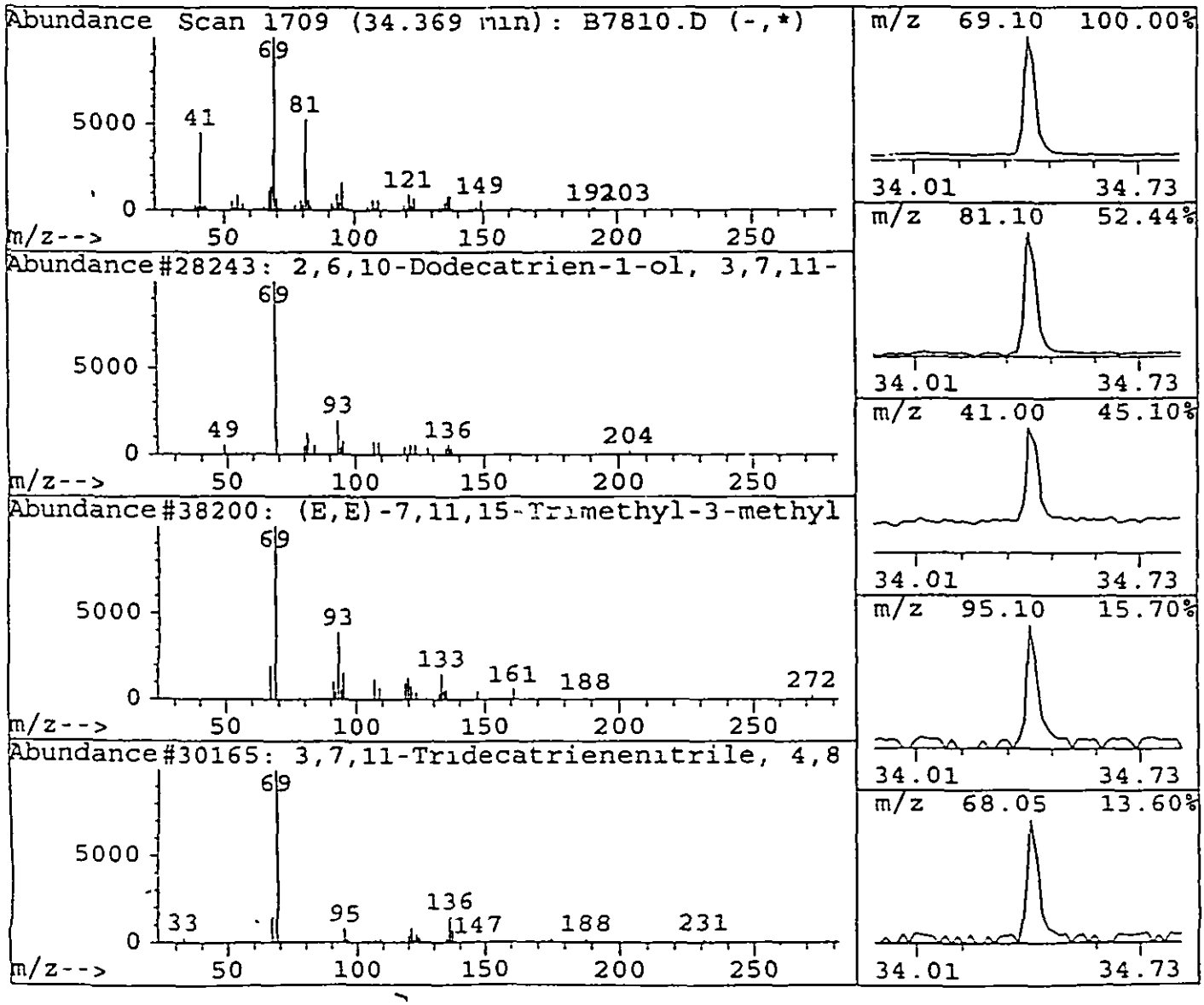


Data File : c:\hpchem\1\data2\b7810.d Vial: 9
Acq On : 3 Jun 95 4:06 pm Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00

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.
34.37	5.41 ug/ml	50573	Perylene-d12	34.91

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	2,6,10-Dodecatrien-1-ol, 3,7,11-tri	28243	004602-84-0	64
2	(E,E)-7,11,15-Trimethyl-3-methylene	38200	070901-63-2	56
3	3,7,11-Tridecatrienenitrile, 4,8,12	30165	006006-01-5	56
4	1,6-Octadiene, 3,5-dimethyl-, cis-	7016	000000-00-0	53
5	2,6-Octadien-1-ol, 3,7-dimethyl-, (	67079	000106-25-2	53



SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 167

SBLK05

Lab Name. EMSL ANALYTICAL Contract: _____

Project No _____ Site _____ Location. _____ Group: _____

Lab File ID B7825 D Lab Sample ID. BLANK5

Instrument ID ABNA Date Extracted. 5/23/95

Matrix. (soil/water) WATER Date Analyzed: 6/4/95

Level: (low/med) _____ Time Analyzed: 0435

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

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	22654MS	22654MS	B7826 D	06/04/95
02	22654MSD	22654MSD	B7827.D	06/04/95
03	22659MS	22659MS	B7828 D	06/04/95
04	22659MSD	22659MSD	B7829.D	06/04/95
05				
06				
07				
08				
09				
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COMMENTS:

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK05

168

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

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

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

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
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
95-57-8	2-Chlorophenol	2	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
88-75-5	2-Nitrophenol	3	U
105-67-9	2,4-Dimethylphenol	3	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-83-2	2,4-Dichlorophenol	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
59-50-7	4-Chloro-3-methylphenol	3	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	3	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
51-28-5	2,4-Dinitrophenol	24	U
100-02-7	4-Nitrophenol	21	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

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK05

169

Lab Name EMSL ANALYTICAL Contract:

Project No Site Location. Group.

Matrix (soil/water) WATER Lab Sample ID BLANK5

Sample wt/vol 1000 0 (g/mL ML Lab File ID B7825 D

Level (low/med) Date Received.

% Moisture decanted. (Y/N) N Date Extracted. 5/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/4/95

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
534-52-1	4,6-Dinitro-2-methylphenol	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
87-86-5	Pentachlorophenol	5	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
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

SBLK05

170

Lab Name EMSL ANALYTICAL Contract

Project No · Site· Location Group·

Matrix (soil/water) WATER Lab Sample ID BLANK5

Sample wt/vol 1000 0 (g/mL ML Lab File ID B7825 D

Level. (low/med) Date Received 5/24/95

% Moisture· decanted (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed. 6/4/95

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

SBLK05

171

Lab Name: EMSL ANALYTICAL Contract.

Project No : Site Location: Group:

Matrix (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol. 1000 0 (g/mL ML Lab File ID B7825 D

Level: (low/med) Date Received. 5/24/95

% Moisture. decanted: (Y/N). N Date Extracted 5/23/95

Concentrated Extract Volume 1000 (uL) Date Analyzed. 6/4/95

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

Quantitation Report

172

Data File : c:\hpchem\1\data2\b7825.d Vial: 24
Acq On : 4 Jun 95 4:35 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 16:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	43303	40.00	ug/mL	0.17
17) Naphthalene-d8	12.92	136	177127	40.00	ug/mL	0.17
32) Acenaphthene-d10	18.27	164	122916	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	199698	40.00	ug/ml	0.26
64) Chrysene-d12	30.88	240	216974	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	174620	40.00	ug/mL	0.31
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.64	112	78262	63.90	ug/mL	63.90%
3) Phenol-d5	8.53	99	133633	65.92	ug/mL	65.92%
18) Nitrobenzene-d5	10.88	82	114709	56.84	ug/mL	56.84%
36) 2-Fluorobiphenyl	16.40	172	202657	54.96	ug/mL	54.96%
54) 2,4,6-Tribromophenol	20.70	330	47874	88.77	ug/mL	88.77%
67) Terphenyl-d14	27.93	244	363044	63.04	ug/mL	63.04%
Target Compounds						**Qvalue**

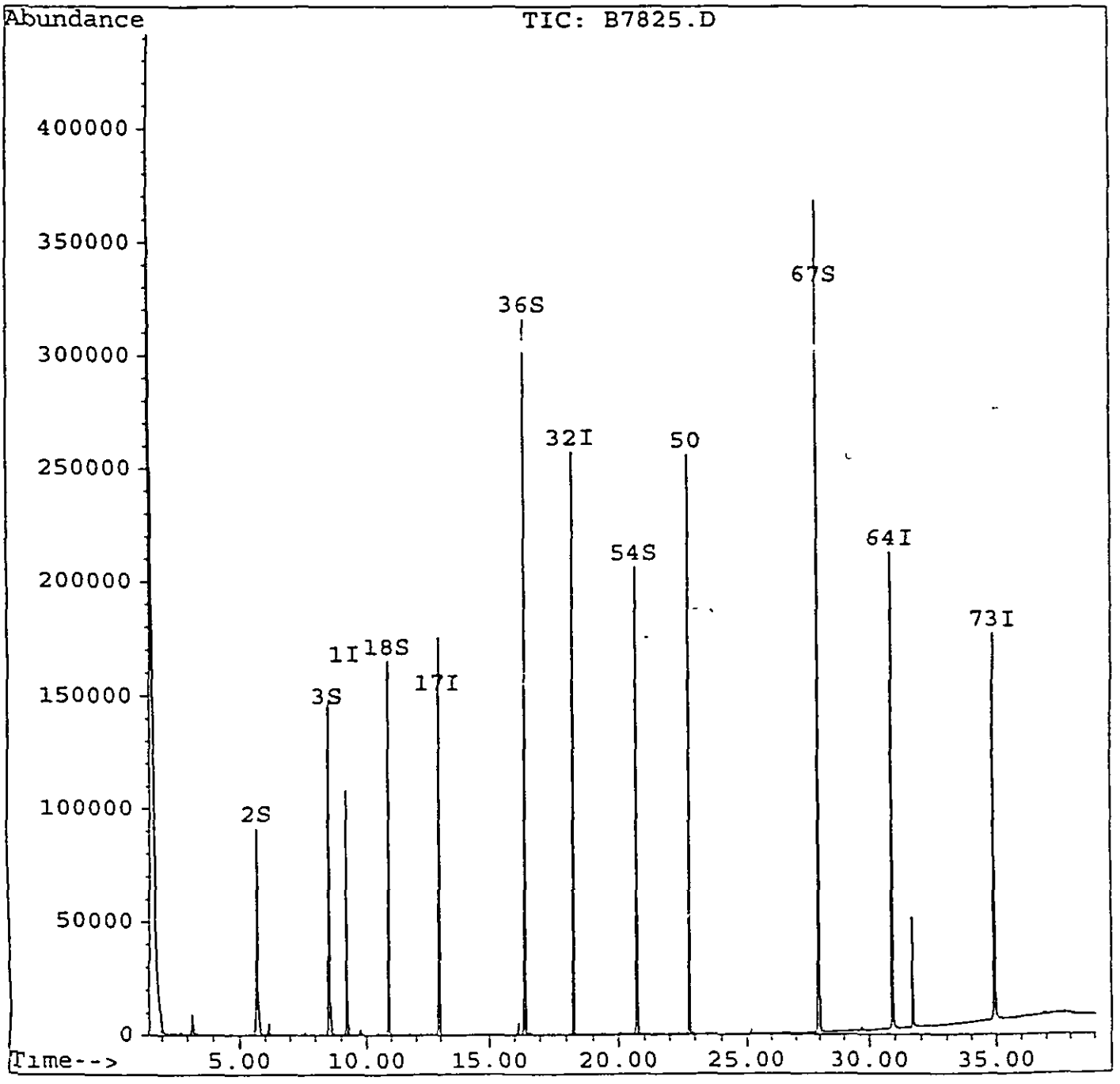
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7825.d
Acq On : 4 Jun 95 4:35 am
Sample : BLANK..... Converted from RTE d
Misc :
Quant Time: Jun 5 16:06 1995

Vial: 24
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 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 May 31 10:06:36 1995
Response via : Initial Calibration

Non-Spiked Sample: B7742.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7826.D	B7827.D
Sample :	22654MS.....	Converted from RTE data file >B7826::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N nitrosodimethylami	0.0	100	108	91	108	91	17	100	1-300
Phenol	0.0	100	69	64	69	64	7	23	5-112
bis(2-Chloroethyl)et	0.0	100	77	68	77	68	13	55	12-158
2-Chlorophenol	0.0	100	76	67	76	67	13	29	23-134
1,3-Dichlorobenzene	0.0	100	57	50	57	50	14	42	1-172
1,4-Dichlorobenzene	0.0	100	58	51	58	51	13	32	20-124
1,2-Dichlorobenzene	0.0	100	62	53	62	53	15	31	32-129
bis(2-chloroisopropy	0.0	100	134	118	134	118	13	46	36-166
N-Nitroso-Di-n-propy	0.0	100	78	66	78	66	16	55	1-230
Hexachloroethane	0.0	100	50	42	50	42	18	25	40-113
Nitrobenzene	0.2	100	84	71	83	71	17	39	35-180
Isophorone	0.0	100	70	59	70	59	17	63	21-196
2-Nitrophenol	0.0	100	79	65	79	65	19	35	29-182
2,4-Dimethylphenol	0.0	100	43	40	43	40	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	58	49	58	49	18	35	33-184
2,4-Dichlorophenol	0.0	100	79	67	79	67	16	26	39-135
1,2,4-Trichlorobenze	0.0	100	67	59	67	59	13	28	44-142
Naphthalene	0.0	100	71	61	71	61	15	30	21-133
Hexachlorobutadiene	0.0	100	55	49	55	49	11	26	24-116
4-Chloro-3-methylphe	0.0	100	73	63	73	63	15	37	22-147
2-Chloronaphthalene	0.0	100	77	68	77	68	12	13	60-118
2,4,6-Trichloropheno	0.0	100	57	52	57	52	8	32	37-144
Dimethylphthalate	0.0	100	44	35	44	35	22	23	1-112
Acenaphthylene	0.0	100	56	50	56	50	12	40	33-145
2,6-Dinitrotoluene	0.0	100	73	71	73	71	3	30	50-158
Acenaphthene	0.0	100	77	71	77	71	8	28	47-145
2,4-Dinitrophenol	0.0	100	68	65	68	65	4	50	1-191
4-Nitrophenol	0.5	100	76	70	76	70	8	47	1-132
2,4-Dinitrotoluene	0.0	100	75	68	75	68	9	22	39-139
Diethylphthalate	0.1	100	47	41	47	41	15	27	1-114
Fluorene	0.9	100	75	69	74	68	9	21	59-121
4-Chlorophenyl-pheny	0.0	100	77	69	77	69	11	33	25-158
4,6-Dinitro-2-methyl	0.0	100	76	70	76	70	8	93	1-181
4-Bromophenyl-phenyl	0.0	100	78	72	78	72	8	23	53-127
Hexachlorobenzene	0.0	100	90	82	90	82	10	25	1-152
Pentachlorophenol	0.0	100	100	93	100	93	7	49	14-176
Phenanthrene	0.0	100	81	75	81	75	9	21	54-120
Anthracene	0.0	100	96	83	96	83	14	32	52-115
Di-n-butylphthalate	0.2	100	77	71	77	71	8	17	1-118
Fluoranthene	0.0	100	95	88	95	88	8	33	26-137
Pyrene	0.0	100	68	65	68	65	5	25	52-115
Butylbenzylphthalate	0.3	100	65	58	64	57	12	23	1-152
Benzo[a]anthracene	0.1	100	65	58	65	58	11	28	33-143
3,3'-Dichlorobenzidi	0.0	100	81	74	81	74	9	71	1-262

Chrysene	0.1	100	118	106	118	106	10	48	17-168
bis(2-Ethylhexyl)pht	0.4	100	71	63	71	62	13	41	8-158
Di-n-octylphthalate	0.0	100	67	59	67	59	13	31	4-146
Benzo[b]fluoranthene	0.0	100	53	48	53	48	11	39	24-159
Benzo[k]fluoranthene	0.1	100	108	99	108	99	8	32	11-162
Benzo[a]pyrene	0.1	100	101	90	101	90	12	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	42	38	42	38	10	45	1-171
Dibenz[a,h]anthracen	0.0	100	47	50	47	50	5	70	1-227
Benzo[g,h,i]perylene	0.0	100	54	48	54	48	11	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:06 1995

Vial: 25
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	33780	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	129967	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	93254	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	155903	40.00	ug/ml	0.25
64) Chrysene-d12	30.91	240	148922	40.00	ug/mL	0.33
73) Perylene-d12	34.91	264	65345	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.66	112	86730	90.77	ug/mL	90.77%
3) Phenol-d5	8.57	99	147096	93.02	ug/mL	93.02%
18) Nitrobenzene-d5	10.90	82	134034	90.52	ug/mL	90.52%
36) 2-Fluorobiphenyl	16.41	172	175522	62.75	ug/mL	62.75%
54) 2,4,6-Tribromophenol	20.71	330	46665	110.83	ug/mL	110.83%
67) Terphenyl-d14	27.94	244	322279	81.53	ug/mL	81.53%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	52801	108.13	ug/mlm	0
5) Pyridine	1.58	79	3052	8.44	ug/ml	100
6) Phenol	8.61	94	97169	68.99	ug/mL	100
7) bis(2-Chloroethyl)ether	12.61	93	132335	77.35	ug/mL	96
8) 2-Chlorophenol	8.63	128	81945	76.45	ug/mL	90
9) 1,3-Dichlorobenzene	9.01	146	66629	56.96	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	69858	57.89	ug/mL	100
11) 1,2-Dichlorobenzene	9.65	146	70561	61.55	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.30	45	211229	133.86	ug/mL#	65
15) N-Nitroso-Di-n-propylamine	10.69	70	88152	77.56	ug/mL	95
16) Hexachloroethane	10.61	117	31123	49.97	ug/mL	89
19) Nitrobenzene	10.96	77	115194	83.63	ug/mL#	85
20) Isophorone	11.75	82	203312	70.04	ug/mL	98
21) 2-Nitrophenol	11.88	139	53977	78.97	ug/mL#	85
22) 2,4-Dimethylphenol	12.33	107	55100	43.09	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.72	93	86556	58.41	ug/mL	98
24) 2,4-Dichlorophenol	12.67	162	76577	79.05	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.83	180	68935	66.95	ug/mL	98
26) Naphthalene	13.00	128	225507	70.91	ug/mL#	90
27) 4-Chloroaniline	13.00	127	28186	18.73	ug/mL#	1
28) Hexachlorobutadiene	13.52	225	33083	55.03	ug/mL	98
29) 4-Chloro-3-methylphenol	15.04	107	91543	73.39	ug/mL	95
30) 2-Chloronaphthalene	16.60	162	173185	76.58	ug/mlm	95
31) 2-Methylnaphthalene	15.04	142	68690	26.91	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	54836	56.62	ug/mL	98
35) 2,4,5-Trichlorophenol	16.12	196	54836	72.58	ug/mL	98
37) 2-Nitroaniline	17.93	65	3806	2.97	ug/mL#	100
38) Dimethylphthalate	17.83	163	132688	43.80	ug/mL	100

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:06 1995

Vial: 25
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	221369	55.71	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	52674	72.83	ug/mL	98
42)	Acenaphthene	18.37	153	184037	77.01	ug/mL	98
43)	2,4-Dinitrophenol	18.68	184	27438	68.35	ug/mL#	82
44)	4-Nitrophenol	19.15	109	29448	76.25	ug/mL	93
46)	2,4-Dinitrotoluene	19.97	165	203714	74.87	ug/mL#	33
47)	Diethylphthalate	20.07	149	159610	47.45	ug/mL	100
48)	Fluorene	19.97	166	219880	74.92	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	106703	76.76	ug/mL	99
51)	4-Nitroaniline	19.97	138	2333	3.60	ug/mL#	26
52)	4,6-Dinitro-2-methylphenol	20.32	198	38799	75.54	ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	120798	60.97	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	341255	72.29	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	63010	78.44	ug/mL	93
57)	Hexachlorobenzene	21.59	284	75708	90.48	ug/mL#	81
58)	Pentachlorophenol	22.31	266	53483	99.80	ug/mL	98
59)	Phenanthrene	22.87	178	347261	81.41	ug/mL	99
60)	Anthracene	22.87	178	375780	95.56	ug/mL	98
62)	Di-n-butylphthalate	25.16	149	485216	77.50	ug/mL	100
63)	Fluoranthene	27.13	202	383198	95.00	ug/mL	95
65)	Benzidine	27.15	184	31355	19.25	ug/ml	100
66)	Pyrene	27.13	202	382718	68.46	ug/mL#	87
68)	Butylbenzylphthalate	29.69	149	231108	64.56	ug/mL	98
69)	Benzo[a]anthracene	30.89	228	364541	64.61	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.03	252	116175	80.76	ug/mL	99
71)	Chrysene	30.89	228	369164	117.64	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	362642	71.41	ug/mL	98
74)	Di-n-octylphthalate	33.57	149	561704	67.50	ug/mL	99
75)	Benzo[b]fluoranthene	33.94	252	214943	53.34	ug/mL	99
76)	Benzo[k]fluoranthene	33.94	252	210450	108.25	ug/mL	91
77)	Benzo[a]pyrene	34.04	252	202935	101.27	ug/mL	97
78)	Indeno[1,2,3-cd]pyrene	37.41	276	31241	42.27	ug/mL#	76
79)	Dibenz[a,h]anthracene	37.53	278	33601	47.21	ug/mL#	91
80)	Benzo[g,h,i]perylene	37.41	276	31328	53.91	ug/mL#	91

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

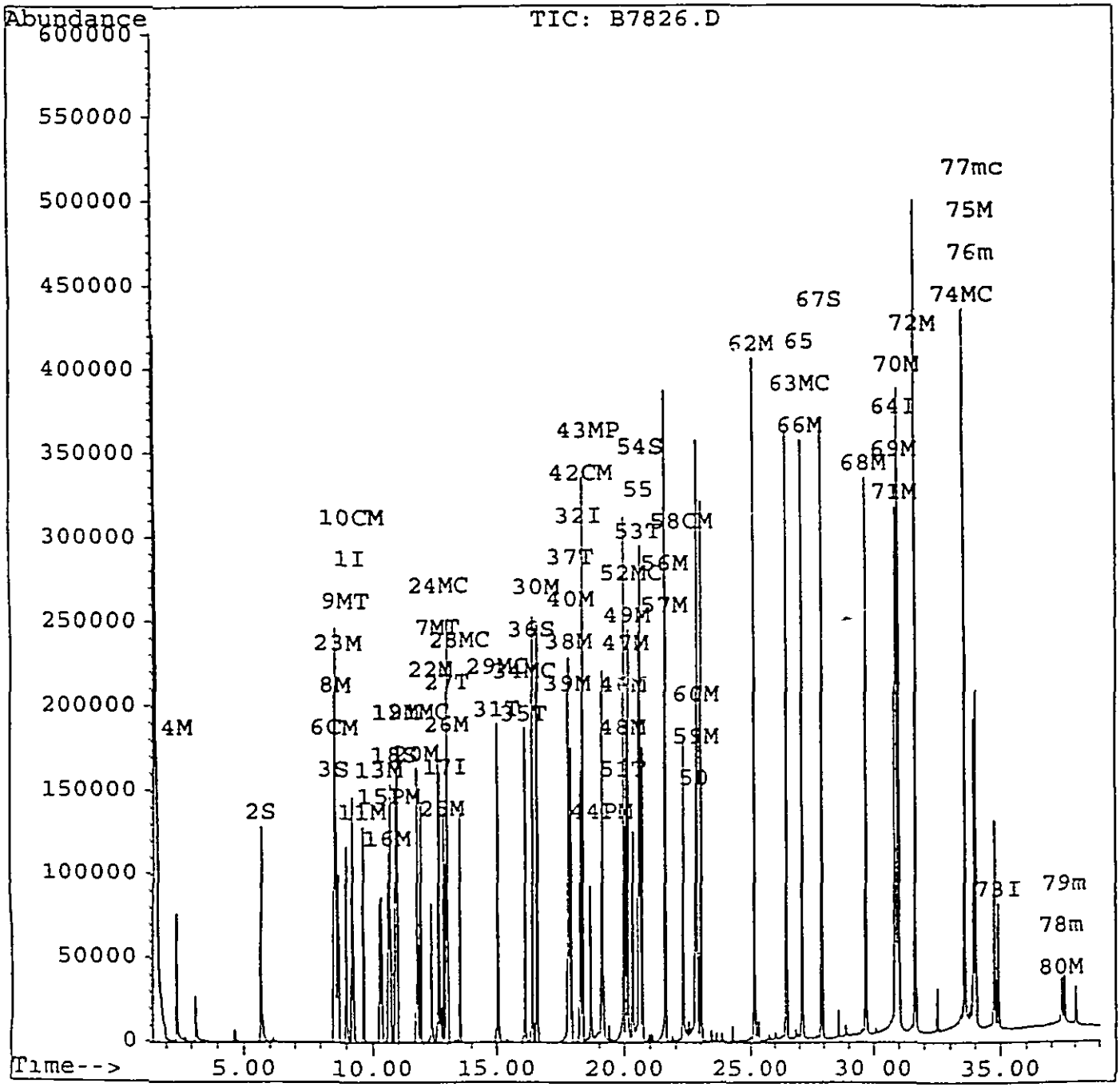
Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS.....
Misc :
Quant Time: Jun 13 13:06 1995

Converted from RTE d

Vial: 25
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d
Acq On : 4 Jun 95 6:15 am
Sample : 22654MSD..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:07 1995

Vial: 26
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	35303	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	144937	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	99611	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	164759	40.00	ug/ml	0.25
64) Chrysene-d12	30.91	240	152801	40.00	ug/mL	0.33
73) Perylene-d12	34.91	264	66464	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.66	112	82094	82.21	ug/mL	82.21%
3) Phenol-d5	8.57	99	140345	84.92	ug/mL	84.92%
18) Nitrobenzene-d5	10.90	82	122579	74.23	ug/mL	74.23%
36) 2-Fluorobiphenyl	16.41	172	181198	60.64	ug/mL	60.64%
54) 2,4,6-Tribromophenol	20.71	330	47406	106.54	ug/mL	106.54%
67) Terphenyl-d14	27.94	244	291235	71.81	ug/mL	71.81%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	46421	90.97	ug/mlm	100
5) Pyridine	1.58	79	3239	8.57	ug/ml	100
6) Phenol	8.61	94	94440	64.16	ug/mL	100
7) bis(2-Chloroethyl)ether	12.59	93	122019	68.25	ug/mL	93
8) 2-Chlorophenol	8.63	128	74868	66.83	ug/mL#	87
9) 1,3-Dichlorobenzene	9.01	146	60664	49.63	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	63929	50.69	ug/mL	97
11) 1,2-Dichlorobenzene	9.65	146	63514	53.01	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.26	45	194225	117.78	ug/mL#	64
15) N-Nitroso-Di-n-propylamine	10.67	70	78184	65.82	ug/mL	99
16) Hexachloroethane	10.61	117	27204	41.80	ug/mL	93
19) Nitrobenzene	10.96	77	108893	70.89	ug/mL	92
20) Isophorone	11.75	82	190833	58.95	ug/mL	99
21) 2-Nitrophenol	11.88	139	49518	64.97	ug/mL#	85
22) 2,4-Dimethylphenol	12.33	107	57269	40.16	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.72	93	80511	48.72	ug/mL	99
24) 2,4-Dichlorophenol	12.67	162	72662	67.26	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.83	180	67428	58.72	ug/mL	99
26) Naphthalene	13.00	128	216145	60.94	ug/mL#	91
27) 4-Chloroaniline	13.00	127	27276	16.26	ug/mL#	4
28) Hexachlorobutadiene	13.52	225	33024	49.25	ug/mL	99
29) 4-Chloro-3-methylphenol	15.04	107	87494	62.90	ug/mL	94
30) 2-Chloronaphthalene	16.58	162	170492	67.60	ug/ml	97
31) 2-Methylnaphthalene	15.04	142	66426	23.33	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	53903	52.11	ug/mL	99
35) 2,4,5-Trichlorophenol	16.12	196	53903	66.79	ug/mL	99
37) 2-Nitroaniline	17.93	65	3941	2.88	ug/mL#	100
38) Dimethylphthalate	17.83	163	113606	35.11	ug/mL	99

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

Quantitation Report

180

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

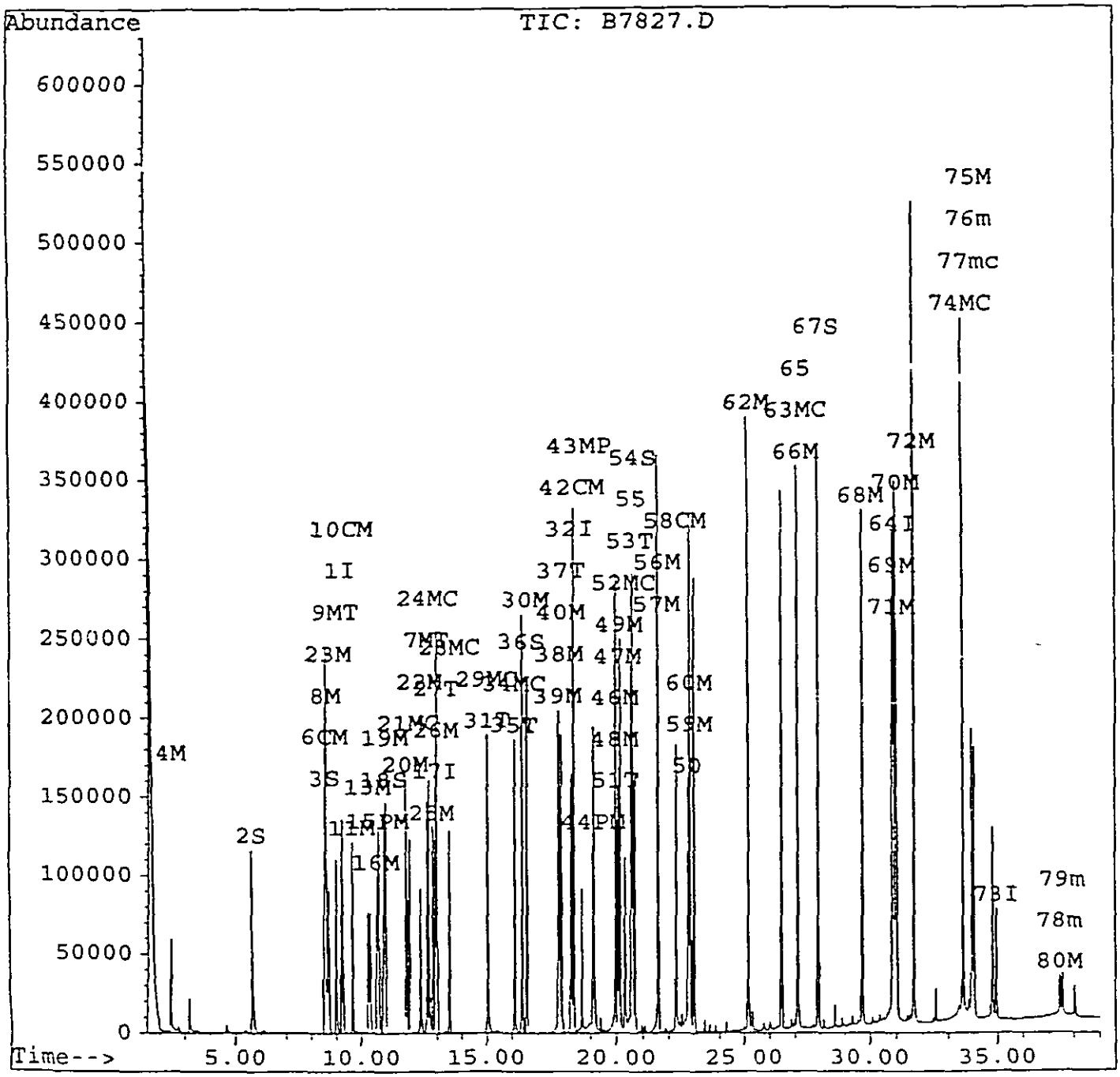
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Acenaphthylene	17.80	152	210414	49.57 ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	54747	70.87 ug/mL	92
42)	Acenaphthene	18.37	153	181623	71.15 ug/mL	99
43)	2,4-Dinitrophenol	18.68	184	28083	65.49 ug/mL#	78
44)	4-Nitrophenol	19.15	109	28931	70.14 ug/mL	91
46)	2,4-Dinitrotoluene	19.97	165	198956	68.45 ug/mL#	33
47)	Diethylphthalate	20.07	149	146204	40.69 ug/mL	99
48)	Fluorene	19.97	166	215505	68.74 ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	102158	68.80 ug/mL	99
51)	4-Nitroaniline	19.97	138	2275	3.32 ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	38003	70.01 ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	120181	57.40 ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	326407	65.42 ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	61314	72.23 ug/mL	92
57)	Hexachlorobenzene	21.59	284	72489	81.98 ug/mL#	80
58)	Pentachlorophenol	22.31	266	52714	93.08 ug/mL	99
59)	Phenanthrene	22.87	178	336724	74.69 ug/mL	98
60)	Anthracene	22.87	178	345412	83.11 ug/mL	97
62)	Di-n-butylphthalate	25.16	149	472693	71.44 ug/mL	100
63)	Fluoranthene	27.13	202	375315	88.04 ug/mL	93
65)	Benzidine	27.15	184	42901	25.67 ug/ml	100
66)	Pyrene	27.13	202	374572	65.30 ug/mL#	88
68)	Butylbenzylphthalate	29.69	149	211242	57.51 ug/mL	99
69)	Benzo[a]anthracene	30.87	228	336521	58.13 ug/mL	100
70)	3,3'-Dichlorobenzidine	31.03	252	109427	74.14 ug/mL#	96
71)	Chrysene	30.87	228	341333	106.01 ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	327633	62.88 ug/mL	99
74)	Di-n-octylphthalate	33.57	149	500739	59.16 ug/mL	99
75)	Benzo[b]fluoranthene	33.94	252	196612	47.97 ug/mL	99
76)	Benzo[k]fluoranthene	33.94	252	196612	99.43 ug/mL	93
77)	Benzo[a]pyrene	33.94	252	182768	89.67 ug/mL	100
78)	Indeno[1,2,3-cd]pyrene	37.41	276	28662	38.13 ug/mL#	78
79)	Dibenz[a,h]anthracene	37.53	278	36034	49.77 ug/mL#	92
80)	Benzo[g,h,i]perylene	37.41	276	28604	48.40 ug/mL	93

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 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 May 31 10:06:36 1995
Response via : Initial Calibration

Non-Spiked Sample: B7741.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7828.D	B7829.D
Sample :	22659MS.....	Converted from RTE data file >B7828::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.0	100	83	85	83	85	1	100	1-300
Phenol	0.0	100	65	65	65	65	0	23	5-112
bis(2-Chloroethyl)et	0.0	100	66	64	66	64	2	55	12-158
2-Chlorophenol	0.0	100	65	65	65	65	1	29	23-134
1,3-Dichlorobenzene	0.0	100	48	48	48	48	1	42	1-172
1,4-Dichlorobenzene	0.0	100	49	50	49	50	2	32	20-124
1,2-Dichlorobenzene	0.0	100	52	53	52	53	1	31	32-129
bis(2-chloroisopropy	0.0	100	118	119	118	119	1	46	36-166
N-Nitroso-Di-n-propy	0.0	100	67	65	67	65	3	55	1-230
Hexachloroethane	0.0	100	51	42	51	42	19	25	40-113
Nitrobenzene	0.1	100	62	66	62	66	6	39	35-180
Isophorone	0.0	100	60	63	60	63	5	63	21-196
2-Nitrophenol	0.0	100	63	65	63	65	4	35	29-182
2,4-Dimethylphenol	0.0	100	34	32	34	32	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	47	50	47	50	6	35	33-184
2,4-Dichlorophenol	0.0	100	68	68	68	68	1	26	39-135
1,2,4-Trichlorobenze	0.0	100	57	60	57	60	6	28	44-142
Naphthalene	0.0	100	63	66	63	66	4	30	21-133
Hexachlorobutadiene	0.0	100	50	52	50	52	4	26	24-116
4-Chloro-3-methylphe	0.0	100	63	63	63	63	1	37	22-147
2-Chloronaphthalene	0.0	100	67	70	67	70	4	13	60-118
2,4,6-Trichloropheno	0.0	100	55	54	55	54	3	32	37-144
Dimethylphthalate	0.0	100	38	34	38	34	11	23	1-112
Acenaphthylene	0.0	100	52	52	52	52	0	40	33-145
2,6-Dinitrotoluene	0.0	100	76	74	76	74	3	30	50-158
Acenaphthene	0.0	100	75	76	75	76	1	28	47-145
2,4-Dinitrophenol	0.0	100	67	66	67	66	2	50	1-191
4-Nitrophenol	0.6	100	79	80	79	79	0	47	1-132
2,4-Dinitrotoluene	0.0	100	71	74	71	74	3	22	39-139
Diethylphthalate	0.0	100	49	48	49	48	2	27	1-114
Fluorene	0.7	100	71	74	70	73	3	21	59-121
4-Chlorophenyl-pheny	0.0	100	70	74	70	74	5	33	25-158
4,6-Dinitro-2-methyl	0.0	100	75	72	75	72	4	93	1-181
4-Bromophenyl-phenyl	0.0	100	73	76	73	76	3	23	53-127
Hexachlorobenzene	0.0	100	84	84	84	84	1	25	1-152
Pentachlorophenol	0.0	100	90	92	90	92	2	49	14-176
Phenanthrene	0.0	100	79	76	79	76	3	21	54-120
Anthracene	0.0	100	88	84	88	84	5	32	52-115
Di-n-butylphthalate	0.1	100	80	79	80	79	1	17	1-118
Fluoranthene	0.0	100	96	96	96	96	0	33	26-137
Pyrene	0.0	100	67	68	67	68	2	25	52-115
Butylbenzylphthalate	0.2	100	67	68	67	67	0	23	1-152
Benzo(a)anthracene	0.1	100	65	64	65	64	1	28	33-143
3,3'-Dichlorobenzidi	0.0	100	20	31	20	31	46	71	1-262

rysene	0.1	100	117	117	117	117	0	48	17-168
bis(2-Ethylhexyl)pht	0.4	100	76	74	75	73	3	41	8-158
-n-octylphthalate	0.0	100	65	68	65	68	6	31	4-146
nzo[b]fluoranthene	0.0	100	52	51	52	51	2	39	24-159
Benzo[k]fluoranthene	0.1	100	108	106	108	106	2	32	11-162
nzo[a]pyrene	0.1	100	104	103	104	102	2	39	17-163
deno[1,2,3-cd]pyre	0.0	100	42	39	42	39	8	45	1-171
benz[a,h]anthracen	0.0	100	52	48	52	48	8	70	1-227
Benzo[g,h,i]perylene	0.0	100	53	49	53	49	9	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

184

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	28616	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	119812	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	81829	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	135678	40.00	ug/ml	0.25
64) Chrysene-d12	30.90	240	133913	40.00	ug/mL	0.32
73) Perylene-d12	34.89	264	64806	40.00	ug/mL	0.30
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.64	112	38324	47.35	ug/mL	47.35%
3) Phenol-d5	8.55	99	92701	69.20	ug/mL	69.20%
18) Nitrobenzene-d5	10.88	82	102452	75.05	ug/mL	75.05%
36) 2-Fluorobiphenyl	16.41	172	163275	66.52	ug/mL	66.52%
54) 2,4,6-Tribromophenol	20.71	330	33951	92.66	ug/mL	92.66%
67) Terphenyl-d14	27.93	244	283818	79.85	ug/mL	79.85%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.41	74	34539	83.50	ug/mlm	0
5) Pyridine	1.54	79	2567	8.38	ug/ml	100
6) Phenol	8.59	94	77522	64.98	ug/mL	100
7) bis(2-Chloroethyl)ether	12.59	93	95053	65.59	ug/mL	96
8) 2-Chlorophenol	8.61	128	59112	65.10	ug/mL	95
9) 1,3-Dichlorobenzene	9.01	146	47356	47.79	ug/mL	98
10) 1,4-Dichlorobenzene	9.26	146	50047	48.96	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	50447	51.95	ug/mL	97
13) bis(2-chloroisopropyl)ethe	10.28	45	157284	117.66	ug/mL#	66
15) N-Nitroso-Di-n-propylamine	10.67	70	64689	67.19	ug/mL	99
16) Hexachloroethane	10.61	117	26874	50.94	ug/mLm	92
19) Nitrobenzene	10.94	77	78667	61.95	ug/mL#	76
20) Isophorone	11.75	82	159932	59.77	ug/mL	99
21) 2-Nitrophenol	11.88	139	39464	62.63	ug/mL	87
22) 2,4-Dimethylphenol	12.33	107	40415	34.28	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.70	93	64392	47.13	ug/mL	98
24) 2,4-Dichlorophenol	12.67	162	60633	67.90	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.83	180	53810	56.69	ug/mL	99
26) Naphthalene	13.00	128	185978	63.43	ug/mL#	91
27) 4-Chloroaniline	13.00	127	23324	16.82	ug/mL#	8
28) Hexachlorobutadiene	13.52	225	27583	49.77	ug/mL	98
29) 4-Chloro-3-methylphenol	15.04	107	71878	62.51	ug/mL	92
30) 2-Chloronaphthalene	16.58	162	140364	67.32	ug/ml	95
31) 2-Methylnaphthalene	15.04	142	56186	23.87	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	47014	55.32	ug/mL	97
35) 2,4,5-Trichlorophenol	16.12	196	47014	70.91	ug/mL	98
37) 2-Nitroaniline	17.93	65	3809	3.39	ug/mL#	100
38) Dimethylphthalate	17.83	163	100094	37.65	ug/mL	99

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

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

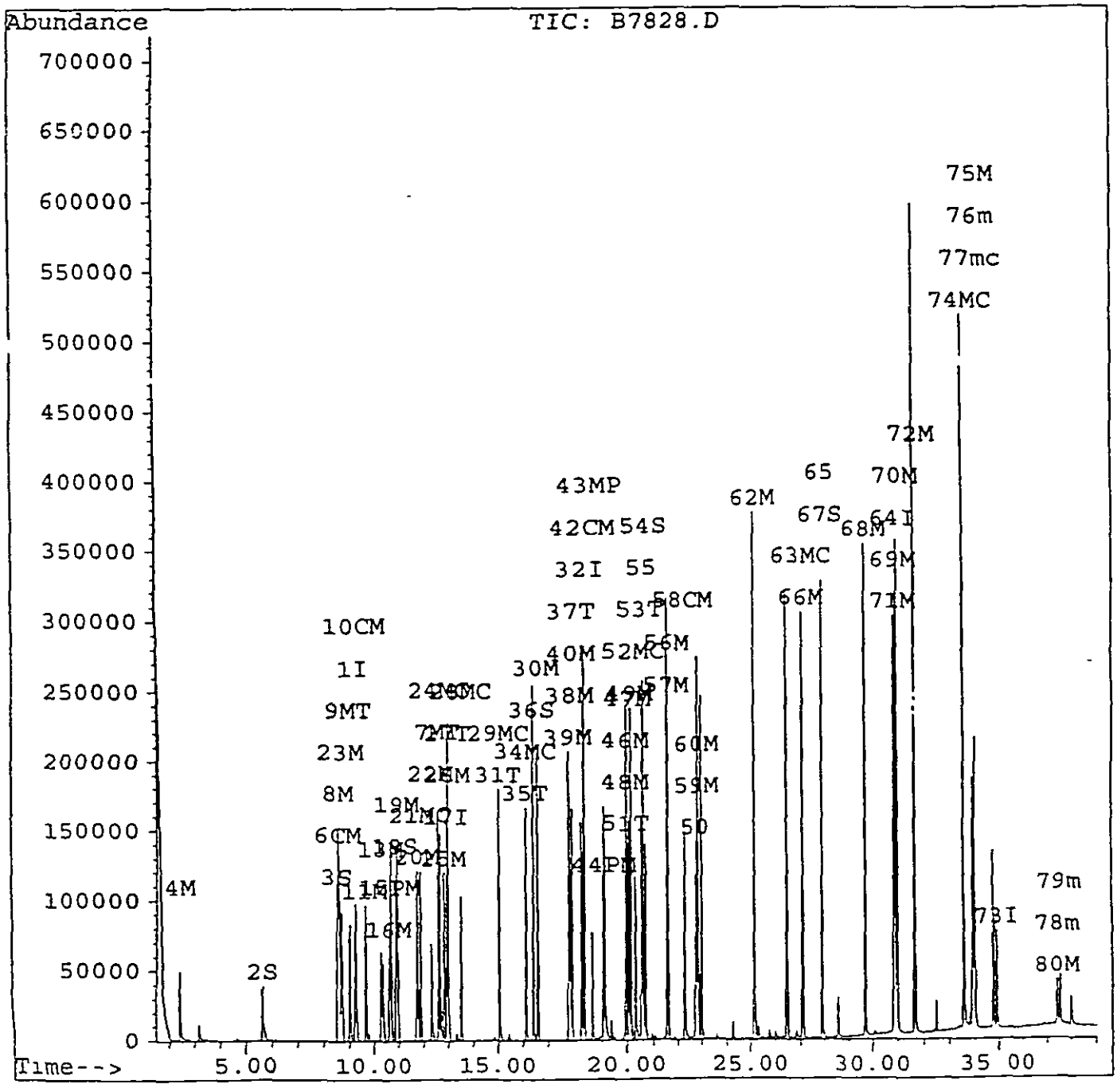
Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	181282	51.99	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	48485	76.40	ug/mL	81
42)	Acenaphthene	18.37	153	158243	75.46	ug/mL	99
43)	2,4-Dinitrophenol	18.66	184	23597	66.99	ug/mL	99
44)	4-Nitrophenol	19.14	109	26892	79.36	ug/mL	88
46)	2,4-Dinitrotoluene	19.97	165	169896	71.16	ug/mL#	34
47)	Diethylphthalate	20.07	149	145441	49.27	ug/mL	98
48)	Fluorene	19.97	166	183372	71.21	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	85539	70.12	ug/mL	98
51)	4-Nitroaniline	19.97	138	1902	3.37	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	33506	74.96	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	89532	51.93	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	282944	68.87	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	51088	73.08	ug/mL	94
57)	Hexachlorobenzene	21.59	284	60888	83.62	ug/mL#	75
58)	Pentachlorophenol	22.31	266	42101	90.27	ug/mL	99
59)	Phenanthrene	22.85	178	292342	78.75	ug/mL	99
60)	Anthracene	22.85	178	302620	88.42	ug/mL	99
62)	Di-n-butylphthalate	25.16	149	437772	80.34	ug/mL	99
63)	Fluoranthene	27.12	202	337156	96.04	ug/mL	94
65)	Benzidine	27.93	184	3699	2.53	ug/ml	100
66)	Pyrene	27.12	202	336460	66.93	ug/mL#	87
68)	Butylbenzylphthalate	29.70	149	217209	67.48	ug/mL	87
69)	Benzo[a]anthracene	30.88	228	328642	64.77	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.00	252	25385	19.62	ug/mLm	97
71)	Chrysene	30.88	228	330668	117.19	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.67	149	345135	75.58	ug/mL	100
74)	Di-n-octylphthalate	33.58	149	533567	64.65	ug/mL	100
75)	Benzo[b]fluoranthene	34.03	252	207506	51.92	ug/mL	99
76)	Benzo[k]fluoranthene	34.03	252	207506	107.62	ug/mL	92
77)	Benzo[a]pyrene	34.03	252	207506	104.42	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.42	276	30768	41.98	ug/mL#	84
79)	Dibenz[a,h]anthracene	37.54	278	36991	52.40	ug/mL	94
80)	Benzo[g,h,i]perylene	37.42	276	30768	53.39	ug/mL	97

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d Vial: 28
Acq On : 4 Jun 95 7:54 am Operator: SCOTTV
Sample : 22659MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.21	152	30456	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	121585	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	84364	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	145091	40.00	ug/ml	0.25
64) Chrysene-d12	30.90	240	140877	40.00	ug/mL	0.32
73) Perylene-d12	34.90	264	65773	40.00	ug/mL	0.30
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.62	112	46772	54.29	ug/mL	54.29%
3) Phenol-d5	8.55	99	107330	75.28	ug/mL	75.28%
18) Nitrobenzene-d5	10.88	82	108636	78.42	ug/mL	78.42%
36) 2-Fluorobiphenyl	16.41	172	165709	65.48	ug/mL	65.48%
54) 2,4,6-Tribromophenol	20.71	330	39093	99.77	ug/mL	99.77%
67) Terphenyl-d14	27.93	244	291732	78.02	ug/mL	78.02%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.41	74	37285	84.69	ug/mlm	0
5) Pyridine	1.56	79	2539	7.79	ug/ml	100
6) Phenol	8.59	94	82228	64.76	ug/mL	100
7) bis(2-Chloroethyl)ether	12.60	93	99103	64.25	ug/mL	98
8) 2-Chlorophenol	8.61	128	63241	65.44	ug/mL	94
9) 1,3-Dichlorobenzene	9.01	146	51022	48.38	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	54214	49.83	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	54332	52.57	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.28	45	169096	118.86	ug/mL#	65
15) N-Nitroso-Di-n-propylamine	10.67	70	66550	64.95	ug/mL	99
16) Hexachloroethane	10.61	117	23688	42.19	ug/mL	96
19) Nitrobenzene	10.94	77	84987	65.95	ug/mL#	77
20) Isophorone	11.75	82	169858	62.55	ug/mL	99
21) 2-Nitrophenol	11.88	139	41660	65.15	ug/mL	88
22) 2,4-Dimethylphenol	12.33	107	38383	32.08	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.70	93	69472	50.11	ug/mL	100
24) 2,4-Dichlorophenol	12.67	162	61214	67.55	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.83	180	58047	60.26	ug/mL	99
26) Naphthalene	13.00	128	195977	65.87	ug/mL#	91
27) 4-Chloroaniline	13.00	127	24740	17.58	ug/mL#	10
28) Hexachlorobutadiene	13.50	225	28998	51.56	ug/mL	97
29) 4-Chloro-3-methylphenol	15.04	107	73983	63.40	ug/mL	98
30) 2-Chloronaphthalene	16 58	162	148187	70.04	ug/ml	98
31) 2-Methylnaphthalene	15.04	142	56674	23.73	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	47065	53.72	ug/mL	98
35) 2,4,5-Trichlorophenol	16.12	196	47065	68.86	ug/mL	99
37) 2-Nitroaniline	17.93	65	3818	3.30	ug/mL#	100
38) Dimethylphthalate	17.83	163	92844	33.88	ug/mL	99

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d Vial: 28
Acq On : 4 Jun 95 7:54 am Operator: SCOTTV
Sample : 22659MSD ..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	187395	52.13	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	48705	74.44	ug/mL	81
42)	Acenaphthene	18.37	153	164599	76.13	ug/mL	99
43)	2,4-Dinitrophenol	18.66	184	23948	65.95	ug/mL	99
44)	4-Nitrophenol	19.15	109	27839	79.68	ug/mL	90
46)	2,4-Dinitrotoluene	19.95	165	181124	73.58	ug/mL#	31
47)	Diethylphthalate	20.07	149	147246	48.39	ug/mL	98
48)	Fluorene	19.95	166	195315	73.56	ug/mL	100
49)	4-Chlorophenyl-phenylether	20.15	204	92973	73.93	ug/mL	99
51)	4-Nitroaniline	19.97	138	2140	3.55	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	34580	72.34	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	103444	56.10	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	304015	69.20	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	50539	75.63	ug/mL	94
57)	Hexachlorobenzene	21.59	284	65629	84.28	ug/mL#	76
58)	Pentachlorophenol	22.31	266	45874	91.98	ug/mL	96
59)	Phenanthrene	22.85	178	302063	76.09	ug/mL	100
60)	Anthracene	22.85	178	307177	83.93	ug/mL	99
62)	Di-n-butylphthalate	25.16	149	462525	79.38	ug/mL	100
63)	Fluoranthene	27.12	202	360324	95.98	ug/mL	93
65)	Benzidine	27.93	184	3521	2.29	ug/ml	100
66)	Pyrene	27.12	202	359722	68.02	ug/mL#	89
68)	Butylbenzylphthalate	29.69	149	229144	67.66	ug/mL	98
69)	Benzo[a]anthracene	30.88	228	343280	64.31	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.00	252	42496	31.23	ug/mLm	95
71)	Chrysene	30.88	228	346867	116.85	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.68	149	354135	73.72	ug/mL	97
74)	Di-n-octylphthalate	33.58	149	572669	68.37	ug/mL	99
75)	Benzo[b]fluoranthene	34.03	252	206742	50.97	ug/mL	98
76)	Benzo[k]fluoranthene	34.03	252	206742	105.65	ug/mL	95
77)	Benzo[a]pyrene	34.03	252	206742	102.50	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.42	276	28894	38.84	ug/mL	89
79)	Dibenz[a,h]anthracene	37.52	278	34681	48.41	ug/mL#	86
80)	Benzo[g,h,i]perylene	37.42	276	28610	48.92	ug/mL	100

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d
Acq On : 4 Jun 95 7:54 am
Sample : 22659MSD..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:38 1995

Vial: 28
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
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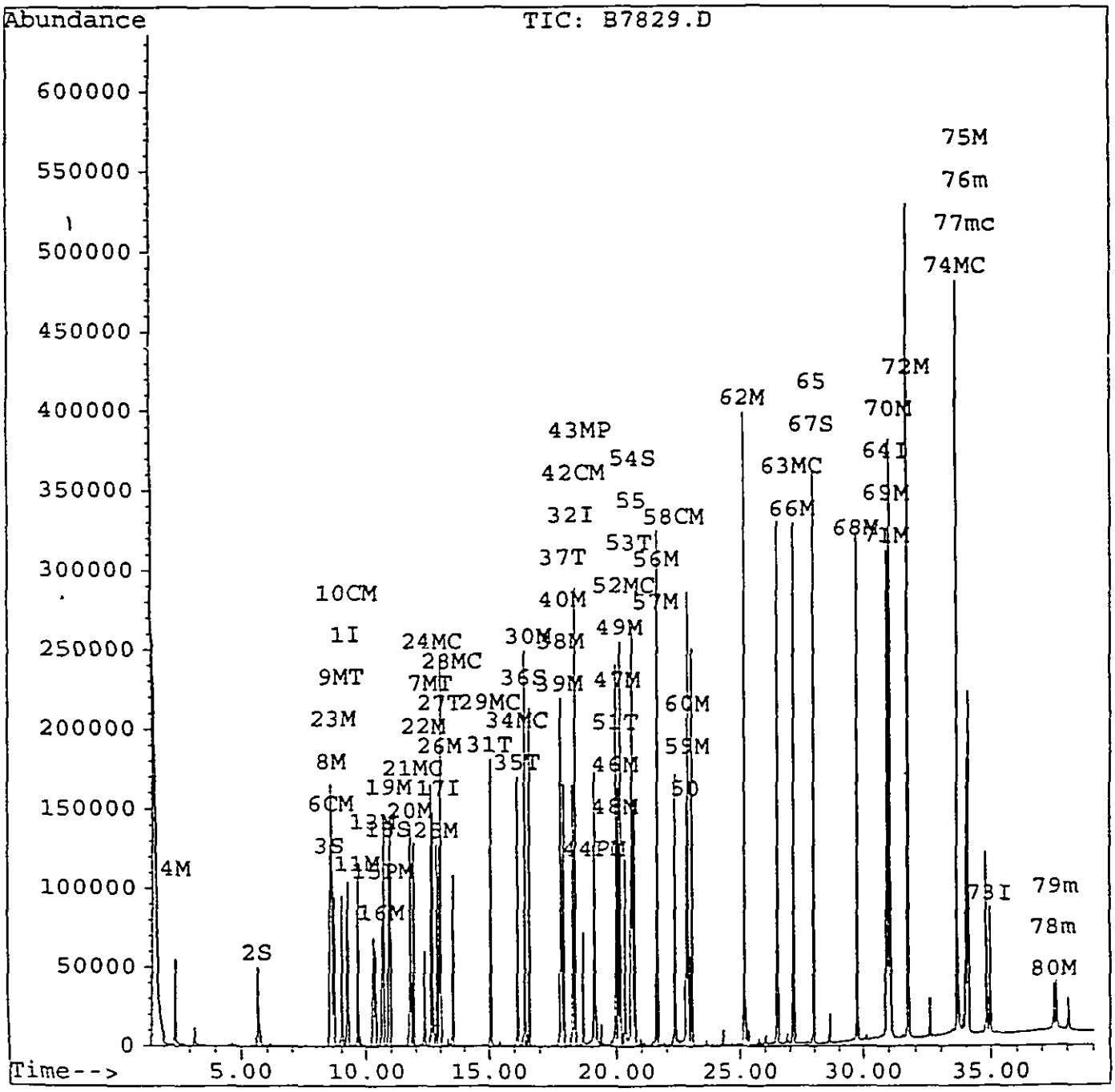

New Jersey Department of Environmental Protection
Division of Water Resources
Bureau of Underground Storage Tanks
CN-029, Trenton, New Jersey 08625

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 Faraia

Laboratory Manager (as defined in N J A C 7 18)

EMSL ANALYTICAL, INC.

Asbestos - Lead - Environmental - Materials

EMSL

_ Jersey

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ANALYTICAL DATA REPORT
FOR
U.S. ARMY, FORT MONMOUTH
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

PROJECT · **#94125091300**

EMSL Project: # 95063936

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1861.1, Trip Blank	95-26426	Aqueous	6/13/95 @ 0605	6/13/95
1861.2, Field Blank	95-26427	Aqueous	6/13/95 @ 1535	6/13/95
1864.1, MW1-2931792, Bldg. #210	95-26433	Aqueous	6/13/95 @ 1315	6/13/95

Laboratory Name	EMSL ANALYTICAL, INC
Certification No	NJDEP No 04653 PADER No 68-367 NY-ELAP No 10896
Supervisor/Manager Signature	Paul Laraia (signature)
Printed Name	Paul V Laraia
Date	07-17-95

REPORT NARRATIVE

All initial runs for the Ft. Monmouth P O #IJO #95-0091/SAI were analyzed within hold. The samples were taken by EMSL between the dates of 5/18/95 thru 5/25/95

There was a problem with the water used for the field and trip blanks On certain days the field crew used DI water from the incorrect system resulting in low level contamination of Toluene, 2-Chlorotoluene and sometimes Chlorobenzene However the resultant concentrations of these compounds were very low and the samples accompanying these field and trip blanks did not show these compounds to be present

EMSL

TABLE OF CONTENTS

EMSL

SAMPLE DATA SUMMARY PACKAGE

EMSL

Date of Report	07/17/95
Project Number	95063933
Lab ID:	95-0026426
Date Collected	06/13/95 06 05
Collected By·	Client
Date Received·	06/13/95 18 50

A' ention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project. 931021191016

Client Designation: Bldg #206,Trip Blank

	Conc.	Unit
(;ANIC		
/olatiles		
Volatiles by 524.2 w/ Library Search	see attached	ug/l

Monmouth NJ
U.S. Army
TRIP BLANK

FMETL# 18611

005

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526426
Lab File ID: C8623.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	50	U
1330-29-7	Xylene(total)	.50	U

U) Not Detected

T Monmouth NJ FMETL# /8611

S. Army

TRIP BLANK

006

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET

EPA 524.2

Lab Name: _EMSL ANALYTICAL_____ Lab Sample ID: _9526426_____

Matrix (soil/water): _WATER_____ Lab File ID: ___C8623.D_____

Sample wt/vol: _25_mL_____ Date Received: _06/13/95_____

Level (low/med): _LOW_____ Date Analyzed: _06/21/95_____

% Moisture: not dec.: _NA_____ Dilution Factor: __1_____

GC Column: _DB-624 x 75m_ ID: _0.53mm_ Soil Aliquot Volume: ____NA____

Soil Extract Volume: ___NA____

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _ug/L__	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT

U - Not Detected

Monmouth NJ army 10 BLANK

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO 9526426V 007

Lab Name: EMSL ANALYTICAL Contract: _____

Project No _____ Site _____ Location: _____ Group _____

Matrix (soil/water) WATER Lab Sample ID. 9526426V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8623 D

Level. (low/med) LOW Date Received 6/13/95

% Moisture not dec NA Date Analyzed. 6/21/95

GC Column DB-624 X 75M ID: 0 53 (mm) Dilution Factor: 1.0

Soil Extract Volume. _____ (uL) Soil Aliquot Volume. _____ (uL)

Concentration Units
(ug/L or ug/Kg) ug/L

Number TICs found. 0

CAS Number	Compound Name	RT	Est Conc.	Q
1	NONE FOUND			
2				
3				
4				
5				
6.				
7				
8				
9				
10.				
11				
12				
13				
14				
15				
16.				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

EMSL

Date of Report: 07/17/95
Project Number: 95063933
Lab ID: 95-0026427
Date Collected: 06/13/95 15:35
Collected By: Client
Date Received: 06/13/95 18:50

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth NJ 07703

Client Project: 931021191016

Client Designation: Bldg #206,Field Blank

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

Monmouth NJ FMETL# 1862
S. Army
Field Blank

009

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526427
Lab File ID: C8624.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.1	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U) Not Detected

Monmouth NJ FMETL# 1861 2

S Army

D BLANK

010

1A

VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: _EMSL ANALYTICAL_____ Lab Sample ID: _9526427_____
Matrix (soil/water): _WATER_____ Lab File ID: ___C8624.D_____
Sample wt/vol: _25 mL_____ Date Received: _06/13/95_____
Level (low/med): _LOW_____ Date Analyzed: _06/21/95_____
% Moisture: not dec.: _NA_____ Dilution Factor: __1_____
GC Column: _DB-624 x 75m_ ID: _0.53mm_ Soil Aliquot Volume: ____NA____
Soil Extract Volume: ___NA____

CAS NO	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _ug/L__	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108 86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U = Not Detected

army
Klamath NS
FIELD BLANK

FIELD 1861 2 - 1E

SAMPLE NO

9526427V

011

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: EMSL ANALYTICAL Contract

Project No. Site. Location Group:

Matrix (soil/water) WATER Lab Sample ID 9526427V

Sample wt/vol: 25 0 (g/mL) ML Lab File ID C8624 D

Level (low/med) LOW Date Received 6/13/95

% Moisture: not dec NA Date Analyzed. 6/21/95

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				
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SAMPLE NO 012

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH NJ

9526427B

Lab Name EMSL ANALYTICAL US ARMY

FMETL# 1812 Site BLDG# 226 NJDEP#

Matrix (soil/water) WATER Lab Sample ID 9526427B

Sample wt/vol 1000.0 (g/mL ML Lab File ID B8025.D

Level (low/med) Date Received 6/13/95

% Moisture decanted. (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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

FORT MONMOUTH, NJ

SAMPLE NO 013

9526427B

Lab Name EMSL ANALYTICAL US ARMY

FMETL# 1861.2 Site BLDG# 286 NJDEP#

Matrix: (soil/water) WATER Lab Sample ID 9526427B

Sample wt/vol 1000.0 (g/mL ML Lab File ID B8025.D

Level (low/med) Date Received 6/13/95

% Moisture decanted. (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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	.5	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

FORT MONMOUTH NJ 1F

SAMPLE NO 014

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526427B

Lab Name: EMSL ANALYTICAL US ARMY

FMETL# 1861 2 Site: BLDG# 246 NJDEP#

Matrix: (soil/water) WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000 0 (g/mL) ML Lab File ID B8025 D

Level (low/med) Date Received. 6/13/95

% Moisture: decanted: (Y/N) N Date Extracted: 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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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EMSL

Attention: Charles Appleby
U.S. Army - Fort Monmouth
SELFM-PW-EV
Building 173
Fort Monmouth, NJ 07703

Project #: 95063936
Date Received: 06/13/95 18.50

The following results are for BN by 625 with Library Search

Lab #	Conc.	Unit	Client Designation
95 0026433	,see attached	ug/l	Bldg.210,MW1-2931792

The following results are for Volatiles by 524 2 w/ Library Search

Lab #	Conc.	Unit	Client Designation
95 0026433	,see attached	ug/l	Bldg 210,MW1-2931792

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1864-1 016

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT. MONMOUTH NJ Bldg# 210 NJDEP MW# 1-293792

Matrix (soil/water) WATER Lab Sample ID 9526433

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8639 D

Level (low/med) LOW Date Received 6/13/95

% Moisture not dec NA Date Analyzed 6/22/95

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	1 3	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# 1864.1

017

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

Project No.: FT. MONMOUTH NJ Bldg#: 210 NJDEP MW#: 1 -293792

Matrix: (soil/water) WATER Lab Sample ID: 9526433

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8639.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

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

Concentration Units: (ug/L or ug/Kg) ug/L

CAS No.	Compound		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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1864.1

013

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 210 NJDEP MW# 1-293792

Matrix (soil/water) WATER Lab Sample ID 9526433V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8639.D

Level (low/med) LOW Date Received 6/13/95

% Moisture not dec NA Date Analyzed 6/22/95

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. 1 Concentration Units (ug/L or ug/Kg) ug/L

	CAS Number	Compound Name	RT	Est Conc	Q
1		Unknown	21 65	1	J
2					
3					
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
FORT MONMOUTH, NJ

SAMPLE NO
9526433B
019

Lab Name EMSL ANALYTICAL US ARMY

FMETL# 18641 Site BLDG# 210 NJDEP# NJ-293792 #210

Matrix (soil/water) WATER Lab Sample ID 9526433B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B8031 D

Level (low/med) Date Received 6/13/95

% Moisture decanted (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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

FORT MONMOUTH, NJ

SAMPLE NO

9526433B 020

Lab Name EMSL ANALYTICAL US ARMY

FMETL# 18641 Site BLDG# 210 NJDEP# MD1-293792 #210

Matrix (soil/water) WATER Lab Sample ID 9526433B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B8031 D

Level (low/med) Date Received 6/13/95

% Moisture. decanted (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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

FORT MONMOUTH NJ 1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
9526433B 021

Lab Name EMSL ANALYTICAL US ARMY

FMETL# 18671 Site BLDG# 210 NJDEP# #1101-293/792 #210

Matrix (soil/water) WATER Lab Sample ID 9526433B

Sample wt/vol 1000 0 (g/mL) ML Lab File ID B8031 D

Level (low/med) Date Received 6/13/95

% Moisture decanted (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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				
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BLDG.#: 210 MW#: 1 NJDEPE WELL ID # 293792

U.S. ARMY FORT MONMOUTH

MONITORING WELL SAMPLING DATASHEET

DATE: 6-13-95

IJO#95-0091

SAMPLING CONTRACTOR: EMSL Analytical Services Inc.

LABORATORY: EMSL Analytical Services, NJDEP CERT #: 04653

SAMPLERS NAMES: Susan Palilonis, Tim Baxter

WEATHER CONDITIONS: Cool, overcast

ELEVATION OF CASING SURVEY MARK: ____.____

TOTAL DEPTH OF WELL FROM TOP OF SURVEYORS MARK: 14.92 FT

DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT

LENGTH OF SCREENED SECTION: ____FT.

DEPTH TO WATER PRIOR TO PURGING AND SAMPLING: 7.01 FT

ELEVATION OF GW PRIOR TO PURGING: ____.____FT 0.71 from screen

THICKNESS OF LNAPL PRIOR TO PURGING : ____.00 FT

PID/Hnu READING IMMEDIATELY AFTER THE WELL CAP IS REMOVED: 21 PPM 1241 from none detected D.O. 1.3 ppm

① pH: 6.08 TEMP: 16.5 °C, SPECIFIC CONDUCTIVITY: 401 µs/cm

DEPTH OF WELL: ____.____FT

HEIGHT OF WATER: ____.____FT

EVACUATED GAL. H2O: 16 GAL (7.91 X .65 X 3 = 15.424)

PURGING START TIME: 1206 END TIME: 1306

PURGE METHOD: (FLOW RATE OF <0.5 GPM TO >5.0 GPM) Pump

PURGE RATE (<0.5 GPM): 2 GPM

TOTAL VOLUME PURGED: 16 GAL.

DEPTH TO WATER AFTER PURGING AND BEFORE SAMPLING: 10.64 FT

② DISSOLVED OXYGEN: 2.0 ppm pH: 6.09 TEMP: 16.9 °C

SPECIFIC CONDUCTIVITY: 420 µs/cm

SAMPLING METHOD. DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON® BAILER

START TIME OF SAMPLING: 1310 END TIME: 1315

③ DISSOLVED OXYGEN 2.1 pH: 6.06 TEMP: 16.6 °C

SPECIFIC CONDUCTIVITY. 376

Color none ODOR none

COMMENTS: on site 1153 slow recharge

EMSL

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 USEP CLP	X
12	Non-Conformance Summary	X

Paul Farara

Laboratory Manager or Environmental Consultant's Signature

07-17-95

Date

EMSL

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

EMSL

CHAIN OF CUSTODY

EMSL ANALYTICAL, INC.

INTERNAL CHAIN OF CUSTODY

EMSL LAB ID NO. 95-26427, 95-26433   PROJECT NO. 95063936

SAMPLE/CONTAINERS   PARAMETERS

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
6/19/95		BN Extraction Prep	Charles Bartolone	SV Jm CB

INTERNAL CUSTODY

Project #: 95063936

Lab ID #'s: 95-26433, 95-26426
95-26427

Analyst

	Name (please print)	Signature	Date
1. Base/Neutrals	Scott Van Etten	SV	6/26/95
2. Acids			
3. Volatiles (GC)			
4. Volatiles (GC/MS)	Scott Kessler	S.K	6/22/95
5. Base Neutrals/Acids			
6. Gasoline			

U S ARMY CECOM FT MONMOUTH 95263936

P.O. #: ISO # 95-0091 / SAI

Chain of Custody

Project #: 941250913.00	Sampler: EMSL (Baxter)	Date / Time 6/13/95	Start:
Customer: Charles Appleby SELFM-RD-EV	Site Name: Bldg #210 MW Sampling		Finish:
Phone: 908-532-6224			

Analysis Parameters: Library; VOA 524.2 + Library; BN 415 – meth 625

Preservation Method

Lab Sample ID Number	Date/Time		Customer Sample Location/ID Number	Sample Matrix	# of Bottles						Remarks
1861.1	6/13	0855	TRIP Blank	aq.	3	X			26426		Samples Kept at 4 °C
1861.2	↓	1535	Field Blank	aq.	6	X	X		26427		
1864.1	↓	1315	Bldg #210 MW1-931792	aq.	6	X	X		26433		

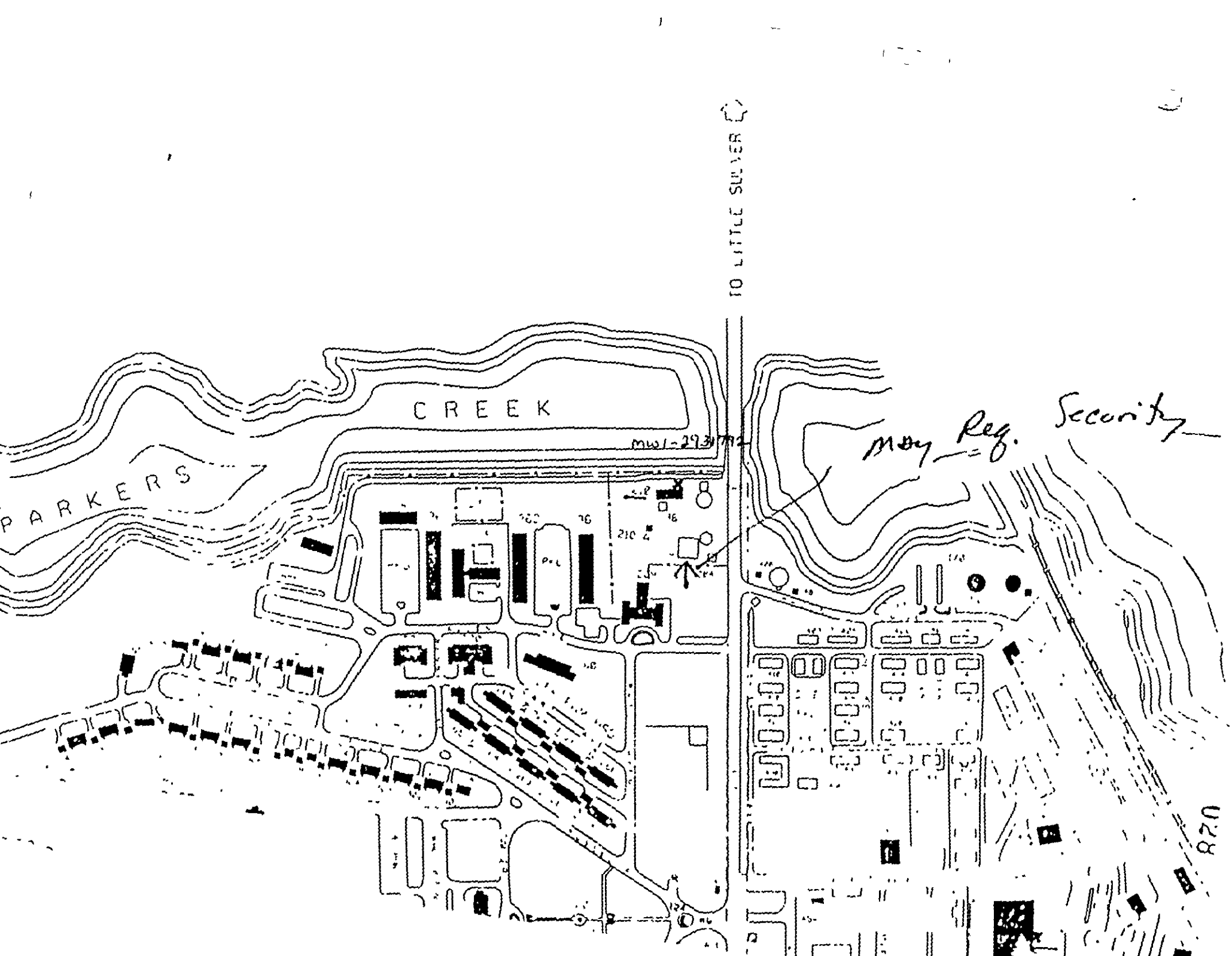
Relinquished By (signature)	Date / Time	Received By (signature)	Shipped By: EMSL
X	6-13-95 1535	X	
Relinquished By (signature)	Date / Time	Received for Lab by (signature):	Date / Time
	6/13/95 1850		

Note: A drawing depicting sample location should be attached or drawn on the reverse side of this chain of custody. (ORIGINAL on Reverse Side)

SOI-ENV COC Form 01 Page 1 of 1 Pages Rev. 0 Date: 02 Apr 93

Enviornmental Laboratory

027


TO LITTLE SELSER
CREEK
PARKERS
MW1-293772
May Reg. Security
820

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 capillary 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

EMSL

LABORATORY CHRONICLE

Lab ID **95-26426, 95-26427, 95-26433** Client **U.S. Army, Fort Monmouth**

	I DATE	II	Hold Time
Date Sampled	6/13/95		
Receipt/Refrigeration	6/13/95		
Extractions			
1. Semivolatile Organics, aqueous	6/19/95		**7 days**
Analyses			
1. Volatile Organics, aqueous	6/21, 22/95		**14 days**
2. Semivolatile Organics, aqueous	6/26/95		**40 days**

QC Supervisor
Review & Approval

(Signature) Peter B Panton
(Printed Name) Peter B Panton
(Date) 07/18/95

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

EMSL

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 1.5-2.0 ppb.***		
	b B/N Fraction		
	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 **Methylene Chloride 73% and 77%.**		
	b B/N Fraction		
	c Acid Fraction		
9	Internal Standard Area/Retention Time Shift Meet Criteria		X

EMSL

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 Faraig Date 07-17-95

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: C8236 D BFB Injection Date. 05/26/95

Instrument ID: 5972-INSTRUMENT-1 BFB Injection Time 0953

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	21.8
75	30.0 - 60.0% of mass 95	52 3
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	Greater than 50.0% of mass 95	57.2
175	5.0 - 9.0% of mass 174	4.2 (7.4)1
176	95.0 - 101.0% of mass 174	55.4 (96.9)1
177	5.0 - 9.0% of mass 176	3.2 (5.8)2

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

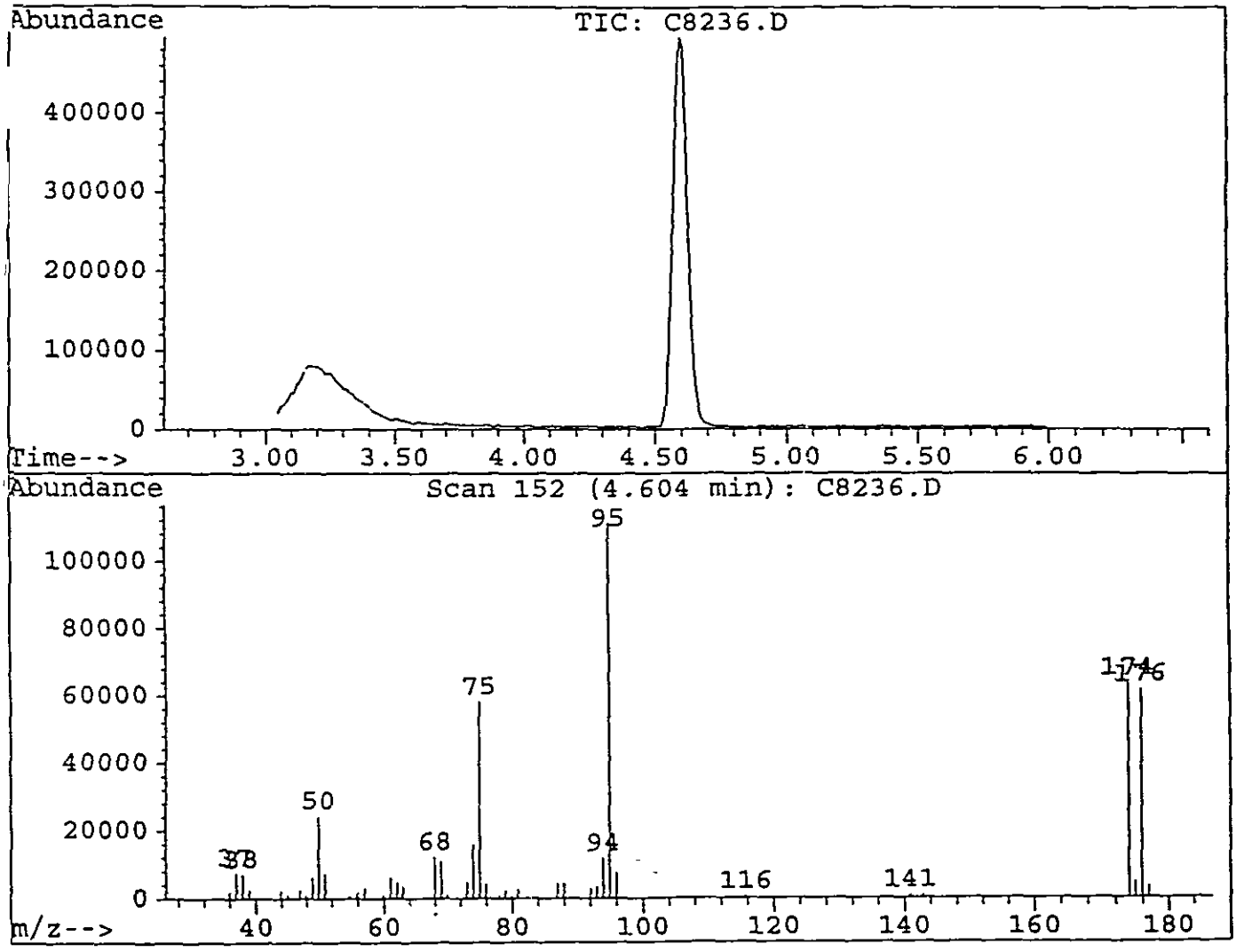
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		4 PPB STANDARD	C8237.D	05/26/95	1035
02		10 PPB STANDARD	C8238.D	05/26/95	1117
03		20 PPB STANDARD	C8239 D	05/26/95	1151
04		30 PPB STANDARD	C8240.D	05/26/95	1226
05		40 PPB STANDARD	C8241 D	05/26/95	1300
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D.\HPCHEM\1\DATA\C8236.D
Acq On : 26 May 95 9:53 am
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: 152

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.8	24232	PASS
75	95	30	60	52.3	58152	PASS
95	95	100	100	100.0	111200	PASS
96	95	5	9	6.8	7580	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	57.2	63568	PASS
175	174	5	9	7.4	4678	PASS
176	174	95	101	96.9	61624	PASS
177	176	5	9	5.8	3577	PASS

n 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
5.00	1948	50.95	7307	72.95	4912	92.05	2865
7.00	7455	54.75	959	73.95	15989	92.95	3574
38.00	7055	55.95	1728	74.95	58152	93.95	11832
1.00	2560	57.00	3162	75.95	4270	94.95	111200
9.00	629	59.90	1118	76.95	625	95.95	7580
43.90	2201	61.00	6169	78.00	812	115.75	506
45.00	1268	62.00	4780	78.90	2214	140.90	844
5.95	2491	62.90	3458	79.90	782	142.80	807
7.95	1002	67.95	12140	80.80	2619	173.95	63568
48.95	6125	68.95	11009	86.90	4356	174.85	4678
9.95	24232	69.95	836	87.95	4439	175.85	61624

n 152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
176.85	3577						

Response Factor Report 5972 - In

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

Calibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha	0.410	0.422	0.387	0.385	0.379	0.396	4.69
3)	M	Chloromethane	0.227	0.249	0.227	0.232	0.232	0.233	3.89
4)	M	Vinyl chloride	0.262	0.275	0.259	0.260	0.259	0.263	2.58
5)	M	Bromomethane	0.193	0.197	0.170	0.166	0.164	0.178	8.95
6)	M	Chloroethane	0.164	0.171	0.161	0.152	0.122	0.154	12.48
7	M	Trichlorofluoromethan	0.583	0.600	0.585	0.589	0.581	0.588	1.25
8)	M	1,1-Dichloroethene	0.255	0.266	0.258	0.257	0.254	0.258	1.92
9)	M	Methylene chloride		0.352	0.271	0.240	0.232	0.274	19.95
0	M	trans-1,2-Dichloroeth	0.274	0.279	0.270	0.271	0.270	0.273	1.39
1		Hexane						0.000#	-1.00
2)	M	1,1-Dichloroethane	0.547	0.545	0.539	0.543	0.552	0.545	0.89
3	M	2,2-Dichloropropane	0.561	0.546	0.527	0.525	0.514	0.534	3.50
4	M	cis-1,2-Dichloroethen	0.263	0.262	0.253	0.251	0.256	0.257	2.11
5)		2-Butanone						0.000#	-1.00
6)	M	Bromochloromethane	0.089	0.088	0.089	0.089	0.094	0.090	2.82
7	M	Chloroform	0.511	0.509	0.507	0.507	0.524	0.512	1.38
8,	M	1,1,1-Trichloroethane	0.573	0.566	0.561	0.564	0.567	0.566	0.77
9)	M	Carbon tetrachloride	0.537	0.520	0.520	0.526	0.526	0.526	1.35
0	M	1,1-Dichloropropene	0.498	0.506	0.486	0.494	0.488	0.495	1.59
1	M	Benzene	0.874	0.885	0.858	0.866	0.870	0.871	1.14
2)	M	1,2-Dichloroethane	0.206	0.210	0.214	0.214	0.225	0.214	3.36
3	M	Trichloroethene	0.387	0.388	0.383	0.386	0.386	0.386	0.51
4	M	1,2-Dichloropropane	0.282	0.281	0.283	0.286	0.293	0.285	1.76
5)	M	Dibromomethane	0.112	0.113	0.112	0.117	0.124	0.115	4.28
6)	M	Bromodichloromethane	0.388	0.385	0.398	0.397	0.412	0.396	2.72
7	M	cis-1,3-Dichloroprope	0.338	0.335	0.343	0.340	0.356	0.342	2.38
8,	M	Toluene	0.646	0.605	0.610	0.613	0.619	0.619	2.61
9)	M	trans-1,3-Dichloropro	0.226	0.229	0.236	0.239	0.252	0.236	4.31
(	M	1,1,2-Trichloroethane	0.107	0.107	0.109	0.110	0.118	0.110	4.12
_	M	Tetrachloroethene	0.395	0.386	0.380	0.388	0.389	0.388	1.40
2)	M	1,3-Dichloropropane	0.217	0.213	0.221	0.218	0.226	0.219	2.24
:	M	Dibromochloromethane	0.208	0.205	0.215	0.216	0.231	0.215	4.72
'	M	1,2-Dibromomethane	0.145	0.145	0.153	0.153	0.166	0.152	5.54
5)	M	Chlorobenzene	0.650	0.638	0.636	0.640	0.657	0.644	1.38
(	M	1,1,1,2-Tetrachloroet	0.256	0.247	0.253	0.257	0.265	0.256	2.62
	M	Ethylbenzene	1.316	1.279	1.288	1.308	1.320	1.302	1.38
8,	M	Xylene (para & meta)	0.479	0.463	0.465	0.465	0.466	0.468	1.38
9)	M	Xylene (Ortho)	0.417	0.409	0.412	0.413	0.418	0.414	0.93
	M	Styrene	0.634	0.626	0.639	0.643	0.663	0.641	2.12
_	M	Bromoform	0.098	0.099	0.107	0.106	0.117	0.105	7.26
-	M	Isopropylbenzene	1.330	1.302	1.317	1.350	1.352	1.330	1.60
)	S	4-Bromofluorobenzene	0.498	0.480	0.493	0.500	0.522	0.499	3.05

' = Out of Range

Method : C:\HPCHEM\1\METHODS\VOA524.M
itle : 524.2 Purgable Organics
ast Update : Fri May 26 16:05:53 1995
Response via : Initial Calibration

alibration Files
4 =C8237.D 10 =C8238.D 20 =C8239.D
30 =C8240.D 40 =C8241.D

		Compound	4	10	20	30	40	Avg	%RSD
4	M	Bromobenzene	0.236	0.232	0.239	0.242	0.251	0.240	3.08
5	M	1,1,2,2-Tetrachloroet	0.110	0.112	0.121	0.120	0.127	0.118	6.04
6)	M	1,2,3-Trichloropropan	0.143	0.138	0.144	0.141	0.150	0.143	2.93
7	M	n-Propylbenzene	1.736	1.684	1.719	1.754	1.761	1.731	1.79
8	M	2-Chlorotoluene	0.967	0.923	0.956	0.968	0.988	0.960	2.50
9)	M	4-Chlorotoluene	1.153	1.113	1.108	1.151	1.176	1.140	2.54
0)	M	1,3,5-Trimethylbenzen	1.107	1.066	1.095	1.117	1 122	1.101	2.04
1	M	tert-Butylbenzene	1.149	1.111	1.135	1.158	1.157	1.142	1.71
2,	M	1,2,4-Trimethylbenzen	1.012	0.993	1.014	1.002	1.025	1.009	1.21
3)	M	sec-Butylbenzene	1.707	1.634	1.688	1.722	1.715	1.693	2.10
4	M	1,3-Dichlorobenzene	0.481	0.468	0.490	0.495	0.511	0.489	3.28
5	M	4-Isopropyltoluene	1.257	1.228	1.267	1.280	1.290	1.264	1.88
6)	M	1,4-Dichlorobenzene	0.483	0.464	0.482	0.487	0.510	0.485	3.39
7	S	1,2-Dichlorobenzene-d	0.223	0.219	0.228	0.230	0.238	0.228	3.15
8	M	1,2-Dichlorobenzene	0.371	0.351	0.359	0.366	0.374	0.364	2.53
9)	M	n-Butylbenzene	1.362	1.297	1.353	1.381	1.382	1.355	2.55
0)	M	1,2-Dibromo-3-chlorop	0.027	0.027	0.030	0.031	0.034	0.030	10.29
1	M	1,2,4-Trichlorobenzen	0.254	0.256	0.266	0.271	0.293	0.268	5.88
2,	M	Hexachlorobutadiene	0.317	0.304	0.330	0.331	0.334	0.323	3.81
3)	M	Naphthalene	0.219	0.220	0.225	0.233	0.262	0.232	7.66
4	M	1,2,3-Trichlorobenzen	0.183	0.175	0.184	0.186	0.207	0.187	6.31
5		Methyl-tert butyl eth	0.289	0.286	0.292	0.288	0.306	0.292	2.82
6)		tert-Butyl Alcohol		0.004	0.005	0.005	0.005	0.004	8.73

= Out of Range

Quantitation Report

040

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.84	96	695393	5.00	ug/L	-0.09
ystem Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.10	95	138448	2.12	ug/L	42.31%
57) 1,2-Dichlorobenzene-d4	21.88	152	62134	1.72	ug/L	34.47%
arget Compounds						Qvalue
2) Dichlorodifluoromethane	3.28	85	227954	3.55	ug/L	92
3) Chloromethane	3.65	50	126260	3.35	ug/L	100
4) Vinyl chloride	3.86	62	145560	3.46	ug/L	97
5) Bromomethane	4.54	94	107256	3.74	ug/L	100
6) Chloroethane	4.76	64	91319	3.57	ug/L	90
7) Trichlorofluoromethane	5.35	101	324396	3.90	ug/L	91
8) 1,1-Dichloroethene	6.42	96	141941	3.68	ug/L	98
9) Methylene chloride	7.41	84	319236	9.50	ug/L	100
10) trans-1,2-Dichloroethene	7.97	96	152530	3.73	ug/L	94
12) 1,1-Dichloroethane	8.76	63	304419	3.74	ug/L	95
13) 2,2-Dichloropropane	9.82	77	311983	4.42	ug/L	99
14) cis-1,2-Dichloroethene	9.82	96	146539	3.80	ug/L	99
16) Bromochloromethane	10.24	128	49545	3.27	ug/L	88
17) Chloroform	10.40	83	284036	3.95	ug/L	99
18) 1,1,1-Trichloroethane	10.73	97	318569	4.20	ug/L	98
19) Carbon tetrachloride	11.03	117	299000	4.01	ug/L	97
20) 1,1-Dichloropropene	11.01	75	277299	3.91	ug/L	96
21) Benzene	11.35	78	486262	3.81	ug/L	99
22) 1,2-Dichloroethane	11.36	62	114527	4.02	ug/L	98
23) Trichloroethene	12.48	95	215417	3.81	ug/L	92
24) 1,2-Dichloropropane	12.83	63	156823	3.58	ug/L	99
25) Dibromomethane	13.02	93	62165	3.54	ug/L	95
26) Bromodichloromethane	13.30	83	215761	3.85	ug/L	95
27) cis-1,3-Dichloropropene	14.06	75	187920	3.78	ug/L	99
28) Toluene	14.64	92	359379	4.19	ug/L	98
29) trans-1,3-Dichloropropene	14.99	75	125469	3.72	ug/L	96
30) 1,1,2-Trichloroethane	15.30	83	59496	3.61	ug/L	98
31) Tetrachloroethene	15.60	166	219930	3.61	ug/L	90
32) 1,3-Dichloropropane	15.58	76	120535	3.72	ug/L	100
33) Dibromochloromethane	15.99	129	115733	3.36	ug/L	99
34) 1,2-Dibromomethane	16.19	107	80701	3.46	ug/L	99
35) Chlorobenzene	17.07	112	361810	3.72	ug/L	96
36) 1,1,1,2-Tetrachloroethane	17.20	131	142326	3.50	ug/L	95
37) Ethylbenzene	17.26	91	732369	4.06	ug/L	98
38) Xylene (para & meta)	17.47	106	533017	7.95	ug/L	92
39) Xylene (Ortho)	18.17	106	231743	3.89	ug/L	90
40) Styrene	18.18	104	352838	3.78	ug/L	87

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

Quantitation Report

041

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41)	Bromoform	18.51	173	54547	3.31 ug/L	97
42)	Isopropylbenzene	18.83	105	739665	3.93 ug/L	89
44)	Bromobenzene	19.38	156	131056	3.44 ug/L #	86
45)	1,1,2,2-Tetrachloroethane	19.32	83	61247	3.65 ug/L	98
46)	1,2,3-Trichloropropane	19.40	75	79406	3.74 ug/L	97
47)	n-Propylbenzene	19.56	91	965762	4.01 ug/L	99
48)	2-Chlorotoluene	19.73	91	538039	4.23 ug/L	92
49)	4-Chlorotoluene	19.91	91	641340	4.20 ug/L m	96
50)	1,3,5-Trimethylbenzene	19.88	105	616118	4.04 ug/L	96
51)	tert-Butylbenzene	20.48	119	639160	3.80 ug/L	88
52)	1,2,4-Trimethylbenzene	20.57	105	562733	3.89 ug/L	91
53)	sec-Butylbenzene	20.88	105	949602	3.96 ug/L	97
54)	1,3-Dichlorobenzene	21.08	146	267522	3.41 ug/L	98
55)	4-Isopropyltoluene	21.14	119	699174	3.73 ug/L	95
56)	1,4-Dichlorobenzene	21.23	146	268966	3.43 ug/L m	96
58)	1,2-Dichlorobenzene	21.91	146	206476	3.45 ug/L	95
59)	n-Butylbenzene	21.89	91	757856	3.95 ug/L	95
60)	1,2-Dibromo-3-chloropropan	23.32	75	15013	3.81 ug/L	81
61)	1,2,4-Trichlorobenzene	24.89	180	141353	3.40 ug/L	93
62)	Hexachlorobutadiene	25.23	225	176270	4.13 ug/L	97
63)	Naphthalene	25.35	128	122077	3.12 ug/L	100
64)	1,2,3-Trichlorobenzene	25.82	180	101707	3.60 ug/L	99
65)	Methyl-tert butyl ether	8.01	73	160639	4.38 ug/L #	100
66)	tert-Butyl Alcohol	7.72	59	2491	0.68 ug/L m	100

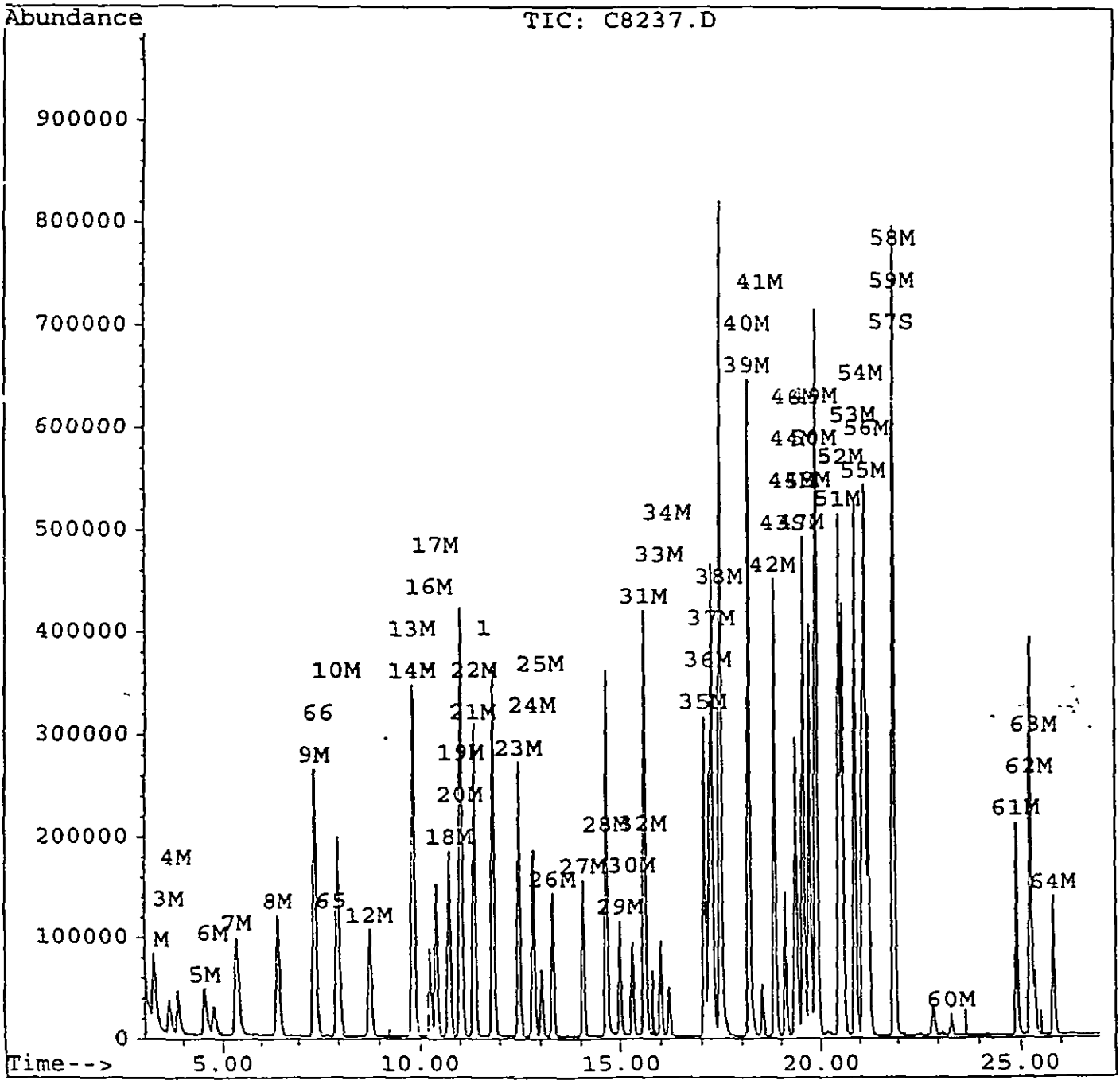
(#) = qualifier out of range (m) = manual integration

042

Data File : d:\hpchem\1\data\c8237.d
Acq On : 26 May 95 10:35 am
Sample : 4 PPB STANDARD
Misc :
Quant Time: May 26 15:22 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	770985	5.00	ug/L		-0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.09	95	370331	5.10	ug/L		102.07%
57) 1,2-Dichlorobenzene-d4	21.88	152	169129	4.23	ug/L		84.62%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.28	85	650612	9.13	ug/L		100
3) Chloromethane	3.64	50	383966	9.18	ug/L		96
4) Vinyl chloride	3.87	62	423851	9.09	ug/L		98
5) Bromomethane	4.52	94	303978	9.57	ug/L		93
6) Chloroethane	4.76	64	264421	9.32	ug/L		94
7) Trichlorofluoromethane	5.34	101	924458	10.04	ug/L		100
8) 1,1-Dichloroethene	6.42	96	410654	9.60	ug/L		96
9) Methylene chloride	7.41	84	542259	14.55	ug/L	m	99
10) trans-1,2-Dichloroethene	7.97	96	429522	9.48	ug/L		100
12) 1,1-Dichloroethane	8.76	63	840489	9.32	ug/L		97
13) 2,2-Dichloropropane	9.83	77	841576	10.74	ug/L		96
14) cis-1,2-Dichloroethene	9.83	96	403406	9.42	ug/L		98
16) Bromochloromethane	10.24	128	135650	8.08	ug/L	#	88
17) Chloroform	10.40	83	785334	9.85	ug/L		99
18) 1,1,1-Trichloroethane	10.73	97	873470	10.39	ug/L		99
19) Carbon tetrachloride	11.03	117	801421	9.70	ug/L		100
20) 1,1-Dichloropropene	11.01	75	780145	9.93	ug/L		96
21) Benzene	11.35	78	1364187	9.64	ug/L		99
22) 1,2-Dichloroethane	11.36	62	323971	10.26	ug/L		99
23) Trichloroethene	12.48	95	597831	9.52	ug/L		92
24) 1,2-Dichloropropane	12.83	63	432807	8.91	ug/L		99
25) Dibromomethane	13.03	93	174304	8.95	ug/L		99
26) Bromodichloromethane	13.29	83	593524	9.55	ug/L		96
27) cis-1,3-Dichloropropene	14.06	75	516054	9.37	ug/L		96
28) Toluene	14.64	92	932739	9.81	ug/L		100
29) trans-1,3-Dichloropropene	14.98	75	353858	9.46	ug/L		95
30) 1,1,2-Trichloroethane	15.30	83	165554	9.05	ug/L		98
31) Tetrachloroethene	15.61	166	594723	8.81	ug/L		97
32) 1,3-Dichloropropane	15.58	76	328378	9.15	ug/L		99
33) Dibromochloromethane	15.99	129	315396	8.25	ug/L		98
34) 1,2-Dibromomethane	16.19	107	223316	8.62	ug/L		93
35) Chlorobenzene	17.07	112	983363	9.11	ug/L		94
36) 1,1,1,2-Tetrachloroethane	17.20	131	380569	8.45	ug/L	m	0
37) Ethylbenzene	17.26	91	1971808	9.86	ug/L		99
38) Xylene (para & meta)	17.47	106	1428718	19.21	ug/L		96
39) Xylene (Ortho)	18.17	106	630244	9.53	ug/L		96
40) Styrene	18.19	104	965656	9.34	ug/L		94

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

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

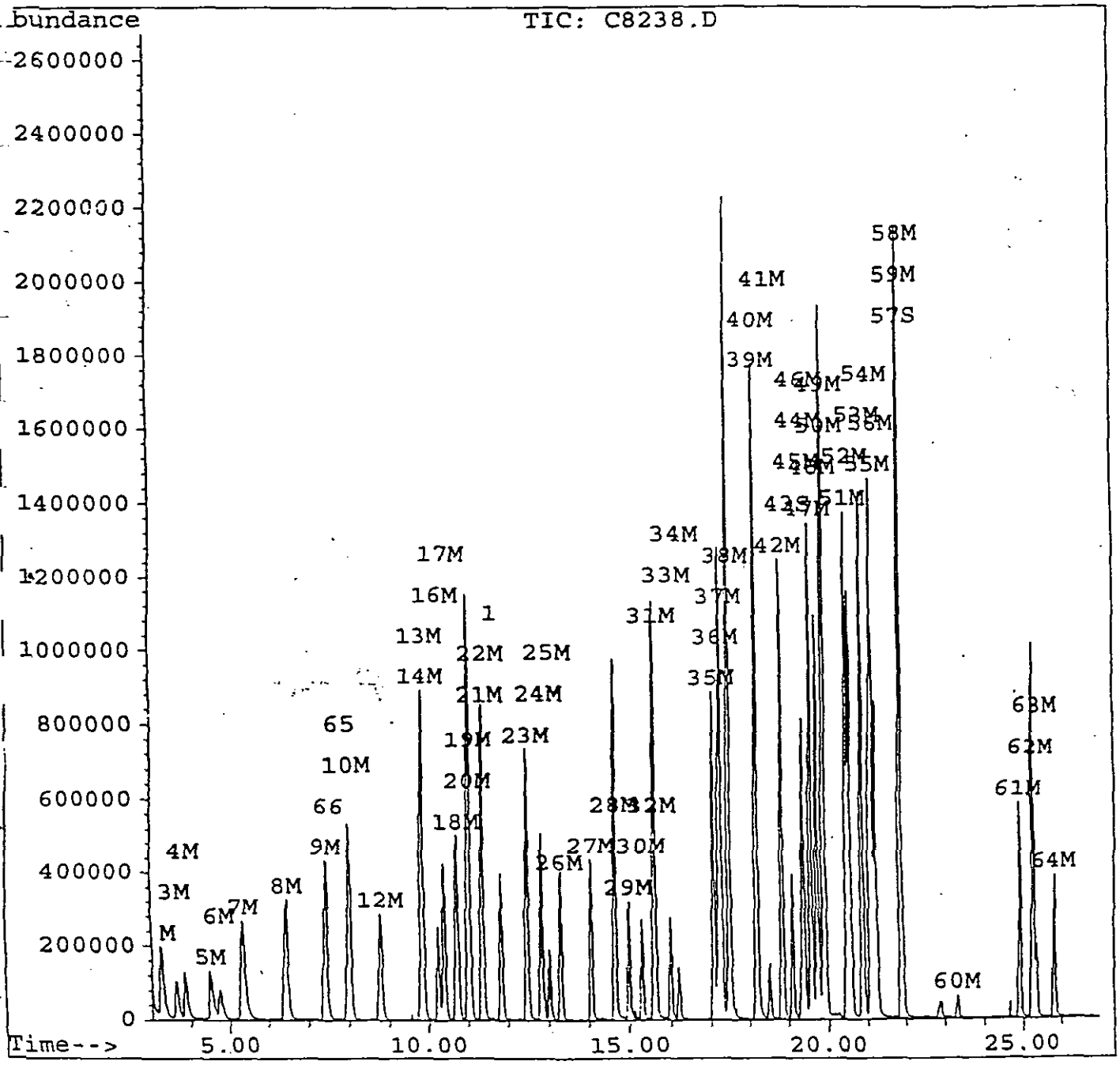
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	153005	8.38	ug/L	m	0
42)	Isopropylbenzene	18.83	105	2008385	9.63	ug/L	m	45
44)	Bromobenzene	19.38	156	357587	8.46	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.32	83	171968	9.24	ug/L		97
46)	1,2,3-Trichloropropane	19.40	75	213285	9.05	ug/L		98
47)	n-Propylbenzene	19.57	91	2596029	9.72	ug/L		97
48)	2-Chlorotoluene	19.73	91	1422833	10.08	ug/L		95
49)	4-Chlorotoluene	19.91	91	1716410	10.14	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.89	105	1643038	9.71	ug/L		98
51)	tert-Butylbenzene	20.48	119	1713787	9.19	ug/L		90
52)	1,2,4-Trimethylbenzene	20.56	105	1530473	9.54	ug/L		94
53)	sec-Butylbenzene	20.88	105	2518935	9.48	ug/L		98
54)	1,3-Dichlorobenzene	21.08	146	722076	8.30	ug/L		96
55)	4-Isopropyltoluene	21.14	119	1893823	9.12	ug/L		95
56)	1,4-Dichlorobenzene	21.24	146	715067	8.22	ug/L	m	94
58)	1,2-Dichlorobenzene	21.91	146	541575	8.16	ug/L		95
59)	n-Butylbenzene	21.89	91	2000405	9.41	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.31	75	41781	9.56	ug/L		95
61)	1,2,4-Trichlorobenzene	24.89	180	394479	8.55	ug/L		99
62)	Hexachlorobutadiene	25.23	225	469504	9.93	ug/L		98
63)	Naphthalene	25.34	128	339645	7.82	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	269640	8.61	ug/L		95
65)	Methyl-tert butyl ether	7.99	73	440628	10.83	ug/L	#	100
66)	tert-Butyl Alcohol	7.72	59	12035	2.96	ug/L		100

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

Data File : d:\hpchem\1\data\c8238.d
Acq On : 26 May 95 11:17 am
Sample : 10 PPB STANDARD
Misc :
Quant Time: May 26 15:59 1995

Vial: 3 045
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 1995

Vial: 4 046
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.84	96	715239	5.00	ug/L		-0.09
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	705539	10.48	ug/L		209.62%
57) 1,2-Dichlorobenzene-d4	21.88	152	325789	8.79	ug/L		175.71%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	1105977	16.74	ug/L		99
3) Chloromethane	3.66	50	650013	16.75	ug/L		99
4) Vinyl chloride	3.89	62	740002	17.11	ug/L		100
5) Bromomethane	4.52	94	485674	16.48	ug/L		93
6) Chloroethane	4.74	64	459311	17.45	ug/L		92
7) Trichlorofluoromethane	5.35	101	1674654	19.60	ug/L		95
8) 1,1-Dichloroethene	6.43	96	738739	18.61	ug/L		98
9) Methylene chloride	7.40	84	775969	22.45	ug/L		96
10) trans-1,2-Dichloroethene	7.98	96	771488	18.36	ug/L		100
12) 1,1-Dichloroethane	8.76	63	1541660	18.42	ug/L		99
13) 2,2-Dichloropropane	9.84	77	1507599	20.74	ug/L		95
14) cis-1,2-Dichloroethene	9.83	96	723609	18.22	ug/L		95
16) Bromochloromethane	10.24	128	255840	16.43	ug/L	#	87
17) Chloroform	10.40	83	1450799	19.62	ug/L	m	0
18) 1,1,1-Trichloroethane	10.72	97	1604334	20.57	ug/L	m	0
19) Carbon tetrachloride	11.03	117	1488607	19.42	ug/L		99
20) 1,1-Dichloropropene	11.01	75	1391827	19.09	ug/L		99
21) Benzene	11.36	78	2454890	18.69	ug/L		98
22) 1,2-Dichloroethane	11.36	62	611769	20.89	ug/L		98
23) Trichloroethene	12.48	95	1094910	18.80	ug/L		90
24) 1,2-Dichloropropane	12.84	63	809803	17.96	ug/L		99
25) Dibromomethane	13.03	93	321601	17.80	ug/L		98
26) Bromodichloromethane	13.30	83	1137821	19.73	ug/L		96
27) cis-1,3-Dichloropropene	14.05	75	981011	19.20	ug/L		95
28) Toluene	14.64	92	1745202	19.79	ug/L		98
29) trans-1,3-Dichloropropene	14.98	75	675693	19.48	ug/L	m	53
30) 1,1,2-Trichloroethane	15.30	83	312764	18.44	ug/L		95
31) Tetrachloroethene	15.61	166	1088014	17.38	ug/L		97
32) 1,3-Dichloropropane	15.59	76	630863	18.95	ug/L		96
33) Dibromochloromethane	16.00	129	614117	17.31	ug/L		97
34) 1,2-Dibromomethane	16.20	107	438464	18.25	ug/L		97
35) Chlorobenzene	17.06	112	1819994	18.18	ug/L		94
36) 1,1,1,2-Tetrachloroethane	17.20	131	725017	17.35	ug/L	m	0
37) Ethylbenzene	17.26	91	3685485	19.86	ug/L		98
38) Xylene (para & meta)	17.47	106	2660124	38.56	ug/L		90
39) Xylene (Ortho)	18.17	106	1177400	19.20	ug/L		88
40) Styrene	18.19	104	1828264	19.06	ug/L		91

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

047

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	304765	18.00	ug/L	m	0
42)	Isopropylbenzene	18.83	105	3768696	19.48	ug/L	m	45
44)	Bromobenzene	19.37	156	682381	17.40	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.32	83	345604	20.02	ug/L		97
46)	1,2,3-Trichloropropane	19.39	75	411958	18.84	ug/L		97
47)	n-Propylbenzene	19.57	91	4919179	19.86	ug/L		98
48)	2-Chlorotoluene	19.72	91	2734593	20.88	ug/L		93
49)	4-Chlorotoluene	19.91	91	3170150	20.18	ug/L		92
50)	1,3,5-Trimethylbenzene	19.89	105	3133027	19.95	ug/L		97
51)	tert-Butylbenzene	20.48	119	3247650	18.76	ug/L		89
52)	1,2,4-Trimethylbenzene	20.56	105	2901790	19.49	ug/L		97
53)	sec-Butylbenzene	20.88	105	4827977	19.58	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	1403188	17.40	ug/L		97
55)	4-Isopropyltoluene	21.15	119	3624786	18.82	ug/L		95
56)	1,4-Dichlorobenzene	21.24	146	1378003	17.08	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	1028245	16.71	ug/L		97
59)	n-Butylbenzene	21.89	91	3870404	19.62	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.31	75	87006	21.47	ug/L		87
61)	1,2,4-Trichlorobenzene	24.89	180	759956	17.76	ug/L		99
62)	Hexachlorobutadiene	25.23	225	943039	21.49	ug/L		97
63)	Naphthalene	25.33	128	643210	15.97	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	527272	18.16	ug/L		99
65)	Methyl-tert butyl ether	8.01	73	836258	22.17	ug/L	#	100
66)	tert-Butyl Alcohol	7.73	59	26154	6.93	ug/L		100

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

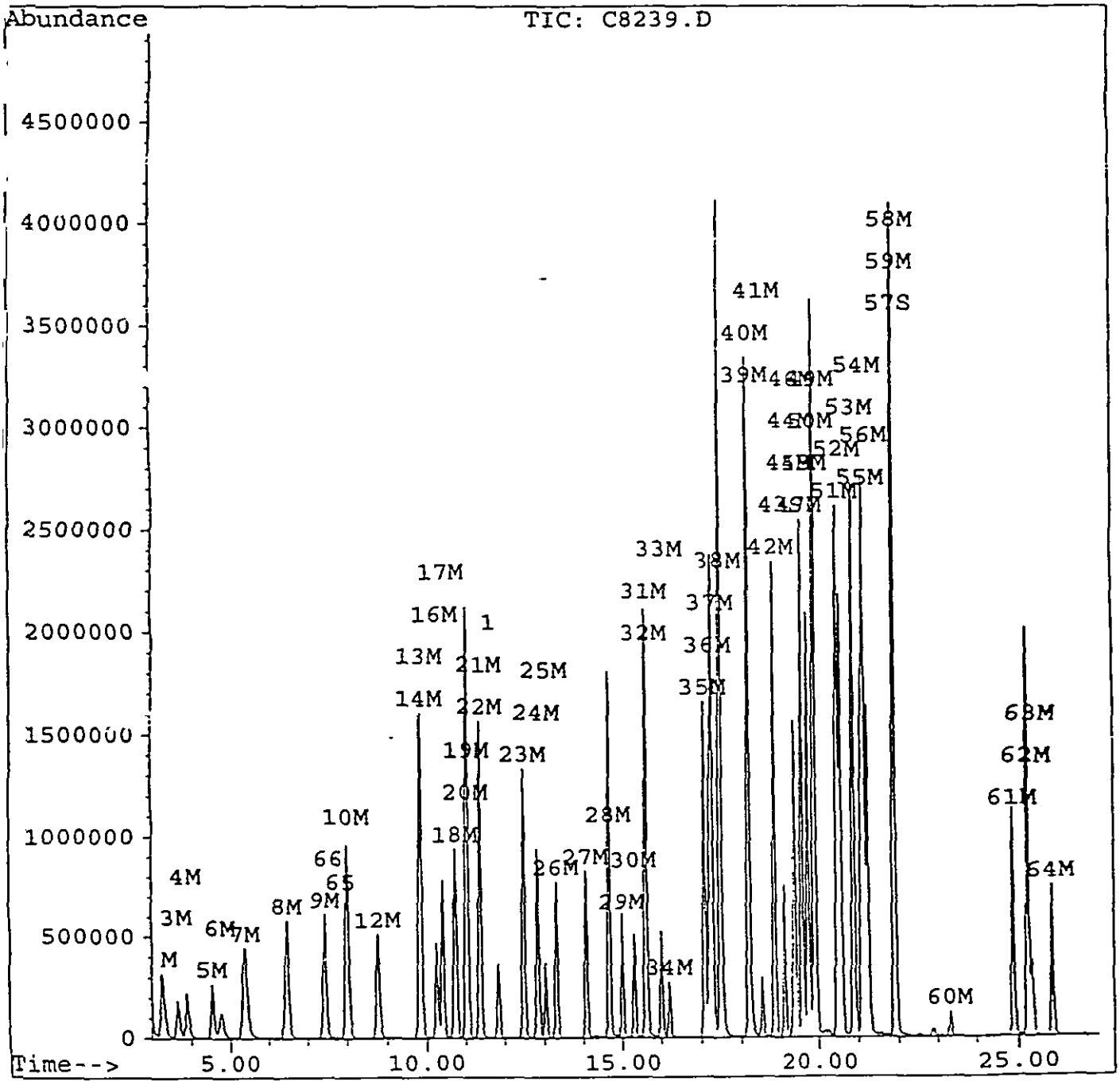
Quantitation Report

048

Data File : d:\hpchem\1\data\c8239.d
Acq On : 26 May 95 11:51 am
Sample : 20 PPB STANDARD
Misc :
Quant Time: May 26 15:53 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

049

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.83	96	707858	5.00 ug/L	-0.10
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.09	95	1062620	15.95 ug/L	319.00%
57) 1,2-Dichlorobenzene-d4	21.88	152	489408	13.34 ug/L	266.70%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.29	85	1634270	24.99 ug/L	98
3) Chloromethane	3.66	50	984170	25.63 ug/L	100
4) Vinyl chloride	3.88	62	1106079	25.84 ug/L	100
5) Bromomethane	4.50	94	702972	24.10 ug/L	92
6) Chloroethane	4.72	64	647108	24.84 ug/L	99
7) Trichlorofluoromethane	5.32	101	2502534	29.59 ug/L	99
8) 1,1-Dichloroethene	6.42	96	1092314	27.81 ug/L	94
9) Methylene chloride	7.40	84	1020488	29.83 ug/L	97
10) trans-1,2-Dichloroethene	7.96	96	1150685	27.67 ug/L	95
12) 1,1-Dichloroethane	8.76	63	2307375	27.86 ug/L	98
13) 2,2-Dichloropropane	9.83	77	2228288	30.98 ug/L	97
14) cis-1,2-Dichloroethene	9.83	96	1065313	27.11 ug/L	93
16) Bromochloromethane	10.24	128	379255	24.61 ug/L #	82
17) Chloroform	10.40	83	2154764	29.45 ug/L	99
18) 1,1,1-Trichloroethane	10.72	97	2396695	31.05 ug/L	99
19) Carbon tetrachloride	11.03	117	2233730	29.45 ug/L	100
20) 1,1-Dichloropropene	11.02	75	2098843	29.09 ug/L	98
21) Benzene	11.36	78	3677001	28.29 ug/L	99
22) 1,2-Dichloroethane	11.37	62	906868	31.29 ug/L	98
23) Trichloroethene	12.48	95	1640085	28.46 ug/L	91
24) 1,2-Dichloropropane	12.83	63	1214345	27.22 ug/L	100
25) Dibromomethane	13.03	93	494826	27.67 ug/L	97
26) Bromodichloromethane	13.30	83	1685621	29.53 ug/L m	66
27) cis-1,3-Dichloropropene	14.06	75	1443936	28.55 ug/L m	0
28) Toluene	14.64	92	2604382	29.84 ug/L	97
29) trans-1,3-Dichloropropene	14.98	75	1013926	29.53 ug/L	98
30) 1,1,2-Trichloroethane	15.30	83	468063	27.88 ug/L	99
31) Tetrachloroethene	15.60	166	1648174	26.60 ug/L	97
32) 1,3-Dichloropropane	15.58	76	925183	28.08 ug/L	100
33) Dibromochloromethane	16.00	129	918828	26.18 ug/L	99
34) 1,2-Dibromomethane	16.19	107	650390	27.36 ug/L	94
35) Chlorobenzene	17.07	112	2720037	27.45 ug/L m	0
36) 1,1,1,2-Tetrachloroethane	17.20	131	1093624	26.44 ug/L m	0
37) Ethylbenzene	17.26	91	5555166	30.24 ug/L	97
38) Xylene (para & meta)	17.47	106	3951154	57.87 ug/L	91
39) Xylene (Ortho)	18.17	106	1755270	28.92 ug/L	92
40) Styrene	18.18	104	2731131	28.76 ug/L	87

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

050

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.50	173	450885	26.90	ug/L	m	0
42)	Isopropylbenzene	18.83	105	5734485	29.95	ug/L	m	45
44)	Bromobenzene	19.37	156	1026534	26.45	ug/L	#	88
45)	1,1,2,2-Tetrachloroethane	19.33	83	508409	29.75	ug/L	m	0
46)	1,2,3-Trichloropropane	19.39	75	599222	27.69	ug/L	#	57
47)	n-Propylbenzene	19.57	91	7449042	30.39	ug/L		99
48)	2-Chlorotoluene	19.73	91	4112354	31.73	ug/L		93
49)	4-Chlorotoluene	19.91	91	4889333	31.45	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.88	105	4744702	30.53	ug/L		95
51)	tert-Butylbenzene	20.46	119	4918253	28.71	ug/L		86
52)	1,2,4-Trimethylbenzene	20.56	105	4256753	28.89	ug/L		95
53)	sec-Butylbenzene	20.88	105	7312067	29.96	ug/L		99
54)	1,3-Dichlorobenzene	21.08	146	2102035	26.33	ug/L		97
55)	4-Isopropyltoluene	21.14	119	5435557	28.52	ug/L		94
56)	1,4-Dichlorobenzene	21.23	146	2067871	25.90	ug/L	m	96
58)	1,2-Dichlorobenzene	21.91	146	1555987	25.55	ug/L	m	44
59)	n-Butylbenzene	21.89	91	5865257	30.04	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.32	75	130755	32.60	ug/L		85
61)	1,2,4-Trichlorobenzene	24.89	180	1151444	27.19	ug/L		97
62)	Hexachlorobutadiene	25.22	225	1405948	32.37	ug/L		97
63)	Naphthalene	25.34	128	988735	24.80	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	788297	27.43	ug/L		97
65)	Methyl-tert butyl ether	8.01	73	1221403	32.71	ug/L	#	100
66)	tert-Butyl Alcohol	7.76	59	39667	10.62	ug/L		100

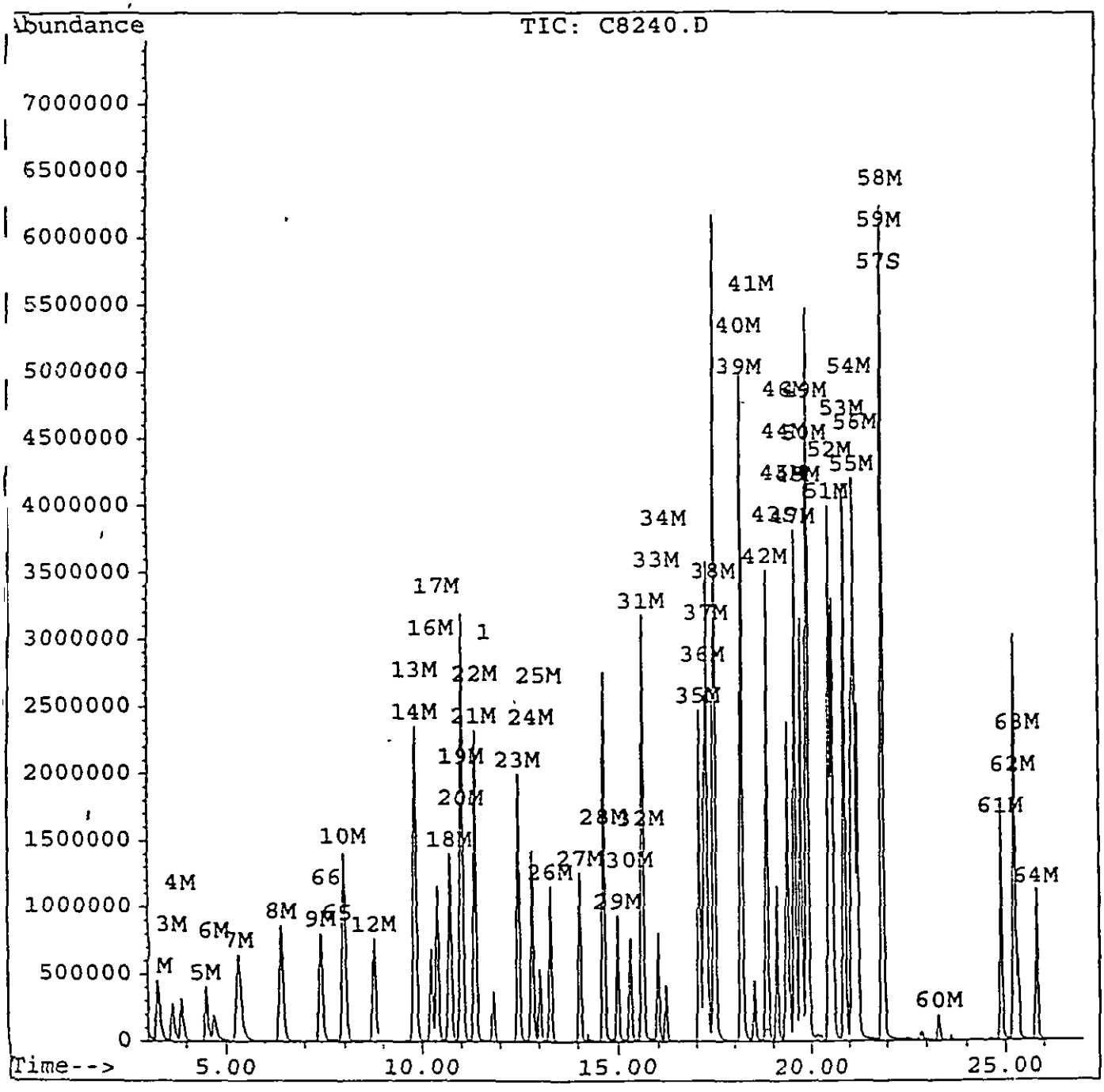
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8240.d
Acq On : 26 May 95 12:26 pm
Sample : 30 PPB STANDARD
Misc :
Quant Time: May 26 15:31 1995

Vial: 5 051
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



Quantitation Report

052

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.83	96	677208	5.00	ug/L		-0.10
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.10	95	1414597	22.19	ug/L		443.88%
57) 1,2-Dichlorobenzene-d4	21.88	152	645268	18.38	ug/L		367.55%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.29	85	2050828	32.77	ug/L		99
3) Chloromethane	3.66	50	1255453	34.18	ug/L		98
4) Vinyl chloride	3.88	62	1403518	34.27	ug/L		99
5) Bromomethane	4.50	94	887089	31.79	ug/L		95
6) Chloroethane	4.68	64	660776	26.52	ug/L		99
7) Trichlorofluoromethane	5.29	101	3146458	38.89	ug/L		98
8) 1,1-Dichloroethene	6.40	96	1373656	36.56	ug/L		94
9) Methylene chloride	7.39	84	1256580	38.40	ug/L		93
10) trans-1,2-Dichloroethene	7.96	96	1461616	36.74	ug/L	m	0
12) 1,1-Dichloroethane	8.74	63	2990291	37.74	ug/L	m	0
13) 2,2-Dichloropropane	9.82	77	2784319	40.46	ug/L		96
14) cis-1,2-Dichloroethene	9.83	96	1387660	36.91	ug/L		95
16) Bromochloromethane	10.23	128	511825	34.71	ug/L	#	88
17) Chloroform	10.39	83	2839115	40.56	ug/L		100
18) 1,1,1-Trichloroethane	10.71	97	3074057	41.62	ug/L		100
19) Carbon tetrachloride	11.02	117	2848789	39.26	ug/L		100
20) 1,1-Dichloropropene	11.00	75	2646146	38.33	ug/L		97
21) Benzene	11.35	78	4715775	37.92	ug/L		98
22) 1,2-Dichloroethane	11.36	62	1219926	43.99	ug/L		100
23) Trichloroethene	12.48	95	2092020	37.94	ug/L		92
24) 1,2-Dichloropropane	12.83	63	1588792	37.22	ug/L		100
25) Dibromomethane	13.02	93	670030	39.16	ug/L		97
26) Bromodichloromethane	13.30	83	2234626	40.92	ug/L	m	85
27) cis-1,3-Dichloropropene	14.05	75	1927356	39.84	ug/L		97
28) Toluene	14.64	92	3353871	40.17	ug/L		99
29) trans-1,3-Dichloropropene	14.98	75	1365218	41.56	ug/L		97
30) 1,1,2-Trichloroethane	15.30	83	640167	39.86	ug/L		96
31) Tetrachloroethene	15.60	166	2106507	35.54	ug/L		98
32) 1,3-Dichloropropane	15.58	76	1225150	38.86	ug/L		98
33) Dibromochloromethane	15.99	129	1250833	37.25	ug/L		99
34) 1,2-Dibromomethane	16.19	107	896884	39.43	ug/L		97
35) Chlorobenzene	17.07	112	3558221	37.53	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.20	131	1437465	36.33	ug/L	m	0
37) Ethylbenzene	17.26	91	7148780	40.68	ug/L		98
38) Xylene (para & meta)	17.47	106	5046126	77.25	ug/L		90
39) Xylene (Ortho)	18.17	106	2266726	39.03	ug/L		90
40) Styrene	18.19	104	3590160	39.52	ug/L		90

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

Quantitation Report

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration

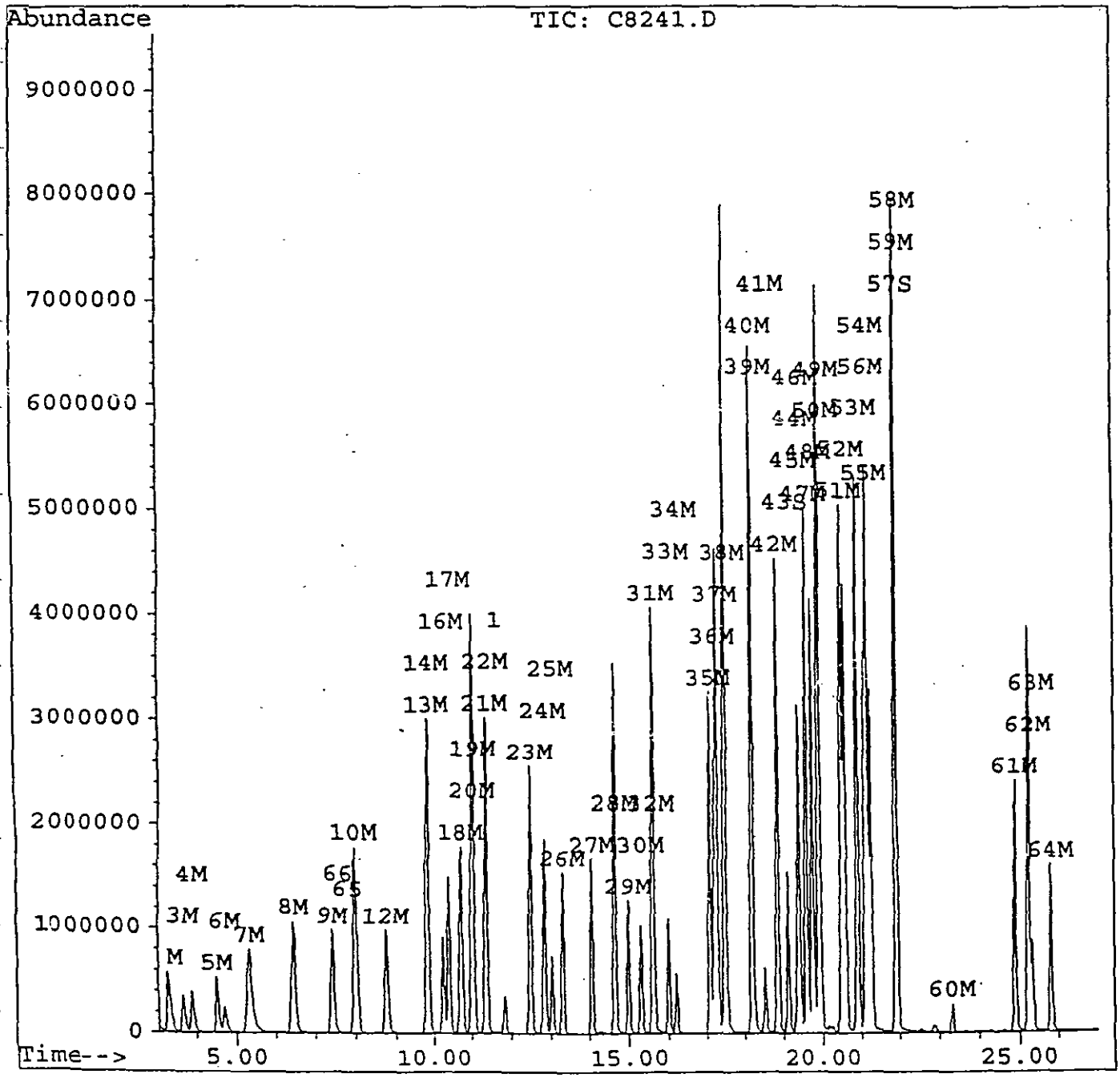
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.51	173	635283	39.62	ug/L	m	0
42)	Isopropylbenzene	18.83	105	7325849	39.99	ug/L	m	45
44)	Bromobenzene	19.37	156	1361555	36.68	ug/L	#	90
45)	1,1,2,2-Tetrachloroethane	19.32	83	689989	42.21	ug/L	m	0
46)	1,2,3-Trichloropropane	19.40	75	810580	39.16	ug/L		97
47)	n-Propylbenzene	19.57	91	9540387	40.68	ug/L		98
48)	2-Chlorotoluene	19.73	91	5352127	43.16	ug/L		92
49)	4-Chlorotoluene	19.92	91	6372870	42.85	ug/L	m	98
50)	1,3,5-Trimethylbenzene	19.89	105	6077505	40.88	ug/L		95
51)	tert-Butylbenzene	20.48	119	6270177	38.26	ug/L		87
52)	1,2,4-Trimethylbenzene	20.56	105	5551247	39.38	ug/L		93
53)	sec-Butylbenzene	20.88	105	9291157	39.79	ug/L		97
54)	1,3-Dichlorobenzene	21.08	146	2769985	36.27	ug/L		96
55)	4-Isopropyltoluene	21.15	119	6986951	38.31	ug/L		95
56)	1,4-Dichlorobenzene	21.08	146	2761726	36.15	ug/L		96
58)	1,2-Dichlorobenzene	21.91	146	2026169	34.77	ug/L		97
59)	n-Butylbenzene	21.89	91	7484823	40.07	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.31	75	186592	48.63	ug/L		86
61)	1,2,4-Trichlorobenzene	24.88	180	1588732	39.22	ug/L		98
62)	Hexachlorobutadiene	25.23	225	1808777	43.53	ug/L		98
63)	Naphthalene	25.32	128	1420685	37.25	ug/L		100
64)	1,2,3-Trichlorobenzene	25.81	180	1119071	40.70	ug/L		100
65)	Methyl-tert butyl ether	8.00	73	1658962	46.44	ug/L	#	100
66)	tert-Butyl Alcohol	7.77	59	51615	14.45	ug/L		100

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

Data File : d:\hpchem\1\data\c8241.d
Acq On : 26 May 95 1:00 pm
Sample : 40 PPB STANDARD
Misc :
Quant Time: May 26 15:35 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 : Fri May 26 16:05:53 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

055

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C8617.D BFB Injection Date: 6/21/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1548

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	22.7
75	30.0 - 66.0% of mass 95	52.5
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	52.8
175	4.0 - 9.0% of mass 174	3.1 (6.0)1
176	93.0 - 101.0% of mass 174	52.3 (99.1)1
177	5.0 - 9.0% of mass 176	3.7 (7.1)2

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

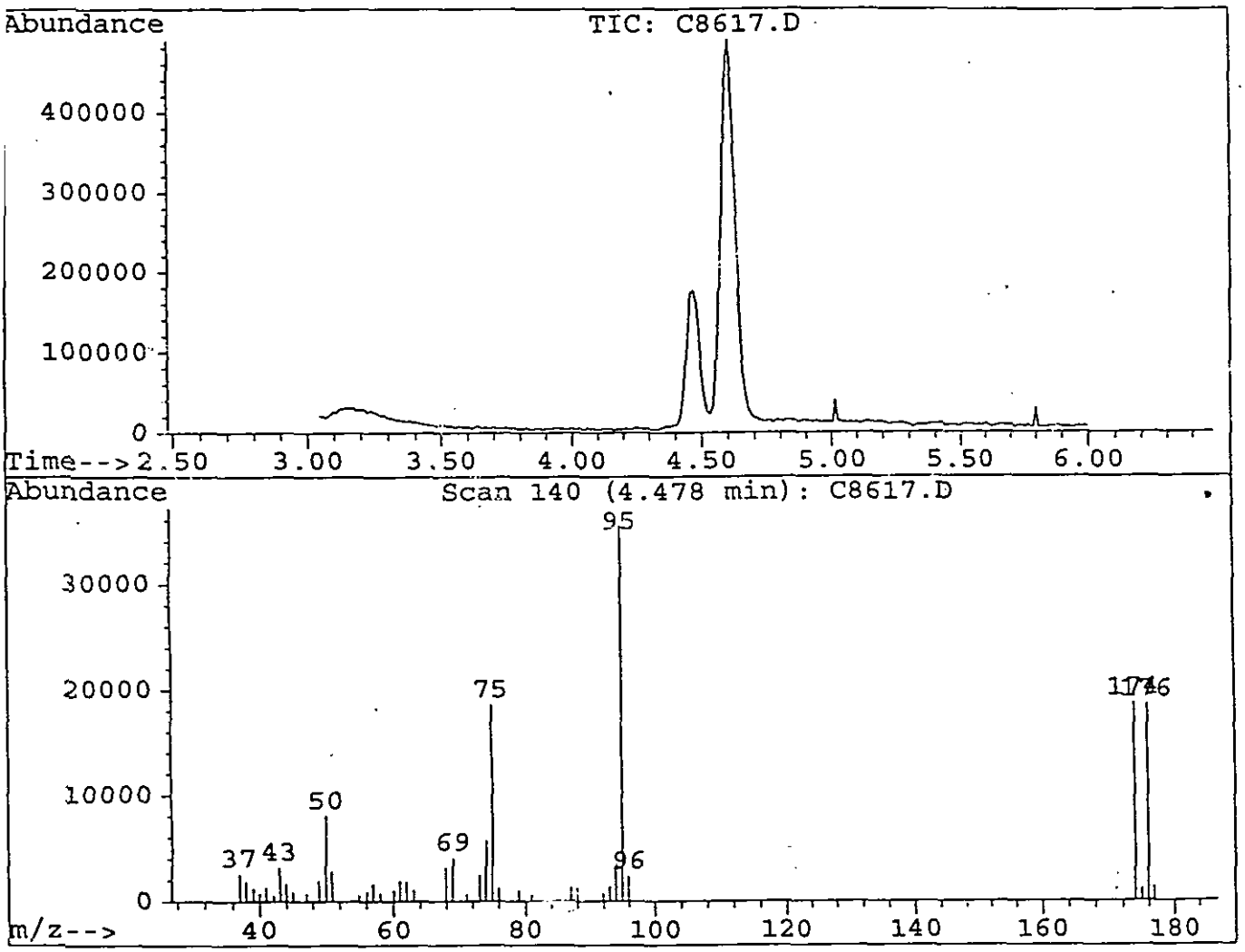
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C8618.D	6/21/95	1601
02	1PPB STD	1PPB STD	C8619.D	6/21/95	1637
03	VBLK01	M. BLANK	C8620.D	6/21/95	1712
04	9525784V	9525784V	C8621.D	6/21/95	1748
05	9527186V	9527186V	C8622.D	6/21/95	1823
06	9526426V	9526426V	C8623.D	6/21/95	1857
07	9526427V	9526427V	C8624.D	6/21/95	1932
08	9526428V	9526428V	C8625.D	6/21/95	2006
09	9526429V	9526429V	C8626.D	6/21/95	2040
10	9526430V	9526430V	C8627.D	6/21/95	2114
11	9526431V	9526431V	C8628.D	6/21/95	2148
12	9526431MS	26431MS	C8629.D	6/21/95	2223
13	9526431MSD	26431MSD	C8630.D	6/21/95	2257
14	10PPBQCS	10PPBQCS	C8631.D	6/21/95	2331
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C8617.D
Acq On : 21 Jun 95 3:48 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: 140

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.7	8038	PASS
75	95	30	60	52.5	18608	PASS
95	95	100	100	100.0	35472	PASS
96	95	5	9	6.6	2335	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	52.8	18728	PASS
175	174	5	9	6.0	1115	PASS
176	174	95	101	99.1	18568	PASS
177	176	5	9	7.1	1317	PASS

140 (4.478 min): C8617.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
37.10	2582	50.05	8038	68.95	4073	92.95	1384
38.00	1896	50.95	2821	71.05	628	93.95	3516
39.10	1222	54.95	608	73.05	2451	94.95	35472
40.00	774	56.10	965	73.95	5684	95.95	2335
41.00	1262	57.00	1666	74.95	18608	173.95	18728
42.10	564	58.10	792	75.95	1241	174.95	1115
43.10	3189	60.10	1073	78.90	994	175.95	18568
44.00	1668	61.00	1890	80.90	802	176.85	1317
45.00	963	62.00	1866	87.00	1251		
47.05	720	63.00	1078	87.95	1250		
48.95	1948	67.95	3154	91.95	733		

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/21/95 Time: 1601

Lab File ID: C8618.D Init. Calib. Date(s): 5/26/95 _____

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
Dichlorodifluoromethane	0.396	0.347		12.4	30.0
Chloromethane	0.233	0.227		2.6	30.0
Vinyl chloride	0.263	0.264		-0.4	30.0
Bromomethane	0.178	0.181		-1.7	30.0
Chloroethane	0.154	0.172		-11.7	30.0
Trichlorofluoromethane	0.588	0.604		-2.7	30.0
1,1-Dichlcroethene	0.258	0.262		-1.6	30.0
Methylene chloride	0.274	0.340		-24.1	30.0
trans-1,2-Dichloroethene	0.273	0.280		-2.6	30.0
1,1-Dichloroethane	0.545	0.596		-9.4	30.0
2,2-Dichloropropane	0.534	0.564		-5.6	30.0
cis-1,2-Dichloroethene	0.257	0.268		-4.3	30.0
Bromochloromethane	0.090	0.091		-1.1	30.0
Chloroform	0.512	0.547		-6.8	30.0
1,1,1-Trichloroethane	0.566	0.590		-4.2	30.0
Carbon tetrachloride	0.526	0.530		-0.8	30.0
1,1-Dichloropropene	0.495	0.528		-6.7	30.0
Benzene	0.871	0.902		-3.6	30.0
1,2-Dichloroethane	0.214	0.244		-14.0	30.0
Trichloroethene	0.386	0.391		-1.3	30.0
1,2-Dichloropropane	0.285	0.315		-10.5	30.0
Dibromomethane	0.115	0.127		-10.4	30.0
Bromodichloromethane	0.396	0.442		-11.6	30.0
cis-1,3-Dichloropropene	0.342	0.379		-10.8	30.0
Toluene	0.619	0.636		-2.7	30.0
trans-1,3-Dichloropropene	0.236	0.268		-13.6	30.0
1,1,2-Trichloroethane	0.110	0.126		-14.5	30.0
Tetrachloroethene	0.388	0.362		6.7	30.0
1,3-Dichloropropane	0.219	0.244		-11.4	30.0
Dibromochloromethane	0.215	0.227		-5.6	30.0
1,2-Dibromomethane	0.152	0.169		-11.2	30.0
Chlorobenzene	0.644	0.644		0.0	30.0
1,1,1,2-Tetrachloroethane	0.256	0.260		-1.6	30.0
Ethylbenzene	1.302	1.343		-3.1	30.0
Xylene (para & meta)	0.468	0.468		0.0	30.0
Xylene (Ortho)	0.414	0.415		-0.2	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/21/95 Time: 1601

Lab File ID: C8618.D Init. Calib. Date(s): 5/26/95 _____

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	0.641	0.655		-2.2	30.0
Bromoform	0.105	0.112		-6.7	30.0
Isopropylbenzene	1.330	1.308		1.7	30.0
Bromobenzene	0.240	0.241		-0.4	30.0
1,1,2,2-Tetrachloroethane	0.118	0.147		-24.6	30.0
1,2,3-Trichloropropane	0.143	0.162		-13.3	30.0
n-Propylbenzene	1.731	1.760		-1.7	30.0
2-Chlorotoluene	0.960	1.058		-10.2	30.0
4-Chlorotoluene	1.140	1.143		-0.3	30.0
1,3,5-Trimethylbenzene	1.101	1.060		3.7	30.0
tert-Butylbenzene	1.142	1.116		2.3	30.0
1,2,4-Trimethylbenzene	1.009	1.011		-0.2	30.0
sec-Butylbenzene	1.693	1.623		4.1	30.0
1,3-Dichlorobenzene	0.489	0.472		3.5	30.0
4-Isopropyltoluene	1.264	1.224		3.2	30.0
1,4-Dichlorobenzene	0.485	0.474		2.3	30.0
1,2-Dichlorobenzene	0.364	0.363		0.3	30.0
n-Butylbenzene	1.355	1.345		0.7	30.0
1,2-Dibromo-3-chloropropane	0.030	0.037		-23.3	30.0
1,2,4-Trichlorobenzene	0.268	0.236		11.9	30.0
Hexachlorobutadiene	0.323	0.275		14.9	30.0
Naphthalene	0.232	0.223		3.9	30.0
1,2,3-Trichlorobenzene	0.187	0.175		6.4	30.0
4-Bromofluorobenzene	0.499	0.515		-3.2	30.0
1,2-Dichlorobenzene-d4	0.228	0.227		0.4	30.0

Evaluate Continuing Calibration Report

060

Data File : D:\HPCHEM\1\DATA\C8618.D
Acq On : 21 Jun 95 4:01 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 May 30 13:15:19 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	94	0.05
2	M	Dichlorodifluoromethane	0.396	0.347	12.3	78	0.05
3	M	Chloromethane	0.233	0.227	2.9	86	0.06
4	M	Vinyl chloride	0.263	0.264	-0.5	91	0.06
5	M	Bromomethane	0.178	0.181	-2.0	87	0.06
6	M	Chloroethane	0.154	0.172	-11.8	95	0.06
7	M	Trichlorofluoromethane	0.588	0.604	-2.9	95	0.08
8	M	1,1-Dichloroethene	0.258	0.262	-1.5	93	0.09
9	M	Methylene chloride	0.274	0.340	-24.1	91	0.07
10	M	trans-1,2-Dichloroethene	0.273	0.280	-2.6	95	0.06
11		Hexane	0.000	0.000#	0.0	0#	0.47#
12	M	1,1-Dichloroethane	0.545	0.596	-9.3	103	0.07
13	M	2,2-Dichloropropane	0.534	0.564	-5.6	98	0.06
14	M	cis-1,2-Dichloroethene	0.257	0.268	-4.4	97	0.06
15		2-Butanone	0.000	0.000#	0.0	0#	-0.05
16	M	Bromochloromethane	0.090	0.091	-0.9	97	0.07
17	M	Chloroform	0.512	0.547	-6.8	101	0.07
18	M	1,1,1-Trichloroethane	0.566	0.590	-4.2	98	0.05
19	M	Carbon tetrachloride	0.526	0.530	-0.8	96	0.05
20	M	1,1-Dichloropropene	0.495	0.528	-6.7	98	0.06
21	M	Benzene	0.871	0.902	-3.6	96	0.06
22	M	1,2-Dichloroethane	0.214	0.244	-14.3	110	0.06
23	M	Trichloroethene	0.386	0.391	-1.4	95	0.05
24	M	1,2-Dichloropropane	0.285	0.315	-10.7	106	0.05
25	M	Dibromomethane	0.115	0.127	-10.4	106	0.04
26	M	Bromodichloromethane	0.396	0.442	-11.7	108	0.06
27	M	cis-1,3-Dichloropropene	0.342	0.379	-10.8	107	0.05
28	M	Toluene	0.619	0.636	-2.8	99	0.05
29	M	trans-1,3-Dichloropropene	0.236	0.268	-13.4	110	0.05
30	M	1,1,2-Trichloroethane	0.110	0.126	-13.8	110	0.05
31	M	Tetrachloroethene	0.388	0.362	6.7	88	0.04
32	M	1,3-Dichloropropane	0.219	0.244	-11.3	108	0.05
33	M	Dibromochloromethane	0.215	0.227	-5.7	105	0.05
34	M	1,2-Dibromomethane	0.152	0.169	-11.1	110	0.05
35	M	Chlorobenzene	0.644	0.644	0.1	95	0.05
36	M	1,1,1,2-Tetrachloroethane	0.256	0.260	-1.8	100	0.04
37	M	Ethylbenzene	1.302	1.343	-3.1	99	0.04
38	M	Xylene (para & meta)	0.468	0.468	-0.1	95	0.04
39	M	Xylene (Ortho)	0.414	0.415	-0.4	96	0.04
40	M	Styrene	0.641	0.655	-2.2	99	0.04
41	M	Bromoform	0.105	0.112	-6.1	106	0.04
42	M	Isopropylbenzene	1.330	1.308	1.7	95	0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C8618.D
Acq On : 21 Jun 95 4:01 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 May 30 13:15:19 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		4-Bromofluorobenzene	0.499	0.515	-3.3	101	0.05
4	M	Bromobenzene	0.240	0.241	-0.4	98	0.04
5	"	1,1,2,2-Tetrachloroethane	0.118	0.147	-24.4	124	0.03
6		1,2,3-Trichloropropane	0.143	0.162	-13.2	111	0.04
7	M	n-Propylbenzene	1.731	1.760	-1.7	99	0.04
8	M	2-Chlorotoluene	0.960	1.058	-10.2	108	0.04
9	M	4-Chlorotoluene	1.140	1.143	-0.3	97	0.05
0	M	1,3,5-Trimethylbenzene	1.101	1.060	3.7	94	0.04
1	M	tert-Butylbenzene	1.142	1.116	2.3	95	0 04
2	M	1,2,4-Trimethylbenzene	1.009	1.011	-0.2	96	0.04
3	M	sec-Butylbenzene	1.693	1.623	4.1	94	0.04
4	M	1,3-Dichlorobenzene	0.469	0.472	3.4	95	0.04
5	M	4-Isopropyltoluene	1.264	1.224	3.2	94	0.04
6	M	1,4-Dichlorobenzene	0.485	0.474	2.2	97	0.04
7	S	1,2-Dichlorobenzene-d4	0.228	0.227	0.4	98	0.03
8	M	1,2-Dichlorobenzene	0.364	0.363	0.3	98	0.04
9	M	n-Butylbenzene	1.355	1.345	0.7	98	0.04
0	M	1,2-Dibromo-3-chloropropane	0.030	0.037	-22.8	128	0.03
1	M	1,2,4-Trichlorobenzene	0.268	0.236	12.1	87	0.04
2	M	Hexachlorobutadiene	0.323	0.275	14.9	85	0.03
3	M	Naphthalene	0.232	0.223	4.0	95	0.03
4	M	1,2,3-Trichlorobenzene	0.187	0.175	6.5	94	0.04
5		Methyl-tert butyl ether	0.292	0.338	-15.8	112	0.06
6		tert-Butyl Alcohol	0.004	0.006	-23.2	133	0.06

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

Quantitation Report

Data File : d:\hpchem\1\data\c8618.d
Acq On : 21 Jun 95 4:01 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 22 15:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.89	96	727435	5.00	ug/L		0.05
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	374679	5.16	ug/L		103.27%
57) 1,2-Dichlorobenzene-d4	21.91	152	165031	4.98	ug/L		99.58%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.33	85	505478	8.77	ug/L		96
3) Chloromethane	3.70	50	329716	9.71	ug/L		98
4) Vinyl chloride	3.93	62	384395	10.05	ug/L		98
5) Bromomethane	4.58	94	263783	10.20	ug/L		96
6) Chloroethane	4.82	64	250557	11.18	ug/L		94
7) Trichlorofluoromethane	5.42	101	879391	10.29	ug/L		97
8) 1,1-Dichloroethene	6.51	96	380949	10.15	ug/L	#	84
9) Methylene chloride	7.48	84	494356	12.41	ug/L		93
10) trans-1,2-Dichloroethene	8.03	96	407093	10.26	ug/L		91
12) 1,1-Dichloroethane	8.83	63	867301	10.93	ug/L		98
13) 2,2-Dichloropropane	9.89	77	821160	10.56	ug/L		100
14) cis-1,2-Dichloroethene	9.89	96	390466	10.44	ug/L		92
16) Bromochloromethane	10.31	128	132118	10.09	ug/L		93
17) Chloroform	10.46	83	795103	10.68	ug/L		98
18) 1,1,1-Trichloroethane	10.78	97	858453	10.42	ug/L		96
19) Carbon tetrachloride	11.09	117	771119	10.08	ug/L		99
20) 1,1-Dichloropropene	11.08	75	767707	10.67	ug/L		98
21) Benzene	11.42	78	1311720	10.36	ug/L		96
22) 1,2-Dichloroethane	11.43	62	355255	11.43	ug/L		99
23) Trichloroethene	12.53	95	569557	10.14	ug/L		93
24) 1,2-Dichloropropane	12.88	63	458759	11.07	ug/L		98
25) Dibromomethane	13.08	93	185487	11.04	ug/L		89
26) Bromodichloromethane	13.35	83	643204	11.17	ug/L		100
27) cis-1,3-Dichloropropene	14.11	75	551896	11.08	ug/L		98
28) Toluene	14.69	92	925447	10.28	ug/L		99
29) trans-1,3-Dichloropropene	15.03	75	390135	11.34	ug/L		98
30) 1,1,2-Trichloroethane	15.35	83	182729	11.38	ug/L		98
31) Tetrachloroethene	15.65	166	526003	9.33	ug/L		95
32) 1,3-Dichloropropane	15.63	76	354394	11.13	ug/L		96
33) Dibromochloromethane	16.04	129	330529	10.57	ug/L		97
34) 1,2-Dibromomethane	16.24	107	246309	11.11	ug/L		97
35) Chlorobenzene	17.12	112	936565	9.99	ug/L		93
36) 1,1,1,2-Tetrachloroethane	17.24	131	378896	10.18	ug/L		97
37) Ethylbenzene	17.30	91	1953647	10.31	ug/L		98
38) Xylene (para & meta)	17.51	106	1362492	20.03	ug/L		94
39) Xylene (Ortho)	18.21	106	604490	10.04	ug/L	#	87
40) Styrene	18.23	104	952735	10.22	ug/L		94

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

Data File . d:\hpchem\1\data\c8618 d
Acq On : 21 Jun 95 4.01 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 22 15:05 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 May 30 13:15.19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	162779	10.61	ug/L		87
42)	Isopropylbenzene	18 87	105	1902422	9.83	ug/L		91
44)	Bromobenzene	19.42	156	350317	10.04	ug/L	#	87
45)	1,1,2,2-Tetrachloroethane	19.35	83	213325	12.44	ug/L		99
46)	1,2,3-Trichloropropane	19.44	75	235860	11.32	ug/L		94
47)	n-Propylbenzene	19.61	91	2561118	10.17	ug/L		100
48)	2-Chlorotoluene	19.77	91	1539557	11.02	ug/L		98
49)	4-Chlorotoluene	19.96	91	1663477	10.03	ug/L		81
50)	1,3,5-Trimethylbenzene	19.93	105	1542800	9.63	ug/L		95
51)	tert-Butylbenzene	20.52	119	1624320	9.77	ug/L		97
52)	1,2,4-Trimethylbenzene	20.60	105	1470730	10.02	ug/L		97
53)	sec-Butylbenzene	20.92	105	2361702	9.59	ug/L		98
54)	1,3-Dichlorobenzene	21.12	146	687196	9.66	ug/L		95
55)	4-Isopropyltoluene	21.18	119	1780582	9.68	ug/L		98
56)	1,4-Dichlorobenzene	21.28	146	690249	9.78	ug/L		90
58)	1,2-Dichlorobenzene	21.95	146	528489	9.97	ug/L	m	0
59)	n-Butylbenzene	21.93	91	1956991	9.93	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.34	75	53519	12.28	ug/L	#	69
61)	1,2,4-Trichlorobenzene	24.93	180	342709	8.79	ug/L		96
62)	Hexachlorobutadiene	25.26	225	400127	8.51	ug/L		100
63)	Naphthalene	25.37	128	323794	9.60	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	254279	9.35	ug/L		96
65)	Methyl-tert butyl ether	8.05	73	491969	11.58	ug/L		100
66)	tert-Butyl Alcohol	7.79	59	16053	24.65	ug/L		100

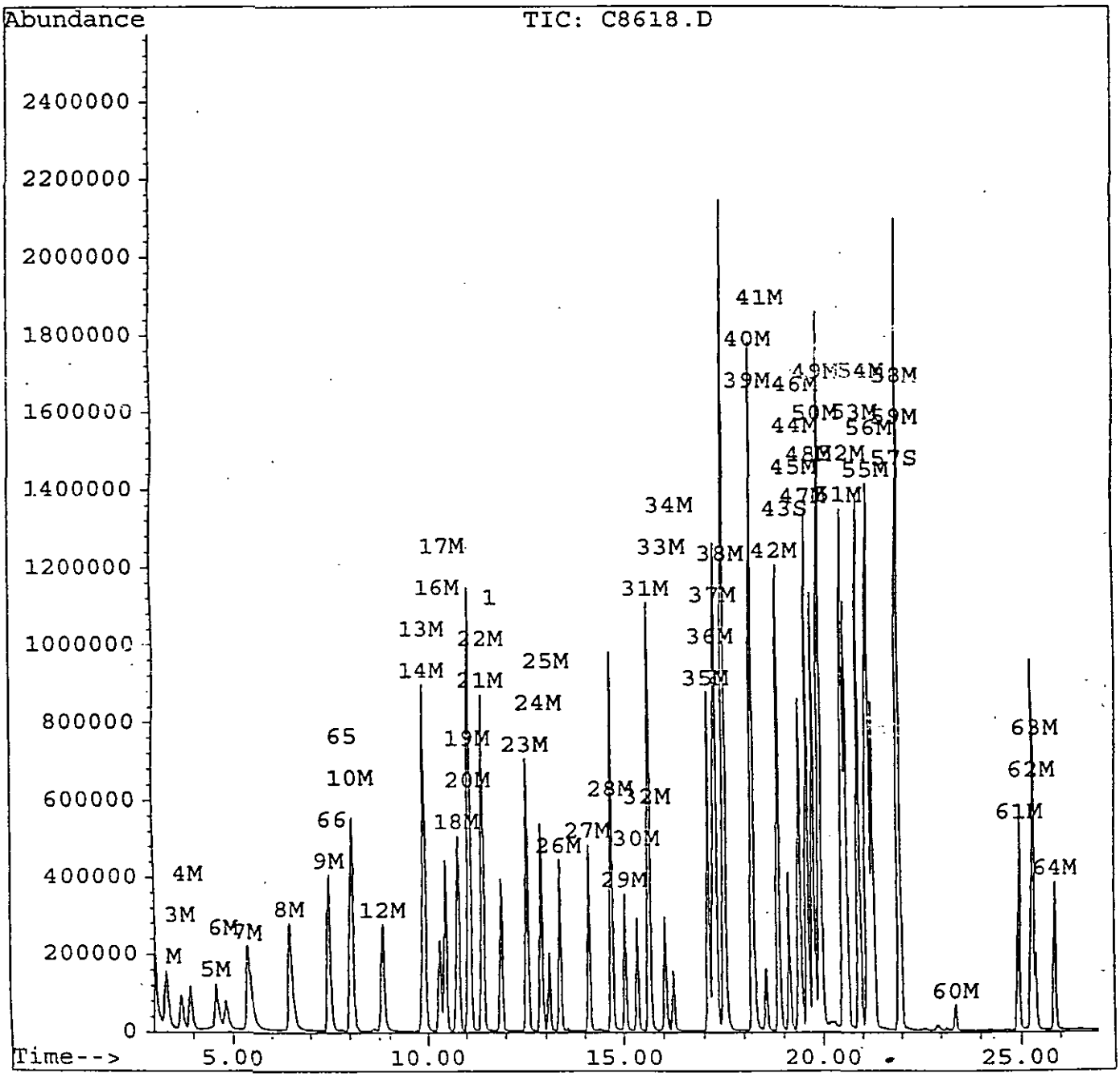
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8618.d
Acq On : 21 Jun 95 4:01 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 22 15:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8619.d
Acq On : 21 Jun 95 4:37 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 21 17:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.89	96	711692	5.00	ug/L	0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.13	95	373846	5.27	ug/L	105.32%
57) 1,2-Dichlorobenzene-d4	21.91	152	171123	5.28	ug/L	105.54%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.33	85	52705	0.93	ug/L	97
3) Chloromethane	3.71	50	34122	1.03	ug/L	91
4) Vinyl chloride	3.92	62	39999	1.07	ug/L	93
5) Bromomethane	4.60	94	30920	1.22	ug/L	93
6) Chloroethane	4.84	64	26096	1.19	ug/L	98
7) Trichlorofluoromethane	5.41	101	91090	1.09	ug/L	93
8) 1,1-Dichloroethene	6.50	96	40718	1.11	ug/L	88
9) Methylene chloride	7.48	84	229773	5.90	ug/L	97
10) trans-1,2-Dichloroethene	8.05	96	42393	1.09	ug/L	90
12) 1,1-Dichloroethane	8.83	63	91491	1.18	ug/L	96
13) 2,2-Dichloropropane	9.90	77	86898	1.14	ug/L	91
14) cis-1,2-Dichloroethene	9.89	96	42670	1.17	ug/L	98
16) Bromochloromethane	10.30	128	13459	1.05	ug/L	88
17) Chloroform	10.46	83	89000	1.22	ug/L	95
18) 1,1,1-Trichloroethane	10.79	97	89755	1.11	ug/L	91
19) Carbon tetrachloride	11.09	117	80493	1.08	ug/L	99
20) 1,1-Dichloropropene	11.07	75	81335	1.16	ug/L	97
21) Benzene	11.42	78	146383	1.18	ug/L	97
22) 1,2-Dichloroethane	11.43	62	36522	1.20	ug/L	94
23) Trichloroethene	12.54	95	61000	1.11	ug/L	91
24) 1,2-Dichloropropane	12.89	63	50473	1.24	ug/L	89
25) Dibromomethane	13.09	93	19444	1.18	ug/L	93
26) Bromodichloromethane	13.35	83	68252	1.21	ug/L	92
27) cis-1,3-Dichloropropene	14.12	75	58043	1.19	ug/L	90
28) Toluene	14.70	92	98298	1.12	ug/L	98
29) trans-1,3-Dichloropropene	15.03	75	42089	1.25	ug/L	95
30) 1,1,2-Trichloroethane	15.35	83	20122	1.28	ug/L	91
31) Tetrachloroethene	15.66	166	57565	1.04	ug/L	97
32) 1,3-Dichloropropane	15.64	76	38747	1.24	ug/L	92
33) Dibromochloromethane	16.03	129	33999	1.11	ug/L	97
34) 1,2-Dibromomethane	16.24	107	24143	1.11	ug/L	92
35) Chlorobenzene	17.12	112	108772	1.19	ug/L	96
36) 1,1,1,2-Tetrachloroethane	17.25	131	41627	1 14	ug/L	96
37) Ethylbenzene	17.30	91	213908	1.15	ug/L	95
38) Xylene (para & meta)	17.52	106	147039	2.21	ug/L	89
39) Xylene (Ortho)	18.21	106	66862	1.14	ug/L	97
40) Styrene	18.22	104	100466	1.10	ug/L	96

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

066

Data File : d.\hpchem\1\data\c8619.d
Acq On : 21 Jun 95 4:37 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 21 17:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit		Qvalue
41)	Bromoform	18.55	173	16015	1.07 ug/L		99
42)	Isopropylbenzene	18.87	105	209607	1.11 ug/L		88
44)	Bromobenzene	19.42	156	38827	1.14 ug/L		91
45)	1,1,2,2-Tetrachloroethane	19.36	83	22067	1.31 ug/L		95
46)	1,2,3-Trichloropropane	19.44	75	27469	1.35 ug/L	#	68
47)	n-Propylbenzene	19.60	91	280035	1.14 ug/L		97
48)	2-Chlorotoluene	19.76	91	175076	1.28 ug/L		93
49)	4-Chlorotoluene	19.96	91	191455	1.18 ug/L		78
50)	1,3,5-Trimethylbenzene	19.93	105	171669	1.10 ug/L		100
51)	tert-Butylbenzene	20.52	119	180983	1.11 ug/L		98
52)	1,2,4-Trimethylbenzene	20.60	105	161019	1.12 ug/L		99
53)	sec-Butylbenzene	20.92	105	263359	1.09 ug/L		100
54)	1,3-Dichlorobenzene	21.12	146	79914	1.15 ug/L		94
55)	4-Isopropyltoluene	21.18	119	188397	1.05 ug/L		97
56)	1,4-Dichlorobenzene	21.27	146	81648	1.18 ug/L		91
58)	1,2-Dichlorobenzene	21.95	146	62416	1.20 ug/L		95
59)	n-Butylbenzene	21.93	91	211185	1.09 ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.35	75	5150	1.21 ug/L	#	69
61)	1,2,4-Trichlorobenzene	24.93	180	44250	1.16 ug/L		95
62)	Hexachlorobutadiene	25.27	225	47861	1.04 ug/L		95
63)	Naphthalene	25.38	128	43576	1.32 ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	33571	1.26 ug/L		91
65)	Methyl-tert butyl ether	8.07	73	59856	1.44 ug/L		94
66)	tert-Butyl Alcohol	8.76	59	1029	1.61 ug/L		100

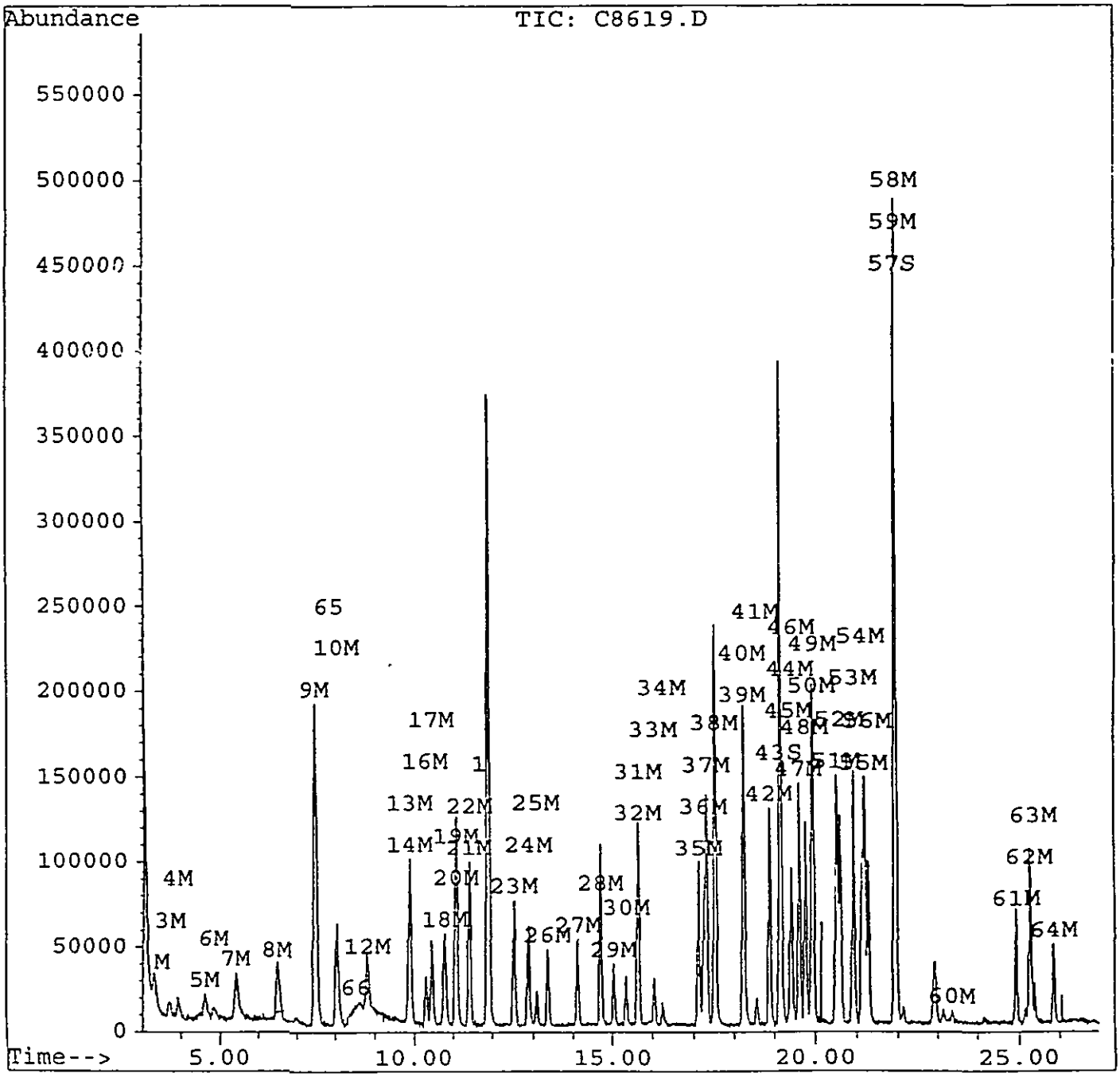
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8619.d
Acq On : 21 Jun 95 4:37 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 21 17:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

068

Data File : d:\hpchem\1\data\c8631.d
Acq On : 21 Jun 95 11:31 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 22 15:30 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.91	96	733483	5.00 ug/L	0.07
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.15	95	362015	4.95 ug/L	98.95%
57) 1,2-Dichlorobenzene-d4	21.93	152	162941	4.88 ug/L	97.50%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.34	85	500381	8.61 ug/L	98
3) Chloromethane	3.72	50	325700	9.52 ug/L	96
4) Vinyl chloride	3.94	62	387791	10.05 ug/L	99
5) Bromomethane	4.59	94	283025	10.85 ug/L	98
6) Chloroethane	4.85	64	251852	11.14 ug/L	98
7) Trichlorofluoromethane	5.44	101	890835	10.33 ug/L	99
8) 1,1-Dichloroethene	6.52	96	385360	10.18 ug/L	87
9) Methylene chloride	7.49	84	503026	12.52 ug/L	98
10) trans-1,2-Dichloroethene	8.05	96	405437	10.14 ug/L	91
12) 1,1-Dichloroethane	8.84	63	851504	10.65 ug/L	97
13) 2,2-Dichloropropane	9.91	77	675028	8.61 ug/L	99
14) cis-1,2-Dichloroethene	9.90	96	373225	9.90 ug/L	89
16) Bromochloromethane	10.32	128	124422	9.42 ug/L	92
17) Chloroform	10.47	83	777600	10.36 ug/L	99
18) 1,1,1-Trichloroethane	10.80	97	859952	10.35 ug/L	97
19) Carbon tetrachloride	11.10	117	769602	9.98 ug/L	98
20) 1,1-Dichloropropene	11.09	75	748160	10.31 ug/L	98
21) Benzene	11.44	78	1294310	10.13 ug/L	97
22) 1,2-Dichloroethane	11.44	62	320034	10.21 ug/L	96
23) Trichloroethene	12.54	95	565141	9.98 ug/L	94
24) 1,2-Dichloropropane	12.90	63	436019	10.43 ug/L	100
25) Dibromomethane	13.10	93	166666	9.84 ug/L	97
26) Bromodichloromethane	13.36	83	588379	10.13 ug/L	99
27) cis-1,3-Dichloropropene	14.12	75	480682	9.57 ug/L	99
28) Toluene	14.71	92	913030	10.06 ug/L	97
29) trans-1,3-Dichloropropene	15.05	75	330498	9.53 ug/L	100
30) 1,1,2-Trichloroethane	15.36	83	163045	10.07 ug/L	98
31) Tetrachloroethene	15.67	166	540500	9.50 ug/L	99
32) 1,3-Dichloropropane	15.65	76	317615	9.89 ug/L	96
33) Dibromochloromethane	16.06	129	297857	9.45 ug/L	100
34) 1,2-Dibromomethane	16.26	107	217360	9.72 ug/L	100
35) Chlorobenzene	17.13	112	922575	9.76 ug/L	95
36) 1,1,1,2-Tetrachloroethane	17.26	131	358768	9.56 ug/L	95
37) Ethylbenzene	17.32	91	1937349	10.14 ug/L	96
38) Xylene (para & meta)	17.53	106	1345139	19.61 ug/L	95
39) Xylene (Ortho)	18.22	106	598062	9.85 ug/L	89
40) Styrene	18.24	104	905261	9.63 ug/L	91

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

Quantitation Report

Data File : d:\hpchem\1\data\c8631.d
Acq On : 21 Jun 95 11:31 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 22 15:30 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.57	173	142040	9.18	ug/L		90
42)	Isopropylbenzene	18.88	105	1910855	9.79	ug/L		89
44)	Bromobenzene	19.43	156	331439	9.42	ug/L	#	83
45)	1,1,2,2-Tetrachloroethane	19.38	83	187588	10.85	ug/L		92
46)	1,2,3-Trichloropropane	19.45	75	194036	9.24	ug/L	#	73
47)	n-Propylbenzene	19.62	91	2551376	10.05	ug/L		98
48)	2-Chlorotoluene	19.78	91	1481631	10.52	ug/L		95
49)	4-Chlorotoluene	19.97	91	1669667	9.98	ug/L	m	83
50)	1,3,5-Trimethylbenzene	19.94	105	1547260	9.58	ug/L		96
51)	tert-Butylbenzene	20.53	119	1656024	9.88	ug/L		96
52)	1,2,4-Trimethylbenzene	20.62	105	1430247	9.66	ug/L		97
53)	sec-Butylbenzene	20.93	105	2400184	9.66	ug/L		98
54)	1,3-Dichlorobenzene	21.14	146	667496	9.30	ug/L		98
55)	4-Isopropyltoluene	21.20	119	1779229	9.59	ug/L		97
56)	1,4-Dichlorobenzene	21.29	146	669011	9.40	ug/L		91
58)	1,2-Dichlorobenzene	21.97	146	505440	9.45	ug/L		97
59)	n-Butylbenzene	21.94	91	1948201	9.80	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.38	75	41556	9.46	ug/L		86
61)	1,2,4-Trichlorobenzene	24.94	180	342967	8.72	ug/L		99
62)	Hexachlorobutadiene	25.28	225	415162	8.76	ug/L		99
63)	Naphthalene	25.39	128	305525	8.98	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	244831	8.93	ug/L		100
65)	Methyl-tert butyl ether	8.09	73	421895	9.85	ug/L		96
66)	tert-Butyl Alcohol	7.78	59	12136	18.48	ug/L		100

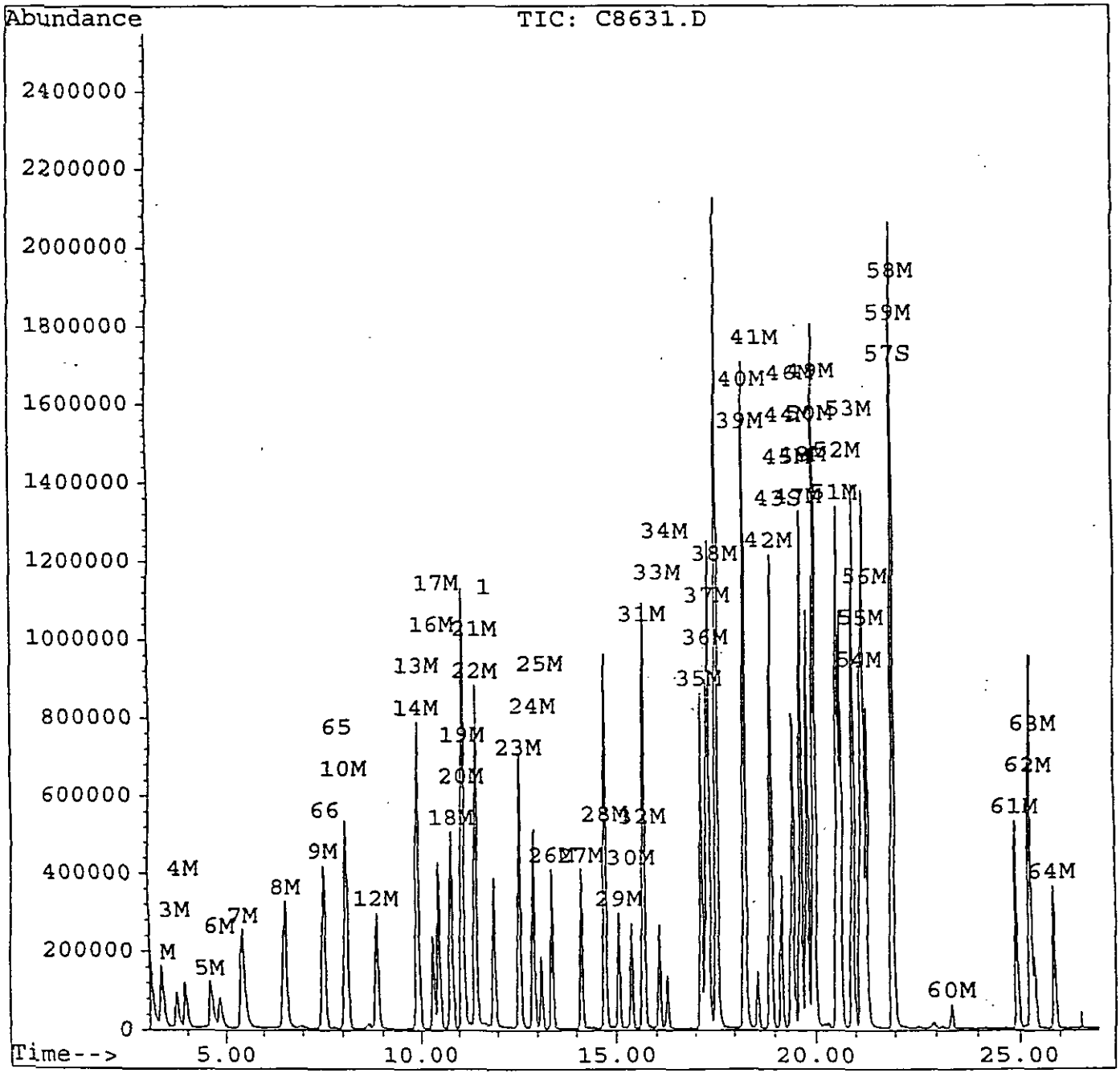
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8631.d
Acq On : 21 Jun 95 11:31 pm
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Jun 22 15:30 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

071

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Lab File ID: C8632 D BFB Injection Date: 6/22/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1746

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	22 4
75	30 0 - 66 0% of mass 95	47.5
95	Base peak, 100% relative abundance	100 0
96	5 0 - 9 0% of mass 95	6 4
173	Less than 2.0% of mass 174	0 0 (0 0)1
174	50 0 - 120 0% of mass 95	55 3
175	4 0 - 9 0% of mass 174	3 9 (7 0)1
176	93 0 - 101 0% of mass 174	53.4 (96 5)1
177	5 0 - 9 0% of mass 176	3 3 (6 1)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	C8633.D	6/22/95	1803
02	1PPB STD	1PPB STD	C8634 D	6/22/95	1838
03	VBLK01	M BLANK	C8635 D	6/22/95	1913
04	9526458V	9526458V	C8636 D	6/22/95	1948
05	9526459V	9526459V	C8637 D	6/22/95	2023
06	9526432V	9526432V	C8638 D	6/22/95	2058
07	9526433V	9526443V	C8639 D	6/22/95	2133
08	9526434V	9526434V	C8640 D	6/22/95	2207
09	9526436V	9526436V	C8641 D	6/22/95	2242
10	9526462V	9526462V	C8644 D	6/23/95	0027
11	9526435V	9526435V	C8645.D	6/23/95	0101
12	10PPB QCS	10PPB QCS	C8646 D	6/23/95	0136
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

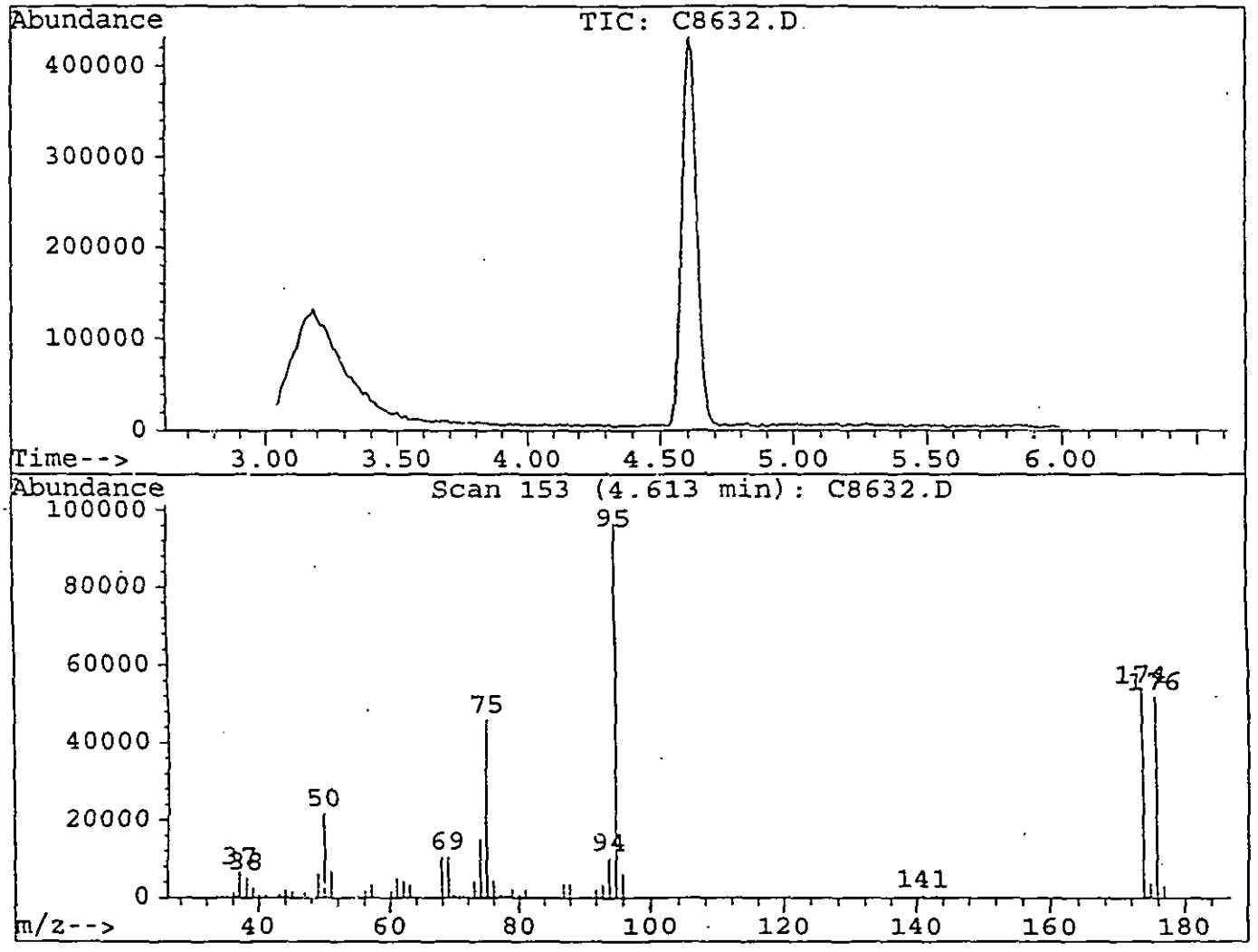
CLPBFB

072

Data File : D:\HPCHEM\1\DATA\C8632.D
Acq On : 22 Jun 95 5:46 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: 153

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	22.4	21680	PASS
75	95	30	60	47.5	45872	PASS
95	95	100	100	100.0	96592	PASS
96	95	5	9	6.4	6166	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	55.3	53416	PASS
175	174	5	9	7.0	3757	PASS
176	174	95	101	96.5	51568	PASS
177	176	5	9	6.1	3141	PASS

C8632.D VOA524.M Thu Jun 22 18:01:26 1995 VOA

153 (4.613 min): C8632.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	1309	49.05	6139	69.05	10498	87.00	3698
37.00	6616	50.05	21680	69.85	728	88.05	3578
38.10	5252	51.05	6857	73.05	4310	92.05	1911
39.10	2549	55.05	749	74.05	15122	93.05	3422
40.00	861	56.10	1702	75.05	45872	94.05	10205
41.00	715	57.10	3366	76.05	4336	95.05	96592
43.10	986	60.10	1695	77.10	741	96.05	6166
44.00	1910	61.00	4996	78.90	2177	141.00	777
45.00	1645	62.00	4444	80.00	901	142.90	596
47.05	1395	63.00	3334	81.00	2125	173.95	53416
47.95	587	68.05	10391	82.00	541	174.95	3757

153 (4.613 min): C8632.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
175.95	51568						
176.95	3141						

VOLATILE CONTINUING CALIBRATION CHECK

074

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/22/95 Time: 1803

Lab File ID: C8633.D Init. Calib. Date(s): 5/26/95 _____

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
Dichlorodifluoromethane	0.396	0.283		28.5	30.0
Chloromethane	0.233	0.178		23.6	30.0
Vinyl chloride	0.263	0.225		14.4	30.0
Bromomethane	0.178	0.174		2.2	30.0
Chloroethane	0.154	0.160		-3.9	30.0
Trichlorofluoromethane	0.588	0.565		3.9	30.0
1,1-Dichloroethene	0.258	0.252		2.3	30.0
Methylene chloride	0.274	0.341		-24.5	30.0
trans-1,2-Dichloroethene	0.273	0.276		-1.1	30.0
1,1-Dichloroethane	0.545	0.573		-5.1	30.0
2,2-Dichloropropane	0.534	0.561		-5.1	30.0
cis-1,2-Dichloroethene	0.257	0.257		0.0	30.0
Bromochloromethane	0.090	0.086		4.4	30.0
Chloroform	0.512	0.532		-3.9	30.0
1,1,1-Trichloroethane	0.566	0.588		-3.9	30.0
Carbon tetrachloride	0.526	0.526		0.0	30.0
1,1-Dichloropropene	0.495	0.516		-4.2	30.0
Benzene	0.871	0.880		-1.0	30.0
1,2-Dichloroethane	0.214	0.230		-7.5	30.0
Trichloroethene	0.386	0.395		-2.3	30.0
1,2-Dichloropropane	0.285	0.308		-8.1	30.0
Dibromomethane	0.115	0.120		-4.3	30.0
Bromodichloromethane	0.396	0.420		-6.1	30.0
cis-1,3-Dichloropropene	0.342	0.361		-5.6	30.0
Toluene	0.619	0.634		-2.4	30.0
trans-1,3-Dichloropropene	0.236	0.251		-6.4	30.0
1,1,2-Trichloroethane	0.110	0.116		-5.5	30.0
Tetrachloroethene	0.388	0.374		3.6	30.0
1,3-Dichloropropane	0.219	0.229		-4.6	30.0
Dibromochloromethane	0.215	0.217		-0.9	30.0
1,2-Dibromomethane	0.152	0.156		-2.6	30.0
Chlorobenzene	0.644	0.643		0.2	30.0
1,1,1,2-Tetrachloroethane	0.256	0.256		0.0	30.0
Ethylbenzene	1.302	1.372		-5.4	30.0
Xylene (para & meta)	0.468	0.469		-0.2	30.0
Xylene (Ortho)	0.414	0.422		-1.9	30.0

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 6/22/95 Time: 1803

Lab File ID: C8633.D Init. Calib. Date(s): 5/26/95 _____

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	0.641	0.649		-1.2	30.0
Bromoform	0.105	0.107		-1.9	30.0
Isopropylbenzene	1.330	1.353		-1.7	30.0
Bromobenzene	0.240	0.240		0.0	30.0
1,1,2,2-Tetrachloroethane	0.118	0.141		-19.5	30.0
1,2,3-Trichloropropane	0.143	0.143		0.0	30.0
n-Propylbenzene	1.731	1.816		-4.9	30.0
2-Chlorotoluene	0.960	1.081		-12.6	30.0
4-Chlorotoluene	1.140	1.195		-4.8	30.0
1,3,5-Trimethylbenzene	1.101	1.104		-0.3	30.0
tert-Butylbenzene	1.142	1.167		-2.2	30.0
1,2,4-Trimethylbenzene	1.009	1.039		-3.0	30.0
sec-Butylbenzene	1.693	1.712		-1.1	30.0
1,3-Dichlorobenzene	0.489	0.486		0.6	30.0
4-Isopropyltoluene	1.264	1.288		-1.9	30.0
1,4-Dichlorobenzene	0.485	0.480		1.0	30.0
1,2-Dichlorobenzene	0.364	0.371		-1.9	30.0
n-Butylbenzene	1.355	1.426		-5.2	30.0
1,2-Dibromo-3-chloropropane	0.030	0.032		-6.7	30.0
1,2,4-Trichlorobenzene	0.268	0.251		6.3	30.0
Hexachlorobutadiene	0.323	0.299		7.4	30.0
Naphthalene	0.232	0.221		4.7	30.0
1,2,3-Trichlorobenzene	0.187	0.174		7.0	30.0
4-Bromofluorobenzene	0.499	0.521		-4.4	30.0
1,2-Dichlorobenzene-d4	0.228	0.239		-4.8	30.0

Evaluate Continuing Calibration Report

076

Data File : D:\HPCHEM\1\DATA\C8633.D
Acq On : 22 Jun 95 6:03 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 May 30 13.15:19 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)
		Fluorobenzene	1.000	1.000	0.0	92	0.06
	M	Dichlorodifluoromethane	0.396	0.283	28.6	61	0.05
3	M	Chloromethane	0.233	0.178	23.7	66	0.07
	M	Vinyl chloride	0.263	0.225	14.5	75	0.06
	M	Bromomethane	0.178	0.174	1.9	81	0.06
6	M	Chloroethane	0.154	0.160	-3.9	86	0.07
7	M	Trichlorofluoromethane	0.588	0.565	3.9	86	0.07
	M	1,1-Dichloroethene	0.258	0.252	2.3	87	0.09
	M	Methylene chloride	0.274	0.341	-24.7	89	0.07
10	M	trans-1,2-Dichloroethene	0.273	0.276	-1.3	91	0.07
		Hexane	0.000	0.000#	0.0	0#	-0.19
	M	1,1-Dichloroethane	0.545	0.573	-5.1	96	0.07
13	M	2,2-Dichloropropane	0.534	0.561	-5.0	94	0.06
	M	cis-1,2-Dichloroethene	0.257	0.257	-0.1	90	0.06
		2-Butanone	0.000	0.000#	0.0	0#	-0.03
16	M	Bromochloromethane	0.090	0.086	4.1	90	0.06
17	M	Chloroform	0.512	0.532	-4.0	96	0.07
	M	1,1,1-Trichloroethane	0.566	0.588	-3.8	95	0.05
	M	Carbon tetrachloride	0.526	0.526	0.1	93	0.06
20	M	1,1-Dichloropropene	0.495	0.516	-4.3	93	0.06
2	M	Benzene	0.871	0.880	-1.0	91	0.07
2	M	1,2-Dichloroethane	0.214	0.230	-7.8	101	0.06
23	M	Trichloroethene	0.386	0.395	-2.3	93	0.05
2	M	1,2-Dichloropropane	0.285	0.308	-8.2	101	0.06
2	M	Dibromomethane	0.115	0.120	-3.7	97	0.05
26	M	Bromodichloromethane	0.396	0.420	-6.1	100	0.06
27	M	cis-1,3-Dichloropropene	0.342	0.361	-5.4	99	0.06
2	M	Toluene	0.619	0.634	-2.5	96	0.05
2	M	trans-1,3-Dichloropropene	0.236	0.251	-6.3	100	0 06
30	M	1,1,2-Trichloroethane	0.110	0.116	-5.1	99	0.05
3	M	Tetrachloroethene	0.388	0.374	3.5	89	0.05
3	M	1,3-Dichloropropane	0.219	0.229	-4.8	99	0.06
33	M	Dibromochloromethane	0 215	0.217	-0.8	97	0.05
3	M	1,2-Dibromomethane	0.152	0.156	-2.2	99	0.05
3	M	Chlorobenzene	0.644	0.643	0.2	92	0.04
36	M	1,1,1,2-Tetrachloroethane	0.256	0.256	-0.1	95	0.05
37	M	Ethylbenzene	1.302	1.372	-5.4	98	0.04
3	M	Xylene (para & meta)	0.468	0.469	-0.4	93	0.05
3	M	Xylene (Ortho)	0.414	0.422	-1.9	95	0.04
4	M	Styrene	0.641	0 649	-1.2	95	0.04
4	M	Bromoform	0.105	0.107	-1.2	99	0 05
4	M	Isopropylbenzene	1.330	1.353	-1.7	95	0.04

(*) = Out of Range

Evaluate Continuing Calibration Report

077

Data File : D:\HPCHEM\1\DATA\C8633.D
Acq On : 22 Jun 95 6:03 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 May 30 13:15:19 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)
	S	4-Bromofluorobenzene	0.499	0.521	-4.5	100	0.05
	M	Bromobenzene	0.240	0.240	-0.1	95	0.04
5	M	1,1,2,2-Tetrachloroethane	0.118	0.141	-19.5	116	0.04
f	M	1,2,3-Trichloropropane	0.143	0.143	0.4	94	0.05
	M	n-Propylbenzene	1.731	1.816	-4.9	99	0.04
	M	2-Chlorotoluene	0.960	1.081	-12.5	107	0.04
9	M	4-Chlorotoluene	1.140	1.195	-4.8	98	0.05
	M	1,3,5-Trimethylbenzene	1.101	1.104	-0.2	95	0.04
	M	tert-Butylbenzene	1.142	1.167	-2.2	96	0.04
2	M	1,2,4-Trimethylbenzene	1.009	1.039	-3.0	96	0.04
	M	sec-Butylbenzene	1.693	1.712	-1.1	96	0.04
	M	1,3-Dichlorobenzene	0.489	0.486	0.6	95	0.04
5	M	4-Isopropyltoluene	1.264	1.288	-1.9	96	0.04
f	M	1,4-Dichlorobenzene	0.485	0.480	1.1	95	0.03
	S	1,2-Dichlorobenzene-d4	0.228	0.239	-4.7	100	0.04
	M	1,2-Dichlorobenzene	0.364	0.371	-1.9	97	0.04
9	M	n-Butylbenzene	1.355	1.426	-5.2	101	0.04
	M	1,2-Dibromo-3-chloropropane	0.030	0.032	-7.9	109	0.04
	M	1,2,4-Trichlorobenzene	0.268	0.251	6.4	90	0.04
2	M	Hexachlorobutadiene	0.323	0.299	7.5	90	0.04
	M	Naphthalene	0.232	0.221	4.5	92	0.03
	M	1,2,3-Trichlorobenzene	0.187	0.174	6.8	91	0.04
5		Methyl-tert butyl ether	0.292	0.311	-6.5	100	0.08
f		tert-Butyl Alcohol	0.004	0.005	-16.2	122	0.04

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

Quantitation Report

078

Data File : d:\hpchem\1\data\c8633.d
Acq On : 22 Jun 95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.90	96	707039	5.00	ug/L		0.06
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.14	95	368561	5.23	ug/L		104.51%
57) 1,2-Dichlorobenzene-d4	21.92	152	168699	5.24	ug/L		104.73%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.33	85	400026	7.14	ug/L	m	95
3) Chloromethane	3.71	50	251760	7.63	ug/L		96
4) Vinyl chloride	3.93	62	318010	8.55	ug/L		99
5) Bromomethane	4.58	94	246681	9.81	ug/L		96
6) Chloroethane	4.83	64	226466	10.39	ug/L		98
7) Trichlorofluoromethane	5.41	101	798701	9.61	ug/L		98
8) 1,1-Dichloroethene	6.51	96	356524	9.77	ug/L		86
9) Methylene chloride	7.48	84	482732	10.47	ug/L		98
10) trans-1,2-Dichloroethene	8.04	96	390349	10.13	ug/L		95
12) 1,1-Dichloroethane	8.83	63	810081	10.51	ug/L		98
13) 2,2-Dichloropropane	9.89	77	793543	10.50	ug/L		99
14) cis-1,2-Dichloroethene	9.89	96	363873	10.01	ug/L		91
16) Bromochloromethane	10.30	128	122124	9.59	ug/L		97
17) Chloroform	10.46	83	752542	10.40	ug/L		95
18) 1,1,1-Trichloroethane	10.78	97	831201	10.38	ug/L		98
19) Carbon tetrachloride	11.10	117	743107	9.99	ug/L		99
20) 1,1-Dichloropropene	11.07	75	729360	10.43	ug/L		100
21) Benzene	11.43	78	1243746	10.10	ug/L		97
22) 1,2-Dichloroethane	11.43	62	325721	10.78	ug/L		97
23) Trichloroethene	12.53	95	558357	10.23	ug/L		90
24) 1,2-Dichloropropane	12.89	63	436098	10.82	ug/L		100
25) Dibromomethane	13.09	93	169354	10.37	ug/L		93
26) Bromodichloromethane	13.35	83	594136	10.61	ug/L		97
27) cis-1,3-Dichloropropene	14.12	75	509835	10.54	ug/L		98
28) Toluene	14.69	92	896828	10.25	ug/L		98
29) trans-1,3-Dichloropropene	15.04	75	355482	10.63	ug/L		98
30) 1,1,2-Trichloroethane	15.35	83	164061	10.51	ug/L		98
31) Tetrachloroethene	15.66	166	529027	9.65	ug/L		97
32) 1,3-Dichloropropane	15.64	76	324439	10.48	ug/L		98
33) Dibromochloromethane	16.04	129	306176	10.08	ug/L		97
34) 1,2-Dibromomethane	16.24	107	220188	10.22	ug/L		99
35) Chlorobenzene	17.11	112	909215	9.98	ug/L		96
36) 1,1,1,2-Tetrachloroethane	17.25	131	361982	10.01	ug/L		98
37) Ethylbenzene	17.30	91	1940679	10.54	ug/L		96
38) Xylene (para & meta)	17.52	106	1327243	20.07	ug/L		91
39) Xylene (Ortho)	18.21	106	596072	10.19	ug/L		88
40) Styrene	18.23	104	917813	10.12	ug/L		96

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

Quantitation Report

079

Data File : d:\hpchem\1\data\c8633.d
Acq On : 22 Jun 95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	150927	10.12	ug/L		84
42)	Isopropylbenzene	18.87	105	1913330	10.17	ug/L	m	0
44)	Bromobenzene	19.42	156	339430	10.01	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.36	83	199232	11.95	ug/L		91
46)	1,2,3-Trichloropropane	19.45	75	201552	9.96	ug/L	#	61
47)	n-Propylbenzene	19.61	91	2567426	10.49	ug/L		99
48)	2-Chlorotoluene	19.77	91	1528233	11.25	ug/L		98
49)	4-Chlorotoluene	19.96	91	1689980	10.48	ug/L		81
50)	1,3,5-Trimethylbenzene	19.93	105	1561186	10.02	ug/L		99
51)	tert-Butylbenzene	20.52	119	1650806	10.22	ug/L		96
52)	1,2,4-Trimethylbenzene	20.60	105	1469615	10.30	ug/L		98
53)	sec-Butylbenzene	20.92	105	2421034	10.11	ug/L		98
54)	1,3-Dichlorobenzene	21.12	146	687840	9.94	ug/L		96
55)	4-Isopropyltoluene	21.18	119	1821304	10.19	ug/L		98
56)	1,4-Dichlorobenzene	21.27	146	678755	9.89	ug/L		91
58)	1,2-Dichlorobenzene	21.95	146	525244	10.19	ug/L		98
59)	n-Butylbenzene	21.93	91	2015880	10.52	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.35	75	45709	10.79	ug/L		94
61)	1,2,4-Trichlorobenzene	24.93	180	354576	9.36	ug/L		98
62)	Hexachlorobutadiene	25.27	225	422912	9.25	ug/L		99
63)	Naphthalene	25.36	128	313116	9.55	ug/L		100
64)	1,2,3-Trichlorobenzene	25.85	180	246300	9.32	ug/L		97
65)	Methyl-tert butyl ether	8.07	73	439747	10.65	ug/L		98
66)	tert-Butyl Alcohol	7.77	59	14710	23.24	ug/L		100

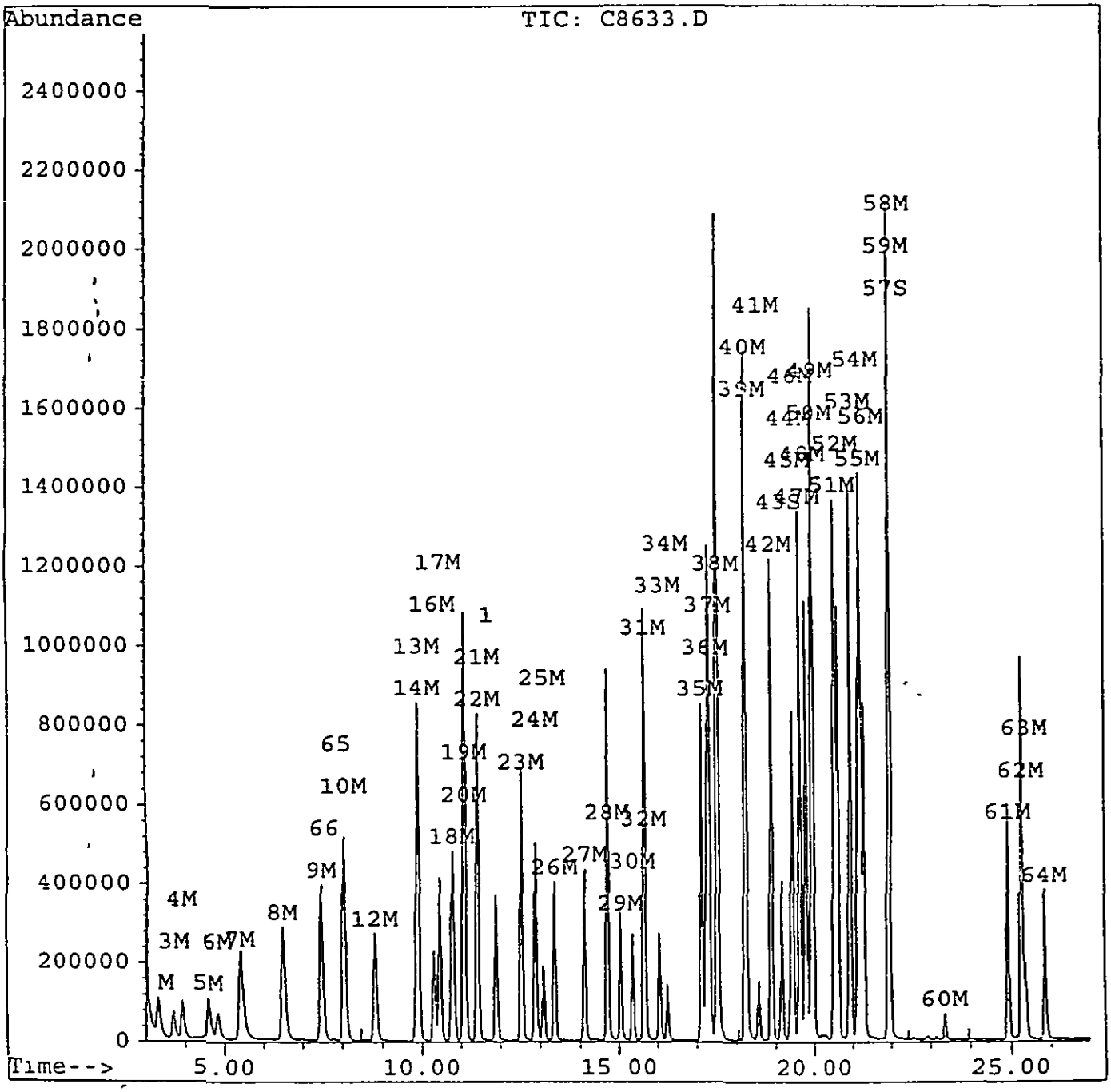
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8633.d
Acq On : 22 Jun-95 6:03 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:05 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8634.d
Acq On : 22 Jun 95 6:38 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:07 1995

Vial: 3 081
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.89	96	720869	5.00 ug/L	0.05
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.14	95	376881	5.24 ug/L	104.82%
57) 1,2-Dichlorobenzene-d4	21.93	152	173226	5.27 ug/L	105.47%
Target Compounds					Qvalue
2) Dichlorodifluoromethane	3.35	85	52366	0.92 ug/L m	89
3) Chloromethane	3.71	50	28443	0.85 ug/L	89
4) Vinyl chloride	3.93	62	34951	0.92 ug/L	97
5) Bromomethane	4.60	94	30255	1.18 ug/L	100
6) Chloroethane	4.84	64	24217	1.09 ug/L	96
7) Trichlorofluoromethane	5.44	101	87747	1.04 ug/L	89
8) 1,1-Dichloroethene	6.51	96	38723	1.04 ug/L	98
9) Methylene chloride	7.48	84	253233	6.42 ug/L	97
10) trans-1,2-Dichloroethene	8.05	96	40344	1.03 ug/L	95
12) 1,1-Dichloroethane	8.82	63	91237	1.16 ug/L	94
13) 2,2-Dichloropropane	9.88	77	88348	1.15 ug/L	97
14) cis-1,2-Dichloroethene	9.89	96	40721	1.10 ug/L	95
16) Bromochloromethane	10.31	128	13148	1.01 ug/L	89
17) Chloroform	10.46	83	84994	1.15 ug/L	93
18) 1,1,1-Trichloroethane	10.79	97	91676	1.12 ug/L	93
19) Carbon tetrachloride	11.10	117	82388	1.09 ug/L	91
20) 1,1-Dichloropropene	11.08	75	80332	1.13 ug/L	92
21) Benzene	11.42	78	140363	1.12 ug/L	98
22) 1,2-Dichloroethane	11.42	62	38349	1.24 ug/L	97
23) Trichloroethene	12.53	95	61556	1.11 ug/L	95
24) 1,2-Dichloropropane	12.88	63	47333	1.15 ug/L	89
25) Dibromomethane	13.08	93	20228	1.22 ug/L	93
26) Bromodichloromethane	13.36	83	67212	1.18 ug/L	95
27) cis-1,3-Dichloropropene	14.12	75	57322	1.16 ug/L	98
28) Toluene	14.70	92	101219	1.13 ug/L	95
29) trans-1,3-Dichloropropene	15 03	75	40716	1.19 ug/L	96
30) 1,1,2-Trichloroethane	15.35	83	18476	1.16 ug/L	96
31) Tetrachloroethene	15.66	166	57016	1.02 ug/L	99
32) 1,3-Dichloropropane	15.64	76	36752	1.16 ug/L	92
33) Dibromochloromethane	16.04	129	34925	1.13 ug/L	89
34) 1,2-Dibromomethane	16.24	107	24435	1.11 ug/L	80
35) Chlorobenzene	17.11	112	100462	1.08 ug/L	94
36) 1,1,1,2-Tetrachloroethane	17.24	131	40882	1.11 ug/L	90
37) Ethylbenzene	17.31	91	210773	1.12 ug/L	95
38) Xylene (para & meta)	17.51	106	144321	2.14 ug/L	95
39) Xylene (Ortho)	18.21	106	64567	1.08 ug/L	94
40) Styrene	18 22	104	99352	1.07 ug/L	95

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

Quantitation Report

082

Data File : d:\hpchem\1\data\c8634.d
Acq On : 22 Jun 95 6:38 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:07 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

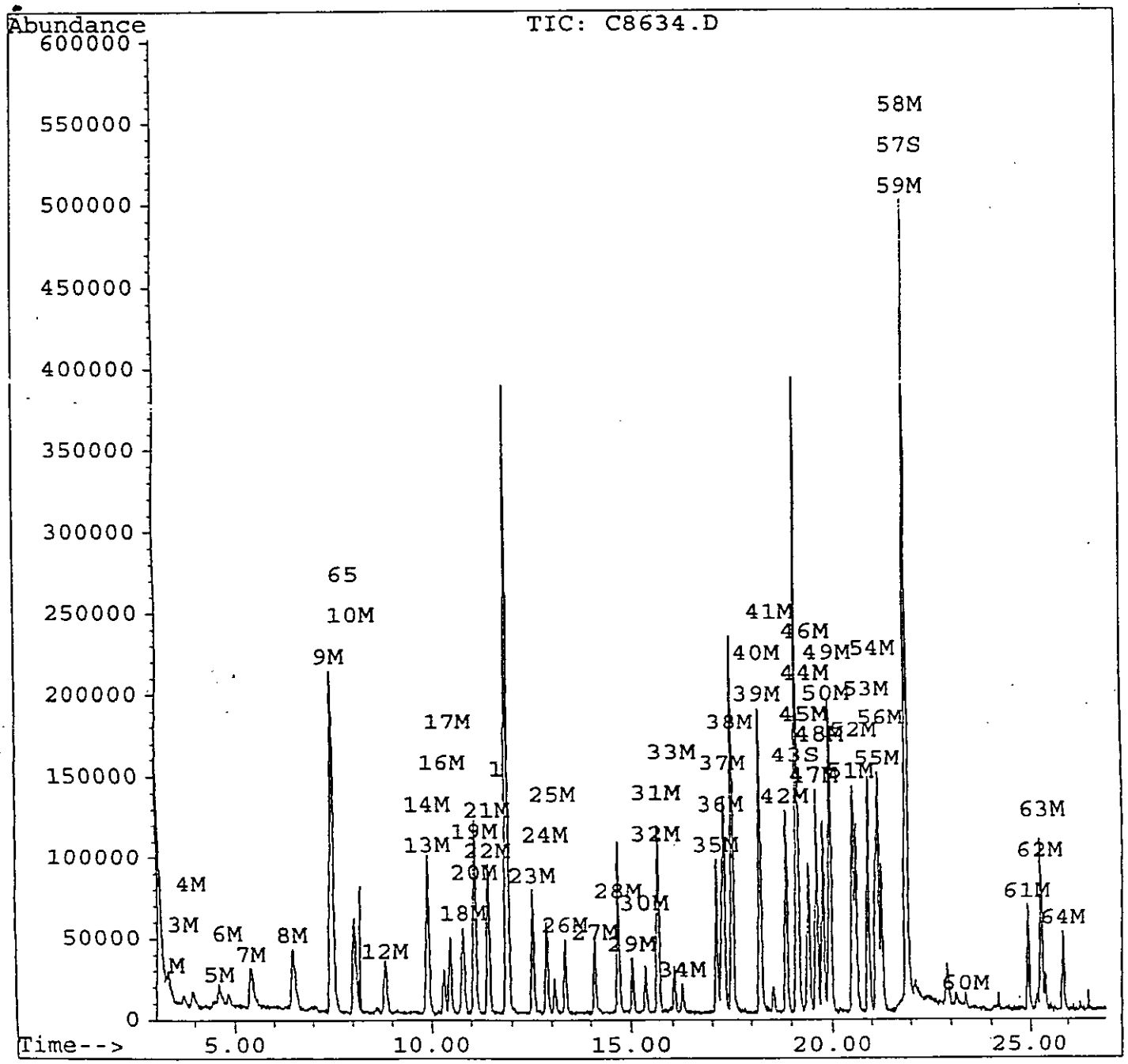
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	15703	1.03	ug/L		78
42)	Isopropylbenzene	18.86	105	200540	1.05	ug/L		91
44)	Bromobenzene	19.41	156	38255	1.11	ug/L		94
45)	1,1,2,2-Tetrachloroethane	19.36	83	22919	1.35	ug/L		91
46)	1,2,3-Trichloropropane	19.43	75	27287	1.32	ug/L	#	69
47)	n-Propylbenzene	19.61	91	274490	1.10	ug/L		96
48)	2-Chlorotoluene	19.77	91	167511	1.21	ug/L		98
49)	4-Chlorotoluene	19.96	91	189324	1.15	ug/L		83
50)	1,3,5-Trimethylbenzene	19.93	105	167955	1.06	ug/L		96
51)	tert-Butylbenzene	20.52	119	171971	1.04	ug/L		94
52)	1,2,4-Trimethylbenzene	20.61	105	156608	1.08	ug/L		97
53)	sec-Butylbenzene	20.93	105	255796	1.05	ug/L		96
54)	1,3-Dichlorobenzene	21.12	146	75763	1.07	ug/L		91
55)	4-Isopropyltoluene	21.18	119	187739	1.03	ug/L		98
56)	1,4-Dichlorobenzene	21.28	146	75376	1.08	ug/L		83
58)	1,2-Dichlorobenzene	21.96	146	59073	1.12	ug/L		96
59)	n-Butylbenzene	21.93	91	212368	1.09	ug/L		94
60)	1,2-Dibromo-3-chloropropan	23.37	75	5121	1.19	ug/L	#	78
61)	1,2,4-Trichlorobenzene	24.93	180	43546	1.13	ug/L		97
62)	Hexachlorobutadiene	25.28	225	46685	1.00	ug/L		94
63)	Naphthalene	25.37	128	41411	1.24	ug/L		100
64)	1,2,3-Trichlorobenzene	25.84	180	32738	1.22	ug/L		96
65)	Methyl-tert butyl ether	8.06	73	59365	1.41	ug/L		96

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

Data File : d:\hpchem\1\data\c8634.d
Acq On : 22 Jun 95 6:38 pm
Sample : 1 PPB CHK STANDARD
Misc :
Quant Time: Jun 26 15:07 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8646.d
Acq On : 23 Jun 95 1:36 am
Sample : 10 PPB QCS
Misc :
Quant Time: Jun 26 15:56 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	695431	5.00	ug/L	0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	347953	5.02	ug/L	100.31%
57) 1,2-Dichlorobenzene-d4	21.92	152	156489	4.94	ug/L	98.77%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.33	85	390498	7.08	ug/L m	96
3) Chloromethane	3.71	50	257383	7.93	ug/L	92
4) Vinyl chloride	3.93	62	323389	8.84	ug/L	98
5) Bromomethane	4.58	94	236508	9.56	ug/L	99
6) Chloroethane	4.82	64	226428	10.56	ug/L	96
7) Trichlorofluoromethane	5.42	101	794677	9.72	ug/L	96
8) 1,1-Dichloroethene	6.51	96	350042	9.75	ug/L	92
9) Methylene chloride	7.49	84	473820	12.44	ug/L	96
10) trans-1,2-Dichloroethene	8.04	96	382661	10.09	ug/L	94
12) 1,1-Dichloroethane	8.84	63	806763	10.64	ug/L	97
13) 2,2-Dichloropropane	9.90	77	628678	8.46	ug/L	97
14) cis-1,2-Dichloroethene	9.90	96	358518	10.03	ug/L	98
16) Bromochloromethane	10.31	128	122183	9.76	ug/L	96
17) Chloroform	10.47	83	742106	10.43	ug/L	98
18) 1,1,1-Trichloroethane	10.79	97	814794	10.34	ug/L	97
19) Carbon tetrachloride	11.10	117	720919	9.86	ug/L	98
20) 1,1-Dichloropropene	11.08	75	697799	10.14	ug/L	96
21) Benzene	11.43	78	1224257	10.11	ug/L	96
22) 1,2-Dichloroethane	11.43	62	316751	10.66	ug/L	98
23) Trichloroethene	12.54	95	551232	10.27	ug/L	93
24) 1,2-Dichloropropane	12.89	63	428157	10.80	ug/L	100
25) Dibromomethane	13.09	93	169571	10.56	ug/L	95
26) Bromodichloromethane	13.36	83	588926	10.69	ug/L	96
27) cis-1,3-Dichloropropene	14.12	75	474061	9.96	ug/L	96
28) Toluene	14.71	92	871313	10.13	ug/L	99
29) trans-1,3-Dichloropropene	15.05	75	328750	10.00	ug/L	94
30) 1,1,2-Trichloroethane	15.35	83	165350	10.77	ug/L	97
31) Tetrachloroethene	15.66	166	502766	9.33	ug/L	99
32) 1,3-Dichloropropane	15.64	76	318676	10.47	ug/L	97
33) Dibromochloromethane	16.06	129	299426	10.02	ug/L	99
34) 1,2-Dibromomethane	16.25	107	218305	10.30	ug/L	94
35) Chlorobenzene	17.12	112	886608	9.89	ug/L	97
36) 1,1,1,2-Tetrachloroethane	17.26	131	360221	10.13	ug/L	94
37) Ethylbenzene	17.31	91	1852028	10.23	ug/L	96
38) Xylene (para & meta)	17.52	106	1270205	19.53	ug/L	91
39) Xylene (Ortho)	18.22	106	571959	9.94	ug/L	89
40) Styrene	18.23	104	881566	9.89	ug/L	94

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

Quantitation Report

Data File : d:\hpchem\1\data\c8646.d
Acq On : 23 Jun 95 1:36 am
Sample : 10 PPB QCS
Misc :
Quant Time: Jun 26 15:56 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.55	173	147081	10.03	ug/L		88
42)	Isopropylbenzene	18.88	105	1821526	9.84	ug/L	m	0
44)	Bromobenzene	19.42	156	326558	9.79	ug/L		91
45)	1,1,2,2-Tetrachloroethane	19.38	83	210572	12.84	ug/L		100
46)	1,2,3-Trichloropropane	19.44	75	194455	9.77	ug/L	#	74
47)	n-Propylbenzene	19.61	91	2414660	10.03	ug/L		99
48)	2-Chlorotoluene	19.77	91	1339438	10.03	ug/L		96
49)	4-Chlorotoluene	19.96	91	1589209	10.02	ug/L		83
50)	1,3,5-Trimethylbenzene	19.93	105	1475207	9.63	ug/L		98
51)	tert-Butylbenzene	20.52	119	1568275	9.87	ug/L		96
52)	1,2,4-Trimethylbenzene	20.61	105	1387022	9.88	ug/L		99
53)	sec-Butylbenzene	20.92	105	2264992	9.62	ug/L		99
54)	1,3-Dichlorobenzene	21.13	146	652659	9.59	ug/L		96
55)	4-Isopropyltoluene	21.19	119	1709595	9.72	ug/L		96
56)	1,4-Dichlorobenzene	21.28	146	638409	9.46	ug/L		90
58)	1,2-Dichlorobenzene	21.96	146	492347	9.71	ug/L	m	0
59)	n-Butylbenzene	21.93	91	1889166	10.02	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.37	75	43161	10.36	ug/L		87
61)	1,2,4-Trichlorobenzene	24.93	180	334388	8.97	ug/L		99
62)	Hexachlorobutadiene	25.27	225	414343	9.22	ug/L		99
63)	Naphthalene	25.38	128	292892	9.08	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	238903	9.19	ug/L		98
65)	Methyl-tert butyl ether	8.07	73	421695	10.38	ug/L		94
66)	tert-Butyl Alcohol	7.78	59	12439	19.98	ug/L		100

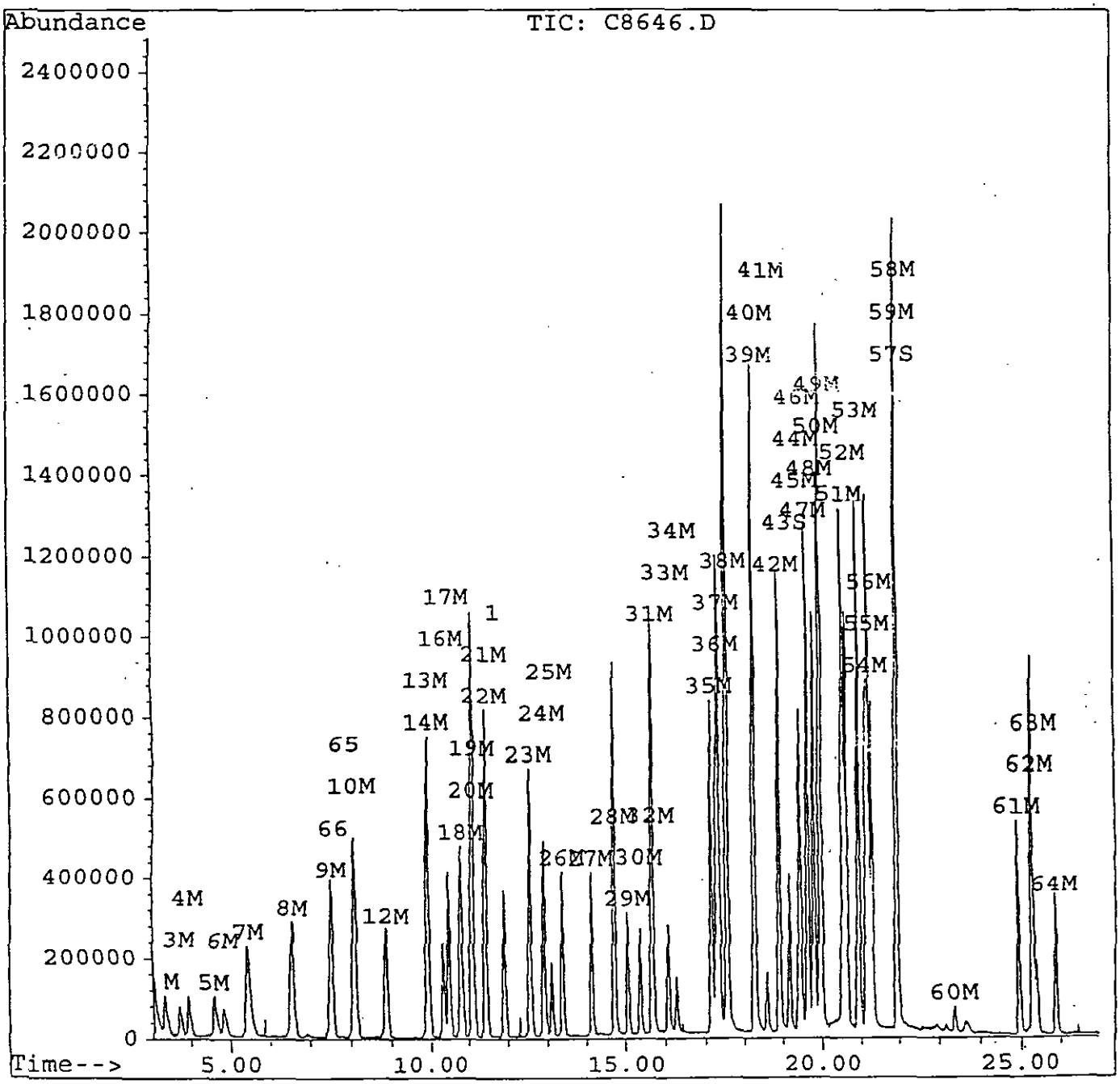
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8646.d
Acq On : 23 Jun 95 1:36 am
Sample : 10 PPB QCS
Misc :
Quant Time: Jun 26 15:56 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C8618.D Date Analyzed: 6/21/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1601

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	727435	11.89				
	UPPER LIMIT	1454870	12.39				
	LOWER LIMIT	363718	11.39				
	SAMPLE NO.						
01	1PPB STD	711692	11.89				
02	VBLK01	698713	11.89				
03	9525784V	704279	11.89				
04	9527186V	683434	11.90				
05	9526426V	698303	11.90				
06	9526427V	692402	11.90				
07	9526428V	710683	11.91				
08	9526429V	725048	11.91				
09	9526430V	719132	11.91				
10	9526431V	725948	11.91				
11	9526431MS	724230	11.91				
12	9526431MSD	717343	11.91				
13	10PPBQCS	733483	11.91				
14							
15							
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.

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

088

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C8633.D Date Analyzed: 6/22/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1803

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	707039	11.90				
	UPPER LIMIT	1414078	12.40				
	LOWER LIMIT	353520	11.40				
	SAMPLE NO.						
01	1PPB STD	720869	11.89				
02	VBLK01	699604	11.89				
03	9526458V	689776	11.90				
04	9526459V	693766	11.90				
05	9526432V	686954	11.90				
06	9526433V	675700	11.90				
07	9526434V	699291	11.89				
08	9526436V	718684	11.89				
09	9526462V	679803	11.90				
10	9526435V	592434	11.90				
11	PPB QCS	695431	11.90				
12							
13							
14							
15							
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 ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526426 Bldg 206 TB
Lab File ID: C8623.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.3	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526426 BLK 2067B
Lab File ID: C8623.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO

9526426V

Blk 26bTB

091

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9526426V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8623 D

Level (low/med) LOW Date Received 6/13/95

% Moisture not dec NA Date Analyzed 6/21/95

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				
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29				
30				

Quantitation Report

092

Data File : d:\hpchem\1\data\c8623.d
Acq On : 21 Jun 95 6:57 pm
Sample : 9526426
Misc : 25 ML
Quant Time: Jun 22 15:11 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	698303	5.00	ug/L	0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	355680	5.11	ug/L	102.12%
57) 1,2-Dichlorobenzene-d4	21.94	152	166590	5.24	ug/L	104.71%
Target Compounds						Qvalue
9) Methylene chloride	7.48	84	87937	2.30	ug/L	96

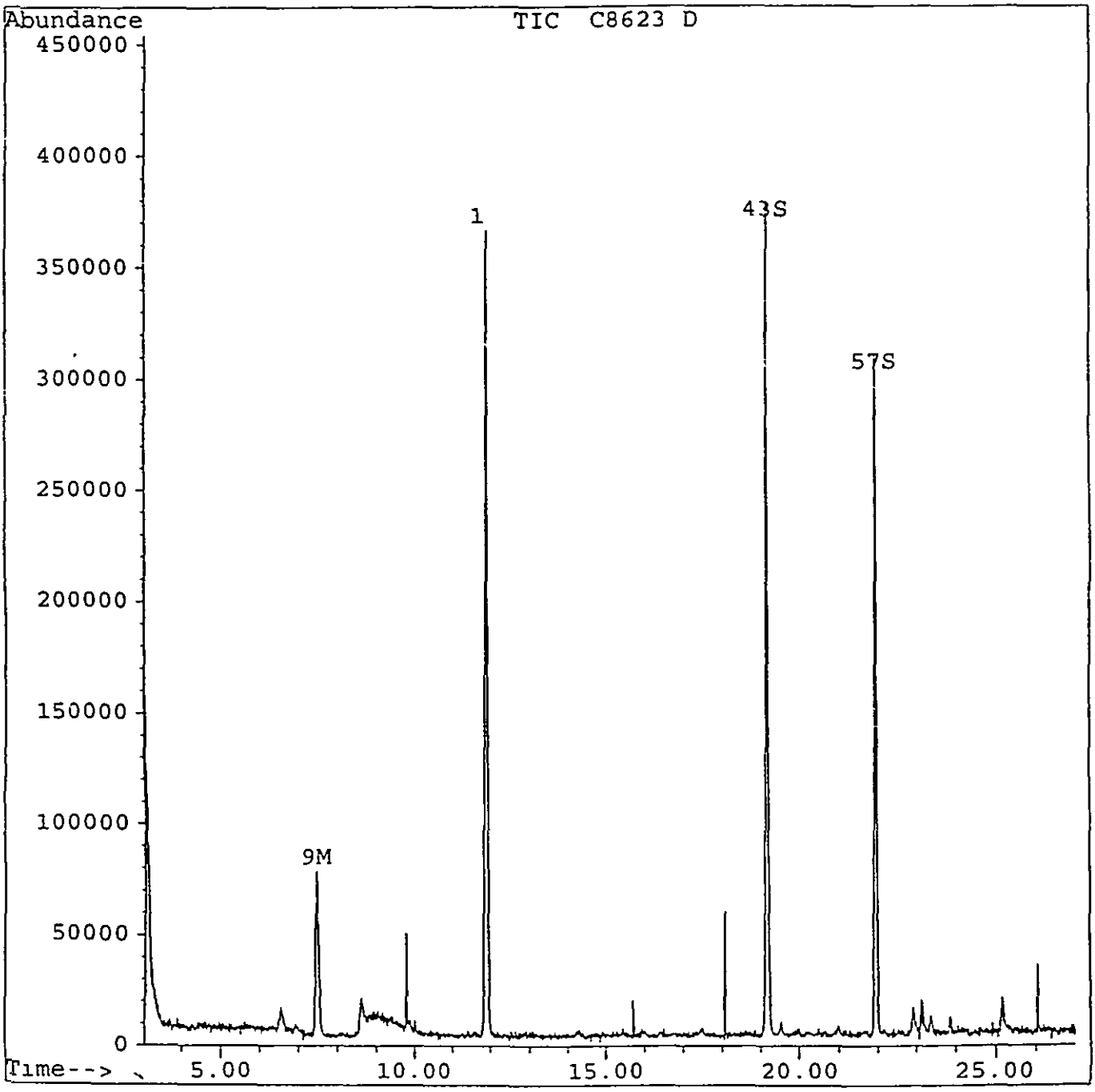
(#) = qualifier out of range (m) = manual integration

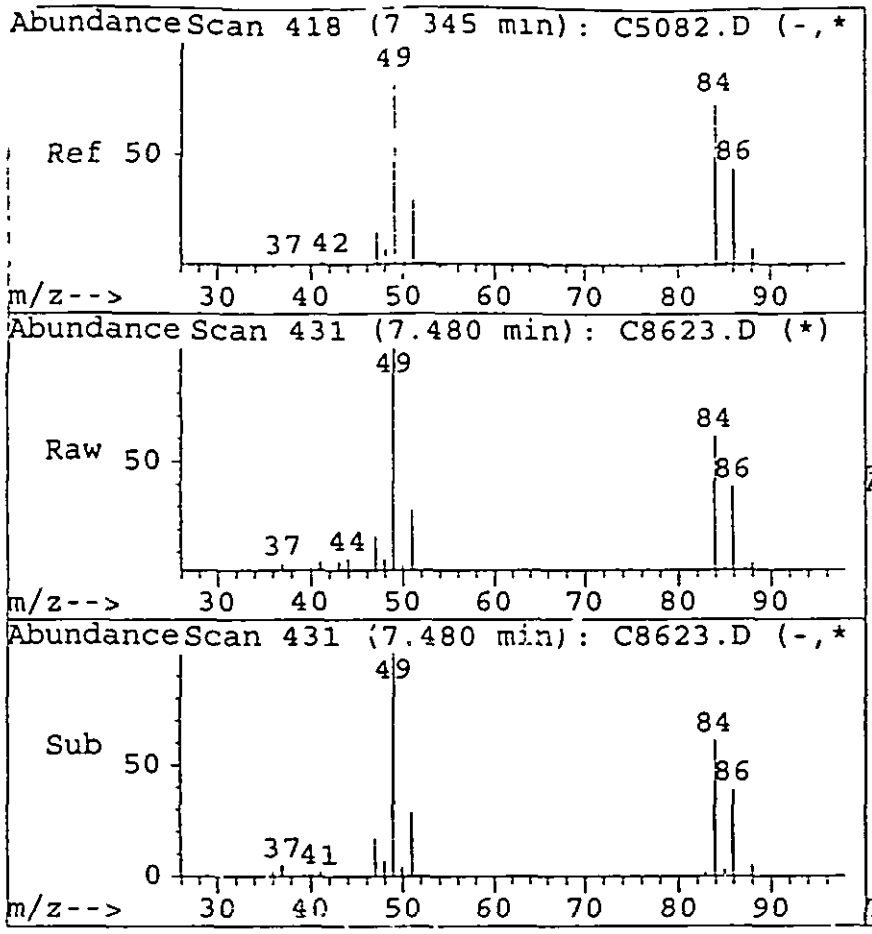
Quantitation Report

Data File : d.\hpchem\1\data\c8623.d
Acq On : 21 Jun 95 6:57 pm
Sample : 9526426
Misc : 25 ML
Quant Time. Jun 22 15:11 1995

Vial: 7
Operator: SRK
Inst : 5972 - In
Multiplr: 1 00

Method c·\HPCHEM\1\METHODS\VOA524.M
Title . 524.2 Purgable Organics
Last Update . Tue May 30 13 15:19 1995
Response via : Multiple Level Calibration

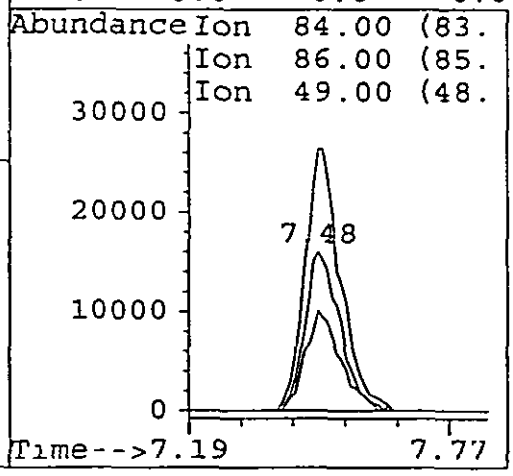




#9
Methylene chloride 094
Concen: 2.30 ug/L
RT 7.48 min Scan# 431
Delta R.T. 0.07 min
Lab File: c8623.d
Acq: 21 Jun 95 6:57 pm

Tgt Ion:84 Resp: 87937

Ion	Ratio	Lower	Upper
84	100		
86	63.4	43.1	83.1
49	164.2	136.3	176.3
0	0.0	0.0	0.0



Library Search Compound Report

Data File : d:\hpchem\1\data\c8623.d
Acq On : 21 Jun 95 6 57 pm
Sample : 9526426
Misc : 25 ML

Vial. 7
Operator: SRK
Inst : 5972 - In
Multiplr 1.00

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

No Library Search Compounds Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
% Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: 9526427 BLK 206 FB
Lab File ID: C8624.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	2.1	B
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

U= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name _EMSL ANALYTICAL_____ Lab Sample ID: _9526427 BLK 206 FB
Matrix (soil/water) _WATER_____ Lab File ID. ___C8624.D_____
Sample wt/vol. _25_mL_____ Date Received: _06/13/95_____
Level (low/med): _LOW_____ Date Analyzed: _06/21/95_____
% Moisture: not dec _NA_____ Dilution Factor __1_____
GC Column: _DB-624 x 75m_ ID: _0.53mm_ Soil Aliquot Volume: ____NA____
Soil Extract Volume ___NA____

CAS NO.	COMPOUND	CONCENTRATION UNITS. (ug/L or ug/Kg) _ug/L__	COMMENT
100-42-1	Styrene	50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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

COMMENT
U= Not Detected

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
098
9526427V
Bldy 206 FB

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Matrix (soil/water) WATER Lab Sample ID 9526427V

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8624 D

Level (low/med) LOW Date Received 6/13/95

% Moisture not dec NA Date Analyzed 6/21/95

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				
14				
15				
16				
17.				
18				
19				
20.				
21.				
22				
23				
24				
25				
26				
27				
28				
29				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c8624.d
Acq On : 21 Jun 95 7:32 pm
Sample : 9526427
Misc : 25 ML
Quant Time: Jun 22 15:12 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	692402	5.00	ug/L	0.06
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	355942	5.15	ug/L	103.07%
57) 1,2-Dichlorobenzene-d4	21.93	152	166107	5.26	ug/L	105.30%
Target Compounds						Qvalue
9) Methylene chloride	7.49	84	80575	2.13	ug/L	95

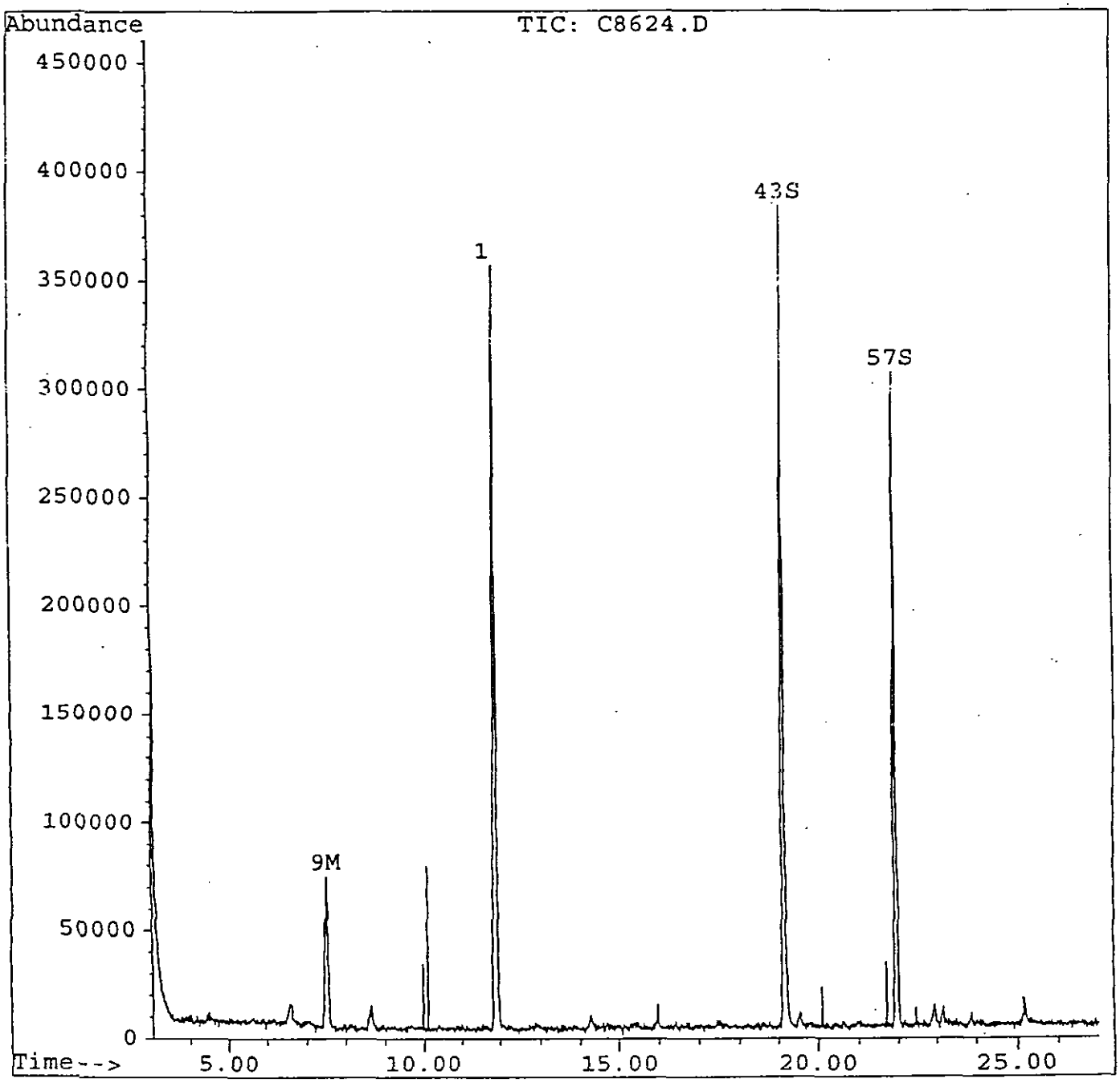
(#) = qualifier out of range (m) = manual integration

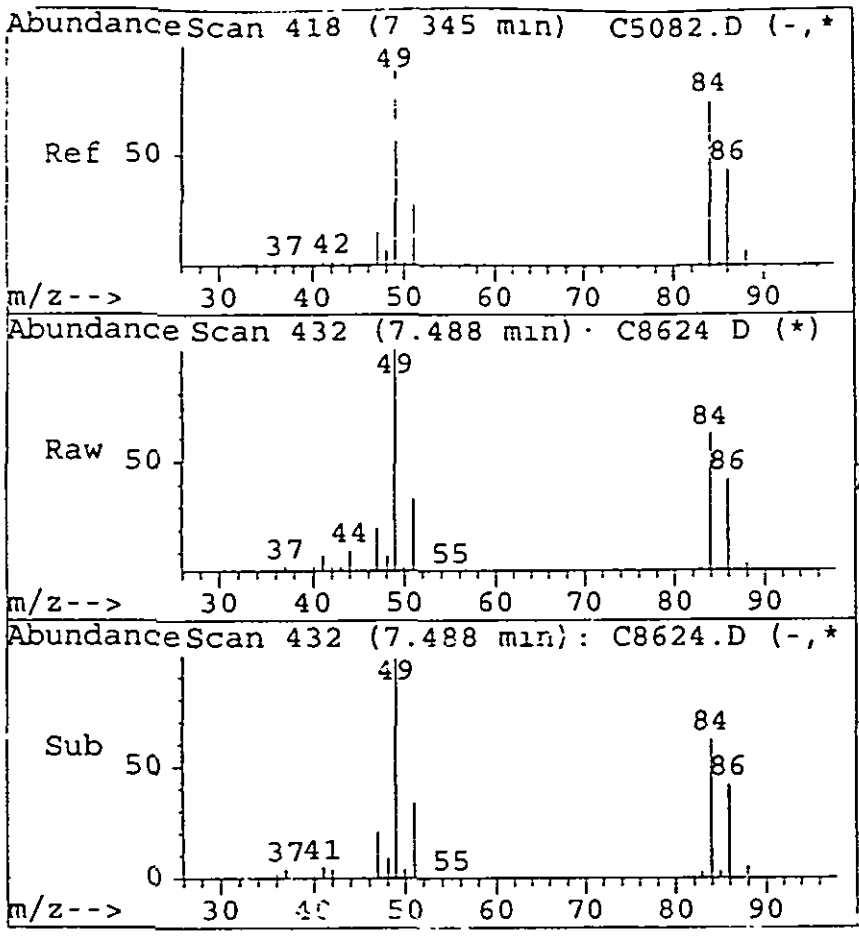
Quantitation Report

Data File : d:\hpchem\1\data\c8624.d
Acq On : 21 Jun 95 7:32 pm
Sample : 9526427
Misc : 25 ML
Quant Time: Jun 22 15:12 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

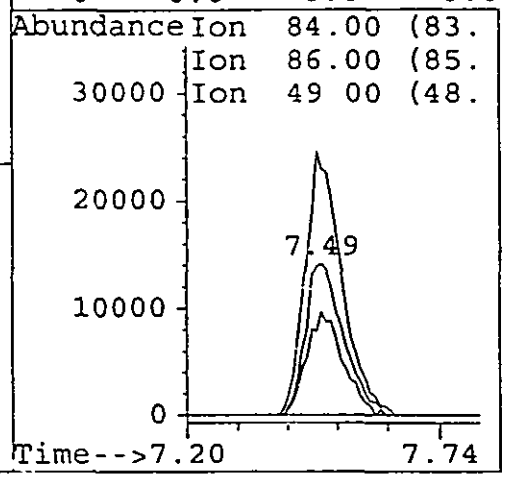




#9
Methylene chloride
Concen· 2.13 ug/L
RT 7 49 mın Scan# 432
Delta R.T. 0.08 mın
Lab File: c8624.d
Acq. 21 Jun 95 7:32 pm

Tgt Ion·84 Resp 80575

Ion	Ratıo	Lower	Upper
84	100		
86	68.9	43.1	83.1
49	162.3	136.3	176 3
0	0.0	0.0	0.0



Data File : d \hpchem\1\data\c8624.d
Acq On : 21 Jun 95 7:32 pm
Sample : 9526427
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 : NBS75K.L

No Library Search Compounds Detected

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW1-293/792

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 210 NJDEP MW# 1

Matrix (soil/water) WATER Lab Sample ID 9526433

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8639 D

Level (low/med) LOW Date Received 6/13/95

% Moisture: not dec NA Date Analyzed 6/22/95

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	1 3	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# MW1-293/792

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# 210 NJDEP MW# 1

Matrix (soil/water) WATER Lab Sample ID 9526433

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8639 D

Level (low/med) LOW Date Received 6/13/95

% Moisture not dec NA Date Analyzed 6/22/95

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 105

MW1-293L792

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

Project No. FT. MONMOUTH NJ Bldg# 210 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9526433V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8639.D

Level: (low/med) LOW Date Received: 6/13/95

% Moisture: not dec. NA Date Analyzed: 6/22/95

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: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Unknown	21.65	1	J
2.				
3.				
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Quantitation Report

Data File . d:\hpchem\1\data\c8639.d
Acq On : 22 Jun 95 9:33 pm
Sample : 9526433
Misc : 25 ML
Quant Time: Jun 26 15:29 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.90	96	675700	5.00 ug/L	0.06
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.14	95	355450	5.27 ug/L	105 47%
57) 1,2-Dichlorobenzene-d4	21.92	152	166186	5 40 ug/L	107.95%
Target Compounds					Qvalue
9) Methylene chloride	7.50	84	46975	1.27 ug/L	85

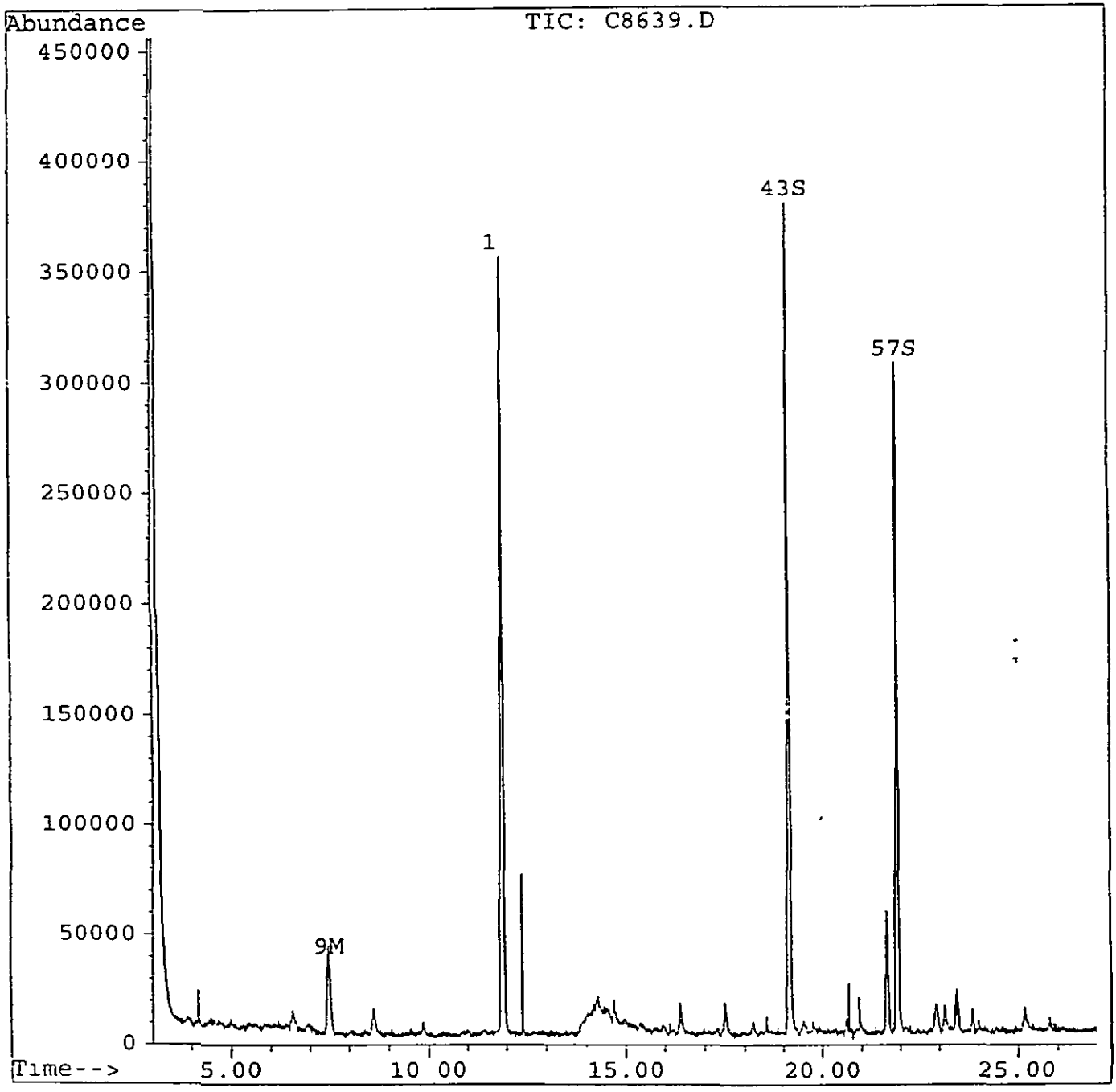
(#) = qualifier out of range (m) = manual integration

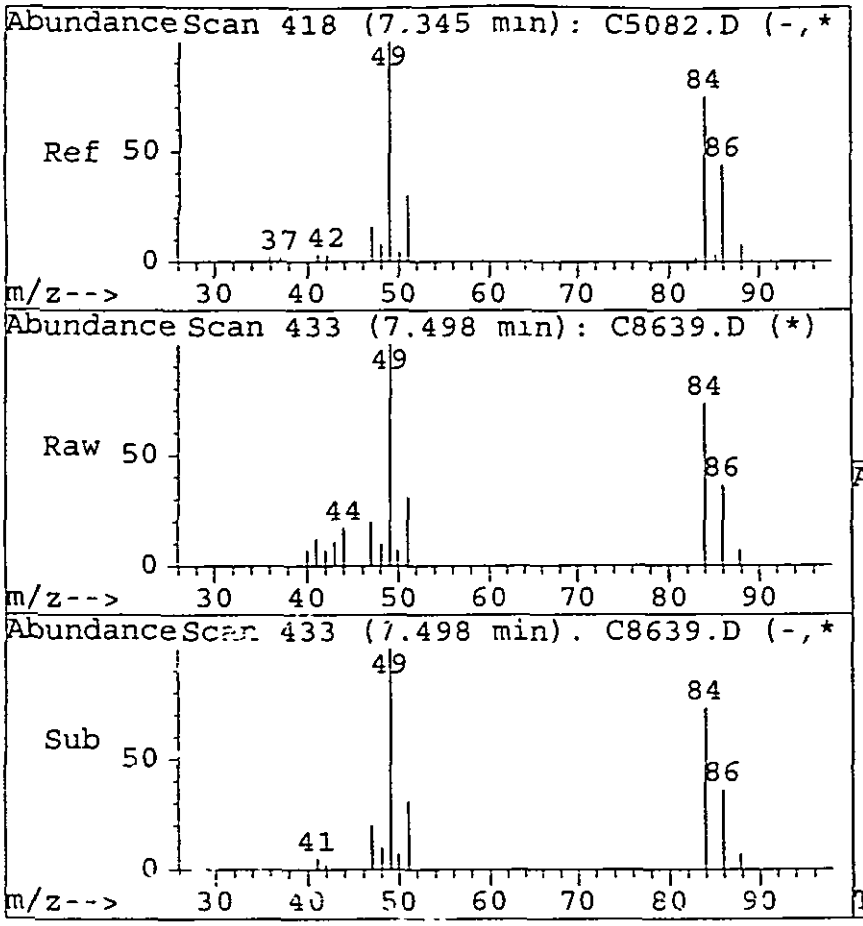
Quantitation Report

Data File : d:\hpchem\1\data\c8639.d
Acq On : 22 Jun 95 9:33 pm
Sample : 9526433
Misc : 25 ML
Quant Time: Jun 26 15:29 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

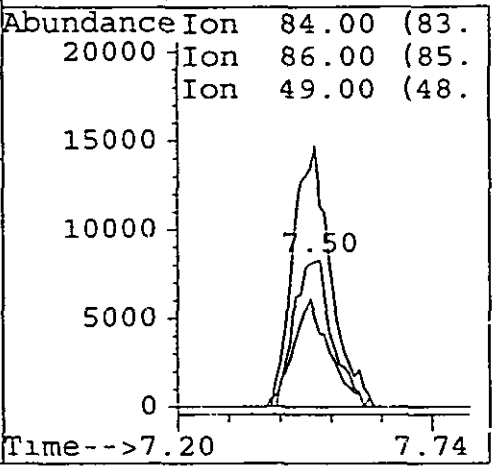




#9
Methylene chloride
Concen: 1.27 ug/L
RT: 7.50 min Scan# 433
Delta R.T. 0.09 min
Lab File: c8639.d
Acq· 22 Jun 95 9:33 pm

Tgt Ion:84 Resp: 46975

Ion	Ratio	Lower	Upper
84	100		
86	50.0	43.1	83.1
49	137.3	136.3	176.3
0	0.0	0.0	0.0



Library Search Compound Report

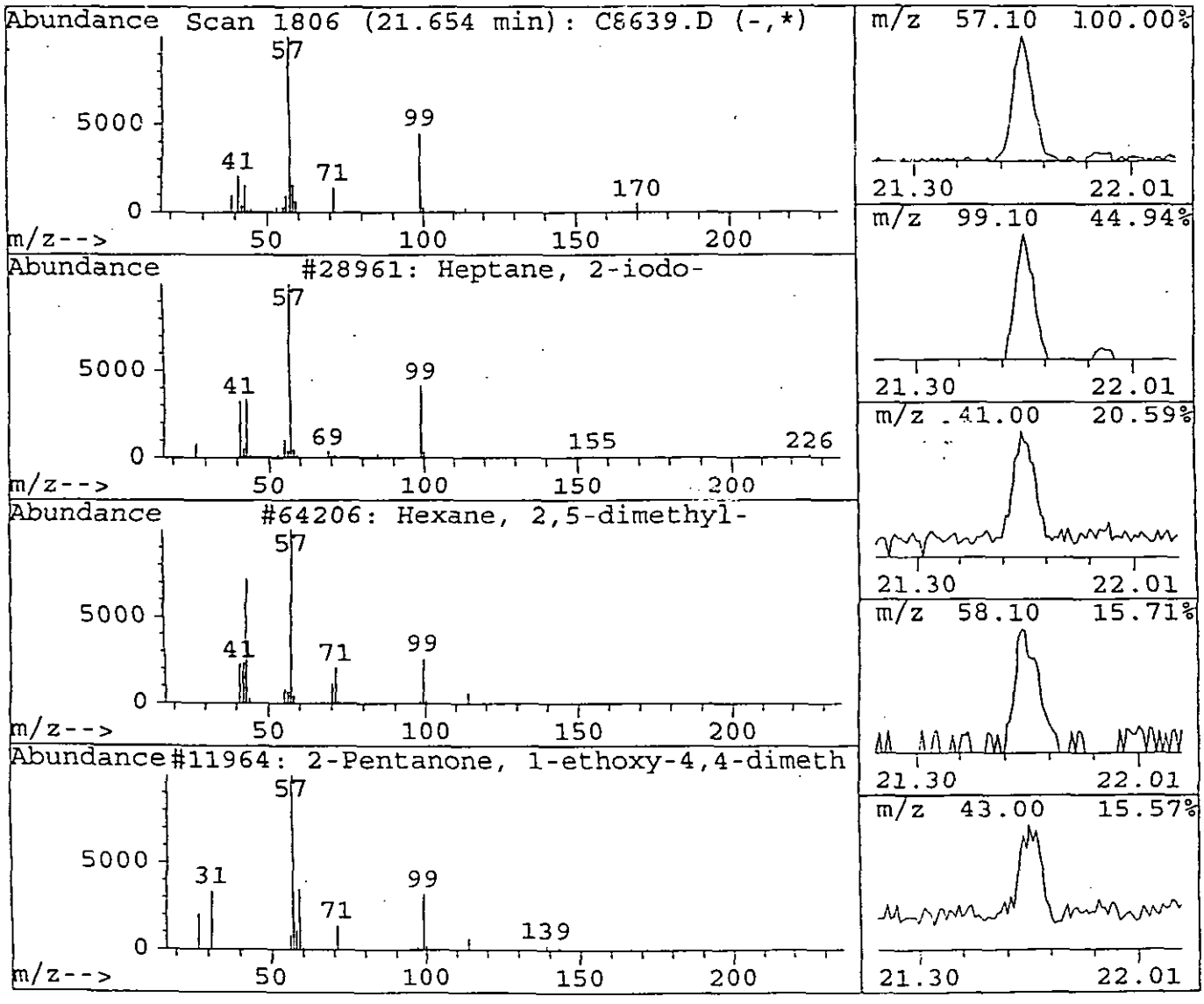
Data File : d:\hpchem\1\data\c8639.d
Acq On : 22 Jun 95 9:33 pm
Sample : 9526433
Misc : 25 ML

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.
21.65	0.56 ug/L	175453	Fluorobenzene	11.90

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Heptane, 2-iodo-	28961	018589-29-2	9
2	Hexane, 2,5-dimethyl-	64206	000592-13-2	9
3	2-Pentanone, 1-ethoxy-4,4-dimethyl-	11964	051193-45-4	40
4	Propane, 2,2'-[1,2-ethanediylbis(ox	16255	026547-47-7	9
5	Cyclohexanol, 4-methyl-	64161	000589-91-3	4



2A

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	1PPB STD	105	106			
02	VBLK01	105	105			
03	9525784V	102	108			
04	9527186V	104	103			
05	9526426V	102	105			
06	9526427V	103	105			
07	9526428V	101	103			
08	9526429V	100	98			
09	9526430V	96	95			
10	9526431V	99	99			
11	9526431MS	101	101			
12	9526431MSD	100	99			
13	10PPBQCS	99	98			
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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

2A

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	1PPB STD	105	105			
02	VBLK01	106	107			
03	9526458V	106	108			
04	9526459V	106	111			
05	9526432V	106	108			
06	9526433V	105	108			
07	9526434V	105	108			
08	9526436V	105	110			
09	9526462V	103	104			
10	9526435V	105	108			
11	1PPB QCS	100	99			
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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

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01

112

Lab Name. EMSL ANALYTICAL Contract

Project No. Site Location Group

Lab File ID C8620 D Lab Sample ID M BLANK

Date Analyzed 6/21/95 Time Analyzed. 1712

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	1PPB STD	1PPB STD	C8619 D	1637
02	9525784V	9525784V	C8621 D	1748
03	9527186V	9527186V	C8622 D	1823
04	9526426V	9526426V	C8623 D	1857
05	9526427V	9526427V	C8624 D	1932
06	9526428V	9526428V	C8625 D	2006
07	9526429V	9526429V	C8626 D	2040
08	9526430V	9526430V	C8627 D	2114
09	9526431V	9526431V	C8628 D	2148
10	9526431MS	26431MS	C8629 D	2223
11	9526431MSD	26431MSD	C8630 D	2257
12	10PPBQCS	10PPBQCS	C8631 D	2331
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COMMENTS

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
atrix (soil/water): WATER
ample wt/vol: 25 mL
Level (low/med): LOW
Moisture: not dec.: NA
C Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: METHOD BLANK
Lab File ID: C8620.D
Date Received: NA
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

AS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
74-83-9	Bromomethane	.50	U
75-01-4	Vinyl Chloride	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-09-2	Methylene Chloride	1.5	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
74-97-1	Bromochloromethane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
67-66-3	Chloroform	.50	U
563-58-6	1,1-Dichloropropene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
74-95-3	Dibromomethane	.50	U
56-23-1	Carbon Tetrachloride	.50	U
75-27-4	Bromodichloromethane	.50	U
78-87-1	1,2-Dichloropropane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
79-01-6	Trichloroethene	.50	U
124-48-1	Dibromochloromethane	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
71-43-2	Benzene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
75-25-2	Bromoform	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
108-88-3	Toluene	.50	U
106-93-4	1,2-Dibromoethane	.50	U
108-90-7	Chlorobenzene	.50	U
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene(total)	.50	U

= Not Detected

1A
VOLATILE ORGANIC ANALYSIS DATA SHEET
EPA 524.2

Lab Name: EMSL ANALYTICAL
Matrix (soil/water): WATER
Sample wt/vol: 25 mL
Level (low/med): LOW
Moisture: not dec.: NA
GC Column: DB-624 x 75m ID: 0.53mm
Soil Extract Volume: NA

Lab Sample ID: METHOD BLANK
Lab File ID: C8620.D
Date Received: NA
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	COMMENT
100-42-1	Styrene	.50	U
98-82-8	Isopropylbenzene	.50	U
108-86-1	Bromobenzene	.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
106-46-7	1,4-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.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	Methyl-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

COMMENT
U= Not Detected

1E

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: C8620.D

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

% Moisture: not dec. NA Date Analyzed: 6/21/95

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.				
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Quantitation Report

Data File : d:\hpchem\1\data\c8620.d
Acq On : 21 Jun 95 5:12 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 22 15:08 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.89	96	698713	5.00	ug/L	0.05
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.14	95	365041	5.24	ug/L	104.75%
57) 1,2-Dichlorobenzene-d4	21.92	152	166792	5.24	ug/L	104.78%
Target Compounds						Qvalue
9) Methylene chloride	7.47	84	55780	1.46	ug/L	94

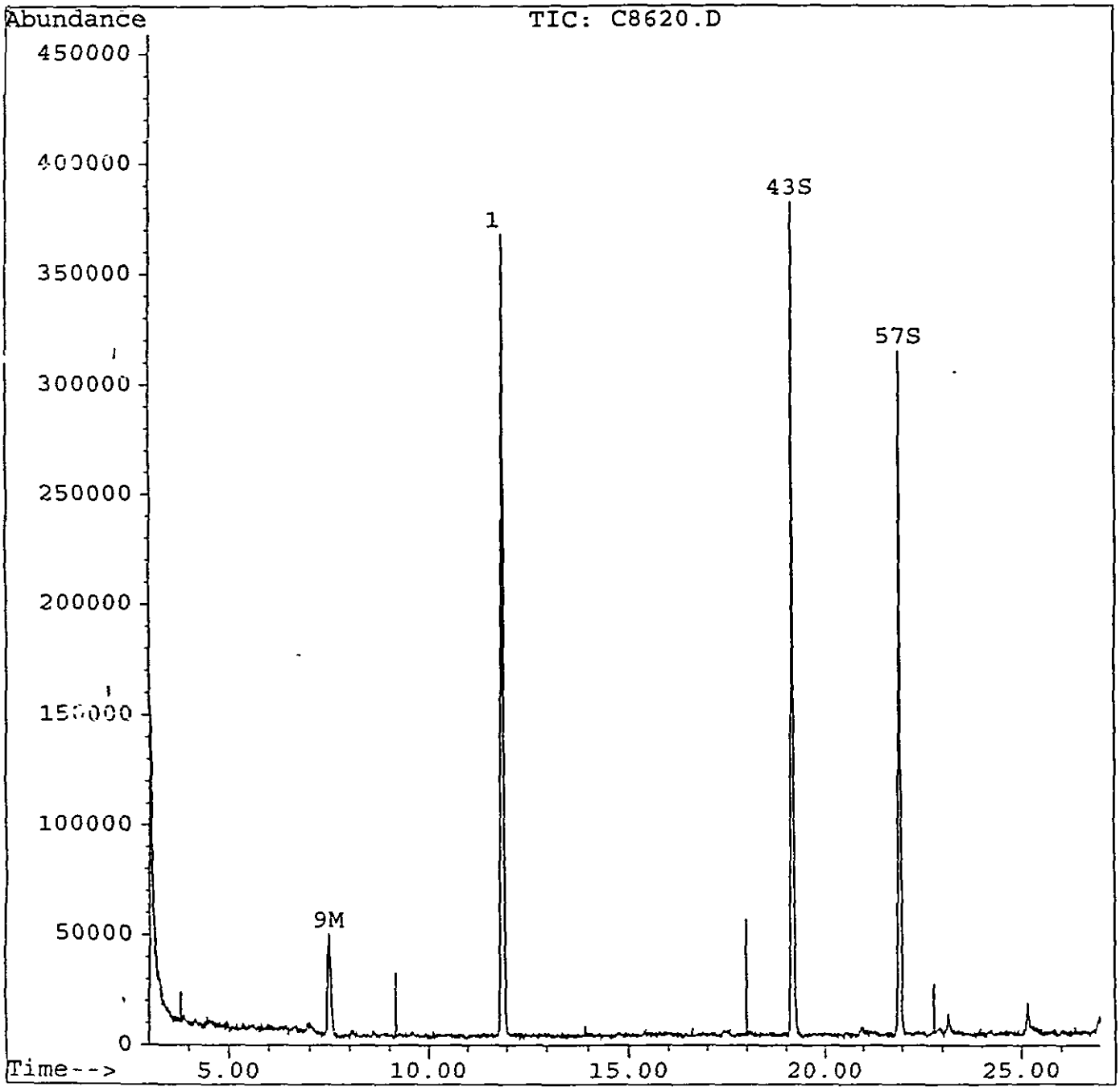
(#) = qualifier out of range (m) = manual integration

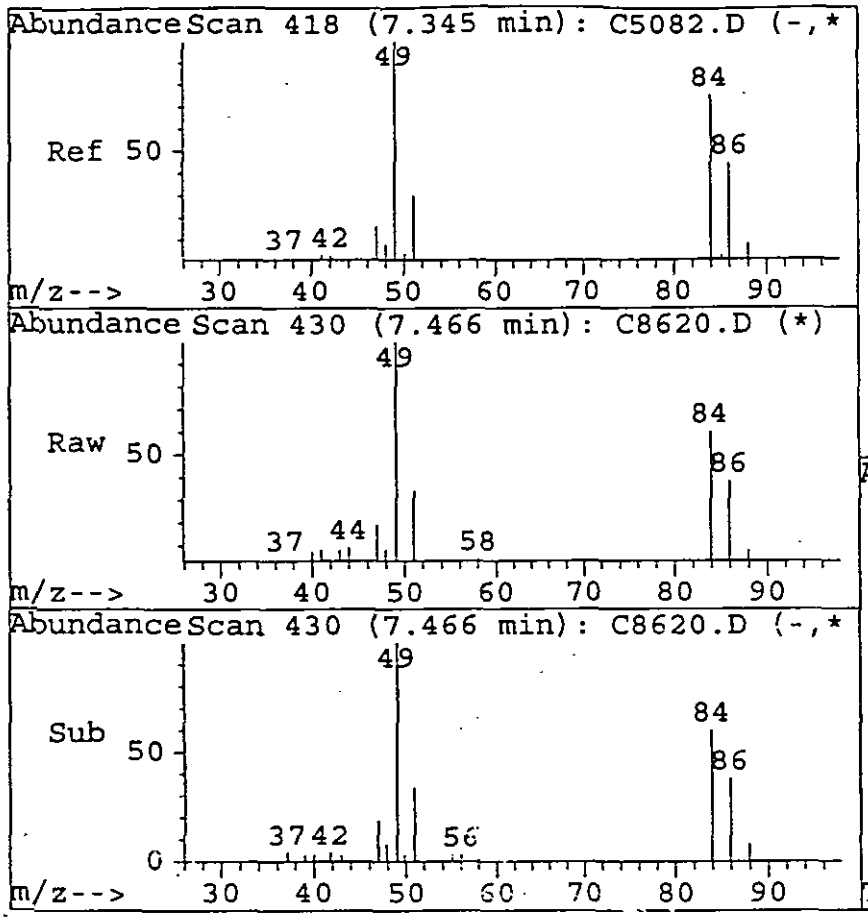
Quantitation Report

Data File : d:\hpchem\1\data\c8620.d
Acq On : 21 Jun 95 5:12 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 22 15:08 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

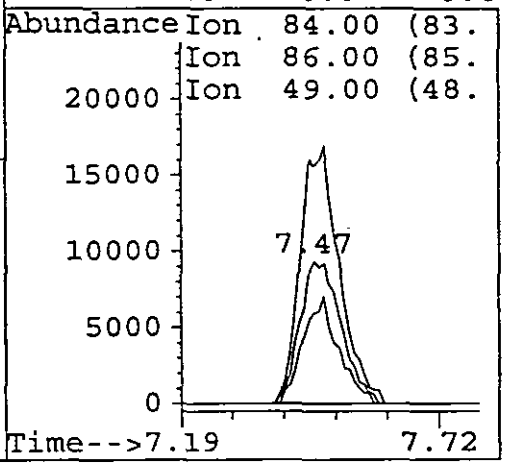




#9
Methylene chloride
Concen: 1.46 ug/L
RT: 7.47 min Scan# 430
Delta R.T. 0.06 min
Lab File: c8620.d
Acq: 21 Jun 95 5:12 pm

Tgt Ion:84 Resp: 55780

Ion	Ratio	Lower	Upper
84	100		
86	63.7	43.1	83.1
49	166.3	136.3	176.3
0	0.0	0.0	0.0



Library Search Compound Report

Data File : d:\hpchem\1\data\c8620.d
Acq On : 21 Jun 95 5:12 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

No Library Search Compounds Detected

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO.

VBLK01

120

Lab Name: EMSL ANALYTICAL Contract: U.S ARM

Project No.: FT. MONMOUTH NJ Site: Location: Group:

Lab File ID: C8635.D Lab Sample ID: M. BLANK

Date Analyzed: 6/22/95 Time Analyzed: 1913

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	1PPB STD	1PPB STD	C8634.D	1838
02	9526458V	9526458V	C8636.D	1948
03	9526459V	9526459V	C8637.D	2023
04	9526432V	9526432V	C8638.D	2058
05	9526433V	9526443V	C8639.D	2133
06	9526434V	9526434V	C8640.D	2207
07	9526436V	9526436V	C8641.D	2242
08	9526462V	9526462V	C8644.D	0027
09	9526435V	9526435V	C8645.D	0101
10	1PPB QCS	1PPB QCS	C8646.D	0136
11				
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COMMENTS:

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 121

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

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

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8635.D

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

% Moisture: not dec. NA Date Analyzed: 6/22/95

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	2.0	
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#: NJDEP MW#:

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8635.D

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

% Moisture: not dec. NA Date Analyzed: 6/22/95

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
1634-04-4	Methy-tertiary butyl ether	.50	U
75-65-0	tertiary-Butyl alcohol	2.0	U

FMETL#

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

123

Lab Name EMSL ANALYTICAL Contract U S ARMY

Project No FT MONMOUTH NJ Bldg# _____ NJDEP MW# _____

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

Sample wt/vol 25 0 (g/mL) ML Lab File ID C8635 D

Level. (low/med) LOW Date Received NA

% Moisture not dec NA Date Analyzed 6/22/95

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.				
14				
15.				
16				
17				
18				
19.				
20.				
21				
22.				
23				
24				
25				
26				
27.				
28				
29				
30				

Quantitation Report

124

Data File : d:\hpchem\1\data\c8635.d
Acq On : 22 Jun 95 7:13 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 26 15:09 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	11.89	96	699604	5.00 ug/L	0.05
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.14	95	369468	5.29 ug/L	105.88%
57) 1,2-Dichlorobenzene-d4	21.91	152	170413	5.35 ug/L	106.91%
Target Compounds					Qvalue
9) Methylene chloride	7.48	84	82521	2.15 ug/L	100

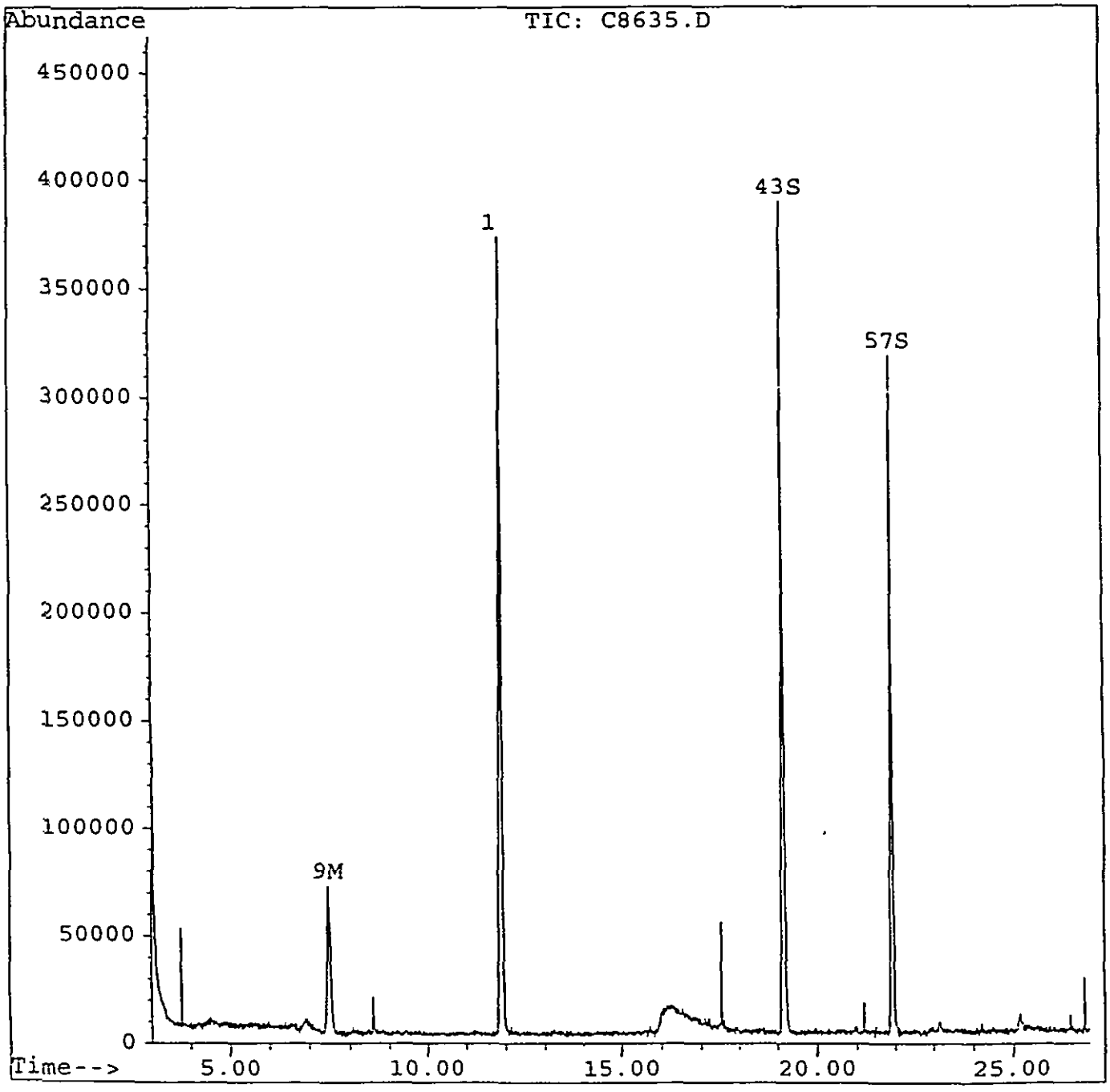
(#) = qualifier out of range (m) = manual integration

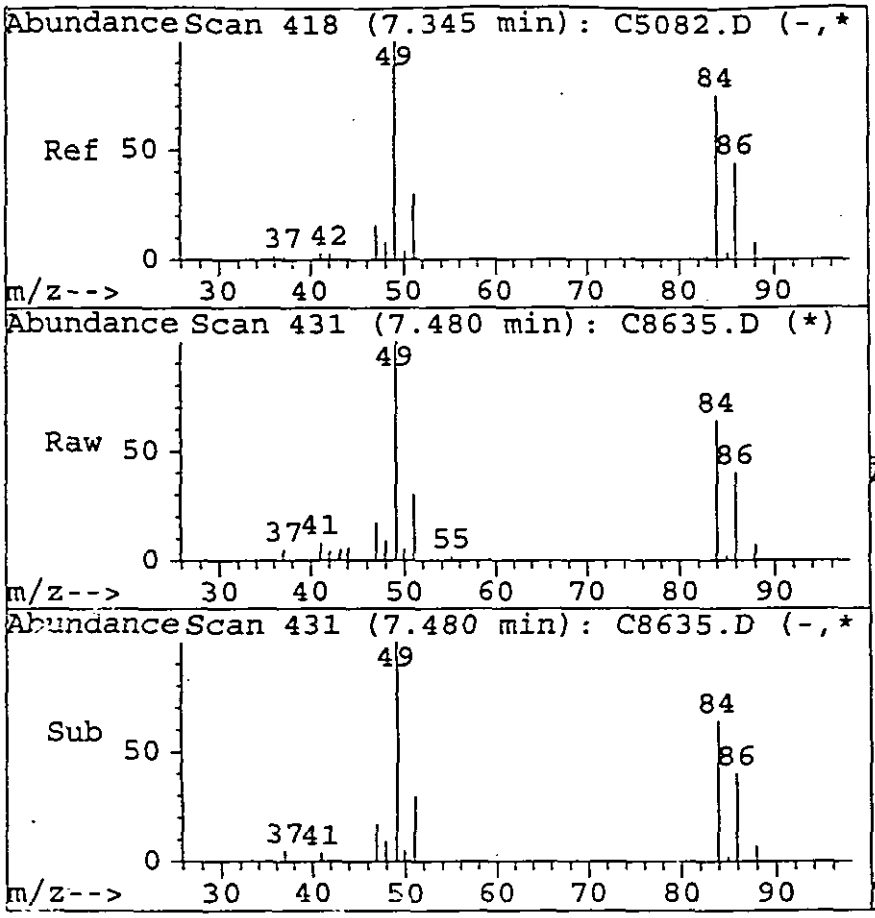
Quantitation Report

Data File : d:\hpchem\1\data\c8635.d
Acq On : 22 Jun 95 7:13 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 26 15:09 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

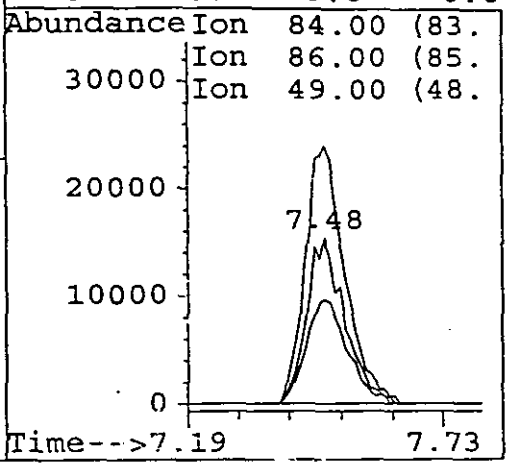




#9
Methylene chloride
Concen: 2.15 ug/L
RT: 7.48 min Scan# 431
Delta R.T. 0.07 min
Lab File: c8635.d
Acq: 22 Jun 95 7:13 pm

Tgt Ion:84 Resp: 82521

Ion	Ratio	Lower	Upper
84	100		
86	62.5	43.1	83.1
49	156.2	136.3	176.3
0	0.0	0.0	0.0



Data File : d:\hpchem\1\data\c8635.d
Acq On : 22 Jun 95 7:13 pm
Sample : METHOD BLANK
Misc : 25 ML

Vial: 4
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

No Library Search Compounds Detected

Spike Recovery and RPD Summary Report - WATER

'ethod : C:\HPCHEM\1\METHODS\VOA524.M
le : 524.2 Purgable Organics
t Update : Tue May 30 13:15:19 1995
Response via : Initial Calibration

-Spiked Sample: C8628.D

	Spike Sample	Spike Duplicate Sample
File ID :	C8629.D	C8630.D
ple :	9526431 MS	9526431 MSD
Time:	21 Jun 95 10:23 pm	21 Jun 95 10:57 pm

pound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
chlorodifluorometh	0.1	10	9	9	87	88	1	25	80-120
loromethane	0.0	10	10	10	101	100	0	25	80-120
inyl chloride	0.0	10	10	10	102	103	1	25	80-120
omomethane	0.0	10	11	11	108	109	1	25	80-120
loroethane	0.0	10	11	12	114	115	1	25	80-120
Trichlorofluorometha	0.0	10	10	11	104	105	1	25	80-120
1-Dichloroethene	0.0	10	10	10	100	100	1	25	80-120
hylene chloride	2.1	10	10	9	77#	73#	6	25	80-120
trans-1 2-Dichloroet	0.0	10	10	10	99	102	4	25	80-120
1-Dichloroethane	0.8	10	12	12	108	109	1	25	80-120
-Dichloropropane	0.0	10	9	9	89	89	1	25	80-120
-1,2-Dichloroethe	0.0	10	11	10	103	101	2	25	80-120
Bromochloromethane	0.0	10	10	10	96	98	2	25	80-120
loroform	0.0	10	10	11	104	105	1	25	80-120
1,1-Trichloroethan	0.0	10	10	10	103	105	1	25	80-120
Carbon tetrachloride	0.0	10	10	10	100	100	0	25	80-120
1-Dichloropropene	0.0	10	10	11	102	107	5	25	80-120
nzene	0.0	10	10	10	103	103	0	25	80-120
,2-Dichloroethane	0.0	10	10	11	103	105	2	25	80-120
richloroethene	1.0	10	11	11	98	101	2	25	80-120
2-Dichloropropane	0.0	10	11	11	108	107	0	25	80-120
bromomethane	0.0	10	10	10	103	103	0	25	80-120
Bromodichloromethane	0.0	10	10	10	103	103	0	25	80-120
s-1,3-Dichloroprop	0.0	10	10	10	100	100	0	25	80-120
luene	0.0	10	10	10	99	102	4	25	80-120
trans-1,3-Dichloropr	0.0	10	10	10	97	101	4	25	80-120
1,2-Trichloroethan	0.0	10	10	10	103	101	1	25	80-120
trachloroethene	1.1	10	11	11	96	98	2	25	80-120
,3-Dichloropropane	0.0	10	10	10	102	102	0	25	80-120
Dibromochloromethane	0.0	10	9	10	94	97	3	25	80-120
2-Dibromomethane	0.0	10	10	10	99	99	0	25	80-120
lorobenzene	0.0	10	10	10	100	100	0	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	10	10	97	97	0	25	80-120
hylbenzene	0.0	10	10	10	98	103	5	25	80-120
lene (para & meta)	0.0	20	18	20	88	98	11	25	80-120
Xylene (Ortho)	0.0	10	9	10	89	99	11	25	80-120
rene	0.0	10	9	9	87	95	9	25	80-120
omoform	0.0	10	9	9	90	93	3	25	80-120
opropylbenzene	0.0	10	10	10	97	100	3	25	80-120
Bromobenzene	0.0	10	10	10	97	97	0	25	80-120
1,2,2-Tetrachloroe	0.0	10	12	11	116	114	2	25	80-120
2,3-Trichloropropa	0.0	10	10	9	103	93	10	25	80-120
n-Propylbenzene	0.0	10	10	10	99	103	4	25	80-120

Quantitation Report

Data File : d:\hpchem\1\data\c8629.d
Acq On : 21 Jun 95 10:23 pm
Sample : 9526431 MS
Misc : 25 ML
Quant Time: Jun 22 15:26 1995

Vial: 13 130
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units		Dev(Min)
1) Fluorobenzene	11.91	96	724230	5.00 ug/L		0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	363199	5.03 ug/L		100.54%
57) 1,2-Dichlorobenzene-d4	21.93	152	166204	5.04 ug/L		100.73%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.34	85	507706	8.84 ug/L		95
3) Chloromethane	3.72	50	341144	10.09 ug/L		98
4) Vinyl chloride	3.94	62	388786	10.21 ug/L		98
5) Bromomethane	4.59	94	276878	10.75 ug/L		99
6) Chloroethane	4.84	64	254197	11.39 ug/L		94
7) Trichlorofluoromethane	5.44	101	889262	10.45 ug/L		97
8) 1,1-Dichloroethene	6.52	96	375620	10.05 ug/L	#	86
9) Methylene chloride	7.49	84	388425	9.79 ug/L		94
10) trans-1,2-Dichloroethene	8.04	96	390408	9.89 ug/L		91
12) 1,1-Dichloroethane	8.84	63	911424	11.54 ug/L		97
13) 2,2-Dichloropropane	9.91	77	692646	8.95 ug/L		100
14) cis-1,2-Dichloroethene	9.91	96	393804	10.58 ug/L		96
16) Bromochloromethane	10.32	128	125174	9.60 ug/L	#	89
17) Chloroform	10.48	83	768687	10.37 ug/L		99
18) 1,1,1-Trichloroethane	10.80	97	848337	10.34 ug/L		97
19) Carbon tetrachloride	11.11	117	761767	10.00 ug/L		99
20) 1,1-Dichloropropene	11.10	75	727926	10.16 ug/L		99
21) Benzene	11.44	78	1301213	10.32 ug/L		97
22) 1,2-Dichloroethane	11.44	62	322398	10.42 ug/L		97
23) Trichloroethene	12.55	95	608503	10.88 ug/L		93
24) 1,2-Dichloropropane	12.90	63	443934	10.76 ug/L		99
25) Dibromomethane	13.10	93	172354	10.30 ug/L		96
26) Bromodichloromethane	13.36	83	587880	10.25 ug/L		96
27) cis-1,3-Dichloropropene	14.12	75	493938	9.96 ug/L		97
28) Toluene	14.71	92	889375	9.93 ug/L		99
29) trans-1,3-Dichloropropene	15.04	75	331412	9.68 ug/L		98
30) 1,1,2-Trichloroethane	15.36	83	164536	10.29 ug/L		91
31) Tetrachloroethene	15.66	166	596030	10.62 ug/L		96
32) 1,3-Dichloropropane	15.64	76	324387	10.23 ug/L		97
33) Dibromochloromethane	16.06	129	292274	9.39 ug/L		98
34) 1,2-Dibromomethane	16.25	107	217921	9.87 ug/L		97
35) Chlorobenzene	17.13	112	937208	10.04 ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.26	131	358271	9.67 ug/L		95
37) Ethylbenzene	17.31	91	1845979	9.79 ug/L		96
38) Xylene (para & meta)	17.53	106	1192303	17.60 ug/L		92
39) Xylene (Ortho)	18.23	106	533612	8.90 ug/L	#	88
40) Styrene	18.24	104	806023	8.68 ug/L	m	95

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

Data File : d:\hpchem\1\data\c8629.d
Acq On : 21 Jun 95 10:23 pm
Sample : 9526431 MS
Misc : 25 ML
Quant Time: Jun 22 15:26 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	138006	9.04	ug/L		90
42)	Isopropylbenzene	18.88	105	1862329	9.66	ug/L	m	0
44)	Bromobenzene	19.43	156	337784	9.72	ug/L	#	89
45)	1,1,2,2-Tetrachloroethane	19.36	83	197805	11.58	ug/L		95
46)	1,2,3-Trichloropropane	19.45	75	214022	10.32	ug/L	#	78
47)	n-Propylbenzene	19.62	91	2472810	9.86	ug/L		99
48)	2-Chlorotoluene	19.78	91	1508455	10.84	ug/L		96
49)	4-Chlorotoluene	19.96	91	1649364	9.99	ug/L	m	85
50)	1,3,5-Trimethylbenzene	19.94	105	1367274	8.57	ug/L	m	99
51)	tert-Butylbenzene	20.53	119	1667250	10.08	ug/L		99
52)	1,2,4-Trimethylbenzene	20.62	105	1272782	8.71	ug/L		100
53)	sec-Butylbenzene	20.93	105	2478805	10.11	ug/L		99
54)	1,3-Dichlorobenzene	21.13	146	684058	9.65	ug/L		98
55)	4-Isopropyltoluene	21.19	119	1627495	8.89	ug/L		98
56)	1,4-Dichlorobenzene	21.29	146	677512	9.64	ug/L		89
58)	1,2-Dichlorobenzene	21.96	146	521231	9.87	ug/L		98
59)	n-Butylbenzene	21.94	91	1944083	9.91	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.37	75	42212	9.73	ug/L		90
61)	1,2,4-Trichlorobenzene	24.93	180	349185	9.00	ug/L		97
62)	Hexachlorobutadiene	25.27	225	444252	9.49	ug/L		100
63)	Naphthalene	25.38	128	307134	9.14	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	252836	9.34	ug/L		98
65)	Methyl-tert butyl ether	8.09	73	552420	13.06	ug/L		97
66)	tert-Butyl Alcohol	7.81	59	17145	26.44	ug/L		100

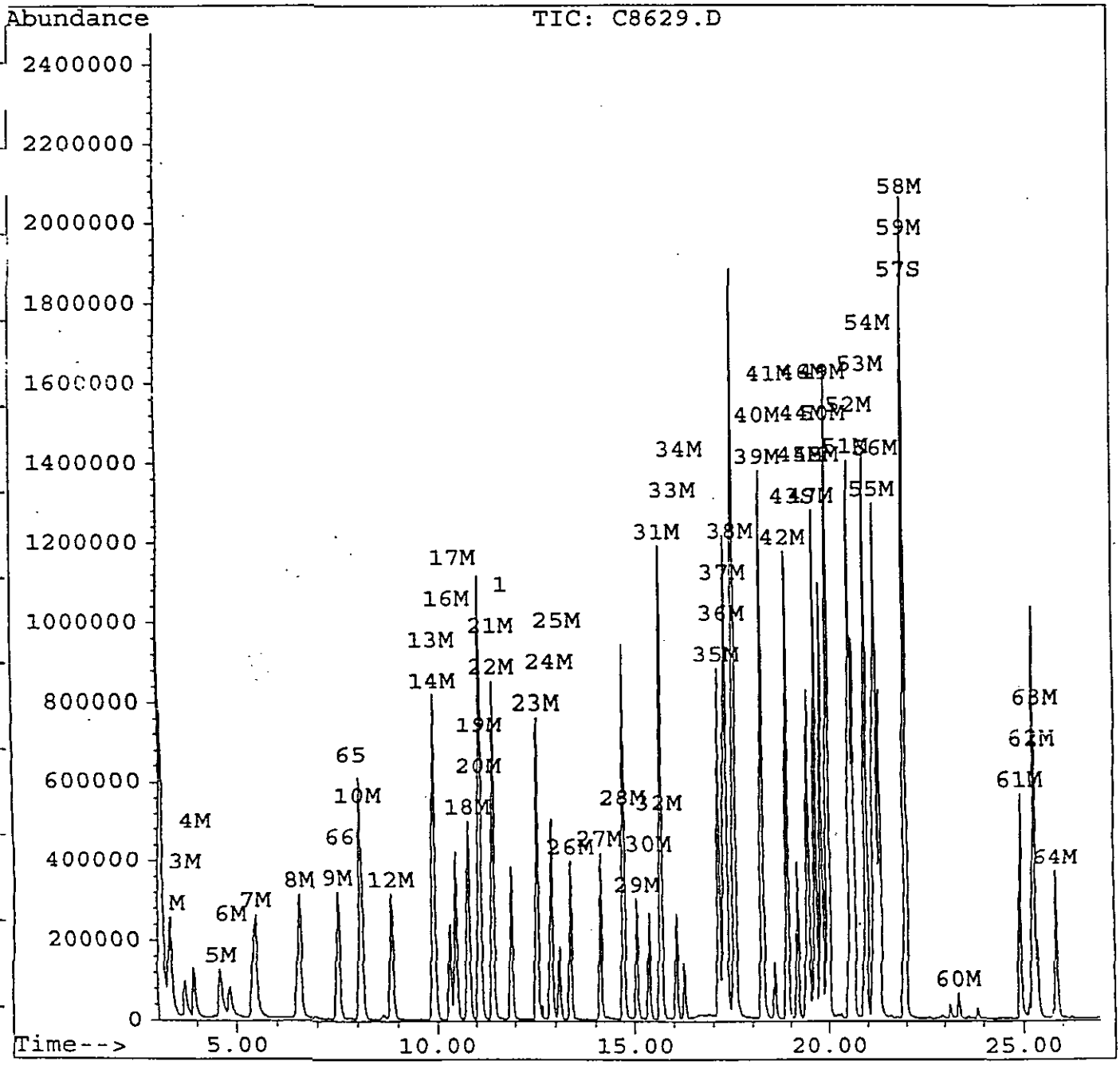
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c8629.d
Acq On : 21 Jun 95 10:23 pm
Sample : 9526431 MS
Misc : 25 ML
Quant Time: Jun 22 15:26 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c8630.d
Acq On : 21 Jun 95 10:57 pm
Sample : 9526431 MSD
Misc : 25 ML
Quant Time: Jun 22 15:19 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	11.91	96	717343	5.00	ug/L		0.07
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.15	95	358737	5.01	ug/L		100.26%
57) 1,2-Dichlorobenzene-d4	21.93	152	161994	4.96	ug/L		99.12%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.34	85	508838	8.95	ug/L		99
3) Chloromethane	3.70	50	336876	10.06	ug/L		96
4) Vinyl chloride	3.94	62	390419	10.35	ug/L		98
5) Bromomethane	4.60	94	277061	10.86	ug/L		96
6) Chloroethane	4.83	64	255023	11.53	ug/L		94
7) Trichlorofluoromethane	5.42	101	888335	10.54	ug/L		99
8) 1,1-Dichloroethene	6.52	96	368492	9.95	ug/L		88
9) Methylene chloride	7.50	84	367763	9.36	ug/L		100
10) trans-1,2-Dichloroethene	8.05	96	400532	10.24	ug/L		90
12) 1,1-Dichloroethane	8.84	63	914463	11.69	ug/L		97
13) 2,2-Dichloropropane	9.90	77	681923	8.89	ug/L		98
14) cis-1,2-Dichloroethene	9.90	96	383613	10.40	ug/L		98
16) Bromochloromethane	10.31	128	126363	9.78	ug/L	#	89
17) Chloroform	10.47	83	772878	10.53	ug/L		98
18) 1,1,1-Trichloroethane	10.80	97	849134	10.45	ug/L		96
19) Carbon tetrachloride	11.11	117	754063	9.99	ug/L		98
20) 1,1-Dichloropropene	11.10	75	757429	10.67	ug/L		98
21) Benzene	11.44	78	1290261	10.33	ug/L		98
22) 1,2-Dichloroethane	11.44	62	324254	10.58	ug/L		96
23) Trichloroethene	12.55	95	615535	11.12	ug/L		97
24) 1,2-Dichloropropane	12.90	63	438654	10.73	ug/L		100
25) Dibromomethane	13.10	93	171417	10.35	ug/L		93
26) Bromodichloromethane	13.36	83	583692	10.27	ug/L		98
27) cis-1,3-Dichloropropene	14.13	75	489464	9.97	ug/L		99
28) Toluene	14.71	92	912224	10.28	ug/L		96
29) trans-1,3-Dichloropropene	15.04	75	341025	10.06	ug/L		99
30) 1,1,2-Trichloroethane	15.36	83	160629	10.14	ug/L		95
31) Tetrachloroethene	15.67	166	603739	10.86	ug/L		100
32) 1,3-Dichloropropane	15.64	76	320235	10.20	ug/L		100
33) Dibromochloromethane	16.06	129	297580	9.65	ug/L		99
34) 1,2-Dibromomethane	16.25	107	216314	9.90	ug/L		99
35) Chlorobenzene	17.13	112	924979	10.01	ug/L		96
36) 1,1,1,2-Tetrachloroethane	17.26	131	354121	9.65	ug/L		98
37) Ethylbenzene	17.32	91	1928537	10.32	ug/L		98
38) Xylene (para & meta)	17.53	106	1316729	19.63	ug/L		90
39) Xylene (Ortho)	18.23	106	589921	9.94	ug/L		94
40) Styrene	18.24	104	869540	9.45	ug/L		96

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

Data File : d.\hpchem\1\data\c8630.d
Acq On : 21 Jun 95 10:57 pm
Sample : 9526431 MSD
Misc : 25 ML
Quant Time: Jun 22 15:19 1995

Vial: 14 134
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue May 30 13:15:19 1995
Response via : Multiple Level Calibration

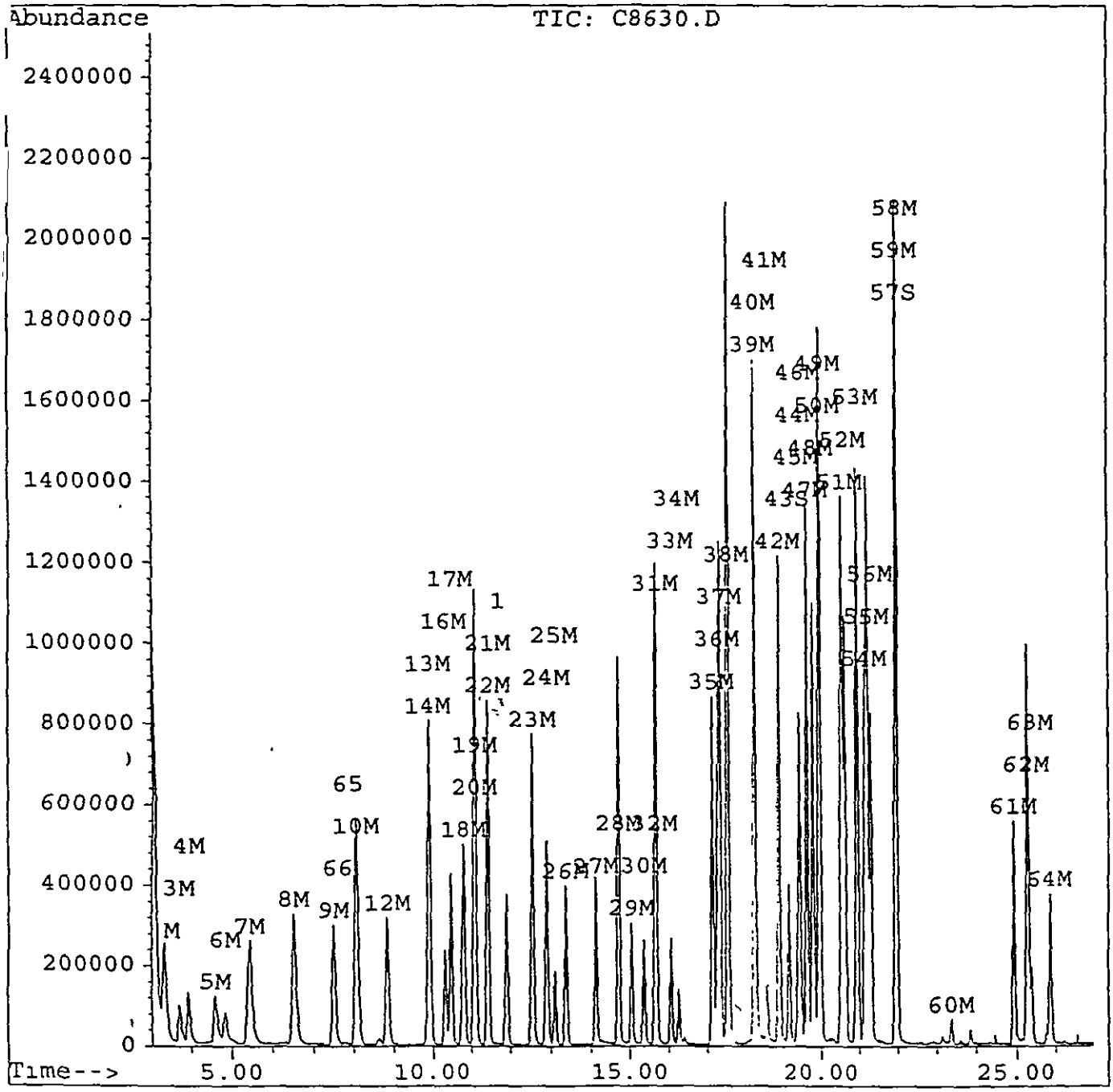
	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.56	173	140370	9.28	ug/L		93
42)	Isopropylbenzene	18.88	105	1900648	9.96	ug/L		90
44)	Bromobenzene	19.43	156	335219	9.74	ug/L	#	84
45)	1,1,2,2-Tetrachloroethane	19.37	83	192628	11.39	ug/L		92
46)	1,2,3-Trichloropropane	19.44	75	191679	9.33	ug/L	#	14
47)	n-Propylbenzene	19.62	91	2545491	10.25	ug/L		99
48)	2-Chlorotoluene	19.78	91	1481385	10.75	ug/L		97
49)	4-Chlorotoluene	19.96	91	1665190	10.18	ug/L	m	87
50)	1,3,5-Trimethylbenzene	19.94	105	1501456	9.50	ug/L		99
51)	tert-Butylbenzene	20.53	119	1656874	10.11	ug/L		96
52)	1,2,4-Trimethylbenzene	20.61	105	1430110	9.88	ug/L		100
53)	sec-Butylbenzene	20.93	105	2490009	10.25	ug/L		97
54)	1,3-Dichlorobenzene	21.14	146	679634	9.68	ug/L		97
55)	4-Isopropyltoluene	21.19	119	1772010	9.77	ug/L		97
56)	1,4-Dichlorobenzene	21.29	146	678563	9.75	ug/L		93
58)	1,2-Dichlorobenzene	21.96	146	525641	10.05	ug/L		98
59)	n-Butylbenzene	21.94	91	1967170	10.12	ug/L		98
60)	1,2-Dibromo-3-chloropropan	23.37	75	42772	9.96	ug/L	#	73
61)	1,2,4-Trichlorobenzene	24.93	180	345906	9.00	ug/L		97
62)	Hexachlorobutadiene	25.27	225	435444	9.39	ug/L		99
63)	Naphthalene	25.38	128	318132	9.56	ug/L		100
64)	1,2,3-Trichlorobenzene	25.86	180	246700	9.20	ug/L		97
65)	Methyl-tert butyl ether	8.07	73	536946	12.81	ug/L		95
66)	tert-Butyl Alcohol	7.81	59	16303	25.38	ug/L		100

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

Data File : d:\hpchem\1\data\c8630.d
Acq On : 21 Jun 95 10:57 pm
Sample : 9526431 MSD
Misc : 25 ML
Quant Time: Jun 22 15:19 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 May 30 13:15:19 1995
Response via : Multiple Level Calibration



EMSL

GC/MS SEMIVOLATILE DATA PACKAGE

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Nam EMSL Analytical Contract _____

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

Lab File ID B7750.D DFTPP Injection Date: 05/30/95

Instrument ID: ABNA DFTPP Injection Time: 0914

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE		
51	30.0 - 80.0% of mass 198	51.3		
68	Less than 2.0% of mass 69	0.0	0.0	)1
69	Mass 69 relative abundance	61.1		
70	Less than 2.0% of mass 69	0.3	0.6	)1
127	25.0 - 75.0% of mass 198	44.4		
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	7.5		
275	10.0 - 30.0% of mass 198	23.1		
365	Greater than 0.75% of mass 198	2.8		
441	Present, but less than mass 443	9.3		
442	40.0 - 110.0% of mass 198	64.3		
443	15.0 - 24.0% of mass 442	13.1	20.3	)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	B7751.D	05/30/95	0944
#		50 STANDARD	B7752.D	05/30/95	1035
#		80 STANDARD	B7753.D	05/30/95	1127
#		120 STANDARD	B7754.D	05/30/95	1220
#		160 STANDARD	B7755 D	05/30/95	1312
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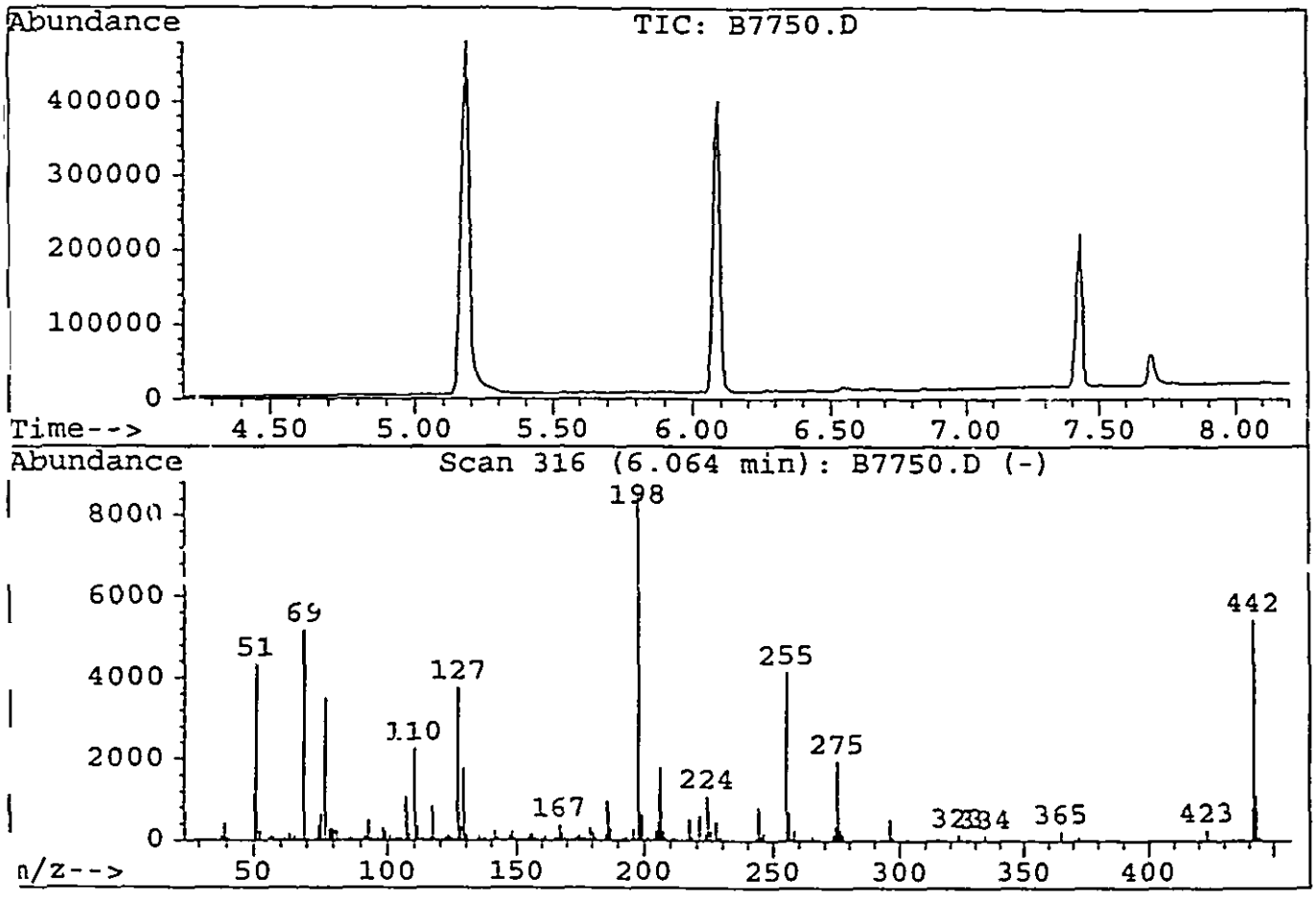
DFTPP

Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 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: 330

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	51.3	4339	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	61.1	5169	PASS
70	69	0	2	0.6	29	PASS
127	198	40	60	44.4	3758	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	8456	PASS
199	198	5	9	7.5	631	PASS
275	198	10	30	23.1	1951	PASS
365	198	1	100	2.8	238	PASS
441	443	0	100	71.3	788	PASS
442	198	40	100	64.3	5436	PASS
443	442	17	23	20.3	1105	PASS

i ed:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
.00	111	58.05	13	78.05	284	96.05	58
.05	417	61.15	74	79.05	332	97.05	35
40.10	59	63.05	154	79.95	245	98.05	313
50.05	1128	64.05	37	81.05	252	99.05	224
.00	4339	65.05	105	82.05	44	100.95	120
05	241	68.95	5169	83.10	16	103.15	68
53.00	10	70.05	29	86.15	75	103.95	87
.05	4	73.05	43	91.05	88	105.05	85
.05	32	74.05	376	91.95	98	107.05	1091
56.05	93	75.05	636	92.95	482	107.95	178
.05	94	77.00	3509	94.05	48	110.05	2258

n 316 (6.064 min): B7750.D

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.05	347	128.00	343	154.10	63	168.00	172
112.15	17	129.00	1776	155.00	140	169.10	54
13.05	65	130.00	152	156.00	177	173.00	40
16.15	81	135.00	123	157.10	46	173.90	77
117.05	837	136.00	50	157.80	35	175.00	147
18.05	55	137.10	72	158.00	32	176.10	56
11.90	87	141.00	242	160.00	52	177.10	85
123.00	132	142.00	80	161.10	108	179.00	311
124.00	82	147.00	121	165.00	75	180.10	207
4.90	49	148.00	213	166.20	66	181.10	81
127.00	3758	148.90	57	167.00	382	182.10	5

an 316 (6.064 min): B7750.D

d ied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
85.10	155	205.05	451	222.95	151	249.05	34
86.10	970	206.05	1785	224.05	1088	255.05	4157
187.10	295	207.05	238	225.05	239	256.05	688
192.00	75	207.95	66	227.05	470	256.95	53
93.10	96	210.25	50	227.95	86	257.95	257
196.00	270	211.05	79	229.05	93	265.05	108
198.00	8456	211.65	38	230.95	42	273.05	139
99.00	631	215.95	52	243.05	75	274.05	352
01.35	77	216.95	525	244.05	828	275.05	1951
202.85	45	217.95	89	245.05	118	276.05	266
04.05	257	220.95	629	246.05	185	277.05	157

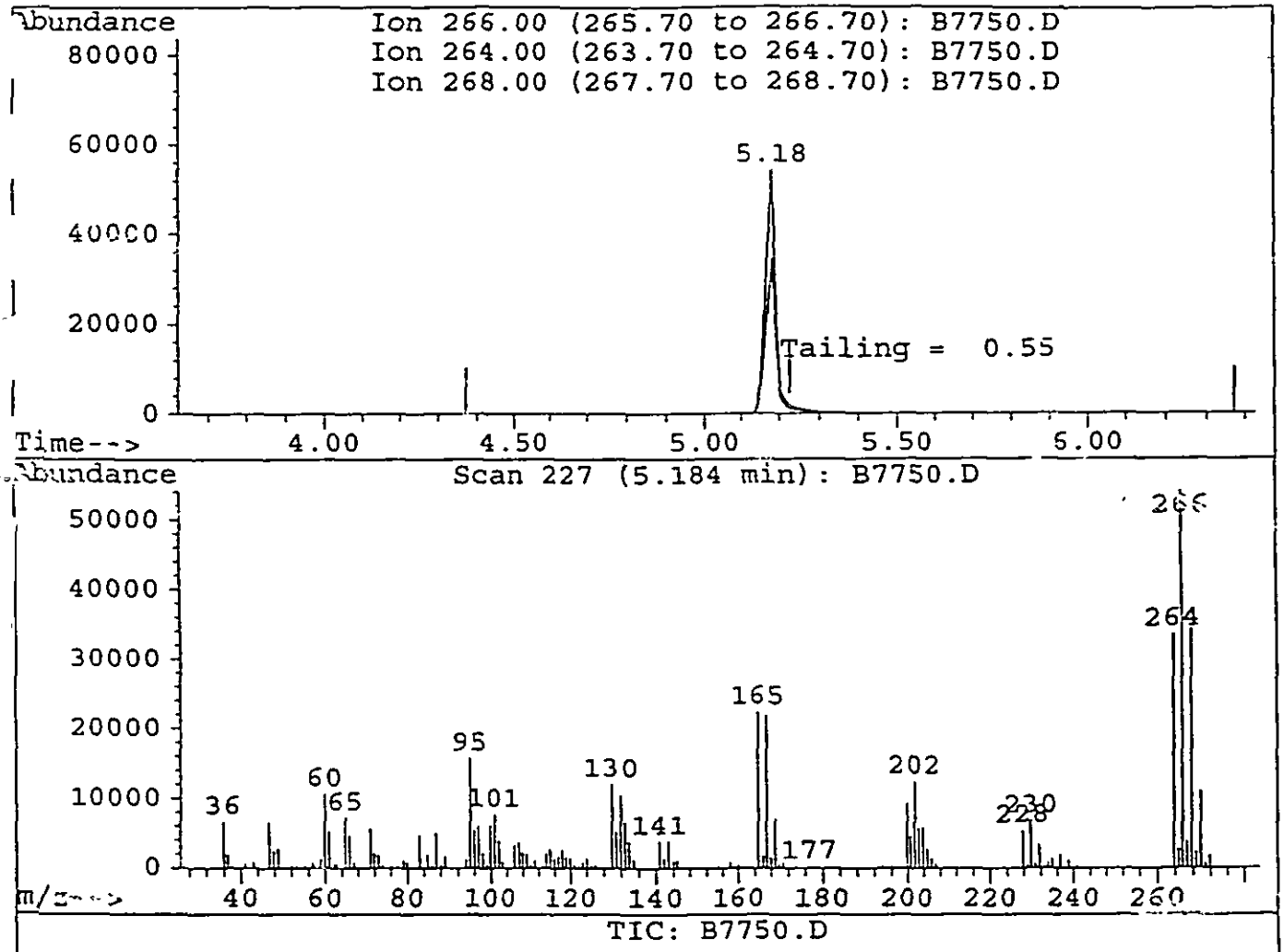
a 316 (6.064 min): B7750.D

d·fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
293.00	31	364.95	238				
296.00	527	372.05	89				
97.00	89	403.05	44				
03.00	67	420.95	40				
314.00	27	423.05	267				
14.90	61	424.05	52				
23.10	148	441.10	788				
324.10	39	442.00	5436				
4.00	124	443.00	1105				
32.10	49	444.10	101				
353.10	51						

Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 30 8:29 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



TIC: B7750.D

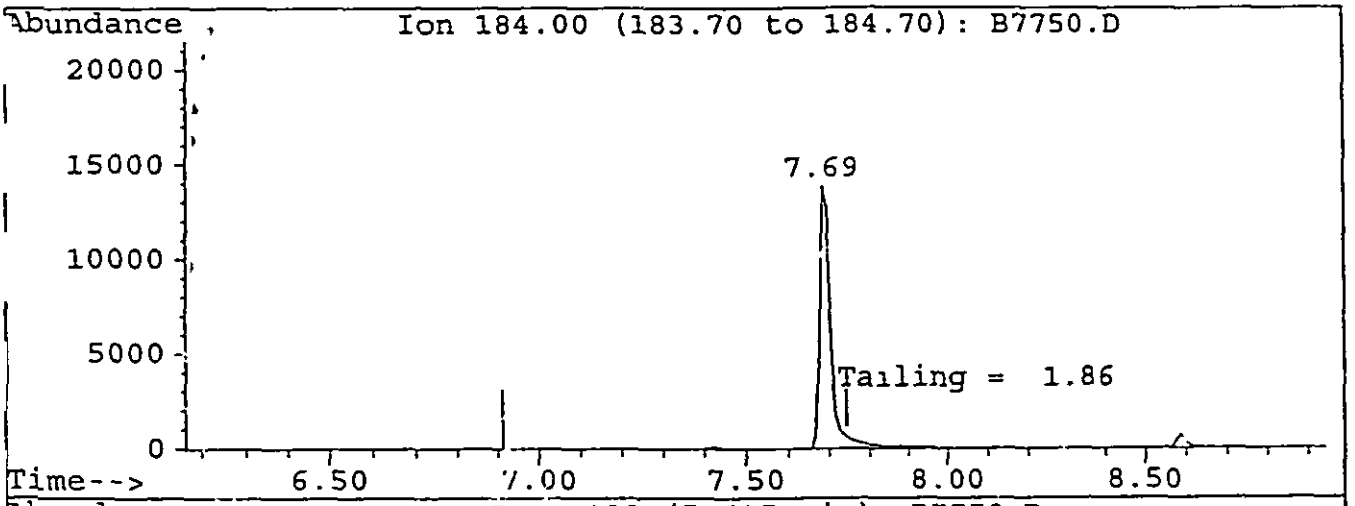
(1) Pentachlorophenol (CM)
5.18min 321.74ug/mL
response 106272

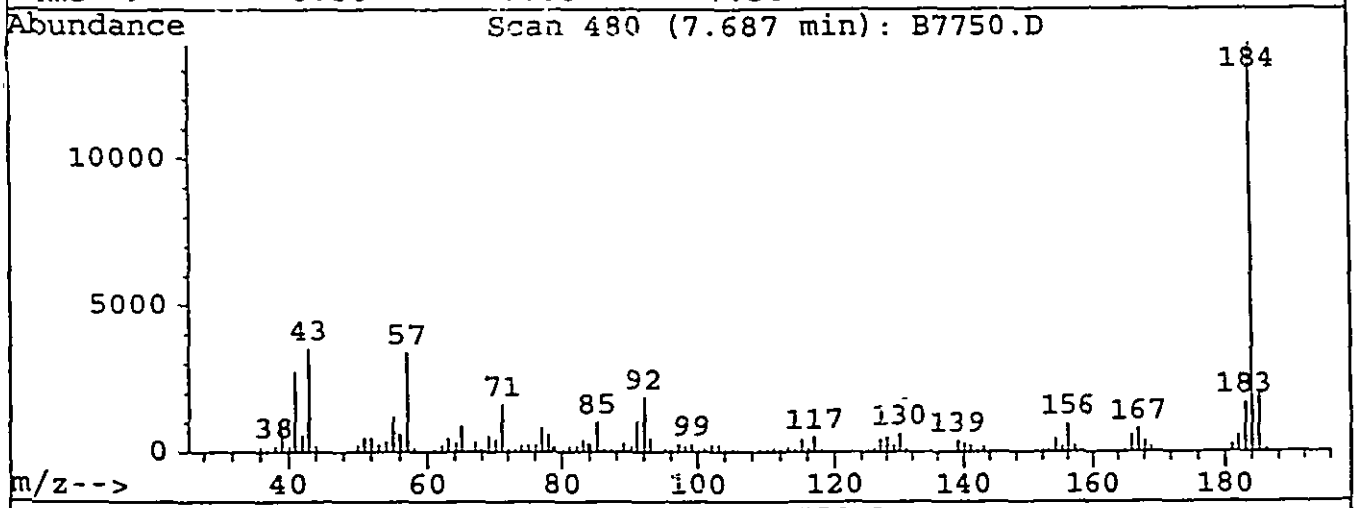
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	62.02
268.00	64.70	63.47
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7750.D Vial: 1
Acq On : 30 May 95 9:14 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 30 8:29 1995

) Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration
)





TIC: B7750.D

(2) Benzidine
7.69min 86.22ug/ml
response 26489

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 May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
)	I	1,4-Dichlorobenzene-d	ISTD						
2)	S	2-Fluorophenol	1.046	1.205	1.170	1.071	1.165	1.131	6.09
3)	S	Phenol-d5	1.808	2.019	1.924	1.724	1.888	1.873	6.00
)	M	N-nitrosodimethylamin	0.599	0.546	0.436	0.731		0.578	21.22
)		Pyridine	0.424	0.364	0.429	0.496		0.428	12.65
6)	CM	Phenol	1.442	1.792	1.686	1.698	1.721	1.668	7.94
)	MT	bis(2-Chloroethyl)eth	1.893	2.082	2.104	2.042	2.008	2.026	4.10
)	M	2-Chlorophenol	1.138	1.284	1.307	1.245	1.372	1.269	6.83
9)	MT	1,3-Dichlorobenzene	1.295	1.404	1.490	1.416	1.320	1.385	5.65
10)	CM	1,4-Dichlorobenzene	1.318	1.468	1.512	1.469	1.379	1.429	5.51
1)	M	1,2-Dichlorobenzene	1.255	1.391	1.452	1.374	1.315	1.357	5.54
12)	T	2-Methylphenol	1.109	1.268	1.262	1.164	1.220	1.204	5.61
13)	M	bis(2-chloroisopropyl	1.886	1.860	1.988	1.730	1.878	1.868	4.92
)	T	4-Methylphenol	1.216	1.432	1.330	1.310	1.320	1.322	5.82
)	PM	N-Nitroso-Di-n-propyl	1.289	1.444	1.471	1.267	1.257	1.346	7.68
16)	M	Hexachloroethane	0.691	0.756	0.792	0.747	0.701	0.737	5.65
)	I	Naphthalene-d8	ISTD						
18)	S	Nitrobenzene-d5	0.437	0.466	0.478	0.437	0.460	0.456	4.02
19)	M	Nitrobenzene	0.398	0.409	0.461	0.436	0.416	0.424	5.86
)	M	Isophorone	0.776	0.850	0.875	0.817	1.149	0.893	16.52
)	MC	2-Nitrophenol	0.189	0.225	0.225	0.200	0.213	0.210	7.50
22)	M	2,4-Dimethylphenol	0.362	0.429	0.388	0.382	0.407	0.394	6.49
)	M	bis(2-Chloroethoxy)me	0.441	0.448	0.467	0.455	0.469	0.456	2.57
)	MC	2,4-Dichlorophenol	0.271	0.299	0.307	0.292	0.322	0.298	6.39
25)	M	1,2,4-Trichlorobenzen	0.293	0.318	0.326	0.322	0.326	0.317	4.42
)	M	Naphthalene	0.922	0.948	1.039	0.963	1.023	0.979	5.12
)	T	4-Chloroaniline	0.455	0.465	0.471	0.468	0.457	0.463	1.47
28)	MC	Hexachlorobutadiene	0.175	0.186	0.189	0.186	0.190	0.185	3.26
29)	MC	4-Chloro-3-methylphen	0.355	0.396	0.398	0.385	0.385	0.384	4.45
)	M	2-Chloronaphthalene	0.672	0.680	0.719	0.700	0.709	0.696	2.81
31)	T	2-Methylnaphthalene	0.890	0.985	0.640	0.702	0.711	0.786	18.46
)	I	Acenaphthene-d10	ISTD						
)	P	Hexachlorocyclopentad	0.294	0.303	0.302	0.258	0.233	0.278	11.19
34)	MC	2,4,6-Trichlorophenol	0.470	0.452	0.413	0.381	0.361	0.415	11.10
)	T	2,4,5-Trichlorophenol	0.221	0.317	0.348	0.370	0.365	0.324	18.94
)	S	2-Fluorobiphenyl	1.163	1.254	1.230	1.178	1.174	1.200	3.30
37)	T	2-Nitroaniline	0.527	0.566	0.592	0.578	0.483	0.549	8.04
)	M	Dimethylphthalate	1.233	1.348	1.373	1.295	1.248	1.299	4.68
)	M	Acenaphthylene	1.606	1.717	1.805	1.711	1.683	1.704	4.20
40)	M	2,6-Dinitrotoluene	0.295	0.312	0.346	0.327	0.271	0.310	9.34
)	T	3-Nitroaniline	0.279	0.370	0.403	0.363	0.315	0.346	14.10

(#) = Out of Range

Response Factor Report ABNA

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 09:37:17 1995
Response via : Initial Calibration

Calibration Files
160 =B7755.D 120 =B7754.D 80 =B7753.D
50 =B7752.D 20 =B7751.D

		Compound	160	120	80	50	20	Avg	%RSD
2)	CM	Acenaphthene	0.982	1.056	1.036	1.024	1.028	1.025	2.65
3	MP	2,4-Dinitrophenol	0.189	0.213	0.198	0.155	0.107	0.172	24.56
4,	PM	4-Nitrophenol	0.151	0.178	0.188	0.168	0.142	0.166	11.52
5)	T	Dibenzofuran	1.475	1.700	1.686	1.669	1.512	1.609	6.62
6	M	2,4-Dinitrotoluene	1.132	1.243	1.193	1.143	1.125	1.167	4.29
7	M	Diethylphthalate	1.274	1.533	1.576	1.452	1.379	1.443	8.38
8)	M	Fluorene	1.222	1.333	1.295	1.228	1.216	1.259	4.17
9	M	4-Chlorophenyl-phenyl	0.554	0.608	0.613	0.591	0.615	0.596	4.25
50)		Phenanthrene-d10	----------ISTD----------						
51	T	4-Nitroaniline	0.131	0.151	0.160	0.214	0.175	0.166	18.75
5	MC	4,6-Dinitro-2-methylp	0.141	0.142	0.151	0.129	0.096	0.132	16.20
5,	T	n-Nitrosodiphenylamin	0.458	0.524	0.531	0.530	0.499	0.508	6.15
54)	S	2,4,6-Tribromophenol	0.098	0.113	0.112	0.106	0.111	0.108	5.77
5		1,2-Diphenylhydrazine	1.065	1.251	1.281	1.312	1.147	1.211	8.48
5	M	4-Bromophenyl-phenyle	0.186	0.198	0.212	0.220	0.213	0.206	6.61
57)	M	Hexachlorobenzene	0.138	0.231	0.244	0.228	0.233	0.215	20.20
5	CM	Pentachlorophenol	0.151	0.150	0.154	0.133	0.119	0.137	10.26
5	M	Phenanthrene	0.983	1.142	1.181	1.095	1.071	1.094	6.87
60)	M	Anthracene	0.809	1.021	1.128	1.028	1.059	1.009	11.85
61		Carbazole	0.656	1.051	1.106	0.964	0.941	0.944	18.43
6	M	Di-n-butylphthalate	1.441	1.645	1.749	1.638	1.559	1.606	7.11
6,	MC	Fluoranthene	0.922	0.947	1.162	1.124	1.019	1.035	10.22
6	I	Chrysene-d12	----------ISTD----------						
6		Benzidine	0.569	0.427	0.364	0.399	0.428	0.437	17.86
66)	M	Pyrene	1.857	1.452	1.658	1.267	1.273	1.502	16.98
6	S	Terphenyl-d14	1.355	1.039	1.124	0.880	0.911	1.062	17.99
6	M	Butylbenzylphthalate	1.130	0.958	1.080	0.843	0.796	0.962	15.08
69)	M	Benzo[a]anthracene	1.813	1.529	1.731	1.342	1.163	1.516	17.74
70	M	3,3'-Dichlorobenzidin	0.345	0.347	0.471	0.353	0.416	0.386	14.47
7	M	Chrysene	0.661	0.691	1.035	0.768	1.060	0.843	22.65
7,	M	bis(2-Ethylhexyl)phth	1.536	1.331	1.560	1.243	1.151	1.364	13.17
7	I	Perylene-d12	----------ISTD----------						
7	MC	Di-n-octylphthalate	4.287	5.460	5.911	4.718		5.094	14.31
75)	M	Benzo[b]fluoranthene	2.445	2.215	2.794	2.522	2.357	2.467	8.75
7)	m	Benzo[k]fluoranthene	1.248	0.961	1.258	1.108	1.376	1.190	13.40
7)	mc	Benzo[a]pyrene	1.114	0.945	1.269	1.355	1.450	1.227	16.33
78)	m	Indeno[1,2,3-cd]pyren	0.493	0.521	0.450	0.417	0.381	0.452	12.46
7)	m	Dibenz[a,h]anthracene	0.471	0.517	0.454	0.365	0.371	0.436	15.14
8)	M	Benzo[g,h,i]perylene	0.385	0.372	0.381	0.326	0.314	0.356	9.28
8i)		1-Methyl naphthalene						0.000#	-1.00
8)		7,12-Dimethylbenz(a)a						0.000#	-1.00

#) = Out of Range

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	25556	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.74	136	103257	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.06	164	74029	40.00	ug/mL	-0.32
50) Phenanthrene-d10	22.53	188	123712	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	101227	40.00	ug/mL	-0.44
73) Perylene-d12	34.60	264	55866	40.00	ug/mL	-0.44
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	37223	52.40	ug/mL	52.40%
3) Phenol-d5	8.39	99	60299	61.22	ug/mL	61.22%
18) Nitrobenzene-d5	10.70	82	59323	55.23	ug/mL	55.23%
36) 2-Fluorobiphenyl	16.21	172	108666	45.06	ug/mL	45.06%
54) 2,4,6-Tribromophenol	20.47	330	17160	50.11	ug/mL	50.11%
67) Terphenyl-d14	27.65	244	115295	44.07	ug/mL	44.07%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.68	74	11819	64.09	ug/mlm	0
6) Phenol	8.41	94	21988	23.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	25656	25.13	ug/mL	94
8) 2-Chlorophenol	8.45	128	17535	22.70	ug/mL	91
9) 1,3-Dichlorobenzene	8.84	146	16873	19.30	ug/mL	95
10) 1,4-Dichlorobenzene	9.09	146	17619	19.90	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	16808	18.80	ug/mL	99
12) 2-Methylphenol	10.13	108	15585	20.61	ug/mLm	62
13) bis(2-chloroisopropyl)ethe	10.13	45	23996	14.64	ug/mL#	8
14) 4-Methylphenol	10.63	108	16867	20.62	ug/mL	96
15) N-Nitroso-Di-n-propylamine	10.47	70	16063	19.56	ug/mL	95
16) Hexachloroethane	10.43	117	8960	16.89	ug/mL	93
19) Nitrobenzene	10.74	77	21469	22.12	ug/mL#	73
20) Isophorone	10.70	82	59319	34.39	ug/mL#	68
21) 2-Nitrophenol	11.70	139	11002	19.97	ug/mL	97
22) 2,4-Dimethylphenol	10.63	107	20989	21.66	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	24189	20.63	ug/mL#	42
24) 2,4-Dichlorophenol	12.47	162	16624	20.82	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.65	180	16825	18.32	ug/mL	99
26) Naphthalene	12.80	128	52795	20.11	ug/mL#	89
27) 4-Chloroaniline	13.15	127	23600	19.35	ug/mL	98
28) Hexachlorobutadiene	13.32	225	9812	16.62	ug/mL	99
29) 4-Chloro-3-methylphenol	14.86	107	19868	19.58	ug/mL	90
30) 2-Chloronaphthalene	16.38	162	36612	17.42	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	36729	19.16	ug/mL	98
33) Hexachlorocyclopentadiene	15.48	237	8635	12.84	ug/mL	99
34) 2,4,6-Trichlorophenol	15.92	196	13356	18.21	ug/mL	96
35) 2,4,5-Trichlorophenol	16.02	196	13494	17.54	ug/mL	98

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

Data File : c:\hpchem\1\data2\b7751.d Vial: 2
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

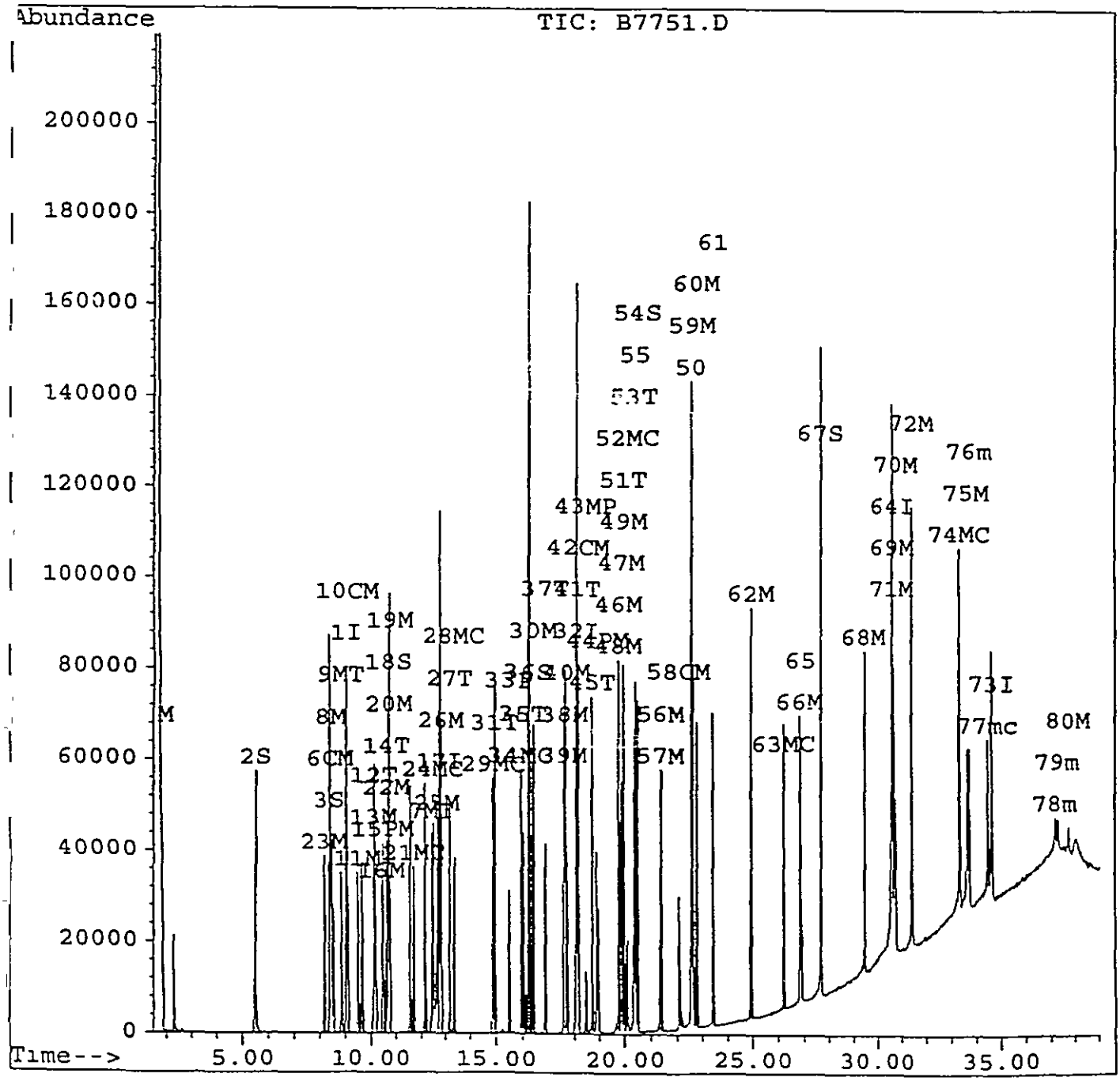
Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.85	65	17876	21.08	ug/mL#	100
38)	Dimethylphthalate	17.62	163	46196	21.25	ug/mL	100
39)	Acenaphthylene	17.58	152	62290	16.75	ug/mL	98
40)	2,6-Dinitrotoluene	17.69	165	10022	19.61	ug/mL	99
41)	3-Nitroaniline	18.12	138	11669	15.38	ug/mL	98
42)	Acenaphthene	18.14	153	38044	16.56	ug/mL	99
43)	2,4-Dinitrophenol	18.44	184	3955	15.55	ug/mLm	95
44)	4-Nitrophenol	18.93	109	5206	21.05	ug/mL	91
45)	Dibenzofuran	18.69	168	55975	17.19	ug/mL	98
46)	2,4-Dinitrotoluene	19.73	165	41635	17.45	ug/mL#	34
47)	Diethylphthalate	19.83	149	51035	19.15	ug/mL	99
48)	Fluorene	19.73	166	45015	17.98	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.93	204	22774	18.71	ug/mL	94
51)	4-Nitroaniline	19.95	138	10837	22.35	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.06	198	5946	17.19	ug/mL	100
53)	n-Nitrosodiphenylamine	20.33	169	30841	25.02	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.39	77	70933	22.38	ug/ml	100
56)	4-Bromophenyl-phenylether	21.37	248	13195	20.03	ug/mL#	89
57)	Hexachlorobenzene	21.35	284	14382	18.78	ug/mL#	51
58)	Pentachlorophenol	22.07	266	7390	16.37	ug/mL	99
59)	Phenanthrene	22.61	178	66272	19.37	ug/mL	98
60)	Anthracene	22.74	178	65476	19.46	ug/mLm	97
61)	Carbazole	23.40	167	58205	18.79	ug/ml	100
62)	Di-n-butylphthalate	24.92	149	96445	16.33	ug/mL	99
63)	Fluoranthene	26.19	202	63031	16.63	ug/mLm	93
65)	Benzidine	26.88	184	21650	24.83	ug/mlm	100
66)	Pyrene	26.83	202	64445	15.73	ug/mL#	87
68)	Butylbenzylphthalate	29.43	149	40290	16.46	ug/mL	90
69)	Benzo[a]anthracene	30.57	228	58860	18.72	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	21074	24.51	ug/mL	98
71)	Chrysene	30.57	228	53653	19.46	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.40	149	58259	15.97	ug/mL	100
74)	Di-n-octylphthalate	33.31	149	92370	9.30	ug/mL	98
75)	Benzo[b]fluoranthene	33.62	252	65848	26.94	ug/mLm	98
76)	Benzo[k]fluoranthene	33.70	252	38434	16.42	ug/mLm	91
77)	Benzo[a]pyrene	34.45	252	40502	24.28	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.16	276	10646	15.19	ug/mL#	85
79)	Dibenz[a,h]anthracene	37.27	278	10355	16.78	ug/mL#	91
80)	Benzo[g,h,i]perylene	37.74	276	8780	14.39	ug/mLm	97

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

Data File : c:\hpchem\1\data2\b7751.d Vial: 2 146
Acq On : 30 May 95 9:44 am Operator: SCOTTV
Sample : 20 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:03 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d Vial: 3 147
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	29664	40.00	ug/mL	-0.27
17) Naphthalene-d8	12.75	136	124059	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	81773	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.52	188	131721	40.00	ug/ml	-0.37
64) Chrysene-d12	30.58	240	118287	40.00	ug/mL	-0.45
73) Perylene-d12	34.60	264	45273	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	39705	48.15	ug/mL	48.15%
3) Phenol-d5	8.39	99	63940	55.92	ug/mL	55.92%
18) Nitrobenzene-d5	10.71	82	67799	52.53	ug/mL	52.53%
36) 2-Fluorobiphenyl	16.20	172	120432	45.21	ug/mL	45.21%
54) 2,4,6-Tribromophenol	20.46	330	17504	48 01	ug/mL	48.01%
67) Terphenyl-d14	27.65	244	130090	42.56	ug/mL	42.56%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.70	74	27115	126.68	ug/mlm	0
6) Phenol	8.43	94	62958	57.46	ug/mL	100
7) bis(2-Chloroethyl)ether	12.42	93	75709	63.88	ug/mL	99
8) 2-Chlorophenol	8.45	128	46179	51.50	ug/mL#	84
9) 1,3-Dichlorobenzene	8.84	146	52488	51.73	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	54452	52.99	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	50964	49.12	ug/mL	99
12) 2-Methylphenol	10.13	108	43177	49.20	ug/mLm	65
13) bis(2-chloroisopropyl)ethe	10.09	45	64159	33.73	ug/mL#	67
14) 4-Methylphenol	10.63	108	48583	51.18	ug/mL	98
15) N-Nitroso-Di-n-propylamine	10.49	70	46969	49.27	ug/mL	99
16) Hexachloroethane	10.42	117	27701	44.99	ug/mL#	69
19) Nitrobenzene	10.76	77	67644	58.02	ug/mL	89
20) Isophorone	11.57	82	126657	61.12	ug/mL	97
21) 2-Nitrophenol	11.69	139	31019	46.87	ug/mL	88
22) 2,4-Dimethylphenol	10.63	107	59303	50.95	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	70617	50.13	ug/mL#	42
24) 2,4-Dichlorophenol	12.48	162	45218	47.12	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.65	180	49933	45.25	ug/mL	98
26) Naphthalene	12.81	128	149358	47.34	ug/mL#	91
27) 4-Chloroaniline	13.15	127	72575	49.52	ug/mL	100
28) Hexachlorobutadiene	13.33	225	28798	40.59	ug/mL	98
29) 4-Chloro-3-methylphenol	14.87	107	59715	48.98	ug/mL	99
30) 2-Chloronaphthalene	16.37	162	108511	42.96	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	108935	47.31	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	26413	35.57	ug/mL	98
34) 2,4,6-Trichlorophenol	15.91	196	38933	48.06	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	37853	44.55	ug/mL	100

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7752.d Vial: 3
Acq On : 30 May 95 10:35 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 10:04 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.85	65	59044	63.04	ug/mL#	100
38)	Dimethylphthalate	17.62	163	132350	55.11	ug/mL	99
39)	Acenaphthylene	17.58	152	174919	42.58	ug/mL	99
40)	2,6-Dinitrotoluene	17.70	165	33402	59.16	ug/mL	98
41)	3-Nitroaniline	18.12	138	37075	44.25	ug/mL	98
42)	Acenaphthene	18.14	153	104702	41.25	ug/mL	100
43)	2,4-Dinitrophenol	18.45	184	15812	56.30	ug/mL#	91
44)	4-Nitrophenol	18.93	109	17219	63.03	ug/mL#	83
45)	Dibenzofuran	18.70	168	170626	47.45	ug/mL	97
46)	2,4-Dinitrotoluene	19.72	165	116800	44.33	ug/mL#	32
47)	Diethylphthalate	19.86	149	148456	50.42	ug/mL	98
48)	Fluorene	19.72	166	125476	45.36	ug/mL	98
49)	4-Chlorophenyl-phenylether	19.92	204	60420	44.93	ug/mL	95
51)	4-Nitroaniline	19.99	138	35220	68.23	ug/mL	97
52)	4,6-Dinitro-2-methylphenol	20.09	198	21308	57.84	ug/mL	100
53)	n-Nitrosodiphenylamine	20.32	169	87310	66.53	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.38	77	216080	64.04	ug/ml	100
56)	4-Bromophenyl-phenylether	21.36	248	36244	51.67	ug/mL#	89
57)	Hexachlorobenzene	21.34	284	37570	46.07	ug/mL#	76
58)	Pentachlorophenol	22.06	266	21962	45.70	ug/mL	98
59)	Phenanthrene	22.60	178	180287	49.49	ug/mL	100
60)	Anthracene	22.75	178	169255	47.24	ug/mLm	99
61)	Carbazole	23.39	167	158797	48.15	ug/ml	99
62)	Di-n-butylphthalate	24.91	149	269738	42.89	ug/mL	100
63)	Fluoranthene	26.20	202	185037	45.86	ug/mLm	81
65)	Benzidine	26.87	184	58973	57.88	ug/mlm	100
66)	Pyrene	26.84	202	187374	39.15	ug/mL	97
68)	Butylbenzylphthalate	29.42	149	124656	43.57	ug/mL	91
69)	Benzo[a]anthracene	30.56	228	198412	54.00	ug/mL	100
70)	3,3'-Dichlorobenzidine	30.71	252	52146	51.91	ug/mL	98
71)	Chrysene	30.66	228	113518	35.24	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.39	149	183732	43.10	ug/mL	99
74)	Di-n-octylphthalate	33.30	149	267010	33.18	ug/mL	98
75)	Benzo[b]fluoranthene	33.63	252	142718	72.04	ug/mL	98
76)	Benzo[k]fluoranthene	33.71	252	62677	33.05	ug/mLm	95
77)	Benzo[a]pyrene	34.44	252	76698	56.74	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	37.16	276	23591	41.53	ug/mLm	96
79)	Dibenz[a,h]anthracene	37.28	278	20678	41.35	ug/mL	96
80)	Benzo[g,h,i]perylene	37.74	276	18451	37.32	ug/mL	95

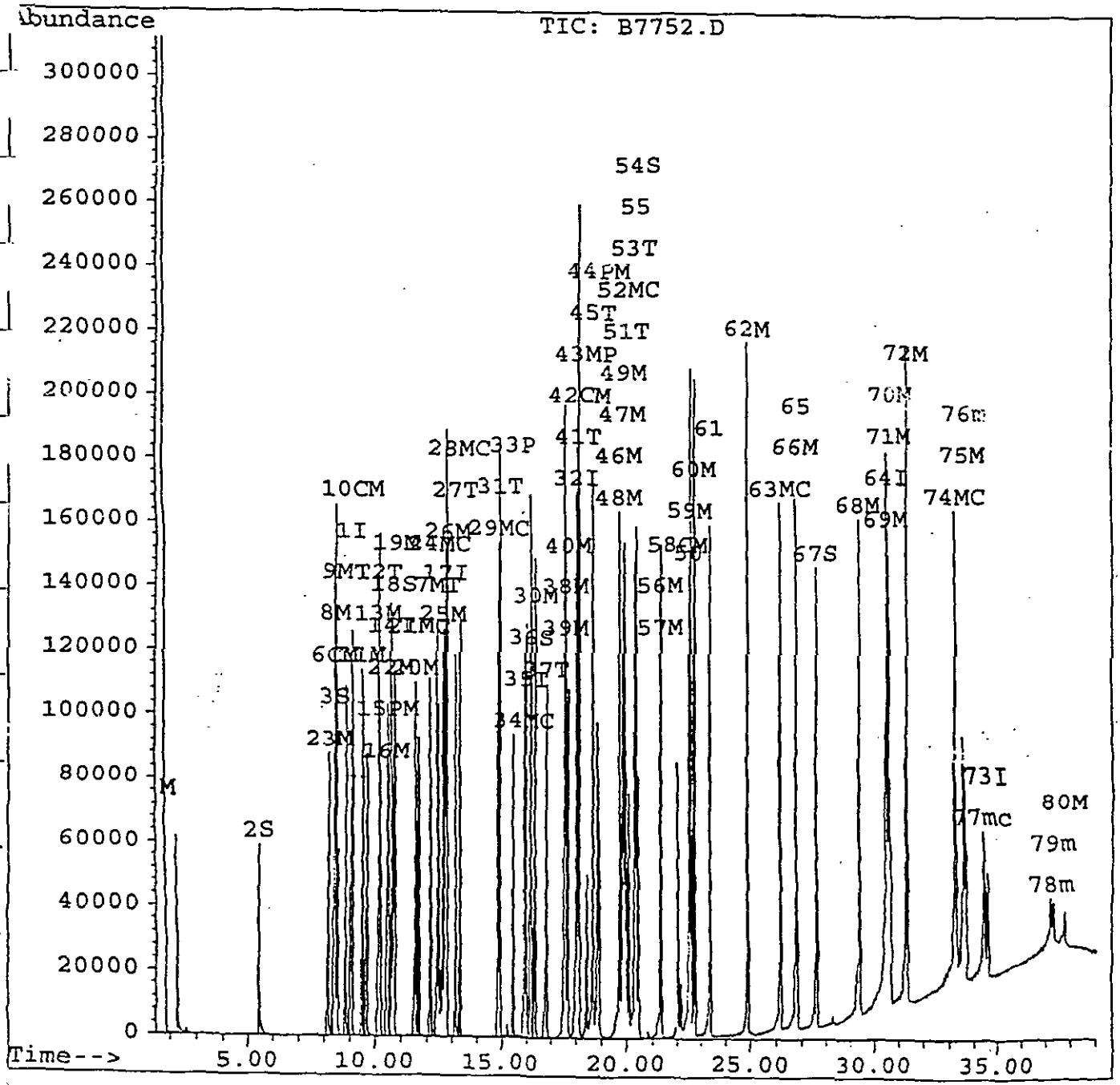
(#) = qualifier out of range (m) = manual integration

Data File : c:\hpchem\1\data2\b7752.d
Acq On : 30 May 95 10:35 am
Sample : 50 STD.....
Misc :
Quant Time: May 31 10:04 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 : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	29814	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.75	136	126317	40.00	ug/mL	-0.28
32) Acenaphthene-d10	18.05	164	87574	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.54	188	151522	40.00	ug/ml	-0.35
64) Chrysene-d12	30.60	240	106944	40.00	ug/mL	-0.42
73) Perylene-d12	34.60	264	39840	40.00	ug/mL	-0.45
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	43593	52.60	ug/mL	52.60%
3) Phenol-d5	8.41	99	71703	62.40	ug/mL	62.40%
18) Nitrobenzene-d5	10.72	82	75552	57.49	ug/mL	57.49%
36) 2-Fluorobiphenyl	16.22	172	134602	47.18	ug/mL	47.18%
54) 2,4,6-Tribromophenol	20.48	330	21167	50.47	ug/mL	50.47%
67) Terphenyl-d14	27.65	244	150199	54.35	ug/mL	54.35%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.62	74	25992	120.82	ug/ml	100
6) Phenol	8.45	94	100529	91.29	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	125480	105.34	ug/mL	99
8) 2-Chlorophenol	8.45	128	77924	86.47	ug/mL#	89
9) 1,3-Dichlorobenzene	8.86	146	88850	87.12	ug/mL	98
10) 1,4-Dichlorobenzene	9.09	146	90142	87.29	ug/mL	98
11) 1,2-Dichlorobenzene	9.49	146	86576	83.03	ug/mL	99
12) 2-Methylphenol	10.15	108	75232	85.29	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	118548	62.01	ug/mL#	81
14) 4-Methylphenol	10.65	108	79296	83.11	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	87737	91.57	ug/mL	94
16) Hexachloroethane	10.44	117	47246	76.35	ug/mL	93
19) Nitrobenzene	10.78	77	116413	98.06	ug/mL#	86
20) Isophorone	11.61	82	221062	104.76	ug/mL	99
21) 2-Nitrophenol	11.71	139	56797	84.29	ug/mL	91
22) 2,4-Dimethylphenol	10.65	107	97981	82.67	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	117962	82.25	ug/mL#	42
24) 2,4-Dichlorophenol	12.50	162	77661	79.49	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.65	180	82424	73.37	ug/mL	100
26) Naphthalene	12.83	128	262498	81.72	ug/mL#	92
27) 4-Chloroaniline	13.17	127	118867	79.65	ug/mL	99
28) Hexachlorobutadiene	13.33	225	47670	66.00	ug/mL	96
29) 4-Chloro-3-methylphenol	14.87	107	100652	81.09	ug/mL	90
30) 2-Chloronaphthalene	16.39	162	181668	70.65	ug/ml	100
31) 2-Methylnaphthalene	14.94	142	161698	68.97	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	52969	66.60	ug/mL	100
34) 2,4,6-Trichlorophenol	15.93	196	72387	83.44	ug/mL	98
35) 2,4,5-Trichlorophenol	16.00	196	60973	67.01	ug/mL	98

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d Vial: 4
Acq On : 30 May 95 11:27 am Operator: SCOTTV
Sample : 80 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:32 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.87	65	103690	103.37	ug/mL#	100
38)	Dimethylphthalate	17.66	163	240471	93.49	ug/mL#	99
39)	Acenaphthylene	17.60	152	316138	71.86	ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	60631	100.28	ug/mL	92
41)	3-Nitroaniline	18.16	138	70580	78.65	ug/mL	92
42)	Acenaphthene	18.16	153	181405	66.74	ug/mL	99
43)	2,4-Dinitrophenol	18.47	184	34630	115.13	ug/mL	93
44)	4-Nitrophenol	18.95	109	33002	112.80	ug/mL	86
45)	Dibenzofuran	18.70	168	295374	76.70	ug/mL	95
46)	2,4-Dinitrotoluene	19.74	165	209002	74.07	ug/mL#	32
47)	Diethylphthalate	19.86	149	275990	87.53	ug/mL	98
48)	Fluorene	19.74	166	226899	76.60	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.94	204	107387	74.57	ug/mL	95
51)	4-Nitroaniline	20.03	138	48638	81.91	ug/mL	96
52)	4,6-Dinitro-2-methylphenol	20.11	198	45736	107.93	ug/mL	100
53)	n-Nitrosodiphenylamine	20.34	169	161028	106.67	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.40	77	388272	100.03	ug/ml	100
56)	4-Bromophenyl-phenylether	21.38	248	64383	79.79	ug/mL	94
57)	Hexachlorobenzene	21.37	284	73929	78.80	ug/mL#	70
58)	Pentachlorophenol	22.06	266	46630	84.35	ug/mL	97
59)	Phenanthrene	22.62	178	357765	85.38	ug/mL	99
60)	Anthracene	22.77	178	341982	82.98	ug/mLm	98
61)	Carbazole	23.41	167	335154	88.34	ug/ml	99
62)	Di-n-butylphthalate	24.91	149	529878	73.24	ug/mL	99
63)	Fluoranthene	26.20	202	352244	75.89	ug/mLm	91
65)	Benzidine	26.88	184	77859	84.53	ug/ml	100
66)	Pyrene	26.84	202	354638	81.96	ug/mL#	89
68)	Butylbenzylphthalate	29.42	149	231051	89.32	ug/mL	95
69)	Benzo[a]anthracene	30.58	228	370214	111.44	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	100778	110.96	ug/mL	98
71)	Chrysene	30.68	228	221302	75.99	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.39	149	333704	86.58	ug/mL	97
74)	Di-n-octylphthalate	33.30	149	471006	66.51	ug/mL	99
75)	Benzo[b]fluoranthene	33.63	252	222662	127.72	ug/mL	97
76)	Benzo[k]fluoranthene	33.71	252	100220	60.05	ug/mLm	94
77)	Benzo[a]pyrene	34.44	252	101126	85.01	ug/mLm	99
78)	Indeno[1,2,3-cd]pyrene	37.17	276	35858	71.73	ug/mL	88
79)	Dibenz[a,h]anthracene	37.28	278	36175	82.20	ug/mL	94
80)	Benzo[g,h,i]perylene	37.75	276	30352	69.77	ug/mLm	99

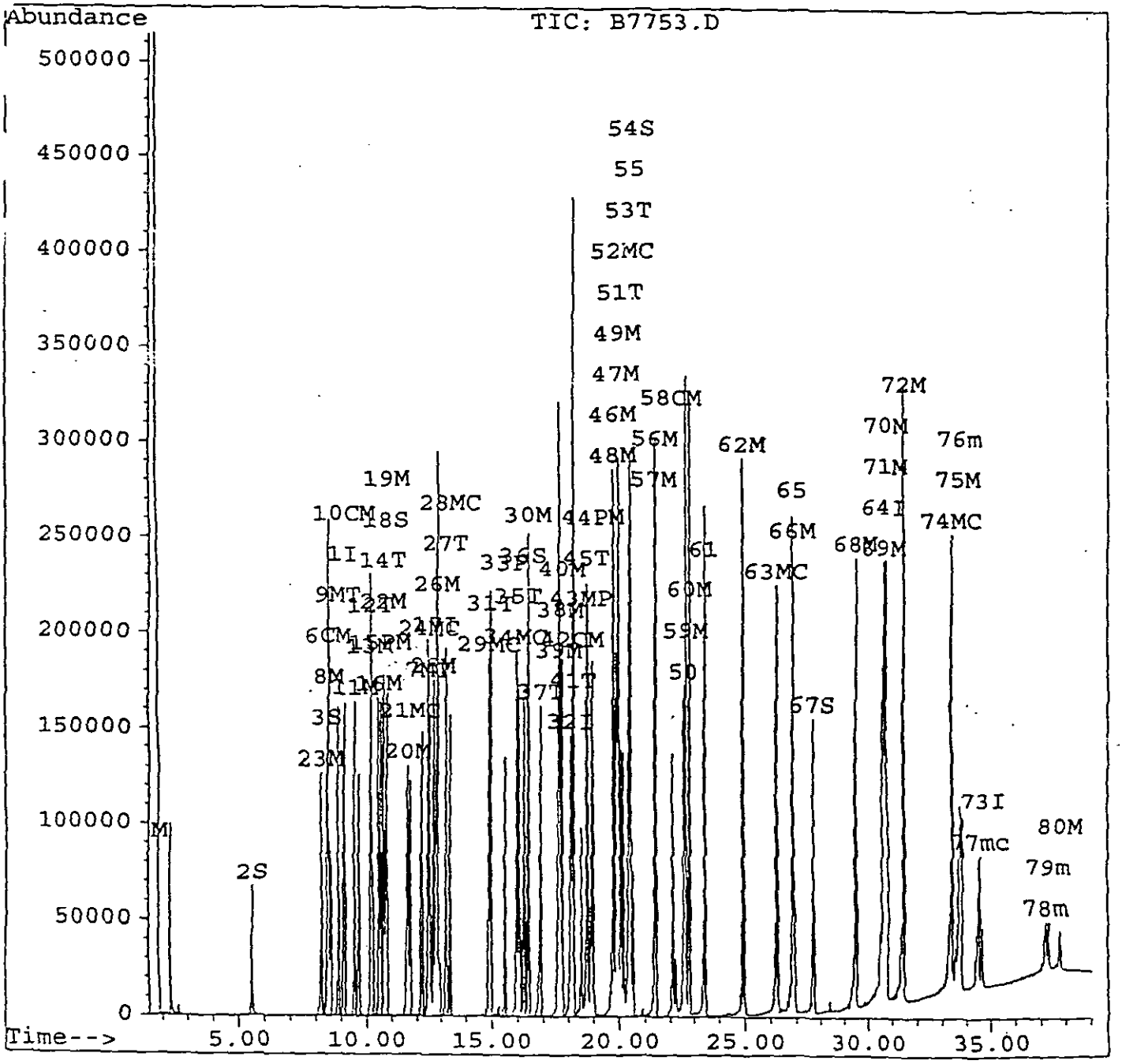
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d
Acq On : 30 May 95 11:27 am
Sample : 80 STD..... Converted from RTE d
Misc :
Quant Time: May 31 9:32 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 May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	27011	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.77	136	112346	40.00	ug/mL	-0.26
32) Acenaphthene-d10	18.05	164	74142	40.00	ug/mL	-0.33
50) Phenanthrene-d10	22.53	188	133454	40.00	ug/ml	-0.36
64) Chrysene-d12	30.59	240	102268	40.00	ug/mL	-0.43
73) Perylene-d12	34.61	264	30843	40.00	ug/mL	-0.44
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	40691	54.19	ug/mL	54.19%
3) Phenol-d5	8.41	99	68173	65.48	ug/mL	65.48%
18) Nitrobenzene-d5	10.73	82	65499	56.04	ug/mL	56.04%
36) 2-Fluorobiphenyl	16.22	172	116201	48.11	ug/mL	48.11%
54) 2,4,6-Tribromophenol	20.48	330	18886	51.13	ug/mL	51.13%
67) Terphenyl-d14	27.64	244	132840	50.26	ug/mL	50.26%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.64	74	44263	227.10	ug/ml	100
6) Phenol	8.47	94	145178	145.51	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	168732	156.34	ug/mL	98
8) 2-Chlorophenol	8.47	128	104043	127.43	ug/mL#	87
9) 1,3-Dichlorobenzene	8.86	146	113739	123.10	ug/mL	98
10) 1,4-Dichlorobenzene	9.11	146	118937	127.12	ug/mL	99
11) 1,2-Dichlorobenzene	9.49	146	112702	119.30	ug/mL	98
12) 2-Methylphenol	10.17	108	102718	128.54	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.11	45	150752	87.04	ug/mL#	79
14) 4-Methylphenol	10.67	108	116050	134.26	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.53	70	117037	134.82	ug/mL	99
16) Hexachloroethane	10.44	117	61265	109.28	ug/mL#	81
19) Nitrobenzene	10.78	77	137726	130.44	ug/mL#	79
20) Isophorone	11.63	82	286449	152.63	ug/mL	100
21) 2-Nitrophenol	11.73	139	75814	126.50	ug/mL	95
22) 2,4-Dimethylphenol	10.67	107	144674	137.24	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.18	93	151120	118.47	ug/mL#	42
24) 2,4-Dichlorophenol	12.52	162	100762	115.96	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.67	180	107106	107.19	ug/mL	98
26) Naphthalene	12.83	128	319371	111.79	ug/mL#	91
27) 4-Chloroaniline	13.17	127	156643	118.02	ug/mL	98
28) Hexachlorobutadiene	13.35	225	62689	97.58	ug/mL	98
29) 4-Chloro-3-methylphenol	14.89	107	133371	120.81	ug/mL#	86
30) 2-Chloronaphthalene	16.39	162	229152	100.19	ug/ml	100
31) 2-Methylnaphthalene	14.96	142	331843	159.13	ug/mL	97
33) Hexachlorocyclopentadiene	15.46	237	67420	100.13	ug/mL	97
34) 2,4,6-Trichlorophenol	15.93	196	100492	136.82	ug/mL	99
35) 2,4,5-Trichlorophenol	16.00	196	70403	91.40	ug/mL	99

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

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

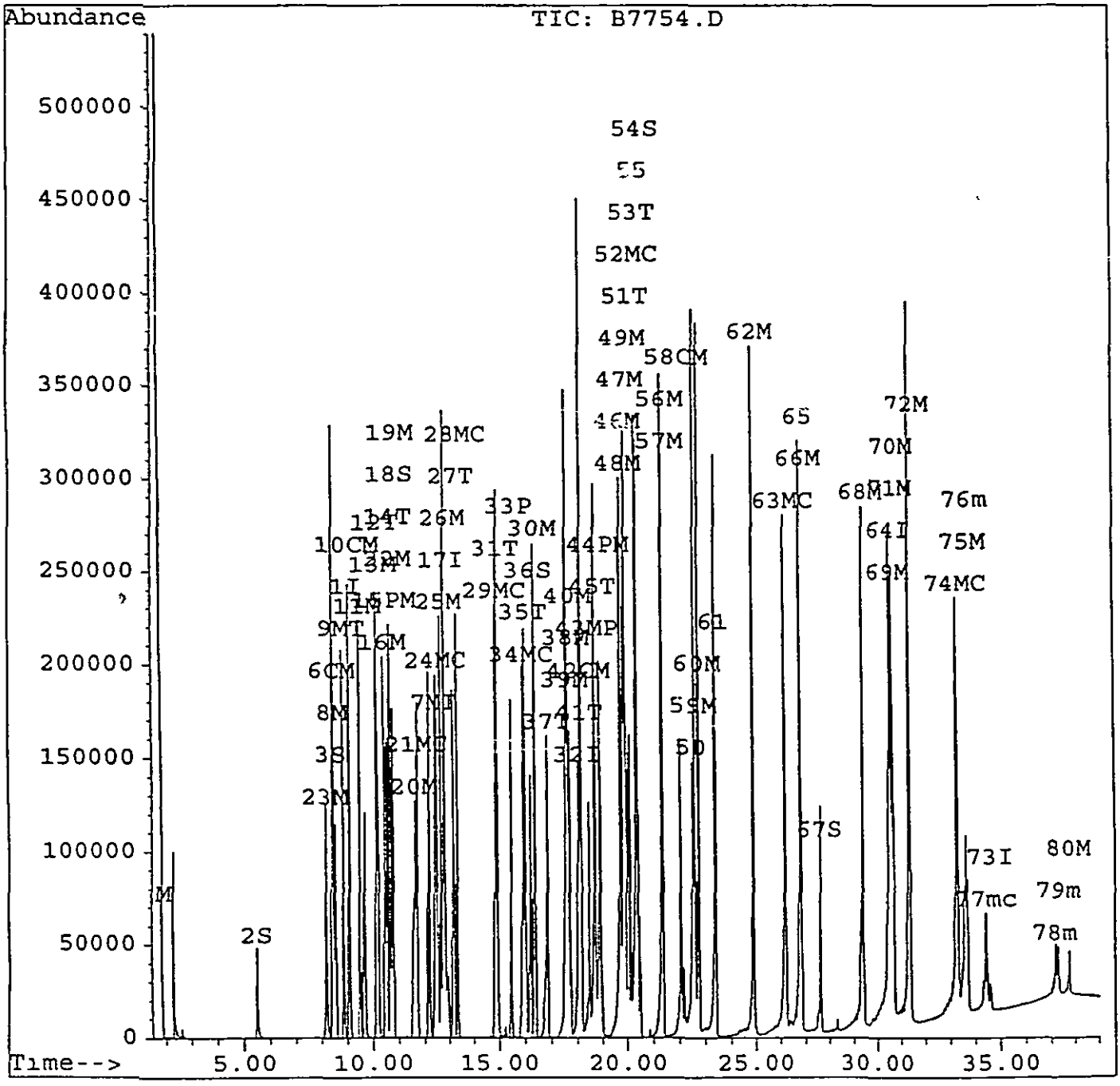
Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	2-Nitroaniline	16.87	65	125966	148.33 ug/mL#	100
38)	Dimethylphthalate	17.66	163	299887	137.71 ug/mL	99
39)	Acenaphthylene	17.61	152	381978	102.55 ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	69446	135.67 ug/mLm	93
41)	3-Nitroaniline	18.16	138	82189	108.18 ug/mL	95
42)	Acenaphthene	18.16	153	234884	102.07 ug/mL	99
43)	2,4-Dinitrophenol	18.49	184	47322	185.83 ug/mL	87
44)	4-Nitrophenol	18.96	109	39654	160.09 ug/mL	90
45)	Dibenzofuran	18.72	168	378169	115.99 ug/mL	98
46)	2,4-Dinitrotoluene	19.75	165	276442	115.72 ug/mL#	32
47)	Diethylphthalate	19.86	149	341020	127.75 ug/mL	99
48)	Fluorene	19.75	166	296520	118.24 ug/mL	98
49)	4-Chlorophenyl-phenylether	19.94	204	135159	110.86 ug/mL	94
51)	4-Nitroaniline	20.06	138	60415	115.52 ug/mL	95
52)	4,6-Dinitro-2-methylphenol	20.13	198	56816	152.23 ug/mLm	100
53)	n-Nitrosodiphenylamine	20.35	169	209653	157.68 ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.40	77	500723	146.47 ug/ml	100
56)	4-Bromophenyl-phenylether	21.39	248	79413	111.75 ug/mL	95
57)	Hexachlorobenzene	21.37	284	92449	111.89 ug/mL#	68
58)	Pentachlorophenol	22.06	266	59890	123.01 ug/mL	99
59)	Phenanthrene	22.62	178	457295	123.90 ug/mL	99
60)	Anthracene	22.78	178	408657	112.58 ug/mLm	99
61)	Carbazole	23.41	167	420878	125.96 ug/ml	99
62)	Di-n-butylphthalate	24.92	149	658579	103.35 ug/mL	100
63)	Fluoranthene	26.21	202	379190	92.76 ug/mLm	91
65)	Benzidine	26.87	184	131098	148.83 ug/mlm	100
66)	Pyrene	26.85	202	445627	107.70 ug/mL#	89
68)	Butylbenzylphthalate	29.43	149	293901	118.82 ug/mL	93
69)	Benzo[a]anthracene	30.57	228	469239	147.71 ug/mL	99
70)	3,3'-Dichlorobenzidine	30.73	252	106370	122.47 ug/mL#	97
71)	Chrysene	30.67	228	211972	76.11 ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.40	149	408257	110.77 ug/mL	98
74)	Di-n-octylphthalate	33.31	149	505170	92.14 ug/mL	100
75)	Benzo[b]fluoranthene	33.64	252	204971	151.87 ug/mLm	97
76)	Benzo[k]fluoranthene	33.72	252	88924	68.83 ug/mLm	96
77)	Benzo[a]pyrene	34.45	252	87415	94.92 ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.18	276	48224	124.60 ug/mL#	81
79)	Dibenz[a,h]anthracene	37.31	278	47851	140.44 ug/mL	98
80)	Benzo[g,h,i]perylene	37.76	276	34423	102.21 ug/mLm	95

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

Data File : c:\hpchem\1\data2\b7754.d Vial: 5
Acq On : 30 May 95 12:20 pm Operator: SCOTTV
Sample : 120 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:49 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d Vial: 6
Acq On : 30 May 95 1:12 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:52 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	29361	40.00	ug/mL	-0.26
17) Naphthalene-d8	12.77	136	123075	40.00	ug/mL	-0.26
32) Acenaphthene-d10	18.07	164	86872	40.00	ug/mL	-0.31
50) Phenanthrene-d10	22.53	188	155037	40.00	ug/ml	-0.36
64) Chrysene-d12	30.60	240	82528	40.00	ug/mL	-0.43
73) Perylene-d12	34.62	264	32039	40.00	ug/mL	-0.43
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.47	112	38395	47.04	ug/mL	47.04%
3) Phenol-d5	8.43	99	66343	58.62	ug/mL	58.62%
18) Nitrobenzene-d5	10.73	82	67218	52.50	ug/mL	52.50%
36) 2-Fluorobiphenyl	16.22	172	126324	44.63	ug/mL	44.63%
54) 2,4,6-Tribromophenol	20.49	330	18970	44.21	ug/mL	44.21%
67) Terphenyl-d14	27.64	244	139748	65.52	ug/mL	65.52%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.64	74	70397	332.28	ug/ml	100
6) Phenol	8.47	94	169408	156.21	ug/mL	100
7) bis(2-Chloroethyl)ether	12.46	93	222301	189.49	ug/mL	91
8) 2-Chlorophenol	8.47	128	133653	150.59	ug/mL#	88
9) 1,3-Dichlorobenzene	8.86	146	152142	151.49	ug/mL	97
10) 1,4-Dichlorobenzene	9.11	146	154778	152.19	ug/mL	98
11) 1,2-Dichlorobenzene	9.49	146	147372	143.51	ug/mL	99
12) 2-Methylphenol	10.17	108	130214	149.90	ug/mLm	63
13) bis(2-chloroisopropyl)ethe	10.13	45	221469	117.64	ug/mL	93
14) 4-Methylphenol	10.67	108	142777	151.95	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.55	70	151444	160.49	ug/mL	97
16) Hexachloroethane	10.44	117	81125	133.13	ug/mL#	82
19) Nitrobenzene	10.80	77	196043	169.49	ug/mL#	87
20) Isophorone	11.65	82	382084	185.84	ug/mL	99
21) 2-Nitrophenol	11.73	139	92995	141.64	ug/mL	89
22) 2,4-Dimethylphenol	10.67	107	178112	154.23	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.20	93	217251	155.46	ug/mL#	42
24) 2,4-Dichlorophenol	12.52	162	133269	140.00	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.67	180	144061	131.61	ug/mL	99
26) Naphthalene	12.83	128	453739	144.98	ug/mL#	91
27) 4-Chloroaniline	13.19	127	223903	153.98	ug/mL	98
28) Hexachlorobutadiene	13.35	225	86033	122.24	ug/mL	97
29) 4-Chloro-3-methylphenol	14.89	107	174950	144.66	ug/mL#	75
30) 2-Chloronaphthalene	16.39	162	331044	132.12	ug/ml	99
31) 2-Methylnaphthalene	14.97	142	438189	191.81	ug/mL	98
33) Hexachlorocyclopentadiene	15.49	237	102334	129.71	ug/mL	99
34) 2,4,6-Trichlorophenol	15.95	196	163412	189.89	ug/mL	97
35) 2,4,5-Trichlorophenol	16.03	196	76742	85.03	ug/mL	98

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d Vial: 6
Acq On : 30 May 95 1:12 pm Operator: SCOTTV
Sample : 160 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: May 31 9:52 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37)	2-Nitroaniline	16.89	65	183241	184.15	ug/mL#	100
38)	Dimethylphthalate	17.67	163	428564	167.96	ug/mL	99
39)	Acenaphthylene	17.61	152	558058	127.87	ug/mL	99
40)	2,6-Dinitrotoluene	17.76	165	102561	171.00	ug/mLm	92
41)	3-Nitroaniline	18.17	138	96949	108.91	ug/mL	100
42)	Acenaphthene	18.17	153	341152	126.53	ug/mL	99
43)	2,4-Dinitrophenol	18.50	184	65640	219.99	ug/mL	88
44)	4-Nitrophenol	18.96	109	52458	180.75	ug/mL	93
45)	Dibenzofuran	18.73	168	512481	134.15	ug/mL	98
46)	2,4-Dinitrotoluene	19.77	165	393324	140.52	ug/mL#	35
47)	Diethylphthalate	19.89	149	442732	141.55	ug/mL	97
48)	Fluorene	19.77	166	424603	144.50	ug/mL	99
49)	4-Chlorophenyl-phenylether	19.94	204	192605	134.83	ug/mL	98
51)	4-Nitroaniline	20.08	138	81046	133.39	ug/mL	90
52)	4,6-Dinitro-2-methylphenol	20.16	198	87159	201.02	ug/mLm	100
53)	n-Nitrosodiphenylamine	20.37	169	283832	183.75	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.41	77	660607	166.34	ug/ml	100
56)	4-Bromophenyl-phenylether	21.39	248	115508	139.91	ug/mLm	91
57)	Hexachlorobenzene	21.37	284	85494	89.06	ug/mLm	53
58)	Pentachlorophenol	22.09	266	81327	143.79	ug/mL	100
59)	Phenanthrene	22.63	178	609750	142.21	ug/mL	99
60)	Anthracene	22.78	178	501796	118.99	ug/mLm	99
61)	Carbazole	23.40	167	406913	104.82	ug/ml	98
62)	Di-n-butylphthalate	24.92	149	893793	120.74	ug/mL	99
63)	Fluoranthene	26.22	202	572007	120.45	ug/mLm	92
65)	Benzidine	26.87	184	187882	264.32	ug/ml	100
66)	Pyrene	26.85	202	612856	183.54	ug/mL#	89
68)	Butylbenzylphthalate	29.44	149	373168	186.95	ug/mL	91
69)	Benzo[a]anthracene	30.58	228	598348	233.40	ug/mL	99
70)	3,3'-Dichlorobenzidine	30.72	252	113910	162.52	ug/mL	99
71)	Chrysene	30.68	228	218157	97.07	ug/mLm	98
72)	bis(2-Ethylhexyl)phthalate	31.41	149	506955	170.44	ug/mL	96
74)	Di-n-octylphthalate	33.32	149	549407	96.47	ug/mL	99
75)	Benzo[b]fluoranthene	33.65	252	313299	223.47	ug/mLm	96
76)	Benzo[k]fluoranthene	33.65	252	159963	119.19	ug/mLm	96
77)	Benzo[a]pyrene	34.46	252	142747	149.22	ug/mLm	97
78)	Indeno[1,2,3-cd]pyrene	37.20	276	63169	157.13	ug/mL	98
79)	Dibenz[a,h]anthracene	37.32	278	60387	170.62	ug/mL	99
80)	Benzo[g,h,i]perylene	37.76	276	49358	141.09	ug/mLm	94

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

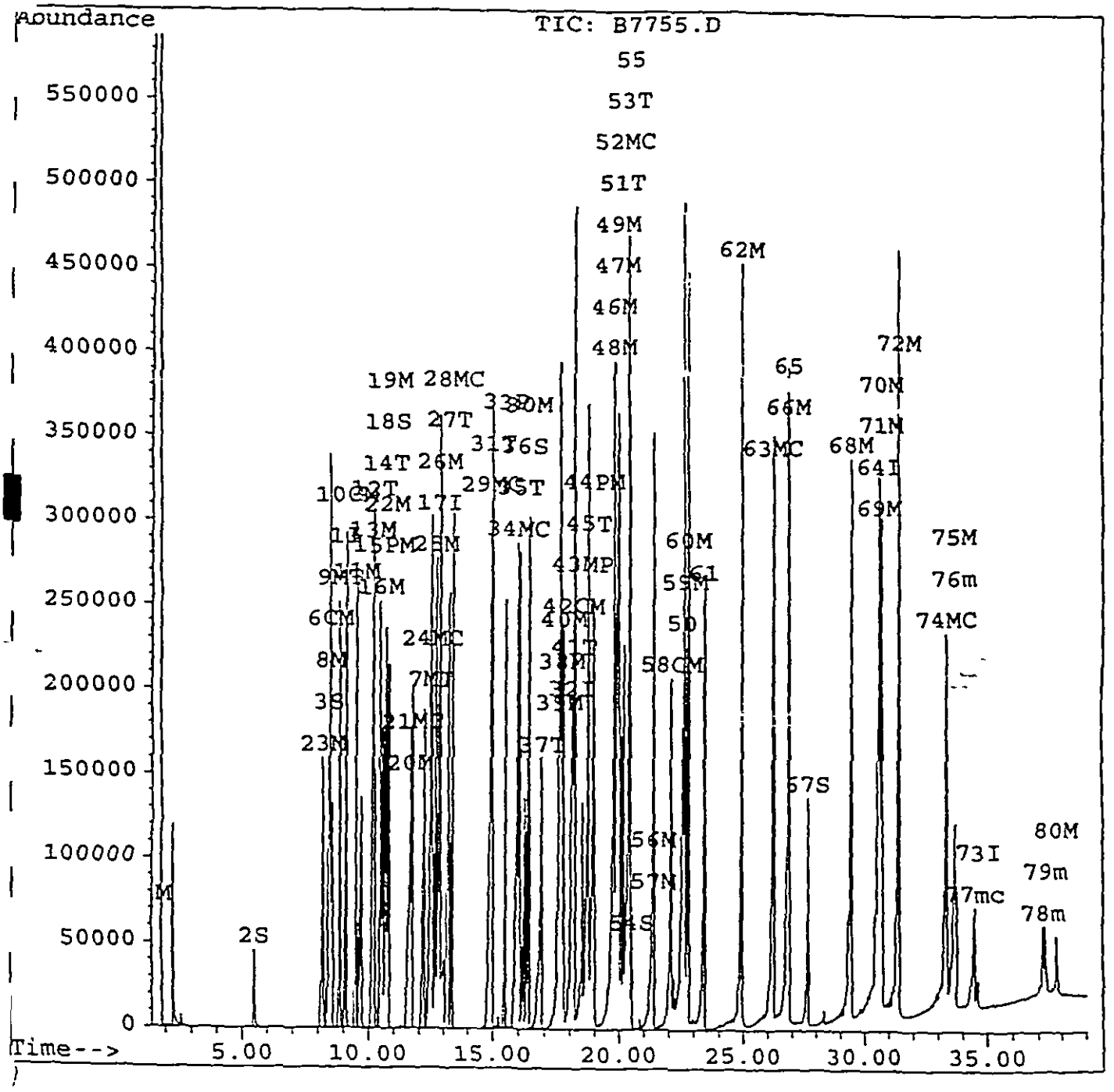
Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d
Acq On : 30 May 95 1:12 pm
Sample : 160 STD.....
Misc :
Quant Time: May 31 9:52 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 : Tue May 30 08:17:48 1995
Response via : Multiple Level Calibration



SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name : EMSL ANALYTICAL Contract: _____

Project No _____ Site. _____ Location: _____ Group _____

Lab File ID B7802 D DFTPP Injection Date 6/3/95

Instrument ID ABNA DFTPP Injection Time. 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30 0 - 80 0% of mass 198	53.6
68	Less than 2 0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	60.9
70	Less than 2 0% of mass 69	0.0 (0.0)1
127	25 0 - 75 0% of mass 198	47 3
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	7.2
275	10.0 - 30 0% of mass 198	22.9
365	Greater than 0 75% of mass 198	2.8
441	Present, but less than mass 443	11.1
442	40 0 - 110.0% of mass 198	70.8
443	15 0 - 24 0% of mass 442	14.0 (19 8)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	B7803.D	6/3/95	1013
02	SBLK01	BLANK1	B7804.D	6/3/95	1104
03	9521072B	9521072B	B7805.D	6/3/95	1154
04	9521073B	9521073B	B7806.D	6/3/95	1244
05	SBLK02	BLANK2	B7807.D	6/3/95	1334
06	9522265B	9522265B	B7808.D	6/3/95	1424
07	9522845B	9522845B	B7809.D	6/3/95	1515
08	SBLK03	BLANK3	B7810.D	6/3/95	1606
09	9523339B	9523339B	B7811.D	6/3/95	1656
10	9523341B	9523341B	B7812.D	6/3/95	1747
11	9523342B	9523342B	B7813 D	6/3/95	1838
12	9523343B	9523343B	B7814 D	6/3/95	1928
13	9523530B	9523530B	B7815.D	6/3/95	2018
14	9523531B	9523531B	B7816 D	6/3/95	2108
15	9523533B	9523533B	B7817 D	6/3/95	2158
16	9523534B	9523534B	B7818.D	6/3/95	2248
17	9523535B	9523535B	B7819.D	6/3/95	2337
18	9523536B	9523536B	B7820 D	6/4/95	0027
19	SBLK04	BLANK4	B7821 D	6/4/95	0117
20	9523789B	9523789B	B7822 D	6/4/95	0206
21	9523792B	9523792B	B7823 D	6/4/95	0256
22	9523787B	9523787B	B7824.D	6/4/95	0346

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name EMSL ANALYTICAL Contract _____

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

Lab File ID B7802 D DFTPP Injection Date 6/3/95

Instrument ID ABNA DFTPP Injection Time: 0953

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	53 6
68	Less than 2 0% of mass 69	0 0 (0 0)1
69	Mass 69 relative abundance	60 9
70	Less than 2 0% of mass 69	0.0 (0 0)1
127	25.0 - 75.0% of mass 198	47 3
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	7.2
275	10.0 - 30 0% of mass 198	22.9
365	Greater than 0.75% of mass 198	2.8
441	Present, but less than mass 443	11.1
442	40 0 - 110.0% of mass 198	70.8
443	15.0 - 24 0% of mass 442	14 0 (19 8)2

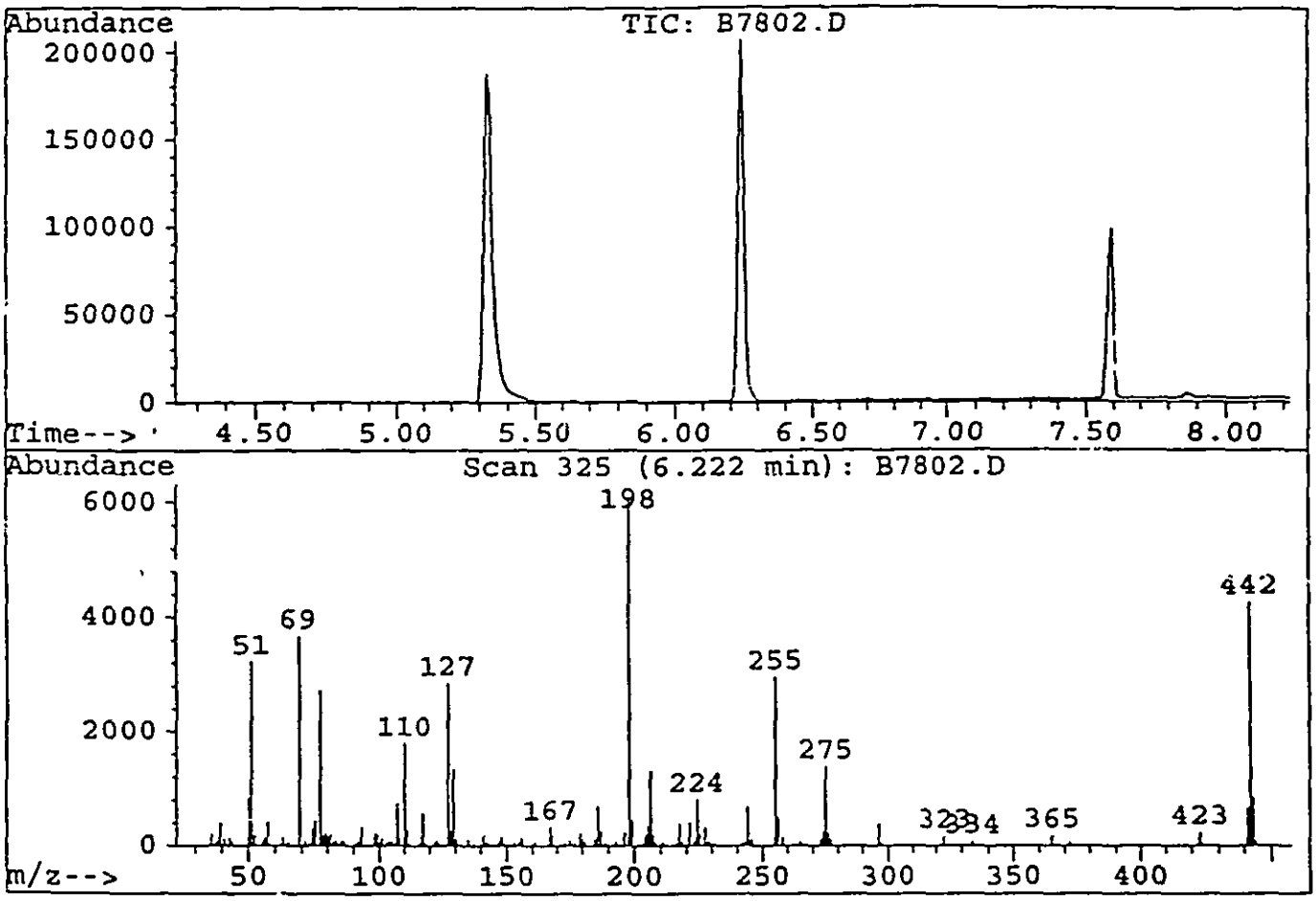
1-Value is % mass 69 2-Value is % mass 442

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	SBLK05	BLANK5	B7825.D	6/4/95	0435
02	22654MS	22654MS	B7826 D	6/4/95	0525
03	22654MSD	22654MSD	B7827.D	6/4/95	0615
04	22659MS	22659MS	B7828.D	6/4/95	0704
05	22659MSD	22659MSD	B7829.D	6/4/95	0754
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : C:\HPCHEM\1\DATA2\B7802.D Vial: 1
Acq On : 3 Jun 95 9:53 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: 325

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	53.6	3226	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	60.9	3667	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	47.3	2846	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	6021	PASS
199	198	5	9	7.2	434	PASS
275	198	10	30	22.9	1379	PASS
365	198	1	100	2.8	170	PASS
441	443	0	100	79.3	669	PASS
442	198	40	100	70.8	4261	PASS
443	442	17	23	19.8	844	PASS

: 1 325 (6.222 min): B7802.D
: PP..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	195	57.05	413	79.95	160	99.05	186
37.90	74	63.05	134	81.05	193	100.05	51
39.10	386	65.05	66	81.95	54	100.95	118
41.05	94	68.95	3667	82.95	76	102.95	50
43.05	140	71.15	74	85.05	67	103.95	70
43.95	71	73.05	38	85.95	78	105.05	69
50.05	844	74.05	294	87.05	29	106.15	34
51.05	3226	74.95	427	90.95	51	107.05	746
52.05	179	77.05	2720	92.05	75	107.95	136
55.15	74	78.05	169	92.95	316	109.95	1785
55.95	133	79.05	215	98.05	224	111.05	275

can 325 (6.222 min): B7802.D
PPP..... Converted from RTE data file >B7802::D5

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
111.85	36	134.90	114	160.00	39	186.00	683
116.05	42	140.90	173	161.00	63	187.00	242
117.05	564	142.10	53	167.00	318	188.90	51
118.05	51	142.90	34	168.00	162	193.00	70
121.90	66	145.90	30	173.00	42	196.10	225
123.00	89	147.00	83	175.00	88	198.00	6021
123.90	35	147.90	160	177.00	64	199.00	434
127.00	2846	149.00	36	179.00	216	201.65	29
128.10	250	152.90	50	180.00	127	202.95	41
128.90	1336	155.00	69	180.90	71	203.95	197
130.10	102	156.00	130	185.00	110	205.05	353

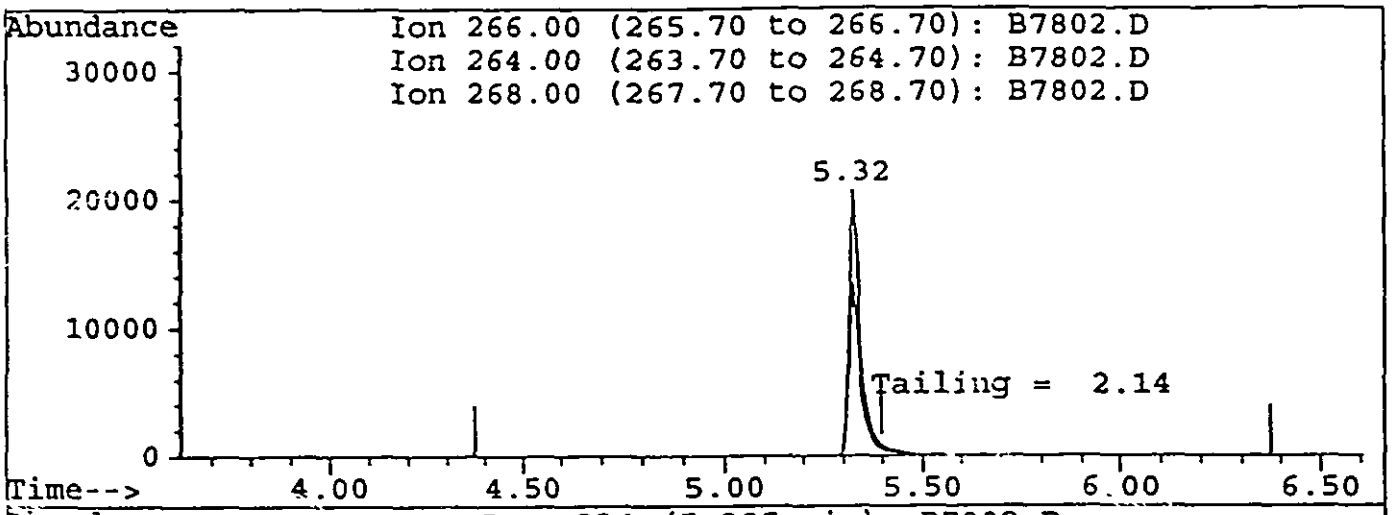
c 1 325 (6.222 min): B7802.D
PP..... Converted from RTE data file >B7802::D5

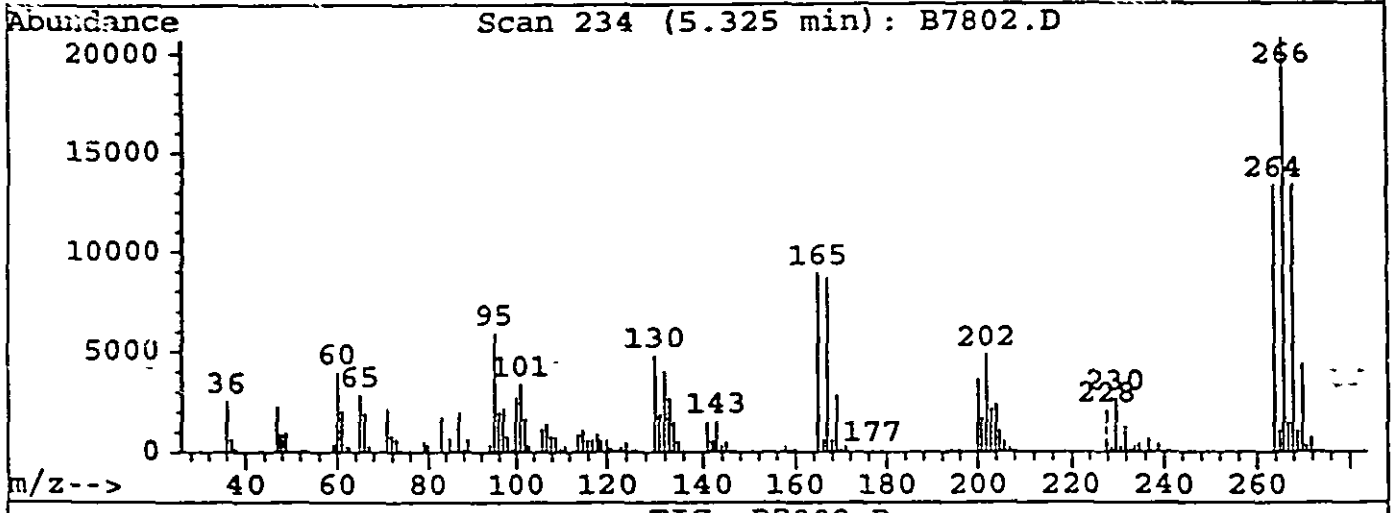
m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
206.05	1320	224.95	192	255.95	487	334.00	73
207.05	189	226.95	305	258.05	143	364.95	170
207.95	55	227.95	55	264.95	68	372.05	67
210.15	33	228.85	61	272.95	102	423.05	224
211.05	66	231.05	37	274.05	239	423.95	49
216.15	46	242.05	44	275.05	1379	441.00	669
216.95	373	243.05	52	276.05	219	442.00	4261
217.95	69	244.05	676	277.05	109	443.00	844
220.95	411	245.05	91	296.00	378	444.00	72
222.95	81	245.95	117	297.00	45		
224.05	802	255.05	2950	323.10	156		

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7802.D Vial: 1
Acq On : 3 Jun 95 9:53 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 3 9:06 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration





TIC: B7802.D

(1) Pentachlorophenol (CM)

5.32min 133.02ug/mL

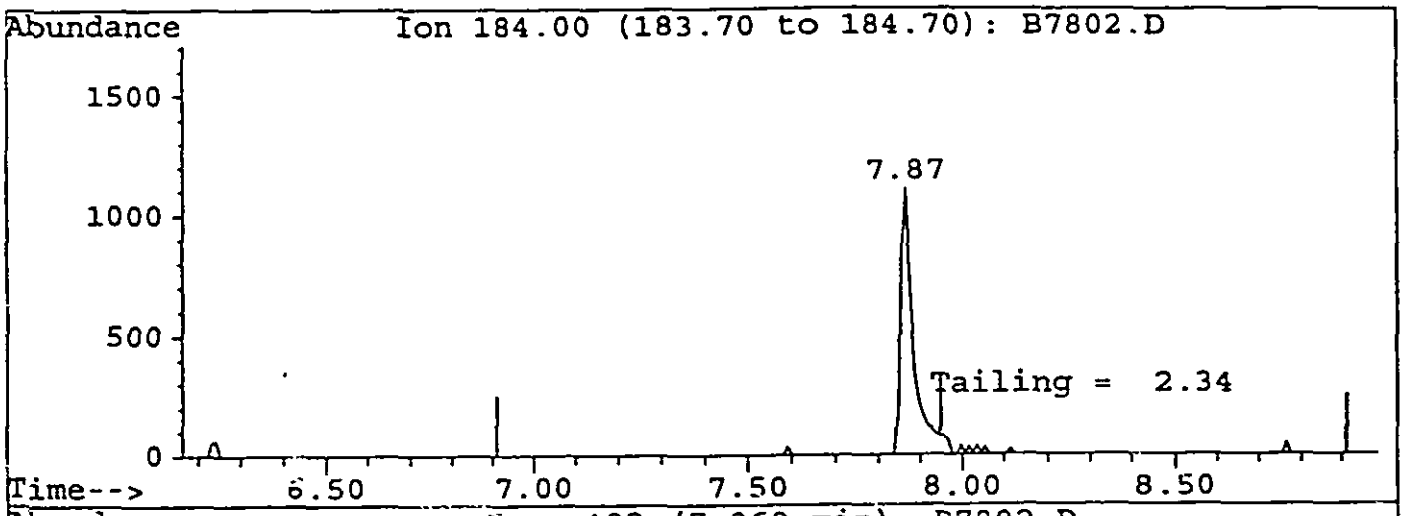
response 43936

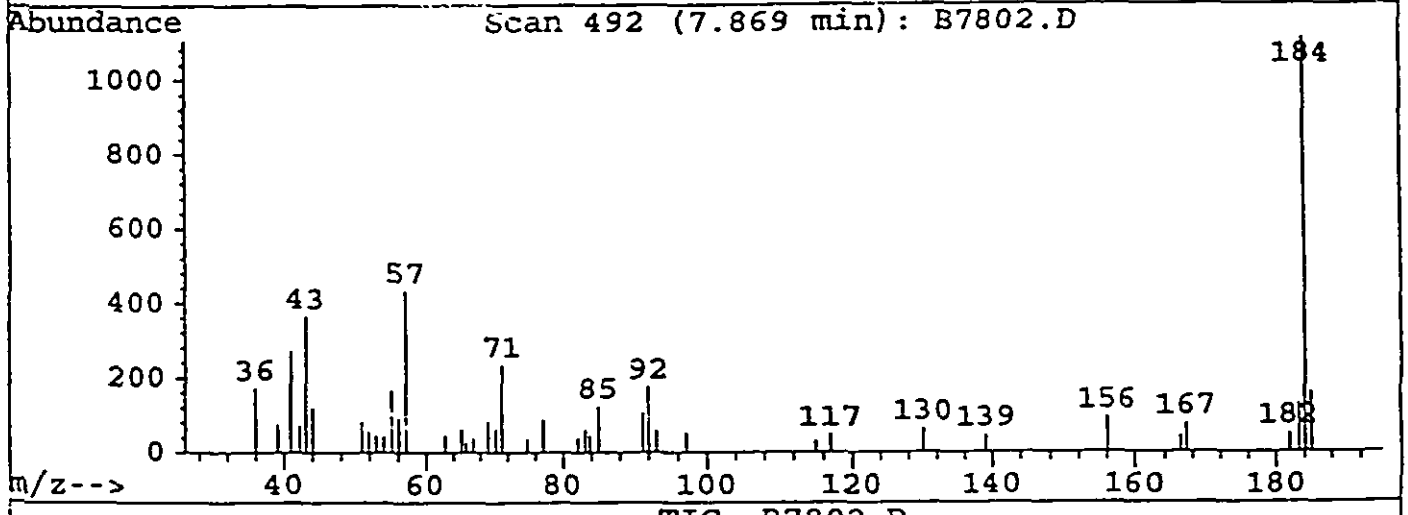
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	64.30
268.00	64.70	64.53
0.00	0.00	0.00

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7802.D Vial: 1
Acq On : 3 Jun 95 9:53 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 3 9:06 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration





TIC: B7802.D

(2) Benzidine
7.87min 7.97ug/ml
response 2449

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: ABNA Calibration Date: 6/3/95 Time: 1013

Lab File ID: B7803.D Init. Calib. Date(s): 6/3/95 1/0/00

Init. Calib. Times: 1013 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
bis(2-Chloroethyl)ether	2.026	2.027		0.0	
1,3-Dichlorobenzene	1.385	1.449		-4.6	
1,4-Dichlorobenzene	1.429	1.500		-5.0	30.0
1,2-Dichlorobenzene	1.357	1.424		-4.9	
bis(2-chloroisopropyl)ether	1.868	1.769		5.3	
N-Nitroso-Di-n-propylamine	1.346	1.315	0.050	2.3	
Hexachloroethane	0.737	0.736		0.1	
Nitrobenzene	0.424	0.446		-5.2	
Isophorone	0.893	0.814		8.8	
bis(2-Chloroethoxy)methane	0.456	0.453		0.7	
1,2,4-Trichlorobenzene	0.317	0.332		-4.7	
Naphthalene	0.979	1.023		-4.5	
4-Chloroaniline	0.463	0.464		-0.2	
Hexachlorobutadiene	0.185	0.191		-3.2	30.0
2-Methylnaphthalene	0.786	0.742		5.6	
Hexachlorocyclopentadiene	0.278	0.250	0.050	10.1	
2-Chloronaphthalene	0.696	0.716		-2.9	
2-Nitroaniline	0.549	0.487		11.3	
Dimethylphthalate	1.299	1.277		1.7	
Acenaphthylene	1.704	1.652		3.1	
2,6-Dinitrotoluene	0.310	0.301		2.9	
3-Nitroaniline	0.346	0.344		0.6	
Acenaphthene	1.025	1.040		-1.5	30.0
Dibenzofuran	1.609	1.625		-1.0	
2,4-Dinitrotoluene	1.167	1.125		3.6	
Diethylphthalate	1.443	1.376		4.6	
Fluorene	1.259	1.219		3.2	
4-Chlorophenyl-phenylether	0.596	0.628		-5.4	
4-Nitroaniline	0.166	0.194		-16.9	
n-Nitrosodiphenylamine	0.508	0.502		1.2	
4-Bromophenyl-phenylether	0.206	0.219		-6.3	
Hexachlorobenzene	0.215	0.232		-7.9	
Phenanthrene	1.094	1.129		-3.2	
Anthracene	1.009	1.064		-5.5	
Carbazole	0.944	1.015		-7.5	
Di-n-butylphthalate	1.606	1.633		-1.7	
Fluoranthene	1.035	1.139		-10.0	30.0

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: 6/3/95 Time: 1013

Lab File ID: B7803.D Init. Calib. Date(s): 6/3/95 1/0/00

Init. Calib. Times: 1013 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Pyrene	1.502	1.240		17.4	
Butylbenzylphthalate	0.962	0.769		20.1	
Benzo[a]anthracene	1.516	1.300		14.2	
3,3'-Dichlorobenzidine	0.386	0.357		7.5	
Chrysene	0.843	0.806		4.4	
bis(2-Ethylhexyl)phthalate	1.364	1.148		15.8	
Di-n-octylphthalate	5.094	4.570		10.3	30.0
Benzo[b]fluoranthene	2.467	2.153		12.7	
Benzo[k]fluoranthene	1.190	1.273		-7.0	
Benzo[a]pyrene	1.227	1.266		-3.2	30.0
Indeno[1,2,3-cd]pyrene	0.452	0.458		-1.3	
Dibenz[a,h]anthracene	0.436	0.384		11.9	
Benzo[g,h,i]perylene	0.356	0.291		18.3	
Nitrobenzene-d5	0.456	0.443		2.9	
2-Fluorobiphenyl	1.200	1.187		1.1	
Terphenyl-d14	1.062	0.881		17.0	

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 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 : Wed May 31 10:06:36 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)
	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.18
	S	2-Fluorophenol	1.131	1.044	7.7	96	0.16
3	S	Phenol-d5	1.873	1.712	8.6	98	0.14
	M	N-nitrosodimethylamine	0.578	0.585	-1.1	79	-0.10
		Pyridine	0.428	0.000#	100.0#	0#	-1.62#
6	CM	Phenol	1.668	1.607	3.7	93	0.14
	MT	bis(2-Chloroethyl)ether	2.026	2.027	-0.1	98	0.18
	M	2-Chlorophenol	1.269	1.290	-1.6	102	0.16
9	MT	1,3-Dichlorobenzene	1.385	1.449	-4.6	101	0.18
1	CM	1,4-Dichlorobenzene	1.429	1.500	-5.0	101	0.18
1	M	1,2-Dichlorobenzene	1.357	1.424	-4.9	102	0.18
1	T	2-Methylphenol	1.204	1.299	-7.9	110	0.66#
13	M	bis(2-chloroisopropyl)ether	1.868	1.769	5.3	101	0.20
	T	4-Methylphenol	1.322	1.299	1.7	98	0.16
	PM	N-Nitroso-Di-n-propylamine	1.346	1.315	2.3	102	0.18
16	M	Hexachloroethane	0.737	0.736	0.1	97	0.19
	I	Naphthalene-d8	1.000	1.000	0.0	94	0.18
18	S	Nitrobenzene-d5	0.456	0.443	2.8	96	0.18
1	M	Nitrobenzene	0.424	0.446	-5.2	96	0.18
	M	Isophorone	0.893	0.814	8.8	94	0.16
21	MC	2-Nitrophenol	0.210	0.202	4.2	95	0.20
22	M	2,4-Dimethylphenol	0.394	0.392	0.4	97	0.16
2	M	bis(2-Chloroethoxy)methane	0.456	0.453	0.7	94	0.16
24	MC	2,4-Dichlorophenol	0.298	0.301	-0.8	97	0.18
25	M	1,2,4-Trichlorobenzene	0.317	0.332	-4.7	97	0.18
	M	Naphthalene	0.979	1.023	-4.5	100	0.20
	T	4-Chloroaniline	0.463	0.464	-0.1	93	0.20
28	MC	Hexachlorobutadiene	0.185	0.191	-3.3	97	0.18
	MC	4-Chloro-3-methylphenol	0.384	0.376	2.0	92	0.18
	M	2-Chloronaphthalene	0.696	0.716	-2.8	96	0.21
31	T	2-Methylnaphthalene	0.786	0.742	5.5	100	0.19
	I	Acenaphthene-d10	1.000	1.000	0.0	99	0.21
	P	Hexachlorocyclopentadiene	0.278	0.250	10.3	95	0.19
34	MC	2,4,6-Trichlorophenol	0.415	0.353	15.0	91	0.20
	T	2,4,5-Trichlorophenol	0.324	0.384	-18.4	102	0.19
	S	2-Fluorobiphenyl	1.200	1.187	1.1	99	0.19
37	T	2-Nitroaniline	0.549	0.487	11.3	83	0.19
	M	Dimethylphthalate	1.299	1.277	1.8	97	0.19
	M	Acenaphthylene	1.704	1.652	3.1	95	0.21
40	M	2,6-Dinitrotoluene	0.310	0.301	2.8	91	0.21

#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 am 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 May 31 10:06:36 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	0.346	0.344	0.6	94	0.21
	CM	Acenaphthene	1.025	1.040	-1.5	100	0.21
43	MP	2,4-Dinitrophenol	0.172	0.164	4.8	104	0.21
1	PM	4-Nitrophenol	0.166	0.160	3.5	94	0.19
5	T	Dibenzofuran	1.609	1.625	-1.0	96	0.21
46	M	2,4-Dinitrotoluene	1.167	1.125	3.6	97	0.23
7	M	Diethylphthalate	1.443	1.376	4.6	93	0.21
3	M	Fluorene	1.259	1.219	3.2	98	0.23
49	M	4-Chlorophenyl-phenylether	0.596	0.628	-5.4	105	0.23
		Phenanthrene-d10	1.000	1.000	0.0	102	0.25
	T	4-Nitroaniline	0.166	0.194	-16.9	93	0.21
52	MC	4,6-Dinitro-2-methylphenol	0.132	0.139	-5.1	109	0.21
3	T	n-Nitrosodiphenylamine	0.508	0.502	1.2	96	0.23
1	S	2,4,6-Tribromophenol	0.108	0.110	-2.0	106	0.23
55		1,2-Diphenylhydrazine (as a	1.211	1.189	1.8	92	0.23
5	M	4-Bromophenyl-phenylether	0.206	0.219	-6.2	101	0.23
7	M	Hexachlorobenzene	0.215	0.232	-8.2	104	0.23
58	CM	Pentachlorophenol	0.137	0.160	-16.2	122	0.23
59	M	Phenanthrene	1.094	1.129	-3.2	105	0.25
0	M	Anthracene	1.009	1.064	-5.5	105	0.25
61		Carbazole	0.944	1.015	-7.5	107	0.25
62	M	Di-n-butylphthalate	1.606	1.633	-1.6	102	0.23
3	MC	Fluoranthene	1.035	1.139	-10.1	103	0.27
64	I	Chrysene-d12	1.000	1.000	0.0	110	0.31
5		Benzidine	0.437	0.361	17.5	99	0.27
5	M	Pyrene	1.502	1.240	17.4	107	0.27
67	S	Terphenyl-d14	1.062	0.881	17.1	110	0.27
68	M	Butylbenzylphthalate	0.962	0.769	20.0	100	0.27
9	M	Benzo[a]anthracene	1.516	1.300	14.2	106	0.31
70	M	3,3'-Dichlorobenzidine	0.386	0.357	7.5	111	0.29
71	M	Chrysene	0.843	0.806	4.4	115	0.31
2	M	bis(2-Ethylhexyl)phthalate	1.364	1.148	15.8	101	0.27
73	I	Perylene-d12	1.000	1.000	0.0	206#	0.30
4	MC	Di-n-octylphthalate	5.094	4.570	10.3	200#	0.27
5	M	Benzo[b]fluoranthene	2.467	2 153	12.7	176#	0.30
76	m	Benzo[k]fluoranthene	1.190	1.273	-7.0	237#	0.31
	mc	Benzo[a]pyrene	1.227	1.266	-3.2	193#	-0.51#
8	m	Indeno[1,2,3-cd]pyrene	0.452	0.458	-1.1	227#	0.26
79	m	Dibenz[a,h]anthracene	0.436	0.384	11.8	217#	0.26

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D Vial: 2
Acq On : 3 Jun 95 10:13 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 : Wed May 31 10:06:36 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)
8	M	Benzo[g,h,i]perylene	0.356	0.291	18.1	185#	0.26
8		1-Methyl naphthalene	0.000	0.000#	0.0	0#	-13.33#
82		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	191#	0.30
8		Quinoline	0.000	0.000#	0.0	95	0.20
8		Thiophenol	0.000	0.000#	0.0	72	0.17
85		4-Methyl chrysene	0.000	0.000#	0.0	118	0.31
86		Dibenz(a,j)acridine	0.000	0.000#	0.0	131	0.27
8		Indene	0.000	0.000#	0.0	94	0.18

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.21	152	29236	40.00	ug/mL	0.18
17) Naphthalene-d8	12.92	136	116999	40.00	ug/mL	0.18
32) Acenaphthene-d10	18.26	164	80656	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	134208	40.00	ug/ml	0.25
64) Chrysene-d12	30.89	240	129676	40.00	ug/mL	0.31
73) Perylene-d12	34.90	264	93467	40.00	ug/mL	0.30
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.63	112	38146	46.13	ug/mL	46.13%
3) Phenol-d5	8.53	99	62550	45.70	ug/mL	45.70%
18) Nitrobenzene-d5	10.88	82	64784	48.60	ug/mL	48.60%
36) 2-Fluorobiphenyl	16.39	172	119643	49.45	ug/mL	49.45%
54) 2,4,6-Tribromophenol	20.69	330	18489	51.01	ug/mL	51.01%
67) Terphenyl-d14	27.91	244	142742	41.47	ug/mL	41.47%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	1.85	74	21365	50.56	ug/mlm	100
6) Phenol	8.57	94	58717	48.17	ug/mL	100
7) bis(2-Chloroethyl)ether	12.60	93	74087	50.04	ug/mL	96
8) 2-Chlorophenol	8.61	128	47149	50.82	ug/mL	95
9) 1,3-Dichlorobenzene	9.01	146	52942	52.30	ug/mL	98
10) 1,4-Dichlorobenzene	9.26	146	54825	52.49	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	52051	52.46	ug/mL	98
12) 2-Methylphenol	10.79	108	47472	53.93	ug/mL	65
13) bis(2-chloroisopropyl)ethe	10.28	45	64632	47.33	ug/mL#	1
14) 4-Methylphenol	10.79	108	47472	49.15	ug/mL	99
15) N-Nitroso-Di-n-propylamine	10.67	70	48058	48.86	ug/mL	91
16) Hexachloroethane	10.61	117	26915	49.93	ug/mL	99
19) Nitrobenzene	10.94	77	65242	52.61	ug/mL#	89
20) Isophorone	11.73	82	119099	45.58	ug/mL	96
21) 2-Nitrophenol	11.88	139	29485	47.92	ug/mL	98
22) 2,4-Dimethylphenol	10.79	107	57307	49.78	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.32	93	66255	49.66	ug/mL#	42
24) 2,4-Dichlorophenol	12.65	162	43957	50.41	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.83	180	48531	52.36	ug/mL	98
26) Naphthalene	13.00	128	149571	52.24	ug/mL#	91
27) 4-Chloroaniline	13.35	127	67787	50.05	ug/mL	98
28) Hexachlorobutadiene	13.50	225	27957	51.65	ug/mL	96
29) 4-Chloro-3-methylphenol	15.04	107	55034	49.01	ug/mL	100
30) 2-Chloronaphthalene	16.58	162	104679	51.41	ug/ml	99
31) 2-Methylnaphthalene	15.14	142	108545	47.23	ug/mL	100
33) Hexachlorocyclopentadiene	15.66	237	25173	44.85	ug/mL	96
34) 2,4,6-Trichlorophenol	16.10	196	35610	42.51	ug/mL	99
35) 2,4,5-Trichlorophenol	16.20	196	38697	59.22	ug/mL	100

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d Vial: 2
Acq On : 3 Jun 95 10:13 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 7 9:32 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

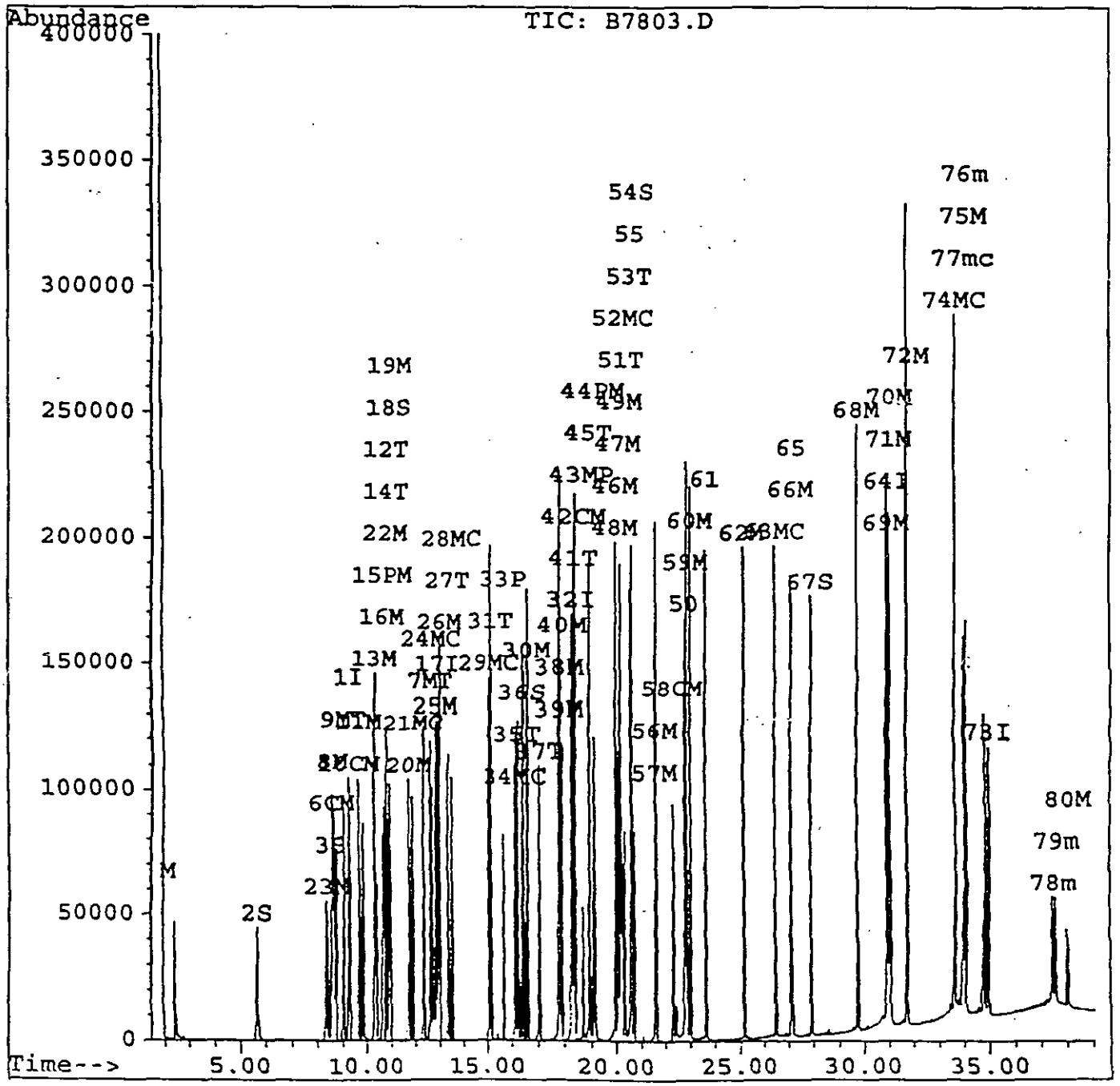
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
37) 2-Nitroaniline	17.05	65	49104	44.34	ug/mL#	100
38) Dimethylphthalate	17.82	163	128716	49.12	ug/mL	99
39) Acenaphthylene	17.80	152	166597	48.47	ug/mL	99
40) 2,6-Dinitrotoluene	17.91	165	30393	48.59	ug/mL	97
41) 3-Nitroaniline	18.34	138	34672	49.71	ug/mL	95
42) Acenaphthene	18.36	153	104858	50.73	ug/mL	100
43) 2,4-Dinitrophenol	18.66	184	16518	47.58	ug/mL	99
44) 4-Nitrophenol	19.13	109	16116	48.25	ug/mL	89
45) Dibenzofuran	18.92	168	163832	50.51	ug/mL	95
46) 2,4-Dinitrotoluene	19.96	165	113430	48.20	ug/mL#	32
47) Diethylphthalate	20.07	149	138770	47.70	ug/mL	100
48) Fluorene	19.96	166	122870	48.41	ug/mL	99
49) 4-Chlorophenyl-phenylether	20.15	204	63340	52.68	ug/mL	93
51) 4-Nitroaniline	20.21	138	32609	58.46	ug/mL	97
52) 4,6-Dinitro-2-methylphenol	20.30	198	23243	52.57	ug/mL	100
53) n-Nitrosodiphenylamine	20.55	169	84236	49.39	ug/mL#	1
55) 1,2-Diphenylhydrazine (as	20.61	77	199476	49.08	ug/ml	100
56) 4-Bromophenyl-phenylether	21.59	248	36733	53.12	ug/mL#	89
57) Hexachlorobenzene	21.58	284	38977	54.11	ug/mL	91
58) Pentachlorophenol	22.29	266	26808	58.11	ug/mL	98
59) Phenanthrene	22.85	178	189424	51.58	ug/mL	100
60) Anthracene	23.00	178	178492	52.73	ug/mLm	99
61) Carbazole	23.64	167	170215	53.76	ug/ml	100
62) Di-n-butylphthalate	25.14	149	273873	50.81	ug/mL	99
63) Fluoranthene	26.47	202	191126	55.04	ug/mLm	95
65) Benzidine	27.14	184	58486	41.24	ug/mlm	100
66) Pyrene	27.10	202	200950	41.28	ug/mLm	87
68) Butylbenzylphthalate	29.69	149	124639	39.98	ug/mL	95
69) Benzo[a]anthracene	30.87	228	210709	42.89	ug/mLm	99
70) 3,3'-Dichlorobenzidine	31.00	252	57942	46.26	ug/mL	99
71) Chrysene	30.96	228	130675	47.82	ug/mLm	97
72) bis(2-Ethylhexyl)phthalate	31.66	149	186121	42.09	ug/mL	99
74) Di-n-octylphthalate	33.57	149	533971	44.86	ug/mLm	99
75) Benzo[b]fluoranthene	33.93	252	251584	43.65	ug/mLm	99
76) Benzo[k]fluoranthene	34.01	252	148737	53.49	ug/mLm	94
77) Benzo[a]pyrene	33.93	252	147880	51.60	ug/mL	98
78) Indeno[1,2,3-cd]pyrene	37.43	276	53465	50.57	ug/mLm	89
79) Dibenz[a,h]anthracene	37.54	278	44917	44.12	ug/mL	98
80) Benzo[g,h,i]perylene	38.01	276	34048	40.97	ug/mLm	98

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

Data File : c:\hpchem\1\data2\b7803.d
Acq On : 3 Jun 95 10:13 am
Sample : 50 STD.....
Misc :
Quant Time: Jun 7 9:32 1995

Vial: 2172
Operator: SCOTTV
Converted from RTE d Inst : ABNA
BT Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID B8021 D DFTPP Injection Date 6/26/95

Instrument ID ABNA DFTPP Injection Time 0057

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
51	30 0 - 80 0% of mass 198	54 5
68	Less than 2 0% of mass 69	0 0 (0 0)1
69	Mass 69 relative abundance	68 1
70	Less than 2 0% of mass 69	0 0 (0 0)1
127	25.0 - 75 0% of mass 198	50 7
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	8 6
275	10 0 - 30 0% of mass 198	23.0
365	Greater than 0.75% of mass 198	2 0
441	Present, but less than mass 443	8 3
442	40 0 - 110 0% of mass 198	47 8
443	15 0 - 24 0% of mass 442	10 1 (21 0)2

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

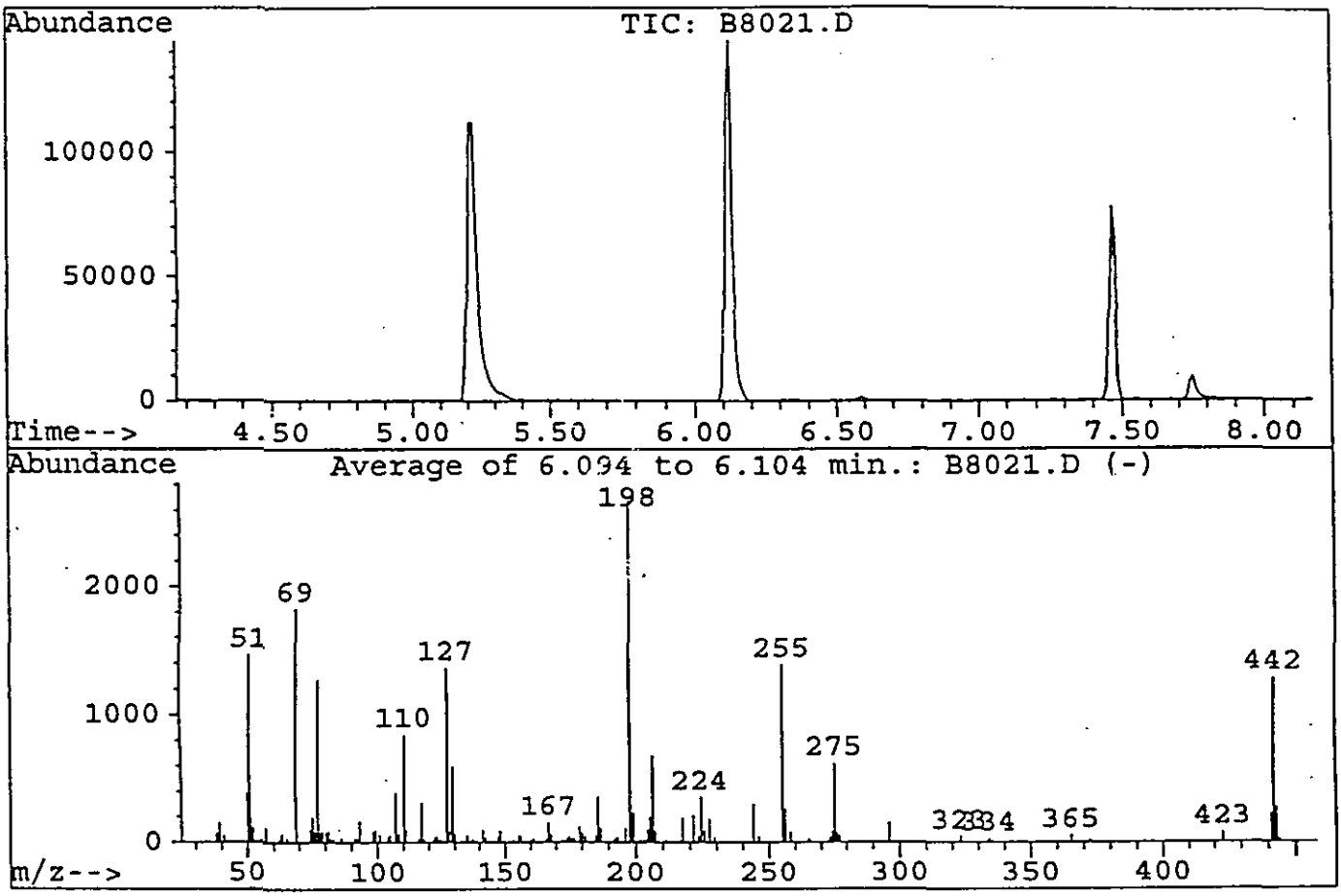
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD050	50 STD	B8022.D	6/26/95	0132
02	SBLK01	BLANK1	B8023 D	6/26/95	0256
03	9526397B	9526397B	B8024.D	6/26/95	0349
04	9526427B	9526427B	B8025 D	6/26/95	0442
05	9526428B	9526428B	B8026.D	6/26/95	0535
06	9526429B	9526429B	B8027 D	6/26/95	0627
07	9526430B	9526430B	B8028.D	6/26/95	0719
08	9526431B	9526431B	B8029 D	6/26/95	0810
09	9526432B	9526432B	B8030.D	6/26/95	0901
10	9526433B	9526433B	B8031.D	6/26/95	0952
11	9526434B	9526434B	B8032 D	6/26/95	1043
12	9526404B	9526404B	B8033 D	6/26/95	1133
13	SBLK02	BLANK2	B8034 D	6/26/95	1223
14	9526460B	9526460B	B8035 D	6/26/95	1314
15	9526461B	9526461B	B8036 D	6/26/95	1404
16	9526462B	9526462B	B8037.D	6/26/95	1455
17	9526605B	9526605B	B8038 D	6/26/95	1545
18	9526606B	9526606B	B8039 D	6/26/95	1636
19	9526607B	9526607B	B8040 D	6/26/95	1726
20	9526608B	9526608B	B8041 D	6/26/95	1817
21	9526609B	9526609B	B8042 D	6/26/95	1907
22					

DFTPP

Data File : C:\HPCHEM\1\DATA2\B8021.D Vial: 1
Acq On : 26 Jun 95 12:57 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: 320

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	30	60	54.5	1464	PASS
68	69	0	2	0.0	0	PASS
69	198	0	100	68.1	1828	PASS
70	69	0	2	0.0	0	PASS
127	198	40	60	50.7	1362	PASS
197	198	0	1	0.0	0	PASS
198	198	100	100	100.0	2686	PASS
199	198	5	9	8.6	231	PASS
275	198	10	30	23.0	618	PASS
365	198	1	100	2.0	53	PASS
441	443	0	100	82.6	223	PASS
442	198	40	100	47.8	1283	PASS
443	442	17	23	21.0	270	PASS

B8021.D BNACLP.M Wed Jun 28 13:48:29 1995 BNA

d fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
38.00	73	65.05	35	82.05	32	107.05	391
39.10	154	68.95	1828	83.05	24	108.15	63
41.00	47	73.15	15	85.95	33	110.05	845
50.05	385	74.05	106	91.05	29	111.00	98
51.05	1464	75.05	199	92.05	30	116.05	28
52.05	108	76.05	82	93.05	167	117.05	312
55.15	20	77.05	1273	98.05	82	117.95	23
56.05	14	78.05	80	99.05	95	122.00	38
57.05	119	79.00	85	100.95	58	122.90	46
62.05	25	80.05	80	104.05	42	124.00	22
63.05	63	81.05	88	104.95	53	124.90	16

/e age of 6.094 to 6.104 min.: B8021.D

od fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
27.00	1362	155.10	51	175.10	51	196.10	109
127.95	83	156.00	47	176.00	29	198.00	2686
29.00	596	157.80	13	177.00	28	199.00	231
30.00	61	160.00	22	179.00	124	201.55	20
135.00	52	161.10	32	180.00	72	202.95	19
37.10	25	166.10	28	181.10	46	204.05	100
41.00	93	167.00	154	185.10	55	205.05	197
142.10	35	168.00	59	186.10	361	206.05	678
147.10	38	172.00	15	187.10	114	207.05	84
48.00	89	173.00	21	192.10	30	211.15	26
53.00	22	174.10	35	193.10	37	216.05	16

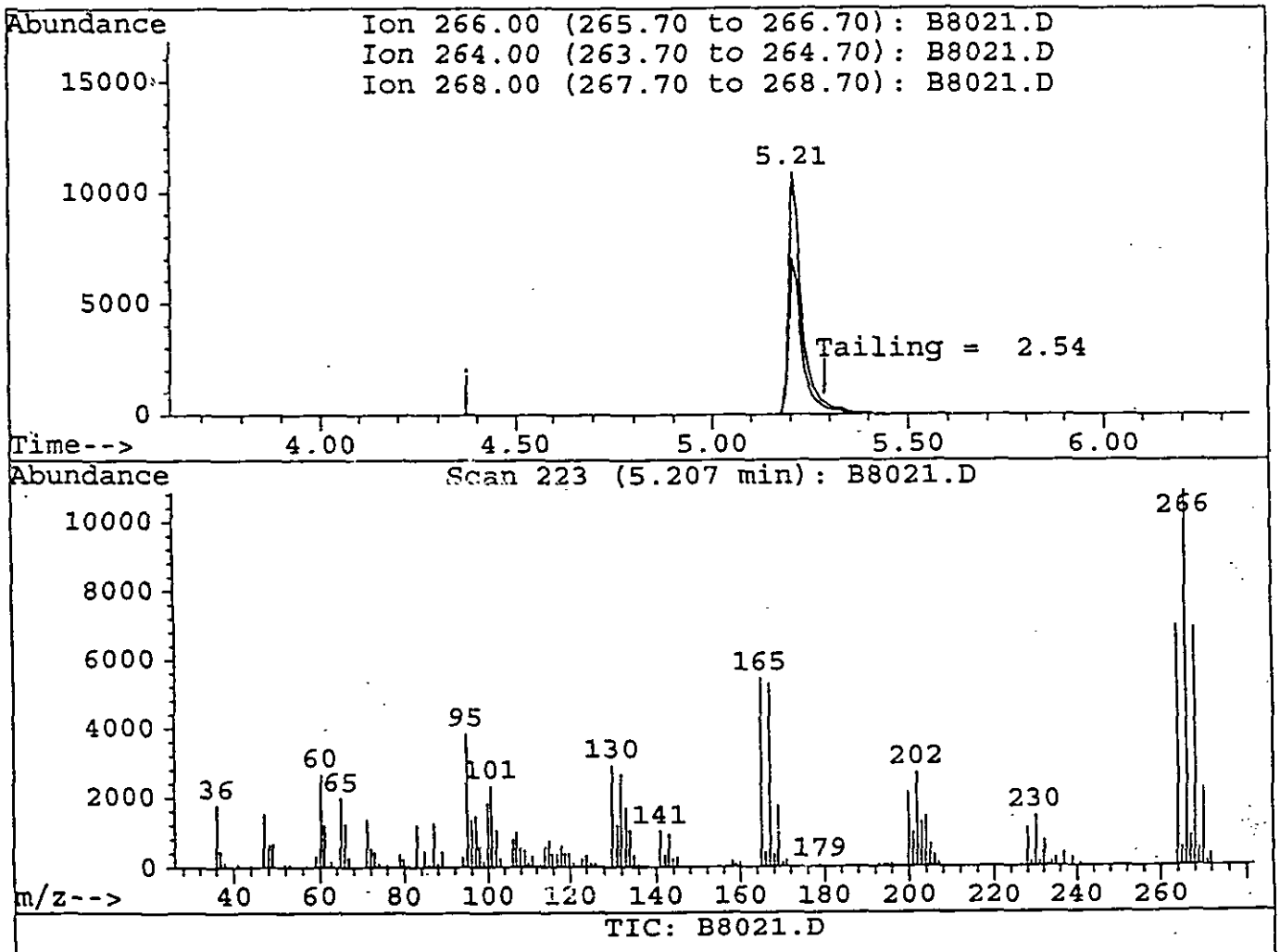
verage of 6.094 to 6.104 min.: B8021.D

od fied:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
217.05	190	258.05	80	372.15	21		
221.05	214	265.05	28	423.10	74		
223.05	49	273.05	39	441.10	223		
224.00	353	274.05	86	442.10	1283		
225.05	91	275.05	618	443.10	270		
227.05	184	276.15	76	444.10	19		
229.05	33	277.15	48				
244.05	303	296.00	152				
246.05	46	323.10	44				
255.05	1384	334.20	26				
256.05	260	365.05	53				

Data File : C:\HPCHEM\1\DATA2\B8021.D Vial: 1
Acq On : 26 Jun 95 12:57 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 26 12:22 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



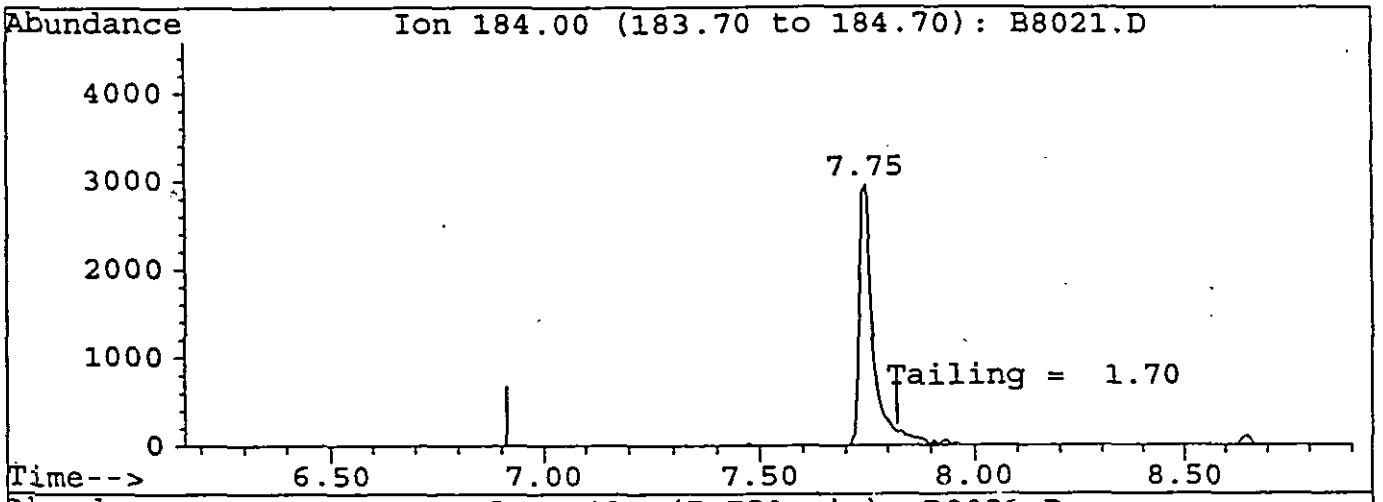
TIC: B8021.D

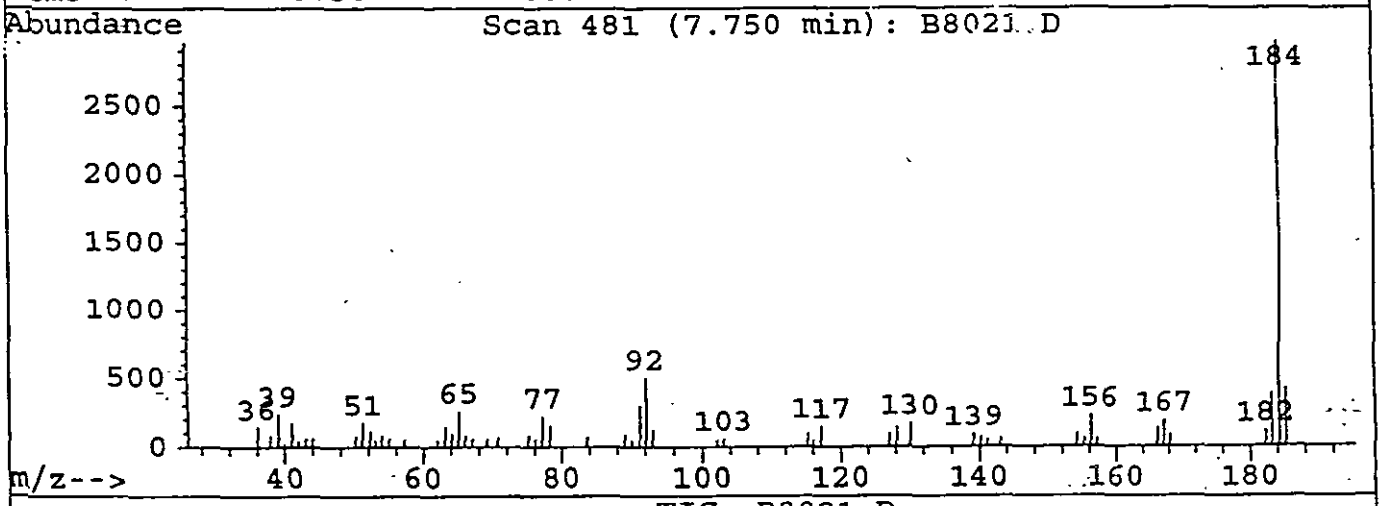
(1) Pentachlorophenol (CM)
5.21min 78.31ug/mL
response 25865

Ion	Exp%	Act%
266.00	100	100
264.00	64.30	64.26
268.00	64.70	63.60
0.00	0.00	0.00

Data File : C:\HPCHEM\1\DATA2\B8021.D Vial: 1
Acq On : 26 Jun 95 12:57 am Operator: SCOTTV
Sample : DFTPP..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 26 12:22 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration





TIC: B8021.D

(2) Benzidine
7.75min 22.22ug/ml
response 6825

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: ABNA Calibration Date: 6/26/95 Time: 0132

Lab File ID: B8022.D Init. Calib. Date(s): 6/26/95 1/0/00

Init. Calib. Times: 0132 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
N-nitrosodimethylamine	0.578	0.594		-2.8	
bis(2-Chloroethyl)ether	2.026	2.057		-1.5	
1,3-Dichlorobenzene	1.385	1.415		-2.2	
1,4-Dichlorobenzene	1.429	1.448		-1.3	30.0
1,2-Dichlorobenzene	1.357	1.394		-2.7	
bis(2-chloroisopropyl)ether	1.868	1.973		-5.6	
N-Nitroso-Di-n-propylamine	1.346	1.356	0.050	-0.7	
Hexachloroethane	0.737	0.753		-2.2	
Nitrobenzene	0.424	0.403		5.0	
Isophorone	0.893	0.801		10.3	
bis(2-Chloroethoxy)methane	0.456	0.437		4.2	
1,2,4-Trichlorobenzene	0.317	0.308		2.8	
Naphthalene	0.979	1.005		-2.7	
Hexachlorobutadiene	0.185	0.171		7.6	30.0
Hexachlorocyclopentadiene	0.278	0.256	0.050	7.9	
2-Chloronaphthalene	0.696	0.677		2.7	
Dimethylphthalate	1.299	1.315		-1.2	
Acenaphthylene	1.704	1.765		-3.6	
2,6-Dinitrotoluene	0.310	0.308		0.6	
Acenaphthene	1.025	1.045		-2.0	30.0
2,4-Dinitrotoluene	1.167	1.178		-0.9	
Diethylphthalate	1.443	1.428		1.0	
Fluorene	1.259	1.274		-1.2	
4-Chlorophenyl-phenylether	0.596	0.606		-1.7	
n-Nitrosodiphenylamine	0.508	0.555		-9.3	
1,2-Diphenylhydrazine(as azo)	0.000	0.000			
4-Bromophenyl-phenylether	0.206	0.205		0.5	
Hexachlorobenzene	0.215	0.185		14.0	
Phenanthrene	1.094	1.121		-2.5	
Anthracene	1.009	1.054		-4.5	
Di-n-butylphthalate	1.606	1.858		-15.7	
Fluoranthene	1.035	1.239		-19.7	30.0
Benzidine	0.437	0.411		5.9	
Pyrene	1.502	1.348		10.3	
Butylbenzylphthalate	0.962	0.919		4.5	
Benzo[a]anthracene	1.516	1.273		16.0	
3,3'-Dichlorobenzidine	0.386	0.365		5.4	

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 6/26/95 Time 0132

Lab File ID B8022 D Init Calib Date(s) 6/26/95 1/0/00

Init. Calib. Times 0132 0000

COMPOUND	$\overline{RRF}$	RRF50	MIN RRF	%D	MAX %D
Chrysene	0.843	0.998		-18 4	
bis(2-Ethylhexyl)phthalate	1.364	1 344		1 5	
Di-n-octylphthalate	5.094	4.618		9 3	30.0
Benzo[b]fluoranthene	2 467	2 164		12 3	
Benzo[k]fluoranthene	1.190	1.213		-1.9	
Benzo[a]pyrene	1.227	1.263		-2.9	30.0
Indeno[1,2,3-cd]pyrene	0.452	0.378		16 4	
Dibenz[a,h]anthracene	0 436	0.371		14.9	
Benzo[g,h,i]perylene	0 356	0.325		8.7	
Nitrobenzene-d5	0 456	0 433		5 0	
2-Fluorobiphenyl	1 200	1 208		-0 7	
Terphenyl-d14	1 062	0 883		16 9	

All other compounds must meet a minimum RRF of 0 010

Data File : C:\HPCHEM\1\DATA2\B8022.D Vial: 2 180
Acq On : 26 Jun 95 1:32 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 Thu Jun 15 14:15.34 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	72	0.00
	S	2-Fluorophenol	1.131	1.081	4.4	73	0.04
	S	Phenol-d5	1.873	1.726	7.8	72	0.04
4	M	N-nitrosodimethylamine	0.578	0.594	-2.7	59	0.36
-		Pyridine	1.374	0.000#	100.0#	0#	-1.62#
	CM	Phenol	1.668	1.648	1.2	70	0.02
/	MT	bis(2-Chloroethyl)ether	2.026	2.057	-1.5	73	0.02
9	M	2-Chlorophenol	1.269	1.246	1.8	72	0.02
	MT	1,3-Dichlorobenzene	1.385	1.415	-2.2	72	0.00
1	CM	1,4-Dichlorobenzene	1.429	1.448	-1.4	71	0.00
11	M	1,2-Dichlorobenzene	1.357	1.394	-2.7	75	0.00
1	T	2-Methylphenol	1.204	1.327	-10.2	82	0.54#
1	M	bis(2-chloroisopropyl)ether	1.868	1.973	-5.6	82	0.04
14	T	4-Methylphenol	1.322	1.327	-0.4	73	0.04
1	PM	N-Nitroso-Di-n-propylamine	1.346	1.356	-0.8	77	0.00
1	M	Hexachloroethane	0.737	0.753	-2.2	73	0.02
17	I	Naphthalene-d8	1.000	1.000	0.0	72	0.02
1	S	Nitrobenzene-d5	0.456	0.433	4.9	71	0.00
1	M	Nitrobenzene	0.424	0.403	5.0	66	0.00
20	M	Isophorone	0.893	0.801	10.4	70	0.00
2	MC	2-Nitrophenol	0.210	0.193	8.1	69	0.02
2	M	2,4-Dimethylphenol	0.394	0.394	-0.0	74	0.04
23	M	bis(2-Chloroethoxy)methane	0.456	0.437	4.1	69	0.00
2	MC	2,4-Dichlorophenol	0.298	0.276	7.3	68	0.06
2	M	1,2,4-Trichlorobenzene	0.317	0.308	2.8	69	0.00
26	M	Naphthalene	0.979	1.005	-2.7	75	0.02
27	T	4-Chloroaniline	0.463	0.417	9.9	64	0.02
2	MC	Hexachlorobutadiene	0.185	0.171	7.4	66	0.02
2	MC	4-Chloro-3-methylphenol	0.384	0.354	7.9	66	0.06
30	M	2-Chloronaphthalene	0.696	0.677	2.7	70	0.04
3	T	2-Methylnaphthalene	0.786	0.928	-18.1	95	0.02
32	I	Acenaphthene-d10	1.000	1.000	0.0	70	0.04
	P	Hexachlorocyclopentadiene	0.278	0.256	7.9	70	0.02
	MC	2,4,6-Trichlorophenol	0.415	0.340	18.2	63	0.04
35	T	2,4,5-Trichlorophenol	0.324	0.372	-14.8	70	0.06
3	S	2-Fluorobiphenyl	1.200	1.208	-0.7	72	0.04
	T	2-Nitroaniline	0.549	0.507	7.6	62	0.04
38	M	Dimethylphthalate	1.299	1.315	-1.2	71	0.04
	M	Acenaphthylene	1.704	1.765	-3.6	72	0.04
	M	2,6-Dinitrotoluene	0.310	0.308	0.7	66	0.04

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B8022.D Vial: 2
Acq On : 26 Jun 95 1:32 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 : Thu Jun 15 14:15:34 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	T	3-Nitroaniline	0.346	0.332	3.9	64	0.06
2	CM	Acenaphthene	1.025	1.045	-1.9	71	0.04
3	MP	2,4-Dinitrophenol	0.172	0.155	10.3	70	0.06
4	PM	4-Nitrophenol	0.166	0.158	4.4	66	0.09
5	T	Dibenzofuran	1.609	1.532	4.7	64	0.04
6	M	2,4-Dinitrotoluene	1.167	1.178	-0.9	72	0.05
7	M	Diethylphthalate	1.443	1.428	1.1	69	0.02
8	M	Fluorene	1.259	1.274	-1.2	73	0.05
9	M	4-Chlorophenyl-phenylether	0.596	0.606	-1.6	72	0.05
10		Phenanthrene-d10	1.000	1.000	0.0	67	0.05
11	T	4-Nitroaniline	0.166	0.198	-19.1	62	0.05
12	MC	4,6-Dinitro-2-methylphenol	0.132	0.136	-3.3	71	0.05
13	T	n-Nitrosodiphenylamine	0.508	0.555	-9.2	70	0.05
14	S	2,4,6-Tribromophenol	0.108	0.091	15.7	58	0.05
15		1,2-Diphenylhydrazine (as a	1.211	1.303	-7.6	67	0.05
16	M	4-Bromophenyl-phenylether	0.206	0.205	0.5	63	0.05
17	M	Hexachlorobenzene	0.215	0.185	13.9	54	0.05
18	CM	Pentachlorophenol	0.137	0.134	2.3	68	0.07
19	M	Phenanthrene	1.094	1.121	-2.4	69	0.05
20	M	Anthracene	1.009	1.054	-4.5	69	0.05
21		Carbazole	0.944	0.932	1.2	65	0.07
22	M	Di-n-butylphthalate	1.606	1.858	-15.7	76	0.05
23	MC	Fluoranthene	1.035	1.239	-19.7	74	0.07
24	I	Chrysene-d12	1.000	1.000	0.0	71	0.10
25		Benzidine	0.437	0.411	5.9	73	0.09
26	M	Pyrene	1.502	1.348	10.2	75	0.07
27	S	Terphenyl-d14	1.062	0.883	16.9	71	0.09
28	M	Butylbenzylphthalate	0.962	0.919	4.4	77	0.09
29	M	Benzo[a]anthracene	1.516	1.273	16.0	67	0.10
30	M	3,3'-Dichlorobenzidine	0.386	0.365	5.5	73	0.10
31	M	Chrysene	0.843	0.998	-18.4	92	0.10
32	M	bis(2-Ethylhexyl)phthalate	1.364	1.344	1.5	76	0.08
37	I	Perylene-d12	1.000	1.000	0.0	102	0.09
38	MC	Di-n-octylphthalate	5.094	4.618	9.4	100	0.08
39	M	Benzo[b]fluoranthene	2.467	2.164	12.3	88	0.10
40	m	Benzo[k]fluoranthene	1.190	1.213	-1.9	112	0.10
41	mc	Benzo[a]pyrene	1.227	1.263	-2.9	95	0.10
42	m	Indeno[1,2,3-cd]pyrene	0.452	0.378	16.3	93	0.05
43	m	Dibenz[a,h]anthracene	0.436	0.371	14.9	104	0.03

(#) = Out of Range

Data File : C:\HPCHEM\1\DATA2\B8022.D Vial: 2
Acq On : 26 Jun 95 1:32 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 : Thu Jun 15 14:15:34 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)
30	M	Benzo[g,h,i]perylene	0.356	0.325	8.7	102	0.03
3		1-Methyl naphthalene	0.000	0.000#	0.0	27#	0.00
3		7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	97	0.09
33		Quinoline	0.000	0.000#	0.0	62	0.02
3		Thiophenol	0.000	0.000#	0.0	0#	-5.47#
3		4-Methyl chrysene	0.000	0.000#	0.0	78	0.10
36		Dibenz(a,j)acridine	0.000	0.000#	0.0	82	0.08
37		Indene	0.000	0.000#	0.0	0#	-9.03#
3		Benzyl alcohol	1.050	0.000#	100.0#	0#	-9.70#
3		Benzoic acid	0.964	0.000#	100.0#	0#	-12.98#

Data File : c:\hpchem\1\data2\b8022.d Vial: 2
Acq On : 26 Jun 95 1:32 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 13:51 1995

Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	21442	40.00	ug/mL	0.00
17) Naphthalene-d8	12.77	136	89144	40.00	ug/mL	0.02
32) Acenaphthene-d10	18.08	164	57304	40.00	ug/mL	0.04
50) Phenanthrene-d10	22.57	188	88470	40.00	ug/ml	0.05
64) Chrysene-d12	30.68	240	83496	40.00	ug/mL	0.10
73) Perylene-d12	34.69	264	46248	40.00	ug/mL	0.09
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.51	112	28986	47.79	ug/mL	47.79%
3) Phenol-d5	8.43	99	46263	46.09	ug/mL	46.09%
18) Nitrobenzene-d5	10.71	82	48301	47.56	ug/mL	47.56%
36) 2-Fluorobiphenyl	16.23	172	86505	50.33	ug/mL	50.33%
54) 2,4,6-Tribromophenol	20.51	330	10076	42.17	ug/mL	42.17%
67) Terphenyl-d14	27.73	244	92120	41.57	ug/mL	41.57%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.31	74	15915	51.35	ug/mlm	0
6) Phenol	8.45	94	44171	49.41	ug/mL	100
7) bis(2-Chloroethyl)ether	12.44	93	55126	50.76	ug/mL	93
8) 2-Chlorophenol	8.47	128	33394	49.08	ug/mL#	88
9) 1,3-Dichlorobenzene	8.84	146	37929	51.09	ug/mL	97
10) 1,4-Dichlorobenzene	9.09	146	38821	50.68	ug/mL	99
11) 1,2-Dichlorobenzene	9.47	146	37367	51.35	ug/mL	98
12) 2-Methylphenol	10.67	108	35563	55.08	ug/mL	64
13) bis(2-chloroisopropyl)ethe	10.13	45	52877	52.79	ug/mL#	67
14) 4-Methylphenol	10.67	108	35563	50.20	ug/mL	97
15) N-Nitroso-Di-n-propylamine	10.49	70	36342	50.38	ug/mL	98
16) Hexachloroethane	10.44	117	20194	51.08	ug/mL	100
19) Nitrobenzene	10.76	77	44854	47.48	ug/mL#	74
20) Isophorone	11.57	82	89209	44.81	ug/mL	98
21) 2-Nitrophenol	11.71	139	21551	45.97	ug/mL	86
22) 2,4-Dimethylphenol	10.67	107	43864	50.01	ug/mL#	32
23) bis(2-Chloroethoxy)methane	8.16	93	48749	47.96	ug/mL#	42
24) 2,4-Dichlorophenol	12.54	162	30803	46.36	ug/mL#	94
25) 1,2,4-Trichlorobenzene	12.65	180	34317	48.59	ug/mL	99
26) Naphthalene	12.82	128	112022	51.35	ug/mL#	91
27) 4-Chloroaniline	13.17	127	46512	45.07	ug/mL	99
28) Hexachlorobutadiene	13.34	225	19100	46.32	ug/mL	97
29) 4-Chloro-3-methylphenol	14.92	107	39399	46.05	ug/mL#	86
30) 2-Chloronaphthalene	16.41	162	75446	48.64	ug/ml	99
31) 2-Methylnaphthalene	14.96	142	103416	59.06	ug/mL	99
33) Hexachlorocyclopentadiene	15.48	237	18372	46.07	ug/mL	99
34) 2,4,6-Trichlorophenol	15.94	196	24339	40.90	ug/mL	99
35) 2,4,5-Trichlorophenol	16.06	196	26643	57.39	ug/mL	97

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

Data File : c.\hpchem\1\data2\b8022 d Vial: 2
Acq On : 26 Jun 95 1:32 am Operator: SCOTTV
Sample : 50 STD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 13:51 1995

Method : C:\HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

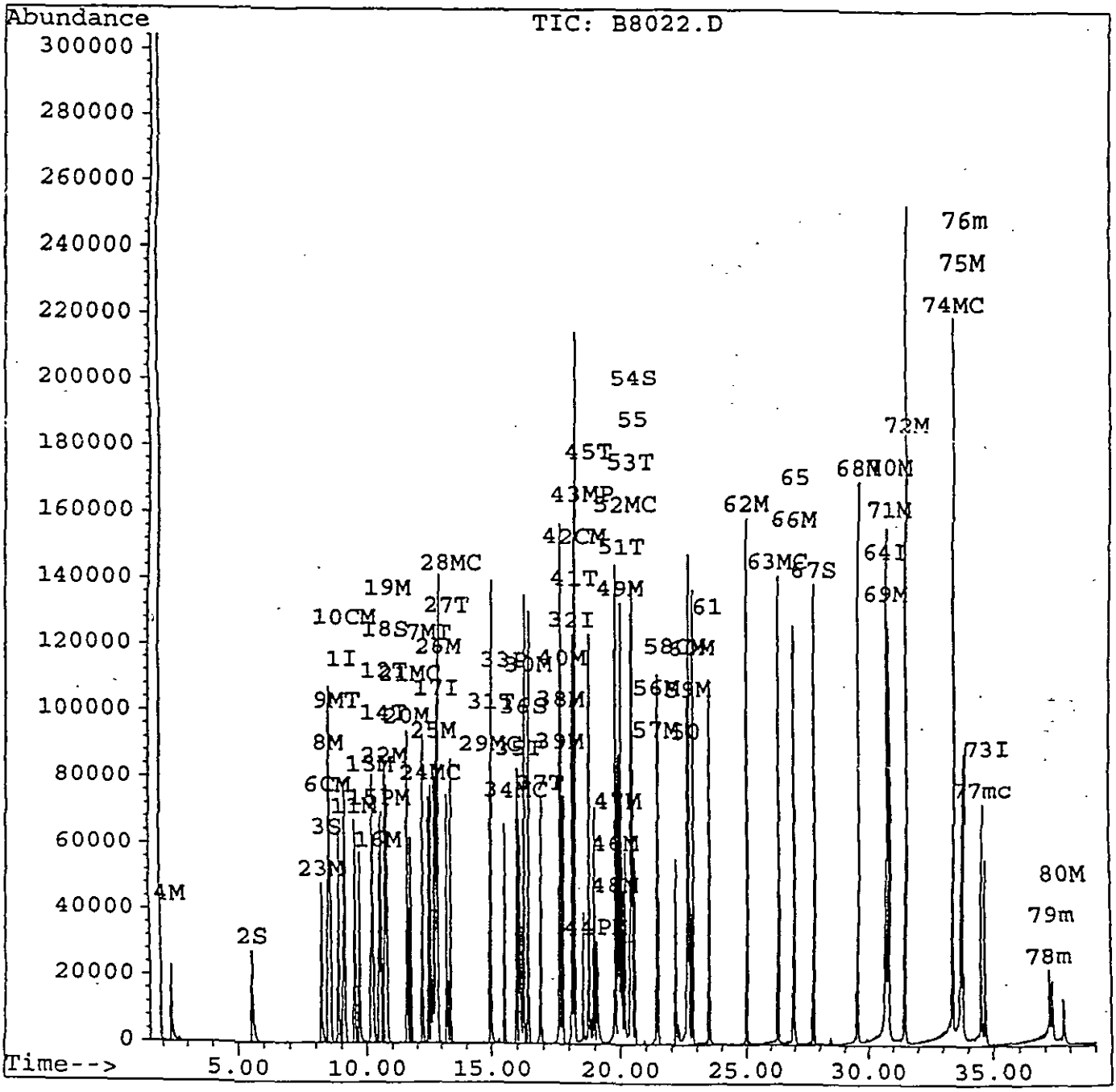
	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
37)	2-Nitroaniline	16.89	65	36347	46.19 ug/mL#	100
38)	Dimethylphthalate	17.66	163	94216	50.61 ug/mL	100
39)	Acenaphthylene	17.62	152	126444	51.78 ug/mL	99
40)	2,6-Dinitrotoluene	17.74	165	22060	49.64 ug/mL	98
41)	3-Nitroaniline	18.18	138	23811	48.05 ug/mL	91
42)	Acenaphthene	18.18	153	74851	50.97 ug/mL	100
43)	2,4-Dinitrophenol	18.51	184	11069	44.87 ug/mL#	79
44)	4-Nitrophenol	19.03	109	11345	47.81 ug/mL	95
45)	Dibenzofuran	18.74	168	109763	47.63 ug/mL	97
46)	2,4-Dinitrotoluene	19.78	165	84381	50.47 ug/mL#	34
47)	Diethylphthalate	19.87	149	102259	49.47 ug/mL	98
48)	Fluorene	19.78	166	91237	50.59 ug/mL	98
49)	4-Chlorophenyl-phenylether	19.97	204	43401	50.81 ug/mL#	89
51)	4-Nitroaniline	20.05	138	21893	59.54 ug/mL	98
52)	4,6-Dinitro-2-methylphenol	20.14	198	15054	51.65 ug/mL	100
53)	n-Nitrosodiphenylamine	20.38	169	61379	54.59 ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.43	77	144138	53.80 ug/ml	100
56)	4-Bromophenyl-phenylether	21.42	248	22677	49.75 ug/mL	95
57)	Hexachlorobenzene	21.40	284	20432	43.03 ug/mL#	55
58)	Pentachlorophenol	22.13	266	14850	48.83 ug/mL	96
59)	Phenanthrene	22.65	178	123975	51.21 ug/mL	99
60)	Anthracene	22.80	178	116611	52.25 ug/mLm	100
61)	Carbazole	23.46	167	103091	49.39 ug/ml	99
62)	Di-n-butylphthalate	24.96	149	205497	57.84 ug/mL	99
63)	Fluoranthene	26.27	202	136995	59.85 ug/mLm	90
65)	Benzidine	26.96	184	42938	47.03 ug/mlm	100
66)	Pyrene	26.90	202	140703	44.89 ug/mL#	91
68)	Butylbenzylphthalate	29.50	149	95939	47.80 ug/mL	87
69)	Benzo[a]anthracene	30.66	228	132833	41.99 ug/mLm	100
70)	3,3'-Dichlorobenzidine	30.82	252	38125	47.27 ug/mL#	96
71)	Chrysene	30.76	228	104112	59.18 ug/mLm	97
72)	bis(2-Ethylhexyl)phthalate	31.47	149	140270	49.26 ug/mL	100
74)	Di-n-octylphthalate	33.38	149	266949	45.32 ug/mLm	99
75)	Benzo[b]fluoranthene	33.73	252	125118	43.87 ug/mLm	95
76)	Benzo[k]fluoranthene	33.80	252	70141	50.97 ug/mLm	97
77)	Benzo[a]pyrene	34.54	252	72996	51.47 ug/mLm	96
78)	Indeno[1,2,3-cd]pyrene	37.21	276	21880	41.83 ug/mL	100
79)	Dibenz[a,h]anthracene	37.31	278	21439	42.56 ug/mL	95
80)	Benzo[g,h,i]perylene	37.77	276	18782	45.67 ug/mLm	92

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

Data File : c:\hpchem\1\data2\b8022.d
Acq On : 26 Jun 95 1:32 am
Sample : 50 STD..... Converted from RTE d
Misc :
Quant Time: Jun 28 13:51 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 Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B7803.D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	29236	9.21	116999	12.92	80656	18.26
	UPPER LIMIT	58472	9.71	233998	13.42	161312	18.76
	LOWER LIMIT	14618	8.71	58500	12.42	40328	17.76
	SAMPLE NO.						
01	SBLK01	29342	9.21	113640	12.92	77393	18.25
02	9521072B	43362	9.20	172473	12.92	120771	18.25
03	9521073B	49674	9.20	207002	12.94	136613	18.27
04	SBLK02	45568	9.20	183778	12.92	124916	18.27
05	9522265B	38448	9.21	156239	12.92	104790	18.25
06	9522845B	34293	9.20	139874	12.92	94484	18.25
07	SBLK03	31802	9.20	131302	12.92	86836	18.27
08	9523339B	31877	9.20	132687	12.92	87914	18.25
09	9523341B	37996	9.20	159444	12.94	104434	18.27
10	9523342B	34168	9.20	146228	12.94	97312	18.27
11	9523343B	33809	9.20	139851	12.92	93023	18.27
12	9523530B	34840	9.20	145007	12.92	98737	18.25
13	9523531B	35055	9.20	145276	12.92	99265	18.27
14	9523533B	36725	9.20	152052	12.92	102907	18.27
15	9523534B	37321	9.29	127658	13.06	64338	18.50
16	9523535B	36905	9.21	144207	12.92	97310	18.26
17	9523536B	36125	9.20	148482	12.92	99681	18.27
18	SBLK04	38489	9.20	152333	12.92	104920	18.25
19	9523789B	39839	9.20	162610	12.92	110929	18.27
20	9523792B	36962	9.20	155161	12.92	105988	18.27
21	9523787B	38496	9.20	159554	12.92	108441	18.27
22	SBLK05	43303	9.20	177127	12.92	122916	18.27

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): B7803 D Date Analyzed. 6/3/95

Instrument ID ABNA Time Analyzed: 1013

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	29236	9 21	116999	12 92	80656	18 26
	UPPER LIMIT	58472	9.71	233998	13.42	161312	18.76
	LOWER LIMIT	14618	8.71	58500	12 42	40328	17 76
	SAMPLE NO						
01	22654MS	33780	9.20	129967	12.94	93254	18.26
02	22654MSD	35303	9 20	144937	12.94	99611	18.26
03	22659MS	28616	9 20	119812	12.94	81829	18.26
04	22659MSD	30456	9.21	121585	12.94	84364	18.26
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): B7803 D Date Analyzed: 6/3/95

Instrument ID: ABNA Time Analyzed: 1013

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	134208	22.77	129676	30.89	93467	34.90
	UPPER LIMIT	268416	23.27	259352	31.39	186934	35 40
	LOWER LIMIT	67104	22.27	64838	30 39	46734	34 40
	SAMPLE NO.						
01	SBLK01	127774	22.76	144639	30 86	143369	34 89
02	9521072B	201946	22.77	208937	30 89	160791	34 90
03	9521073B	222787	22.77	231737	30.89	165808	34.90
04	SBLK02	200423	22.77	227269	30.88	184816	34 91
05	9522265B	172502	22.78	184570	30 88	122938	34 91
06	9522845B	149864	22.78	156654	30 88	124082	34 91
07	SBLK03	142609	22.77	151919	30.88	122270	34.91
08	9523339B	145640	22.78	157437	30 89	128975	34.92
09	9523341B	172617	22.77	198222	30 90	166777	34 93
10	9523342B	156213	22.77	174808	30.88	147217	34 91
11	9523343B	149747	22.77	162481	30 88	137109	34 91
12	9523530B	159922	22.78	179407	30.88	152667	34 91
13	9523531B	164218	22.77	179435	30 88	151215	34.91
14	9523533B	167089	22.77	185071	30 88	155624	34 91
15	9523534B	126172	22.95	162548	30.91	85072	34 88
16	9523535B	153052	22.76	160811	30 89	134801	34 89
17	9523536B	149413	22.77	158425	30 88	129419	34 91
18	SBLK04	168411	22.78	175380	30 88	148566	34 91
19	9523789B	183194	22.77	209328	30 88	181543	34 91
20	9523792B	175832	22 77	198461	30 88	168915	34 91
21	9523787B	177208	22 77	191680	30 88	155077	34 91
22	SBLK05	199698	22 77	216974	30 88	174620	34 91

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): B7803 D Date Analyzed. 6/3/95

Instrument ID: ABNA Time Analyzed. 1013

		IS4 (PHN) AREA #		RT #	IS5 (CRY) AREA #		RT #	IS6 (PRY) AREA #		RT #
	12 HOUR STD	134208		22.77	129676		30 89	93467		34 90
	UPPER LIMIT	268416		23.27	259352		31 39	186934		35 40
	LOWER LIMIT	67104		22 27	64838		30 39	46734		34 40
	SAMPLE NO.									
01	22654MS	155903		22.77	148922		30 91	65345		34 91
02	22654MSD	164759		22.77	152801		30 91	66464		34 91
03	22659MS	135678		22.77	133913		30 90	64806		34 89
04	22659MSD	145091		22.77	140877		30 90	65773		34 90
05										
06										
07										
08										
09										
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13										
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15										
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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

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name EMSL ANALYTICAL Contract

Project No Site Location Group

Lab File ID (Standard) B8022 D Date Analyzed 6/26/95

Instrument ID ABNA Time Analyzed 0132

		IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
	12 HOUR STD	21442	9 03	89144	12 77	57304	18 08
	UPPER LIMIT	42884	9 53	178288	13 27	114608	18.58
	LOWER LIMIT	10721	8.53	44572	12 27	28652	17 58
	SAMPLE NO						
01	SBLK01	18647	9 05	76527	12.74	50131	18.07
02	9526397B	23451	9 05	97748	12 74	61605	18.08
03	9526427B	24416	9.05	99072	12.75	65585	18.08
04	9526428B	24553	9.03	101580	12.75	66203	18.08
05	9526429B	27637	9.03	109180	12.75	72940	18 08
06	9526430B	30774	9 04	131052	12 75	85269	18 07
07	9526431B	28375	9 04	119977	12.73	76248	18.07
08	9526432B	26867	9 03	111812	12 75	72507	18.06
09	9526433B	31882	9 03	132938	12 75	85781	18 06
10	9526434B	31359	9 03	130386	12.75	86662	18.06
11	9526404B	27624	9.15	99335	12.91	50190	18.32
12	SBLK02	34799	9 04	143633	12.75	96973	18.06
13	9526460B	31927	9.03	123816	12.75	83112	18 06
14	9526461B	32045	9 03	130665	12.75	88931	18 06
15	9526462B	31027	9 04	127134	12 75	84900	18 06
16	9526605B	32505	9.03	129997	12 74	90498	18.06
17	9526606B	33509	9 03	130010	12 74	89335	18.06
18	9526607B	31707	9 03	125566	12 74	86746	18.06
19	9526608B	29751	9 03	123689	12 75	85078	18 06
20	9526609B	32785	9 03	132417	12 73	89239	18 06
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

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name EMSL ANALYTICAL Contract

Project No . Site Location Group

Lab File ID (Standard) B8022 D Date Analyzed 6/26/95

Instrument ID ABNA Time Analyzed 0132

		IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
	12 HOUR STD	88470	22 57	83496	30 68	46248	34 69
	UPPER LIMIT	176940	23 07	166992	31 18	92496	35 19
	LOWER LIMIT	44235	22 07	41748	30 18	23124	34.19
	SAMPLE NO						
01	SBLK01	82468	22 58	90615	30 68	86128	34.70
02	9526397B	102617	22 58	113970	30 68	83805	34 71
03	9526427B	109899	22 58	116909	30 67	78497	34 69
04	9526428B	106319	22.57	105542	30.67	89295	34 69
05	9526429B	118151	22.57	120174	30 67	83249	34.70
06	9526430B	138762	22 57	149884	30 67	58029	34 70
07	9526431B	128318	22 57	147780	30 68	61251	34 70
08	9526432B	120490	22 57	139055	30 67	62024	34.69
09	9526433B	142537	22 57	146160	30 67	48583	34 68
10	9526434B	139691	22.57	162373	30 67	59773	34 69
11	9526404B	80940	22 81	108486	30 70	87968	34 66
12	SBLK02	164949	22 57	155418	30.67	60234	34.68
13	9526460B	128520	22.57	125979	30 66	86508	34.68
14	9526461B	150455	22 57	151786	30 67	57313	34.70
15	9526462B	143517	22 57	163582	30 67	70818	34 70
16	9526605B	149315	22.56	159677	30 66	32874	34 69
17	9526606B	146020	22 56	165364	30.67	64198	34.69
18	9526607B	133121	22 56	156278	30 66	82524	34 69
19	9526608B	147468	22 58	155888	30 67	60262	34 69
20	9526609B	142783	22 56	163992	30 67	46820	34 68
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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
FORT MONMOUTH, NJ

SAMPLE NO
9526427B
Bldg 206 FB

192

Lab Name EMSL ANALYTICAL US ARMY

FMETL# Site BLDG# NJDEP#

Matrix (soil/water) WATER Lab Sample ID 9526427B

Sample wt/vol 1000.0 (g/mL ML Lab File ID B8025.D

Level (low/med) Date Received 6/13/95

% Moisture decanted (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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

SEMI-VOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

9526427B 193

Bkg 206 FB

Lab Name EMSL ANALYTICAL US ARMY

FMETL# Site BLDG# NJDEP#

Matrix (soil/water) WATER Lab Sample ID 9526427B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B8025 D

Level (low/med) Date Received 6/13/95

% Moisture decanted (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526427B
Bldg 206 FB

Lab Name: EMSL ANALYTICAL US ARMY: _____

FMETL#: _____ Site: _____ BLDG#: _____ NJDEP#: _____

Matrix (soil/water): WATER Lab Sample ID: 9526427B

Sample wt/vol: 1000 0 (g/mL) ML Lab File ID: B8025 D

Level (low/med): _____ Date Received: 6/13/95

% Moisture: _____ decanted (Y/N): N Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95

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.				
9.				
10				
11.				
12.				
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14				
15				
16.				
17.				
18.				
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20				
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22.				
23.				
24.				
25.				
26.				
27.				
28.				
29				
30				

Data File c:\hpchem\1\data2\b8025 d Vial 5
Acq On 26 Jun 95 4 42 am Operator. SCOTTV
Sample . 26427. . . Converted from RTE d Inst ABNA
Misc . BT Multiplr. 1.00
Quant Time Jun 28 14.50 1995

Method . c:\HPCHEM\1\METHODS\BNACLP M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14·15:34 1995
Response via : Multiple Level Calibration

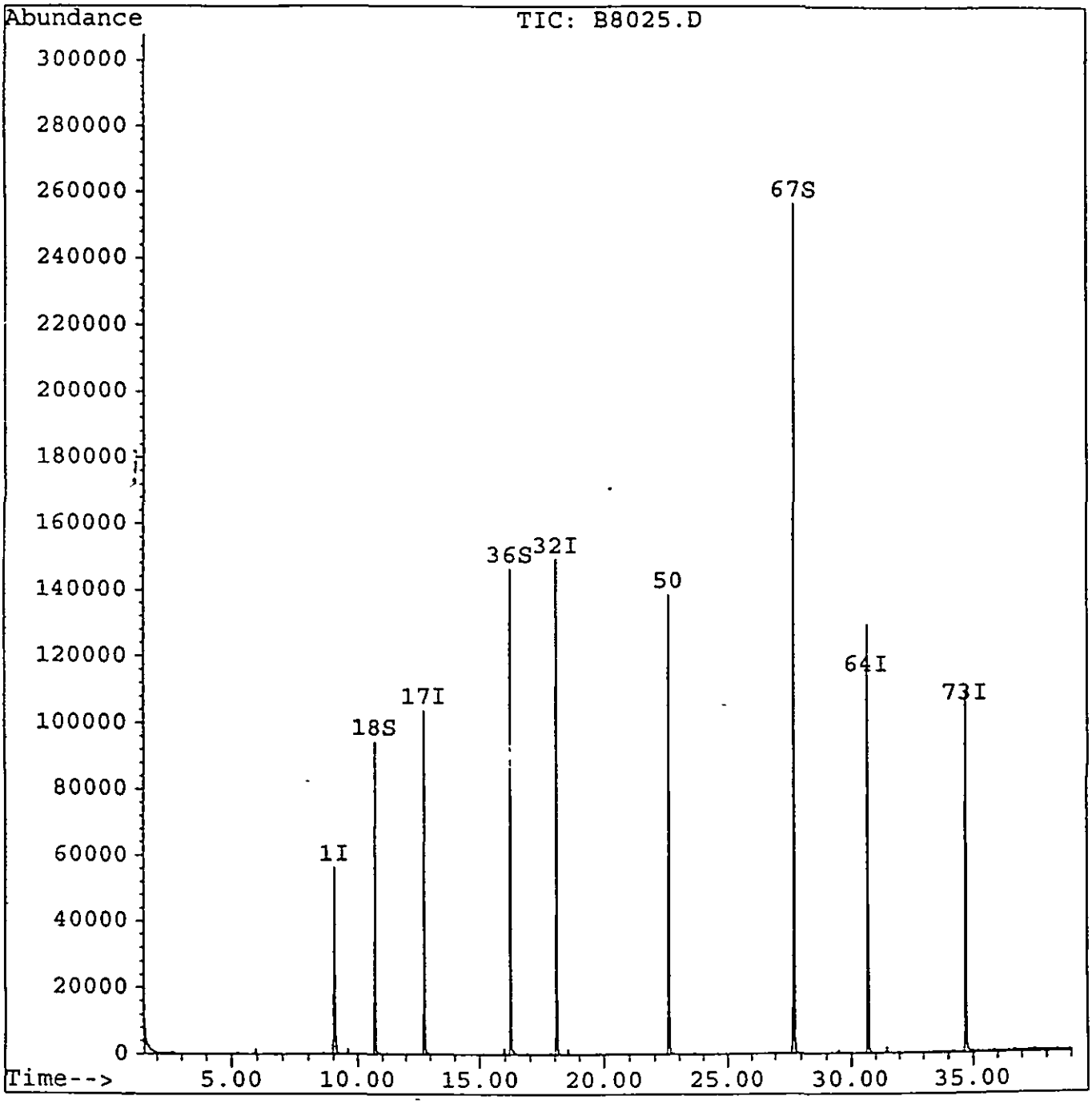
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	24416	40.00	ug/mL	0.02
17) Naphthalene-d8	12.75	136	99072	40.00	ug/mL	0.00
32) Acenaphthene-d10	18.08	164	65585	40.00	ug/mL	0.03
50) Phenanthrene-d10	22.58	188	109899	40.00	ug/ml	0.06
64) Chrysene-d12	30.67	240	116909	40.00	ug/mL	0.09
73) Perylene-d12	34.69	264	78497	40.00	ug/mL	0.10
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.03	99	104	0.09	ug/mL	0.09%
18) Nitrobenzene-d5	10.71	82	61825	54.77	ug/mL	54.77%
36) 2-Fluorobiphenyl	16.23	172	106501	54.14	ug/mL	54.14%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.74	244	208248	67.11	ug/mL	67.11%

Target Compounds Qvalue

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

Data File : c:\hpchem\1\data2\b8025.d Vial 5
Acq On : 26 Jun 95 4 42 am Operator: SCOTTV
Sample : 26427..... Converted from RTE d Inst . ABNA
Misc : BT Multiplr. 1.00
Quant Time Jun 28 14:50 1995

Method c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update Thu Jun 15 14:15:34 1995
Response via Multiple Level Calibration



Data File : c:\hpchem\1\data2\b8025.d Vial: 5
Acq On : 26 Jun 95 4:42 am Operator: SCOTTV
Sample : 26427... .... Converted from RTE d Inst : ABNA
Misc BT Multiplr: 1.00

Method . c \HPCHEM\1\METHODS\BNACLP M
Title . CLP BNA Calibration
Library . NBS75K.L

No Library Search Compounds Detected

SAMPLE NO 198

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

FORT MONMOUTH, NJ

9526433B

MW01-293792

Lab Name EMSL ANALYTICAL US ARMY

FMETL# Site BLDG# 210 NJDEP#

Matrix (soil/water) WATER Lab Sample ID 9526433B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B8031 D

Level (low/med) Date Received 6/13/95

% Moisture decanted (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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

FORT MONMOUTH, NJ

SAMPLE NO

9526433B

MW1-293252

199

Lab Name EMSL ANALYTICAL US ARMY

FMETL# Site BLDG# 210 NJDEP#

Matrix (soil/water) WATER Lab Sample ID 9526433B

Sample wt/vol 1000 0 (g/mL ML Lab File ID B8031 D

Level (low/med) Date Received: 6/13/95

% Moisture decanted (Y/N) N Date Extracted: 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed: 6/26/95

Injection Volume 1 0 (uL) Dilution Factor: 1 0

GPC Cleanup (Y/N) N pH

Concentration Units:

CAS No.	Compound	(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

FORT MONMOUTH NJ 1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO
9526433B
mvl-293792

200

Lab Name. EMSL ANALYTICAL US ARMY

FMETL# Site BLDG# 210 NJDEP#

Matrix (soil/water) WATER Lab Sample ID 9526433B

Sample wt/vol 1000 0 (g/mL) ML Lab File ID B8031 D

Level (low/med) Date Received 6/13/95

% Moisture decanted (Y/N) N Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL) Date Analyzed 6/26/95

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				
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Quantitation Report

Data File : c:\hpchem\1\data2\b8031.d Vial: 11
Acq On : 26 Jun 95 9:52 am Operator: SCOTTV
Sample : 26433..... ... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 14:55 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.03	152	31882	40.00	ug/mL	0.00
17) Naphthalene-d8	12.75	136	132938	40.00	ug/mL	0.00
32) Acenaphthene-d10	18.06	164	85781	40.00	ug/mL	0.02
50) Phenanthrene-d10	22.57	188	142537	40.00	ug/ml	0.05
64) Chrysene-d12	30.67	240	146160	40.00	ug/mL	0.09
73) Perylene-d12	34.68	264	48583	40.00	ug/mL	0.08
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.03	99	348	0.23	ug/mL	0.23%
18) Nitrobenzene-d5	10.69	82	71252	47.04	ug/mL	47.04%
36) 2-Fluorobiphenyl	16.21	172	141465	54.98	ug/mL	54.98%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.73	244	264515	68.18	ug/mL	68.18%

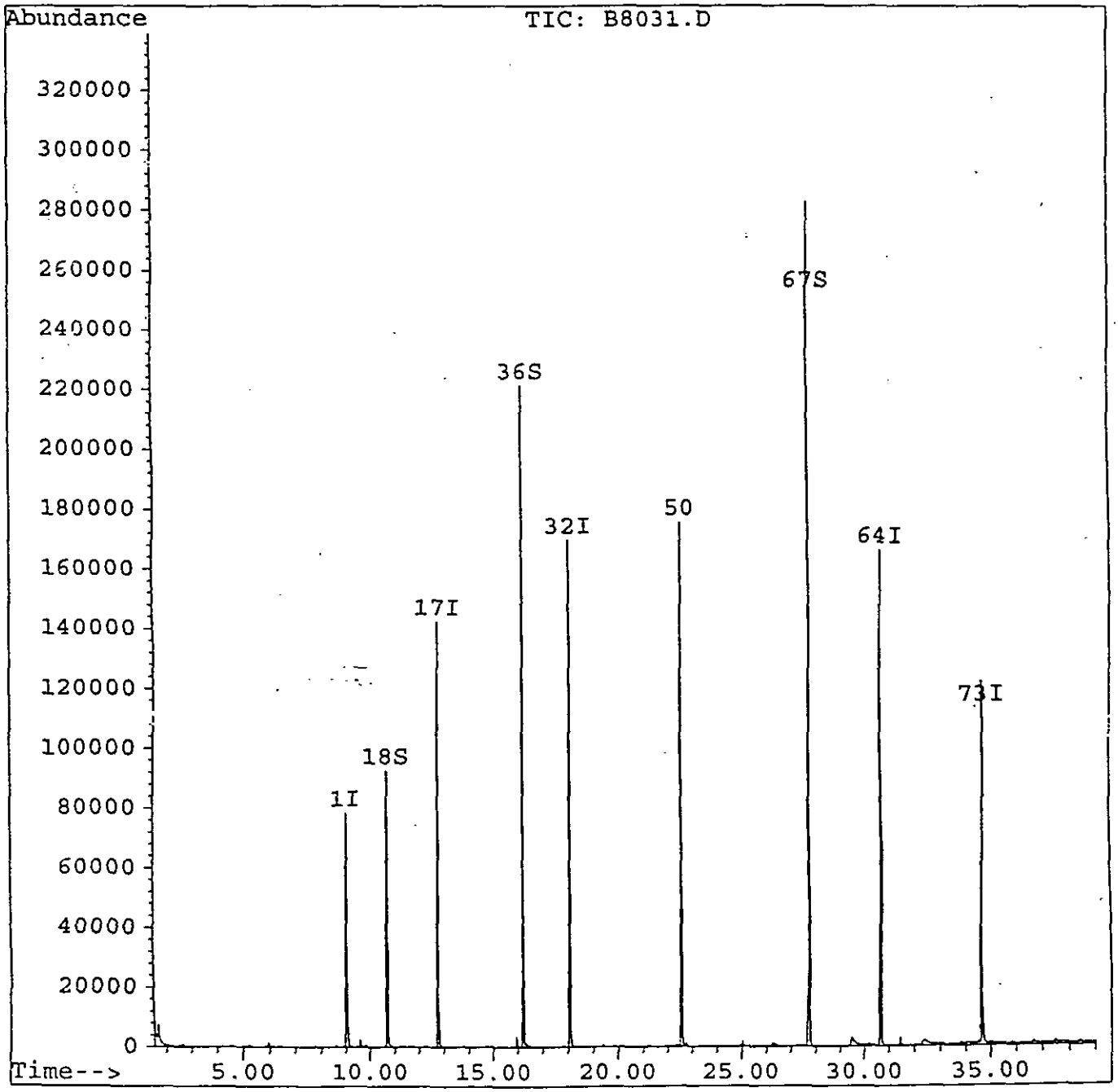
Target Compounds Qvalue

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

Quantitation Report

Data File : c:\hpchem\1\data2\b8031.d Vial: 11
Acq On : 26 Jun 95 9:52 am Operator: SCOTTV
Sample : 26433..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 14:55 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: EMSL ANALYTICAL Contract. _____

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

	SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK02	29	23	38						
02	9522265B	44	37	66						
03	9522845B	60	49	73						
04	SBLK03	68	67	89						
05	9523339B	73	69	60						
06	9523341B	61	60	63						
07	9523342B	74	70	68						
08	9523343B	64	62	72						
09	9523530B	64	61	65						
10	9523531B	73	67	69						
11	9523533B	40	39	64						
12	9523534B	81	67	76						
13	9523535B	70	69	68						
14	9523536B	62	65	68						
15	SBLK04	62	61	68						
16	9523789B	57	61	72						
17	9523792B	60	64	70						
18	9523787B	39	43	63						
19	SBLK05	57	55	63						
20	22654MS	91	63	82						
21	22654MSD	74	61	72						
22	22659MS	75	67	80						
23	22659MSD	78	65	78						
24										
25										
26										
27										
28										
29										
30										

	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 (NBZ) #	S2 (FBP) #	S3 (TPH) #	#	#	#	#	#	TOT OUT
01	SBLK01	73	75	75						
02	9526397B	32	31	65						
03	9526427B	55	54	67						
04	9526428B	43	47	73						
05	9526429B	71	80	75						
06	9526430B	67	73	69						
07	9526431B	58	64	56						
08	9526432B	50	58	67						
09	9526433B	47	55	68						
10	9526434B	67	72	67						
11	9526404B	67	72	62						
12	SBLK02	42	47	82						
13	9526460B	43	53	67						
14	9526461B	46	54	82						
15	9526462B	43	54	68						
16	9526605B	57	61	66						
17	9526606B	50	53	69						
18	9526607B	40	43	41						
19	9526608B	24	36	47						
20	9526609B	42	51	66						
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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

4B

SAMPLE NO. 605

SEMIVOLATILE METHOD BLANK SUMMARY

SBLK05

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: B7825.D Lab Sample ID: BLANK5

Instrument ID: ABNA Date Extracted: 5/23/95

Matrix: (soil/water) WATER Date Analyzed: 6/4/95

Level: (low/med) _____ Time Analyzed: 0435

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

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	22654MS	22654MS	B7826.D	06/04/95
02	22654MSD	22654MSD	B7827.D	06/04/95
03	22659MS	22659MS	B7828.D	06/04/95
04	22659MSD	22659MSD	B7829.D	06/04/95
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COMMENTS.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

SBLK05

206

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) Date Received:

% Moisture: decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

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
108-95-2	Phenol	2	U
111-44-4	bis(2-Chloroethyl)ether	1	U
95-57-8	2-Chlorophenol	2	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
88-75-5	2-Nitrophenol	3	U
105-67-9	2,4-Dimethylphenol	3	U
111-91-1	bis(2-Chloroethoxy)methane	3	U
120-83-2	2,4-Dichlorophenol	3	U
120-82-1	1,2,4-Trichlorobenzene	2	U
91-20-3	Naphthalene	2	U
87-68-3	Hexachlorobutadiene	2	U
59-50-7	4-Chloro-3-methylphenol	3	U
77-47-4	Hexachlorocyclopentadiene	12	U
88-06-2	2,4,6-Trichlorophenol	3	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
51-28-5	2,4-Dinitrophenol	24	U
100-02-7	4-Nitrophenol	21	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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. SBLK05 207

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000 0 (g/mL ML Lab File ID: B7825.D

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

% Moisture: _____ decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume. 1000 (uL) Date Analyzed: 6/4/95

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
534-52-1	4,6-Dinitro-2-methylphenol	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
87-86-5	Pentachlorophenol	5	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
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.

SBLK05 208

Lab Name: EMSL ANALYTICAL Contract:

Project No.: Site: Location: Group:

Matrix: (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000.0 (g/mL ML Lab File ID: B7825 D

Level (low/med) Date Received: 5/24/95

% Moisture: decanted: (Y/N): N Date Extracted: 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

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

SBLK05 209

Lab Name: EMSL ANALYTICAL Contract: _____

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

Matrix (soil/water) WATER Lab Sample ID: BLANK5

Sample wt/vol: 1000 0 (g/mL ML Lab File ID: B7825.D

Level: (low/med) _____ Date Received: 5/24/95

% Moisture: _____ decanted: (Y/N): N Date Extracted. 5/23/95

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/4/95

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7825.d Vial: 24
Acq On : 4 Jun 95 4:35 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 16:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

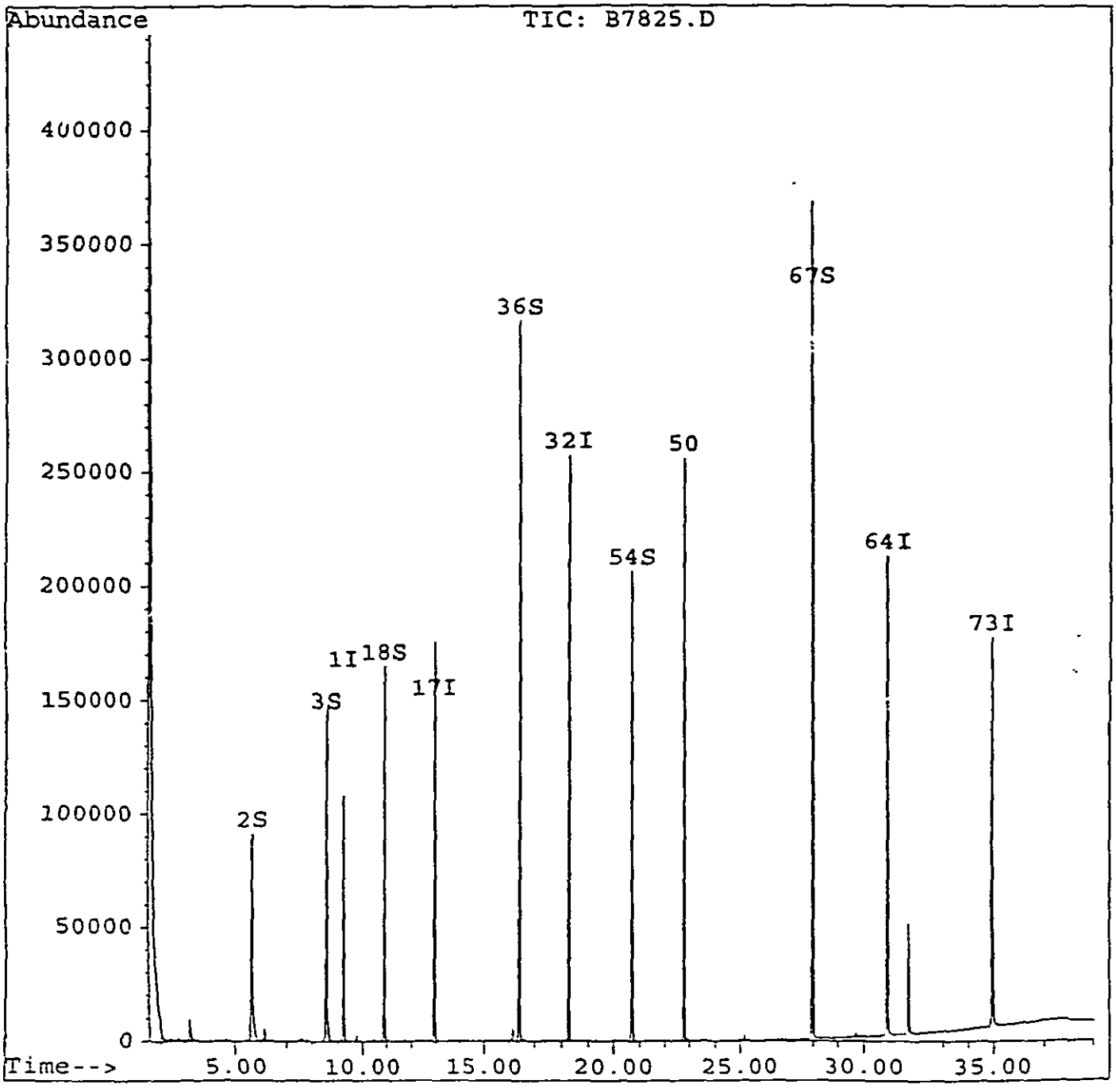
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	43303	40.00	ug/mL	0.17
17) Naphthalene-d8	12.92	136	177127	40.00	ug/mL	0.17
32) Acenaphthene-d10	18.27	164	122916	40.00	ug/mL	0.22
50) Phenanthrene-d10	22.77	188	199698	40.00	ug/ml	0.26
64) Chrysene-d12	30.88	240	216974	40.00	ug/mL	0.30
73) Perylene-d12	34.91	264	174620	40.00	ug/mL	0.31
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	5.64	112	78262	63.90	ug/mL	63.90%
3) Phenol-d5	8.53	99	133633	65.92	ug/mL	65.92%
18) Nitrobenzene-d5	10.88	82	114709	56.84	ug/mL	56.84%
36) 2-Fluorobiphenyl	16.40	172	202657	54.96	ug/mL	54.96%
54) 2,4,6-Tribromophenol	20.70	330	47874	88.77	ug/mL	88.77%
67) Terphenyl-d14	27.33	244	363044	63.04	ug/mL	63.04%
Target Compounds						**Qvalue**

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7825.d Vial: 24
Acq On : 4 Jun 95 4:35 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 5 16:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



SEMIVOLATILE METHOD BLANK SUMMARY

SBLK01

212

Lab Name EMSL ANALYTICAL Contract

Project No. Site Location Group

Lab File ID B8023 D Lab Sample ID BLANK1

Instrument ID ABNA Date Extracted 6/19/95

Matrix (soil/water) WATER Date Analyzed 6/26/95

Level (low/med) Time Analyzed. 0256

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

	SAMPLE NO	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	9526397B	9526397B	B8024 D	06/26/95
02	9526427B	9526427B	B8025.D	06/26/95
03	9526428B	9526428B	B8026 D	06/26/95
04	9526429B	9526429B	B8027 D	06/26/95
05	9526430B	9526430B	B8028 D	06/26/95
06	9526431B	9526431B	B8029.D	06/26/95
07	9526432B	9526432B	B8030 D	06/26/95
08	9526433B	9526433B	B8031 D	06/26/95
09	9526434B	9526434B	B8032 D	06/26/95
10	9526404B	9526404B	B8033 D	06/26/95
11				
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COMMENTS

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK01

213

Lab Name EMSL ANALYTICAL

Site

Matrix (soil/water) WATER

Lab Sample ID BLANK1

Sample wt/vol 1000 0 (g/mL ML

Lab File ID B8023 D

Level (low/med)

Date Received: 6/14/95

% Moisture decanted· (Y/N) N

Date Extracted. 6/19/95

Concentrated Extract Volume 1000 (uL)

Date Analyzed: 6/26/95

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK01

214

Lab Name EMSL ANALYTICAL

Site

Matrix (soil/water) WATER

Lab Sample ID BLANK1

Sample wt/vol 1000 0 (g/mL ML

Lab File ID B8023 D

Level (low/med)

Date Received. 6/14/95

% Moisture

decanted. (Y/N) N

Date Extracted 6/19/95

Concentrated Extract Volume 1000 (uL)

Date Analyzed. 6/26/95

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

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK01

215

Lab Name: EMSL ANALYTICAL

Site:

Matrix: (soil/water) WATER

Lab Sample ID: BLANK1

Sample wt/vol: 1000.0 (g/mL) ML

Lab File ID: B8023.D

Level: (low/med)

Date Received: 6/14/95

% Moisture: decanted: (Y/N) N

Date Extracted: 6/19/95

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 6/26/95

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.				
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28.				
29.				
30.				

Data File : c:\hpchem\1\data2\b8023.d Vial: 3
Acq On : 26 Jun 95 2.56 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 14:48 1995

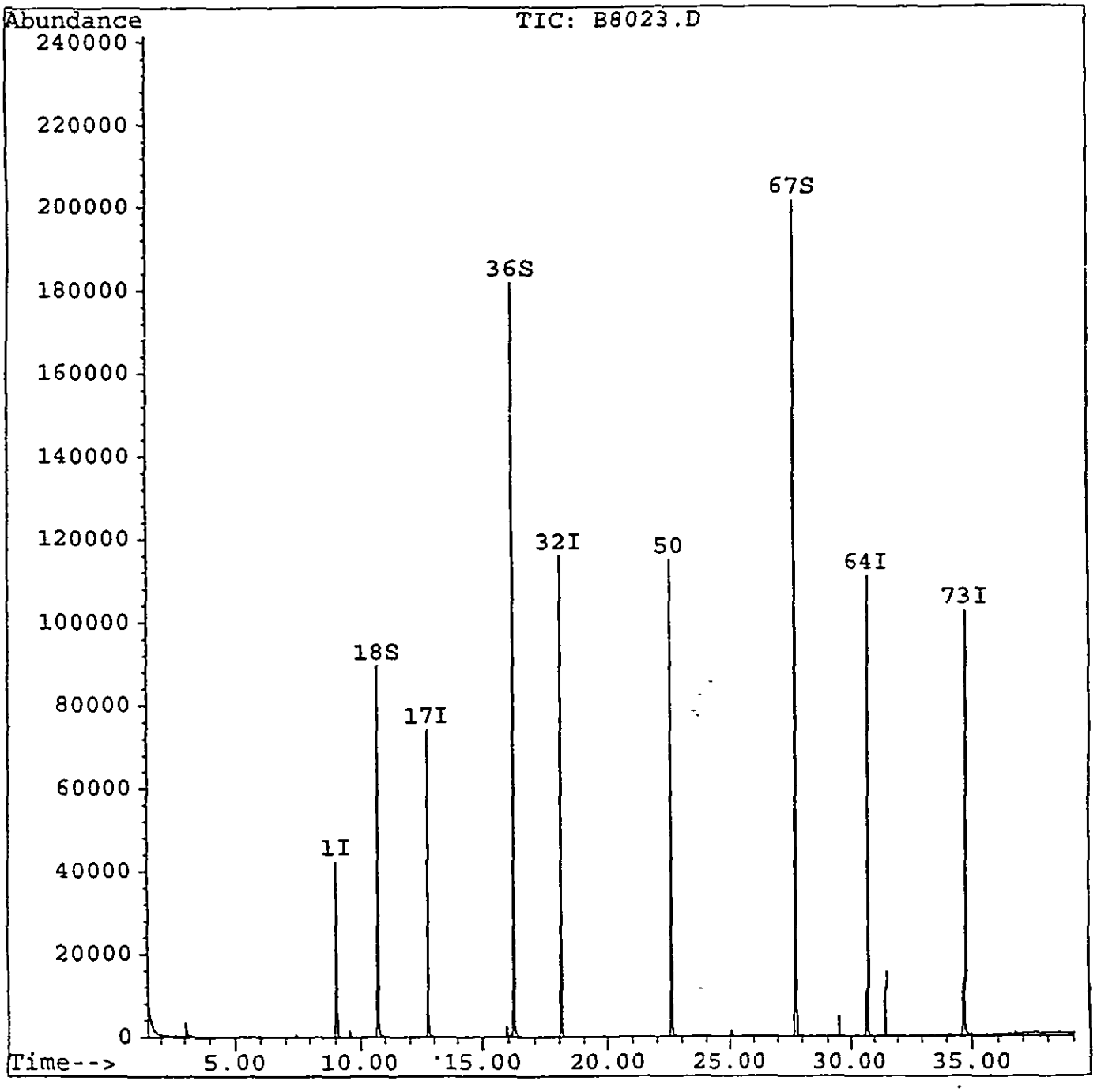
Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.05	152	18647	40.00	ug/mL	0.02
17) Naphthalene-d8	12.74	136	76527	40.00	ug/mL	0.00
32) Acenaphthene-d10	18.07	164	50131	40.00	ug/mL	0.03
50) Phenanthrene-d10	22.58	188	82468	40.00	ug/ml	0.06
64) Chrysene-d12	30.68	240	90615	40.00	ug/mL	0.10
73) Perylene-d12	34.70	264	86128	40.00	ug/mL	0.11
System Monitoring Compounds						**%Recovery**
2) 2-Fluorophenol	0.00	112	0	0.00	ug/mL	0.00%
3) Phenol-d5	9.05	99	81	0.09	ug/mL	0.09%
18) Nitrobenzene-d5	10.70	82	63446	72.77	ug/mL	72.77%
36) 2-Fluorobiphenyl	16.22	172	112181	74.60	ug/mL	74.60%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.74	244	179869	74.79	ug/mL	74.79%
Target Compounds						**Qvalue**

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

Data File : c:\hpchem\1\data2\b8023.d Vial: 3
Acq On : 26 Jun 95 2.56 am Operator: SCOTTV
Sample : BLANK..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 28 14:48 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Thu Jun 15 14:15:34 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

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Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Initial Calibration

bn-Spiked Sample: B7742.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7826.D	B7827.D
Sample :	22654MS.....	Converted from RTE data file >B7826::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.0	100	108	91	108	91	17	100	1-300
Phenol	0.0	100	69	64	69	64	7	23	5-112
bis(2-Chloroethyl)et	0.0	100	77	68	77	68	13	55	12-158
2-Chlorophenol	0.0	100	76	67	76	67	13	29	23-134
1,3-Dichlorobenzene	0.0	100	57	50	57	50	14	42	1-172
1,4-Dichlorobenzene	0.0	100	58	51	58	51	13	32	20-124
1,2-Dichlorobenzene	0.0	100	62	53	62	53	15	31	32-129
bis(2-chloroisopropy	0.0	100	134	118	134	118	13	46	36-166
N-Nitroso-Di-n-propy	0.0	100	78	66	78	66	16	55	1-230
Hexachloroethane	0.0	100	50	42	50	42	18	25	40-113
Nitrobenzene	0.2	100	84	71	83	71	17	39	35-180
Isophorone	0.0	100	70	59	70	59	17	63	21-196
2-Nitrophenol	0.0	100	79	65	79	65	19	35	29-182
2,4-Dimethylphenol	0.0	100	43	40	43	40	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	58	49	58	49	18	35	33-184
2,4-Dichlorophenol	0.0	100	79	67	79	67	16	26	39-135
1,2,4-Trichlorobenze	0.0	100	67	59	67	59	13	28	44-142
Naphthalene	0.0	100	71	61	71	61	15	30	21-133
Hexachlorobutadiene	0.0	100	55	49	55	49	11	26	24-116
4-Chloro-3-methylphe	0.0	100	73	63	73	63	15	37	22-147
2-Chloronaphthalene	0.0	100	77	68	77	68	12	13	60-118
2,4,6-Trichloropheno	0.0	100	57	52	57	52	8	32	37-144
Dimethylphthalate	0.0	100	44	35	44	35	23	23	1-112
Acenaphthylene	0.0	100	56	50	56	50	12	40	33-145
2,6-Dinitrotoluene	0.0	100	73	71	73	71	3	30	50-158
Acenaphthene	0.0	100	77	71	77	71	8	28	47-145
2,4-Dinitrophenol	0.0	100	68	65	68	65	4	50	1-191
4-Nitrophenol	0.5	100	76	70	76	70	8	47	1-132
2,4-Dinitrotoluene	0.0	100	75	68	75	68	9	22	39-139
Diethylphthalate	0.1	100	47	41	47	41	15	27	1-114
Fluorene	0.9	100	75	69	74	68	9	21	59-121
4-Chlorophenyl-phenyl	0.0	100	77	69	77	69	11	33	25-158
4,6-Dinitro-2-methyl	0.0	100	76	70	76	70	8	93	1-181
4-Bromophenyl-phenyl	0.0	100	78	72	78	72	8	23	53-127
Hexachlorobenzene	0.0	100	90	82	90	82	10	25	1-152
Pentachlorophenol	0.0	100	100	93	100	93	7	49	14-176
Phenanthrene	0.0	100	81	75	81	75	9	21	54-120
Anthracene	0.0	100	96	83	96	83	14	32	52-115
Di-n-butylphthalate	0.2	100	77	71	77	71	8	17	1-118
Fluoranthene	0.0	100	95	88	95	88	8	33	26-137
Pyrene	0.0	100	68	65	68	65	5	25	52-115
Butylbenzylphthalate	0.3	100	65	58	64	57	12	23	1-152
Benzo[a]anthracene	0.1	100	65	58	65	58	11	28	33-143
3,3'-Dichlorobenzidi	0.0	100	81	74	81	74	9	71	1-262

hrysene	0.1	100	118	106	118	106	10	48	17-168
is(2-Ethylhexyl)pht	0.4	100	71	63	71	62	13	41	8-158
Di-n-octylphthalate	0.0	100	67	59	67	59	13	31	4-146
enzo[b]fluoranthene	0.0	100	53	48	53	48	11	39	24-159
enzo[k]fluoranthene	0.1	100	108	99	108	99	8	32	11-162
Benzo[a]pyrene	0.1	100	101	90	101	90	12	39	17-163
ndeno[1,2,3-cd]pyre	0.0	100	42	38	42	38	10	45	1-171
ibenz[a,h]anthracen	0.0	100	47	50	47	50	5	70	1-227
Benzo[g,h,i]perylene	0.0	100	54	48	54	48	11	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d Vial: 25
Acq On : 4 Jun 95 5:25 am Operator: SCOTTV
Sample : 22654MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	33780	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	129967	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	93254	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	155903	40.00	ug/ml	0.25
64) Chrysene-d12	30.91	240	148922	40.00	ug/mL	0.33
73) Perylene-d12	34.91	264	65345	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.66	112	86730	90.77	ug/mL	90.77%
3) Phenol-d5	8.57	99	147096	93.02	ug/mL	93.02%
18) Nitrobenzene-d5	10.90	82	134034	90.52	ug/mL	90.52%
36) 2-Fluorobiphenyl	16.41	172	175522	62.75	ug/mL	62.75%
54) 2,4,6-Tribromophenol	20.71	330	46665	110.83	ug/mL	110.83%
67) Terphenyl-d14	27.94	244	322279	81.53	ug/mL	81.53%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	52801	108.13	ug/mlm	0
5) Pyridine	1.58	79	3052	8.44	ug/ml	100
6) Phenol	8.61	94	97169	68.99	ug/mL	100
7) bis(2-Chloroethyl)ether	12.61	93	132335	77.35	ug/mL	96
8) 2-Chlorophenol	8.63	128	81945	76.45	ug/mL	90
9) 1,3-Dichlorobenzene	9.01	146	66629	56.96	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	69858	57.89	ug/mL	100
11) 1,2-Dichlorobenzene	9.65	146	70561	61.55	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.30	45	211229	133.86	ug/mL#	65
15) N-Nitroso-Di-n-propylamine	10.69	70	88152	77.56	ug/mL	95
16) Hexachloroethane	10.61	117	33123	49.97	ug/mL	89
19) Nitrobenzene	10.96	77	115194	83.63	ug/mL#	85
20) Isophorone	11.75	82	203312	70.04	ug/mL	98
21) 2-Nitrophenol	11.88	139	53977	78.97	ug/mL#	85
22) 2,4-Dimethylphenol	12.33	107	55100	43.09	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.72	93	86556	58.41	ug/mL	98
24) 2,4-Dichlorophenol	12.67	162	76577	79.05	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.83	180	68935	66.95	ug/mL	98
26) Naphthalene	13.00	128	225507	70.91	ug/mL#	90
27) 4-Chloroaniline	13.00	127	28186	18.73	ug/mL#	1
28) Hexachlorobutadiene	13.52	225	33083	55.03	ug/mL	98
29) 4-Chloro-3-methylphenol	15.04	107	91543	73.39	ug/mL	95
30) 2-Chloronaphthalene	16.60	162	173185	76.58	ug/mlm	95
31) 2-Methylnaphthalene	15.04	142	68690	26.91	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	54836	56.62	ug/mL	98
35) 2,4,5-Trichlorophenol	16.12	196	54836	72.58	ug/mL	98
37) 2-Nitroaniline	17.93	65	3806	2.97	ug/mL#	100
38) Dimethylphthalate	17.83	163	132688	43.80	ug/mL	100

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d Vial: 25
Acq On : 4 Jun 95 5:25 am Operator: SCOTTV
Sample : 22654MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:06 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc Unit	Qvalue
39)	Acenaphthylene	17.80	152	221369	55.71 ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	52674	72.83 ug/mL	98
42)	Acenaphthene	18.37	153	184037	77.01 ug/mL	98
43)	2,4-Dinitrophenol	18.68	184	27438	68.35 ug/mL#	82
44)	4-Nitrophenol	19.15	109	29448	76.25 ug/mL	93
46)	2,4-Dinitrotoluene	19.97	165	203714	74.87 ug/mL#	33
47)	Diethylphthalate	20.07	149	159610	47.45 ug/mL	100
48)	Fluorene	19.97	166	219880	74.92 ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	106703	76.76 ug/mL	99
51)	4-Nitroaniline	19.97	138	2333	3.60 ug/mL#	26
52)	4,6-Dinitro-2-methylphenol	20.32	198	38799	75.54 ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	120798	60.97 ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	341255	72.29 ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	63010	78.44 ug/mL	93
57)	Hexachlorobenzene	21.59	284	75708	90.48 ug/mL#	81
58)	Pentachlorophenol	22.31	266	53483	99.80 ug/mL	98
59)	Phenanthrene	22.87	178	347261	81.41 ug/mL	99
60)	Anthracene	22.87	178	375780	95.56 ug/mL	98
62)	Di-n-butylphthalate	25.16	149	485216	77.50 ug/mL	100
63)	Fluoranthene	27.13	202	383198	95.00 ug/mL	95
65)	Benzidine	27.15	184	31355	19.25 ug/ml	100
66)	Pyrene	27.13	202	382718	68.46 ug/mL#	87
68)	Butylbenzylphthalate	29.69	149	231108	64.56 ug/mL	98
69)	Benzo[a]anthracene	30.89	228	364541	64.61 ug/mL	99
70)	3,3'-Dichlorobenzidine	31.03	252	116175	80.76 ug/mL	99
71)	Chrysene	30.89	228	369164	117.64 ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	362642	71.41 ug/mL	98
74)	Di-n-octylphthalate	33.57	149	561704	67.50 ug/mL	99
75)	Benzo[b]fluoranthene	33.94	252	214943	53.34 ug/mL	99
76)	Benzo[k]fluoranthene	33.94	252	210450	108.25 ug/mL	91
77)	Benzo[a]pyrene	34.04	252	202935	101.27 ug/mL	97
78)	Indeno[1,2,3-cd]pyrene	37.41	276	31241	42.27 ug/mL#	76
79)	Dibenz[a,h]anthracene	37.53	278	33601	47.21 ug/mL#	91
80)	Benzo[g,h,i]perylene	37.41	276	31328	53.91 ug/mL#	91

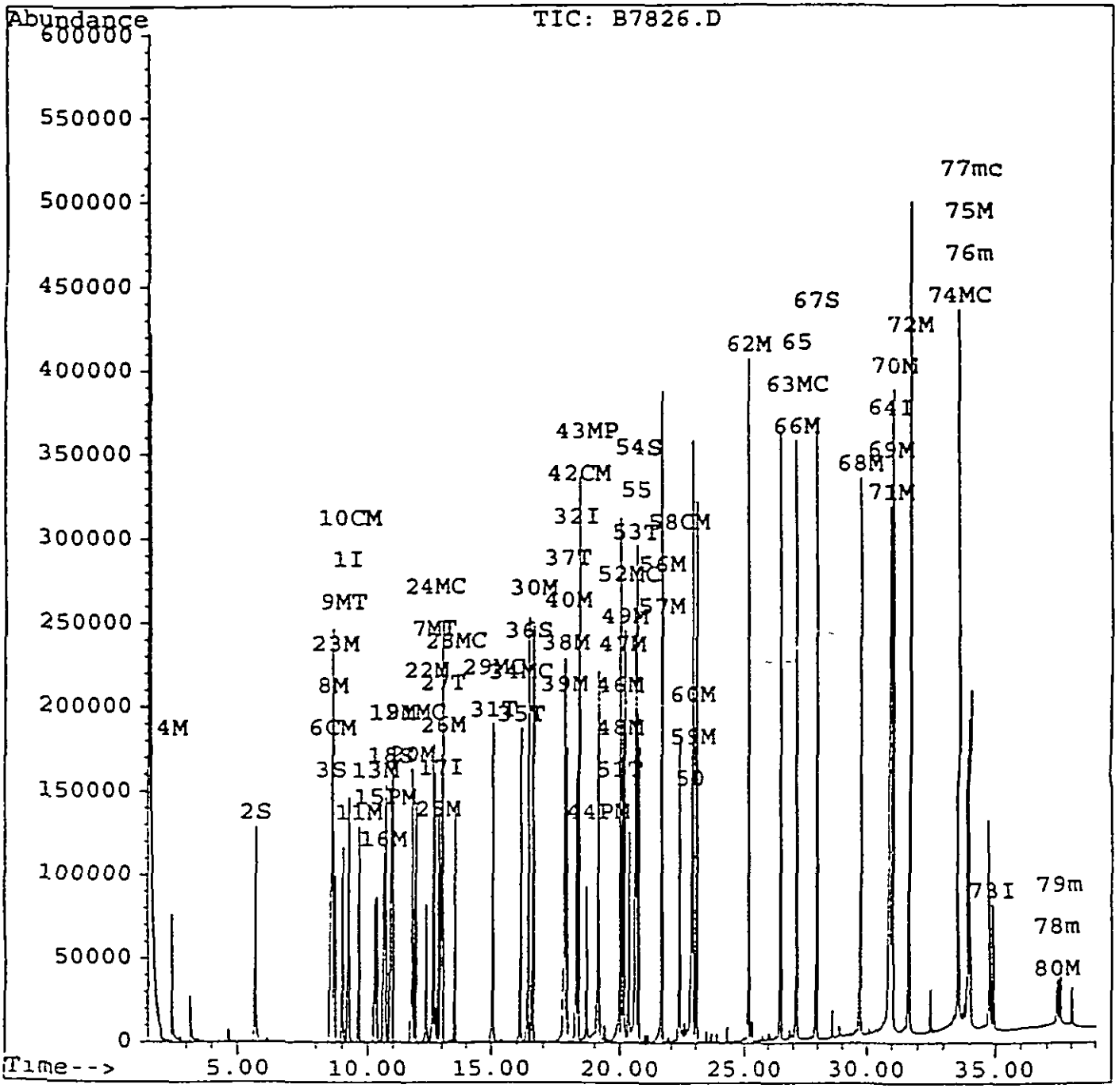
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : c:\hpchem\1\data2\b7826.d
Acq On : 4 Jun 95 5:25 am
Sample : 22654MS..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:06 1995

Vial: 25
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.20	152	35303	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	144937	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	99611	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	164759	40.00	ug/ml	0.25
64) Chrysene-d12	30.91	240	152801	40.00	ug/mL	0.33
73) Perylene-d12	34.91	264	66464	40.00	ug/mL	0.31
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.66	112	82094	82.21	ug/mL	82.21%
3) Phenol-d5	8.57	99	140345	84.92	ug/mL	84.92%
18) Nitrobenzene-d5	10.90	82	122579	74.23	ug/mL	74.23%
36) 2-Fluorobiphenyl	16.41	172	181198	60.64	ug/mL	60.64%
54) 2,4,6-Tribromophenol	20.71	330	47406	106.54	ug/mL	106.54%
67) Terphenyl-d14	27.94	244	291235	71.81	ug/mL	71.81%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.43	74	46421	90.97	ug/mlm	100
5) Pyridine	1.58	79	3239	8.57	ug/ml	100
6) Phenol	8.61	94	94440	64.16	ug/mL	100
7) bis(2-Chloroethyl)ether	12.59	93	122019	68.25	ug/mL	93
8) 2-Chlorophenol	8.63	128	74868	66.83	ug/mL#	87
9) 1,3-Dichlorobenzene	9.01	146	60664	49.63	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	63929	50.69	ug/mL	97
11) 1,2-Dichlorobenzene	9.65	146	63514	53.01	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.26	45	194225	117.78	ug/mL#	64
15) N-Nitroso-Di-n-propylamine	10.67	70	78184	65.82	ug/mL	99
16) Hexachloroethane	10.61	117	27204	41.80	ug/mL	93
19) Nitrobenzene	10.96	77	108893	70.89	ug/mL	92
20) Isophorone	11.75	82	190833	58.95	ug/mL	99
21) 2-Nitrophenol	11.88	139	49518	64.97	ug/mL#	85
22) 2,4-Dimethylphenol	12.33	107	57269	40.16	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.72	93	80511	48.72	ug/mL	99
24) 2,4-Dichlorophenol	12.67	162	72662	67.26	ug/mL	99
25) 1,2,4-Trichlorobenzene	12.83	180	67428	58.72	ug/mL	99
26) Naphthalene	13.00	128	216145	60.94	ug/mL#	91
27) 4-Chloroaniline	13.00	127	27276	16.26	ug/mL#	4
28) Hexachlorobutadiene	13.52	225	33024	49.25	ug/mL	99
29) 4-Chloro-3-methylphenol	15.04	107	87494	62.90	ug/mL	94
30) 2-Chloronaphthalene	16.58	162	170492	67.60	ug/ml	97
31) 2-Methylnaphthalene	15.04	142	66426	23.33	ug/mL#	13
34) 2,4,6-Trichlorophenol	16.12	196	53903	52.11	ug/mL	99
35) 2,4,5-Trichlorophenol	16.12	196	53903	66.79	ug/mL	99
37) 2-Nitroaniline	17.93	65	3941	2 88	ug/mL#	100
38) Dimethylphthalate	17.83	163	113606	35.11	ug/mL	99

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d Vial: 26
Acq On : 4 Jun 95 6:15 am Operator: SCOTTV
Sample : 22654MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:07 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	210414	49.57	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	54747	70.87	ug/mL	92
42)	Acenaphthene	18.37	153	181623	71.15	ug/mL	99
43)	2,4-Dinitrophenol	18.68	184	28083	65.49	ug/mL#	78
44)	4-Nitrophenol	19.15	109	28931	70.14	ug/mL	91
46)	2,4-Dinitrotoluene	19.97	165	198956	68.45	ug/mL#	33
47)	Diethylphthalate	20.07	149	146204	40.69	ug/mL	99
48)	Fluorene	19.97	166	215505	68.74	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	102158	68.80	ug/mL	99
51)	4-Nitroaniline	19.97	138	2275	3.32	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	38003	70.01	ug/mL	100
53)	n-Nitrosodiphenylamine	20.57	169	120181	57.40	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	326407	65.42	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	61314	72.23	ug/mL	92
57)	Hexachlorobenzene	21.59	284	72489	81.98	ug/mL#	80
58)	Pentachlorophenol	22.31	266	52714	93.08	ug/mL	99
59)	Phenanthrene	22.87	178	336724	74.69	ug/mL	98
60)	Anthracene	22.87	178	345412	83.11	ug/mL	97
62)	Di-n-butylphthalate	25.16	149	472693	71.44	ug/mL	100
63)	Fluoranthene	27.13	202	375315	88.04	ug/mL	93
65)	Benzidine	27.15	184	42901	25.67	ug/ml	100
66)	Pyrene	27.13	202	374572	65.30	ug/mL#	88
68)	Butylbenzylphthalate	29.69	149	211242	57.51	ug/mL	99
69)	Benzo[a]anthracene	30.87	228	336521	58.13	ug/mL	100
70)	3,3'-Dichlorobenzidine	31.03	252	109427	74.14	ug/mL#	96
71)	Chrysene	30.87	228	341333	106.01	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.66	149	327633	62.88	ug/mL	99
74)	Di-n-octylphthalate	33.57	149	500739	59.16	ug/mL	99
75)	Benzo[b]fluoranthene	33.94	252	196612	47.97	ug/mL	99
76)	Benzo[k]fluoranthene	33.94	252	196612	99.43	ug/mL	93
77)	Benzo[a]pyrene	33.94	252	132768	89.67	ug/mL	100
78)	Indeno[1,2,3-cd]pyrene	37.41	276	28662	38.13	ug/mL#	78
79)	Dibenz[a,h]anthracene	37.53	278	36034	49.77	ug/mL#	92
80)	Benzo[g,h,i]perylene	37.41	276	28604	48.40	ug/mL	93

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

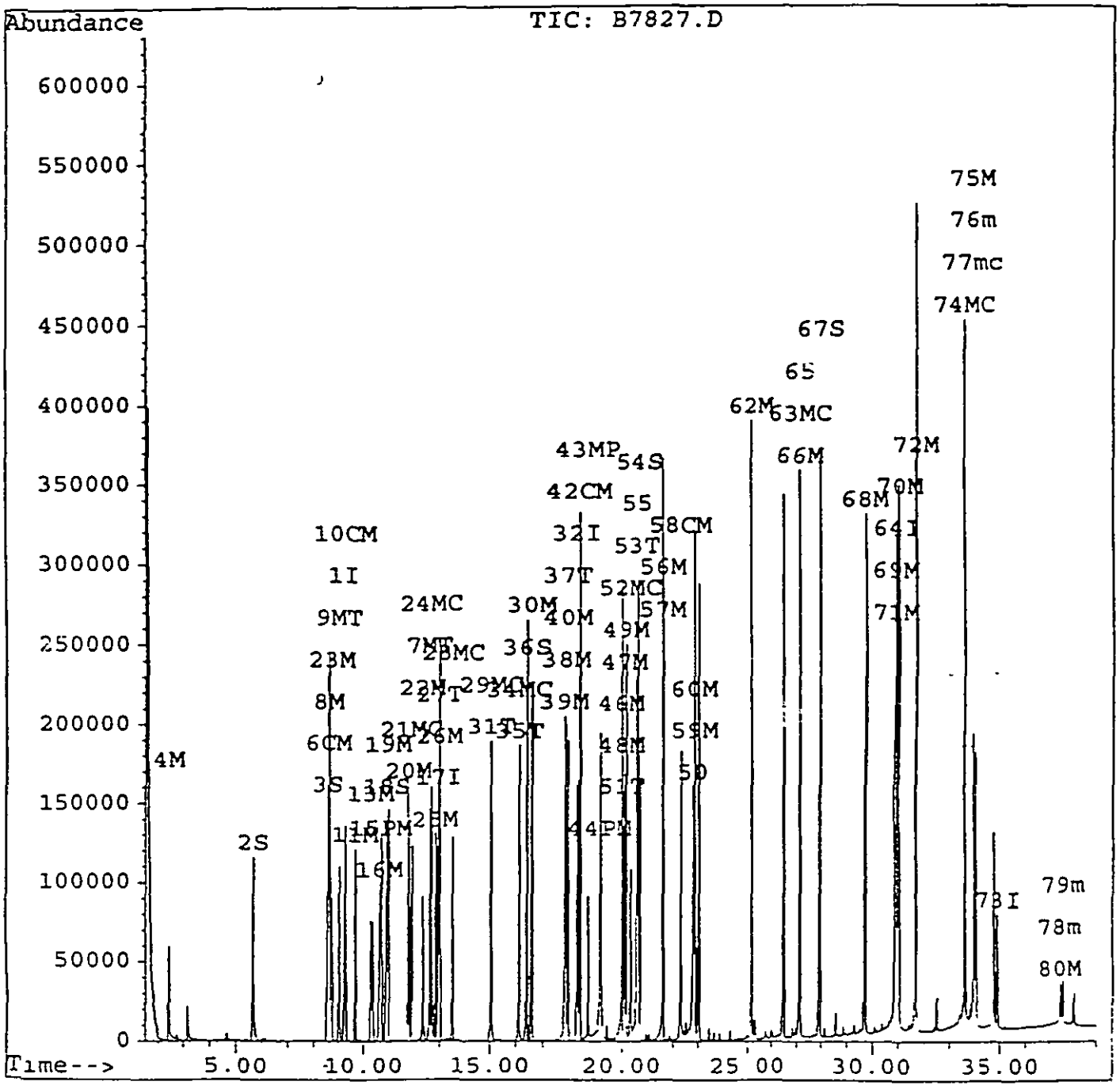
Quantitation Report

Data File : c:\hpchem\1\data2\b7827.d
Acq On : 4 Jun 95 6:15 am
Sample : 22654MSD.....
Misc :
Quant Time: Jun 13 13:07 1995

Converted from RTE d

Vial: 26
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Spike Recovery and RPD Summary Report - WATER

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Method : C:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Initial Calibration

Non-Spiked Sample: B7741.D

	Spike Sample	Spike Duplicate Sample
File ID :	B7828.D	B7829.D
Sample :	22659MS.....	Converted from RTE data file >B7828::D5

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
N-nitrosodimethylami	0.0	100	83	85	83	85	1	100	1-300
henol	0.0	100	65	65	65	65	0	23	5-112
bis(2-Chloroethyl)et	0.0	100	66	64	66	64	2	55	12-158
2-Chlorophenol	0.0	100	65	65	65	65	1	29	23-134
1,3-Dichlorobenzene	0.0	100	48	48	48	48	1	42	1-172
1,4-Dichlorobenzene	0.0	100	49	50	49	50	2	32	20-124
1,2-Dichlorobenzene	0.0	100	52	53	52	53	1	31	32-129
bis(2-chloroisopropy	0.0	100	118	119	118	119	1	46	36-156
N-Nitroso-Di-n-propy	0.0	100	67	65	67	65	3	55	1-230
Hexachloroethane	0.0	100	51	42	51	42	19	25	40-113
Nitrobenzene	0.1	100	62	66	62	66	6	39	35-180
Isophorone	0.0	100	60	63	60	63	5	63	21-196
2-Nitrophenol	0.0	100	63	65	63	65	4	35	29-182
2,4-Dimethylphenol	0.0	100	34	32	34	32	7	26	32-119
bis(2-Chloroethoxy)m	0.0	100	47	50	47	50	6	35	33-184
2,4-Dichlorophenol	0.0	100	68	68	68	68	1	26	39-135
1,2,4-Trichlorobenze	0.0	100	57	60	57	60	6	28	44-142
Naphthalene	0.0	100	63	66	63	66	4	30	21-133
Hexachlorobutadiene	0.0	100	50	52	50	52	4	26	24-116
4-Chloro-3-methylphe	0.0	100	63	63	63	63	1	37	22-147
2-Chloronaphthalene	0.0	100	67	70	67	70	4	13	60-118
2,4,6-Trichloropheno	0.0	100	55	54	55	54	3	32	37-144
Dimethylphthalate	0.0	100	38	34	38	34	11	23	1-112
Acenaphthylene	0.0	100	52	52	52	52	0	40	33-145
2,6-Dinitrotoluene	0.0	100	76	74	76	74	3	30	50-158
Acenaphthene	0.0	100	75	76	75	76	1	28	47-145
2,4-Dinitrophenol	0.0	100	67	66	67	66	2	50	1-191
4-Nitrophenol	0.6	100	79	80	79	79	0	47	1-132
2,4-Dinitrotoluene	0.0	100	71	74	71	74	3	22	39-139
Diethylphthalate	0.0	100	49	48	49	48	2	27	1-114
Fluorene	0.7	100	71	74	70	73	3	21	59-121
4-Chlorophenyl-pheny	0.0	100	70	74	70	74	5	33	25-158
4,6-Dinitro-2-methyl	0.0	100	75	72	75	72	4	93	1-181
4-Bromophenyl-phenyl	0.0	100	73	76	73	76	3	23	53-127
Hexachlorobenzene	0.0	100	84	84	84	84	1	25	1-152
Pentachlorophenol	0.0	100	90	92	90	92	2	49	14-176
Phenanthrene	0.0	100	79	76	79	76	3	21	54-120
Anthracene	0.0	100	88	84	88	84	5	32	52-115
Di-n-butylphthalate	0.1	100	80	79	80	79	1	17	1-118
Fluoranthene	0.0	100	96	96	96	96	0	33	26-137
Pyrene	0.0	100	67	68	67	68	2	25	52-115
Butylbenzylphthalate	0.2	100	67	68	67	67	0	23	1-152
Benzo[a]anthracene	0.1	100	65	64	65	64	1	28	33-143
3,3'-Dichlorobenzidi	0.0	100	20	31	20	31	46	71	1-262

hrysene	0.1	100	117	117	117	117	0	48	17-168
is(2-Ethylhexyl)pht	0.4	100	76	74	75	73	3	41	8-158
Di-n-octylphthalate	0.0	100	65	68	65	68	6	31	4-146
enzo[b]fluoranthene	0.0	100	52	51	52	51	2	39	24-159
enzo[k]fluoranthene	0.1	100	108	106	108	106	2	32	11-162
Benzo[a]pyrene	0.1	100	104	103	104	102	2	39	17-163
ndeno[1,2,3-cd]pyre	0.0	100	42	39	42	39	8	45	1-171
ibenz[a,h]anthracen	0.0	100	52	48	52	48	8	70	1-227
enzo[g,h,i]perylene	0.0	100	53	49	53	49	9	59	1-219

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min
1) 1,4-Dichlorobenzene-d4	9.20	152	28616	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	119812	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	81829	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	135678	40.00	ug/ml	0.25
64) Chrysene-d12	30.90	240	133913	40.00	ug/mL	0.32
73) Perylene-d12	34.89	264	64806	40.00	ug/mL	0.30
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.64	112	38324	47.35	ug/mL	47.35
3) Phenol-d5	8.55	99	92701	69.20	ug/mL	69.20
18) Nitrobenzene-d5	10.88	82	102452	75.05	ug/mL	75.05
36) 2-Fluorobiphenyl	16.41	172	163275	66.52	ug/mL	66.52
54) 2,4,6-Tribromophenol	20.71	330	33951	92.66	ug/mL	92.66
67) Terphenyl-d14	27.93	244	283818	79.85	ug/mL	79.85
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.41	74	34539	83.50	ug/mlm	0
5) Pyridine	1.54	79	2567	8.38	ug/ml	100
6) Phenol	8.59	94	77522	64.98	ug/mL	100
7) bis(2-Chloroethyl)ether	12.59	93	95053	65.59	ug/mL	96
8) 2-Chlorophenol	8.61	128	59112	65.10	ug/mL	95
9) 1,3-Dichlorobenzene	9.01	146	47356	47.79	ug/mL	98
10) 1,4-Dichlorobenzene	9.26	146	50047	48.96	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	50447	51.95	ug/mL	97
13) bis(2-chloroisopropyl)ethe	10.28	45	157284	117.66	ug/mL#	66
15) N-Nitroso-Di-n-propylamine	10.67	70	64689	67.19	ug/mL	99
16) Hexachloroethane	10.61	117	26874	50.94	ug/mLm	92
19) Nitrobenzene	10.94	77	78667	61.95	ug/mL#	76
20) Isophorone	11.75	82	159932	59.77	ug/mL	99
21) 2-Nitrophenol	11.88	139	39464	62.63	ug/mL	87
22) 2,4-Dimethylphenol	12.33	107	40415	34.28	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.70	93	64392	47.13	ug/mL	98
24) 2,4-Dichlorophenol	12.67	162	60633	67.90	ug/mL	98
25) 1,2,4-Trichlorobenzene	12.83	180	53810	56.69	ug/mL	99
26) Naphthalene	13.00	128	185978	63.43	ug/mL#	91
27) 4-Chloroaniline	13.00	127	23324	16.82	ug/mL#	8
28) Hexachlorobutadiene	13.52	225	27583	49.77	ug/mL	98
29) 4-Chloro-3-methylphenol	15.04	107	71878	62.51	ug/mL	92
30) 2-Chloronaphthalene	16.58	162	140364	67.32	ug/ml	95
31) 2-Methylnaphthalene	15.04	142	56186	23.87	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	47014	55.32	ug/mL	97
35) 2,4,5-Trichlorophenol	16.12	196	47014	70.91	ug/mL	98
37) 2-Nitroaniline	17.93	65	3809	3.39	ug/mL#	100
38) Dimethylphthalate	17.83	163	100094	37.65	ug/mL	99

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

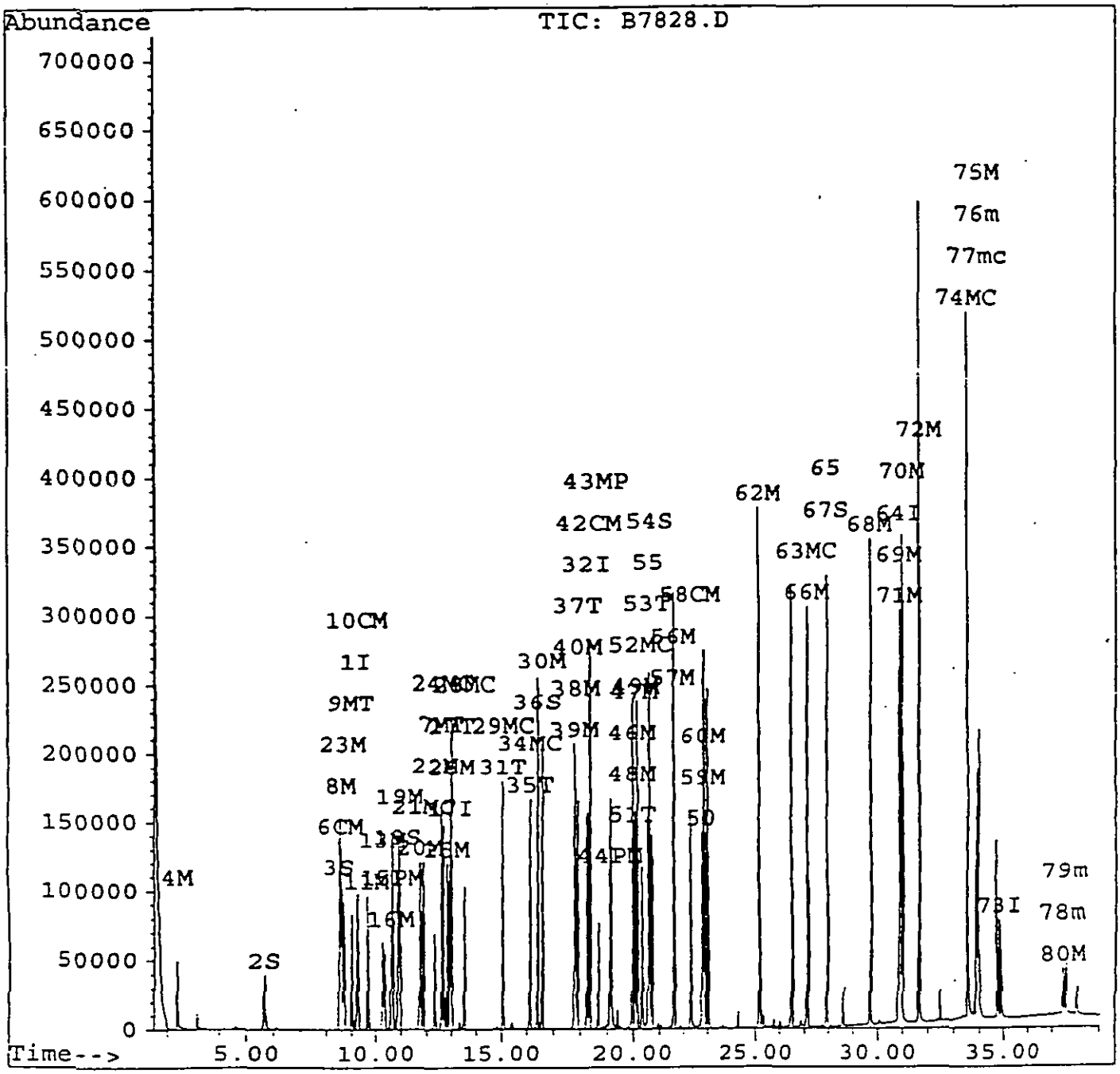
Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	181282	51.99	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	48485	76.40	ug/mL	81
42)	Acenaphthene	18.37	153	158243	75.46	ug/mL	99
43)	2,4-Dinitrophenol	18.66	184	23597	66.99	ug/mL	99
44)	4-Nitrophenol	19.14	109	26892	79.36	ug/mL	88
46)	2,4-Dinitrotoluene	19.97	165	169896	71.16	ug/mL#	34
47)	Diethylphthalate	20.07	149	145441	49.27	ug/mL	98
48)	Fluorene	19.97	166	183372	71.21	ug/mL	99
49)	4-Chlorophenyl-phenylether	20.15	204	85539	70.12	ug/mL	98
51)	4-Nitroaniline	19.97	138	1902	3.37	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	33506	74.96	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	89532	51.93	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	282944	68.87	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	51088	73.08	ug/mL	94
57)	Hexachlorobenzene	21.59	284	60888	83.62	ug/mL#	75
58)	Pentachlorophenol	22.31	266	42101	90.27	ug/mL	99
59)	Phenanthrene	22.85	178	292342	78.75	ug/mL	99
60)	Anthracene	22.85	178	302620	88.42	ug/mL	99
62)	Di-n-butylphthalate	25.16	149	437772	80.34	ug/mL	99
63)	Fluoranthene	27.12	202	337156	96.04	ug/mL	94
65)	Benzidine	27.93	184	3699	2.53	ug/ml	100
66)	Pyrene	27.12	202	336460	66.93	ug/mL#	87
68)	Butylbenzylphthalate	29.70	149	217209	67.48	ug/mL	87
69)	Benzo[a]anthracene	30.88	228	328642	64.77	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.00	252	25385	19.62	ug/mLm	97
71)	Chrysene	30.88	228	330668	117.19	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.67	149	345135	75.58	ug/mL	100
74)	Di-n-octylphthalate	33.58	149	533567	64.65	ug/mL	100
75)	Benzo[b]fluoranthene	34.03	252	207506	51.92	ug/mL	99
76)	Benzo[k]fluoranthene	34.03	252	207506	107.62	ug/mL	92
77)	Benzo[a]pyrene	34.03	252	207506	104.42	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.42	276	30768	41.98	ug/mL#	84
79)	Dibenz[a,h]anthracene	37.54	278	36991	52.40	ug/mL	94
80)	Benzo[g,h,i]perylene	37.42	276	30768	53.39	ug/mL	97

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

Data File : c:\hpchem\1\data2\b7828.d Vial: 27
Acq On : 4 Jun 95 7:04 am Operator: SCOTTV
Sample : 22659MS..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:36 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d Vial: 28
Acq On : 4 Jun 95 7:54 am Operator: SCOTTV
Sample : 22659MSD..... Converted from RTE d Inst : ABNA
Misc : BT Multiplr: 1.00
Quant Time: Jun 13 13:38 1995

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	9.21	152	30456	40.00	ug/mL	0.17
17) Naphthalene-d8	12.94	136	121585	40.00	ug/mL	0.19
32) Acenaphthene-d10	18.26	164	84364	40.00	ug/mL	0.21
50) Phenanthrene-d10	22.77	188	145091	40.00	ug/ml	0.25
64) Chrysene-d12	30.90	240	140877	40.00	ug/mL	0.32
73) Perylene-d12	34.90	264	65773	40.00	ug/mL	0.30
System Monitoring Compounds						%Recovery
2) 2-Fluorophenol	5.62	112	46772	54.29	ug/mL	54.29%
3) Phenol-d5	8.55	99	107330	75.28	ug/mL	75.28%
18) Nitrobenzene-d5	10.88	82	108636	78.42	ug/mL	78.42%
36) 2-Fluorobiphenyl	16.41	172	165709	65.48	ug/mL	65.48%
54) 2,4,6-Tribromophenol	20.71	330	39093	99.77	ug/mL	99.77%
67) Terphenyl-d14	27.93	244	291732	78.02	ug/mL	78.02%
Target Compounds						Qvalue
4) N-nitrosodimethylamine	2.41	74	37285	84.69	ug/mlm	0
5) Pyridine	1.56	79	2539	7.79	ug/ml	100
6) Phenol	8.59	94	82228	64.76	ug/mL	100
7) bis(2-Chloroethyl)ether	12.60	93	99103	64.25	ug/mL	98
8) 2-Chlorophenol	8.61	128	63241	65.44	ug/mL	94
9) 1,3-Dichlorobenzene	9.01	146	51022	48.38	ug/mL	97
10) 1,4-Dichlorobenzene	9.26	146	54214	49.83	ug/mL	99
11) 1,2-Dichlorobenzene	9.65	146	54332	52.57	ug/mL	98
13) bis(2-chloroisopropyl)ethe	10.28	45	169096	118.86	ug/mL#	65
15) N-Nitroso-Di-n-propylamine	10.67	70	66550	64.95	ug/mL	99
16) Hexachloroethane	10.61	117	23688	42.19	ug/mL	96
19) Nitrobenzene	10.94	77	84987	65.95	ug/mL#	77
20) Isophorone	11.75	82	169858	62.55	ug/mL	99
21) 2-Nitrophenol	11.88	139	41660	65.15	ug/mL	88
22) 2,4-Dimethylphenol	12.33	107	38383	32.08	ug/mLm	1
23) bis(2-Chloroethoxy)methane	8.70	93	69472	50.11	ug/mL	100
24) 2,4-Dichlorophenol	12.67	162	61214	67.55	ug/mL	97
25) 1,2,4-Trichlorobenzene	12.83	180	58047	60.26	ug/mL	99
26) Naphthalene	13.00	128	195977	65.87	ug/mL#	91
27) 4-Chloroaniline	13.00	127	24740	17.58	ug/mL#	10
28) Hexachlorobutadiene	13.50	225	28998	51.56	ug/mL	97
29) 4-Chloro-3-methylphenol	15.04	107	73983	63.40	ug/mL	98
30) 2-Chloronaphthalene	16.58	162	148187	70.04	ug/ml	98
31) 2-Methylnaphthalene	15.04	142	56674	23.73	ug/mL#	18
34) 2,4,6-Trichlorophenol	16.12	196	47065	53.72	ug/mL	98
35) 2,4,5-Trichlorophenol	16.12	196	47065	68.86	ug/mL	99
37) 2-Nitroaniline	17.93	65	3818	3.30	ug/mL#	100
38) Dimethylphthalate	17.83	163	92844	33.88	ug/mL	99

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

Quantitation Report

Data File : c:\hpchem\1\data2\b7829.d
Acq On : 4 Jun 95 7:54 am
Sample : 22659MSD..... Converted from RTE d
Misc :
Quant Time: Jun 13 13:38 1995

Vial: 28
Operator: SCOTTV
Inst : ABNA
BT Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\BNACLP.M
Title : CLP BNA Calibration
Last Update : Wed May 31 10:06:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
39)	Acenaphthylene	17.80	152	187395	52.13	ug/mL	99
40)	2,6-Dinitrotoluene	17.93	165	48705	74.44	ug/mL	81
42)	Acenaphthene	18.37	153	164599	76.13	ug/mL	99
43)	2,4-Dinitrophenol	18.66	184	23948	65.95	ug/mL	99
44)	4-Nitrophenol	19.15	109	27839	79.68	ug/mL	90
46)	2,4-Dinitrotoluene	19.95	165	181124	73.58	ug/mL#	31
47)	Diethylphthalate	20.07	149	147246	48.39	ug/mL	98
48)	Fluorene	19.95	166	195315	73.56	ug/mL	100
49)	4-Chlorophenyl-phenylether	20.15	204	92973	73.93	ug/mL	99
51)	4-Nitroaniline	19.97	138	2140	3.55	ug/mL#	23
52)	4,6-Dinitro-2-methylphenol	20.32	198	34580	72.34	ug/mL	100
53)	n-Nitrosodiphenylamine	20.55	169	103444	56.10	ug/mL#	1
55)	1,2-Diphenylhydrazine (as	20.63	77	304015	69.20	ug/ml	100
56)	4-Bromophenyl-phenylether	21.61	248	56539	75.63	ug/mL	94
57)	Hexachlorobenzene	21.59	284	65629	84.28	ug/mL#	76
58)	Pentachlorophenol	22.31	266	45874	91.98	ug/mL	96
59)	Phenanthrene	22.85	178	302063	76.09	ug/mL	100
60)	Anthracene	22.85	178	307177	83.93	ug/mL	99
62)	Di-n-butylphthalate	25.16	149	462525	79.38	ug/mL	100
63)	Fluoranthene	27.12	202	360324	95.98	ug/mL	93
65)	Benzidine	27.93	184	3521	2.29	ug/ml	100
66)	Pyrene	27.12	202	359722	68.02	ug/mL#	89
68)	Butylbenzylphthalate	29.69	149	229144	67.66	ug/mL	98
69)	Benzo[a]anthracene	30.88	228	343280	64.31	ug/mL	99
70)	3,3'-Dichlorobenzidine	31.00	252	42496	31.23	ug/mLm	95
71)	Chrysene	30.88	228	346867	116.85	ug/mL	97
72)	bis(2-Ethylhexyl)phthalate	31.68	149	354135	73.72	ug/mL	97
74)	Di-n-octylphthalate	33.58	149	572669	68.37	ug/mL	99
75)	Benzo[b]fluoranthene	34.03	252	206742	50.97	ug/mL	98
76)	Benzo[k]fluoranthene	34.03	252	206742	105.65	ug/mL	95
77)	Benzo[a]pyrene	34.03	252	206742	102.50	ug/mL	98
78)	Indeno[1,2,3-cd]pyrene	37.42	276	28894	38.84	ug/mL	89
79)	Dibenz[a,h]anthracene	37.52	278	34681	48.41	ug/mL#	86
80)	Benzo[g,h,i]perylene	37.42	276	28610	48.92	ug/mL	100

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

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 Farai

Laboratory Manager (as defined in N.J.A.C. 7:18)