

United States Army

Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

***Building 206
Main Post Area***

**NJDEP UST Registration No. 081533-4
NJDEP Closure Approval No. C-93-2616**

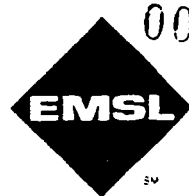
**Volume 2 of 2
Appendix G, Part 2**

February 1996

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

PROJECT: 931021191016

EMSL Project: # 95063933

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
1861.3, MW1-2931784, Bldg. #206	95-26428	Aqueous	6/13/95 @ 1011	6/13/95

Laboratory Name

Certification No.

Supervisor/Manager Signature
Printed Name

Date

EMSL ANALYTICAL, INC.

NJDEP No. 04653
PADER No. 68-367
NY-ELAP No. 10896

Paul V. Laraia
Paul V. Laraia

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.

DATES
Incorrect
9-11-95
CH

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EMSL

SAMPLE DATA SUMMARY PACKAGE

EMSL

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

Project #: 95063933
Date Received: 06/13/95 18:50

The following results are for BN by 625 with Library Search

Lab #	Conc.	Unit	Client Designation
95 0026427	;see attached ug/l		Bldg #206,Field Blank
95 0026428	;see attached ug/l		Bldg #206,MW1-2931784

The following results are for Volatiles by 524.2 w/ Library Search

Lab #	Conc.	Unit	Client Designation
95 0026426	;see attached ug/l		Bldg #206,Trip Blank
95 0026427	;see attached ug/l		Bldg #206,Field Blank
95 0026428	;see attached ug/l		Bldg #206,MW1-2931784

FT. Monmouth NJ

FMETL# 1861.1

005

U.S. Army

TRIP BLANK

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

= Not Detected

U.S. Army
TRIP BLANK

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

CONCENTRATION UNITS:

CAS NO. COMPOUND (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

FMETL# 1861-1

1E

SAMPLE NO.

S. Army
PIP BLANK

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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:

Number TICs found: 0

(ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	NONE FOUND			
2.				
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1A
VOLATILE 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

T Monmouth NJ FMETR# 1861.2

U.S. Army

009

ED BLANK

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

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

U.S. Army
Fort Monmouth NJ
FIELD BLANK

FMETL# 1861.2

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

9526427V

010

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			
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1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

FORT MONMOUTH, NJ

9526427B

011

Lab Name: EMSL ANALYTICAL

US ARMY

FMETL# 1861.2

Site: _____

BLDG# 266

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: _____

Concentration Units:

CAS No.	Compound	(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

9526427B

US ARMY

NJDEP# Field Blank

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526427B

013

Lab Name: EMSL ANALYTICAL US ARMYFMETL# 1861.2 Site: BLDG# 266 NJDEP# FIELD BLANKMatrix: (soil/water) WATER Lab Sample ID: 9526427BSample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8025.DLevel: (low/med) Date Received: 6/13/95% Moisture: decanted: (Y/N) N Date Extracted: 6/19/95Concentrated Extract Volume: 1000 (uL) Date Analyzed: 6/26/95Injection Volume: 1.0 (uL) Dilution Factor: 1.0GPC Cleanup: (Y/N) N pH:

Concentration Units:

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

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
2.				
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S Army

206

1A

JNEP MW-1

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: 9526428
Lab File ID: C8625.D
Date Received: 06/13/95
Date Analyzed: 06/21/95
Dilution Factor: 1
Soil Aliquot Volume: NA

CONCENTRATION UNITS:

CAS NO. COMPOUND (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	2.0	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

= Not Detected

Army
Adj # 206

015

SDEPMW-1
29317841A
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: 9526428
Lab File ID: C8625.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

Lab Name: EMSL ANALYTICAL

Contract:

Project No.

Site:

Location:

Group:

Matrix: (soil/water) WATER

Lab Sample ID: 9526428V

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: C8625.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			
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SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

017

9526428B

Lab Name: EMSL ANALYTICAL

FORT MONMOUTH, NJ
US ARMY

FMETL# 1861.3

Site: _____

BLDG# 206

NJDEP# MA1-2931784

Matrix: (soil/water) WATER

Lab Sample ID: 9526428B

Sample wt/vol: 1000.0 (g/mL ML)

Lab File ID: B8026.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
62-75-9	N-nitrosodimethylamine	2	U	U
111-44-4	bis(2-Chloroethyl)ether	1	U	U
541-73-1	1,3-Dichlorobenzene	2	U	U
106-46-7	1,4-Dichlorobenzene	1	U	U
95-50-1	1,2-Dichlorobenzene	2	U	U
108-60-1	bis(2-chloroisopropyl)ether	5	U	U
621-64-7	N-Nitroso-Di-n-propylamine	2	U	U
67-72-1	Hexachloroethane	1	U	U
98-95-3	Nitrobenzene	2	U	U
78-59-1	Isophorone	1	U	U
111-91-1	bis(2-Chloroethoxy)methane	3	U	U
120-82-1	1,2,4-Trichlorobenzene	2	U	U
91-20-3	Naphthalene	2	U	U
87-68-3	Hexachlorobutadiene	2	U	U
77-47-4	Hexachlorocyclopentadiene	12	U	U
91-58-7	2-Chloronaphthalene	1	U	U
131-11-3	Dimethylphthalate	1	U	U
208-96-8	Acenaphthylene	5	U	U
606-20-2	2,6-Dinitrotoluene	2	U	U
83-32-9	Acenaphthene	3	U	U
121-14-2	2,4-Dinitrotoluene	3	U	U
84-66-2	Diethylphthalate	1	U	U
86-73-7	Fluorene	3	U	U
7005-72-3	4-Chlorophenyl-phenylether	3	U	U
86-30-6	n-Nitrosodiphenylamine	6	U	U
122-66-7	1,2-Diphenylhydrazine(as azo)	6	U	U
101-55-3	4-Bromophenyl-phenylether	2	U	U
118-74-1	Hexachlorobenzene	2	U	U
85-01-08	Phenanthrene	2	U	U
120-12-7	Anthracene	2	U	U
84-74-2	Di-n-butylphthalate	5	U	U
206-44-0	Fluoranthene	1	U	U
92-87-5	Benzidine	1	U	U

018

Lab Name: EMSL ANALYTICAL

FORT MONMOUTH, NJ
US ARMY

9526428B

FMETL# 1861.3

Site:

BLDG# 206

NJDEP# PW-293178f

Matrix: (soil/water) WATER

Lab Sample ID: 9526428B

Sample wt/vol: 1000.0 (g/mL ML

Lab File ID: B8026.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:

[illegible]

FORT MONMOUTH NJ

1F

SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526428B

019

Lab Name: EMSL ANALYTICAL

US ARMY

FMETL# 1861.3

Site: _____

BLDG#

206NJDEP# W-2931784Matrix: (soil/water) WATERLab Sample ID: 9526428BSample wt/vol: 1000.0 (g/mL) MLLab File ID: B8026.D

Level: (low/med) _____

Date Received: 6/13/95

% Moisture: _____

decanted: (Y/N) NDate Extracted: 6/19/95Concentrated Extract Volume: 1000 (uL)Date Analyzed: 6/26/95Injection Volume: 1.0 (uL)Dilution Factor: 1.0GPC Cleanup: (Y/N) N

pH: _____

Concentration Units:

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

CAS Number	Compound Name	RT	Est. Conc	Q
1.	NONE FOUND			
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BLDG.#: 206 MW#: 1 NJDEPE WELL ID # 2931784

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 #: 04653SAMPLERS NAMES: Susan Palilonis, Tim BaxterWEATHER CONDITIONS: cool, overcast, breezy

ELEVATION OF CASING SURVEY MARK: _____

TOTAL DEPTH OF WELL FROM TOP OF SURVEYORS MARK: 11.68 FTDEPTH FROM SURVEYORS MARK TO SCREEN: _____ FT from screen

LENGTH OF SCREENED SECTION: _____ FT.

DEPTH TO WATER PRIOR TO PURGING AND SAMPLING: 4.50 FT

ELEVATION OF GW PRIOR TO PURGING: _____ FT

THICKNESS OF LNAPL PRIOR TO PURGING: 0 FT

PID/Hnu READING IMMEDIATELY AFTER THE WELL CAP IS

REMOVED: 41 PPM ⁰⁹⁴⁷ None Detected① pH: 6.69 TEMP: 16.9 °C, SPECIFIC CONDUCTIVITY: 597 ^{D.O. 1.6 ppm} µs/cm

DEPTH OF WELL: _____ FT

HEIGHT OF WATER: _____ FT

EVACUATED GAL. H2O: 14 GAL (7.18 X .65 X 3 = 14.001)PURGING START TIME: 0954 END TIME: 1002

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

GPM) PumpPURGE RATE (<0.5 GPM): 2 GPMTOTAL VOLUME PURGED: 15 GAL.

DEPTH TO WATER AFTER PURGING AND BEFORE

SAMPLING: 5.88 FT② DISSOLVED OXYGEN: 0.9 ppm pH: 6.81 TEMP: 16.9 °CSPECIFIC CONDUCTIVITY: 744 µs/cm

SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP

FSPM 1992) TEFLON® BAILER

START TIME OF SAMPLING: 1006 END TIME: 1011③ DISSOLVED OXYGEN: 1.1 ppm pH: 6.51 TEMP: 17.8 °CSPECIFIC CONDUCTIVITY: 423 µs/cmColor yellow/brown ODOR gas - fruitCOMMENTS: on site 0945, flush surface well, no inside
gasket/seal.

Aug 3002 - water level 3.85
K Sherr from screen

Aug 3002 - water level 4.37

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. | <u>X</u> |
| 2. | Table of Contents | <u>X</u> |
| 3. | Summary Sheets listing analytical results for all targeted and non-targeted compounds. | <u>X</u> |
| 4. | Summary Table cross-referencing field ID #'s vs. Lab ID #'s. | <u>X</u> |
| 5. | Document bound, paginated and legible. | <u>X</u> |
| 6. | Chain of Custody | <u>X</u> |
| 7. | Methodology Summary | <u>X</u> |
| 8. | Laboratory Chronicle and Holding Time Check. | <u>X</u> |
| 9. | Results submitted on a dry weight basis (if applicable). | <u>X</u> |
| 10. | Method Detection Limits. | <u>X</u> |
| 11. | Lab certified by NJDEP for parameters or appropriate category of parameters or a member of the USEP CLP. | <u>X</u> |
| 12. | Non-Conformance Summary | <u>X</u> |

Paul Marino

Laboratory Manager or Environmental
Consultant's Signature

07-17-95

Date

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

A. Checklist which must be attached to the Summary

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

Page #	
<u>1</u>	1. Name and address of the facility.
<u>1</u>	2. Name of the laboratory performing the sample analysis.
<u>1</u>	3. NJDEP certification number assigned to the laboratory pursuant to N.J.A.C. 7:18.
<u>1</u>	4. Laboratory sample identification number.
<u>1</u>	5. Customer sample identification number corresponding to the laboratory sample identification.
<u>1</u>	6. Sample Location (also on the site diagram).
<u>1</u>	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.
<u>28-29</u>	8. The reference for the method used (e.g., EPA Method 625, 40 CFR Part 136).
<u>1</u>	9. The signature of the person completing the report form.
<u>1</u>	10. The dates the laboratory report form was prepared, as well as the dates the sample were collected, submitted and analyzed.
<u>30</u>	11. A list of all parameters (constituents and conditions) for which the analyses were performed.
<u>3-20</u>	12. Sample results and corresponding units for each parameter.



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INTERNAL CUSTODY

EMSL

Project #: 95063933Lab ID #'s: 95-26426, 95-26427
95-26928

Analyst

Name (please print)

Signature

Date

1. Base/Neutrals

Scott Van Etten



6/26/95

2. Acids

3. Volatiles (GC)

4. Volatiles (GC/MS)

Scott Kessler



6/21/95

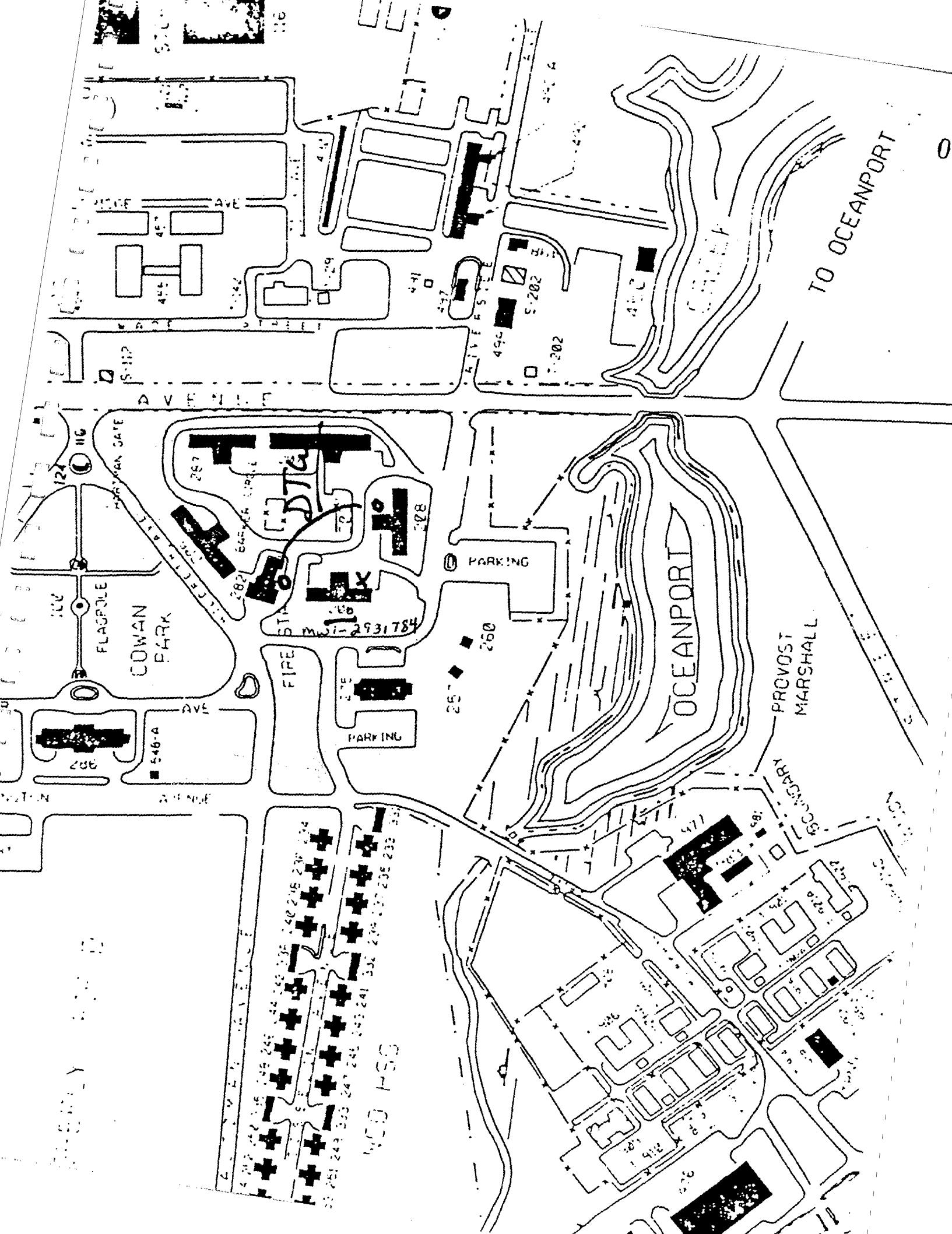
5. Base Neutrals/Acids

6. Gasoline

45063933

Chain of Custody

[illegible]



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OCEANPORT

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PARKING

COWAN
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**EMSL**

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 mm ID).

Method detection limits are as stated.

Semivolatiles by GC/MS - Aqueous

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

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

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

Method detection limits are as stated.



LABORATORY CHRONICLE

Lab ID: 95-26426 to 95-26428

Client: U.S. Army, Fort Monmouth

	I	DATE	II	<u>Hold Time</u>
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		6/21/95		14 days
2. Semivolatile Organics, aqueous		6/26/95		40 days

QC Supervisor
Review & Approval

(Signature) Peter B. Pantan
(Printed Name) Peter B. Pantan
(Date) 07/17/95

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)	_____	<u>X</u>
2.	GC/MS Tune Specifications		
	a. BFB Meet Criteria	_____	<u>X</u>
	b. DFTPP Meet Criteria	_____	<u>X</u>
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series.	_____	<u>X</u>
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.	_____	<u>X</u>
5.	GC/MS Calibration - Initial Requirements		
	a. Calibration Check Compounds	_____	<u>X</u>
	b. System Performance Check Compounds	_____	<u>X</u>
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:	_____	<u>X</u>
	a. VOA Fraction <u>Methylene Chloride 1.5 ppb.</u>	_____	
	b. B/N Fraction _____	_____	
	c. Acid Fraction _____	_____	
7.	Surrogate Recoveries Meet Criteria	_____	<u>X</u>
	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)	<u>X</u>	_____
	a. VOA Fraction <u>Methylene Chloride 77% and 73%.</u>	_____	
	b. B/N Fraction _____	_____	
	c. Acid Fraction _____	_____	
9.	Internal Standard Area/Retention Time Shift Meet Criteria	_____	<u>X</u>

The logo for EMSL (Environmental Monitoring Systems Laboratory) is a black diamond shape with the letters "EMSL" in white, bold, sans-serif font inside.GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT, cont.

- | | | <u>No</u> | <u>Yes</u> |
|-----|--|-----------|----------------------|
| 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 Locain

Date:

07-17-95

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

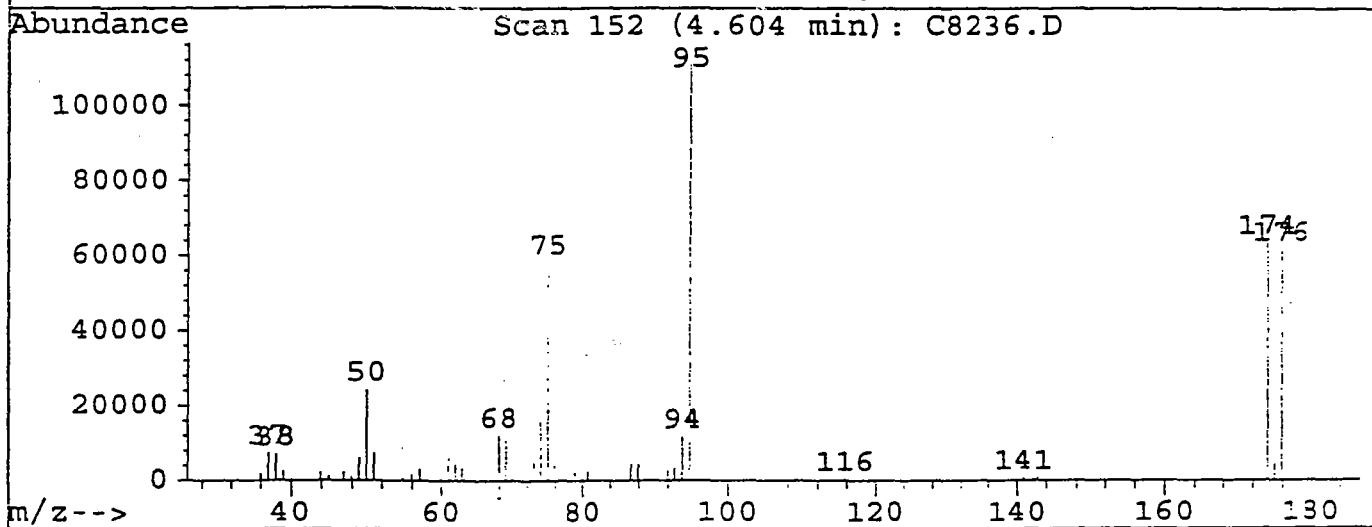
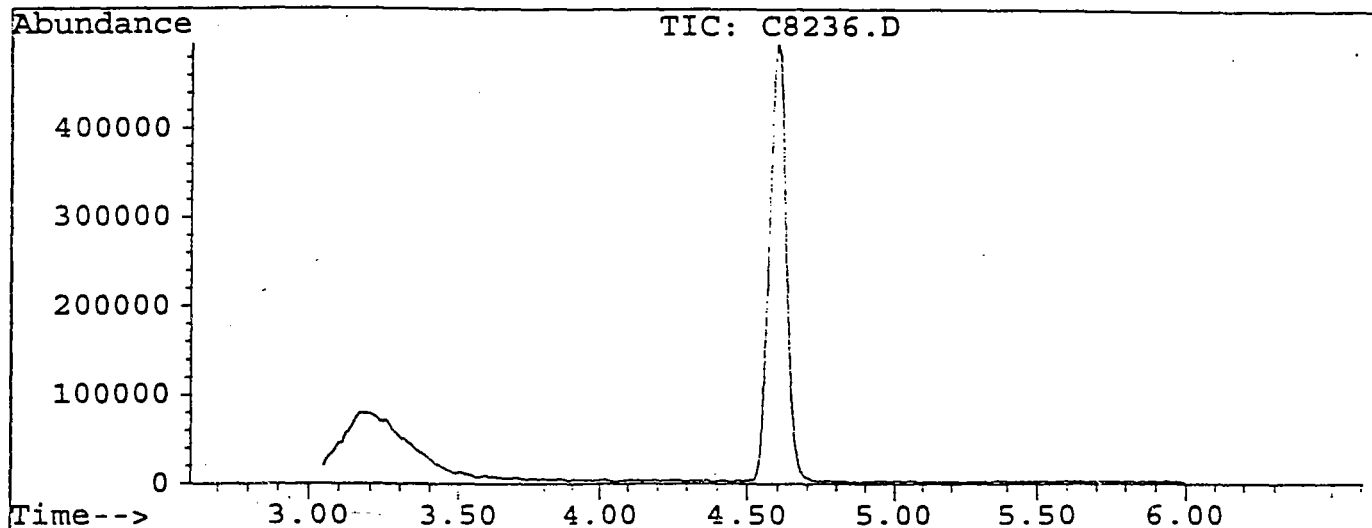
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

CLIENT	LAB	LAB	DATE	TIME
SAMPLE ID	SAMPLE ID	FILE ID	ANALYZED	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
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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

152 (4.604 min): C8236.D
BFB TUNE

036

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

152 (4.604 min): C8236.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
76.85	3577						

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 Dichlorodifluoromethane	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 Trichlorofluoromethane	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	0.113	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

VOA524.M

Fri May 26 16:06:32 1995

VOA

Page 1

Response Factor Report 5972 - In

038

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
44) 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
46) M	1,2,3-Trichloropropan	0.143	0.138	0.144	0.141	0.150	0.143	2.93
47) 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
49) M	4-Chlorotoluene	1.153	1.113	1.108	1.151	1.176	1.140	2.54
50) M	1,3,5-Trimethylbenzen	1.107	1.066	1.095	1.117	1.122	1.101	2.04
51) 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
53) M	sec-Butylbenzene	1.707	1.634	1.688	1.722	1.715	1.693	2.10
54) 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
56) M	1,4-Dichlorobenzene	0.483	0.464	0.482	0.487	0.510	0.485	3.39
57) 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
59) M	n-Butylbenzene	1.362	1.297	1.353	1.381	1.382	1.355	2.55
60) M	1,2-Dibromo-3-chlorop	0.027	0.027	0.030	0.031	0.034	0.030	10.29
61) 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
63) M	Naphthalene	0.219	0.220	0.225	0.233	0.262	0.232	7.66
64) M	1,2,3-Trichlorobenzen	0.183	0.175	0.184	0.186	0.207	0.187	6.31
65) M	Methyl-tert butyl eth	0.289	0.286	0.292	0.288	0.306	0.292	2.82
66) M	tert-Butyl Alcohol		0.004	0.005	0.005	0.005	0.004	8.73

Quantitation Report

039

Data File : d:\hpchem\1\data\c8237.d
 Acq Cn : 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	R.T.	QIon	Response	Conc	Units	%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	R.T.	QIon	Response	Conc	Units	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

c8237.d VOA524.M

Fri May 26 16:07:35 1995

VOA

Page 1

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

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

041

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	R.T.	QIon	Response	Conc	Units	%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	R.T.	QIon	Response	Conc	Units	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

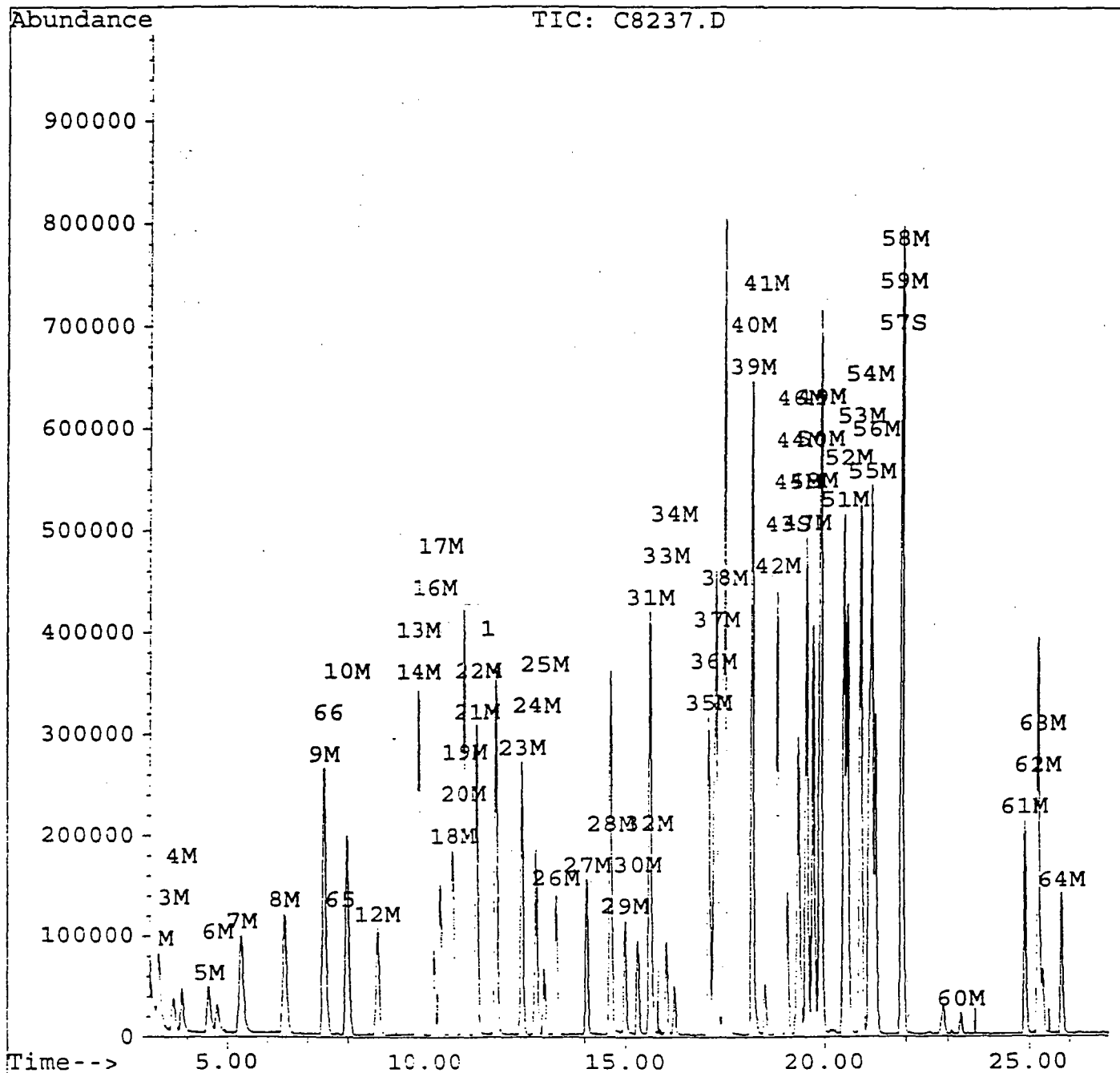
Quantitation Report

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

043

Data File : d:\hpcchem\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: SPK
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	0
42) Isopropylbenzene	18.83	105	2008385	9.63	ug/L	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	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	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

044

Data File : d:\hpchem\1\data\c8238.d

Vial: 3

Acq On : 26 May 95 11:17 am

Operator: SRK

Sample : 10 PPB STANDARD

Inst : 5972 - In

Misc :

Multiplr: 1.00

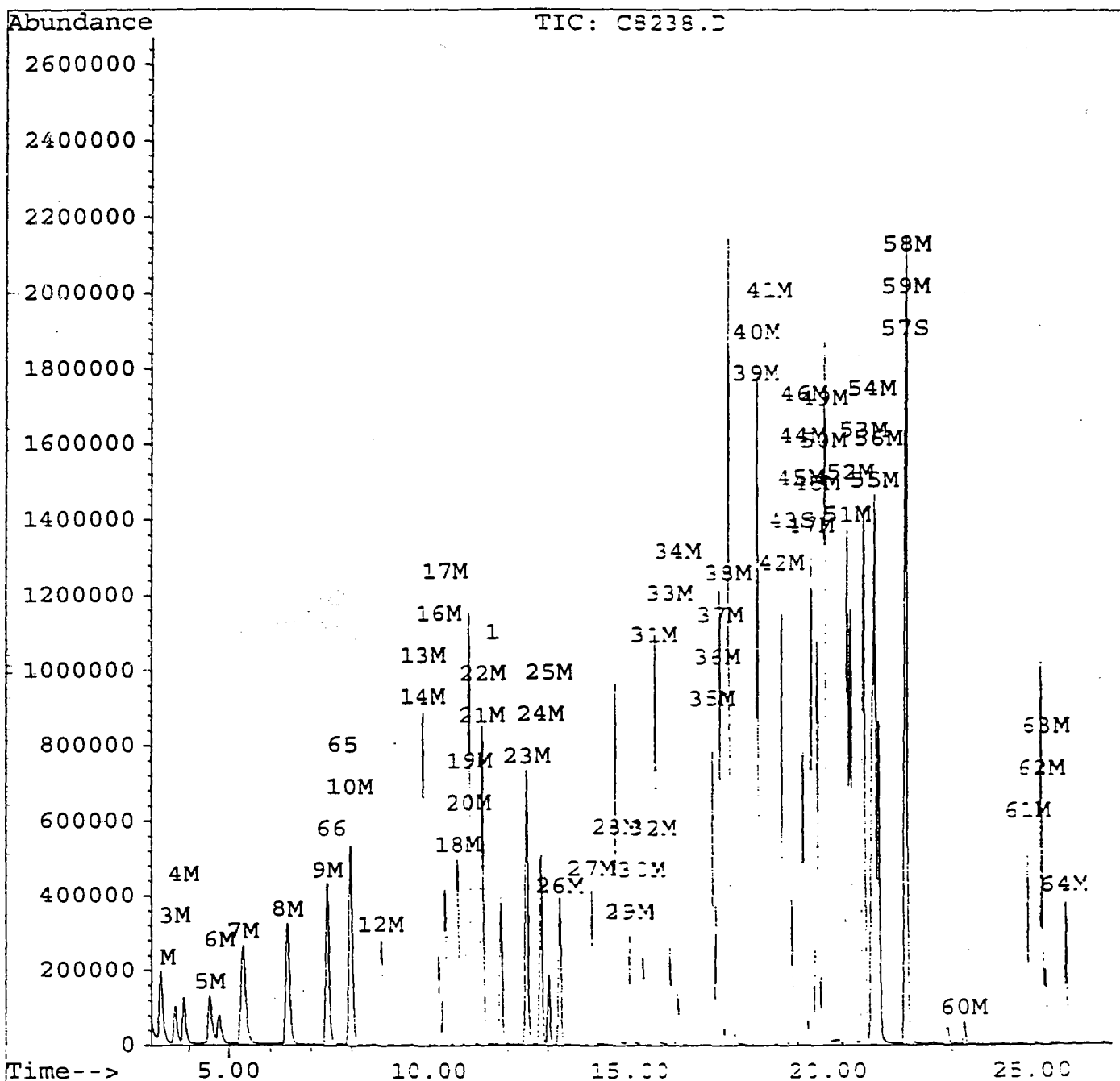
Quant Time: May 26 15:59 1995

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

045

Data File : d:\hpcchem\1\data\c8239.d
 Acq Cn : 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

Quantitation Report

046

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	37006	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

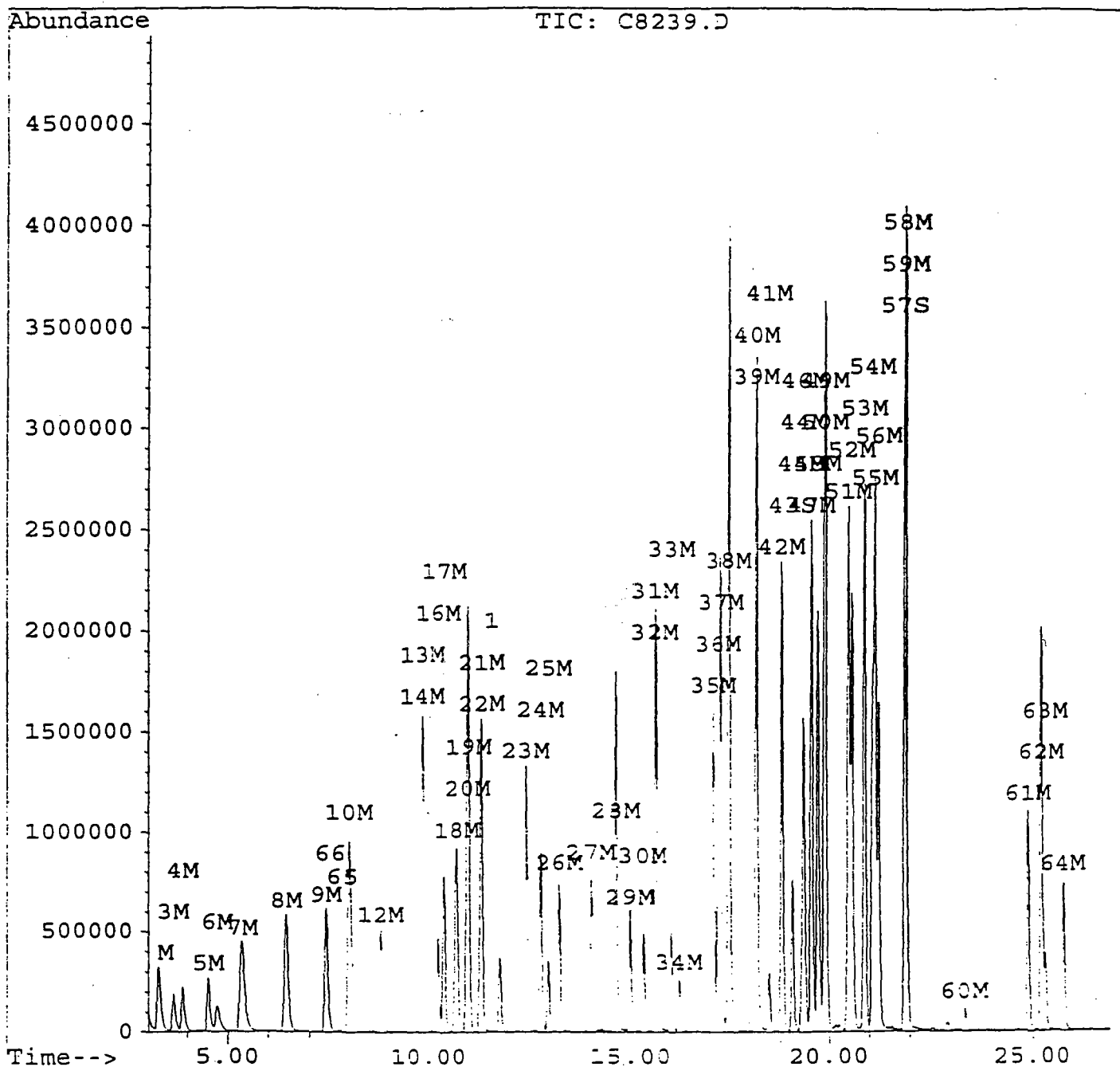
Quantitation Report

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



Quantitation Report

048

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	469408	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	2223288	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	2093843	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	1665621	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	463063	27.88	ug/L	99
31) Tetrachloroethene	15.60	166	1643174	26.60	ug/L	97
32) 1,3-Dichloropropane	15.58	76	905183	28.08	ug/L	100
33) Dibromochloromethane	16.00	129	913828	26.18	ug/L	99
34) 1,2-Dibromomethane	16.19	107	660390	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

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

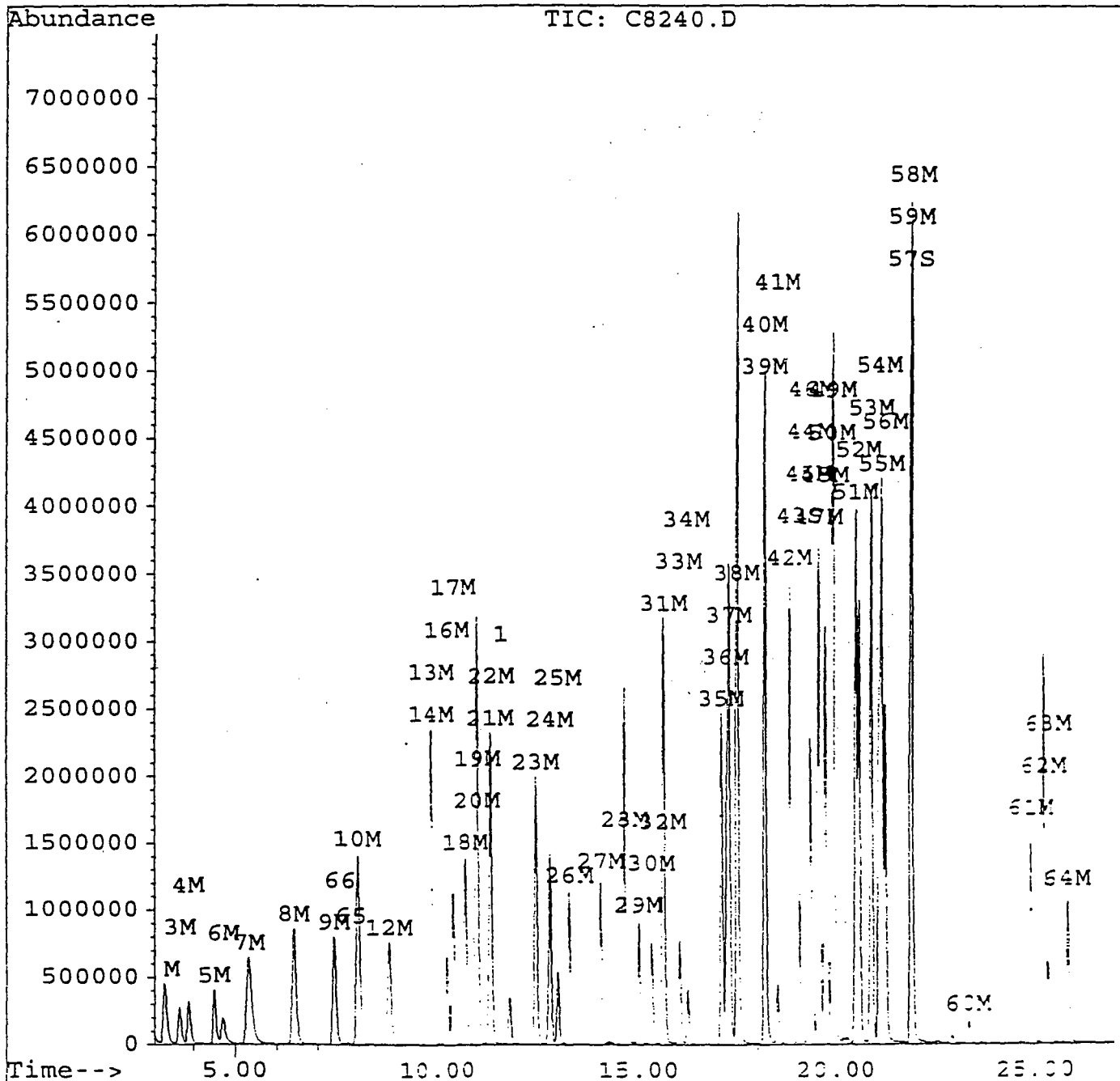
Compound	R.T.	QIon	Response	Conc	Unit	Qvalue
41) Bromoform	18.50	173	450885	26.90	ug/L m	0
42) Isopropylbenzene	18.83	105	5734485	29.95	ug/L m	45
44) Bromobenzene	19.37	156	1026534	26.45	ug/L #	88
45) 1,1,2,2-Tetrachloroethane	19.33	83	508409	29.75	ug/L m	0
46) 1,2,3-Trichloropropane	19.39	75	599222	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

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

050
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

051

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

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

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

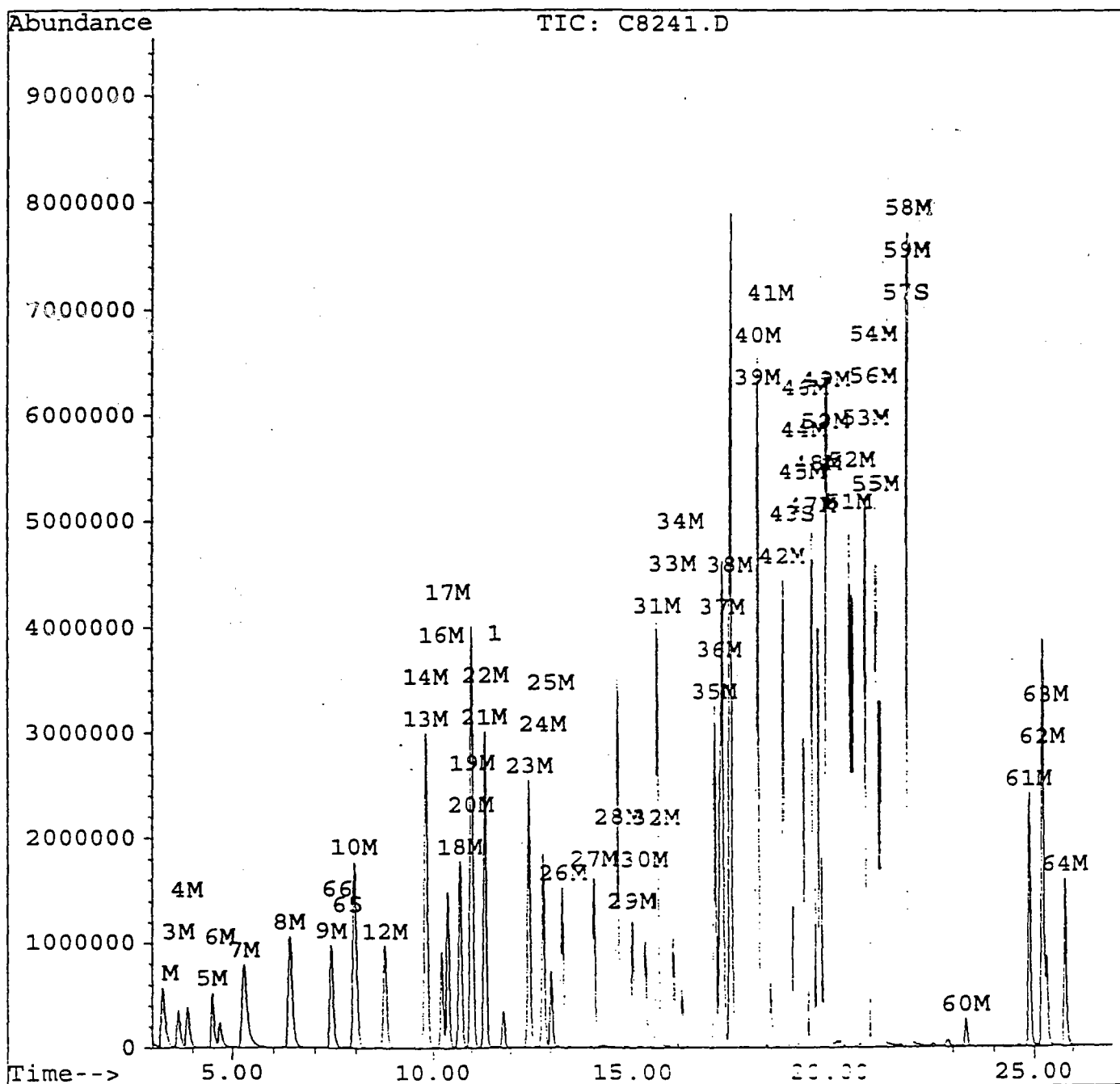
Quantitation Report

053

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)

054

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

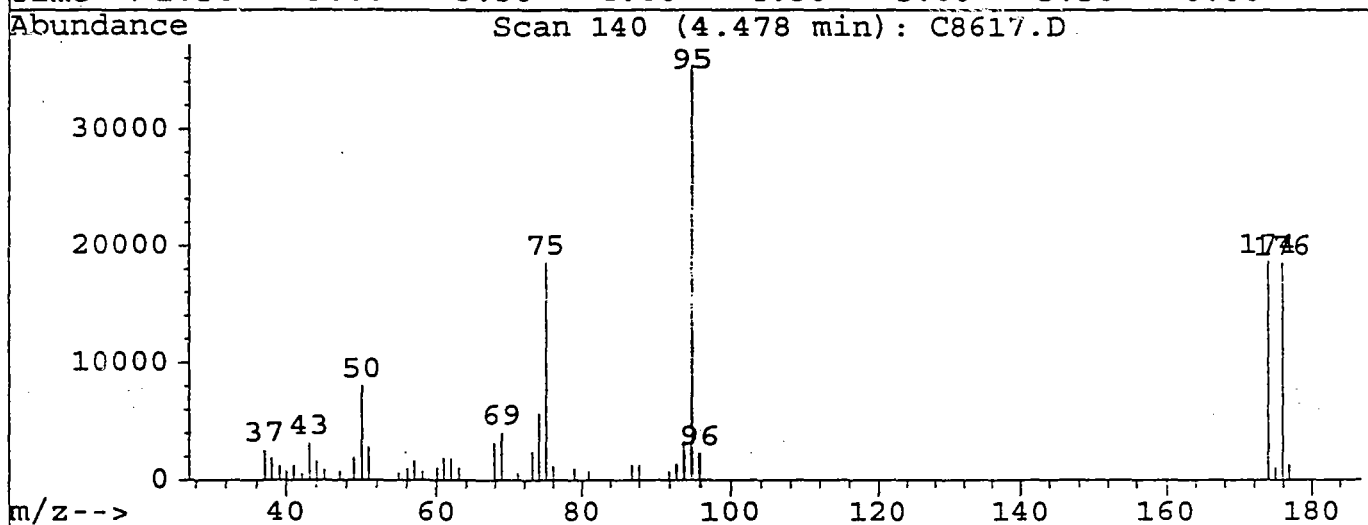
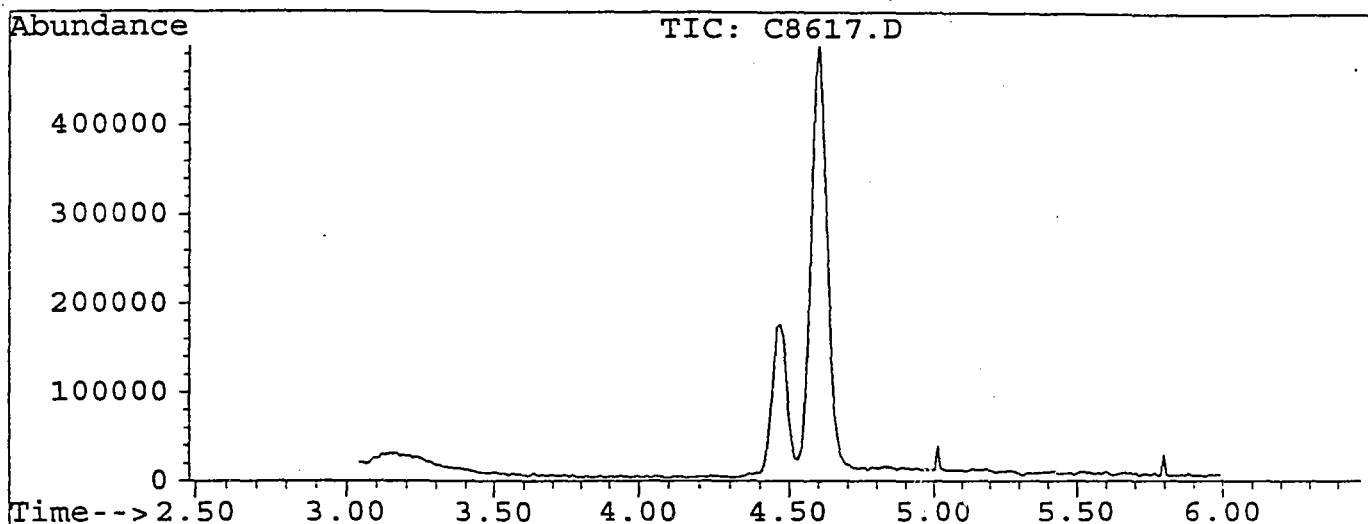
This check applies to the following SAMPLES, MS, MSD, BLANKS and STANDARDS:

	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

Scan 140 (4.478 min): C8617.D
BFB TUNE

056

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

057

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No. _____

Site: _____

Location: _____

Group: _____

Instrument ID: 5972-INSTRUMENT 1Calibration Date: 6/21/95Time: 1601Lab File ID: C8618.DInit. Calib. Date(s): 5/26/95Heated Purge: (Y/N) N

Init. Calib. Times: _____

GC Column: DB-624 X 7ID: 0.53 (mm)

COMPOUND	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-Dichloroethene	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

7A
VOLATILE CONTINUING CALIBRATION CHECK

058

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	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

059

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

C8618.D VOA524.M

Thu Jun 22 15:21:18 1995

VOA

Page 1

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)
13 S	4-Bromofluorobenzene	0.499	0.515	-3.3	101	0.05
14 M	Bromobenzene	0.240	0.241	-0.4	98	0.04
15 M	1,1,2,2-Tetrachloroethane	0.118	0.147	-24.4	124	0.03
16 M	1,2,3-Trichloropropane	0.143	0.162	-13.2	111	0.04
17 M	n-Propylbenzene	1.731	1.760	-1.7	99	0.04
18 M	2-Chlorotoluene	0.960	1.058	-10.2	108	0.04
19 M	4-Chlorotoluene	1.140	1.143	-0.3	97	0.05
50 M	1,3,5-Trimethylbenzene	1.101	1.060	3.7	94	0.04
51 M	tert-Butylbenzene	1.142	1.116	2.3	95	0.04
52 M	1,2,4-Trimethylbenzene	1.009	1.011	-0.2	96	0.04
53 M	sec-Butylbenzene	1.693	1.623	4.1	94	0.04
54 M	1,3-Dichlorobenzene	0.489	0.472	3.4	95	0.04
55 M	4-Isopropyltoluene	1.264	1.224	3.2	94	0.04
56 M	1,4-Dichlorobenzene	0.485	0.474	2.2	97	0.04
57 S	1,2-Dichlorobenzene-d4	0.228	0.227	0.4	98	0.03
58 M	1,2-Dichlorobenzene	0.364	0.363	0.3	98	0.04
59 M	n-Butylbenzene	1.355	1.345	0.7	98	0.04
60 M	1,2-Dibromo-3-chloropropane	0.030	0.037	-22.8	128	0.03
61 M	1,2,4-Trichlorobenzene	0.268	0.236	12.1	87	0.04
62 M	Hexachlorobutadiene	0.323	0.275	14.9	85	0.03
63 M	Naphthalene	0.232	0.223	4.0	95	0.03
64 M	1,2,3-Trichlorobenzene	0.187	0.175	6.5	94	0.04
65	Methyl-tert butyl ether	0.292	0.338	-15.8	112	0.06
66	tert-Butyl Alcohol	0.004	0.006	-23.2	133	0.06

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: 2 061
 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

Quantitation Report

062

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	11.53	ug/L	100
66) tert-Butyl Alcohol	7.79	59	16053	24.65	ug/L	100

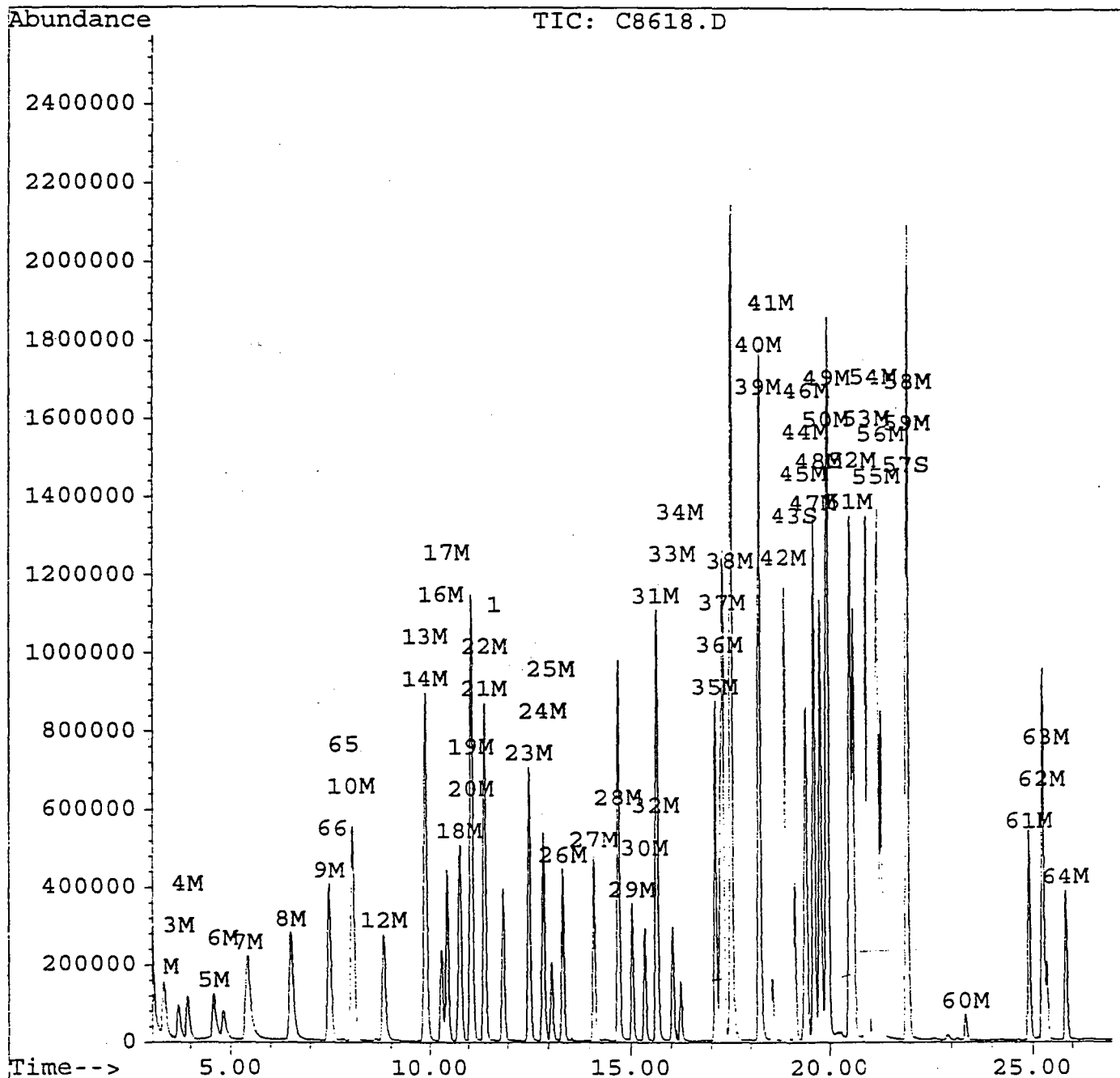
(#) = qualifier out of range (m) = manual integration

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: 2 063
 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: 3 064
 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	R.T.	QIon	Response	Conc	Units	%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	R.T.	QIon	Response	Conc	Units	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

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: 3 065
 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

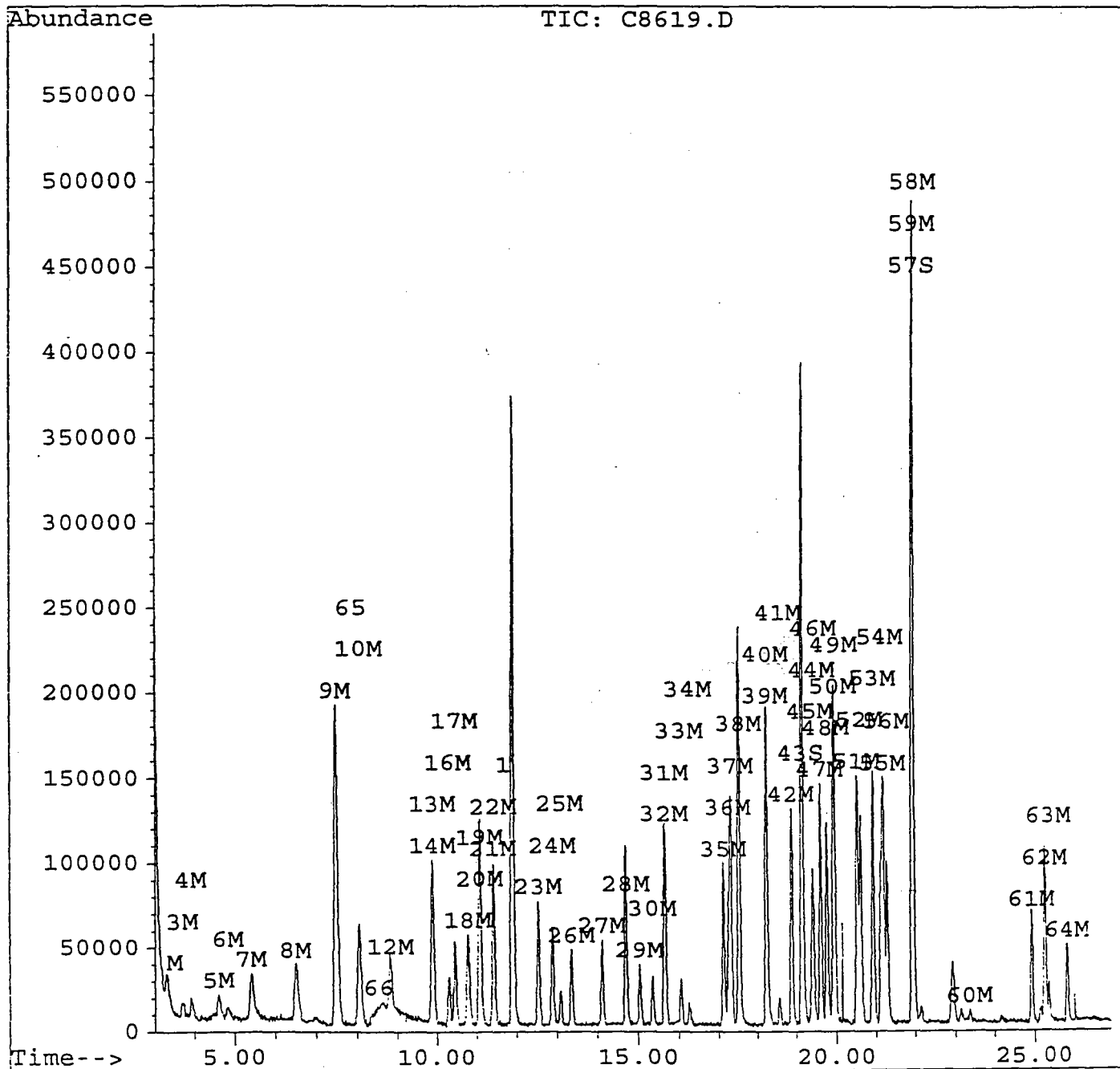
(#) = qualifier out of range (m) = manual integration

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: 3 066
 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\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: 15 067
 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	R.T.	QIon	Response	Conc	Units	%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	R.T.	QIon	Response	Conc	Units	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 **068**
 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

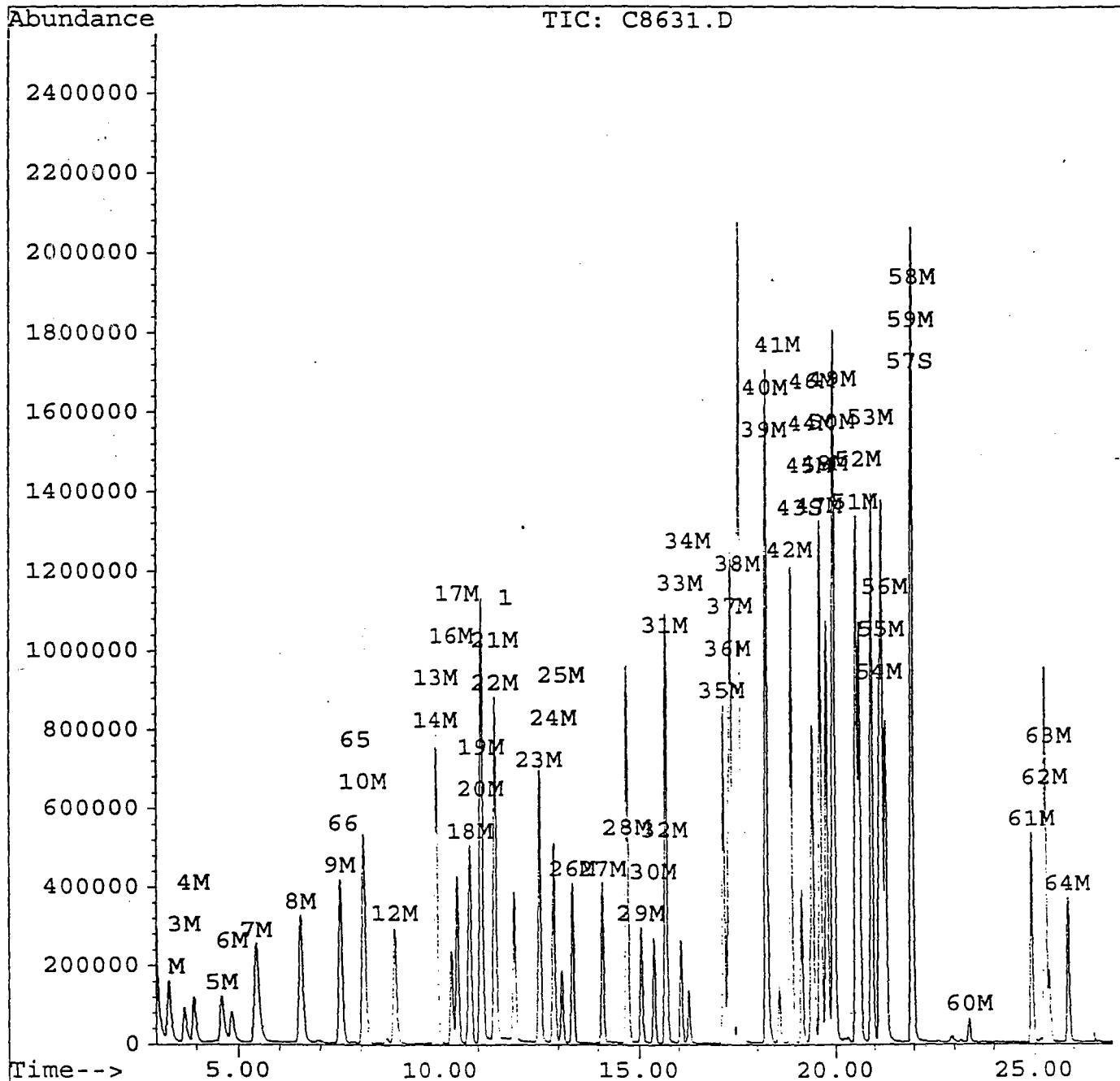
Quantitation Report

069

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 INTERNAL STANDARD AREA AND RT SUMMARY

070

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No.: _____

Site: _____

Location: _____

Group: _____

Lab File ID (Standard): C8618.DDate Analyzed: 6/21/95Instrument ID: 5972-INSTRUMENT 1Time Analyzed: 1601GC Column: DB-624 X 75MID: 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.

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	(ug/L or ug/Kg)	ug/L	COMMENT
---------	----------	-----------------	------	---------

}= Not Detected

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

9526426V

13415 206TB

073

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:

Number TICs found: 0

(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

074

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

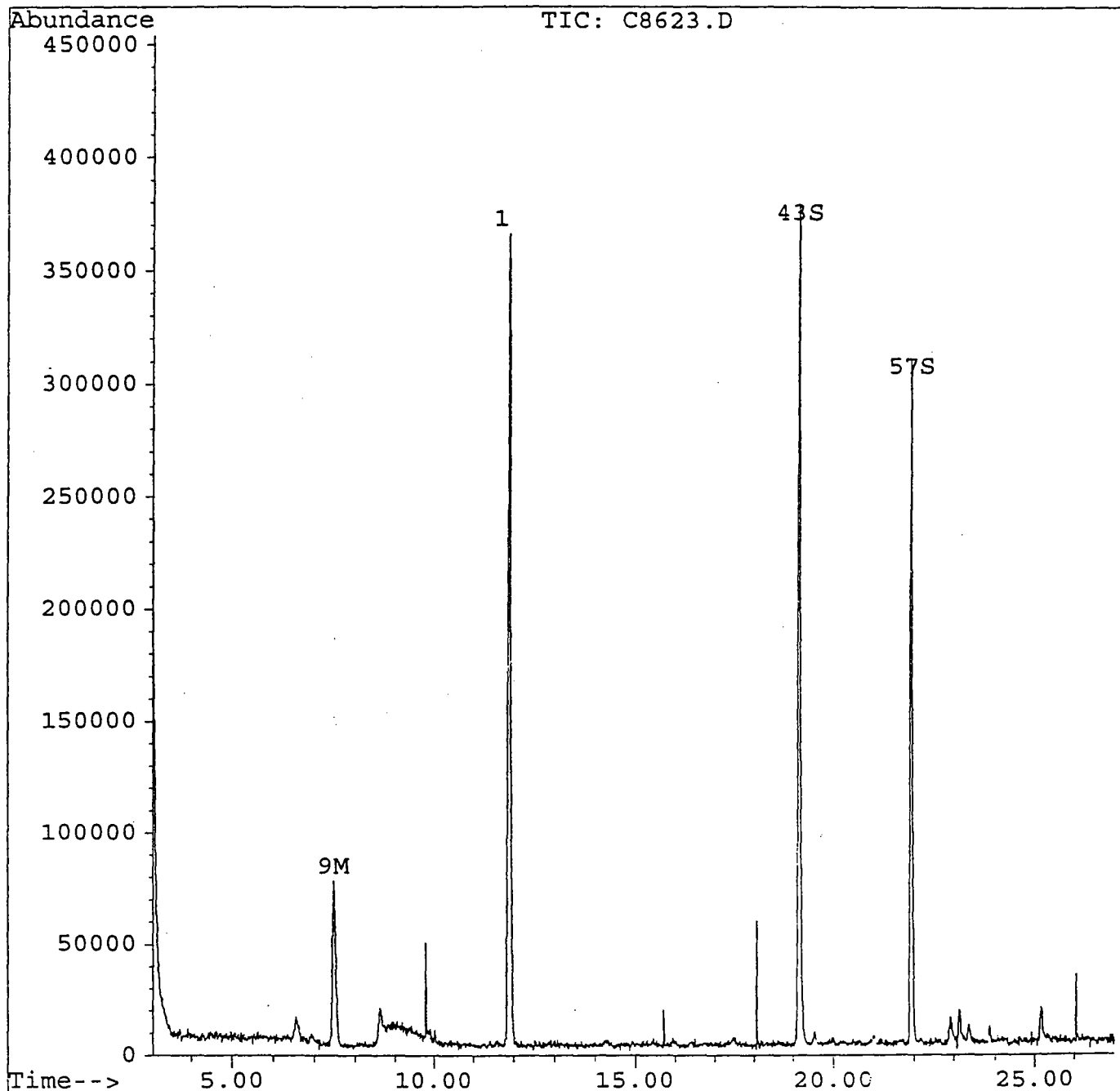
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	11.90	96	698303	5.00	ug/L	0.06
System Monitoring Compounds				%Recovery		
43) 4-Bromofluorobenzene	19.15	95	355680	5.11	ug/L	102.12%
57) 1,2-Dichlorobenzene-d4	21.94	152	166590	5.24	ug/L	104.71%
Target Compounds				Qvalue		
9) Methylene chloride	7.48	84	87937	2.30	ug/L	96

Quantitation Report

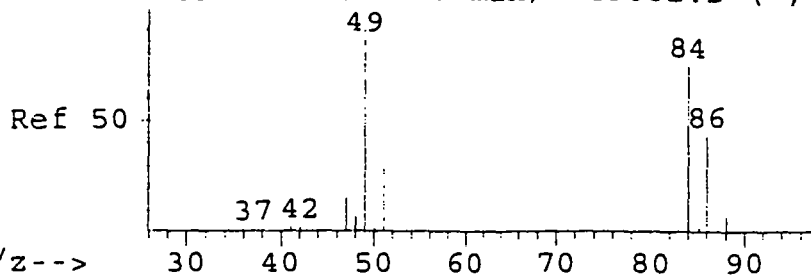
Data File : d:\hpchem\1\data\c8623.d
Acq On : 21 Jun 95 6:57 pm
Sample : 9526426
Misc : 25 ML
Quant Time: Jun 22 15:11 1995

Vial: 7 075
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



Abundance Scan 418 (7.345 min): C5082.D (-, *



#9

Methylene chloride

076

Concen: 2.33 ug/L

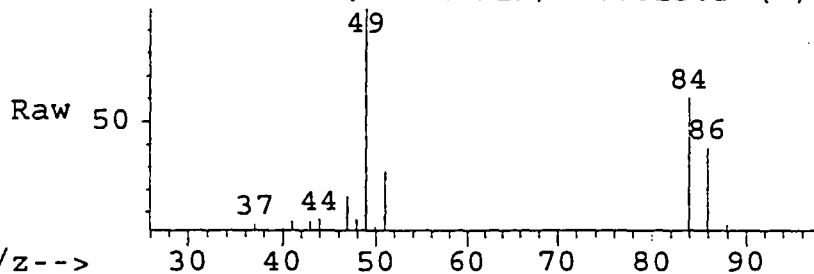
RT: 7.48 min Scan# 431

Delta R.T. 0.07 min

Lab File: c8623.d

Acq: 21 Jun 95 6:57 pm

Abundance Scan 431 (7.480 min): C8623.D (*)



Tgt Ion: 84 Resp: 87937

Ion Ratio Lower Upper

84 100

86 63.4 43.1 83.1

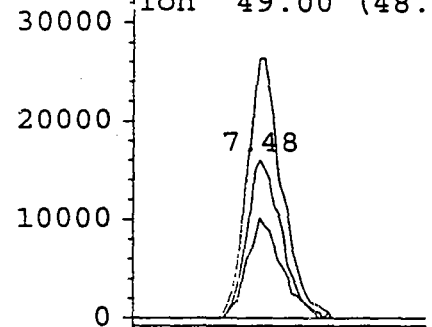
49 164.2 136.3 176.3

0 0.0 0.0 0.0

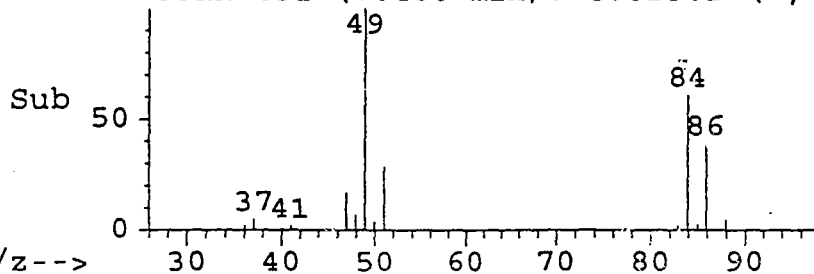
Abundance Ion 84.00 (83.

Ion 86.00 (85.

Ion 49.00 (48.



Abundance Scan 431 (7.480 min): C8623.D (-, *



Time-->7.19

7.77

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: 7 077
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 Lab Sample ID: 9526427 Bldg 206 F15
 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

CONCENTRATION UNITS:

CAS NO. COMPOUND (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

J= 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: 9526427 Bldg 206 FB
 Lab File ID: C8624.D
 Date Received: 06/13/95
 Date Analyzed: 06/21/95
 Dilution Factor: 1
 Soil Aliquot Volume: NA

CONCENTRATION UNITS:

CAS NO. COMPOUND (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

IE
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

9526427V

Wdy 206 FB

030

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.				
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Quantitation Report

Data File : d:\hpcchem\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: 8 081
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.	Q	Ion	Response	Conc	Units	Dev (Min)
1) Fluorobenzene	11.90	96		692402	5.00	ug/L	0.06
							%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%
							Qvalue
9) Methylene chloride	7.49	84		80575	2.13	ug/L	95

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

c8624.d VOA524.M

Thu Jun 22 15:38:19 1995

VOA

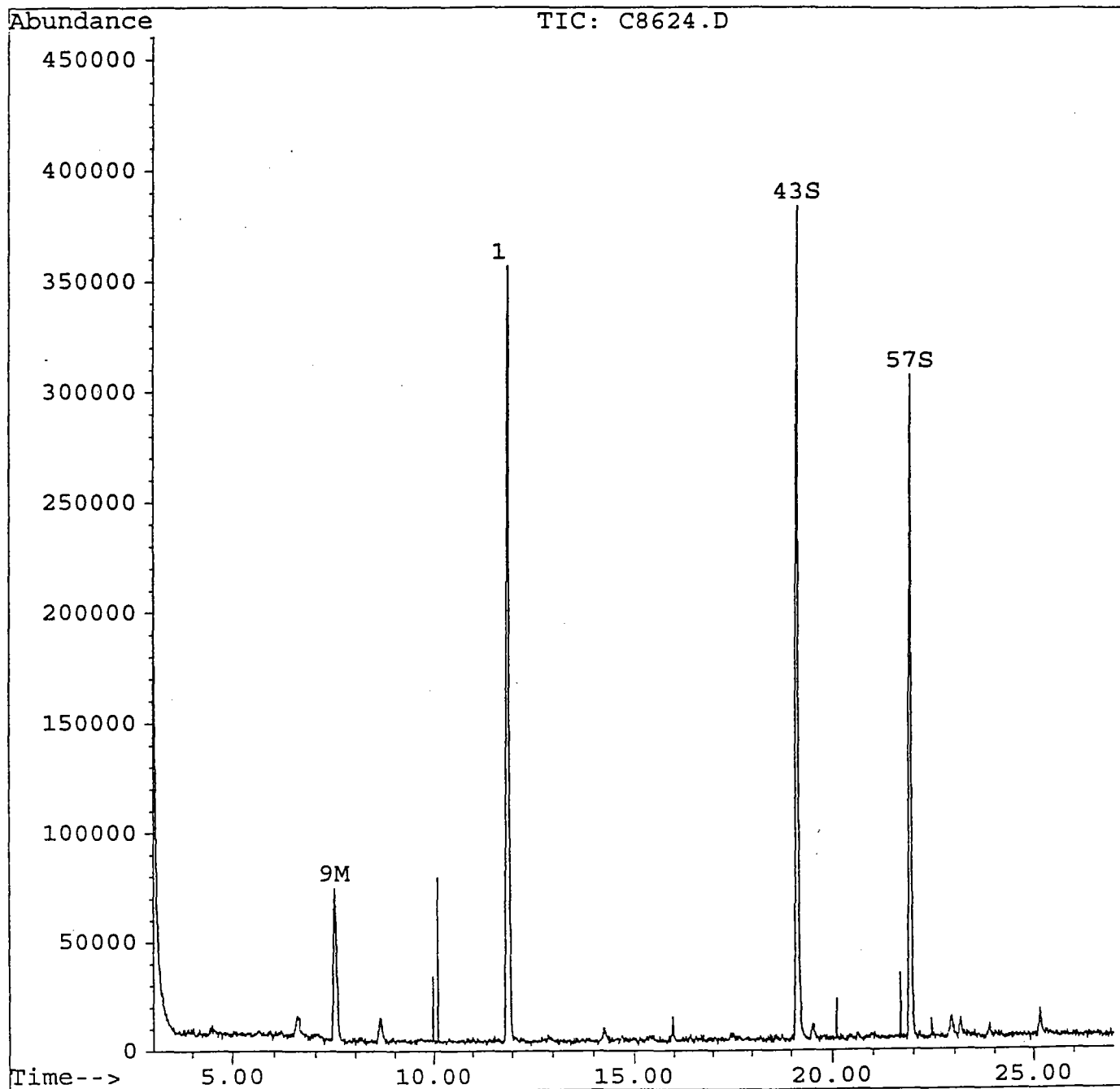
Page 1

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: 8 082
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



Abundance Scan 418 (7.345 min): C5082.D (-, *

#9

Methylene chloride

Concen: 2.13 ug/L

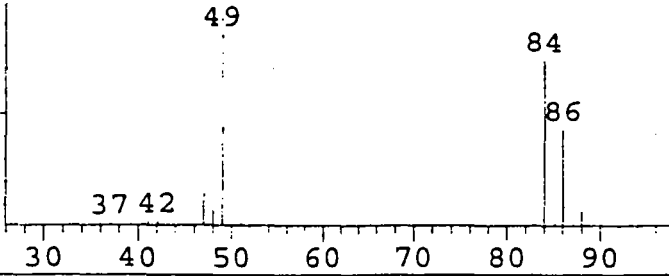
RT: 7.49 min Scan# 432

Delta R.T. 0.08 min

Lab File: c8624.d

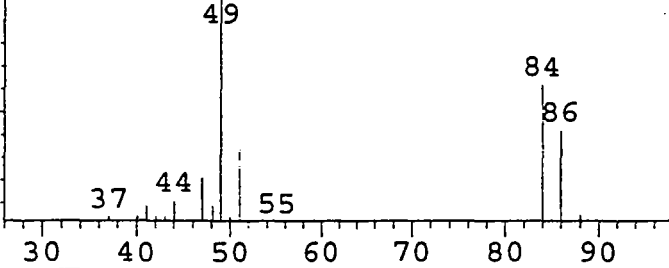
Acq: 21 Jun 95 7:32 pm

Ref 50



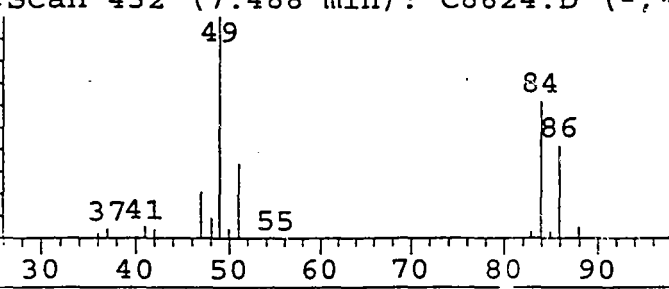
Abundance Scan 432 (7.488 min): C8624.D (*)

Raw 50



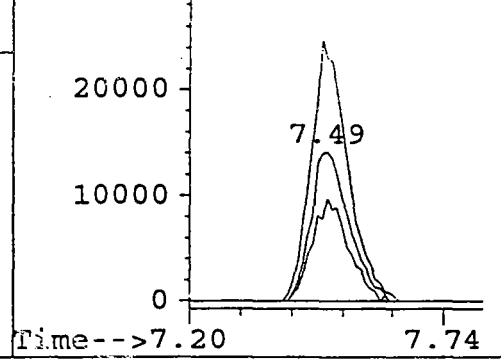
Abundance Scan 432 (7.488 min): C8624.D (-, *

Sub



Tgt Ion:	84	Resp:	80575
Ion	Ratio	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

Abundance	Ion	84.00 (83.
	Ion	86.00 (85.
	Ion	49.00 (48.



Library Search Compound Report

084

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

8845 206
9526428V
7441-2931784

087

Lab Name: EMSL ANALYTICAL Contract: _____
Project No. _____ Site: _____ Location: _____ Group: _____
Matrix: (soil/water) WATER Lab Sample ID: 9526428V
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C8625.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.				
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Quantitation Report

Data File : d:\hpchem\1\data\c8625.d
 Acq On : 21 Jun 95 8:06 pm
 Sample : 9526428
 Misc : 25 ML
 Quant Time: Jun 21 20:33 1995

Vial: 9 088
 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

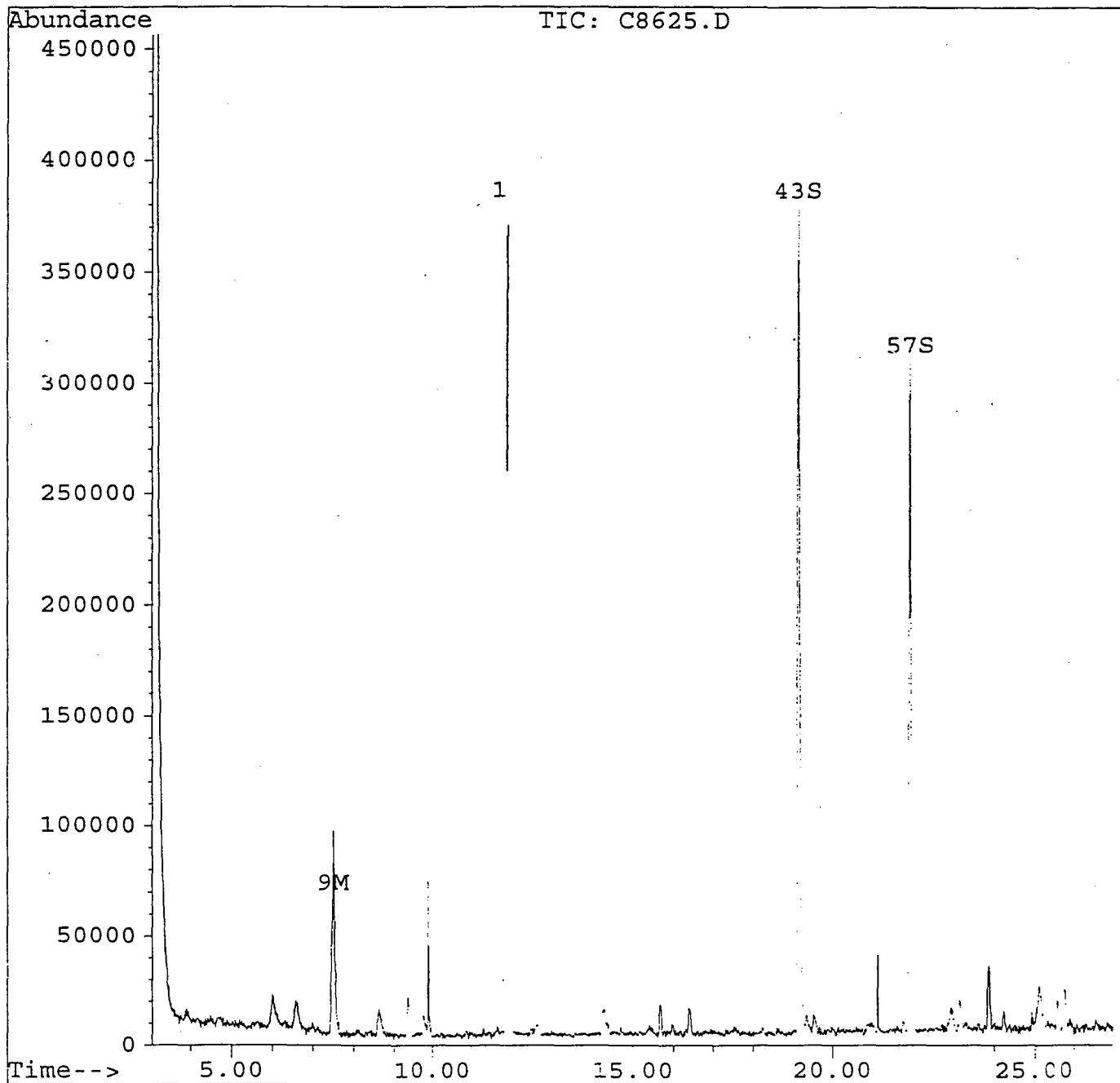
Internal Standards	R.T.	QIon	Response	Conc	Units	Dev (Min)
1) Fluorobenzene	11.91	96	710683	5.00	ug/L	0.07
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.15	95	358899	5.06	ug/L	101.25%
57) 1,2-Dichlorobenzene-d4	21.93	152	166925	5.15	ug/L	103.09%
Target Compounds						Qvalue
9) Methylene chloride	7.50	84	75702	1.95	ug/L	93

Quantitation Report

Data File : d:\hpchem\1\data\c8625.d
Acq On : 21 Jun 95 8:06 pm
Sample : 9526428
Misc : 25 ML
Quant Time: Jun 21 20:33 1995

Vial: 9 089
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: 1.95 ug/L

RT: 7.50 min Scan# 433

Delta R.T. 0.09 min

Lab File: c8625.d

Acq: 21 Jun 95 8:06 pm

Tgt Ion:84 Resp: 75702

Ion Ratio Lower Upper

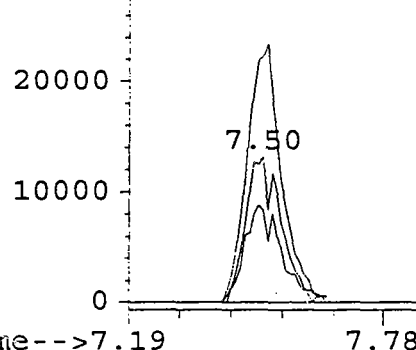
84 100

86 63.8 43.1 83.1

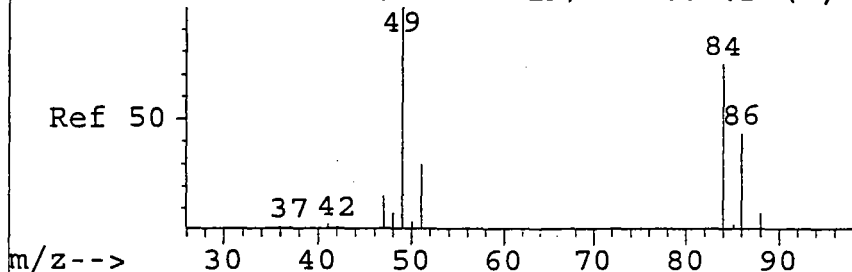
49 169.5 136.3 176.3

0 0.0 0.0 0.0

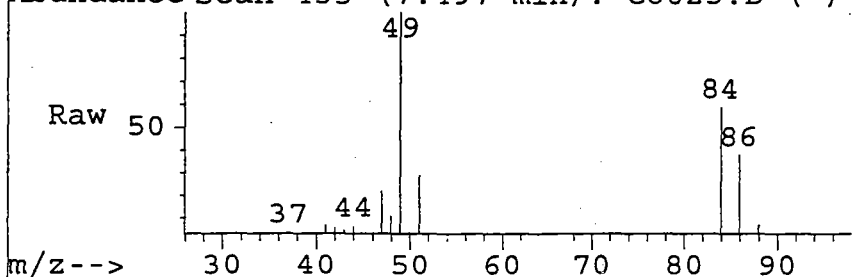
Abundance	Ion	84.00 (83.
30000	Ion	86.00 (85.
	Ion	49.00 (48.



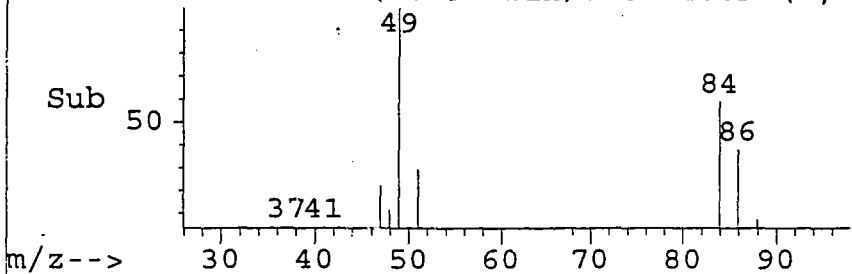
Abundance Scan 418 (7.345 min): C5082.D (-,*



Abundance Scan 433 (7.497 min): C8625.D (*)



Abundance Scan 433 (7.497 min): C8625.D (-,*



Library Search Compound Report

091

Data File : d:\hpchem\1\data\c8625.d
Acq On : 21 Jun 95 8:06 pm
Sample : 9526428
Misc : 25 ML

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

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

No Library Search Compounds Detected

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

092

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			
14						
15						
16						
17						
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27						
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29						
30						

SMC1 (BFB) = 4-Bromofluorobenzene
 SMC2 (DCB) = 1,2-Dichlorobenzene-d4

QC LIMITS
 (80-120)
 (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. 093

VBLK01

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
13				
14				
15				
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29				
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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: 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
---------	----------	---	------	---------

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

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

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

CAS NO.	COMPOUND	(ug/L or ug/Kg) <u>ug/L</u>	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. 096

VBK01

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.				
4.				
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Quantitation Report

097

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
					%Recovery	
System Monitoring Compounds						
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%
					Qvalue	
Target Compounds						
9) Methylene chloride	7.47	84	55780	1.46	ug/L	94

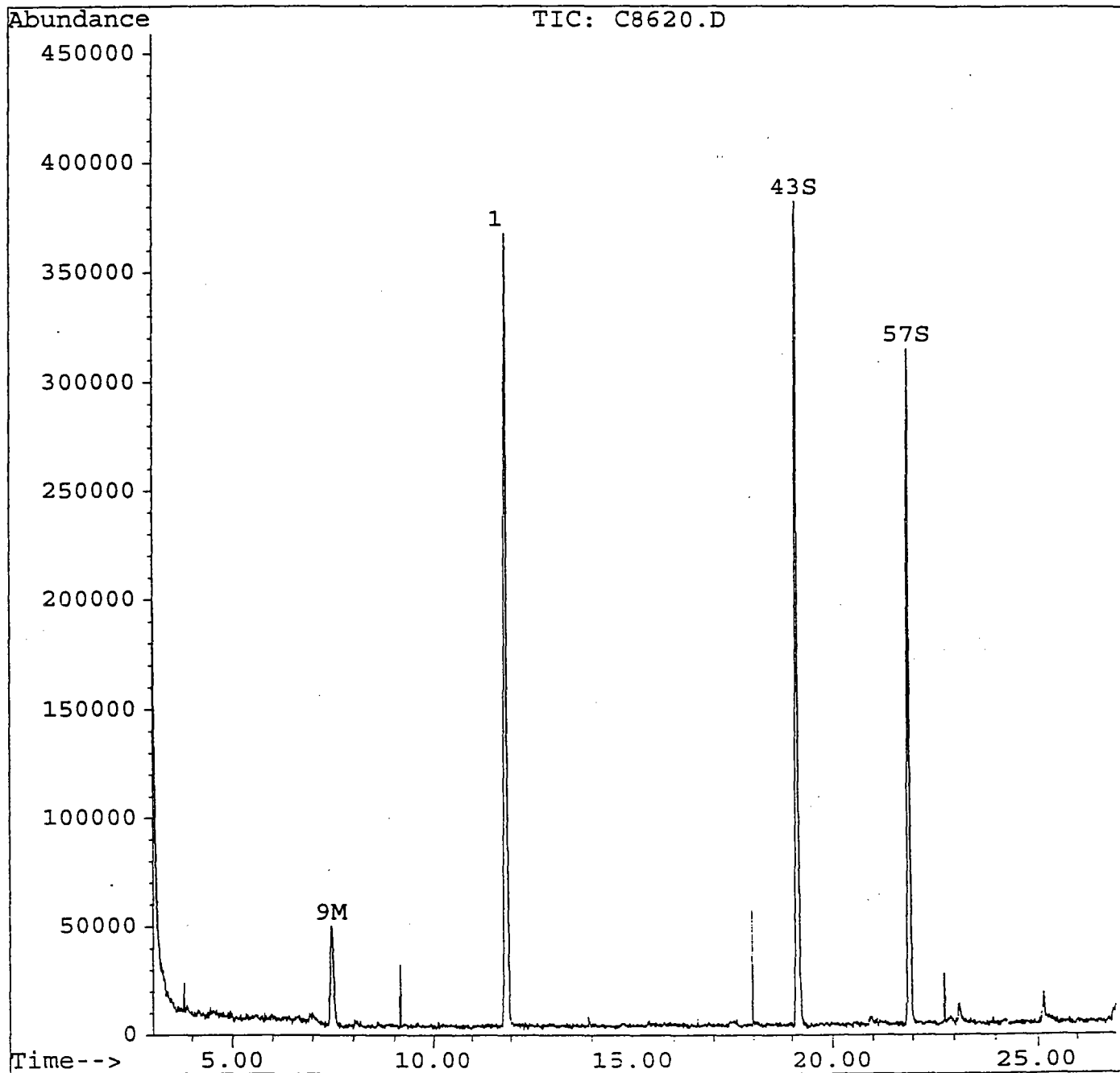
Quantitation Report

098

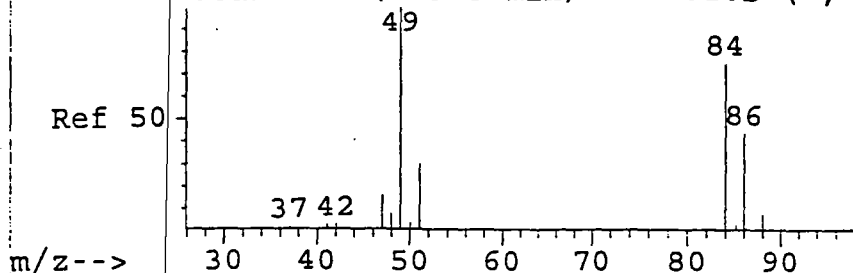
Data File : d:\hpchem\1\data\c8620.d
Acq On : 21 Jun 95 5:12 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Jun 22 15:08 1995

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



Abundance Scan 418 (7.345 min): C5082.D (-, *



#9

099

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

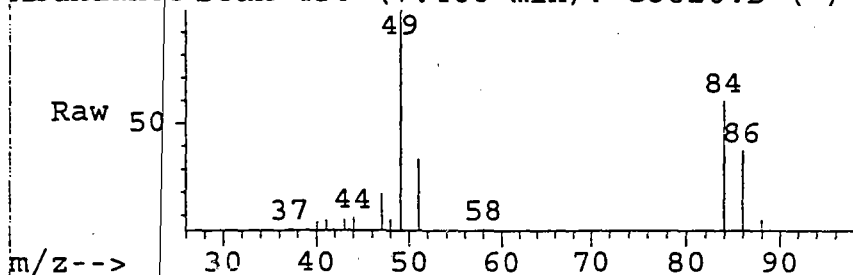
84 100

86 63.7 43.1 83.1

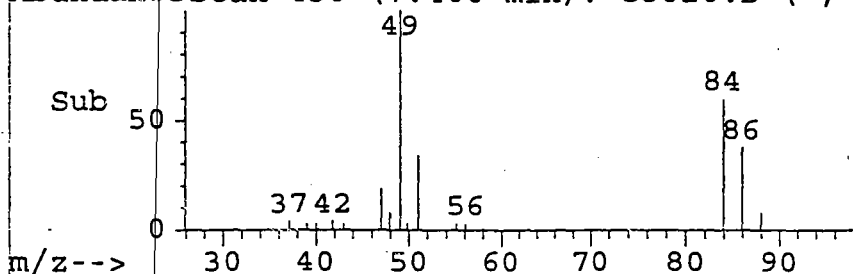
49 166.3 136.3 176.3

0 0.0 0.0 0.0

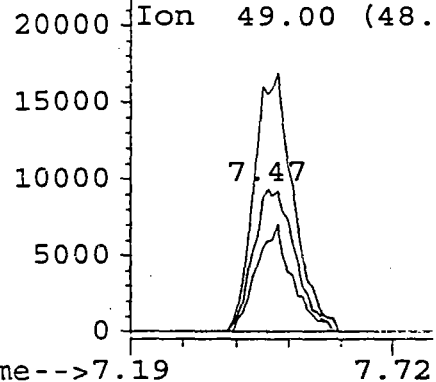
Abundance Scan 430 (7.466 min): C8620.D (*)



Abundance Scan 430 (7.466 min): C8620.D (-, *



Abundance Ion 84.00 (83.
Ion 86.00 (85.
Ion 49.00 (48.



Library Search Compound Report

100

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

Spike Recovery and RPD Summary Report - WATER

101

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: C8628.D

Spike
Sample

Spike
Duplicate Sample

File ID : C8629.D

C8630.D

Sample : 9526431 MS

9526431 MSD

Acq Time: 21 Jun 95 10:23 pm

21 Jun 95 10:57 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD % Rec
Dichlorodifluorometh	0.1	10	9	9	87	88	1	25 80-120
Chloromethane	0.0	10	10	10	101	100	0	25 80-120
Vinyl chloride	0.0	10	10	10	102	103	1	25 80-120
Bromomethane	0.0	10	11	11	108	109	1	25 80-120
Chloroethane	0.0	10	11	12	114	115	1	25 80-120
Trichlorofluorometha	0.0	10	10	11	104	105	1	25 80-120
1,1-Dichloroethene	0.0	10	10	10	100	100	1	25 80-120
Methylene 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
1,1-Dichloroethane	0.8	10	12	12	108	109	1	25 80-120
2,2-Dichloropropane	0.0	10	9	9	89	89	1	25 80-120
cis-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
Chloroform	0.0	10	10	11	104	105	1	25 80-120
1,1,1-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
1,1-Dichloropropene	0.0	10	10	11	102	107	5	25 80-120
Benzene	0.0	10	10	10	103	103	0	25 80-120
1,2-Dichloroethane	0.0	10	10	11	103	105	2	25 80-120
Trichloroethene	1.0	10	11	11	98	101	2	25 80-120
1,2-Dichloropropane	0.0	10	11	11	108	107	0	25 80-120
Dibromomethane	0.0	10	10	10	103	103	0	25 80-120
Bromodichloromethane	0.0	10	10	10	103	103	0	25 80-120
cis-1,3-Dichloroprop	0.0	10	10	10	100	100	0	25 80-120
Toluene	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
1,1,2-Trichloroethan	0.0	10	10	10	103	101	1	25 80-120
Tetrachloroethene	1.1	10	11	11	96	98	2	25 80-120
1,3-Dichloropropane	0.0	10	10	10	102	102	0	25 80-120
Dibromochloromethane	0.0	10	9	10	94	97	3	25 80-120
1,2-Dibromomethane	0.0	10	10	10	99	99	0	25 80-120
Chlorobenzene	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
Ethylbenzene	0.0	10	10	10	98	103	5	25 80-120
Xylene (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
Xylene	0.0	10	9	9	87	95	9	25 80-120
Bromoform	0.0	10	9	9	90	93	3	25 80-120
Isopropylbenzene	0.0	10	10	10	97	100	3	25 80-120
Bromobenzene	0.0	10	10	10	97	97	0	25 80-120
1,1,2,2-Tetrachloroe	0.0	10	12	11	116	114	2	25 80-120
1,2,3-Trichloropropa	0.0	10	10	9	103	93	10	25 80-120

2-Chlorotoluene	0.0	10	11	11	108	108	1	25	80-120	102
4-Chlorotoluene	0.0	10	10	10	100	102	2	25	80-120	
1,3,5-Trimethylbenzene	0.0	10	8	10	90	95	5	25	80-120	
tert-Butylbenzene	0.0	10	10	10	100	100	0	25	80-120	
1,2,4-Trimethylbenzene	0.0	10	9	10	87	99	13	25	80-120	
sec-Butylbenzene	0.0	10	10	10	98	99	1	25	80-120	
1,3-Dichlorobenzene	0.0	10	10	10	97	97	0	25	80-120	
4-Isopropyltoluene	0.0	10	9	10	89	97	9	25	80-120	
1,4-Dichlorobenzene	0.0	10	10	10	96	97	1	25	80-120	
1,2-Dichlorobenzene	0.0	10	10	10	98	99	2	25	80-120	
tert-Butylbenzene	0.0	10	10	10	99	101	2	25	80-120	
1,2-Dibromo-3-chloro	0.0	10	10	10	97	100	2	25	80-120	
1,2,4-Trichlorobenzene	0.0	10	9	9	90	90	0	25	80-120	
Hexachlorobutadiene	0.0	10	9	9	95	94	1	25	80-120	
Naphthalene	0.0	10	9	10	91	95	4	25	80-120	
1,2,3-Trichlorobenzene	0.0	10	9	9	93	92	2	25	80-120	

VOA524.M

Thu Jun 22 15:23:46 1995

VOA

Quantitation Report

103

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

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	R.T.	QIon	Response	Conc	Units	%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	R.T.	QIon	Response	Conc	Units	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

Quantitation Report

104

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

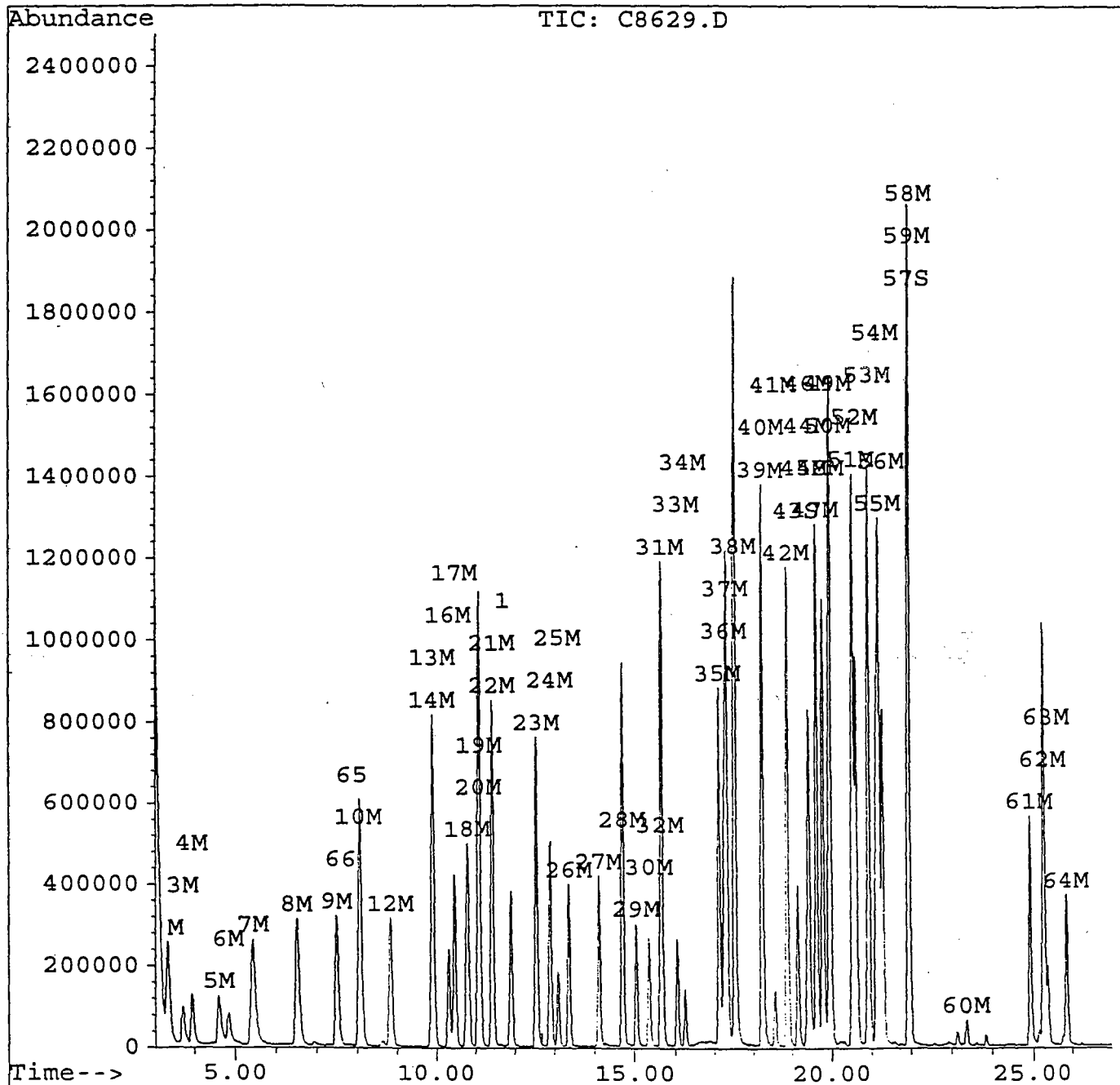
Quantitation Report

105

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

106

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

Quantitation Report

107

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

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

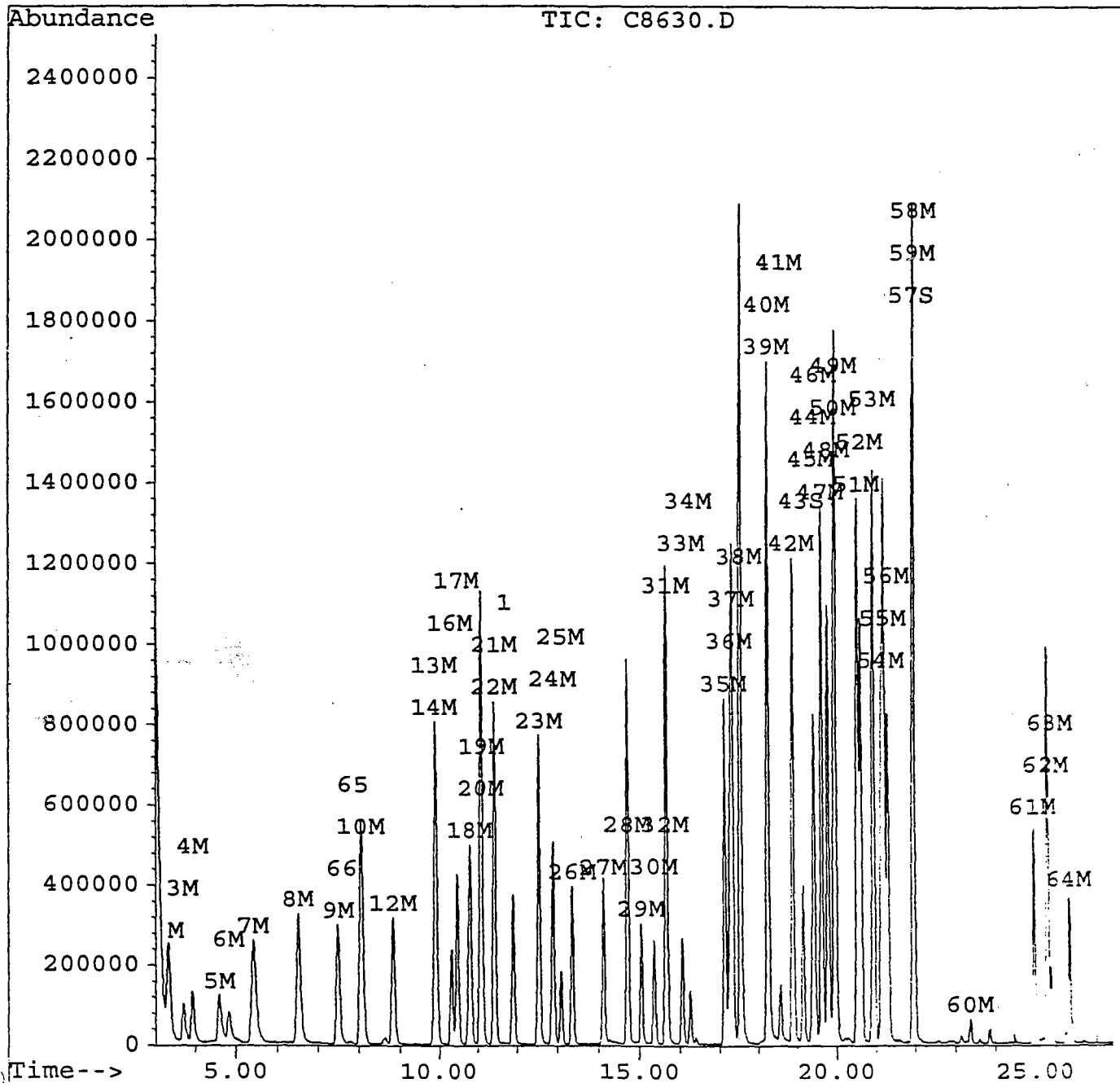
Quantitation Report

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

108

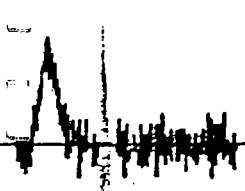
Vial: 14
 Operator: SRK
 Inst : 5972 - In
 Multiplr: 1.00

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





GC/MS SEMIVOLATILE DATA PACKAGE



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
69	Mass 69 relative abundance	61.1
70	Less than 2.0% of mass 69	0.3
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

2-Value is % mass 442

[illegible]

Data File : C:\HPCHEM\1\DATA2\B7750.D

Vial: 1

Acq On : 30 May 95 9:14 am

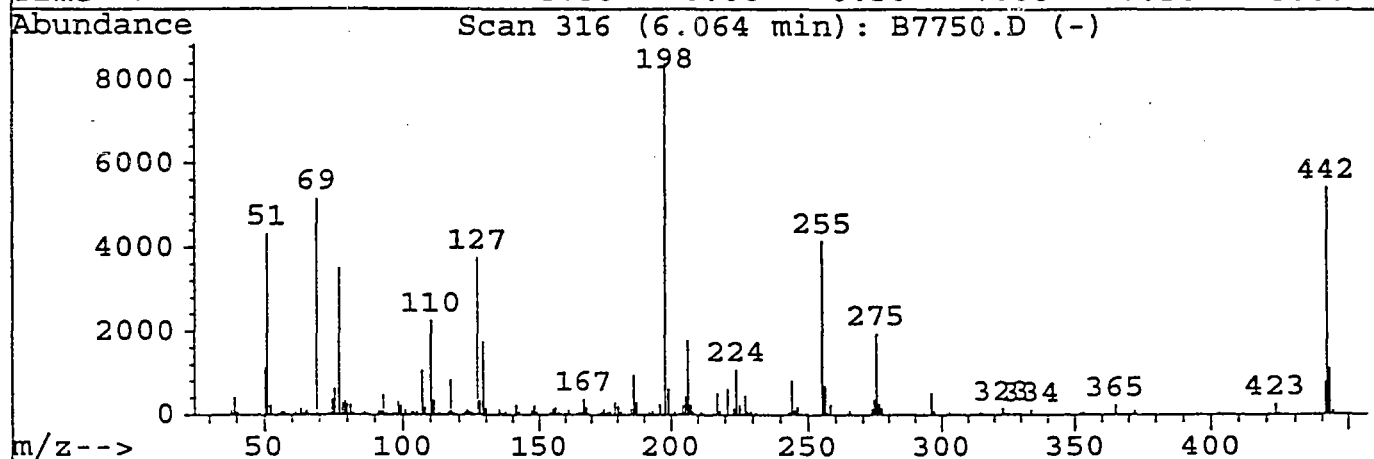
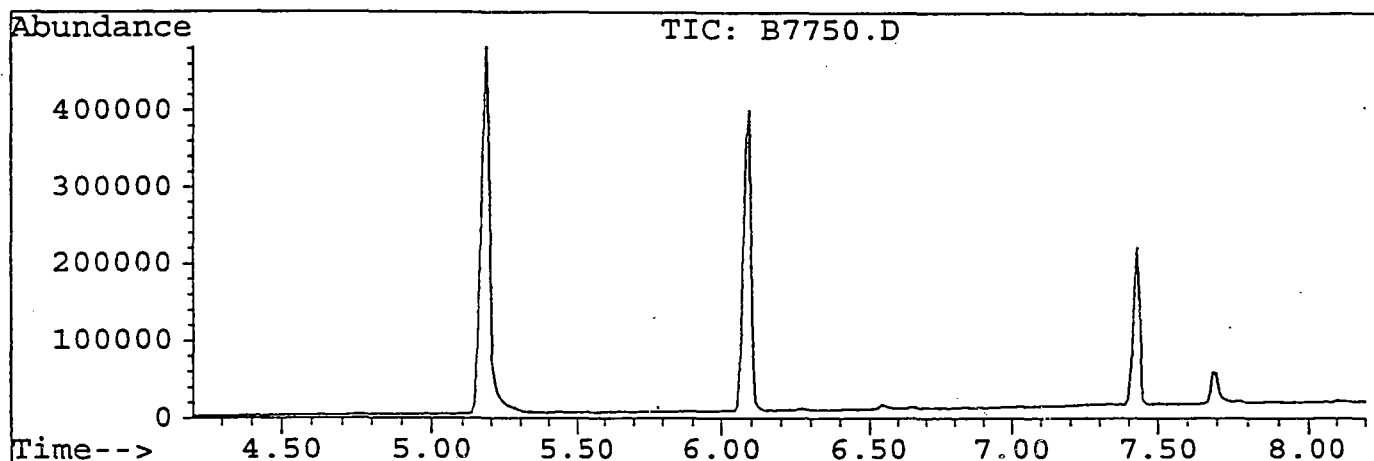
Operator: SCOTTV

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

an 316 (6.064 min): B7750.D

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.	112
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	
40.05	1128	64.05	37	81.05	252	99.05	224	
41.00	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	

an 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
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

an 316 (6.064 min): B7750.D

ified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
135.10	155	205.05	451	222.95	151	249.05	34
136.10	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	215.95	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

an 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				
324.00	124	443.00	1105				
352.10	49	444.10	101				
353.10	51						

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B7750.D

Vial: 1

113

Acq On : 30 May 95 9:14 am

Operator: SCOTTV

Sample : DFTPP..... Converted from RTE d Inst : ABNA

Misc : BT Multiplr: 1.00

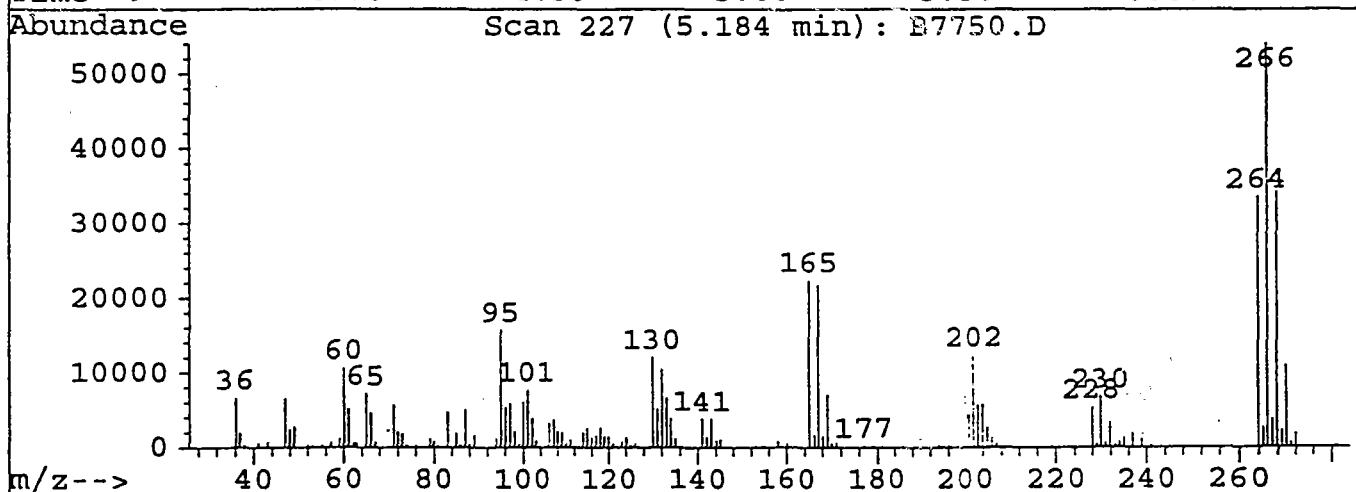
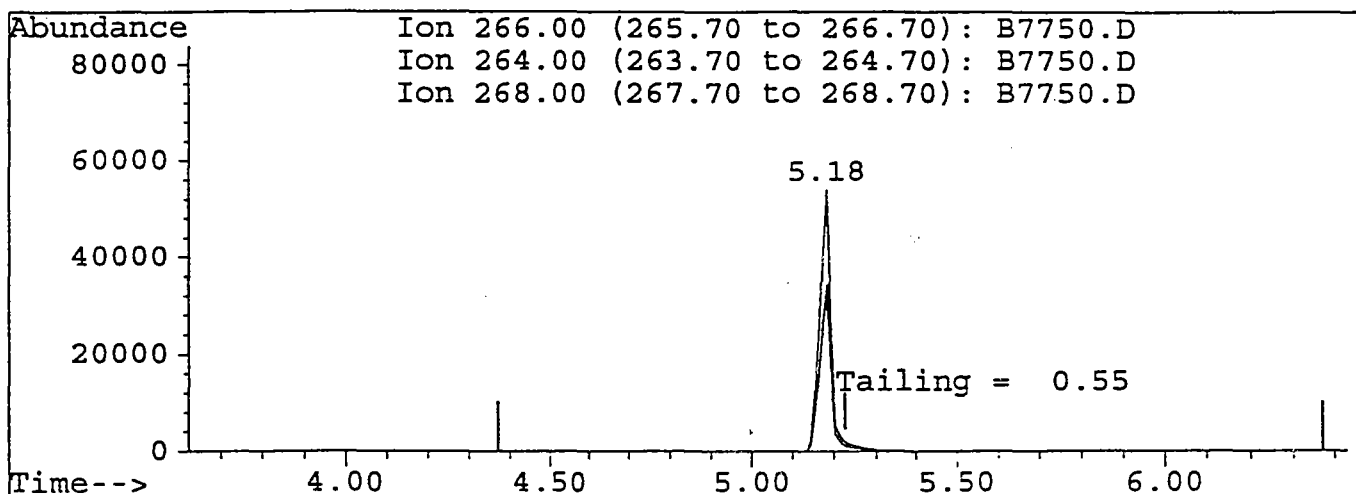
Quant Time: May 30 8:29 1995

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

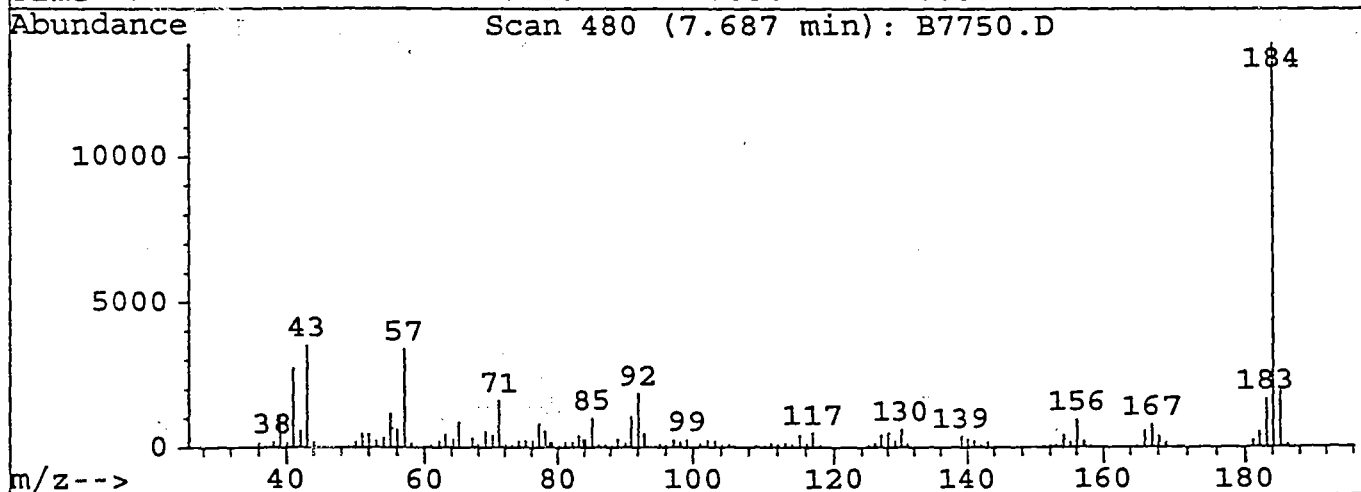
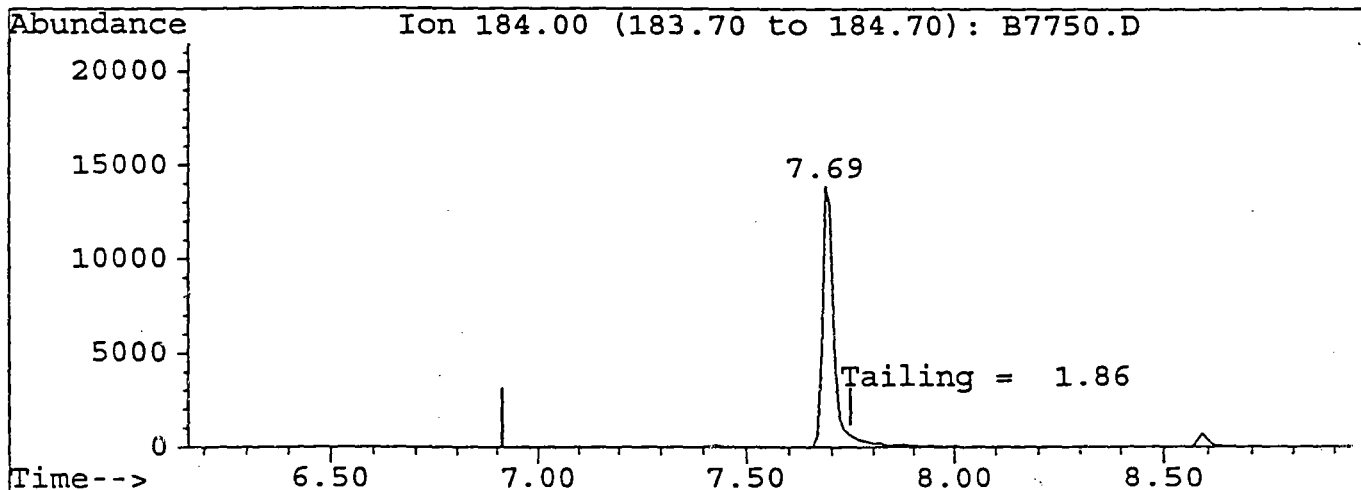
Ion	Exp%	Act%
266.00	100	100
264.00	64.30	62.02
268.00	64.70	63.47
0.00	0.00	0.00

Quantitation Report

114

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

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
-----ISTD-----								
I	1,4-Dichlorobenzene-d							
2) S	2-Fluorophenol	1.046	1.205	1.170	1.071	1.165	1.131	6.09
2) 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
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
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
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	1.330	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
-----ISTD-----								
17) I	Naphthalene-d8							
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
-----ISTD-----								
32) I	Acenaphthene-d10							
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
 BNACLP.M

Wed May 31 10:06:54 1995

BNA

Page 1

Method : C:\HPCHEM\1\METHODS\BNACL.P.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
41) CM	Acenaphthene	0.982	1.056	1.036	1.024	1.028	1.025	2.65
42) MP	2,4-Dinitrophenol	0.189	0.213	0.198	0.155	0.107	0.172	24.56
44) PM	4-Nitrophenol	0.151	0.178	0.188	0.168	0.142	0.166	11.52
45) 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
47) M	Diethylphthalate	1.274	1.533	1.576	1.452	1.379	1.443	8.38
48) 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
50)	Phenanthrene-d10	-----ISTD-----						
51) 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
53) 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
55) S	1,2-Diphenylhydrazine	1.065	1.251	1.281	1.312	1.147	1.211	8.48
56) 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
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
60) M	Anthracene	0.809	1.021	1.128	1.028	1.059	1.009	11.85
61) I	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
63) MC	Fluoranthene	0.922	0.947	1.162	1.124	1.019	1.035	10.22
64) I	Chrysene-d12	-----ISTD-----						
65) S	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
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	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
71) M	Chrysene	0.661	0.691	1.035	0.768	1.060	0.843	22.65
72) M	bis(2-Ethylhexyl)phth	1.536	1.331	1.560	1.243	1.151	1.364	13.17
73) I	Perylene-d12	-----ISTD-----						
74) 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
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
78) m	Indeno[1,2,3-cd]pyren	0.493	0.521	0.450	0.417	0.381	0.452	12.46
79) 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
81) S	1-Methyl naphthalene						0.000#	-1.00
82) S	7,12-Dimethylbenz(a)a						0.000#	-1.00

Quantitation Report

117

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

b7751.d BNACLP.M

Wed May 31 10:07:53 1995

BNA

Page 1

Quantitation Report

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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

b7751.d BNACLP.M

Wed May 31 10:07:58 1995

BNA

Page 2

Quantitation Report

Data File : c:\hpchem\1\data2\b7751.d

Acq On : 30 May 95 9:44 am

Sample : 20 STD.....

Misc :

Quant Time: May 31 10:03 1995

Vial: 2 119

Operator: SCOTT

Converted from RTE d Inst : ABNA

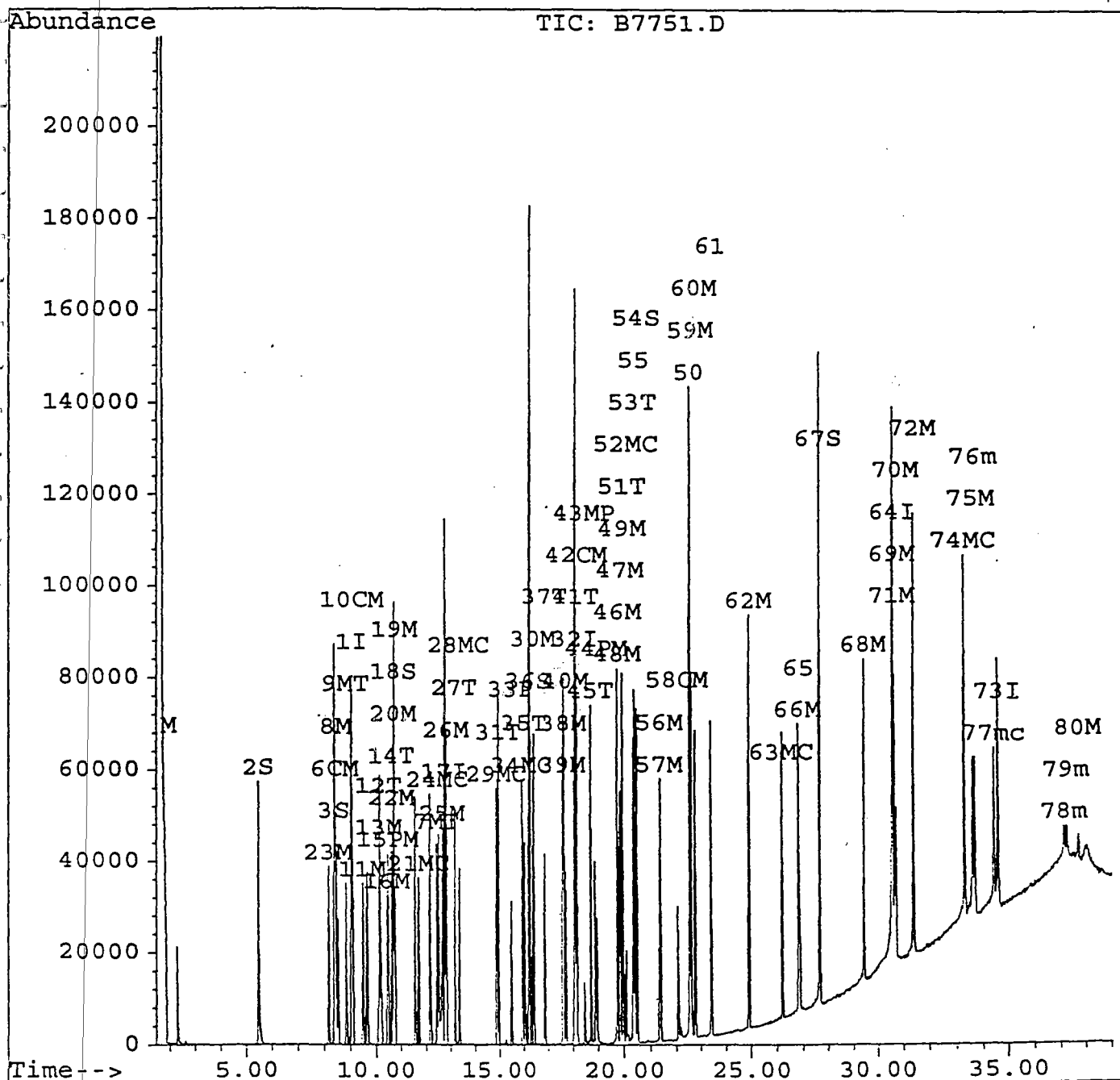
BT Multiplr: 1.00

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\b7751.d

Acq On : 30 May 95 9:44 am

Sample : 20 STD.....

Misc :

Quant Time: May 31 10:03 1995

Vial: 2 **119**

Operator: SCOTT

Converted from RTE d Inst : ABNA

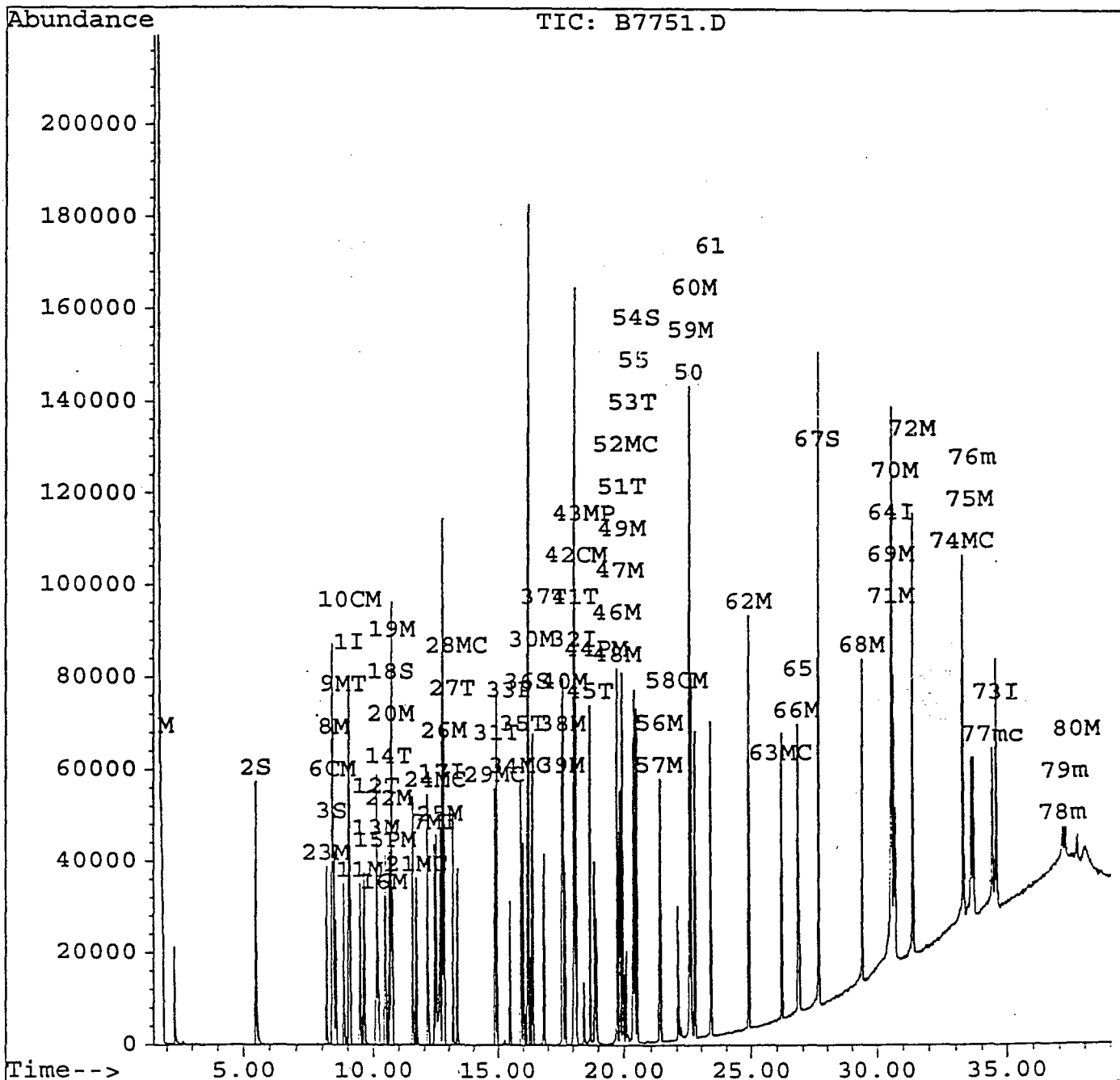
BT Multiplr: 1.00

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: 3 120

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	103511	42.96	ug/ml	97
31) 2-Methylnaphthalene	14.94	142	103935	47.31	ug/mL	98
33) Hexachlorocyclopentadiene	15.46	237	26413	35.57	ug/mL	98
34) 2,4,6-Trichlorophenol	15.91	196	33933	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

b7752.d BNACLP.M

Wed May 31 10:08:38 1995

ENA

Page 1

Quantitation Report

121

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

b7752.d BNACLP.M

Wed May 31 10:08:45 1995

BNA

Page 2

Quantitation Report

122

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

Vial: 3

Operator: SCOTTV

Inst : ABNA

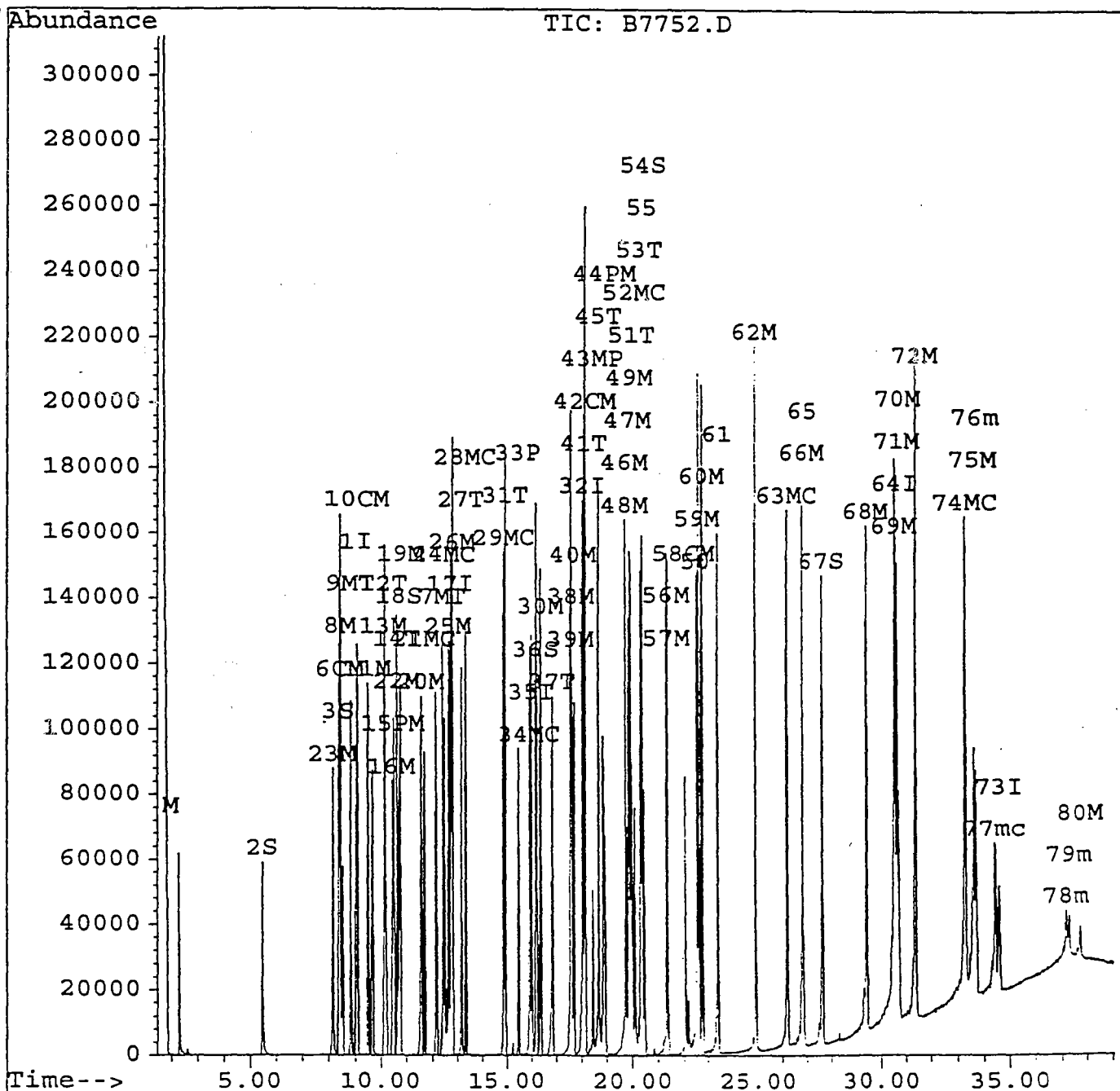
BT Multiplr: 1.00

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

123

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

b7753.d BNACLP.M

Wed May 31 10:09:24 1995

BNA

Page 1

Quantitation Report

Data File : c:\hpchem\1\data2\b7753.d

Vial: 4 124

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

b7753.d BNACLP.M

Wed May 31 10:09:31 1995

BNA

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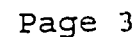
Vial: 4

Operator: SCOTTV

Converted from RTE d Inst : ABNA

BT Multplr: 1.00

Response via : Multiple Level Calibration



Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d

Vial: 5 126

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	70433	91.40	ug/mL	99

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

b7754.d BNACLP.M

Wed May 31 10:10:10 1995

BNA

Page 1

Quantitation Report

127

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

b7754.d BNACLP.M

Wed May 31 10:10:17 1995

BNA

Page 2

Quantitation Report

Data File : c:\hpchem\1\data2\b7754.d

Vial: 5 128

Acq On : 30 May 95 12:20 pm

Operator: SCOTTV

Sample : 120 STD.....

Converted from RTE d Inst

: ABNA

Misc :

BT Multiplr: 1.00

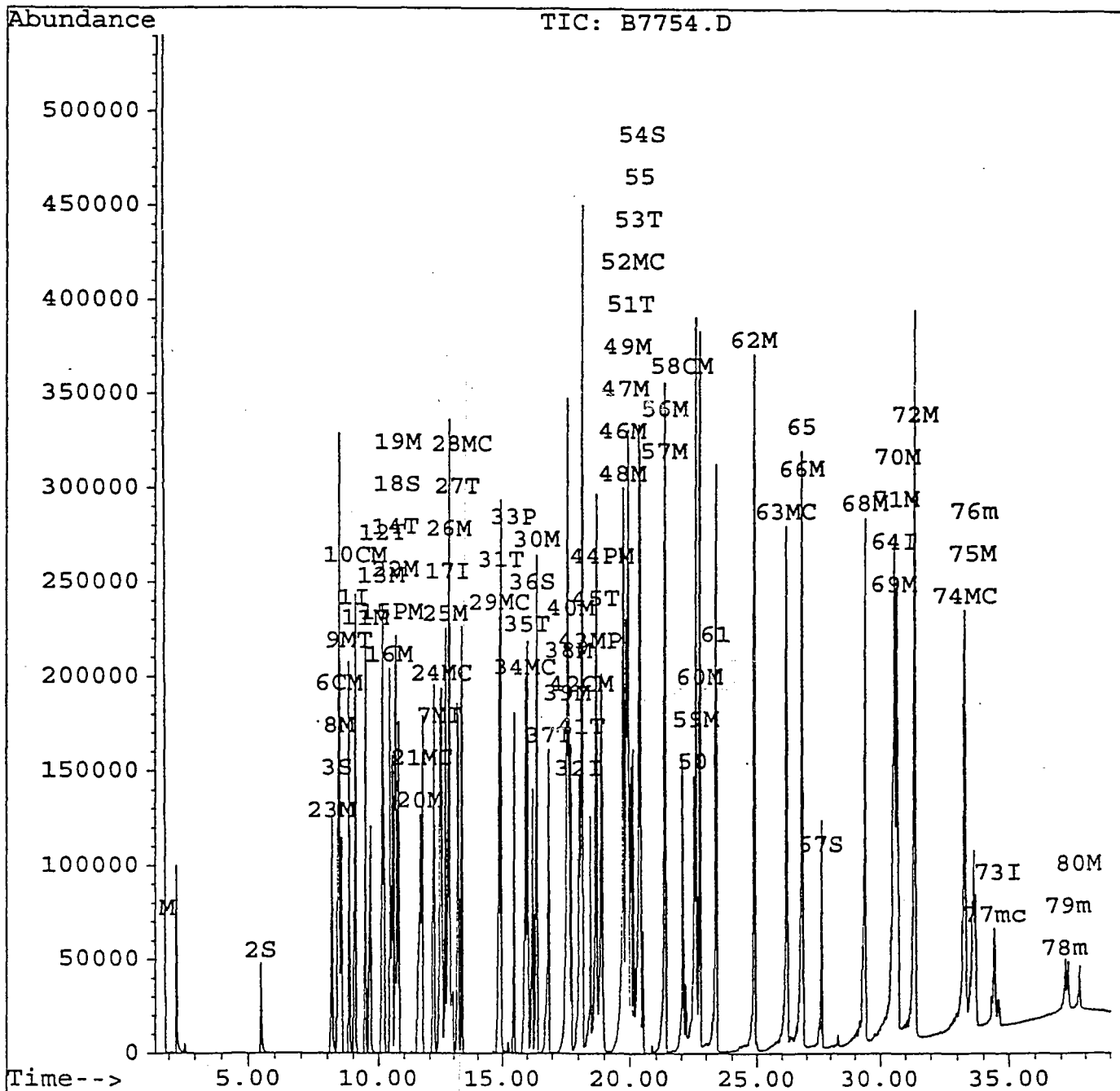
Quant Time: May 31 9:49 1995

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

129

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

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

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

b7755.d BNACLP.M

Wed May 31 10:10:57 1995

BNA

Page 1

Quantitation Report

Data File : c:\hpchem\1\data2\b7755.d

Vial: 6

130

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

b7755.d BNACLP.M

Wed May 31 10:11:03 1995

BNA

Page 2

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Vial: 6

Operator: SCOTTV

Converted from RTE d Inst : ABNA

BT Multiplr: 1.00

Response via : Multiple Level Calibration



5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

132

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

5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

133

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

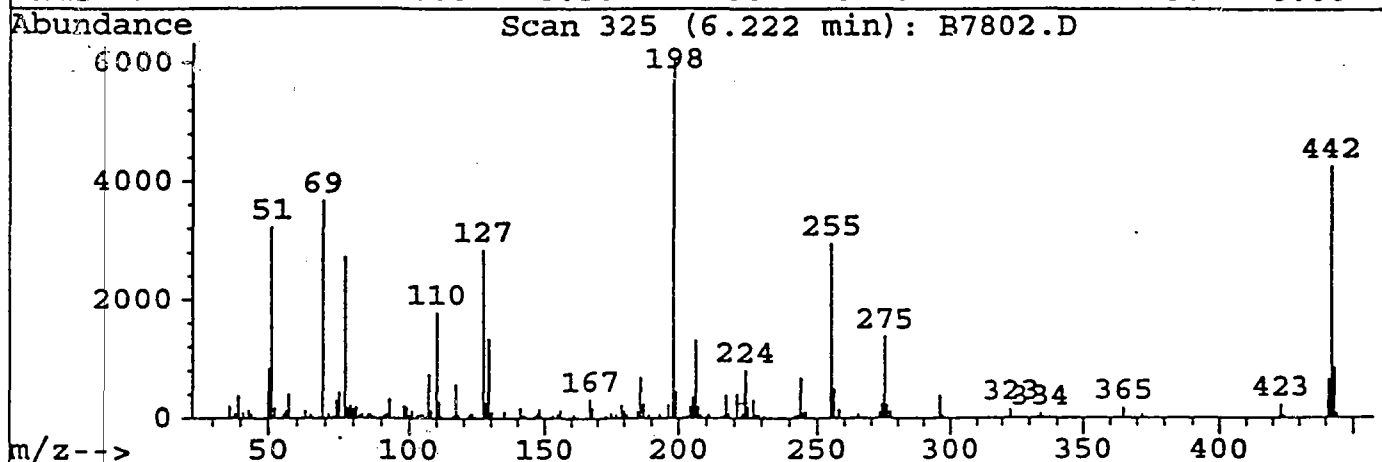
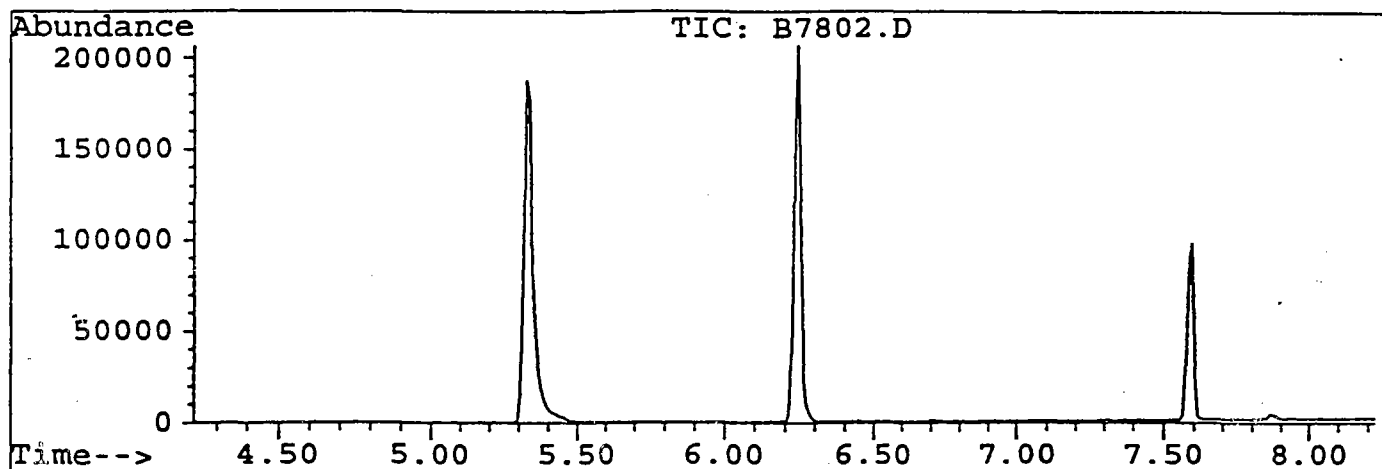
Operator: SCOTTV

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

Can 325 (6.222 min): B7802.D

FTPP..... Converted from RTE data file >B7802::D5

135

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

FTPP..... 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

Can 325 (6.222 min): B7802.D

FTPP..... 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

136

Data File : C:\HPCHEM\1\DATA2\B7802.D

Acq On : 3 Jun 95 9:53 am

Sample : DFTPP..... Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

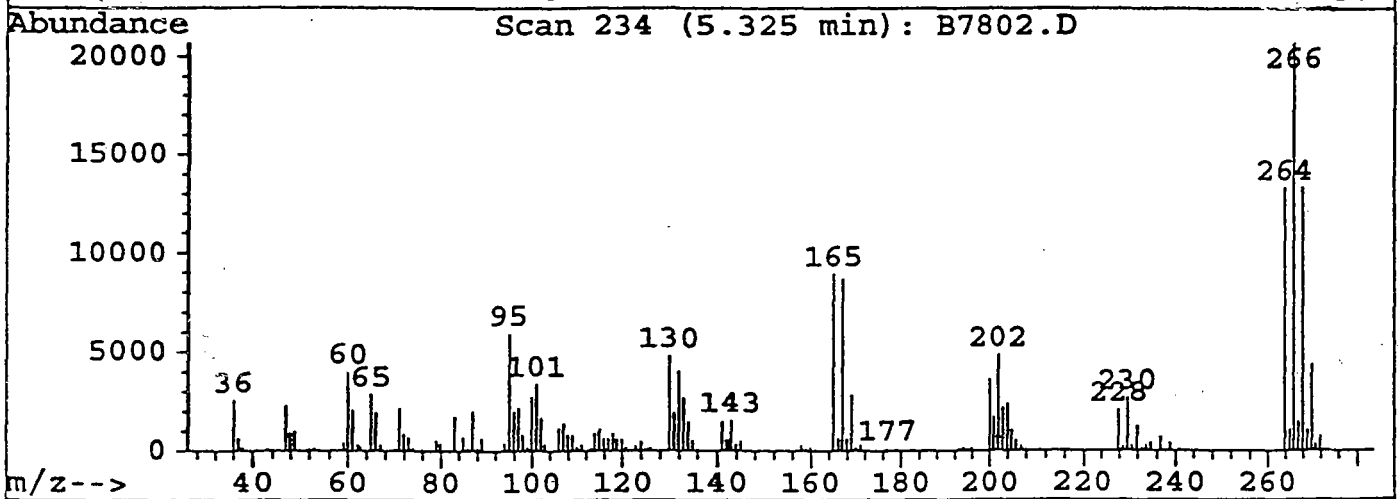
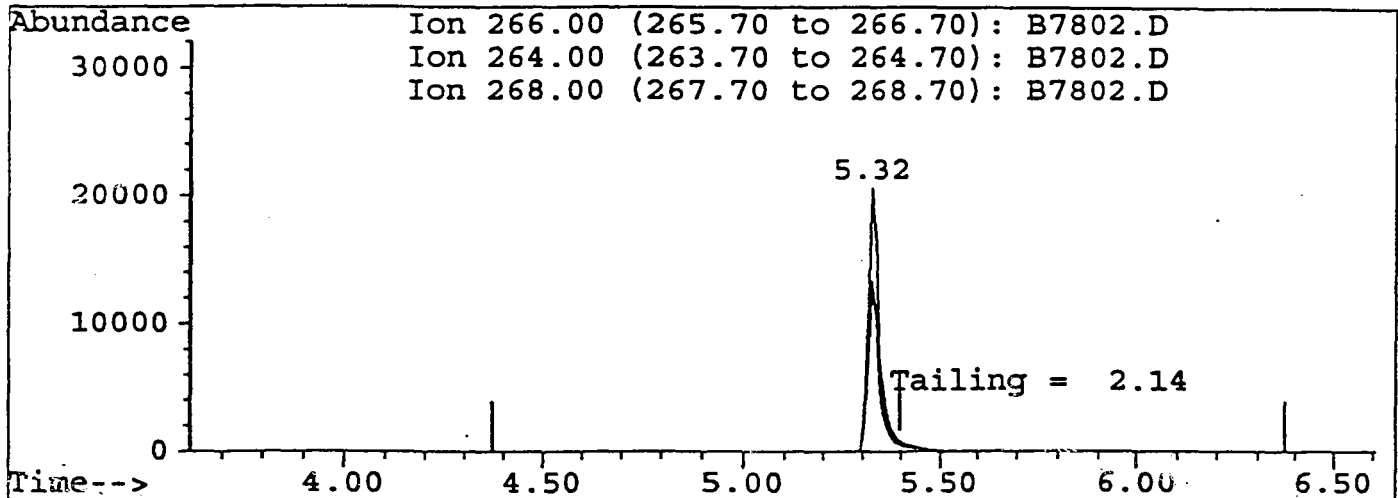
Quant Time: Jun 3 9:06 1995

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

137

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

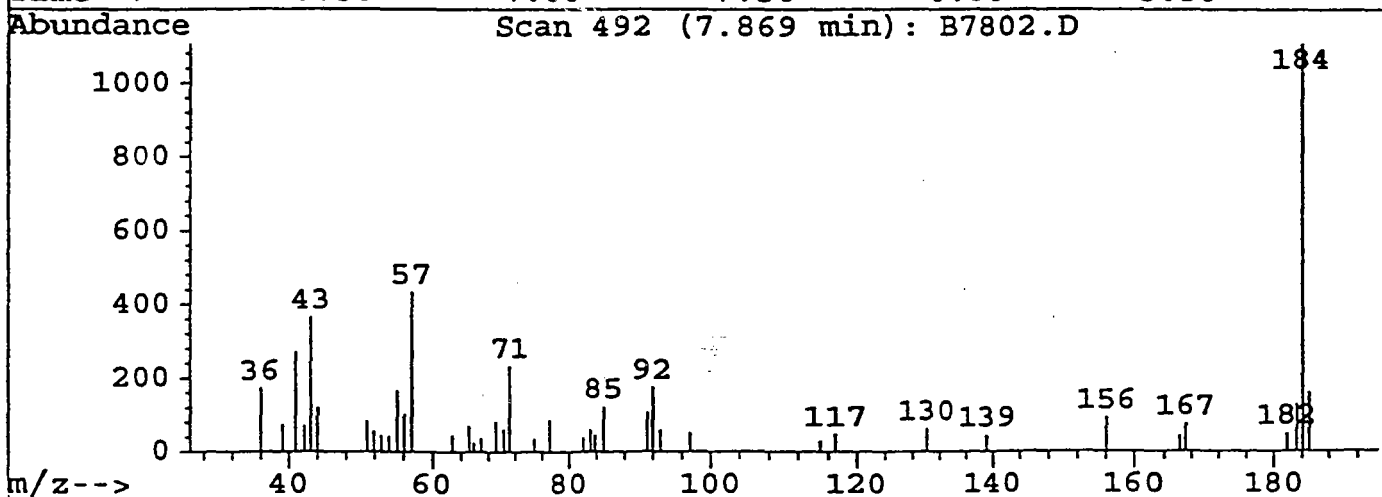
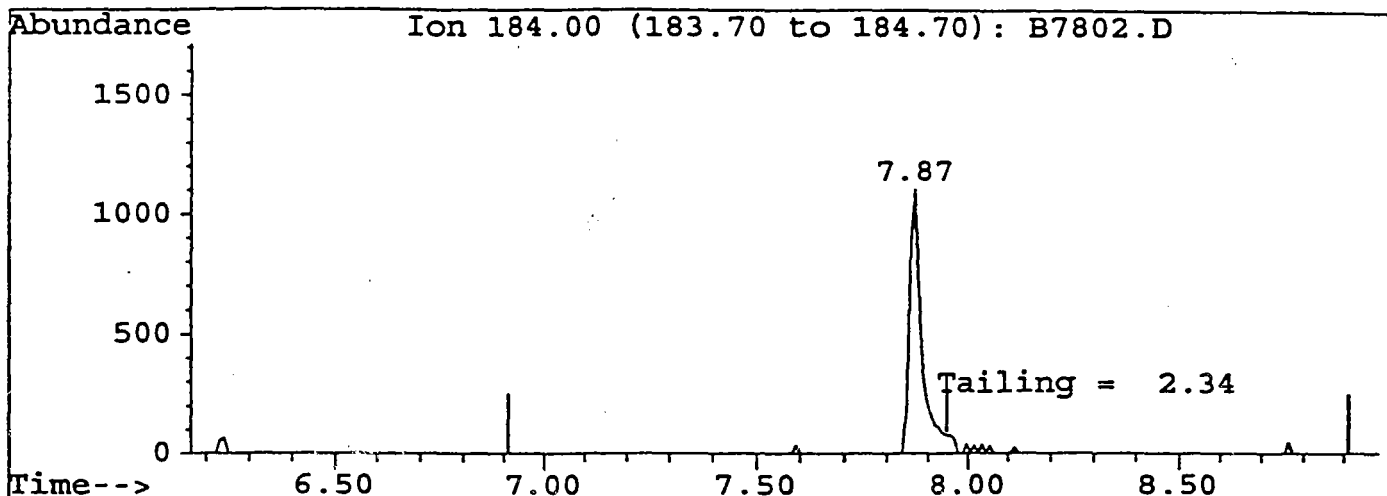
Quant Time: Jun 3 9:06 1995

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

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

138

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
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.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No.

Site: Location:

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

[illegible]

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B7803.D

Vial: 2 140

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)
1 I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.18
2 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
4 M	N-nitrosodimethylamine	0.578	0.585	-1.1	79	-0.10
5	Pyridine	0.428	0.000#	100.0#	0#	-1.62#
6 CM	Phenol	1.668	1.607	3.7	93	0.14
7 MT	bis(2-Chloroethyl) ether	2.026	2.027	-0.1	98	0.18
8 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
11 M	1,2-Dichlorobenzene	1.357	1.424	-4.9	102	0.18
12 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
14 T	4-Methylphenol	1.322	1.299	1.7	98	0.16
15 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
17 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
20 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
23 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
26 M	Naphthalene	0.979	1.023	-4.5	100	0.20
27 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
30 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
32 I	Acenaphthene-d10	1.000	1.000	0.0	99	0.21
33 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
35 T	2,4,5-Trichlorophenol	0.324	0.384	-18.4	102	0.19
36 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
38 M	Dimethylphthalate	1.299	1.277	1.8	97	0.19
39 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

B7803.D BNACLP.M

Wed Jun 07 09:32:50 1995

BNA

Page 1

Evaluate Continuing Calibration Report

141

Data File : C:\HPCHEM\1\DATA2\B7803.D

Vial: 2

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)
4 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
4 PM	4-Nitrophenol	0.166	0.160	3.5	94	0.19
47 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
4 M	Diethylphthalate	1.443	1.376	4.6	93	0.21
4 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
5	Phenanthrene-d10	1.000	1.000	0.0	102	0.25
51 T	4-Nitroaniline	0.166	0.194	-16.9	93	0.21
53 MC	4,6-Dinitro-2-methylphenol	0.132	0.139	-5.1	109	0.21
5 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
5 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
5 M	Phenanthrene	1.094	1.129	-3.2	105	0.25
6 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
6 MC	Fluoranthene	1.035	1.139	-10.1	103	0.27
64 I	Chrysene-d12	1.000	1.000	0.0	110	0.31
6	Benzidine	0.437	0.361	17.5	99	0.27
68 M	Pyrene	1.502	1.240	17.4	107	0.27
67 S	Terphenyl-d14	1.062	0.881	17.1	110	0.27
6 M	Butylbenzylphthalate	0.962	0.769	20.0	100	0.27
6 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
7 M	Chrysene	0.843	0.806	4.4	115	0.31
7 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
7 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
7 inc	Benzo[a]pyrene	1.227	1.266	-3.2	193#	-0.51#
7 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

B7803.D BNACLP.M

Wed Jun 07 09:33:02 1995

BNA

Page 2

Evaluate Continuing Calibration Report

142

Data File : C:\HPCHEM\1\DATA2\B7803.D

Vial: 2

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)
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

Quantitation Report

143

Data File : c:\hpcchem\1\data2\b7803.d

Acq On : 3 Jun 95 10:13 am

Sample : 50 STD.....

Misc :

Quant Time: Jun 7 9:32 1995

Vial: 2

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

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: 2144

Acq On : 3 Jun 95 10:13 am

Operator: SCOTT V

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

b7803.d BNACLP.M

Wed Jun 07 09:36:04 1995

BNA

Page 2

Quantitation Report

Data File : c:\hpchem\1\data2\b7803.d

Vial: 2 145

Acq On : 3 Jun 95 10:13 am

Operator: SCOTTV

Sample : 50 STD.....

Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

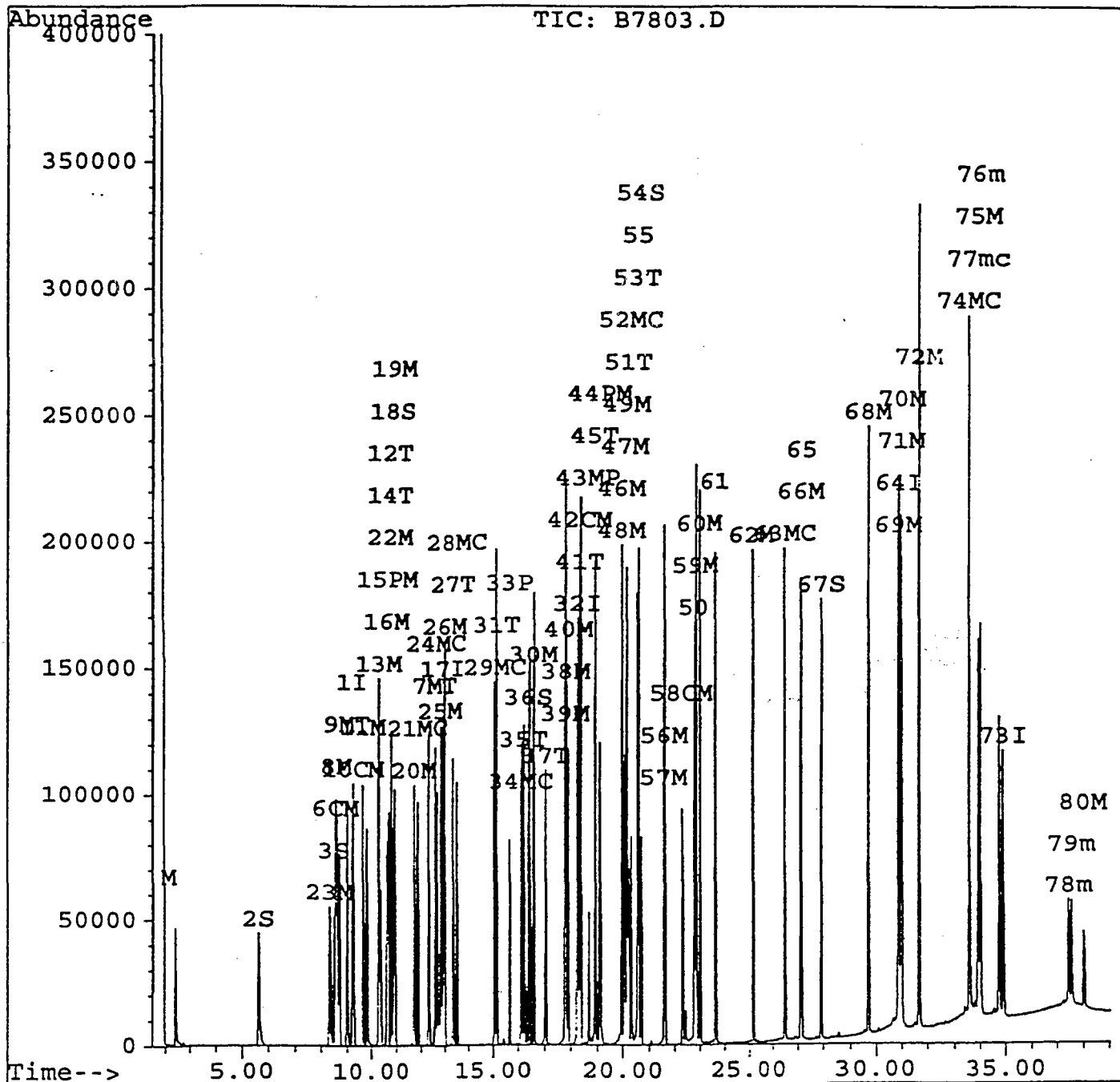
Quant Time: Jun 7 9:32 1995

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



5B
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

146

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					

Data File : C:\HPCHEM\1\DATA2\B8021.D

Vial: 1

Acq On : 26 Jun 95 12:57 am

Operator: SCOTTV

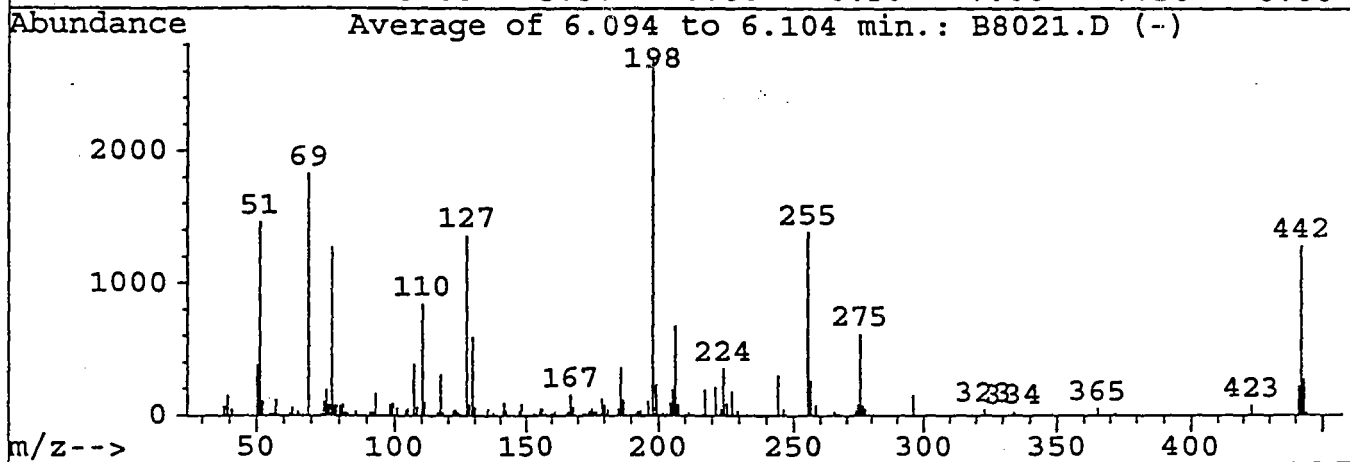
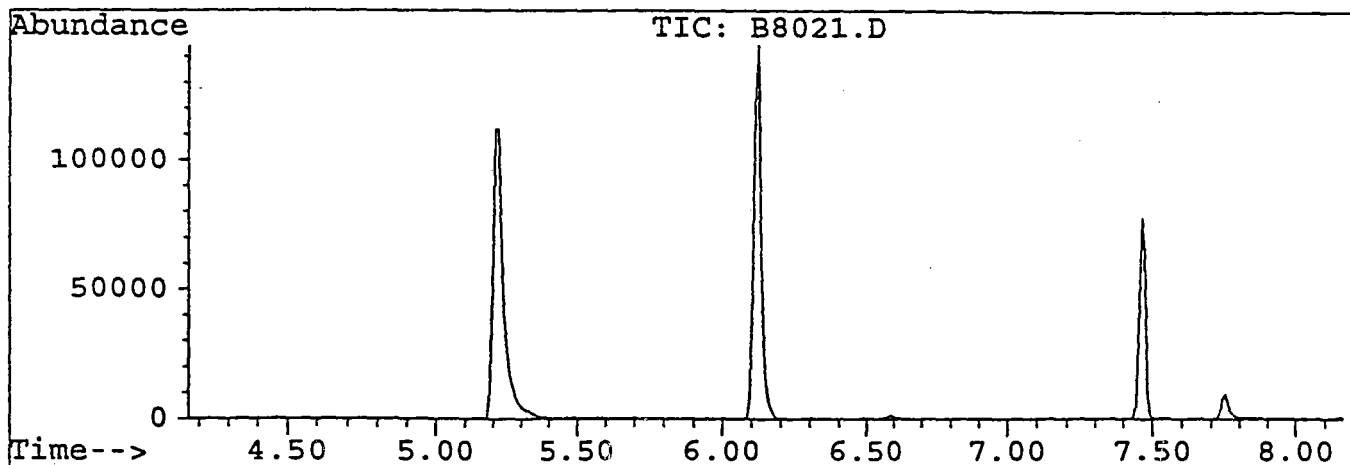
Sample : DFTPP..... Converted from RTE d Inst : ABNA

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

verage of 6.094 to 6.104 min.: B8021.D

Modified: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

Average of 6.094 to 6.104 min.: B8021.D

Modified:subtracted

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
127.00	1362	155.10	51	175.10	51	196.10	109
127.95	83	156.00	47	176.00	29	198.00	2686
129.00	596	157.80	13	177.00	28	199.00	231
130.00	61	160.00	22	179.00	124	201.55	20
135.00	52	161.10	32	180.00	72	202.95	19
137.10	25	166.10	28	181.10	46	204.05	100
141.00	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
148.00	89	173.00	21	192.10	30	211.15	26
153.00	22	174.10	35	193.10	37	216.05	16

Average of 6.094 to 6.104 min.: B8021.D

Modified: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				

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B8021.D

Vial: 1 **149**

Acq On : 26 Jun 95 12:57 am

Operator: SCOTTV

Sample : DFTPP..... Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

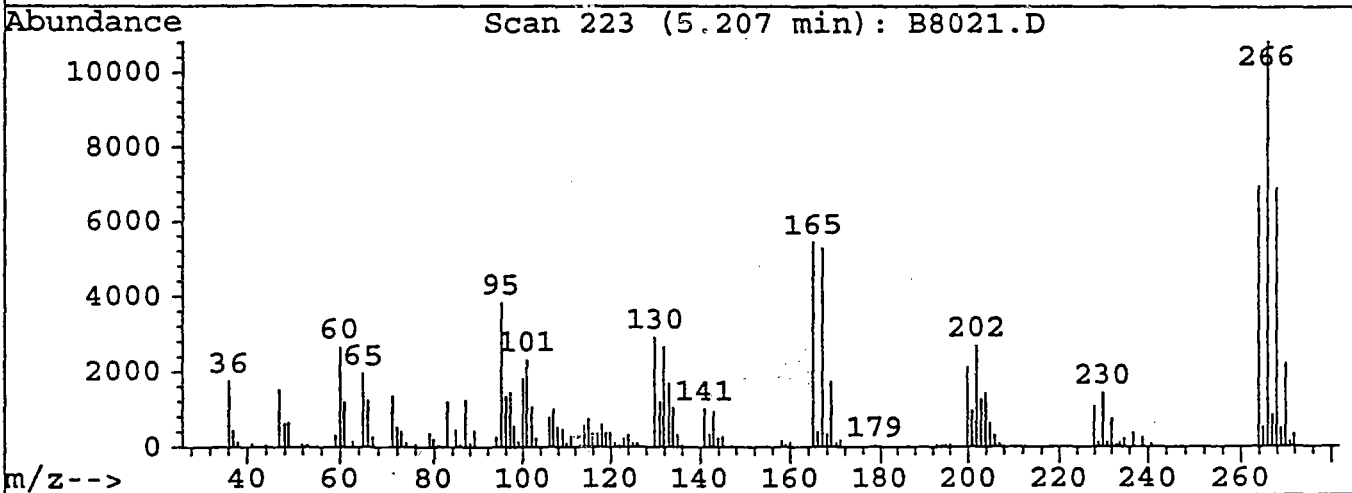
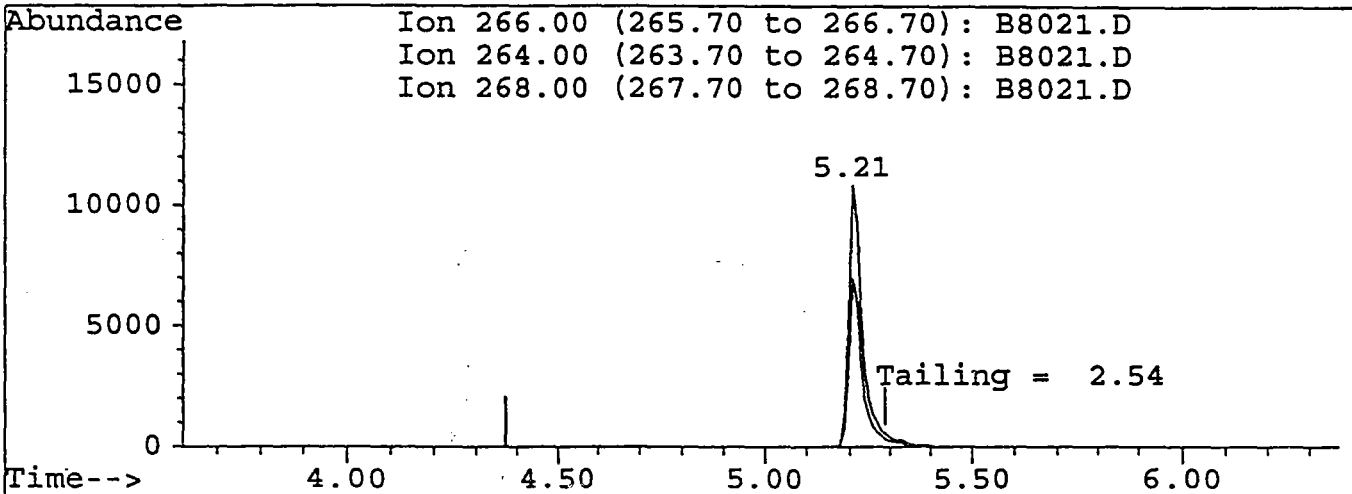
Quant Time: Jun 26 12:22 1995

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

Quantitation Report

Data File : C:\HPCHEM\1\DATA2\B8021.D

Vial: 1 **150**

Acq On : 26 Jun 95 12:57 am

Operator: SCOTTV

Sample : DFTPP..... Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

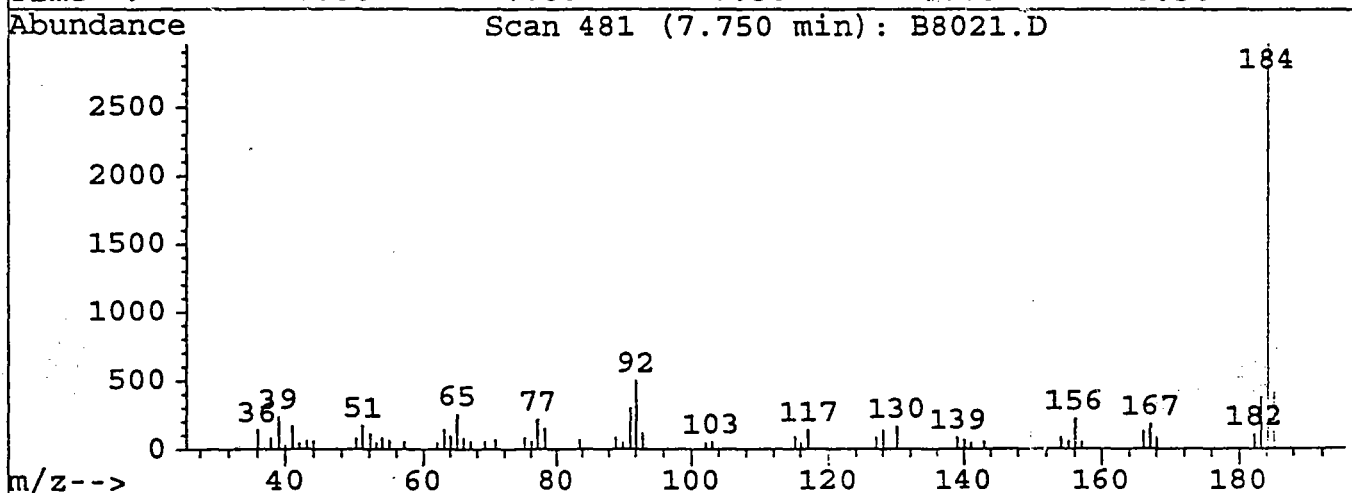
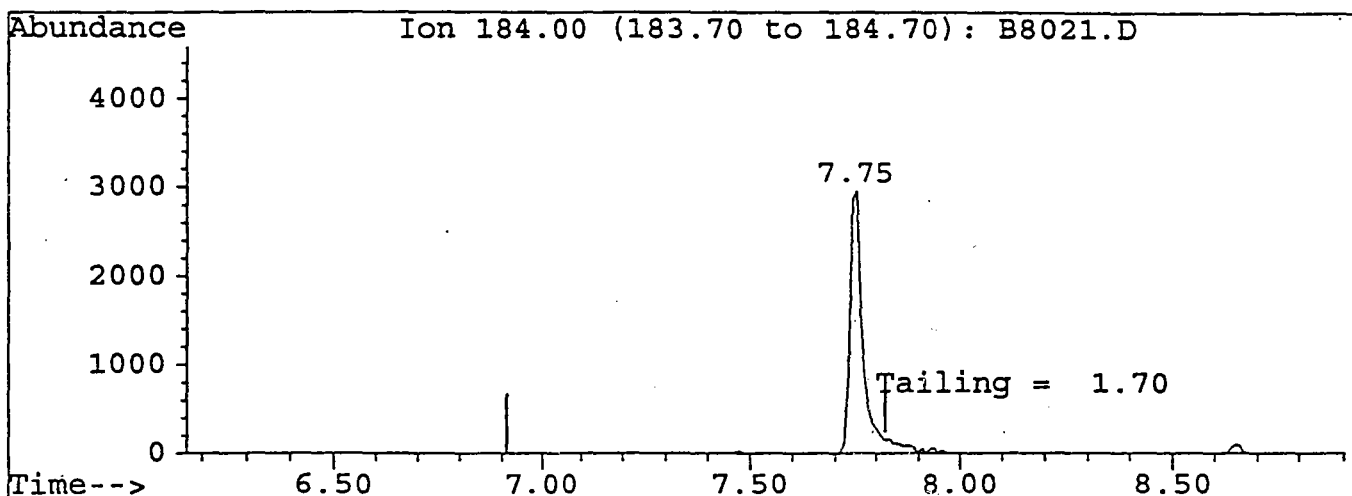
Quant Time: Jun 26 12:22 1995

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

151

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No. _____

Site: _____

Location: _____

Group: _____

Instrument ID: ABNACalibration Date: 6/26/95Time: 0132Lab File ID: B8022.DInit. Calib. Date(s): 6/26/95 1/0/00Init. Calib. Times: 0132 0000

COMPOUND	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.

152

Contract:

Group:

Time: 0132

Init. Calib. Date(s): 6/26/95 1/0/00

Init. Calib. Times: 0132 0000

[illegible]

All other compounds must meet a minimum RRF of 0.010.

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA2\B8022.D

Vial: 2 **153**

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
2 S	2-Fluorophenol	1.131	1.081	4.4	73	0.04
3 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
5	Pyridine	1.374	0.000#	100.0#	0#	-1.62#
6 CM	Phenol	1.668	1.648	1.2	70	0.02
7 MT	bis(2-Chloroethyl) ether	2.026	2.057	-1.5	73	0.02
8 M	2-Chlorophenol	1.269	1.246	1.8	72	0.02
9 MT	1,3-Dichlorobenzene	1.385	1.415	-2.2	72	0.00
10 CM	1,4-Dichlorobenzene	1.429	1.448	-1.4	71	0.00
11 M	1,2-Dichlorobenzene	1.357	1.394	-2.7	73	0.00
12 T	2-Methylphenol	1.204	1.327	-10.2	82	0.54#
13 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
15 PM	N-Nitroso-Di-n-propylamine	1.346	1.356	-0.8	77	0.00
16 M	Hexachloroethane	0.737	0.753	-2.2	73	0.02
17 I	Naphthalene-d8	1.000	1.000	0.0	72	0.02
18 S	Nitrobenzene-d5	0.456	0.433	4.9	71	0.00
19 M	Nitrobenzene	0.424	0.403	5.0	66	0.00
20 M	Isophorone	0.893	0.801	10.4	70	0.00
21 MC	2-Nitrophenol	0.210	0.193	8.1	69	0.02
22 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
24 MC	2,4-Dichlorophenol	0.298	0.276	7.3	68	0.06
25 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
28 MC	Hexachlorobutadiene	0.185	0.171	7.4	66	0.02
29 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
31 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
33 P	Hexachlorocyclopentadiene	0.278	0.256	7.9	70	0.02
34 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
36 S	2-Fluorobiphenyl	1.200	1.208	-0.7	72	0.04
37 T	2-Nitroaniline	0.549	0.507	7.6	62	0.04
38 M	Dimethylphthalate	1.299	1.315	-1.2	71	0.04
39 M	Acenaphthylene	1.704	1.765	-3.6	72	0.04
40 M	2,6-Dinitrotoluene	0.310	0.308	0.7	66	0.04

(#) = Out of Range

B8022.D BNACLP.M

Wed Jun 28 13:54:12 1995

BNA

Page 1

Evaluate Continuing Calibration Report

154

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)
4 T	3-Nitroaniline	0.346	0.332	3.9	64	0.06
42 CM	Acenaphthene	1.025	1.045	-1.9	71	0.04
43 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
45 T	Dibenzofuran	1.609	1.532	4.7	64	0.04
46 M	2,4-Dinitrotoluene	1.167	1.178	-0.9	72	0.05
47 M	Diethylphthalate	1.443	1.428	1.1	69	0.02
48 M	Fluorene	1.259	1.274	-1.2	73	0.05
49 M	4-Chlorophenyl-phenylether	0.596	0.606	-1.6	72	0.05
50	Phenanthrene-d10	1.000	1.000	0.0	67	0.05
51 T	4-Nitroaniline	0.166	0.198	-19.1	62	0.05
52 MC	4,6-Dinitro-2-methylphenol	0.132	0.136	-3.3	71	0.05
53 T	n-Nitrosodiphenylamine	0.508	0.555	-9.2	70	0.05
54 S	2,4,6-Tribromophenol	0.108	0.091	15.7	58	0.05
55	1,2-Diphenylhydrazine (as a	1.211	1.303	-7.6	67	0.05
56 M	4-Bromophenyl-phenylether	0.206	0.205	0.5	63	0.05
57 M	Hexachlorobenzene	0.215	0.185	13.9	54	0.05
58 CM	Pentachlorophenol	0.137	0.134	2.3	68	0.07
59 M	Phenanthrene	1.094	1.121	-2.4	69	0.05
60 M	Anthracene	1.009	1.054	-4.5	69	0.05
61	Carbazole	0.944	0.932	1.2	65	0.07
62 M	Di-n-butylphthalate	1.606	1.858	-15.7	76	0.05
63 MC	Fluoranthene	1.035	1.239	-19.7	74	0.07
64 I	Chrysene-d12	1.000	1.000	0.0	71	0.10
65	Benzidine	0.437	0.411	5.9	73	0.09
66 M	Pyrene	1.502	1.348	10.2	75	0.07
67 S	Terphenyl-d14	1.062	0.883	16.9	71	0.09
68 M	Butylbenzylphthalate	0.962	0.919	4.4	77	0.09
69 M	Benzo[a]anthracene	1.516	1.273	16.0	67	0.10
70 M	3,3'-Dichlorobenzidine	0.386	0.365	5.5	73	0.10
71 M	Chrysene	0.843	0.998	-18.4	92	0.10
72 M	bis(2-Ethylhexyl)phthalate	1.364	1.344	1.5	76	0.08
73 I	Perylene-d12	1.000	1.000	0.0	102	0.09
74 MC	Di-n-octylphthalate	5.094	4.618	9.4	100	0.08
75 M	Benzo[b]fluoranthene	2.467	2.164	12.3	88	0.10
76 m	Benzo[k]fluoranthene	1.190	1.213	-1.9	112	0.10
77 mc	Benzo[a]pyrene	1.227	1.263	-2.9	95	0.10
78 m	Indeno[1,2,3-cd]pyrene	0.452	0.378	16.3	93	0.05
79 m	Dibenz[a,h]anthracene	0.436	0.371	14.9	104	0.03

(#)= Out of Range

B8022.D BNACLP.M

Wed Jun 28 13:54:32 1995

BNA

Page 2

Evaluate Continuing Calibration Report

155

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)
M Benzo[g,h,i]perylene	0.356	0.325	8.7	102	0.03
81 1-Methyl naphthalene	0.000	0.000#	0.0	27#	0.00
82 7,12-Dimethylbenz(a)anthrac	0.000	0.000#	0.0	97	0.09
8 Quinoline	0.000	0.000#	0.0	62	0.02
8 Thiophenol	0.000	0.000#	0.0	0#	-5.47#
85 4-Methyl chrysene	0.000	0.000#	0.0	78	0.10
8 Dibenz(a,j)acridine	0.000	0.000#	0.0	82	0.08
8 Indene	0.000	0.000#	0.0	0#	-9.03#
88 Benzyl alcohol	1.050	0.000#	100.0#	0#	-9.70#
8 Benzoic acid	0.964	0.000#	100.0#	0#	-12.98#

(#) = Out of Range

B8022.D BNACLP.M

SPCC's out = 0 CCC's out = 0

Wed Jun 28 13:54:35 1995

BNA

Page 3

Quantitation Report

Data File : c:\hpchem\1\data2\b8022.d

vial: 2 156

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

b8022.d BNACLP.M

Wed Jun 28 13:56:53 1995

BNA

Page 1

Quantitation Report

Data File : c:\hpchem\1\data2\b8022.d

Vial: 2 157

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

Quantitation Report

Data File : c:\hpchem\1\data2\b8022.d

Vial: 2 158

Acq On : 26 Jun 95 1:32 am

Operator: SCOTTV

Sample : 50 STD..... Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

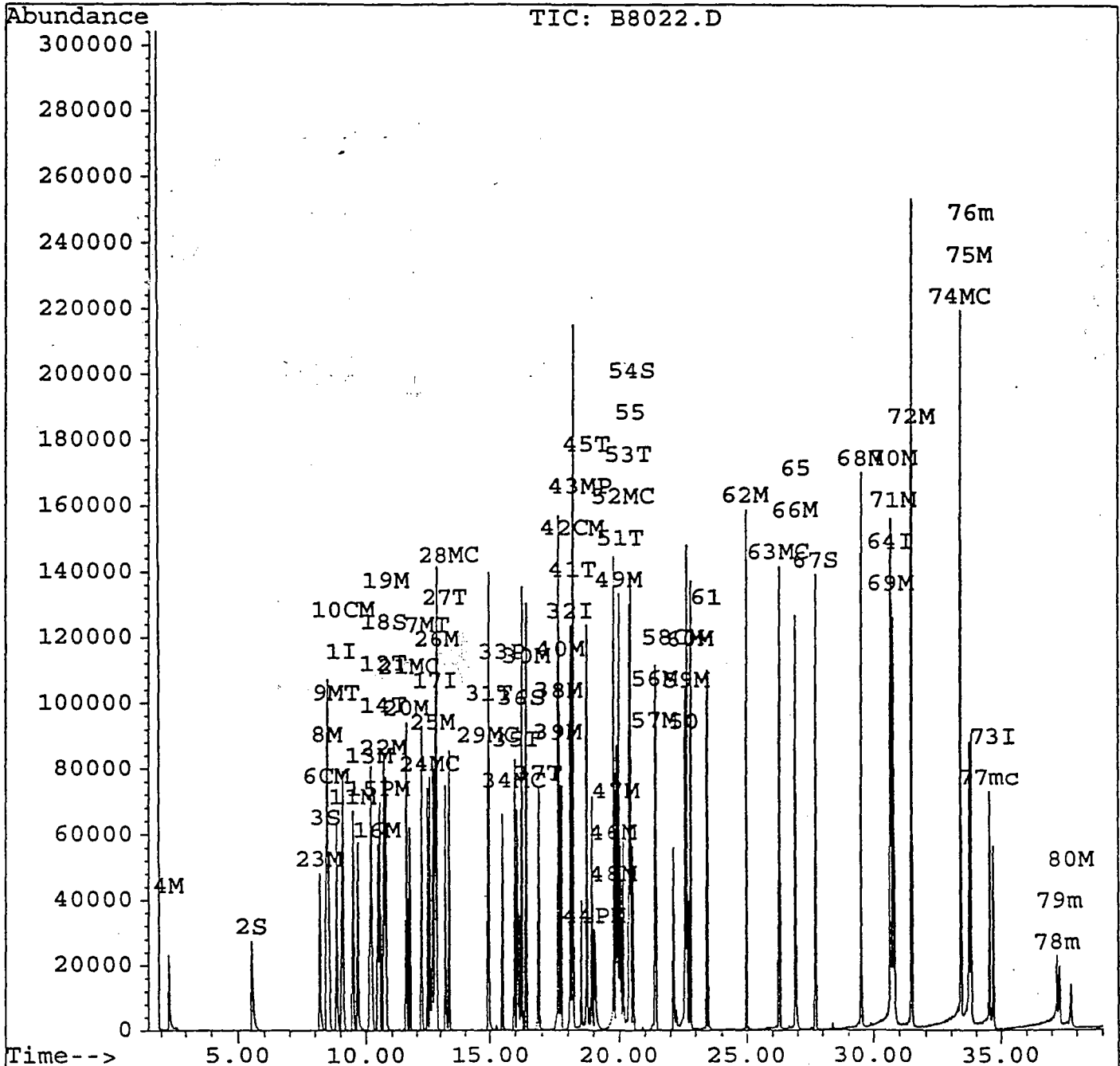
Quant Time: Jun 28 13:51 1995

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



SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

159

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No.: _____

Site: _____

Location: _____

Group: _____

Lab File ID (Standard): B7803.DDate Analyzed: 6/3/95Instrument ID: ABNATime Analyzed: 1013

	IS1 (DCB)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	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

160

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)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	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						
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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

161

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No.: _____

Site: _____

Location: _____

Group: _____

Lab File ID (Standard): B7803.DDate Analyzed: 6/3/95Instrument ID: ABNATime Analyzed: 1013

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	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.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

162

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No.: _____

Site: _____

Location: _____

Group: _____

Lab File ID (Standard): B7803.DDate Analyzed: 6/3/95Instrument ID: ABNATime Analyzed: 1013

		IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
		AREA #	RT #	AREA #	RT #	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							
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12							
13							
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15							
16							
17							
18							
19							
20							
21							
22							

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

163

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)		IS2 (NPT)		IS3 (ANT)	
	AREA #	RT #	AREA #	RT #	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

164

Lab Name: EMSL ANALYTICAL

Contract: _____

Project No.: _____

Site: _____

Location: _____

Group: _____

Lab File ID (Standard): B8022.DDate Analyzed: 6/26/95Instrument ID: ABNATime Analyzed: 0132

	IS4 (PHN)		IS5 (CRY)		IS6 (PRY)	
	AREA #	RT #	AREA #	RT #	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.

1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

Lab Name: EMSL ANALYTICAL

FORT MONMOUTH, NJ

US ARMY

9526427B

165

PRdc, 206 FB

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: _____

Concentration Units:

CAS No.	Compound	(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

Lab Name: EMSL ANALYTICAL

FORT MONMOUTH, NJ

9526427B

US ARMY

Bulc, 206 FB 166

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:

Concentration Units:

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

9526427B

Bldg, 206 FB

167

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:

Concentration Units:

Number TICs found:

0

(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 : c:\hpchem\1\data2\b8025.d

Vial: 5 168

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\BNACL.P.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

b8025.d BNACL.P.M

Wed Jun 28 16:00:16 1995

BNA

Page 1

Quantitation Report

Data File : c:\hpchem\1\data2\b8025.d

Vial: 5 169

Acq On : 26 Jun 95 4:42 am

Operator: SCOTTV

Sample : 26427.....

Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

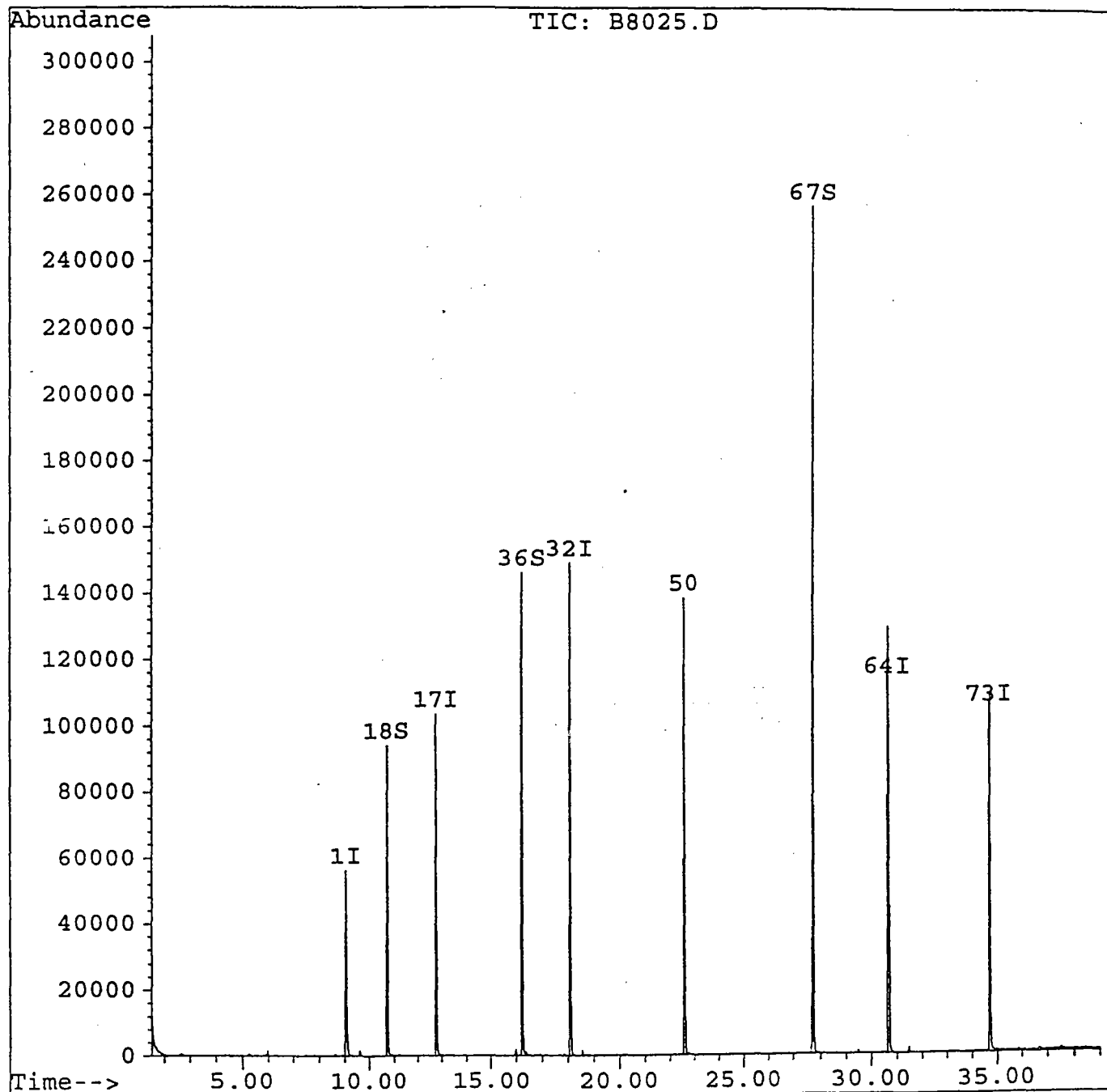
Quant Time: Jun 28 14:50 1995

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



Library Search Compound Report

170

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

1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

Lab Name: EMSL ANALYTICAL

FORT MONMOUTH, NJ

US ARMY

Bldg 206
9526428B

HWI-2931784

171

FMETL# _____

Site: _____

BLDG# _____

NJDEP# _____

Matrix: (soil/water) WATER

Lab Sample ID: 9526428B

Sample wt/vol: 1000.0 (g/mL ML)

Lab File ID: B8026.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
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

Lab Name: EMSL ANALYTICAL

US ARMY

Bld, 206
9526428B

MW 1-2431784

172

FMETL#

Site:

BLDG#

NJDEP#

Matrix: (soil/water)

WATER

Lab Sample ID: 9526428B

Sample wt/vol:

1000.0 (g/mL ML

Lab File ID: B8026.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

[illegible]

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDSBldg 206
9526428B
HWI-2931784

173

Lab Name: EMSL ANALYTICAL US ARMY _____
FMETL# _____ Site: _____ BLDG# _____ NJDEP# _____
Matrix: (soil/water) WATER Lab Sample ID: 9526428B
Sample wt/vol: 1000.0 (g/mL) ML Lab File ID: B8026.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.				
13.				
14.				
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18.				
19.				
20.				
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27.				
28.				
29.				
30.				

Quantitation Report

Data File : c:\hpchem\1\data2\b8026.d

Vial: 6

174

Acq On : 26 Jun 95 5:35 am

Operator: SCOTTV

Sample : 26428.....

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	9.03	152	24553	40.00	ug/mL	0.00
17) Naphthalene-d8	12.75	136	101580	40.00	ug/mL	0.00
32) Acenaphthene-d10	18.08	164	66203	40.00	ug/mL	0.04
50) Phenanthrene-d10	22.57	188	106319	40.00	ug/mL	0.05
64) Chrysene-d12	30.67	240	105542	40.00	ug/mL	0.09
73) Perylene-d12	34.69	264	89295	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	0.00	99	0	0.00	ug/mL	0.00%
18) Nitrobenzene-d5	10.71	82	49646	42.90	ug/mL	42.90%
36) 2-Fluorobiphenyl	16.22	172	93253	46.96	ug/mL	46.96%
54) 2,4,6-Tribromophenol	0.00	330	0	0.00	ug/mL	0.00%
67) Terphenyl-d14	27.74	244	203828	72.76	ug/mL	72.76%

Target Compounds

Qvalue

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

b8026.d BNACLP.M

Wed Jun 28 16:01:30 1995

BNA

Page 1

Quantitation Report

Data File : c:\hpchem\1\data2\b8026.d

Vial: 6 **175**

Acq On : 26 Jun 95 5:35 am

Operator: SCOTTV

Sample : 26428.....

Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

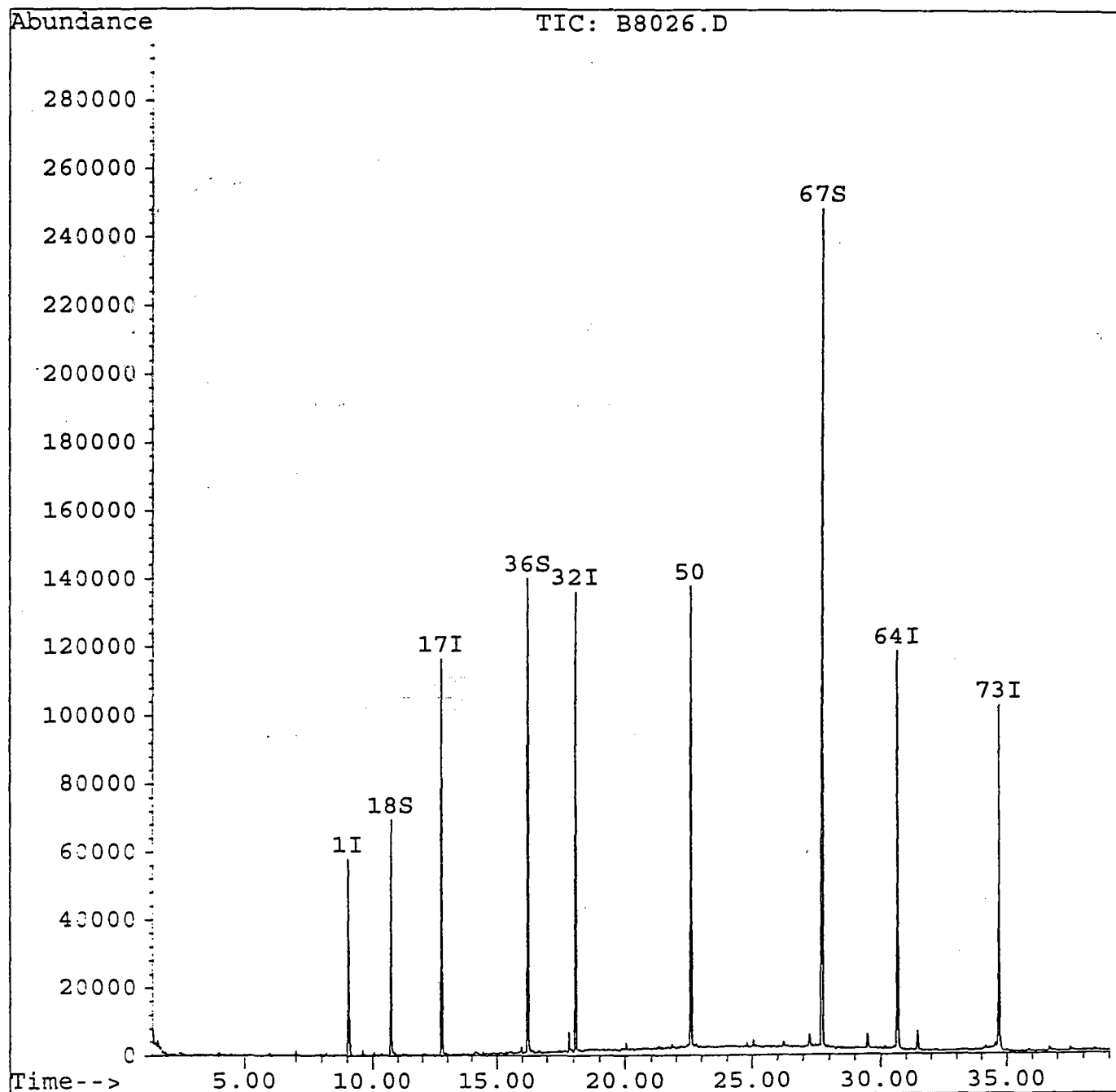
Quant Time: Jun 28 14:50 1995

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



Library Search Compound Report

176

Data File : c:\hpchem\1\data2\b8026.d Vial: 6
Acq On : 26 Jun 95 5:35 am Operator: SCOTTV
Sample : 26428..... 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

WATER SEMIVOLATILE SURROGATE RECOVERY

177

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										

S1 (NBZ) = Nitrobenzene-d5

S2 (FBP) = 2-Fluorobiphenyl

S3 (TPH) = Terphenyl-d14

QC LIMITS

(22-101)

(20-94)

(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

178

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						
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

S1 (NBZ) = Nitrobenzene-d5
 S2 (FBP) = 2-Fluorobiphenyl
 S3 (TPH) = Terphenyl-d14

QC LIMITS
 (22-101)
 (20-94)
 (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. 179

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				
10				
11				
12				
13				
14				
15				
16				
17				
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20				
21				
22				
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26				
27				
28				
29				
30				

COMMENTS:

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 180

SBLK05

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: _____

Concentration Units:

CAS No.	Compound	(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

Contract:

Location:

Group:

Lab Sample ID: BLANK5

Lab File ID: B7825.D

Date Received:

decanted: (Y/N): N

Date Extracted: 5/23/95

Date Analyzed: 6/4/95

Dilution Factor: 1.0

pH:

0

3/90

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SAMPLE NO. 182

SBLK05

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:		Q
		(ug/L or ug/Kg)	ug/L	
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

Lab Name: EMSL ANALYTICAL

Contract:

SBLK05

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:

Concentration Units:

[illegible]

Quantitation Report

184

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

b7825.d BNACLP.M

Mon Jun 05 16:42:11 1995

BNA

Page 1

Quantitation Report

185

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

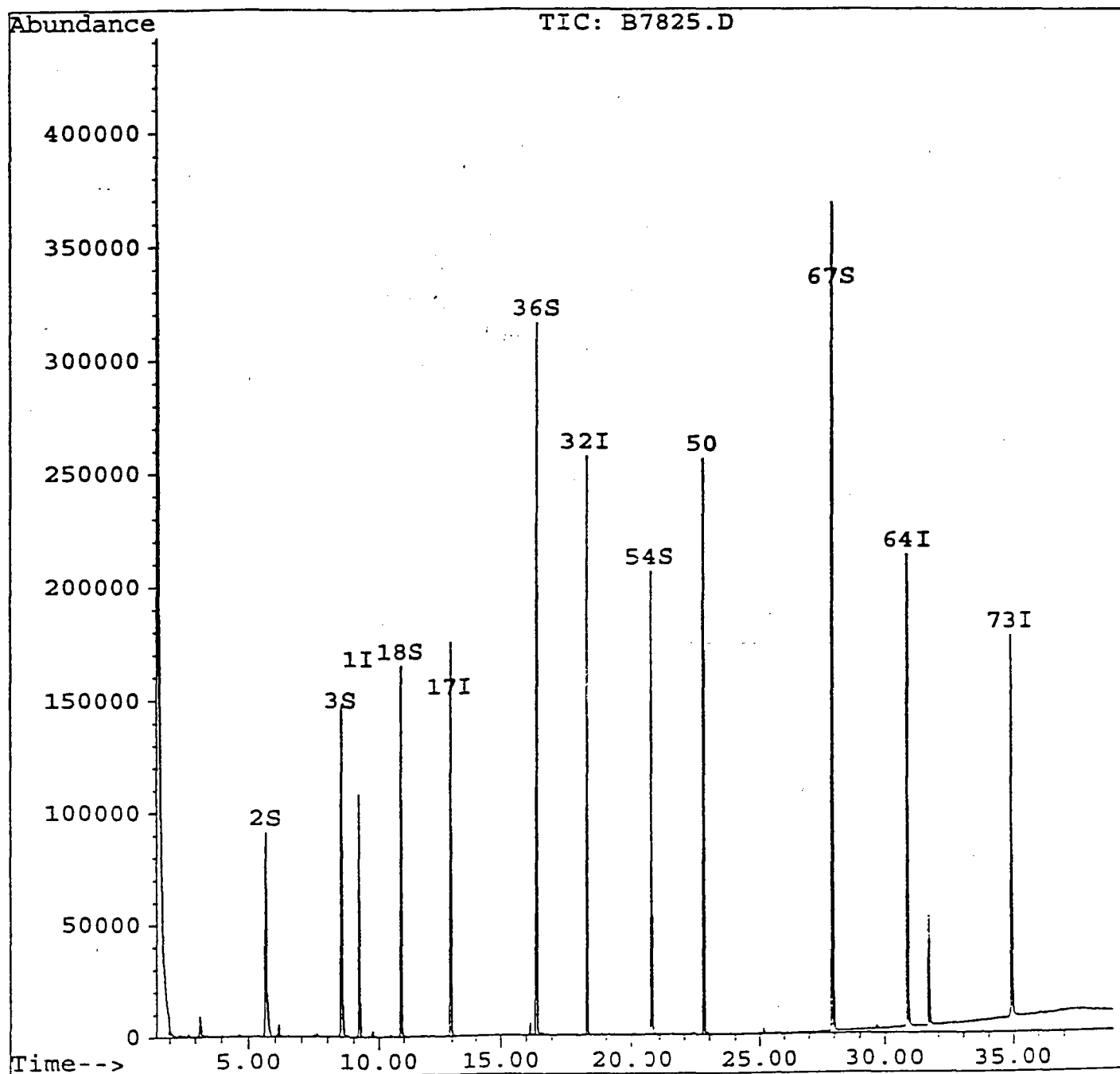
Quant Time: Jun 5 16:06 1995

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



4B
SEMIVOLATILE METHOD BLANK SUMMARY

SAMPLE NO.
SBLK01

186

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				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
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25				
26				
27				
28				
29				
30				

COMMENTS:

SBLK01

187

Lab Name: EMSL ANALYTICAL

Site: _____

Matrix: (soil/water) WATERLab Sample ID: BLANK1Sample wt/vol: 1000.0 (g/mL ML)Lab File ID: B8023.D

Level: (low/med) _____

Date Received: 6/14/95% Moisture: _____ decanted: (Y/N): NDate Extracted: 6/19/95Concentrated Extract Volume: 1000 (uL)Date Analyzed: 6/26/95Injection Volume: 1.0 (uL)Dilution Factor: 1.0GPC Cleanup: (Y/N) N

pH: _____

Concentration Units:

CAS No.	Compound	(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

SBLK01

188

Site:

Lab Sample ID: BLANK1

Lab File ID: B8023.D

Date Received: 6/14/95

Date Extracted: 6/19/95

Date Analyzed: 6/26/95

Dilution Factor: 1.0

pH:

(ug/L or ug/Kg)

ug/L

Q

Page 2 of 2

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SBLK01

189

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: _____

Concentration Units:

Number TICs found: 0

(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.				
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21.				
22.				
23.				
24.				
25.				
26.				
27.				
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

Data File : c:\hpchem\1\data2\b8023.d

Vial: 3

191

Acq On : 26 Jun 95 2:56 am

Operator: SCOTTV

Sample : BLANK.....

Converted from RTE d Inst : ABNA

Misc :

BT Multiplr: 1.00

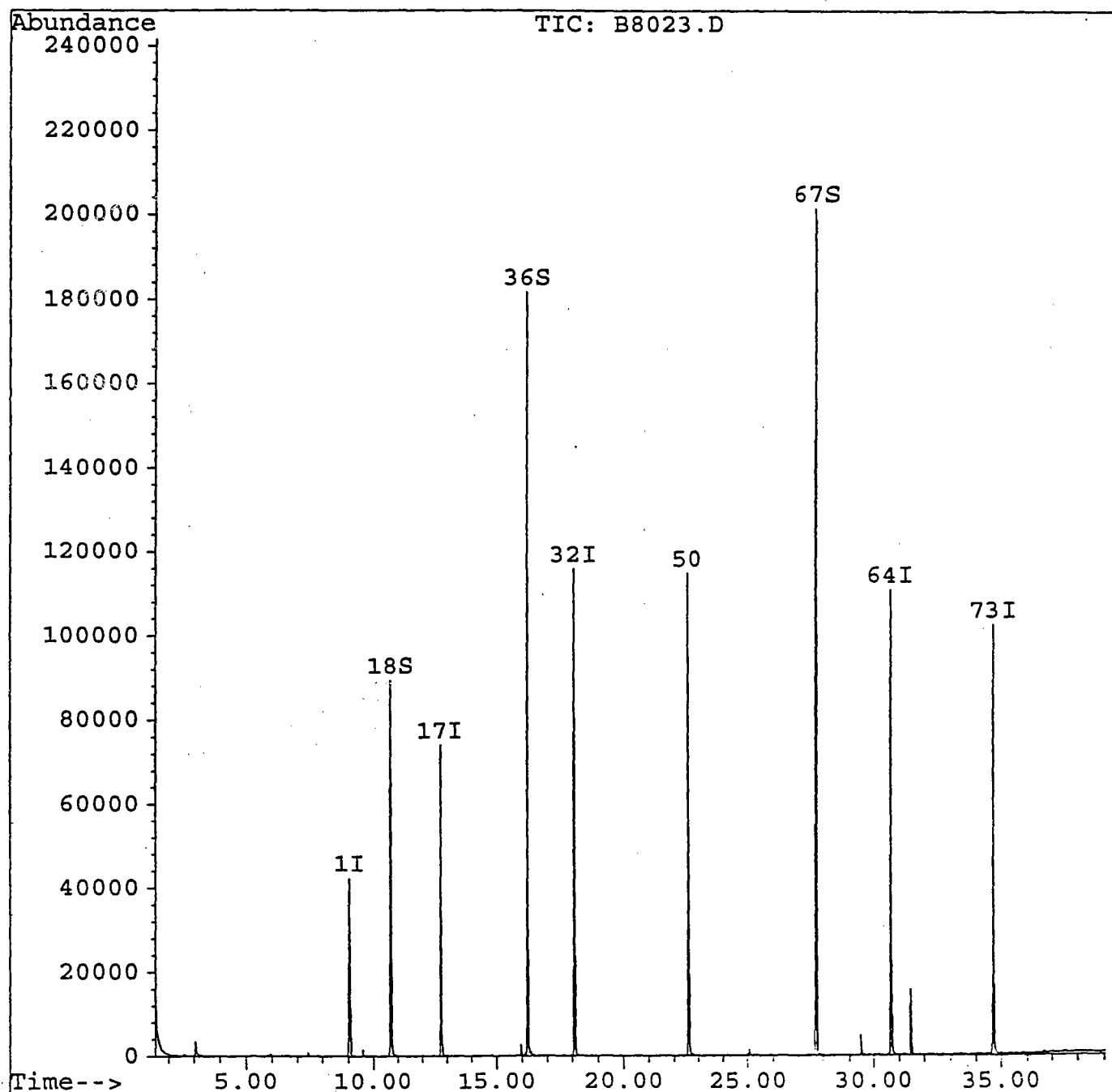
Quant Time: Jun 28 14:48 1995

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



192

Non-Spiked Sample: B7742.D

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 RPD	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
1,4-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
1-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
1-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
1-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
							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

BNACLP.M

Tue Jun 13 13:08:56 1995

BNA

Quantitation Report

194

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\BNACL.P.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

b7826.d BNACL.P.M

Tue Jun 13 13:09:53 1995

BNA

Page 1

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

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

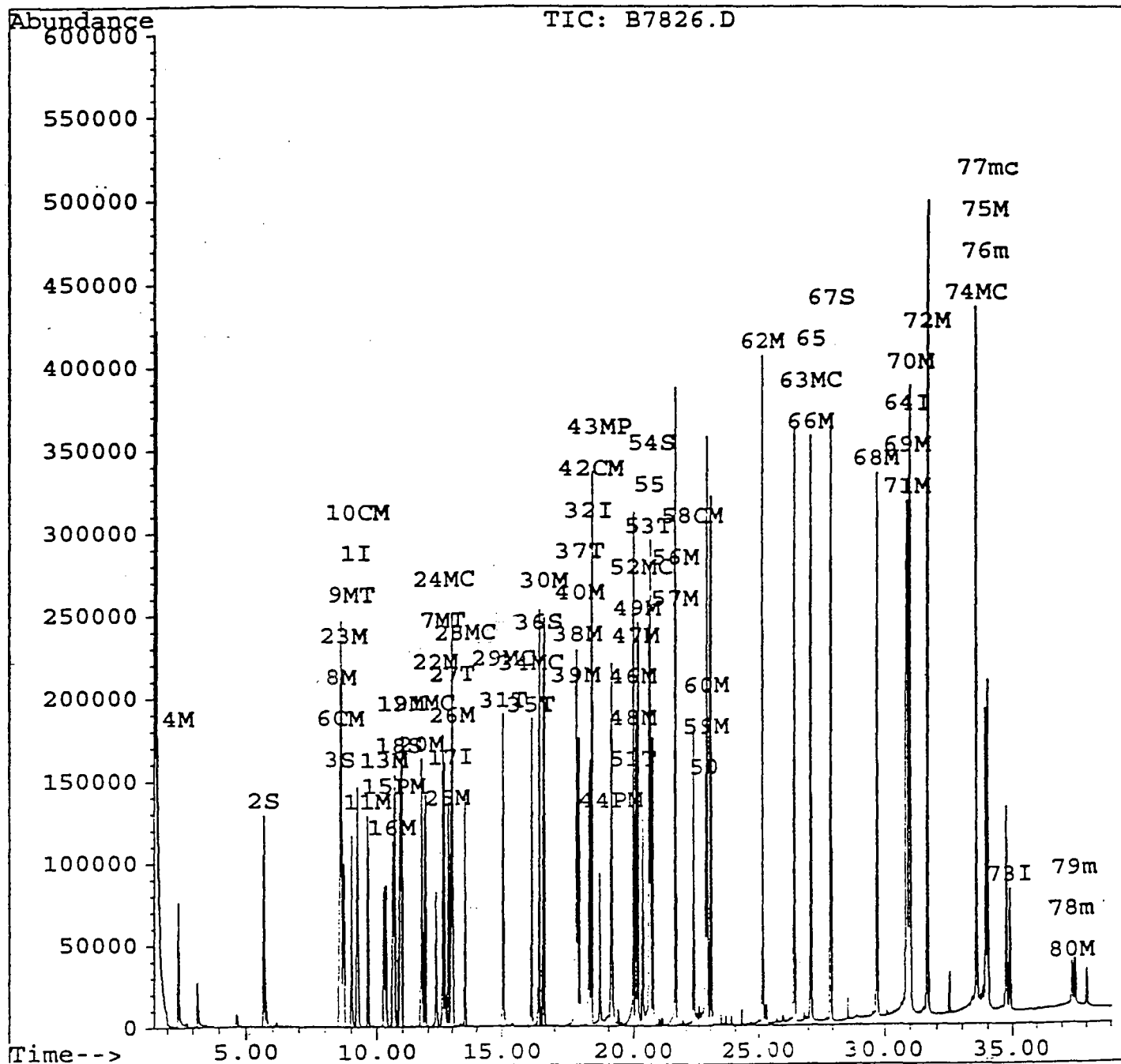
Quant Time: Jun 13 13:06 1995

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



Quantitation Report

197

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	93
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	93
24) 2,4-Dichlorophenol	12.67	162	72662	67.26 ug/mL	93
25) 1,2,4-Trichlorobenzene	12.83	180	67428	58.72 ug/mL	93
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	93
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	91
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	93
35) 2,4,5-Trichlorophenol	16.12	196	53903	66.79 ug/mL	93
37) 2-Nitroaniline	17.93	65	3941	2.88 ug/mL#	100
38) Dimethylphthalate	17.83	163	113606	35.11 ug/mL	93

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

b7827.d BNACLP.M

Tue Jun 13 13:10:49 1995

BNA

Page 1

Quantitation Report

198

Data File : c:\hpcchem\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

199

Vial: 26

Acq On : 4 Jun 95 6:15 am

Operator: SCOTTV

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Sample      : 22654MSD.....      Converted from RTE d Inst      : ABNA
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Misc :

BT Multiplr: 1.00

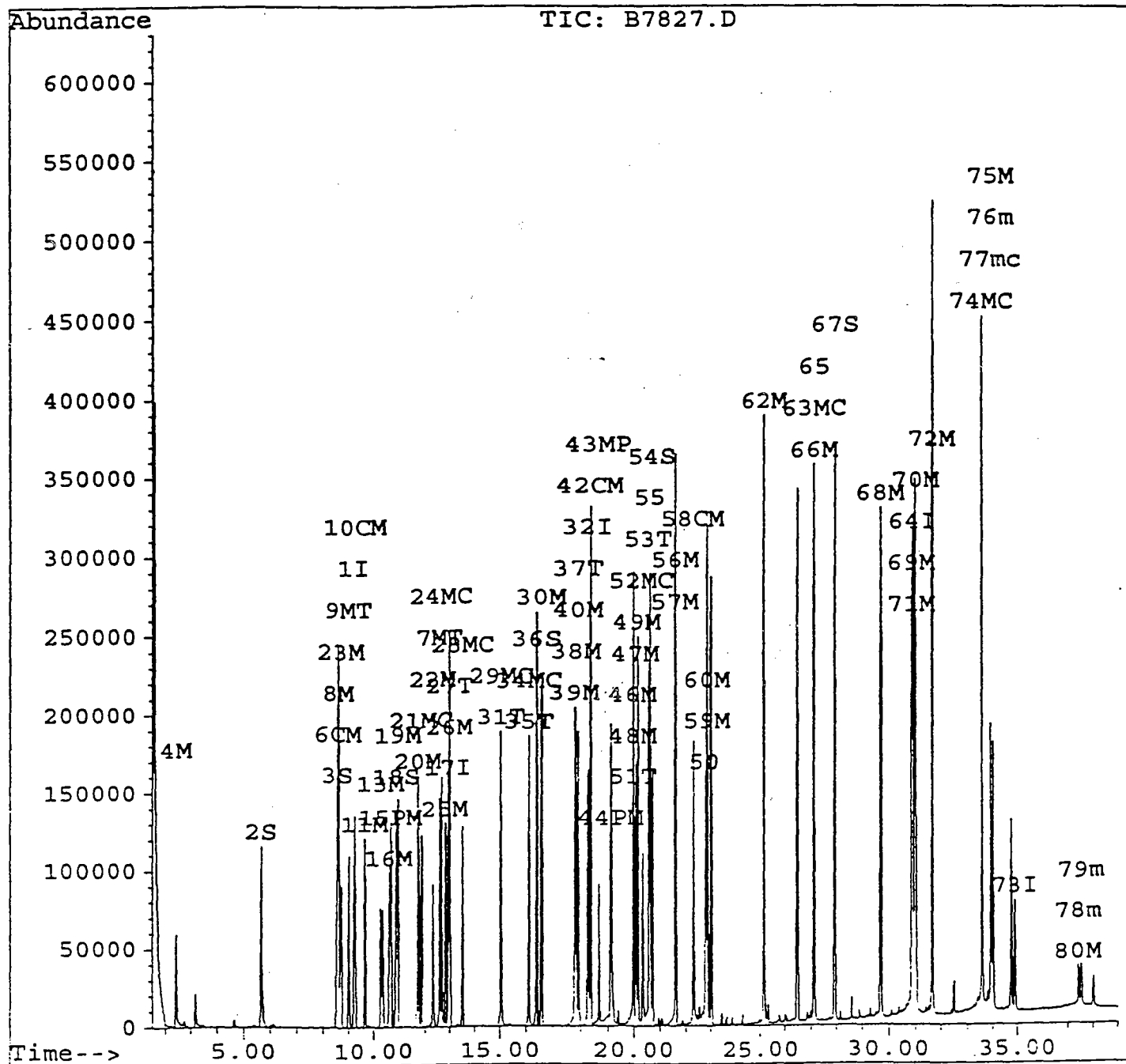
Quant Time: Jun 13 13:07 1995

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

200

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 RPD	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
	0.0	100	20	31	21	31	46	71	1-262

Chrysene	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
Di-n-octylphthalate	0.0	100	65	68	65	68	6	31	4-146
Benzo[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
Benzo[a]pyrene	0.1	100	104	103	104	102	2	39	17-163
Indeno[1,2,3-cd]pyre	0.0	100	42	39	42	39	8	45	1-171
Dibenz[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

201

BNACLP.M

Tue Jun 13 13:39:34 1995

BNA

Quantitation Report

202

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(Mir
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	0.22
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#	97
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	99
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#	10
38) Dimethylphthalate	17.83	163	100094	37.65	ug/mL	98

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

Quantitation Report

203

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

b7828.d BNACLP.M

Tue Jun 13 13:40:40 1995

BNA

Page 2

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

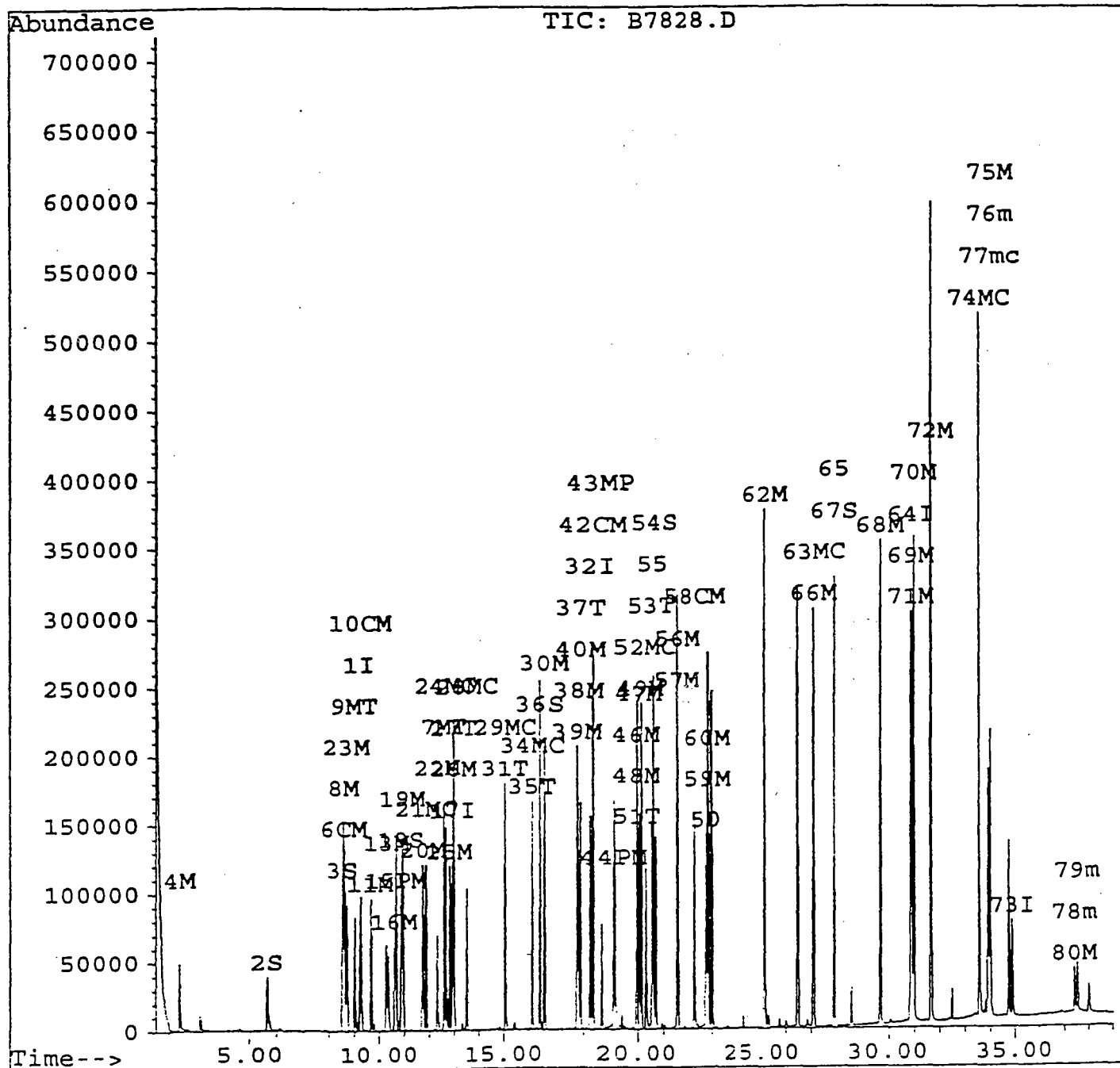
Quant Time: Jun 13 13:36 1995

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

205

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(Mir
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	
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	97
13) bis(2-chloroisopropyl)ethe	10.28	45	169096	118.86	ug/mL#	68
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	94
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	8
22) 2,4-Dimethylphenol	12.33	107	38383	32.08	ug/mLm	
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	9
25) 1,2,4-Trichlorobenzene	12.83	180	58047	60.26	ug/mL	9
26) Naphthalene	13.00	128	195977	65.87	ug/mL#	9
27) 4-Chloroaniline	13.00	127	24740	17.58	ug/mL#	1
28) Hexachlorobutadiene	13.50	225	28998	51.56	ug/mL	9
29) 4-Chloro-3-methylphenol	15.04	107	73983	63.40	ug/mL	9
30) 2-Chloronaphthalene	16.58	162	148187	70.04	ug/ml	9
31) 2-Methylnaphthalene	15.04	142	56674	23.73	ug/mL#	1
34) 2,4,6-Trichlorophenol	16.12	196	47065	53.72	ug/mL	9
35) 2,4,5-Trichlorophenol	16.12	196	47065	68.86	ug/mL	9
37) 2-Nitroaniline	17.93	65	3818	3.30	ug/mL#	10
38) Dimethylphthalate	17.83	163	92844	33.88	ug/mL	9

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

b7829.d BNACLP.M

Tue Jun 13 13:41:28 1995

BNA

Page 1

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	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

207

Vial: 28

Operator: SCOTTV

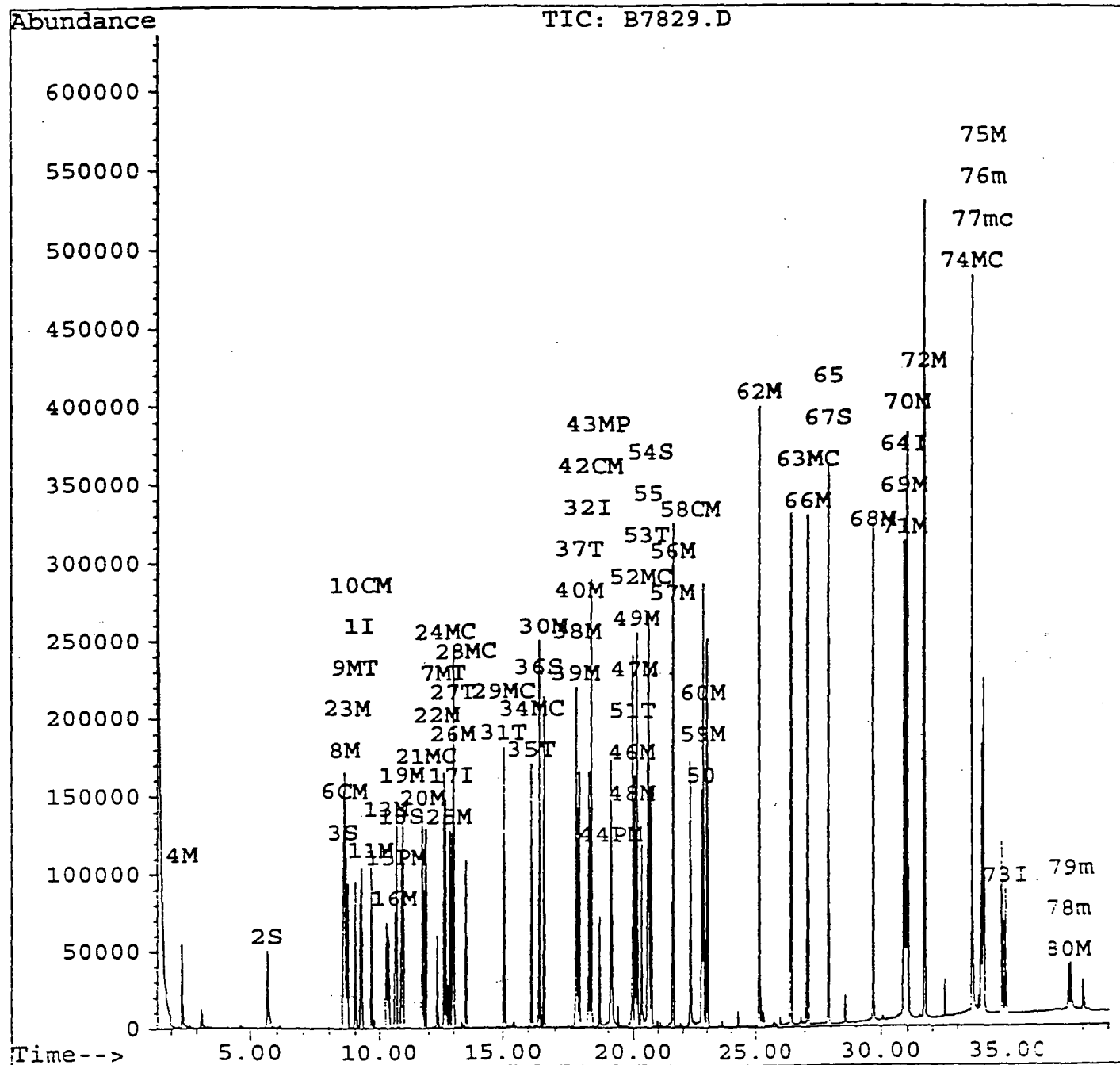
BT Multiplr: 1.00

Quant Time: Jun 13 13:38 1995

Title : CLP BNA Calibration

Last Update : Wed May 31 10:06:36 1995

Response via : Multiple Level Calibration



EMSL

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.



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