United States Army
Fort Monmouth, New Jersey

Underground Storage Tank Closure and Site Investigation Report

Building 2567

NJDEP Case #s 89-12-12-1442 and 91-08-27-1414

May 2000

VOLUME 2 0F 4

EMSL ANALYTICAL, INC.

Asbestos - Lead - Environmental - Materials

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

PROJECT : **MW Sampling, Bldg. 2567**
P.O.# IJO #95-0091/SAI

EMSL Project: # 95118774

Field Sample No. & Location	Laboratory Sample ID	Matrix	Date & Time of Collection	Date Received
1975.1, MW1-2926925	**95-54052**	**Aqueous**	**11/21/95 @ 1154**	**11/21/95**
1975.2, MW2-2926926	**95-54053**	**Aqueous**	**11/21/95 @ 1040**	**11/21/95**
1975.3, MW3-2926947	**95-54054**	**Aqueous**	**11/21/95 @ 1253**	**11/21/95**
1975.4, MW4-2926948	**95-54055**	**Aqueous**	**11/21/95 @ 1114**	**11/21/95**
1975.5, MW5-2931783	**95-54056**	**Aqueous**	**11/21/95 @ 1421**	**11/21/95**
1975.6, Trip Blank	**95-54057**	**Aqueous**	**11/21/95 @ 0620**	**11/21/95**
1975.7, Field Blank	**95-54058**	**Aqueous**	**11/21/95 @ 1600**	**11/21/95**
1975.8, Duplicate	**95-54059**	**Aqueous**	**11/21/95 ***	**11/21/95**

*** Time of Collection was not provided on the Chain of Custody.**

Laboratory Name: EMSL ANALYTICAL, INC.

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

Supervisor/Manager Signature: Paul Laraia

Printed Name: Paul V. Laraia

Date: 1-11-95

EMSL

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EMSL

SAMPLE DATA SUMMARY PACKAGE

EMSL

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054052
Date Collected: 11/21/95 11:54
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: MW1-2926925

	Conc.	Unit
METALS		
Lead	<0.0030	mg/l
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.1 2926925 005

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554052V

Sample wt/vol: 1.25 (g/mL) ML Lab File ID: C0462.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 20.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	36	B
156-60-65	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
594-20-7	2,2-Dichloropropane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
74-97-1	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-1	Carbon tetrachloride	10	U
563-58-6	1,1-Dichloropropene	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
78-87-1	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-1	cis-1,3-Dichloropropene	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-1	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
142-28-9	1,3-Dichloropropane	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromomethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.1 29269 25

006

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554052V

Sample wt/vol: 1.25 (g/mL) ML Lab File ID: C0462.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 20.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	10	U
1330-29-7	Xylene (total)	10	U
100-42-1	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
108-86-1	Bromobenzene	10	U
79-34-1	1,1,2,2-Tetrachloroethane	10	U
96-18-4	1,2,3-Trichloropropane	10	U
103-65-1	n-Propylbenzene	10	U
95-49-8	2-Chlorotoluene	10	U
106-43-4	4-Chlorotoluene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
98-06-6	tert-Butylbenzene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
99-87-6	4-Isopropyltoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
104-51-8	n-Butylbenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
91-20-3	Naphthalene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
1634-04-4	Methy-tertiary butyl ether	80	
75-65-0	tertiary-Butyl alcohol	860	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1975.1 2926925 007

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

Project No. FT. MONMOUTH NJ Bldg: 2567 NJDEP MW#: 1 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554052V

Sample wt/vol: 1.25 (g/mL) ML Lab File ID: C0462.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 20.0

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

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	23.07	68	J
2.	Column Bleed	23.08	12	J
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EMSL

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054053
Date Collected: 11/21/95 10:40
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: MW2-2926926

	Conc.	Unit
METALS		
Lead	<0.0030	mg/l
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.2 2926926

009

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9554053V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0406.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.2 2926926

010

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9554053V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0406.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	3.6	
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	1.0	
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	1.1	
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.60	
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	4.6	
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	7.3	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	1.60	
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1975.2 2926926

011

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: 2 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554053V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0406.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.18	1	J
2. 611-14-3	Benzene, 1-ethyl-2-methyl-	20.07	2	J
3. 526-73-8	Benzene, 1,2,3-trimethyl-	21.64	2	J
4.	Unknown Hydrocarbon	22.01	8	J
5. 1758-88-9	Benzene, 2-ethyl-1,4-dimethy	22.65	1	J
6. 535-77-3	Benzene, 1-methyl-3-(1-methy	22.85	1	J
7.	Unknown	23.06	3	J
8.	Unknown	23.09	3	J
9. 488-23-3	Benzene, 1,2,3,4-tetramethyl	23.58	1	J
10. 95-93-2	Benzene, 1,2,4,5-tetramethyl	23.68	1	J
11. 767-58-8	Indan, 1-methyl-	24.19	1	J
12. 824-22-6	1H-Indene, 2,3-dihydro-4-met	24.49	3	J
13.	Unknown	24.80	3	J
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EMSL

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054054
Date Collected: 11/21/95 12:53
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: MW3-2926947

	Conc.	Unit
METALS		
Lead	<0.0030	mg/l
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.3 2926947

013

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9554054V

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: C0461.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 10.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-09-2	Methylene chloride	18	B
156-60-65	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
74-97-1	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-1	Carbon tetrachloride	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
71-43-2	Benzene	35	
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-1	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-1	cis-1,3-Dichloropropene	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-1	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromomethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.3 2926947

014

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9554054V

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: C0461.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 10.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	5.0	U
1330-29-7	Xylene (total)	91	
100-42-1	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	14	
108-86-1	Bromobenzene	5.0	U
79-34-1	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	7.7	
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
91-20-3	Naphthalene	6.6	
87-61-6	1,2,3-Trichlorobenzene	5.0	U
1634-04-4	Methy-tertiary butyl ether	360	
75-65-0	tertiary-Butyl alcohol	46	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1975.3 2926.947 015

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

Project No. FT. MONMOUTH NJ Bldg: 2567 NJDEP MW#: 3 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554054V

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: C0461.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 10.0

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

Number TICs found: 9 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 78-78-4	Butane, 2-methyl-	5.28	15	J
2.	Unknown Hydrocarbon	9.98	24	J
3. 110-82-7	Cyclohexane	11.15	6	J
4. 103-65-1	Benzene, propyl-	19.86	14	J
5.	Unknown Hydrocarbon	20.02	6	J
6. 95-36-3	1,2,4-Trimethylbenzene	20.86	6	J
7. 526-73-8	Benzene, 1,2,3-trimethyl-	21.63	16	J
8.	Unknown Hydrocarbon	22.00	31	J
9.	Column Bleed	23.07	37	J
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EMSL

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054055
Date Collected: 11/21/95 11:14
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: MW4-2926948

	Conc.	Unit
METALS		
Lead	<0.0030	mg/l
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.4 2926948

017

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9554055V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0404.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.4 2926948 018

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9554055V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0404.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1975.4 2926948

019

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: 4 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554055V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0404.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.18	1	J
2.	Column Bleed	19.70	1	J
3.	Column Bleed	23.08	2	J
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EMSL

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054056
Date Collected: 11/21/95 14:21
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: MW5-2931783

	Conc.	Unit
METALS		
Lead	<0.0030	mg/l
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.5 2931783

021

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9554056V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0405.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.5 2931783

022

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9554056V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0405.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

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VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL#: 1975.5 2931783

023

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: 5 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554056V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0405.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	19.71	1	J
2.	Column Bleed	23.08	1	J
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EMSL

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054057
Date Collected: 11/21/95 16:00
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: Trip Blank

	Conc.	Unit
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.6 Trip Blank

025

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554057V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0402.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.6 Trip Blank 026

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554057V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0402.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1975.6 Trip Blank 027

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: TB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554057V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0402.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 109-99-9	Furan, tetrahydro-	10.73	3	J
2.	Column Bleed	19.69	1	J
3.	Column Bleed	23.09	6	J
4.	Column Bleed	23.10	1	J
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EMSL

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054058
Date Collected: 11/21/95 16:00
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: Field Blank

	Conc.	Unit
METALS		
Lead	<0.0030	mg/l
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

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VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.7 Field Blank

029

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554058V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0403.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.7 Field Blank

030

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554058V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0403.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 1975.7 Field Blank 031

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: FB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554058V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0403.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 115-07-1	Propene	3.45	1	J
2. 109-99-9	Furan, tetrahydro-	10.74	3	J
3.	Column Bleed	19.72	1	J
4.	Column Bleed	23.09	2	J
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30.				

Date of Report: 12/11/95
Project Number: 95118774
Lab ID: 95-0054059
Date Collected: 11/21/95 00:00
Collected By: Client
Date Received: 11/21/95 16:30

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

Client Project: MW Sampling Bldg.2567

Client Designation: Duplicate

	Conc.	Unit
METALS		
Lead	<0.0030	mg/l
ORGANIC		
Volatiles		
Methyl tertiary-butyl ether	see attached	ug/l
tert-Butyl alcohol	see attached	ug/l
Volatiles by 524.2 w/ Library Search	see attached	ug/l
Xylenes	see attached	ug/l

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.8 Duplicate 033

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: DUP

Matrix: (soil/water) WATER Lab Sample ID: 9554059V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0459.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 1975.8 Duplicate 034

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: DUP

Matrix: (soil/water) WATER Lab Sample ID: 9554059V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0459.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# 19758 Duplicate 035

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

Project No. FT. MONMOUTH NJ Bldg: 2567 NJDEP MW#: DUP Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554059V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0459.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.17	1	J
2.				
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EMSL

LABORATORY DELIVERABLES

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

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

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

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

Paul Farara

Laboratory Manager or Environmental Consultant's Signature

1-11-95

Date

EMSL

QUALITY ASSURANCE/QUALITY CONTROL (QA/QC)

A. Checklist which must be attached to the Summary

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

Page #		
1	1.	Name and address of the facility.
1	2.	Name of the laboratory performing the sample analysis.
1	3.	NJDEP certification number assigned to the laboratory pursuant to N.J.A.C. 7:18.
1	4.	Laboratory sample identification number.
1	5.	Customer sample identification number corresponding to the laboratory sample identification.
1	6.	Sample Location (also on the site diagram).
1	7.	Matrix of the sample analyzed (i.e., water or sediments; including soil, sediment, and sludges). All sediment results must be reported on a dry weight basis.
44-45	8.	The reference for the method used (e.g., EPA Method 625, 40 CFR Part 136).
1	9.	The signature of the person completing the report form.
1	10.	The dates the laboratory report form was prepared, as well as the dates the sample were collected, submitted and analyzed.
46	11.	A list of all parameters (constituents and conditions) for which the analyses were performed.
3-35	12.	Sample results and corresponding units for each parameter.

EMSL

CHAIN OF CUSTODY

EMSL ANALYTICAL INC.
3 Cooper Street
Westmont, New Jersey 08108
609-858-9573
609-858-4571 (Fax)

Chain of Custody / Analysis Request Form

EMSL Project # 951187 74
PO # IJO#95-0091/SAI

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

1. Report to:	2. Bill to:	Project: Bldg 2567
US ARMY FT.MONMOUTH Charles Appleby SELFM-PW-EV Env.Lab.Cert#13461		MW SAMPLING Tel #: 908-532-6224 FAX #:

3. Sampled by (Signature)	4. # of Samples in Shipment	5. Date of Sample Shipment	6. Date Results Needed
Baxter/Palilonis	Eight	11-21-95	

Item No.	Sample Number	Station Location / Sample ID	COMP	GRAB	Matrix: WATER	SOIL	AIR	SLUDGE	OTHER	Method Preserved: HCl	HNO_3	H_2SO_4	ICE	NONE	OTHER	Sampling: Date	Time	Number of Containers	Indicate Analysis Requested: Lead	VOA 524 + Library	Included Xylene, TBA, MTBE	Laboratory Number
																		37				
1	1975.1	MW1 - 2926925		X	X					X	X		X			11/21	1154	5	X		X	54052
2	.2	MW 2 - 2926926		X	X					X	X		X			11/21	1040	5	X		X	53
3	.3	MW 3 - 2926947		X	X					X	X		X			11/21	1253	5	X		X	54
4	.4	MW 4 - 2926948		X	X					X	X		X			11/21	1114	5	X		X	55
5	.5	MW 5 - 2931783		X	X					X	X		X			11/21	1421	5	X		X	56
6	.6	TRIP Blank		X	X					X			X			11/21	0620	3			X	57
7	.7	Field Blank		X	X					X	X		X			11/21	1600	4	X		X	58
8	.8	Duplicate		X	X					X	X		X			11/21	—	5	X		X	59
9		* Samples at 4°C.																				

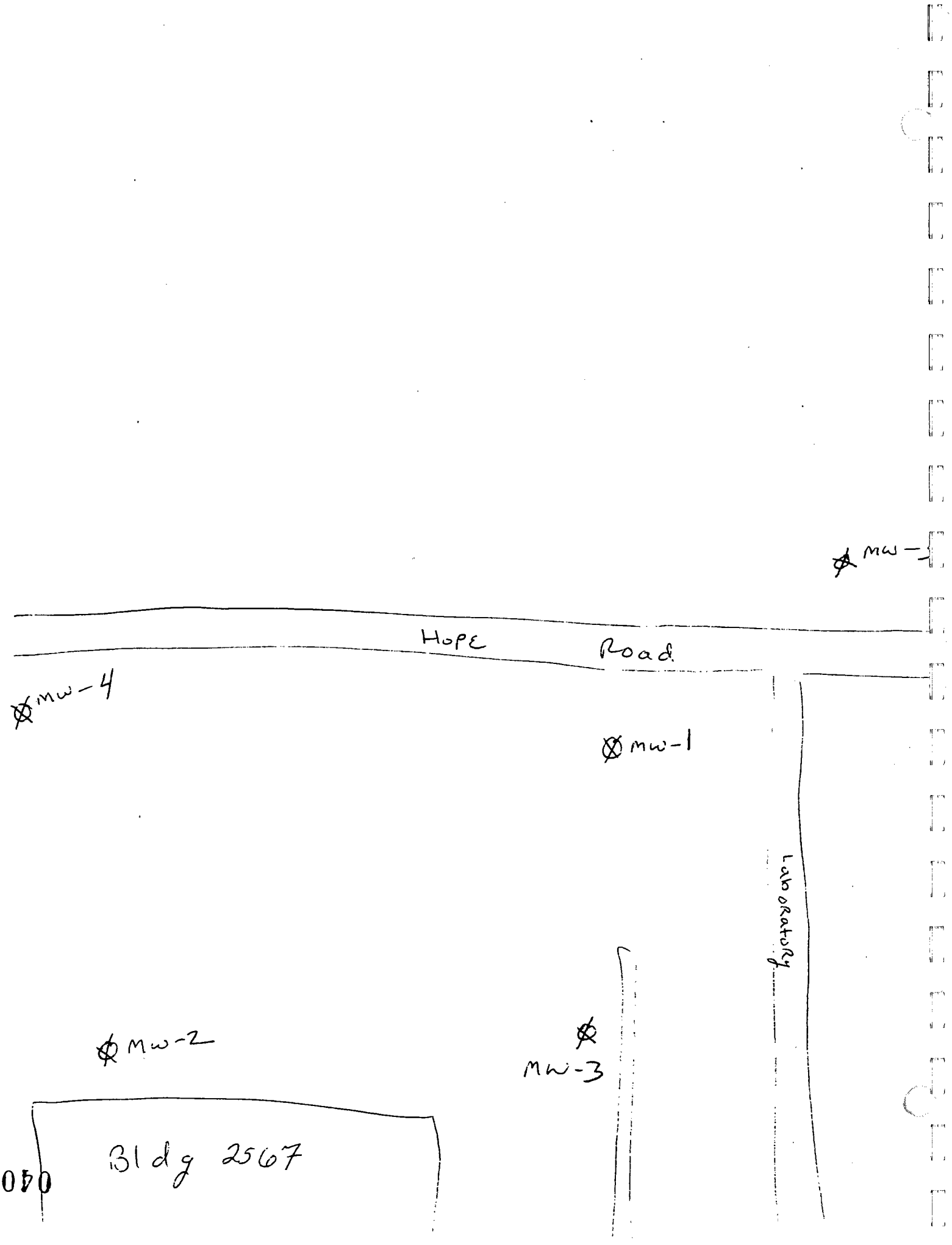
Released by (Signature)	Date/Time Released	Delivery Method	Received by (Signature)	Company/Agency Affiliation	Date/Time Received	Condition Noted
B. Mk	11-21 1630	Courier	[signature]	EMSL	11/21/95	
	/		[signature]	EMSL	11/21 1630	
	/				/	

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

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

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

039


MW-5
Hope Road
MW-4
MW-1
Laboratory
MW-2
MW-3
Bldg 2567

INTERNAL CHAIN OF CUSTODY(ORGANICS)

SAMPLE No(S).	ANALYSIS	DATE ANALYZED	NAME (PRINT)	NAME (SIGNATURE)
53933-5	BTEX/MTBE	12/2/95	S.VanEtten	
54874-81	VOA GCMS	12/2/95	S.VanEtten	
53556	BNSOIL	12/5/95	S.VanEtten	
9553593-602	8260	11/29, 12/4/95	S. Kessler	
54563-7	BNA+	12/6/95	S.VanEtten	
9553334	VOA+CS+TICR	12/06/95	M. Ciampi	
9555436	TCLP BENZENE	12/06/95	M. CIAMPI	
9554885-87	VOA	12/06/95	M. CIAMPI	
9555448, 50	VOA	12/06/95	M. CIAMPI	
9555096	BTEX	12/01 - 12/07	M. Ciampi	
62454-67	TCLP BNA	12/6-7/95	S.VanEtten	
54738-41-48	PAH	12/8-8/95	S.VanEtten	
9554498-99	8260	12/4/95	S. Kessler	
9555721-4	Gasoline	12/7/95	M. Ciampi	MC
9555721-4	BTEX	11	S.VanEtten	
9554340-41	524.2	12/4/95	S. Kessler	
9553053-61	524.2	11/21/11/27/12/1/12/4	S. Kessler	
9554060-6	524.2	12/2/95	S. Kessler	
9554062-63	524.2	12/2/95	S. Kessler	
9554652-59	524.2	11/30 + 12/4/95	S. Kessler	
9554101-08	524.2	12/2+ 12/4/95	S. Kessler	
55089, 90552	TCLBNA	12/8/95	S.VanEtten	

EMSL ANALYTICAL, INC.

INTERNAL CHAIN OF CUSTODY

EMSL

EMSL LAB ID NO. 54052 - 54059

PROJECT NO. 95118774

SAMPLE/CONTAINERS

PARAMETERS Lead

DATE	TIME	ANALYSIS	NAME (PRINT)	SIGNATURE
11/29/95		Metals prep	Dominic Tolenzi	for PT [illegible]

INTERNAL CUSTODY

Project #: 95118774

Lab ID #'s: 5032 - 5405-9

Analyst

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

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 1 NJDEPE WELL ID # 2926925
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: Tom Baxter, Susan Palilonis 1126 AM

DATE: 11-21-95
WEATHER CONDITIONS: Cold, overcast

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 13.11 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3.60 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: <1 PPM none detect.
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 19 GAL
(9.51 X 0.65 X 3 = 18.54)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) Pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1132
pH: 6.79 s.u. TEMP: 16.2 Deg.C
Dissolved Oxygen: 2.2 PPM Specific Conductivity: 568 us/cm

PURGE END TIME: 1149
pH: 6.91 s.u. TEMP: 16.9 Deg.C
Dissolved Oxygen: 1.6 PPM Specific Conductivity: 801 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 6.72 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 19 GAL. 1154
pH: 6.89 s.u. TEMP: 16.9 Deg.C
Dissolved Oxygen: 1.8 PPM Specific Conductivity: 787 us/cm

COMMENTS: _____

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2617 MW#: 2 NJDEPE WELL ID # 2926926
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: Tom Baxter, Susan Palilonis 10:12 AM

DATE: 11-21-95
WEATHER CONDITIONS: Cold, Overcast

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 12.22 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3.00 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: <1 PPM None Detect
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 18 GAL
(9.22 X 0.65 X 3 = 17.97)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1026
pH: 6.28 s.u. TEMP: 15.2 Deg.C
Dissolved Oxygen: 2.3 PPM Specific Conductivity: 721 us/cm

PURGE END TIME: 1036
pH: 6.27 s.u. TEMP: 17.4 Deg.C
Dissolved Oxygen: 1.8 PPM Specific Conductivity: 838 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 4[redacted].66 FT 1040 hrs
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 18 GAL.
pH: 6.33 s.u. TEMP: 17.4 Deg.C
Dissolved Oxygen: 1.6 PPM Specific Conductivity: 796 us/cm

COMMENTS: No inside gasket - filled w/ water.
Foul odor.

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 3 NJDEPE WELL ID # 292694M
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: Tom Baxter, Susan Palilonis 1200

DATE: 11-21-95
WEATHER CONDITIONS: Cold, overcast

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 12.52 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 3.0 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: 3 PPM
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 19 GAL
(9.52 X 0.65 X 3 = 18.56)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1217
pH: 6.83 s.u. TEMP: 16.8 Deg.C
Dissolved Oxygen: 1.5 PPM Specific Conductivity: 202 us/cm

PURGE END TIME: 1245
pH: 6.54 s.u. TEMP: 16.9 Deg.C
Dissolved Oxygen: 1.4 PPM Specific Conductivity: 414 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 5.45 FT 12:53
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 18 GAL.
pH: 6.54 s.u. TEMP: 17.7 Deg.C
Dissolved Oxygen: 1.5 PPM Specific Conductivity: 393 us/cm

COMMENTS: slow Recharge faint odor

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 4 NJDEPE WELL ID # 2926948
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: Tom Baxter, Susan Palilonis
10:50 AM
DATE: 11-21-95
WEATHER CONDITIONS: Cold, Overcast

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 11.61 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 2.22 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: <1 PPM none Detc.
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 18 GAL
(9.39 X 0.65 X 3 = 18.31)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) Pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1057
pH: 6.48 s.u. 1.94 TEMP: 15.5 Deg.C
Dissolved Oxygen: [redacted] PPM Specific Conductivity: 148 us/cm

PURGE END TIME: 1106
pH: 5.87 s.u. TEMP: 15.7 Deg.C
Dissolved Oxygen: 1.4 PPM Specific Conductivity: 251 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 3.05 FT 11:14
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 18 GAL.
pH: 5.83 s.u. TEMP: 15.6 Deg.C
Dissolved Oxygen: 1.1 PPM Specific Conductivity: 253 us/cm

COMMENTS: _____

Ø Duplicate

U.S. ARMY FORT MONMOUTH
MONITORING WELL SAMPLING DATASHEET

IJO#95-0091
BLDG.#: 2567 MW#: 5 NJDEPE WELL ID # 2931783
LABORATORY: EMSL Analytical Services, NJDEP CERT # 04653
SAMPLING CONTRACTOR: EMSL Analytical Services Inc.
SAMPLERS NAMES: Tom Baxter, Susan Palilonis
1406 pm
DATE: 11-21-95
WEATHER CONDITIONS: Cold, sunny, Breezy

ELEVATION OF CASING SURVEY MARK: ____.____FT
TOTAL DEPTH FROM TOP OF SURVEYORS MARK: 14.87 FT
DEPTH FROM SURVEYORS MARK TO SCREEN: ____.____FT
LENGTH OF SCREENED SECTION: ____.____FT
DEPTH TO H2O PRIOR TO PURGING AND SAMPLING: 6.30 FT
ELEVATION OF GW PRIOR TO PURGING: ____.____FT
THICKNESS OF LNAPL PRIOR TO PURGING: 0.0 FT

PID/Hnu READING IMMEDIATELY AFTER CAP REMOVAL: <1 PPM None Detect.
DEPTH OF WELL: ____.____FT HEIGHT OF WATER: ____.____FT
GAL OF H2O TO BE EVACUATED (EST) 17 GAL
(8.57 X 0.65 X 3 = 16.71)
PURGE METHOD: (FLOW OF <0.5 GPM TO >5.0 GPM) Pump
PURGE RATE (0.5 GPM) : 2 GPM

PURGE START TIME: 1410
pH: 5.44 s.u. TEMP: 14.6 Deg.C
Dissolved Oxygen: 1.6 PPM Specific Conductivity: 596 us/cm

PURGE END TIME: 1419
pH: 5.42 s.u. TEMP: 14.4 Deg.C
Dissolved Oxygen: 1.3 PPM Specific Conductivity: 571 us/cm

DEPTH TO H2O AFTER PURGING AND BEFORE SAMPLING: 6.36 FT
SAMPLING METHOD: DEDICATED, DECONTAMINATED (IAW NJDEP FSPM 1992) TEFLON (R) BAILER
TOTAL VOLUME PURGED : 17 GAL. 1421
pH: 5.25 s.u. TEMP: 14.2 Deg.C
Dissolved Oxygen: 1.3 PPM Specific Conductivity: 524 us/cm

COMMENTS: _____

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 capiullary column (DB-624 0.53 mn ID).

Method detection limits are as stated.

Metals - Aqueous (Total)

This is a procedure used to determine metals concentrations in aqueous matrices. It involves an acidic digestion under oxidizing conditions of approximately 100 milliliters of sample. Nitric and hydrochloric acids as well as hydrogen peroxide are employed in the digestion. The digested sample is filtered and diluted to 100 milliliters. The analysis is performed by ICP, furnace atomic absorption or flame atomic absorption. Reference methods are SW-846 3rd Edition, September 1986, Revised July 1992, EPA Methods for the Chemical Analysis of Water and Wastes, Revised, March 1983 and Methods for the Determination of Metals in Environmental Samples EPA/600/4-91/010 June 1991.

EMSL

LABORATORY CHRONICLE

Lab ID: **95-54052 to 95-54059** Client: **E-Systems**

	I DATE	II Hold Time
Date Sampled	**11/21/95**	
Receipt/Refrigeration	**11/21/95**	
Extractions		
1. Metals Prep.	**11/29/95**	
Analyses		
1. Metals (Pb)	**12/7/95**	**6 months**
2. Volatile Organics	**11/30, 12/4-5/95**	**14 days**

QC Supervisor
Review & Approval

(Signature) Peter B. Panton
(Printed Name) Peter B. Panton
(Date) 12/19/96

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

EMSL

GC/MS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMAT

		No	Yes
1.	Chromatograms Labeled/Compounds Identified (Field Samples and Method Blanks)		X
2.	GC/MS Tune Specifications		
	a. BFB Meet Criteria		X
	b. DFTPP Meet Criteria	NA	
3.	GC/MS Tuning Frequency - Performed every 24 hours for 600 series and 12 hours for 8000 series.		X
4,	GC/MS Calibration - Initial Calibration performed within 30 days before sample analysis and continuing calibration performed within 24 hours of. sample analysis for 600 series and 12 hours for 8000 series.		X
5.	GC/MS Calibration - Initial Requirements		
	a. Calibration Check Compounds		X
	b. System Performance Check Compounds		X
6.	Blank Contamination - If yes, list compounds and concentrations in each blank:		X
	a. VOA Fraction **Methylene Chloride 0.60 - 1.1 ppb.**		
	b. B/N Fraction		
	c. Acid Fraction		
7.	Surrogate Recoveries Meet Criteria		X
	If not met, list those compounds and their recoveries which fall outside the acceptable range:		
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
	If not met, were the calculations checked and the results qualified as "estimated"?		
8.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (If not met, list those compounds and their recoveries which fall outside the acceptable range)		X
	a. VOA Fraction		
	b. B/N Fraction		
	c. Acid Fraction		
9.	Internal Standard Area/Retention Time Shift Meet Criteria		X

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

		No	Yes
10.	Extraction Holding Time Met	NA	

If not met, list number of days exceeded for each sample:

		No	Yes
11.	Analysis Holding Time Met		X

If not met, list number of days exceeded for each sample:

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

Additional Comments:

Laboratory Manager Paul Faraig Date: 1-11-95

EMSL

METALS ANALYSIS CONFORMANCE/NON-CONFORMANCE SUMMARY FORMA

		No	Yes
1.	Calibration Summary Meet Criteria		X
2.	ICP Interference Check Sample Results Summary Submitted (if applicable) Meet Criteria	NA	
3.	Serial Dilution Summary Submitted (if applicable) / Meet Criteria	NA	
4.	Laboratory Control Sample Summary Submitted (if applicable) / Meet Criteria		X
5.	Blank Contamination - If yes, list compounds and concentrations in each blank.	X	
6.	Matrix Spike/Matrix Spike Duplicate Recoveries Meet Criteria (if not met, list those compounds and their recoveries which fall outside the acceptable range)		X
7.	Extraction Holding Time Met		X
	If not met, list number of days exceeded for each sample:		
8.	Analysis Holding Time Met		X
	If not met, list number of days exceeded for each sample:		

9. 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 Farara Date: 1-11-95

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: C0274.D BFB Injection Date: 11/21/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 0930

GC Column DB-62 ID: 0.53 (mm) Heated Purge: (Y / N) _____

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	18.1
75	30.0 - 60.0% of mass 95	42.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	70.3
175	5.0 - 9.0% of mass 174	4.9 (6.9)1
176	95.0 - 101.0% of mass 174	69.0 (98.1)1
177	5.0 - 9.0% of mass 176	4.8 (7.0)2

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

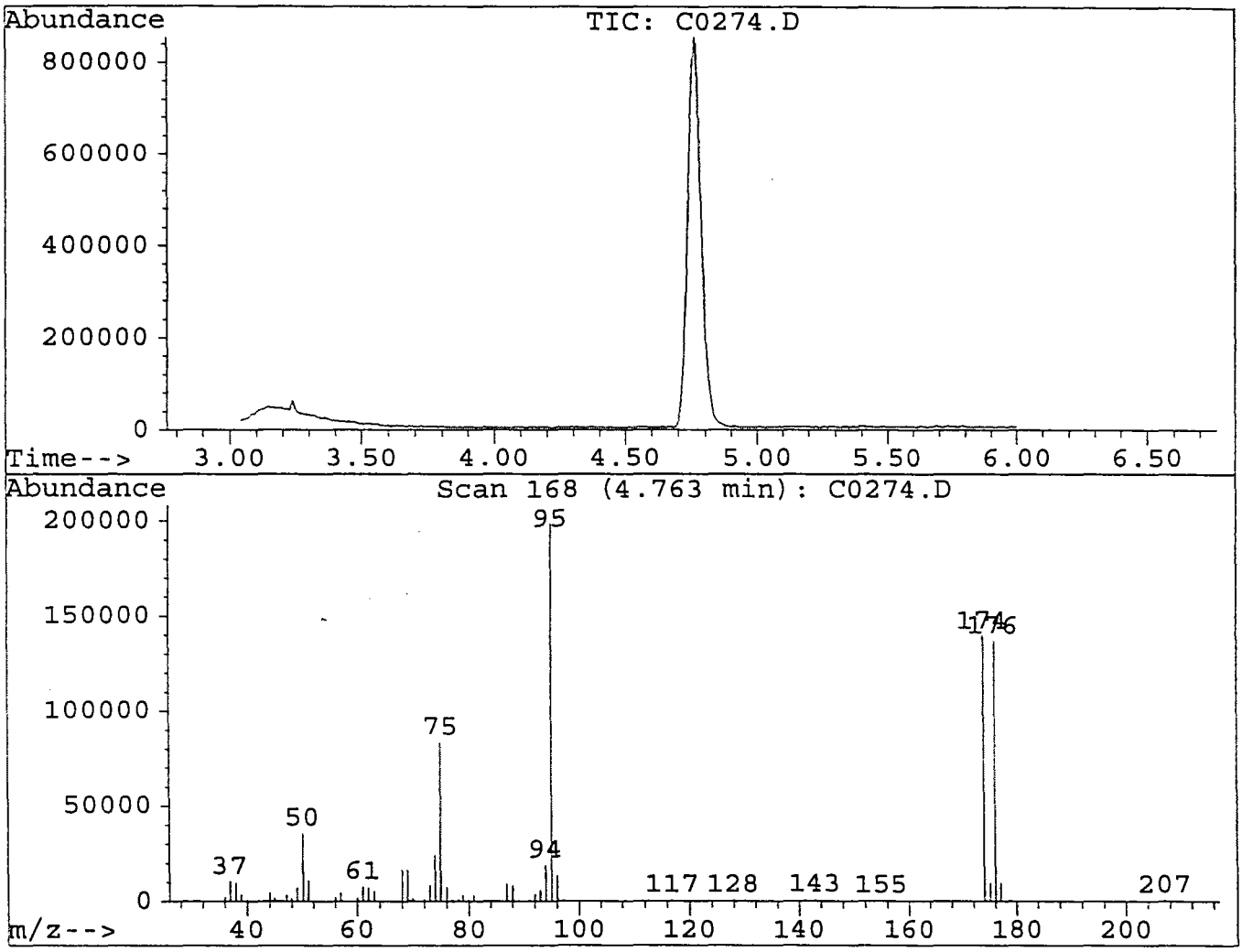
THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01		0.5 PPB STANDARD	C0275.D	11/21/95	0943
02		10 PPB STANDARD	C0279.D	11/21/95	1202
03		20 PPB STANDARD	C0278.D	11/21/95	1128
04		30 PPB STANDARD	C0277.D	11/21/95	1052
05		40 PPB STANDARD	C0276.D	11/21/95	1018
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File : D:\HPCHEM\1\DATA\C0274.D
Acq On : 21 Nov 95 9:30 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: 168

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.1	35864	PASS
75	95	30	80	42.0	83456	PASS
95	95	100	100	100.0	198528	PASS
96	95	5	9	6.9	13614	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	70.3	139520	PASS
175	174	5	9	6.9	9663	PASS
176	174	95	101	98.1	136832	PASS
177	176	5	9	7.0	9524	PASS

can 168 (4.763 min): C0274.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.00	2277	50.05	35864	68.95	16840	80.90	3318
37.00	10480	51.05	11301	69.95	1438	81.90	791
38.00	9596	54.95	647	71.95	1154	86.90	8982
39.00	3619	56.00	2228	72.95	8548	87.95	8221
40.00	1027	57.00	4456	73.95	24384	90.95	535
42.90	511	60.00	1764	74.95	83456	91.95	3828
44.00	4623	61.00	7920	75.95	7334	92.95	5832
44.90	1739	62.00	7223	77.00	1369	93.95	18976
47.05	3487	63.00	5277	78.00	1252	94.95	198528
47.95	1465	67.05	583	78.90	3315	95.95	13614
48.95	7258	67.95	16648	79.90	878	96.95	630

Scan 168 (4.763 min): C0274.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
105.90	570	175.95	136832				
116.85	739	176.95	9524				
118.90	643	207.00	701				
127.90	866						
129.95	560						
134.85	621						
141.00	967						
142.90	1142						
154.85	600						
173.95	139520						
174.95	9663						

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Initial Calibration

Calibration Files
0.5 =C0275.D 10 =C0279.D 20 =C0278.D
30 =C0277.D 40 =C0276.D

		Compound	0.5	10	20	30	40	Avg	%RSD
1)		Fluorobenzene	----------ISTD----------						
2)	M	Dichlorodifluorometha	0.287	0.266	0.261	0.265	0.273	0.271	3.80
3)	M	Chloromethane	0.232	0.207	0.195	0.196	0.198	0.206	7.64
4)	M	Vinyl chloride	0.231	0.229	0.223	0.226	0.235	0.229	1.94
5)	M	Bromomethane	0.205	0.165	0.144	0.144	0.136	0.159	17.51
6)	M	Chloroethane	0.143	0.138	0.128	0.117	0.109	0.127	11.04
7)	M	Trichlorofluoromethan	0.426	0.390	0.383	0.392	0.384	0.395	4.52
8)	M	1,1-Dichloroethene	0.255	0.233	0.231	0.230	0.234	0.237	4.48
9)	M	Methylene chloride		0.279	0.233	0.219	0.215	0.237	12.46
10)	M	trans-1,2-Dichloroeth	0.282	0.270	0.266	0.264	0.270	0.270	2.62
11)		Hexane						0.000#	-1.00
12)	M	1,1-Dichloroethane	0.532	0.513	0.498	0.494	0.503	0.508	2.94
13)	M	2,2-Dichloropropane	0.466	0.408	0.407	0.415	0.426	0.424	5.77
14)	M	cis-1,2-Dichloroethen	0.273	0.275	0.262	0.258	0.260	0.266	2.85
15)		2-Butanone						0.000#	-1.00
16)	M	Bromochloromethane	0.115	0.124	0.113	0.111	0.113	0.115	4.52
17)	M	Chloroform	0.487	0.479	0.459	0.457	0.464	0.469	2.85
18)	M	1,1,1-Trichloroethane	0.469	0.457	0.449	0.444	0.453	0.454	2.09
19)	M	Carbon tetrachloride	0.428	0.432	0.426	0.426	0.435	0.429	0.90
20)	M	1,1-Dichloropropene	0.445	0.423	0.418	0.413	0.419	0.424	2.93
21)	M	Benzene	0.992	0.878	0.833	0.817	0.829	0.870	8.27
22)	M	1,2-Dichloroethane	0.199	0.209	0.190	0.185	0.191	0.195	4.85
23)	M	Trichloroethene	0.377	0.365	0.354	0.350	0.358	0.361	2.90
24)	M	1,2-Dichloropropane	0.306	0.319	0.296	0.290	0.298	0.302	3.69
25)	M	Dibromomethane	0.128	0.145	0.131	0.127	0.131	0.132	5.52
26)	M	Bromodichloromethane	0.386	0.413	0.387	0.379	0.389	0.391	3.37
27)	M	cis-1,3-Dichloroprope	0.351	0.372	0.347	0.340	0.352	0.352	3.45
28)	M	Toluene		0.639	0.609	0.597	0.610	0.614	2.89
29)	M	trans-1,3-Dichloropro	0.237	0.263	0.239	0.234	0.243	0.243	4.73
30)	M	1,1,2-Trichloroethane	0.127	0.144	0.128	0.124	0.129	0.131	5.87
31)	M	Tetrachloroethene	0.458	0.436	0.429	0.425	0.429	0.435	3.03
32)	M	1,3-Dichloropropane	0.248	0.273	0.243	0.233	0.240	0.247	6.16
33)	M	Dibromochloromethane	0.241	0.284	0.260	0.253	0.262	0.260	6.03
34)	M	1,2-Dibromoethane	0.180	0.212	0.189	0.182	0.189	0.190	6.83
35)	M	Chlorobenzene	0.746	0.734	0.693	0.676	0.688	0.707	4.33
36)	M	1,1,1,2-Tetrachloroet	0.287	0.316	0.290	0.285	0.290	0.294	4.34
37)	M	Ethylbenzene	1.356	1.287	1.236	1.205	1.219	1.261	4.87
38)	M	Xylene (para & meta)	0.530	0.488	0.464	0.451	0.453	0.477	6.89
39)	M	Xylene (Ortho)	0.469	0.454	0.427	0.416	0.422	0.438	5.22
40)	M	Styrene	0.676	0.715	0.668	0.646	0.655	0.672	3.95
)	M	Bromoform	0.121	0.161	0.145	0.141	0.144	0.142	10.19
)	M	Isopropylbenzene	1.274	1.248	1.201	1.179	1.192	1.219	3.31
43)	S	4-Bromofluorobenzene	0.533	0.559	0.538	0.528	0.541	0.540	2.22

#) = Out of Range

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Initial Calibration

Calibration Files
0.5 =C0275.D 10 =C0279.D 20 =C0278.D
30 =C0277.D 40 =C0276.D

		Compound	0.5	10	20	30	40	Avg	%RSD
44)	M	Bromobenzene	0.310	0.343	0.314	0.304	0.307	0.316	4.90
45)	M	1,1,2,2-Tetrachloroet	0.145	0.183	0.161	0.153	0.158	0.160	8.85
46)	M	1,2,3-Trichloropropan	0.165	0.182	0.161	0.154	0.159	0.164	6.55
47)	M	n-Propylbenzene	1.751	1.699	1.650	1.605	1.613	1.664	3.68
48)	M	2-Chlorotoluene	1.051	0.971	0.921	0.960	0.960	0.973	4.91
49)	M	4-Chlorotoluene	1.145	1.127	1.065	1.036	1.045	1.084	4.57
50)	M	1,3,5-Trimethylbenzen	1.107	1.095	1.045	1.018	1.021	1.057	3.93
51)	M	tert-Butylbenzene	1.227	1.237	1.176	1.146	1.151	1.187	3.56
52)	M	1,2,4-Trimethylbenzen	1.151	1.093	1.030	1.001	1.006	1.056	6.08
53)	M	sec-Butylbenzene	1.690	1.667	1.602	1.555	1.547	1.612	3.99
54)	M	1,3-Dichlorobenzene	0.660	0.666	0.617	0.592	0.589	0.625	5.84
55)	M	4-Isopropyltoluene	1.355	1.354	1.290	1.245	1.236	1.296	4.41
56)	M	1,4-Dichlorobenzene	0.648	0.660	0.600	0.574	0.581	0.612	6.40
57)	S	1,2-Dichlorobenzene-d	0.336	0.368	0.338	0.325	0.324	0.338	5.29
58)	M	1,2-Dichlorobenzene	0.519	0.543	0.485	0.462	0.462	0.494	7.28
59)	M	n-Butylbenzene	1.377	1.370	1.307	1.265	1.257	1.315	4.31
60)	M	1,2-Dibromo-3-chlorop	0.035	0.037	0.033	0.031	0.032	0.034	7.58
61)	M	1,2,4-Trichlorobenzen	0.384	0.446	0.404	0.384	0.383	0.400	6.73
62)	M	Hexachlorobutadiene	0.355	0.365	0.350	0.339	0.329	0.348	4.00
63)	M	Naphthalene	0.407	0.444	0.383	0.353	0.347	0.387	10.34
64)	M	1,2,3-Trichlorobenzen	0.279	0.337	0.297	0.274	0.271	0.292	9.42
65)		Methyl-tert butyl eth		0.339	0.297	0.289	0.299	0.306	7.29
66)		tert-Butyl Alcohol		0.005	0.004	0.004	0.004	0.005	9.33

#) = Out of Range

Quantitation Report

056

Data File : D:\HPCHEM\1\DATA\C0275.D
Acq On : 21 Nov 95 9:43 am
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:45 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 Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.21	96	1820408	5.00	ug/L		0.42
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.44	95	969768	4.67	ug/L		93.41%
57) 1,2-Dichlorobenzene-d4	22.24	152	612531	4.91	ug/L		98.22%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.53	85	52316	0.39	ug/L		97
3) Chloromethane	3.98	50	42319	0.61	ug/L		98
4) Vinyl chloride	4.16	62	42117	0.51	ug/L		92
5) Bromomethane	4.90	94	37297	0.62	ug/L		97
6) Chloroethane	5.12	64	25997	0.54	ug/L		90
7) Trichlorofluoromethane	5.71	101	77594	0.41	ug/L		100
8) 1,1-Dichloroethene	6.81	96	46511	0.54	ug/L	#	71
9) Methylene chloride	7.81	84	319424	3.67	ug/L		97
10) trans-1,2-Dichloroethene	8.35	96	51408	0.53	ug/L		95
12) 1,1-Dichloroethane	9.14	63	96756	0.50	ug/L		100
13) 2,2-Dichloropropane	10.19	77	84847	0.44	ug/L		94
14) cis-1,2-Dichloroethene	10.21	96	49660	0.52	ug/L		97
16) Bromochloromethane	10.63	128	20891	0.50	ug/L		99
17) Chloroform	10.77	83	88666	0.45	ug/L		96
18) 1,1,1-Trichloroethane	11.09	97	85372	0.42	ug/L		93
19) Carbon tetrachloride	11.37	117	77995	0.41	ug/L		90
20) 1,1-Dichloropropene	11.37	75	81023	0.48	ug/L		94
21) Benzene	11.73	78	180526	0.59	ug/L		92
22) 1,2-Dichloroethane	11.76	62	36177	0.38	ug/L		83
23) Trichloroethene	12.83	95	68547	0.50	ug/L		97
24) 1,2-Dichloropropane	13.20	63	55699	0.54	ug/L		98
25) Dibromomethane	13.41	93	23381	0.45	ug/L		95
26) Bromodichloromethane	13.67	83	70253	0.42	ug/L		98
27) cis-1,3-Dichloropropene	14.41	75	63879	0.48	ug/L		92
28) Toluene	14.99	92	153622	0.69	ug/L	m	98
29) trans-1,3-Dichloropropene	15.35	75	43191	0.44	ug/L		89
30) 1,1,2-Trichloroethane	15.67	83	23162	0.49	ug/L		95
31) Tetrachloroethene	15.94	166	83338	0.52	ug/L		97
32) 1,3-Dichloropropane	15.96	76	45174	0.49	ug/L		95
33) Dibromochloromethane	16.36	129	43861	0.43	ug/L		99
34) 1,2-Dibromoethane	16.57	107	32720	0.46	ug/L	m	95
35) Chlorobenzene	17.41	112	135723	0.53	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.56	131	52286	0.47	ug/L		98
37) Ethylbenzene	17.60	91	246785	0.52	ug/L	m	67
38) Xylene (para & meta)	17.80	106	192842	1.13	ug/L		90
39) Xylene (Ortho)	18.51	106	85435	0.54	ug/L	m	93
40) Styrene	18.53	104	123015	0.51	ug/L		90

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

Quantitation Report

Data File : D:\HPCHEM\1\DATA\C0275.D
Acq On : 21 Nov 95 9:43 am
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:45 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 Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.88	173	21972	0.40	ug/L		93
42)	Isopropylbenzene	19.16	105	231861	0.50	ug/L		96
44)	Bromobenzene	19.72	156	56512	0.49	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.69	83	26461	0.46	ug/L		96
46)	1,2,3-Trichloropropane	19.75	75	29999	0.47	ug/L	m	1
47)	n-Propylbenzene	19.90	91	318712	0.50	ug/L	m	58
48)	2-Chlorotoluene	20.07	91	191301	0.52	ug/L	m	98
49)	4-Chlorotoluene	20.26	91	208453	0.49	ug/L		96
50)	1,3,5-Trimethylbenzene	20.21	105	201508	0.49	ug/L		97
51)	tert-Butylbenzene	20.81	119	223381	0.50	ug/L		96
52)	1,2,4-Trimethylbenzene	20.90	105	209498	0.50	ug/L		97
53)	sec-Butylbenzene	21.21	105	307562	0.49	ug/L	m	57
54)	1,3-Dichlorobenzene	21.43	146	120084	0.52	ug/L	m	95
55)	4-Isopropyltoluene	21.47	119	246629	0.50	ug/L		98
56)	1,4-Dichlorobenzene	21.59	146	117975	0.52	ug/L	m	96
58)	1,2-Dichlorobenzene	22.28	146	94399	0.52	ug/L	m	0
59)	n-Butylbenzene	22.22	91	250733	0.49	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.70	75	6427	0.45	ug/L	m	0
61)	1,2,4-Trichlorobenzene	25.25	180	69932	0.47	ug/L		93
62)	Hexachlorobutadiene	25.57	225	64588	0.48	ug/L		99
63)	Naphthalene	25.71	128	74092	0.53	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	50786	0.47	ug/L	m	0
65)	Methyl-tert butyl ether	8.40	73	84870	0.70	ug/L	m	0

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

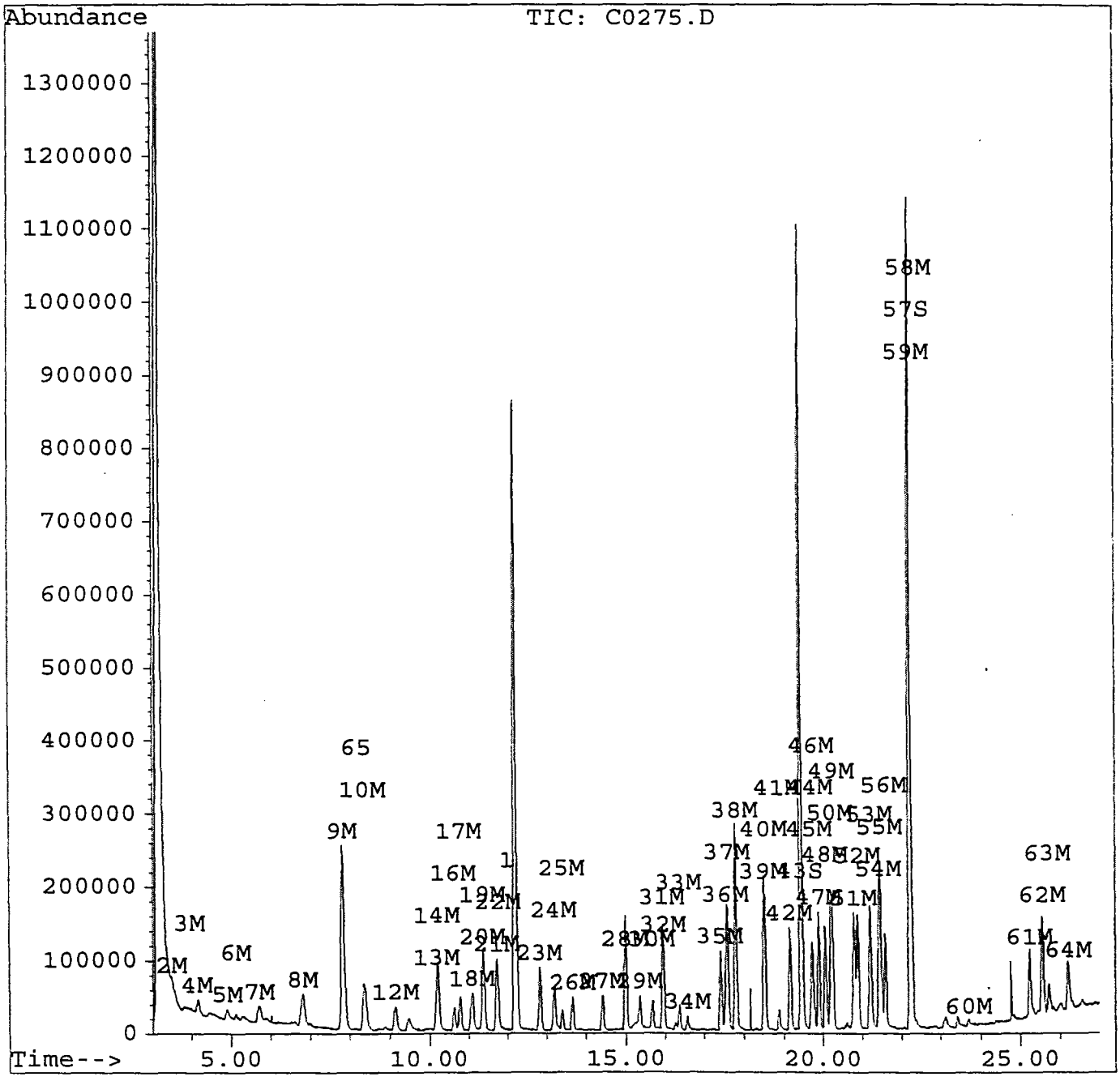
Quantitation Report

058

Data File : D:\HPCHEM\1\DATA\C0275.D
Acq On : 21 Nov 95 9:43 am
Sample : 0.5 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:45 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 Nov 21 13:46:36 1995
Response via : Multiple Level Calibration



Quantitation Report

053

Data File : d:\hpchem\1\data\c0279.d
Acq On : 21 Nov 95 12:02 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:10 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.21	96	1609009	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.46	95	899980	4.90	ug/L		98.08%
57) 1,2-Dichlorobenzene-d4	22.25	152	592880	5.38	ug/L		107.56%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	856472	7.28	ug/L		99
3) Chloromethane	3.99	50	666017	10.89	ug/L		99
4) Vinyl chloride	4.18	62	735860	10.01	ug/L		98
5) Bromomethane	4.88	94	531114	9.97	ug/L		94
6) Chloroethane	5.12	64	444951	10.52	ug/L		99
7) Trichlorofluoromethane	5.71	101	1256624	7.50	ug/L		96
8) 1,1-Dichloroethene	6.83	96	750318	9.77	ug/L	#	78
9) Methylene chloride	7.83	84	899322	11.70	ug/L		99
10) trans-1,2-Dichloroethene	8.36	96	867754	10.09	ug/L		92
12) 1,1-Dichloroethane	9.16	63	1649567	9.64	ug/L		98
13) 2,2-Dichloropropane	10.21	77	1314116	7.70	ug/L		87
14) cis-1,2-Dichloroethene	10.22	96	884860	10.51	ug/L	#	89
16) Bromochloromethane	10.64	128	399435	10.81	ug/L		97
17) Chloroform	10.79	83	1542720	8.81	ug/L		99
18) 1,1,1-Trichloroethane	11.10	97	1469392	8.16	ug/L		97
19) Carbon tetrachloride	11.38	117	1389681	8.31	ug/L		99
20) 1,1-Dichloropropene	11.38	75	1360544	9.04	ug/L		97
21) Benzene	11.73	78	2826008	10.49	ug/L		98
22) 1,2-Dichloroethane	11.77	62	673923	8.03	ug/L		90
23) Trichloroethene	12.84	95	1175434	9.62	ug/L		99
24) 1,2-Dichloropropane	13.21	63	1027243	11.25	ug/L		100
25) Dibromomethane	13.42	93	467301	10.25	ug/L		96
26) Bromodichloromethane	13.67	83	1330545	9.02	ug/L		100
27) cis-1,3-Dichloropropene	14.43	75	1198677	10.14	ug/L		96
28) Toluene	15.00	92	2055048	10.48	ug/L		97
29) trans-1,3-Dichloropropene	15.36	75	846524	9.69	ug/L		92
30) 1,1,2-Trichloroethane	15.67	83	463270	11.00	ug/L		97
31) Tetrachloroethene	15.95	166	1403167	9.97	ug/L		99
32) 1,3-Dichloropropane	15.97	76	877213	10.66	ug/L		99
33) Dibromochloromethane	16.37	129	913271	10.23	ug/L		98
34) 1,2-Dibromoethane	16.58	107	683447	10.96	ug/L		98
35) Chlorobenzene	17.43	112	2362576	10.50	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.57	131	1018157	10.30	ug/L		97
37) Ethylbenzene	17.61	91	4142973	9.94	ug/L		96
38) Xylene (para & meta)	17.82	106	3139022	20.79	ug/L		93
39) Xylene (Ortho)	18.52	106	1462030	10.52	ug/L		93
40) Styrene	18.54	104	2300383	10.69	ug/L		89

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

Quantitation Report

060

Data File : d:\hpchem\1\data\c0279.d
Acq On : 21 Nov 95 12:02 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:10 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.89	173	519312	10.60	ug/L		98
42)	Isopropylbenzene	19.17	105	4015738	9.78	ug/L	m	0
44)	Bromobenzene	19.74	156	1102438	10.77	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.69	83	588802	11.59	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	586144	10.31	ug/L	#	28
47)	n-Propylbenzene	19.91	91	5467496	9.79	ug/L		98
48)	2-Chlorotoluene	20.08	91	3124523	9.65	ug/L		97
49)	4-Chlorotoluene	20.27	91	3628061	9.64	ug/L		96
50)	1,3,5-Trimethylbenzene	20.22	105	3523555	9.67	ug/L		95
51)	tert-Butylbenzene	20.82	119	3979719	10.01	ug/L		96
52)	1,2,4-Trimethylbenzene	20.91	105	3517466	9.42	ug/L		95
53)	sec-Butylbenzene	21.22	105	5364130	9.72	ug/L		99
54)	1,3-Dichlorobenzene	21.44	146	2143707	10.49	ug/L		98
55)	4-Isopropyltoluene	21.48	119	4355898	9.92	ug/L		97
56)	1,4-Dichlorobenzene	21.60	146	2122376	10.55	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	1748295	10.98	ug/L	m	0
59)	n-Butylbenzene	22.23	91	4410108	9.74	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.71	75	120610	9.58	ug/L	#	80
61)	1,2,4-Trichlorobenzene	25.25	180	1434366	10.89	ug/L		97
62)	Hexachlorobutadiene	25.58	225	1174339	9.84	ug/L		95
63)	Naphthalene	25.73	128	1427329	11.66	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.23	180	1085916	11.35	ug/L		99
65)	Methyl-tert butyl ether	8.40	73	1090548	10.21	ug/L		97
66)	tert-Butyl Alcohol	8.19	59	33044	21.67	ug/L		100

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

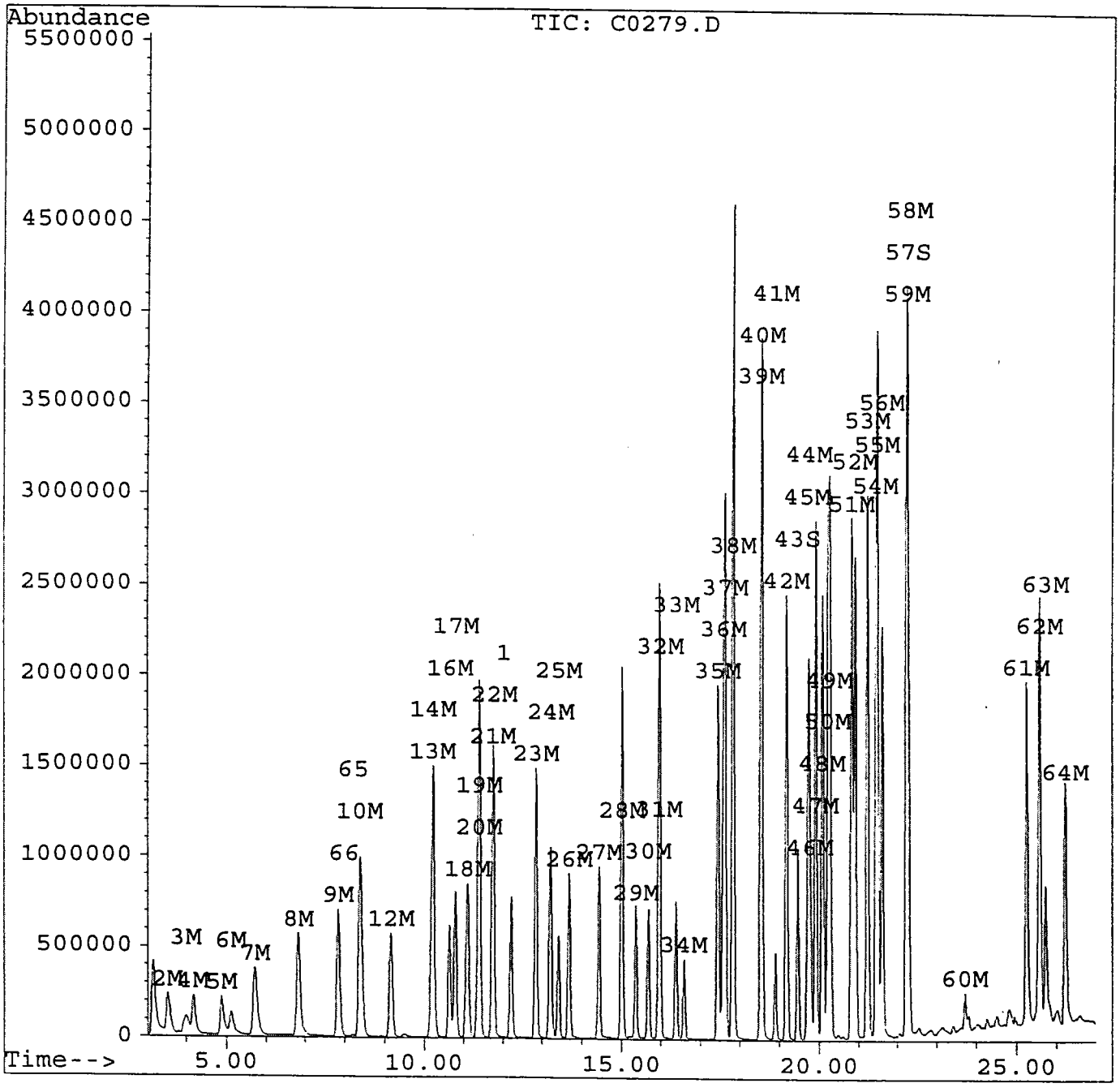
Quantitation Report

061

Data File : d:\hpchem\1\data\c0279.d
Acq On : 21 Nov 95 12:02 pm
Sample : 10 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:10 1995

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:46:36 1995
Response via : Multiple Level Calibration



Quantitation Report

062

Data File : d:\hpchem\1\data\c0278.d
Acq On : 21 Nov 95 11:28 am
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:07 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.21	96	1722488	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.46	95	927311	4.72	ug/L		94.40%
57) 1,2-Dichlorobenzene-d4	22.25	152	582262	4.93	ug/L		98.68%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	1801450	14.31	ug/L		97
3) Chloromethane	3.97	50	1343518	20.52	ug/L		100
4) Vinyl chloride	4.17	62	1539511	19.56	ug/L		99
5) Bromomethane	4.86	94	994458	17.44	ug/L		94
6) Chloroethane	5.08	64	881354	19.47	ug/L		100
7) Trichlorofluoromethane	5.68	101	2638002	14.71	ug/L		98
8) 1,1-Dichloroethene	6.81	96	1593355	19.38	ug/L	#	79
9) Methylene chloride	7.82	84	1603537	19.49	ug/L		98
10) trans-1,2-Dichloroethene	8.36	96	1831930	19.90	ug/L	m	0
12) 1,1-Dichloroethane	9.16	63	3432597	18.74	ug/L		99
13) 2,2-Dichloropropane	10.20	77	2802037	15.33	ug/L		89
14) cis-1,2-Dichloroethene	10.22	96	1806300	20.03	ug/L	m	0
16) Bromochloromethane	10.64	128	780203	19.72	ug/L		98
17) Chloroform	10.79	83	3159991	16.85	ug/L		98
18) 1,1,1-Trichloroethane	11.10	97	3092727	16.05	ug/L		97
19) Carbon tetrachloride	11.39	117	2932708	16.38	ug/L		100
20) 1,1-Dichloropropene	11.38	75	2880851	17.89	ug/L		96
21) Benzene	11.73	78	5738442	19.90	ug/L		98
22) 1,2-Dichloroethane	11.77	62	1311439	14.60	ug/L		86
23) Trichloroethene	12.84	95	2437464	18.64	ug/L		98
24) 1,2-Dichloropropane	13.21	63	2041662	20.88	ug/L		100
25) Dibromomethane	13.42	93	900094	18.45	ug/L		96
26) Bromodichloromethane	13.67	83	2668736	16.90	ug/L		99
27) cis-1,3-Dichloropropene	14.43	75	2391296	18.90	ug/L		98
28) Toluene	15.00	92	4196821	19.99	ug/L		97
29) trans-1,3-Dichloropropene	15.36	75	1647489	17.62	ug/L		92
30) 1,1,2-Trichloroethane	15.68	83	884119	19.60	ug/L		98
31) Tetrachloroethene	15.95	166	2952465	19.59	ug/L		99
32) 1,3-Dichloropropane	15.97	76	1676229	19.03	ug/L		99
33) Dibromochloromethane	16.37	129	1793224	18.76	ug/L		99
34) 1,2-Dibromoethane	16.58	107	1299437	19.47	ug/L		98
35) Chlorobenzene	17.43	112	4775180	19.82	ug/L		97
36) 1,1,1,2-Tetrachloroethane	17.57	131	1998640	18.89	ug/L		97
37) Ethylbenzene	17.61	91	8519170	19.10	ug/L		97
38) Xylene (para & meta)	17.82	106	6392350	39.55	ug/L		92
39) Xylene (Ortho)	18.52	106	2944771	19.80	ug/L		90
40) Styrene	18.54	104	4602890	19.99	ug/L		89

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

Quantitation Report

Data File : d:\hpchem\1\data\c0278.d
Acq On : 21 Nov 95 11:28 am
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:07 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.89	173	1001404	19.09	ug/L		97
42)	Isopropylbenzene	19.17	105	8277271	18.83	ug/L	m	0
44)	Bromobenzene	19.74	156	2166384	19.76	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.69	83	1106145	20.34	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	1110952	18.25	ug/L	#	28
47)	n-Propylbenzene	19.91	91	11371671	19.02	ug/L		98
48)	2-Chlorotoluene	20.08	91	6343572	18.29	ug/L		96
49)	4-Chlorotoluene	20.27	91	7335851	18.21	ug/L		96
50)	1,3,5-Trimethylbenzene	20.22	105	7200036	18.46	ug/L		94
51)	tert-Butylbenzene	20.82	119	8099224	19.04	ug/L		95
52)	1,2,4-Trimethylbenzene	20.91	105	7100072	17.77	ug/L		95
53)	sec-Butylbenzene	21.22	105	11034278	18.68	ug/L		98
54)	1,3-Dichlorobenzene	21.44	146	4253419	19.44	ug/L		98
55)	4-Isopropyltoluene	21.48	119	8886497	18.90	ug/L		97
56)	1,4-Dichlorobenzene	21.60	146	4135214	19.21	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	3344031	19.61	ug/L		99
59)	n-Butylbenzene	22.23	91	9001935	18.57	ug/L		97
60)	1,2-Dibromo-3-chloropropan	23.71	75	224773	16.68	ug/L	#	76
61)	1,2,4-Trichlorobenzene	25.25	180	2785545	19.75	ug/L		98
62)	Hexachlorobutadiene	25.58	225	2413438	18.89	ug/L		96
63)	Naphthalene	25.73	128	2640403	20.14	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	2045433	19.96	ug/L		99
65)	Methyl-tert butyl ether	8.40	73	2048272	17.91	ug/L		97
66)	tert-Butyl Alcohol	8.22	59	60041	36.77	ug/L		100

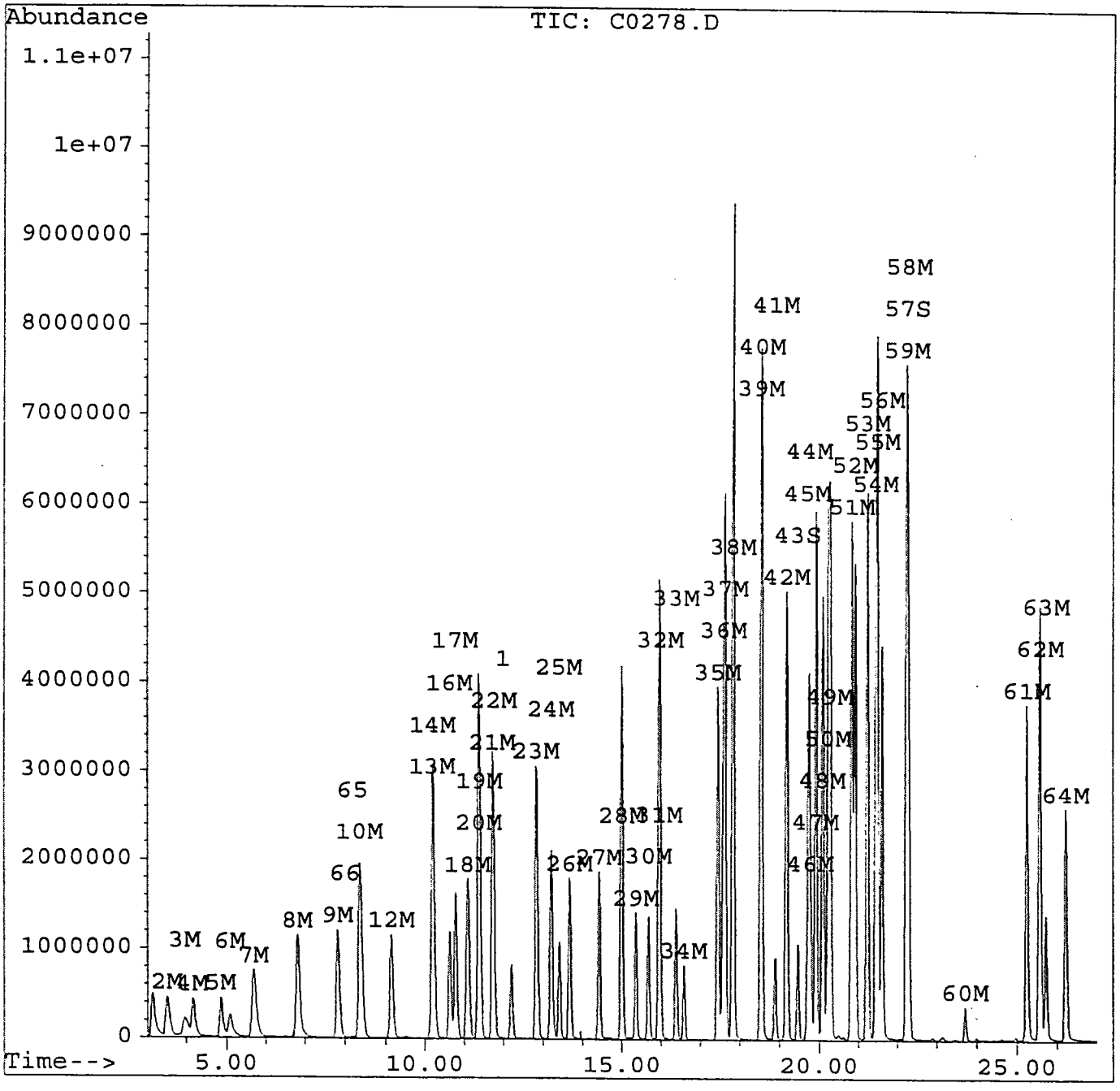
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0278.d
Acq On : 21 Nov 95 11:28 am
Sample : 20 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:07 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0277.d
Acq On : 21 Nov 95 10:52 am
Sample : 30 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:04 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.22	96	1784794	5.00	ug/L		0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.46	95	942277	4.63	ug/L		92.57%
57) 1,2-Dichlorobenzene-d4	22.25	152	579998	4.74	ug/L		94.86%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	2836497	21.75	ug/L		98
3) Chloromethane	3.99	50	2098923	30.94	ug/L		99
4) Vinyl chloride	4.18	62	2415650	29.63	ug/L		98
5) Bromomethane	4.86	94	1539157	26.06	ug/L	m	0
6) Chloroethane	5.06	64	1257519	26.81	ug/L		98
7) Trichlorofluoromethane	5.68	101	4199498	22.60	ug/L		97
8) 1,1-Dichloroethene	6.82	96	2462267	28.90	ug/L	#	79
9) Methylene chloride	7.83	84	2344560	27.50	ug/L		98
10) trans-1,2-Dichloroethene	8.36	96	2831636	29.69	ug/L		91
12) 1,1-Dichloroethane	9.16	63	5287314	27.85	ug/L		99
13) 2,2-Dichloropropane	10.21	77	4444886	23.47	ug/L		89
14) cis-1,2-Dichloroethene	10.22	96	2767927	29.62	ug/L	#	89
16) Bromochloromethane	10.64	128	1185004	28.91	ug/L		99
17) Chloroform	10.79	83	4893833	25.18	ug/L		97
18) 1,1,1-Trichloroethane	11.10	97	4753944	23.81	ug/L		97
19) Carbon tetrachloride	11.39	117	4564218	24.60	ug/L		100
20) 1,1-Dichloropropene	11.38	75	4427341	26.53	ug/L		97
21) Benzene	11.75	78	8752088	29.30	ug/L		98
22) 1,2-Dichloroethane	11.77	62	1984347	21.32	ug/L		88
23) Trichloroethene	12.84	95	3749920	27.68	ug/L		98
24) 1,2-Dichloropropane	13.21	63	3110146	30.70	ug/L		99
25) Dibromomethane	13.42	93	1360516	26.91	ug/L		97
26) Bromodichloromethane	13.67	83	4057411	24.80	ug/L		99
27) cis-1,3-Dichloropropene	14.43	75	3639910	27.76	ug/L		97
28) Toluene	15.00	92	6391124	29.38	ug/L		98
29) trans-1,3-Dichloropropene	15.36	75	2506952	25.87	ug/L		92
30) 1,1,2-Trichloroethane	15.68	83	1332952	28.52	ug/L		97
31) Tetrachloroethene	15.95	166	4549744	29.13	ug/L		99
32) 1,3-Dichloropropane	15.97	76	2491473	27.30	ug/L		100
33) Dibromochloromethane	16.37	129	2708999	27.35	ug/L		99
34) 1,2-Dibromoethane	16.58	107	1946729	28.14	ug/L		100
35) Chlorobenzene	17.43	112	7236418	28.98	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.57	131	3057070	27.88	ug/L		97
37) Ethylbenzene	17.61	91	12907921	27.92	ug/L		97
38) Xylene (para & meta)	17.82	106	9651078	57.62	ug/L		91
39) Xylene (Ortho)	18.52	106	4457409	28.92	ug/L		92
40) Styrene	18.54	104	6923206	29.02	ug/L		89

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

Quantitation Report

Data File : d:\hpchem\1\data\c0277.d
Acq On : 21 Nov 95 10:52 am
Sample : 30 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:04 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.89	173	1511160	27.81	ug/L		96
42)	Isopropylbenzene	19.17	105	12622410	27.71	ug/L	m	0
44)	Bromobenzene	19.74	156	3255768	28.66	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.69	83	1633104	28.98	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	1648511	26.13	ug/L	#	25
47)	n-Propylbenzene	19.91	91	17183034	27.74	ug/L		97
48)	2-Chlorotoluene	20.08	91	10285555	28.63	ug/L		96
49)	4-Chlorotoluene	20.27	91	11091027	26.58	ug/L		96
50)	1,3,5-Trimethylbenzene	20.22	105	10903523	26.98	ug/L		95
51)	tert-Butylbenzene	20.82	119	12273662	27.84	ug/L		95
52)	1,2,4-Trimethylbenzene	20.91	105	10722862	25.90	ug/L		95
53)	sec-Butylbenzene	21.22	105	16654167	27.21	ug/L		98
54)	1,3-Dichlorobenzene	21.44	146	6339763	27.97	ug/L		99
55)	4-Isopropyltoluene	21.48	119	13330894	27.36	ug/L		98
56)	1,4-Dichlorobenzene	21.60	146	6141628	27.53	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	4942796	27.97	ug/L		98
59)	n-Butylbenzene	22.23	91	13546684	26.97	ug/L		96
60)	1,2-Dibromo-3-chloropropan	23.71	75	334490	23.96	ug/L		79
61)	1,2,4-Trichlorobenzene	25.25	180	4113150	28.14	ug/L		98
62)	Hexachlorobutadiene	25.58	225	3635507	27.46	ug/L	m	82
63)	Naphthalene	25.73	128	3782351	27.85	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	2931888	27.61	ug/L	m	0
65)	Methyl-tert butyl ether	8.41	73	3097117	26.13	ug/L	m	0
66)	tert-Butyl Alcohol	8.22	59	91328	53.98	ug/L	m	100

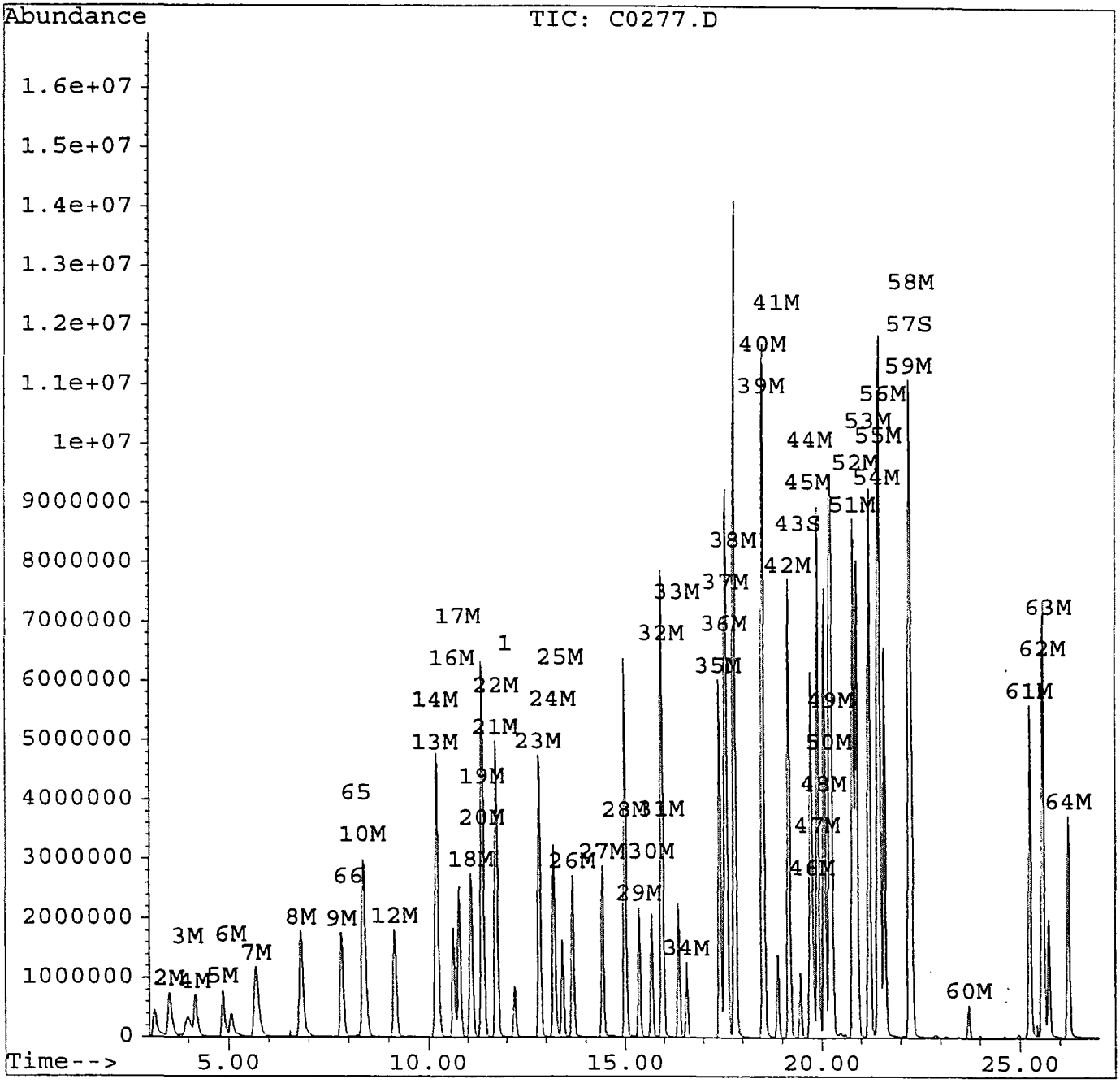
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0277.d
Acq On : 21 Nov 95 10:52 am
Sample : 30 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 13:04 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 Nov 21 13:42:15 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0276.d
Acq On : 21 Nov 95 10:18 am
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 11:18 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.20	96	1759102	5.00	ug/L		0.00
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.45	95	951185	4.74	ug/L		94.81%
57) 1,2-Dichlorobenzene-d4	22.25	152	570741	4.74	ug/L		94.71%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.54	85	3842951	29.89	ug/L		98
3) Chloromethane	3.99	50	2785093	41.66	ug/L	m	0
4) Vinyl chloride	4.18	62	3300688	41.07	ug/L		98
5) Bromomethane	4.84	94	1920657	32.99	ug/L		95
6) Chloroethane	5.04	64	1536210	33.23	ug/L		99
7) Trichlorofluoromethane	5.65	101	5402420	29.50	ug/L		97
8) 1,1-Dichloroethene	6.80	96	3288045	39.15	ug/L	#	79
9) Methylene chloride	7.81	84	3032483	36.08	ug/L		100
10) trans-1,2-Dichloroethene	8.34	96	3794962	40.37	ug/L		91
12) 1,1-Dichloroethane	9.15	63	7085234	37.87	ug/L		98
13) 2,2-Dichloropropane	10.20	77	5990137	32.10	ug/L	m	0
14) cis-1,2-Dichloroethene	10.21	96	3663460	39.78	ug/L	m	0
16) Bromochloromethane	10.62	128	1592491	39.42	ug/L		97
17) Chloroform	10.78	83	6527086	34.08	ug/L		98
18) 1,1,1-Trichloroethane	11.09	97	6371834	32.38	ug/L		97
19) Carbon tetrachloride	11.37	117	6118402	33.46	ug/L		99
20) 1,1-Dichloropropene	11.37	75	5894994	35.84	ug/L		97
21) Benzene	11.73	78	11670569	39.63	ug/L		98
22) 1,2-Dichloroethane	11.76	62	2682220	29.24	ug/L		88
23) Trichloroethene	12.83	95	5035850	37.71	ug/L		99
24) 1,2-Dichloropropane	13.20	63	4191796	41.98	ug/L		99
25) Dibromomethane	13.41	93	1841134	36.94	ug/L		97
26) Bromodichloromethane	13.66	83	5475563	33.96	ug/L		99
27) cis-1,3-Dichloropropene	14.42	75	4948085	38.29	ug/L		97
28) Toluene	14.99	92	8579596	40.01	ug/L		97
29) trans-1,3-Dichloropropene	15.35	75	3412681	35.73	ug/L		93
30) 1,1,2-Trichloroethane	15.67	83	1814691	39.39	ug/L		98
31) Tetrachloroethene	15.94	166	6041995	39.25	ug/L		99
32) 1,3-Dichloropropane	15.96	76	3372769	37.49	ug/L		100
33) Dibromochloromethane	16.36	129	3681997	37.72	ug/L		100
34) 1,2-Dibromoethane	16.57	107	2661298	39.04	ug/L		100
35) Chlorobenzene	17.43	112	9681263	39.34	ug/L	m	0
36) 1,1,1,2-Tetrachloroethane	17.56	131	4081175	37.76	ug/L		97
37) Ethylbenzene	17.60	91	17160562	37.67	ug/L		97
38) Xylene (para & meta)	17.81	106	12756573	77.27	ug/L	m	99
39) Xylene (Ortho)	18.52	106	5937952	39.09	ug/L		91
40) Styrene	18.54	104	9213631	39.18	ug/L		88

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

Quantitation Report

069

Data File : d:\hpchem\1\data\c0276.d
Acq On : 21 Nov 95 10:18 am
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 11:18 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.88	173	2023918	37.79	ug/L		96
42)	Isopropylbenzene	19.17	105	16768168	37.34	ug/L	m	0
44)	Bromobenzene	19.74	156	4325694	38.64	ug/L	m	0
45)	1,1,2,2-Tetrachloroethane	19.70	83	2225957	40.08	ug/L		98
46)	1,2,3-Trichloropropane	19.78	75	2238025	35.99	ug/L	#	12
47)	n-Propylbenzene	19.91	91	22705937	37.19	ug/L		97
48)	2-Chlorotoluene	20.08	91	13504805	38.14	ug/L		95
49)	4-Chlorotoluene	20.27	91	14709970	35.76	ug/L		95
50)	1,3,5-Trimethylbenzene	20.22	105	14363384	36.06	ug/L		94
51)	tert-Butylbenzene	20.82	119	16201797	37.29	ug/L		95
52)	1,2,4-Trimethylbenzene	20.90	105	14158340	34.70	ug/L		95
53)	sec-Butylbenzene	21.22	105	21775294	36.10	ug/L		98
54)	1,3-Dichlorobenzene	21.44	146	8291350	37.11	ug/L		99
55)	4-Isopropyltoluene	21.48	119	17391875	36.21	ug/L		97
56)	1,4-Dichlorobenzene	21.60	146	8176260	37.19	ug/L		99
58)	1,2-Dichlorobenzene	22.28	146	6501610	37.33	ug/L		99
59)	n-Butylbenzene	22.23	91	17695059	35.75	ug/L		95
60)	1,2-Dibromo-3-chloropropan	23.71	75	453725	32.98	ug/L	#	78
61)	1,2,4-Trichlorobenzene	25.25	180	5391357	37.43	ug/L		98
62)	Hexachlorobutadiene	25.57	225	4629499	35.48	ug/L	m	82
63)	Naphthalene	25.73	128	4877034	36.43	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.22	180	3818605	36.49	ug/L		98
65)	Methyl-tert butyl ether	8.41	73	4202915	35.98	ug/L	m	0
66)	tert-Butyl Alcohol	8.22	59	120228	72.11	ug/L	m	100

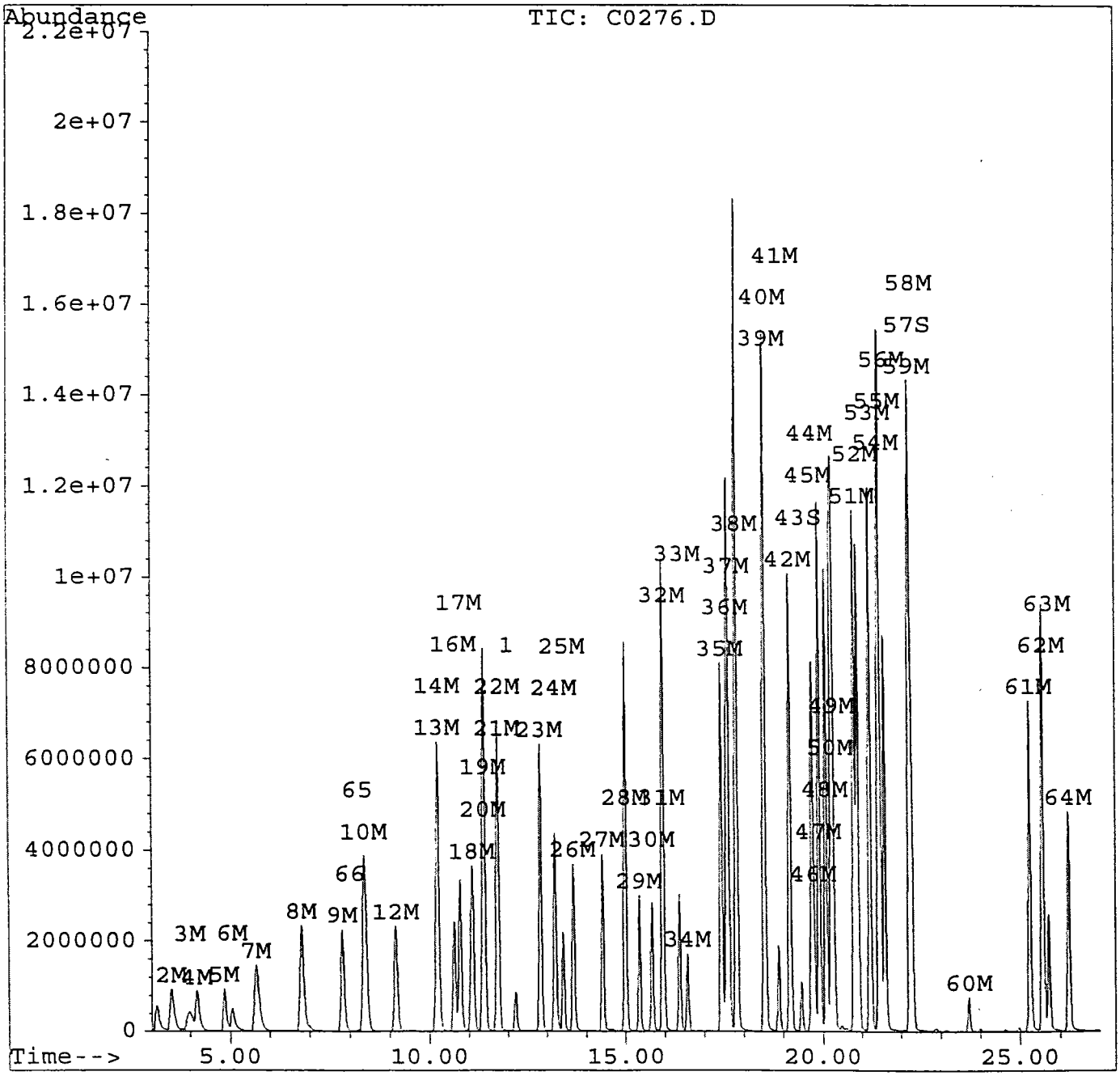
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0276.d
Acq On : 21 Nov 95 10:18 am
Sample : 40 PPB STANDARD
Misc : 25 ML
Quant Time: Nov 21 11:18 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Tue Nov 21 13:42:15 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

071

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0397.D BFB Injection Date: 11/30/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 1842

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.4
75	30.0 - 66.0% of mass 95	43.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	67.5
175	4.0 - 9.0% of mass 174	5.0 (7.5)1
176	93.0 - 101.0% of mass 174	65.5 (97.0)1
177	5.0 - 9.0% of mass 176	4.5 (6.9)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	C0398.D	11/30/95	1854
02	10 QCS	10 QCS	C0399.D	11/30/95	1929
03	1 STND	1 STND	C0400.D	11/30/95	2003
04	VBLK01	M. BLANK	C0401.D	11/30/95	2037
05	9554057V	9554057V	C0402.D	11/30/95	2111
06	9554058V	9554058V	C0403.D	11/30/95	2144
07	9554055V	9554055V	C0404.D	11/30/95	2219
08	9554056V	9554056V	C0405.D	11/30/95	2252
09	9554053V	9554053V	C0406.D	11/30/95	2326
10	9554056MS	54056MS	C0410.D	12/1/95	0142
11	9554056MSD	54056MSD	C0411.D	12/1/95	0216
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

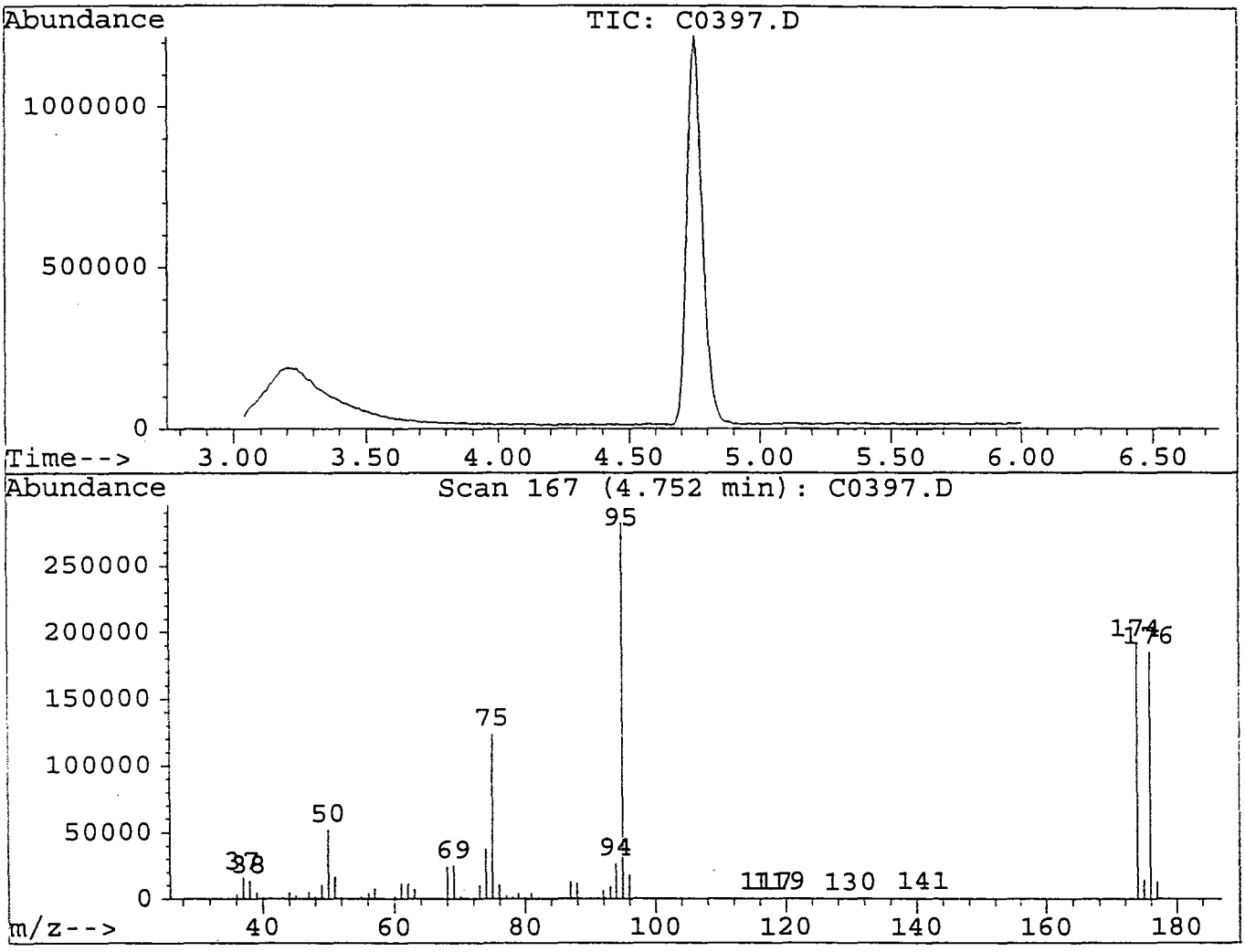
CLPBFB

072

Data File : D:\HPCHEM\1\DATA\C0397.D
Acq On : 30 Nov 95 6:42 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: 167

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	52144	PASS
75	95	30	80	43.8	123872	PASS
95	95	100	100	100.0	282688	PASS
96	95	5	9	6.5	18344	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	67.5	190848	PASS
175	174	5	9	7.5	14250	PASS
176	174	95	101	97.0	185216	PASS
177	176	5	9	6.9	12781	PASS

C0397.D VOA524.M Thu Nov 30 18:54:36 1995 VOA

can 167 (4.752 min): C0397.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	3675	49.05	10777	63.00	7581	75.95	10843
37.00	16520	50.05	52144	64.00	636	77.00	2551
38.00	13701	51.05	16512	67.15	832	78.00	1681
39.10	5602	51.95	845	68.05	24464	78.90	4182
40.00	868	55.05	1733	69.05	25064	79.90	1252
41.10	1403	56.10	3901	70.05	2069	80.90	4286
43.00	1501	57.00	7432	71.05	538	82.00	1141
44.00	4740	58.00	516	71.95	1299	86.90	12976
45.00	2743	60.00	2142	72.95	10468	87.95	12021
47.05	4754	61.00	11898	73.95	37464	91.05	1070
47.95	1877	62.00	11304	74.95	123872	91.95	6051

Scan 167 (4.752 min): C0397.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
93.05	9347	127.90	794				
93.95	26960	129.85	705				
94.95	282688	141.00	1603				
95.95	18344	142.90	1438				
96.95	844	147.80	616				
103.90	925	173.95	190848				
105.00	544	174.95	14250				
105.90	687	175.95	185216				
116.95	1230	176.95	12781				
117.95	876						
119.00	1039						

VOLATILE CONTINUING CALIBRATION CHECK

074

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 11/30/95 Time: 1854

Lab File ID: C0398.D Init. Calib. Date(s): 11/21/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

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

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.271	0.306		-12.9	30.0
Chloromethane	0.206	0.226		-9.7	30.0
Vinyl chloride	0.229	0.255		-11.4	30.0
Bromomethane	0.159	0.174		-9.4	30.0
Chloroethane	0.127	0.156		-22.8	30.0
Trichlorofluoromethane	0.395	0.424		-7.3	30.0
1,1-Dichloroethene	0.237	0.249		-5.1	30.0
Methylene chloride	0.237	0.281		-18.6	30.0
trans-1,2-Dichloroethene	0.270	0.278		-3.0	30.0
1,1-Dichloroethane	0.508	0.523		-3.0	30.0
2,2-Dichloropropane	0.424	0.431		-1.7	30.0
cis-1,2-Dichloroethene	0.266	0.269		-1.1	30.0
Bromochloromethane	0.115	0.111		3.5	30.0
Chloroform	0.469	0.472		-0.6	30.0
1,1,1-Trichloroethane	0.454	0.455		-0.2	30.0
Carbon tetrachloride	0.429	0.427		0.5	30.0
1,1-Dichloropropene	0.424	0.437		-3.1	30.0
Benzene	0.870	0.866		0.5	30.0
1,2-Dichloroethane	0.195	0.186		4.6	30.0
Trichloroethene	0.361	0.361		0.0	30.0
1,2-Dichloropropane	0.302	0.308		-2.0	30.0
Dibromomethane	0.132	0.129		2.3	30.0
Bromodichloromethane	0.391	0.383		2.0	30.0
cis-1,3-Dichloropropene	0.352	0.349		0.9	30.0
Toluene	0.614	0.623		-1.5	30.0
trans-1,3-Dichloropropene	0.243	0.235		3.3	30.0
1,1,2-Trichloroethane	0.131	0.131		0.0	30.0
Tetrachloroethene	0.435	0.426		2.1	30.0
1,3-Dichloropropane	0.247	0.246		0.4	30.0
Dibromochloromethane	0.260	0.244		6.2	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.707	0.705		0.3	30.0
1,1,1,2-Tetrachloroethane	0.294	0.289		1.7	30.0
Ethylbenzene	1.261	1.266		-0.4	30.0
Xylene (para & meta)	0.477	0.485		-1.7	30.0
Xylene (Ortho)	0.438	0.441		-0.7	30.0

VOLATILE CONTINUING CALIBRATION CHECK

075

Lab Name: EMSL ANALYTICAL Contract:

Project No. Site: Location: Group:

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 11/30/95 Time: 1854

Lab File ID: C0398.D Init. Calib. Date(s): 11/21/95

Heated Purge: (Y/N) N Init. Calib. Times:

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

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.672	0.678		-0.9	30.0
Bromoform	0.142	0.129		9.2	30.0
Isopropylbenzene	1.219	1.232		-1.1	30.0
Bromobenzene	0.316	0.306		3.2	30.0
1,1,2,2-Tetrachloroethane	0.160	0.163		-1.9	30.0
1,2,3-Trichloropropane	0.164	0.161		1.8	30.0
n-Propylbenzene	1.664	1.681		-1.0	30.0
2-Chlorotoluene	0.973	0.945		2.9	30.0
4-Chlorotoluene	1.084	1.082		0.2	30.0
1,3,5-Trimethylbenzene	1.057	1.048		0.9	30.0
tert-Butylbenzene	1.187	1.190		-0.3	30.0
1,2,4-Trimethylbenzene	1.056	1.036		1.9	30.0
sec-Butylbenzene	1.612	1.650		-2.4	30.0
1,3-Dichlorobenzene	0.625	0.608		2.7	30.0
4-Isopropyltoluene	1.296	1.303		-0.5	30.0
1,4-Dichlorobenzene	0.612	0.594		2.9	30.0
1,2-Dichlorobenzene	0.494	0.471		4.7	30.0
n-Butylbenzene	1.315	1.330		-1.1	30.0
1,2-Dibromo-3-chloropropane	0.034	0.030		11.8	30.0
1,2,4-Trichlorobenzene	0.400	0.362		9.5	30.0
Hexachlorobutadiene	0.348	0.322		7.5	30.0
Naphthalene	0.387	0.343		11.4	30.0
1,2,3-Trichlorobenzene	0.292	0.255		12.7	30.0
4-Bromofluorobenzene	0.540	0.520		3.7	30.0
1,2-Dichlorobenzene-d4	0.338	0.318		5.9	30.0

Evaluate Continuing Calibration Report

076

Data File : D:\HPCHEM\1\DATA\C0398.D
Acq On : 30 Nov 95 6:54 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 : Wed Nov 22 09:25:47 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	119	-0.01
2	M	Dichlorodifluoromethane	0.271	0.306	-13.1	136	-0.01
3	M	Chloromethane	0.206	0.226	-10.0	130	-0.03
4	M	Vinyl chloride	0.229	0.255	-11.6	132	-0.01
5	M	Bromomethane	0.159	0.174	-9.3	125	-0.02
6	M	Chloroethane	0.127	0.156	-22.9	134	-0.01
7	M	Trichlorofluoromethane	0.395	0.424	-7.4	129	-0.01
8	M	1,1-Dichloroethene	0.237	0.249	-5.2	127	-0.01
9	M	Methylene chloride	0.237	0.281	-18.8	119	-0.01
10	M	trans-1,2-Dichloroethene	0.270	0.278	-2.9	122	-0.01
11		Hexane	0.000	0.000#	0.0	0#	-0.50#
12	M	1,1-Dichloroethane	0.508	0.523	-3.0	121	-0.01
13	M	2,2-Dichloropropane	0.424	0.431	-1.6	125	-0.01
14	M	cis-1,2-Dichloroethene	0.266	0.269	-1.1	116	-0.01
15		2-Butanone	0.000	0.000#	0.0	0#	-0.11
16	M	Bromochloromethane	0.115	0.111	4.1	106	-0.01
17	M	Chloroform	0.469	0.472	-0.7	117	-0.01
18	M	1,1,1-Trichloroethane	0.454	0.455	-0.2	118	-0.01
19	M	Carbon tetrachloride	0.429	0.427	0.5	117	-0.01
20	M	1,1-Dichloropropene	0.424	0.437	-3.2	123	-0.02
21	M	Benzene	0.870	0.866	0.5	117	-0.01
22	M	1,2-Dichloroethane	0.195	0.186	4.6	105	-0.02
23	M	Trichloroethene	0.361	0.361	0.1	117	-0.02
24	M	1,2-Dichloropropane	0.302	0.308	-2.1	115	-0.02
25	M	Dibromomethane	0.132	0.129	2.5	105	-0.02
26	M	Bromodichloromethane	0.391	0.383	2.0	110	-0.02
27	M	cis-1,3-Dichloropropene	0.352	0.349	1.1	111	-0.02
28	M	Toluene	0.614	0.623	-1.5	116	-0.03
29	M	trans-1,3-Dichloropropene	0.243	0.235	3.5	106	-0.03
30	M	1,1,2-Trichloroethane	0.131	0.131	-0.0	108	-0.03
31	M	Tetrachloroethene	0.435	0.426	2.2	116	-0.03
32	M	1,3-Dichloropropane	0.247	0.246	0.5	107	-0.03
33	M	Dibromochloromethane	0.260	0.244	5.9	102	-0.03
34	M	1,2-Dibromoethane	0.190	0.184	3.2	103	-0.03
35	M	Chlorobenzene	0.707	0.705	0.3	114	-0.03
36	M	1,1,1,2-Tetrachloroethane	0.294	0.289	1.8	108	-0.04
37	M	Ethylbenzene	1.261	1.266	-0.4	117	-0.03
38	M	Xylene (para & meta)	0.477	0.485	-1.6	118	-0.04
	M	Xylene (Ortho)	0.438	0.441	-0.8	115	-0.03
40	M	Styrene	0.672	0.678	-0.9	112	-0.03
41	M	Bromoform	0.142	0.129	9.2	95	-0.04
42	M	Isopropylbenzene	1.219	1.232	-1.1	117	-0.03

(#) = Out of Range

Evaluate Continuing Calibration Report

077

Data File : D:\HPCHEM\1\DATA\C0398.D Vial: 2
Acq On : 30 Nov 95 6:54 pm Operator: SRK
Sample : 10 PPB CHK STANDARD Inst : 5972 - In
Misc : Multiplr: 1.00

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.540	0.520	3.6	110	-0.03
44	M	Bromobenzene	0.316	0.306	3.1	106	-0.03
45	M	1,1,2,2-Tetrachloroethane	0.160	0.163	-1.8	106	-0.03
46	M	1,2,3-Trichloropropane	0.164	0.161	2.3	105	-0.04
47	M	n-Propylbenzene	1.664	1.681	-1.0	117	-0.04
48	M	2-Chlorotoluene	0.973	0.945	2.9	115	-0.03
49	M	4-Chlorotoluene	1.084	1.082	0.2	114	-0.04
50	M	1,3,5-Trimethylbenzene	1.057	1.048	0.8	114	-0.03
51	M	tert-Butylbenzene	1.187	1.190	-0.2	114	-0.04
52	M	1,2,4-Trimethylbenzene	1.056	1.036	2.0	112	-0.04
53	M	sec-Butylbenzene	1.612	1.650	-2.3	117	-0.04
54	M	1,3-Dichlorobenzene	0.625	0.608	2.7	108	-0.04
55	M	4-Isopropyltoluene	1.296	1.303	-0.6	114	-0.04
56	M	1,4-Dichlorobenzene	0.612	0.594	3.1	107	-0.04
57	S	1,2-Dichlorobenzene-d4	0.338	0.318	6.0	102	-0.04
58	M	1,2-Dichlorobenzene	0.494	0.471	4.6	103	-0.04
59	M	n-Butylbenzene	1.315	1.330	-1.1	115	-0.04
60	M	1,2-Dibromo-3-chloropropane	0.034	0.030	10.2	96	-0.04
61	M	1,2,4-Trichlorobenzene	0.400	0.362	9.7	96	-0.05
62	M	Hexachlorobutadiene	0.348	0.322	7.4	105	-0.05
63	M	Naphthalene	0.387	0.343	11.2	92	-0.05
64	M	1,2,3-Trichlorobenzene	0.292	0.255	12.5	90	-0.06
65		Methyl-tert butyl ether	0.306	0.288	6.0	101	-0.01
66		tert-Butyl Alcohol	0.005	0.005	0.1	104	-0.03

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

Quantitation Report

078

Data File : d:\hpchem\1\data\c0398.d
Acq On : 30 Nov 95 6:54 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 10:47 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.20	96	1908108	5.00	ug/L		-0.01
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.42	95	992890	4.82	ug/L		96.39%
57) 1,2-Dichlorobenzene-d4	22.21	152	607158	4.70	ug/L		94.01%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.53	85	1167768	11.31	ug/L		99
3) Chloromethane	3.96	50	863543	11.00	ug/L		99
4) Vinyl chloride	4.17	62	974248	11.16	ug/L		100
5) Bromomethane	4.86	94	663053	10.93	ug/L		98
6) Chloroethane	5.10	64	596284	12.29	ug/L		99
7) Trichlorofluoromethane	5.70	101	1618863	10.74	ug/L		99
8) 1,1-Dichloroethene	6.82	96	950663	10.52	ug/L		97
9) Methylene chloride	7.82	84	1072915	11.88	ug/L		99
10) trans-1,2-Dichloroethene	8.35	96	1061387	10.29	ug/L		100
12) 1,1-Dichloroethane	9.15	63	1996022	10.30	ug/L		99
13) 2,2-Dichloropropane	10.20	77	1645019	10.16	ug/L		98
14) cis-1,2-Dichloroethene	10.21	96	1024800	10.11	ug/L		99
16) Bromochloromethane	10.63	128	421725	9.59	ug/L		94
17) Chloroform	10.78	83	1802967	10.07	ug/L		99
18) 1,1,1-Trichloroethane	11.08	97	1736396	10.02	ug/L		99
19) Carbon tetrachloride	11.37	117	1630697	9.95	ug/L		99
20) 1,1-Dichloropropene	11.36	75	1669008	10.32	ug/L		99
21) Benzene	11.72	78	3304079	9.95	ug/L		99
22) 1,2-Dichloroethane	11.74	62	709536	9.54	ug/L		98
23) Trichloroethene	12.82	95	1375780	9.99	ug/L		99
24) 1,2-Dichloropropane	13.19	63	1176574	10.21	ug/L		100
25) Dibromomethane	13.39	93	492966	9.75	ug/L		95
26) Bromodichloromethane	13.65	83	1461464	9.80	ug/L		97
27) cis-1,3-Dichloropropene	14.40	75	1330510	9.89	ug/L		99
28) Toluene	14.97	92	2377379	10.15	ug/L		99
29) trans-1,3-Dichloropropene	15.33	75	895891	9.65	ug/L	m	50
30) 1,1,2-Trichloroethane	15.64	83	498359	10.00	ug/L		99
31) Tetrachloroethene	15.92	166	1625341	9.78	ug/L		99
32) 1,3-Dichloropropane	15.94	76	938707	9.95	ug/L		99
33) Dibromochloromethane	16.34	129	932975	9.41	ug/L		100
34) 1,2-Dibromoethane	16.55	107	702844	9.68	ug/L		99
35) Chlorobenzene	17.39	112	2690191	9.97	ug/L		99
36) 1,1,1,2-Tetrachloroethane	17.53	131	1101432	9.82	ug/L		99
37) Ethylbenzene	17.58	91	4832080	10.04	ug/L		100
38) Xylene (para & meta)	17.78	106	3698279	20.32	ug/L		98
39) Xylene (Ortho)	18.49	106	1683667	10.08	ug/L		97
40) Styrene	18.51	104	2586882	10.09	ug/L		97

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

Quantitation Report

Data File : d:\hpchem\1\data\c0398.d
Acq On : 30 Nov 95 6:54 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 10:47 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.85	173	493751	9.08	ug/L		96
42)	Isopropylbenzene	19.14	105	4703468	10.11	ug/L	m	0
44)	Bromobenzene	19.70	156	1168280	9.69	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.66	83	621348	10.18	ug/L		100
46)	1,2,3-Trichloropropane	19.74	75	612602	9.77	ug/L	#	71
47)	n-Propylbenzene	19.87	91	6413778	10.10	ug/L		100
48)	2-Chlorotoluene	20.04	91	3605245	9.71	ug/L		100
49)	4-Chlorotoluene	20.23	91	4127446	9.98	ug/L		99
50)	1,3,5-Trimethylbenzene	20.19	105	4000170	9.92	ug/L		99
51)	tert-Butylbenzene	20.78	119	4541948	10.02	ug/L		99
52)	1,2,4-Trimethylbenzene	20.87	105	3952603	9.80	ug/L		99
53)	sec-Butylbenzene	21.18	105	6296034	10.23	ug/L		99
54)	1,3-Dichlorobenzene	21.40	146	2321068	9.73	ug/L		99
55)	4-Isopropyltoluene	21.44	119	4974406	10.06	ug/L		100
56)	1,4-Dichlorobenzene	21.56	146	2265070	9.69	ug/L		99
58)	1,2-Dichlorobenzene	22.24	146	1798514	9.54	ug/L		98
59)	n-Butylbenzene	22.19	91	5074312	10.11	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.66	75	115697	8.98	ug/L		97
61)	1,2,4-Trichlorobenzene	25.20	180	1379694	9.03	ug/L		99
62)	Hexachlorobutadiene	25.53	225	1229287	9.26	ug/L		99
63)	Naphthalene	25.67	128	1310442	8.88	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.17	180	973510	8.75	ug/L		99
65)	Methyl-tert butyl ether	8.39	73	1097455	9.40	ug/L		98
66)	tert-Butyl Alcohol	8.16	59	34348	19.97	ug/L		100

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

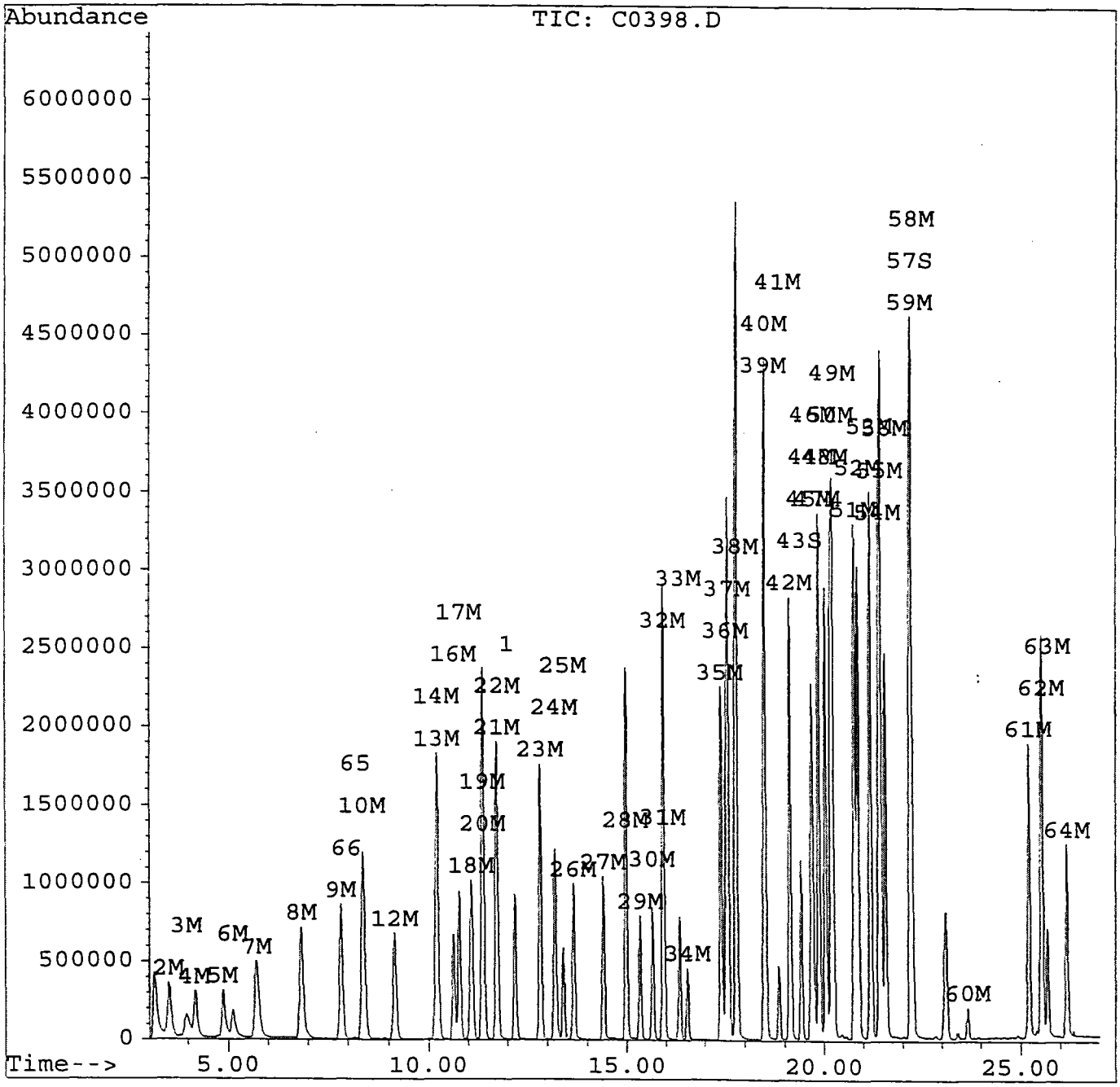
Quantitation Report

080

Data File : d:\hpchem\1\data\c0398.d
Acq On : 30 Nov 95 6:54 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 10:47 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

081

Data File : d:\hpchem\1\data\c0399.d
Acq On : 30 Nov 95 7:29 pm
Sample : 10 PPB QCS
Misc :
Quant Time: Dec 5 10:49 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.19	96	1861940	5.00	ug/L		-0.02
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.41	95	971579	4.83	ug/L		96.66%
57) 1,2-Dichlorobenzene-d4	22.21	152	614594	4.88	ug/L		97.52%
Target Compounds							Qvalue
2) Dichlorodifluoromethane	3.53	85	1027525	10.20	ug/L		99
3) Chloromethane	3.97	50	643764	8.41	ug/L		99
4) Vinyl chloride	4.16	62	845066	9.92	ug/L		97
5) Bromomethane	4.86	94	616791	10.42	ug/L		99
6) Chloroethane	5.09	64	493297	10.42	ug/L		99
7) Trichlorofluoromethane	5.69	101	1559843	10.60	ug/L		99
8) 1,1-Dichloroethene	6.80	96	964958	10.95	ug/L		96
9) Methylene chloride	7.80	84	1028635	11.67	ug/L		99
10) trans-1,2-Dichloroethene	8.35	96	1046127	10.39	ug/L		99
12) 1,1-Dichloroethane	9.13	63	1957599	10.35	ug/L		100
13) 2,2-Dichloropropane	10.19	77	1600816	10.13	ug/L		100
14) cis-1,2-Dichloroethene	10.20	96	1016263	10.27	ug/L		99
16) Bromochloromethane	10.62	128	420241	9.80	ug/L		96
17) Chloroform	10.76	83	1748036	10.00	ug/L		100
18) 1,1,1-Trichloroethane	11.07	97	1686535	9.97	ug/L		99
19) Carbon tetrachloride	11.37	117	1587648	9.93	ug/L		99
20) 1,1-Dichloropropene	11.36	75	1706837	10.82	ug/L		99
21) Benzene	11.72	78	3075500	9.49	ug/L		100
22) 1,2-Dichloroethane	11.74	62	710366	9.79	ug/L		97
23) Trichloroethene	12.82	95	1363383	10.15	ug/L		100
24) 1,2-Dichloropropane	13.19	63	1155418	10.28	ug/L		100
25) Dibromomethane	13.38	93	483195	9.80	ug/L		94
26) Bromodichloromethane	13.65	83	1459345	10.02	ug/L		100
27) cis-1,3-Dichloropropene	14.39	75	1403601	10.70	ug/L		98
28) Toluene	14.97	92	2199065	9.62	ug/L		99
29) trans-1,3-Dichloropropene	15.33	75	910466	10.05	ug/L	m	50
30) 1,1,2-Trichloroethane	15.65	83	487771	10.03	ug/L		99
31) Tetrachloroethene	15.92	166	1587625	9.79	ug/L		98
32) 1,3-Dichloropropane	15.94	76	928740	10.09	ug/L		100
33) Dibromochloromethane	16.34	129	923760	9.54	ug/L		99
34) 1,2-Dibromoethane	16.54	107	702769	9.92	ug/L		98
35) Chlorobenzene	17.39	112	2554148	9.70	ug/L		98
36) 1,1,1,2-Tetrachloroethane	17.53	131	1077722	9.85	ug/L		98
37) Ethylbenzene	17.57	91	4444417	9.47	ug/L		100
38) Xylene (para & meta)	17.77	106	3424688	19.28	ug/L		98
39) Xylene (Ortho)	18.49	106	1584490	9.72	ug/L		96
40) Styrene	18.51	104	2450047	9.79	ug/L		96

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

Data File : d:\hpchem\1\data\c0399.d
Acq On : 30 Nov 95 7:29 pm
Sample : 10 PPB QCS
Misc :
Quant Time: Dec 5 10:49 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.85	173	489931	9.23	ug/L		99
42)	Isopropylbenzene	19.14	105	4763098	10.50	ug/L	m	0
44)	Bromobenzene	19.70	156	1093095	9.30	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.65	83	608574	10.22	ug/L		99
46)	1,2,3-Trichloropropane	19.73	75	584766	9.56	ug/L	#	83
47)	n-Propylbenzene	19.87	91	6038855	9.75	ug/L		99
48)	2-Chlorotoluene	20.04	91	3590088	9.91	ug/L		99
49)	4-Chlorotoluene	20.23	91	3948238	9.78	ug/L	m	98
50)	1,3,5-Trimethylbenzene	20.19	105	3636559	9.24	ug/L		98
51)	tert-Butylbenzene	20.77	119	4299501	9.72	ug/L		99
52)	1,2,4-Trimethylbenzene	20.87	105	3553748	9.03	ug/L		99
53)	sec-Butylbenzene	21.18	105	5965421	9.94	ug/L		100
54)	1,3-Dichlorobenzene	21.39	146	2219412	9.54	ug/L		99
55)	4-Isopropyltoluene	21.43	119	4689436	9.72	ug/L		100
56)	1,4-Dichlorobenzene	21.56	146	2178193	9.55	ug/L		100
58)	1,2-Dichlorobenzene	22.24	146	1749943	9.51	ug/L	m	0
59)	n-Butylbenzene	22.19	91	4701684	9.60	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.66	75	114021	9.07	ug/L		98
61)	1,2,4-Trichlorobenzene	25.21	180	1321309	8.86	ug/L		98
62)	Hexachlorobutadiene	25.53	225	1259342	9.73	ug/L		100
63)	Naphthalene	25.67	128	1233656	8.57	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.17	180	950600	8.75	ug/L		100

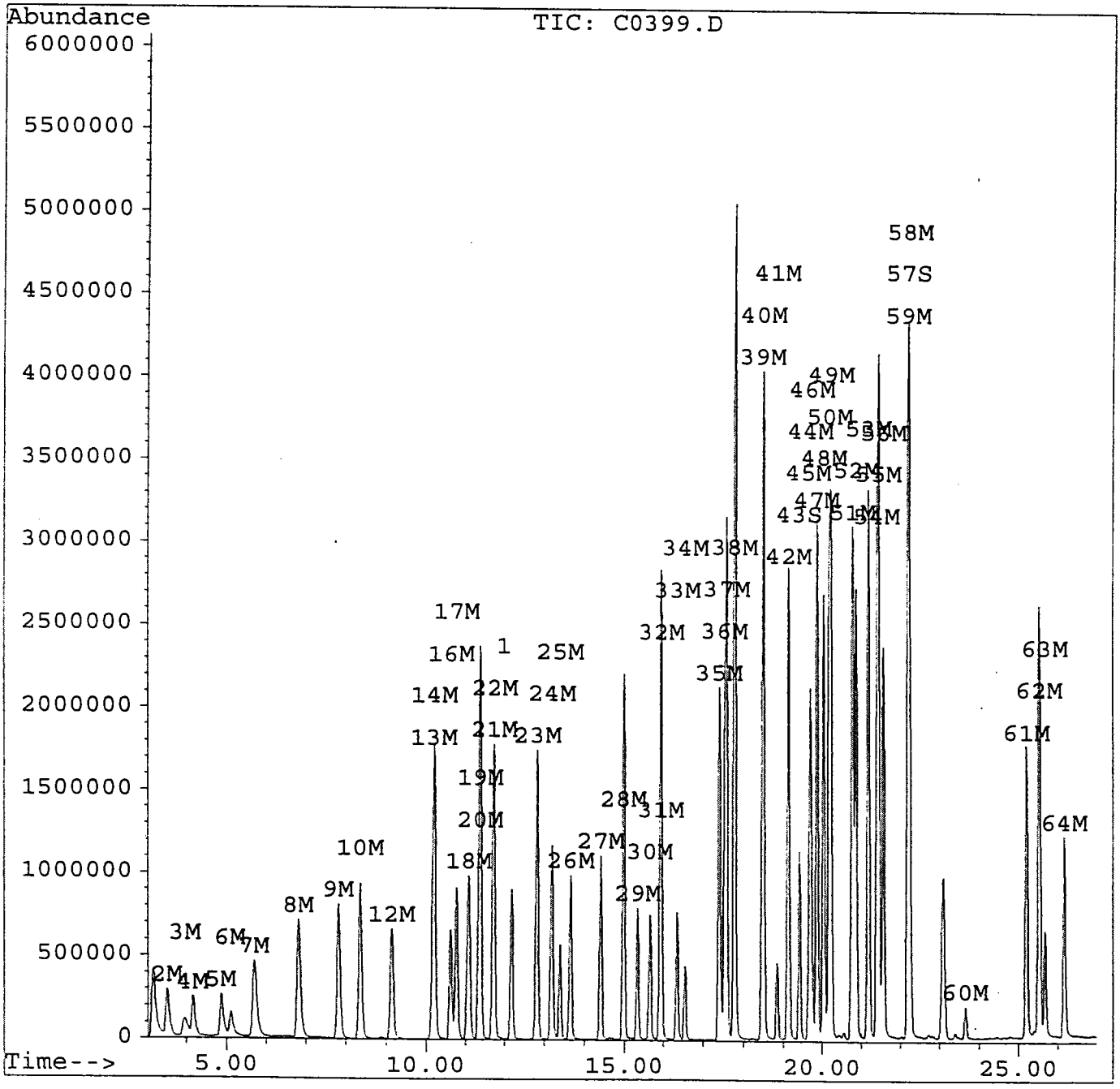
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0399.d
Acq On : 30 Nov 95 7:29 pm
Sample : 10 PPB QCS
Misc :
Quant Time: Dec 5 10:49 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0400.d
Acq On : 30 Nov 95 8:03 pm
Sample : 1 PPB STANDARD
Misc :
Quant Time: Dec 5 10:50 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.19	96	1819255	5.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.41	95	958200	4.88	ug/L	97.57%
57) 1,2-Dichlorobenzene-d4	22.21	152	609276	4.95	ug/L	98.94%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.52	85	113709	1.15	ug/L	99
3) Chloromethane	3.96	50	83488	1.12	ug/L	99
4) Vinyl chloride	4.17	62	92807	1.12	ug/L	95
5) Bromomethane	4.89	94	77896	1.35	ug/L	96
6) Chloroethane	5.11	64	58418	1.26	ug/L	98
7) Trichlorofluoromethane	5.70	101	156248	1.09	ug/L	94
8) 1,1-Dichloroethene	6.80	96	95500	1.11	ug/L	99
9) Methylene chloride	7.80	84	357913	4.16	ug/L	97
10) trans-1,2-Dichloroethene	8.35	96	103736	1.05	ug/L	97
12) 1,1-Dichloroethane	9.15	63	192259	1.04	ug/L	99
13) 2,2-Dichloropropane	10.19	77	158243	1.02	ug/L	99
14) cis-1,2-Dichloroethene	10.20	96	99720	1.03	ug/L	99
16) Bromochloromethane	10.62	128	43153	1.03	ug/L	95
17) Chloroform	10.76	83	175981	1.03	ug/L	99
18) 1,1,1-Trichloroethane	11.08	97	165717	1.00	ug/L	97
19) Carbon tetrachloride	11.37	117	156876	1.00	ug/L	97
20) 1,1-Dichloropropene	11.36	75	162080	1.05	ug/L	99
21) Benzene	11.71	78	337322	1.07	ug/L	99
22) 1,2-Dichloroethane	11.74	62	70627	1.00	ug/L	98
23) Trichloroethene	12.82	95	137143	1.04	ug/L	97
24) 1,2-Dichloropropane	13.18	63	115329	1.05	ug/L	100
25) Dibromomethane	13.38	93	49918	1.04	ug/L	92
26) Bromodichloromethane	13.65	83	143495	1.01	ug/L	96
27) cis-1,3-Dichloropropene	14.39	75	130709	1.02	ug/L	97
28) Toluene	14.97	92	248485	1.11	ug/L	95
29) trans-1,3-Dichloropropene	15.32	75	89865	1.02	ug/L	99
30) 1,1,2-Trichloroethane	15.65	83	49997	1.05	ug/L	97
31) Tetrachloroethene	15.92	166	163120	1.03	ug/L	97
32) 1,3-Dichloropropane	15.94	76	95582	1.06	ug/L	97
33) Dibromochloromethane	16.34	129	90813	0.96	ug/L	94
34) 1,2-Dibromoethane	16.55	107	71319	1.03	ug/L	96
35) Chlorobenzene	17.39	112	270011	1.05	ug/L	97
36) 1,1,1,2-Tetrachloroethane	17.53	131	113154	1.06	ug/L	95
37) Ethylbenzene	17.57	91	486840	1.06	ug/L	99
38) Xylene (para & meta)	17.77	106	373315	2.15	ug/L	98
39) Xylene (Ortho)	18.48	106	171077	1.07	ug/L	96
40) Styrene	18.50	104	256197	1.05	ug/L	99

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

Quantitation Report

Data File : d:\hpchem\1\data\c0400.d
Acq On : 30 Nov 95 8:03 pm
Sample : 1 PPB STANDARD
Misc :
Quant Time: Dec 5 10:50 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.85	173	48830	0.94	ug/L		100
42)	Isopropylbenzene	19.13	105	466568	1.05	ug/L		96
44)	Bromobenzene	19.69	156	121970	1.06	ug/L		97
45)	1,1,2,2-Tetrachloroethane	19.65	83	69392	1.19	ug/L		97
46)	1,2,3-Trichloropropane	19.73	75	69864	1.17	ug/L		98
47)	n-Propylbenzene	19.87	91	636114	1.05	ug/L		99
48)	2-Chlorotoluene	20.03	91	385251	1.09	ug/L		95
49)	4-Chlorotoluene	20.23	91	444092	1.13	ug/L	m	94
50)	1,3,5-Trimethylbenzene	20.18	105	407954	1.06	ug/L		97
51)	tert-Butylbenzene	20.78	119	460494	1.07	ug/L		98
52)	1,2,4-Trimethylbenzene	20.87	105	420818	1.09	ug/L		98
53)	sec-Butylbenzene	21.18	105	628098	1.07	ug/L		98
54)	1,3-Dichlorobenzene	21.39	146	243318	1.07	ug/L		97
55)	4-Isopropyltoluene	21.44	119	509934	1.08	ug/L		98
56)	1,4-Dichlorobenzene	21.55	146	244497	1.10	ug/L		99
58)	1,2-Dichlorobenzene	22.24	146	199489	1.11	ug/L		97
59)	n-Butylbenzene	22.19	91	526717	1.10	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.65	75	15343	1.25	ug/L		85
61)	1,2,4-Trichlorobenzene	25.20	180	160163	1.10	ug/L		98
62)	Hexachlorobutadiene	25.53	225	133525	1.06	ug/L		98
63)	Naphthalene	25.67	128	177215	1.26	ug/L		100
64)	1,2,3-Trichlorobenzene	26.17	180	122146	1.15	ug/L		99
65)	Methyl-tert butyl ether	8.39	73	120668	1.08	ug/L		96
66)	tert-Butyl Alcohol	8.14	59	1389	0.85	ug/L		100

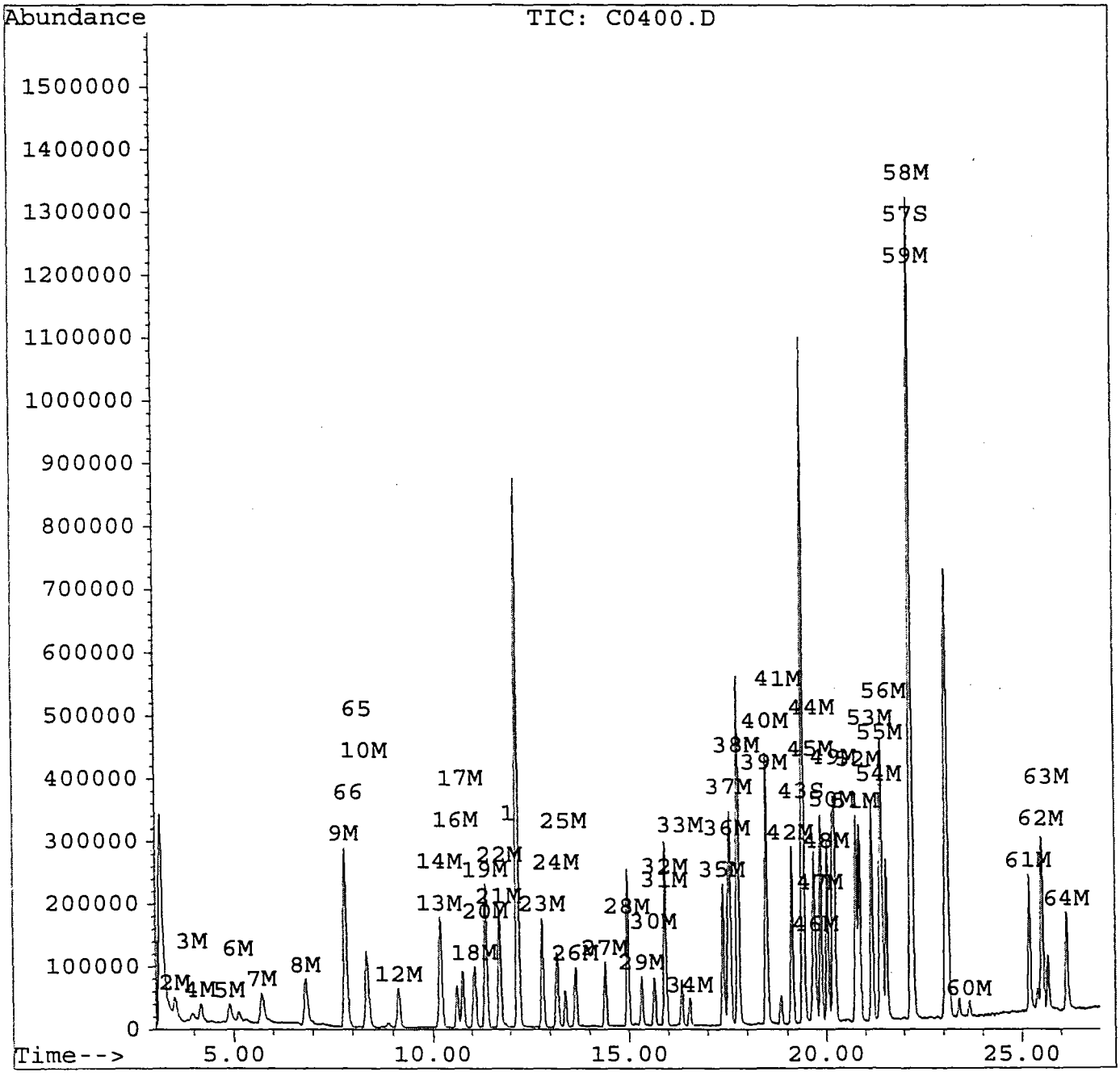
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0400.d
Acq On : 30 Nov 95 8:03 pm
Sample : 1 PPB STANDARD
Misc :
Quant Time: Dec 5 10:50 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

087

Lab Name : EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0453.D BFB Injection Date: 12/4/95

Instrument ID: 5972-INSTRUMENT 1 BFB Injection Time: 2010

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge: (Y/N) _____

m/e	ION ABUNDANCE CRITERIA	%RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	18.4
75	30.0 - 66.0% of mass 95	44.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.8
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	66.8
175	4.0 - 9.0% of mass 174	4.9 (7.3)1
176	93.0 - 101.0% of mass 174	65.1 (97.5)1
177	5.0 - 9.0% of mass 176	4.3 (6.6)2

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

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

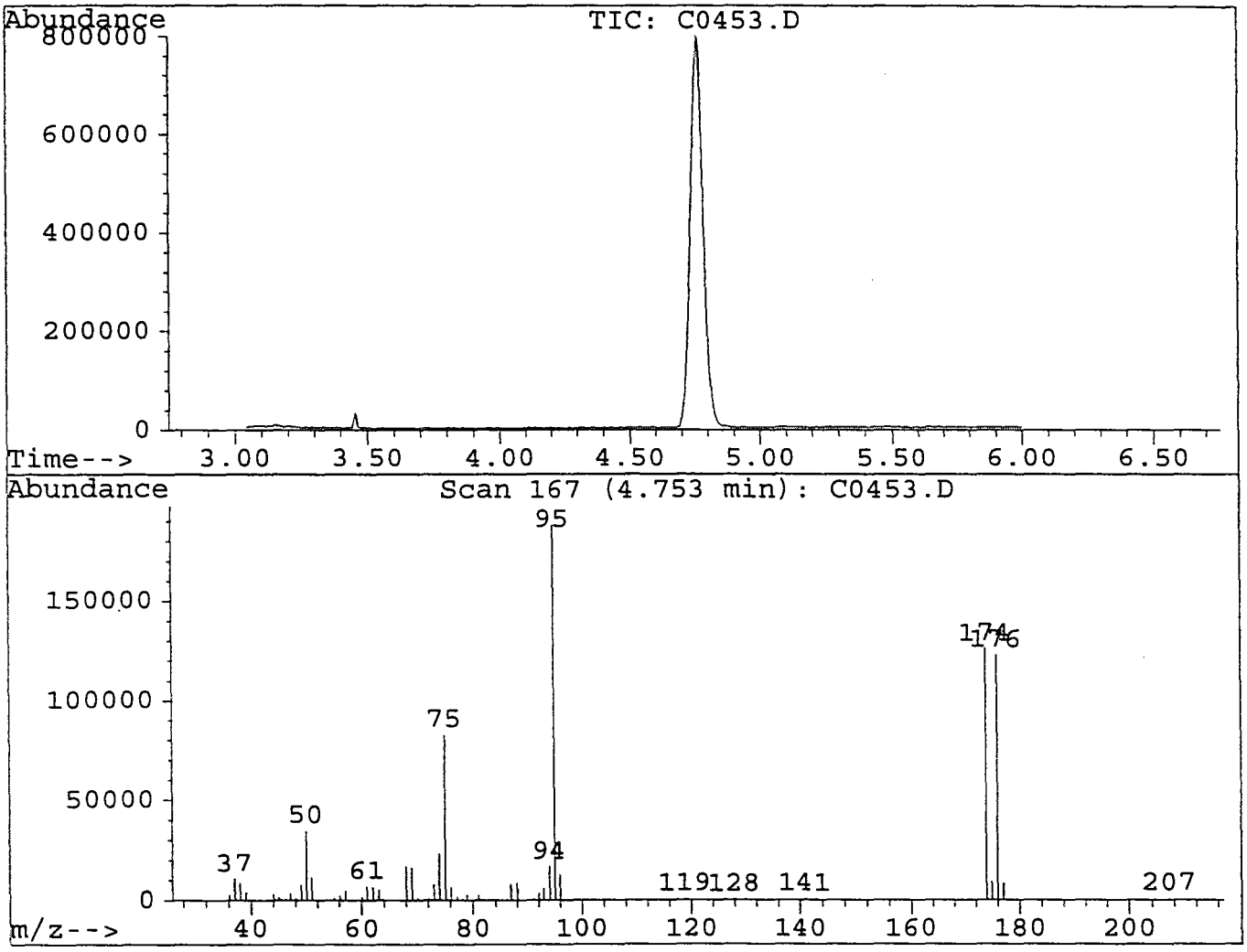
	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	10 STND	C0454.D	12/4/95	2023
02	VBLK01	M. BLANK	C0455.D	12/4/95	2057
03	9554340V	9554340V	C0456.D	12/4/95	2132
04	9554341V	9554341V	C0457.D	12/4/95	2206
05	9553656V	9553656V	C0458.D	12/4/95	2241
06	9554059V	9554059V	C0459.D	12/4/95	2315
07	9554103V	9554103V	C0460.D	12/4/95	2350
08	9554054V	9554054V	C0461.D	12/5/95	0024
09	9554052V	9554052V	C0462.D	12/5/95	0058
10	9554107V	9554107V	C0463.D	12/5/95	0133
11	9554108V	9554108V	C0464.D	12/5/95	0207
12	9554105V	9554105V	C0465.D	12/5/95	0241
13	9554106V	9554106V	C0466.D	12/5/95	0315
14	9554104V	9554104V	C0467.D	12/5/95	0350
15	10 QCS	10 QCS	C0468.D	12/5/95	0424
16					
17					
18					
19					
20					
21					
22					

CLPBFB

Data File : D:\HPCHEM\1\DATA\C0453.D
Acq On : 4 Dec 95 8:10 pm
Sample : BFB TUNE
Misc : 25 NG INJECTIOM

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

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



Peak Apex is scan: 167

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	18.4	34768	PASS
75	95	30	80	44.0	82888	PASS
95	95	100	100	100.0	188480	PASS
96	95	5	9	6.8	12808	PASS
173	174	0	2	0.0	0	PASS
174	95	50	100	66.8	125952	PASS
175	174	5	9	7.3	9149	PASS
176	174	95	101	97.5	122776	PASS
177	176	5	9	6.6	8155	PASS

C0453.D VOA524.M Tue Dec 05 12:37:44 1995 VOA

can 167 (4.753 min): C0453.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
36.10	2570	50.05	34768	70.05	1195	81.80	632
37.10	10776	51.05	11132	72.05	974	86.90	7978
38.10	8628	55.05	1118	73.05	8001	88.05	8476
39.10	4206	56.10	2333	74.05	23320	91.05	565
40.10	605	57.10	4682	75.05	82888	92.05	3416
43.10	568	60.10	1666	76.05	6602	92.95	5762
44.00	3022	61.00	7024	77.10	1754	94.05	16784
45.00	1529	62.00	6706	78.00	931	95.05	188480
47.05	3667	63.00	5343	78.90	2972	96.05	12808
48.05	1249	68.05	16960	80.00	696	103.90	599
49.05	7566	69.05	16191	80.90	2595	105.90	727

Scan 167 (4.753 min): C0453.D
BFB TUNE

m/z	abund.	m/z	abund.	m/z	abund.	m/z	abund.
116.85	590						
118.90	676						
127.90	546						
129.95	526						
140.90	808						
142.90	788						
173.95	125952						
174.95	9149						
175.95	122776						
176.95	8155						
207.00	1071						

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/4/95 Time: 2023

Lab File ID: C0454.D Init. Calib. Date(s): 11/21/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

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

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Dichlorodifluoromethane	0.271	0.227		16.2	30.0
Chloromethane	0.206	0.196		4.9	30.0
Vinyl chloride	0.229	0.227		0.9	30.0
Bromomethane	0.159	0.157		1.3	30.0
Chloroethane	0.127	0.143		-12.6	30.0
Trichlorofluoromethane	0.395	0.389		1.5	30.0
1,1-Dichloroethene	0.237	0.238		-0.4	30.0
Methylene chloride	0.237	0.248		-4.6	30.0
trans-1,2-Dichloroethene	0.270	0.271		-0.4	30.0
1,1-Dichloroethane	0.508	0.510		-0.4	30.0
2,2-Dichloropropane	0.424	0.403		5.0	30.0
cis-1,2-Dichloroethene	0.266	0.267		-0.4	30.0
Bromochloromethane	0.115	0.111		3.5	30.0
Chloroform	0.469	0.460		1.9	30.0
1,1,1-Trichloroethane	0.454	0.447		1.5	30.0
Carbon tetrachloride	0.429	0.418		2.6	30.0
1,1-Dichloropropene	0.424	0.423		0.2	30.0
Benzene	0.870	0.859		1.3	30.0
1,2-Dichloroethane	0.195	0.185		5.1	30.0
Trichloroethene	0.361	0.356		1.4	30.0
1,2-Dichloropropane	0.302	0.301		0.3	30.0
Dibromomethane	0.132	0.130		1.5	30.0
Bromodichloromethane	0.391	0.382		2.3	30.0
cis-1,3-Dichloropropene	0.352	0.344		2.3	30.0
Toluene	0.614	0.607		1.1	30.0
trans-1,3-Dichloropropene	0.243	0.235		3.3	30.0
1,1,2-Trichloroethane	0.131	0.130		0.8	30.0
Tetrachloroethene	0.435	0.421		3.2	30.0
1,3-Dichloropropane	0.247	0.246		0.4	30.0
Dibromochloromethane	0.260	0.251		3.5	30.0
1,2-Dibromoethane	0.000	0.000			30.0
Chlorobenzene	0.707	0.696		1.6	30.0
1,1,1,2-Tetrachloroethane	0.294	0.292		0.7	30.0
Ethylbenzene	1.261	1.238		1.8	30.0
Xylene (para & meta)	0.477	0.469		1.7	30.0
Xylene (Ortho)	0.438	0.434		0.9	30.0

7A

VOLATILE CONTINUING CALIBRATION CHECK

091

Lab Name: EMSL ANALYTICAL Contract: _____

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

Instrument ID: 5972-INSTRUMENT 1 Calibration Date: 12/4/95 Time: 2023

Lab File ID: C0454.D Init. Calib. Date(s): 11/21/95 _____

Heated Purge: (Y/N) N Init. Calib. Times: _____ _____

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

COMPOUND	$\overline{RRF}$	RRF10	MIN RRF	%D	MAX %D
Styrene	0.672	0.665		1.0	30.0
Bromoform	0.142	0.138		2.8	30.0
Isopropylbenzene	1.219	1.194		2.1	30.0
Bromobenzene	0.316	0.307		2.8	30.0
1,1,2,2-Tetrachloroethane	0.160	0.165		-3.1	30.0
1,2,3-Trichloropropane	0.164	0.160		2.4	30.0
n-Propylbenzene	1.664	1.655		0.5	30.0
2-Chlorotoluene	0.973	0.929		4.5	30.0
4-Chlorotoluene	1.084	1.079		0.5	30.0
1,3,5-Trimethylbenzene	1.057	1.018		3.7	30.0
tert-Butylbenzene	1.187	1.171		1.3	30.0
1,2,4-Trimethylbenzene	1.056	1.008		4.5	30.0
sec-Butylbenzene	1.612	1.600		0.7	30.0
1,3-Dichlorobenzene	0.625	0.601		3.8	30.0
4-Isopropyltoluene	1.296	1.287		0.7	30.0
1,4-Dichlorobenzene	0.612	0.588		3.9	30.0
1,2-Dichlorobenzene	0.494	0.475		3.8	30.0
n-Butylbenzene	1.315	1.314		0.1	30.0
1,2-Dibromo-3-chloropropane	0.034	0.031		8.8	30.0
1,2,4-Trichlorobenzene	0.400	0.371		7.3	30.0
Hexachlorobutadiene	0.348	0.329		5.5	30.0
Naphthalene	0.387	0.357		7.8	30.0
1,2,3-Trichlorobenzene	0.292	0.273		6.5	30.0
4-Bromofluorobenzene	0.540	0.529		2.0	30.0
1,2-Dichlorobenzene-d4	0.338	0.330		2.4	30.0

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C0454.D
Acq On : 4 Dec 95 8:23 pm
Sample : 10 PPB CHK STANDARD
Misc :

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

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 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	106	-0.03
2	M	Dichlorodifluoromethane	0.271	0.227	15.9	91	-0.03
3	M	Chloromethane	0.206	0.196	4.6	101	-0.04
4	M	Vinyl chloride	0.229	0.227	0.7	105	-0.03
5	M	Bromomethane	0.159	0.157	1.0	101	-0.03
6	M	Chloroethane	0.127	0.143	-12.2	110	-0.03
7	M	Trichlorofluoromethane	0.395	0.389	1.6	106	-0.04
8	M	1,1-Dichloroethene	0.237	0.238	-0.5	108	-0.03
9	M	Methylene chloride	0.237	0.248	-4.7	94	-0.03
10	M	trans-1,2-Dichloroethene	0.270	0.271	-0.2	107	-0.03
11		Hexane	0.000	0.000#	0.0	0#	-0.02
12	M	1,1-Dichloroethane	0.508	0.510	-0.5	106	-0.03
13	M	2,2-Dichloropropane	0.424	0.403	5.1	105	-0.03
14	M	cis-1,2-Dichloroethene	0.266	0.267	-0.4	103	-0.03
15		2-Butanone	0.000	0.000#	0.0	0#	-0.15
16	M	Bromochloromethane	0.115	0.111	3.3	95	-0.04
17	M	Chloroform	0.469	0.460	1.9	102	-0.03
18	M	1,1,1-Trichloroethane	0.454	0.447	1.6	104	-0.03
19	M	Carbon tetrachloride	0.429	0.418	2.6	103	-0.02
20	M	1,1-Dichloropropene	0.424	0.423	0.1	106	-0.03
21	M	Benzene	0.870	0.859	1.2	104	-0.03
22	M	1,2-Dichloroethane	0.195	0.185	5.1	94	-0.04
23	M	Trichloroethene	0.361	0.356	1.2	104	-0.03
24	M	1,2-Dichloropropane	0.302	0.301	0.4	100	-0.03
25	M	Dibromomethane	0.132	0.130	1.5	95	-0.03
26	M	Bromodichloromethane	0.391	0.382	2.3	98	-0.03
27	M	cis-1,3-Dichloropropene	0.352	0.344	2.4	98	-0.04
28	M	Toluene	0.614	0.607	1.1	101	-0.04
29	M	trans-1,3-Dichloropropene	0.243	0.235	3.3	95	-0.04
30	M	1,1,2-Trichloroethane	0.131	0.130	0.6	96	-0.03
31	M	Tetrachloroethene	0.435	0.421	3.2	103	-0.04
32	M	1,3-Dichloropropane	0.247	0.246	0.4	96	-0.04
33	M	Dibromochloromethane	0.260	0.251	3.4	94	-0.04
34	M	1,2-Dibromoethane	0.190	0.186	2.1	93	-0.04
35	M	Chlorobenzene	0.707	0.696	1.6	101	-0.04
36	M	1,1,1,2-Tetrachloroethane	0.294	0.292	0.6	98	-0.05
37	M	Ethylbenzene	1.261	1.238	1.8	102	-0.05
38	M	Xylene (para & meta)	0.477	0.469	1.7	102	-0.05
	M	Xylene (Ortho)	0.438	0.434	0.9	101	-0.04
40	M	Styrene	0.672	0.665	1.0	99	-0.04
41	M	Bromoform	0.142	0.138	3.4	90	-0.05
42	M	Isopropylbenzene	1.219	1.194	2.0	102	-0.04

(#) = Out of Range

Evaluate Continuing Calibration Report

Data File : D:\HPCHEM\1\DATA\C0454.D
Acq On : 4 Dec 95 8:23 pm
Sample : 10 PPB CHK STANDARD
Misc :

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

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

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

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
43	S	4-Bromofluorobenzene	0.540	0.529	1.9	100	-0.04
44	M	Bromobenzene	0.316	0.307	2.7	95	-0.05
45	M	1,1,2,2-Tetrachloroethane	0.160	0.165	-3.2	96	-0.04
46	M	1,2,3-Trichloropropane	0.164	0.160	2.5	93	-0.04
47	M	n-Propylbenzene	1.664	1.655	0.6	103	-0.05
48	M	2-Chlorotoluene	0.973	0.929	4.5	102	-0.04
49	M	4-Chlorotoluene	1.084	1.079	0.4	102	-0.05
50	M	1,3,5-Trimethylbenzene	1.057	1.018	3.7	99	-0.04
51	M	tert-Butylbenzene	1.187	1.171	1.4	100	-0.05
52	M	1,2,4-Trimethylbenzene	1.056	1.008	4.6	98	-0.05
53	M	sec-Butylbenzene	1.612	1.600	0.7	102	-0.05
54	M	1,3-Dichlorobenzene	0.625	0.601	3.8	96	-0.05
55	M	4-Isopropyltoluene	1.296	1.287	0.7	101	-0.05
56	M	1,4-Dichlorobenzene	0.612	0.588	4.1	95	-0.05
57	S	1,2-Dichlorobenzene-d4	0.338	0.330	2.6	95	-0.05
58	M	1,2-Dichlorobenzene	0.494	0.475	3.9	93	-0.05
59	M	n-Butylbenzene	1.315	1.314	0.1	102	-0.05
60	M	1,2-Dibromo-3-chloropropane	0.034	0.031	8.0	88	-0.05
61	M	1,2,4-Trichlorobenzene	0.400	0.371	7.4	88	-0.06
62	M	Hexachlorobutadiene	0.348	0.329	5.4	96	-0.06
63	M	Naphthalene	0.387	0.357	7.8	85	-0.06
64	M	1,2,3-Trichlorobenzene	0.292	0.273	6.4	86	-0.07
65		Methyl-tert butyl ether	0.306	0.286	6.6	89	-0.03
66		tert-Butyl Alcohol	0.005	0.004	1.7	92	-0.05

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

Quantitation Report

Data File : d:\hpchem\1\data\c0454.d
Acq On : 4 Dec 95 8:23 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 12:39 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.18	96	1707673	5.00	ug/L	-0.03
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.41	95	904193	4.90	ug/L	98.09%
57) 1,2-Dichlorobenzene-d4	22.20	152	563119	4.87	ug/L	97.42%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.51	85	776948	8.41	ug/L	98
3) Chloromethane	3.95	50	670138	9.54	ug/L	98
4) Vinyl chloride	4.15	62	775846	9.93	ug/L	100
5) Bromomethane	4.85	94	537025	9.90	ug/L	97
6) Chloroethane	5.08	64	487238	11.22	ug/L	100
7) Trichlorofluoromethane	5.67	101	1328067	9.84	ug/L	97
8) 1,1-Dichloroethene	6.80	96	812229	10.05	ug/L	98
9) Methylene chloride	7.80	84	846576	10.47	ug/L	97
10) trans-1,2-Dichloroethene	8.33	96	925667	10.02	ug/L	99
12) 1,1-Dichloroethane	9.13	63	1742579	10.05	ug/L	100
13) 2,2-Dichloropropane	10.18	77	1375360	9.49	ug/L	99
14) cis-1,2-Dichloroethene	10.19	96	911588	10.04	ug/L	99
16) Bromochloromethane	10.60	128	380605	9.67	ug/L	92
17) Chloroform	10.76	83	1571333	9.81	ug/L	100
18) 1,1,1-Trichloroethane	11.06	97	1526005	9.84	ug/L	99
19) Carbon tetrachloride	11.36	117	1428391	9.74	ug/L	100
20) 1,1-Dichloropropene	11.35	75	1445822	9.99	ug/L	99
21) Benzene	11.70	78	2934581	9.88	ug/L	100
22) 1,2-Dichloroethane	11.72	62	631670	9.49	ug/L	97
23) Trichloroethene	12.81	95	1217271	9.88	ug/L	99
24) 1,2-Dichloropropane	13.18	63	1027175	9.96	ug/L	100
25) Dibromomethane	13.38	93	445495	9.85	ug/L	98
26) Bromodichloromethane	13.64	83	1304784	9.77	ug/L	100
27) cis-1,3-Dichloropropene	14.38	75	1174214	9.76	ug/L	98
28) Toluene	14.96	92	2073327	9.89	ug/L	99
29) trans-1,3-Dichloropropene	15.32	75	803113	9.67	ug/L	100
30) 1,1,2-Trichloroethane	15.64	83	443493	9.94	ug/L	100
31) Tetrachloroethene	15.91	166	1438802	9.68	ug/L	97
32) 1,3-Dichloropropane	15.93	76	841399	9.96	ug/L	99
33) Dibromochloromethane	16.33	129	857382	9.66	ug/L	99
34) 1,2-Dibromoethane	16.54	107	636213	9.79	ug/L	97
35) Chlorobenzene	17.38	112	2377140	9.84	ug/L	100
36) 1,1,1,2-Tetrachloroethane	17.52	131	997221	9.94	ug/L	98
37) Ethylbenzene	17.56	91	4227403	9.82	ug/L	99
38) Xylene (para & meta)	17.77	106	3201975	19.65	ug/L	99
39) Xylene (Ortho)	18.48	106	1481807	9.91	ug/L	98
40) Styrene	18.50	104	2271536	9.90	ug/L	97

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

Quantitation Report

Data File : d:\hpchem\1\data\c0454.d
Acq On : 4 Dec 95 8:23 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 12:39 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.84	173	469797	9.66	ug/L		99
42)	Isopropylbenzene	19.13	105	4079109	9.80	ug/L	m	0
44)	Bromobenzene	19.68	156	1049082	9.73	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.65	83	563865	10.32	ug/L		99
46)	1,2,3-Trichloropropane	19.74	75	547139	9.75	ug/L	#	66
47)	n-Propylbenzene	19.86	91	5650696	9.94	ug/L		100
48)	2-Chlorotoluene	20.03	91	3172131	9.55	ug/L		98
49)	4-Chlorotoluene	20.22	91	3684800	9.96	ug/L		99
50)	1,3,5-Trimethylbenzene	20.18	105	3478382	9.63	ug/L		98
51)	tert-Butylbenzene	20.77	119	3998456	9.86	ug/L		99
52)	1,2,4-Trimethylbenzene	20.86	105	3442333	9.54	ug/L		99
53)	sec-Butylbenzene	21.17	105	5464748	9.93	ug/L		100
54)	1,3-Dichlorobenzene	21.39	146	2051990	9.62	ug/L		98
55)	4-Isopropyltoluene	21.43	119	4396113	9.93	ug/L		100
56)	1,4-Dichlorobenzene	21.55	146	2006728	9.59	ug/L		99
58)	1,2-Dichlorobenzene	22.23	146	1621463	9.61	ug/L		98
59)	n-Butylbenzene	22.18	91	4487734	9.99	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.65	75	106109	9.20	ug/L		97
61)	1,2,4-Trichlorobenzene	25.19	180	1266024	9.26	ug/L		98
62)	Hexachlorobutadiene	25.52	225	1122799	9.46	ug/L		99
63)	Naphthalene	25.66	128	1218163	9.22	ug/L	m	0
64)	1,2,3-Trichlorobenzene	26.16	180	932285	9.36	ug/L		98
65)	Methyl-tert butyl ether	8.37	73	975933	9.34	ug/L		99
66)	tert-Butyl Alcohol	8.14	59	30263	19.66	ug/L		100

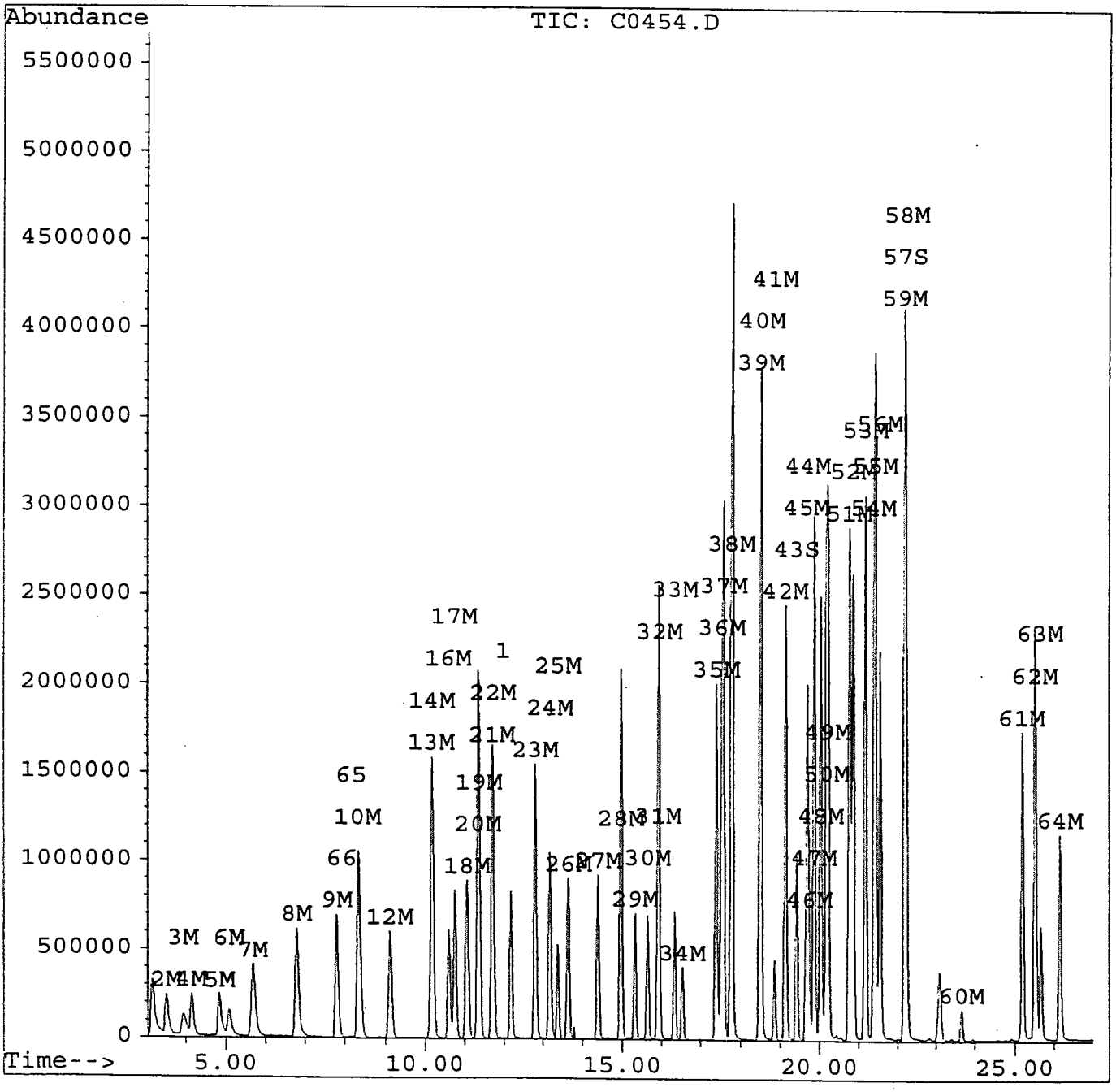
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0454.d
Acq On : 4 Dec 95 8:23 pm
Sample : 10 PPB CHK STANDARD
Misc :
Quant Time: Dec 5 12:39 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

097

Data File : d:\hpchem\1\data\c0468.d
Acq On : 5 Dec 95 4:24 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Dec 5 13:01 1995

Vial: 29
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.17	96	1619816	5.00	ug/L	-0.04
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.39	95	870507	4.98	ug/L	99.55%
57) 1,2-Dichlorobenzene-d4	22.19	152	560866	5.11	ug/L	102.30%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.50	85	853860	9.74	ug/L	99
3) Chloromethane	3.94	50	547453	8.22	ug/L	100
4) Vinyl chloride	4.13	62	713730	9.63	ug/L	98
5) Bromomethane	4.82	94	493949	9.60	ug/L	98
6) Chloroethane	5.07	64	427427	10.38	ug/L	97
7) Trichlorofluoromethane	5.67	101	1354244	10.58	ug/L	99
8) 1,1-Dichloroethene	6.78	96	845302	11.02	ug/L	99
9) Methylene chloride	7.78	84	807553	10.53	ug/L	97
10) trans-1,2-Dichloroethene	8.32	96	913464	10.43	ug/L	99
12) 1,1-Dichloroethane	9.11	63	1709394	10.39	ug/L	99
13) 2,2-Dichloropropane	10.17	77	1195723	8.70	ug/L	100
14) cis-1,2-Dichloroethene	10.18	96	904385	10.50	ug/L	97
16) Bromochloromethane	10.60	128	383767	10.28	ug/L	98
17) Chloroform	10.74	83	1535961	10.11	ug/L	100
18) 1,1,1-Trichloroethane	11.05	97	1481576	10.07	ug/L	100
19) Carbon tetrachloride	11.35	117	1409116	10.13	ug/L	98
20) 1,1-Dichloropropene	11.34	75	1488832	10.85	ug/L	99
21) Benzene	11.70	78	2712039	9.62	ug/L	99
22) 1,2-Dichloroethane	11.72	62	649296	10.28	ug/L	100
23) Trichloroethene	12.79	95	1203998	10.30	ug/L	100
24) 1,2-Dichloropropane	13.17	63	1025008	10.48	ug/L	99
25) Dibromomethane	13.36	93	450033	10.49	ug/L	95
26) Bromodichloromethane	13.63	83	1323233	10.45	ug/L	99
27) cis-1,3-Dichloropropene	14.38	75	1229511	10.77	ug/L	99
28) Toluene	14.96	92	1936808	9.74	ug/L	100
29) trans-1,3-Dichloropropene	15.31	75	807638	10.25	ug/L	100
30) 1,1,2-Trichloroethane	15.63	83	445503	10.53	ug/L	99
31) Tetrachloroethene	15.90	166	1405800	9.97	ug/L	98
32) 1,3-Dichloropropane	15.92	76	854921	10.67	ug/L	100
33) Dibromochloromethane	16.32	129	874482	10.39	ug/L	100
34) 1,2-Dibromoethane	16.53	107	649092	10.53	ug/L	98
35) Chlorobenzene	17.38	112	2296993	10.02	ug/L	98
36) 1,1,1,2-Tetrachloroethane	17.52	131	982097	10.32	ug/L	98
37) Ethylbenzene	17.56	91	3920708	9.60	ug/L	100
38) Xylene (para & meta)	17.76	106	3020063	19.54	ug/L	100
39) Xylene (Ortho)	18.47	106	1417505	9.99	ug/L	96
40) Styrene	18.49	104	2190811	10.06	ug/L	99

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

Quantitation Report

Data File : d:\hpchem\1\data\c0468.d
Acq On : 5 Dec 95 4:24 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Dec 5 13:01 1995

Vial: 29
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.83	173	474348	10.28	ug/L		97
42)	Isopropylbenzene	19.11	105	4203986	10.65	ug/L	m	0
44)	Bromobenzene	19.68	156	998971	9.77	ug/L		99
45)	1,1,2,2-Tetrachloroethane	19.64	83	575054	11.10	ug/L		99
46)	1,2,3-Trichloropropane	19.72	75	541323	10.17	ug/L	#	78
47)	n-Propylbenzene	19.86	91	5352452	9.93	ug/L		99
48)	2-Chlorotoluene	20.02	91	3024513	9.60	ug/L		99
49)	4-Chlorotoluene	20.22	91	3489442	9.94	ug/L		100
50)	1,3,5-Trimethylbenzene	20.17	105	3232976	9.44	ug/L		99
51)	tert-Butylbenzene	20.76	119	3827957	9.95	ug/L		97
52)	1,2,4-Trimethylbenzene	20.85	105	3143843	9.19	ug/L		98
53)	sec-Butylbenzene	21.16	105	5270040	10.09	ug/L		100
54)	1,3-Dichlorobenzene	21.38	146	2001692	9.89	ug/L		99
55)	4-Isopropyltoluene	21.42	119	4136549	9.85	ug/L		99
56)	1,4-Dichlorobenzene	21.54	146	1998479	10.07	ug/L		99
58)	1,2-Dichlorobenzene	22.23	146	1602625	10.01	ug/L		97
59)	n-Butylbenzene	22.17	91	4095167	9.61	ug/L		99
60)	1,2-Dibromo-3-chloropropan	23.64	75	109329	9.99	ug/L		95
61)	1,2,4-Trichlorobenzene	25.19	180	1209053	9.32	ug/L		99
62)	Hexachlorobutadiene	25.51	225	1125465	9.99	ug/L		100
63)	Naphthalene	25.66	128	1705947	13.62	ug/L		100
64)	1,2,3-Trichlorobenzene	26.15	180	894566	9.47	ug/L		99

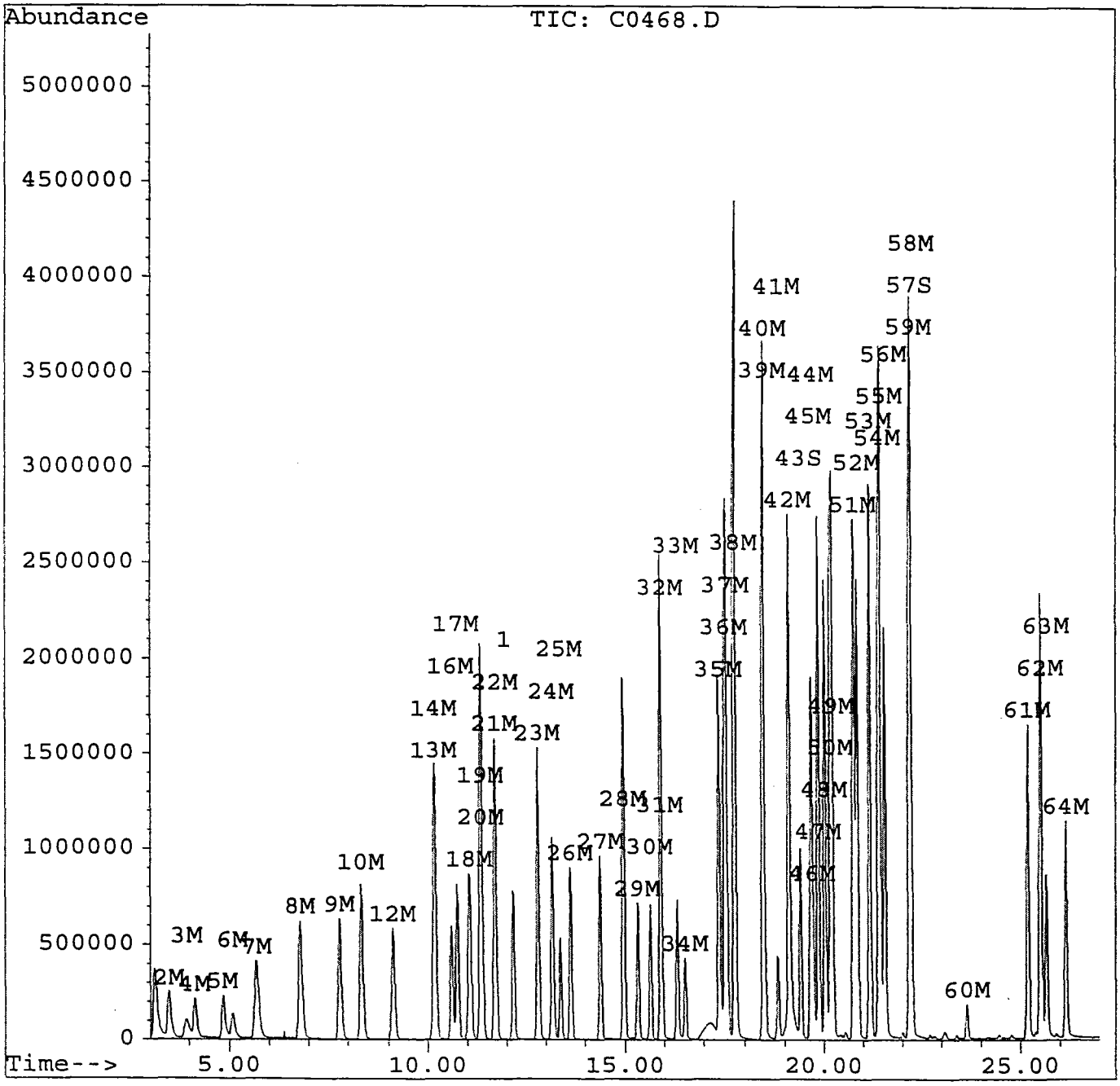
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0468.d
Acq On : 5 Dec 95 4:24 am
Sample : 10 PPB QCS
Misc : 25 ML
Quant Time: Dec 5 13:01 1995

Vial: 29
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C0398.D Date Analyzed: 11/30/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 1854

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1908108	12.20				
	UPPER LIMIT	3816216	12.70				
	LOWER LIMIT	954054	11.70				
	SAMPLE NO.						
01	10 QCS	1861940	12.19				
02	1 STND	1819255	12.19				
03	VBLK01	1791267	12.19				
04	9554057V	1784652	12.19				
05	9554058V	1746725	12.19				
06	9554055V	1763008	12.19				
07	9554056V	1800135	12.20				
08	9554053V	1781968	12.19				
09	9554056MS	1749772	12.21				
10	9554056MSD	1750948	12.22				
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

101

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID (Standard): C0454.D Date Analyzed: 12/4/95

Instrument ID: 5972-INSTRUMENT 1 Time Analyzed: 2023

GC Column: DB-624 X 75M ID: 0.53 (mm) Heated Purge (Y/N) N

		IS1 (FBZ) AREA #	RT #	AREA #	RT #	AREA #	RT #
	8 HOUR STD	1707673	12.18				
	UPPER LIMIT	3415346	12.68				
	LOWER LIMIT	853837	11.68				
	SAMPLE NO.						
01	VBLK01	1668088	12.18				
02	9554340V	1716809	12.18				
03	9554341V	1715061	12.18				
04	9553656V	1715090	12.18				
05	9554059V	1608685	12.18				
06	9554103V	1695901	12.18				
07	9554054V	1646190	12.18				
08	9554052V	1651924	12.18				
09	9554107V	1626148	12.17				
10	9554108V	1572615	12.17				
11	9554105V	1639970	12.17				
12	9554106V	1570318	12.18				
13	9554104V	1652821	12.17				
14	10 QCS	1619816	12.17				
15							
16							
17							
18							
19							
20							
21							
22							

IS1 (FBZ) = Fluorobenzene

AREA UPPER LIMIT = +30% of internal standard area
AREA LOWER LIMIT = -30% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw292625 102

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554052V

Sample wt/vol: 1.25 (g/mL) ML Lab File ID: C0462.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 20.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	10	U
74-87-3	Chloromethane	10	U
75-01-4	Vinyl chloride	10	U
74-83-9	Bromomethane	10	U
75-00-3	Chloroethane	10	U
75-69-4	Trichlorofluoromethane	10	U
75-35-4	1,1-Dichloroethene	10	U
75-09-2	Methylene chloride	36	B
156-60-65	trans-1,2-Dichloroethene	10	U
75-34-3	1,1-Dichloroethane	10	U
594-20-7	2,2-Dichloropropane	10	U
156-59-2	cis-1,2-Dichloroethene	10	U
74-97-1	Bromochloromethane	10	U
67-66-3	Chloroform	10	U
71-55-6	1,1,1-Trichloroethane	10	U
56-23-1	Carbon tetrachloride	10	U
563-58-6	1,1-Dichloropropene	10	U
71-43-2	Benzene	10	U
107-06-2	1,2-Dichloroethane	10	U
79-01-6	Trichloroethene	10	U
78-87-1	1,2-Dichloropropane	10	U
74-95-3	Dibromomethane	10	U
75-27-4	Bromodichloromethane	10	U
10061-01-1	cis-1,3-Dichloropropene	10	U
108-88-3	Toluene	10	U
10061-02-6	trans-1,3-Dichloropropene	10	U
79-00-1	1,1,2-Trichloroethane	10	U
127-18-4	Tetrachloroethene	10	U
142-28-9	1,3-Dichloropropane	10	U
124-48-1	Dibromochloromethane	10	U
106-93-4	1,2-Dibromomethane	10	U
108-90-7	Chlorobenzene	10	U
630-20-6	1,1,1,2-Tetrachloroethane	10	U

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw292625 103

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 1

Matrix: (soil/water) WATER Lab Sample ID: 9554052V

Sample wt/vol: 1.25 (g/mL) ML Lab File ID: C0462.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 20.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	10	U
1330-29-7	Xylene (total)	10	U
100-42-1	Styrene	10	U
75-25-2	Bromoform	10	U
98-82-8	Isopropylbenzene	10	U
108-86-1	Bromobenzene	10	U
79-34-1	1,1,2,2-Tetrachloroethane	10	U
96-18-4	1,2,3-Trichloropropane	10	U
103-65-1	n-Propylbenzene	10	U
95-49-8	2-Chlorotoluene	10	U
106-43-4	4-Chlorotoluene	10	U
108-67-8	1,3,5-Trimethylbenzene	10	U
98-06-6	tert-Butylbenzene	10	U
95-63-6	1,2,4-Trimethylbenzene	10	U
135-98-8	sec-Butylbenzene	10	U
541-73-1	1,3-Dichlorobenzene	10	U
99-87-6	4-Isopropyltoluene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
104-51-8	n-Butylbenzene	10	U
96-12-8	1,2-Dibromo-3-chloropropane	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
87-68-3	Hexachlorobutadiene	10	U
91-20-3	Naphthalene	10	U
87-61-6	1,2,3-Trichlorobenzene	10	U
1634-04-4	Methy-tertiary butyl ether	80	
75-65-0	tertiary-Butyl alcohol	860	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# MW1-292625 104

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

Project No. FT. MONMOUTH NJ Bldg: 2567 NJDEP MW#: 1 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554052V

Sample wt/vol: 1.25 (g/mL) ML Lab File ID: C0462.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 20.0

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

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	23.07	68	J
2.	Column Bleed	23.08	12	J
3.				
4.				
5.				
6.				
7.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0462.d
Acq On : 5 Dec 95 12:58 am
Sample : 9554052 BLDG 2567 MW-1
Misc : 1.25 ML 1:20
Quant Time: Dec 5 12:52 1995

Vial: 23
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.18	96	1651924	5.00	ug/L	-0.03
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.40	95	869350	4.87	ug/L	97.49%
57) 1,2-Dichlorobenzene-d4	22.19	152	543099	4.86	ug/L	97.13%
Target Compounds						Qvalue
9) Methylene chloride	7.78	84	139762	1.79	ug/L m	94
65) Methyl-tert butyl ether	8.37	73	407108	4.03	ug/L	98
66) tert-Butyl Alcohol	8.14	59	63746	42.81	ug/L	100

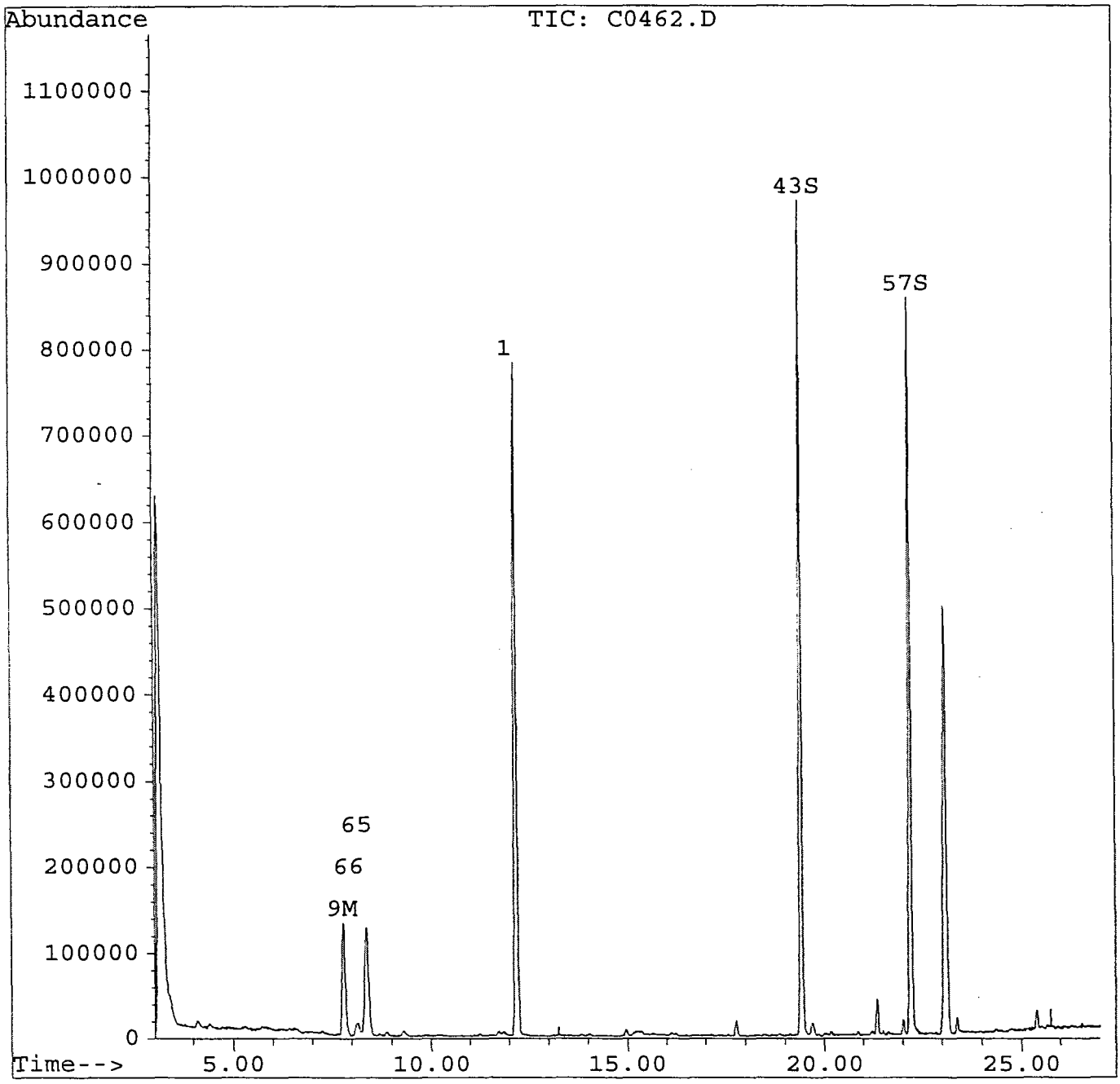
(#) = qualifier out of range (m) = manual integration

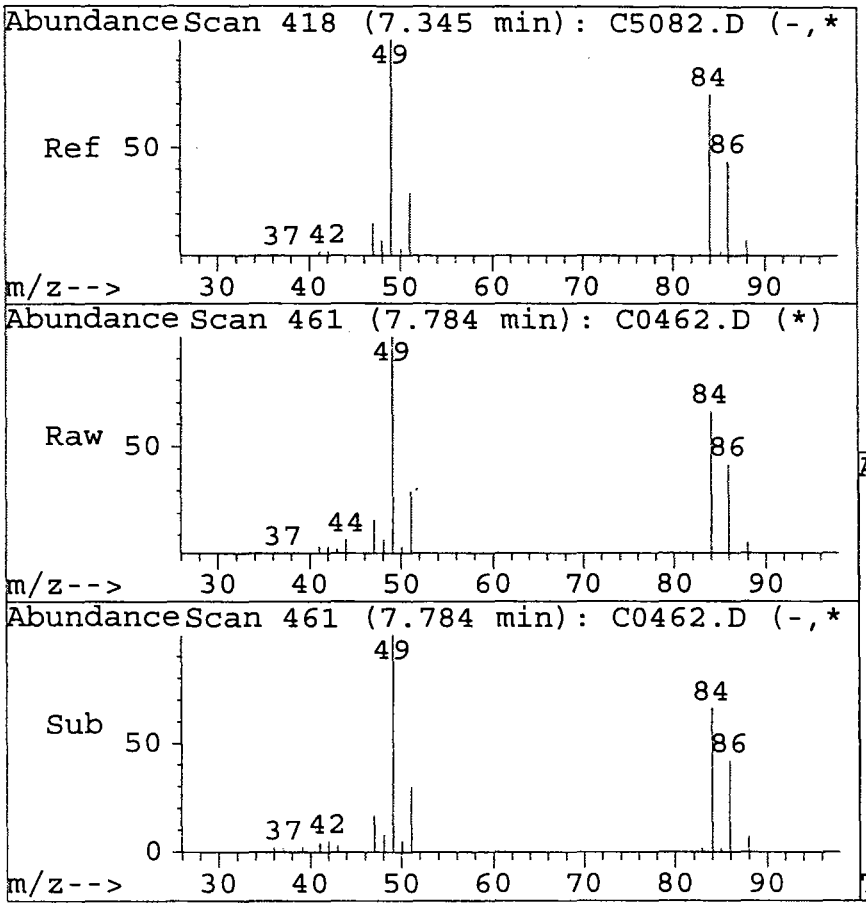
Quantitation Report

Data File : d:\hpchem\1\data\c0462.d
Acq On : 5 Dec 95 12:58 am
Sample : 9554052 BLDG 2567 MW-1
Misc : 1.25 ML 1:20
Quant Time: Dec 5 12:52 1995

Vial: 23
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

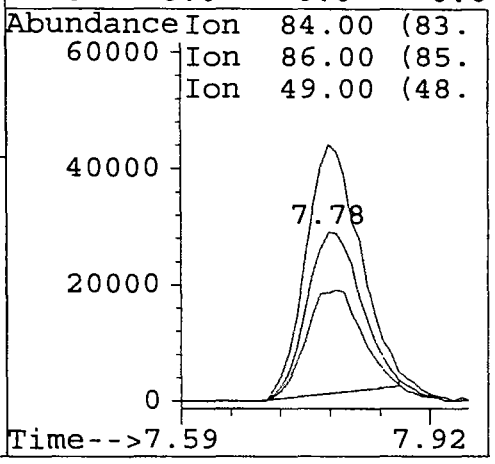


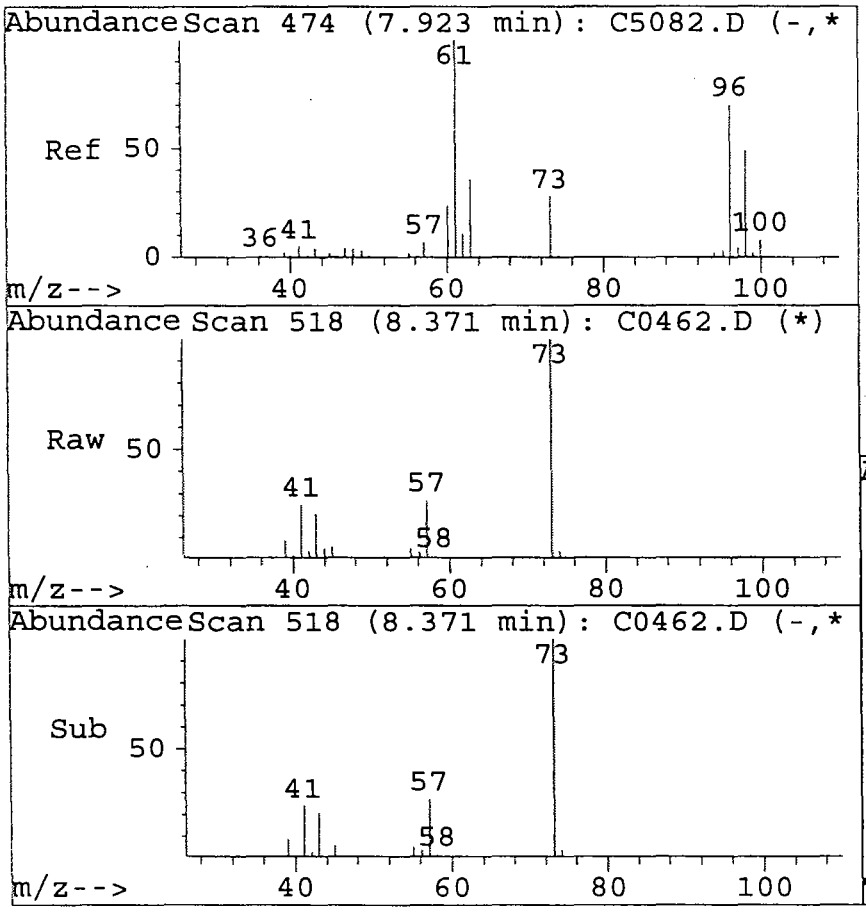


#9
Methylene chloride
Concen: 1.79 ug/L m
RT: 7.78 min Scan# 461
Delta R.T. -0.04 min
Lab File: c0462.d
Acq: 5 Dec 95 12:58 am

Tgt Ion:84 Resp: 139762

Ion	Ratio	Lower	Upper
84	100		
86	58.9	45.2	85.2
49	133.0	121.1	161.1
0	0.0	0.0	0.0

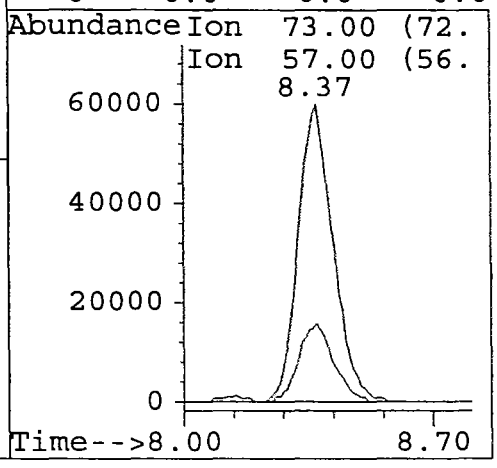


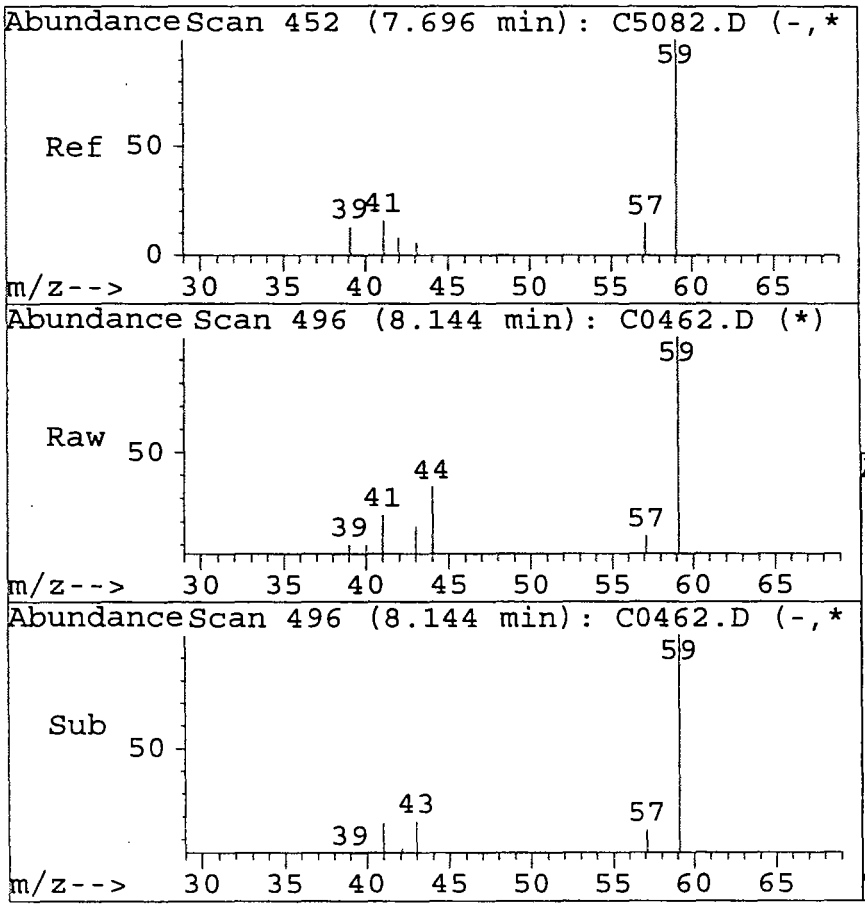


#65
Methyl-tert butyl ether
Concen: 4.03 ug/L
RT: 8.37 min Scan# 518
Delta R.T. -0.03 min
Lab File: c0462.d
Acq: 5 Dec 95 12:58 am

Tgt Ion:73 Resp: 407108

Ion	Ratio	Lower	Upper
73	100		
57	26.6	5.7	45.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



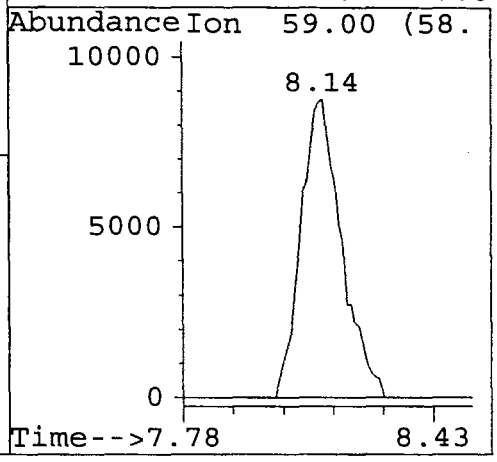


#66
tert-Butyl Alcohol

Concen: 42.81 ug/L
RT: 8.14 min Scan# 496
Delta R.T. -0.04 min
Lab File: c0462.d
Acq: 5 Dec 95 12:58 am

Tgt Ion:59 Resp: 63746

Ion	Ratio	Lower	Upper
59	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

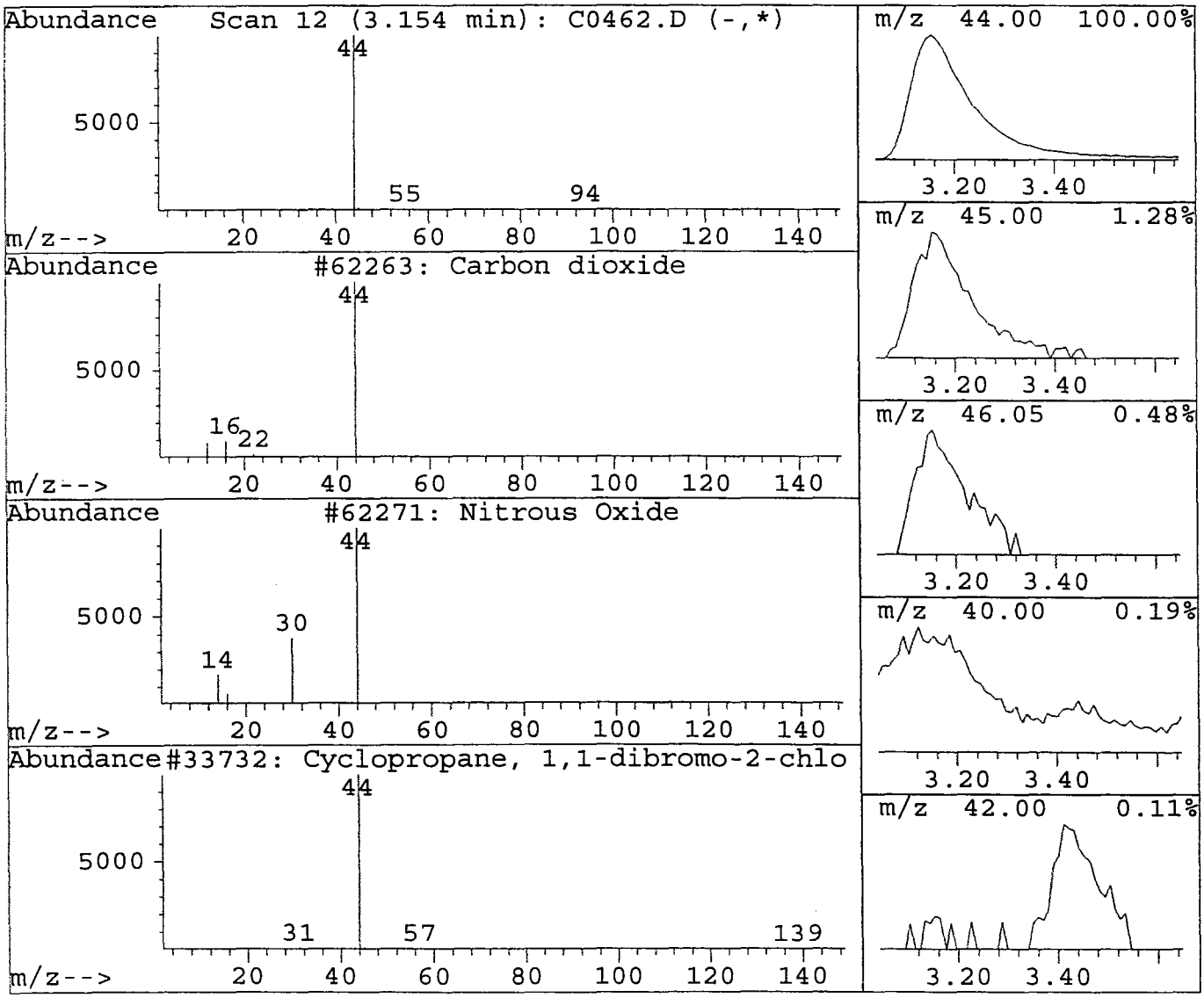
Data File : d:\hpchem\1\data\c0462.d
Acq On : 5 Dec 95 12:58 am
Sample : 9554052 BLDG 2567 MW-1
Misc : 1.25 ML 1:20

Vial: 23
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.15	7.15 ug/L	4977397	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Ethyne, fluoro-	35	002713-09-9	2



Library Search Compound Report

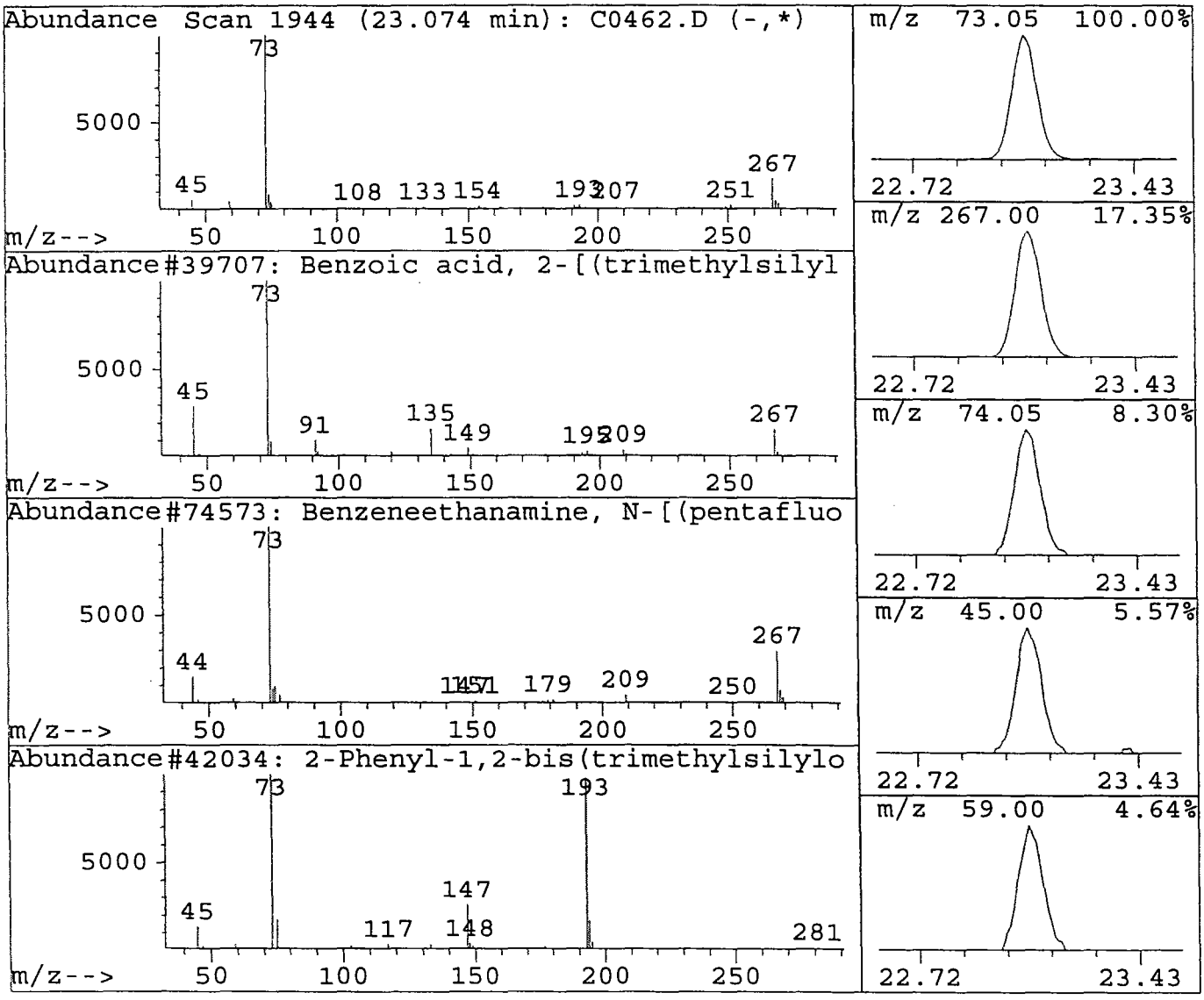
Data File : d:\hpchem\1\data\c0462.d
Acq On : 5 Dec 95 12:58 am
Sample : 9554052 BLDG 2567 MW-1
Misc : 1.25 ML 1:20

Vial: 23
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.07	3.42 ug/L	2378927	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	9
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	38
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	Acetaldehyde, O-methyloxime	289	033581-43-0	4
5	N-Ethylformamide	292	000627-45-2	3



Library Search Compound Report

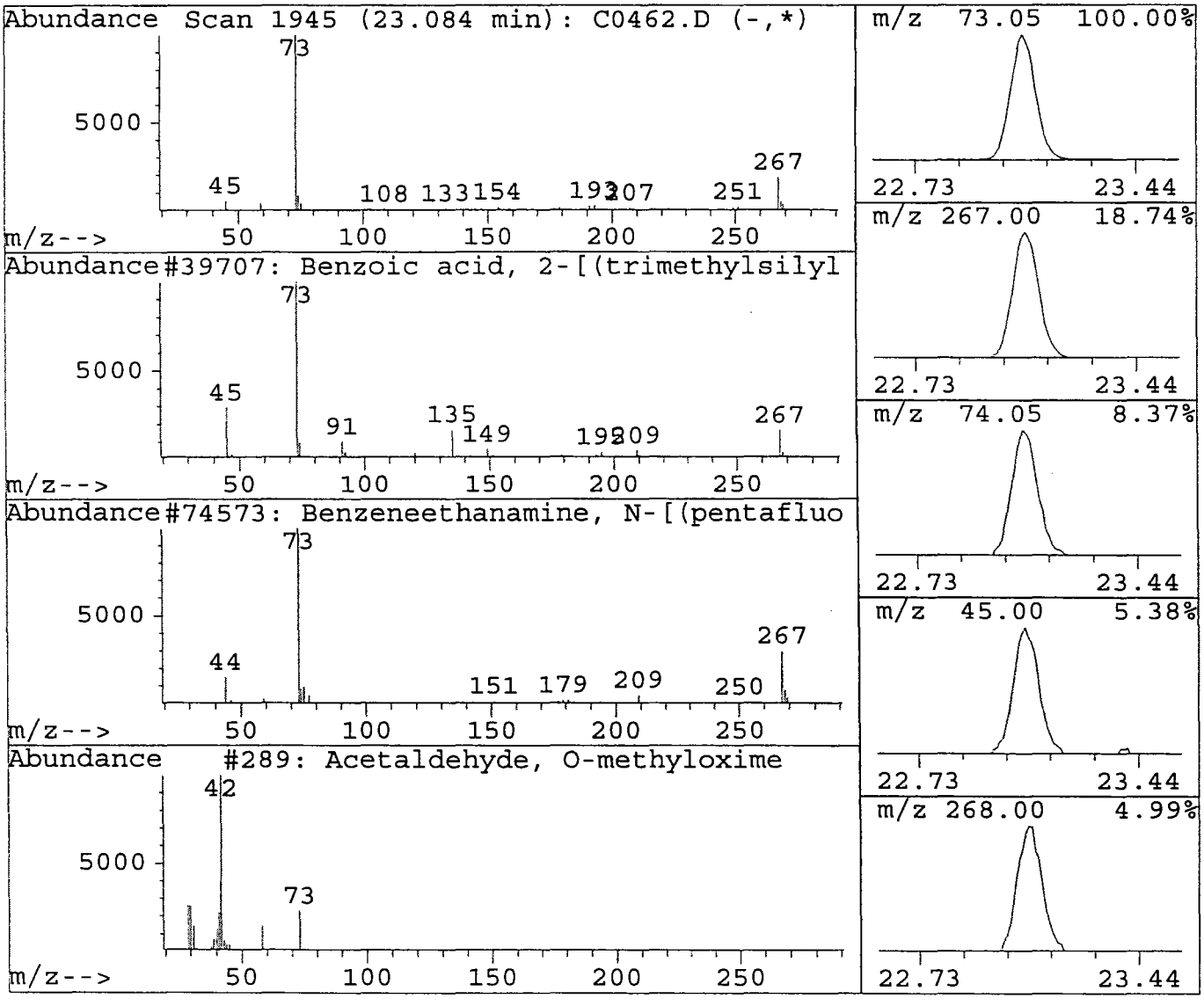
Data File : d:\hpchem\1\data\c0462.d
Acq On : 5 Dec 95 12:58 am
Sample : 9554052 BLDG 2567 MW-1
Misc : 1.25 ML 1:20

Vial: 23
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.08	0.61 ug/L	427366	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	33
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	25
3	Acetaldehyde, O-methyloxime	289	033581-43-0	4
4	N-Ethylformamide	292	000627-45-2	3
5	Benzeneacetic acid, trimethylsilyl	70091	002078-18-4	5



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw2-2926926

112

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9554053V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0406.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW2-2926926

113

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 2

Matrix: (soil/water) WATER Lab Sample ID: 9554053V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0406.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	.50	U
1330-29-7	Xylene (total)	3.6	
100-42-1	Styrene	.50	U
75-25-2	Bromoform	.50	U
98-82-8	Isopropylbenzene	1.0	
108-86-1	Bromobenzene	.50	U
79-34-1	1,1,2,2-Tetrachloroethane	.50	U
96-18-4	1,2,3-Trichloropropane	.50	U
103-65-1	n-Propylbenzene	1.1	
95-49-8	2-Chlorotoluene	.50	U
106-43-4	4-Chlorotoluene	.50	U
108-67-8	1,3,5-Trimethylbenzene	.60	
98-06-6	tert-Butylbenzene	.50	U
95-63-6	1,2,4-Trimethylbenzene	4.6	
135-98-8	sec-Butylbenzene	.50	U
541-73-1	1,3-Dichlorobenzene	.50	U
99-87-6	4-Isopropyltoluene	.50	U
106-46-7	1,4-Dichlorobenzene	.50	U
95-50-1	1,2-Dichlorobenzene	.50	U
104-51-8	n-Butylbenzene	.50	U
96-12-8	1,2-Dibromo-3-chloropropane	.50	U
120-82-1	1,2,4-Trichlorobenzene	.50	U
87-68-3	Hexachlorobutadiene	.50	U
91-20-3	Naphthalene	7.3	
87-61-6	1,2,3-Trichlorobenzene	.50	U
1634-04-4	Methy-tertiary butyl ether	1.60	
75-65-0	tertiary-Butyl alcohol	2.0	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# MW2-2426926 114

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: 2 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554053V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0406.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.18	1	J
2. 611-14-3	Benzene, 1-ethyl-2-methyl-	20.07	2	J
3. 526-73-8	Benzene, 1,2,3-trimethyl-	21.64	2	J
4.	Unknown Hydrocarbon	22.01	8	J
5. 1758-88-9	Benzene, 2-ethyl-1,4-dimethy	22.65	1	J
6. 535-77-3	Benzene, 1-methyl-3-(1-methy	22.85	1	J
7.	Unknown	23.06	3	J
8.	Unknown	23.09	3	J
9. 488-23-3	Benzene, 1,2,3,4-tetramethyl	23.58	1	J
10. 95-93-2	Benzene, 1,2,4,5-tetramethyl	23.68	1	J
11. 767-58-8	Indan, 1-methyl-	24.19	1	J
12. 824-22-6	1H-Indene, 2,3-dihydro-4-met	24.49	3	J
13.	Unknown	24.80	3	J
14.				
15.				
16.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML
Quant Time: Dec 7 13:36 1995

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.19	96	1781968	5.00	ug/L		-0.02
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.41	95	935513	4.86	ug/L		97.25%
57) 1,2-Dichlorobenzene-d4	22.21	152	595003	4.93	ug/L		98.65%
Target Compounds							Qvalue
9) Methylene chloride	7.80	84	49307	0.58	ug/L		99
38) Xylene (para & meta)	17.77	106	611693	3.60	ug/L		97
42) Isopropylbenzene	19.14	105	456127	1.05	ug/L		98
47) n-Propylbenzene	19.87	91	673701	1.14	ug/L		99
50) 1,3,5-Trimethylbenzene	20.19	105	211966	0.56	ug/L		100
52) 1,2,4-Trimethylbenzene	20.87	105	1748531	4.64	ug/L		99
63) Naphthalene	25.68	128	1002129	7.27	ug/L	m	0
65) Methyl-tert butyl ether	8.39	73	177296	1.63	ug/L		77

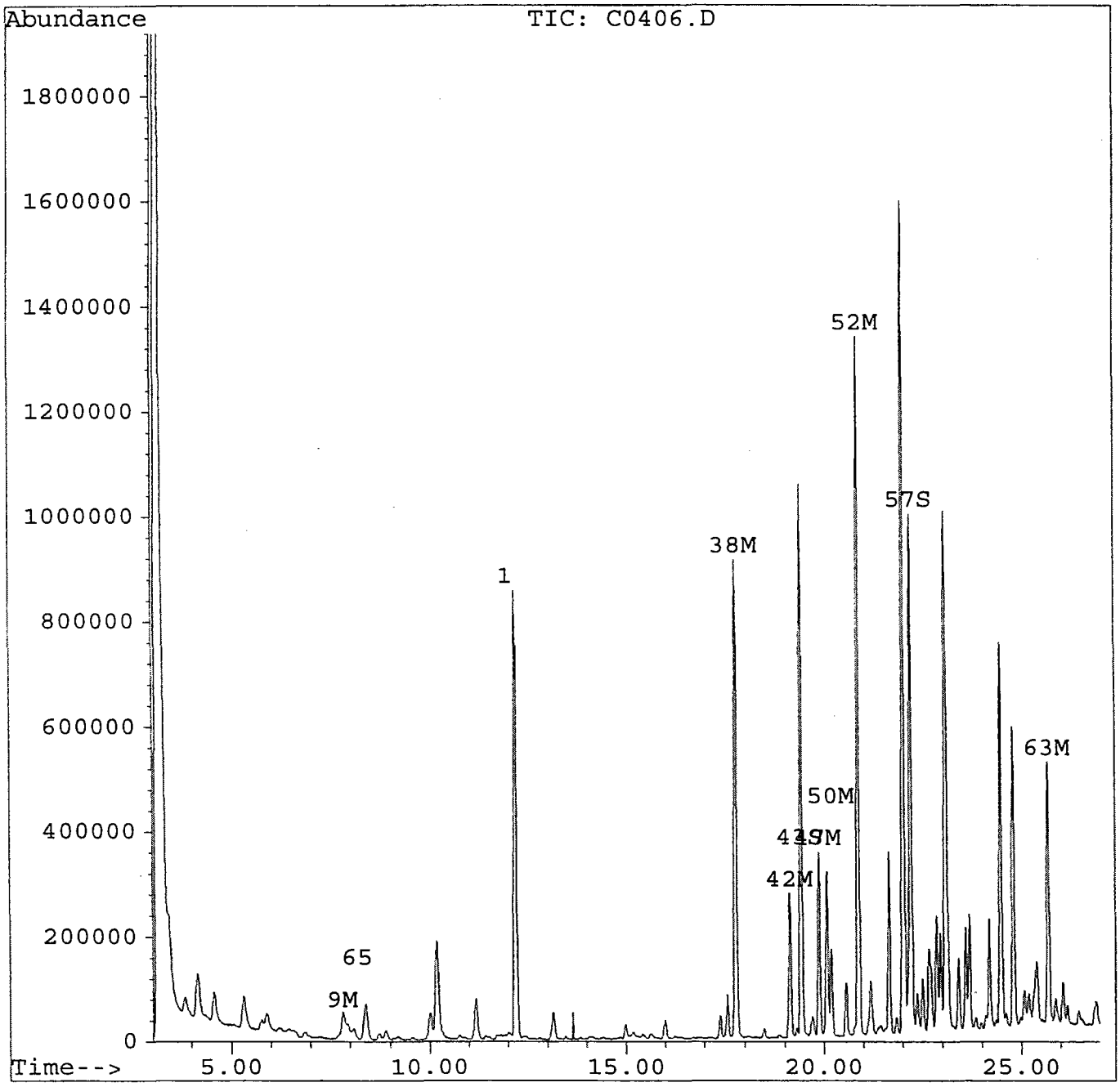
(#) = qualifier out of range (m) = manual integration

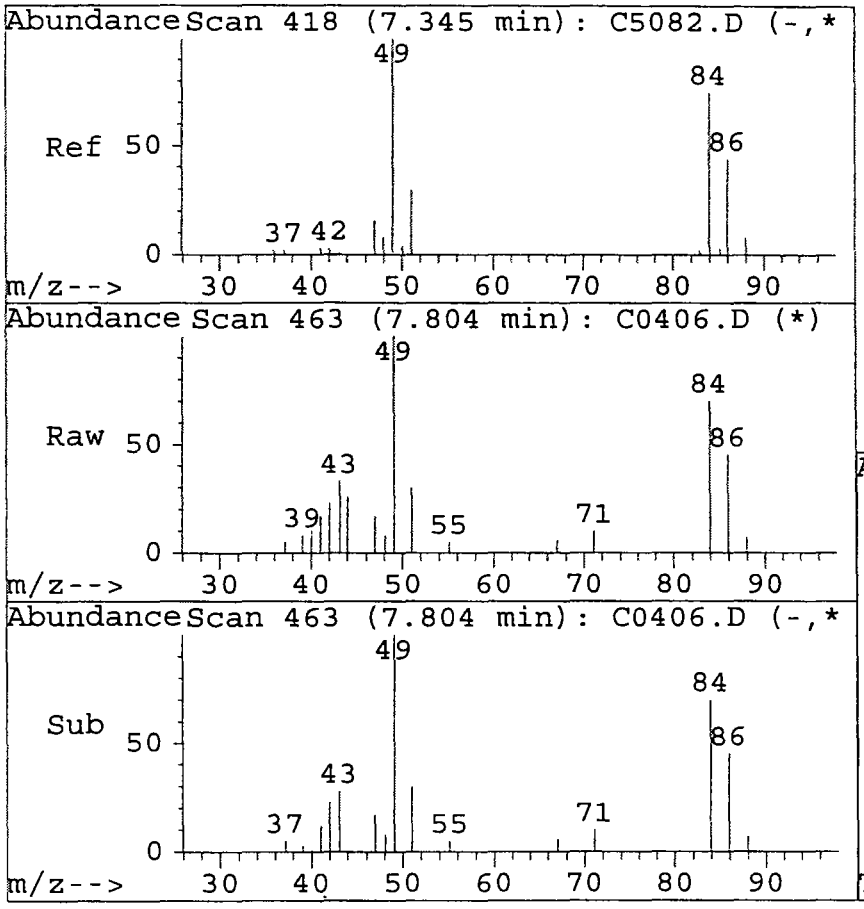
Quantitation Report

Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML
Quant Time: Dec 7 13:36 1995

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

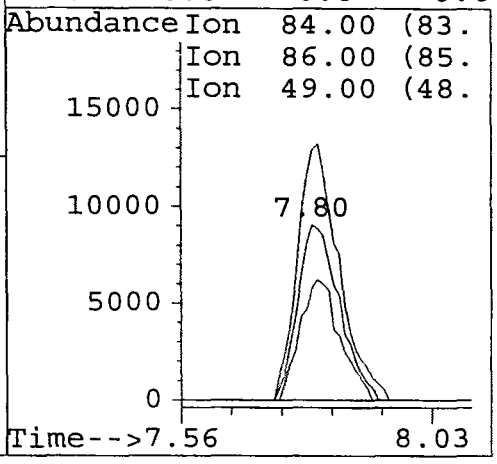


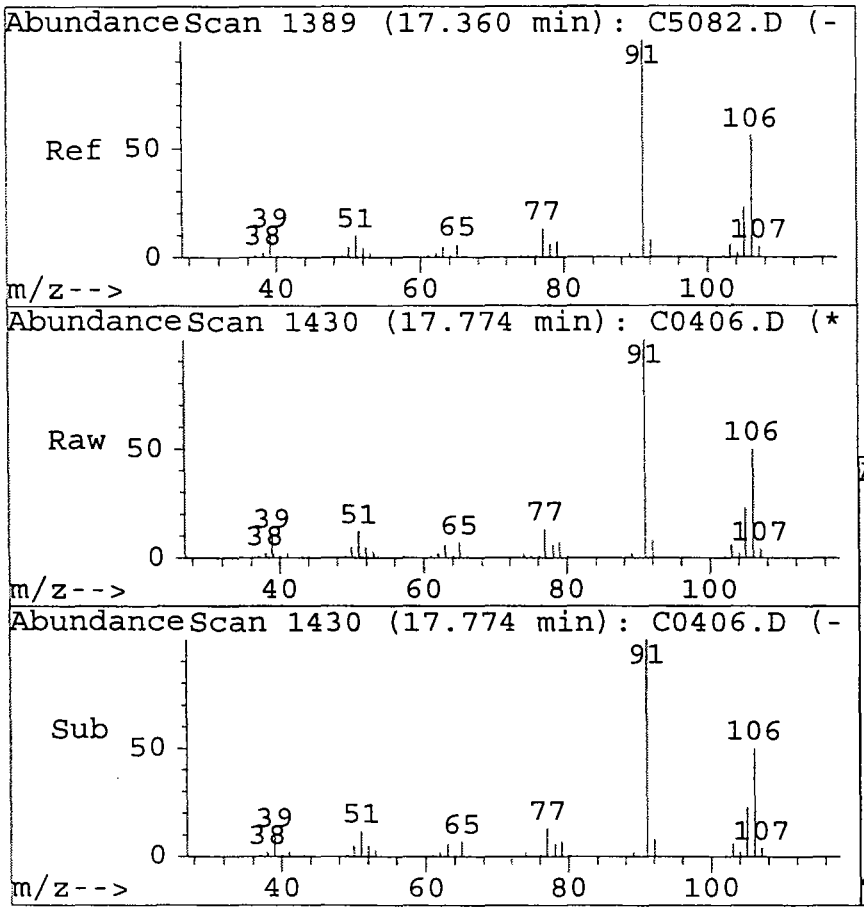


#9
Methylene chloride
Concen: 0.58 ug/L
RT: 7.80 min Scan# 463
Delta R.T. -0.02 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:84 Resp: 49307

Ion	Ratio	Lower	Upper
84	100		
86	63.6	45.2	85.2
49	142.3	121.1	161.1
0	0.0	0.0	0.0

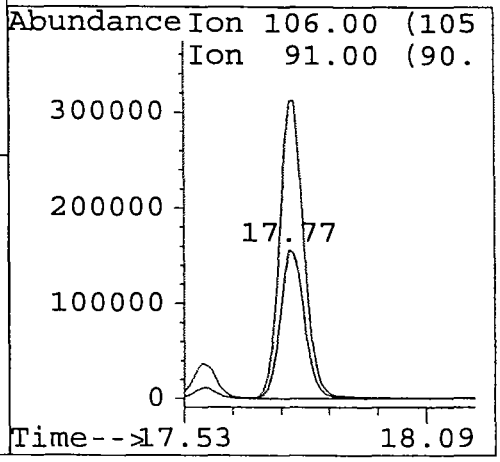


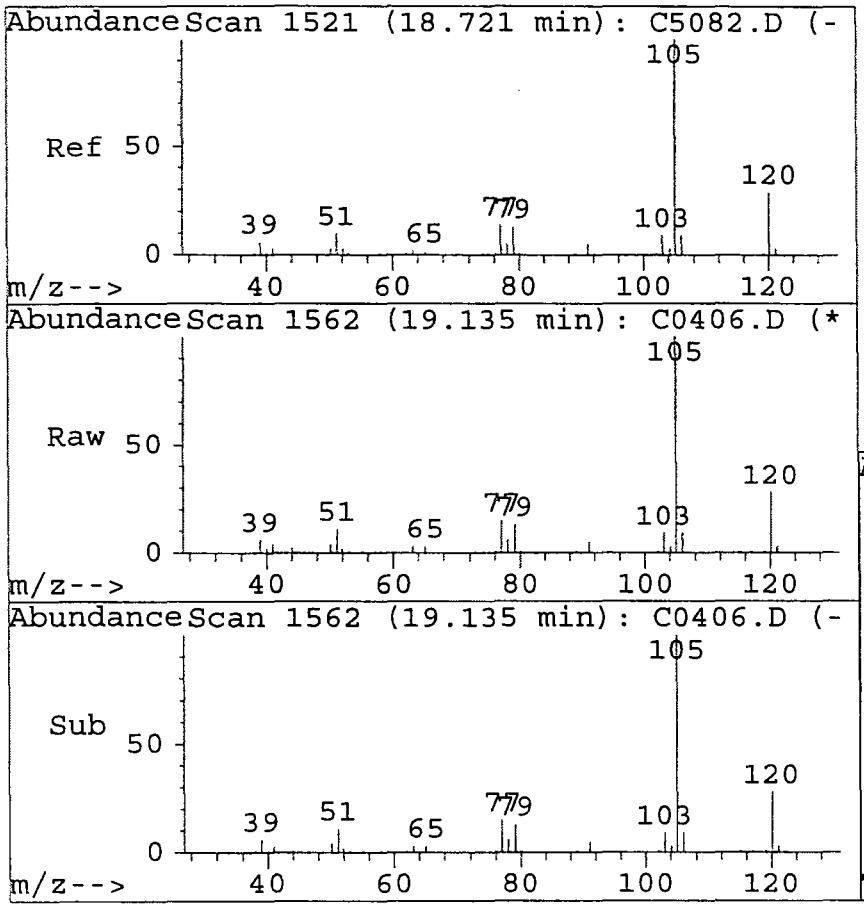


#38
Xylene (para & meta)
Concen: 3.60 ug/L
RT: 17.77 min Scan# 1430
Delta R.T. -0.04 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:106 Resp: 611693

Ion	Ratio	Lower	Upper
106	100		
91	199.2	183.6	223.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

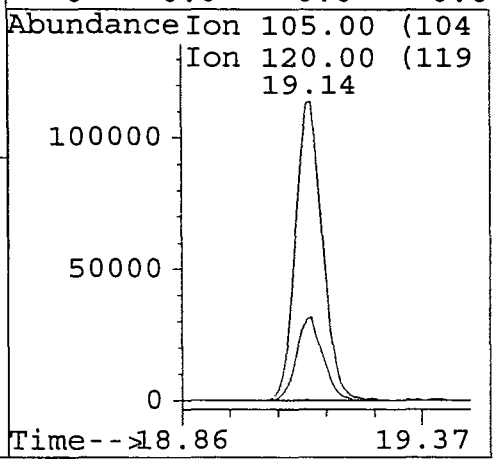


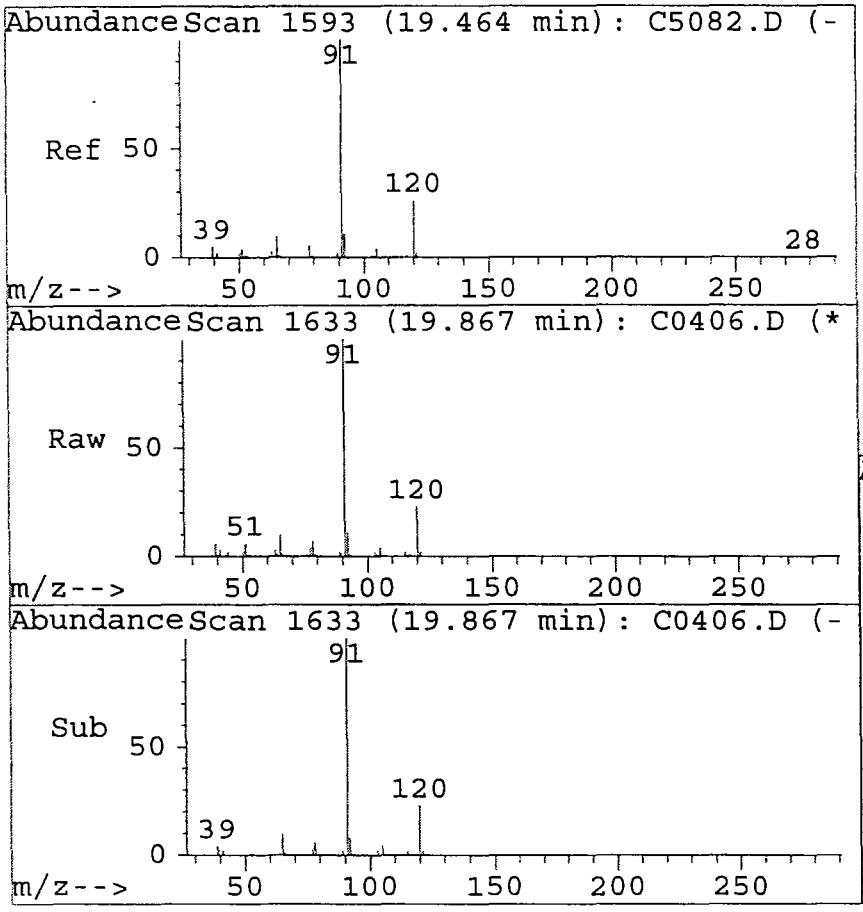


#42
Isopropylbenzene
Concen: 1.05 ug/L
RT: 19.14 min Scan# 1562
Delta R.T. -0.03 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:105 Resp: 456127

Ion	Ratio	Lower	Upper
105	100		
120	28.2	9.2	49.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

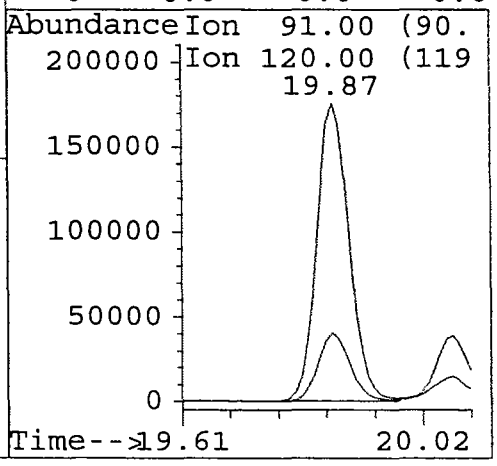


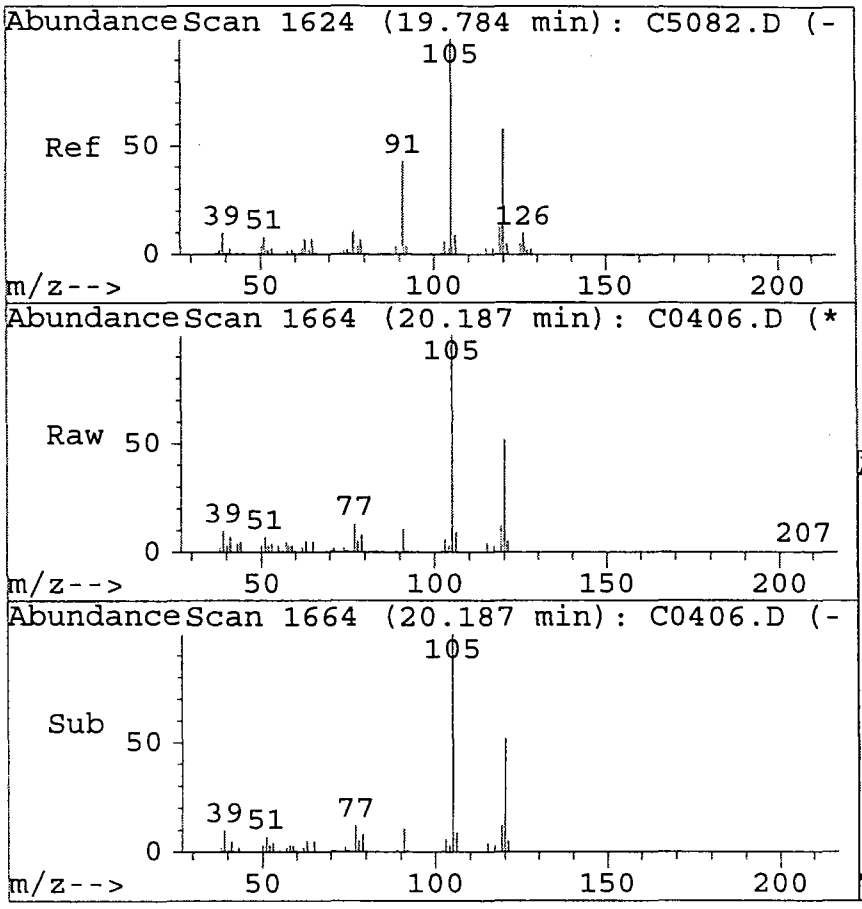


#47
n-Propylbenzene
Concen: 1.14 ug/L
RT: 19.87 min Scan# 1633
Delta R.T. -0.04 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:91 Resp: 673701

Ion	Ratio	Lower	Upper
91	100		
120	23.1	2.5	42.5
0	0.0	0.0	0.0
0	0.0	0.0	0.0

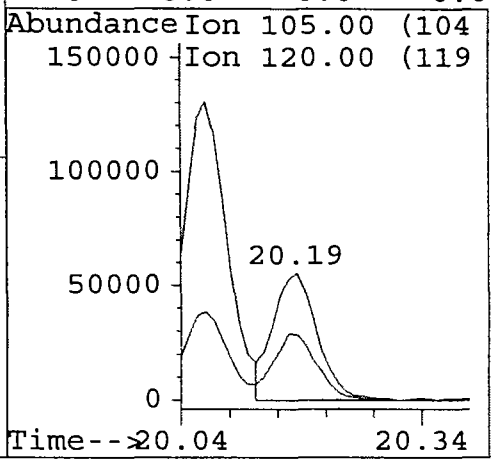


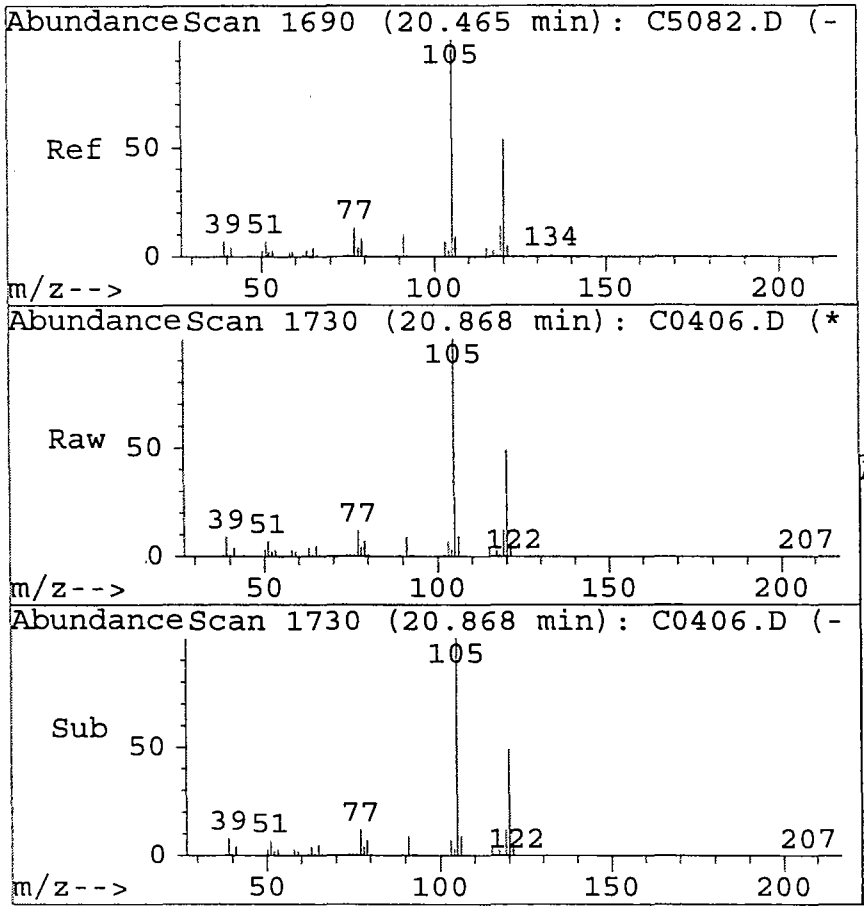


#50
1,3,5-Trimethylbenzene
Concen: 0.56 ug/L
RT: 20.19 min Scan# 1664
Delta R.T. -0.03 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:105 Resp: 211966

Ion	Ratio	Lower	Upper
105	100		
120	51.5	31.8	71.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

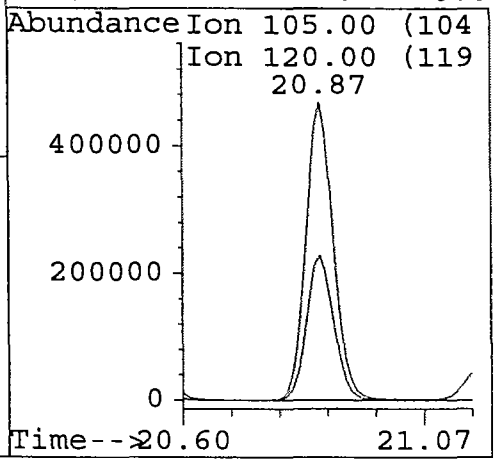


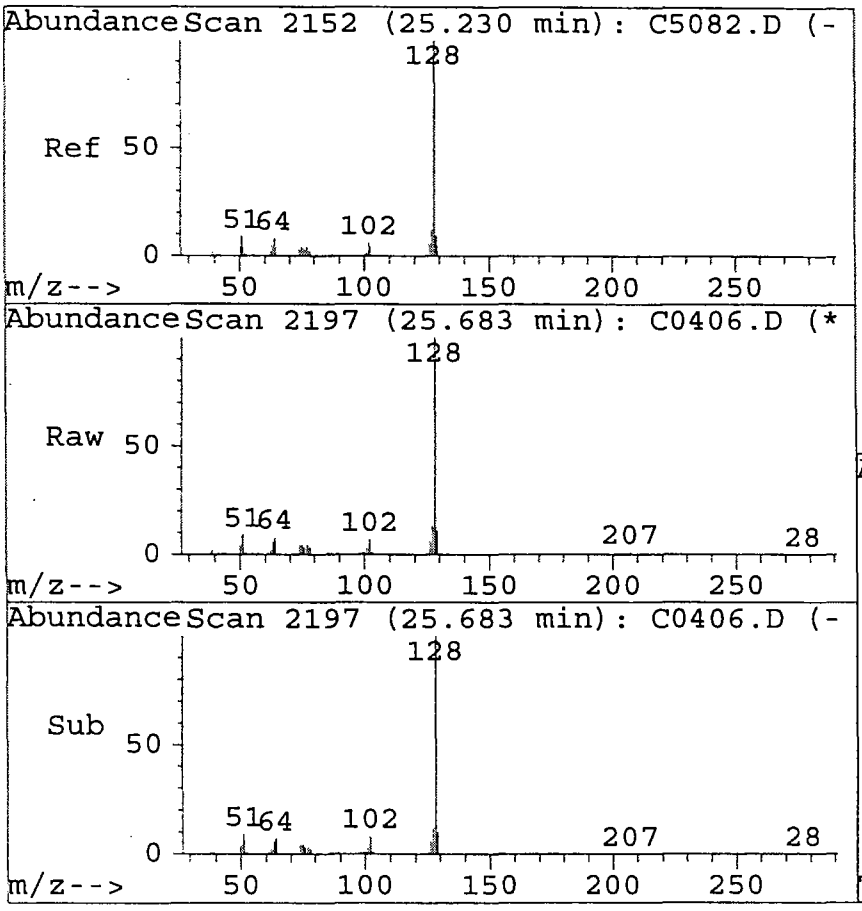


#52
1,2,4-Trimethylbenzene
Concen: 4.64 ug/L
RT: 20.87 min Scan# 1730
Delta R.T. -0.04 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:105 Resp: 1748531

Ion	Ratio	Lower	Upper
105	100		
120	48.8	27.9	67.9
0	0.0	0.0	0.0
0	0.0	0.0	0.0

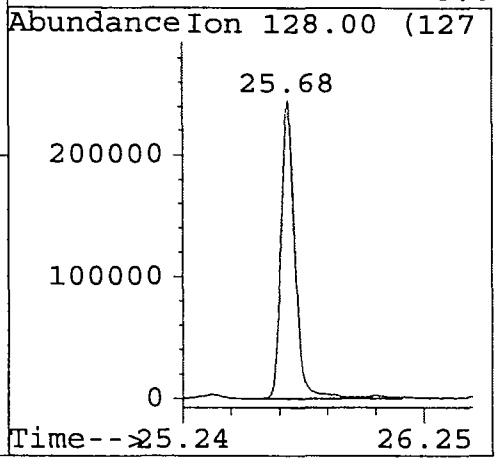


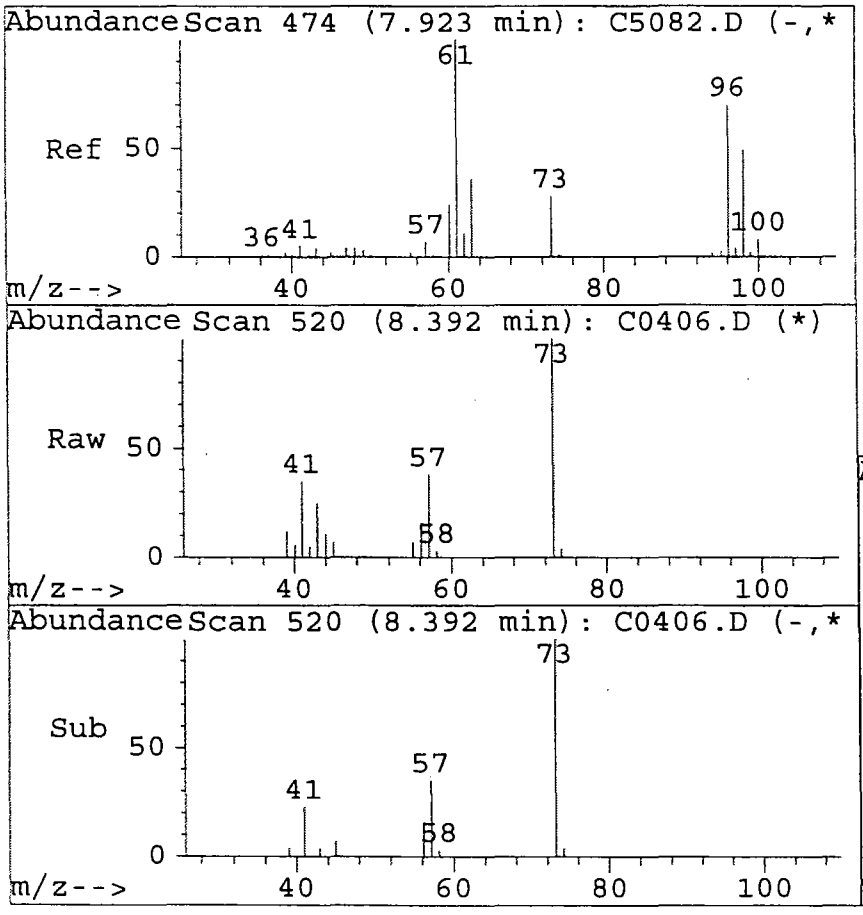


#63
Naphthalene
Concen: 7.27 ug/L m
RT: 25.68 min Scan# 2197
Delta R.T. -0.04 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:128 Resp: 1002129

Ion	Ratio	Lower	Upper
128	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

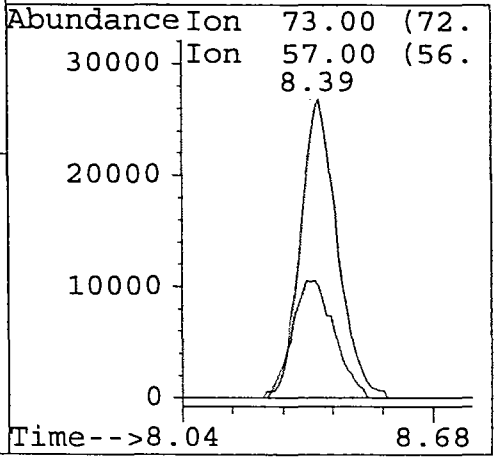




#65
Methyl-tert butyl ether
Concen: 1.63 ug/L
RT: 8.39 min Scan# 520
Delta R.T. -0.01 min
Lab File: c0406.d
Acq: 30 Nov 95 11:26 pm

Tgt Ion:73 Resp: 177296

Ion	Ratio	Lower	Upper
73	100		
57	37.5	5.7	45.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

121

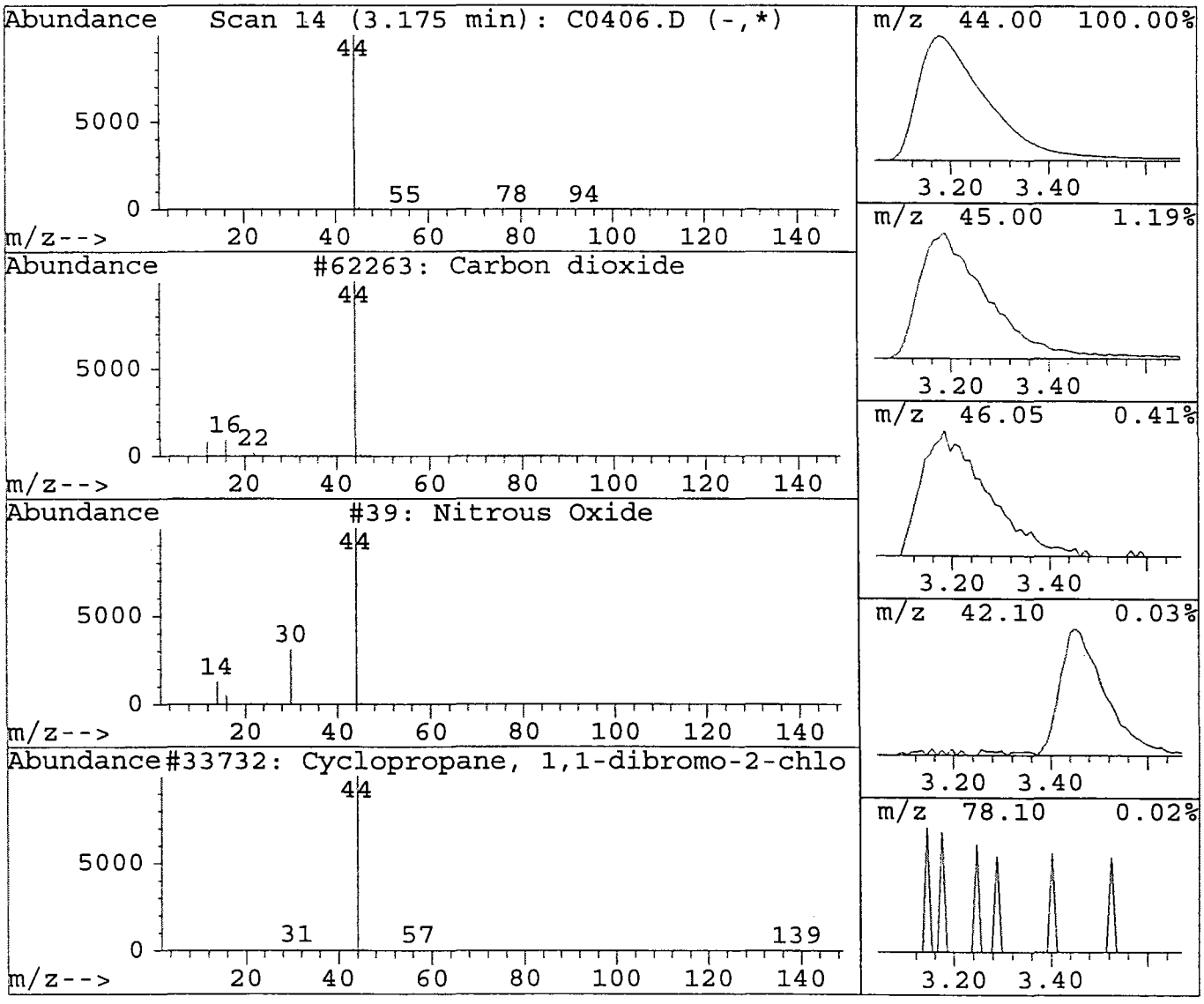
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.17	34.50 ug/L	26161299	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	39	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Ethyne, fluoro-	35	002713-09-9	2



Library Search Compound Report

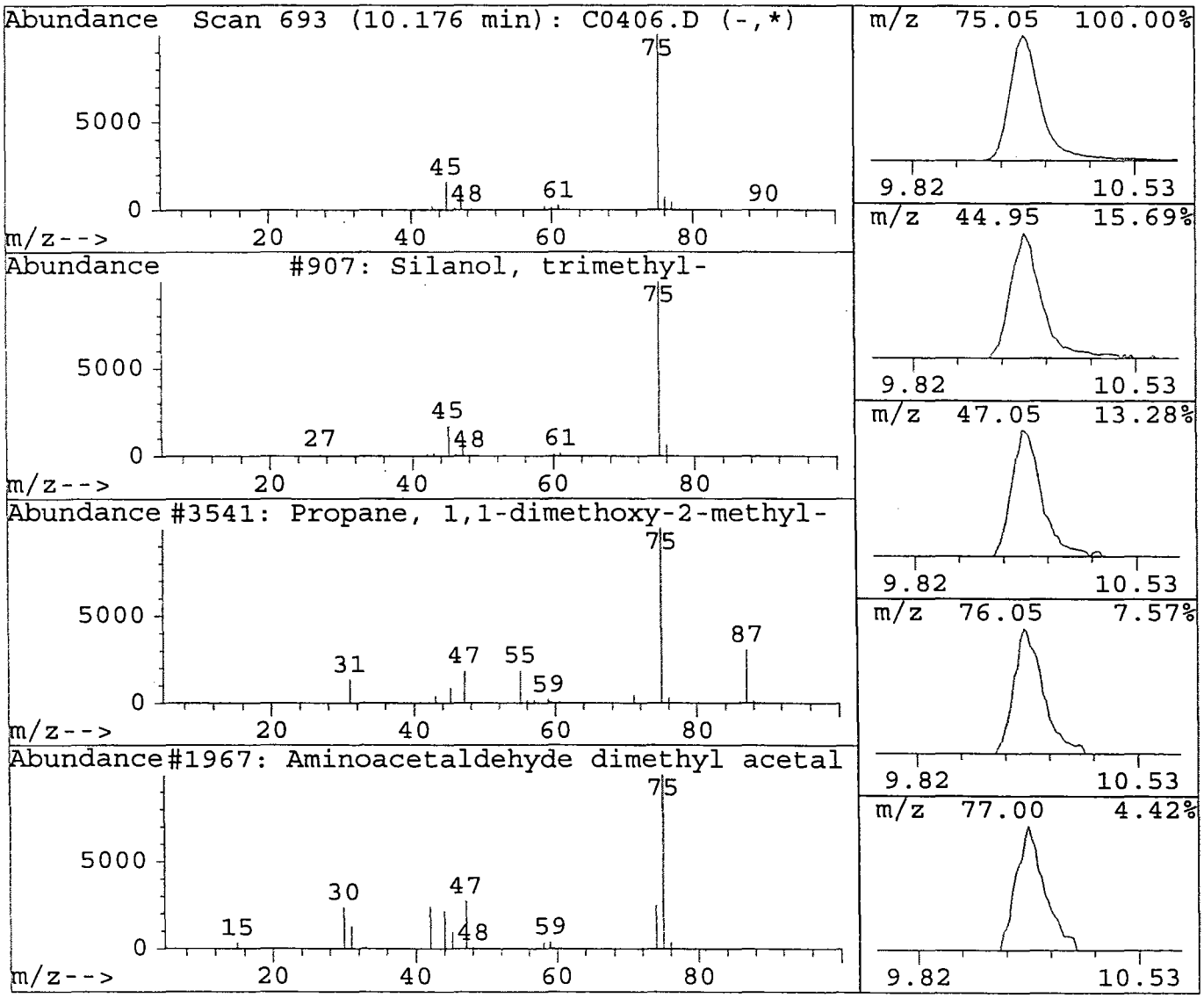
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
10.18	1.40 ug/L	1060254	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	907	001066-40-6	64
2	Propane, 1,1-dimethoxy-2-methyl-	3541	041632-89-7	2
3	Aminoacetaldehyde dimethyl acetal	1967	022483-09-6	2
4	1,1-Dimethoxydodecane	29998	000000-00-0	2
5	Threonine	64491	000072-19-5	2



Library Search Compound Report

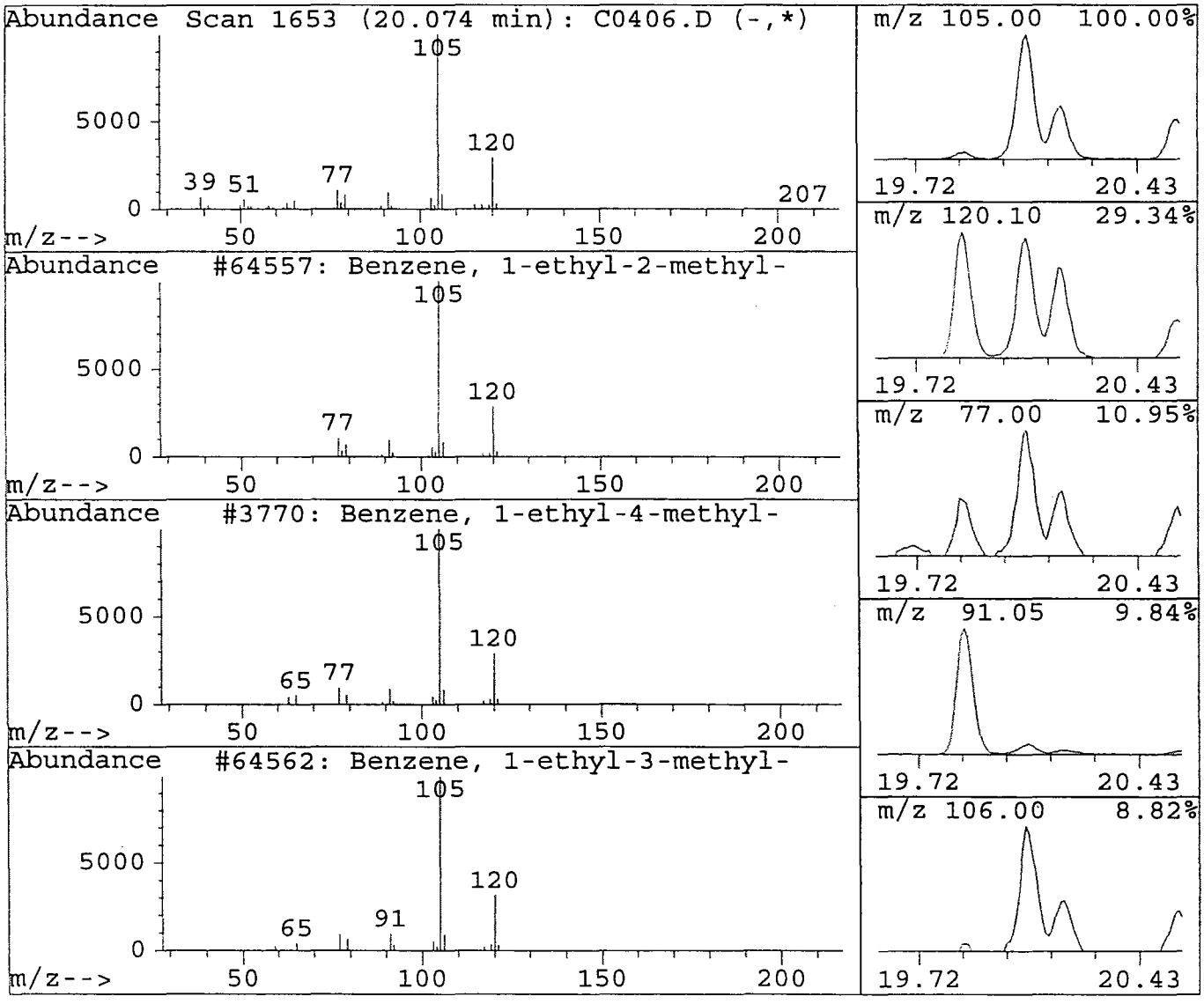
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
20.07	1.66 ug/L	1258857	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	64557	000611-14-3	95
2	Benzene, 1-ethyl-4-methyl-	3770	000622-96-8	95
3	Benzene, 1-ethyl-3-methyl-	64562	000620-14-4	91
4	Benzene, (1-methylethyl)-	64553	000098-82-8	86
5	Benzene, 1,2,3-trimethyl-	64575	000526-73-8	52



Library Search Compound Report

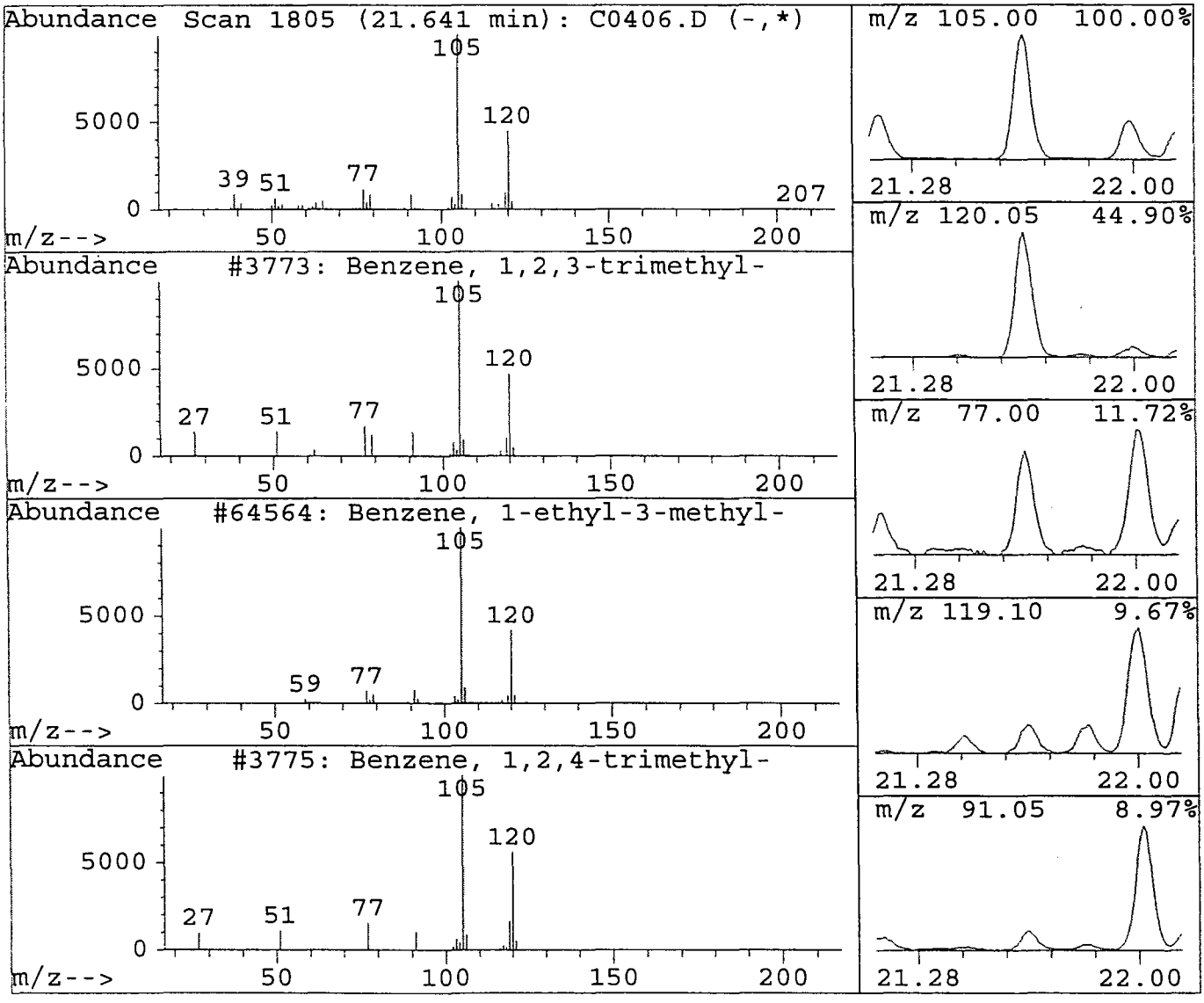
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
21.64	1.69 ug/L	1285213	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3-trimethyl-	3773	000526-73-8	87
2	Benzene, 1-ethyl-3-methyl-	64564	000620-14-4	90
3	Benzene, 1,2,4-trimethyl-	3775	000095-63-6	64
4	Benzene, 1,3,5-trimethyl-	64571	000108-67-8	72
5	Benzene, 1-ethyl-4-methyl-	64566	000622-96-8	87



Library Search Compound Report

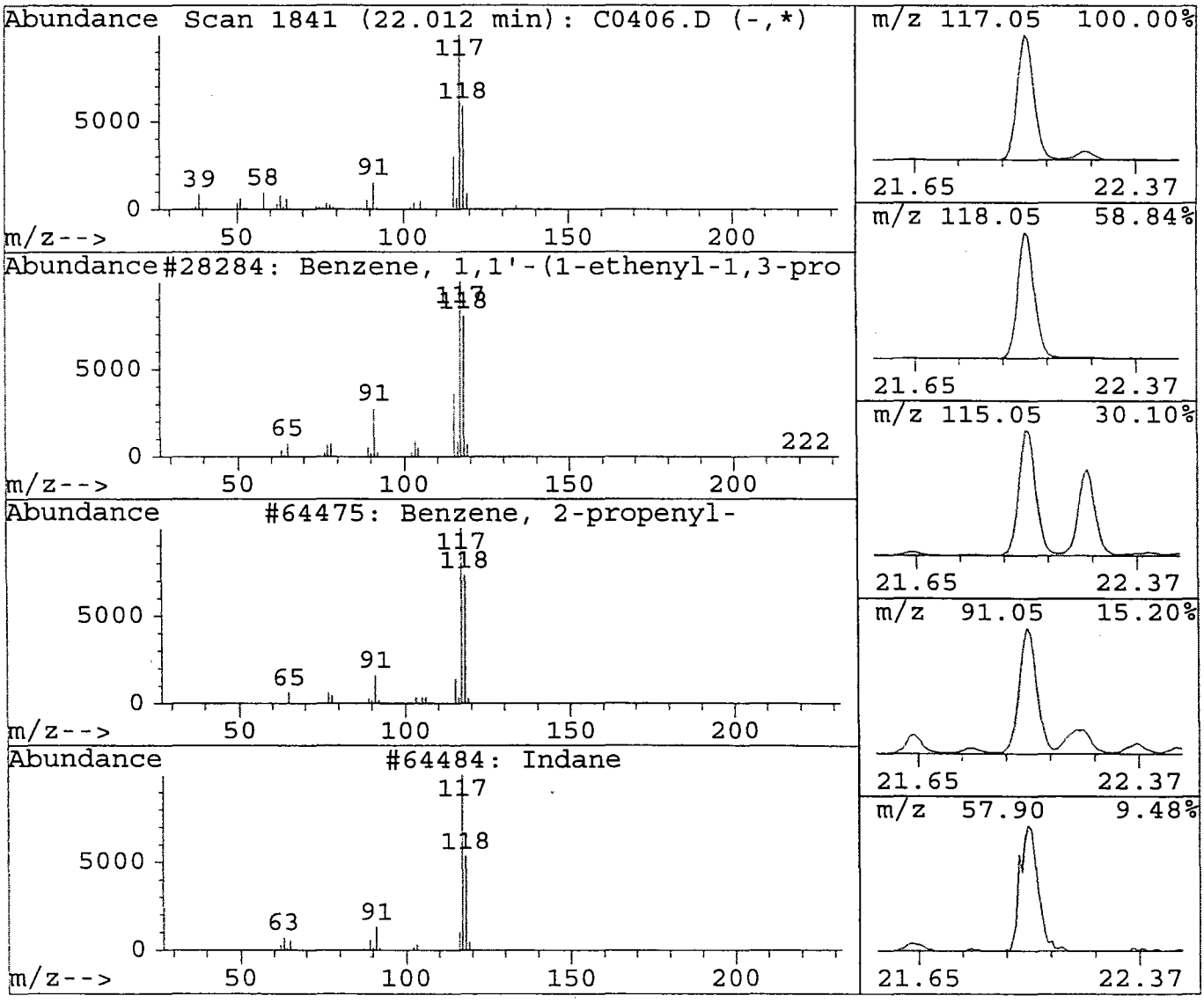
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
22.01	8.13 ug/L	6164519	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,1'-(1-ethenyl-1,3-propan	28284	061141-97-7	40
2	Benzene, 2-propenyl-	64475	000300-57-2	37
3	Indane	64484	000496-11-7	35
4	Benzene, 1-ethenyl-2-methyl-	64478	000611-15-4	49
5	Benzene, 1-ethenyl-4-methyl-	64480	000622-97-9	22



Library Search Compound Report

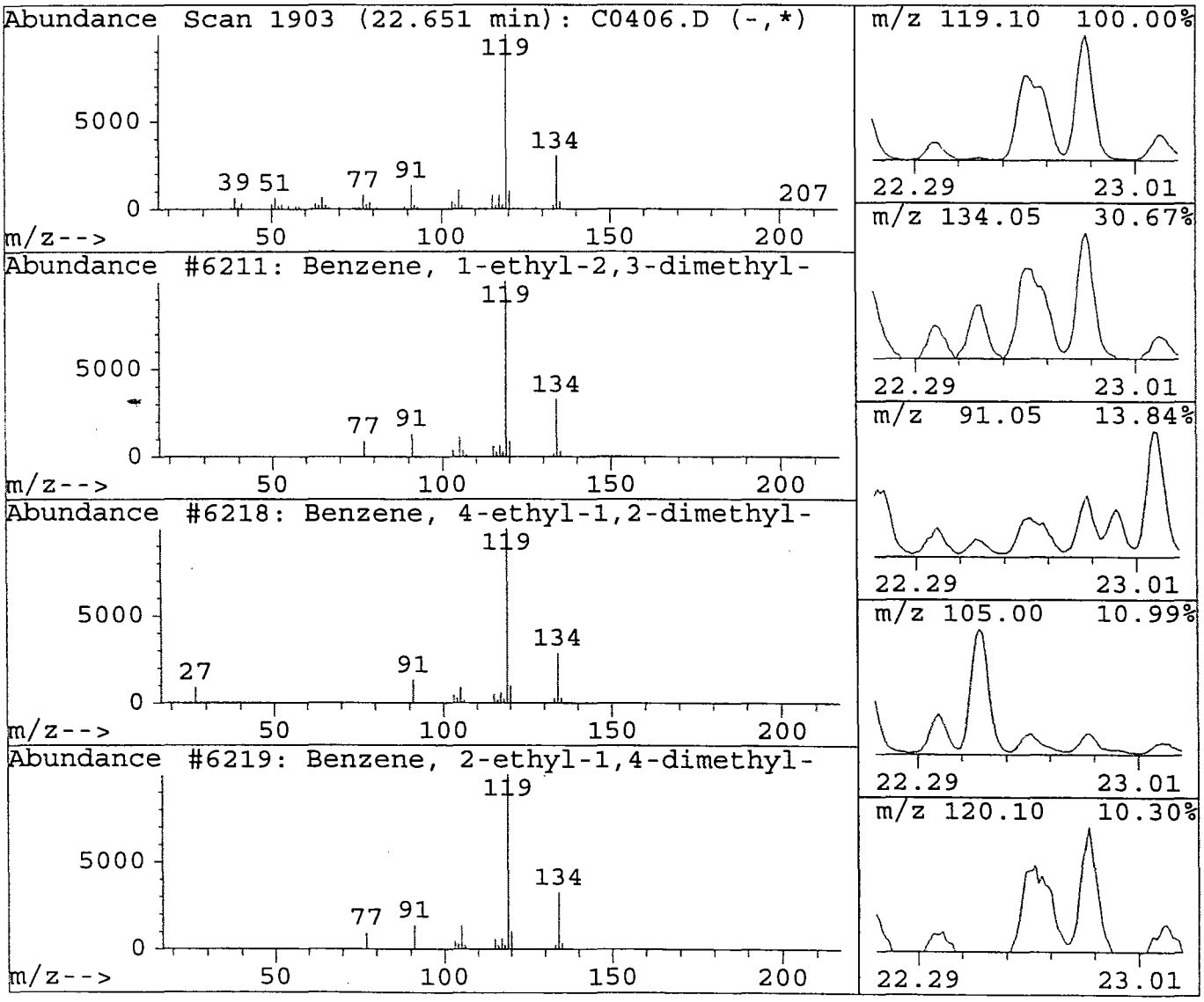
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
22.65	1.25 ug/L	944971	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2,3-dimethyl-	6211	000933-98-2	91
2	Benzene, 4-ethyl-1,2-dimethyl-	6218	000934-80-5	95
3	Benzene, 2-ethyl-1,4-dimethyl-	6219	001758-88-9	97
4	Benzene, 1-ethyl-3,5-dimethyl-	65553	000934-74-7	94
5	Benzene, 2-ethyl-1,3-dimethyl-	6200	002870-04-4	94



Library Search Compound Report

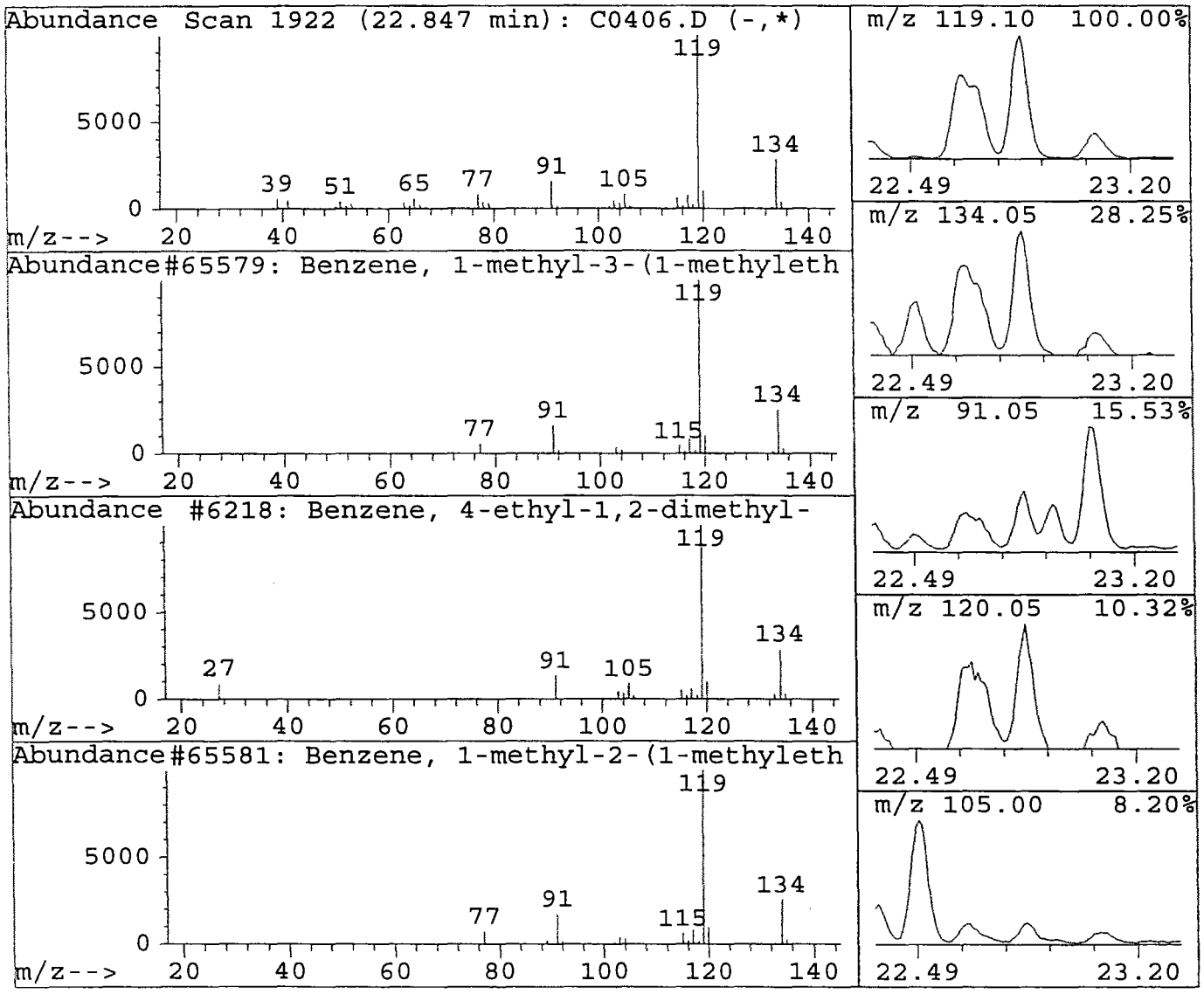
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
22.85	1.00 ug/L	755635	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-methyl-3-(1-methylethyl)	65579	000535-77-3	97
2	Benzene, 4-ethyl-1,2-dimethyl-	6218	000934-80-5	94
3	Benzene, 1-methyl-2-(1-methylethyl)	65581	000527-84-4	97
4	Benzene, 1-methyl-4-(1-methylethyl)	65536	000099-87-6	97
5	Benzene, 2-ethyl-1,3-dimethyl-	6200	002870-04-4	95



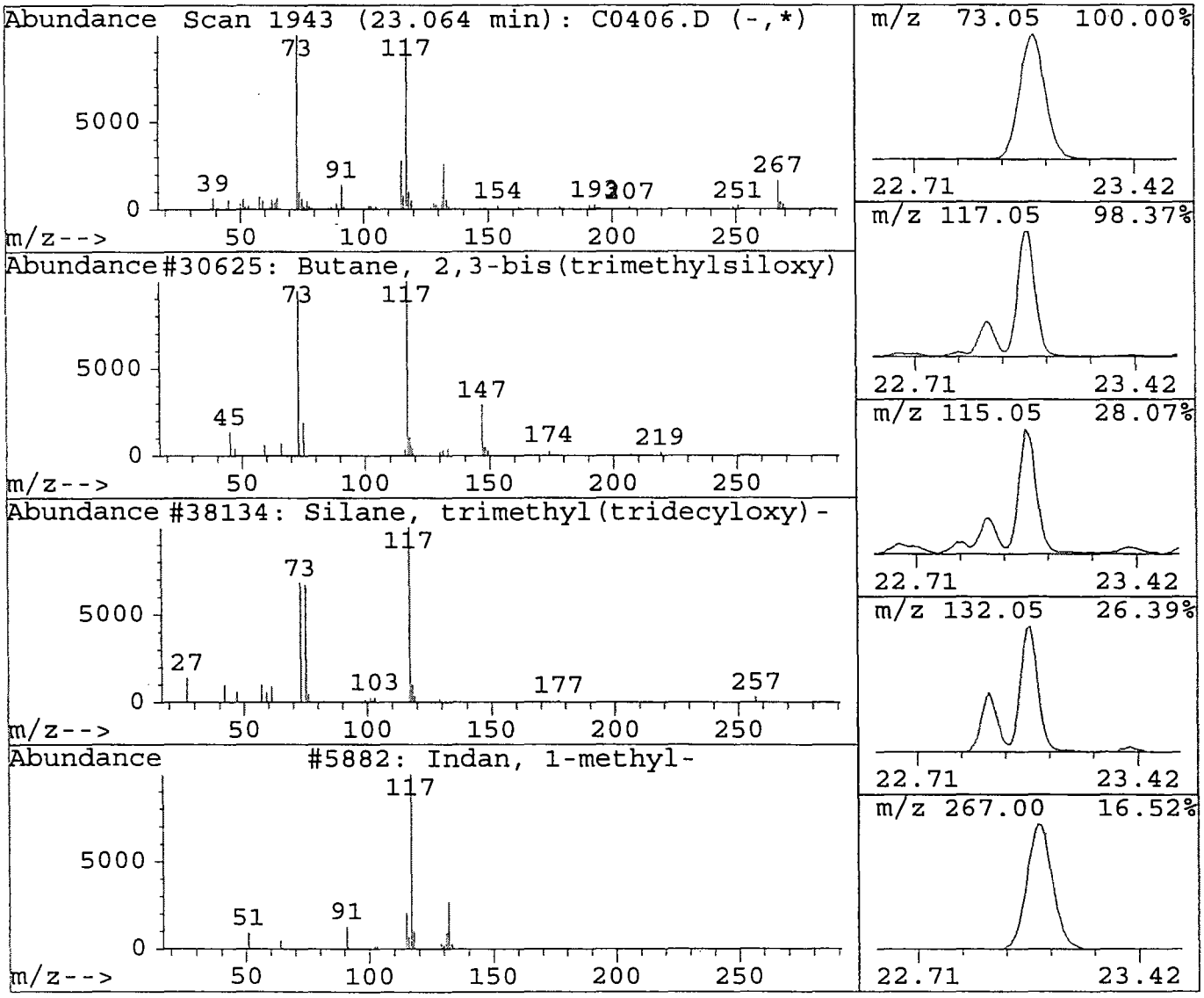
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.06	2.52 ug/L	1913606	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2,3-bis(trimethylsiloxy)-	30625	053274-85-4	40
2	Silane, trimethyl(tridecyloxy)-	38134	056554-32-6	37
3	Indan, 1-methyl-	5882	000767-58-8	70
4	2,3-Dihydro-1-methylindene	5901	027133-93-3	70
5	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	38



Library Search Compound Report

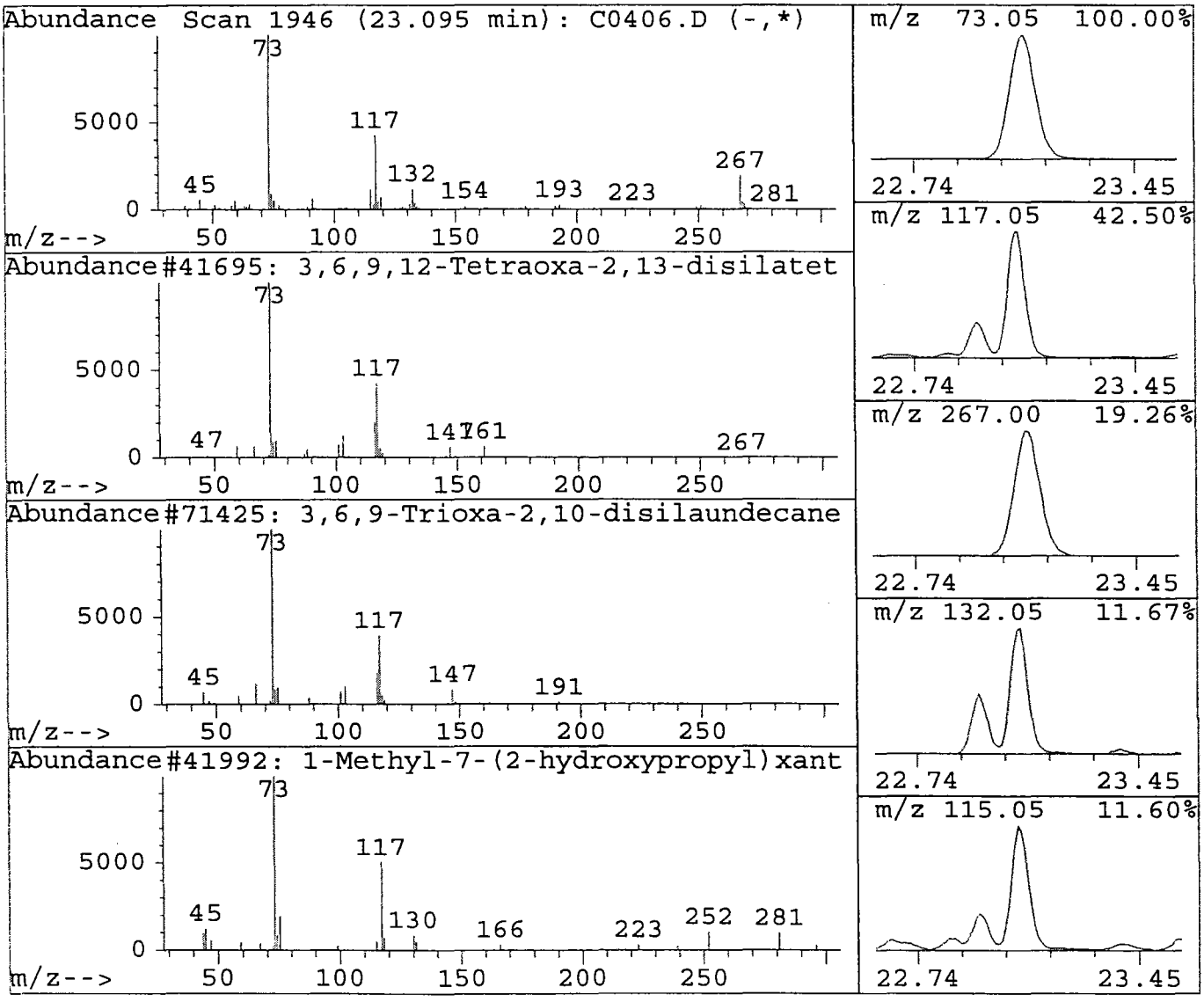
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.09	3.35 ug/L	2537305	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	3,6,9,12-Tetraoxa-2,13-disilatetrad	41695	062185-58-4	9
2	3,6,9-Trioxa-2,10-disilaundecane, 2	71425	016654-74-3	37
3	1-Methyl-7-(2-hydroxypropyl)xanthin	41992	000000-00-0	4
4	Decanoic acid, 10-fluoro-, trimethy	36208	026305-85-1	4
5	Disilane, pentamethyl-	5731	000812-15-7	12



Library Search Compound Report

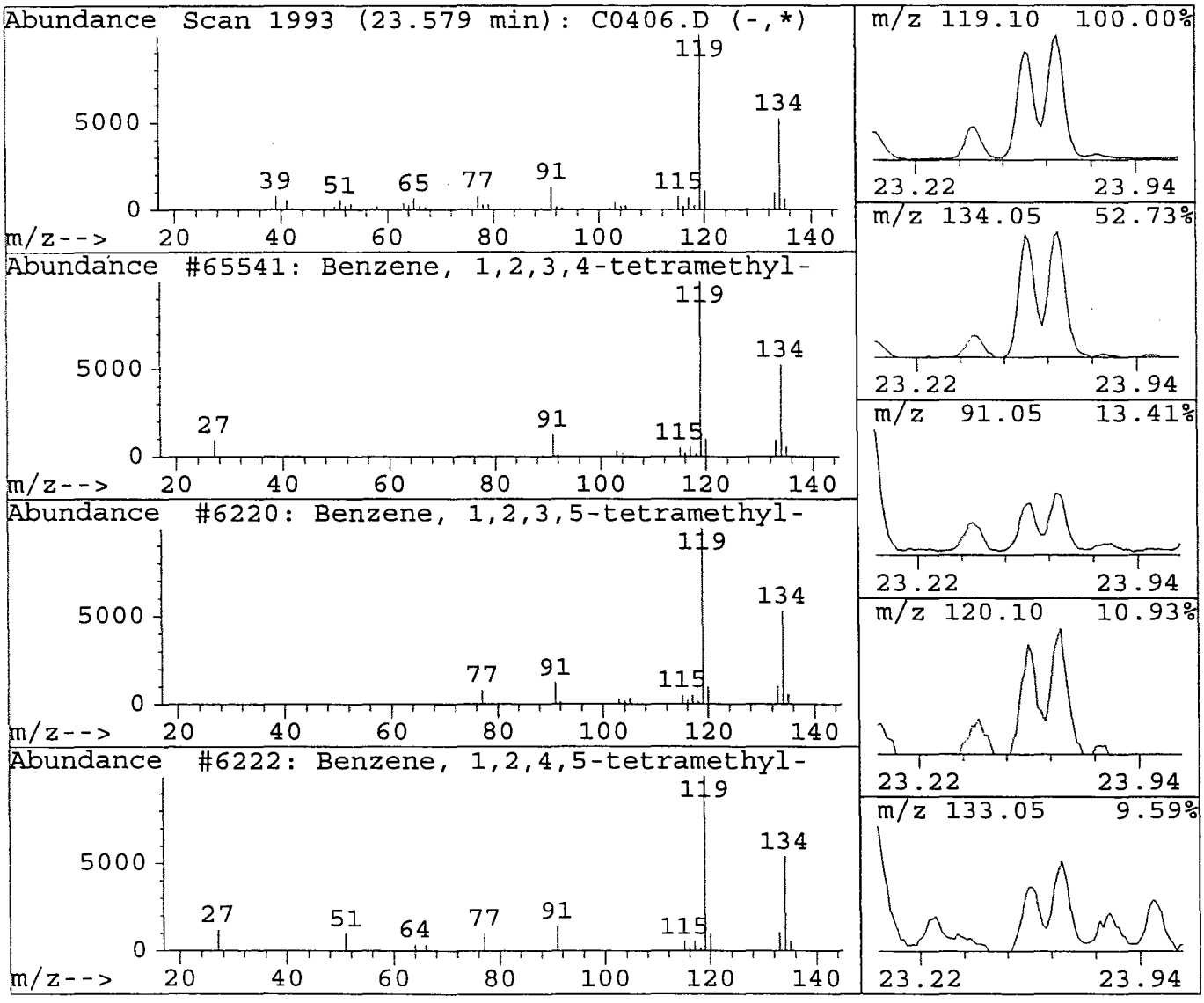
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.58	0.96 ug/L	731571	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,3,4-tetramethyl-	65541	000488-23-3	97
2	Benzene, 1,2,3,5-tetramethyl-	6220	000527-53-7	97
3	Benzene, 1,2,4,5-tetramethyl-	6222	000095-93-2	90
4	Benzene, 1,3-diethyl-	65565	000141-93-5	87
5	Benzene, 1-ethyl-3,5-dimethyl-	65553	000934-74-7	78



Library Search Compound Report

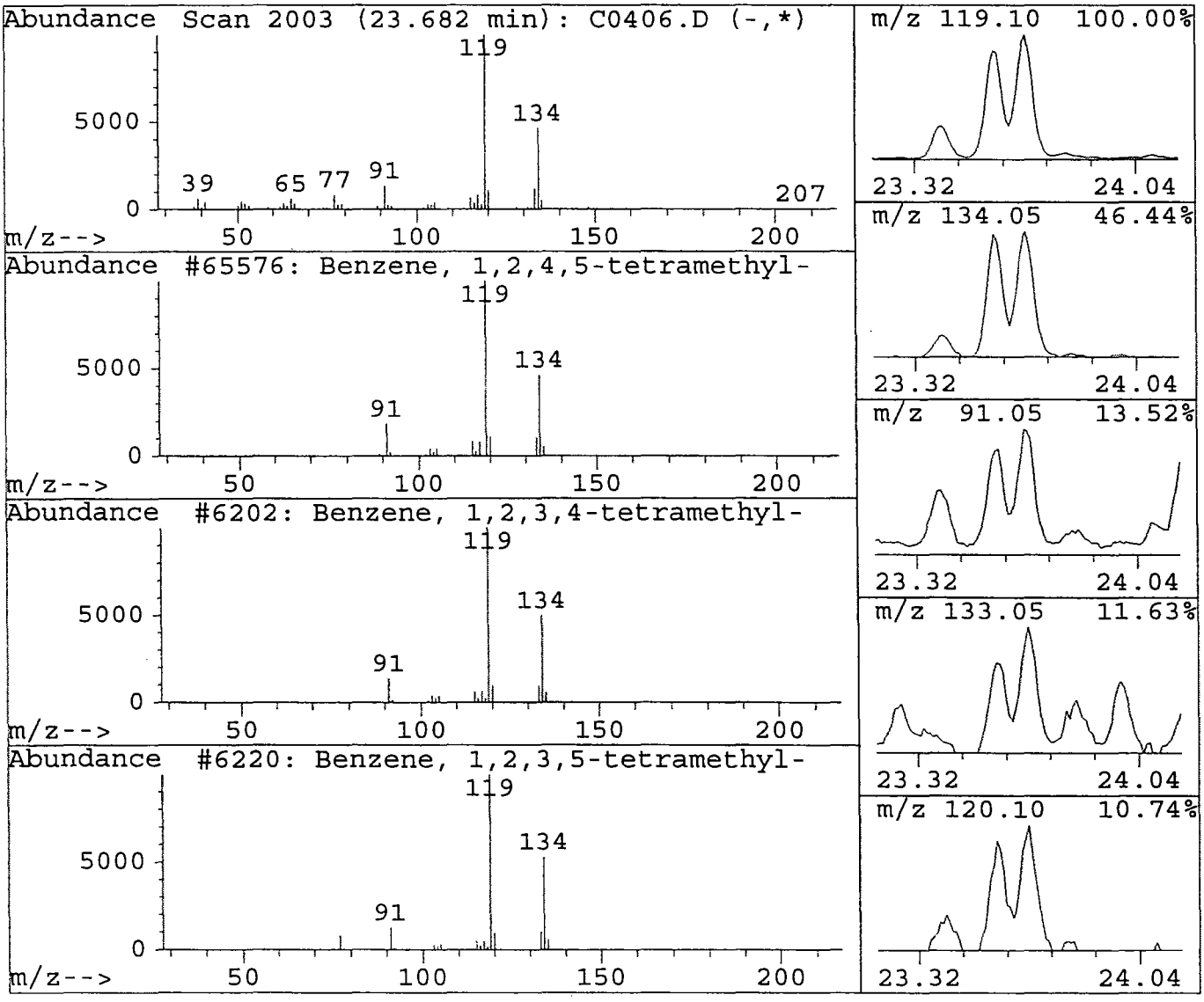
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.68	1.04 ug/L	788969	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1,2,4,5-tetramethyl-	65576	000095-93-2	97
2	Benzene, 1,2,3,4-tetramethyl-	6202	000488-23-3	97
3	Benzene, 1,2,3,5-tetramethyl-	6220	000527-53-7	97
4	Benzene, 1-ethyl-3,5-dimethyl-	65554	000934-74-7	91
5	Benzene, 2-ethyl-1,4-dimethyl-	65570	001758-88-9	87



Library Search Compound Report

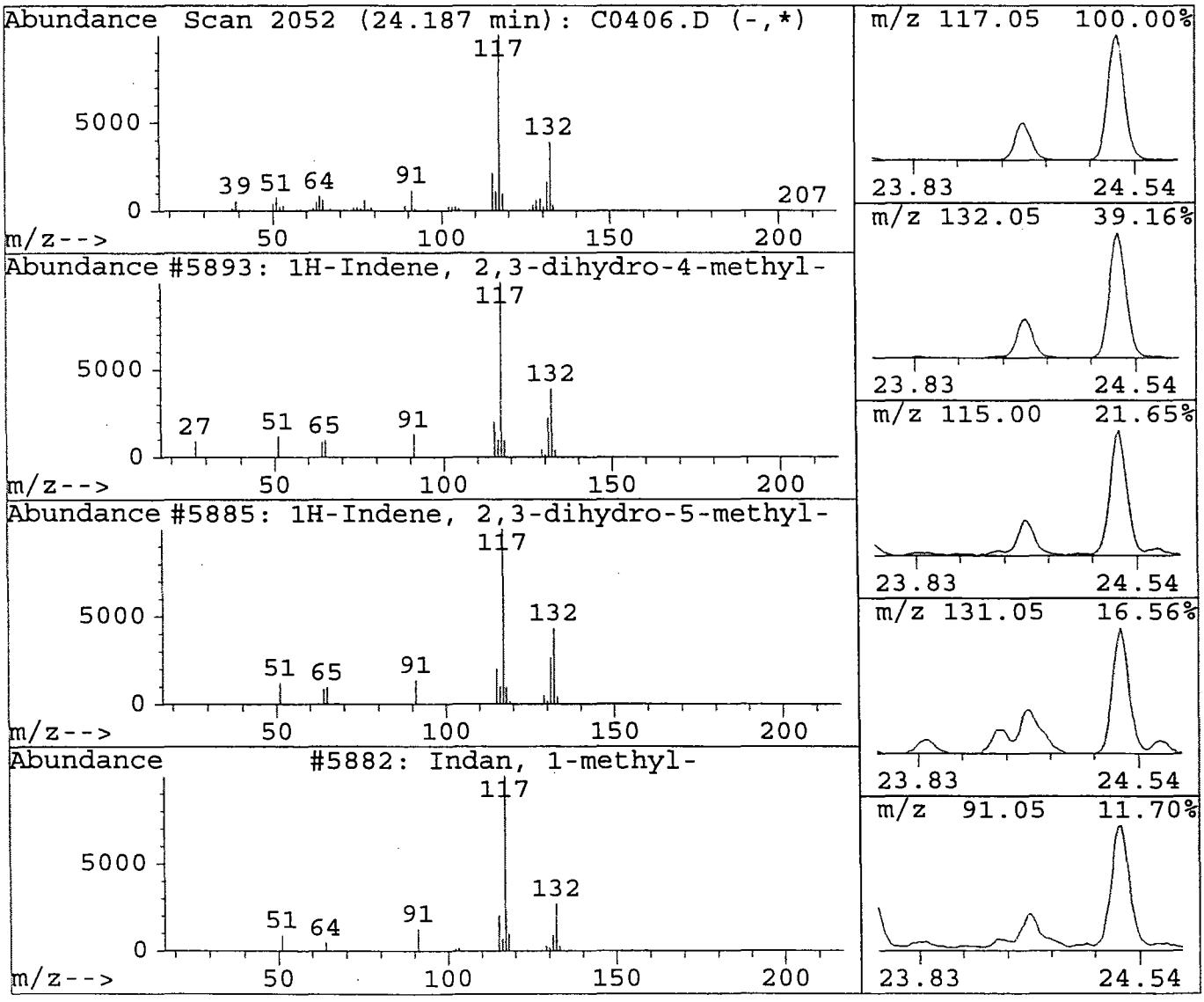
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
24.19	1.06 ug/L	803553	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	72
2	1H-Indene, 2,3-dihydro-5-methyl-	5885	000874-35-1	70
3	Indan, 1-methyl-	5882	000767-58-8	90
4	2,3-Dihydro-1-methylindene	5901	027133-93-3	80
5	Benzene, 1-ethenyl-3-ethyl-, mixt.	36689	055319-72-7	86



Library Search Compound Report

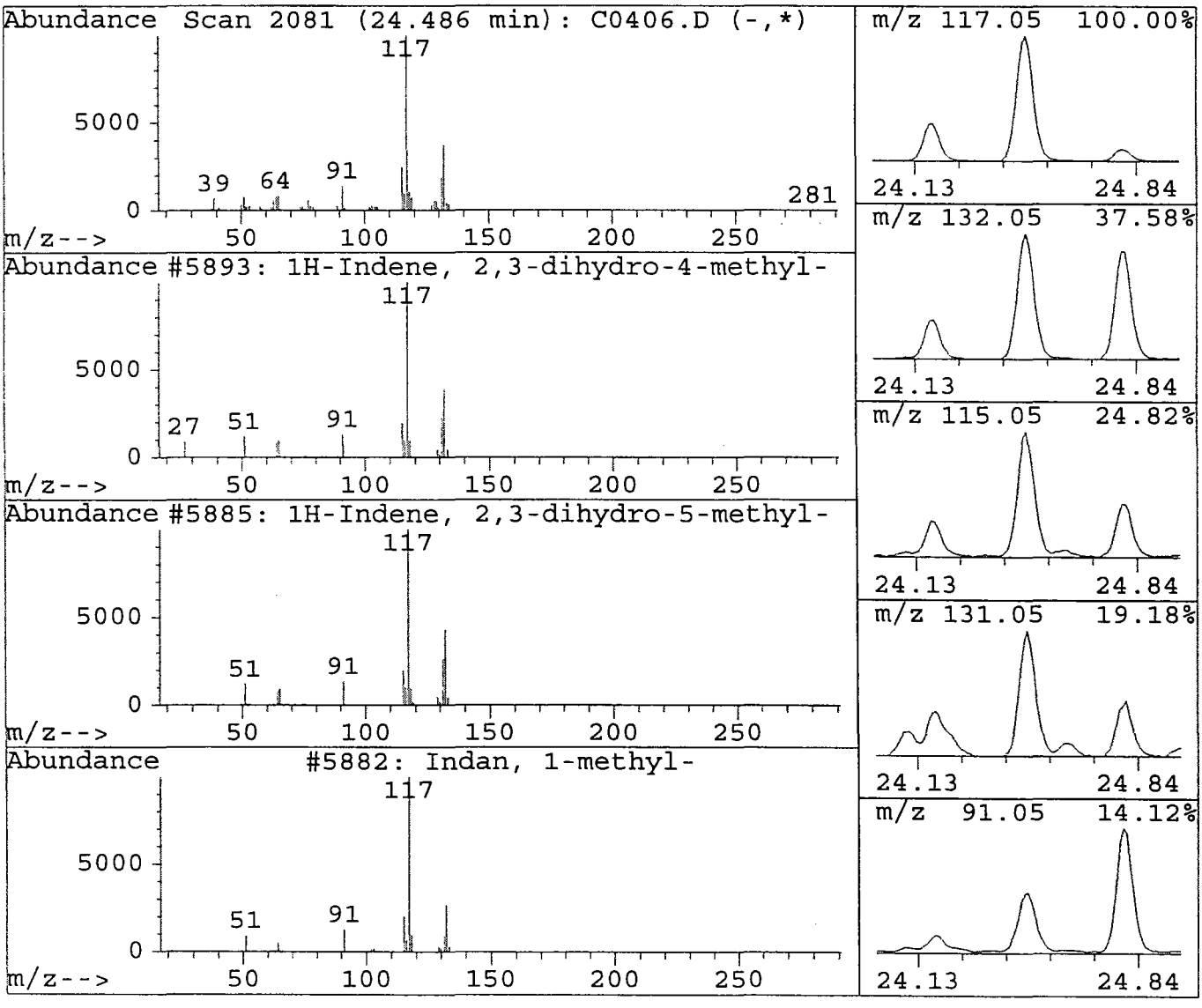
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
24.49	3.19 ug/L	2421241	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1H-Indene, 2,3-dihydro-4-methyl-	5893	000824-22-6	94
2	1H-Indene, 2,3-dihydro-5-methyl-	5885	000874-35-1	64
3	Indan, 1-methyl-	5882	000767-58-8	87
4	2,3-Dihydro-1-methylindene	5901	027133-93-3	87
5	Benzene, (1-methyl-1-propenyl)-, (Z	5904	000767-99-7	91



Library Search Compound Report

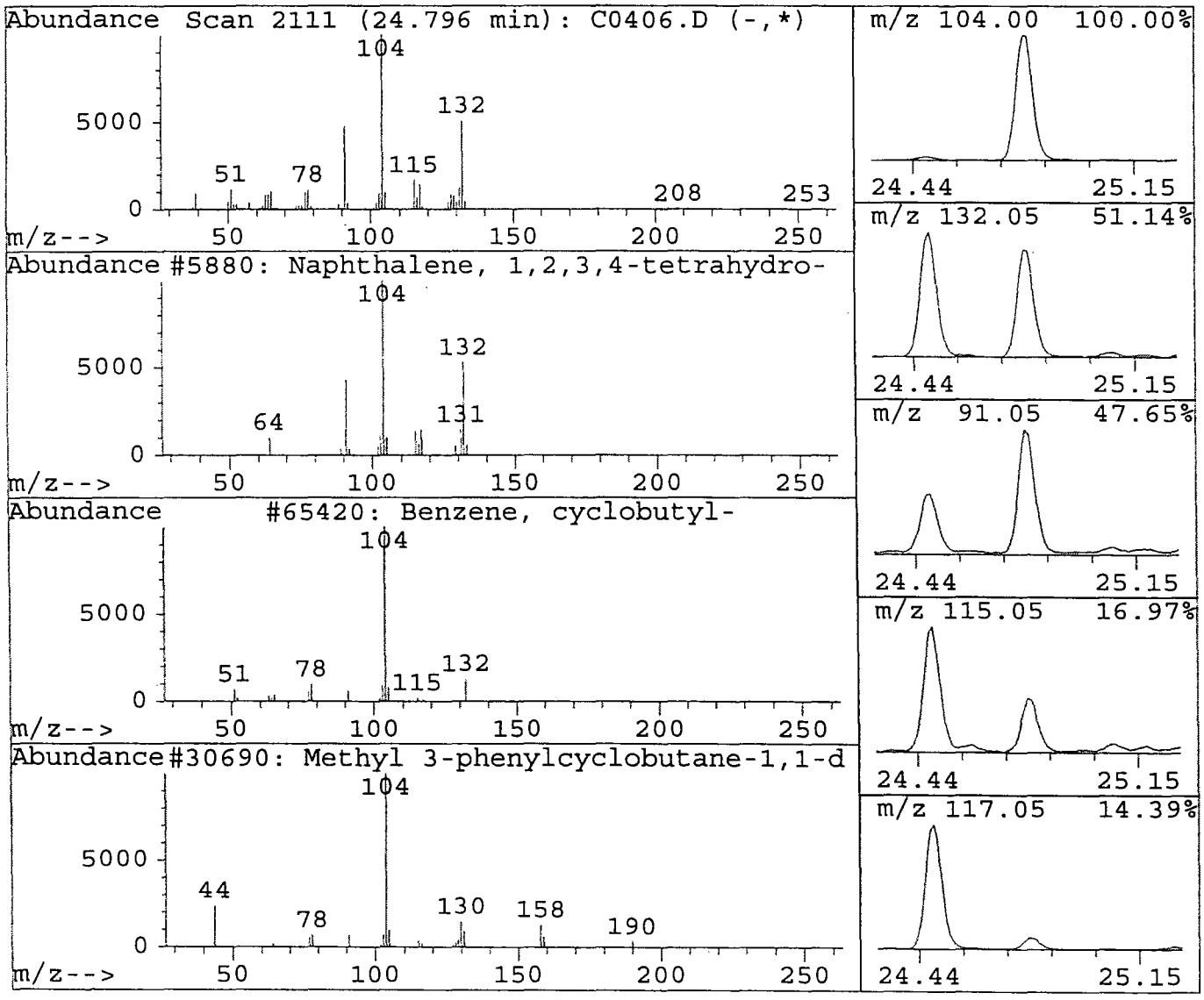
Data File : d:\hpchem\1\data\c0406.d
Acq On : 30 Nov 95 11:26 pm
Sample : 9554053 BLDG 2567 MW-2
Misc : 25 ML

Vial: 10
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
24.80	2.82 ug/L	2135174	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Naphthalene, 1,2,3,4-tetrahydro-	5880	000119-64-2	96
2	Benzene, cyclobutyl-	65420	004392-30-7	43
3	Methyl 3-phenylcyclobutane-1,1-dica	30690	000000-00-0	38
4	Phensuximide	69208	000086-34-0	38
5	Benzene, 1,1'-(1,2-cyclobutanediyl)	25034	007694-30-6	43



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 135

MW3-2926947

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9554054V

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: C0461.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 10.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	5.0	U
74-87-3	Chloromethane	5.0	U
75-01-4	Vinyl chloride	5.0	U
74-83-9	Bromomethane	5.0	U
75-00-3	Chloroethane	5.0	U
75-69-4	Trichlorofluoromethane	5.0	U
75-35-4	1,1-Dichloroethene	5.0	U
75-09-2	Methylene chloride	18	B
156-60-65	trans-1,2-Dichloroethene	5.0	U
75-34-3	1,1-Dichloroethane	5.0	U
594-20-7	2,2-Dichloropropane	5.0	U
156-59-2	cis-1,2-Dichloroethene	5.0	U
74-97-1	Bromochloromethane	5.0	U
67-66-3	Chloroform	5.0	U
71-55-6	1,1,1-Trichloroethane	5.0	U
56-23-1	Carbon tetrachloride	5.0	U
563-58-6	1,1-Dichloropropene	5.0	U
71-43-2	Benzene	35	
107-06-2	1,2-Dichloroethane	5.0	U
79-01-6	Trichloroethene	5.0	U
78-87-1	1,2-Dichloropropane	5.0	U
74-95-3	Dibromomethane	5.0	U
75-27-4	Bromodichloromethane	5.0	U
10061-01-1	cis-1,3-Dichloropropene	5.0	U
108-88-3	Toluene	5.0	U
10061-02-6	trans-1,3-Dichloropropene	5.0	U
79-00-1	1,1,2-Trichloroethane	5.0	U
127-18-4	Tetrachloroethene	5.0	U
142-28-9	1,3-Dichloropropane	5.0	U
124-48-1	Dibromochloromethane	5.0	U
106-93-4	1,2-Dibromomethane	5.0	U
108-90-7	Chlorobenzene	5.0	U
630-20-6	1,1,1,2-Tetrachloroethane	5.0	U

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW3-2926947

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 3

Matrix: (soil/water) WATER Lab Sample ID: 9554054V

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: C0461.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 x 75m ID: 0.53 (mm) Dilution Factor: 10.0

CAS No.	Compound	Concentration Units: (ug/L or ug/Kg) ug/L	Q
100-41-4	Ethylbenzene	5.0	U
1330-29-7	Xylene (total)	91	
100-42-1	Styrene	5.0	U
75-25-2	Bromoform	5.0	U
98-82-8	Isopropylbenzene	14	
108-86-1	Bromobenzene	5.0	U
79-34-1	1,1,2,2-Tetrachloroethane	5.0	U
96-18-4	1,2,3-Trichloropropane	5.0	U
103-65-1	n-Propylbenzene	5.0	U
95-49-8	2-Chlorotoluene	5.0	U
106-43-4	4-Chlorotoluene	5.0	U
108-67-8	1,3,5-Trimethylbenzene	7.7	
98-06-6	tert-Butylbenzene	5.0	U
95-63-6	1,2,4-Trimethylbenzene	5.0	U
135-98-8	sec-Butylbenzene	5.0	U
541-73-1	1,3-Dichlorobenzene	5.0	U
99-87-6	4-Isopropyltoluene	5.0	U
106-46-7	1,4-Dichlorobenzene	5.0	U
95-50-1	1,2-Dichlorobenzene	5.0	U
104-51-8	n-Butylbenzene	5.0	U
96-12-8	1,2-Dibromo-3-chloropropane	5.0	U
120-82-1	1,2,4-Trichlorobenzene	5.0	U
87-68-3	Hexachlorobutadiene	5.0	U
91-20-3	Naphthalene	6.6	
87-61-6	1,2,3-Trichlorobenzene	5.0	U
1634-04-4	Methy-tertiary butyl ether	360	
75-65-0	tertiary-Butyl alcohol	46	

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# MW3-292694-7 137

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

Project No. FT. MONMOUTH NJ Bldg: 2567 NJDEP MW#: 3 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554054V

Sample wt/vol: 2.5 (g/mL) ML Lab File ID: C0461.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/5/95

GC Column: DB-624 X 75M ID: 0.53 (mm) Dilution Factor: 10.0

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

Concentration Units:

Number TICs found: 9 (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 78-78-4	Butane, 2-methyl-	5.28	15	J
2.	Unknown Hydrocarbon	9.98	24	J
3. 110-82-7	Cyclohexane	11.15	6	J
4. 103-65-1	Benzene, propyl-	19.86	14	J
5.	Unknown Hydrocarbon	20.02	6	J
6. 95-36-3	1,2,4-Trimethylbenzene	20.86	6	J
7. 526-73-8	Benzene, 1,2,3-trimethyl-	21.63	16	J
8.	Unknown Hydrocarbon	22.00	31	J
9.	Column Bleed	23.07	37	J
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

138

Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10
Quant Time: Dec 5 12:50 1995

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units		Dev(Min)
1) Fluorobenzene	12.18	96	1646190	5.00	ug/L		-0.03
System Monitoring Compounds							%Recovery
43) 4-Bromofluorobenzene	19.40	95	866615	4.88	ug/L		97.52%
57) 1,2-Dichlorobenzene-d4	22.20	152	542580	4.87	ug/L		97.38%
Target Compounds							Qvalue
9) Methylene chloride	7.78	84	141653	1.82	ug/L	m	97
21) Benzene	11.70	78	1002261	3.50	ug/L		98
38) Xylene (para & meta)	17.76	106	1425220	9.07	ug/L		99
42) Isopropylbenzene	19.11	105	554275	1.38	ug/L		97
50) 1,3,5-Trimethylbenzene	20.17	105	269164	0.77	ug/L		99
63) Naphthalene	25.66	128	84621	0.66	ug/L		100
65) Methyl-tert butyl ether	8.36	73	3652168	36.25	ug/L		95
66) tert-Butyl Alcohol	8.13	59	6857	4.62	ug/L		100

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

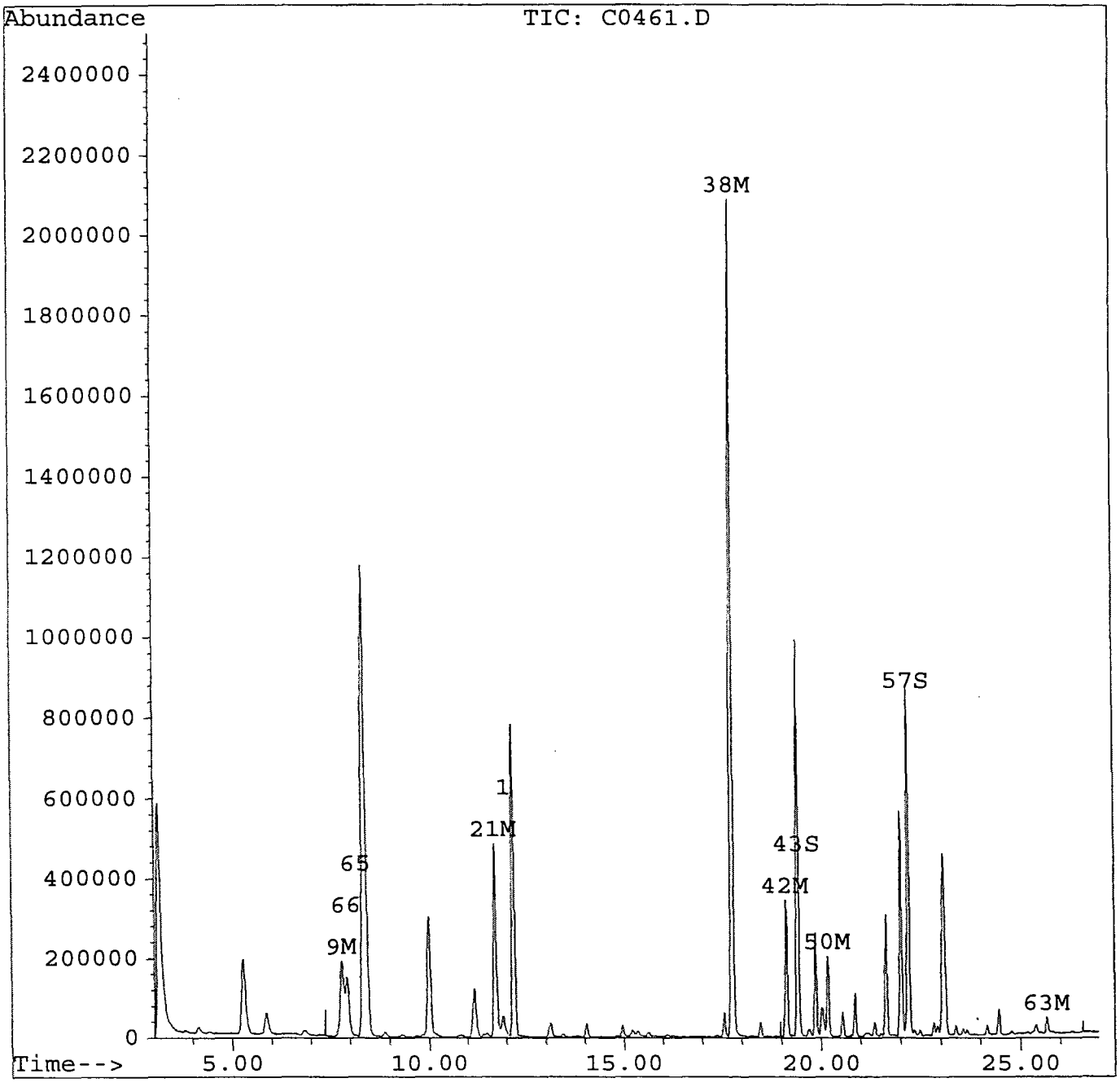
Quantitation Report

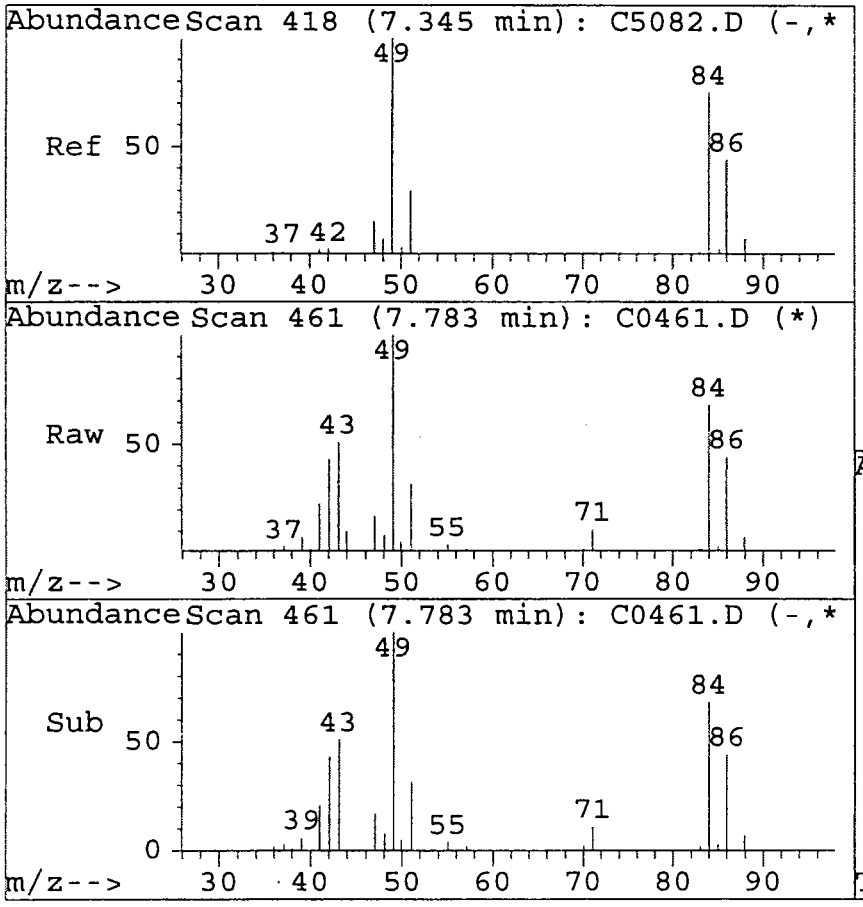
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10
Quant Time: Dec 5 12:50 1995

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

139

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

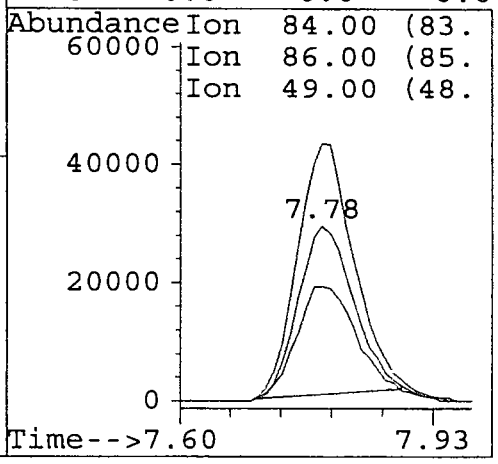


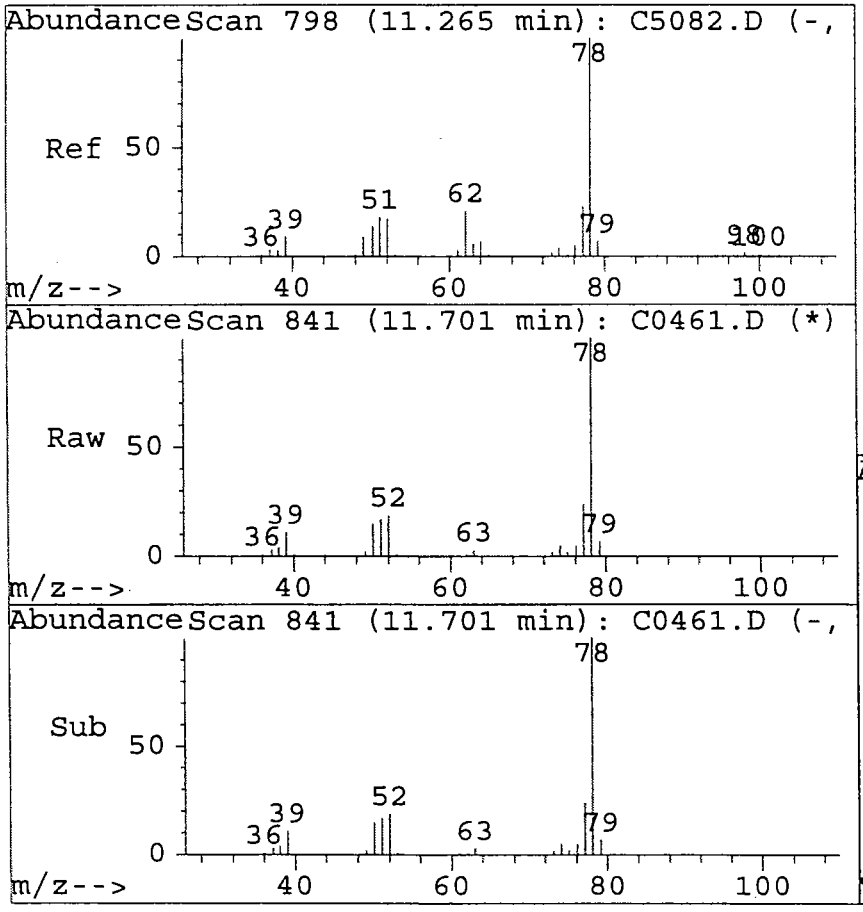


#9
Methylene chloride
Concen: 1.82 ug/L m
RT: 7.78 min Scan# 461
Delta R.T. -0.04 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:84 Resp: 141653

Ion	Ratio	Lower	Upper
84	100		
86	58.9	45.2	85.2
49	133.0	121.1	161.1
0	0.0	0.0	0.0

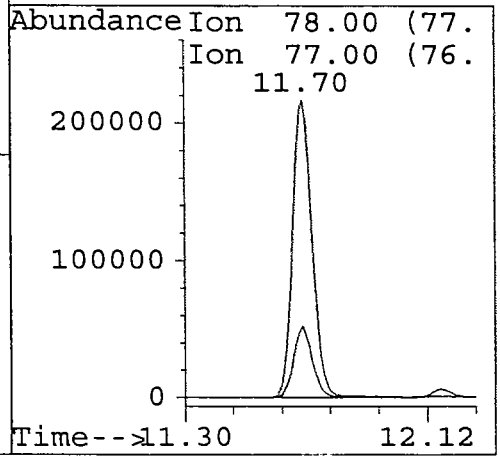


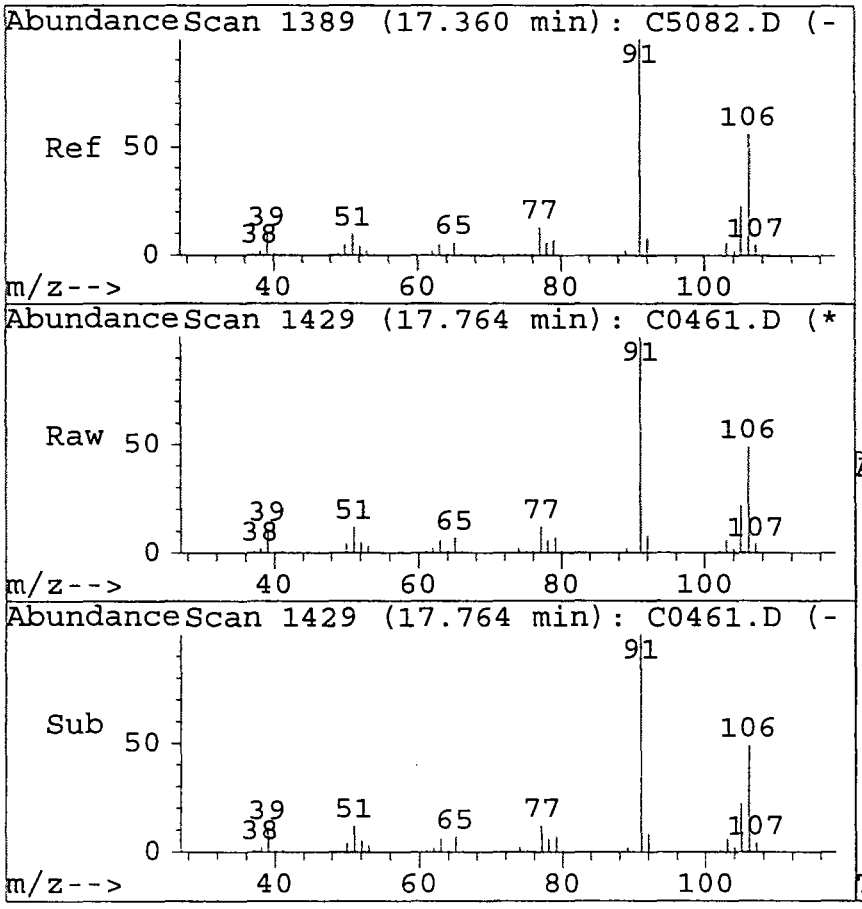


#21
Benzene
Concen: 3.50 ug/L
RT: 11.70 min Scan# 841
Delta R.T. -0.03 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:78 Resp: 1002261

Ion	Ratio	Lower	Upper
78	100		
77	24.1	3.3	43.3
0	0.0	0.0	0.0
0	0.0	0.0	0.0

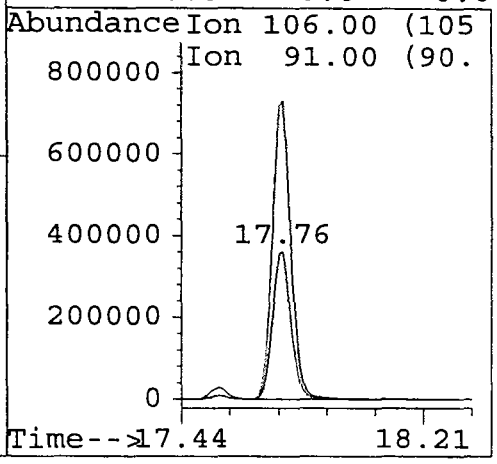


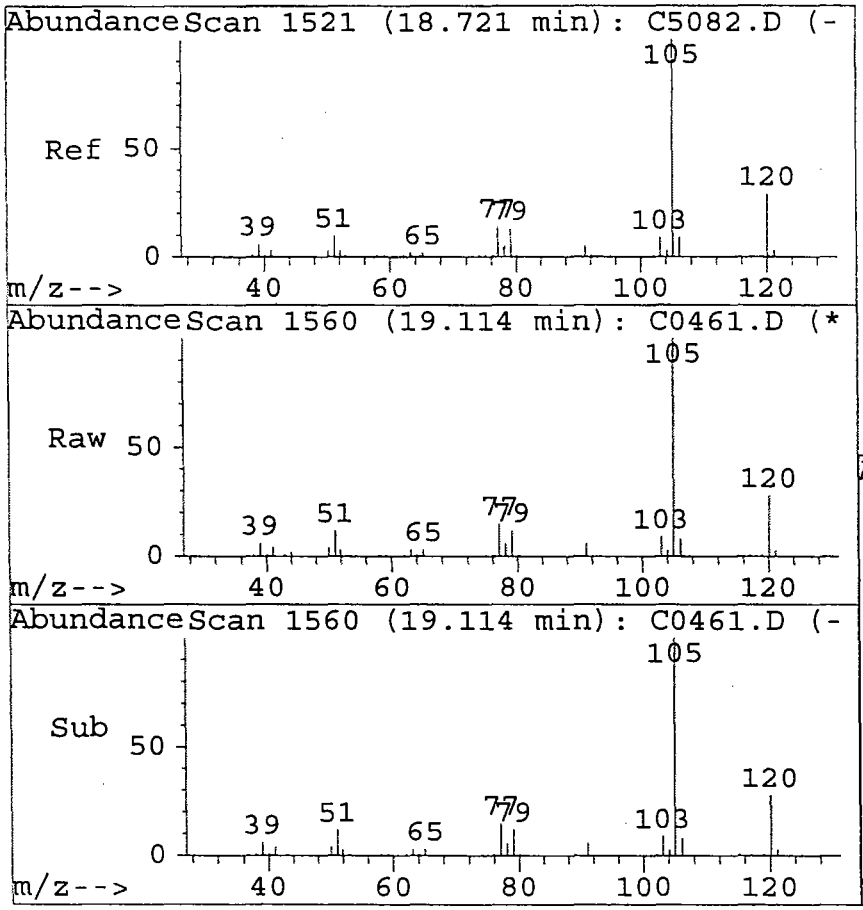


#38
Xylene (para & meta)
Concen: 9.07 ug/L
RT: 17.76 min Scan# 1429
Delta R.T. -0.05 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:106 Resp: 1425220

Ion	Ratio	Lower	Upper
106	100		
91	202.2	183.6	223.6
0	0.0	0.0	0.0
0	0.0	0.0	0.0

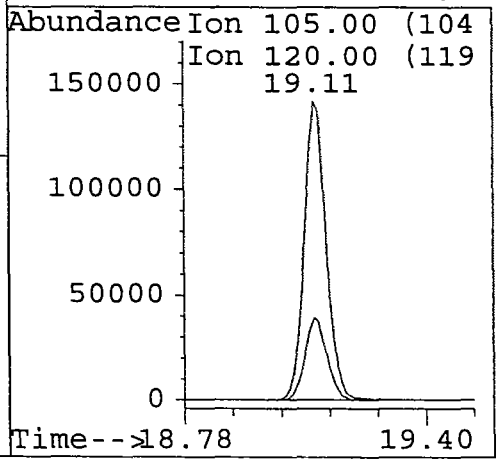


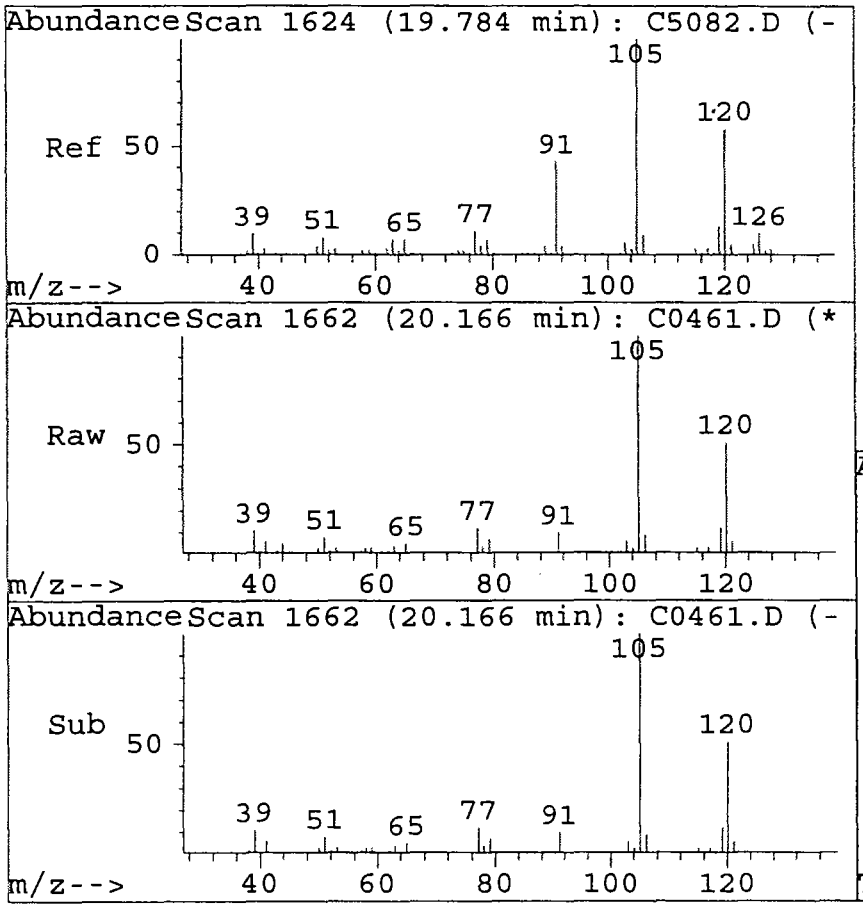


#42
Isopropylbenzene
Concen: 1.38 ug/L
RT: 19.11 min Scan# 1560
Delta R.T. -0.05 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:105 Resp: 554275

Ion	Ratio	Lower	Upper
105	100		
120	27.8	9.2	49.2
0	0.0	0.0	0.0
0	0.0	0.0	0.0

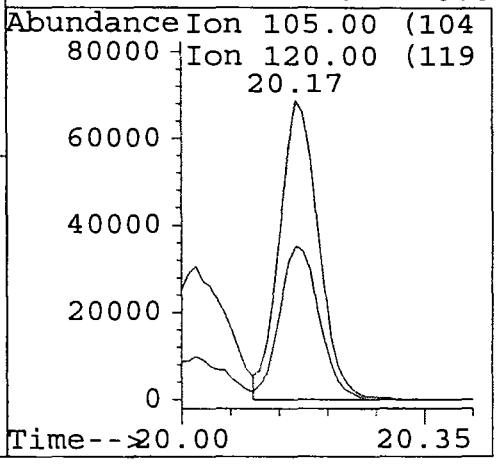


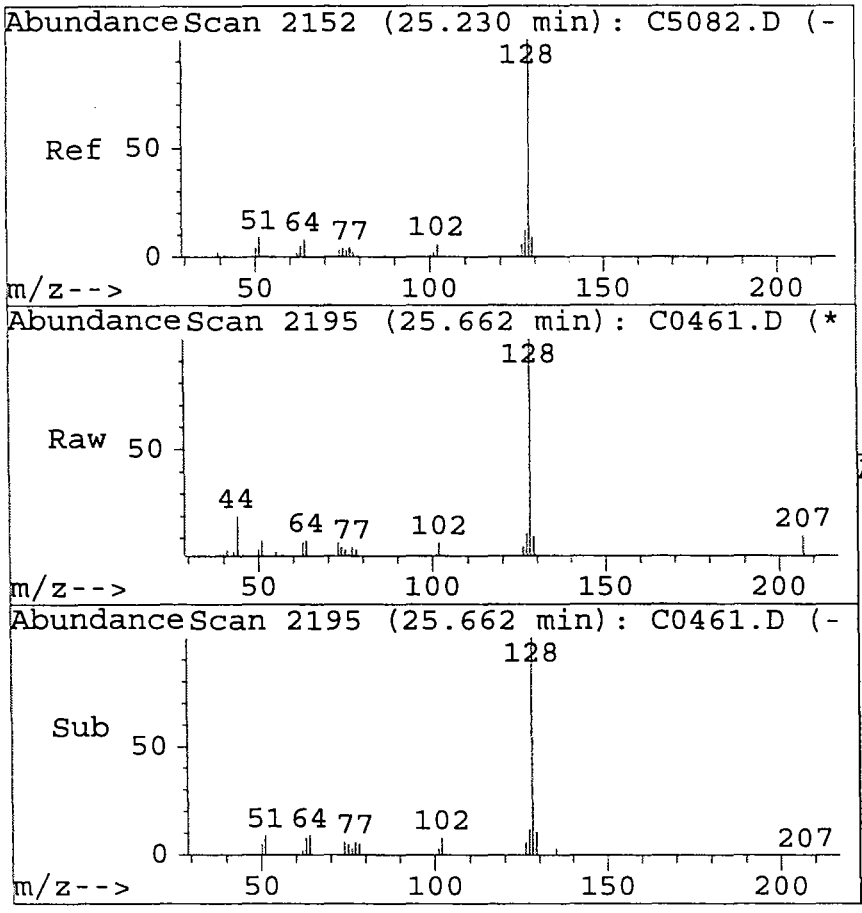


#50
1,3,5-Trimethylbenzene
Concen: 0.77 ug/L
RT: 20.17 min Scan# 1662
Delta R.T. -0.05 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:105 Resp: 269164

Ion	Ratio	Lower	Upper
105	100		
120	51.3	31.8	71.8
0	0.0	0.0	0.0
0	0.0	0.0	0.0

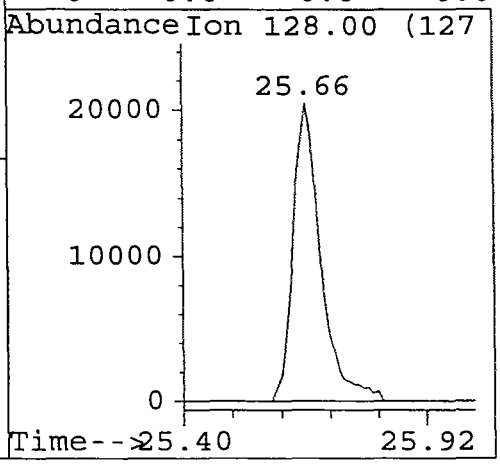


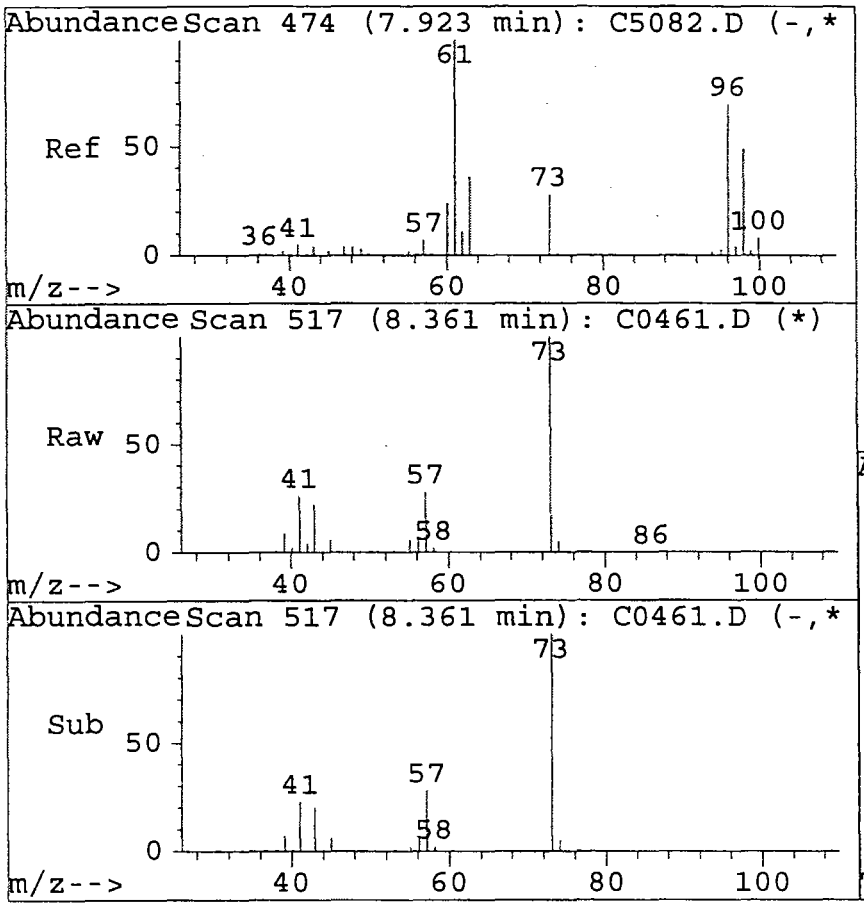


#63
Naphthalene
Concen: 0.66 ug/L
RT: 25.66 min Scan# 2195
Delta R.T. -0.06 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:128 Resp: 84621

Ion	Ratio	Lower	Upper
128	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0

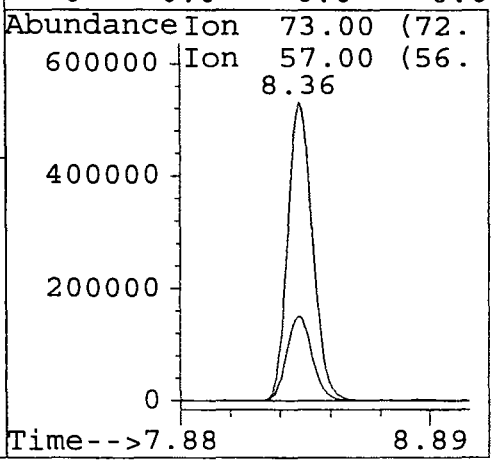


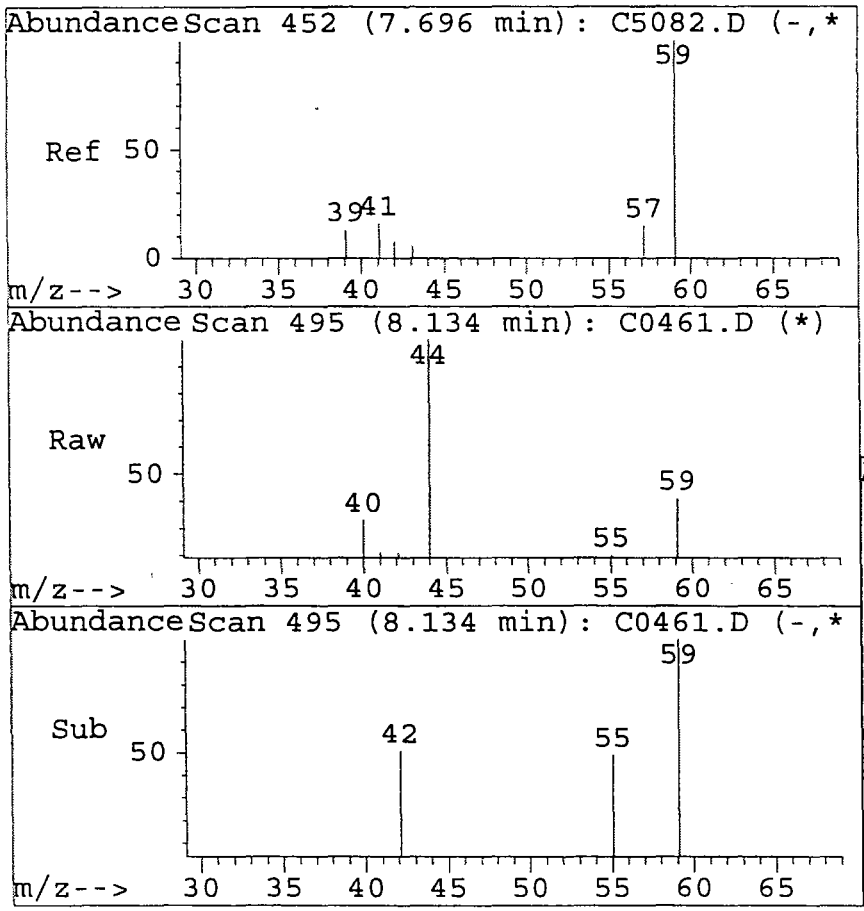


#65
Methyl-tert butyl ether
Concen: 36.25 ug/L
RT: 8.36 min Scan# 517
Delta R.T. -0.04 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:73 Resp: 3652168

Ion	Ratio	Lower	Upper
73	100		
57	28.5	5.7	45.7
0	0.0	0.0	0.0
0	0.0	0.0	0.0

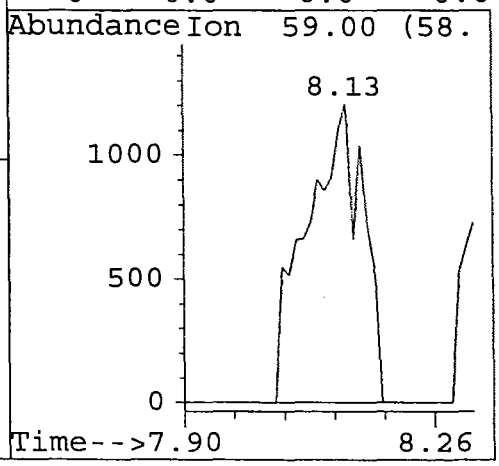




#66
tert-Butyl Alcohol
Concen: 4.62 ug/L
RT: 8.13 min Scan# 495
Delta R.T. -0.05 min
Lab File: c0461.d
Acq: 5 Dec 95 12:24 am

Tgt Ion:59 Resp: 6857

Ion	Ratio	Lower	Upper
59	100		
0	0.0	0.0	0.0
0	0.0	0.0	0.0
0	0.0	0.0	0.0



Library Search Compound Report

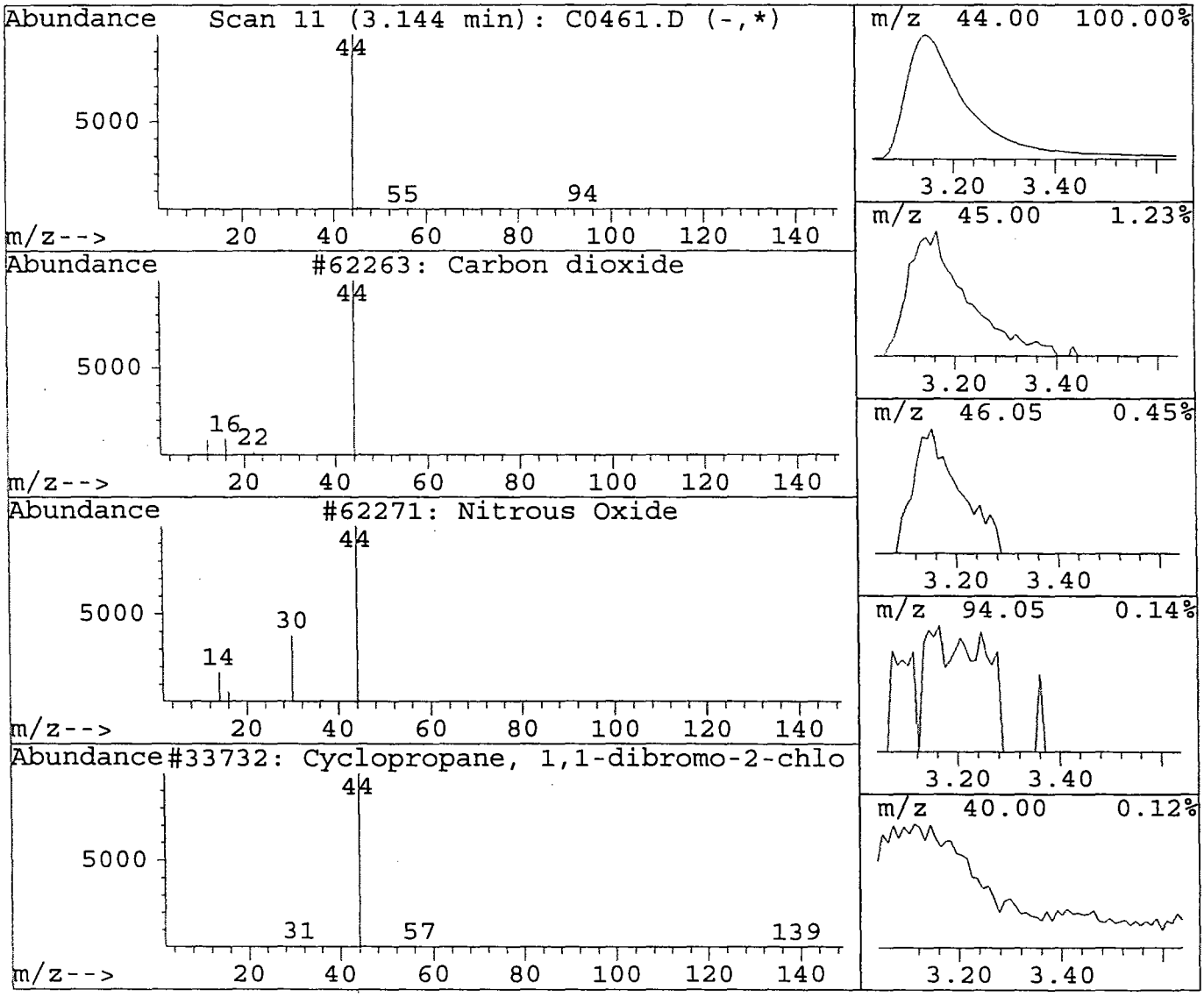
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.14	6.50 ug/L	4522010	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Ethyne, fluoro-	35	002713-09-9	2



Library Search Compound Report

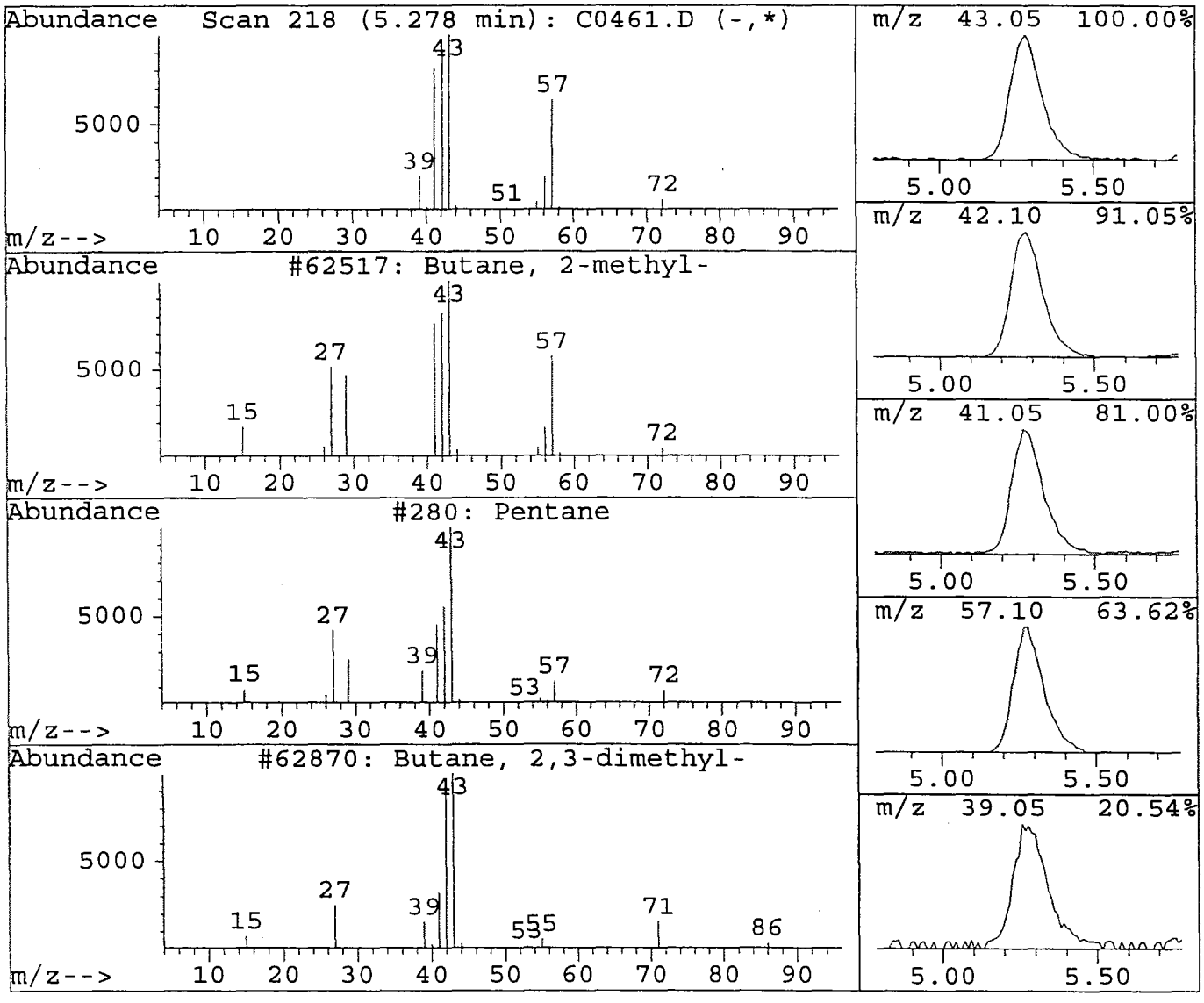
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
5.28	1.54 ug/L	1073505	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Butane, 2-methyl-	62517	000078-78-4	91
2	Pentane	280	000109-66-0	37
3	Butane, 2,3-dimethyl-	62870	000079-29-8	33
4	Isobutane	62334	000075-28-5	5
5	3-Buten-1-ol	264	000627-27-0	9



Library Search Compound Report

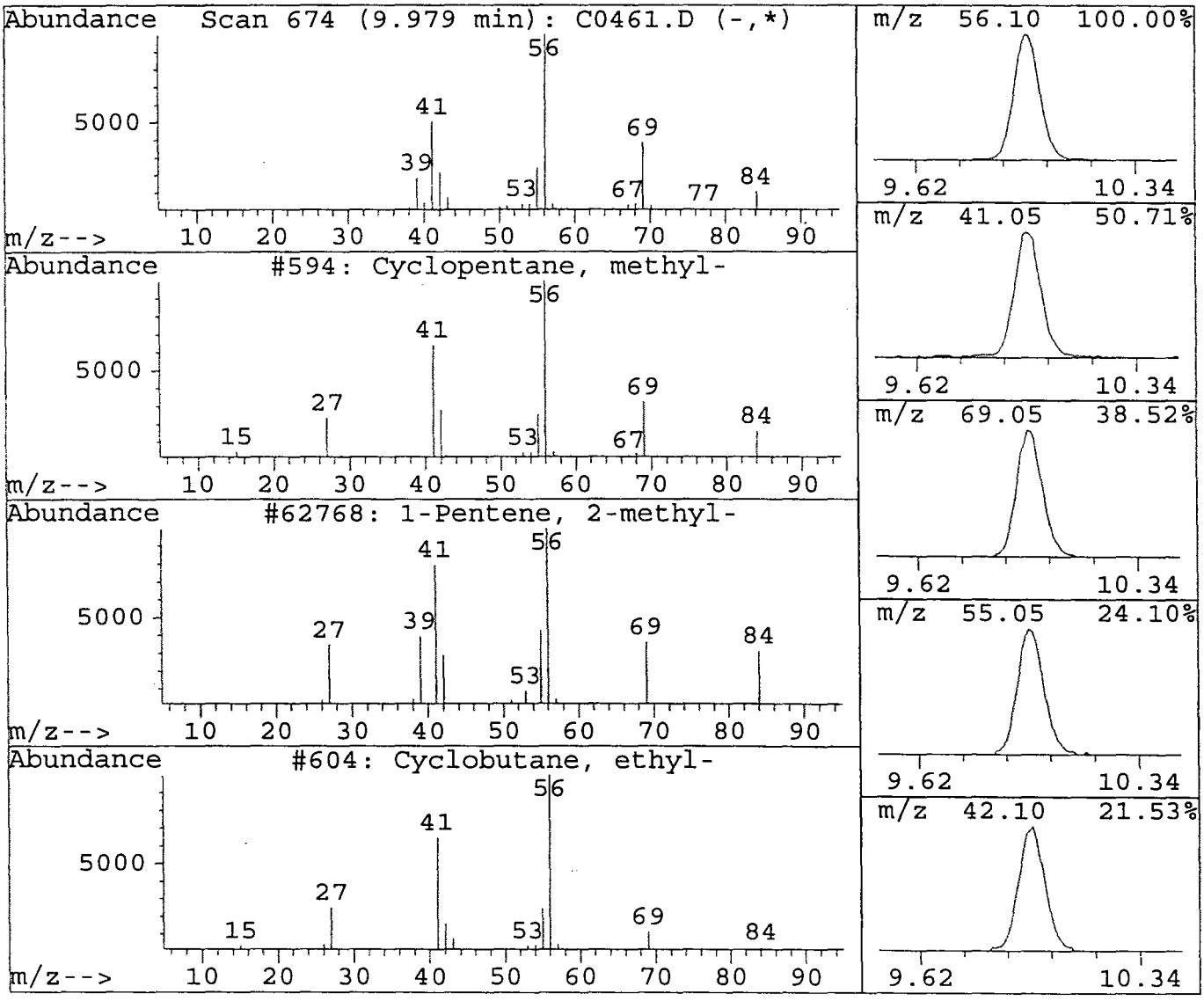
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
9.98	2.45 ug/L	1701850	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclopentane, methyl-	594	000096-37-7	52
2	1-Pentene, 2-methyl-	62768	000763-29-1	16
3	Cyclobutane, ethyl-	604	004806-61-5	64
4	1H-Tetrazole, 5-methyl-	529	004076-36-2	80
5	Oxetane, 3,3-dimethyl-	62839	006921-35-3	33



Library Search Compound Report

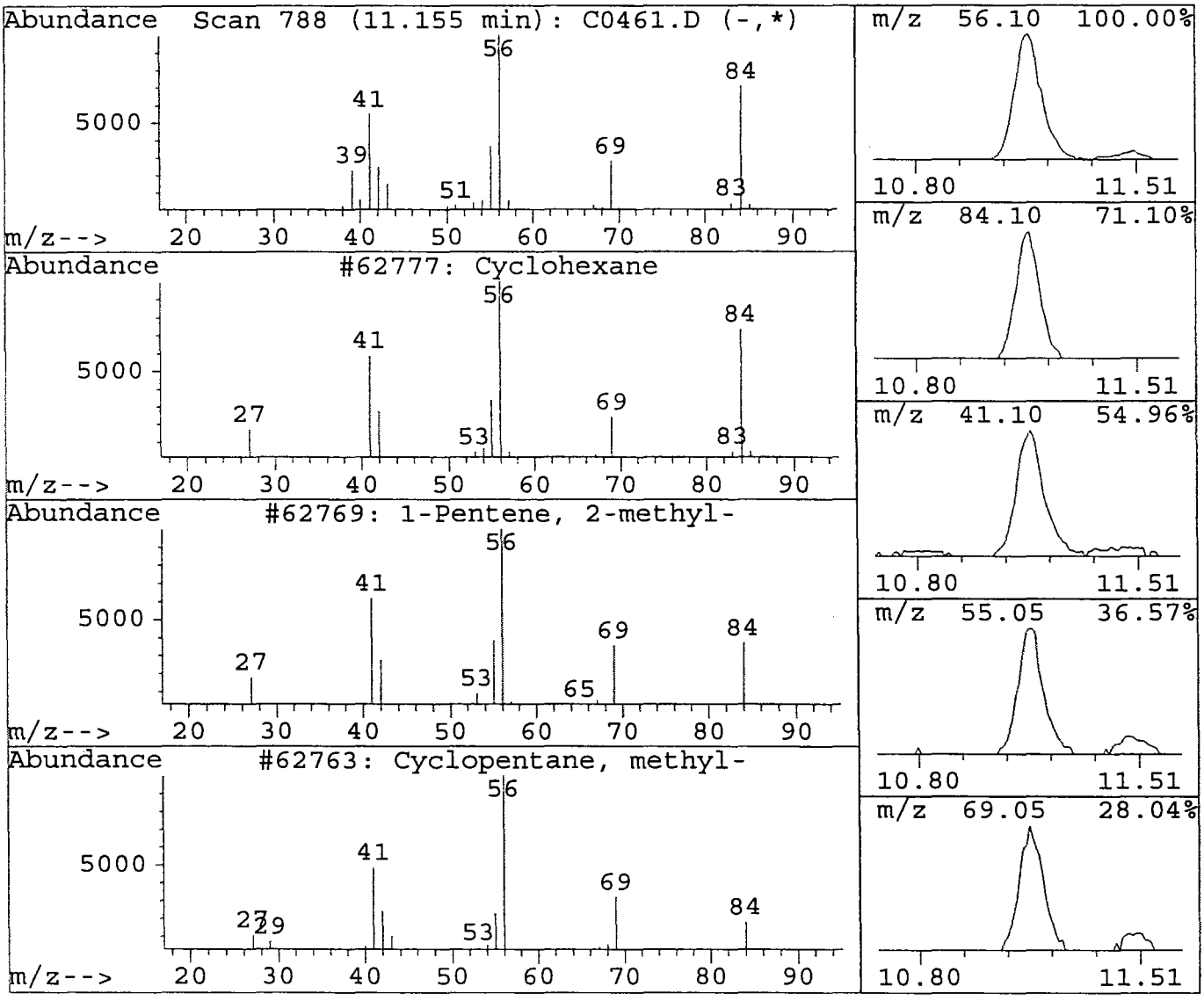
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
11.15	0.59 ug/L	409362	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Cyclohexane	62777	000110-82-7	94
2	1-Pentene, 2-methyl-	62769	000763-29-1	50
3	Cyclopentane, methyl-	62763	000096-37-7	53
4	1-Hexene	62754	000592-41-6	17
5	Cyclopropane, propyl-	593	002415-72-7	23



Library Search Compound Report

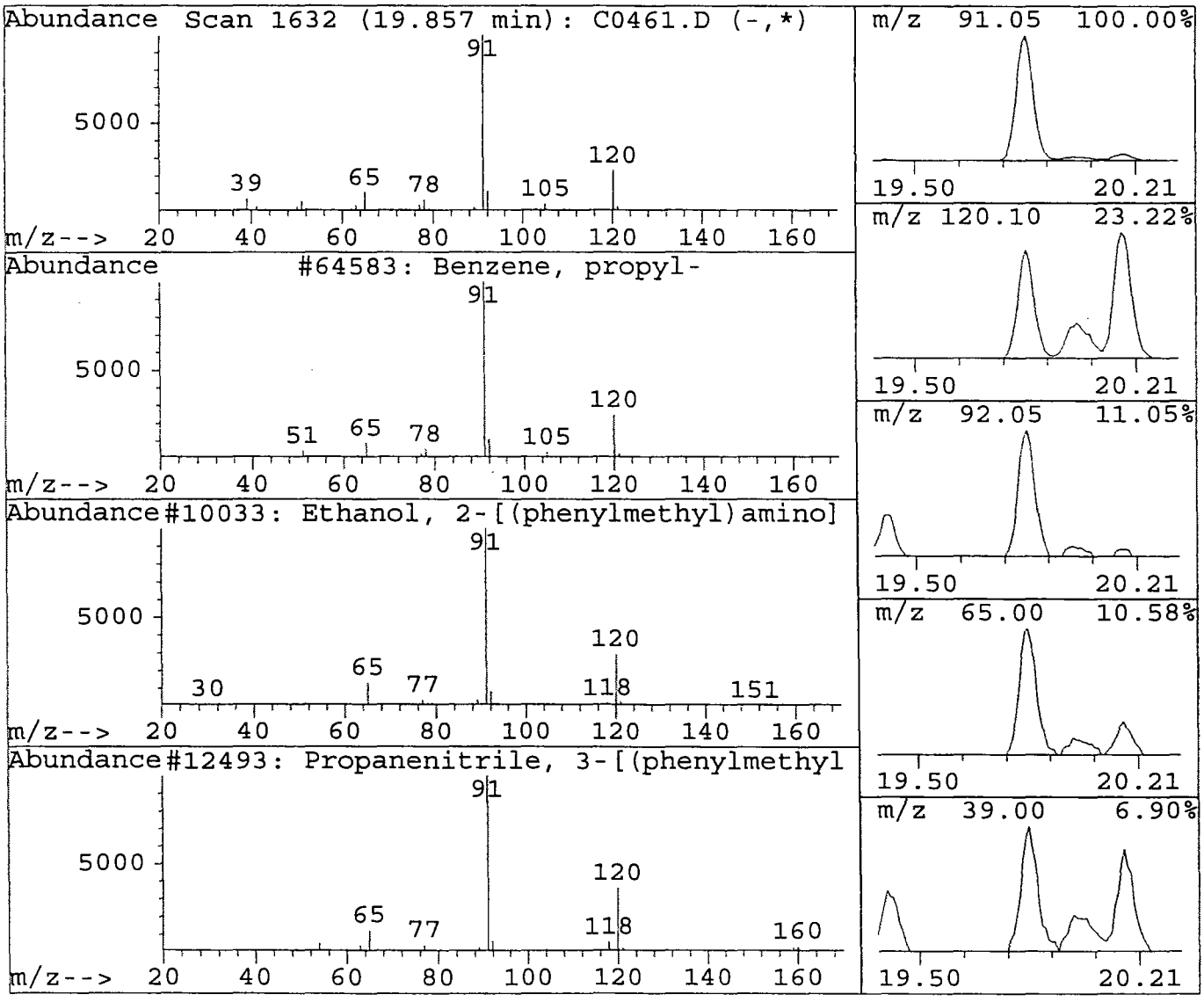
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
19.86	1.40 ug/L	975021	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, propyl-	64583	000103-65-1	91
2	Ethanol, 2-[(phenylmethyl)amino]-	10033	000104-63-2	33
3	Propanenitrile, 3-[(phenylmethyl)am	12493	000706-03-6	36
4	1,2-Ethanediamine, N-(phenylmethyl)	9756	004152-09-4	23
5	Benzeneacetaldehyde	64545	000122-78-1	23



Library Search Compound Report

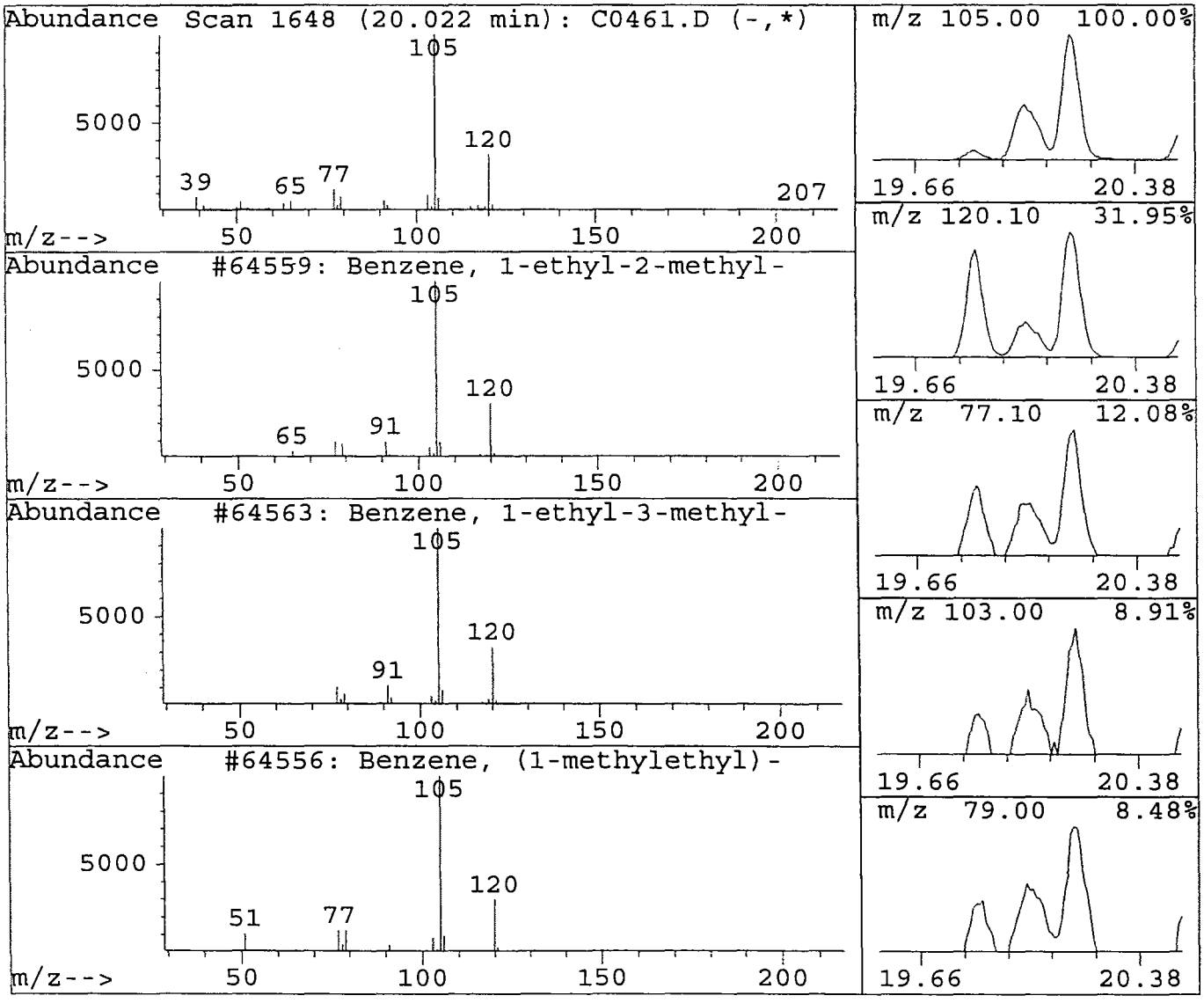
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
20.02	0.56 ug/L	392509	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 1-ethyl-2-methyl-	64559	000611-14-3	72
2	Benzene, 1-ethyl-3-methyl-	64563	000620-14-4	86
3	Benzene, (1-methylethyl)-	64556	000098-82-8	80
4	Benzene, 1-ethyl-4-methyl-	64566	000622-96-8	91
5	Benzene, 1,2,3-trimethyl-	64576	000526-73-8	64



Library Search Compound Report

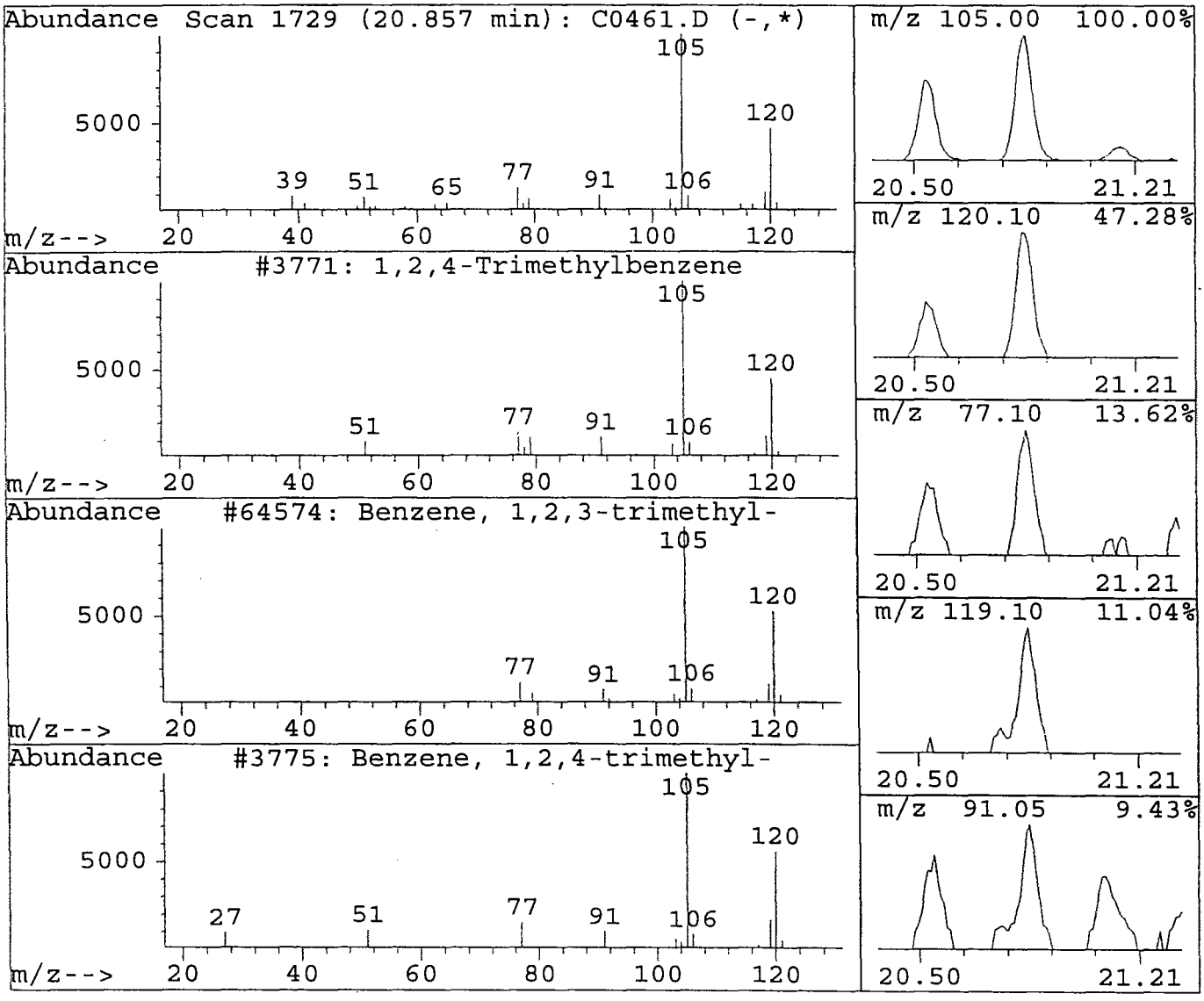
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
20.86	0.57 ug/L	399810	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,2,4-Trimethylbenzene	3771	000095-36-3	80
2	Benzene, 1,2,3-trimethyl-	64574	000526-73-8	87
3	Benzene, 1,2,4-trimethyl-	3775	000095-63-6	87
4	Benzene, 1,3,5-trimethyl-	64571	000108-67-8	91
5	Benzene, 1-ethyl-3-methyl-	64564	000620-14-4	80



Library Search Compound Report

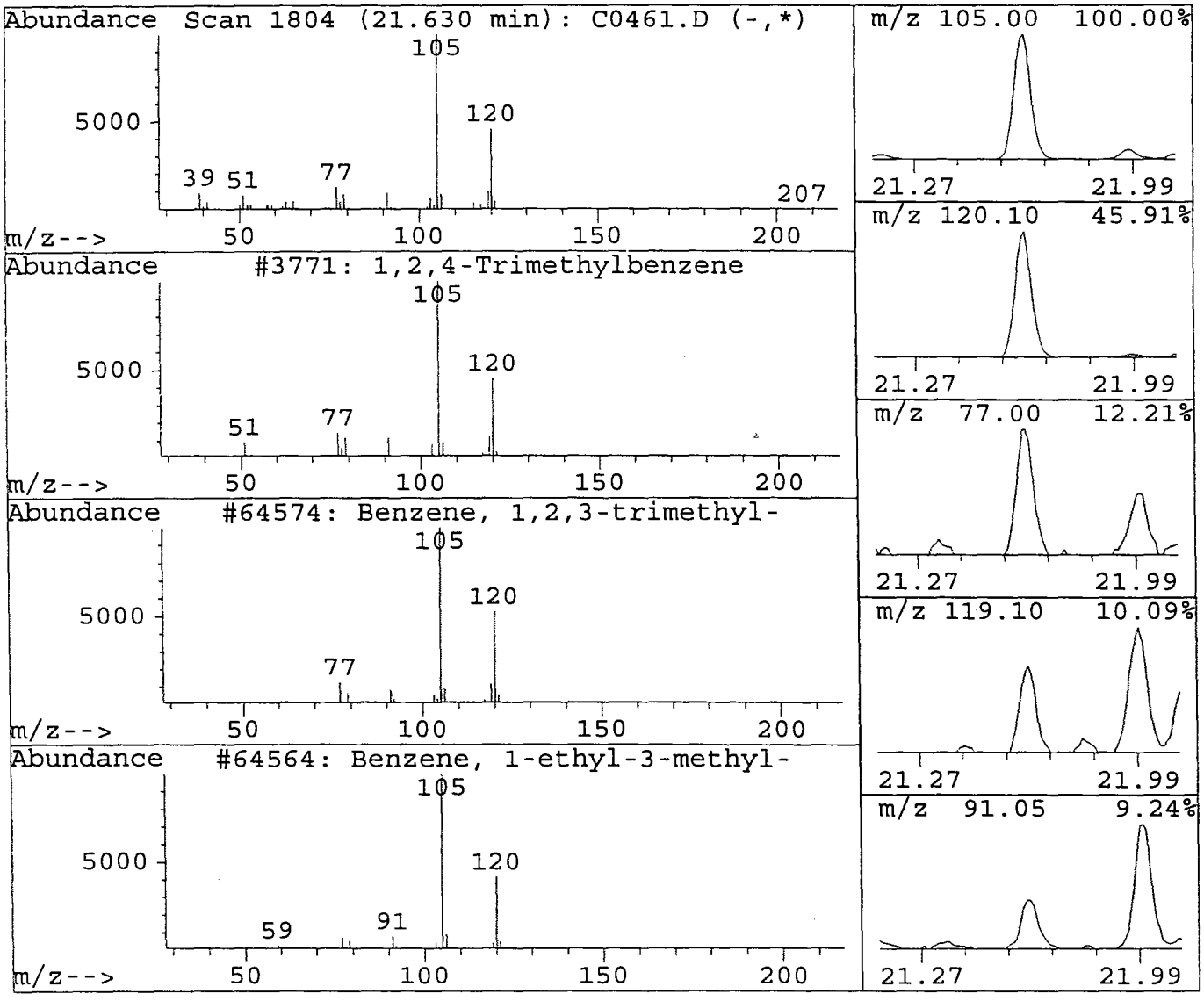
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
21.63	1.61 ug/L	1119913	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	1,2,4-Trimethylbenzene	3771	000095-36-3	52
2	Benzene, 1,2,3-trimethyl-	64574	000526-73-8	91
3	Benzene, 1-ethyl-3-methyl-	64564	000620-14-4	90
4	Benzene, 1,2,4-trimethyl-	3775	000095-63-6	80
5	Benzene, 1,3,5-trimethyl-	64571	000108-67-8	83



Library Search Compound Report

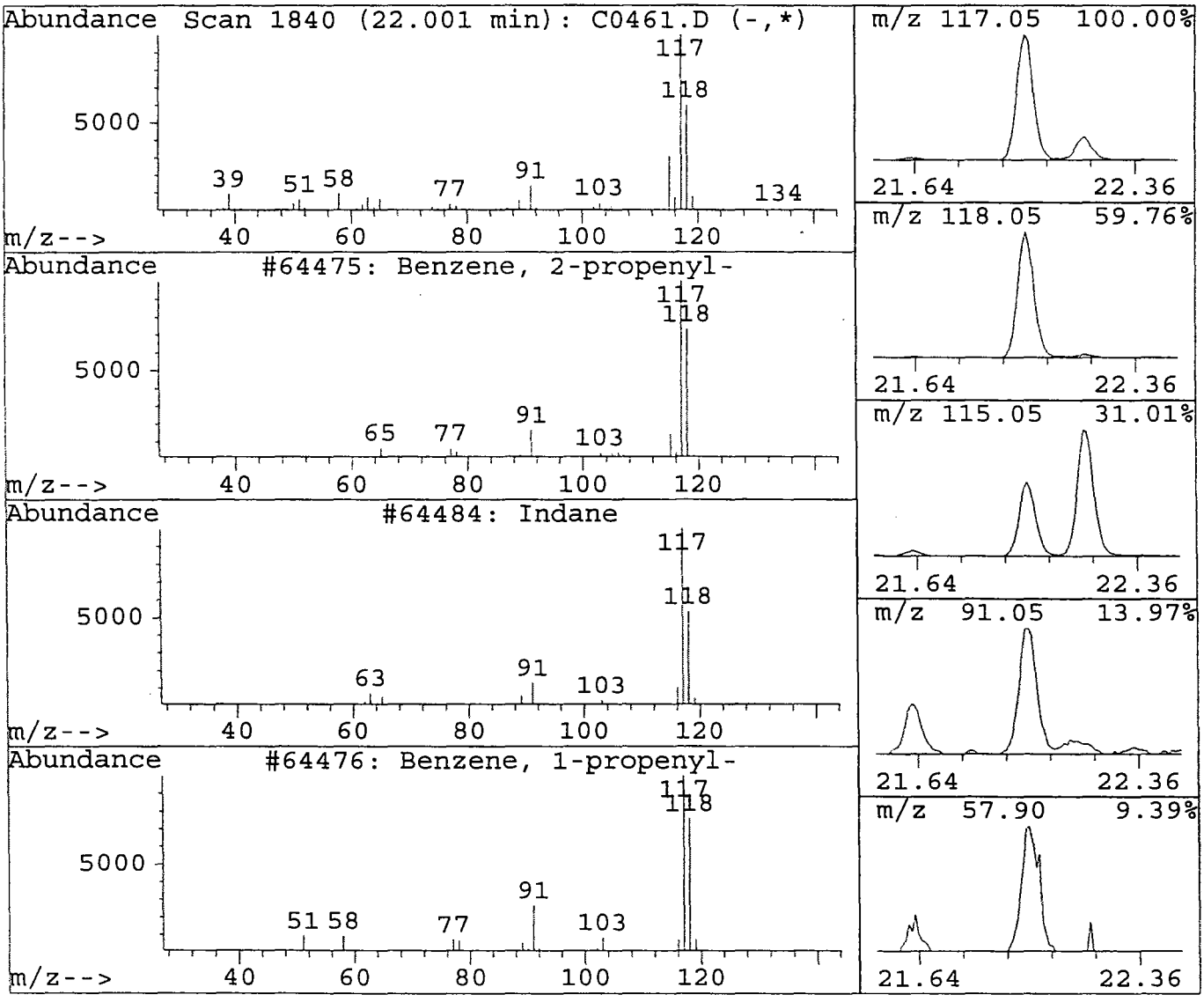
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
22.00	3.08 ug/L	2141596	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzene, 2-propenyl-	64475	000300-57-2	46
2	Indane	64484	000496-11-7	81
3	Benzene, 1-propenyl-	64476	000637-50-3	46
4	Benzene, 1-ethenyl-2-methyl-	64478	000611-15-4	35
5	Benzene, 1-ethenyl-4-methyl-	64480	000622-97-9	22



Library Search Compound Report

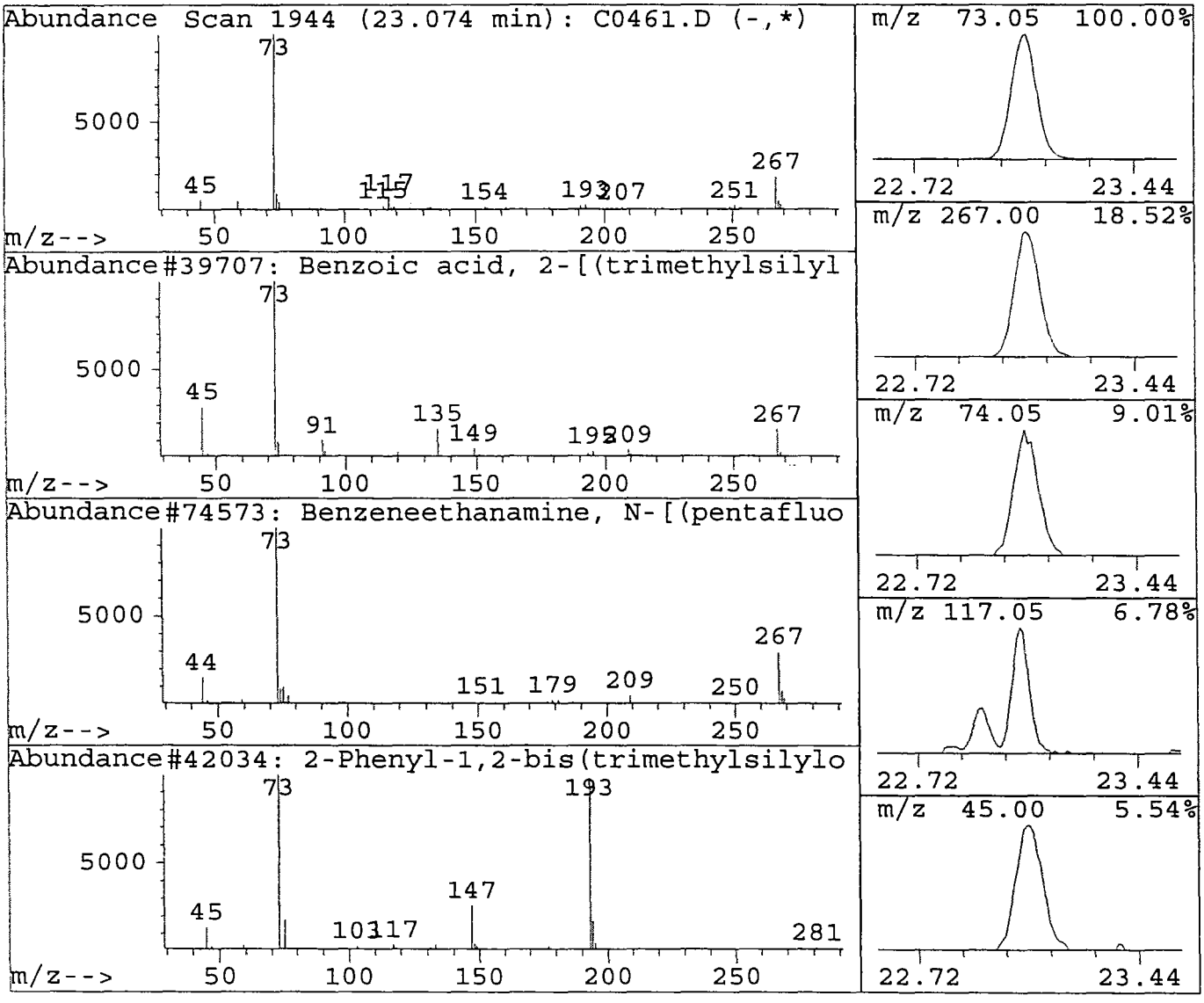
Data File : d:\hpchem\1\data\c0461.d
Acq On : 5 Dec 95 12:24 am
Sample : 9554054 BLDG 2567 MW-3
Misc : 2.5 ML 1:10

Vial: 22
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.07	3.66 ug/L	2543758	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	36
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	32
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	Benzeneacetic acid, trimethylsilyl	70090	002078-18-4	4
5	Rhodoviolascin	60808	034255-08-8	4



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW4-292948

154

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9554055V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0404.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# mw4-2926948

155

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 4

Matrix: (soil/water) WATER Lab Sample ID: 9554055V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0404.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1E

FMETL# mw4-2926948 156

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: 4 Group: _____

Matrix: (soil/water) WATER Lab Sample ID: 9554055V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0404.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.18	1	J
2.	Column Bleed	19.70	1	J
3.	Column Bleed	23.08	2	J
4.				
5.				
6.				
7.				
8.				
9.				
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20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c0404.d
Acq On : 30 Nov 95 10:19 pm
Sample : 9554055 BLDG 2567 MW-4
Misc : 25 ML
Quant Time: Dec 5 10:55 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.19	96	1763008	5.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.41	95	936547	4.92	ug/L	98.41%
57) 1,2-Dichlorobenzene-d4	22.21	152	590214	4.95	ug/L	98.91%
Target Compounds						Qvalue
9) Methylene chloride	7.80	84	52401	0.63	ug/L	98

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

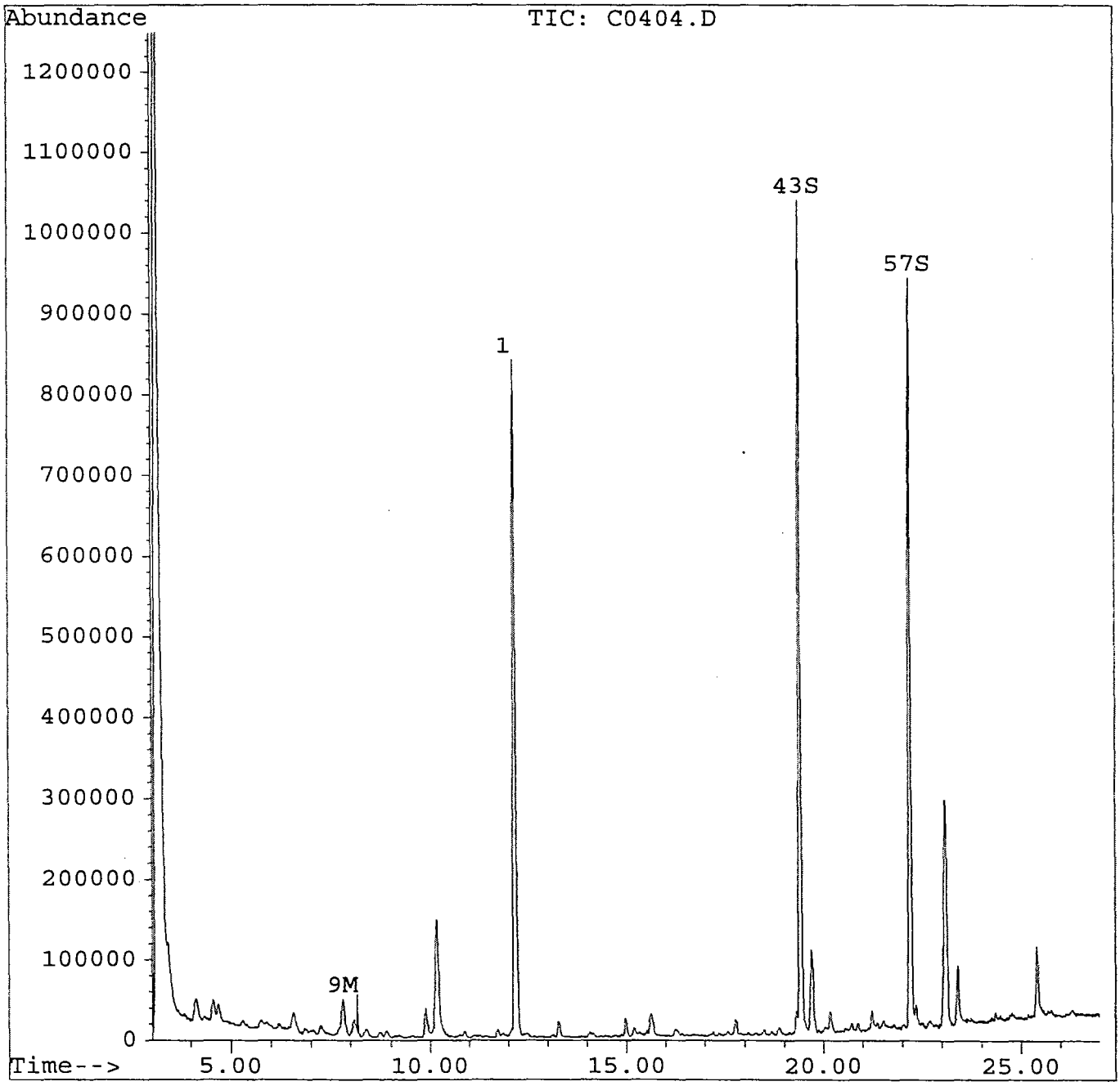
Quantitation Report

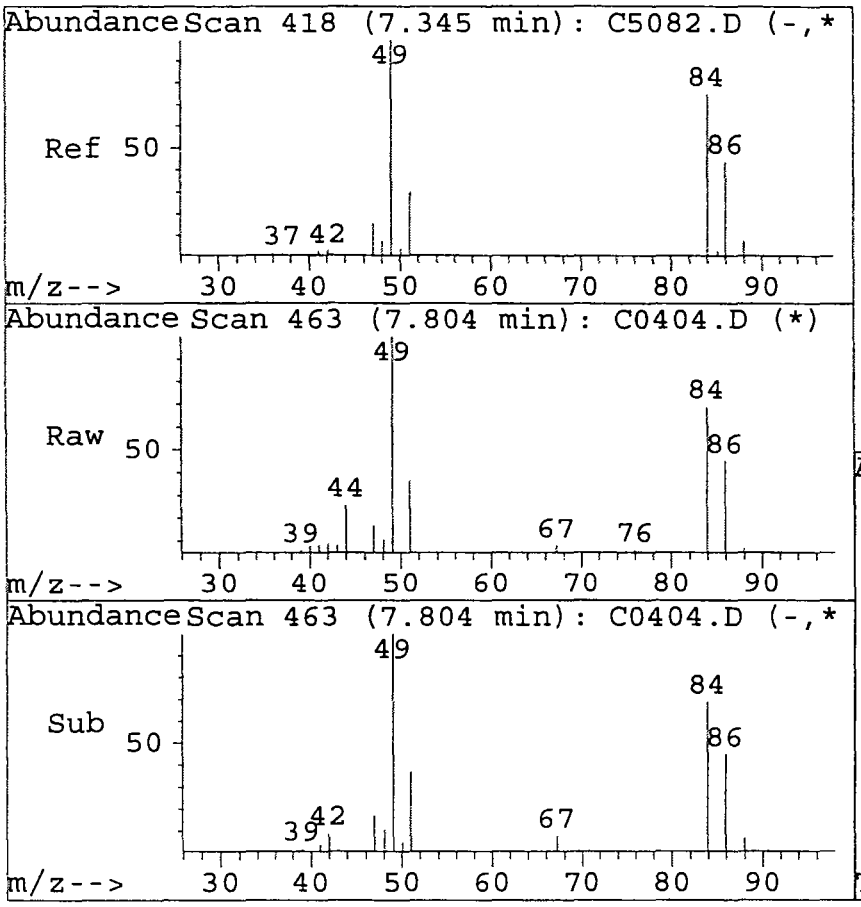
158

Data File : d:\hpchem\1\data\c0404.d
Acq On : 30 Nov 95 10:19 pm
Sample : 9554055 BLDG 2567 MW-4
Misc : 25 ML
Quant Time: Dec 5 10:55 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

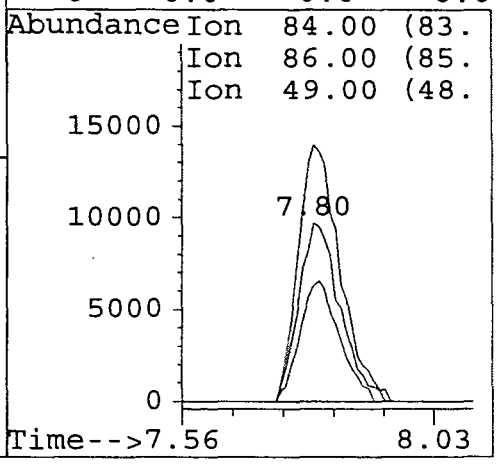




#9
Methylene chloride
Concen: 0.63 ug/L
RT: 7.80 min Scan# 463
Delta R.T. -0.02 min
Lab File: c0404.d
Acq: 30 Nov 95 10:19 pm

Tgt Ion:84 Resp: 52401

Ion	Ratio	Lower	Upper
84	100		
86	64.6	45.2	85.2
49	143.9	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

160

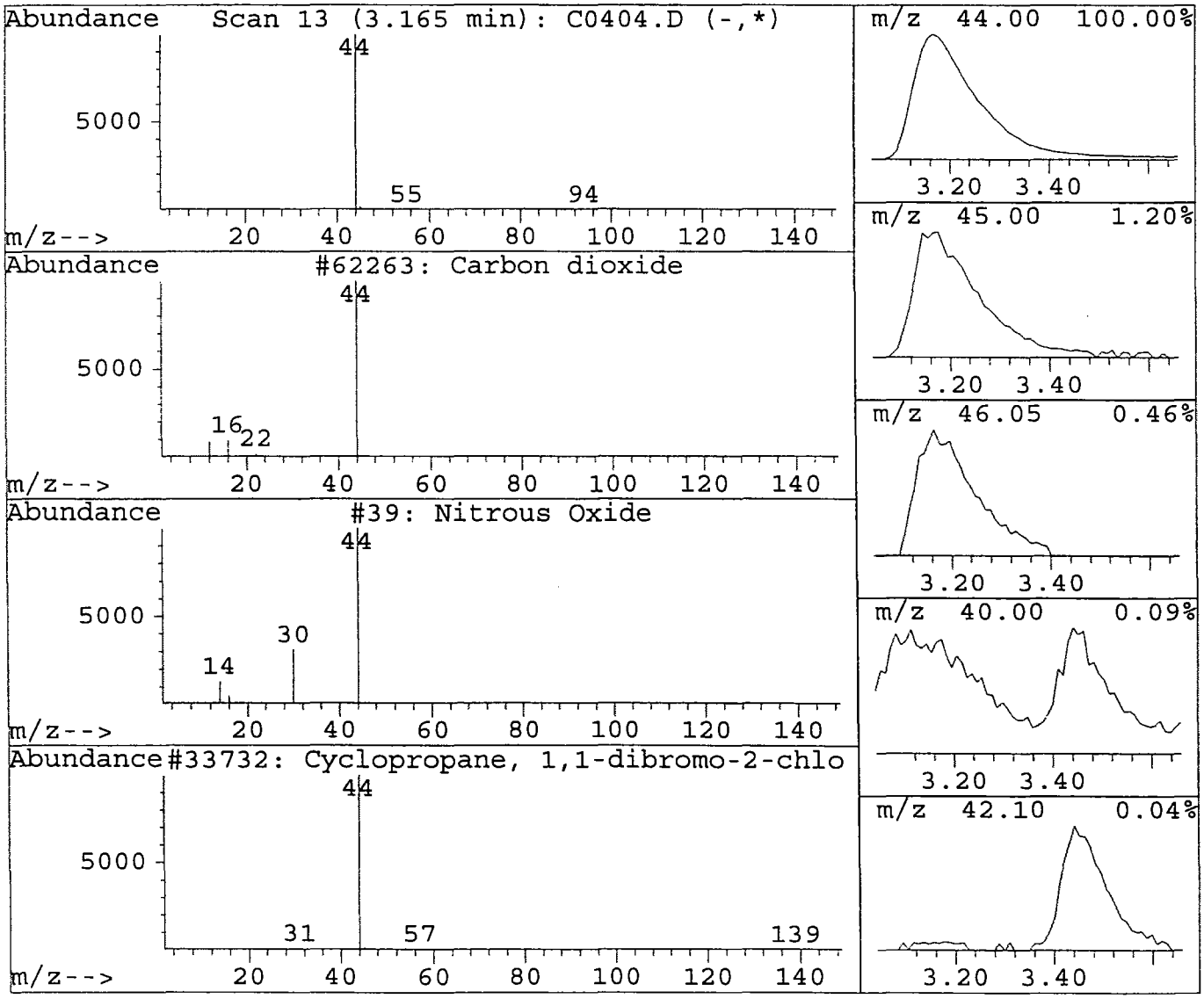
Data File : d:\hpchem\1\data\c0404.d
Acq On : 30 Nov 95 10:19 pm
Sample : 9554055 BLDG 2567 MW-4
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.16	16.83 ug/L	12520080	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	39	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Ethyne, fluoro-	35	002713-09-9	2



Library Search Compound Report

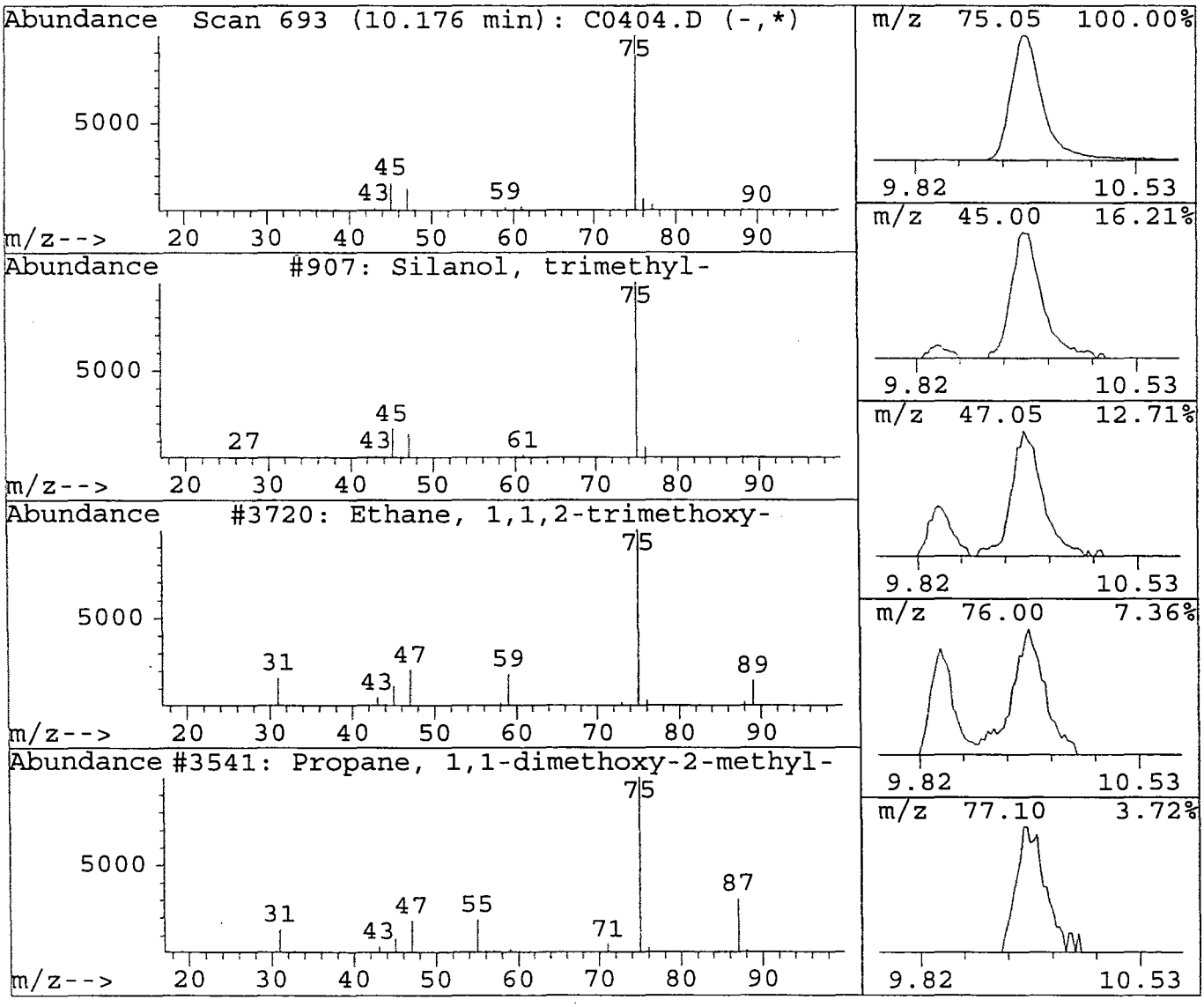
Data File : d:\hpchem\1\data\c0404.d
Acq On : 30 Nov 95 10:19 pm
Sample : 9554055 BLDG 2567 MW-4
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
10.18	1.33 ug/L	990211	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	907	001066-40-6	78
2	Ethane, 1,1,2-trimethoxy-	3720	024332-20-5	1
3	Propane, 1,1-dimethoxy-2-methyl-	3541	041632-89-7	2
4	1,1-Dimethoxydodecane	29998	000000-00-0	2
5	Aminoacetaldehyde dimethyl acetal	1967	022483-09-6	2



Library Search Compound Report

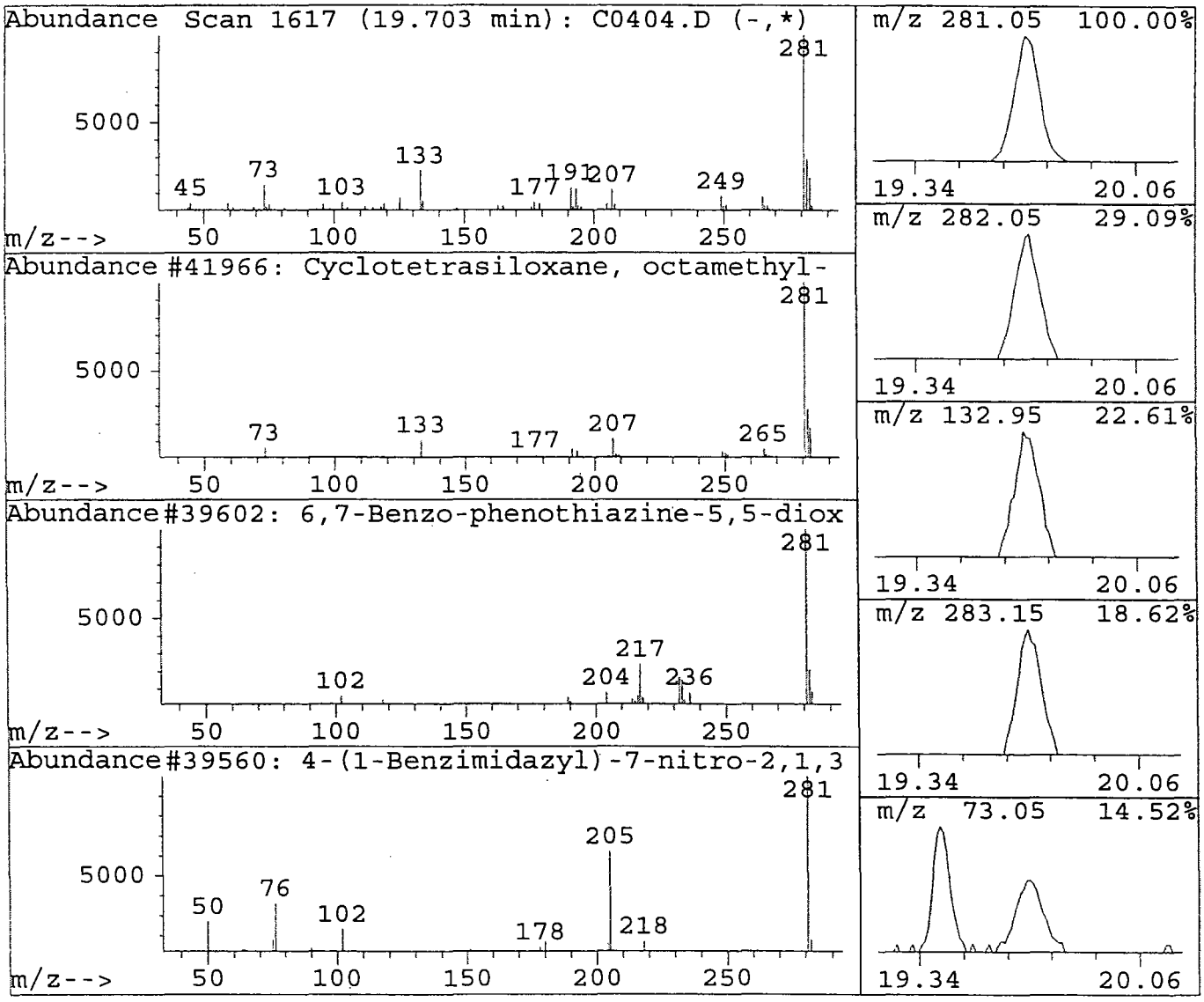
Data File : d:\hpchem\1\data\c0404.d
Acq On : 30 Nov 95 10:19 pm
Sample : 9554055 BLDG 2567 MW-4
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
19.70	0.62 ug/L	459932	Fluorobenzene	12.19

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	64
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	5
3	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	5
4	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	9
5	3,6-Bis(N-dimethylamino)-9-ethylcar	39624	057103-04-5	23



Library Search Compound Report

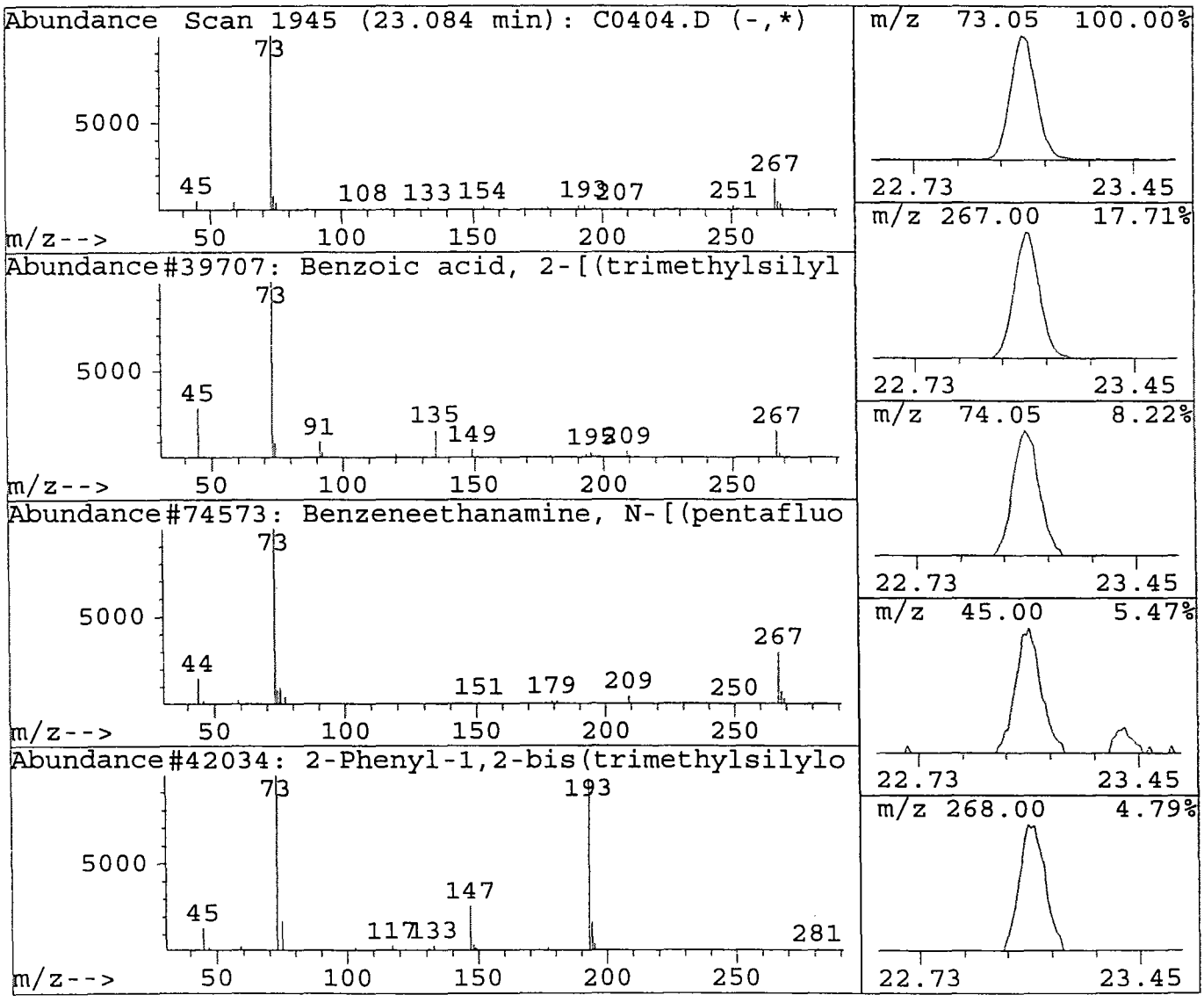
Data File : d:\hpchem\1\data\c0404.d
Acq On : 30 Nov 95 10:19 pm
Sample : 9554055 BLDG 2567 MW-4
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.08	1.81 ug/L	1345163	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	4
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	38
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	4
4	Butane, 2,3-dimethoxy-2-methyl-	5815	074421-00-4	2
5	N-Ethylformamide	292	000627-45-2	3



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW5-2931783

104

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9554056V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0405.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# MW5-2931783

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: 5

Matrix: (soil/water) WATER Lab Sample ID: 9554056V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0405.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

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

1E

FMETL# MW5-2931783 166

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: 5 Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554056V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0405.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	19.71	1	J
2.	Column Bleed	23.08	1	J
3.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0405.d
Acq On : 30 Nov 95 10:52 pm
Sample : 9554056 BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 10:56 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.20	96	1800135	5.00	ug/L	-0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.41	95	966407	4.97	ug/L	99.45%
57) 1,2-Dichlorobenzene-d4	22.21	152	608741	5.00	ug/L	99.91%
Target Compounds						Qvalue

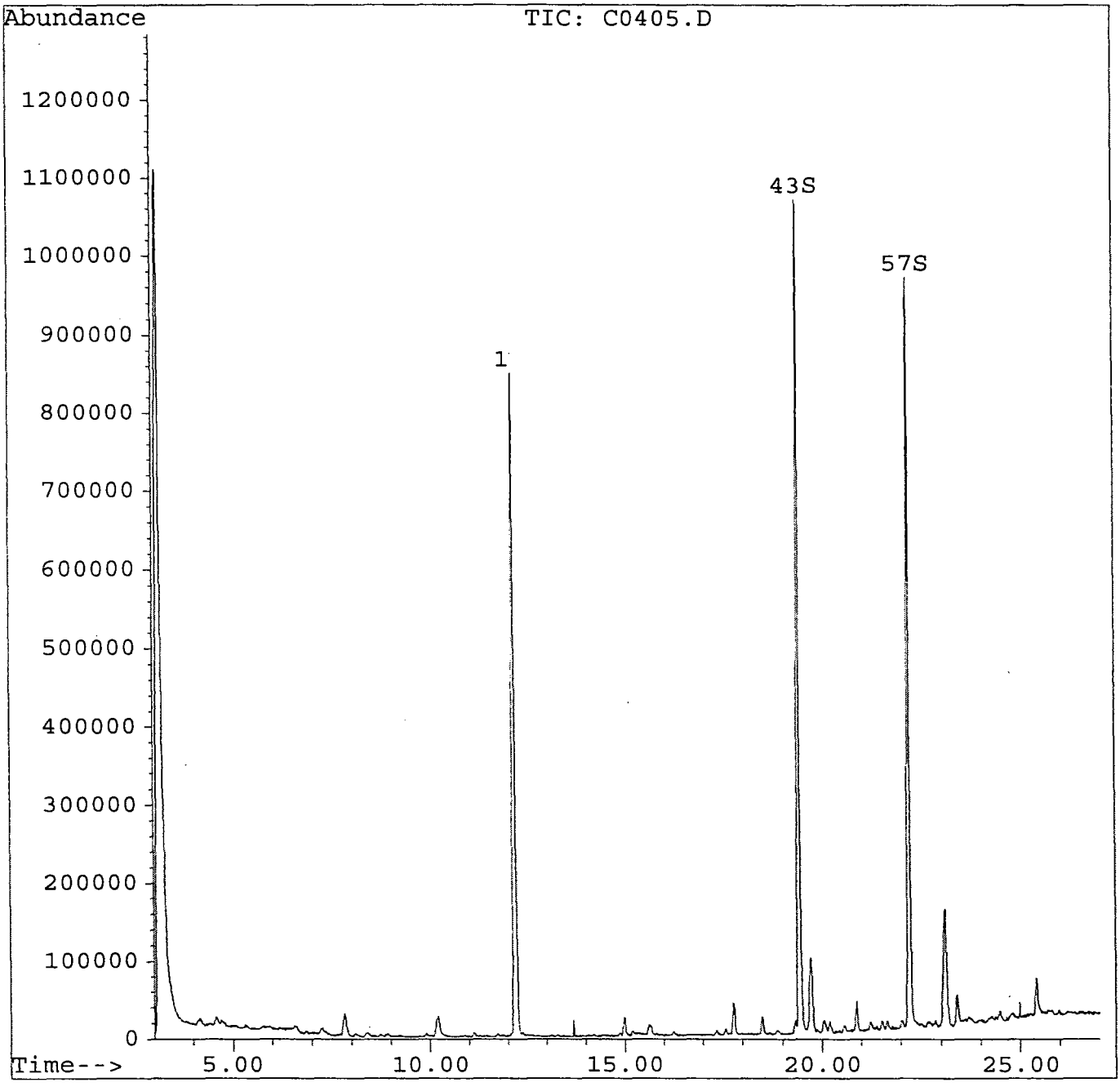
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0405.d
Acq On : 30 Nov 95 10:52 pm
Sample : 9554056 BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 10:56 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Library Search Compound Report

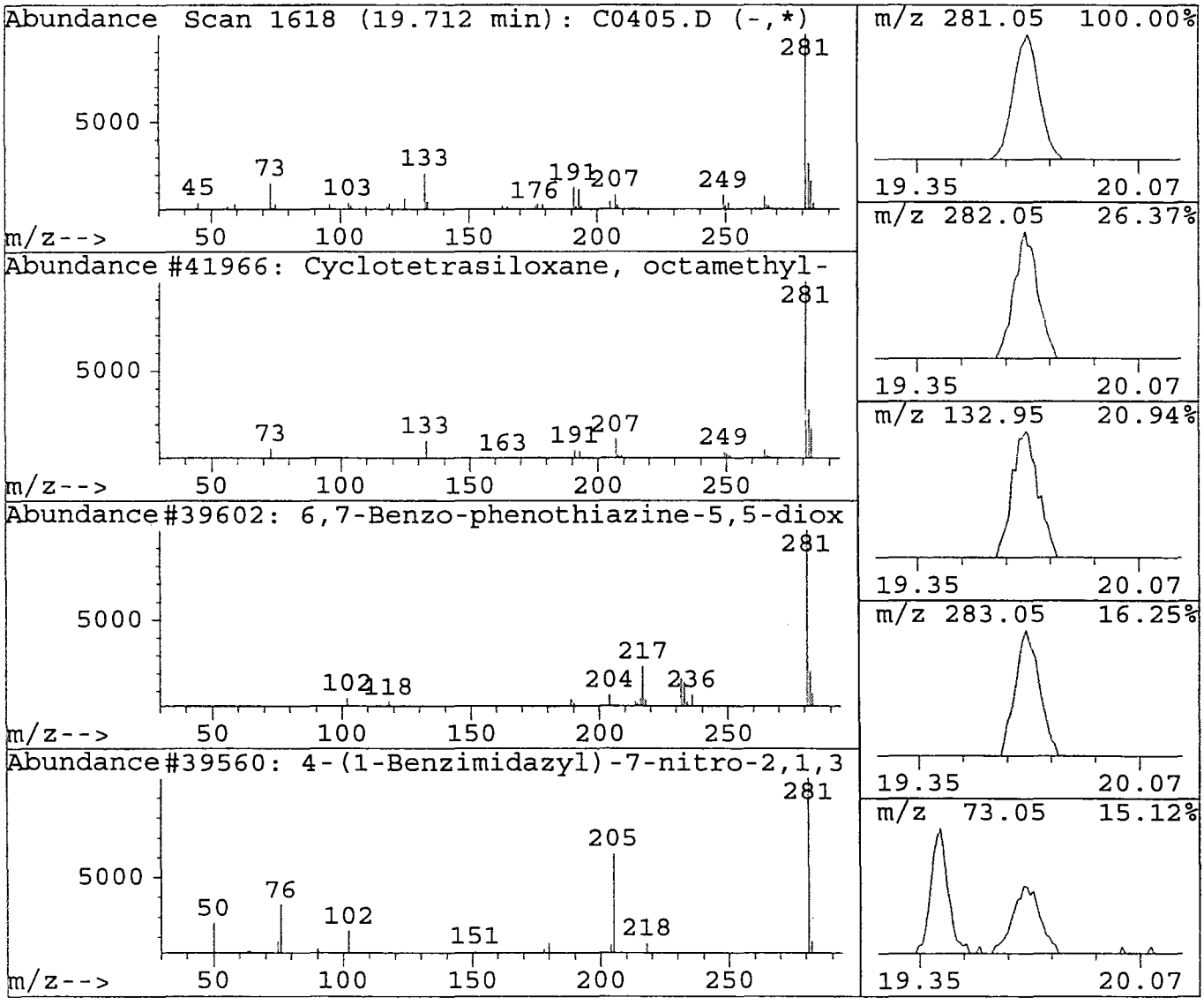
Data File : d:\hpchem\1\data\c0405.d
Acq On : 30 Nov 95 10:52 pm
Sample : 9554056 BLDG 2567 MW-5
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
19.71	0.53 ug/L	402058	Fluorobenzene	12.20

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	14
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	9
4	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	50
5	3,6-Bis(N-dimethylamino)-9-ethylcar	39624	057103-04-5	50



Library Search Compound Report

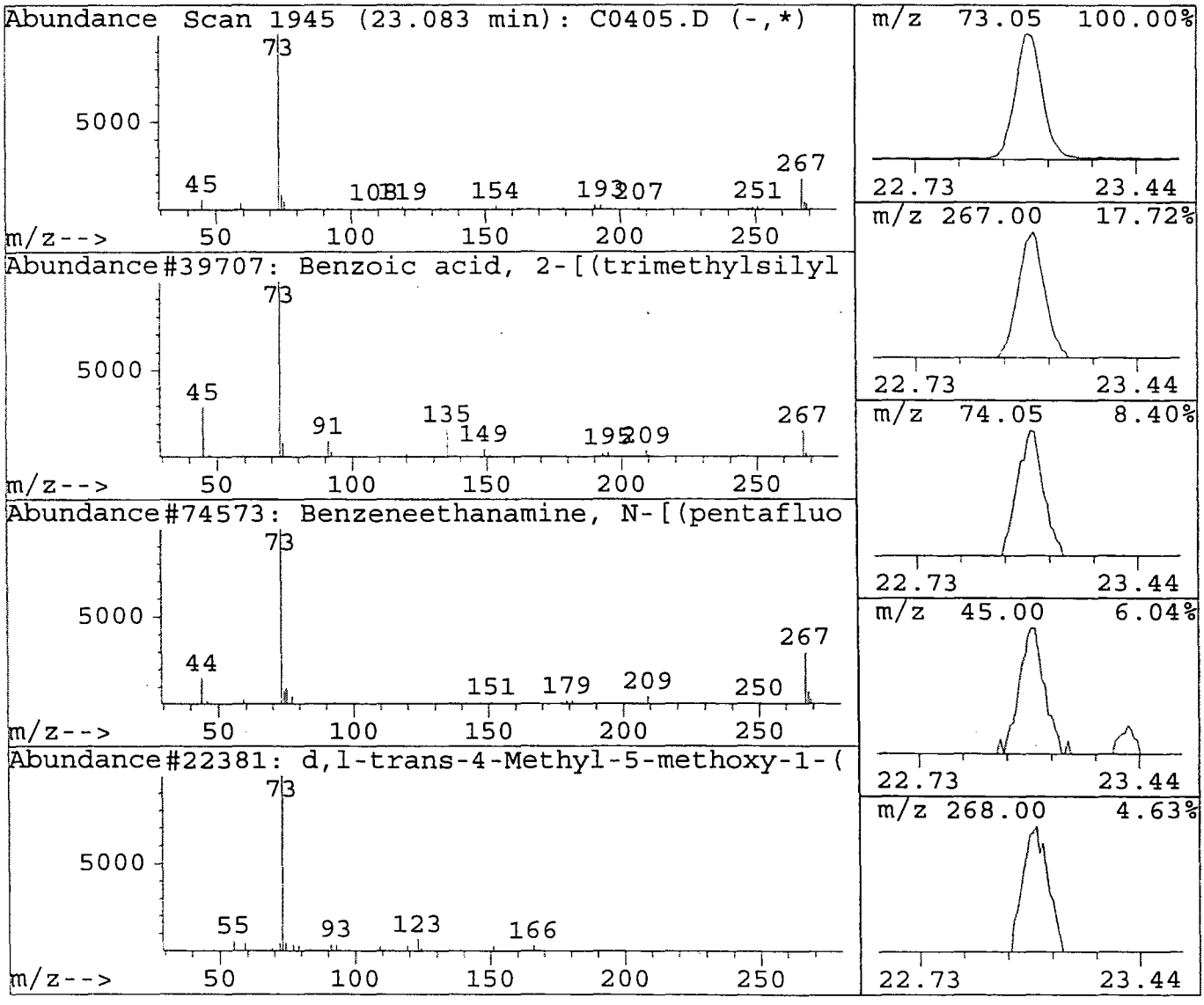
Data File : d:\hpchem\1\data\c0405.d
Acq On : 30 Nov 95 10:52 pm
Sample : 9554056 BLDG 2567 MW-5
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.08	0.97 ug/L	728528	Fluorobenzene	12.20

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	36
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	9
3	d,l-trans-4-Methyl-5-methoxy-1-(1-m	22381	000000-00-0	2
4	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	9
5	N-Ethylformamide	292	000627-45-2	4



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 171

Trip Blank

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554057V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0402.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# Trip Blank 172

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: TB

Matrix: (soil/water) WATER Lab Sample ID: 9554057V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0402.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# Trip Blank 173

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: TB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554057V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0402.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 109-99-9	Furan, tetrahydro-	10.73	3	J
2.	Column Bleed	19.69	1	J
3.	Column Bleed	23.09	6	J
4.	Column Bleed	23.10	1	J
5.				
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7.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0402.d
Acq On : 30 Nov 95 9:11 pm
Sample : 9554057 TB
Misc : 25 ML
Quant Time: Dec 5 10:52 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.19	96	1784652	5.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.41	95	945911	4.91	ug/L	98.19%
57) 1,2-Dichlorobenzene-d4	22.20	152	605012	5.01	ug/L	100.16%
Target Compounds						Qvalue
9) Methylene chloride	7.81	84	75602	0.90	ug/L	98

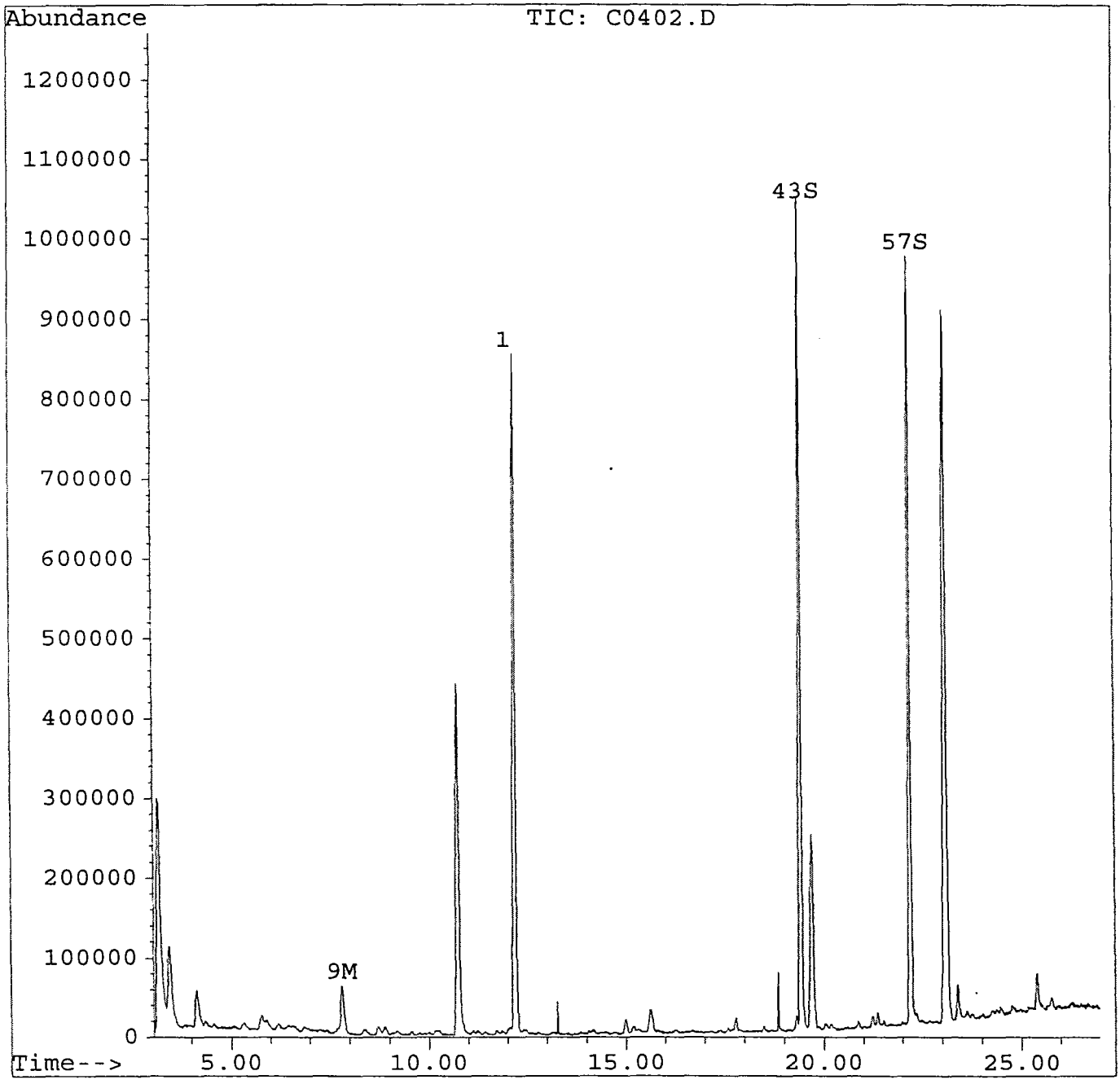
(#) = qualifier out of range (m) = manual integration

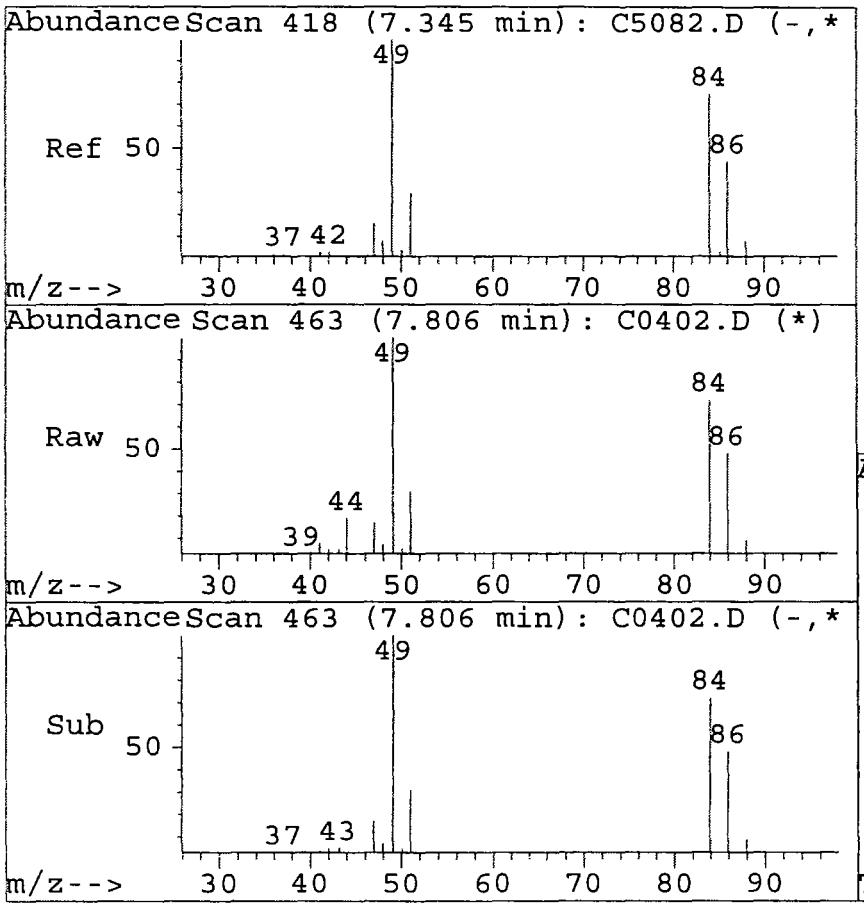
Quantitation Report

Data File : d:\hpchem\1\data\c0402.d
Acq On : 30 Nov 95 9:11 pm
Sample : 9554057 TB
Misc : 25 ML
Quant Time: Dec 5 10:52 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

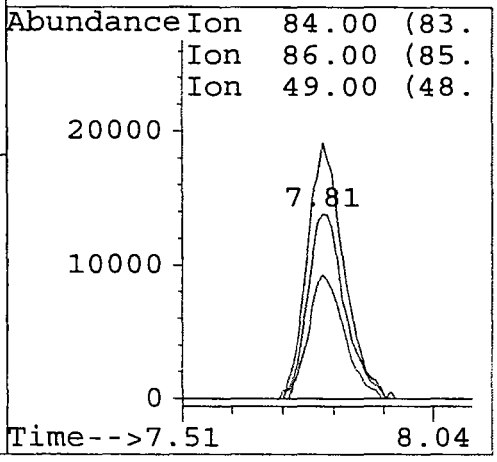




#9
Methylene chloride
Concen: 0.90 ug/L
RT: 7.81 min Scan# 463
Delta R.T. -0.02 min
Lab File: c0402.d
Acq: 30 Nov 95 9:11 pm

Tgt Ion:84 Resp: 75602

Ion	Ratio	Lower	Upper
84	100		
86	67.3	45.2	85.2
49	138.9	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

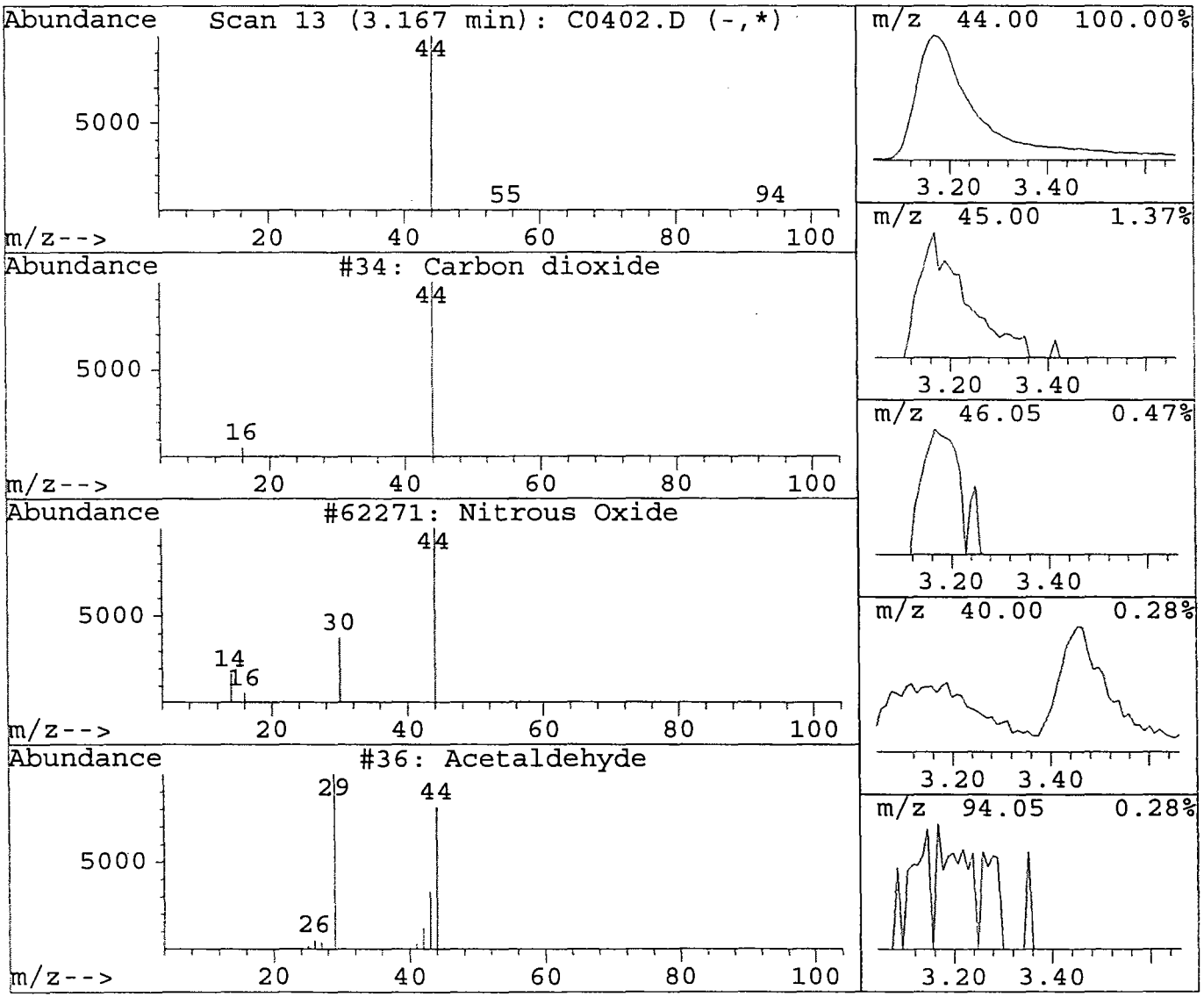
Data File : d:\hpchem\1\data\c0402.d
Acq On : 30 Nov 95 9:11 pm
Sample : 9554057 TB
Misc : 25 ML

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.17	2.88 ug/L	2166120	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Acetaldehyde	36	000075-07-0	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Benzeneethanamine, 3,4-benzyloxy-2,	53810	000000-00-0	2



Library Search Compound Report

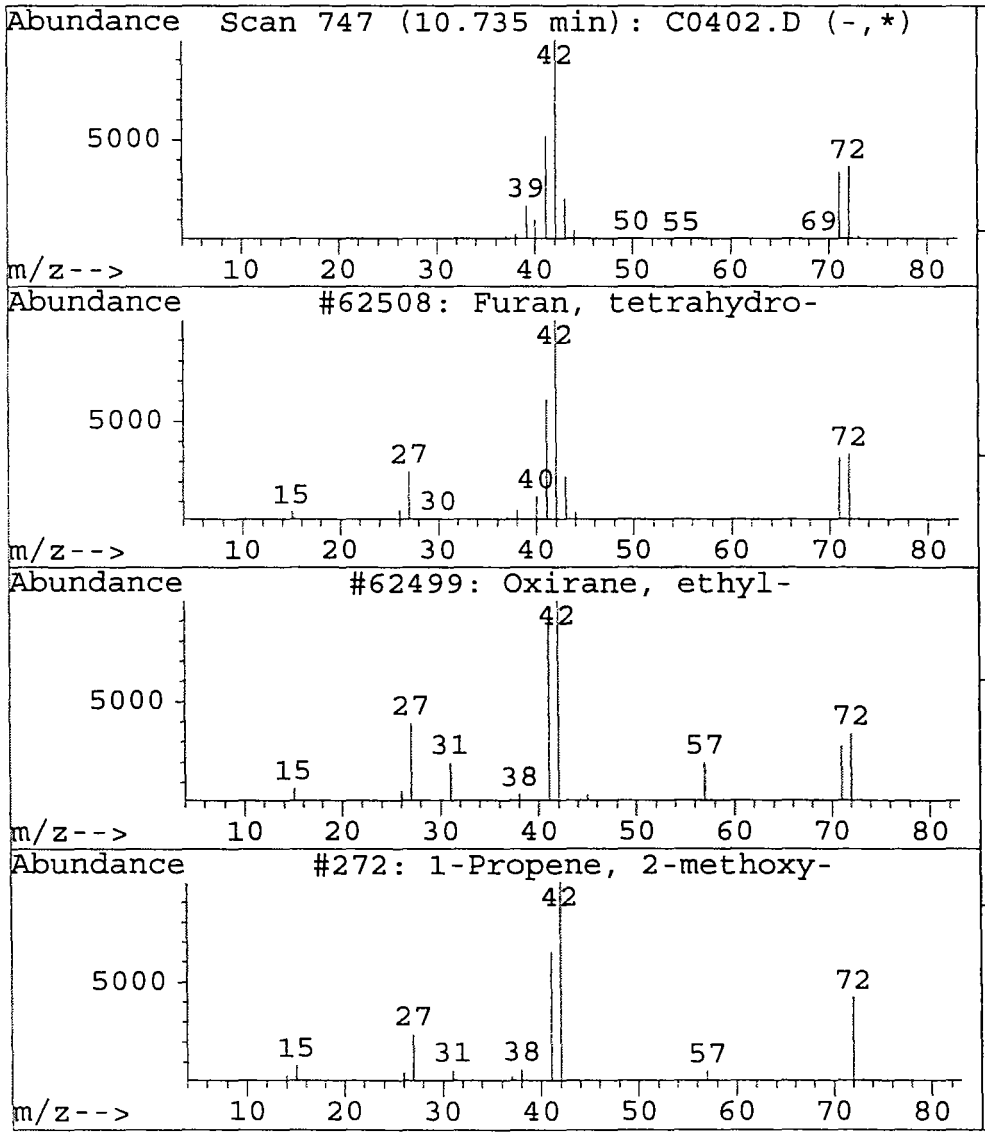
Data File : d:\hpchem\1\data\c0402.d
Acq On : 30 Nov 95 9:11 pm
Sample : 9554057 TB
Misc : 25 ML

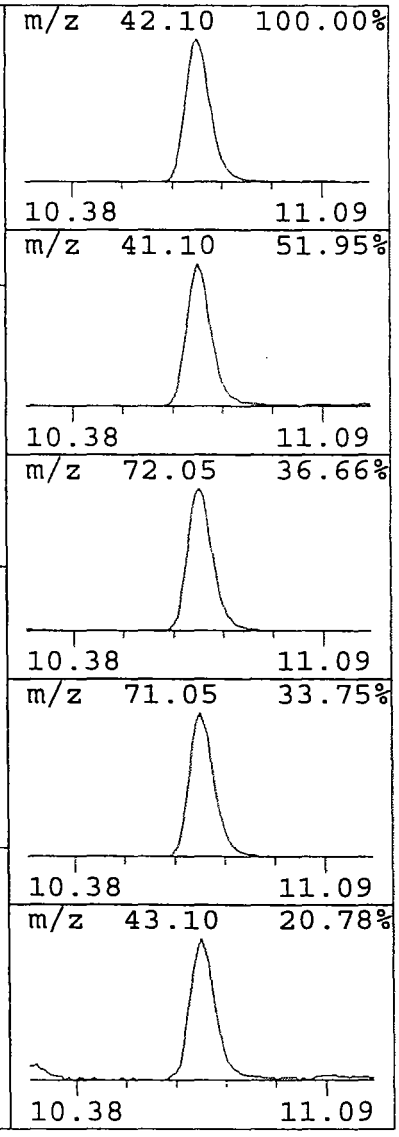
Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
10.73	2.98 ug/L	2237837	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62508	000109-99-9	90
2	Oxirane, ethyl-	62499	000106-88-7	64
3	1-Propene, 2-methoxy-	272	000116-11-0	38
4	Oxirane, 2,2-dimethyl-	62511	000558-30-5	43
5	Formaldehyde, dimethylhydrazone	257	002035-89-4	4





Library Search Compound Report

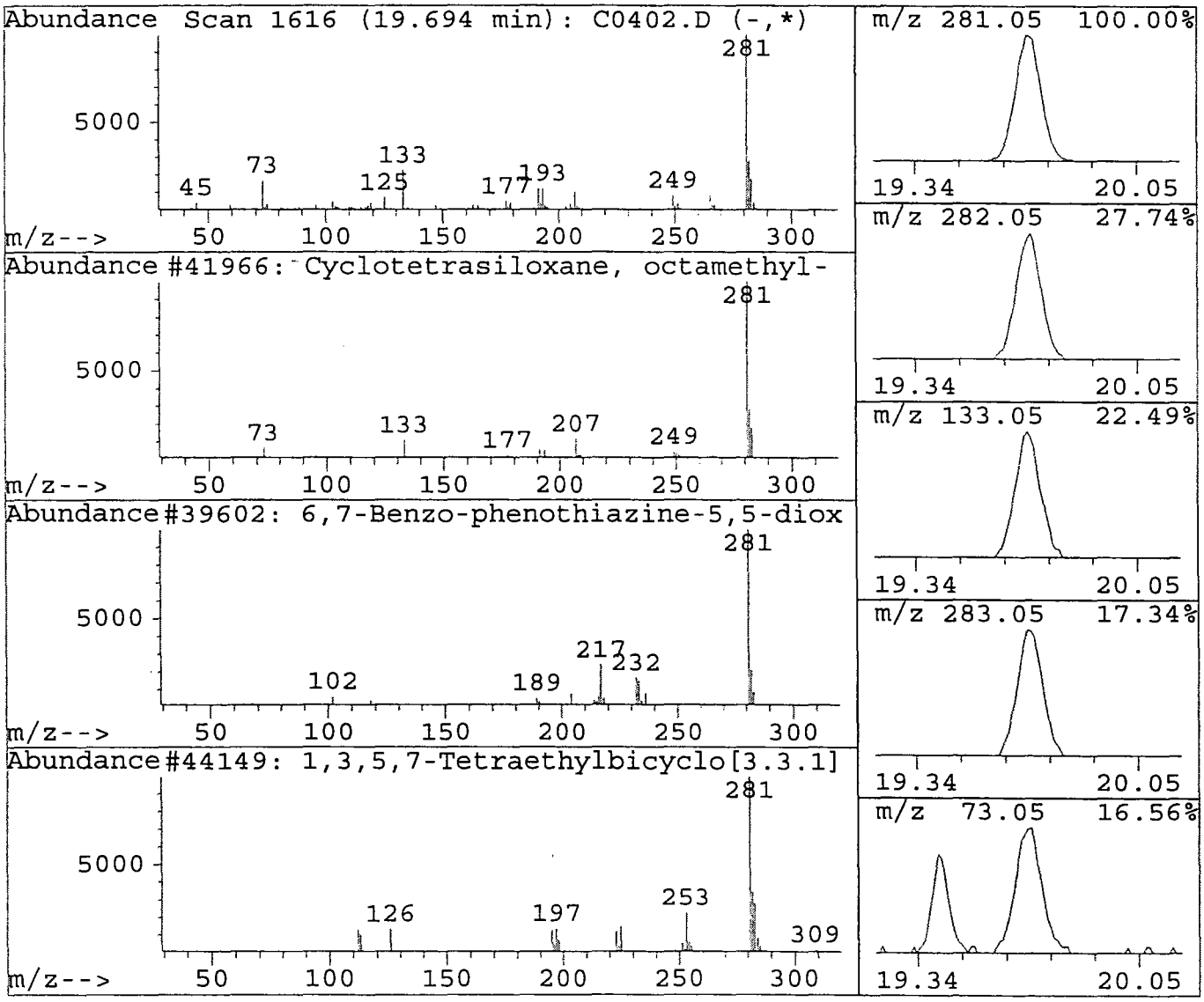
Data File : d:\hpchem\1\data\c0402.d
Acq On : 30 Nov 95 9:11 pm
Sample : 9554057 TB
Misc : 25 ML

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
19.69	1.39 ug/L	1041502	Fluorobenzene	12.19

Hit# of 16	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	64
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	1,3,5,7-Tetraethylbicyclo[3.3.1]tet	44149	073420-21-0	2
4	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	9
5	3,6-Bis(N-dimethylamino)-9-ethylcar	39624	057103-04-5	9



Library Search Compound Report

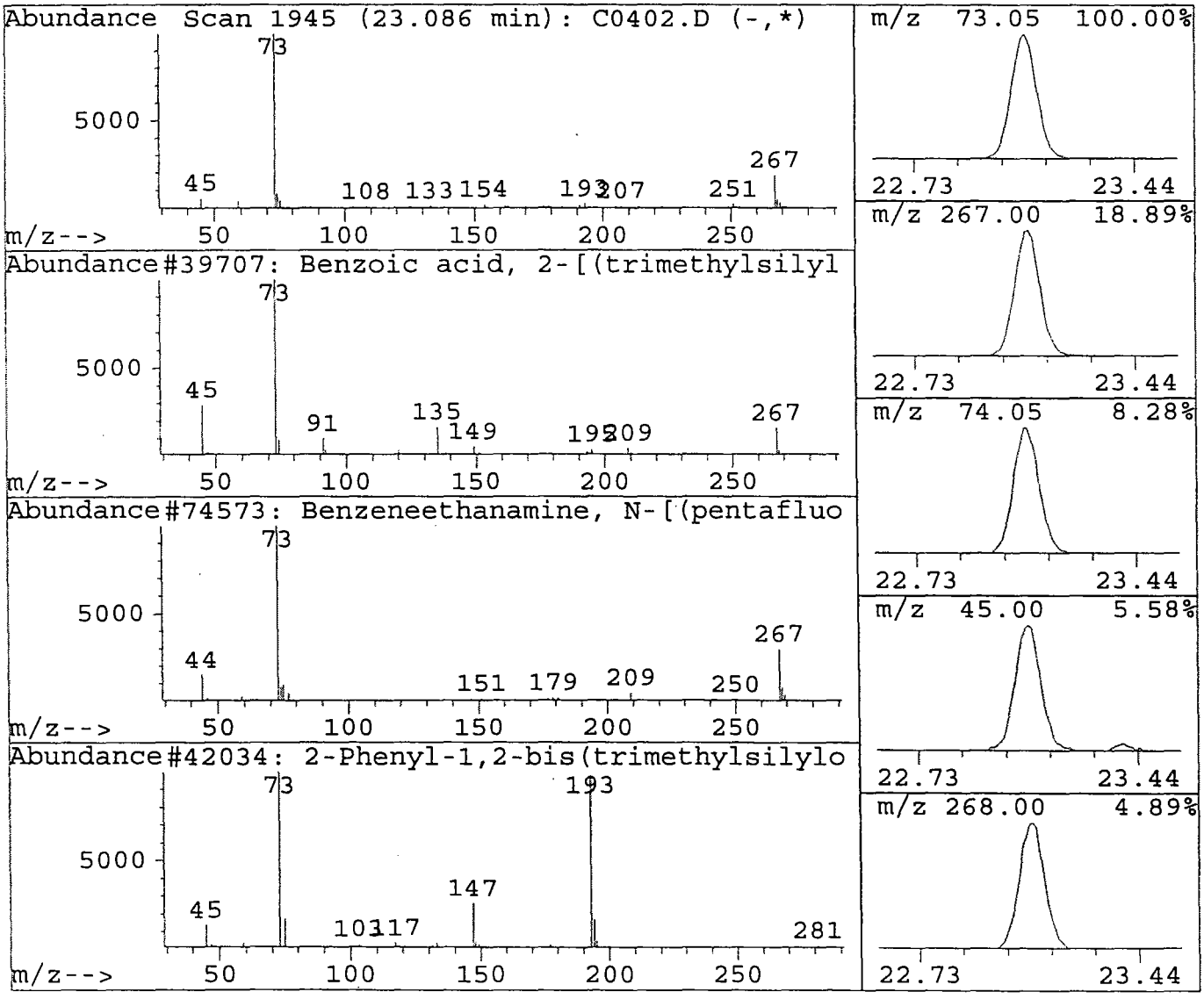
Data File : d:\hpchem\1\data\c0402.d
Acq On : 30 Nov 95 9:11 pm
Sample : 9554057 TB
Misc : 25 ML

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.09	5.70 ug/L	4277150	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	33
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	38
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	N-Ethylformamide	292	000627-45-2	3
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	2



Library Search Compound Report

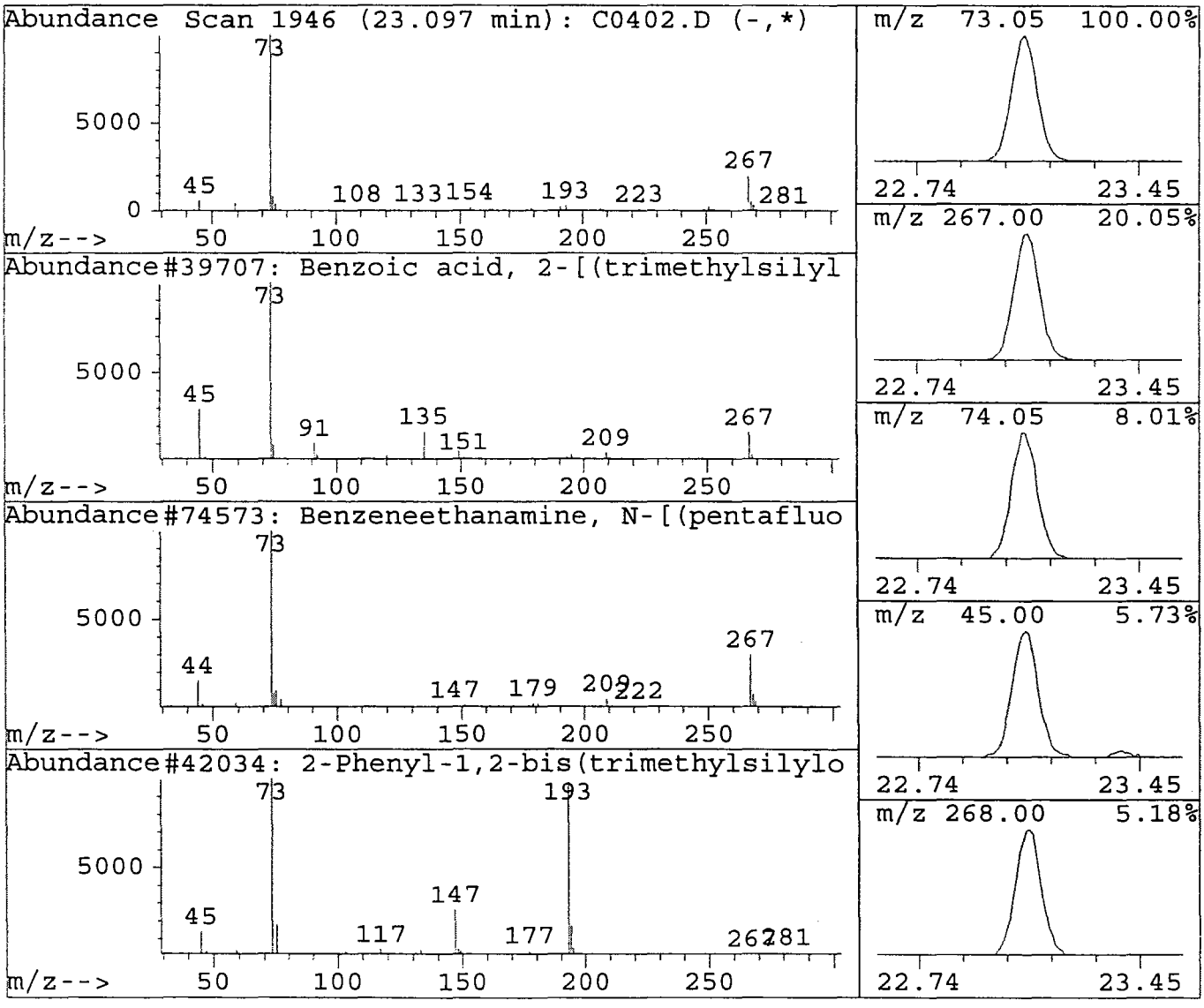
Data File : d:\hpchem\1\data\c0402.d
Acq On : 30 Nov 95 9:11 pm
Sample : 9554057 TB
Misc : 25 ML

Vial: 6
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.10	1.08 ug/L	814603	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	2
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	40
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	N-Ethylformamide	292	000627-45-2	3
5	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	2



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 182

Field Blank

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554058V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0403.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 183

Field Blank

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: FB

Matrix: (soil/water) WATER Lab Sample ID: 9554058V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0403.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# Field Blank

184

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

Project No. FT. MONMOUTH NJ BLDG: 2567 NJDEP MW#: FB Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554058V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0403.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

CAS Number	Compound Name	RT	Est. Conc.	Q
1. 115-07-1	Propene	3.45	1	J
2. 109-99-9	Furan, tetrahydro-	10.74	3	J
3.	Column Bleed	19.72	1	J
4.	Column Bleed	23.09	2	J
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Quantitation Report

Data File : d:\hpchem\1\data\c0403.d
Acq On : 30 Nov 95 9:44 pm
Sample : 9554058 FB
Misc : 25 ML
Quant Time: Dec 5 10:53 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.19	96	1746725	5.00	ug/L	-0.02
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.42	95	927870	4.92	ug/L	98.40%
57) 1,2-Dichlorobenzene-d4	22.20	152	594789	5.03	ug/L	100.60%
Target Compounds						Qvalue
9) Methylene chloride	7.81	84	74565	0.90	ug/L	97

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

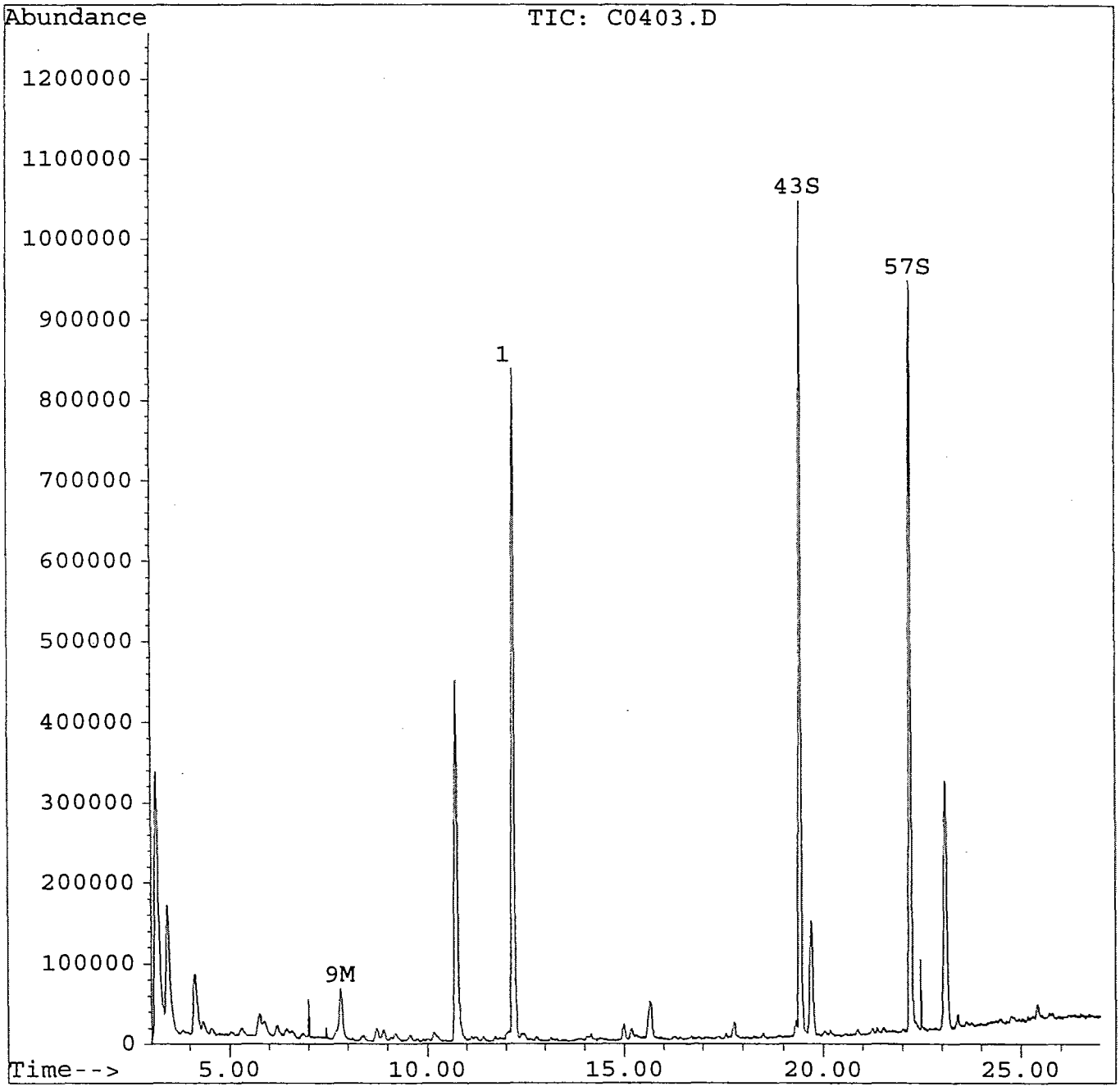
Quantitation Report

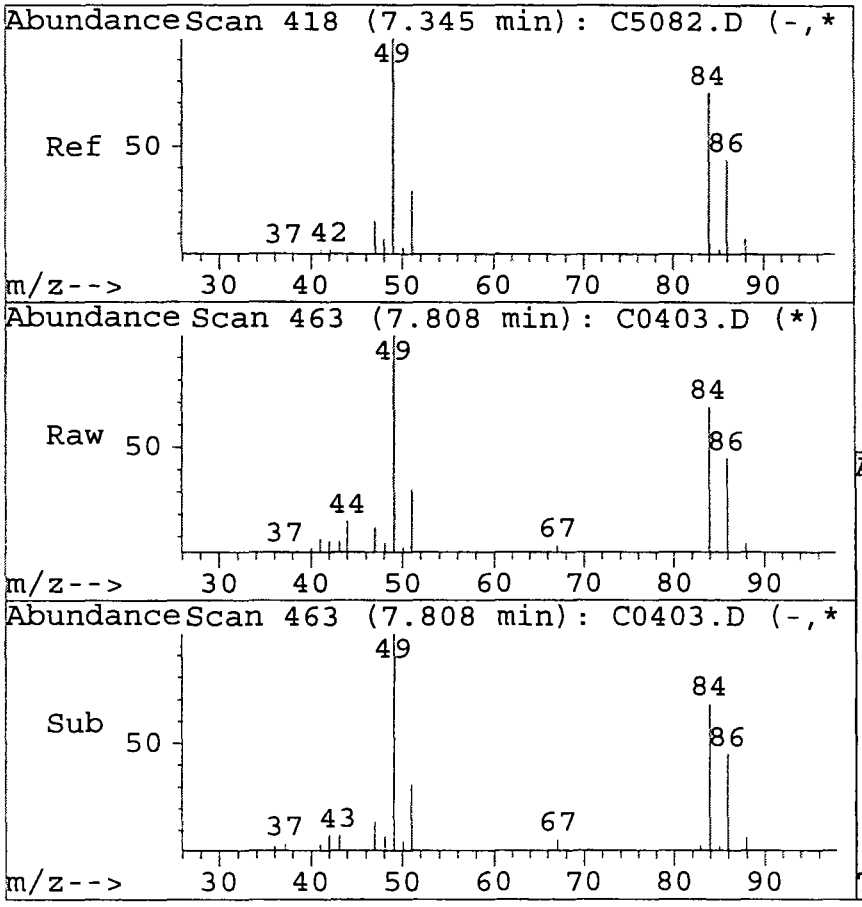
186

Data File : d:\hpchem\1\data\c0403.d
Acq On : 30 Nov 95 9:44 pm
Sample : 9554058 FB
Misc : 25 ML
Quant Time: Dec 5 10:53 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



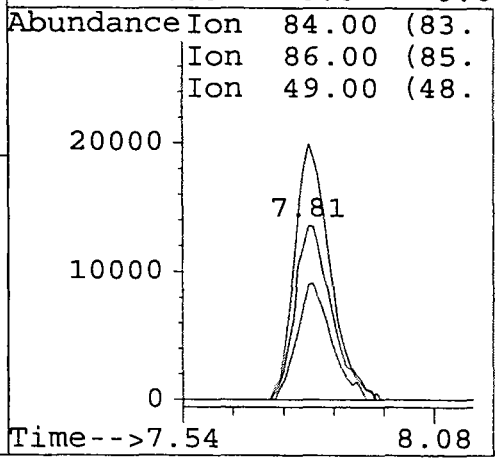


#9
Methylene chloride
Concen: 0.90 ug/L
RT: 7.81 min Scan# 463
Delta R.T. -0.02 min
Lab File: c0403.d
Acq: 30 Nov 95 9:44 pm

187

Tgt Ion:84 Resp: 74565

Ion	Ratio	Lower	Upper
84	100		
86	65.8	45.2	85.2
49	146.4	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

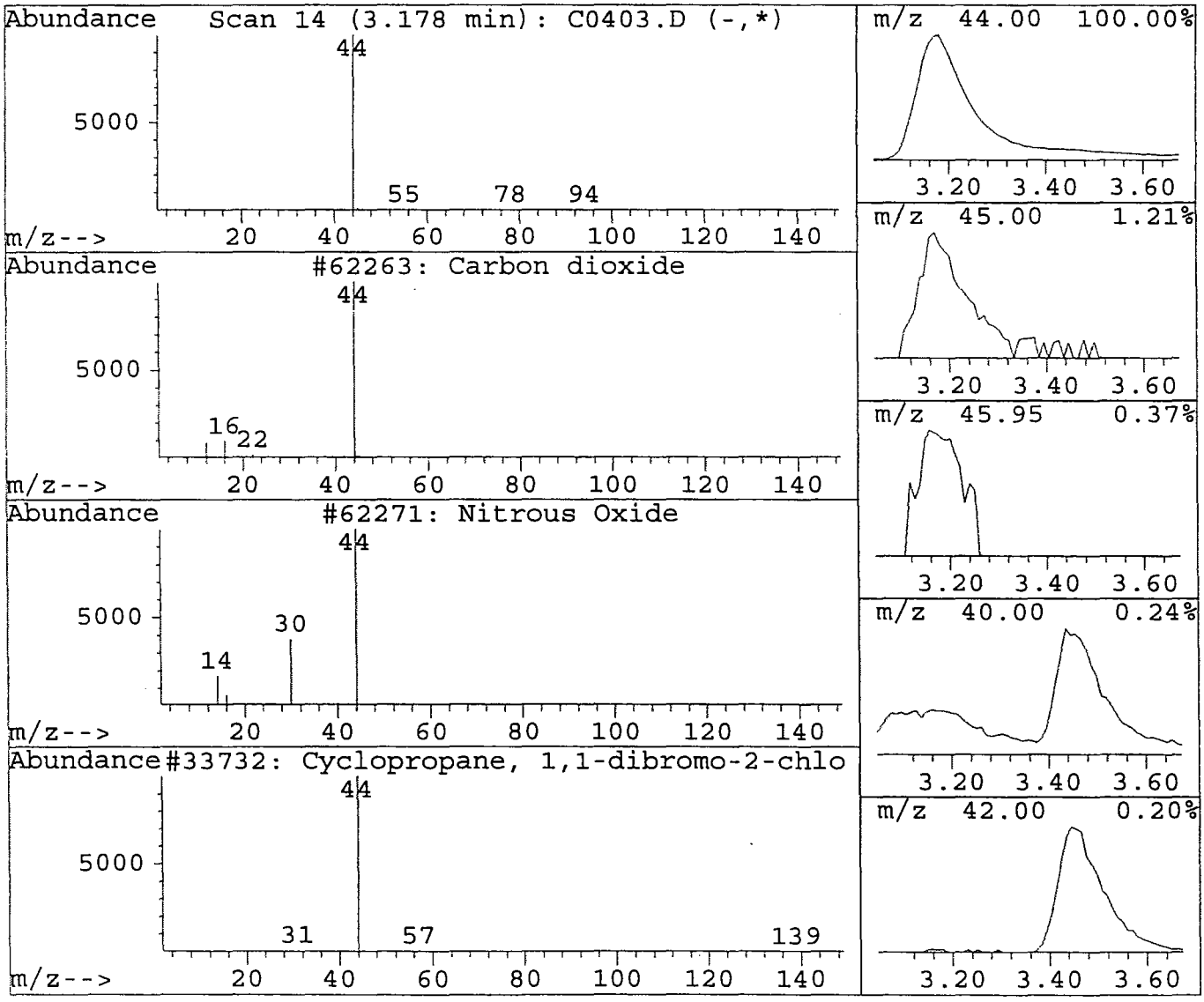
Data File : d:\hpchem\1\data\c0403.d
Acq On : 30 Nov 95 9:44 pm
Sample : 9554058 FB
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.18	3.31 ug/L	2441569	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Ethyne, fluoro-	35	002713-09-9	2



Library Search Compound Report

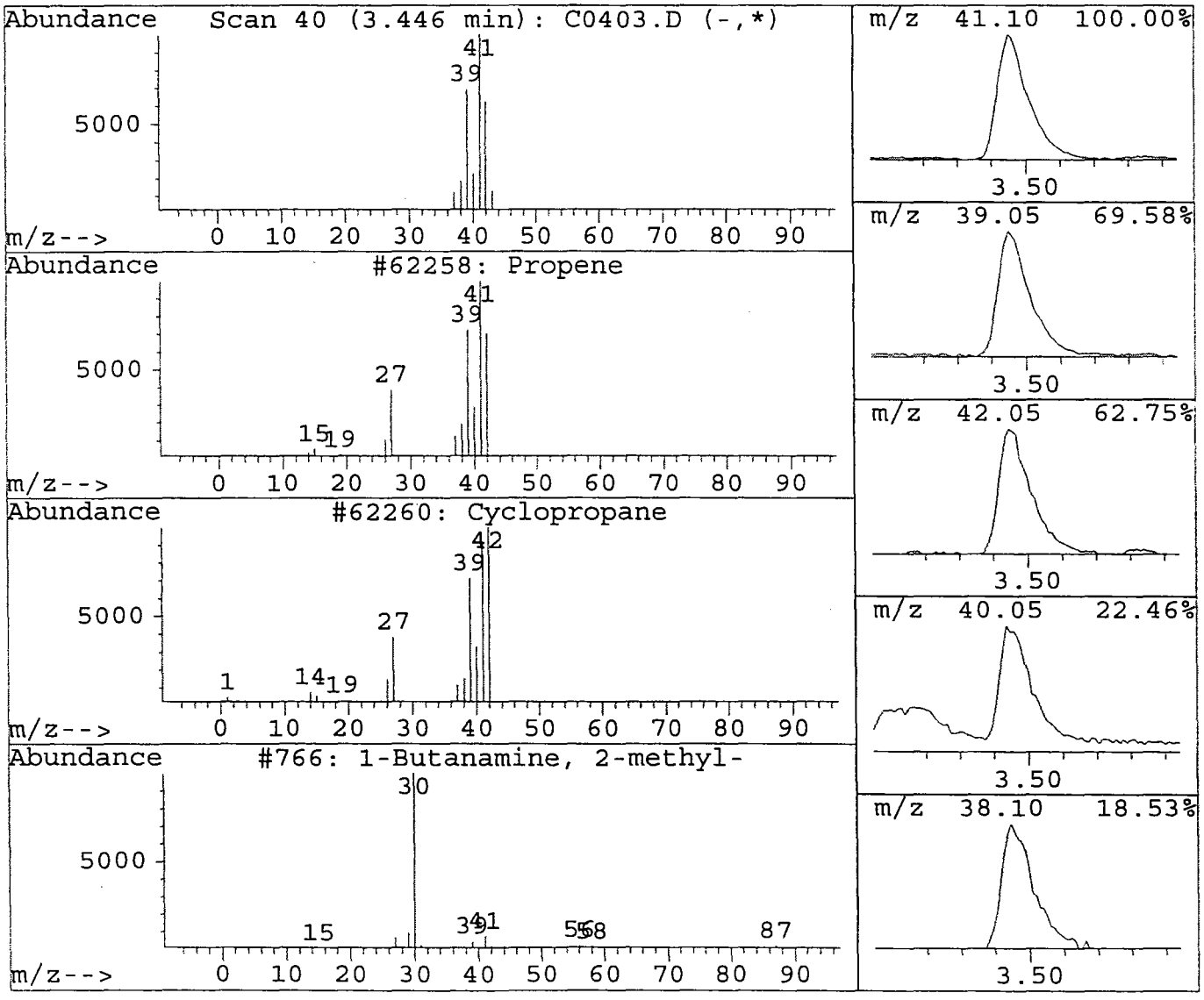
Data File : d:\hpchem\1\data\c0403.d
Acq On : 30 Nov 95 9:44 pm
Sample : 9554058 FB
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.45	0.73 ug/L	542118	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Propene	62258	000115-07-1	90
2	Cyclopropane	62260	000075-19-4	64
3	1-Butanamine, 2-methyl-	766	000096-15-1	1
4	3-Aminopropionitrile	62428	000151-18-8	1
5	Methane, isocyano-	26	000593-75-9	3



Library Search Compound Report

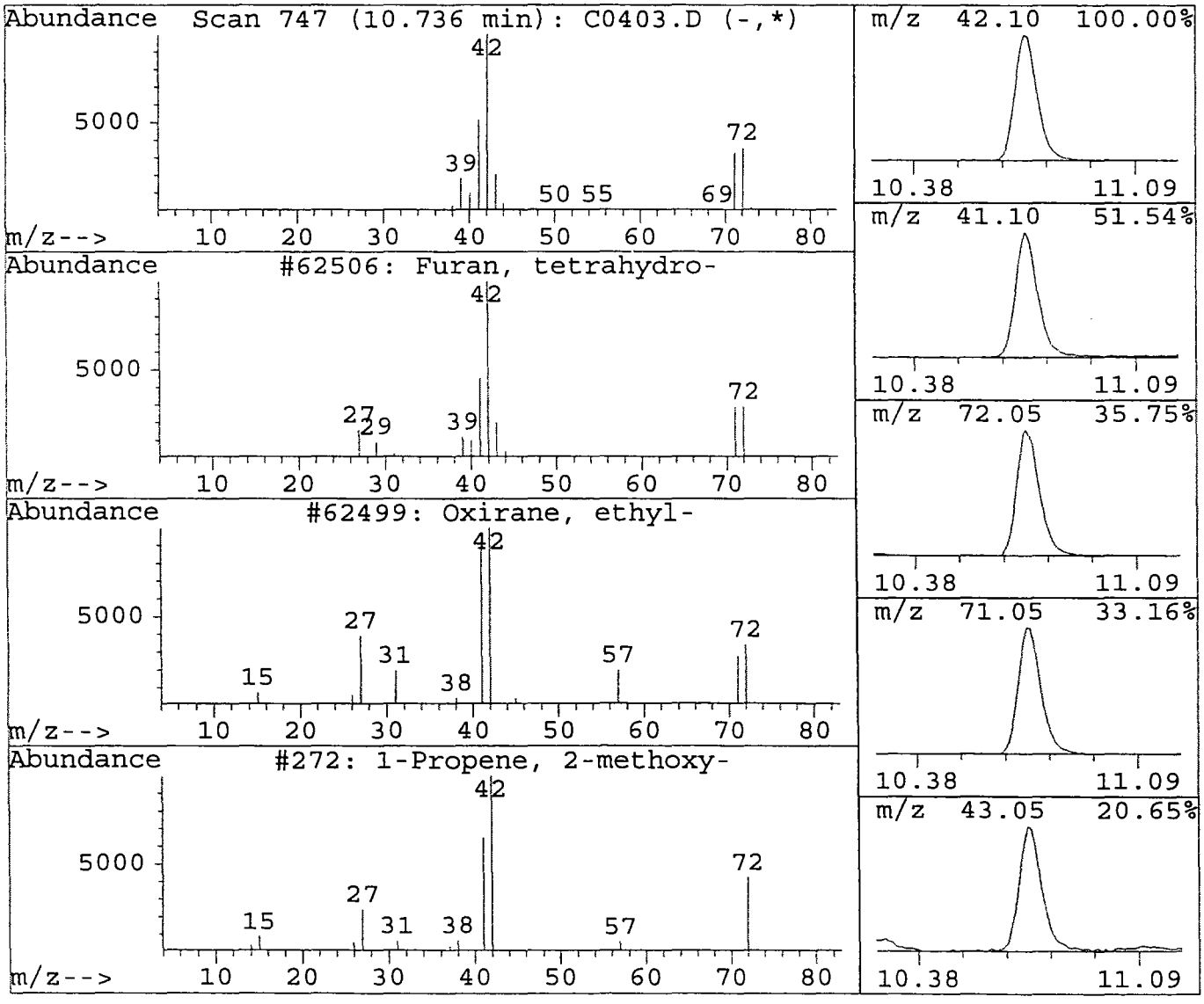
Data File : d:\hpchem\1\data\c0403.d
Acq On : 30 Nov 95 9:44 pm
Sample : 9554058 FB
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
10.74	3.08 ug/L	2275887	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Furan, tetrahydro-	62506	000109-99-9	90
2	Oxirane, ethyl-	62499	000106-88-7	39
3	1-Propene, 2-methoxy-	272	000116-11-0	38
4	3-Buten-1-ol	264	000627-27-0	4
5	Oxirane, 2,2-dimethyl-	62511	000558-30-5	46



Library Search Compound Report

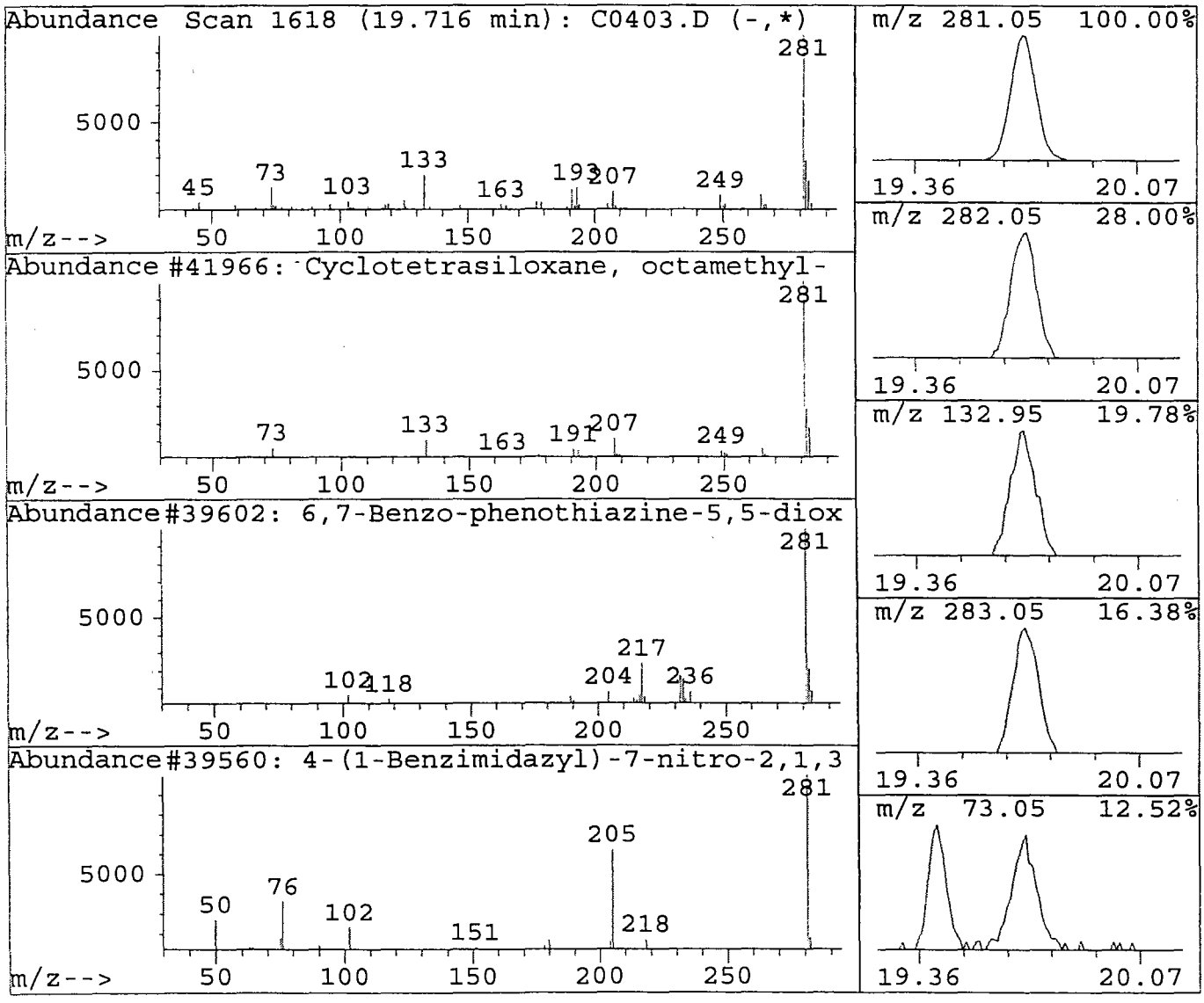
Data File : d:\hpchem\1\data\c0403.d
Acq On : 30 Nov 95 9:44 pm
Sample : 9554058 FB
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
19.72	0.86 ug/L	633078	Fluorobenzene	12.19

Hit# of 17	Tentative ID	Ref#	CAS#	Qual
1	Cyclotetrasiloxane, octamethyl-	41966	000556-67-2	9
2	6,7-Benzo-phenothiazine-5,5-dioxide	39602	000000-00-0	9
3	4-(1-Benzimidazyl)-7-nitro-2,1,3-ox	39560	091485-32-4	5
4	Benzene, 1-phenyl-4-(2-cyano-2-phen	39643	027869-56-3	47
5	3,6-Bis(N-dimethylamino)-9-ethylcar	39624	057103-04-5	2



Library Search Compound Report

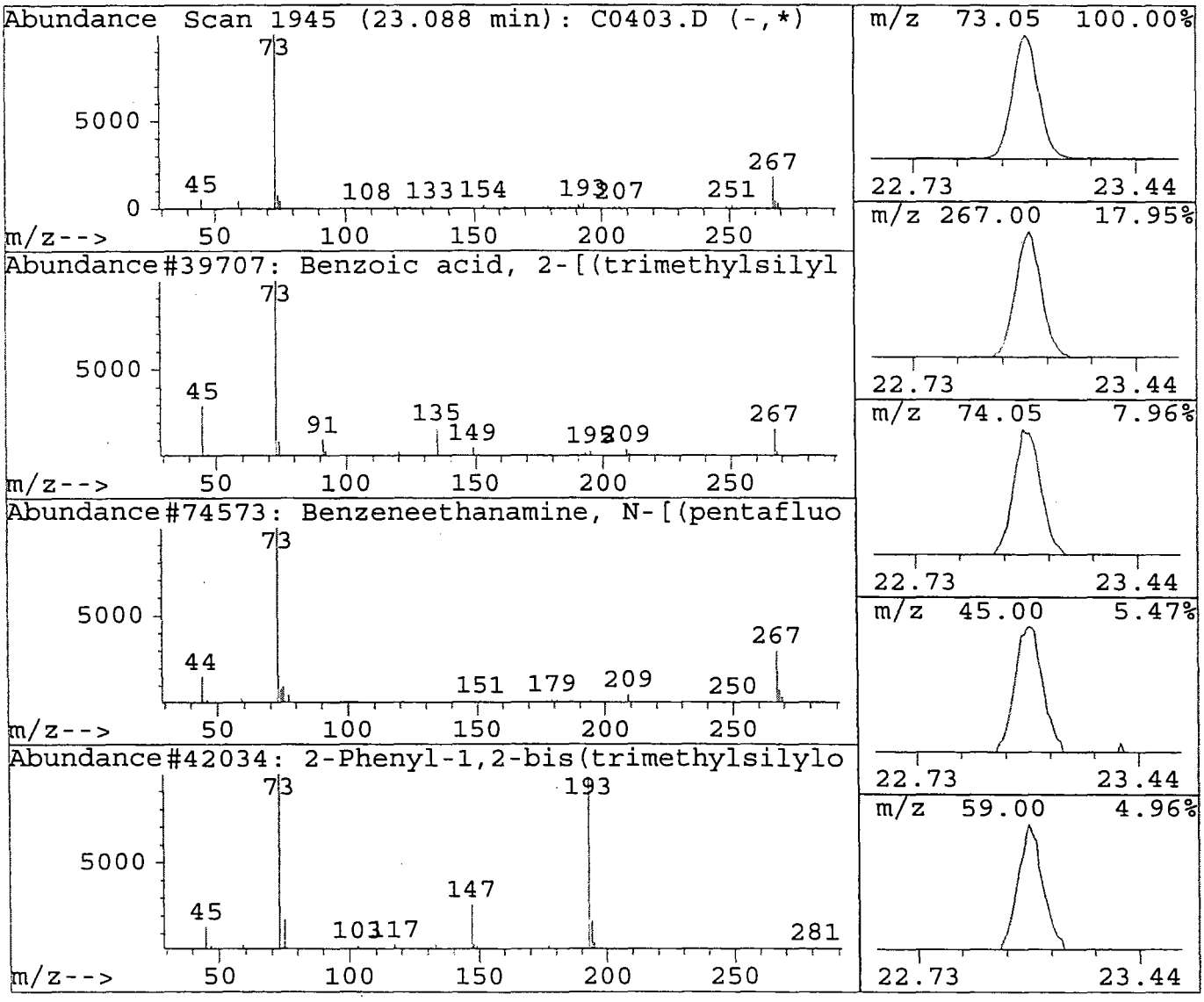
Data File : d:\hpchem\1\data\c0403.d
Acq On : 30 Nov 95 9:44 pm
Sample : 9554058 FB
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.09	2.04 ug/L	1505679	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	2
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	38
3	2-Phenyl-1,2-bis(trimethylsilyloxy)	42034	000000-00-0	2
4	N-Ethylformamide	292	000627-45-2	3
5	Benzeneacetic acid, trimethylsilyl	70091	002078-18-4	9



1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 193

Duplicate

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: DUP

Matrix: (soil/water) WATER Lab Sample ID: 9554059V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0459.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# Duplicate

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

Project No.: FT. MONMOUTH NJ Bldg#: 2567 NJDEP MW#: DUP

Matrix: (soil/water) WATER Lab Sample ID: 9554059V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0459.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

FMETL# Duplicate

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

Project No. FT. MONMOUTH NJ Bldg: 2567 NJDEP MW#: DUP Group:

Matrix: (soil/water) WATER Lab Sample ID: 9554059V

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0459.D

Level: (low/med) LOW Date Received: 11/21/95

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	10.17	1	J
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Quantitation Report

Data File : d:\hpchem\1\data\c0459.d
Acq On : 4 Dec 95 11:15 pm
Sample : 9554059 BLDG 2567 DUP
Misc : 25 ML
Quant Time: Dec 5 12:48 1995

Vial: 20
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.18	96	1608685	5.00	ug/L	-0.03
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.41	95	867853	5.00	ug/L	99.94%
57) 1,2-Dichlorobenzene-d4	22.20	152	550527	5.06	ug/L	101.11%
Target Compounds						Qvalue
9) Methylene chloride	7.79	84	38842	0.51	ug/L	93

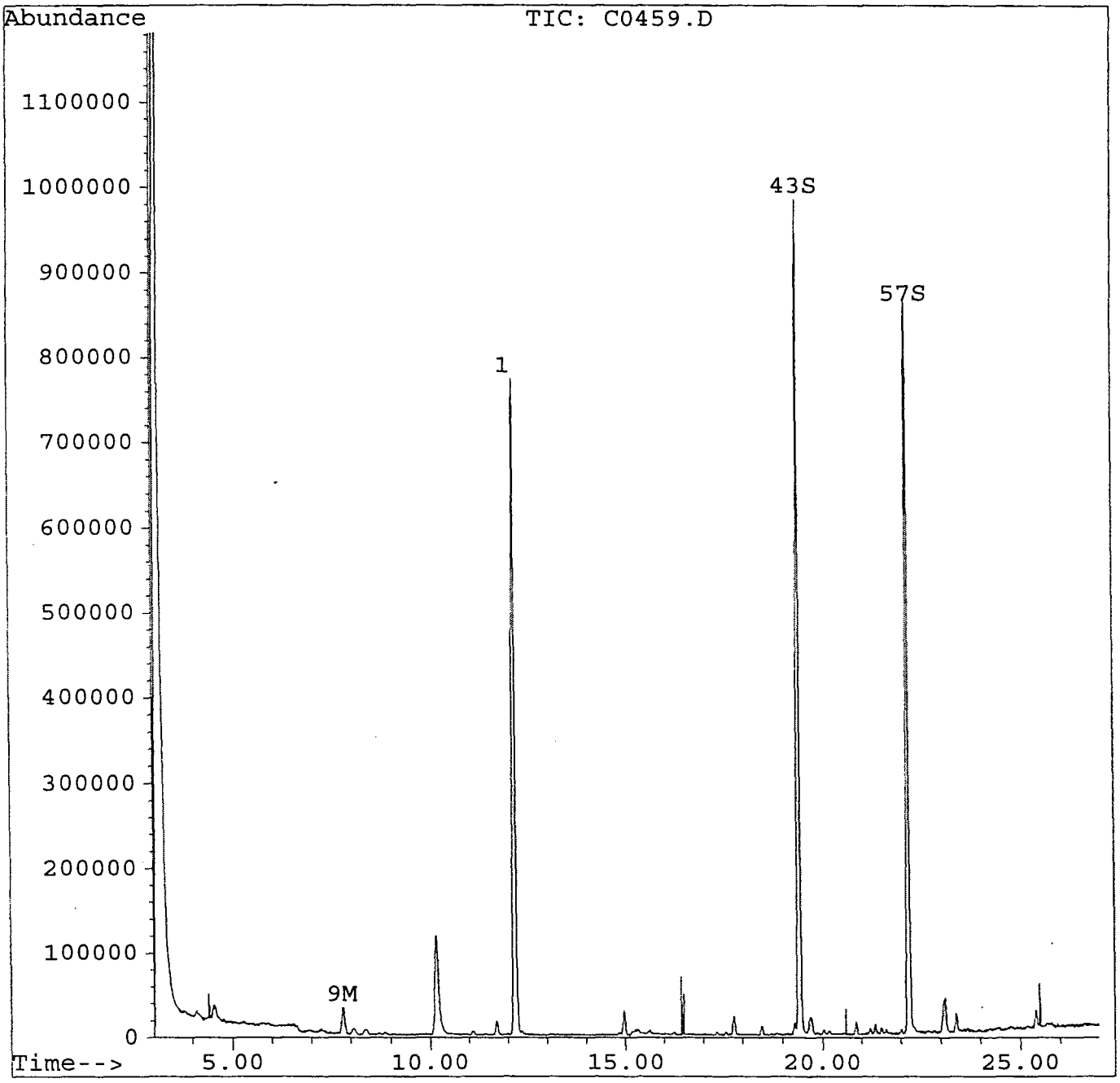
(#) = qualifier out of range (m) = manual integration

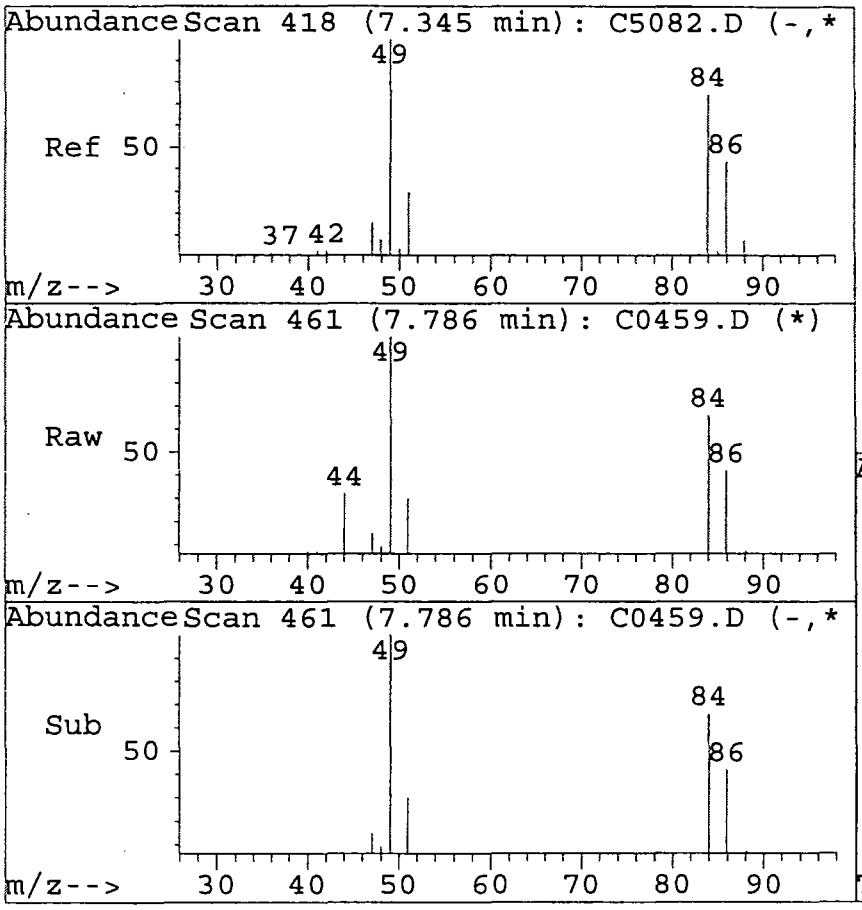
Quantitation Report

Data File : d:\hpchem\1\data\c0459.d
Acq On : 4 Dec 95 11:15 pm
Sample : 9554059 BLDG 2567 DUP
Misc : 25 ML
Quant Time: Dec 5 12:48 1995

Vial: 20
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

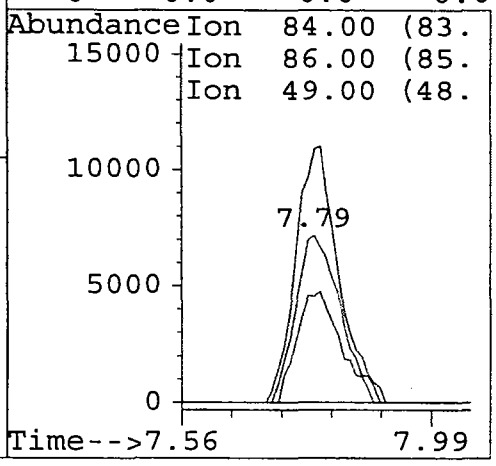




#9
Methylene chloride
Concen: 0.51 ug/L
RT: 7.79 min Scan# 461
Delta R.T. -0.04 min
Lab File: c0459.d
Acq: 4 Dec 95 11:15 pm

Tgt Ion:84 Resp: 38842

Ion	Ratio	Lower	Upper
84	100		
86	63.6	45.2	85.2
49	151.8	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

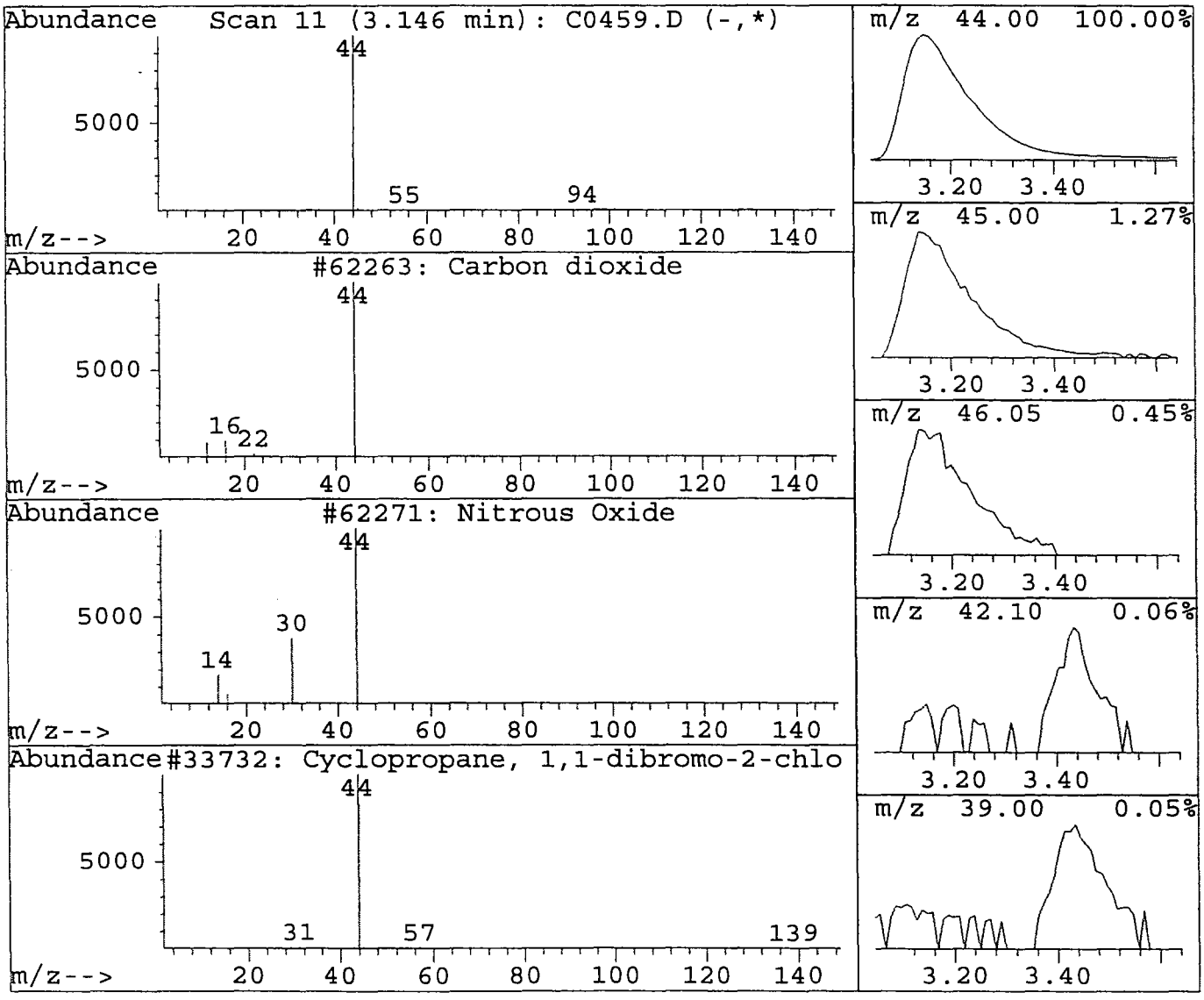
Data File : d:\hpchem\1\data\c0459.d
Acq On : 4 Dec 95 11:15 pm
Sample : 9554059 BLDG 2567 DUP
Misc : 25 ML

Vial: 20
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.15	19.45 ug/L	13150165	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	62263	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Ethyne, fluoro-	35	002713-09-9	2



Library Search Compound Report

200

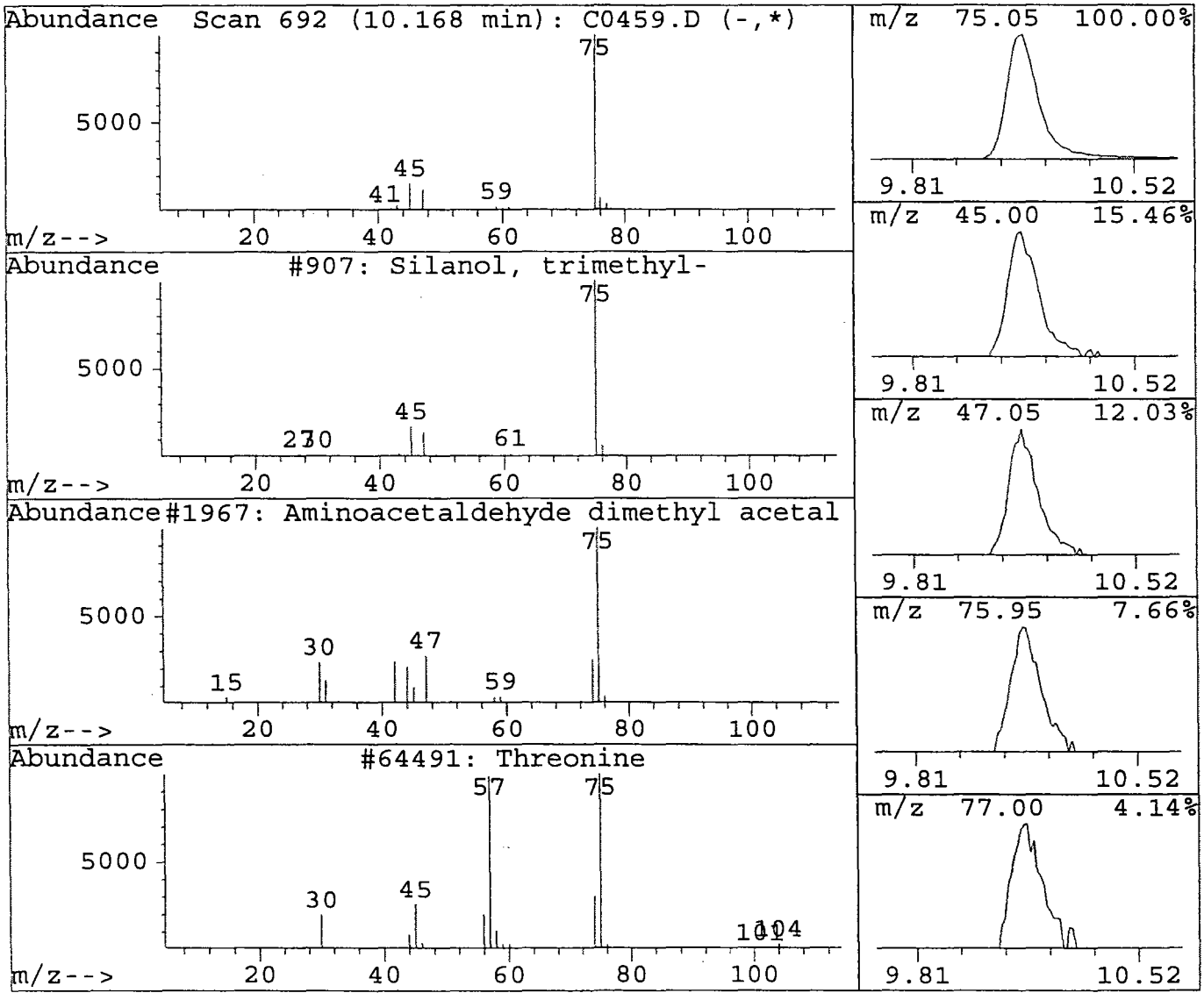
Data File : d:\hpchem\1\data\c0459.d
Acq On : 4 Dec 95 11:15 pm
Sample : 9554059 BLDG 2567 DUP
Misc : 25 ML

Vial: 20
Operator: SRK
Inst : 5972 - In
Multiplr: 1.00

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

R.T.	Conc	Area	Relative to ISTD	R.T.
10.17	1.03 ug/L	694125	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Silanol, trimethyl-	907	001066-40-6	78
2	Aminoacetaldehyde dimethyl acetal	1967	022483-09-6	2
3	Threonine	64491	000072-19-5	1
4	Penicillamine	9413	000052-67-5	1
5	Butane, 1-nitro-	1813	000627-05-4	1



2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

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

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	10 QCS	97	98			
02	1 STND	98	99			
03	VBLK01	99	100			
04	9554057V	98	100			
05	9554058V	98	101			
06	9554055V	98	99			
07	9554056V	99	100			
08	9554053V	97	99			
09	9554056MS	97	95			
10	9554056MSD	96	96			
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QC LIMITS

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

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: EMSL ANALYTICAL Contract: _____

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

	SAMPLE NO.	SMC1 (BFB) #	SMC2 (DCB) #	#	OTHER #	TOT OUT
01	VBLK01	99	100			
02	9554340V	99	100			
03	9554341V	99	100			
04	9553656V	98	100			
05	9554059V	100	101			
06	9554103V	99	99			
07	9554054V	98	97			
08	9554052V	97	97			
09	9554107V	97	99			
10	9554108V	100	102			
11	9554105V	100	99			
12	9554106V	100	100			
13	9554104V	102	97			
14	10 QCS	100	102			
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QC LIMITS

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

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

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO. 203

VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0401.D Lab Sample ID: M. BLANK

Date Analyzed: 11/30/95 Time Analyzed: 2037

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	10 QCS	10 QCS	C0399.D	1929
02	1 STND	1 STND	C0400.D	2003
03	9554057V	9554057V	C0402.D	2111
04	9554058V	9554058V	C0403.D	2144
05	9554055V	9554055V	C0404.D	2219
06	9554056V	9554056V	C0405.D	2252
07	9554053V	9554053V	C0406.D	2326
08	9554056MS	54056MS	C0410.D	0142
09	9554056MSD	54056MSD	C0411.D	0216
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COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 204

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

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

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0401.D

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

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

Concentration Units:

CAS No.	Compound	(ug/L or ug/Kg) ug/L	Q
75-71-8	Dichlorodifluoromethane	.50	U
74-87-3	Chloromethane	.50	U
75-01-4	Vinyl chloride	.50	U
74-83-9	Bromomethane	.50	U
75-00-3	Chloroethane	.50	U
75-69-4	Trichlorofluoromethane	.50	U
75-35-4	1,1-Dichloroethene	.50	U
75-09-2	Methylene chloride	1.1	
156-60-65	trans-1,2-Dichloroethene	.50	U
75-34-3	1,1-Dichloroethane	.50	U
594-20-7	2,2-Dichloropropane	.50	U
156-59-2	cis-1,2-Dichloroethene	.50	U
74-97-1	Bromochloromethane	.50	U
67-66-3	Chloroform	.50	U
71-55-6	1,1,1-Trichloroethane	.50	U
56-23-1	Carbon tetrachloride	.50	U
563-58-6	1,1-Dichloropropene	.50	U
71-43-2	Benzene	.50	U
107-06-2	1,2-Dichloroethane	.50	U
79-01-6	Trichloroethene	.50	U
78-87-1	1,2-Dichloropropane	.50	U
74-95-3	Dibromomethane	.50	U
75-27-4	Bromodichloromethane	.50	U
10061-01-1	cis-1,3-Dichloropropene	.50	U
108-88-3	Toluene	.50	U
10061-02-6	trans-1,3-Dichloropropene	.50	U
79-00-1	1,1,2-Trichloroethane	.50	U
127-18-4	Tetrachloroethene	.50	U
142-28-9	1,3-Dichloropropane	.50	U
124-48-1	Dibromochloromethane	.50	U
106-93-4	1,2-Dibromomethane	.50	U
108-90-7	Chlorobenzene	.50	U
630-20-6	1,1,1,2-Tetrachloroethane	.50	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 205

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

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

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0401.D

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

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET

TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 206

VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0401.D

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

% Moisture: not dec. NA Date Analyzed: 11/30/95

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

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

Number TICs found: 1 Concentration Units: (ug/L or ug/Kg) ug/L

CAS Number	Compound Name	RT	Est. Conc.	Q
1.	Column Bleed	23.08	1	J
2.				
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Quantitation Report

Data File : d:\hpchem\1\data\c0401.d
Acq On : 30 Nov 95 8:37 pm
Sample : METHOD BLANK
Misc :
Quant Time: Dec 5 10:51 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc Units	Dev(Min)
1) Fluorobenzene	12.19	96	1791267	5.00 ug/L	-0.02
System Monitoring Compounds					%Recovery
43) 4-Bromofluorobenzene	19.41	95	954298	4.93 ug/L	98.69%
57) 1,2-Dichlorobenzene-d4	22.20	152	609057	5.02 ug/L	100.45%
Target Compounds					Qvalue
9) Methylene chloride	7.81	84	90551	1.07 ug/L	97

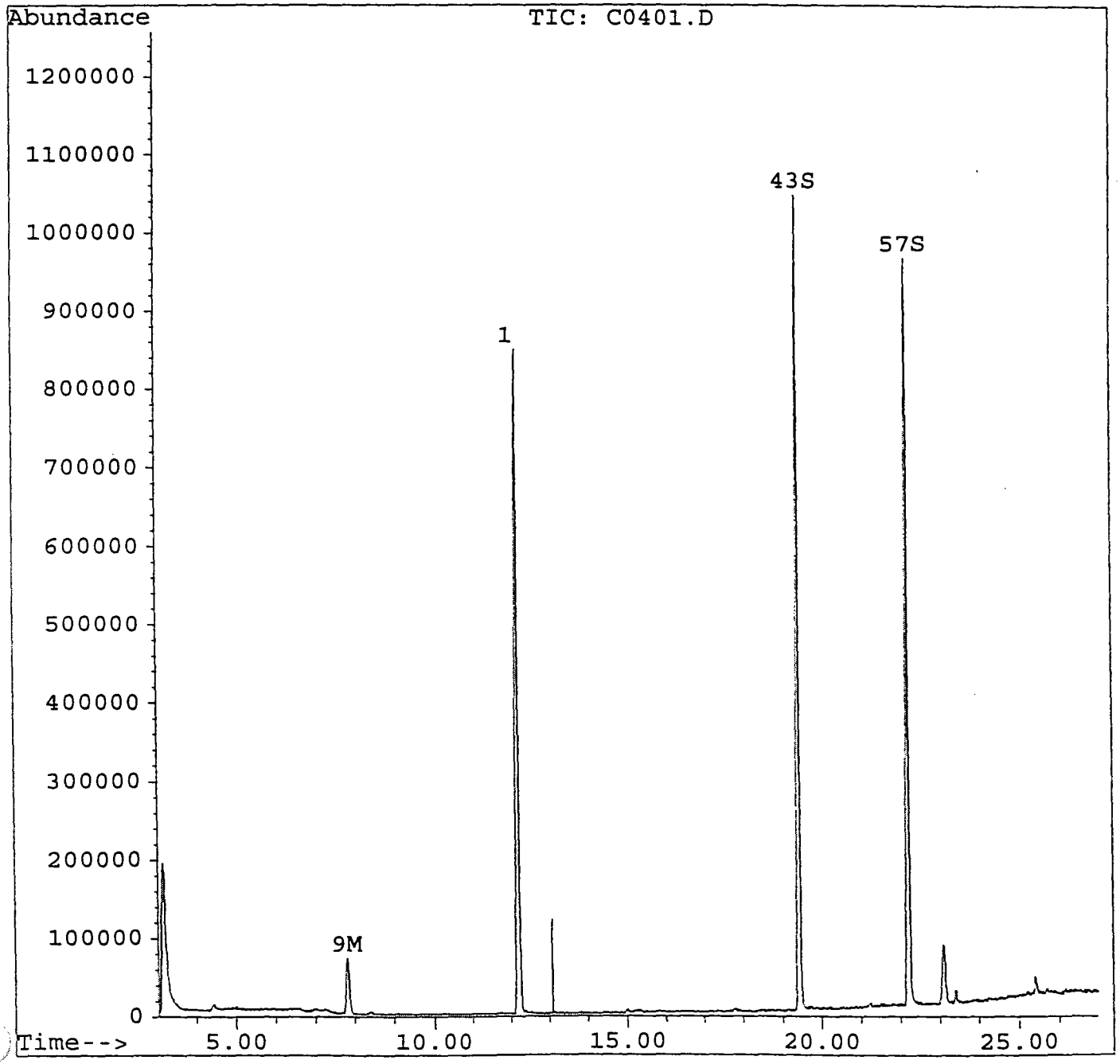
(#) = qualifier out of range (m) = manual integration

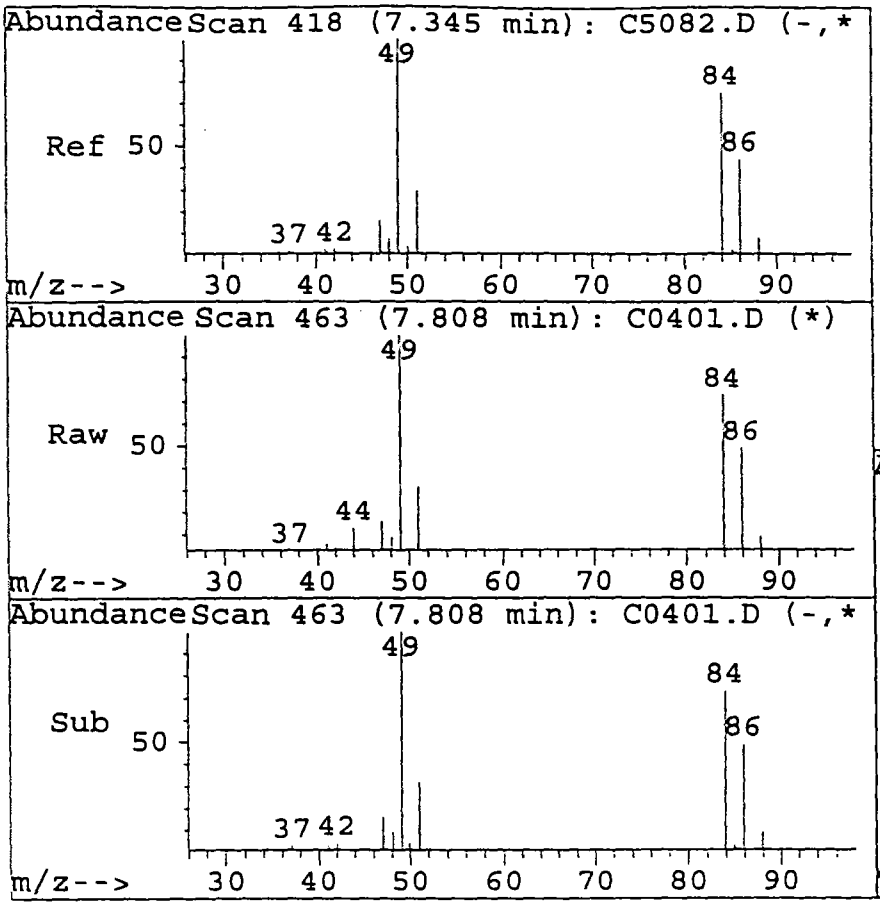
Quantitation Report

Data File : d:\hpchem\1\data\c0401.d
Acq On : 30 Nov 95 8:37 pm
Sample : METHOD BLANK
Misc :
Quant Time: Dec 5 10:51 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

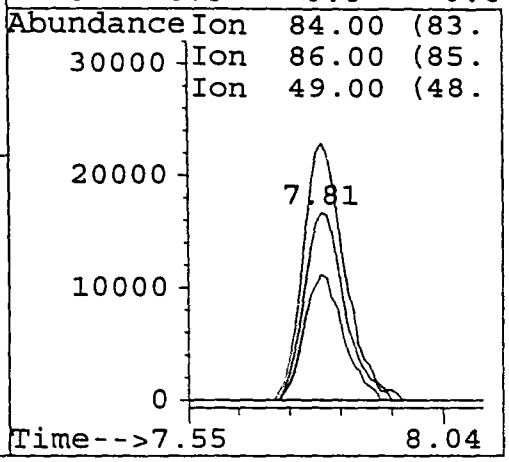




#9
Methylene chloride
Concen: 1.07 ug/L
RT: 7.81 min Scan# 463
Delta R.T. -0.02 min
Lab File: c0401.d
Acq: 30 Nov 95 8:37 pm

Tgt Ion:84 Resp: 90551

Ion	Ratio	Lower	Upper
84	100		
86	67.0	45.2	85.2
49	137.3	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

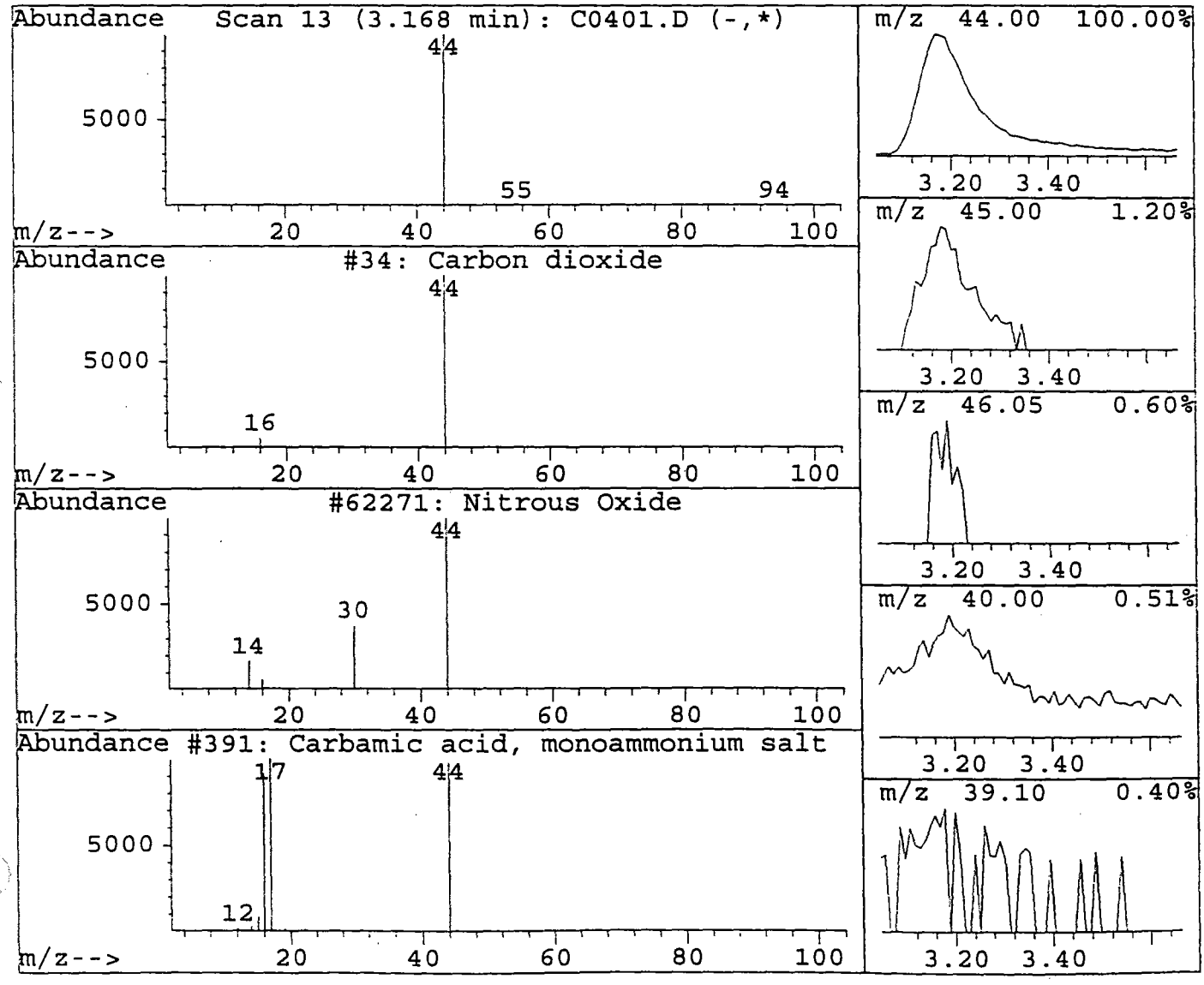
Data File : d:\hpchem\1\data\c0401.d
Acq On : 30 Nov 95 8:37 pm
Sample : METHOD BLANK
Misc :

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.17	2.06 ug/L	1552902	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	62271	010024-97-2	3
3	Carbamic acid, monoammonium salt	391	001111-78-0	2
4	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
5	Ethyne, fluoro-	35	002713-09-9	2



Library Search Compound Report

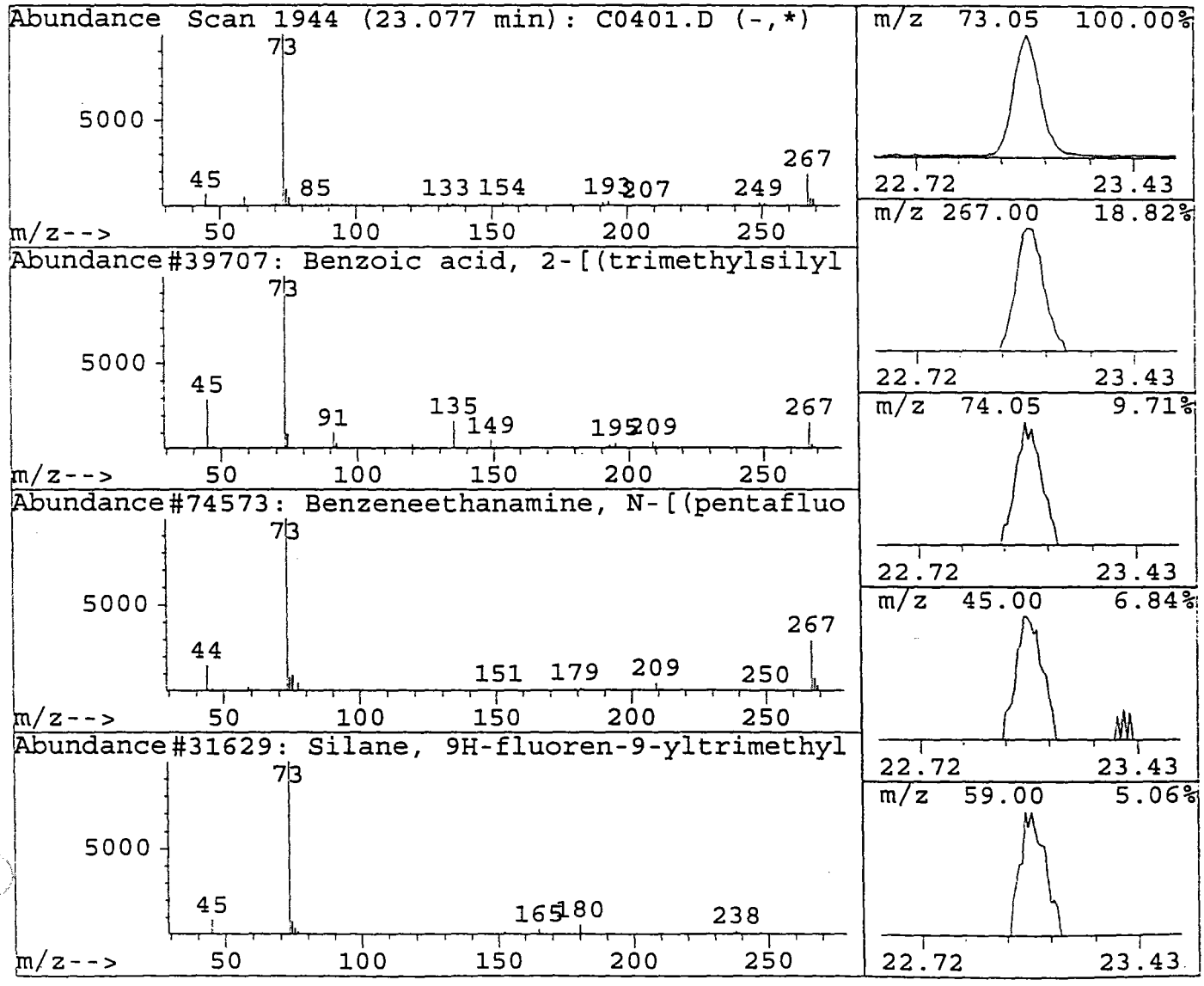
Data File : d:\hpchem\1\data\c0401.d
Acq On : 30 Nov 95 8:37 pm
Sample : METHOD BLANK
Misc :

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
23.08	0.57 ug/L	432810	Fluorobenzene	12.19

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Benzoic acid, 2-[(trimethylsilyl)ox	39707	003789-85-3	38
2	Benzeneethanamine, N-[(pentafluorop	74573	055429-85-1	9
3	Silane, 9H-fluoren-9-yltrimethyl-	31629	007385-10-6	4
4	3-Hexanol, 2,4-dimethyl-	5550	013432-25-2	2
5	Guanidine, methyl-	62524	000471-29-4	3



4A

VOLATILE METHOD BLANK SUMMARY

SAMPLE NO. VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

Lab File ID: C0455.D Lab Sample ID: M. BLANK

Date Analyzed: 12/4/95 Time Analyzed: 2057

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	9554340V	9554340V	C0456.D	2132
02	9554341V	9554341V	C0457.D	2206
03	9553656V	9553656V	C0458.D	2241
04	9554059V	9554059V	C0459.D	2315
05	9554103V	9554103V	C0460.D	2350
06	9554054V	9554054V	C0461.D	0024
07	9554052V	9554052V	C0462.D	0058
08	9554107V	9554107V	C0463.D	0133
09	9554108V	9554108V	C0464.D	0207
10	9554105V	9554105V	C0465.D	0241
11	9554106V	9554106V	C0466.D	0315
12	9554104V	9554104V	C0467.D	0350
13	10 QCS	10 QCS	C0468.D	0424
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL# 213

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

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

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0455.D

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

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

FMETL#

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

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

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0455.D

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

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

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

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO. 215

VBLK01

Lab Name: EMSL ANALYTICAL Contract: _____

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

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

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: C0455.D

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

% Moisture: not dec. NA Date Analyzed: 12/4/95

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

Data File : d:\hpchem\1\data\c0455.d
Acq On : 4 Dec 95 8:57 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 5 12:40 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.18	96	1668088	5.00	ug/L	-0.03
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.41	95	891817	4.95	ug/L	99.04%
57) 1,2-Dichlorobenzene-d4	22.20	152	566663	5.02	ug/L	100.36%
Target Compounds						Qvalue
9) Methylene chloride	7.79	84	47068	0.60	ug/L	91

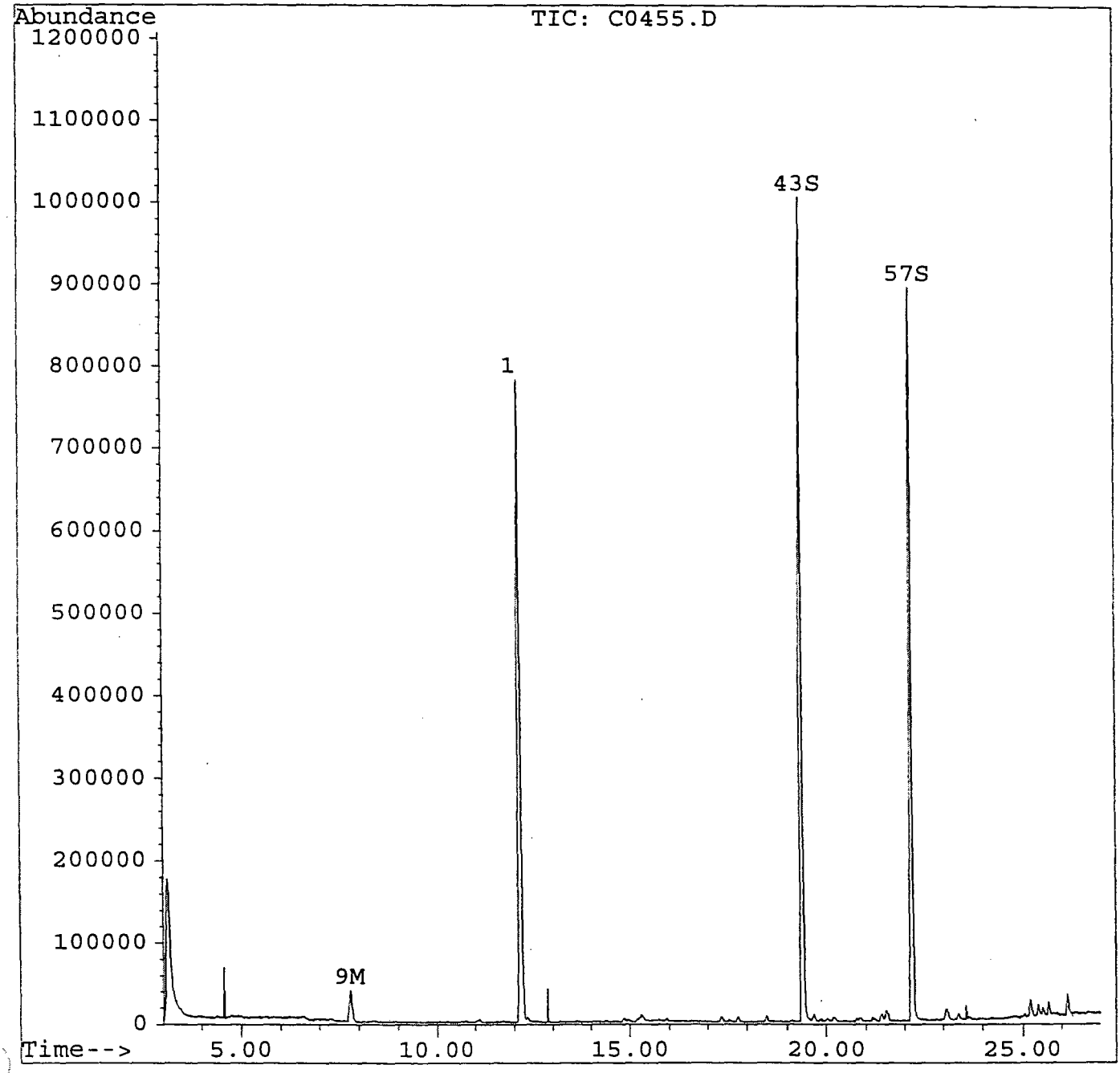
(#) = qualifier out of range (m) = manual integration

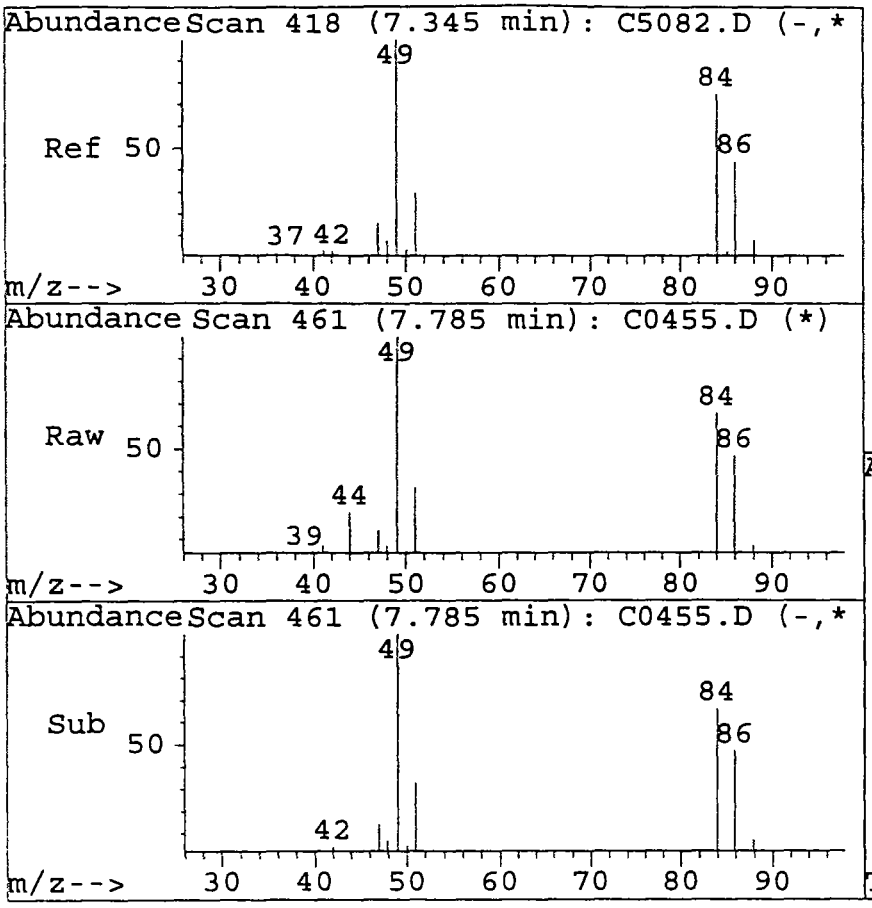
Quantitation Report

Data File : d:\hpchem\1\data\c0455.d
Acq On : 4 Dec 95 8:57 pm
Sample : METHOD BLANK
Misc : 25 ML
Quant Time: Dec 5 12:40 1995

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

Method : c:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

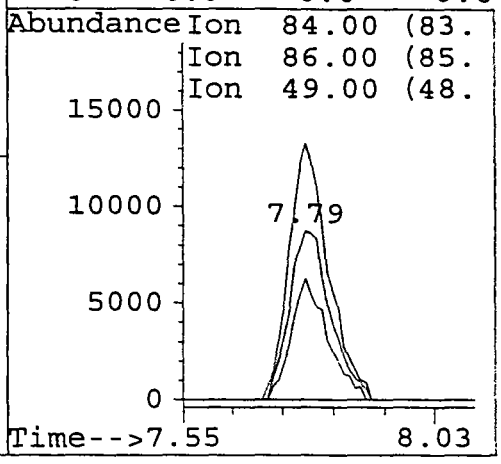




#9
Methylene chloride
Concen: 0.60 ug/L
RT: 7.79 min Scan# 461
Delta R.T. -0.04 min
Lab File: c0455.d
Acq: 4 Dec 95 8:57 pm

Tgt Ion:84 Resp: 47068

Ion	Ratio	Lower	Upper
84	100		
86	71.7	45.2	85.2
49	152.0	121.1	161.1
0	0.0	0.0	0.0



Library Search Compound Report

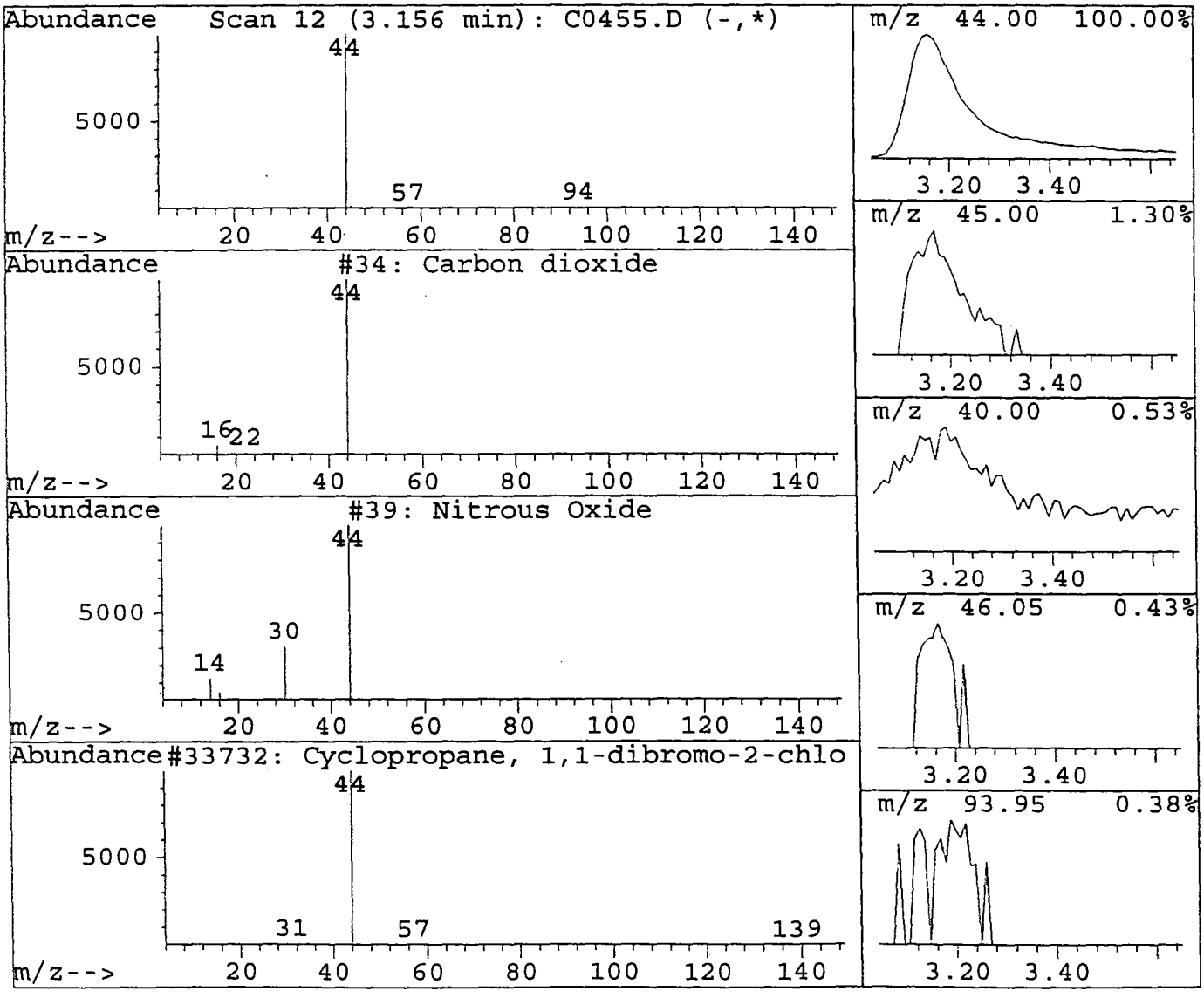
Data File : d:\hpchem\1\data\c0455.d
Acq On : 4 Dec 95 8:57 pm
Sample : METHOD BLANK
Misc : 25 ML

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

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

R.T.	Conc	Area	Relative to ISTD	R.T.
3.16	1.81 ug/L	1267771	Fluorobenzene	12.18

Hit# of 20	Tentative ID	Ref#	CAS#	Qual
1	Carbon dioxide	34	000124-38-9	4
2	Nitrous Oxide	39	010024-97-2	3
3	Cyclopropane, 1,1-dibromo-2-chloro-	33732	024071-57-6	2
4	Carbamic acid, monoammonium salt	391	001111-78-0	2
5	Acetaldehyde	62264	000075-07-0	2



Spike Recovery and RPD Summary Report - WATER

Method : C:\HPCHEM\1\METHODS\VOA524.M
Title : 524.2 Purgable Organics
Last Update : Wed Nov 22 09:25:47 1995
Response via : Initial Calibration

Non-Spiked Sample: C0405.D

	Spike Sample	Spike Duplicate Sample
File ID :	C0410.D	C0411.D
Sample :	9554056 MS BLDG 2567 MW-5	9554056 MSD BLDG 2567
Acq Time:	1 Dec 95 1:42 am	1 Dec 95 2:16 am

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC Limits RPD	QC Limits % Rec
Dichlorodifluorometh	0.0	10	9	9	94	94	0	25	80-120
Chloromethane	0.0	10	10	10	101	99	2	25	80-120
Vinyl chloride	0.0	10	10	10	103	101	3	25	80-120
Bromomethane	0.0	10	10	10	102	101	1	25	80-120
Chloroethane	0.0	10	12	12	116	116	0	25	80-120
Trichlorofluorometha	0.0	10	10	10	100	100	0	25	80-120
1,1-Dichloroethene	0.0	10	10	10	102	102	0	25	80-120
Methylene chloride	0.0	10	9	9	85	86	1	25	80-120
trans-1,2-Dichloroet	0.0	10	10	10	101	101	1	25	80-120
1,1-Dichloroethane	0.0	10	10	10	100	101	0	25	80-120
2,2-Dichloropropane	0.0	10	9	9	89	88	1	25	80-120
cis-1,2-Dichloroethe	0.0	10	10	10	100	100	0	25	80-120
Bromochloromethane	0.0	10	9	10	95	96	2	25	80-120
Chloroform	0.0	10	10	10	98	98	0	25	80-120
1,1,1-Trichloroethan	0.0	10	10	10	98	98	0	25	80-120
Carbon tetrachloride	0.0	10	10	10	97	96	1	25	80-120
1,1-Dichloropropene	0.0	10	10	10	101	99	2	25	80-120
Benzene	0.0	10	10	10	98	99	0	25	80-120
1,2-Dichloroethane	0.0	10	9	9	93	93	0	25	80-120
Trichloroethene	0.0	10	10	10	99	98	0	25	80-120
1,2-Dichloropropane	0.0	10	10	10	100	100	1	25	80-120
Dibromomethane	0.0	10	10	9	95	95	1	25	80-120
Bromodichloromethane	0.0	10	10	9	96	94	1	25	80-120
cis-1,3-Dichloroprop	0.0	10	9	9	95	93	1	25	80-120
Toluene	0.0	10	10	10	100	99	1	25	80-120
trans-1,3-Dichloropr	0.0	10	9	9	91	90	1	25	80-120
1,1,2-Trichloroethan	0.0	10	9	10	94	96	2	25	80-120
Tetrachloroethene	0.0	10	10	10	98	97	1	25	80-120
1,3-Dichloropropane	0.0	10	10	10	96	97	1	25	80-120
Dibromochloromethane	0.0	10	9	9	92	91	1	25	80-120
1,2-Dibromoethane	0.0	10	9	9	94	94	0	25	80-120
Chlorobenzene	0.0	10	10	10	99	99	0	25	80-120
1,1,1,2-Tetrachloroe	0.0	10	10	10	97	96	1	25	80-120
Ethylbenzene	0.0	10	10	10	98	97	2	25	80-120
Xylene (para & meta)	0.0	20	20	19	97	96	1	25	80-120
Xylene (Ortho)	0.0	10	10	10	97	96	1	25	80-120
Styrene	0.0	10	9	9	88	88	0	25	80-120
Bromoform	0.0	10	9	9	89	88	1	25	80-120
Isopropylbenzene	0.0	10	10	10	99	98	1	25	80-120
Bromobenzene	0.0	10	10	10	97	98	0	25	80-120
1,1,2,2-Tetrachloroe	0.0	10	10	10	100	100	1	25	80-120
1,2,3-Trichloropropa	0.0	10	9	9	92	92	0	25	80-120
n-Propylbenzene	0.0	10	10	10	99	98	1	25	80-120

2-Chlorotoluene	0.0	10	10	10	95	100	5	25	80-120
4-Chlorotoluene	0.0	10	10	10	98	97	1	25	80-120
1,3,5-Trimethylbenze	0.0	10	9	9	93	92	1	25	80-120
tert-Butylbenzene	0.0	10	10	10	99	99	0	25	80-120
1,2,4-Trimethylbenze	0.0	10	10	9	94	93	1	25	80-120
sec-Butylbenzene	0.0	10	10	10	100	100	0	25	80-120
,3-Dichlorobenzene	0.0	10	10	10	96	97	1	25	80-120
4-Isopropyltoluene	0.0	10	10	10	98	97	1	25	80-120
1,4-Dichlorobenzene	0.0	10	10	10	96	96	1	25	80-120
1,2-Dichlorobenzene	0.0	10	10	9	95	95	0	25	80-120
n-Butylbenzene	0.0	10	10	10	99	98	0	25	80-120
1,2-Dibromo-3-chloro	0.0	10	9	8	86	85	1	25	80-120
1,2,4-Trichlorobenze	0.0	10	9	9	89	90	1	25	80-120
Hexachlorobutadiene	0.0	10	9	9	93	94	1	25	80-120
Naphthalene	0.0	10	9	9	85	90	6	25	80-120
1,2,3-Trichlorobenze	0.0	10	9	9	85	88	4	25	80-120

VOA524.M Thu Dec 07 14:01:03 1995 VOA

Quantitation Report

Data File : d:\hpchem\1\data\c0410.d
Acq On : 1 Dec 95 1:42 am
Sample : 9554056 MS BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 11:13 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.21	96	1749772	5.00	ug/L	0.00
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.42	95	911672	4.83	ug/L	96.52%
57) 1,2-Dichlorobenzene-d4	22.22	152	565523	4.77	ug/L	95.48%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.54	85	889398	9.39	ug/L	98
3) Chloromethane	3.97	50	729051	10.13	ug/L	99
4) Vinyl chloride	4.19	62	828021	10.34	ug/L	99
5) Bromomethane	4.88	94	570557	10.26	ug/L	99
6) Chloroethane	5.11	64	515654	11.59	ug/L	96
7) Trichlorofluoromethane	5.72	101	1385563	10.02	ug/L	99
8) 1,1-Dichloroethene	6.84	96	842914	10.18	ug/L	97
9) Methylene chloride	7.83	84	740220	8.94	ug/L	96
10) trans-1,2-Dichloroethene	8.36	96	959373	10.14	ug/L	99
12) 1,1-Dichloroethane	9.16	63	1783238	10.03	ug/L	100
13) 2,2-Dichloropropane	10.21	77	1330010	8.96	ug/L	98
14) cis-1,2-Dichloroethene	10.22	96	926859	9.97	ug/L	98
16) Bromochloromethane	10.64	128	382059	9.48	ug/L	97
17) Chloroform	10.78	83	1604565	9.77	ug/L	99
18) 1,1,1-Trichloroethane	11.09	97	1563393	9.84	ug/L	99
19) Carbon tetrachloride	11.38	117	1460651	9.72	ug/L	99
20) 1,1-Dichloropropene	11.38	75	1490500	10.05	ug/L	98
21) Benzene	11.73	78	3006420	9.88	ug/L	100
22) 1,2-Dichloroethane	11.75	62	634290	9.30	ug/L	97
23) Trichloroethene	12.83	95	1244513	9.86	ug/L	99
24) 1,2-Dichloropropane	13.20	63	1059110	10.02	ug/L	99
25) Dibromomethane	13.40	93	442271	9.54	ug/L	96
26) Bromodichloromethane	13.66	83	1310089	9.58	ug/L	99
27) cis-1,3-Dichloropropene	14.41	75	1166975	9.46	ug/L	98
28) Toluene	14.99	92	2170593	10.11	ug/L	99
29) trans-1,3-Dichloropropene	15.34	75	775566	9.11	ug/L	100
30) 1,1,2-Trichloroethane	15.66	83	431815	9.45	ug/L	98
31) Tetrachloroethene	15.94	166	1491832	9.79	ug/L	99
32) 1,3-Dichloropropane	15.95	76	830477	9.60	ug/L	98
33) Dibromochloromethane	16.35	129	838190	9.21	ug/L	100
34) 1,2-Dibromoethane	16.56	107	626901	9.41	ug/L	99
35) Chlorobenzene	17.40	112	2450177	9.90	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.55	131	997040	9.70	ug/L	98
37) Ethylbenzene	17.59	91	4352559	9.86	ug/L	100
38) Xylene (para & meta)	17.80	106	3269827	19.59	ug/L	96
39) Xylene (Ortho)	18.50	106	1500311	9.79	ug/L	96
40) Styrene	18.52	104	2071481	8.81	ug/L	98

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

Quantitation Report

Data File : d:\hpchem\1\data\c0410.d
Acq On : 1 Dec 95 1:42 am
Sample : 9554056 MS BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 11:13 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Compound	R.T.	QIon	Response	Conc Unit	Qvalue
41) Bromoform	18.87	173	443339	8.89 ug/L	98
42) Isopropylbenzene	19.15	105	4217762	9.89 ug/L m	45
44) Bromobenzene	19.71	156	1075785	9.74 ug/L	99
45) 1,1,2,2-Tetrachloroethane	19.67	83	556990	9.95 ug/L	97
46) 1,2,3-Trichloropropane	19.75	75	535644	9.32 ug/L	89
47) n-Propylbenzene	19.88	91	5773869	9.92 ug/L	99
48) 2-Chlorotoluene	20.05	91	3245230	9.54 ug/L	99
49) 4-Chlorotoluene	20.25	91	3714565	9.80 ug/L	99
50) 1,3,5-Trimethylbenzene	20.20	105	3459453	9.35 ug/L	99
51) tert-Butylbenzene	20.79	119	4133339	9.95 ug/L	99
52) 1,2,4-Trimethylbenzene	20.88	105	3539425	9.57 ug/L	100
53) sec-Butylbenzene	21.19	105	5636747	9.99 ug/L	100
54) 1,3-Dichlorobenzene	21.41	146	2103161	9.62 ug/L	100
55) 4-Isopropyltoluene	21.45	119	4430704	9.77 ug/L	99
56) 1,4-Dichlorobenzene	21.57	146	2049638	9.56 ug/L	99
58) 1,2-Dichlorobenzene	22.26	146	1643411	9.50 ug/L	97
59) n-Butylbenzene	22.20	91	4555123	9.90 ug/L	99
60) 1,2-Dibromo-3-chloropropan	23.67	75	101116	8.55 ug/L	99
61) 1,2,4-Trichlorobenzene	25.22	180	1245533	8.89 ug/L	98
62) Hexachlorobutadiene	25.54	225	1132618	9.31 ug/L	99
63) Naphthalene	25.69	128	1154426	8.53 ug/L m	0
64) 1,2,3-Trichlorobenzene	26.19	180	868051	8.50 ug/L	99
65) Methyl-tert butyl ether	8.40	73	974000	9.10 ug/L	99
66) tert-Butyl Alcohol	8.13	59	42347	26.85 ug/L m	100

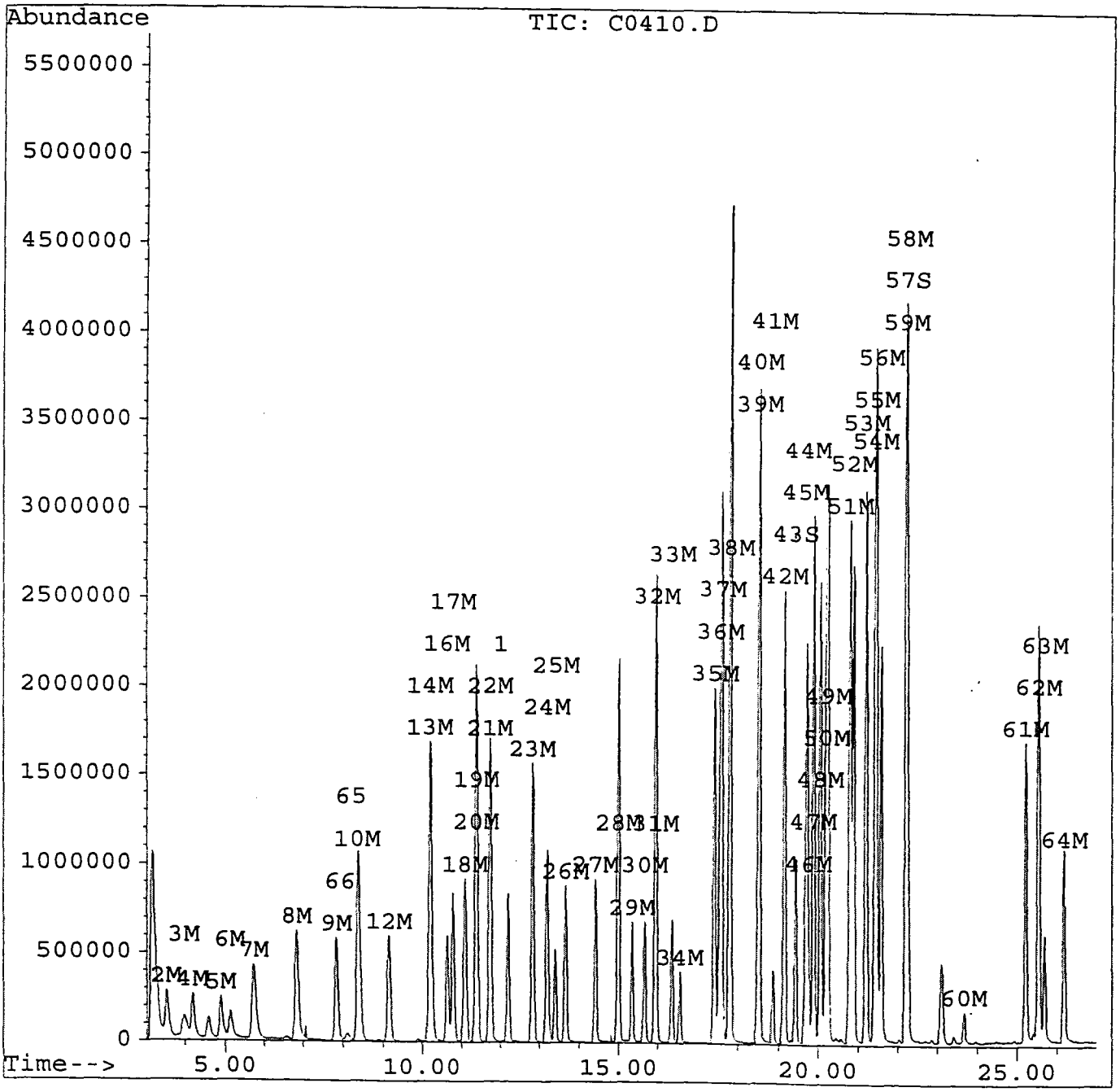
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0410.d
Acq On : 1 Dec 95 1:42 am
Sample : 9554056 MS BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 11:13 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



Quantitation Report

Data File : d:\hpchem\1\data\c0411.d
Acq On : 1 Dec 95 2:16 am
Sample : 9554056 MSD BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 11:12 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	12.22	96	1750948	5.00	ug/L	0.01
System Monitoring Compounds						%Recovery
43) 4-Bromofluorobenzene	19.44	95	908970	4.81	ug/L	96.17%
57) 1,2-Dichlorobenzene-d4	22.23	152	566782	4.78	ug/L	95.63%
Target Compounds						Qvalue
2) Dichlorodifluoromethane	3.55	85	888485	9.38	ug/L	100
3) Chloromethane	3.97	50	716423	9.95	ug/L	99
4) Vinyl chloride	4.19	62	806245	10.07	ug/L	98
5) Bromomethane	4.89	94	566898	10.19	ug/L	98
6) Chloroethane	5.14	64	515872	11.59	ug/L	99
7) Trichlorofluoromethane	5.72	101	1382103	9.99	ug/L	98
8) 1,1-Dichloroethene	6.84	96	845804	10.20	ug/L	99
9) Methylene chloride	7.84	84	747338	9.02	ug/L	99
10) trans-1,2-Dichloroethene	8.37	96	952204	10.06	ug/L	99
12) 1,1-Dichloroethane	9.17	63	1790470	10.07	ug/L	99
13) 2,2-Dichloropropane	10.21	77	1312402	8.83	ug/L	97
14) cis-1,2-Dichloroethene	10.23	96	929009	9.98	ug/L	99
16) Bromochloromethane	10.64	128	388207	9.62	ug/L	97
17) Chloroform	10.80	83	1611833	9.81	ug/L	100
18) 1,1,1-Trichloroethane	11.11	97	1562518	9.82	ug/L	99
19) Carbon tetrachloride	11.39	117	1444902	9.61	ug/L	98
20) 1,1-Dichloropropene	11.38	75	1467639	9.89	ug/L	100
21) Benzene	11.74	78	3021089	9.92	ug/L	99
22) 1,2-Dichloroethane	11.77	62	632462	9.27	ug/L	98
23) Trichloroethene	12.84	95	1241093	9.82	ug/L	100
24) 1,2-Dichloropropane	13.21	63	1054008	9.97	ug/L	100
25) Dibromomethane	13.42	93	438321	9.45	ug/L	99
26) Bromodichloromethane	13.67	83	1291820	9.44	ug/L	99
27) cis-1,3-Dichloropropene	14.43	75	1152912	9.34	ug/L	98
28) Toluene	14.99	92	2155061	10.03	ug/L	100
29) trans-1,3-Dichloropropene	15.35	75	766216	9.00	ug/L	100
30) 1,1,2-Trichloroethane	15.67	83	441184	9.65	ug/L	99
31) Tetrachloroethene	15.94	166	1480731	9.71	ug/L	98
32) 1,3-Dichloropropane	15.96	76	837563	9.67	ug/L	99
33) Dibromochloromethane	16.36	129	828185	9.10	ug/L	98
34) 1,2-Dibromoethane	16.57	107	626591	9.40	ug/L	99
35) Chlorobenzene	17.42	112	2454514	9.91	ug/L	99
36) 1,1,1,2-Tetrachloroethane	17.55	131	991639	9.64	ug/L	98
37) Ethylbenzene	17.59	91	4283045	9.70	ug/L	99
38) Xylene (para & meta)	17.80	106	3234188	19.36	ug/L	96
39) Xylene (Ortho)	18.50	106	1487356	9.70	ug/L	96
40) Styrene	18.52	104	2071372	8.80	ug/L	100

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

Quantitation Report

Data File : d:\hpchem\1\data\c0411.d
Acq On : 1 Dec 95 2:16 am
Sample : 9554056 MSD BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 11:12 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration

	Compound	R.T.	QIon	Response	Conc	Unit		Qvalue
41)	Bromoform	18.87	173	437828	8.78	ug/L		99
42)	Isopropylbenzene	19.15	105	4190722	9.82	ug/L	m	0
44)	Bromobenzene	19.71	156	1080859	9.77	ug/L		98
45)	1,1,2,2-Tetrachloroethane	19.67	83	562372	10.04	ug/L		97
46)	1,2,3-Trichloropropane	19.76	75	537637	9.35	ug/L		86
47)	n-Propylbenzene	19.89	91	5722104	9.82	ug/L		100
48)	2-Chlorotoluene	20.07	91	3400505	9.98	ug/L		98
49)	4-Chlorotoluene	20.25	91	3696601	9.74	ug/L		99
50)	1,3,5-Trimethylbenzene	20.20	105	3439166	9.29	ug/L		99
51)	tert-Butylbenzene	20.80	119	4122413	9.91	ug/L		98
52)	1,2,4-Trimethylbenzene	20.89	105	3495822	9.45	ug/L		100
53)	sec-Butylbenzene	21.20	105	5638910	9.99	ug/L		100
54)	1,3-Dichlorobenzene	21.42	146	2118263	9.68	ug/L		100
55)	4-Isopropyltoluene	21.46	119	4401557	9.70	ug/L		99
56)	1,4-Dichlorobenzene	21.58	146	2063920	9.62	ug/L		99
58)	1,2-Dichlorobenzene	22.26	146	1642544	9.49	ug/L		97
59)	n-Butylbenzene	22.21	91	4543485	9.86	ug/L		100
60)	1,2-Dibromo-3-chloropropan	23.68	75	100212	8.47	ug/L		98
61)	1,2,4-Trichlorobenzene	25.22	180	1260135	8.99	ug/L		97
62)	Hexachlorobutadiene	25.55	225	1142235	9.38	ug/L		100
63)	Naphthalene	25.69	128	1223957	9.04	ug/L		100
64)	1,2,3-Trichlorobenzene	26.19	180	899732	8.81	ug/L		99
65)	Methyl-tert butyl ether	8.40	73	978548	9.13	ug/L		98
66)	tert-Butyl Alcohol	8.16	59	43620	27.64	ug/L	m	100

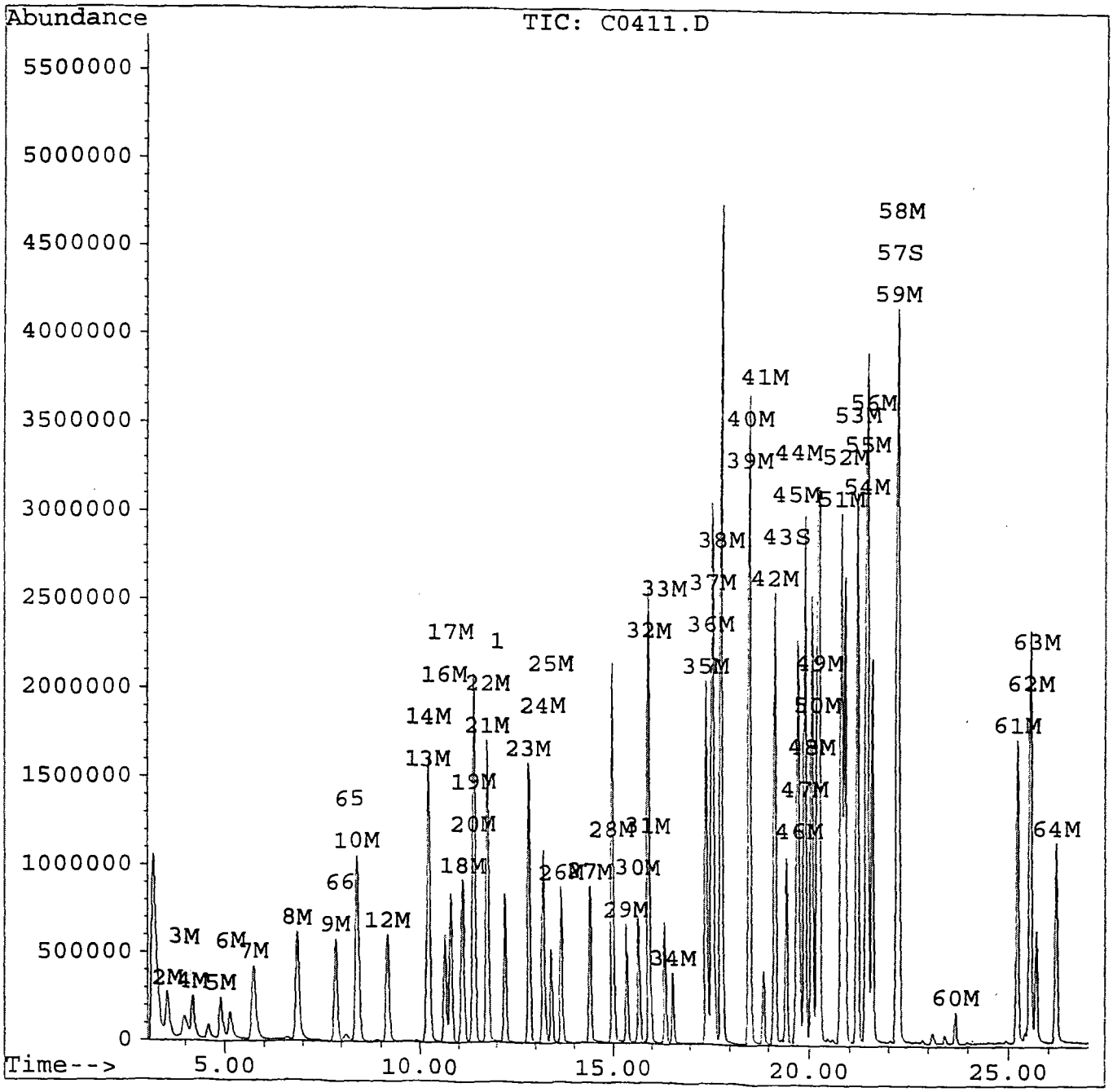
(#) = qualifier out of range (m) = manual integration

Quantitation Report

Data File : d:\hpchem\1\data\c0411.d
Acq On : 1 Dec 95 2:16 am
Sample : 9554056 MSD BLDG 2567 MW-5
Misc : 25 ML
Quant Time: Dec 5 11:12 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 : Wed Nov 22 09:25:47 1995
Response via : Multiple Level Calibration



EMSL

METALS DATA PACKAGE

EMSL

COVER PAGE - METALS ANALYSES DATA PACKAGE

Lab Name: **EMSL ANALYTICAL, INC.** Contract: _____

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

SOW No.: _____

Client Sample ID	Lab Sample ID
MW1-2926925	**95-54052**
MW2-2926926	**95-54053**
MW3-2926947	**95-54054**
MW4-2926948	**95-54055**
MW5-2931783	**95-54056**
Field Blank	**95-54058**
Duplicate	**95-54059**

Were ICP interelement corrections applied? Yes/No **NO**

Were ICP background corrections applies? Yes/No **NO**

If yes - were raw data generated before application of background correction? Yes/No **NO**

Comments: **ICP was not used**

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

Signature: _____ Name: Paul V. Laraia

Date: _____ Title: Laboratory Manager

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

Project #: 95118774
Date Received: 11/21/95 16:30

Customer Project No. MW Sampling Bldg.2567

The following results are for Lead

Lab #	Conc.	Unit	Client Designation
95 0054052	<0.0030	mg/l	MW1-2926925
95 0054053	<0.0030	mg/l	MW2-2926926
95 0054054	<0.0030	mg/l	MW3-2926947
95 0054055	<0.0030	mg/l	MW4-2926948
95 0054056	<0.0030	mg/l	MW5-2931783
95 0054058	<0.0030	mg/l	Field Blank
95 0054059	<0.0030	mg/l	Duplicate

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: **EMSL Analytical** Contract: _____

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

Initial Calibration Source: **Inorganic Ventures**

Continuing Calibration Source: **SPEX**

Concentration Units: **mg/l**

Analyte	Initial Calibration			Continuing Calibration					M
	True	Found	%R (1)	True	Found	%R (1)	Found	%R (1)	
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	**0.02**	**0.01888**	**94**	**0.02**	**0.01952**	**98**			**F**
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110

EMSL

BLANKS

Lab Name: **EMSL ANALYTICAL** Contract: _____

Lab Code: _____ Case No.: _____ AS No.: _____ SDG No.: _____

Preparation Blank Matrix (soil/water): **Water**

Preparation Blank Concentration Units (mg/l or mg/kg): **mg/l**

	Inital Calibration Blank		Continuing Calibration Blank (ug/l)						Preparation Blank		
Analyte	(ug/l)	C	1	C	2	C	3	C		C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead	**0.04**		**0.09**						**<0.0025**		**F**
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

EMSL

SPIKE SAMPLE RECOVERY

Lab Name: **EMSL Analytical** Contract: _____ Lab Sample No.: **95-53653**

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

Matrix (soil/water): **Water** Level (low/med) : **Low**

% Solids for Sample: _____

Concentration Units (mg/l or mg/kg dry weight): **mg/l**

	Control Limit	Spiked Sample		Sample Result		Spike Added			
Analyte	%R	Result (SSR)	C	(SR)	C	(SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead	**75-125**	**0.0241**		**0.003**		**0.02**	**106**		**F**
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments: _____

DUPLICATES

Lab Name: **EMSL ANALYTICAL** Contract: _____ Lab Sample No.: **95-53653**

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

Matrix (soil/water): **Water** :Level (low/med.): **Low**

% Solids for Sample: _____ % Solids for Duplicate: _____

Concentration units (mg/l or mg/kg dry weight): **mg/l**

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	**+/-20%**	**0.003**		**0.003**		**0.0**		**F**
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

LABORATORY CONTROL SAMPLE

Lab Name: **EMSL Analytical** Contract: _____

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

Solid LCS Source: _____

Aqueous LCS Source: **Inorganic Ventures**

Analyte	Aqueous (mg/l)			Solid (mg/kg)				
	True	Found	% R	True	Found	C	Limits	% R
Aluminum								
Antimony								
Arsenic								
Barium								
Beryllium								
Cadmium								
Calcium								
Chromium								
Cobalt								
Copper								
Iron								
Lead	**0.0200**	**0.0214**	**107**				**80-120%**	
Magnesium								
Manganese								
Mercury								
Nickel								
Potassium								
Selenium								
Silver								
Sodium								
Thallium								
Vanadium								
Zinc								
Cyanide								

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

LABORATORY AUTHENTICATION STATEMENT

I certify under penalty of law, where applicable, this laboratory meets the Laboratory Performance Standards and Quality Control requirements specified in N.J.A.C. 7:18, 40 CFR Part 136 for Water and Wastewater Analyses and SW 846 for Solid Waste Analyses. I have personally examined and am familiar with the information contained in this report, and based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the submitted information is true, accurate, complete, and meets the standards specified in N.J.A.C. 7:18, 40 CFR Part 136, and/or SW 846. I am aware that there are significant penalties for submitting false information, including the possibility of a fine and imprisonment.

Paul Farario

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