

02.08-03/01/97-02293

**Contractor's Closeout Report  
for  
Sites 6 and 82 Source Removal  
Operable Unit No. 2  
MCB Camp Lejeune  
Jacksonville, North Carolina**

**Volume VII of IX**

Prepared for:

**DEPARTMENT OF THE NAVY  
Contract No. N62470-93-D-3032  
Delivery Order 0032**

Prepared by

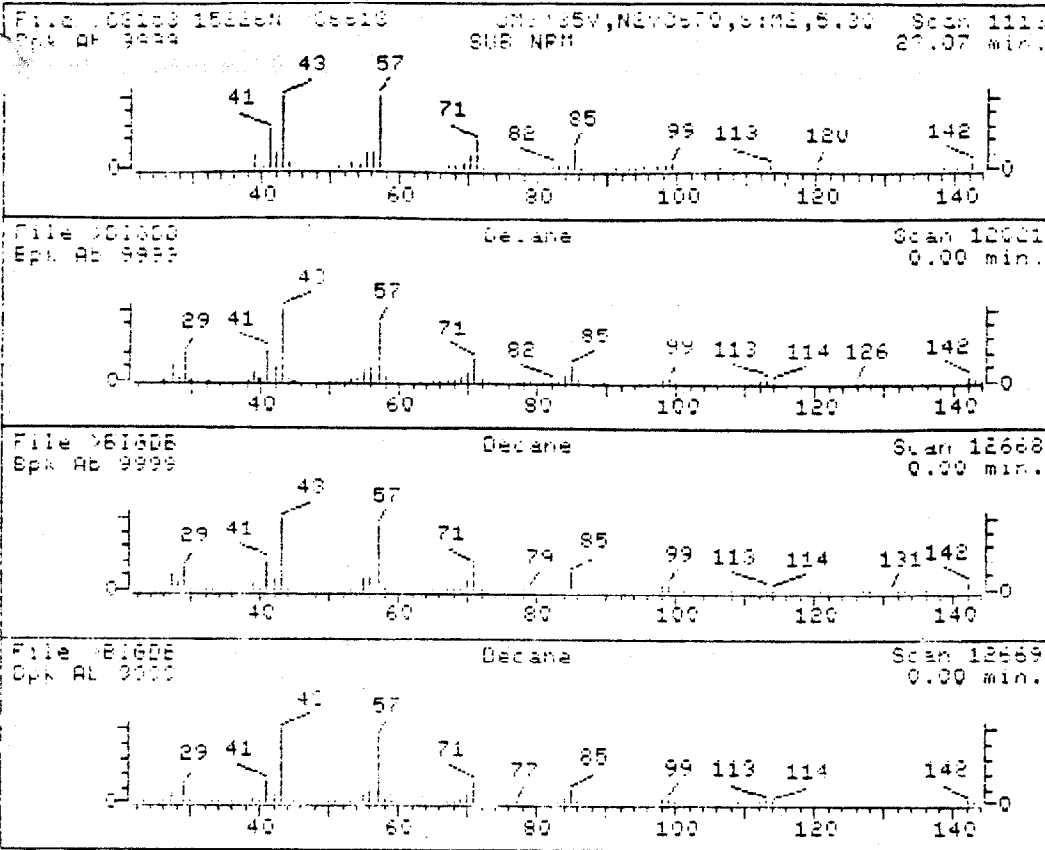


**OHM Remediation  
Services Corp.**  
A Subsidiary of OHM Corporation

5335 Triangle Parkway, Suite 450  
Norcross, GA 30092

March 1997

OHM Project No. 15226



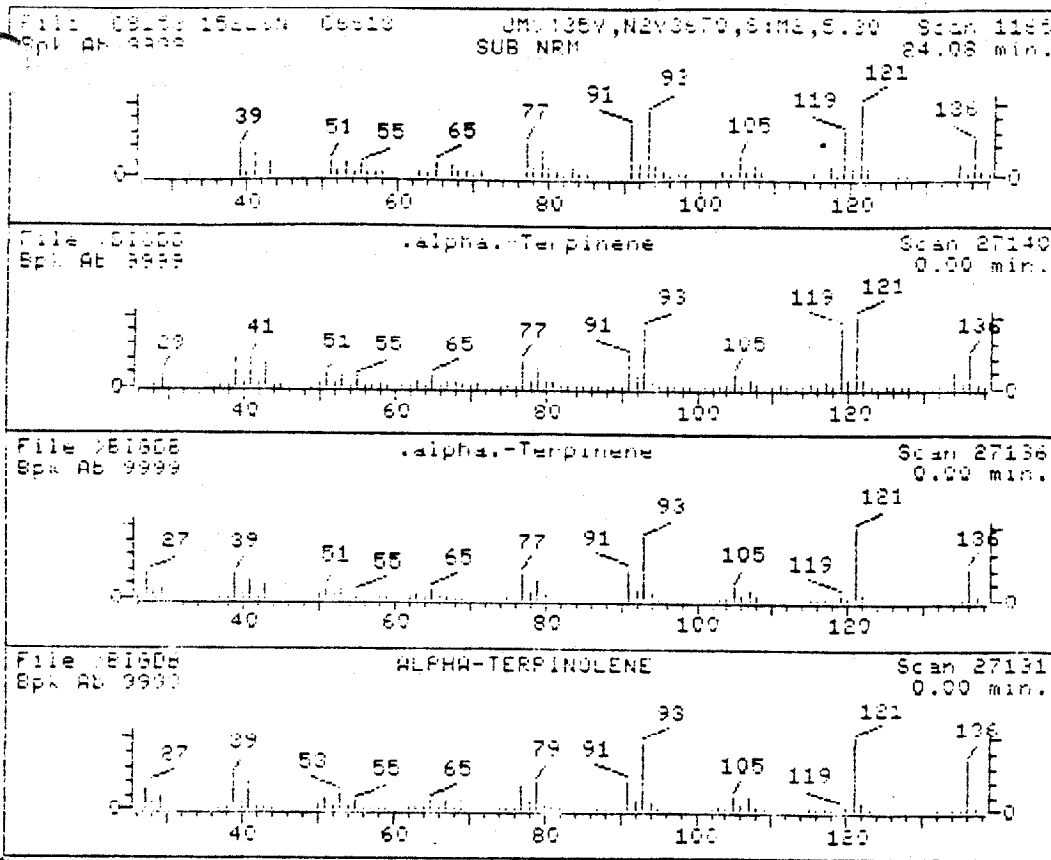
Data File: >08153::05  
 Name: 15226N 04418  
 Misc Data: JM9435U,N2U3670,S:M2,5.30,F:1,  
 RT (min): 27.07  
 Scan: 1113  
 Area: 94752 Rank: 8  
 Semi-quantitative Conc (uncorrected): 14.02 ug/l  
 Semi-quantitative Conc (corrected): 2.65 ug/kg  
 Calculated using Istd: CHLOROBENZENE-45 (ISTD) @ 19.59 minutes

$14.02 \times 0.005 \times 0.426 = 0.006$

- 1. Decane 142 C10H22
- 2. Decane 142 C10H22
- 3. Decane 142 C10H22

Sample file: >08153 Spectrum #: 1113  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 56

Prob.	CAS #	CON #	ROOT	K	PK	#FLG	TILT	%	CON	C_I	R_IV
95*	124185	10821	"BIGDB	84	13	1	0	98	2	72	93
89*	124185	12668	"BIGDB	72	28	1	0	88	2	66	71
87*	124185	12669	"BIGDB	62	31	2	0	112	4	63	48



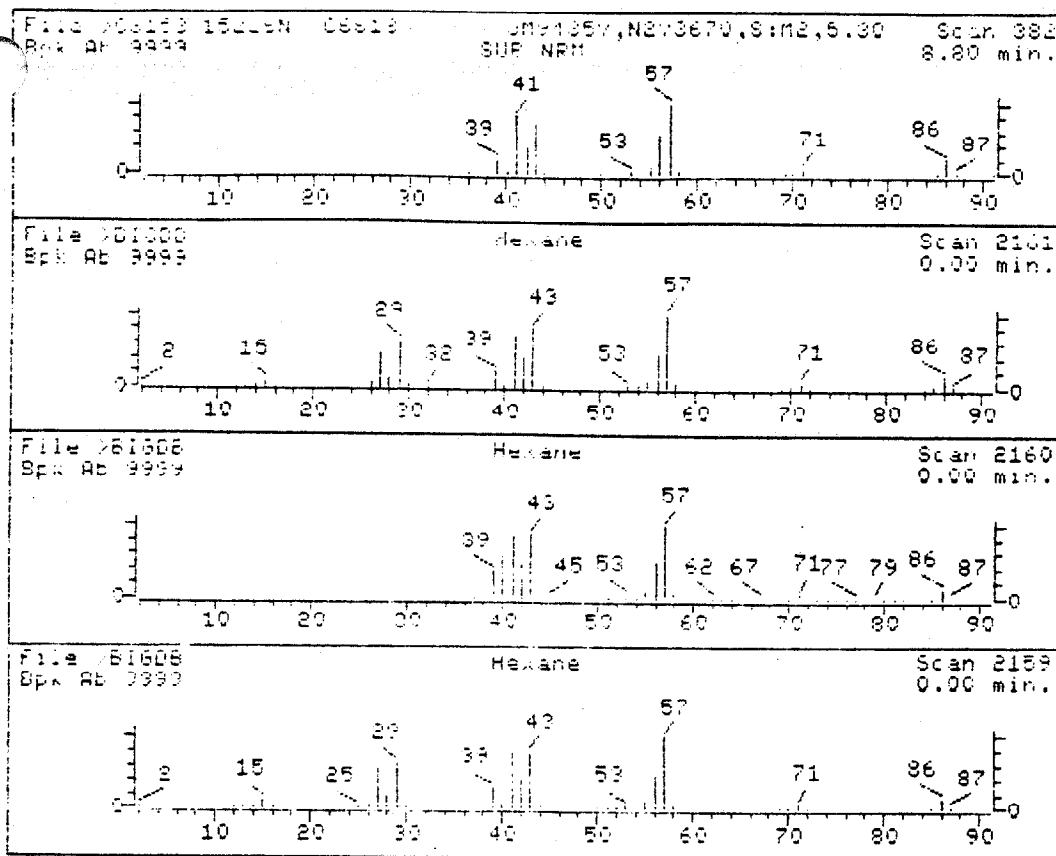
Data File: >08153::05  
 Name: 15224N 06618  
 Misc Data: JMR435U,N203670,S:M2,5.30,5:1,  
 RT (min): 24.08  
 Scan: 1165  
 Area: 86792 Rank: 9  
 Semi-quantitative Conc (uncorrected): 12.84 ug/l  
 Semi-quantitative Conc (corrected): 2.42 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

$2.42 \times 0.005 = .005$

- |                      |            |
|----------------------|------------|
| 1. alpha-Terpinene   | 136 C10H16 |
| 2. alpha-Terpinene   | 136 C10H16 |
| 3. ALPHA-TERPINOLENE | 136 C10H16 |

Sample file: >08153 Spectrum #: 1165  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
94*	99865	27140	"BIGDB	102	17	1	0	91	17	60	95
94*	99865	27136	"BIGDB	93	20	0	0	100	24	53	96
94*	586629	27131	"BIGDB	88	33	0	0	70	25	53	96

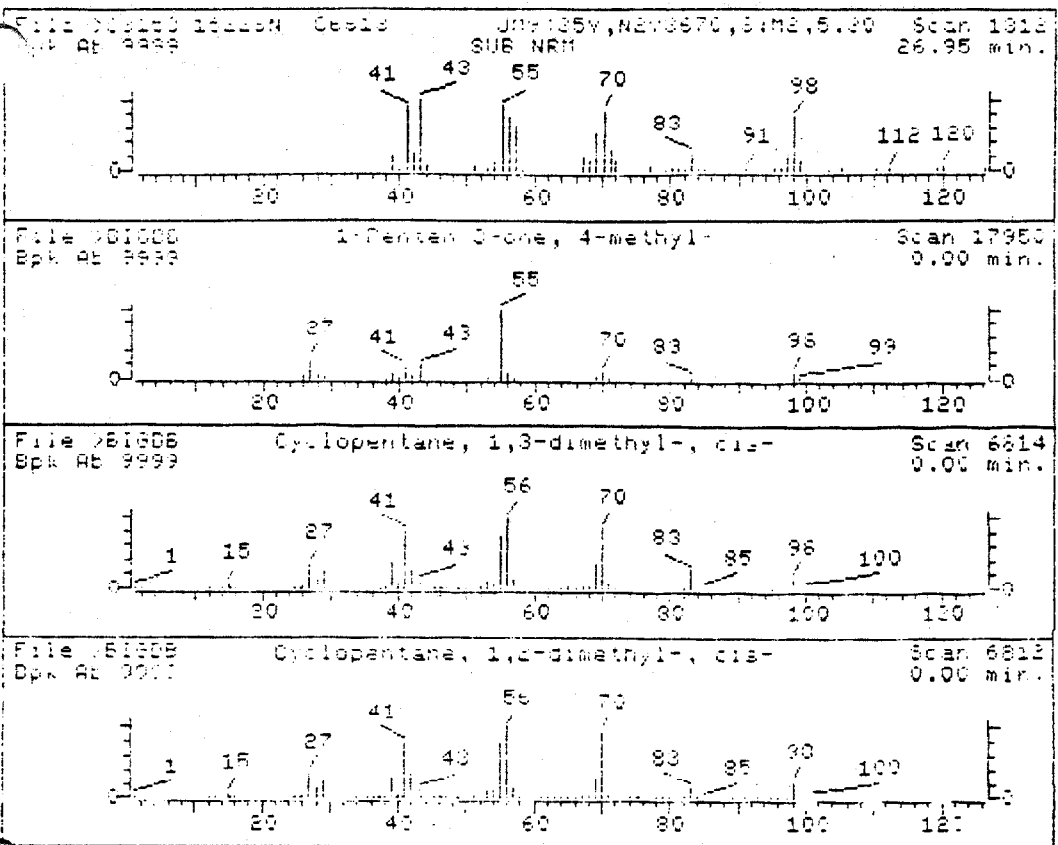


Data File: >08153::DF  
 Name: 15224N C6618  
 Misc Data: JM9435U,N203670,S:M2,5.30,5:1,  
 RT (min): 8.80  
 Scan: 382  
 Area: 64391 Rank: 10  
 Semi-quantitative Conc (uncorrected): 10.17 ug/l  
 Semi-quantitative Conc (corrected): 1.92 ug/kg  
 Calculated using Istd: BROMOCHLOROMETHANE (ISTD) @ 10.81 minutes

- 1. Hexane 86 C6H14
- 2. Hexane 86 C6H14
- 3. Hexane 86 C6H14

Sample file: >08153 Spectrum #: 382  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
84*	110543	2161	"BIGDB	51	43	0	0	88	9	55	61
81*	110543	2160	"BIGDB	59	31	2	0	81	8	53	45
79*	110543	2159	"BIGDB	56	40	0	0	92	11	43	67



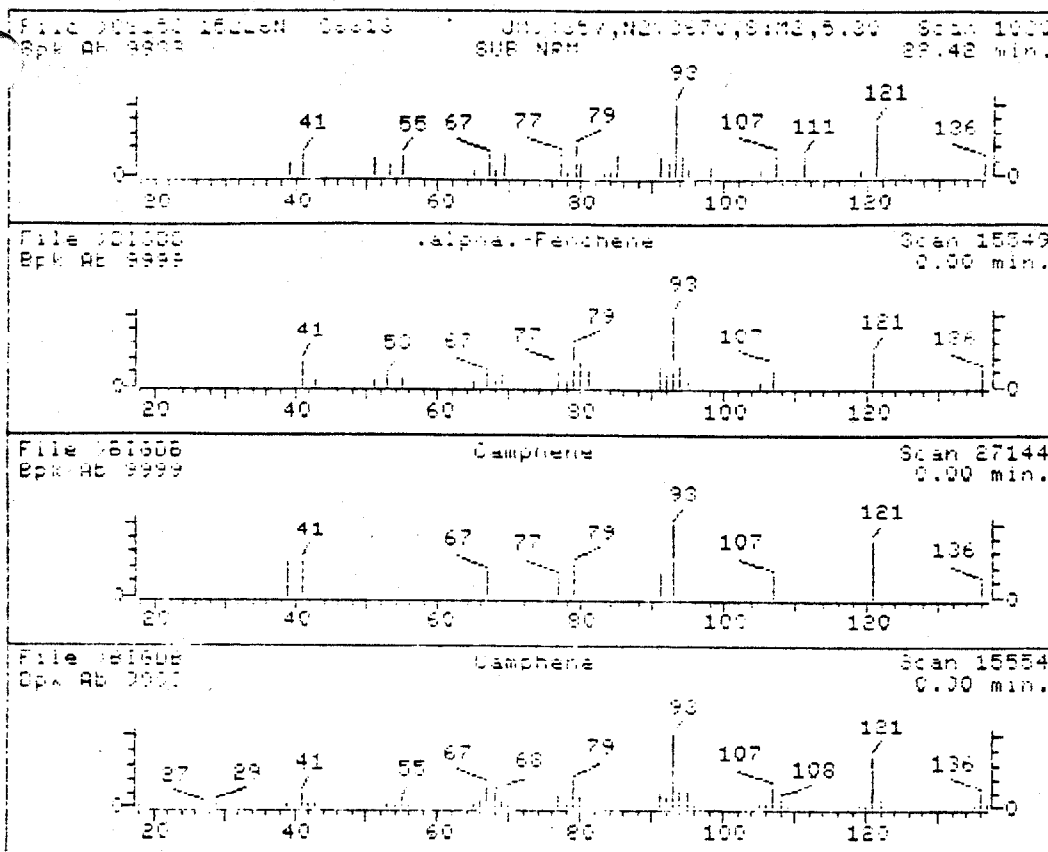
Date File: >CR153::DE  
Name: 1522AN 06618  
Misc Data: JMW435U, N2U3670, S:M2, 5.30, 5:1,  
RT (min): 26.95

Scan: 1312  
Area: 63316 Rank: 11  
Semi-quantitative Conc (uncorrected): 9.37 ug/l  
Semi-quantitative Conc (corrected): 1.77 ug/kg,  $0.005 \times .426 = .004$   
Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

- |                                      |           |
|--------------------------------------|-----------|
| 1. 1-Pentan-3-one, 4-methyl-         | 98 C6H10O |
| 2. Cyclopentane, 1,3-dimethyl-, cis- | 98 C7H14  |
| 3. Cyclopentane, 1,2-dimethyl-, cis- | 98 C7H14  |

Sample file: >CR153 Spectrum #: 1312  
Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
60*	1606479	17950	"BIGDB	23	54	3	0	772	15	30	12
46*	2532583	6814	"BIGDB	38	63	0	0	73	40	17	35
3. 41*	1192183	6812	"BIGDB	35	67	0	0	64	45	14	31



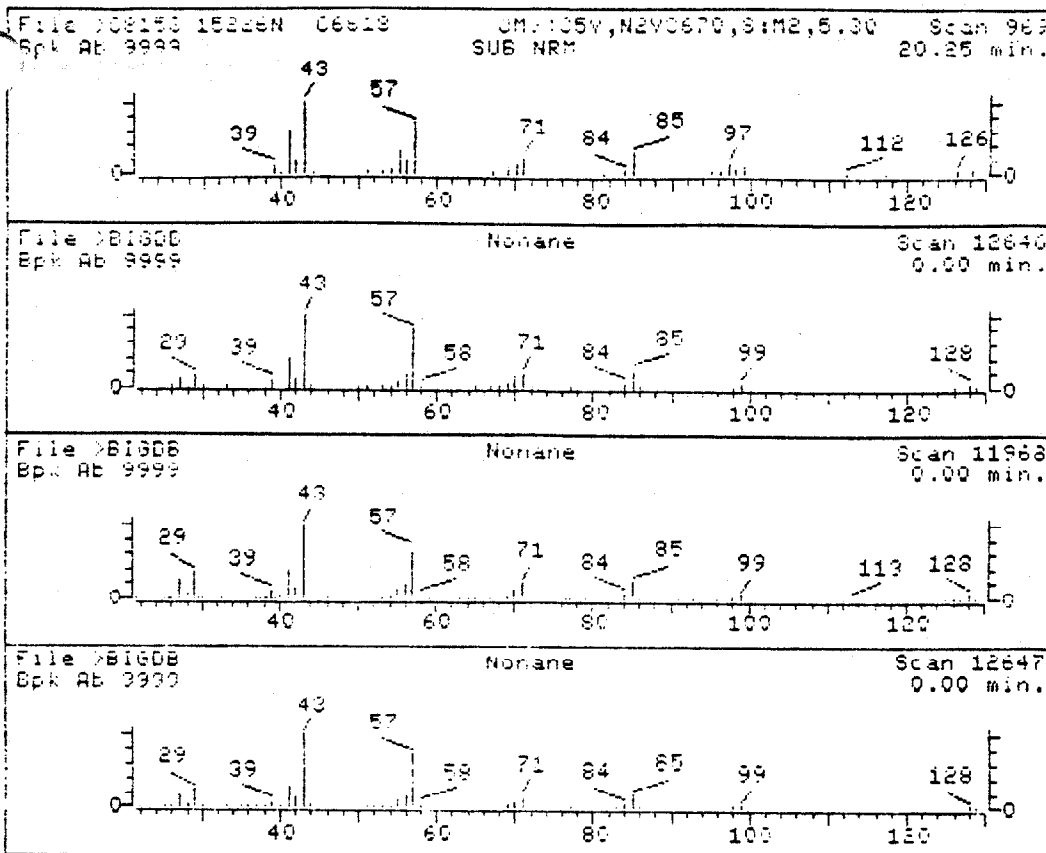
Data File: >08153:06  
 Name: 15026N C6618  
 Misc Data: JMR435U,N2U3670,S:M2,5.30,5:1,  
 RT (min): 27.42  
 Scan: 1080  
 Area: 57720 Rank: 12  
 Semi-quantitative Conc (unconnected): 8.54 ug/l  
 Semi-quantitative Conc (corrected): 1.61 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

$1.61 \times 0.005 \times 0.426 = 0.003$

- |                   |            |
|-------------------|------------|
| 1. alpha-Fenchene | 136 C10H16 |
| 2. Camphene       | 136 C10H16 |
| 3. Camphene       | 136 C10H16 |

Sample file: >08153 Spectrum #: 1080  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
73*	471841	15549	"BIGDB	62	55	1	0	70	25	32	60
67*	79925	27144	"BIGDB	65	16	1	-2	76	28	27	53
63*	79925	15554	"BIGDB	73	48	3	1	100	17	30	31



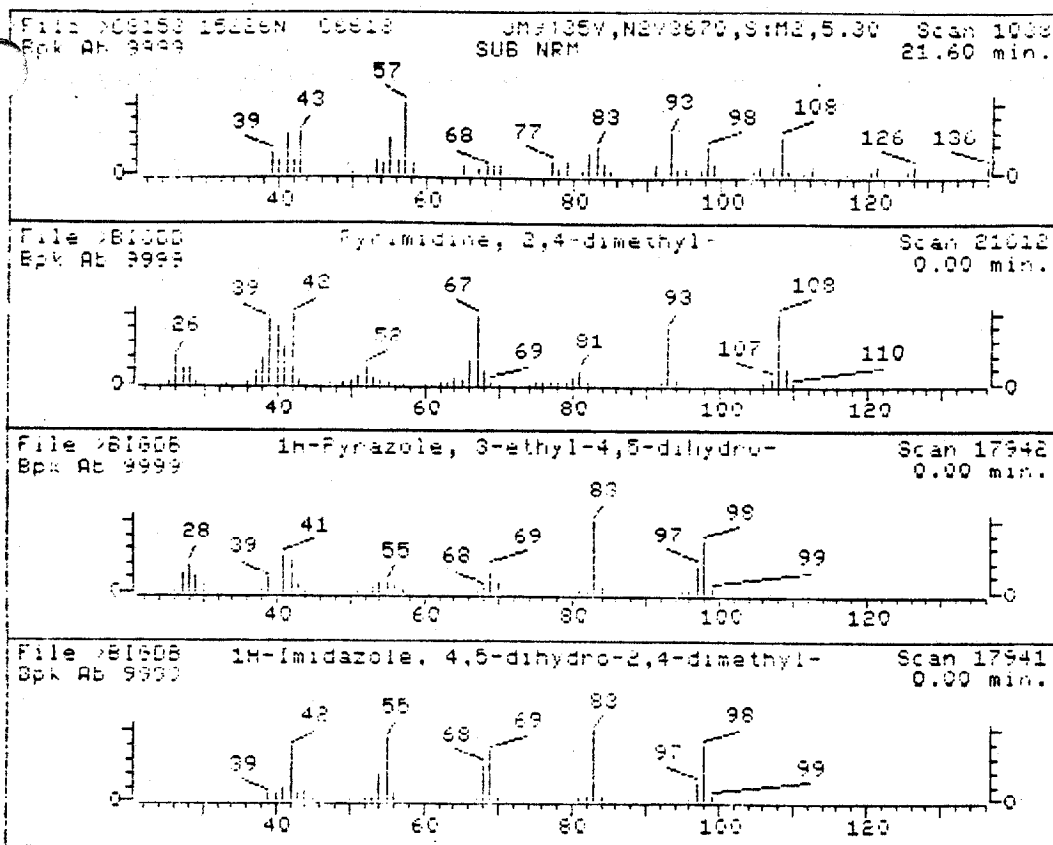
Data File: >C8153::05  
 Name: 15226N C6618  
 Misc Data: JM9435U,N2U3670,S:M2,5.30,5:1,  
 RT (min): 20.25  
 Scan: 969  
 Area: 52727 Rank: 13  
 Semi-quantitative Conc (uncorrected): 7.80 ug/l  
 Semi-quantitative Conc (corrected): 1.47 ug/kg  
 Calculated using Istd: CHLOROBENZENE-45 (ISTD) @ 19.59 minutes

*Handwritten:*  $0.426 \times 0.003 = 0.003$

- 1. Nonane 128 C9H20
- 2. Nonane 128 C9H20
- 3. Nonane 128 C9H20

Sample file: >C8153 Spectrum #: 969  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 52

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
64*	111842	11968	"BIGDB	60	35	2	0	88	21	28	43
62*	111842	11968	"BIGDB	61	35	2	0	100	27	25	43



Data File: >C8153::DF  
 Name: 15226N C6618  
 Misc Data: JM9435U,N2U3670,S:M2,5.30,5:1,  
 RT (min): 21.60  
 Scan: 1038  
 Area: 51306 Rank: 14  
 Semi-quantitative Conc (uncorrected): 7.59 ug/l  
 Semi-quantitative Conc (corrected): 1.43 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

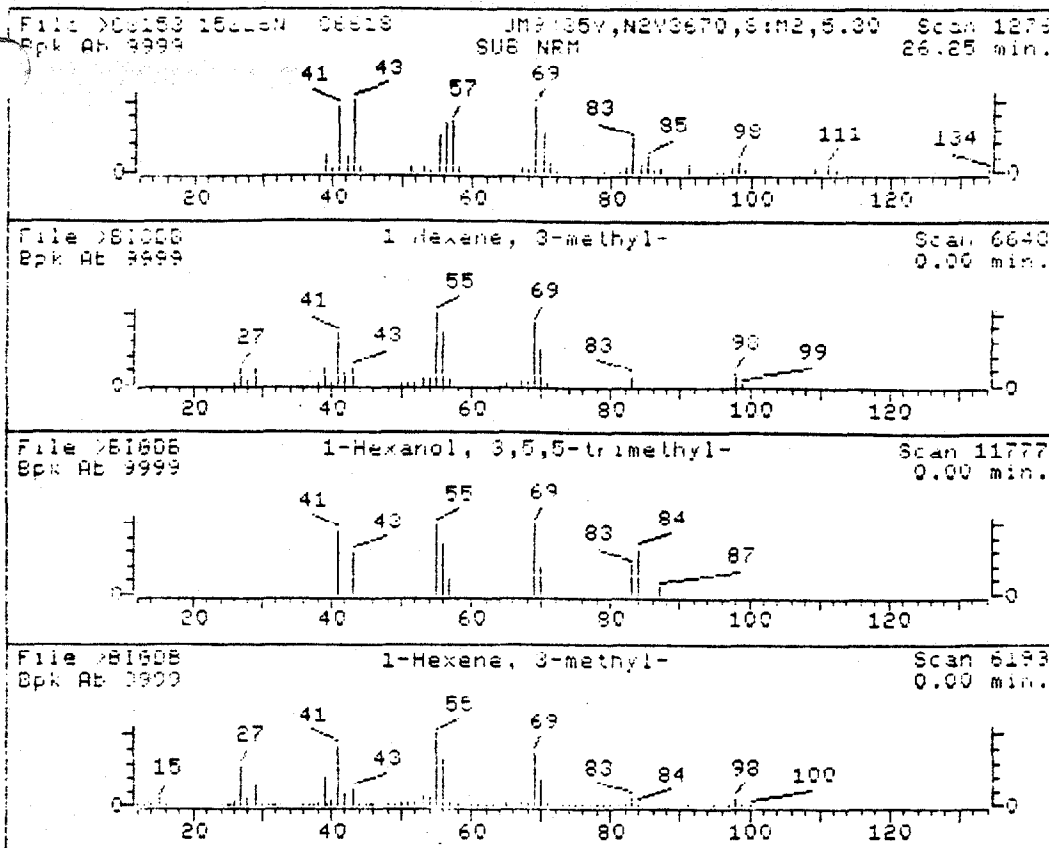
$x.005 \times .426 = .003$

- 1. Pyrimidine, 2,4-dimethyl- 108 C6H8N2
- 2. 1H-Pyrazole, 3-ethyl-4,5-dihydro- 98 C5H10N2
- 3. 1H-Imidazole, 4,5-dihydro-2,4-dimethyl- 98 C5H10N2

Sample file: >C8153 Spectrum #: 1038  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
15*	14331545	21612	"B1606	24	115	3	0	53	58	3	12





Data File: &gt;C8153::DF

Name: 15226N 06618

Misc Data: JM9435U,N203670,S:M2,5.30,5:1,

RT (min): 26.25

Scan: 1276

Area: 48754 Rank: 15

Semi-quantitative Conc (uncorrected): 7.22 ug/l

Semi-quantitative Conc (corrected): 1.36 ug/kg

Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.59 minutes

- |                                |            |
|--------------------------------|------------|
| 1. 1-Hexene, 3-methyl-         | 98 C7H14   |
| 2. 1-Hexanol, 3,5,5-trimethyl- | 144 C9H20O |
| 3. 1-Hexene, 3-methyl-         | 98 C7H14   |

Sample file: >C8153 Spectrum #: 1276  
Search speed: 2 Tilting option: S No. of ion ranges searched: 49

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
44*	3404613	6648	"BIGDB	49	52	2	0	92	29	19	22
43	3452979	11777	"BIGDB	41	38	2	0	94	23	17	14

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ABC Contract: NRCA U6619  
 Lab Code:      Case No.:      SAS No.:      SDG No.: U6617  
 Matrix: (soil/water) SOIL Lab Sample ID: TM9436  
 Sample wt/vol: 4.07 (g/mL) g Lab File ID: B4165  
 Level: (low/med) med Date Received: 02/23/94  
 ‡ Moisture: not dec. NA Date Analyzed: 06/28/94  
 GC Column: DB604 ID: 53 (mm) Dilution Factor: 125  
 Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 100 (uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	Q
74-87-3	Chloromethane	12900	
74-83-9	Bromomethane	768	u
75-01-4	Vinyl Chloride	↓	↓
75-00-3	Chloroethane	↓	↓
75-09-2	Methylene Chloride	416	J
67-64-1	Acetone	2720	
75-15-0	Carbon Disulfide	768	u
75-35-4	1,1-Dichloroethene	↓	↓
75-34-3	1,1-Dichloroethane	↓	↓
540-59-0	1,2-Dichloroethene (total)	↓	↓
67-66-3	Chloroform	17500	
107-06-2	1,2-Dichloroethane	768	u
78-93-3	2-Butanone	1540	u
71-55-6	1,1,1-Trichloroethane	768	u
56-23-5	Carbon Tetrachloride	6270	
75-27-4	Bromodichloromethane	768	u
78-87-5	1,2-Dichloropropane	↓	↓
10061-01-5	cis-1,3-Dichloropropene	↓	↓
79-01-6	Trichloroethene	↓	↓
124-48-1	Dibromochloromethane	↓	↓
79-00-5	1,1,2-Trichloroethane	↓	↓
71-43-2	Benzene	↓	↓
10061-02-6	trans-1,3-Dichloropropene	↓	↓
75-25-2	Bromoform	↓	↓
108-10-1	4-Methyl-2-Pentanone	1540	u
591-78-6	2-Hexanone	768	u
127-18-4	Tetrachloroethene	286	J
79-34-5	1,1,2,2-Tetrachloroethane	768	u
108-88-3	Toluene	206	J
108-90-7	Chlorobenzene	768	u
100-41-4	Ethylbenzene	966	
100-42-5	Styrene	768	u
1330-20-7	Xylene (total)	5520	

0131

EPA SAMPLE NO.

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ASC Contract: NASA C6619  
 Lab Code: — Case No.: — SAS No.: — SDG No.: C6617  
 Matrix: (soil/water) soil Lab Sample ID: IM9436  
 Sample wt/vol: 4.03 (g/mL) g Lab File ID: B4165  
 Level: (low/med) med Date Received: 062394  
 % Moisture: not dec. NA Date Analyzed: 062894  
 GC Column: TR604 ID: 053 (mm) Dilution Factor: 125  
 Soil Extract Volume: 1000 (uL) Soil Aliquot Volume: 100 (uL)

Number TICs found: 10
 CONCENTRATION UNITS:  
 (ug/L or ug/Kg) ug/Kg

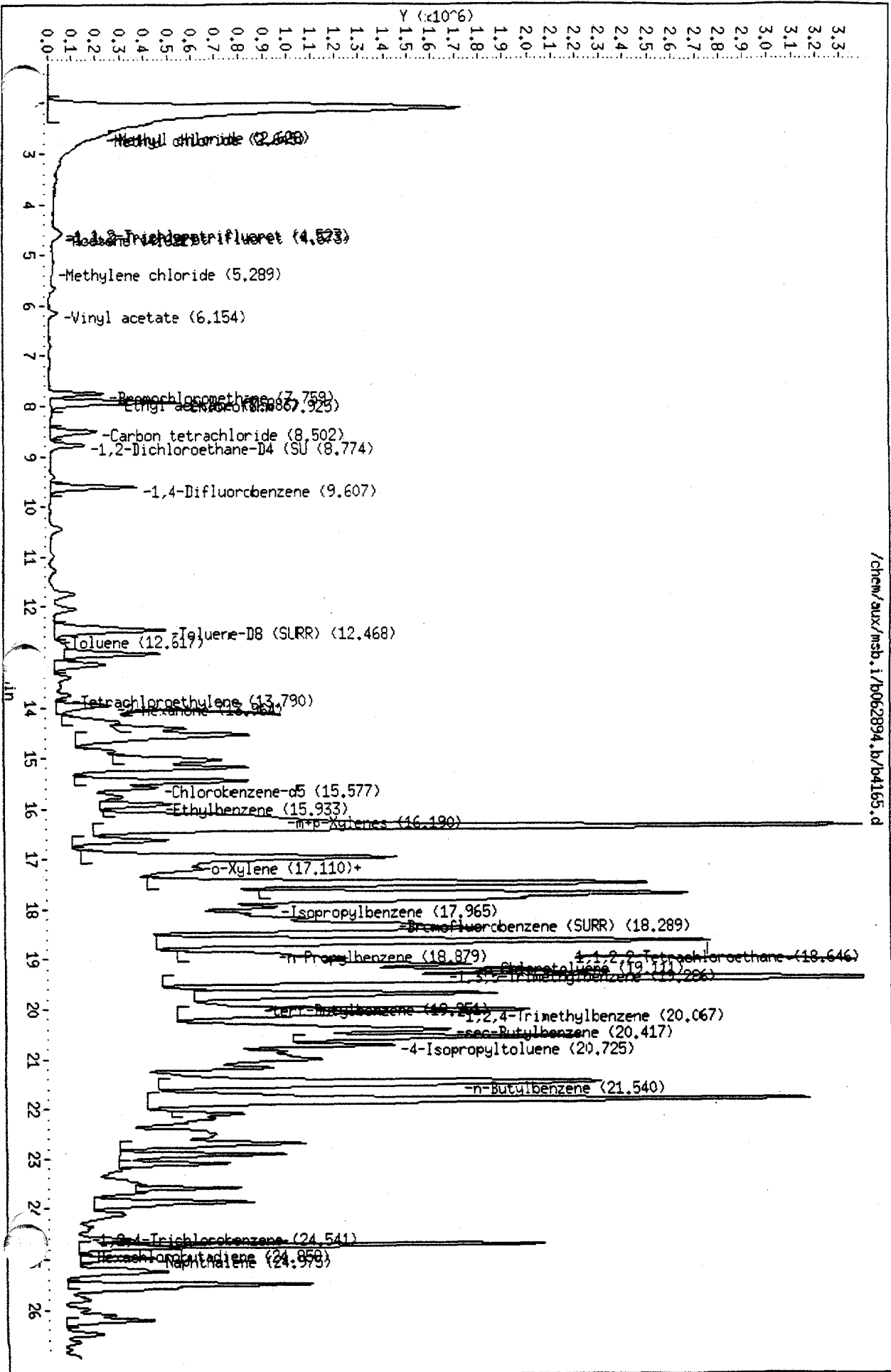
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. <u>611-14-3</u>	<u>benzene, 1-ethyl-2-methyl-</u>	<u>19.623</u>	<u>30900</u>	<u>J</u>
2. <u>1067-04-5</u>	<u>benzene, 2-chloro-1,3,5-trimethyl-</u>	<u>24.733</u>	<u>38800</u>	<u>J</u>
3. <u>124-12-5</u>	<u>benzene</u>	<u>19.394</u>	<u>99400</u>	<u>J</u>
4. <u>93-02-7</u>	<u>nonane, decahydro, trans</u>	<u>21.482</u>	<u>57300</u>	<u>J</u>
5. <u>111-84-9</u>	<u>nonane</u>	<u>16.365</u>	<u>82300</u>	<u>J</u>
6. <u>1100-21-4</u>	<u>undecane</u>	<u>21.823</u>	<u>82000</u>	<u>J</u>
7. <u>19489-10-2</u>	<u>cis-1-Ethyl-3-methyl-cyclohexane</u>	<u>16.969</u>	<u>40800</u>	<u>J</u>
8. <u>—</u>	<u>undecane</u>	<u>2.101</u>	<u>57800</u>	<u>J</u>
9. <u>—</u>	<u>—</u>	<u>—</u>	<u>43100</u>	<u>J</u>
10. <u>—</u>	<u>—</u>	<u>—</u>	<u>47400</u>	<u>J</u>
11. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
12. <u>—</u>	<u>1,1,2-Trichlorotrifluoroethane</u>	<u>4.573</u>	<u>1290</u>	<u>X</u>
13. <u>—</u>	<u>Isopropylbenzene</u>	<u>17.965</u>	<u>3480</u>	<u>X</u>
14. <u>—</u>	<u>n-Propylbenzene</u>	<u>18.879</u>	<u>4130</u>	<u>X</u>
15. <u>—</u>	<u>1,3,5-Trimethylbenzene</u>	<u>19.286</u>	<u>1750</u>	<u>X</u>
16. <u>—</u>	<u>1,2,4-Trimethylbenzene</u>	<u>20.067</u>	<u>5390</u>	<u>X</u>
17. <u>—</u>	<u>Sec-Butylbenzene</u>	<u>20.417</u>	<u>8350</u>	<u>X</u>
18. <u>—</u>	<u>4-Isopropyltoluene</u>	<u>20.725</u>	<u>12500</u>	<u>X</u>
19. <u>—</u>	<u>n-Butylbenzene</u>	<u>21.540</u>	<u>10500</u>	<u>X</u>
20. <u>—</u>	<u>Naphthalene</u>	<u>24.975</u>	<u>1030</u>	<u>X</u>
21. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
22. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
23. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
24. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
25. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
26. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
27. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
28. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
29. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
30. <u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>

Data File: /chem/aux/msb.i/b062894.b/b4165.d  
Date: 28-JUN-94 15:37  
Instrument: msb.i  
Sample ID:  
Column phase: J&W DB\_624  
Volume Injected (uL): 0.0

C6619

Column diameter: 0.53

/chem/aux/msb.i/b062894.b/b4165.d



Data File: /chem/aux/msb.i/b062894.b/b4165.d  
 Report Date: 30-Jun-1994 14:00

Page 1

## Analytical Services Corp.

## VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msb.i/b062894.b/b4165.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 28-JUN-94 15:37 Autotune Date: {  
 Operator : steve Inst ID: msb.i  
 Smp Info : 15226n c6619  
 Misc Info : jm9436v,n2v3677,s:m2,4.07,5:125,  
 Comment :  
 Method : /chem/aux/msb.i/b062894.b/8240b.m  
 Meth Date : 30-Jun-1994 11:57 tom  
 Cal Date : 28-JUN-94 10:30 Cal File: b4157.d  
 Als bottle: 11  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

Compounds	QUANT SIG MASS	RT	REL RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN ( ug/l)	FINAL ( ug/l)
Methyl chloride	50.00	2.645	(0.339)	141273	84.2	84.2 (QM)
10 1,1,2-Trichlorotrifluoroethane	101.00	4.573	(0.583)	86164	8.43	8.43 (QM)
11 Acetone	43.00	4.622	(0.596)	20333	17.7	17.7 (aM)
15 Methylene chloride	84.00	5.289	(0.682)	13048	2.71	2.71 (aQM)
20 Vinyl acetate	43.00	6.154	(0.641)	32051	19.1	<del>19.1 (a)</del>
24 Ethyl acetate	88.00	7.883	(1.016)	223	0.534	0.534 (aQ)
* 25 Bromochloromethane	128.00	7.759	(1.000)	174411	50.0	
27 Chloroform	83.00	7.933	(1.022)	1154708	114	114
29 Carbon tetrachloride	117.00	8.502	(0.885)	398514	40.8	40.8
\$ 31 1,2-Dichloroethane-D4 (SURR)	65.00	8.774	(1.131)	296658	56.2	56.2 ✓
* 34 1,4-Difluorobenzene	114.00	9.607	(1.000)	797553	50.0	
\$ 43 Toluene-D8 (SURR)	98.00	12.476	(0.801)	809796	55.5	55.5 (R) ✓
44 Toluene	92.00	12.617	(0.810)	12828	1.34	1.34 (aQM)
47 Tetrachloroethylene	164.00	13.790	(0.885)	12531	1.86	1.86 (aQM)
49 2-Hexanone	43.00	13.964	(0.896)	324192	94.4	<del>94.4 (Q)</del>
* 52 Chlorobenzene-d5	117.00	15.577	(1.000)	622959	50.0	
55 Ethylbenzene	106.00	15.933	(1.023)	36197	6.29	6.29
56 m-p-Xylenes	106.00	16.190	(1.039)	47560	6.83	6.83 (Q)
57 o-Xylene	106.00	17.110	(1.098)	202997	29.1	29.1
58 Styrene	104.00	17.102	(1.098)	10012	0.910	<del>0.910 (aQ)</del>
60 Isopropylbenzene	105.00	17.965	(1.153)	460998	22.7	22.7
\$ 61 Bromofluorobenzene (SURR)	95.00	18.289	(1.174)	529057	54.0	54.0 (M) ✓
63 1,1,2,2-Tetrachloroethane	83.00	18.646	(1.197)	615933	74.4	<del>74.4 (Q)</del>
65 n-Propylbenzene	120.00	18.879	(1.212)	146563	26.9	<del>26.9 (Q)</del>
56 o-Chlorotoluene	126.00	19.111	(1.227)	6041	1.15	<del>1.15 (aQ)</del>
1,3,5-Trimethylbenzene	105.00	19.286	(1.238)	188747	11.4	11.4
68 p-Chlorotoluene	126.00	19.111	(1.227)	6687	1.25	1.25 (aQ)
69 tert-Butylbenzene	119.00	19.951	(1.281)	88145	4.82	<del>4.82 (aQ)</del>
70 1,2,4-Trimethylbenzene	105.00	20.067	(1.288)	555362	35.1	35.1

Data File: /chem/aux/msb.i/b062894.b/b4165.d  
Report Date: 30-Jun-1994 14:00

Page 2

Compounds	QUANT SIG		CONCENTRATIONS			
	MASS	RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL ( ug/l)
-----	----	--	-----	-----	-----	-----
71 sec-Butylbenzene	105.00	20.417	(1.311)	1280630	54.4	54.4
73 4-Isopropyltoluene	119.00	20.725	(1.330)	1661448	81.5	81.5
76 n-Butylbenzene	91.00	21.540	(1.383)	1310203	68.7	68.7
78 1,2,4-Trichlorobenzene	180.00	24.541	(1.575)	13970	1.97	1.97(aQ)
79 Hexachlorobutadiene	225.00	24.858	(1.596)	5911	1.61	1.61(aQ)
80 Naphthalene	128.00	24.975	(1.603)	80866	6.70	6.70

## QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.
- M - Compound response manually integrated.

Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 2

Date: 28-JUN-94 15:37

Instrument: msb.i

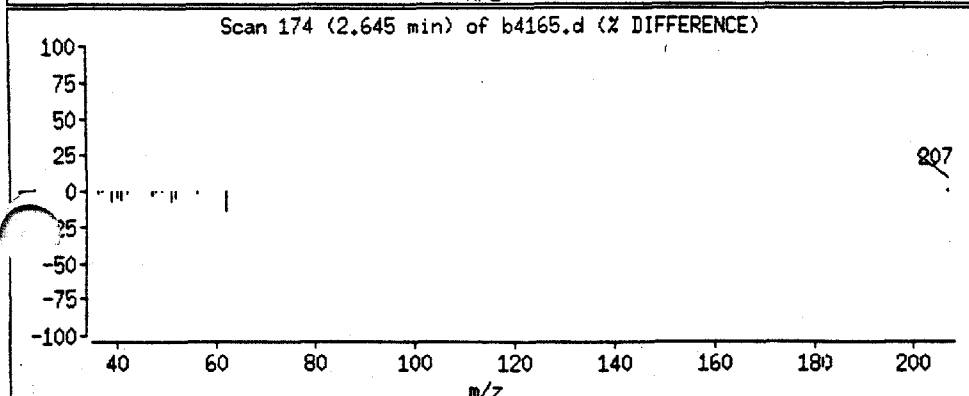
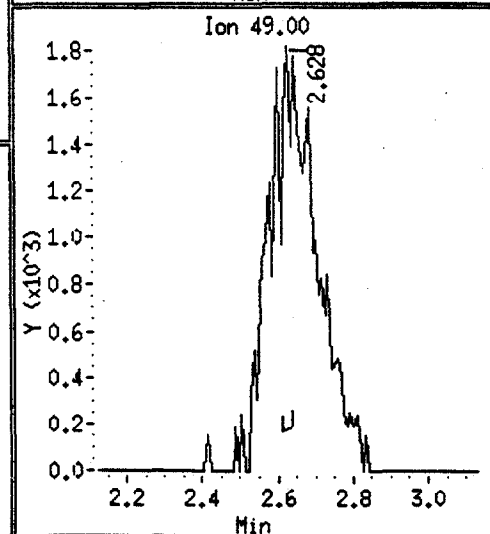
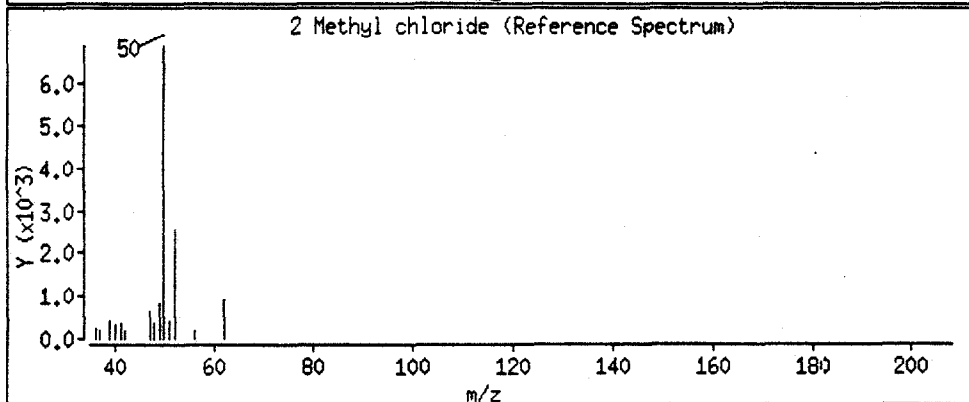
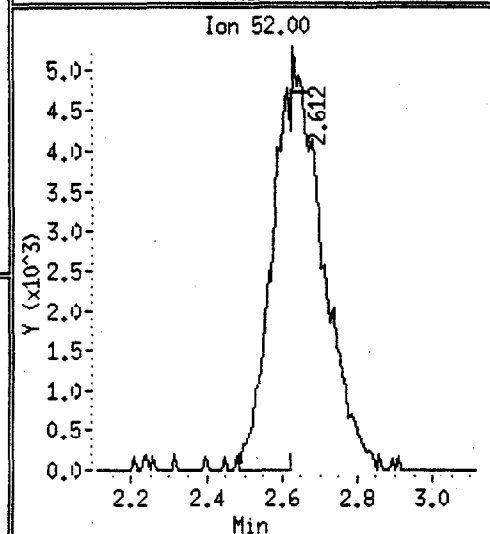
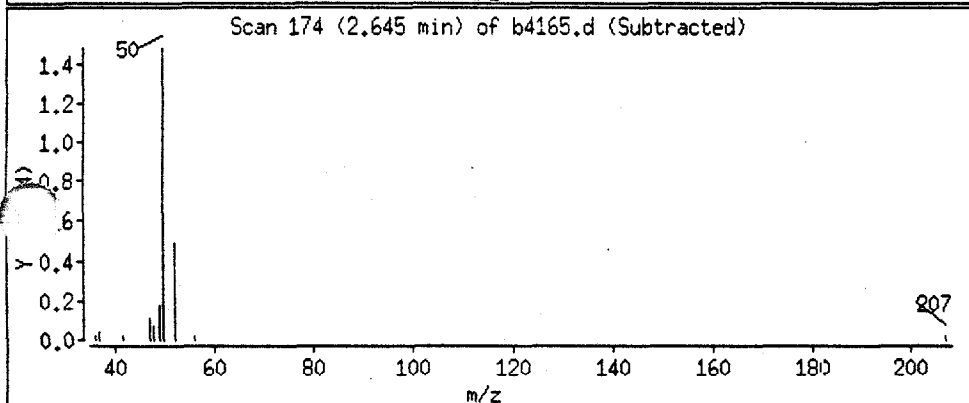
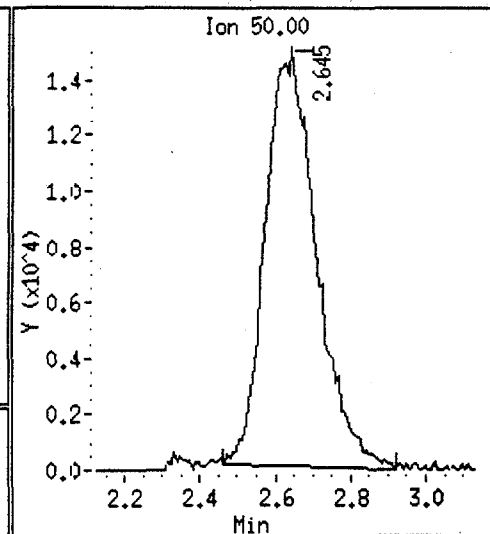
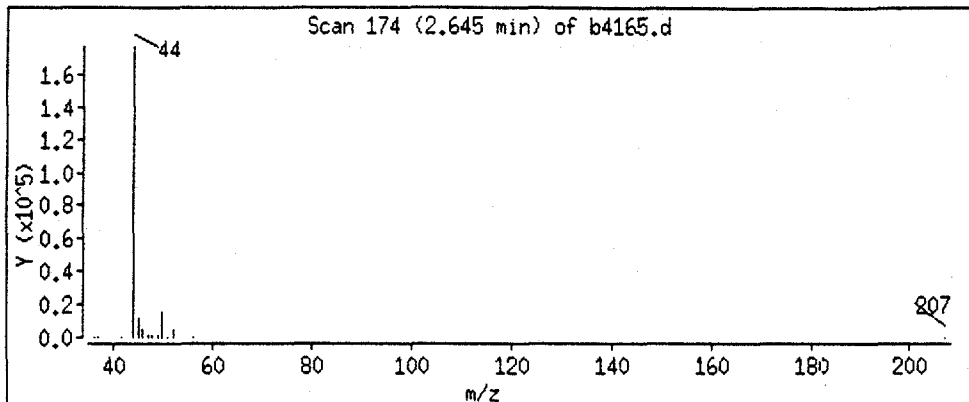
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

2 Methyl chloride



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

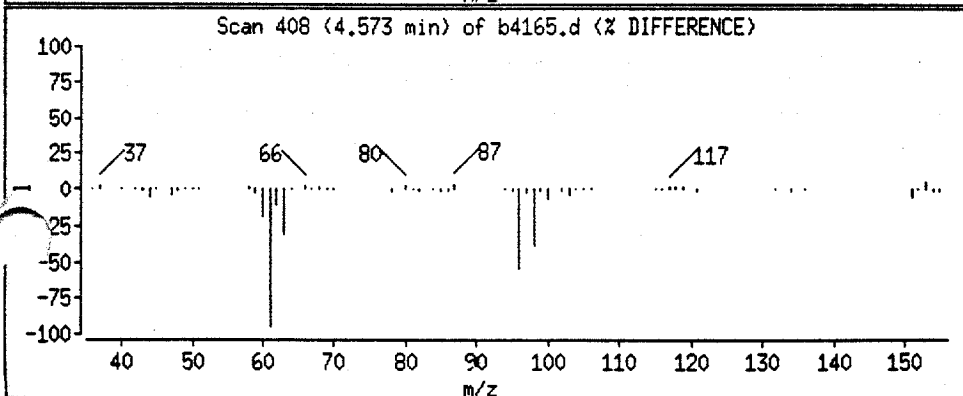
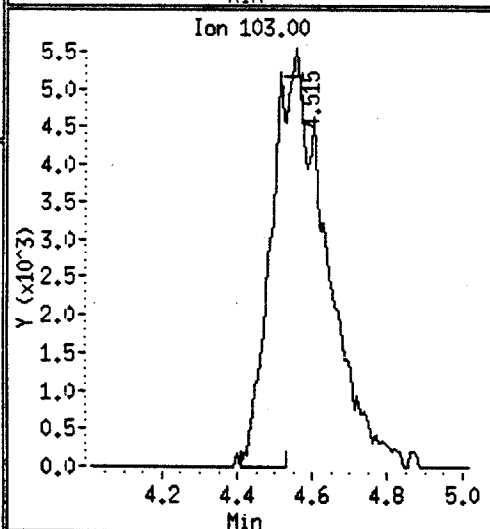
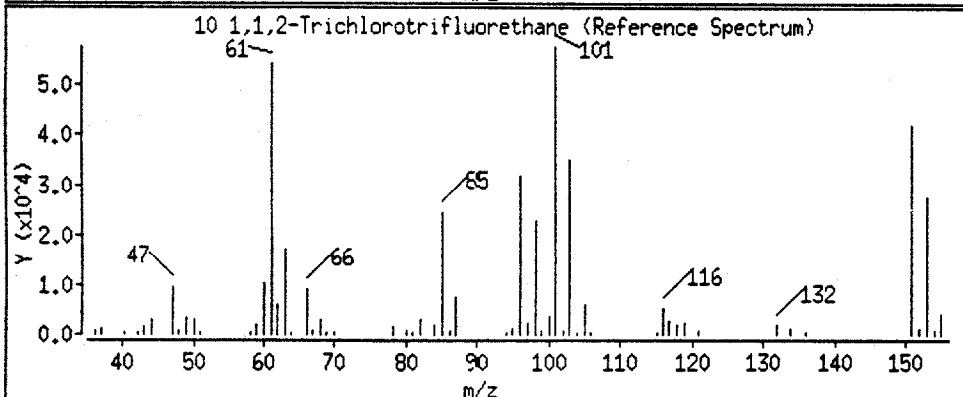
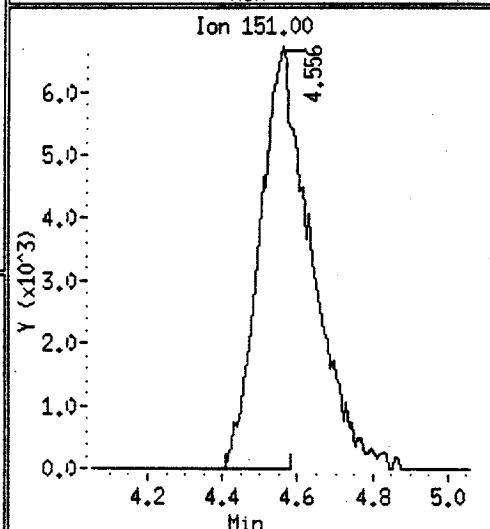
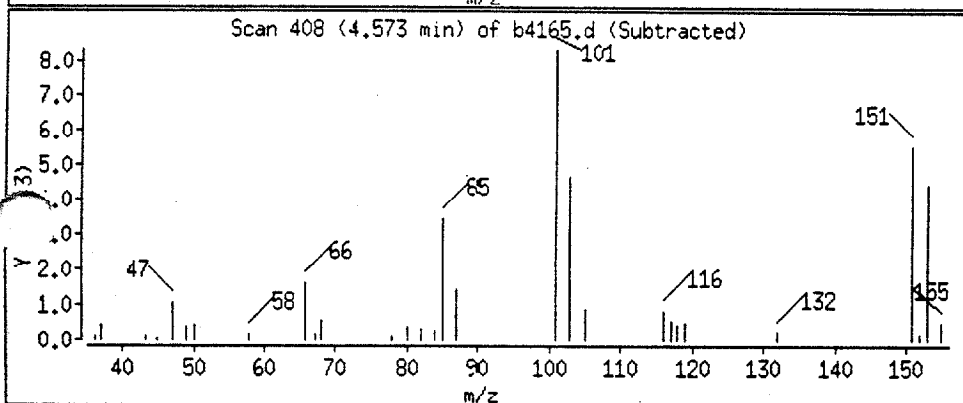
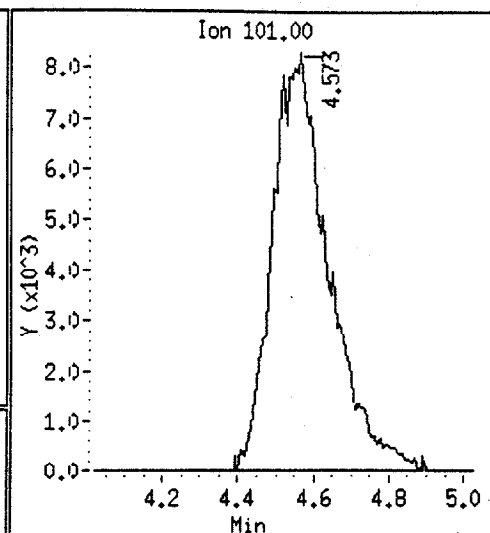
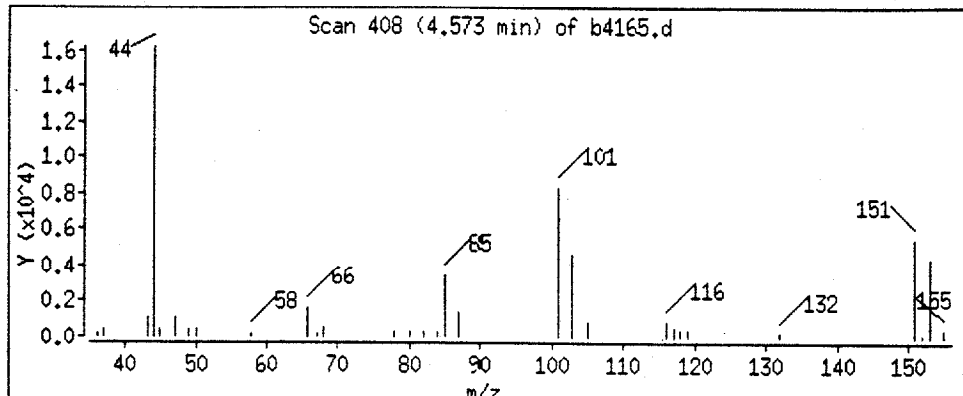
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

10 1,1,2-Trichlorotrifluoroethane





Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 4

Date: 28-JUN-94 15:37

Instrument: msb.i

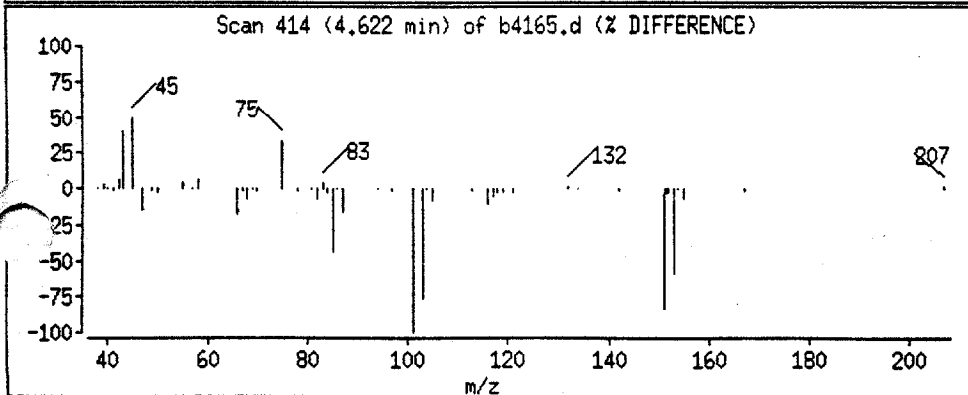
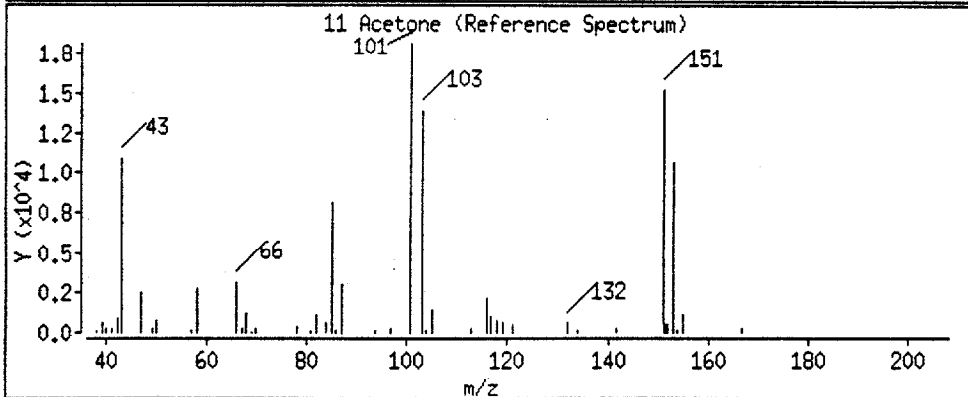
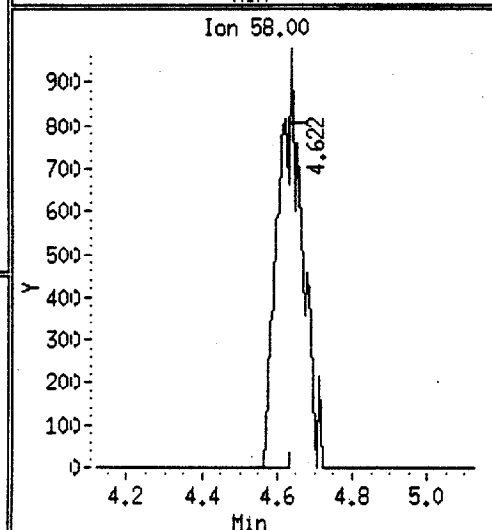
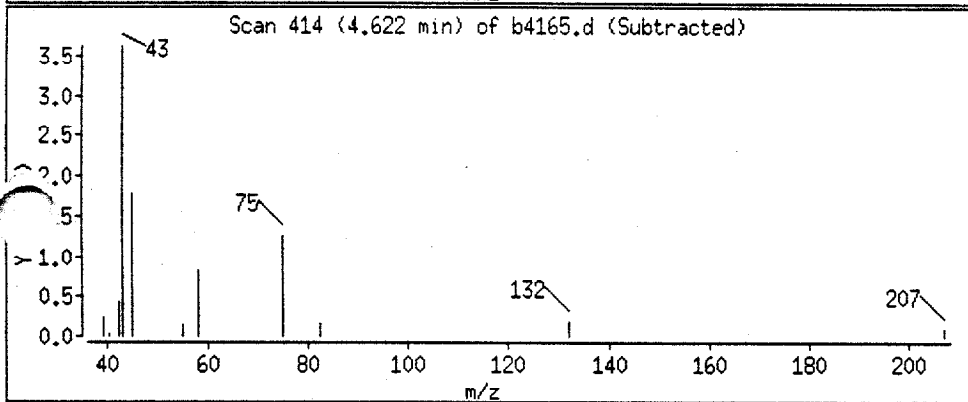
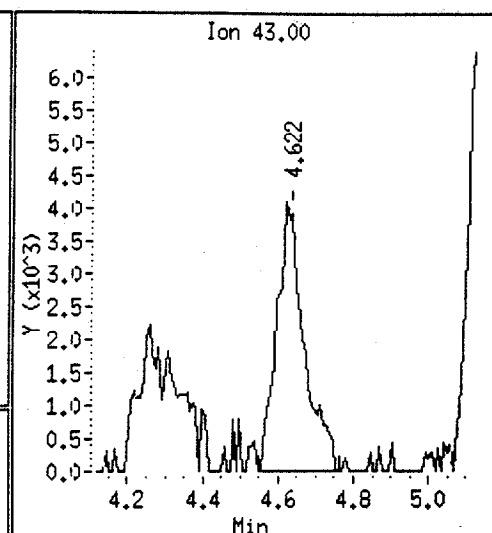
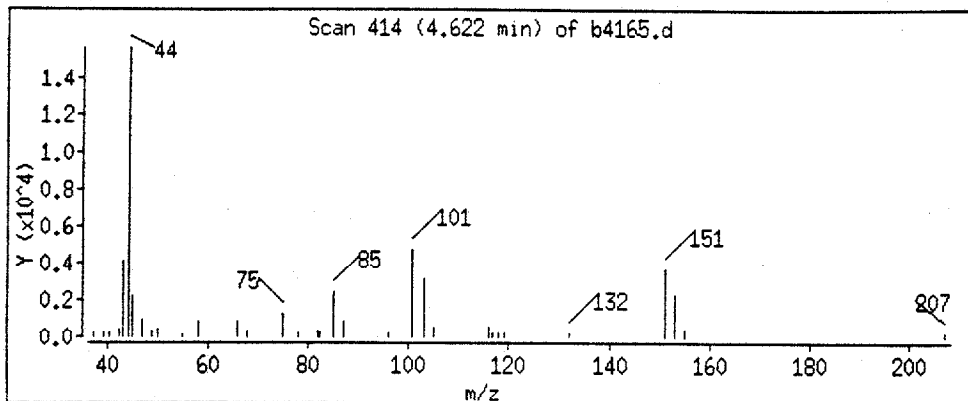
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

11 Acetone



Data File: /chem/aux/msb.1/b062894.b/b4165.d

Page 5

Date: 28-JUN-94 15:37

Instrument: msb.1

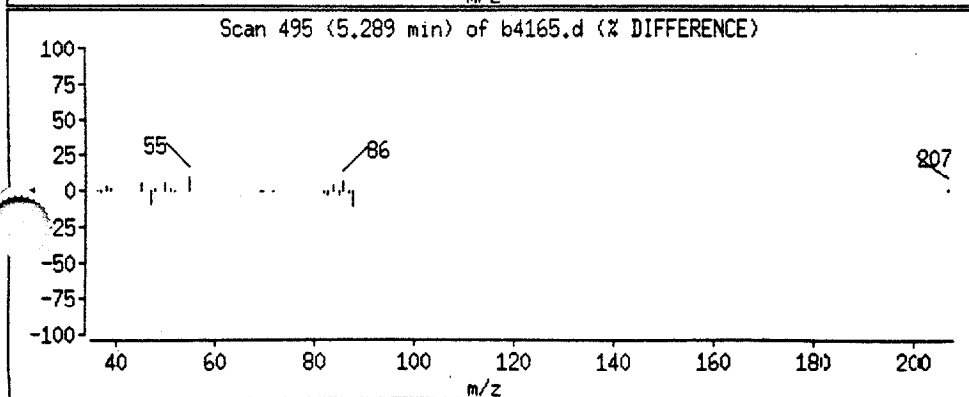
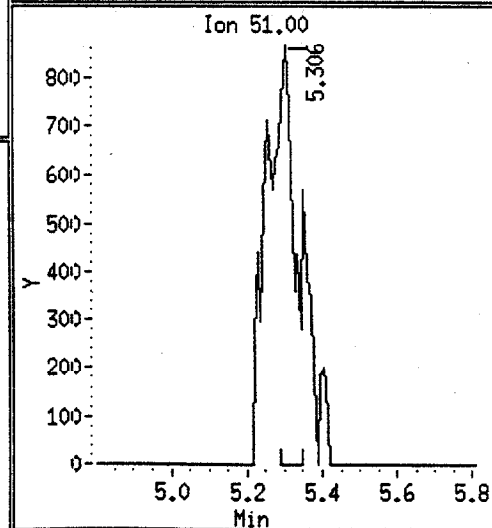
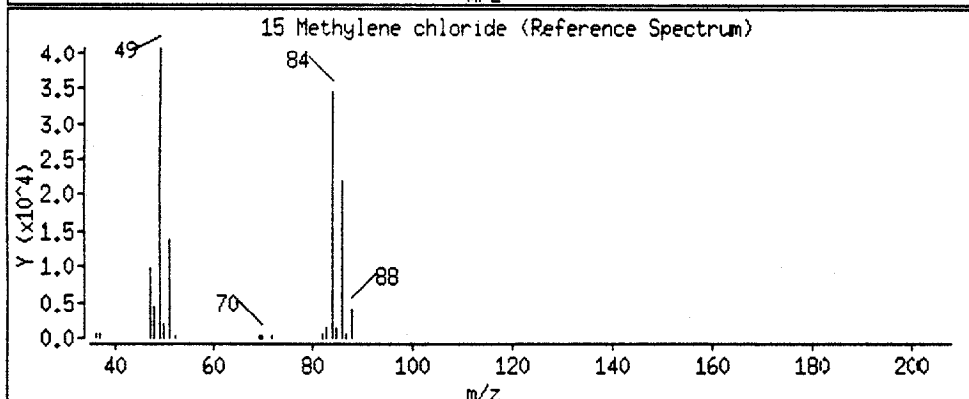
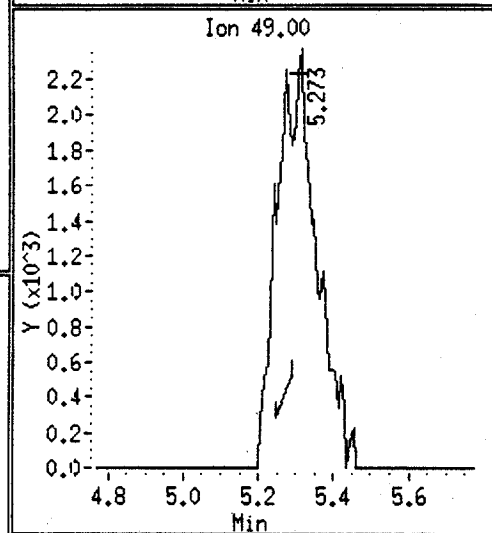
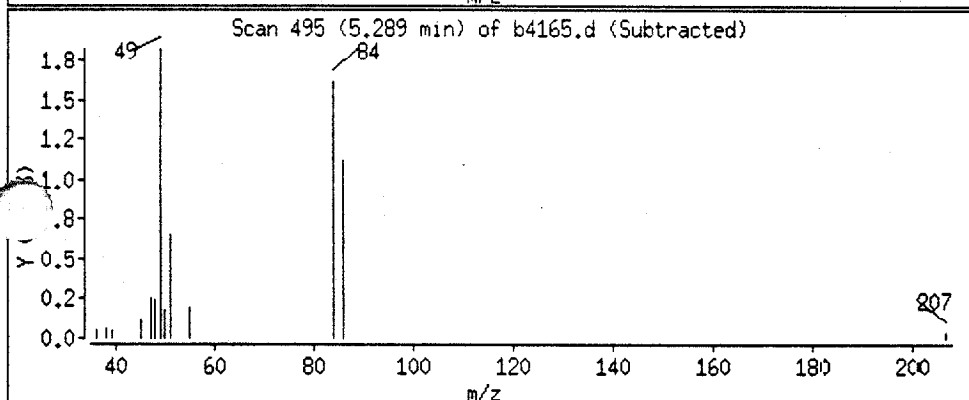
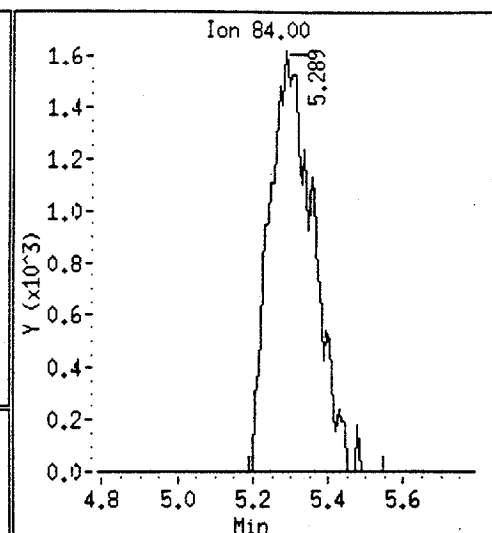
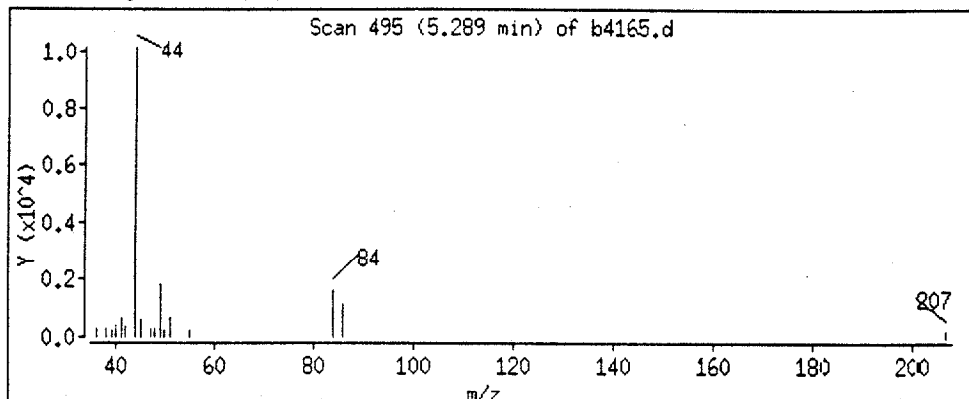
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

15 Methylene chloride



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

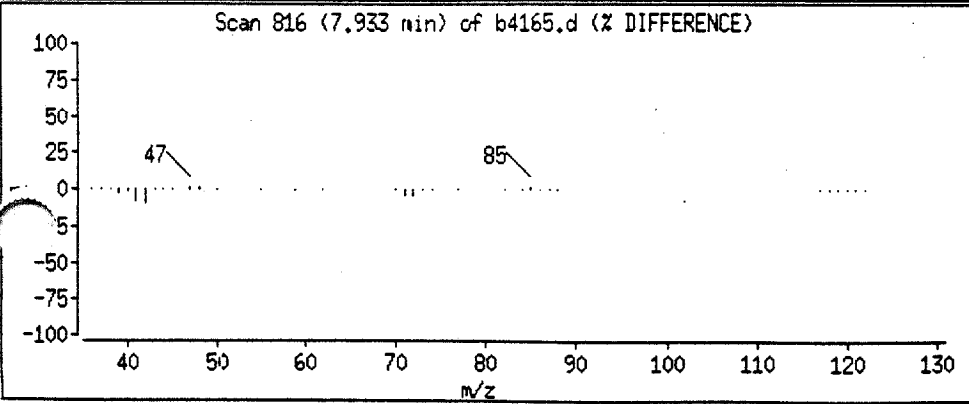
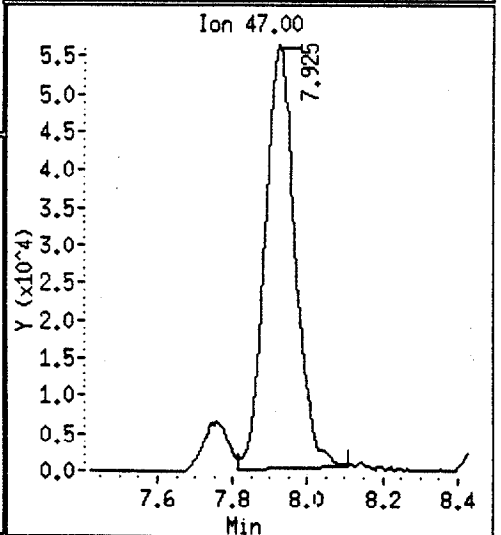
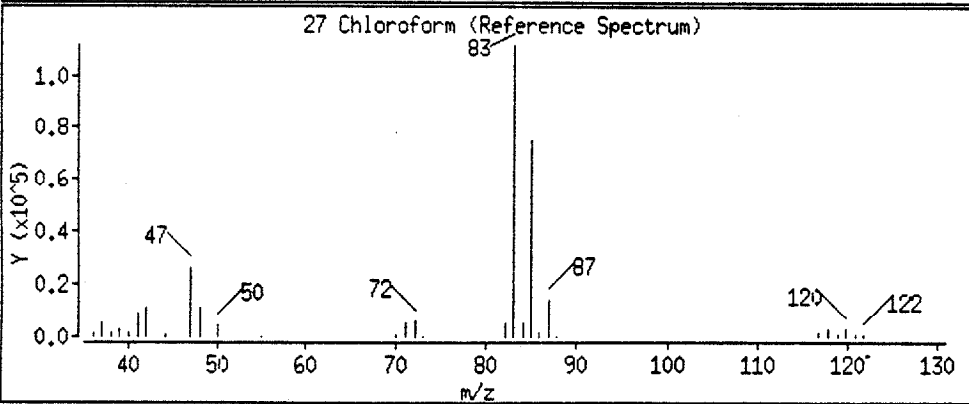
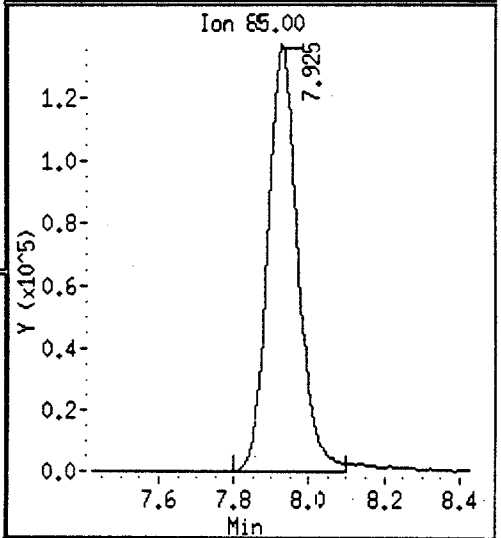
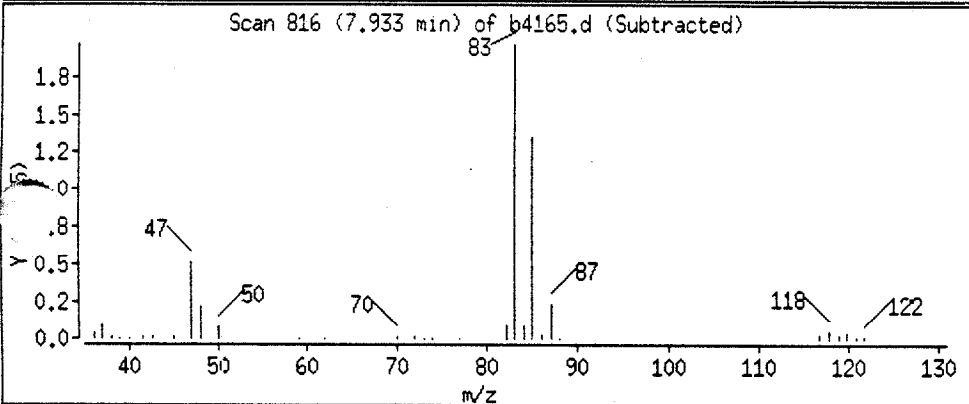
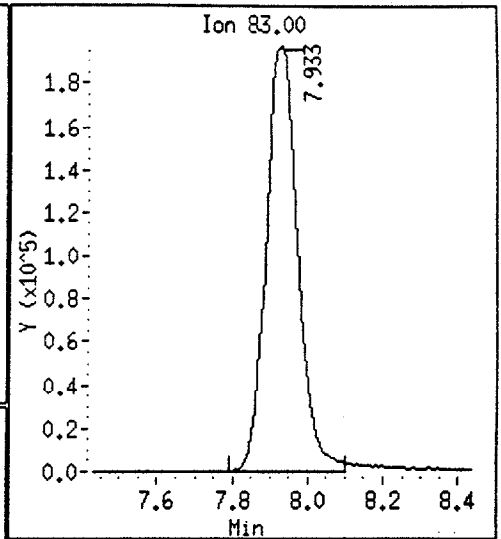
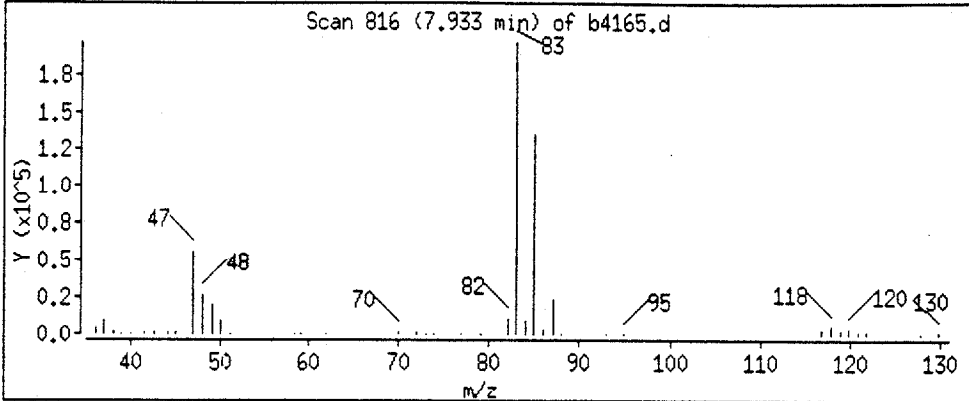
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

27 Chloroform



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

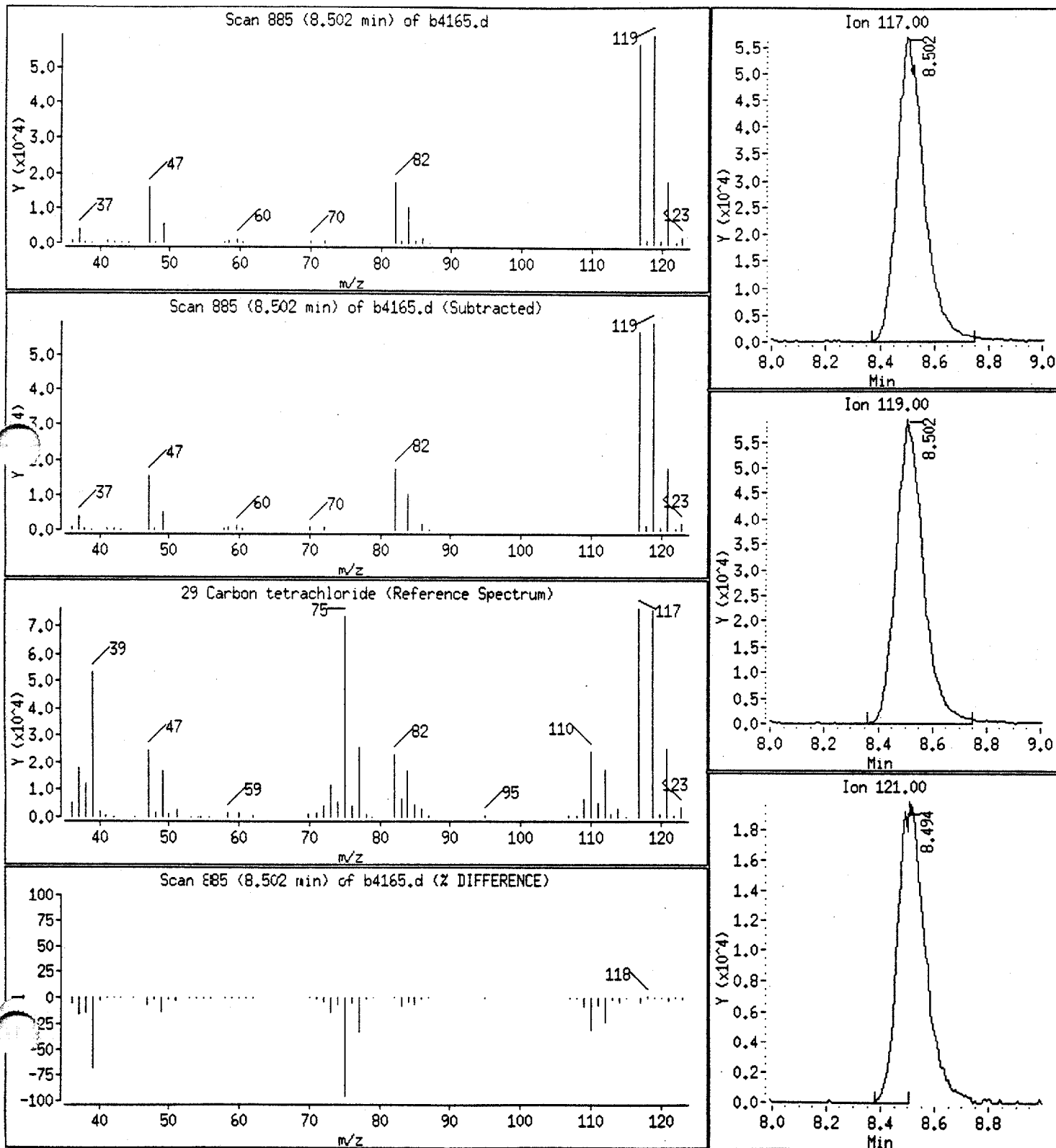
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

29 Carbon tetrachloride



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

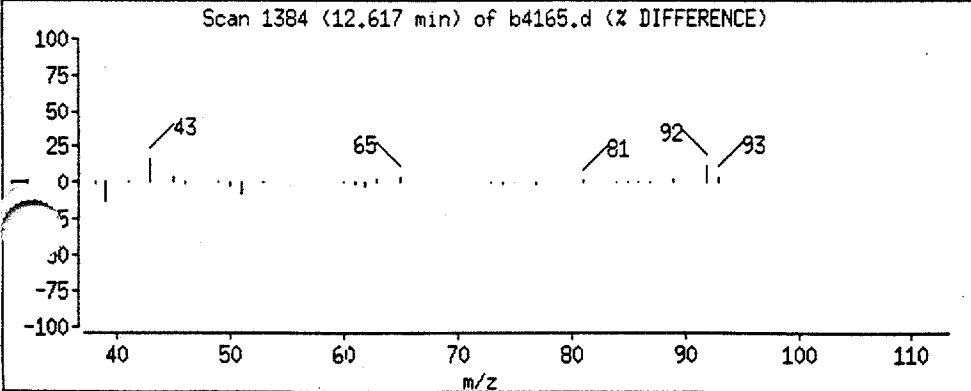
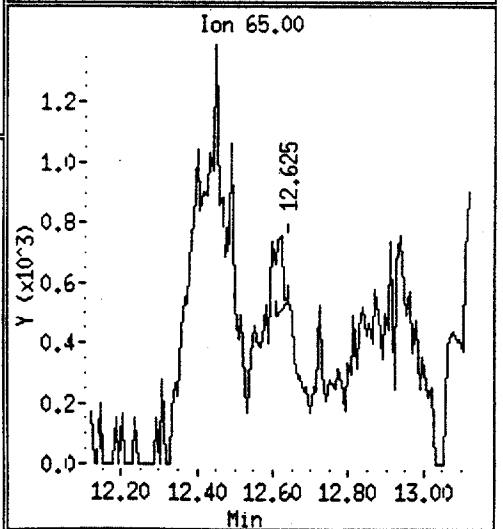
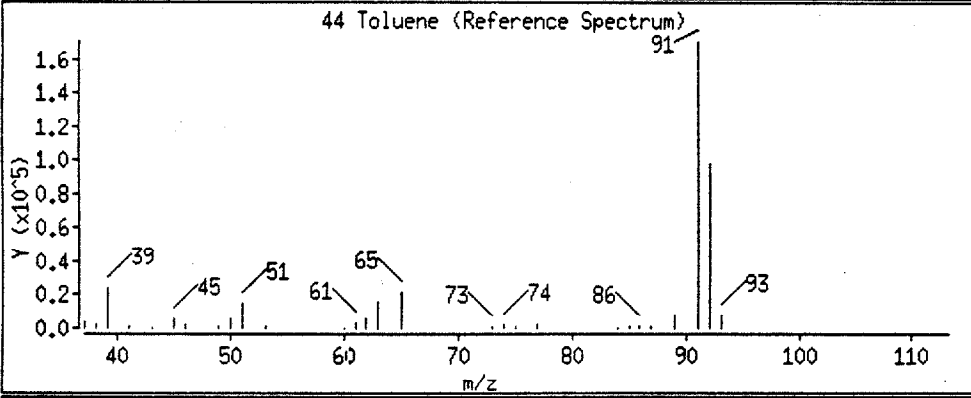
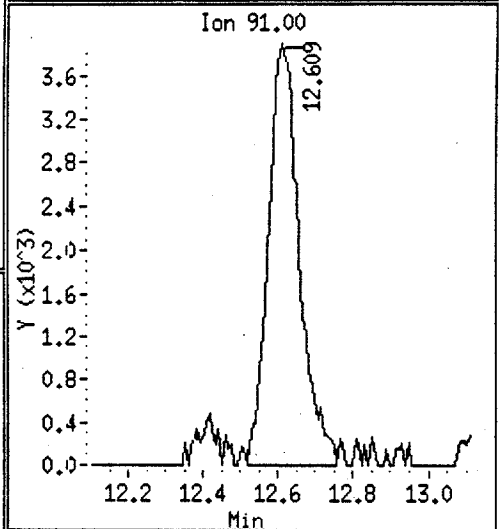
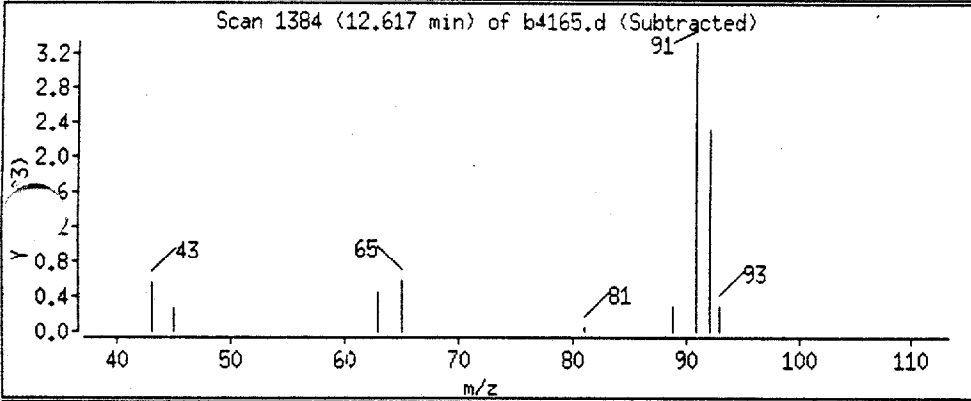
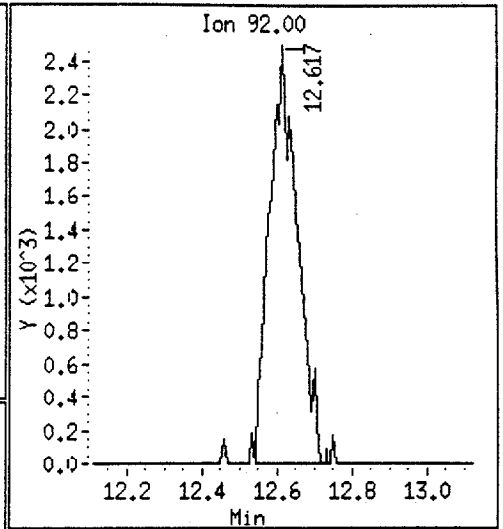
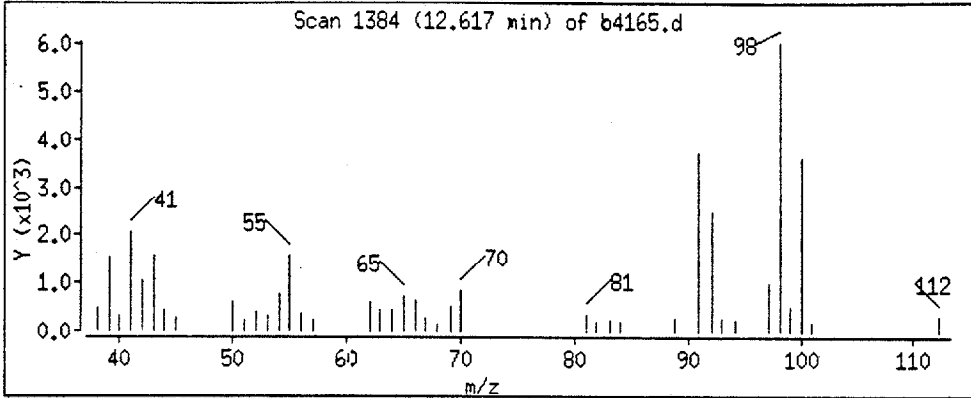
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

44 Toluene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 11

Date: 28-JUN-94 15:37

Instrument: msb.i

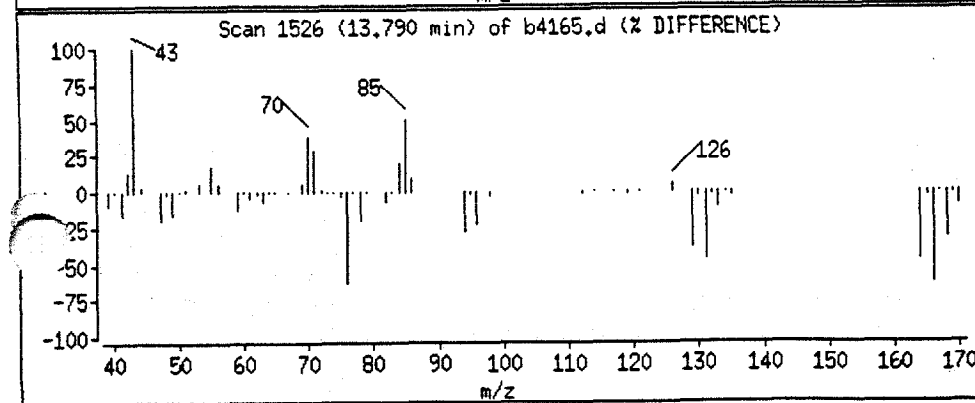
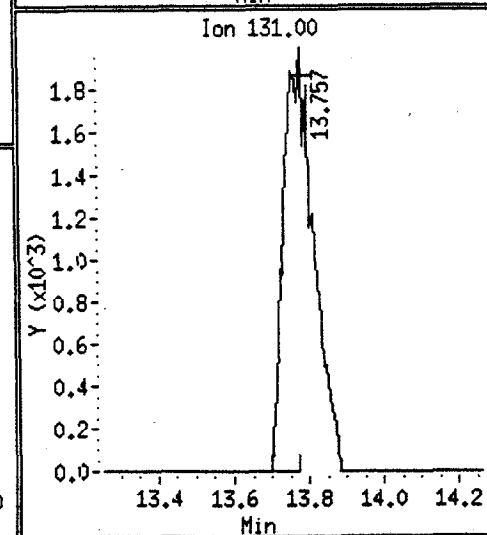
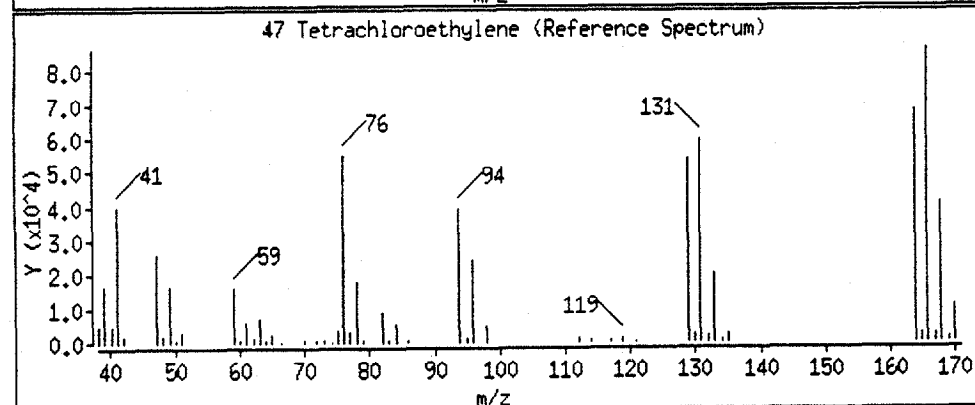
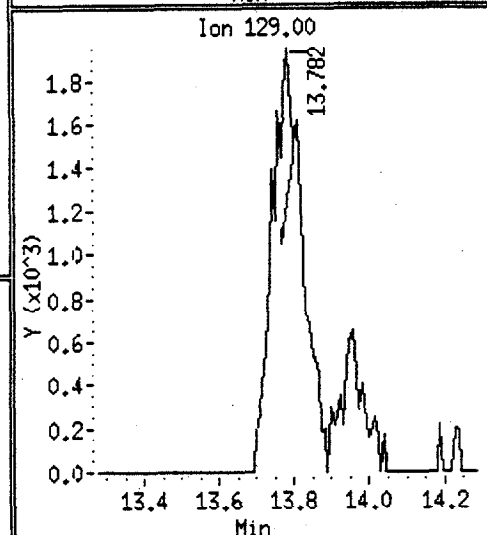
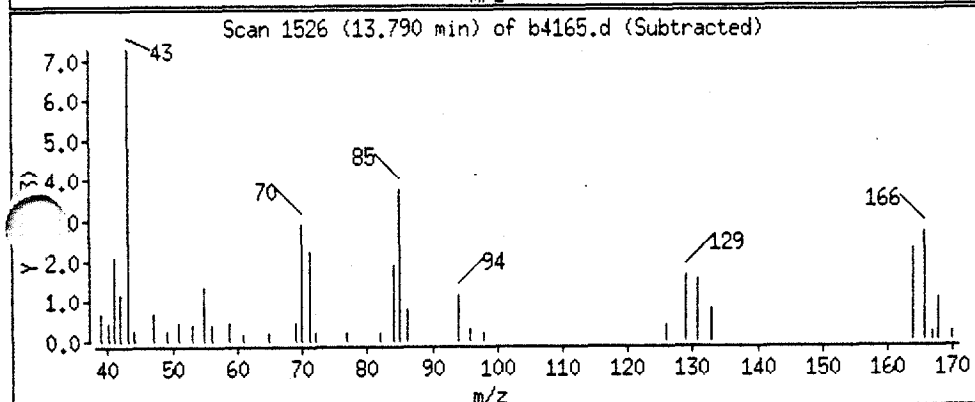
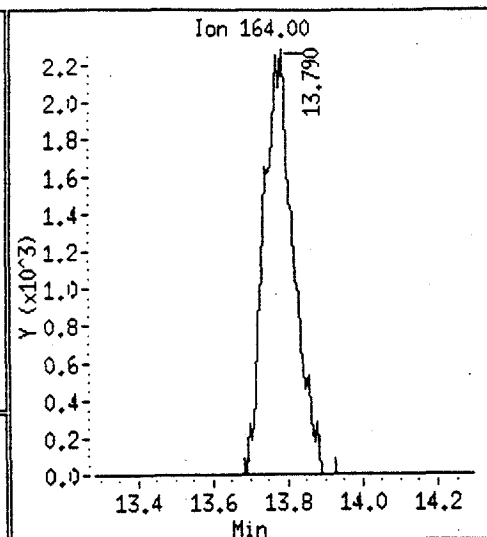
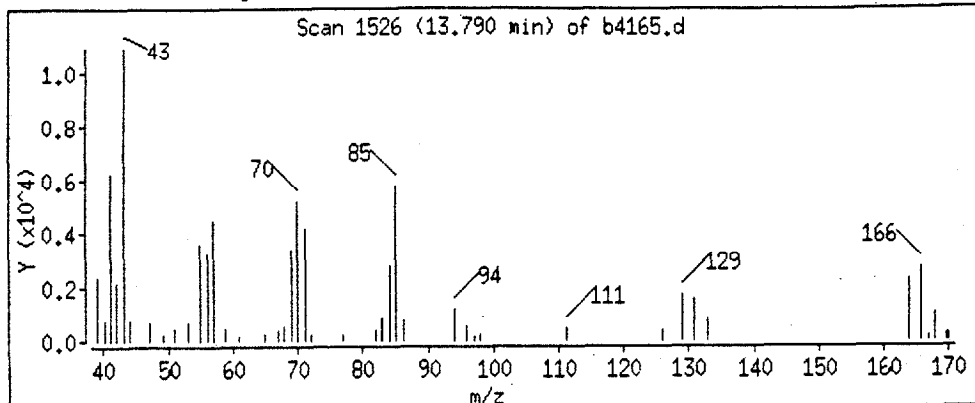
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

47 Tetrachloroethylene



Data File: /chem/aux/msb.1/b062894.b/b4165.d

Page 14

Date : 28-JUN-94 15:37

Instrument : msb.i

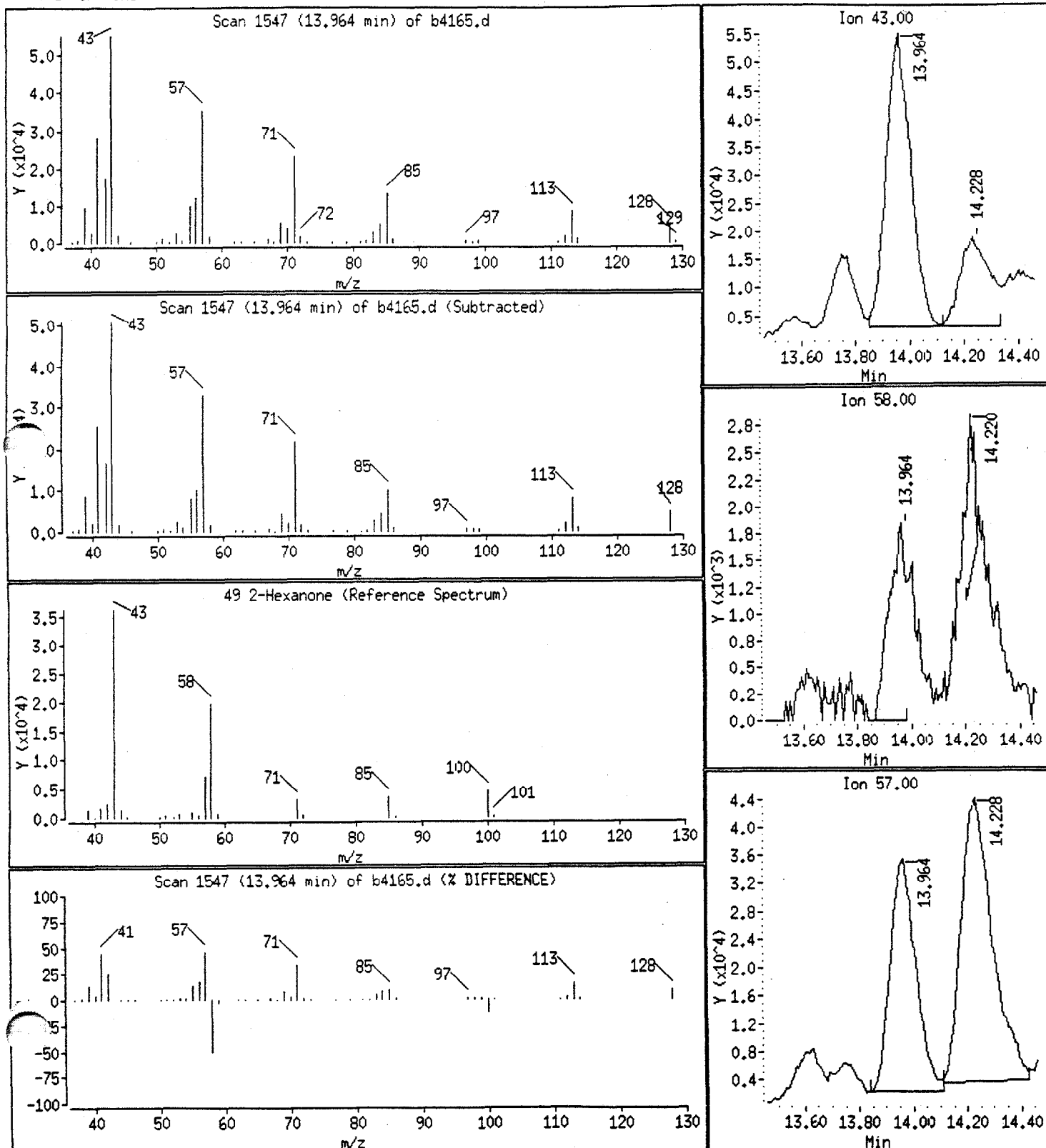
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

49 2-Hexanone



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 15

Date: 28-JUN-94 15:37

Instrument: msb.i

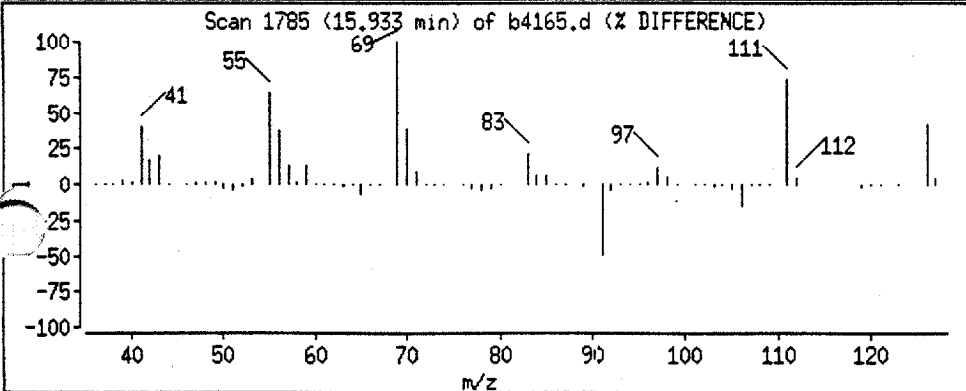
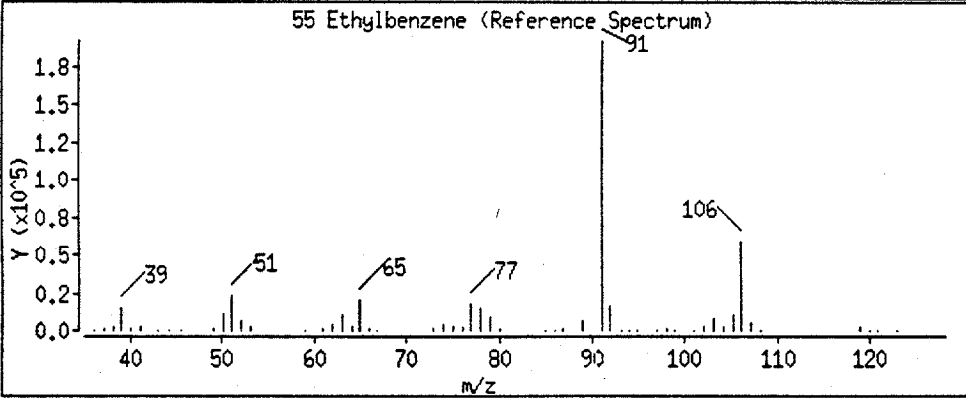
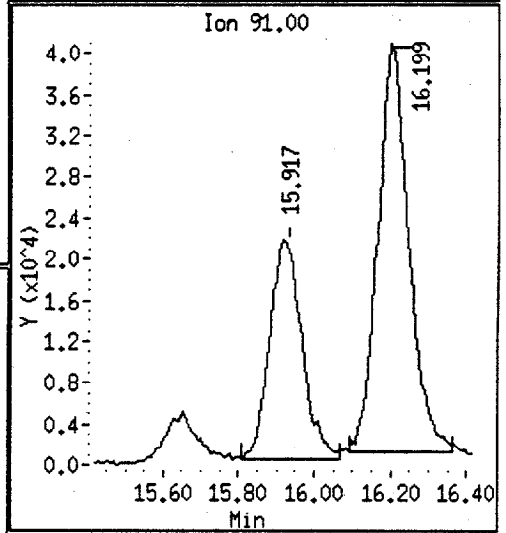
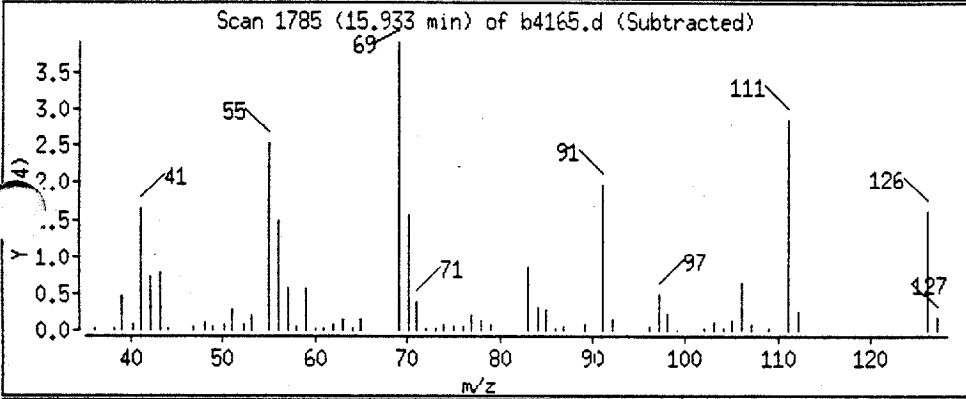
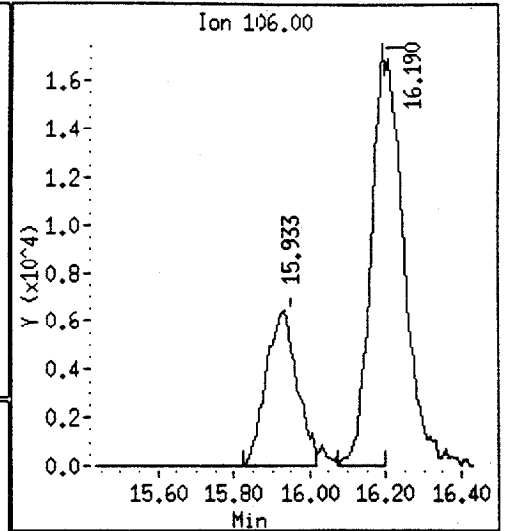
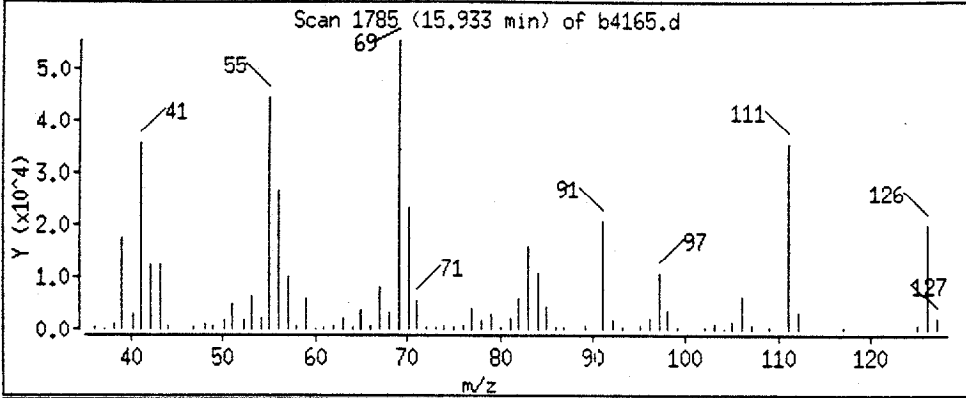
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

55 Ethylbenzene





Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date: 28-JUN-94 15:37

Instrument: msb.i

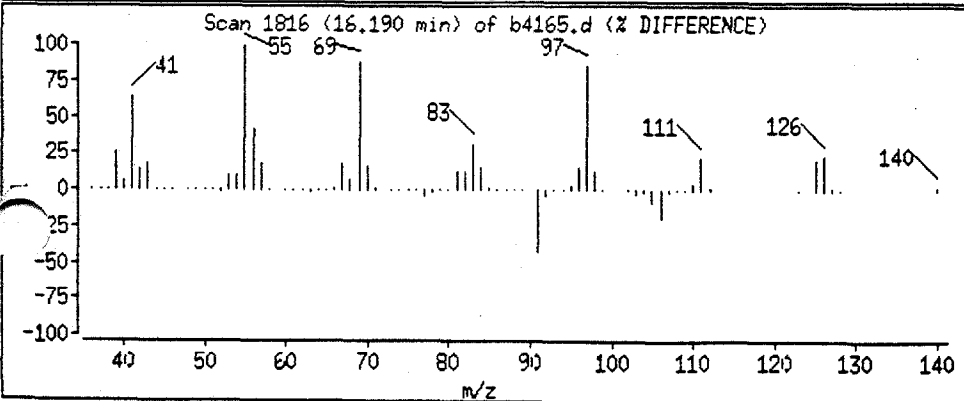
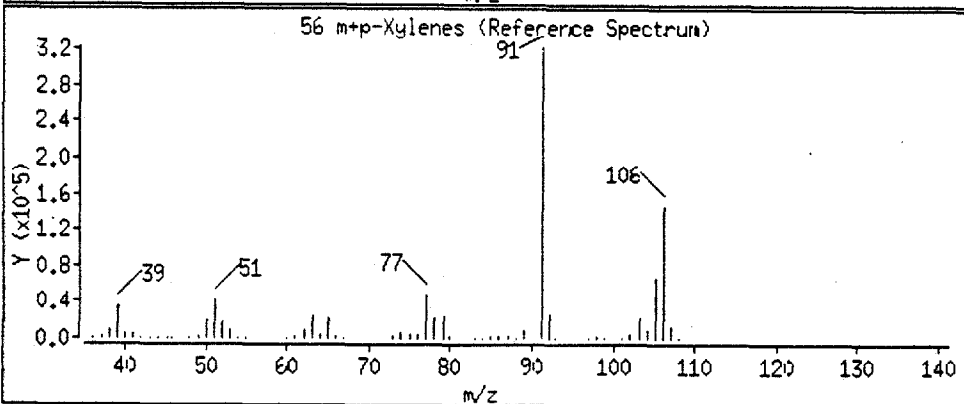
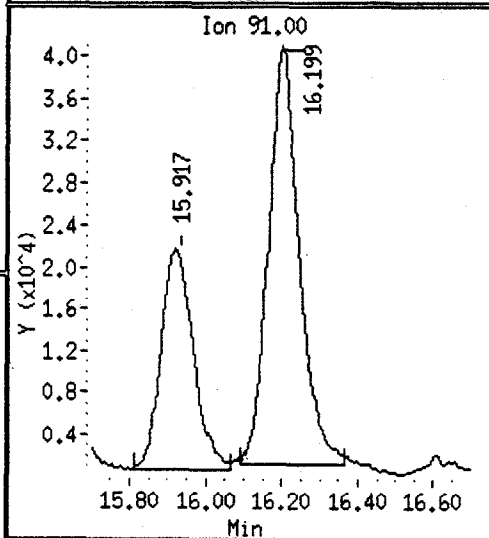
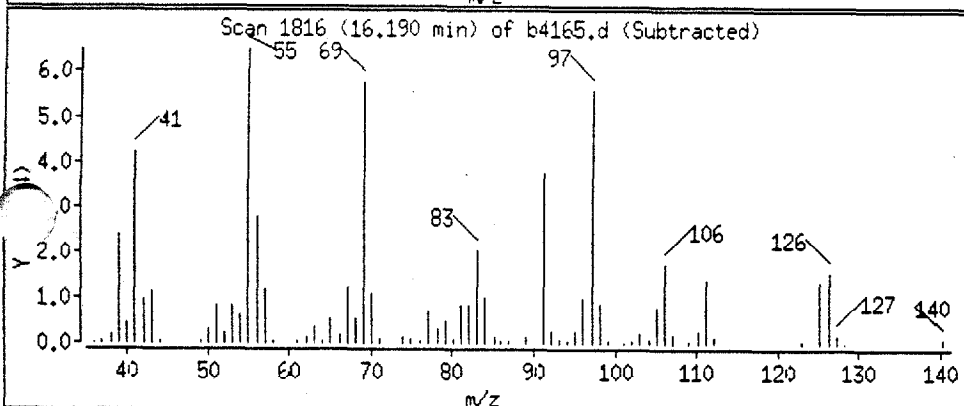
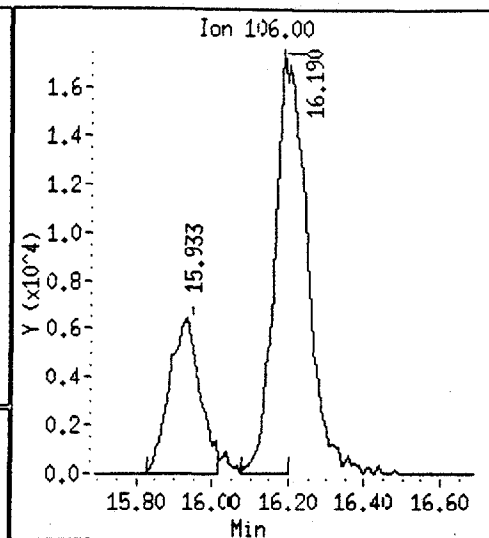
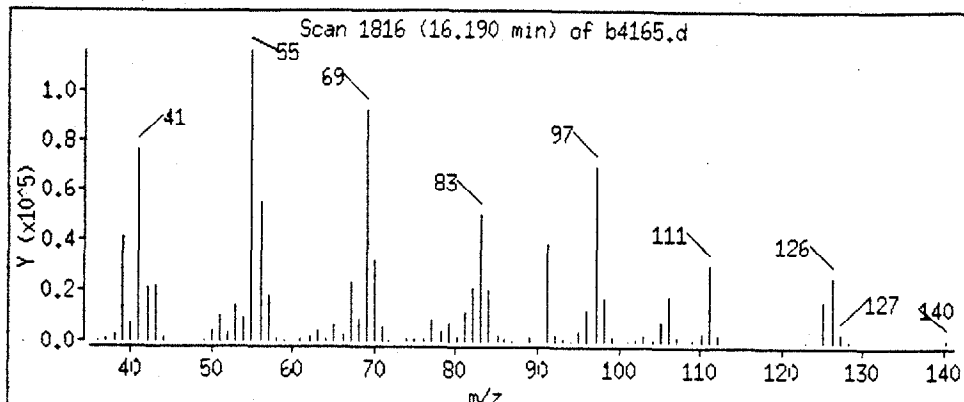
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

56 m+p-Xylenes



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

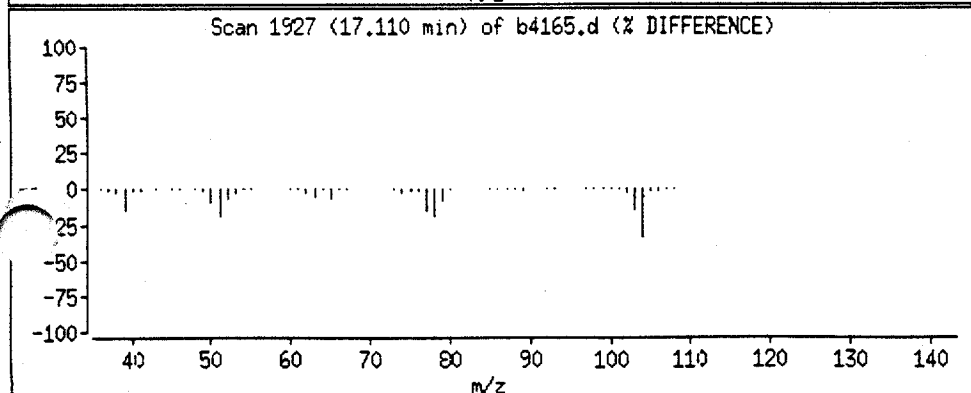
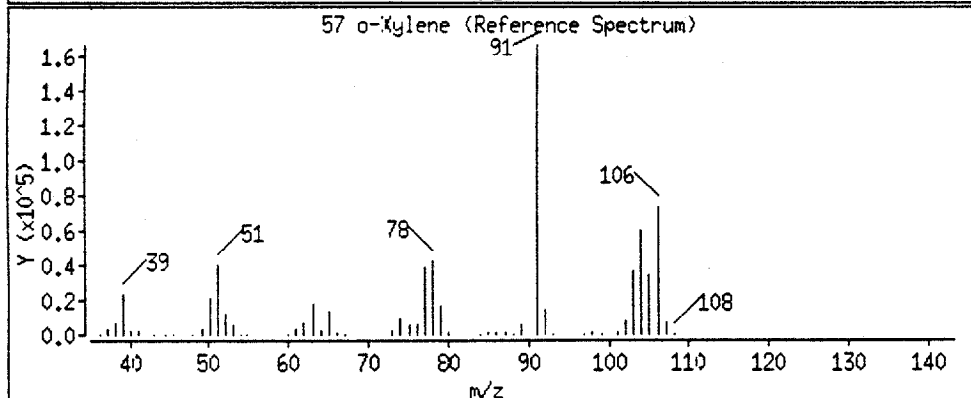
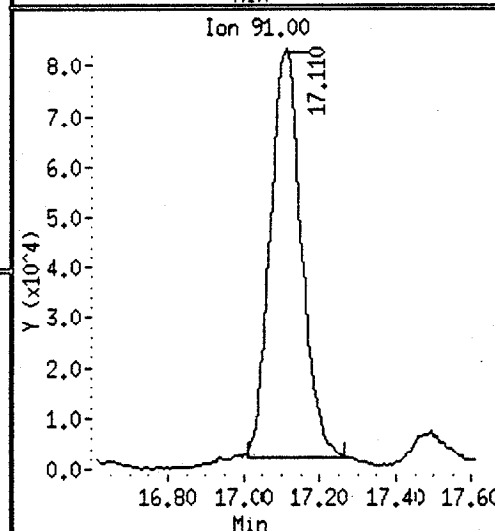
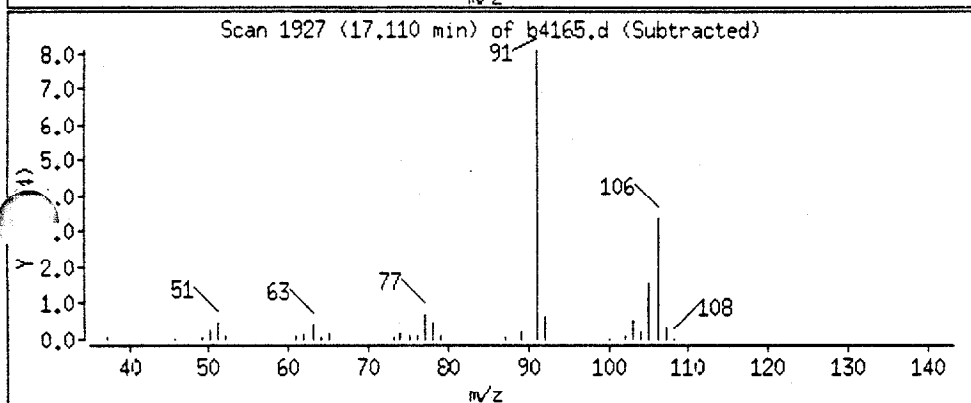
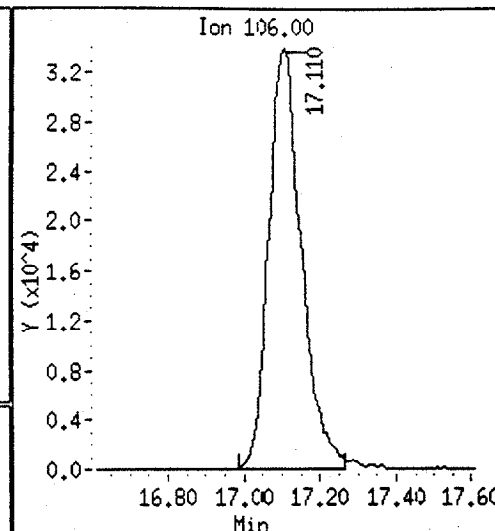
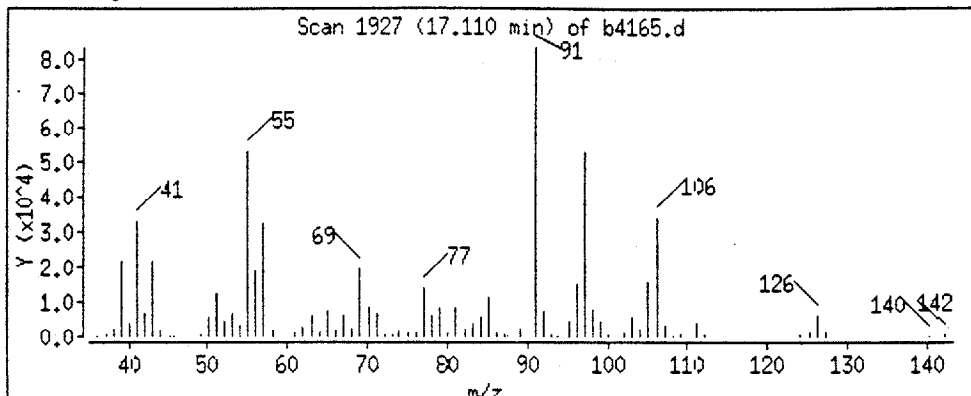
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

57 o-Xylene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

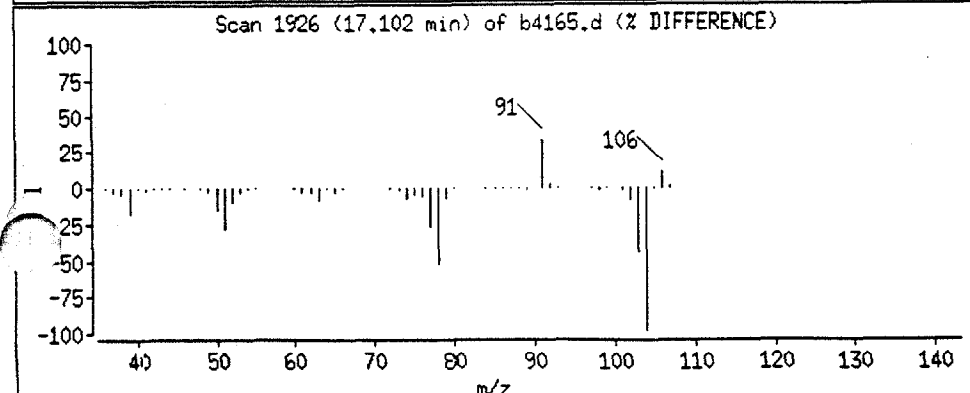
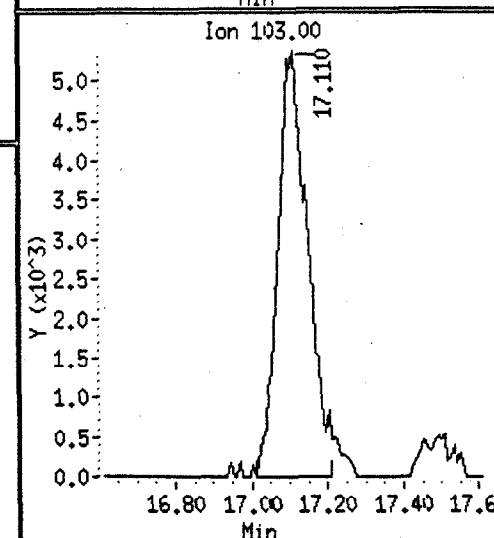
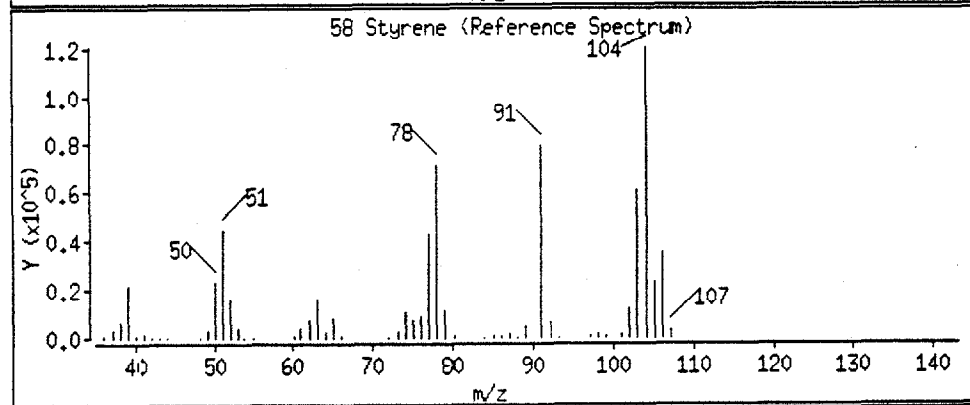
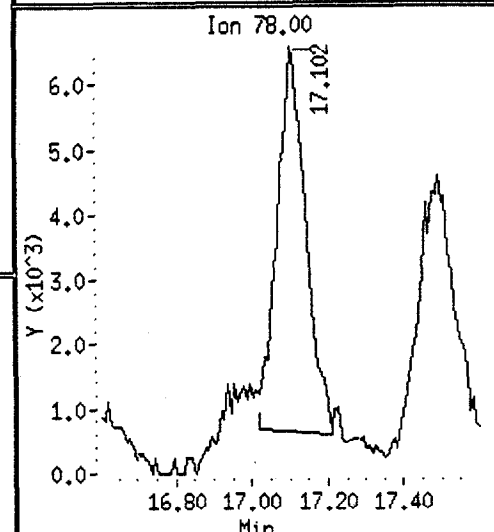
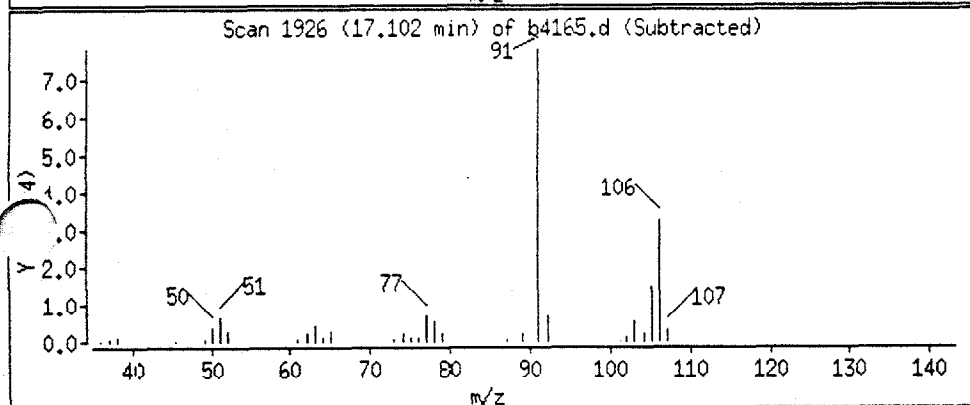
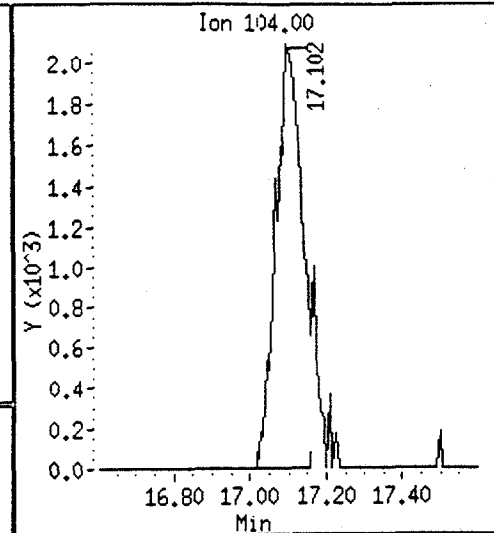
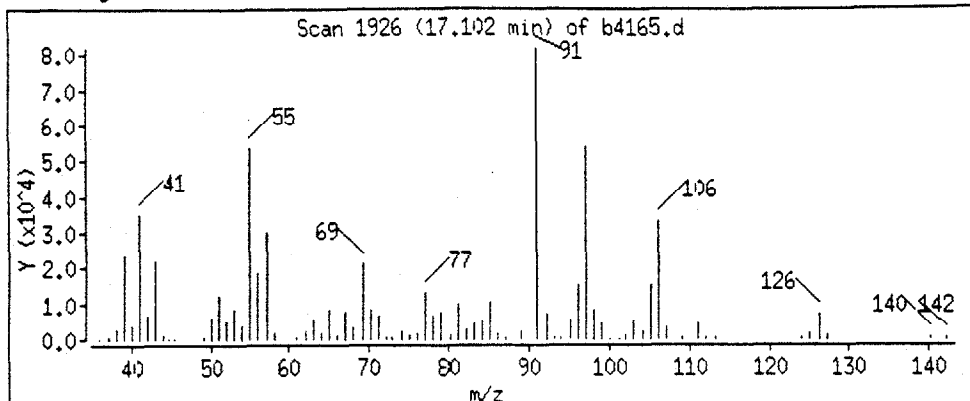
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

58 Styrene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 19

Date : 28-JUN-94 15:37

Instrument : msb.i

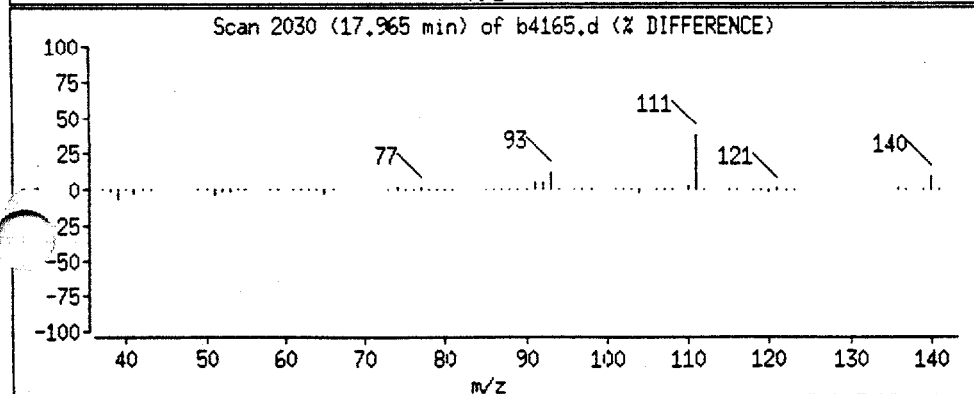
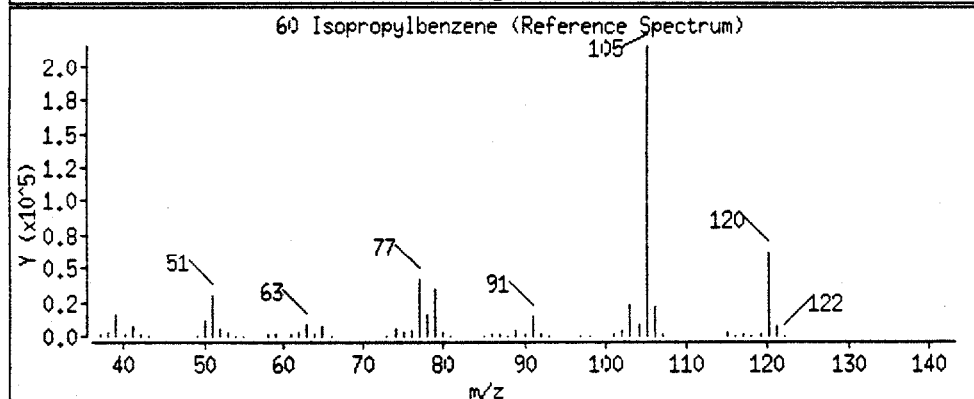
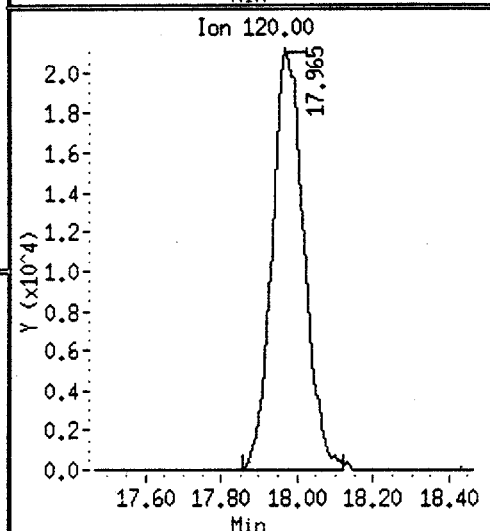
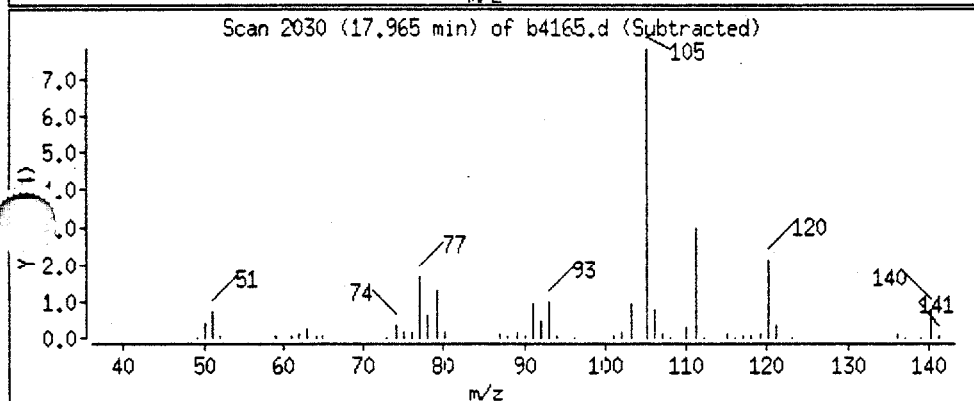
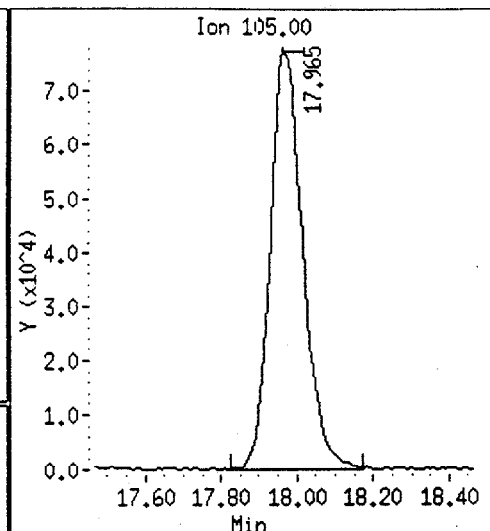
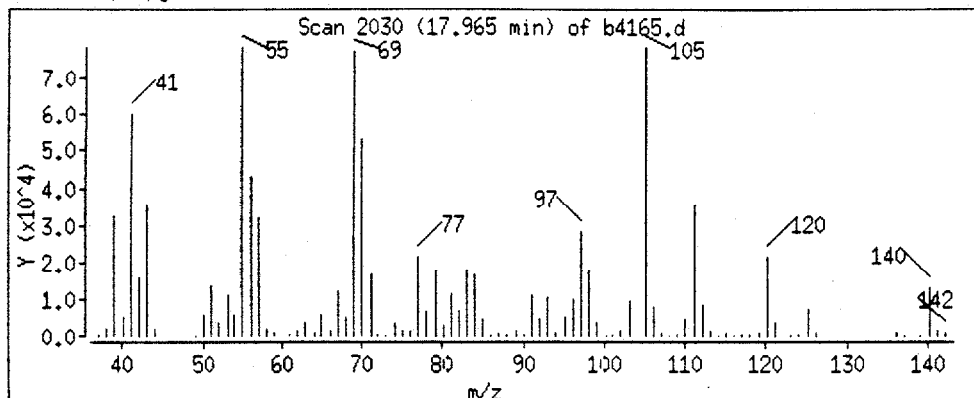
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

60 Isopropylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 20

Date : 28-JUN-94 15:37

Instrument : msb.i

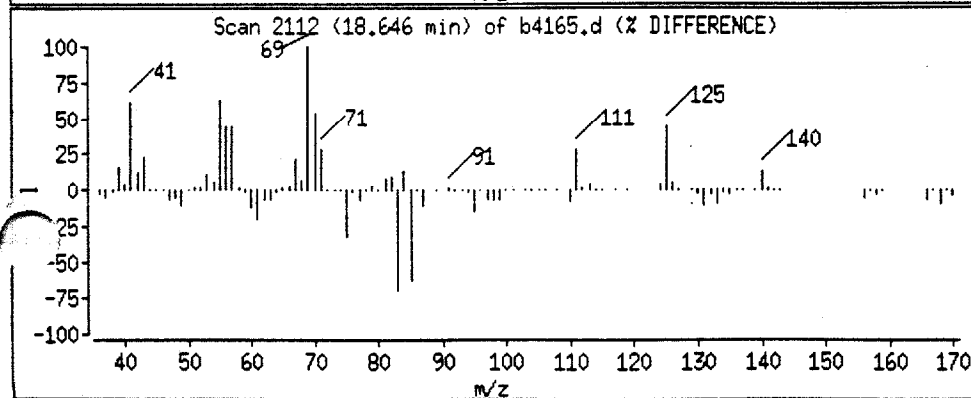
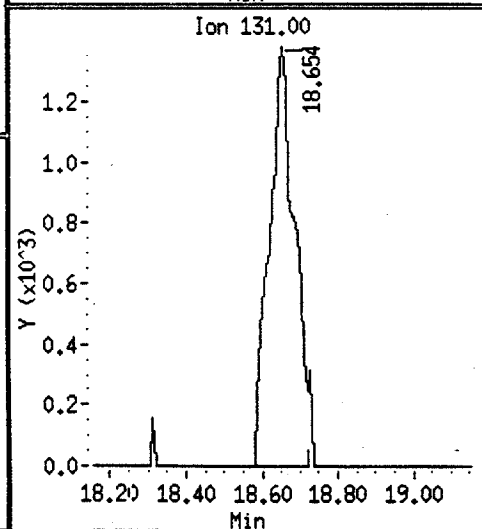
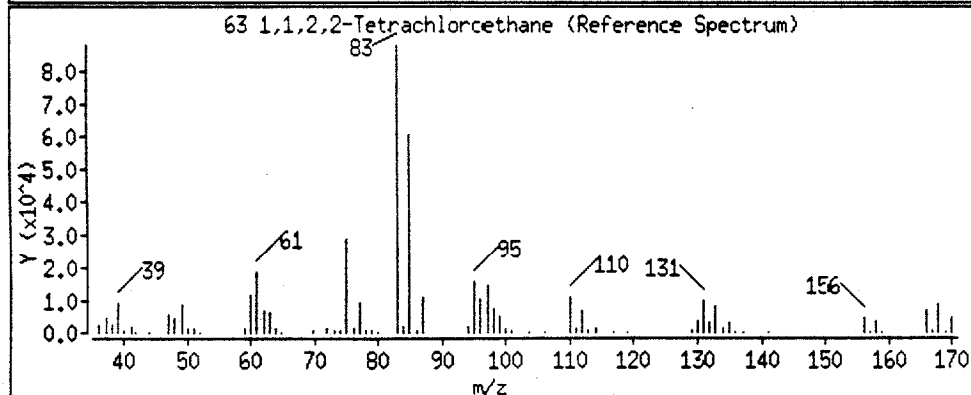
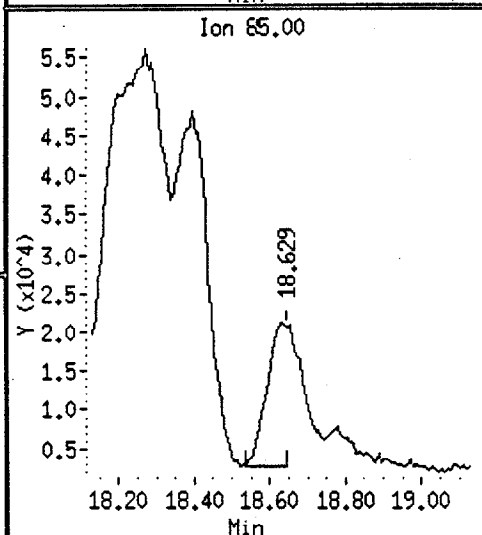
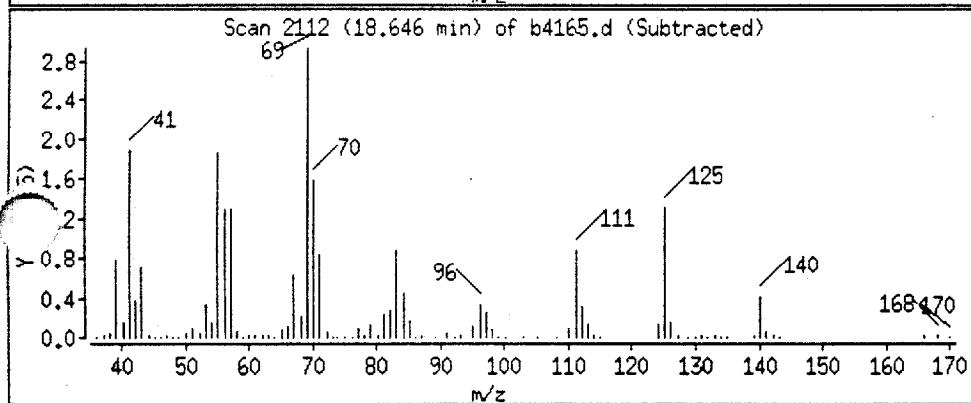
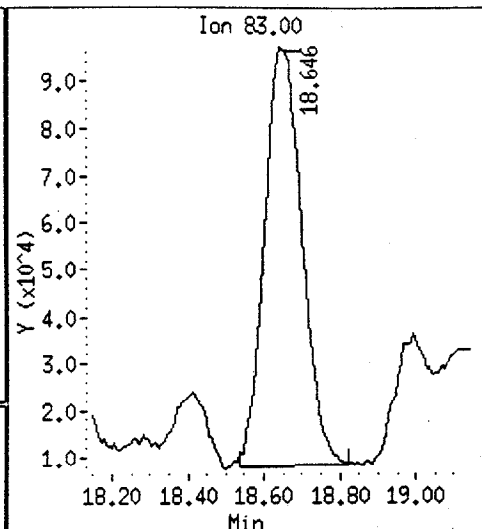
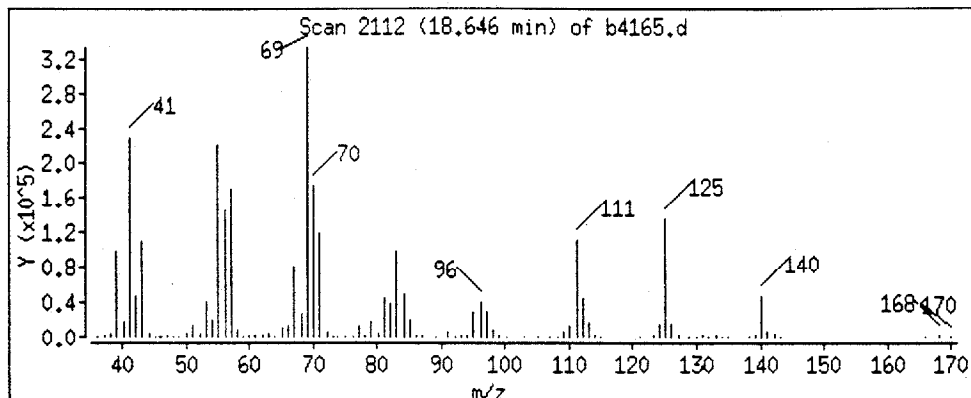
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

63 1,1,2,2-Tetrachloroethane



Date : 28-JUN-94 15:37

Instrument : msb.i

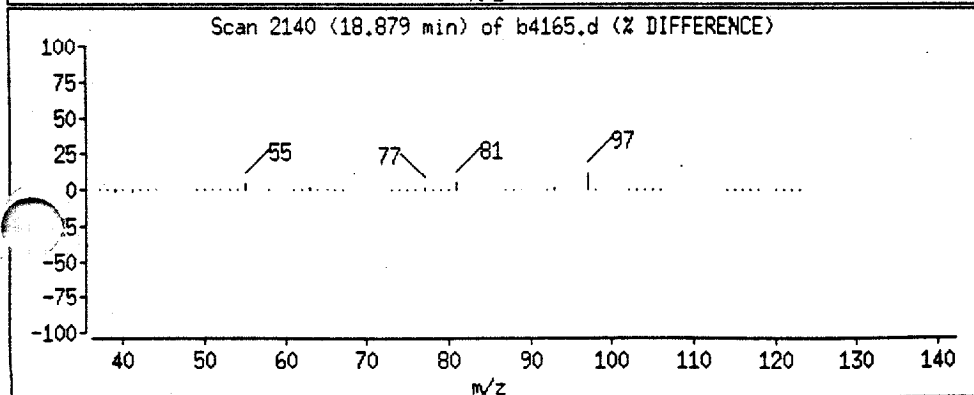
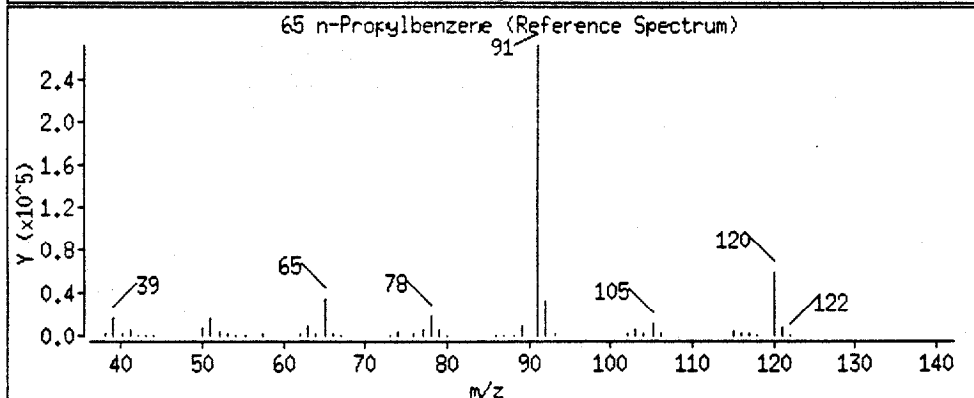
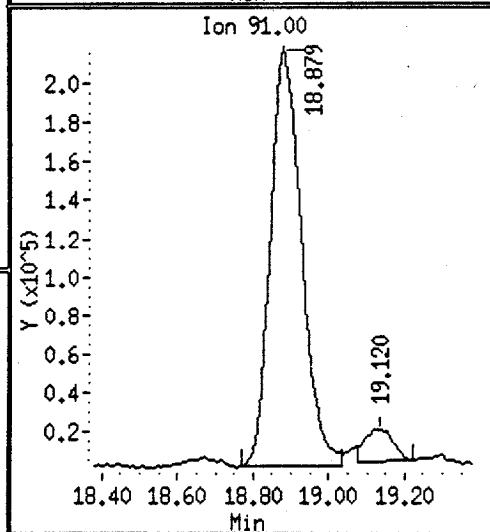
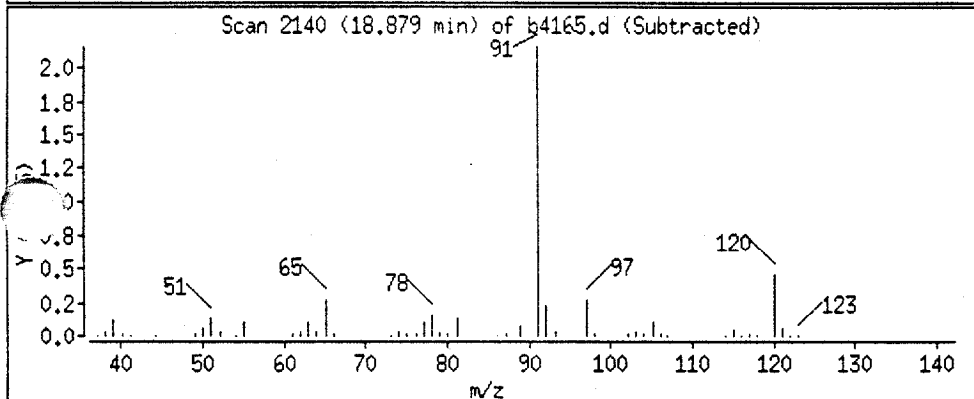
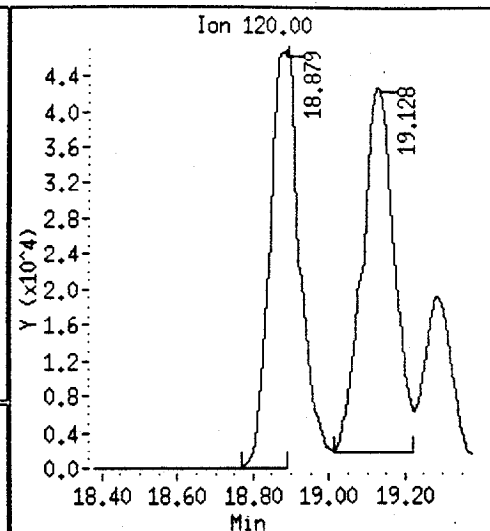
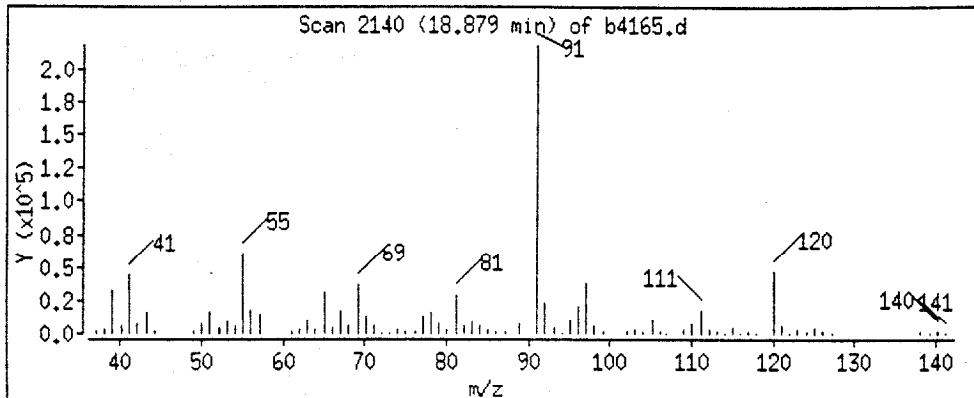
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

65 n-Propylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 23

Date : 28-JUN-94 15:37

Instrument : msb.i

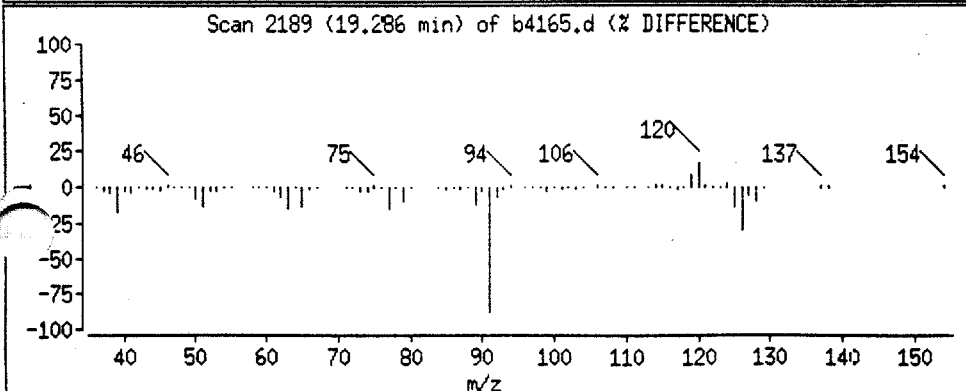
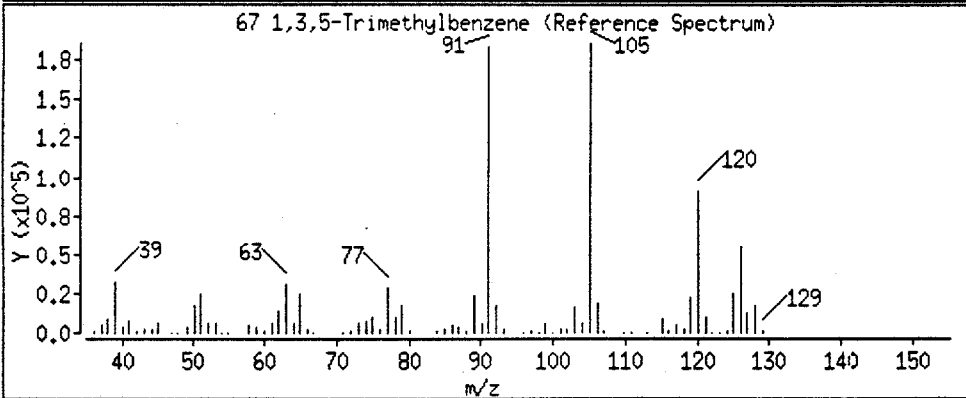
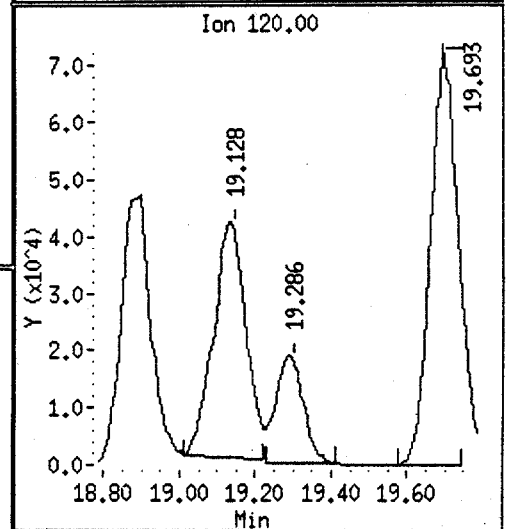
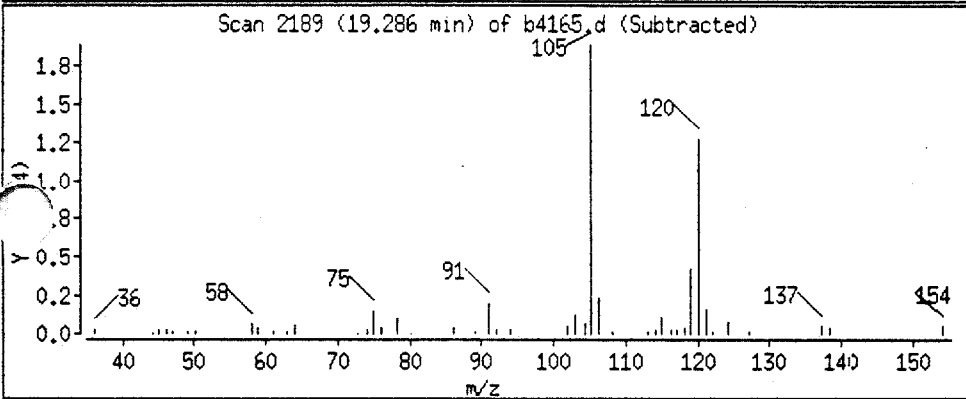
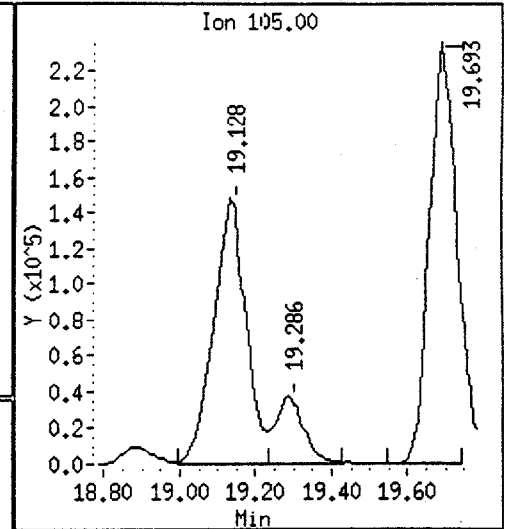
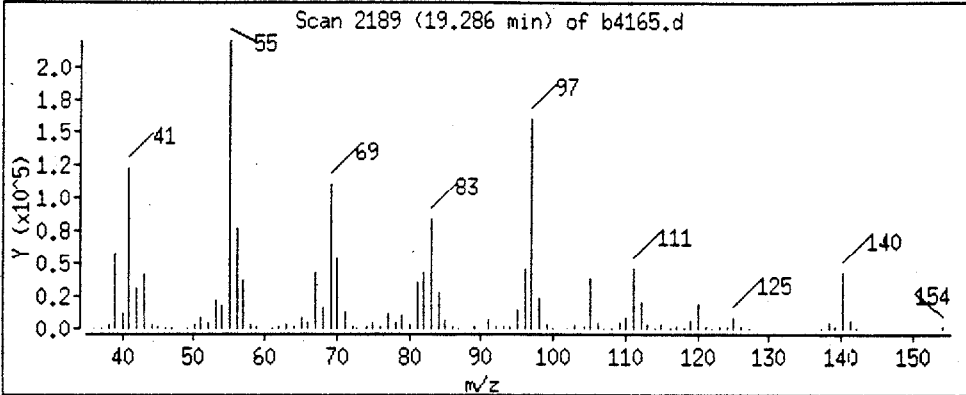
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

67 1,3,5-Trimethylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

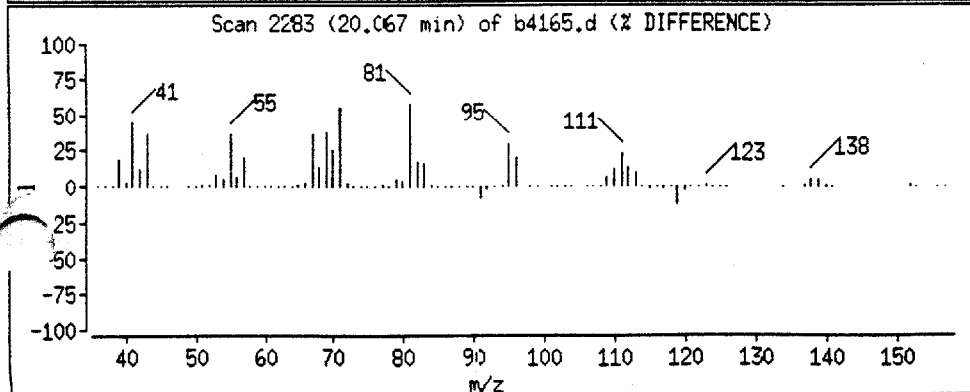
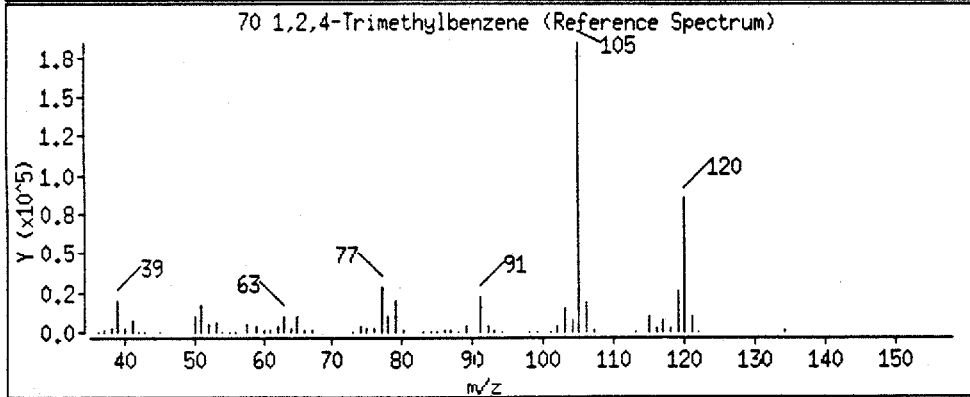
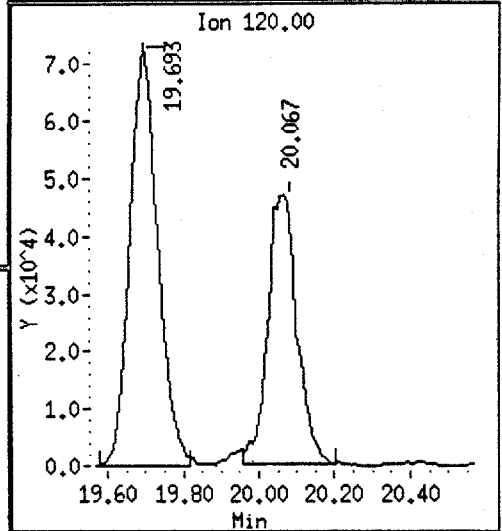
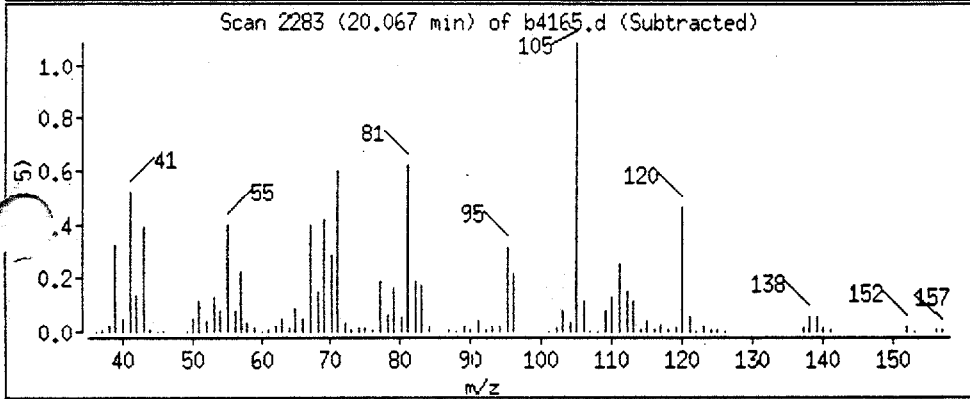
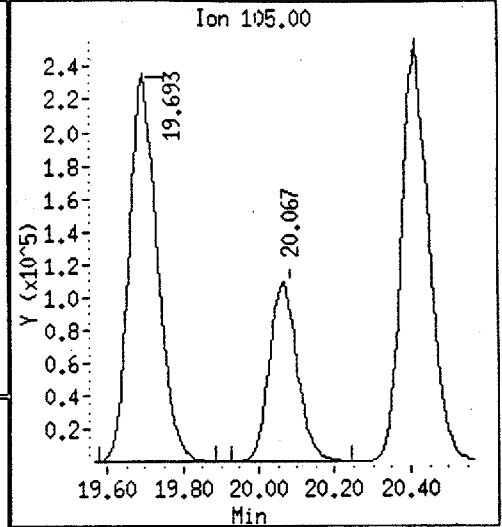
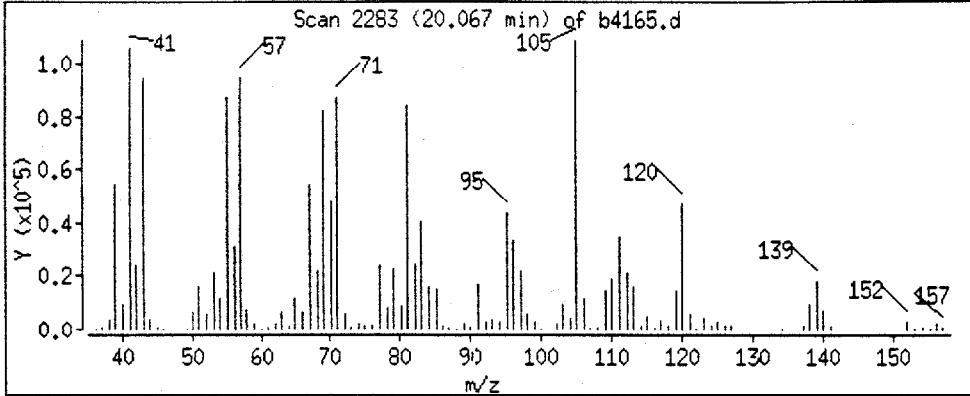
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

70 1,2,4-Trimethylbenzene





Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

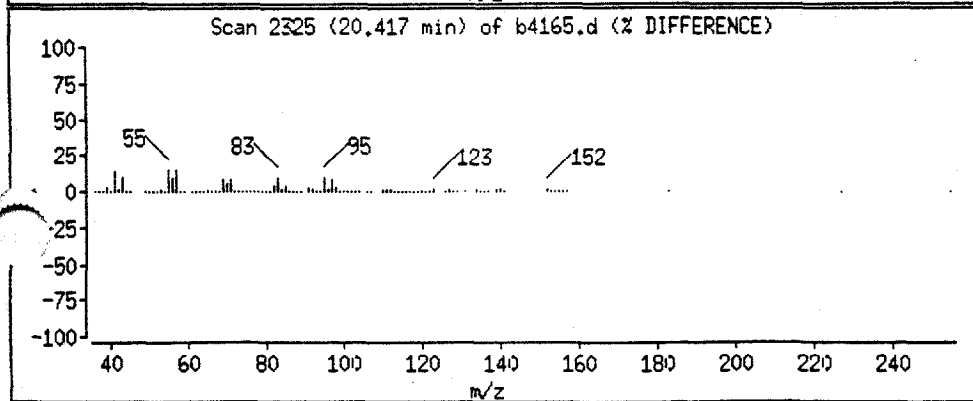
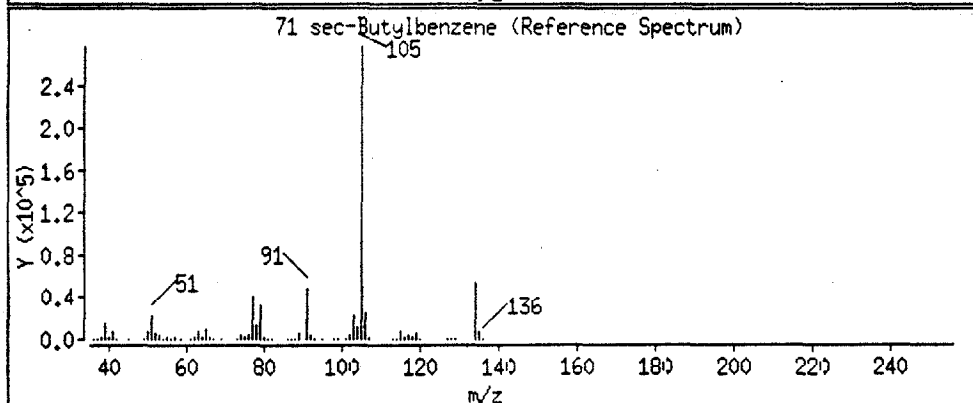
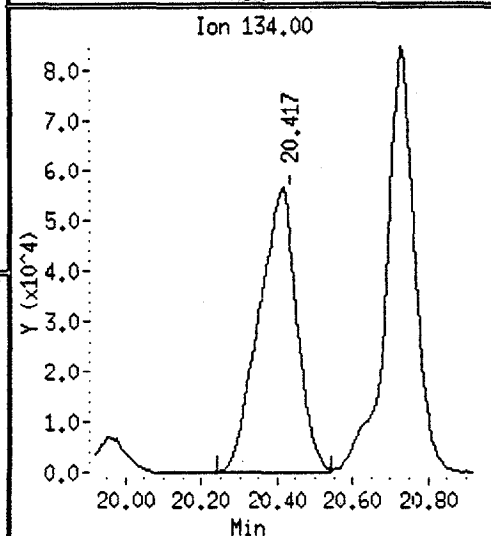
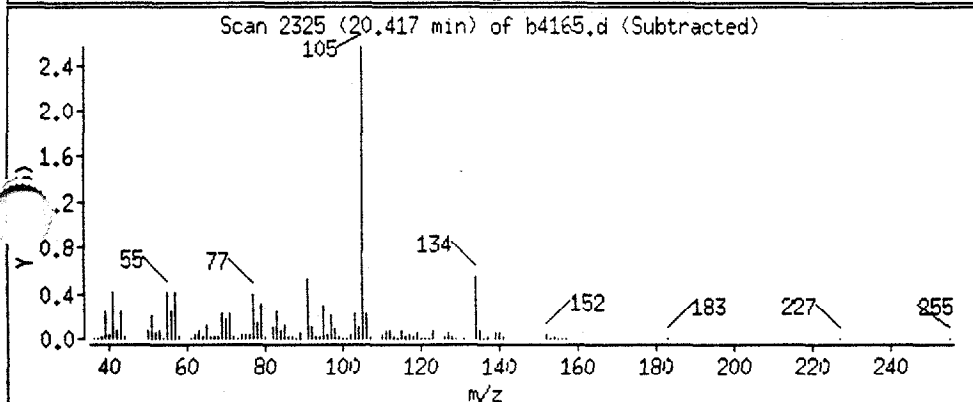
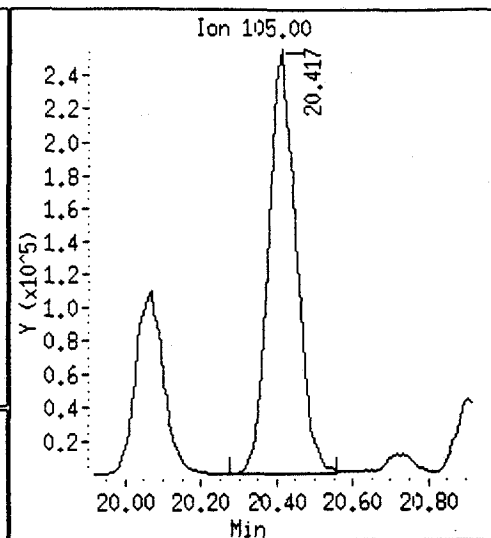
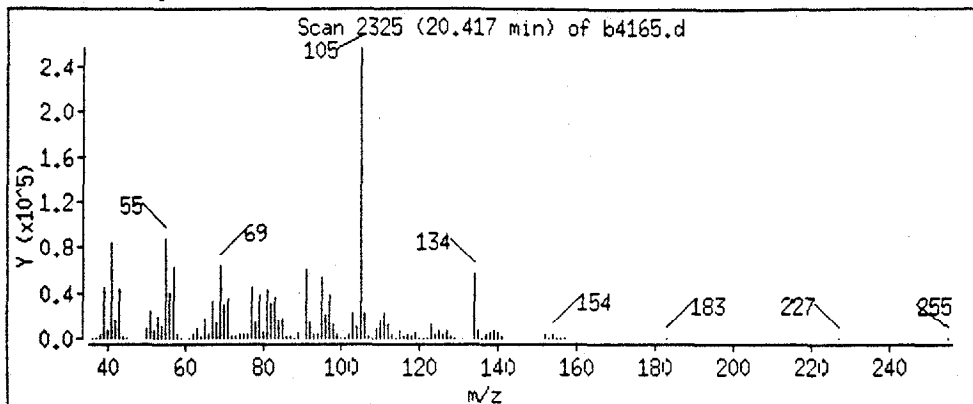
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

71 sec-Butylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 28

Date : 28-JUN-94 15:37

Instrument : msb.i

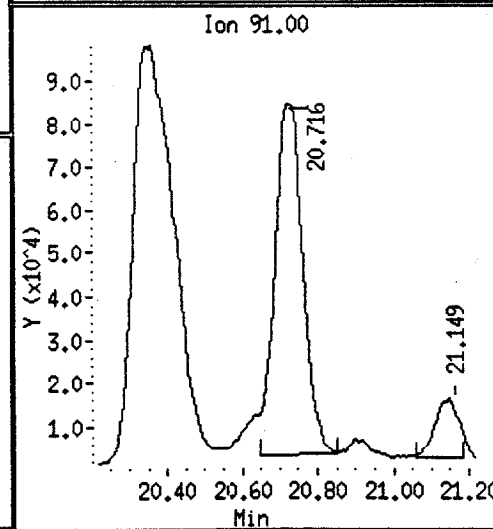
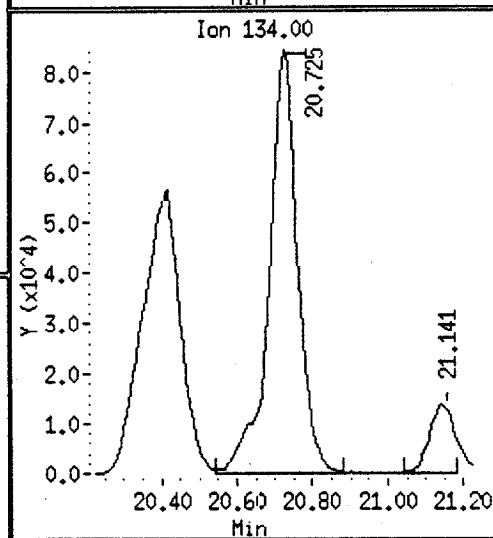
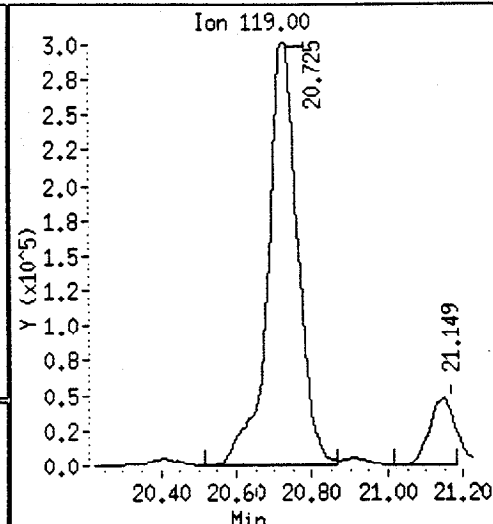
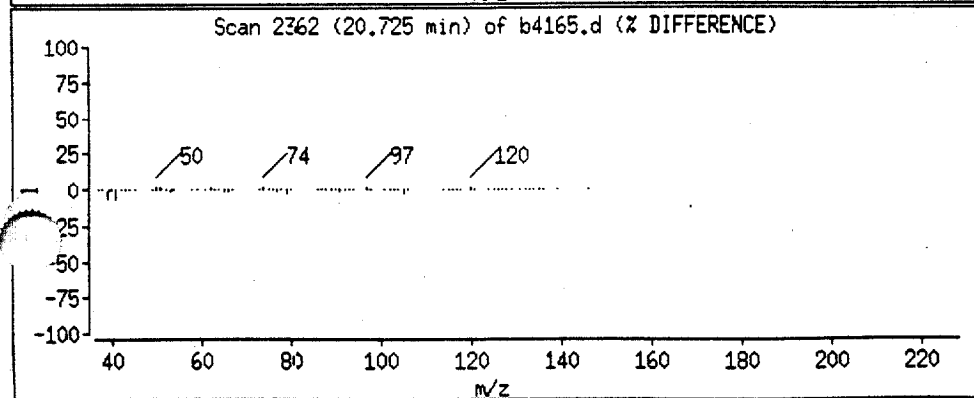
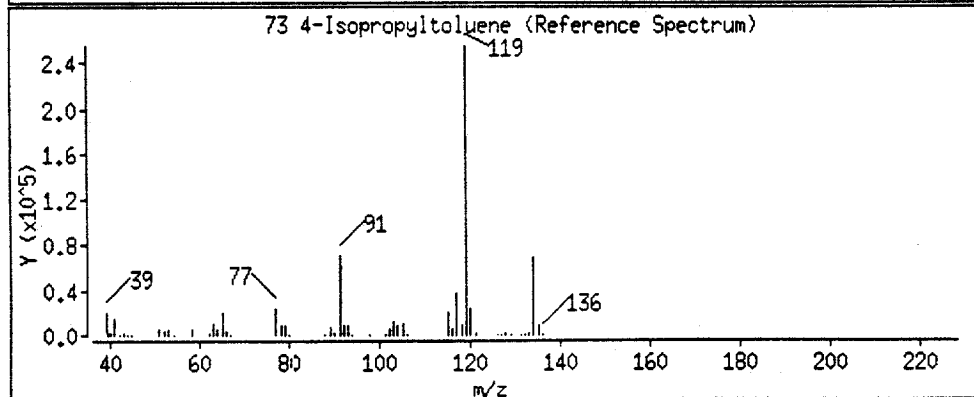
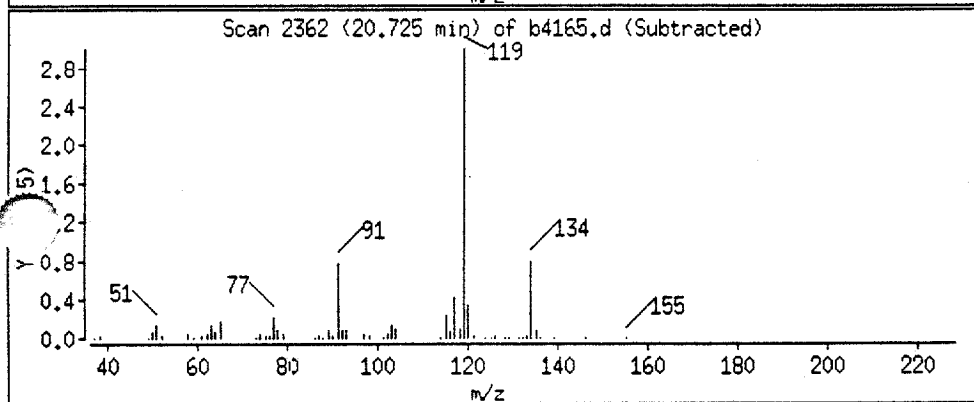
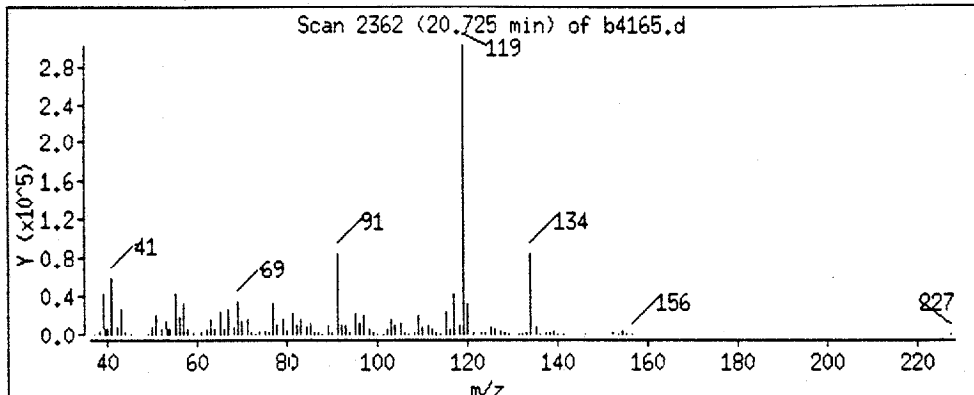
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

73 4-Isopropyltoluene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 29

Date: 28-JUN-94 15:37

Instrument: msb.i

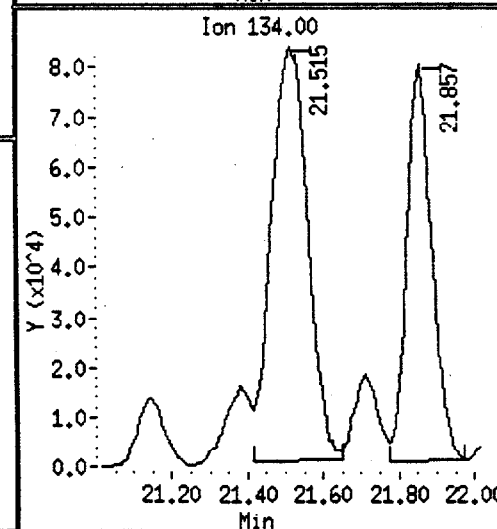
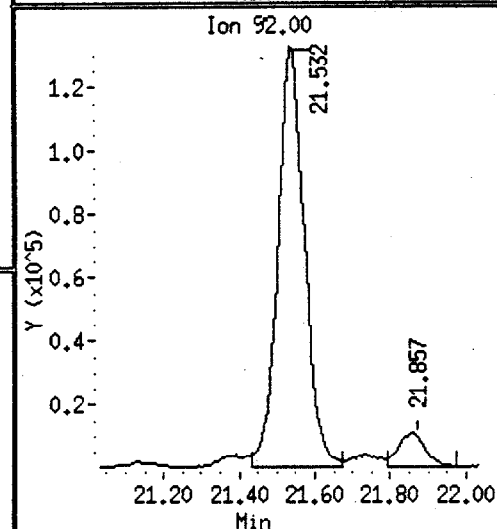
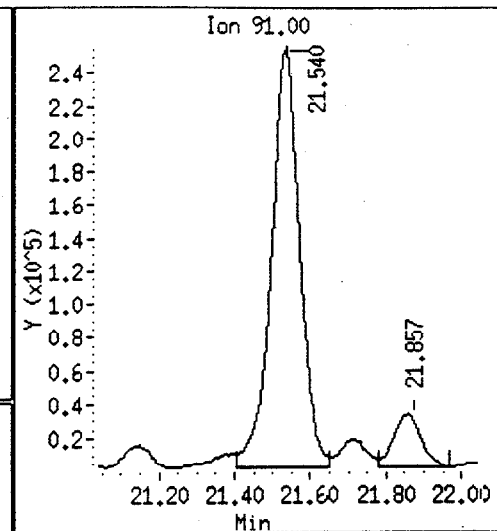
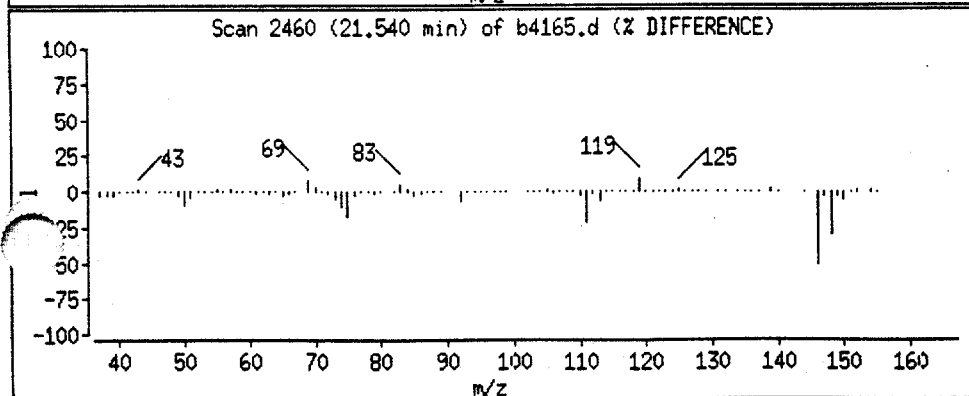
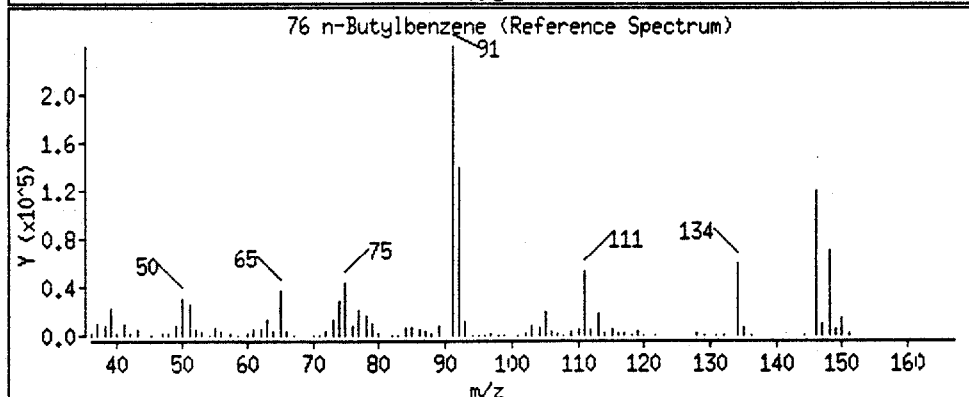
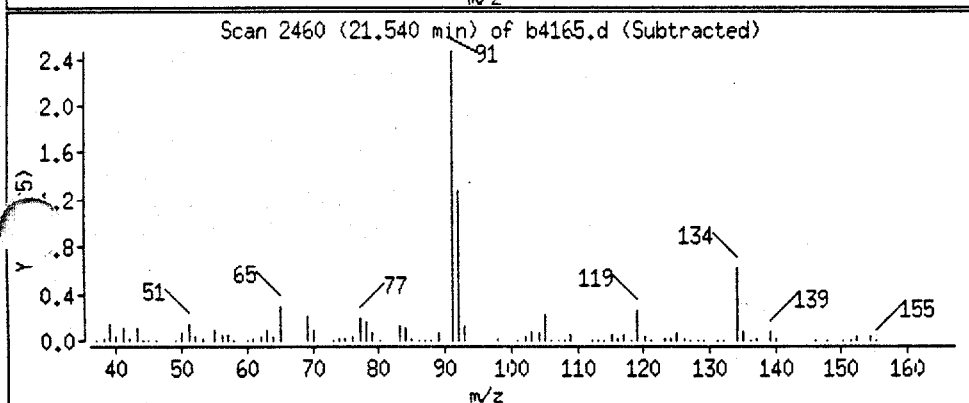
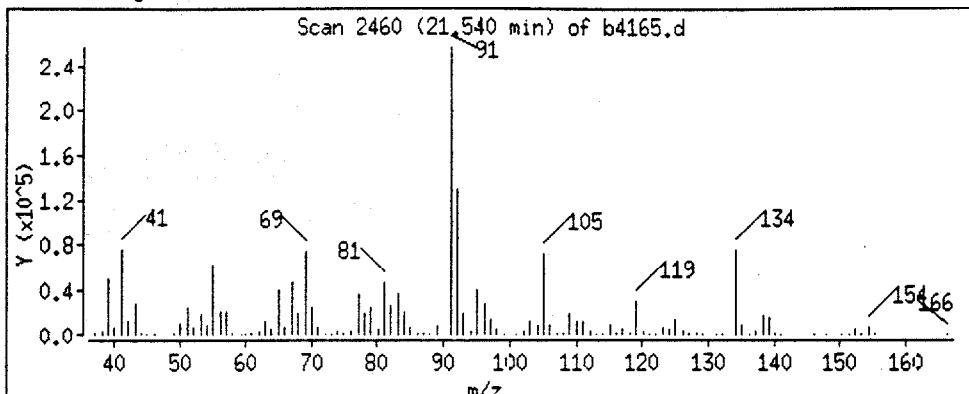
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

76 n-Butylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 32

Date : 28-JUN-94 15:37

Instrument : msb.i

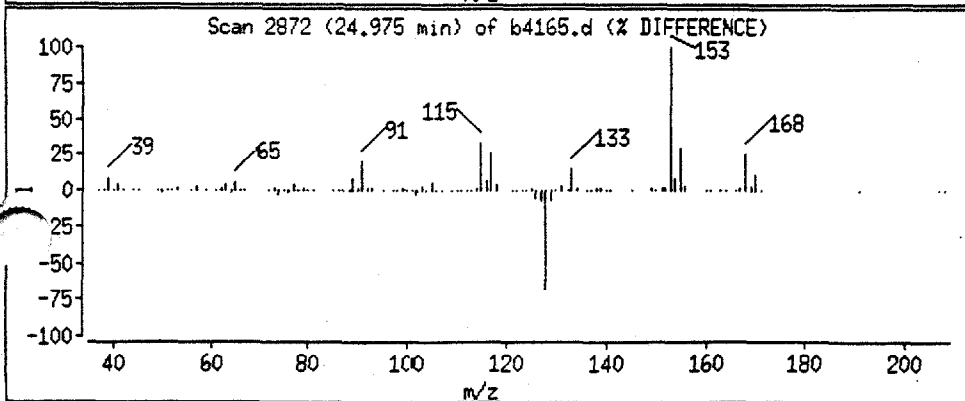
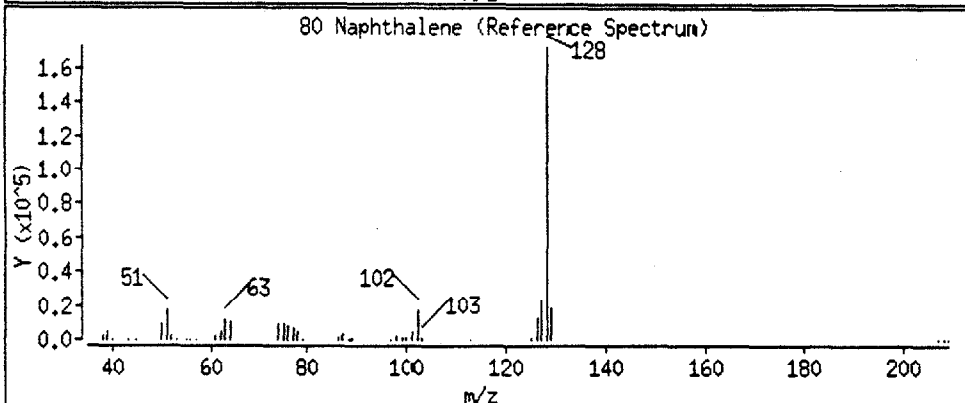
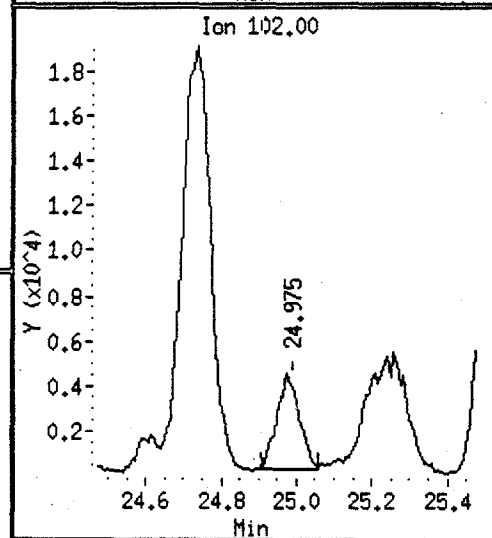
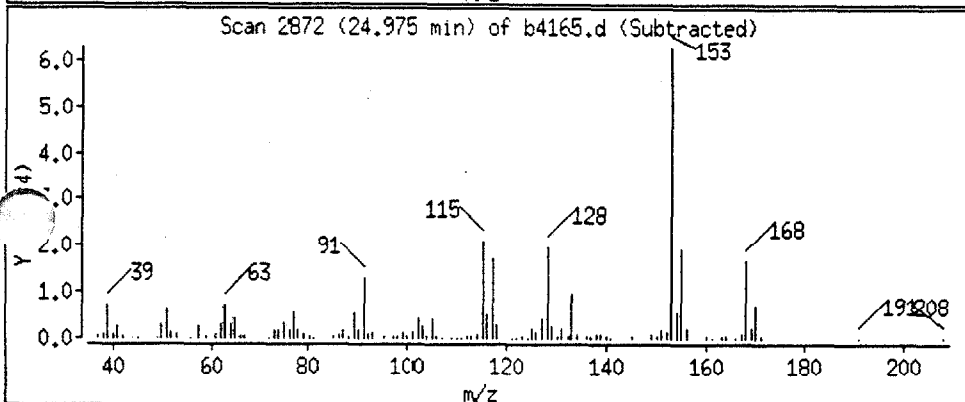
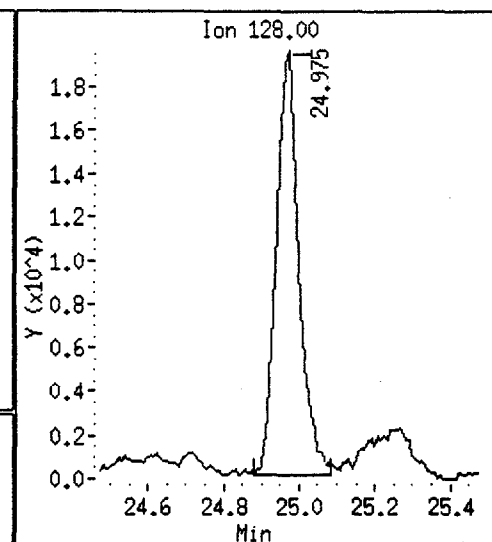
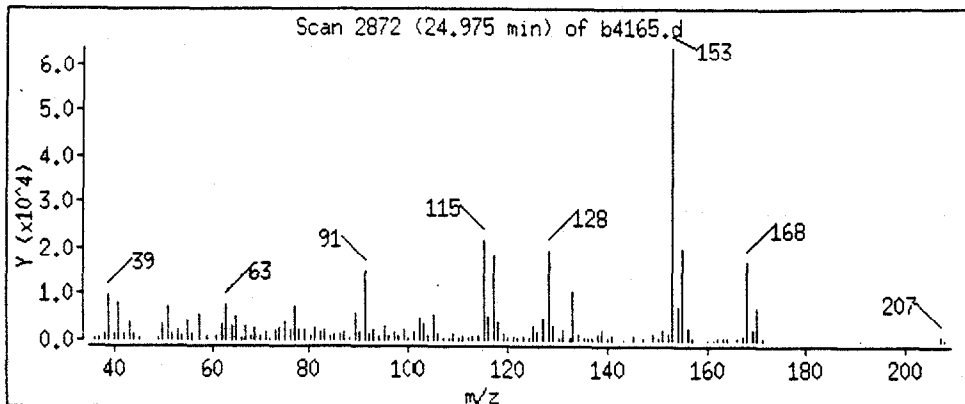
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

80 Naphthalene



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 46

Date: 28-JUN-94 15:37

Instrument: msb.i

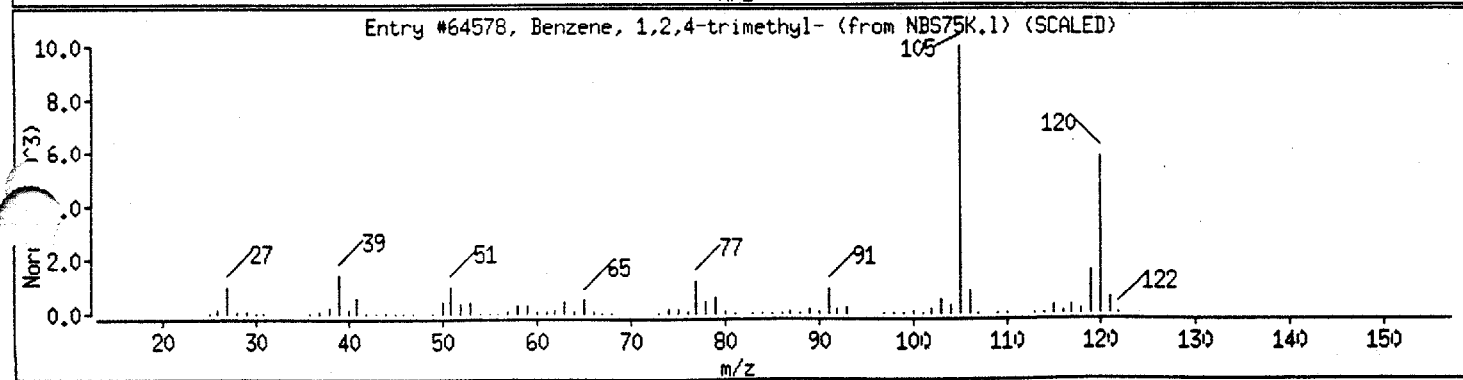
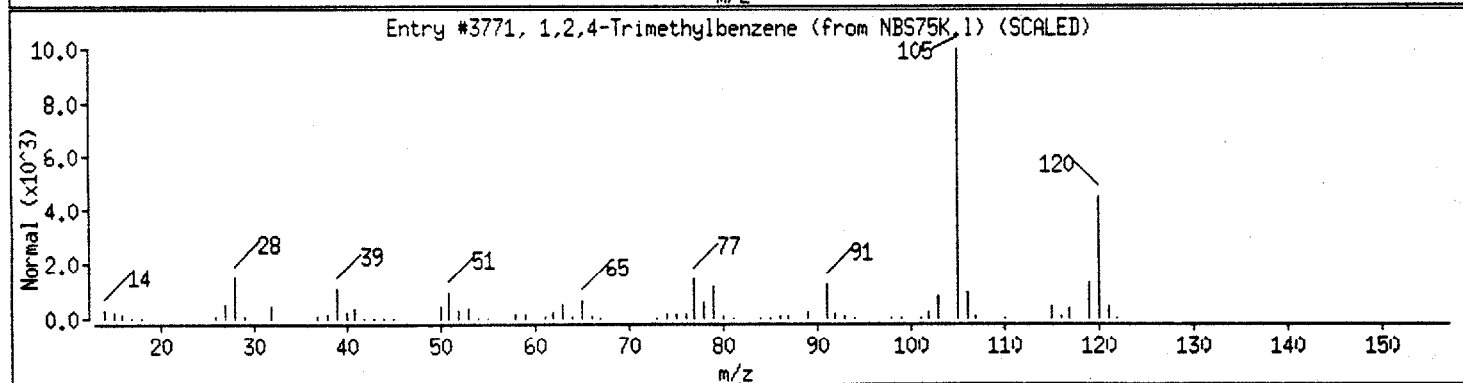
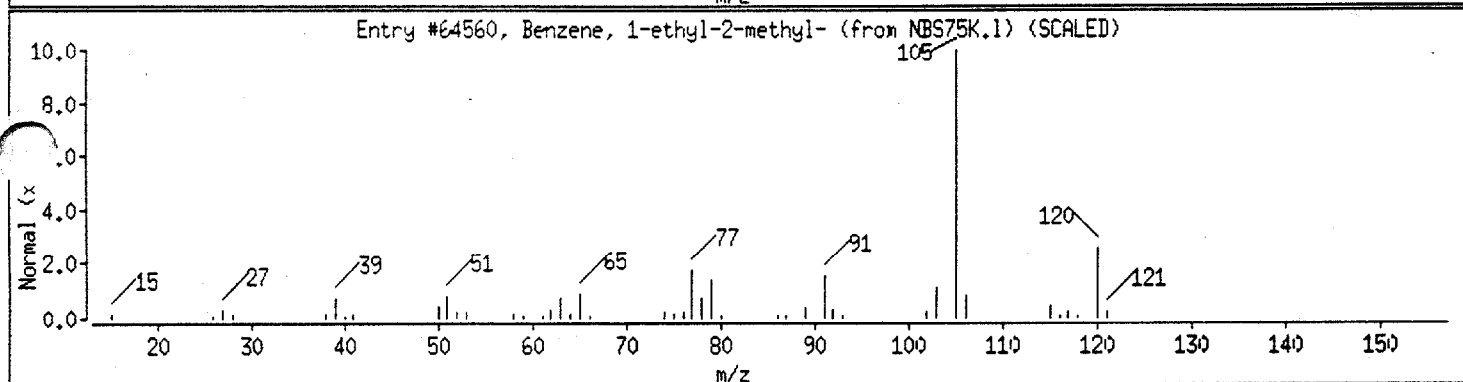
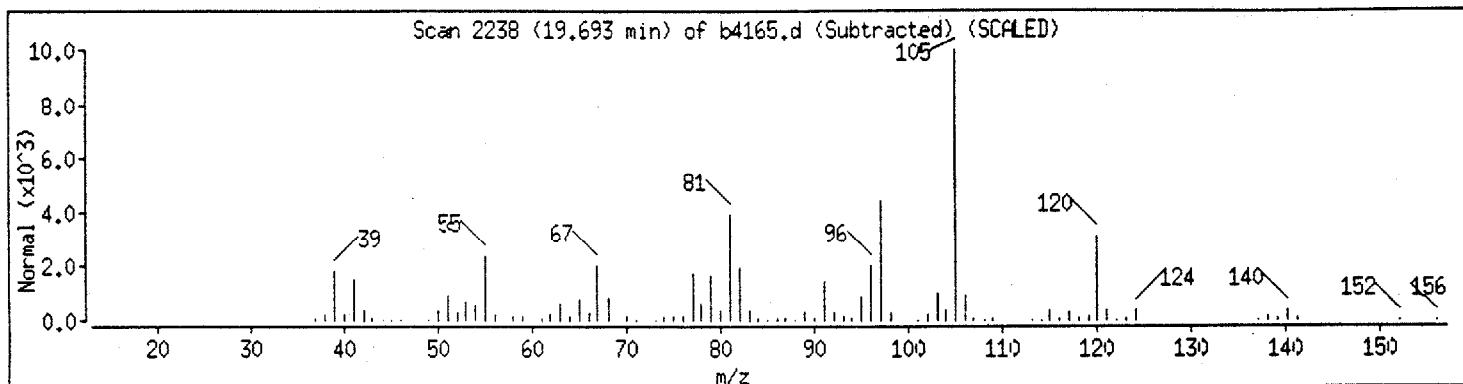
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.1	64560	74
1,2,4-Trimethylbenzene	95-36-3	NBS75K.1	3771	38
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.1	64578	38



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 54

Date: 28-JUN-94 15:37

Instrument: msb.i

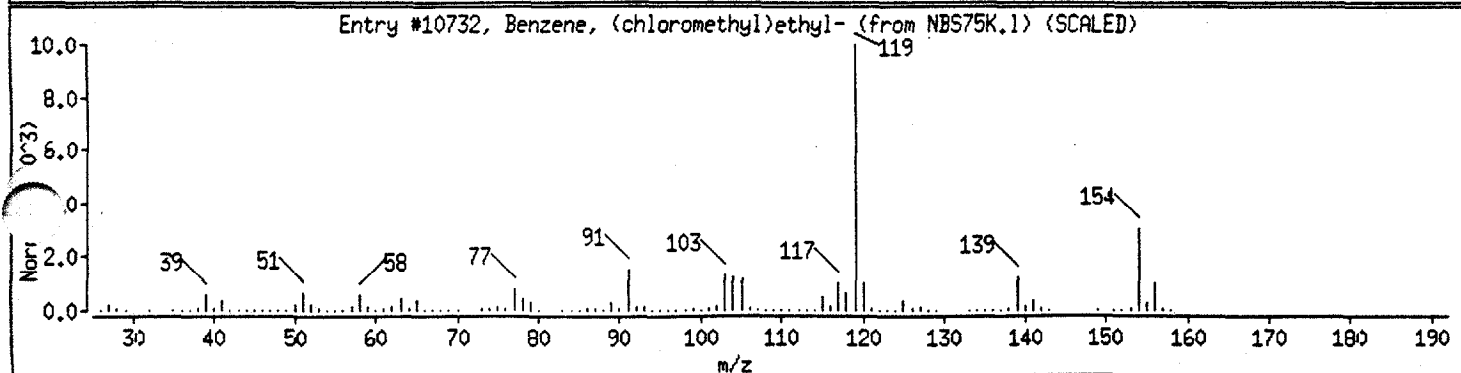
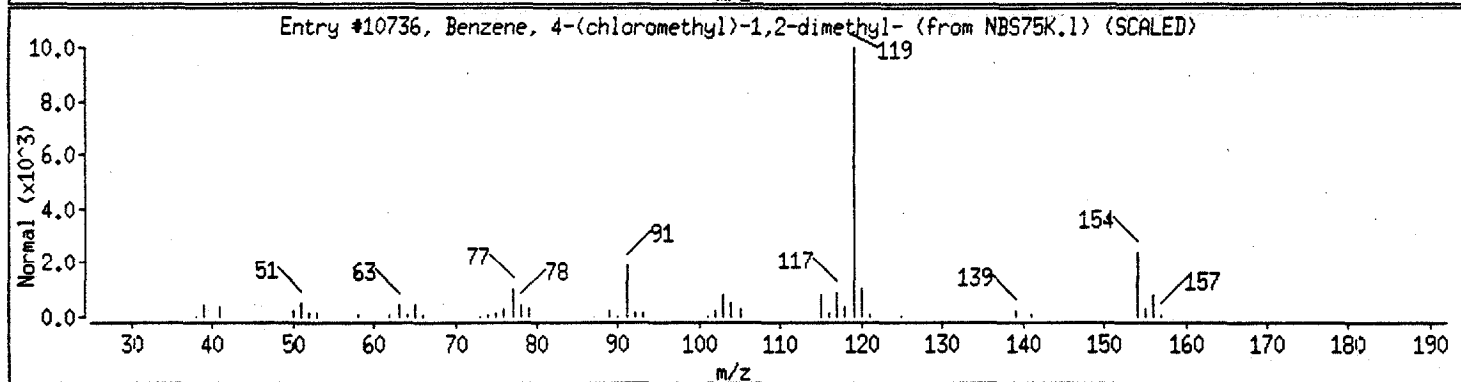
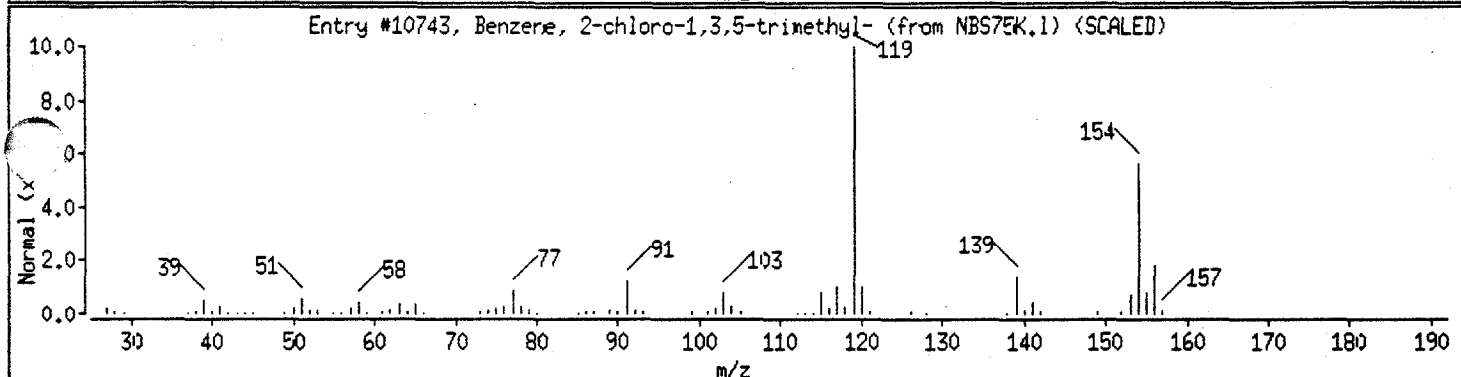
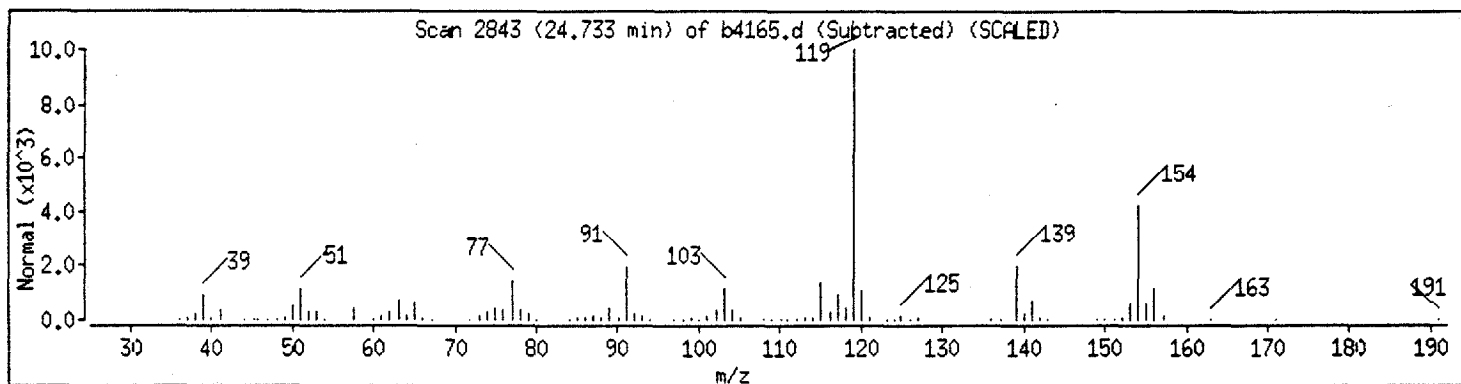
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 2-chloro-1,3,5-trimethyl-	1667-04-5	NBS75K.1	10743	90
Benzene, 4-(chloromethyl)-1,2-dimethyl-	102-46-5	NBS75K.1	10736	87
Benzene, (chloromethyl)ethyl-	26968-58-1	NBS75K.1	10732	87



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 45

Date : 28-JUN-94 15:37

Instrument : msb.i

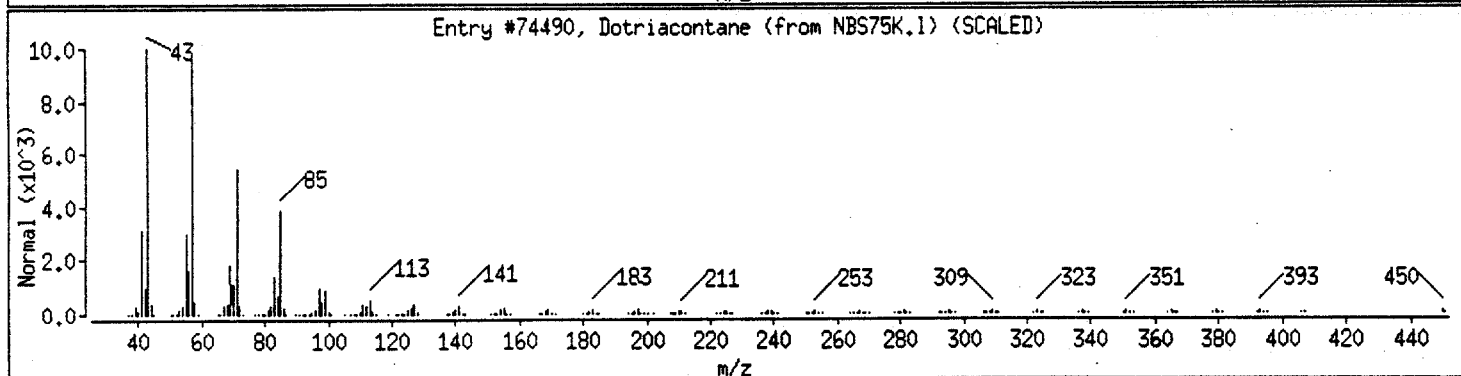
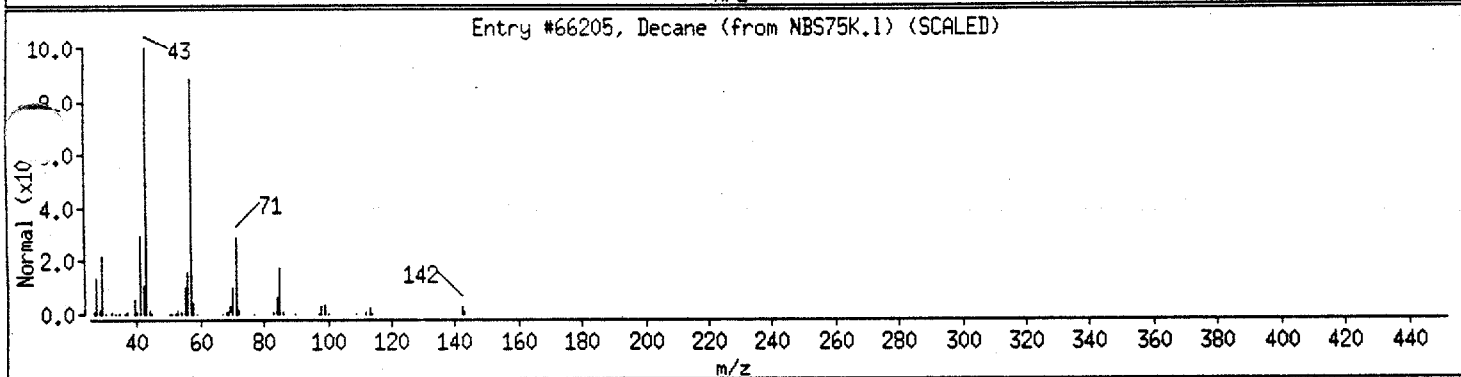
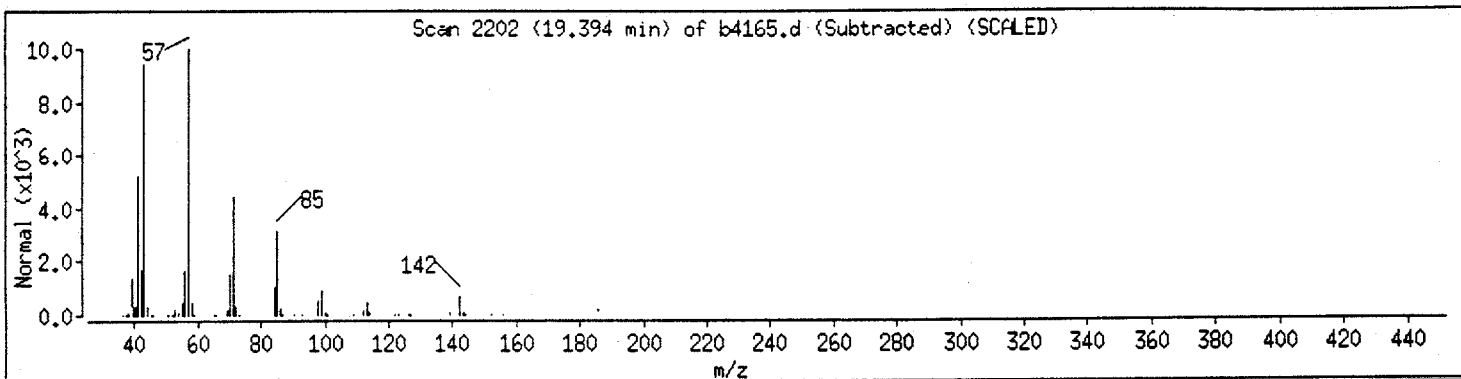
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Decane	124-18-5	NBS75K.1	66205	95
Dotriacontane	544-85-4	NBS75K.1	74490	90



Data File: /chem/aux/msb.1/b062894.b/b4165.d

Page 49

Date: 28-JUN-94 15:37

Instrument: msb.i

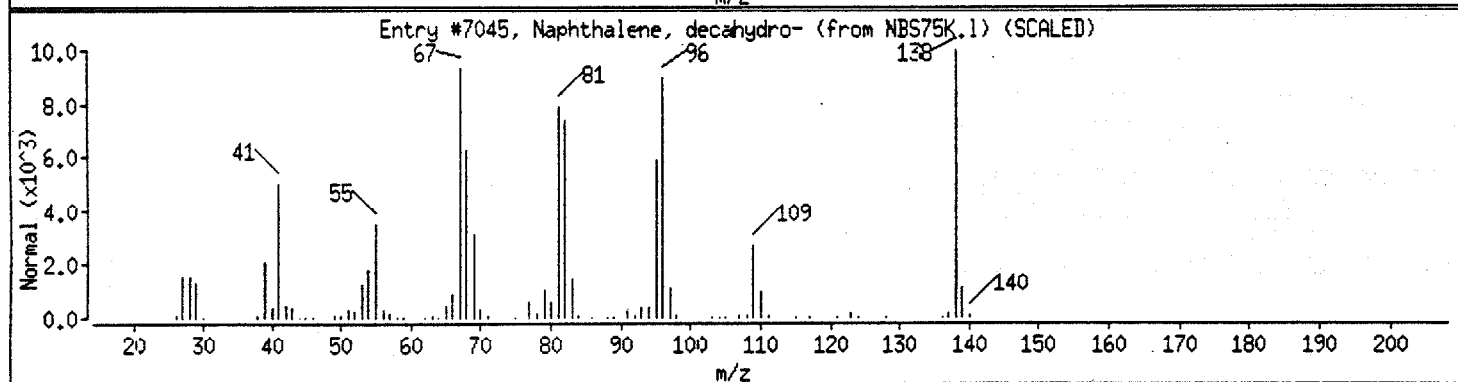
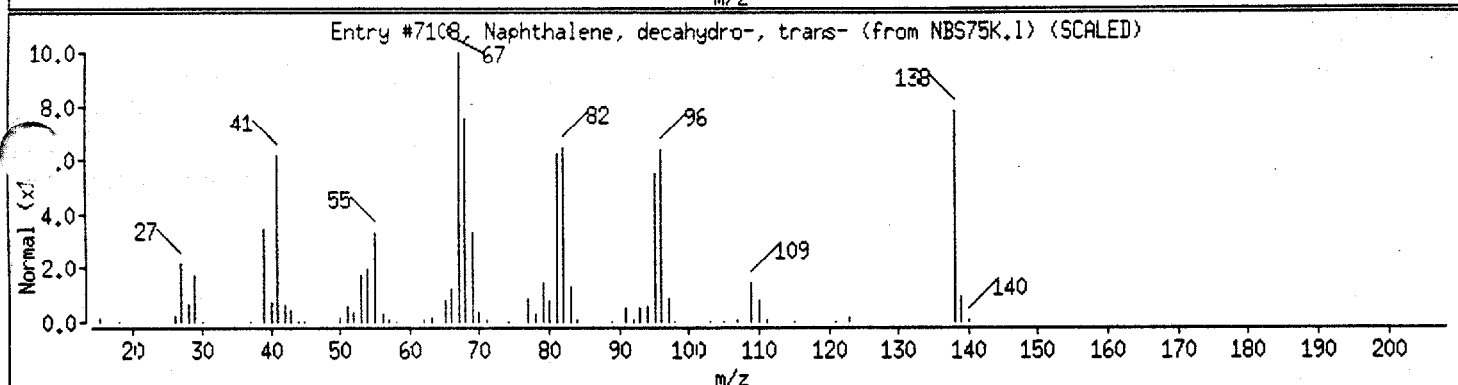
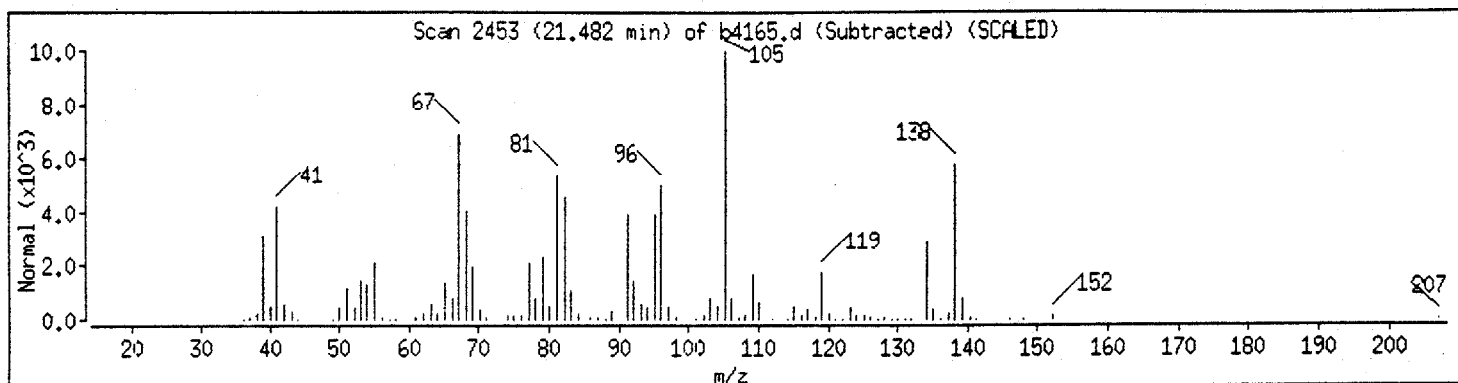
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Naphthalene, decahydro-, trans-	493-02-7	NBS75K.1	7108	98
Naphthalene, decahydro-	91-17-8	NBS75K.1	7045	95





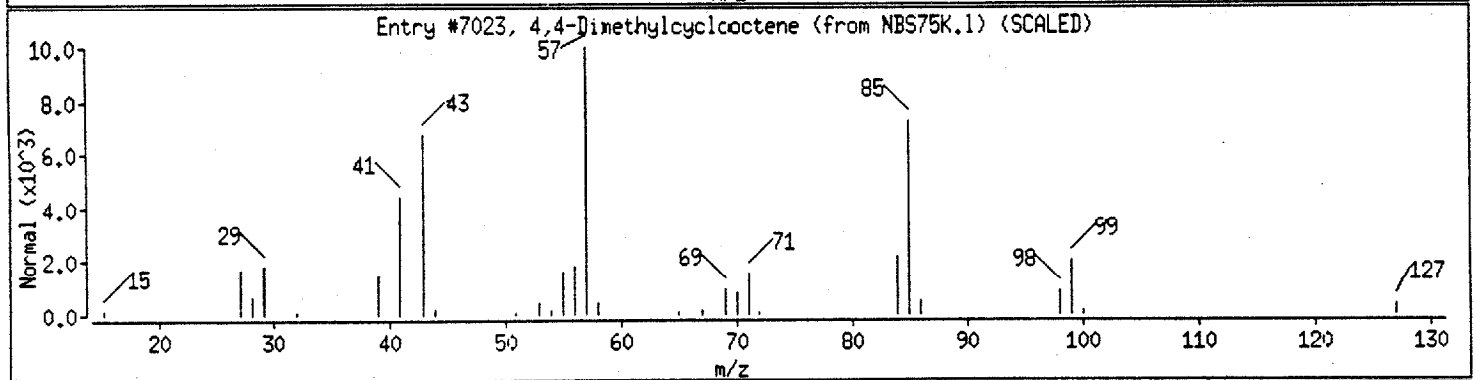
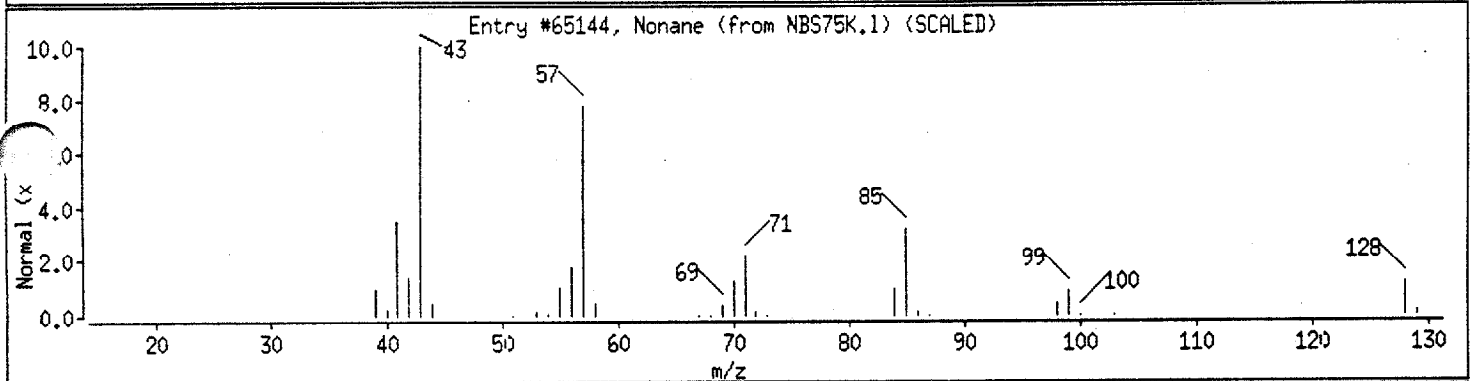
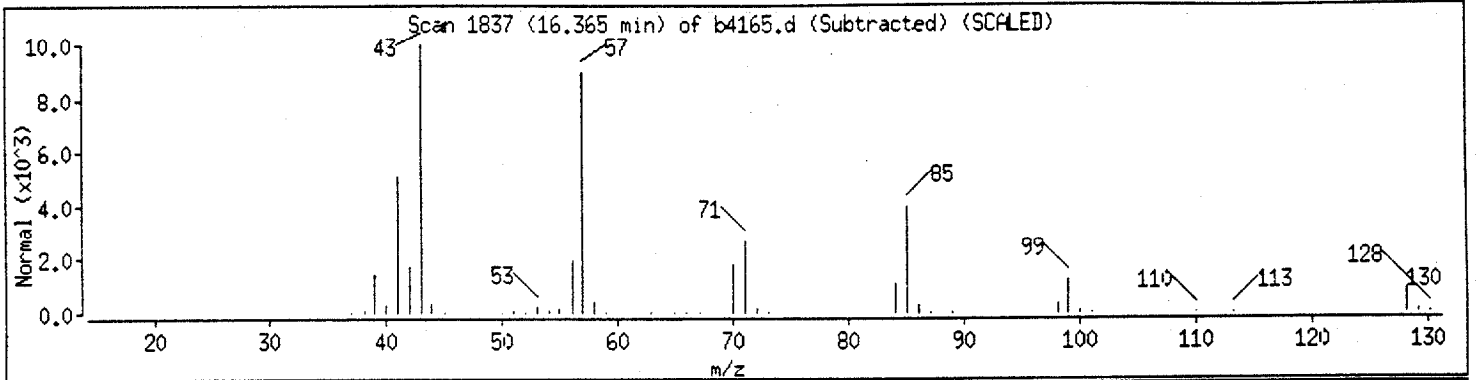
Data File: /chem/aux/msb.i/b062894.b/b4165.d  
 Date : 28-JUN-94 15:37

Page 40

Instrument : msb.i  
 Sample ID :  
 Column phase : J&W DB\_624  
 Volume Injected (uL) : 0.0

Column diameter : 0.53

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonane	111-84-2	NBS75K.1	65144	94
4,4-Dimethylcyclooctene	0-00-0	NBS75K.1	7023	72



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Page 50

Date: 28-JUN-94 15:37

Instrument: msb.i

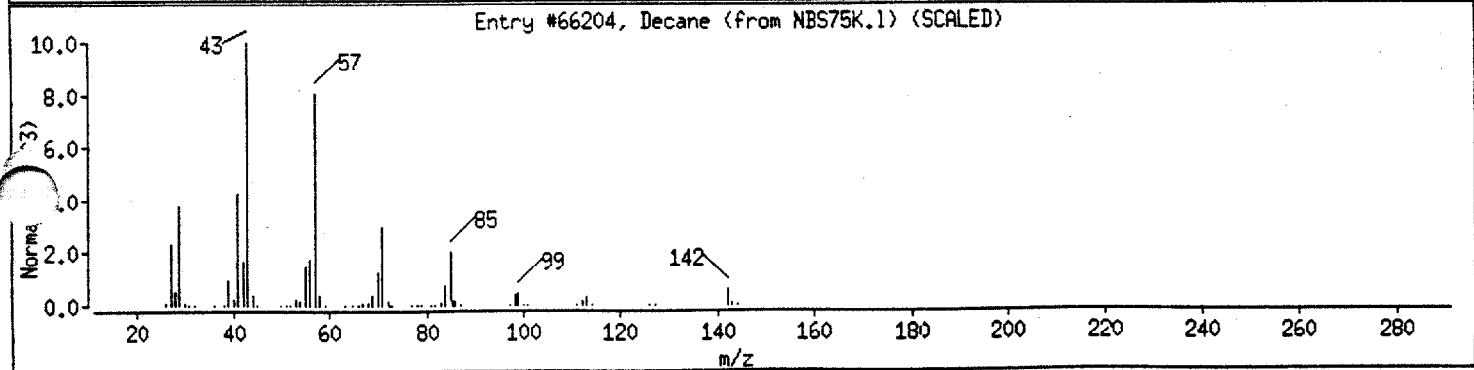
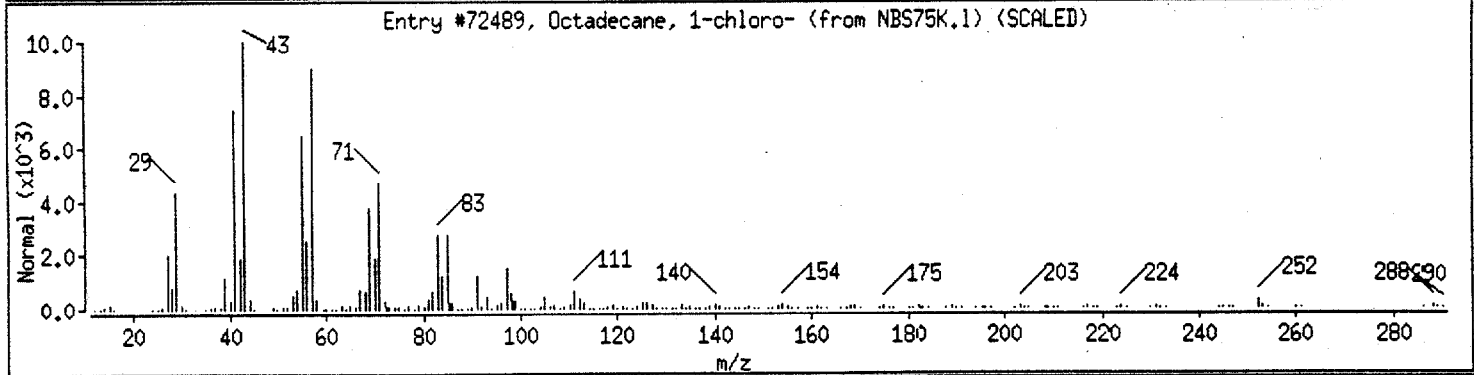
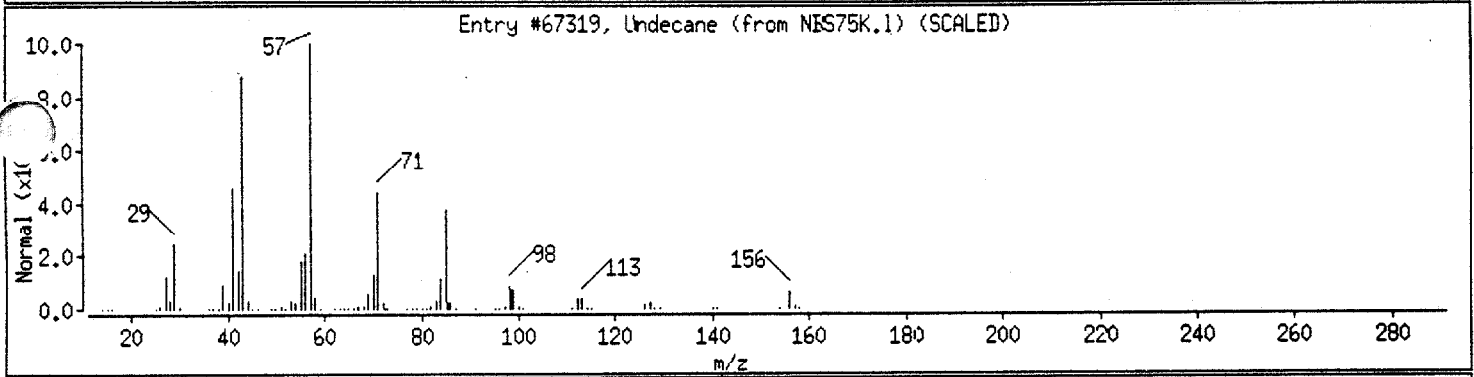
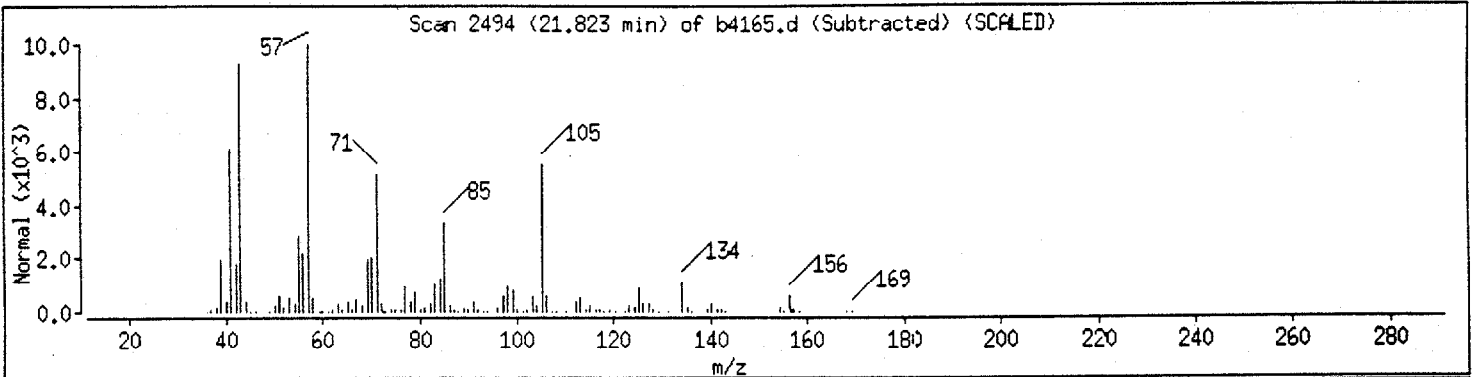
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane	1120-21-4	NBS75K.1	67319	94
Octadecane, 1-chloro-	3386-33-2	NBS75K.1	72489	80
Decane	124-18-5	NBS75K.1	66204	80



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

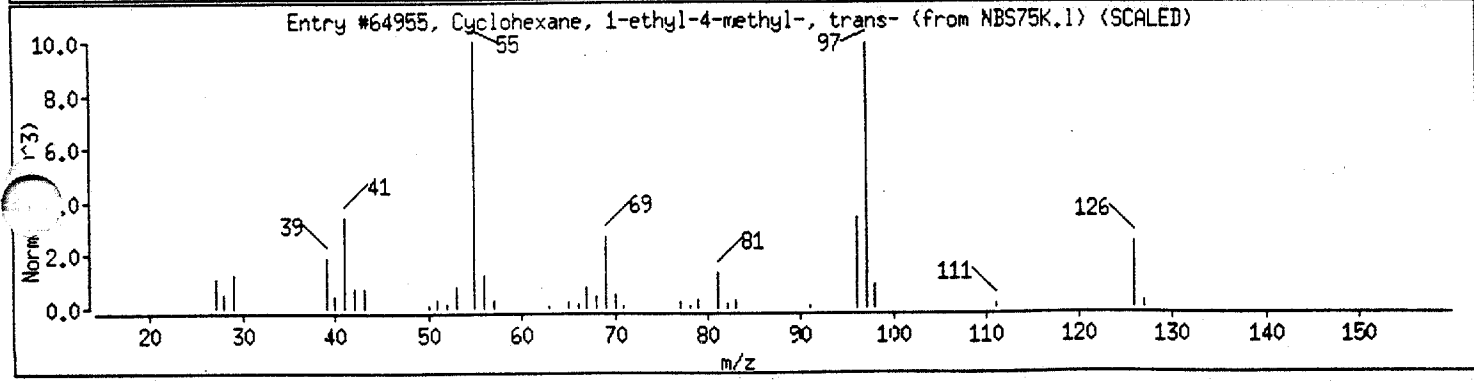
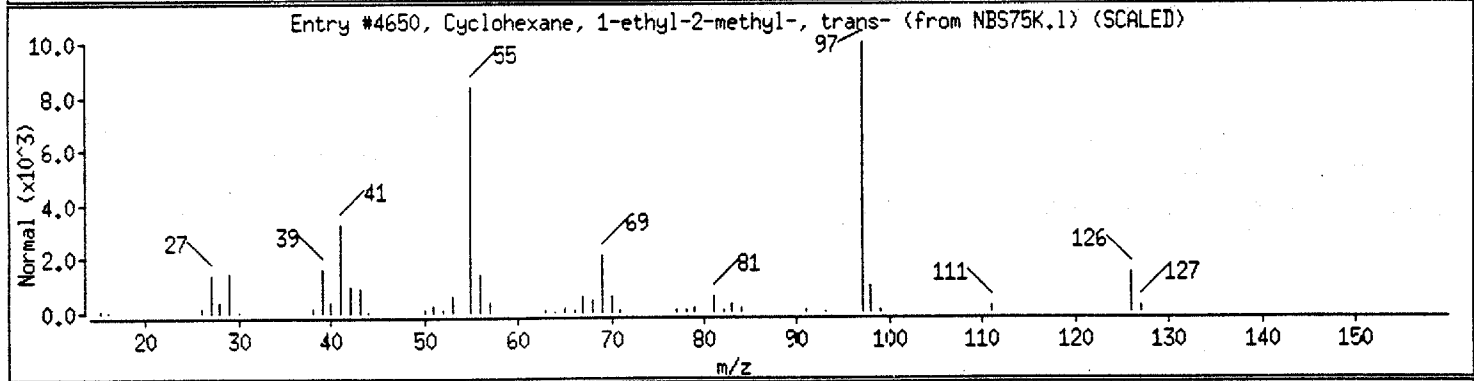
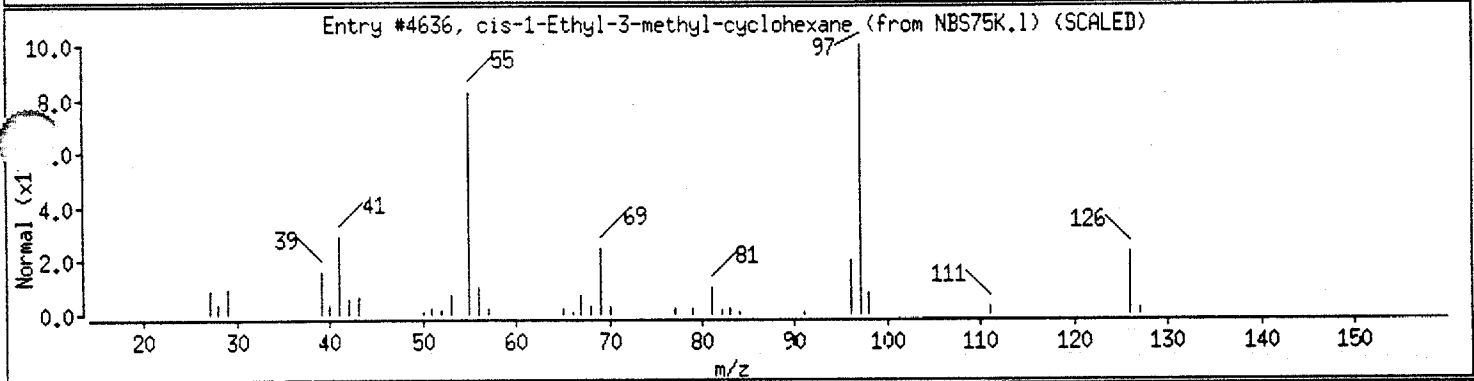
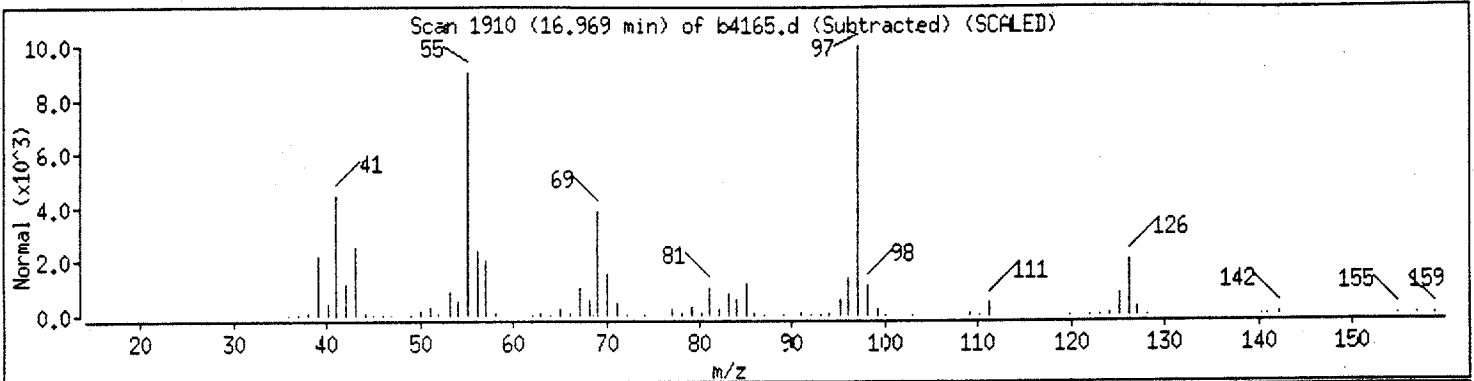
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
cis-1-Ethyl-3-methyl-cyclohexane	19489-10-2	NBS75K.1	4636	68
Cyclohexane, 1-ethyl-2-methyl-, trans-	4923-78-8	NBS75K.1	4650	68
Cyclohexane, 1-ethyl-4-methyl-, trans-	6236-88-0	NBS75K.1	64955	68



Data File: /chem/aux/msb.i/b062894.b/b4165.d

Date : 28-JUN-94 15:37

Instrument : msb.i

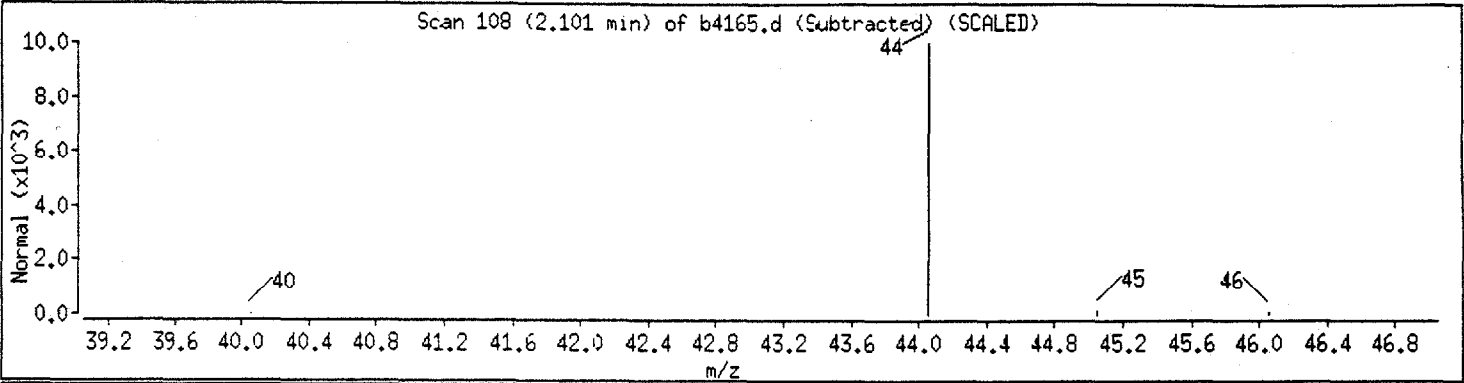
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ASC Contract: NelSA CU620

Lab Code: — Case No.: — SAS No.: — SDG No.: CU17

Matrix: (soil/water) soil Lab Sample ID: JM9437

Sample wt/vol: 0.50 (g/mL) g Lab File ID: C8181

Level: (low/med) LOW Date Received: 062394

‡ Moisture: not dec. 40% Date Analyzed: 062894

GC Column: DB-624 ID: .53 (mm) Dilution Factor: 1

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 5000 (uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/kg</u>	Q
74-87-3	-----Chloromethane	125	u
74-83-9	-----Bromomethane	125	u
75-01-4	-----Vinyl Chloride	125	u
75-00-3	-----Chloroethane	125	u
75-09-2	-----Methylene Chloride	79.2	BT
67-64-1	-----Acetone	1340	B
75-15-0	-----Carbon Disulfide	125	u
75-35-4	-----1,1-Dichloroethene	↓	↓
75-34-3	-----1,1-Dichloroethane	↓	↓
540-59-0	-----1,2-Dichloroethene (total)	↓	↓
67-66-3	-----Chloroform	654	↓
107-06-2	-----1,2-Dichloroethane	125	u
78-93-3	-----2-Butanone	↓	↓
71-55-6	-----1,1,1-Trichloroethane	↓	↓
56-23-5	-----Carbon Tetrachloride	216	↓
75-27-4	-----Bromodichloromethane	125	u
78-87-5	-----1,2-Dichloropropane	↓	↓
10061-01-5	-----cis-1,3-Dichloropropene	↓	↓
79-01-6	-----Trichloroethene	↓	↓
124-48-1	-----Dibromochloromethane	↓	↓
79-00-5	-----1,1,2-Trichloroethane	↓	↓
71-43-2	-----Benzene	↓	↓
10061-02-6	-----trans-1,3-Dichloropropene	↓	↓
75-25-2	-----Bromoform	↓	↓
108-10-1	-----4-Methyl-2-Pentanone	↓	↓
591-78-6	-----2-Hexanone	↓	↓
127-18-4	-----Tetrachloroethene	67.0	J
79-34-5	-----1,1,2,2-Tetrachloroethane	125	u
108-88-3	-----Toluene	64.8	J
108-90-7	-----Chlorobenzene	198	J
100-41-4	-----Ethylbenzene	58.5	J
100-42-5	-----Styrene	125	u
1330-20-7	-----Xylene (total)	228	↓

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: ASC Contract: NERSA C6620  
 Lab Code:      Case No.:      SAS No.:      SDG No.: C6617  
 Matrix: (soil/water) soil Lab Sample ID: JN9437  
 Sample wt/vol: 20 (g/mL) g Lab File ID: 108181  
 Level: (low/med) low Date Received: 062394  
 ‡ Moisture: not dec. 40 Date Analyzed: 062894  
 GC Column: DB-621 ID: 0.53 (mm) Dilution Factor: 1  
 Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 500 (uL)

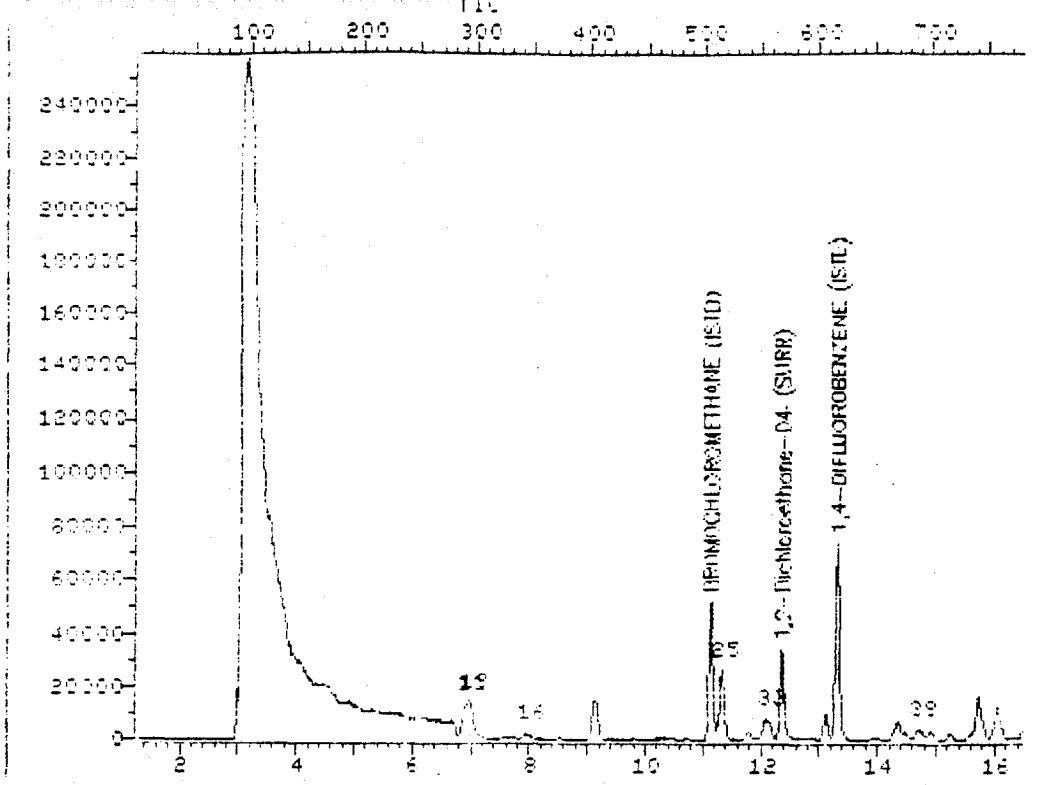
Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 111842	<del>Decane</del> Nonane	20.55	<del>121</del> 1210	J
2. 111659	Octane	17.04	<del>616</del> 616	J
3. 124185	Decane	23.35	<del>751</del> 751	J
4. 76131	1,1,2-Trichloro-1,2,2-Trifluoroethane	6.98	<del>799</del> 799	J
5.	Unknown hydrocarbon	19.30	<del>481</del> 481	J
6. 952036	1,2,4-Trimethylbenzene	24.09	<del>470</del> 470	J
7. 1120214	Undecane	25.69	<del>410</del> 410	J
8. 592278	2-methylheptane	15.74	<del>370</del> 370	J
9. 69102778	pentachloro-1-o-xylene	26.41	<del>371</del> 371	J
10. 61143	1-ethyl-2-methylbenzene	23.30	<del>330</del> 330	J
11.		23.15		
12.				
13.	1,1,2-Trichlorotrifluoroethane	6.94	384	X
14.	1,4-Dioxane	14.70	8889	X
15.	1,3,5-Trimethylbenzene	23.33	125	X
16.	1,2,4-Trimethylbenzene	24.09	417	X
17.	1,3-Dichlorobenzene	24.83	72.2	X
18.	1,2,4-Trichlorobenzene	28.56	179	X
19.	Naphthalene	29.03	69.7	X
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

## TOTAL ION CHROMATOGRAM

File: ^CR181 35.0-260.0 amu. 15226N C6620 JMS-370, N2/3670, 5:1



C6620

Data File: ^CR181::DF

Quant Output File: ^CR181::QT

Name: 15226N C6620

Misc: JMS370,N2/3670,5:M2,0.50,5:1,

Id File: IC628A::04

Title: MSD-C DB624 0.53mmX75m VOLATILE GC/MS

Last Calibration: 940628 12:19

Operator ID: USFRTSC

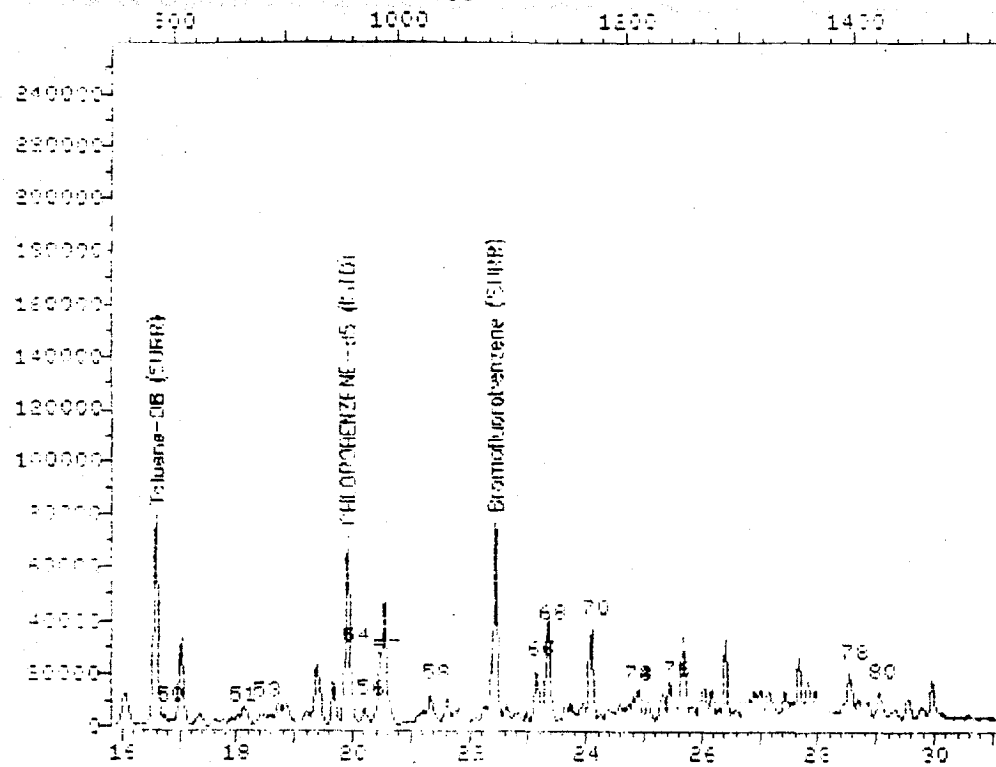
Quant Time: 940628 15:16

Injected at: 940628 14:25

Page 1 of 2

## TOTAL ION CHROMATOGRAM

File: 19181 36.0-260.0 amu. 100000. 06620 JMS4370, NSV3670, SIM  
TIC



C6620

Data File: \08181\1:06

Quant Output File: ^08181\1:QT

Name: 15224N 06620

Misc: JMS4370, NSV3670, SIM, 0.50, 5:1,

Id File: 10629A\1:04

Title: MSD-C DR404 0.53mmX75m VOLATILE GC/MS

Last Calibration: 940608 12:19

Operator ID: USERT60

Quant Time: 940608 15:16

Injected at: 940608 14:26

Page 2 of 2



QUANT REPORT

Operator ID: USERTSC  
 Output File: 008191:QT  
 Data File: 008191:DF  
 Name: 1902AN 0400  
 Mix: 1MP437U, NOUT620, 5:12, 0.50, 5:1

Quant Rev: 7      Quant Time: 940428 15:16  
 Injected at: 940428 14:35  
 Dilution Factor: 1.00000

Dywt. 20

ID File: 106284:04  
 Title: MSD-0 CB024 0.53mgM75% VOLATILE GC MS  
 Last Calibration: 940628 10:19

3-5-94

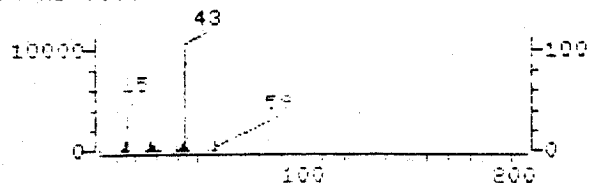
Compound	R.T.	Q ion	Area	Conc	Units	q
11) *BROMOCHLOROMETHANE (ISTD)	11.13	128.0	39317	50.00	ug/l	87
111) 1,1,2-Trichlorotrifluoroethane	6.94	101.0	32492	15.38	ug/l	86
171) Acetone	7.00	43.0	22790	53.61	ug/l	80
161) Methylene chloride	7.95	84.0	3444	3.17	ug/l	89
951) Chloroform	11.33	83.0	55919	25.17	ug/l	94
241) 1,2-Dichloroethane-C4 (EUPP)	12.76	65.0	64479	58.01	ug/l	95
391) *1,4-DIFLUOROBENZENE (ISTD)	13.32	114.0	178192	50.00	ug/l	94
331) Carbon tetrachloride	12.09	117.0	13906	8.66	ug/l	93
381) 1,4-Dioxane	14.70	88.0	13329	355.63	ug/l	94
481) *CHLOROBENZENE-D5 (ISTD)	19.91	117.0	107449	50.00	ug/l	92
491) Toluene-D8 (SUPP)	16.59	98.0	138260	58.75	ug/l	87
511) Toluene	16.75	92.0	4488	2.58	ug/l	94
511) Tetrachloroethylene	18.02	164.0	2882	2.68	ug/l	90
531) 2-Hexanone	18.45	43.0	4781	173.97	ug/l	56
541) Chlorobenzene	19.97	112.0	17346	7.90	ug/l	90
561) Ethylbenzene	20.22	106.0	2435	2.34	ug/l	97
571) m,p-Xylenes	20.48	106.0	12287	9.10	ug/l	90
581) o-Xylene	21.34	106.0	5472	4.26	ug/l	91
601) Bromofluorobenzene (SUPP)	22.43	95.0	61645	42.67	ug/l	79
641) o-Chlorotoluene	23.15	126.0	2480	2.73	ug/l	94
671) p-Chlorotoluene	23.15	126.0	2480	2.57	ug/l	94
681) 1,3,5-Trimethylbenzene	23.33	105.0	15131	4.99	ug/l	95
701) 1,2,4-Trimethylbenzene	24.09	105.0	48679	16.72	ug/l	80
731) 1,3-Dichlorobenzene	24.83	146.0	6046	2.89	ug/l	97
741) 1,4-Dichlorobenzene	24.83	146.0	6046	2.59	ug/l	97
761) n-Butylbenzene	25.47	91.0	8388	2.36	ug/l	53
781) 1,2,4-Trichlorobenzene	28.56	180.0	12926	7.17	ug/l	92
801) Naphthalene	29.03	128.0	10670	2.79	ug/l	88

\* Compound is ISTD

~~Report Only~~ 3-5-94

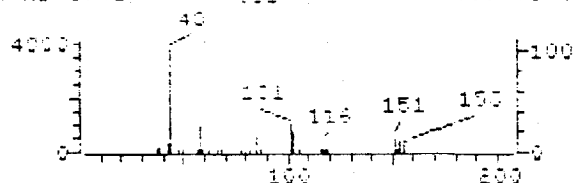
## REFERENCE STANDARD SPECTRUM

File DB01 NBS Rev. E Data B Scan 90  
 BOK AB 9999 90.00 min.



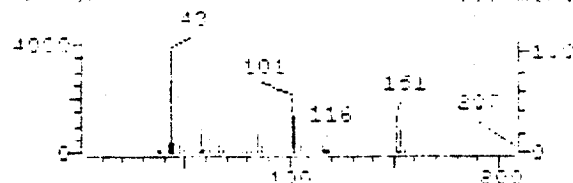
## SAMPLE SPECTRUM (SRI)-GROUND SUBTRACTED

File >08181 15226N 06620 Scan 293  
 Op. At 0741 50E 7.00 min.

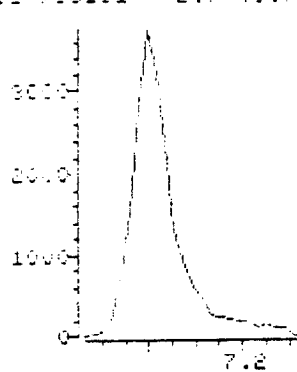


## SAMPLE SPECTRUM (VINA TERPES)

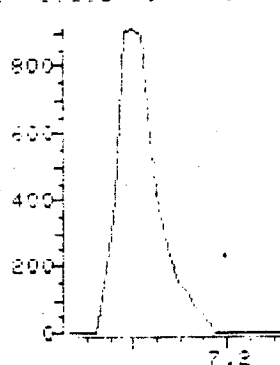
File >08181 15226N 06620 Scan 291  
 Op. At 0741 50E 7.00 min.



File >08181 42.7-43.7 am



File >08181 57.7-59.7 am



Data File: >08181::06

Quant Output File: >08181::QT

Name: 15226N 06620

Misc: JMP437U,NQ43670,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 17

Compound Name: Acetone

Scan Number: 293

Retention Time: 7.00 min.

Quant Ion: 43.0

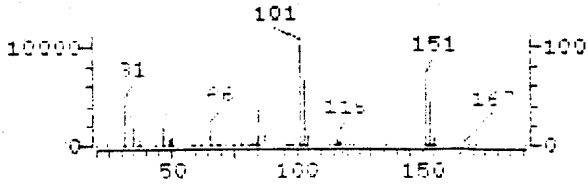
Area: 22790

Concentration: 53.61 ug/l

q-value: 80

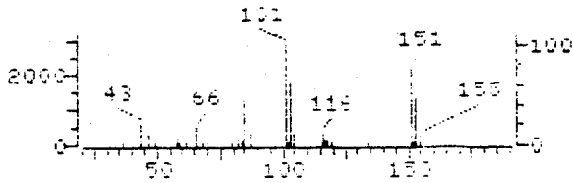
REFERENCE STANDARD SPECTRUM

File: 08181 15226N 0652V Scan: 290  
 Exp. Ab: 9999 13367.00 min.



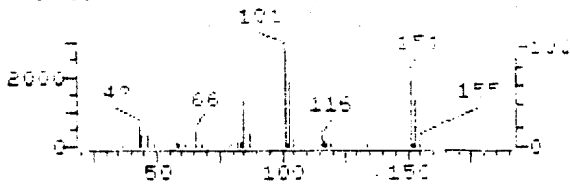
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 08181 15226N 0652V Scan: 290  
 Exp. Ab: 9999 6.94 min.

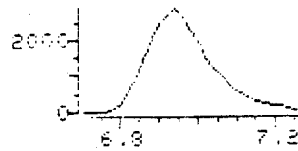


SAMPLE SPECTRUM (UNSUBTRACTED)

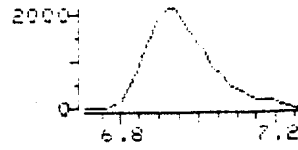
File: 08181 15226N 0652V Scan: 290  
 Exp. Ab: 9999 6.94 min.



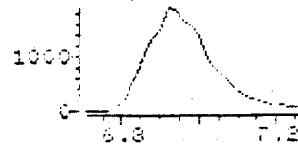
File: 08181 100.7-101.7



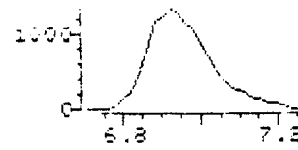
File: 08181 150.7-151.7



File: 08181 100.7-100.7



File: 08181 152.7-153.7



Data File: 08181::05

Quant Output File: 08181::QT

Name: 15226N 0652V

Misc: JMR4370,N203670,S:02,0.50,6:1,

Quant Time: 940628 15:16

Quant ID File: IC629A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 11

Compound Name: 1,1,2-Trichlorotrifluoroethane

Scan Number: 290

Retention Time: 6.94 min.

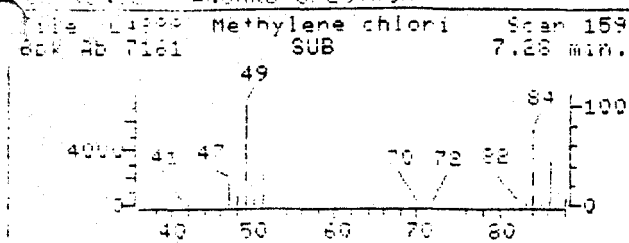
Quant Ion: 101.0

Area: 32492

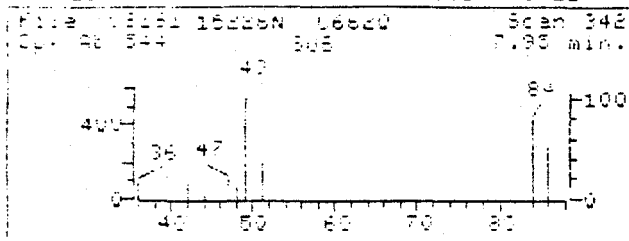
Concentration: 15.38 ug/l

q-value: 86

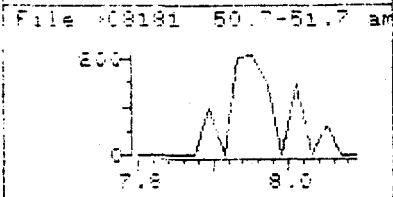
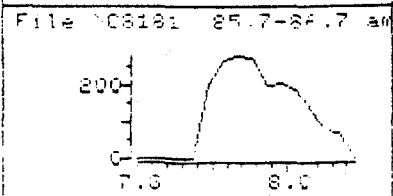
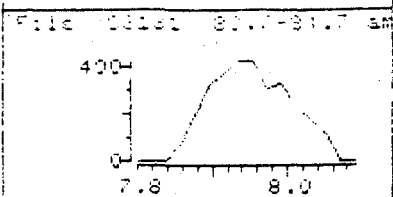
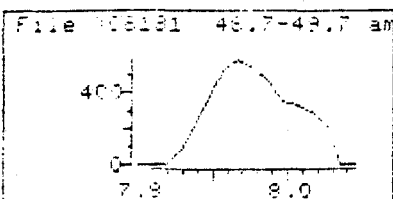
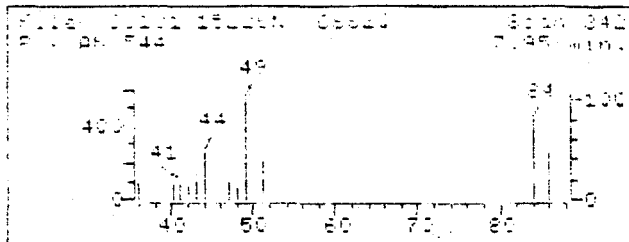
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: ^08181::DF

Quant Output File: ^08181::QT

Name: 15226N C6620

Misc: JMR437U,N2U3670,S:MO,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 16

Compound Name: Methylene chloride

Scan Number: 342

Retention Time: 7.95 min.

Quant Ion: 84.0

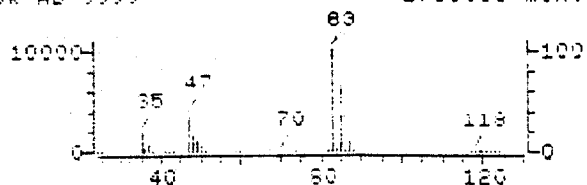
Area: 3444

Concentration: 3.17 ug/l

q-value: 89

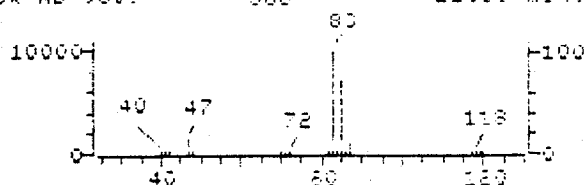
## REFERENCE STANDARD SPECTRUM

File >DBMS NBS Rev. E Data B Scan 2738  
Bpk Ab 9999 2738.00 min.



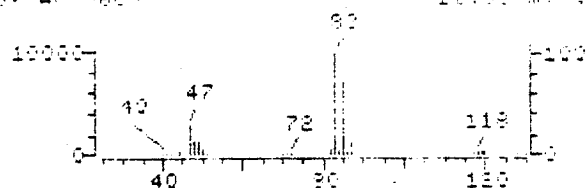
## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >CR181 15226N 0662V Scan 515  
Bpk Ab 3000 SUE 11.33 min.

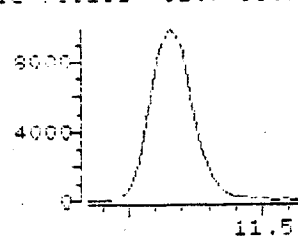


## SAMPLE SPECTRUM (UNSUBTRACTED)

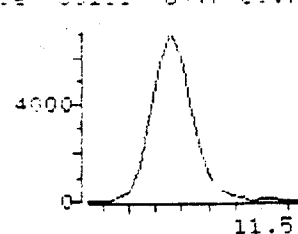
File >CR181 15226N 0662V Scan 515  
Bpk Ab 3800 11.33 min.



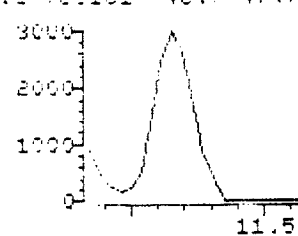
File >CR181 82.7-83.7 am



File >CR181 84.7-85.7 am



File >CR181 46.7-47.7 am



Data File: >CR181::DF

Quant Output File: >CR181::QT

Name: 15226N 0662V

Misc: JMP4370,N203670,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 25

Compound Name: Chloroform

Scan Number: 515

Retention Time: 11.33 min.

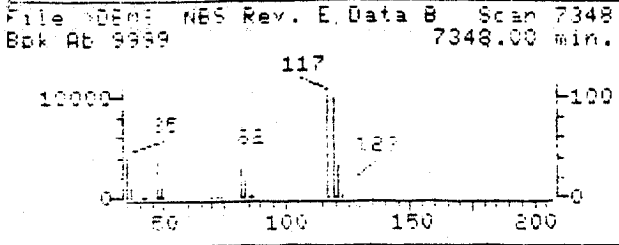
Quant Ion: 83.0

Area: 55919

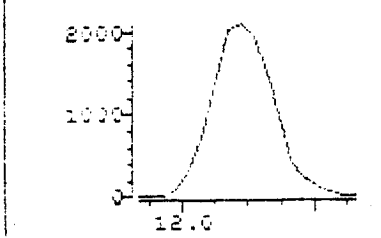
Concentration: 26.17 ug/l

q-value: 96

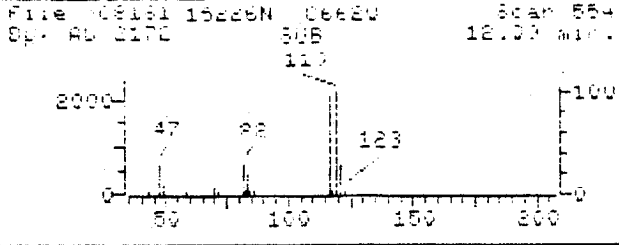
REFERENCE STANDARD SPECTRUM



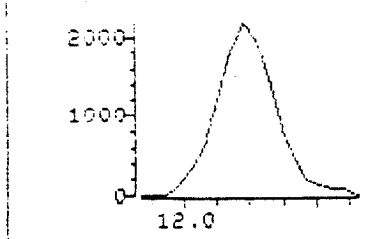
File: ^C8181 116.7-117.7



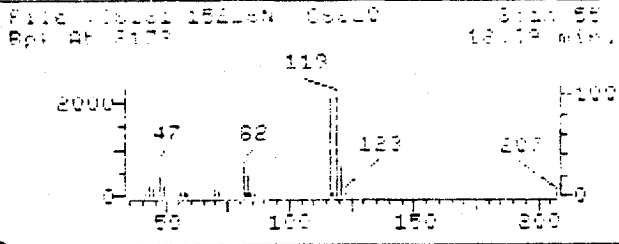
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



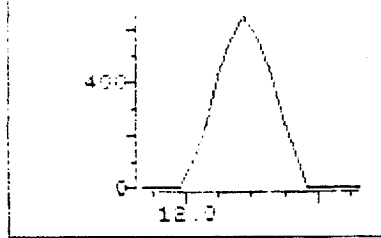
File: ^C8181 118.7-119.7



SAMPLE SPECTRUM (UNADJUSTED)



File: ^C8181 120.7-121.7



Data File: ^C8181::OF

Quant Output File: ^C8181::QT

Name: 15226N D6620

Misc: JM94370,N203670,S:M2,0.50,5:1,

Quant Time: 940628 15:15

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 33

Compound Name: Carbon tetrachloride

Scan Number: 554

Retention Time: 12.09 min.

Quant Ion: 117.0

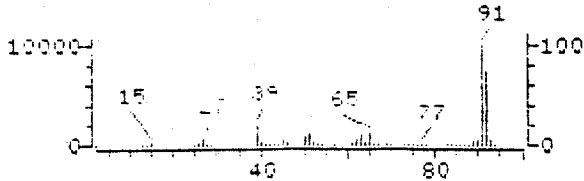
Area: 13906

Concentration: 8.66 ug/l

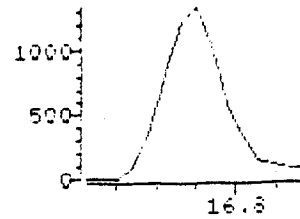
q-value: 93

## REFERENCE STANDARD SPECTRUM

File >DB003 NBS Rev. E Data B Scan 839  
Bpk At 9399 839.00 min.

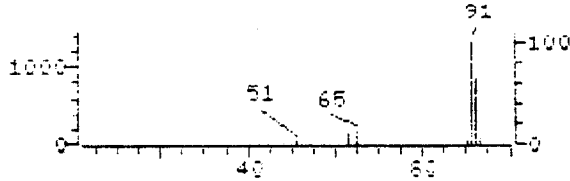


File >C8181 90.7-91.7 am

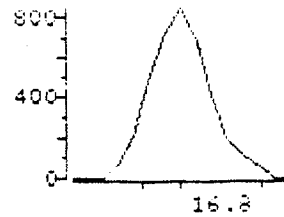


## SAMPLE SPECTRUM (NBS:GROUND SUBTRACTED)

File >C8181 15226N 06620 Scan 793  
Bpk At 1324 306 16.75 min.

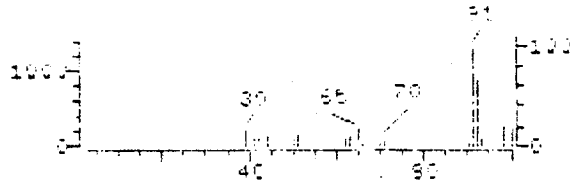


File >C8181 91.7-92.7 am

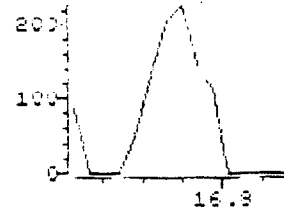


## SAMPLE SPECTRUM (UNSUBTRACTED)

File >C8181 15226N 06620 Scan 793  
Bpk At 1324 306 16.75 min.



File >C8181 84.7-85.7 am



Data File: >C8181::05

Quant Output File: >C8181::QT

Name: 15226N 06620

Misc: JM94370,N203670,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::04

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 50

Compound Name: Toluene

Scan Number: 793

Retention Time: 16.75 min.

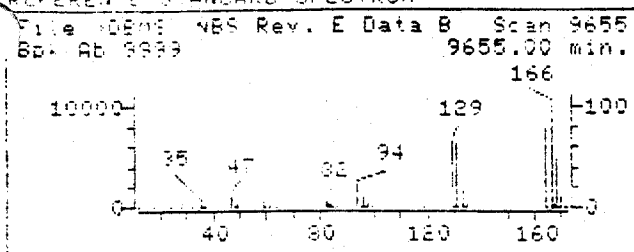
Quant Ion: 92.0

Area: 4088

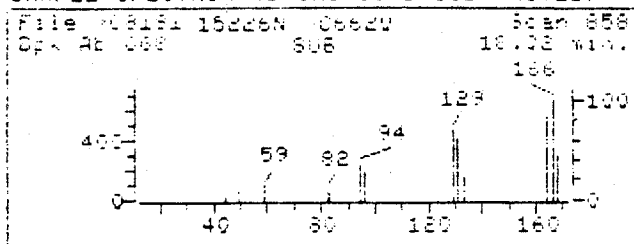
Concentration: 2.58 ug/l

q-value: 94

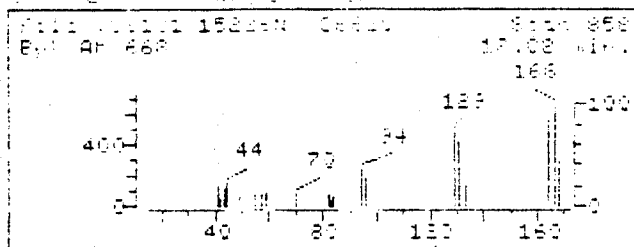
## REFERENCE STANDARD SPECTRUM



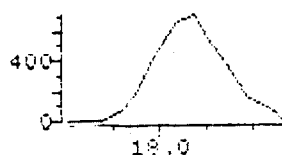
## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNINTEGRATED)



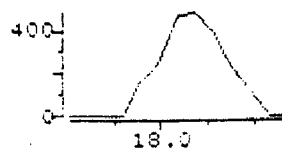
File &gt;08181 165.7-166.7



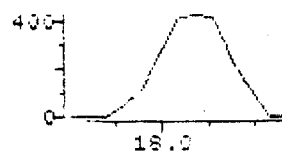
File &gt;08181 161.7-164.7



File &gt;08181 129.7-129.7



File &gt;08181 131.7-131.7



Data File: &gt;08181:IDF

Quant Output File: &gt;08181::QT

Name: 15224N C662U

Misc: JMR437U,N2U3A70,S:M2,0.50,5:1,

Quant Time: 940628 18:16

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: F1

Compound Name: Tetrachloroethylene

Scan Number: 858

Retention Time: 18.02 min.

Quant Ion: 164.0

Area: 2992

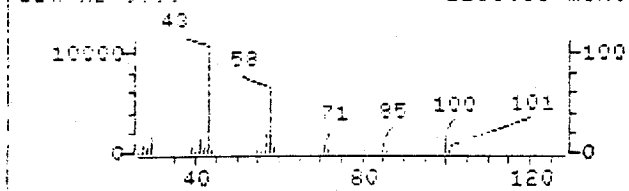
Concentration: 2.48 ug/l

q-value: 90

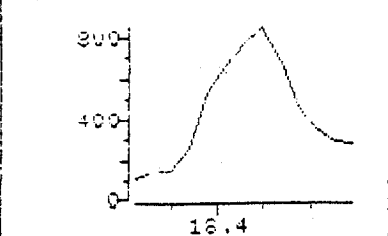


## REFERENCE STANDARD SPECTRUM

File: 08181 NBS Rev. E Data B Scan 1283  
 Bot At 9999 1283.00 min.

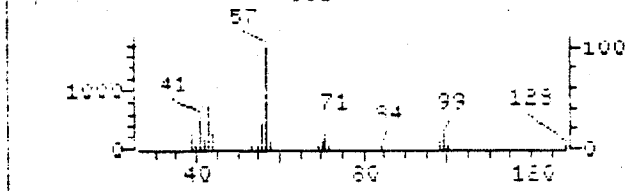


File: ^08181 42.7-43.7 am

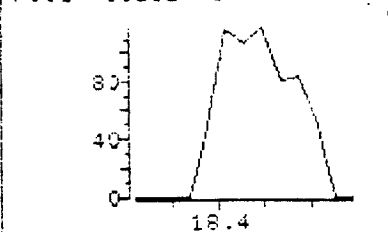


## SAMPLE SPECTRUM - BACKGROUND SUBTRACTED

File: ^08181 15226N 0682U Scan 880  
 Bot At 1754 505 18.45 min.

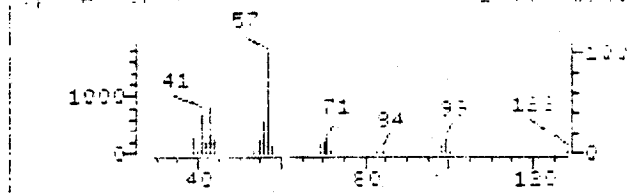


File: ^08181 57.7-59.7 am

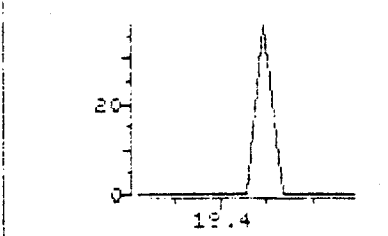


## SAMPLE SPECTRUM - UNADJUSTED

File: ^08181 15226N 0682U Scan 880  
 Bot At 1754 505 18.45 min.



File: ^08181 90.7-100.7 am



Data File: ^08181::05

Quant Output File: ^08181::QT

Name: 15226N 0682U

Misc: JM9437U,N213870,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::04

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 53

Compound Name: 2-Hexanone

Scan Number: 880

Retention Time: 18.45 min.

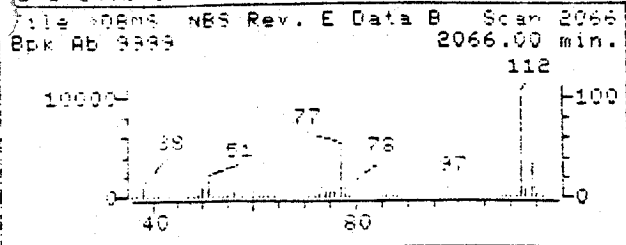
Quant Ion: 43.0

Area: 4781

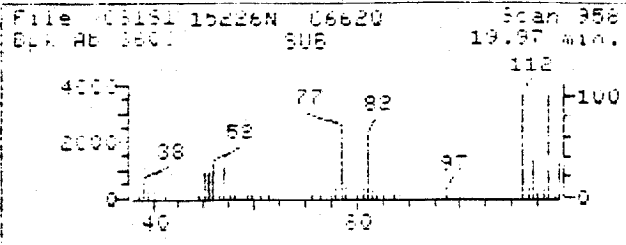
Concentration: 3.97 ug/l

q-value: 56

REFERENCE STANDARD SPECTRUM



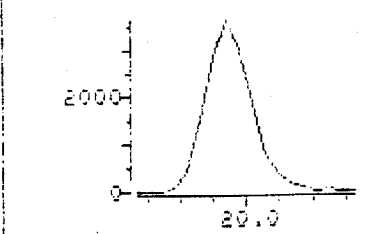
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



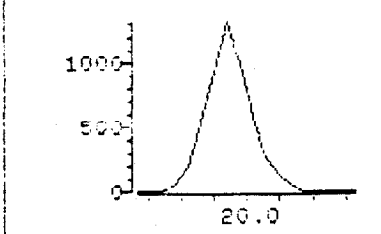
SAMPLE SPECTRUM (UNSUBTRACTED)



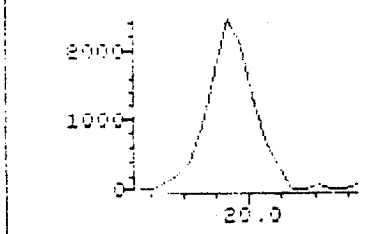
File 00181 111.7-112.7



File 00181 113.7-114.7



File 00181 78.7-77.7 am



Data File: >00181::06

Quant Output File: ^00181::QT

Name: 15226N 06620

Misc: JMW4370,NM43670,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 54

Compound Name: Chlorobenzene

Scan Number: 958

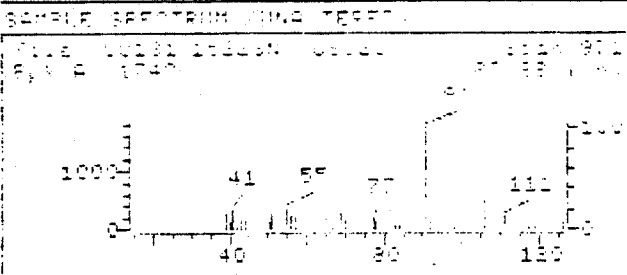
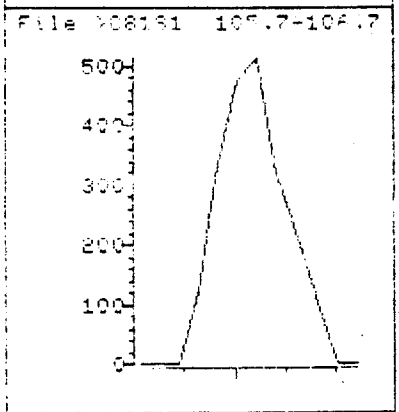
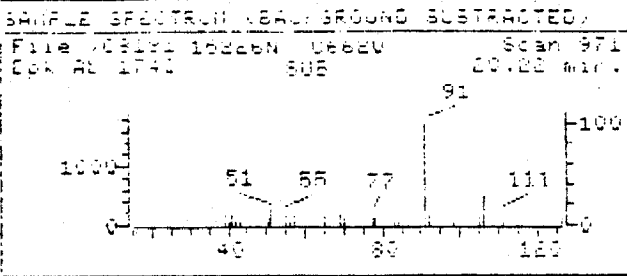
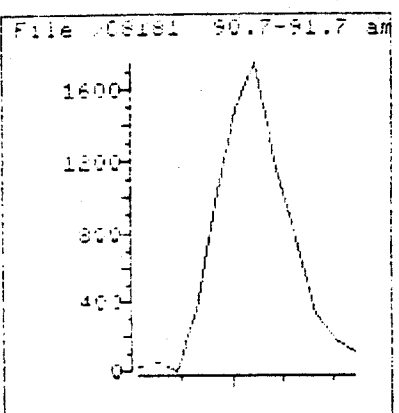
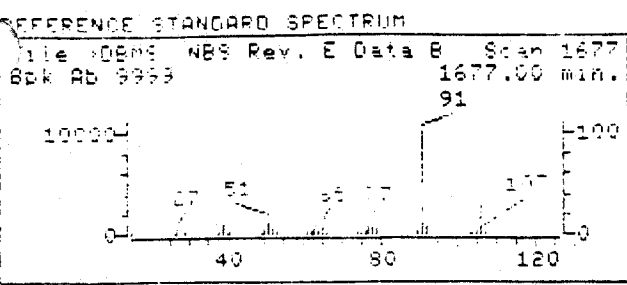
Retention Time: 19.97 min.

Quant Ion: 112.0

Area: 17346

Concentration: 7.90 ug/l

q-value: .90



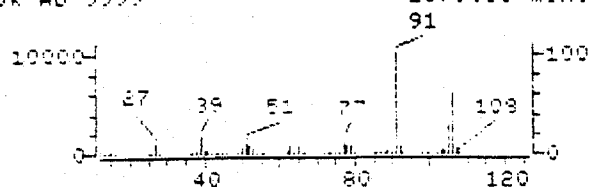
Date File: >08181::05  
 Name: 150264 C5620  
 Misc: JM94370,N203670,S:M2,0.50,5:1,  
 Quant Time: 940628 15:16  
 Injected at: 940628 14:25

Quant Output File: >08181::QT  
 Quant ID File: IC628A::04  
 Last Calibration: 940628 12:19

Compound No: 56  
 Compound Name: Ethylbenzene  
 Scan Number: 971  
 Retention Time: 20.22 min.  
 Quant Ion: 106.0  
 Area: 2435  
 Concentration: 2.74 ug/l  
 q-value: 97

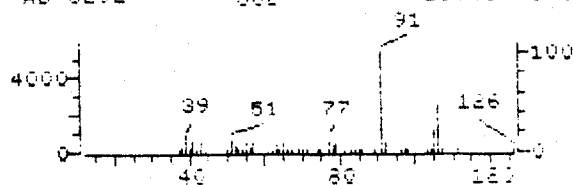
## REFERENCE STANDARD SPECTRUM

File: NBSMS NBS Rev. E Data B Scan 1679  
 Bok Ab 9999 1679.00 min.



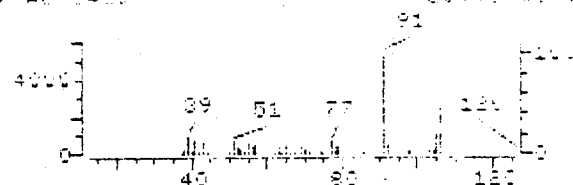
## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: C08181 15226N C6620 Scan 984  
 Cp. Ab 5202 806 20.40 min.

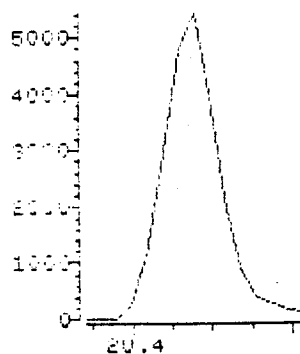


## SIMPLE SPECTRUM (UNADJUSTED)

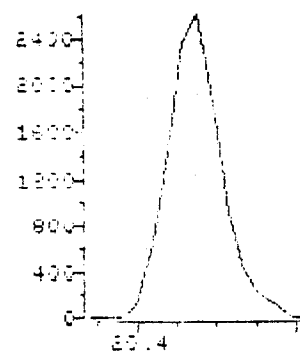
File: C08181 15226N C6620 Scan 984  
 Bok Ab 5410 806 20.48 min.



File: C08181 20.7-31.7 am



File: C08181 105.7-106.7



Data File: >C08181::OF

Quant Output File: >C08181::QT

Name: 15226N C6620

Misc: JM94370,N043870,6:MC,0.50,5:1,

Quant Time: 940628 15:15

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 57

Compound Name: m,p-Xylenes

Scan Number: 984

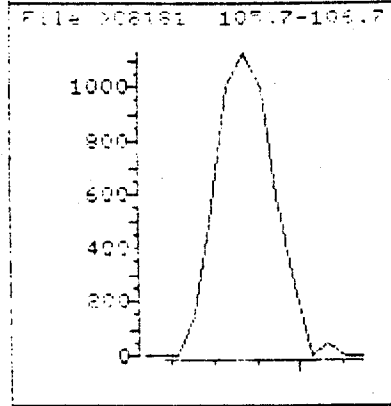
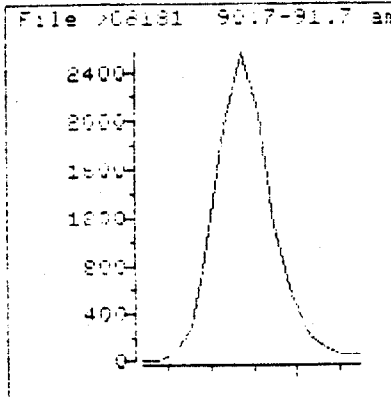
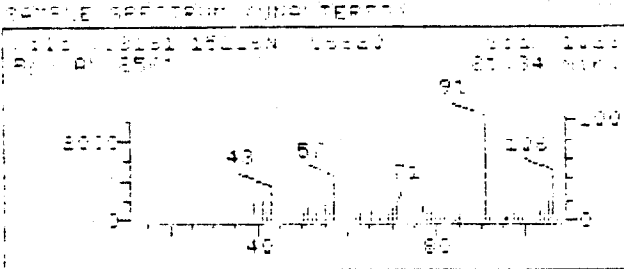
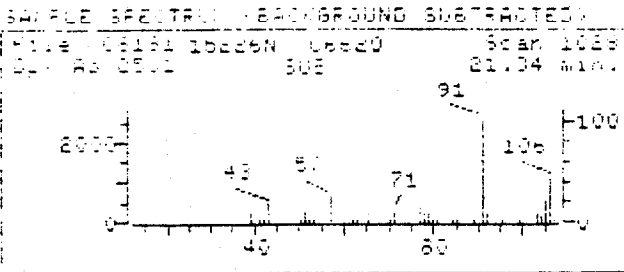
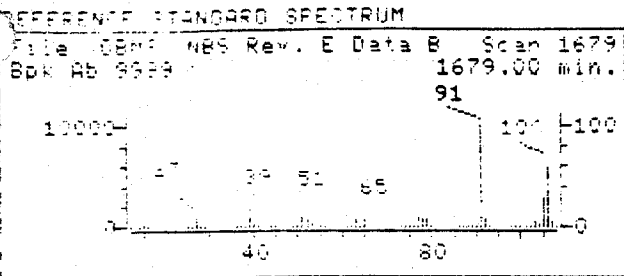
Retention Time: 20.48 min.

Quant Ion: 106.0

Area: 12387

Concentration: 9.10 ug/l

q-value: 90



Data File: IC628A::05  
 Name: 1522AN CA600  
 Misc: JMP437U,N2U3670,S:M2,0.50,5:1,  
 Quant Time: 940628 15:14  
 Injected at: 940628 14:25

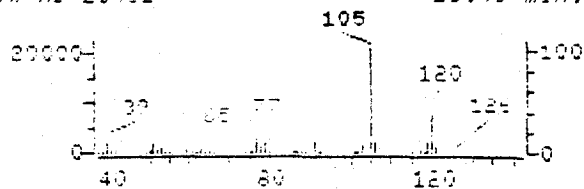
Quant Output File: IC628A::QT

Compound No: 58  
 Compound Name: o-Xylene  
 Scan Number: 1008  
 Retention Time: 21.34 min.  
 Quant Ion: 106.0  
 Area: 5472  
 Concentration: 4.26 ug/l  
 q-value: 91

Quant ID File: IC628A::D4  
 Last Calibration: 940628 12:19

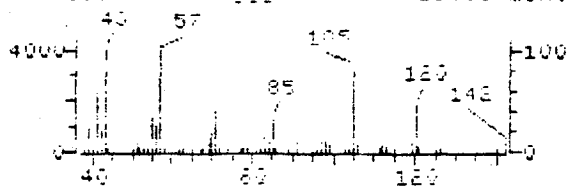
## REFERENCE STANDARD SPECTRUM

File: 107011 WSTD20 10-22-9 Scan: 893  
 Pk: Ab: 20432 13.46 min.



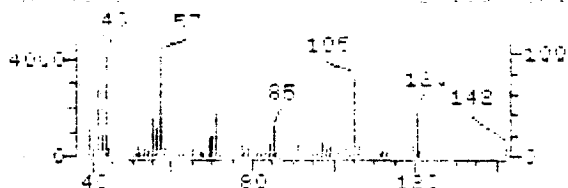
## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File: 10818 15000N 0602V Scan: 1170  
 Cp: Ab: 2014 308 23.33 min.

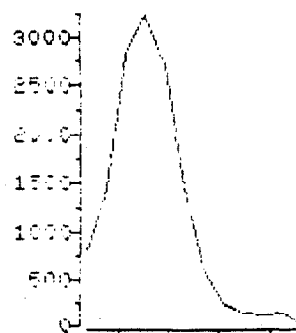


## SAMPLE SPECTRUM (UNDETERMINED)

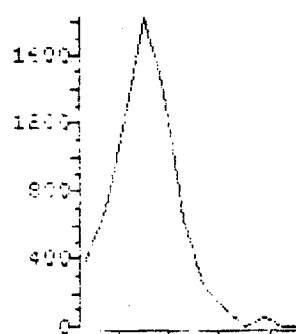
File: 10818 15000N 0602V Scan: 1170  
 Cp: Ab: 2014 308 23.33 min.



File: 108181 104.7-106.7



File: 108181 113.7-120.7



Data File: 108181::DF

Quant. Output File: 108181::QT

Name: 152264 06620

Misc: JM94370,N203670,S:M2,0.50,5:1,

Quant. Time: 940628 15:16

Quant. ID File: 10628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 69

Compound Name: 1,3,5-Trimethylbenzene

Scan Number: 1170

Retention Time: 23.33 min.

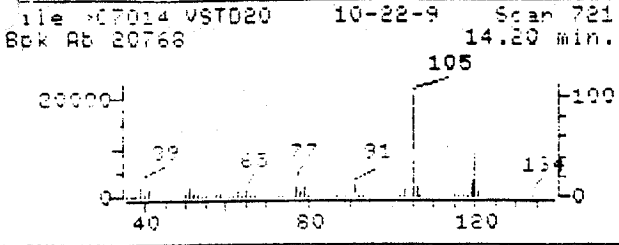
Quant. Ion: 105.0

Area: 15131

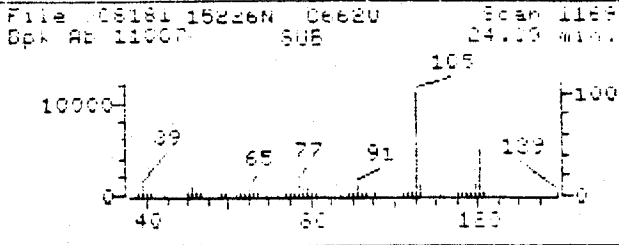
Concentration: 4.99 ug/l

q-value: 95

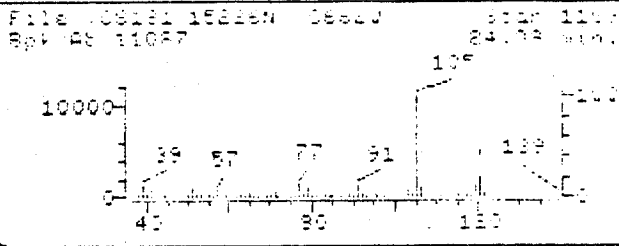
REFERENCE STANDARD SPECTRUM



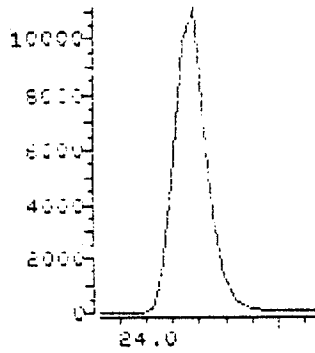
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



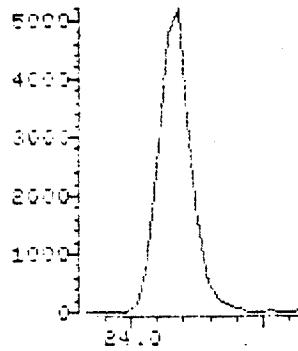
SAMPLE SPECTRUM (UNADJUSTED)



File >C8181 104.7-106.7



File >C8181 118.7-120.7



Data File: >C8181::DF

Quant Output File: ^C8181::QT

Name: 15226N C662U

Misc: JM9437U,N2U3670,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::D4

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 70

Compound Name: 1,2,4-Trimethylbenzene

Scan Number: 1169

Retention Time: 24.09 min.

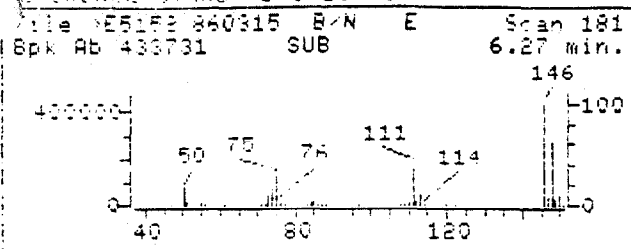
Quant Ion: 105.0

Area: 48679

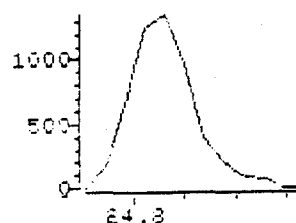
Concentration: 16.72 ug/l

q-value: 82

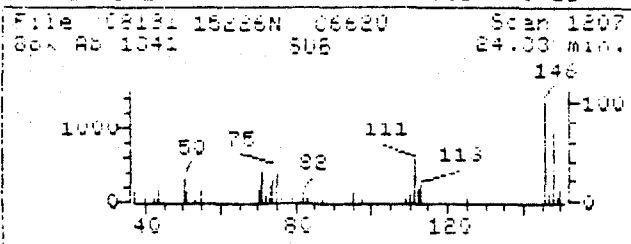
## REFERENCE STANDARD SPECTRUM



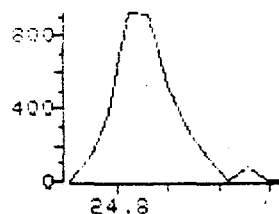
File &gt;C8181 146.7-146.7



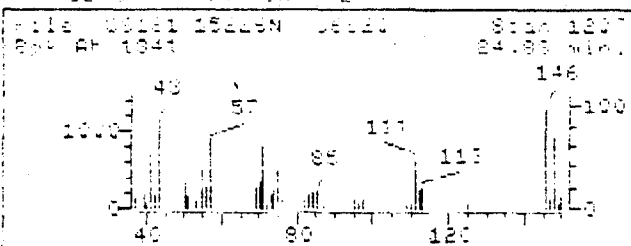
## SAMPLE SPECTRUM BACKGROUND SUBTRACTED



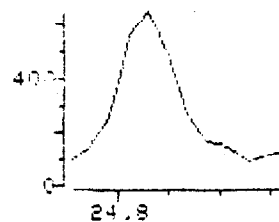
File &gt;C8181 147.7-148.7



## SAMPLE SPECTRUM UNALTERED



File &gt;C8181 110.7-111.7



Data File: &gt;C8181::DF

Quant Output File: ^C8181::QT

Name: 15226N C6620

Misc: JM94370,N203670,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::04

Injected at: 940628 14:25

Last Calibration: 940628 12:19

Compound No: 73

Compound Name: 1,3-Dichlorobenzene

Scan Number: 1207

Retention Time: 24.83 min.

Quant Ion: 146.0

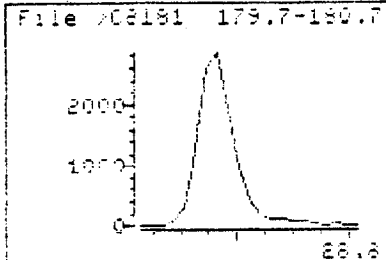
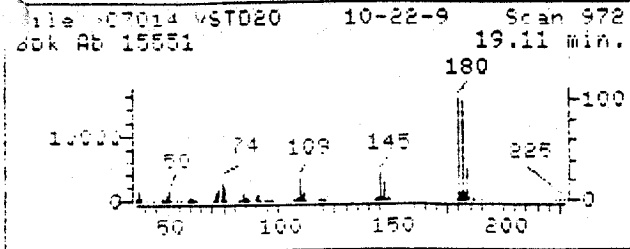
Area: 6046

Concentration: 2.89 ug/l

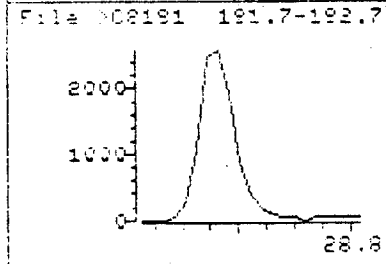
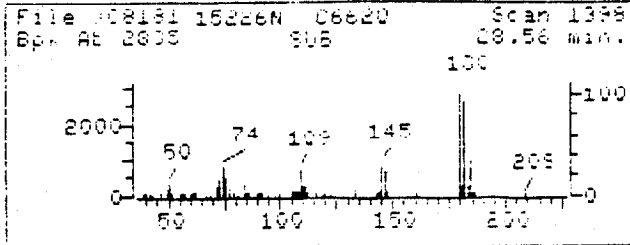
q-value: 97



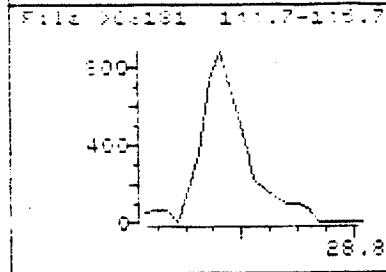
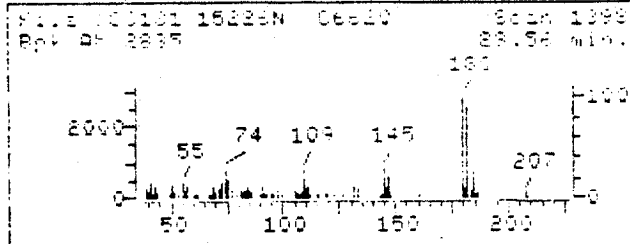
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

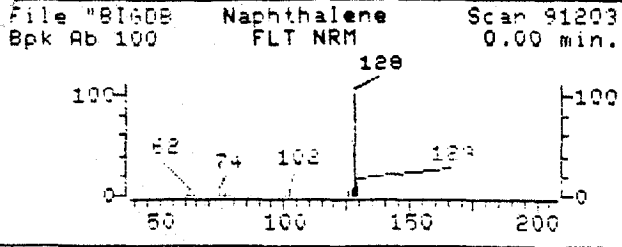


Data File: >C8181::DF  
 Name: 15226N 06620  
 Misc: JMP4370,N207670,5:M2,0.50,5:1,  
 Quant Time: 940628 15:16  
 Injected at: 940628 14:29

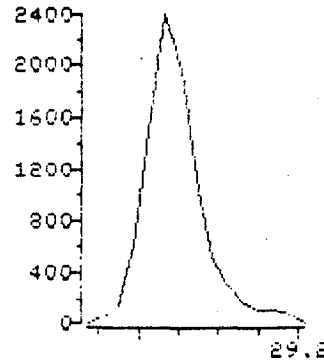
Quant Output File: >C8181::QT  
 Quant ID File: 10628A::D4  
 Last Calibration: 940628 12:19

Compound No: 78  
 Compound Name: 1,2,4-Trichlorobenzene  
 Scan Number: 1398  
 Retention Time: 28.56 min.  
 Quant Ion: 180.0  
 Area: 12926  
 Concentration: 7.17 ug/l  
 q-value: 92

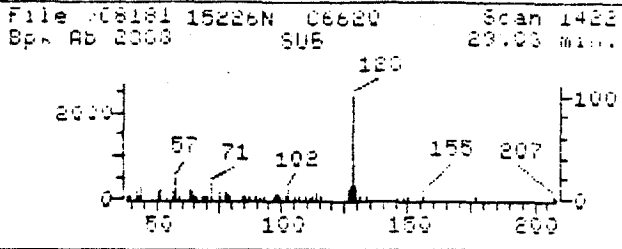
REFERENCE STANDARD SPECTRUM



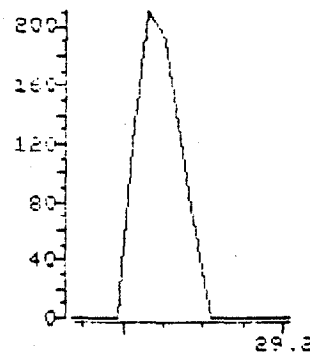
File >C8181 127.7-128.7



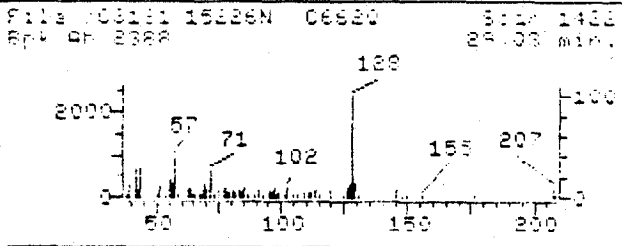
SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



File >C8181 101.7-102.7



SAMPLE SPECTRUM (UNADJUSTED)



Data File: >C8181::DF

Quant Output File: ^C8181::QT

Name: 15226N C6620

Misc: JM9437U,N2U3270,S:M2,0.50,5:1,

Quant Time: 940628 15:16

Quant ID File: IC628A::D4

Injected at: 940628 14:29

Last Calibration: 940628 12:19

Compound No: 80

Compound Name: Naphthalene

Scan Number: 1422

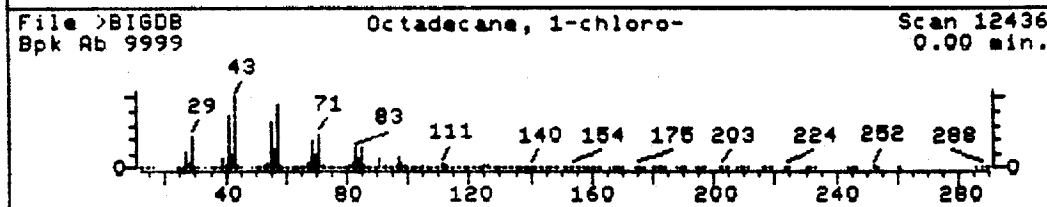
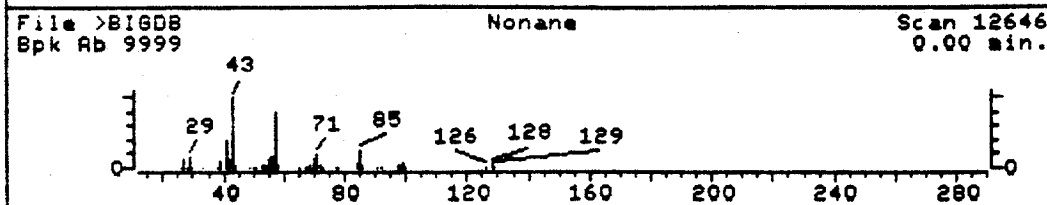
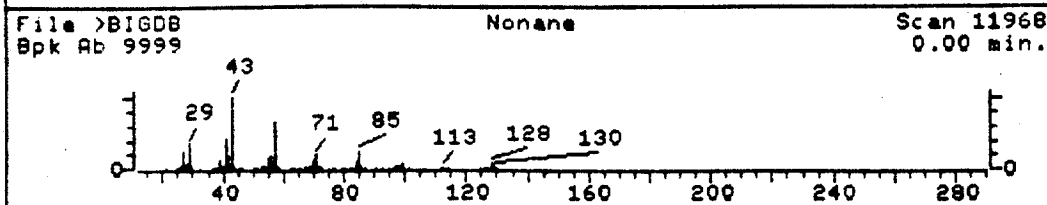
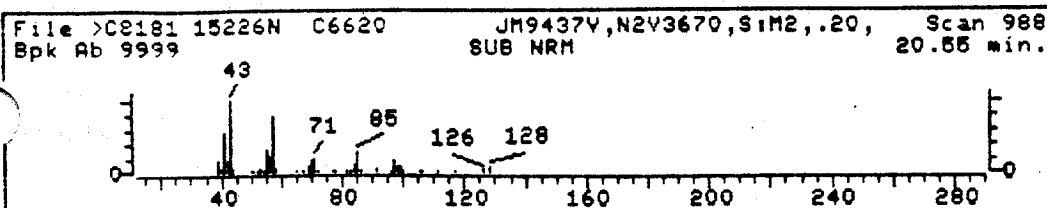
Retention Time: 29.03 min.

Quant Ion: 128.0

Area: 10670

Concentration: 2.79 ug/l

q-value: 88

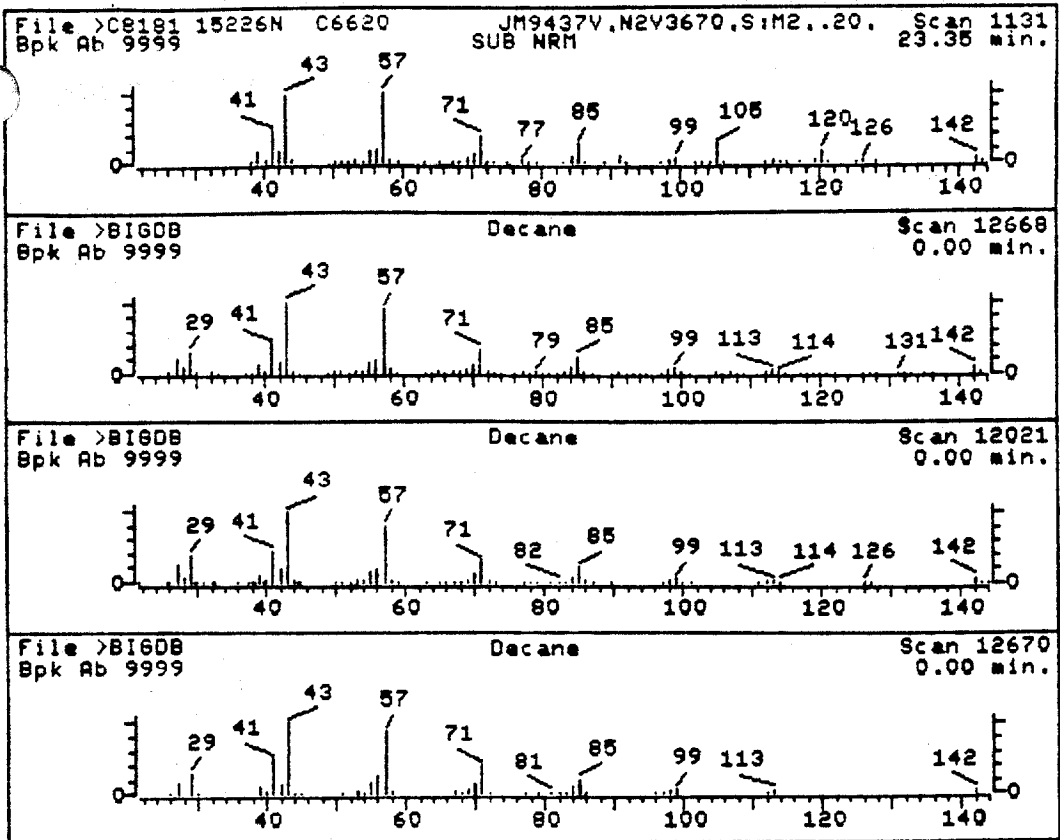


Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437V,N2V3670,S:M2,.20,5:1,  
 RT (min): 20.55  
 Scan: 988  
 Area: 365917 Rank: 4  
 Semi-quantitative Conc (uncorrected): 48.27 ug/l  
 Semi-quantitative Conc (corrected): 241.37 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.91 minutes

- |                          |              |
|--------------------------|--------------|
| 1. Nonane                | 128 C9H20    |
| 2. Nonane                | 128 C9H20    |
| 3. Octadecane, 1-chloro- | 288 C18H37Cl |

Sample file: >C8181 Spectrum #: 988  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 54

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	111842	11968	"BIGDB	83	13	0	0	98	8	68 95
	83*	111842	12646	"BIGDB	63	32	0	0	83	13	51 76
	70	3386332	12436	"BIGDB	72	75	3	0	73	8	42 12



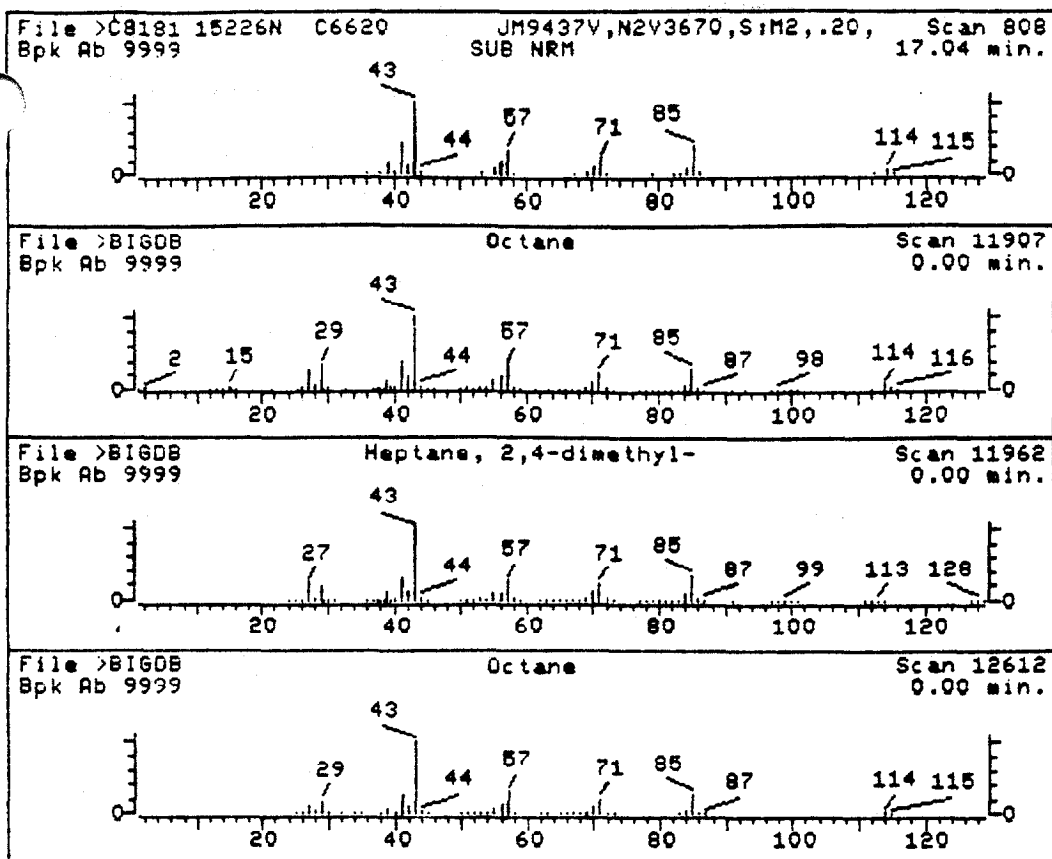
Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437U,N2U3670,S:M2,.20,5:1,  
 RT (min): 23.35  
 Scan: 1131  
 Area: 227755 Rank: 5  
 Semi-quantitative Conc (uncorrected): 30.05 ug/l  
 Semi-quantitative Conc (corrected): 150.24 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.91 minutes

*x.005=.751*

- 1. Decane 142 C10H22
- 2. Decane 142 C10H22
- 3. Decane 142 C10H22

Sample file: >C8181 Spectrum #: 1131  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 63

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	124185	12668	"BIGDB	91	9	0	0	84	13	64 96
	95*	124185	12021	"BIGDB	89	8	0	0	90	13	64 96
	93*	124185	12670	"BIGDB	77	22	0	0	77	18	60 93



Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437U,N2U3670,S:M2,.20,5:1,  
 RT (min): 17.04  
 Scan: 808  
 Area: 186856 Rank: 6  
 Semi-quantitative Conc (uncorrected): 24.65 ug/l  
 Semi-quantitative Conc (corrected): 123.26 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.91 minutes

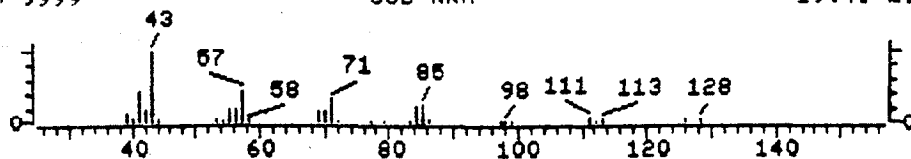
*Handwritten:*  $\times .005 = .616$

- |                           |           |
|---------------------------|-----------|
| 1. Octane                 | 114 C8H18 |
| 2. Heptane, 2,4-dimethyl- | 128 C9H20 |
| 3. Octane                 | 114 C8H18 |

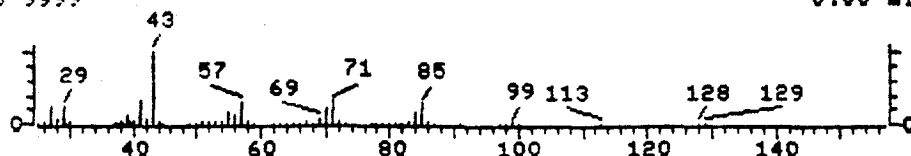
Sample file: >C8181 Spectrum #: 808  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	95*	111659	11907	"BIGDB	81	12	0	0	90	1	72	95
	76	2213232	11962	"BIGDB	60	32	2	0	100	9	45	21
	70*	111659	12612	"BIGDB	71	18	1	0	116	45	24	77

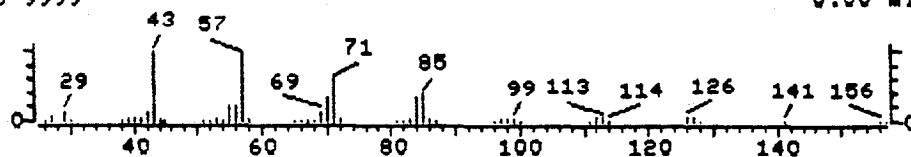
File >C8181 15226N C6620 JM9437U,N2V3670,S:M2,.20, Scan 929  
 Bpk Ab 9999 SUB NRM 19.40 min.



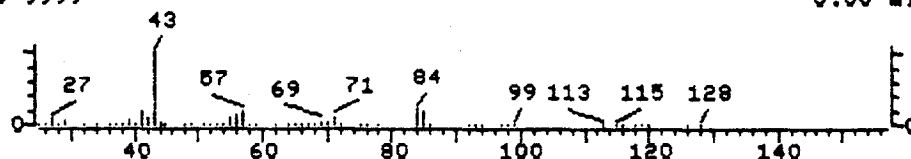
File >BIGDB Hexane, 2,3,4-trimethyl- Scan 11960  
 Bpk Ab 9999 0.00 min.



File >BIGDB Nonane, 4,5-dimethyl- Scan 12086  
 Bpk Ab 9999 0.00 min.



File >BIGDB Heptane, 2,3-dimethyl- Scan 12644  
 Bpk Ab 9999 0.00 min.



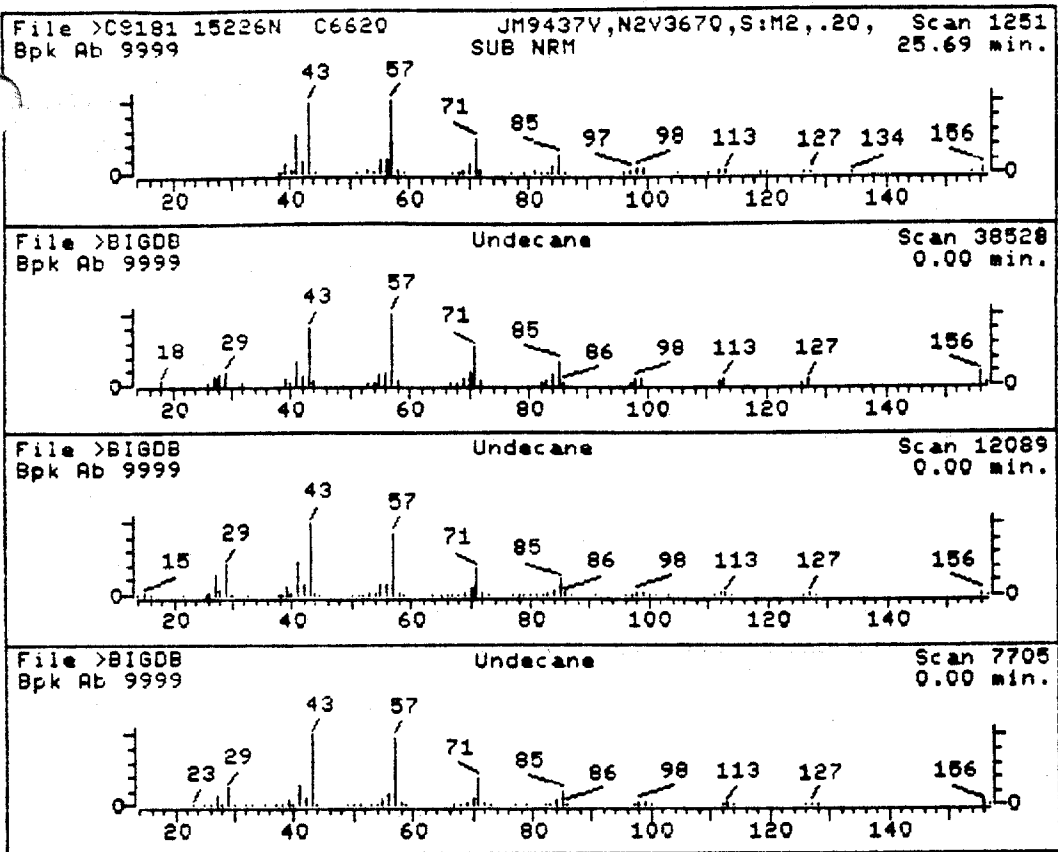
Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437U,N2V3670,S:M2,.20,5:1,  
 RT (min): 19.40  
 Scan: 929  
 Area: 145720 Rank: 9  
 Semi-quantitative Conc (uncorrected): 19.22 ug/l  
 Semi-quantitative Conc (corrected): 96.12 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.91 minutes

*X.005 .481*

- |                             |            |
|-----------------------------|------------|
| 1. Hexane, 2,3,4-trimethyl- | 128 C9H20  |
| 2. Nonane, 4,5-dimethyl-    | 156 C11H24 |
| 3. Heptane, 2,3-dimethyl-   | 128 C9H20  |

Sample file: >C8181 Spectrum #: 929  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 55

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	58*	921471	11960	"BIGDB	39	51	0	0	86	34	22	43
	58	17302237	12086	"BIGDB	61	29	2	0	48	18	25	21
	50*	3074713	12644	"BIGDB	36	52	0	0	100	40	17	39



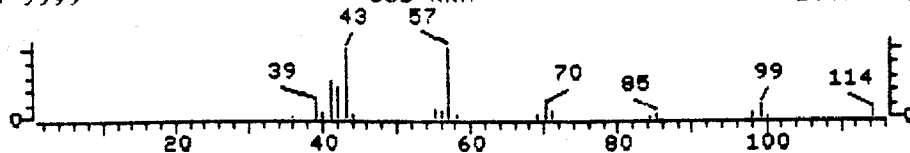
Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437U,N2U3670,S:M2,.20,5:1,  
 RT (min): 25.69  
 Scan: 1251  
 Area: 124436 Rank: 12  
 Semi-quantitative Conc (uncorrected): 16.42 ug/l  
 Semi-quantitative Conc (corrected): 82.08 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.91 minutes

- |             |            |
|-------------|------------|
| 1. Undecane | 156 C11H24 |
| 2. Undecane | 156 C11H24 |
| 3. Undecane | 156 C11H24 |

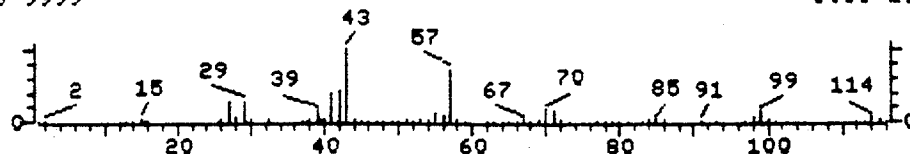
Sample file: >C8181 Spectrum #: 1251  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 57

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	95*	1120214	38528	"BIGDB	97	11	0	4	89	5	72 93
	95*	1120214	12089	"BIGDB	83	14	0	0	97	2	72 95
	89*	1120214	7705	"BIGDB	65	31	0	0	97	3	66 78

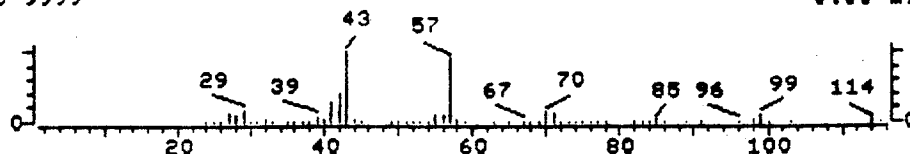
File >C8181 15226N C6620 JM9437U,N2V3670,S:M2,.20, Scan 741  
 Bpk Ab 9999 SUB NRM 15.74 min.



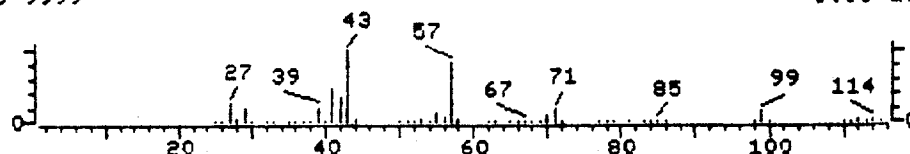
File >BIGDB Heptane, 2-methyl- Scan 18916  
 Bpk Ab 9999 0.00 min.



File >BIGDB Heptane, 2-methyl- Scan 18543  
 Bpk Ab 9999 0.00 min.



File >BIGDB Hexane, 2,5-dimethyl- Scan 18544  
 Bpk Ab 9999 0.00 min.



Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437U,N2U3670,S:M2,.20,5:1,  
 RT (min): 15.74  
 Scan: 741  
 Area: 117529 Rank: 13  
 Semi-quantitative Conc (uncorrected): 14.94 ug/l  
 Semi-quantitative Conc (corrected): 74.68 ug/kg  
 Calculated using Istd: 1,4-DIFLUOROBENZENE (ISTD) @ 13.32 minutes

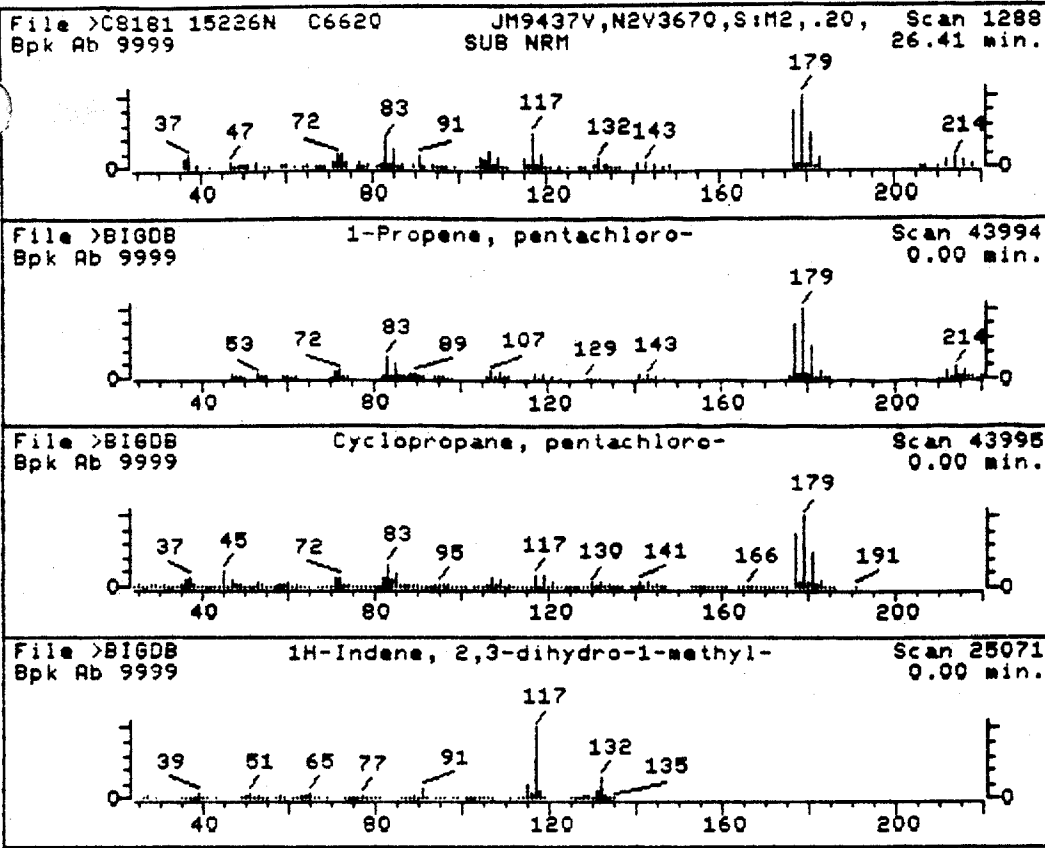
*0.005 = 373*

- |                          |           |
|--------------------------|-----------|
| 1. Heptane, 2-methyl-    | 114 C8H18 |
| 2. Heptane, 2-methyl-    | 114 C8H18 |
| 3. Hexane, 2,5-dimethyl- | 114 C8H18 |

Sample file: >C8181 Spectrum #: 741  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	84*	592278	18916	"BIGDB	69	24	1	0	98	6	55	67
	84*	592278	18543	"BIGDB	50	41	0	0	95	8	55	60
	60*	592132	18544	"BIGDB	43	50	3	0	98	12	30	15





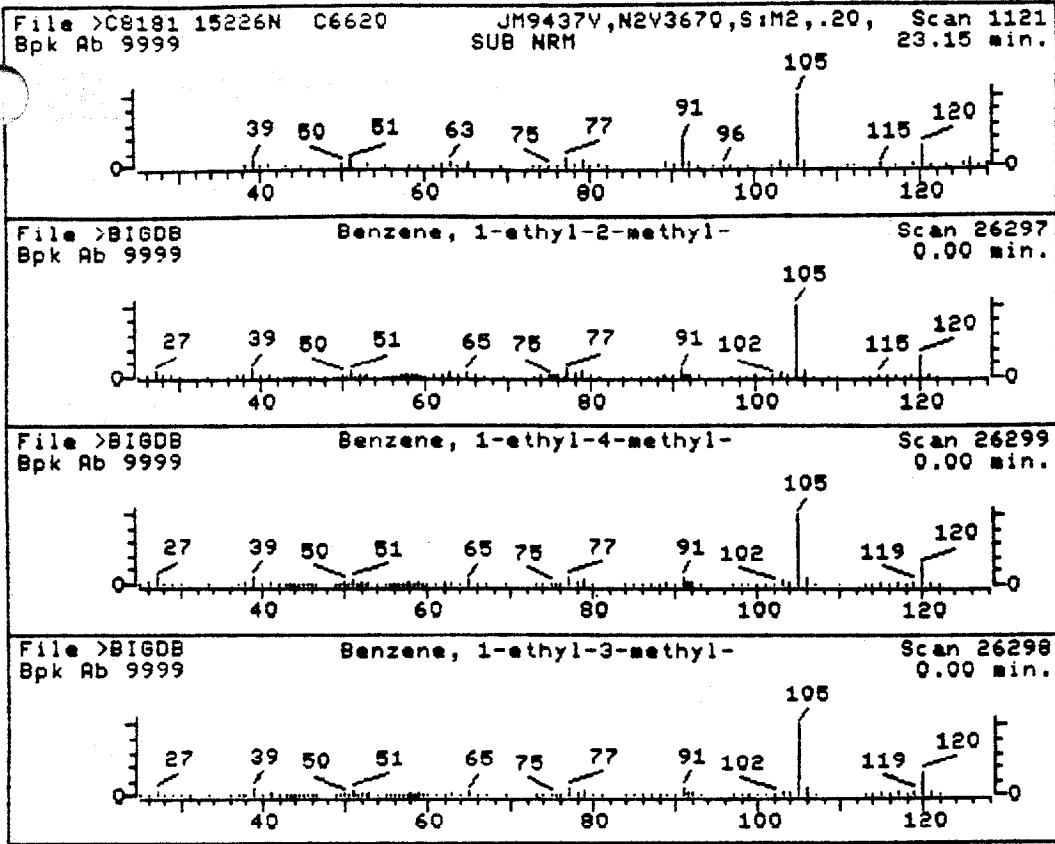
Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437U,N2V3670,S:M2,.20,5:1,  
 RT (min): 26.41  
 Scan: 1288  
 Area: 112401 Rank: 14  
 Semi-quantitative Conc (uncorrected): 14.83 ug/l  
 Semi-quantitative Conc (corrected): 74.14 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.91 minutes

*x1,005 = .371*

- |                                     |            |
|-------------------------------------|------------|
| 1. 1-Propene, pentachloro-          | 212 C3HC15 |
| 2. Cyclopropane, pentachloro-       | 212 C3HC15 |
| 3. 1H-Indene, 2,3-dihydro-1-methyl- | 132 C10H12 |

Sample file: >C8181 Spectrum #: 1288  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	95*	69102778	43994	"BIGDB	96	44	0	0	83	21	53	97
2.	64	6262517	43995	"BIGDB	85	61	1	0	81	25	28	40



Data File: >C8181::D5  
 Name: 15226N C6620  
 Misc Data: JM9437V,N2V3670,S:M2,.20,5:1,  
 RT (min): 23.15  
 Scan: 1121  
 Area: 111422 Rank: 15  
 Semi-quantitative Conc (uncorrected): 14.70 ug/l  
 Semi-quantitative Conc (corrected): 73.50 ug/kg  
 Calculated using Istd: CHLOROBENZENE-d5 (ISTD) @ 19.91 minutes

*X1005 = 368*

- |                               |           |
|-------------------------------|-----------|
| 1. Benzene, 1-ethyl-2-methyl- | 120 C9H12 |
| 2. Benzene, 1-ethyl-4-methyl- | 120 C9H12 |
| 3. Benzene, 1-ethyl-3-methyl- | 120 C9H12 |

Sample file: >C8181 Spectrum #: 1121  
 Search speed: 2 Tilting option: S No. of ion ranges searched: 57

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	91*	611143	26297	"BIGDB	67	18	0	0	82	23	53	92
	91*	622968	26299	"BIGDB	67	18	0	0	85	23	53	92
	86*	620144	26298	"BIGDB	69	18	0	2	81	19	50	83

1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ASC

Contract: NEESA

C4621

Lab Code:      Case No.:     

SAS No.:     

SDG No.: C4617

Matrix: (soil/water) soil

Lab Sample ID: Jm9438

Sample wt/vol: 4/100 (g/mL) g

Lab File ID: B4157

Level: (low/med) med.

Date Received: 062394

% Moisture: not dec. NA

Date Analyzed: 062794

GC Column: DB224 ID: 75 (mm)

Dilution Factor: ~~2000~~ 1000 DL

Soil Extract Volume: 5000 (uL)

Soil Aliquot Volume: 5 (uL)

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

CAS NO.

COMPOUND

CAS NO.	COMPOUND	CONCENTRATION UNITS (ug/L or ug/Kg)	Q
74-87-3	Chloromethane	10000	u
74-83-9	Bromomethane	↓	↓
75-01-4	Vinyl Chloride	↓	↓
75-00-3	Chloroethane	↓	↓
75-09-2	Methylene Chloride	2500	u
67-64-1	Acetone	12000	u
75-15-0	Carbon Disulfide	↓	↓
75-35-4	1,1-Dichloroethene	↓	↓
75-34-3	1,1-Dichloroethane	↓	↓
540-59-0	1,2-Dichloroethene (total)	↓	↓
67-66-3	Chloroform	↓	↓
107-06-2	1,2-Dichloroethane	↓	↓
78-93-3	2-Butanone	24000	u
71-55-6	1,1,1-Trichloroethane	2000	u
56-23-5	Carbon Tetrachloride	↓	↓
75-27-4	Bromodichloromethane	↓	↓
78-87-5	1,2-Dichloropropane	↓	↓
10061-01-5	cis-1,3-Dichloropropene	↓	↓
79-01-6	Trichloroethene	↓	↓
124-48-1	Dibromochloromethane	↓	↓
79-00-5	1,1,2-Trichloroethane	↓	↓
71-43-2	Benzene	↓	↓
10061-02-6	trans-1,3-Dichloropropene	↓	↓
75-25-2	Bromoform	↓	↓
108-10-1	4-Methyl-2-Pentanone	24000	u
591-78-6	2-Hexanone	12000	u
127-18-4	Tetrachloroethene	↓	↓
79-34-5	1,1,2,2-Tetrachloroethane	↓	↓
108-88-3	Toluene	1600	u
108-90-7	Chlorobenzene	1200	u
100-41-4	Ethylbenzene	5910	u
100-42-5	Styrene	2000	u
1330-20-7	Xylene (total)	83700	u

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: ASC Contract: NEESA CL1621

Lab Code:      Case No.:      SAS No.:      SDG No.: CL1617

Matrix: (soil/water) soil Lab Sample ID: Jm9438

Sample wt/vol: 4.16 (g/mL) g Lab File ID: B4117

Level: (low/med) med Date Received: 062794

‡ Moisture: not dec. NA Date Analyzed: 062794

GC Column: DB224 ID: 75 (mm) Dilution Factor: ~~1000~~ 1000 BA

Soil Extract Volume: 10000 (uL) Soil Aliquot Volume: 5 (uL)

Number TICs found: 4 CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg

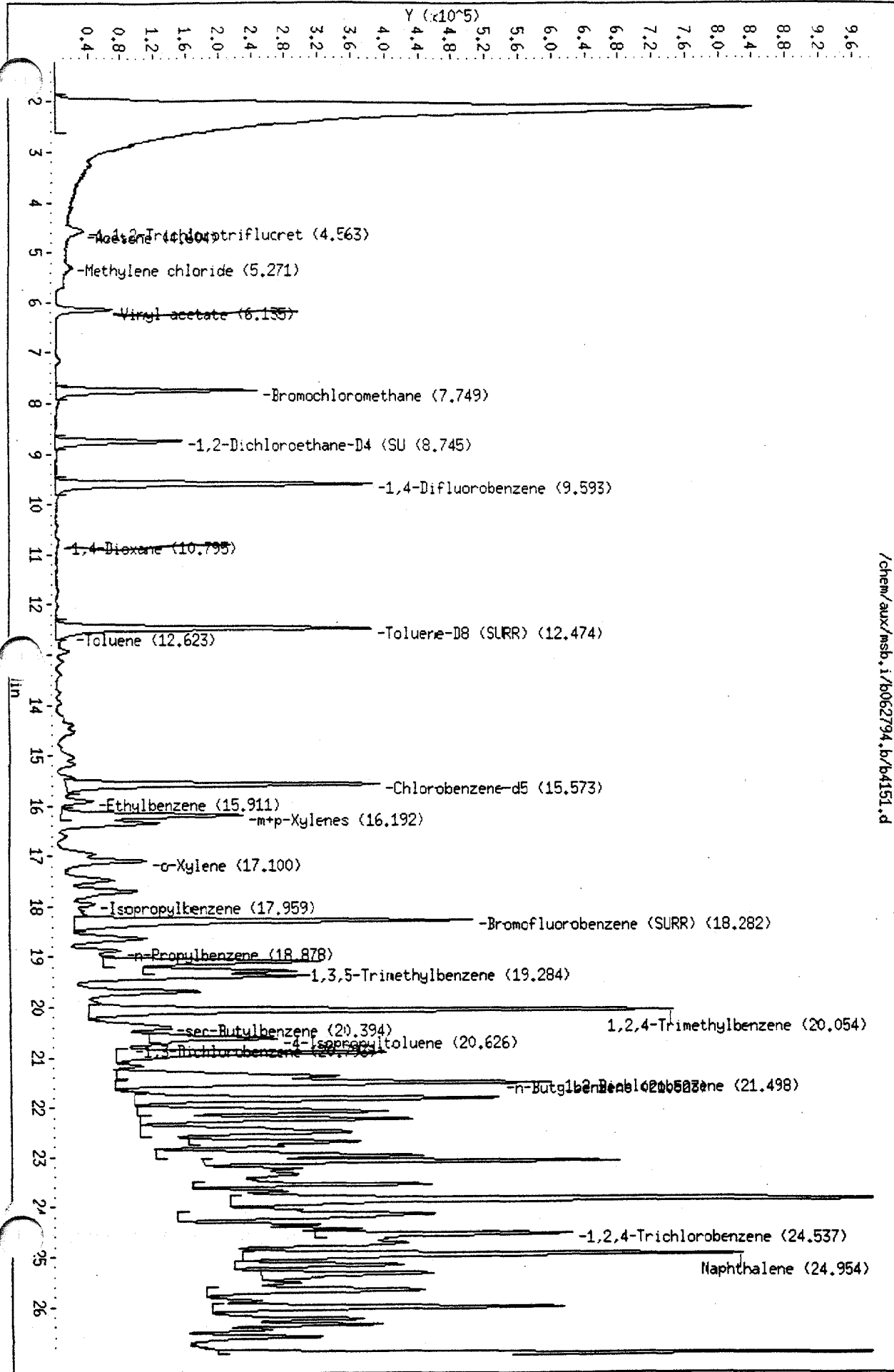
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. <u>526-73-8</u>	<u>Benzene, 1,3,5-trimethyl</u>	<u>20.909</u>	<u>527000</u>	<u>J</u>
2.	<u>unknown subst. aromatic</u>	<u>19.093</u>	<u>452000</u>	<u>J</u>
3.		<u>20.626</u>	<u>241000</u>	<u>J</u>
4.	↓	<u>21.373</u>	<u>275000</u>	<u>J</u>
5.				
6.				
7.	<u>Isopropylbenzene</u>	<u>17.959</u>	<u>6560</u>	<u>X</u>
8.	<u>n-propylbenzene</u>	<u>18.878</u>	<u>14000</u>	<u>X</u>
9.	<u>1,3,5-Trimethylbenzene</u>	<u>19.284</u>	<u>53800</u>	<u>X</u>
10.	<u>1,2,4-Trimethylbenzene</u>	<u>20.054</u>	<u>154000</u>	<u>X</u>
11.	<u>sec-butylbenzene</u>	<u>20.394</u>	<u>11800</u>	<u>X</u>
12.	<u>1,3-Dichlorobenzene</u>	<u>20.743</u>	<u>29100</u>	<u>X</u>
13.	<u>4-Isopropyltoluene</u>	<u>20.666</u>	<u>17300</u>	<u>X</u>
14.	<u>1,4-Dichlorobenzene</u>	<u>20.773</u>	<u>2900</u>	<u>X</u>
15.	<u>1,2-Dichlorobenzene</u>	<u>21.207</u>	<u>13200</u>	<u>X</u>
16.	<u>n-Butylbenzene</u>	<u>21.523</u>	<u>29800</u>	<u>X</u>
17.	<u>Naphthalene</u>	<u>24.463</u>	<u>200000</u>	<u>X</u>
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/aux/msb.i/b062794.b/b4151.d  
Date: 27-JUN-94 17:27  
Instrument: msb.i  
Sample ID:  
Column phase: J&W DB\_624  
Volume Injected (ul): 0.0

C16621

Column diameter: 0.53

/chem/aux/msb.i/b062794.b/b4151.d



Data File: /chem/aux/msb.i/b062794.b/b4151.d  
 Report Date: 28-Jun-1994 07:34

Analytical Services Corp.

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msb.i/b062794.b/b4151.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 27-JUN-94 17:27 Autotune Date: {  
 Operator : steve Inst ID: msb.i  
 Smp Info : 15226n c6621  
 Misc Info : jm9438v,n4v3672,1:m2,4.16,5:10000  
 Comment : *A 4*  
 Method : /chem/aux/msb.i/b062794.b/8240b.m  
 Meth Date : 28-Jun-1994 07:29 tom  
 Cal Date : 27-JUN-94 10:54 Cal File: b4143.d  
 Als bottle: 11  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

Compounds	QUANT SIG	RT	REL RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ug/l)	FINAL (ug/l)
10 1,1,2-Trichlorotrifluorethane	101.00	4.563	(0.589)	7296	0.731	0.731(aQ)
11 Acetone	43.00	4.604	(0.594)	2993	2.48	<del>2.48(a)</del>
15 Methylene chloride	84.00	5.271	(0.680)	5237	1.05	1.05(a)
26 Vinyl acetate	43.00	<del>6.135</del>	<del>(0.640)</del>	<del>27983</del>	<del>15.7</del>	<del>15.7(aQ)</del>
* 25 Bromochloromethane	128.00	7.749	(1.000)	179372	50.0	
\$ 31 1,2-Dichloroethane-D4 (SURR) ✓	65.00	8.745	(1.129)	300265	51.7	51.7
* 34 1,4-Difluorobenzene	114.00	9.593	(1.000)	824041	50.0	
38 1,4-Dioxane	88.00	10.795	(1.125)	1997	<del>20.2</del>	<del>20.2</del>
\$ 43 Toluene-DB (SURR) ✓	98.00	12.466	(0.801)	787354	48.9	48.9
44 Toluene	92.00	12.623	(0.811)	7062	0.688	0.688(a)
* 52 Chlorobenzene-d5	117.00	15.564	(1.000)	656414	50.0	
55 Ethylbenzene	106.00	15.911	(1.022)	15018	2.46	2.46(aQ)
56 m-p-Xylenes	106.00	16.192	(1.040)	171209	23.5	23.5
57 o-Xylene	106.00	17.100	(1.099)	83967	11.3	11.3
60 Isopropylbenzene	105.00	17.959	(1.154)	59457	2.73	2.73(a)
\$ 61 Bromofluorobenzene (SURR) ✓	95.00	18.282	(1.175)	524546	48.2	48.2
65 n-Propylbenzene	120.00	18.878	(1.213)	34088	5.83	5.83
67 1,3,5-Trimethylbenzene	105.00	19.284	(1.239)	394726	22.4	22.4
70 1,2,4-Trimethylbenzene	105.00	20.054	(1.288)	1071776	64.0	64.0
71 sec-Butylbenzene	105.00	20.394	(1.310)	119655	4.92	4.92(a)
72 1,3-Dichlorobenzene	146.00	20.793	(1.336)	15415	1.23	1.23(aQ)
73 4-Isopropyltoluene	119.00	20.626	(1.325)	150177	7.20	7.20
74 1,4-Dichlorobenzene	146.00	20.793	(1.336)	15415	1.21	1.21(a)
75 1,2-Dichlorobenzene	146.00	21.507	(1.382)	63114	5.48	5.48(Q)
76 n-Butylbenzene	91.00	21.523	(1.383)	245843	12.4	12.4(Q)
8 1,2,4-Trichlorobenzene	180.00	24.537	(1.576)	3936	0.517	<del>0.517(aQ)</del>
40 Naphthalene	128.00	24.963	(1.604)	1062762	83.3	83.3

*Hexane  
contaminant*

Data File: /chem/aux/msb.i/b062794.b/b4151.d  
Report Date: 28-Jun-1994 07:34

Page 2

QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.

Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 7

Date : 27-JUN-94 17:27

Instrument : msb.i

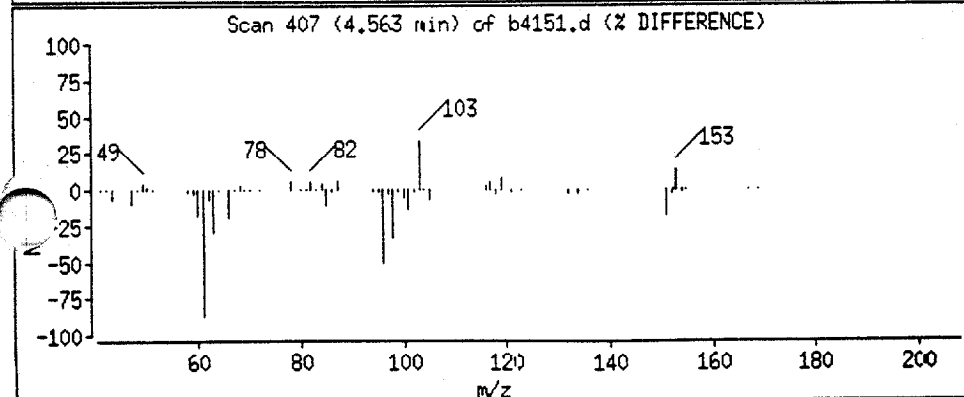
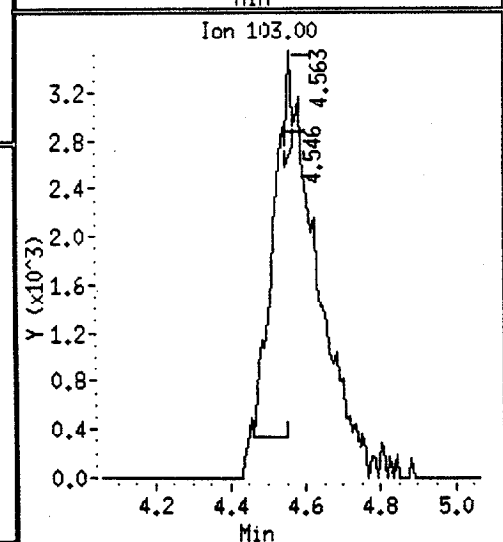
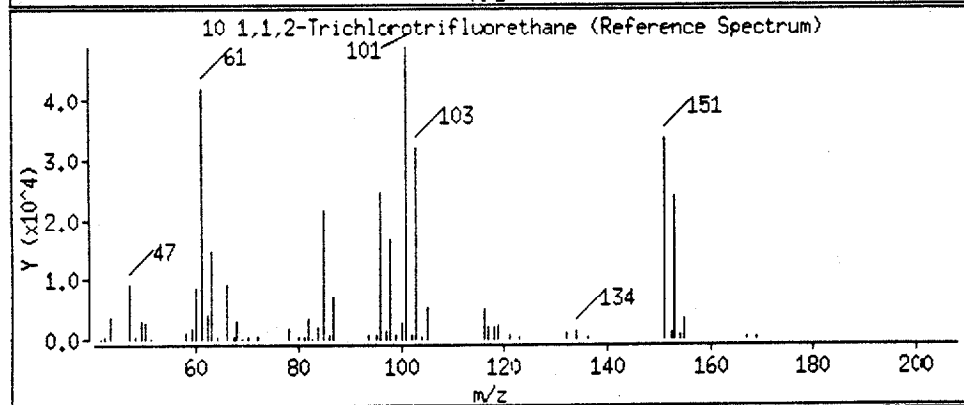
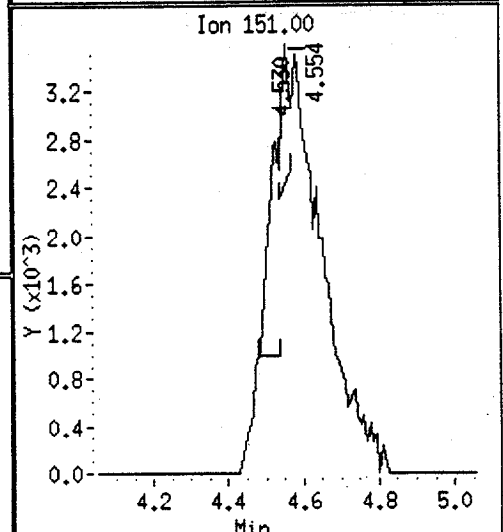
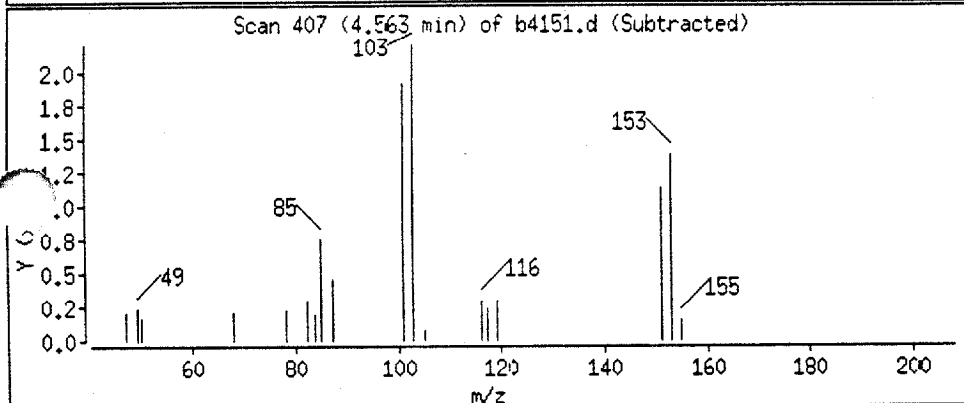
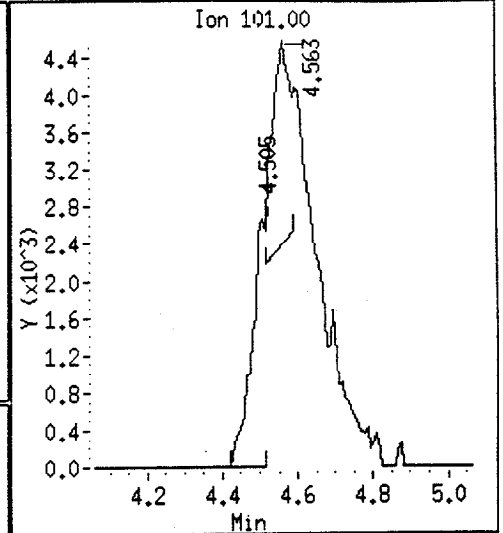
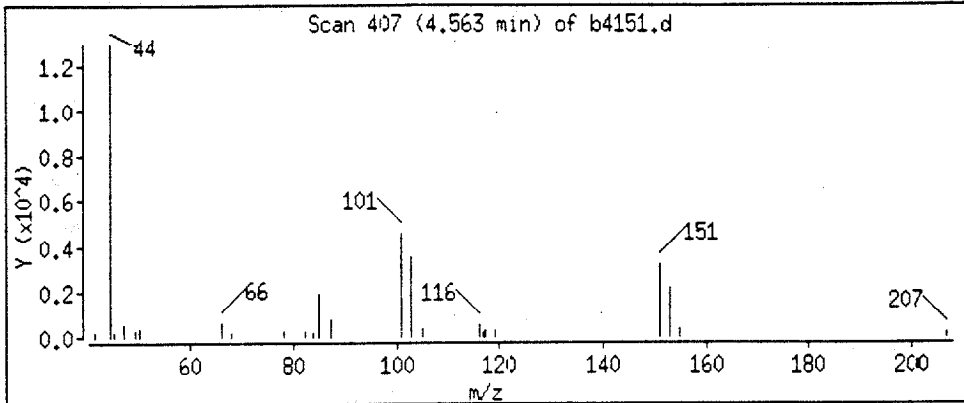
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

10 1,1,2-Trichlorotrifluoroethane





Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date: 27-JUN-94 17:27

Instrument: msb.i

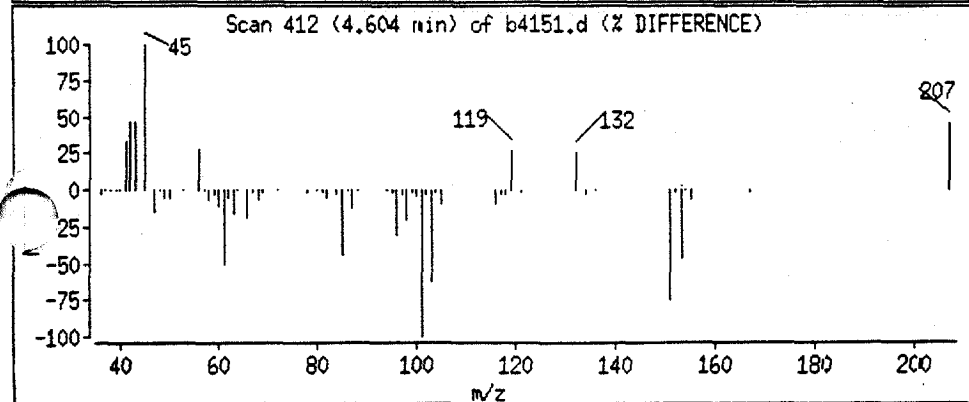
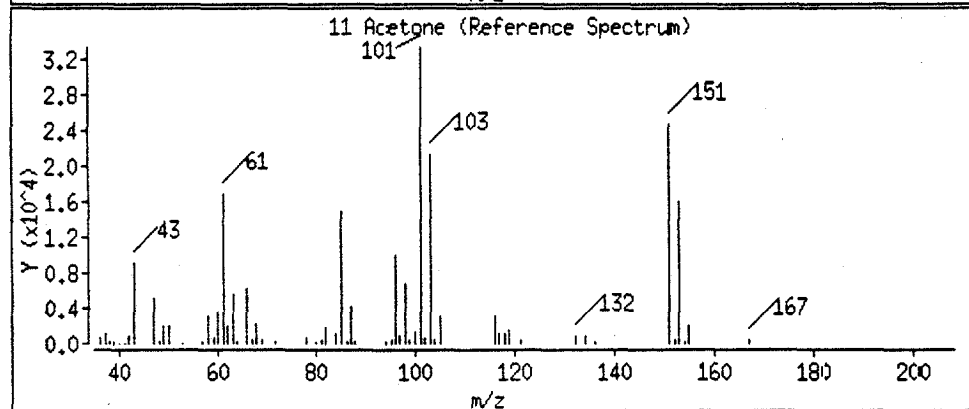
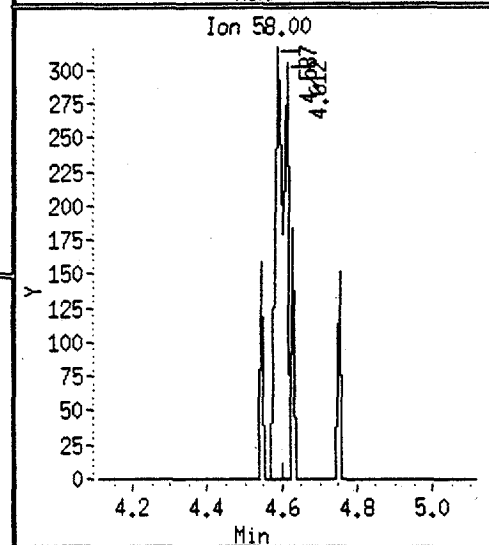
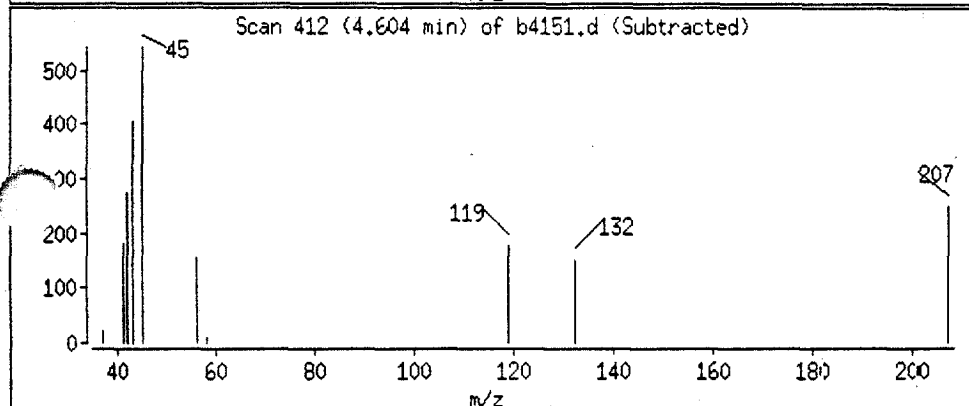
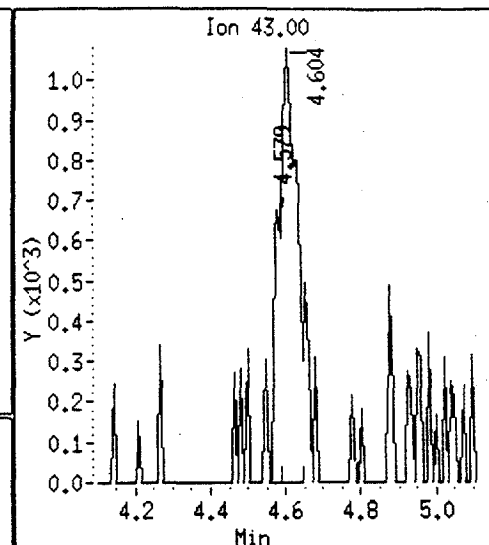
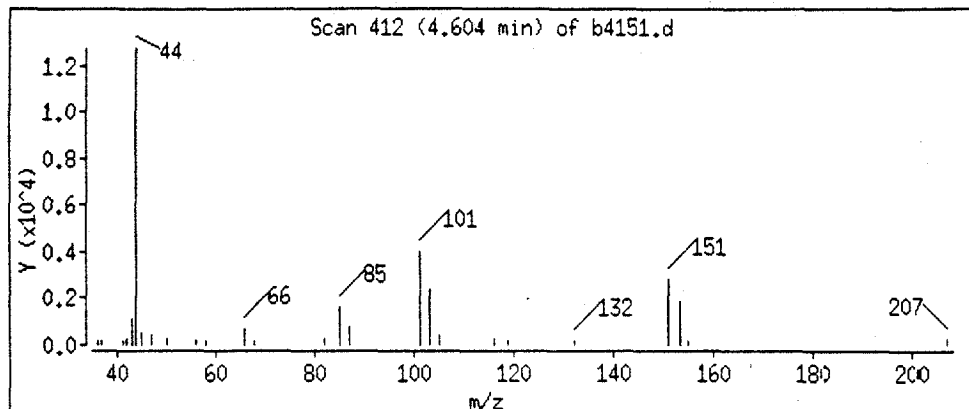
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

11 Acetone



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 9

Date : 27-JUN-94 17:27

Instrument : msb.i

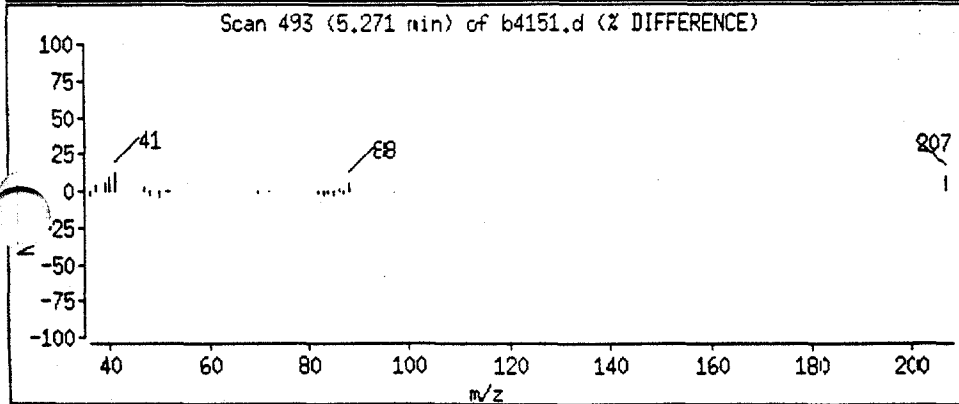
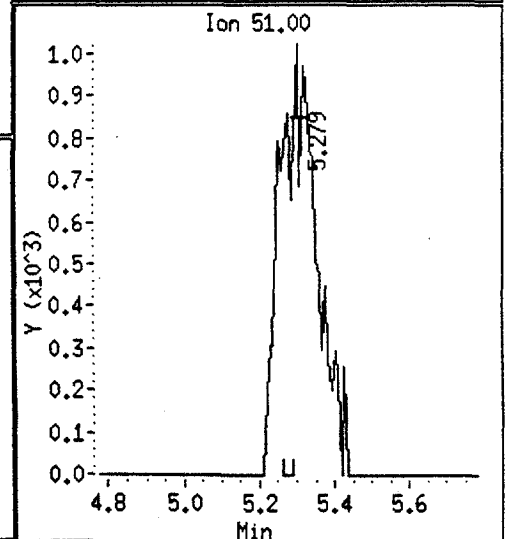
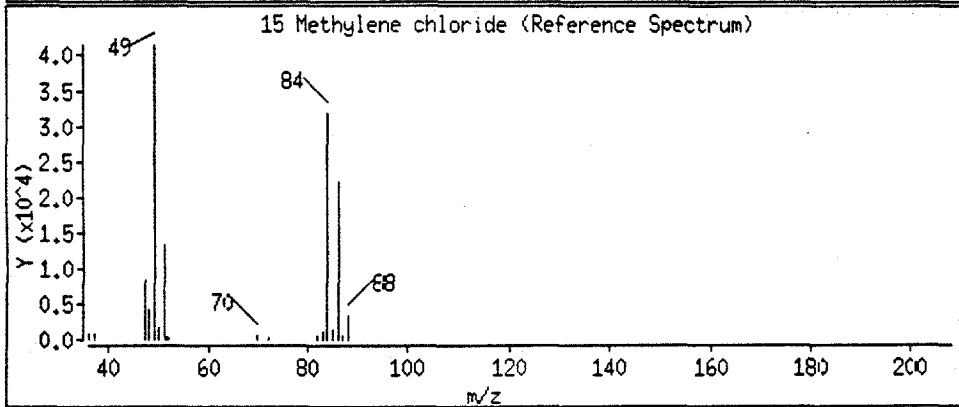
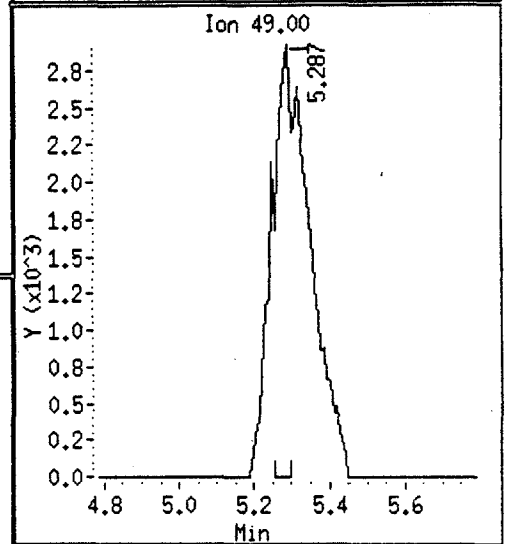
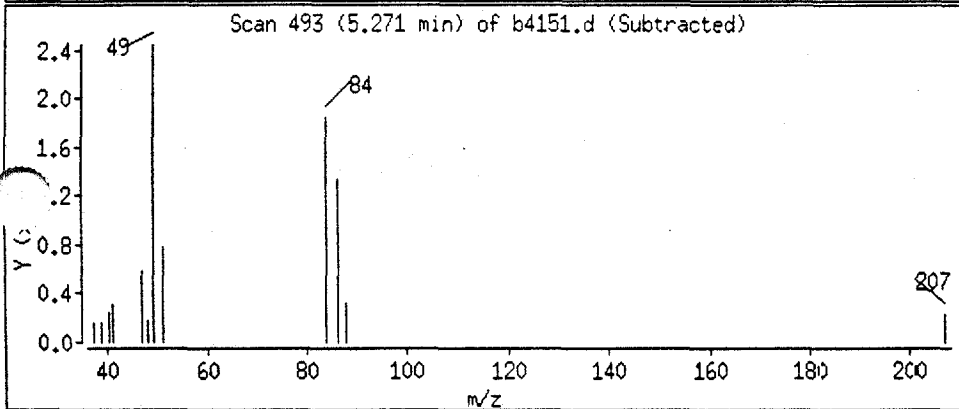
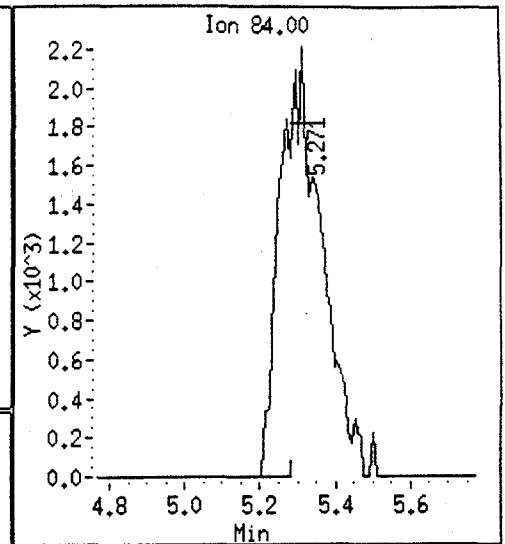
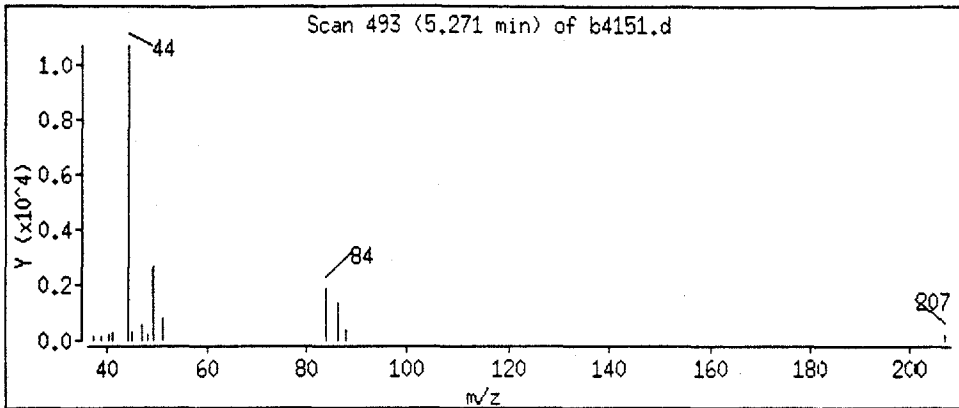
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

15 Methylene chloride



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date : 27-JUN-94 17:27

Instrument : msb.i

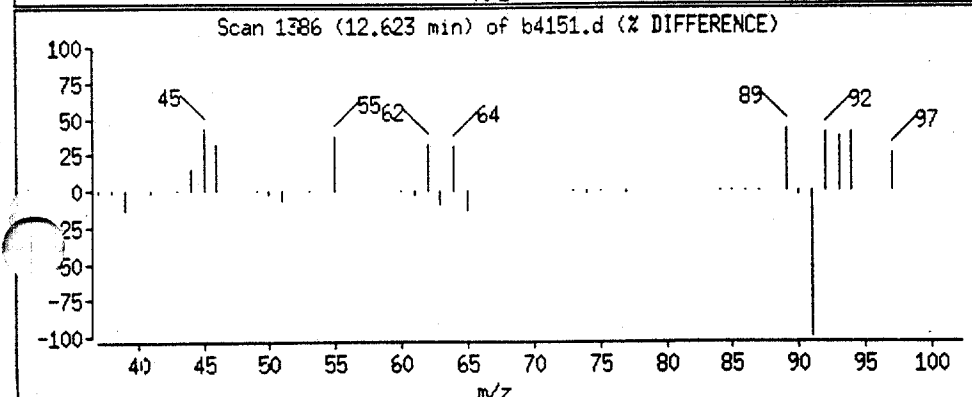
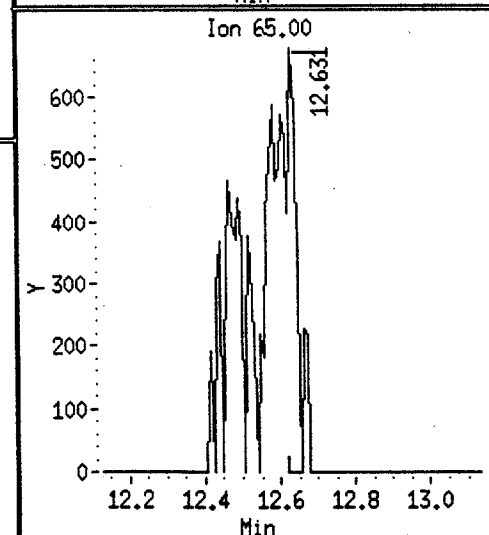
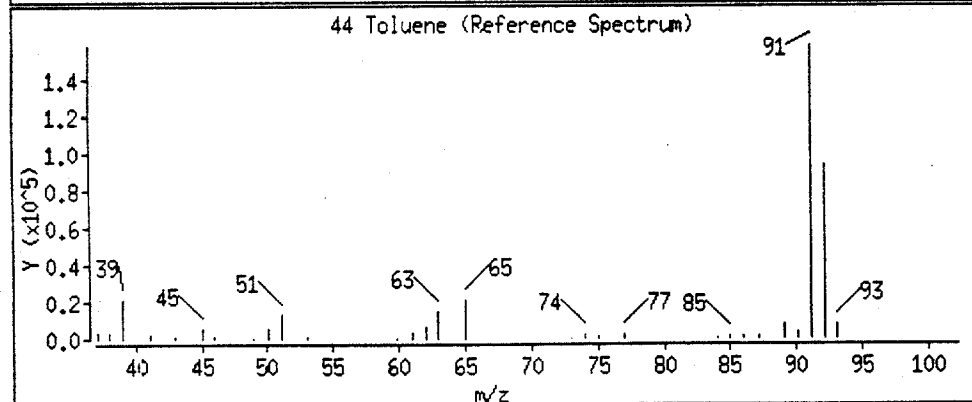
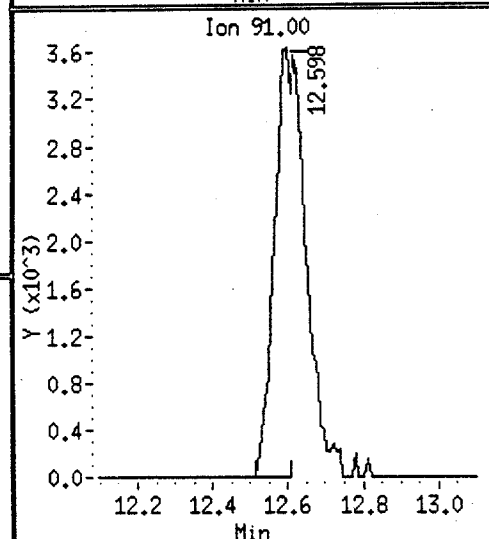
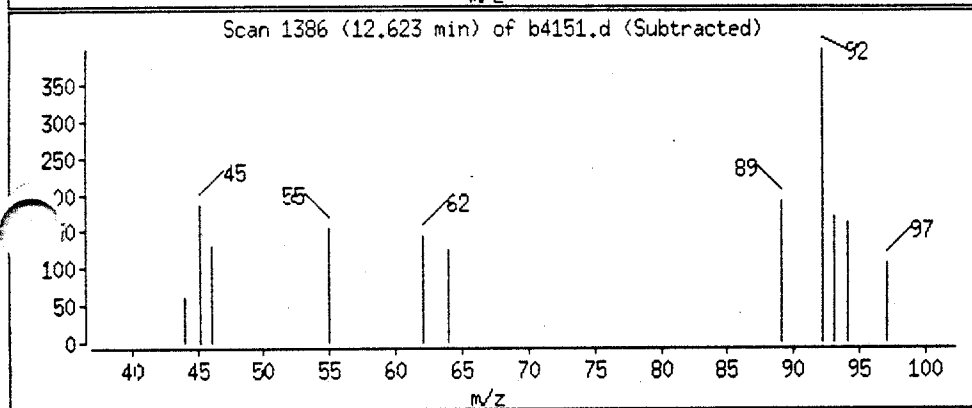
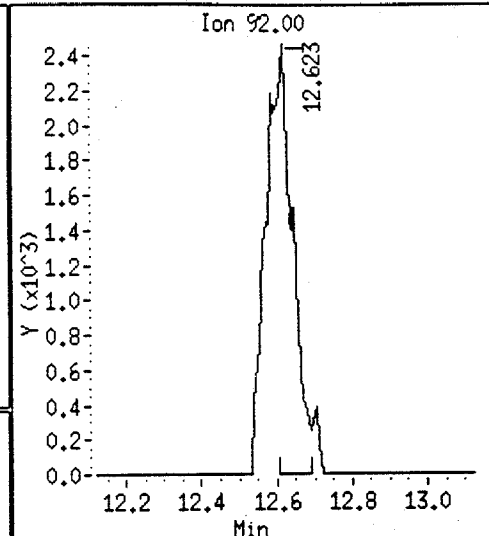
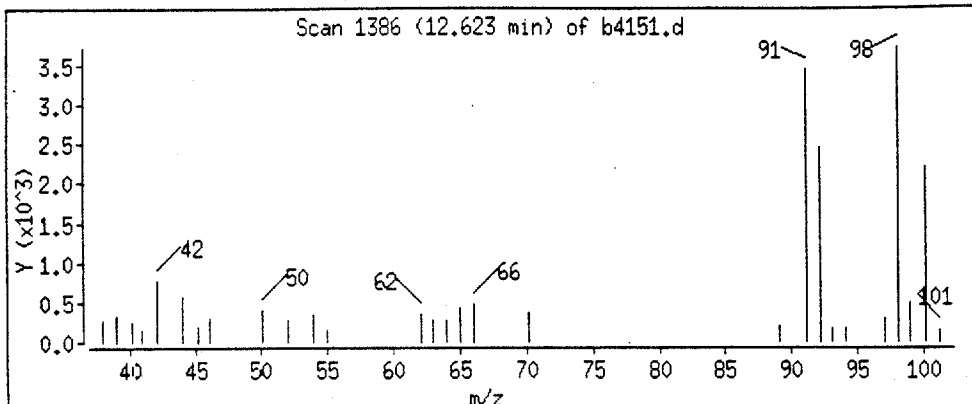
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

44 Toluene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date : 27-JUN-94 17:27

Instrument : msb.i

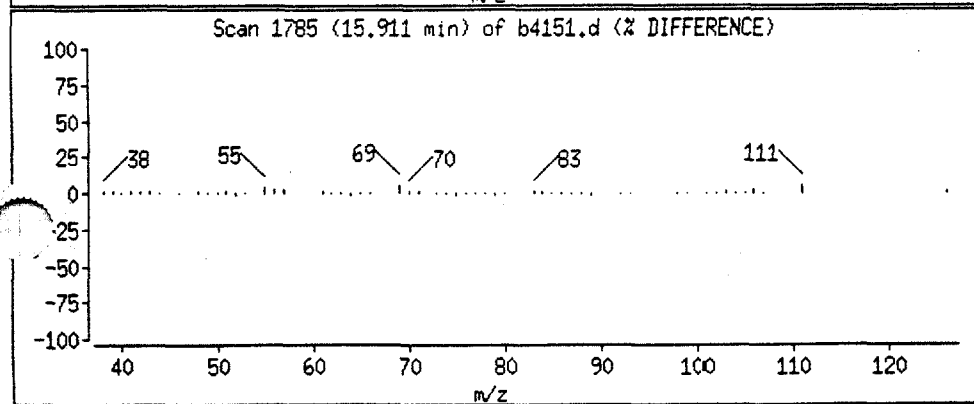
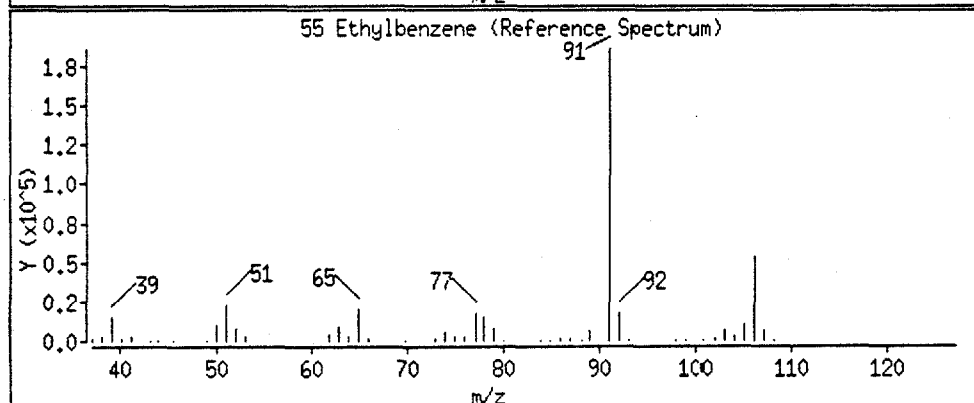
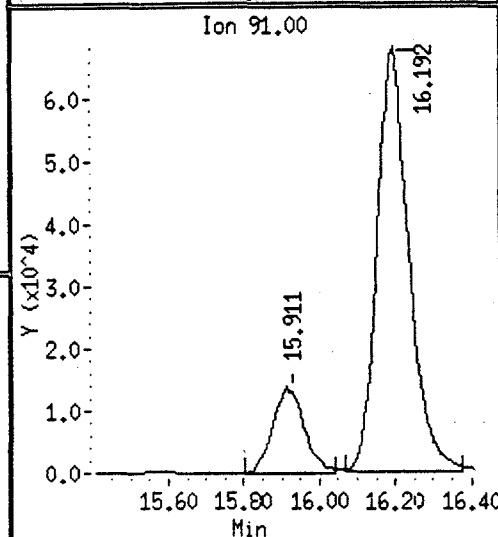
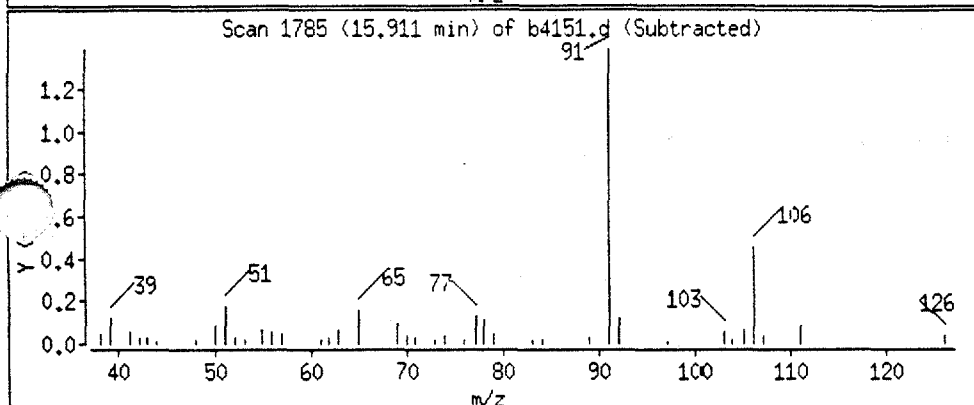
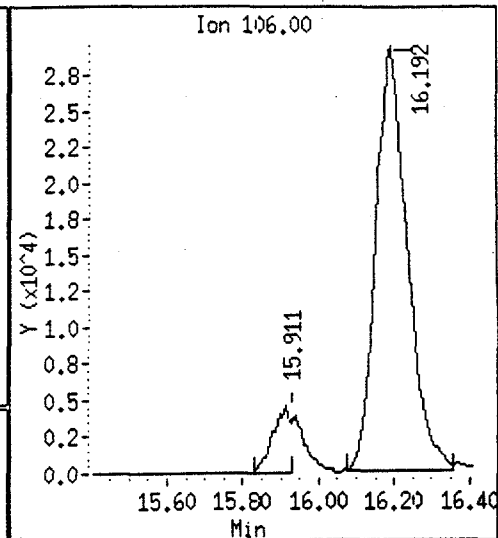
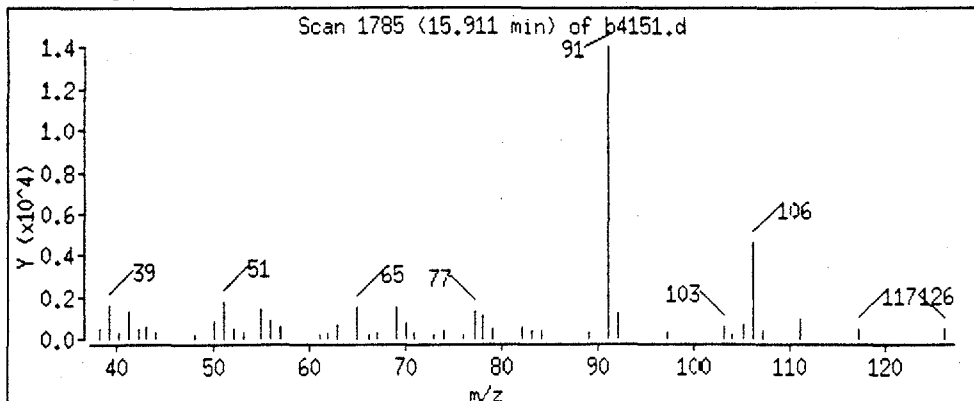
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

55 Ethylbenzene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date: 27-JUN-94 17:27

Instrument: msb.i

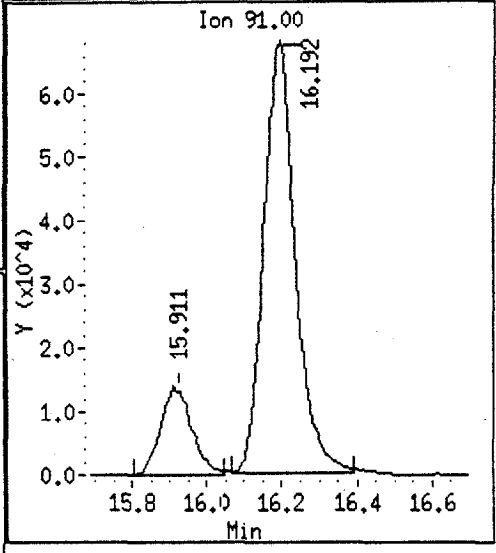
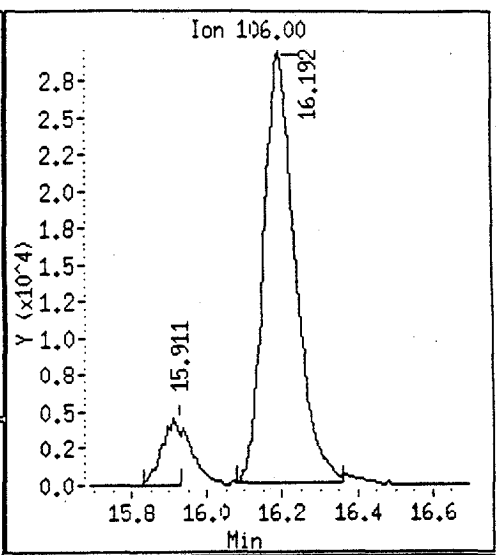
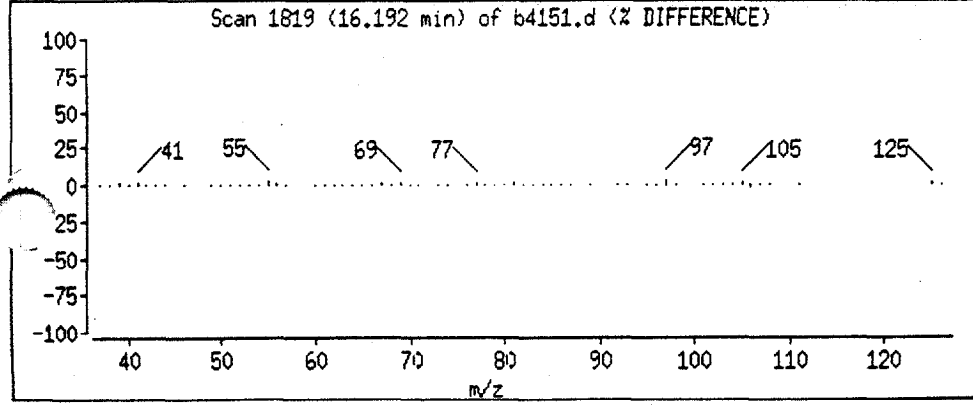
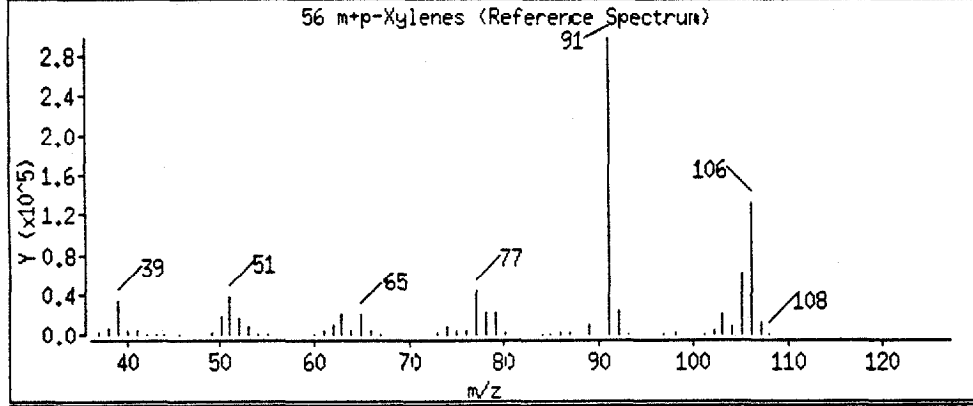
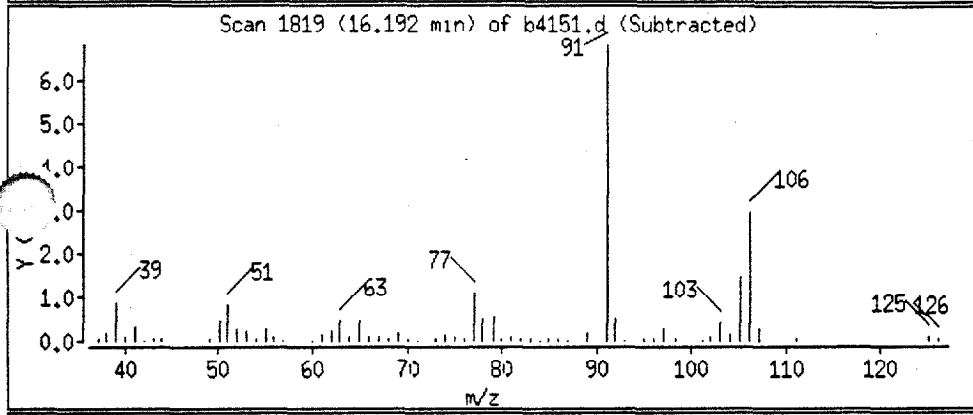
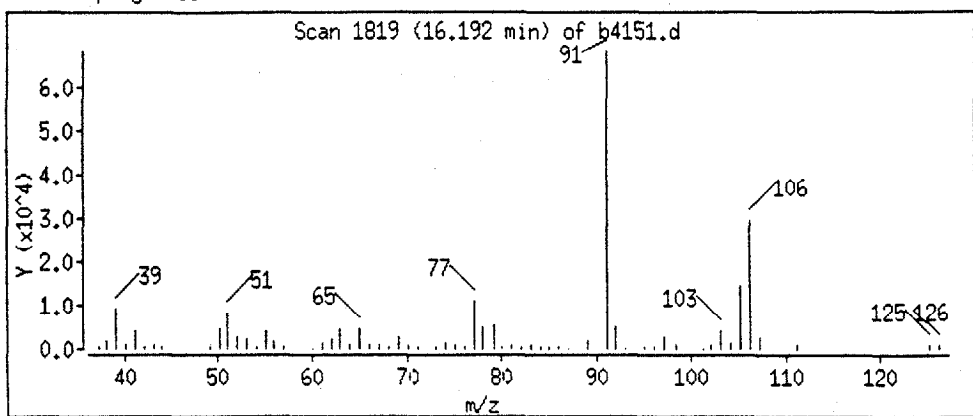
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

56 m+p-Xylenes



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date: 27-JUN-94 17:27

Instrument: msb.i

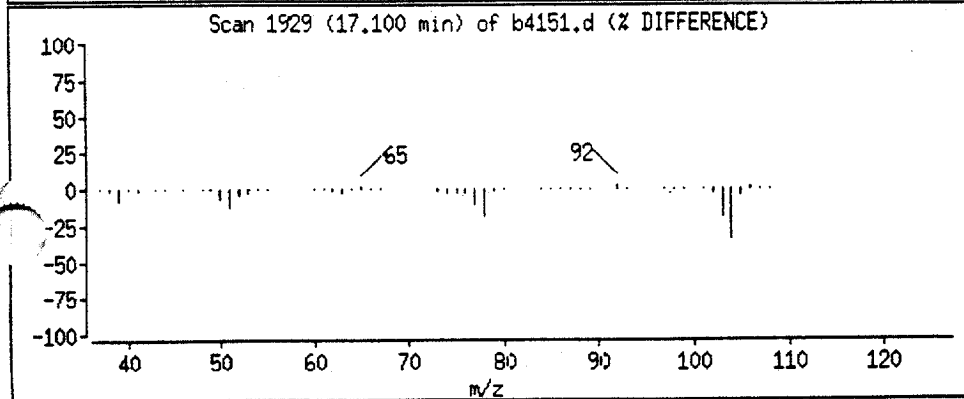
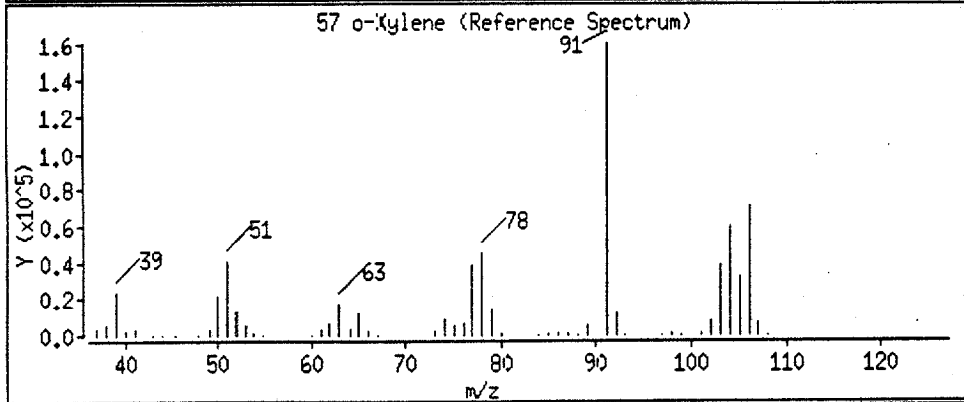
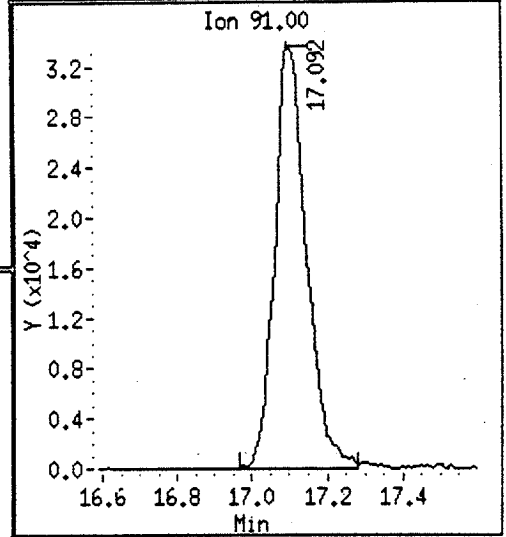
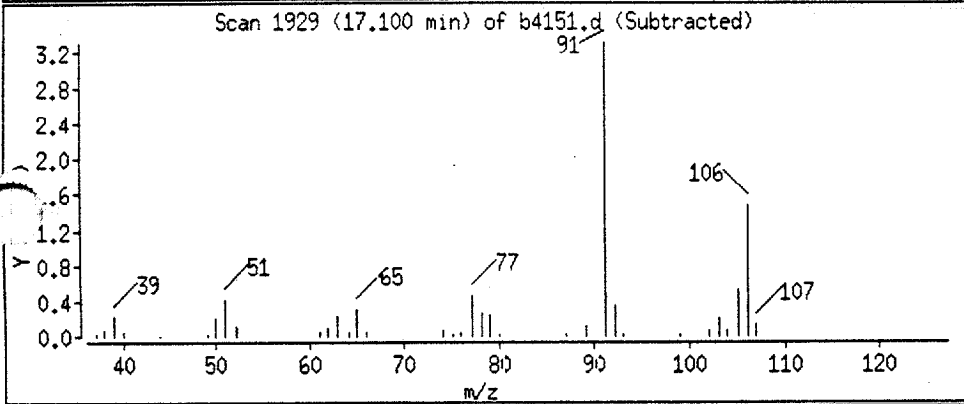
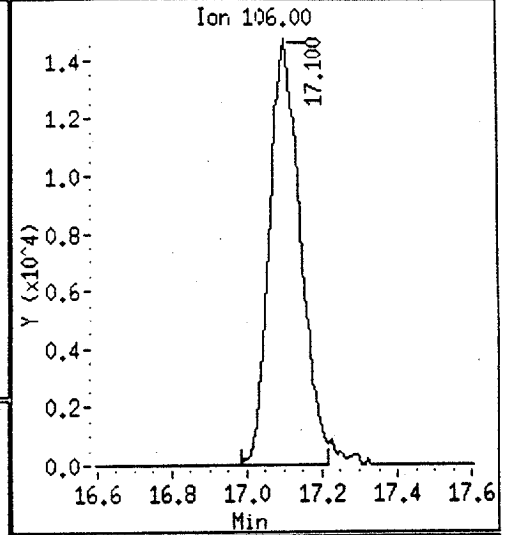
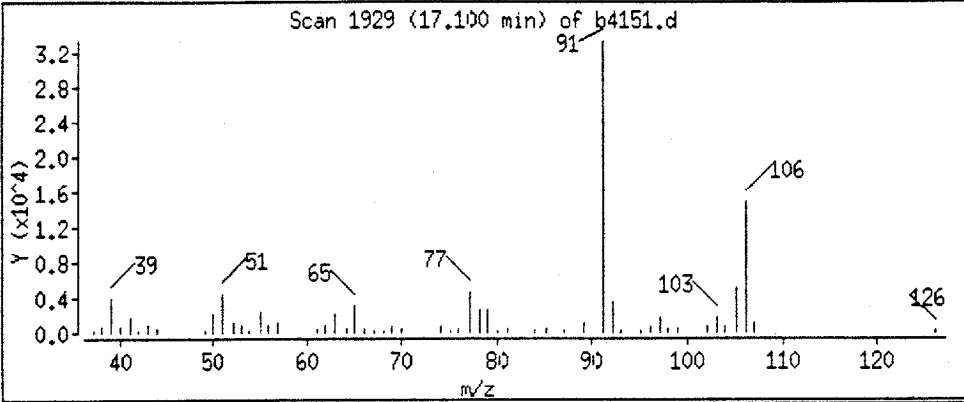
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

57 o-Xylene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date: 27-JUN-94 17:27

Instrument: msb.i

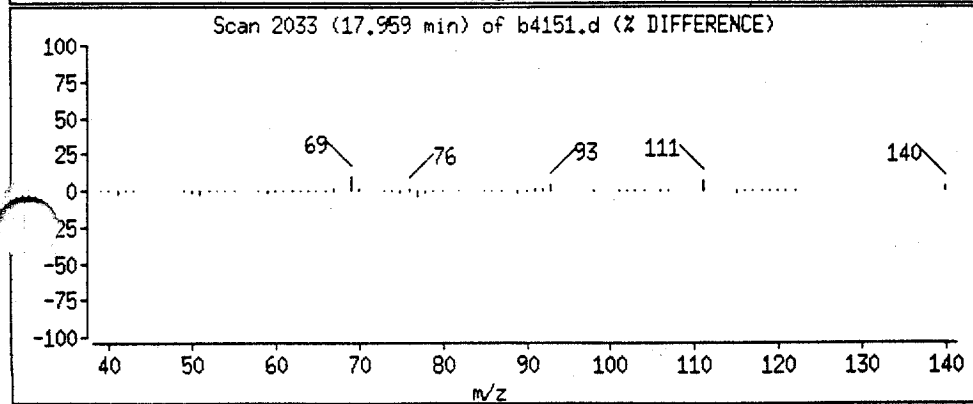
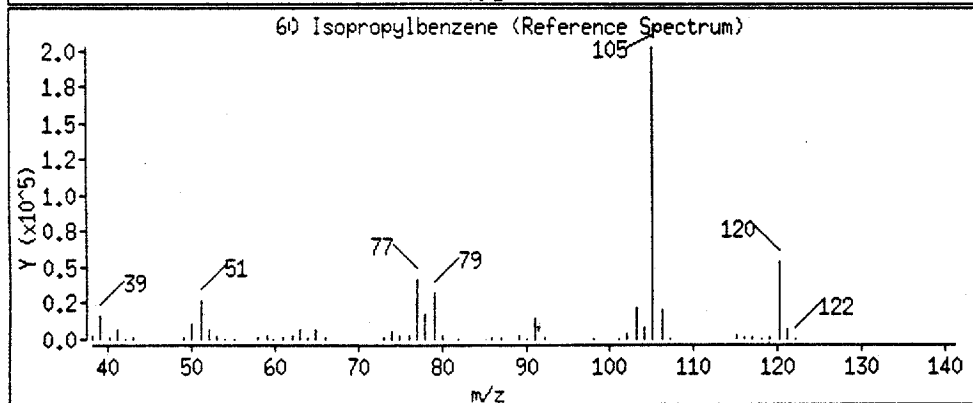
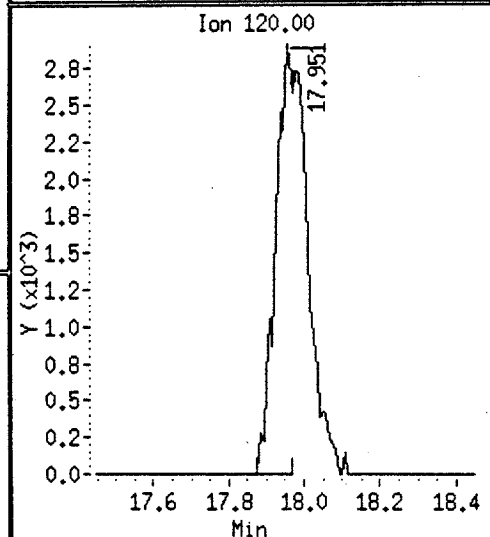
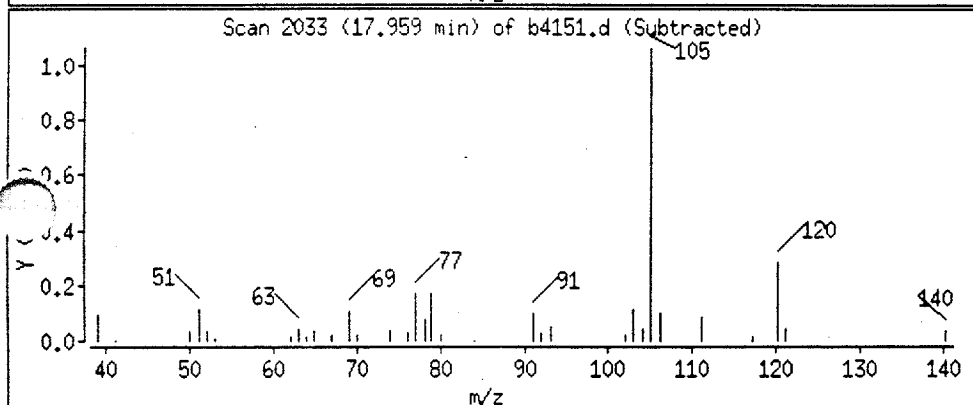
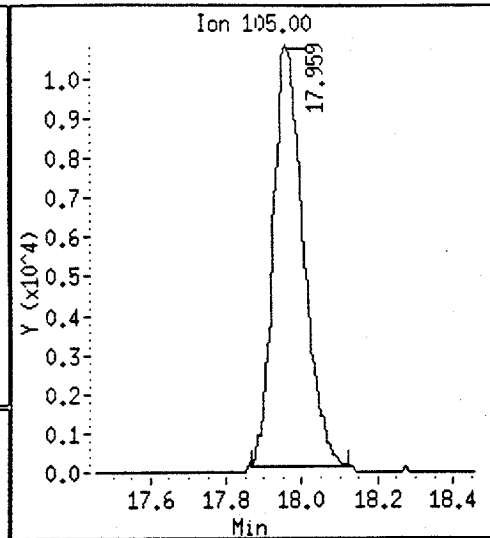
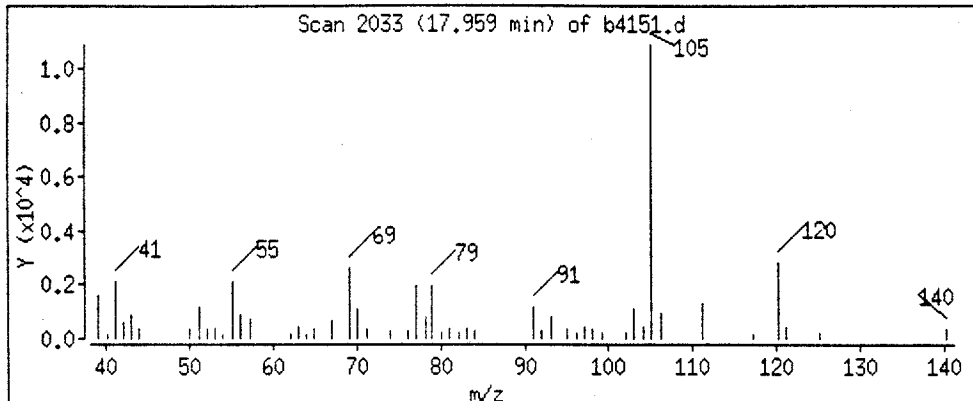
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

60 Isopropylbenzene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 17

Date: 27-JUN-94 17:27

Instrument: msb.i

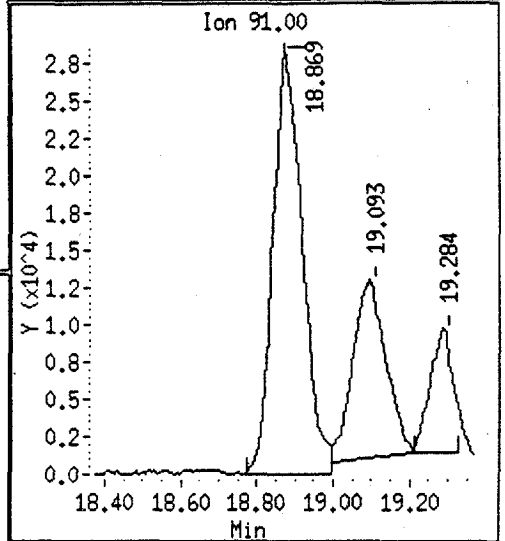
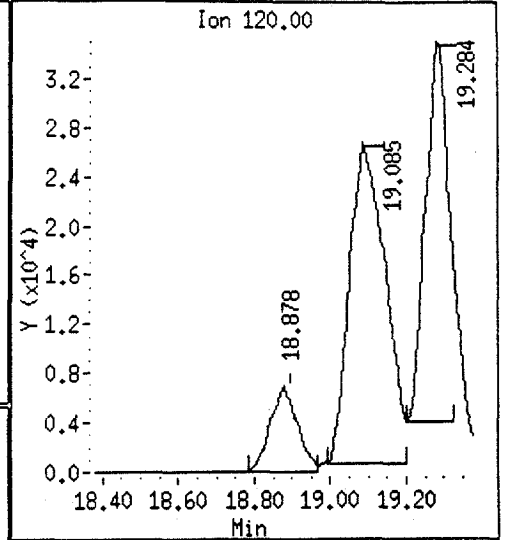
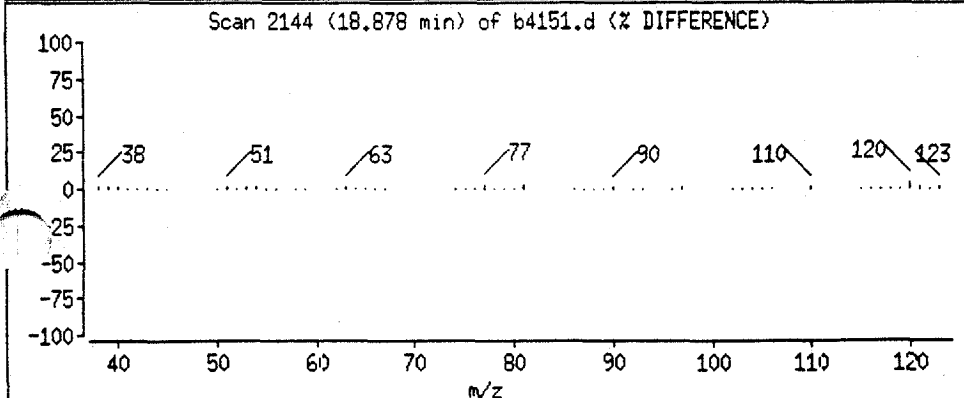
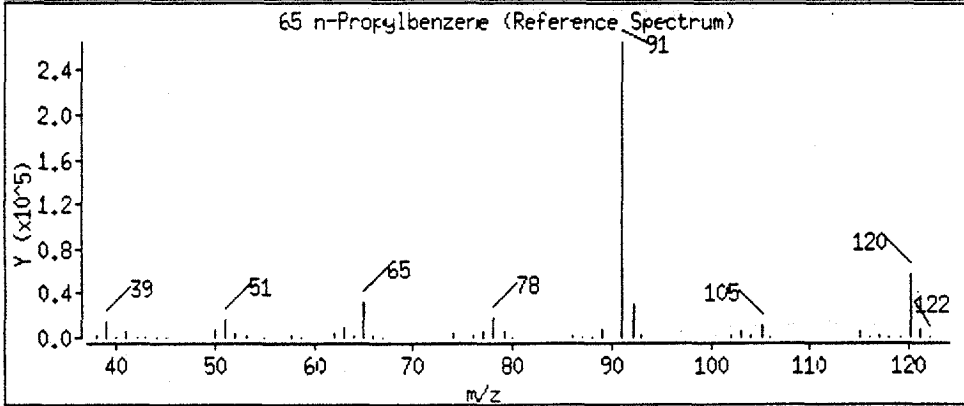
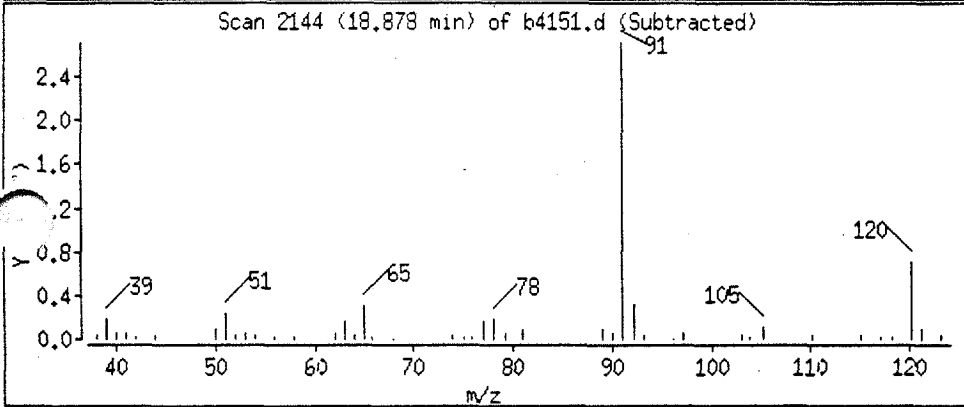
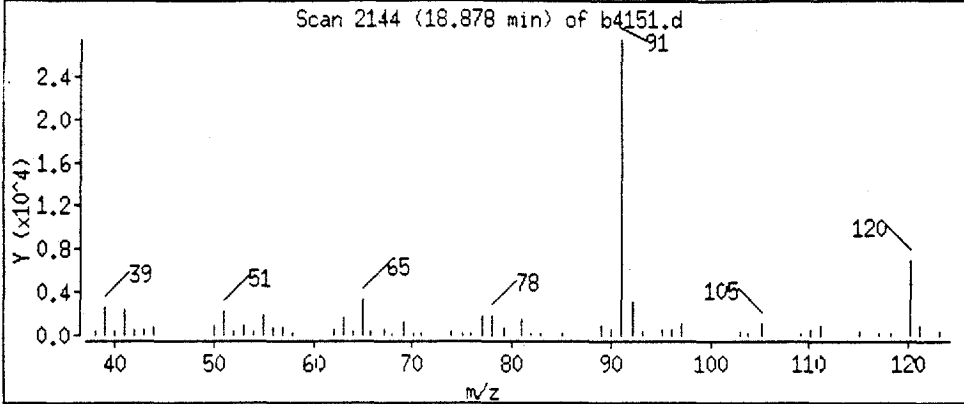
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

65 n-Propylbenzene





Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 18

Date : 27-JUN-94 17:27

Instrument : msb.i

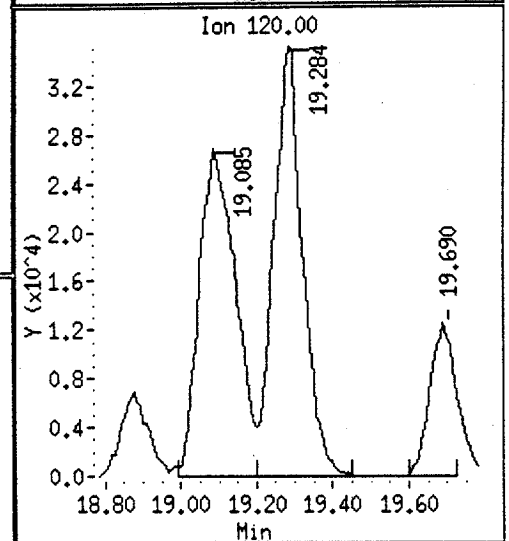
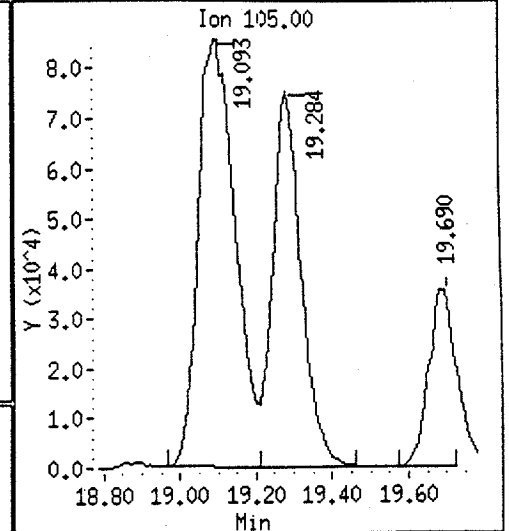
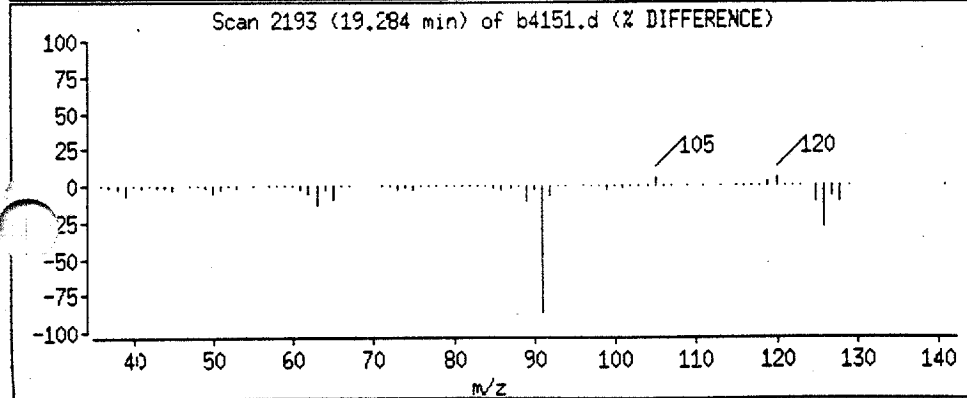
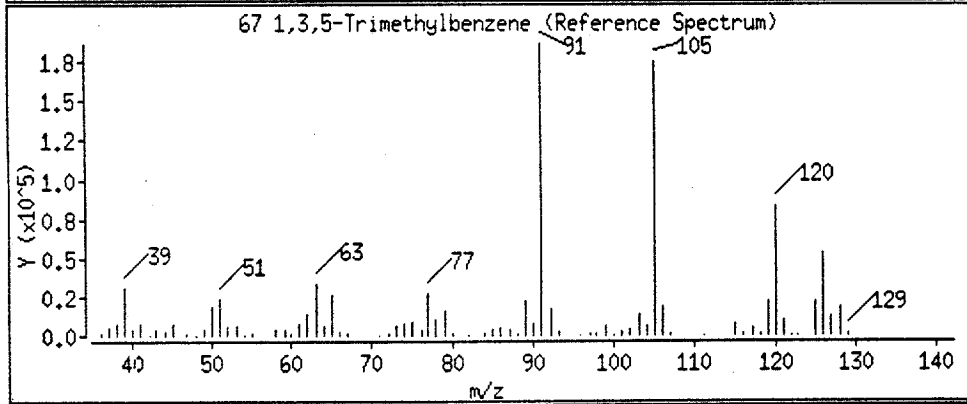
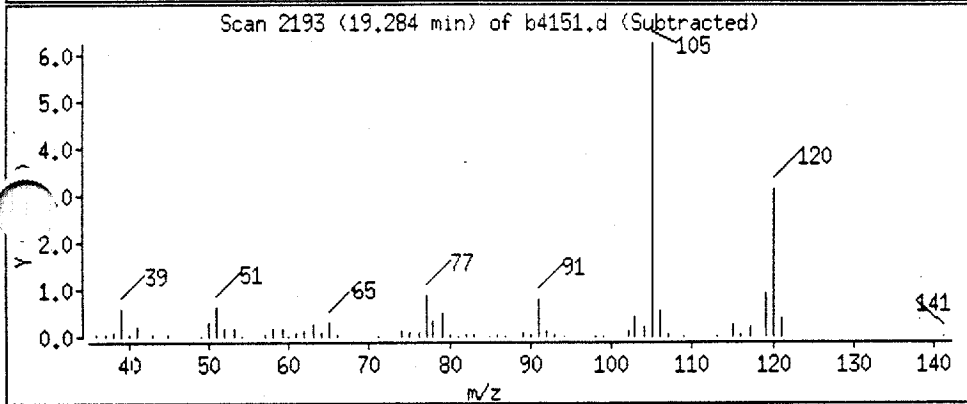
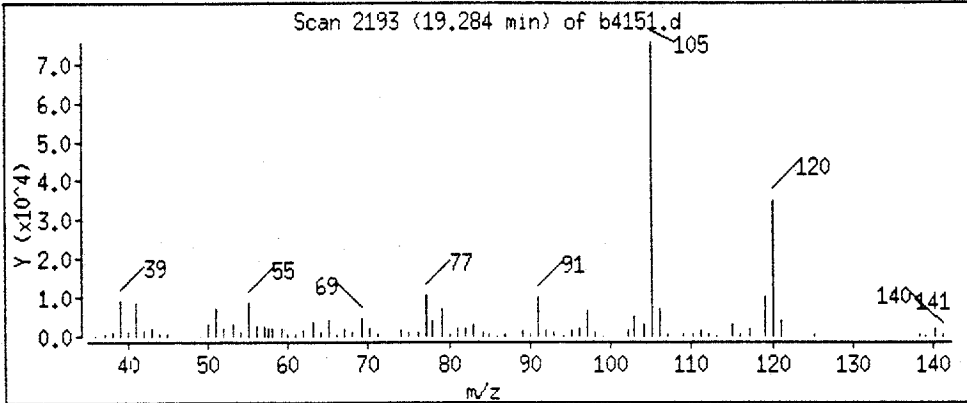
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

67 1,3,5-Trimethylbenzene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 19

Date : 27-JUN-94 17:27

Instrument : msb.i

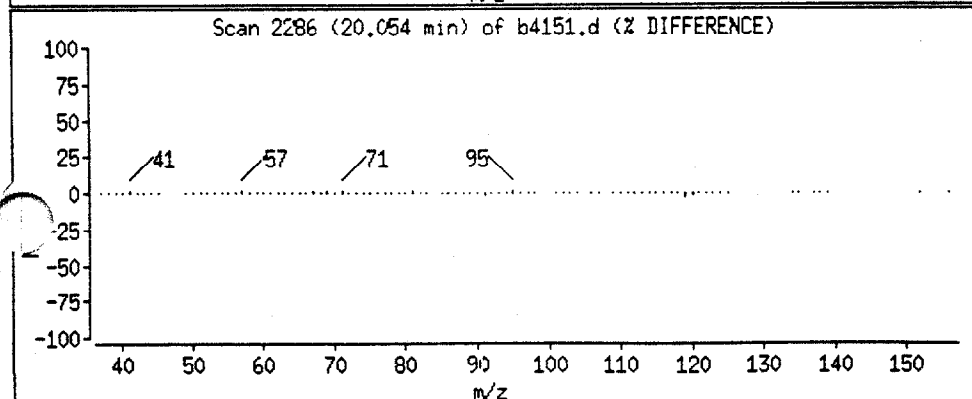
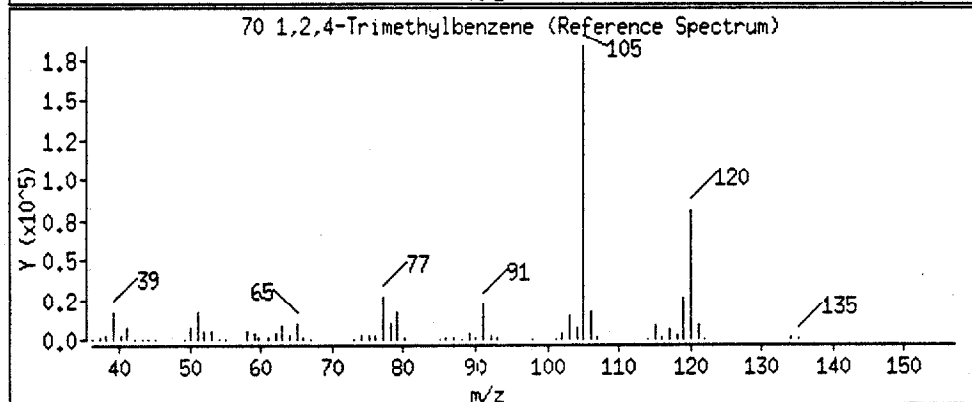
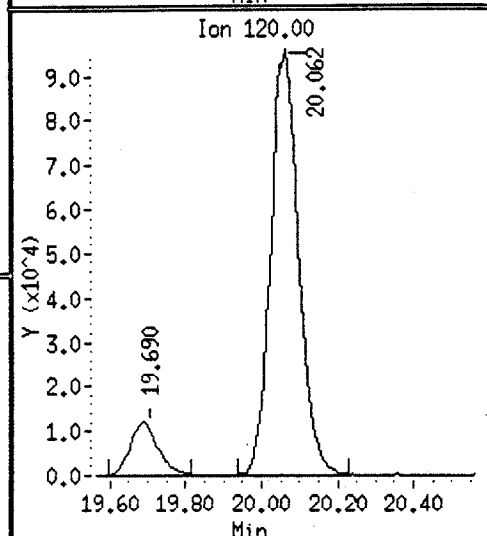
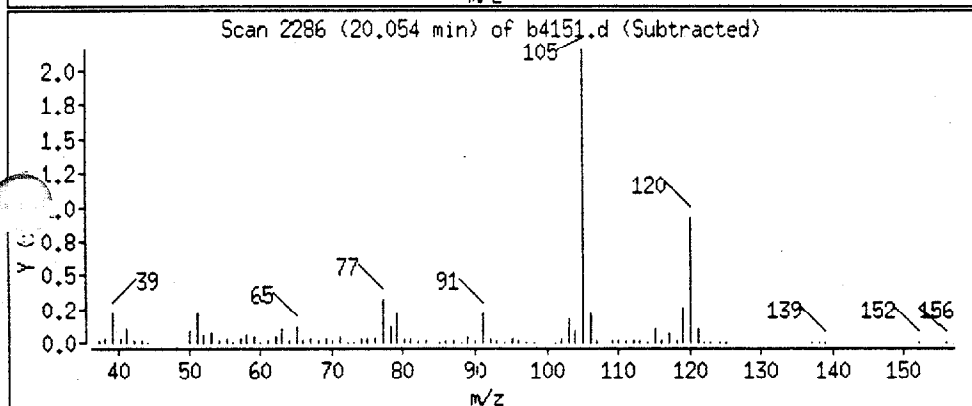
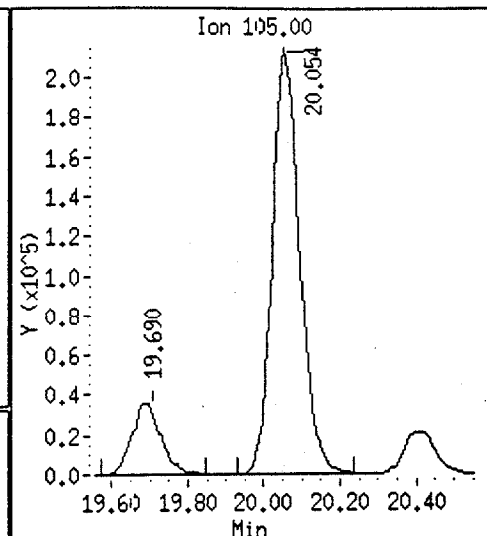
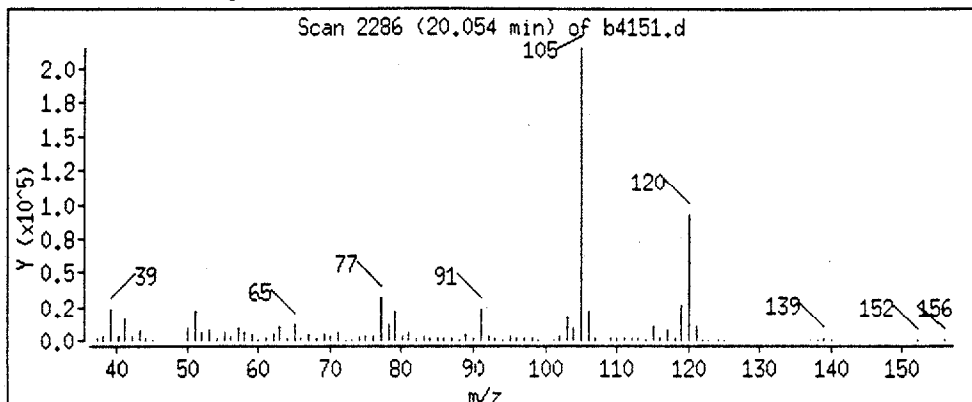
Sample ID :

Column phase : J&amp;W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

70 1,2,4-Trimethylbenzene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 20

Date : 27-JUN-94 17:27

Instrument : msb.i

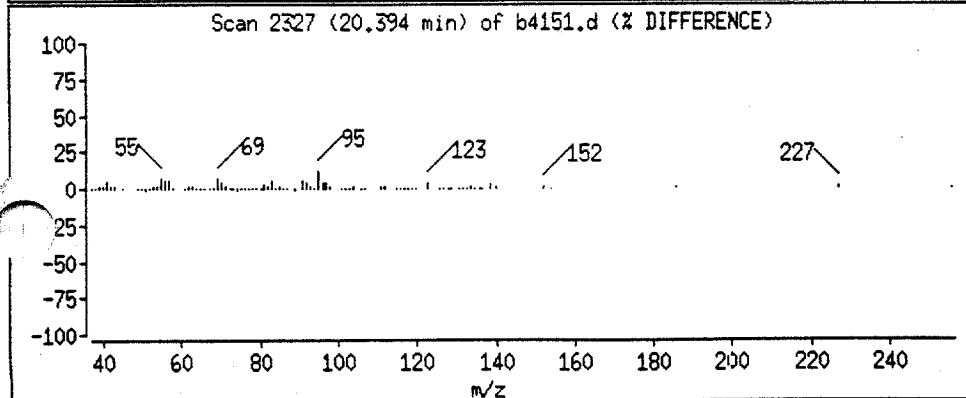
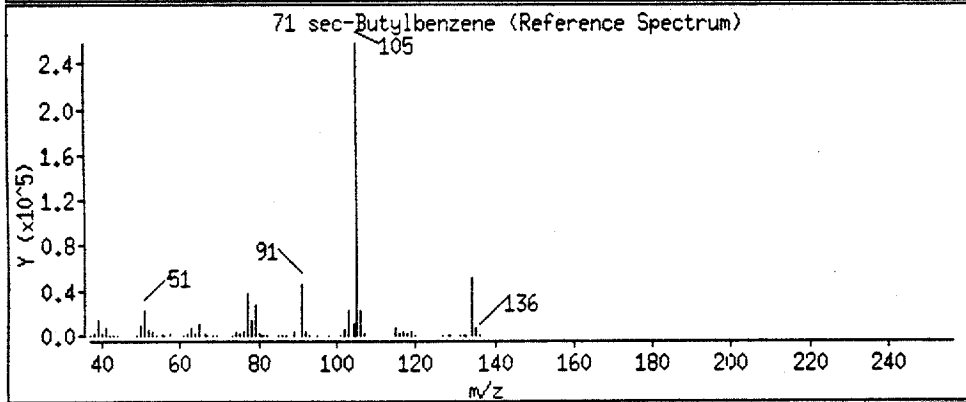
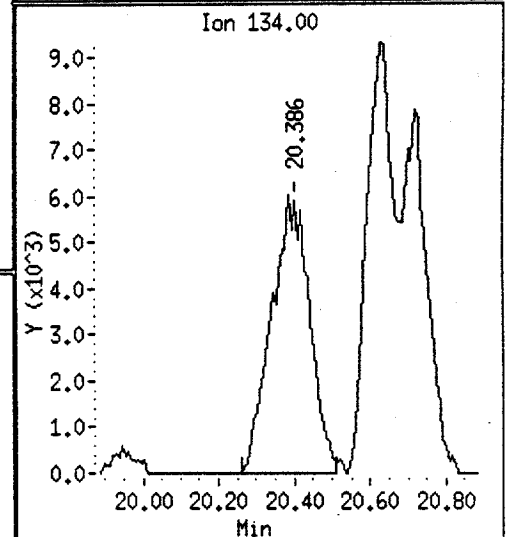
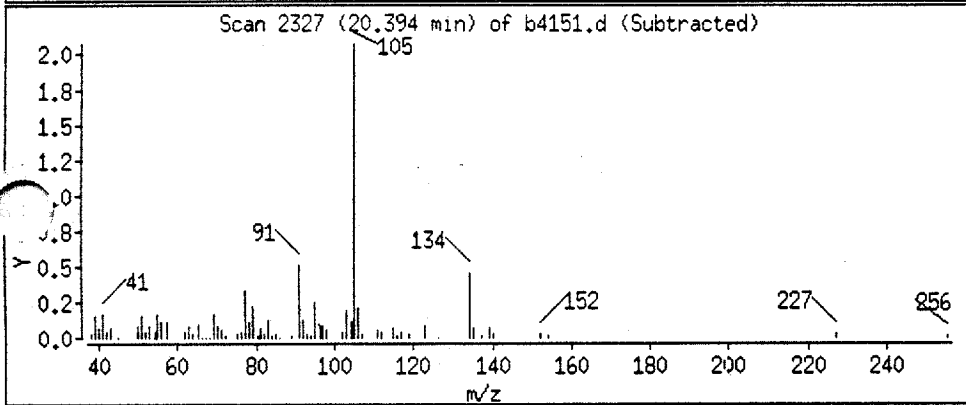
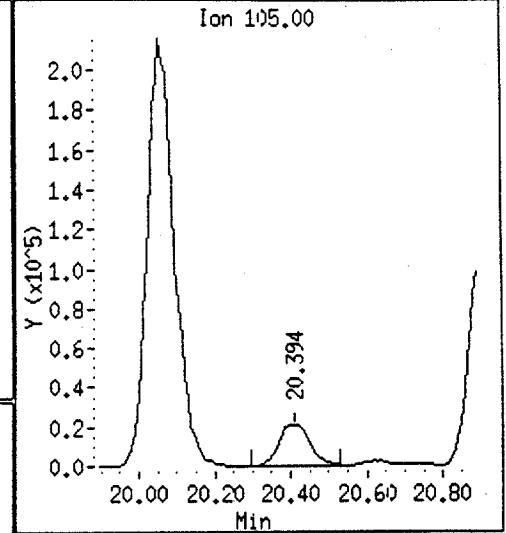
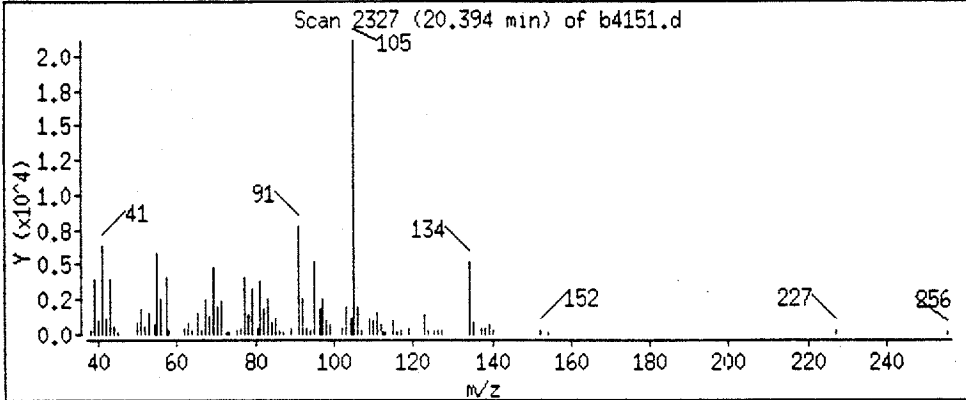
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

71 sec-Butylbenzene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 21

Date : 27-JUN-94 17:27

Instrument : msb.i

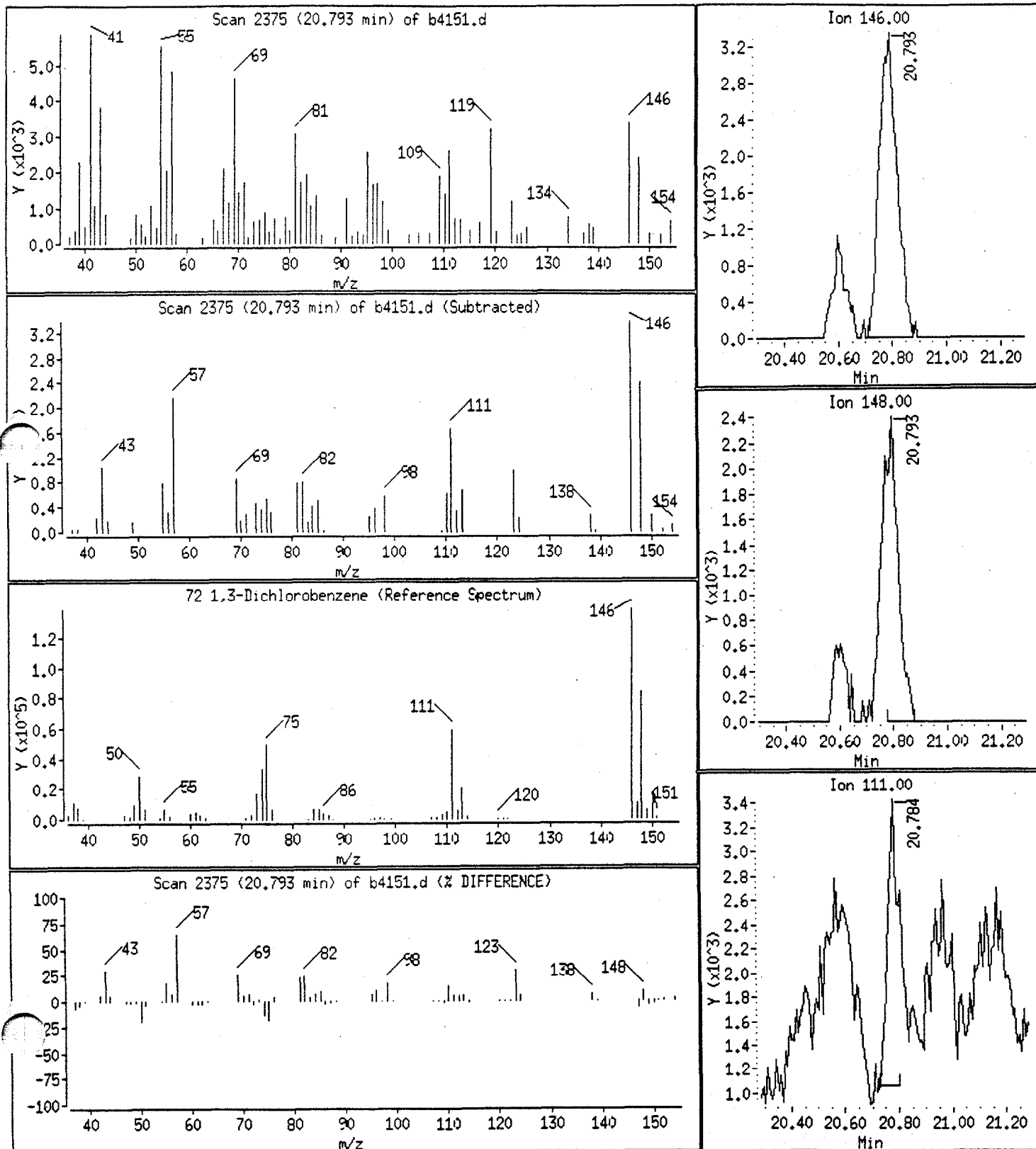
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

72 1,3-Dichlorobenzene



Data File: /chem/aux/msb.1/b062794.b/b4151.d

Date: 27-JUN-94 17:27

Instrument: msb.i

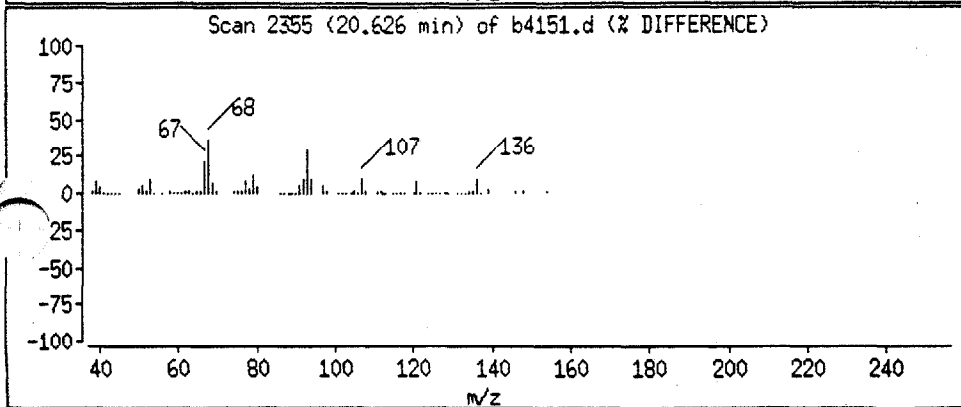
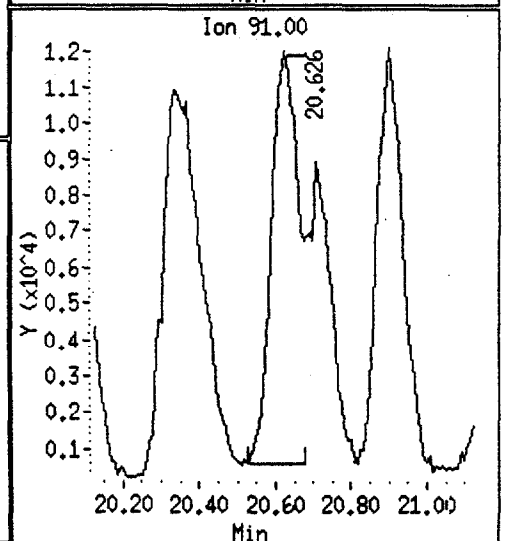
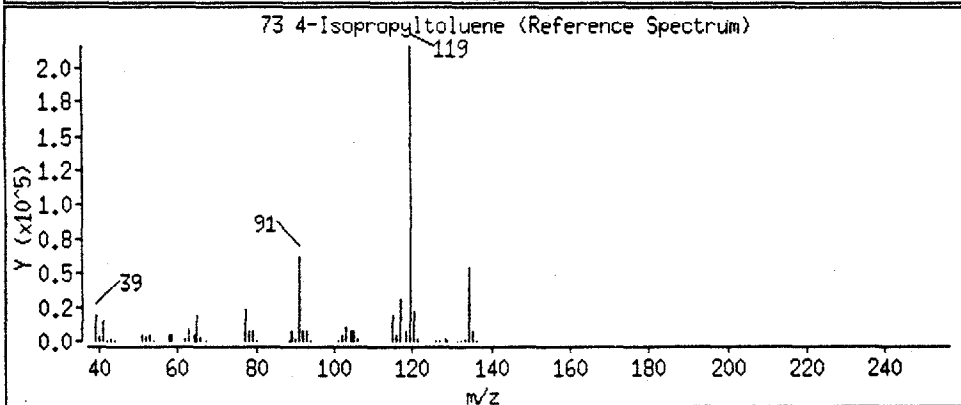
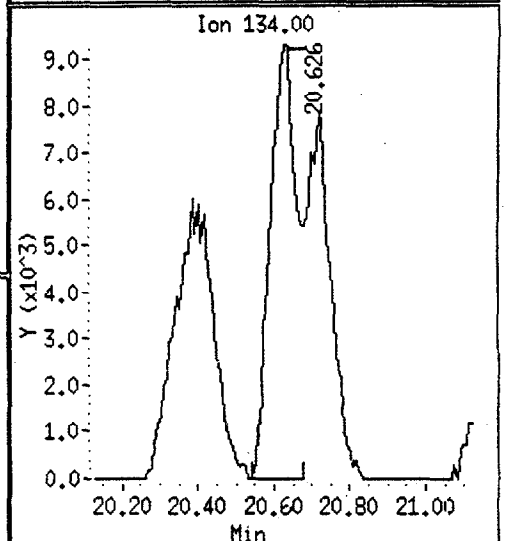
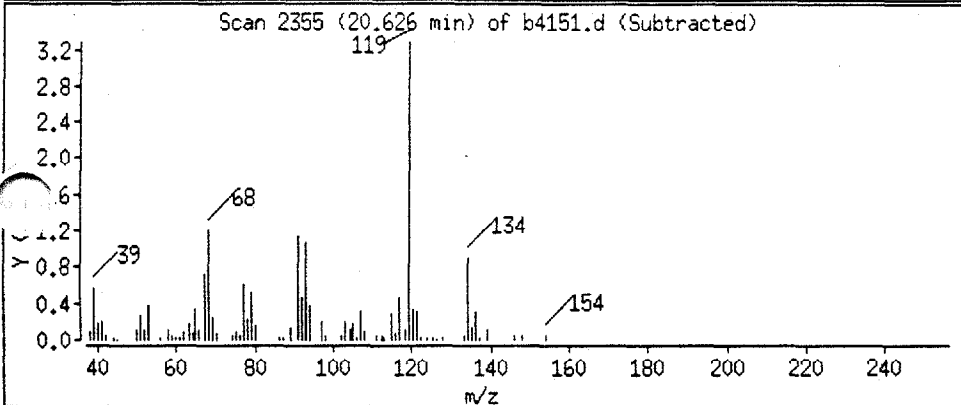
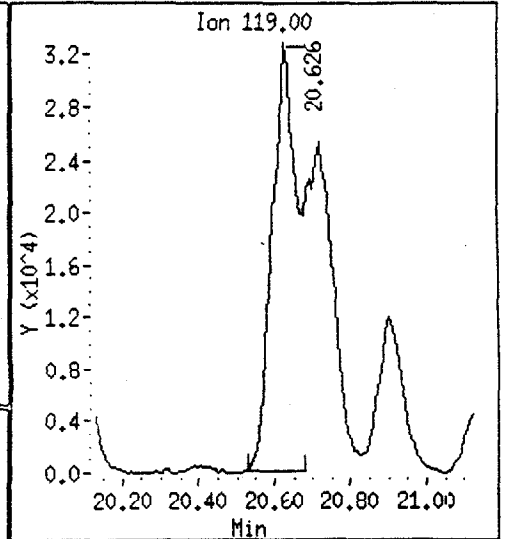
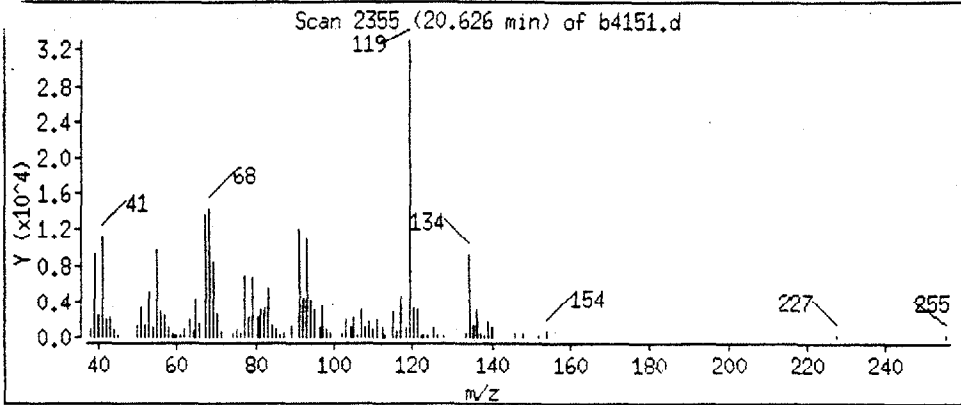
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

73 4-Isopropyltoluene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 23

Date: 27-JUN-94 17:27

Instrument: msb.i

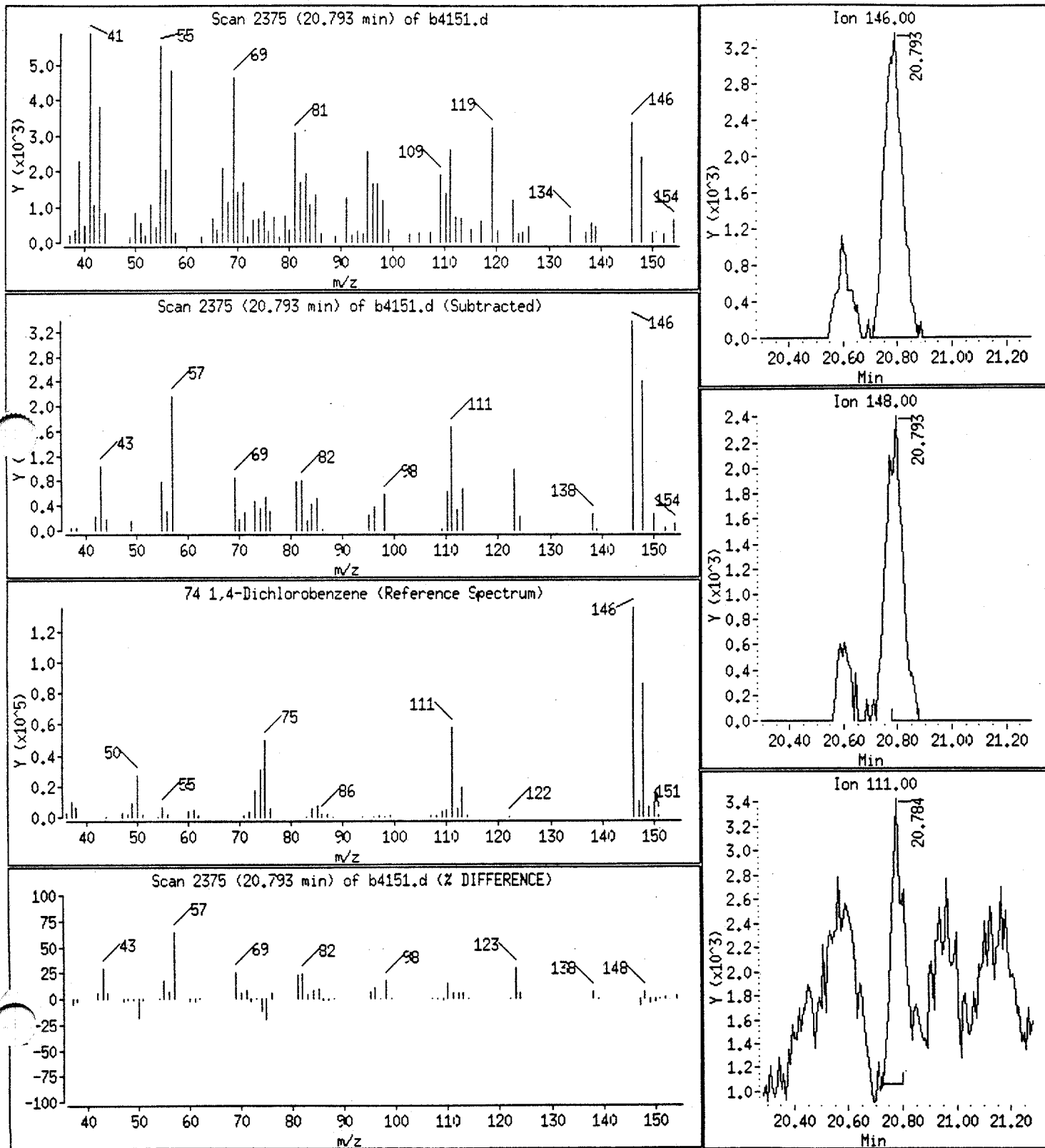
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

74 1,4-Dichlorobenzene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date : 27-JUN-94 17:27

Instrument : msb.i

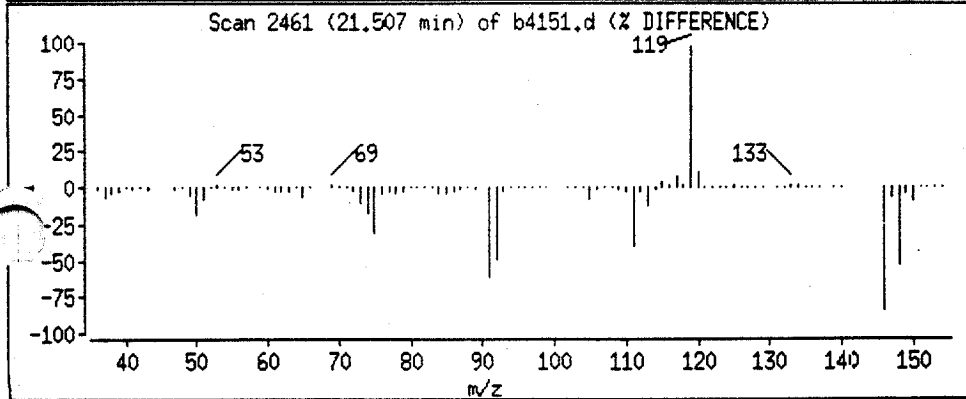
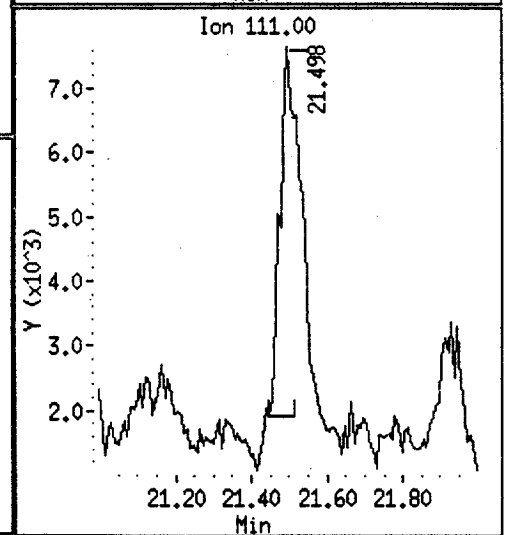
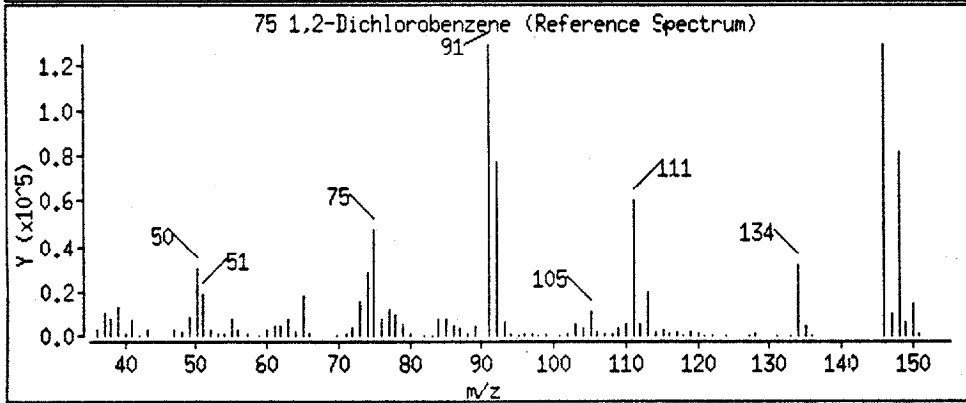
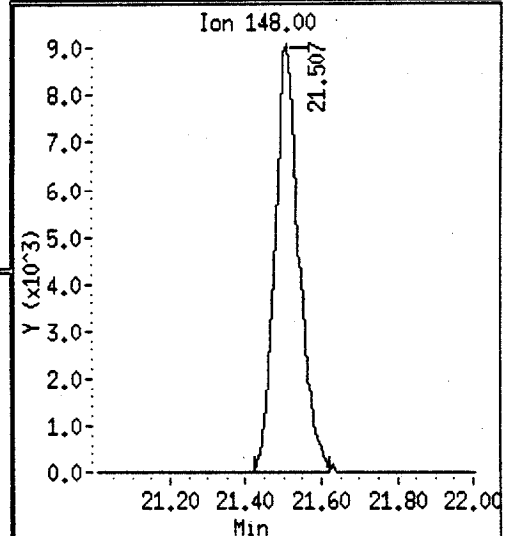
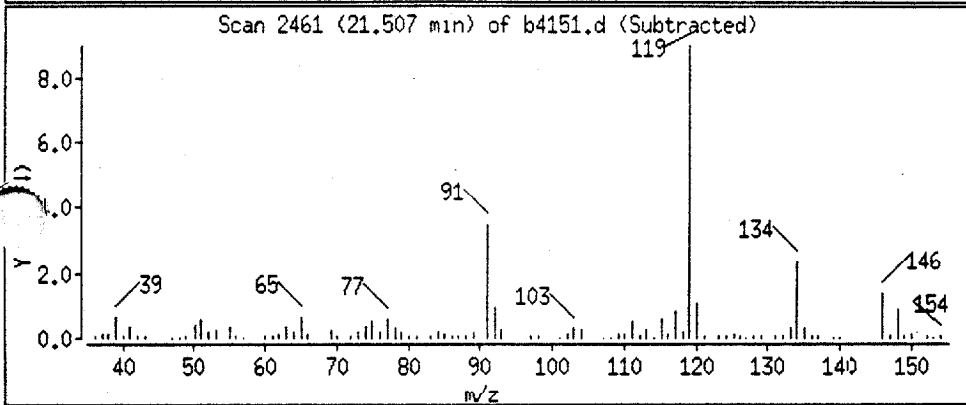
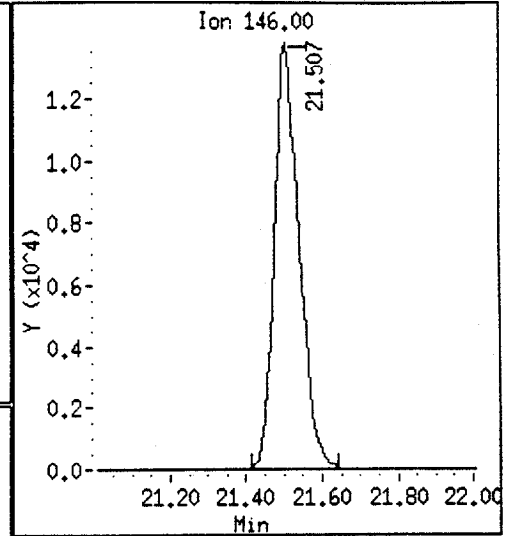
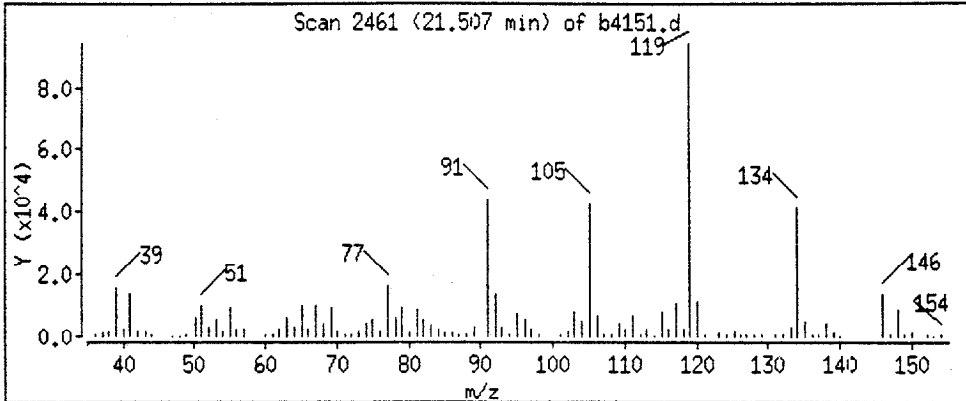
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

75 1,2-Dichlorobenzene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Date : 27-JUN-94 17:27

Instrument : msb.i

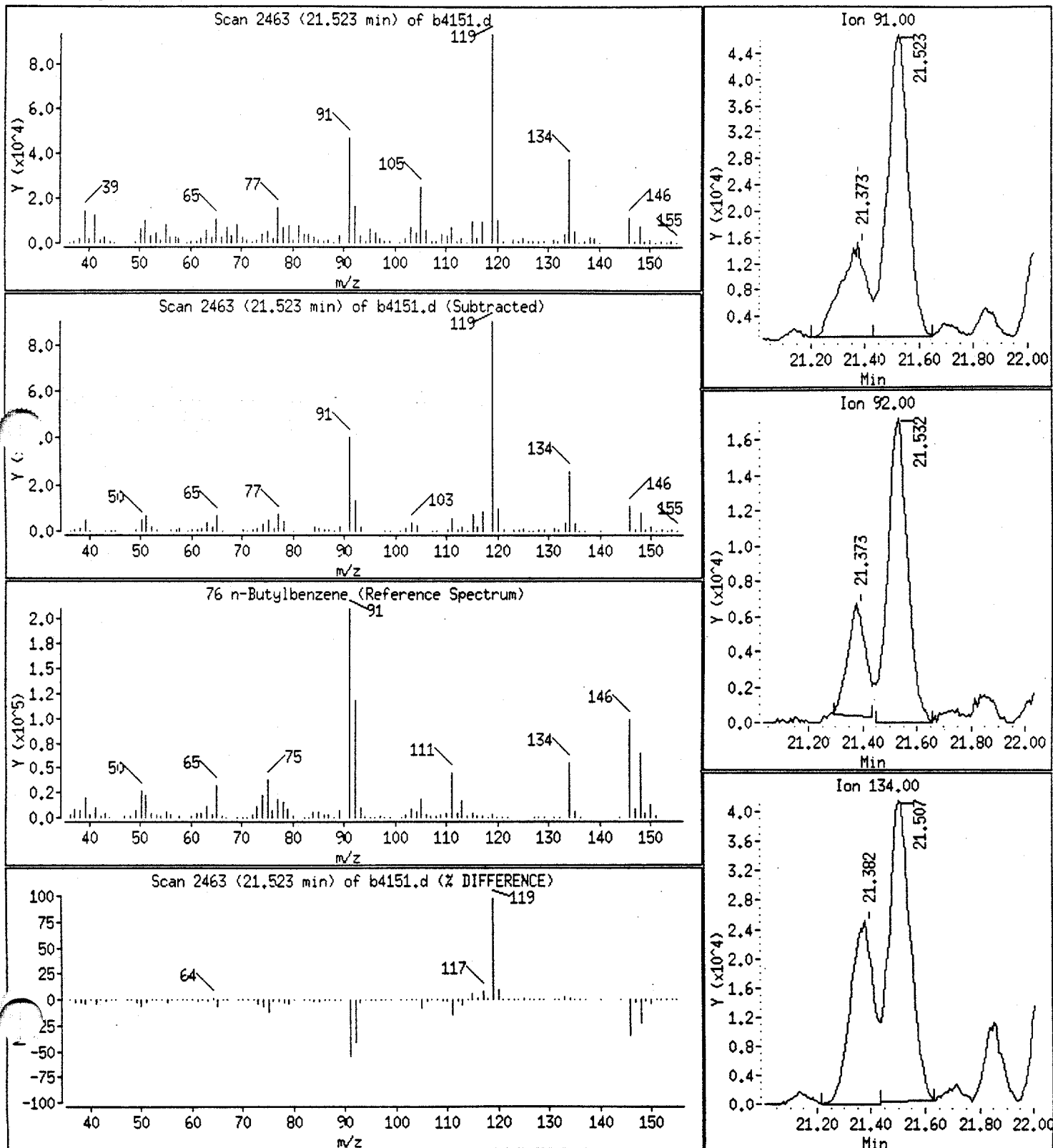
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

76 n-Butylbenzene





Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 27

Date : 27-JUN-94 17:27

Instrument : msb.i

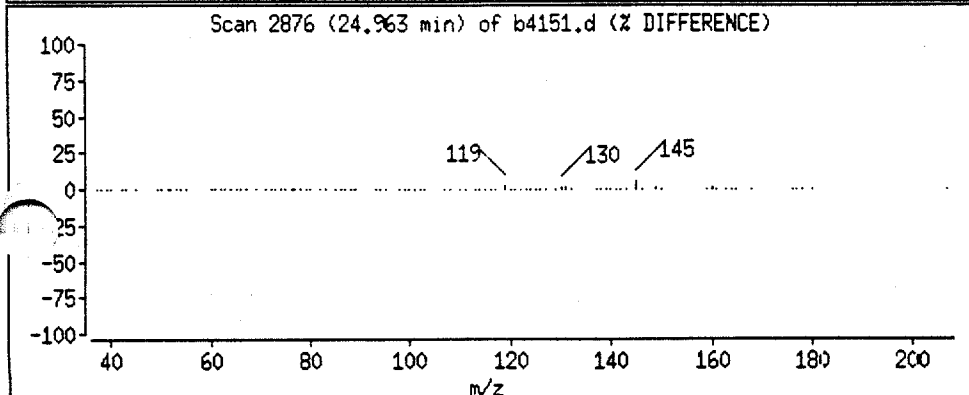
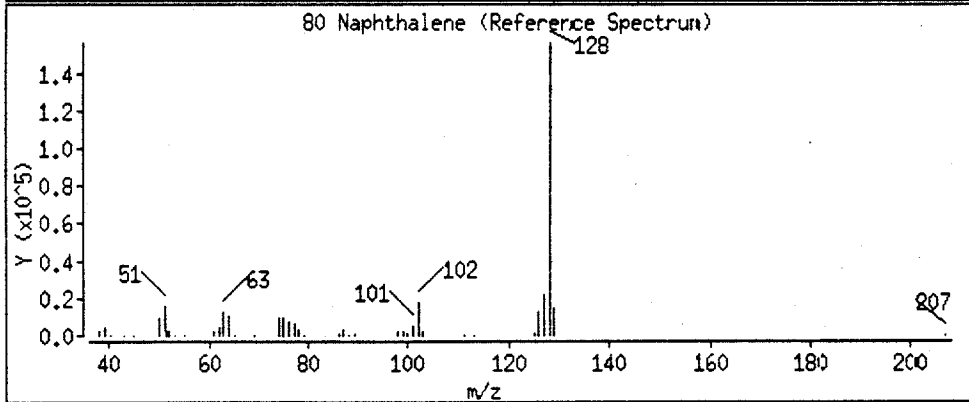
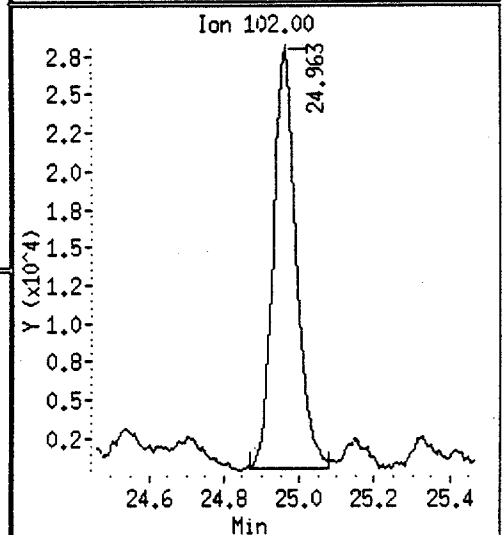
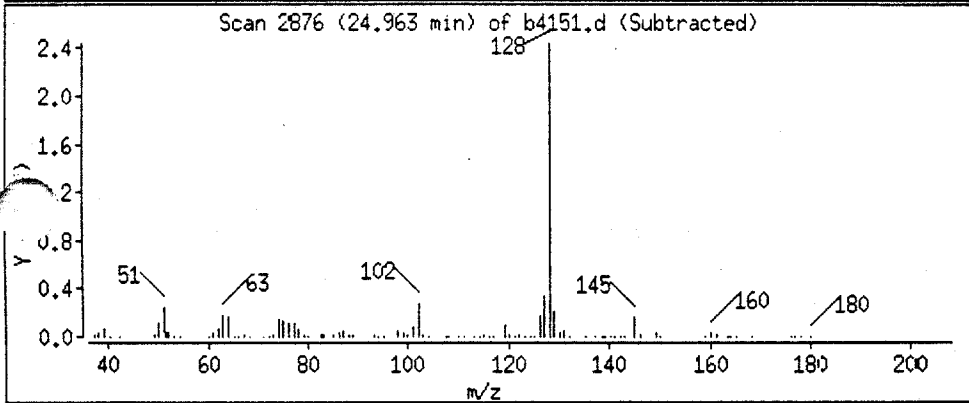
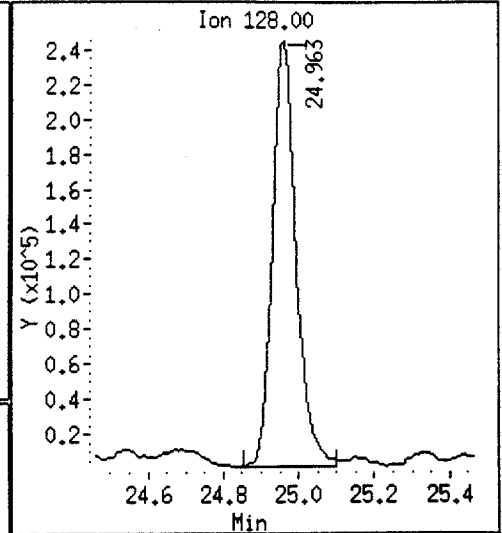
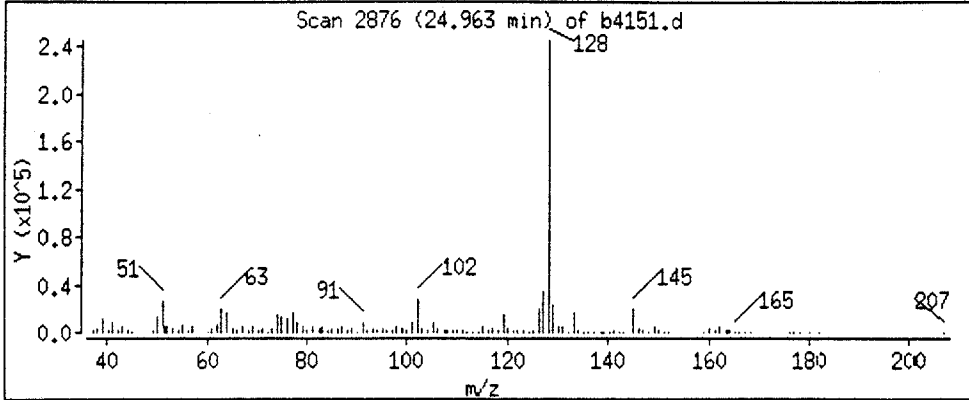
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

80 Naphthalene



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 31

Date: 27-JUN-94 17:27

Instrument: msb.i

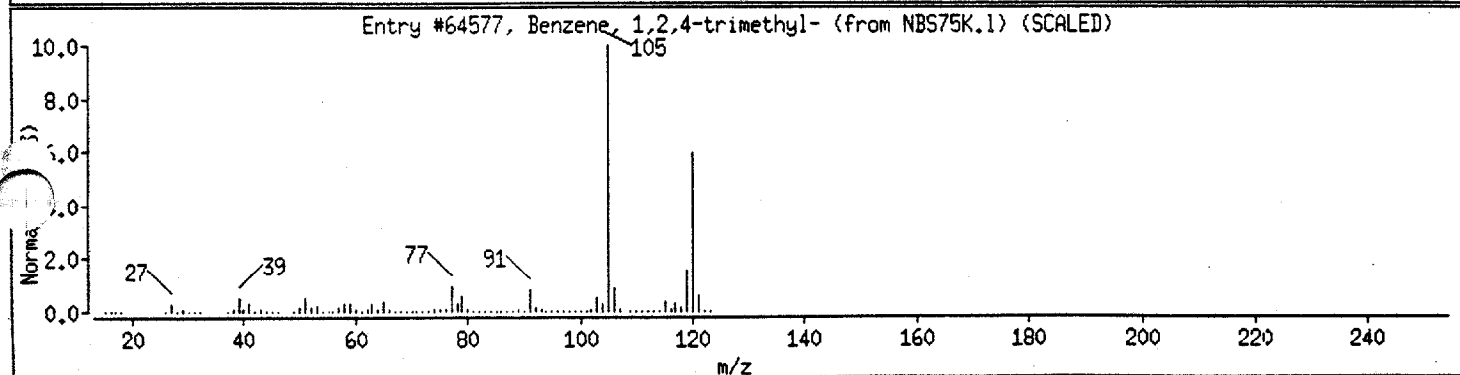
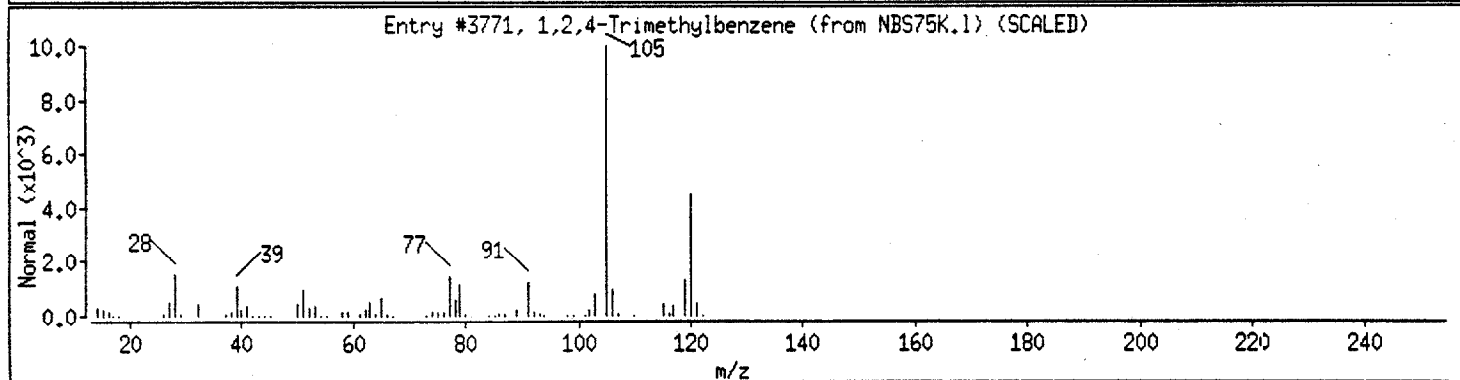
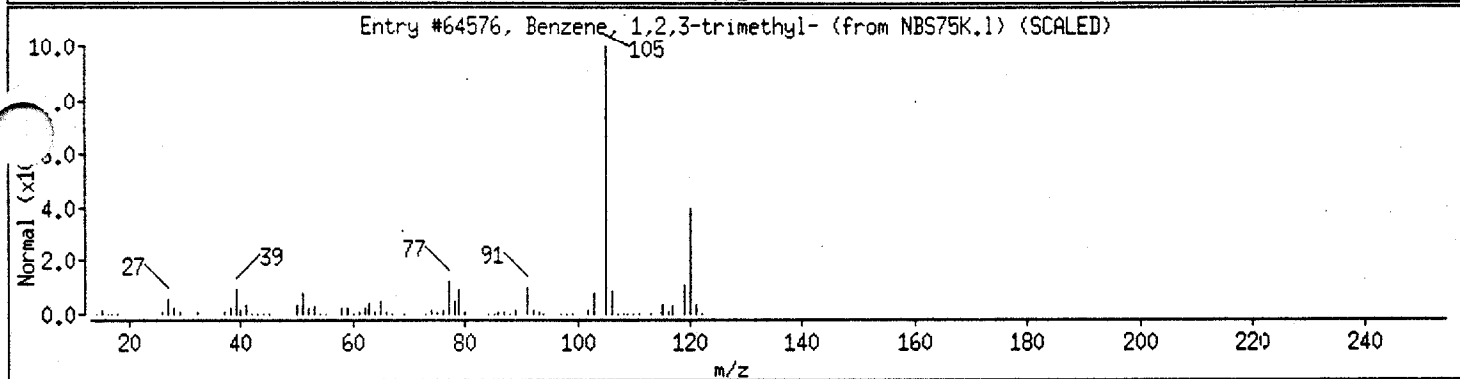
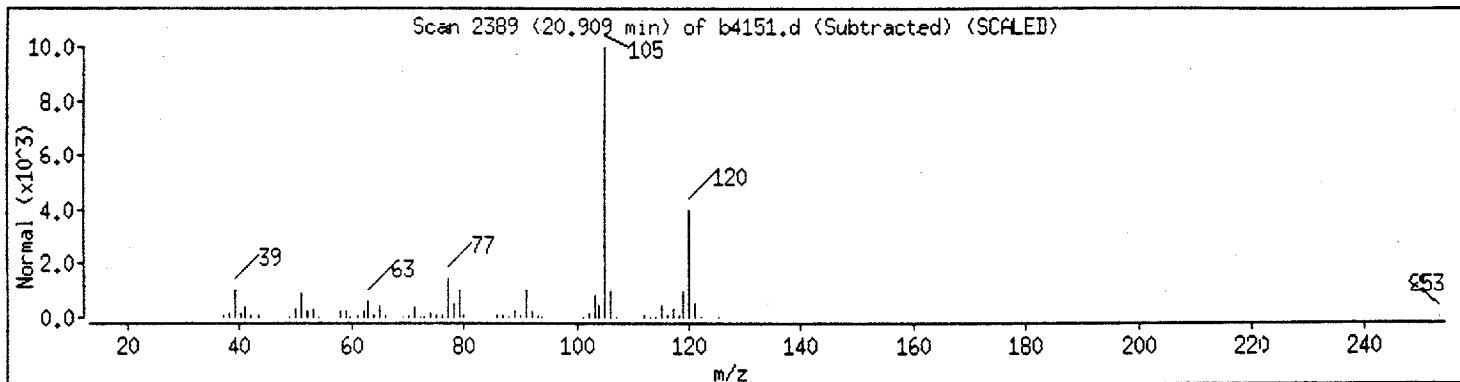
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	64576	97
1,2,4-Trimethylbenzene	95-36-3	NBS75K.1	3771	96
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.1	64577	94



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 29

Date: 27-JUN-94 17:27

Instrument: msb.i

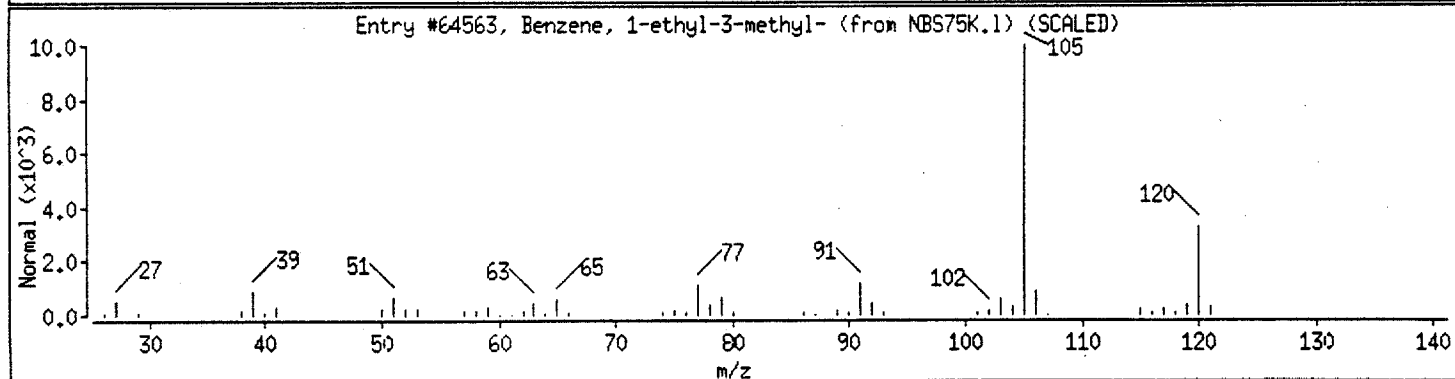
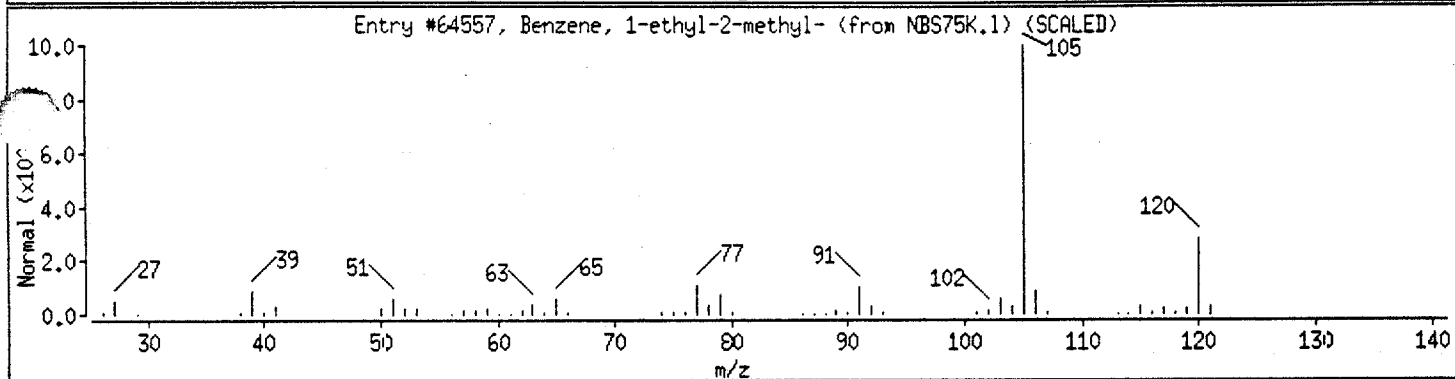
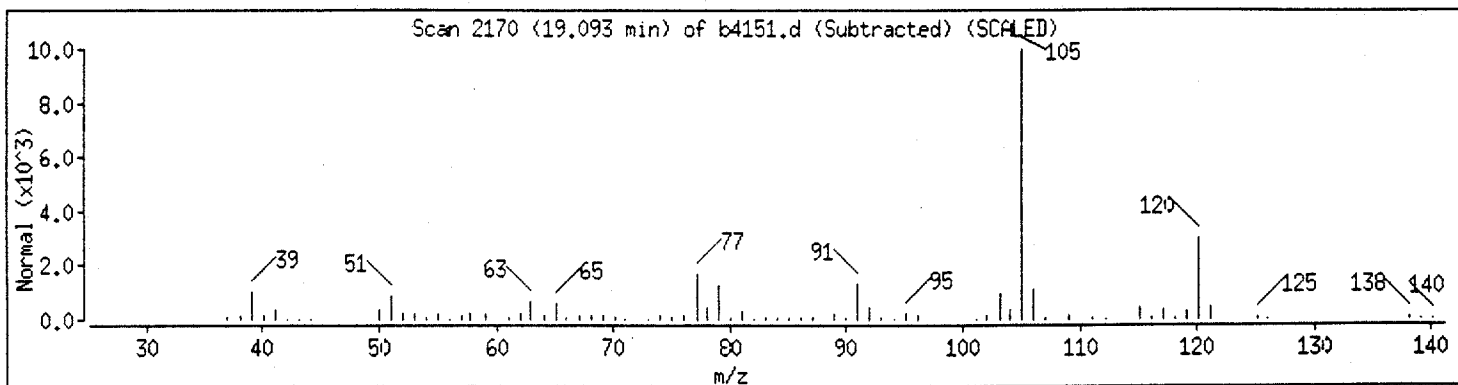
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.1	64557	94
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.1	64563	94



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 30

Date : 27-JUN-94 17:27

Instrument : msb.i

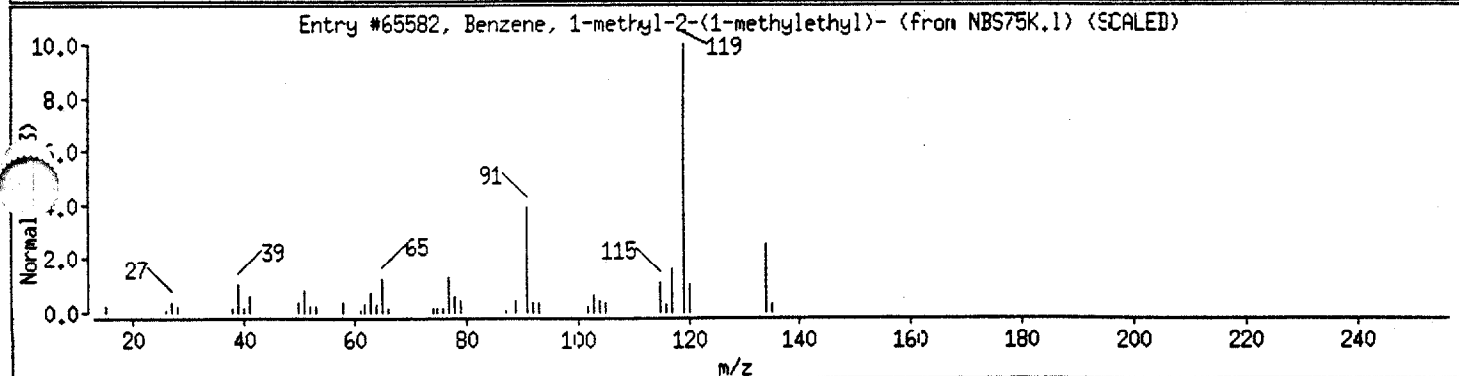
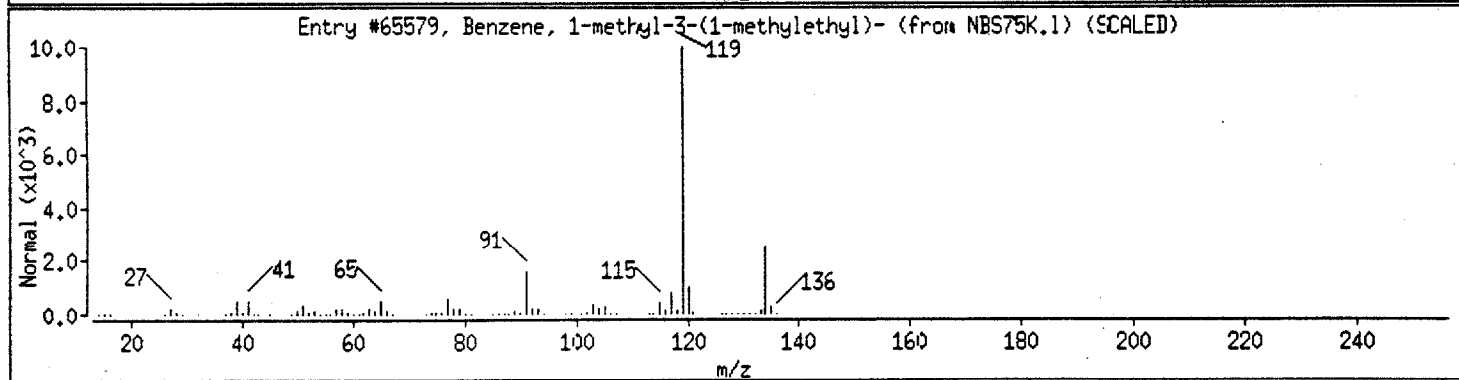
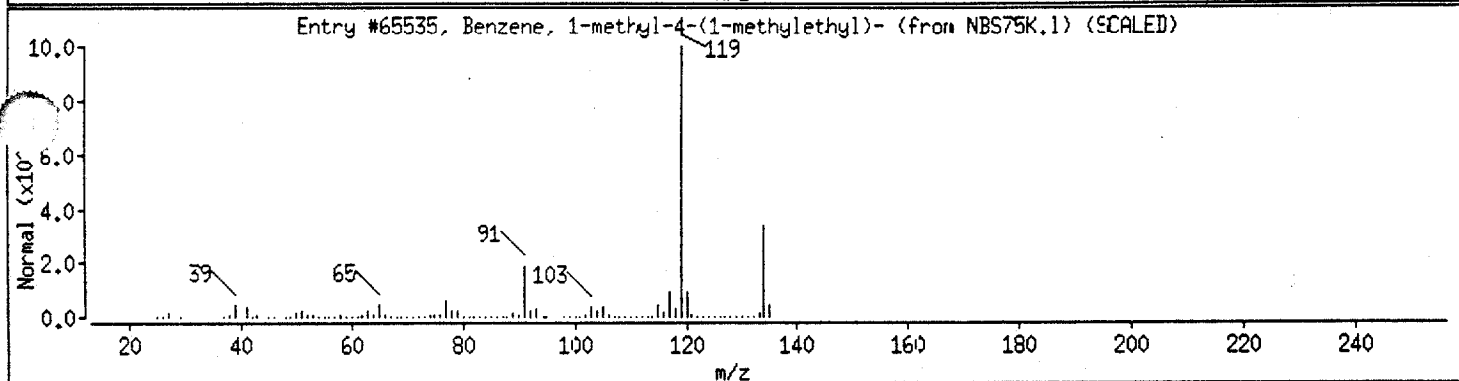
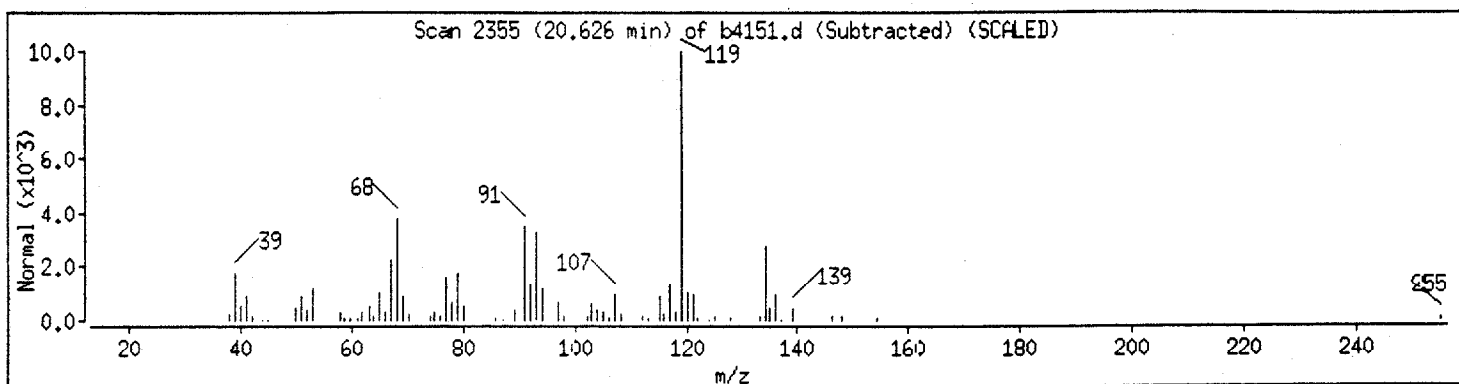
Sample ID :

Column phase : J&amp;W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NBS75K.1	65535	92
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NBS75K.1	65579	92
Benzene, 1-methyl-2-(1-methylethyl)-	527-84-4	NBS75K.1	65582	83



Data File: /chem/aux/msb.i/b062794.b/b4151.d

Page 32

Date: 27-JUN-94 17:27

Instrument: msb.i

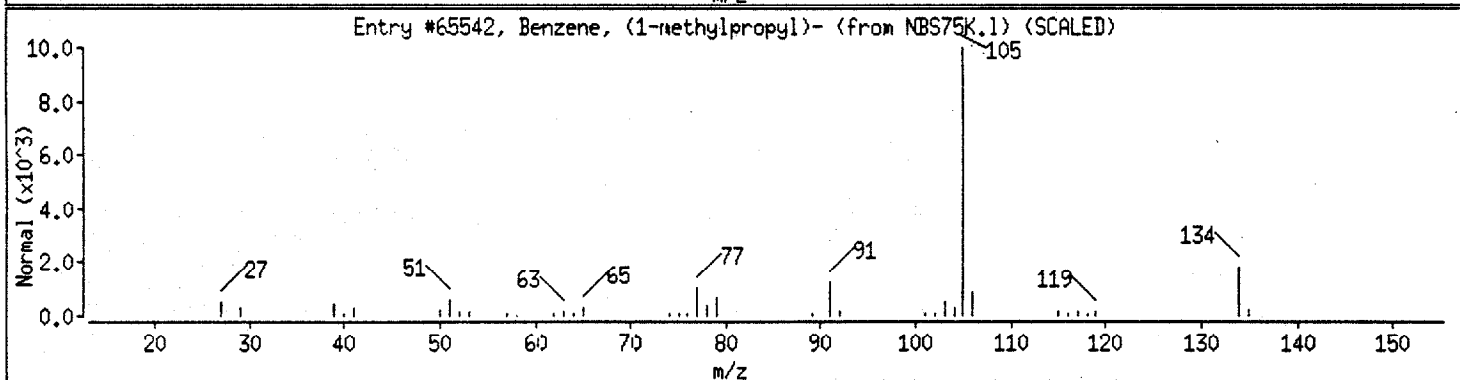
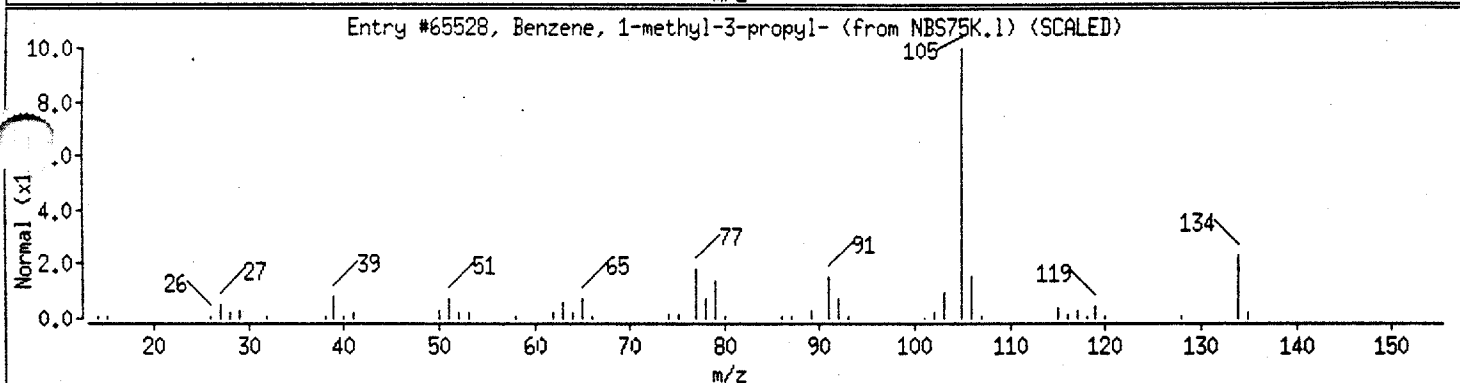
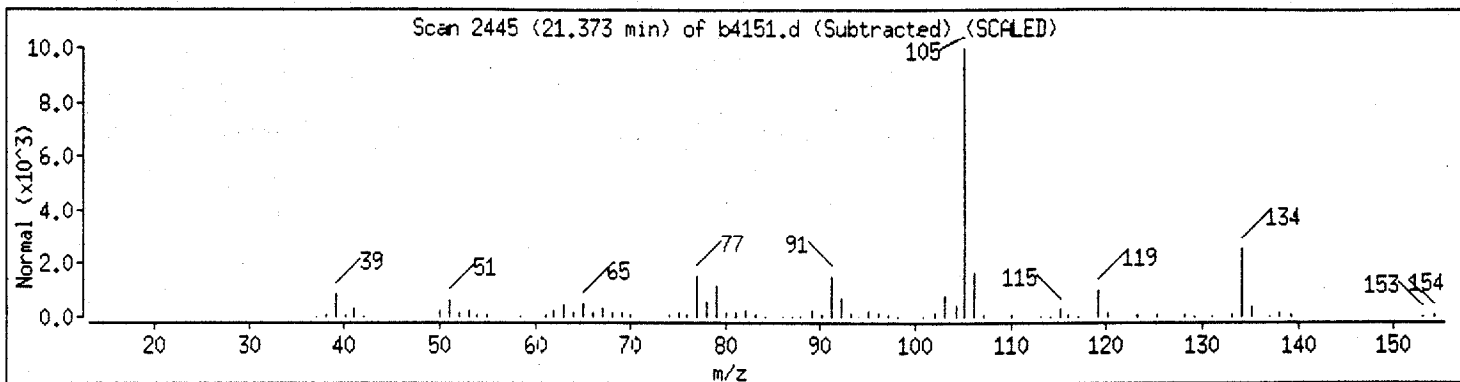
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-methyl-3-propyl-	1074-43-7	NBS75K.1	65528	93
Benzene, (1-methylpropyl)-	135-98-8	NBS75K.1	65542	87



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ASC Contract: NEESA CG622  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6007  
 Matrix: (soil/water) WATER Lab Sample ID: JM 9439V  
 Sample wt/vol: 5.00 (g/mL) ml Lab File ID: B4148  
 Level: (low/med) low Date Received: 06/23/94  
 ‡ Moisture: not dec. NA Date Analyzed: 06/28/94  
 GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1  
 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

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

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS; (ug/L or ug/Kg) <u>ug/L</u>	Q
74-87-3	Chloromethane	5.00	u
74-83-9	Bromomethane	5.00	u
75-01-4	Vinyl Chloride	5.00	u
75-00-3	Chloroethane	5.00	u
75-09-2	Methylene Chloride	31.8	u
67-64-1	Acetone	208	u
75-15-0	Carbon Disulfide	5.00	u
75-35-4	1,1-Dichloroethene	5.00	u
75-34-3	1,1-Dichloroethane	5.00	u
540-59-0	1,2-Dichloroethene (total)	5.00	u
67-66-3	Chloroform	5.00	u
107-06-2	1,2-Dichloroethane	5.00	u
78-93-3	2-Butanone	95.1	u
71-55-6	1,1,1-Trichloroethane	5.00	u
56-23-5	Carbon Tetrachloride	5.00	u
75-27-4	Bromodichloromethane	5.00	u
78-87-5	1,2-Dichloropropane	5.00	u
10061-01-5	cis-1,3-Dichloropropene	5.00	u
79-01-6	Trichloroethene	5.00	u
124-48-1	Dibromochloromethane	5.00	u
79-00-5	1,1,2-Trichloroethane	5.00	u
71-43-2	Benzene	1.62	BJ
10061-02-6	trans-1,3-Dichloropropene	5.00	u
75-25-2	Bromoform	5.00	u
108-10-1	4-Methyl-2-Pentanone	10.0	u
591-78-6	2-Hexanone	5.00	u
127-18-4	Tetrachloroethene	5.00	u
79-34-5	1,1,2,2-Tetrachloroethane	5.00	u
108-88-3	Toluene	4.05	J
108-90-7	Chlorobenzene	5.00	u
100-41-4	Ethylbenzene	7.29	u
100-42-5	Styrene	5.00	u
1330-20-7	Xylene (total)	159	u

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: ASC Contract: NEESA C6622  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Matrix: (soil/water) WATER Lab Sample ID: JM9439V  
 Sample wt/vol: 5.00 (g/mL) ml Lab File ID: B4158  
 Level: (low/med) Low Date Received: 06/23/94  
 ‡ Moisture: not dec. NA Date Analyzed: 06/28/94  
 GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1  
 Soil Extract Volume: NA (uL) Soil Aliquot Volume: NA (uL)

Number TICs found: 4

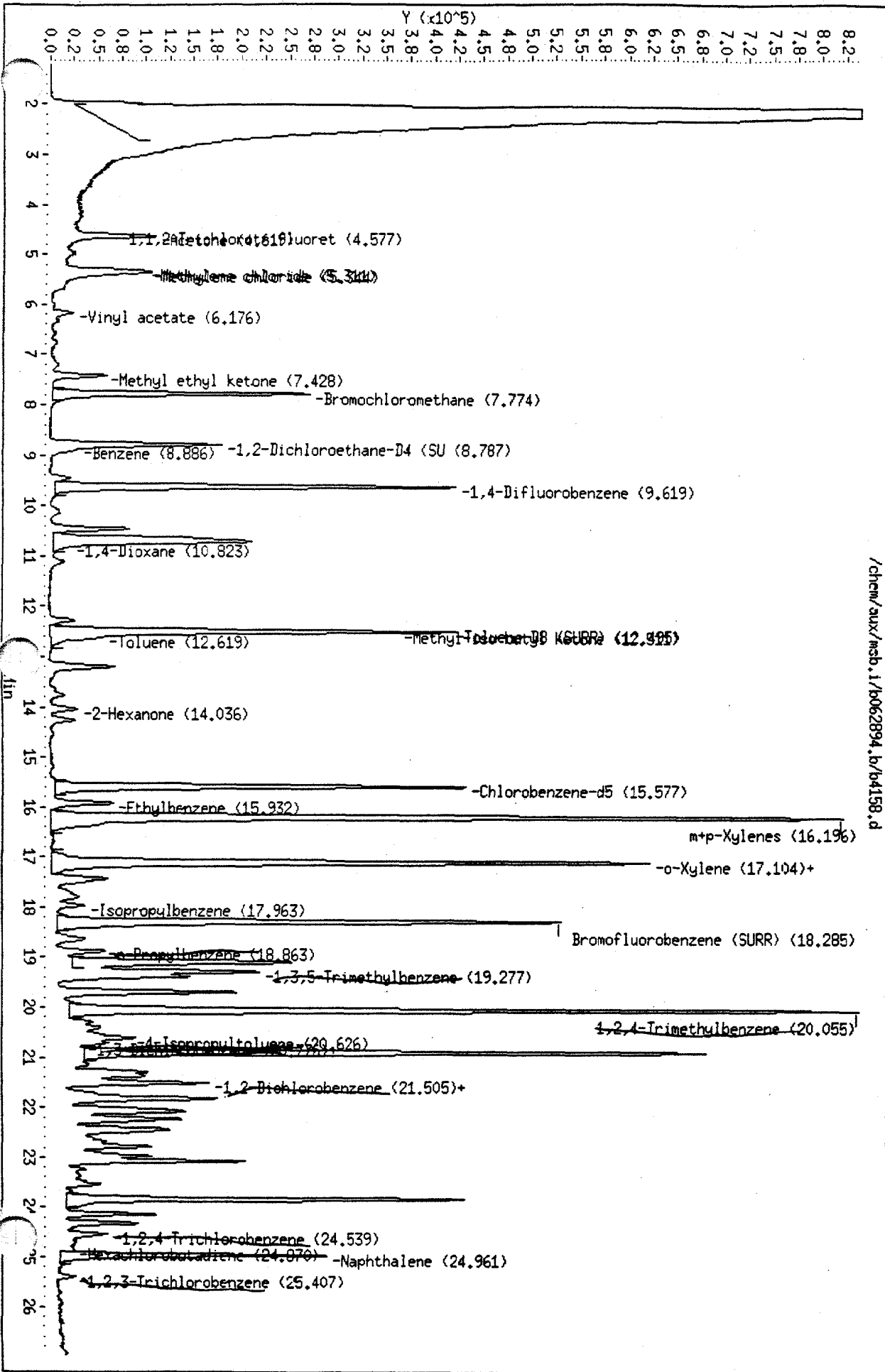
CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. <u>96-22-0</u>	<u>3-Pentane</u>	<u>10.71</u>	<u>40.0</u>	<u>J</u>
2. <u>620-14-4</u>	<u>Benzene, 1-ethyl-3-methyl-</u>	<u>19.09</u>	<u>29.8</u>	
3. <u>526-73-8</u>	<u>Benzene, 1,2,3-trimethyl-</u>	<u>20.90</u>	<u>66.8</u>	<u>J</u>
4. <u>95-93-2</u>	<u>Benzene, 1,2,4,5-tetraethyl-</u>	<u>23.83</u>	<u>41.6</u>	<u>J</u>
5.				
6.				
7.	<u>1,1,2-Trichloroethane</u>	<u>4.577</u>	<u>3.14</u>	<u>X</u>
8.	<u>Isopropyl Benzene</u>	<u>17.943</u>	<u>2.61</u>	<u>X</u>
9.	<u>n-Propyl Benzene</u>	<u>18.863</u>	<u>4.95</u>	<u>X</u>
10.	<u>1,2,4-Trimethylbenzene</u>	<u>20.055</u>	<u>72.7</u>	<u>X</u>
11.	<u>4-Isopropylbenzene</u>	<u>20.676</u>	<u>3.59</u>	<u>X</u>
12.	<u>Naphthalene</u>	<u>24.961</u>	<u>38.8</u>	<u>X</u>
13.	<u>1,2,3-Trichlorobenzene</u>	<u>25.707</u>	<u>2.12</u>	<u>X</u>
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/aux/msb.1/b062894.b/b4158.d  
Date: 28-JUN-94 11:37  
Instrument: msb.i  
Sample ID:  
Column phase: J&W DB.624  
Volume Injected (ul): 0.0

C6622

Column diameter: 0.53





Data File: /chem/aux/msb.i/b062894.b/b4158.d  
 Report Date: 30-Jun-1994 15:21

Page 1

## Analytical Services Corp.

## VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msb.i/b062894.b/b4158.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 28-JUN-94 11:37 Autotune Date: {  
 Operator : steve Inst ID: msb.i  
 Smp Info : 15226n c6622  
 Misc Info : jm9439v,nlv3671,1:m2,5,5:1,  
 Comment :  
 Method : /chem/aux/msb.i/b062894.b/8240b.m  
 Meth Date : 30-Jun-1994 11:57 tom  
 Cal Date : 28-JUN-94 10:30 Cal File: b4157.d  
 Als bottle: 4  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

TS  
6-30-94

Compounds	QUANT	SIG	MASS	RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN ( ug/l)	FINAL ( ug/l)
1,1,2-Trichlorotrifluoroethane	101.00	====	43.00	4.577	(0.589)	36622	3.14	3.14(aQM)
11 Acetone	43.00	==	84.00	4.619	(0.594)	273428	208	208
15 Methylene chloride	84.00	=====	20.00	5.344	(0.683)	174943	31.8	41.8(aQM)
20 Vinyl acetate	43.00	=====	72.00	6.176	(0.642)	15385	8.07	8.07(a)
23 Methyl ethyl ketone	72.00	=====	128.00	7.428	(0.772)	45740	85.1	85.1(aQ)
* 25 Bromochloromethane	128.00	=====	65.00	7.774	(1.000)	199148	50.0	50.0
\$ 31 1,2-Dichloroethane-D4 (SURR)	65.00	=====	78.00	8.787	(1.130)	332194	55.1	55.1 ✓
32 Benzene	78.00	=====	114.00	8.886	(0.924)	23003	1.62	1.62(a)
* 34 1,4-Difluorobenzene	114.00	=====	88.00	9.619	(1.000)	907416	50.0	50.0
38 1,4-Dioxane	88.00	=====	43.00	10.823	(1.125)	21457	204	204(aQM)
42 Methyl-iso-butyl ketone	43.00	=====	98.00	12.511	(0.803)	5225	0.922	0.922(aQ)
\$ 43 Toluene-D8 (SURR)	98.00	=====	22.00	12.495	(0.802)	857243	51.7	51.7 ✓
44 Toluene	22.00	=====	49.00	12.619	(0.810)	43938	4.05	4.05(a)
49 2-Hexanone	49.00	=====	117.00	14.036	(0.901)	60878	15.6	15.6(a)
* 52 Chlorobenzene-d5	117.00	=====	106.00	15.585	(1.000)	708302	50.0	50.0
55 Ethylbenzene	106.00	=====	106.00	15.932	(1.022)	47717	7.29	7.29
56 m+p-Xylenes	106.00	=====	106.00	16.196	(1.039)	719209	90.8	90.8
57 o-Xylene	106.00	=====	106.00	17.104	(1.097)	542566	68.4	68.4
58 Styrene	104.00	=====	104.00	17.095	(1.097)	14306	1.14	1.14(aQ)
60 Isopropylbenzene	105.00	=====	95.00	17.963	(1.153)	60373	2.61	2.61(a)
\$ 61 Bromofluorobenzene (SURR)	95.00	=====	120.00	18.285	(1.173)	586161	52.7	52.7 ✓
65 n-Propylbenzene	120.00	=====	105.00	18.863	(1.210)	30692	4.95	4.95(aQ)
67 1,3,5-Trimethylbenzene	105.00	=====	105.00	19.277	(1.237)	337606	18.0	18.0
70 1,2,4-Trimethylbenzene	105.00	=====	146.00	20.055	(1.287)	1307034	72.7	72.7 OIC RA
72 1,3-Dichlorobenzene	146.00	=====	119.00	20.776	(1.333)	7147	0.523	0.523(aQ)
3 4-Isopropyltoluene	119.00	=====	146.00	20.626	(1.323)	83178	3.59	3.59(a) OK #
74 1,4-Dichlorobenzene	146.00	=====	146.00	20.776	(1.333)	7147	0.516	0.516(aQ)
75 1,2-Dichlorobenzene	146.00	=====	91.00	21.505	(1.380)	7078	0.571	0.571(a)
76 n-Butylbenzene	91.00	=====	21.513	21.513	(1.380)	68739	3.17	3.17(aQ)

Data File: /chem/aux/msb.i/b062894.b/b4158.d  
Report Date: 30-Jun-1994 15:21

Page 2

Compounds	QUANT SIG	RT	REL RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN ( ug/l)	FINAL ( ug/l)
-----	----	==	-----	-----	-----	-----
78 1,2,4-Trichlorobenzene	180.00	24.539	(1.575)	11129	1.38	<del>1.38(a)</del>
79 Hexachlorobutadiene	225.00	24.870	(1.596)	4637	1.11	1.11(aQ)
80 Naphthalene	128.00	24.961	(1.602)	533495	38.8	38.8
81 1,2,3-Trichlorobenzene	180.00	25.407	(1.630)	13450	2.12	<del>2.12(a)</del> OK M

## QC Flag Legend

- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- M - Compound response manually integrated.

Data File: /chem/aux/msb.i/b062894.b/b4158.d

Date : 28-JUN-94 11:37

Instrument : msb.i

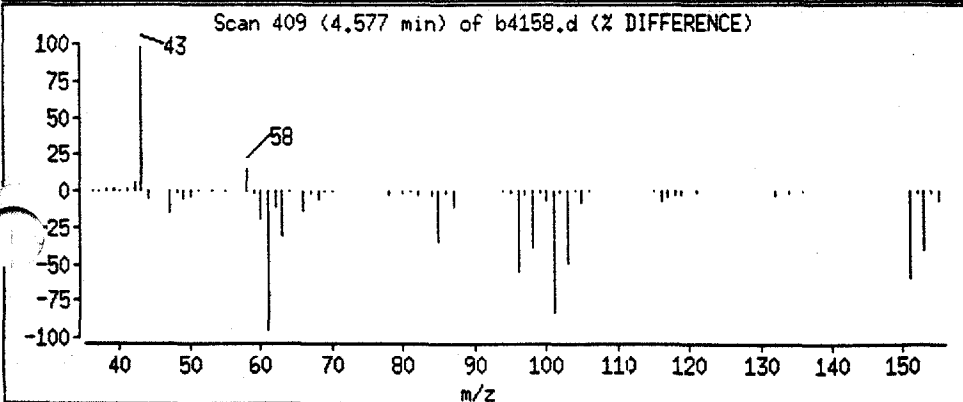
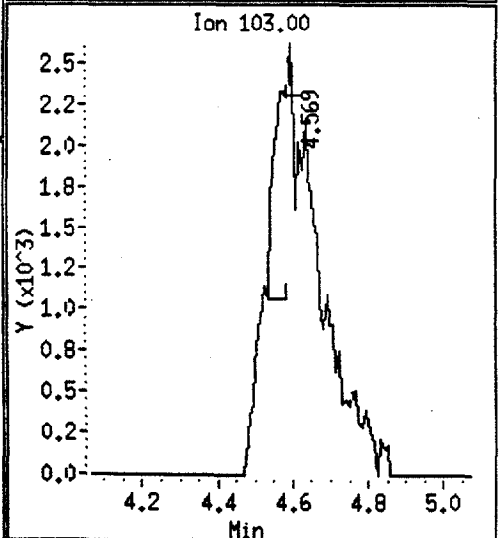
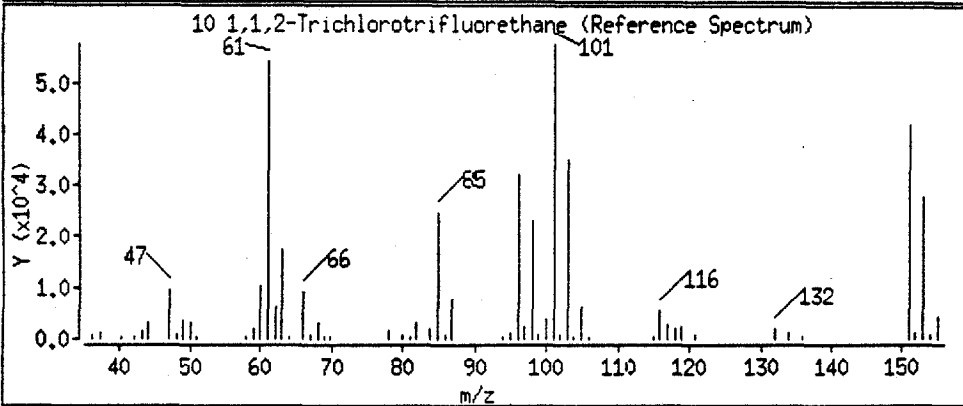
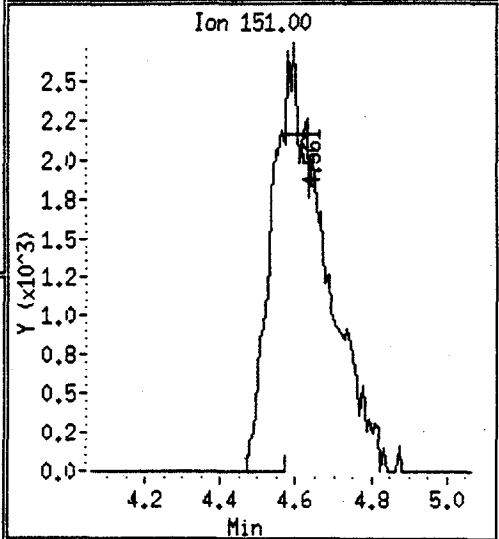
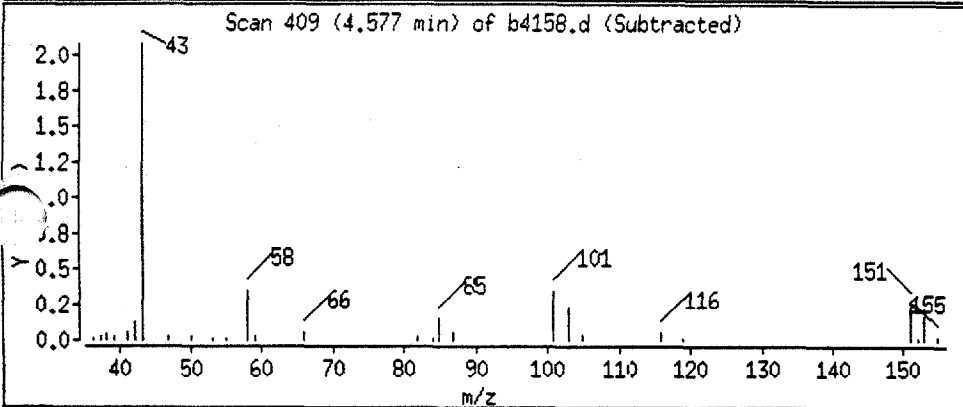
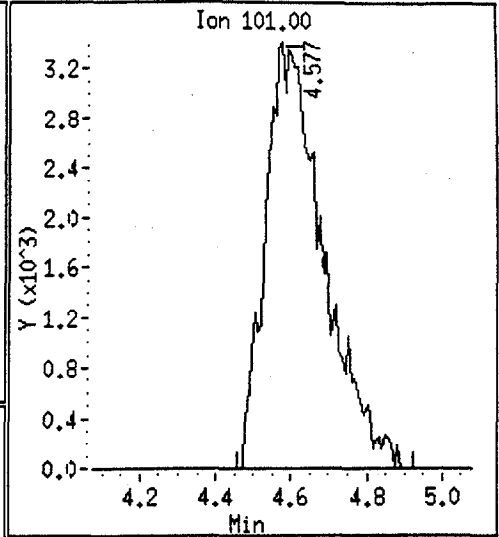
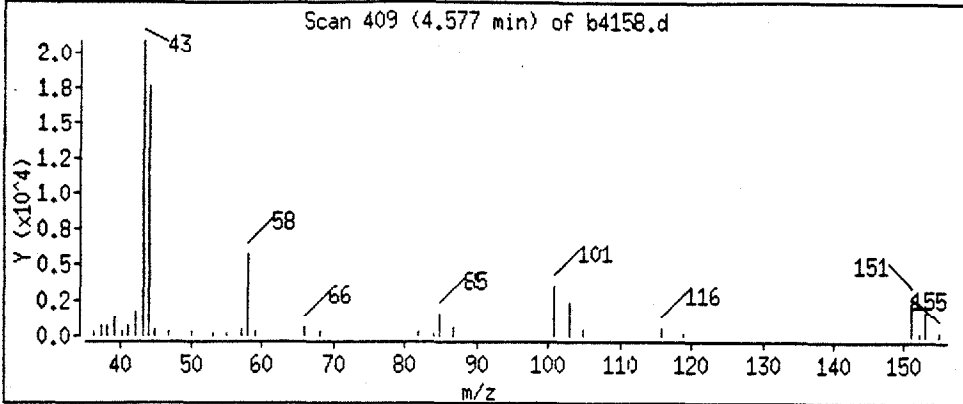
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

10 1,1,2-Trichlorotrifluoroethane



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 7

Date: 28-JUN-94 11:37

Instrument: msb.i

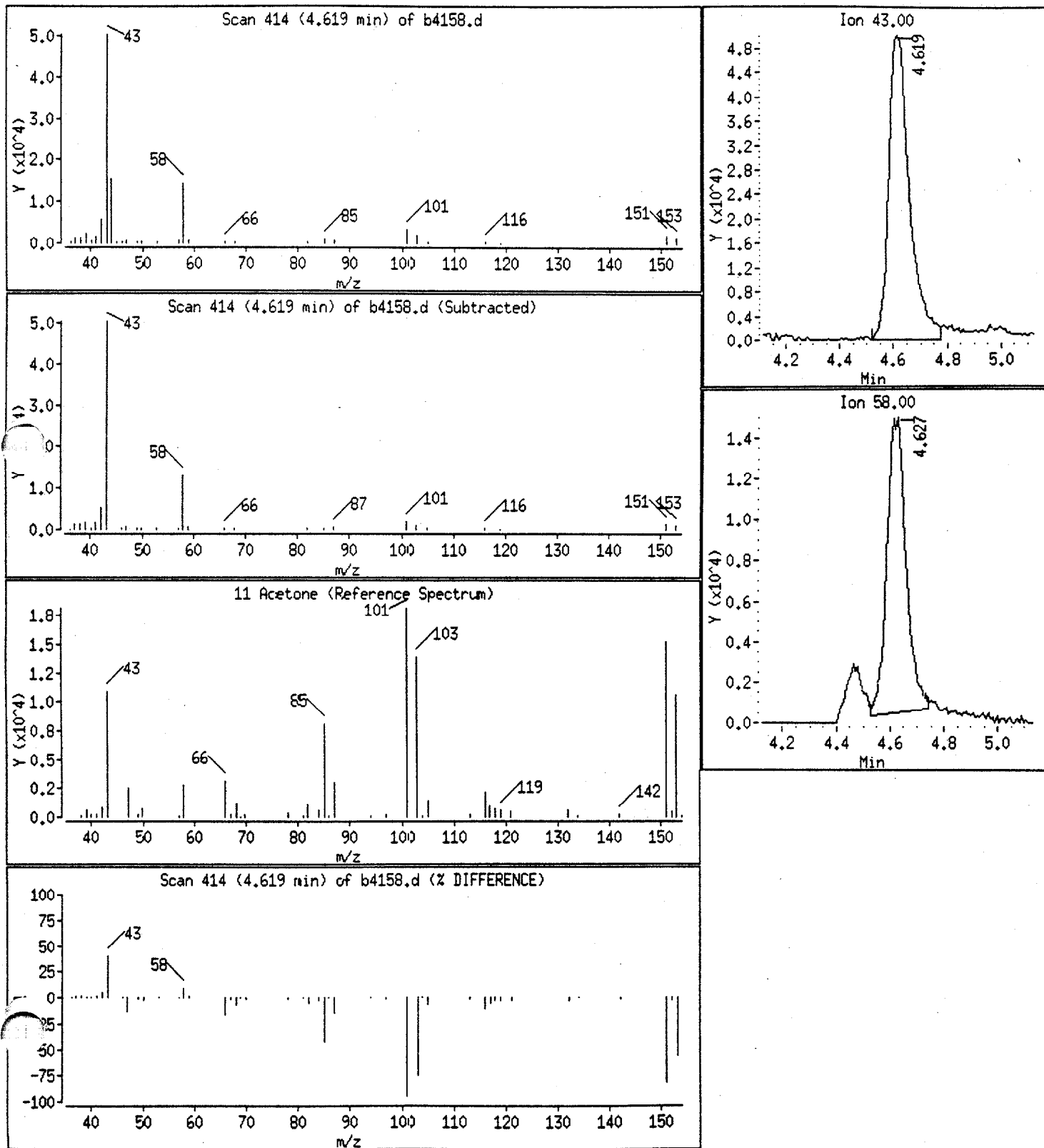
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

## 11 Acetone



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 4

Date: 28-JUN-94 11:37

Instrument: msb.i

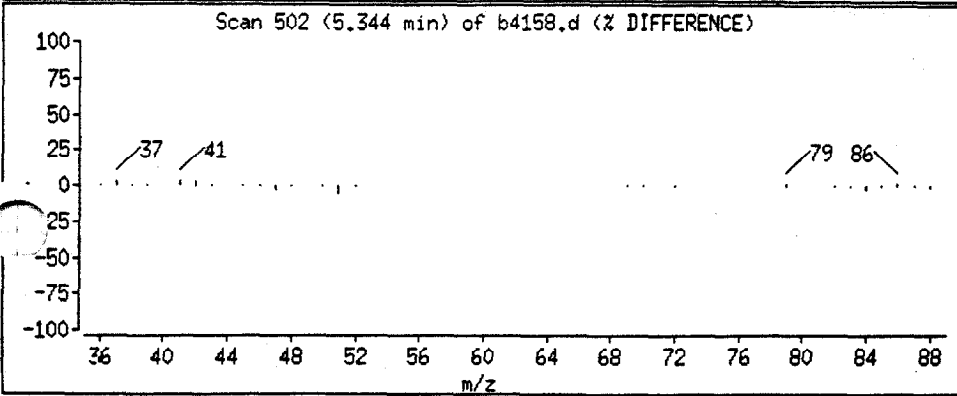
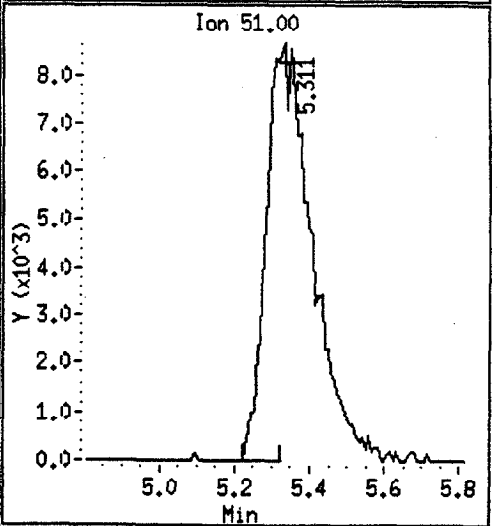
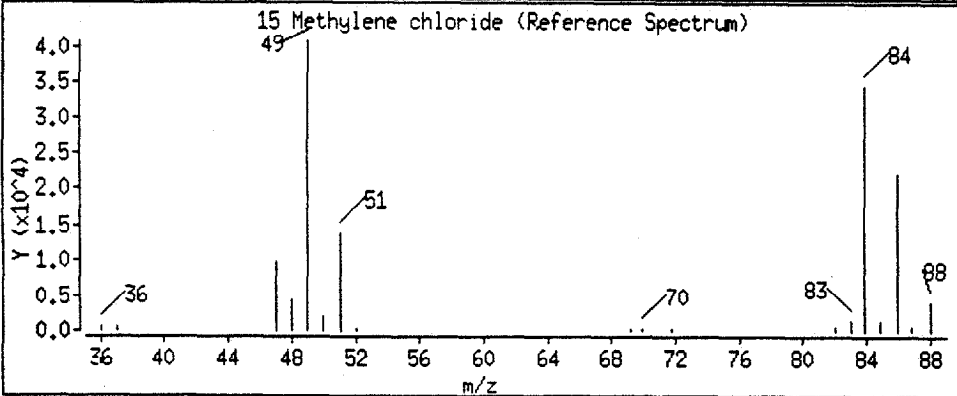
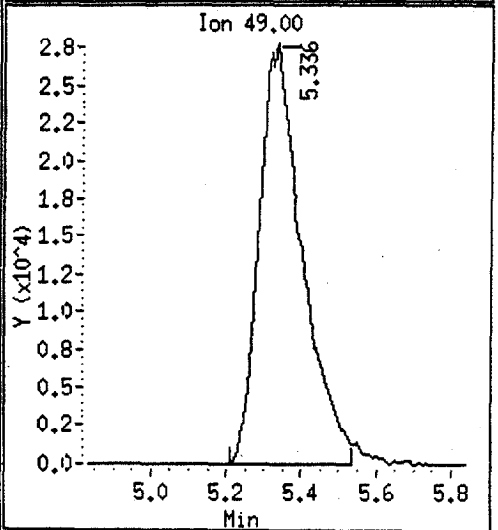
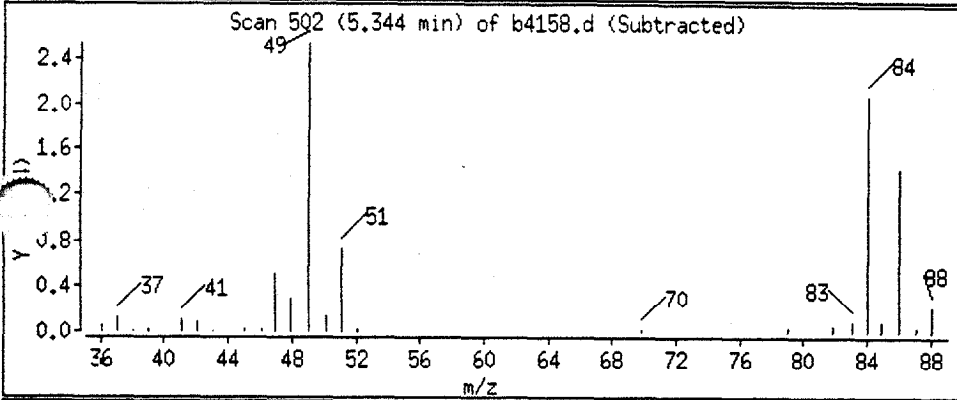
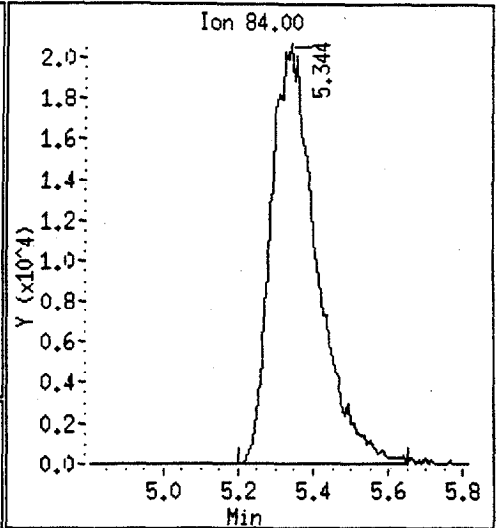
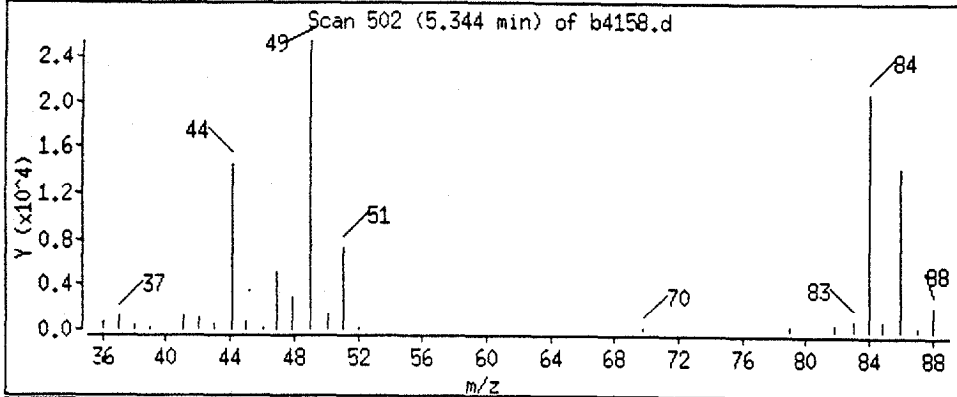
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

15 Methylene chloride



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 9

Date : 28-JUN-94 11:37

Instrument : msb.i

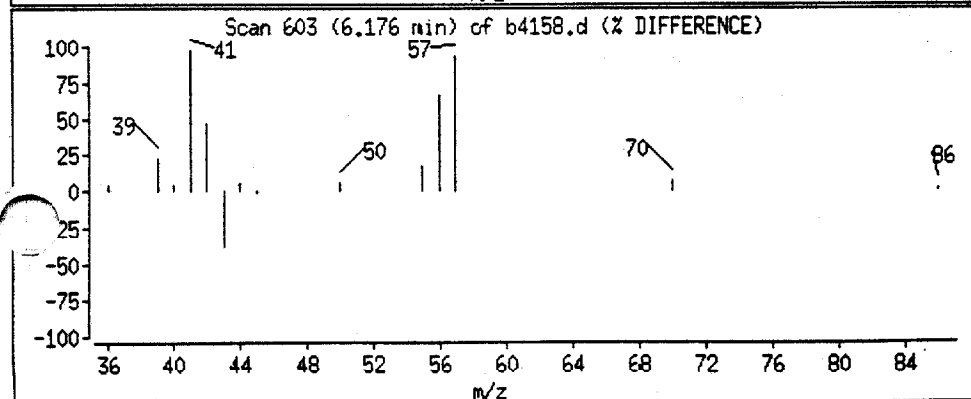
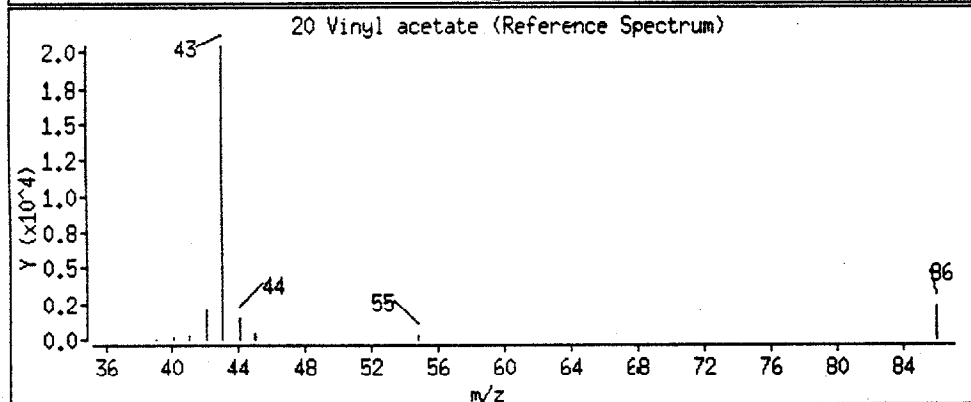
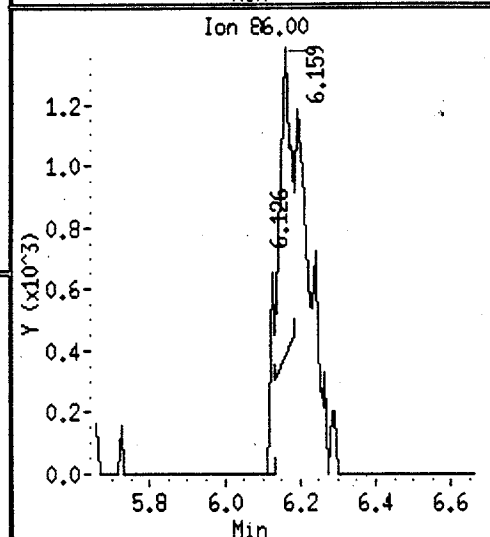
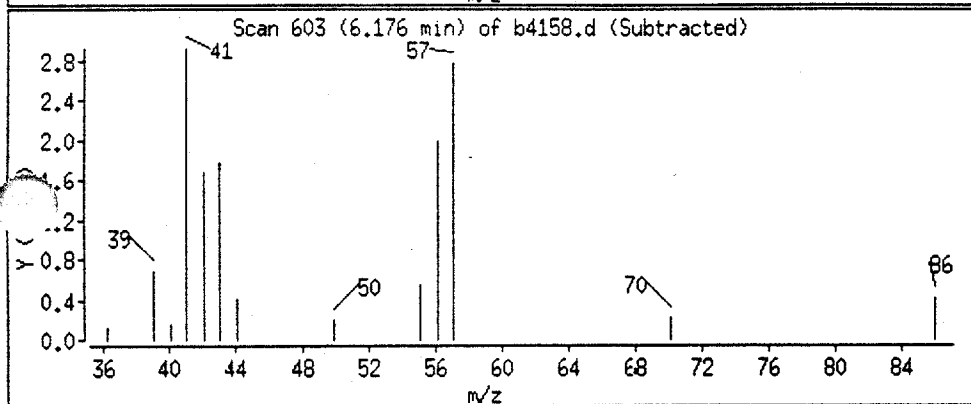
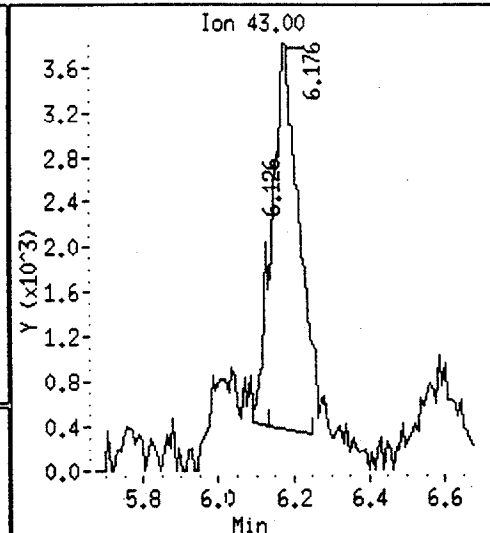
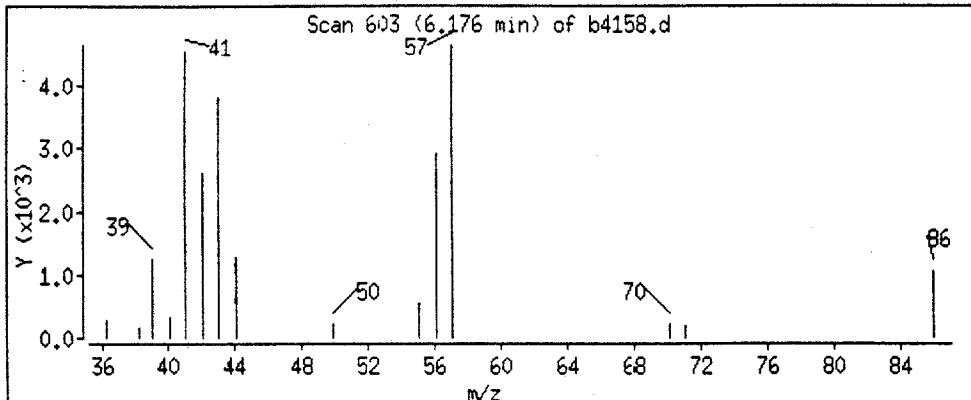
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

20 Vinyl acetate



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Date : 28-JUN-94 11:37

Instrument : msb.i

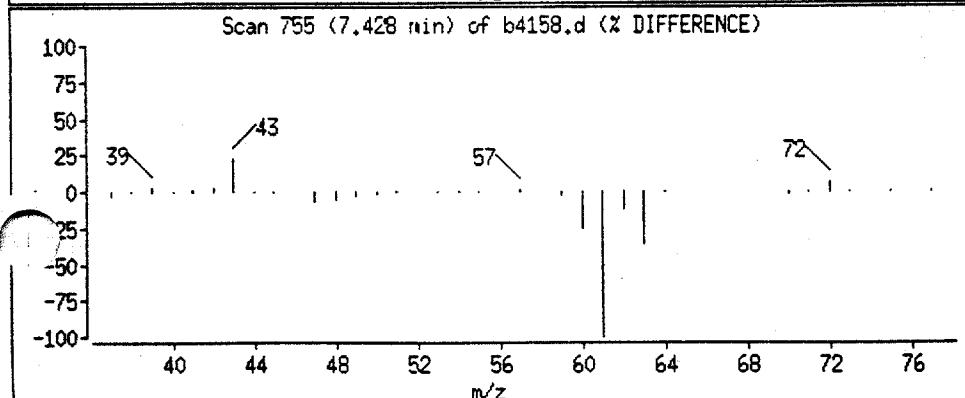
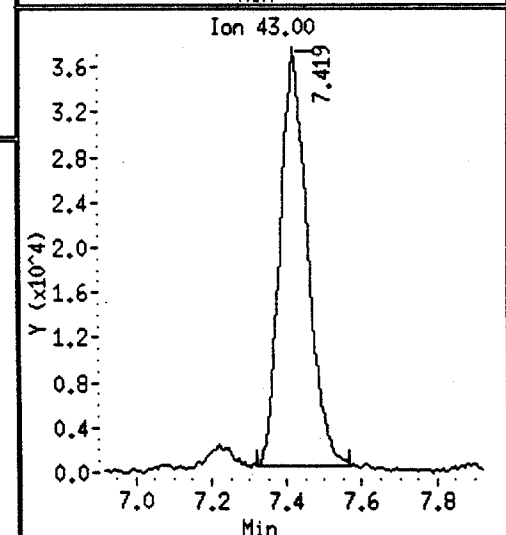
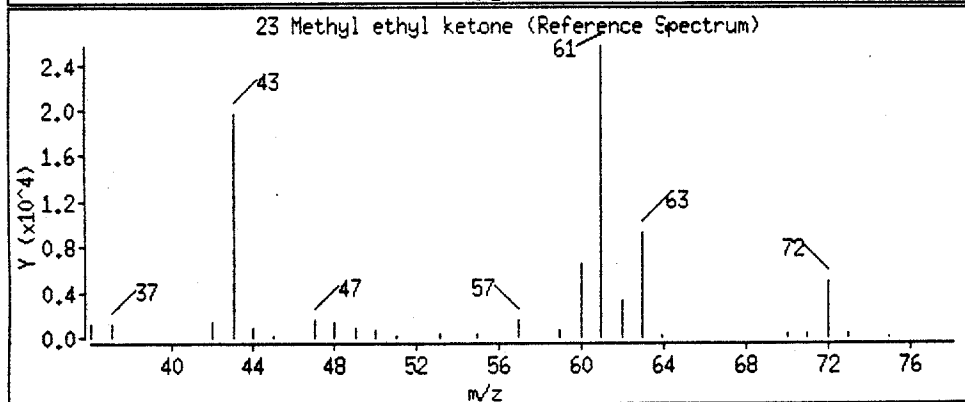
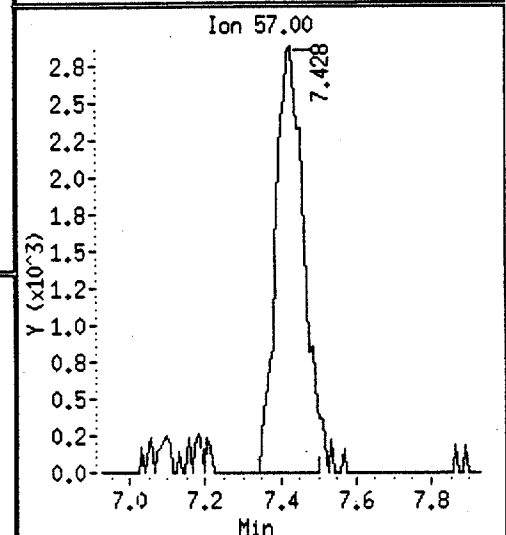
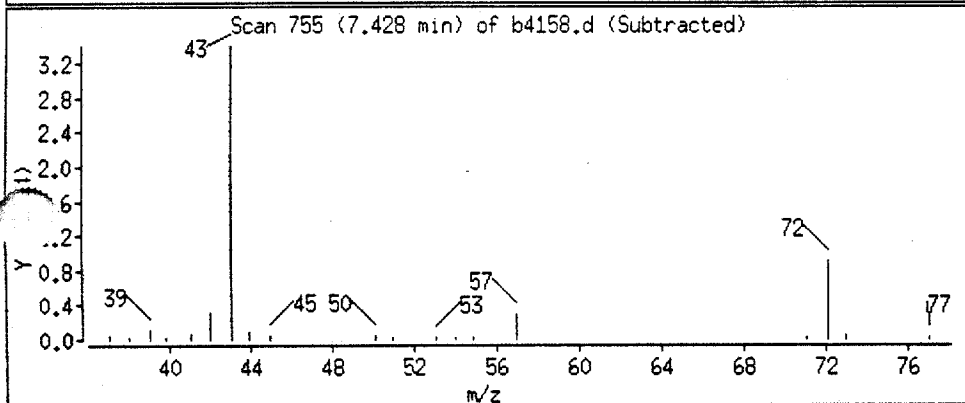
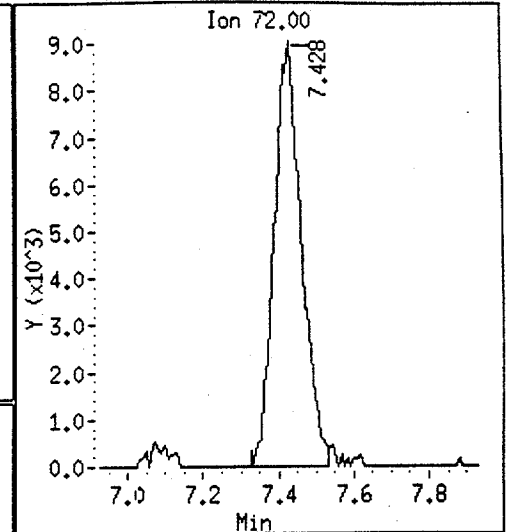
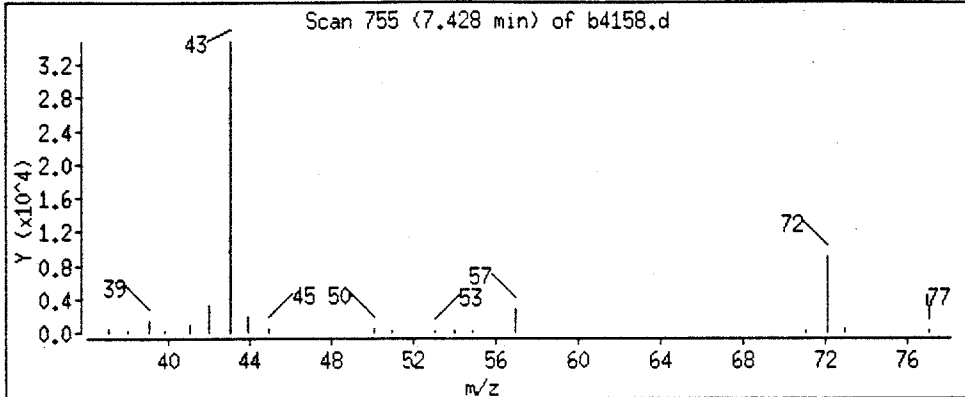
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

23 Methyl ethyl ketone



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Date: 28-JUN-94 11:37

Instrument: msb.i

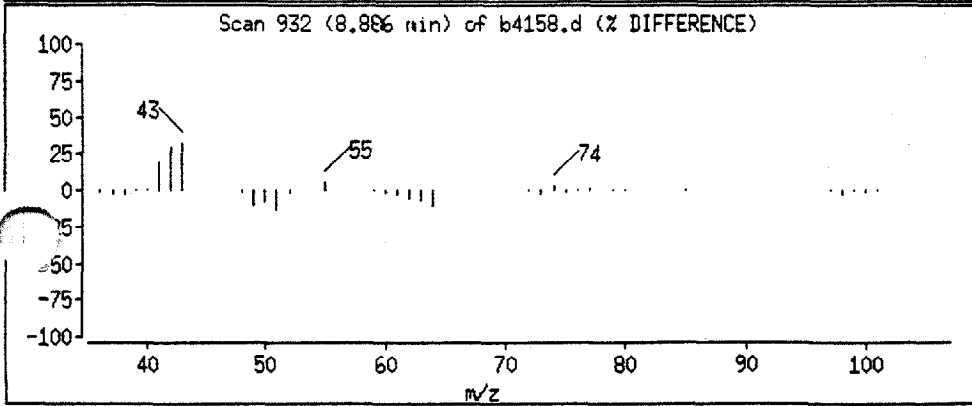
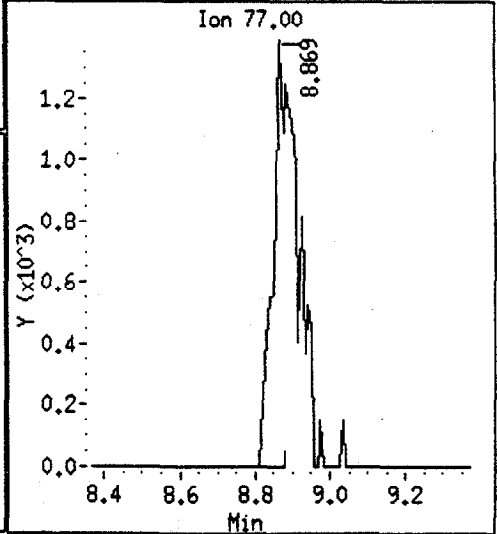
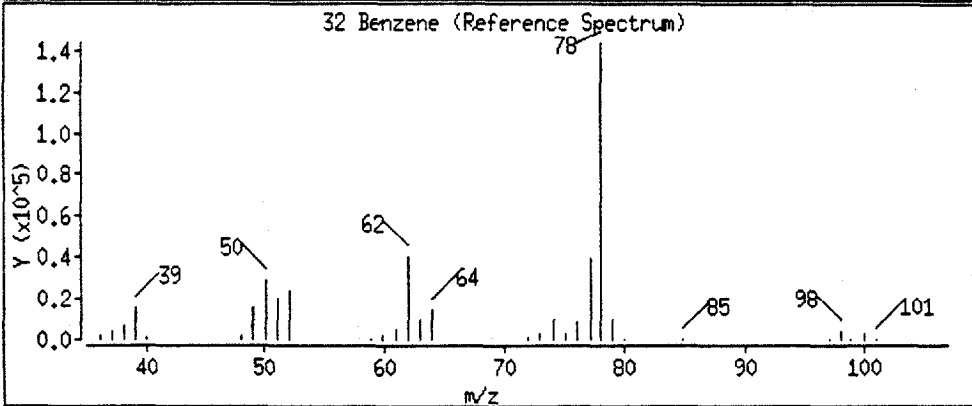
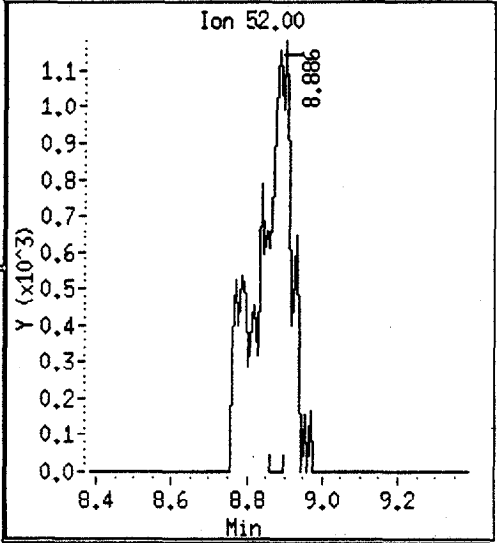
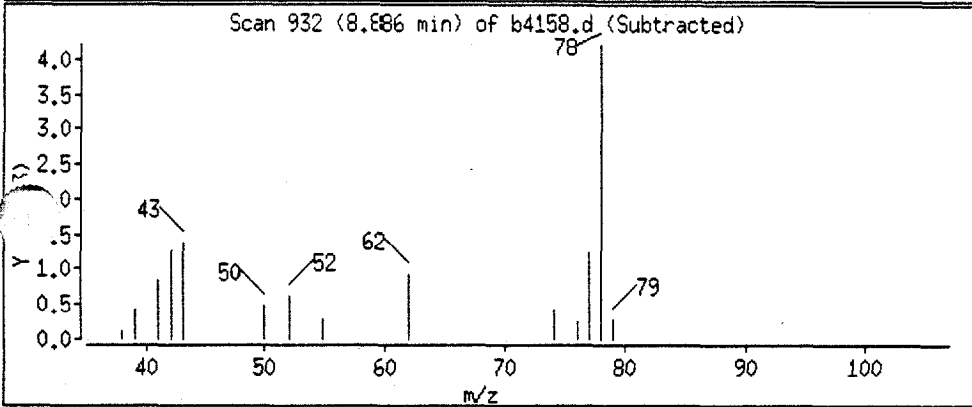
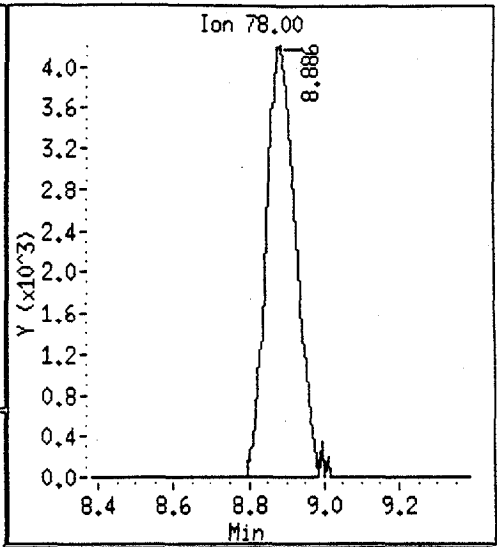
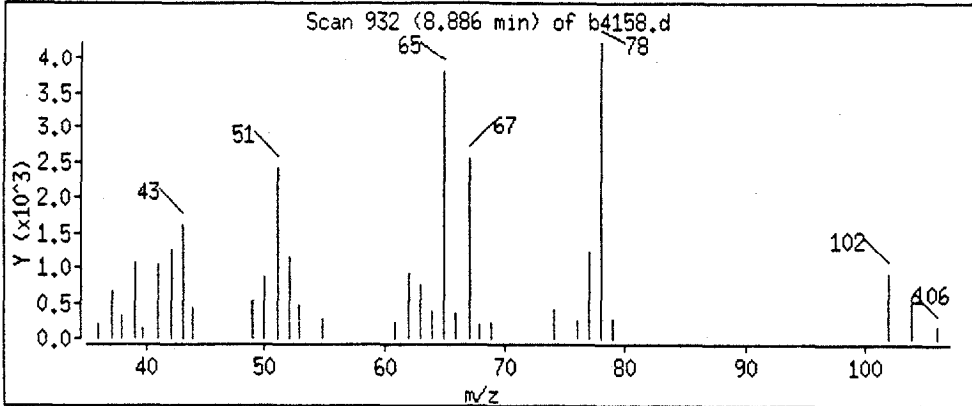
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

32 Benzene





Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 13

Date : 28-JUN-94 11:37

Instrument : msb.i

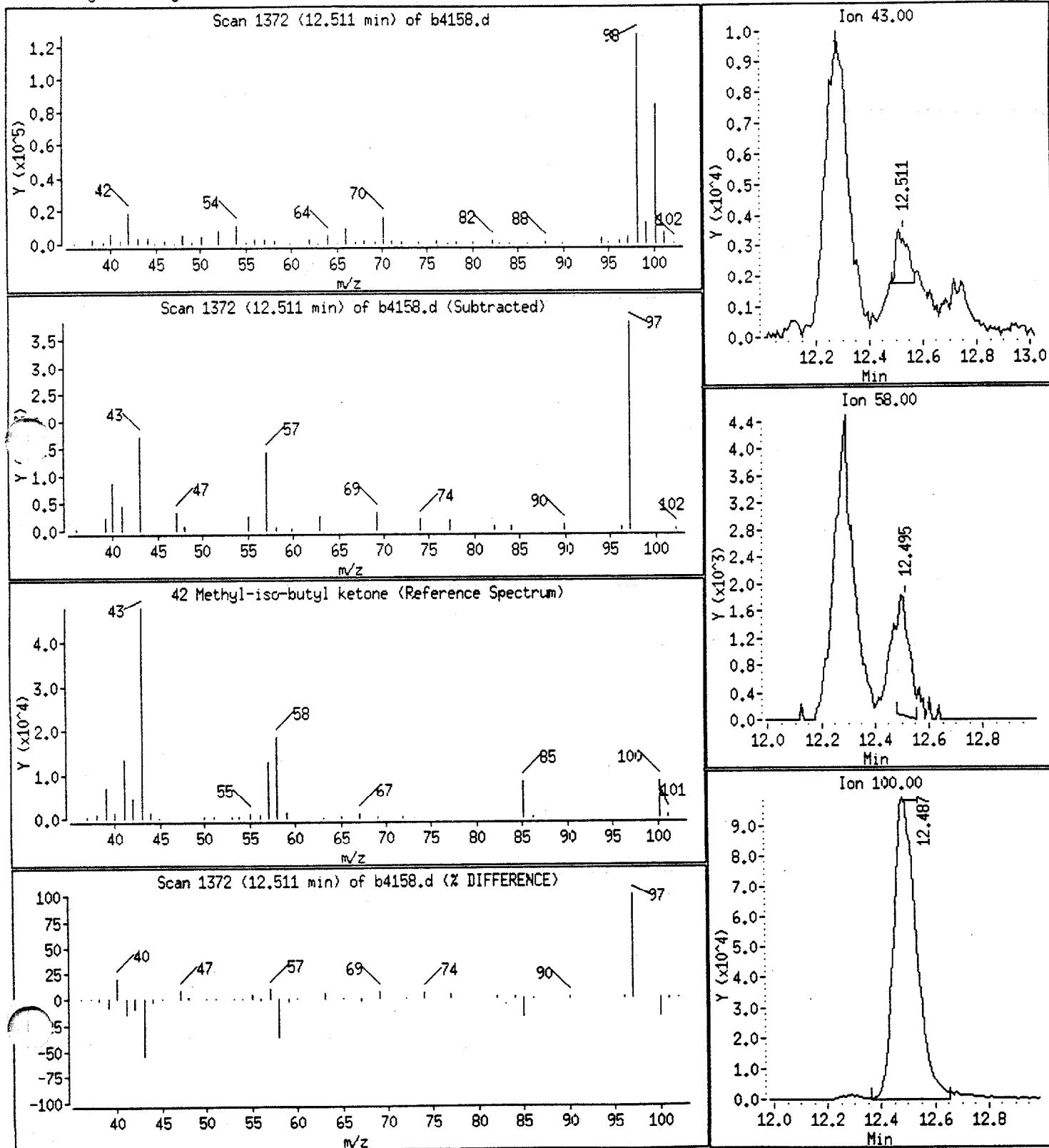
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

42 Methyl-iso-butyl ketone



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 14

Date : 28-JUN-94 11:37

Instrument : msb.i

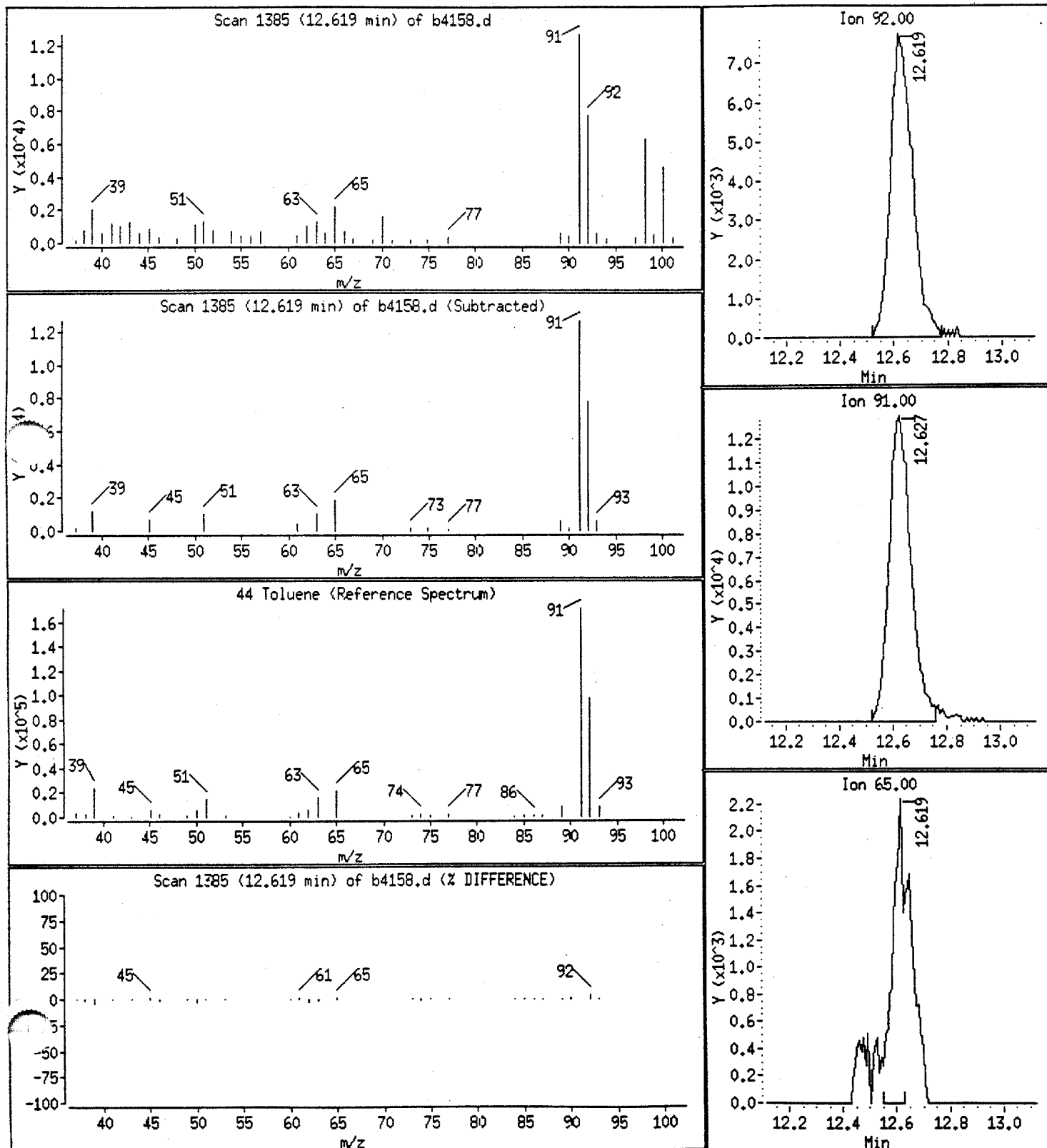
Sample ID :

Column phase : J&amp;W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

44 Toluene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Date: 28-JUN-94 11:37

Instrument: msb.i

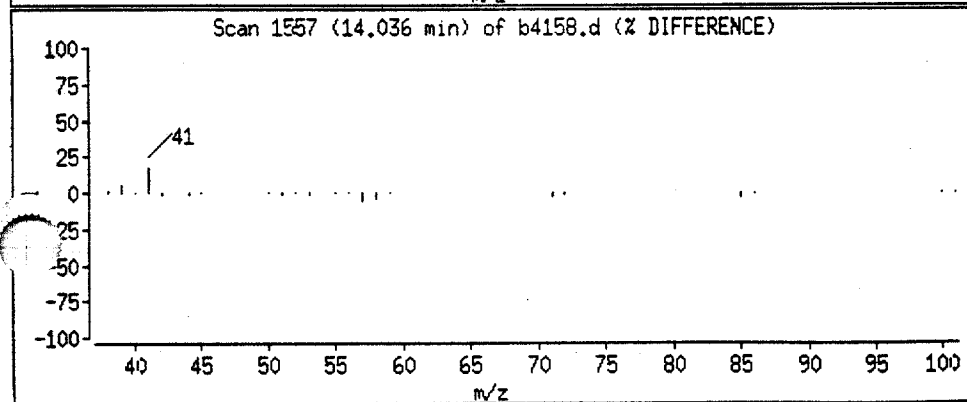
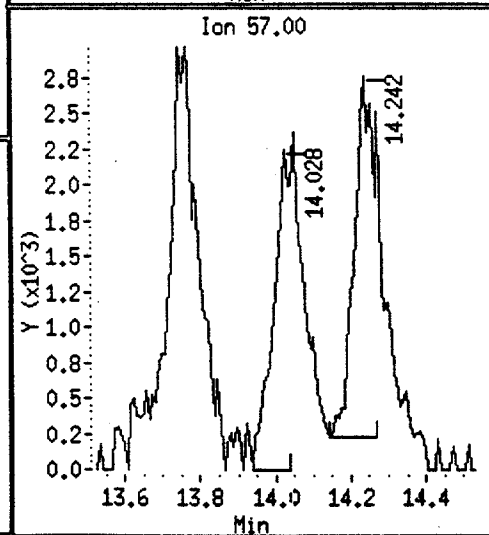
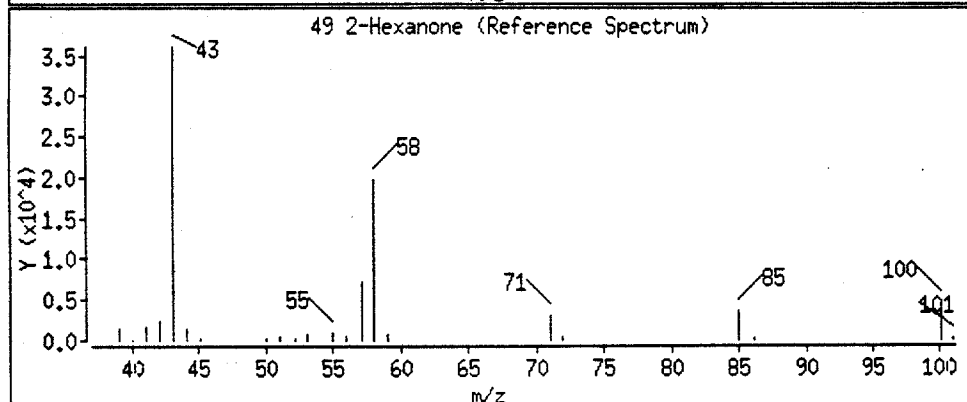
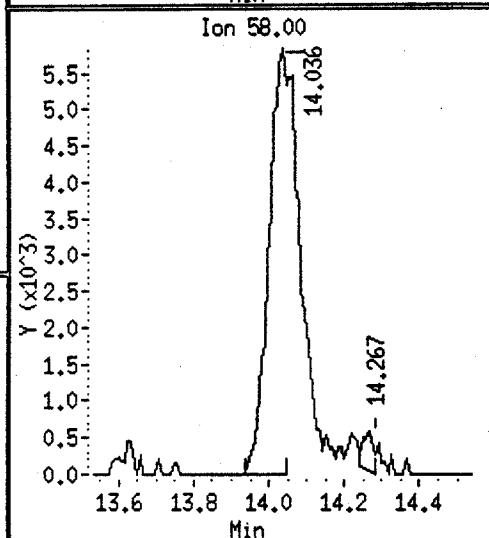
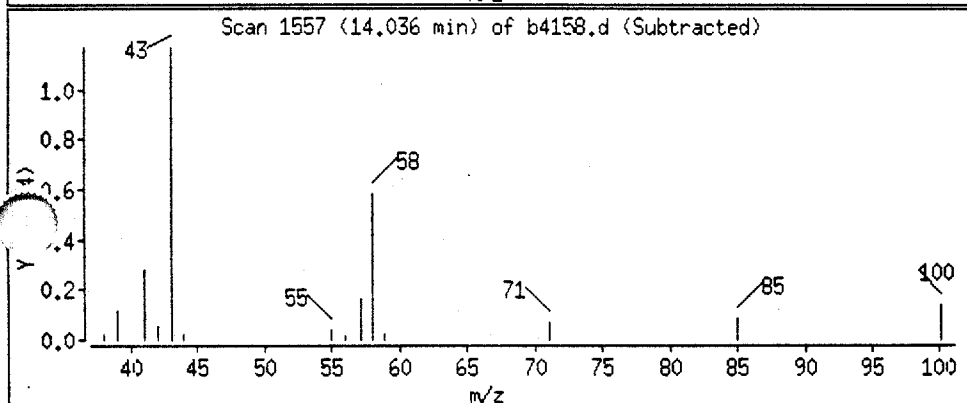
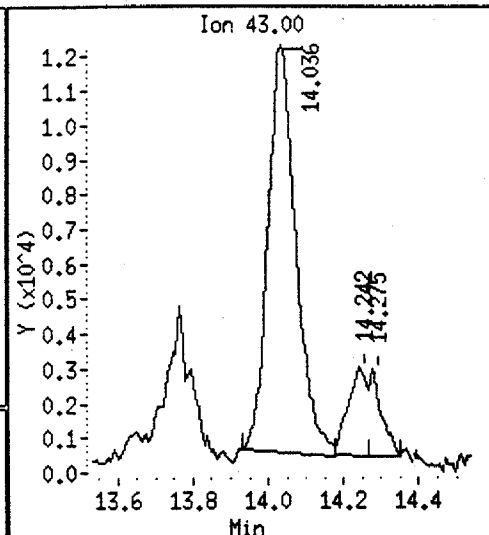
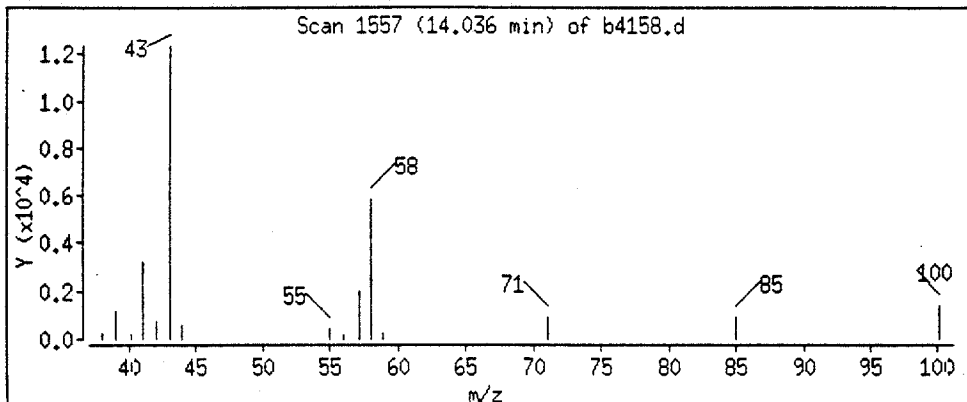
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

49 2-Hexanone



Data File: /chem/aux/msb.1/b062894.b/b4158.d

Page 16

Date : 28-JUN-94 11:37

Instrument : msb.1

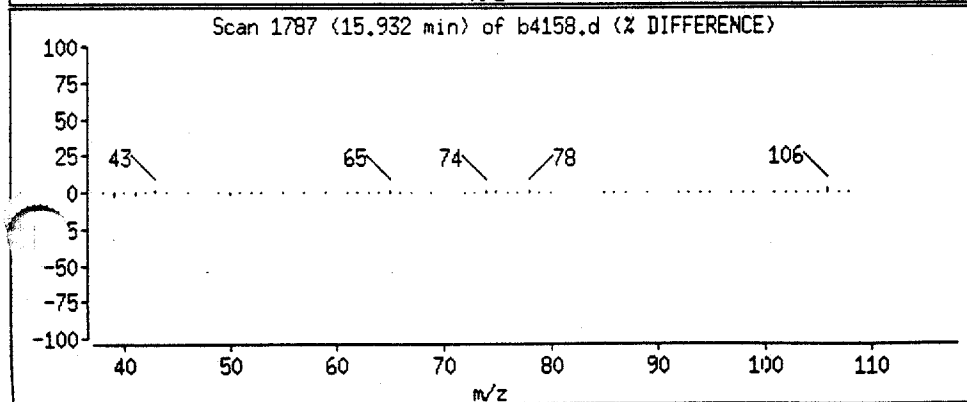
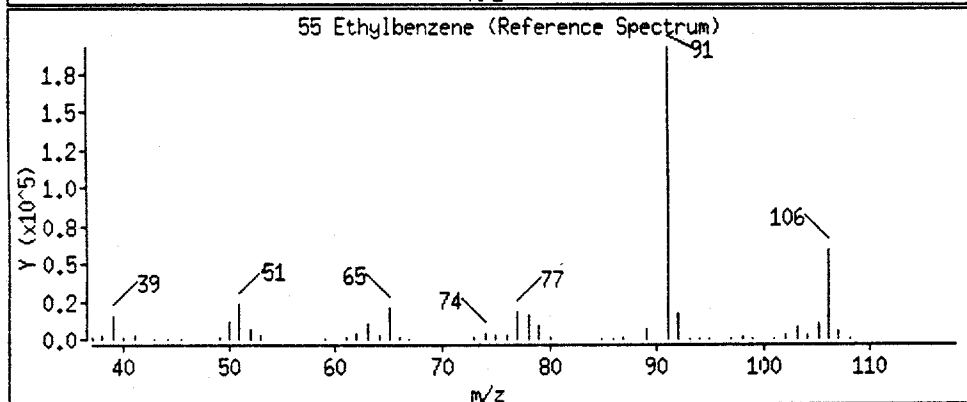
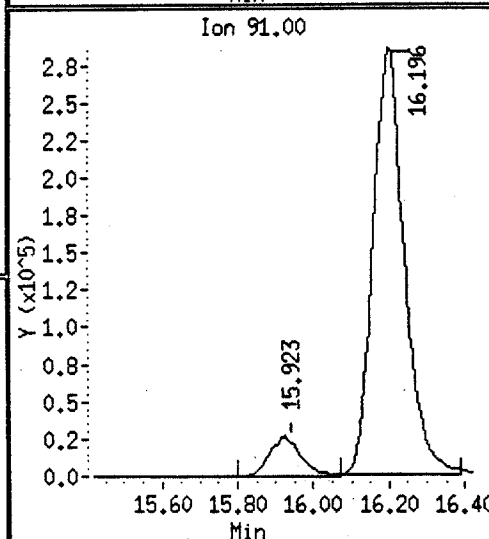
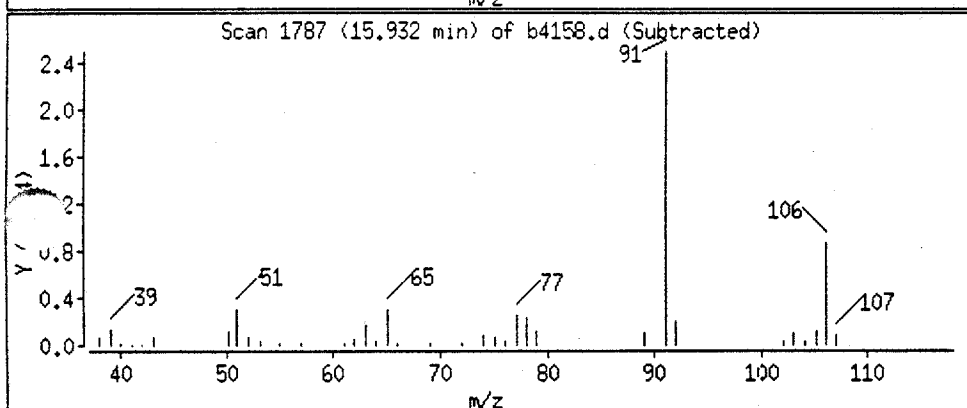
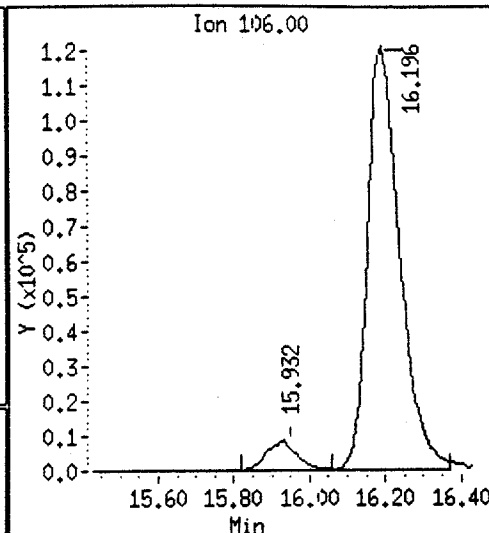
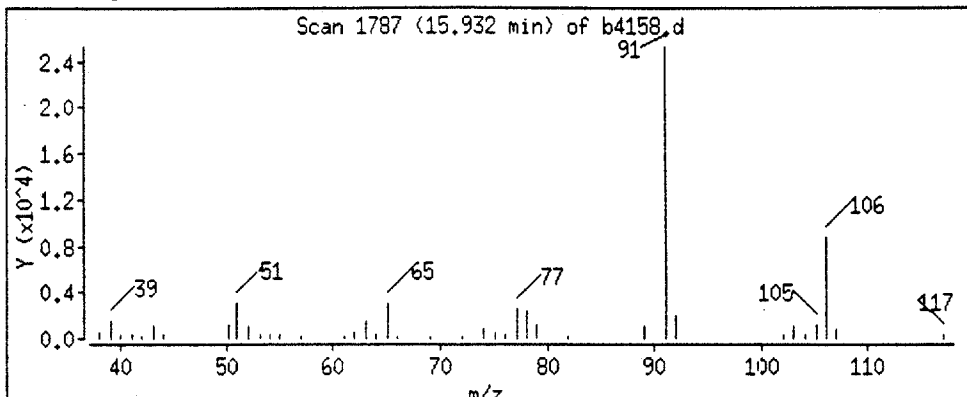
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

55 Ethylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 17

Date : 28-JUN-94 11:37

Instrument : msb.i

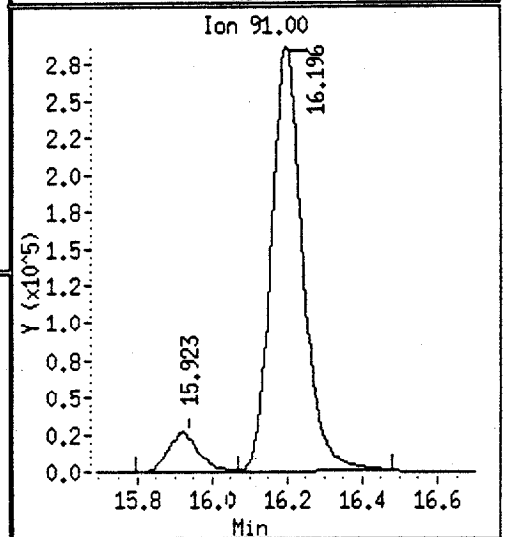
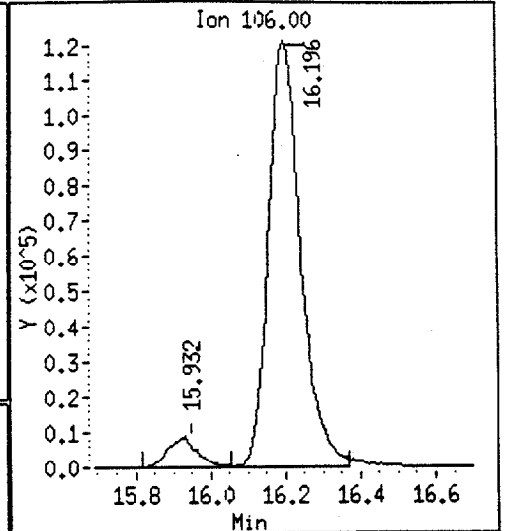
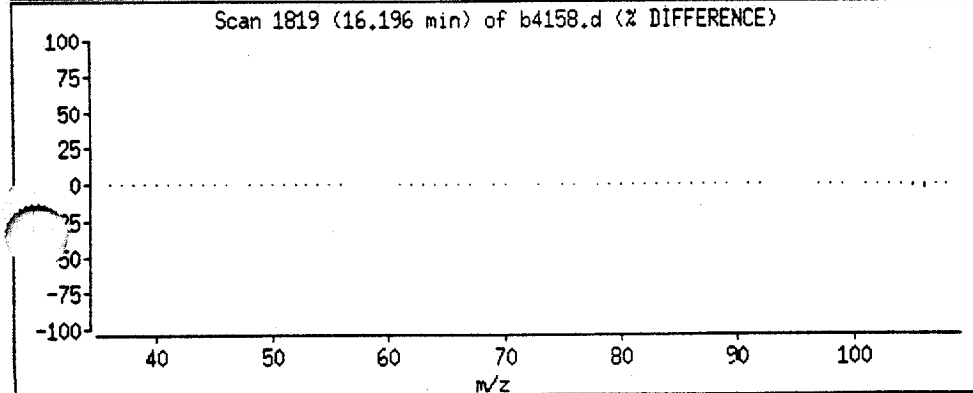
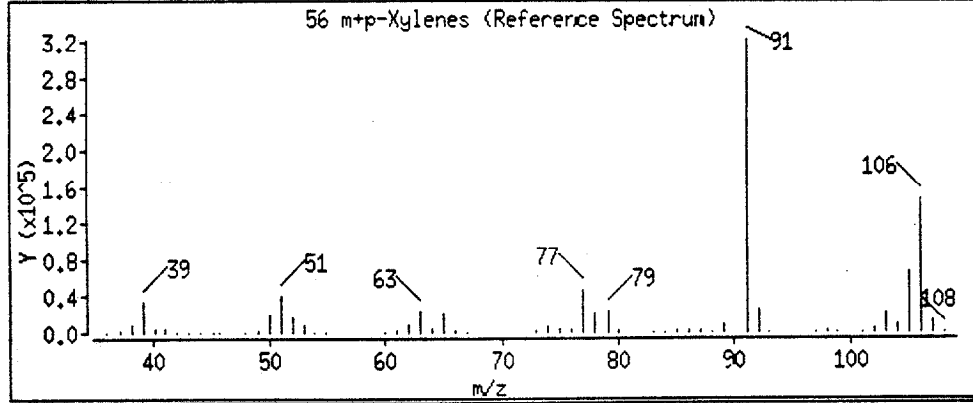
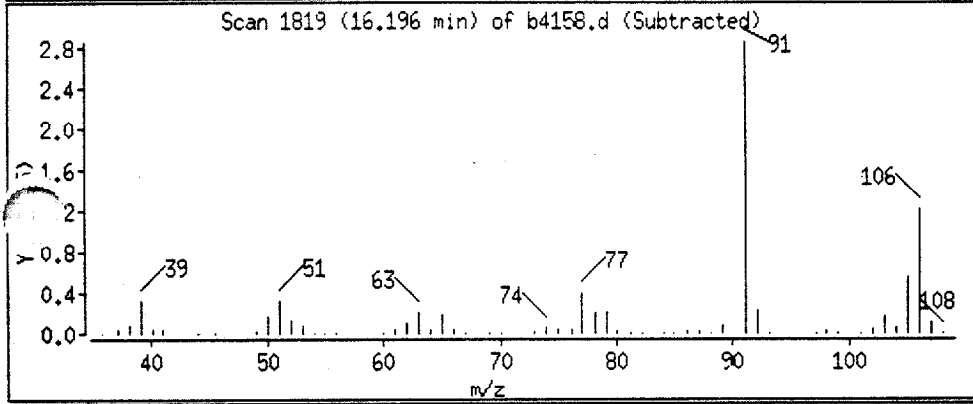
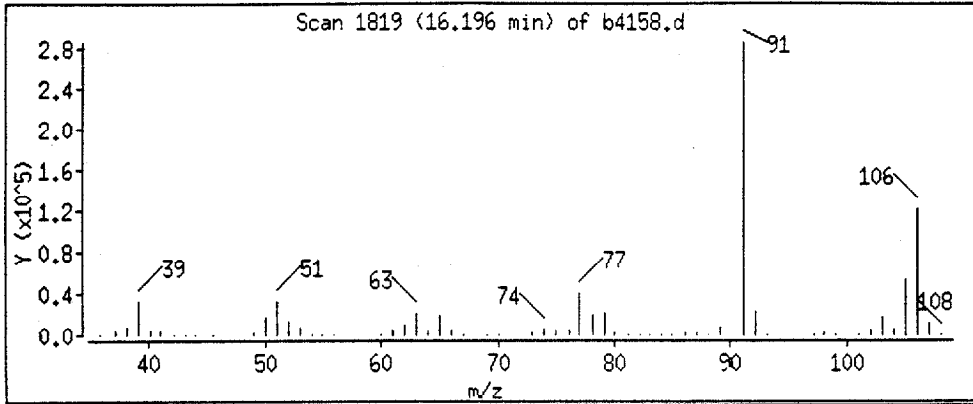
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

56 m+p-Xylenes



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Date : 28-JUN-94 11:37

Instrument : msb.i

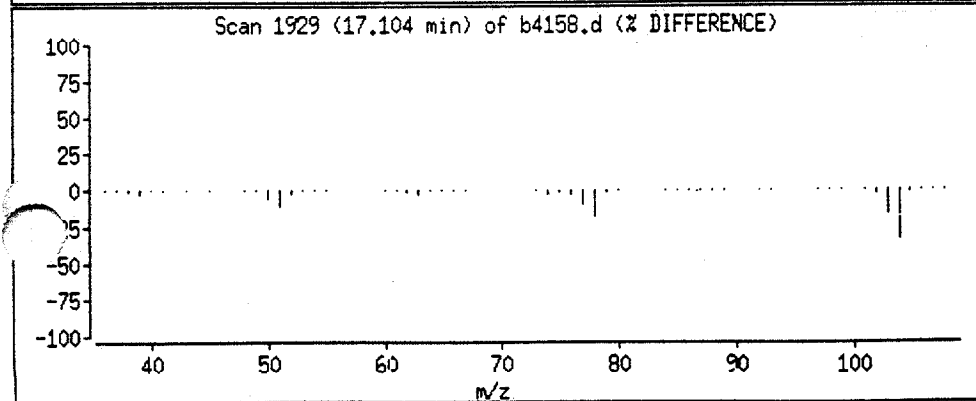
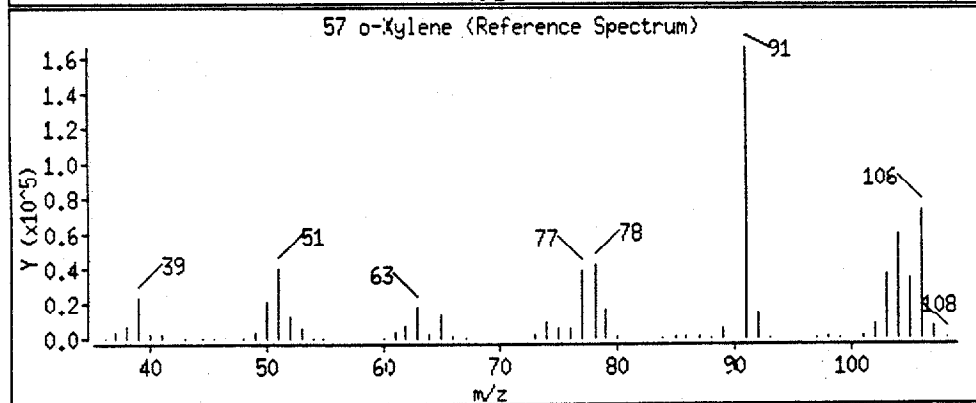
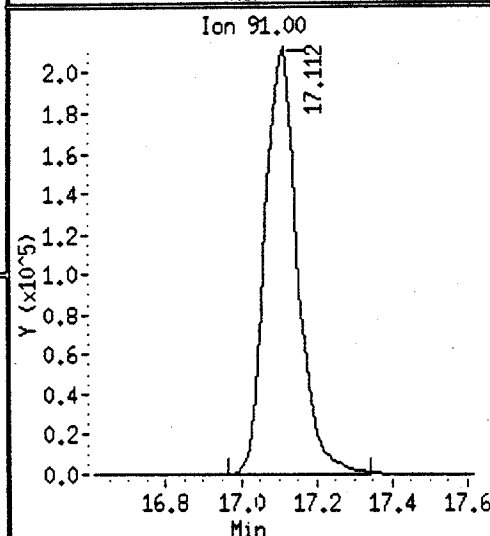
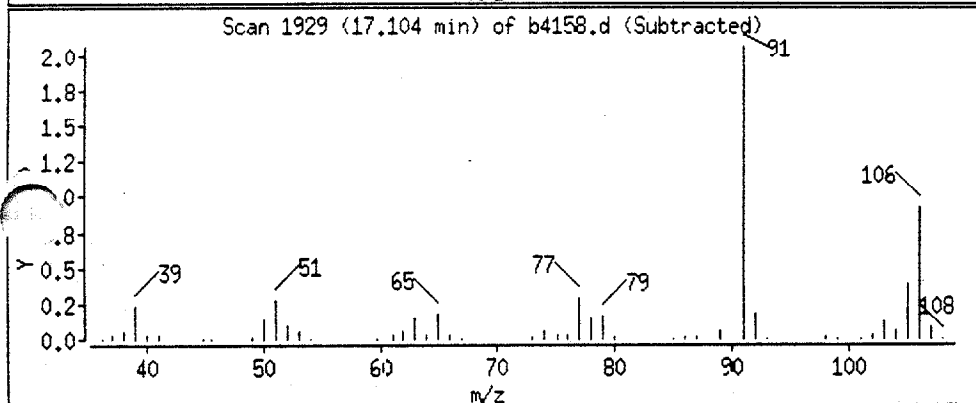
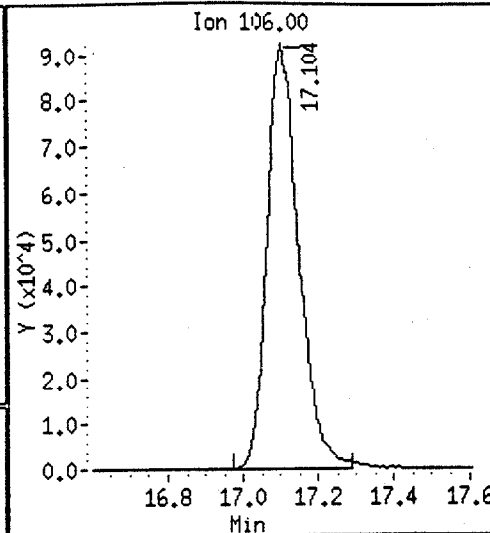
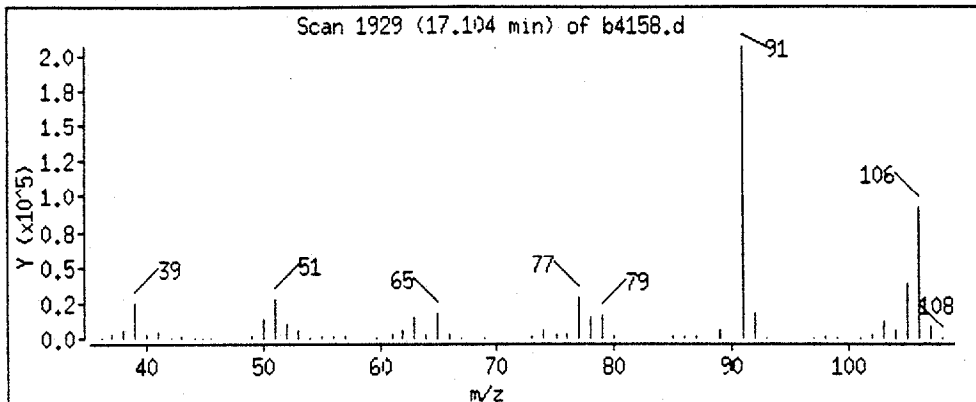
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

57 o-Xylene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 19

Date : 28-JUN-94 11:37

Instrument : msb.i

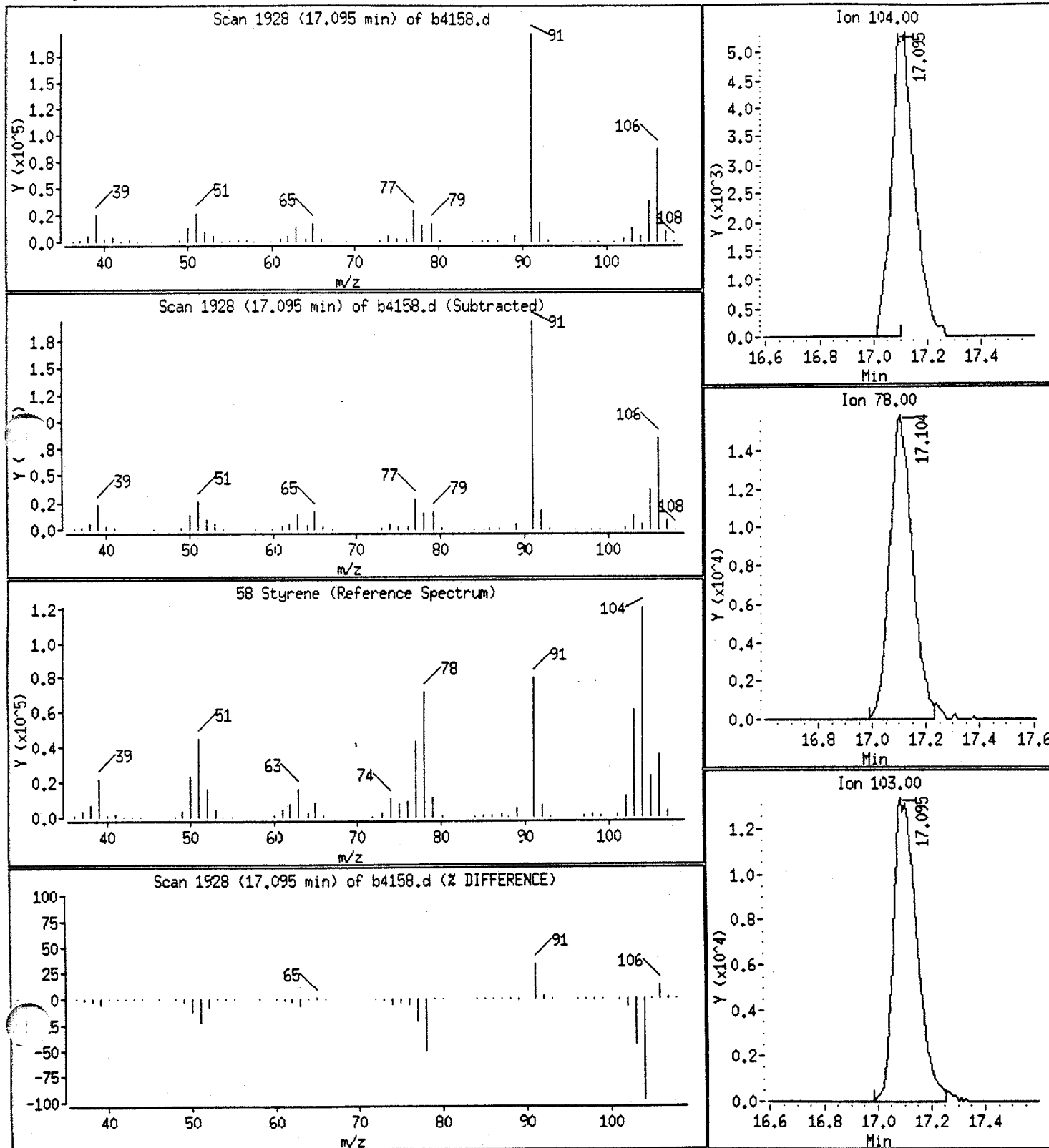
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

58 Styrene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 20

Date : 28-JUN-94 11:37

Instrument : msb.i

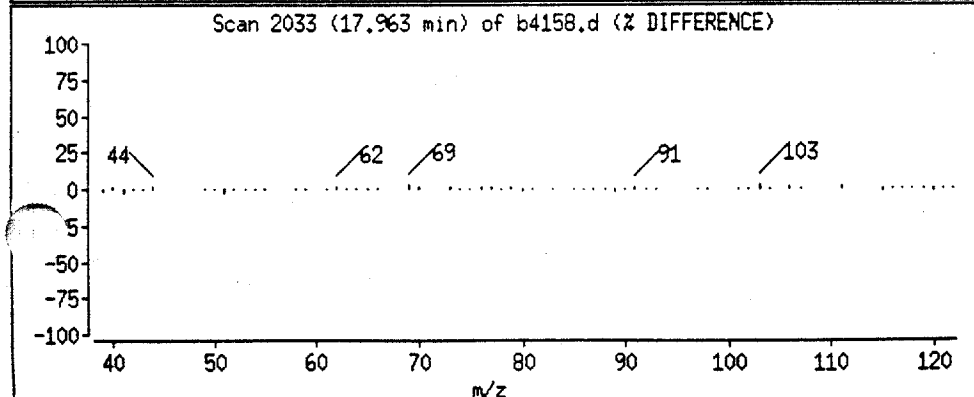
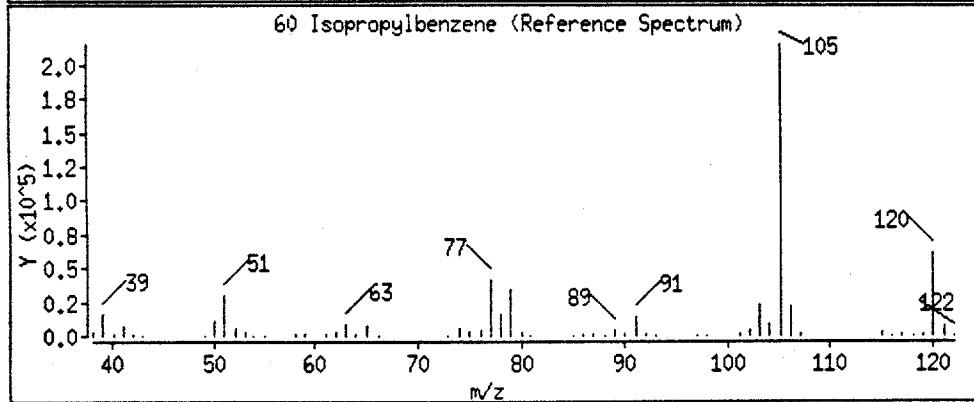
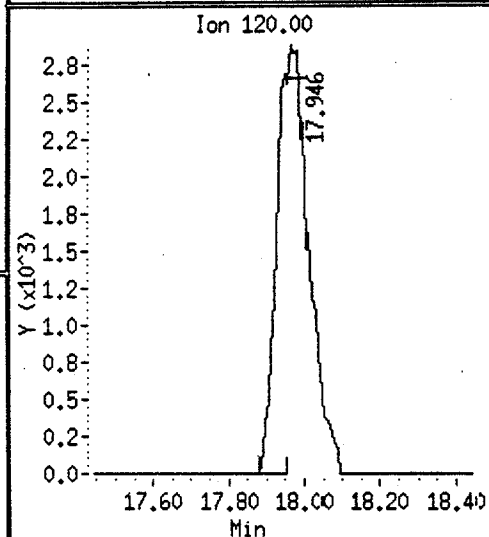
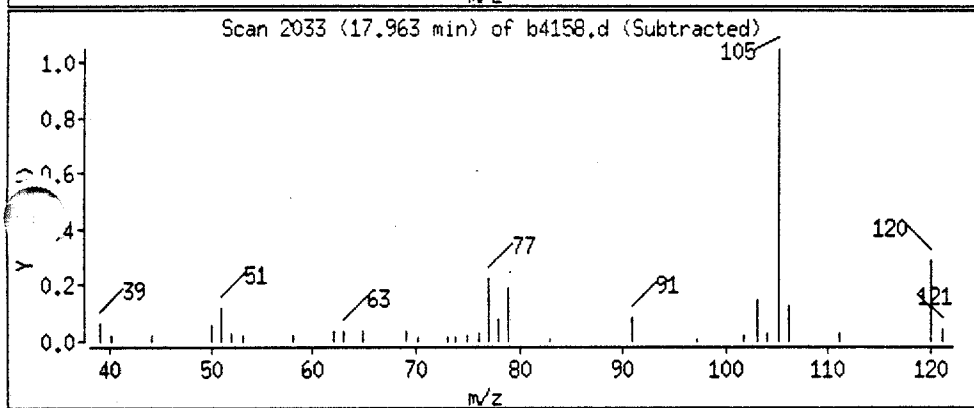
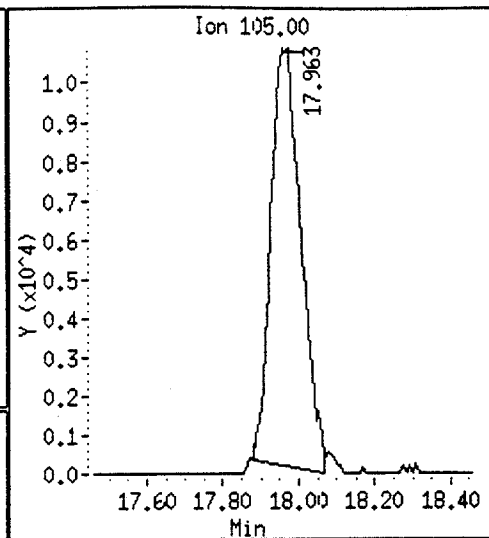
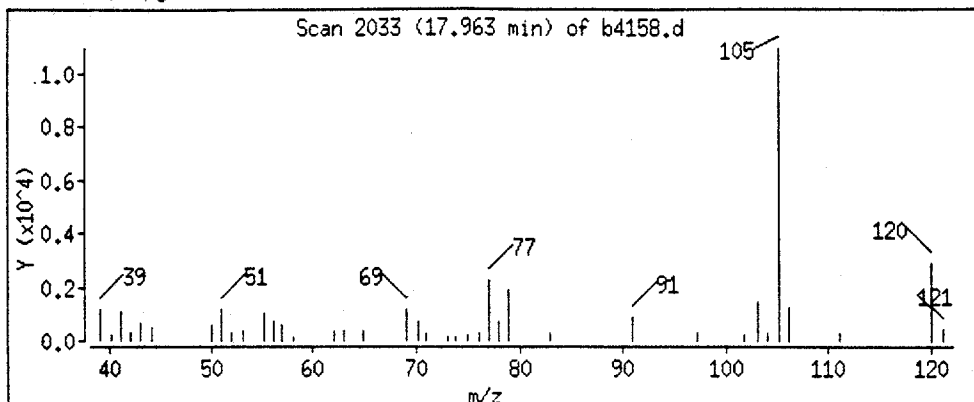
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

60 Isopropylbenzene





Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 21

Date : 28-JUN-94 11:37

Instrument : msb.i

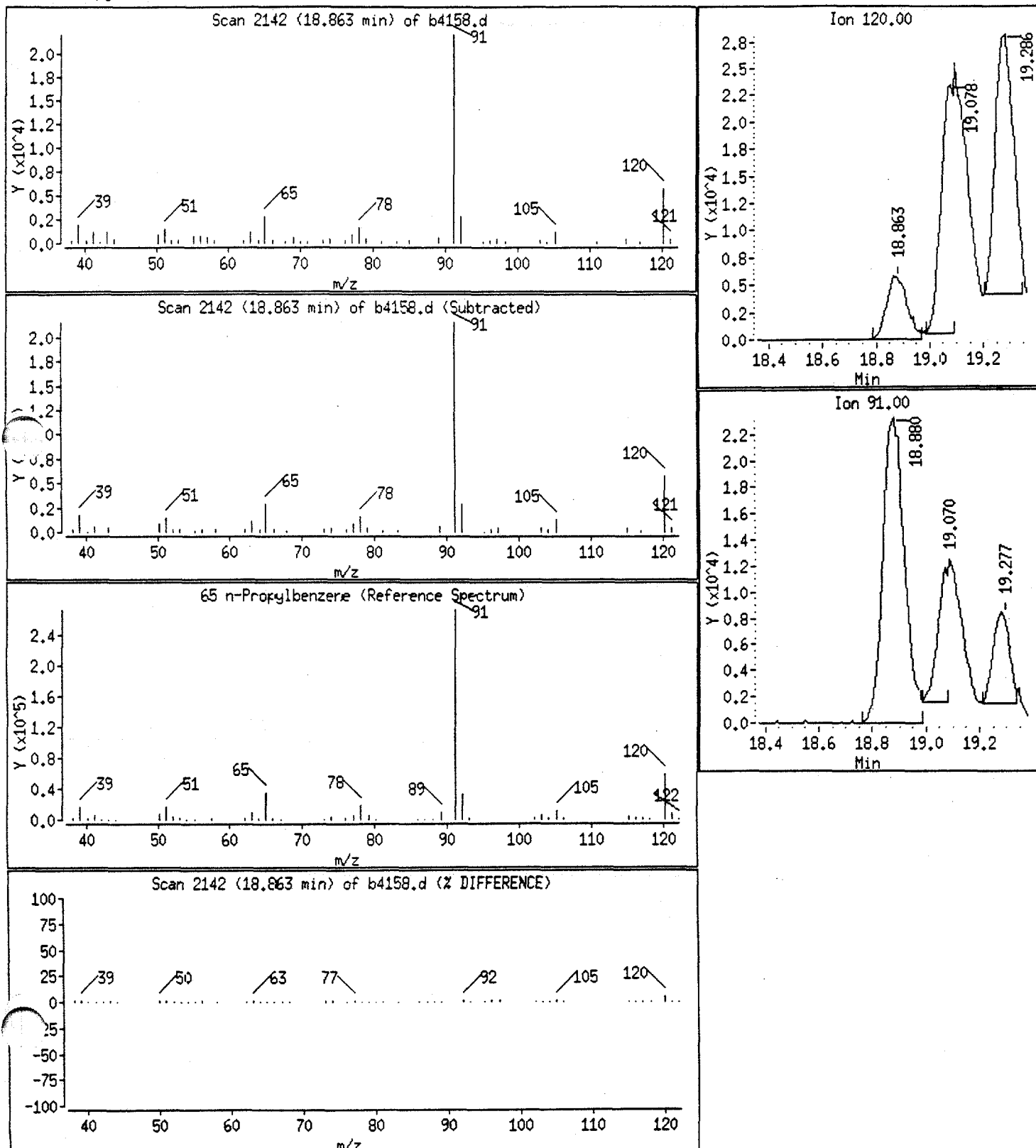
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

65 n-Propylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 23

Date : 28-JUN-94 11:37

Instrument : msb.i

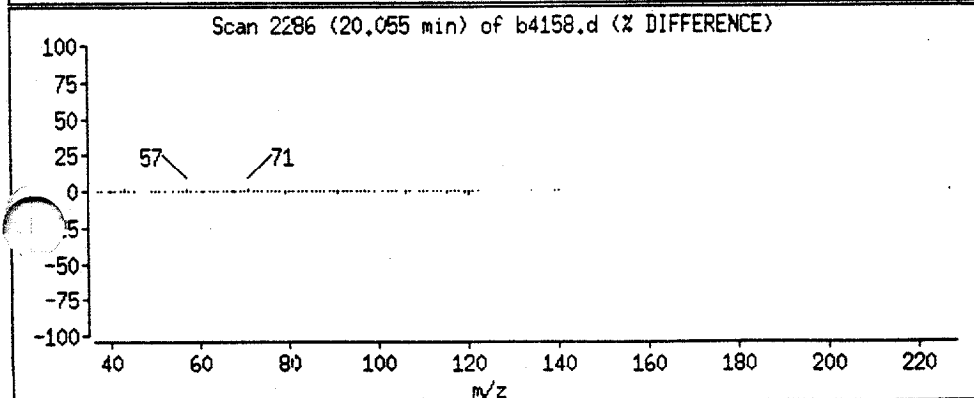
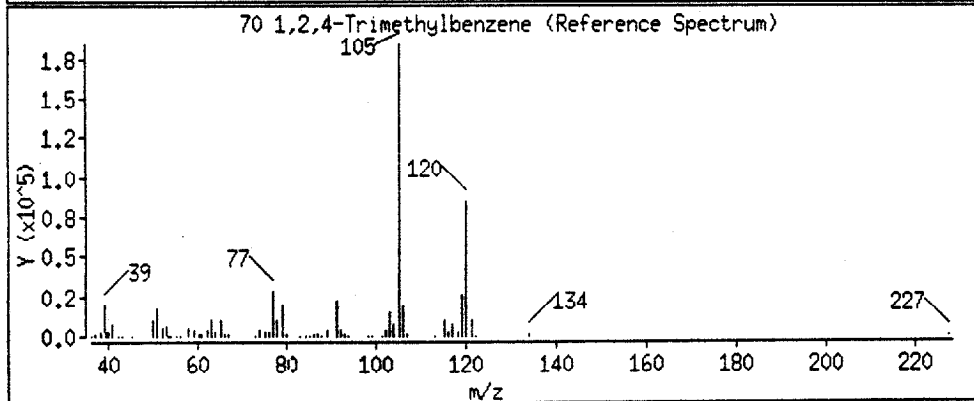
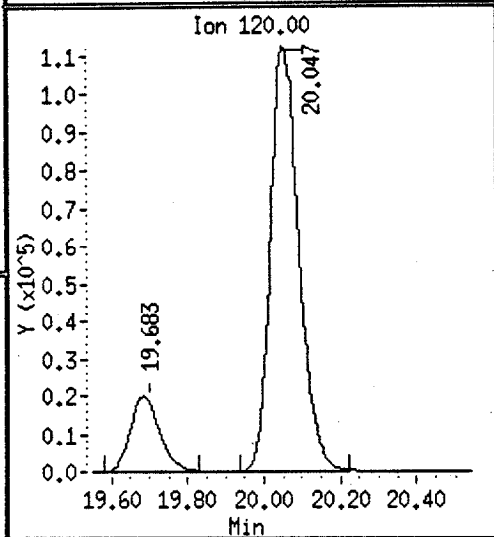
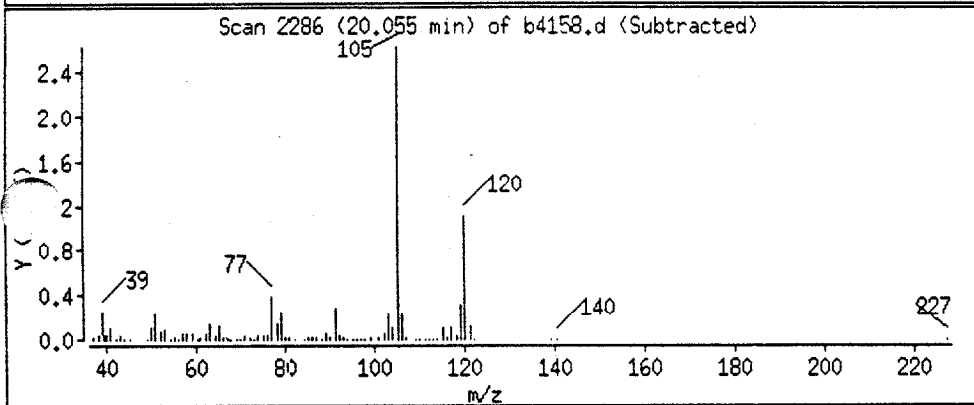
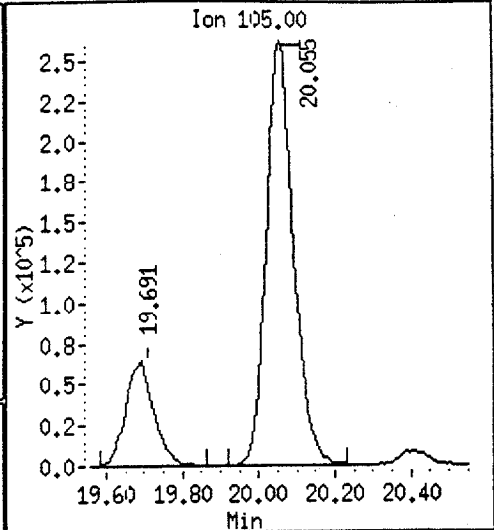
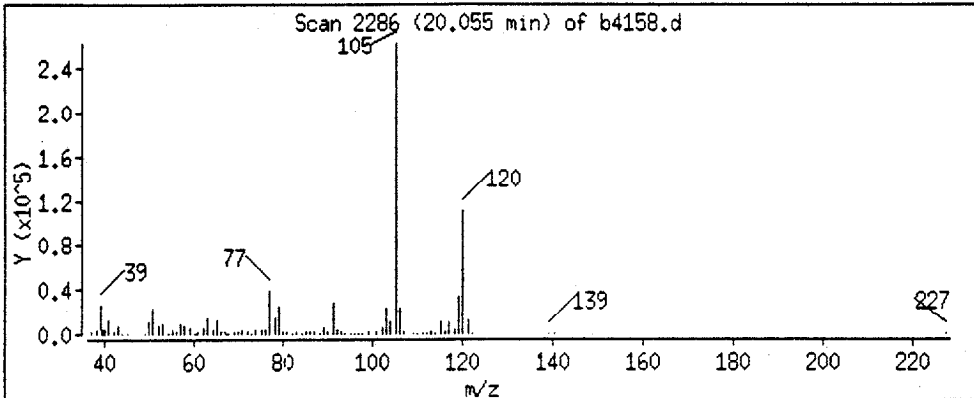
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

70 1,2,4-Trimethylbenzene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Date: 28-JUN-94 11:37

Instrument: msb.i

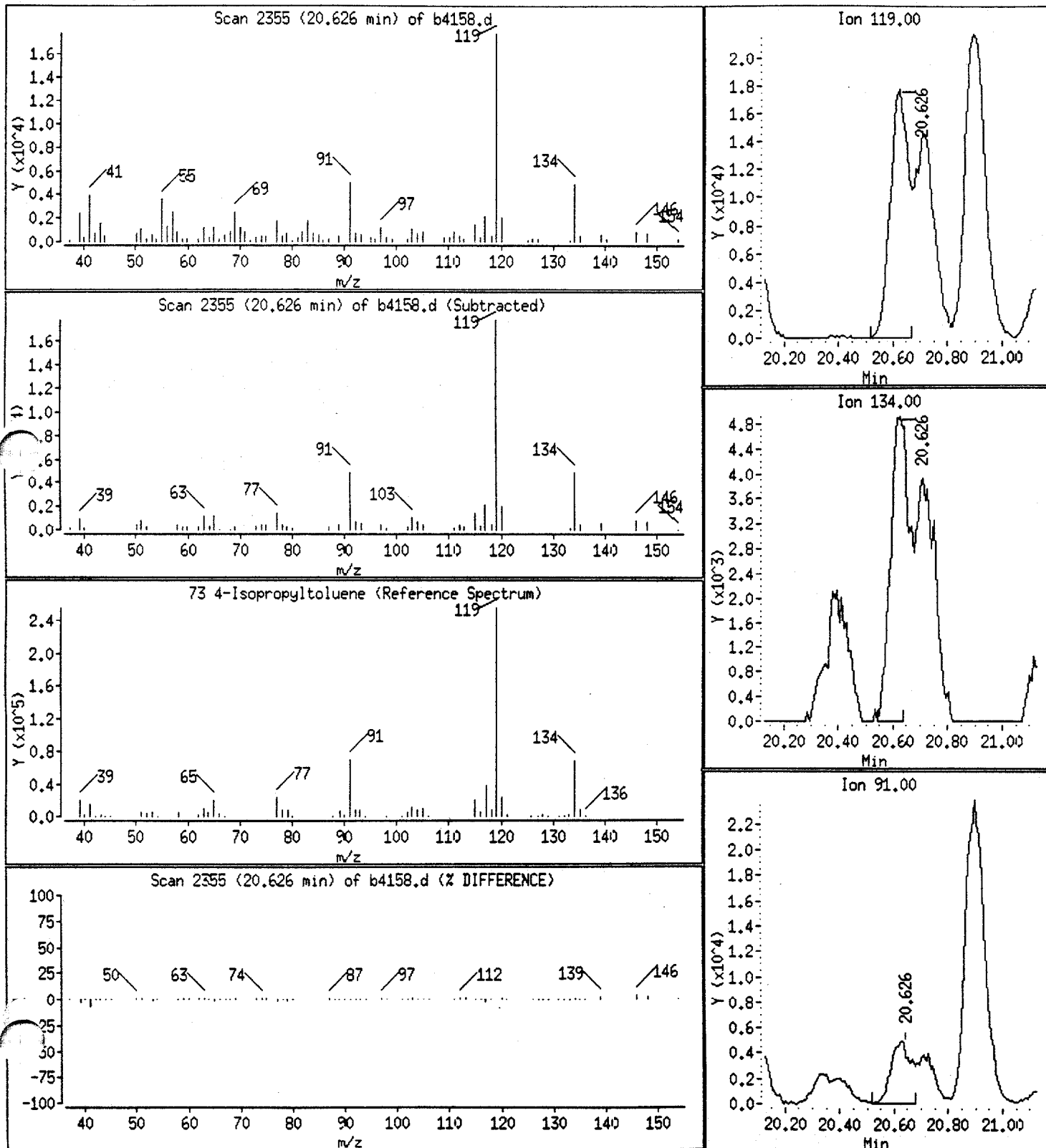
Sample ID:

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

73 4-Isopropyltoluene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Date : 28-JUN-94 11:37

Instrument : msb.i

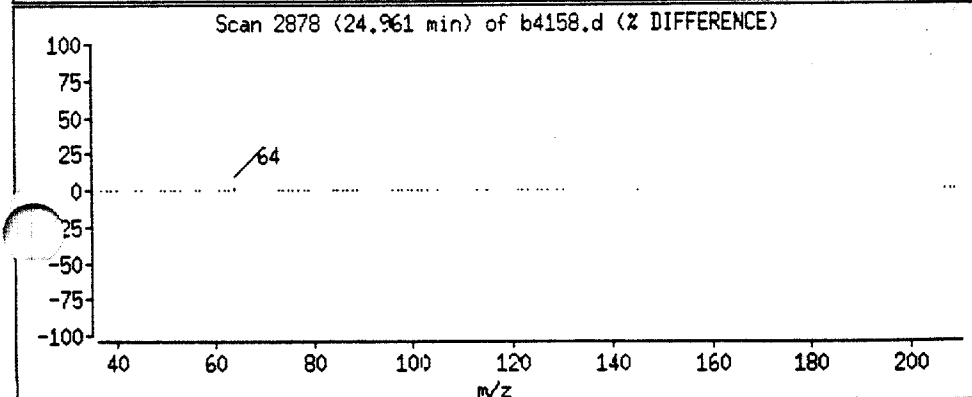
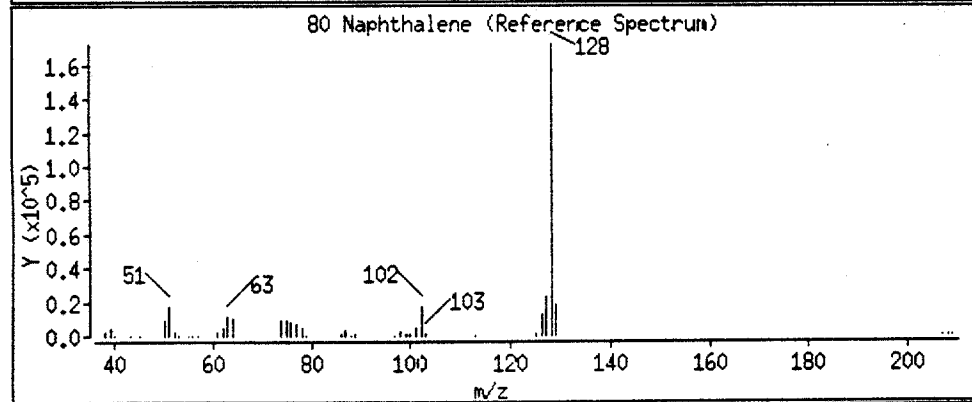
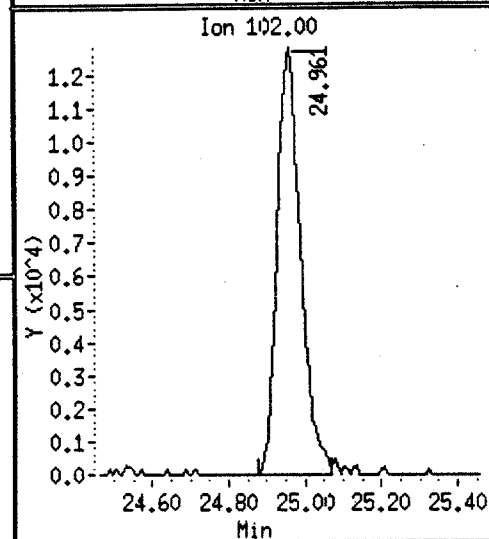
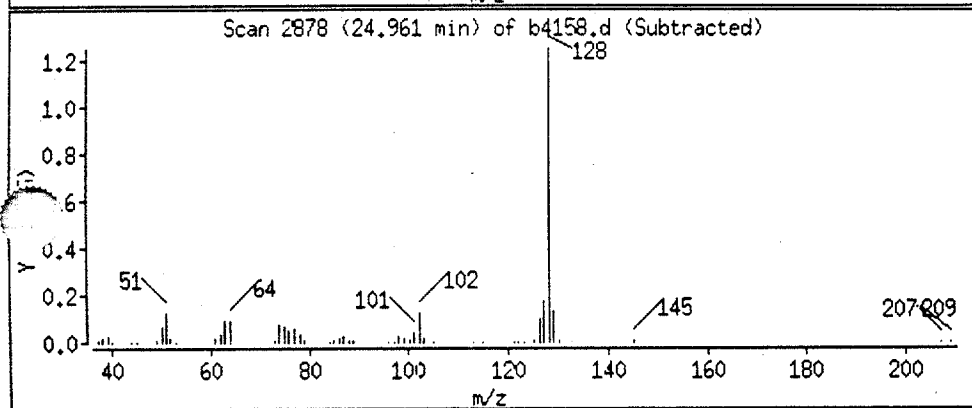
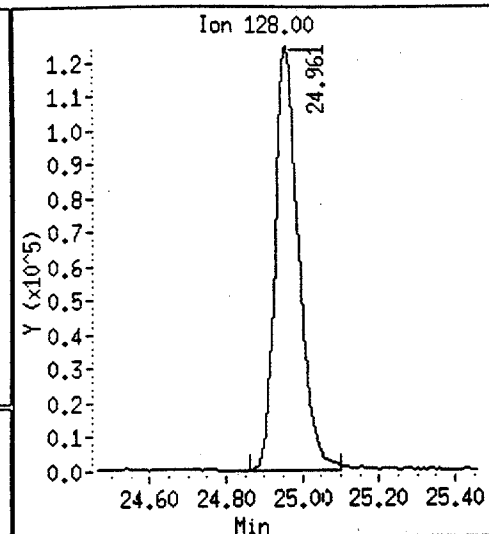
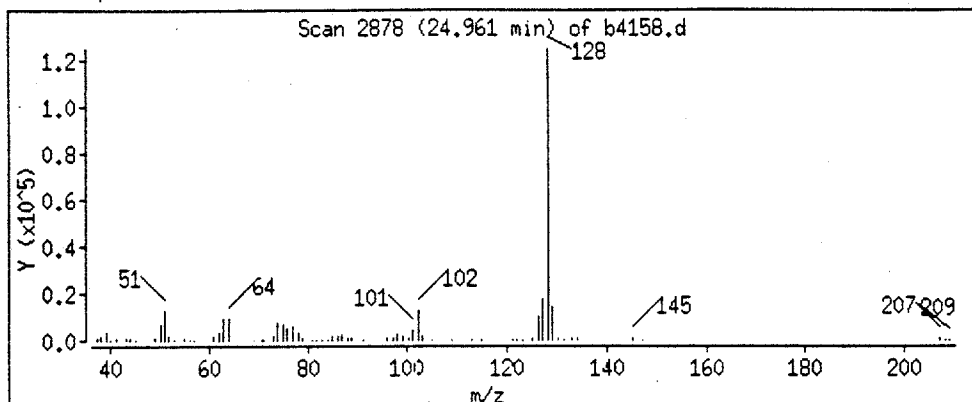
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

80 Naphthalene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 32

Date : 28-JUN-94 11:37

Instrument : msb.i

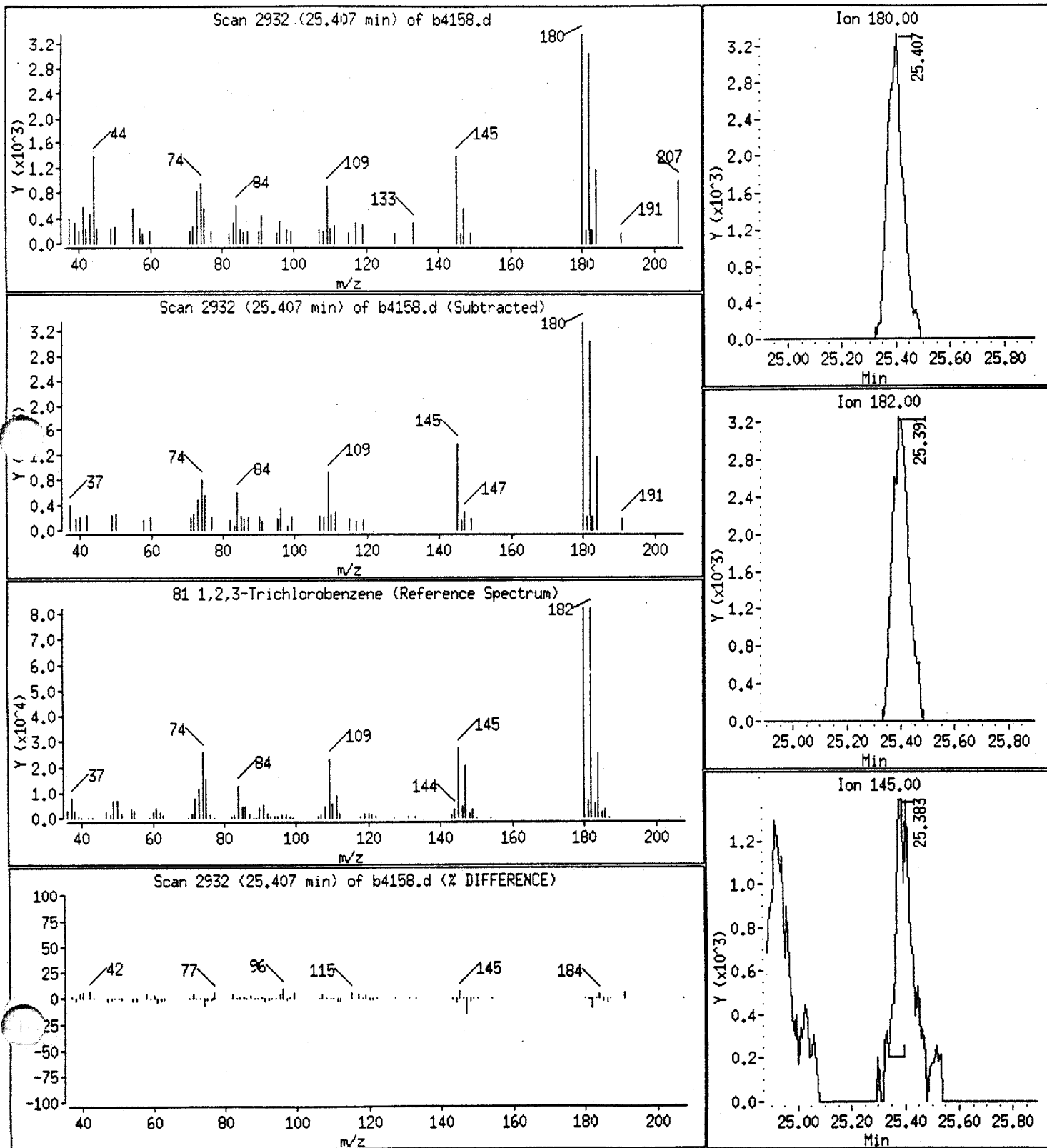
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

81 1,2,3-Trichlorobenzene



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 34

Date : 28-JUN-94 11:37

Instrument : msb.i

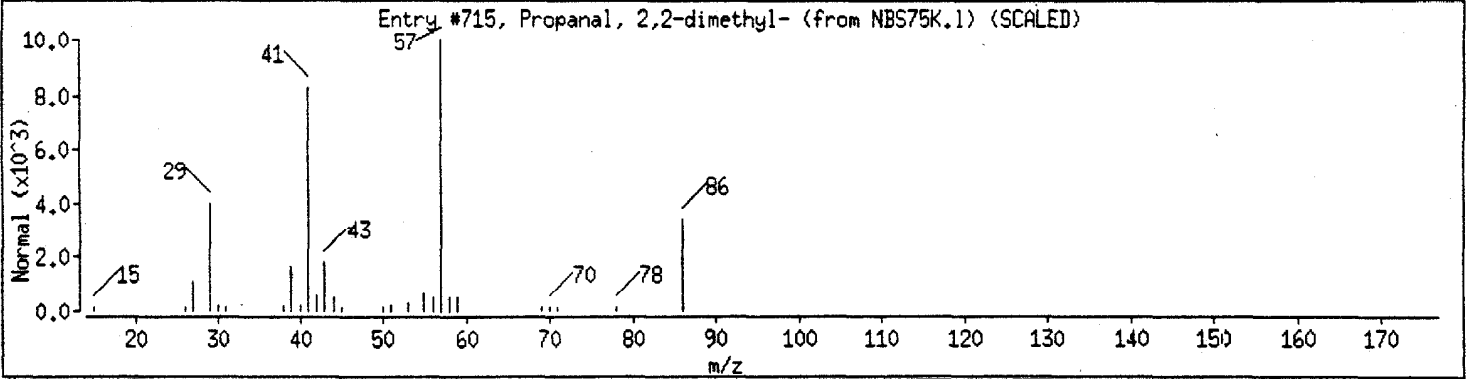
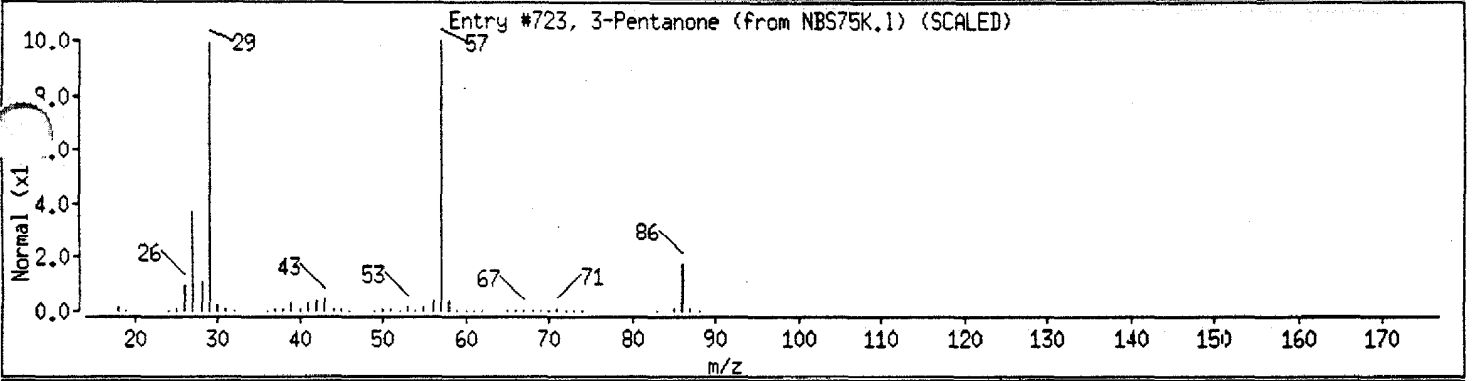
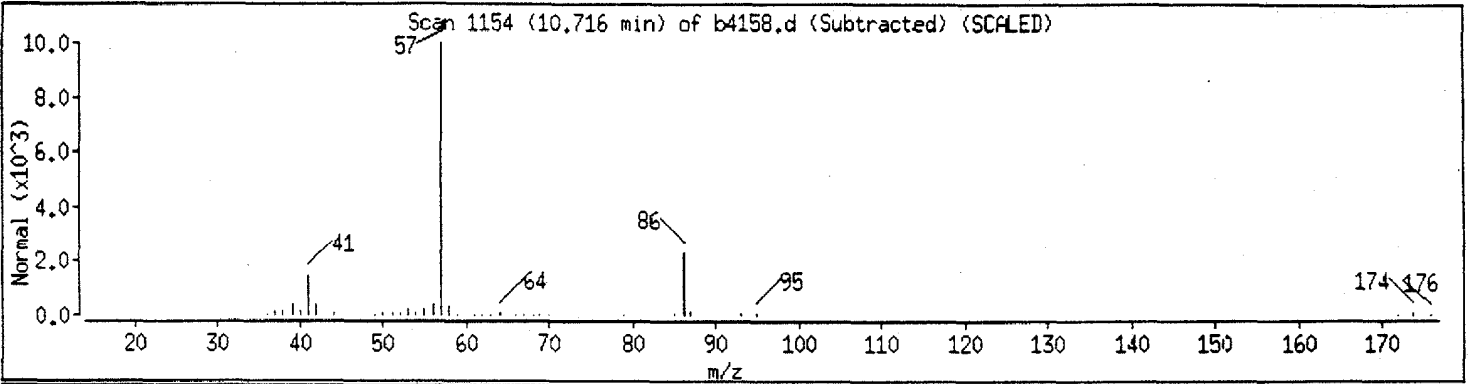
Sample ID :

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
3-Pentanone	96-22-0	NBS75K.1	723	80
Propanal, 2,2-dimethyl-	630-19-3	NBS75K.1	715	50



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 36

Date: 28-JUN-94 11:37

Instrument: msb.i

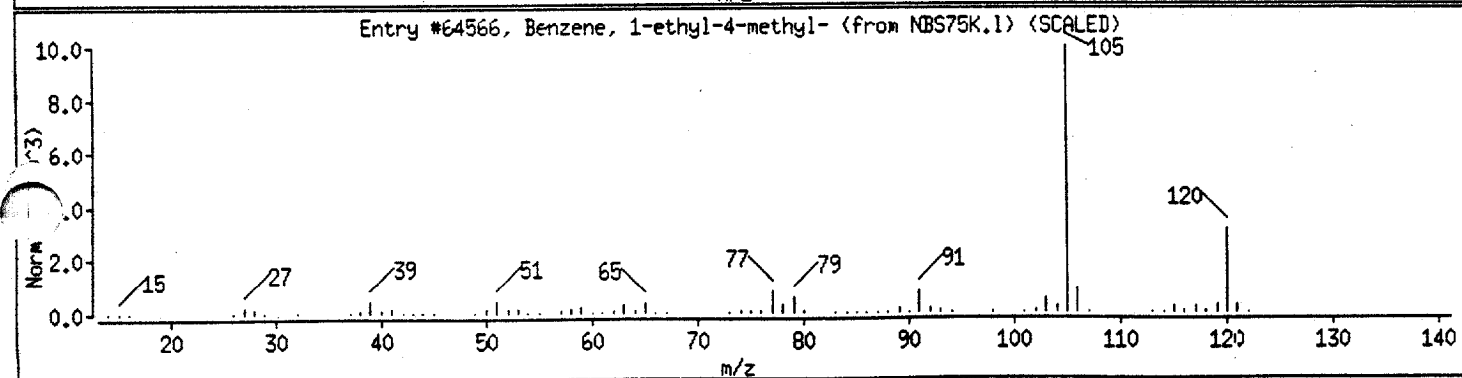
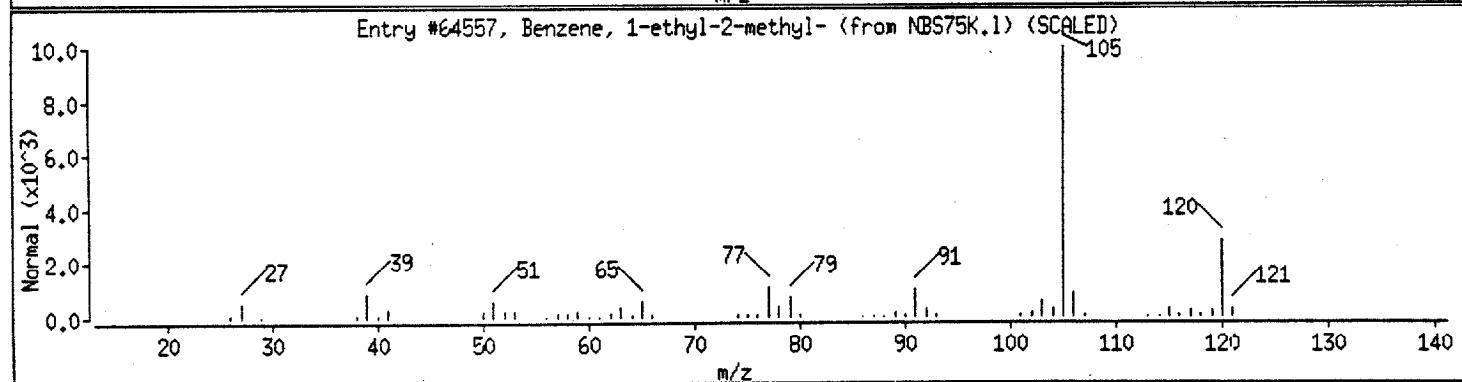
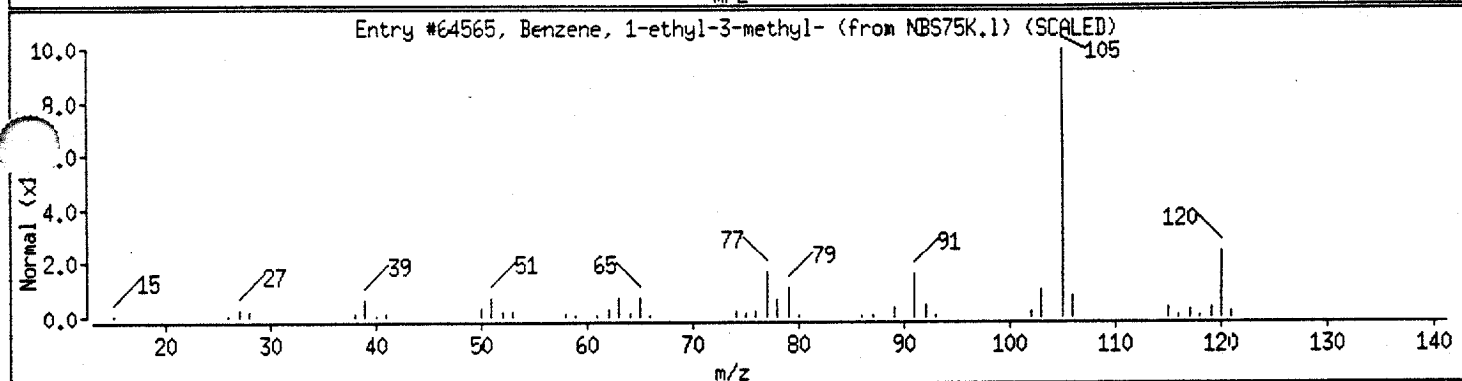
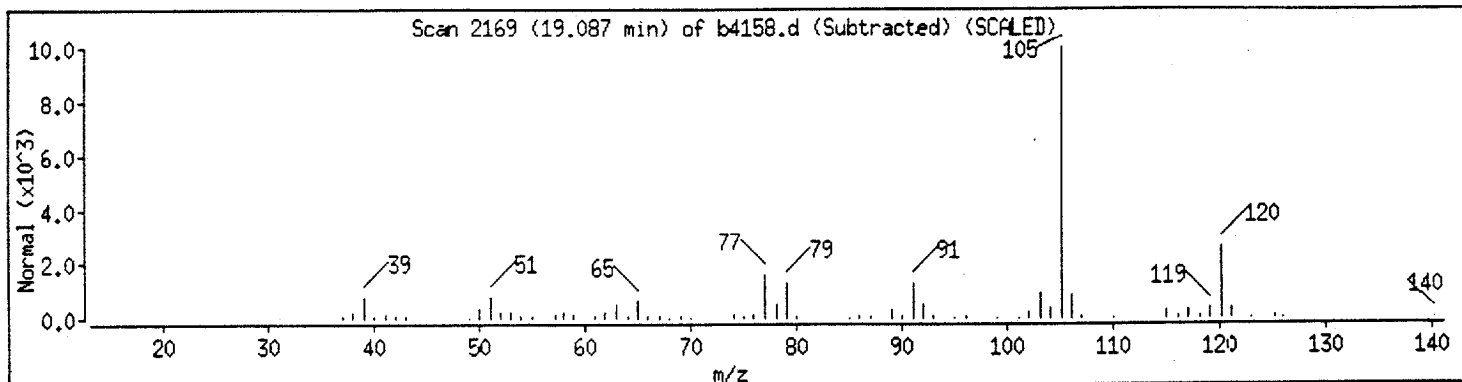
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.1	64565	97
Benzene, 1-ethyl-2-methyl-	611-14-3	NBS75K.1	64557	94
Benzene, 1-ethyl-4-methyl-	622-96-8	NBS75K.1	64566	91



Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 37

Date: 28-JUN-94 11:37

Instrument: msb.i

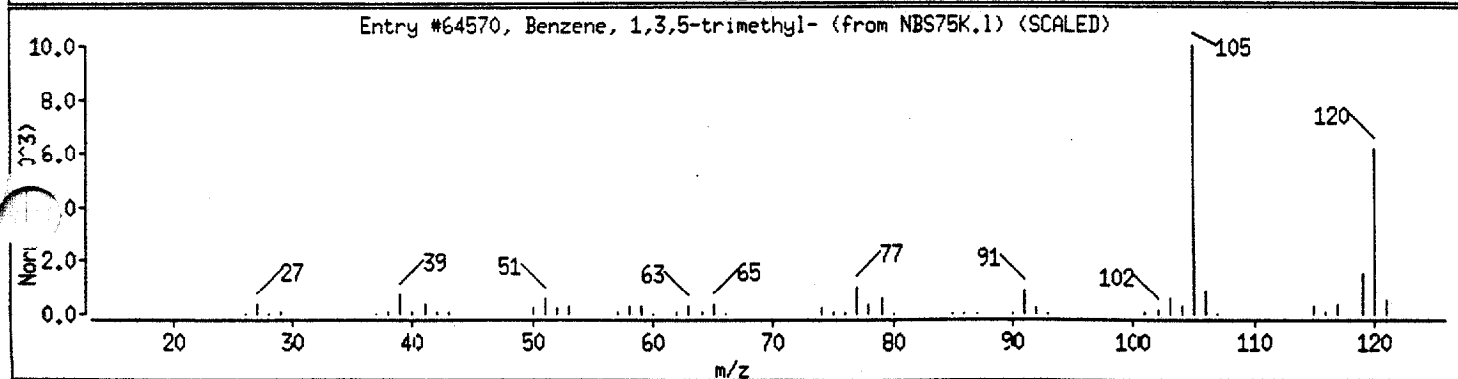
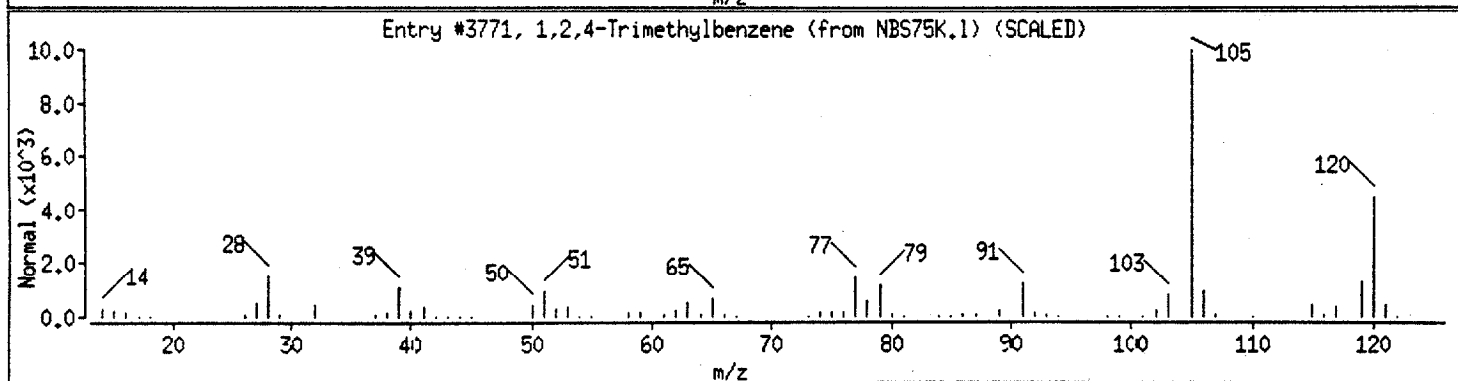
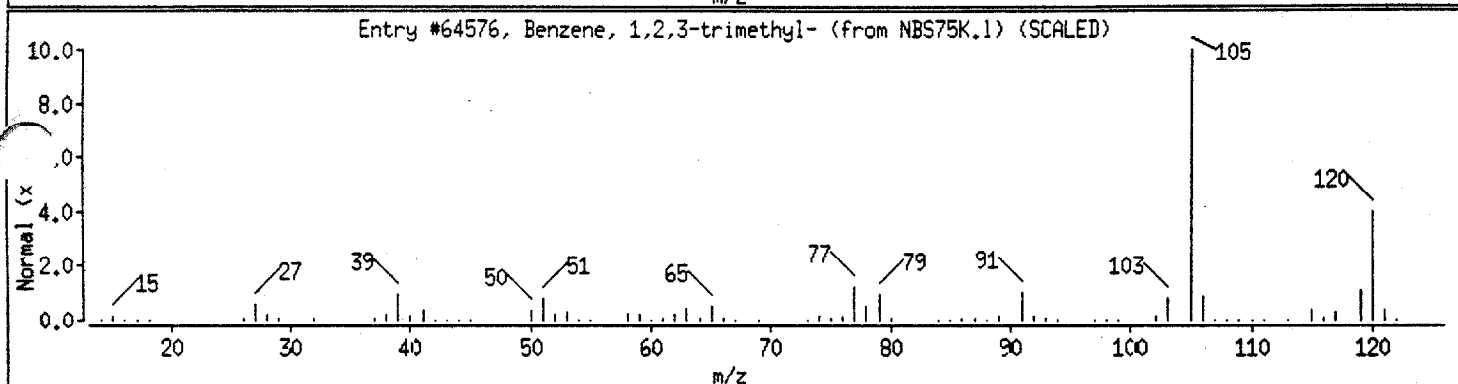
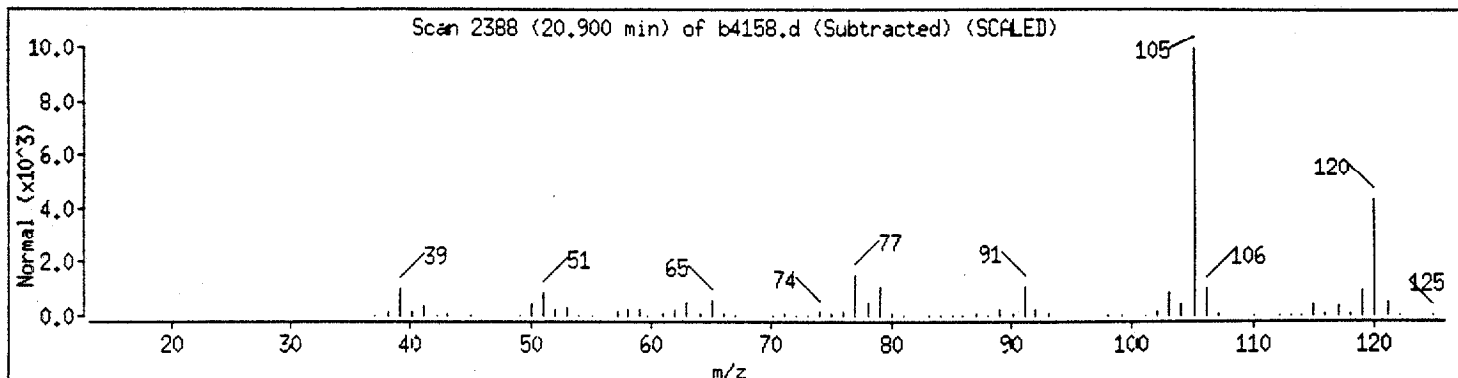
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	64576	97
1,2,4-Trimethylbenzene	95-36-3	NBS75K.1	3771	96
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.1	64570	95





Data File: /chem/aux/msb.i/b062894.b/b4158.d

Page 38

Date: 28-JUN-94 11:37

Instrument: msb.i

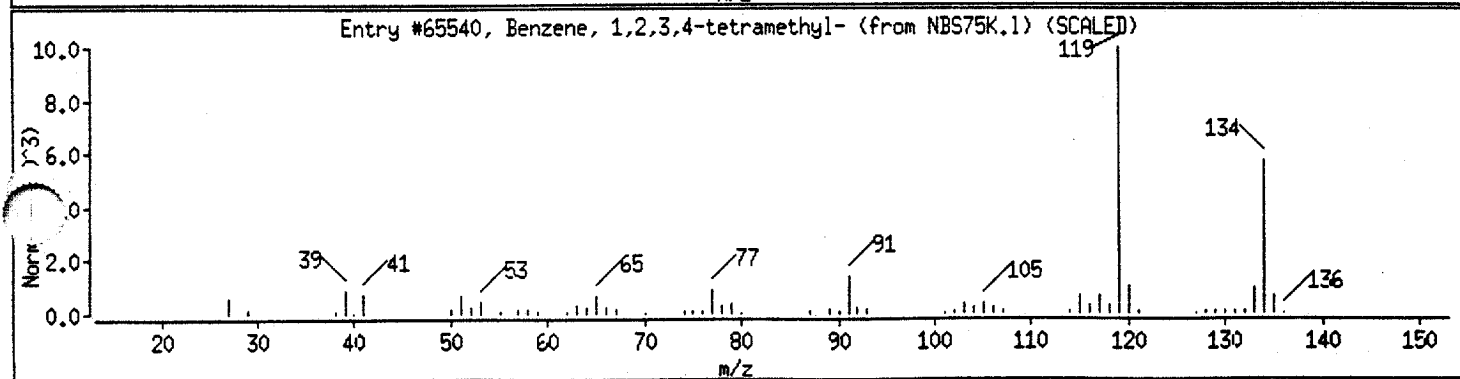
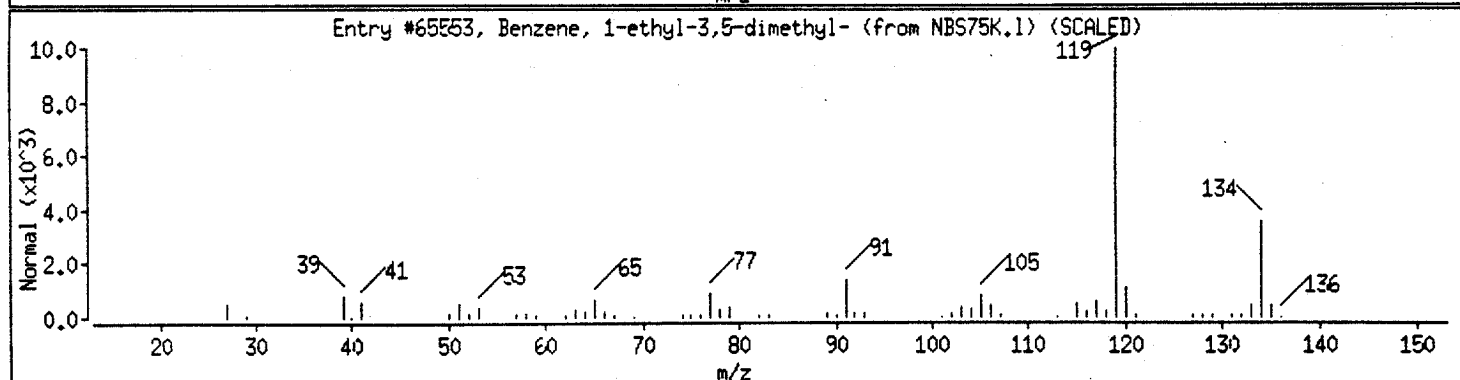
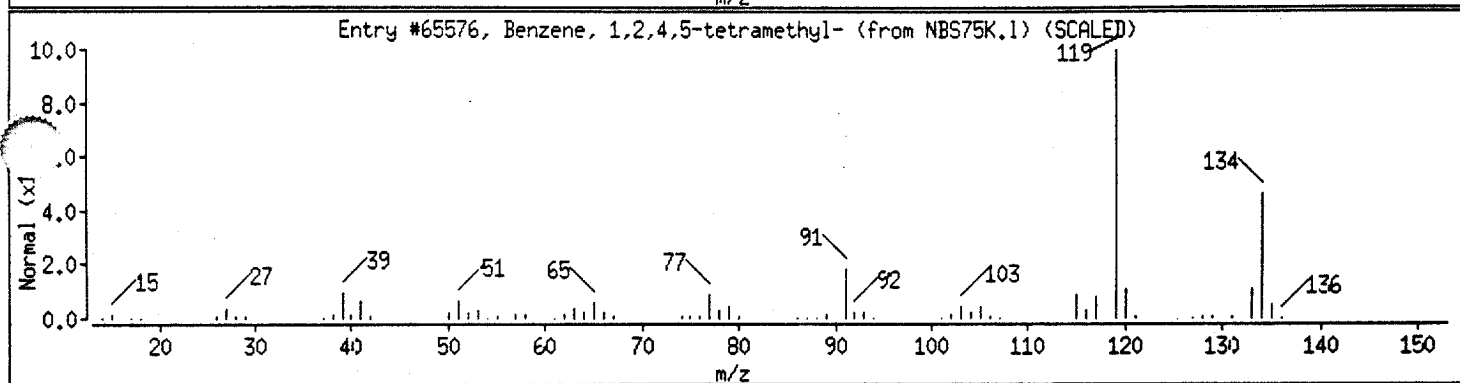
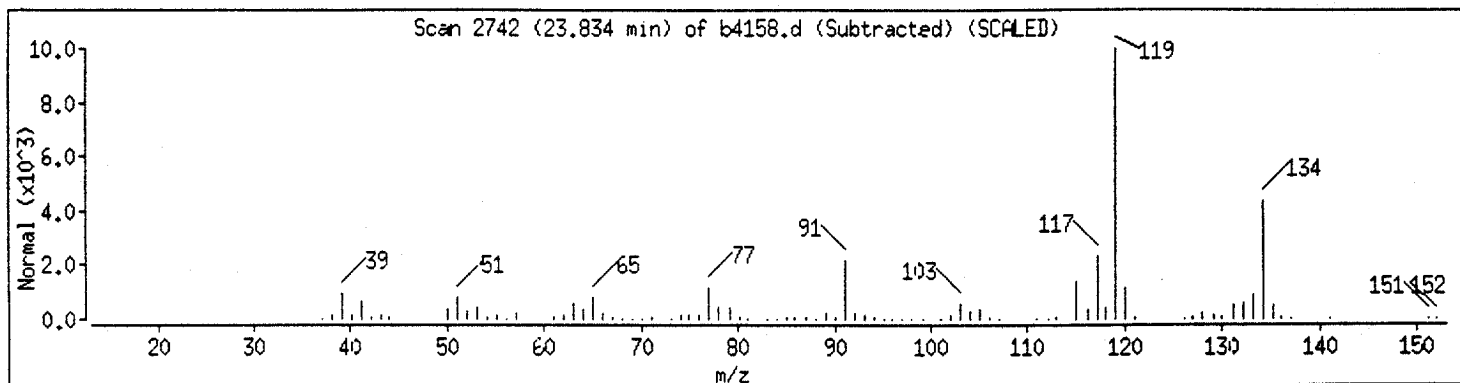
Sample ID:

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1,2,4,5-tetramethyl-	95-93-2	NBS75K.1	65576	94
Benzene, 1-ethyl-3,5-dimethyl-	934-74-7	NBS75K.1	65553	87
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NBS75K.1	65540	87



SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0250

Lab Name: ASC

Contract: AKCSA

Lab Code:       

Case No.:       

SAS No.:       

SDG No.: 14417

Level: (low/med) Med

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLK01	107	110	114		E
02	VSPK01	104	107	109		
03	0619MS	117	111	106		
04	0619MSD	113	106	103		
05	0619	111	108	112		
06	0619	101	96.4	105		↓
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

- SMC1 (TOL) = Toluene-d8 (84-138)
- SMC2 (BFB) = Bromofluorobenzene (59-113)
- SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring Compound diluted out

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

0251

Lab Name: ASC

Contract: NEESA

Lab Code:      Case No.:     

SAS No.:     

SDG No.: CUU17

Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLK02	100	101	105		0
02	VSPK02	110	106	108		0
03	C6018MS	109	91.2	111		0
04	C6018MSD	115	100	114		0
05	CUU18	127	87.3	117		0
06	CUU20	118	85.3	116		0
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS  
 SMC1 (TOL) = Toluene-d8 (84-138)  
 SMC2 (BFB) = Bromofluorobenzene (59-113)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

# 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

0252

Lab Name: ASC Contract: NUSA

Lab Code:      Case No.:      SAS No.:      SDG No.: C4617

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VBLK2	100	100	111		0
02	VSPK2	92.6	91.4	96.0		0
03	C4621ms	94.8	94.8	94.8		0
04	C4621msD	101	99.6	99.0		0
05	C4621	97.8	96.4	97.8		0
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS

SMC1 (TOL) = Toluene-d8 (88-110)  
 SMC2 (BFB) = Bromofluorobenzene (86-115)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

# 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: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: 01017

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
01	VOA BLK 01	91.8	92.4	99.8		Ø
02	VOA SPR 01	98.2	98.0	110		Ø
03	C6622	103	103	110		Ø
04	C6622MS	94.6	98.6	99.4		Ø
05	C6622MSD	106	109	108		Ø
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						
27						
28						
29						
30						

QC LIMITS  
 SMC1 (TOL) = Toluene-d8 (88-110)  
 SMC2 (BFB) = Bromofluorobenzene (86-115)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

# Column to be used to flag recovery values  
 \* Values outside of contract required QC limits  
 D System Monitoring Compound diluted out

3B  
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0254

Lab Name: ASC Contract: NASA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: 16117  
 Matrix Spike - EPA Sample No.: 16619 Level: (low/med) med

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	7680	0	6650	86.6	59-172
Trichloroethene	7680	↓	7340	95.6	62-137
Benzene	7680	↓	7490	97.6	66-142
Toluene	7680	206	880	103	59-139
Chlorobenzene	7680	0	7650	99.6	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	7680	6650	98.4	12.8	22	59-172
Trichloroethene	7680	7340	97.4	1.87	24	62-137
Benzene	7680	7490	100	2.83	21	66-142
Toluene	7680	880	103	0	21	59-139
Chlorobenzene	7680	7650	99.3	402	21	60-133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits  
 Spike Recovery: 0 out of 10 outside limits

COMMENTS: \_\_\_\_\_

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NASA C6617  
 Lab Code:      Case No.:      SAS No.:      SDG No.: DU-11118  
 Matrix Spike - EPA Sample No.: C6618 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	116	0	127	110	59-172
Trichloroethene	116	↓	203	175	62-137
Benzene	116	↓	116	100	66-142
Toluene	116	↓	115	99.4	59-139
Chlorobenzene	116	↓	110	95.3	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	116	142	122	10.9	22 59-172
Trichloroethene	↓	207	178	1.73	24 62-137
Benzene	↓	116	100	0	21 66-142
Toluene	↓	119	103	2.70	21 59-139
Chlorobenzene	↓	116	100	4.67	21 60-133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits  
 Spike Recovery: 2 out of 10 outside limits

COMMENTS: \_\_\_\_\_

3B

## SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NUSA  
 Lab Code: \_\_\_\_\_ Case No.: \_\_\_\_\_ SAS No.: \_\_\_\_\_ SDG No.: Chek 17  
 Matrix Spike - EPA Sample No.: C11121 Level: (low/med) med

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	120000	0	118000	98.4	59-172
Trichloroethene	↓	↓	138000	115	62-137
Benzene	↓	↓	109000	90.8	66-142
Toluene	↓	↓	109000	90.8	59-139
Chlorobenzene	↓	↓	78000	90.0	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	120000	125000	104	5.15	22 59-172
Trichloroethene	↓	132000	110	7.09	24 62-137
Benzene	↓	125000	104	13.9	21 66-142
Toluene	↓	122000	102	12.0	21 59-139
Chlorobenzene	↓	120000	100	10.5	21 60-133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 6 out of 5 outside limits

Spike Recovery: 6 out of 10 outside limits

COMMENTS: \_\_\_\_\_



3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Matrix Spike - EPA Sample No.: C6622 MS

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,1-Dichloroethene	50.0	5.00	51.2	102	61-145
Trichloroethene	50.0	5.00	49.1	98.2	71-120
Benzene	50.0	<del>5.00</del> 1.62	52.4	102	76-127
Toluene	50.0	<del>5.00</del> 4.05	52.3	105	76-125
Chlorobenzene	50.0	5.00	49.8	99.6	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50.0	52.9	106	3.27	14	61-145
Trichloroethene	50.0	51.2	102	4.19	14	71-120
Benzene	50.0	54.2	105	3.48	11	76-127
Toluene	50.0	50.0	104	7.39	13	76-125
Chlorobenzene	50.0	51.7	103	2.37	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: \_\_\_\_\_

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ASD Contract: Neesa VBK01  
 Lab Code:      Case No.:      SAS No.:      SDG No.: 16017  
 Lab File ID: B4163 Lab Sample ID: NDV3677V  
 Date Analyzed: 062894 Time Analyzed: 1428  
 GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y  
 Instrument ID: MST-B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED	
01	VSPAC1	NDV3677VS	B4164	<del>1428</del>	1523
02	16017MS	JM9436VS	B4164	<del>1453</del>	1611
03	16019MSD	JM9436VF	B4167	<del>1611</del>	1645
04	16019	JM9436VF	B4165	<del>1645</del>	1537
05	16017	JM9434	B4168	<del>153</del>	1720
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					

COMMENTS:

---



---

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ASC Contract: NCLSA VBLK02

Lab Code: — Case No.: — SAS No.: — SDG No.: C11017

Lab File ID: C8148 Lab Sample ID: N2V3670V

Date Analyzed: 062794 Time Analyzed: 1102

GC Column: DB-624 ID: .53 (mm) Heated Purge: (Y/N) Y

Instrument ID: MSD-C

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	VSPK03	N2V3670 VS	C8178 C8180	1343 1212
02	C10618 MS	JM9435 VS	C8179 C8183	1810 1301
03	C11018 MS	JM9435 VR	C8180	1343
04	C11018	JM9435	C8183	1810
05	C10620	JM9437	C8181	1425
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

DLL  
7/19/94

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ASC Contract: NEESA VBLK02  
~~CL 219394~~  
 Lab Code:      Case No.:      SAS No.:      SDG No.: Cold7  
 Lab File ID: 34149 Lab Sample ID: N4V3674U  
 Date Analyzed: 062794 Time Analyzed: 1618  
 GC Column: DB624 ID: 75 (mm) Heated Purge: (Y/N)   
 Instrument ID: MSD-B

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	<u>VSPK02</u>	<u>3415 N4V3674U</u>	<u>34150</u>	<u>1652</u>
02	<u>CL1621MS</u>	<u>JM9438XS</u>	<u>34152</u>	<u>1821</u>
03	<u>CL1621MSD</u>	<u>JM9438XS</u>	<u>34153</u>	<u>1830</u>
04	<u>CL1621</u>	<u>JM9438</u>	<u>34151</u>	<u>1707</u>
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

---



---

4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ASC Contract: NEEA VOABLK01  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C16617  
 Lab File ID: B4144 Lab Sample ID: NV3671V  
 Date Analyzed: 06/27/94 Time Analyzed: 1326  
 GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N  
 Instrument ID: MSB.C

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	<u>VOASPK01</u>	<u>NV3671V3</u>	<u>B4145</u>	<u>1401</u>
02	<u>C16622</u>	<u>JM7439V</u>	<u>B4158</u>	<u>1137</u>
03	<u>C16622MS</u>	<u>JM7439V5</u>	<u>B4159</u>	<u>1211</u>
04	<u>C16622MSD</u>	<u>JM7439VR</u>	<u>B4160</u>	<u>1246</u>
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

---



---

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESC  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Lab File ID: B408 BFB Injection Date: 6/14/94  
 Instrument ID: MSD-B BFB Injection Time: 1236  
 GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.2
75	30.0 - 66.0% of mass 95	55.8
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	50.0 - 120.0% of mass 95	52.74 (74.1)
175	4.0 - 9.0 % of mass 174	6.5 (7.8) 1
176	93.0 - 101.0% of mass 174	73.8 (99.6) 1
177	5.0 - 9.0% of mass 176	5.2 (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:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	Calibr. Std. #1	Std. 10.0 ppb	B4087	6/14/94	1654
02	Calibr. Std. #2	Std. 20.0 ppb	B4088	6/14/94	1731
03	Calibr. Std. #3	Std. 50.0 ppb	B4089	6/14/94	1807
04	Calibr. Std. #4	Std. 100 ppb	B4090	6/14/94	1844
05	Calibr. Std. #5	Std. 200 ppb	B4091	6/14/94	1922
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Lab File ID: ZC8129 BFB Injection Date: 6/24/94  
 Instrument ID: MSD-C BFB Injection Time: 1053  
 GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	24.85
75	30.0 - 66.0% of mass 95	53.52
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.80
173	Less than 2.0% of mass 174	0.00 (0.00) 1
174	50.0 - 120.0% of mass 95	79.39
175	4.0 - 9.0 % of mass 174	6.31 (7.95) 1
176	93.0 - 101.0% of mass 174	77.84 (98.05) 1
177	5.0 - 9.0% of mass 176	5.66 (7.27) 2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	Calibr. Std. #1	10.0 ppb Std	ZC8131	6/24/94	1224
02	Calibr. Std. #2	20.0 ppb Std	ZC8132		1306
03	Calibr. Std. #3	50.0 ppb Std	ZC8133		1348
04	Calibr. Std. #4	100 ppb Std	ZC8134		1430
05	Calibr. Std. #5	200 ppb Std	ZC8135		1512
06	VOA BLK01	NV3668V	ZC8136		1630
07	VOA DR01	NV9668VS	ZC8137		1721
08	N-001	JM9447VX	ZC8138		1803
09	N-001MS	JM9447VS	ZC8139		1845
10	N-001MSD	JM9447VR	ZC8140		1927
11	E-002	JM9448V	ZC8141		2009
12	W-004	JM9450V	ZC8142		2057
13	B-005	JM9451V	ZC8143		2132
14	S-003	JM9449V	ZC8144		2214
15					
16					
17					
18					
19					
20					
21					
22					

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Lab File ID: B4142 BFB Injection Date: 06/27/94  
 Instrument ID: MSB.L BFB Injection Time: 1022  
 GC Column: DB624 ID: 0.53 (mm) Heated Purge: (Y/N) No

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	20.6
75	30.0 - 66.0% of mass 95	56.9
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	(0.7 )1
174	50.0 - 120.0% of mass 95	76.1
175	4.0 - 9.0 % of mass 174	(7.7 )1
176	93.0 - 101.0% of mass 174	(96.3 )1
177	5.0 - 9.0% of mass 176	(7.3 )2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	<del>402</del> CHK STD.	CHK STD	B4143	06/27/94	1054
02	VOA BLK	NV3671V	B4144	06/27/94	1326
03	VOA SPK	NV3671VS	B4145	06/27/94	1401
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					



5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: 062794  
 Lab File ID: B4142 BFB Injection Date: 062794  
 Instrument ID: MSD-F BFB Injection Time: 1022  
 GC Column: B624 ID: 75 (mm) Heated Purge: (Y/N) N  
FAL 83894

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	19.2
75	30.0 - 66.0% of mass 95	56.2
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	8.1
173	Less than 2.0% of mass 174	0.4 ( )1
174	50.0 - 120.0% of mass 95	64.4
175	4.0 - 9.0 % of mass 174	8.5 ( )1
176	93.0 - 101.0% of mass 174	100 ( )1
177	5.0 - 9.0% of mass 176	7.7 ( )2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK02	N4V31274V	B4149	062794	1618
02	VBP02	N4V31274VS	B4150		1652
03	CL02105	JM9438VS	B4153		1801
04	CL02102	JM9438VR	B4153		1836
05	CL021	JM9438	B4157		1727
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NRESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: 060617  
 Lab File ID: D14-08147 C8144 BFB Injection Date: 062794  
 Instrument ID: MSD-C BFB Injection Time: 0842  
 GC Column: DB24 ID: .53 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.16
75	30.0 - 66.0% of mass 95	48.15
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	8.20
173	Less than 2.0% of mass 174	0.00 ( 1)
174	50.0 - 120.0% of mass 95	88.24
175	4.0 - 9.0 % of mass 174	7.05 ( 1)
176	93.0 - 101.0% of mass 174	96.53 ( 1)
177	5.0 - 9.0% of mass 176	6.64 ( 2)

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBLK02	N2V3670V	C8148	062794	1102
02	C60618	JM9435	C8153	✓	1810
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEEK  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Lab File ID: B4156 BFB Injection Date: 06/28/94  
 Instrument ID: MSB.C BFB Injection Time: 0955  
 GC Column: DB624 ID: 053 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	50.1
75	30.0 - 66.0% of mass 95	48.9
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	<del>20.0</del> (1.4) 1
174	50.0 - 120.0% of mass 95	69.7
175	4.0 - 9.0 % of mass 174	( 8.5 ) 1
176	93.0 - 101.0% of mass 174	( 96.7 ) 1
177	5.0 - 9.0% of mass 176	( 7.1 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CHK STD	CHK STD	B4157	06/28/94	1030
02	C6622	JM9439U	B4158	06/28/94	1137
03	C6622 MS	JM9439US	B4159	06/28/94	1542
04	C6622 MSD	JM9439UR	B4160	06/28/94	1547
05	VBK01	N2V3677V	B4163		1428
06	VSPK01	N2V3677VS	B4164		1503
07	C6619 MS	JM3436VS	B4166		1611
08	C6619 MSD	JM3436VR	B4167		1645
09	C6619	JM3436	B4165		1537
10	C6617	JM3434	B4168		1720
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NL-ISA  
 Lab Code:        Case No.:        SAS No.:        SDG No.: CUU17  
 Lab File ID: C8176 BFB Injection Date: 062894  
 Instrument ID: MSD-C BFB Injection Time: 1056  
 GC Column: DB624 ID: 253 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.77
75	30.0 - 66.0% of mass 95	46.56
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	8.47
173	Less than 2.0% of mass 174	0.00 ( )1
174	50.0 - 120.0% of mass 95	85.95
175	4.0 - 9.0 % of mass 174	7.30 ( )1
176	93.0 - 101.0% of mass 174	98.11 ( )1
177	5.0 - 9.0% of mass 176	7.83 ( )2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSP302	N2V3670KS	C8178	062894	1213
02	CUU18MS	JM9435VS	C8179	↓	1301
03	CUU18MSD	JM9435VR	C8180	↓	1343
04	CUU20	JM9437	C8181	↓	1425
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

6A  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: CLM7  
 Instrument ID: MSD-B Calibration Date(s): 6-14-94 6-14-94  
 Heated Purge: (Y/N) N Calibration Times: 11054 1920  
 GC Column: DB624 ID: 0.53 (mm)

LAB FILE ID:	RRF10 =	RRF20 =	RRF50 =	RRF100 =	RRF200 =	RRF	RSD
RRF50 = <u>B4087</u>	RRF100 = <u>B4087</u>	RRF200 = <u>B4088</u>					
COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	RSD
Chloromethane	0.3920	0.5809	—	0.6447	0.5593	0.5938	19.97
Bromomethane	*1.1340	1.1123	—	0.9909	0.9063	1.0359	10.52 *
Vinyl Chloride	*1.1417	1.0845	—	1.1116	1.0336	1.1104	2.14 *
Chloroethane	0.7556	0.6932	—	0.5226	0.4715	0.6107	22.16
Methylene Chloride	1.8712	1.5927	1.4610	1.4588	1.3401	1.5448	13.15
Acetone	—	0.4522	0.2669	0.2345	0.1892	0.2857	46.43
Carbon Disulfide	5.7341	4.0233	3.7720	3.7653	3.2889	4.1087	23.03
1,1-Dichloroethene	*1.8174	1.4667	1.4141	1.2571	1.2079	1.4526	15.54 *
1,1-Dichloroethane	*3.2176	2.6782	2.4941	2.5101	2.3250	2.6450	12.99 *
1,2-Dichloroethene (total)	1.9054	1.6422	1.5285	1.5217	1.3844	1.5964	12.24
Chloroform	*3.5363	3.0513	2.8073	2.7084	2.5450	2.9288	13.16 *
1,2-Dichloroethane	*2.3780	2.0796	1.8925	1.8432	1.7519	1.9290	12.48 *
2-Butanone	0.04109	0.03159	0.03265	0.03013	0.02900	0.03289	14.56
1,1,1-Trichloroethane	*0.7386	0.6552	0.5985	0.5815	0.5016	0.6277	11.31 *
Carbon Tetrachloride	*0.7210	0.6148	0.5556	0.5378	0.5046	0.5868	14.49 *
Bromodichloromethane	*0.82929	0.75863	0.68132	0.6827	0.6453	0.7195	10.28 *
1,2-Dichloropropane	0.4778	0.4236	0.3776	0.3766	0.3579	0.4027	12.03
cis-1,3-Dichloropropene	*0.6399	0.5992	0.5501	0.5533	0.5307	0.5835	10.55 *
Trichloroethene	*0.5363	0.4693	0.4344	0.4301	0.4109	0.4562	10.85 *
Dibromochloromethane	*0.6390	0.5824	0.5300	0.5395	0.5228	0.5636	7.85 *
1,1,2-Trichloroethane	*0.4418	0.3979	0.3676	0.3584	0.3477	0.3828	9.90 *
Benzene	*1.1232	0.9720	0.8654	0.7822	0.7727	0.9131	15.11 *
trans-1,3-Dichloropropene	*0.6225	0.5677	0.5106	0.5132	0.4909	0.5370	8.65 *
Bromoform	*0.5380	0.4961	0.4782	0.4740	0.4590	0.4874	5.87 *
4-Methyl-2-Pentanone	0.44634	0.4697	0.3847	0.3705	0.3710	0.3765	8.10
2-Hexanone	0.2872	0.2317	0.2607	0.2510	0.2420	0.2545	8.31
Tetrachloroethene	*0.6714	0.5769	0.5290	0.5063	0.4930	0.5553	13.03 *
1,1,2,2-Tetrachloroethane	*0.87134	0.74724	0.70723	0.6688	0.6299	0.7252	12.78 *
Toluene	*0.9571	0.8391	0.7513	0.7675	0.7299	0.8090	11.42 *
Chlorobenzene	*1.2655	1.1220	1.0227	1.0171	0.9735	1.0802	10.83 *
Ethylbenzene	*0.61086	0.5346	0.4948	0.4700	0.4596	0.5190	11.94 *
Styrene	*1.1402	1.0042	0.9387	0.9312	0.8570	0.9743	10.93 *
Xylene (total)	*0.7011	0.6544	0.5767	0.5820	0.5422	0.6113	10.58 *
Toluene-d8	1.4457	1.4417	1.2660	1.2437	1.2020	1.3198	8.74
Bromofluorobenzene	*0.95198	0.91263	0.83301	0.80165	0.7571	0.8513	9.39 *
1,2-Dichloroethane-d4	1.7738	1.6948	1.5144	1.4981	1.3911	1.5244	9.90

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.

6A  
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Instrument ID: MSD-C Calibration Date(s): 062494  
 Heated Purge: (Y/N) Y Calibration Times: 1224 1572  
 GC Column: DB624 ID: 0.53 (mm)

LAB FILE ID:	RRF10 =	RRF20 =	RRF50 =	RRF100 =	RRF200 =	RRF	% RSD
>C8131	>C8131	>C8132	>C8133	>C8134	>C8135		
>C8133	>C8134	>C8135					
COMPOUND	RRF10	RRF20	RRF50	RRF100	RRF200	RRF	% RSD
Chloromethane	0.75036	0.73550	0.75246	0.75072	0.71748	0.74131	2.02
Bromomethane	*1.6662	1.6014	1.6538	1.6834	1.6166	1.6443	2.09
Vinyl Chloride	*1.2829	1.2771	1.5339	1.3886	1.3677	1.3780	3.74
Chloroethane	0.78705	0.82139	0.76730	0.87981	0.85236	0.82257	7.25
Methylene Chloride	1.8708	1.6606	1.5762	1.5743	1.5244	2.375	2.37
Acetone	0.59733	0.67802	0.56735	0.52658	0.43354	1.6413	16.10
Carbon Disulfide	3.4012	3.3287	3.5333	3.7612	3.7452	3.5540	5.52
1,1-Dichloroethene	*1.6937	1.6199	1.5500	1.60753	1.5851	1.6112	3.36
1,1-Dichloroethane	*2.8963	2.7266	2.5775	2.6469	2.5584	2.6211	5.12
1,2-Dichloroethene (total)	1.6220	1.6226	1.5723	1.6036	1.5502	1.6061	3.16
Chloroform	*3.3942	3.0811	2.9362	2.9229	2.8663	3.0401	7.01
1,2-Dichloroethane	*2.4849	2.2247	2.0904	2.1088	2.0478	2.1913	8.06
2-Butanone	0.03973	0.04827	0.04736	0.05021	0.03851	0.04482	11.57
1,1,1-Trichloroethane	*0.57124	0.51444	0.50173	0.50053	0.50192	0.51797	5.85
Carbon Tetrachloride	*0.50971	0.48254	0.47936	0.48209	0.48705	0.48795	2.44
Bromodichloromethane	*0.56769	0.55889	0.58003	0.59182	0.59785	0.57995	2.75
1,2-Dichloropropane	0.3703	0.37716	0.36332	0.36376	0.36150	0.37295	4.25
cis-1,3-Dichloropropene	*0.44882	0.43735	0.46047	0.47478	0.47105	0.46019	3.71
Trichloroethene	*0.46068	0.42520	0.42724	0.41676	0.41724	0.43034	4.17
Dibromochloromethane	*0.47993	0.48020	0.51778	0.55542	0.55333	0.51833	7.412
1,1,2-Trichloroethane	*0.37899	0.34518	0.33589	0.34458	0.32880	0.34669	5.861
Benzene	*1.0342	0.96622	0.91976	0.93358	0.91535	0.95380	5.15
trans-1,3-Dichloropropene	*0.36864	0.36515	0.38662	0.41129	0.42138	0.39462	6.43
Bromoform	*0.33911	0.3214	0.40228	0.46225	0.44263	0.39650	12.53
4-Methyl-2-Pentanone	0.21027	0.20896	0.20774	0.20562	0.17811	0.20094	6.56
2-Hexanone	0.56937	0.57128	0.55868	0.56152	0.48332	0.54774	6.89
Tetrachloroethene	*0.55951	0.52000	0.49644	0.49956	0.47791	0.51067	6.09
1,1,2,2-Tetrachloroethane	*0.86562	0.8582	0.85742	0.8705	0.82784	0.88475	5.85
Toluene	*0.92134	0.84251	0.80523	0.81962	0.81145	0.84003	5.67
Chlorobenzene	*1.1618	1.0653	1.0141	1.0337	1.0085	1.0567	5.94
Ethylbenzene	*0.56150	0.51137	0.48866	0.50393	0.49495	0.51368	6.30
Styrene	*1.0872	1.0031	0.97181	1.0197	1.0396	1.0231	4.16
Xylene (total)	*0.70154	0.66041	0.63406	0.62781	0.63713	0.65339	5.00
Toluene-d8	1.265	1.1684	1.1492	1.186	1.1607	1.1762	2.23
Bromofluorobenzene	*0.77768	0.70974	0.69072	0.70334	0.69456	0.71521	4.99
1,2-Dichloroethane-d4	1.71712	1.7244	1.6850	1.6902	1.6603	1.7028	4.59

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.

7A  
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NELSA C66117  
 Lab Code:      Case No.:      SAS No.:      SDG No.: C66117  
 Instrument ID: MSD-7 Calibration Date: 072794 Time: 1858  
 Lab File ID: B4143 Init. Calib. Date(s): 061494 061494  
 Heated Purge: (Y/N) Y Init. Calib. Times: 1654 1920  
 GC Column: DB124 ID: 75 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.544	0.550		1.2	
Bromomethane	1.036	0.926	0.100	12.5	25.0
Vinyl Chloride	1.110	1.059	0.100	4.6	25.0
Chloroethane	0.611	0.605		0.9	
Methylene Chloride	1.545	1.386		10.3	
Acetone	0.284	0.336		17.6	
Carbon Disulfide	4.109	3.944		3.5	
1,1-Dichloroethene	1.453	1.282	0.100	11.8	25.0
1,1-Dichloroethane	2.104	2.578	0.200	2.5	25.0
1,2-Dichloroethene (total)	1.596	1.486		6.9	
Chloroform	2.930	3.026	0.200	2.6	25.0
1,2-Dichloroethane	1.929	2.174	0.100	4.3	25.0
2-Butanone	0.033	0.030		9.4	
1,1,1-Trichloroethane	0.628	0.626	0.100	0.3	25.0
Carbon Tetrachloride	0.587	0.596	0.100	1.6	25.0
Bromodichloromethane	0.719	0.662	0.200	8.0	25.0
1,2-Dichloropropane	0.403	0.364		9.7	
cis-1,3-Dichloropropene	0.583	0.552	0.200	5.5	25.0
Trichloroethene	0.452	0.424	0.300	7.0	25.0
Dibromochloromethane	0.564	0.521	0.100	7.1	25.0
1,1,2-Trichloroethane	0.383	0.334	0.100	12.8	25.0
Benzene	0.913 / 0.787	0.488	0.500	13.1	25.0
trans-1,3-Dichloropropene	0.537	0.570	0.100	5.0	25.0
Bromoform	0.488	0.424	0.100	13.1	25.0
4-Methyl-2-Pentanone	0.396	0.405		2.2	
2-Hexanone	0.255	0.277		9.0	
Tetrachloroethene	0.555	0.575	0.200	7.3	25.0
1,1,2,2-Tetrachloroethane	0.725	0.693	0.500	4.4	25.0
Toluene	0.809	0.782	0.400	3.3	25.0
Chlorobenzene	1.086	1.014	0.500	6.1	25.0
Ethylbenzene	0.514	0.464	0.100	9.6	25.0
Styrene	0.974	0.916	0.300	6.0	25.0
Xylene (total) <u>MTP</u>	0.611	0.555	0.300	9.2	25.0
Toluene-d3	1.320	1.225		7.2	
Bromofluorobenzene	0.851	0.829	0.200	2.6	25.0
1,2-Dichloroethane-d4	1.574	1.619		2.8	

13.8 DIL  
E13194

All other compounds must meet a minimum RRF of 0.010.

7A  
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: C6617  
 Instrument ID: MSB.C Calibration Date: 06/14/94 Time: 1030  
 Lab File ID: B4157 Init. Calib. Date(s): 06/14/94 06/14/94  
 Heated Purge: (Y/N) N Init. Calib. Times: 1654 1920  
 GC Column: DB-24 ID: 0.53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.544	0.481		11.6	
Bromomethane	1.030	0.772	0.100	6.2	25.0
Vinyl Chloride	1.110	1.027	0.100	7.3	25.0
Chloroethane	0.611	0.601		1.6	
Methylene Chloride	1.545	1.381		10.6	
Acetone	0.286	0.330		15.5	
Carbon Disulfide	4.109	3.891		5.3	
1,1-Dichloroethene	1.453	1.318	0.100	9.3	25.0
1,1-Dichloroethane	2.645	2.537	0.200	4.1	25.0
1,2-Dichloroethene (total)	1.596	1.501		6.0	
Chloroform	2.930	2.899	0.200	1.0	25.0
1,2-Dichloroethane	1.989	2.027	0.100	4.9	25.0
2-Butanone	0.033	0.030		9.9	
1,1,1-Trichloroethane	0.628	0.628	0.100	0.0	25.0
Carbon Tetrachloride	0.587	0.613	0.100	4.4	25.0
Bromodichloromethane	0.719	0.642	0.200	10.7	25.0
1,2-Dichloropropane	0.403	0.355		11.9	
cis-1,3-Dichloropropene	0.583	0.539	0.200	7.7	25.0
Trichloroethene	0.456	0.440	0.300	3.6	25.0
Dibromochloromethane	0.564	0.528	0.100	6.2	25.0
1,1,2-Trichloroethane	0.383	0.337	0.100	12.0	25.0
Benzene	0.913	0.780	0.500	14.5	25.0
trans-1,3-Dichloropropene	0.537	0.500	0.100	6.9	25.0
Bromoform	0.488	0.421	0.100	13.8	25.0
4-Methyl-2-Pentanone	0.336	0.400		0.8	
2-Hexanone	0.255	0.276		8.3	
Tetrachloroethene	0.555	0.541	0.200	2.6	25.0
1,1,2,2-Tetrachloroethane	0.725	0.664	0.500	8.4	25.0
Toluene	0.809	0.765	0.400	5.4	25.0
Chlorobenzene	1.030	1.016	0.500	6.0	25.0
Ethylbenzene	0.514	0.462	0.100	10.1	25.0
Styrene	0.974	0.883	0.300	9.3	25.0
Xylene (total)	0.611	0.559	0.300	8.6	25.0
Toluene-d8	1.320	1.170	11.3	11.3	
Bromofluorobenzene	0.851	0.786	0.200	7.7	25.0
1,2-Dichloroethane-d4	1.574	1.515		3.8	

All other compounds must meet a minimum RRF of 0.010.



7A  
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA  
 Lab Code:        Case No.:        SAS No.:        SDG No.: CELL 17  
 Instrument ID: MSD-C Calibration Date: 062794 Time: 0908  
 Lab File ID: 08147 Init. Calib. Date(s): 062494  
 Heated Purge: (Y/N) Y Init. Calib. Times: 1224 1512  
 GC Column: DB624 ID: 53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	74131	69149		6.72	
Bromomethane	16428	26434	0.100	23.08	25.0
Vinyl Chloride	13305	98994	0.100	25.57	25.0
Chloroethane	62858	64961		21.60	
Methylene Chloride	16426	13032		20.57	
Acetone	56134	43676		22.20	
Carbon Disulfide	355404	28524		19.66	
1,1-Dichloroethene	161124	131844	0.100	16.17	25.0
1,1-Dichloroethane	268114	225280	0.200	15.98	25.0
1,2-Dichloroethene (total)	160414	131834		17.92	
Chloroform	30414	25984	0.200	14.53	25.0
1,2-Dichloroethane	219134	17959	0.100	19.27	25.0
2-Butanone	64482	64084		8.87	
1,1,1-Trichloroethane	51297	46619	0.100	10.00	25.0
Carbon Tetrachloride	46795	44599	0.100	8.60	25.0
Bromodichloromethane	57945	48602	0.200	16.12	25.0
1,2-Dichloropropane	37095	32175		13.73	
cis-1,3-Dichloropropene	46649	42673	0.200	7.33	25.0
Trichloroethene	43034	37087	0.300	9.17	25.0
Dibromochloromethane	51833	47816	0.100	7.65	25.0
1,1,2-Trichloroethane	34067	30429	0.100	12.23	25.0
Benzene	95380	81709	0.500	14.33	25.0
trans-1,3-Dichloropropene	39062	36863	0.100	5.63	25.0
Bromoform	39650	37350	0.100	5.80	25.0
4-Methyl-2-Pentanone	2654	1745		13.13	
2-Hexanone	54984	48822		11.21	
Tetrachloroethene	51068	46909	0.200	8.15	25.0
1,1,2,2-Tetrachloroethane	88475	47777	0.500	7.17	25.0
Toluene	8023	74817	0.400	10.93	25.0
Chlorobenzene	165067	97074	0.500	8.13	25.0
Ethylbenzene	57368	46185	0.100	10.09	25.0
Styrene	102302	92031	0.300	10.05	25.0
Xylene (total)	65399	59570	0.300	8.83	25.0
Toluene-d8	11767	99626		15.30	
Bromofluorobenzene	71521	60878	0.200	14.88	25.0
1,2-Dichloroethane-d4	170281	131644		22.69	

All other compounds must meet a minimum RRF of 0.010.

11.99  
DLE  
719194

7A  
VOLATILE CONTINUING CALIBRATION CHECK

0274

Lab Name: ASC Contract: NEESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: CUU17  
 Instrument ID: MSD-1 Calibration Date: 062894 Time: 1030  
 Lab File ID: B4157 Init. Calib. Date(s): 061494  
 Heated Purge: (Y/N) Y Init. Calib. Times: 1154 1220  
 GC Column: DB624 ID: 53 (mm)

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	0.544	0.481		11.6	
Bromomethane	1.036	0.972	0.100	6.3	25.0
Vinyl Chloride	1.110	1.027	0.100	7.5	25.0
Chloroethane	0.611	0.601		1.6	
Methylene Chloride	1.545	1.381		10.6	
Acetone	0.286	0.336		15.5	
Carbon Disulfide	4.169	3.891		5.3	
1,1-Dichloroethene	1.453	1.318	0.100	9.3	25.0
1,1-Dichloroethane	2.645	2.537	0.200	4.1	25.0
1,2-Dichloroethene (total trans)	1.596	1.501		6.0	
Chloroform	2.936	2.899	0.200	1.0	25.0
1,2-Dichloroethane	1.989	2.087	0.100	4.9	25.0
2-Butanone	0.033	0.030		9.9	
1,1,1-Trichloroethane	0.628	0.628	0.100	0	25.0
Carbon Tetrachloride	0.587	0.613	0.100	4.4	25.0
Bromodichloromethane	0.719	0.643	0.200	10.7	25.0
1,2-Dichloropropane	0.403	0.355		11.9	
cis-1,3-Dichloropropene	0.583	0.537	0.200	7.7	25.0
Trichloroethene	0.456	0.440	0.300	3.6	25.0
Dibromochloromethane	0.564	0.528	0.100	6.2	25.0
1,1,2-Trichloroethane	0.383	0.337	0.100	2.0	25.0
Benzene	0.913	0.780	0.500	14.5	25.0
trans-1,3-Dichloropropene	0.537	0.560	0.100	6.9	25.0
Bromoform	0.488	0.421	0.100	8.13.8	25.0
4-Methyl-2-Pentanone	0.396	0.400		0.8	
2-Hexanone	0.255	0.276		8.3	
Tetrachloroethene	0.555	0.541	0.200	2.6	25.0
1,1,2,2-Tetrachloroethane	0.725	0.664	0.500	8.4	25.0
Toluene	0.809	0.765	0.400	5.4	25.0
Chlorobenzene	1.080	1.016	0.500	6.0	25.0
Ethylbenzene	0.574	0.462	0.100	10.1	25.0
Styrene	0.474	0.883	0.300	9.3	25.0
Xylene (total)	0.611	0.559	0.300	8.6	25.0
Toluene-d3	1.320	1.170	0.100	11.3	
Bromofluorobenzene	0.851	0.786	0.200	7.7	25.0
1,2-Dichloroethane-d4	1.574	1.515		3.8	

All other compounds must meet a minimum RRF of 0.010.

7A  
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: RSC Contract: NCSA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: CUU17  
 Instrument ID: MSD-C Calibration Date: 0602894 Time: 1122  
 Lab File ID: 08177 Init. Calib. Date(s): 0602494  
 Heated Purge: (Y/N) Y Init. Calib. Times: 06-15-1224 1573  
 GC Column: DB124 ID: .53 (mm) 119194

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Chloromethane	24131	22170		2.64	
Bromomethane	1.64426	1.33891	0.100	18.57	25.0
Vinyl Chloride	1.33205	1.0534	0.100	20.82	25.0
Chloroethane	1.82858	1.68597		17.21	
Methylene Chloride	1.64126	1.38061		15.80	
Acetone	1.56136	1.52587		6.32	
Carbon Disulfide	3.55404	2.88235		18.90	
1,1-Dichloroethene	1.61124	1.34587	0.100	16.47	25.0
1,1-Dichloroethane	2.68114	2.37259	0.200	11.57	25.0
1,2-Dichloroethene (total) <u>10.8</u>	1.60664	1.37120		14.63	
Chloroform	3.04014	2.71769	0.200	10.61	25.0
1,2-Dichloroethane	2.19134	1.89284	0.100	13.62	25.0
2-Butanone	1.04482	1.04266		6.14	
1,1,1-Trichloroethane	1.57797	1.48454	0.100	6.45	25.0
Carbon Tetrachloride	1.48795	1.45672	0.100	7.63	25.0
Bromodichloromethane <u>57945</u>	1.57823	1.47057	0.200	8.10	25.0 → 14.00
1,2-Dichloropropane	1.57803	1.44663	0.4985	13.55	
cis-1,3-Dichloropropene	1.46049	1.44591	0.200	3.17	25.0
Trichloroethene	1.43034	1.41347	0.300	3.92	25.0
Dibromochloromethane	1.57833	1.47635	0.100	8.10	25.0
1,1,2-Trichloroethane	1.34669	1.31842	0.100	8.15	25.0
Benzene	1.45380	1.88074	0.500	7.45	25.0
trans-1,3-Dichloropropene	1.39062	1.28187	0.100	2.24	25.0
Bromoform	1.39650	1.38853	0.100	2.01	25.0
4-Methyl-2-Pentanone	1.20099	1.19694		1.98	
2-Hexanone	1.54984	1.56004		1.86	
Tetrachloroethene	1.57668	1.49497	0.200	2.10	25.0
1,1,2,2-Tetrachloroethane	1.49777	1.47924	0.500	2.55	25.0
Toluene	1.84003	1.80813	0.400	3.80	25.0
Chlorobenzene	1.05667	1.02178	0.500	3.35	25.0
Ethylbenzene	1.57368	1.48332	0.100	5.91	25.0
Styrene	1.62309	1.49541	0.300	2.71	25.0
Xylene (total) <u>m+p</u>	1.65339	1.62808	0.300	3.84	25.0
Toluene-d8	1.17617	1.09578		6.89	
Bromofluorobenzene	1.71521	1.67223	0.200	6.01	25.0
1,2-Dichloroethane-d4	1.70281	1.41355		16.97	

All other compounds must meet a minimum RRF of 0.010.

8A  
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ASC Contract: NEPSA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: 06617  
 Lab File ID (Standard): B4157 Date Analyzed: 6/28/94  
 Instrument ID: MSD-B Time Analyzed: 1030  
 GC Column: DB624 ID: 53 (mm) Heated Purge: (Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 HOUR STD	219137	7.763	981826	9.613	759233	15.571
UPPER LIMIT	438274	8.263	1463652	10.113	1518466	16.071
LOWER LIMIT	107568	7.263	490913	9.113	379017	15.071
EPA SAMPLE NO.						
01 VFLK01	177182	7.765	818605	9.609	655353	15.574
02 VSPRL1	183388	7.756	806879	9.604	658499	15.572
03 C6619MS	189725	7.740	84059	9.600	627851	15.575
04 C6619MSD	182001	7.764	831254	9.600	634465	15.575
05 C6617	174411	7.759	797553	9.607	622759	15.577
06 C6617	190763	7.758	918135	9.604	723641	15.580
07 C6622	19948	7.77	90746	9.62	75302	15.58
08 C6622MS	109449	7.76	930268	9.61	719628	15.51
09 C6622MSD	195132	7.76	862822	9.61	669094	15.58
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane  
 IS2 (DFB) = 1,4-Difluorobenzene  
 IS3 (CBZ) = Chlorobenzene-d5

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

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

8A  
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0277

Lab Name: ASC Contract: NWESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: CLL17  
 Lab File ID (Standard): C8147 Date Analyzed: 062794  
 Instrument ID: MSA-C Time Analyzed: 0908  
 GC Column: DB624 ID: 53(mm) Heated Purge: (Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 HOUR STD	49921	10.81	218237	12.99	163302	19.59
UPPER LIMIT	49842	11.31	4310424	13.49	326604	20.09
LOWER LIMIT	24961	10.31	109119	12.49	81657	19.09
EPA SAMPLE NO.						
01	VBLK02	10.83	235118	12.99	177933	19.58
02	No618	10.81	161605	12.98	109705	19.57
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane  
 IS2 (DFB) = 1,4-Difluorobenzene  
 IS3 (CBZ) = Chlorobenzene-d5

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

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

8A  
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: A-SC Contract: Neesa  
 Lab Code:      Case No.:      SAS No.:      SDG No.: CL017  
 Lab File ID (Standard): B4143 Date Analyzed: 06/10/2007  
 Instrument ID: MSD-B Time Analyzed: 1258  
 GC Column: DB624 ID: 75 (mm) Heated Purge: (Y/N) Y

	IS1(BCM) AREA #	RT #	IS2(DFB) AREA #	RT #	IS3(CBZ) AREA #	RT #
12 HOUR STD	2016003	7.770	9080081	9.112	695721	15.577
UPPER LIMIT	9032006	8.270	1816162	10.112	1391442	16.077
LOWER LIMIT	1008002	7.270	454041	9.112	347861	15.077
EPA SAMPLE NO.						
01	VBLK02	7.744	887950	9.589	707302	15.565
02	VSPB02	7.748	887968	9.595	715818	15.571
03	M0621MS	7.755	906333	9.598	729788	15.572
04	CL021MSD	7.747	859699	9.598	681867	15.574
05	16021	7.745	824041	9.593	656414	15.564
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (BCM) = Bromochloromethane  
 IS2 (DFB) = 1,4-Difluorobenzene  
 IS3 (CBZ) = Chlorobenzene-d5

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

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

8A  
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0279

Lab Name: ASC Contract: WERSA  
 Lab Code:        Case No.:        SAS No.:        SDG No.: CUU17  
 Lab File ID (Standard): C8177 Date Analyzed: 062894  
 Instrument ID: MSD-C Time Analyzed: 1122  
 GC Column: DB624 ID: 53 (mm) Heated Purge: (Y/N) Y

	IS1 (BCM) AREA #	RT #	IS2 (DFB) AREA #	RT #	IS3 (CBZ) AREA #	RT #
12 HOUR STD	54873	11.14	241086	13.30	174510	19.90
UPPER LIMIT	109746	11.64	482172	13.80	353020	20.40
LOWER LIMIT	27437	10.64	120543	12.80	88255	19.40
EPA SAMPLE NO.						
01	<del>VBIK02</del>	<del>50533</del>	<del>235118</del>	<del>1299</del>	<del>177933</del>	<del>19.58</del>
02	<del>CHU18</del>	<del>45565</del>	<del>161609</del>	<del>12.98</del>	<del>109765</del>	<del>19.57</del>
03	VSPK02	44947	212462	13.30	152218	19.89
04	CUU18MS	44708	186492	13.30	133673	19.90
05	CUU18MS	37337	160602	13.34	110859	19.94
06	CUU20	39317	178192	13.32	107449	19.91
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

VOID  
DL  
7/19/94  
82

IS1 (BCM) = Bromochloromethane  
 IS2 (DFB) = 1,4-Difluorobenzene  
 IS3 (CBZ) = Chlorobenzene-d5

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

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

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0280  
EPA SAMPLE NO.

Name: ASC Contract: NEESA C6617  
 Code: — Case No.: — SAS No.: ✓ SDG No.: C6617  
 Matrix: (soil/water) Soil Lab Sample ID: JM9434C  
 Sample wt/vol: 30.6 (g/mL) g Lab File ID: 08757  
 Level: (low/med) low Date Received: 0623-94  
 % Moisture: 23.3 decanted: (Y/N) N Date Extracted: 062794  
 Concentrated Extract Volume: 10,000 (uL) Date Analyzed: 062894  
 Injection Volume: 1.0 (uL) Dilution Factor: 1000  
 GPC Cleanup: (Y/N) N pH: 7

CAS NO. — COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/Kg Q

108-95-2-----Phenol	350 424000	u
111-44-4-----bis(2-Chloroethyl) ether		
95-57-8-----2-Chlorophenol		
541-73-1-----1,3-Dichlorobenzene		
106-46-7-----1,4-Dichlorobenzene		
95-50-1-----1,2-Dichlorobenzene		
95-48-7-----2-Methylphenol		
108-60-1-----2,2'-oxybis(1-Chloropropane)		
106-44-5-----4-Methylphenol		
621-64-7-----N-Nitroso-di-n-propylamine		
67-72-1-----Hexachloroethane		
98-95-3-----Nitrobenzene		
78-59-1-----Isophorone		
88-75-5-----2-Nitrophenol		
105-67-9-----2,4-Dimethylphenol		
111-91-1-----bis(2-Chloroethoxy) methane		
120-83-2-----2,4-Dichlorophenol		
120-82-1-----1,2,4-Trichlorobenzene		
91-20-3-----Naphthalene	69900	J
106-47-8-----4-Chloroaniline	424000	u
87-68-3-----Hexachlorobutadiene		
59-50-7-----4-Chloro-3-methylphenol		
91-57-6-----2-Methylnaphthalene		
77-47-4-----Hexachlorocyclopentadiene		
88-06-2-----2,4,6-Trichlorophenol		
95-95-4-----2,4,5-Trichlorophenol	1030000	u
91-58-7-----2-Chloronaphthalene	424000	
88-74-4-----2-Nitroaniline	1030000	
131-11-3-----Dimethylphthalate	424000	
208-96-8-----Acenaphthylene		
606-20-2-----2,6-Dinitrotoluene		
99-09-2-----3-Nitroaniline	1030000	
83-32-9-----Acenaphthene	424000	v



1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0281**

Name: ASC Contract: NEESA CL617  
 Code: — Case No.: — SAS No.: — SDG No.: —  
 Matrix: (soil/water) SOIL Lab Sample ID: JMP434C  
 Sample wt/vol: 306 (g/mL) g Lab File ID: D8757  
 Level: (low/med) 22.1 LOW Date Received: 062394  
 % Moisture: 23.3 decanted: (Y/N) N Date Extracted: 062794  
 Concentrated Extract Volume: 10,000 (uL) Date Analyzed: 062894  
 Injection Volume: 1.0 (uL) Dilution Factor: 1000  
 GPC Cleanup: (Y/N) N pH: 7

CAS NO. - COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/Kg Q

51-28-5-----2,4-Dinitrophenol	1030000	u
100-02-7-----4-Nitrophenol	1030000	
132-64-9-----Dibenzofuran	424000	
121-14-2-----2,4-Dinitrotoluene		
84-66-2-----Diethylphthalate		
7005-72-3-----4-Chlorophenyl-phenylether		
86-73-7-----Fluorene	↓	
100-01-6-----4-Nitroaniline	1030000	
534-52-1-----4,6-Dinitro-2-methylphenol	↓	
86-30-6-----N-Nitrosodiphenylamine (1)	424000	
101-55-3-----4-Bromophenyl-phenylether		
118-74-1-----Hexachlorobenzene	↓	
87-86-5-----Pentachlorophenol	1030000	
85-01-8-----Phenanthrene	424000	
120-12-7-----Anthracene		
86-74-8-----Carbazole		
84-74-2-----Di-n-butylphthalate		
206-44-0-----Fluoranthene		
129-00-0-----Pyrene		
85-68-7-----Butylbenzylphthalate		
91-94-1-----3,3'-Dichlorobenzidine		
56-55-3-----Benzo(a)anthracene		
218-01-9-----Chrysene		
117-81-7-----bis(2-Ethylhexyl)phthalate	61400	J
117-84-0-----Di-n-octylphthalate	424000	u
205-99-2-----Benzo(b)fluoranthene		
207-08-9-----Benzo(k)fluoranthene		
50-32-8-----Benzo(a)pyrene		
193-39-5-----Indeno(1,2,3-cd)pyrene		
53-70-3-----Dibenz(a,h)anthracene		
191-24-2-----Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: ASC

Contract: NEESA

C6617

Lab Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) Soil Lab Sample ID: JM9434C

Sample wt/vol: 30.6 (g/mL) 8 Lab File ID: D8757

Level: (low/med) low Date Received: 062394

% Moisture: 22.1 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 062894

Injection Volume: 1.0 (uL) Dilution Factor: 1000

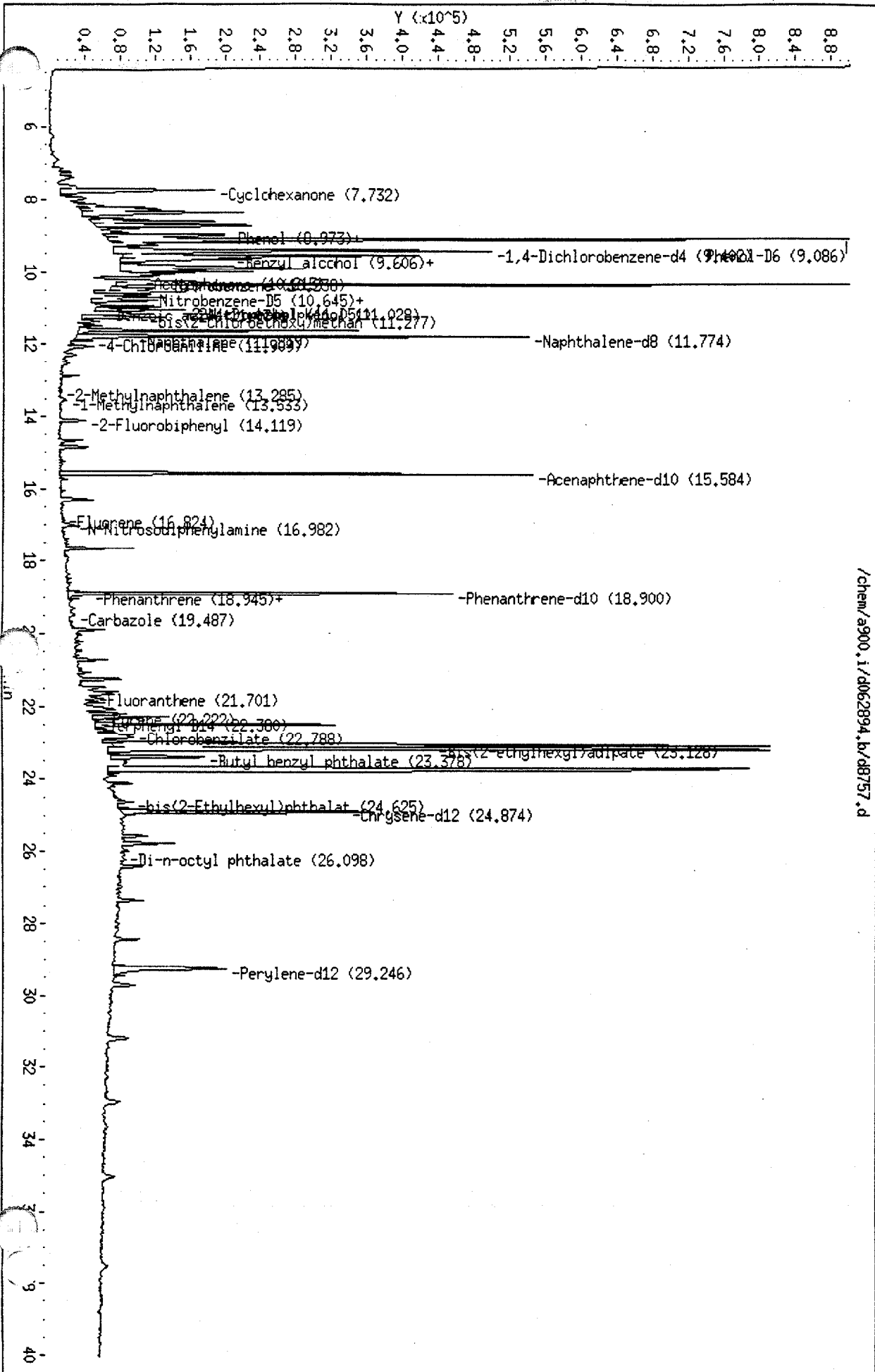
GPC Cleanup: (Y/N) N pH: 7

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

Number TICs found: 20

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. <u>111-84-2</u>	<u>Nonane</u>	<u>7.73</u>	<u>551000</u>	<u>J</u>
2. <u>99-85-4</u>	<u>1,4-Cyclohexadiene, 1-methyl</u>	<u>8.34</u>	<u>569000</u>	
3.	<u>Unknown</u>	<u>8.61</u>	<u>501000</u>	
4.	<u>Unknown</u>	<u>8.73</u>	<u>551000</u>	
5.	<u>Unknown</u>	<u>9.00</u>	<u>437000</u>	
6. <u>174-18-5</u>	<u>Decane</u>	<u>9.09</u>	<u>1640000</u>	
7. <u>526-73-8</u>	<u>Benzene, 1,2,3-trimethyl-</u>	<u>9.15</u>	<u>499000</u>	
8. <u>99-87-6</u>	<u>Benzene, 1-methyl-4-(1-methyl</u>	<u>9.54</u>	<u>821000</u>	
9. <u>1678-93-9</u>	<u>Cyclohexane, butyl-</u>	<u>9.63</u>	<u>596000</u>	
10.	<u>Unknown</u>	<u>9.90</u>	<u>1010000</u>	
11. <u>1120-31-4</u>	<u>Undecane</u>	<u>10.33</u>	<u>1670000</u>	
12. <u>2958-76-1</u>	<u>Naphthalene, decahydro-2-me</u>	<u>10.78</u>	<u>302000</u>	
13.	<u>Unknown</u>	<u>11.25</u>	<u>335000</u>	
14. <u>112-40-3</u>	<u>Dodecane</u>	<u>11.62</u>	<u>667000</u>	
15. <u>77-54-8</u>	<u>1,1-Dichloro-2,2-bis(p-chlo</u>	<u>22.49</u>	<u>870000</u>	
16. <u>1072-22-6</u>	<u>DDMU</u>	<u>22.97</u>	<u>421000</u>	
17. <u>53-14-0</u>	<u>Mitotane</u>	<u>23.06</u>	<u>2060000</u>	
18.	<u>Unknown</u>	<u>23.17</u>	<u>2270000</u>	
19. <u>50-81-3</u>	<u>Chlorophenothane</u>	<u>23.38</u>	<u>373000</u>	
20. <u>789-02-6</u>	<u>o, p'-DDT</u>	<u>23.70</u>	<u>4360000</u>	<u>-</u>
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/a900.i/d062894.b/d8757.d  
Date: 28-JUN-94 18:48  
Instrument: a900.i  
Sample ID:  
Column phase: J&W DB-5  
Volume Injected (ul): 1.0



/chem/a900.i/d062894.b/d8757.d

Column diameter : 0.25

C6617

Data File: /chem/a900.i/d062894.b/d8757.d  
 Report Date: 29-Jun-1994 08:05

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/d062894.b/d8757.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 28-JUN-94 18:48 Autotune Date: {  
 Operator : Tom Inst ID: a900.i  
 Smp Info : 15226N-C6617  
 Misc Info : JM9434C,N2C40851,S:M1,30.6,10:100, BTL#  
 Comment :  
 Method : /chem/a900.i/d062894.b/bna8270d.m  
 Meth Date : 29-Jun-1994 08:02 darren  
 Cal Date : 28-JUN-94 14:35 Cal File: d8753.d  
 Als bottle: 0  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

Compounds	QUANT	SIG	MASS	RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/ml)	FINAL ( ug/L)
<del>1 Cyclohexanone</del>	55.00		7.732	(0.822)	36009	10.1	10.1 (a)	Peak
\$ 10 Phenol-D6	99.00		9.086	(0.966)	25606	5.25	5.25 (TaQR)	
11 Phenol	94.00		8.973	(0.954)	6848	1.09	1.09 (a)	RT
12 Aniline	66.00		8.973	(0.954)	2351	0.449	0.449 (a)	< 1
<del>13 bis(2-Chloroethyl) ether</del>	93.00		8.973	(0.954)	43961	3.97	3.97 (a)	IGN
* 17 1,4-Dichlorobenzene-d4	152.00		9.402	(1.000)	124655	OK 40.0		
19 Benzyl alcohol	108.00		9.606	(1.022)	658	0.220	0.220 (a)	
21 2-Methylphenol	108.00		9.606	(1.022)	658	0.149	0.149 (a)	
24 Acetophenone	105.00		10.215	(1.086)	3961	0.766	0.766 (a)	
\$ 27 Nitrobenzene-D5	82.00		10.645	(0.904)	1258	0.257	0.257 (TaQR)	OK
28 Nitrobenzene	77.00		10.238	(0.870)	5736	1.13	1.13 (a)	P
29 Isophorone	82.00		10.645	(0.904)	1727	0.172	0.172 (a)	< 1
30 2,4-Dimethylphenol	107.00		11.028	(0.937)	2035	0.489	0.489 (a)	< 1
31 2-Nitrophenol	139.00		11.051	(0.939)	1060	0.432	0.432 (a)	< 1
32 Benzoic acid	122.00		11.074	(0.941)	557	0.226	0.226 (TaQ)	< 1
<del>33 bis(2-Chloroethoxy)methane</del>	93.00		11.277	(0.958)	1100	0.170	0.170 (a)	< 1
* 37 Naphthalene-d8	136.00		11.774	(1.000)	498290	OK 40.0		
38 Naphthalene	128.00		11.819	(1.004)	21310	2.14	2.14 (a)	
<del>39 4-Chloroaniline</del>	127.00		11.909	(1.012)	341	0.0684	0.0684 (a)	< 1
<del>45 2-Methylnaphthalene</del>	142.00		13.285	(1.128)	1646	0.231	0.231 (a)	< 1
<del>46 1-Methylnaphthalene</del>	142.00		13.533	(1.439)	860	0.123	0.123 (a)	< 1
\$ 51 2-Fluorobiphenyl	172.00		14.119	(0.906)	749	0.117	0.117 (aQR)	
* 58 Acenaphthene-d10	164.00		15.584	(1.000)	292949	OK 40.0		
<del>69 Fluorene</del>	166.00		16.824	(1.080)	749	0.0964	0.0964 (a)	< 1
72 N-Nitrosodiphenylamine	169.00		16.982	(0.899)	10399	1.94	1.94 (a)	
81 Phenanthrene-d10	188.00		18.900	(1.000)	434720	OK 40.0		
7 Phenanthrene	178.00		18.945	(1.002)	4327	0.439	0.439 (a)	< 1
<del>83 Anthracene</del>	178.00		18.945	(1.002)	4327	0.421	0.421 (a)	
<del>84 Carbazole</del>	167.00		19.487	(1.031)	1089	0.106	0.106 (a)	

Data File: /chem/a900.i/d062894.b/d8757.d  
 Report Date: 29-Jun-1994 08:05

Page 2

Compounds	QUANT SIG	RT	REL RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN (ug/ml)	FINAL ( ug/L)
<del>87 Fluoranthene</del>	202.00	21.701	(1.148)	997	0.0966	<del>0.0966(aQ)</del> <
<del>89 Pyrene</del>	202.00	22.222	(0.893)	1375	0.129	<del>0.129(aQ)</del> <
S 90 Terphenyl-D14	244.00	22.380	(0.900)	1531	0.202	<del>0.202(aQ)</del> <
<del>91 Chlorobenzilate</del>	251.00	22.788	(0.916)	966	0.280	<del>0.280(aQ)</del> <
<del>92 Bis(2-ethylhexyl)adipate</del>	129.00	23.128	(0.930)	1305	0.204	<del>0.204(aQ)</del> <
<del>93 Butyl benzyl phthalate</del>	149.00	23.378	(0.940)	932	0.135	<del>0.135(aQ)</del> <
95 bis(2-Ethylhexyl)phthalate	149.00	24.625	(0.990)	14931	1.88	1.88 (a)
* 99 Chrysene-d12	240.00	24.874	(1.000)	334940 OK	40.0	
<del>101 Di-n-octyl phthalate</del>	149.00	26.098	(0.892)	1694	0.152	<del>0.152(a)</del> <
* 105 Perylene-d12	264.00	29.246	(1.000)	211729 OK	40.0	

## QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Qualifier signal failed the ratio test.
- Spike/Surrogate failed recovery limits.

Data File: /chem/a900.i/d062894.b/d8757.d

Date : 28-JUN-94 18:48

Instrument : a900.i

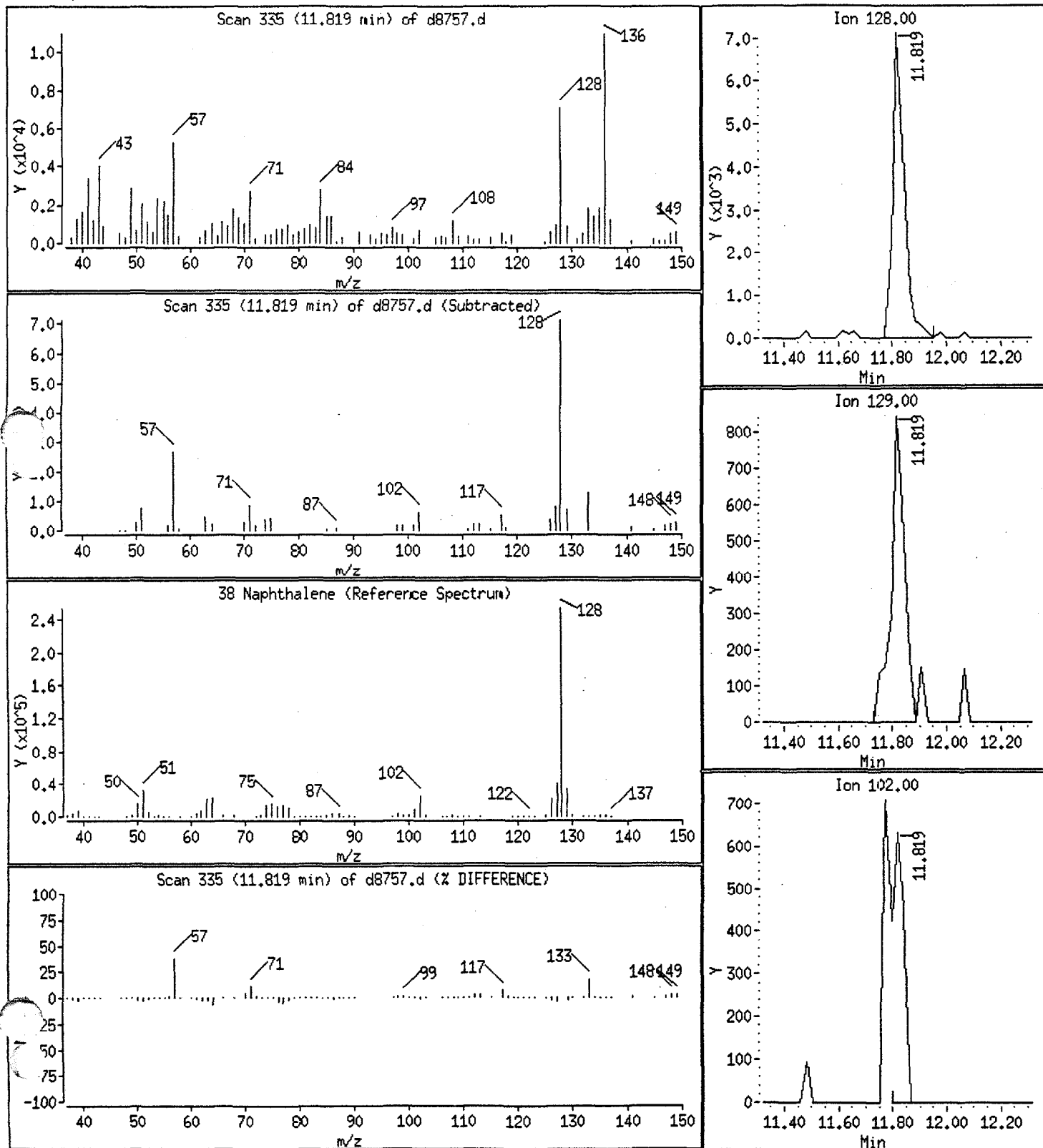
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

38 Naphthalene



Data File: /chem/a900.i/d062894.b/d8757.d

Page 35

Date : 28-JUN-94 18:48

Instrument : a900.i

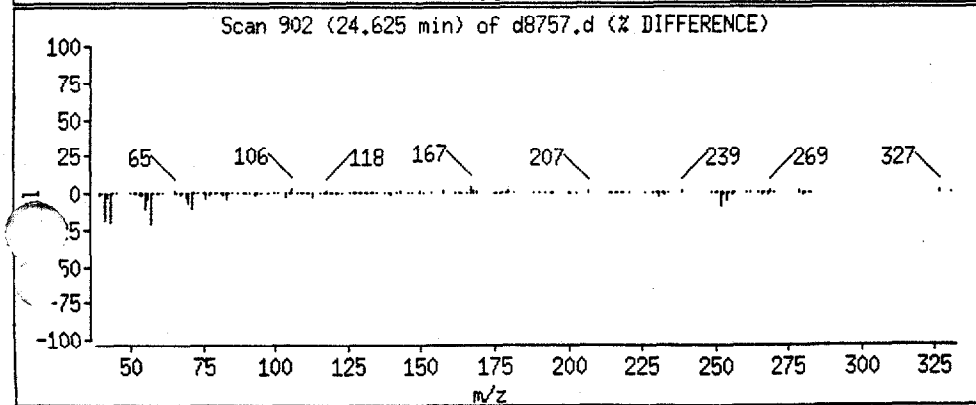
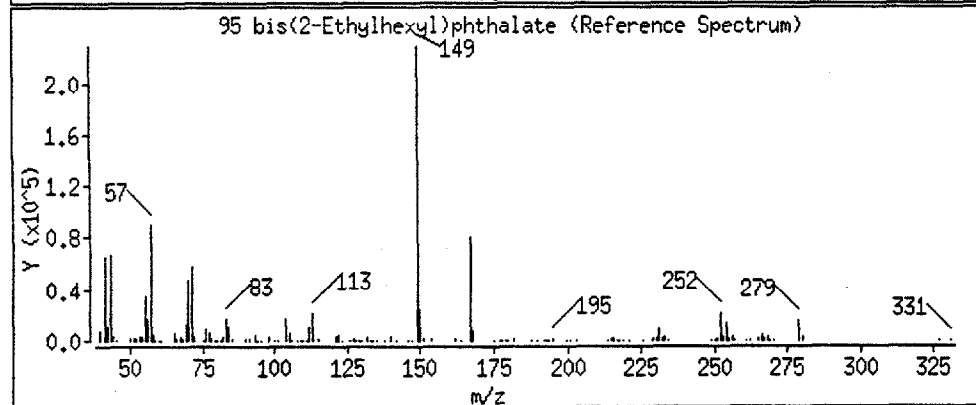
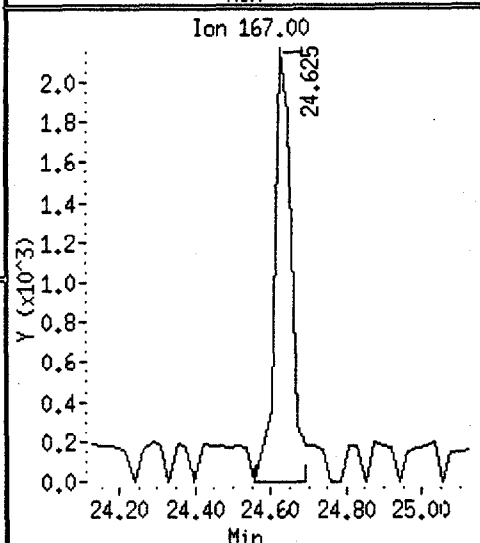
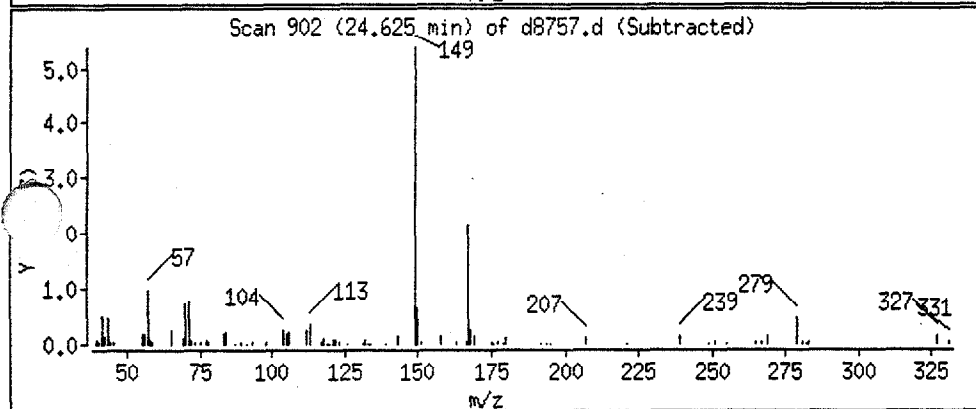
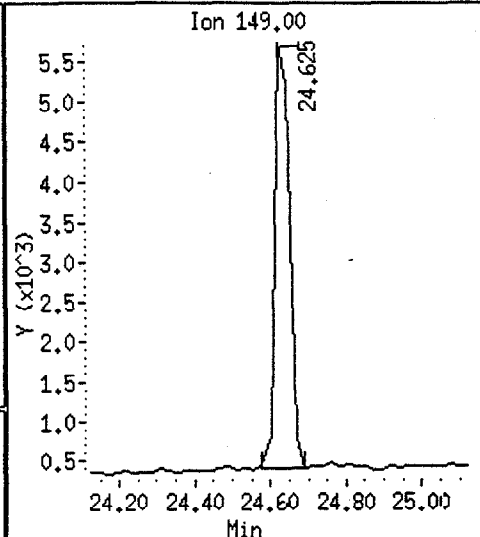
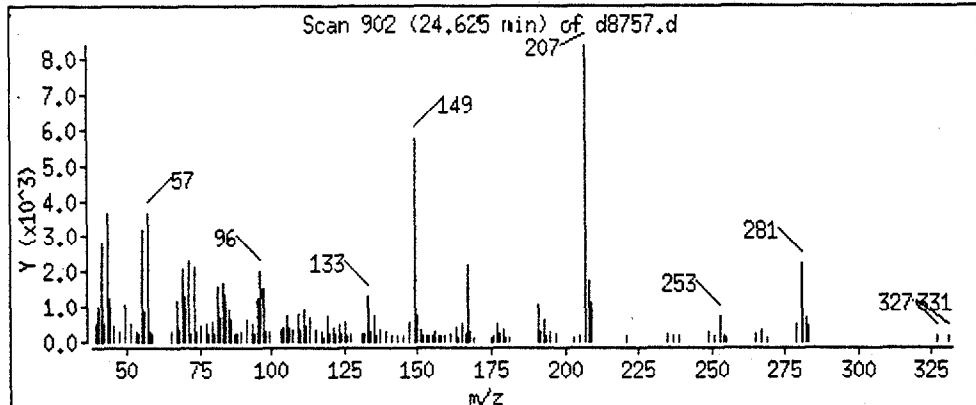
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

95 bis(2-Ethylhexyl)phthalate



Data File: /chem/a900.i/d062894.b/d8757.d

Page 7

Date: 28-JUN-94 18:48

Instrument: a900.i

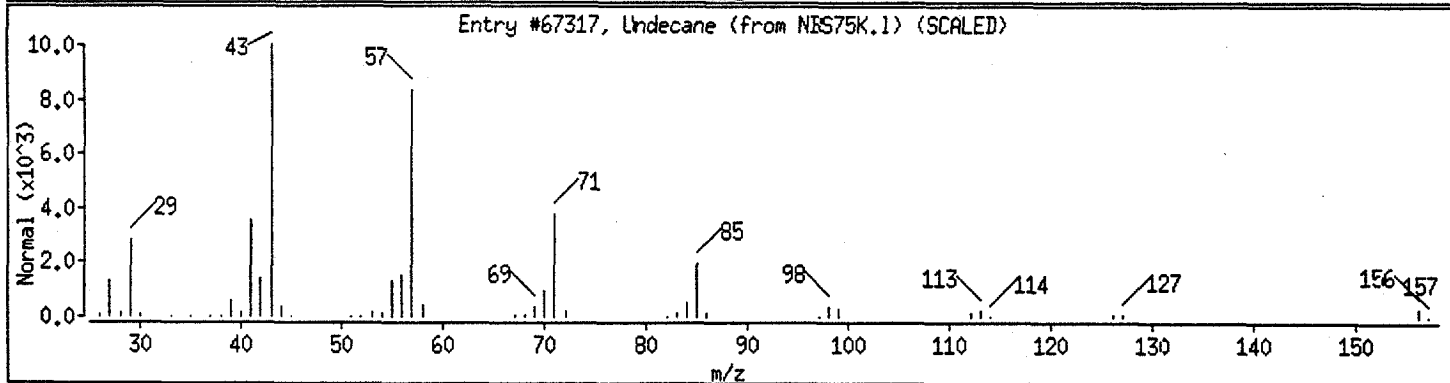
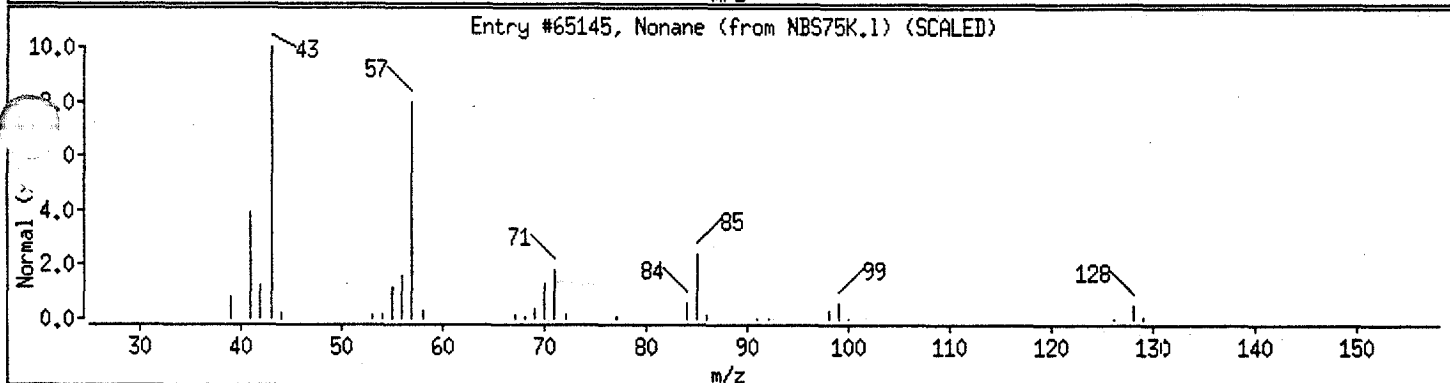
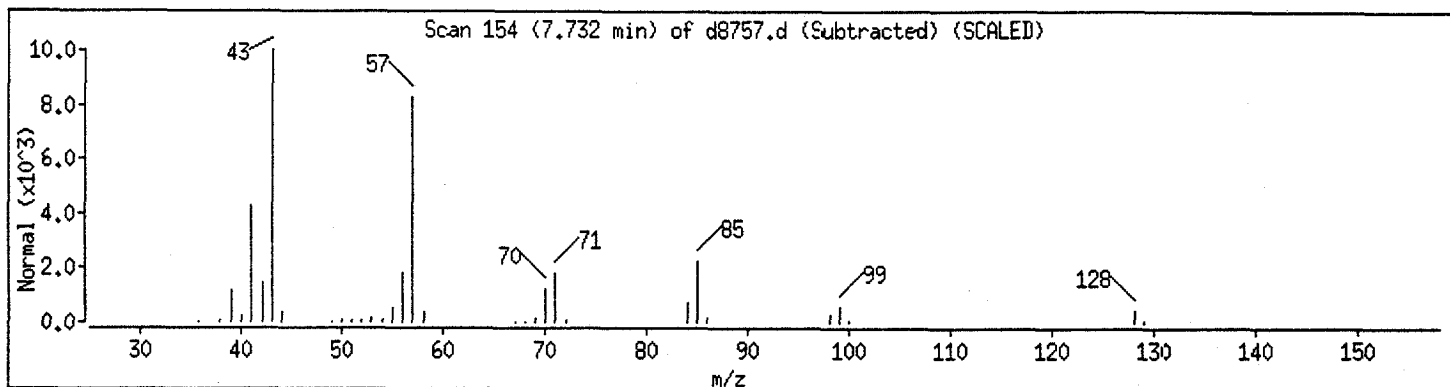
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonane	111-84-2	NBS75K.1	65145	95
Undecane	1120-21-4	NBS75K.1	67317	72





Data File: /chem/a900.i/d062894.b/d8757.d

Date : 28-JUN-94 18:48

Instrument : a900.i

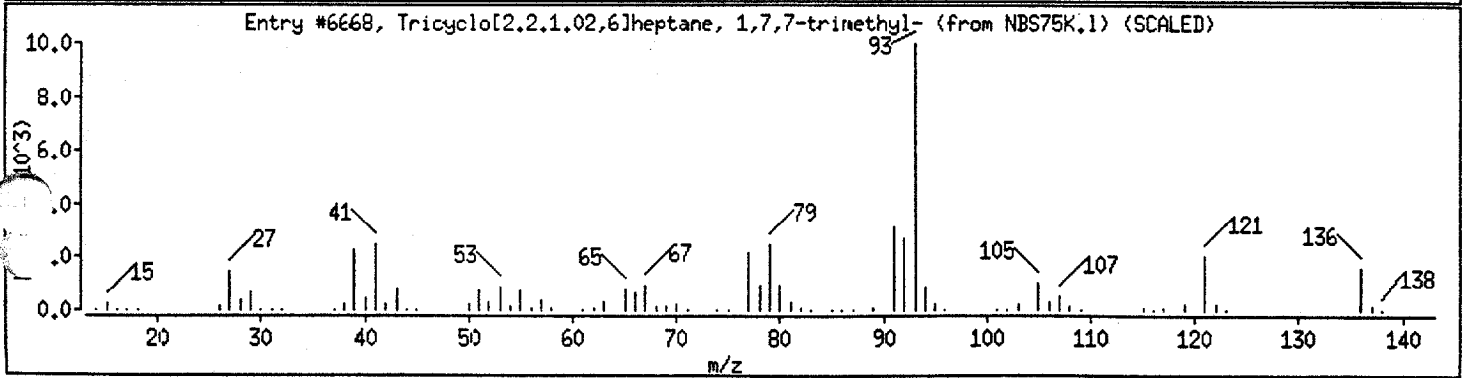
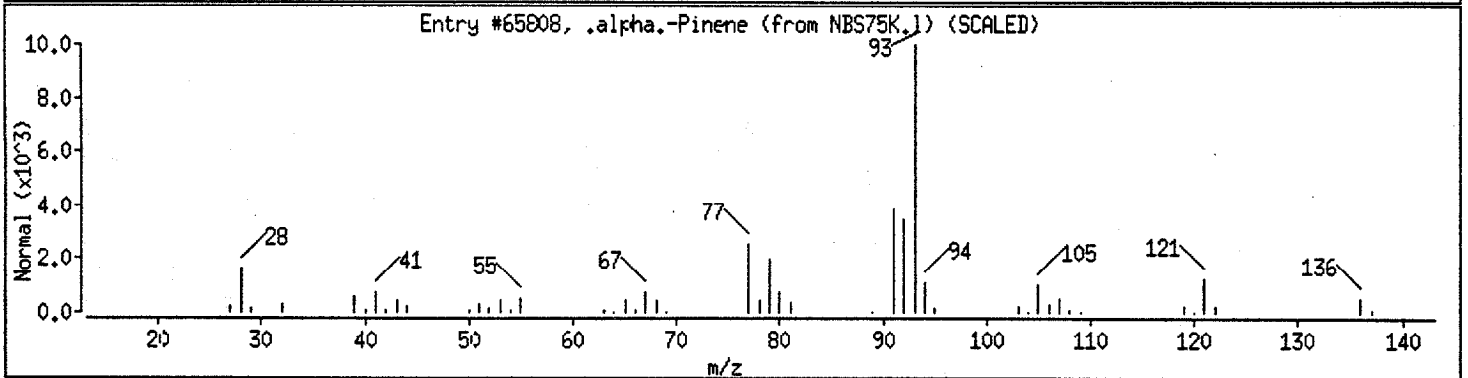
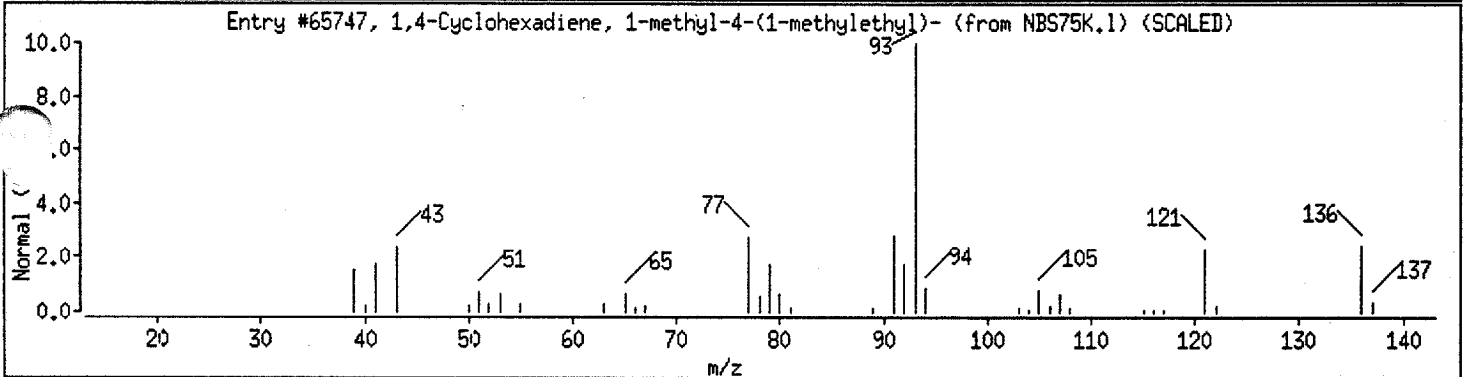
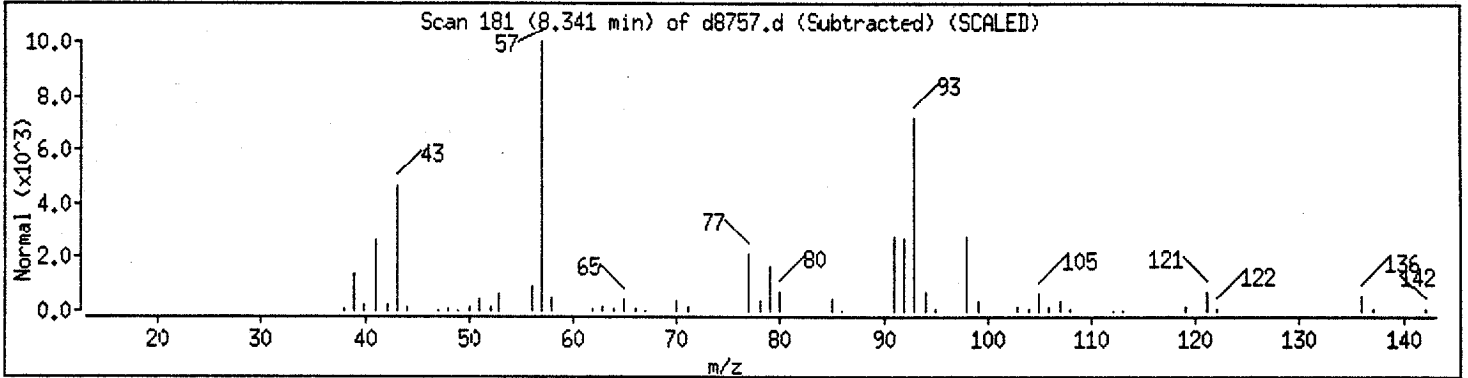
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

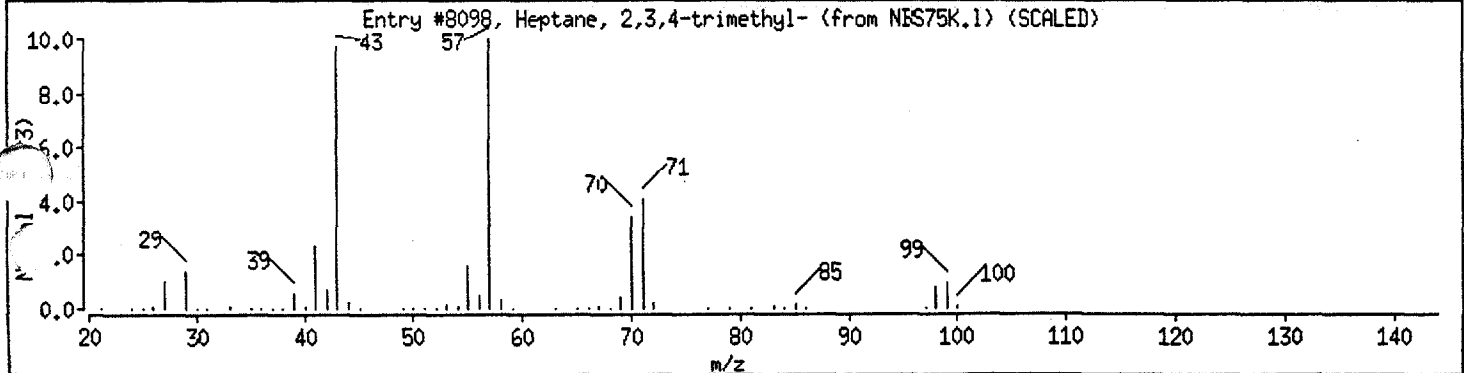
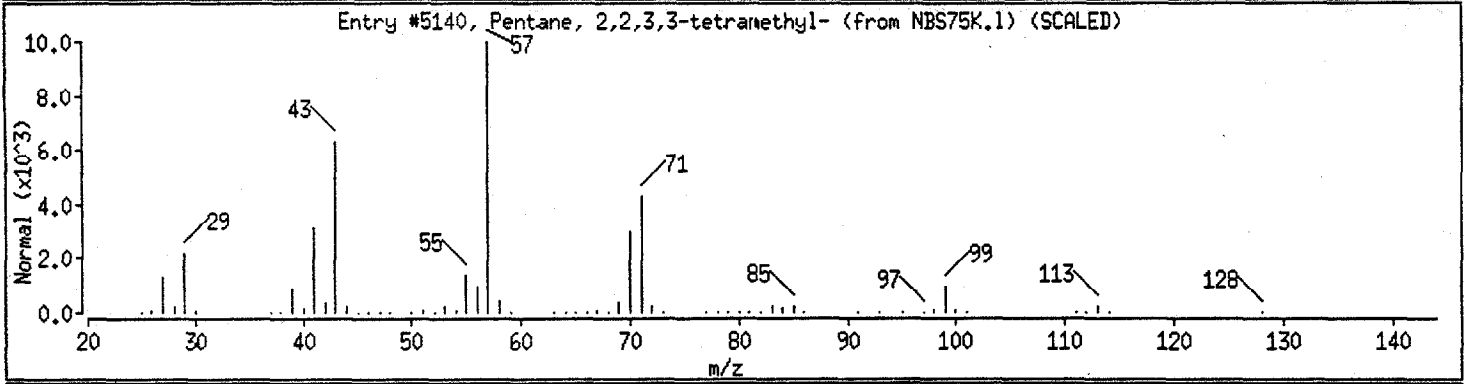
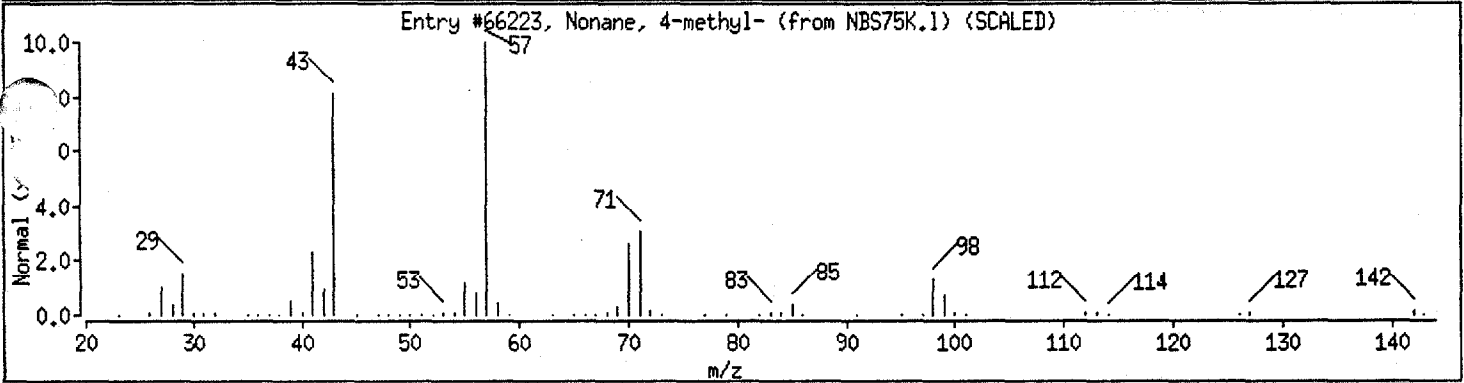
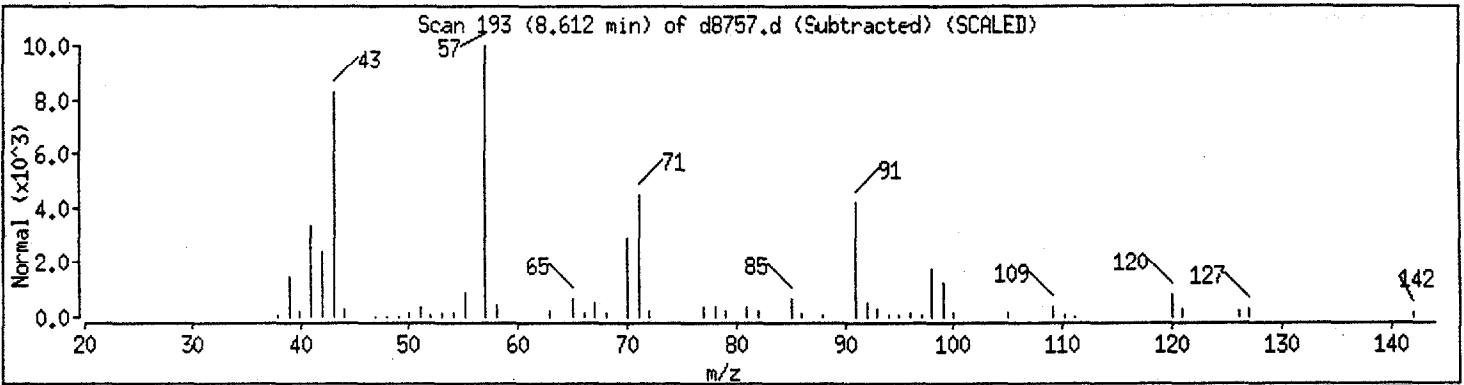
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NBS75K.1	65747	90
.alpha.-Pinene	80-56-8	NBS75K.1	65808	60
Tricyclo[2.2.1.0 <sup>2,6</sup> ]heptane, 1,7,7-trime	508-32-7	NBS75K.1	6668	58



Data File: /chem/a900.i/d062894.b/d8757.d  
 Date: 28-JUN-94 18:48  
 Instrument: a900.i  
 Sample ID:  
 Column phase: J&W DB-5  
 Volume Injected (uL): 1.0

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonane, 4-methyl-	17301-94-9	NBS75K.1	66223	76
Pentane, 2,2,3,3-tetramethyl-	7154-79-2	NBS75K.1	5140	50
Heptane, 2,3,4-trimethyl-	52896-95-4	NBS75K.1	8098	50



Data File: /chem/a900.i/d062894.b/d8757.d

Date: 28-JUN-94 18:48

Instrument: a900.i

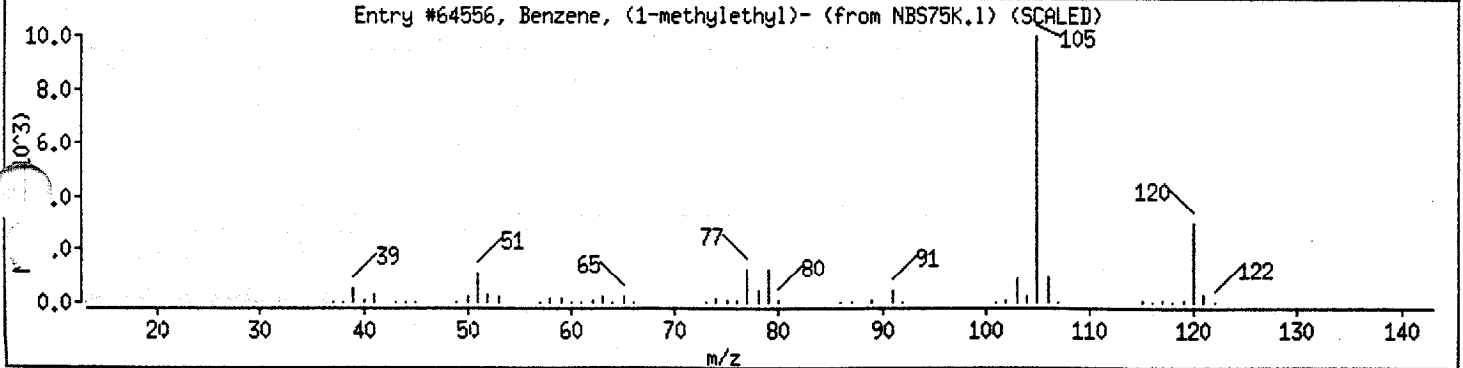
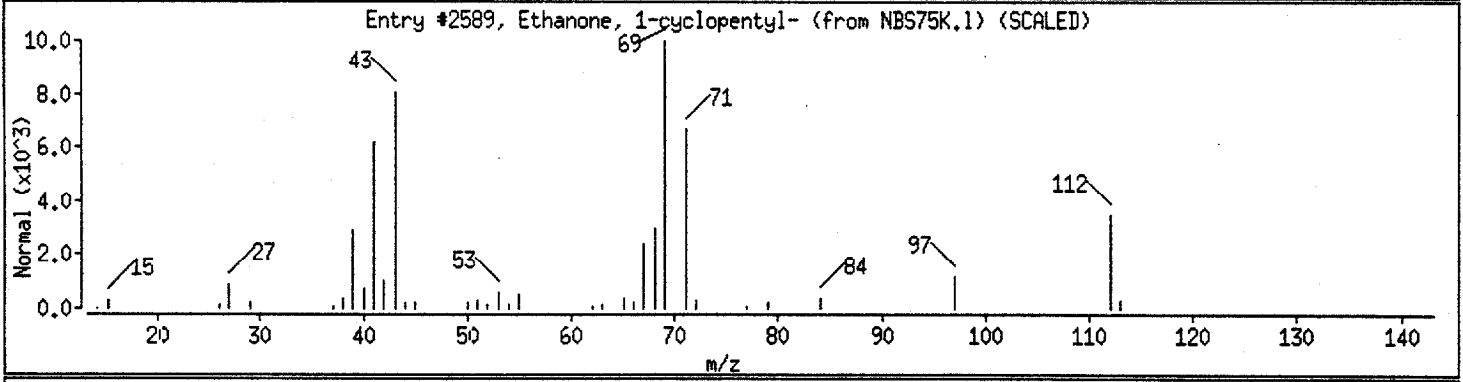
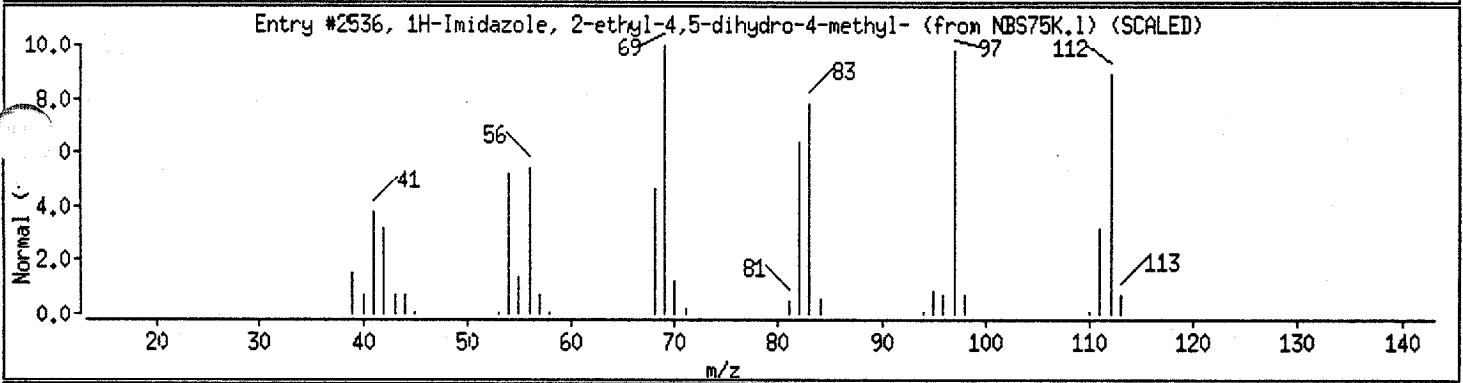
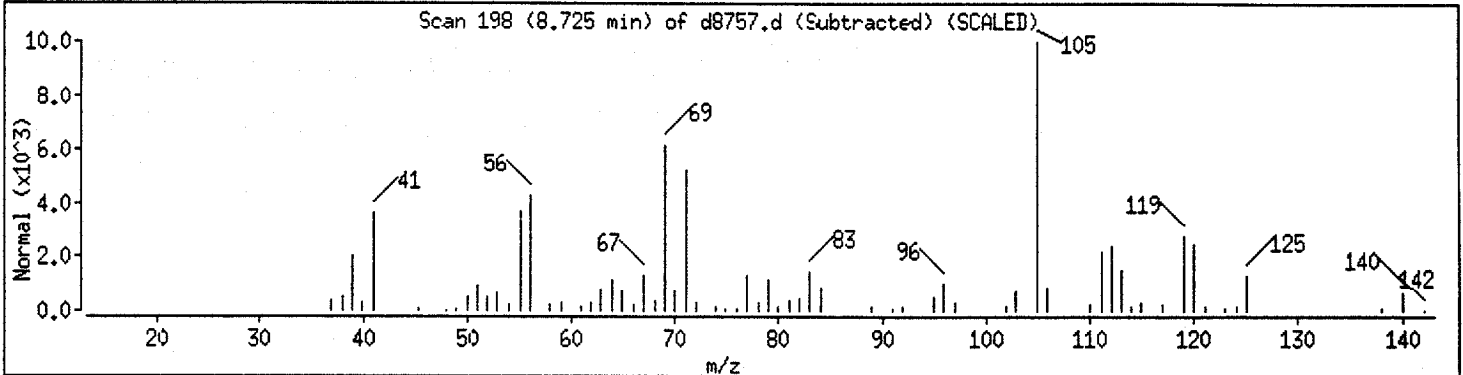
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1H-Imidazole, 2-ethyl-4,5-dihydro-4-meth	931-35-1	NBS75K.1	2536	30
Ethanone, 1-cyclopentyl-	6004-60-0	NBS75K.1	2589	18
Benzene, (1-methylethyl)-	98-82-8	NBS75K.1	64556	15



Data File: /chem/a900.i/d062894.b/d8757.d

Page 14

Date : 28-JUN-94 18:48

Instrument : a900.i

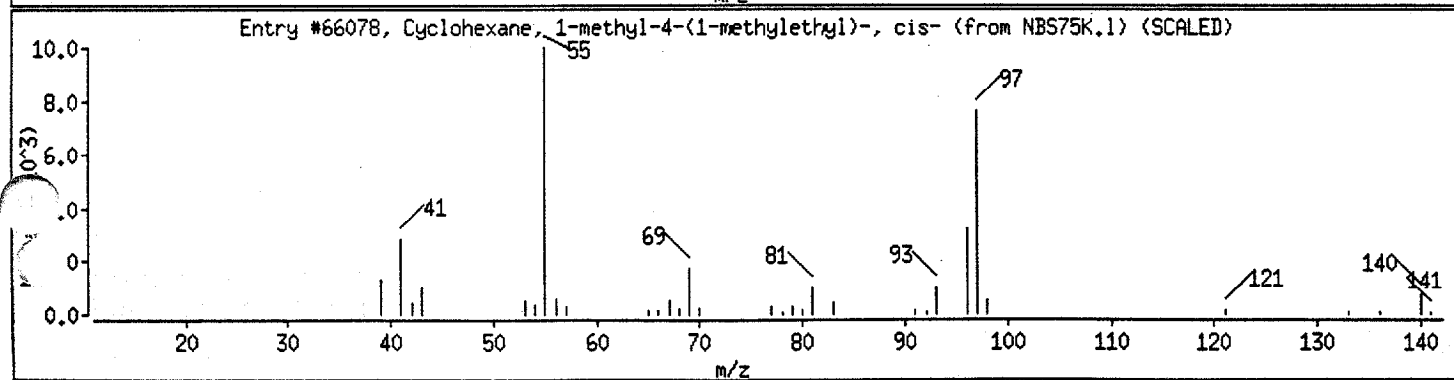
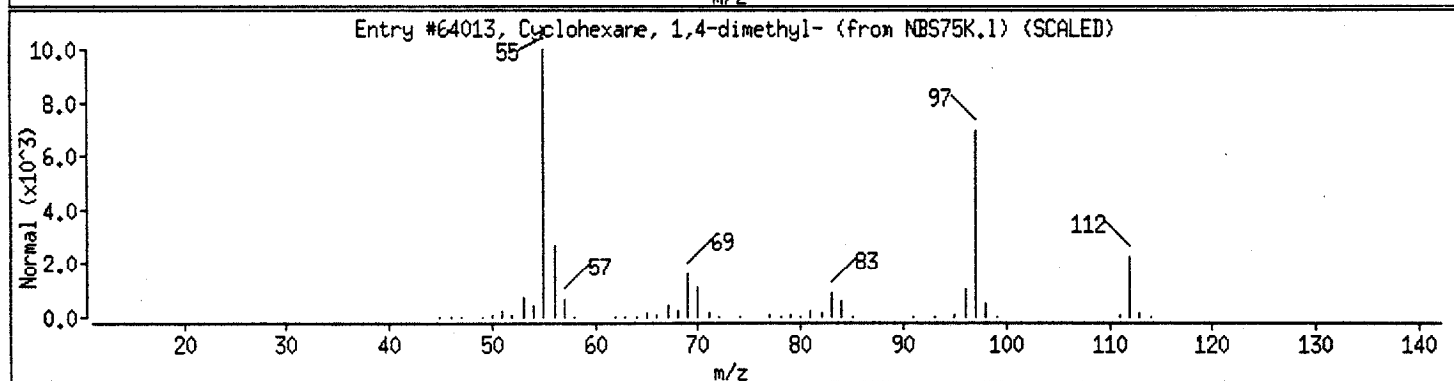
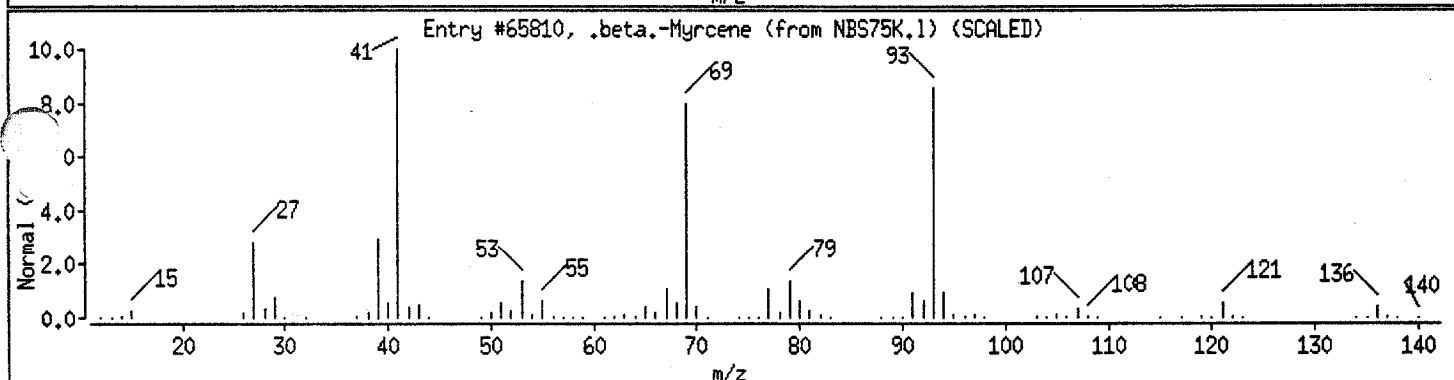
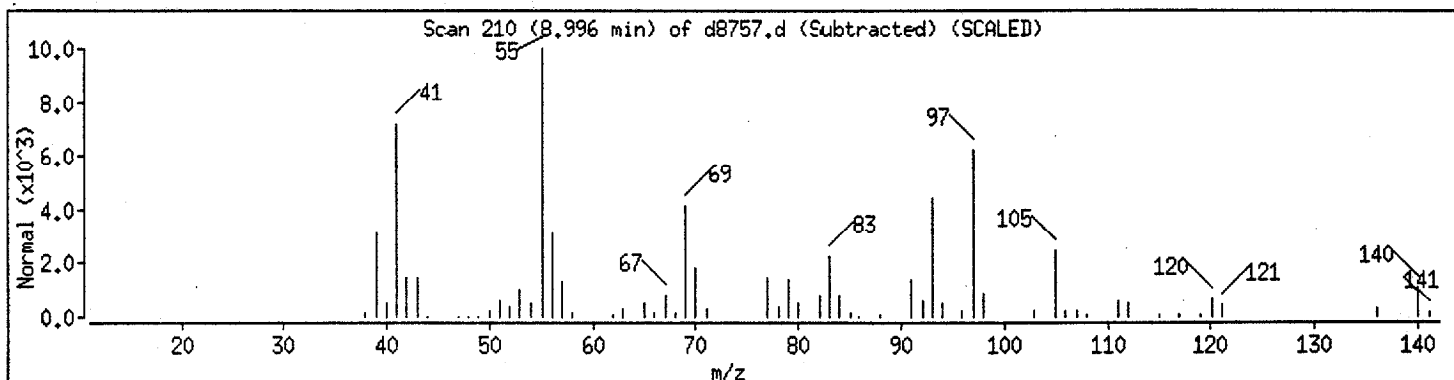
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
.beta.-Myrcene	123-35-3	NBS75K.1	65810	53
Cyclohexane, 1,4-dimethyl-	589-90-2	NBS75K.1	64013	50
Cyclohexane, 1-methyl-4-(1-methylethyl)-	6069-98-3	NBS75K.1	66078	38



Data File: /chem/a900.i/d062894.b/d8757.d

Page 15

Date: 28-JUN-94 18:48

Instrument: a900.i

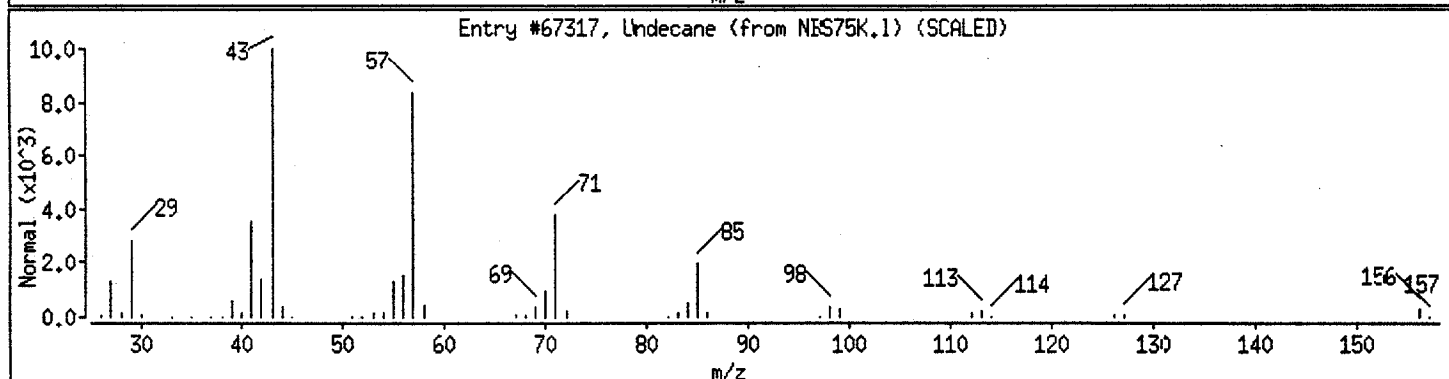
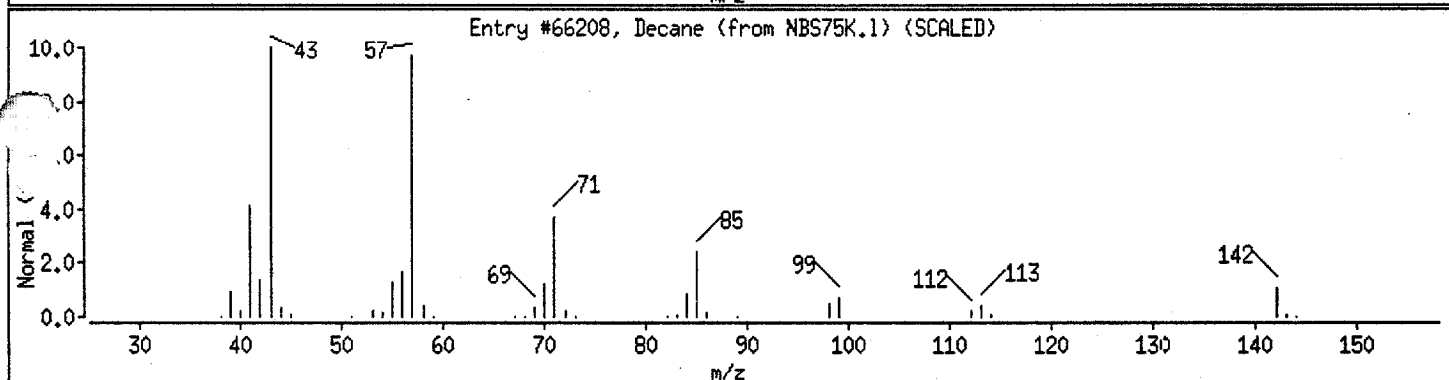
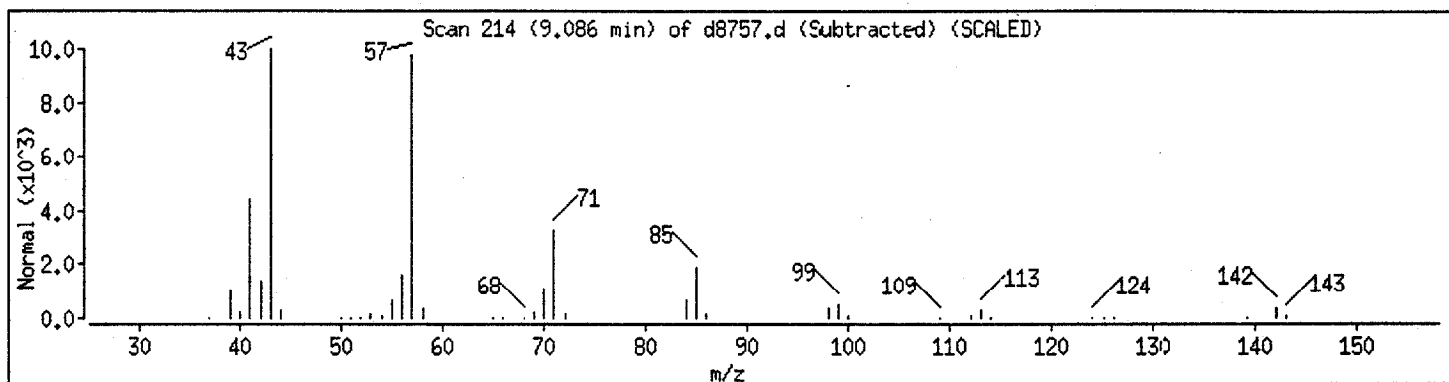
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Decane	124-18-5	NBS75K.1	66208	96
Undecane	1120-21-4	NBS75K.1	67317	90



Data File: /chem/a900.i/d062894.b/d8757.d

Page 16

Date: 28-JUN-94 18:48

Instrument: a900.i

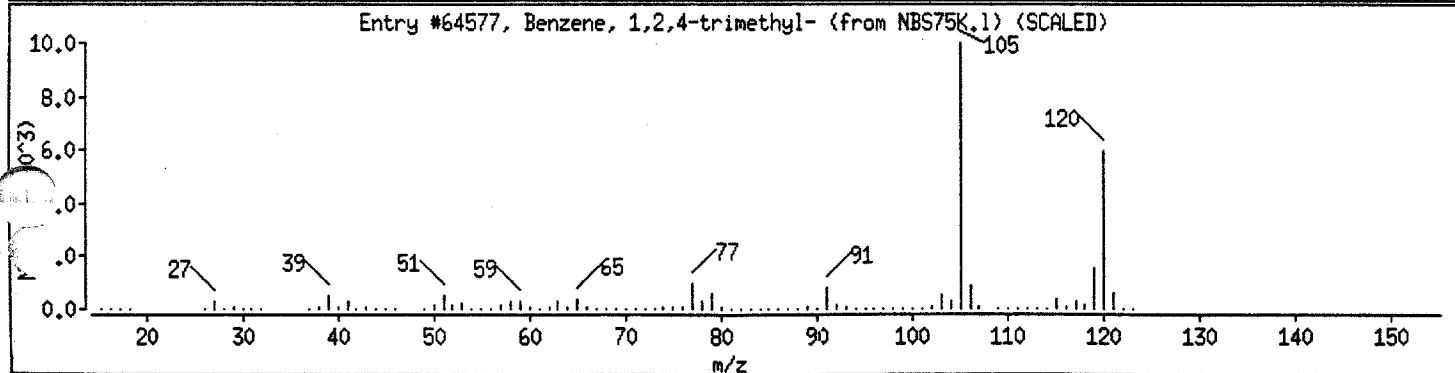
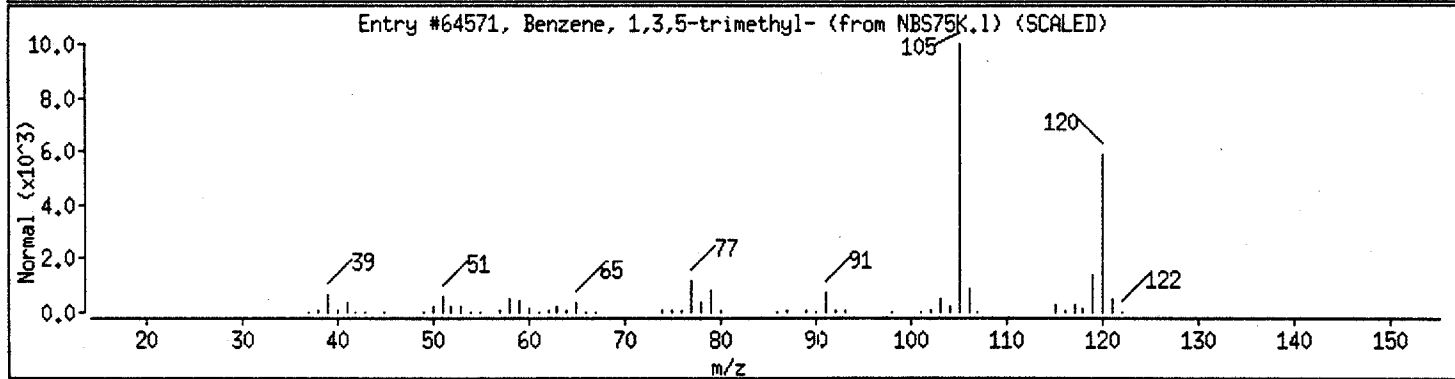
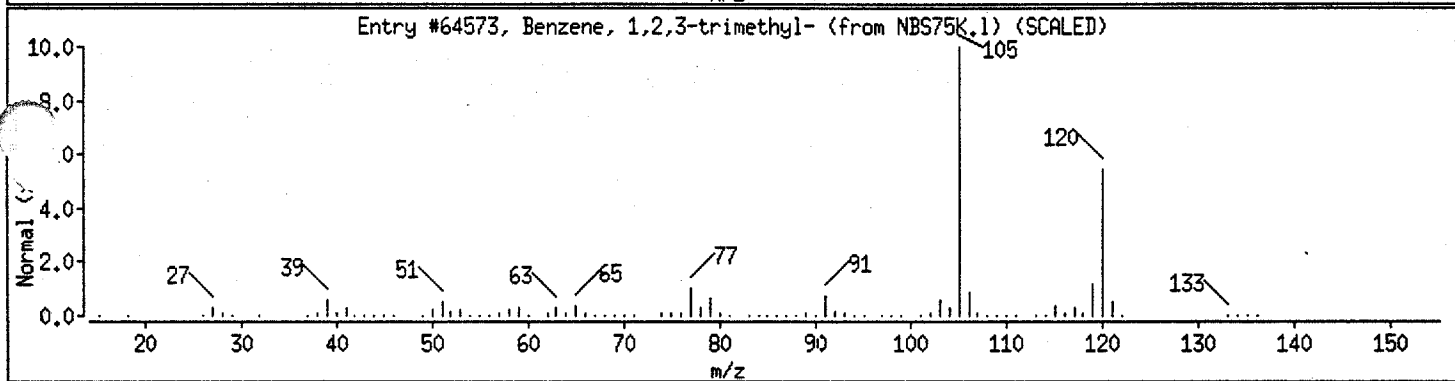
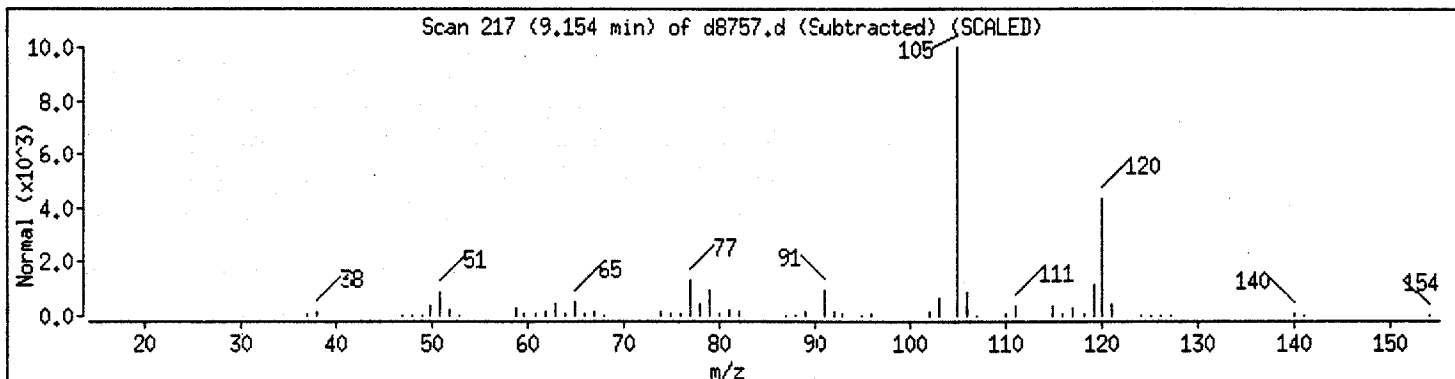
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	64573	95
Benzene, 1,3,5-trimethyl-	108-67-8	NBS75K.1	64571	95
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.1	64577	94



Data File: /chem/a900.i/d062894.b/d8757.d

Page 18

Date : 28-JUN-94 18:48

Instrument : a900.i

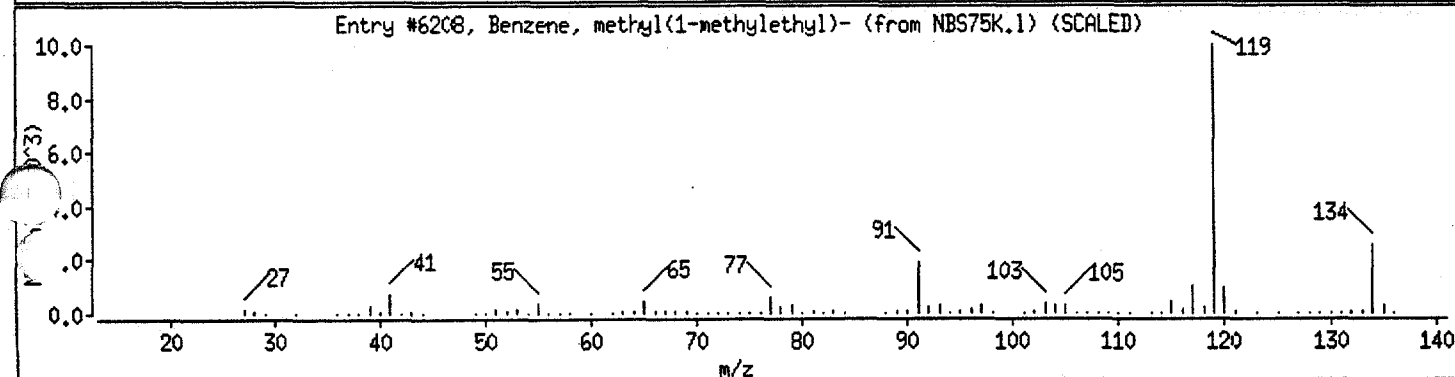
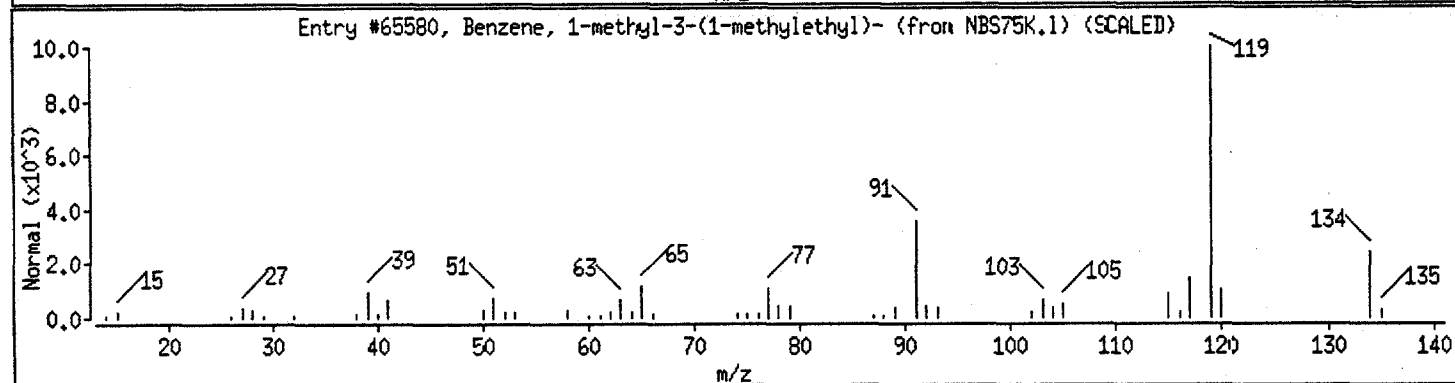
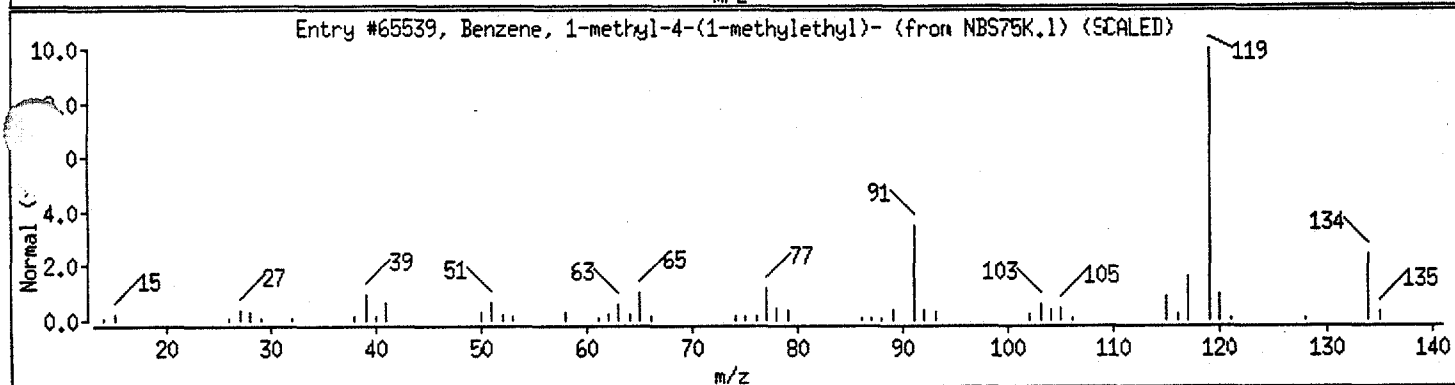
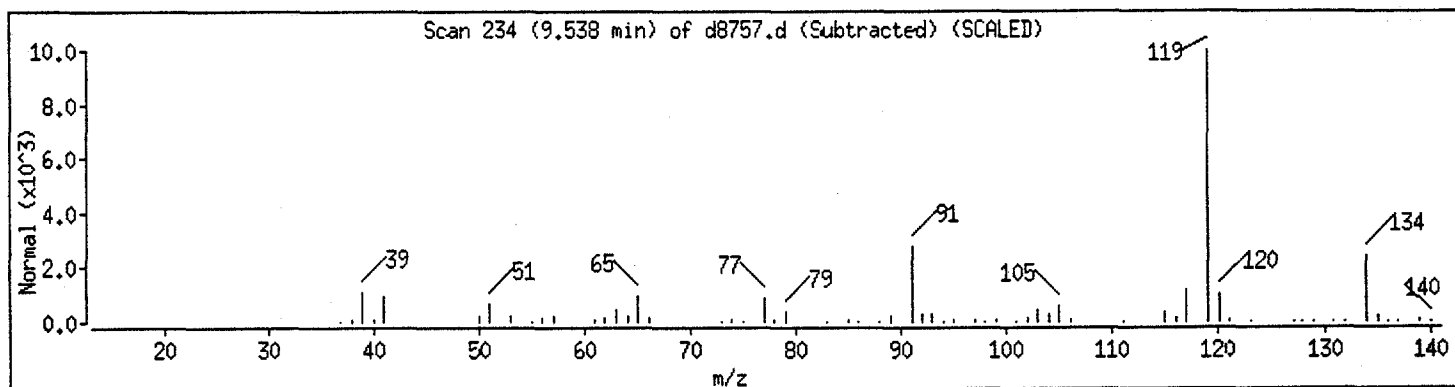
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NBS75K.1	65539	91
Benzene, 1-methyl-3-(1-methylethyl)-	535-77-3	NBS75K.1	65580	91
Benzene, methyl(1-methylethyl)-	25155-15-1	NBS75K.1	6208	90



Data File: /chem/a900.i/d062894.b/d8757.d

Date : 28-JUN-94 18:48

Instrument : a900.i

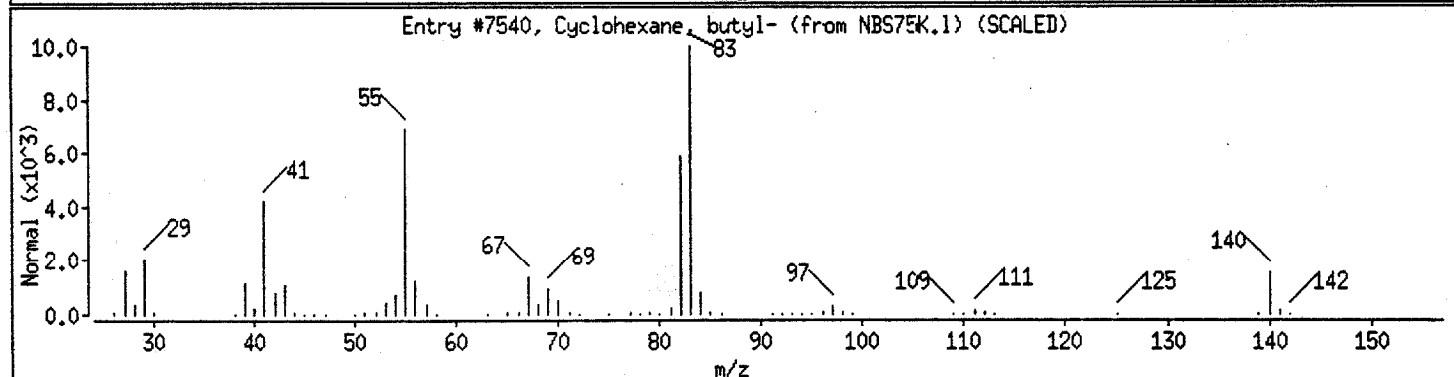
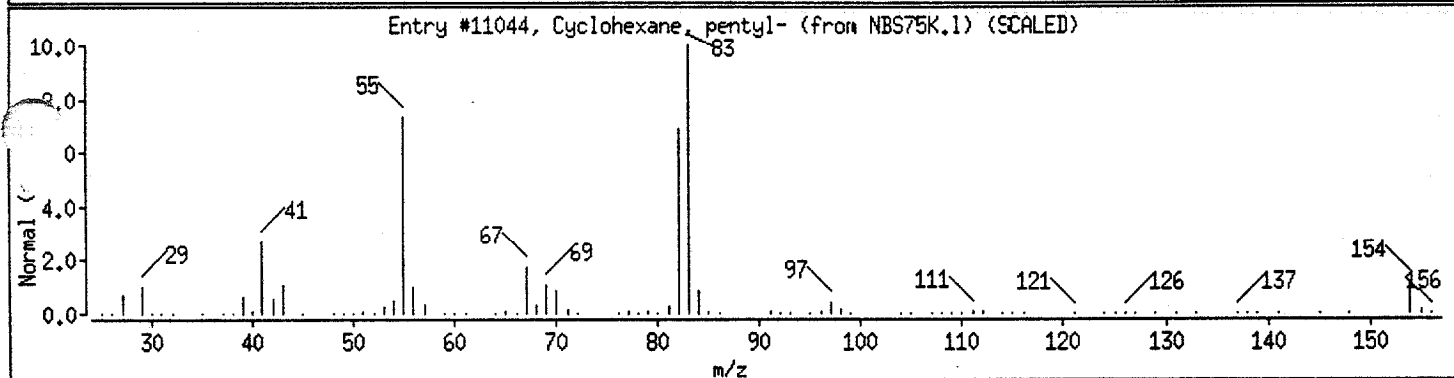
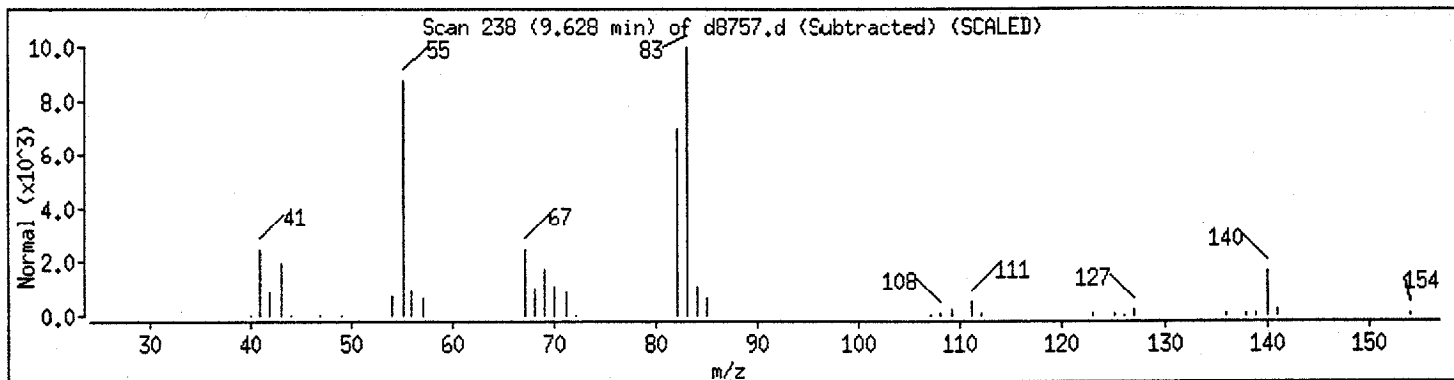
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclohexane, pentyl-	4292-92-6	NBS75K.1	11044	87
Cyclohexane, butyl-	1678-93-9	NBS75K.1	7540	86





Data File: /chem/a900.i/d062894.b/d8757.d

Date : 28-JUN-94 18:48

Instrument : a900.i

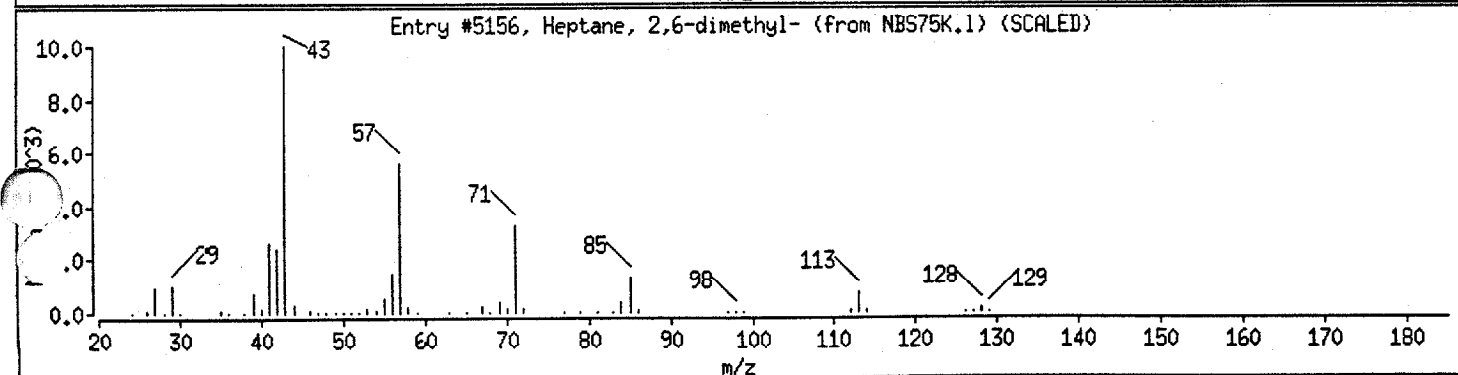
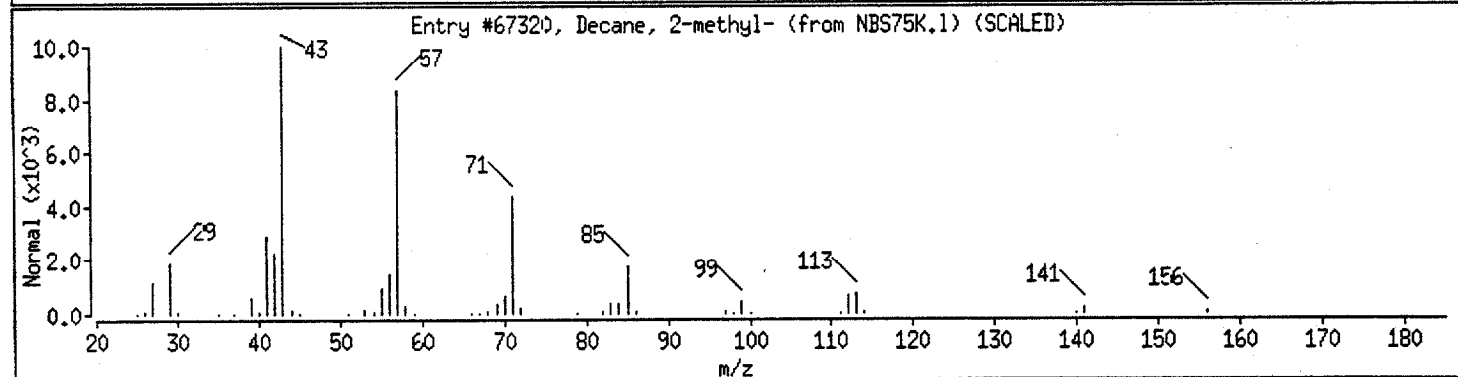
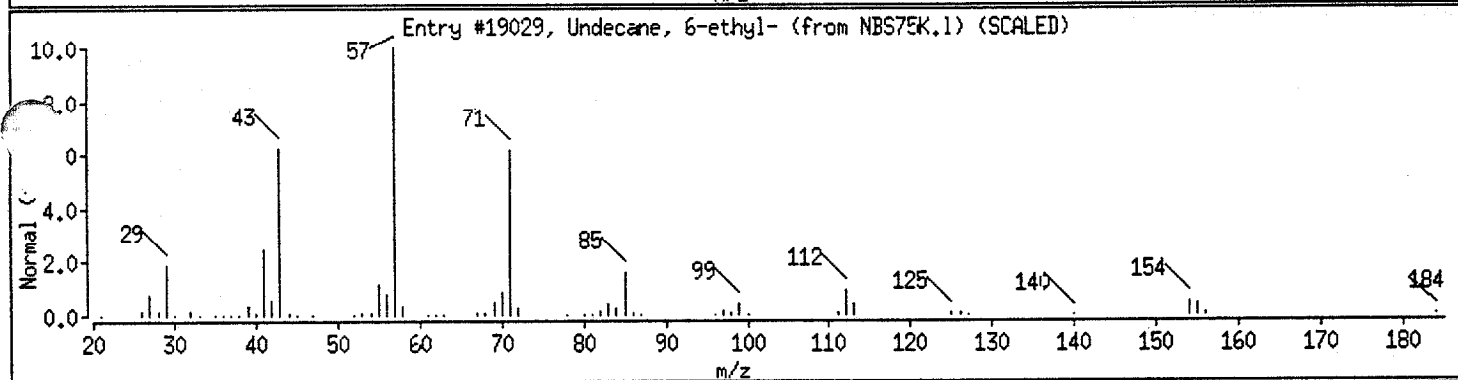
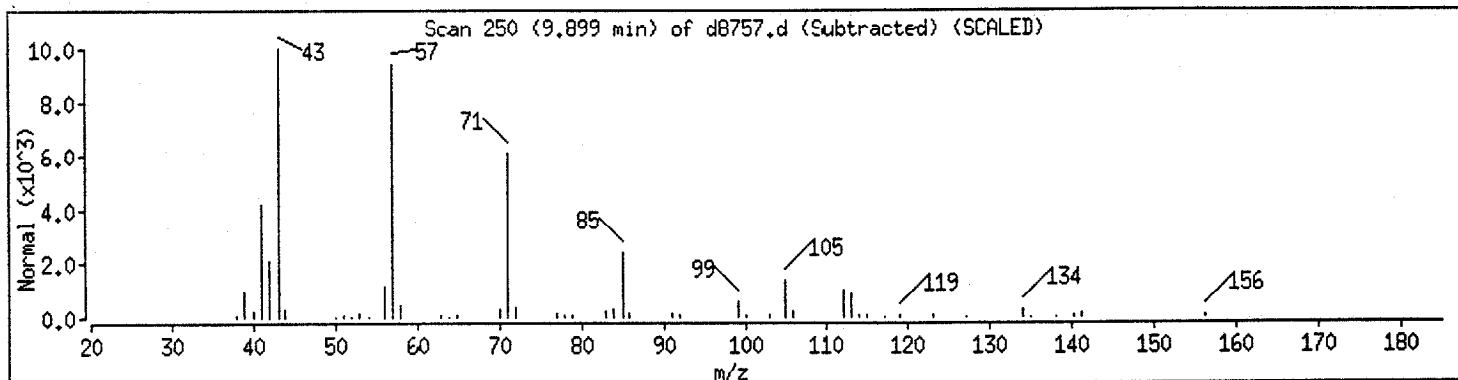
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane, 6-ethyl-	17312-60-6	NBS75K.1	19029	64
Decane, 2-methyl-	6975-98-0	NBS75K.1	67320	62
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.1	5156	59



Data File: /chem/a900.i/d062894.b/d8757.d

Page 22

Date: 28-JUN-94 18:48

Instrument: a900.i

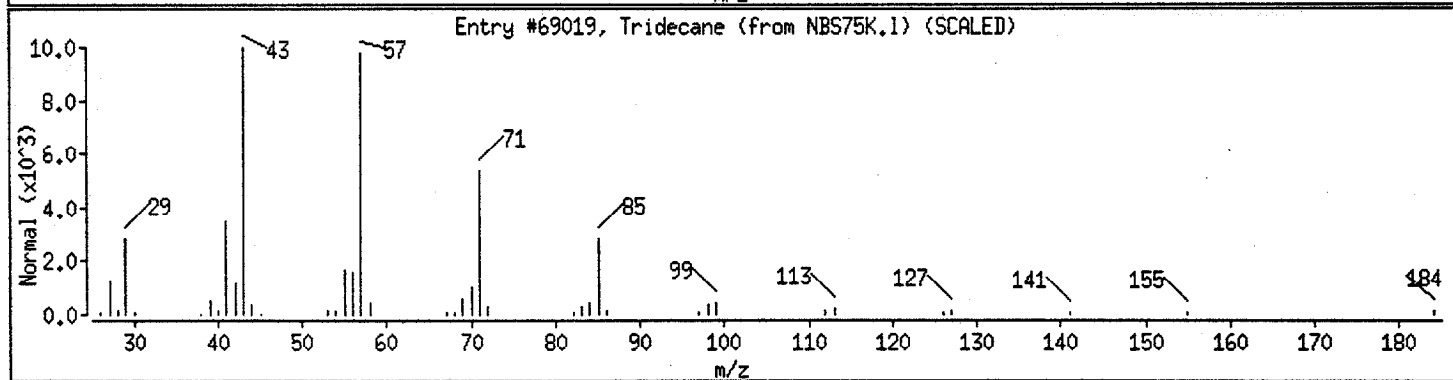
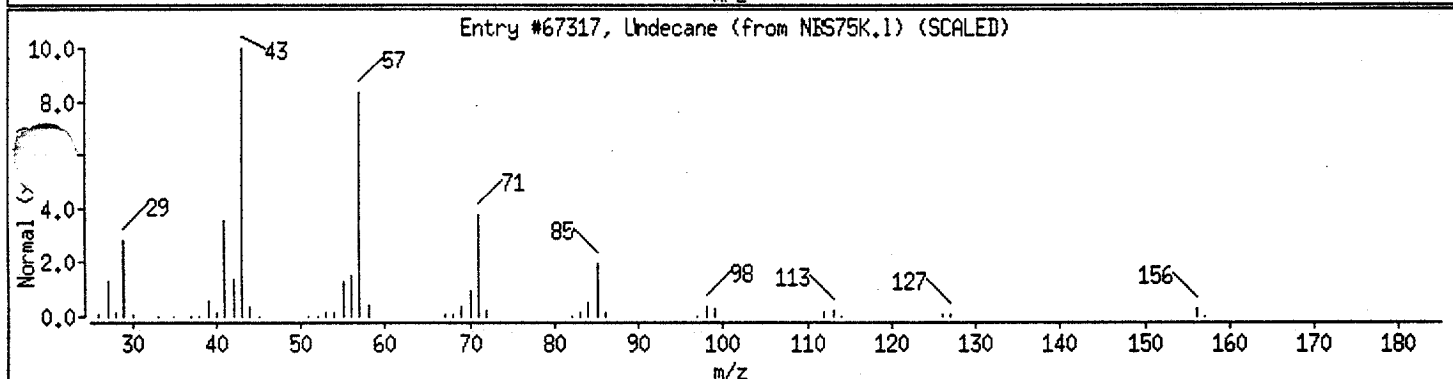
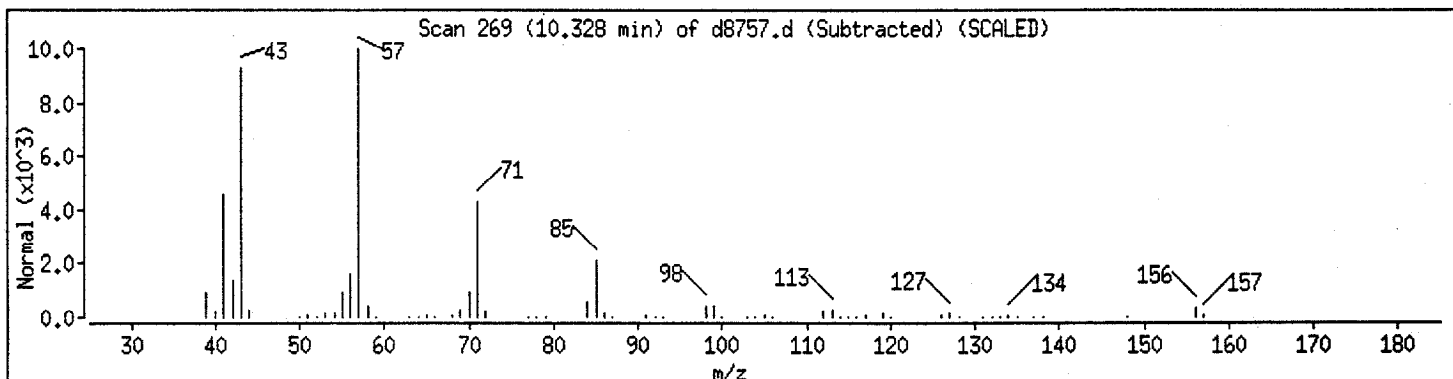
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane	1120-21-4	NBS75K.1	67317	97
Tridecane	629-50-5	NBS75K.1	69019	90



Data File: /chem/a900.i/d062894.b/d8757.d

Date: 28-JUN-94 18:48

Instrument: a900.i

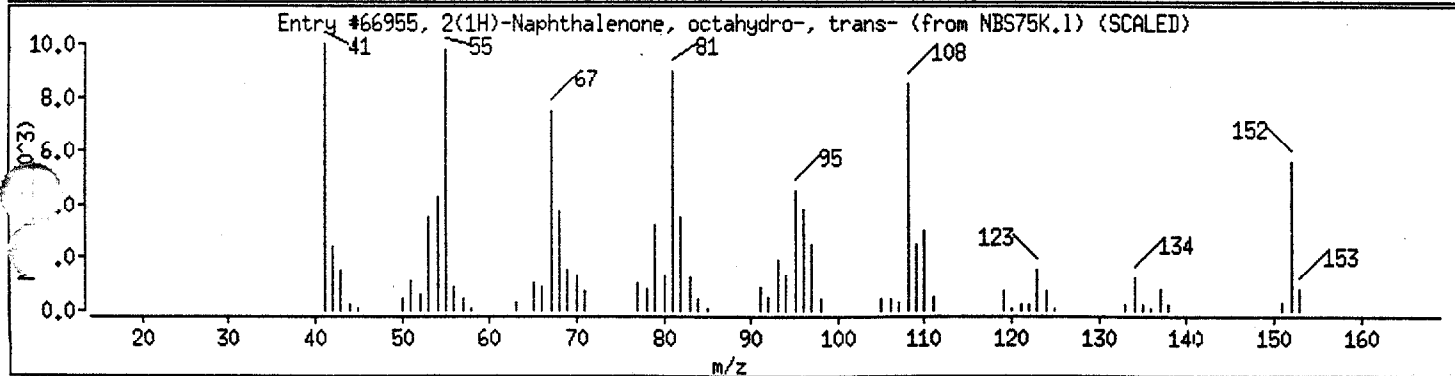
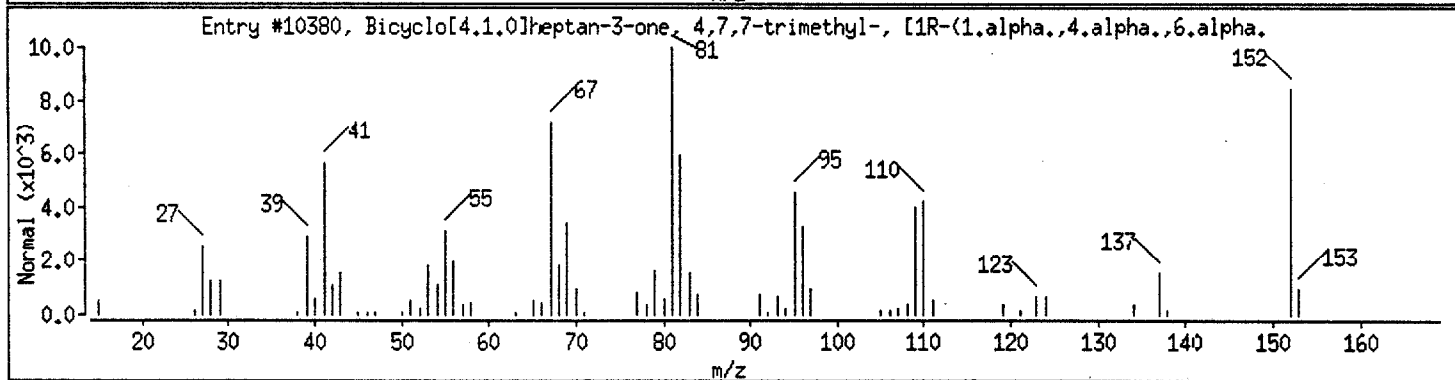
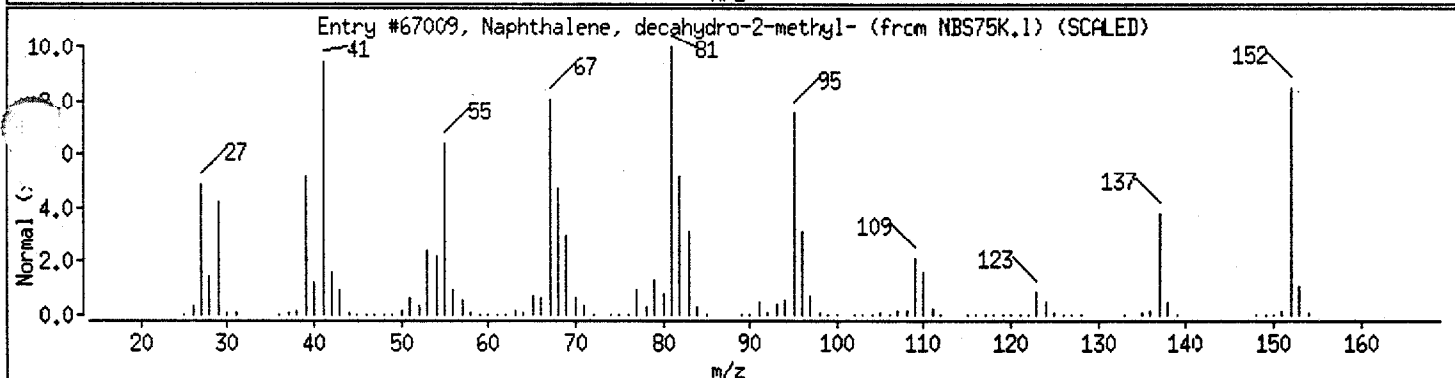
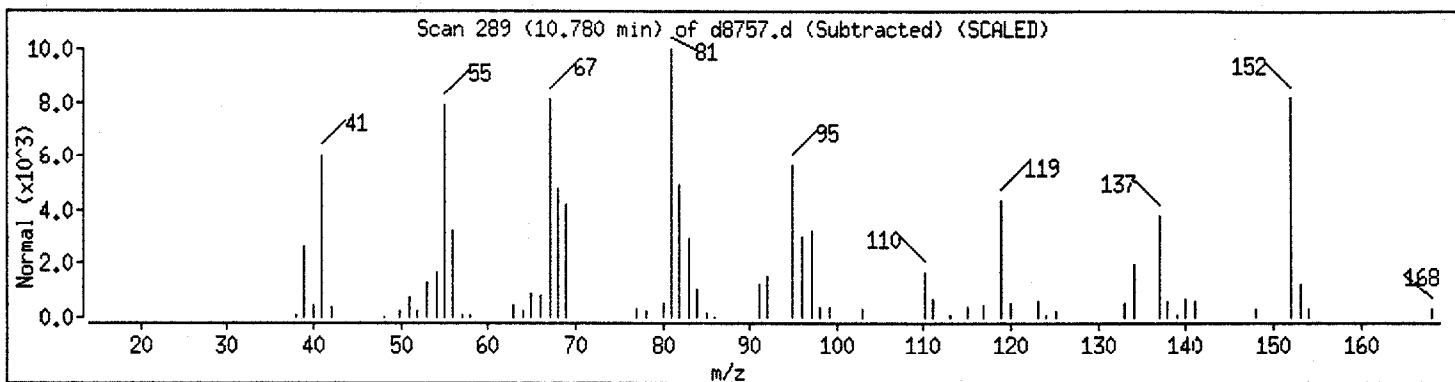
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Naphthalene, decahydro-2-methyl-	2958-76-1	NBS75K.1	67009	86
Bicyclo[4.1.0]heptan-3-one, 4,7,7-trimet	4176-04-9	NBS75K.1	10380	81
2(1H)-Naphthalenone, octahydro-, trans-	16021-08-2	NBS75K.1	66955	74



Data File: /chem/a900.i/d062894.b/d8757.d

Page 30

Date: 28-JUN-94 18:48

Instrument: a900.i

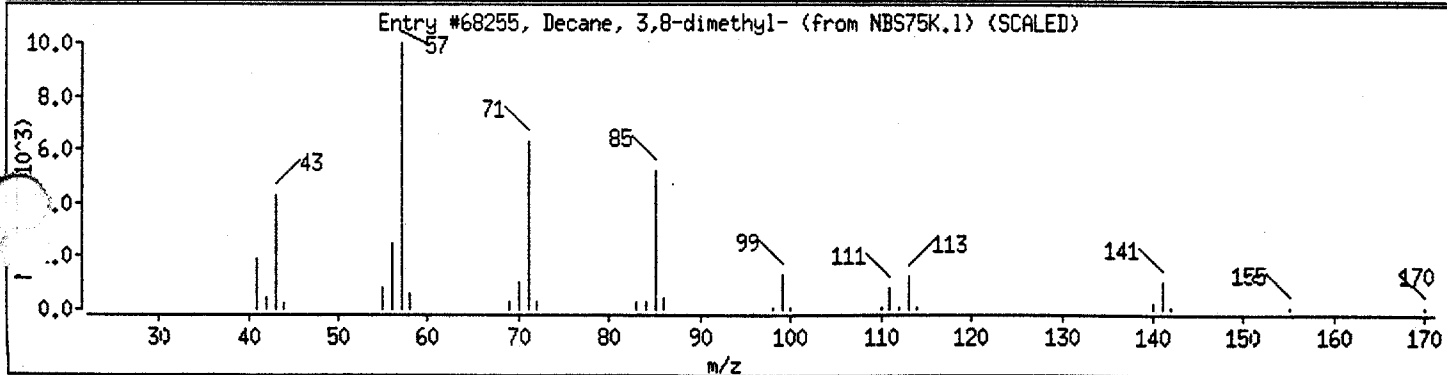
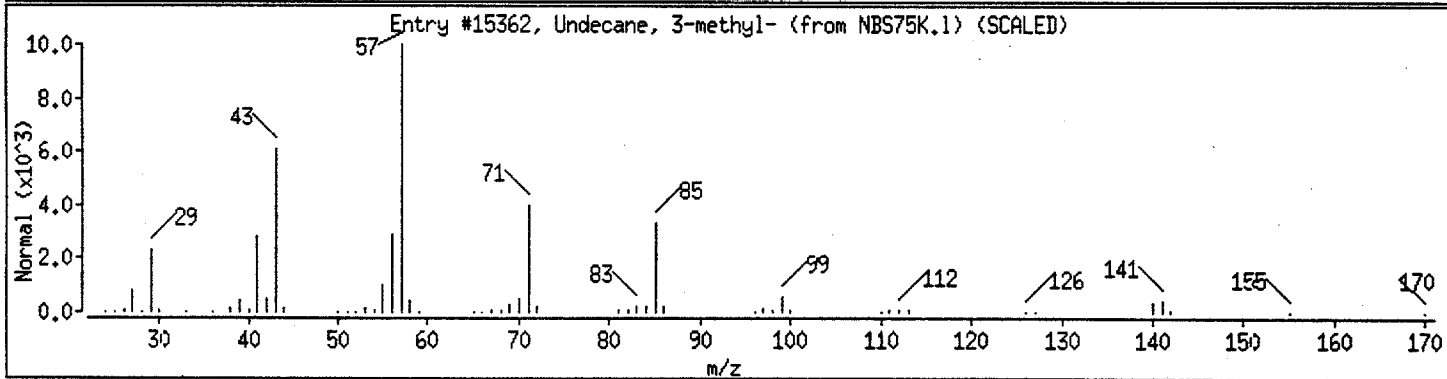
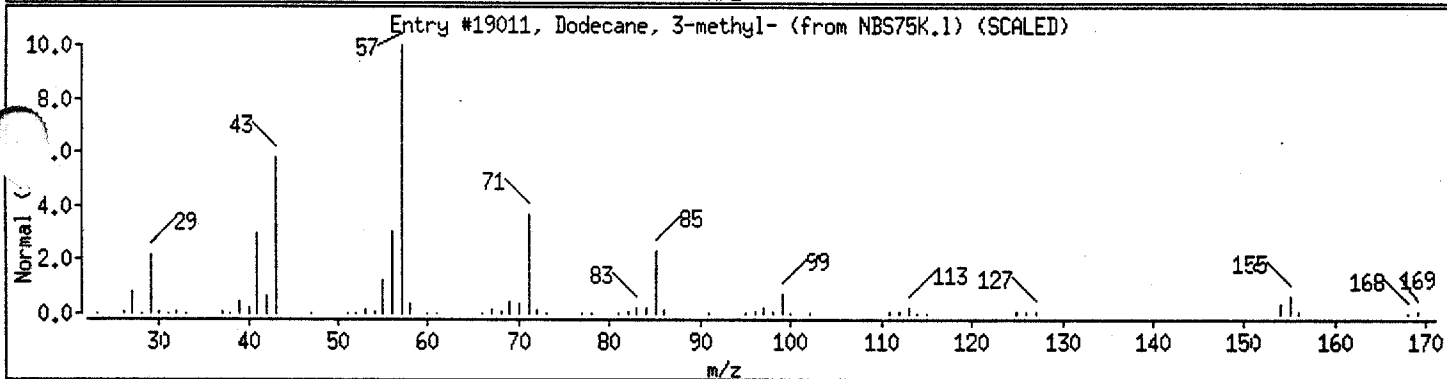
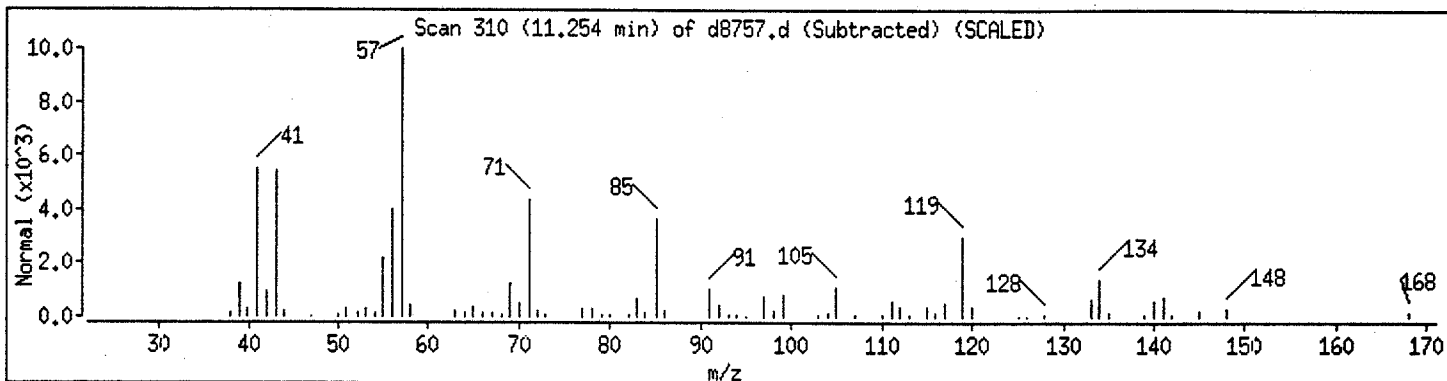
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Dodecane, 3-methyl-	17312-57-1	NBS75K.1	19011	53
Undecane, 3-methyl-	1002-43-3	NBS75K.1	15362	52
Decane, 3,8-dimethyl-	17312-55-9	NBS75K.1	68255	38



Data File: /chem/a900.i/d062894.b/d8757.d

Page 31

Date : 28-JUN-94 18:48

Instrument : a900.i

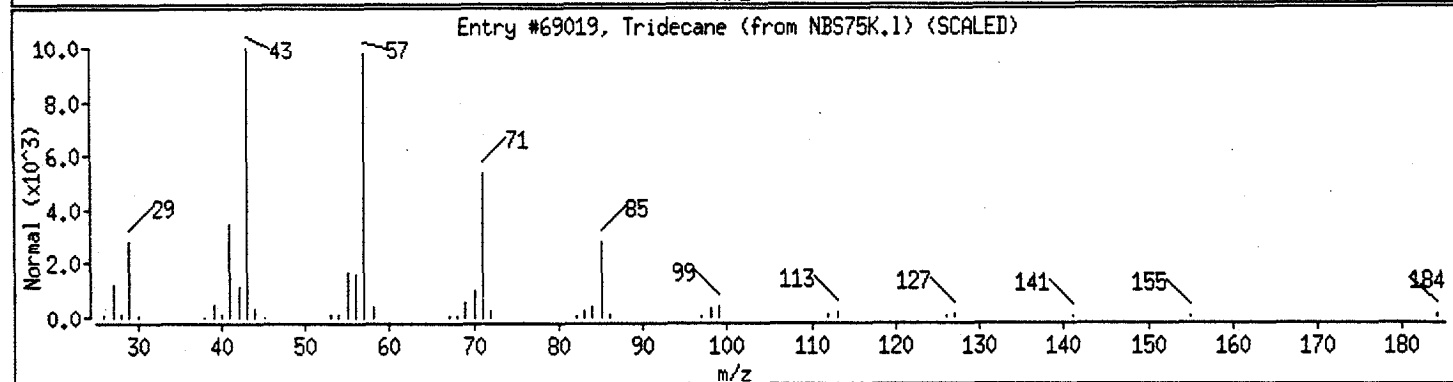
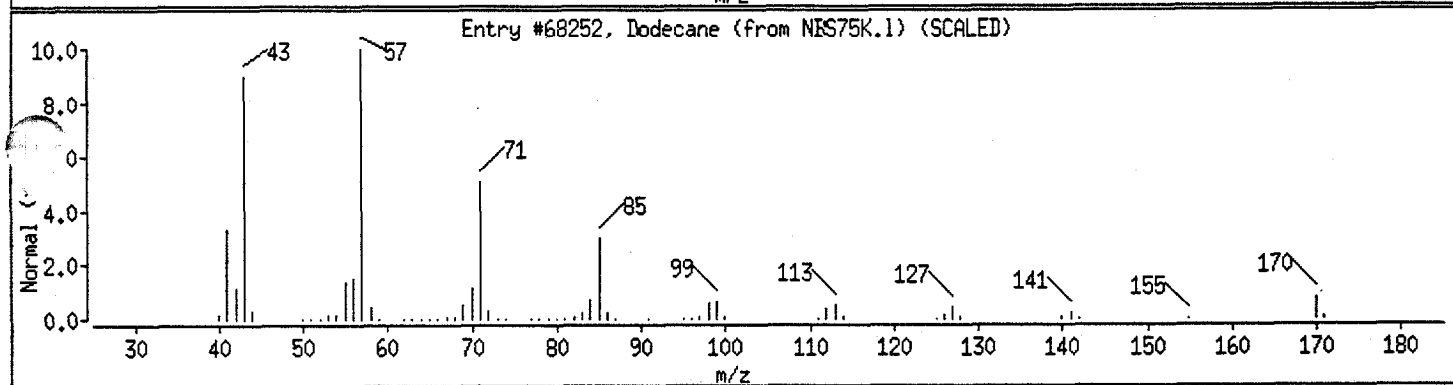
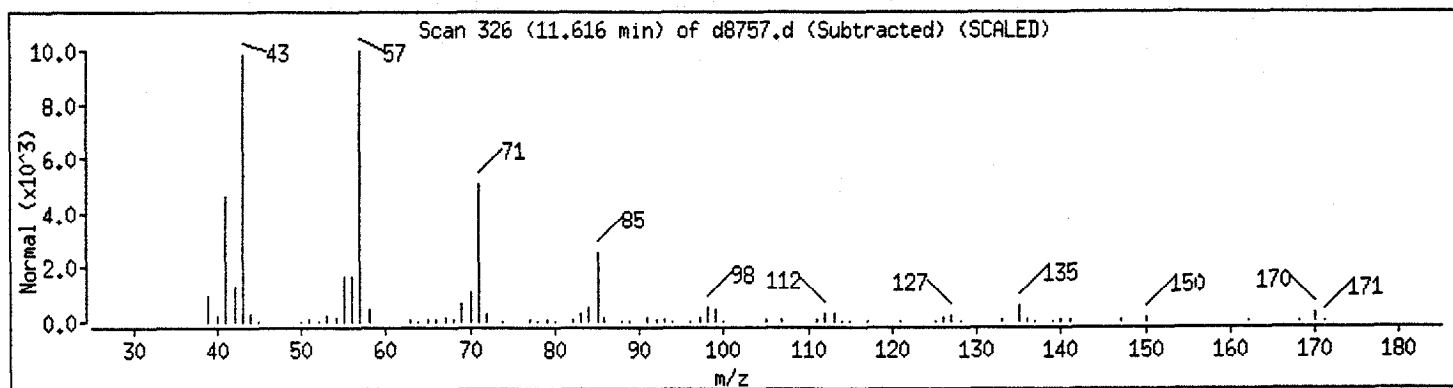
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Dodecane	112-40-3	NBS75K.1	68252	96
Tridecane	629-50-5	NBS75K.1	69019	87



Data File: /chem/a900.i/d062894.b/d8757.d

Page 35

Date : 28-JUN-94 18:48

Instrument : a900.i

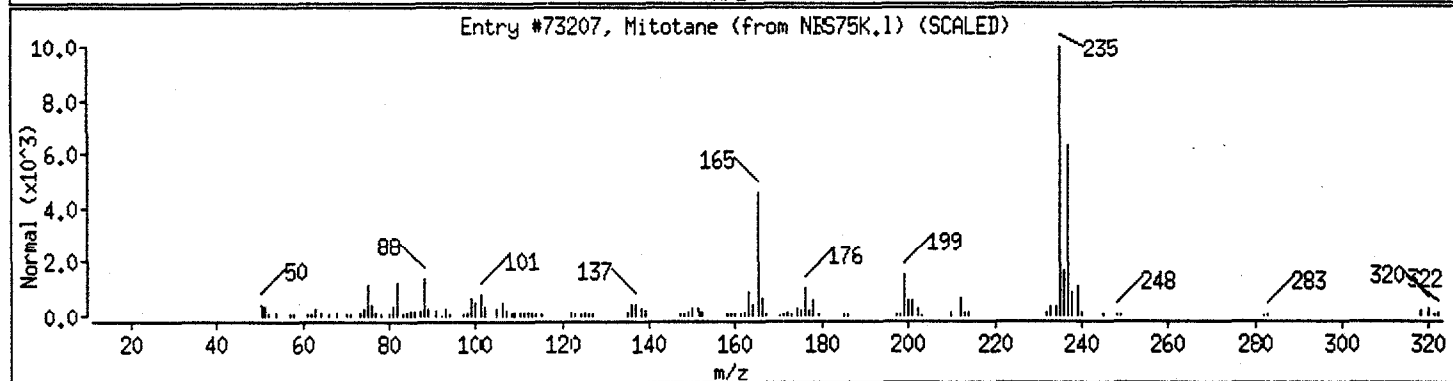
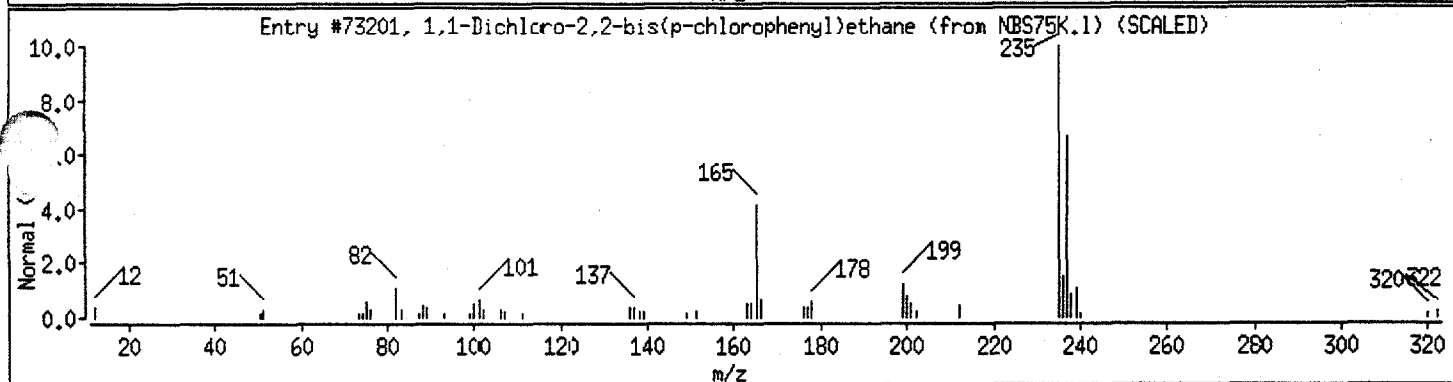
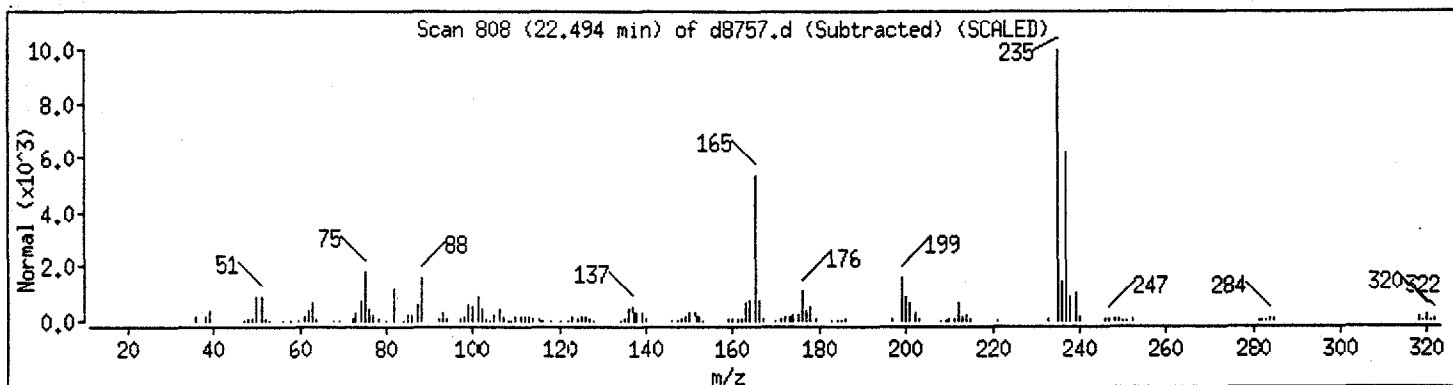
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane	72-54-8	NBS75K.1	73201	95
Mitotane	53-19-0	NBS75K.1	73207	95



Data File: /chem/a900.i/d062894.b/d8757.d

Date: 28-JUN-94 18:48

Instrument: a900.i

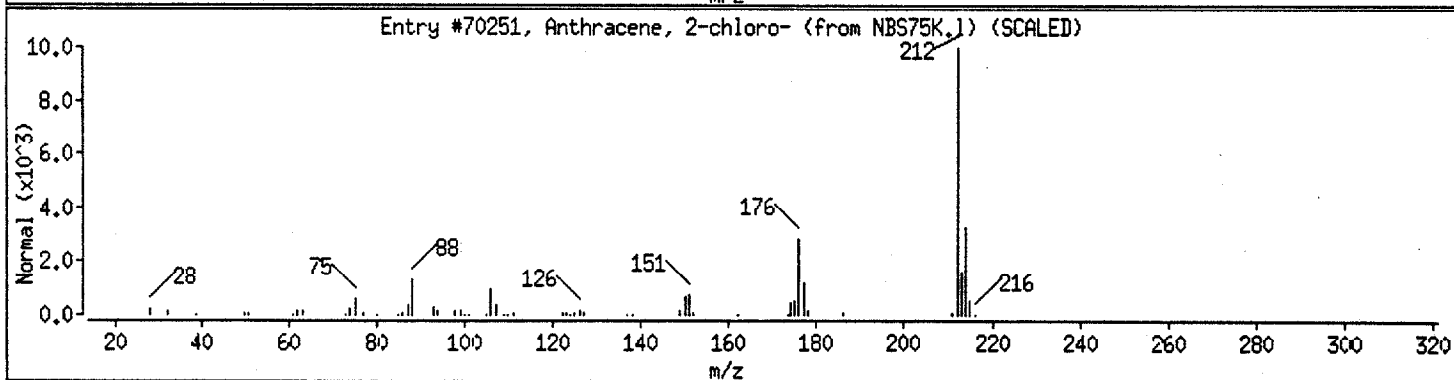
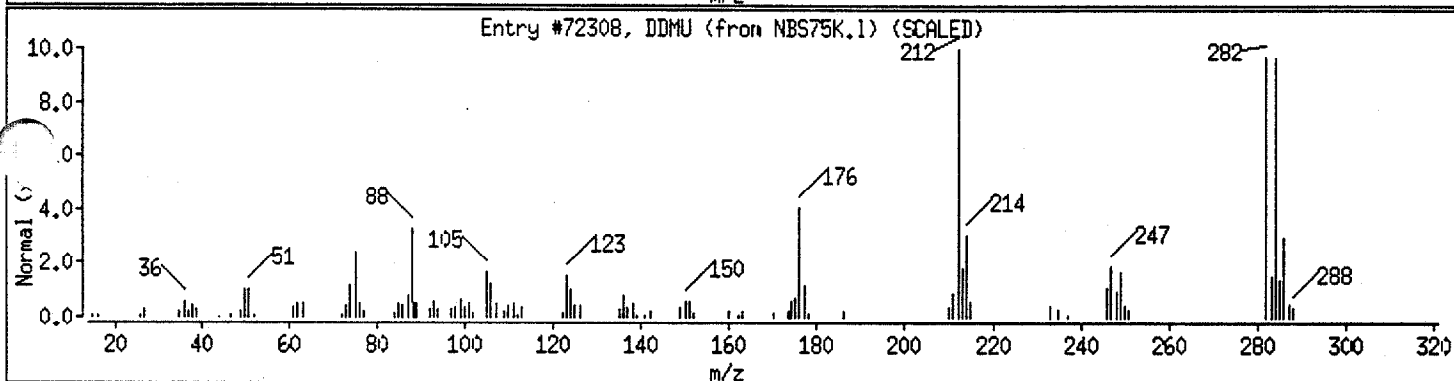
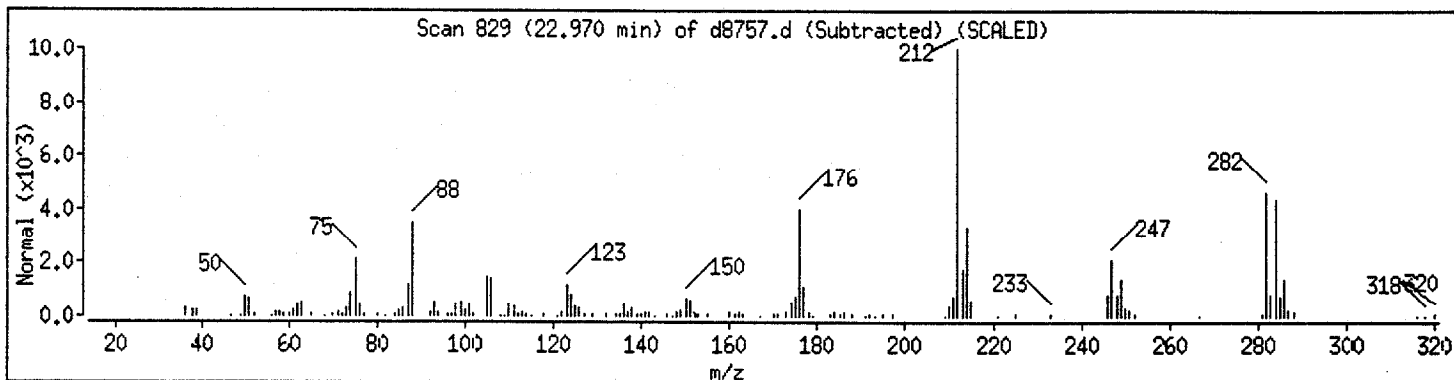
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
DDMU	1022-22-6	NBS75K.1	72308	96
Anthracene, 2-chloro-	17135-78-3	NBS75K.1	70251	86



Data File: /chem/a900.i/d062894.b/d8757.d

Page 37

Date : 28-JUN-94 18:48

Instrument : a900.i

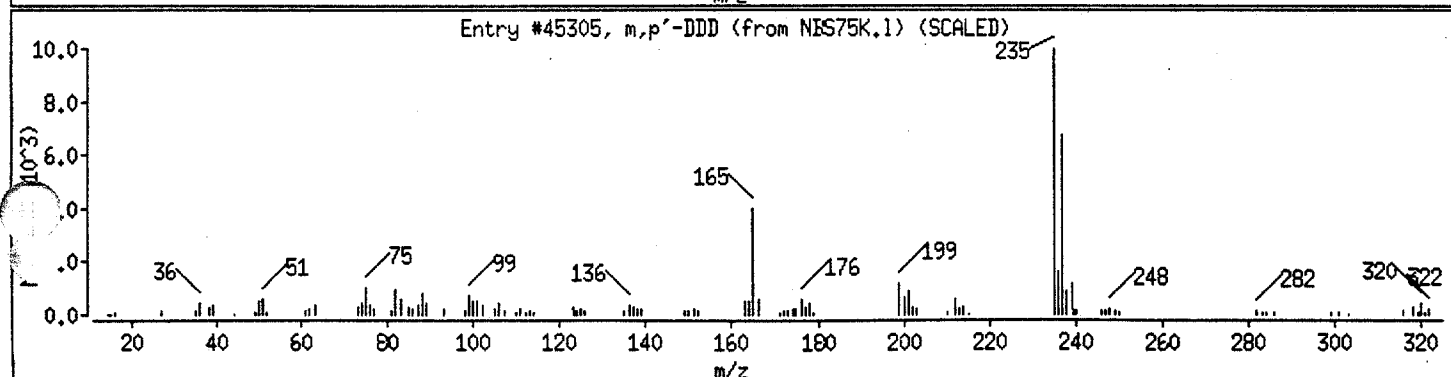
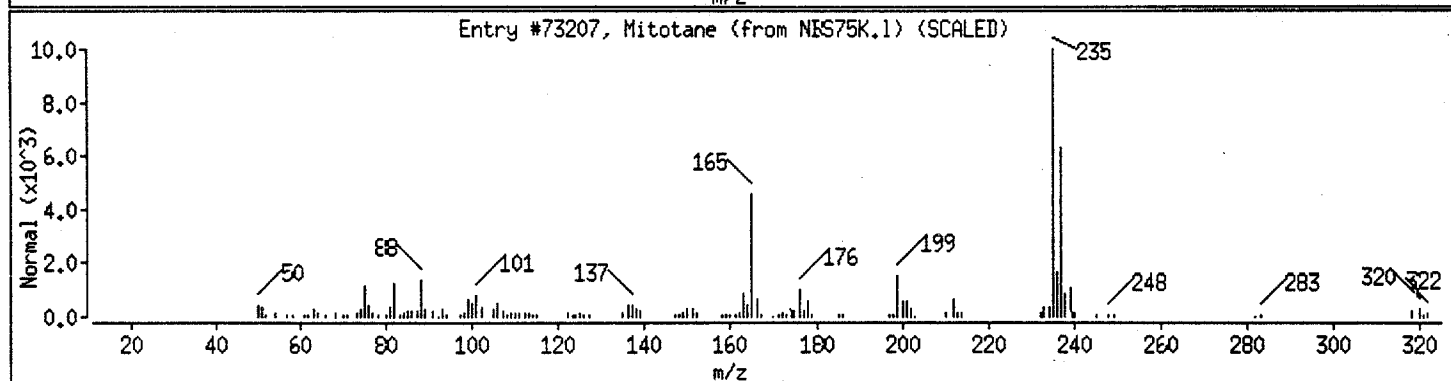
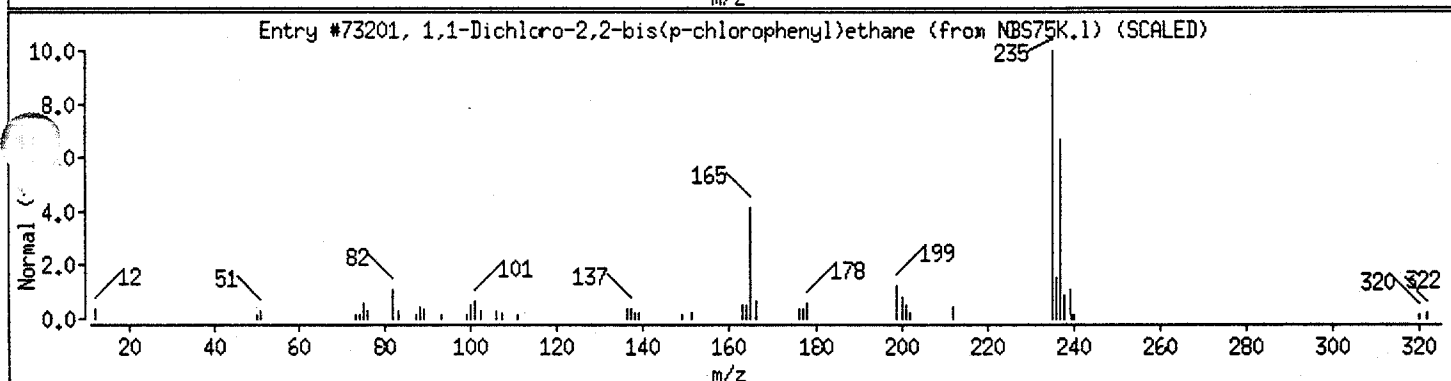
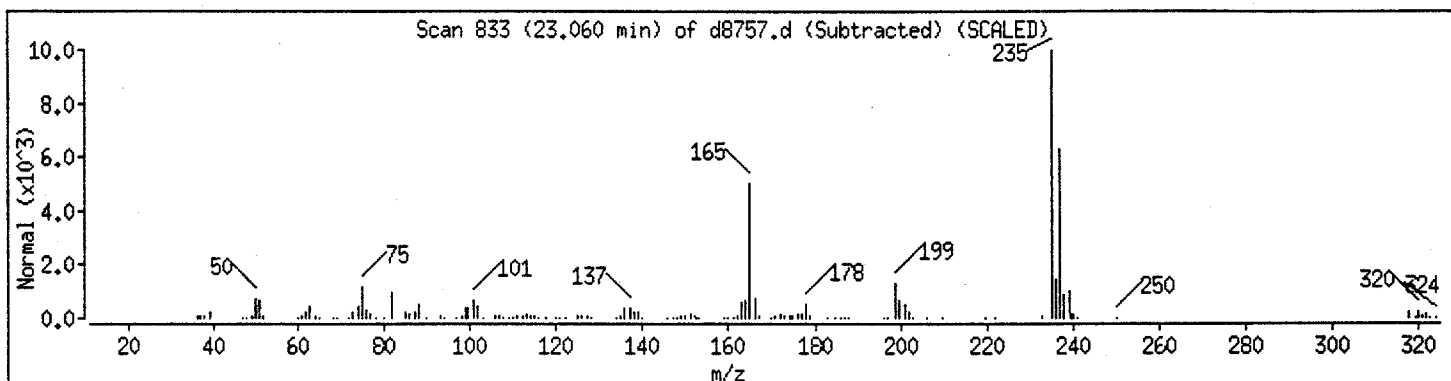
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane	72-54-8	NBS75K.1	73201	96
Mitotane	53-19-0	NBS75K.1	73207	94
m,p'-DDD	4329-12-8	NBS75K.1	45305	94

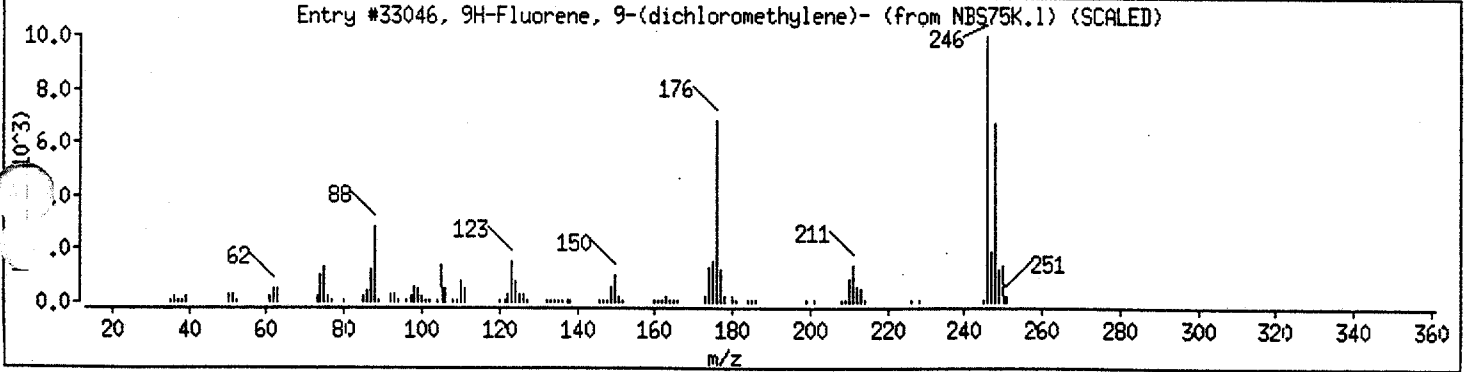
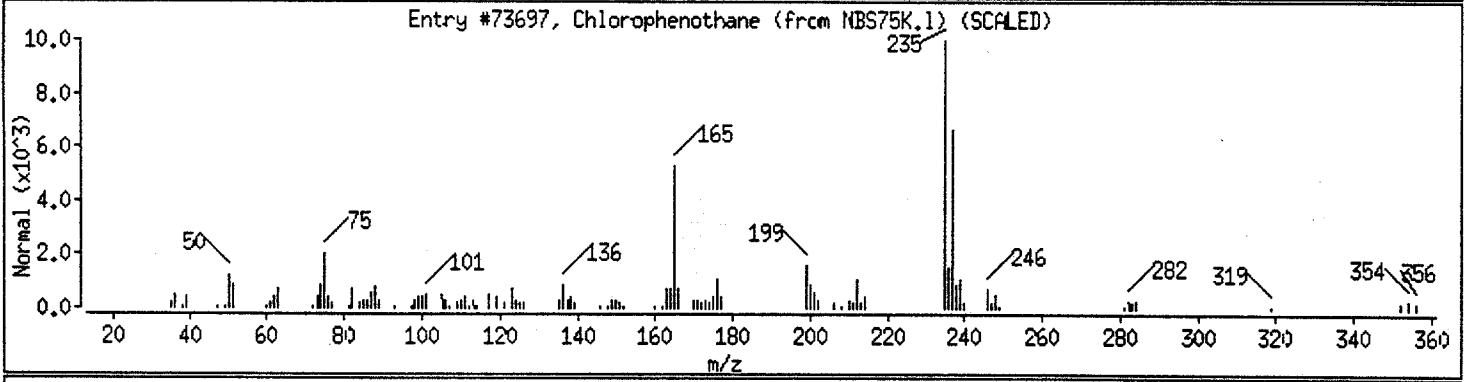
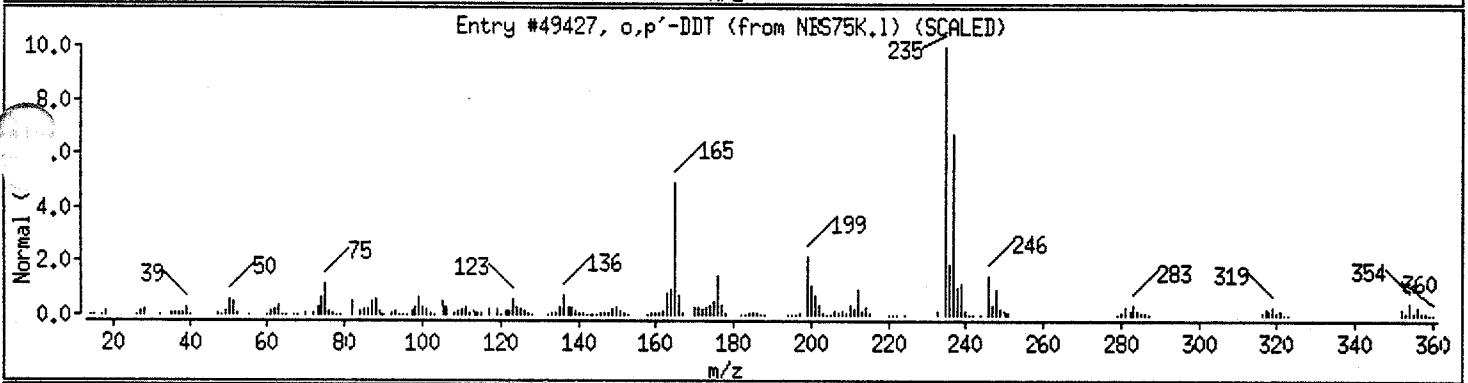
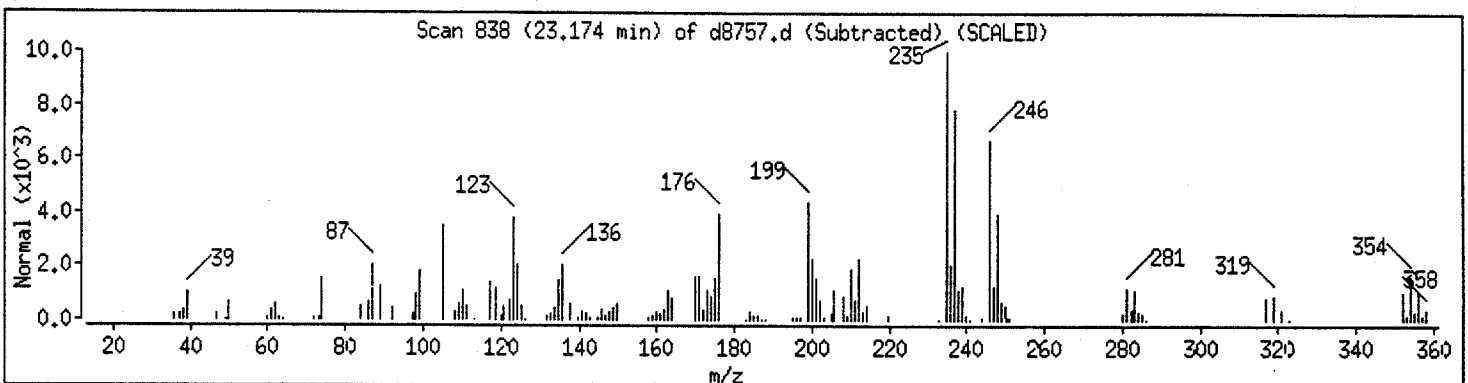




Data File: /chem/a900.i/d062894.b/d8757.d  
Date: 28-JUN-94 18:48  
Instrument: a900.i  
Sample ID:  
Column phase: J&W DB-5  
Volume Injected (uL): 1.0

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
o,p'-DDT	789-02-6	NBS75K.1	49427	90
Chlorophenothane	50-29-3	NBS75K.1	73697	55
9H-Fluorene, 9-(dichloromethylene)-	835-17-6	NBS75K.1	33046	50



Data File: /chem/a900.i/d062894.b/d8757.d

Page 39

Date: 28-JUN-94 18:48

Instrument: a900.i

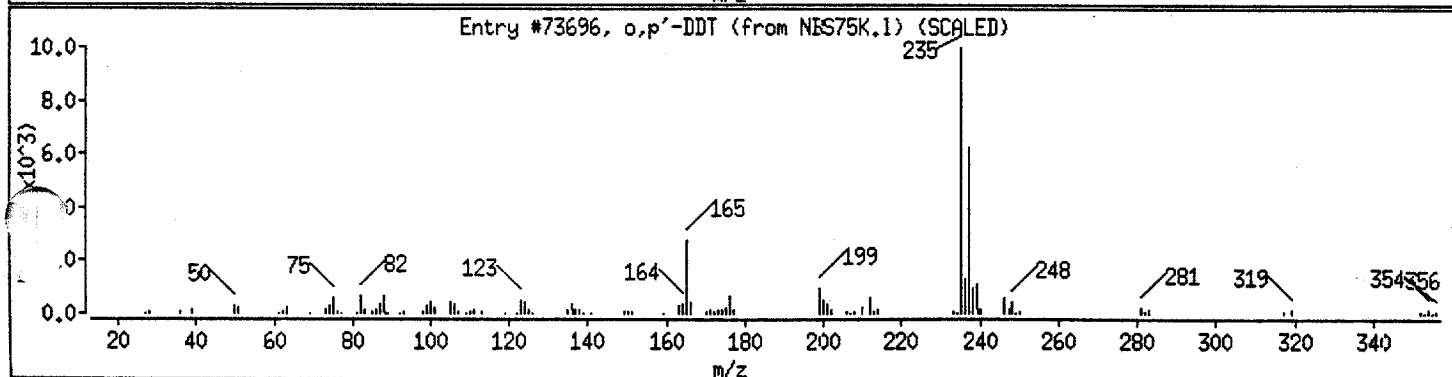
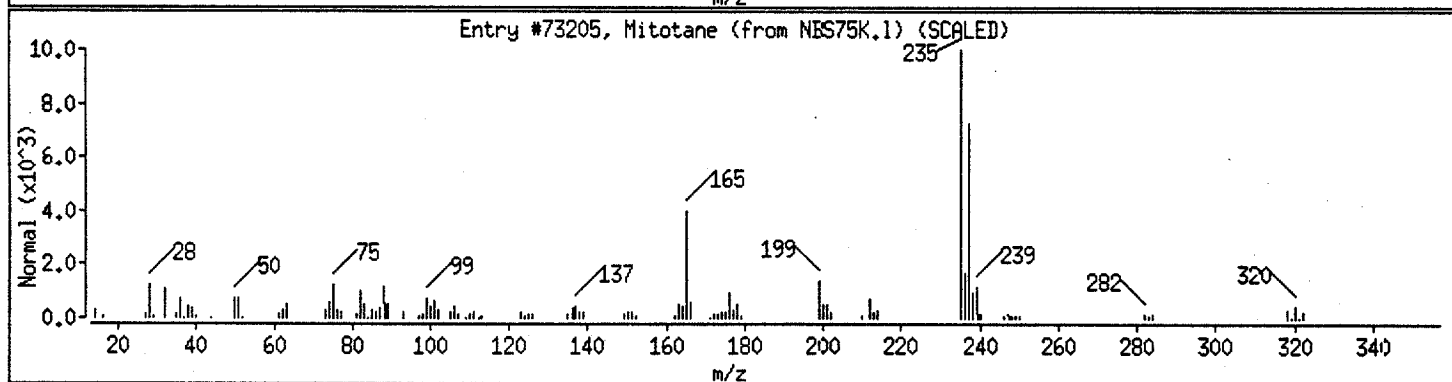
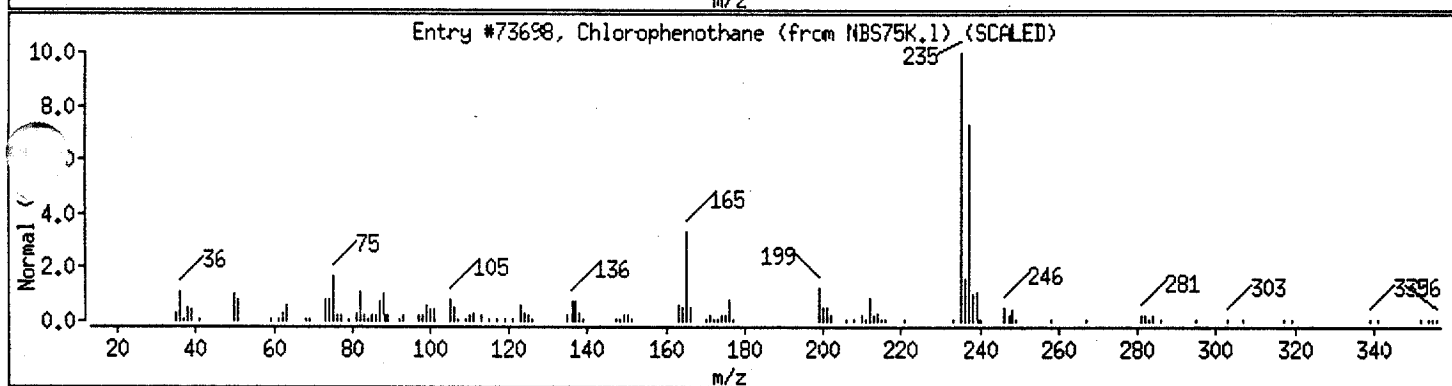
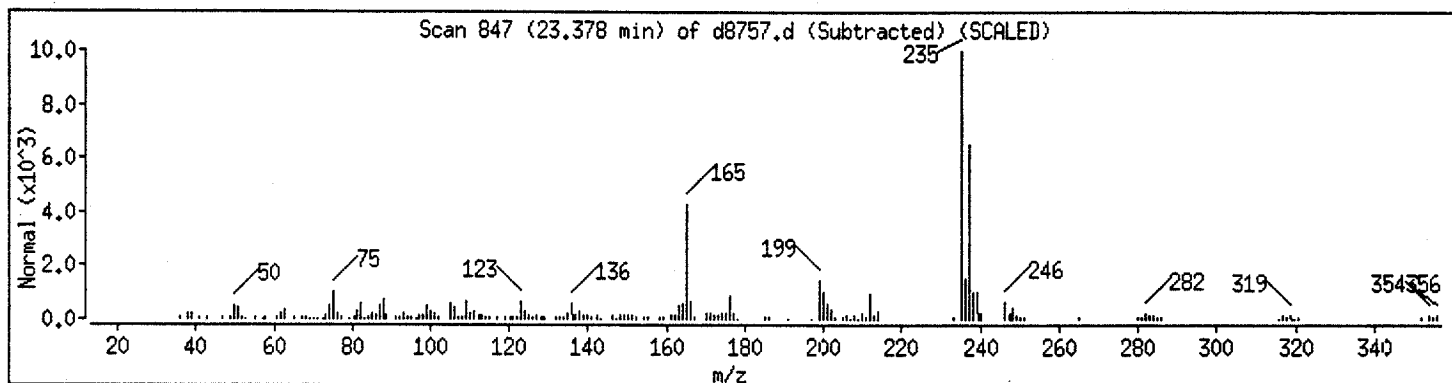
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Chlorophenothane	50-29-3	NBS75K.1	73698	96
Mitotane	53-19-0	NBS75K.1	73205	95
o,p'-DDT	789-02-6	NBS75K.1	73696	95



Data File: /chem/a900.i/d062894.b/d8757.d

Page 40

Date: 28-JUN-94 18:48

Instrument: a900.i

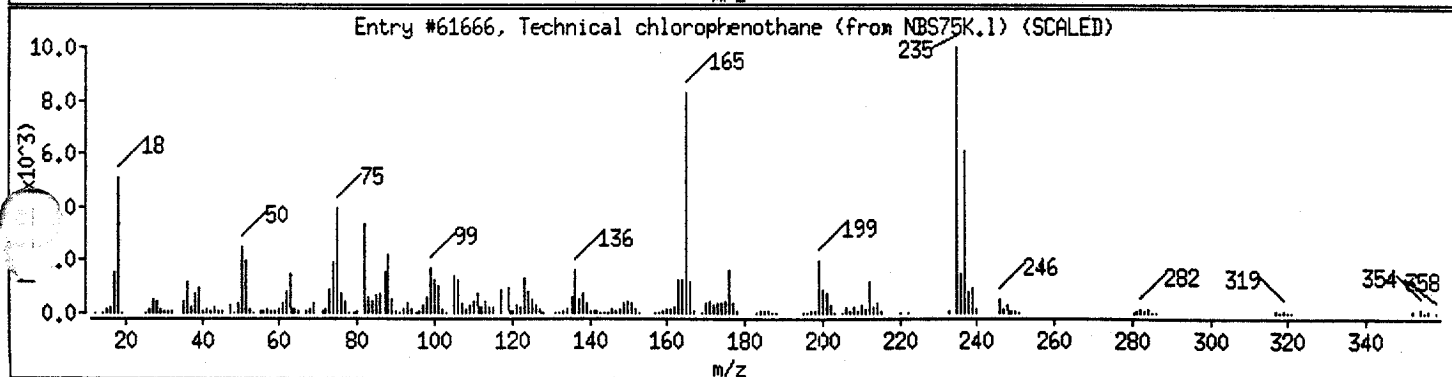
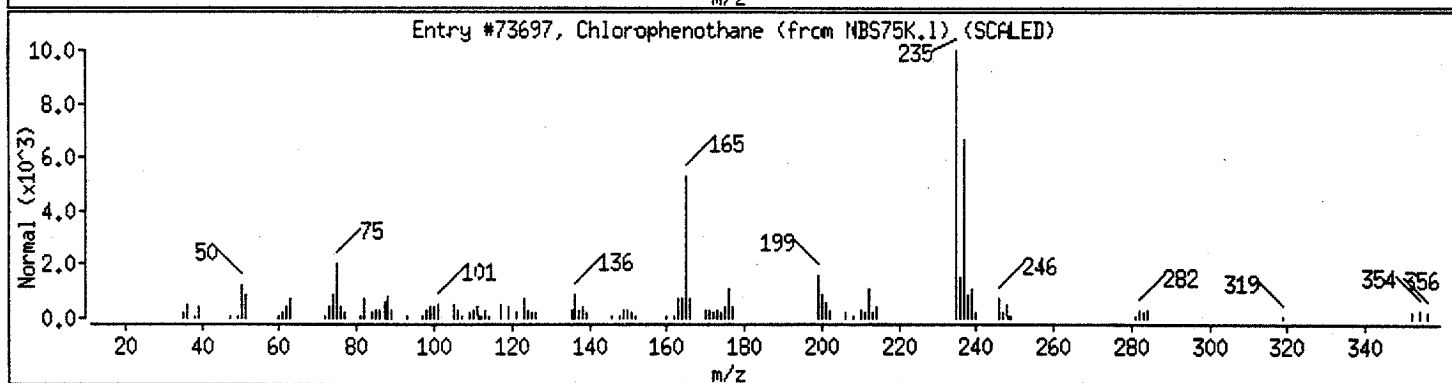
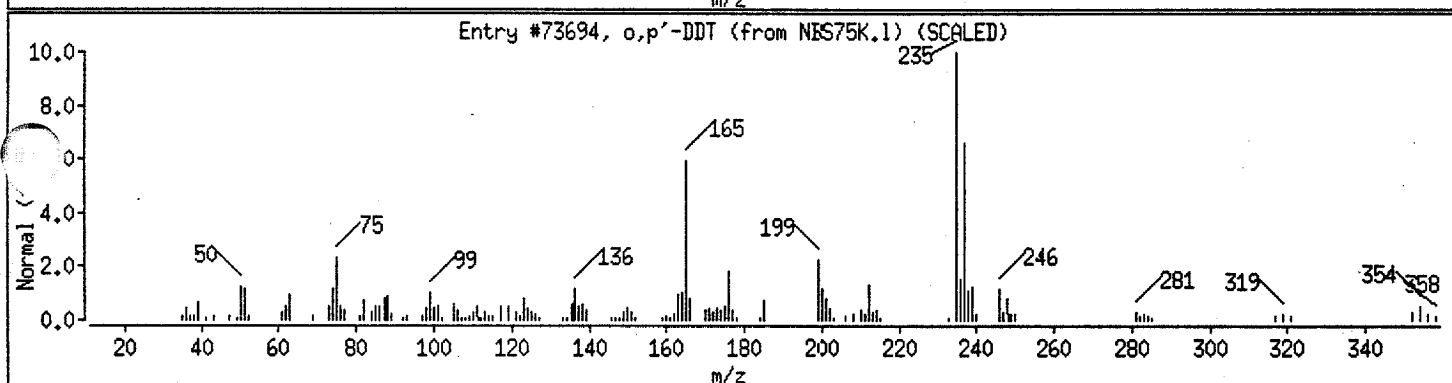
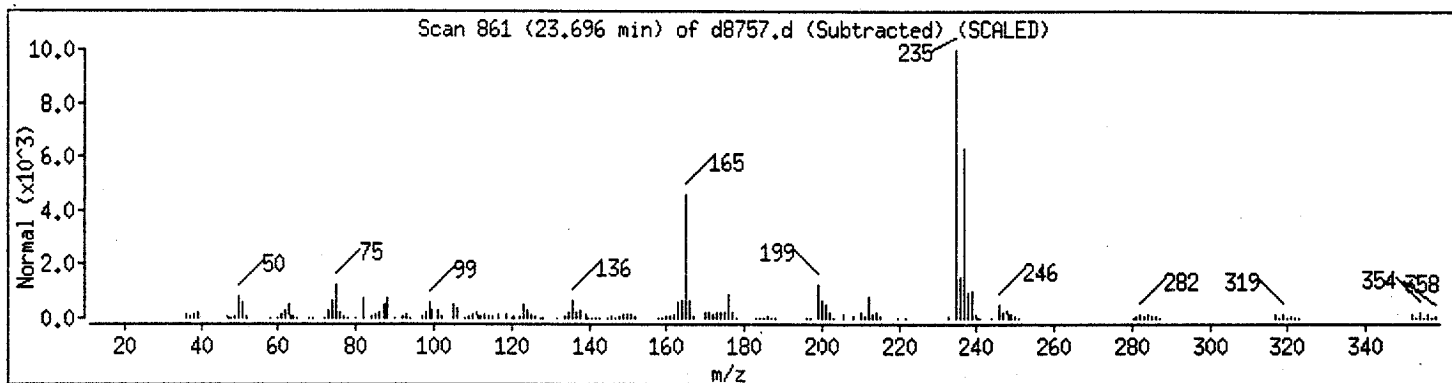
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
o,p'-DDT	789-02-6	NBS75K.1	73694	96
Chlorophenothane	50-29-3	NBS75K.1	73697	95
Technical chlorophenothane	8017-34-3	NBS75K.1	61666	91



1B SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ASC

Contract: NEESA

C6618

I Code: - Case No.: -

SAS No.: - SDG No.: C6617

Matrix: (soil/water) Soil

Lab Sample ID: JM9435C

Sample wt/vol: 5.7 (g/mL) g

Lab File ID: D8756

Level: (low/med) low

Date Received: 062394

% Moisture: 57.4 decanted: (Y/N) N

Date Extracted: 062794

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 062894

Injection Volume: 1.0 (uL)

Dilution Factor: 5.8

GPC Cleanup: (Y/N) N pH: 7

CAS NO. - COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg Q

108-95-2-----Phenol	4500	u
111-44-4-----bis(2-Chloroethyl) ether		
95-57-8-----2-Chlorophenol		
541-73-1-----1,3-Dichlorobenzene		
106-46-7-----1,4-Dichlorobenzene		
95-50-1-----1,2-Dichlorobenzene		
95-48-7-----2-Methylphenol		
108-60-1-----2,2'-oxybis(1-Chloropropane)		
106-44-5-----4-Methylphenol		
621-64-7-----N-Nitroso-di-n-propylamine		
67-72-1-----Hexachloroethane		
98-95-3-----Nitrobenzene		
78-59-1-----Isophorone		
88-75-5-----2-Nitrophenol		
105-67-9-----2,4-Dimethylphenol		
111-91-1-----bis(2-Chloroethoxy)methane		
120-83-2-----2,4-Dichlorophenol		
120-82-1-----1,2,4-Trichlorobenzene		
91-20-3-----Naphthalene		
106-47-8-----4-Chloroaniline	10800	
87-68-3-----Hexachlorobutadiene		
59-50-7-----4-Chloro-3-methylphenol		
91-57-6-----2-Methylnaphthalene		
77-47-4-----Hexachlorocyclopentadiene		
88-06-2-----2,4,6-Trichlorophenol	↓	
95-95-4-----2,4,5-Trichlorophenol	10800	
91-58-7-----2-Chloronaphthalene	4500	
88-74-4-----2-Nitroaniline	10800	
131-11-3-----Dimethylphthalate	4500	
208-96-8-----Acenaphthylene		
606-20-2-----2,6-Dinitrotoluene	↓	
99-09-2-----3-Nitroaniline	10800	
83-32-9-----Acenaphthene	4500	↓

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0309**

Job Name: AS e Contract: NEESA C66B

Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) Soil Lab Sample ID: JM9435C

Sample wt/vol: 5.2 (g/mL) g Lab File ID: 18756

Level: (low/med) low Date Received: 062394

% Moisture: 57.4 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 062894

Injection Volume: 1.0 (uL) Dilution Factor: 5.8

GPC Cleanup: (Y/N) NO pH: 7

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	Q
51-28-5	2,4-Dinitrophenol	10800	u
100-02-7	4-Nitrophenol	↓	f
132-64-9	Dibenzofuran	4500	
121-14-2	2,4-Dinitrotoluene	↓	
84-66-2	Diethylphthalate	↓	
7005-72-3	4-Chlorophenyl-phenylether	↓	
86-73-7	Fluorene	↓	
100-01-6	4-Nitroaniline	10800	
534-52-1	4,6-Dinitro-2-methylphenol	↓	
86-30-6	N-Nitrosodiphenylamine (1)	4500	
101-55-3	4-Bromophenyl-phenylether	↓	
118-74-1	Hexachlorobenzene	↓	
87-86-5	Pentachlorophenol	10800	
85-01-8	Phenanthrene	4500	
120-12-7	Anthracene	↓	
86-74-8	Carbazole	↓	
84-74-2	Di-n-butylphthalate	↓	
206-44-0	Fluoranthene	↓	
129-00-0	Pyrene	↓	
85-68-7	Butylbenzylphthalate	↓	
91-94-1	3,3'-Dichlorobenzidine	↓	
56-55-3	Benzo(a)anthracene	↓	
218-01-9	Chrysene	↓	
117-81-7	bis(2-Ethylhexyl)phthalate	↓	
117-84-0	Di-n-octylphthalate	↓	
205-99-2	Benzo(b)fluoranthene	↓	
207-08-9	Benzo(k)fluoranthene	↓	
50-32-8	Benzo(a)pyrene	↓	
193-39-5	Indeno(1,2,3-cd)pyrene	↓	
53-70-3	Dibenz(a,h)anthracene	↓	
191-24-2	Benzo(g,h,i)perylene	↓	0

(1) - Cannot be separated from Diphenylamine

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO. **0310**

Job Name: ASC Contract: NEESA 06618

Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) soil Lab Sample ID: JM9435C

Sample wt/vol: 15.2 (g/mL) g Lab File ID: D8756

Level: (low/med) low Date Received: 062394

% Moisture: 57.4 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 062894

Injection Volume: 1.0 (uL) Dilution Factor: 5.8

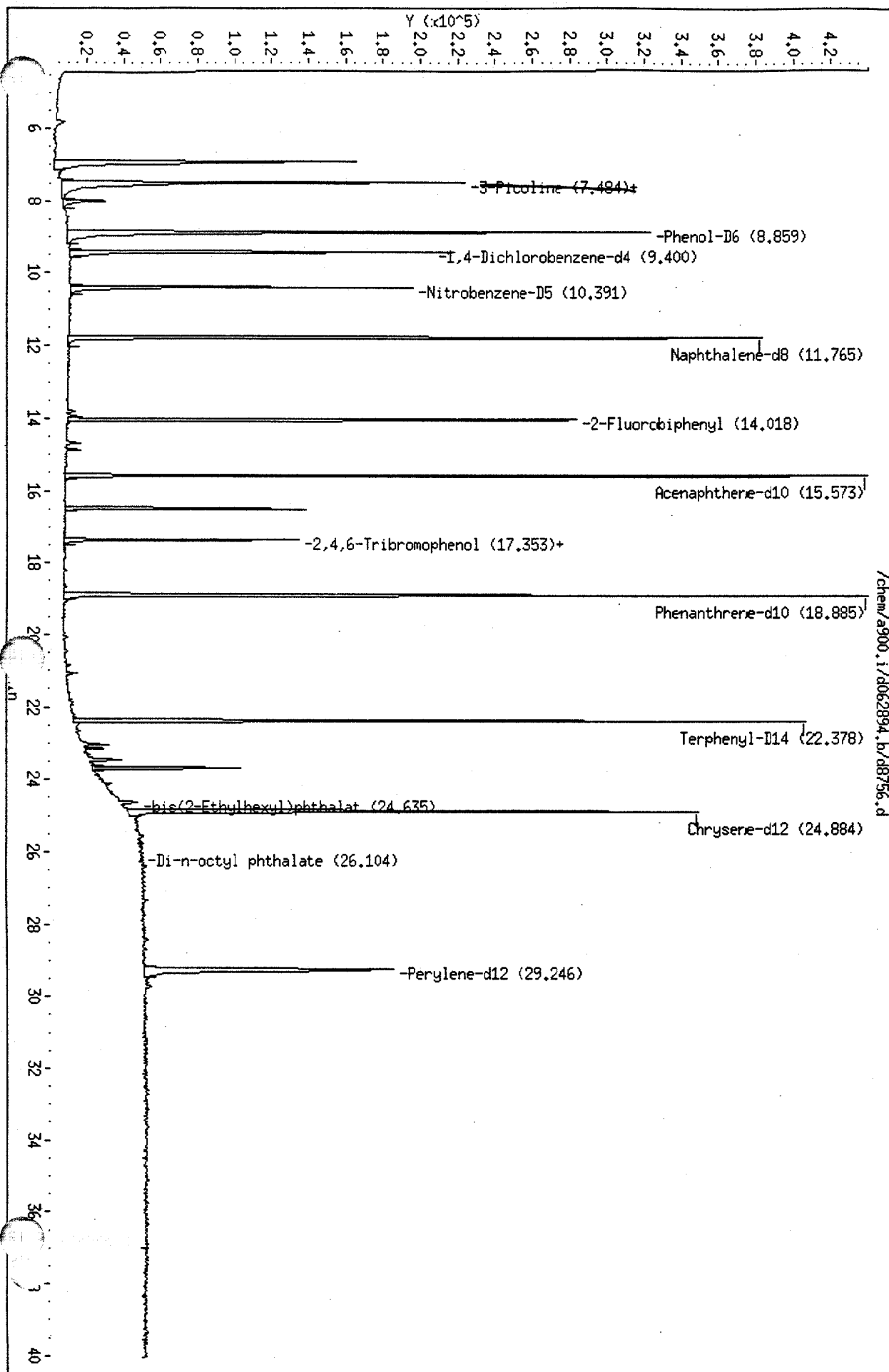
GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 2

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Pentanol Isomer	16.48	4700	J
2. 8017-34-3	Technical Chlorophenanthrene		3500	J
3.	(DDT)			
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.				

Data File: /chem/a900.1/d062894.b/d8756.d  
Date: 28-JUN-94 17:59  
Instrument: a900.1  
Sample ID :  
Column phase : J&W DB-5  
Volume Injected (ul) : 1.0



/chem/a900.1/d062894.b/d8756.d

C6618

Column diameter : 0.25

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/d062894.b/d8756.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 28-JUN-94 17:59 Autotune Date: {  
 Operator : Tom Inst ID: a900.i  
 Smp Info : 15226N-C6618  
 Misc Info : JM9435C,N2C40851A,S:M1,5.22,1:1, BTL#  
 Comment :  
 Method : /chem/a900.i/d062894.b/bna8270d.m  
 Meth Date : 29-Jun-1994 08:02 darren  
 Cal Date : 28-JUN-94 14:35 Cal File: d8753.d  
 Als bottle: 0  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

Compounds	QUANT	SIG	RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN	FINAL
	MASS					(ug/ml)	( ug/L)
-----	----		--	-----	-----	-----	-----
<del>3 Picoline</del>	93.00		7.484	(0.796)	5041	1.00	<del>1.00 (1.00) RT</del>
\$ 2-Fluorophenol	112.00		7.484	(0.796)	249666	59.0	59.0
\$ 10 Phenol-D6	99.00		8.859	(0.942)	365008	78.4	78.4
* 17 1,4-Dichlorobenzene-d4	152.00		9.400	(1.000)	118991OK	40.0	
\$ 27 Nitrobenzene-D5	82.00		10.391	(0.883)	157752	35.9	35.9
* 37 Naphthalene-d8	136.00		11.765	(1.000)	447335OK	40.0	
\$ 51 2-Fluorobiphenyl	172.00		14.018	(0.900)	262260	45.3	45.3
* 58 Acenaphthene-d10	164.00		15.573	(1.000)	265443OK	40.0	
\$ 74 2,4,6-Tribromophenol	330.00		17.353	(1.114)	36503	33.2	33.2
<del>75 4-Bromophenyl phenyl ether</del>	248.00		17.353	(0.919)	2314	1.08	<del>1.08 (1.08) RT</del>
* 81 Phenanthrene-d10	188.00		18.885	(1.000)	415202OK	40.0	
\$ 90 Terphenyl-D14	244.00		22.378	(0.899)	356500	47.2	47.2
<del>95 bis(2-Ethylhexyl)phthalate</del>	149.00		24.635	(0.990)	5245	0.663	<del>0.663 (0.663) &lt; L</del>
* 99 Chrysene-d12	240.00		24.884	(1.000)	332801OK	40.0	
<del>101 Di-n-octyl phthalate</del>	149.00		26.104	(0.893)	1102	0.100	<del>0.100 (0.100) &lt; L</del>
* 105 Perylene-d12	264.00		29.246	(1.000)	209143OK	40.0	

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Qualifier signal failed the ratio test.



Data File: /chem/a900.i/d062894.b/d8756.d  
Report Date: 29-Jun-1994 08:04

Page 2

Q Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount  
Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount  
exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

Data File: /chem/a900.i/d062894.b/d8756.d

Page 11

Date: 28-JUN-94 17:59

Instrument: a900.i

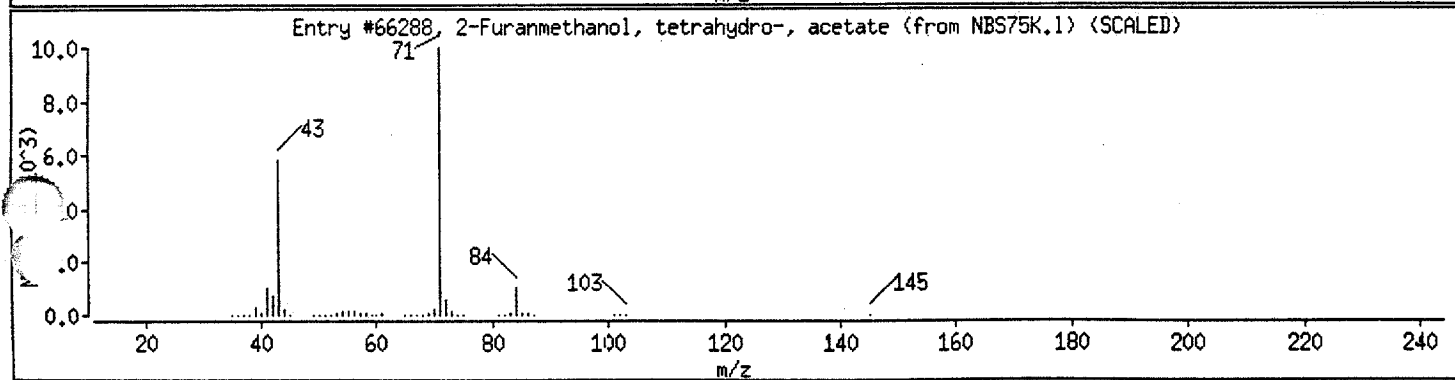
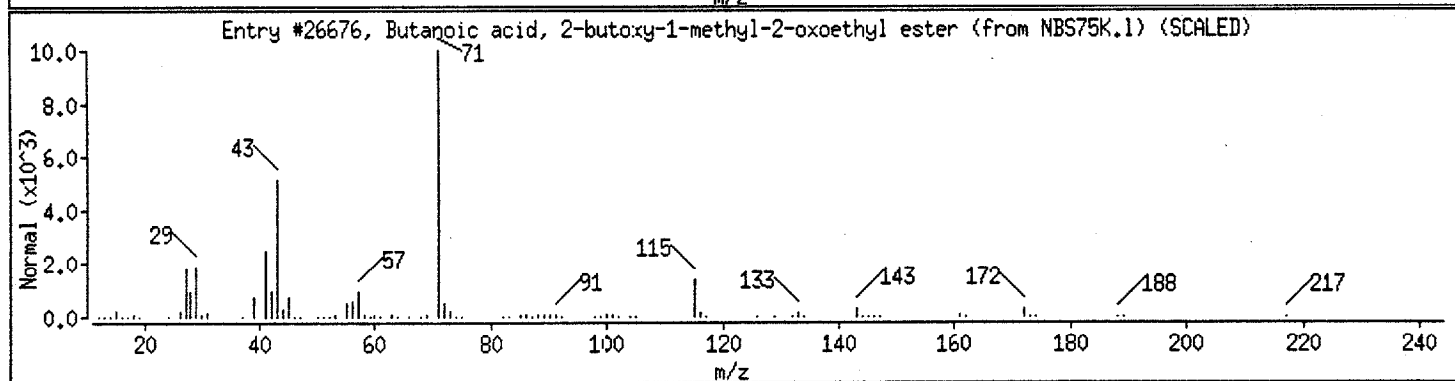
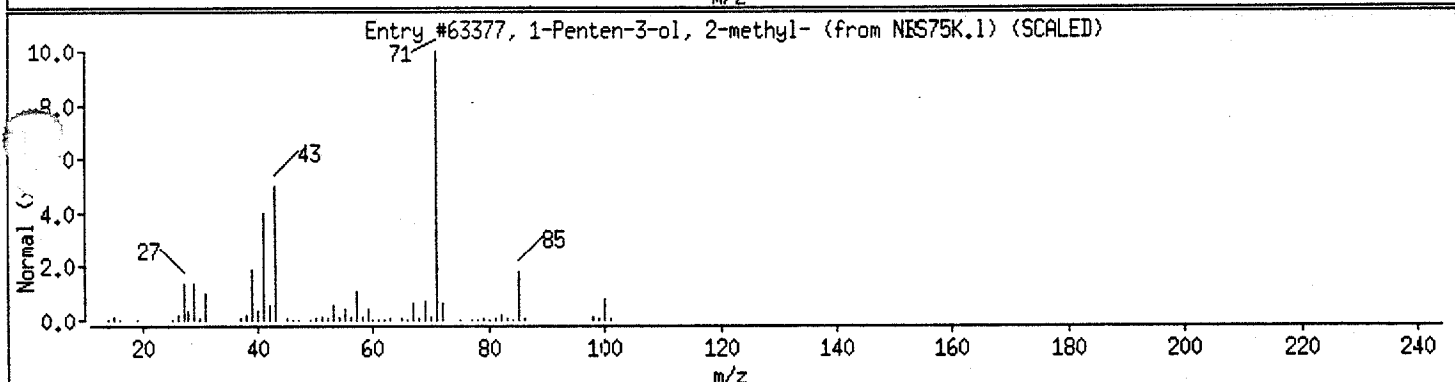
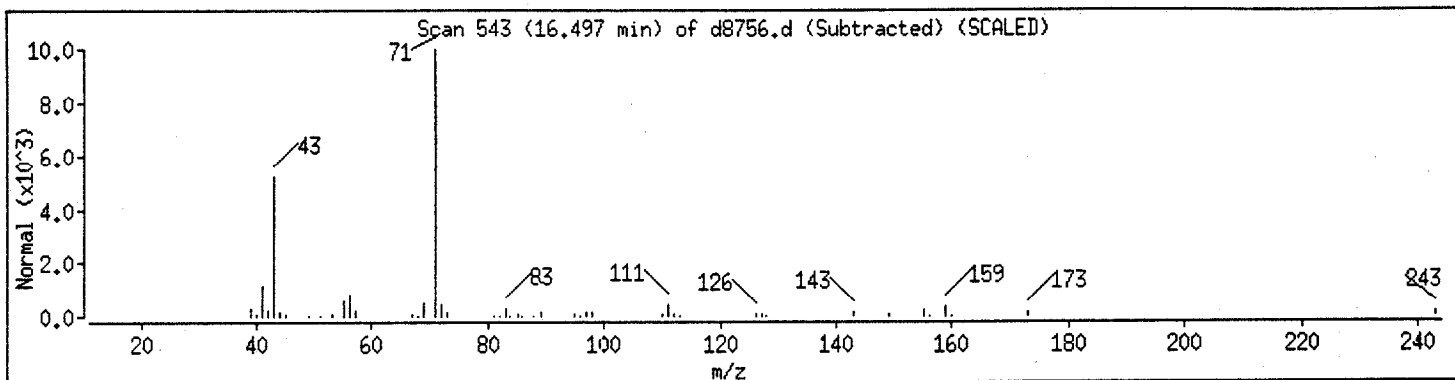
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1-Penten-3-ol, 2-methyl-	2088-07-5	NBS75K.1	63377	39
Butanoic acid, 2-butoxy-1-methyl-2-oxoet	7492-70-8	NBS75K.1	26676	38
2-Furanmethanol, tetrahydro-, acetate	637-64-9	NBS75K.1	66288	38



Data File: /chem/a900.i/d062894.b/d8756.d

Page 12

Date : 28-JUN-94 17:59

Instrument : a900.i

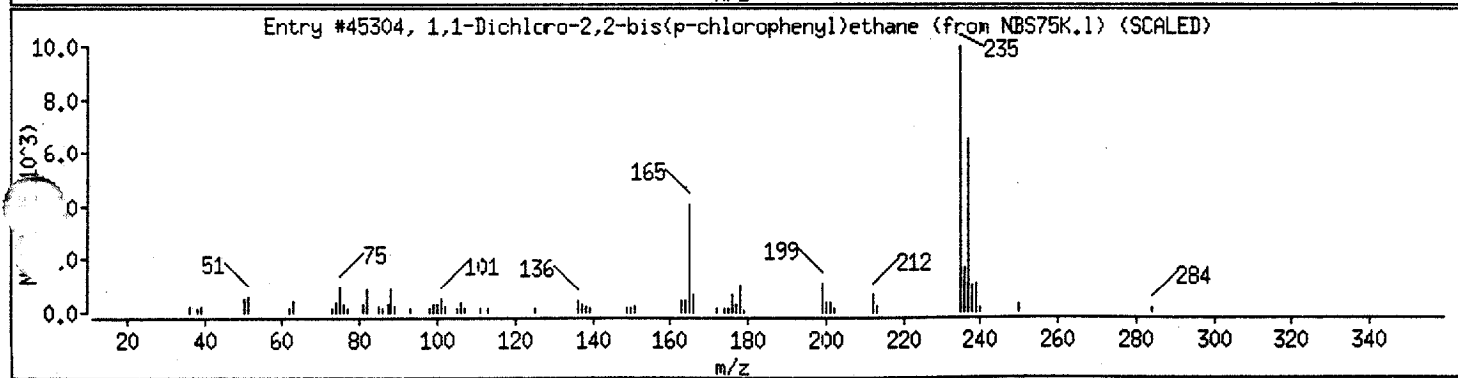
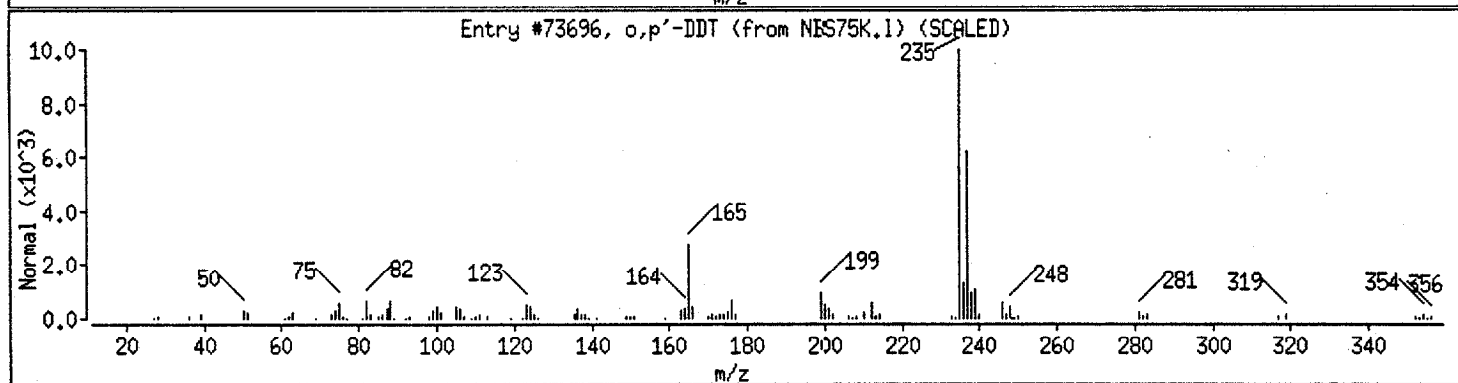
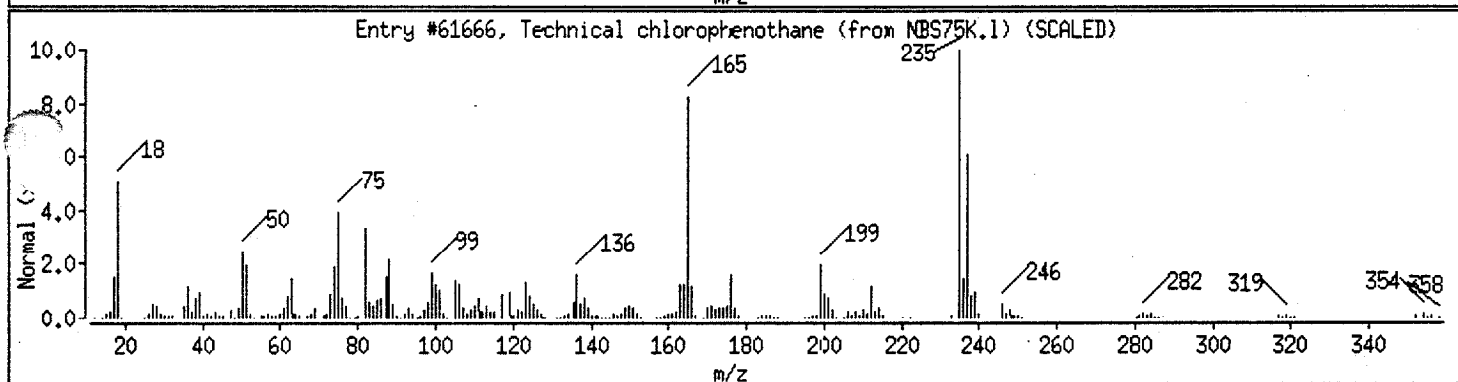
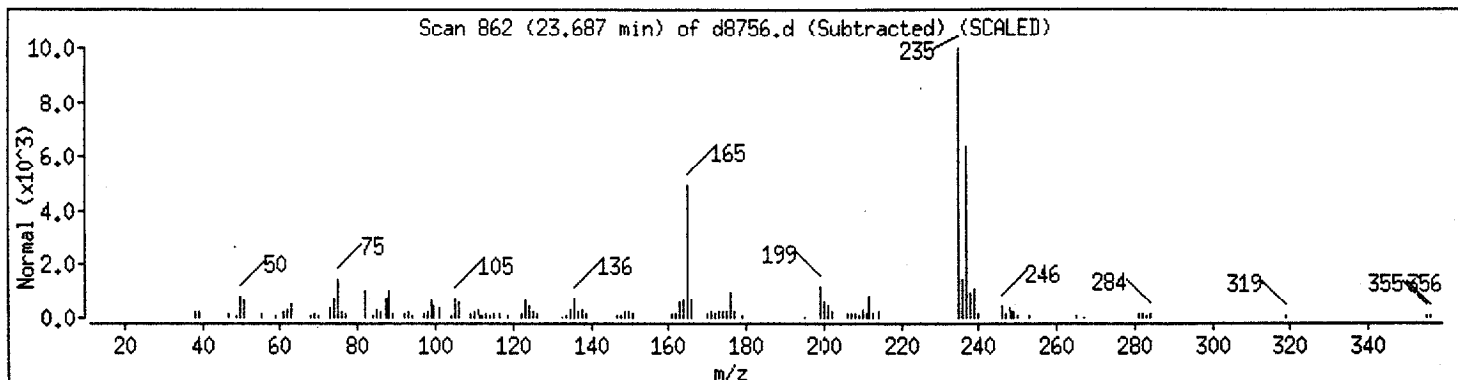
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Technical chlorophenothane	8017-34-3	NBS75K.1	61666	91
o,p'-DDT	789-02-6	NBS75K.1	73696	91
1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane	72-54-8	NBS75K.1	45304	91



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

C6619

Lab Name: ASC

Contract: NEESA

Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) Soil Lab Sample ID: JM9436C

Sample wt/vol: 30.1 (g/mL) g Lab File ID: D8758

Level: (low/med) low Date Received: 062394

% Moisture: 35.7 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 072894

Injection Volume: 1.0 (uL) Dilution Factor: 1000

GPC Cleanup: (Y/N) N pH: 7

CAS NO. — COMPOUND CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/Kg Q

108-95-2-----	Phenol	510000	u
111-44-4-----	bis(2-Chloroethyl) ether		
95-57-8-----	2-Chlorophenol		
541-73-1-----	1,3-Dichlorobenzene		
106-46-7-----	1,4-Dichlorobenzene		
95-50-1-----	1,2-Dichlorobenzene		
95-48-7-----	2-Methylphenol		
108-60-1-----	2,2'-oxybis(1-Chloropropane)		
106-44-5-----	4-Methylphenol		
621-64-7-----	N-Nitroso-di-n-propylamine		
67-72-1-----	Hexachloroethane		
98-95-3-----	Nitrobenzene		
78-59-1-----	Isophorone		
88-75-5-----	2-Nitrophenol		
105-67-9-----	2,4-Dimethylphenol		
111-91-1-----	bis(2-Chloroethoxy)methane		
120-83-2-----	2,4-Dichlorophenol		
120-82-1-----	1,2,4-Trichlorobenzene		
91-20-3-----	Naphthalene		
106-47-8-----	4-Chloroaniline		
87-68-3-----	Hexachlorobutadiene		
59-50-7-----	4-Chloro-3-methylphenol		
91-57-6-----	2-Methylnaphthalene		
77-47-4-----	Hexachlorocyclopentadiene		
88-06-2-----	2,4,6-Trichlorophenol	↓	
95-95-4-----	2,4,5-Trichlorophenol	120000	
91-58-7-----	2-Chloronaphthalene	510000	
88-74-4-----	2-Nitroaniline	1200000	
131-11-3-----	Dimethylphthalate	510000	
208-96-8-----	Acenaphthylene		
606-20-2-----	2,6-Dinitrotoluene	↓	
99-09-2-----	3-Nitroaniline	1200000	
83-32-9-----	Acenaphthene	510000	↓

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0317**

C669

Name: ASC Contract: NEESA

Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) soil Lab Sample ID: J19436C

Sample wt/vol: 30.1 (g/mL) g Lab File ID: D8758

Level: (low/med) low Date Received: 062394

% Moisture: 35.7 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 062894

Injection Volume: 1.0 (uL) Dilution Factor: 1000

GPC Cleanup: (Y/N) N pH: 7

CAS NO. — COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) ug/kg e

51-28-5-----2,4-Dinitrophenol	1200000	u
100-02-7-----4-Nitrophenol	↓	
132-64-9-----Dibenzofuran	510000	
121-14-2-----2,4-Dinitrotoluene	↓	
84-66-2-----Diethylphthalate		
7005-72-3-----4-Chlorophenyl-phenylether		
86-73-7-----Fluorene	↓	
100-01-6-----4-Nitroaniline	1200000	
534-52-1-----4,6-Dinitro-2-methylphenol	↓	
86-30-6-----N-Nitrosodiphenylamine (1)	510000	
101-55-3-----4-Bromophenyl-phenylether	↓	
118-74-1-----Hexachlorobenzene		
87-86-5-----Pentachlorophenol	1200000	
85-01-8-----Phenanthrene	510000	
120-12-7-----Anthracene		
86-74-8-----Carbazole		
84-74-2-----Di-n-butylphthalate		
206-44-0-----Fluoranthene		
129-00-0-----Pyrene		
85-68-7-----Butylbenzylphthalate		
91-94-1-----3,3'-Dichlorobenzidine		
56-55-3-----Benzo(a)anthracene		
218-01-9-----Chrysene		
117-81-7-----bis(2-Ethylhexyl)phthalate		
117-84-0-----Di-n-octylphthalate		
205-99-2-----Benzo(b)fluoranthene		
207-08-9-----Benzo(k)fluoranthene		
50-32-8-----Benzo(a)pyrene		
193-39-5-----Indeno(1,2,3-cd)pyrene		
53-70-3-----Dibenz(a,h)anthracene		
191-24-2-----Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

66619

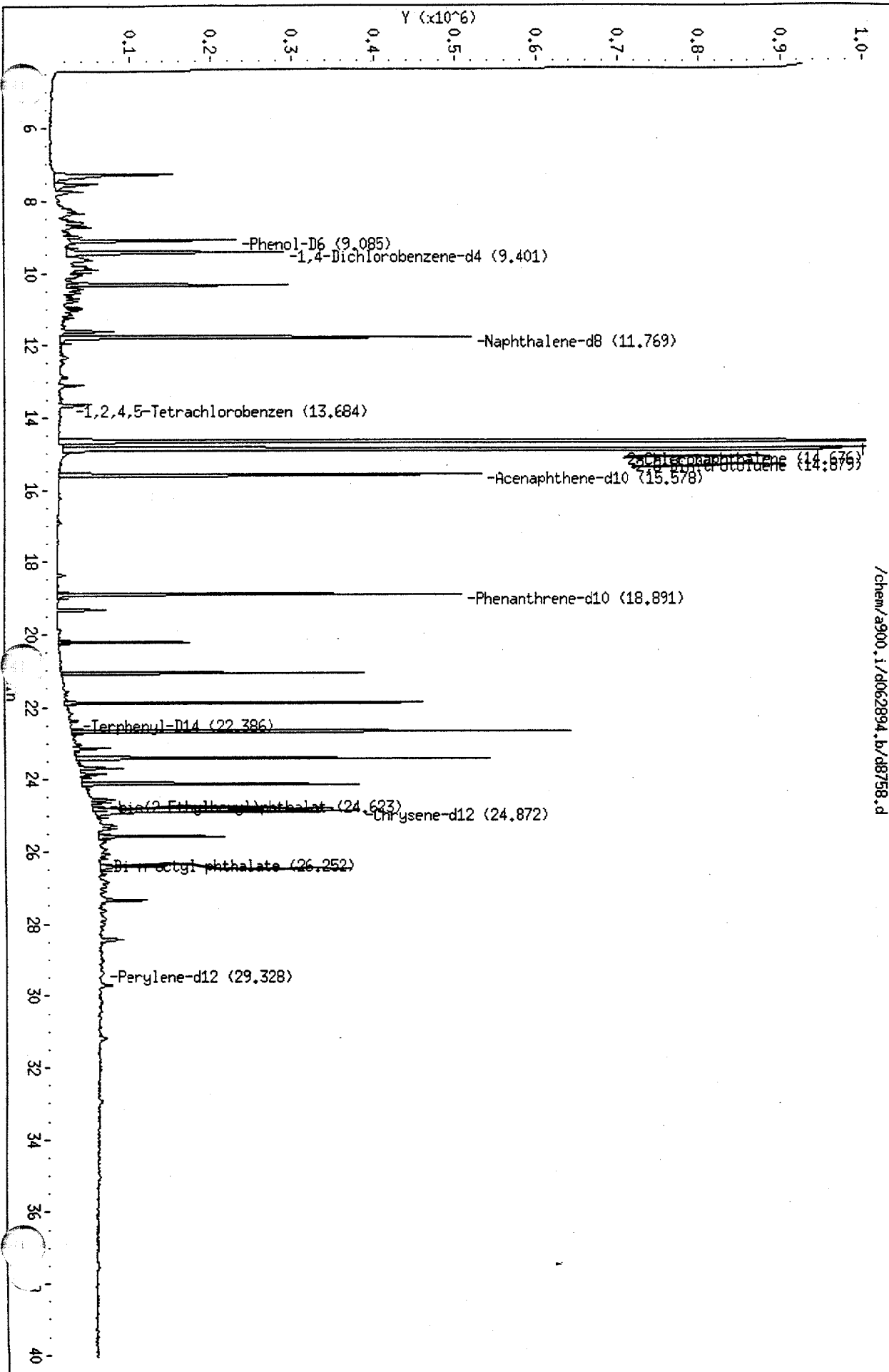
Lab Name: ASC Contract: NESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: —  
 Matrix: (soil/water) Soil Lab Sample ID: JM9436C  
 Sample wt/vol: 30.1 (g/mL) g Lab File ID: D 8758  
 Level: (low/med) low Date Received: 062394  
 % Moisture: 535.7 decanted: (Y/N) N Date Extracted: 062794  
 Concentrated Extract Volume: 10000 (uL) Date Analyzed: 062894  
 Injection Volume: 1.0 (uL) Dilution Factor: 1000  
 GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 20

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	7.26	271000	I
2.	Unknown	7.53	284000	
3.	Unknown	8.22	270000	
4.	<u>124-18-5</u> Decane	9.09	687000	
5.	Unknown hydrocarbon	9.65	452000	
6.	<u>284-177-5</u> Decane 4-methyl	9.85	256000	
7.	Unknown hydrocarbon	9.90	225000	
8.	Unknown hydrocarbon	10.28	6371625300	
9.	<u>1170-21-4</u> Undecane	10.33	316000	
10.	<u>634-93-5</u> Benzenamine 2,4,6-trichlor	14.68	4090000	
11.	Unknown	14.86	4420000	
12.	<u>117-95-8</u> Eicosane	20.22	431000	
13.	<u>629-74-7</u> Heneicosane	21.06	873000	
14.	<u>629-91-0</u> Docosane	21.87	1190000	
15.	<u>638-61-5</u> Tricosane	22.66	1480000	
16.	<u>646-31-1</u> Tetracosane	23.46	1760000	
17.	<u>679-92-5</u> Nonadecane	24.13	997000	
18.	<u>679-78-7</u> Heptadecane	24.83	977000	
19.	<u>593-45-3</u> Octadecane	25.57	528000	
20.	<u>725-64-1</u> Heptadecane, 9-octyl	26.29	359000	
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/a900.i/d062894.b/d8758.d  
Date: 28-JUN-94 19:38  
Instrument: a900.i  
Sample ID:  
Column phase: J&W DB-5  
Volume Injected (uL): 1.0



/chem/a900.i/d062894.b/d8758.d

Column diameter: 0.25

C6669

Data File: /chem/a900.i/d062894.b/d8758.d  
Report Date: 29-Jun-1994 08:06

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/d062894.b/d8758.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 28-JUN-94 19:38 Autotune Date: {  
 Operator : Tom Inst ID: a900.i  
 Smp Info : 15226N-C6619  
 Misc Info : JM9436C,N2C40851,S:M1,30.2,10:100, BTL#  
 Comment :  
 Method : /chem/a900.i/d062894.b/bna8270d.m  
 Meth Date : 29-Jun-1994 08:02 darren  
 Cal Date : 28-JUN-94 14:35 Cal File: d8753.d  
 Als bottle: 0  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

Compounds	QUANT SIG	MASS	RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/ml)	FINAL (ug/L)
----- Phenol-D6	-----	99.00	9.085	(0.966)	5348	1.03	1.03 (TaQR)
* / 1,4-Dichlorobenzene-d4		152.00	9.401	(1.000)	132861OK	40.0	
* 37 Naphthalene-d8		136.00	11.769	(1.000)	516136OK	40.0	
<del>47 1,2,4,5-Tetrachlorobenzene</del>		216.00	13.684	(0.878)	2254	0.610	<del>0.610 (aR)</del> L
<del>52 2-Chloronaphthalene</del>		162.00	14.676	(0.942)	41657	5.69	<del>5.69 (aR)</del> RT
<del>55 2,6-Dinitrotoluene</del>		165.00	14.879	(0.955)	3726	1.40	<del>1.40 (aR)</del> RT
* 58 Acenaphthene-d10		164.00	15.578	(1.000)	301449OK	40.0	
* 81 Phenanthrene-d10		188.00	18.891	(1.000)	449882OK	40.0	
\$ 90 Terphenyl-D14		244.00	22.386	(0.900)	1335	0.167	0.167 (aR)
<del>95 bis(2-Ethylhexyl)phthalate</del>		149.00	24.623	(0.990)	5442	0.649	<del>0.649 (aR)</del> C1
* 99 Chrysene-d12		240.00	24.872	(1.000)	352846OK	40.0	
<del>101 Di-n-octyl phthalate</del>		149.00	26.252	(0.895)	107	0.305	<del>0.305 (aR)</del> C1
* 105 Perylene-d12		264.00	29.328	(1.000)	6652 LOW	40.0	

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation (BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.



Data File: /chem/a900.i/d062894.b/d8758.d

Date: 28-JUN-94 19:38

Instrument: a900.i

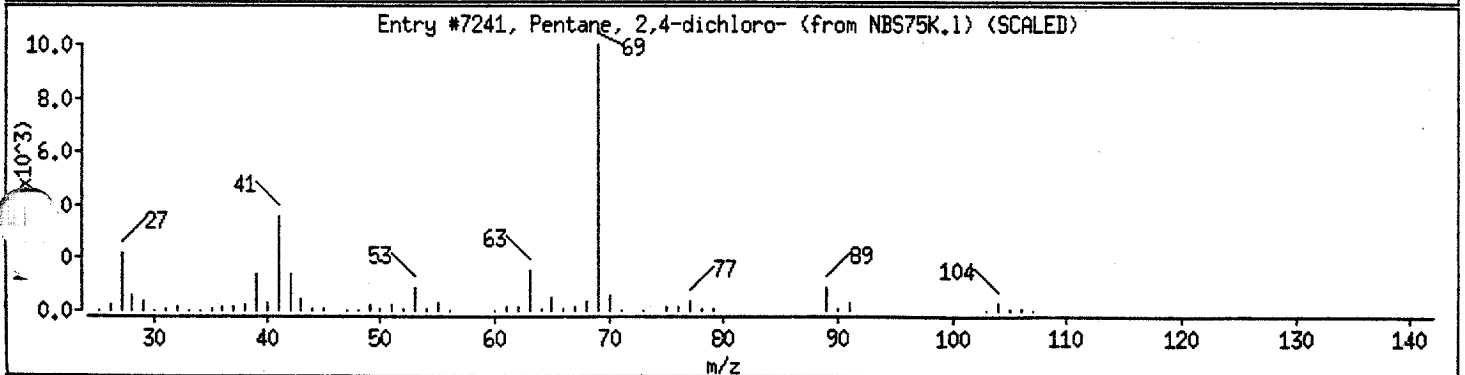
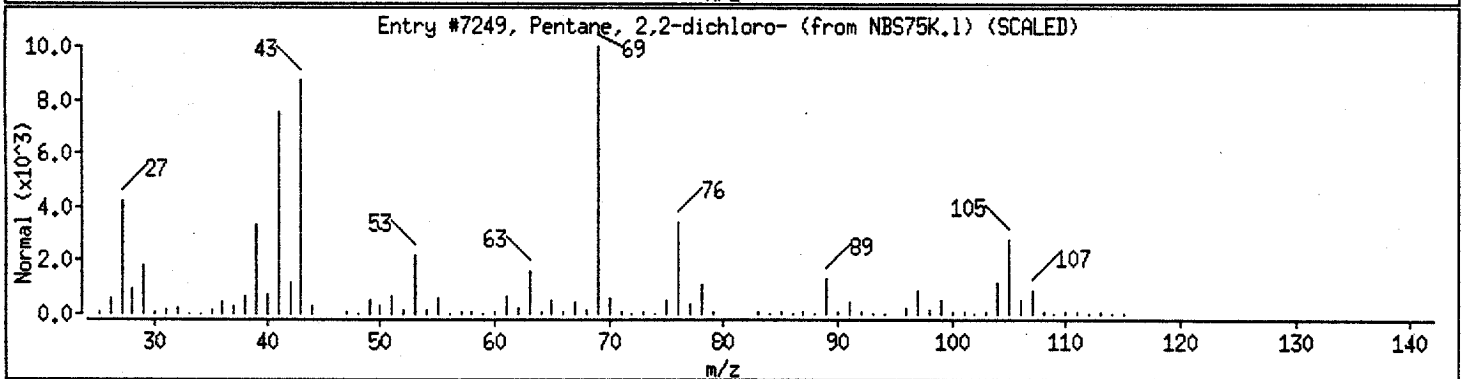
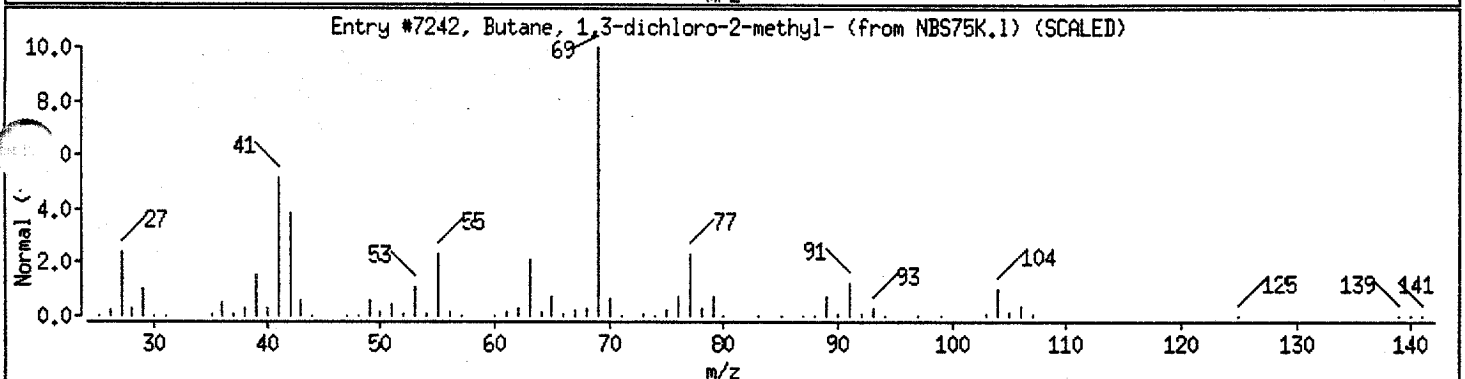
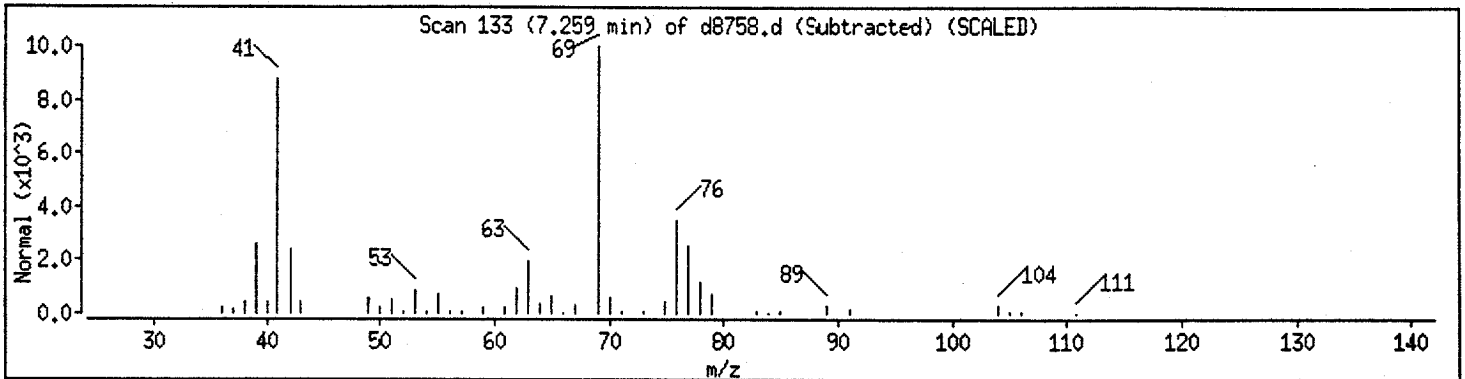
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, 1,3-dichloro-2-methyl-	23010-07-3	NBS75K.1	7242	40
Pentane, 2,2-dichloro-	34887-14-4	NBS75K.1	7249	25
Pentane, 2,4-dichloro-	625-67-2	NBS75K.1	7241	23



Data File: /chem/a900.i/d062894.b/d8758.d

Page 8

Date : 28-JUN-94 19:38

Instrument : a900.i

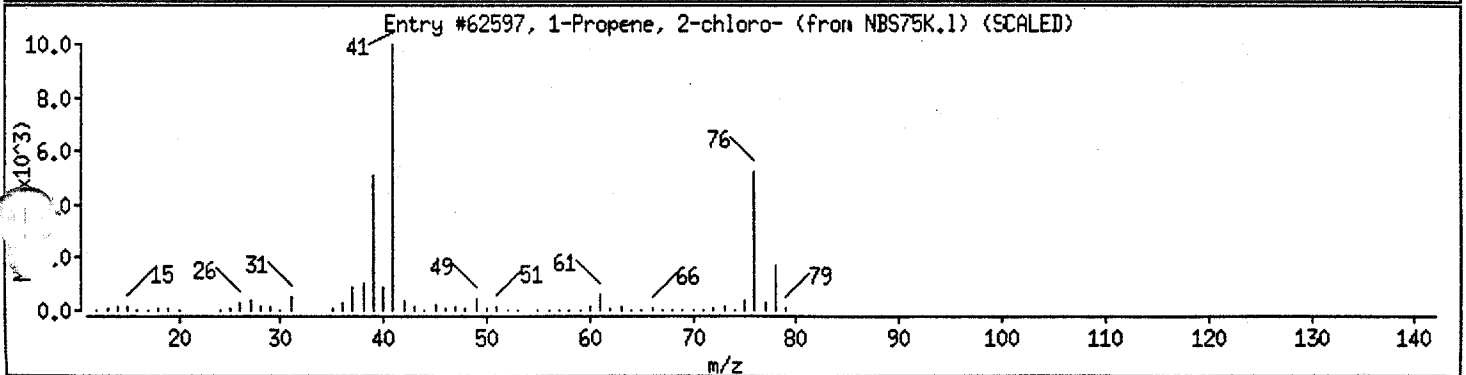
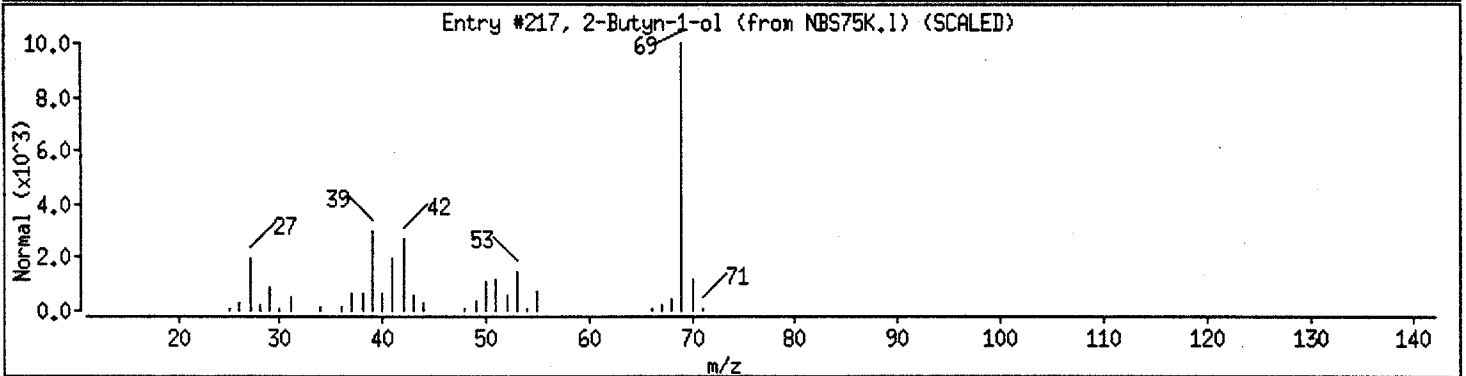
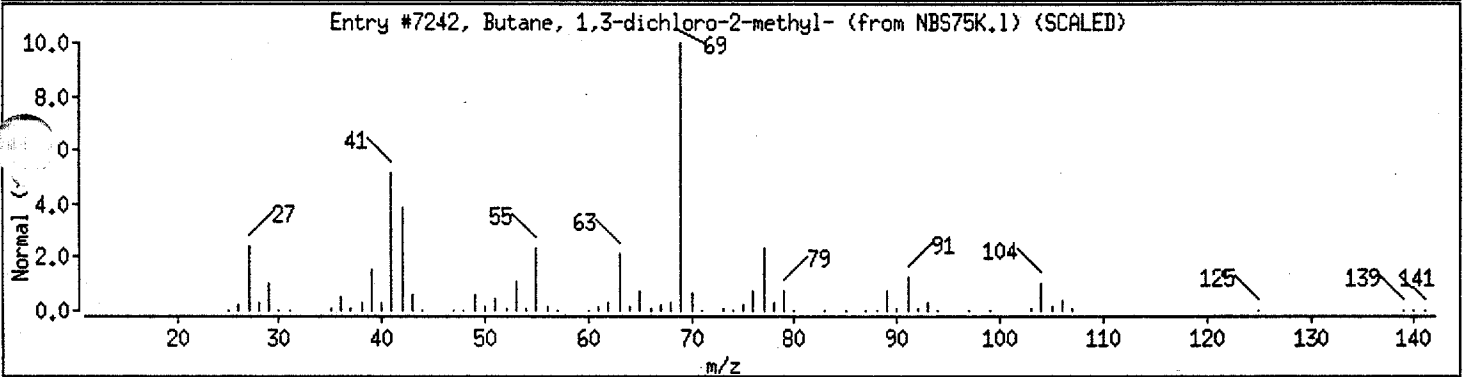
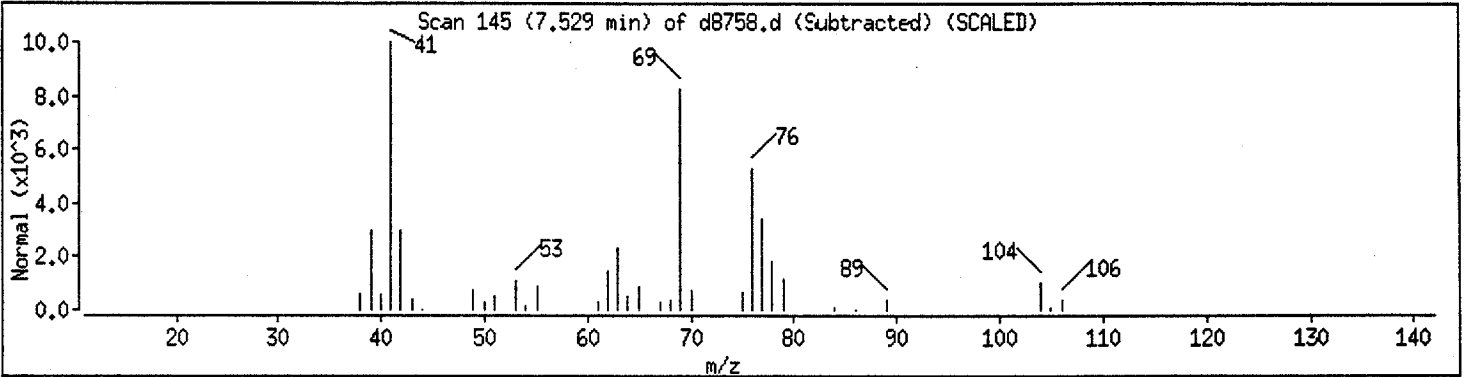
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, 1,3-dichloro-2-methyl-	23010-07-3	NBS75K.1	7242	50
2-Butyn-1-ol	764-01-2	NBS75K.1	217	12
1-Propene, 2-chloro-	557-98-2	NBS75K.1	62597	11



Data File: /chem/a900.i/d062894.b/d8758.d

Page 13

Date: 28-JUN-94 19:38

Instrument: a900.i

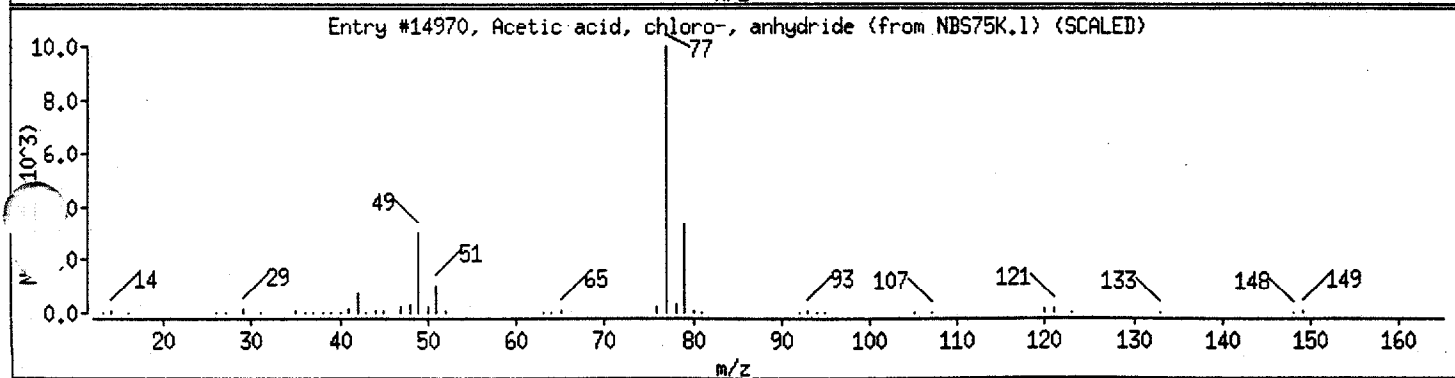
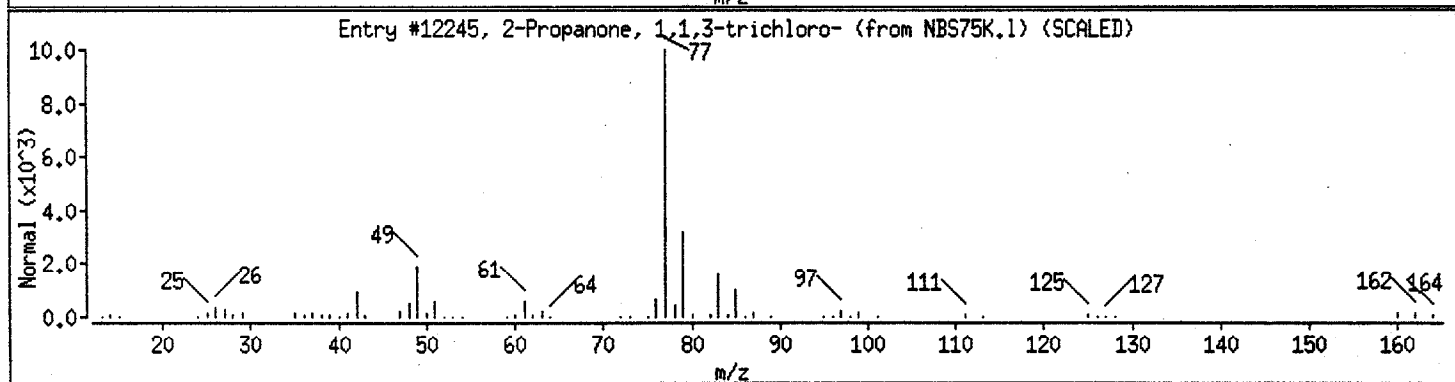
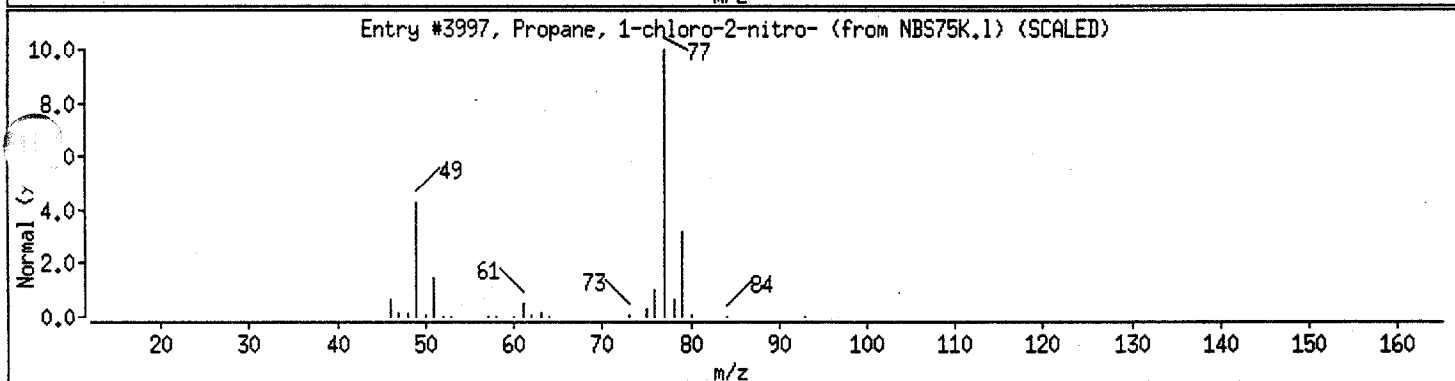
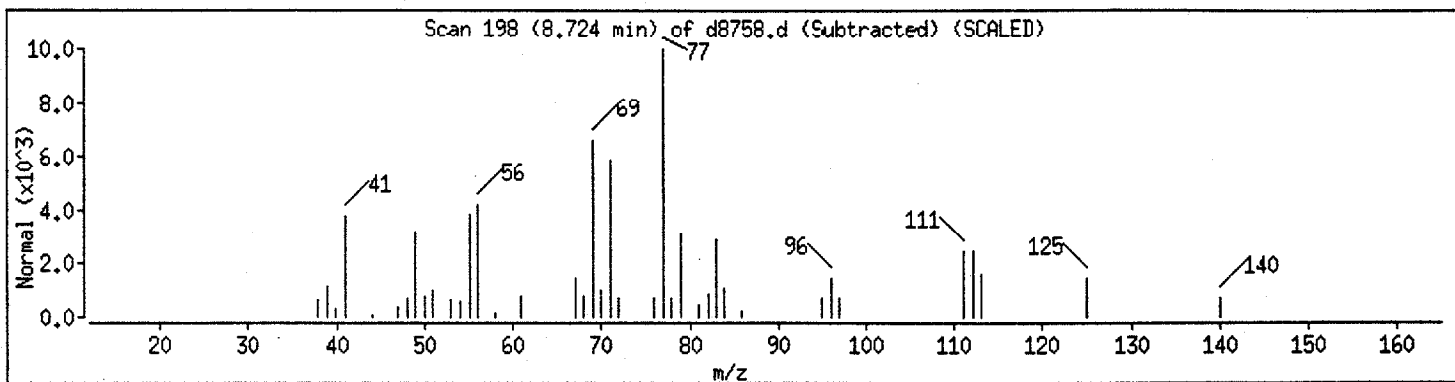
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Propane, 1-chloro-2-nitro-	2425-66-3	NBS75K.1	3997	38
2-Propanone, 1,1,3-trichloro-	921-03-9	NBS75K.1	12245	32
Acetic acid, chloro-, anhydride	541-88-8	NBS75K.1	14970	32



Data File: /chem/a900.i/d062894.b/d8758.d

Page 16

Date: 28-JUN-94 19:38

Instrument: a900.i

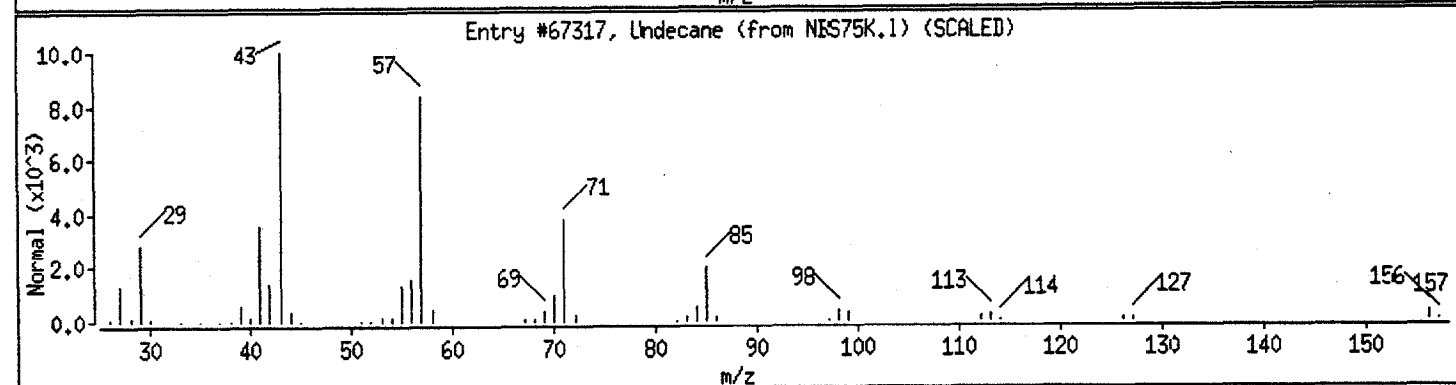
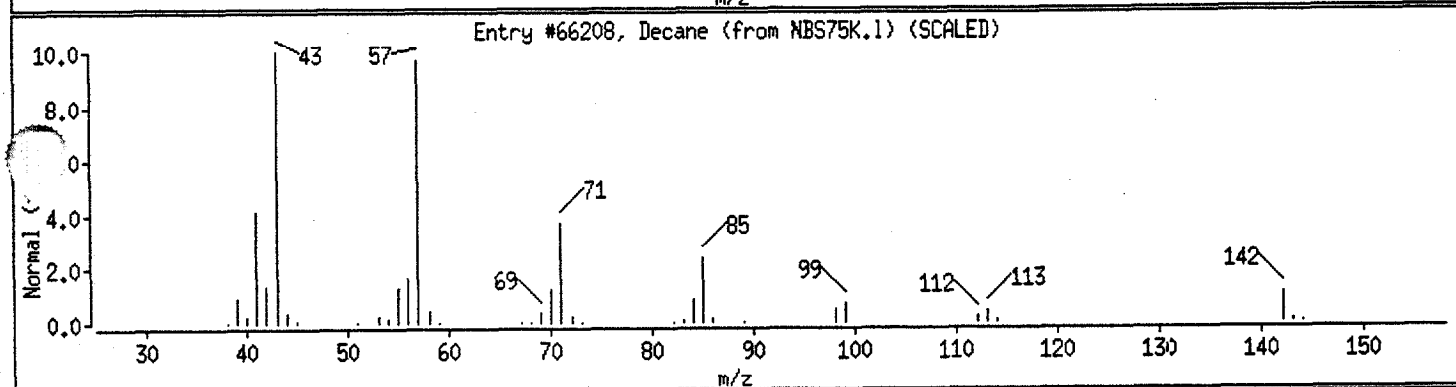
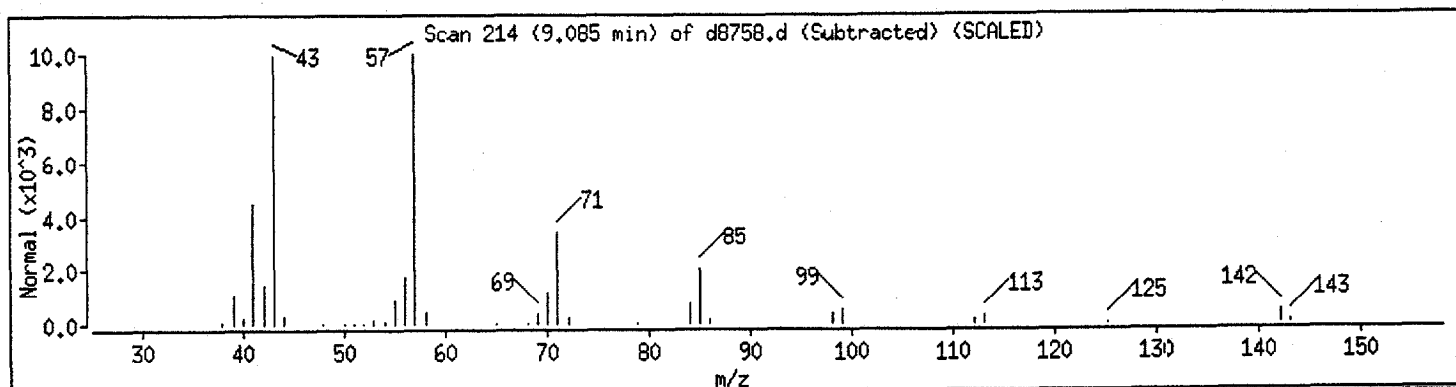
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

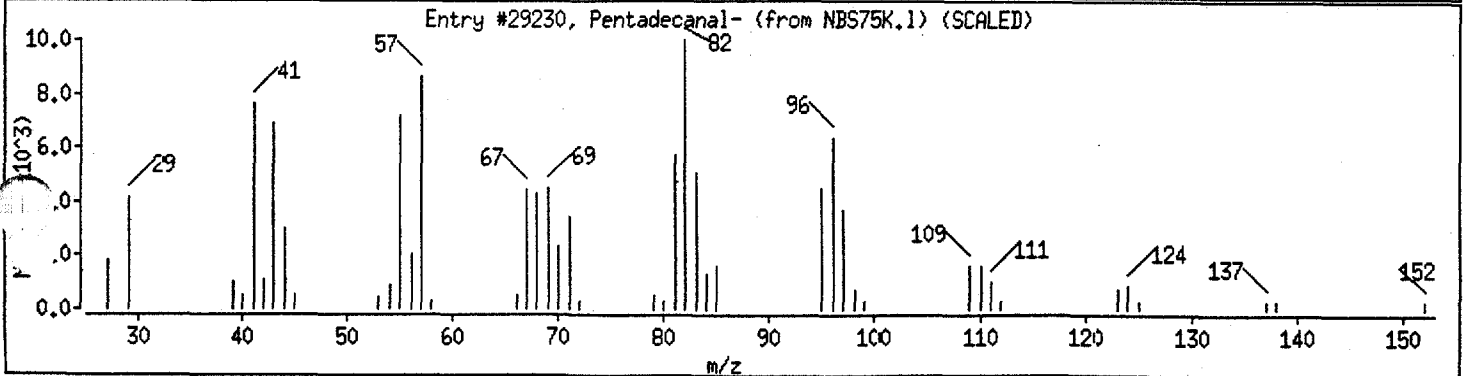
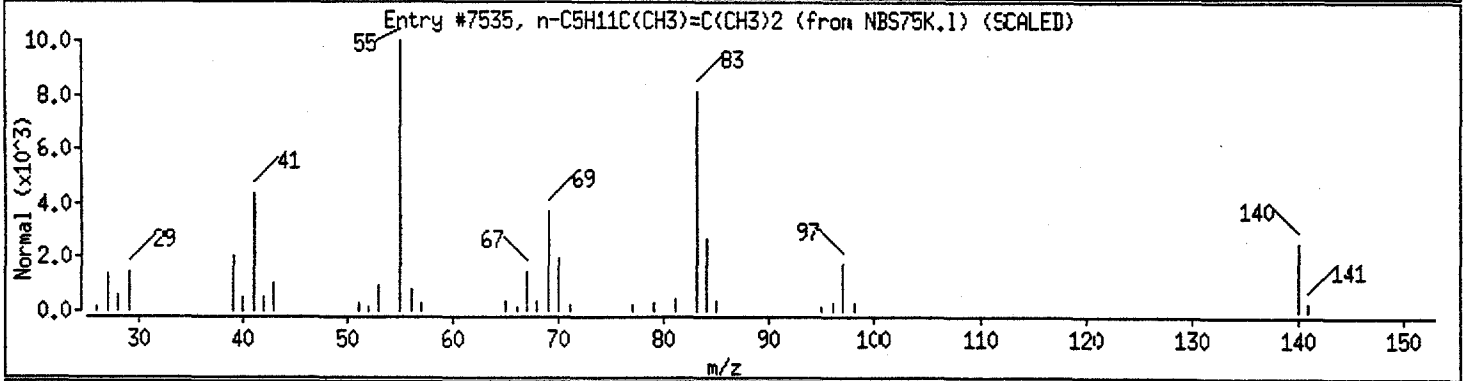
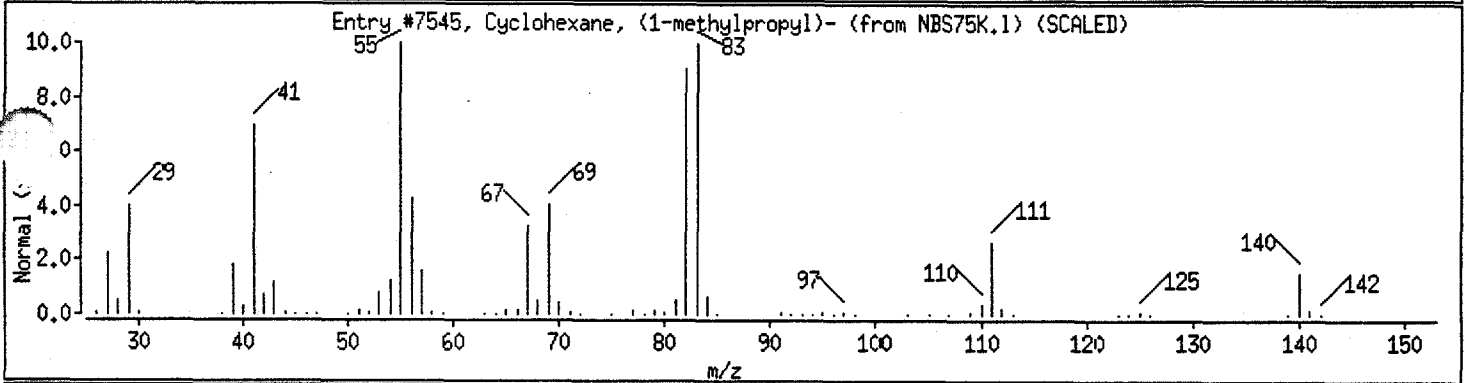
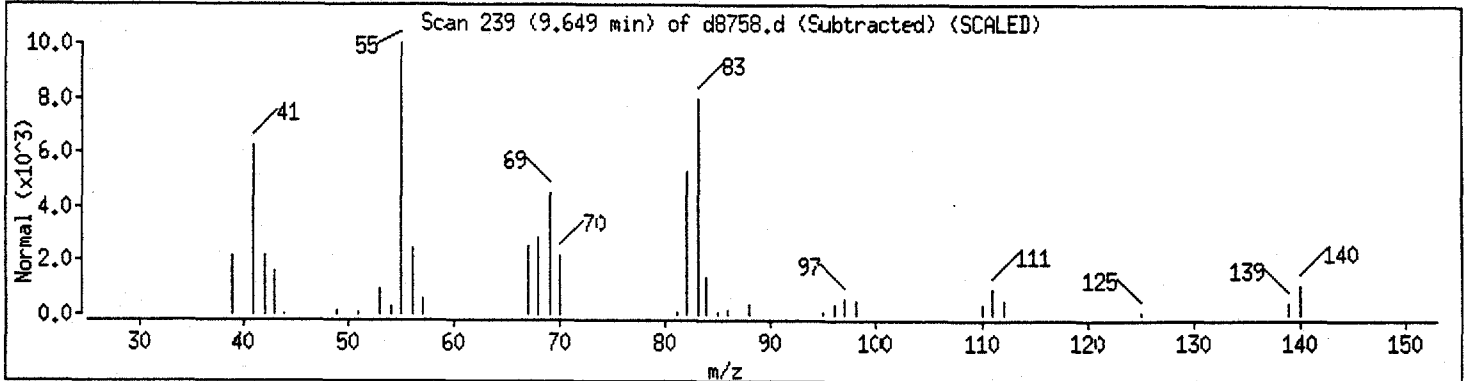
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Decane	124-18-5	NBS75K.1	66208	96
Undecane	1120-21-4	NBS75K.1	67317	90



Data File: /chem/a900.i/d062894.b/d8758.d  
Date: 28-JUN-94 19:38  
Instrument: a900.i  
Sample ID:  
Column phase: J&W DB-5  
Volume Injected (uL): 1.0

Column diameter: 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclohexane, (1-methylpropyl)-	7058-01-7	NBS75K.1	7545	58
n-C5H11C(CH3)=C(CH3)2	19781-18-1	NBS75K.1	7535	43
Pentadecanal-	2765-11-9	NBS75K.1	29230	43



Data File: /chem/a900.i/d062894.b/d8758.d

Date : 28-JUN-94 19:38

Instrument : a900.i

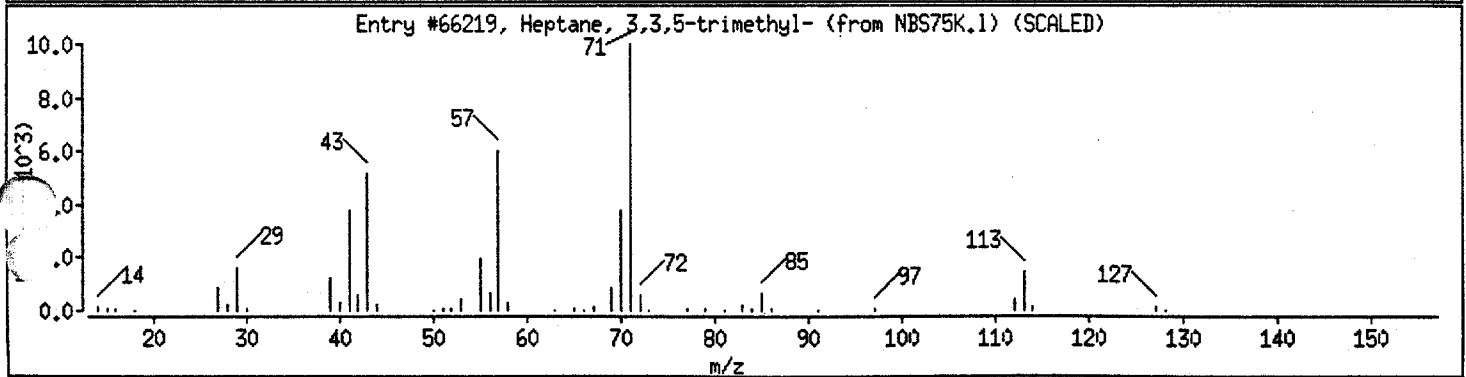
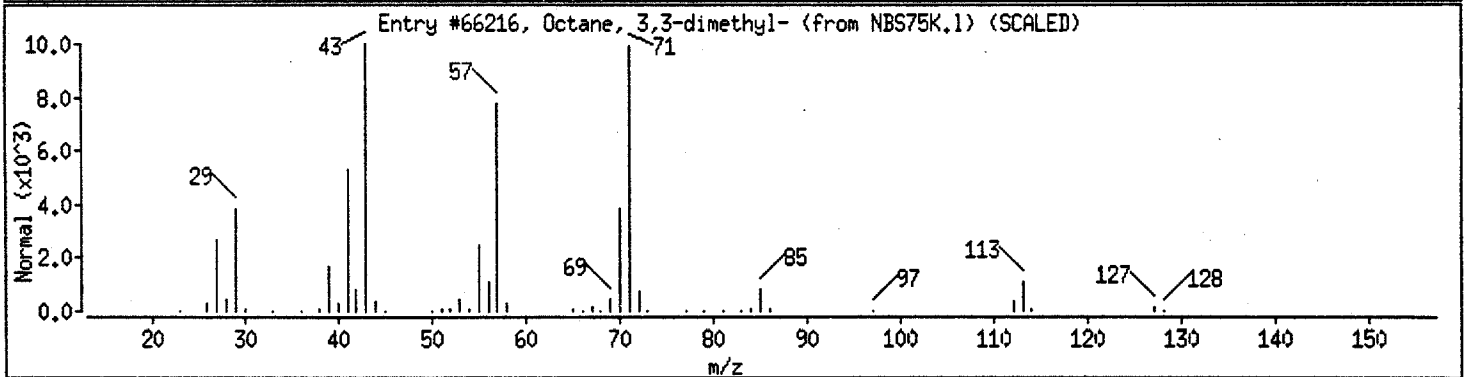
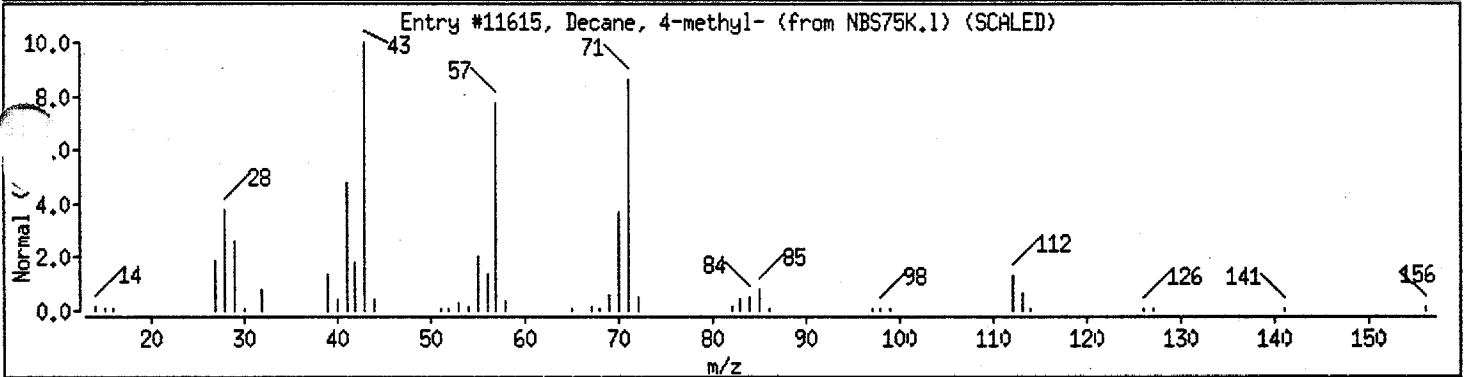
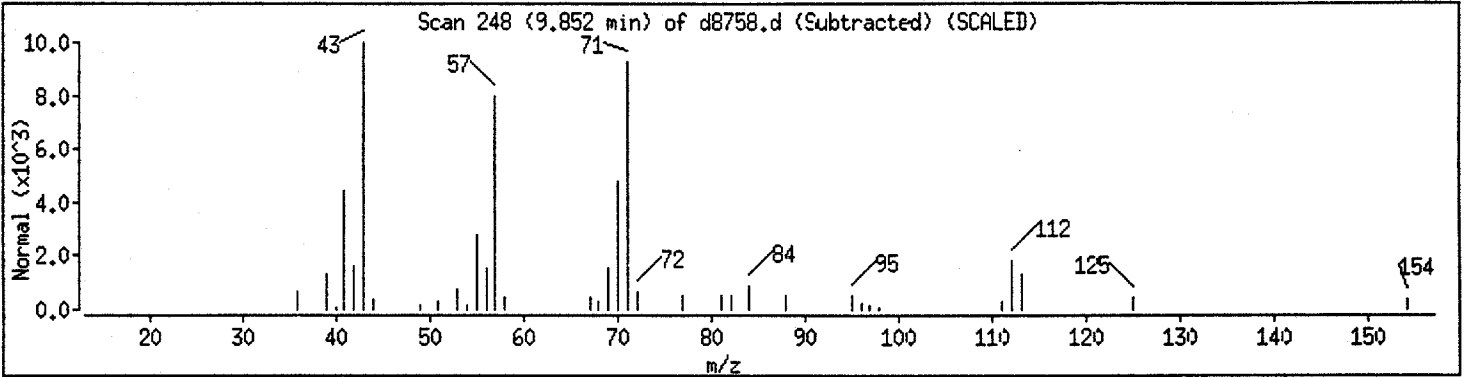
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Decane, 4-methyl-	2847-72-5	NBS75K.1	11615	78
Octane, 3,3-dimethyl-	4110-44-5	NBS75K.1	66216	64
Heptane, 3,3,5-trimethyl-	7154-80-5	NBS75K.1	66219	64



Data File: /chem/a900.i/d062894.b/d8758.d

Date : 28-JUN-94 19:38

Instrument : a900.i

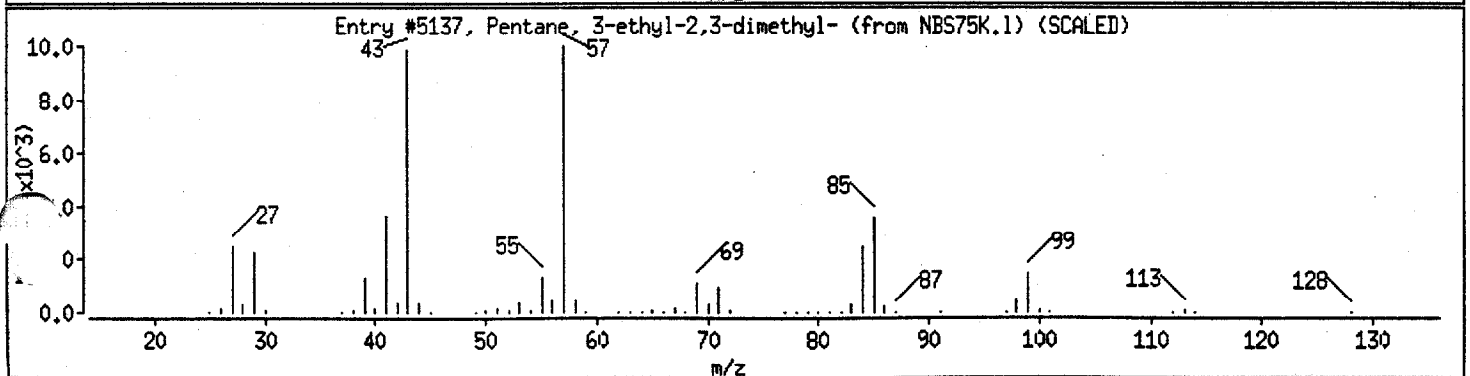
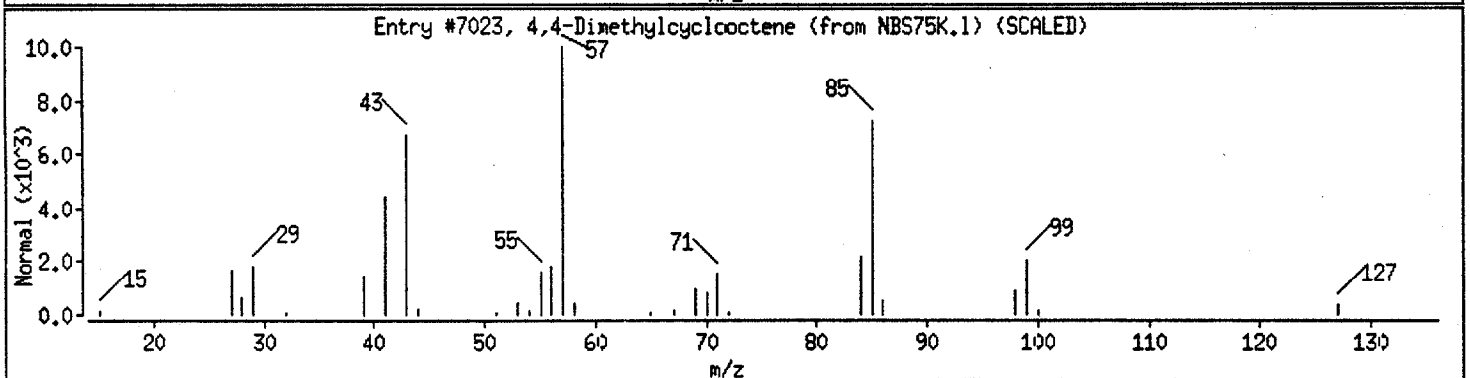
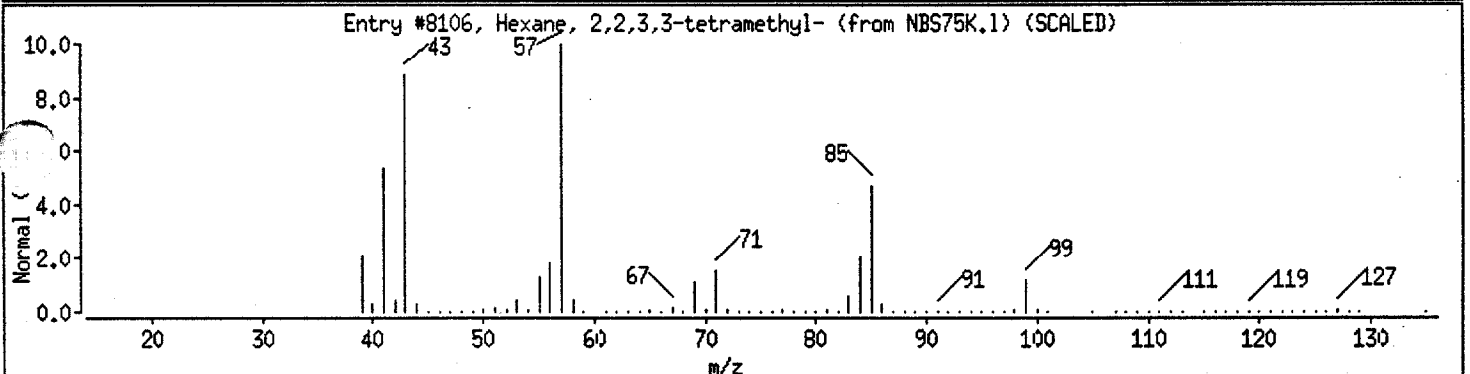
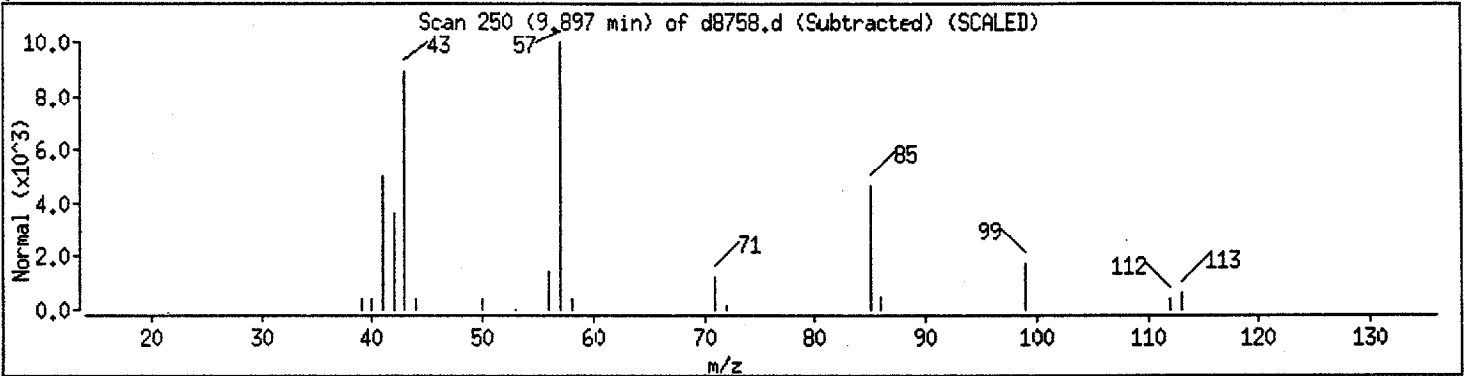
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Hexane, 2,2,3,3-tetramethyl-	13475-81-5	NBS75K.1	8106	50
4,4-Dimethylcyclooctene	0-00-0	NBS75K.1	7023	45
Pentane, 3-ethyl-2,3-dimethyl-	16747-33-4	NBS75K.1	5137	45



Data File: /chem/a900.i/d062894.b/d8758.d

Page 20

Date : 28-JUN-94 19:38

Instrument : a900.i

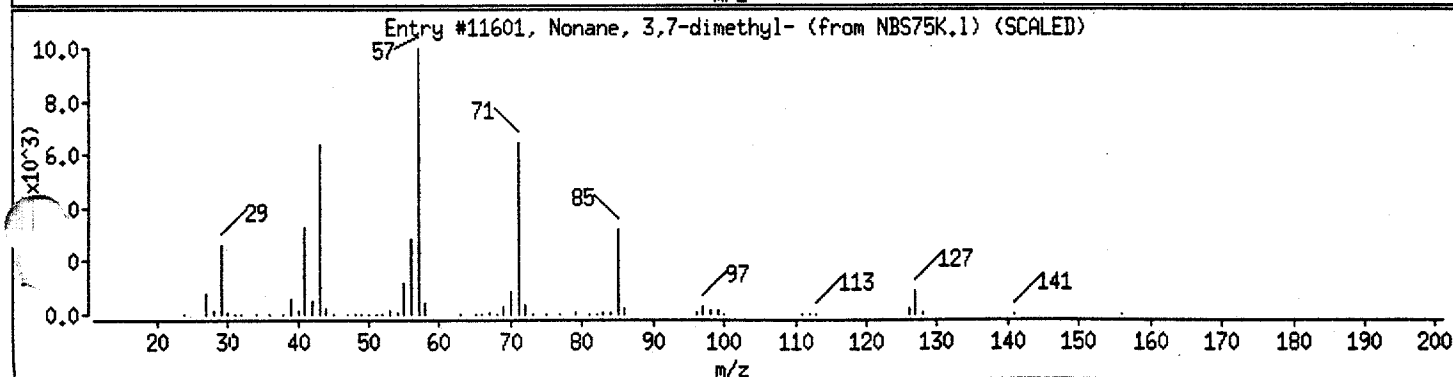
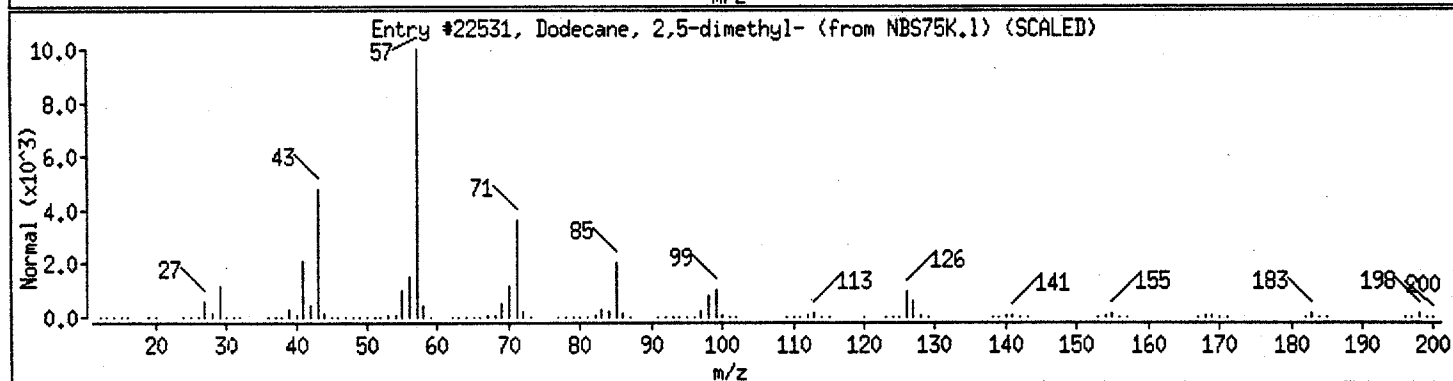
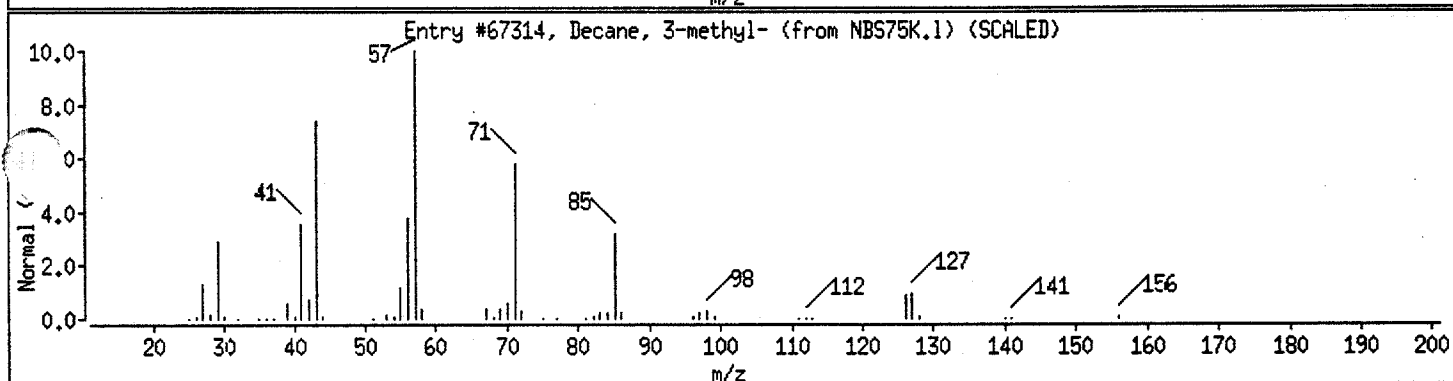
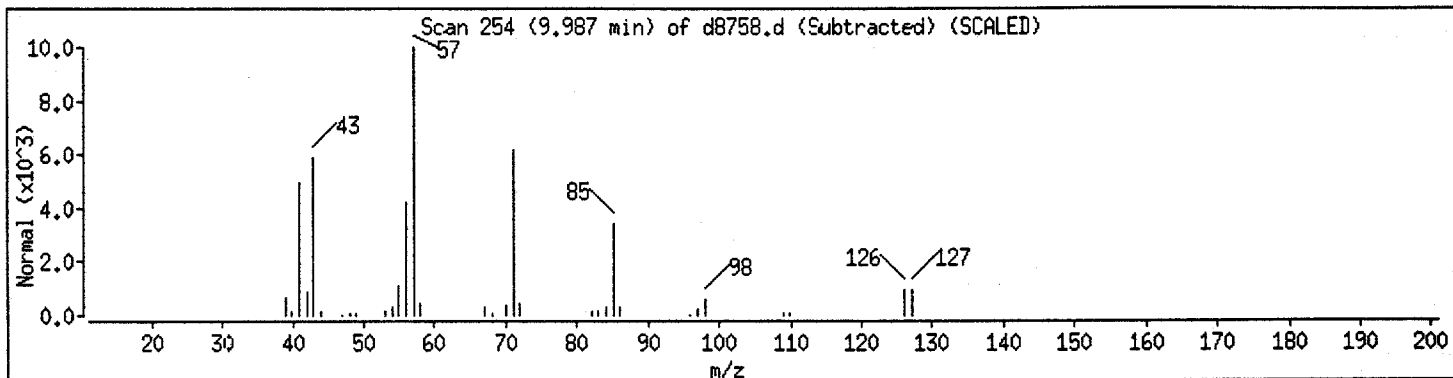
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Decane, 3-methyl-	13151-34-3	NBS75K.1	67314	83
Dodecane, 2,5-dimethyl-	56292-65-0	NBS75K.1	22531	59
Nonane, 3,7-dimethyl-	17302-32-8	NBS75K.1	11601	59





Data File: /chem/a900.i/d062894.b/d8758.d

Page 21

Date : 28-JUN-94 19:38

Instrument : a900.1

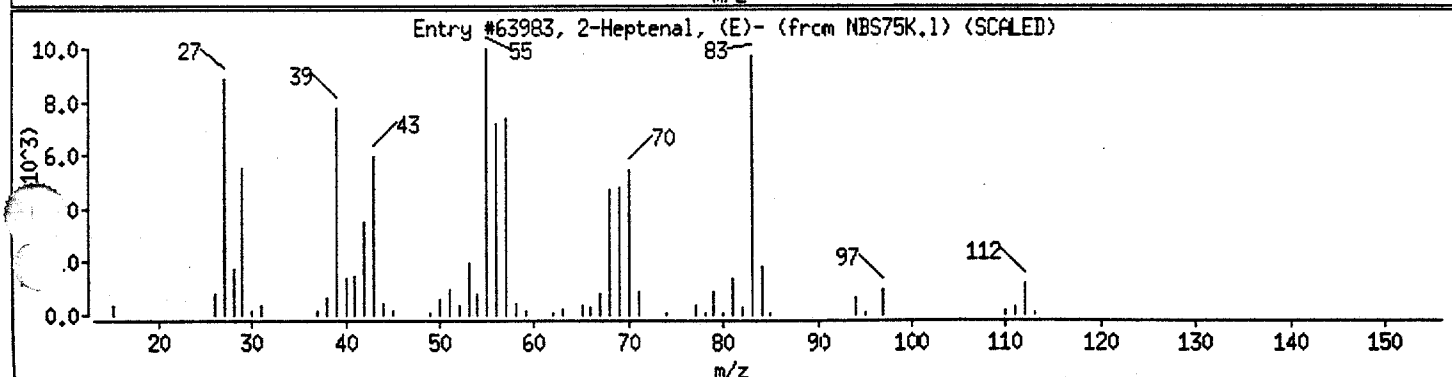
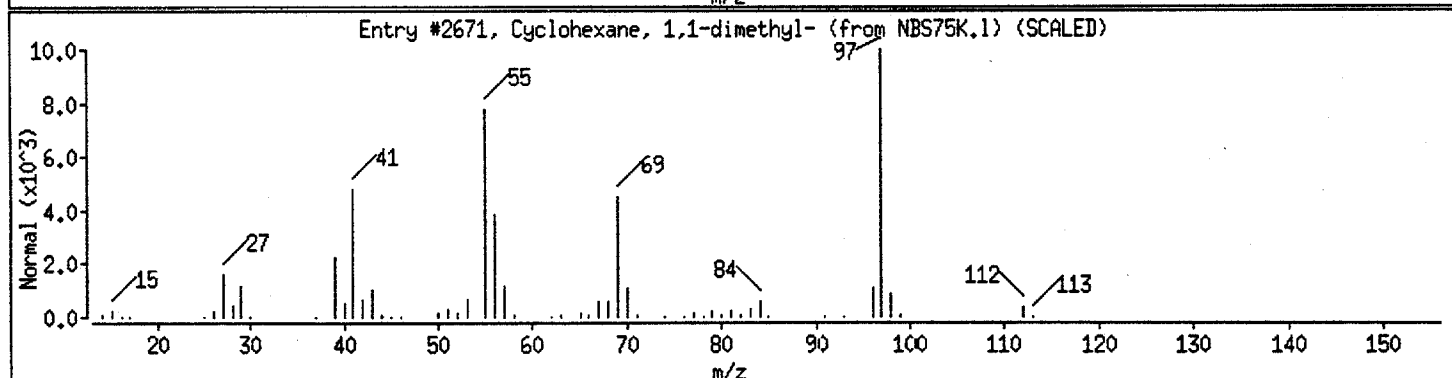
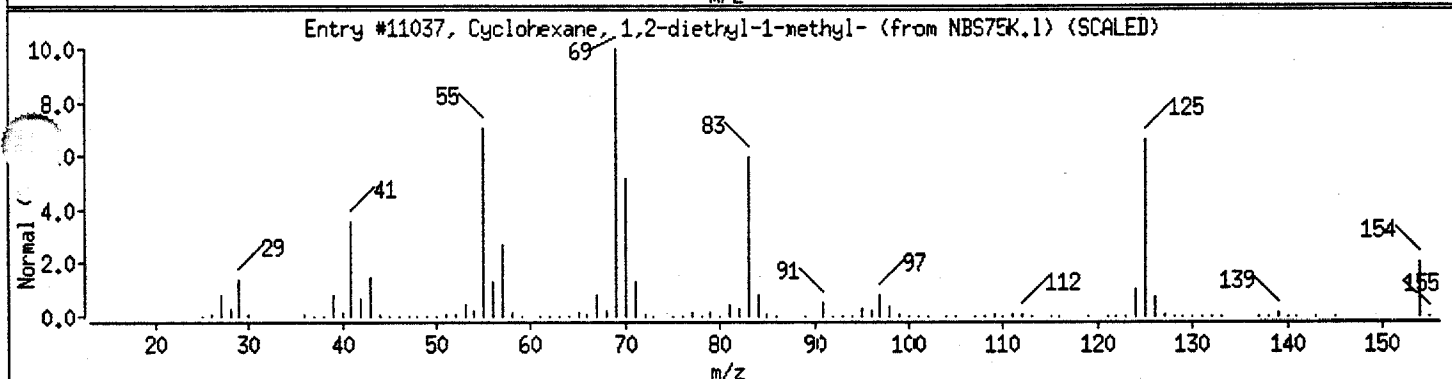
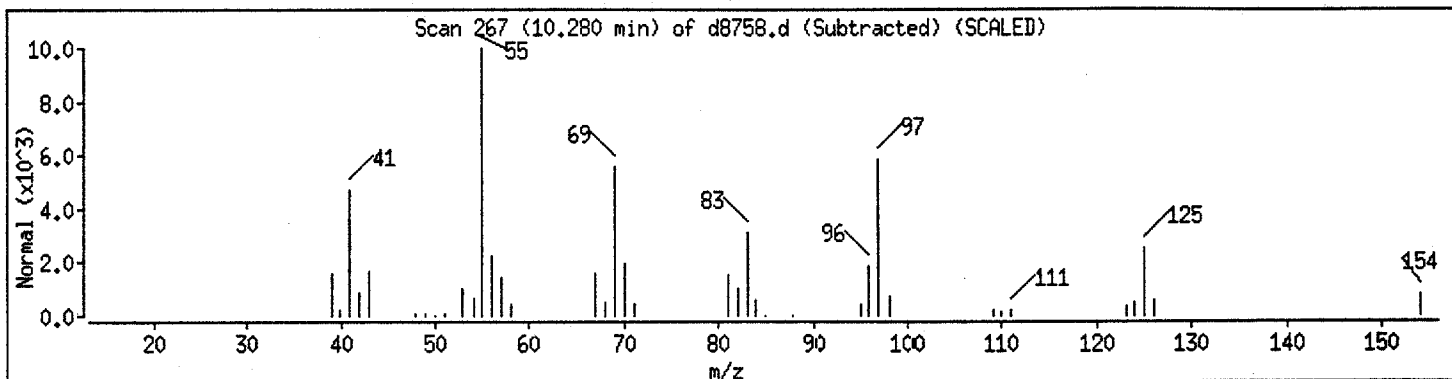
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclohexane, 1,2-diethyl-1-methyl-	61141-79-5	NBS75K.1	11037	43
Cyclohexane, 1,1-dimethyl-	590-66-9	NBS75K.1	2671	35
2-Heptenal, (E)-	18829-55-5	NBS75K.1	63983	27



Data File: /chem/a900.i/d062894.b/d8758.d

Page 22

Date : 28-JUN-94 19:38

Instrument : a900.i

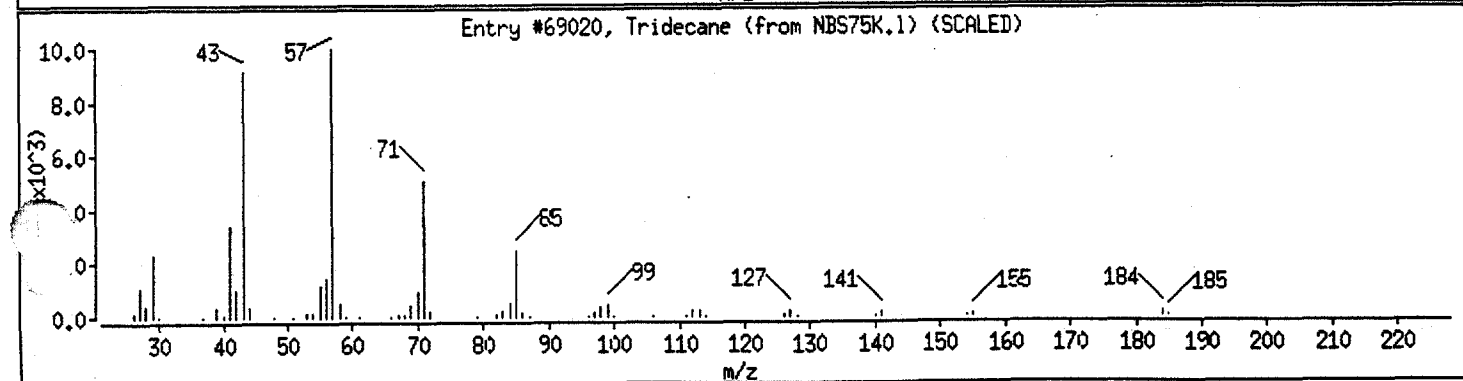
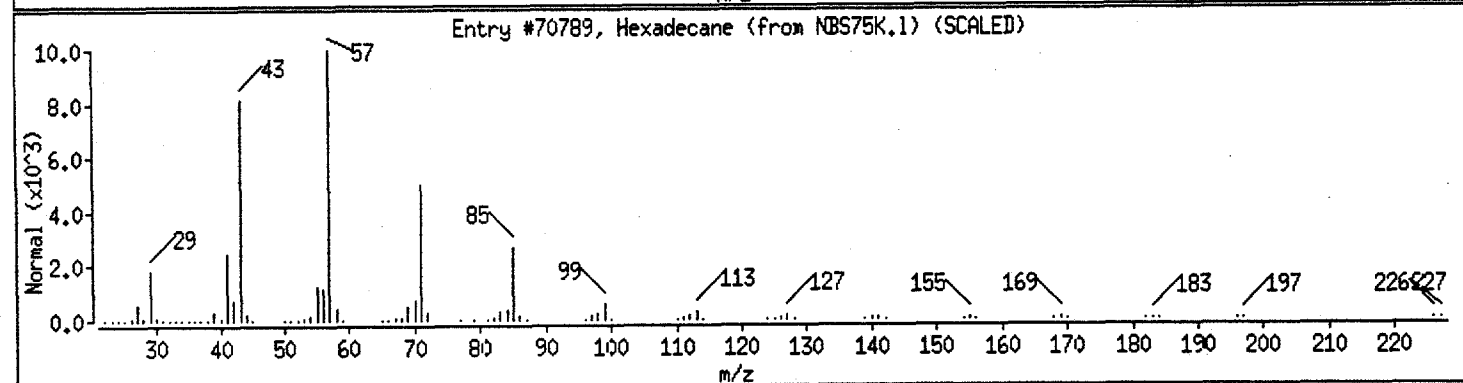
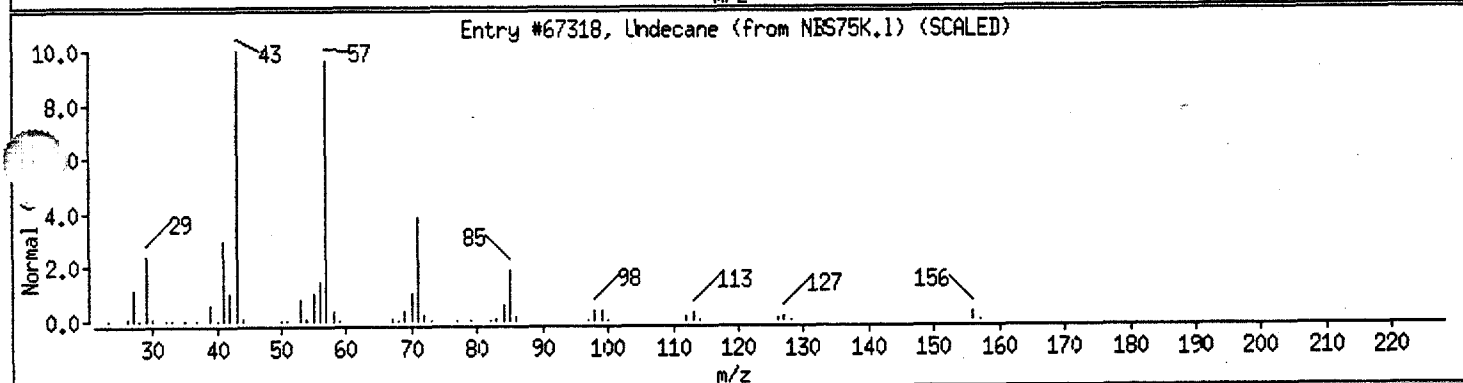
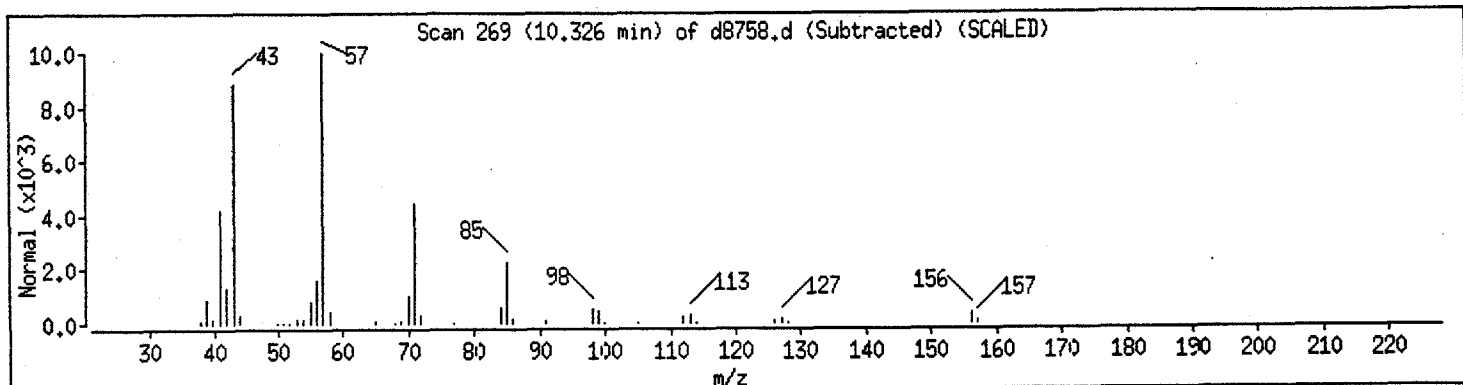
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane	1120-21-4	NBS75K.1	67318	97
Hexadecane	544-76-3	NBS75K.1	70789	90
Tridecane	629-50-5	NBS75K.1	69020	90



Data File: /chem/a900.i/d062894.b/d8758.d

Page 25

Date : 28-JUN-94 19:38

Instrument : a900.i

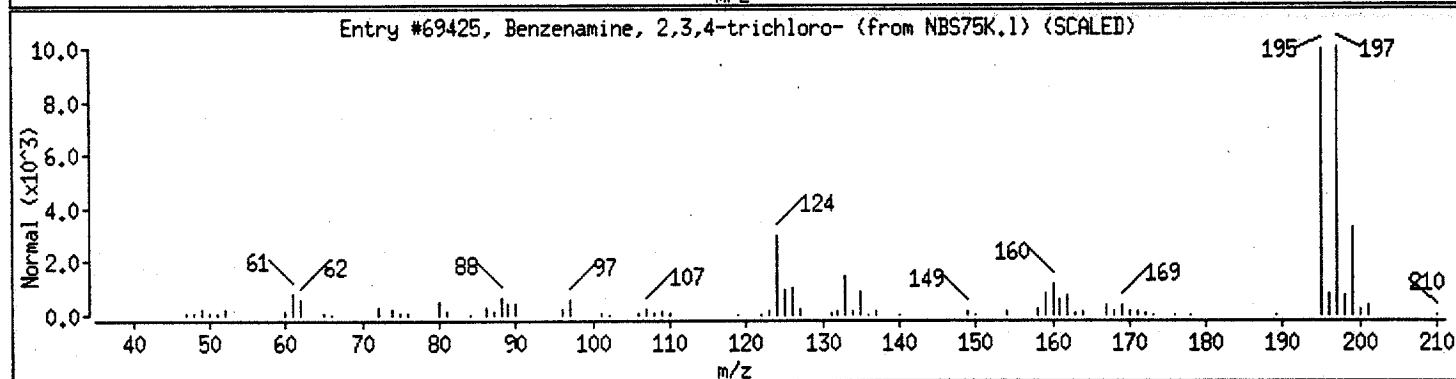
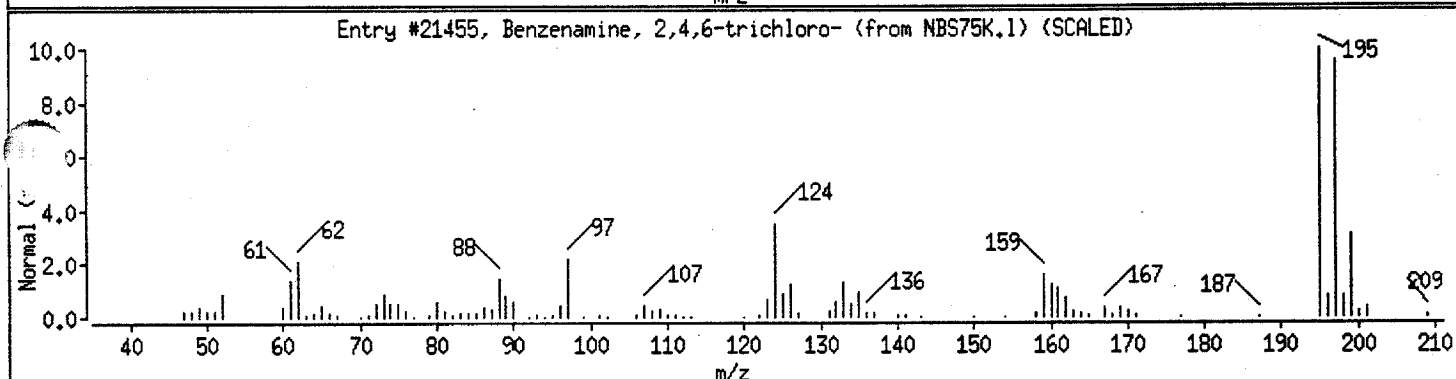
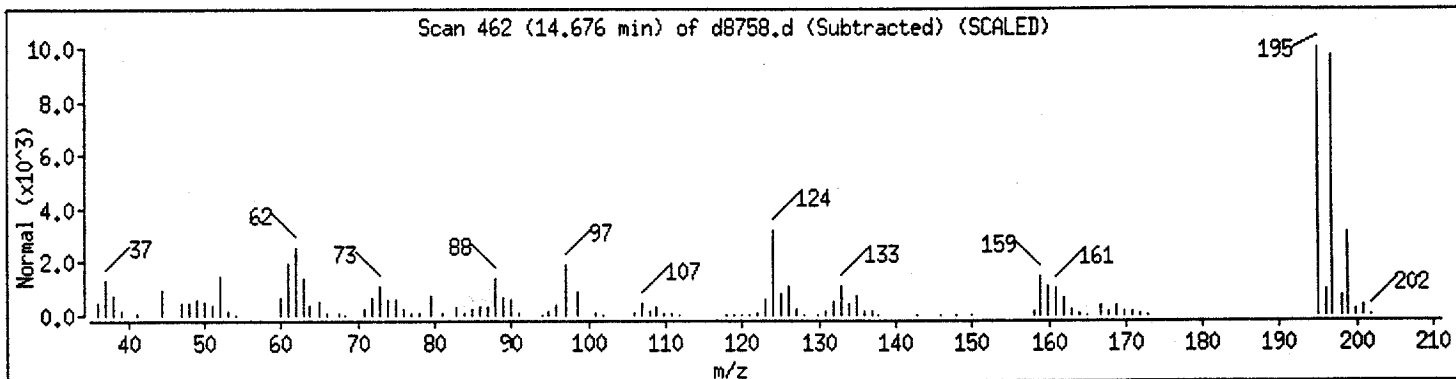
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzenamine, 2,4,6-trichloro-	634-93-5	NBS75K.1	21455	98
Benzenamine, 2,3,4-trichloro-	634-67-3	NBS75K.1	69425	98



Data File: /chem/a900.i/d062894.b/d8758.d

Page 26

Date : 28-JUN-94 19:38

Instrument : a900.i

Sample ID :

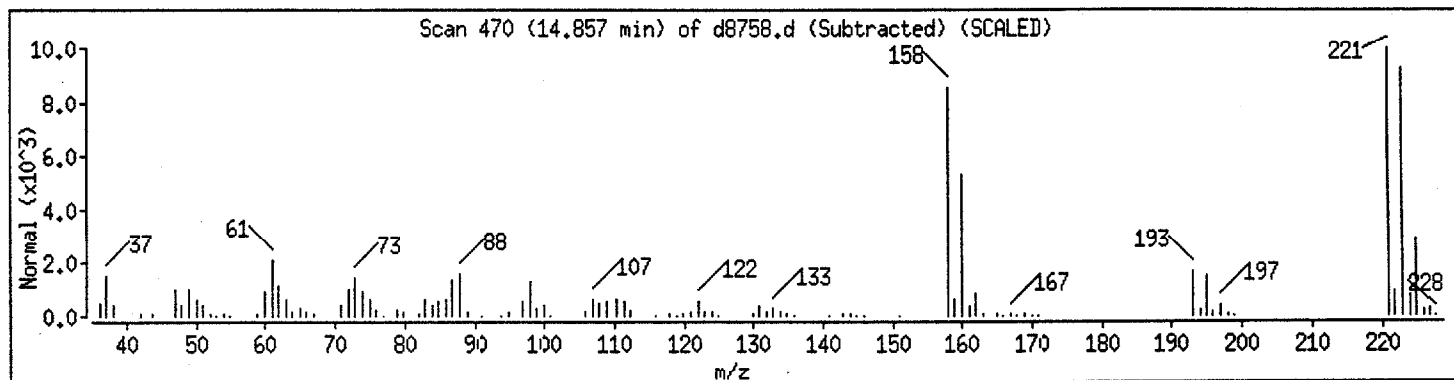
Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
-------------------------------	------------	---------	-----------	---------

UNKNOWN



Data File: /chem/a900.i/d062894.b/d8758.d

Page 27

Date : 28-JUN-94 19:38

Instrument : a900.i

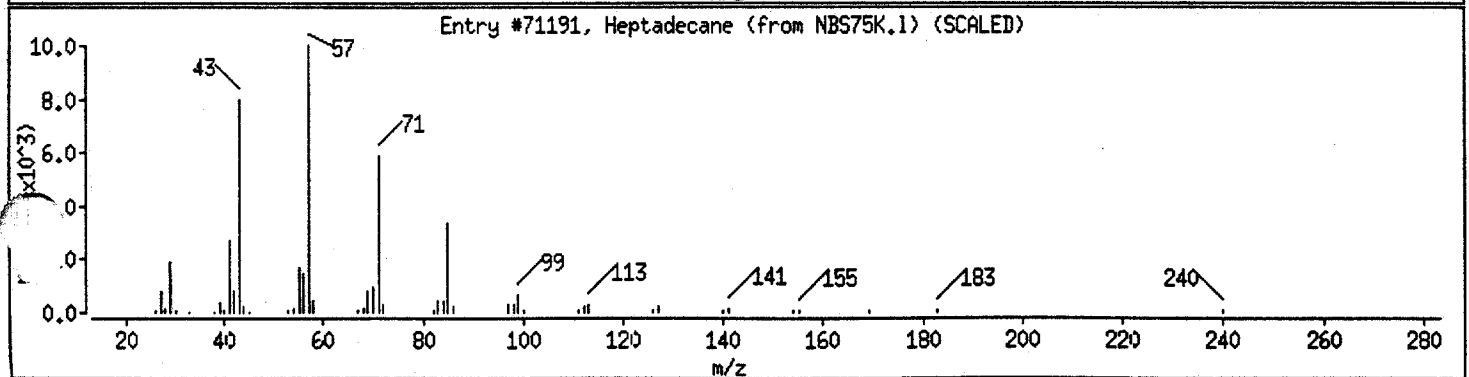
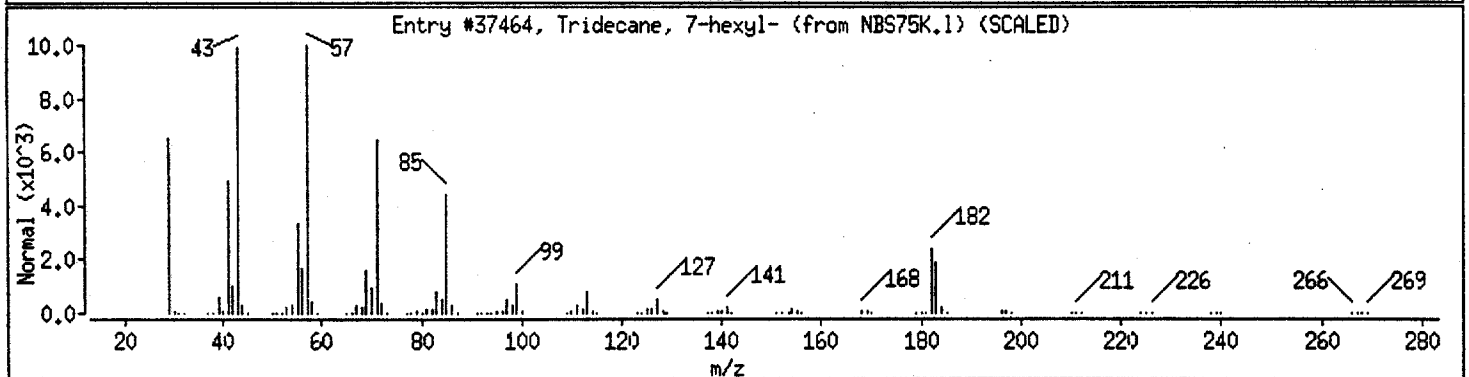
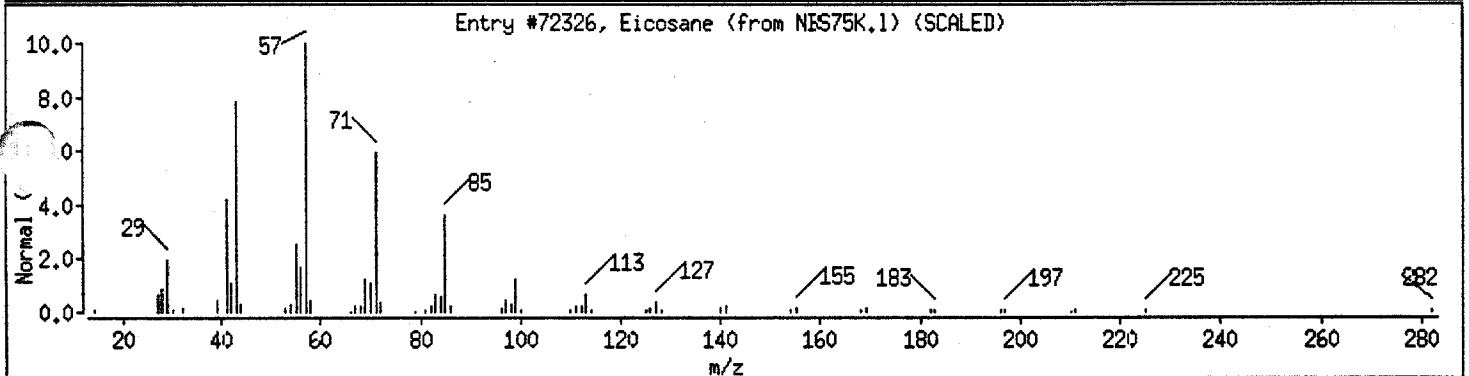
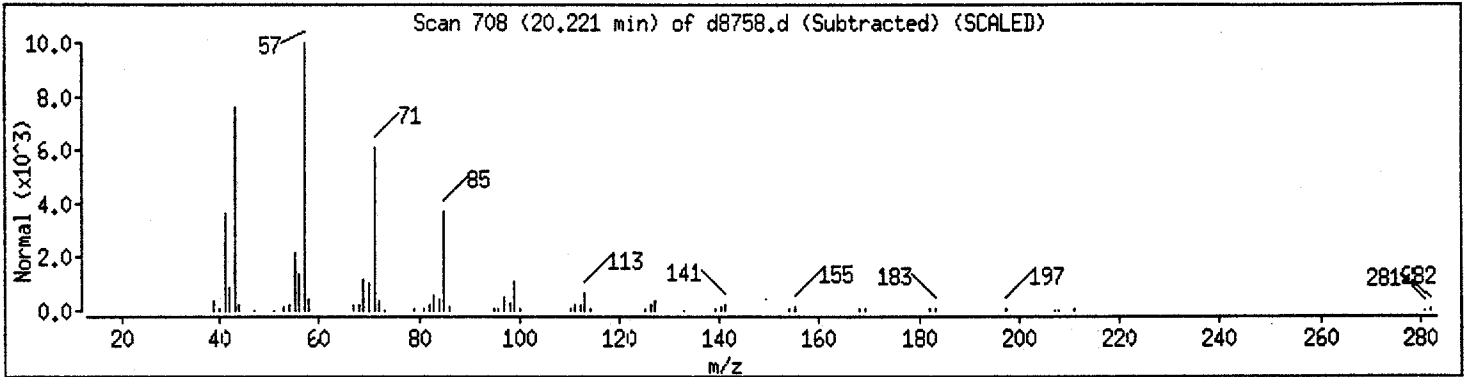
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Eicosane	112-95-8	NBS75K.1	72326	99
Tridecane, 7-hexyl-	7225-66-3	NBS75K.1	37464	91
Heptadecane	629-78-7	NBS75K.1	71191	91



Data File: /chem/a900.i/d062894.b/d8758.d

Page 28

Date : 28-JUN-94 19:38

Instrument : a900.i

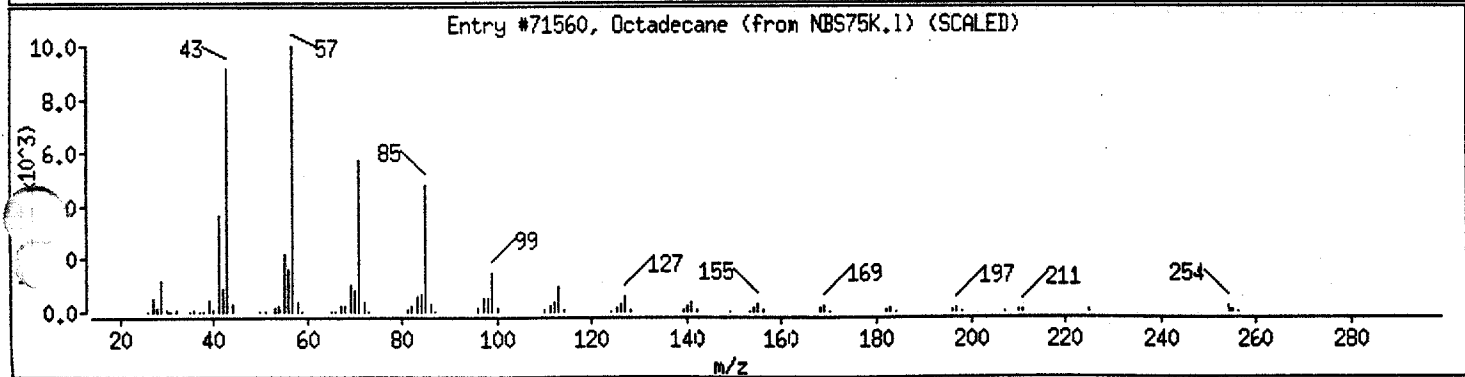
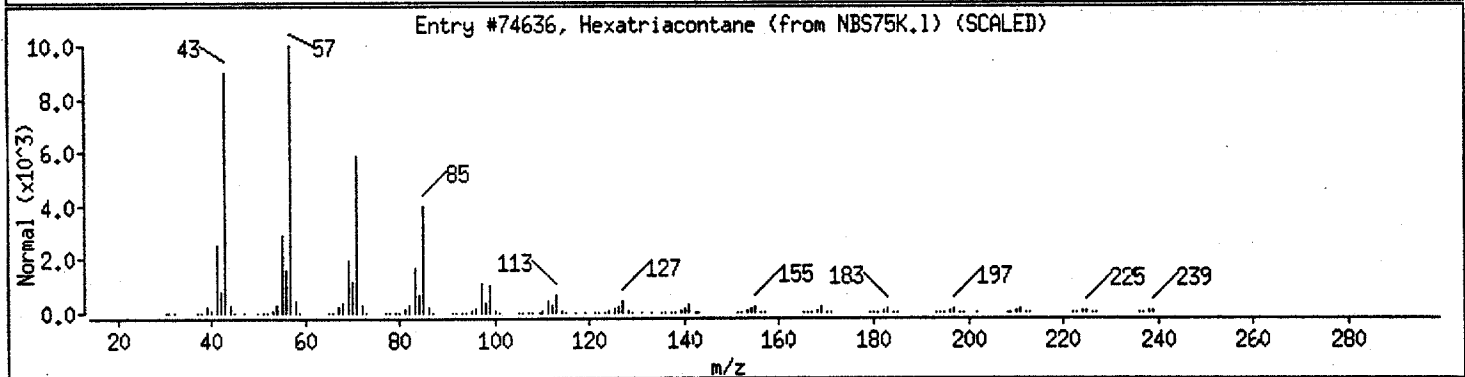
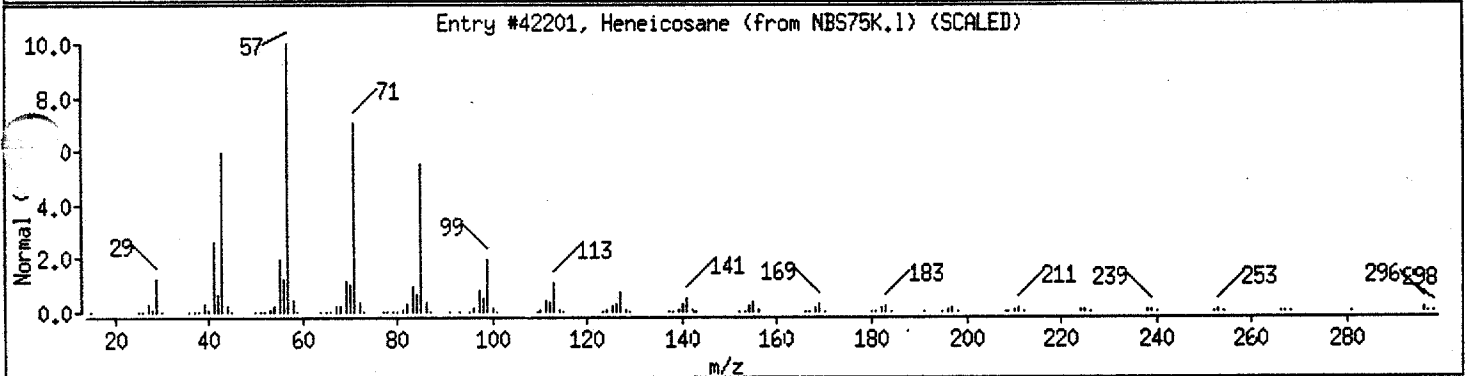
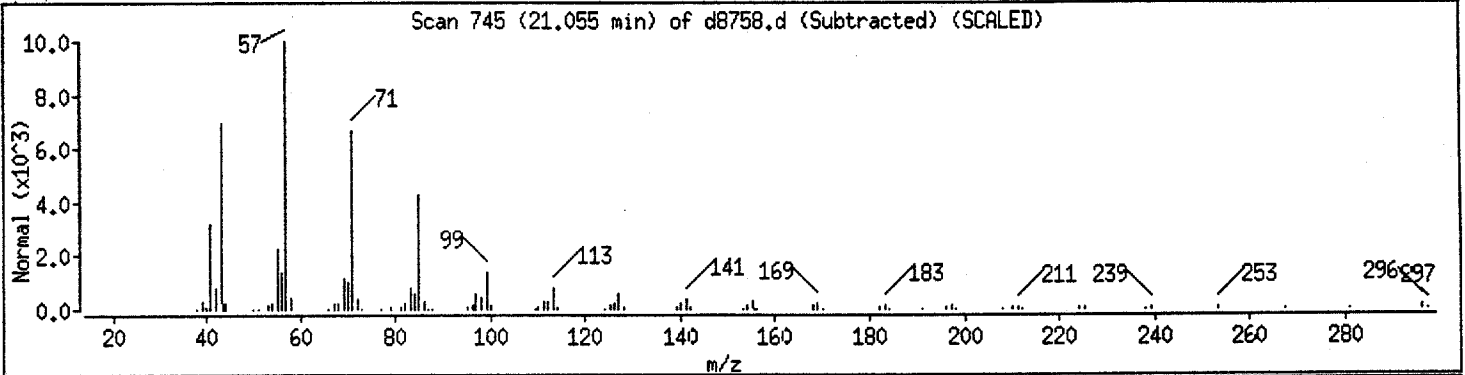
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Heneicosane	629-94-7	NBS75K.1	42201	99
Hexatriacontane	630-06-8	NBS75K.1	74636	91
Octadecane	593-45-3	NBS75K.1	71560	91



Data File: /chem/a900.i/d062894.b/d8758.d

Page 29

Date : 28-JUN-94 19:38

Instrument : a900.i

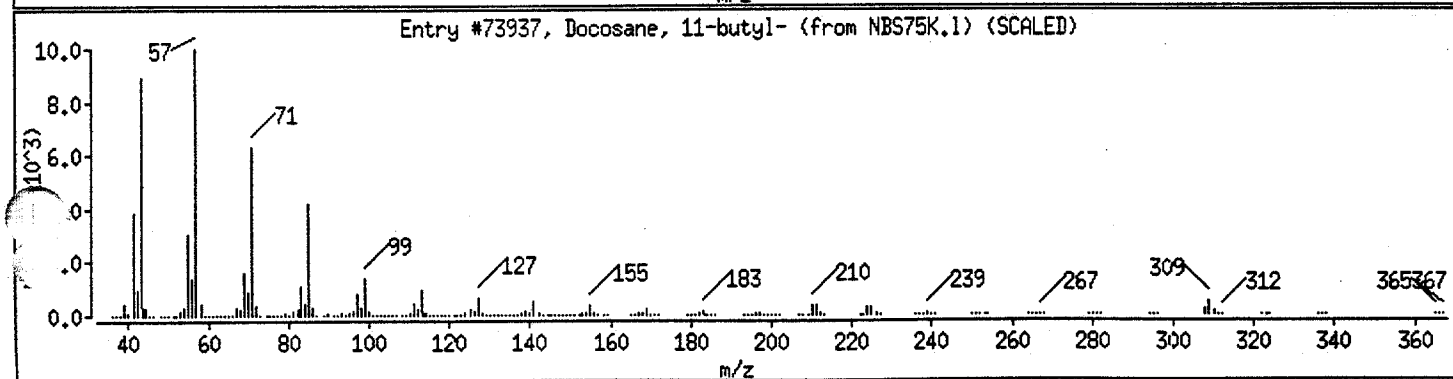
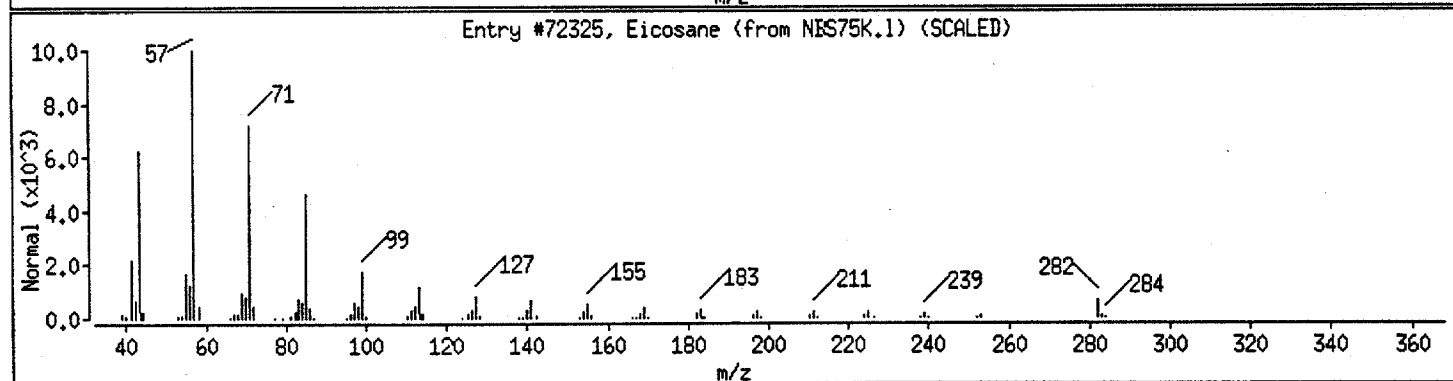
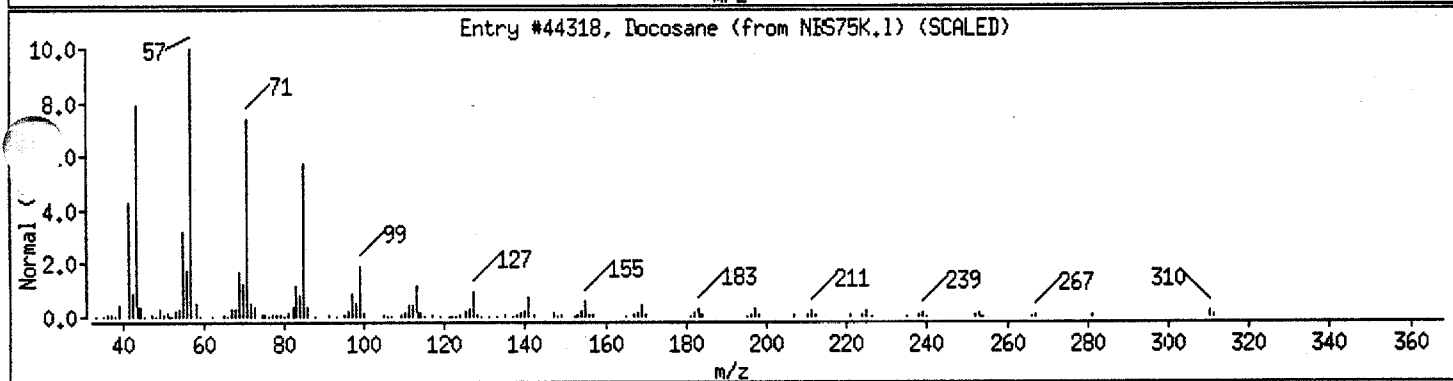
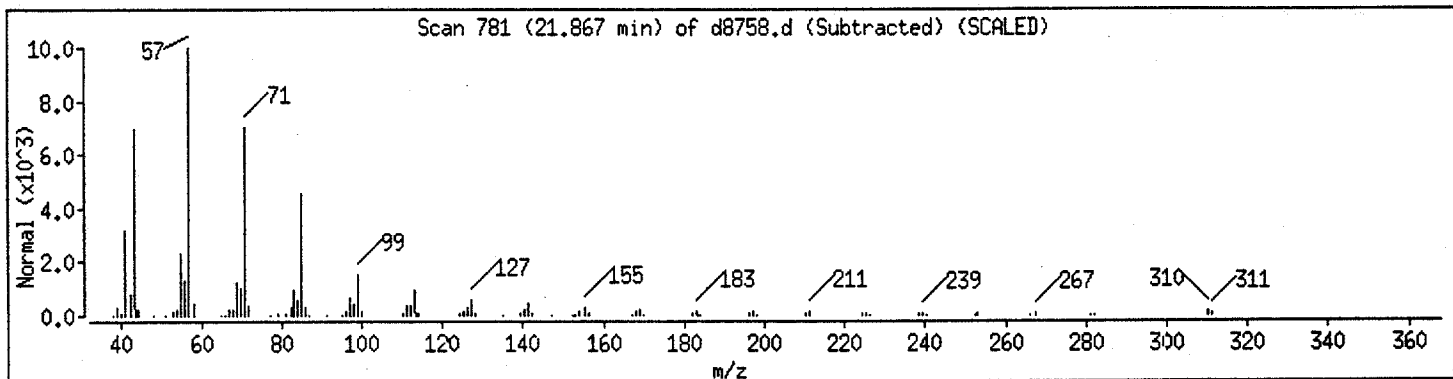
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Docosane	629-97-0	NBS75K.1	44318	98
Eicosane	112-95-8	NBS75K.1	72325	93
Docosane, 11-butyl-	13475-76-8	NBS75K.1	73937	91



Data File: /chem/a900.i/d062894.b/d8758.d

Page 30

Date : 28-JUN-94 19:38

Instrument : a900.i

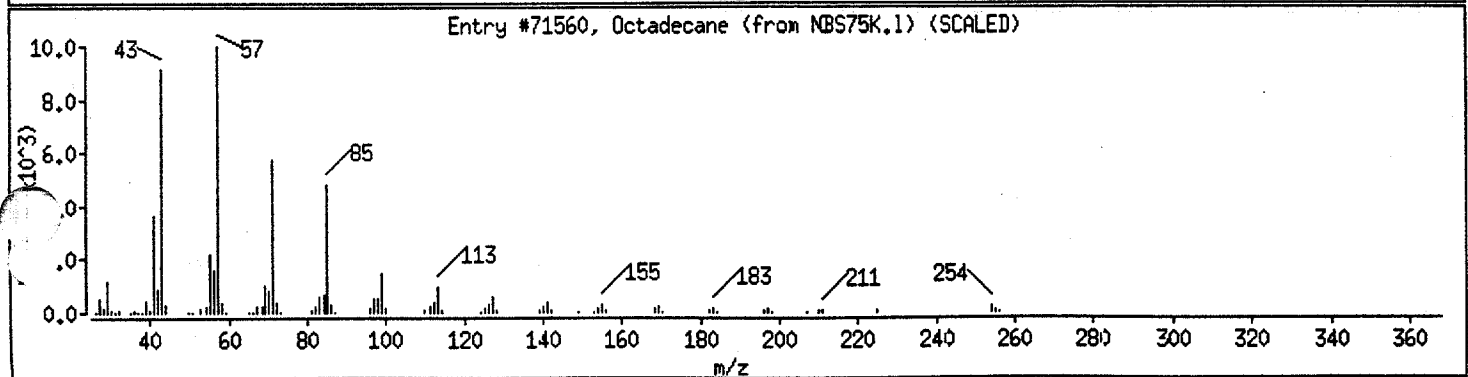
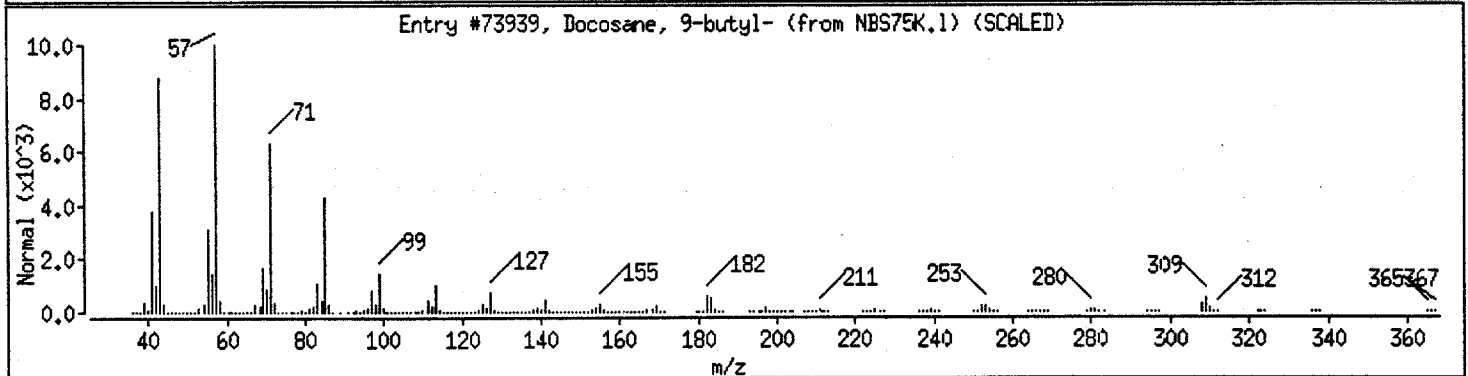
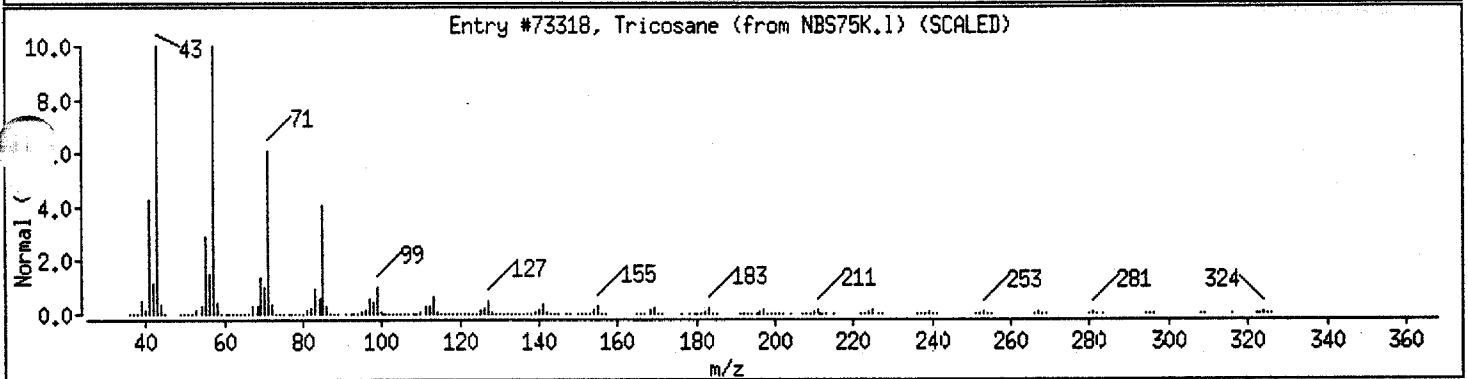
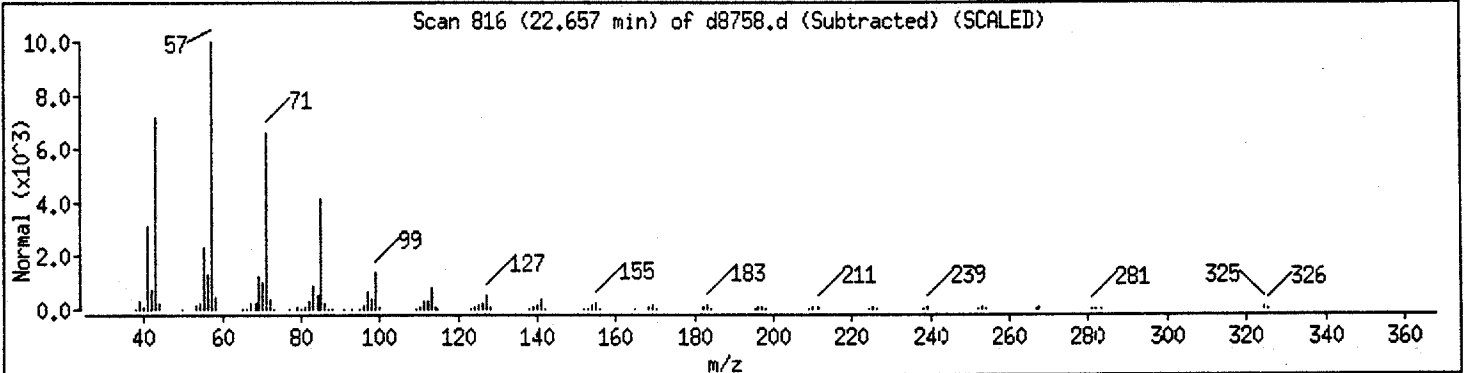
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Tricosane	638-67-5	NBS75K.1	73318	95
Docosane, 9-butyl-	55282-14-9	NBS75K.1	73939	91
Octadecane	593-45-3	NBS75K.1	71560	91





Data File: /chem/a900.i/d062894.b/d8758.d

Page 31

Date: 28-JUN-94 19:38

Instrument: a900.i

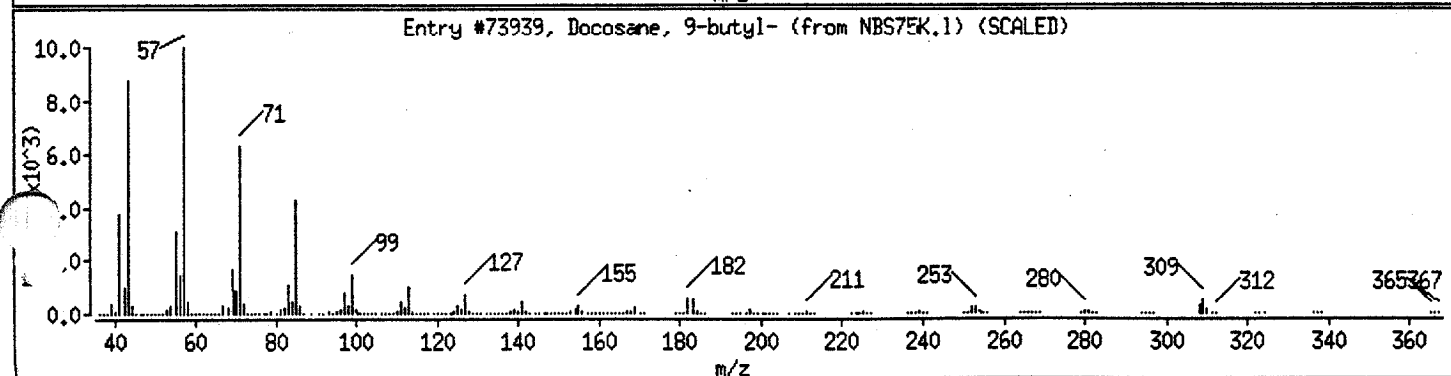
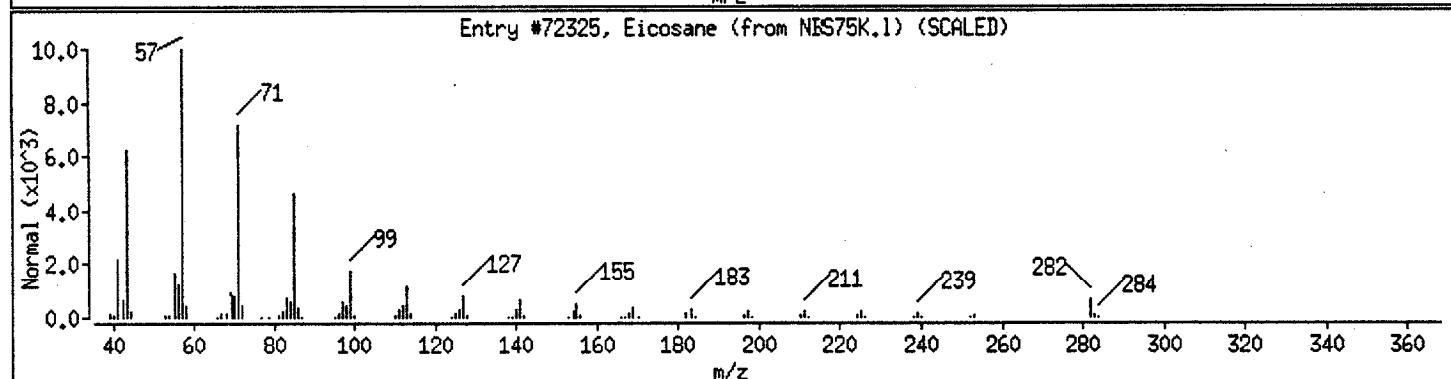
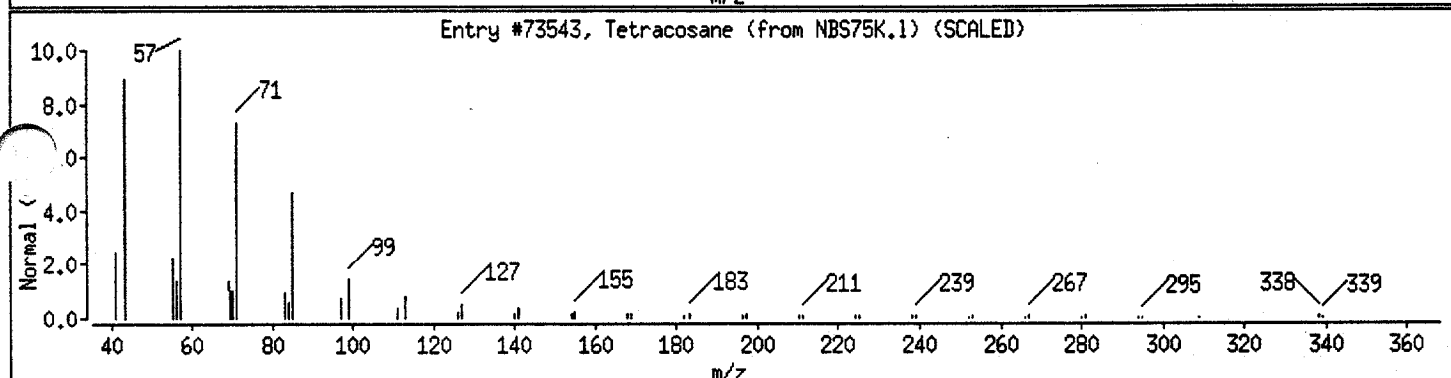
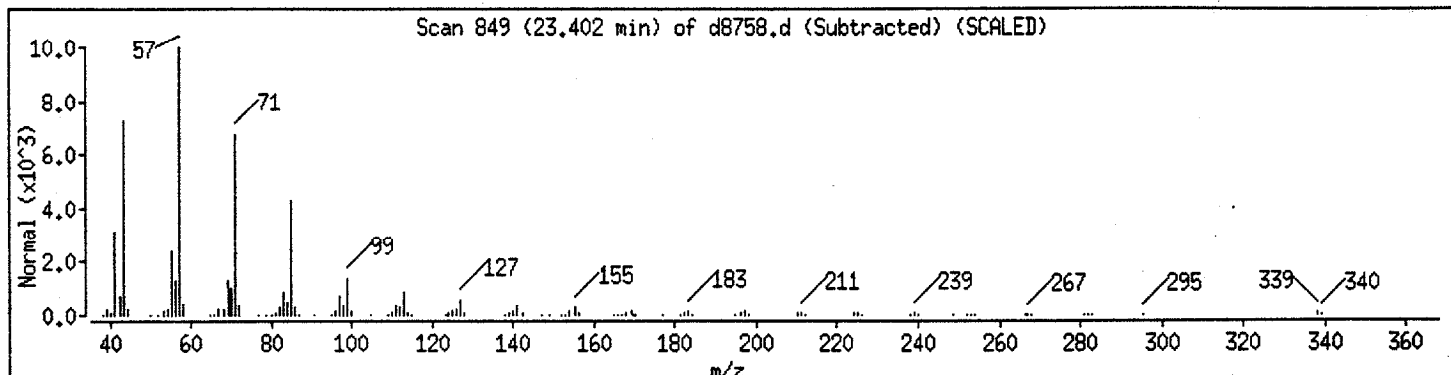
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Tetracosane	646-31-1	NBS75K.1	73543	98
Eicosane	112-95-8	NBS75K.1	72325	97
Docosane, 9-butyl-	55282-14-9	NBS75K.1	73939	91



Data File: /chem/a900.i/d062894.b/d8758.d

Page 33

Date: 28-JUN-94 19:38

Instrument: a900.i

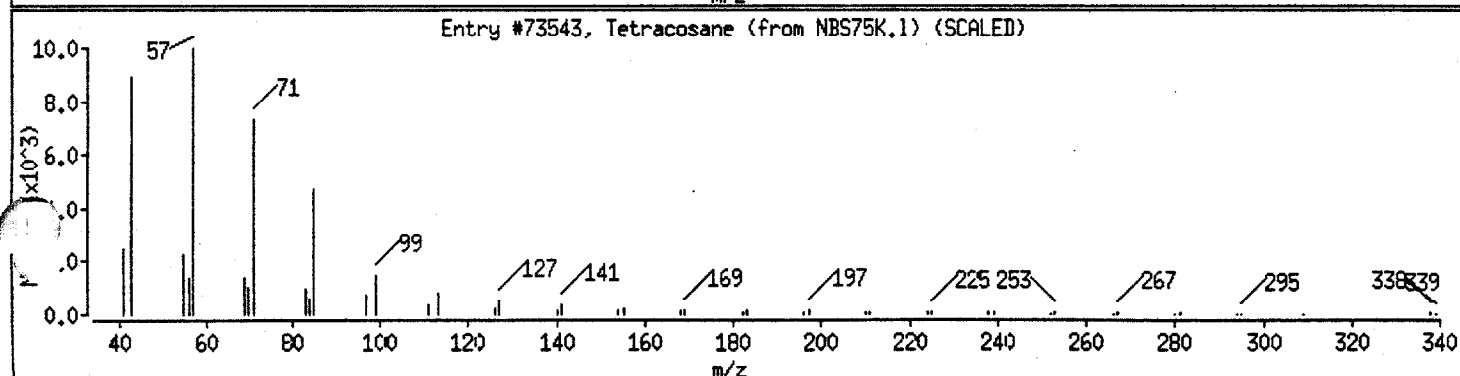
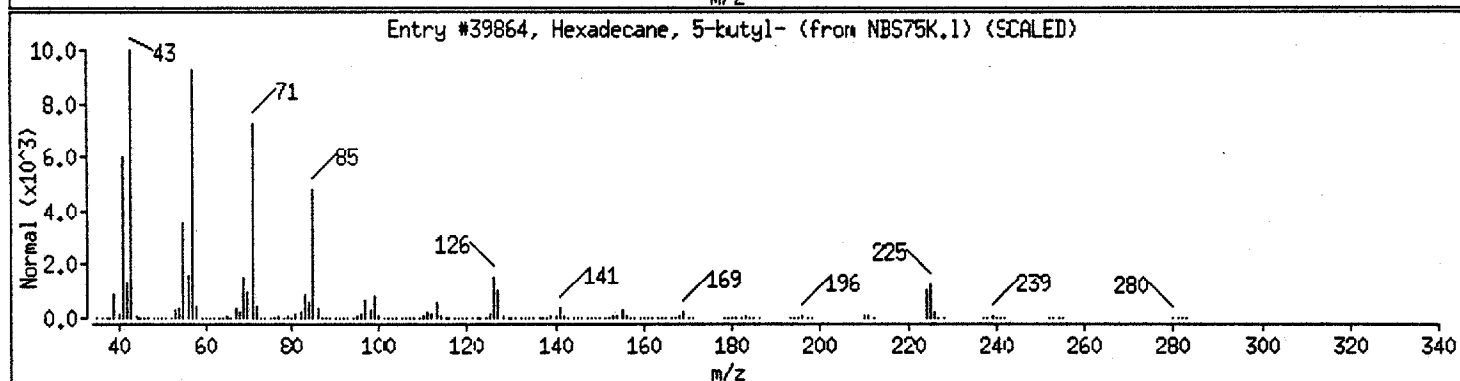
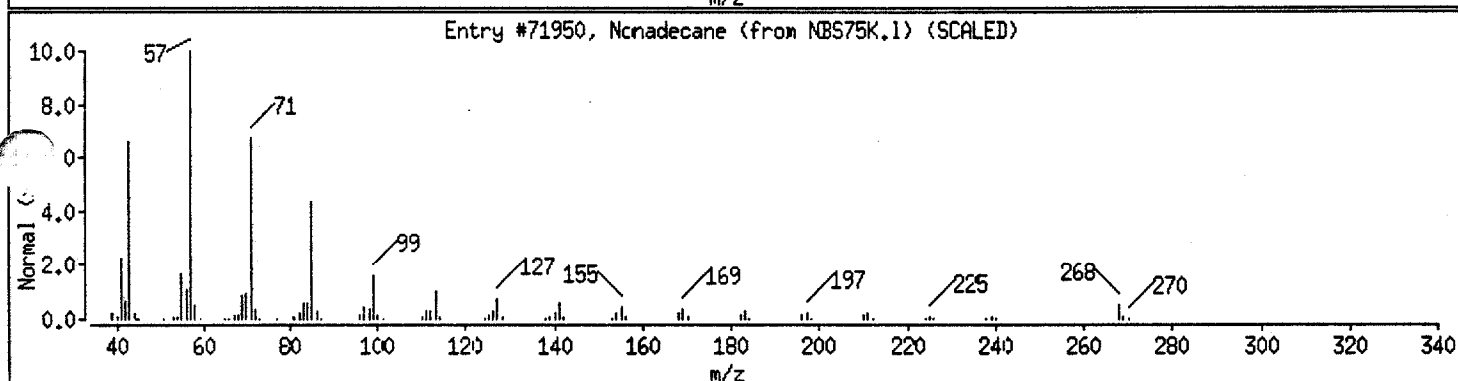
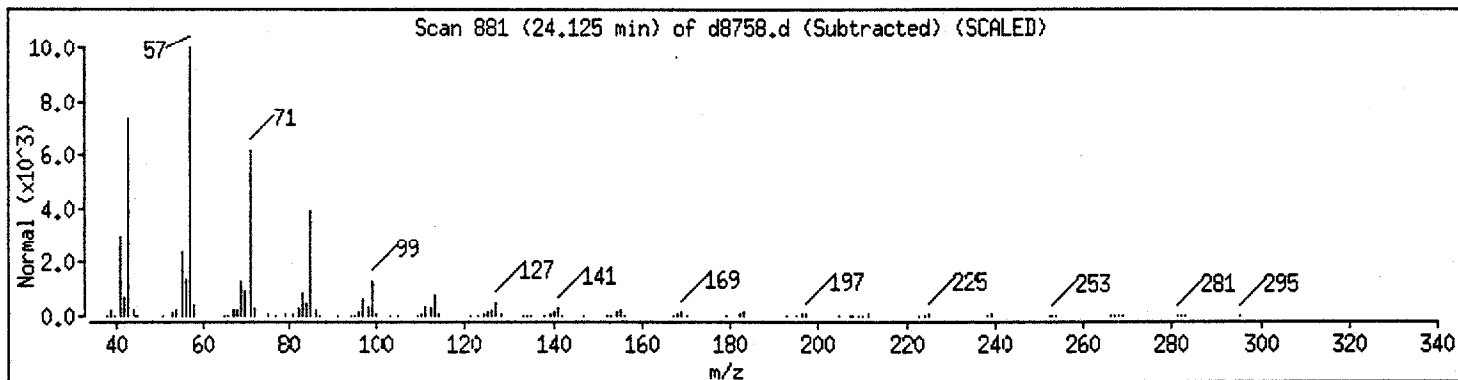
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonadecane	629-92-5	NBS75K.1	71950	97
Hexadecane, 5-butyl-	6912-07-8	NBS75K.1	39864	93
Tetracosane	646-31-1	NBS75K.1	73543	91



Data File: /chem/a900.i/d062894.b/d8758.d

Page 34

Date: 28-JUN-94 19:38

Instrument: a900.i

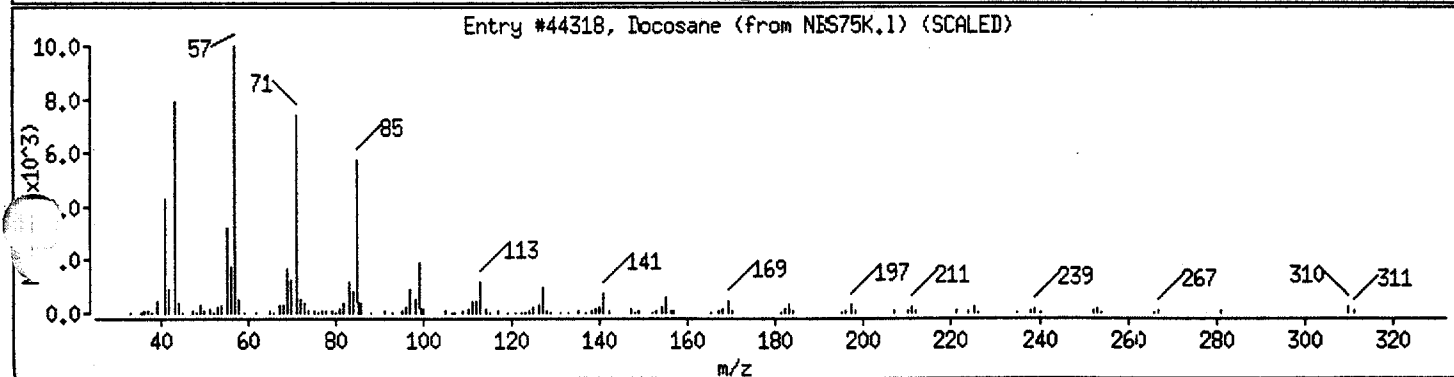
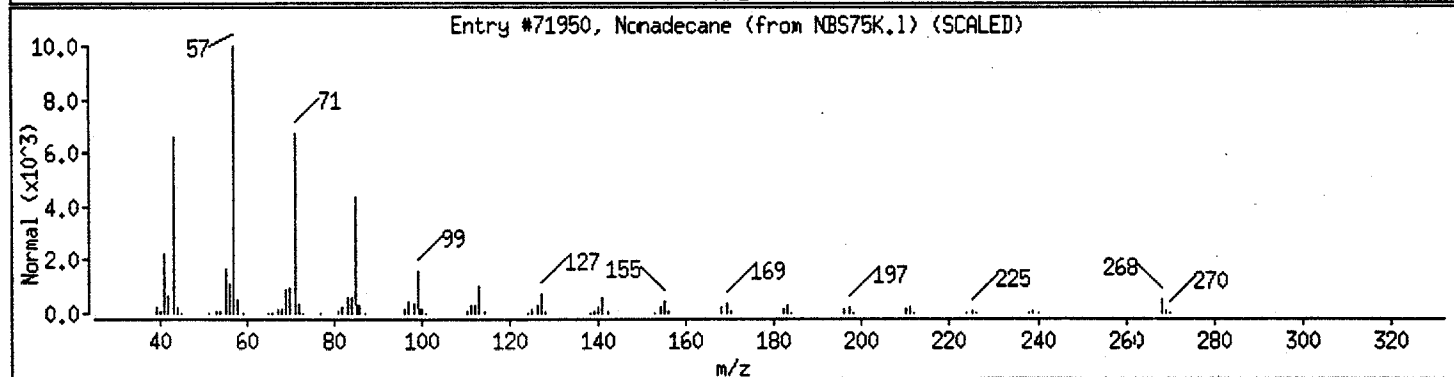
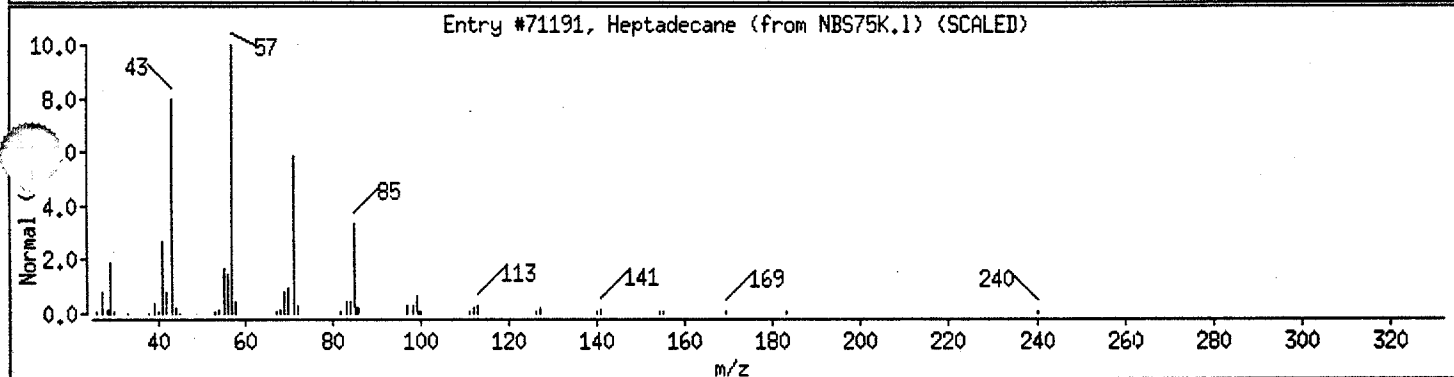
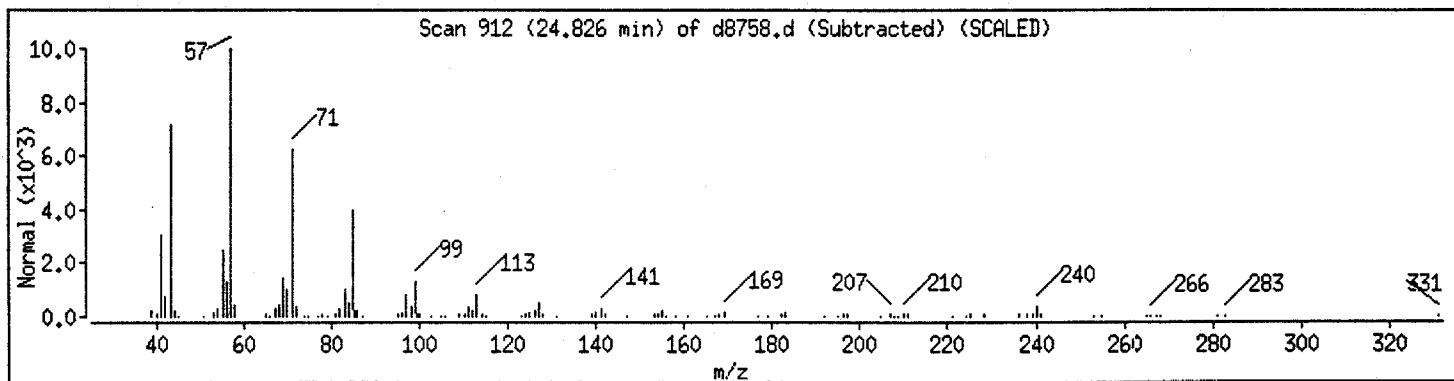
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

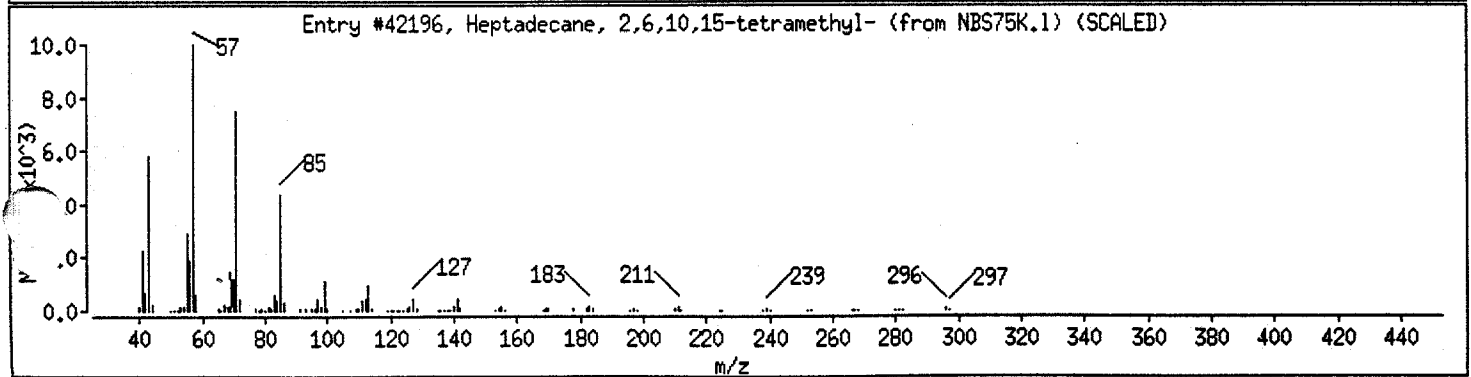
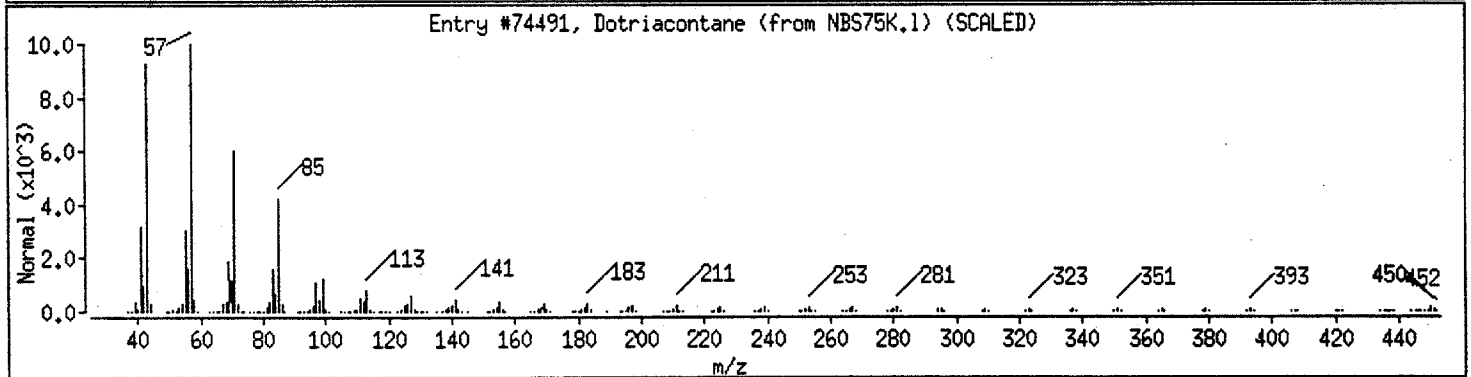
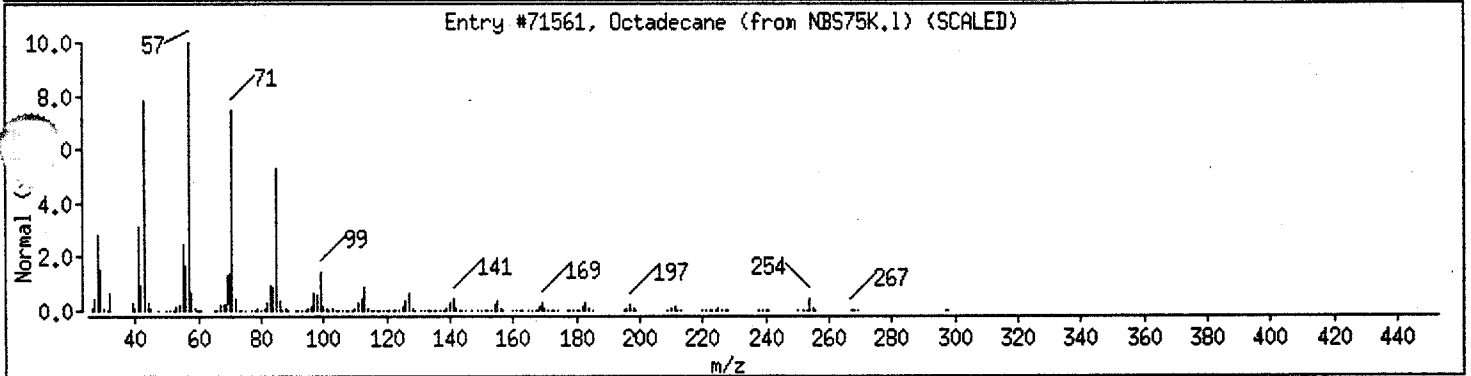
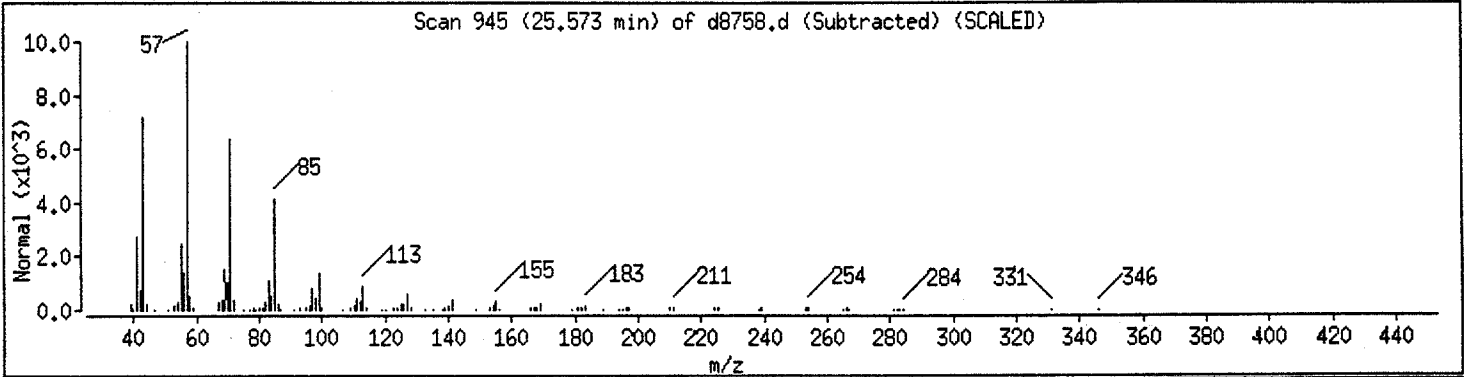
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Heptadecane	629-78-7	NBS75K.1	71191	97
Nonadecane	629-92-5	NBS75K.1	71950	95
Docosane	629-97-0	NBS75K.1	44318	91



Data File: /chem/a900.i/d062894.b/d8758.d  
 Date : 28-JUN-94 19:38  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Octadecane	593-45-3	NBS75K.1	71561	93
Dotriacontane	544-85-4	NBS75K.1	74491	91
Heptadecane, 2,6,10,15-tetramethyl-	54833-48-6	NBS75K.1	42196	91



Data File: /chem/a900.i/d062894.b/d8758.d

Date: 28-JUN-94 19:38

Instrument: a900.i

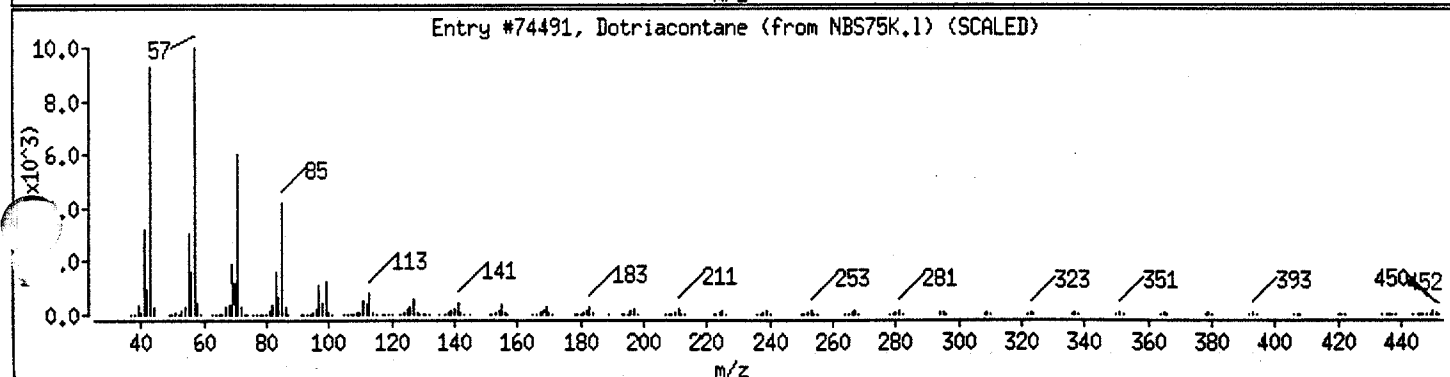
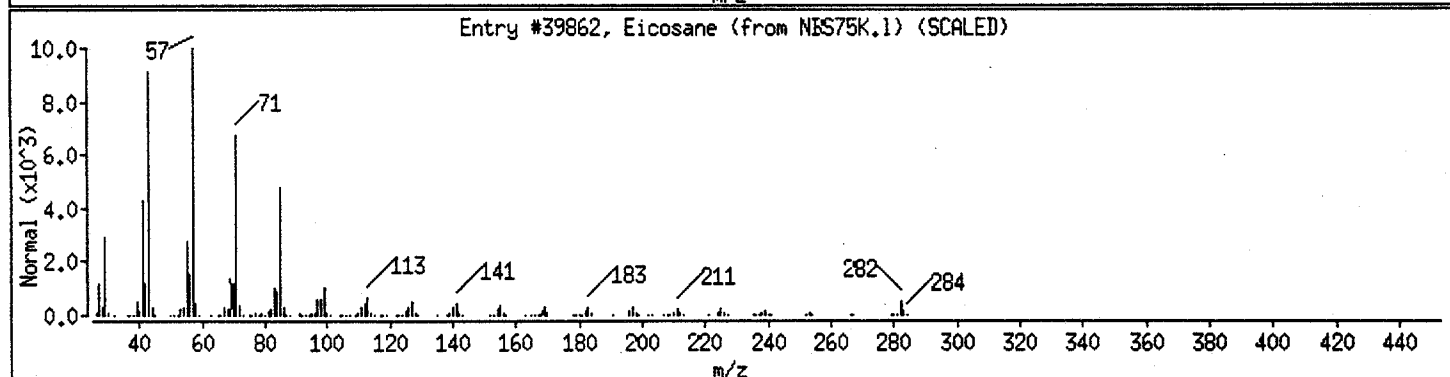
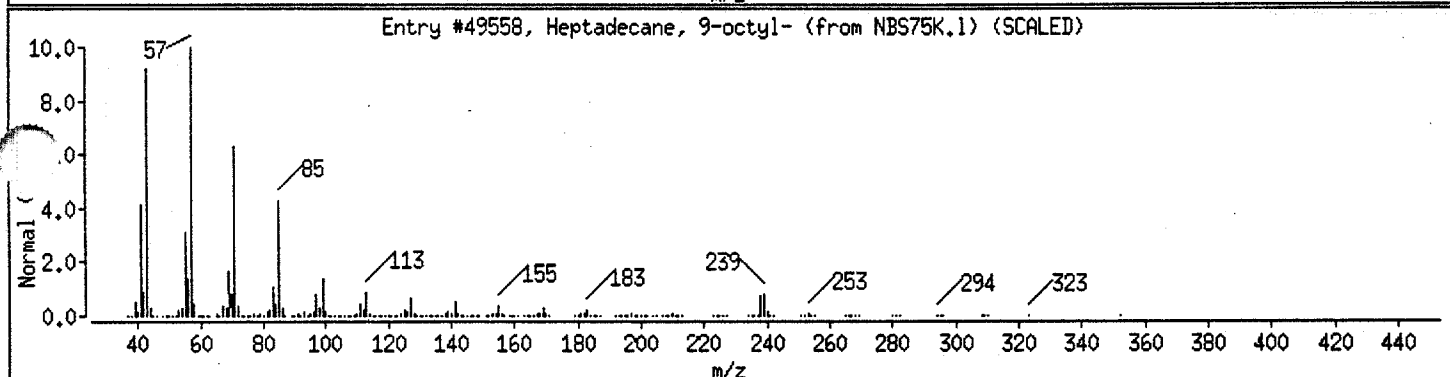
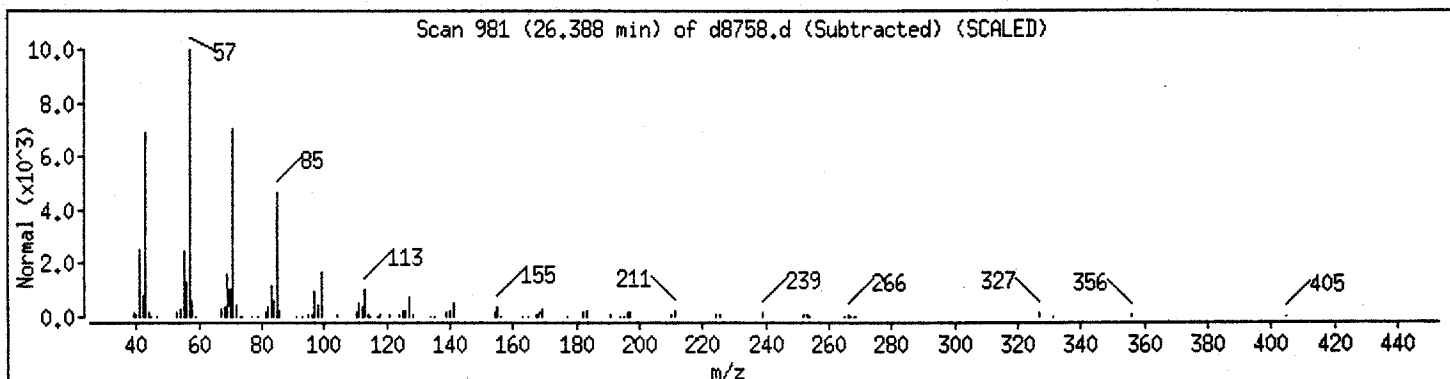
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Heptadecane, 9-octyl-	7225-64-1	NBS75K.1	49558	91
Eicosane	112-95-8	NBS75K.1	39862	91
Dotriacontane	544-85-4	NBS75K.1	74491	91



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0342**

Lab Name: ASC

Contract: NEESA

C6630

Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) Soil Lab Sample ID: JM9437C

Sample wt/vol: 30.2 (g/mL) g Lab File ID: D8759

Level: (low/med) low Date Received: 062394

% Moisture: 6.7 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 062894

Injection Volume: 1.0 (uL) Dilution Factor: 1000

GPC Cleanup: (Y/N) N pH: 7

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/Kg                      Q

108-95-2-----Phenol	840 000	↓
111-44-4-----bis(2-Chloroethyl) ether		
95-57-8-----2-Chlorophenol		
541-73-1-----1,3-Dichlorobenzene		
106-46-7-----1,4-Dichlorobenzene		
95-50-1-----1,2-Dichlorobenzene		
95-48-7-----2-Methylphenol		
108-60-1-----2,2'-oxybis(1-Chloropropane)		
106-44-5-----4-Methylphenol		
621-64-7-----N-Nitroso-di-n-propylamine		
67-72-1-----Hexachloroethane		
98-95-3-----Nitrobenzene		
78-59-1-----Isophorone		
88-75-5-----2-Nitrophenol		
105-67-9-----2,4-Dimethylphenol		
111-91-1-----bis(2-Chloroethoxy)methane		
120-83-2-----2,4-Dichlorophenol		
120-82-1-----1,2,4-Trichlorobenzene		
91-20-3-----Naphthalene		
106-47-8-----4-Chloroaniline		
87-68-3-----Hexachlorobutadiene		
59-50-7-----4-Chloro-3-methylphenol		
91-57-6-----2-Methylnaphthalene		
77-47-4-----Hexachlorocyclopentadiene		
88-06-2-----2,4,6-Trichlorophenol		
95-95-4-----2,4,5-Trichlorophenol	2000 000	
91-58-7-----2-Chloronaphthalene	840 000	
88-74-4-----2-Nitroaniline	2000 000	
131-11-3-----Dimethylphthalate	840 000	
208-96-8-----Acenaphthylene		
606-20-2-----2,6-Dinitrotoluene		
99-09-2-----3-Nitroaniline	2000 000	
83-32-9-----Acenaphthene	840 000	↓

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0343**

Lab Name: ASC Contract: NEESA C6620

Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) soil Lab Sample ID: JM9437C

Sample wt/vol: 30.2 (g/mL) g Lab File ID: D8759

Level: (low/med) low Date Received: 062394

% Moisture: 60.7 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 062894

Injection Volume: 1.0 (uL) Dilution Factor: 1000

GPC Cleanup: (Y/N) N pH: 7

CONCENTRATION UNITS: ug/kg

CAS NO. — COMPOUND (ug/L or ug/Kg) ug/kg Q

51-28-5-----2,4-Dinitrophenol	2000000	u
100-02-7-----4-Nitrophenol	↓	
132-64-9-----Dibenzofuran	840000	
121-14-2-----2,4-Dinitrotoluene	↓	
84-66-2-----Diethylphthalate	↓	
7005-72-3-----4-Chlorophenyl-phenylether	↓	
86-73-7-----Fluorene	↓	
100-01-6-----4-Nitroaniline	2000000	
534-52-1-----4,6-Dinitro-2-methylphenol	↓	
86-30-6-----N-Nitrosodiphenylamine (1)	840000	
101-55-3-----4-Bromophenyl-phenylether	↓	
118-74-1-----Hexachlorobenzene	↓	
87-86-5-----Pentachlorophenol	2000000	
85-01-8-----Phenanthrene	840000	
120-12-7-----Anthracene	↓	
86-74-8-----Carbazole	↓	
84-74-2-----Di-n-butylphthalate	↓	
206-44-0-----Fluoranthene	↓	
129-00-0-----Pyrene	↓	
85-68-7-----Butylbenzylphthalate	↓	
91-94-1-----3,3'-Dichlorobenzidine	↓	
56-55-3-----Benzo(a)anthracene	↓	
218-01-9-----Chrysene	↓	
117-81-7-----bis(2-Ethylhexyl)phthalate	↓	
117-84-0-----Di-n-octylphthalate	↓	
205-99-2-----Benzo(b)fluoranthene	↓	
207-08-9-----Benzo(k)fluoranthene	↓	
50-32-8-----Benzo(a)pyrene	↓	
193-39-5-----Indeno(1,2,3-cd)pyrene	↓	
53-70-3-----Dibenz(a,h)anthracene	↓	
191-24-2-----Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Lab Name: ASC Contract: NEESA C6620

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

Matrix: (soil/water) Soil Lab Sample ID: JM9437C

Sample wt/vol: 30.2 (g/mL) 7 Lab File ID: D8759

Level: (low/med) low Date Received: 062394

% Moisture: 60.7 decanted: (Y/N) N Date Extracted: 062794

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 062894

Injection Volume: 1.0 (uL) Dilution Factor: 1000

GPC Cleanup: (Y/N) N pH: 7

Number TICs found: 7 CONCENTRATION UNITS: ug/L or ug/Kg

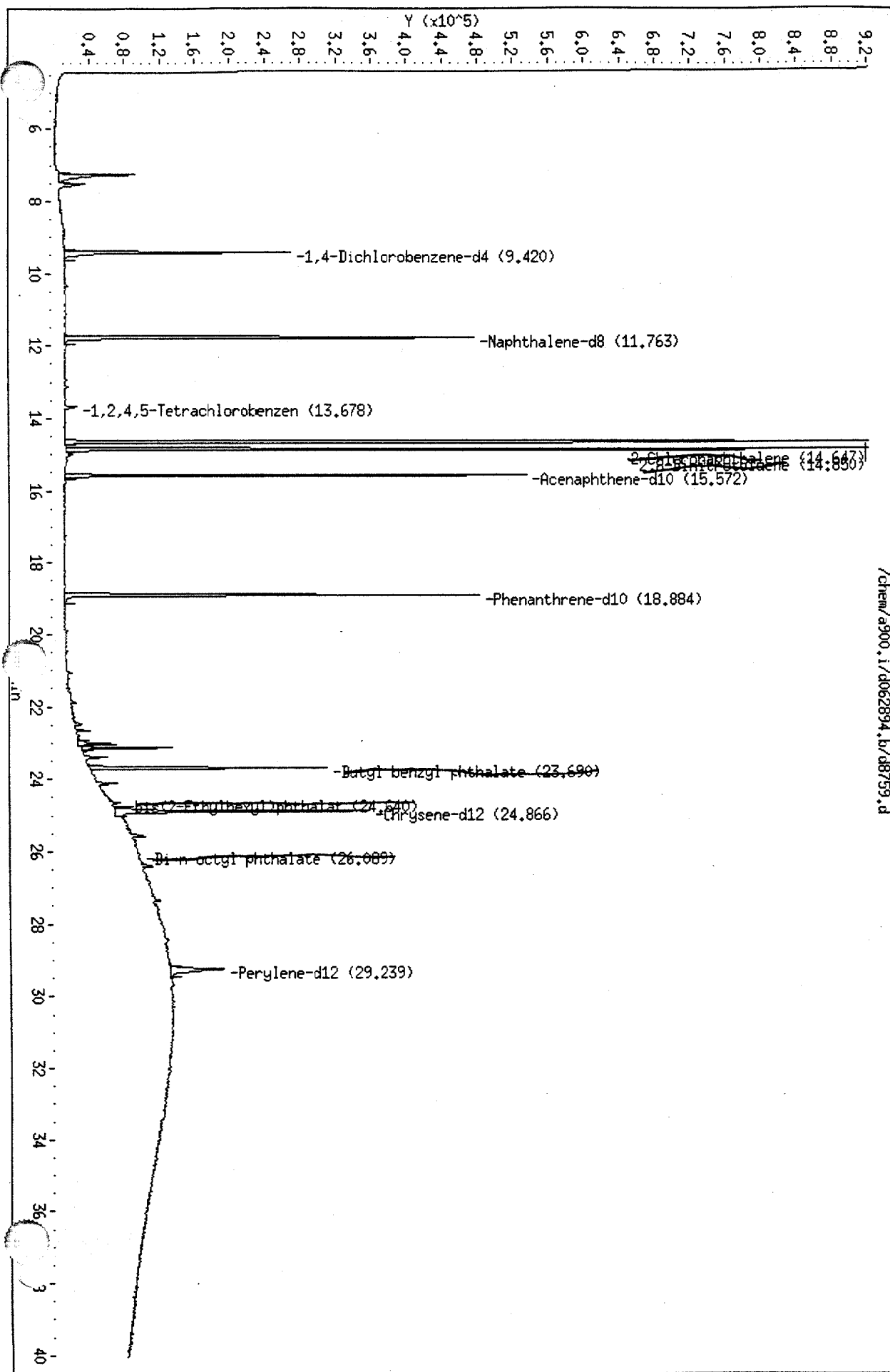
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown	7.26	653000	J
2.	Unknown	7.53	182000	
3. 634-93-5	Benzonamine 2,4,6-trimethyl	14.65	150-520000	
4.	Unknown	14.85	2620000	
5. 53-19-0	Mitolane	23.03	182000	
6. 289-07-6	op'-DDT	23.13	347000	
7. 50-29-2	Chlorophenothane	23.69	941000	
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				



Data File: /chem/a900.i/d062894.b/d8759.d  
Date: 28-JUN-94 20:27  
Instrument: a900.i  
Sample ID:  
Column phase: J&W DB-5  
Volume Injected (ul): 1.0

Column diameter: 0.25

C6620



/chem/a900.i/d062894.b/d8759.d

Data File: /chem/a900.i/d062894.b/d8759.d  
Report Date: 29-Jun-1994 08:06

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/d062894.b/d8759.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 28-JUN-94 20:27 Autotune Date: {  
 Operator : Tom Inst ID: a900.i  
 Smp Info : 15226N-C6620  
 Misc Info : JM9437C,N2C40851,S:M1,30.2,10:100, BTL#  
 Comment :  
 Method : /chem/a900.i/d062894.b/bna8270d.m  
 Meth Date : 29-Jun-1994 08:02 darren  
 Cal Date : 28-JUN-94 14:35 Cal File: d8753.d  
 Als bottle: 0  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

Compounds	QUANT	SIG	RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/ml)	FINAL ( ug/L)
1,4-Dichlorobenzene-d4	152.00		9.420	(1.000)	132926OK	40.0	
* Naphthalene-d8	136.00		11.763	(1.000)	53604OK	40.0	
47 1,2,4,5-Tetrachlorobenzene	216.00		13.678	(0.878)	5605	1.51	1.51 (aa)
<del>52 2-Chloronaphthalene</del>	162.00		14.647	(0.941)	23434	3.19	<del>2.19 (aa)</del> RT
<del>55 2,6-Dinitrotoluene</del>	165.00		14.850	(0.954)	1844	0.692	<del>0.692 (aa)</del> < l
* 58 Acenaphthene-d10	164.00		15.572	(1.000)	302911OK	40.0	
* 81 Phenanthrene-d10	188.00		18.884	(1.000)	443154OK	40.0	
<del>93 Butyl Benzyl phthalate</del>	149.00		23.690	(0.953)	2205	0.322	<del>0.322 (aa)</del> < l
<del>95 bis(2-Ethylhexyl)phthalate</del>	149.00		24.640	(0.991)	5929	0.751	<del>0.751 (aa)</del> < l
* 99 Chrysene-d12	240.00		24.866	(1.000)	332140OK	40.0	
<del>101 Di-n-octyl phthalate</del>	149.00		26.089	(0.892)	1397	0.242	<del>0.242 (aa)</del> < l
* 105 Perylene-d12	264.00		29.239	(1.000)	109589Low	40.0	

QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation (BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.

↓  
2X

Data File: /chem/a900.i/d062894.b/d8759.d  
Report Date: 29-Jun-1994 08:06

Page 2

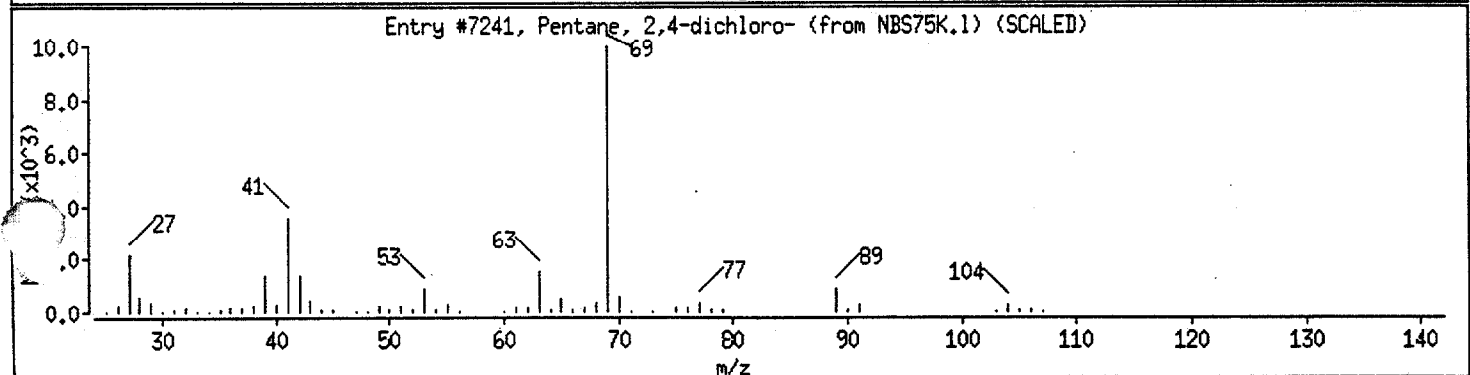
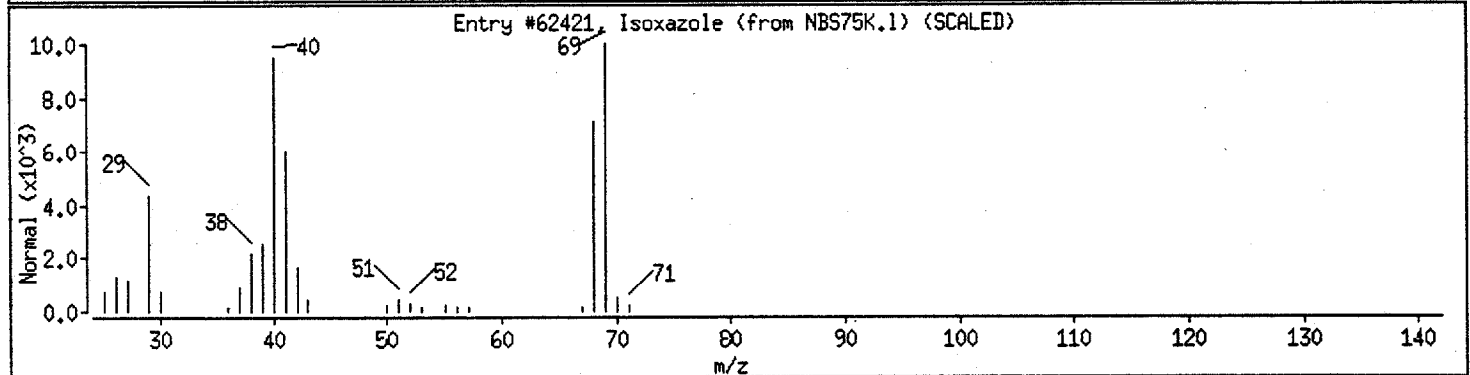
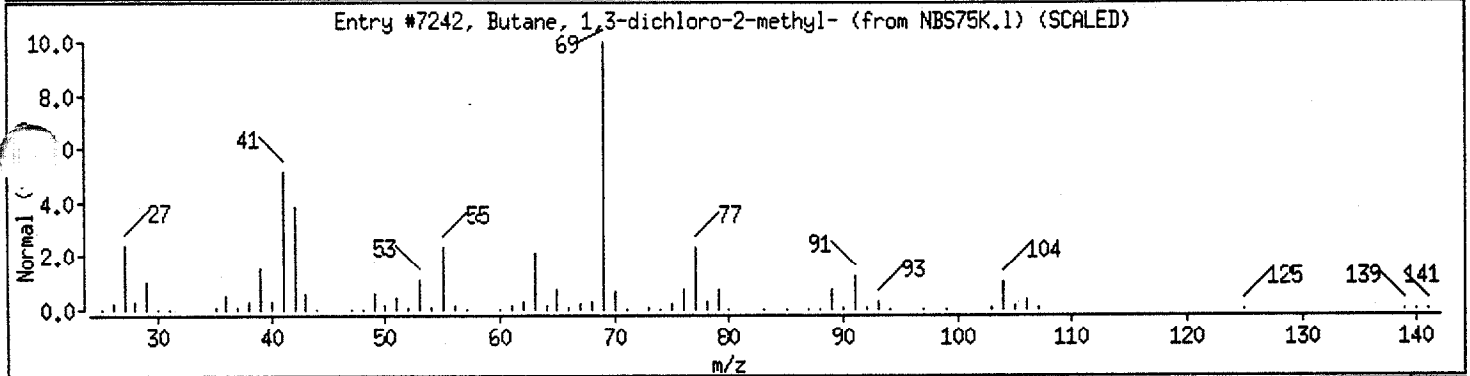
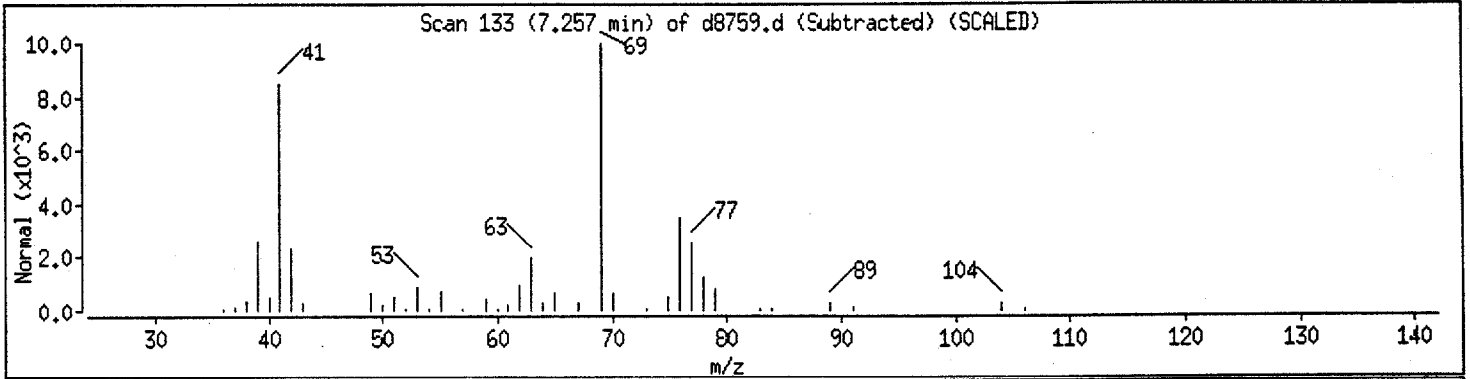
QC Flag Legend

Q - Qualifier signal failed the ratio test.

Data File: /chem/a900.i/d062894.b/d8759.d  
 Date : 28-JUN-94 20:27  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, 1,3-dichloro-2-methyl-	23010-07-3	NBS75K.1	7242	38
Isoxazole	288-14-2	NBS75K.1	62421	23
Pentane, 2,4-dichloro-	625-67-2	NBS75K.1	7241	23



Data File: /chem/a900.i/d062894.b/d8759.d

Page 7

Date : 28-JUN-94 20:27

Instrument : a900.i

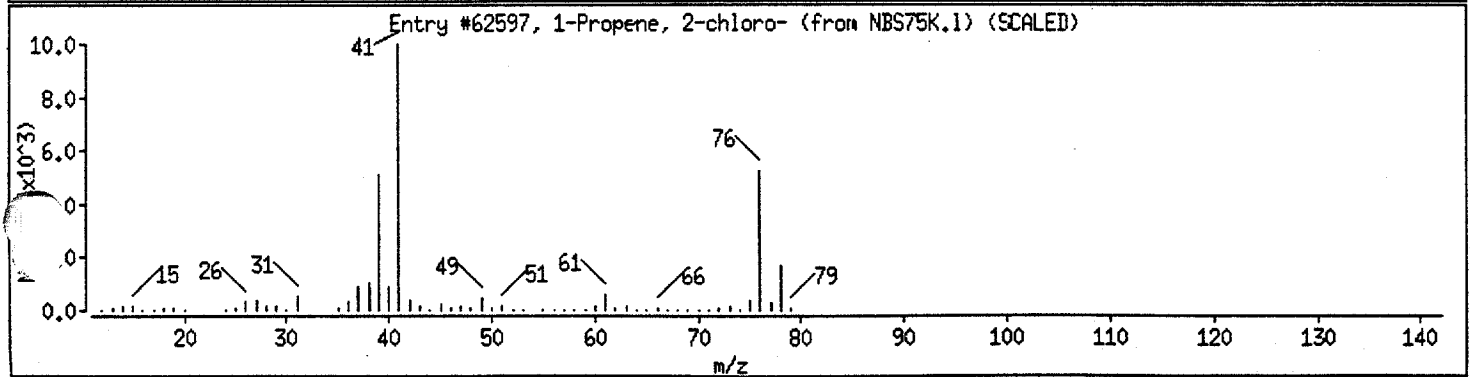
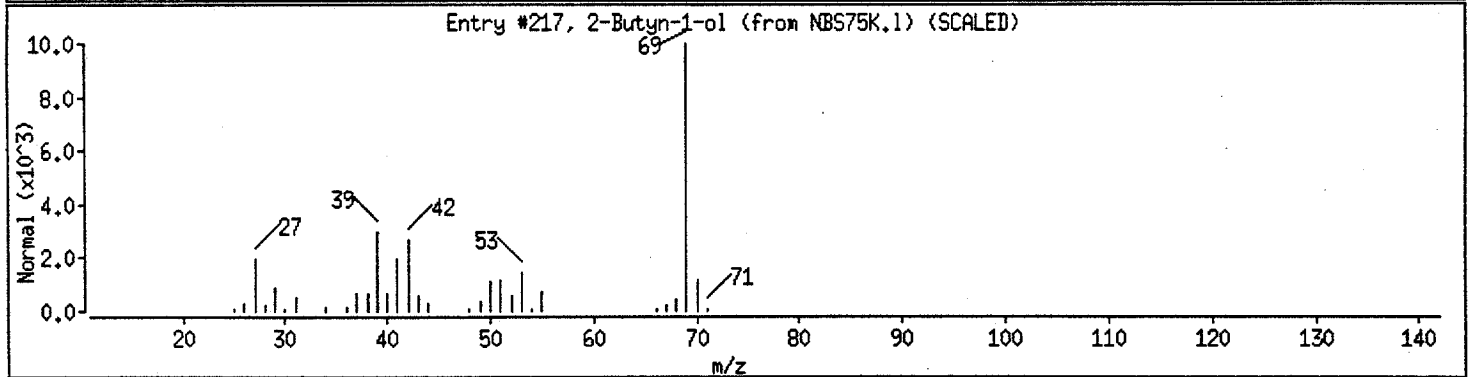
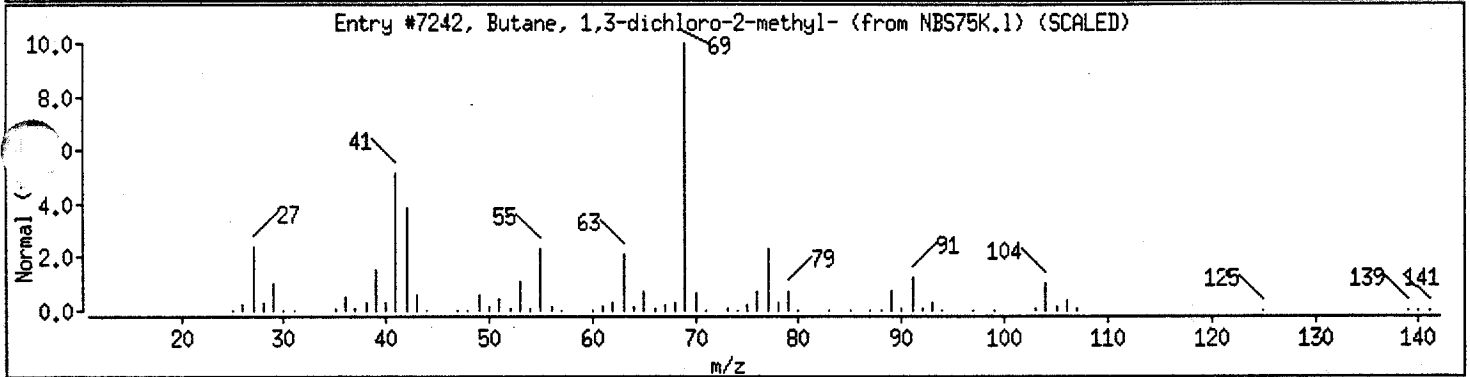
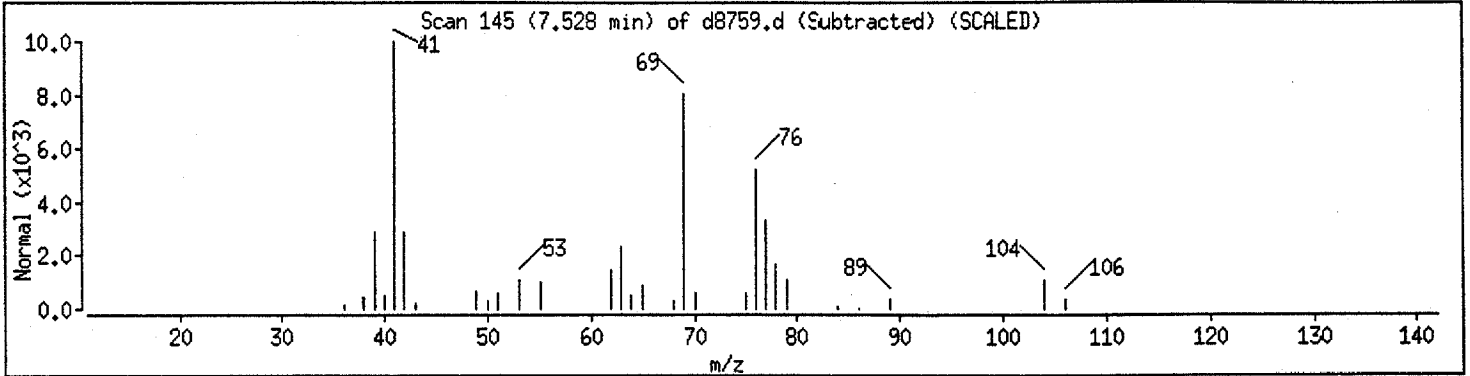
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, 1,3-dichloro-2-methyl-	23010-07-3	NBS75K.1	7242	38
2-Butyn-1-ol	764-01-2	NBS75K.1	217	12
1-Propene, 2-chloro-	557-98-2	NBS75K.1	62597	11



Data File: /chem/a900.i/d062894.b/d8759.d

Page 8

Date: 28-JUN-94 20:27

Instrument: a900.i

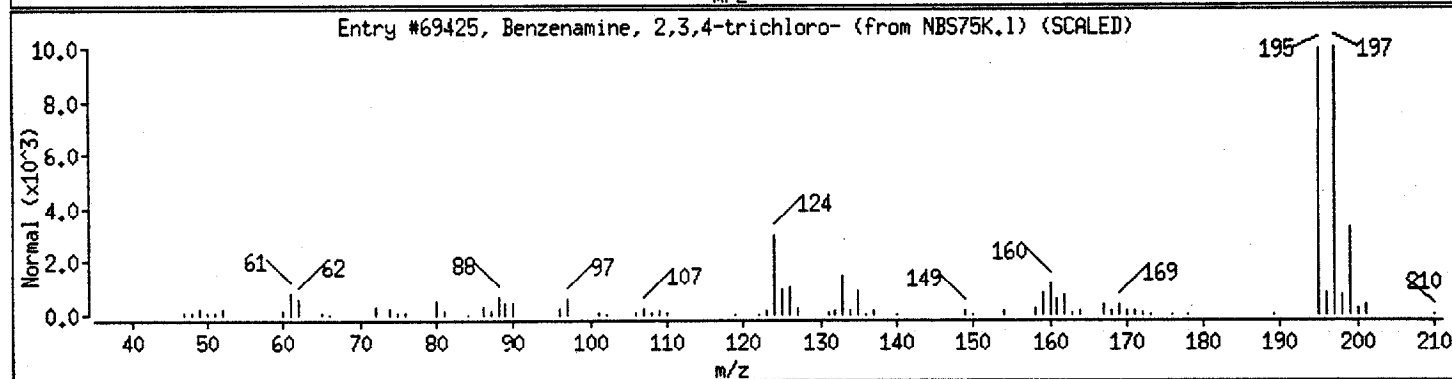
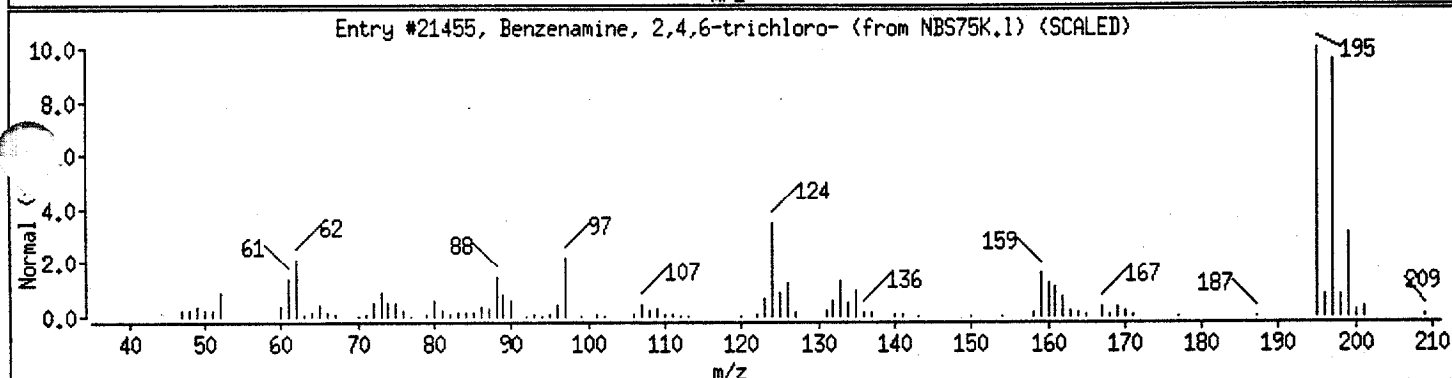
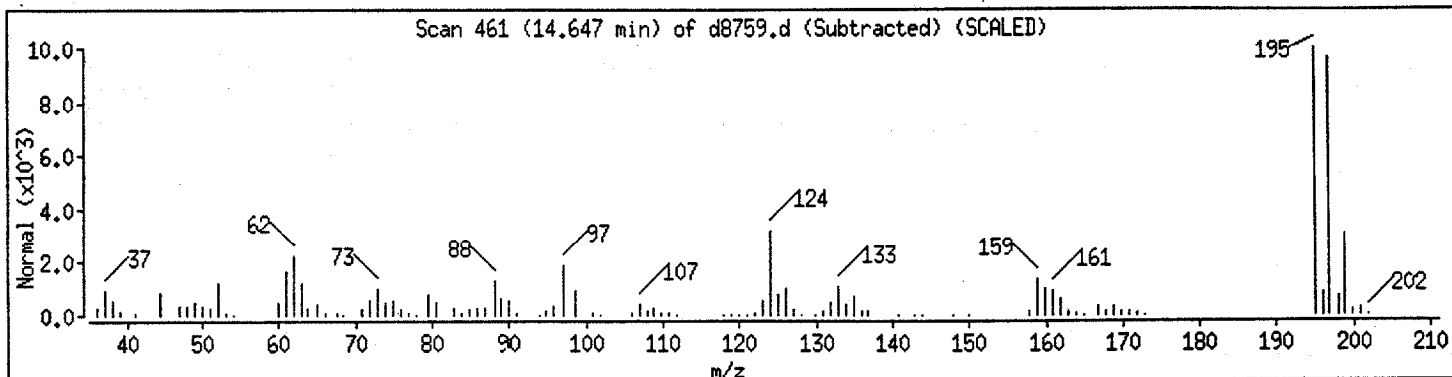
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

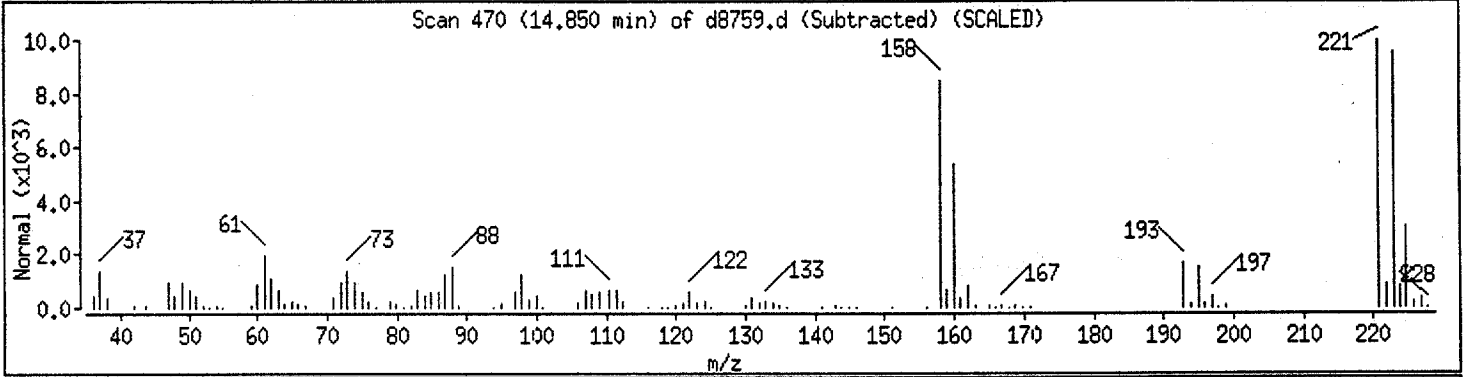
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzenamine, 2,4,6-trichloro-	634-93-5	NBS75K.1	21455	99
Benzenamine, 2,3,4-trichloro-	634-67-3	NBS75K.1	69425	98



Data File: /chem/a900.i/d062894.b/d8759.d  
Date : 28-JUN-94 20:27  
Instrument : a900.i  
Sample ID :  
Column phase : J&W DB-5  
Volume Injected (uL) : 1.0

Column diameter : 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
UNKNOWN				



Data File: /chem/a900.i/d062894.b/d8759.d

Page 10

Date : 28-JUN-94 20:27

Instrument : a900.i

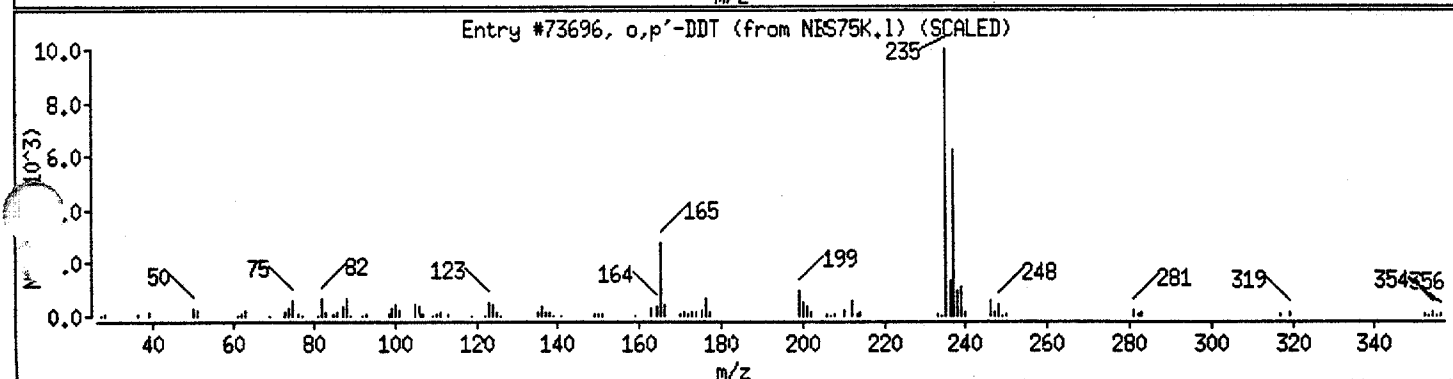
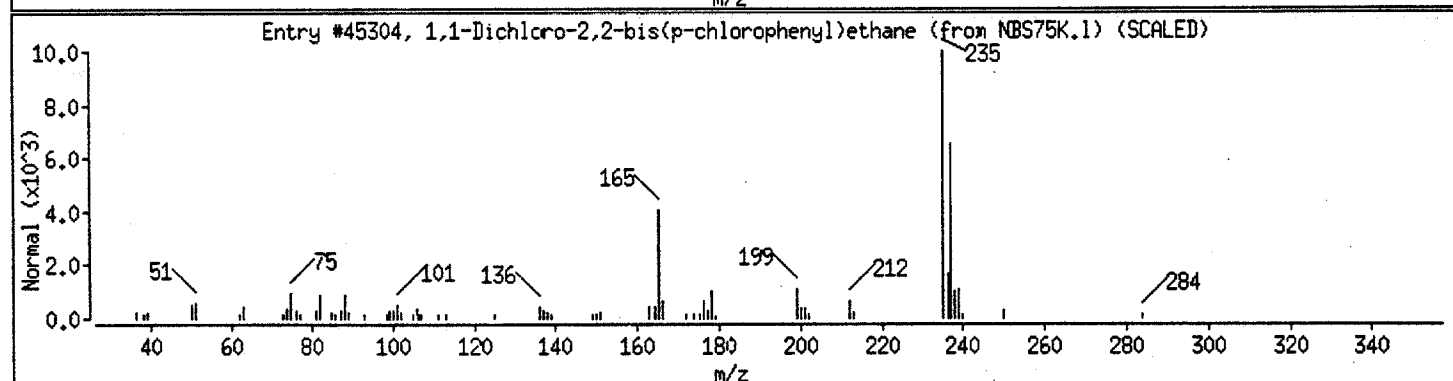
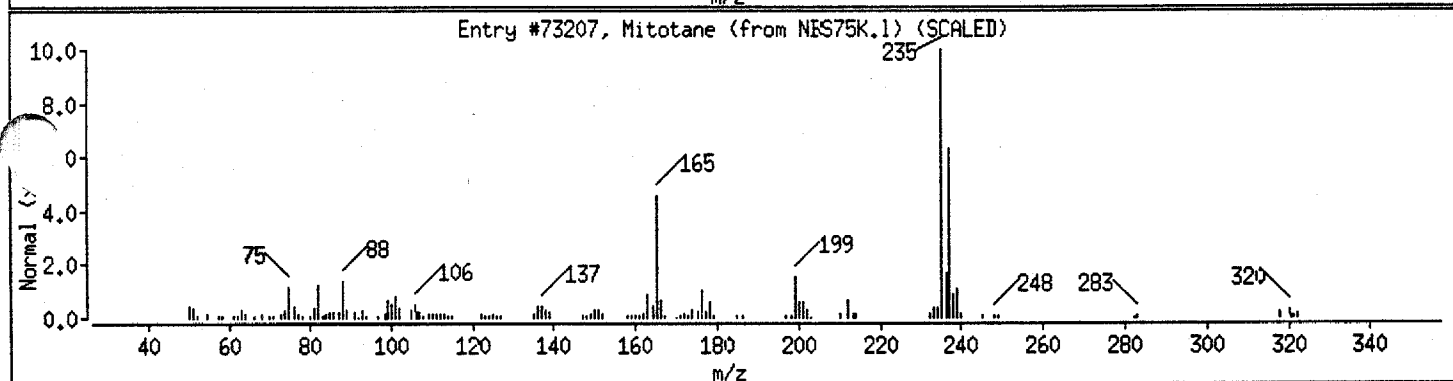
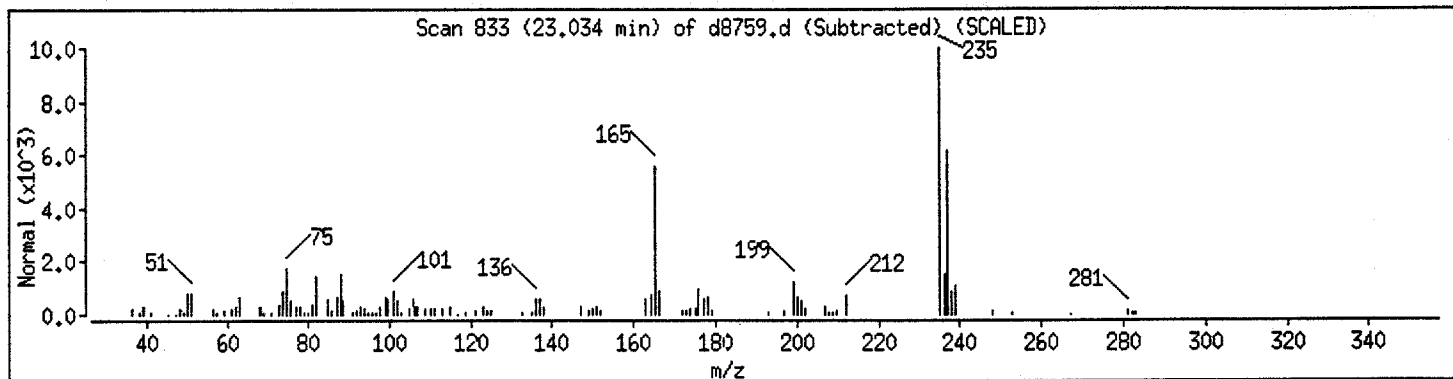
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Mitotane	53-19-0	NBS75K.1	73207	91
1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane	72-54-8	NBS75K.1	45304	87
o,p'-DDT	789-02-6	NBS75K.1	73696	80





Data File: /chem/a900.i/d062894.b/d8759.d

Date : 28-JUN-94 20:27

Instrument : a900.i

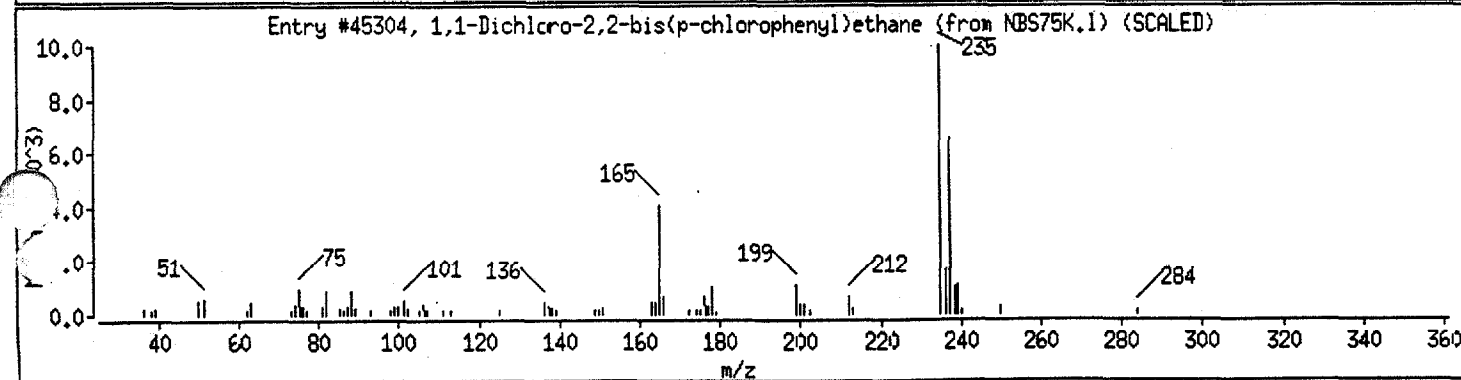
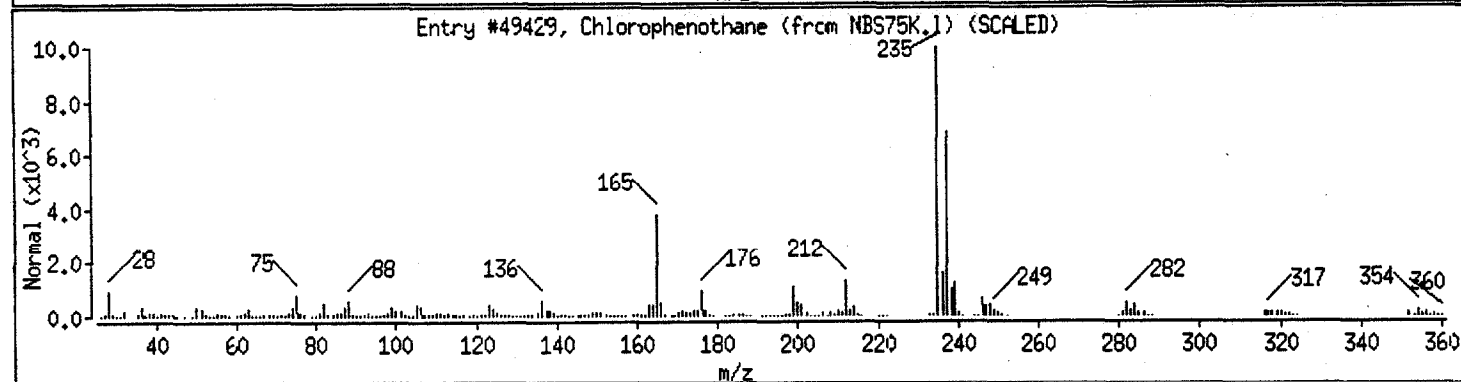
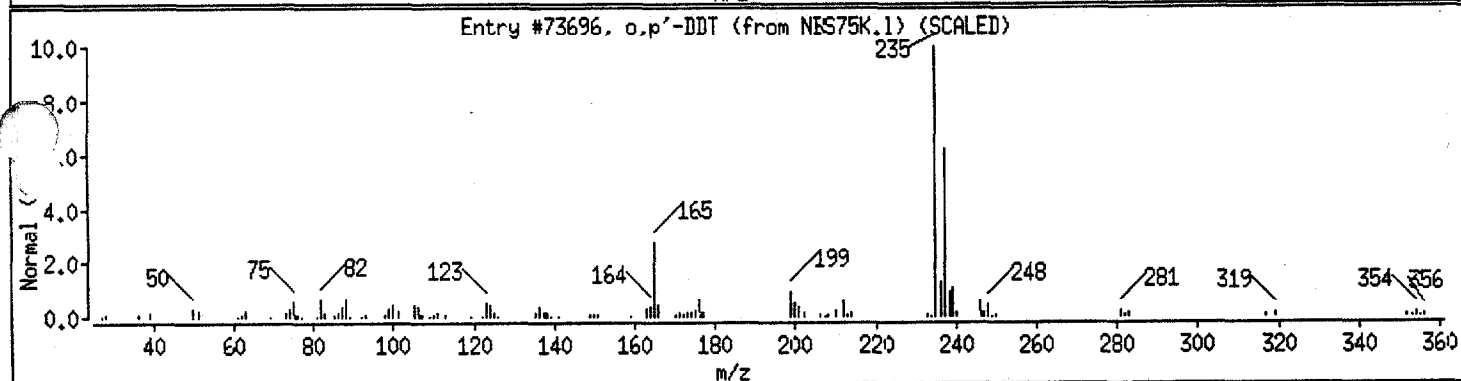
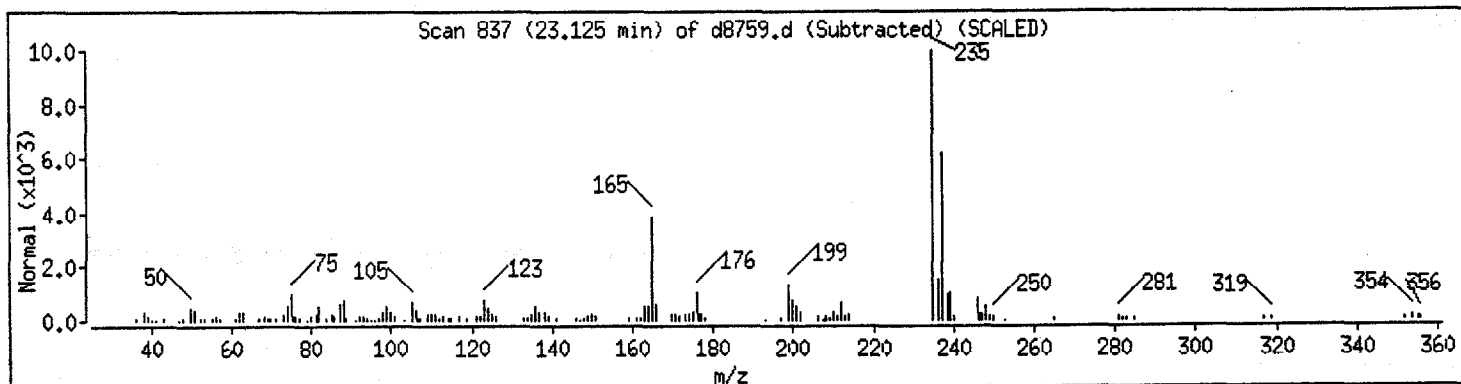
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
o,p'-DDT	789-02-6	NBS75K.1	73696	99
Chlorophenothane	50-29-3	NBS75K.1	49429	91
1,1-Dichloro-2,2-bis(p-chlorophenyl)ethane	72-54-8	NBS75K.1	45304	91



Data File: /chem/a900.i/d062894.b/d8759.d

Date: 28-JUN-94 20:27

Instrument: a900.i

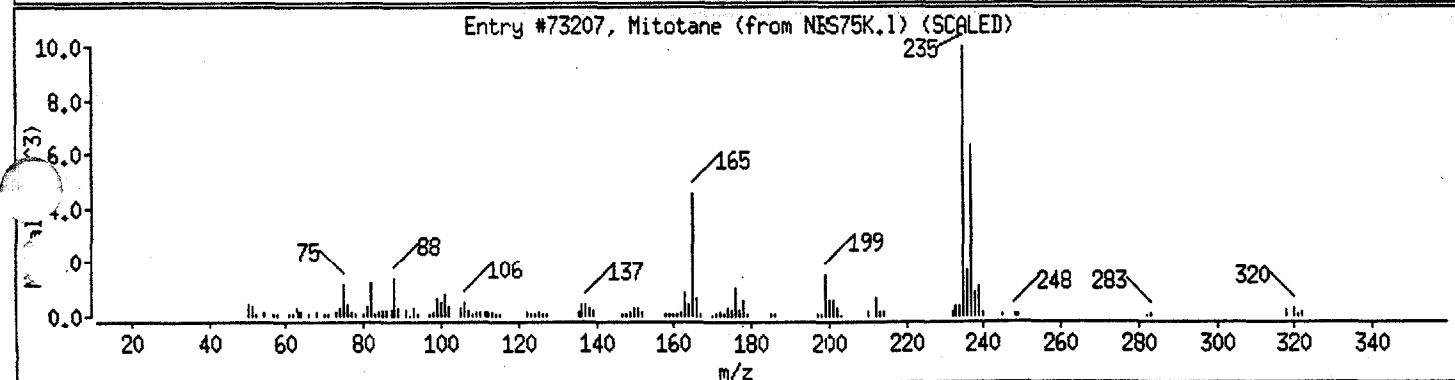
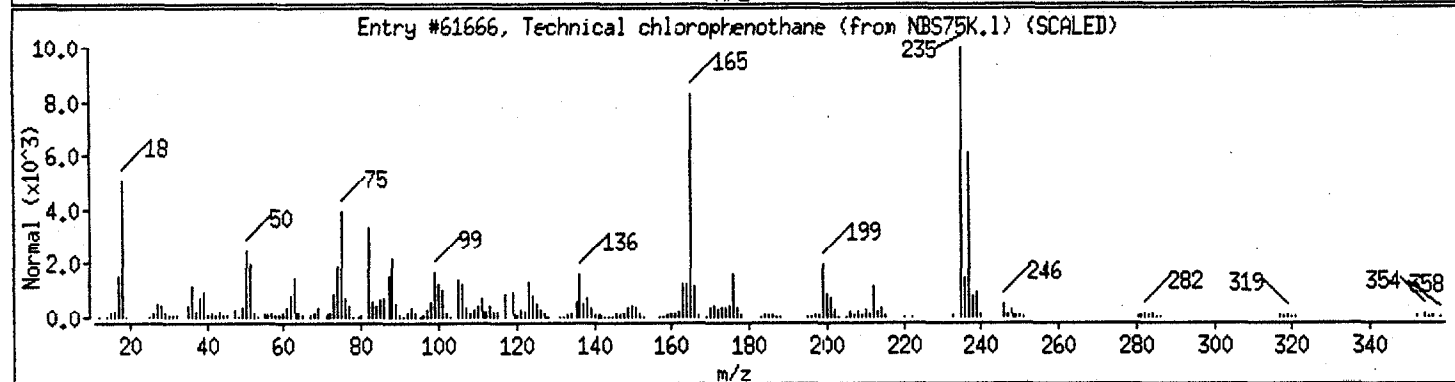
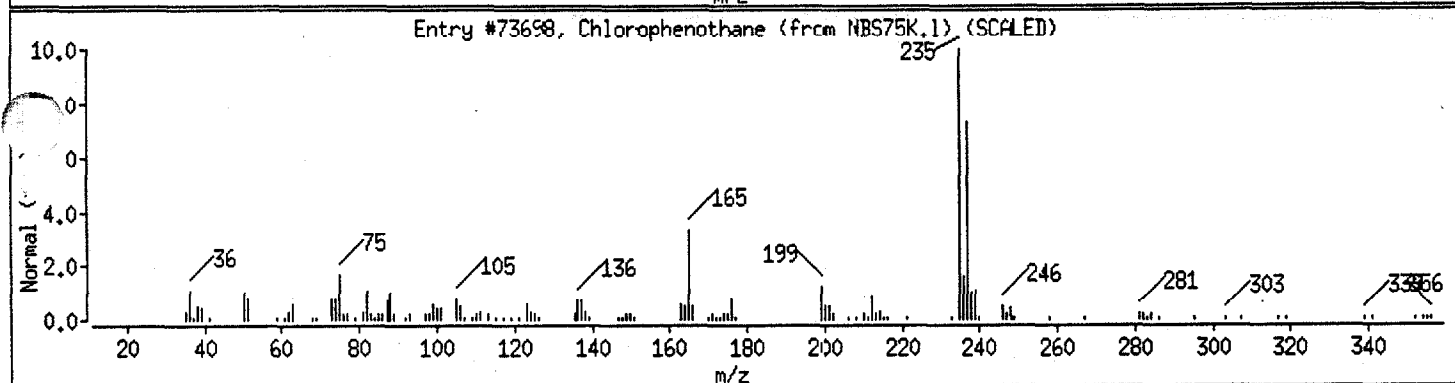
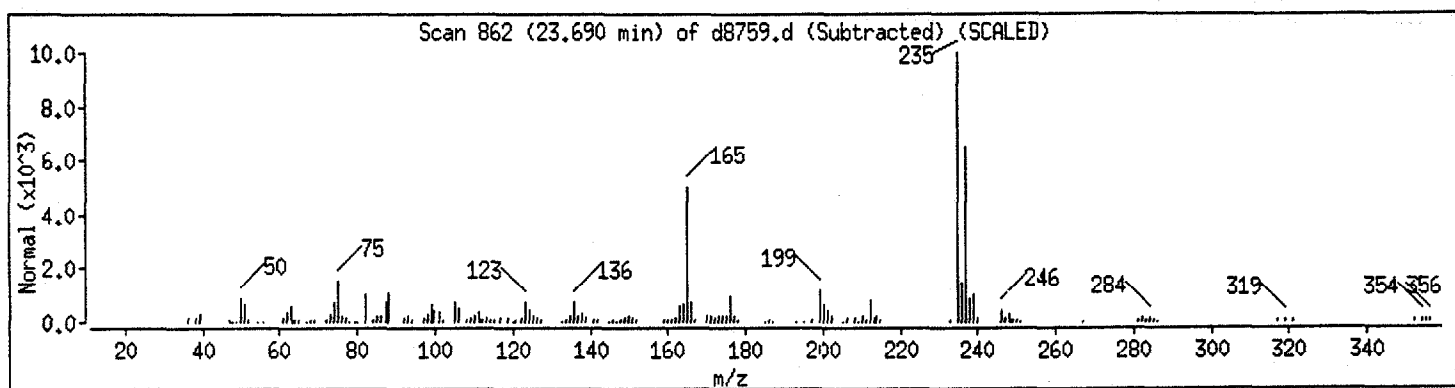
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Chlorophenothane	50-29-3	NBS75K.1	73698	93
Technical chlorophenothane	8017-34-3	NBS75K.1	61666	91
Mitotane	53-19-0	NBS75K.1	73207	91



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0355**

Lab Name: ASC Contract: NELSA CU621  
 Lab Code:     Case No.:     SAS No.:     SDG No.: CU617  
 Matrix: (soil/water) Soil Lab Sample ID: JM9438  
 Sample wt/vol: 1.66 (g/mL) g Lab File ID: D878E  
 Level: (low/med) low Date Received: CU2394  
 % Moisture: NA decanted: (Y/N) N Date Extracted: CU3094  
 Concentrated Extract Volume: 500 (uL) Date Analyzed: CU3094  
 Injection Volume: 1.6 (uL) Dilution Factor: 20  
 GPC Cleanup: (Y/N) N pH: NA

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/kg</u>	Q
108-95-2	Phenol	991000	
111-44-4	bis(2-Chloroethyl) ether	943000	u
95-57-8	2-Chlorophenol	↓	↓
541-73-1	1,3-Dichlorobenzene	↓	↓
106-46-7	1,4-Dichlorobenzene	↓	↓
95-50-1	1,2-Dichlorobenzene	↓	↓
95-48-7	2-Methylphenol	4160000	
108-60-1	2,2'-oxybis(1-Chloropropane)	943000	u
106-44-5	4-Methylphenol	901000	J
621-64-7	N-Nitroso-di-n-propylamine	943000	u
67-72-1	Hexachloroethane	↓	↓
98-95-3	Nitrobenzene	↓	↓
78-59-1	Isophorone	↓	↓
88-75-5	2-Nitrophenol	↓	↓
105-67-9	2,4-Dimethylphenol	1170000	
111-91-1	bis(2-Chloroethoxy)methane	943000	u
120-83-2	2,4-Dichlorophenol	↓	↓
120-82-1	1,2,4-Trichlorobenzene	↓	↓
91-20-3	Naphthalene	500000	J
106-47-8	4-Chloroaniline	943000	u
87-68-3	Hexachlorobutadiene	↓	↓
59-50-7	4-Chloro-3-methylphenol	↓	↓
91-57-6	2-Methylnaphthalene	2190000	
77-47-4	Hexachlorocyclopentadiene	943000	u
88-06-2	2,4,6-Trichlorophenol	↓	↓
95-95-4	2,4,5-Trichlorophenol	↓	↓
91-58-7	2-Chloronaphthalene	↓	↓
88-74-4	2-Nitroaniline	↓	↓
131-11-3	Dimethylphthalate	↓	↓
208-96-8	Acenaphthylene	↓	↓
606-20-2	2,6-Dinitrotoluene	↓	↓
99-09-2	3-Nitroaniline	↓	↓
83-32-9	Acenaphthene	↓	↓

1C SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ASC Contract: NERSA Case No.: Lab Code: Case No.: SAS No.: SDG No.: 04617 Matrix: (soil/water) Soil Lab Sample ID: JM9438 Sample wt/vol: 100 (g/mL) 5 Lab File ID: D8788 Level: (low/med) Low Date Received: 062394 % Moisture: NH decanted: (Y/N) N Date Extracted: 063094 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 063094 Injection Volume: 10 (uL) Dilution Factor: 20 GPC Cleanup: (Y/N) N pH: NA

Table with 4 columns: CAS NO., COMPOUND, CONCENTRATION UNITS (ug/L or ug/Kg), and a unit symbol. Rows list various organic compounds like 2,4-Dinitrophenol, 4-Nitrophenol, Dibenzofuran, etc., with their respective concentrations and units.

(1) - Cannot be separated from Diphenylamine

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

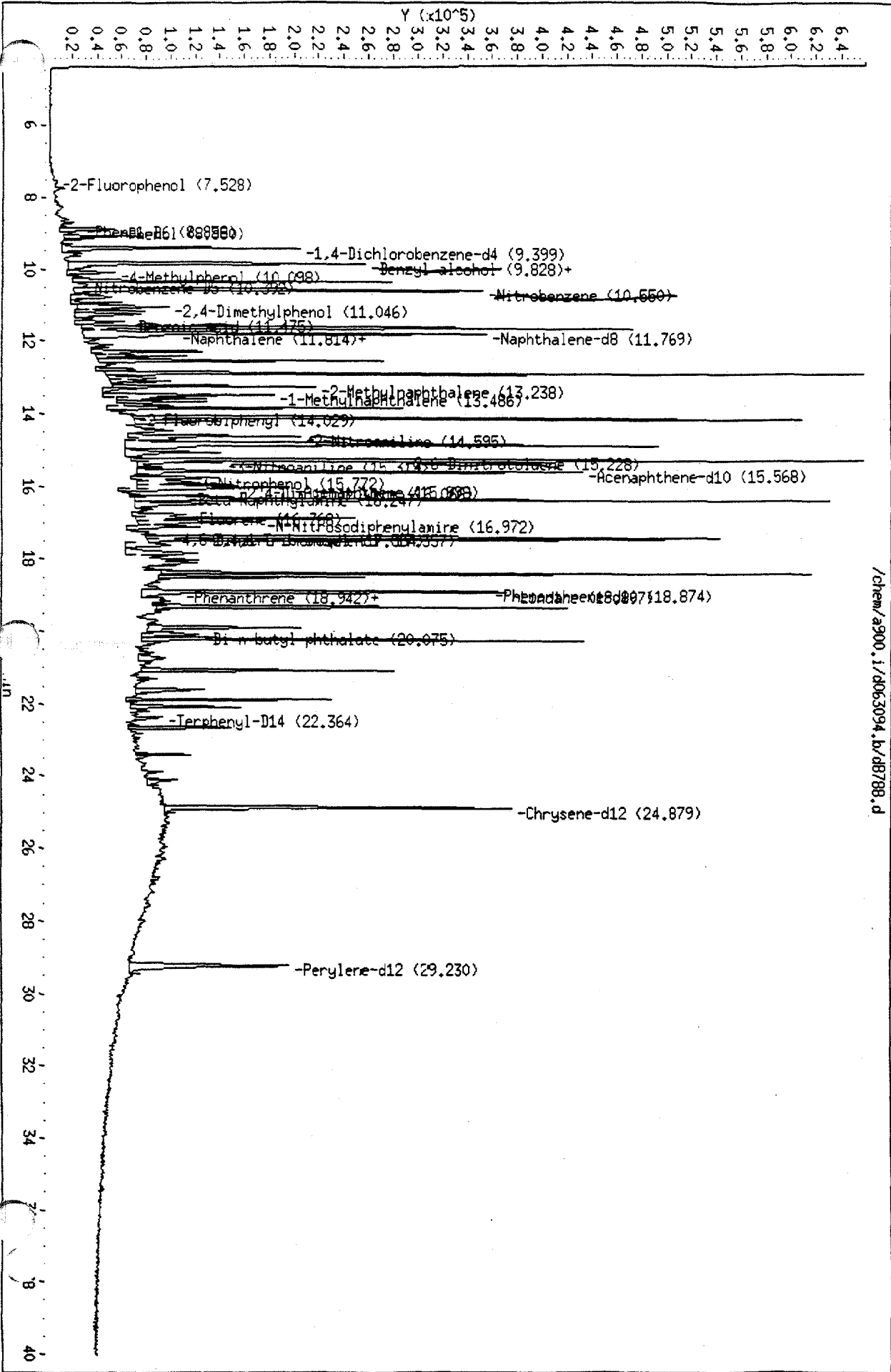
EPA SAMPLE NO.

Lab Name: ASC Contract: NUSA CU121  
Lab Code:      Case No.:      SAS No.:      SDG No.: CU117  
Matrix: (soil/water) soil Lab Sample ID: T19438  
Sample wt/vol: 1.0g (g/mL) g Lab File ID: D8768  
Level: (low/med) LOW Date Received: 11-23-94  
% Moisture: NA decanted: (Y/N) N Date Extracted: 11-30-94  
Concentrated Extract Volume: 5000 (uL) Date Analyzed: 11-30-94  
Injection Volume: 1.0 (uL) Dilution Factor: 20  
GPC Cleanup: (Y/N) N pH: NA

Number TICs found: 20 CONCENTRATION UNITS:  
(ug/L or ug/Kg) ug/Kg

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 629-97-0	DODECANE	21.865	1500	J
2. 112-40-3	Dodecane	11.611	2570	
3. 3591-98-3	Dodecane, 1,6,10-trimethyl	13.806	1960	
4. 1002-84-2	EICOSANE	14.871	2760	
5. 629-94-7	HEPTADECANE	21.049	2150	
6. 629-78-7	Heptadecane	17.380	4810	
7. 544-76-3	Hexadecane	16.338	590	
8. 530-50-7	Hydrozine, 1,1-dimethyl	16.972	1640	
9. 2131-42-2	Naphthalene, 1,4,8-trimethyl	16.451	1220	
10. 629-98-5	Nonadecane	19.305	3390	
11. 5911-64-1a	Nonane, 3-methyl	12.537	1550	
12. 593-45-3	Octadecane	18.376	3880	
13. 629-62-9	Pentadecane	15.257	5900	
14. 1002-84-2	Pentadecanoic Acid	19.871	1640	
15. 629-59-4	Tetradecane	14.697	4780	
16. 629-80-5	Tridecane	12.876	3300	
17. 1120-21-4	Undecane	10.324	3730	
18. 530-50-7	Undecane, 3,5-dimethyl	16.859	2230	
19. -	unknown	-	6800	
20. -	unknown	-	3550	▼
21. 17312-81-1	11,11,11-trifluoro-1-octadecane	-	-	-
22. -	-	-	-	-
23. -	-	-	-	-
24. -	-	-	-	-
25. -	-	-	-	-
26. -	-	-	-	-
27. -	-	-	-	-
28. -	-	-	-	-
29. -	-	-	-	-
30. -	-	-	-	-

Data File: /chem/a900.1/d063094.b/d8788.d  
Date: 30-JUN-94 15:16  
Instrument: a900.1  
Sample ID:  
Column phase: J&W DB-5  
Volume Injected (uL): 1.0



/chem/a900.1/d063094.b/d8788.d

C6621

Column diameter: 0.25

Data File: /chem/a900.i/d063094.b/d8788.d  
Report Date: 04-Jul-1994 12:49

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/d063094.b/d8788.d

Lab. Id. : Quant Type: ISTD

Inj Date : 30-JUN-94 15:16 Autotune Date: {

Operator : Tom Inst ID: a900.i

Smp Info : 15226N-C6621

Misc Info : JM9438C,N4C40854,S:M1,1.06,5:20,

BTL#

Comment :

Method : /chem/a900.i/d063094.b/bna8270d.m

Meth Date : 04-Jul-1994 12:45 tom

Cal Date : 30-JUN-94 13:59

Cal File: d8787.d

Als bottle: 0

Dil Factor: 1.000

Target Version: Target 3.00

Integrator: HP RTE

Compound Sublist: all.sub

Sample Matrix: WATER

*ISC*  
*7-6-94*

Compounds	QUANT	SIG	MASS	RT	REL RT	RESPONSE	CONCENTRATIONS	
							ON-COLUMN (ug/ml)	FINAL (ug/L)
8 2-Fluorophenol	112.00			7.528	(0.801)	7397	3.68	3.68 (aR)
10 Phenol-D6	99.00			8.858	(0.942)	14132	5.26	5.26 (aR)
11 Phenol	94.00			8.880	(0.945)	35594	10.5	10.5 (Q)
* 17 1,4-Dichlorobenzene-d4	152.00			9.399	(1.000)	64207	40.0	
19 Benzyl alcohol	108.00			9.828	(1.046)	103228	66.7	66.7 (aQ)
21 2-Methylphenol	108.00			9.828	(1.046)	103222	44.1	44.1
23 4-Methylphenol	108.00			10.098	(1.074)	22893	9.55	9.55 (a)
S 27 Nitrobenzene-D5	82.00			10.392	(0.883)	7857	3.10	3.10 (aR)
28 Nitrobenzene	77.00			10.550	(0.896)	67426	25.5	25.5 (Q)
30 2,4-Dimethylphenol	107.00			11.046	(0.939)	28249	12.4	12.4
32 Benzoic acid	122.00			11.475	(0.975)	5586	5.15	5.15 (aQ)
* 37 Naphthalene-d8	136.00			11.769	(1.000)	268315	40.0	
38 Naphthalene	128.00			11.814	(1.004)	32977	5.30	5.30 (a)
39 4-Chloroaniline	127.00			11.814	(1.004)	5404	2.08	2.08 (aQ)
45 2-Methylnaphthalene	142.00			13.238	(1.125)	96374	23.2	23.2
46 1-Methylnaphthalene	142.00			13.486	(1.435)	56099	13.5	13.5 (A)
S 51 2-Fluorobiphenyl	172.00			14.029	(0.901)	9869	2.28	2.28 (aR)
53 2-Nitroaniline	65.00			14.595	(0.937)	1997	1.07	1.07 (aQ)
55 2,6-Dinitrotoluene	165.00			15.228	(0.978)	1460	1.07	1.07 (a)
57 3-Nitroaniline	138.00			15.319	(0.984)	1341	1.04	1.04 (a)
* 58 Acenaphthene-d10	164.00			15.568	(1.000)	179962	40.0	
60 Acenaphthene	153.00			15.998	(1.028)	7114	1.59	1.59 (aQ)
61 4-Nitrophenol	109.00			15.772	(1.013)	858	1.95	1.95 (aQ)
62 2,4-Dinitrotoluene	165.00			16.066	(1.032)	2009	1.14	1.14 (aQ)
65 Beta-Naphthylamine	143.00			16.247	(1.044)	2249	2.15	2.15 (aQ)
69 Fluorene	166.00			16.768	(1.077)	7115	1.40	1.40 (a)
71 4,6-Dinitro-o-cresol	198.00			17.334	(0.918)	1575	1.80	1.80 (aQ)
/2 N-Nitrosodiphenylamine	169.00			16.972	(0.899)	44236	12.4	12.4 (Q)
S 74 2,4,6-Tribromophenol	330.00			17.357	(1.115)	2865	3.76	3.76 (aR)

Data File: /chem/a900.i/d063094.b/d8788.d  
 Report Date: 04-Jul-1994 12:49

Page 2

Compounds	QUANT SIG		REL RT	RESPONSE	CONCENTRATIONS	
	MASS	RT			ON-COLUMN (ug/ml)	FINAL ( ug/L)
79 Lindane	183.00	18.897	(1.001)	8925	11.5	<del>RT 11.5(a)</del>
* 81 Phenanthrene-d10	188.00	18.874	(1.000)	294616	40.0	
82 Phenanthrene	178.00	18.942	(1.004)	24313	3.63	<del>3.63(a)</del>
83 Anthracene	178.00	18.942	(1.004)	24313	3.45	<del>3.45(a)</del>
85 Di-n-butyl phthalate	149.00	20.075	(1.064)	18224	2.28	<del>2.28(a)</del>
\$ 90 Terphenyl-D14	244.00	22.364	(0.899)	14983	2.40	2.40(aR) ✓
* 99 Chrysene-d12	240.00	24.879	(1.000)	296699	40.0	
* 105 Perylene-d12	264.00	29.230	(1.000)	203644	40.0	

## QC Flag Legend

- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- A - Target compound detected but, quantitated amount exceeded maximum amount.
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.



Data File: /chem/a900.i/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

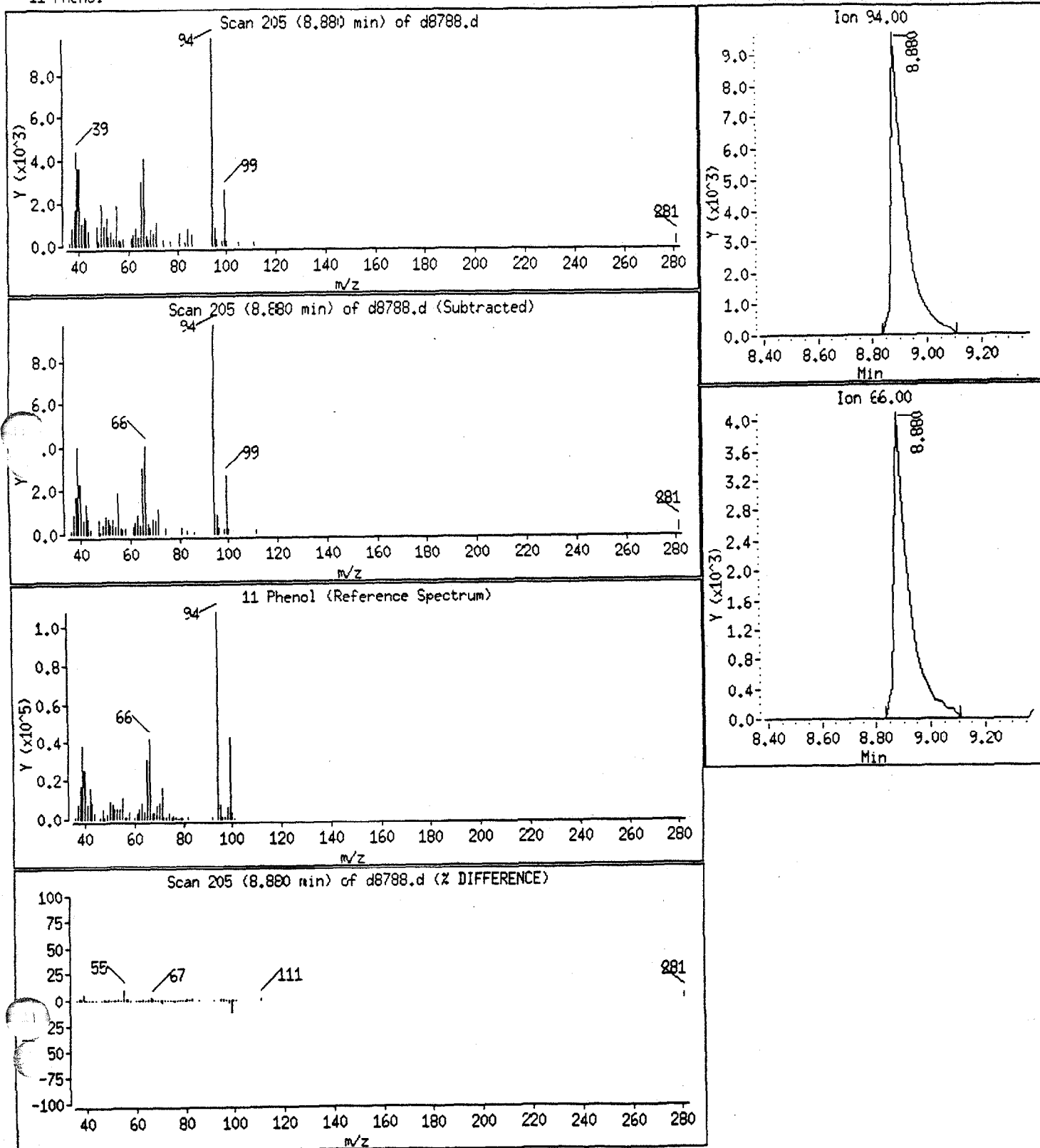
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

11 Phenol



Data File: /chem/a900.i/d063094.b/d8788.d

Page 9

Date : 30-JUN-94 15:16

Instrument : a900.i

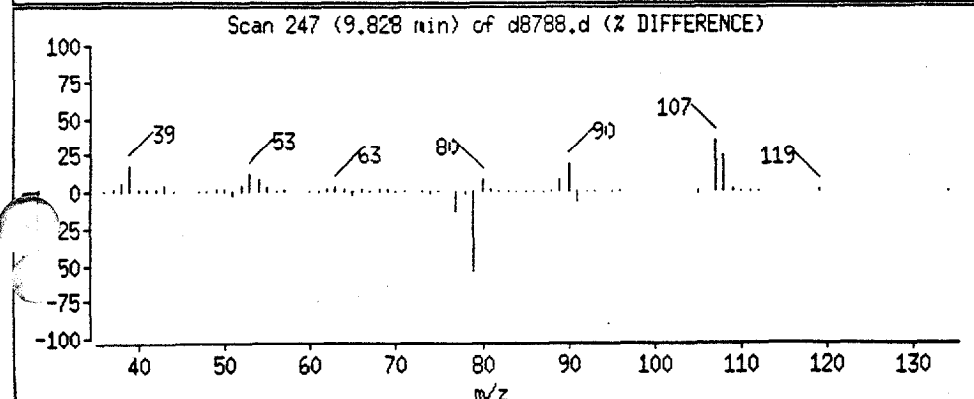
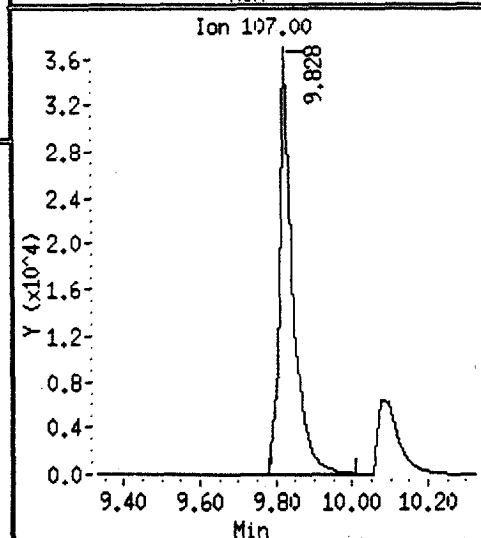
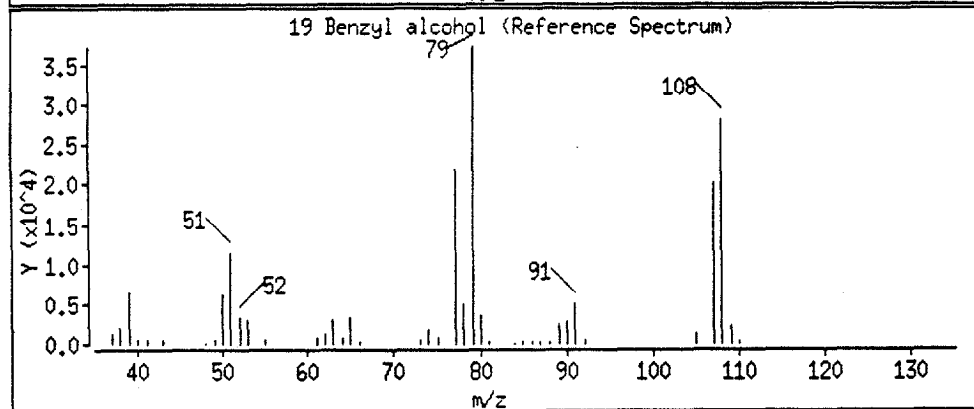
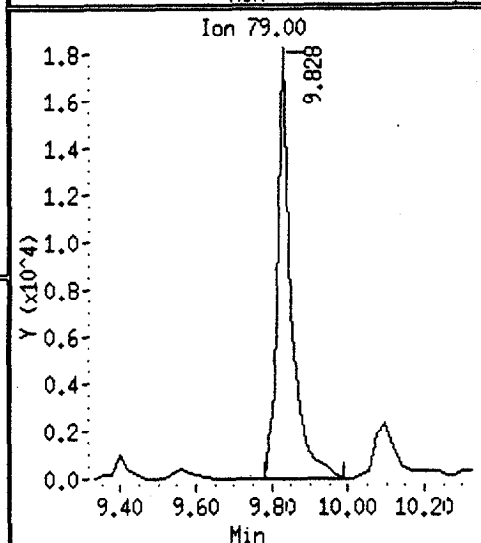
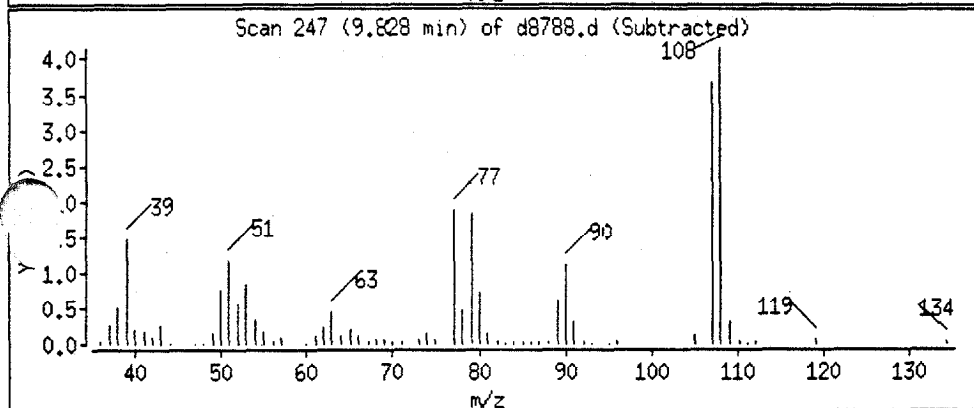
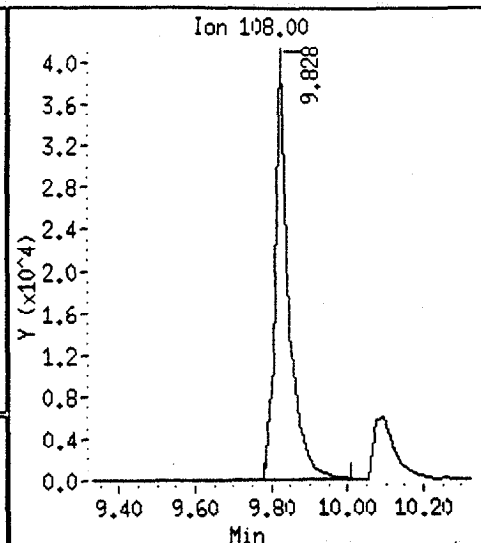
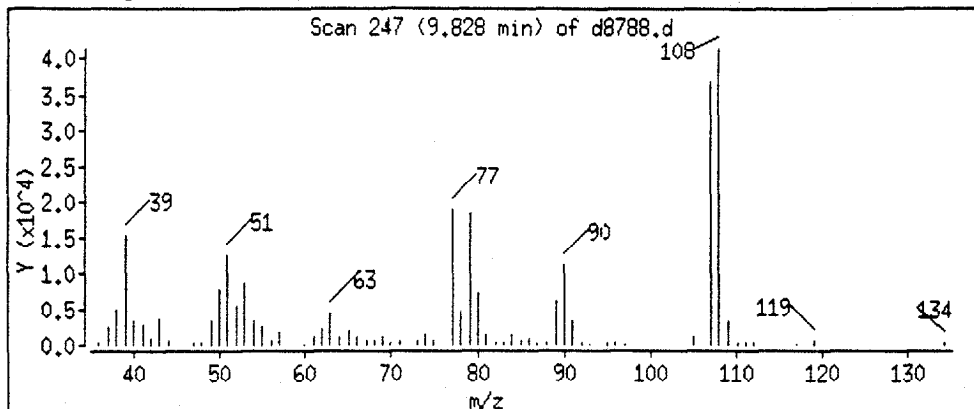
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

19 Benzyl alcohol



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

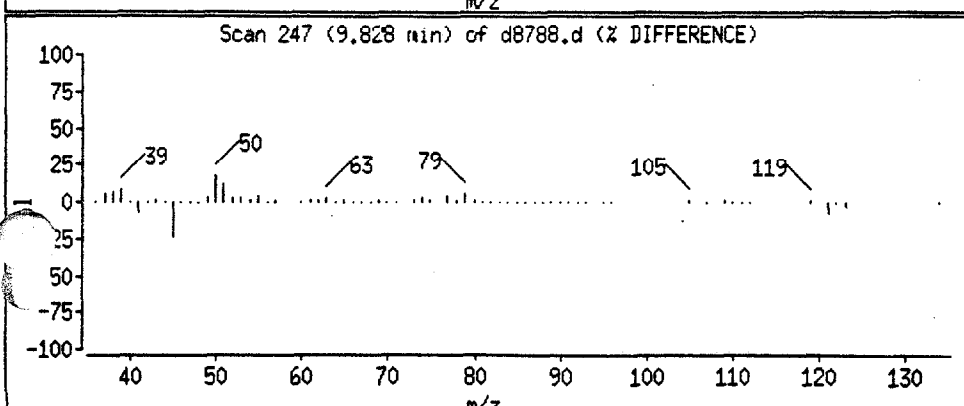
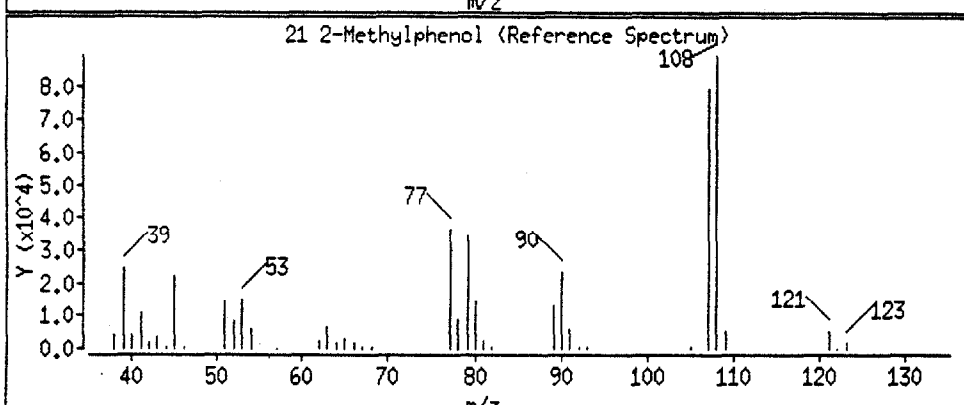
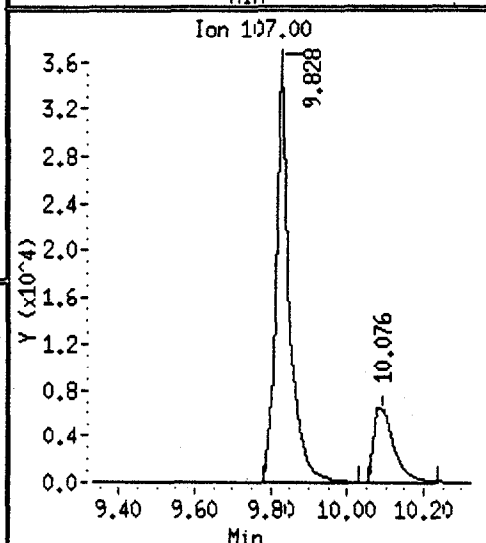
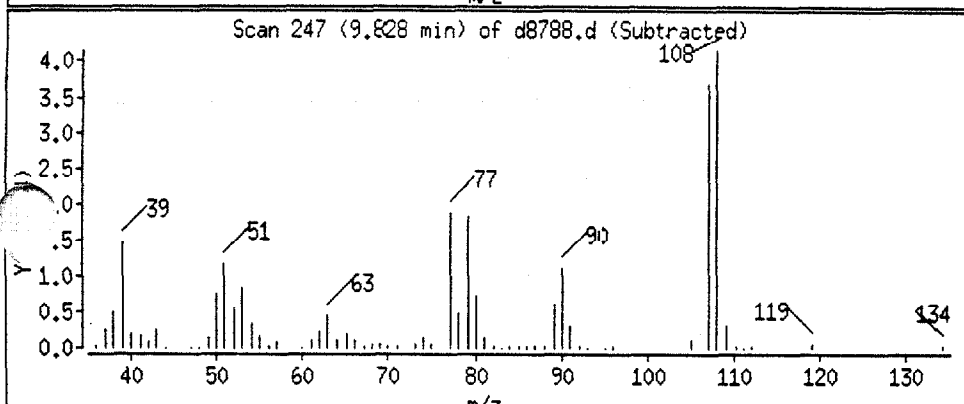
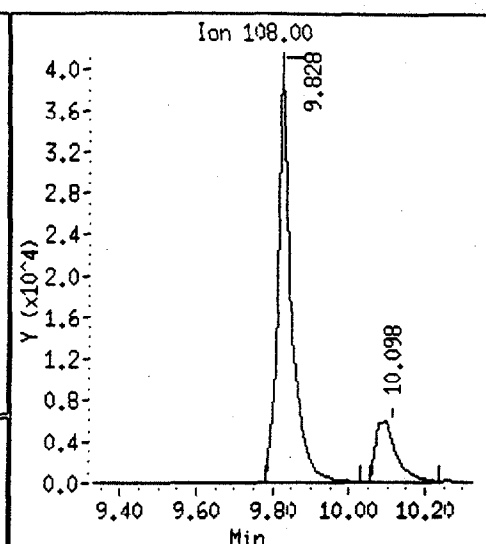
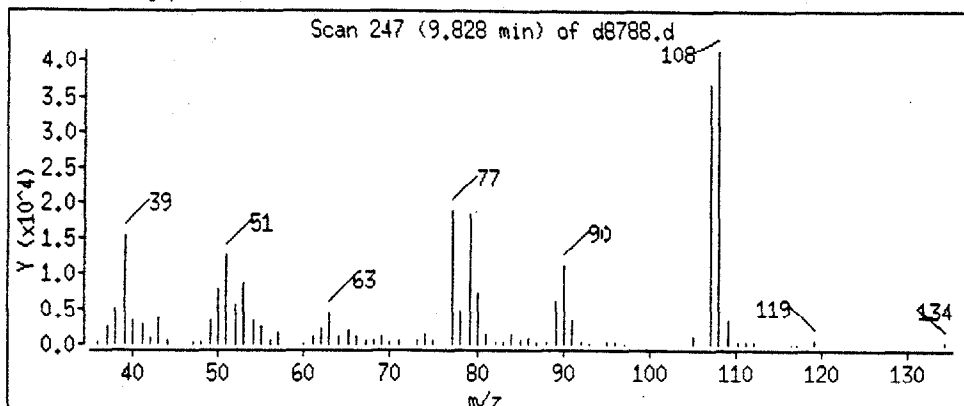
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

21 2-Methylphenol



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

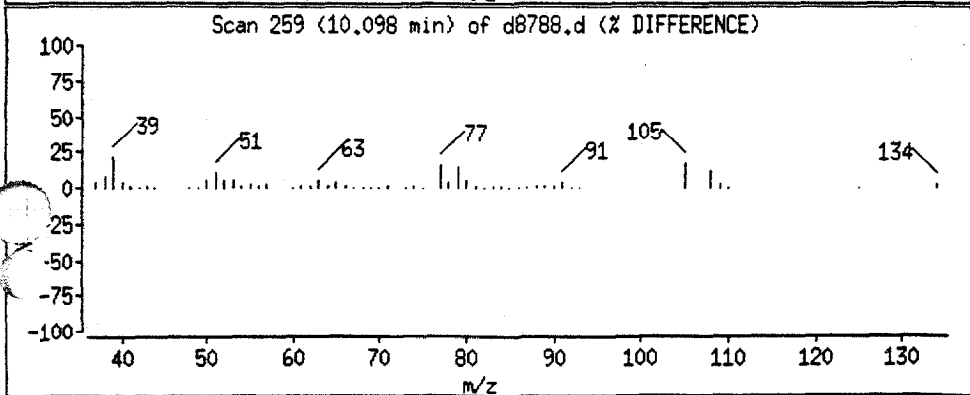
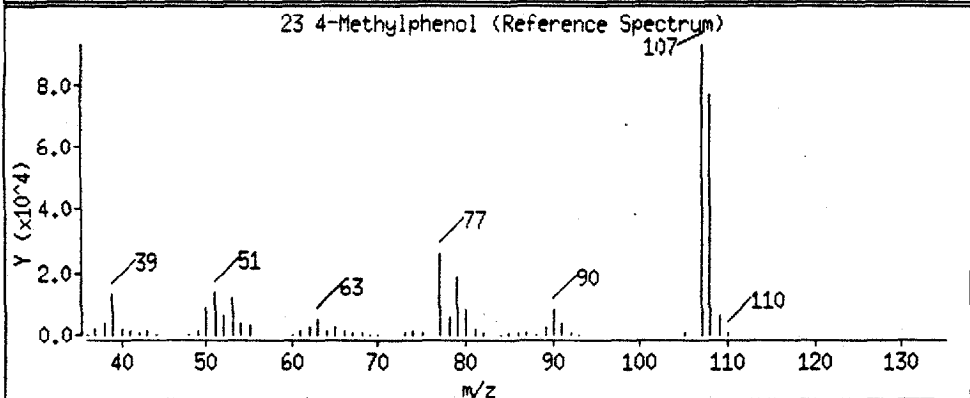
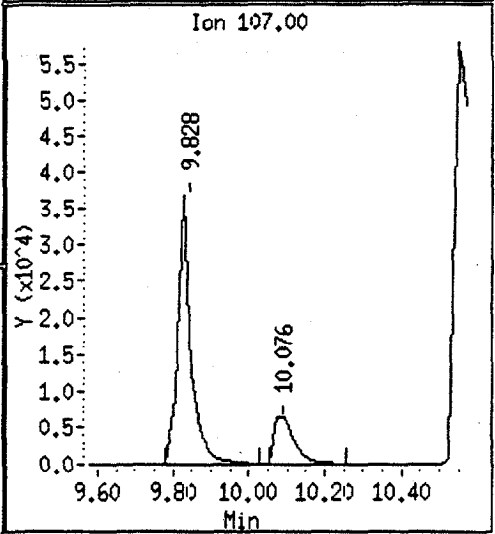
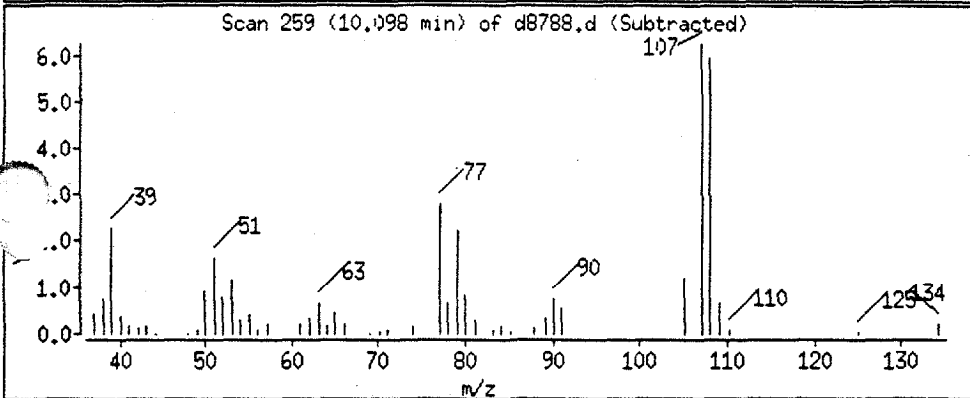
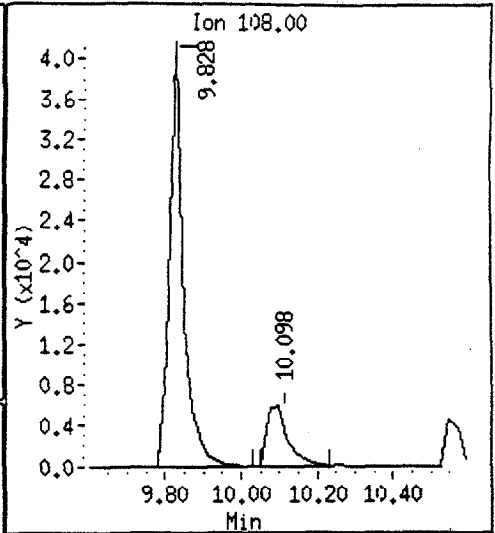
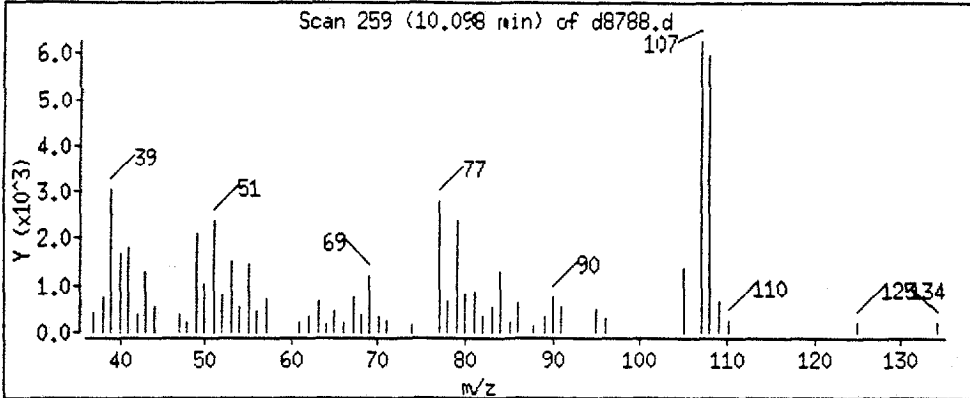
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

23 4-Methylphenol



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

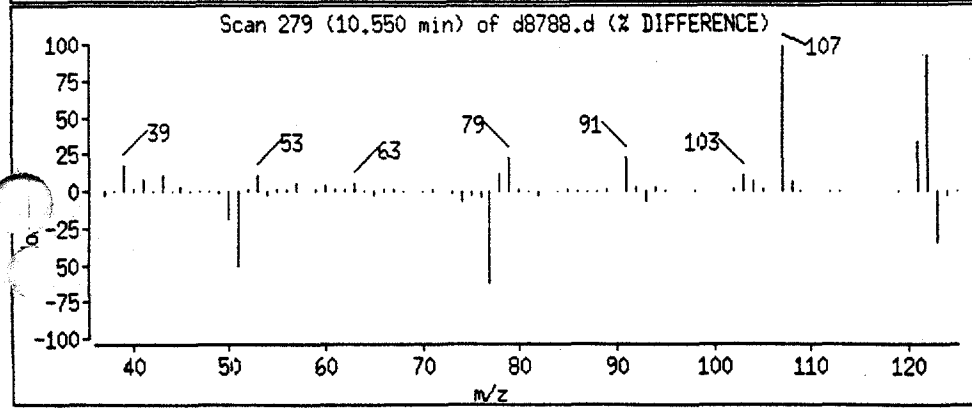
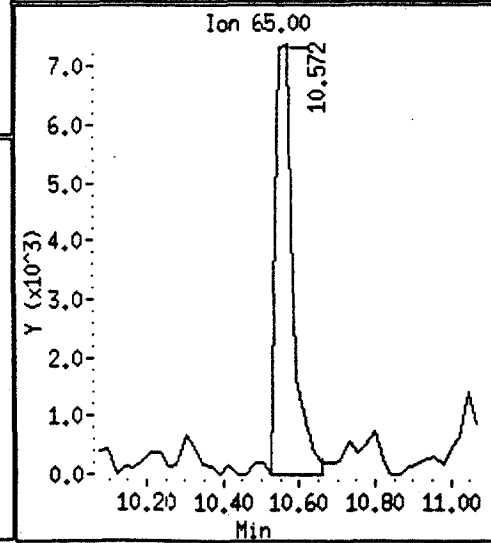
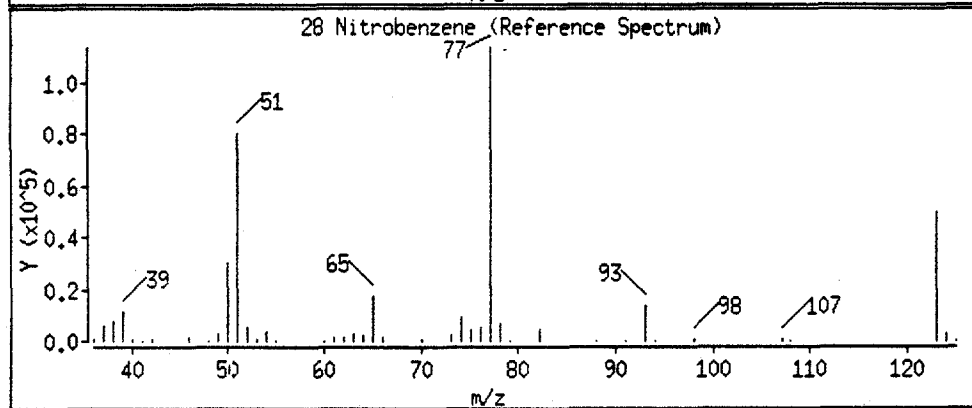
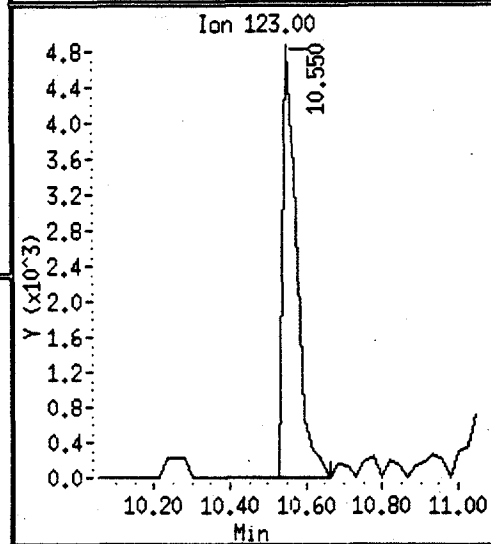
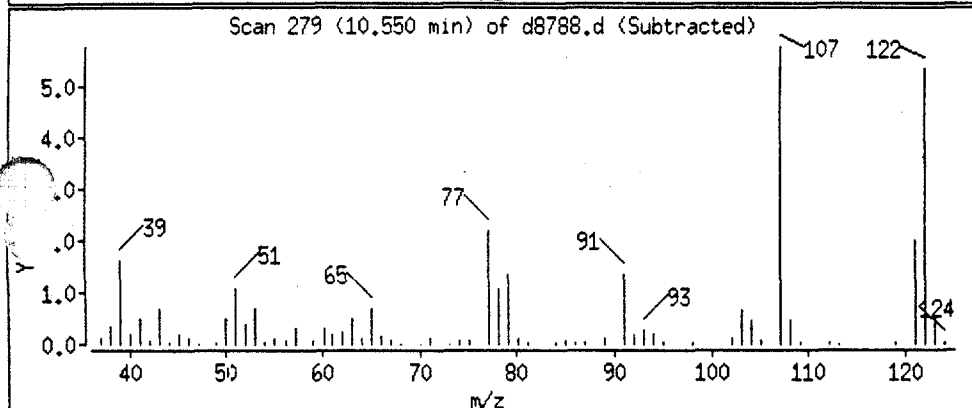
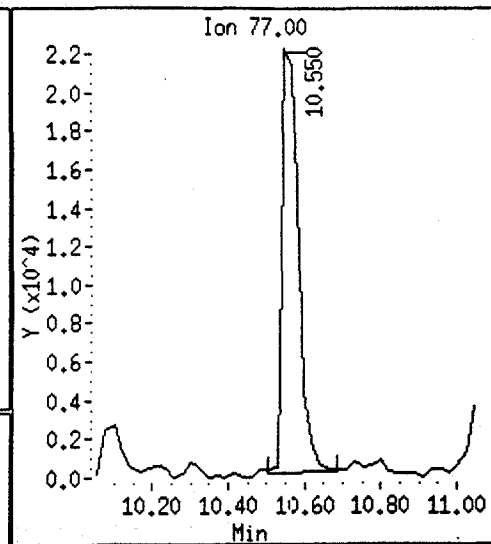
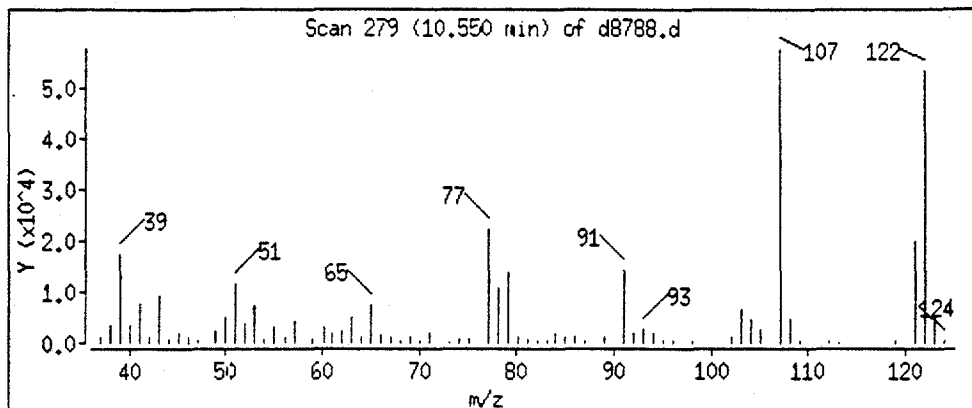
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

28 Nitrobenzene



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

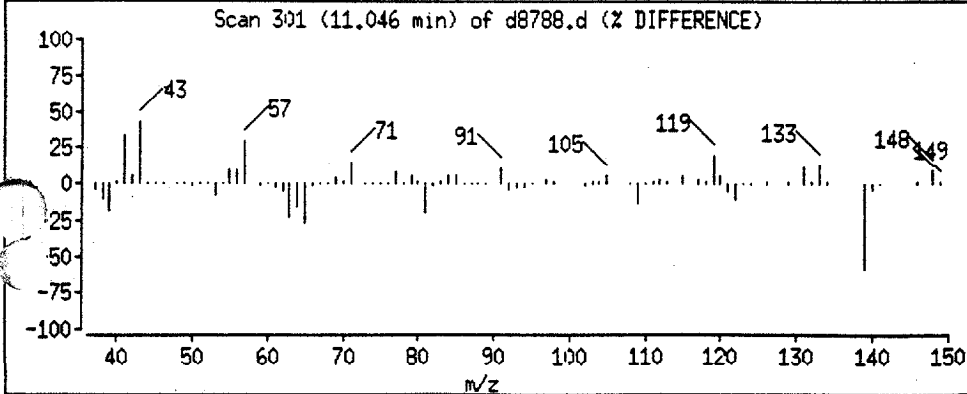
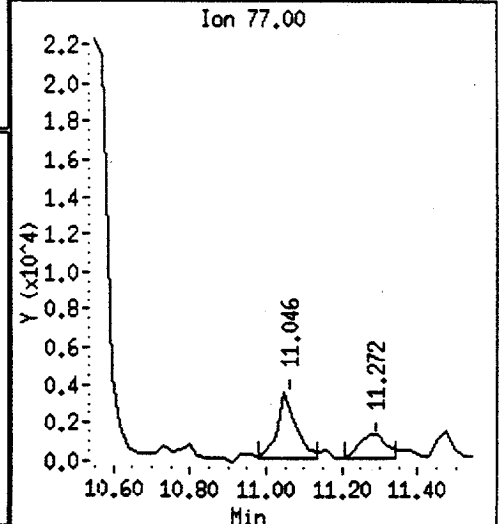
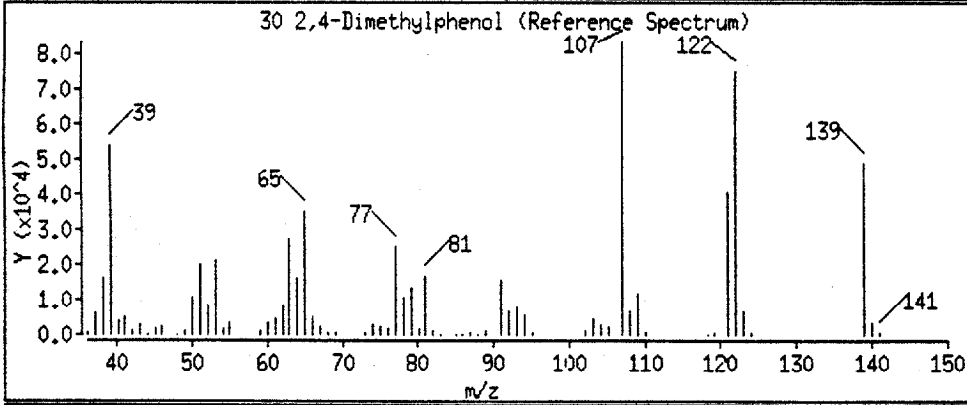
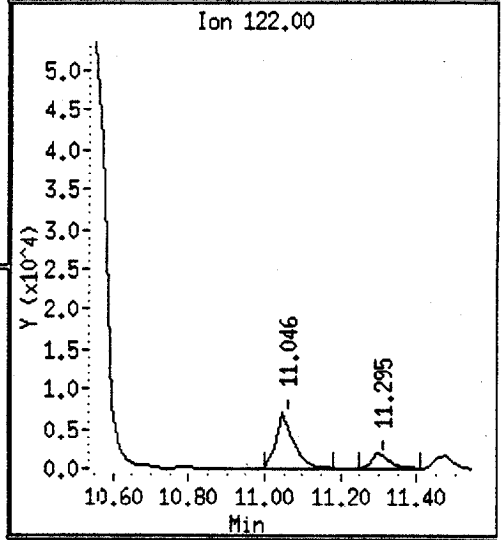
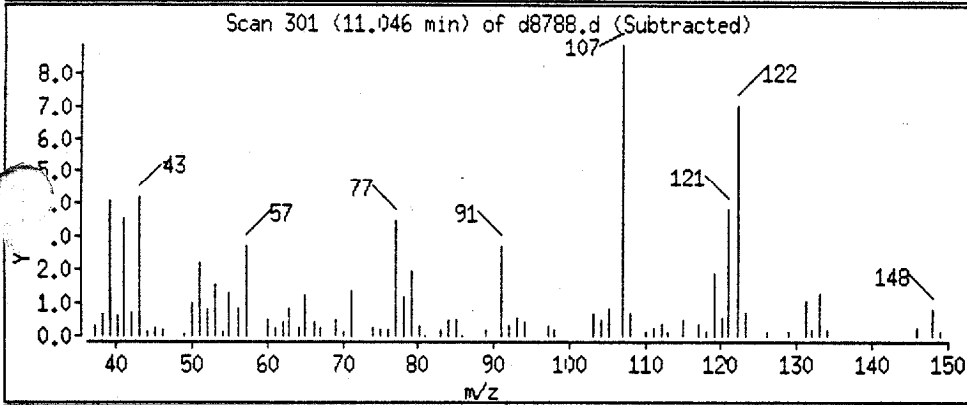
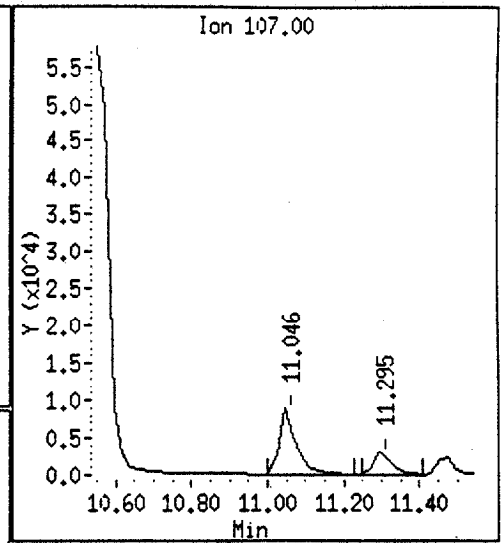
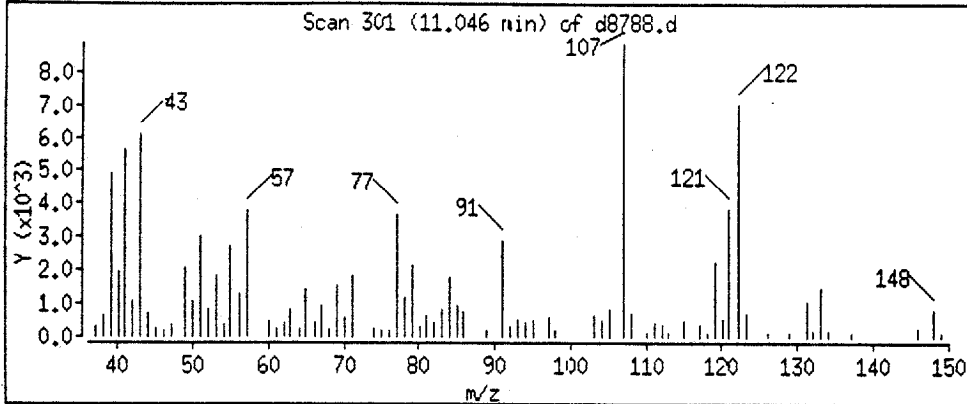
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

30 2,4-Dimethylphenol



Data File: /chem/a900.1/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

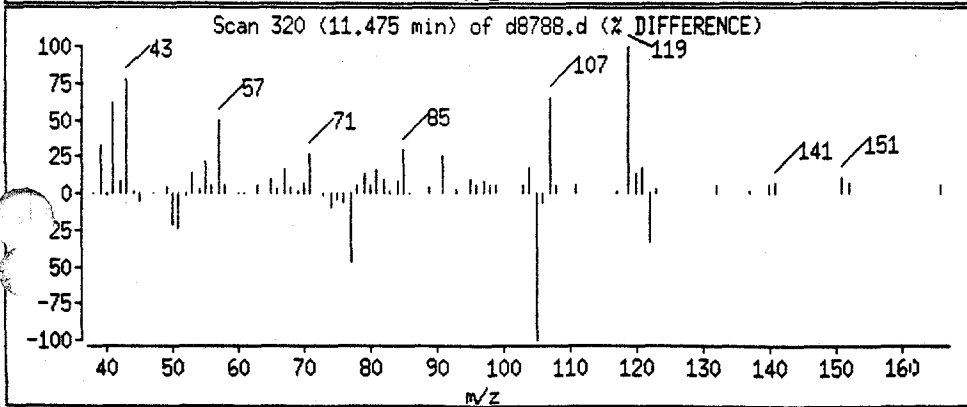
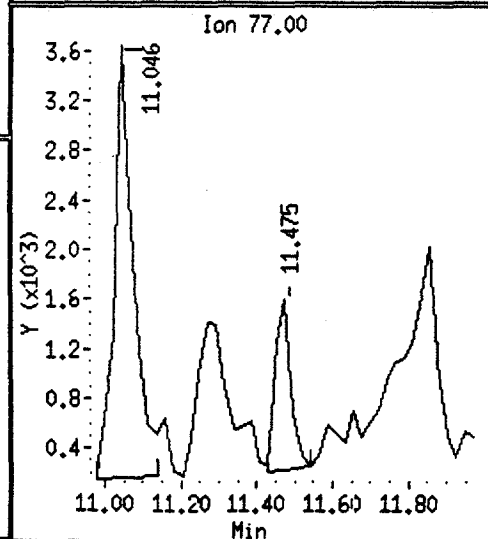
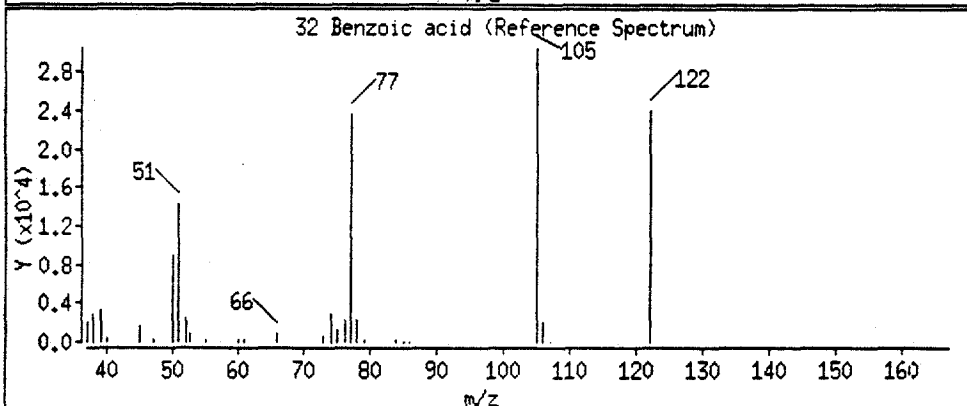
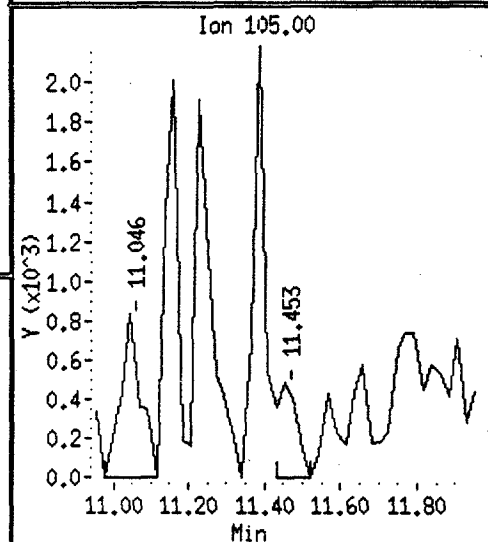
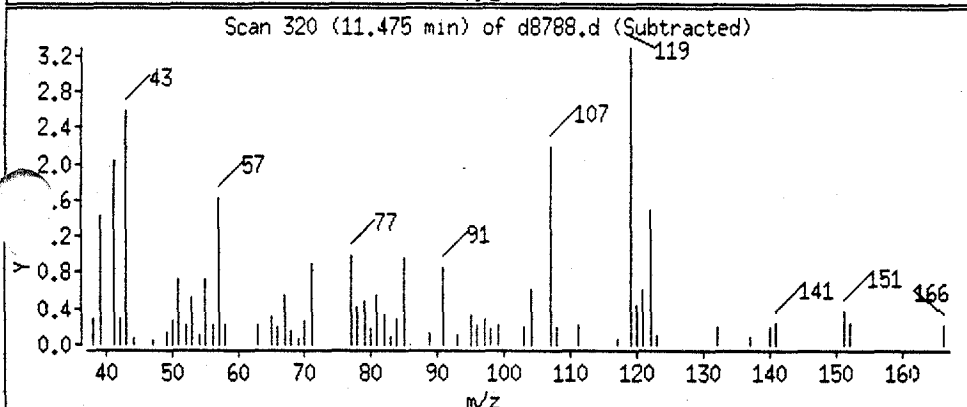
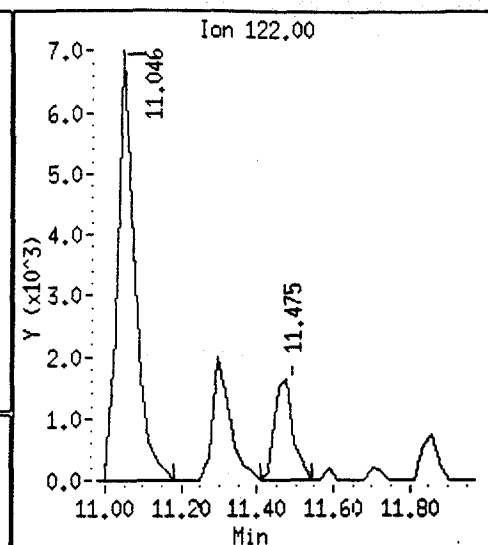
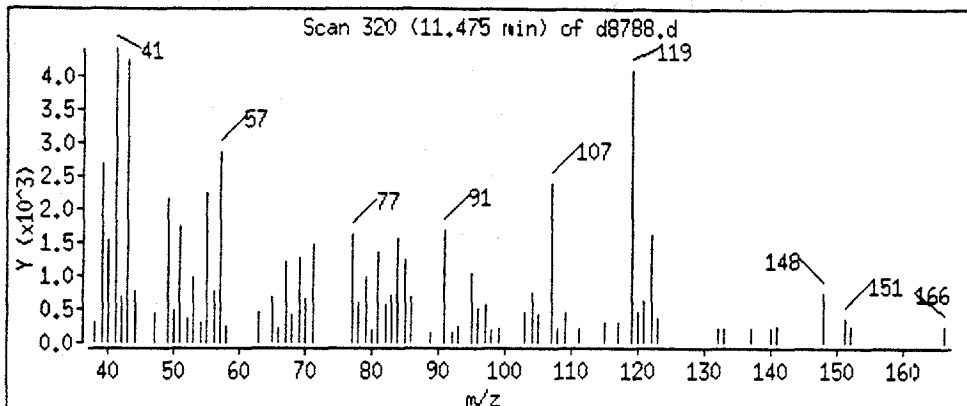
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

32 Benzoic acid



Data File: /chem/a900.1/d063094.b/d8788.d

Page 15

Date: 30-JUN-94 15:16

Instrument: a900.i

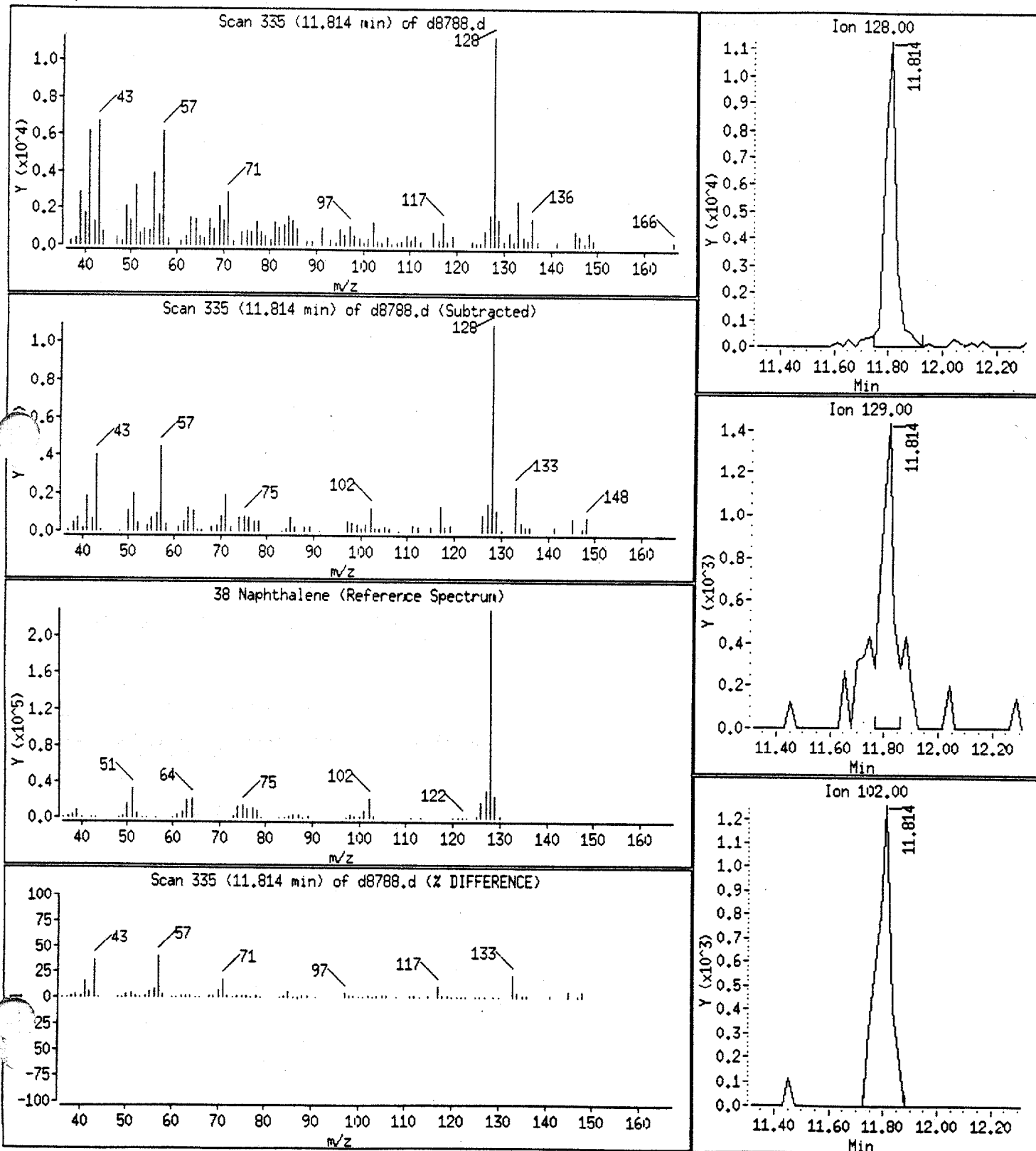
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

## 38 Naphthalene





Data File: /chem/a900.i/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

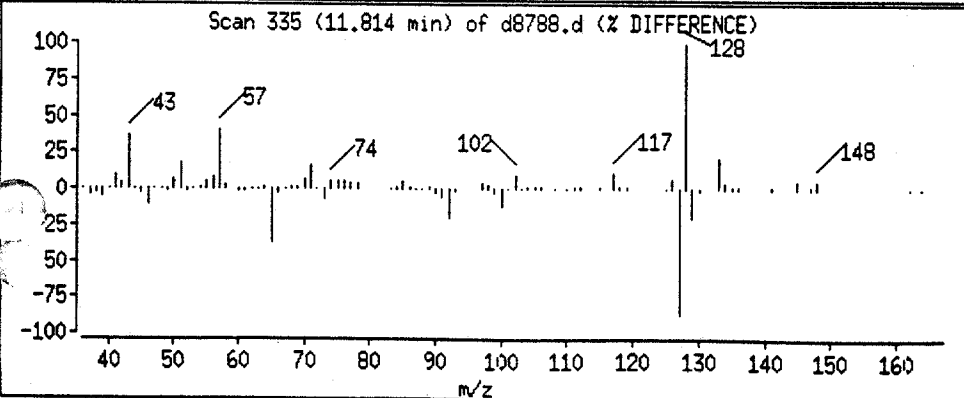
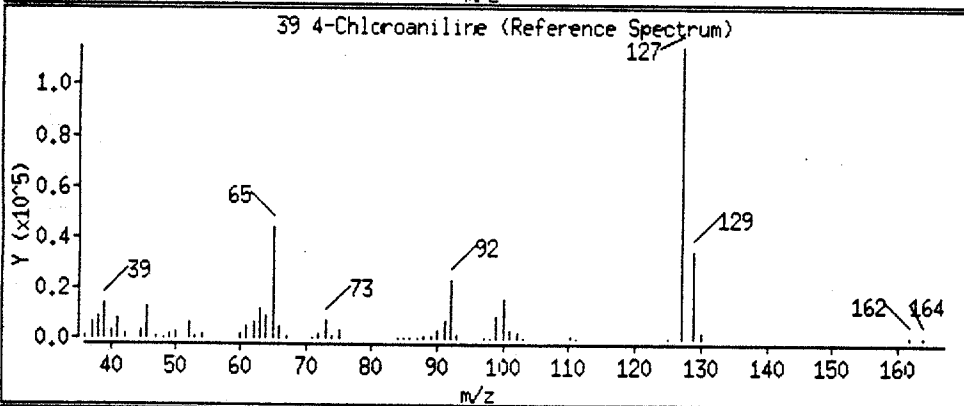
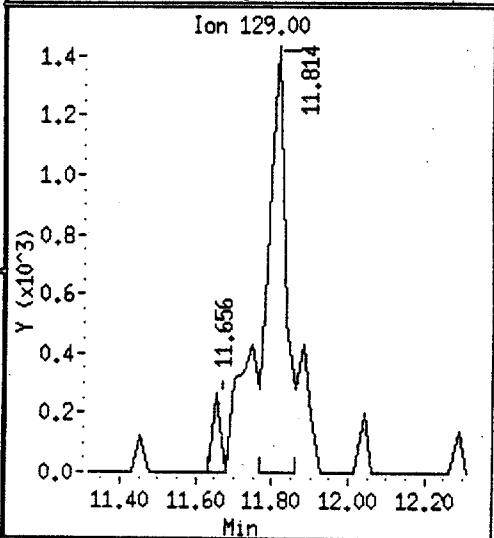
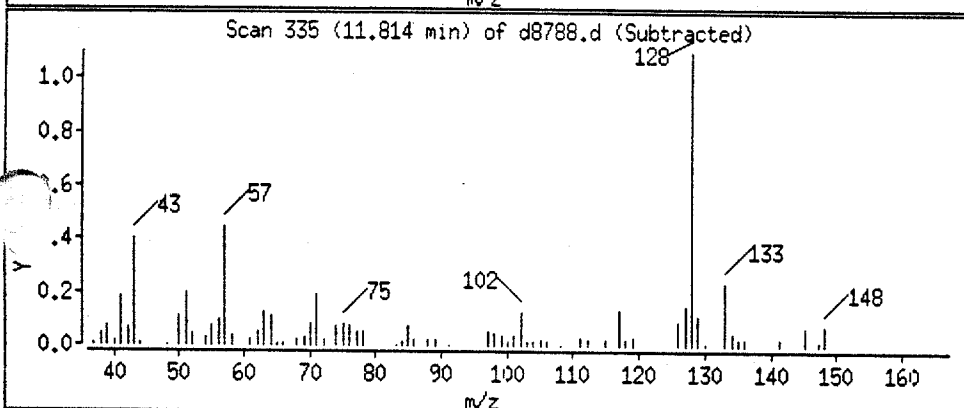
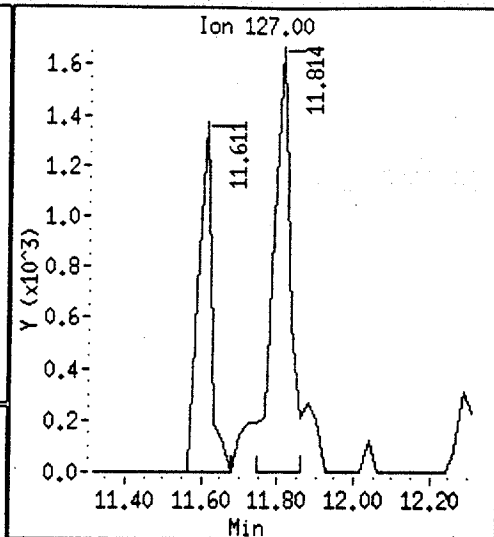
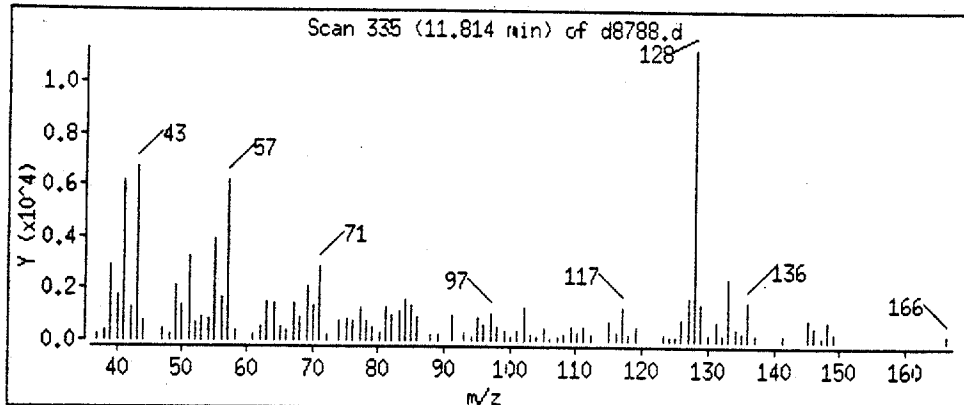
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

39 4-Chloroaniline



Data File: /chem/a900.1/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

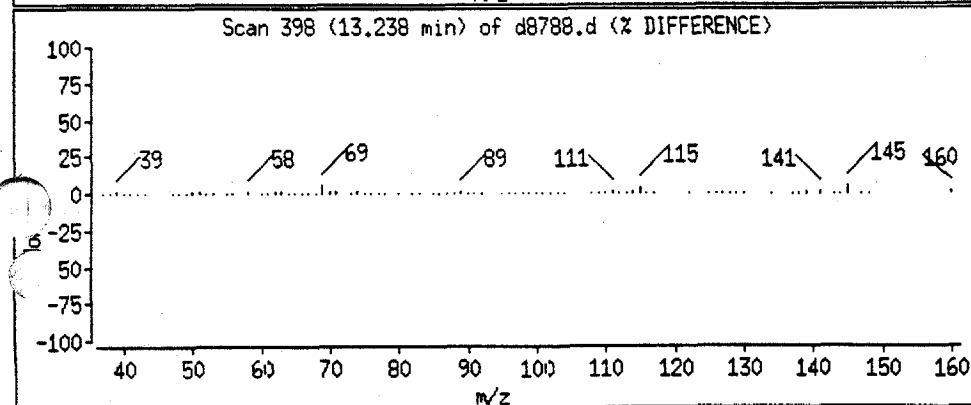
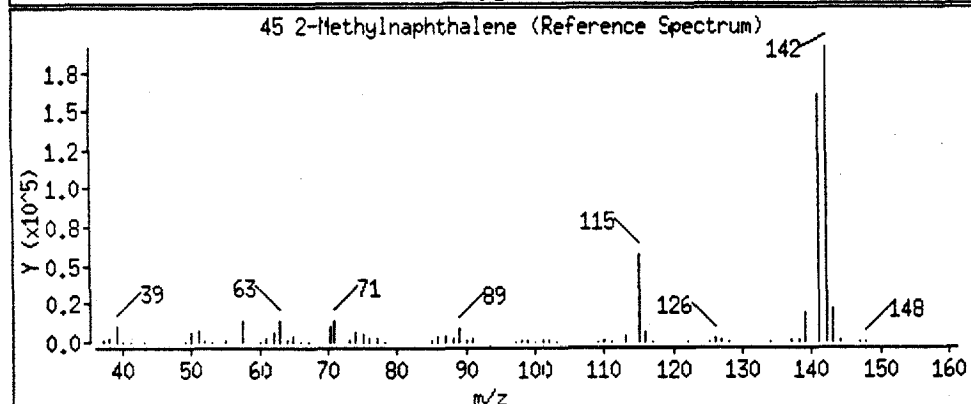
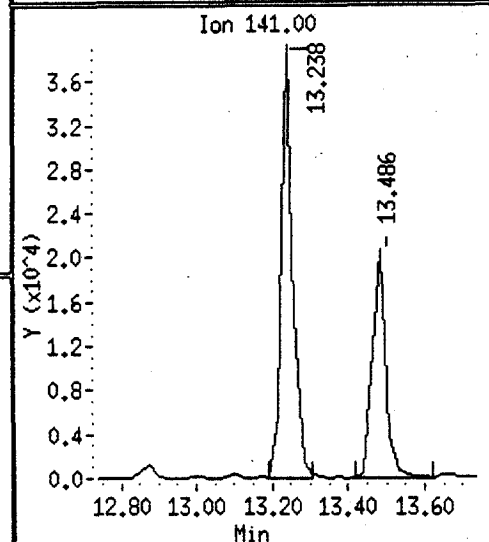
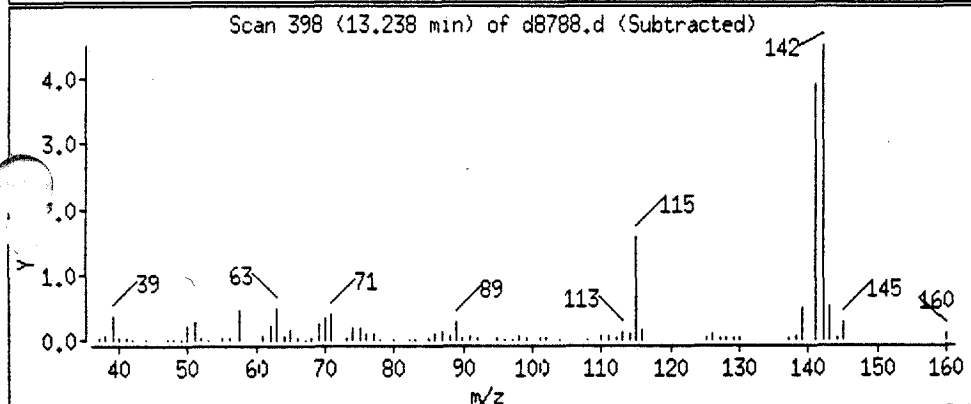
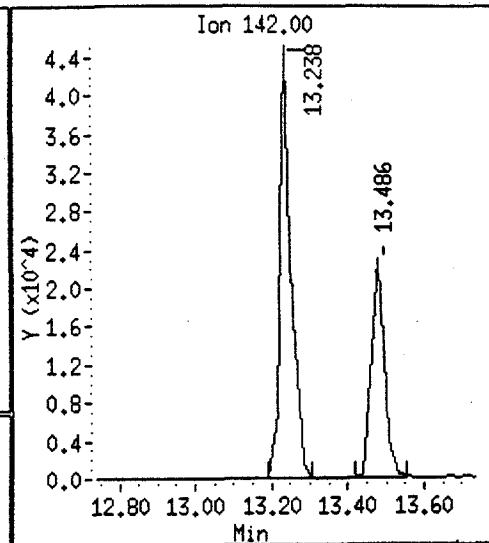
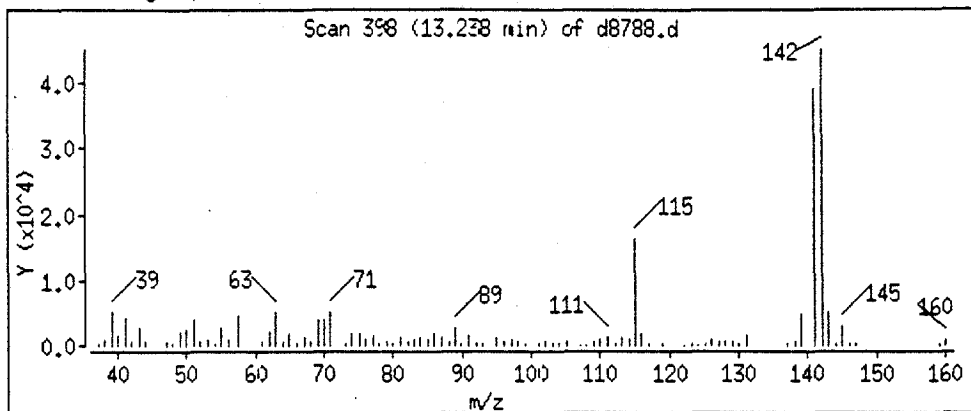
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

45 2-Methylnaphthalene



Data File: /chem/a900.i/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

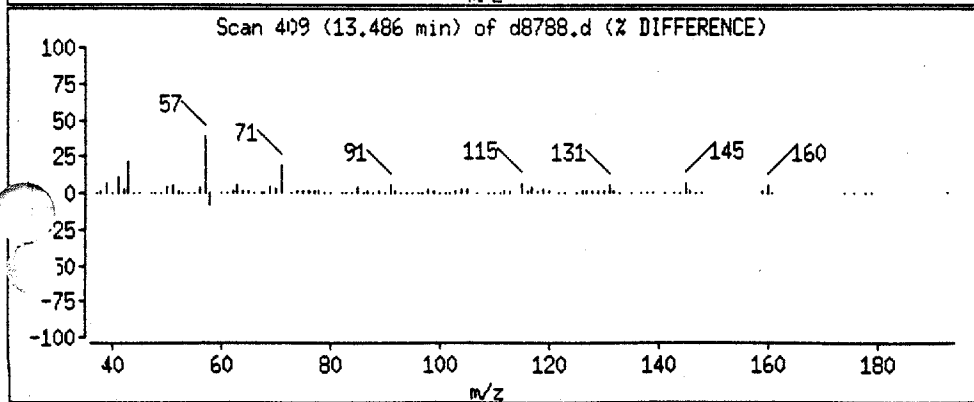
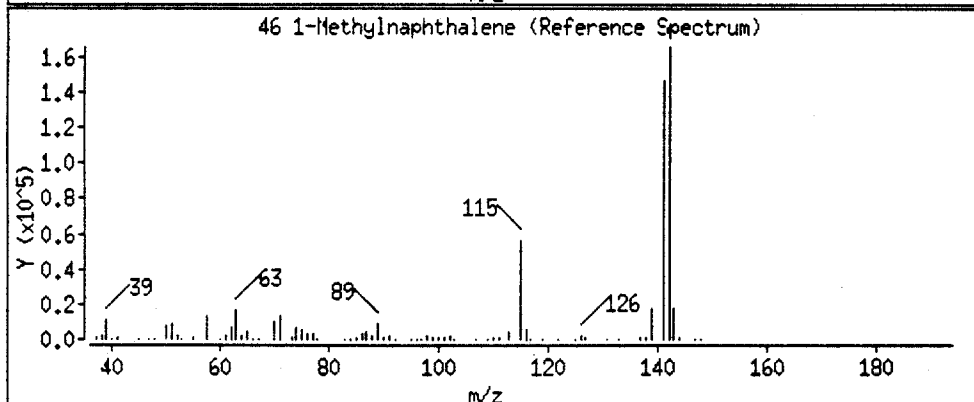
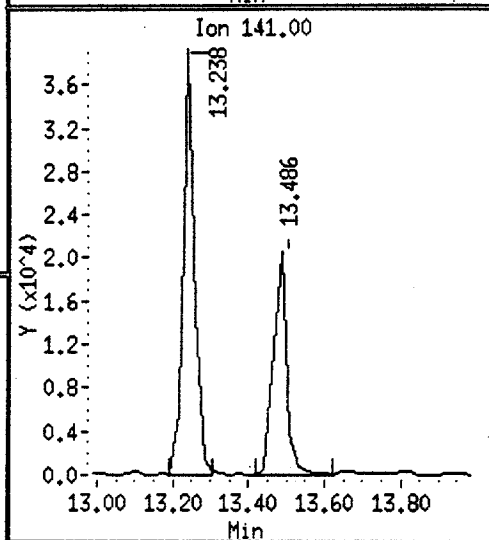
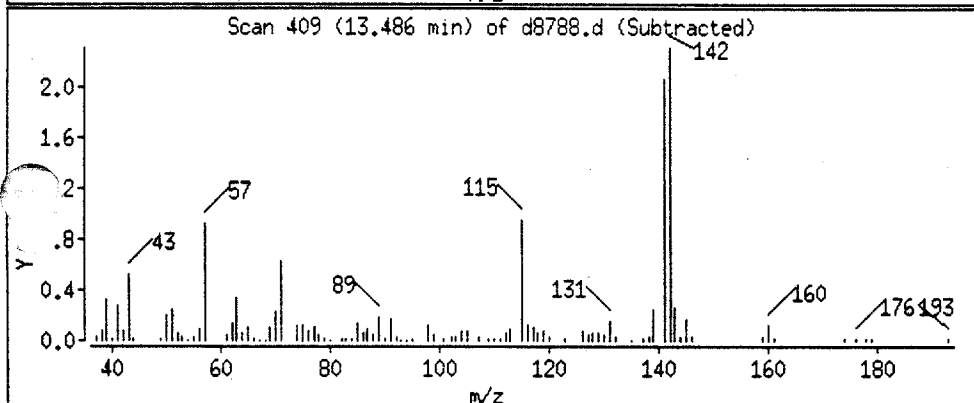
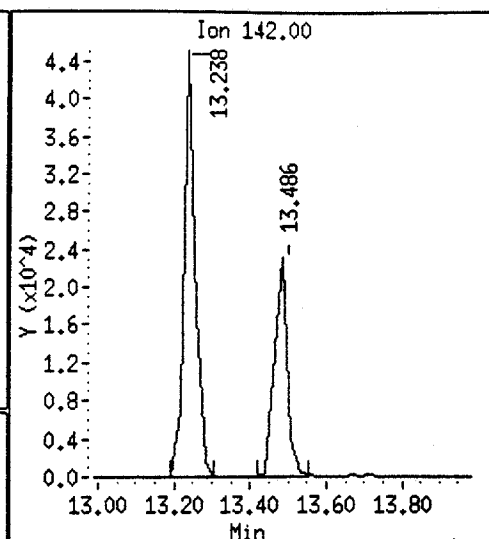
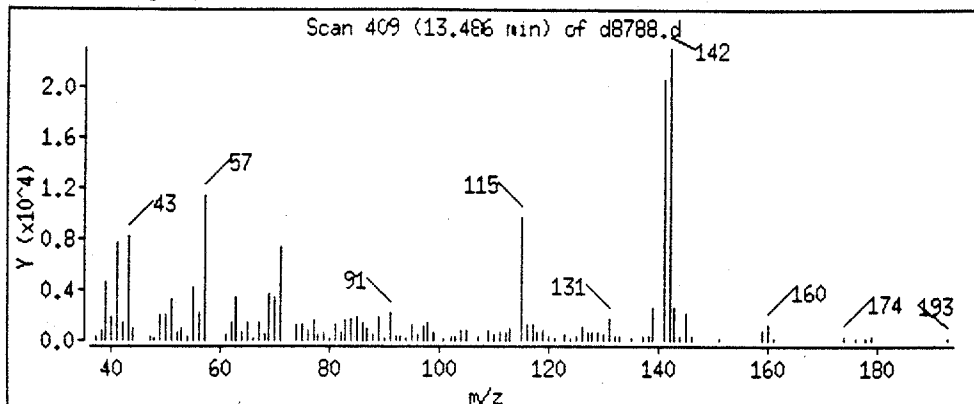
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

46 1-Methylnaphthalene



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

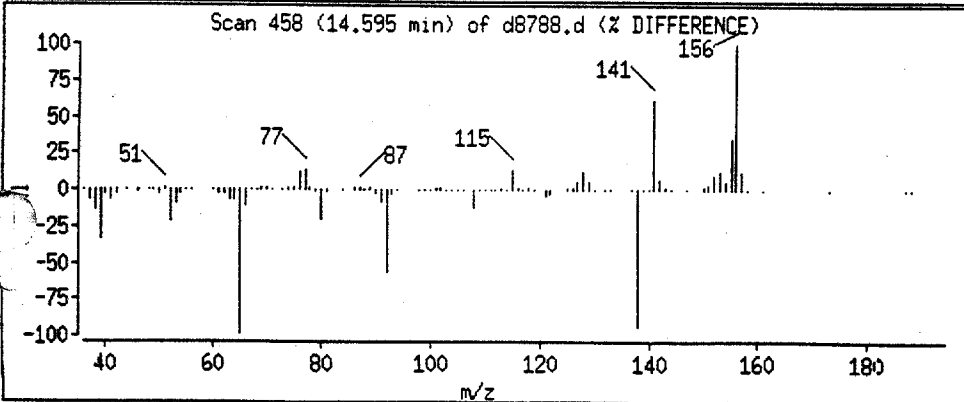
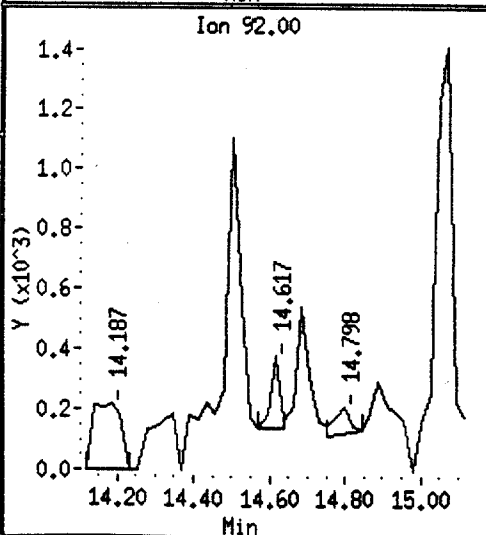
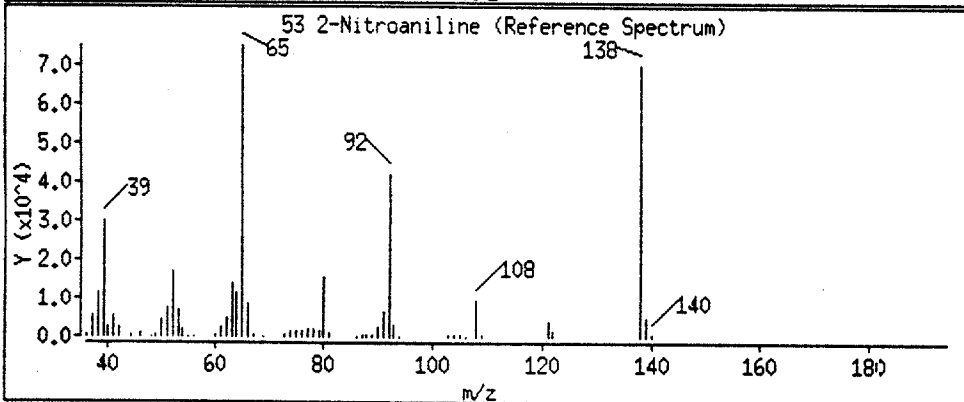
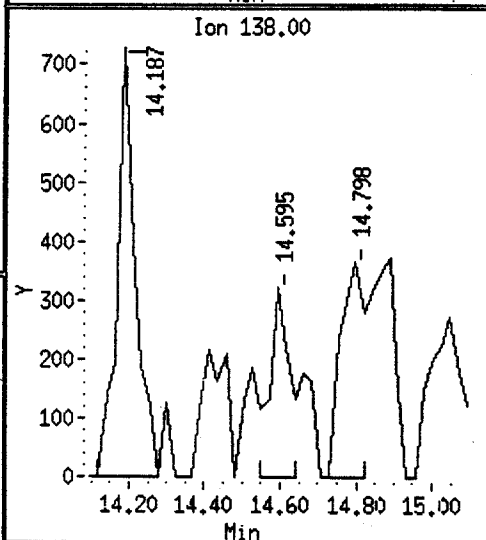
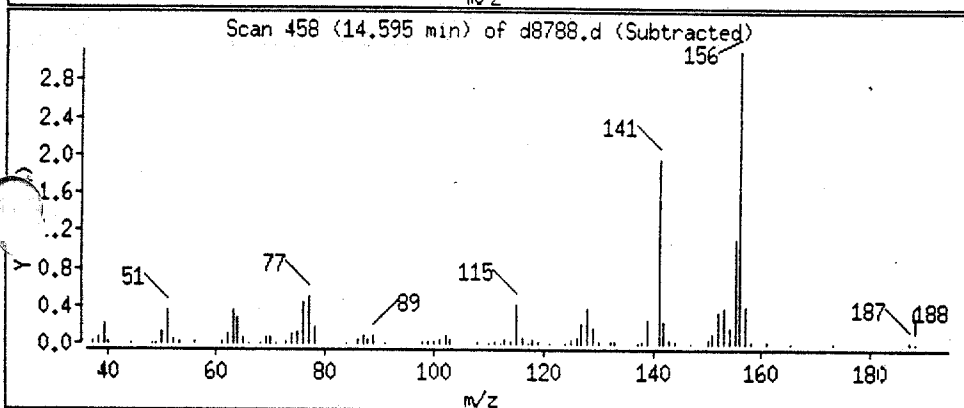
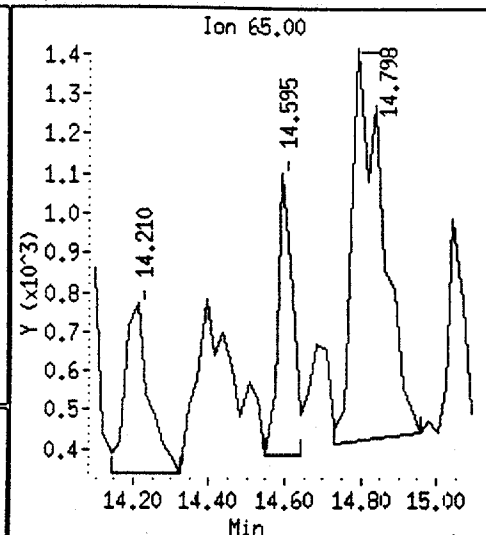
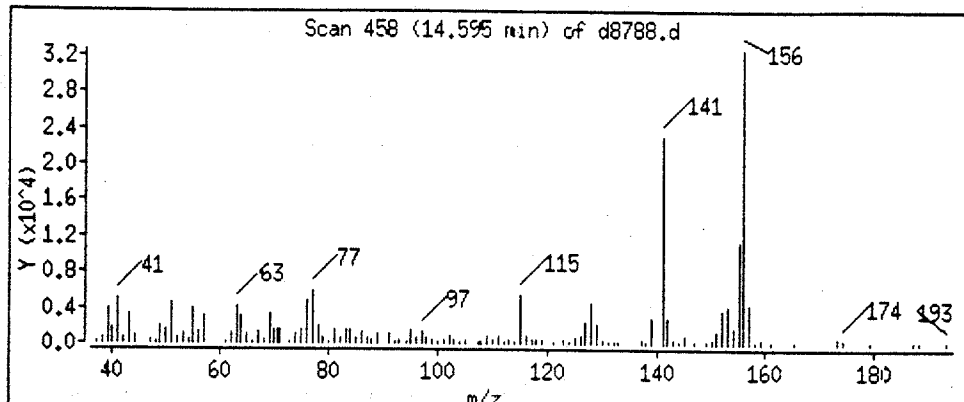
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

53 2-Nitroaniline



Data File: /chem/a900.1/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

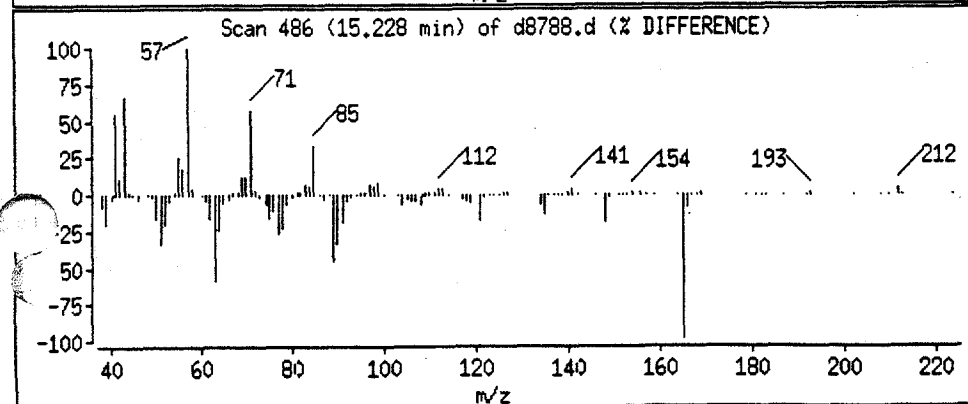
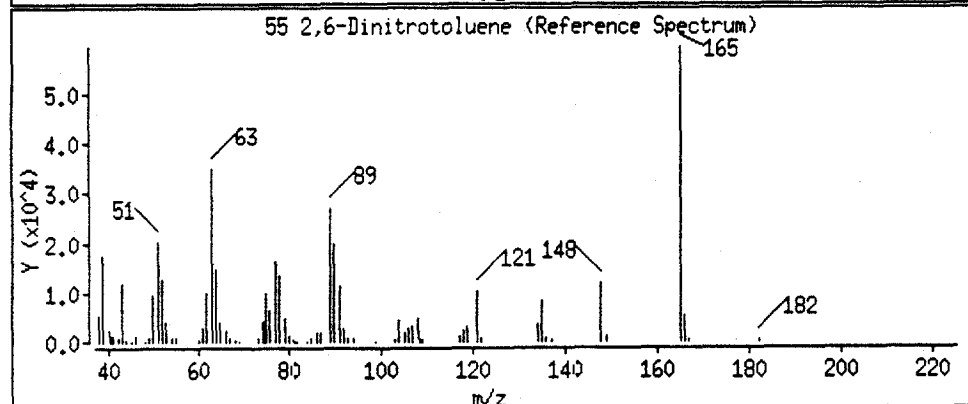
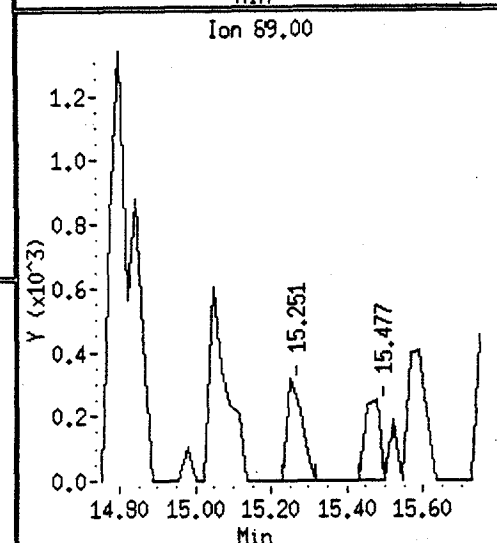
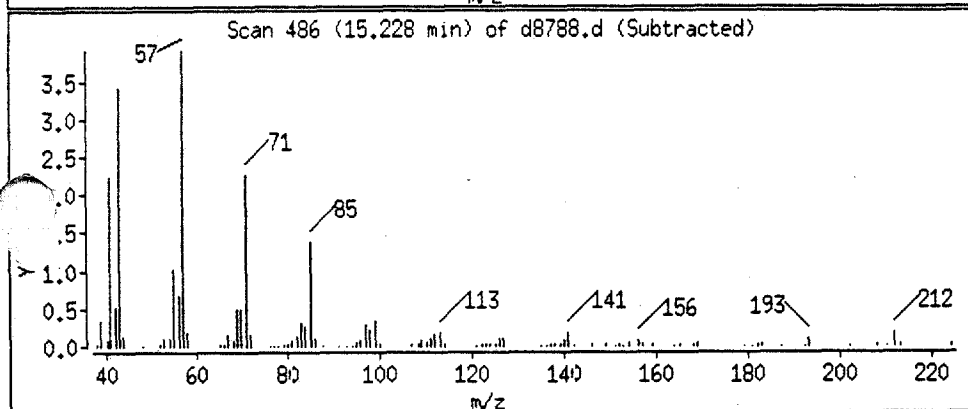
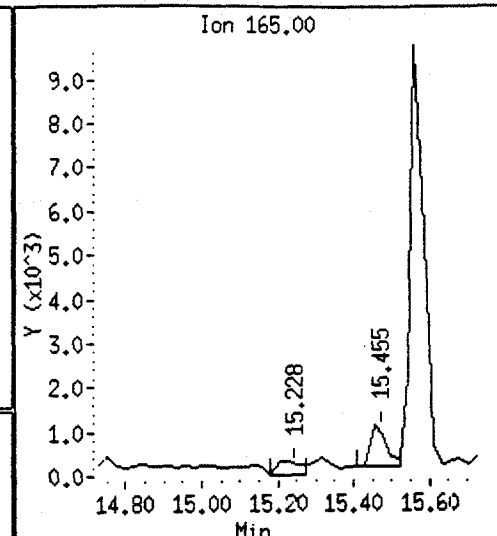
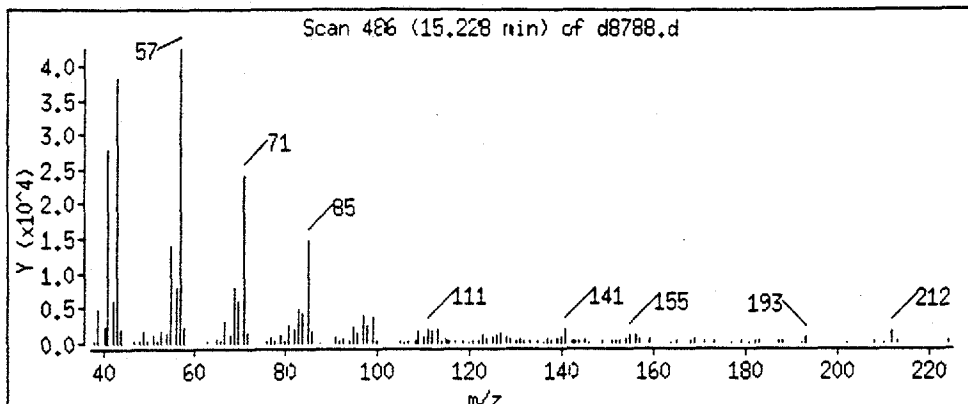
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

55 2,6-Dinitrotoluene



Data File: /chem/a900.i/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

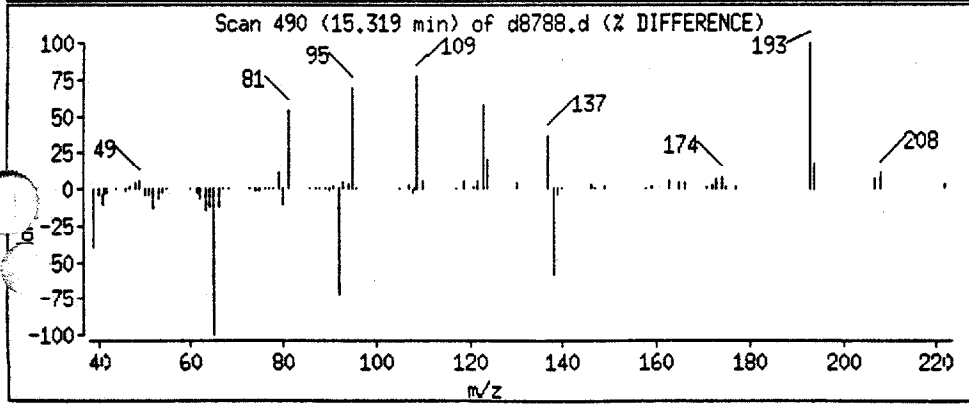
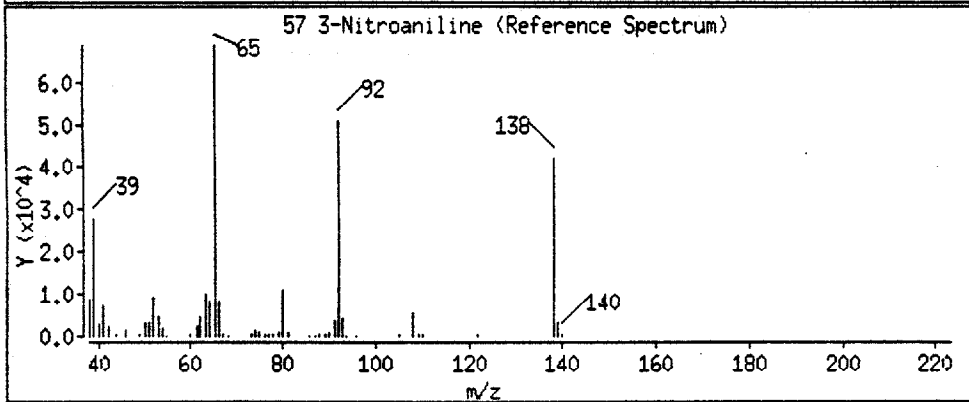
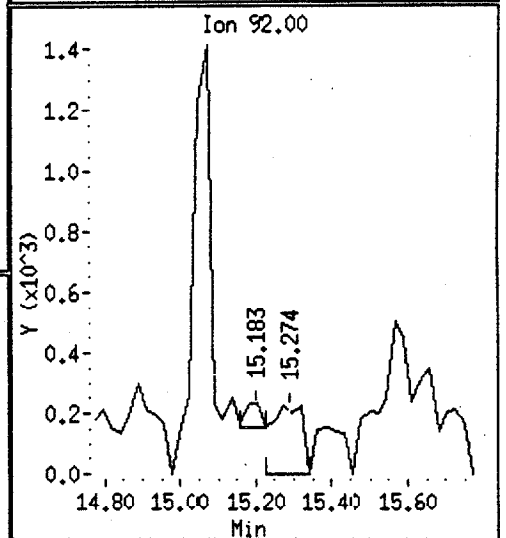
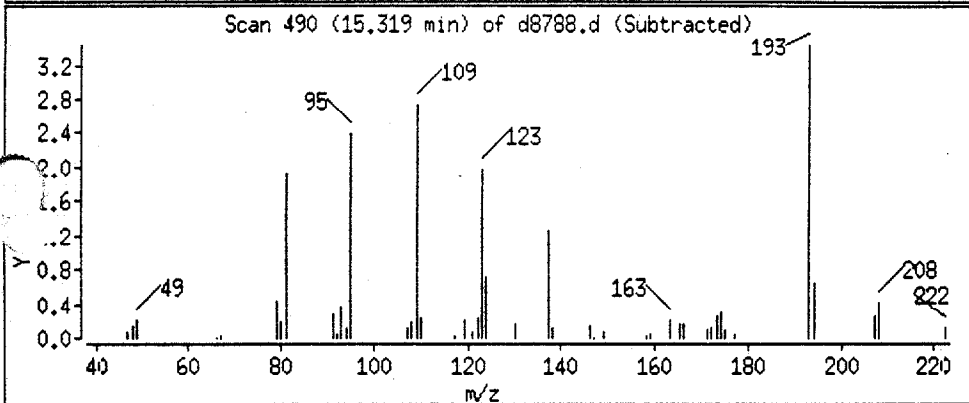
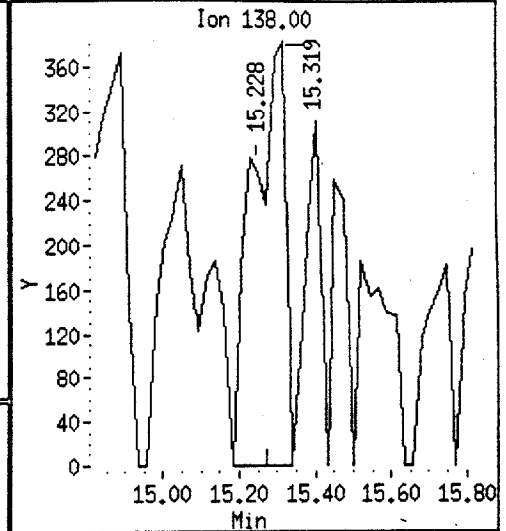
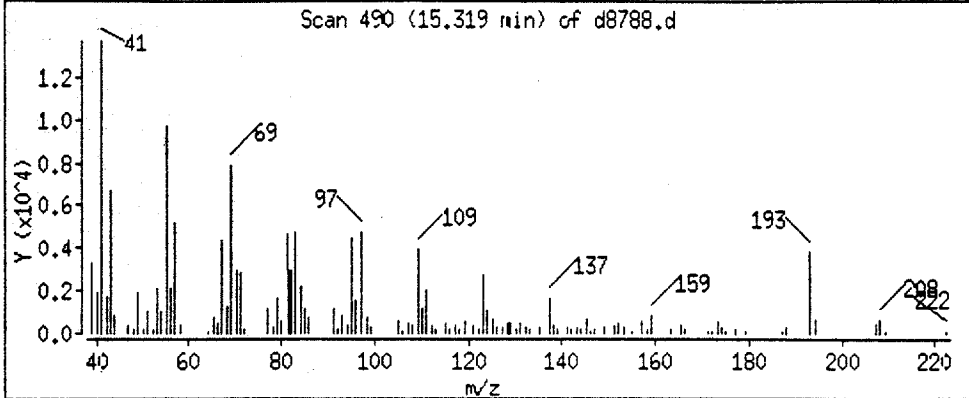
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

57 3-Nitroaniline



Data File: /chem/a900.i/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

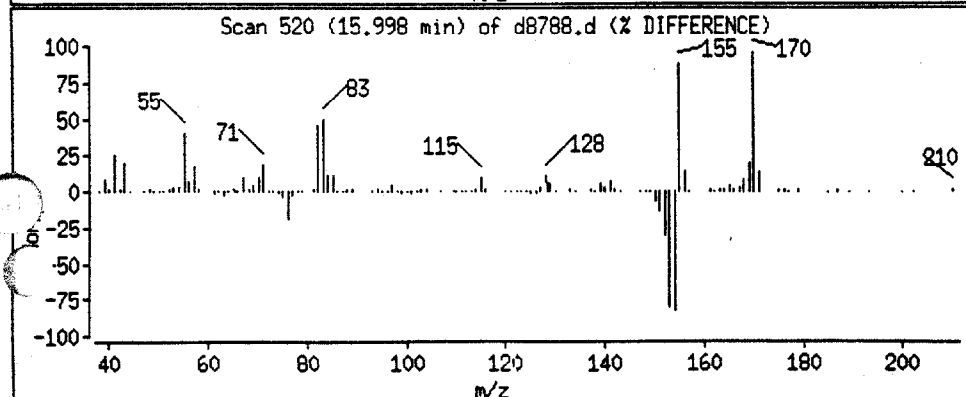
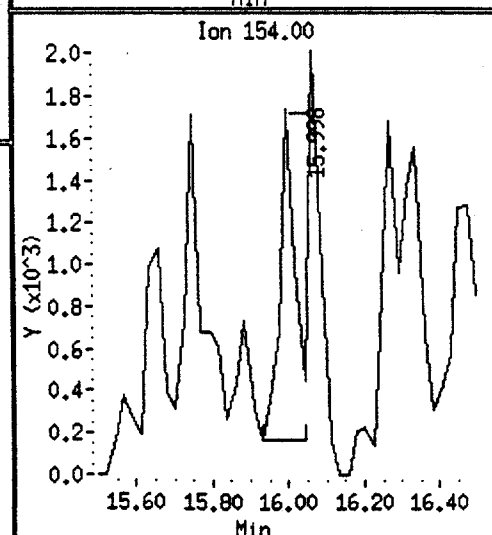
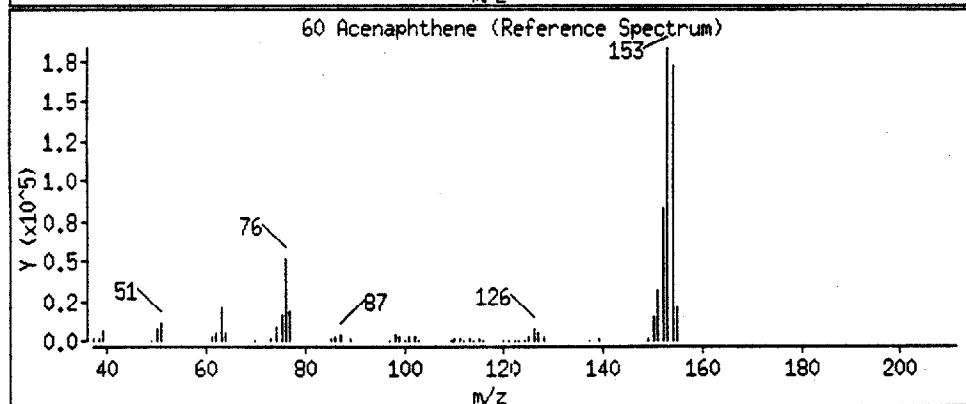
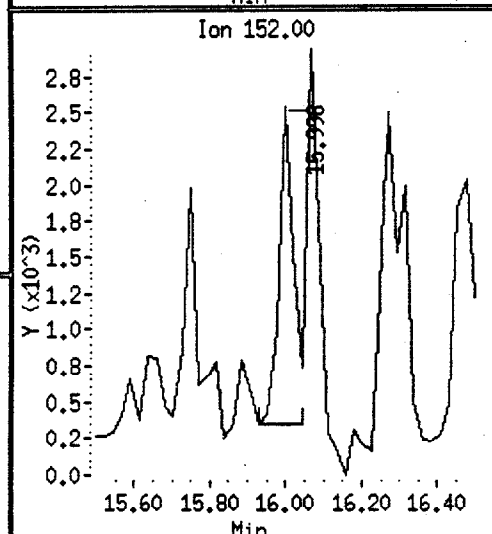
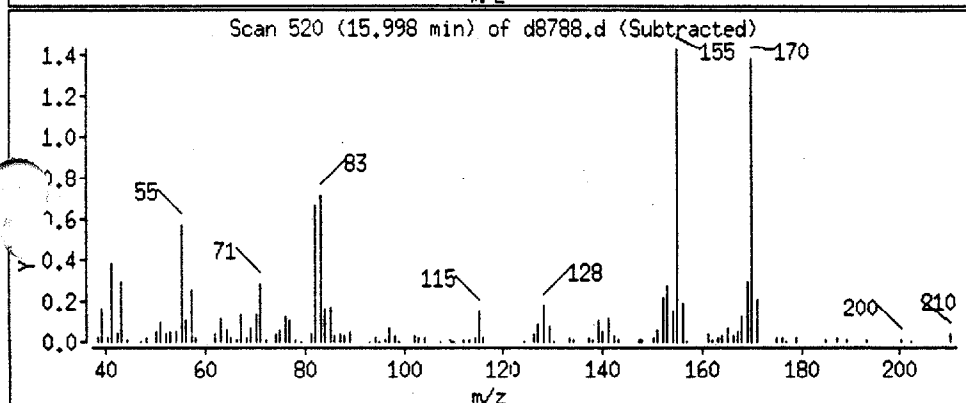
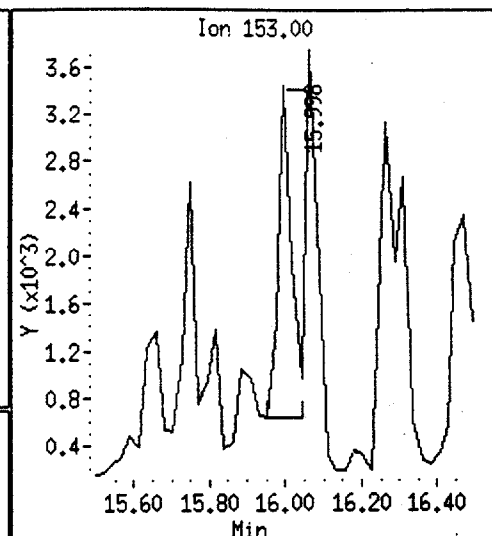
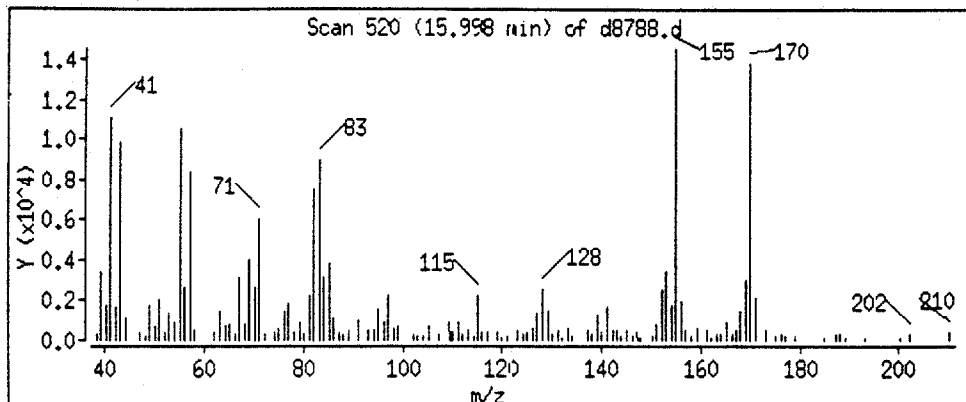
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

60 Acenaphthene



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

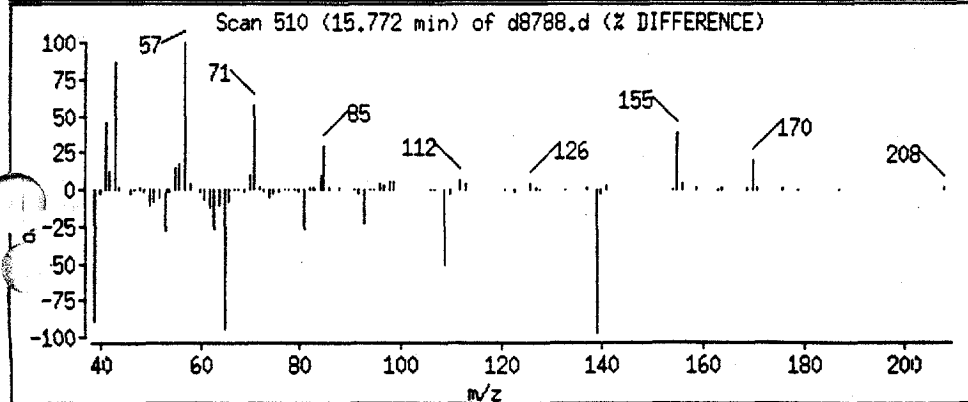
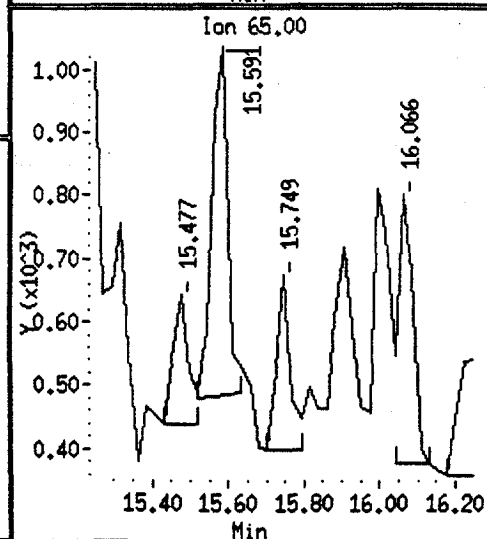
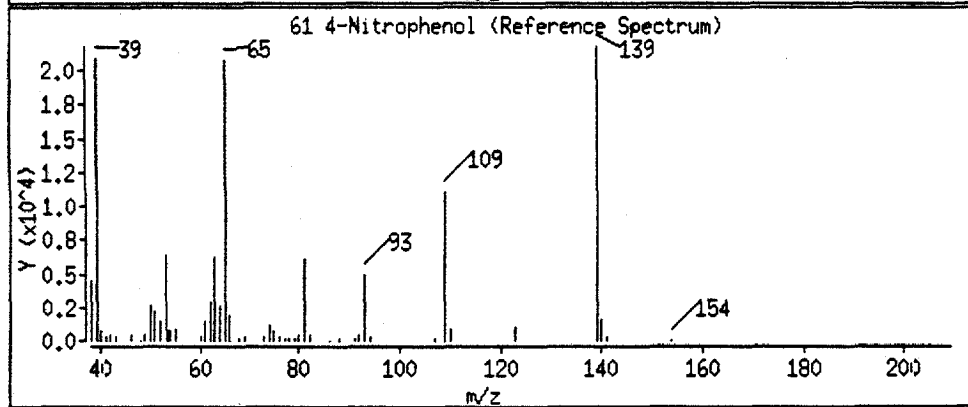
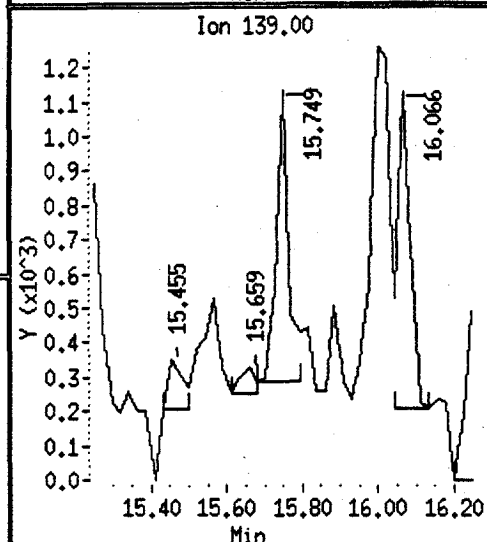
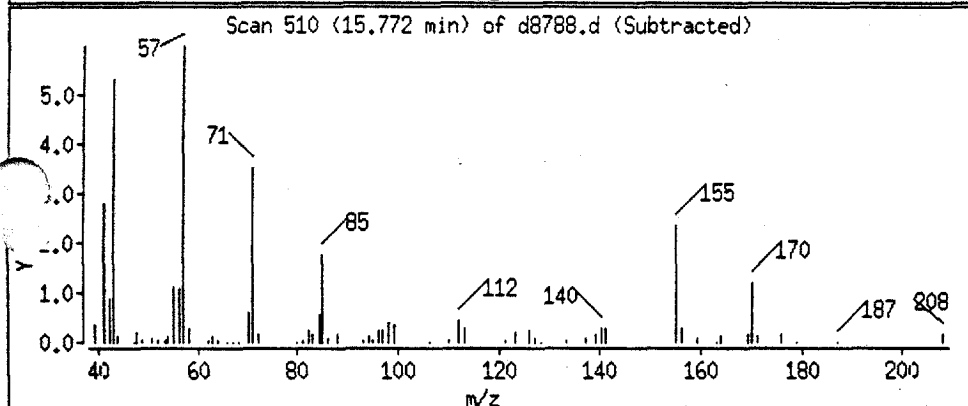
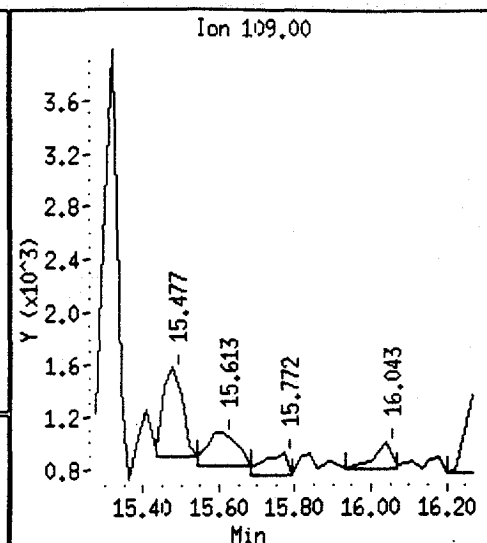
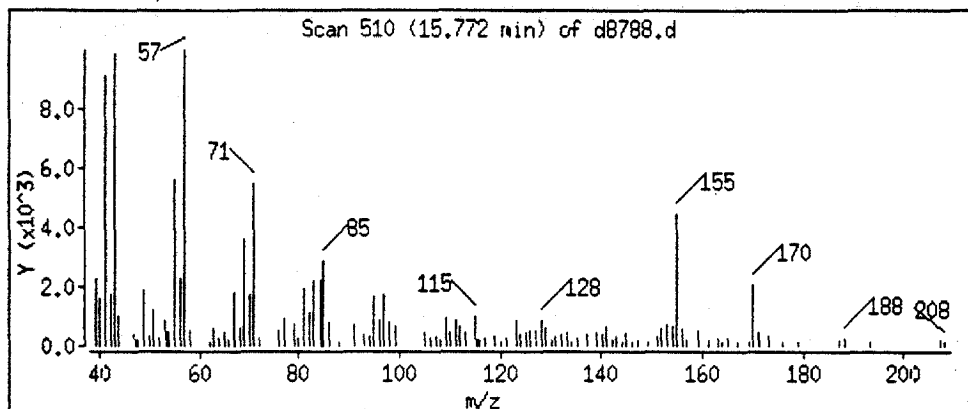
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

61 4-Nitrophenol





Data File: /chem/a900.1/d063094.b/d8788.d

Page 24

Date : 30-JUN-94 15:16

Instrument : a900.i

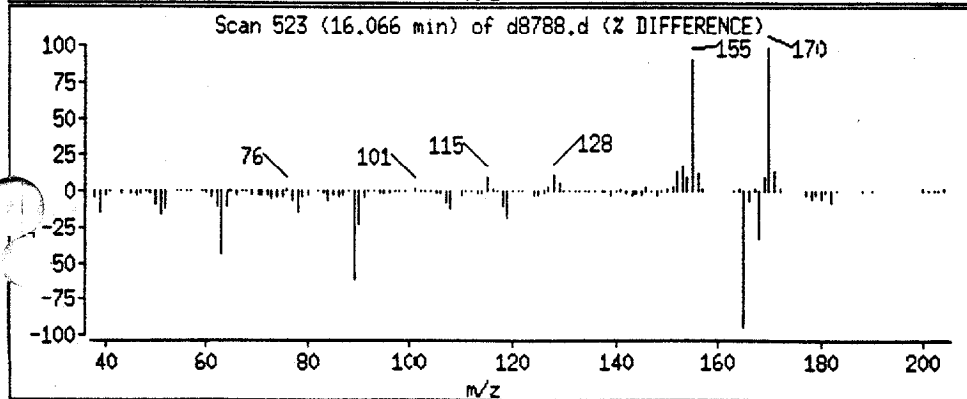
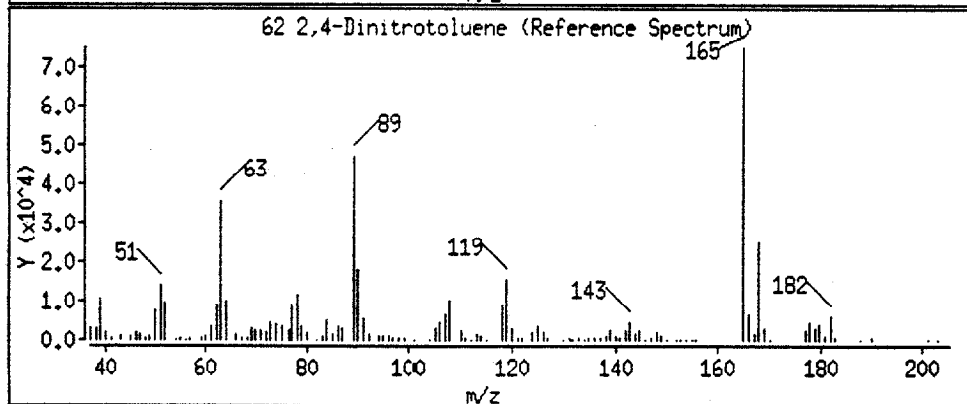
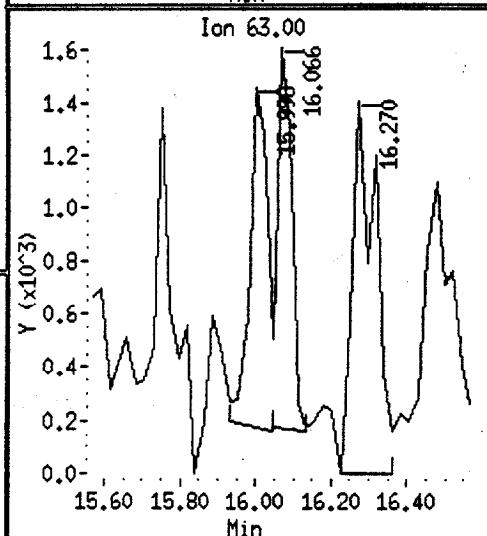
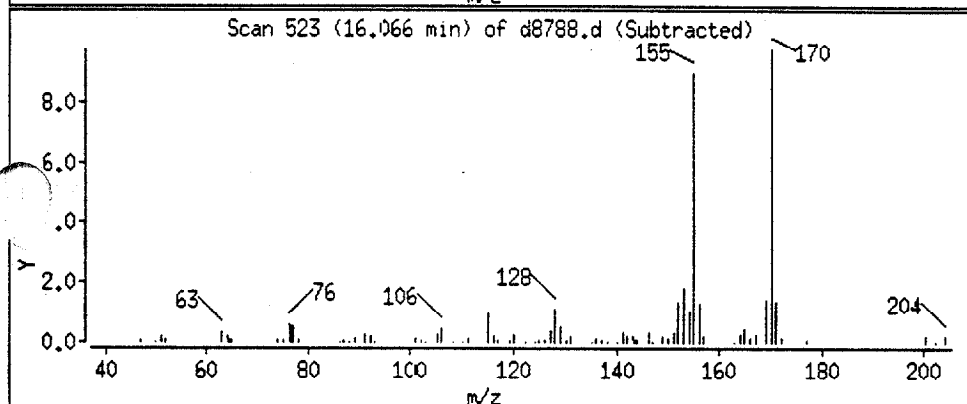
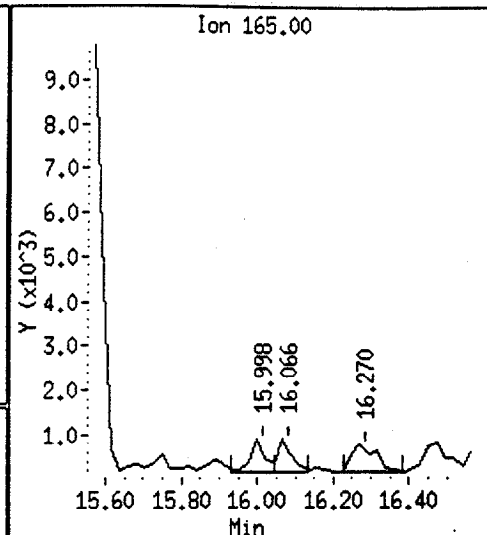
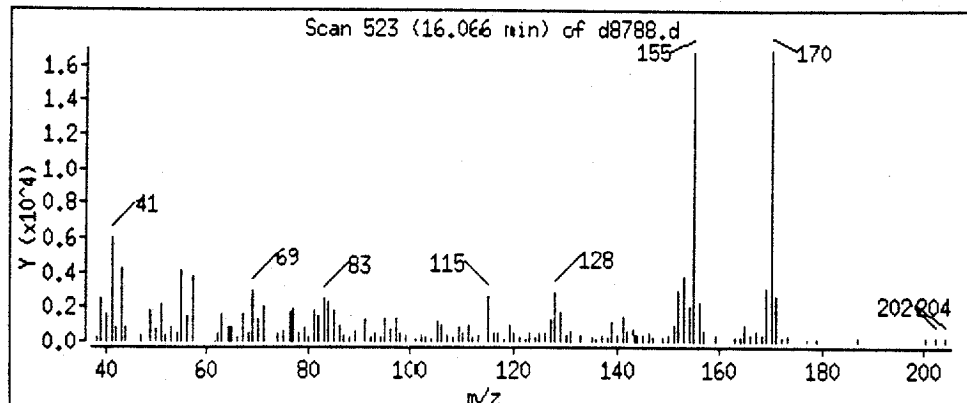
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

## 62 2,4-Dinitrotoluene



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

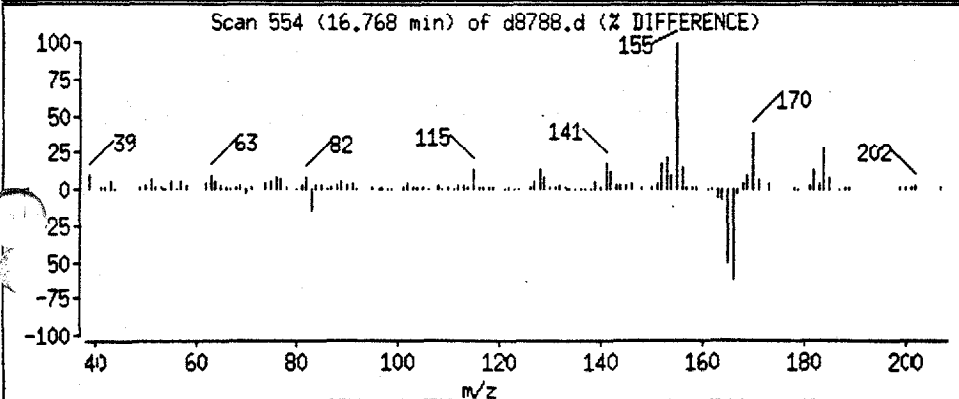
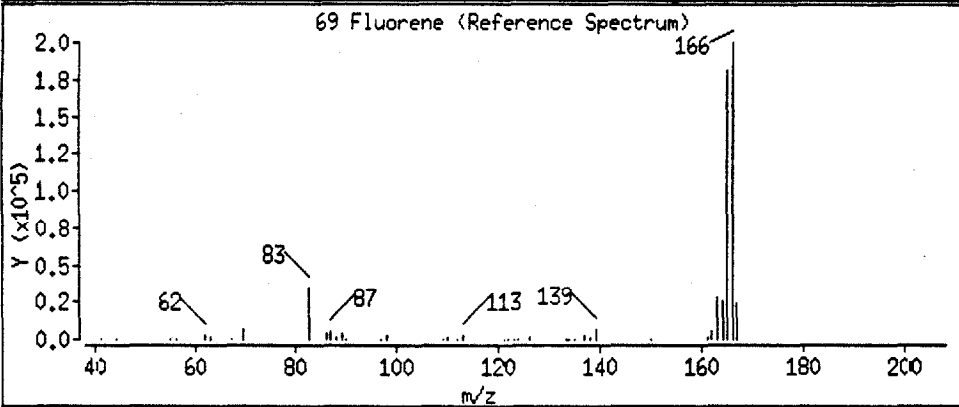
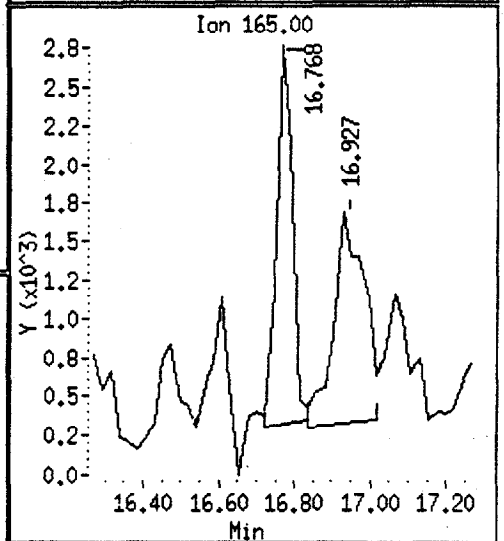
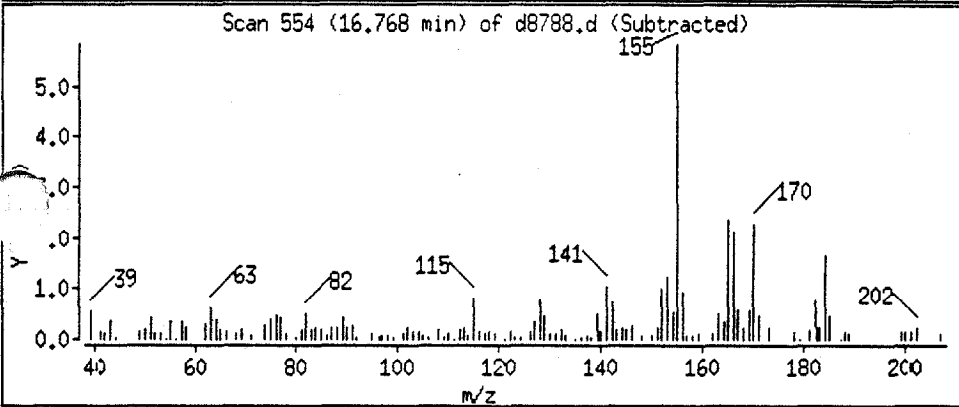
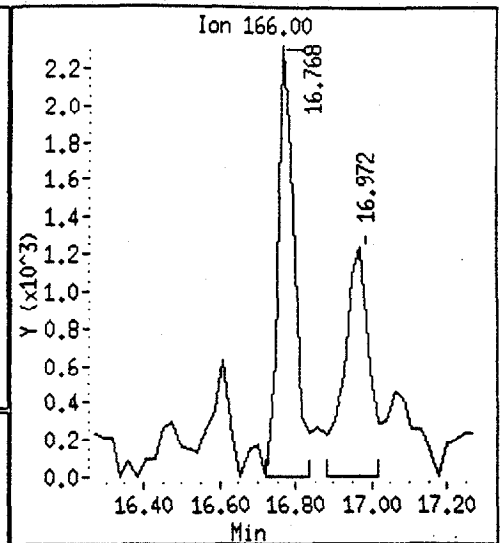
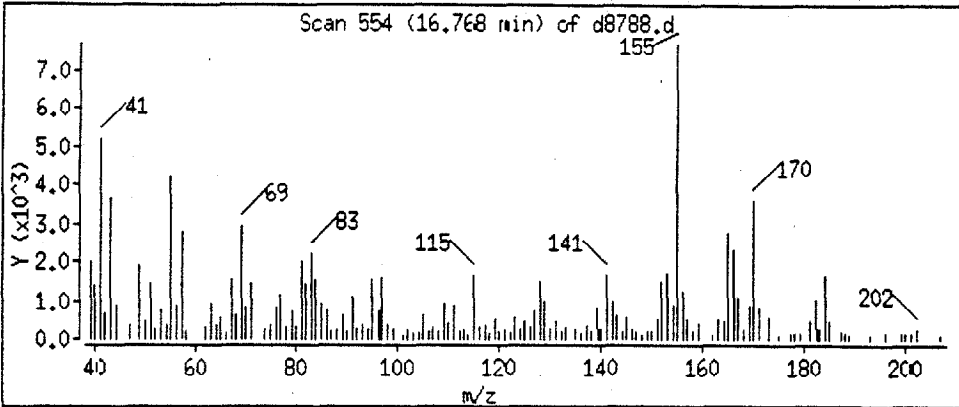
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

69 Fluorene



Data File: /chem/a900.i/d063094.b/d8788.d

Page 27

Date : 30-JUN-94 15:16

Instrument : a900.i

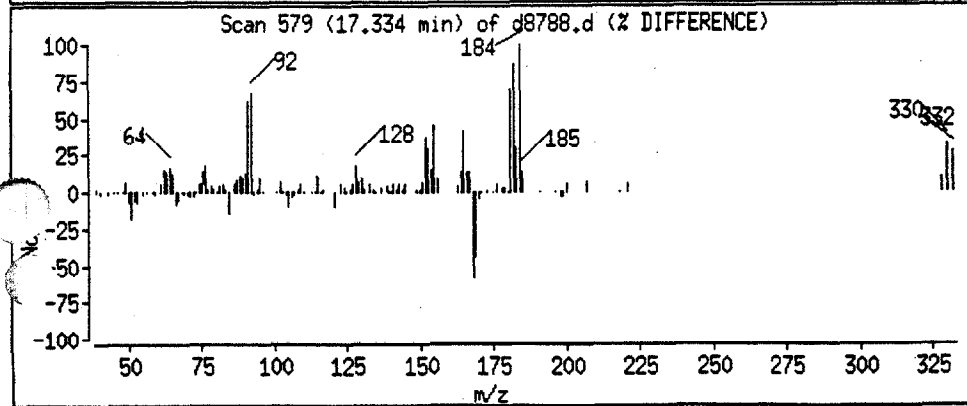
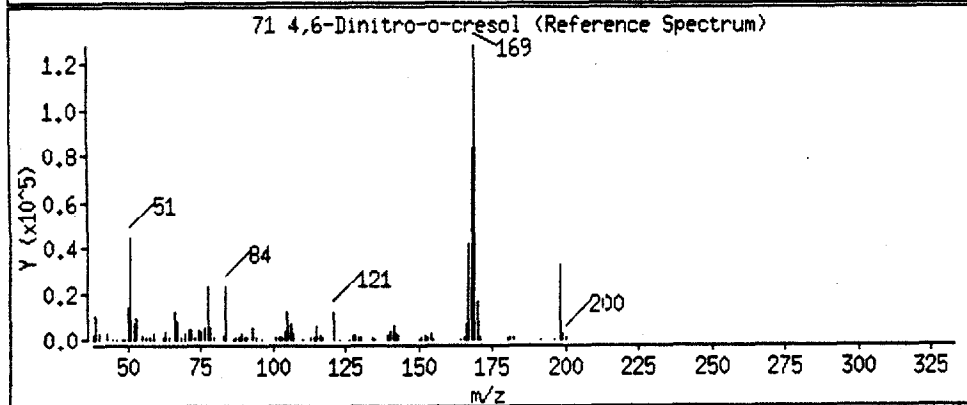
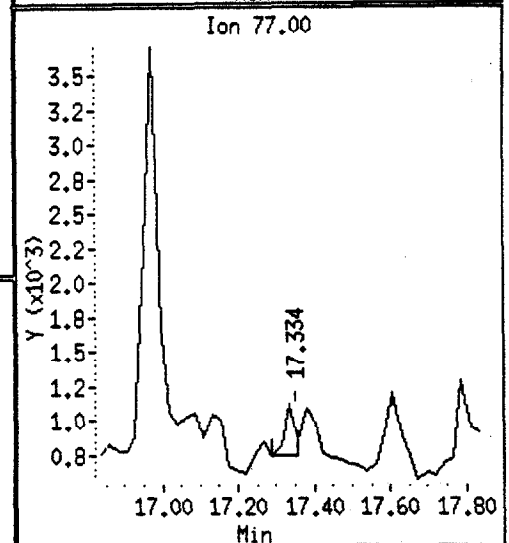
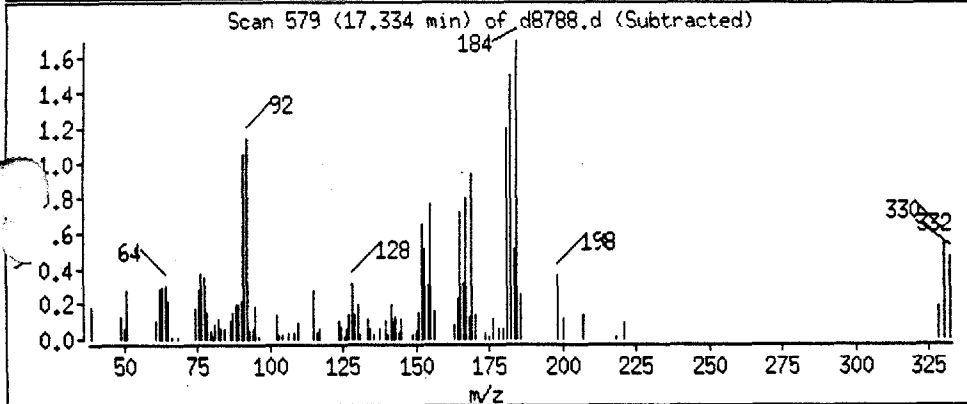
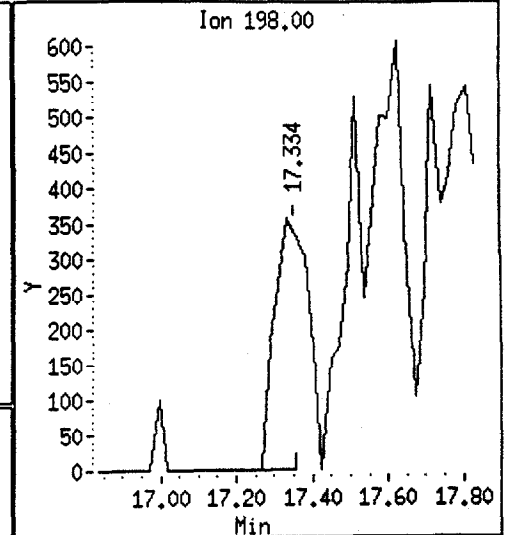
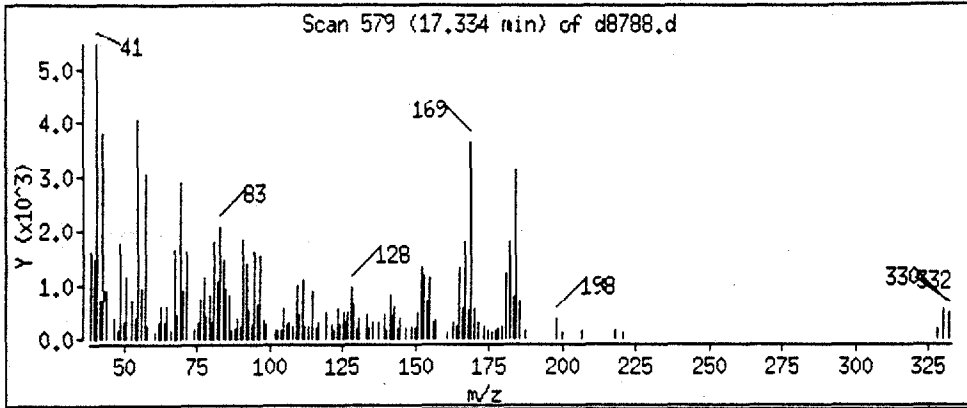
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

71 4,6-Dinitro-o-cresol



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

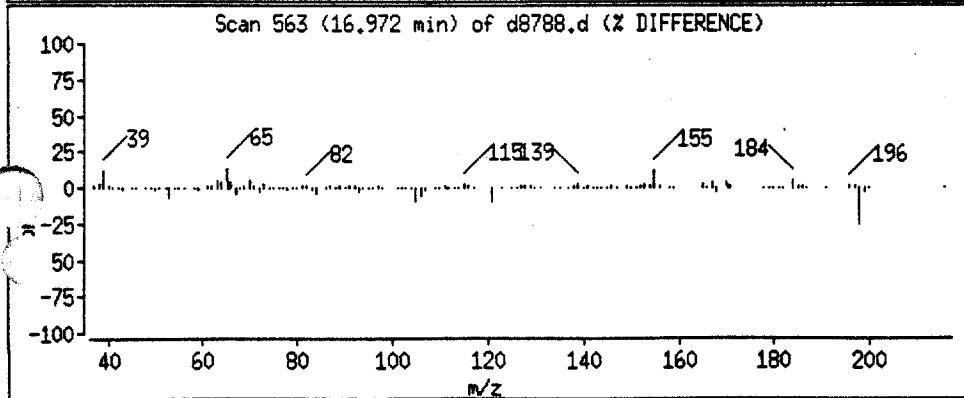
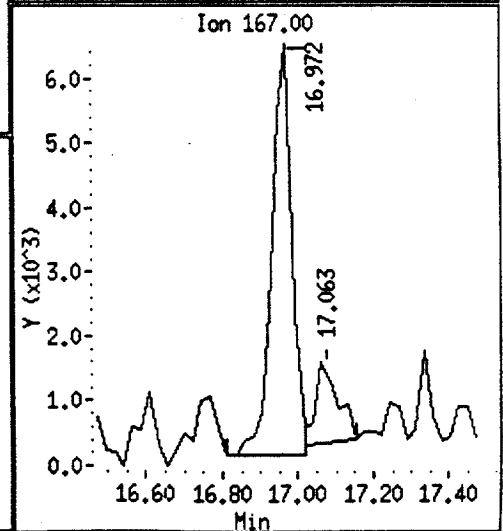
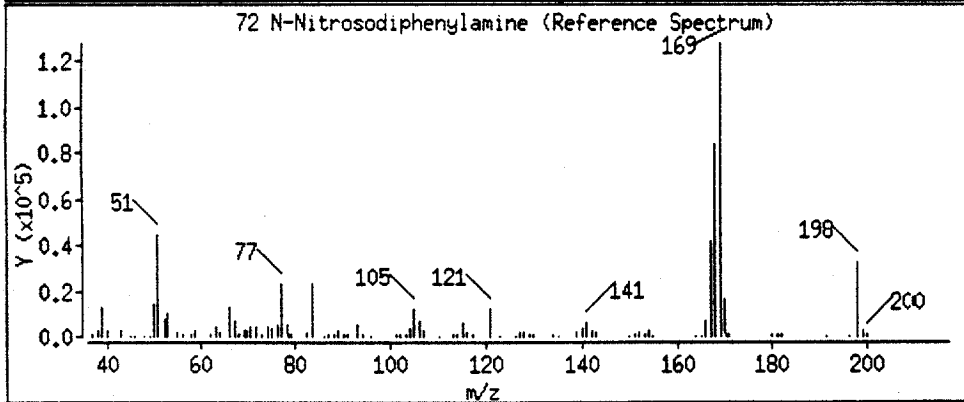
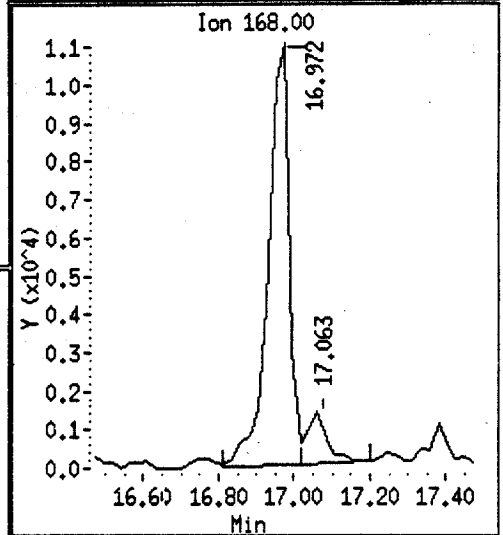
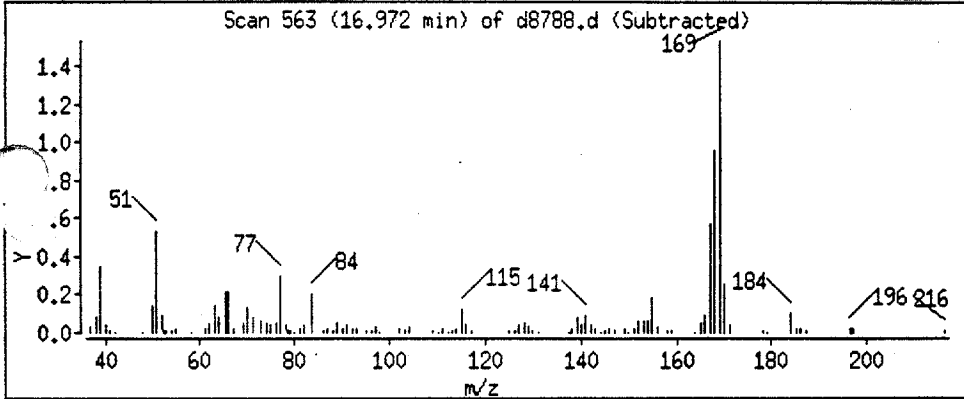
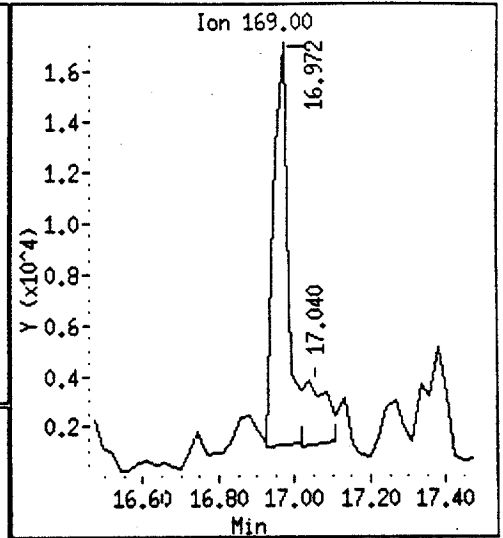
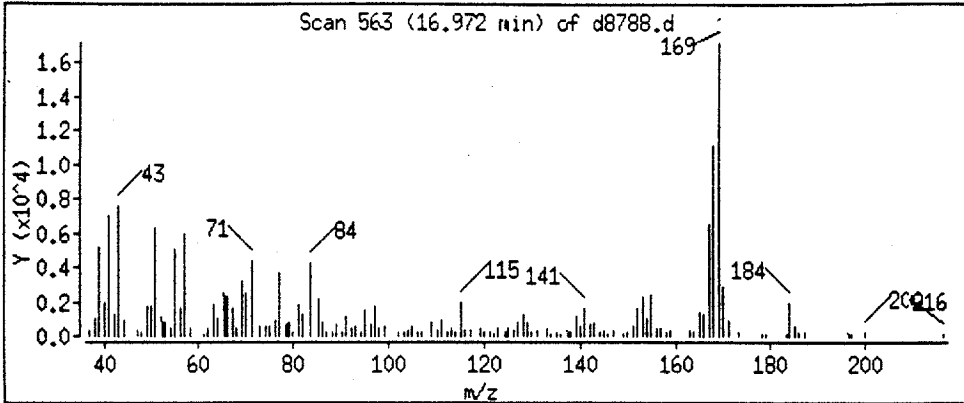
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

72 N-Nitrosodiphenylamine



Data File: /chem/a900.1/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

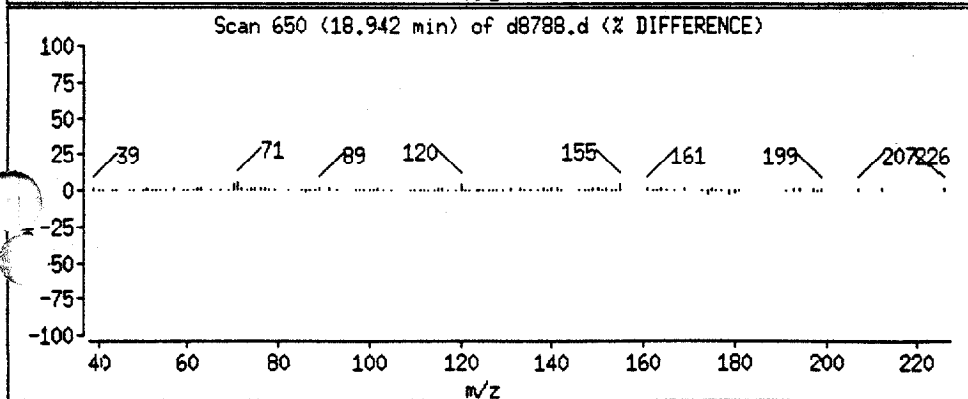
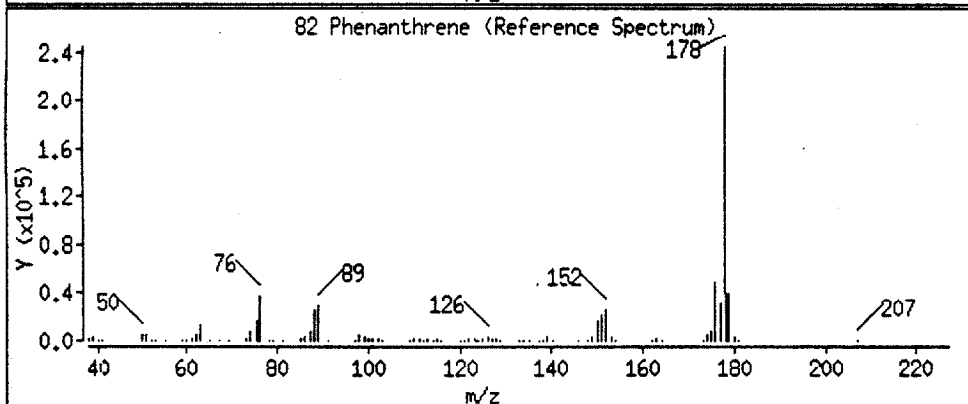
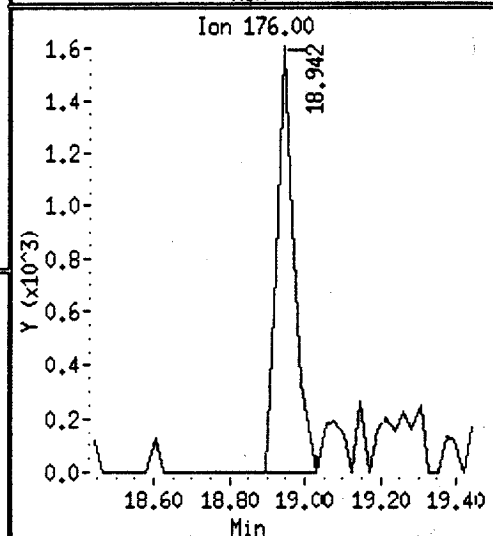
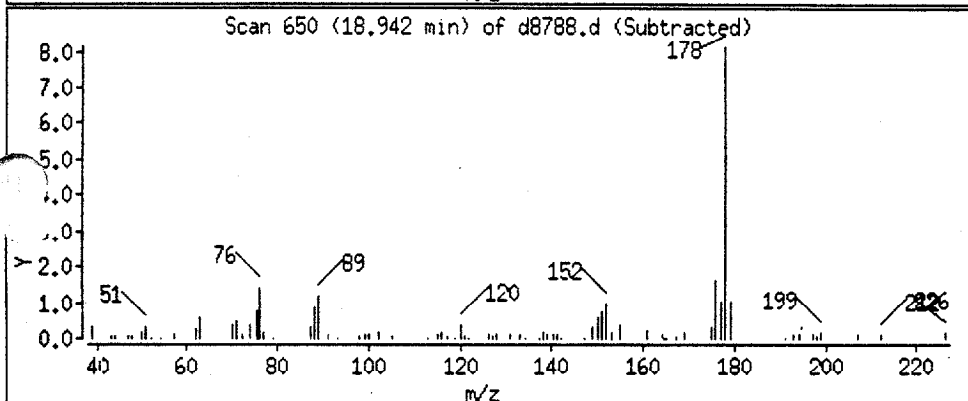
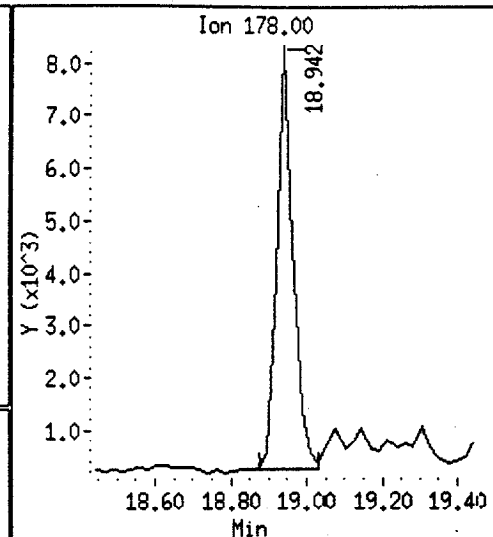
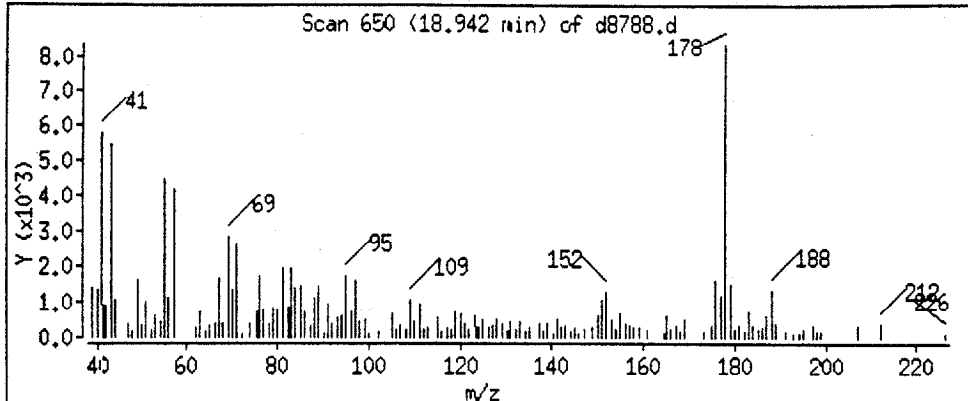
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

82 Phenanthrene



Data File: /chem/a900.i/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

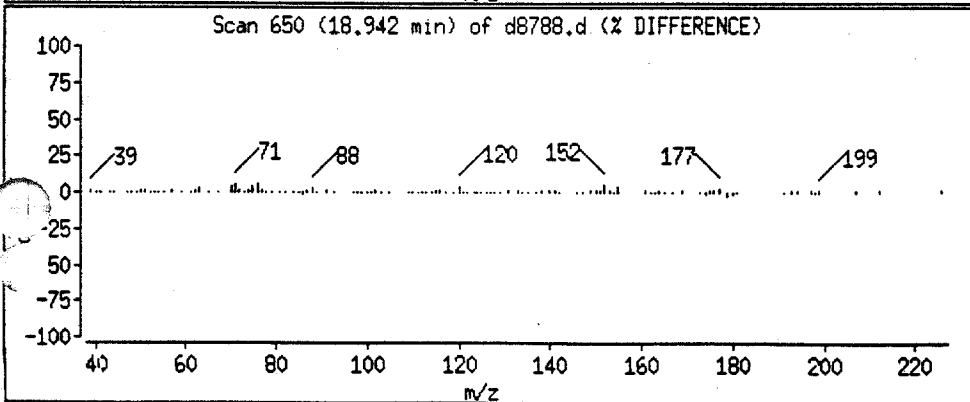
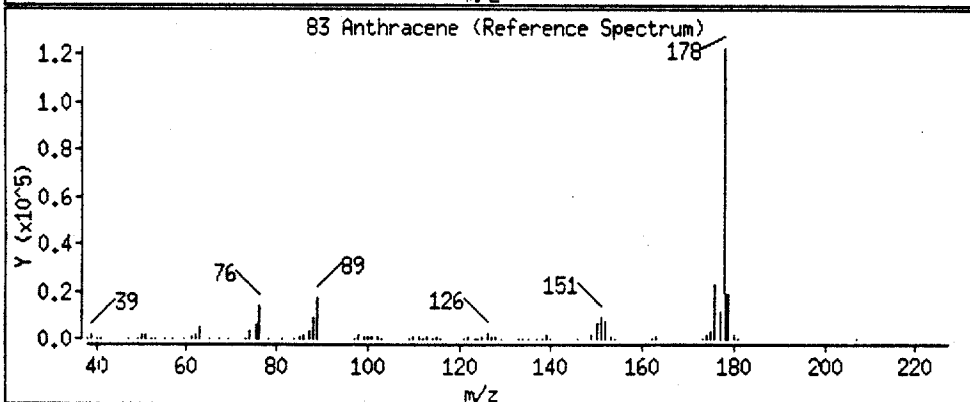
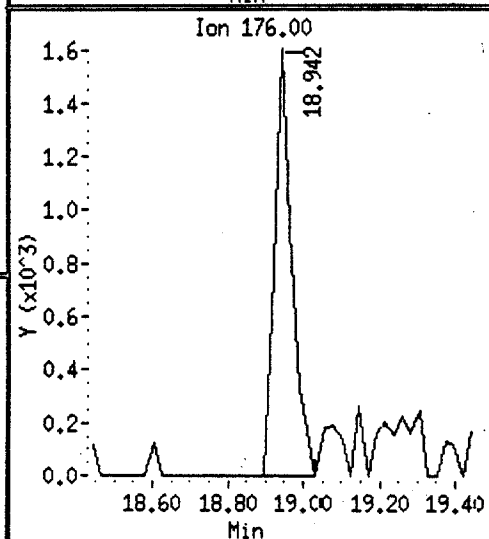
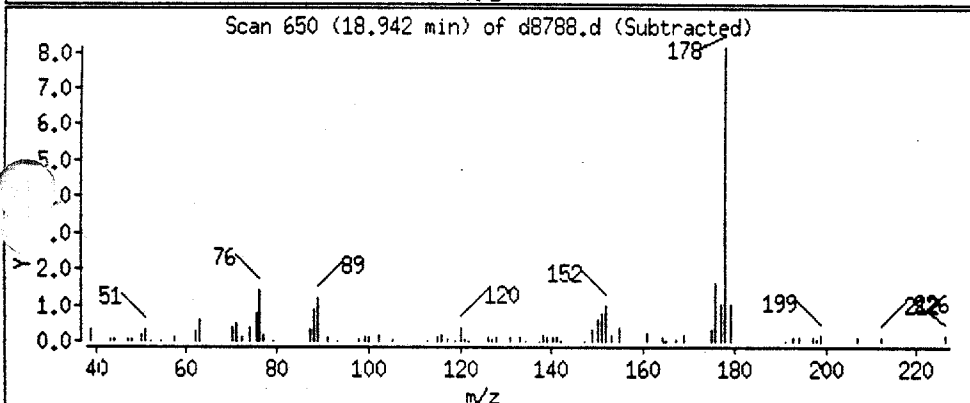
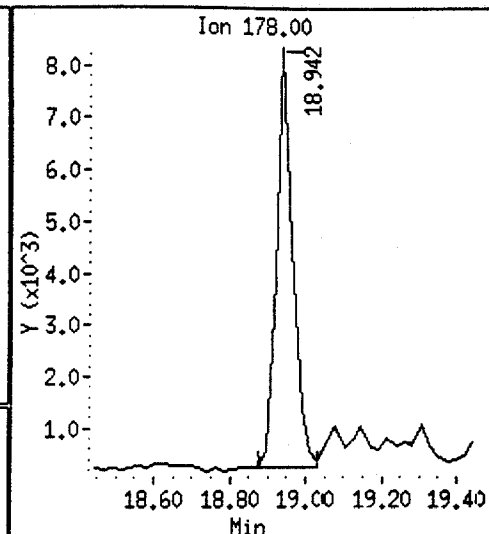
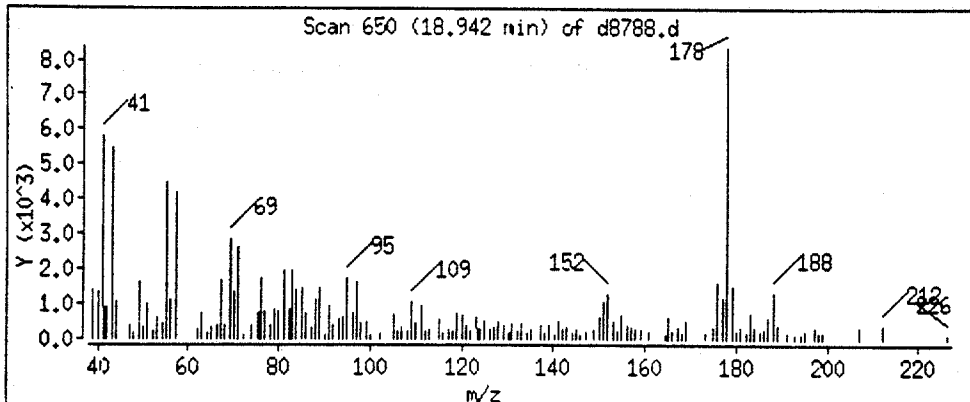
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

83 Anthracene



Data File: /chem/a900.1/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

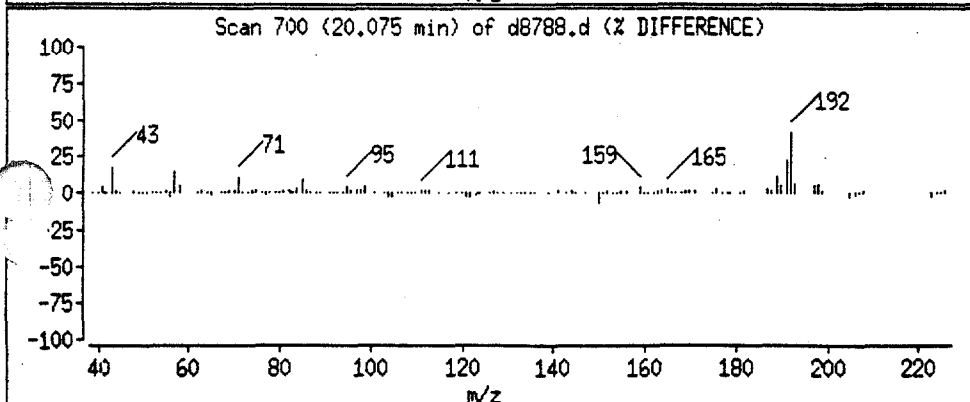
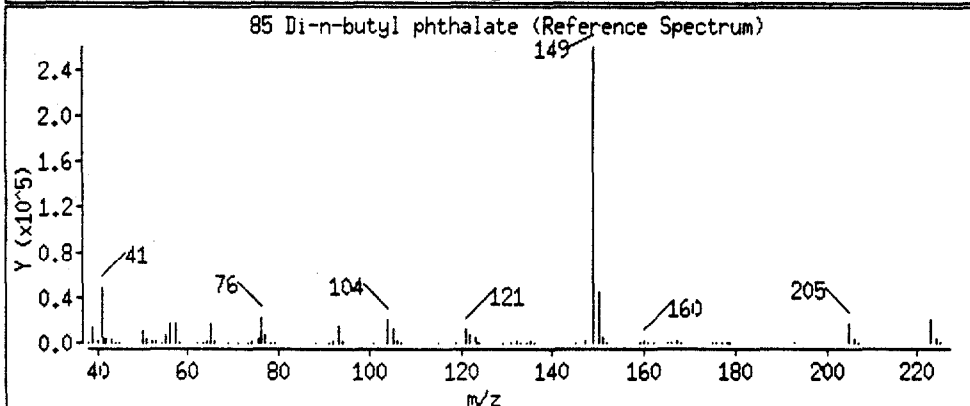
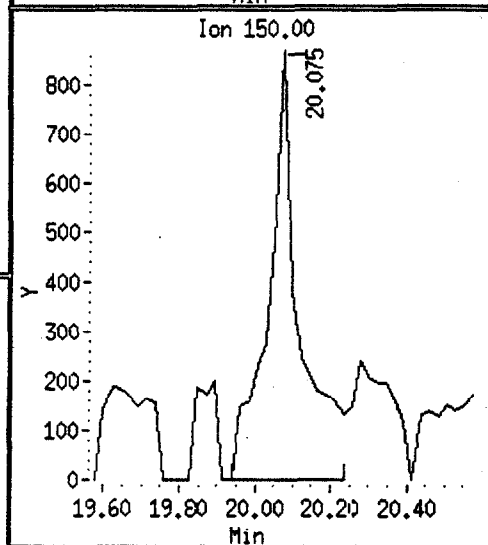
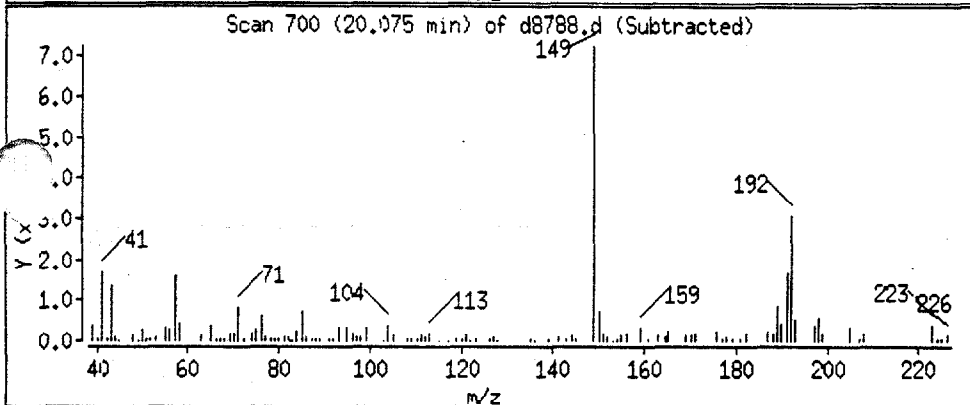
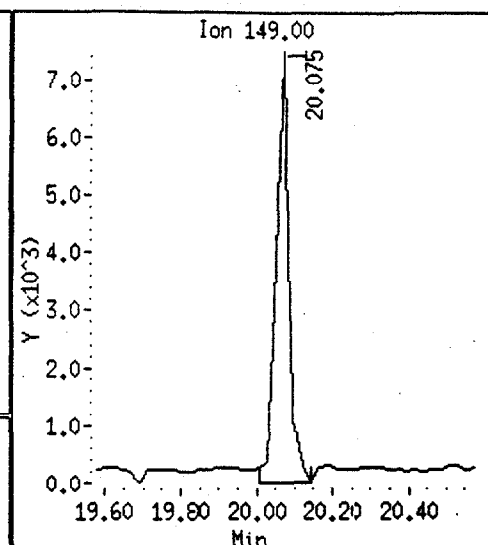
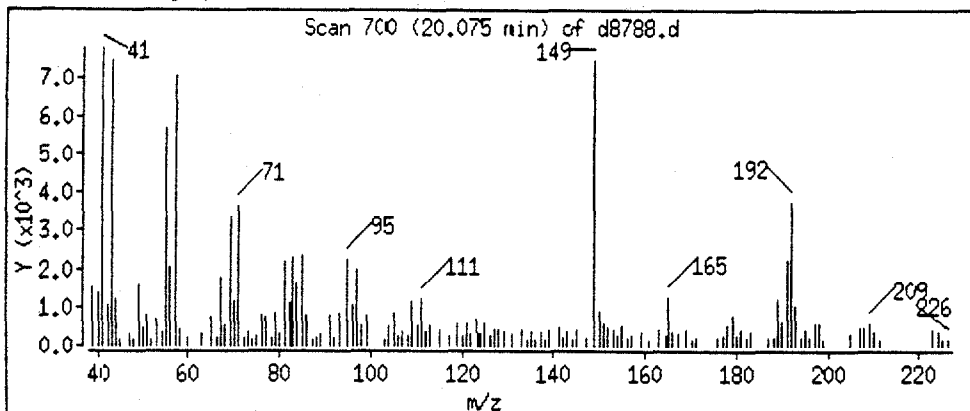
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

85 Di-n-butyl phthalate



Data File: /chem/a900.1/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

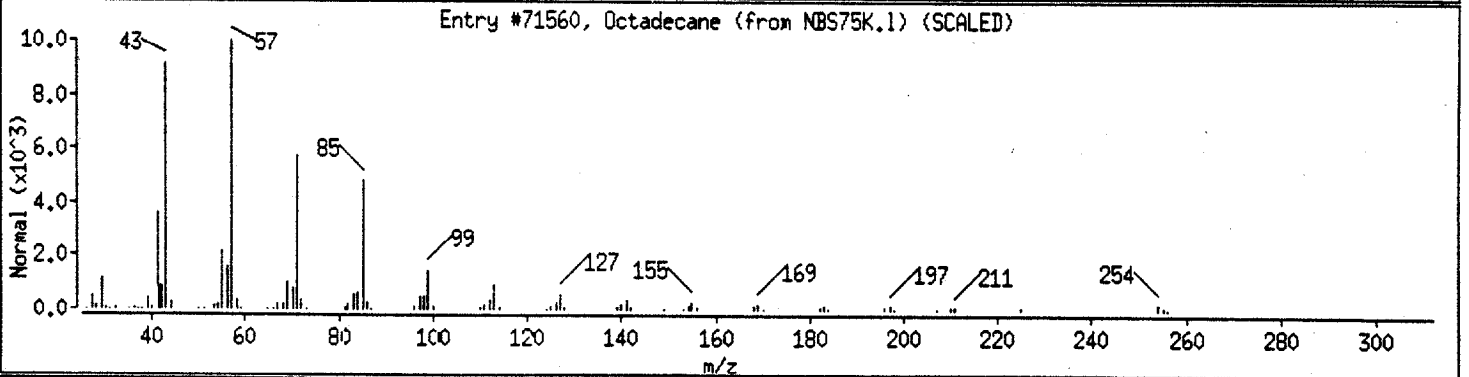
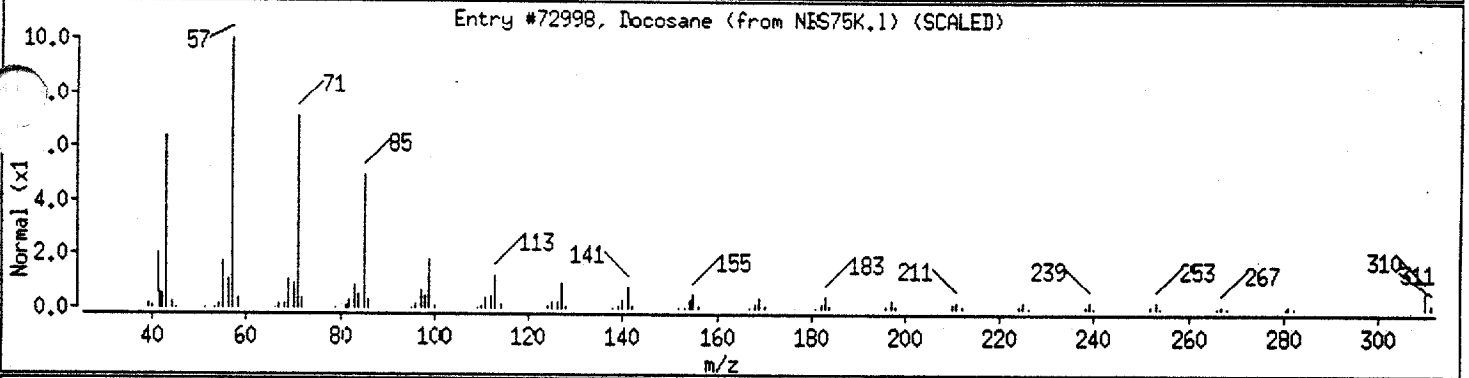
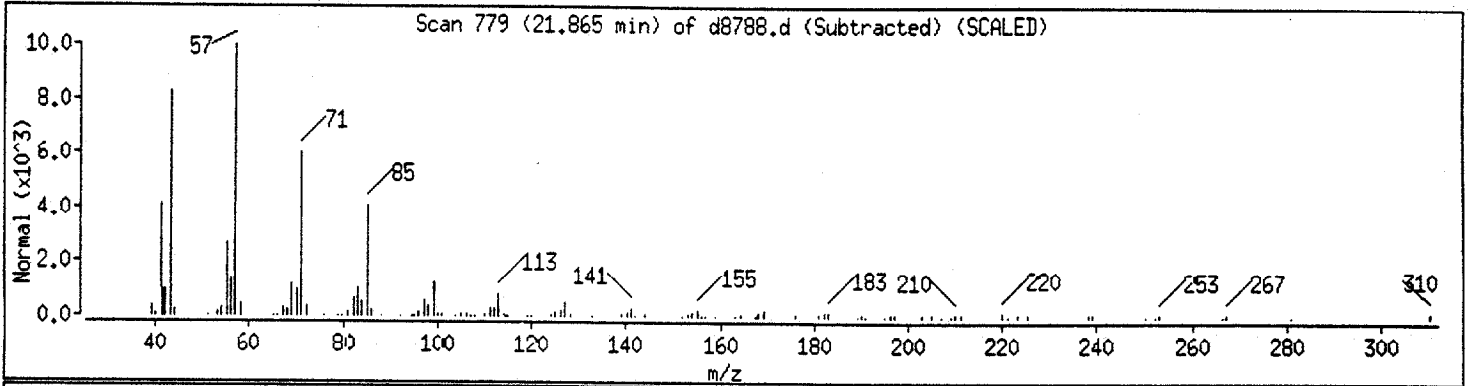
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Docosane	629-97-0	NBS7EK.1	72998	96
Octadecane	593-45-3	NBS7EK.1	71560	91





Data File: /chem/a900.i/d063094.b/d8788.d

Page 35

Date : 30-JUN-94 15:16

Instrument : a900.i

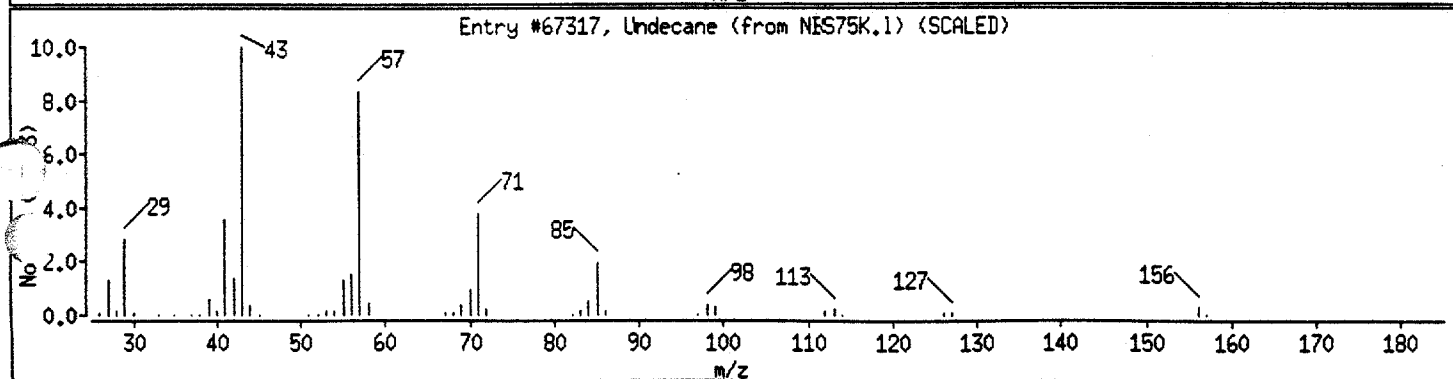
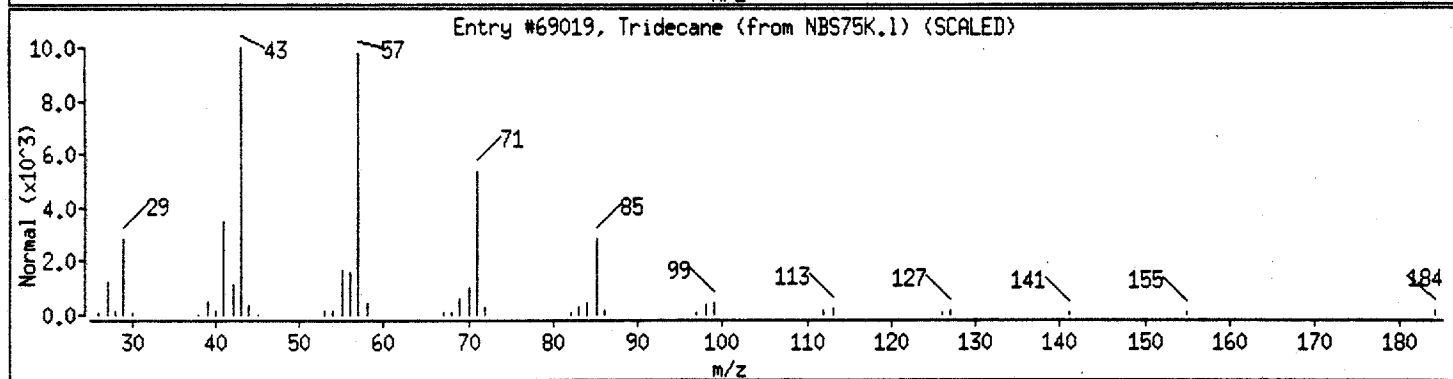
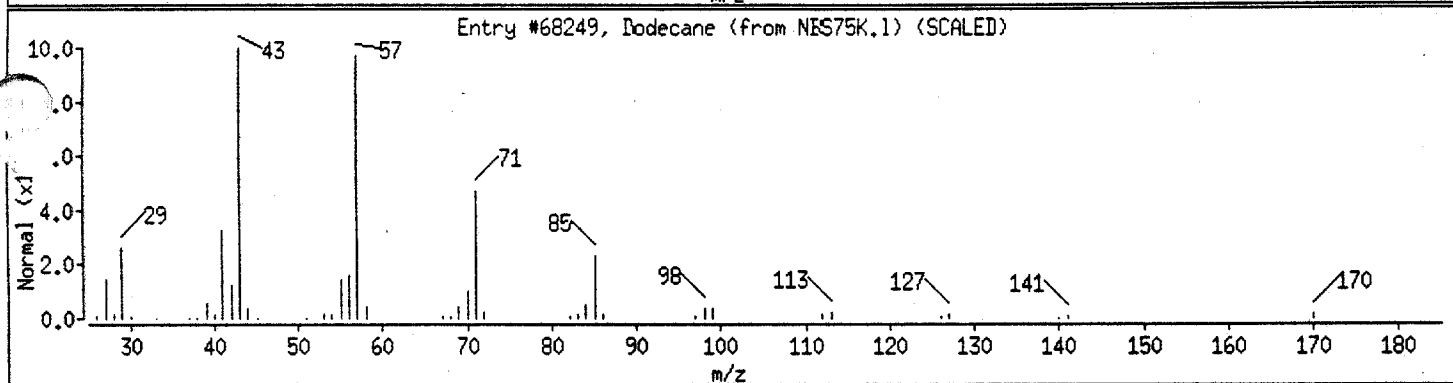
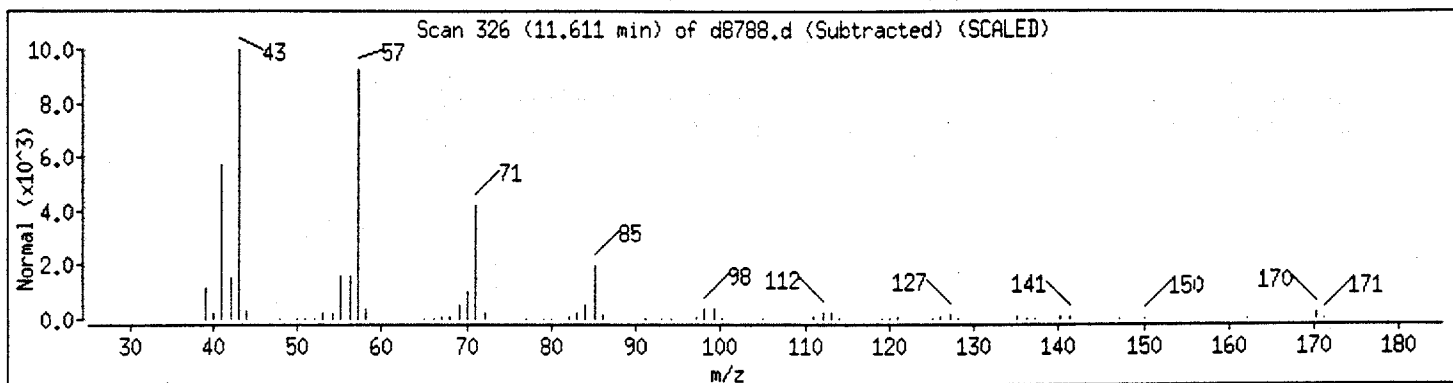
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

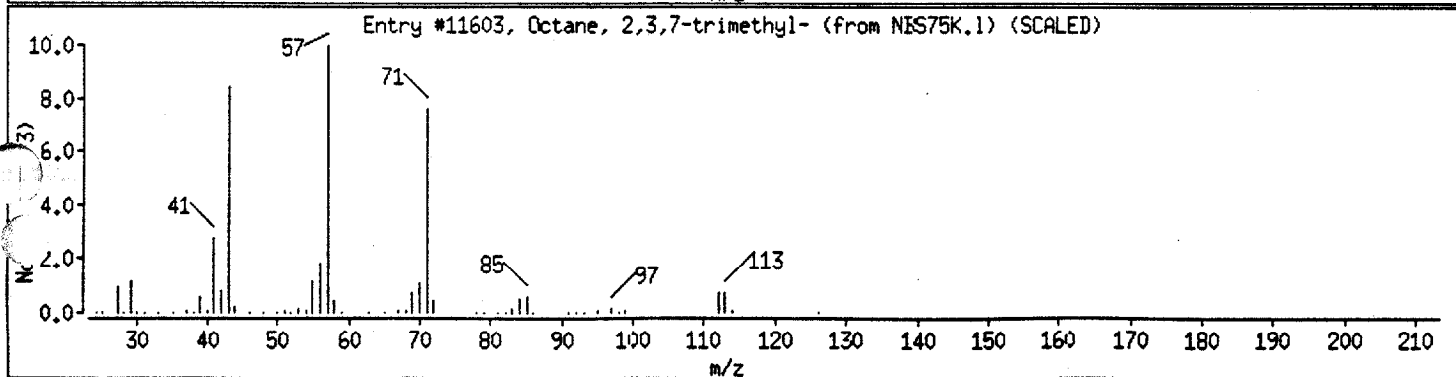
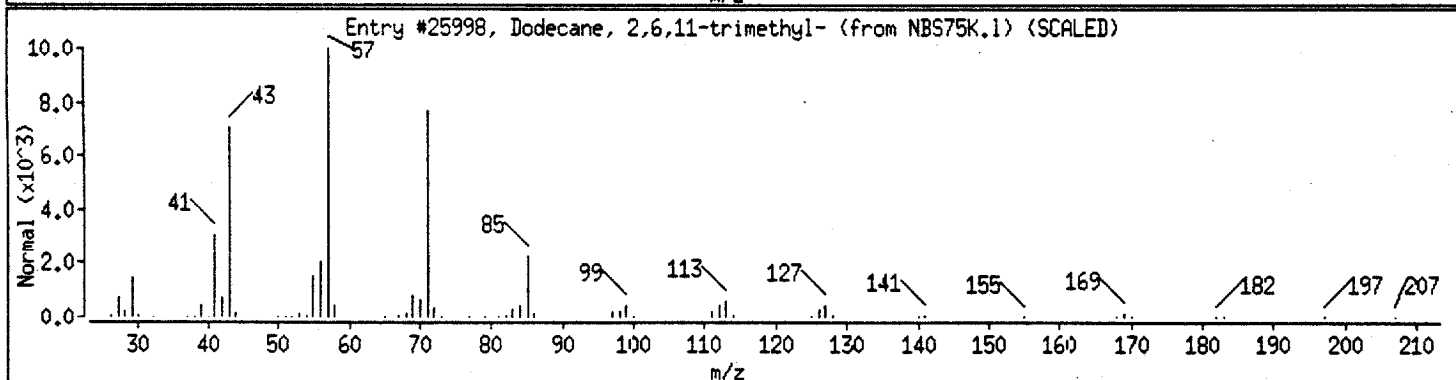
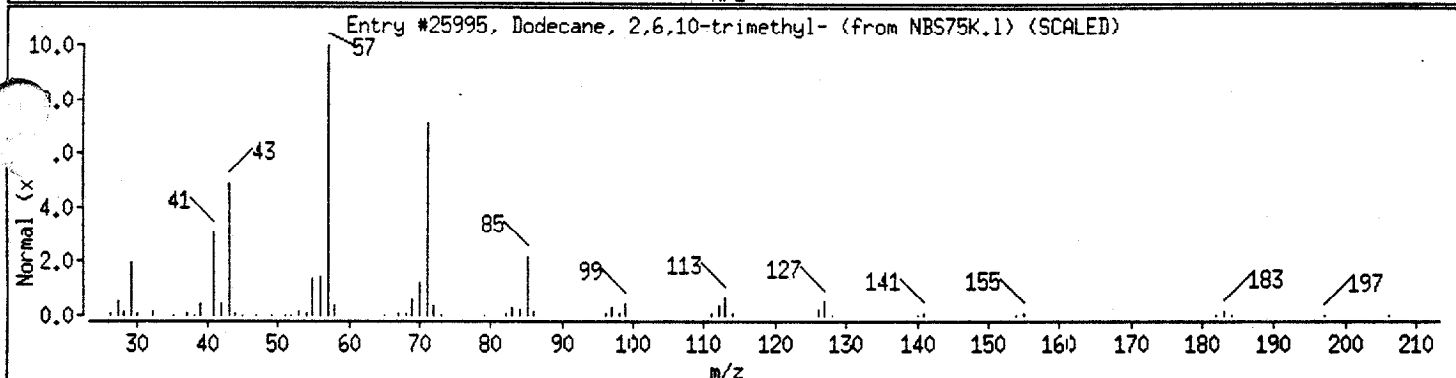
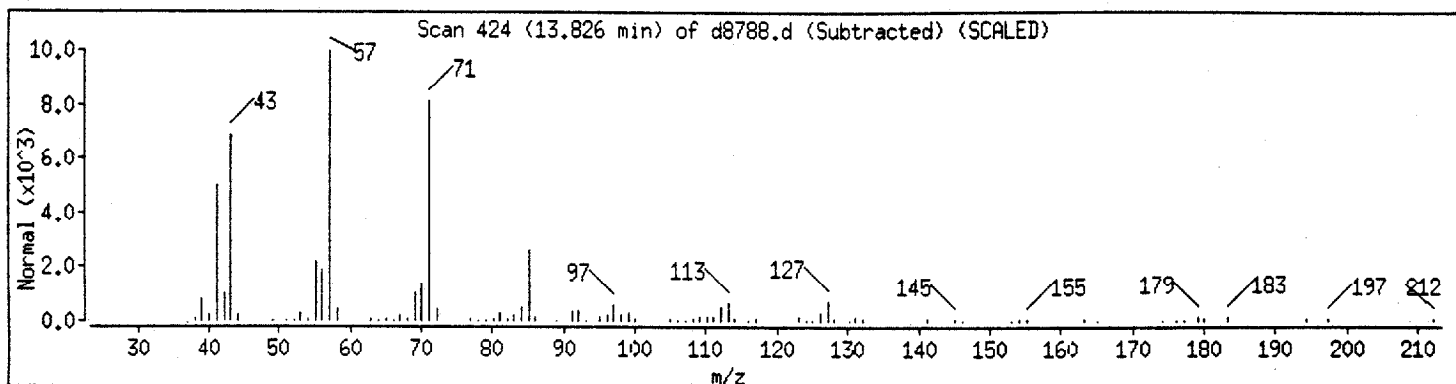
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Dodecane	112-40-3	NBS75K.1	68249	94
Tridecane	629-50-5	NBS75K.1	69019	90
Undecane	1120-21-4	NBS75K.1	67317	90



Data File: /chem/a900.i/d063094.b/d8788.d  
 Date : 30-JUN-94 15:16  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Dodecane, 2,6,10-trimethyl-	3891-98-3	NBS75K.1	25995	90
Dodecane, 2,6,11-trimethyl-	31295-56-4	NBS75K.1	25998	83
Octane, 2,3,7-trimethyl-	62016-34-6	NBS75K.1	11603	72



Data File: /chem/a900.i/d063094.b/d8788.d

Page 58

Date : 30-JUN-94 15:16

Instrument : a900.i

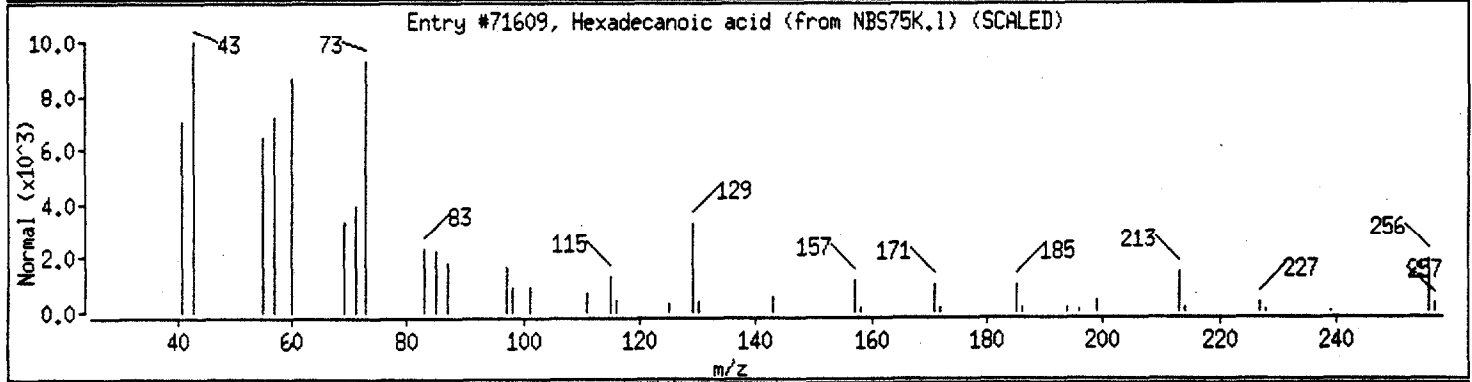
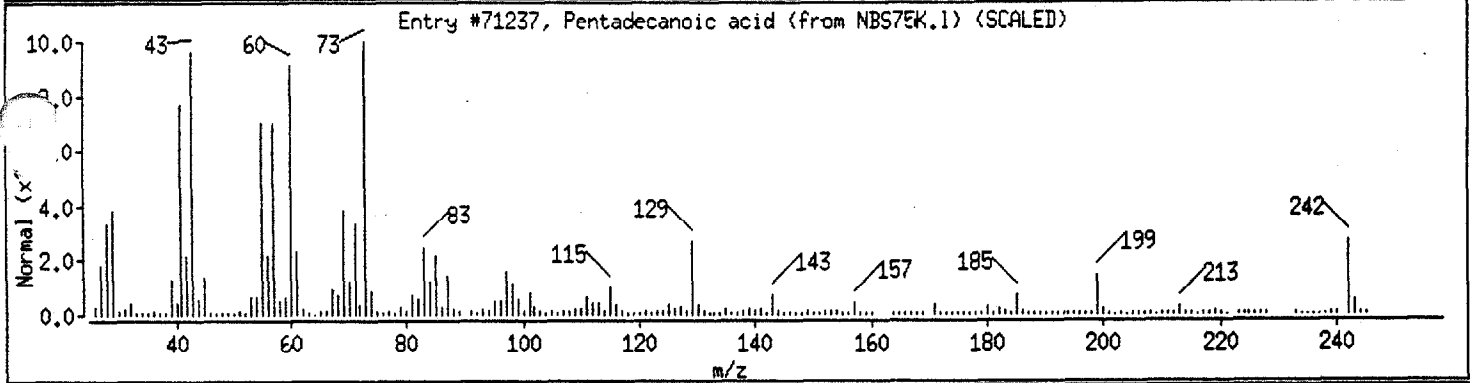
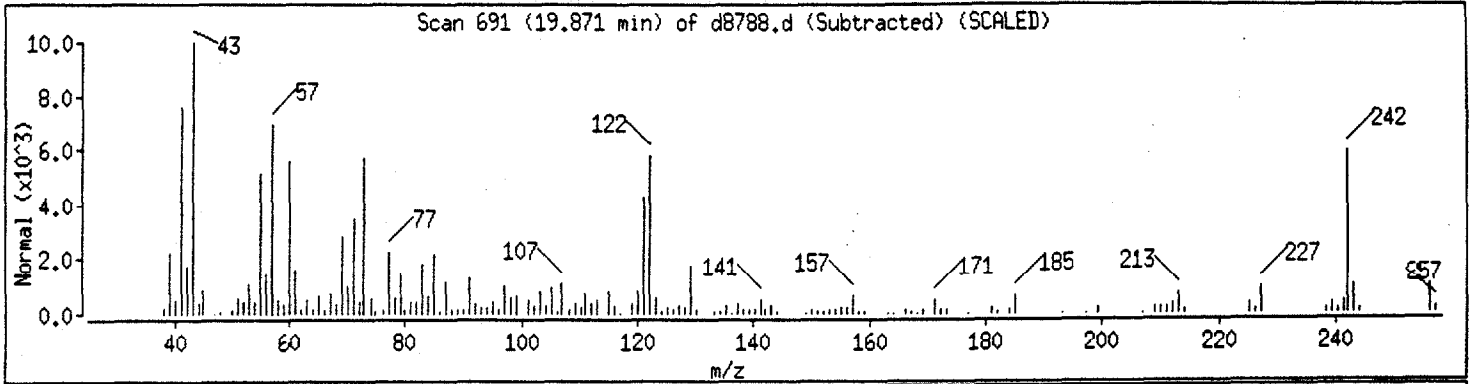
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentadecanoic acid	1002-84-2	NBS75K.1	71237	95
Hexadecanoic acid	57-10-3	NBS75K.1	71609	78



Data File: /chem/a900.i/d063094.b/d8788.d

Page 60

Date : 30-JUN-94 15:16

Instrument : a900.i

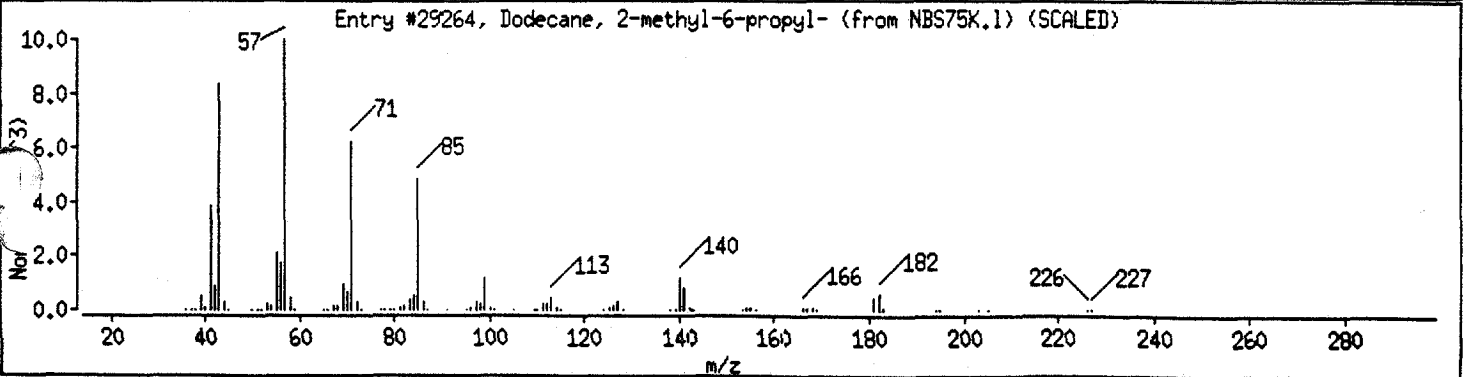
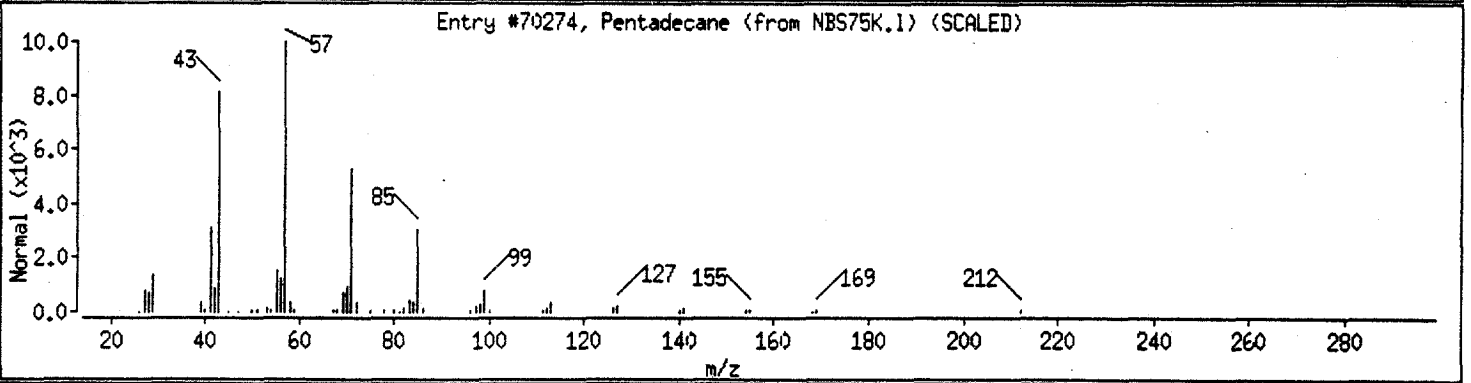
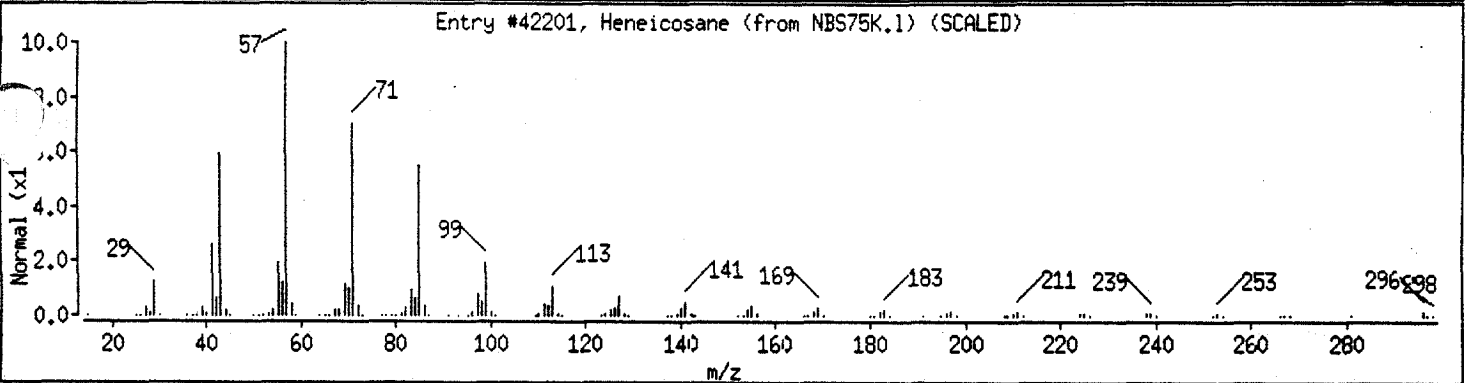
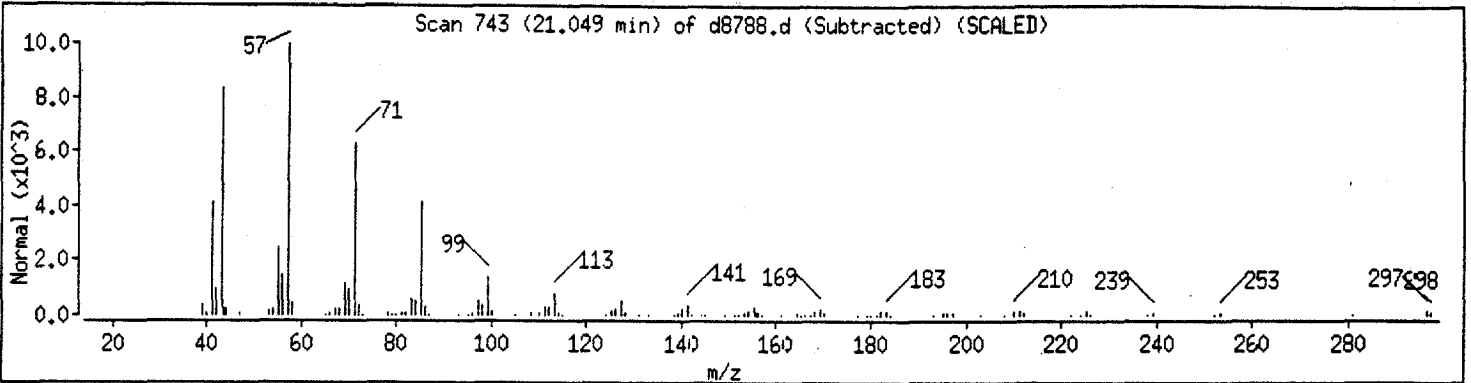
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Heneicosane	629-94-7	NBS75K.1	42201	99
Pentadecane	629-62-9	NBS75K.1	70274	93
Dodecane, 2-methyl-6-propyl-	55045-08-4	NBS75K.1	29264	93



Data File: /chem/a900.i/d063094.b/d8788.d

Page 51

Date : 30-JUN-94 15:16

Instrument : a900.i

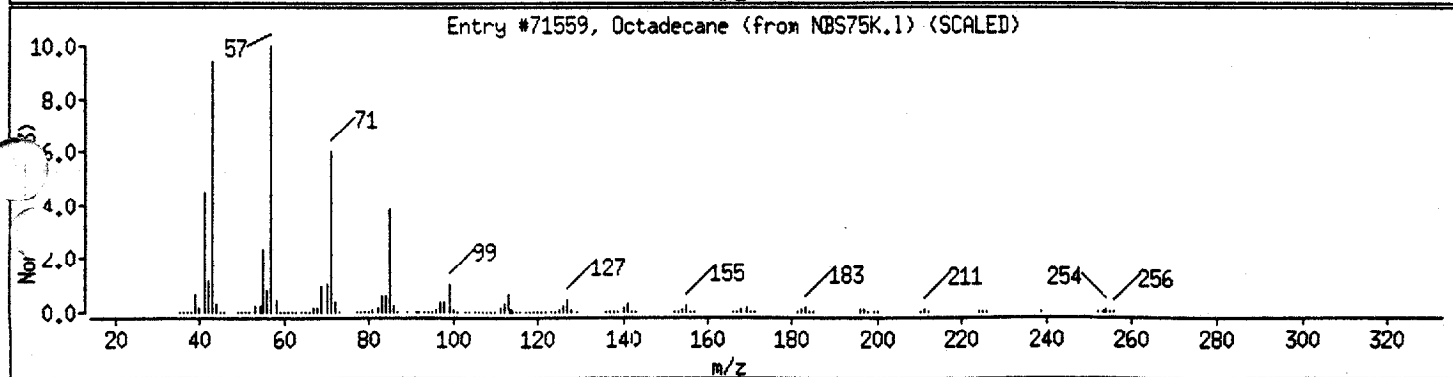
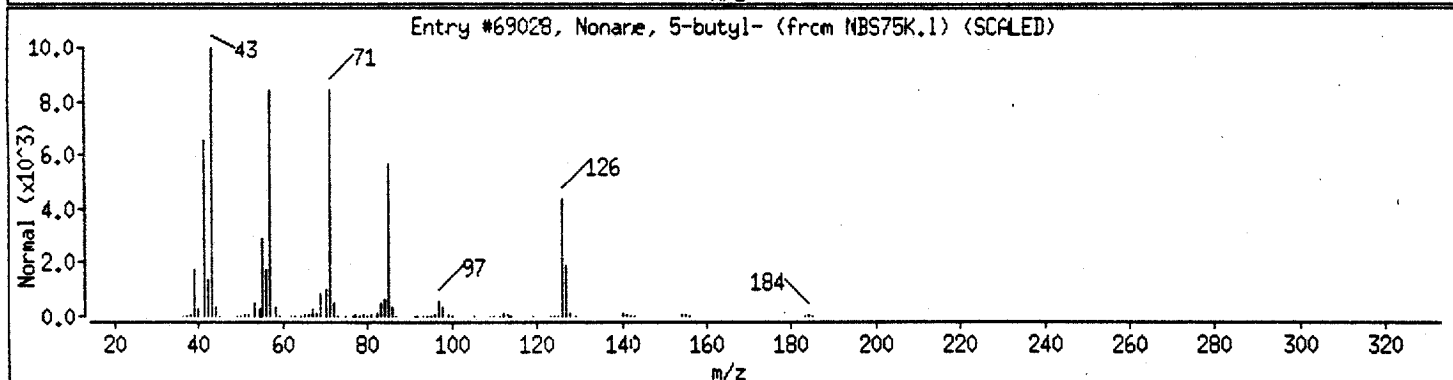
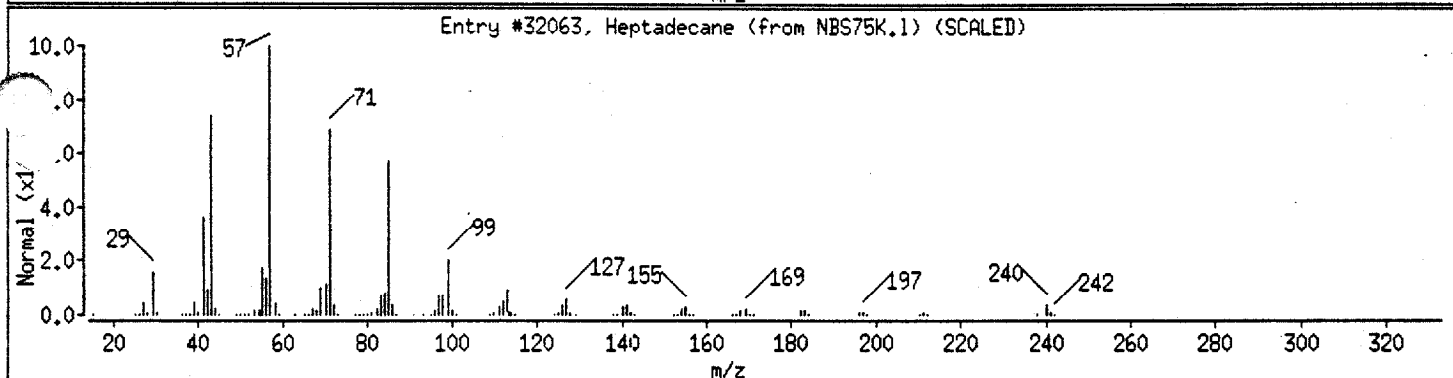
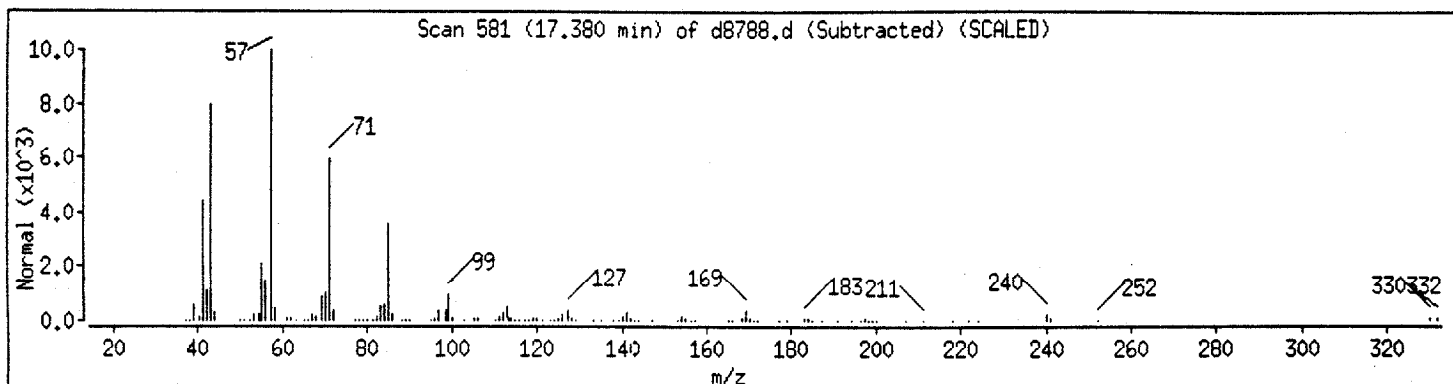
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Heptadecane	629-78-7	NBS75K.1	32063	97
Nonane, 5-butyl-	17312-63-9	NBS75K.1	69028	92
Octadecane	593-45-3	NBS75K.1	71559	91



Data File: /chem/a900.1/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

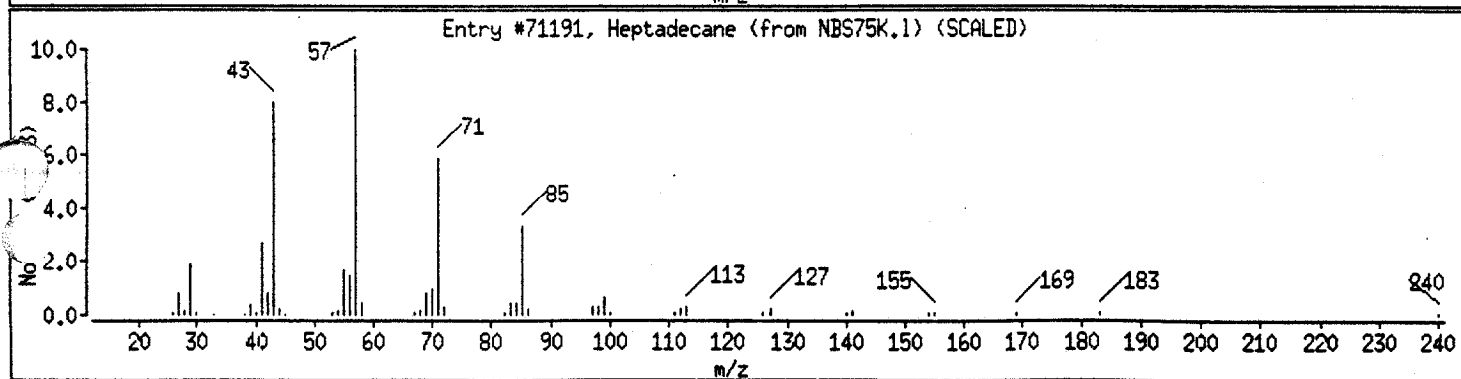
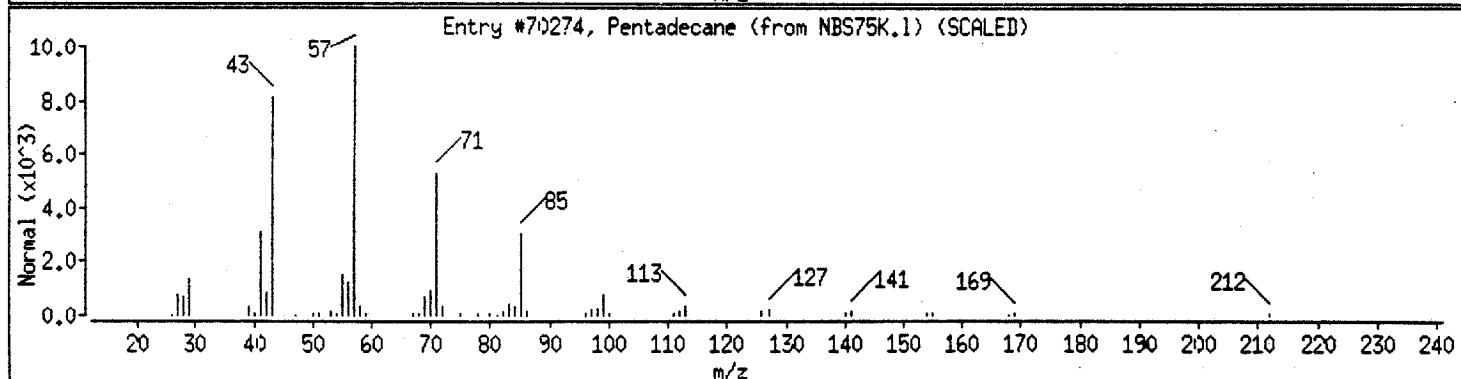
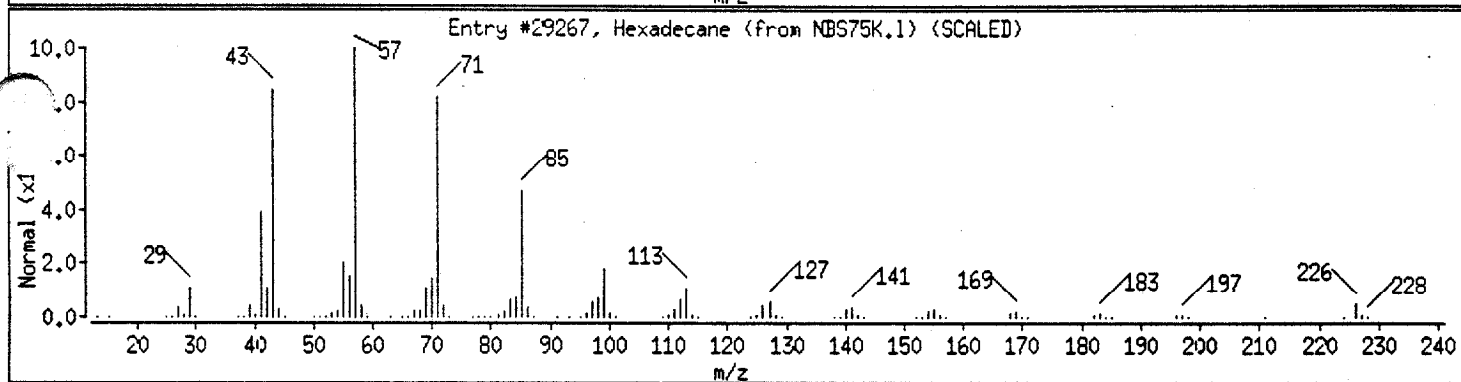
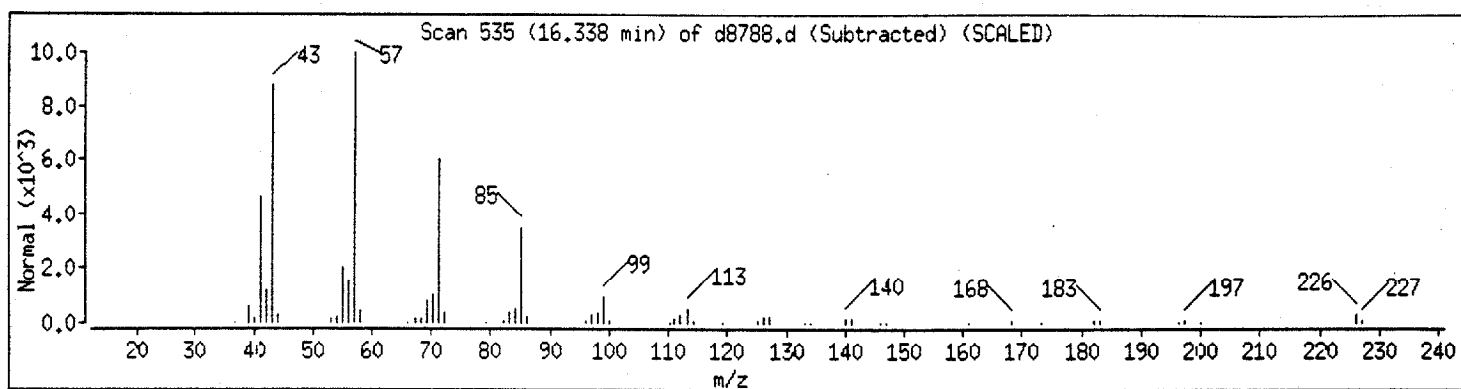
Sample ID :

Column phase : J&amp;W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Hexadecane	544-76-3	NBS75K.1	29267	96
Pentadecane	629-62-9	NBS75K.1	70274	91
Heptadecane	629-78-7	NBS75K.1	71191	91



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

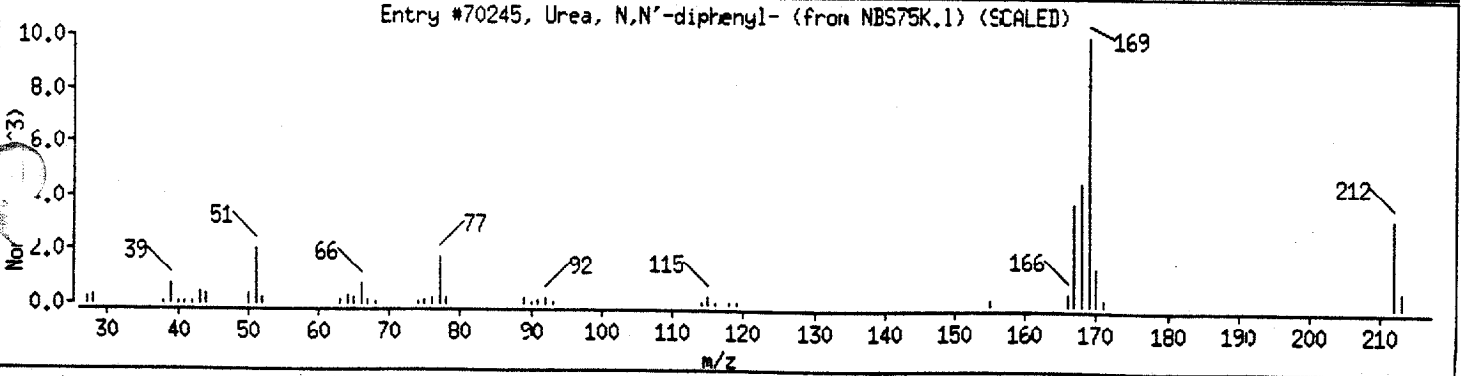
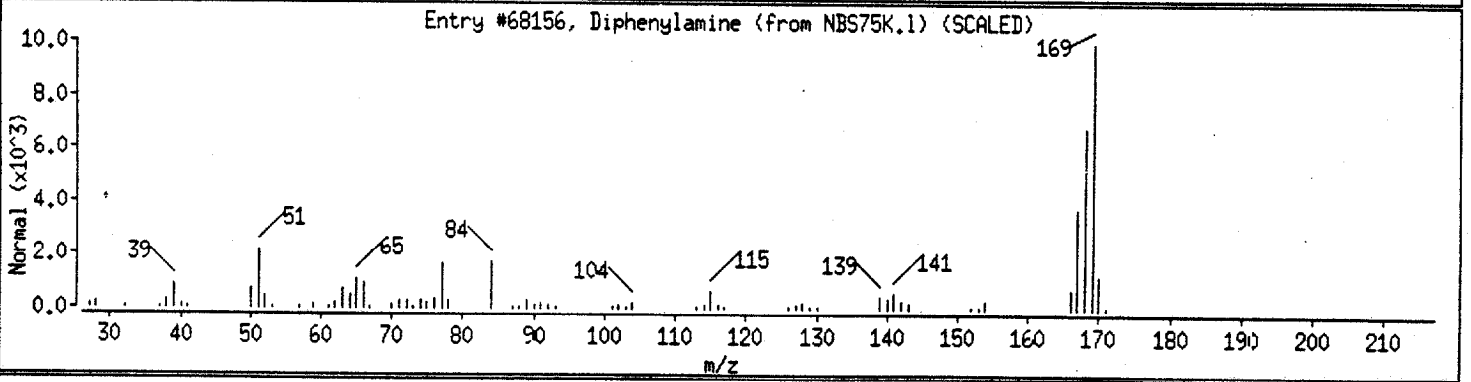
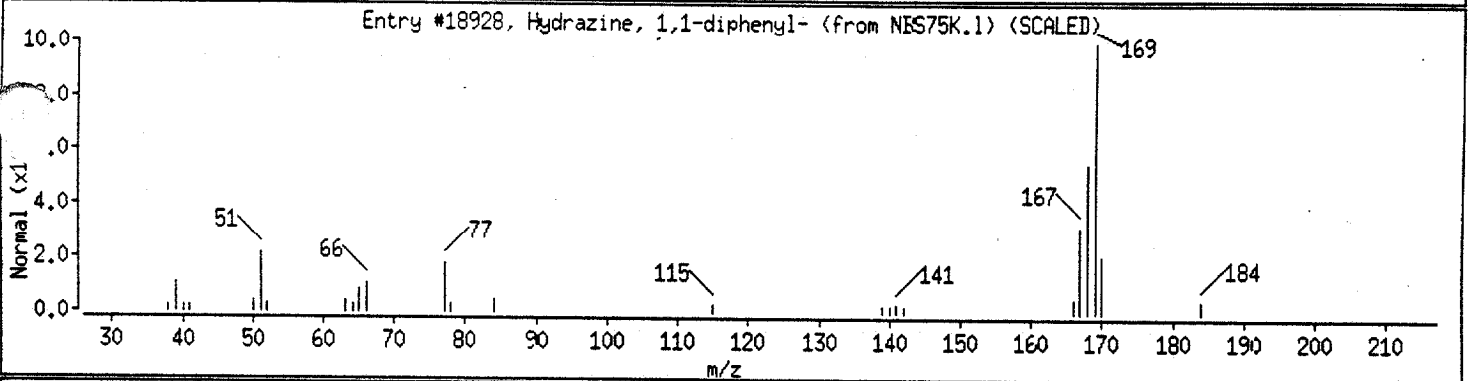
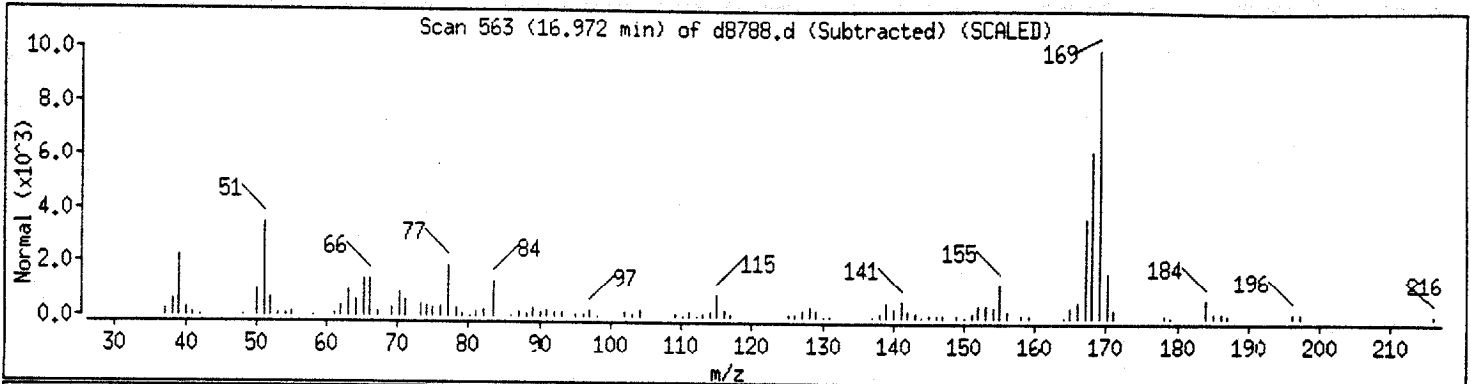
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

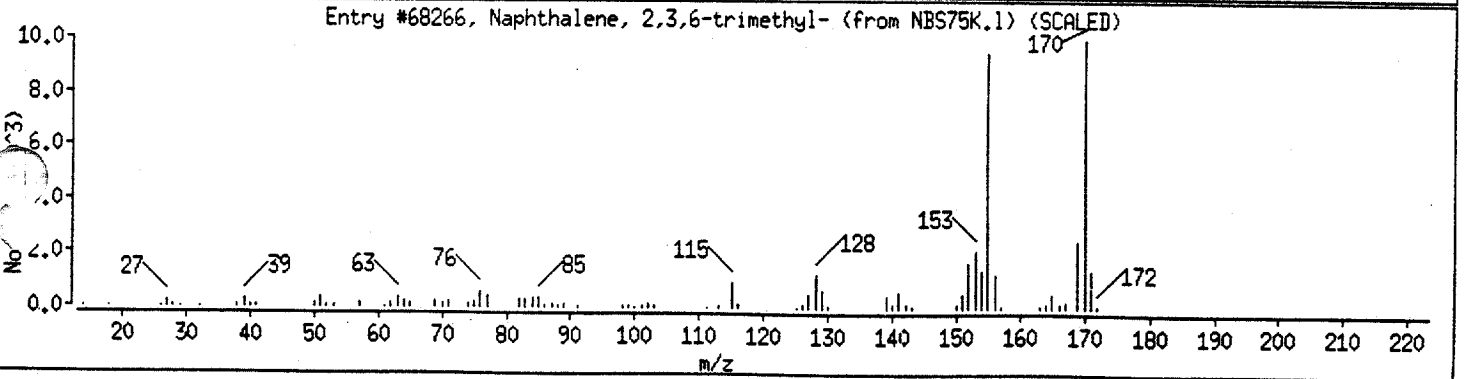
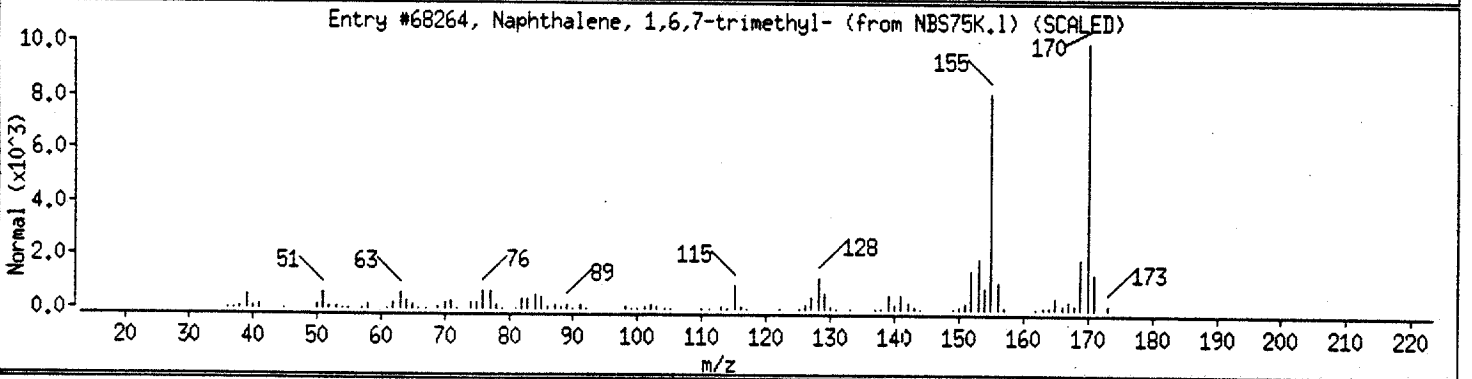
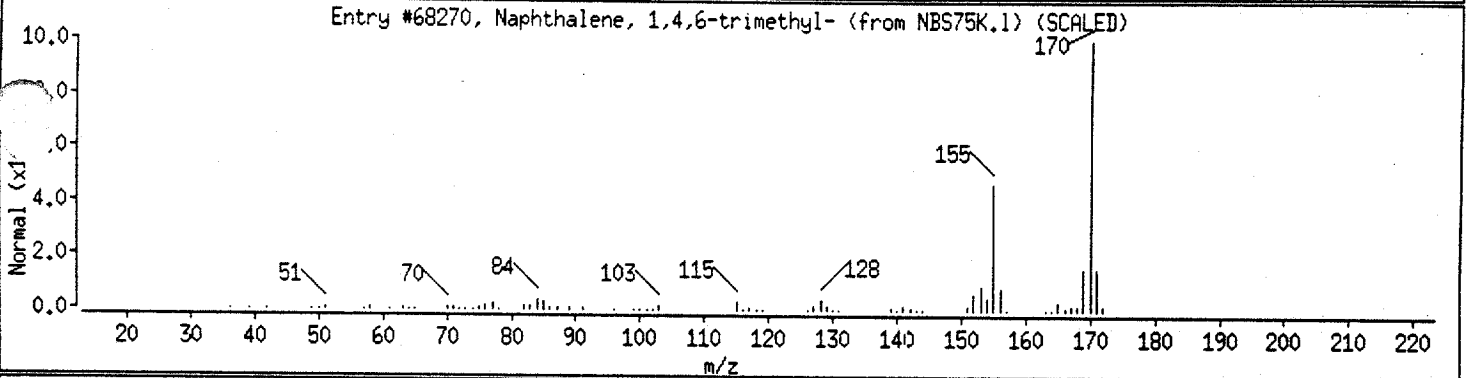
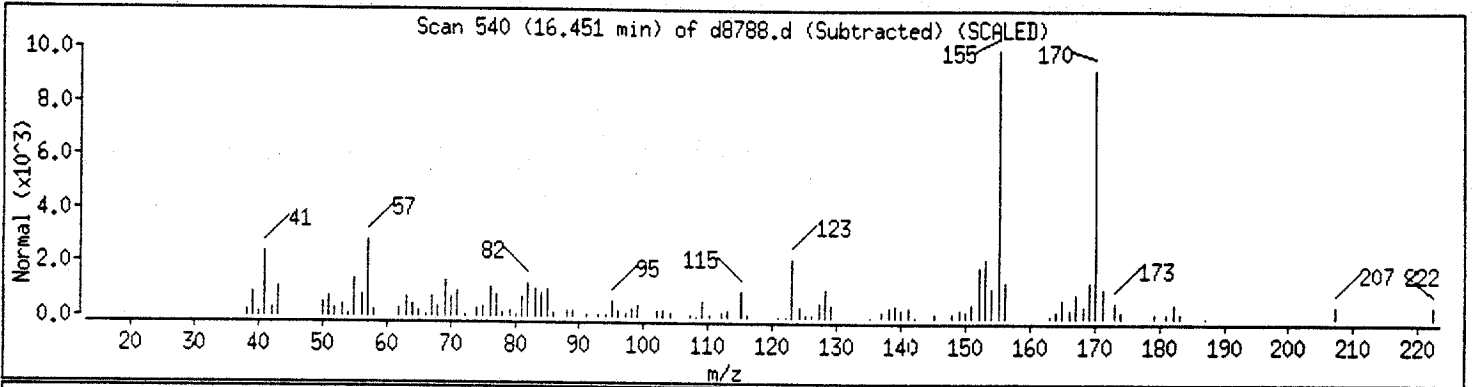
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Hydrazine, 1,1-diphenyl-	530-50-7	NBS75K.1	18928	93
Diphenylamine	122-39-4	NBS75K.1	68156	92
Urea, N,N'-diphenyl-	102-07-8	NBS75K.1	70245	86



Data File: /chem/a900.1/d063094.b/d8788.d  
 Date : 30-JUN-94 15:16  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Naphthalene, 1,4,6-trimethyl-	2131-42-2	NBS75K.1	68270	93
Naphthalene, 1,6,7-trimethyl-	2245-38-7	NBS75K.1	68264	87
Naphthalene, 2,3,6-trimethyl-	829-26-5	NBS75K.1	68266	87





Data File: /chem/a900.i/d063094.b/d8788.d

Page 57

Date: 30-JUN-94 15:16

Instrument: a900.i

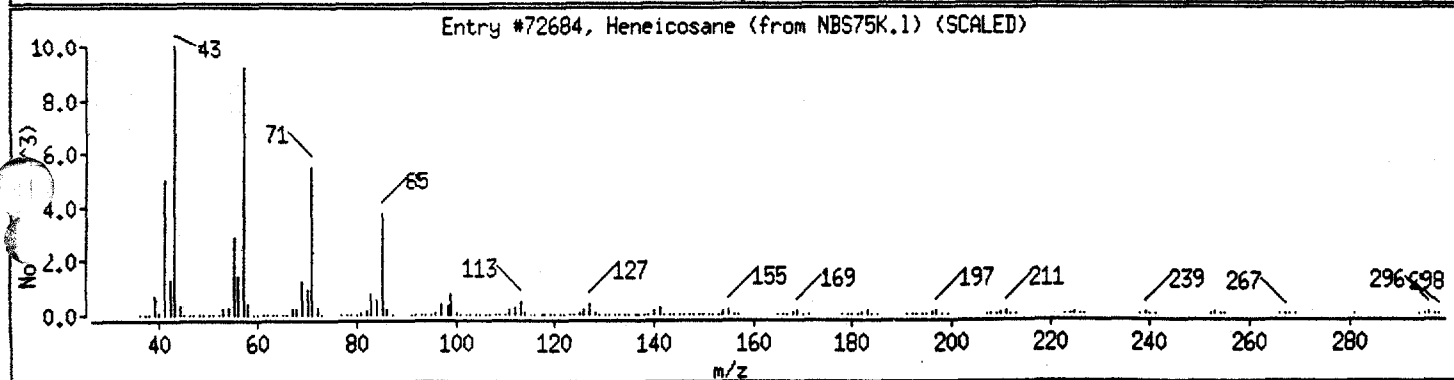
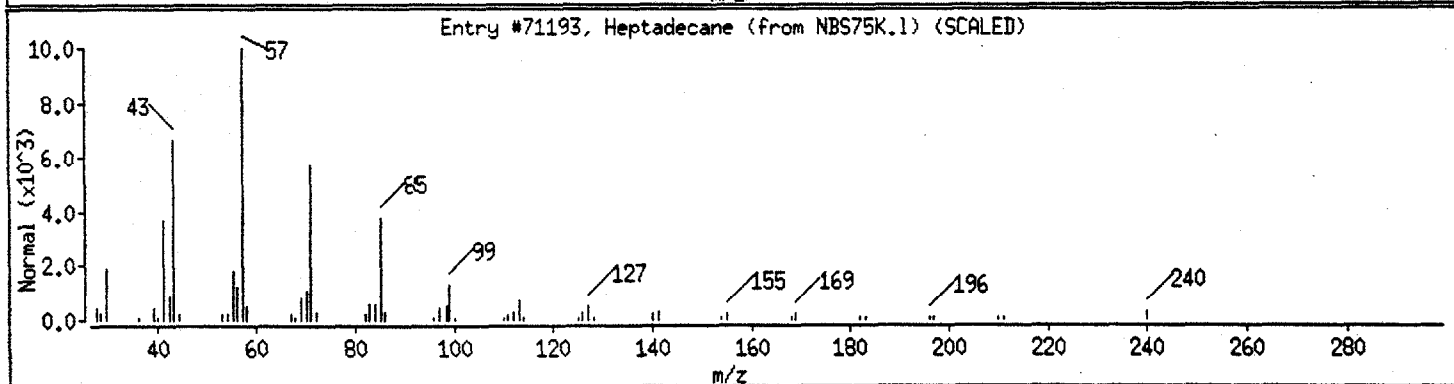
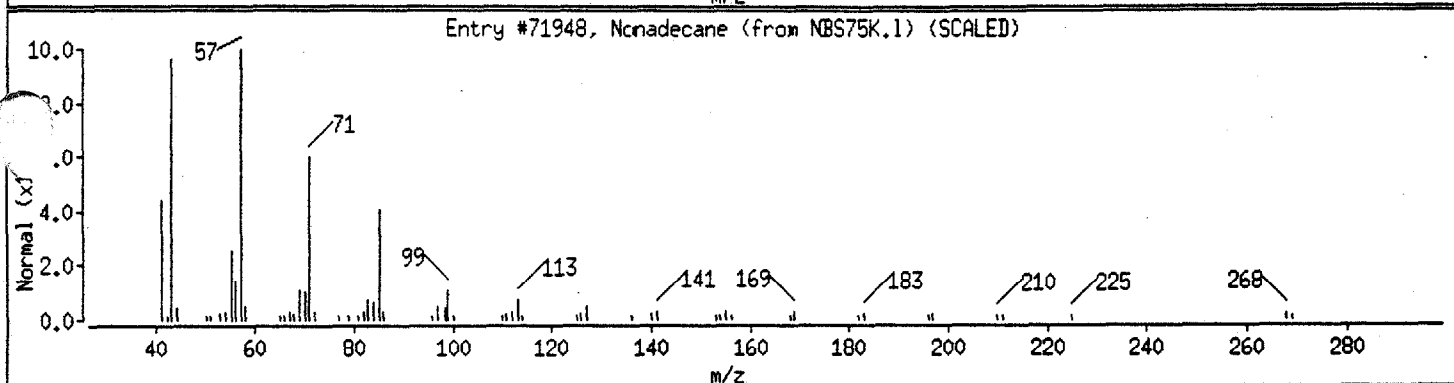
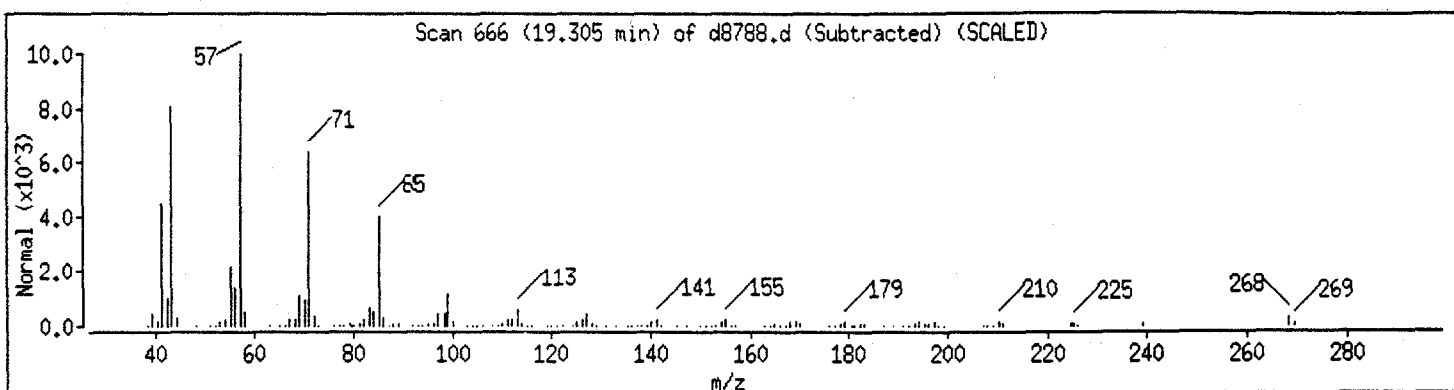
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonadecane	629-92-5	NBS75K.1	71948	95
Heptadecane	629-78-7	NBS75K.1	71193	91
Heneicosane	629-94-7	NBS75K.1	72684	90



Data File: /chem/a900.1/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

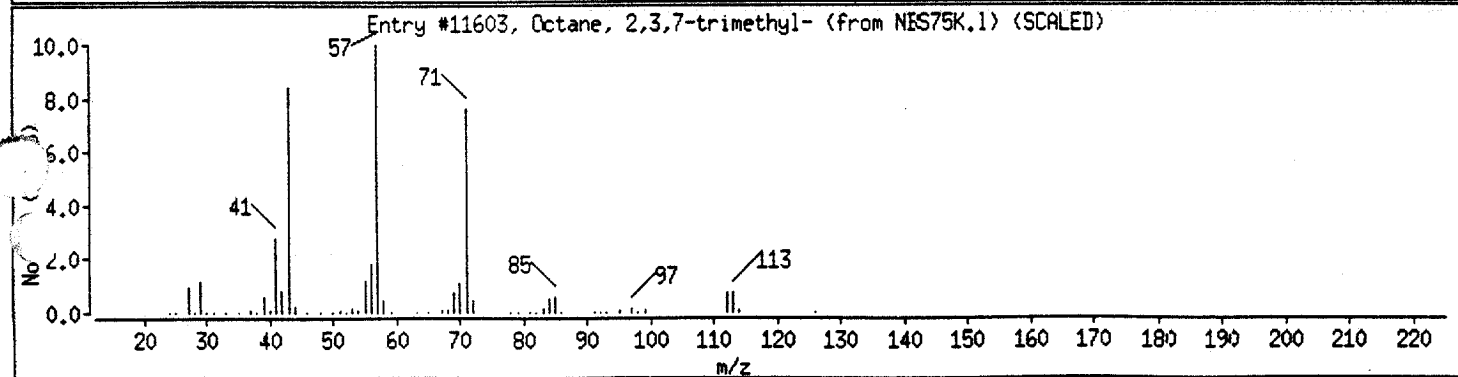
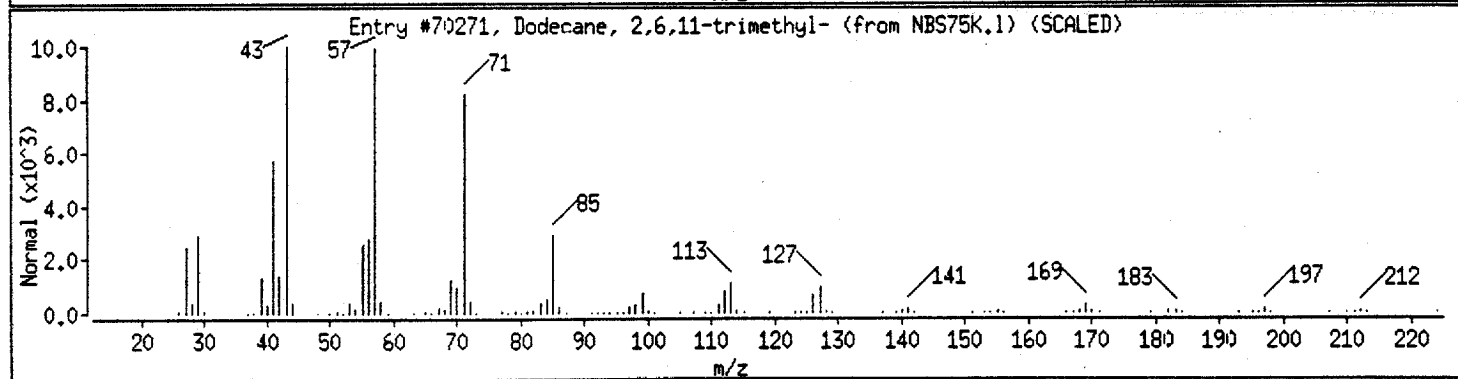
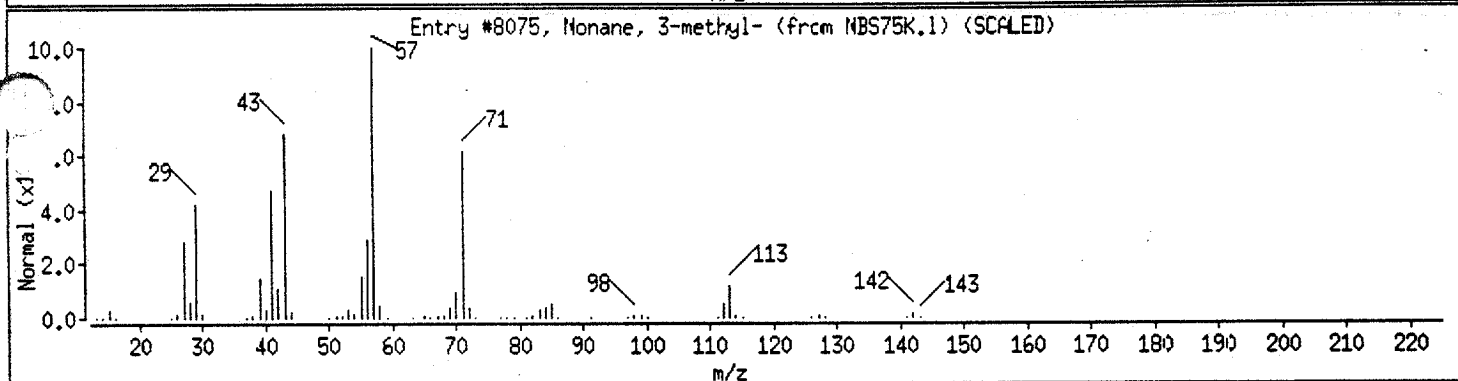
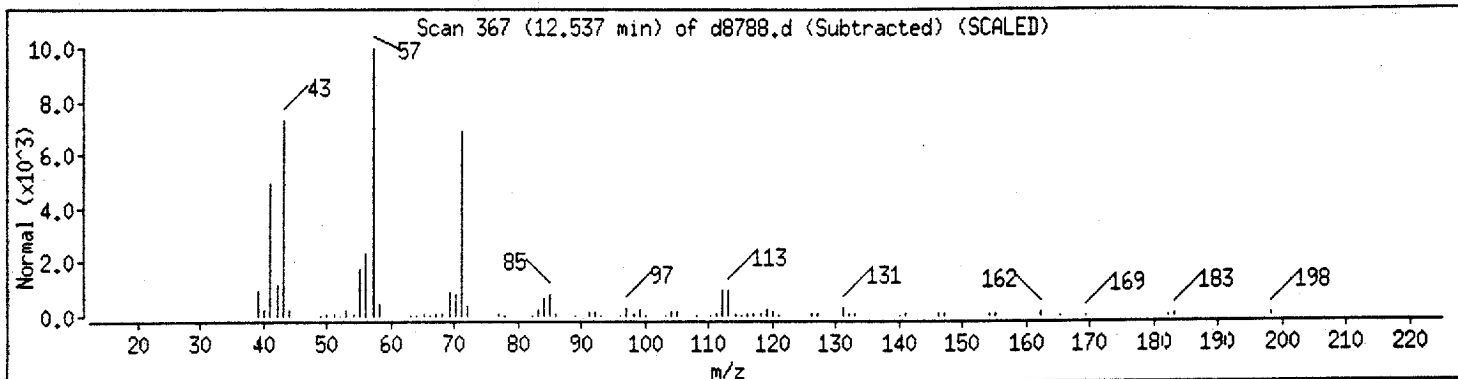
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

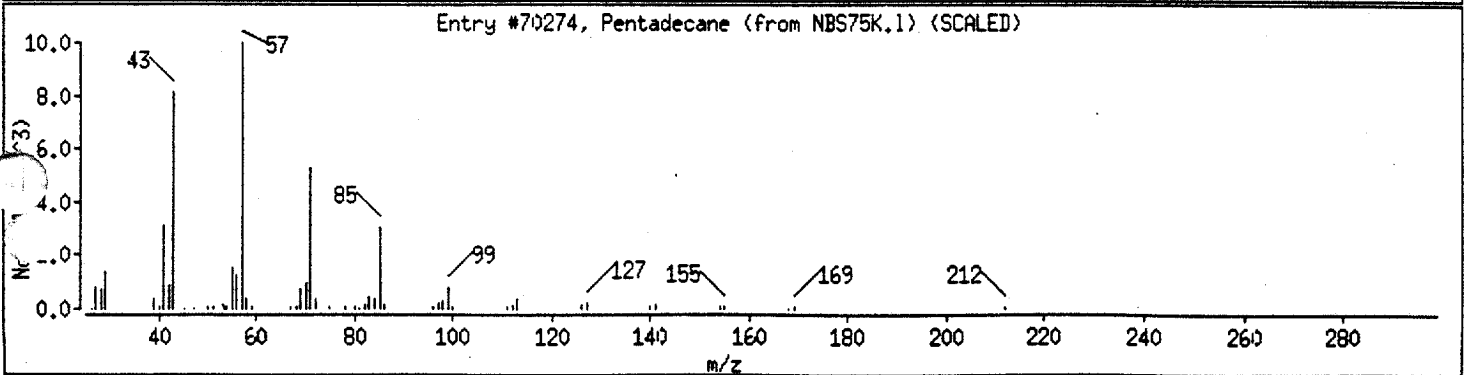
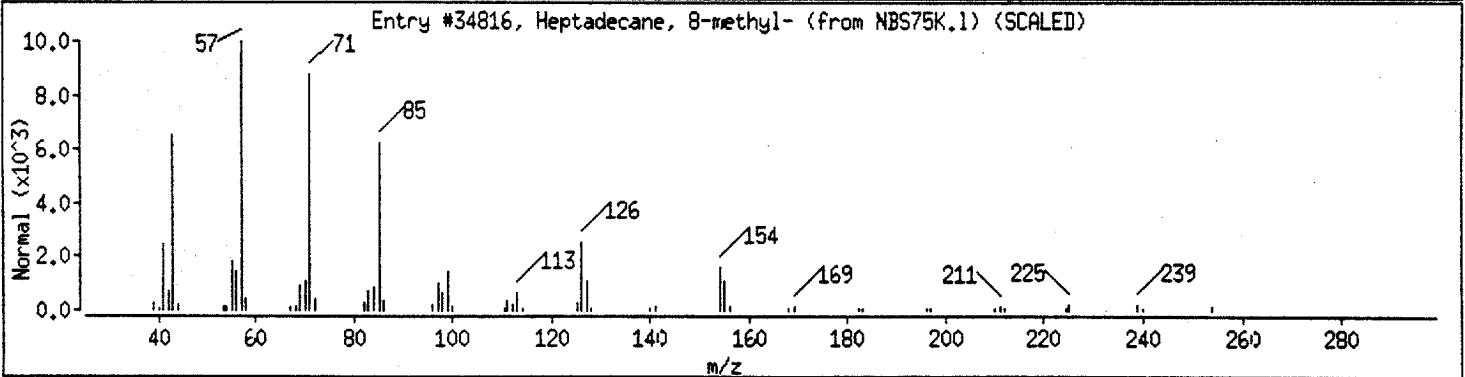
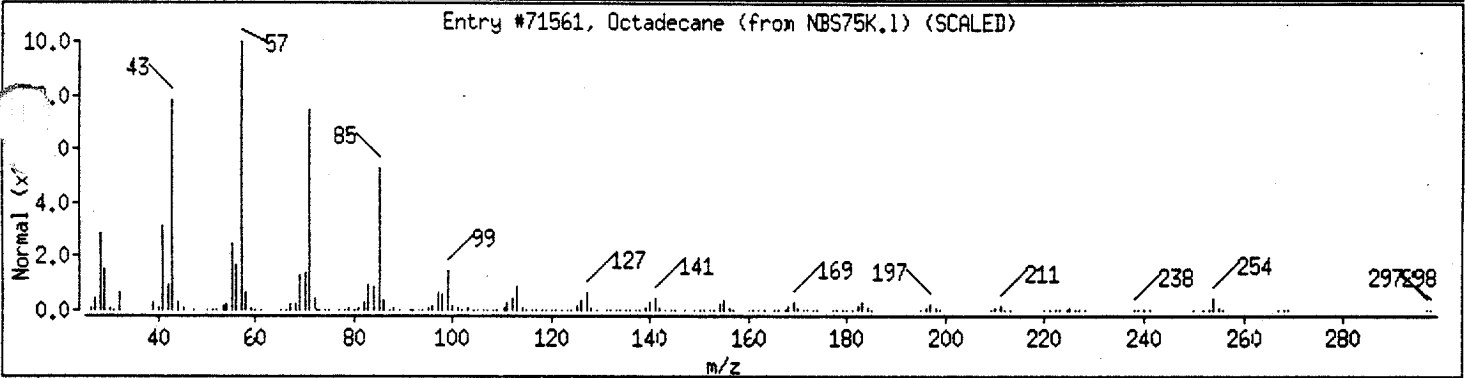
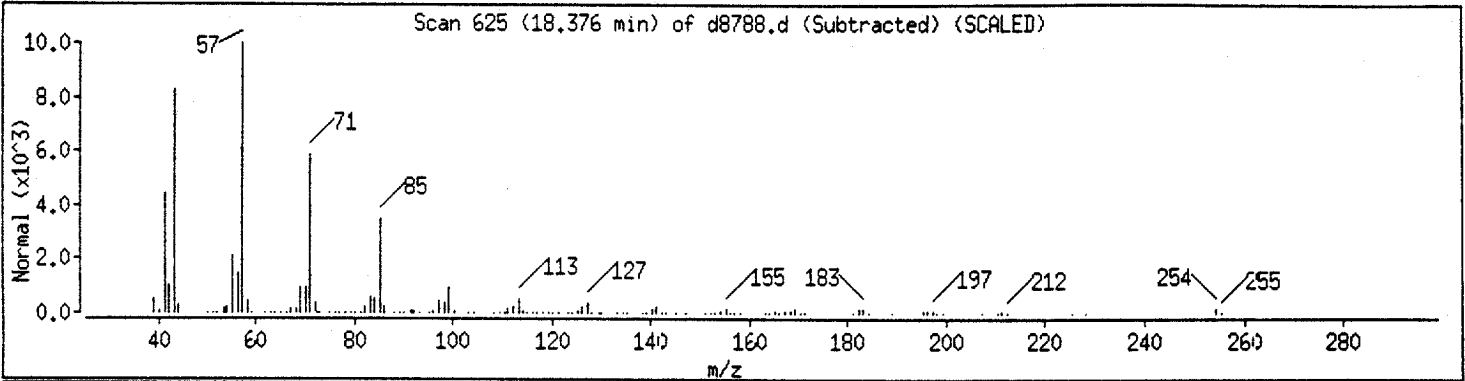
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonane, 3-methyl-	5911-04-6	NBS75K.1	8075	90
Dodecane, 2,6,11-trimethyl-	31295-56-4	NBS75K.1	70271	83
Octane, 2,3,7-trimethyl-	62016-34-6	NBS75K.1	11603	80



Data File: /chem/a900.1/d063094.b/d8788.d  
Date : 30-JUN-94 15:16  
Instrument : a900.1  
Sample ID :  
Column phase : J&W DB-5  
Volume Injected (uL) : 1.0

Column diameter : 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Octadecane	593-45-3	NBS75K.1	71561	97
Heptadecane, 8-methyl-	13287-23-5	NBS75K.1	34816	91
Pentadecane	629-62-9	NBS75K.1	70274	91



Data File: /chem/a900.i/d063094.b/d8788.d

Date: 30-JUN-94 15:16

Instrument: a900.i

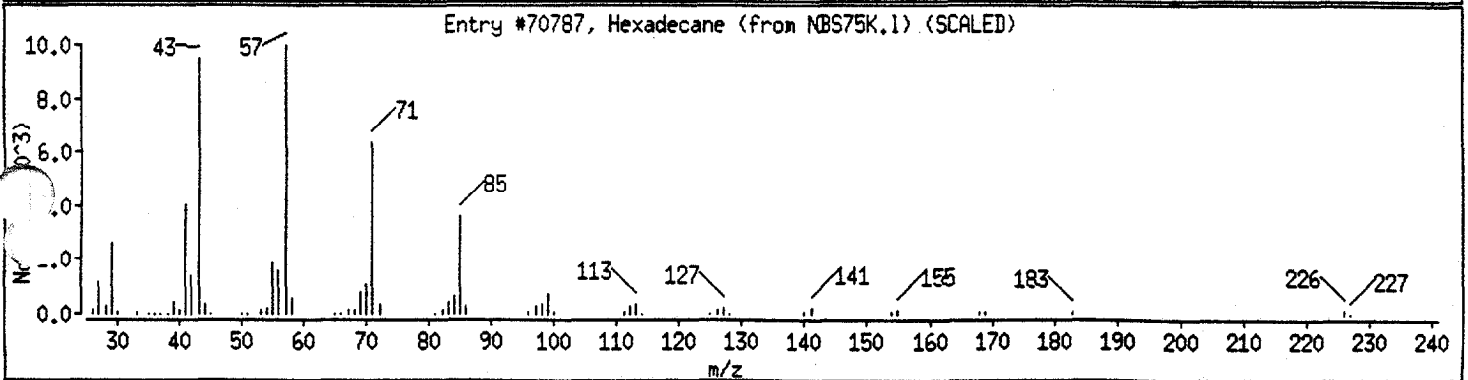
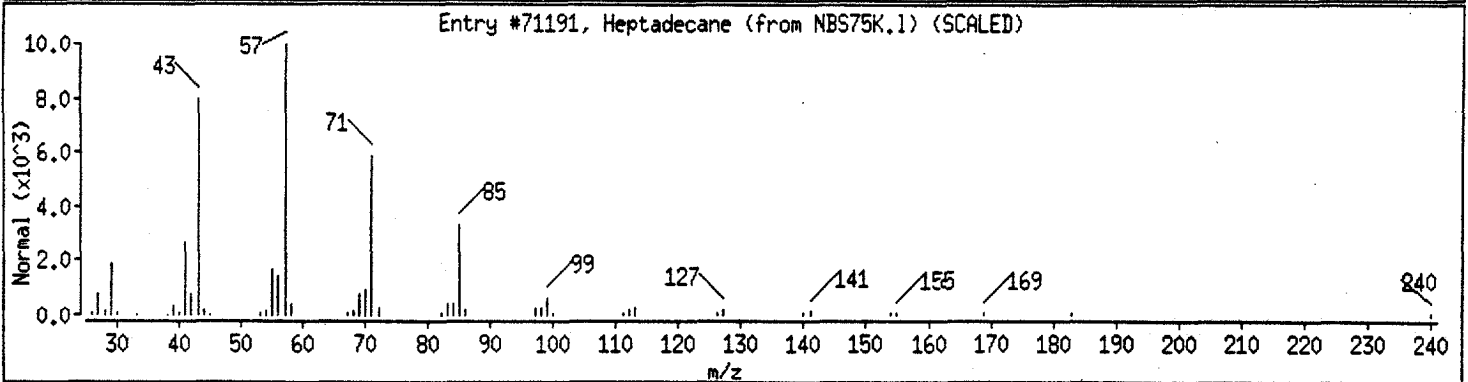
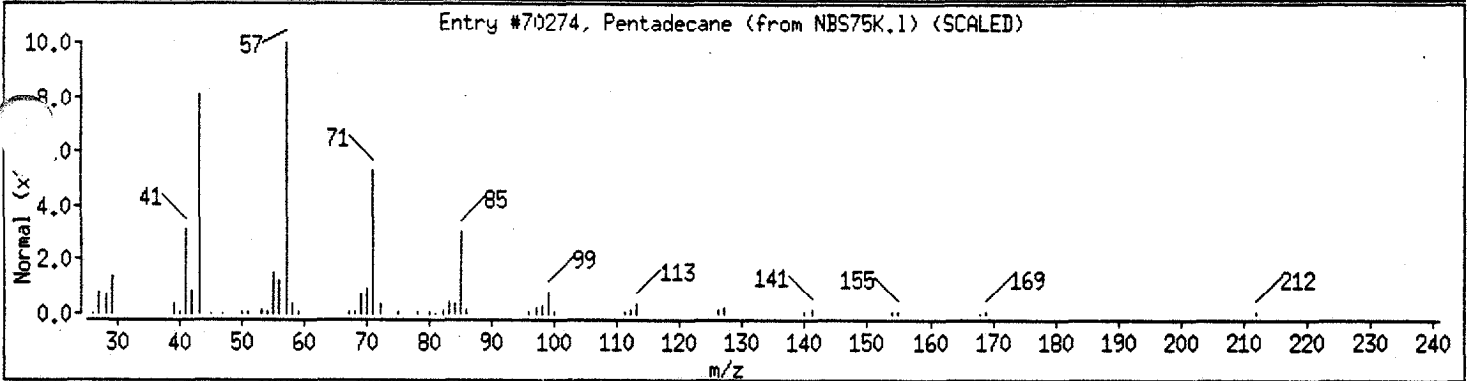
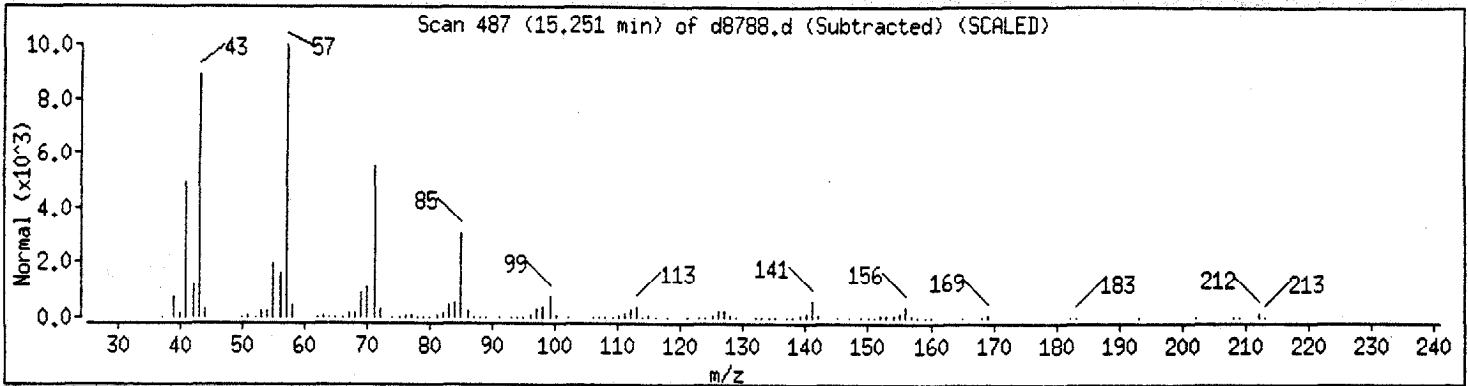
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentadecane	629-62-9	NBS75K.1	70274	93
Heptadecane	629-78-7	NBS75K.1	71191	87
Hexadecane	544-76-3	NBS75K.1	70787	87



Data File: /chem/a900.i/d063094.b/d8788.d

Page 41

Date : 30-JUN-94 15:16

Instrument : a900.i

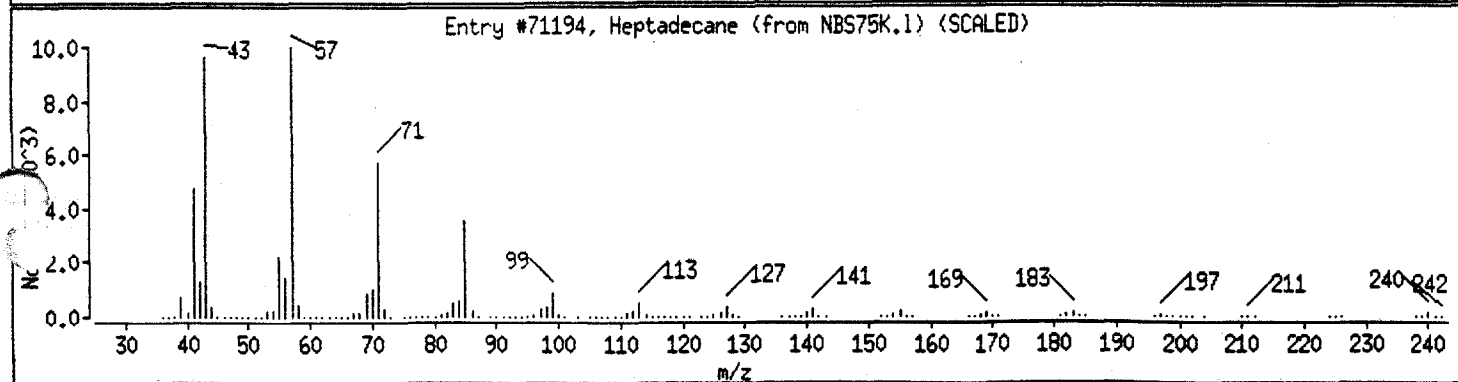
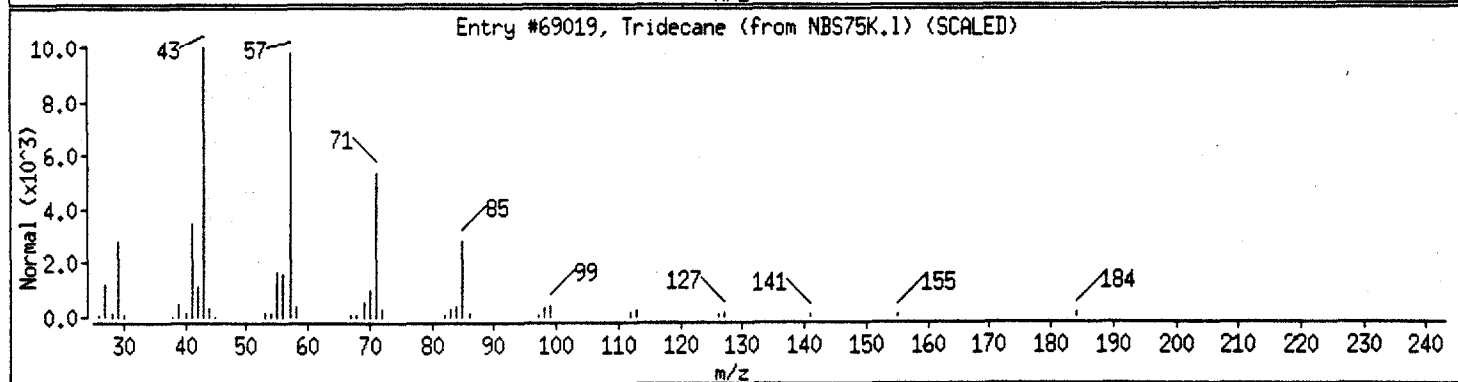
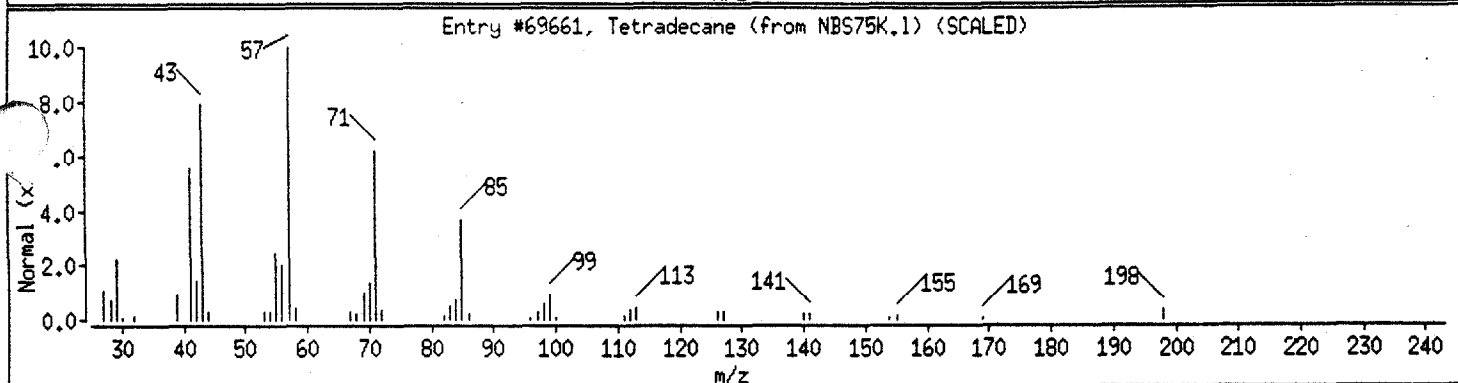
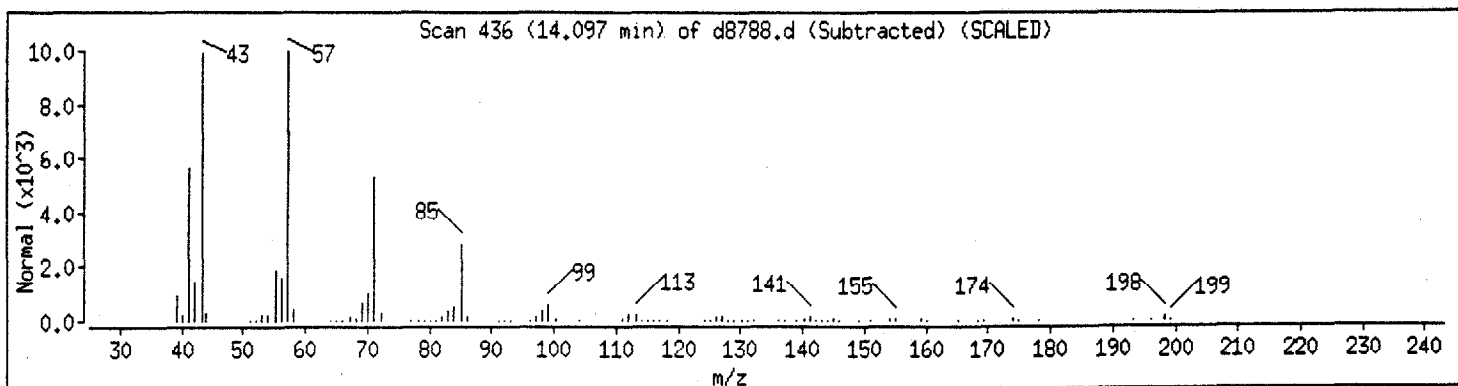
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Tetradecane	629-59-4	NBS75K.1	69661	97
Tridecane	629-50-5	NBS75K.1	69019	91
Heptadecane	629-78-7	NBS75K.1	71194	90



Data File: /chem/a900.i/d063094.b/d8788.d

Page 38

Date: 30-JUN-94 15:16

Instrument: a900.i

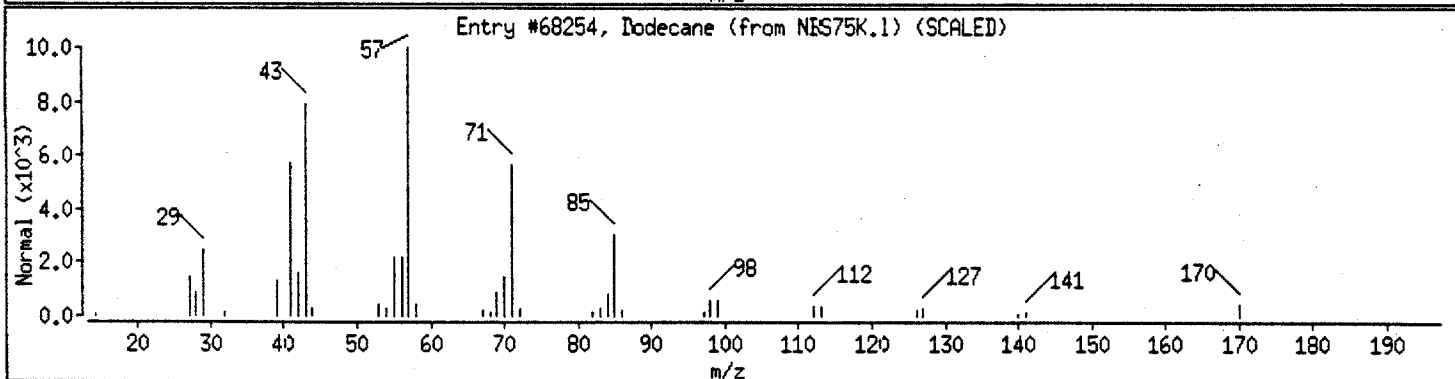
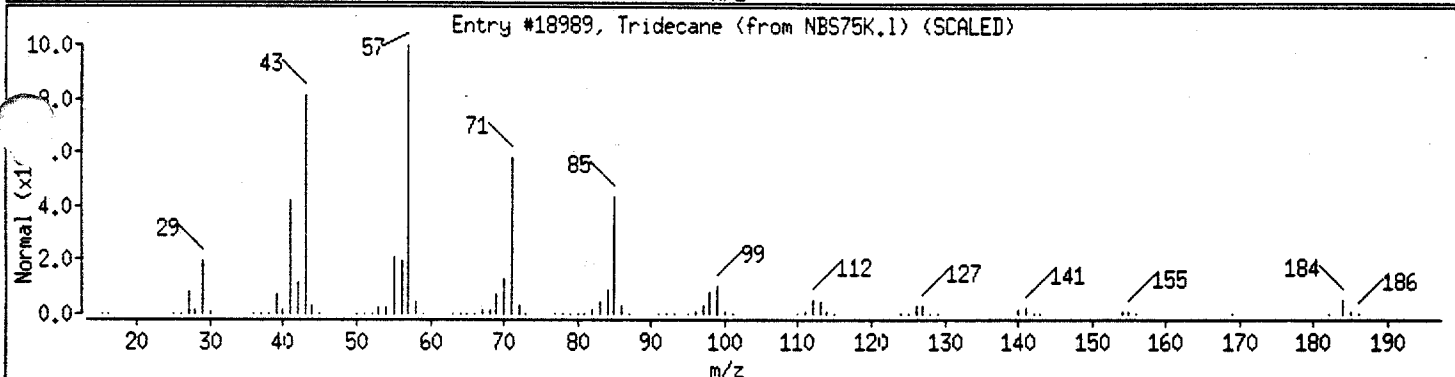
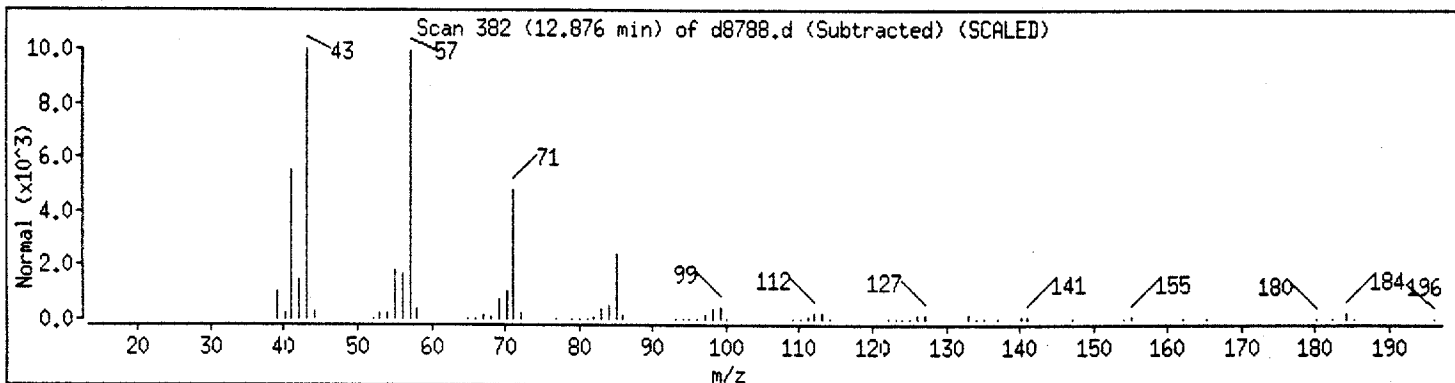
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Tridecane	629-50-5	NBS75K.1	18989	97
Dodecane	112-40-3	NBS75K.1	68254	90



Data File: /chem/a900.i/d063094.b/d8788.d

Page 33

Date: 30-JUN-94 15:16

Instrument: a900.i

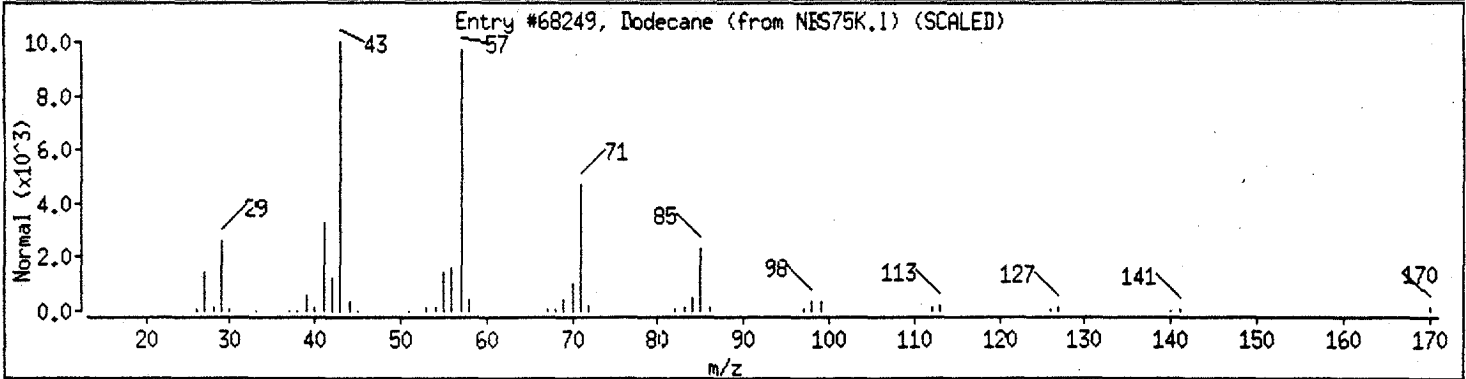
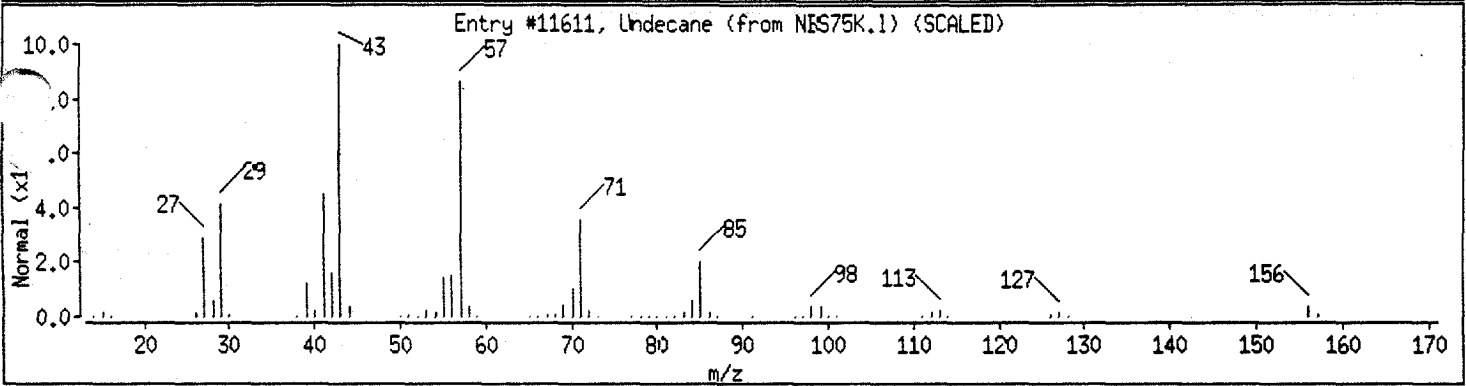
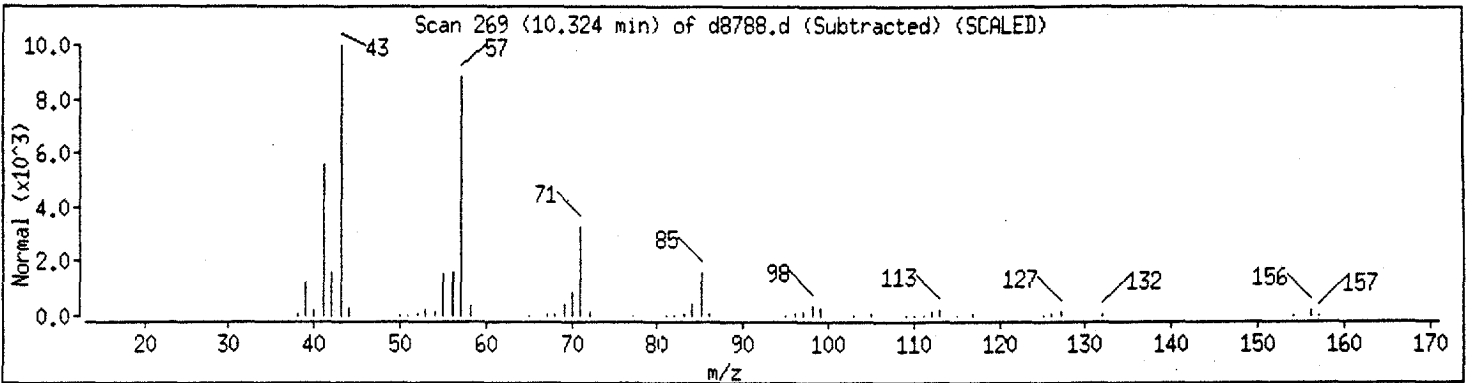
Sample ID:

Column phase: J&W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane	1120-21-4	NBS75K.1	11611	94
Dodecane	112-40-3	NBS75K.1	68249	90



Data File: /chem/a900.i/d063094.b/d8788.d

Date : 30-JUN-94 15:16

Instrument : a900.i

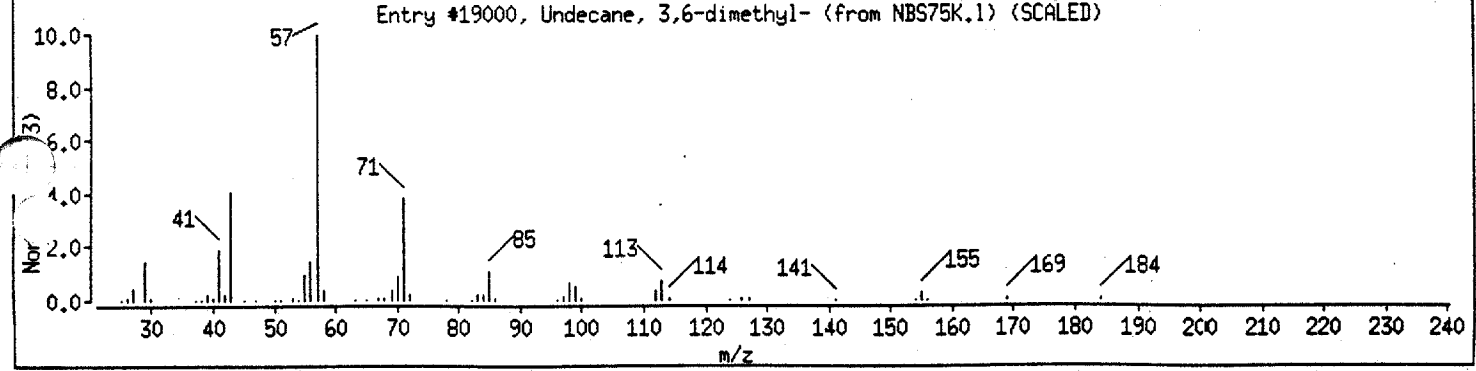
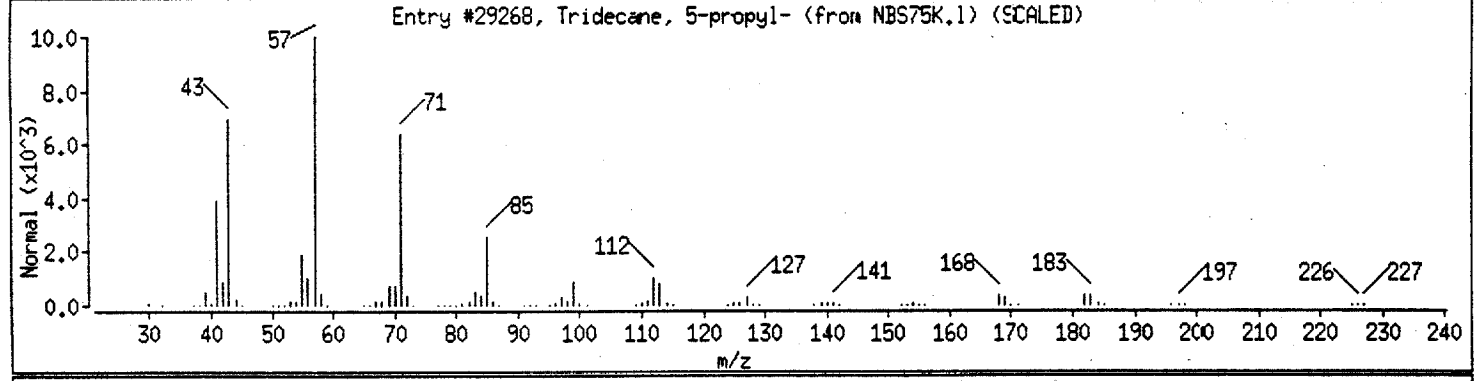
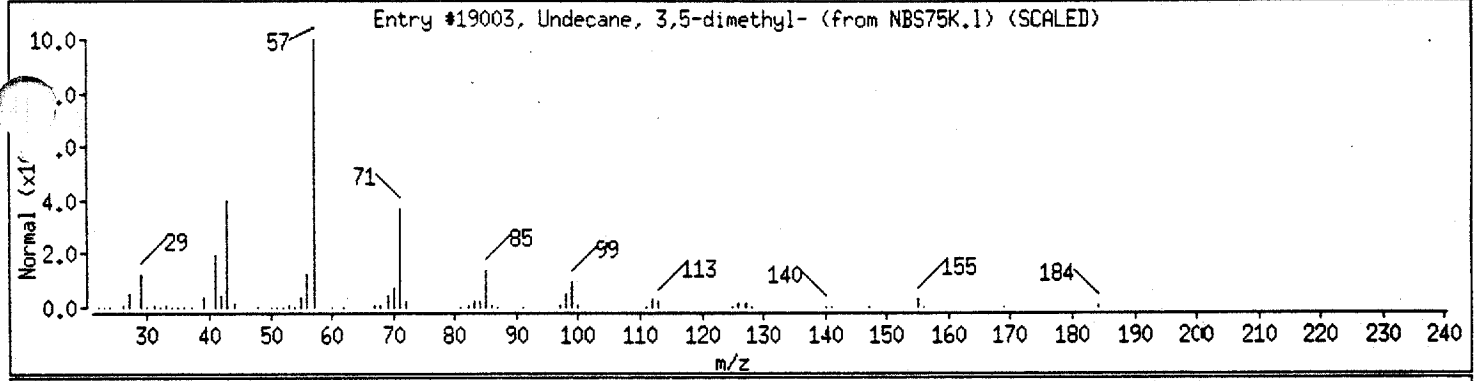
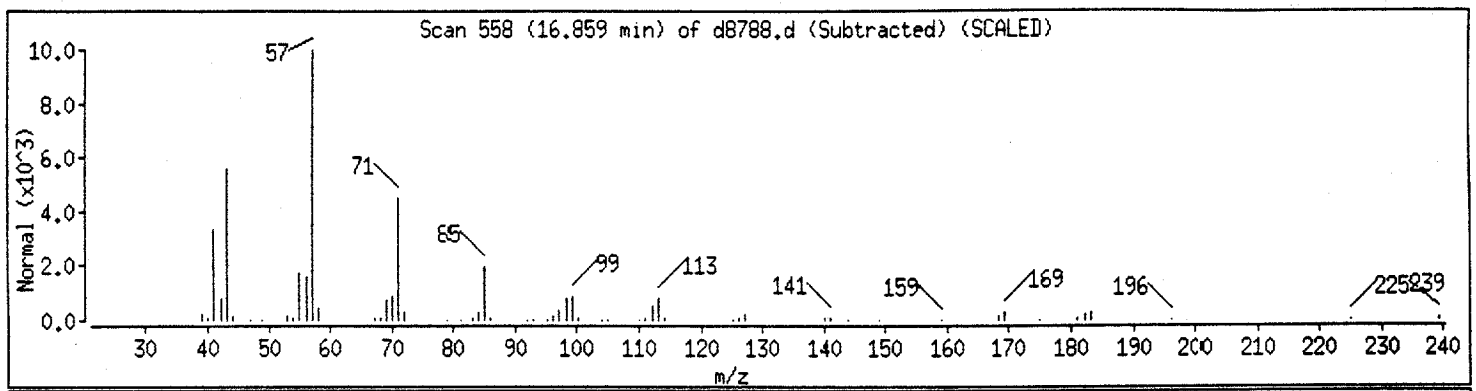
Sample ID :

Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane, 3,5-dimethyl-	17312-81-1	NBS75K.1	19003	78
Tridecane, 5-propyl-	55045-11-9	NBS75K.1	29268	72
Undecane, 3,6-dimethyl-	17301-28-9	NBS75K.1	19000	72





1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0401**

Lab Name: ASC

Contract: NEESA

C6622

L Code: NA Case No.: NA

SAS No.: NA SDG No.: \_\_\_\_\_

Matrix: (soil/water) WATER

Lab Sample ID: JM9439C

Sample wt/vol: 5 (g/mL) ml

Lab File ID: D8776

Level: (low/med) LOW

Date Received: 062494

% Moisture: NA decanted: (Y/N) N

Date Extracted: 062894

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 062994

Injection Volume: 1.0 (uL)

Dilution Factor: 200

GPC Cleanup: (Y/N) N pH: —

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

CAS NO. - COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	
108-95-2-----Phenol	2000	u
111-44-4-----bis(2-Chloroethyl) ether		
95-57-8-----2-Chlorophenol		
541-73-1-----1,3-Dichlorobenzene		
106-46-7-----1,4-Dichlorobenzene		
95-50-1-----1,2-Dichlorobenzene		
95-48-7-----2-Methylphenol		
108-60-1-----2,2'-oxybis(1-Chloropropane)		
106-44-5-----4-Methylphenol		
621-64-7-----N-Nitroso-di-n-propylamine		
67-72-1-----Hexachloroethane		
98-95-3-----Nitrobenzene		
78-59-1-----Isophorone		
88-75-5-----2-Nitrophenol		
105-67-9-----2,4-Dimethylphenol		
111-91-1-----bis(2-Chloroethoxy)methane		
120-83-2-----2,4-Dichlorophenol		
120-82-1-----1,2,4-Trichlorobenzene		
91-20-3-----Naphthalene		
106-47-8-----4-Chloroaniline		
87-68-3-----Hexachlorobutadiene		
59-50-7-----4-Chloro-3-methylphenol		
91-57-6-----2-Methylnaphthalene		
77-47-4-----Hexachlorocyclopentadiene		
88-06-2-----2,4,6-Trichlorophenol	v	
95-95-4-----2,4,5-Trichlorophenol	5000	
91-58-7-----2-Chloronaphthalene	2000	
88-74-4-----2-Nitroaniline	5000	
131-11-3-----Dimethylphthalate	2000	
208-96-8-----Acenaphthylene	2000	
606-20-2-----2,6-Dinitrotoluene	2000	
99-09-2-----3-Nitroaniline	5000	
83-32-9-----Acenaphthene	2000	
	20	v

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0402**

Name: ASC Contract: NEESA C6622  
 Code: NA Case No.: NA SAS No.: NA SDG No.: \_\_\_\_\_  
 Matrix: (soil/water) WATER Lab Sample ID: JM9439C  
 Sample wt/vol: 5 (g/mL) ml Lab File ID: D8776  
 Level: (low/med) low Date Received: 062494  
 % Moisture: NA decanted: (Y/N) N Date Extracted: 062894  
 Concentrated Extract Volume: 1000 (uL) Date Analyzed: 062994  
 Injection Volume: 1.0 (uL) Dilution Factor: 200  
 GPC Cleanup: (Y/N) N pH: -

CAS NO. - COMPOUND CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L Q

51-28-5-----	2,4-Dinitrophenol	5000	u
100-02-7-----	4-Nitrophenol	↓	
132-64-9-----	Dibenzofuran	2000	
121-14-2-----	2,4-Dinitrotoluene	↓	
84-66-2-----	Diethylphthalate	↓	
7005-72-3-----	4-Chlorophenyl-phenylether	↓	
86-73-7-----	Fluorene	↓	
100-01-6-----	4-Nitroaniline	5000	
534-52-1-----	4,6-Dinitro-2-methylphenol	↓	
86-30-6-----	N-Nitrosodiphenylamine (1)	2000	
101-55-3-----	4-Bromophenyl-phenylether	↓	
118-74-1-----	Hexachlorobenzene	↓	
87-86-5-----	Pentachlorophenol	5000	
85-01-8-----	Phenanthrene	2000	
120-12-7-----	Anthracene	↓	
86-74-8-----	Carbazole	↓	
84-74-2-----	Di-n-butylphthalate	↓	
206-44-0-----	Fluoranthene	↓	
129-00-0-----	Pyrene	↓	
85-68-7-----	Butylbenzylphthalate	↓	
91-94-1-----	3,3'-Dichlorobenzidine	↓	
56-55-3-----	Benzo(a)anthracene	↓	
218-01-9-----	Chrysene	↓	
117-81-7-----	bis(2-Ethylhexyl)phthalate	↓	
117-84-0-----	Di-n-octylphthalate	↓	
205-99-2-----	Benzo(b)fluoranthene	↓	
207-08-9-----	Benzo(k)fluoranthene	↓	
50-32-8-----	Benzo(a)pyrene	↓	
193-39-5-----	Indeno(1,2,3-cd)pyrene	↓	
53-70-3-----	Dibenz(a,h)anthracene	↓	
191-24-2-----	Benzo(g,h,i)perylene	↓	↓

(1) - Cannot be separated from Diphenylamine

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

Name: ASC Contract: NEESA C6622

Code: — Case No.: — SAS No.: — SDG No.: —

Matrix: (soil/water) WATER Lab Sample ID: JM9439C

Sample wt/vol: 5 (g/mL) ml Lab File ID: D8776

Level: (low/med) low Date Received: 062494

% Moisture: NA decanted: (Y/N) N Date Extracted: 062894

Concentrated Extract Volume: 1000 (uL) Date Analyzed: 062994

Injection Volume: 1.0 (uL) Dilution Factor: 200

GPC Cleanup: (Y/N) N pH: —

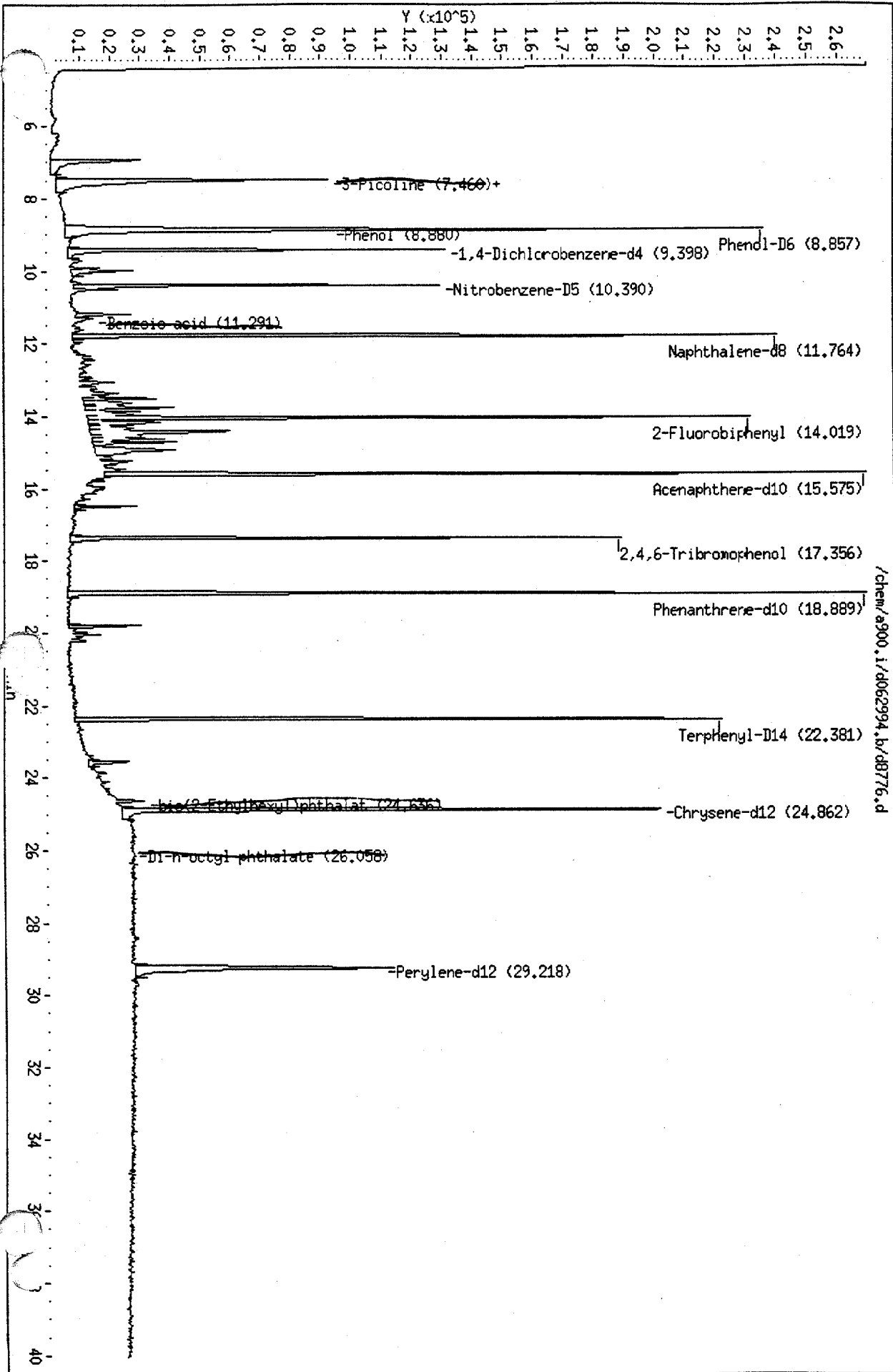
Number TICs found: 11

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	Unknown Organic Acid	9.98	1700 <sup>25%</sup>	J
2. 124-07-2	Octanoic Acid	11.2	820	J
3.	unknown	13.5	1200	
4.		13.6	1400	
5.		13.7	1400	
6.		14.1	1300	
7.		14.3	990	
8.		14.4	2900	
9.		14.6	1000	
10.		14.7	1100	
11.		14.9	2200	J
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Data File: /chem/a900.i/d062294.b/d8776.d  
Date: 29-JUN-94 15:05  
Instrument: a900.i  
Sample ID:  
Column phase: J&W DB-5  
Volume Injected (ul): 1.0

Column diameter: 0.25



C2266  
C6622

Data File: /chem/a900.i/d062994.b/d8776.d  
Report Date: 29-Jun-1994 15:55

Analytical Services Corp.

BASE NEUTRAL QUANT AND RATIO REPORT

Data file : /chem/a900.i/d062994.b/d8776.d  
Lab. Id. : Quant Type: ISTD  
Inj Date : 29-JUN-94 15:05 Autotune Date: {  
Operator : Tom Inst ID: a900.i  
Smp Info : 15226N-C6622  
Misc Info : JM9439C,N1C40848,L:M1,5.00,1:1,  
Comment :  
Method : /chem/a900.i/d062994.b/bna8270d.m  
Meth Date : 29-Jun-1994 15:51 tom  
Cal Date : 29-JUN-94 09:54 Cal File: d8770.d  
Als bottle: 0  
Dil Factor: 1.000 Target Version: Target 3.00  
Integrator: HP RTE Compound Sublist: all.sub  
Sample Matrix: WATER

CX  
C6622

BTL#

Compounds	QUANT SIG	MASS	RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN (ug/ml)	FINAL (ug/L)
<del>3 Nicotine</del>	====	93.00	7.460 (0.794)	1725	0.746	<del>0.746 (Taq)</del> <1	
\$ 2-Fluorophenol		112.00	7.460 (0.794)	114503	60.7	60.7	
\$ 10 Phenol-D6		99.00	8.857 (0.942)	116634	56.1	56.1	
<del>11 Phenol</del>		94.00	8.880 (0.945)	897	0.325	<del>0.325 (aq)</del> <1	
* 17 1,4-Dichlorobenzene-d4		152.00	9.398 (1.000)	58927OK	40.0		
\$ 27 Nitrobenzene-D5		82.00	10.390 (0.883)	111337	53.8	53.8	
32 Benzoic acid		122.00	11.291 (0.960)	4753	4.03	4.03 (aAQ)	
* 37 Naphthalene-d8		136.00	11.764 (1.000)	232915OK	40.0		
\$ 51 2-Fluorobiphenyl		172.00	14.019 (0.900)	147390	42.9	42.9	
* 58 Acenaphthene-d10		164.00	15.575 (1.000)	150753OK	40.0		
\$ 74 2,4,6-Tribromophenol		330.00	17.356 (1.114)	58560	78.5	78.5	
* 81 Phenanthrene-d10		188.00	18.889 (1.000)	229999OK	40.0		
\$ 90 Terphenyl-D14		244.00	22.381 (0.900)	213093	43.9	43.9	
95 bis(2-Ethylhexyl)phthalate		149.00	24.636 (0.991)	5855	1.38	1.38 (a)	
* 99 Chrysene-d12		240.00	24.862 (1.000)	213572OK	40.0		
<del>101 Di-n-octyl phthalate</del>		149.00	26.058 (0.892)	953	0.123	<del>0.123 (a)</del> <1	
* 105 Perylene-d12		264.00	29.218 (1.000)	141972OK	40.0		

QC Flag Legend

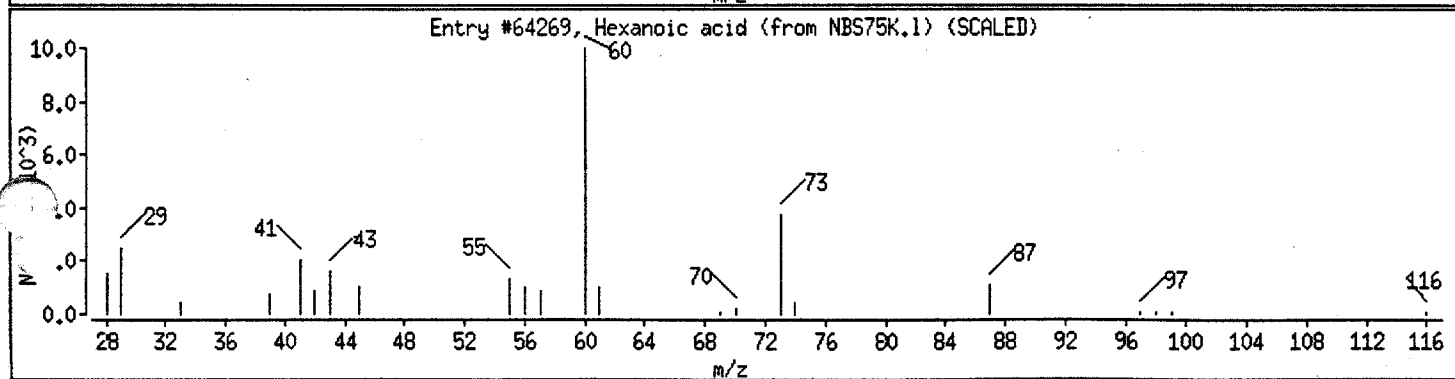
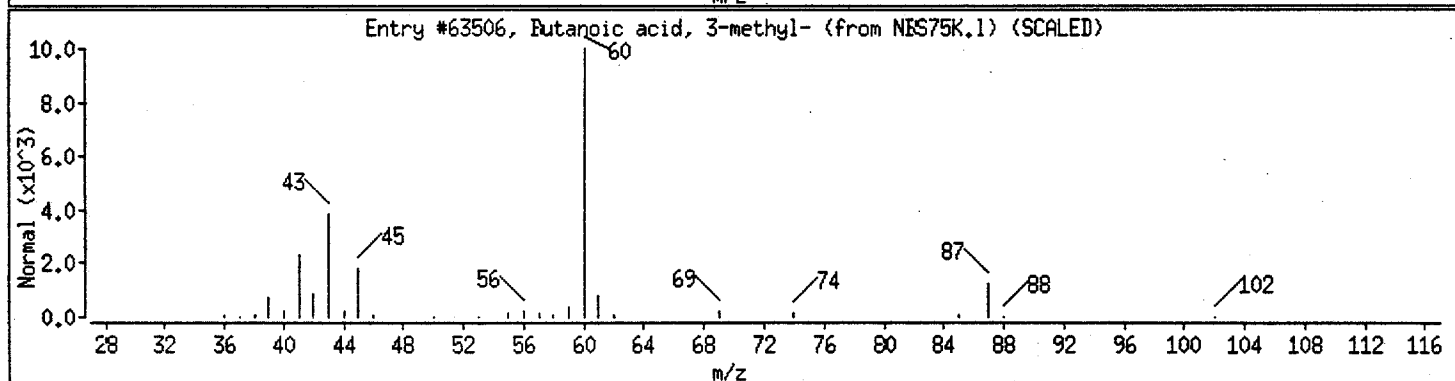
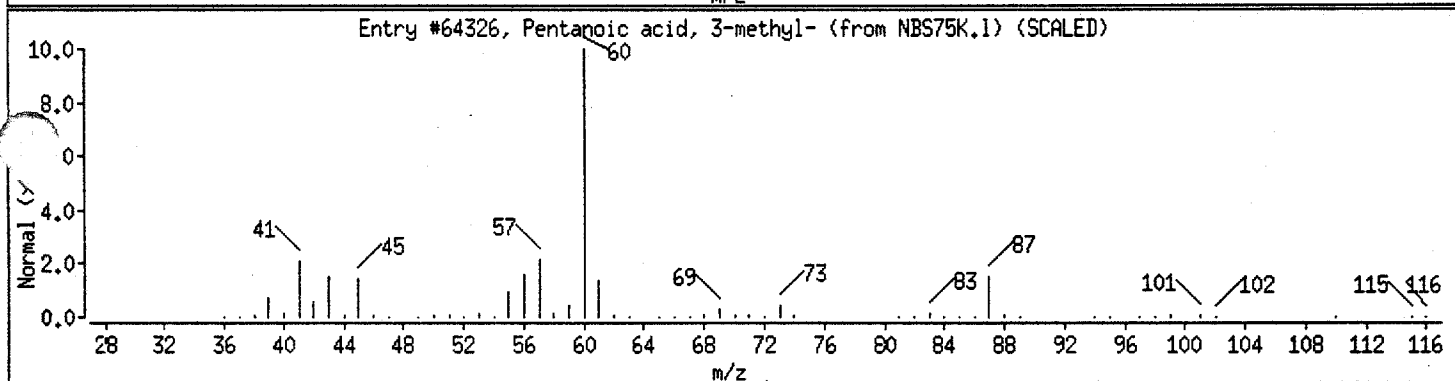
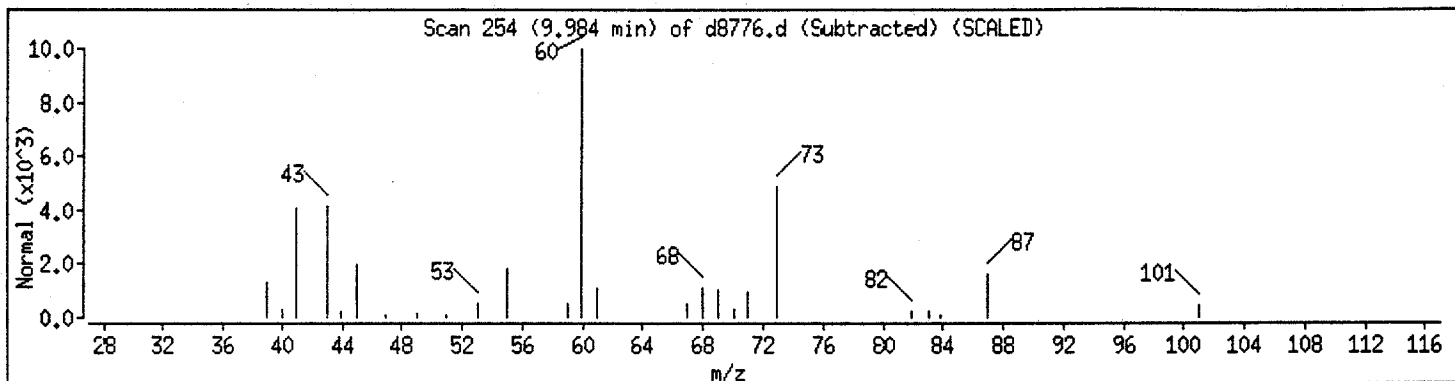
- T - Target compound detected outside RT window.
- a - Target compound detected but, quantitated amount Below Limit Of Quantitation (BLOQ).
- Q - Target compound detected but, quantitated amount exceeded maximum amount.
- OK - Qualifier signal failed the ratio test.

Data File: /chem/a900.i/d062994.b/d8776.d  
 Date : 29-JUN-94 15:05  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

*6672*

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Pentanoic acid, 3-methyl-	105-43-1	NBS75K.1	64326	59
Butanoic acid, 3-methyl-	503-74-2	NBS75K.1	63506	59
Hexanoic acid	142-62-1	NBS75K.1	64269	53



Data File: /chem/a900.i/d062994.b/d8776.d

Date : 29-JUN-94 15:05

Instrument : a900.i

Sample ID :

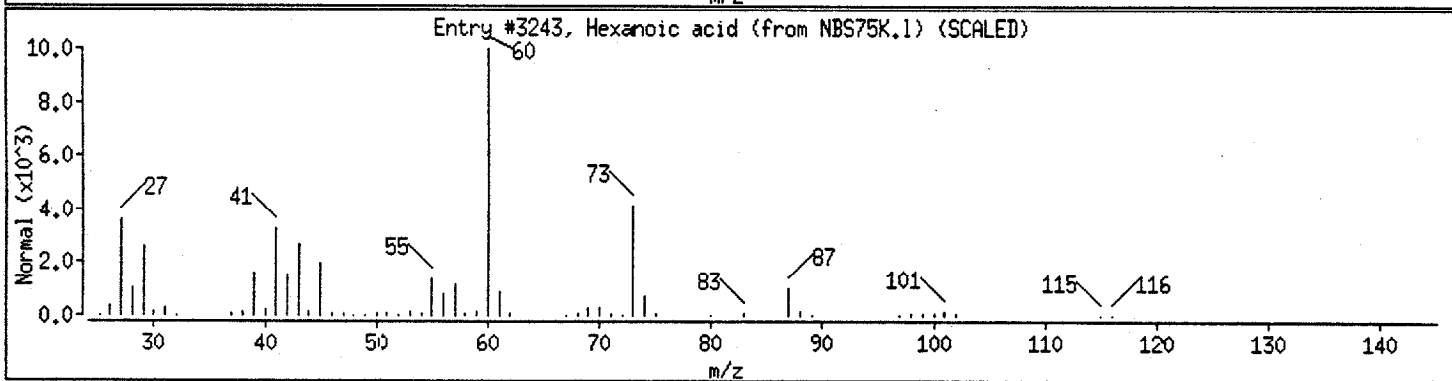
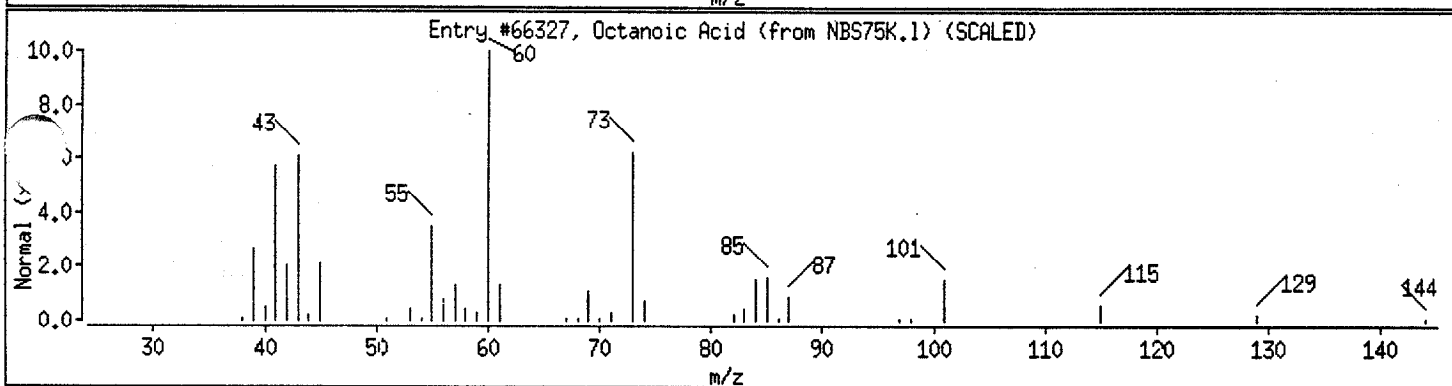
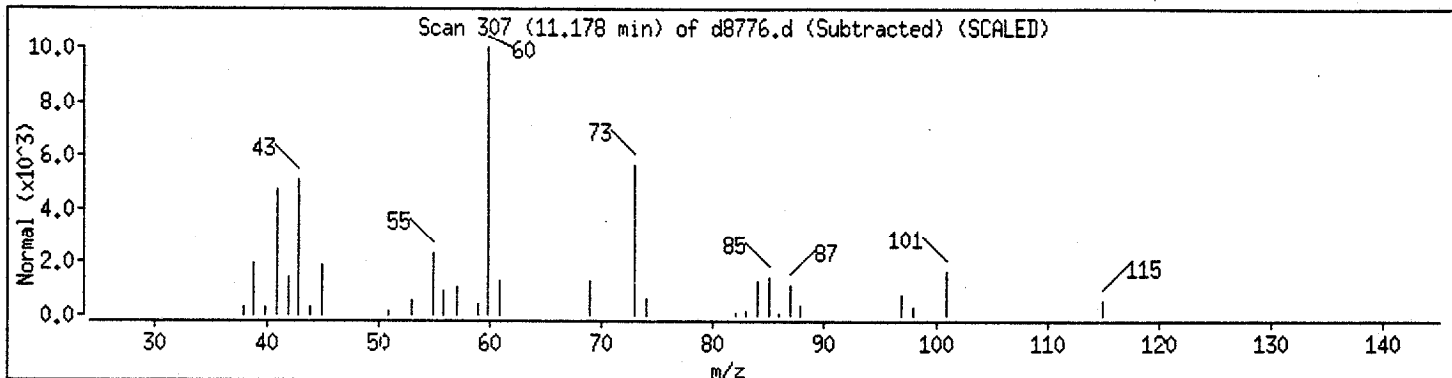
Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

*C6622*

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Octanoic Acid	124-07-2	NBS75K.1	66327	90
Hexanoic acid	142-62-1	NBS75K.1	3243	72



Data File: /chem/a900.i/d062994.b/d8776.d

Page 14

Date : 29-JUN-94 15:05

Instrument : a900.i

Sample ID :

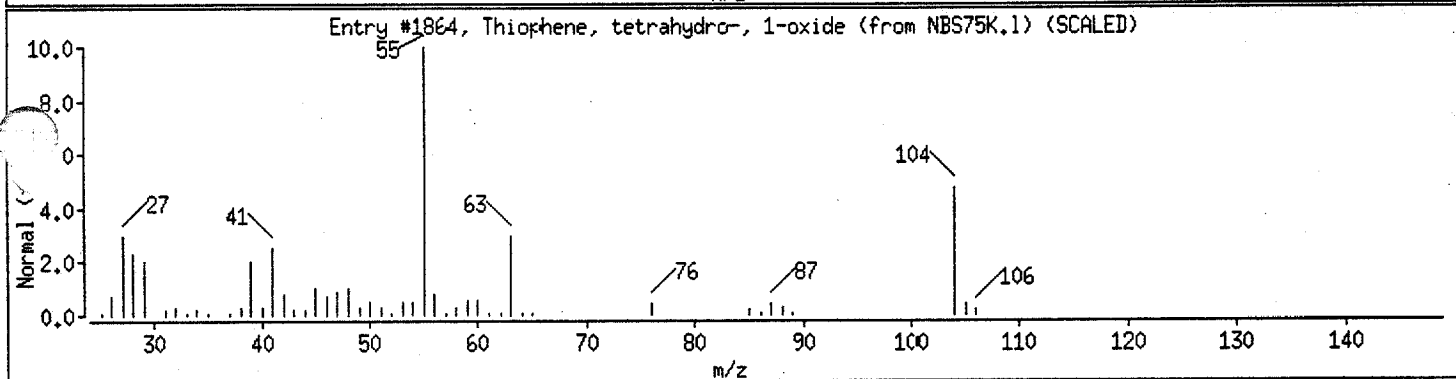
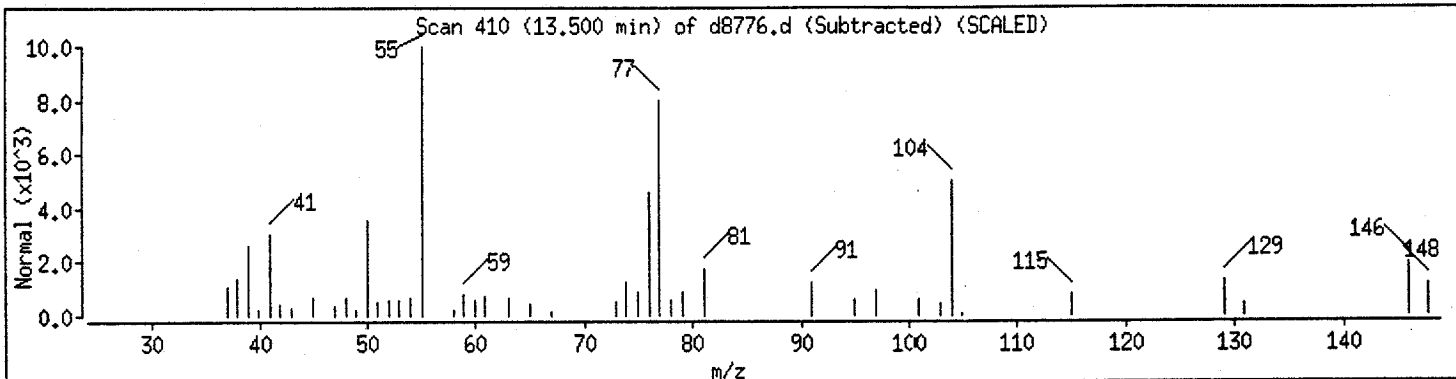
Column phase : J&W DB-5

Column diameter : 0.25

Volume Injected (uL) : 1.0

C6622

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Thiophene, tetrahydro-, 1-oxide	1600-44-8	NBS75K.1	1864	10



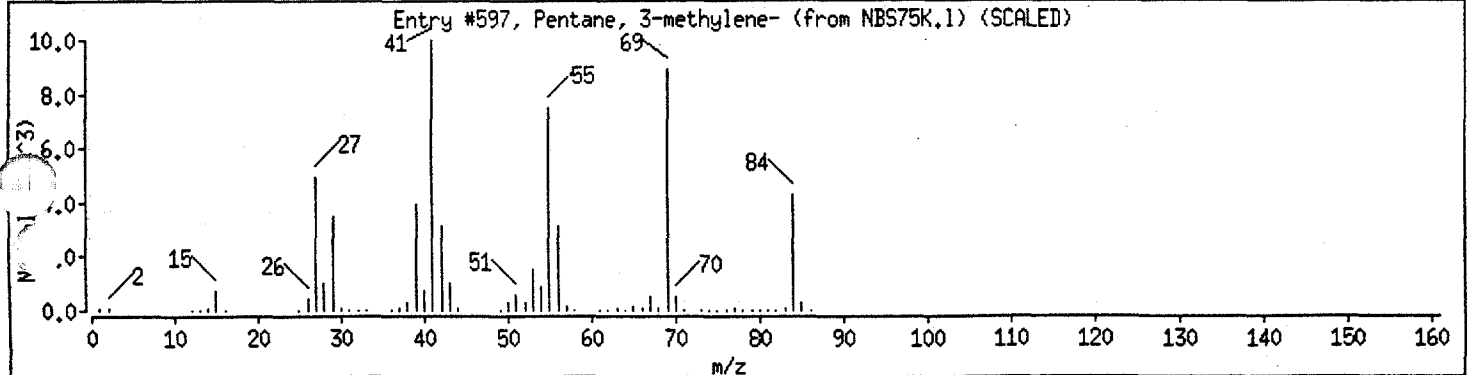
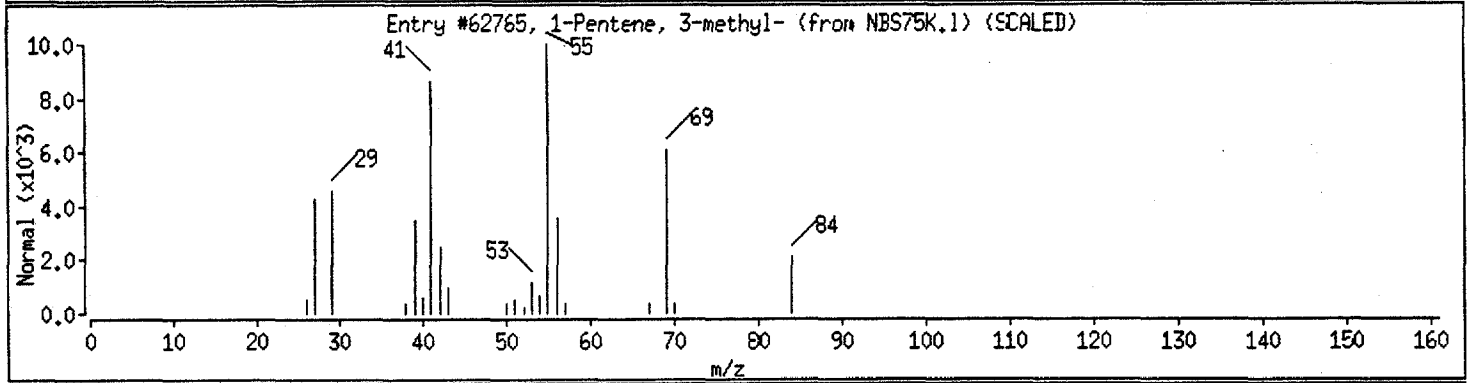
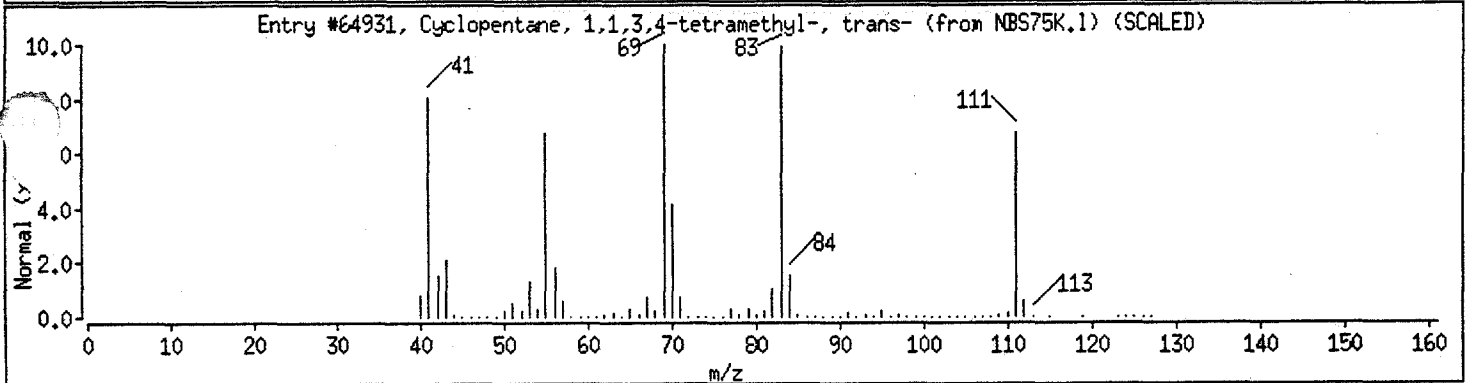
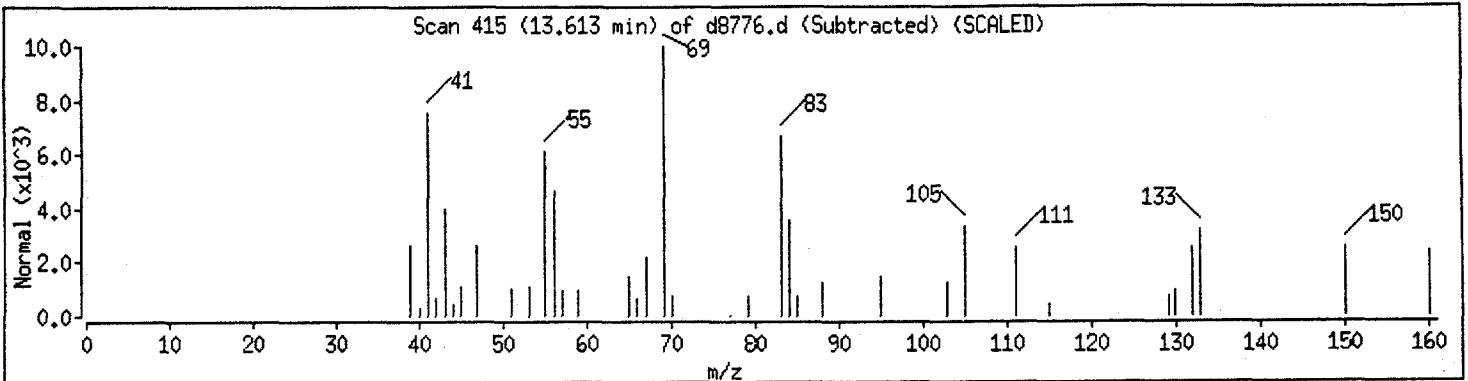


Data File: /chem/a900.i/d062994.b/d8776.d  
 Date : 29-JUN-94 15:05  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

*C6622*

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclopentane, 1,1,3,4-tetramethyl-, tran	20309-77-7	NBS75K.1	64931	38
1-Pentene, 3-methyl-	760-20-3	NBS75K.1	62765	35
Pentane, 3-methylene-	760-21-4	NBS75K.1	597	27

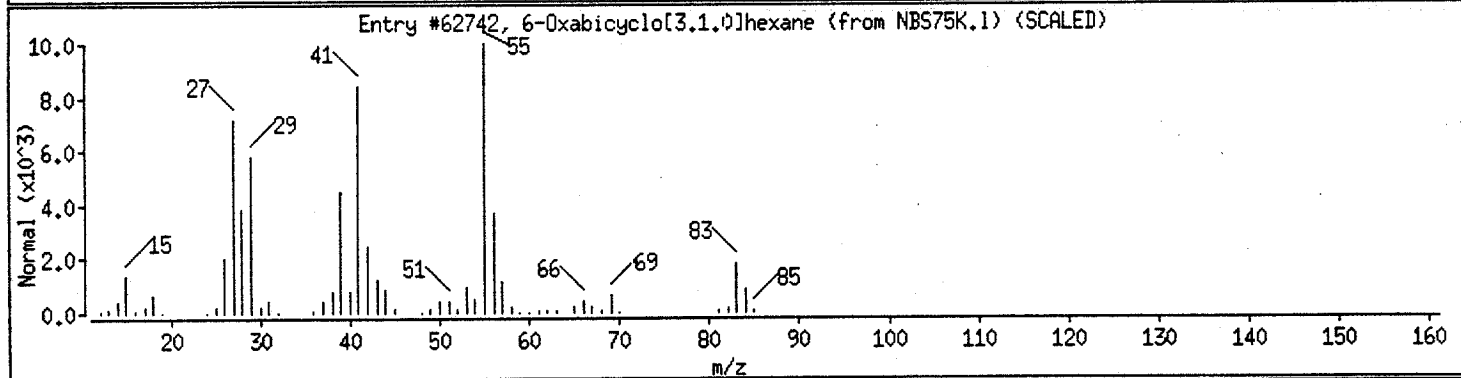
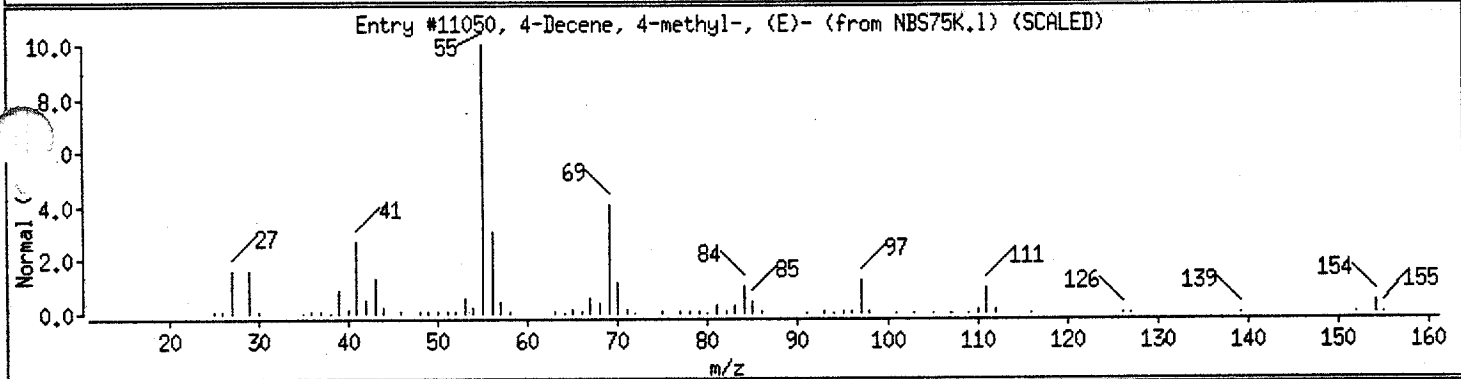
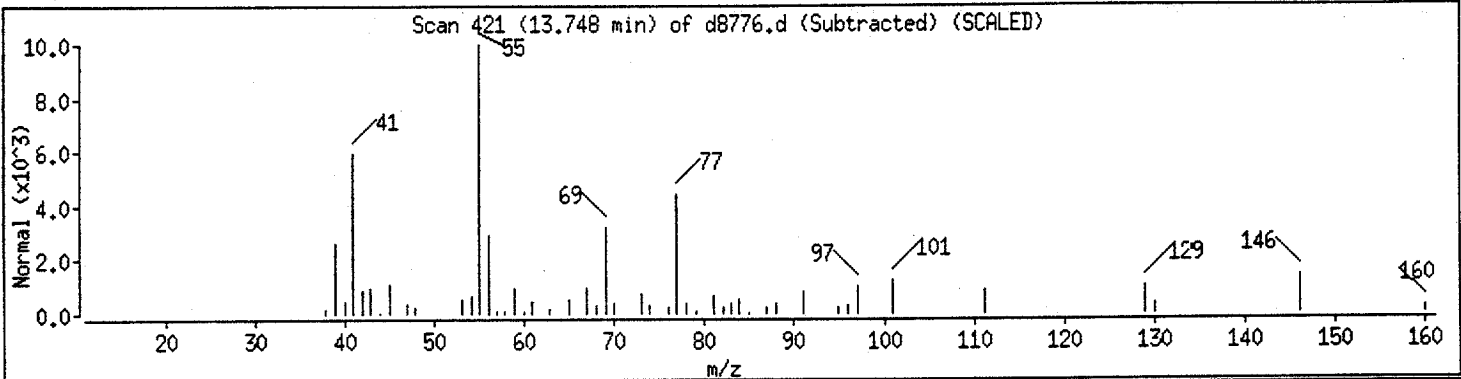


Data File: /chem/a900.i/d062994.b/d8776.d  
Date : 29-JUN-94 15:05  
Instrument : a900.i  
Sample ID :  
Column phase : J&W DB-5  
Volume Injected (uL) : 1.0

Column diameter : 0.25

*C6622*

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
4-Decene, 4-methyl-, (E)-	60366-66-7	NBS75K.1	11050	12
6-Oxabicyclo[3.1.0]hexane	285-67-6	NBS75K.1	62742	10

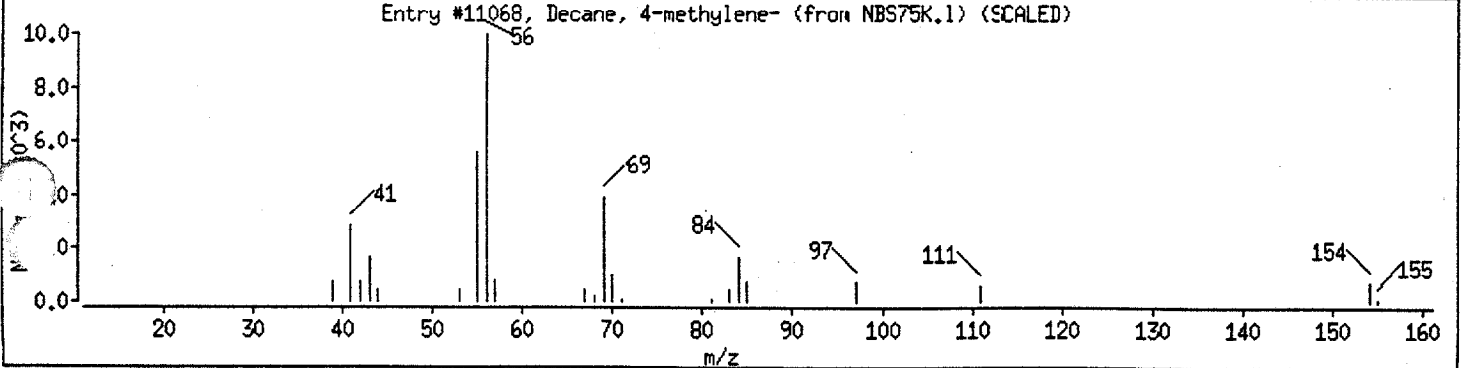
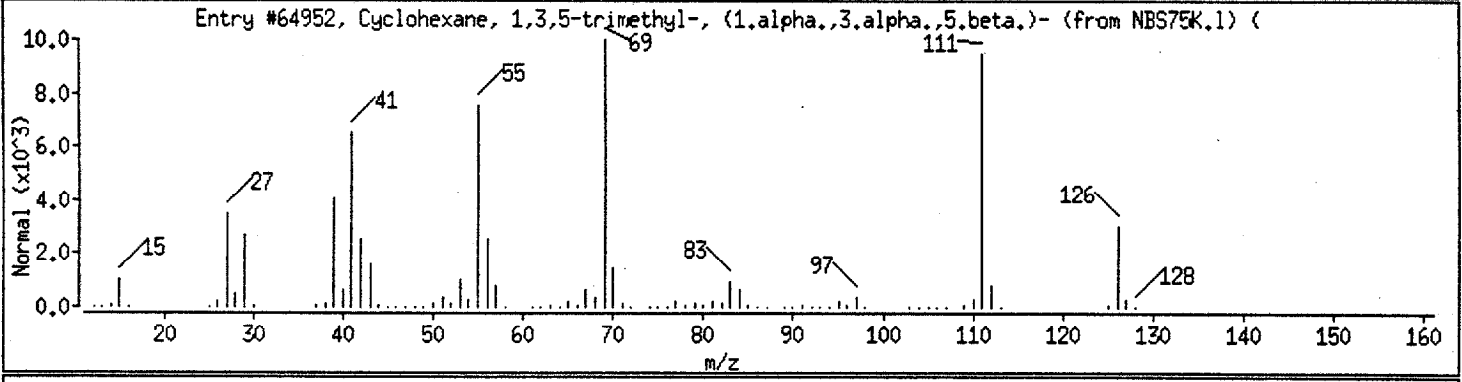
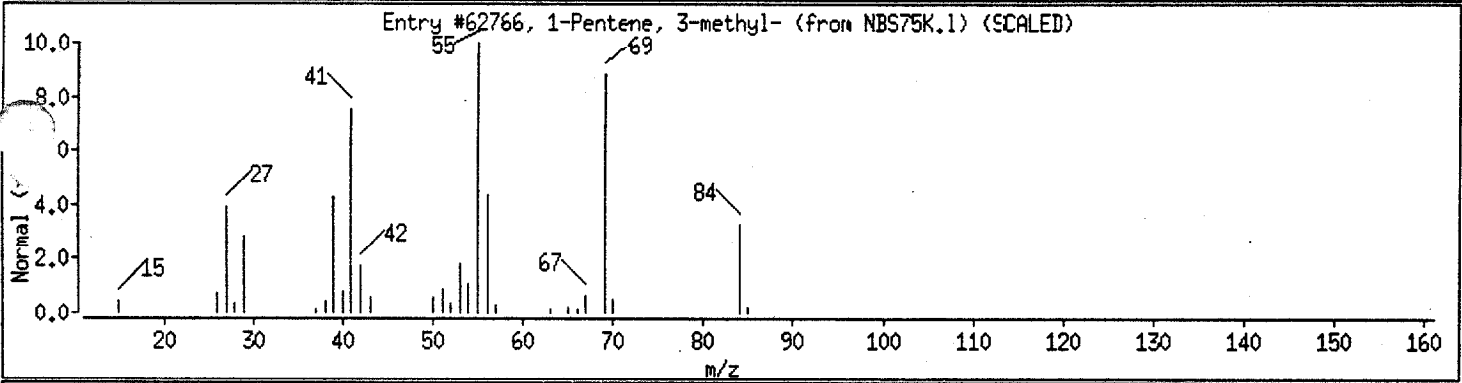
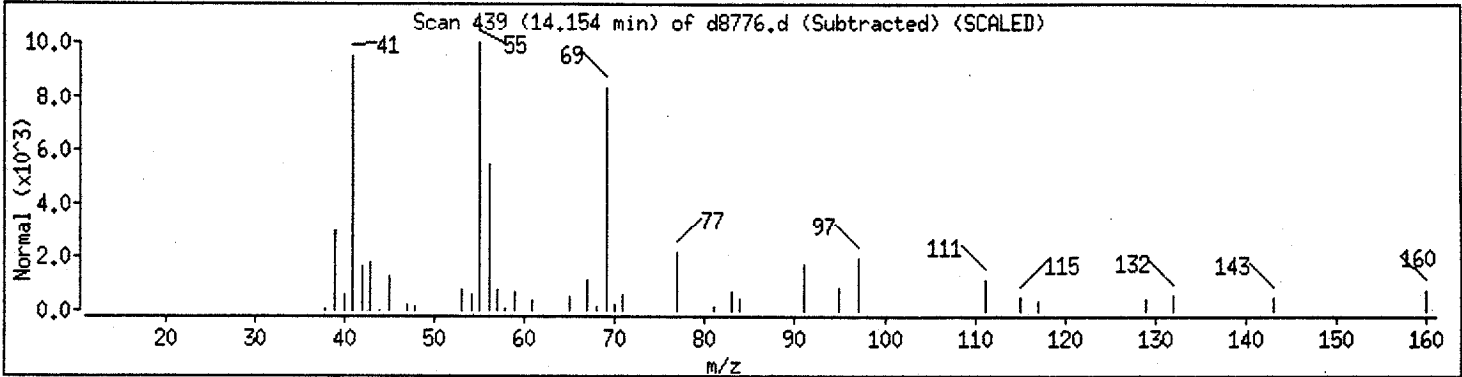


Data File: /chem/a900.i/d062994.b/d8776.d  
Date : 29-JUN-94 15:05  
Instrument : a900.i  
Sample ID :  
Column phase : J&W DB-5  
Volume Injected (uL) : 1.0

Column diameter : 0.25

*6620*

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1-Pentene, 3-methyl-	760-20-3	NBS75K.1	62766	43
Cyclohexane, 1,3,5-trimethyl-, (1.alpha.	1795-26-2	NBS75K.1	64952	38
Decane, 4-methylene-	24949-41-5	NBS75K.1	11068	37

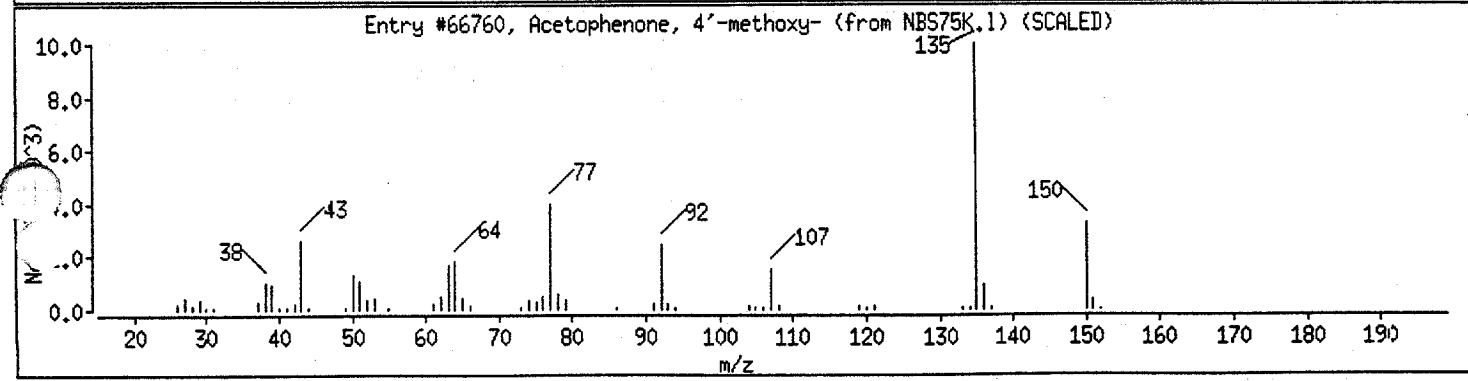
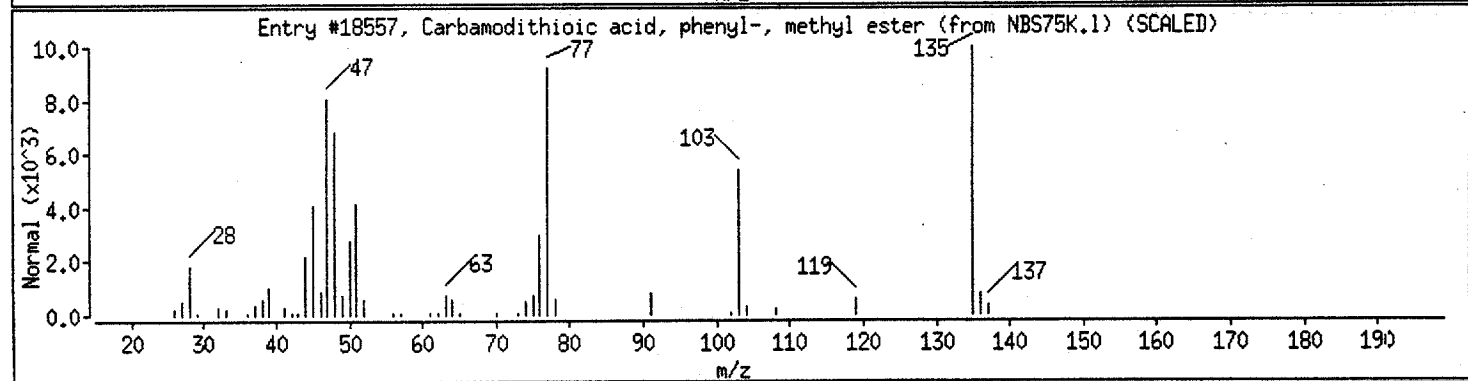
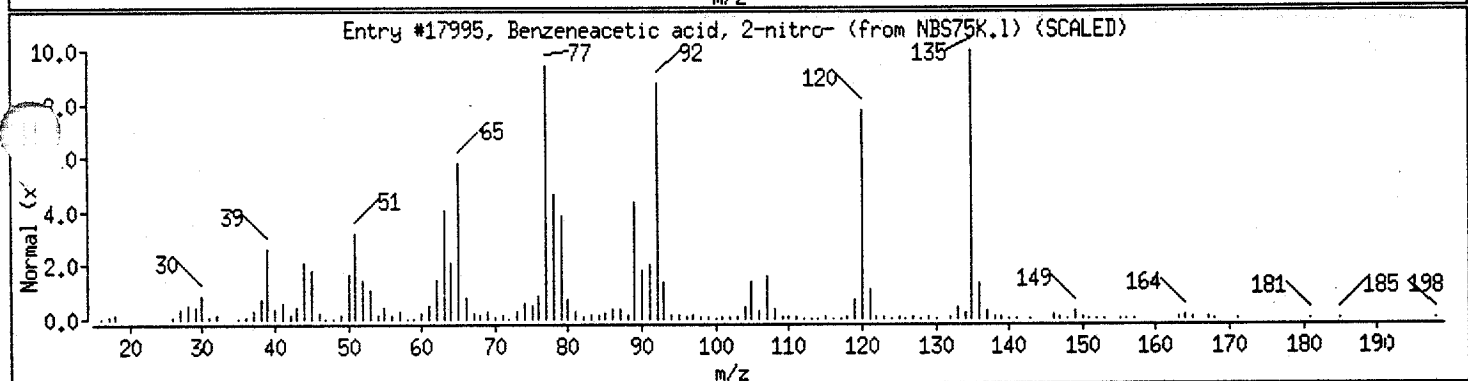
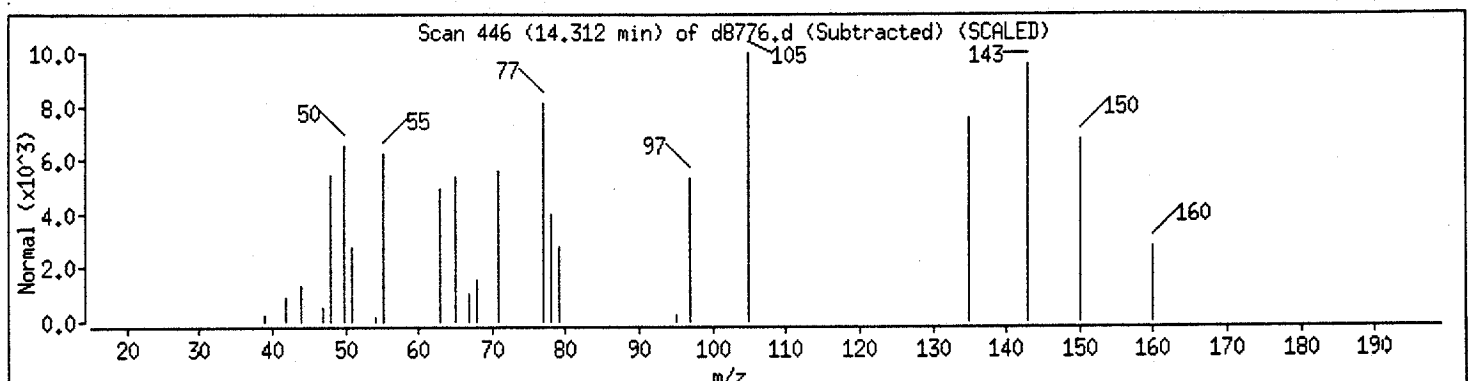


C662

Data File: /chem/a900.i/d062994.b/d8776.d  
 Date : 29-JUN-94 15:05  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzeneacetic acid, 2-nitro-	3740-52-1	NBS75K.1	17995	27
Carbamodithioic acid, phenyl-, methyl es	701-73-5	NBS75K.1	18557	10
Acetophenone, 4'-methoxy-	100-06-1	NBS75K.1	66760	10



Data File: /chem/a900.i/d062994.b/d8776.d

Date: 29-JUN-94 15:05

Instrument: a900.i

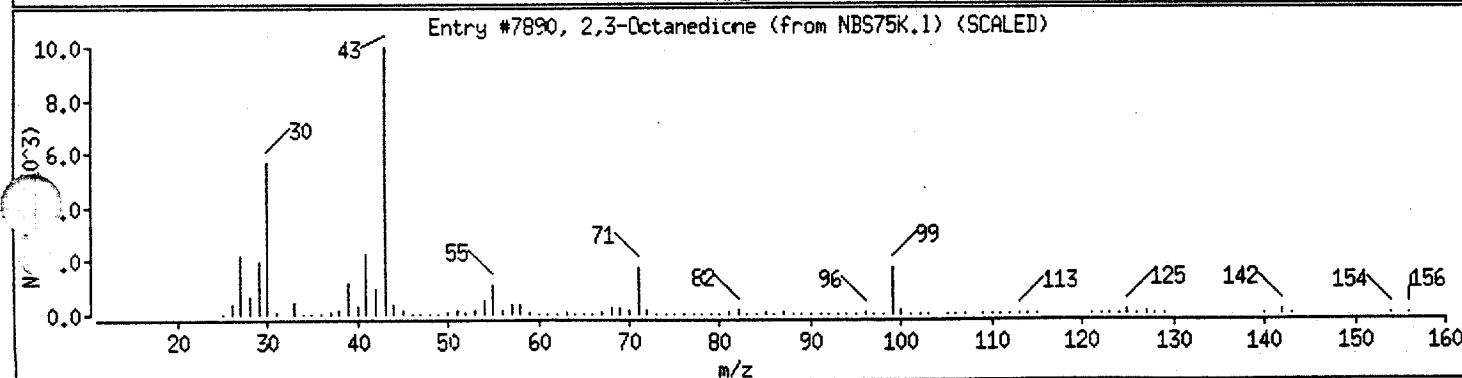
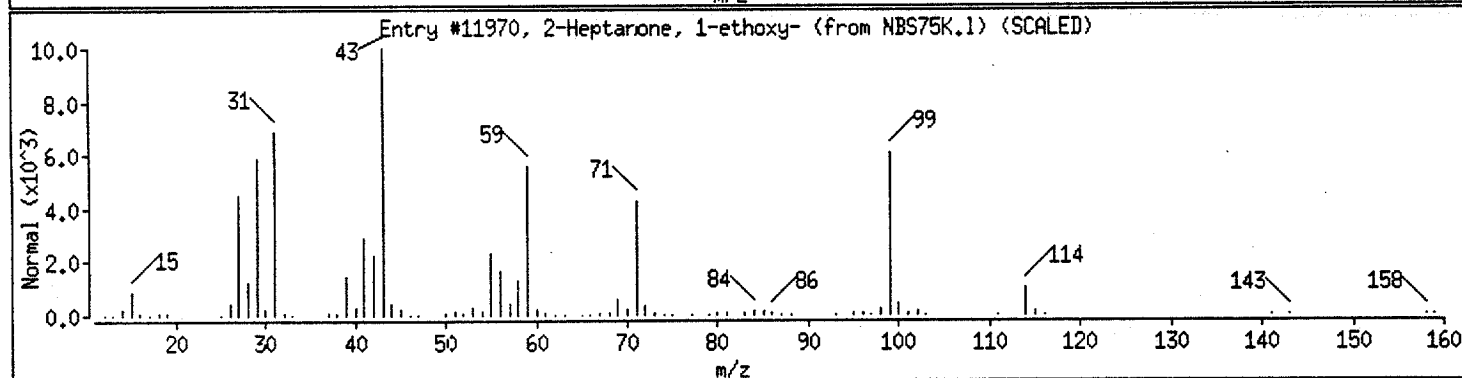
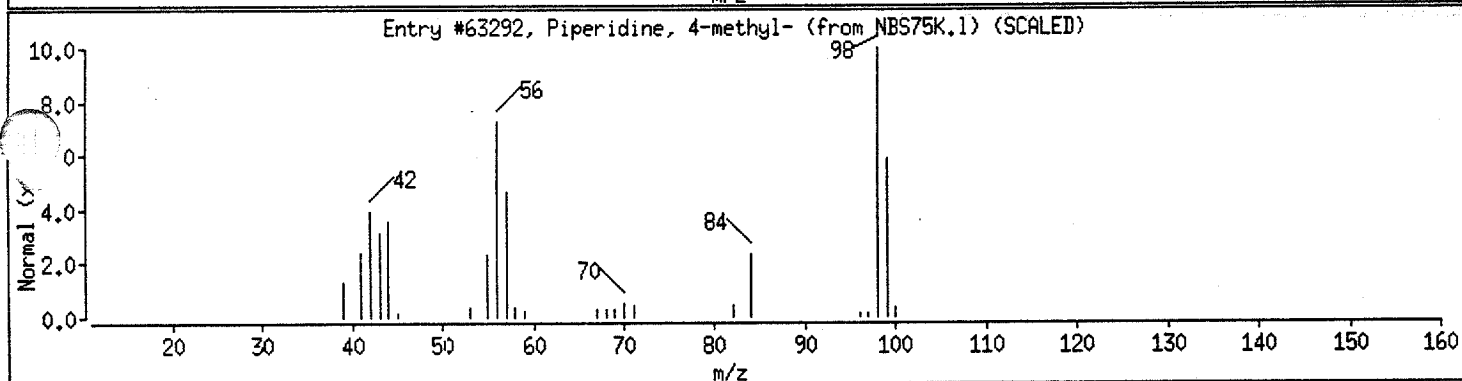
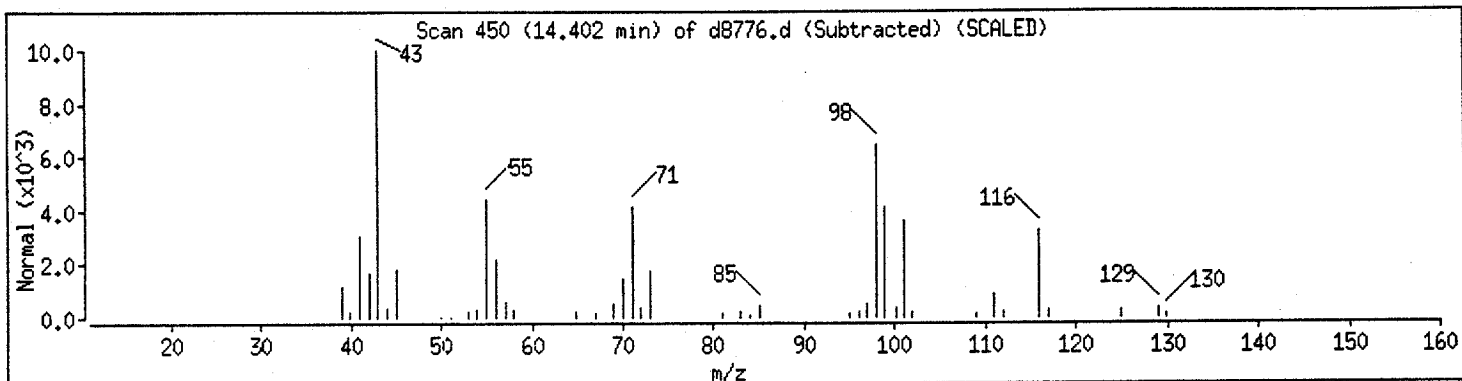
Sample ID:

Column phase: J&amp;W DB-5

Column diameter: 0.25

Volume Injected (uL): 1.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Piperidine, 4-methyl-	626-58-4	NBS75K.1	63292	32
2-Heptanone, 1-ethoxy-	51149-70-3	NBS75K.1	11970	25
2,3-Octanedione	585-25-1	NBS75K.1	7890	16

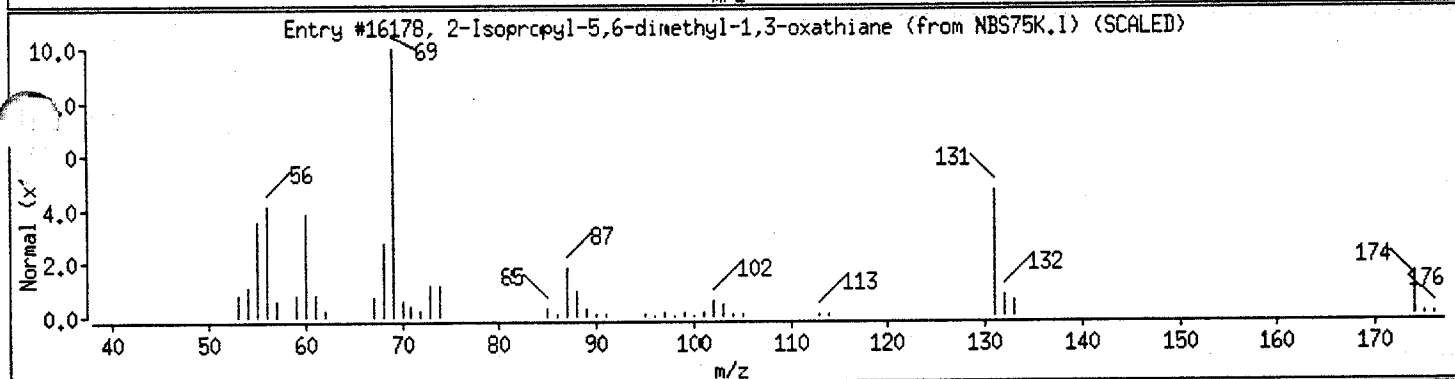
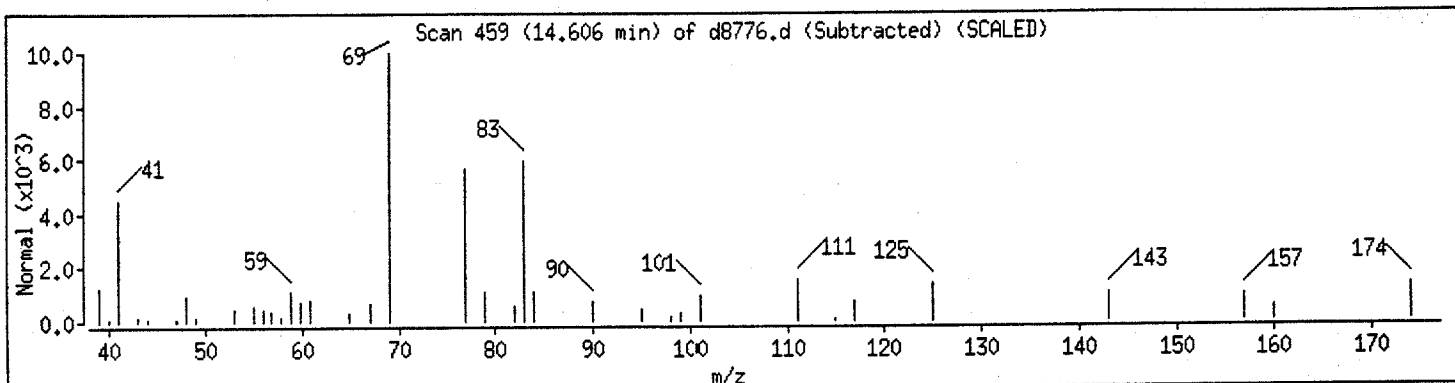


Data File: /chem/a900.i/d062994.b/d8776.d  
Date : 29-JUN-94 15:05  
Instrument : a900.i  
Sample ID :  
Column phase : J&W DB-5  
Volume Injected (uL) : 1.0

Column diameter : 0.25

06623

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
2-Isopropyl-5,6-dimethyl-1,3-oxathiane	0-00-0	NBS75K.1	16178	12

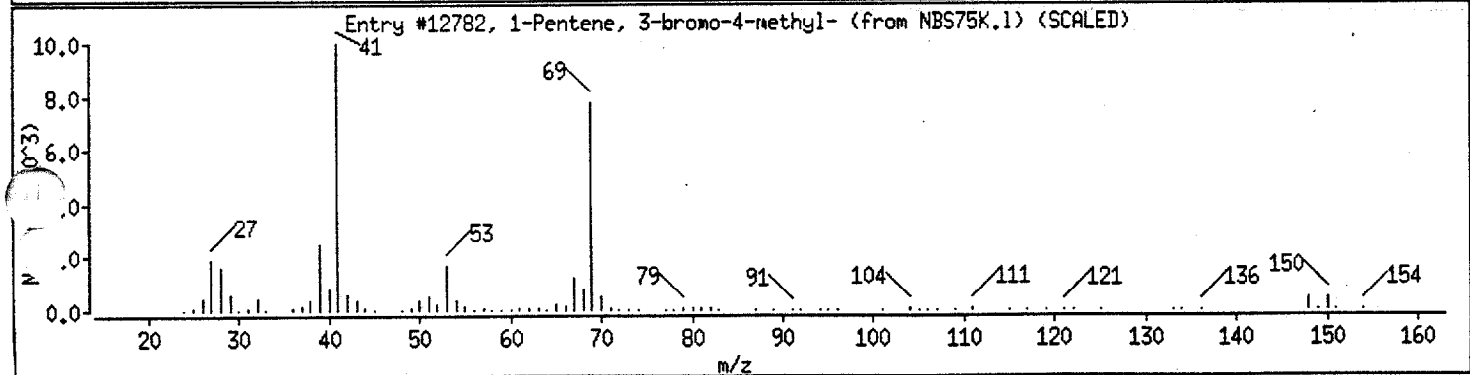
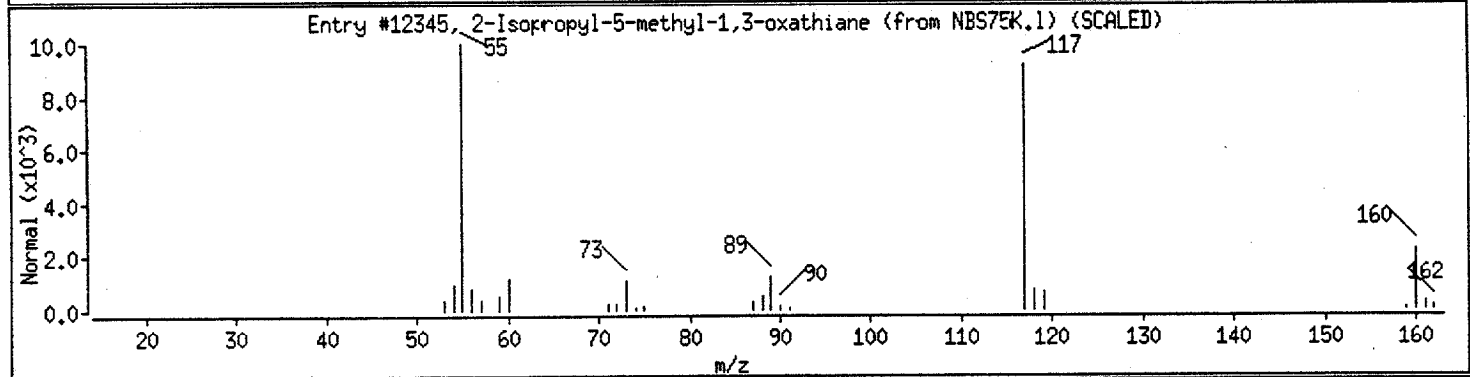
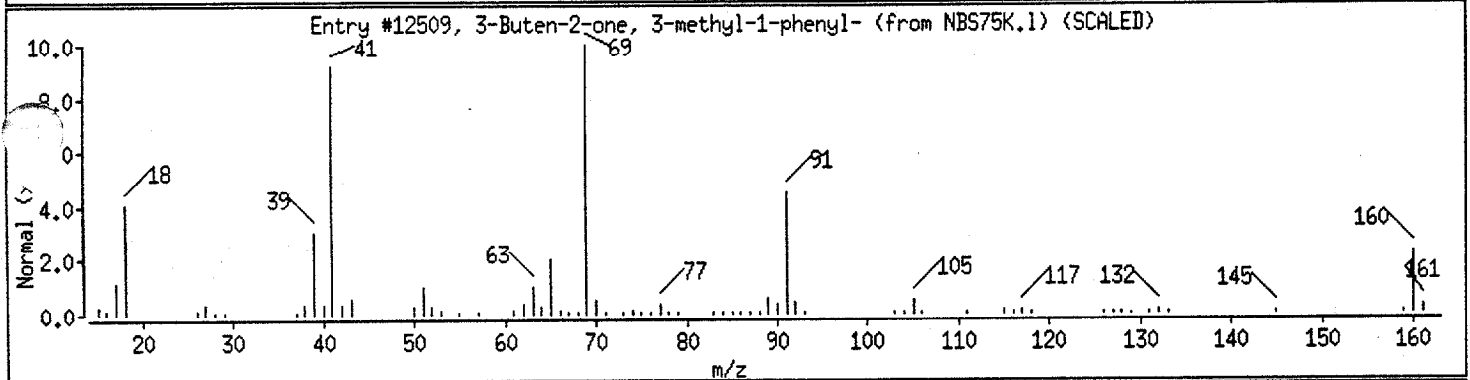
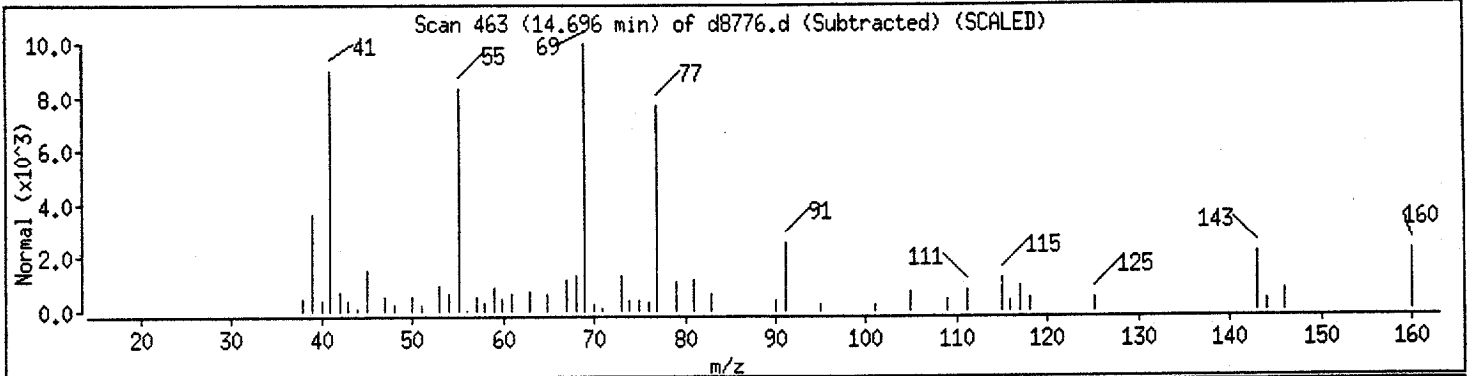


Data File: /chem/a900.1/d062994.b/d8776.d  
 Date: 29-JUN-94 15:05  
 Instrument: a900.i  
 Sample ID:  
 Column phase: J&W DB-5  
 Volume Injected (uL): 1.0

Column diameter: 0.25

C6622

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
3-Buten-2-one, 3-methyl-1-phenyl-	55956-30-4	NBS75K.1	12509	12
2-Isopropyl-5-methyl-1,3-oxathiane	0-00-0	NBS75K.1	12345	10
1-Pentene, 3-bromo-4-methyl-	815-47-4	NBS75K.1	12782	10

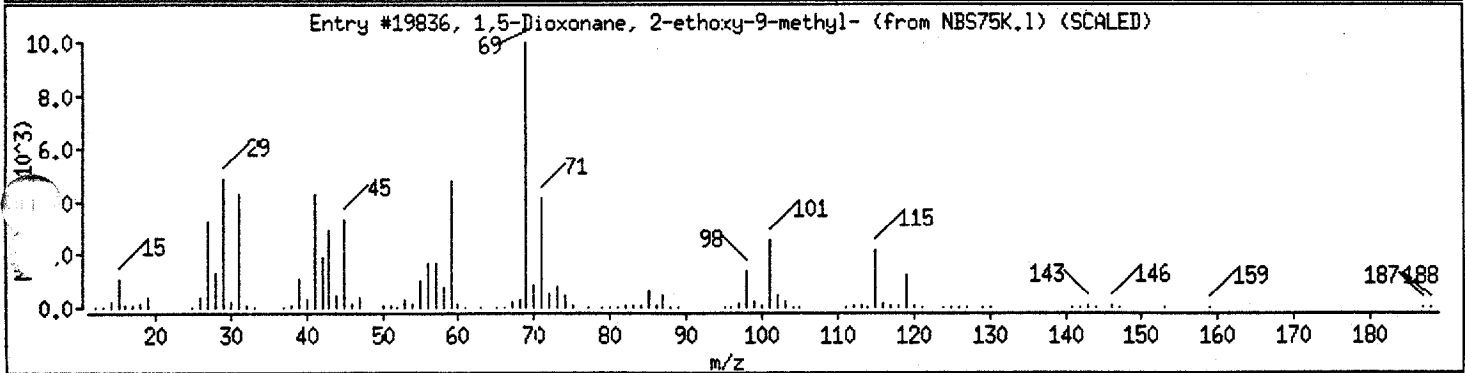
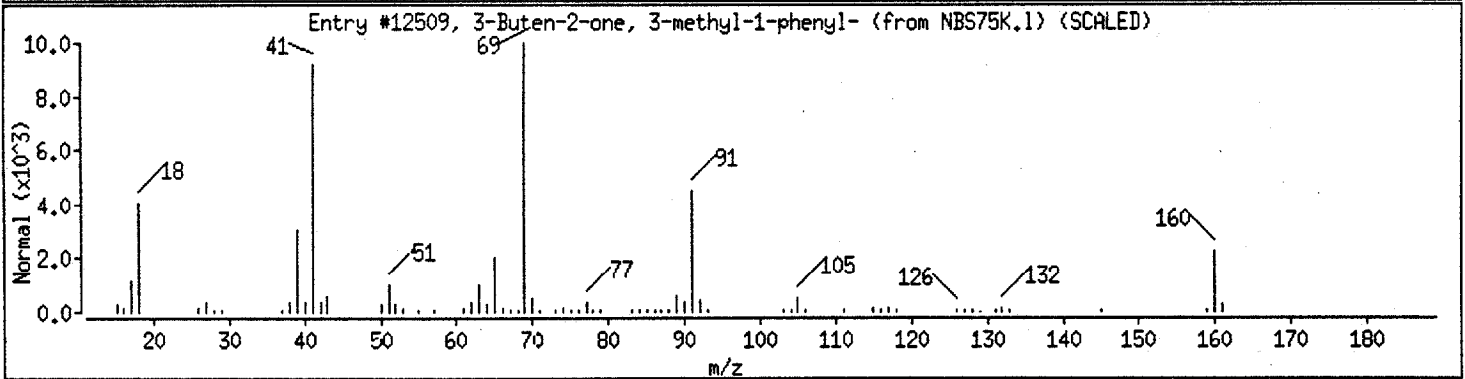
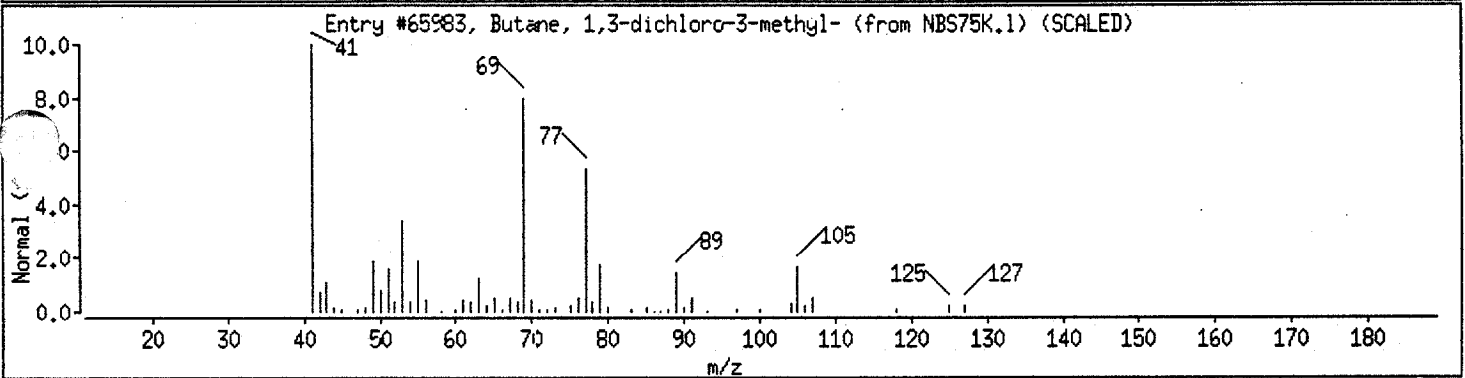
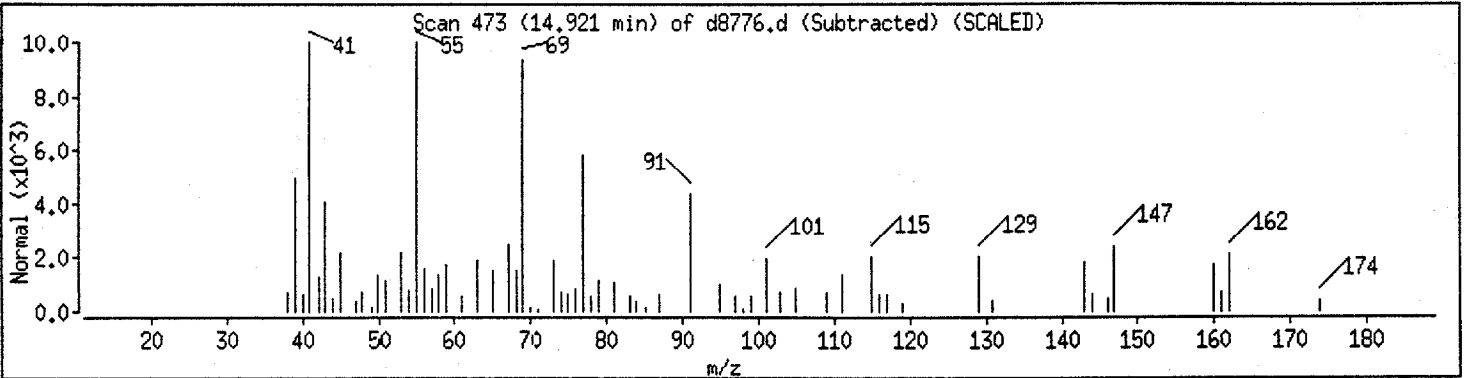


Data File: /chem/a900.i/d062994.b/d8776.d  
 Date : 29-JUN-94 15:05  
 Instrument : a900.i  
 Sample ID :  
 Column phase : J&W DB-5  
 Volume Injected (uL) : 1.0

Column diameter : 0.25

*c6622*

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, 1,3-dichloro-3-methyl-	624-96-4	NBS75K.1	65983	32
3-Buten-2-one, 3-methyl-1-phenyl-	55956-30-4	NBS75K.1	12509	25
1,5-Dioxonane, 2-ethoxy-9-methyl-	55702-56-2	NBS75K.1	19836	17





2D  
SOIL SEMIVOLATILE SURROGATE RECOVERY

0417

Lab Name: ASC Contract: NEESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: 0417  
 Level: (low/med) low

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	C6617	∅ D	∅ D	∅ D	∅ D	∅ D	∅ D			∅
02	C6618	72	91	94	78	59	33			∅
03	C6619	∅ D	∅ D	∅ D	∅ D	∅ D	∅ D			∅
04	C6620	∅ D	∅ D	∅ D	∅ D	∅ D	∅ D			∅
05	SBIK01	24	45	99	49	26	70			∅
06	SBIK02	74	88	97	81	59	71			∅
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

QC LIMITS

S1 (NBZ) = Nitrobenzene-d5 (23-120)  
 S2 (FBP) = 2-Fluorobiphenyl (30-115)  
 S3 (TPH) = Terphenyl-d14 (18-137)  
 S4 (PHL) = Phenol-d5 (24-113)  
 S5 (2FP) = 2-Fluorophenol (25-121)  
 S6 (TBP) = 2,4,6-Tribromophenol (19-122)  
 S7 (2CP) = 2-Chlorophenol-d4 (20-130) (advisory)  
 S8 (DCB) = 1,2-Dichlorobenzene-d4 (20-130) (advisory)

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

2D  
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: ASC Contract: NEISA

Lab Code:        Case No.:        SAS No.:        SDG No.: CUU17

Level: (low/med) low

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TCF OUT
01	SRK03	107	88.2	82.3	99.0	90.5	77.7			E
02	SSPK03	122*	99.6	101	106	99.6	110			L
03	Chlo21	D	D	D	D	D	D			B
04										
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

- QC LIMITS
- S1 (NBZ) = Nitrobenzene-d5 (23-120)
  - S2 (FBP) = 2-Fluorobiphenyl (30-115)
  - S3 (TPH) = Terphenyl-d14 (18-137)
  - S4 (PHL) = Phenol-d5 (24-113)
  - S5 (2FP) = 2-Fluorophenol (25-121)
  - S6 (TBP) = 2,4,6-Tribromophenol (19-122)
  - S7 (2CP) = 2-Chlorophenol-d4 (20-130) (advisory)
  - S8 (DCB) = 1,2-Dichlorobenzene-d4 (20-130) (advisory)

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

2C  
WATER SEMIVOLATILE SURROGATE RECOVERY

0419

Lab Name: ASC Contract: NEESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.:     

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	S7 (2CP) #	S8 (DCB) #	TOT OUT
01	WW-001MS	108	101	86	81	75	91			D
02	WW-001MSB	102	96	85	79	74	85			D
03	WW-001	68	60	73	33	33	48			D
04	C6622	107	85	87	56	61	78			D
05	SBIK01	79	78	88	47	51	67			D
06										
07										
08										
09										
10										
11										
12										
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										

- QC LIMITS
- S1 (NBZ) = Nitrobenzene-d5 (35-114)
  - S2 (FBP) = 2-Fluorobiphenyl (43-116)
  - S3 (TPH) = Terphenyl-d14 (33-141)
  - S4 (PHL) = Phenol-d5 (10-110)
  - S5 (2FP) = 2-Fluorophenol (21-110)
  - S6 (TBP) = 2,4,6-Tribromophenol (10-123)
  - S7 (2CP) = 2-Chlorophenol-d4 (33-110) (advisory)
  - S8 (DCB) = 1,2-Dichlorobenzene-d4 (16-110) (advisory)

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

30  
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEUSA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: CU17  
 Matrix Spike - EPA Sample No.: CU17 Level: (low/med) low

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	<i>see comment</i>	<i>see comment</i>			26-90
2-Chlorophenol					25-102
1,4-Dichlorobenzene					28-104
N-Nitroso-di-n-prop. (1)					41-126
1,2,4-Trichlorobenzene					38-107
4-Chloro-3-methylphenol					26-103
Acenaphthene					31-137
4-Nitrophenol					11-114
2,4-Dinitrotoluene					28-89
Pentachlorophenol					17-109
Pyrene					35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	<i>see comment</i>	<i>see comment</i>			35 26-90
2-Chlorophenol					50 25-102
1,4-Dichlorobenzene					27 28-104
N-Nitroso-di-n-prop. (1)					28 41-126
1,2,4-Trichlorobenzene					23 38-107
4-Chloro-3-methylphenol					33 26-103
Acenaphthene					19 31-137
4-Nitrophenol					50 11-114
2,4-Dinitrotoluene					47 28-89
Pentachlorophenol					47 17-109
Pyrene					36 35-142

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

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

RPD: \_\_\_\_\_ out of \_\_\_\_\_ outside limits  
 Spike Recovery: \_\_\_\_\_ out of \_\_\_\_\_ outside limits

COMMENTS: Because the spiked sample was run at a high dilution, no matrix spike and duplicate results are required.

## SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESALab Code: NA Case No.: NA SAS No.: NA SDG No.: 16617Blank Spike - EPA Sample No.: SBUK01

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
Phenol	3330	0	2140	64.3	12-110
2-Chlorophenol	3330		1910	57.3	27-123
1,4-Dichlorobenzene	3330		803	25.9*	36-97
N-Nitroso-di-n-Prop. (1)	3330		2500	76.8	41-116
1,2,4-Trichlorobenzene	3330		1590	47.7	39-98
4-Chloro-3-methylphenol	3330		2870	86.2	23-97
benaphthene	3330		2670	80.2	46-118
Nitrophenol	3330		2500	74.9	10-80
2,4-Dinitrotoluene	3330		3070	110*	24-96
Pentachlorophenol	3330		2820	84.7	9-103
Pyrene	3330		2910	87.2	26-127

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

# Column to be used to flag recoveries with an asterisk

\* Values outside of QC limits

Spike Recovery: 2 out of 11 outside limits

COMMENTS: \_\_\_\_\_

3D  
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: Neesa  
 Lab Code:      Case No.:      SAS No.:      SDG No.: CU17  
 Matrix Spike - EPA Sample No.: C101021 Level: (low/med) low

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	<u>See comment</u>	<u>See comment</u>			26-90
2-Chlorophenol					25-102
1,4-Dichlorobenzene					28-104
N-Nitroso-di-n-prop. (1)					41-126
1,2,4-Trichlorobenzene					38-107
4-Chloro-3-methylphenol					26-103
Acenaphthene					31-137
4-Nitrophenol					11-114
2,4-Dinitrotoluene					28-89
Pentachlorophenol					17-109
Pyrene					35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
Phenol	<u>See comment</u>	<u>See comment</u>			35 26-90
2-Chlorophenol					50 25-102
1,4-Dichlorobenzene					27 28-104
N-Nitroso-di-n-prop. (1)					18 41-126
1,2,4-Trichlorobenzene					23 38-107
4-Chloro-3-methylphenol					33 26-103
Acenaphthene					19 31-137
4-Nitrophenol					50 11-114
2,4-Dinitrotoluene					47 28-89
Pentachlorophenol					47 17-109
Pyrene					36 35-142

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

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

RPD:      out of      outside limits  
 Spike Recovery:      out of      outside limits

COMMENTS: Because the spiked sample was run at a high dilution, no matrix spike and duplicate results are required.

SEMIVOLATILE BLANK SPIKE RECOVERY

Lab Name: ASC Contract: NEESA

Lab Code: NA Case No.: NA SAS No.: NA SDG No.: 01117

Blank Spike - EPA Sample No.: SBLK03

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
Phenol	500000	0	670000	134*	12-110
2-Chlorophenol	↓	↓	670000	134*	27-123
1,4-Dichlorobenzene	↓	↓	500000	112*	36-97
N-Nitroso-di-n-Prop. (1)	↓	↓	870000	174*	41-116
1,2,4-Trichlorobenzene	↓	↓	500000	112*	39-98
Chloro-3-methylphenol	↓	↓	695000	139*	23-97
enaphthene	↓	↓	590000	116	46-118
Nitrophenol	↓	↓	665000	133*	10-80
2,4-Dinitrotoluene	↓	↓	660000	132*	24-96
Pentachlorophenol	↓	↓	655000	131*	9-103
Pyrene	↓	↓	540000	108	26-127

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

# Column to be used to flag recoveries with an asterisk

\* Values outside of QC limits

Spike Recovery: 9 out of 11 outside limits

COMMENTS: QC limits listed are for writers.

3C  
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

0424

Lab Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — 3 SDG No.: —  
 Matrix Spike - EPA Sample No.: WW-001

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	200	∅	130	65	12-110
2-Chlorophenol			170	85	27-123
1,4-Dichlorobenzene			140	70	36- 97
N-Nitroso-di-n-prop. (1)			200	100	41-116
1,2,4-Trichlorobenzene			140	70	39- 98
4-Chloro-3-methylphenol			170	85	23- 97
Acenaphthene			160	80	46-118
4-Nitrophenol			87	43	10- 80
2,4-Dinitrotoluene			190	95	24- 96
Pentachlorophenol			150	75	9-103
Pyrene	↓	↓	160	80	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Phenol	200	120	60	8	42	12-110
2-Chlorophenol		170	85	∅	40	27-123
1,4-Dichlorobenzene		140	70	∅	28	36- 97
N-Nitroso-di-n-prop. (1)		210	105	5	38	41-116
1,2,4-Trichlorobenzene		140	70	∅	28	39- 98
4-Chloro-3-methylphenol		170	85	∅	42	23- 97
Acenaphthene		170	85	6	31	46-118
4-Nitrophenol		110	55	24	50	10- 80
2,4-Dinitrotoluene		200	100	5	38	24- 96
Pentachlorophenol		150	75	∅	50	9-103
Pyrene	↓	160	80	∅	31	26-127

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

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

RPD: ∅ out of 11 outside limits  
 Spike Recovery: ∅ out of 22 outside limits

REMARKS: \_\_\_\_\_



4B  
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO 0425

SBIK01

Name: ASC

Contract: NEESA

Code: — Case No.: —

SAS No.: — SDG No.: CUU17

Lab File ID: DE 743

Lab Sample ID: N240851C

Instrument ID: MSD-D

Date Extracted: 062794

Matrix: (soil/water) Soil

Date Analyzed: 062794

Level: (low/med) low

Time Analyzed: 23:43

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	C6617	Jm9434C	DE757	062894
02	C66189	Jm9436C	DE758	↓
03	C66120	Jm9437C	DE759	↓
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

---

4B SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SBIK02

Name: ASC

Contract: NEZ3A

Lab Code: Case No.:

SAS No.:

SDG No.: CU117

Lab File ID: D8754

Lab Sample ID: N2C40851A

Instrument ID: MSD-D

Date Extracted: 062794

Matrix: (soil/water) SOIL

Date Analyzed: 062894

Level: (low/med) LOW

Time Analyzed: 16:20

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	C6618	JM9435C	D8756	062894
02				
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

\_\_\_\_\_

48  
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

Lab Name: ASC

Contract: Uest

SBLK03

Lab Code:     Case No.:    

SAS No.:     SDG No.: CU17

Lab File ID: D8789

Lab Sample ID: N4040854C

Instrument ID: MSD-D

Date Extracted: 063094

Matrix: (soil/water) Soil

Date Analyzed: 063094

Level: (low/med) low

Time Analyzed: 1606

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	<u>S.SPK03</u>	<u>N4040854C</u>	<u>D8790</u>	<u>063094</u>
02	<u>U6601</u>	<u>J05438</u>	<u>D8788</u>	<u>   </u>
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

\_\_\_\_\_

4B  
SEMIVOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

SR1K01

Name: ASC

Contract: NEESA

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

Lab File ID: D8771

Lab Sample ID: NUC40848C

Instrument ID: MSD-D

Date Extracted: 062894

Matrix: (soil/water) WATER

Date Analyzed: 062994

Level: (low/med) LOW

Time Analyzed: 10:56

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	<u>WW-001MS</u>	<u>JM9452CS</u>	<u>D8773</u>	<u>062994</u>
02	<u>WW-001MSD</u>	<u>JM9452CR</u>	<u>D8774</u>	↓
03	<u>WW-001</u>	<u>JM9452C</u>	<u>D8775</u>	↓
04	<u>C6622</u>	<u>JM9439C</u>	<u>D8776</u>	↓
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

\_\_\_\_\_

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ASC Contract: NEESA  
Lab Code:      Case No.:      SAS No.:      SDG No.: Cell 7  
Lab File ID: 08722 DFTPP Injection Date: 062494  
Instrument ID: MSD-D DFTPP Injection Time: 12:01

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	48.4
68	Less than 2.0% of mass 69	0.0 ( 0 ) 1
69	Mass 69 relative abundance	66.3
70	Less than 2.0% of mass 69	0.3 ( 0.4 ) 1
127	25.0 - 75.0% of mass 198	47.1
197	Less than 1.0% of mass 198	∅
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.3
275	10.0 - 30.0% of mass 198	20.0
365	Greater than 0.75% of mass 198	2.0
441	Present, but less than mass 443	6.2
442	40.0 - 110.0% of mass 198	41.9
443	15.0 - 24.0% of mass 442	7.7 (18.5) 2

1-Value is % mass 69

2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD80	SSTD80	08723	062494	12:34
02	SSTD50	SSTD50	08724		13:24
03	SSTD20	SSTD20	08725		14:13
04	SSTD120	SSTD120	08726		15:03
05	SSTD160	SSTD160	08727	↓	15:52
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B  
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ASC Contract: NEESA  
Lab Code: — Case No.: — SAS No.: — SDG No.: CUU17  
Lab File ID: D8732 DFTPP Injection Date: 062794  
Instrument ID: MSD-15 DFTPP Injection Time: 13.58

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	48.6
68	Less than 2.0% of mass 69	0 (0) 1
69	Mass 69 relative abundance	62.9
70	Less than 2.0% of mass 69	0.2 (0.4) 1
127	25.0 - 75.0% of mass 198	44.0
197	Less than 1.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	19.5
365	Greater than 0.75% of mass 198	1.6
441	Present, but less than mass 443	7.3
442	40.0 - 110.0% of mass 198	52.6
443	15.0 - 24.0% of mass 442	10.0 (19.0) 2

1-Value is % mass 69

2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD80	SSTD80	D8733	062794	14:19
02	SBIK01	NAC40851C	D8743	062794	23:43
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ASC Contract: NEESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: C11117  
 Lab File ID: D8752 DFTPP Injection Date: 062894  
 Instrument ID: MSD-D DFTPP Injection Time: 14:15

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	50.3
68	Less than 2.0% of mass 69	0 (0) 1
69	Mass 69 relative abundance	63.2
70	Less than 2.0% of mass 69	.3 (.5) 1
127	25.0 - 75.0% of mass 198	40.8
197	Less than 1.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	17.2
365	Greater than 0.75% of mass 198	1.2
441	Present, but less than mass 443	2.5
442	40.0 - 110.0% of mass 198	45.7
443	15.0 - 24.0% of mass 442	8.8 (19.3) 2

1-Value is % mass 69

2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SST080	SST080	D8753	062894	14:35
02	SBK02	N2C40851A	D8754	↓	16:20
03	L6618	JM9435C	D8756		17:59
04	C6617	JM9434C	D8757		18:48
05	C6619	JM9436C	D8758		19:38
06	C6620	JM9437C	D8759		20:27
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

5B  
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: C6617  
 Lab File ID: D8769 DFTPP Injection Date: 062994  
 Instrument ID: MSD-D DFTPP Injection Time: 9.33

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	51.2
68	Less than 2.0% of mass 69	0 (0) 1
69	Mass 69 relative abundance	64.7
70	Less than 2.0% of mass 69	0.5 (0.8) 1
127	25.0 - 75.0% of mass 198	41.4
197	Less than 1.0% of mass 198	0
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	19.7
365	Greater than 0.75% of mass 198	1.5
441	Present, but less than mass 443	7.7
442	40.0 - 110.0% of mass 198	53.0
443	15.0 - 24.0% of mass 442	10.3 (19.5) 2

1-Value is % mass 69

2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SST080	SST080	D8770	062994	9:54
02	SBK01	NIC40848C	D8771		10:56
03	SSPK01	NIC40848CS	D8772		11:46
04	ww-001ms	JM9452CS	D8773		12:36
05	ww-001msd	JM9452CR	D8774		13:25
06	ww-001	JM9452C	D8775		14:15
07	C6622	JM9439C	D8776	↓	15:05
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					



5B  
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
DECAFLUCROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: ASC Contract: NEESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: CLL617  
 Lab File ID: D8786 DFTPP Injection Date: 063094  
 Instrument ID: MSA-1 DFTPP Injection Time: 1333

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	57.33
68	Less than 2.0% of mass 69	0.00 ( 1 )
69	Mass 69 relative abundance	64.69
70	Less than 2.0% of mass 69	0.00 ( 1 )
127	25.0 - 75.0% of mass 198	42.32
197	Less than 1.0% of mass 198	0.00
198	Base Peak, 100% relative abundance	100
199	5.0 to 9.0% of mass 198	7.24
275	10.0 - 30.0% of mass 198	21.39
365	Greater than 0.75% of mass 198	1.75
441	Present, but less than mass 443	73.05 7.20
442	40.0 - 110.0% of mass 198	52.18
443	15.0 - 24.0% of mass 442	18.89 4.05 ( 2 )

1-Value is % mass 69

2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SPK03	NYC40834C	D8789	063094	1245
02	SSPK03	NYC40834S	D8790	↓	1359
03	CLL021	JM9438		↓	1516
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

68  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: 11117  
 Instrument ID: MSD.D Calibration Date(s): 6-24-94 6-24-94  
 Calibration Times: 14:43:04 12:34 15:52

LAB FILE ID: RRF20 = D8725 RRF50 = D8724  
 RRF80 = D8723 RRF120 = D8726 RRF160 = D8727

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Phenol	1.938	1.997	1.684	1.408	1.694	1.824	7.74
bis(2-Chloroethyl) ether	3.436	3.272	3.217	2.953	2.727	3.121	8.98
2-Chlorophenol	1.835	1.501	1.392	1.420	1.390	1.508	12.5
1,3-Dichlorobenzene	2.245	1.766	1.491	1.590	1.479	1.714	18.6
1,4-Dichlorobenzene	2.245	1.766	1.636	1.590	1.479	1.743	17.1
1,2-Dichlorobenzene	1.992	1.598	1.471	1.433	1.352	1.569	16.1
2-Methylphenol	1.705	1.465	1.309	1.241	1.162	1.364	15.4
2,2'-oxybis(1-Chloropropane)	2.783	2.171	1.662	2.383	2.442	2.283	18.1
4-Methylphenol	1.783	1.479	1.381	1.312	1.195	1.430	15.6
N-Nitroso-di-n-propylamine	1.429	1.141	1.065	9.716	9.299	1.107	17.9
Hexachloroethane	9.440	7.809	7.400	7.177	6.860	7.740	13.1
Nitrobenzene	5.460	4.312	3.958	4.057	3.796	4.318	15.5
Isophorone	1.173	1.937	1.857	1.848	1.823	1.928	15.2
2-Nitrophenol	3.175	2.316	2.015	1.802	1.543	2.170	29.0
2,4-Dimethylphenol	4.986	3.939	3.704	3.220	2.854	3.741	21.8
bis(2-Chloroethoxy) methane	6.783	5.974	4.181	4.738	4.489	5.193	18.0
2,4-Dichlorophenol	4.293	3.499	3.090	2.918	2.451	3.260	21.1
1,2,4-Trichlorobenzene	5.036	3.875	3.363	3.418	3.025	3.743	20.9
Naphthalene	1.449	1.082	1.941	1.926	1.090	1.052	23.1
4-Chloroaniline	3.661	4.072	3.875	3.932	3.613	3.830	5.00
Hexachlorobutadiene	2.940	2.232	1.949	1.931	1.731	2.157	21.9
4-Chloro-3-methylphenol	4.722	3.998	3.670	3.626	3.376	3.878	13.4
2-Methylnaphthalene	9.449	7.114	6.451	5.874	5.053	6.788	24.6
Hexachlorocyclopentadiene	-	2.318	1.966	2.241	1.983	2.152	9.35
2,4,6-Trichlorophenol	5.117	4.437	3.722	3.873	3.439	4.118	16.2
2,4,5-Trichlorophenol	5.536	4.183	3.775	3.328	2.795	3.962	26.6
2-Chloronaphthalene	1.461	1.171	1.043	9.758	8.535	1.100	21.1
2-Nitroaniline	4.540	4.176	3.906	4.155	3.894	4.134	6.36
Dimethylphthalate	1.959	1.568	1.394	1.300	1.187	1.482	20.3
Acenaphthylene	2.241	1.819	1.612	1.520	1.339	1.706	20.2
2,6-Dinitrotoluene	5.006	3.985	3.491	3.484	3.213	3.734	13.6
3-Nitroaniline	1.823	2.097	2.232	3.120	3.113	2.476	24.3
Acenaphthene	1.521	1.233	1.095	9.534	8.348	1.134	24.5
2,4-Dinitrophenol	1.0495	1.204	1.132	1.596	1.754	1.236	39.6
4-Nitrophenol	0.647	1.056	1.455	1.206	1.265	1.126	27.0
Dibenzofuran	2.003	1.532	1.332	1.167	1.006	1.408	27.4
2,4-Dinitrotoluene	5.303	4.513	4.002	3.355	2.832	4.001	24.2

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.

6C  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: \_\_\_\_\_  
 Instrument ID: MSD D Calibration Date(s): 6-24-94 6-24-94  
 Calibration Times: 12:34 15:52

LAB FILE ID: RRF20 = D8725 RRF50 = D8724  
 RRF80 = D8723 RRF120 = D8726 RRF160 = D8727

COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Diethylphthalate	2.036	1.642	1.449	1.310	1.143	1.516	22.7
4-Chlorophenyl-phenylether	*.8521	.6730	.5510	.5414	.4772	.6189	24.0
Fluorene	*1.666	1.313	1.131	1.060	.9070	1.215	24.0
4-Nitroaniline	.2132	.1835	.2391	.2997	.2909	.2453	20.3
4,6-Dinitro-2-methylphenol	.1301	.1367	.1293	.1387	.1273	.1324	3.75
N-Nitrosodiphenylamine (1)	.7325	.5430	.5081	.4698	.4137	.5334	22.7
4-Bromophenyl-phenylether	*.3135	.2459	.2074	.2257	.1992	.2383	19.2
Hexachlorobenzene	*.4096	.309	.2581	.2902	.2580	.3053	20.4
Pentachlorophenol	*	.1122	.1189	.1416	.1365	.1273	11.0
Phenanthrene	*1.497	1.154	1.086	.9936	.8453	1.115	21.8
Anthracene	*1.541	1.176	1.111	1.018	.8725	1.143	21.8
Carbazole	1.316	1.106	1.017	.9797	.8461	1.053	16.6
Di-n-butylphthalate	2.490	1.876	1.811	1.470	1.131	1.756	23.8
Fluoranthene	*1.646	1.294	1.203	1.117	.9249	1.239	21.3
Pyrene	*1.740	1.398	1.203	1.079	.9273	1.269	24.8
Butylbenzylphthalate	1.092	.7591	.7098	.5049	.3966	.6925	38.7
3,3'-Dichlorobenzidine	.4293	.2077	.2696	.2361	.2894	.3064	24.0
Benzo(a)anthracene	*1.503	1.230	1.126	1.126	1.057	1.208	14.6
Chrysene	*1.470	1.203	1.058	1.064	.9343	1.146	17.9
bis(2-Ethylhexyl)phthalate	1.660	1.259	1.183	1.016	.8641	1.196	25.1
Di-n-octylphthalate	3.637	2.901	2.605	2.436	2.172	2.750	20.4
Benzo(b)fluoranthene	*2.254	1.575	1.379	1.330	1.244	1.584	24.4
Benzo(k)fluoranthene	*2.091	1.943	1.725	1.827	1.553	1.922	11.8
Benzo(a)pyrene	*1.748	1.444	1.298	1.337	1.248	1.415	14.1
Indeno(1,2,3-cd)pyrene	*1.608	1.438	1.403	1.372	1.252	1.415	9.11
Dibenz(a,h)anthracene	*1.291	1.165	1.128	1.129	1.043	1.151	7.82
Benzo(g,h,i)perylene	*1.237	1.109	1.098	1.053	.9552	1.090	9.37
Nitrobenzene-d5	.5134	.4175	.3919	.3979	.3785	.4198	12.9
2-Fluorobiphenyl	*1.646	1.211	1.082	.8655	.6836	1.102	24.0
Terphenyl-d14	*1.291	.9911	.8445	.8317	.7366	.9429	22.8
Phenol-d5	*1.956	1.685	1.465	1.440	1.363	1.582	15.2
2-Fluorophenol	*1.466	1.273	1.218	1.278	1.229	1.292	7.76
2,4,6-Tribromophenol	.2288	.2103	.1617	.1907	.1824	.1948	13.3
2-Chlorophenol-d4	*						
1,2-Dichlorobenzene-d4	*						

1. Cannot be separated from Diphenylamine

\* Compounds with required minimum RRF and maximum %RSD values.  
 All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Name: ASC Contract: NEESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: CLC17  
 Instrument ID: MSD-D Calibration Date: 062794 Time: 15:17  
 Lab File ID: D8733 Init. Calib. Date(s): 062494  
 Init. Calib. Times: 1234 1552

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.824	1.912	0.800	4.8	25.0
bis(2-Chloroethyl) ether	3.121	3.260	0.700	4.5	25.0
2-Chlorophenol	1.828	1.406	0.800	6.7	25.0
1,3-Dichlorobenzene	1.714	1.537	0.600	10.3	25.0
1,4-Dichlorobenzene	1.743	1.537	0.500	11.8	25.0
1,2-Dichlorobenzene	1.829	1.376	0.400	12.3	25.0
2-Methylphenol	1.364	1.274	0.700	6.6	25.0
2,2'-oxybis(1-Chloropropane)	2.288	1.937		15.4	
4-Methylphenol	1.430	1.311	0.600	8.3	25.0
N-Nitroso-di-n-propylamine	1.107	0.995	0.500	10.1	25.0
Hexachloroethane	0.774	0.715	0.300	7.6	25.0
Nitrobenzene	0.432	0.404	0.200	6.4	25.0
Isophorone	0.930	0.872	0.400	6.2	25.0
2-Nitrophenol	0.217	0.195	0.100	9.9	25.0
2,4-Dimethylphenol	0.374	0.347	0.200	7.1	25.0
bis(2-Chloroethoxy)methane	0.579	0.491	0.300	5.4	25.0
2,4-Dichlorophenol	0.326	0.293	0.200	10.3	25.0
1,2,4-Trichlorobenzene	0.374	0.313	0.200	16.5	25.0
Naphthalene	1.052	0.937	0.700	10.9	25.0
4-Chloroaniline	0.383	0.387		0.9	
Hexachlorobutadiene	0.216	0.167		22.5	
4-Chloro-3-methylphenol	0.388	0.334	0.200	13.9	25.0
2-Methylnaphthalene	0.679	0.690	0.400	10.4	25.0
Hexachlorocyclopentadiene	0.215	0.193		10.4	
2,4,6-Trichlorophenol	0.412	0.373	0.200	9.5	25.0
2,4,5-Trichlorophenol	0.396	0.347	0.200	12.4	25.0
2-Chloronaphthalene	1.101	1.033	0.300	16.2	25.0
2-Nitroaniline	0.413	0.423		2.2	
Dimethylphthalate	1.482	1.324		10.7	
Acenaphthylene	1.706	1.615	1.000	5.3	25.0
2,6-Dinitrotoluene	0.373	0.339	0.200	9.1	25.0
3-Nitroaniline	0.248	0.274		10.6	
Acenaphthene	1.134	1.046	0.800	7.7	25.0
2,4-Dinitrophenol	0.124	0.090		27.0	
4-Nitrophenol	0.113	0.103		8.8	
Dibenzofuran	1.408	1.328	0.800	5.6	25.0
2,4-Dinitrotoluene	0.420	0.390	0.200	2.6	25.0

13.1 DR 715194

All other compounds must meet a minimum RRF of 0.010.

7C  
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NERSA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: C66017  
 Instrument ID: MSD-D Calibration Date: 062794 Time: 1517  
 Lab File ID: DE733 Init. Calib. Date(s): 062494  
 Init. Calib. Times: 1234 1552

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.576	1.407		7.2	
4-Chlorophenyl-phenylether	0.619	0.540	0.400	12.7	25.0
Fluorene	1.215	1.116	0.900	8.2	25.0
4-Nitroaniline	0.245	0.226		8.0	
4,6-Dinitro-2-methylphenol	0.132	0.131		1.0	
N-Nitrosodiphenylamine (1)	0.533	0.517		3.0	
4-Bromophenyl-phenylether	0.238	0.201	0.100	15.5	25.0
Hexachlorobenzene	0.305	0.252	0.100	17.6	25.0
Pentachlorophenol	0.127	0.098	0.050	22.6	25.0
Phenanthrene	1.115	1.016	0.700	8.9	25.0
Anthracene	1.144	1.044	0.700	8.7	25.0
Carbazole	1.053	0.989		6.1	
Di-n-butylphthalate	1.752	1.456		17.1	
Fluoranthene	1.239	1.058	0.600	11.4	25.0
Pyrene	1.269	1.249	0.600	1.6	25.0
Butylbenzylphthalate	0.692	0.719		3.9	
3,3'-Dichlorobenzidine	0.366	0.376		16.1	
Benzo(a)anthracene	1.208	1.076	0.800	10.9	25.0
Chrysene	1.146	1.017	0.700	11.2	25.0
bis(2-Ethylhexyl)phthalate	1.196	1.204		0.6	
Di-n-octylphthalate	2.752	2.799		1.8	
Benzo(b)fluoranthene	1.584	1.457	0.700	8.0	25.0
Benzo(k)fluoranthene	1.822	1.624	0.700	10.9	25.0
Benzo(a)pyrene	1.415	1.276	0.700	9.6	25.0
Indeno(1,2,3-cd)pyrene	1.415	1.270	0.500	13.8	25.0
Dibenz(a,h)anthracene	1.151	0.994	0.400	13.6	25.0
Benzo(g,h,i)perylene	1.090	0.966	0.500	11.4	25.0
Nitrobenzene-d5	0.420	0.399	0.200	5.1	25.0
2-Fluorobiphenyl	1.102	1.032	0.700	6.3	25.0
Terphenyl-d14	0.943	0.835	0.500	7.3	25.0
Phenol-d5	1.582	1.475	0.800	6.7	25.0
2-Fluorophenol	1.293	1.368	0.600	6.3	25.0
2,4,6-Tribromophenol	0.195	0.152		21.7	
2-Chlorophenol-d4			0.800		25.0
1,2-Dichlorobenzene-d4			0.400		25.0

5.8%

(1) Cannot be separated from Diphenylamine  
 All other compounds must meet a minimum RRF of 0.010.

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: Nesta  
 Lab Code: — Case No.: — SAS No.: — SDG No.: C1117  
 Instrument ID: MSD-D Calibration Date: 062894 Time: 1435  
 Lab File ID: D8753 Init. Calib. Date(s): 062494  
 Init. Calib. Times: 1234 1552

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.824	2.018	0.800	10.6	25.0
bis(2-Chloroethyl) ether	3.121	3.557	0.700	14.0	25.0
2-Chlorophenol	1.528	1.524	0.800	0.3	25.0
1,3-Dichlorobenzene	1.714	1.658	0.600	3.3	25.0
1,4-Dichlorobenzene	1.743	1.658	0.500	4.9	25.0
1,2-Dichlorobenzene <u>DL 711594</u>	1.569	1.405	0.400	3.8	25.0
2-Methylphenol	1.364	1.416	0.700	3.8	25.0
2,2'-oxybis(1-Chloropropane)	2.285	2.701		18.1	
4-Methylphenol	1.438	1.316	0.600	8.0	25.0
N-Nitroso-di-n-propylamine	1.107	1.105	0.500	0.2	25.0
Hexachloroethane	0.774	0.690	0.300	10.9	25.0
Nitrobenzene	0.432	0.408	0.200	5.6	25.0
Isophorone	0.930	0.805	0.400	13.5	25.0
2-Nitrophenol <u>DL 711594</u>	0.217	0.317	0.100	9.3	25.0
2,4-Dimethylphenol	0.374	0.334	0.200	10.8	25.0
bis(2-Chloroethoxy) methane	0.579	0.579	0.300	0	25.0
2,4-Dichlorophenol	0.326	0.290	0.200	11.1	25.0
1,2,4-Trichlorobenzene	0.374	0.300	0.200	19.9	25.0
Naphthalene	1.052	0.880	0.700	24.0	25.0
4-Chloroaniline	0.383	0.400		4.4	
Hexachlorobutadiene	0.216	0.156		27.8	
4-Chloro-3-methylphenol	0.388	0.356	0.200	8.3	25.0
2-Methylnaphthalene	0.679	0.571	0.400	15.9	25.0
Hexachlorocyclopentadiene	0.215	0.167		22.2	
2,4,6-Trichlorophenol	0.412	0.366	0.200	11.0	25.0
2,4,5-Trichlorophenol	0.396	0.322	0.200	19.3	25.0
2-Chloronaphthalene	1.101	0.971	0.300	11.8	25.0
2-Nitroaniline	0.413	0.423		2.2	
Dimethylphthalate	1.482	1.221		17.6	
Acenaphthylene	1.706	1.354	1.000	20.6	25.0
2,6-Dinitrotoluene	0.373	0.352	0.200	5.8	25.0
3-Nitroaniline	0.248	0.323		30.3	
Acenaphthene	1.134	0.952	0.800	16.0	25.0
2,4-Dinitrophenol	0.124	0.108		12.8	
4-Nitrophenol	0.113	0.084		25.5	
Dibenzofuran	1.408	1.220	0.800	13.4	25.0
2,4-Dinitrotoluene	0.400	0.344	0.200	14.0	25.0

All other compounds must meet a minimum RRF of 0.010.

7C

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA  
 Lab Code: --- Case No.: --- SAS No.: --- SDG No.: 061017  
 Instrument ID: MSD-D Calibration Date: 062894 Time: 1435  
 Lab File ID: D8753 Init. Calib. Date(s): 062494  
 Init. Calib. Times: 1234 1552

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.576	1.158		23.6	
4-Chlorophenyl-phenylether	0.619	0.579	0.400	16.2	25.0
Fluorene	1.215	1.001	0.900	12.7	25.0
4-Nitroaniline	0.245	0.257		4.9	
4,6-Dinitro-2-methylphenol	0.132	0.120		9.6	
N-Nitrosodiphenylamine (1)	0.533	0.494		7.3	
4-Bromophenyl-phenylether	0.238	0.202	0.100	13.7	25.0
Hexachlorobenzene	0.305	0.249	0.100	18.4	25.0
Pentachlorophenol	0.127	0.113	0.050	10.9	25.0
Phenanthrene	1.115	0.906	0.700	18.7	25.0
Anthracene	1.144	0.945	0.700	17.4	25.0
Carbazole	1.053	0.944		10.3	
Di-n-butylphthalate	1.750	1.077		42.6	
Fluoranthene	1.239	0.950	0.600	23.4	25.0
Pyrene	1.269	1.272	0.600	0.2	25.0
Butylbenzylphthalate	0.692	0.824		18.9	
3,3'-Dichlorobenzidine	0.306	0.309		20.4	
Benzo(a)anthracene	1.208	1.078	0.800	10.8	25.0
Chrysene	1.146	0.992	0.700	13.4	25.0
bis(2-Ethylhexyl)phthalate	1.196	0.950		20.6	
Di-n-octylphthalate	2.750	2.107		23.4	
Benzo(b)fluoranthene	1.584	1.369	0.700	13.6	25.0
Benzo(k)fluoranthene	1.822	1.780	0.700	2.3	25.0
Benzo(a)pyrene	1.415	1.263	0.700	10.7	25.0
Indeno(1,2,3-cd)pyrene	1.415	1.263	0.500	10.7	25.0
Dibenz(a,h)anthracene	1.157	1.007	0.400	12.5	25.0
Benzo(g,h,i)perylene	1.090	1.005	0.500	7.9	25.0
Nitrobenzene-d5	0.420	0.393	0.200	6.5	25.0
2-Fluorobiphenyl	1.102	0.872	0.700	20.8	25.0
Terphenyl-d14	0.943	0.907	0.500	3.8	25.0
Phenol-d5	1.582	1.564	0.800	1.1	25.0
2-Fluorophenol	1.293	1.424	0.600	0.1	25.0
2,4,6-Tribromophenol	0.195	0.165		15.1	
2-Chlorophenol-d4			0.800		25.0
1,2-Dichlorobenzene-d4			0.400		25.0

(1) Cannot be separated from Diphenylamine  
 All other compounds must meet a minimum RRF of 0.010.

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: 06617  
 Instrument ID: MSD-D Calibration Date: 062994 Time: 9.54  
 Lab File ID: D8770 Init. Calib. Date(s): 062494 062494  
 Init. Calib. Times: 12:34 15:52

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.824	1.871	0.800	2.6	25.0
bis(2-Chloroethyl) ether	3.121	3.186	0.700	2.1	25.0
2-Chlorophenol	1.508	1.404	0.800	6.9	25.0
1,3-Dichlorobenzene	1.714	1.416	0.600	17.4	25.0
1,4-Dichlorobenzene	1.743	1.777	0.500	1.5	25.0
1,2-Dichlorobenzene	1.569	1.459	0.400	7.0	25.0
2-Methylphenol	1.364	1.392	0.700	2.0	25.0
2,2'-oxybis(1-Chloropropane)	2.288	2.447		28.8	
4-Methylphenol	1.430	1.266	0.600	11.5	25.0
N-Nitroso-di-n-propylamine	1.107	.980	0.500	11.5	25.0
Hexachloroethane	.774	.702	0.300	9.3	25.0
Nitrobenzene	.432	.378	0.200	12.4	25.0
Isophorone	.930	.834	0.400	10.3	25.0
2-Nitrophenol	.217	.202	0.100	7.1	25.0
2,4-Dimethylphenol	.374	.329	0.200	12.1	25.0
bis(2-Chloroethoxy) methane	.519	.488	0.300	6.0	25.0
2,4-Dichlorophenol	.326	.302	0.200	7.4	25.0
1,2,4-Trichlorobenzene	.374	.329	0.200	12.2	25.0
Naphthalene	1.052	.951	0.700	9.6	25.0
4-Chloroaniline	.383	.398		4.0	
Hexachlorobutadiene	.216	.181		15.9	
4-Chloro-3-methylphenol	.388	.347	0.200	10.5	25.0
2-Methylnaphthalene	.679	.610	0.400	10.2	25.0
Hexachlorocyclopentadiene	.215	.210		2.5	
2,4,6-Trichlorophenol	.412	.364	0.200	11.7	25.0
2,4,5-Trichlorophenol	.396	.348	0.200	12.2	25.0
2-Chloronaphthalene	1.101	.995	0.800	9.7	25.0
2-Nitroaniline	.413	.402		2.9	
Dimethylphthalate	1.482	1.295		12.6	
Acenaphthylene	1.706	1.546	1.300	9.4	25.0
2,6-Dinitrotoluene	.373	.344	0.200	7.9	25.0
3-Nitroaniline	.248	.305		23.1	
Acenaphthene	1.134	.971	0.800	14.4	25.0
2,4-Dinitrophenol	.124	.123		.7	
4-Nitrophenol	.113	.081		28.5	
Dibenzofuran	1.408	1.333	0.800	5.3	25.0
2,4-Dinitrotoluene	.400	.366	0.200	8.4	25.0

All other compounds must meet a minimum RRF of 0.010.



## SEMIVOLATILE CONTINUING CALIBRATION CHECK

0441

Lab Name: HSC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: 06617  
 Instrument ID: MSD-D Calibration Date: 062994 Time: 0954  
 Lab File ID: D8770 Init. Calib. Date(s): 062994 062994  
 Init. Calib. Times: 1234 1552

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.576	1.278		15.7	
4-Chlorophenyl-phenylether	.619	.577	0.400	6.7	25.0
Fluorene	1.215	1.114	0.900	8.3	25.0
4-Nitroaniline	.245	.259		5.7	
4,6-Dinitro-2-methylphenol	.132	.126		4.8	
N-Nitrosodiphenylamine (1)	.533	.470		11.8	
4-Bromophenyl-phenylether	.238	.212	0.100	10.9	25.0
Hexachlorobenzene	.305	.272	0.100	11.0	25.0
Pentachlorophenol	.127	.122	0.050	4.3	25.0
Phenanthrene	1.115	.969	0.700	13.1	25.0
Anthracene	1.144	.955	0.700	13.0	25.0
Carbazole	1.053	.952		9.6	
Di-n-butylphthalate	1.756	1.189		32.3	
Fluoranthene	1.239	1.037	0.600	16.3	25.0
Pyrene	1.269	1.236	0.600	2.6	25.0
Butylbenzylphthalate	.692	.698		0.9	
3,3'-Dichlorobenzidine	.306	.369		20.4	
Benzo(a)anthracene	1.208	1.064	0.800	11.9	25.0
Chrysene	1.146	1.025	0.700	10.6	25.0
bis(2-Ethylhexyl)phthalate	1.196	.796		33.5	
Di-n-octylphthalate	2.780	2.176		20.9	
Benzo(b)fluoranthene	1.584	1.497	0.700	5.5	25.0
Benzo(k)fluoranthene	1.822	1.537	0.700	15.6	25.0
Benzo(a)pyrene	1.415	1.247	0.700	11.9	25.0
Indeno(1,2,3-cd)pyrene	1.415	1.198	0.500	15.4	25.0
Dibenz(a,h)anthracene	1.157	.968	0.400	15.9	25.0
Benzo(g,h,i)perylene	1.090	.934	0.500	14.4	25.0
Nitrobenzene-d5	.420	.355	0.200	15.4	25.0
2-Fluorobiphenyl	1.102	.912	0.700	17.3	25.0
Terphenyl-d14	.943	.909	0.500	3.6	25.0
Phenol-d5	1.582	1.411	0.800	10.8	25.0
2-Fluorophenol	1.293	1.281	0.600	0.9	25.0
2,4,6-Tribromophenol	.195	.198		1.6	
2-Chlorophenol-d4			0.800		25.0
1,2-Dichlorobenzene-d4			0.400		25.0

(1) Cannot be separated from Diphenylamine  
 All other compounds must meet a minimum RRF of 0.010.

7B

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: ARESA  
 Lab Code:        Case No.:        SAS No.:        SDG No.: CU6017  
 Instrument ID: MSD-D Calibration Date: 063094 Time: 1359  
 Lab File ID: D8787 Init. Calib. Date(s): 062494  
 Init. Calib. Times: 1234 1552

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.824	2.109	0.800	15.6	25.0
bis(2-Chloroethyl) ether	3.121	3.787	0.700	21.3	25.0
2-Chlorophenol	1.528	1.379	0.800	8.5	25.0
1,3-Dichlorobenzene	1.714	1.751	0.600	2.2	25.0
1,4-Dichlorobenzene	1.743	1.751	0.500	6.5	25.0
1,2-Dichlorobenzene	1.569	1.430	0.400	8.9	25.0
2-Methylphenol	1.364	1.457	0.700	6.8	25.0
2,2'-oxybis(1-Chloropropane)	2.288	3.217		40.6	
4-Methylphenol	1.430	1.493	0.600	4.4	25.0
N-Nitroso-di-n-propylamine	1.167	1.161	0.500	4.9	25.0
Hexachloroethane	0.774	0.744	0.300	3.8	25.0
Nitrobenzene	0.432	0.393	0.200	8.9	25.0
Isophorone	0.930	1.861	0.400	7.4	25.0
2-Nitrophenol	0.217	0.191	0.100	12.0	25.0
2,4-Dimethylphenol	0.374	0.340	0.200	9.1	25.0
bis(2-Chloroethoxy)methane	0.574	0.500	0.300	3.7	25.0
2,4-Dichlorophenol	0.324	0.266	0.200	18.5	25.0
1,2,4-Trichlorobenzene	0.374	0.284	0.200	24.2	25.0
Naphthalene	1.052	0.927	0.700	11.5	25.0
4-Chloroaniline	0.383	0.387		1.1	
Hexachlorobutadiene	0.214	0.150		30.4	
4-Chloro-3-methylphenol	0.388	0.332	0.200	14.4	25.0
2-Methylnaphthalene	0.679	0.621	0.400	8.6	25.0
Hexachlorocyclopentadiene	0.215	0.155		27.9	
2,4,6-Trichlorophenol	0.412	0.305	0.200	25.9	25.0
2,4,5-Trichlorophenol	0.396	0.318	0.200	19.6	25.0
2-Chloronaphthalene	1.101	0.915	0.300	16.9	25.0
2-Nitroaniline	0.413	0.416		0.6	
Dimethylphthalate	1.482	1.192		19.6	
Acenaphthylene	1.706	1.418	1.200	16.9	25.0
2,6-Dinitrotoluene	0.373	0.303	0.200	18.7	25.0
3-Nitroaniline	0.248	0.286		15.4	
Acenaphthene	1.131	0.992	0.300	12.5	25.0
2,4-Dinitrophenol	0.124	0.400	0.393	1.9	9.0
4-Nitrophenol	0.113	0.095		13.3	
Dibenzofuran	1.408	1.388	0.800	1.4	25.0
2,4-Dinitrotoluene	0.400	0.393	0.200	1.9	25.0

All other compounds must meet a minimum RRF of 0.010.

DUL 7/15/94

7C  
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: ASC Contract: NEESA  
 Lab Code: --- Case No.: --- SAS No.: --- SDG No.: C16617  
 Instrument ID: 115A-D Calibration Date: 063094 Time: 1359  
 Lab File ID: DE787 Init. Calib. Date(s): 062494  
 Init. Calib. Times: 1234 1552

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.516	1.345		11.3	
4-Chlorophenyl-phenylether	0.619	0.538	0.400	13.0	25.0
Fluorene	1.215	1.130	0.900	7.0	25.0
4-Nitroaniline	0.245	0.241		1.8	
4,6-Dinitro-2-methylphenol	0.132	0.119		10.1	
N-Nitrosodiphenylamine (1)	0.533	0.485		9.1	
4-Bromophenyl-phenylether	0.238	0.194	0.100	18.8	25.0
Hexachlorobenzene	0.305	0.238	0.100	22.1	25.0
Pentachlorophenol	0.127	0.104	0.050	18.1	25.0
Phenanthrene	1.115	0.909	0.700	18.5	25.0
Anthracene	1.144	0.950	0.700	16.4	25.0
Carbazole	1.053	0.845		19.8	
Di-n-butylphthalate	1.756	1.084		38.3	
Fluoranthene	1.239	0.964	0.600	20.2	25.0
Pyrene	1.269	1.160	0.600	8.6	25.0
Butylbenzylphthalate	0.692	0.789		13.9	
3,3'-Dichlorobenzidine	0.306	0.343		11.8	
Benzo(a)anthracene	1.208	1.024	0.800	15.2	25.0
Chrysene	1.140	0.944	0.700	17.7	25.0
bis(2-Ethylhexyl)phthalate	1.196	0.991		16.9	
Di-n-octylphthalate	2.750	2.280		17.1	
Benzo(k)fluoranthene	1.584	1.284	0.700	18.4	25.0
Benzo(k)fluoranthene	1.822	1.835	0.700	0.7	25.0
Benzo(a)pyrene	1.415	1.136	0.700	15.5	25.0
Indeno(1,2,3-cd)pyrene	1.415	1.133	0.500	19.9	25.0
Dibenz(a,h)anthracene	1.157	0.915	0.400	20.5	25.0
Benzo(g,h,i)perylene	1.090	0.868	0.500	20.4	25.0
Nitrobenzene-d5	0.420	0.378	0.200	10.0	25.0
2-Fluorobiphenyl	1.102	0.902	0.700	12.7	25.0
Terphenyl-d14	0.943	0.843	0.500	10.6	25.0
Phenol-d5	1.583	1.474	0.800	5.8	25.0
2-Fluorophenol	1.293	1.253	0.600	3.1	25.0
2,4,6-Tribromophenol	0.195	0.169		13.0	
2-Chlorophenol-d4			0.800		25.0
1,2-Dichlorobenzene-d4			0.400		25.0

(1) Cannot be separated from Diphenylamine  
 All other compounds must meet a minimum RRF of 0.010.

8B  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0444

Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: Cle617  
 Lab File ID (Standard): 158733 Date Analyzed: 062794  
 Instrument ID: MSD-15 Time Analyzed: 14:19

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	76882	9.87	280085	12.33	152311	16.18
UPPER LIMIT	153764	10.37	566170	12.83	304622	16.68
LOWER LIMIT	38441	9.37	140642	11.83	76155	15.68
EPA SAMPLE NO.						
01 <u>SBIK01</u>	<u>109717</u>	<u>9.87</u>	<u>394652</u>	<u>12.33</u>	<u>222571</u>	<u>16.18</u>
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

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

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

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

8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0445

Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: CUU17  
 Lab File ID (Standard): D8733 Date Analyzed: 062794  
 Instrument ID: MSD-D Time Analyzed: 14:19

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	223882	19.55	195561	25.64	150873	30.56
UPPER LIMIT	447764	20.05	391122	26.14	301746	31.06
LOWER LIMIT	111941	19.05	97780	25.14	75436	30.06
EPA SAMPLE NO.						
01 SRIK01	331621	19.51	271117	25.60	173242	30.54
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

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

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

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

8B  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

b Name: ASC Contract: NEESA  
b Code: — Case No.: — SAS No.: — SDG No.: C1117  
Lab File ID (Standard): D8753 Date Analyzed: 062894  
Instrument ID: MSD-D Time Analyzed: 14:35

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #	
12 HOUR STD	116791	9.40	470696	11.77	278708	15.58	
UPPER LIMIT	233582	9.90	941392	12.27	557416	16.08	
LOWER LIMIT	58395	8.90	235348	11.27	139354	15.08	
EPA SAMPLE NO.							
01	SBIK02	119467	9.42	464865	11.79	281578	15.59
02	C6618	118991	9.40	447335	11.76	265447	15.57
03	C6617	124655	9.40	498290	11.77	292949	15.58
04	C6619	132861	9.40	576136	11.77	301449	15.58
05	C6620	132926	9.42	536044	11.76	302911	15.57
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

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

8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0447

Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: C6617  
 Lab File ID (Standard): 158753 Date Analyzed: 062894  
 Instrument ID: MSD-D Time Analyzed: 14.35

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #	
12 HOUR STD	408743	18.90	310277	24.88	228989	29.25	
UPPER LIMIT	817486	19.40	620554	25.38	457998	29.75	
LOWER LIMIT	204371	18.40	155138	24.38	114494	28.75	
EPA SAMPLE NO.							
01	S131K02	430674	18.91	343668	24.88	220492	29.27
02	C6618	415202	18.88	332801	24.88	209143	29.25
03	C6617	434720	18.90	334940	24.87	211729	29.25
04	C6619	449882	18.89	352846	24.87	6652*	29.33
05	C6620	443154	18.88	332140	24.87	109589*	29.24
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							

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

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

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

## SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0448

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA  
 Lab File ID (Standard): \_\_\_\_\_ Date Analyzed: \_\_\_\_\_  
 Instrument ID: MSD-D Time Analyzed: \_\_\_\_\_

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT
12 HOUR STD	74111	9.40	227082	11.77	215591	15.58
UPPER LIMIT	148222	9.90	1654164	12.27	109795	16.08
LOWER LIMIT	37055	8.90	163541	11.27	431182	15.08
EPA SAMPLE NO.						
01	01021	9.40	268315	11.77	179962	15.57
02	<del>SPRINK</del> 71577	9.40	293522	11.74	180963	15.55
03	<del>SPRINK</del> 60123	9.38	262851	11.75	166736	15.55
04	<del>SPRINK</del> 55103					
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = +0.50 minutes of internal standard RT

RT LOWER LIMIT = -0.50 minutes of internal standard RT

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

\* Values outside of QC limits.



8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0449

Lab Name: ASC Contract: NEESA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: NA  
 Lab File ID (Standard): \_\_\_\_\_ Date Analyzed: \_\_\_\_\_  
 Instrument ID: MSD-T Time Analyzed: \_\_\_\_\_

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	352841	18.92	300079	24.88	200112	29.22
UPPER LIMIT	705682	19.40	600158	25.38	400224	29.92
LOWER LIMIT	176420	18.44	150039	24.38	100056	28.72
EPA SAMPLE NO.						
01	297110	18.57	291139	24.88	203644	29.28
02	296832	18.56	291153	24.86	198134	29.20
03	292478	18.87	284774	24.85	167938	29.21
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
13						
19						
20						
21						
22						

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

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

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

8B  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

0450

Lab Name: ASC Contract: NEESA  
 Lab Code: — Case No.: — SAS No.: — SDG No.: —  
 Lab File ID (Standard): DE770 Date Analyzed: 062994  
 Instrument ID: MSE-D Time Analyzed: 9:54

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	71571	9.42	286619	11.87	185647	15.60
UPPER LIMIT	143142	9.42	1433095*	12.29	371294	16.10
LOWER LIMIT	35725	8.92	573238*	11.29	92823	15.10
EPA SAMPLE NO.						
01	SBIK01	9.40	263845	11.76	167994	15.59
02	ww-coims	9.40	269026	11.77	165078	15.57
03	ww-coimSB	9.40	252082	11.76	153904	15.57
04	ww-co1	9.42	232922	11.76	141189	15.57
05	C6622	9.40	232915	11.76	150753	15.57
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

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

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

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

8C  
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Name: ASC Contract: NEESA  
Lab Code:      Case No.:      SAS No.:      SDG No.:       
Lab File ID (Standard): 158770 Date Analyzed: 062994  
Instrument ID: MSD-D Time Analyzed: 9.54

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	305799	18.90	259546	24.90	193878	29.226
UPPER LIMIT	611598	19.40	579092	25.40	387756	29.76
LOWER LIMIT	152899	18.40	129773	24.80	96939	28.76
EPA SAMPLE NO.						
01 SBIK01	268994	18.90	263062	24.88	173501	29.23
02 ww-01.ms	279901	18.90	263461	24.87	170436	29.22
03 ww-01.msd	260302	18.89	240847	24.89	153998	29.22
04 ww-01	222639	18.88	215753	24.87	141193	29.23
05 C6622	229999	18.89	213572	24.86	141972	29.22
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

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

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

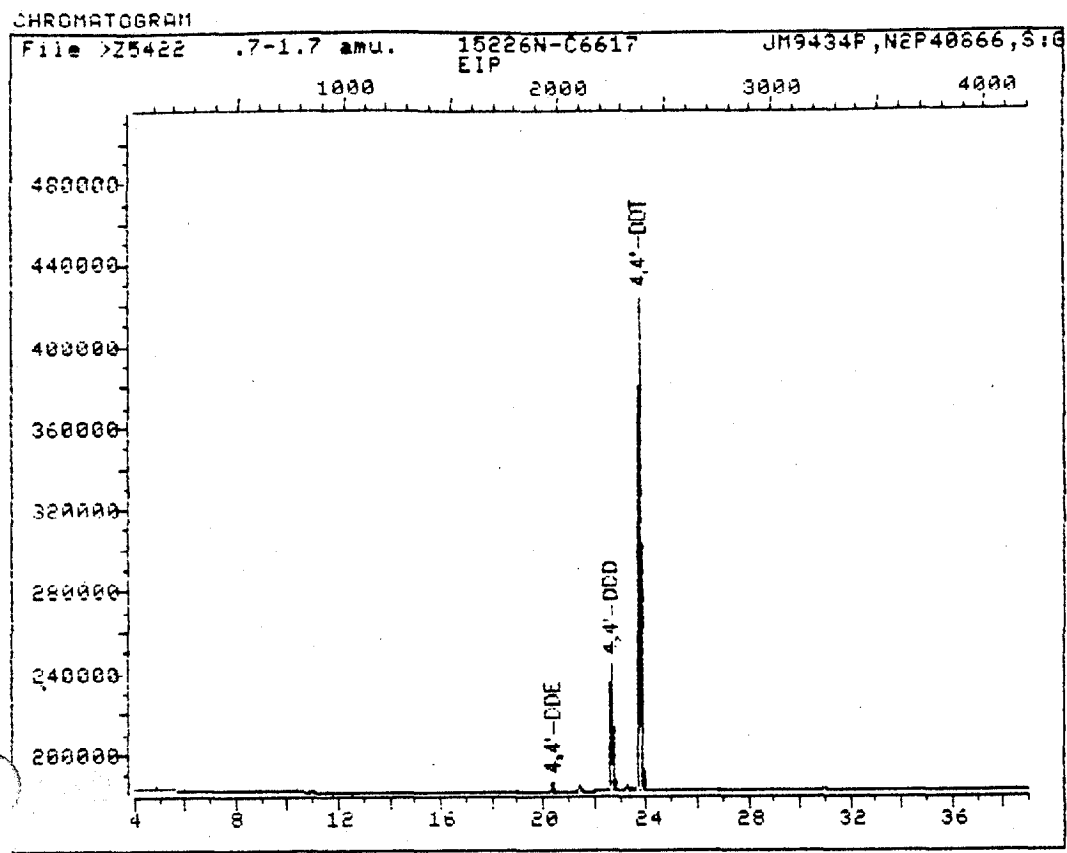
# Column used to flag internal standard area values with an asterisk.  
\* Values outside of QC limits.

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: ASC Contract: NLRSA C6617  
 Lab Code: — Case No.: — SAS No.: — SDG No.: C6617 6/23/94  
 Matrix: (soil/water) soil Lab Sample ID: JM9434  
 Sample wt/vol: 30.2 (g/mL) g Lab File ID: ^Z5422  
 % Moisture: 22.1 decanted: (Y/N) N! Date Received: 6/23/94  
 Extraction: (SepF/Cont/Sonc) SN Date Extracted: 6/24/94  
 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/5/94  
 Injection Volume: 1.0 (uL) Dilution Factor: 200000  
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/Kg</u>	<u>Q</u>
319-84-6	alpha-BHC	<u>2130000</u>	<u>U</u>
319-85-7	beta-BHC	↓	↓
319-36-8	delta-BHC	↓	↓
58-89-9	gamma-BHC (Lindane)	↓	↓
76-44-8	Heptachlor	↓	↓
309-00-2	Aldrin	↓	↓
1024-57-3	Heptachlor epoxide	↓	↓
959-98-8	Endosulfan I	↓	↓
60-57-1	Dieldrin	<u>4250000</u>	↓
72-55-9	4,4'-DDE	↓	↓
72-20-8	Endrin	↓	↓
33213-65-9	Endosulfan II	↓	↓
72-54-8	4,4'-DDD	<u>15600000</u>	↓
1031-07-8	Endosulfan sulfate	<u>4250000</u>	<u>U</u>
50-29-3	4,4'-DDT	<u>506000</u>	<u>B</u>
72-43-5	Methoxychlor	<u>21300000</u>	<u>U</u>
53494-70-5	Endrin ketone	<u>4250000</u>	↓
7421-36-3	Endrin aldehyde	↓	↓
5103-71-9	alpha-Chlordane	<u>21300000</u>	↓
5103-74-2	gamma-Chlordane	↓	↓
8001-35-2	Toxaphene <u>De 7/1/94</u>	<u>213000000</u> <u>42500000</u>	↓
12674-11-2	Aroclor-1016	<u>42500000</u>	↓
11104-28-2	Aroclor-1221	<u>85000000</u>	↓
11141-16-5	Aroclor-1232	<u>42500000</u>	↓
53469-21-9	Aroclor-1242	↓	↓
12672-29-6	Aroclor-1248	↓	↓
11097-69-1	Aroclor-1254	↓	↓
11096-82-5	Aroclor-1260	↓	↓



C6617

Data File: >Z5422::05 Quant Output File: ^Z5422::05  
Name: 15226N-C6617 Instrument ID: Z  
Misc: JM9434P,N2P40866,S:G5,23.52,50:200000

Id File: IZPMRG::05  
Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL  
Last Calibration: 940702 09:21 Last Qcal Time: 940702 01:32

Operator ID: USER2  
Quant Time : 940705 22:57  
Injected at: 940705 22:17

QUANT REPORT

Operator ID: USER2  
 Output File: ^Z5422::D5  
 Data File: >Z5422::D5  
 Name: 19226N-C6617  
 Misc: JM9434P,N2P40866,S:G5,23.52,50:200000

Quant Rev: 7      Quant Time: 940705 22:57  
 Injected at: 940705 22:17  
 Dilution Factor: 1.00000  
 Instrument ID: Z

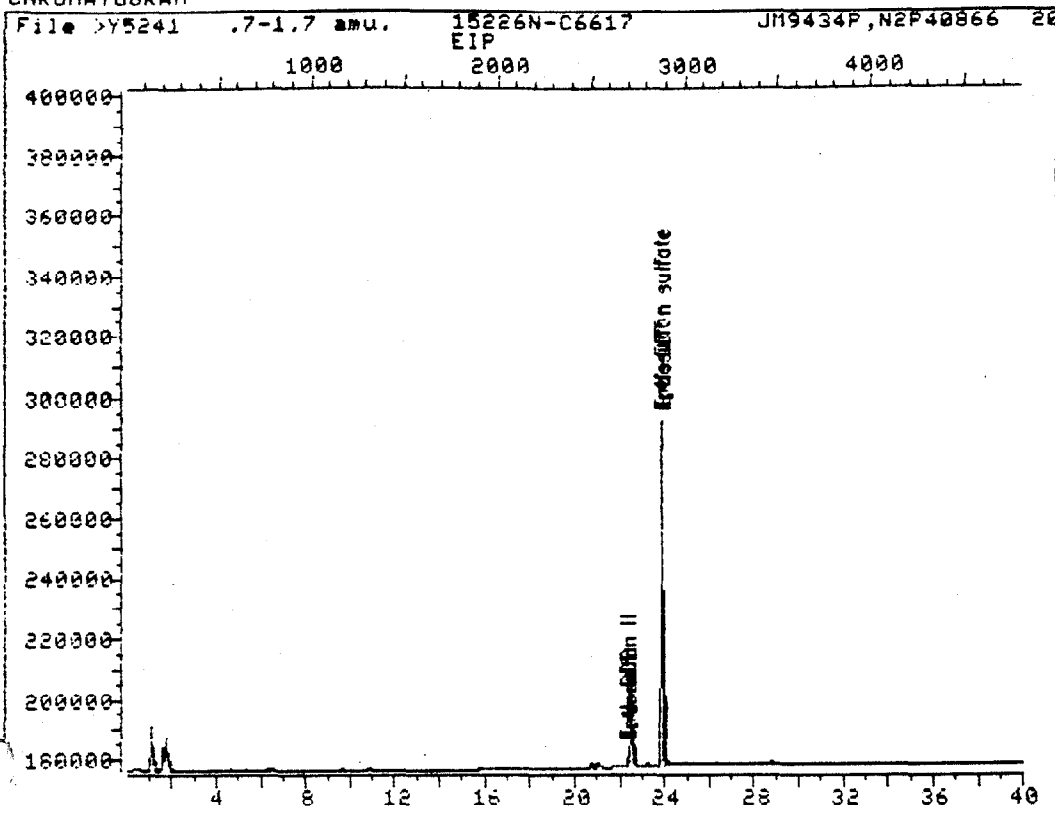
ID File: IZPMRG::D5  
 Title: PESTICIDES DB-608 BY GC 82 (FRONT) MIX A NEESA 1.00UL  
 Last Calibration: 940702 09:21      Last Qual Time: 940702 01:32

Compound	R.T.	Scan#	Area	Conc	Units	q
8) #4,4'-DDD	22.59	2232	332320	.0366	ug/ml	100 ✓
9) #4,4'-DDT	23.76	2372	1106987	.119	ug/ml	100 ✓
<del>28) #4,4'-DDE</del>	<del>20.33</del>	<del>1961</del>	<del>20736</del>	<del>.00165</del>	<del>ug/ml</del>	<del>100</del>

# Compound uses ESTD

ak  
7/6/14

## CHROMATOGRAM



C6617

Data File: >Y5241::D5  
Name: 15226N-C6617  
Misc: JM9434P,N2P40866 200000X

Quant Output File: ^Y5241::D5  
Instrument ID: Y

Id File: IYPMRG::D5  
Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
Last Calibration: 940702 11:25 Last Qcal Time: 940702 02:18

Operator ID: USER2  
Quant Time : 940705 23:44  
Injected at: 940705 23:02

QUANT REPORT

Operator ID: USER2  
Output File: >Y5241::D5  
Data File: >Y5241::D5  
Name: 15226N-D6617  
Misc: JM9434P,N2P40866 200000X

Quant ReV: 7      Quant Time: 940705 23:44  
                  Injected at: 940705 23:02  
Dilution Factor: 1.00000  
Instrument ID: Y

ID File: IYPMRG::D5  
Title: PESTICIDES 06-5 BY GC 82 (REAR) MIX A NEESA 1.00UL  
Last Calibration: 940702 11:25      Last Qcal Time: 940702 02:18

Compound	R.T.	Scan#	Area	Conc	Units	q
8) #4,4'-DDD	22.39	2687	23711	.00568	ug/ml	100 ✓
9) #4,4'-DDT	23.89	2867	554720	.114	ug/ml	100 ✓
<del>22) #Endosulfan II</del>	<del>22.39</del>	<del>2687</del>	<del>23711</del>	<del>.00365</del>	<del>ug/ml</del>	<del>100</del>
31) #Endosulfan sulfate	23.89	2867	554720	.0940	ug/ml	100

# Compound uses ESTD

QC  
1/6/14



1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0457**

C 4418

Lab Name: ASC Contract: NEPSA

Lab Code: — Case No.: — SAS No.: — SDG No. NA C4417

Matrix: (soil/water) SOIL Lab Sample ID: JM9435

Sample wt/vol: 5.25 (g/mL) g Lab File ID: 175412

% Moisture: 57.5 decanted: (Y/N) — Date Received: 6/23/94

Extraction: (SepF/Cont/Sonc) SOX Date Extracted: 6/26/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/5/94

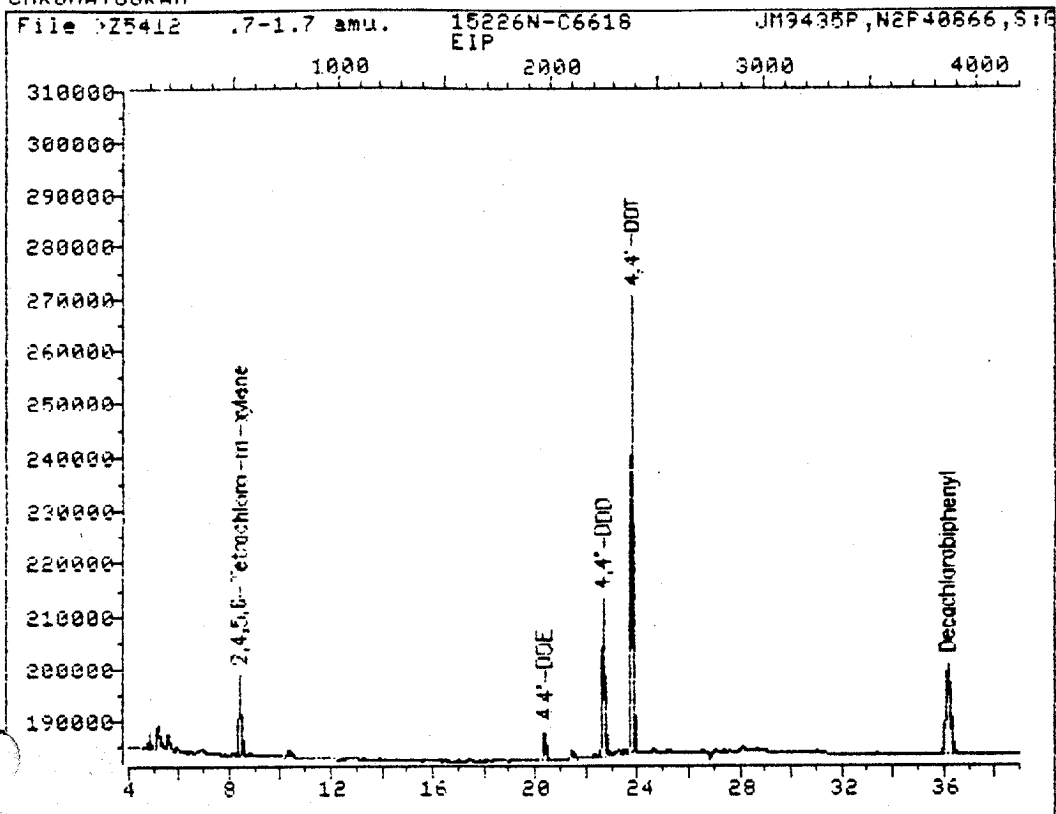
Injection Volume: 1.0 (uL) Dilution Factor: 20

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND	CONCENTRATION	Q
319-84-6	alpha-BHC	224	u
319-85-7	beta-BHC	↓	↓
319-36-8	delta-BHC	↓	↓
58-89-9	gamma-BHC (Lindane)	↓	↓
76-44-8	Heptachlor	↓	↓
309-00-2	Aldrin	↓	↓
1024-57-3	Heptachlor epoxide	↓	↓
959-98-8	Endosulfan I	↓	↓
60-57-1	Dieldrin	448	↓
72-55-9	4,4'-DDE	↓	↓
72-20-8	Endrin	↓	↓
33213-65-9	Endosulfan II	↓	↓
72-54-8	4,4'-DDD	↓	↓
1031-07-8	Endosulfan sulfate	↓	↓
50-29-3	4,4'-DDT	2030	B
72-43-5	Methoxychlor	2240	u
53494-70-5	Endrin ketone	448	↓
7421-36-3	Endrin aldehyde	↓	↓
5103-71-9	alpha-Chlordane	224	↓
5103-74-2	gamma-Chlordane	↓	↓
8001-35-2	Toxaphene	22400	↓
12674-11-2	Aroclor-1016	4480	↓
11104-28-2	Aroclor-1221	8970	↓
11141-16-5	Aroclor-1232	4480	↓
53469-21-9	Aroclor-1242	↓	↓
12672-29-6	Aroclor-1248	↓	↓
11097-69-1	Aroclor-1254	↓	↓
11096-82-5	Aroclor-1260	↓	↓

## CHROMATOGRAM



Data File: &gt;Z5412::D5

Quant Output File: ^Z5412::D5

Name: 15226N-C6618

Instrument ID: Z

Misc: JM9435P,N2P40866,S:G5,2.23,5:20,

Id File: IZPMRG::D5

Title: PESTICIDES 08-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL

Last Calibration: 940702 09:21

Last Qcal Time: 940702 01:32

Operator ID: USER2

Quant Time : 940705 14:44

Injected at: 940705 14:04

QUANT REPORT

Operator ID: USER2  
 Output File: ^25412::D5  
 Data File: >25412::D5  
 Name: 15226N-C6618  
 Misc: JM9435P,N2P40866,S:G5,2.23,5:20,

Quant Rev: 7      Quant Time: 940705 14:44  
 Injected at: 940705 14:04  
 Dilution Factor: 1.00000  
 Instrument ID: Z

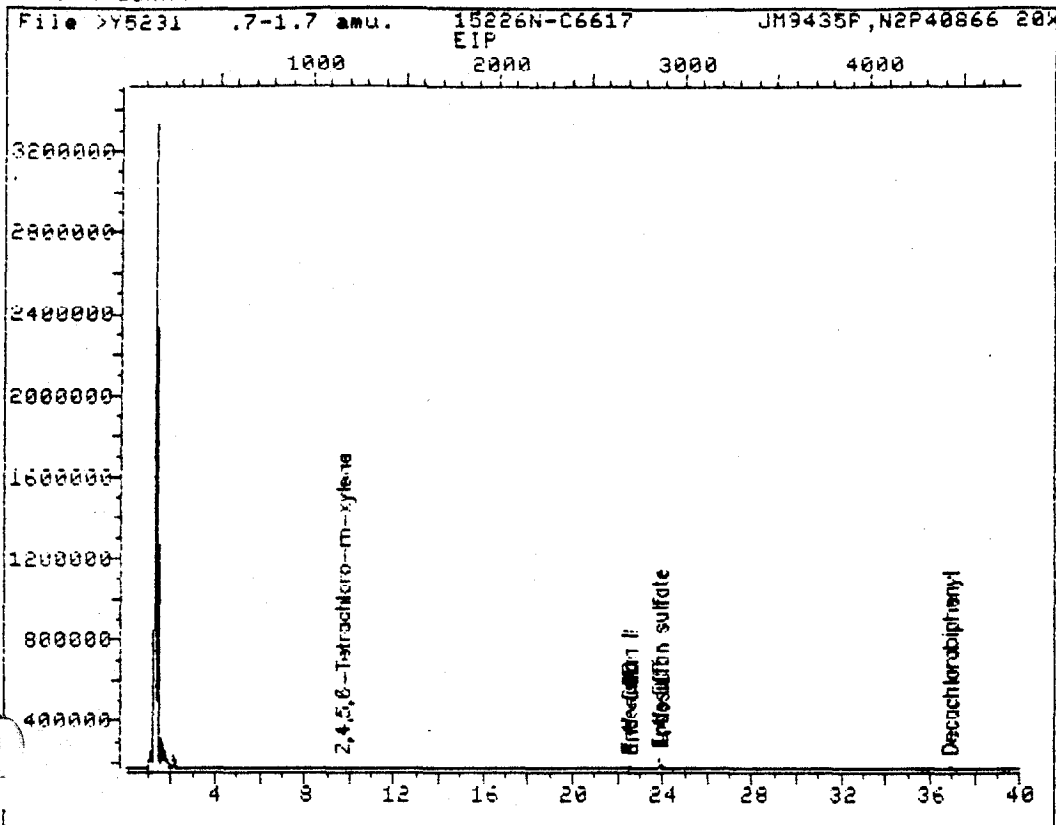
ID File: IZPMRG::D5  
 Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL  
 Last Calibration: 940702 09:21      Last Qcal Time: 940702 01:32

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #2,4,5,6-Tetrachloro-m-xylene	8.37	525	80543	.00487	ug/ml	100 ✓
8) #4,4'-DDD	22.61	2234	176895	<del>.0175</del>	<del>ug/ml</del>	<del>100</del>
9) #4,4'-DDT	23.77	2373	420545	.0453	ug/ml	100 ✓
11) #Decachlorobiphenyl	36.11	3854	207979	.00878	ug/ml	100 ✓
28) #4,4'-DDE	20.33	1961	29696	<del>.00237</del>	<del>ug/ml</del>	<del>100</del>

Compound uses ESTD

ac  
7/6/94

CHROMATOGRAM



C6618

Data File: >Y5231::D5  
 Name: 15226N-C6617  
 Misc: JM9435P,N2P40866 20X

Quant Output File: ^Y5231::D5  
 Instrument ID: Y

Id File: IYPMRG::D5  
 Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
 Last Calibration: 940702 11:25 Last Qual Time: 940702 02:18

Operator ID: USER2  
 Quant Time : 940705 15:31  
 Injected at: 940705 14:49

QUANT REPORT

Operator ID: USER2  
Output File: >Y5231::05  
Data File: >Y5231::05  
Name: 15226N-C6617  
Misc: JM9435P,N2P40866 20X

Quant Rev: 7      Quant Time: 940705 15:31  
                  Injected at: 940705 14:49  
Dilution Factor: 1.00000  
Instrument ID: Y

ID File: IYPMRG::05

Title: PESTICIDES 06-5 BY GC B2 (REAR) MIX A NEESA 1.00UL

Last Calibration: 940702 11:25

Last Qual Time: 940702 02:18

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #2,4,5,6-Tetrachloro-m-xylene	9.71	1165	36256	.00535	ug/ml	100 ✓
<del>8) #4,4'-DDD</del>	22.53	2703	71936	<del>.0172</del>	<del>ug/ml</del>	<del>100</del>
9) #4,4'-DDT	23.90	2868	213728	.0440	ug/ml	100 ✓
11) #Decachlorobiphenyl	36.88	4425	96552	.00898	ug/ml	100 ✓
<del>29) #Endosulfan II</del>	22.53	2703	71936	<del>.0111</del>	<del>ug/ml</del>	<del>100</del>
<del>31) #Endosulfan sulfate</del>	23.90	2868	213728	<del>.0362</del>	<del>ug/ml</del>	<del>100</del>

Compound uses ESTD

AK  
7/6/94

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0462**

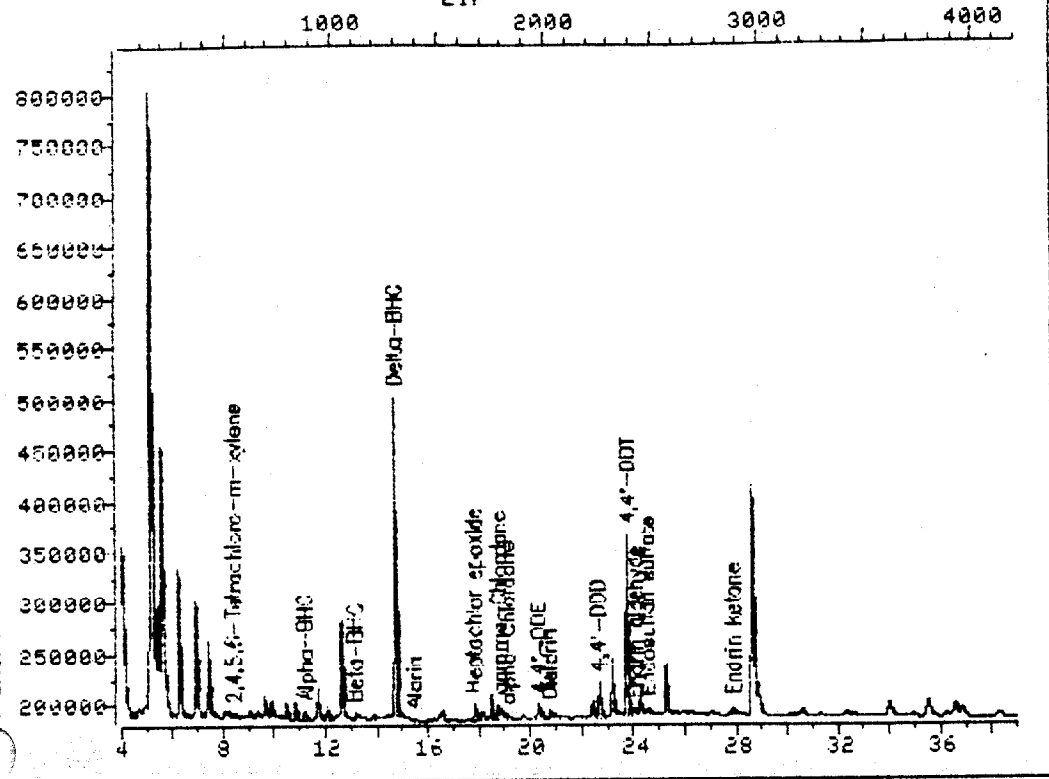
Lab Name: ASC Contract: NELSA C6619  
 Lab Code:     Case No.:     SAS No.:     SDG No.: N/A C6617  
 Matrix: (soil/water) soil Lab Sample ID: JM9436  
 Sample wt/vol: 30.2 (g/mL) g Lab File ID: ^ Z-5346  
 % Moisture: 35.7 decanted: (Y/N) N Date Received: 6/23/94  
 Extraction: (SepF/Cont/Sonc) SOX Date Extracted: 6/26/94  
 Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/1/94  
 Injection Volume: 1.0 (uL) Dilution Factor: 500  
 GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	Q
319-84-6	alpha-BHC	1290	N
319-85-7	beta-BHC	↓	↓
319-36-8	delta-BHC	↓	↓
58-89-9	gamma-BHC (Lindane)	↓	↓
76-44-8	Heptachlor	↓	↓
309-00-2	Aldrin	↓	↓
1024-57-3	Heptachlor epoxide	↓	↓
959-98-8	Endosulfan I	↓	↓
60-57-1	Dieldrin	2580	↓
72-55-9	4,4'-DDE	↓	↓
72-20-8	Endrin	↓	↓
33213-65-9	Endosulfan II	↓	↓
72-54-8	4,4'-DDD	↓	↓
1031-07-8	Endosulfan sulfate	↓	↓
50-29-3	4,4'-DDT	21000	B
72-43-5	Methoxychlor	12900	U
53494-70-5	Endrin ketone	2580	↓
7421-36-3	Endrin aldehyde	↓	↓
5103-71-9	alpha-Chlordane	1290	↓
5103-74-2	gamma-Chlordane	↓	↓
8001-35-2	Toxaphene	129000	↓
12674-11-2	Aroclor-1016	25800	↓
11104-28-2	Aroclor-1221	57500	↓
11141-16-5	Aroclor-1232	25800	↓
53469-21-9	Aroclor-1242	↓	↓
12672-29-6	Aroclor-1248	↓	↓
11097-69-1	Aroclor-1254	↓	↓
11096-82-5	Aroclor-1260	↓	↓

CHROMATOGRAM

File >Z5346 .7-1.7 amu. 15226N-C6619 JM9436P,N2P40866,S:18  
EIP



C6619

Data File: >Z5346::05

Quant Output File: ^Z5346::05

Name: 15226N-C6619

Instrument ID: Z

Misc: JM9436P,N2P40866,S:G5,19.41,10:500,

Id File: IZPMRG::05

Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL

Last Calibration: 940627 10:22

Last Qcal Time: 940624 22:59

Operator ID: USER2

Quant Time : 940701 03:09

Injected at: 940701 02:28

## QUANT REPORT

Page 1

Operator ID: USER2                      Quant Rev: 7                      Quant Time: 940701 03:09  
 Output File: ^25346::D5                      Injected at: 940701 02:28  
 Data File: >25346::D5                      Dilution Factor: 1.00000  
 Name: 15226N-C6619                      Instrument ID: Z  
 Misc: JM9436P,N2P40866,S:G5,19.41,10:500,

ID File: IZPMRG::D5  
 Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL  
 Last Calibration: 940627 10:22                      Last Qual Time: 940624 22:59

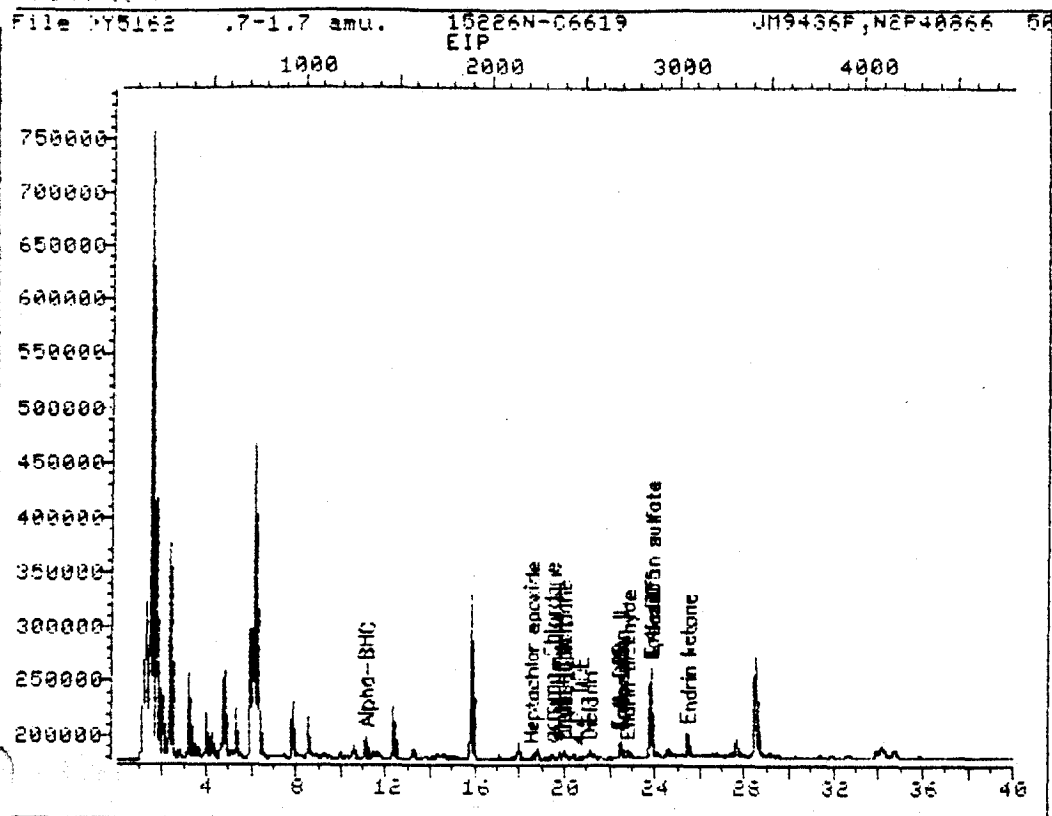
Compound	R.T.	Scan#	Area	Conc	Units	q
<del>1</del> #2,4,5,6-Tetrachloro-m-xylene	8.39	528	22592	<del>.00126</del>	ug/ml	100
<del>2</del> #Alpha-BHC	11.19	864	51583	<del>.00388</del>	ug/ml	100
<del>6</del> #Dieldrin	20.72	2008	69503	<del>.00455</del>	ug/ml	100
<del>4</del> #4,4'-DDD	22.61	2234	210271	<del>.0210</del>	ug/ml	100
9) #4,4'-DDT	23.78	2374	810531	.0814	ug/ml	100 ✓
<del>7</del> #Beta-BHC	13.13	1097	35104	<del>.00351</del>	ug/ml	100
<del>7</del> #Delta-BHC	14.72	1287	1516649	<del>.138</del>	ug/ml	100
<del>1</del> #Aldrin	15.47	1377	29695	<del>.00197</del>	ug/ml	100
<del>1</del> #Heptachlor epoxide	17.80	1657	110335	<del>.00580</del>	ug/ml	100
<del>1</del> #gamma-Chlordane	18.74	1770	79519	<del>.00409</del>	ug/ml	100
<del>2</del> #alpha-Chlordane	19.10	1813	31839	<del>.00160</del>	ug/ml	100
<del>2</del> #4,4'-DDE	20.30	1957	80883	<del>.00597</del>	ug/ml	100
<del>3</del> #Endrin aldehyde	24.07	2409	29184	<del>.00259</del>	ug/ml	100
<del>3</del> #Endosulfan sulfate	24.55	2467	43032	<del>.00359</del>	ug/ml	100
<del>3</del> #Endrin ketone	27.88	2866	52544	<del>.00390</del>	ug/ml	100

# Compound uses ESTD

QC  
 ~10/19/94



## CHROMATOGRAM



*Chloro AT*  
*Cle619*

Data File: >Y5162::D5  
Name: 15226N-C6619  
Misc: JM9436P,N2P40866 500X

Quant Output File: ^Y5162::D5  
Instrument ID: Y

Id File: IYPMRG::D5  
Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
Last Calibration: 940627 10:17 Last Qcal Time: 940625 00:30

Operator ID: USER2  
Quant Time : 940701 03:56  
Injected at: 940701 03:13

QUANT REPORT

Operator ID: USER2  
Output File: >Y5162::D5  
Data File: >Y5162::D5  
Name: 15226N-C6619  
Misc: JM9436P,N2P40866 500X

Quant Rev: 7 Quant Time: 940701 03:56  
Injected at: 940701 03:13  
Dilution Factor: 1.00000  
Instrument ID: Y

ID File: IYPMRG::D5  
Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
Last Calibration: 940627 10:17 Last Qcal Time: 940625 00:30

Compound	R.T.	Scan#	Area	Conc	Units	q
<del>2</del> #Alpha-BHC	11.12	1334	114048	<del>.0280</del>	ug/ml	100
<del>5</del> #Endosulfan I	19.93	2392	31992	<del>.00466</del>	ug/ml	100
<del>6</del> #Dieldrin	21.12	2534	32954	<del>.00491</del>	ug/ml	100
<del>8</del> #4,4'-DDD	22.48	2698	76927	<del>.0181</del>	ug/ml	100
<del>9</del> #4,4'-DDT	23.85	2862	484365	<del>.0984</del>	ug/ml	100✓
<del>25</del> #Heptachlor epoxide	18.54	2225	25408	<del>.00320</del>	ug/ml	100
<del>26</del> #gamma-Chlordane	19.42	2330	36160	<del>.00430</del>	ug/ml	100
<del>27</del> #alpha-Chlordane	19.93	2392	31992	<del>.00370</del>	ug/ml	100
<del>31</del> #4,4'-DDE	20.68	2482	23487	<del>.00391</del>	ug/ml	100
<del>32</del> #Endosulfan II	22.48	2698	76927	<del>.0115</del>	ug/ml	100
<del>30</del> #Endrin aldehyde	22.81	2737	40160	<del>.00754</del>	ug/ml	100
<del>31</del> #Endosulfan sulfate	23.85	2862	484365	<del>.0919</del>	ug/ml	100
<del>32</del> #Endrin ketone	25.47	3057	146951	<del>.0222</del>	ug/ml	100

# Compound uses ESTD

ak  
7/6/84

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0467**

Lab Name: ASC Contract: NESEA C6620

Lab Code: — Case No.: — SAS No.: — SDG No.: NA C6617A

Matrix: (soil/water) soil Lab Sample ID: JM9437

Sample wt/vol: 30.0 (g/mL) n Lab File ID: 75413

% Moisture: 60.7 decanted: (Y/N) N Date Received: 6/23/94

Extraction: (SepF/Cont/Sonc) SON Date Extracted: 7/2-6/26/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/5/94

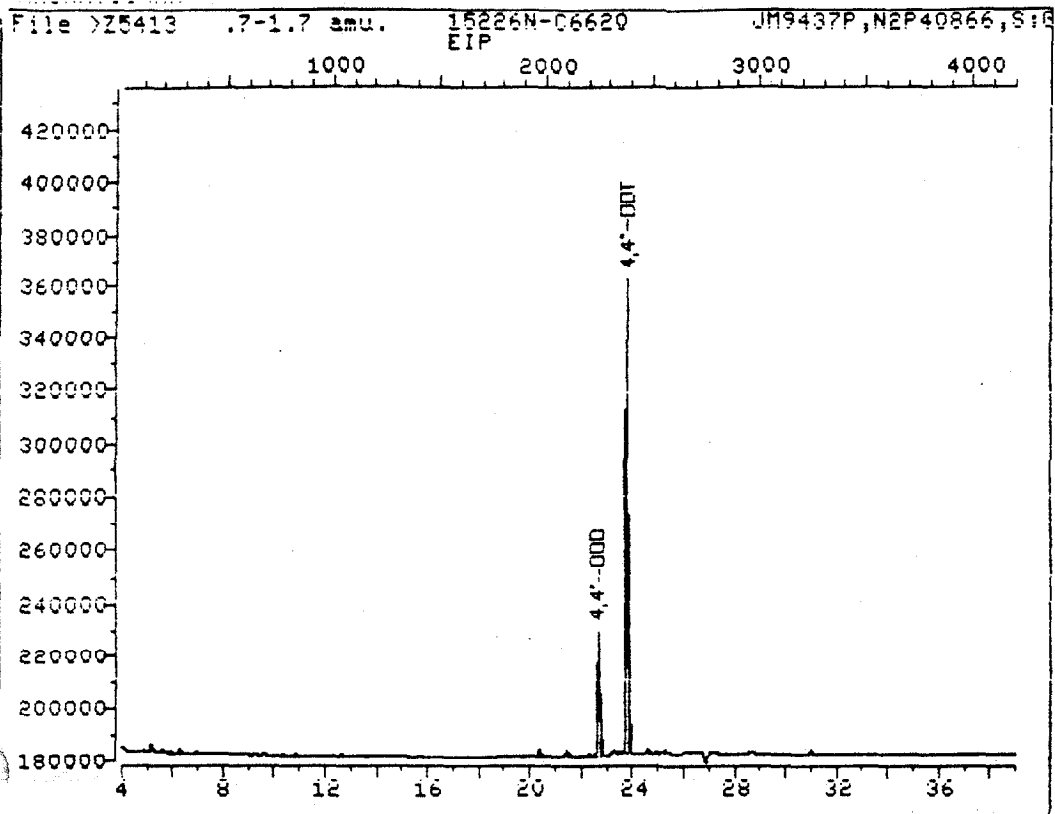
Injection Volume: 1.0 (uL) Dilution Factor: 50000

GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

CONCENTRATION UNITS:

CAS NO.	COMPOUND	(ug/L or ug/Kg) <u>ug/Kg</u>	Q
319-84-6	alpha-BHC	106000	u
319-85-7	beta-BHC		
319-36-8	delta-BHC		
58-89-9	gamma-BHC (Lindane)		
76-44-8	Heptachlor		
309-00-2	Aldrin		
1024-57-3	Heptachlor epoxide		
959-98-8	Endosulfan I		
60-57-1	Dieldrin	212000	
72-55-9	4,4'-DDE		
72-20-8	Endrin		
33213-65-9	Endosulfan II		
72-54-8	4,4'-DDD		
1031-07-8	Endosulfan sulfate		
50-29-3	4,4'-DDT	1940000	B
72-43-5	Methoxychlor	1060000	u
53494-70-5	Endrin ketone	212000	
7421-36-3	Endrin aldehyde		
5103-71-9	alpha-Chlordane	106000	
5103-74-2	gamma-Chlordane		
8001-35-2	Toxaphene	1060000	
12674-11-2	Aroclor-1016	212000	
11104-28-2	Aroclor-1221	424000	
11141-16-5	Aroclor-1232	212000	
53469-21-9	Aroclor-1242		
12672-29-6	Aroclor-1248		
11097-69-1	Aroclor-1254		
11096-82-5	Aroclor-1260		

## CHROMATOGRAM



C6620

Data File: &gt;Z5413::D5

Quant Output File: ^Z5413::D5

Name: 15226N-C6620

Instrument ID: Z

Misc: JM9437P,N2P40866,S:G5,11.79,5:50000

Id File: IZPMRG::D5

Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL

Last Calibration: 940702 09:21

Last Qcal Time: 940702 01:32

Operator ID: USER2

Quant Time : 940705 15:30

Injected at: 940705 14:49

QUANT REPORT

Operator ID: USER2                      Quant Rev: 7            Quant Time: 940705 15:30  
 Output File: ^Z5413::D5                      Injected at: 940705 14:49  
 Data File: >Z5413::D5                      Dilution Factor: 1.00000  
 Name: 15226N-C6620                      Instrument ID: Z  
 Misc: JM9437P,N2P40866,S:G5,11.79,5:50000

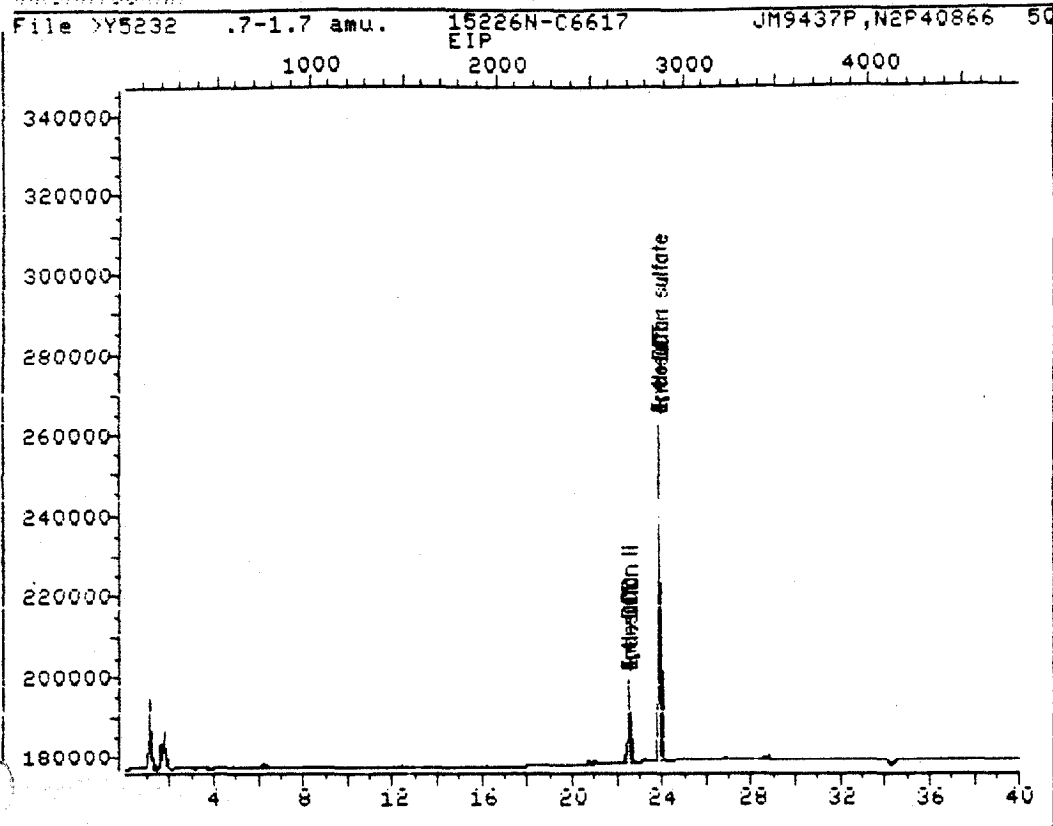
ID File: IZPMRG::D5  
 Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL  
 Last Calibration: 940702 09:21                      Last Qcal Time: 940702 01:32

Compound	R.T.	Scan#	Area	Conc	Units	q
<del>8) #4,4'-DDD</del>	22.60	2233	257472	<del>.0283</del>	<del>ug/ml</del>	100
9) #4,4'-DDT	23.77	2373	847528	.0913	ug/ml	100 ✓

# Compound uses ESTD

ak  
7/6/99

CHROMATOGRAM



Data File: >Y5232::D5  
 Name: 15226N-~~66617~~ 06620  
 Misc: JM9437P,N2P40866 50000X

Quant Output File: ^Y5232::D5  
 Instrument ID: Y

Id File: IYPMRG::D5  
 Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
 Last Calibration: 940702 11:25 Last Qcal Time: 940702 02:18

Operator ID: USER2  
 Quant Time : 940705 16:54  
 Injected at: 940705 16:12

## QUANT REPORT

Page 1

Operator ID: USER2  
 Output File: >Y5232::D5  
 Data File: >Y5232::D5  
 Name: 15226N-~~6617~~ Cow NT  
 Misc: JM9437P,N2P40866 50000X

Quant Rev: 7      Quant Time: 940705 16:54  
 Injected at: 940705 16:12  
 Dilution Factor: 1.00000  
 Instrument ID: Y

ID File: IYPMRG::D5

Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL

Last Calibration: 940702 11:25

Last Qcal Time: 940702 02:18

Compound	R.T.	Scan#	Area	Conc	Units	q
<del>8)</del> #4,4'-DDD	22.53	2703	108479	<del>.0260</del>	<del>ug/ml</del>	<del>100</del>
9) #4,4'-DDT	23.89	2867	421089	.0866	ug/ml	100 ✓
<del>29)</del> #Endosulfan II	22.53	2703	108479	<del>.0167</del>	<del>ug/ml</del>	<del>100</del>
31) #Endosulfan sulfate	23.89	2867	421089	.0713	ug/ml	100

# Compound uses ESTD

OK  
7/6/94

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0472**

Lab Name: ASC Contract: NEESA C16121

Lab Code:     Case No.:     SAS No.:     SDG No.: C16117

Matrix: (soil/water) organic Lab Sample ID: JM7438

Sample wt/vol: 1.02 (g/mL) g Lab File ID: 25416

% Moisture: NA decanted: (Y/N) N Date Received: 6/23/94

Extraction: (SepF/Cont/Sonc) NA Date Extracted: 6/30/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 7/5/94

Injection Volume: 1.0 (uL) Dilution Factor: 25

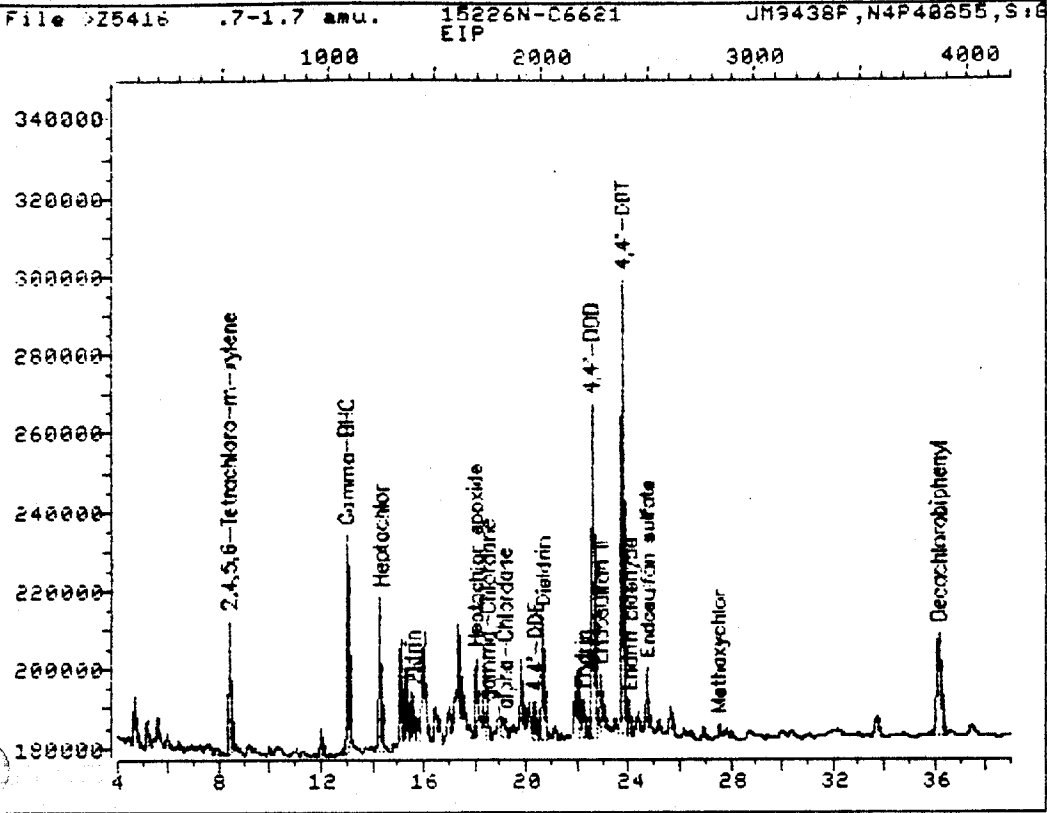
GPC Cleanup: (Y/N) N pH: NA Sulfur Cleanup: (Y/N) N

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/Kg</u>	g
319-84-6	alpha-BHC	613	u
319-85-7	beta-BHC	↓	↓
319-36-8	delta-BHC	↓	↓
58-89-9	gamma-BHC (Lindane)	↓ 613	↓
76-44-8	Heptachlor	OLM694 ↓ 1480	u
309-00-2	Aldrin	708	
1024-57-3	Heptachlor epoxide	931	
959-98-8	Endosulfan I	613	u
60-57-1	Dieldrin	1230	
72-55-9	4,4'-DDE	↓	↓
72-20-8	Endrin	↓	↓
33213-65-9	Endosulfan II	↓	↓
72-54-8	4,4'-DDD	↓	↓
1031-07-8	Endosulfan sulfate	↓	↓
50-29-3	4,4'-DDT	7500	B
72-43-5	Methoxychlor	6130	u
53494-70-5	Endrin ketone	1230	
7421-36-3	Endrin aldehyde	↓	
5103-71-9	alpha-Chlordane	613	
5103-74-2	gamma-Chlordane	↓	
8001-35-2	Toxaphene	61300	
12674-11-2	Aroclor-1016	12300	
11104-28-2	Aroclor-1221	24500	
11141-16-5	Aroclor-1232	12300	
53469-21-9	Aroclor-1242	↓	
12672-29-6	Aroclor-1248	↓	
11097-69-1	Aroclor-1254	↓	
11096-82-5	Aroclor-1260	↓	↓



CHROMATOGRAM



C6621

Data File: >25416::05                      Quant Output File: ^25416::05  
 Name: 15226N-C6621                      Instrument ID: 2  
 Misc: JM9438P,N4P40855,S:G5,1.02,5:25,

Id File: IZPMRG::05  
 Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL  
 Last Calibration: 940702 09:21              Last Qcal Time: 940702 01:32

Operator ID: USER2  
 Quant Time : 940705 18:24  
 Injected at: 940705 17:43

QUANT REPORT

Operator ID: USER2  
 Output File: >25416::05  
 Data File: >25416::05  
 Name: 15226N-C6621  
 Misc: JM9438P,N4P40855,S:G5,1.02,5:25,

Quant Rev: 7      Quant Time: 940705 18:24  
 Injected at: 940705 17:43  
 Dilution Factor: 1.00000  
 Instrument ID: Z

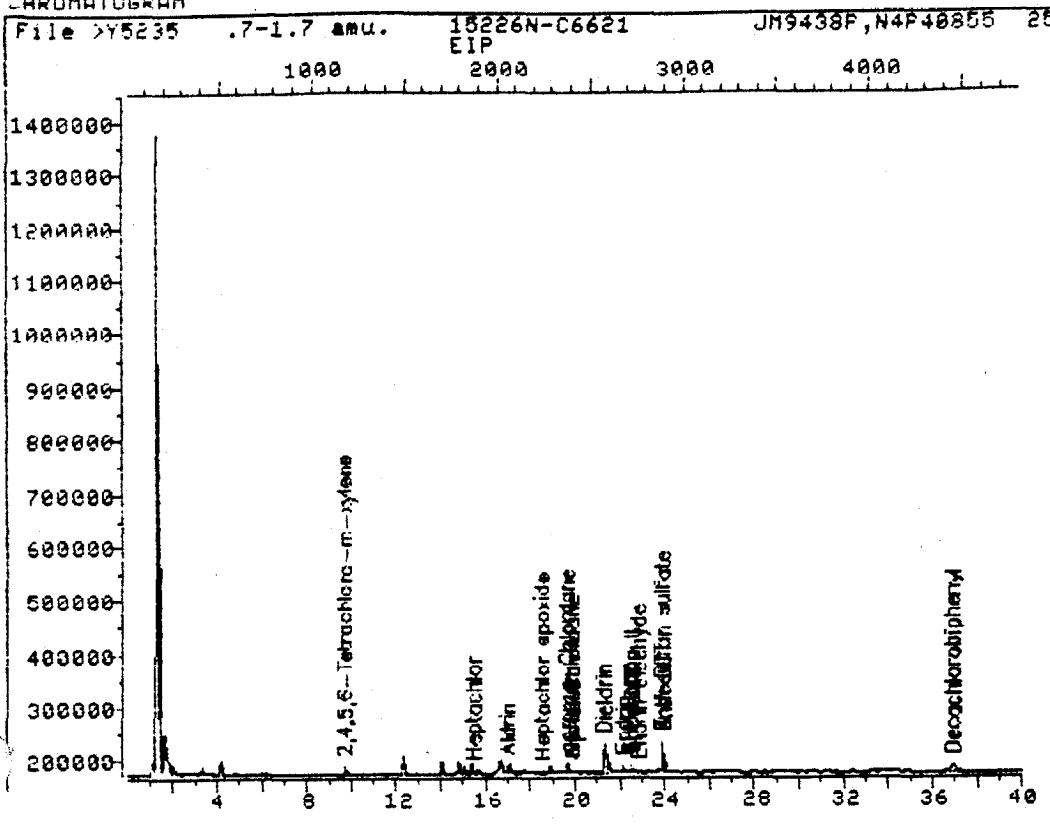
ID File: IZPMRG::05  
 Title: PESTICIDES DR-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL  
 Last Calibration: 940702 09:21      Last Qual Time: 940702 01:32

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #2,4,5,6-Tetrachloro-m-xylene	8.37	✓ 525	187327	.0113	ug/ml	100 ✓
<del>3) #Gamma-BHC</del>	12.98	1079	290015	<del>.0212</del>	<del>ug/ml</del>	100
<del>4) #Heptachlor</del>	14.29	1236	220800	<del>.0121</del>	<del>ug/ml</del>	100
<del>6) #Dieldrin</del>	20.63	1997	200132	<del>.0143</del>	<del>ug/ml</del>	100
<del>7) #Endrin</del>	22.20	2185	70816	<del>.00632</del>	<del>ug/ml</del>	100
<del>8) #4,4'-DDD</del>	22.53	2224	636165	<del>.0200</del>	<del>ug/ml</del>	100
9) #4,4'-DDT	23.77	2373	570123	.0614	ug/ml	100 ✓
<del>10) #Methoxychlor</del>	27.50	2821	24735	<del>.00367</del>	<del>ug/ml</del>	100
11) #Decachlorobiphenyl	36.10	✓ 3853	304299	.0128	ug/ml	100 ✓
14) #Aldrin	15.57	1389	81056	.00578	ug/ml	100 ✓
25) #Heptachlor epoxide	18.01	1682	135584	.00760	ug/ml	100 ✓
<del>26) #gamma-Chlordane</del>	18.47	1738	45344	<del>.00248</del>	<del>ug/ml</del>	100
<del>27) #alpha-Chlordane</del>	19.14	1818	44128	<del>.00236</del>	<del>ug/ml</del>	100
<del>28) #4,4'-DDE</del>	20.33	1961	51424	<del>.00418</del>	<del>ug/ml</del>	100
<del>29) #Endosulfan II</del>	22.88	2267	95522	<del>.00665</del>	<del>ug/ml</del>	100
<del>30) #Endrin aldehyde</del>	24.02	2403	53568	<del>.00588</del>	<del>ug/ml</del>	100
<del>31) #Endosulfan sulfate</del>	24.70	2485	82688	<del>.00787</del>	<del>ug/ml</del>	100

# Compound uses ESTD

all  
 7/6/99

## CHROMATOGRAM



Data File: >Y5235::D5  
Name: 15226N-C6621  
Misc: JM9438P,N4P40855 25X

Quant Output File: ^Y5235::D5  
Instrument ID: Y

Id File: IYPMRG::D5  
Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
Last Calibration: 940702 11:25 Last Qcal Time: 940702 02:18

Operator ID: USER2  
Quant Time : 940705 19:11  
Injected at: 940705 18:29

## QUANT REPORT

Page 1

Operator ID: USER2  
 Output File: >Y5235::05  
 Data File: >Y5235::05  
 Name: 15226N-C6621  
 Misc: JM9438P,N4P40855 25X

Quant Rev: 7      Quant Time: 940705 19:11  
 Injected at: 940705 18:29  
 Dilution Factor: 1.00000  
 Instrument ID: Y

ID File: IYPMRG::05

Title: PESTICIDES 08-5 BY GC B2 (REAR) MIX A NEESA 1.00UL

Last Calibration: 940702 11:25

Last Qcal Time: 940702 02:18

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #2,4,5,6-Tetrachloro-m-xylene	9.71	1165	57600	.00849	ug/ml	100 ✓
<del>4) #Heptachlor</del>	15.44	1853	22208	<del>.00282</del>	<del>ug/ml</del>	100
<del>5) #Endosulfan I</del>	19.90	2388	23552	<del>.00359</del>	<del>ug/ml</del>	100
<del>6) #Dieldrin</del>	21.29	2555	451169	<del>.0705</del>	<del>ug/ml</del>	100
<del>7) #Endrin</del>	22.14	2657	67615	<del>.0123</del>	<del>ug/ml</del>	100
<del>8) #4,4'-DDD</del>	22.53	2703	65984	<del>.0158</del>	<del>ug/ml</del>	100
9) #4,4'-DDT	23.90	2868	275584	.0567	ug/ml	100 ✓
10) #Decachlorobiphenyl	36.88	4425	155792	.0145	ug/ml	100 ✓
11) #Aldrin	16.99	2039	90623	.0146	ug/ml	100 ✓
15) #Heptachlor epoxide	18.52	2222	30464	.00398	ug/ml	100 ✓
<del>26) #gamma-Chlordane</del>	19.63	2356	76960	<del>.00956</del>	<del>ug/ml</del>	100
<del>27) #alpha-Chlordane</del>	19.90	2388	23552	<del>.00286</del>	<del>ug/ml</del>	100
<del>29) #Endosulfan II</del>	22.53	2703	65984	<del>.0102</del>	<del>ug/ml</del>	100
<del>30) #Endrin aldehyde</del>	22.85	2742	24768	<del>.00460</del>	<del>ug/ml</del>	100
<del>31) #Endosulfan sulfate</del>	23.90	2868	275584	<del>.0467</del>	<del>ug/ml</del>	100

# Compound uses ESTD

ak  
7/6/94

1D  
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO. **0477**

Lab Name: ASC Contract: N/A C6672

Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A <sup>CG67</sup>

Matrix: (soil/water) Water Lab Sample ID: JM9439P

Sample wt/vol: 5 (g/mL) ml Lab File ID: 125350

% Moisture: N/A decanted: (Y/N)      Date Received: 6/23/94

Extraction: (SepF/Cont/Sonc) SepF Date Extracted: 6/27/94

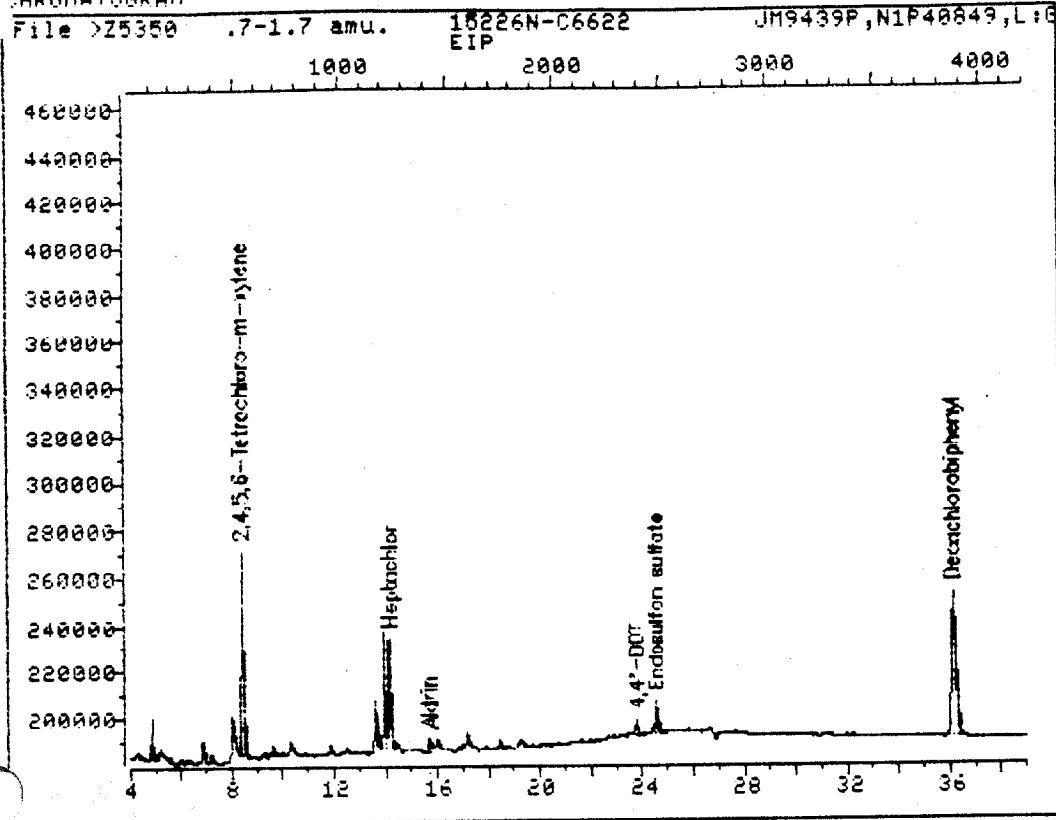
Concentrated Extract Volume: 1000 (uL) Date Analyzed: 7/1/94

Injection Volume: 1.0 (uL) Dilution Factor: 5.0

GPC Cleanup: (Y/N) N pH: 7 Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>ug/L</u>	Q
319-84-6	alpha-BHC	5.00	U
319-85-7	beta-BHC	↓	↓
319-36-8	delta-BHC	↓	↓
58-89-9	gamma-BHC (Lindane)	↓	↓
76-44-8	Heptachlor	↓	↓
309-00-2	Aldrin	↓	↓
1024-57-3	Heptachlor epoxide	↓	↓
959-98-8	Endosulfan I	↓	↓
60-57-1	Dieldrin	10.0	↓
72-55-9	4,4'-DDE	↓	↓
72-20-8	Endrin	↓	↓
33213-65-9	Endosulfan II	↓	↓
72-54-8	4,4'-DDD	↓	↓
1031-07-8	Endosulfan sulfate	↓	↓
50-29-3	4,4'-DDT	3.18	BJ
72-43-5	Methoxychlor	50.0	U
53494-70-5	Endrin ketone	10.0	↓
7421-36-3	Endrin aldehyde	↓	↓
5103-71-9	alpha-Chlordane	5.00	↓
5103-74-2	gamma-Chlordane	↓	↓
8001-35-2	Toxaphene	500	↓
12674-11-2	Aroclor-1016	.100	↓
11104-28-2	Aroclor-1221	.200	↓
11141-16-5	Aroclor-1232	.100	↓
53469-21-9	Aroclor-1242	↓	↓
12672-29-6	Aroclor-1248	↓	↓
11097-69-1	Aroclor-1254	↓	↓
11096-82-5	Aroclor-1260	↓	↓

## CHROMATOGRAM



C6622

Data File: >Z5350::D5  
Name: 15226N-C6622  
Misc: JM9439P,N1P40849,L:G5,5,1:5,

Quant Output File: ^Z5350::D5  
Instrument ID: Z

Id File: IZPMRG::D5  
Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL  
Last Calibration: 940627 10:22 Last Qcal Time: 940624 22:59

Operator ID: USER2  
Quant Time : 940701 06:11  
Injected at: 940701 05:30

## QUANT REPORT

Page 1

Operator ID: USER2  
 Output File: ^Z5350::D5  
 Data File: >Z5350::D5  
 Name: 15226N-C6622  
 Misc: JM9439P,N1P40849,L:G5,5,1:5,

Quant Rev: 7      Quant Time: 940701 06:11  
 Injected at: 940701 05:30  
 Dilution Factor: 1.00000  
 Instrument ID: Z

ID File: IZPMRG::D5

Title: PESTICIDES DB-608 BY GC B2 (FRONT) MIX A NEESA 1.00UL

Last Calibration: 940627 10:22

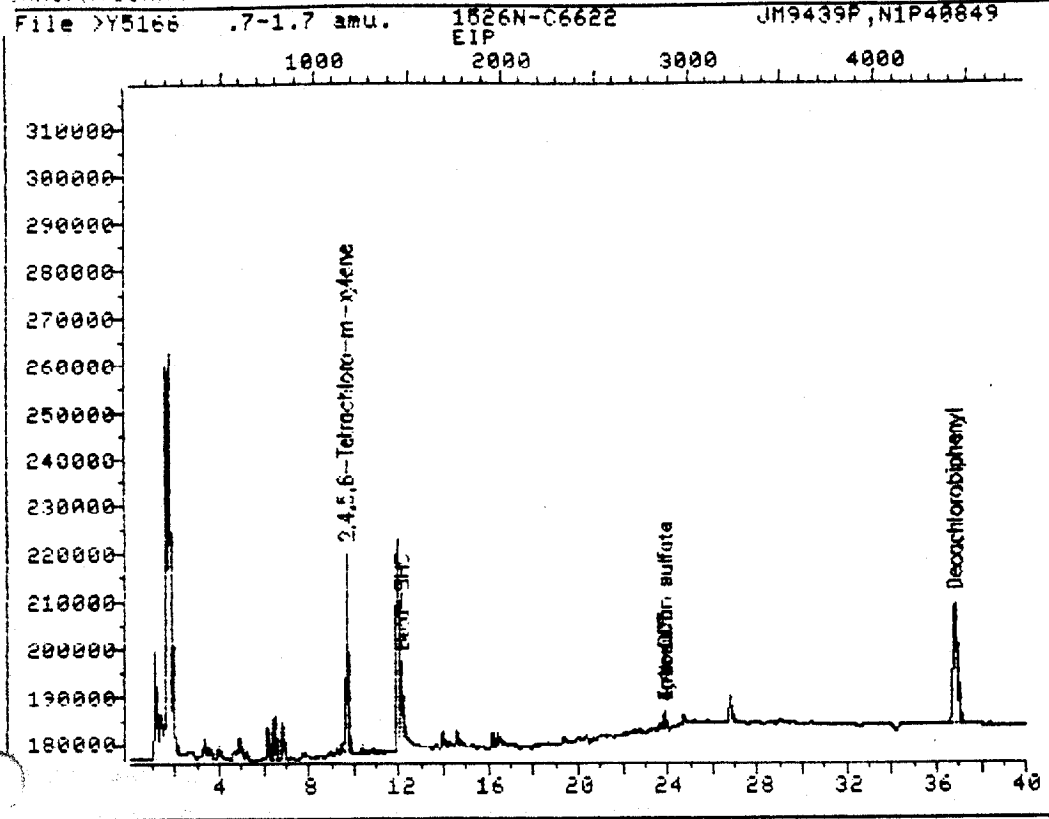
Last Qcal Time: 940624 22:59

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #2,4,5,6-Tetrachloro-m-xylene	8.37	525	407968	.0227	ug/ml	100 ✓
<del>4)</del> #Heptachlor	14.17	1221	274879	<del>.0136</del>	<del>ug/ml</del>	100
9) #4,4'-DDT	23.78	2374	31648	.00318	ug/ml	100 ✓
11) #Decachlorobiphenyl	36.12	3855	751189	.0290	ug/ml	100 ✓
<del>24)</del> #Aldrin	15.67	1401	30463	<del>.00202</del>	<del>ug/ml</del>	100
<del>31)</del> #Endosulfan sulfate	24.55	2467	76319	<del>.00637</del>	<del>ug/ml</del>	100

Compound uses ESTD

all  
 7/19/94

CHROMATOGRAM



Data File: >Y5166::D5  
Name: 1526N-C6622  
Misc: JM9439P,N1P40849

Quant Output File: ^Y5166::D5  
Instrument ID: Y

Id File: IYPMRG::D5  
Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
Last Calibration: 940627 10:17 Last Qcal Time: 940625 00:30

Operator ID: USER2  
Quant Time : 940701 06:58  
Injected at: 940701 06:16



QUANT REPORT

Operator ID: USER2  
Output File: ^Y5166::D5  
Data File: >Y5166::D5  
Name: 1526N-C6622  
Misc: JM9439P,N1P40849

Quant Rev: 7      Quant Time: 940701 06:58  
                  Injected at: 940701 06:16  
Dilution Factor: 1.00000  
Instrument ID: Y

ID File: IYPMRG::D5  
Title: PESTICIDES DB-5 BY GC B2 (REAR) MIX A NEESA 1.00UL  
Last Calibration: 940627 10:17

Last Qual Time: 940625 00:30

Compound	R.T.	Scan#	Area	Conc	Units	q
1) #2,4,5,6-Tetrachloro-m-xylene	9.67	1160	194239	<del>.0272</del>	ug/ml	100 ✓
9) #4,4'-DDT	23.86	2863	23359	<del>.00475</del>	ug/ml	100 ✓
11) #Decachlorobiphenyl	36.78	4413	327225	<del>.0300</del>	ug/ml	100 ✓
22) #Beta-BHC	12.12	1454	100192	.0230	ug/ml	100
<del>31)</del> #Endosulfan sulfate	23.86	2863	23359	.00443	ug/ml	100

# Compound uses ESTD

ak  
7/17/97

2F  
SOIL PESTICIDE SURROGATE RECOVERY

0482

Lab Name: ASC Contract: NEESA  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6617  
 GC Column(1): DB605 ID: 0.53 (mm) GC Column(2): DB5 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	P BLK	55.6*	63.0	93.0	96.7			1
02	PSPK	47.1*	52.0*	95.0	98.7			2
03	C6617	D	D	D	D			0
04	C6618	↓	↓	↓	↓			0
05	C6619	↓	↓	↓	↓			0
06	C6620	↓	↓	↓	↓			0
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY  
QC LIMITS

TCX = Tetrachloro-m-xylene (60-150)  
 DCB = Decachlorobiphenyl (60-150)

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

2E  
WATER PESTICIDE SURROGATE RECOVERY

0483

Lab Name: ASC Contract: NEESA

Lab Code:      Case No.:      SAS No.:      SDG No.: CU617

GC Column(1): DBU6E ID: 53(mm) GC Column(2): DB5 ID: 53(mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK03	97.0	101	92.2	97.2			<del>φ</del>
02	PSPK03	94.9	101	97.0	102			<del>φ</del>
03	CU621	D	D	D	D			φ
04								
05								
06								
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY  
QC LIMITS

TCX = Tetrachloro-m-xylene (60-150)  
DCB = Decachlorobiphenyl (60-150)

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

2E  
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A <sup>A</sup> 6617  
 GC Column(1): DB608 ID: 0.53 (mm) GC Column(2): DB5 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBCK01	63.4	65.6	89.5	95.3			0
02	PSPK01	57.4*	60.7	84.2	89.5			1
03	WW001MS	55.6*	56.7*	86.3	90.6			2
04	WW001MS0	61.6	65.2	93.6	96.5			0
05	WW001	63.2	63.4	91.5	91.8			0
06	G.6.622	50.7*	60.7	84.8	87.7			1
07								
08								
09								
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY  
QC LIMITS

TCX = Tetrachloro-m-xylene (60-150)  
 DCB = Decachlorobiphenyl (60-150)

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

3F  
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NEESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: AA 6617  
 Matrix Spike - EPA Sample No.: 66617

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	<i>see comment</i>				46-127
Heptachlor					35-130
Aldrin					34-132
Dieldrin					31-134
Endrin					42-139
4,4'-DDT					23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
gamma-BHC (Lindane)	<i>see comment</i>				50	46-127
Heptachlor					31	35-130
Aldrin					43	34-132
Dieldrin					38	31-134
Endrin					45	42-139
4,4'-DDT					50	23-134

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD:      out of      outside limits  
 Spike Recovery:      out of      outside limits

COMMENTS: As per level C, due to the dilution of the spiked sample, no matrix spike and duplicate data are required.

3F  
SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: NRESA  
 Lab Code:      Case No.:      SAS No.:      SDG No.: C1617  
 Matrix Spike - EPA Sample No.: C1621

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	<i>See comment</i>				46-127
Heptachlor					35-130
Aldrin					34-132
Dieldrin					31-134
Endrin					42-139
4,4'-DDT					23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
gamma-BHC (Lindane)	<i>See comment</i>				50 46-127
Heptachlor					31 35-130
Aldrin					43 34-132
Dieldrin					38 31-134
Endrin					45 42-139
4,4'-DDT					50 23-134

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD:      out of      outside limits  
 Spike Recovery:      out of      outside limits

COMMENTS: As per level C, due to the delution of the spiked sample, matrix spike and duplicate results are not required.

3E  
WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A  
 Matrix Spike - EPA Sample No.: WW001

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	LI F
gamma-BHC (Lindane)	7.18	ND	5.15	71.7	56
Heptachlor	5.63		3.25	57.7	40
Aldrin	6.81		3.19	46.8	40
Dieldrin	12.6		9.35	74.2	52
Endrin	13.4		10.1	75.4	56
4,4'-DDT	10.2	224	11.2	108	38

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
gamma-BHC (Lindane)	7.18	6.00	83.6	15.2	15	56-100
Heptachlor	5.63	3.82	67.9	16.1	20	40-100
Aldrin	6.81	4.09	60.1	29.6	22	40-100
Dieldrin	12.6	10.6	84.1	12.5	18	52-100
Endrin	13.4	11.5	85.8	13.0	21	56-100
4,4'-DDT	10.2	12.3	121	9.96	27	38-100

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 1 out of 6 outside limits  
 Spike Recovery: 0 out of 12 outside limits

COMMENTS: \_\_\_\_\_

4C  
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO

Lab Name: ASC Contract: NCSA PBLK02  
 Lab Code: — Case No.: — SAS No.: — SDG No.: AA-CU017  
 Lab Sample ID: N2P40866P Lab File ID: 1Z5342  
 Matrix: (soil/water) soil Extraction: (SepF/Cont/Sonc) SOX  
 Sulfur Cleanup: (Y/N) N Date Extracted: 6/26/94  
 Date Analyzed (1): 7/11/94 Date Analyzed (2): 7/11/94  
 Time Analyzed (1): 2326 Time Analyzed (2): 0011  
 Instrument ID (1): HP82F Instrument ID (2): HP82R  
 GC Column (1): DB608 ID: 53 (mm) GC Column (2): DB-5 ID: 53 (mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	<u>PSPK03</u>	<u>N2P40866RS</u>	<u>7/01/94</u>	<u>7/01/94</u>
02	<u>C6617</u>	<u>Jm9434</u>	<u>7/05/94</u>	<u>7/05/94</u>
03	<u>C6618</u>	<u>Jm9435</u>	<u>↓</u>	<u>↓</u>
04	<u>C6619</u>	<u>Jm9436</u>	<u>7/01/94</u>	<u>7/01/94</u>
05	<u>C6620</u>	<u>Jm9437</u>	<u>7/05/94</u>	<u>7/05/94</u>
06	<u>C6621</u>	<u>Jm 0010</u>	<u>DU 7-7-94</u>	
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:



4C  
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO

Lab Name: ASC Contract: NEESA PBLK03  
 Lab Code: — Case No.: — SAS No.: — SDG No.: CLL17  
 Lab Sample ID: N4P40855 Lab File ID: 1 25414  
 Matrix: (soil/water) ORGANIC Extraction: (SepF/Cont/Sonc) NA  
 Sulfur Cleanup: (Y/N) N Date Extracted: 6/30/94  
 Date Analyzed (1): 7/5/94 Date Analyzed (2): 7/5/94  
 Time Analyzed (1): 1612 Time Analyzed (2): 1657  
 Instrument ID (1): HPBDF Instrument ID (2): HPBDR  
 GC Column (1): DB608 ID: 53(mm) GC Column (2): DB5 ID: 53(mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	<u>P.9PK03</u>	<u>N4P40855PS</u>	<u>7/5/94</u>	<u>7/5/94</u>
02	<u>CLL17</u>	<u>JM 9438</u>	<u>↓</u>	<u>↓</u>
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

4C  
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO

Lab Name: ASC Contract: N/A PBLK01  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A Count  
 Lab Sample ID: NIP40849P Lab File ID: 125328  
 Matrix: (soil/water) Water Extraction: (SepF/Cont/Sonc) SepF  
 Sulfur Cleanup: (Y/N) N Date Extracted: 6/27/94  
 Date Analyzed (1): 6/30/94 Date Analyzed (2): 6/30/94  
 Time Analyzed (1): 12:46 Time Analyzed (2): 13:32  
 Instrument ID (1): HPB2F Instrument ID (2): HPB2R  
 GC Column (1): DB608 ID: 0.53 (mm) GC Column (2): DB5 ID: 0.53 (mm)

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	<u>PSPK01</u>	<u>NIP40849P</u>	<u>6/30/94</u>	<u>6/30/94</u>
02	<u>WW001MS</u>	<u>JM9452PS</u>	<u>7/1/94</u>	<u>7/1/94</u>
03	<u>WW001MSD</u>	<u>JM9452PR</u>	<u>d</u>	<u>d</u>
04	<u>WW001</u>	<u>JM9452P</u>	<u>6/30/94</u>	<u>6/30/94</u>
05	<u>C6622</u>	<u>JM9439P</u>	<u>7/1/94</u>	<u>7/1/94</u>
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

6E

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6607  
 Instrument ID: HPB2F Level (x low): low 1.00 mid 4.00 high 40.0  
 GC Column: DB608 ID: .53 (mm) Date(s) Analyzed: 6/24/94 6/25/94

COMPOUND	CALIBRATION FACTORS			MEAN	%RSD
	LOW	MID	HIGH		
alpha-BHC	12100000	14100000	25900000	17300000	42.9
beta-BHC	9183800	10000000	11400000	10200000	11.0
delta-BHC	9107200	11000000	21300000	13800000	47.7
gamma-BHC (Lindane)	12900000	15100000	24100000	17400000	34.4
Heptachlor	20000000	20100000	22200000	20800000	5.90
Aldrin	14200000	15100000	21500000	16900000	23.5
Heptachlor epoxide	18400000	19000000	20800000	19400000	6.46
Endosulfan I	16700000	16300000	18200000	17100000	5.82
Dieldrin	14600000	15300000	18100000	16000000	11.7
4,4'-DDE	11800000	13600000	17700000	14400000	20.9
Endrin	12200000	12400000	14700000	13100000	10.8
Endosulfan II	14300000	15300000	16000000	15200000	5.89
4,4'-DDD	9302300	9998400	13200000	10800000	19.1
Endosulfan sulfate	11400000	12000000	13200000	12200000	7.38
4,4'-DDT	8895900	9960700	13300000	10700000	21.6
Methoxychlor	7383700	7573550	6655982	7204411	6.72
Endrin ketone	11900000	13500000	60640	8475138	86.5
Endrin aldehyde	11200000	11300000	11000000	11200000	4.28
alpha-Chlordane	19000000	20000000	21800000	20300000	7.05
gamma-Chlordane	18700000	19400000	21800000	20000000	8.15
Tetrachloro-m-xylene	17400000	17900000	18600000	18000000	3.51
Decachlorobiphenyl	29400000	25900000	19000000	24700000	21.4

\* Surrogate calibration factors are measured from Standard Mix A analyses.

\* RSD must be less than or equal 20.0 % for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6F  
PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Cld617  
 Instrument ID: HP32F Date(s) Analyzed: 6/24/94 6/24/94  
 GC Column: DB608 ID: .53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene	.500	*1	22.57	22.50	22.14	324840
		*2	22.97	22.90	23.04	432440
		*3	23.81	23.74	23.80	320070
		4	24.14	24.07	24.21	258200
		5	24.65	24.58	24.72	339520
Aroclor 1216	.100	*1	11.08	11.01	11.15	460350
		*2	12.82	12.75	12.89	1099700
		*3	14.33	14.26	14.40	1758900
		4	15.00	14.93	15.07	645840
		5	15.65	15.58	15.72	505970
Aroclor 1221	.202	*1	7.32	7.25	7.39	221436
		*2	10.17	10.10	10.24	263346
		*3	10.80	10.73	10.87	199188
		4	11.06	10.99	11.13	633267
		5	—	—	—	—
Aroclor 1232	.100	*1	11.06	10.99	11.13	1057600
		*2	12.80	12.73	12.87	1157000
		*3	14.03	13.96	14.20	407050
		4	14.32	14.25	14.39	1667500
		5	14.99	14.92	15.06	621470
Aroclor 1242	.100	*1	11.07	11.00	11.14	432600
		*2	12.81	12.74	12.88	935680
		*3	14.32	14.25	14.39	1404700
		4	14.99	14.92	15.06	505930
		5	15.64	15.57	15.71	384010
Aroclor 1248	.100	*1	16.97	16.90	17.04	782200
		*2	17.48	17.41	17.55	674090
		*3	17.80	17.73	17.87	643330
		4	18.02	17.95	18.09	823050
		5	18.28	18.21	18.35	978520
Aroclor 1254	.100	*1	18.85	18.78	18.92	1325700
		*2	20.95	20.88	21.02	1519200
		*3	21.42	21.35	21.49	1400200
		4	21.66	21.59	21.73	741260
		5	21.99	21.92	22.06	860540
Aroclor 1260	.100	*1	21.67	21.60	21.74	1384200
		*2	22.00	21.93	22.07	1425800
		*3	22.80	22.73	22.87	472760
		4	23.73	23.66	23.80	127070
		5	25.84	25.77	25.91	1971300

\* Denotes required peaks

6D  
PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C1617  
 Instrument ID: HPB2F Level (x low): low 1.00 mid 4.00 high 40.0  
 GC Column: DB608 ID: 0.53 (mm) Date(s) Analyzed: 6/24/94 6/25/94

COMPOUND	RT OF STANDARDS			MEAN RT	RT WINDOW	
	LOW	MID	HIGH		FROM	TO
alpha-BHC	11.24	11.24	11.24	11.24	11.19	11.29
beta-BHC	13.21	13.21	13.21	13.21	13.16	13.26
delta-BHC	14.73	14.73	14.73	14.73	14.68	14.78
gamma-BHC (Lindane)	12.89	12.89	12.89	12.89	12.84	12.94
Heptachlor	14.23	14.23	14.23	14.23	14.18	14.28
Aldrin	15.60	15.60	15.60	15.60	15.55	15.65
Heptachlor epoxide	17.94	17.94	17.94	17.94	17.89	18.01
Endosulfan I	19.38	19.38	19.38	19.38	19.31	19.45
Dieldrin	20.63	20.63	20.63	20.63	20.56	20.70
4,4'-DDE	20.33	20.33	20.33	20.33	20.26	20.40
Endrin	22.11	22.11	22.11	22.11	22.04	22.18
Endosulfan II	22.84	22.84	22.84	22.84	22.77	22.91
4,4'-DDD	22.57	22.57	22.57	22.57	22.50	22.64
Endosulfan sulfate	24.65	24.65	24.65	24.65	24.58	24.72
4,4'-DDT	23.77	23.77	23.77	23.77	23.70	23.84
Methoxychlor	27.51	27.51	27.52	27.51	27.44	27.58
Endrin ketone	28.13	28.13	28.13	28.13	28.06	28.20
Endrin aldehyde	24.16	24.16	24.16	24.16	24.09	24.23
alpha-Chlordane	19.27	19.27	19.27	19.27	19.20	19.34
gamma-Chlordane	18.61	18.61	18.61	18.61	18.54	18.68
Tetrachloro-m-xylene	8.36	8.36	8.36	8.36	8.31	8.41
Decachlorobiphenyl	36.09	36.11	36.10	36.10	36.00	36.20

\* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are  $\pm 0.05$  minutes for all compounds that elute before Heptachlor epoxide,  $\pm 0.07$  minutes for all other compounds, except  $\pm 0.10$  minutes for Decachlorobiphenyl.

6E

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6617  
 Instrument ID: HPB2R Level (x low): low 1.00 mid 4.00 high 40.0  
 GC Column: DB5 ID: .53 (mm) Date(s) Analyzed: 6/24/94 6/25/94

COMPOUND	CALIBRATION FACTORS			MEAN	%RSD
	LOW	MID	HIGH		
alpha-BHC	4704000	5705550	11200000	7209232	48.7
beta-BHC	4073000	4359950	5096010	4509653	11.7
delta-BHC	3757600	4576000	9611620	5981740	53.0
gamma-BHC (Lindane)	5299000	6291200	1060000	7405944	38.3
Heptachlor	8102200	8174400	9620420	8632340	9.92
Aldrin	5945600	6571200	9501856	7339552	25.9
Heptachlor epoxide	7980800	7945550	9206370	8377573	8.57
Endosulfan I	6911800	6860750	8063600	7278717	9.35
Dieldrin	6428800	6710400	8308660	7149287	14.2
4,4'-DDE	5900800	6002475	8165005	6689927	19.1
Endrin	5491200	5599975	7109675	6066951	14.9
Endosulfan II	6204700	6688750	7329523	6740984	8.37
4,4'-DDD	3718300	4246425	5965258	4643328	25.3
Endosulfan sulfate	4739100	5268775	6204540	5404139	13.7
4,4'-DDT	4969600	4920025	6454780	5448135	16.0
Methoxychlor	3609600	3687995	3195809	3497801	7.56
Endrin ketone	5756700	6627250	7541950	6641967	13.4
Endrin aldehyde	5254300	5328800	5320870	5301323	7.72
alpha-Chlordane	8422200	8648000	9788420	8952874	8.18
gamma-Chlordane	8268800	8411250	9762176	8814076	9.35
Tetrachloro-m-xylene	6336000	7148750	7868040	7117597	10.8
Decachlorobiphenyl	1210000	1090000	8367233	1090000	18.1

\* Surrogate calibration factors are measured from Standard Mix A analyses.

%RSD must be less than or equal to 20.0 % for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

60

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Job Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Cldell  
 Instrument ID: HPB2R Level (x low): low 1.00 mid 4.00 high 40.0  
 GC Column: DB5 ID: 0.53 (mm) Date(s) Analyzed: 6/24/94 6/25/94

COMPOUND	RT OF STANDARDS			MEAN RT	RT WINDOW	
	LOW	MID	HIGH		FROM	TO
alpha-BHC	11.21	11.21	11.21	11.21	11.16	11.26
beta-BHC	12.11	12.10	12.10	12.10	12.05	12.15
delta-BHC	13.55	13.55	13.55	13.55	13.50	13.60
gamma-BHC (Lindane)	12.51	12.50	12.50	12.50	12.00	12.55
Heptachlor	15.43	15.42	15.42	15.42	15.37	15.47
Aldrin	16.90	16.90	16.90	16.90	16.85	16.95
Heptachlor epoxide	18.42	18.42	18.42	18.42	18.35	18.49
Endosulfan I	19.92	19.92	19.92	19.92	19.85	19.99
Dieldrin	21.01	21.01	21.01	21.01	20.94	21.08
4,4'-DDE	20.65	20.65	20.65	20.65	20.58	20.72
Endrin	21.87	21.86	21.86	21.86	21.79	21.93
Endosulfan II	22.27	22.27	22.27	22.27	22.20	22.34
4,4'-DDD	22.33	22.33	22.32	22.32	22.25	22.39
Endosulfan sulfate	23.76	23.76	23.76	23.76	23.69	23.83
4,4'-DDT	23.83	23.83	23.82	23.82	23.75	23.89
Methoxychlor	25.96	25.96	25.96	25.96	25.89	26.03
Endrin ketone	25.70	25.70	25.70	25.70	25.63	25.77
Endrin aldehyde	22.83	22.83	22.83	22.83	22.76	22.90
alpha-Chlordane	19.88	19.88	19.88	19.88	19.81	19.95
gamma-Chlordane	19.37	19.37	19.37	19.37	19.30	19.44
Tetrachloro-m-xylene	9.63	9.63	9.63	9.63	9.58	9.68
Decachlorobiphenyl	36.69	36.70	36.71	36.70	36.60	36.80

\* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are  $\pm 0.05$  minutes for all compounds that elute before Heptachlor epoxide,  $\pm 0.07$  minutes for all other compounds, except  $\pm 0.10$  minutes for Decachlorobiphenyl.

## PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Udel7  
 Instrument ID: HPB2R Date(s) Analyzed: 6/24/64 6/24/64  
 GC Column: DB5 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW		CALIBRATION FACTOR
				FROM	TO	
Toxaphene	.500	*1	22.60	22.53	22.67	203460
		*2	23.74	23.67	23.81	213460
		*3	24.11	24.04	24.18	202240
		4	24.68	24.61	24.75	293820
		5	25.51	25.44	25.58	254080
Aroclor 1216	.100	*1	11.28	11.21	11.35	210110
		*2	12.89	12.82	12.96	471570
		*3	13.64	13.57	13.71	250570
		4	14.79	14.72	14.86	649250
		5	15.13	15.06	15.20	290070
Aroclor 1231	.202	*1	7.43	7.36	7.50	106306
		*2	10.62	10.55	10.69	100811
		*3	11.01	10.94	11.08	78445
		4	11.27	11.20	11.34	279014
		5	—	—	—	—
Aroclor 1232	.100	*1	11.27	11.20	11.34	455200
		*2	12.89	12.82	12.96	449740
		*3	13.64	13.57	13.71	245900
		4	14.79	14.72	14.86	596670
		5	15.13	15.06	15.20	272730
Aroclor 1242	.100	*1	11.28	11.21	11.35	190360
		*2	12.89	12.82	12.96	365170
		*3	13.64	13.57	13.71	200200
		4	14.79	14.72	14.86	504750
		5	15.13	15.06	15.20	237450
Aroclor 1248	.100	*1	14.79	14.72	14.86	431860
		*2	15.13	15.06	15.20	173690
		*3	16.13	16.06	16.20	277410
		4	16.92	16.85	16.99	288760
		5	17.41	17.34	17.48	359980
Aroclor 1254	.100	*1	18.60	18.53	18.67	646430
		*2	19.53	19.46	19.60	649440
		*3	20.93	20.86	21.00	646970
		4	21.83	21.76	21.90	339560
		5	22.00	21.93	22.07	435710
Aroclor 1260	.100	*1	21.83	21.76	21.90	546860
		*2	22.81	22.74	22.88	839650
		*3	23.32	23.25	23.39	316540
		4	23.86	23.79	23.93	227440
		5	26.53	26.46	26.60	225360

\* Denotes required peaks



66  
PESTICIDE ANALYTE RESOLUTION SUMMARY

Lab Name: ASC Contract: NA  
Lab Code: NA Case No.: NA SAS No.: NA SDG No.: Ulele7  
GC Column (1): DB008 ID: .53 (mm) Instrument ID (1): B2F  
EPA Sample No. (Standard 1): RESCF Lab Sample ID (1): GA7590  
Date Analyzed (1): 6/24/94 Time Analyzed (1): 12:55

	ANALYTE	RT	RESOLUTION (%)
01	TCX	8.35	100
02	gamma-Chlordane	18.60	100
03	Endosulfan F	19.37	100
04	4,4'-DDE	20.32	100
05	Dieldrin	20.62	100
06	Endosulfan Sulfate	24.64	100
07	Methoxychlor	27.50	100
08	Endrin Ketone	28.12	100
09	DCB	36.08	100

GC Column (2): DB-5 ID: .53 (mm) Instrument ID (2): B2R  
EPA Sample No. (Standard 2): RESCR Lab Sample ID (2): GA7590  
Date Analyzed (2): 6/24/94 Time Analyzed (2): 12:55

	ANALYTE	RT	RESOLUTION (%)
01	TCX	9.62	100
02	gamma-Chlordane	19.36	100
03	Endosulfan I	19.92	100
04	4,4'-DDE	20.64	100
05	Dieldrin	21.00	100
06	Endosulfan sulfate	23.75	100
07	Endrin Ketone	25.69	99
08	Methoxychlor	25.95	99
09	DCB	36.69	100

Resolution of two adjacent peaks must be calculated as a percentage of the height of the smaller peak, and must be greater than or equal to 60.0%.

6E

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: N/A c1007  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A  
 Instrument ID: HP82F Level (x low): low 1.00 mid 4.00 high 40.0  
 GC Column: DB608 ID: 0.53 (mm) Date(s) Analyzed: 7/1/94 7/2/94

COMPOUND	CALIBRATION FACTORS			MEAN	%RSD
	LOW	MID	HIGH		
alpha-BHC	11000000	12700000	24500000	16000000	46.0
beta-BHC	8262400	9193550	10800000	9424718	13.7
delta-BHC	8998200	11000000	21500000	13800000	48.6
gamma-BHC (Lindane)	11800000	13700000	22900000	16200000	36.8
Heptachlor	17800000	18200000	20800000	18900000	8.55
Aldrin	13000000	14000000	20500000	15800000	25.6
Heptachlor epoxide	17200000	17800000	20000000	18400000	7.92
Endosulfan I	15300000	15000000	17200000	15800000	7.63
Dieldrin	13500000	14000000	17200000	14900000	13.3
4,4'-DDE	11000000	12600000	16900000	13500000	22.6
Endrin	11000000	11200000	13800000	12000000	13.0
Endosulfan II	13300000	14400000	15400000	14300000	7.30
4,4'-DDD	8550400	9090400	12400000	10000000	20.9
Endosulfan sulfate	10900000	11700000	12900000	11800000	8.67
4,4'-DDT	8339100	9284700	12700000	10100000	22.8
Methoxychlor	6363520	6743270	6178506	6428932	4.98
Endrin ketone	11100000	12700000	15400000	13100000	16.6
Endrin aldehyde	10500000	10700000	10500000	10600000	1.02
alpha-Chlordane	17400000	18700000	21000000	19000000	9.52
gamma-Chlordane	17500000	18300000	20900000	18900000	9.44
Tetrachloro-m-xylene	16000000	16500000	17600000	16700000	4.80
Decachlorobiphenyl	21400000	23700000	17800000	22600000	11.4

\* Surrogate calibration factors are measured from Standard Mix A analyses.

RSD must be less than or equal 20.0 % for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6F  
PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A C661?  
 Instrument ID: HPB2F Date(s) Analyzed: 7/1/94 7/2/94  
 GC Column: DB6.8 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	TO	CALIBRATION FACTOR
Toxaphene	.500	*1	22.98	22.91	23.05	421280
		*2	23.82	23.75	23.89	341460
		*3	24.16	24.09	24.23	244880
		4	24.28	24.21	24.35	214400
		5	24.67	24.60	24.74	350940
Aroclor 1216	.100	*1	11.08	11.01	11.15	436710
		*2	12.82	12.75	12.89	1052100
		*3	14.33	14.26	14.40	1090100
		4	15.01	14.94	15.08	653610
		5	15.65	15.58	15.72	542070
Aroclor 1231	.200	*1	7.32	7.25	7.39	204678
		*2	10.18	10.11	10.25	240490
		*3	10.81	10.74	10.88	182124
		4	11.07	11.00	11.14	588366
		5				
Aroclor 1232	.100	*1	7.32	7.25	7.39	232450
		*2	10.18	10.11	10.25	291230
		*3	10.81	10.74	10.88	249440
		4	11.07	11.00	11.14	976910
		5	12.81	12.74	12.88	1063500
Aroclor 1242	.100	*1	11.08	11.01	11.15	390570
		*2	12.82	12.75	12.89	861910
		*3	14.33	14.26	14.40	1297100
		4	15.01	14.94	15.08	476320
		5	15.65	15.58	15.72	407720
Aroclor 1248	.100	*1	14.33	14.26	14.40	1102700
		*2	15.65	15.58	15.72	679430
		*3	16.98	16.91	17.05	736410
		4	17.49	17.42	17.56	625050
		5	18.03	17.96	18.10	795940
Aroclor 1254	.100	*1	18.61	18.54	18.68	1014600
		*2	18.86	18.79	18.93	1254200
		*3	20.33	20.46	20.60	612750
		4	20.96	20.89	21.03	1398600
		5	21.43	21.36	21.50	1060700
Aroclor 1260	.100	*1	22.00	21.93	22.07	1358800
		*2	23.74	23.67	23.81	1200400
		*3	25.30	25.23	25.37	725870
		4	25.85	25.78	25.92	1745300
		5	28.05	27.98	28.12	886980

\* Denotes required peaks

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Job Name: Asc Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 11/1 <sup>11/1</sup> <sub>11/1</sub> <sup>11/1</sup> <sub>11/1</sub>  
 Instrument ID: HPB2F Level (x low): low 1.00 mid 4.00 high 40.0  
 GC Column: DB608 ID: 0.53 (mm) Date(s) Analyzed: 7/1/94 7/2/94

COMPOUND	RT OF STANDARDS			MEAN RT	RT WINDOW	
	LOW	MID	HIGH		FROM	TO
alpha-BHC	11.25	11.25	11.25	11.25	11.20	11.30
beta-BHC	13.23	13.22	13.22	13.22	13.17	13.27
delta-BHC	14.75	14.75	14.74	14.75	14.70	14.80
gamma-BHC (Lindane)	12.90	12.90	12.90	12.90	12.85	12.95
Heptachlor	14.24	14.24	14.24	14.24	14.19	14.29
Aldrin	15.61	15.61	15.61	15.61	15.56	15.66
Heptachlor epoxide	17.95	17.95	17.95	17.95	17.88	18.02
Endosulfan I	19.39	19.39	19.38	19.39	19.32	19.46
Dieldrin	20.64	20.64	20.63	20.64	20.57	20.71
4,4'-DDE	20.34	20.33	20.33	20.34	20.27	20.41
Endrin	22.13	22.13	22.12	22.12	22.05	22.19
Endosulfan II	22.86	22.85	22.85	22.85	22.78	22.92
4,4'-DDD	22.58	22.58	22.58	22.58	22.51	22.65
Endosulfan sulfate	24.66	24.66	24.66	24.66	24.59	24.73
4,4'-DDT	23.78	23.78	23.78	23.78	23.71	23.85
Methoxychlor	27.53	27.53	27.53	27.53	27.46	27.60
Endrin ketone	28.15	28.15	28.14	28.15	28.08	28.22
Endrin aldehyde	24.17	24.17	24.17	24.17	24.10	24.24
alpha-Chlordane	19.28	19.28	19.28	19.28	19.21	19.35
gamma-Chlordane	18.62	18.62	18.62	18.62	18.55	18.69
Tetrachloro-m-xylene	8.37	8.37	8.37	8.37	8.32	8.42
Decachlorobiphenyl	36.13	36.13	36.13	36.13	36.03	36.23

\* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are  $\pm 0.05$  minutes for all compounds that elute before Heptachlor epoxide,  $\pm 0.07$  minutes for all other compounds, except  $\pm 0.10$  minutes for Decachlorobiphenyl.

6E

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A  
 Instrument ID: HP23R Level (x low): low 100 mid 400 high 400  
 GC Column: DB5 ID: 053 (mm) Date(s) Analyzed: 7/1/94 7/2/94

COMPOUND	CALIBRATION FACTORS				
	LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	4524800	5523200	10900000	6993643	49.3
beta-BHC	3686400	4124750	4918920	4243357	14.7
delta-BHC	4179000	4900750	9973770	6351153	49.7
gamma-BHC (Lindane)	5081400	6663920	10400000	7165444	39.1
Heptachlor	7724600	7864000	9272416	8287005	10.3
Aldrin	5631800	6211250	9119246	6987432	26.8
Heptachlor epoxide	7262200	7655900	8882720	8000273	9.63
Endosulfan I	6739000	6568000	7757840	7021613	9.16
Dieldrin	6131200	6403150	8001743	6845364	14.8
4,4'-DDE	6371200	6057625	7862893	6762573	14.3
Endrin	5359900	5482425	6929220	5923849	14.7
Endosulfan II	5983900	6493575	7143388	6590288	8.89
4,4'-DDD	3773700	4173600	5860880	4602393	24.1
Endosulfan sulfate	5014400	5903225	6183788	5700472	10.7
4,4'-DDT	4995200	4861625	6223500	5360109	14.0
Methoxychlor	3672320	3782565	3169971	3541618	9.22
Endrin ketone	5795100	6347950	7622745	6755265	13.6
Endrin aldehyde	5161500	5380000	5267330	5269610	2.07
alpha-Chlordane	7852800	8233600	9443136	8509846	9.76
gamma-Chlordane	7731000	8046400	9403936	8393778	10.6
Tetrachloro-m-xylene	6111800	6780750	7570960	6821171	10.7
Decachlorobiphenyl	11700000	10800000	8237630	10200000	17.5

• Surrogate calibration factors are measured from Standard Mix A analyses.

%RSD must be less than or equal 20.0 % for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6F  
PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A 10607  
 Instrument ID: HPB2R Date(s) Analyzed: 7/1/94 7/2/94  
 GC Column: DB5 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	TO	CALIBRATION FACTOR
Toxaphene		*1	22.69	22.62	22.76	209940
		*2	23.83	23.76	23.90	240360
		*3	24.20	24.13	24.27	208020
		4	24.76	24.69	24.83	346140
		5	25.60	25.53	25.67	279720
Aroclor 1216		*1	11.36	11.29	11.43	198650
		*2	12.97	12.90	13.04	446280
		*3	13.72	13.65	13.79	241670
		4	14.88	14.81	14.95	620790
		5	15.22	15.15	15.29	277300
Aroclor 1231		*1	7.49	7.42	7.56	98950
		*2	10.69	10.62	10.76	110540
		*3	11.09	11.02	11.16	75342
		4	11.35	11.28	11.42	265847
		5				
Aroclor 1232		*1	7.50	7.43	7.57	113670
		*2	10.70	10.63	10.77	119620
		*3	11.09	11.02	11.16	98090
		4	11.35	11.28	11.42	426430
		5	12.97	12.90	13.04	422920
Aroclor 1242		*1	11.36	11.29	11.43	181950
		*2	12.97	12.90	13.04	317810
		*3	13.72	13.65	13.79	184780
		4	14.81	14.74	14.88	406740
		5	15.22	15.15	15.29	207770
Aroclor 1246		*1	14.87	14.80	14.94	426440
		*2	16.22	16.15	16.29	257460
		*3	16.47	16.40	16.54	212230
		4	17.00	16.93	17.07	269780
		5	17.50	17.43	17.57	344050
Aroclor 1254		*1	18.09	18.02	18.16	593050
		*2	19.62	19.55	19.69	624400
		*3	21.01	20.94	21.08	600140
		4	21.91	21.84	21.98	309920
		5	22.08	22.01	22.15	407380
Aroclor 1260		*1	23.94	23.87	24.01	667210
		*2	24.50	24.43	24.57	316020
		*3	24.71	24.64	24.78	317020
		4	26.43	26.36	26.50	298150
		5	26.62	26.55	26.69	692670

\* Denotes required peaks

60

## PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ASC Contract: \_\_\_\_\_  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: N/A <sup>Client</sup>  
 Instrument ID: HPB2R Level (x low): low 1.00 mid 4.00 high 40.0  
 GC Column: DB5 ID: 0.53 (mm) Date(s) Analyzed: 7/1/94 7/2/94

COMPOUND	RT OF STANDARDS			MEAN RT	RT WINDOW	
	LOW	MID	HIGH		FROM	TO
alpha-BHC	11.29	11.29	11.28	11.29	11.24	11.34
beta-BHC	12.18	12.18	12.17	12.18	12.13	12.23
delta-BHC	13.63	13.63	13.63	13.63	13.58	13.68
gamma-BHC (Lindane)	12.59	12.58	12.58	12.59	12.54	12.64
Heptachlor	15.52	15.52	15.52	15.52	15.47	15.57
Aldrin	16.99	16.99	16.98	16.99	16.94	17.04
Heptachlor epoxide	18.52	18.51	18.51	18.51	18.44	18.58
Endosulfan I	20.02	20.02	20.02	20.02	19.95	20.09
Dieldrin	21.09	21.09	21.09	21.09	21.02	21.16
4,4'-DDE	20.73	20.73	20.72	20.73	20.66	20.80
Endrin	21.95	21.95	21.95	21.95	21.88	22.02
Endosulfan II	22.36	22.35	22.35	22.35	22.28	22.42
4,4'-DDD	22.41	22.40	22.40	22.40	22.33	22.47
Endosulfan sulfate	23.84	23.84	23.84	23.84	23.77	23.91
4,4'-DDT	23.91	23.90	23.90	23.90	23.83	23.97
Methoxychlor	26.05	26.04	26.04	26.04	25.97	26.11
Endrin ketone	25.79	25.79	25.79	25.79	25.72	25.86
Endrin aldehyde	22.92	22.92	22.91	22.91	22.84	22.98
alpha-Chlordane	19.97	19.97	19.97	19.97	19.90	20.04
gamma-Chlordane	19.45	19.45	19.45	19.45	19.38	19.52
Tetrachloro-m-xylene	9.71	9.71	9.71	9.71	9.66	9.76
Decachlorobiphenyl	36.88	36.88	36.88	36.88	36.78	36.98

\* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are  $\pm 0.05$  minutes for all compounds that elute before Heptachlor epoxide,  $\pm 0.07$  minutes for all other compounds, except  $\pm 0.10$  minutes for Decachlorobiphenyl.

6G  
PESTICIDE ANALYTE RESOLUTION SUMMARY

Lab Name: ASC Contract: NA  
 Lab Code: NA Case No.: NA SAS No.: NA SDG No.: Ude17

GC Column (1): CP-08 ID: .53 (mm) Instrument ID (1): B2F  
 EPA Sample No. (Standard 1): RESCE Lab Sample ID (1): GA7590  
 Date Analyzed (1): 7/1/94 Time Analyzed (1): 1625

	ANALYTE	RT	RESOLUTION (%)
01	TCX	9.37	100
02	gamma-chlordane	19.62	100
03	Endosulfan I	19.79	100
04	4,4'-DDE	20.34	100
05	Dieldrin	20.65	100
06	Endosulfan Sulfate	24.66	100
07	Methoxychlor	27.53	100
08	Endrin Ketone	29.15	100
09	DCB	30.13	100

GC Column (2): DF-5 ID: .53 (mm) Instrument ID (2): B2R  
 EPA Sample No. (Standard 2): RESCE Lab Sample ID (2): GA7590  
 Date Analyzed (2): 7/1/94 Time Analyzed (2): 1711

	ANALYTE	RT	RESOLUTION (%)
01	TCX	9.70	100
02	gamma-chlordane	19.44	100
03	Endosulfan I	20.01	100
04	4,4'-DDE	20.73	100
05	Dieldrin	21.09	100
06	Endosulfan Sulfate	23.83	100
07	Endrin Ketone	25.78	98
08	Methoxychlor	26.04	98
09	DCB	30.89	100

Resolution of two adjacent peaks must be calculated as a percentage of the height of the smaller peak, and must be greater than or equal to 60.0%.



7D

## PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C16217  
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 6/24/94 6/25/94

EPA Sample No. (PIBLK): PIBLKFI Date Analyzed: 6/30/94  
 Lab Sample ID (PIBLK): PIBLKFI Time Analyzed: 10:04  
 EPA Sample No. (PEM): PEMFI Date Analyzed: 6/30/94  
 Lab Sample ID (PEM): PEMFI Time Analyzed: 10:50

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.24	11.19	11.29	.008	.010	84.1
beta-BHC	13.22	13.16	13.26	.010	.010	97.0
gamma-BHC (Lindane)	12.90	12.84	12.94	.008	.010	78.2
Endrin	22.12	22.04	22.18	.051	.050	102
4,4'-DDT	23.77	23.70	23.84	.116	.100	116
Methoxychlor	27.52	27.44	27.58	.224	.250	89.6

4,4'-DDT % breakdown (1): 4.50 Endrin % breakdown (1): 7.73  
 Combined % breakdown (1): 12.2

## QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 0607  
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 6/24/94 6/25/94  
 EPA Sample No. (PIBLK): PIBLK2 Date Analyzed: 6/30/94  
 Lab Sample ID (PIBLK): PIBLK2 Time Analyzed: 18:06  
 EPA Sample No. (INDA): INDAF1 Date Analyzed: 6/30/94  
 Lab Sample ID (INDA): INDAF1 Time Analyzed: 18:52

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.25	11.19	11.29	.019	.020	23.7
gamma-BHC (Lindane)	12.90	12.84	12.94	.019	.020	17.0
Heptachlor	14.24	14.18	14.28	.019	.020	8.77
Endosulfan I	19.38	19.31	19.45	.020	.020	6.63
Dieldrin	20.63	20.56	20.70	.039	.040	7.33
Endrin	22.12	22.04	22.18	.038	.040	10.4
4,4'-DDD	22.58	22.50	22.64	.038	.040	11.7
4,4'-DDT	23.78	23.70	23.84	.038	.040	10.3
Methoxychlor	27.52	27.44	27.58	.180	.200	5.58
Tetrachloro-m-xylene	8.37	8.31	8.41	.019	.020	2.86
Decachlorobiphenyl	36.11	36.00	36.20	.038	.040	.05

EPA Sample No. (INDB): INDBF1 Date Analyzed: 6/30/94  
 Lab Sample ID (INDB): INDBF1 Time Analyzed: 19:38

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
beta-BHC	13.22	13.16	13.26	.019	.020	5.25
delta-BHC	14.74	14.68	14.78	.021	.020	18.1
Aldrin	15.60	15.53	15.65	.019	.020	14.3
Heptachlor epoxide	17.94	17.87	18.01	.020	.020	3.60
4,4'-DDE	20.33	20.26	20.40	.039	.040	7.14
Endosulfan II	22.85	22.77	22.91	.039	.040	1.51
Endosulfan sulfate	24.65	24.58	24.72	.039	.040	3.95
Endrin ketone	28.14	28.06	28.20	.038	.040	5.7
Endrin aldehyde	24.16	24.09	24.23	.039	.040	2.75
alpha-Chlordane	19.28	19.20	19.34	.020	.020	3.05
gamma-Chlordane	18.61	18.54	18.68	.020	.020	3.76
Tetrachloro-m-xylene	8.37	8.31	8.41	.019	.020	.05
Decachlorobiphenyl	36.11	36.00	36.20	.039	.040	.03

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.

## PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Cldc17  
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 6/24/94 6/25/94

EPA Sample No. (PIBLK): PIBLKF3 Date Analyzed: 7/1/94  
 Lab Sample ID (PIBLK): PIBLKF3 Time Analyzed: 06:16  
 EPA Sample No. (PEM): PEMF2 Date Analyzed: 7/1/94  
 Lab Sample ID (PEM): PEMF2 Time Analyzed: 07:02

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.25	11.19	11.29	.009	.010	93.6
beta-BHC	13.22	13.16	13.26	.011	.010	108
gamma-BHC (Lindane)	12.90	12.84	12.94	.009	.010	88.5
Endrin	22.12	22.04	22.18	.058	.050	116
4,4'-DDT	23.78	23.70	23.84	.132	.100	132
Methoxychlor	27.53	27.44	27.58	.263	.250	105

4,4'-DDT % breakdown (1): 2.64 Endrin % breakdown (1): 4.36  
 Combined % breakdown (1): 7.00

## QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: U6619  
 GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 6/24/94 6/25/94  
 EPA Sample No. (PIBLK): PIBLKRI Date Analyzed: 6/30/94  
 Lab Sample ID (PIBLK): PIBLKRI Time Analyzed: 10:04  
 EPA Sample No. (PEM): PEMRI Date Analyzed: 6/30/94  
 Lab Sample ID (PEM): PEMRI Time Analyzed: 10:50

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.24	11.16	11.26	.008	.010	81.9
beta-BHC	12.13	12.05	12.15	.010	.010	101
gamma-BHC (Lindane)	12.53	12.00	12.55	.008	.010	78.6
Endrin	21.89	21.79	21.93	.055	.050	109
4,4'-DDT	23.85	23.75	23.89	.115	.100	116
Methoxychlor	25.98	25.89	29.03	.247	.250	98.8

4,4'-DDT % breakdown (1): 0.00

Endrin % breakdown (1): 0.00

Combined % breakdown (1): 0.00

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6617  
 GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 6/24/94 6/25/94  
 EPA Sample No. (PIBLK): PIBLKR2 Date Analyzed: 6/30/94  
 Lab Sample ID (PIBLK): PIBLKR3 Time Analyzed: 18:52  
 EPA Sample No. (INDA): INDARI Date Analyzed: 6/30/94  
 Lab Sample ID (INDA): INDARI Time Analyzed: 19:38

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.24	11.16	11.26	.020	.020	20.3
gamma-BHC (Lindane)	12.54	12.00	12.55	.020	.020	14.7
Heptachlor	15.47	15.37	15.47	.020	.020	6.88
Endosulfan I	19.96	19.85	19.99	.020	.020	5.74
Dieldrin	21.04	20.94	21.08	.040	.040	5.59
Endrin	21.89	21.79	21.93	.040	.040	8.62
4,4'-DDD	22.35	22.25	22.39	.041	.040	6.52
4,4'-DDT	23.85	23.75	23.89	.040	.040	10.9
Methoxychlor	25.99	25.89	29.03	.197	.200	3.86
Tetrachloro-m-xylene	9.66	9.58	9.68	.020	.020	.44
Decachlorobiphenyl	36.77	36.60	36.80	.041	.040	6.10

EPA Sample No. (INDB): INDBR1 Date Analyzed: 6/30/94  
 Lab Sample ID (INDB): INDBR1 Time Analyzed: 20:23

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NCM AMOUNT (ng)	RPD
beta-BHC	12.13	12.05	12.15	.020	.020	5.91
delta-BHC	13.58	13.50	13.60	.022	.020	17.3
Aldrin	16.93	16.85	16.95	.020	.020	11.0
Heptachlor epoxide	18.46	18.35	18.49	.020	.020	4.12
4,4'-DDE	20.68	20.58	20.72	.042	.040	4.83
Endosulfan II	22.30	22.20	22.34	.040	.040	.33
Endosulfan sulfate	23.78	23.69	23.83	.044	.040	8.13
Endrin ketone	25.73	25.63	25.77	.041	.040	2.45
Endrin aldehyde	22.86	22.76	22.90	.040	.040	.53
alpha-Chlordane	19.92	19.81	19.95	.020	.020	3.57
gamma-Chlordane	19.39	19.30	19.44	.020	.020	4.52
Tetrachloro-m-xylene	9.66	9.58	9.68	.020	.020	.02
Decachlorobiphenyl	36.77	36.60	36.80	.040	.040	.01

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.

7D  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6617  
 GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 6/24/94 6/25/94

EPA Sample No. (PIBLK): PIBLKR3 Date Analyzed: 7/1/94  
 Lab Sample ID (PIBLK): PIBLKR3 Time Analyzed: 07:02  
 EPA Sample No. (PEM): PEMR2 Date Analyzed: 7/1/94  
 Lab Sample ID (PEM): PEMR2 Time Analyzed: 07:47

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.24	11.16	11.26	.009	.010	94.0
beta-BHC	12.14	12.05	12.15	.011	.010	111
gamma-BHC (Lindane)	12.54	12.00	12.55	.009	.010	88.9
Endrin	21.90	21.79	21.93	.061	.050	122
4,4'-DDT	23.85	23.25	23.89	.132	.100	132
Methoxychlor	25.99	25.89	29.03	.281	.250	124

4,4'-DDT % breakdown (1): 3.41 Endrin % breakdown (1): 0.00  
 Combined % breakdown (1): 3.41

QC LIMITS:

- RPD of amounts in PEM must be less than or equal to 25.0%
- 4,4'-DDT breakdown must be less than or equal to 20.0%
- Endrin breakdown must be less than or equal to 20.0%
- Combined breakdown must be less than or equal to 30.0%

7D  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C667  
 GC Column: DB-23 ID: 053 (mm) Init. Calib. Date(s): 7/1/94 7/2/94

EPA Sample No. (PIBLK): PIBLKF2 Date Analyzed: 7/5/94  
 Lab Sample ID (PIBLK): PIBLKF2 Time Analyzed: 09:50  
 EPA Sample No. (PEM): PEMF2 Date Analyzed: 7/5/94  
 Lab Sample ID (PEM): PEMF2 Time Analyzed: 10:34

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.25	11.20	11.30	.009	.010	89.9
beta-BHC	13.22	13.17	13.27	.010	.010	101
gamma-BHC (Lindane)	12.90	12.85	12.95	.008	.010	80.1
Endrin	22.12	22.05	22.19	.051	.050	103
4,4'-DDT	23.17	23.71	23.85	.104	.100	104
Methoxychlor	27.52	27.46	27.60	.180	.250	72.0

4,4'-DDT % breakdown (1): 4.79 Endrin % breakdown (1): 5.29  
 Combined % breakdown (1): 10.4

QC LIMITS:

- RPD of amounts in PEM must be less than or equal to 25.0%
- 4,4'-DDT breakdown must be less than or equal to 20.0%
- Endrin breakdown must be less than or equal to 20.0%
- Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: U6617  
 GC Column: DB603 ID: 0.53 (mm) Init. Calib. Date(s): 7/1/94 7/2/94  
 EPA Sample No. (PIBLK): PIBLKFB Date Analyzed: 7/5/94  
 Lab Sample ID (PIBLK): PIBLKFB Time Analyzed: 18:29  
 EPA Sample No. (INDA): INDAF1 Date Analyzed: 7/5/94  
 Lab Sample ID (INDA): INDAF1 Time Analyzed: 19:15

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.24	11.20	11.30	.020	.020	21.2
gamma-BHC (Lindane)	12.89	12.85	12.95	.020	.020	16.9
Heptachlor	14.23	14.19	14.29	.020	.020	6.43
Endosulfan I	19.38	19.33	19.46	.020	.020	7.33
Dieldrin	20.63	20.57	20.71	.039	.040	9.29
Endrin	22.11	22.05	22.19	.039	.040	14.48
4,4'-DDD	22.57	22.51	22.65	.040	.040	9.67
4,4'-DDT	23.17	23.11	23.25	.035	.040	20.2
Methoxychlor	27.51	27.46	27.60	.179	.200	6.14
Tetrachloro-m-xylene	8.36	8.32	8.42	.020	.020	.62
Decachlorobiphenyl	36.09	36.03	36.23	.037	.040	2.51

EPA Sample No. (INDB): INDBE1 Date Analyzed: 7/5/94  
 Lab Sample ID (INDB): INDBE1 Time Analyzed: 20:00

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
beta-BHC	13.21	13.17	13.27	.020	.020	2.13
delta-BHC	14.74	14.70	14.80	.020	.020	24.0
Aldrin	15.62	15.56	15.66	.020	.020	9.98
Heptachlor epoxide	17.94	17.88	18.02	.020	.020	2.58
4,4'-DDE	20.33	20.27	20.41	.040	.040	6.57
Endosulfan II	22.84	22.78	22.92	.040	.040	.52
Endosulfan sulfate	24.65	24.59	24.73	.040	.040	2.14
Endrin ketone	28.13	28.08	28.22	.039	.040	5.17
Endrin aldehyde	24.16	24.10	24.24	.039	.040	.62
alpha-Chlordane	19.27	19.21	19.35	.020	.020	1.91
gamma-Chlordane	18.61	18.55	18.69	.020	.020	2.56
Tetrachloro-m-xylene	8.36	8.32	8.42	.020	.020	.02
Decachlorobiphenyl	36.09	36.03	36.23	.038	.040	.04

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.



70  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Udd07  
 GC Column: DB5 ID: 053 (mm) Init. Calib. Date(s): 7/1/94 7/2/94

EPA Sample No. (PIBLK): PIBLKR2 Date Analyzed: 7/5/94  
 Lab Sample ID (PIBLK): PIBLKR2 Time Analyzed: 09:50  
 EPA Sample No. (PEM): PEMR2 Date Analyzed: 7/5/94  
 Lab Sample ID (PEM): PEMR2 Time Analyzed: 10:36

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.30	11.24	11.34	.008	.010	82.6
beta-BHC	12.19	12.13	12.23	.010	.010	102
gamma-BHC (Lindane)	12.12	12.54	12.64	.008	.010	78.6
Endrin	21.96	21.88	22.02	.052	.050	105
4,4'-DDT	23.91	23.83	23.97	.106	.100	106
Methoxychlor	26.25	25.97	26.11	.225	.250	90

4,4'-DDT % breakdown (1): 0.00 Endrin % breakdown (1): 0.00  
 Combined % breakdown (1): 0.00

QC LIMITS:

- RPD of amounts in PEM must be less than or equal to 25.0%
- 4,4'-DDT breakdown must be less than or equal to 20.0%
- Endrin breakdown must be less than or equal to 20.0%
- Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6677  
 GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 7/1/94 7/2/94  
 EPA Sample No. (PIBLK): PIBLKR3 Date Analyzed: 7/5/94  
 Lab Sample ID (PIBLK): PIBLKR3 Time Analyzed: 19:15  
 EPA Sample No. (INDA): INDARI Date Analyzed: 7/5/94  
 Lab Sample ID (INDA): INDARI Time Analyzed: 20:00

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.28	11.24	11.34	.019	.020	24.2
gamma-BHC (Lindane)	12.58	12.54	12.64	.019	.020	18.9
Heptachlor	15.51	15.47	15.57	.019	.020	10.1
Endosulfan I	20.01	19.95	20.09	.019	.020	13.6
Dieldrin	21.05	21.02	21.10	.037	.040	14.1
Endrin	21.94	21.88	22.02	.037	.040	15.6
4,4'-DDD	22.39	22.33	22.47	.038	.040	14.8
4,4'-DDT	23.89	23.83	23.97	.033	.040	25.3
Methoxychlor	26.03	25.97	26.11	.175	.200	6.43
Tetrachloro-m-xylene	9.70	9.66	9.76	.020	.020	3.22
Decachlorobiphenyl	36.86	36.78	36.98	.038	.040	.22

EPA Sample No. (INDB): INDBRI Date Analyzed: 7/5/94  
 Lab Sample ID (INDB): INDBRI Time Analyzed: 20:46

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	12.17	12.13	12.23	.020	.020	4.04
delta-BHC	13.63	13.58	13.68	.020	.020	22.4
Aldrin	16.97	16.94	17.04	.020	.020	12.6
Heptachlor epoxide	18.50	18.44	18.58	.020	.020	5.78
4,4'-DDE	20.72	20.66	20.80	.037	.040	17.2
Endosulfan II	22.34	22.28	22.42	.039	.040	3.73
Endosulfan sulfate	23.83	23.77	23.91	.037	.040	4.43
Endrin ketone	25.76	25.72	25.86	.039	.040	2.42
Endrin aldehyde	22.90	22.84	22.98	.038	.040	2.10
alpha-Chlordane	19.96	19.90	20.04	.020	.020	6.35
gamma-Chlordane	19.44	19.38	19.52	.020	.020	6.14
Tetrachloro-m-xylene	9.70	9.66	9.76	.020	.020	0.0
Decachlorobiphenyl	36.85	36.78	36.96	.040	.040	.01

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.

7D  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6617  
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 7/1/94 7/2/94  
 EPA Sample No. (PIBLK): PIBLK4 Date Analyzed: 7/6/94  
 Lab Sample ID (PIBLK): PIBLK4 Time Analyzed: 05:53  
 EPA Sample No. (PEM): PEMF3 Date Analyzed: 7/6/94  
 Lab Sample ID (PEM): PEMF3 Time Analyzed: 06:38

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.24	11.20	11.30	.009	.010	89.5
beta-BHC	13.21	13.17	13.27	.011	.010	106
gamma-BHC (Lindane)	12.89	12.95	12.95	.009	.010	89.6
Endrin	22.11	22.05	22.19	.055	.050	111
4,4'-DDT	23.76	23.71	23.85	.118	.100	118
Methoxychlor	27.51	27.46	27.60	.248	.250	99.2

4,4'-DDT % breakdown (1): 4.56 Endrin % breakdown (1): 5.59  
 Combined % breakdown (1): 10.2

## QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Cole 17  
 GC Column: DBW8 ID: 053 (mm) Init. Calib. Date(s): 7/1/94 7/2/94  
 EPA Sample No. (PIBLK): PIBLKFS Date Analyzed: 7/6/94  
 Lab Sample ID (PIBLK): PIBLKFS Time Analyzed: 09.41  
 EPA Sample No. (INDA): INDAF2 Date Analyzed: 7/6/94  
 Lab Sample ID (INDA): INDAF2 Time Analyzed: 10:26

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.24	11.30	11.30	.021	.020	18.6
gamma-BHC (Lindane)	12.09	12.35	12.45	.021	.020	12.8
Heptachlor	14.23	14.19	14.29	.021	.020	1.21
Endosulfan I	19.38	19.32	19.46	.021	.020	2.60
Dieldrin	20.03	20.57	20.71	.041	.040	3.61
Endrin	22.1	22.05	22.19	.040	.040	5.88
4,4'-DDD	22.57	22.51	22.65	.042	.040	3.84
4,4'-DDT	23.77	23.71	23.85	.039	.040	11.60
Methoxychlor	27.51	27.46	27.60	.193	.200	1.43
Tetrachloro-m-xylene	8.36	8.32	8.42	.021	.020	1.86
Decachlorobiphenyl	36.09	36.03	36.23	.039	.040	1.07

EPA Sample No. (INDB): INDBF2 Date Analyzed: 7/6/94  
 Lab Sample ID (INDB): INDBF2 Time Analyzed: 11:12

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	13.21	13.17	13.27	.021	.020	1.77
delta-BHC	14.74	14.70	14.80	.021	.020	16.0
Aldrin	15.60	15.56	15.66	.021	.020	5.94
Heptachlor epoxide	17.93	17.88	18.02	.021	.020	1.30
4,4'-DDE	20.33	20.27	20.41	.042	.040	2.47
Endosulfan II	22.84	22.78	22.92	.042	.040	4.86
Endosulfan sulfate	24.64	24.59	24.73	.042	.040	3.41
Endrin ketone	28.13	28.08	28.22	.042	.040	1.29
Endrin aldehyde	24.16	24.10	24.24	.042	.040	5.20
alpha-Chlordane	19.27	19.21	19.35	.021	.020	2.77
gamma-Chlordane	18.61	18.55	18.69	.021	.020	1.55
Tetrachloro-m-xylene	8.36	8.32	8.42	.021	.020	1.05
Decachlorobiphenyl	36.08	36.03	36.23	.040	.040	0

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.

7D  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Cel017  
 GC Column: DB5 ID: 053 (mm) Init. Calib. Date(s): 7/1/94 7/2/94

EPA Sample No. (PIBLK): PIBLKR4 Date Analyzed: 7/6/94  
 Lab Sample ID (PIBLK): PIBLKR4 Time Analyzed: 06:38  
 EPA Sample No. (PEM): PEMR3 Date Analyzed: 7/6/94  
 Lab Sample ID (PEM): PEMR3 Time Analyzed: 07:24

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.28	11.24	11.34	.009	.010	85.9
beta-BHC	12.17	12.13	12.23	.011	.010	106
gamma-BHC (Lindane)	12.58	12.54	12.64	.008	.010	82.3
Endrin	21.93	21.88	22.02	.055	.050	111
4,4'-DDT	23.81	23.83	23.97	.114	.100	114
Methoxychlor	26.03	25.97	26.11	.241	.250	96.4

4,4'-DDT % breakdown (1): 4.22 Endrin % breakdown (1): 0.00  
 Combined % breakdown (1): 4.22

QC LIMITS:

- RPD of amounts in PEM must be less than or equal to 25.0%
- 4,4'-DDT breakdown must be less than or equal to 20.0%
- Endrin breakdown must be less than or equal to 20.0%
- Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: Udel7  
 GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 7/1/94 7/2/94  
 EPA Sample No. (PIBLK): PIBLKRS Date Analyzed: 7/6/94  
 Lab Sample ID (PIBLK): PIBLKRS Time Analyzed: 10:26  
 EPA Sample No. (INDA): INDAR2 Date Analyzed: 7/6/94  
 Lab Sample ID (INDA): INDAR2 Time Analyzed: 11:12

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.23	11.24 11.34	.020	.020	19.4
gamma-BHC (Lindane)	12.58	12.54 12.62	.021	.020	13.4
Heptachlor	15.51	15.47 15.57	.020	.020	4.16
Endosulfan I	20.01	19.95 20.09	.020	.020	5.05
Dieldrin	21.08	21.02 21.16	.041	.040	3.91
Endrin	21.94	21.88 22.02	.040	.040	6.64
4,4'-DDD	22.39	22.33 22.47	.042	.040	4.69
4,4'-DDT	23.89	23.83 23.97	.038	.040	13.8
Methoxychlor	26.03	25.97 26.11	.100	.200	1.53
Tetrachloro-m-xylene	9.10	9.06 9.16	.020	.020	1.42
Decachlorobiphenyl	36.86	36.78 36.95	.041	.040	7.30

EPA Sample No. (INDB): INDBR2 Date Analyzed: 7/6/94  
 Lab Sample ID (INDB): INDBR2 Time Analyzed: 11:57

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	12.17	12.13 12.23	.021	.020	9.8
delta-BHC	13.63	13.58 13.68	.021	.020	18.3
Aldrin	16.98	16.94 17.04	.021	.020	7.56
Heptachlor epoxide	18.50	18.44 18.58	.021	.020	7.8
4,4'-DDE	20.72	20.66 20.80	.038	.040	14.2
Endosulfan II	22.34	22.28 22.42	.042	.040	3.22
Endosulfan sulfate	23.83	23.77 23.91	.039	.040	1.71
Endrin ketone	25.78	25.72 25.86	.041	.040	5.03
Endrin aldehyde	22.90	22.84 22.98	.041	.040	4.49
alpha-Chlordane	19.96	19.90 20.04	.021	.020	.81
gamma-Chlordane	19.44	19.38 19.52	.021	.020	.50
Tetrachloro-m-xylene	9.70	9.66 9.76	.021	.020	1.03
Decachlorobiphenyl	36.86	36.78 36.98	.042	.040	10.4

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.

7D  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: 116617  
 GC Column: DB608 ID: 0.53 (mm) Init. Calib. Date(s): 7/1/94 7/2/94

EPA Sample No. (PIBLK): PIBLKFG Date Analyzed: 7/7/94  
 Lab Sample ID (PIBLK): PIBLKFG Time Analyzed: 07:09  
 EPA Sample No. (PEM): PEM14 Date Analyzed: 7/7/94  
 Lab Sample ID (PEM): PEM14 Time Analyzed: 07:55

PEM COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.25	11.20	11.30	1.009	.010	86.6
beta-BHC	13.22	13.17	13.27	.010	.010	103
gamma-BHC (Lindane)	12.90	12.85	12.95	.008	.010	82.6
Endrin	22.12	22.05	22.19	.052	.050	105
4,4'-DDT	23.77	23.71	23.85	.110	.100	110
Methoxychlor	27.51	27.46	27.60	.205	.250	82.0

4,4'-DDT % breakdown (1): 4.50 Endrin % breakdown (1): 8.81  
 Combined % breakdown (1): 13.3

## QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6617  
 GC Column: DB609 ID: 053 (mm) Init. Calib. Date(s): 7/1/94 7/2/94  
 EPA Sample No. (PIBLK): PIBLK7 Date Analyzed: 7/7/94  
 Lab Sample ID (PIBLK): PIBLK7 Time Analyzed: 14:36  
 EPA Sample No. (INDA): INDAF3 Date Analyzed: 7/7/94  
 Lab Sample ID (INDA): INDAF3 Time Analyzed: 15:21

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.25	11.20	11.30	.021	.020	19.3
gamma-BHC (Lindane)	12.90	12.85	12.95	.020	.020	13.5
Heptachlor	14.24	14.19	14.29	.021	.020	1.42
Endosulfan I	19.38	19.33	19.46	.021	.020	2.74
Dieldrin	20.63	20.57	20.71	.041	.040	4.28
Endrin	22.12	22.05	22.19	.041	.040	5.27
4,4'-DDD	22.58	22.51	22.65	.042	.040	5.76
4,4'-DDT	23.78	23.71	23.85	.039	.040	11.6
Methoxychlor	27.52	27.46	27.60	.091	.200	1.06
Tetrachloro-m-xylene	8.37	8.32	8.42	.021	.020	1.28
Decachlorobiphenyl	36.12	36.03	36.23	.039	.040	1.31

EPA Sample No. (INDB): INDBF3 Date Analyzed: 7/7/94  
 Lab Sample ID (INDB): INDBF3 Time Analyzed: 16:07

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM TO		CALC AMOUNT (ng)	NCM AMOUNT (ng)	RPD
beta-BHC	13.22	13.17	13.27	.020	.020	1.60
delta-BHC	14.75	14.70	14.80	.020	.020	19.25
Aldrin	15.61	15.56	15.66	.020	.020	9.49
Heptachlor epoxide	17.95	17.88	18.02	.020	.020	1.54
4,4'-DDE	20.33	20.27	20.41	.040	.040	6.28
Endosulfan II	22.85	22.78	22.92	.041	.040	1.93
Endosulfan sulfate	24.66	24.59	24.73	.040	.040	.49
Endrin ketone	28.14	28.08	28.22	.040	.040	3.36
Endrin aldehyde	24.17	24.10	24.24	.040	.040	1.28
alpha-Chlordane	19.28	19.21	19.35	.020	.020	1.05
gamma-Chlordane	18.62	18.55	18.69	.020	.020	1.87
Tetrachloro-m-xylene	8.37	8.32	8.42	.020	.020	.01
Decachlorobiphenyl	36.12	36.03	36.23	.039	.040	.03

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.



7D  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C6617  
 GC Column: DB5 ID: 0.53 (mm) Init. Calib. Date(s): 7/1/94 7/2/94

EPA Sample No. (PIBLK): PIBLKRL6 Date Analyzed: 7/7/94

Lab Sample ID (PIBLK): PIBLKRL6 Time Analyzed: 07.09

EPA Sample No. (PEM): PEMR4 Date Analyzed: 7/7/94

Lab Sample ID (PEM): PEMR4 Time Analyzed: 07:55

PEM COMPOUND	RT	RT WINDOW		CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
		FROM	TO			
alpha-BHC	11.30	11.24	11.34	.009	.010	85.2
beta-BHC	12.19	12.13	12.23	.011	.010	105
gamma-BHC (Lindane)	12.59	12.54	12.64	.008	.010	81.7
Endrin	21.95	21.83	22.02	.054	.050	108
4,4'-DDT	23.90	23.83	23.97	.109	.100	109
Methoxychlor	26.04	25.97	26.11	.230	.250	92

4,4'-DDT % breakdown (1): 0.00

Endrin % breakdown (1): 0.00

Combined % breakdown (1): 0.00

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7E  
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ASC Contract: N/A  
 Lab Code: N/A Case No.: N/A SAS No.: N/A SDG No.: C06617  
 GC Column: DB5 ID: 053 (mm) Init. Calib. Date(s): 7/1/94 7/2/94  
 EPA Sample No. (PIBLK): PEBLR7 Date Analyzed: 7/7/94  
 Lab Sample ID (PIBLK): PEBLR7 Time Analyzed: 15:21  
 EPA Sample No. (INDA): INDAR3 Date Analyzed: 7/7/94  
 Lab Sample ID (INDA): INDAR3 Time Analyzed: 16:07

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	11.29	11.24	11.34	.020	.020	19.3
gamma-BHC (Lindane)	12.59	12.54	12.64	.020	.020	13.7
Heptachlor	15.52	15.47	15.57	.020	.020	4.18
Endosulfan I	20.03	19.95	20.09	.020	.020	4.52
Dieldrin	21.10	21.02	21.16	.041	.040	3.63
Endrin	21.96	21.88	22.02	.040	.040	6.63
4,4'-DDD	22.41	22.33	22.47	.042	.040	4.33
4,4'-DDT	23.91	23.83	23.97	.039	.040	12.8
Methoxychlor	26.05	25.97	26.11	.186	.200	4.3
Tetrachloro-m-xylene	9.71	9.66	9.76	.021	.020	1.71
Decachlorobiphenyl	36.89	36.78	36.98	.041	.040	6.71

EPA Sample No. (INDB): INDBR3 Date Analyzed: 7/7/94  
 Lab Sample ID (INDB): INDBR3 Time Analyzed: 16:52

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	12.19	12.13	12.23	.020	.020	1.40
delta-BHC	13.64	13.58	13.68	.021	.020	20.5
Aldrin	16.99	16.94	17.04	.021	.020	9.08
Heptachlor epoxide	18.52	18.44	18.58	.020	.020	3.26
4,4'-DDE	20.23	20.16	20.30	.040	.040	9.97
Endosulfan II	22.36	22.28	22.42	.041	.040	.56
Endosulfan sulfate	23.84	23.77	23.91	.040	.040	2.57
Endrin ketone	25.80	25.72	25.86	.040	.040	1.59
Endrin aldehyde	22.92	22.84	22.98	.040	.040	.83
alpha-Chlordane	19.77	19.70	19.84	.020	.020	2.31
gamma-Chlordane	19.86	19.78	19.92	.020	.020	2.02
Tetrachloro-m-xylene	9.72	9.66	9.76	.020	.020	.01
Decachlorobiphenyl	36.90	36.78	36.98	.041	.040	1.02

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.



Analytical Services Corp.

## ANALYTICAL REPORT

**Client:** OHM Remediation Services Corporation  
Southern Region (Morrisville, NC)

**Attn:** Kent Geis  
Bill Perry

**Project:** 15226N - NEESA; Camp LeJuene, Jacksonville, NC

**Sample(s):** C6627

**Sample Type(s):** Solid

**Analysis Performed:** Test Bulk and Organics

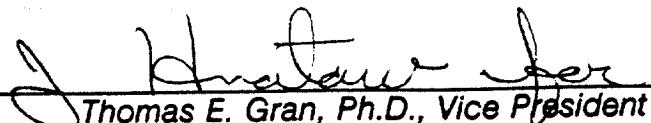
**Date Sample Received:** July 18, 1994

**Date Order Received:** July 18, 1994

**Joblink(s):** 616230

*This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. Analytical Services Corporation assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.*

Reviewed and  
Approved by:

  
Thomas E. Gran, Ph.D., Vice President

Date: 7-20-94

## PROJECT NARRATIVE

---

The following items relate to the samples and analytical data contained in this report.

- o All sample results are reported on an as received "wet weight" basis.
- o Note any and all comments at the bottom of the tables in Appendix B and/or Appendix C.
- o **ASC** will retain samples for a maximum of thirty (30) days after completion of the analysis, samples will be held for a longer period of time, if appropriate arrangements are made in advance. A nominal disposal charge of \$5.00/sample will be imposed for unreturned samples.

**APPENDIX A**  
**DATA SUMMARY REPORT**

**NOTE:** The Tentatively Identified Volatile (GC/MS) Screen result(s), if applicable, is included in Appendix B.

# DATA SUMMARY REPORT

DATE: 07/19/94

Company: OHM REMEDIATION SERVICES CORPORATION

PAGE: 1

Sample Point ID: C6627  
ASC Sample Number: JN0316  
Sample Date: 940718  
Facility Code: 015226N

Parameters                      Units

## Total Pesticide Analysis, GC, (GS04)

Aldrin	mg/kg	<3320
Alpha-BHC	mg/kg	<3320
Beta-BHC	mg/kg	<3320
Chlordane	mg/kg	<16600
4,4'-DDD	mg/kg	<3320
4,4'-DDE	mg/kg	<3320
4,4'-DDT	mg/kg	32200
Delta-BHC	mg/kg	<3320
Dieldrin	mg/kg	<3320
Endosulfan sulfate	mg/kg	<3320
Endosulfan I	mg/kg	<3320
Endosulfan II	mg/kg	<3320
Endrin	mg/kg	<3320
Endrin aldehyde	mg/kg	<3320
Endrin ketone	mg/kg	<3320
Gamma-BHC	mg/kg	<3320
Heptachlor	mg/kg	<3320
Heptachlor epoxide	mg/kg	<3320
Methoxychlor	mg/kg	<3320
Toxaphene	mg/kg	<66400

0003

**APPENDIX B**  
**QUANTITATIVE RESULTS**

**CONVENTIONAL DATA****Test Bulking Results**

Facility: 15226N  
Sample Identifier: C6627  
ASC Sample Number: JN0316

---

Test Bulking Parameters	Result
Date of Test Bulk:	7/18/94
Samples Bulk:	18, 19, 21, 22, 23, 24, 25, 26, 32, 43, 63, 72, 74, 76, 77, 78, 80
Temperature Rise:	< 2.0°C
Gas Evolved:	None observed
Precipitate:	None observed
Gelling or Solidification:	None observed



TOTAL PESTICIDE ANALYSIS, GC, (GS04)

0006

Company Name Facility Sample Point ASC Sample No.  
 OHM REMEDIATION SERVICES CORPORATION 015226N C6627 JN0316

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	3320	ND	Q2P40970
Alpha-BHC	ND	3320	ND	Q2P40970
Beta-BHC	ND	3320	ND	Q2P40970
Chlordane	ND	16600	ND	Q2P40970
4,4'-DDD	ND	3320	ND	Q2P40970
4,4'-DDE	ND	3320	ND	Q2P40970
4,4'-DDT	32200	3320	.062	Q2P40970
Delta-BHC	ND	3320	ND	Q2P40970
Dieldrin	ND	3320	ND	Q2P40970
Endosulfan sulfate	ND	3320	ND	Q2P40970
Endosulfan I	ND	3320	ND	Q2P40970
Endosulfan II	ND	3320	ND	Q2P40970
Endrin	ND	3320	ND	Q2P40970
Endrin aldehyde	ND	3320	ND	Q2P40970
Endrin ketone	ND	3320	ND	Q2P40970
Gamma-BHC	ND	3320	ND	Q2P40970
Heptachlor	ND	3320	ND	Q2P40970
Heptachlor epoxide	ND	3320	ND	Q2P40970
Methoxychlor	ND	3320	ND	Q2P40970
Toxaphene	ND	66400	ND	Q2P40970

- Matrix spike recoveries are not available due to the dilution of the QC matrix spike sample extracts during analysis.

**APPENDIX C**  
**QUALITY ASSURANCE DATA**

**SUMMARY OF ANALYTICAL METHODOLOGY**

ASC Joblink # 616230

---

REFERENCE	TITLE
8080	SW-846 Organochlorine Pesticides and/or PCBs

---

## METHODOLOGY REFERENCES

---

- ASTM *American Society for Testing and Materials*, 1985 edition.
- CAWW *Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.
- CLP *USEPA Contract Laboratory Program*, Document #OLMO1.0, updates December 1990 #OLMO1.1 and February 1991 #OLMO1.1.1.
- EPA-500 *USEPA Methods for the Determination of Organic Compounds in Drinking Water*, EPA-600/4-88/039 December 1988.
- EPA-600 *USEPA Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, EPA-600/4-82-057 July 1982.
- NIOSH *National Institute for Occupational Safety and Health*, 3rd edition, 1984.
- SMEWW *Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.
- STOA *Spot Tests In Organic Analysis*, 7th edition, 1966.
- SW-846 *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Update #1 July 1992.
- (1) This method was modified to incorporate the use of Boron Trifluoride (BF<sub>3</sub>) as the derivatizing reagent according to Method 6640 in *SMEWW*, 17th edition, 1989.
- Title 22 *Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

### ASC Certifications

State	Agency	Certification #
Alabama	ADEM	40830
California	CADOH	1178
Colorado	CODOH	OH113
Delaware	DEHSS	OH113
Kansas	KSDHE	E-202 & E-1173
Louisiana	LADOHH	92-10
Maryland	MDDHMH	210
Massachusetts	MADEP	M-OH113
New Jersey	NJDEPE	74603
New York	NYDOH	10712
North Carolina	NCDEM	392
Ohio	OHEPA	OH113
Oklahoma	OKDEQ	9216
Pennsylvania	PADER	68-450
South Carolina	SCDEHNR	92002
Tennessee	TNDOH/TNDEC	2978
Virginia	VADGS	00011
Washington	WADOE	C154
Wisconsin	WIDNR	999037160

**Validated by:**

- o US Army Corps of Engineers ..... Chemical Analysis in Various Matrices

**Approvals:**

- o Chemical Waste Management ..... Waste Characterization Analysis
- o EnviroSAFE ..... Waste Characterization Analysis
- o USDA ..... Permit for Importing Soils
- o Florida DEP ..... Quality Assurance Plan #930034G
- o Naval Facilities Engineering Service Center ..... Chemical Analysis in Various Matrices

**REPORT KEY**

---

mg/kg	= milligram per kilogram (ppm)
Mg/m <sup>3</sup>	= milligram per cubic meter
ug/kg	= microgram per kilogram (ppb)
mg/L	= milligram per liter (ppm)
ug/L	= microgram per liter (ppb)
mg/W	= milligram per wipe
ug/W	= microgram per wipe
mg/SMP	= milligram per sample
ug/SMP	= microgram per sample
um/cm	= microMho per centimeter
pCi/l	= picocurie per liter
gm/cc	= grams per cubic centimeter
ppm	= parts per million
ppb	= parts per billion
ND	= Not detected at or above stated detection limit
<	= less than
>	= greater than
%	= percent
BTU/lb	= British Thermal Units per pound
Deg. C	= Degrees Celsius
n/a	= not applicable
Unk	= unknown
std	= result is relative to standard pH units
CV	= Conventional
IR	= Infrared Spectrophotometric
GC	= Gas Chromatograph Instrument
GC/MS	= Gas Chromatography/Mass Spectrometer Instrument
GRO	= Gasoline Range Organics
DRO	= Diesel Range Organics
PCB	= Polychlorinated Biphenyls (PCBs)
EP TOX	= Extraction Procedure Toxicity
TCLP	= Toxicity Characteristic Leaching Procedure
RCRA	= Resource Conservation and Recovery Act

QUALITY ASSURANCE DATA

TOTAL PESTICIDE ANALYSIS, GC, (GS04)

0012

Compounds	Blank Results mg/kg	Blank Spike Recov	Unspiked Sample Results mg/kg	Matrix Spike Recov	Relative Percent Diff	Batch Number
Aldrin	ND	83	-	-	-	Q2P40970
Alpha-BHC	ND	81	-	-	-	Q2P40970
Beta-BHC	ND	86	-	-	-	Q2P40970
Chlordane	ND	92	-	-	-	Q2P40970
4,4'-DDD	ND	97	-	-	-	Q2P40970
4,4'-DDE	ND	94	-	-	-	Q2P40970
4,4'-DDT	.062	109	-	-	-	Q2P40970
Delta-BHC	ND	96	-	-	-	Q2P40970
Dieldrin	ND	93	-	-	-	Q2P40970
Endosulfan sulfate	ND	99	-	-	-	Q2P40970
Endosulfan I	ND	100	-	-	-	Q2P40970
Endosulfan II	ND	95	-	-	-	Q2P40970
Endrin	ND	93	-	-	-	Q2P40970
Endrin aldehyde	ND	79	-	-	-	Q2P40970
Endrin ketone	ND	95	-	-	-	Q2P40970
Gamma-BHC	ND	83	-	-	-	Q2P40970
Heptachlor	ND	85	-	-	-	Q2P40970
Heptachlor epoxide	ND	90	-	-	-	Q2P40970
Methoxychlor	ND	108	-	-	-	Q2P40970

QUALITY ASSURANCE DATA  
SURROGATE SUMMARY REPORT

0013

SURROGATE ID            B816            A500            # OUT

QC BATCH: Q2P40970 Solid (Pesticide compounds by GC)

**SAMPLE ID**

BLANK	53	112	0
BLANK SPIKE	66	113	0
C6627	0 D	0 D	0

**QC LIMITS**            (30-130) (30-130)

SURROGATE ID

B816 = 2,4,5,6-Tetrachloro-m-xylene  
A500 = Decachlorobiphenyl

\* Values outside of method quality control limits  
D Surrogate diluted out

It is ASC's laboratory policy to allow one surrogate per sample fraction (acid, base-neutral or pesticide) to exceed the stated QC limits. This policy is based upon the USEPA SOW for the Contract Laboratory Program (CLP).



**APPENDIX D**  
**CHAIN-OF-CUSTODY RECORD(S)**



Analytical Services Corp.

## ANALYTICAL REPORT

**Client:** OHM Remediation Services Corporation  
Southern Region (Morrisville, NC)

**Attn:** Kent Geis  
Tom Mears

**Project:** 15226N - NEESA; Camp LeJeune, Jacksonville, NC

**Sample(s):** CLJ-WCS001, CLJ-WCS002 and CLJ-WCS005 through CLJ-WCS012

**Sample Type(s):** Solid

**Analysis Performed:** Organics

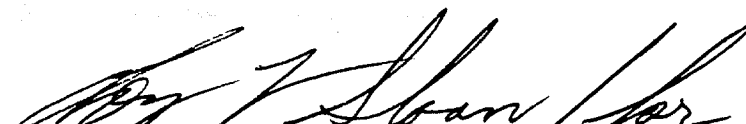
**Date Sample Received:** September 1, 1994

**Date Order Received:** September 1, 1994

**Joblink(s):** 616536

*This report is **"PROPRIETARY AND CONFIDENTIAL"** and delivered to, and intended for the exclusive use of the above named client only. Analytical Services Corporation assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.*

Reviewed and  
Approved by:

  
Thomas E. Gran, Ph.D., Vice President

Date: September 8, 1994

## PROJECT NARRATIVE

---

The following items relate to the samples and analytical data contained in this report.

- o All sample results are reported on a "dry weight" basis.
- o The identity of all pesticide compounds were confirmed by secondary column analysis.
- o Note any and all comments at the bottom of the tables in Appendix B and/or Appendix C.
- o **ASC** will retain samples for a maximum of thirty (30) days after completion of the analysis, samples will be held for a longer period of time, if appropriate arrangements are made in advance. A nominal disposal charge of \$5.00/sample will be imposed for unreturned samples.

**APPENDIX A**  
**DATA SUMMARY REPORT**

**NOTE:** The Tentatively Identified Volatile (GC/MS) Screen result(s), if applicable, is included in Appendix B.

# DATA SUMMARY REPORT

DATE: 09/07/94

PAGE: 1

Company: OHM REMEDIATION SERVICES CORPORATION

Sample Point ID:	CLJ-WCS001	CLJ-WCS002	CLJ-WCS005	CLJ-WCS006	CLJ-WCS007	CLJ-WCS008	CLJ-WCS009	CLJ-WCS010
ASC Sample Number:	JN1786	JN1787	JN1788	JN1789	JN1790	JN1791	JN1792	JN1793
Sample Date:	940824	940824	940826	940826	940826	940826	940826	940826
Facility Code:	015226N	015226N	015226N	015226N	015226N	015226N	015226N	015226N

Parameters Units

**Target Compound List Pesticide and PCB Analysis, GC, (GS25)**

Compound	CLJ-WCS001	CLJ-WCS002	CLJ-WCS005	CLJ-WCS006	CLJ-WCS007	CLJ-WCS008	CLJ-WCS009	CLJ-WCS010
Aldrin	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Alpha-BHC	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Beta-BHC	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
alpha-Chlordane	<.020	<.018	.019	.028	.022	<.018	.043	<.020
gamma-Chlordane	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
4,4'-DDD	1.42	1.92	18.0	18.2	21.1	1.28	47.7	2.23
4,4'-DDE	.173	.142	.401	1.08	.316	.034	.694	.141
4,4'-DDT	2.65	7.46	39.9	32.6	43.0	3.82	117	5.21
Delta-BHC	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Dieldrin	<.020	.020	.048	.050	.054	<.018	.061	<.020
Endosulfan sulfate	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Endosulfan I	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Endosulfan II	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Endrin	<.020	.027	.121	.185	.061	<.018	.326	<.020
Endrin ketone	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Endrin aldehyde	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Gamma-BHC	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Heptachlor	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Heptachlor epoxide	<.020	<.018	<.018	<.018	<.019	<.018	.093	<.020
Methoxychlor	<.020	<.018	<.018	<.018	<.019	<.018	<.019	<.020
Toxaphene	<.396	<.362	<.360	<.363	<.381	<.350	<.379	<.401
Aroclor 1016	<.198	<.181	<.180	<.181	<.190	<.175	<.189	<.200
Aroclor 1221	<.198	<.181	<.180	<.181	<.190	<.175	<.189	<.200
Aroclor 1232	<.198	<.181	<.180	<.181	<.190	<.175	<.189	<.200
Aroclor 1242	<.198	<.181	<.180	<.181	<.190	<.175	<.189	<.200
Aroclor 1248	<.198	<.181	<.180	<.181	<.190	<.175	<.189	<.200
Aroclor 1254	<.198	<.181	<.180	<.181	<.190	<.175	<.189	<.200
Aroclor 1260	<.198	<.181	<.180	<.181	<.190	<.175	<.189	<.200

# DATA SUMMARY REPORT

DATE: 09/07/94

Company: OHM REMEDIATION SERVICES CORPORATION

PAGE: 2

<b>Sample Point ID:</b>	CLJ-WCS011	CLJ-WCS012
ASC Sample Number:	JN1794	JN1795
Sample Date:	940826	940826
Facility Code:	015226N	015226N

Parameters	Units
------------	-------

**Target Compound List Pesticide and PCB Analysis, GC, (GS25)**

Aldrin	mg/kg	<.019	<.019
Alpha-BHC	mg/kg	<.019	<.019
Beta-BHC	mg/kg	<.019	<.019
alpha-Chlordane	mg/kg	<.019	<.019
gamma-Chlordane	mg/kg	<.019	<.019
4,4'-DDD	mg/kg	.203	4.55
4,4'-DDE	mg/kg	.033	.234
4,4'-DDT	mg/kg	.129	18.1
Delta-BHC	mg/kg	<.019	<.019
Dieldrin	mg/kg	<.019	.031
Endosulfan sulfate	mg/kg	<.019	<.019
Endosulfan I	mg/kg	<.019	<.019
Endosulfan II	mg/kg	<.019	<.019
Endrin	mg/kg	<.019	.086
Endrin ketone	mg/kg	<.019	<.019
Endrin aldehyde	mg/kg	<.019	<.019
Gamma-BHC	mg/kg	<.019	<.019
Heptachlor	mg/kg	<.019	<.019
Heptachlor epoxide	mg/kg	<.019	.025
Methoxychlor	mg/kg	<.019	<.019
Toxaphene	mg/kg	<.387	<.381
Aroclor 1016	mg/kg	<.194	<.191
Aroclor 1221	mg/kg	<.194	<.191
Aroclor 1232	mg/kg	<.194	<.191
Aroclor 1242	mg/kg	<.194	<.191
Aroclor 1248	mg/kg	<.194	<.191
Aroclor 1254	mg/kg	<.194	<.191
Aroclor 1260	mg/kg	<.194	<.191

**APPENDIX B**  
**QUANTITATIVE RESULTS**

# TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS001	JN1786

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.020	ND	N2P41215
Alpha-BHC	ND	.020	ND	N2P41215
Beta-BHC	ND	.020	ND	N2P41215
alpha-Chlordane	ND	.020	ND	N2P41215
gamma-Chlordane	ND	.020	ND	N2P41215
4,4'-DDD	1.42	.198	ND	N2P41215
4,4'-DDE	.173	.020	ND	N2P41215
4,4'-DDT	2.65	.198	ND	N2P41215
Delta-BHC	ND	.020	ND	N2P41215
Dieldrin	ND	.020	ND	N2P41215
Endosulfan sulfate	ND	.020	ND	N2P41215
Endosulfan I	ND	.020	ND	N2P41215
Endosulfan II	ND	.020	ND	N2P41215
Endrin	ND	.020	ND	N2P41215
Endrin ketone	ND	.020	ND	N2P41215
Endrin aldehyde	ND	.020	ND	N2P41215
Gamma-BHC	ND	.020	ND	N2P41215
Heptachlor	ND	.020	ND	N2P41215
Heptachlor epoxide	ND	.020	ND	N2P41215
Methoxychlor	ND	.020	ND	N2P41215
Toxaphene	ND	.396	ND	N2P41215
Aroclor 1016	ND	.198	ND	N2P41215
Aroclor 1221	ND	.198	ND	N2P41215
Aroclor 1232	ND	.198	ND	N2P41215
Aroclor 1242	ND	.198	ND	N2P41215
Aroclor 1248	ND	.198	ND	N2P41215
Aroclor 1254	ND	.198	ND	N2P41215
Aroclor 1260	ND	.198	ND	N2P41215



## TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS002	JN1787

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.018	ND	N2P41215
Alpha-BHC	ND	.018	ND	N2P41215
Beta-BHC	ND	.018	ND	N2P41215
alpha-Chlordane	ND	.018	ND	N2P41215
gamma-Chlordane	ND	.018	ND	N2P41215
4,4'-DDD	1.92	.905	ND	N2P41215
4,4'-DDE	.142	.018	ND	N2P41215
4,4'-DDT	7.46	.905	ND	N2P41215
Delta-BHC	ND	.018	ND	N2P41215
Dieldrin	.020	.018	ND	N2P41215
Endosulfan sulfate	ND	.018	ND	N2P41215
Endosulfan I	ND	.018	ND	N2P41215
Endosulfan II	ND	.018	ND	N2P41215
Endrin	.027	.018	ND	N2P41215
Endrin ketone	ND	.018	ND	N2P41215
Endrin aldehyde	ND	.018	ND	N2P41215
Gamma-BHC	ND	.018	ND	N2P41215
Heptachlor	ND	.018	ND	N2P41215
Heptachlor epoxide	ND	.018	ND	N2P41215
Methoxychlor	ND	.018	ND	N2P41215
Toxaphene	ND	.362	ND	N2P41215
Aroclor 1016	ND	.181	ND	N2P41215
Aroclor 1221	ND	.181	ND	N2P41215
Aroclor 1232	ND	.181	ND	N2P41215
Aroclor 1242	ND	.181	ND	N2P41215
Aroclor 1248	ND	.181	ND	N2P41215
Aroclor 1254	ND	.181	ND	N2P41215
Aroclor 1260	ND	.181	ND	N2P41215

## TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS005	JN1788

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.018	ND	N2P41215
Alpha-BHC	ND	.018	ND	N2P41215
Beta-BHC	ND	.018	ND	N2P41215
alpha-Chlordane	.019	.018	ND	N2P41215
gamma-Chlordane	ND	.018	ND	N2P41215
4,4'-DDD	18.0	4.50	ND	N2P41215
4,4'-DDE	.401	.018	ND	N2P41215
4,4'-DDT	39.9	4.50	ND	N2P41215
Delta-BHC	ND	.018	ND	N2P41215
Dieldrin	.048	.018	ND	N2P41215
Endosulfan sulfate	ND	.018	ND	N2P41215
Endosulfan I	ND	.018	ND	N2P41215
Endosulfan II	ND	.018	ND	N2P41215
Endrin	.121	.018	ND	N2P41215
Endrin ketone	ND	.018	ND	N2P41215
Endrin aldehyde	ND	.018	ND	N2P41215
Gamma-BHC	ND	.018	ND	N2P41215
Heptachlor	ND	.018	ND	N2P41215
Heptachlor epoxide	ND	.018	ND	N2P41215
Methoxychlor	ND	.018	ND	N2P41215
Toxaphene	ND	.360	ND	N2P41215
Aroclor 1016	ND	.180	ND	N2P41215
Aroclor 1221	ND	.180	ND	N2P41215
Aroclor 1232	ND	.180	ND	N2P41215
Aroclor 1242	ND	.180	ND	N2P41215
Aroclor 1248	ND	.180	ND	N2P41215
Aroclor 1254	ND	.180	ND	N2P41215
Aroclor 1260	ND	.180	ND	N2P41215

## TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS006	JN1789

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.018	ND	N2P41215
Alpha-BHC	ND	.018	ND	N2P41215
Beta-BHC	ND	.018	ND	N2P41215
alpha-Chlordane	.028	.018	ND	N2P41215
gamma-Chlordane	ND	.018	ND	N2P41215
4,4'-DDD	18.2	9.06	ND	N2P41215
4,4'-DDE	1.08	.181	ND	N2P41215
4,4'-DDT	32.6	9.06	ND	N2P41215
Delta-BHC	ND	.018	ND	N2P41215
Dieldrin	.050	.018	ND	N2P41215
Endosulfan sulfate	ND	.018	ND	N2P41215
Endosulfan I	ND	.018	ND	N2P41215
Endosulfan II	ND	.018	ND	N2P41215
Endrin	.185	.018	ND	N2P41215
Endrin ketone	ND	.018	ND	N2P41215
Endrin aldehyde	ND	.018	ND	N2P41215
Gamma-BHC	ND	.018	ND	N2P41215
Heptachlor	ND	.018	ND	N2P41215
Heptachlor epoxide	ND	.018	ND	N2P41215
Methoxychlor	ND	.018	ND	N2P41215
Toxaphene	ND	.363	ND	N2P41215
Aroclor 1016	ND	.181	ND	N2P41215
Aroclor 1221	ND	.181	ND	N2P41215
Aroclor 1232	ND	.181	ND	N2P41215
Aroclor 1242	ND	.181	ND	N2P41215
Aroclor 1248	ND	.181	ND	N2P41215
Aroclor 1254	ND	.181	ND	N2P41215
Aroclor 1260	ND	.181	ND	N2P41215

## TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS007	JN1790

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.019	ND	N2P41215
Alpha-BHC	ND	.019	ND	N2P41215
Beta-BHC	ND	.019	ND	N2P41215
alpha-Chlordane	.022	.019	ND	N2P41215
gamma-Chlordane	ND	.019	ND	N2P41215
4,4'-DDD	21.1	3.81	ND	N2P41215
4,4'-DDE	.316	.019	ND	N2P41215
4,4'-DDT	43.0	3.81	ND	N2P41215
Delta-BHC	ND	.019	ND	N2P41215
Dieldrin	.054	.019	ND	N2P41215
Endosulfan sulfate	ND	.019	ND	N2P41215
Endosulfan I	ND	.019	ND	N2P41215
Endosulfan II	ND	.019	ND	N2P41215
Endrin	.061	.019	ND	N2P41215
Endrin ketone	ND	.019	ND	N2P41215
Endrin aldehyde	ND	.019	ND	N2P41215
Gamma-BHC	ND	.019	ND	N2P41215
Heptachlor	ND	.019	ND	N2P41215
Heptachlor epoxide	ND	.019	ND	N2P41215
Methoxychlor	ND	.019	ND	N2P41215
Toxaphene	ND	.381	ND	N2P41215
Aroclor 1016	ND	.190	ND	N2P41215
Aroclor 1221	ND	.190	ND	N2P41215
Aroclor 1232	ND	.190	ND	N2P41215
Aroclor 1242	ND	.190	ND	N2P41215
Aroclor 1248	ND	.190	ND	N2P41215
Aroclor 1254	ND	.190	ND	N2P41215
Aroclor 1260	ND	.190	ND	N2P41215

## TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS008	JN1791

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.018	ND	N2P41215
Alpha-BHC	ND	.018	ND	N2P41215
Beta-BHC	ND	.018	ND	N2P41215
alpha-Chlordane	ND	.018	ND	N2P41215
gamma-Chlordane	ND	.018	ND	N2P41215
4,4'-DDD	1.28	.350	ND	N2P41215
4,4'-DDE	.034	.018	ND	N2P41215
4,4'-DDT	3.82	.350	ND	N2P41215
Delta-BHC	ND	.018	ND	N2P41215
Dieldrin	ND	.018	ND	N2P41215
Endosulfan sulfate	ND	.018	ND	N2P41215
Endosulfan I	ND	.018	ND	N2P41215
Endosulfan II	ND	.018	ND	N2P41215
Endrin	ND	.018	ND	N2P41215
Endrin ketone	ND	.018	ND	N2P41215
Endrin aldehyde	ND	.018	ND	N2P41215
Gamma-BHC	ND	.018	ND	N2P41215
Heptachlor	ND	.018	ND	N2P41215
Heptachlor epoxide	ND	.018	ND	N2P41215
Methoxychlor	ND	.018	ND	N2P41215
Toxaphene	ND	.350	ND	N2P41215
Aroclor 1016	ND	.175	ND	N2P41215
Aroclor 1221	ND	.175	ND	N2P41215
Aroclor 1232	ND	.175	ND	N2P41215
Aroclor 1242	ND	.175	ND	N2P41215
Aroclor 1248	ND	.175	ND	N2P41215
Aroclor 1254	ND	.175	ND	N2P41215
Aroclor 1260	ND	.175	ND	N2P41215

## TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS009	JN1792

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.019	ND	N2P41215
Alpha-BHC	ND	.019	ND	N2P41215
Beta-BHC	ND	.019	ND	N2P41215
alpha-Chlordane	.043	.019	ND	N2P41215
gamma-Chlordane	ND	.019	ND	N2P41215
4,4'-DDD	47.7	1.89	ND	N2P41215
4,4'-DDE	.694	.170	ND	N2P41215
4,4'-DDT	117	9.47	ND	N2P41215
Delta-BHC	ND	.019	ND	N2P41215
Dieldrin	.061	.019	ND	N2P41215
Endosulfan sulfate	ND	.019	ND	N2P41215
Endosulfan I	ND	.019	ND	N2P41215
Endosulfan II	ND	.019	ND	N2P41215
Endrin	.326	.019	ND	N2P41215
Endrin ketone	ND	.019	ND	N2P41215
Endrin aldehyde	ND	.019	ND	N2P41215
Gamma-BHC	ND	.019	ND	N2P41215
Heptachlor	ND	.019	ND	N2P41215
Heptachlor epoxide	.093	.019	ND	N2P41215
Methoxychlor	ND	.019	ND	N2P41215
Toxaphene	ND	.379	ND	N2P41215
Aroclor 1016	ND	.189	ND	N2P41215
Aroclor 1221	ND	.189	ND	N2P41215
Aroclor 1232	ND	.189	ND	N2P41215
Aroclor 1242	ND	.189	ND	N2P41215
Aroclor 1248	ND	.189	ND	N2P41215
Aroclor 1254	ND	.189	ND	N2P41215
Aroclor 1260	ND	.189	ND	N2P41215

# TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS010	JN1793

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.020	ND	N2P41215
Alpha-BHC	ND	.020	ND	N2P41215
Beta-BHC	ND	.020	ND	N2P41215
alpha-Chlordane	ND	.020	ND	N2P41215
gamma-Chlordane	ND	.020	ND	N2P41215
4,4'-DDD	2.23	.200	ND	N2P41215
4,4'-DDE	.141	.020	ND	N2P41215
4,4'-DDT	5.21	.401	ND	N2P41215
Delta-BHC	ND	.020	ND	N2P41215
Dieldrin	ND	.020	ND	N2P41215
Endosulfan sulfate	ND	.020	ND	N2P41215
Endosulfan I	ND	.020	ND	N2P41215
Endosulfan II	ND	.020	ND	N2P41215
Endrin	ND	.020	ND	N2P41215
Endrin ketone	ND	.020	ND	N2P41215
Endrin aldehyde	ND	.020	ND	N2P41215
Gamma-BHC	ND	.020	ND	N2P41215
Heptachlor	ND	.020	ND	N2P41215
Heptachlor epoxide	ND	.020	ND	N2P41215
Methoxychlor	ND	.020	ND	N2P41215
Toxaphene	ND	.401	ND	N2P41215
Aroclor 1016	ND	.200	ND	N2P41215
Aroclor 1221	ND	.200	ND	N2P41215
Aroclor 1232	ND	.200	ND	N2P41215
Aroclor 1242	ND	.200	ND	N2P41215
Aroclor 1248	ND	.200	ND	N2P41215
Aroclor 1254	ND	.200	ND	N2P41215
Aroclor 1260	ND	.200	ND	N2P41215

# TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS011	JN1794

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.019	ND	N2P41215
Alpha-BHC	ND	.019	ND	N2P41215
Beta-BHC	ND	.019	ND	N2P41215
alpha-Chlordane	ND	.019	ND	N2P41215
gamma-Chlordane	ND	.019	ND	N2P41215
4,4'-DDD	.203	.019	ND	N2P41215
4,4'-DDE	.033	.019	ND	N2P41215
4,4'-DDT	.129	.019	ND	N2P41215
Delta-BHC	ND	.019	ND	N2P41215
Dieldrin	ND	.019	ND	N2P41215
Endosulfan sulfate	ND	.019	ND	N2P41215
Endosulfan I	ND	.019	ND	N2P41215
Endosulfan II	ND	.019	ND	N2P41215
Endrin	ND	.019	ND	N2P41215
Endrin ketone	ND	.019	ND	N2P41215
Endrin aldehyde	ND	.019	ND	N2P41215
Gamma-BHC	ND	.019	ND	N2P41215
Heptachlor	ND	.019	ND	N2P41215
Heptachlor epoxide	ND	.019	ND	N2P41215
Methoxychlor	ND	.019	ND	N2P41215
Toxaphene	ND	.387	ND	N2P41215
Aroclor 1016	ND	.194	ND	N2P41215
Aroclor 1221	ND	.194	ND	N2P41215
Aroclor 1232	ND	.194	ND	N2P41215
Aroclor 1242	ND	.194	ND	N2P41215
Aroclor 1248	ND	.194	ND	N2P41215
Aroclor 1254	ND	.194	ND	N2P41215
Aroclor 1260	ND	.194	ND	N2P41215



# TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Company Name	Facility	Sample Point	ASC Sample No.
OHM REMEDIATION SERVICES CORPORATION	015226N	CLJ-WCS012	JN1795

Compounds	Sample Results mg/kg	Detection Limits mg/kg	Blank Results mg/kg	Batch Number
Aldrin	ND	.019	ND	N2P41215
Alpha-BHC	ND	.019	ND	N2P41215
Beta-BHC	ND	.019	ND	N2P41215
alpha-Chlordane	ND	.019	ND	N2P41215
gamma-Chlordane	ND	.019	ND	N2P41215
4,4'-DDD	4.55	.859	ND	N2P41215
4,4'-DDE	.234	.019	ND	N2P41215
4,4'-DDT	18.1	.859	ND	N2P41215
Delta-BHC	ND	.019	ND	N2P41215
Dieldrin	.031	.019	ND	N2P41215
Endosulfan sulfate	ND	.019	ND	N2P41215
Endosulfan I	ND	.019	ND	N2P41215
Endosulfan II	ND	.019	ND	N2P41215
Endrin	.086	.019	ND	N2P41215
Endrin ketone	ND	.019	ND	N2P41215
Endrin aldehyde	ND	.019	ND	N2P41215
Gamma-BHC	ND	.019	ND	N2P41215
Heptachlor	ND	.019	ND	N2P41215
Heptachlor epoxide	.025	.019	ND	N2P41215
Methoxychlor	ND	.019	ND	N2P41215
Toxaphene	ND	.381	ND	N2P41215
Aroclor 1016	ND	.191	ND	N2P41215
Aroclor 1221	ND	.191	ND	N2P41215
Aroclor 1232	ND	.191	ND	N2P41215
Aroclor 1242	ND	.191	ND	N2P41215
Aroclor 1248	ND	.191	ND	N2P41215
Aroclor 1254	ND	.191	ND	N2P41215
Aroclor 1260	ND	.191	ND	N2P41215

**APPENDIX C**

**QUALITY ASSURANCE DATA**

# SUMMARY OF ANALYTICAL METHODOLOGY

ASC Joblink # 616536

---

REFERENCE	TITLE
8080	SW-846 Organochlorine Pesticides and/or PCBs

---

## METHODOLOGY REFERENCES

---

- ASTM**      *American Society for Testing and Materials*, 1985 edition.
- CAWW**      *Methods for Chemical Analysis of Water and Wastes*, April 1979 and Updated #1 March 1983.
- CLP**        *USEPA Contract Laboratory Program*, Document #OLMO1.0, updates December 1990 #OLMO1.1 and February 1991 #OLMO1.1.1.
- EPA-500**    *USEPA Methods for the Determination of Organic Compounds in Drinking Water*, EPA-600/4-88/039 December 1988.
- EPA-600**    *USEPA Test Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater*, EPA-600/4-82-057 July 1982.
- NIOSH**      *National Institute for Occupational Safety and Health*, 3rd edition, 1984.
- SMEWW**     *Standard Methods for the Examination of Water and Wastewater*, 17th edition, 1989.
- STOA**      *Spot Tests In Organic Analysis*, 7th edition, 1966.
- SW-846**     *Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods*, 3rd edition, September 1986 and Update #1 July 1992.
- (1)**         This method was modified to incorporate the use of Boron Trifluoride (BF<sub>3</sub>) as the derivatizing reagent according to Method 6640 in *SMEWW*, 17th edition, 1989.
- Title 22**     *Waste Extraction Test*, Title 22, Section 66261.126 Appendix 2 of the California Administrative Code, May 1991.

## ASC Certifications

State	Agency	Certification #
Alabama	ADEM	40830
California	CADOH	1178
Colorado	CODOH	OH113
Delaware	DEHSS	OH113
Kansas	KSDHE	E-202 & E-1173
Louisiana	LADOHH	92-10
Maryland	MDDHMH	210
Massachusetts	MADEP	M-OH113
New Jersey	NJDEPE	74603
New York	NYDOH	10712
North Carolina	NCDEM	392
Ohio	OHEPA	OH113
Oklahoma	OKDEQ	9216
Pennsylvania	PADER	68-450
South Carolina	SCDEHNR	92002
Tennessee	TNDOH/TNDEC	2978
Virginia	VADGS	00011
Washington	WADOE	C154
Wisconsin	WIDNR	999037160

**Validated by:**

- o US Army Corps of Engineers ..... Chemical Analysis in Various Matrices

**Approvals:**

- o Chemical Waste Management ..... Waste Characterization Analysis
- o EnviroSAFE ..... Waste Characterization Analysis
- o USDA ..... Permit for Importing Soils
- o Florida DEP ..... Quality Assurance Plan #930034G
- o Naval Facilities Engineering Service Center ..... Chemical Analysis in Various Matrices

## REPORT KEY

---

mg/kg	= milligram per kilogram (ppm)
Mg/m <sup>3</sup>	= milligram per cubic meter
ug/kg	= microgram per kilogram (ppb)
mg/L	= milligram per liter (ppm)
ug/L	= microgram per liter (ppb)
mg/W	= milligram per wipe
ug/W	= microgram per wipe
mg/SMP	= milligram per sample
ug/SMP	= microgram per sample
um/cm	= microMho per centimeter
pCi/l	= picocurie per liter
gm/cc	= grams per cubic centimeter
ppm	= parts per million
ppb	= parts per billion
ND	= Not detected at or above stated detection limit
<	= less than
>	= greater than
%	= percent
BTU/lb	= British Thermal Units per pound
Deg. C	= Degrees Celsius
n/a	= not applicable
Unk	= unknown
std	= result is relative to standard pH units
CV	= Conventionals
IR	= Infrared Spectrophotometric
GC	= Gas Chromatograph Instrument
GC/MS	= Gas Chromatography/Mass Spectrometer Instrument
GRO	= Gasoline Range Organics
DRO	= Diesel Range Organics
PCB	= Polychlorinated Biphenyls (PCBs)
EP TOX	= Extraction Procedure Toxicity
TCLP	= Toxicity Characteristic Leaching Procedure
RCRA	= Resource Conservation and Recovery Act

QUALITY ASSURANCE DATA

TARGET COMPOUND LIST PESTICIDE AND PCB ANALYSIS, GC, (GS25)

Compounds	Blank Results mg/kg	Blank Spike Recov	Unspiked Sample Results mg/kg	Matrix Spike Recov	Relative Percent Diff	Batch Number
Aldrin	ND	69	ND	125	18	N2P41215
Alpha-BHC	ND	63	ND	112	12	N2P41215
Beta-BHC	ND	77	ND	126	10	N2P41215
alpha-Chlordane	ND	87	ND	143	11	N2P41215
gamma-Chlordane	ND	85	ND	127	7	N2P41215
4,4'-DDD	ND	91	1.42	-	83	N2P41215
4,4'-DDE	ND	92	.173	-	3	N2P41215
4,4'-DDT	ND	100	2.65	-	56	N2P41215
Delta-BHC	ND	87	ND	141	12	N2P41215
Dieldrin	ND	91	ND	136	11	N2P41215
Endosulfan sulfate	ND	93	ND	118	8	N2P41215
Endosulfan I	ND	88	ND	133	11	N2P41215
Endosulfan II	ND	91	ND	121	11	N2P41215
Endrin	ND	91	ND	115	8	N2P41215
Endrin ketone	ND	89	ND	113	9	N2P41215
Endrin aldehyde	ND	63	ND	93	11	N2P41215
Gamma-BHC	ND	68	ND	120	11	N2P41215
Heptachlor	ND	72	ND	136	11	N2P41215
Heptachlor epoxide	ND	87	ND	140	10	N2P41215
Methoxychlor	ND	97	ND	154	18	N2P41215

- Because the analyte was present in the unspiked sample at a high level, the spiked sample does not provide valid spike recovery data.

**QUALITY ASSURANCE DATA  
SURROGATE SUMMARY REPORT**

SURROGATE ID	B816	A500	# OUT
--------------	------	------	-------

QC BATCH: N2P41215 Solid (Pesticide compounds by GC)

<b>SAMPLE ID</b>			
BLANK	66	109	0
BLANK SPIKE	52	101	0
CLJ-WCS001	87	124	0
CLJ-WCS001 MD	84	128	0
CLJ-WCS001 MS	90	138	0
CLJ-WCS002	82	149	0
CLJ-WCS005	77	133	0
CLJ-WCS006	84	128	0
CLJ-WCS007	83	139	0
CLJ-WCS008	83	152 *	1
CLJ-WCS009	96	147	0
CLJ-WCS010	88	132	0
CLJ-WCS011	84	151 *	1
CLJ-WCS012	103	131	0

QC LIMITS                   (30-150) (30-150)

SURROGATE ID

B816 = 2,4,5,6-Tetrachloro-m-xylene  
A500 = Decachlorobiphenyl

\* Values outside of method quality control limits  
D Sample was diluted, however, some surrogates may be reported if results were observed.

It is ASC's laboratory policy to allow one surrogate per sample fraction (acid, base-neutral or pesticide) to exceed the stated QC limits. This policy is based upon the USEPA SOW for the Contract Laboratory Program (CLP).



**APPENDIX D**  
**CHAIN-OF-CUSTODY RECORD(S)**



OHM Remediation  
Services Corp.  
A Subsidiary of OHM Corporation

**ANALYTICAL DIVISION**  
Laboratory Analysis Report

**Client:** OHM Remediation Services Corp.  
Southern Region (Morrisville, NC)

**VOLUME I OF III**

**Attn:** Kent Geis

**Project:** 15226N - NEESA; Camp LeJeune, Jacksonville, NC

**Sample(s):** CLJDWS102, CLJDWS151 and CLJDWS075

**Sample Type(s):** Liquid, Organic and Solid

**Analysis Performed:** Tier II - Conventionals, Metals and Organics

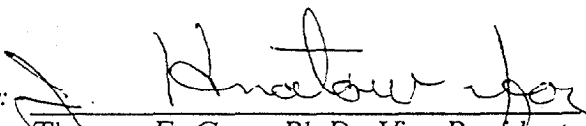
**Date Sample Received:** November 10, 1994

**Date Order Received:** November 10, 1994

**Joblink(s):** 617061

*This report is "PROPRIETARY AND CONFIDENTIAL" and delivered to, and intended for the exclusive use of the above named client only. OHM Remediation Services Corp., Analytical Division, assumes no responsibility or liability for the reliance hereon or use hereof by anyone other than the above named client.*

Reviewed and Approved by:

  
Thomas E. Gran, Ph.D., Vice President

Date: May 12, 1995

## SUMMARY OF ANALYTICAL METHODOLOGY

Parameter	Reference	Method
<b>Conventionals</b>		
Solids, Total	MCAWW	160.3
Solids, Total Suspended (liquid)	MCAWW	160.2
Solids, Total Dissolved (liquid)	MCAWW	160.1
BTU/lb	ASTM	D240-76
Sulfide, Total as S	SW-846	9030
Percent Moisture by Distillation	ASTM	D95
Acids by IC (Cl, NO <sub>3</sub> , PO <sub>4</sub> and SO <sub>4</sub> )	MCAWW	300.0
Cyanide, Total and Amenable	SW-846	9010
<b><u>RCRA Characteristics</u></b>		
Reactive Sulfide	SW-846	7.3.4.2
Flash Point, Seta Flash	SW-846	1020
Reactive Cyanide	SW-846	7.3.3.2
pH, Electrode (soil)	CLP	1.7.1.1
pH, Electrode (liquid)	SW-846	9040
<b>Metals</b>		
Total Metals	SW-846	6010
Mercury by Cold Vapor (solid)	SW-846	7471
Mercury by Cold Vapor (liquid)	SW-846	7470
<b>Organics</b>		
Volatile Compounds by GC/MS	CLP	SOW
Semi-volatile Compounds by GC/MS	CLP	SOW
Pesticides and PCBs by GC	SW-846	8080

## Narrative for SDG # CLJDWS075

Laboratory: OHM Remediation Services Corp.  
Analytical Division

Project #: 15226N

Project Location: Camp Lejeune, Jacksonville, NC.

Samples in this Sample Delivery Group (SDG):

CLJDWS075

CLJDWS102

CLJDWS151

The temperature of the samples received by the laboratory was 15°C.

#### Volatile Organics by GC/MS

Elevated Practical Quantitation Limits (PQL) were reported due to high levels of target and/or nontarget compounds present in the samples.

Zero of 51 surrogate recoveries were outside QC limits.

Zero of 30 matrix spike recoveries and zero of 15 matrix RPD's were outside QC limits.

A sample from another SDG# was utilized for the matrix spike/matrix spike duplicate for the water and soil matrices in this SDG.

All target compounds were inadvertently spiked for this analytical batch. Only the required CLP spiking compounds were reported on Form III.

Low levels of Methylene Chloride were detected in the method blank for the water matrix and should therefore, be taken into consideration when assessing the data.

Low levels of Xylene were detected in the method blanks for the organic and soil matrices and should therefore, be taken into consideration when assessing the data.

All initial calibration criteria were met except Toluene that was analyzed on 11/8/94. Due to possible laboratory error, this constituent only had a three point calibration curve generated.

Three compounds were outside continuing calibration on 11/17/94, lab ID# c0150.d. One compound was outside continuing calibration on 11/18/94, lab ID# c0173.d. All other compounds met continuing calibration criteria.

All internal standard criteria were met for this SDG except sample CLJDWS151. Chlorobenzene-d<sub>5</sub> was outside criteria due to matrix interferences which was verified by multiple analyses.

All holding times were met for this SDG.

## Semivolatile Organics by GC/MS

Elevated Practical Quantitation Limits (PQL) were reported due to high levels of target and/or nontarget compounds present in the samples.

Seven of 84 surrogates were outside QC limits, 30 surrogates were diluted below detectable levels (recoveries were reported whenever possible).

Matrix spike recoveries and matrix RPD's were outside QC limits for the oil matrix due to sample dilutions caused by high levels of compounds present. QA/QC acceptance was based on blank (method) spike recoveries which, in some cases, were biased high for this batch.

Zero of 22 soil matrix spike recoveries and one of 11 soil matrix RPD's were outside QC limits.

Matrix spike data is not available for the water sample #CLJDWS102 due to the insufficient sample volume supplied. QA/QC acceptance was based on blank (method) spike recoveries which, in some cases, were biased high for this batch. Insufficient sample remained to re-extract and re-analyze.

All method blank criteria were met for this SDG.

One compound was outside initial calibration criteria on 11/10/04. All other initial calibration criteria were met for this SDG.

One compound was outside continuing calibration criteria on 11/10/94 and 11/21/04, lab ID# e2872.d and e2921.d. Six compounds were outside continuing calibration on 11/18/94, lab ID# b4987.d. Four compounds were outside continuing calibration on 11/20/94, lab ID# e2893.d. Two compounds were outside continuing calibration on 11/22/94, lab ID# e2943.d. All other compounds were within criteria.

Two internal standard area counts were outside QC limits for sample CLJDWS151 due to matrix interferences and was confirmed by replicate analysis.

No GPC cleanup was performed on the solid samples submitted in this SDG.

All holding times were met for this SDG.

**Pesticides by GC**

Elevated Practical Quantitation Limits (PQL) were reported due to high levels of target and/or nontarget compounds present in the samples.

Six of 28 surrogates were outside CLP Advisory QC limits listed on FORM II PEST 1&2. Two of 14 surrogates were outside method limits for TCX and four of 14 surrogates were outside method limits for DCB in the primary/quantitation analysis. Four surrogates were diluted below quantitation limits.

Zero of 12 soil matrix spike recoveries and six of 6 soil matrix RPD's were outside QC limits.

Oil matrix spike/matrix spike duplicates were diluted below detectable levels. The samples associated with this batch are CLJDWS075.

Matrix spike data is not available for the water sample #CLJDWS102 due to the insufficient sample volume supplied. QA/QC acceptance was based on blank (method) spike recoveries which were within QC limits.

A soil sample from another SDG# was utilized for the matrix spike/matrix spike duplicate for this SDG.

All method blank criteria were met for this SDG.

All compounds met %RSD initial calibration criteria for the primary analysis except for the surrogate compound Decachlorobiphenyl (DCB). Two compounds were outside initial calibration criteria for the confirmation analysis.

Two compounds were outside continuing primary calibration on 11/4/94, lab ID# Z7433.

Ten compounds were outside ending calibration on 11/4/94, lab ID# Z7463.

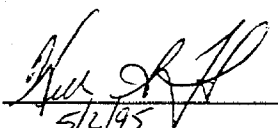
Five compounds were outside continuing confirmation on 11/16/94, lab ID# Y7337.

Sixteen compounds were outside ending confirmation on 11/18/94, lab ID# Y7393 and five compounds were outside ending confirmation on 11/19/94, lab ID# Y7405.

None of these compounds were detected in any samples associated with these standards but would have been detected if present in the samples.

No GPC cleanup was performed on solid samples submitted in this SDG.

All holding times were met for this SDG.

Signature: 

Date: 5/2/95

Name: William A. Fithian

Title: Technical Project Manager



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

00007  
EPA SAMPLE NO.

CLJDWS075

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESC  
 Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS075  
 Matrix: (soil/water) SOIL Lab Sample ID: JN4743V  
 Sample wt/vol: .53 (g/mL) G Lab File ID: C0197  
 Level: (low/med) LOW Date Received: 11/10/94  
 % Moisture: not dec. \_\_\_\_\_ Date Analyzed: 11/19/94  
 GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 5000.0 <sup>5000</sup> 48,000  
 Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100 (uL) <sup>100</sup>

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

CAS NO. COMPOUND Q

74-87-3	-----Chloromethane	240000	U
74-83-9	-----Bromomethane	240000	U
75-01-4	-----Vinyl Chloride	240000	U
75-00-3	-----Chloroethane	240000	U
75-09-2	-----Methylene Chloride	120000	J
67-64-1	-----Acetone	470000	U
75-15-0	-----Carbon Disulfide	240000	U
75-35-4	-----1,1-Dichloroethene	240000	U
75-34-3	-----1,1-Dichloroethane	240000	U
67-66-3	-----Chloroform	240000	U
107-06-2	-----1,2-Dichloroethane	240000	U
78-93-3	-----2-Butanone	240000	U
71-55-6	-----1,1,1-Trichloroethane	240000	U
56-23-5	-----Carbon Tetrachloride	240000	U
75-27-4	-----Bromodichloromethane	240000	U
78-87-5	-----1,2-Dichloropropane	240000	U
10061-01-5	-----cis-1,3-Dichloropropene	240000	U
79-01-6	-----Trichloroethene	240000	U
124-48-1	-----Dibromochloromethane	240000	U
79-00-5	-----1,1,2-Trichloroethane	240000	U
71-43-2	-----Benzene	240000	U
10061-02-6	-----trans-1,3-Dichloropropene	240000	U
75-25-2	-----Bromoform	240000	U
108-10-1	-----Methyl-iso-butyl ketone	470000	U
591-78-6	-----2-Hexanone	240000	U
127-18-4	-----Tetrachloroethylene	240000	U
79-34-5	-----1,1,2,2-Tetrachloroethane	240000	U
108-88-3	-----Toluene	130000	J
108-90-7	-----Chlorobenzene	240000	U
100-41-4	-----Ethylbenzene	350000	
100-42-5	-----Styrene	240000	U
1330-20-7	-----Xylene (total)	1800000	B
156-60-5	-----1,2-Trans-dichloroethylene	240000	U

00008

EPA SAMPLE NO.

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLJDWS075

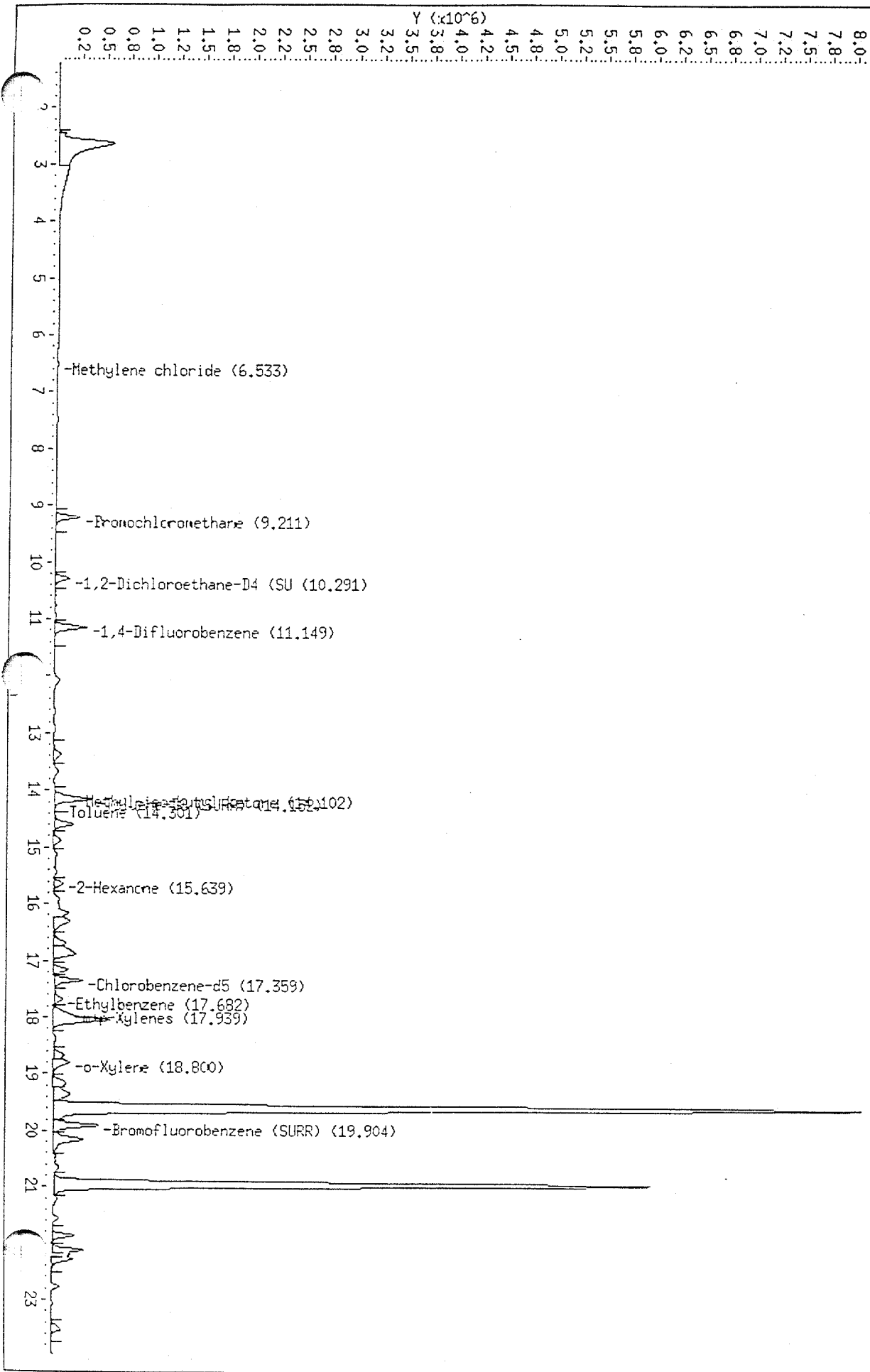
Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESCLab Code: \_\_\_\_\_ Case No.: 15226N SAS No.: \_\_\_\_\_ SDG No.: CLJDWS075Matrix: (soil/water) SOIL Lab Sample ID: JN4743VSample wt/vol: .53 (g/mL) G Lab File ID: C0197Level: (low/med) LOW Date Received: 11/10/94% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 11/19/94GC Column: DB624 ID: 0.53 (mm) Dilution Factor: ~~5000.0~~ 43,000Soil Extract Volume: 5000 (uL) Soil Aliquot Volume: 100 (uL)Number TICs found: 15CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 111-65-9	Octane	14.60	2100000	JN
2. 3073-66-3	Cyclohexane, 1,1,3-trimethyl	16.31	2200000	JN
3. 3074-71-3	Heptane, 2,3-dimethyl-	16.69	1400000	JN
4. 2213-23-2	Heptane, 2,4-dimethyl-	16.88	3600000	JN
5. 2216-33-3	Octane, 3-methyl-	17.15	1500000	JN
6. 111-84-2	Nonane	18.05	8100000	JN
7.	Unk hydrocarbon	18.68	1300000	J
8.	Unk hydrocarbon	19.16	1700000	J
9.	Unk hydrocarbon	19.36	2500000	J
10. 80-56-8	.alpha.-Pinene	19.60	84000000	JN
11. 79-92-5	Camphene	20.16	3500000	JN
12. 127-91-3	.beta.-Pinene	20.96	56000000	JN
13. 99-86-5	1,3-Cyclohexadiene, 1-methyl	21.87	2000000	JN
14. 5989-27-5	D-Limonene	22.12	2600000	JN
15. 3387-41-5	Bicyclo[3.1.0]hexane, 4-meth	22.29	1900000	JN

Data File: /chem/aux/msc.i/c111994.b/c0197.d  
Date : 19-NOV-94 17:25  
Instrument : msc.i  
Sample ID : 15226n c1jdw075  
Column phase : J&W DB\_624  
Volume Injected (ul) : 0.0

Column diameter : 0.53

/chem/aux/msc.i/c111994.b/c0197.d



Data File: /chem/aux/msc.i/c111994.b/c0197.d  
 Report Date: 19-Nov-1994 17:58

Page 1

## Analytical Services Corp.

## VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msc.i/c111994.b/c0197.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 19-NOV-94 17:25 Autotune Date: {  
 Operator : dana Inst ID: msc.i  
 Smp Info : 15226n cljdw075  
 Misc Info : jn4743v,n4v4035,s:m2,0.53,5.00:5000,  
 Comment :  
 Method : /chem/aux/msc.i/c111994.b/8240ambic.m  
 Meth Date : 19-Nov-1994 17:57 jeff  
 Cal Date : 19-NOV-94 16:20 Cal File: c0195.d  
 Als bottle: 25  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

OK  
11-25

Compounds	QUANT SIG		CONCENTRATIONS			
	MASS	RT	REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL ( ug/l)
Methylene chloride	84.00	6.533	(0.709)	10420	2.64	2.64(aQ)
Bromochloromethane	128.00	9.211	(1.000)	184538	50.0	
S 19 1,2-Dichloroethane-D4 (SURR)	65.00	10.299	(1.118)	282802	47.7	47.7 ✓
* 22 1,4-Difluorobenzene	114.00	11.149	(1.000)	731042	50.0	
28 Methyl-iso-butyl ketone	43.00	14.102	(0.812)	12697	3.06	<del>3.06(aQ)</del> MS
S 29 Toluene-D8 (SURR)	98.00	14.160	(0.816)	590834	51.0	51.0 ✓
30 Toluene	92.00	14.301	(0.824)	20350	2.84	2.84(aQ)
34 2-Hexanone	43.00	15.648	(0.901)	150262	61.4	<del>61.4(aQ)</del> MS
* 36 Chlorobenzene-d5	117.00	17.359	(1.000)	466643	50.0	
38 Ethylbenzene	106.00	17.674	(1.018)	31548	7.44	7.44
39 m-p-Xylenes	106.00	17.939	(1.033)	80041	16.2	16.2
40 o-Xylene	106.00	18.808	(1.083)	105473	21.0	21.0
S 43 Bromofluorobenzene (SURR)	95.00	19.912	(1.147)	401542	48.7	48.7 ✓

## QC Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Q - Qualifier signal failed the ratio test.

Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 9

Date: 19-NOV-94 17:25

Instrument: msc.i

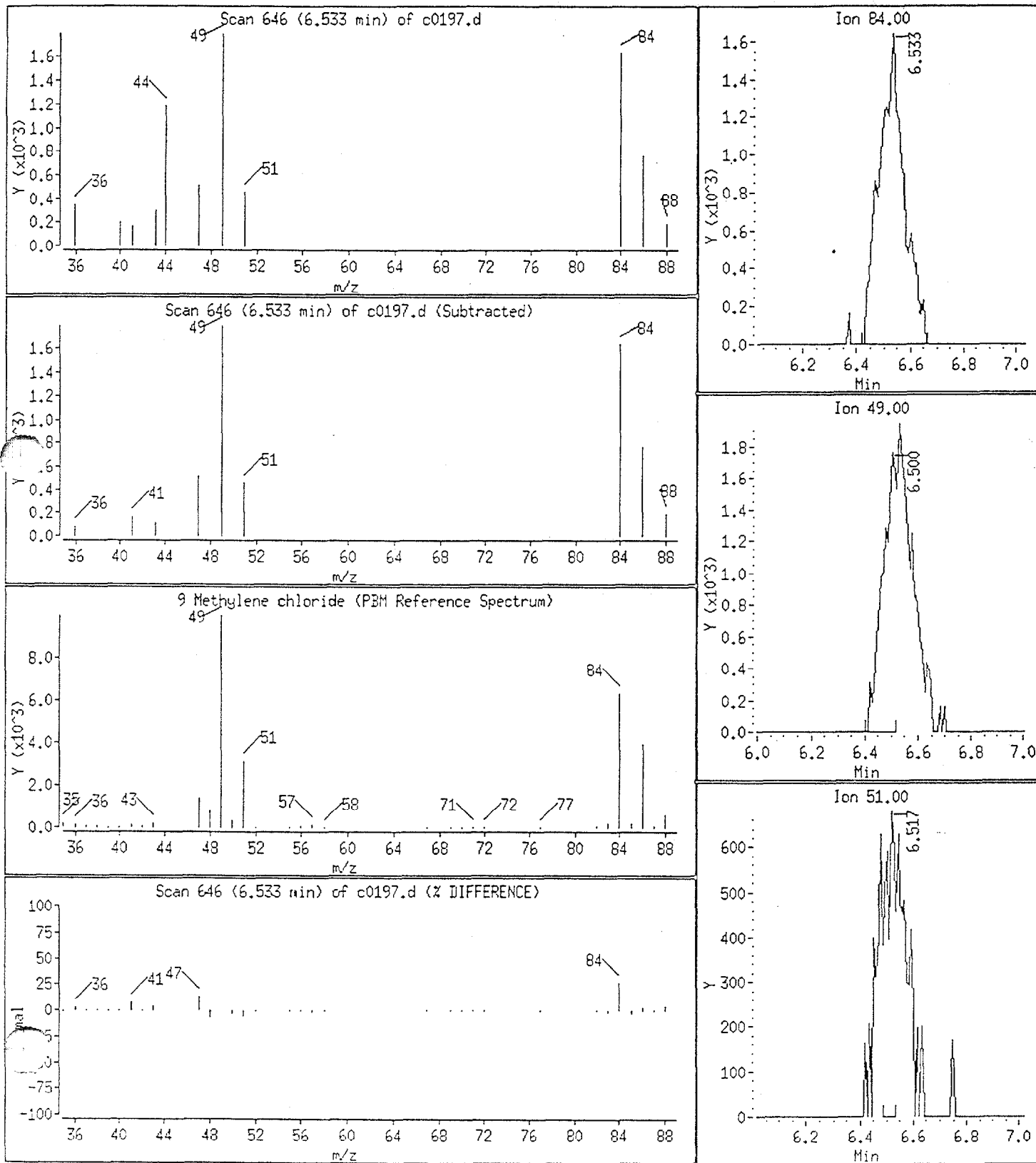
Sample ID: 15226n cljdw075

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

9 Methylene chloride



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 11

Date: 19-NOV-94 17:25

Instrument: msc.i

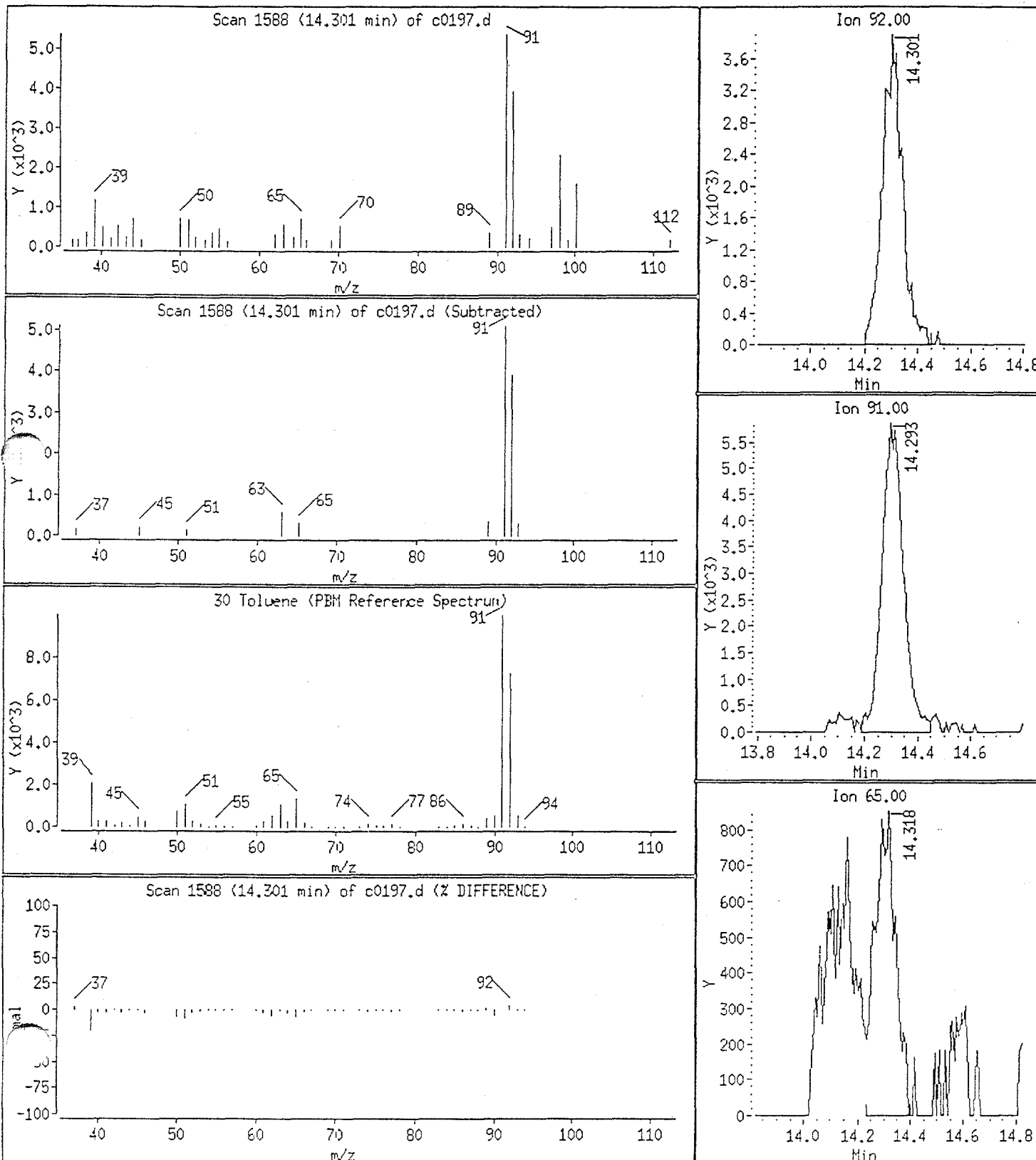
Sample ID: 15226n cljdwsl075

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

30 Toluene



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Date: 19-NOV-94 17:25

Instrument: msc.i

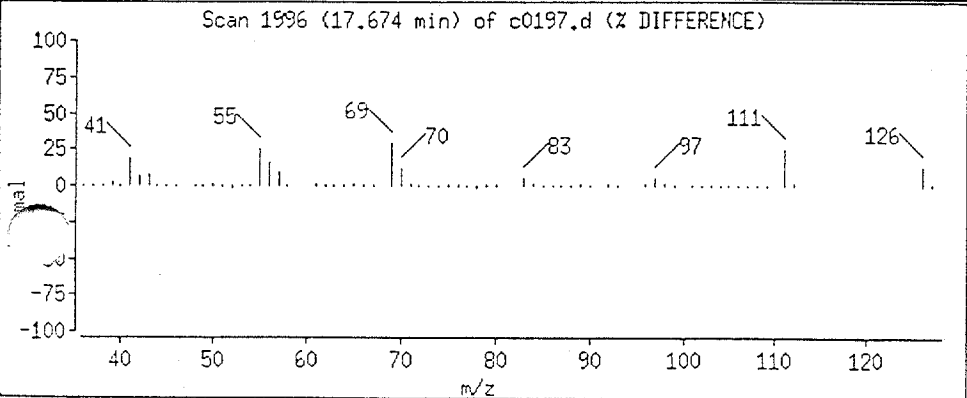
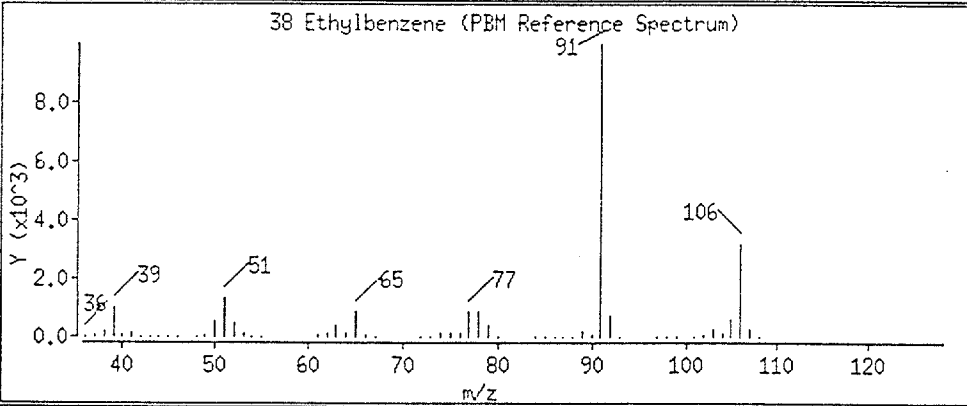
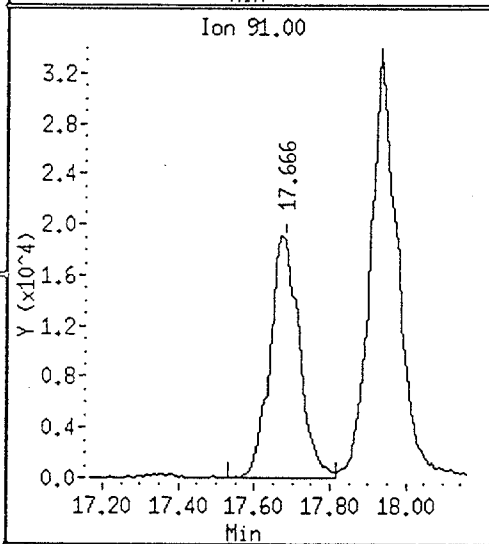
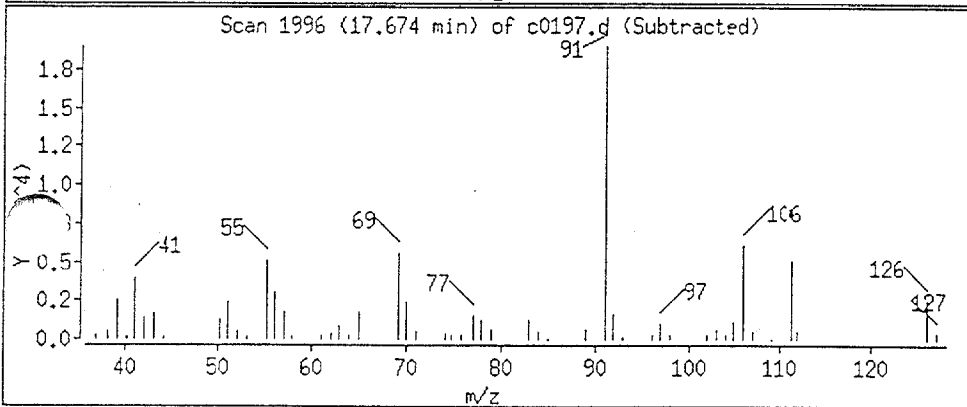
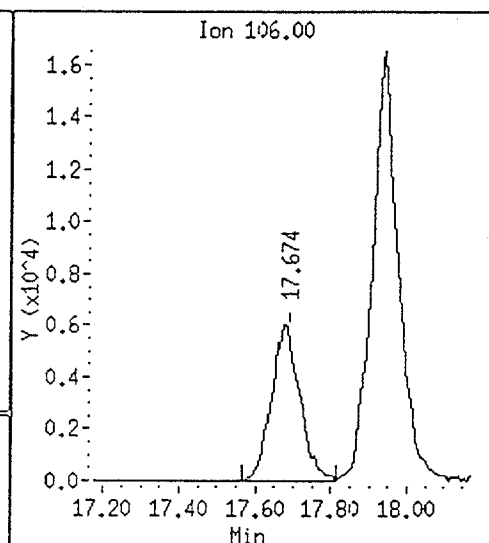
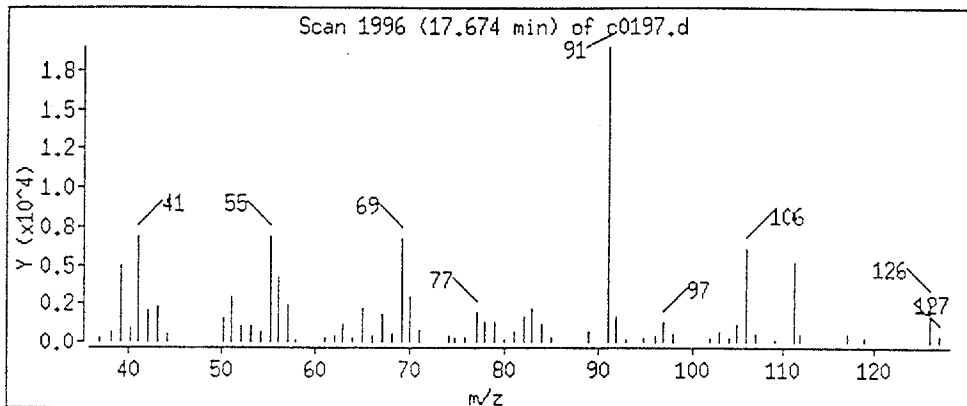
Sample ID: 15226n cljdw075

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

38 Ethylbenzene



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Date: 19-NOV-94 17:25

Instrument: msc.i

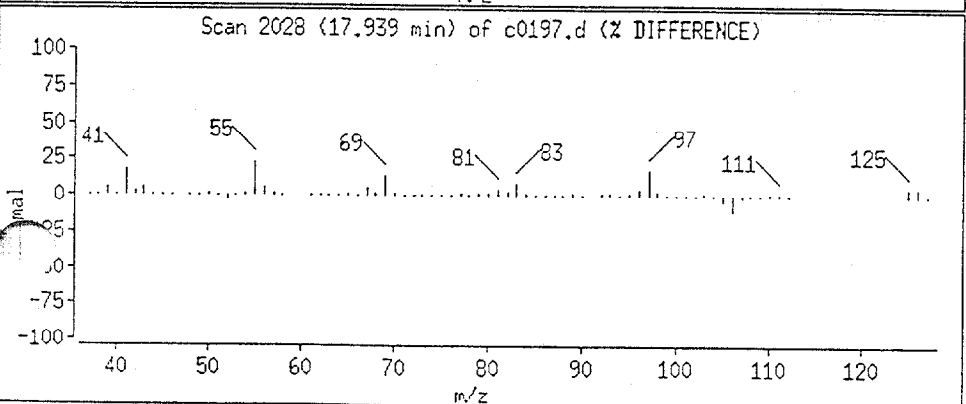
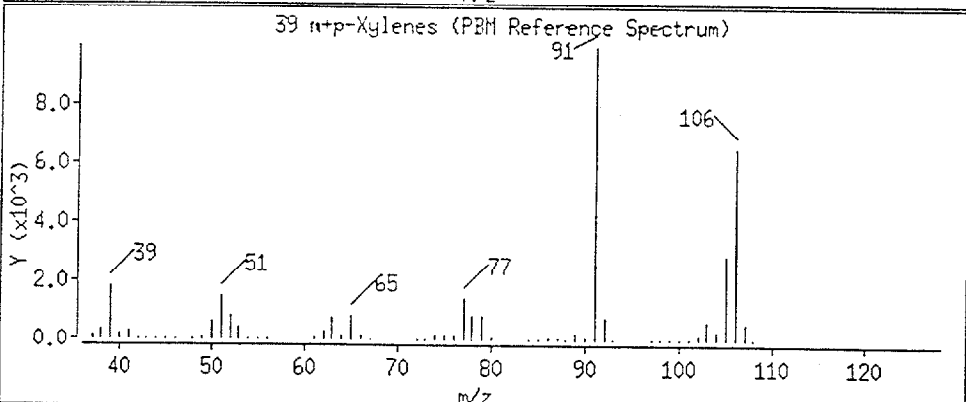
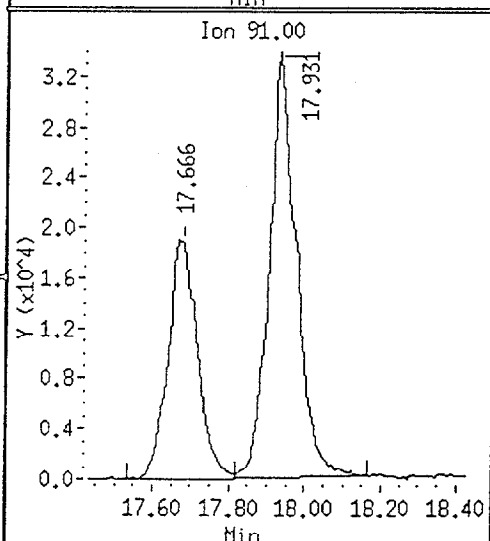
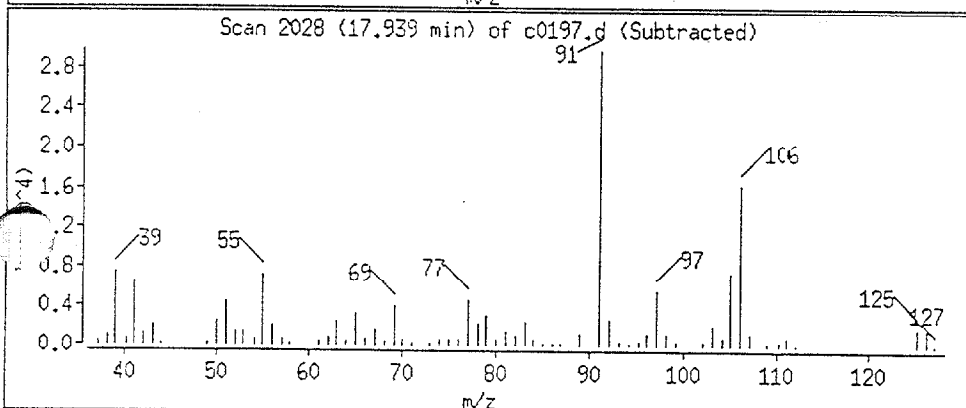
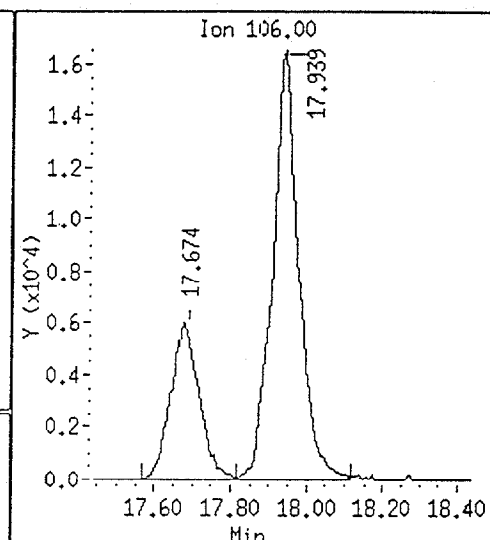
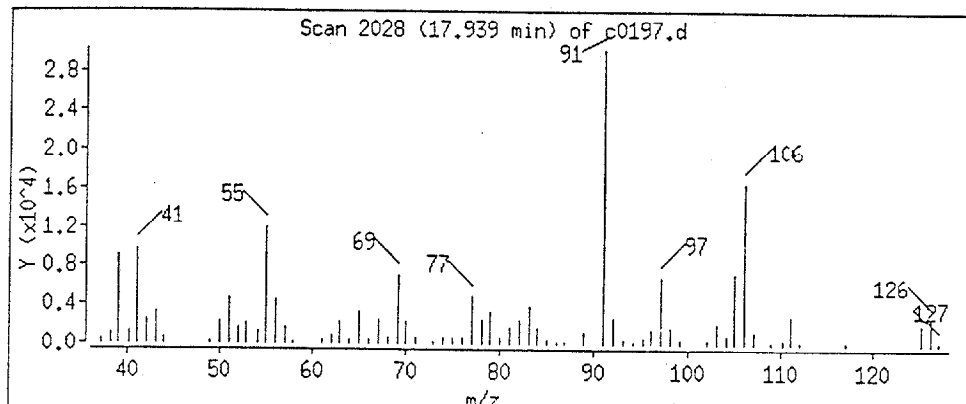
Sample ID: 15226n cljdw075

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

39 m+p-Xylenes





Data File: /chem/aux/msc.i/c111994.b/c0197.d

Date: 19-NOV-94 17:25

Instrument: msc.i

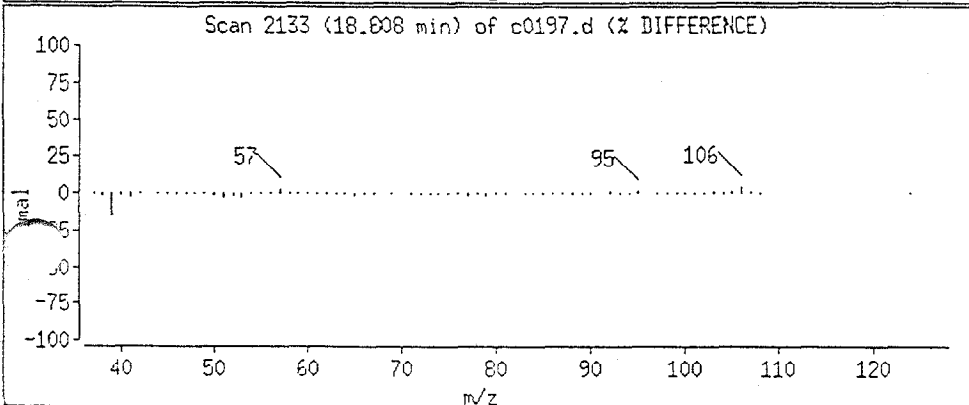
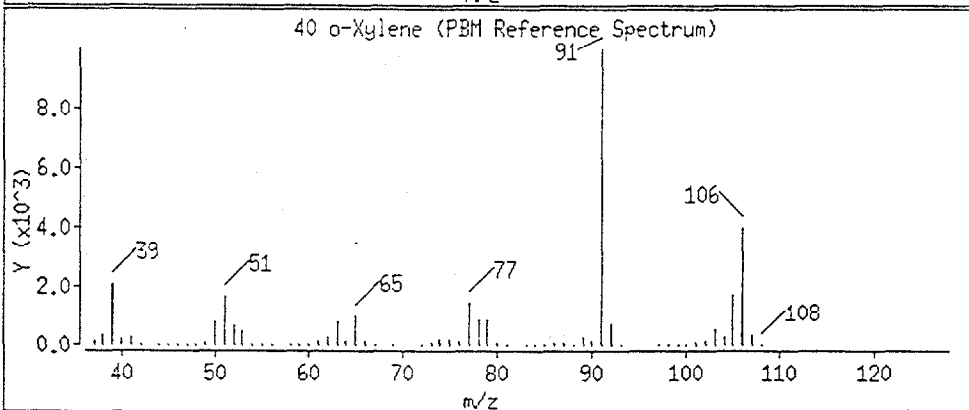
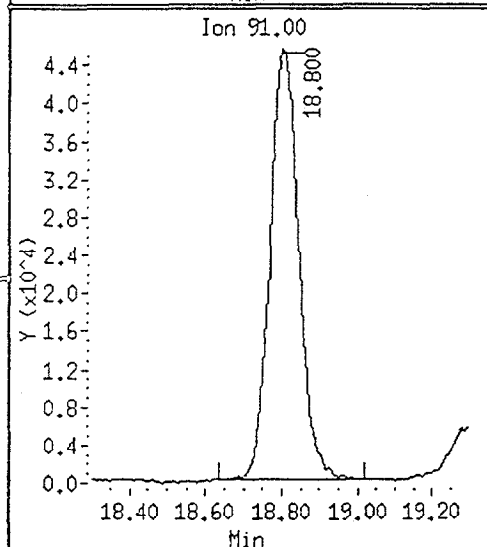
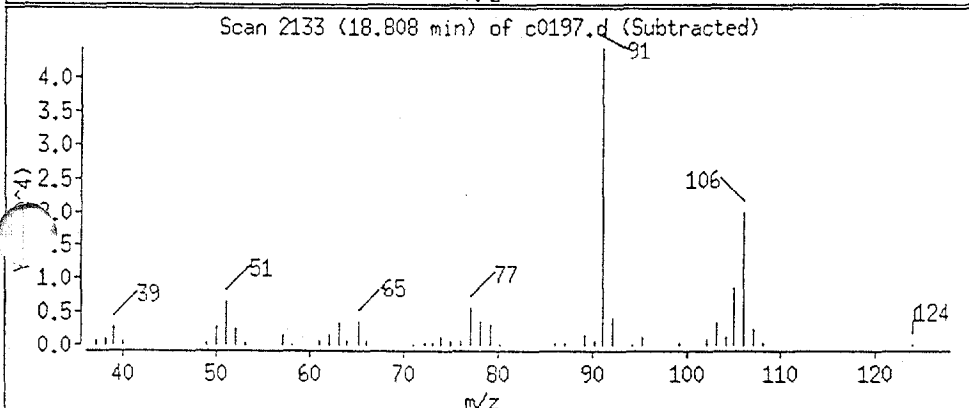
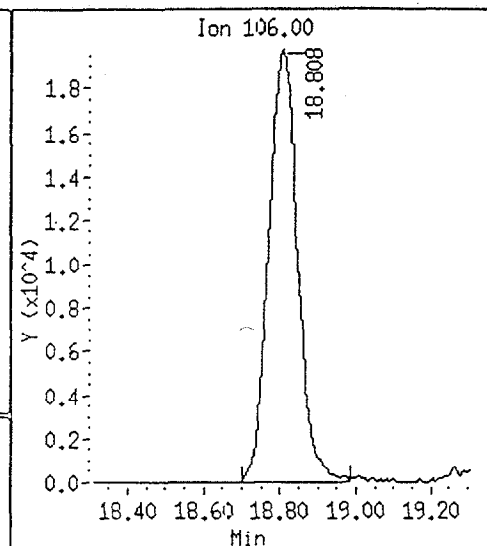
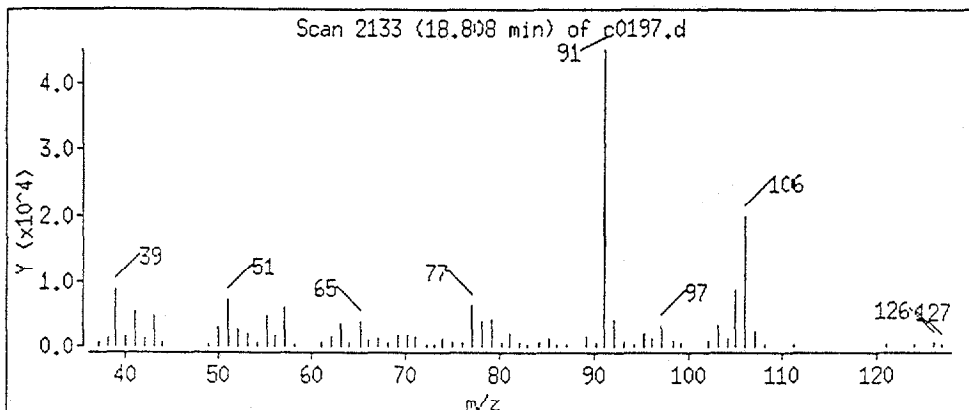
Sample ID: 15226n cljdw075

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

40 o-Xylene



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 18

Date: 19-NOV-94 17:25

Instrument: msc.i

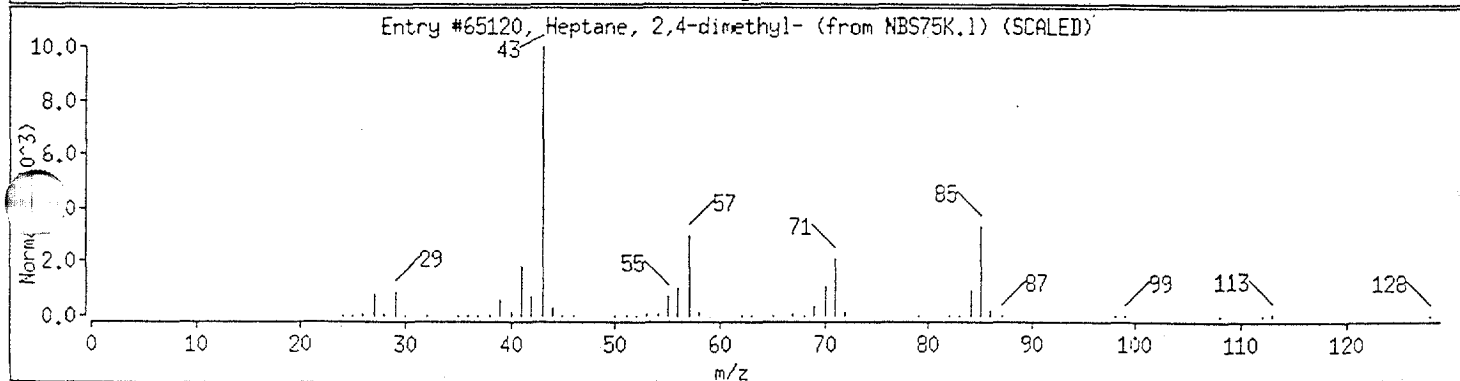
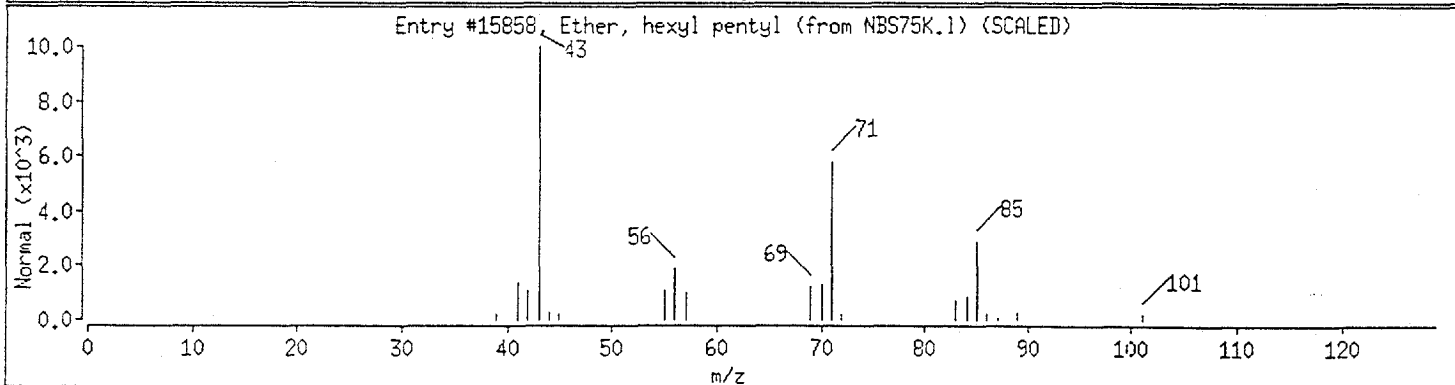
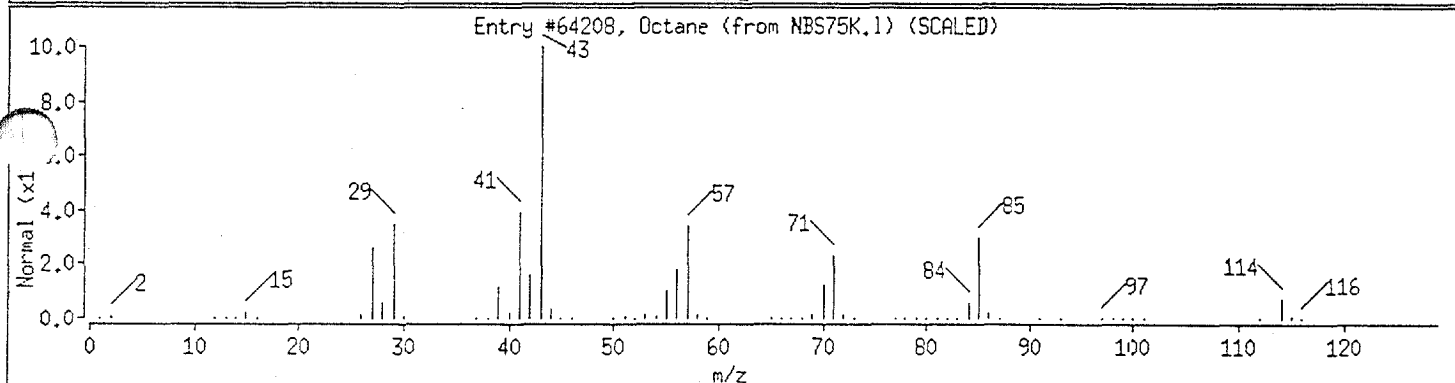
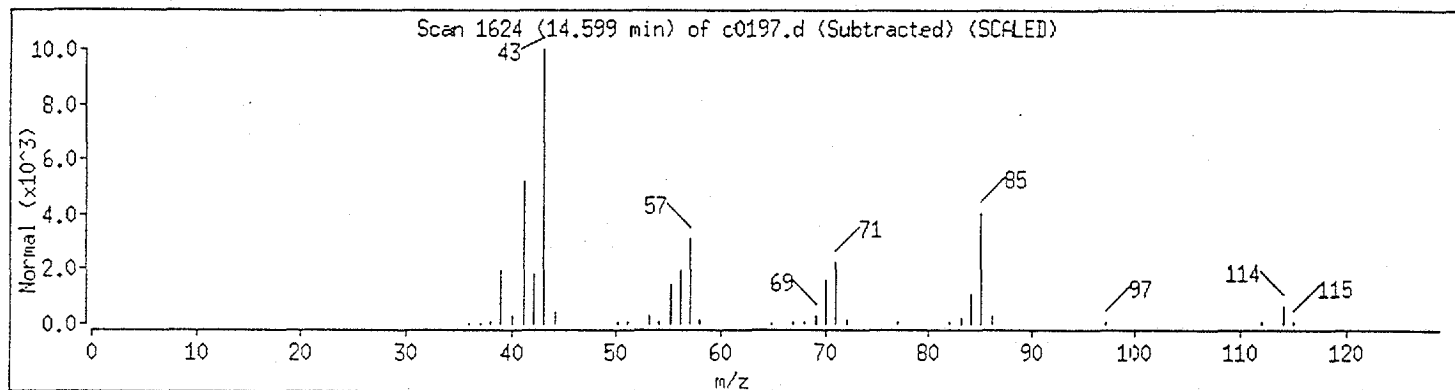
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Octane	111-65-9	NBS75K.1	64208	94
Ether, hexyl pentyl	32357-83-8	NBS75K.1	15858	64
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.1	65120	64



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 20

Date: 19-NOV-94 17:25

Instrument: msc.i

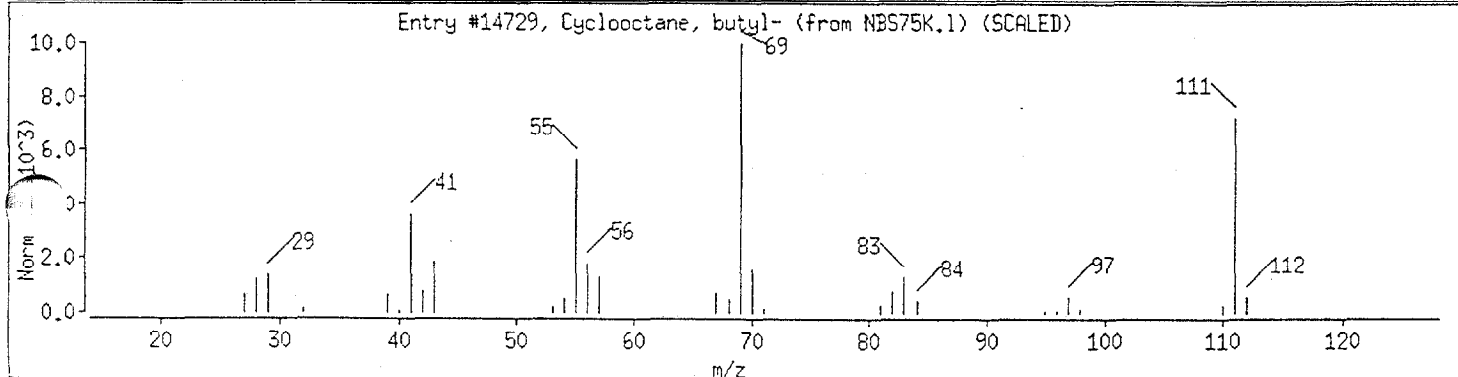
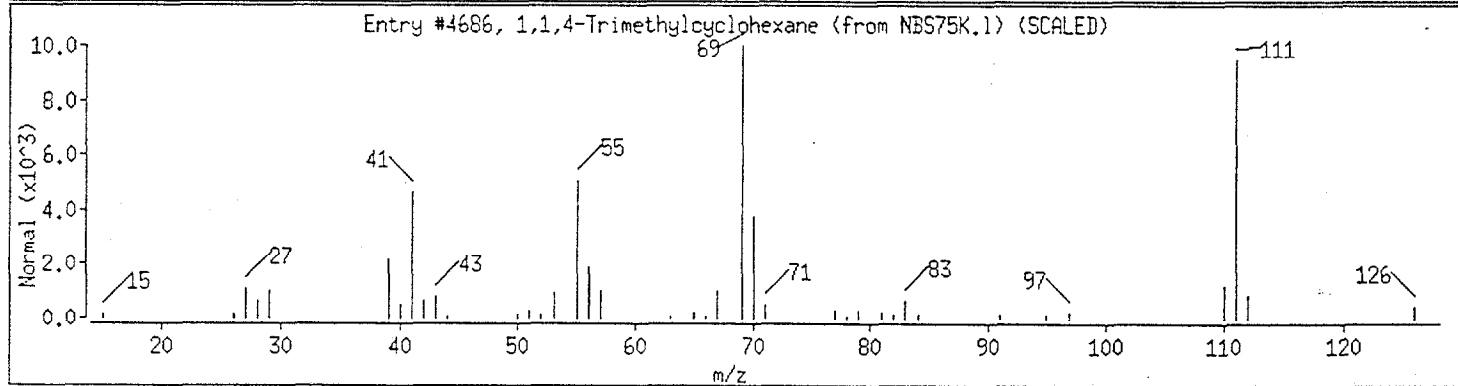
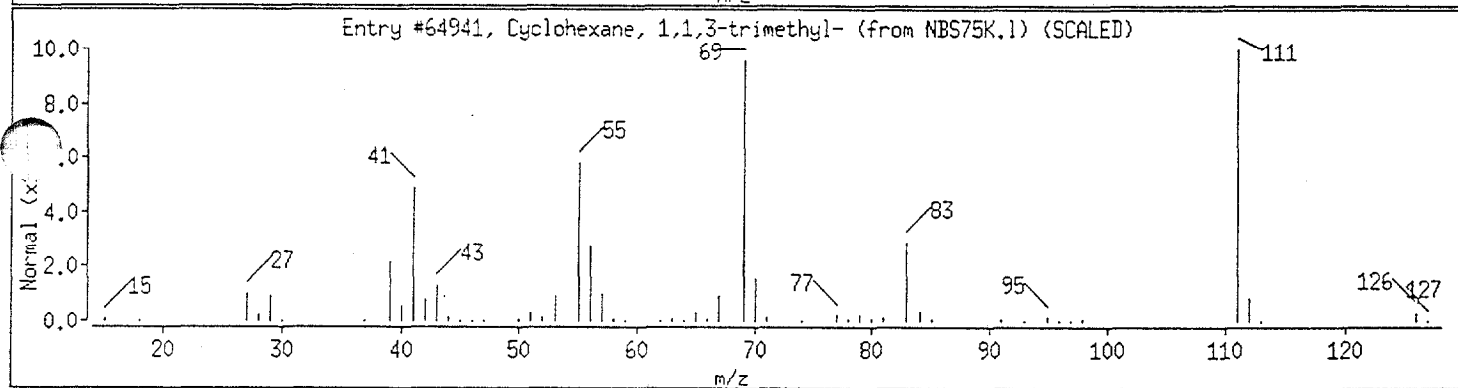
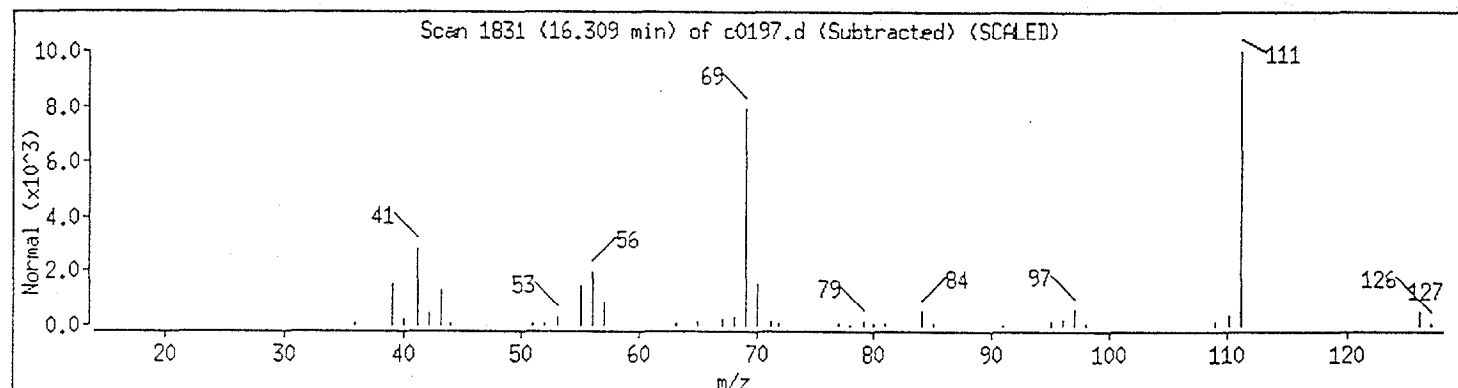
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclohexane, 1,1,3-trimethyl-	3073-66-3	NBS75K.1	64941	78
1,1,4-Trimethylcyclohexane	7094-27-1	NBS75K.1	4686	72
Cyclooctane, butyl-	16538-93-5	NBS75K.1	14729	56



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 21

Date: 19-NOV-94 17:25

Instrument: msc.i

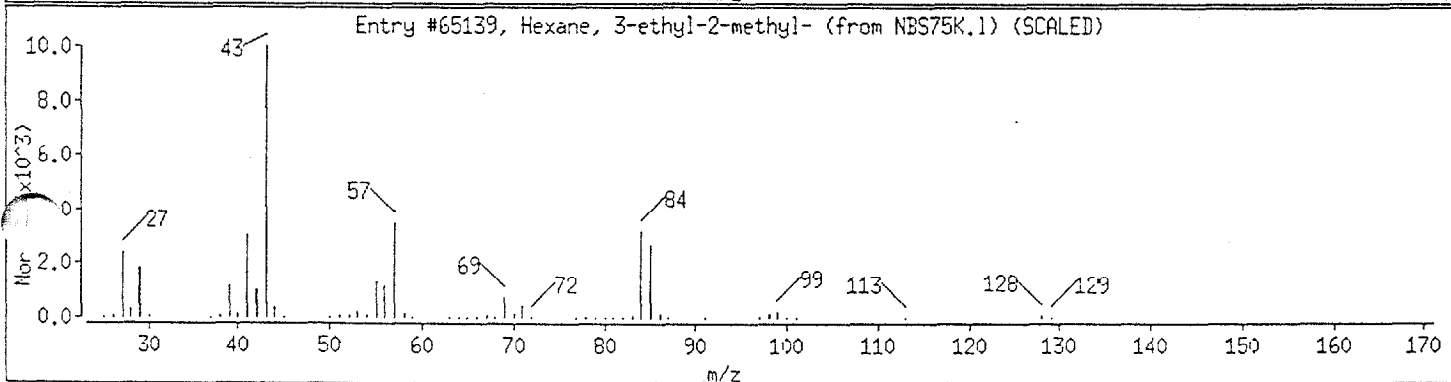
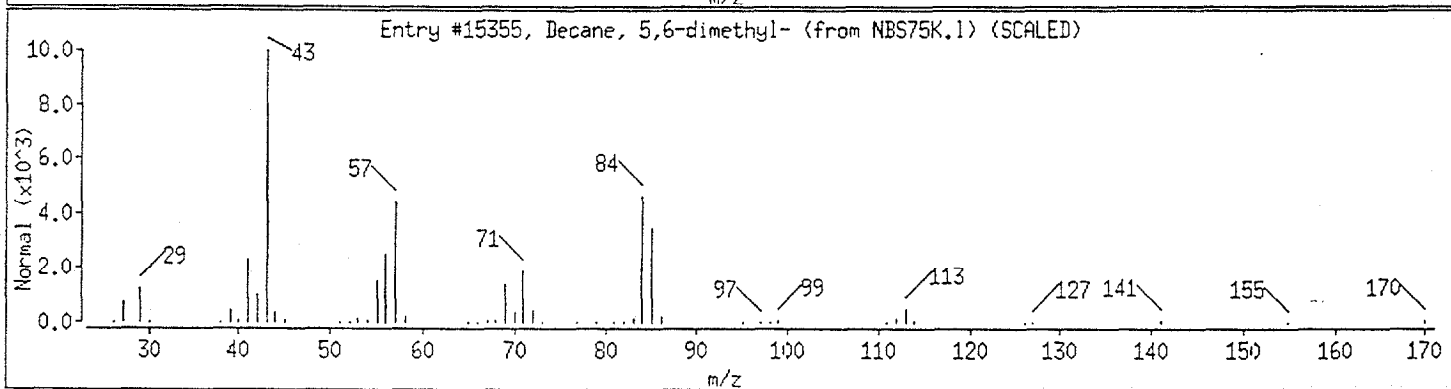
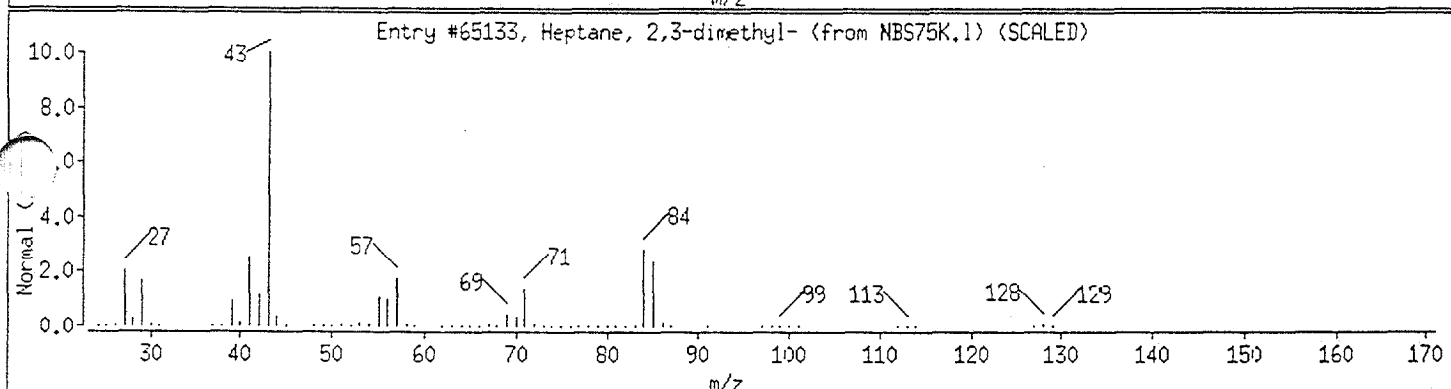
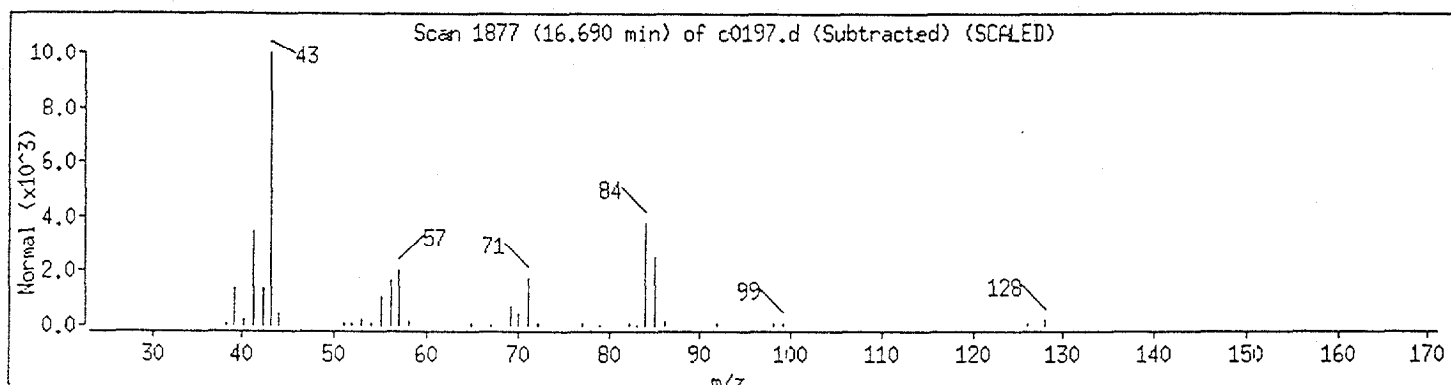
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Heptane, 2,3-dimethyl-	3074-71-3	NBS7EK.1	65133	83
Decane, 5,6-dimethyl-	1636-43-7	NBS7EK.1	15355	83
Hexane, 3-ethyl-2-methyl-	16789-46-1	NBS7EK.1	65139	78



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 22

Date: 19-NOV-94 17:25

Instrument: msc.i

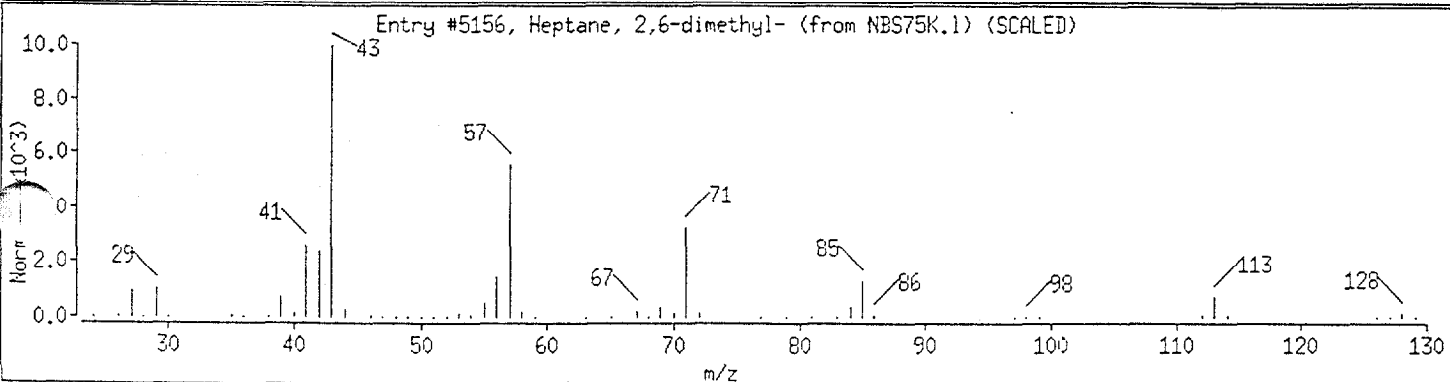
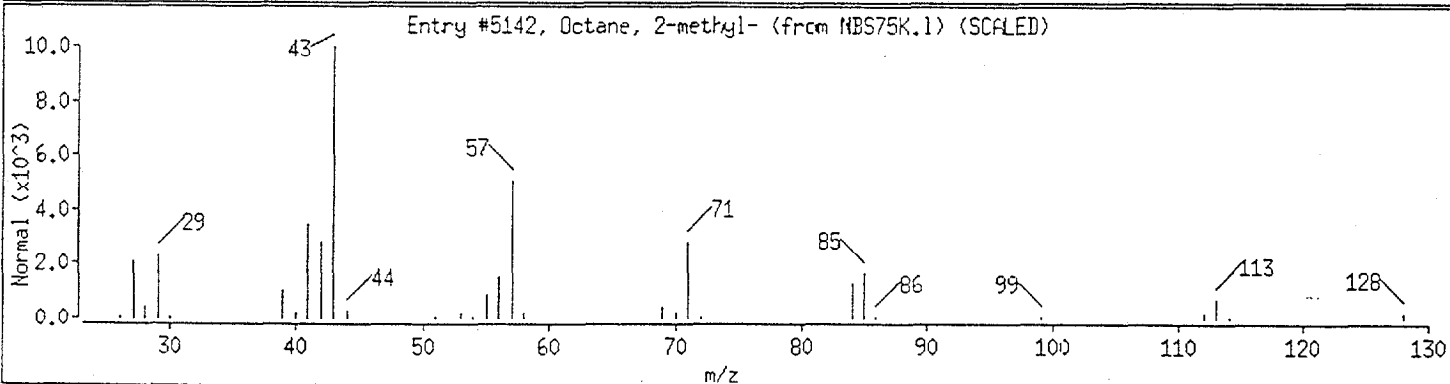
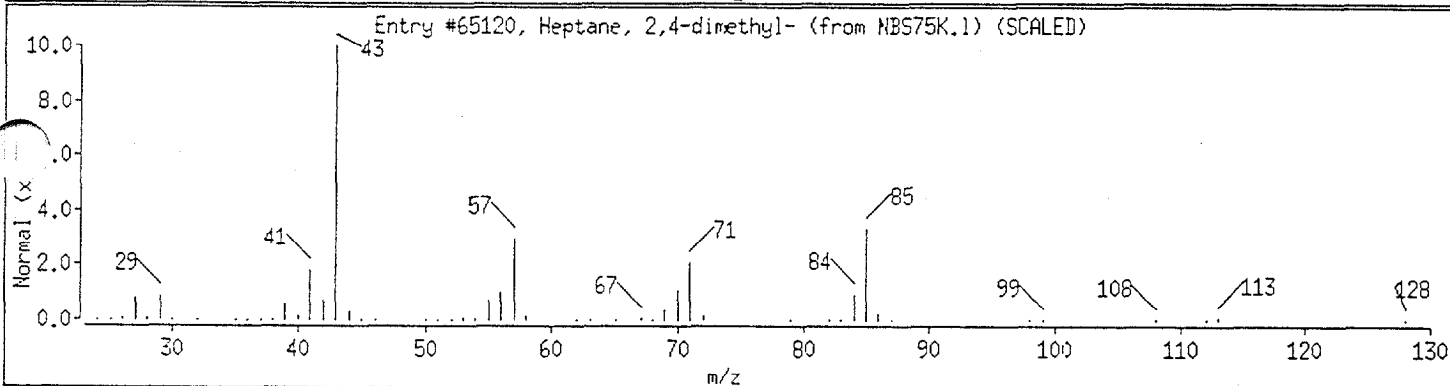
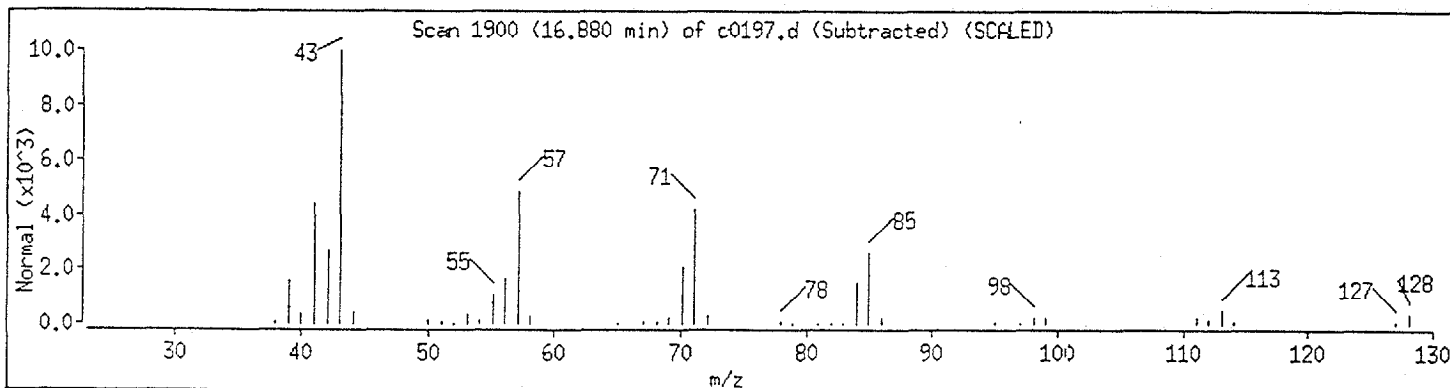
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Heptane, 2,4-dimethyl-	2213-23-2	NBS75K.1	65120	80
Octane, 2-methyl-	3221-61-2	NBS75K.1	5142	64
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.1	5156	59



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 23

Date: 19-NOV-94 17:25

Instrument: msc.i

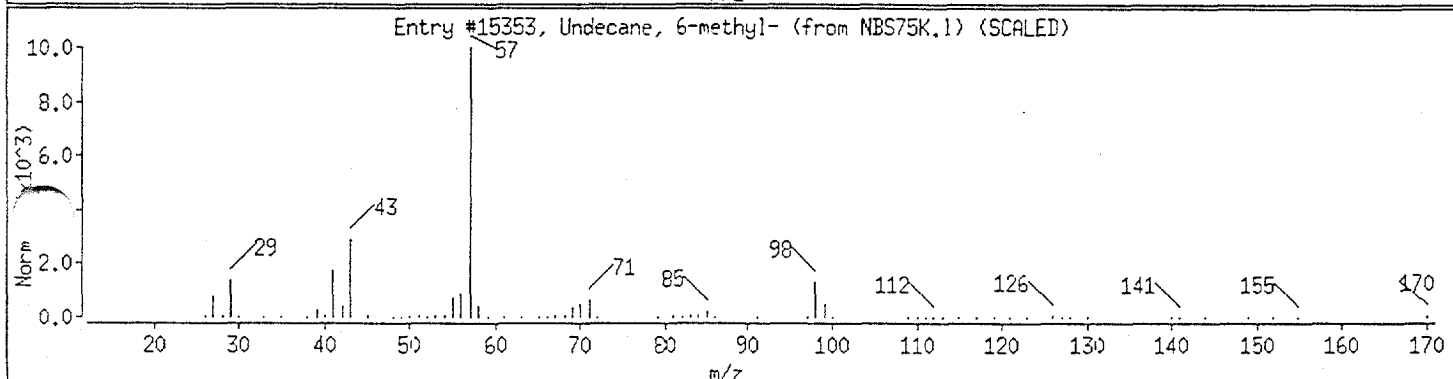
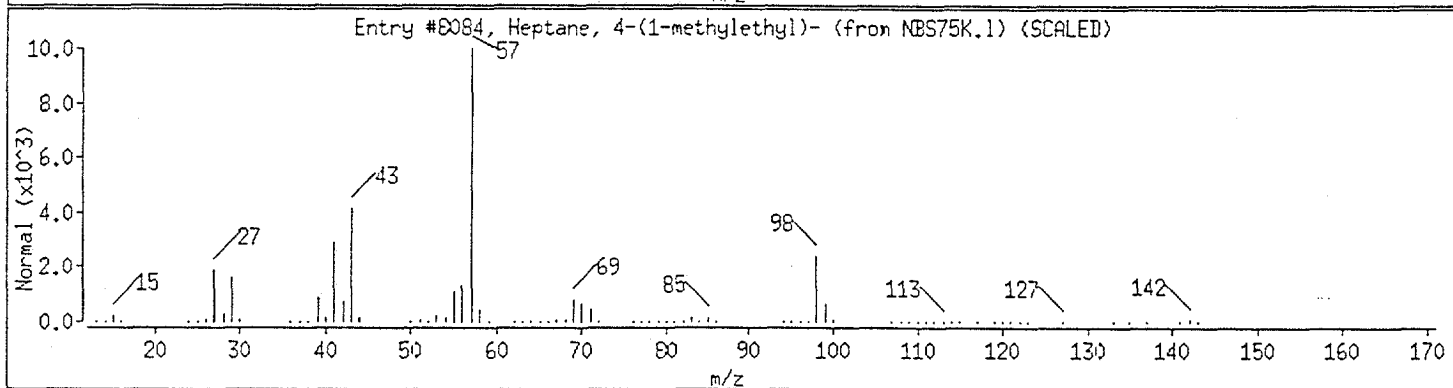
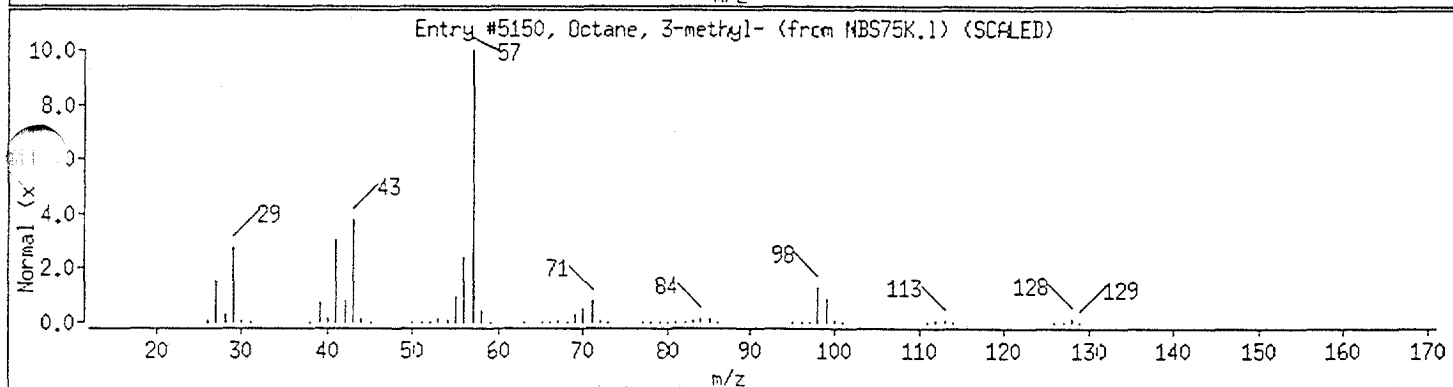
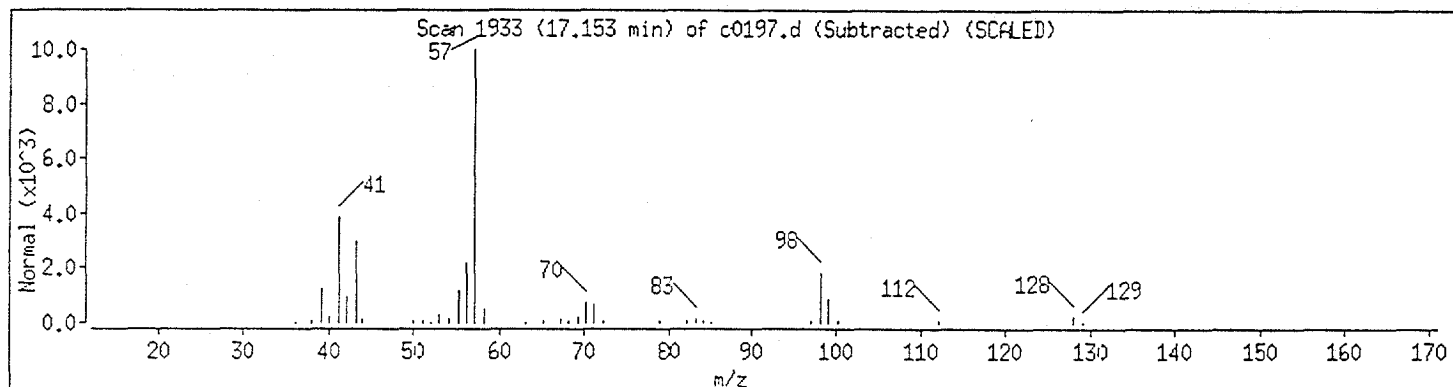
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Octane, 3-methyl-	2216-33-3	NBS75K.1	5150	86
Heptane, 4-(1-methylethyl)-	52896-87-4	NBS75K.1	8084	64
Undecane, 6-methyl-	17302-33-9	NBS75K.1	15353	59



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 24

Date: 19-NOV-94 17:25

Instrument: msc.i

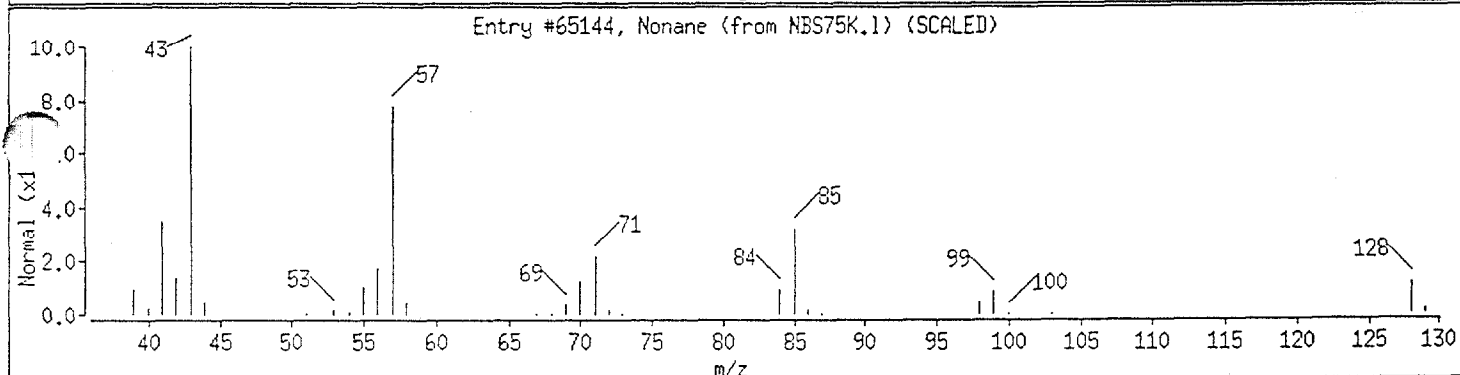
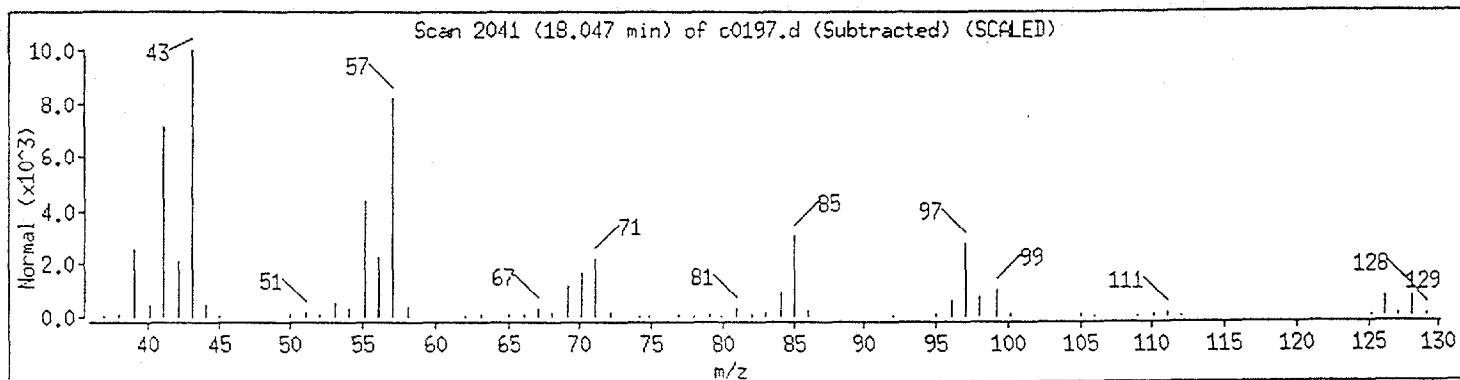
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Nonane	111-84-2	NBS7EK.1	65144	89



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 25

Date: 19-NOV-94 17:25

Instrument: msc.i

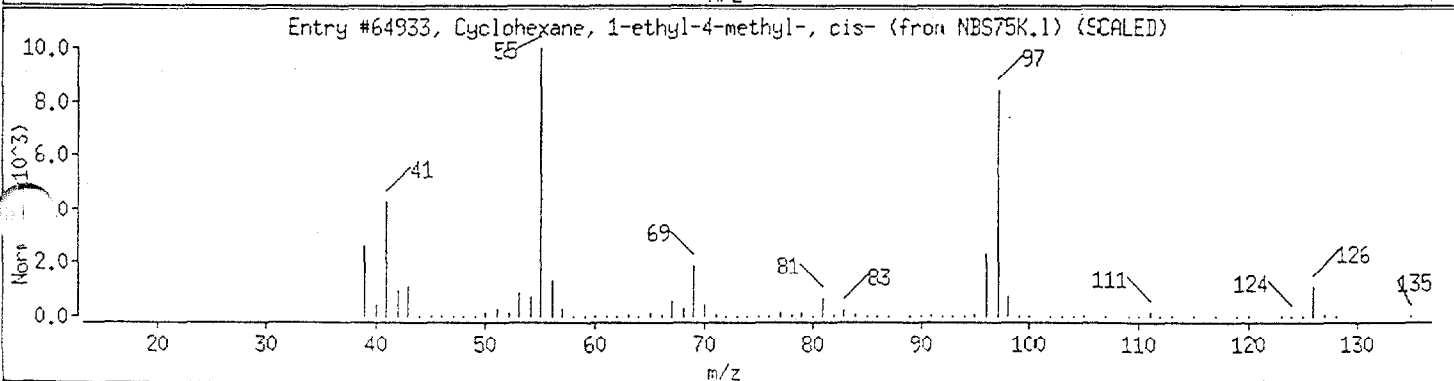
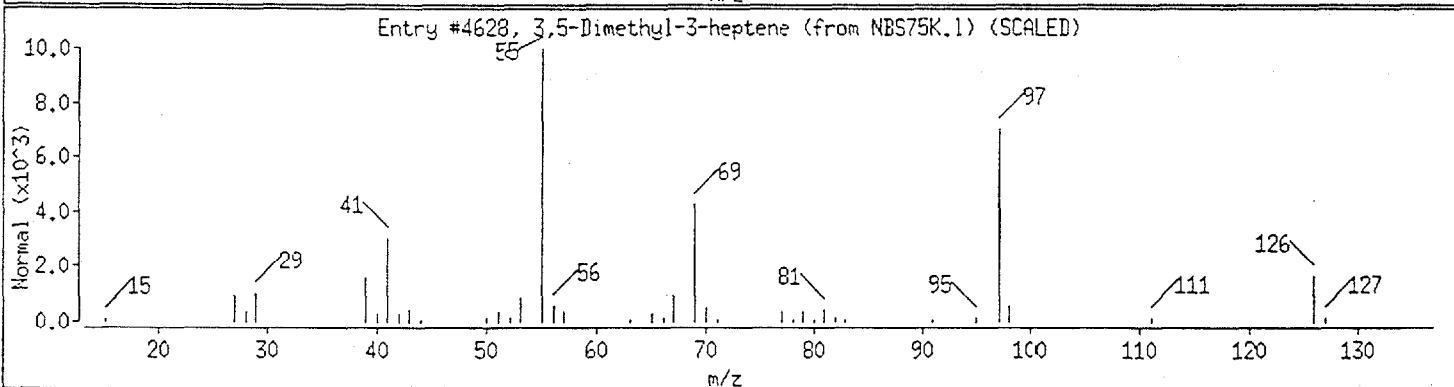
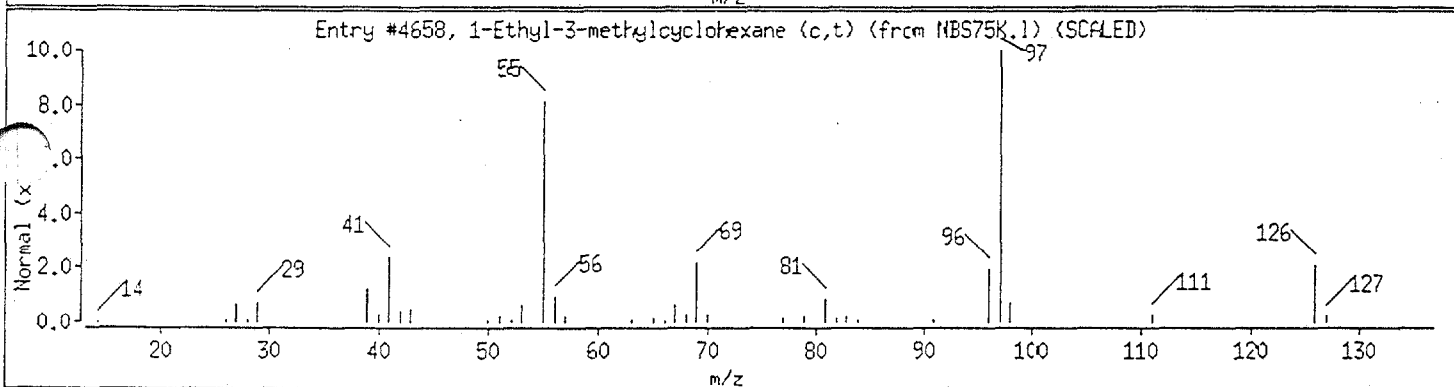
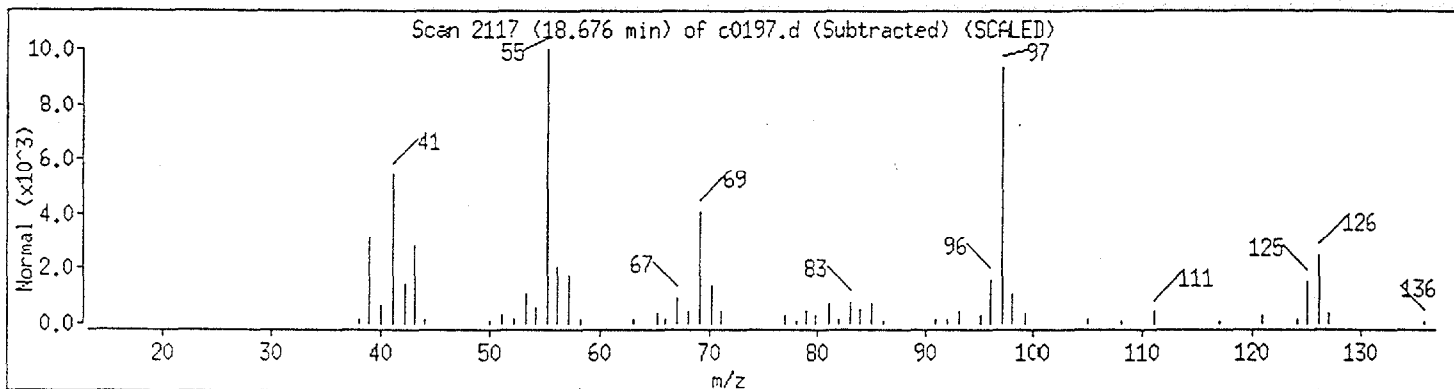
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1-Ethyl-3-methylcyclohexane (c,t)	3728-55-0	NBS75K.1	4658	81
3,5-Dimethyl-3-heptene	59643-68-4	NBS75K.1	4628	68
Cyclohexane, 1-ethyl-4-methyl-, cis-	4926-78-7	NBS75K.1	64933	68





Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 26

Date: 19-NOV-94 17:25

Instrument: msc.i

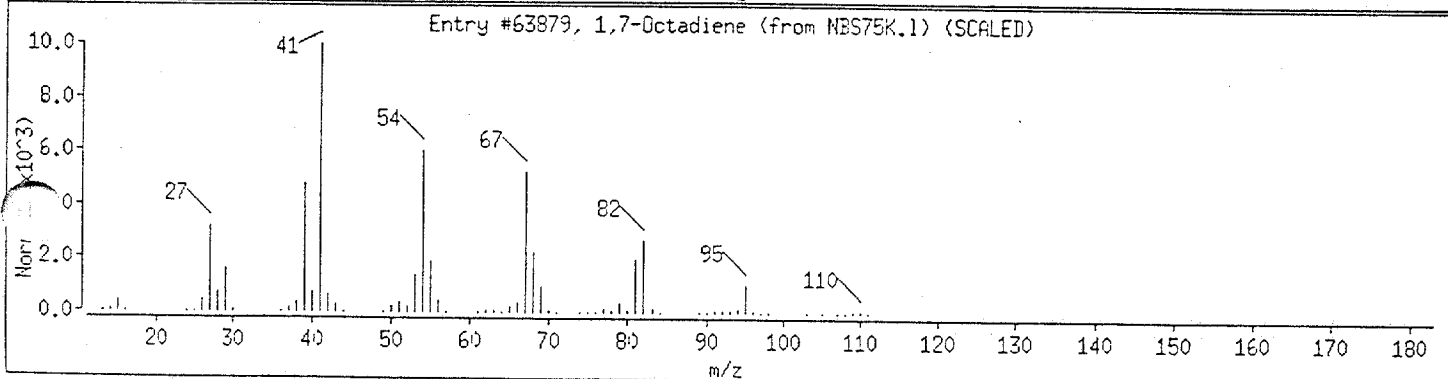
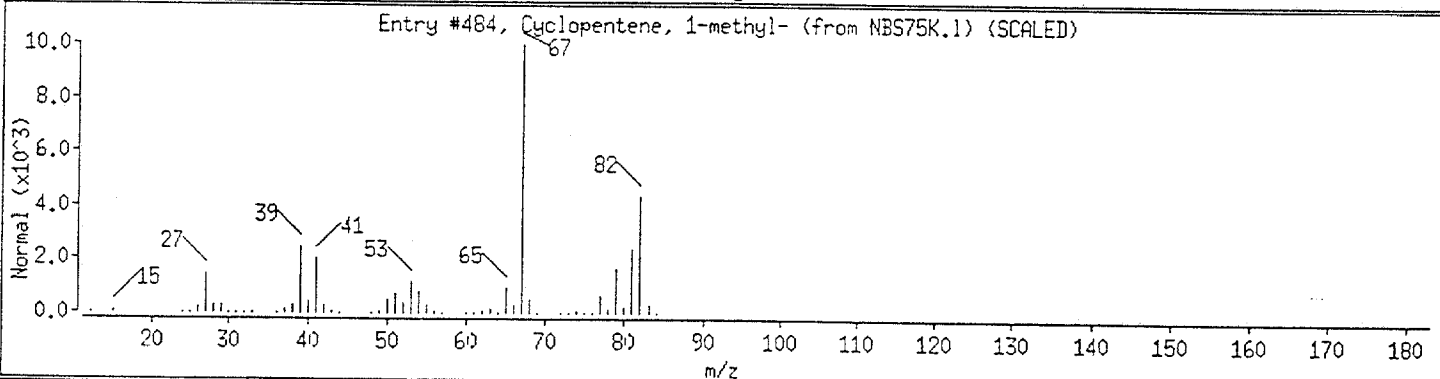
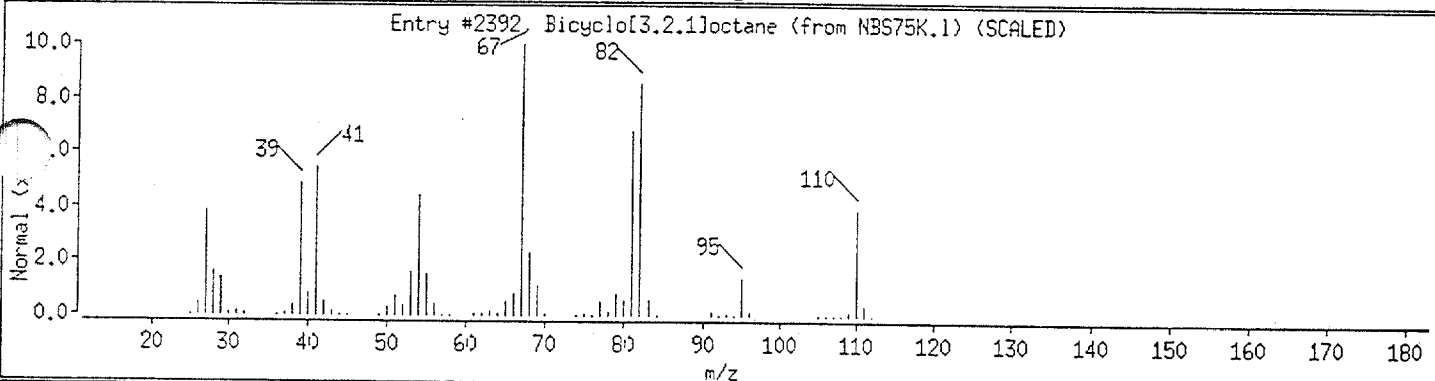
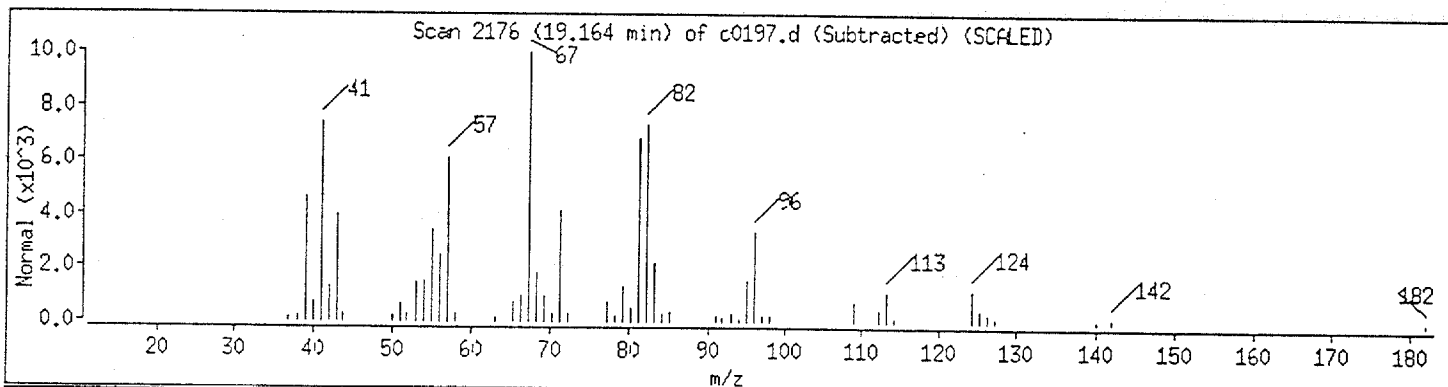
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Bicyclo[3.2.1]octane	6221-55-2	NBS75K.1	2392	47
Cyclopentene, 1-methyl-	693-89-0	NBS75K.1	484	46
1,7-Octadiene	3710-30-3	NBS75K.1	63879	43



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 27

Date: 19-NOV-94 17:25

Instrument: msc.i

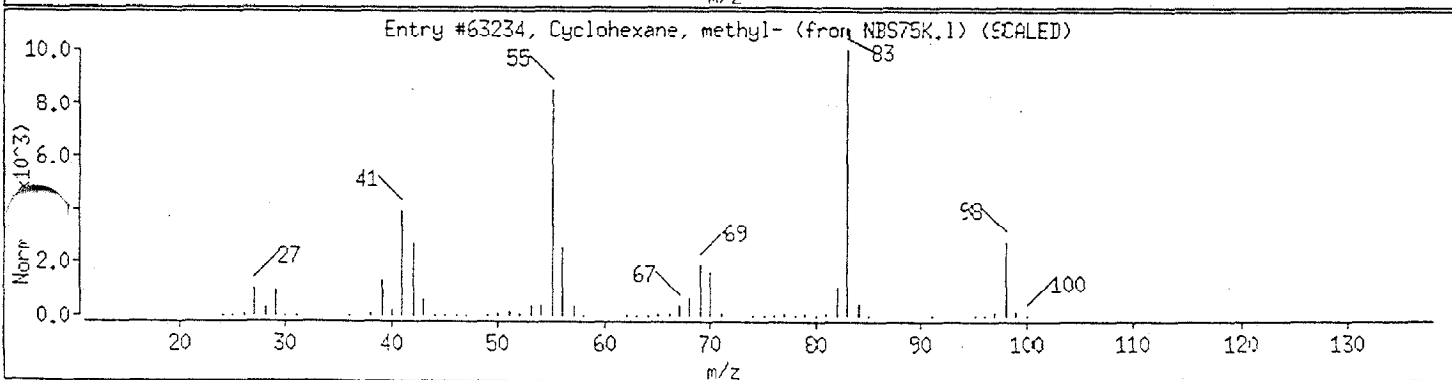
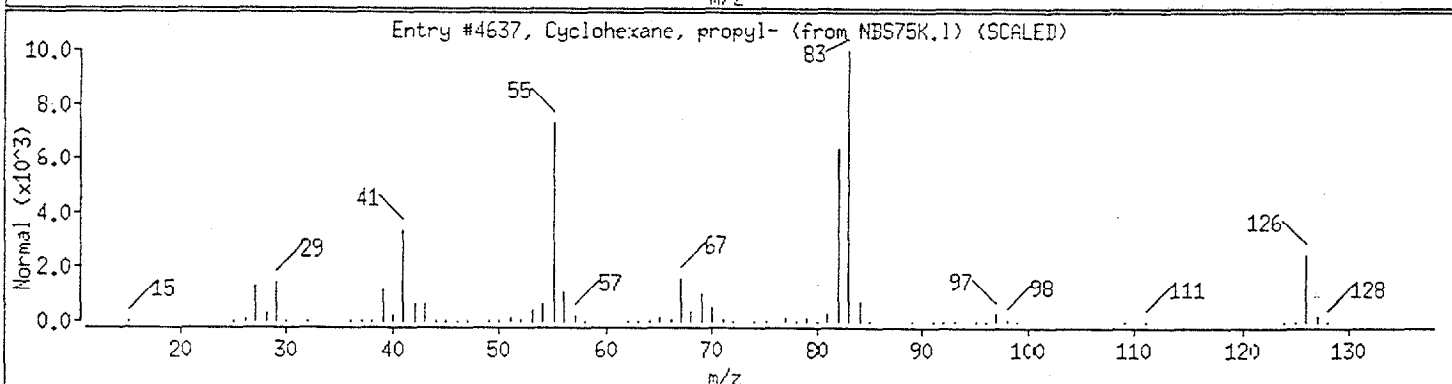
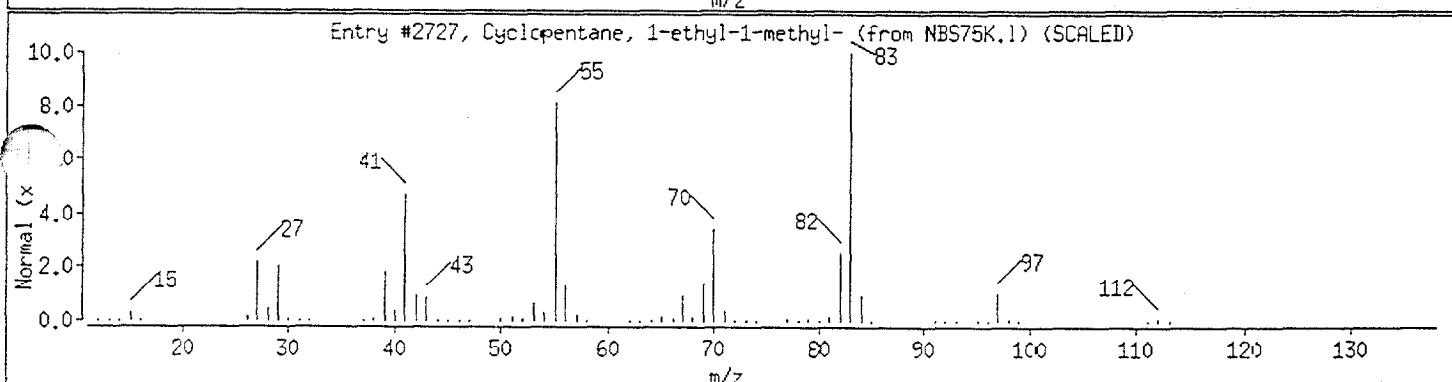
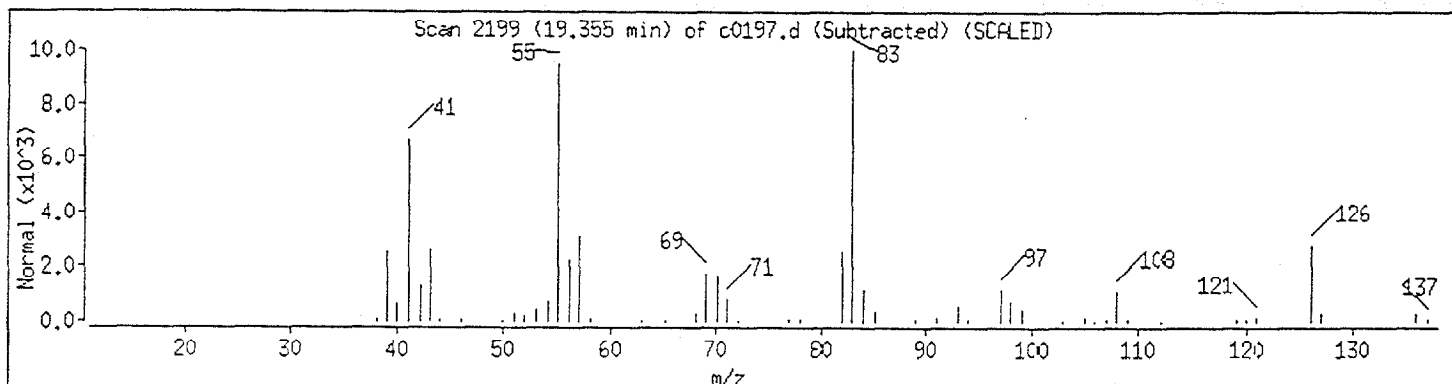
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.1

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclopentane, 1-ethyl-1-methyl-	16747-50-5	NBS75K.1	2727	59
Cyclohexane, propyl-	1678-92-8	NBS75K.1	4637	58
Cyclohexane, methyl-	108-87-2	NBS75K.1	63234	50



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 28

Date: 19-NOV-94 17:25

Instrument: msc.i

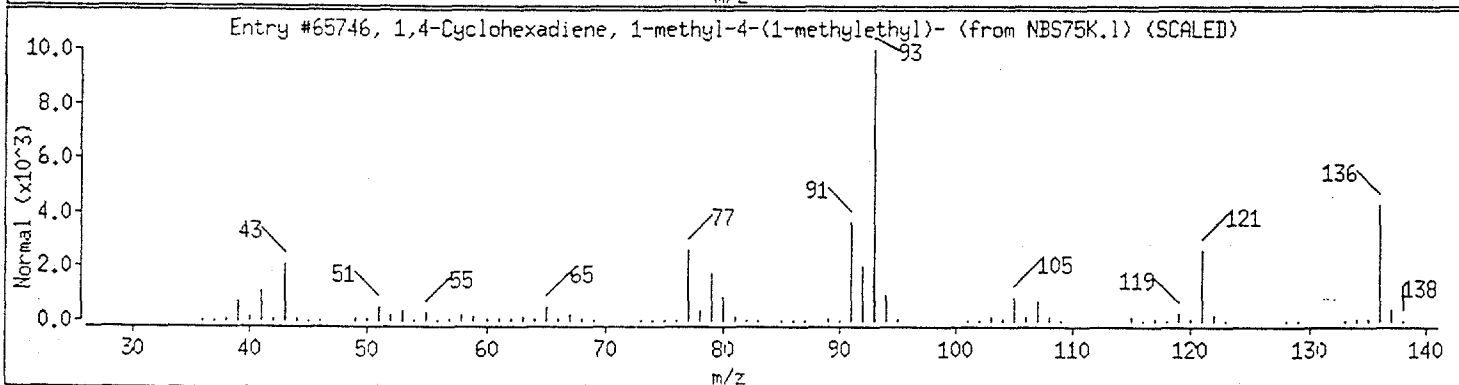
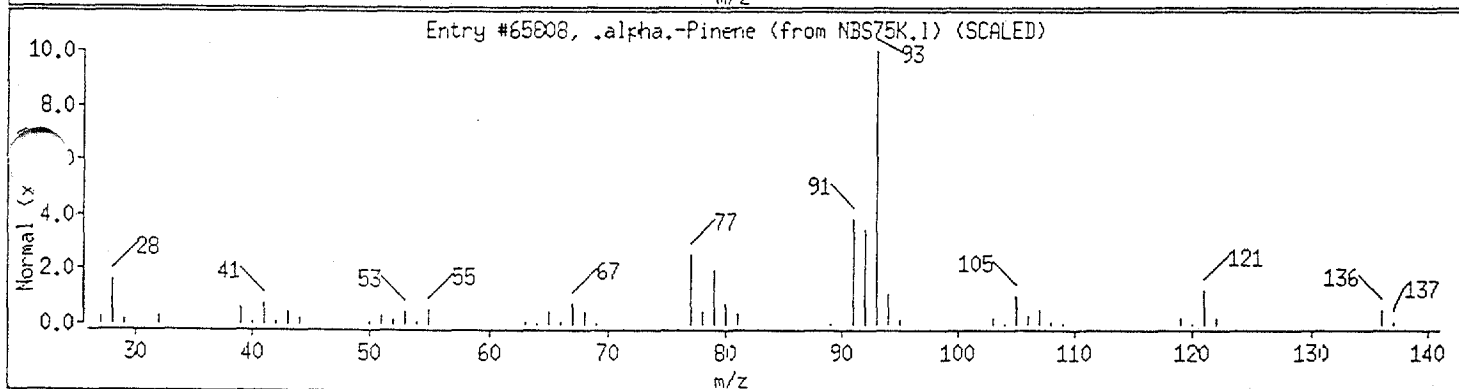
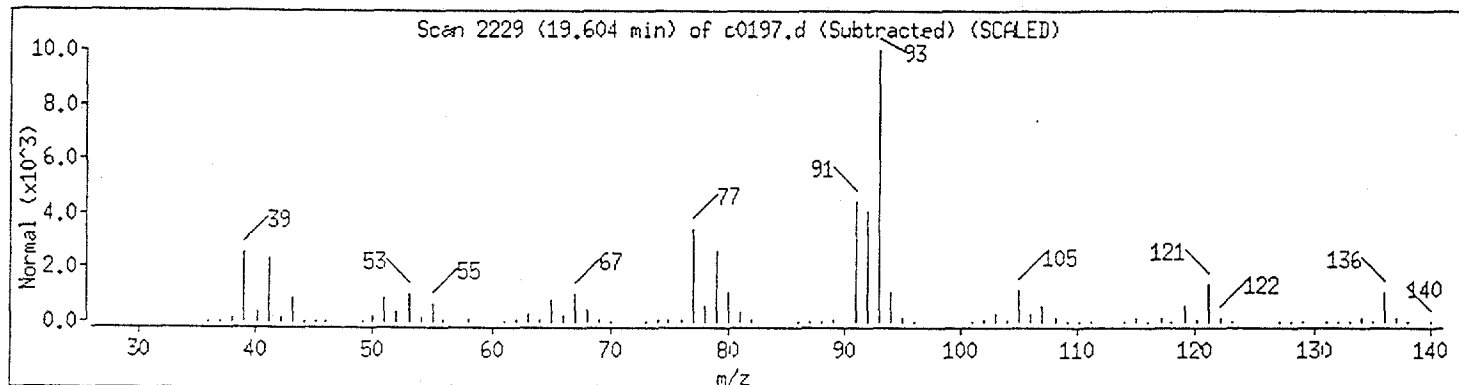
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
.alpha.-Pinene	80-56-8	NBS75K.1	65808	97
1,4-Cyclohexadiene, 1-methyl-4-(1-methyl	99-85-4	NBS75K.1	65746	90



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 29

Date: 19-NOV-94 17:25

Instrument: msc.i

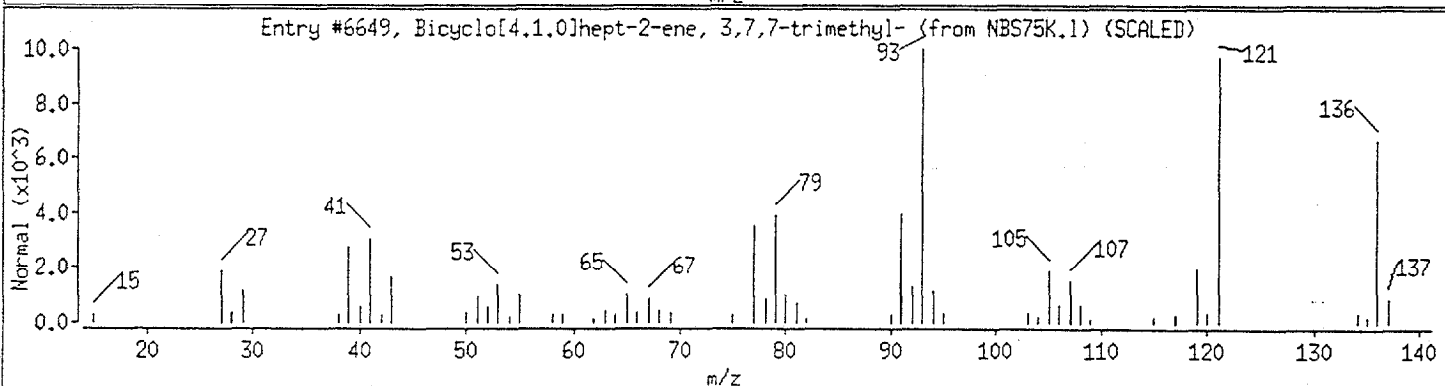
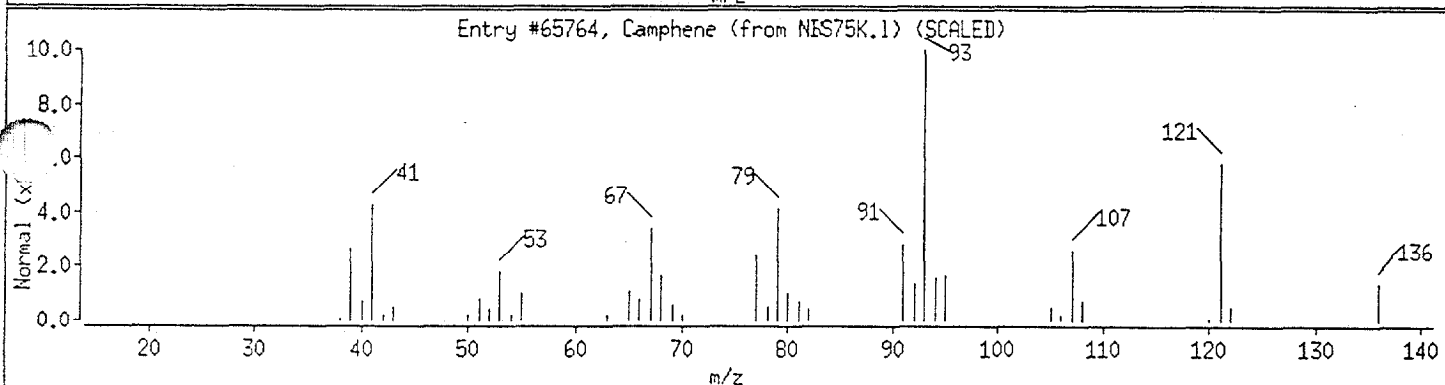
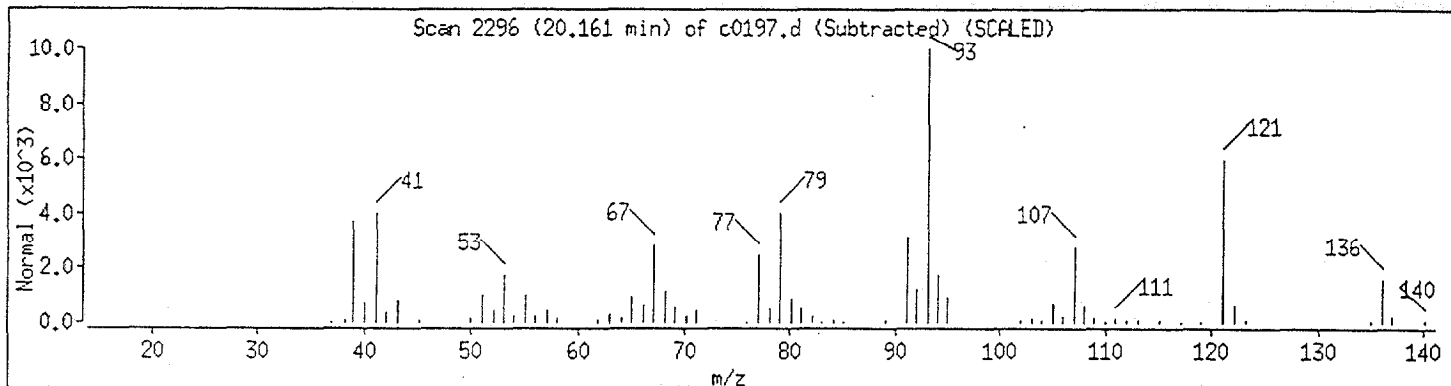
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Camphene	79-92-5	NBS7EK.1	65764	95
Bicyclo[4.1.0]hept-2-ene, 3,7,7-trimethy	554-61-0	NBS7EK.1	6649	90



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 30

Date: 19-NOV-94 17:25

Instrument: msc.i

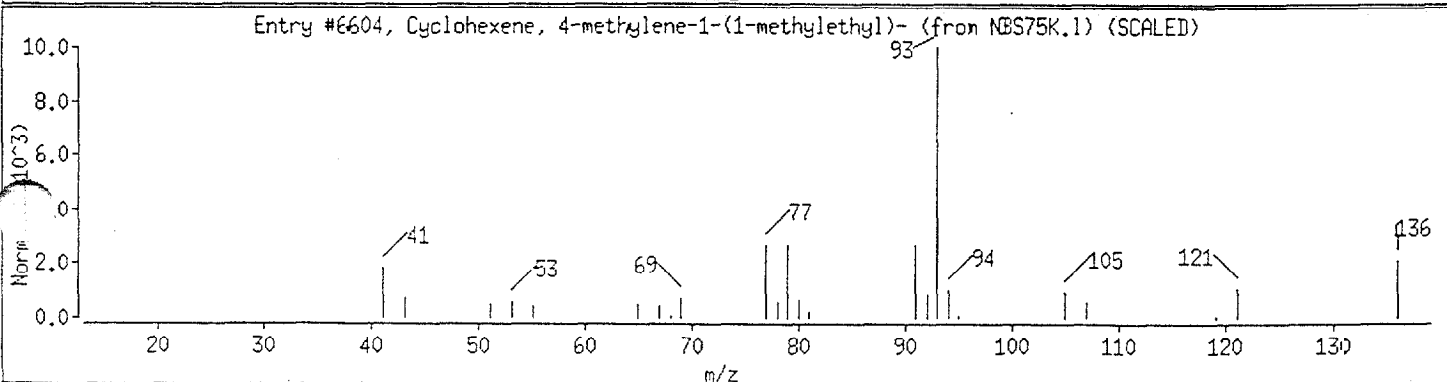
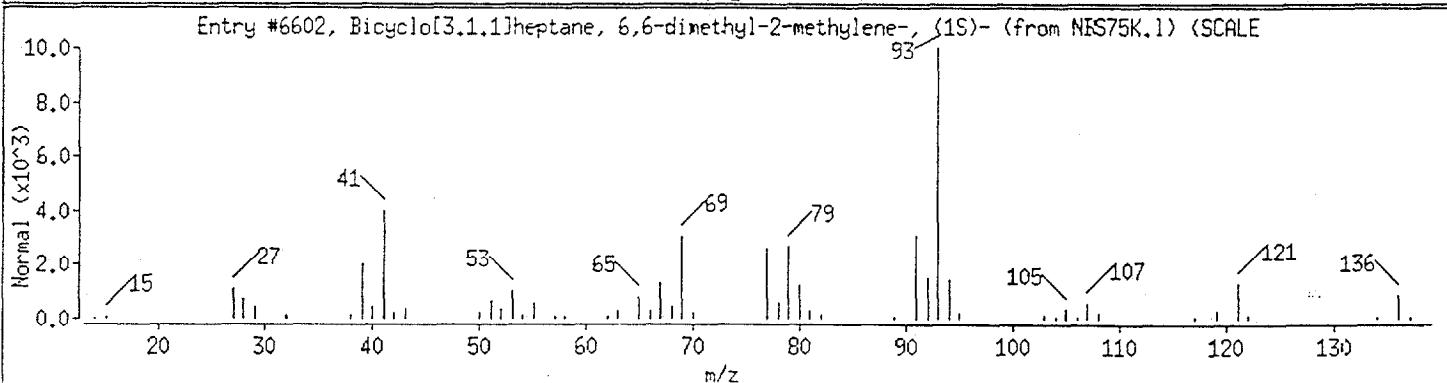
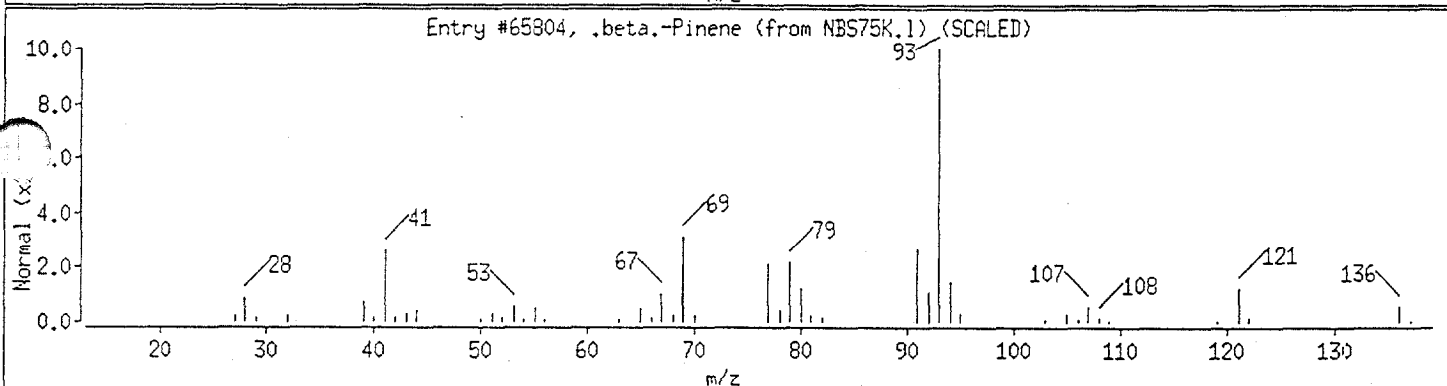
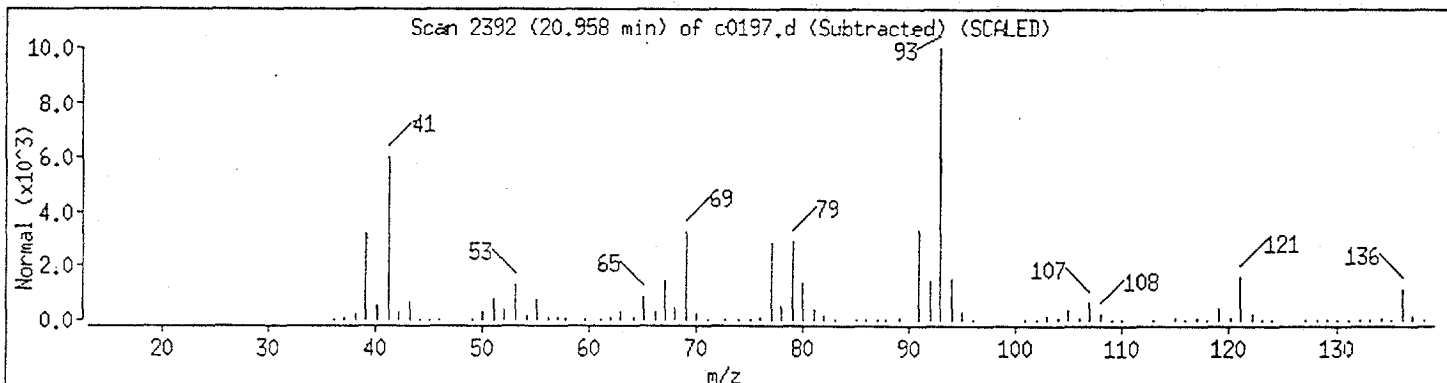
Sample ID: 15226n cljduw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
.beta.-Pinene	127-91-3	NBS75K.1	65804	96
Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-me	18172-67-3	NBS75K.1	6602	96
Cyclohexene, 4-methylene-1-(1-methylethy	99-84-3	NBS75K.1	6604	91



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 31

Date: 19-NOV-94 17:25

Instrument: msc.i

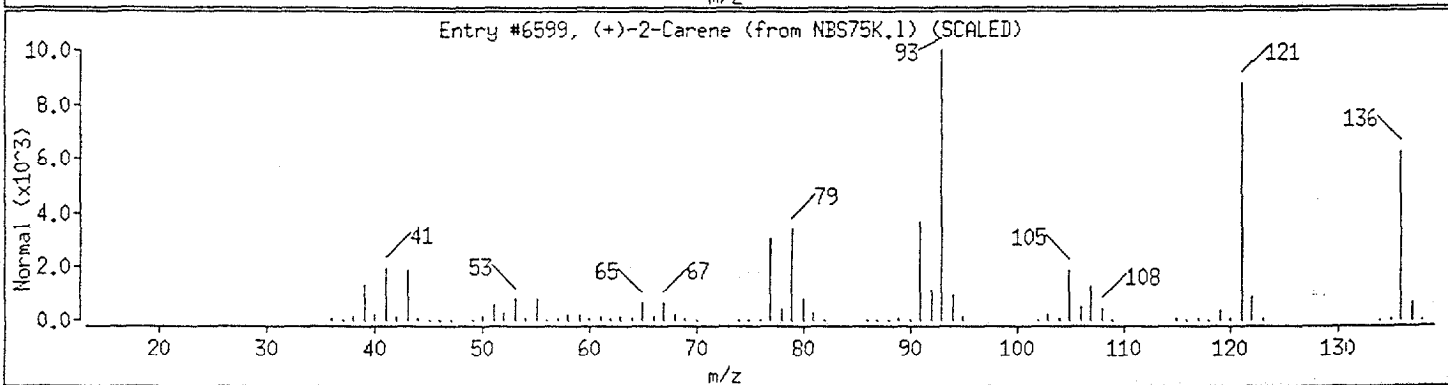
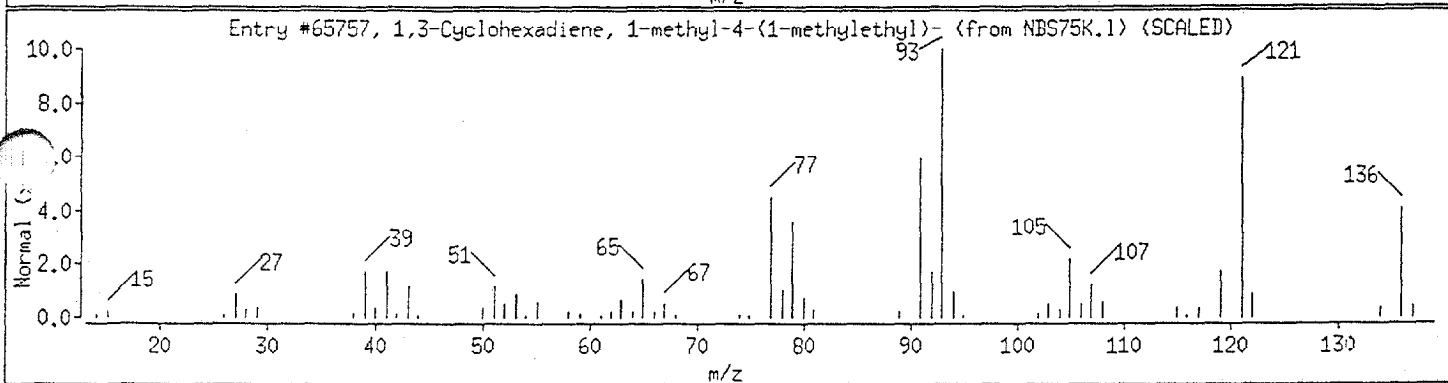
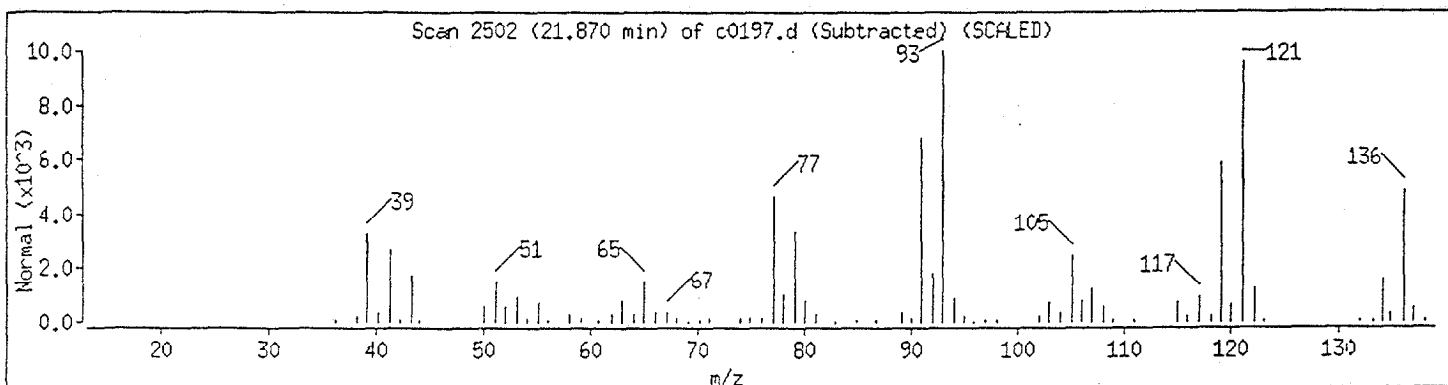
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1,3-Cyclohexadiene, 1-methyl-4-(1-methyl	99-86-5	NBS75K.1	65757	96
(+)-2-Carene	0-00-0	NBS75K.1	6599	93



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 32

Date: 19-NOV-94 17:25

Instrument: msc.i

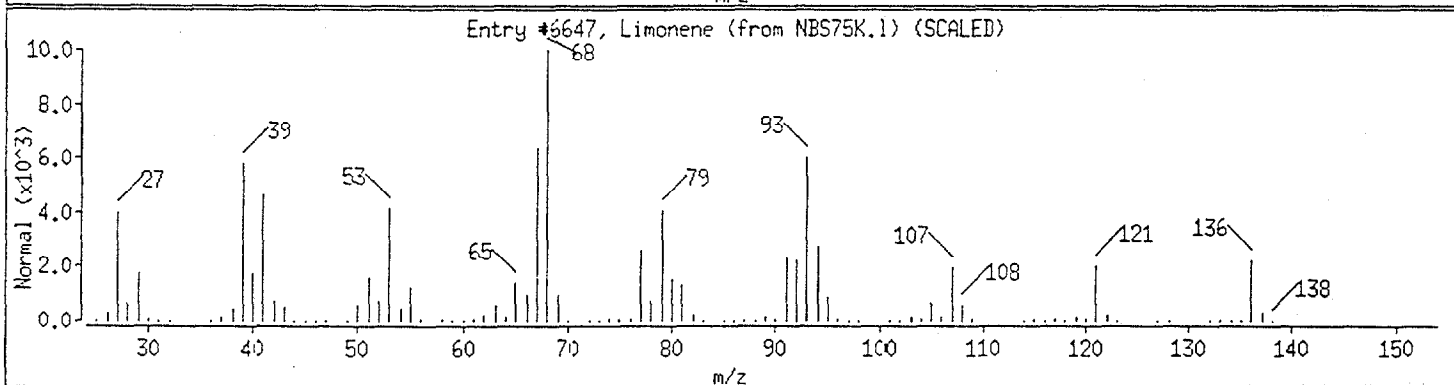
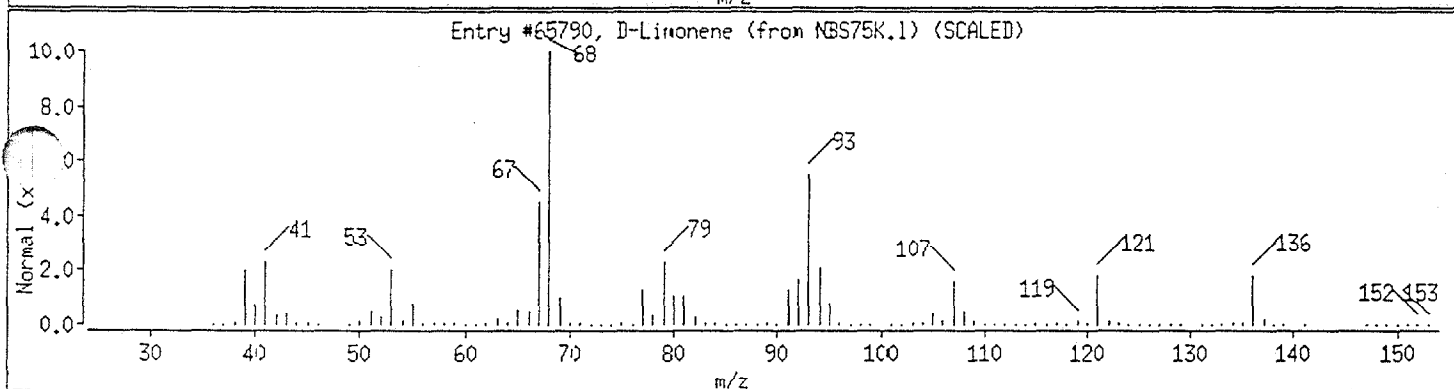
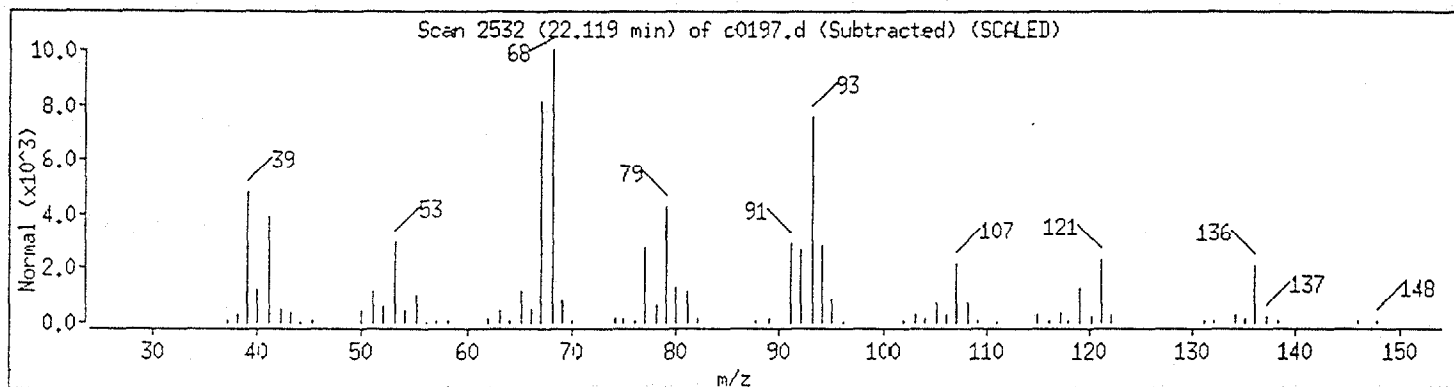
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Volume Injected (uL): 0.0

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
D-Limonene	5989-27-5	NBS75K.1	65790	94
Limonene	138-86-3	NBS75K.1	6647	94



Data File: /chem/aux/msc.i/c111994.b/c0197.d

Page 33

Date: 19-NOV-94 17:25

Instrument: msc.i

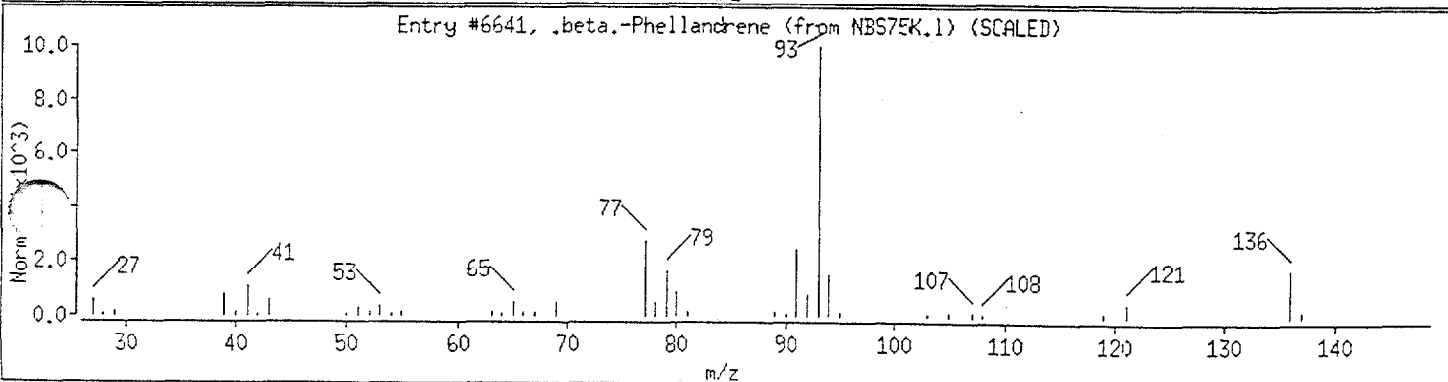
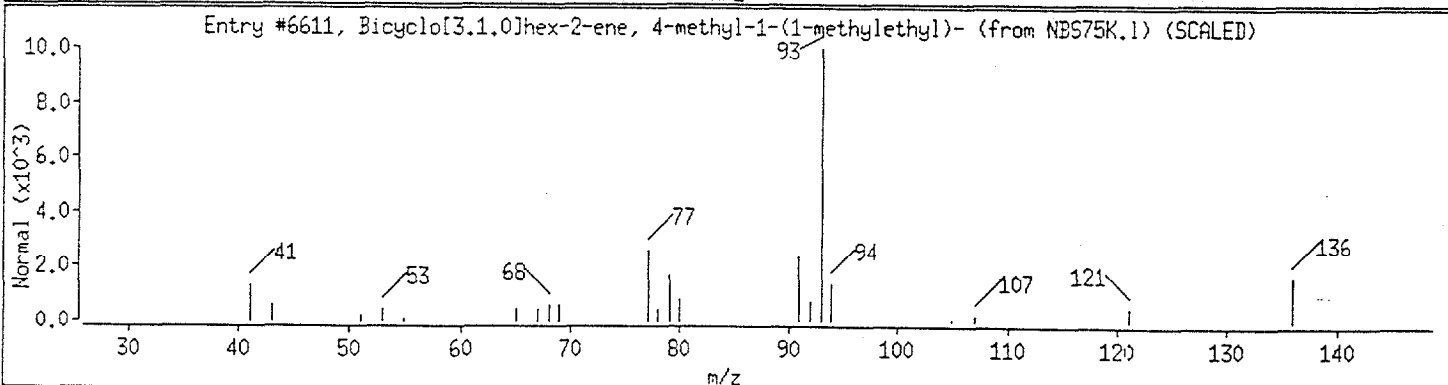
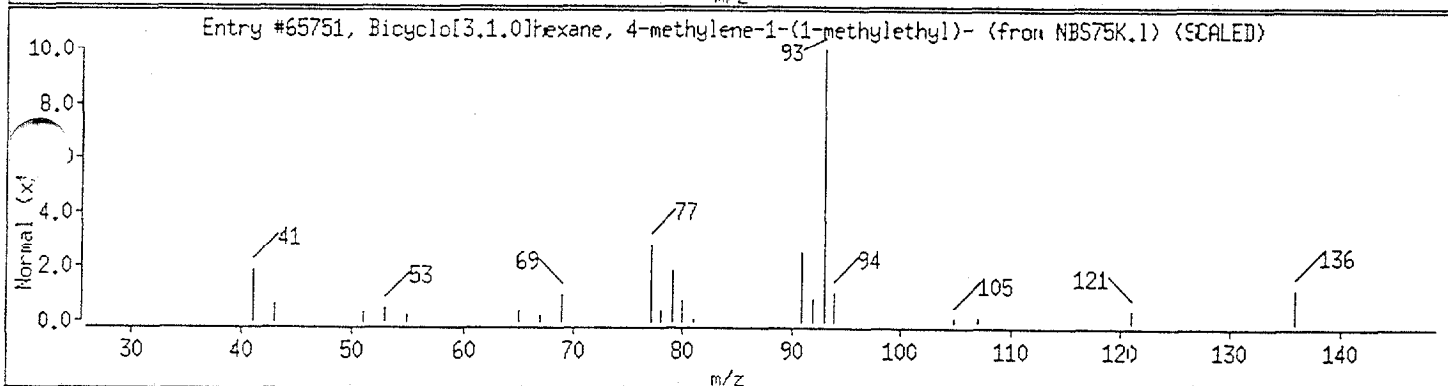
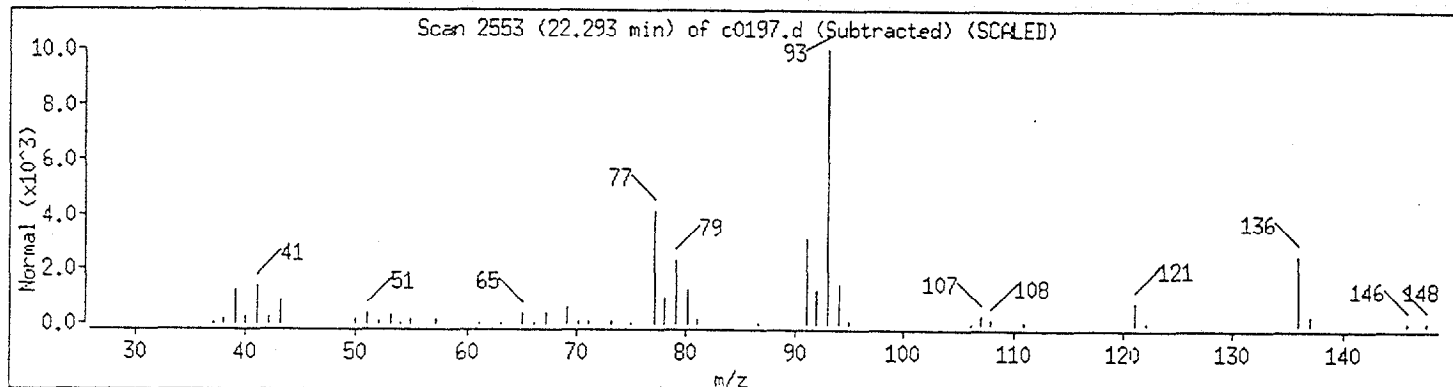
Sample ID: 15226n cljdw075

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Bicyclo[3.1.0]hexane, 4-methylene-1-(1-m	3387-41-5	NBS75K.1	65751	91
Bicyclo[3.1.0]hex-2-ene, 4-methyl-1-(1-m	28634-89-1	NBS75K.1	6611	91
.beta.-Phellandrene	555-10-2	NBS75K.1	6641	91





1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

00031  
EPA SAMPLE NO.

CLJDWS102

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESC

Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS102<sup>075</sup>

Matrix: (soil/water) WATER Lab Sample ID: JN4741V

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: C0214

Level: (low/med) LOW Date Received: 11/10/94

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 11/20/94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: ~~#####~~ 10000

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

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L                      Q

74-87-3-----	Chloromethane	50000	U
74-83-9-----	Bromomethane	50000	U
75-01-4-----	Vinyl Chloride	50000	U
75-00-3-----	Chloroethane	50000	U
75-09-2-----	Methylene Chloride	50000	U
67-64-1-----	Acetone	100000	U
75-15-0-----	Carbon Disulfide	50000	U
75-35-4-----	1,1-Dichloroethene	50000	U
75-34-3-----	1,1-Dichloroethane	50000	U
67-66-3-----	Chloroform	50000	U
107-06-2-----	1,2-Dichloroethane	50000	U
78-93-3-----	2-Butanone	50000	U
71-55-6-----	1,1,1-Trichloroethane	50000	U
56-23-5-----	Carbon Tetrachloride	50000	U
75-27-4-----	Bromodichloromethane	50000	U
78-87-5-----	1,2-Dichloropropane	50000	U
10061-01-5-----	cis-1,3-Dichloropropene	50000	U
79-01-6-----	Trichloroethene	50000	U
124-48-1-----	Dibromochloromethane	50000	U
79-00-5-----	1,1,2-Trichloroethane	50000	U
71-43-2-----	Benzene	50000	U
10061-02-6-----	trans-1,3-Dichloropropene	50000	U
75-25-2-----	Bromoform	50000	U
108-10-1-----	Methyl-iso-butyl ketone	100000	U
591-78-6-----	2-Hexanone	50000	U
127-18-4-----	Tetrachloroethylene	50000	U
79-34-5-----	1,1,2,2-Tetrachloroethane	50000	U
108-88-3-----	Toluene	40000	J
108-90-7-----	Chlorobenzene	50000	U
100-41-4-----	Ethylbenzene	50000	U
100-42-5-----	Styrene	50000	U
1330-20-7-----	Xylene (total)	13000	BJ
156-60-5-----	1,2-Trans-dichloroethylene	50000	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

00032  
EPA SAMPLE NO.

CLJDWS102

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESC

Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS102<sup>075</sup>

Matrix: (soil/water) WATER Lab Sample ID: JN4741V

Sample wt/vol: 5.00 (g/mL) ML Lab File ID: C0214

Level: (low/med) LOW Date Received: 11/10/94

% Moisture: not dec. \_\_\_\_\_ Date Analyzed: 11/20/94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: ~~#####~~ 10000

Soil Extract Volume: N/A (uL) Soil Aliquot Volume: N/A (uL)

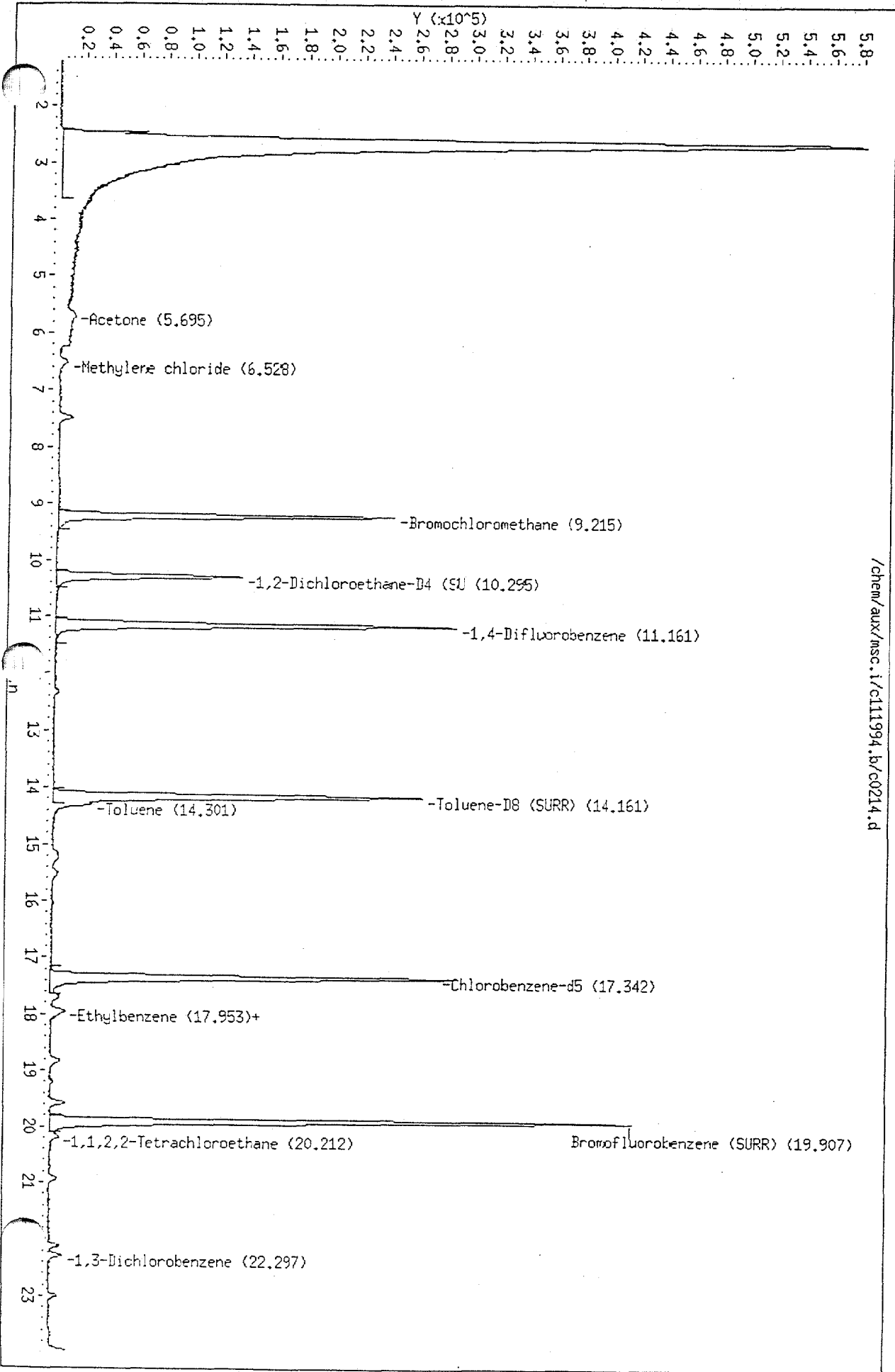
Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

Data File: /chem/aux/msc.i/c111994.b/c0214.d  
Date: 20-NOV-94 02:18  
Instrument: msc.i  
Sample ID: 15226n c1jws102  
Column phase: J&W DB\_624  
Volume Injected (ul): 0.0

Column diameter: 0.53

/chem/aux/msc.i/c111994.b/c0214.d



Data File: /chem/aux/msc.i/c111994.b/c0214.d  
 Report Date: 21-Nov-1994 07:59

Page 1

## Analytical Services Corp.

## VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msc.i/c111994.b/c0214.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 20-NOV-94 02:18 Autotune Date: {  
 Operator : dana Inst ID: msc.i  
 Smp Info : 15226n cljdw102  
 Misc Info : jn4741v,nlv4036,l:m2,5.00,5.00:10000,  
 Comment :  
 Method : /chem/aux/msc.i/c111994.b/8240ambic.m  
 Meth Date : 21-Nov-1994 07:53 jeff  
 Cal Date : 19-NOV-94 16:20 Cal File: c0195.d  
 Als bottle: 41  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

*JH*  
*11-25*

Compounds	QUANT SIG		CONCENTRATIONS			
	MASS	RT REL RT	RESPONSE	ON-COLUMN ( ug/l)	FINAL ( ug/l)	
Acetone	43.00	5.695 (0.618)	3043	3.09	<del>3.09(a)</del> MS	
9 Methylene chloride	84.00	6.528 (0.708)	4948	1.20	<del>1.20(aQ)</del> MS	
* 15 Bromochloromethane	128.00	9.215 (1.000)	192667	50.0		
\$ 19 1,2-Dichloroethane-D4 (SURR)	65.00	10.295 (1.117)	254501	41.1	41.1	✓
* 22 1,4-Difluorobenzene	114.00	11.161 (1.000)	550682	50.0		
\$ 29 Toluene-D8 (SURR)	98.00	14.161 (0.817)	533588	44.9	44.9	✓
30 Toluene	92.00	14.301 (0.825)	29197	3.98	3.98(a)	
* 36 Chlorobenzene-d5	117.00	17.342 (1.000)	477926	50.0		
38 Ethylbenzene	106.00	17.953 (1.035)	6400	1.47	<del>1.47(a)</del> RT	
39 m+p-Xylenes	106.00	17.953 (1.035)	6400	1.26	1.26(aQ)	
\$ 43 Bromofluorobenzene (SURR)	95.00	19.907 (1.148)	418028	49.5	49.5	✓
44 1,1,2,2-Tetrachloroethane	83.00	20.212 (1.165)	7222	1.13	<del>1.13(a)</del> MS	
45 1,3-Dichlorobenzene	146.00	22.297 (1.286)	13097	1.16	1.16(a)	

## QC Flag Legend

- a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).  
 Q - Qualifier signal failed the ratio test.

Data File: /chem/aux/msc.i/c111994.b/c0214.d

Date : 20-NOV-94 02:18

Instrument : msc.i

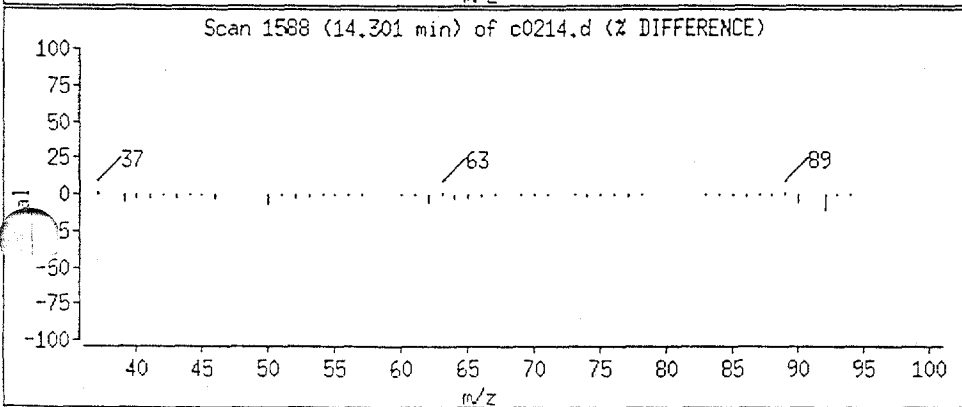
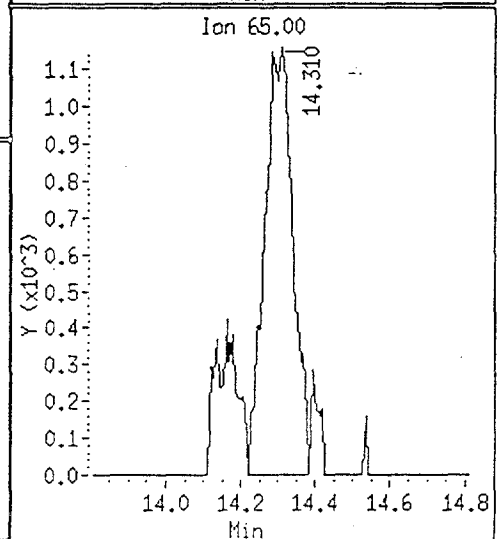
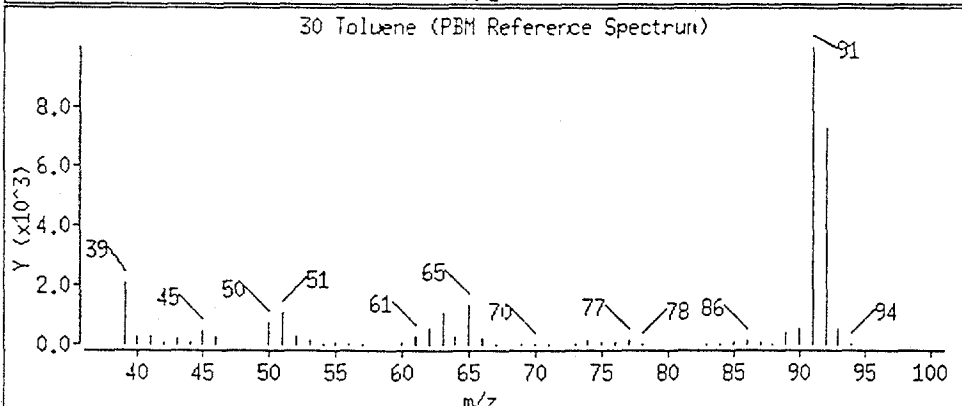
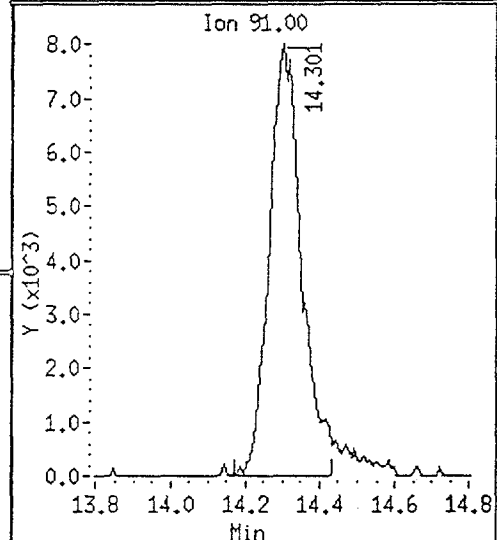
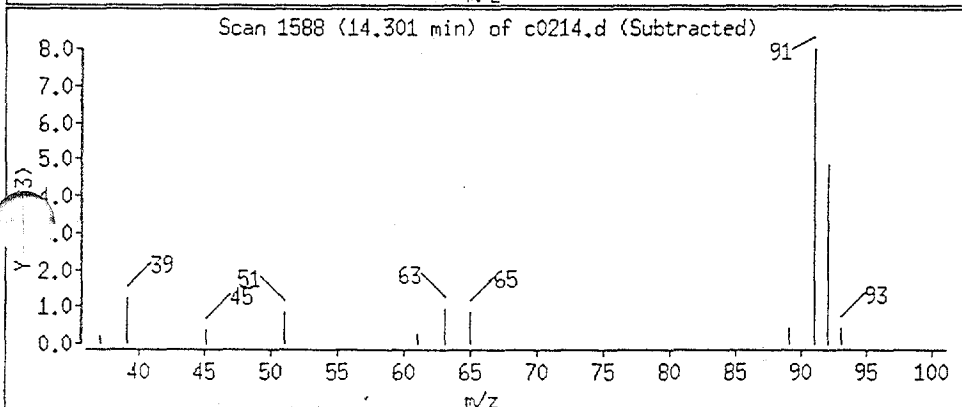
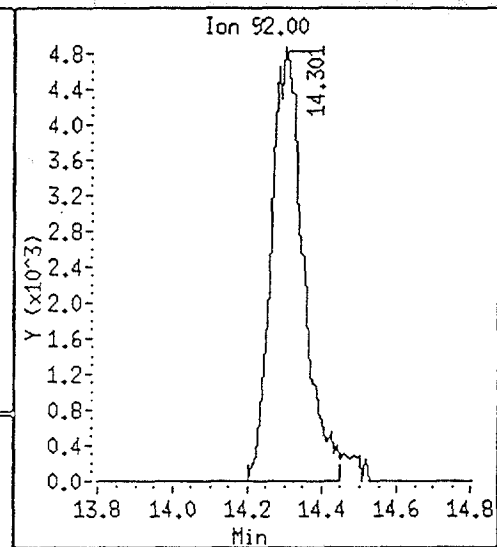
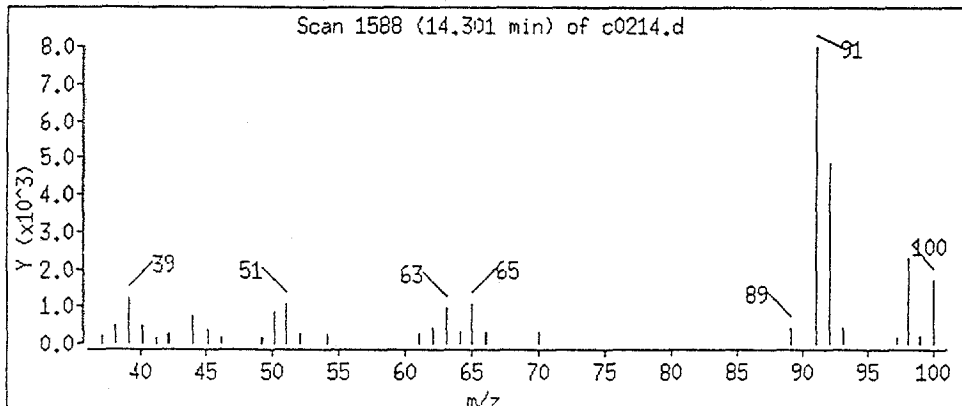
Sample ID : 15226n cljdw102

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

30 Toluene



Data File: /chem/aux/msc.i/c111994.b/c0214.d

Date : 20-NOV-94 02:18

Instrument : msc.i

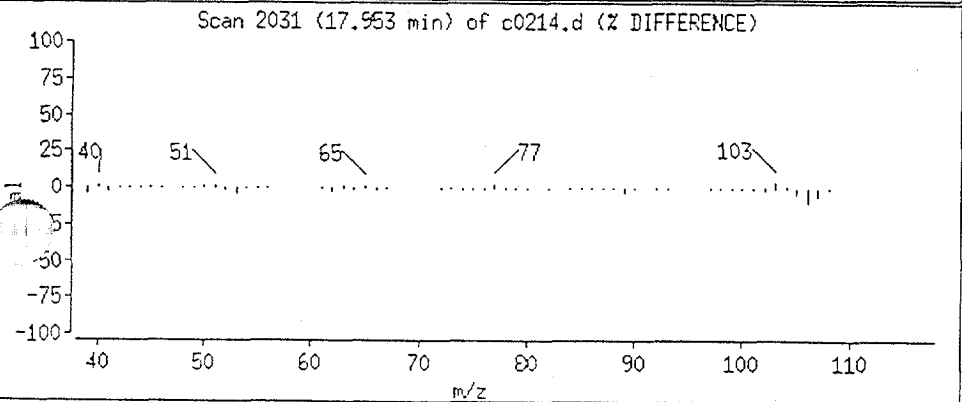
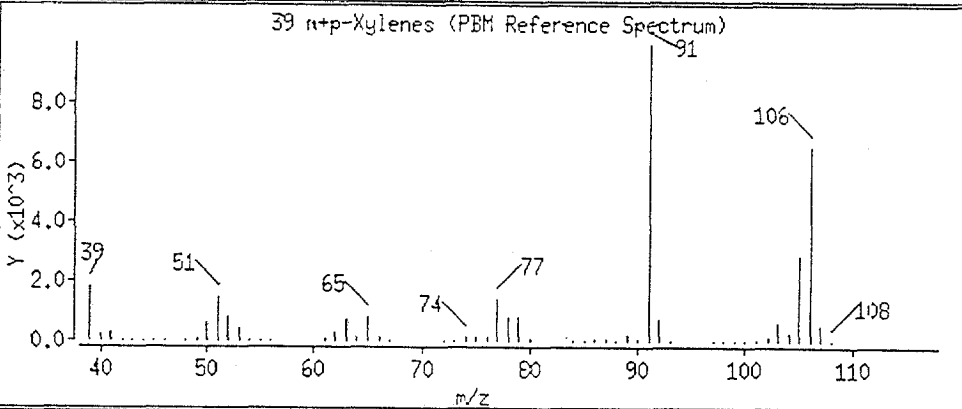
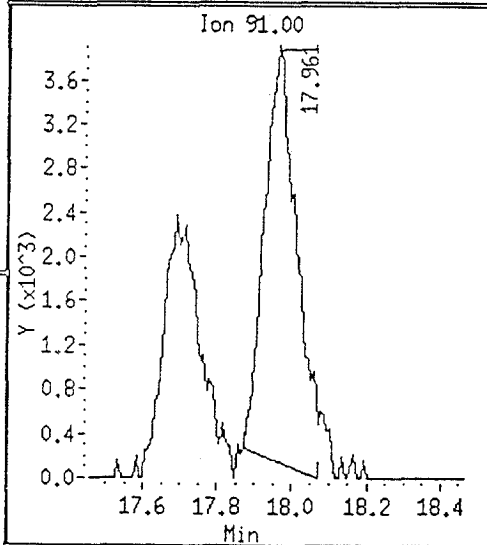
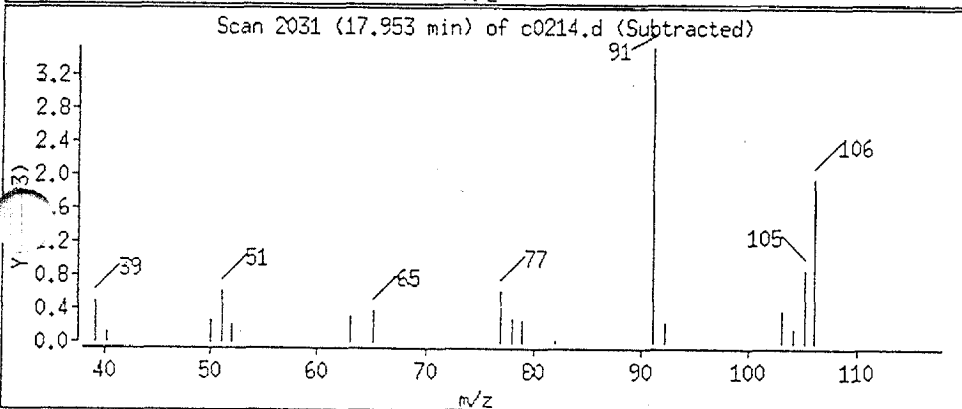
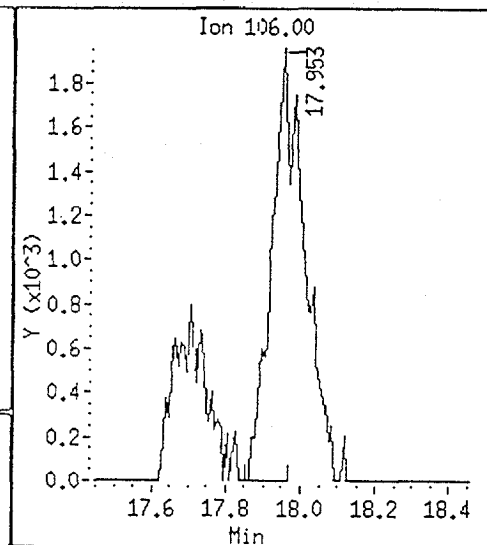
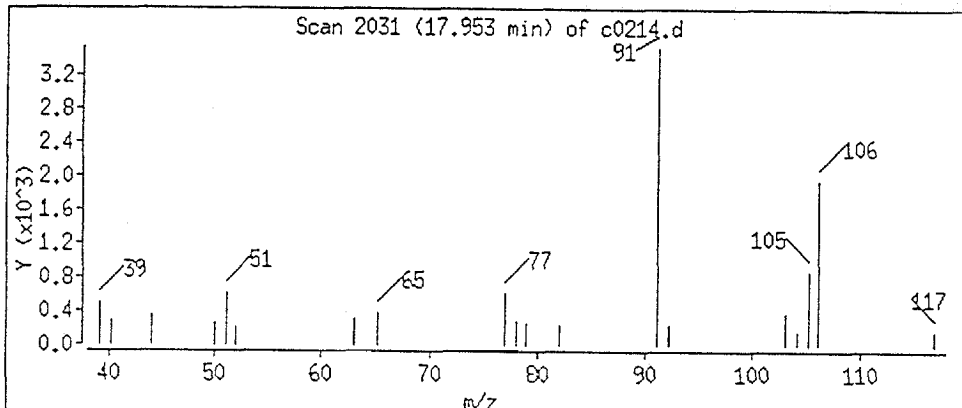
Sample ID : 15226n cljdw102

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.1

39 m+p-Xylenes



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLJDWS151

Lab Name: ANALYTICAL SERVICES CORP.Contract: NEESALab Code: N/A Case No.: 15224NSAS No.: N/A SDG No.: CLJDWS075Matrix: (soil/water) SOILLab Sample ID: JN4742VSample wt/vol: 4.08 (g/mL) GLab File ID: C0189Level: (low/med) LOWDate Received: 11/10/94% Moisture: not dec. 7Date Analyzed: 11/18/94GC Column: DB624 ID: 0.53 (mm)Dilution Factor: 1.0Soil Extract Volume: 5000 (uL)Soil Aliquot Volume:        (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG		Q
74-87-3	-----Chloromethane	6	U	
74-83-9	-----Bromomethane	6	U	
75-01-4	-----Vinyl Chloride	6	U	
75-00-3	-----Chloroethane	6	U	
75-09-2	-----Methylene Chloride	540	BE	
67-64-1	-----Acetone	410	E	
75-15-0	-----Carbon Disulfide	6	U	
75-35-4	-----1,1-Dichloroethene	6	U	
75-34-3	-----1,1-Dichloroethane	6	U	
67-66-3	-----Chloroform	48		
107-06-2	-----1,2-Dichloroethane	6	U	
78-93-3	-----2-Butanone	18		
71-55-6	-----1,1,1-Trichloroethane	6	U	
56-23-5	-----Carbon Tetrachloride	3	J	
75-27-4	-----Bromodichloromethane	6	U	
78-87-5	-----1,2-Dichloropropane	6	U	
10061-01-5	-----cis-1,3-Dichloropropene	6	U	
79-01-6	-----Trichloroethene	3	J	
124-48-1	-----Dibromochloromethane	6	U	
79-00-5	-----1,1,2-Trichloroethane	6	U	
71-43-2	-----Benzene	6	U	
10061-02-6	-----trans-1,3-Dichloropropene	6	U	
75-25-2	-----Bromoform	6	U	
108-10-1	-----Methyl-iso-butyl ketone	12	U	
591-78-6	-----2-Hexanone	6	U	
127-18-4	-----Tetrachloroethylene	11		
79-34-5	-----1,1,2,2-Tetrachloroethane	5	J	
108-88-3	-----Toluene	13		
108-90-7	-----Chlorobenzene	6	U	
100-41-4	-----Ethylbenzene	6	U	
100-42-5	-----Styrene	6	U	
1330-20-7	-----Xylene (total)	15		
156-60-5	-----1,2-Trans-dichloroethylene	6	U	

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

00038  
EPA SAMPLE NO.

CLJDWS151

Lab Name: ANALYTICAL SERVICES CORP. Contract: NEESA  
 Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS075  
 Matrix: (soil/water) SOIL Lab Sample ID: JN4742V  
 Sample wt/vol: 4.08 (g/mL) G Lab File ID: C0189  
 Level: (low/med) LOW Date Received: 11/10/94  
 % Moisture: not dec. 7 Date Analyzed: 11/18/94  
 GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0  
 Soil Extract Volume: 5000 (uL) Soil Aliquot Volume:        (uL)

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

Number TICs found: 14

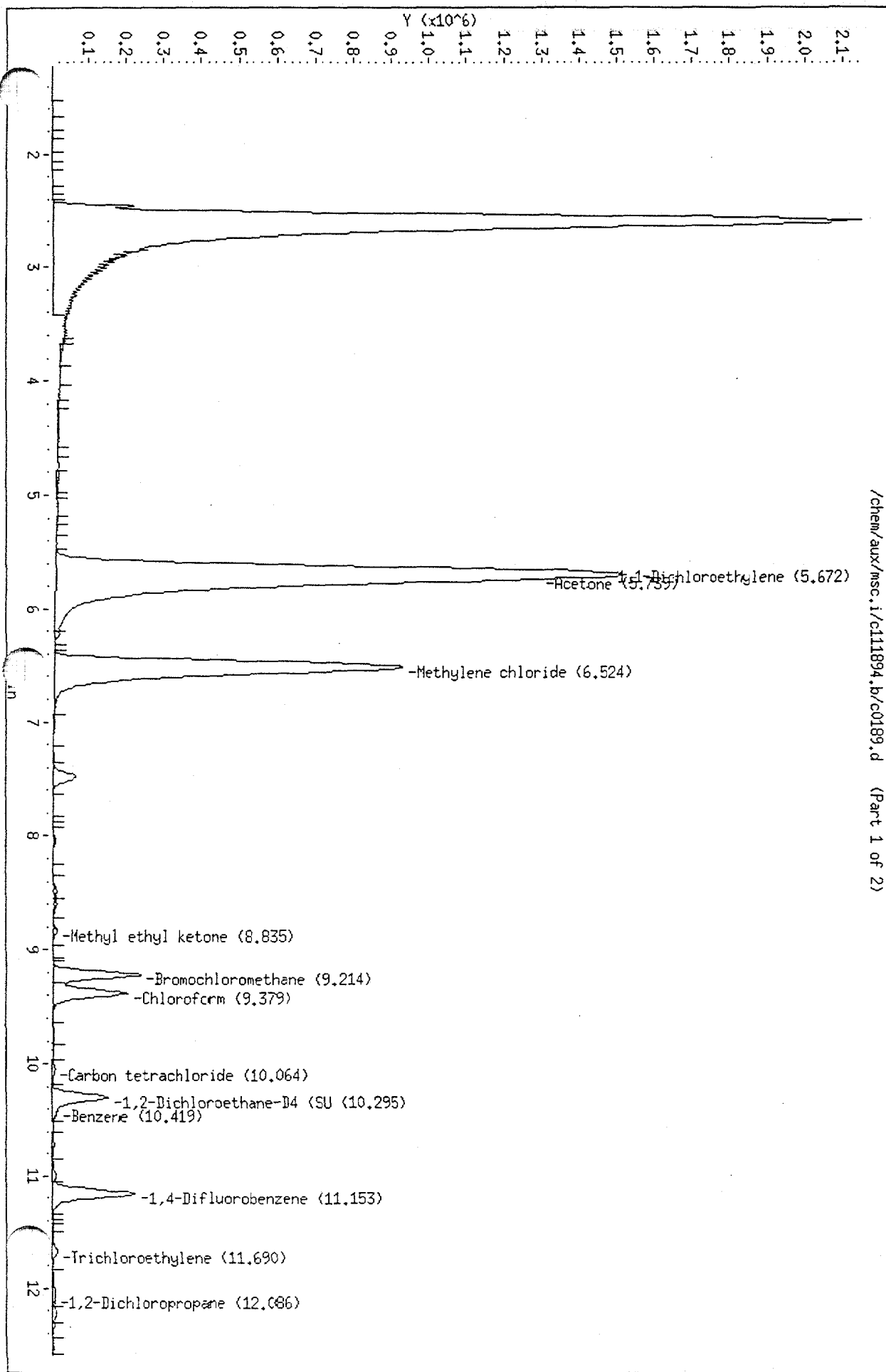
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 76-13-1	Ethane, 1,1,2-trichloro-1,2,	5.70	920	JN
2. 110-54-3	Hexane	7.47	19	JN
3.	Unk hydrocarbon	15.94	14	J
4.	Unk substituted aromatic	17.70	7	J
5.	Unk hydrocarbon	19.13	7	J
6. 95-49-8	Benzene, 1-chloro-2-methyl-	20.63	91	JN
7. 108-41-8	Benzene, 1-chloro-3-methyl-	20.86	86	JN
8. 526-73-8	Benzene, 1,2,3-trimethyl-	21.57	28	JN
9.	Unk hydrocarbon	21.90	9	J
10. 99-87-6	Benzene, 1-methyl-4-(1-methy	22.19	17	JN
11.	Unk hydrocarbon	22.68	15	J
12.	Unk hydrocarbon	22.96	13	J
13. 1120-21-4	Undecane	23.21	38	JN
14.	unknown	23.32	11	J



Data File: /chem/aux/msc.i/c111894.b/c0189.d  
Date: 18-NOV-94 21:18  
Instrument: msc.i  
Sample ID: 15226n c1jds151  
Column phase: J&W DB\_624  
Volume Injected (ul): 0.0

/chem/aux/msc.i/c111894.b/c0189.d (Part 1 of 2)

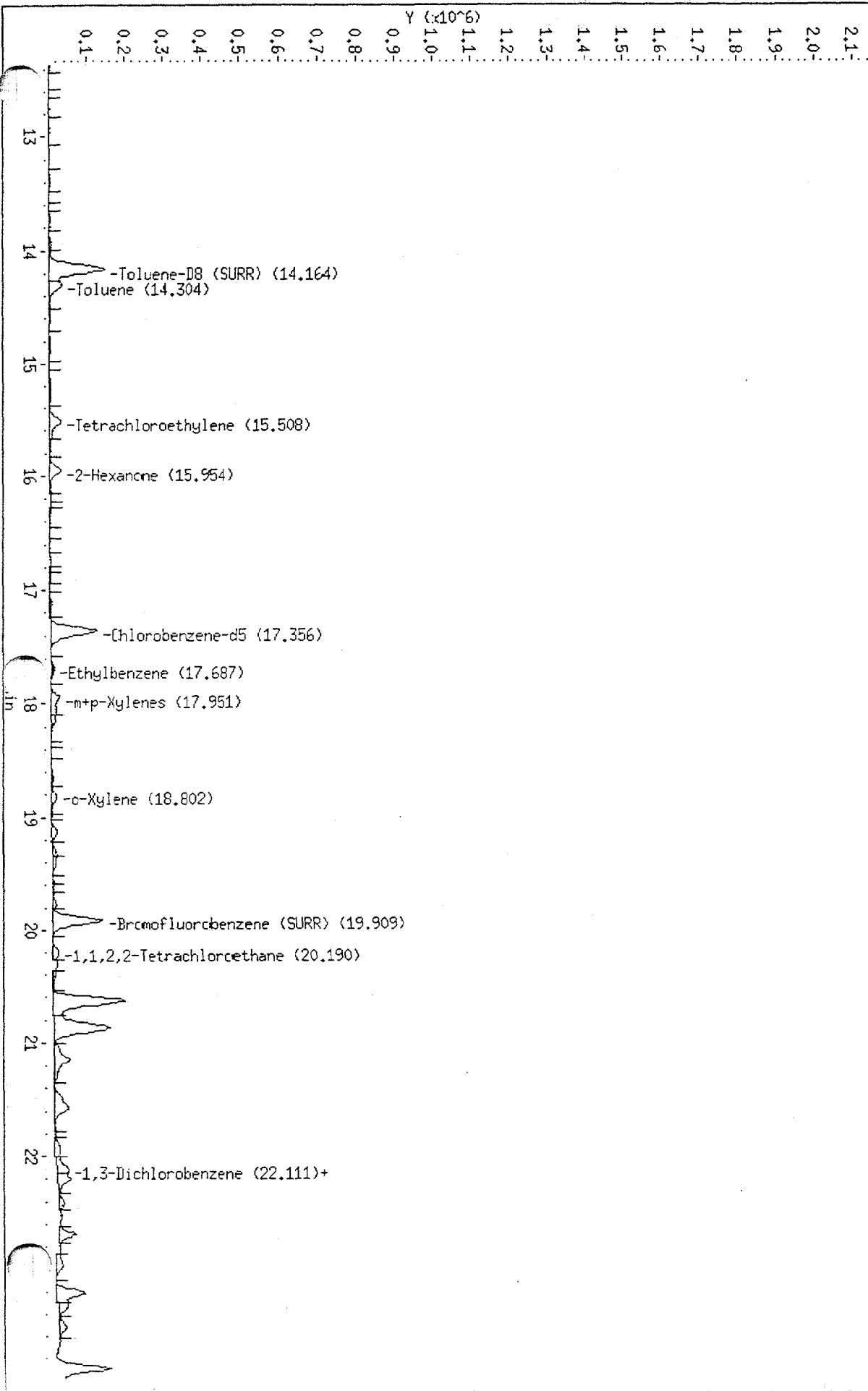
Column diameter: 0.53



Data File: /chem/aux/msc.i/c111894.br/c0189.d  
Date: 18-NOV-94 21:18  
Instrument: msc.i  
Sample ID: 15226n c1jdw151  
Column phase: J&W DB\_624  
Volume Injected (ul): 0.0

Column diameter: 0.53

/chem/aux/msc.i/c111894.br/c0189.d (Part 2 of 2)



Analytical Services Corp.

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msc.i/c111894.b/c0189.d  
 Lab. Id. : Quant Type: ISTD  
 Inj Date : 18-NOV-94 21:18 Autotune Date: {  
 Operator : dana Inst ID: msc.i  
 Smp Info : 15226n cljdws151  
 Misc Info : jn4742v,n2v4030,s:m2,4.08,5.00:1,  
 Comment :  
 Method : /chem/aux/msc.i/c111894.b/8240heatc.m  
 Meth Date : 19-Nov-1994 09:25 jeff  
 Cal Date : 18-NOV-94 11:32 Cal File: c0173.d  
 Als bottle: 19  
 Dil Factor: 1.000 Target Version: Target 3.00  
 Integrator: HP RTE Compound Sublist: all.sub  
 Sample Matrix: WATER

*ZSUMR  
 IIS OUT  
 Reg Dilution*

*JH  
 11-27*

Compounds	QUANT SIG	RT	REL RT	RESPONSE	CONCENTRATIONS	
					ON-COLUMN ( ug/l)	FINAL ( ug/l)
1,1-Dichloroethylene	96.00	5.672	(0.615)	4625	1.30	1.30(aQ)
7 Acetone	43.00	5.739	(0.622)	707235	333	333
9 Methylene chloride	84.00	6.524	(0.707)	1610052	442	442
14 Methyl ethyl ketone	72.00	8.835	(0.791)	7397	14.4	14.4(aQ)
* 15 Bromochloromethane	128.00	9.222	(1.000)	160662	50.0	
16 Chloroform	83.00	9.379	(1.017)	378677	39.4	39.4
18 Carbon tetrachloride	117.00	10.064	(0.902)	13269	2.11	2.11(a)
S 19 1,2-Dichloroethane-D4 (SURR)	65.00	10.295	(1.116)	299750	45.7	45.7
20 Benzene	78.00	10.419	(0.933)	9861	1.45	1.45(a) MS
* 22 1,4-Difluorobenzene	114.00	11.162	(1.000)	457625	50.0	
23 Trichloroethylene	130.00	11.690	(1.047)	9102	2.25	2.25(a)
24 1,2-Dichloropropane	63.00	12.086	(1.083)	3594	1.10	1.10(aQ) MS
S 29 Toluene-D8 (SURR)	98.00	14.164	(0.816)	262081	67.7	67.7(R) H
30 Toluene	92.00	14.304	(0.824)	27582	11.0	11.0
33 Tetrachloroethylene	164.00	15.517	(0.894)	19514	9.00	9.00
34 2-Hexanone	43.00	15.954	(0.919)	14337	5.30	5.30(aQ) MS
* 36 Chlorobenzene-d5	117.00	17.356	(1.000)	167408	50.0	
38 Ethylbenzene	106.00	17.687	(1.019)	3661	2.34	2.34(aQ) MS
39 m+p-Xylenes	106.00	17.951	(1.034)	14738	7.92	7.92
40 o-Xylene	106.00	18.802	(1.083)	7439	3.99	3.99(a)
S 43 Bromofluorobenzene (SURR)	95.00	19.909	(1.147)	111724	35.1	35.1(R) L
44 1,1,2,2-Tetrachloroethane	83.00	20.190	(1.163)	14994	4.28	4.28(a)
45 1,3-Dichlorobenzene	146.00	22.120	(1.274)	24273	5.97	5.97
46 1,4-Dichlorobenzene	146.00	22.120	(1.274)	24144	4.97	4.97(a) RT

*see run # c0206.d  
 for quantitation*

Flag Legend

a - Target compound detected but, quantitated amount  
 Below Limit Of Quantitation(BLOQ).

Data File: /chem/aux/msc.i/c111894.b/c0189.d  
Report Date: 19-Nov-1994 09:33

Page 2

QC Flag Legend

- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/aux/msc.i/c111894.b/c0189.d

Date: 18-NOV-94 21:18

Instrument: msc.i

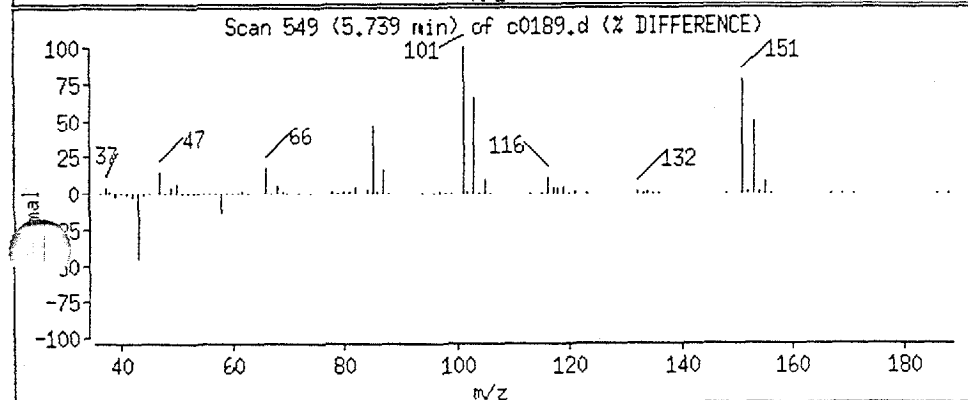
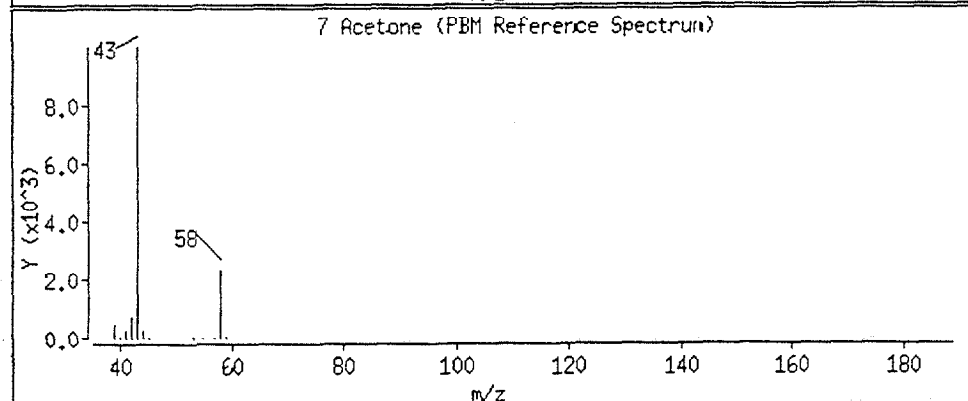
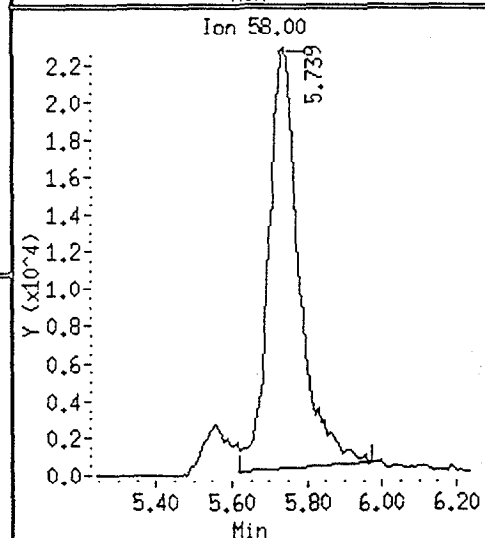
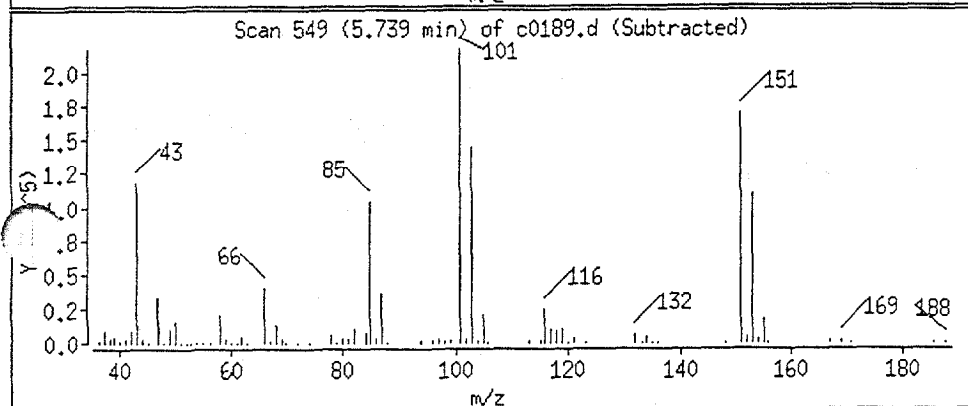
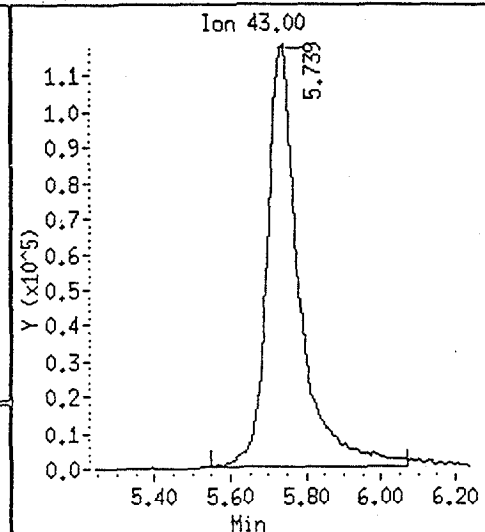
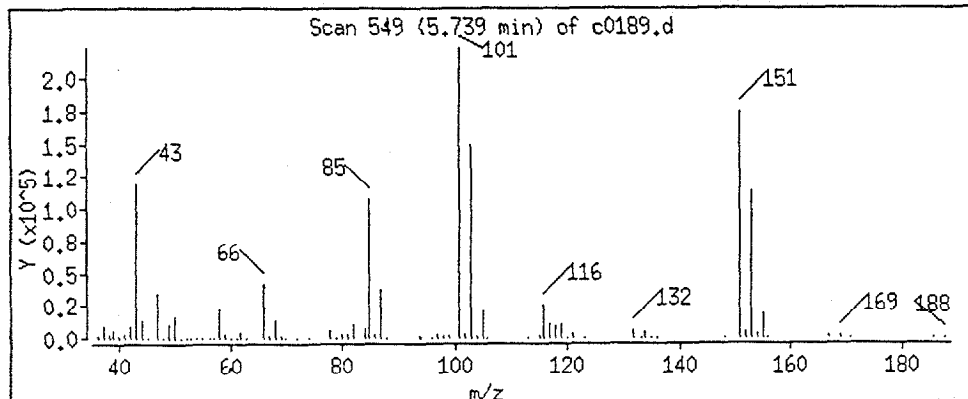
Sample ID: 15226n cljdw151

Column phase: J&W BB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

7 Acetone



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 13

Date: 18-NOV-94 21:18

Instrument: msc.i

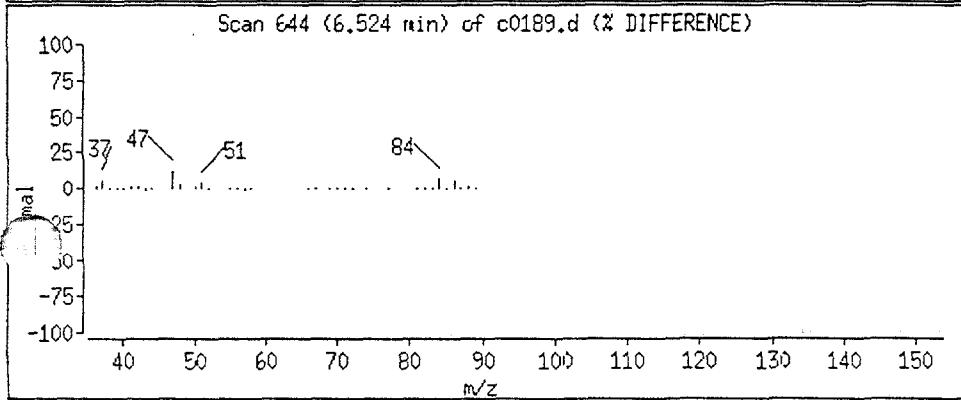
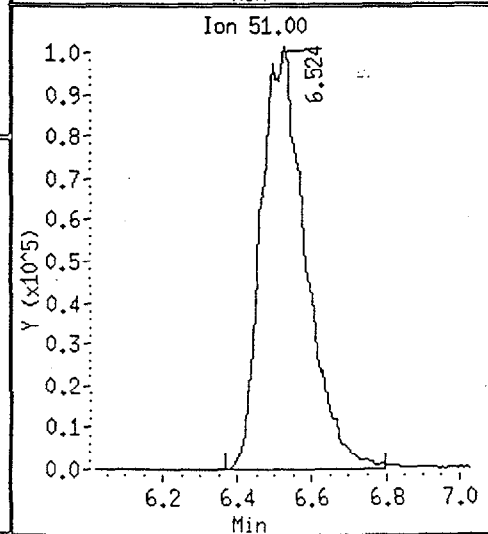
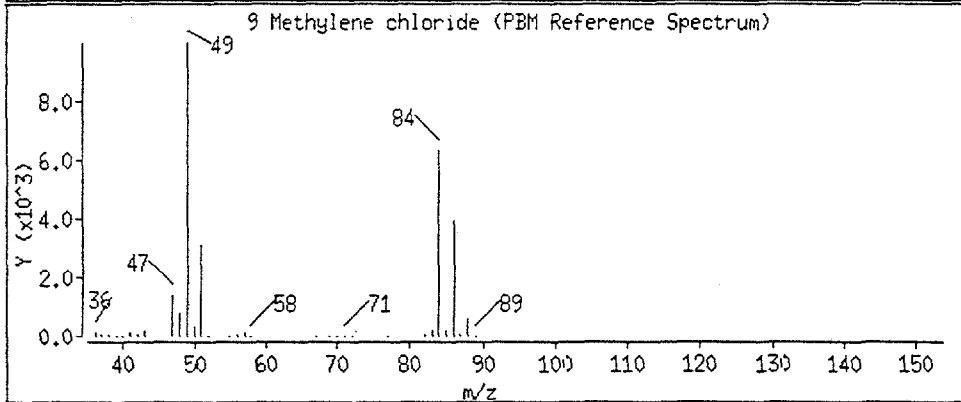
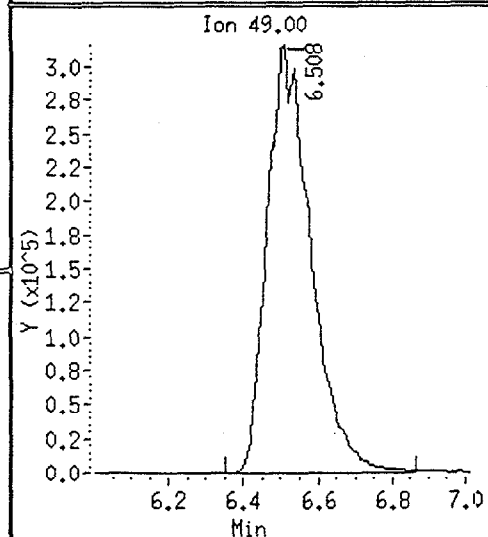
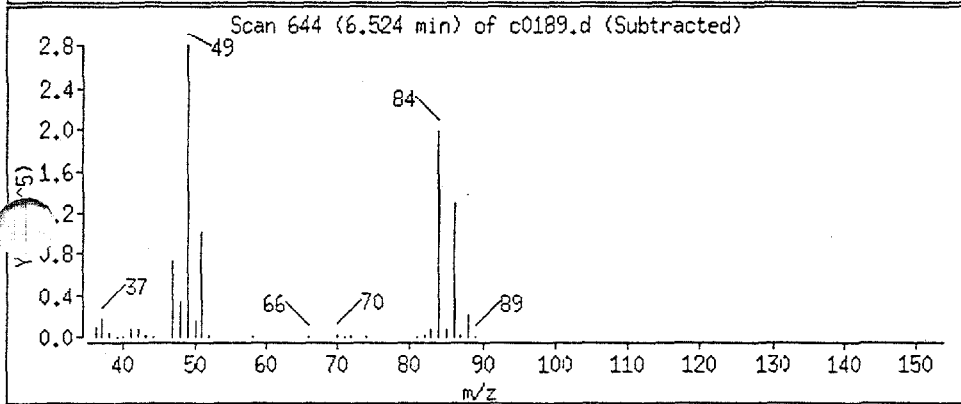
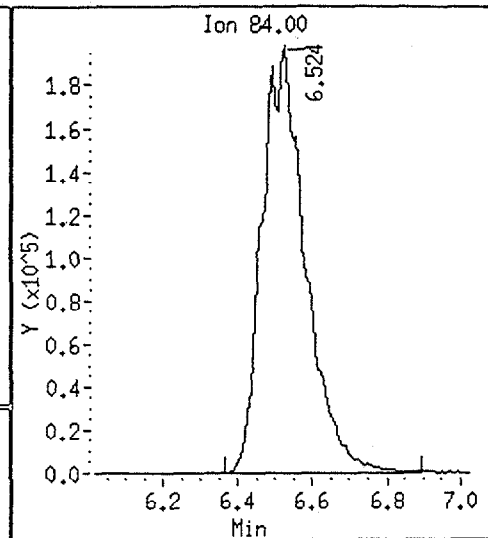
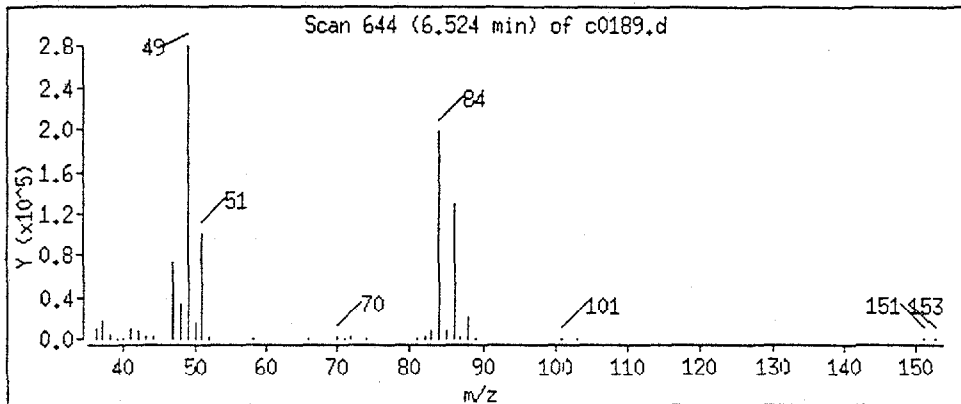
Sample ID: 15226n cljdwsl51

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

9 Methylene chloride



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 14

Date: 18-NOV-94 21:18

Instrument: msc.i

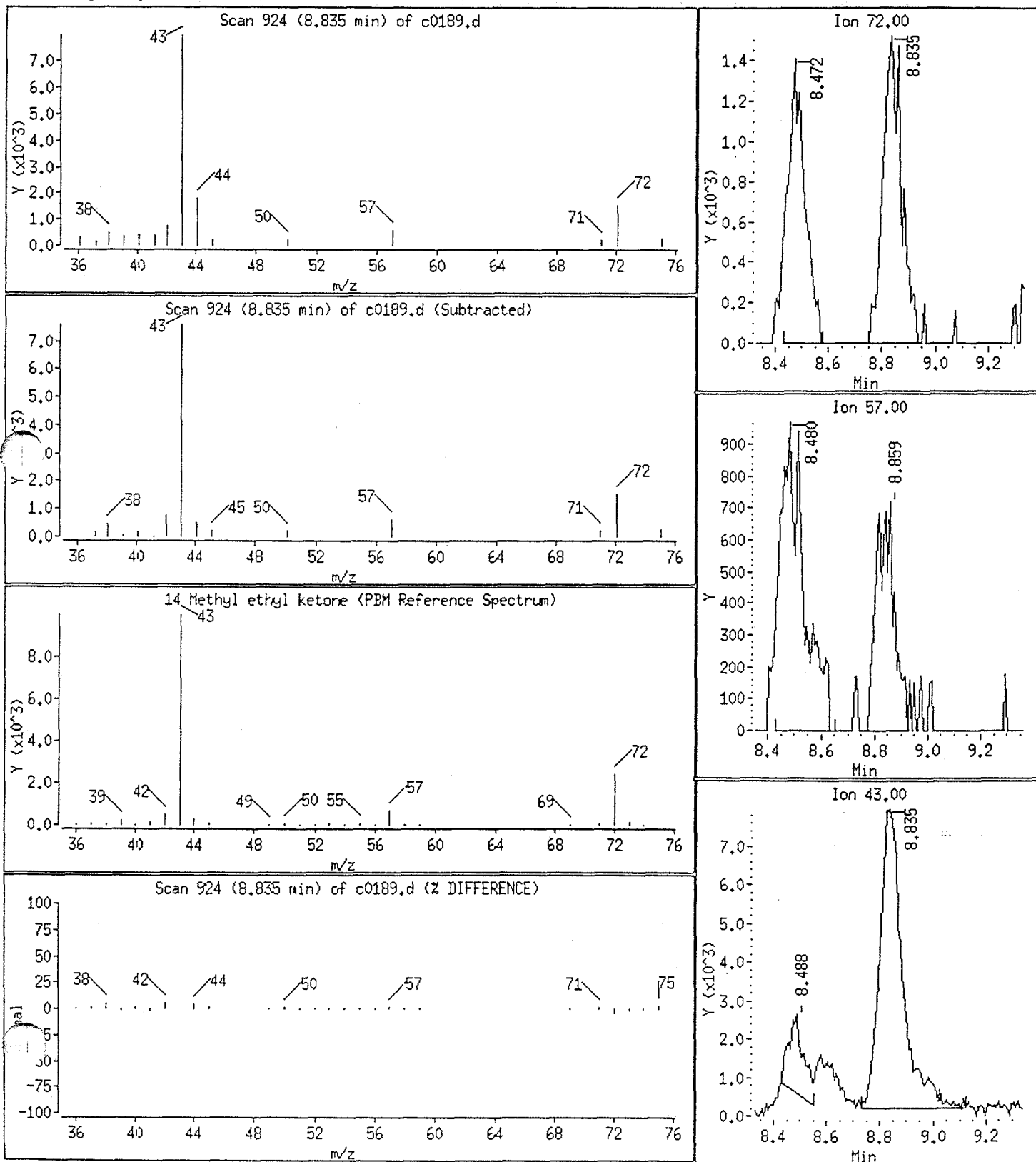
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

14 Methyl ethyl ketone



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 15

Date: 18-NOV-94 21:18

Instrument: msc.i

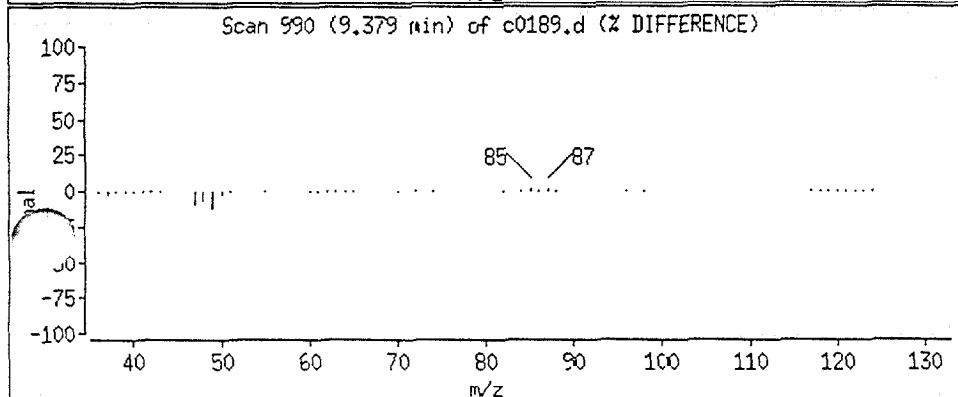
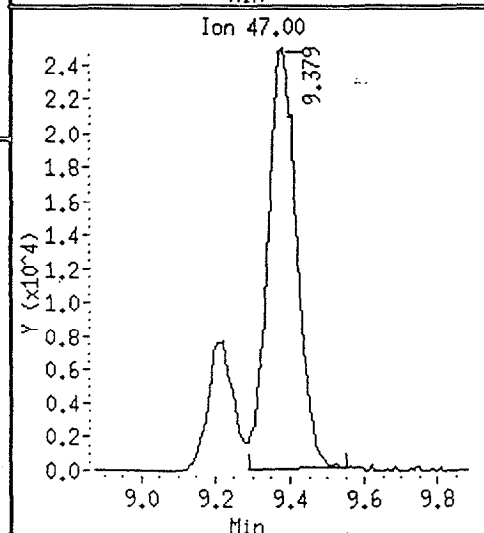
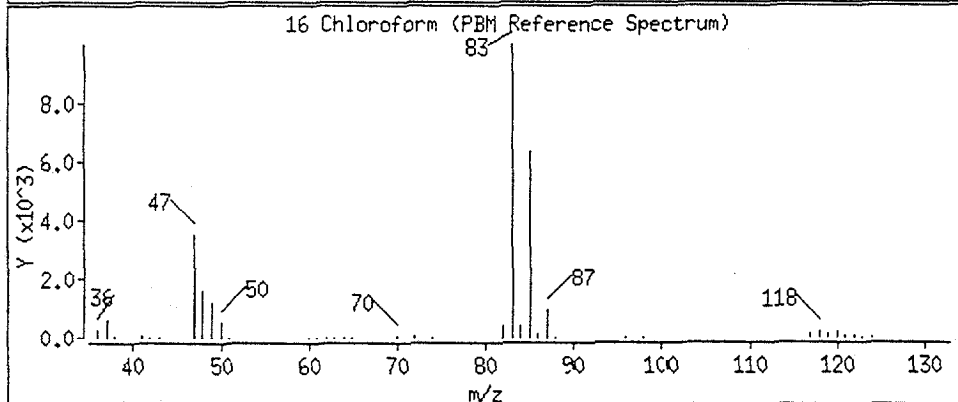
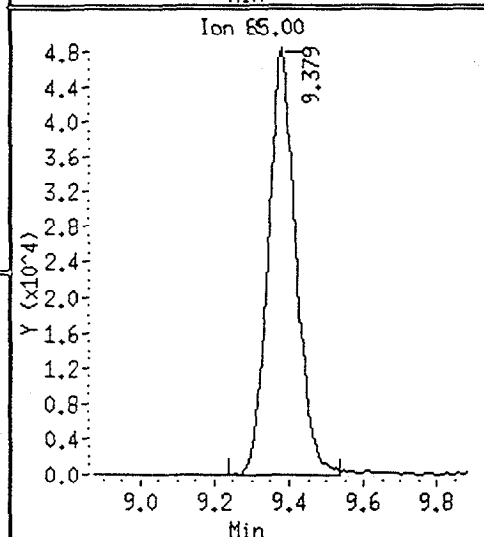
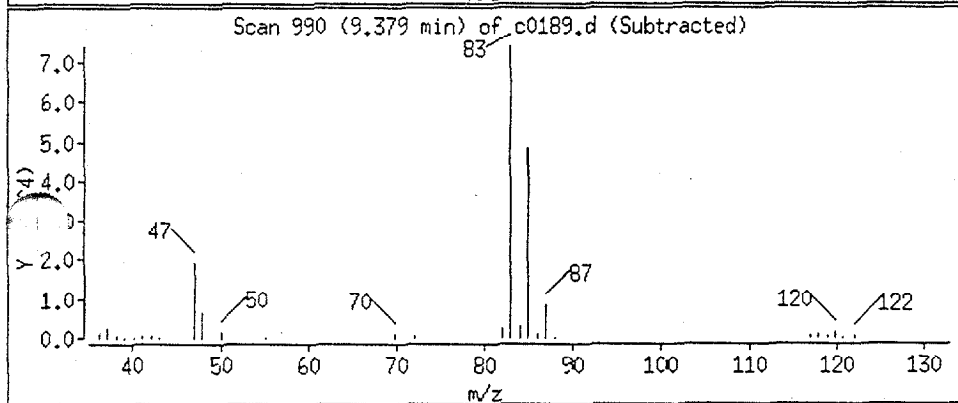
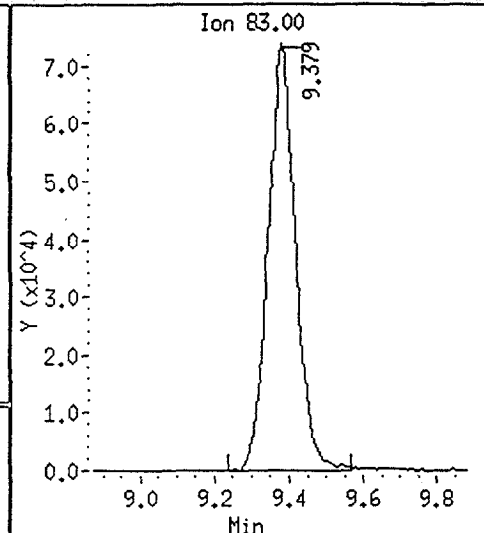
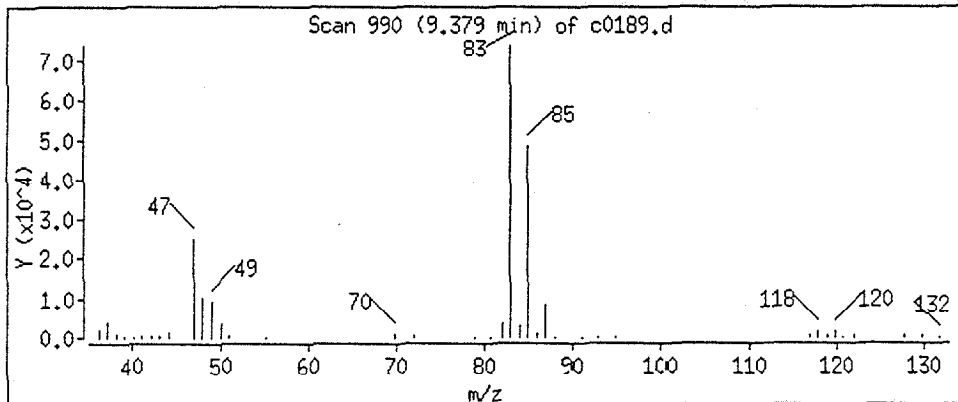
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

16 Chloroform





Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 16

Date: 18-NOV-94 21:18

Instrument: msc.i

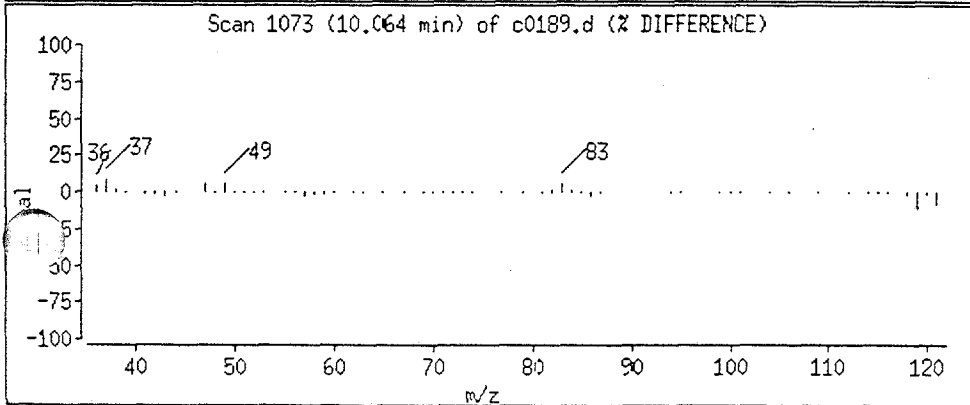
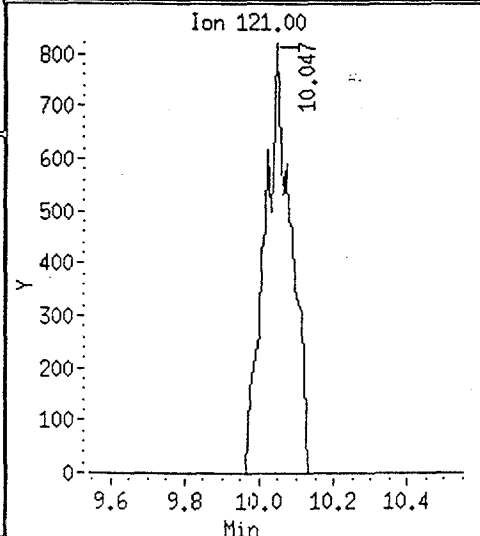
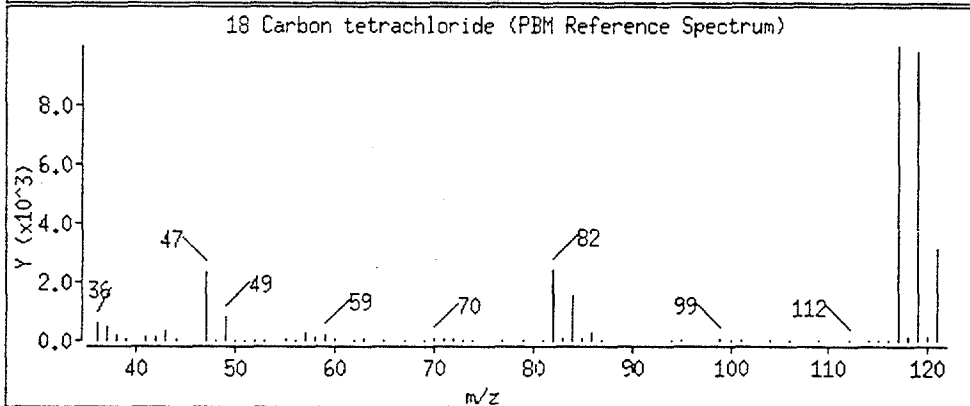
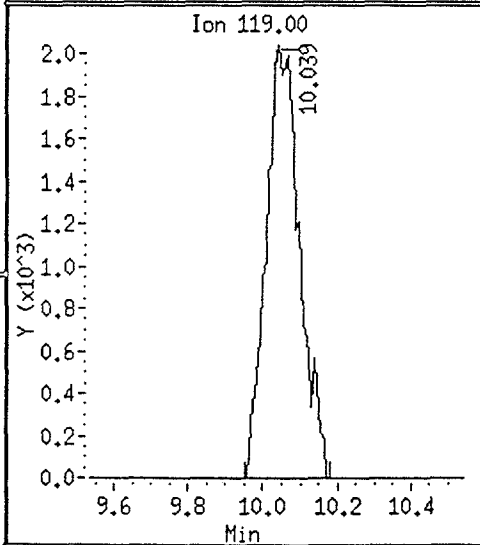
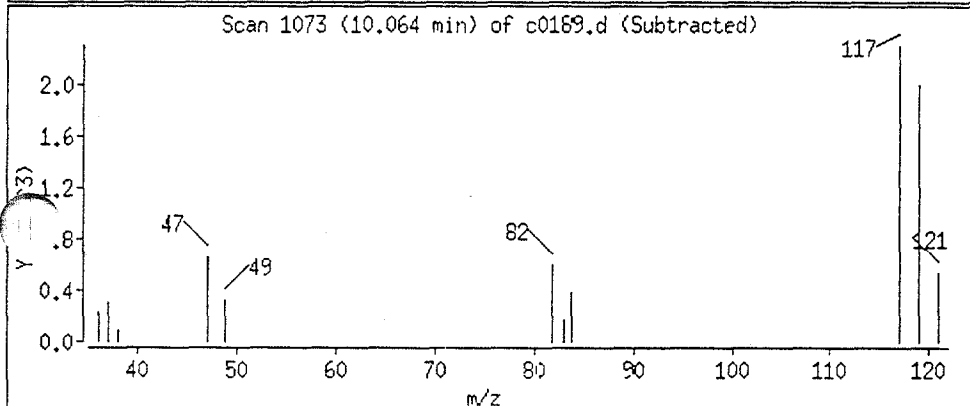
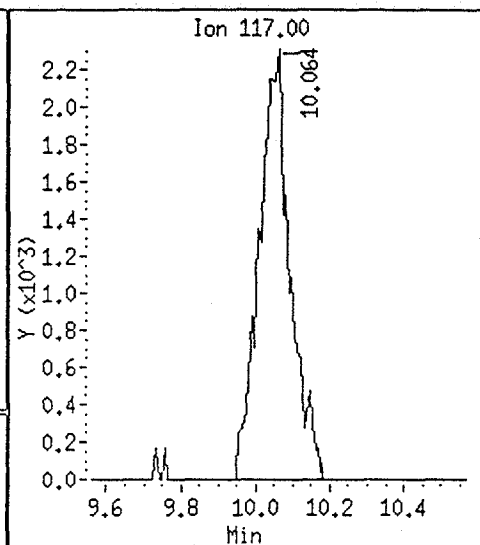
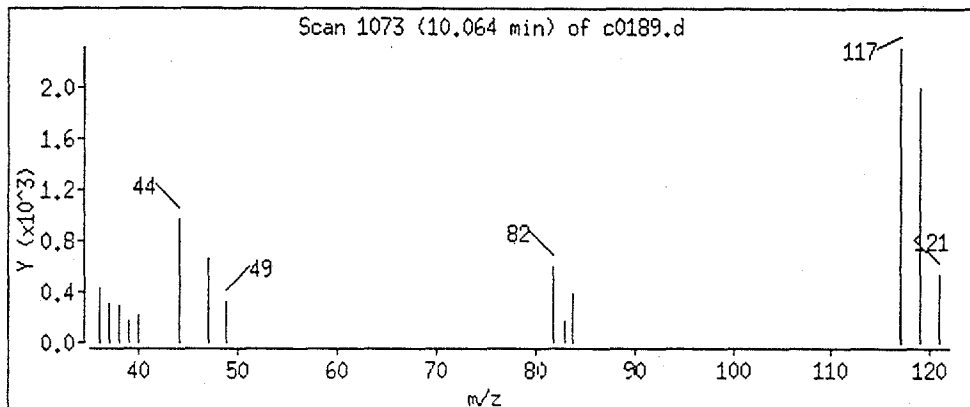
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

18 Carbon tetrachloride



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Date: 18-NOV-94 21:18

Instrument: msc.i

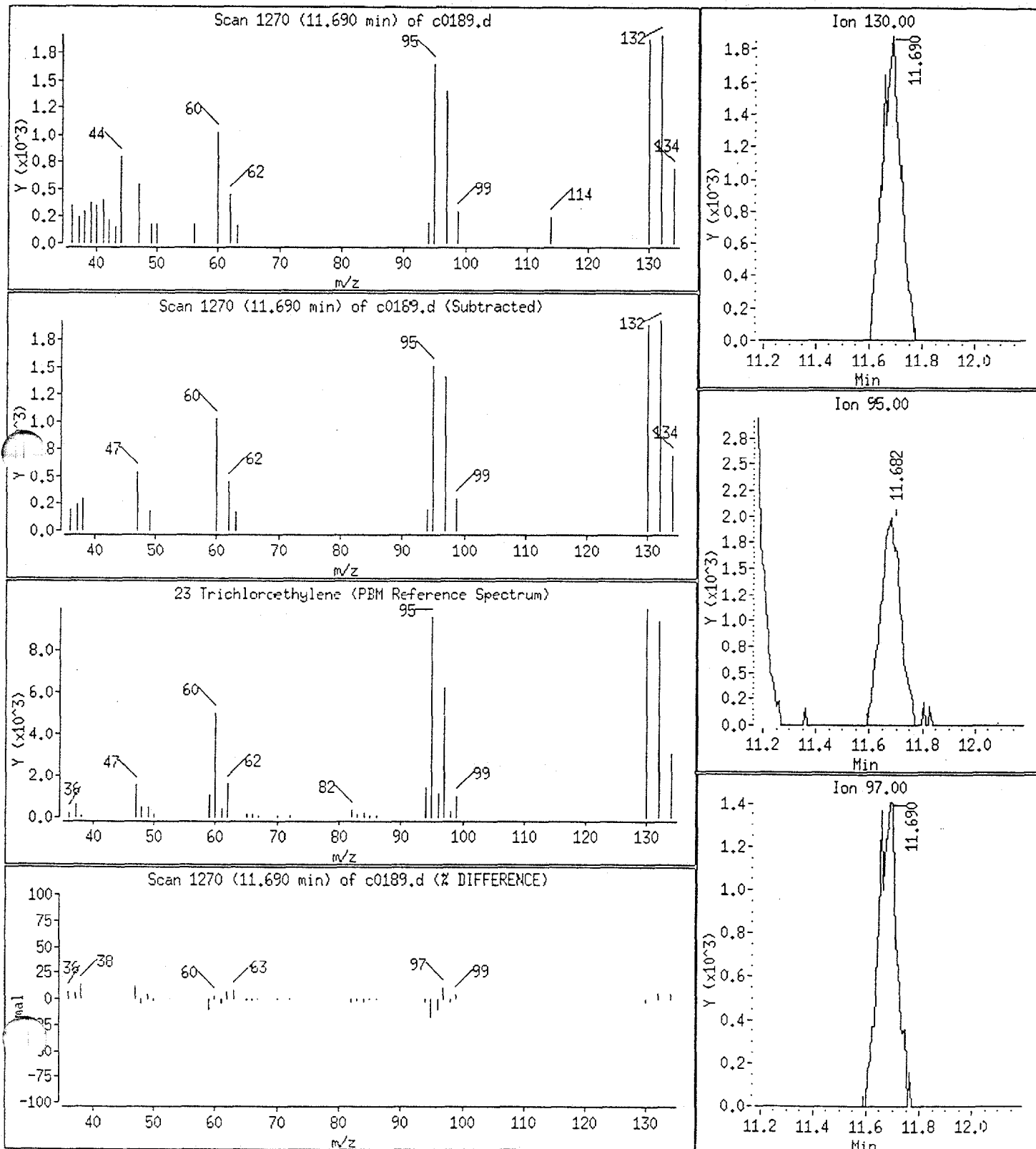
Sample ID: 15226n cljdwsl51

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

23 Trichloroethylene



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 20

Date : 18-NOV-94 21:18

Instrument : msc.i

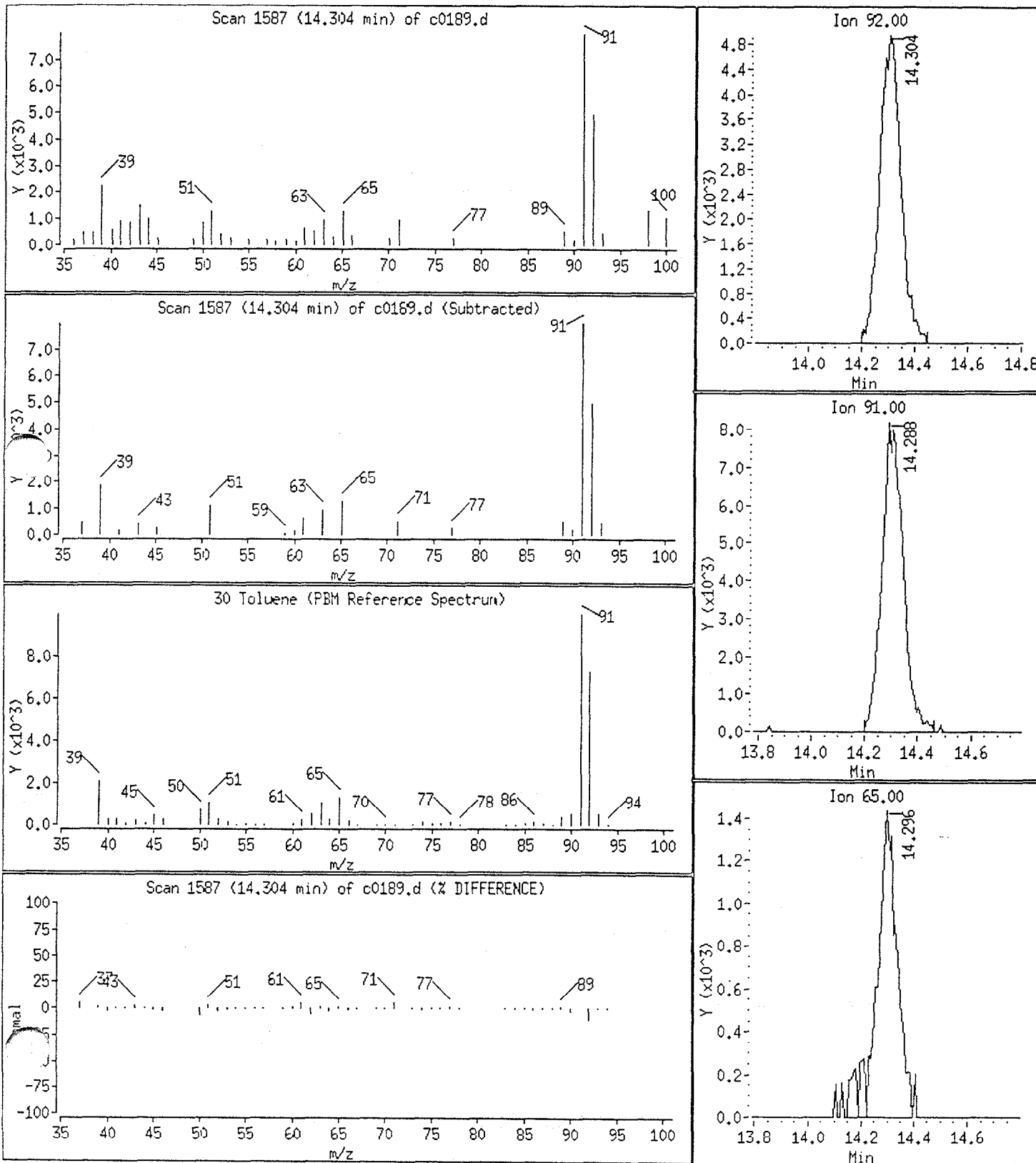
Sample ID : 15226n cljdw151

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

30 Toluene



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Date : 18-NOV-94 21:18

Instrument : msc.i

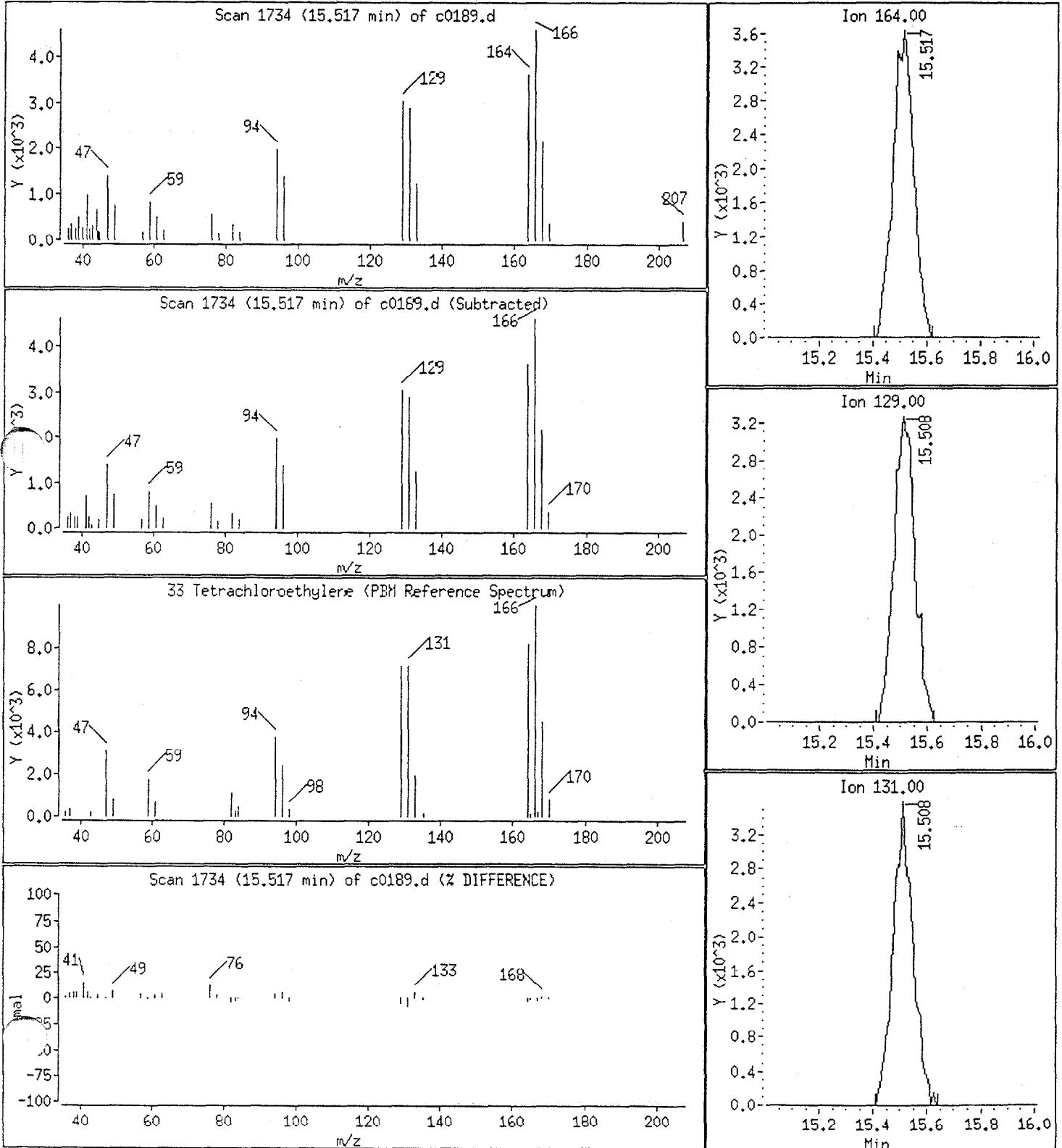
Sample ID : 15226n cljdw151

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

33 Tetrachloroethylene



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Date : 18-NOV-94 21:18

Instrument : msc.i

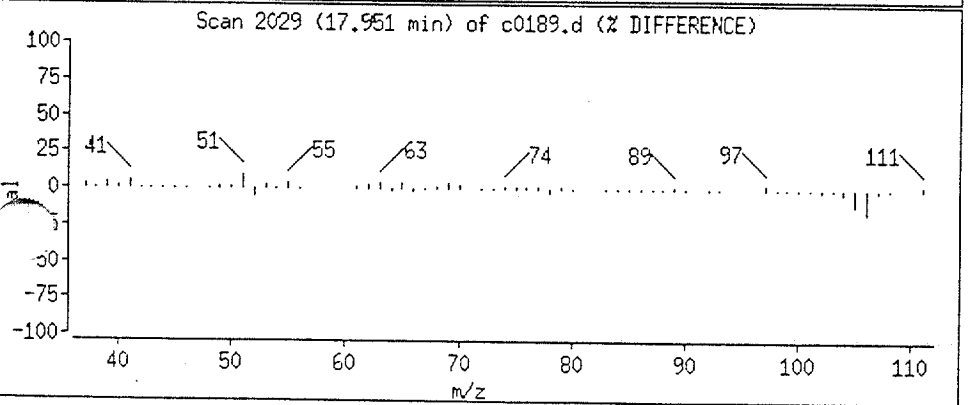
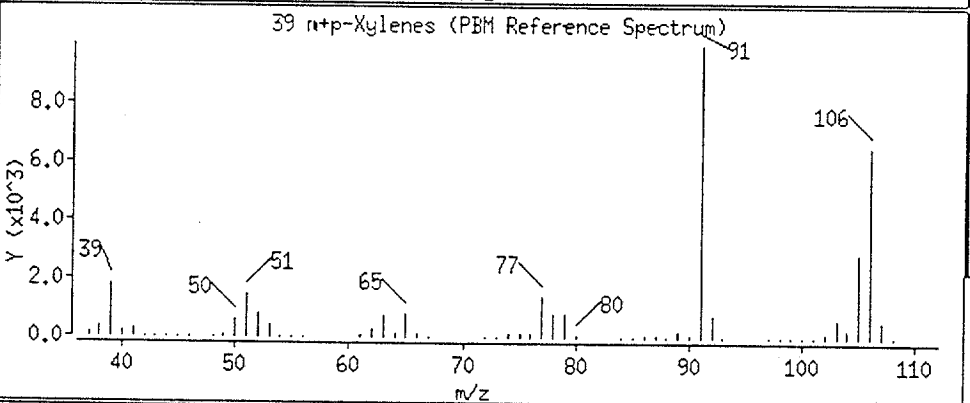
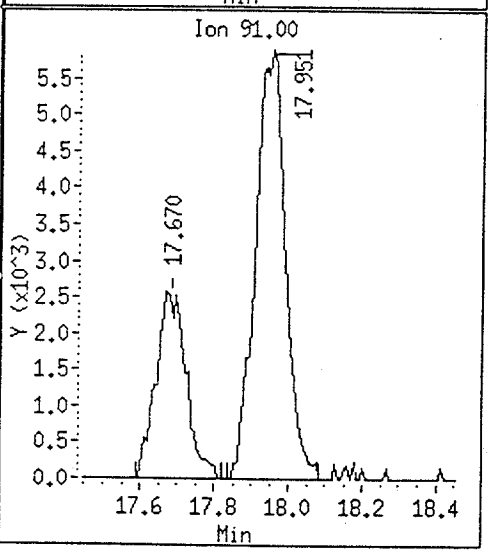
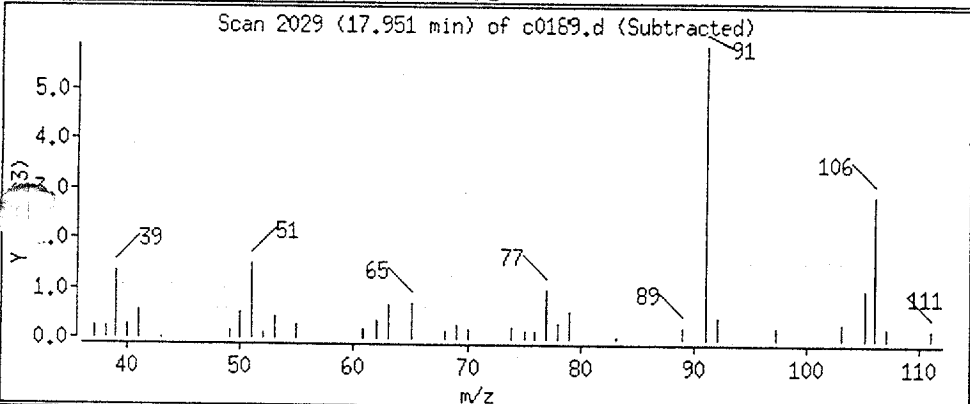
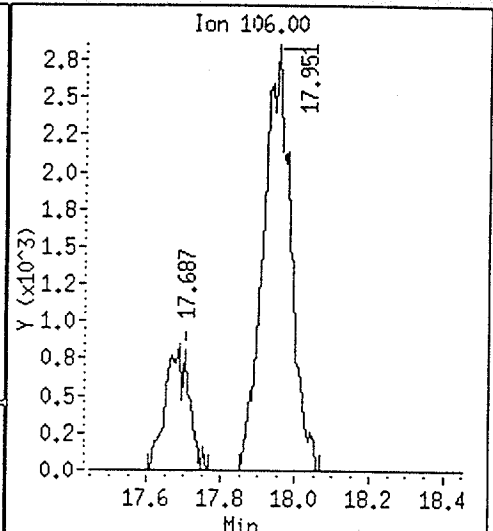
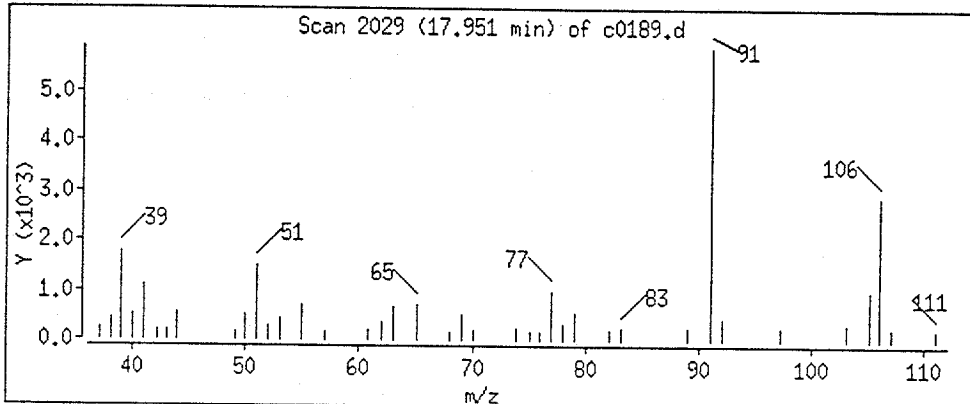
Sample ID : 15226n cljdw151

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

39 m+p-Xylenes



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 25

Date: 18-NOV-94 21:18

Instrument: msc.i

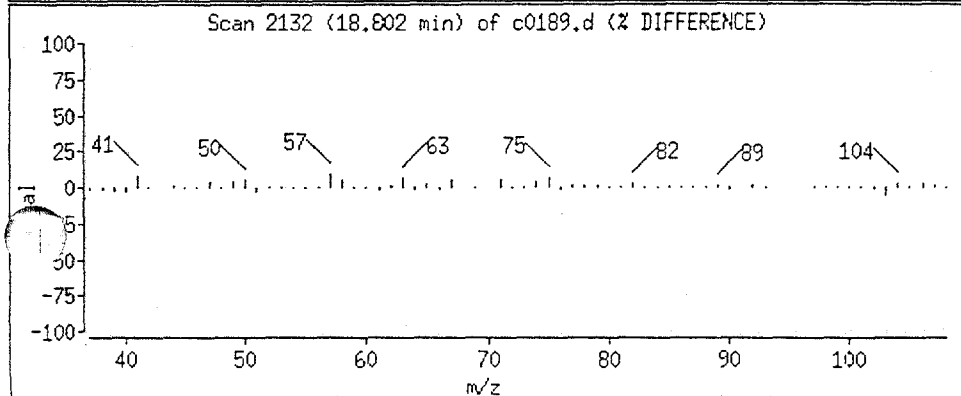
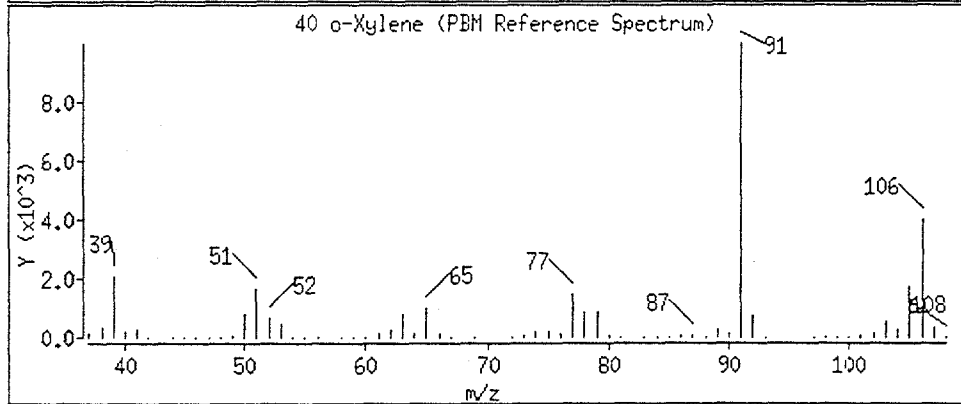
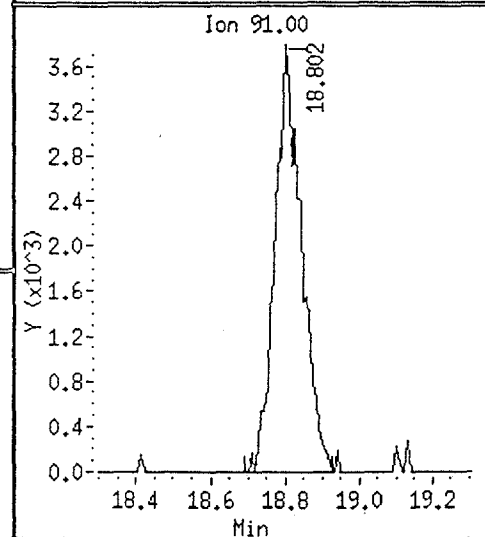
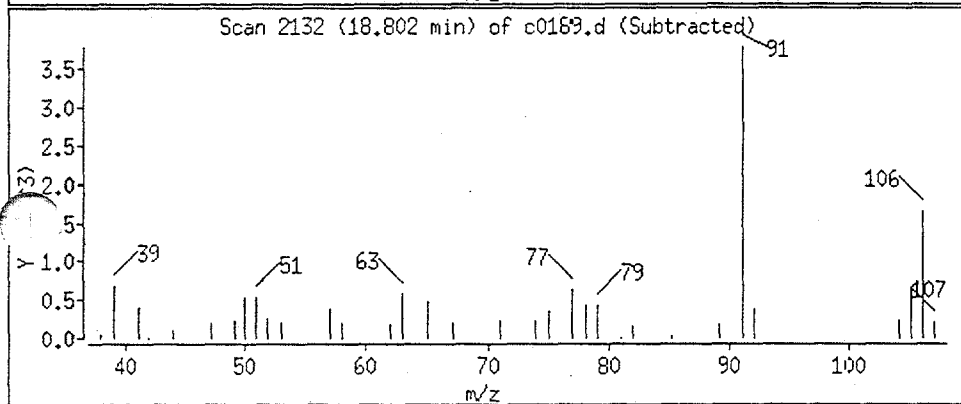
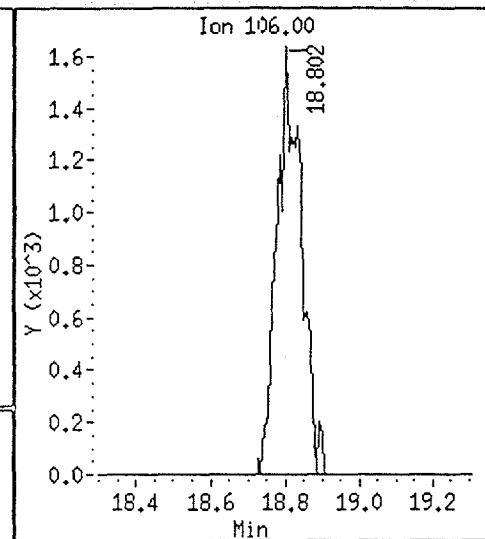
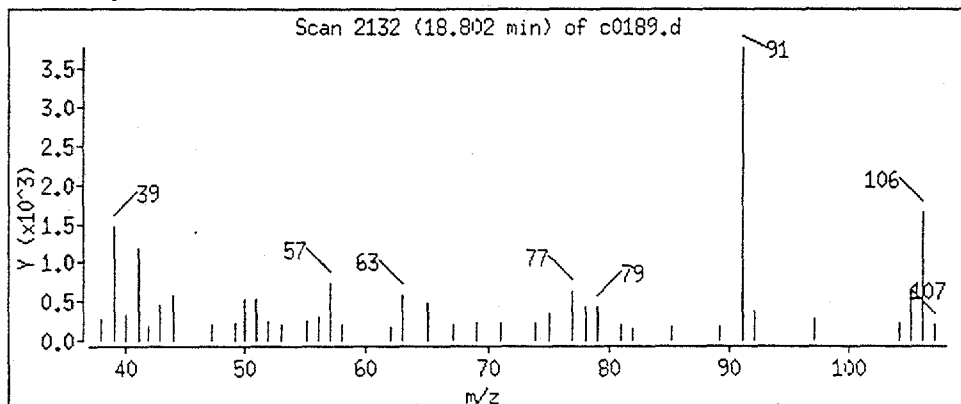
Sample ID: 15226n cljdwsl51

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

40 o-Xylene



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 26

Date: 18-NOV-94 21:18

Instrument: msc.i

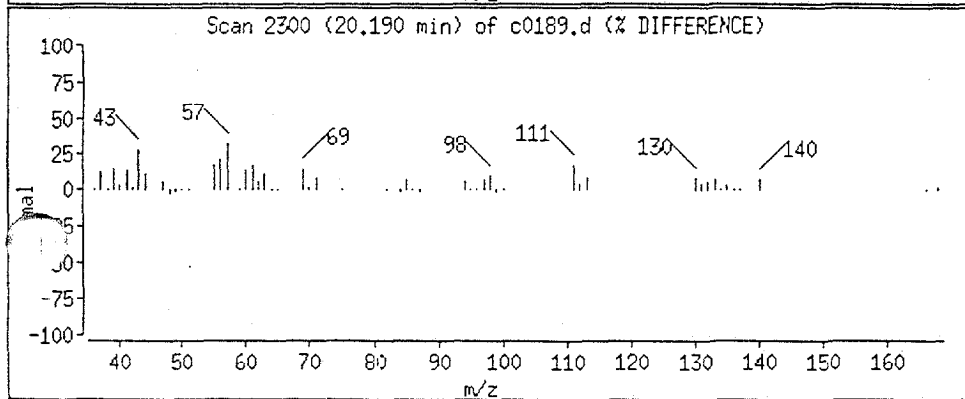
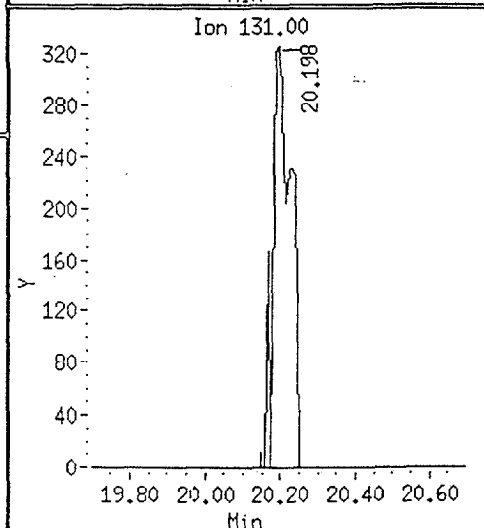
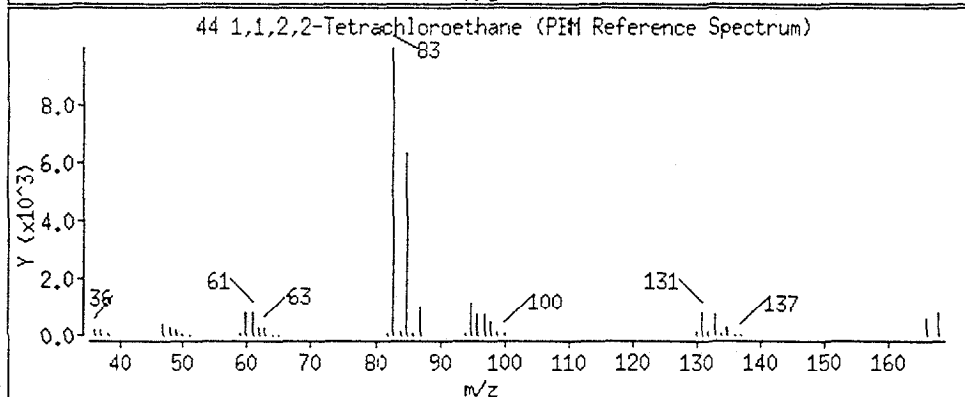
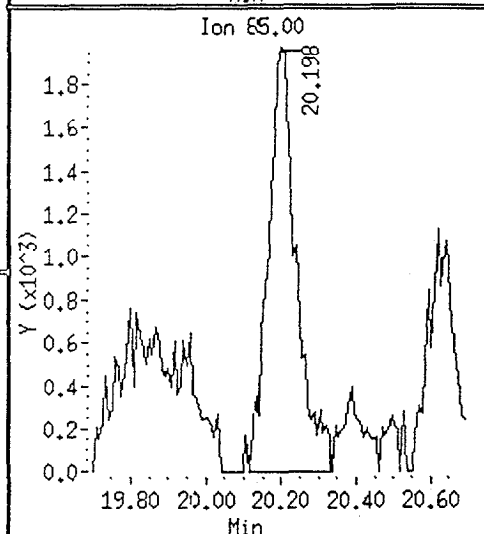
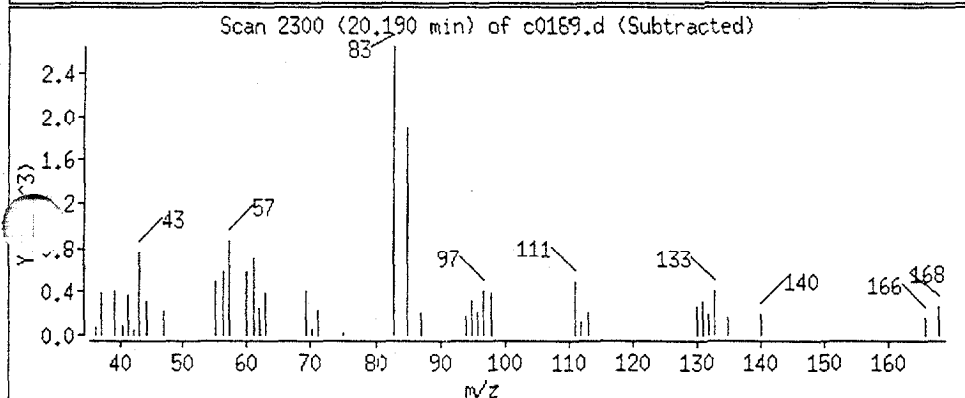
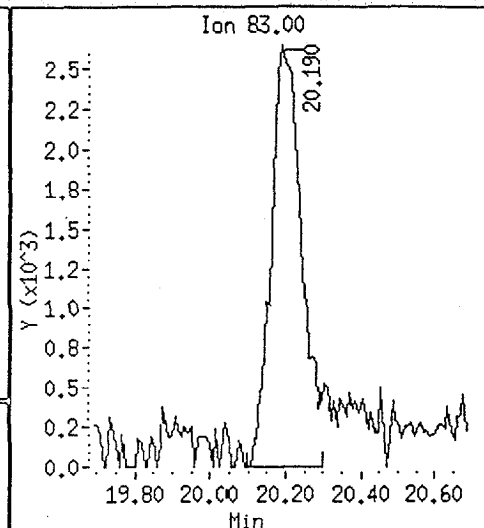
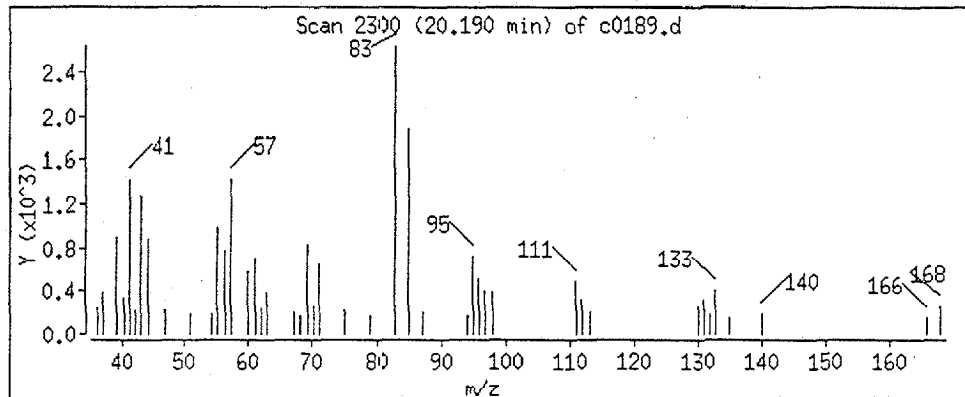
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

44 1,1,2,2-Tetrachloroethane



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 30

Date: 18-NOV-94 21:18

Instrument: msc.i

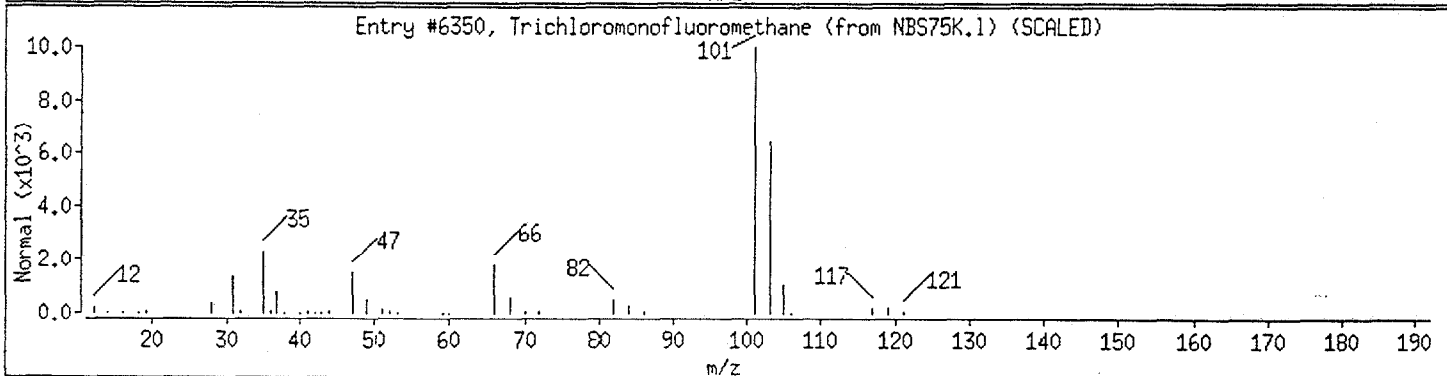
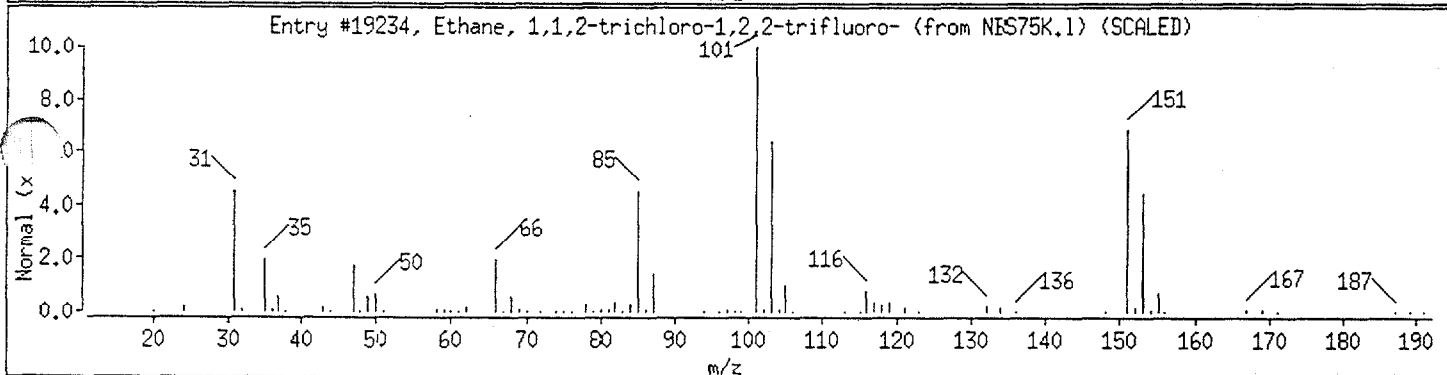
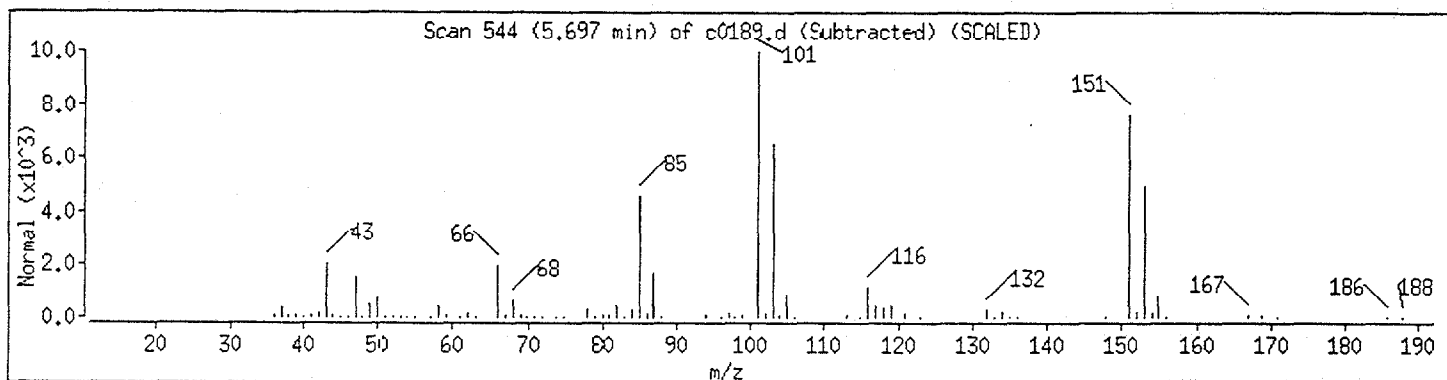
Sample ID: 15226n c1jdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Ethane, 1,1,2-trichloro-1,2,2-trifluoro-	76-13-1	NBS75K.1	19234	91
Trichloromonofluoromethane	75-69-4	NBS75K.1	6350	37





Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 32

Date: 18-NOV-94 21:18

Instrument: msc.i

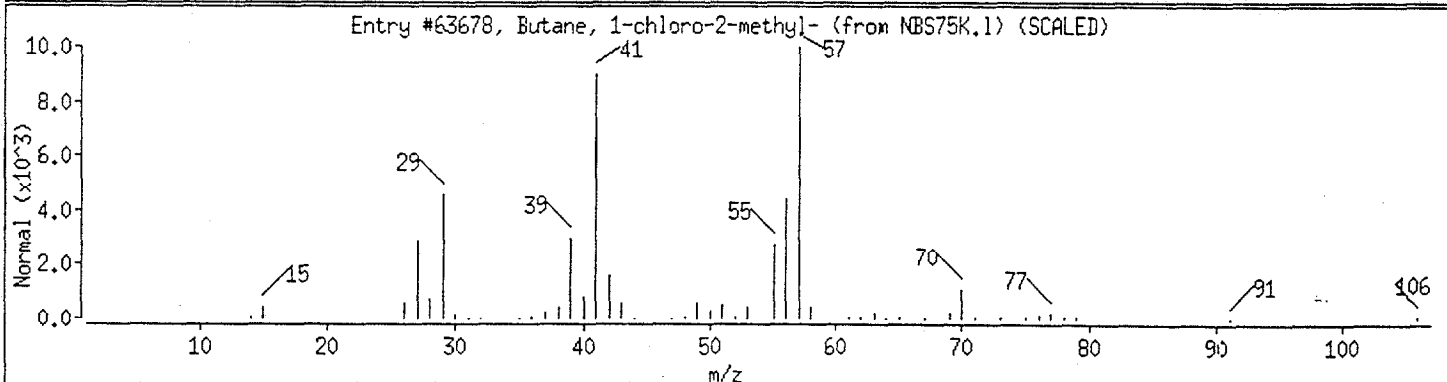
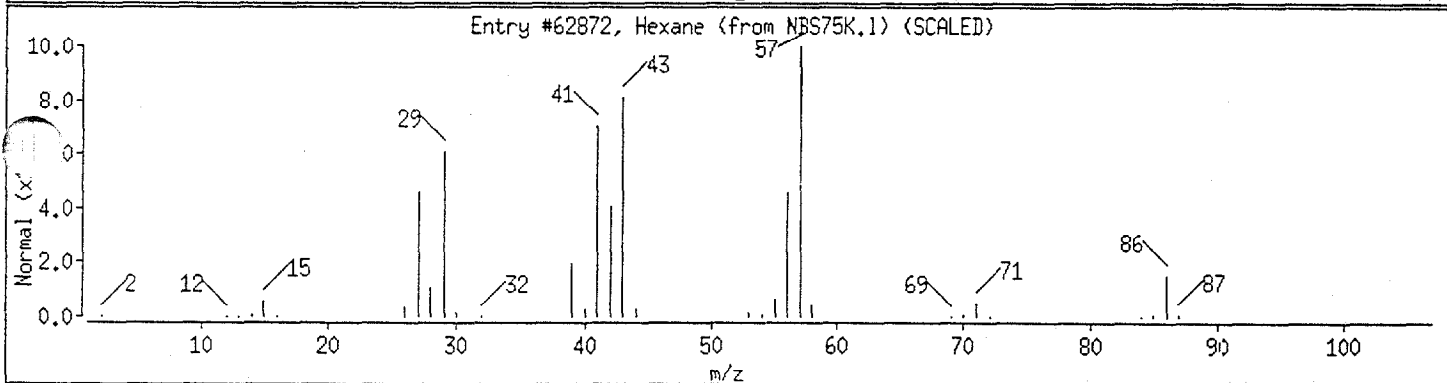
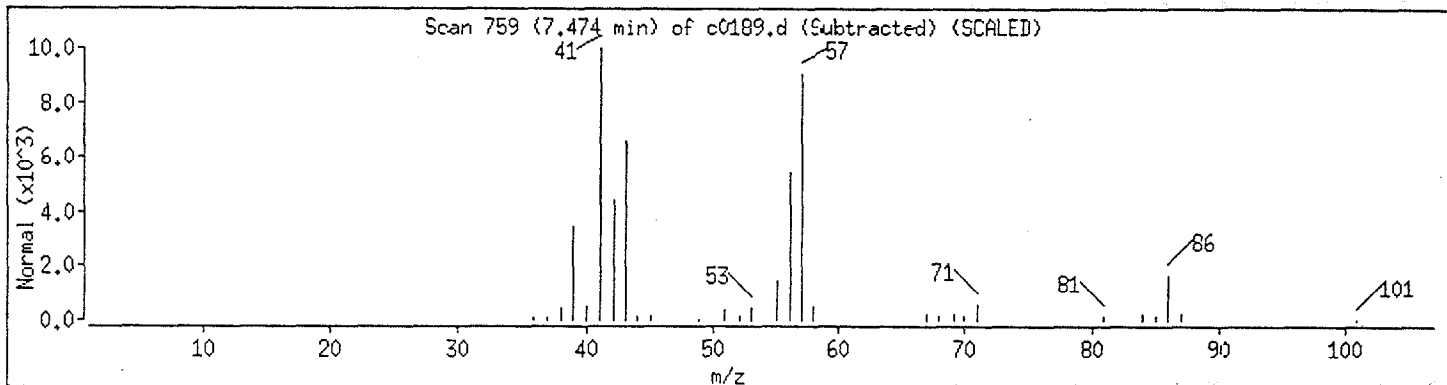
Sample ID: 15226n cljdwsl51

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Hexane	110-54-3	NBS7EK.1	62872	80
Butane, 1-chloro-2-methyl-	616-13-7	NBS7EK.1	63678	40



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 33

Date: 18-NOV-94 21:18

Instrument: msc.i

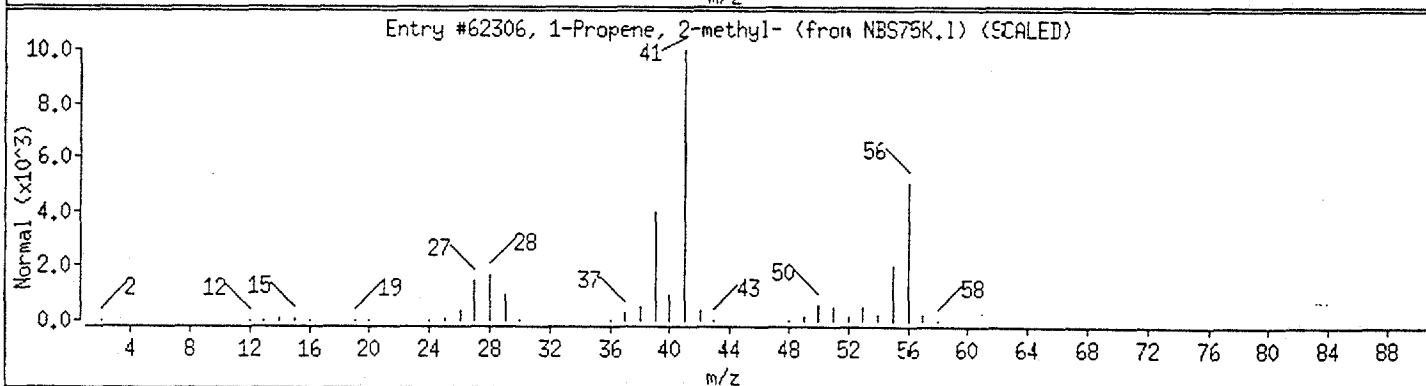
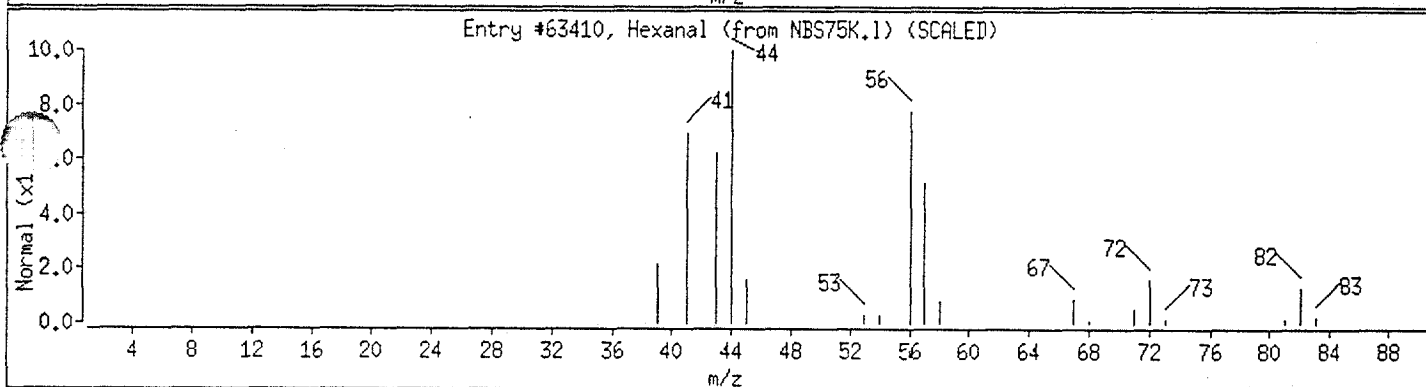
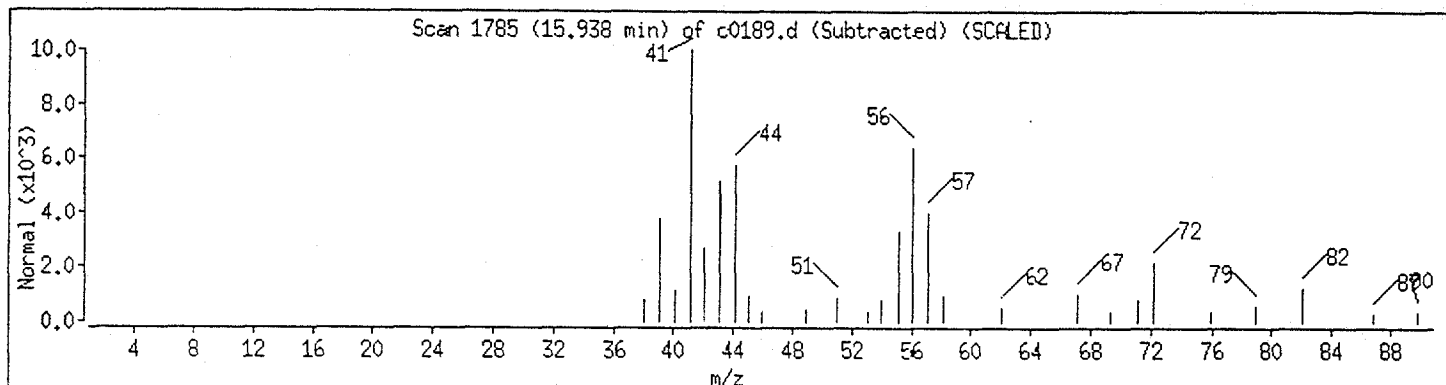
Sample ID: 15226n cljdwsl51

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

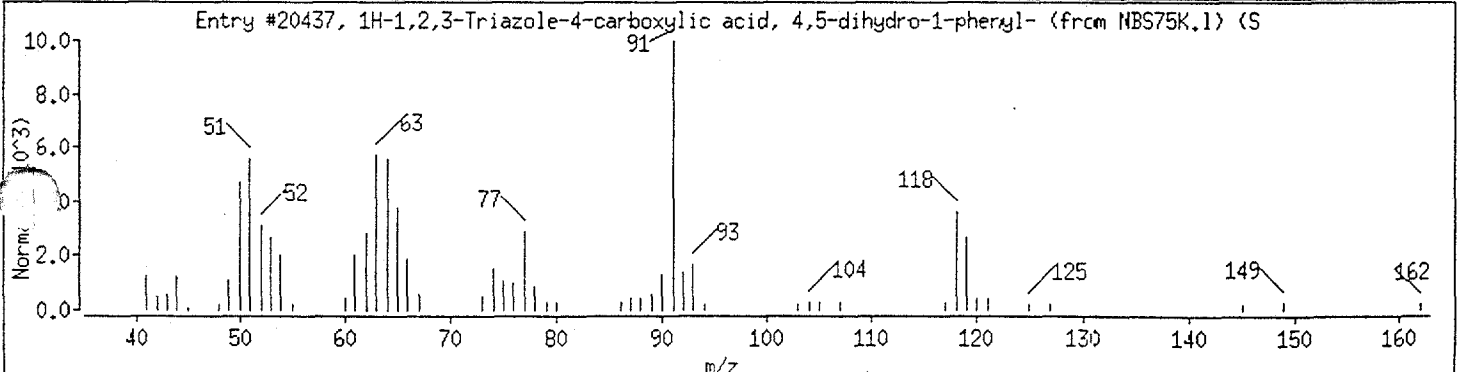
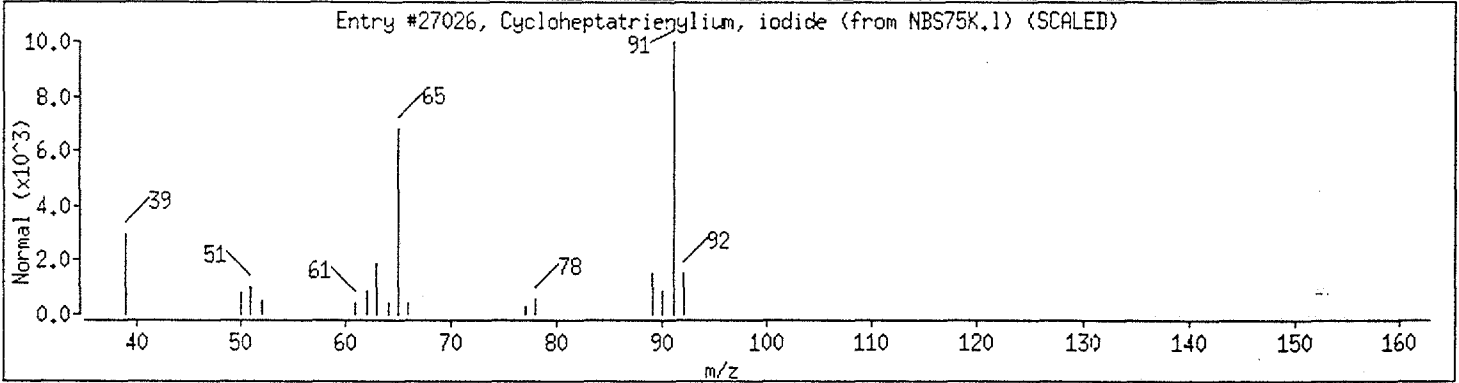
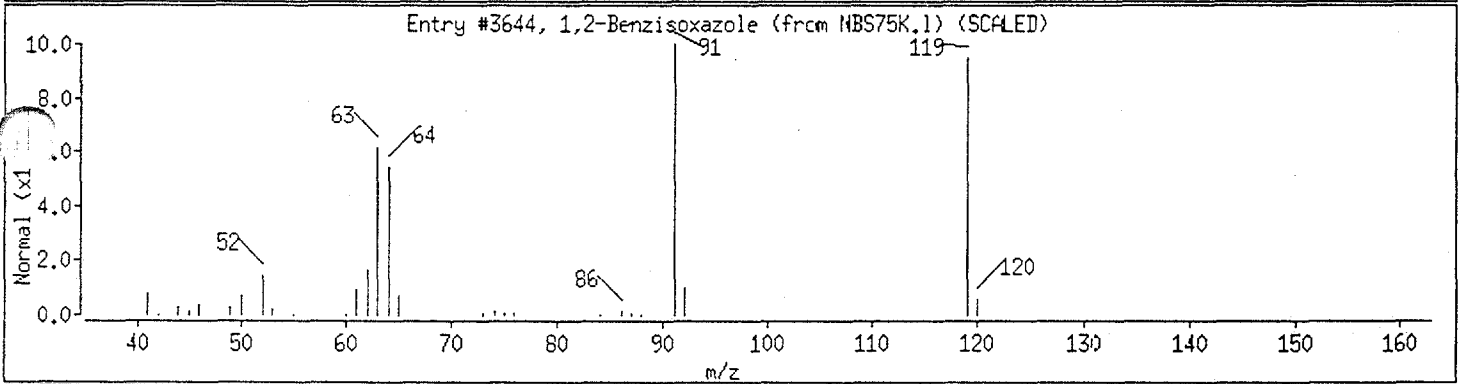
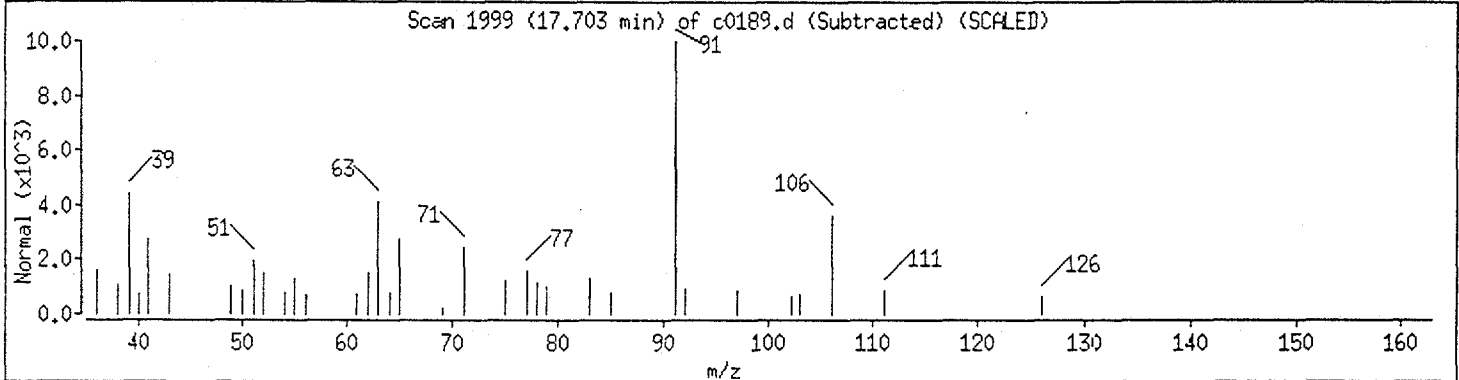
Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Hexanal	66-25-1	NBS7EK.1	63410	27
1-Propene, 2-methyl-	115-11-7	NBS7EK.1	62306	18



Data File: /chem/aux/msc.i/c111894.b/c0189.d  
 Date: 18-NOV-94 21:18  
 Instrument: msc.i  
 Sample ID: 15226n cljdw151  
 Column phase: J&W DB\_624  
 Volume Injected (uL): 0.0

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1,2-Benzisoxazole	271-95-4	NBS75K.1	3644	45
Cycloheptatrienylium, iodide	1316-80-9	NBS75K.1	27026	42
1H-1,2,3-Triazole-4-carboxylic acid, 4,5	54798-96-8	NBS75K.1	20437	38



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 35

Date: 18-NOV-94 21:18

Instrument: msc.i

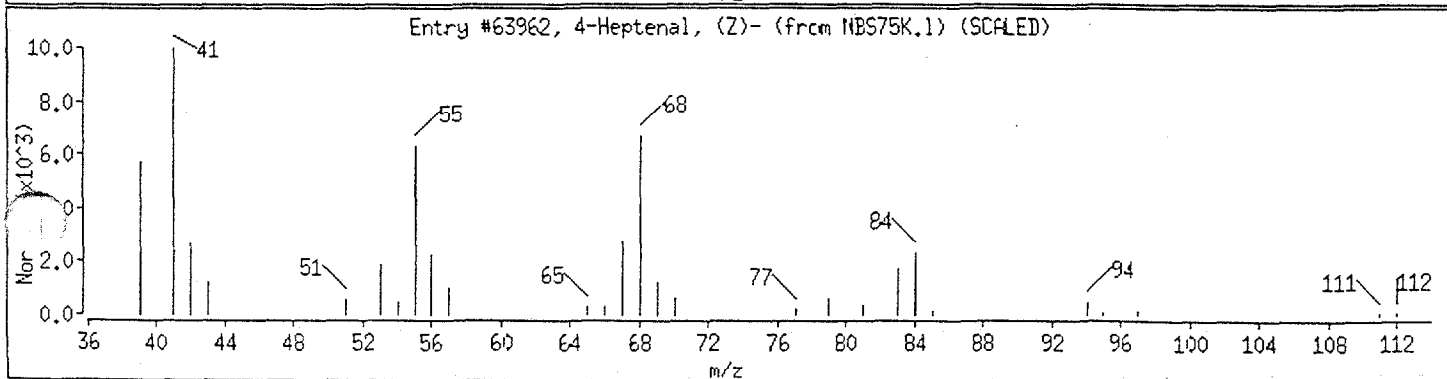
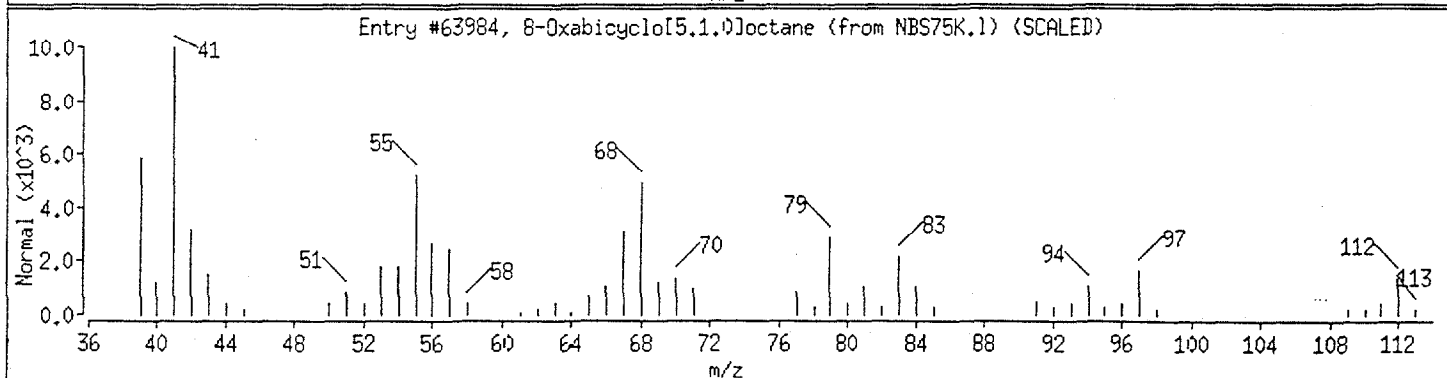
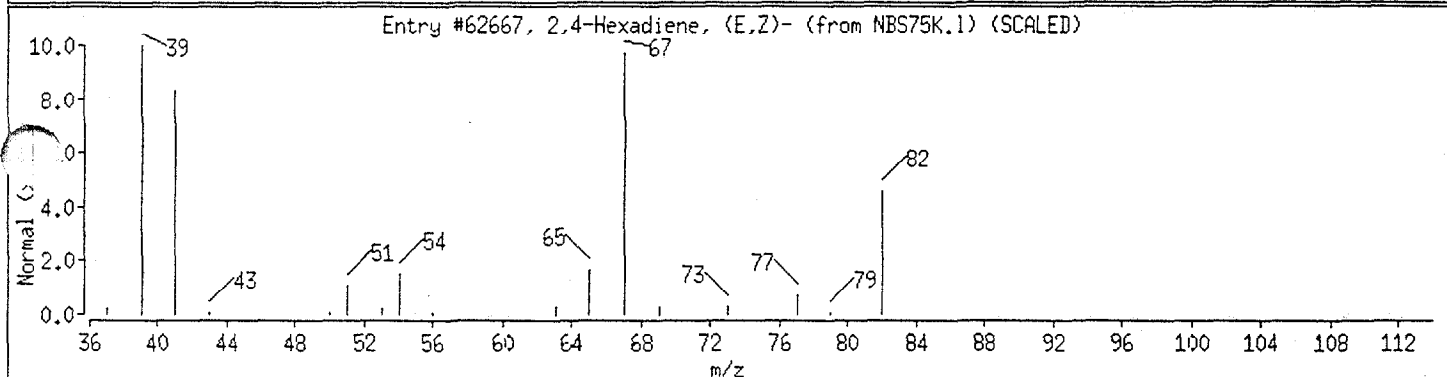
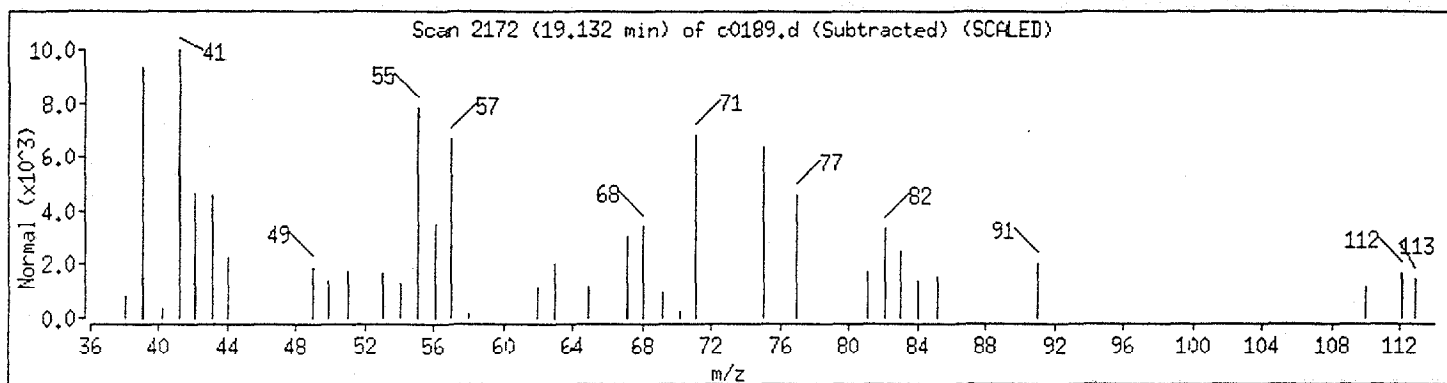
Sample ID: 15226n cljdwsl51

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
2,4-Hexadiene, (E,Z)-	5194-50-3	NBS75K.1	62667	43
8-Oxabicyclo[5.1.0]octane	286-45-3	NBS75K.1	63984	40
4-Heptenal, (Z)-	6728-31-0	NBS75K.1	63962	40



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 36

Date: 18-NOV-94 21:18

Instrument: msc.i

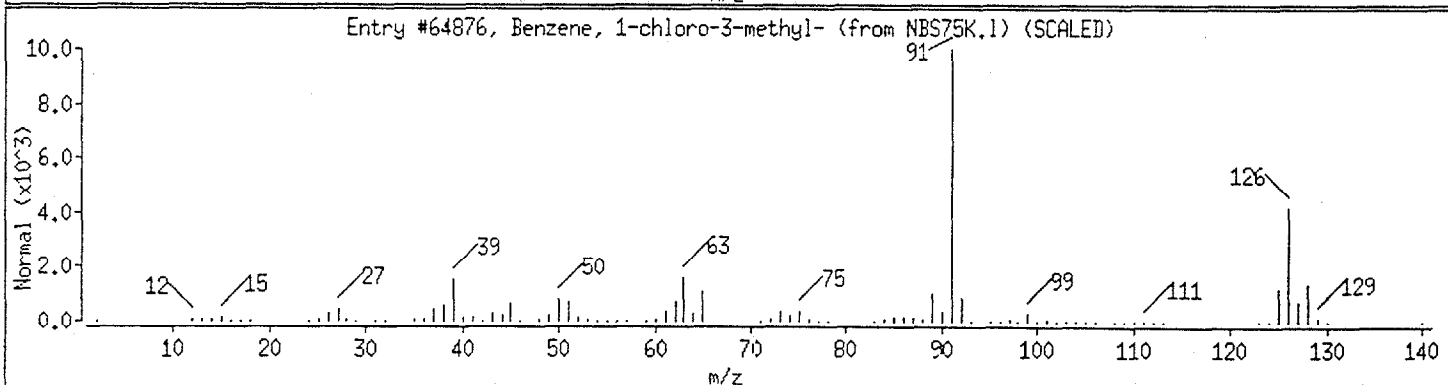
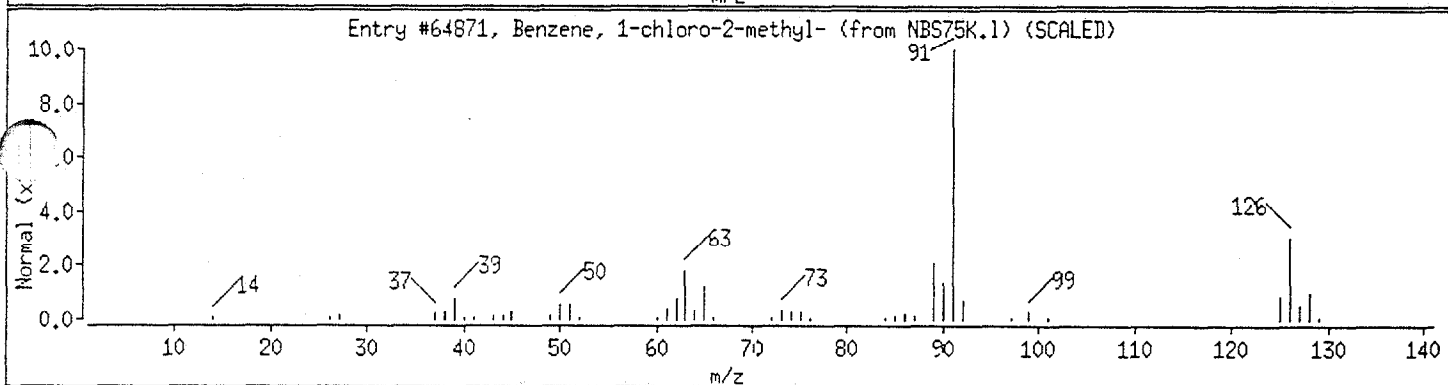
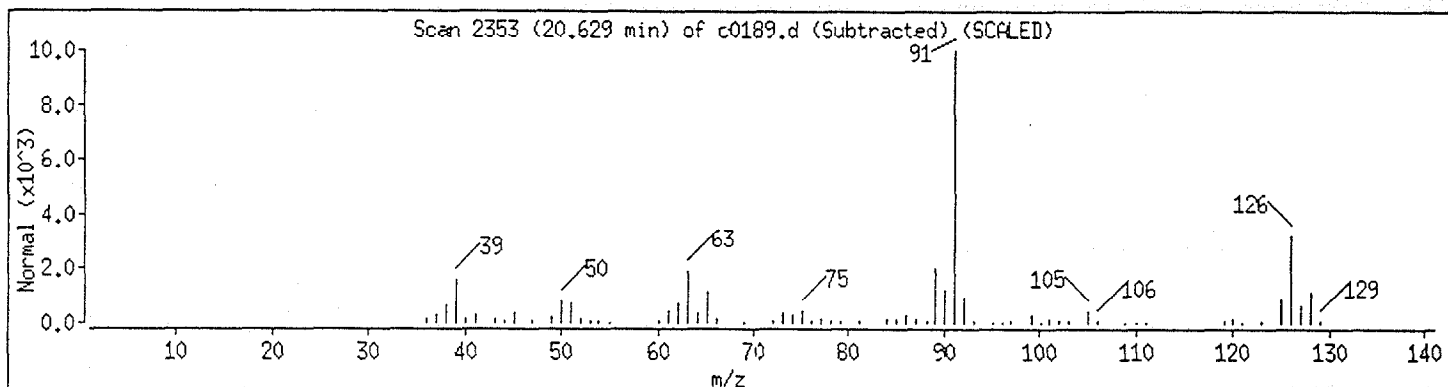
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-chloro-2-methyl-	95-49-8	NBS75K.1	64871	96
Benzene, 1-chloro-3-methyl-	108-41-8	NBS75K.1	64876	93



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 37

Date: 18-NOV-94 21:18

Instrument: msc.i

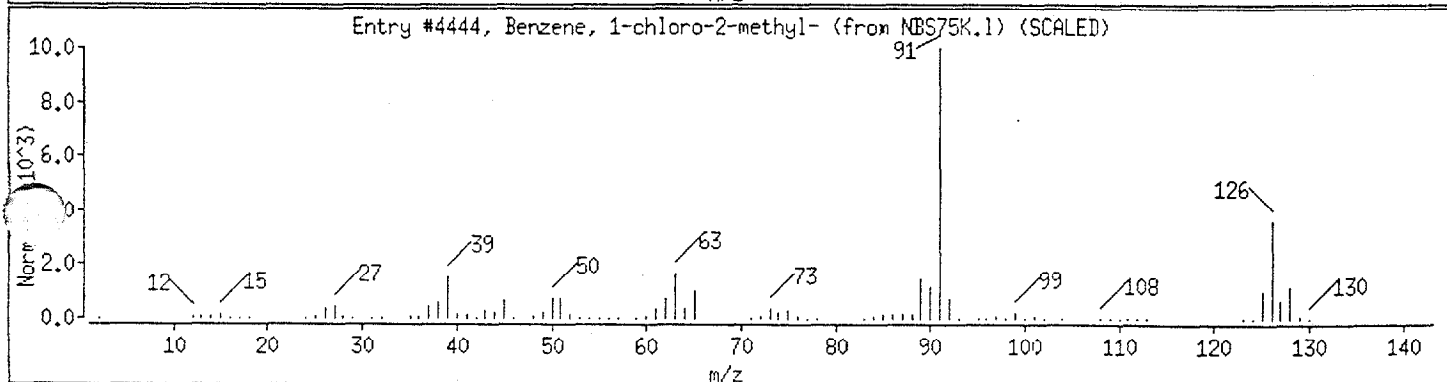
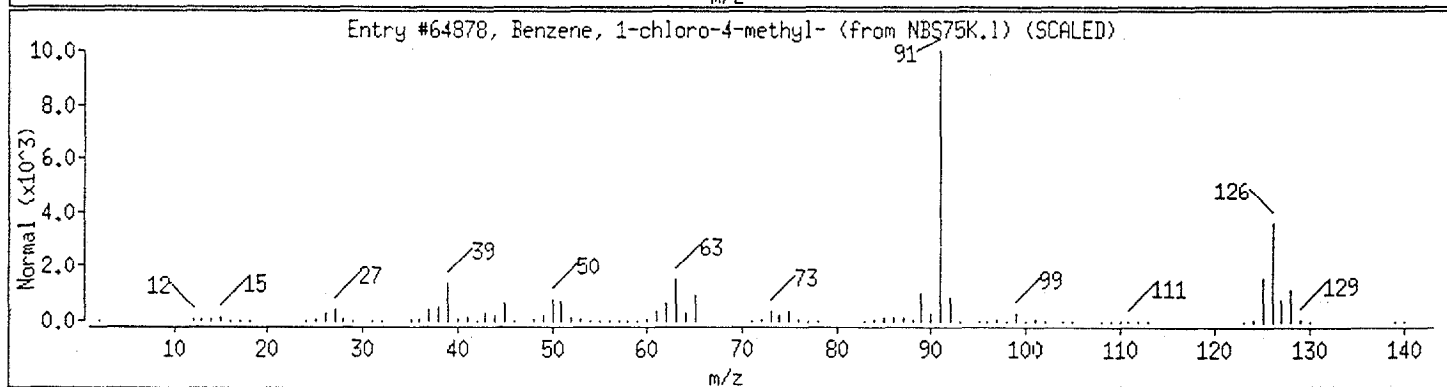
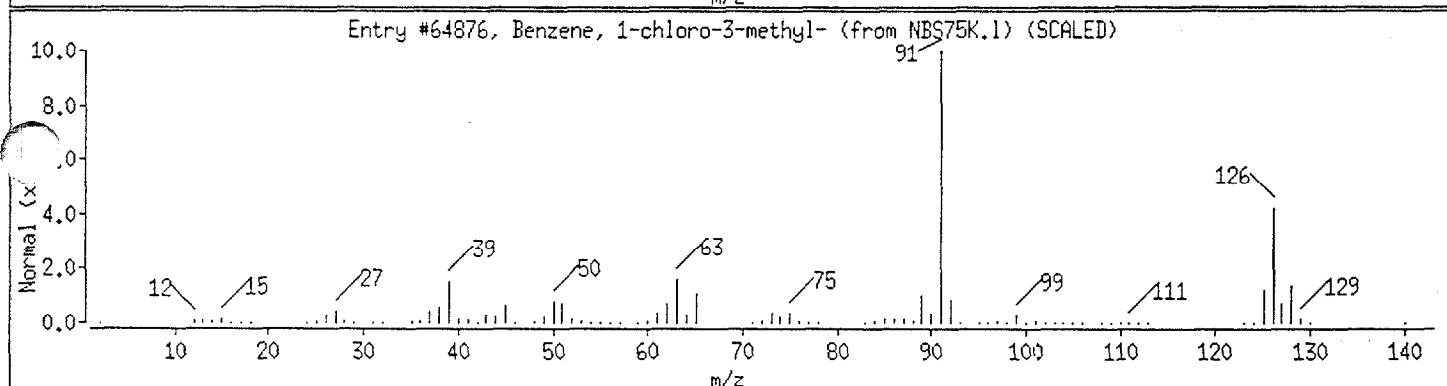
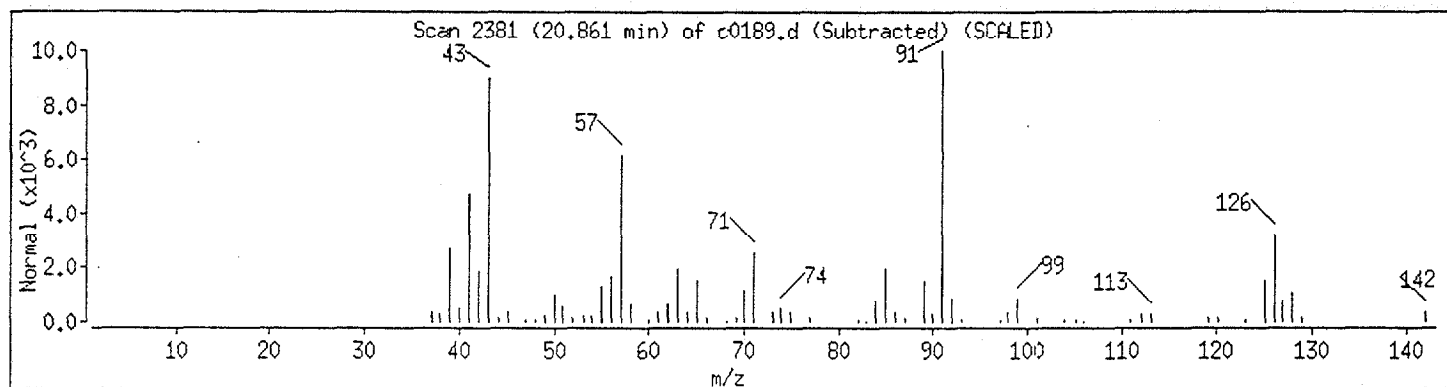
Sample ID: 15226n cljdwsl51

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-chloro-3-methyl-	108-41-8	NBS75K.1	64876	91
Benzene, 1-chloro-4-methyl-	106-43-4	NBS75K.1	64878	91
Benzene, 1-chloro-2-methyl-	95-49-8	NBS75K.1	4444	78



Data File: /chem/aux/msc.1/c111894.b/c0189.d

Page 39

Date: 18-NOV-94 21:18

Instrument: msc.1

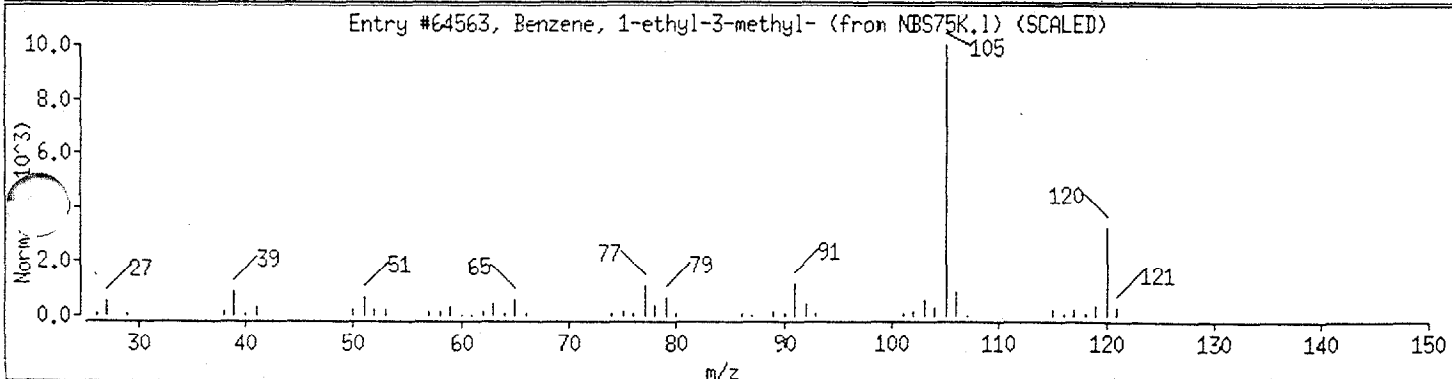
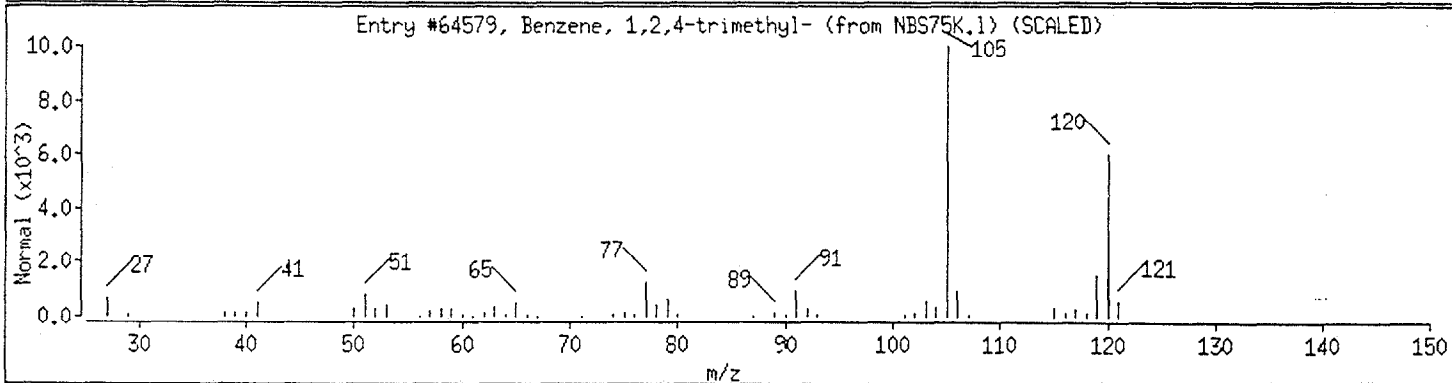
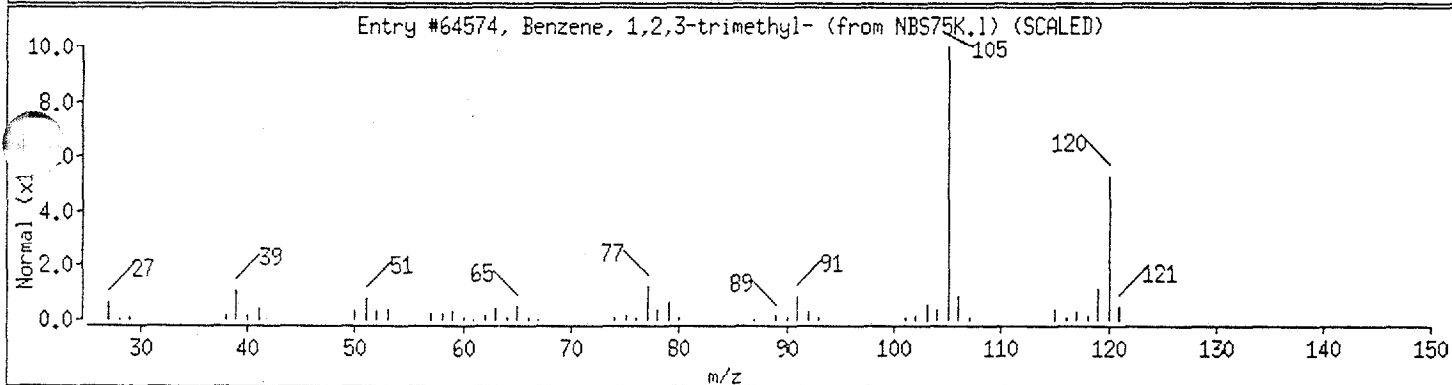
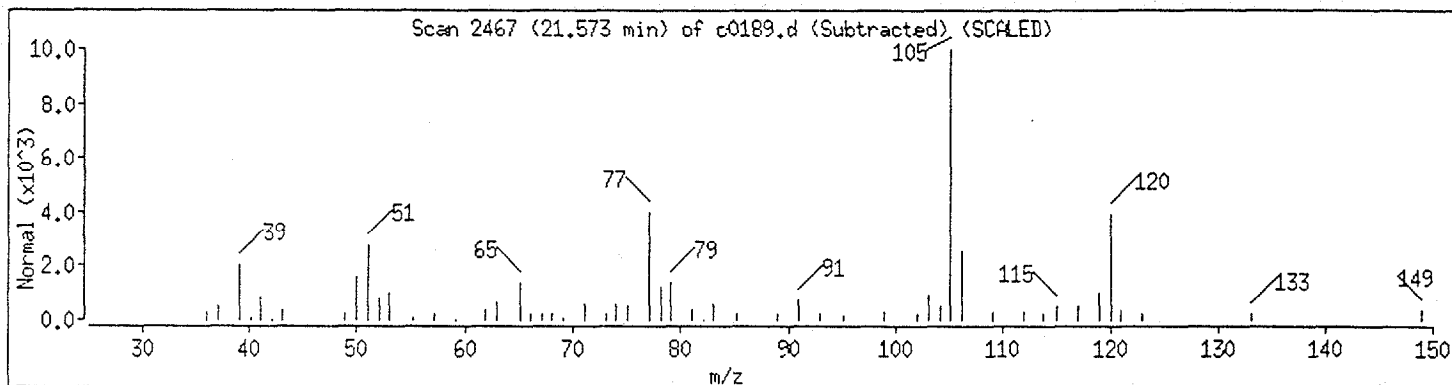
Sample ID: 15226n cljdwsl51

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1,2,3-trimethyl-	526-73-8	NBS75K.1	64574	68
Benzene, 1,2,4-trimethyl-	95-63-6	NBS75K.1	64579	64
Benzene, 1-ethyl-3-methyl-	620-14-4	NBS75K.1	64563	64



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 40

Date: 18-NOV-94 21:18

Instrument: msc.i

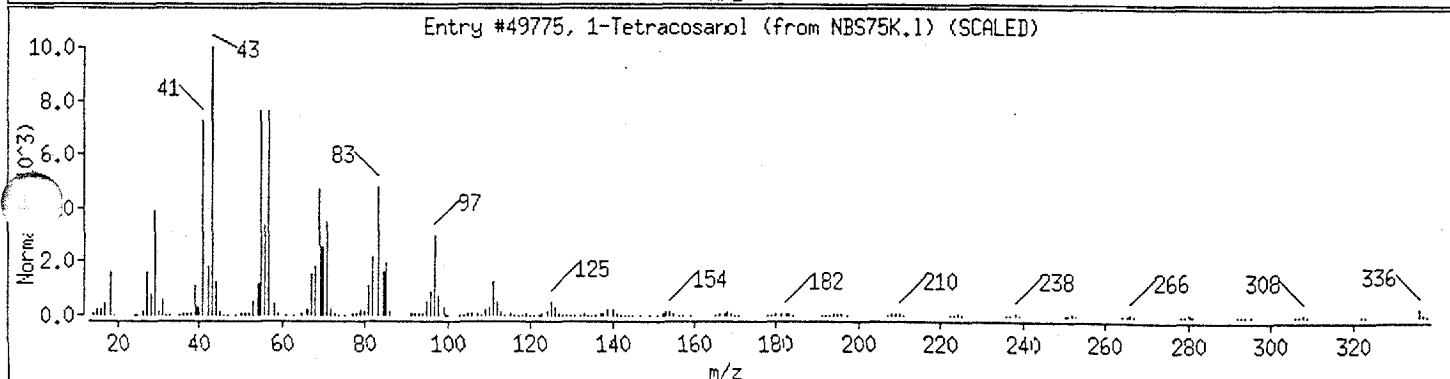
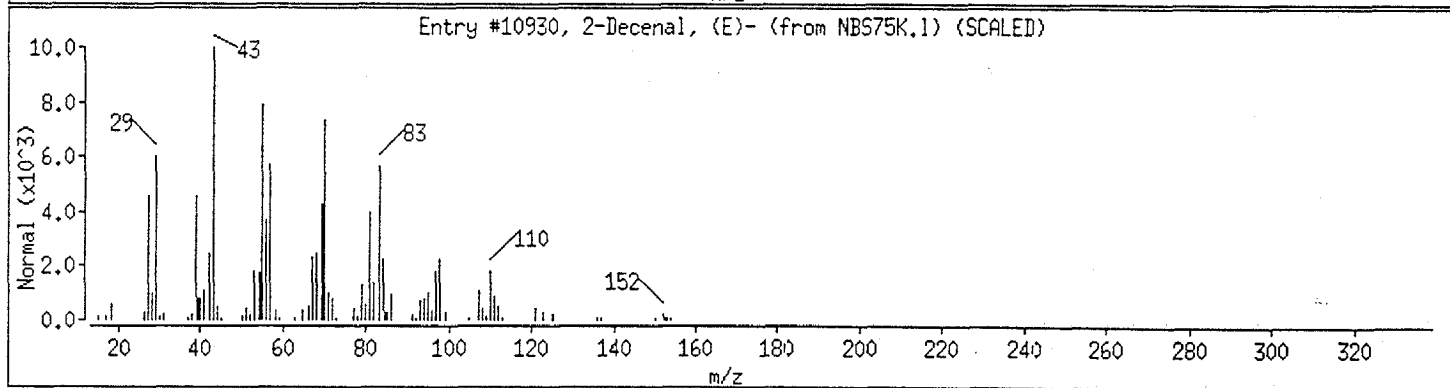
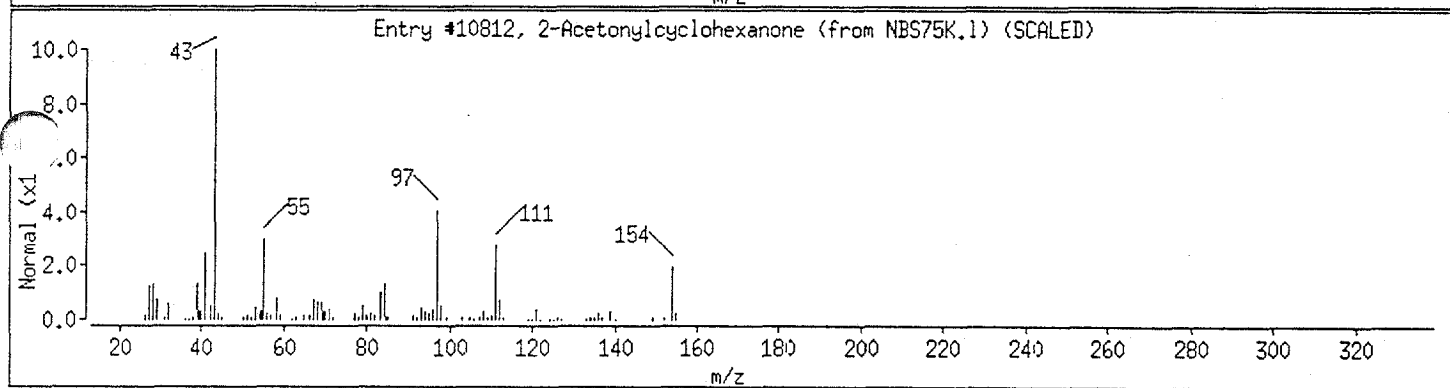
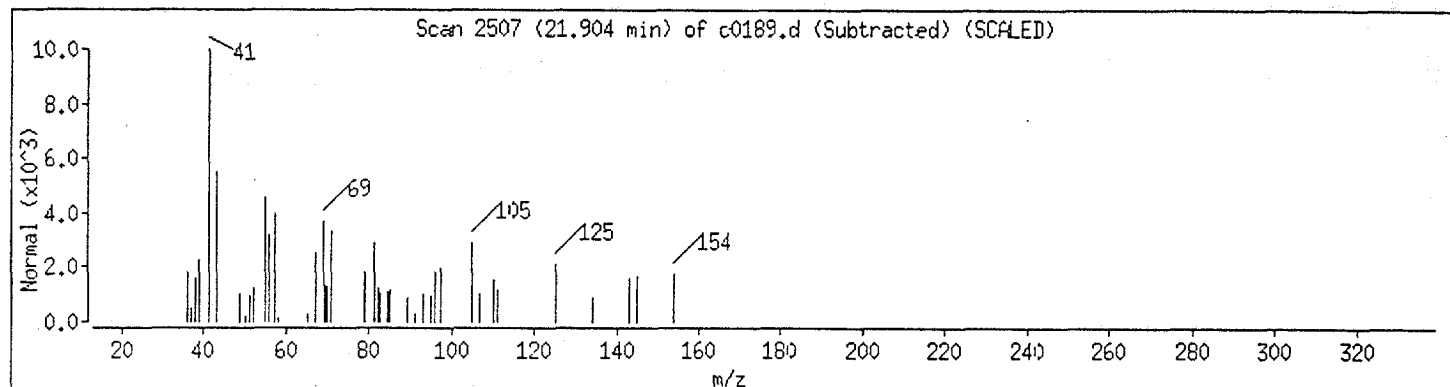
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
2-Acetylglucosylcholine	6126-53-0	NBS75K.1	10812	14
2-Decenal, (E)-	3913-81-3	NBS75K.1	10930	10
1-Tetracosanol	506-51-4	NBS75K.1	49775	10





Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 41

Date: 18-NOV-94 21:18

Instrument: msc.i

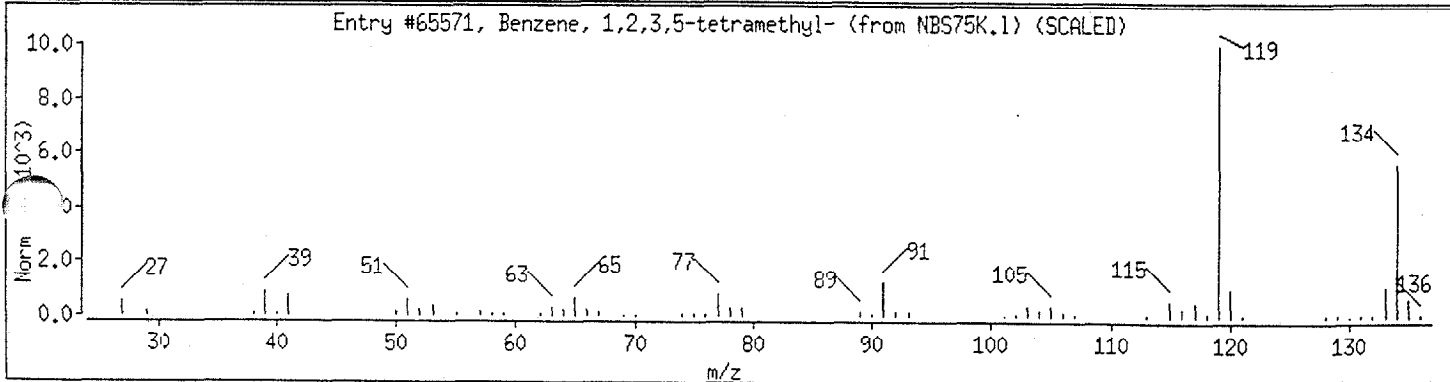
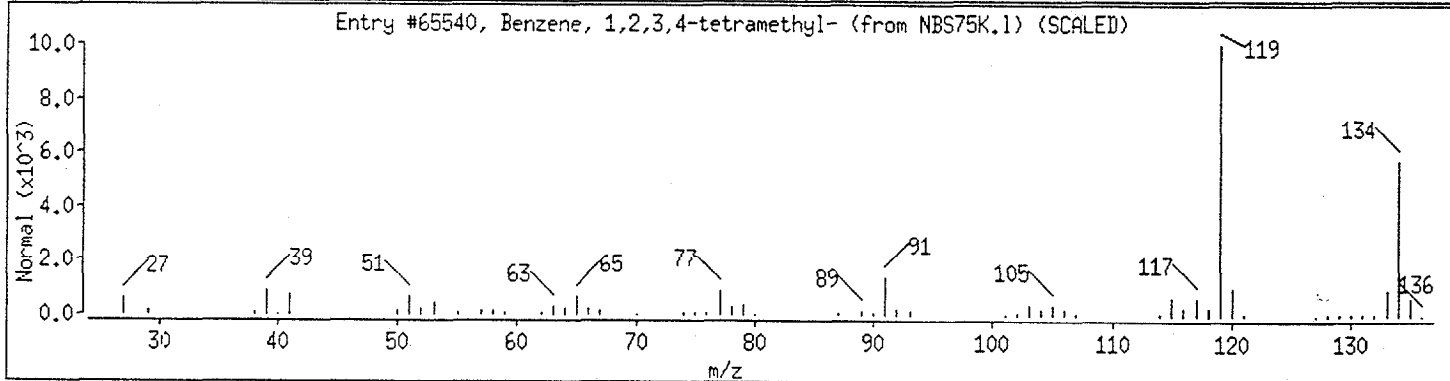
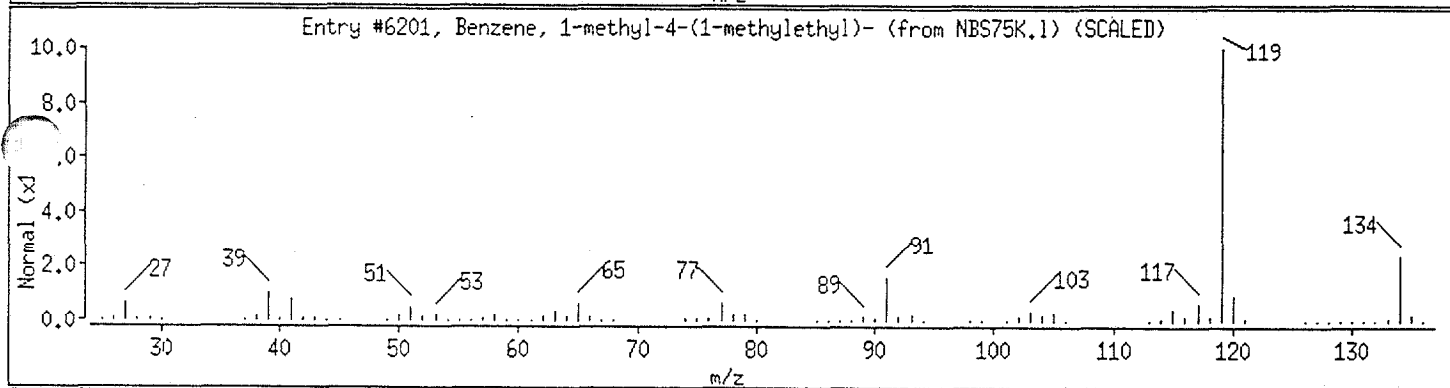
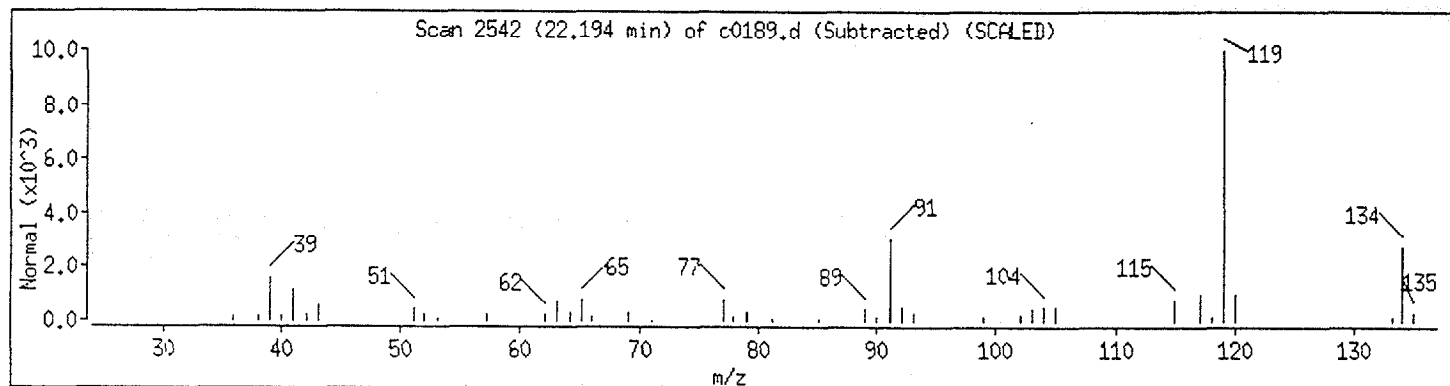
Sample ID: 15226n cljdwsl51

Column phase: J&amp;W DB\_624

Volume Injected (uL): 0.0

Column diameter: 0.53

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Benzene, 1-methyl-4-(1-methylethyl)-	99-87-6	NBS75K.1	6201	91
Benzene, 1,2,3,4-tetramethyl-	488-23-3	NBS75K.1	65540	91
Benzene, 1,2,3,5-tetramethyl-	527-53-7	NBS75K.1	65571	91



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 42

Date : 18-NOV-94 21:18

Instrument : msc.i

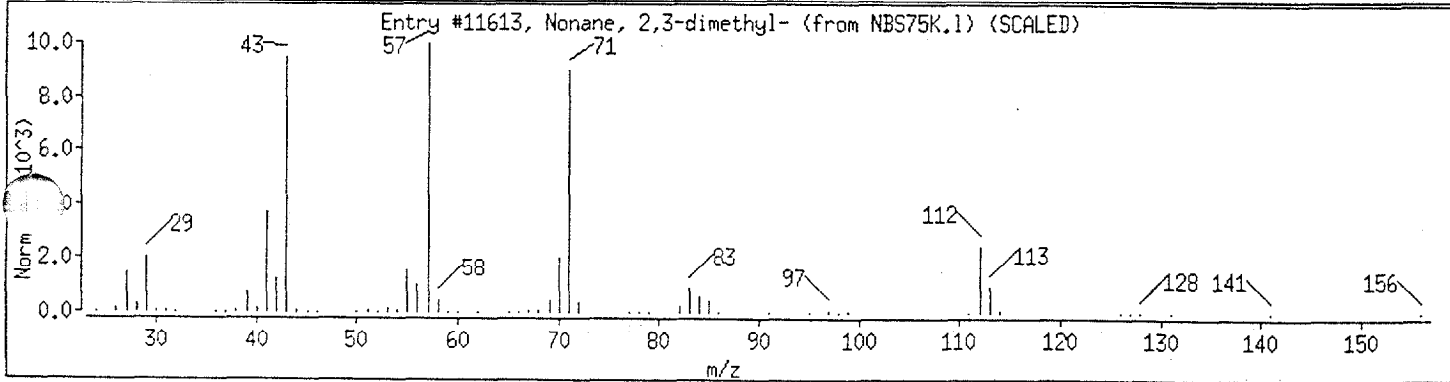
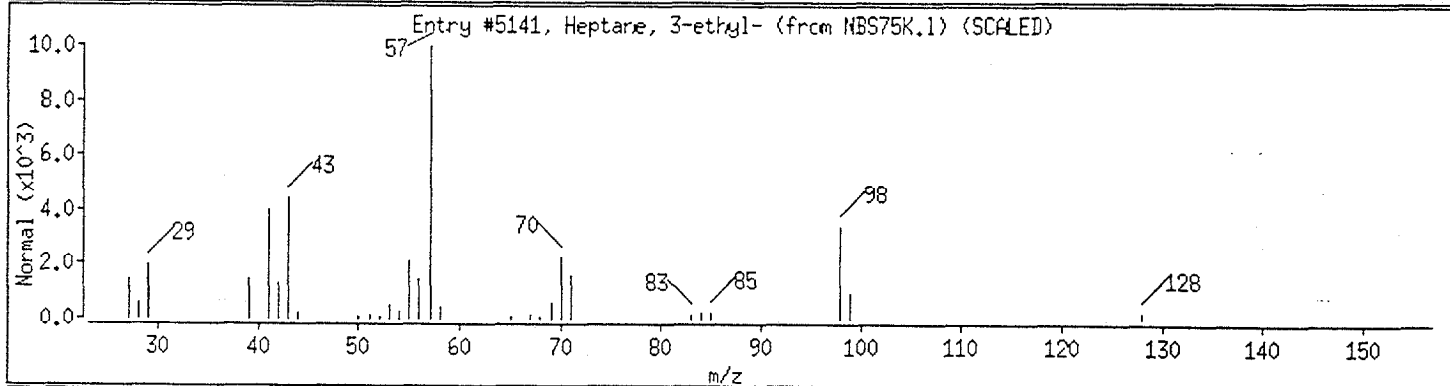
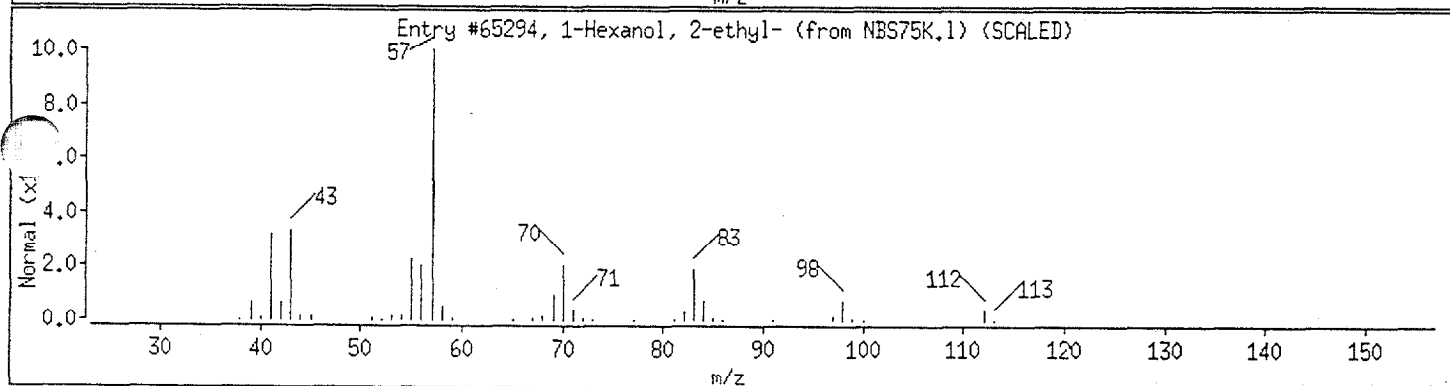
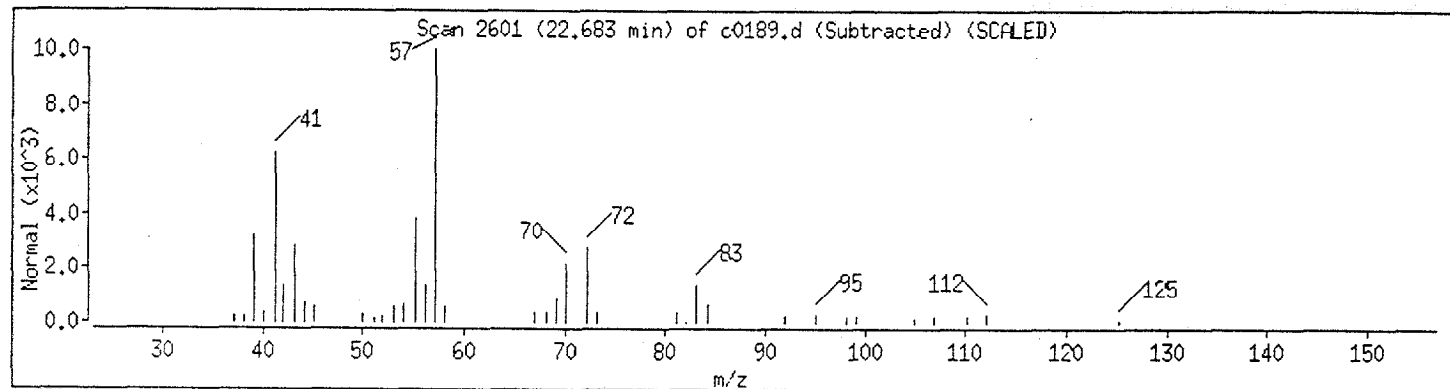
Sample ID : 15226n cljclws151

Column phase : J&amp;W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
1-Hexanol, 2-ethyl-	104-76-7	NBS75K.1	65294	50
Heptane, 3-ethyl-	15869-80-4	NBS75K.1	5141	47
Nonane, 2,3-dimethyl-	2884-06-2	NBS75K.1	11613	42



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 43

Date: 18-NOV-94 21:18

Instrument: msc.i

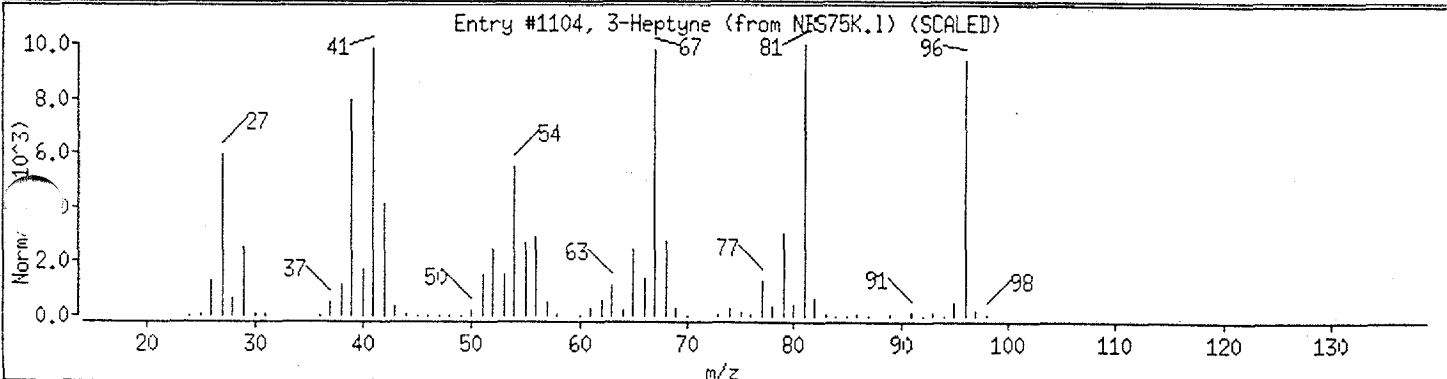
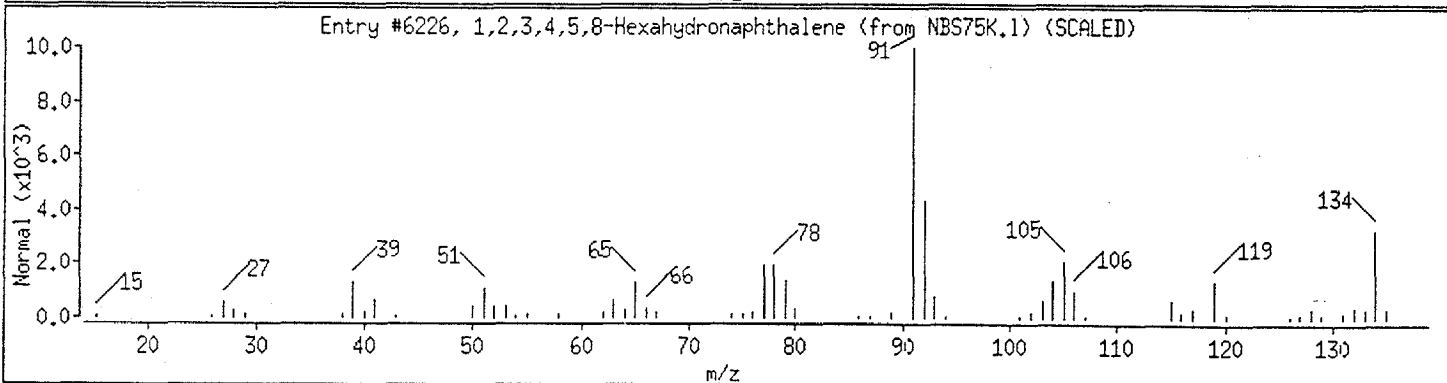
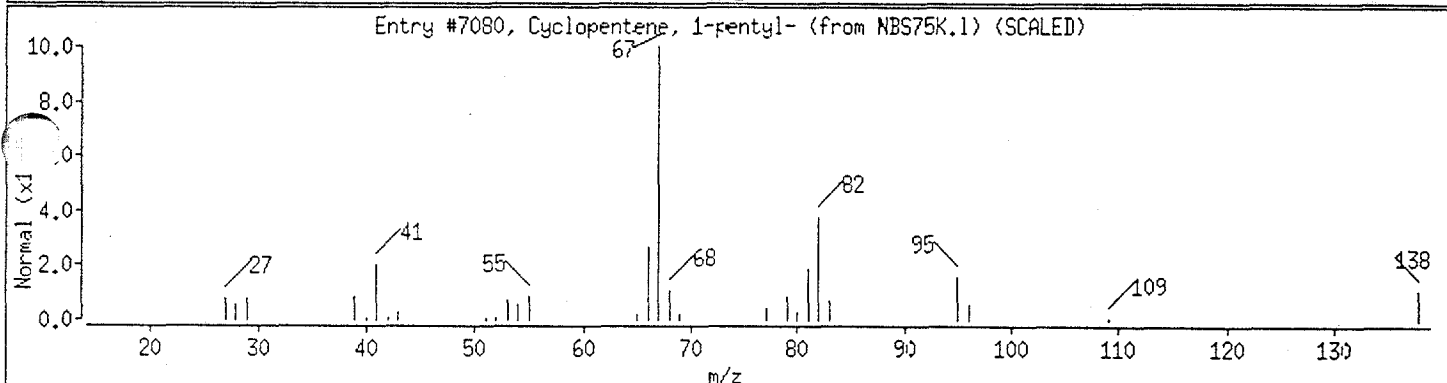
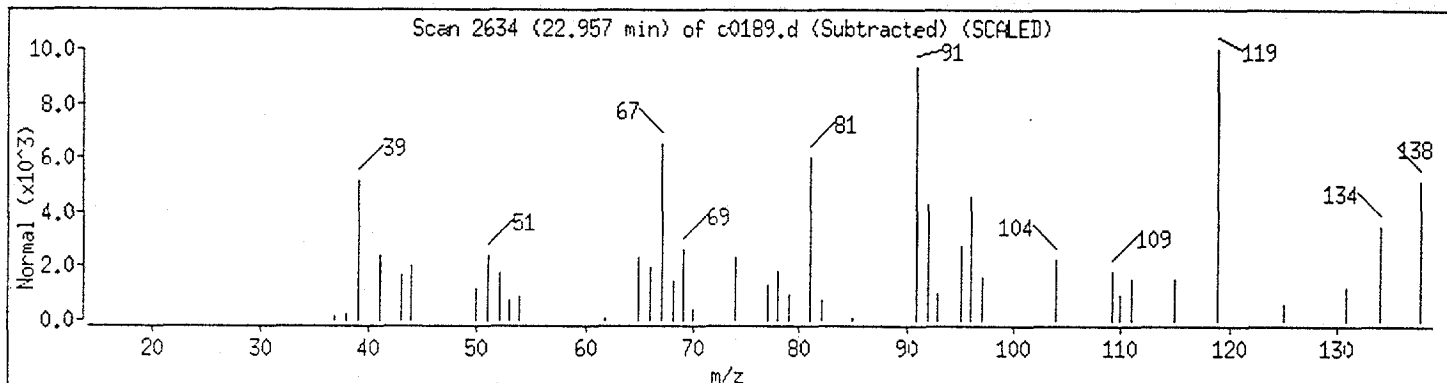
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Cyclopentene, 1-pentyl-	4291-98-9	NBS75K.1	7080	35
1,2,3,4,5,8-Hexahydronaphthalene	36231-13-7	NBS75K.1	6226	11
3-Heptyne	2586-89-2	NBS75K.1	1104	11



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 44

Date: 18-NOV-94 21:18

Instrument: msc.i

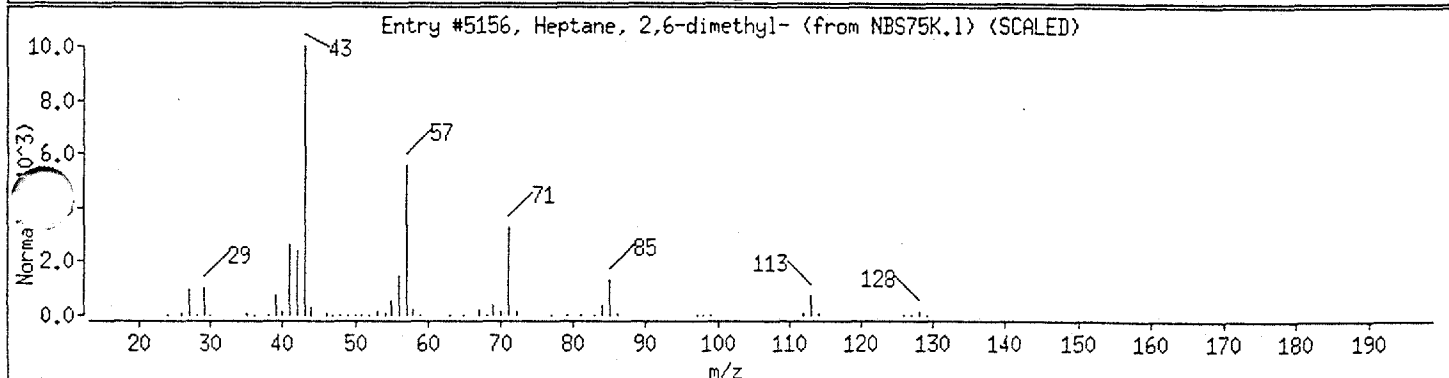
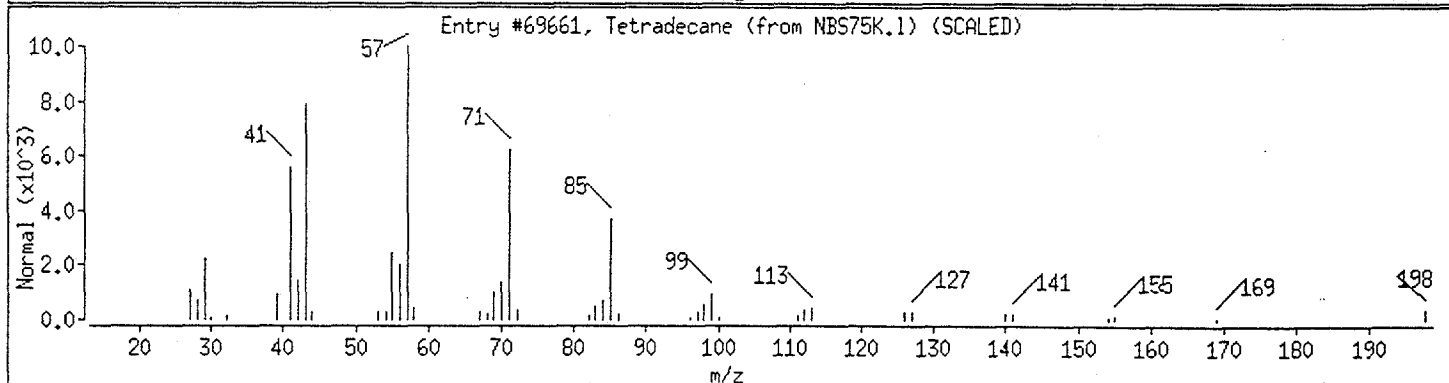
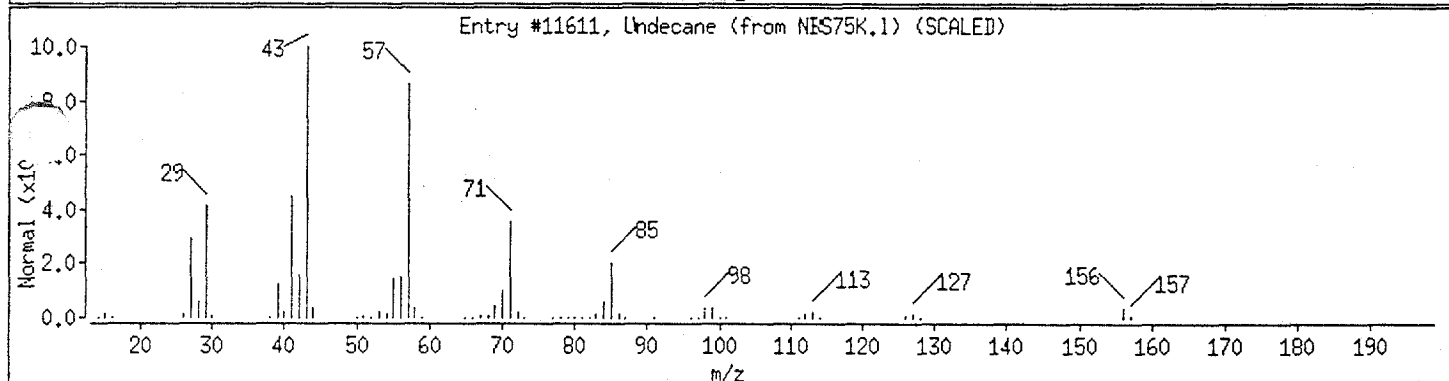
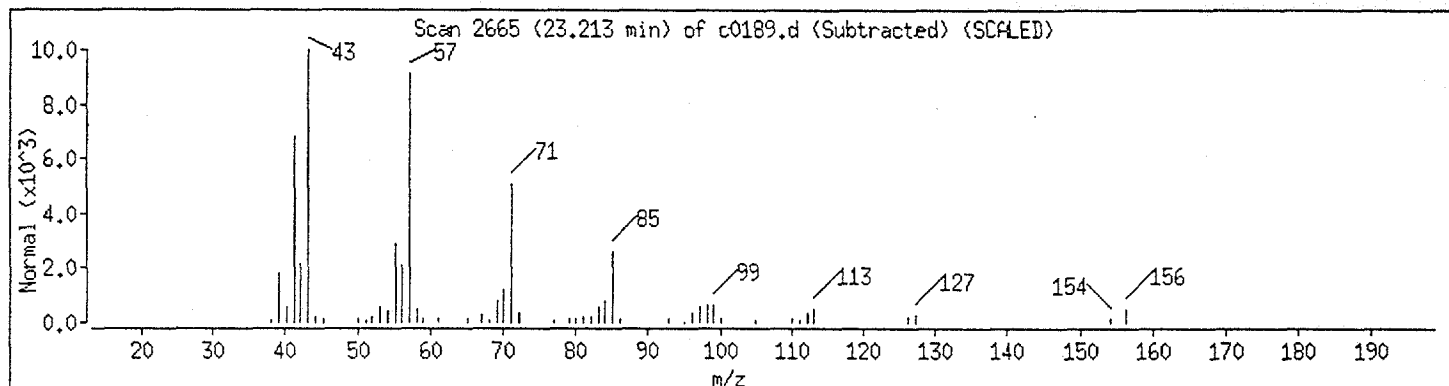
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Undecane	1120-21-4	NBS75K.1	11611	95
Tetradecane	629-59-4	NBS75K.1	69661	80
Heptane, 2,6-dimethyl-	1072-05-5	NBS75K.1	5156	80



Data File: /chem/aux/msc.i/c111894.b/c0189.d

Page 45

Date: 18-NOV-94 21:18

Instrument: msc.i

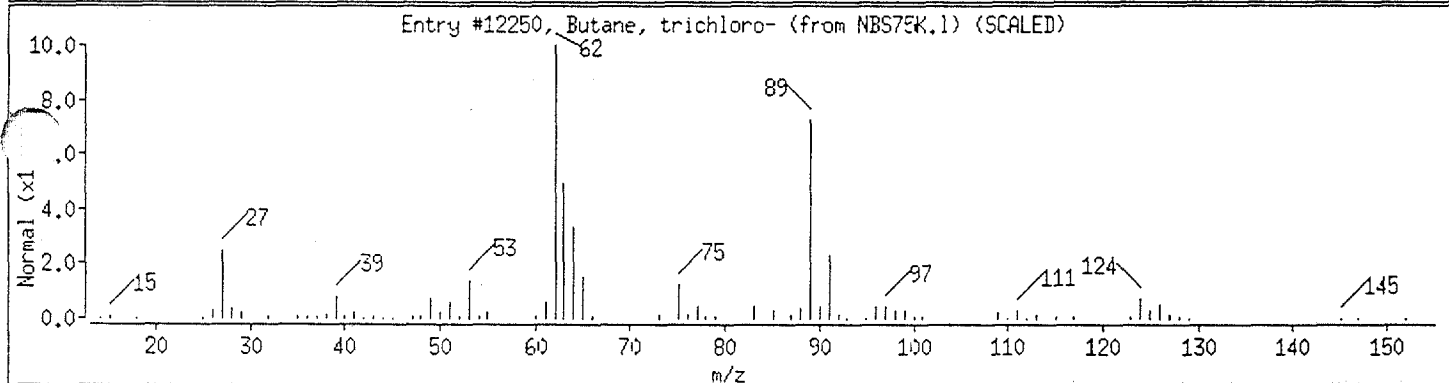
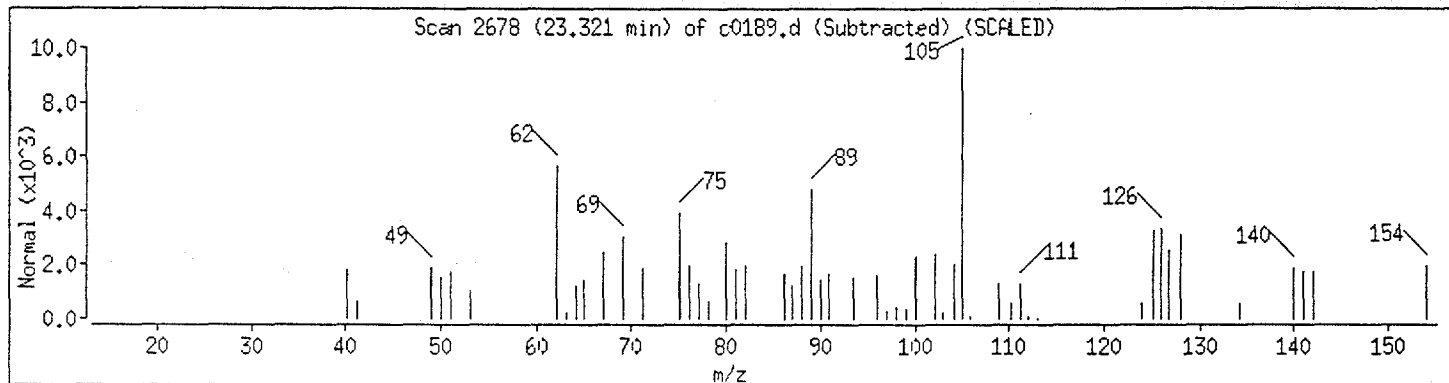
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

Library Search Compound Match	CAS Number	Library	Lib Entry	Quality
Butane, trichloro-	30028-27-4	NBS75K.1	12250	25



1A  
VOLATILE ORGANICS ANALYSIS DATA SHEET

CLJDWS151DL

Lab Name: ANALYTICAL SERVICES CORP.

Contract: NEESA

Lab Code: N/A Case No.: 15226N

SAS No.: N/A

SDG No.: CLJDWS075

Matrix: (soil/water) SOIL

Lab Sample ID: JN4742V

Sample wt/vol: 1.02 (g/mL) G

Lab File ID: C0206

Level: (low/med) LOW

Date Received: 11/10/94

% Moisture: not dec. 7

Date Analyzed: 11/19/94

GC Column: DB624 ID: 0.53 (mm)

Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL)

Soil Aliquot Volume:          (uL)

CAS NO.                      COMPOUND                      CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG                      Q

74-87-3	-----Chloromethane	25	U
74-83-9	-----Bromomethane	25	U
75-01-4	-----Vinyl Chloride	25	U
75-00-3	-----Chloroethane	25	U
75-09-2	-----Methylene Chloride	61	BD
67-64-1	-----Acetone	260	D
75-15-0	-----Carbon Disulfide	25	U
75-35-4	-----1,1-Dichloroethene	25	U
75-34-3	-----1,1-Dichloroethane	25	U
67-66-3	-----Chloroform	100	<del>X</del> D
107-06-2	-----1,2-Dichloroethane	25	U
78-93-3	-----2-Butanone	43	<del>X</del> D
71-55-6	-----1,1,1-Trichloroethane	25	U
56-23-5	-----Carbon Tetrachloride	5	JD
75-27-4	-----Bromodichloromethane	25	U
78-87-5	-----1,2-Dichloropropane	25	U
10061-01-5	-----cis-1,3-Dichloropropene	25	U
79-01-6	-----Trichloroethene	8	JD
124-48-1	-----Dibromochloromethane	25	U
79-00-5	-----1,1,2-Trichloroethane	25	U
71-43-2	-----Benzene	5	JD
10061-02-6	-----trans-1,3-Dichloropropene	25	U
75-25-2	-----Bromoform	25	U
108-10-1	-----Methyl-iso-butyl ketone	49	U
591-78-6	-----2-Hexanone	25	U
127-18-4	-----Tetrachloroethylene	27	<del>X</del> D
79-34-5	-----1,1,2,2-Tetrachloroethane	14	JD
108-88-3	-----Toluene	33	<del>X</del> D
108-90-7	-----Chlorobenzene	25	U
100-41-4	-----Ethylbenzene	25	U
100-42-5	-----Styrene	25	U
1330-20-7	-----Xylene (total)	37	<del>X</del> D
156-60-5	-----1,2-Trans-dichloroethylene	25	U

1E  
VOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

CLJDWS151DL

Lab Name: ANALYTICAL SERVICES CORP. Contract: NEESA

Lab Code: N/A Case No.: 15224N SAS No.: N/A SDG No.: CLJDWS025

Matrix: (soil/water) SOIL Lab Sample ID: JN4742V

Sample wt/vol: 1.02 (g/mL) G Lab File ID: C0206

Level: (low/med) LOW Date Received: 11/10/94

% Moisture: not dec. 7 Date Analyzed: 11/19/94

GC Column: DB624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: 5000 (uL) Soil Aliquot Volume:        (uL)

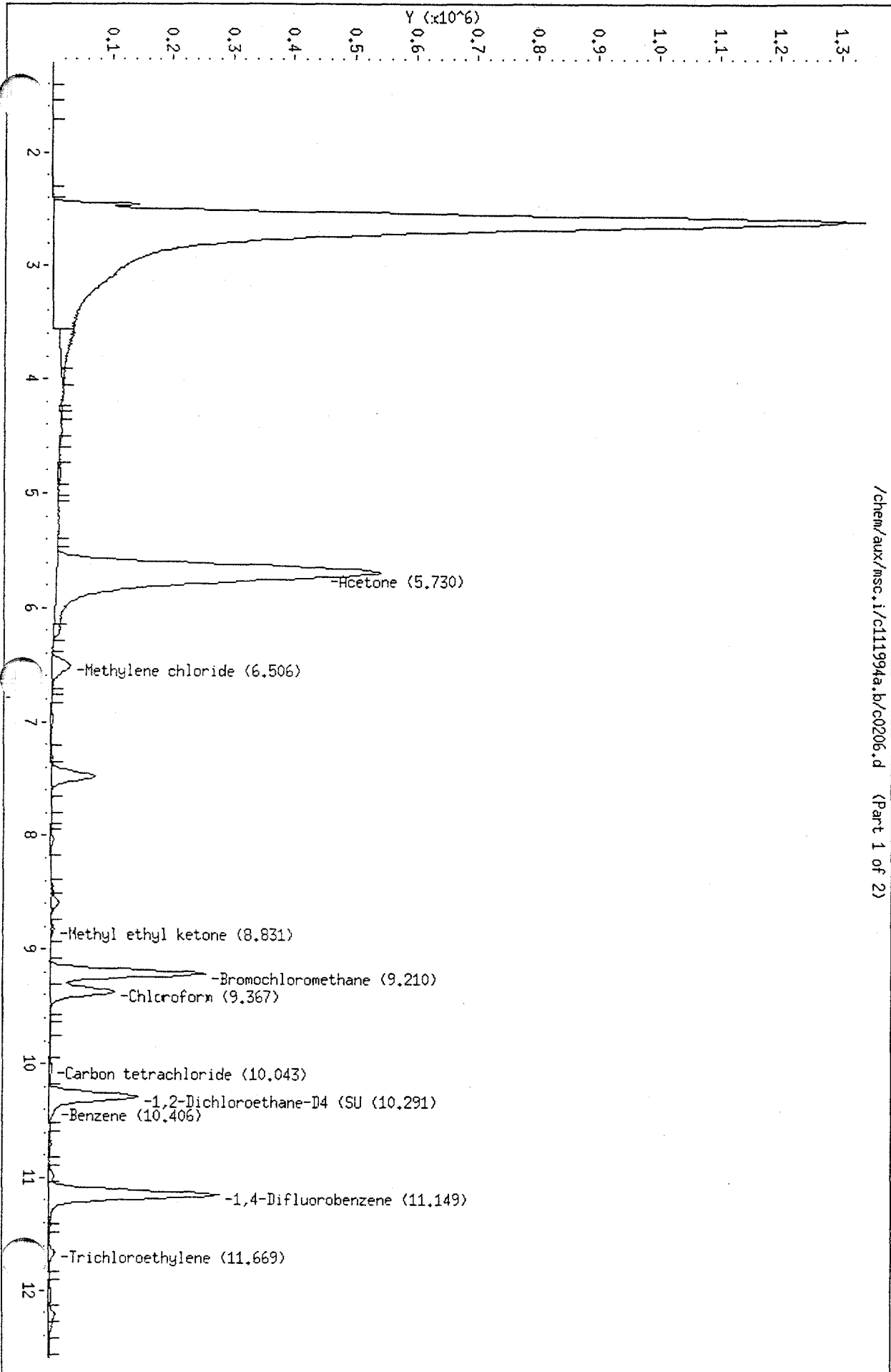
Number TICs found: 0 CONCENTRATION UNITS:  
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	See run # C0189.d			

Data File: /chem/aux/msc.i/c111994a.b/c0206.d  
Date: 19-NOV-94 21:56  
Instrument: msc.i  
Sample ID: 15226n c1jdias151  
Column phase: J&W DB\_624  
Volume Injected (ul): 0.0

Column diameter: 0.53

/chem/aux/msc.i/c111994a.b/c0206.d (Part 1 of 2)

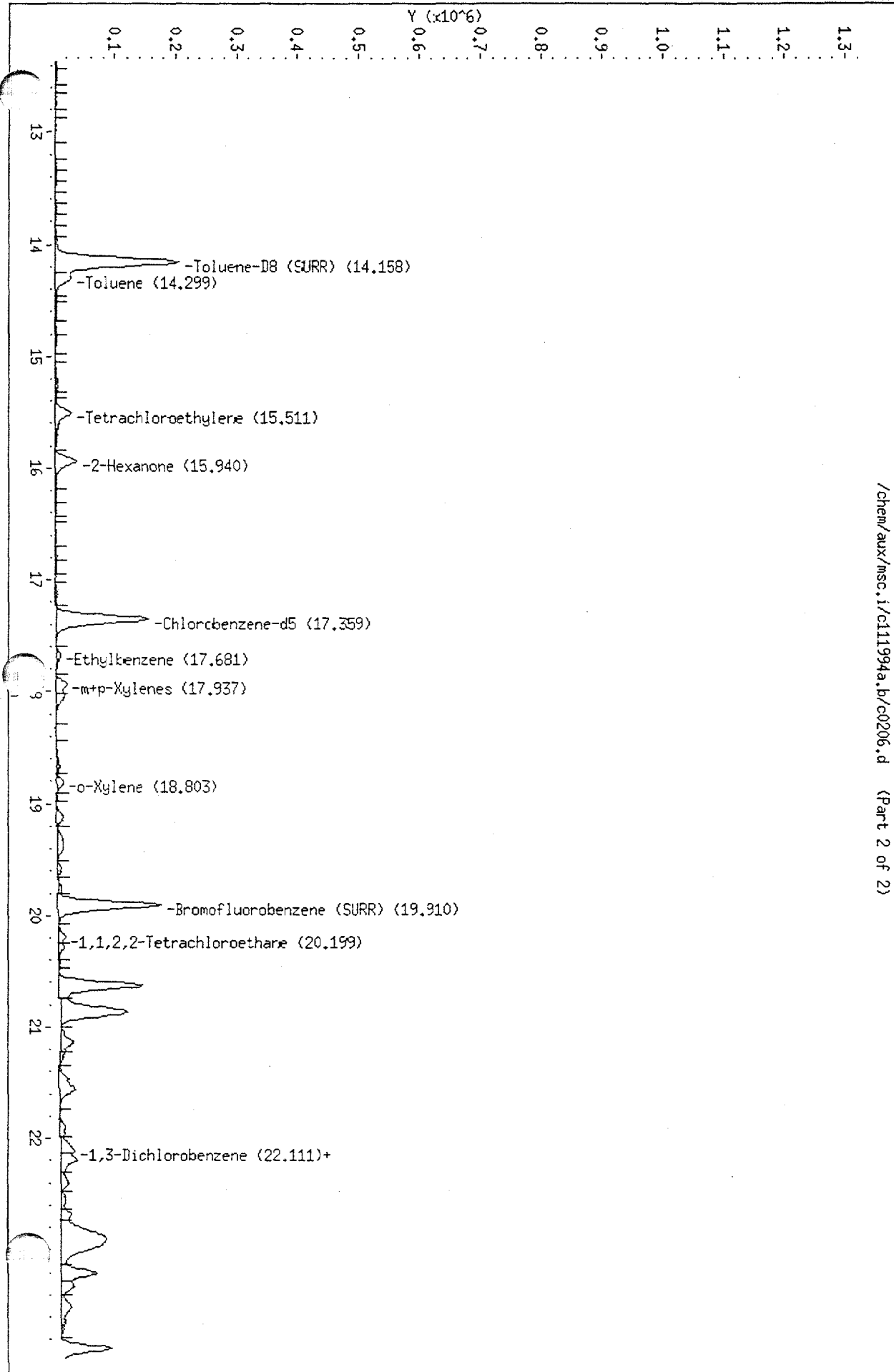




Data File: /chem/aux/msc.i/c111994a.b/c02006.d  
Date: 19-NOV-94 21:56  
Instrument: msc.i  
Sample ID: 15226n c1jdms151  
Column phase: J&W DB\_624  
Volume Injected (uL): 0.0

Column diameter: 0.53

/chem/aux/msc.i/c111994a.b/c02006.d (Part 2 of 2)



Data File: /chem/aux/msc.i/c111994a.b/c0206.d  
Report Date: 21-Nov-1994 08:18

Analytical Services Corp.

VOLATILE REPORT SW-846 Method 8240

Data file : /chem/aux/msc.i/c111994a.b/c0206.d  
Lab. Id. : Quant Type: ISTD  
Inj Date : 19-NOV-94 21:56 Autotune Date: {  
Operator : dana Inst ID: msc.i  
Smp Info : 15226n cljdw151  
Misc Info : jn4742v/m2v4030,s:m2,1.02,5.00:1,  
Comment :  
Method : /chem/aux/msc.i/c111994a.b/8240heatc.m  
Meth Date : 21-Nov-1994 08:15 jeff  
Cal Date : 19-NOV-94 19:38 Cal File: c0202.d  
Als bottle: 33  
Dil Factor: 1.000 Target Version: Target 3.00  
Integrator: HP RTE Compound Sublist: all.sub  
Sample Matrix: WATER

*1 IS out  
2 Surrogate*

*JA  
11-27*

Compounds	QUANT SIG	MASS	RT	REL RT	RESPONSE	CONCENTRATIONS	
						ON-COLUMN ( ug/l)	FINAL ( ug/l)
7 Acetone		43.00	5.730	(0.622)	101885	52.9	52.9(a) *
9 Methylene chloride		84.00	6.506	(0.706)	55446	12.4	12.4 *
14 Methyl ethyl ketone		72.00	8.831	(0.792)	4771	8.83	8.83(aQ)
* 15 Bromochloromethane		128.00	9.210	(1.000)	203483	50.0	
16 Chloroform		83.00	9.367	(1.017)	218921	20.8	20.8
18 Carbon tetrachloride		117.00	10.043	(0.901)	8079	1.07	1.07(a)
S 19 1,2-Dichloroethane-D4 (SURR)		65.00	10.291	(1.117)	278759	49.7	49.7 2
20 Benzene		78.00	10.406	(0.933)	9276	1.05	1.05(a)
* 22 1,4-Difluorobenzene		114.00	11.149	(1.000)	645847	50.0	
23 Trichloroethylene		130.00	11.677	(1.047)	9237	1.53	1.53(a)
S 29 Toluene-D8 (SURR)		98.00	14.158	(0.816)	411138	70.6	70.6(R) H
30 Toluene		92.00	14.291	(0.823)	26103	6.78	6.78
33 Tetrachloroethylene		164.00	15.519	(0.894)	19412	5.57	5.57
34 2-Hexanone		43.00	15.948	(0.919)	19948	6.60	6.60(aQ) MS
* 36 Chlorobenzene-d5		117.00	17.359	(1.000)	254431	50.0	
38 Ethylbenzene		106.00	17.681	(1.019)	3480	1.48	1.48(aQ) MS
39 m+p-Xylenes		106.00	17.945	(1.034)	14055	5.01	5.01
40 o-Xylene		106.00	18.803	(1.083)	6941	2.48	2.48(a) MS
S 43 Bromofluorobenzene (SURR)		95.00	19.902	(1.147)	159060	36.6	36.6(R) L
44 1,1,2,2-Tetrachloroethane		83.00	20.199	(1.164)	12703	2.88	2.88(a)
45 1,3-Dichlorobenzene		146.00	22.120	(1.274)	21572	3.56	3.56(a)
46 1,4-Dichlorobenzene		146.00	22.120	(1.274)	21572	3.17	3.17(a) RT

*> only see run #  
C0189.d for  
OHA*

QC Flag Legend

- Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
- Q - Qualifier signal failed the ratio test.
- R - Spike/Surrogate failed recovery limits.

Data File: /chem/aux/msc.i/c111994a,b/c0206.d

Date: 19-NOV-94 21:56

Instrument: msc.i

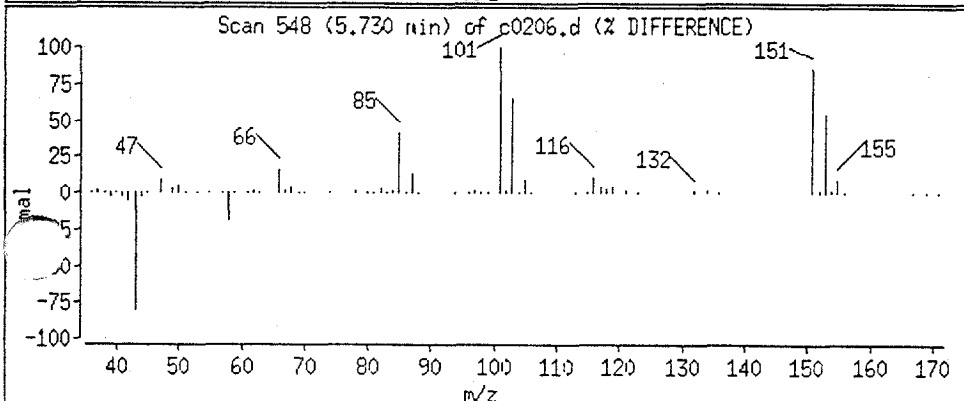
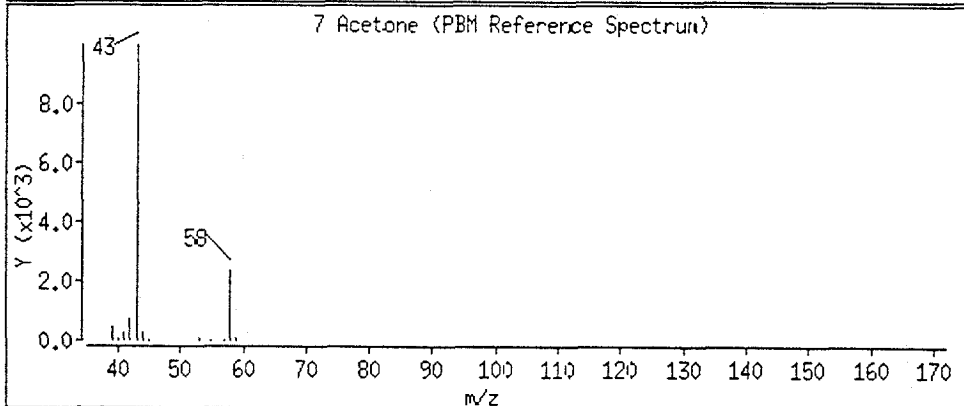
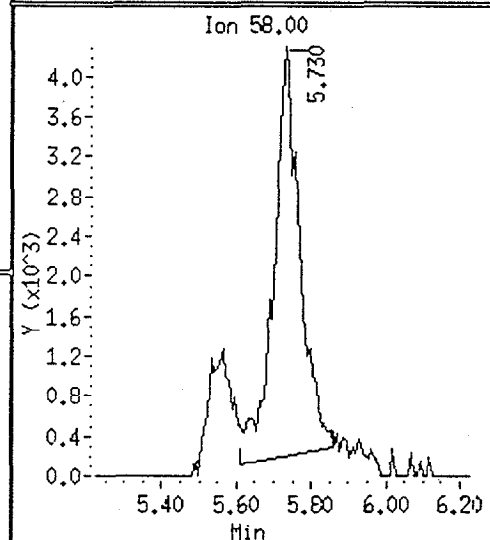
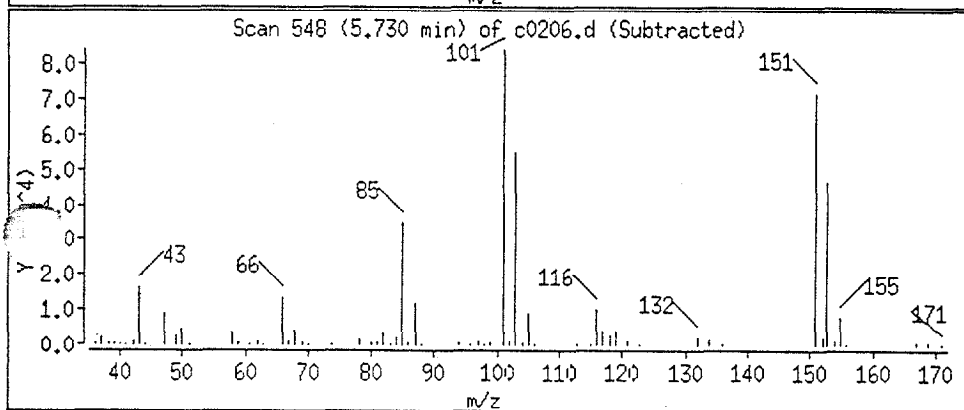
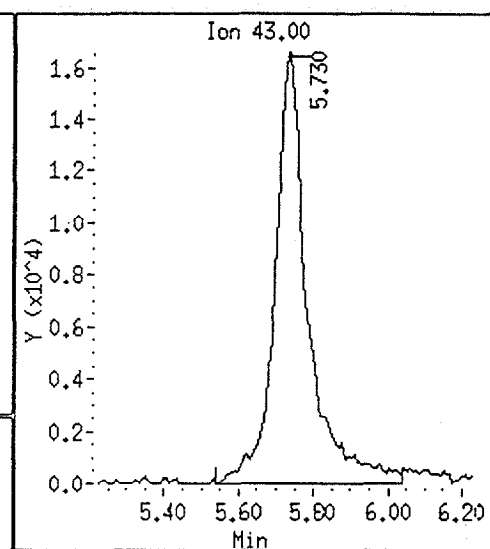
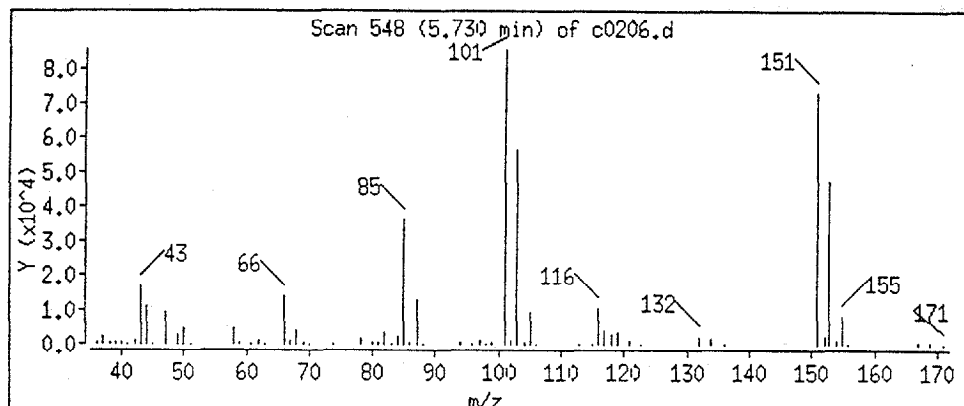
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

7 Acetone



Data File: /chem/aux/msc.i/c111994a,b/c0206.d

Page 11

Date: 19-NOV-94 21:56

Instrument: msc.i

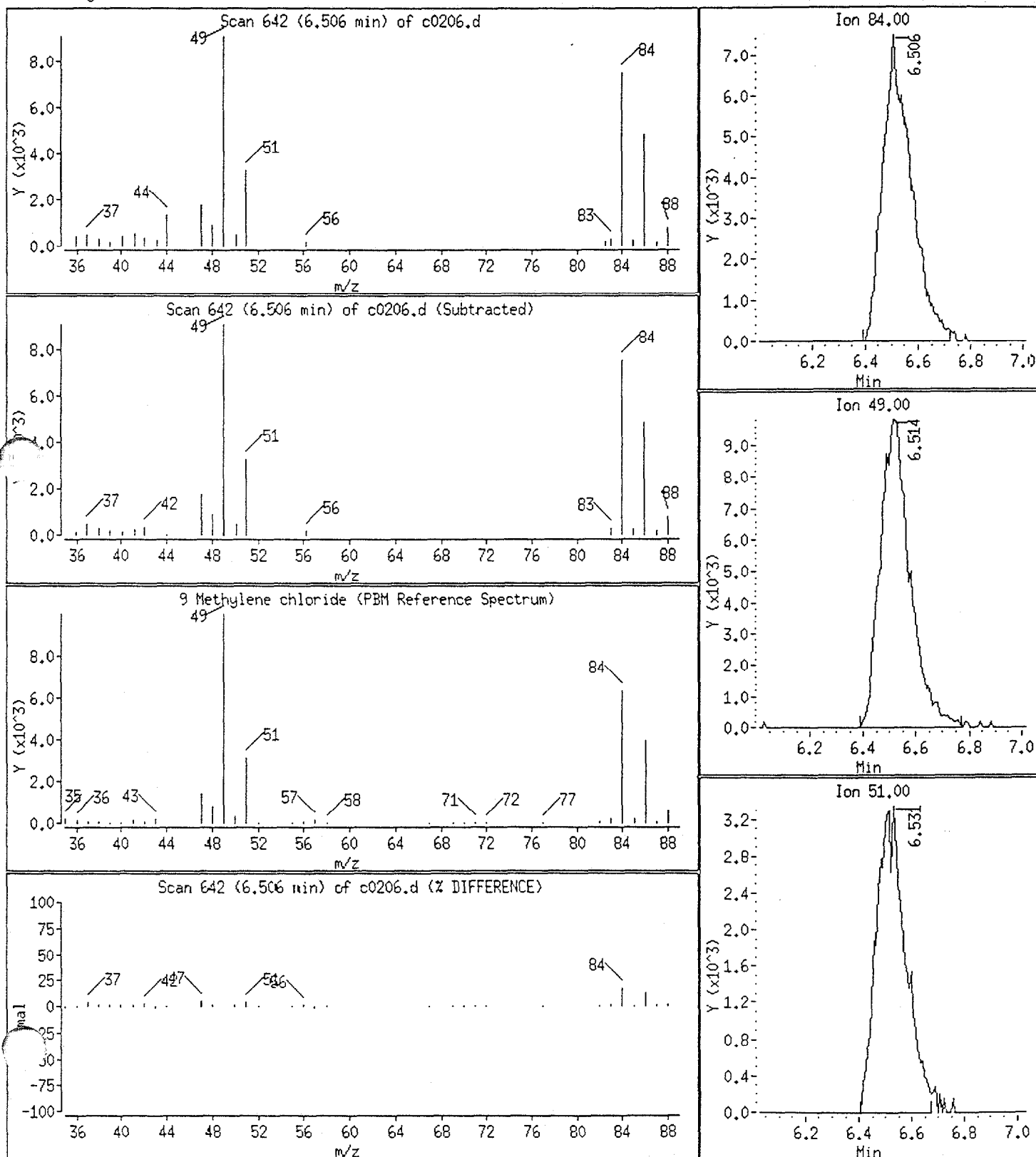
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

9 Methylene chloride



Data File: /chem/aux/msc.i/c111994a,b/c0206.d

Date : 19-NOV-94 21:56

Instrument : msc.i

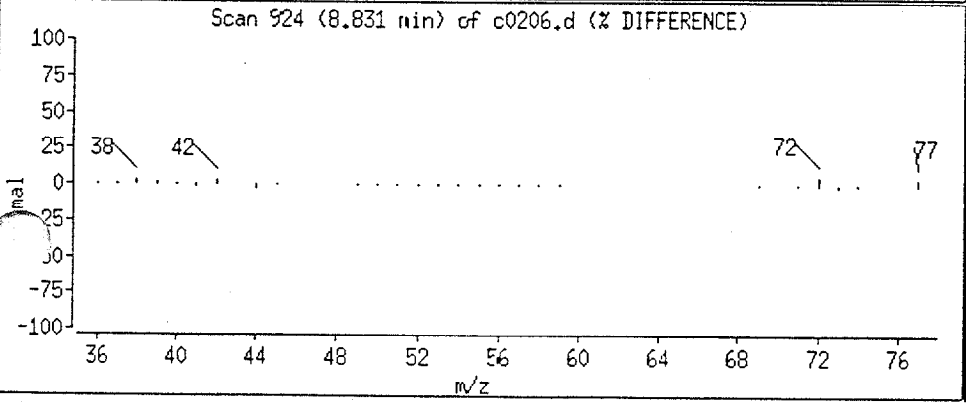
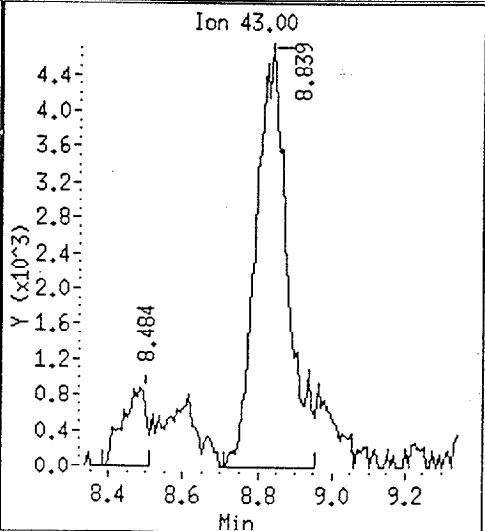
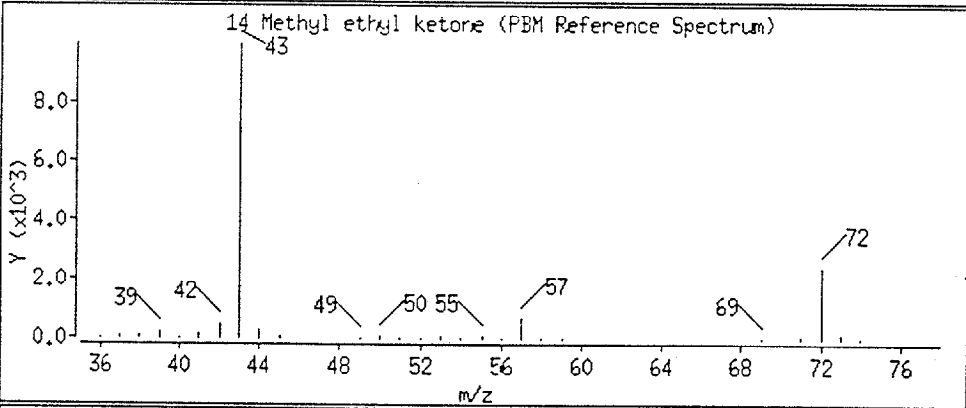
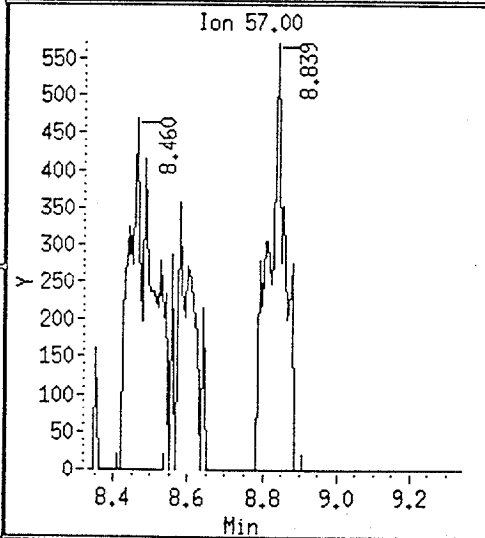
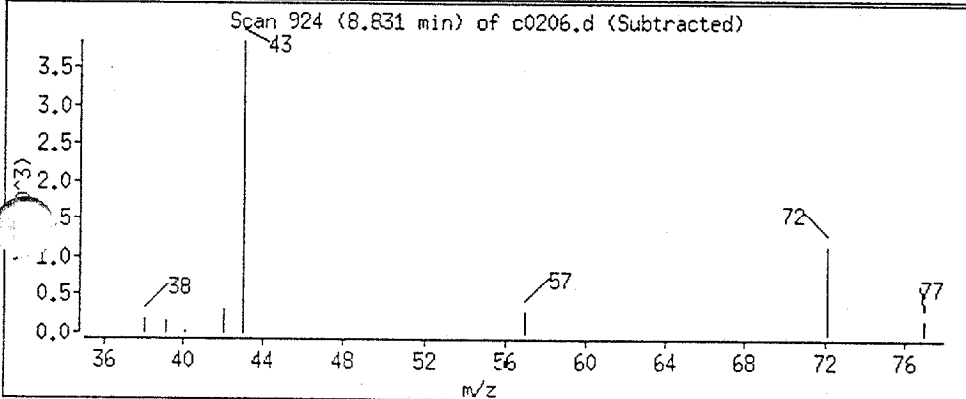
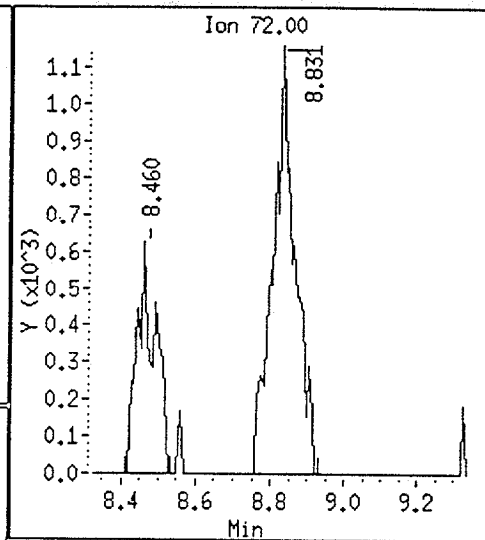
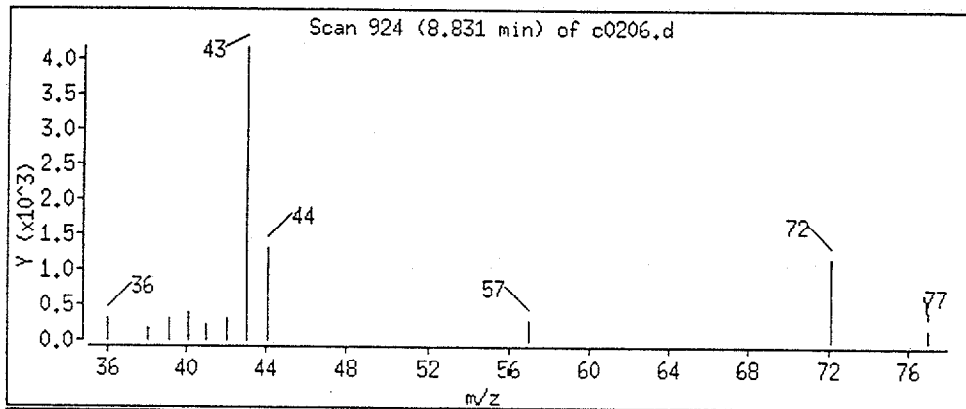
Sample ID : 15226n cljdwsl51

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

14 Methyl ethyl ketone



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Page 13

Date: 19-NOV-94 21:56

Instrument: msc.i

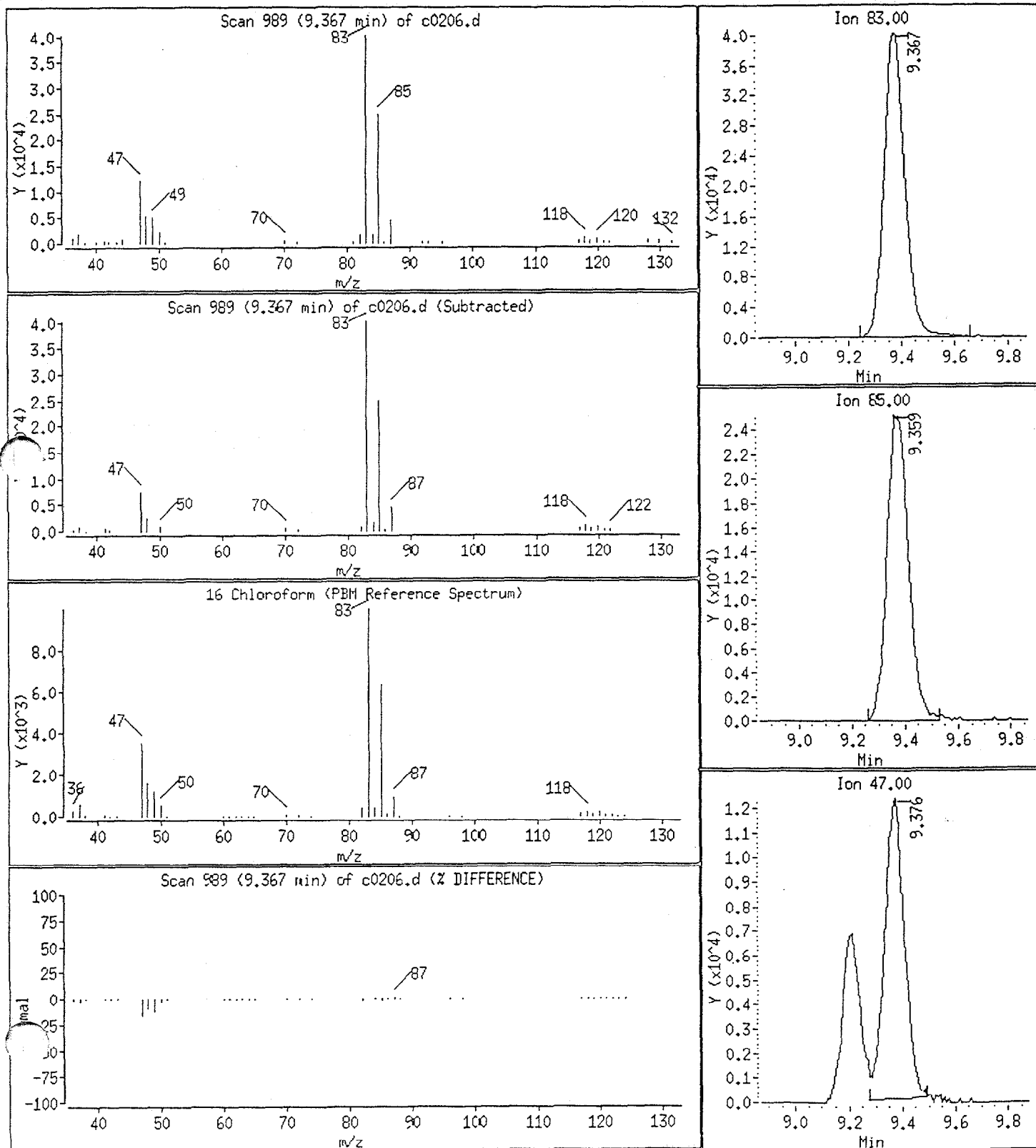
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

16 Chloroform



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Date: 19-NOV-94 21:56

Instrument: msc.i

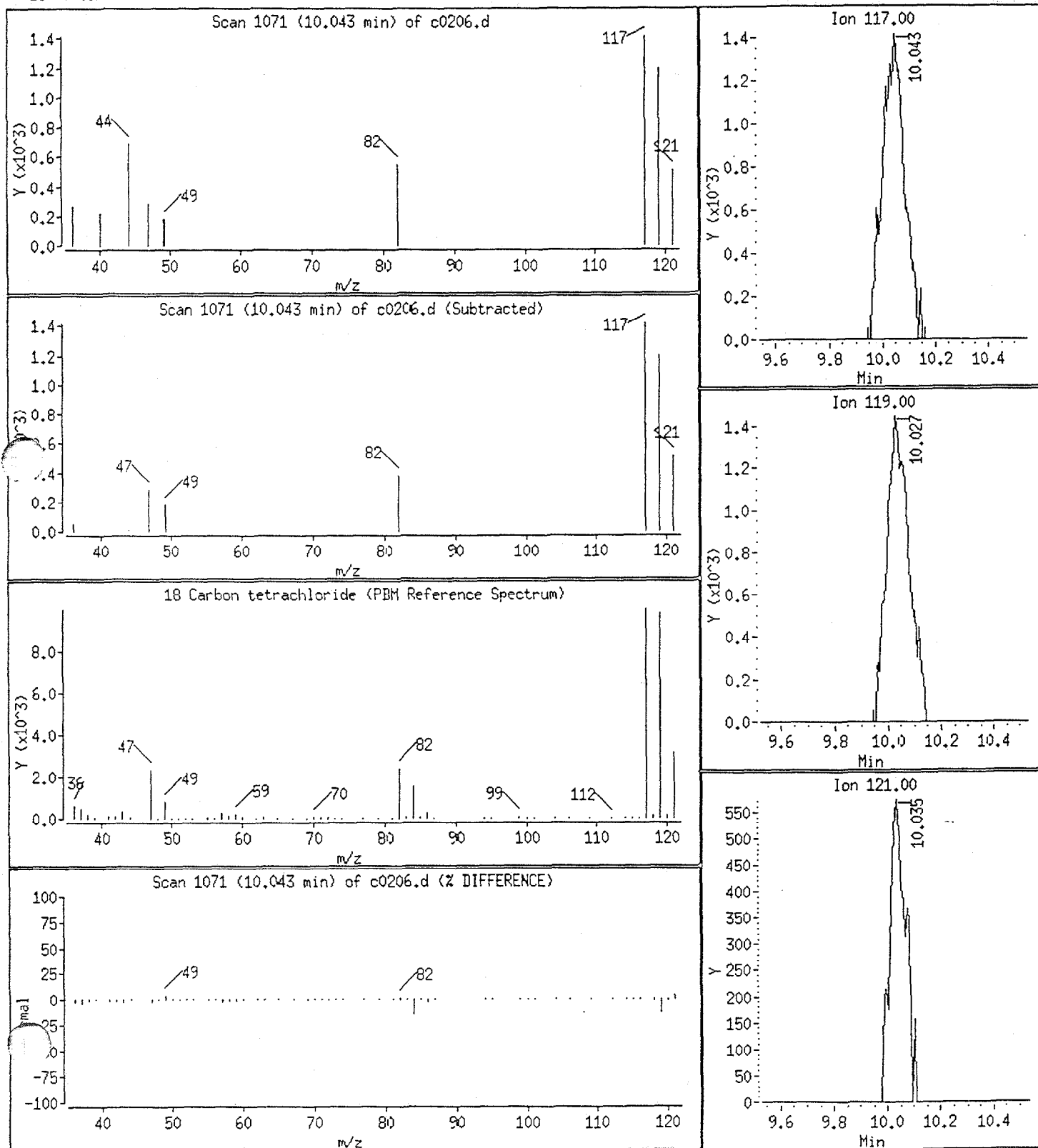
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

18 Carbon tetrachloride



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Date: 19-NOV-94 21:56

Instrument: msc.i

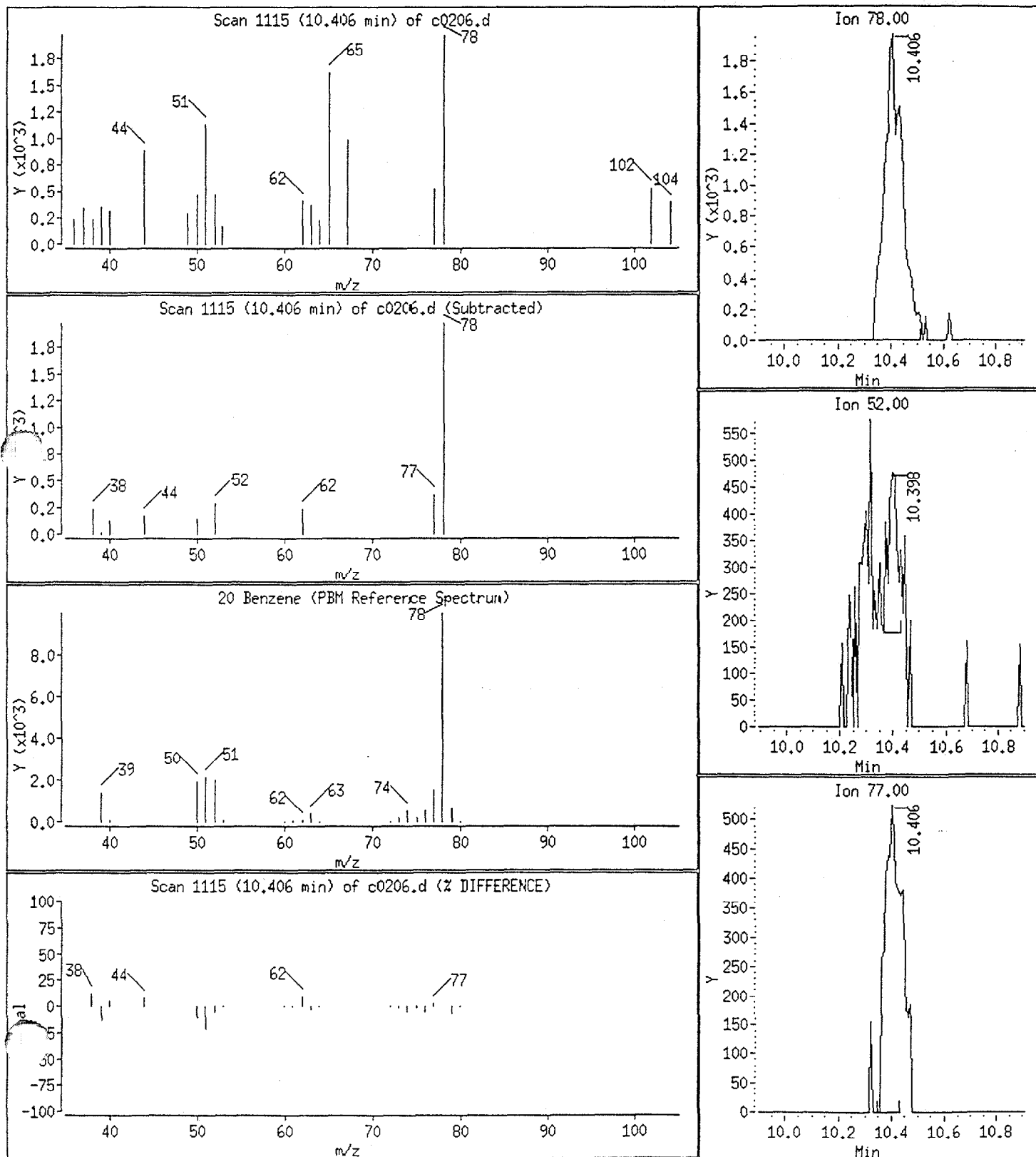
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

20 Benzene





Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Page 16

Date: 19-NOV-94 21:56

Instrument: msc.i

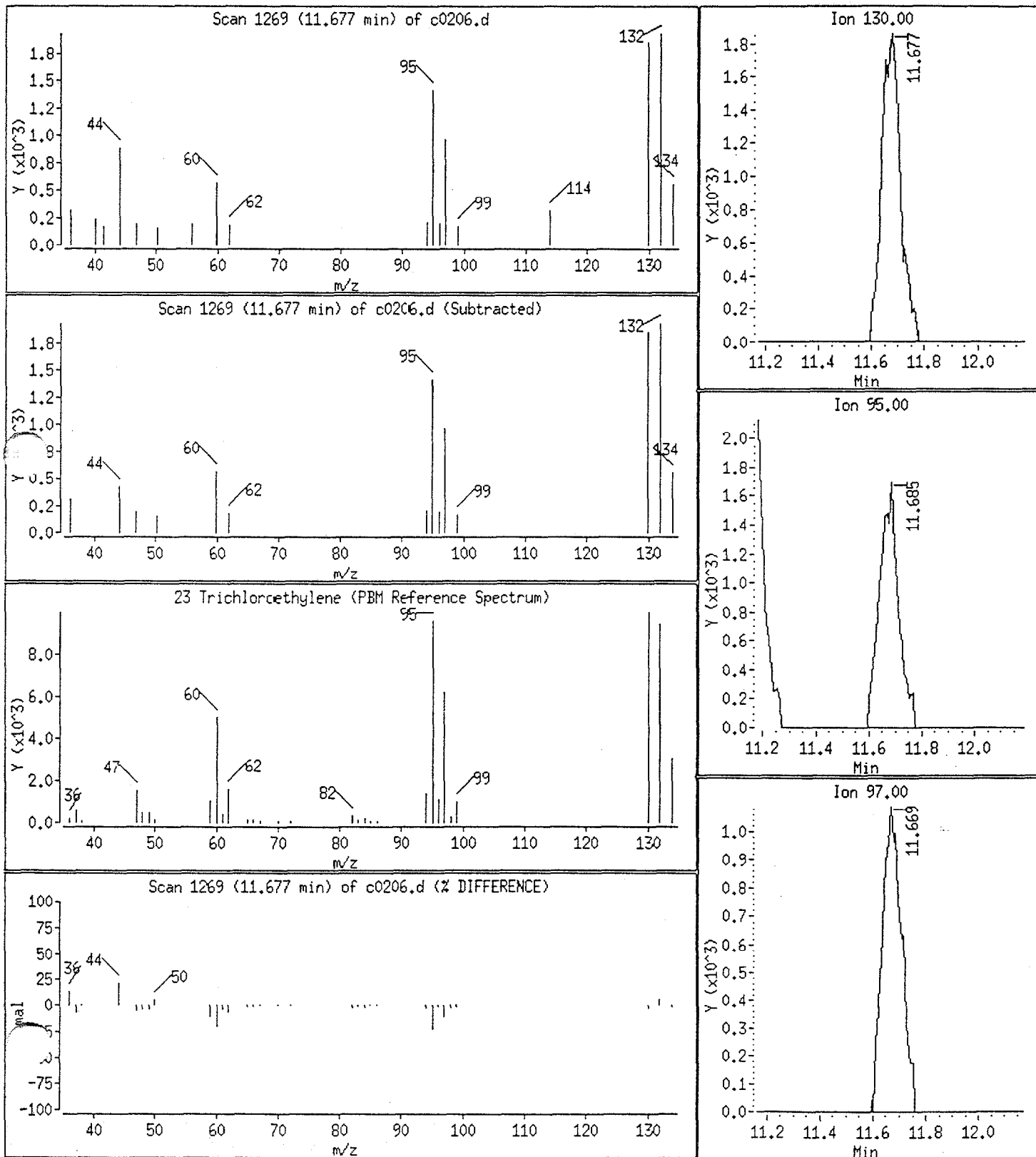
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

23 Trichloroethylene



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Page 17

Date: 19-NOV-94 21:56

Instrument: msc.i

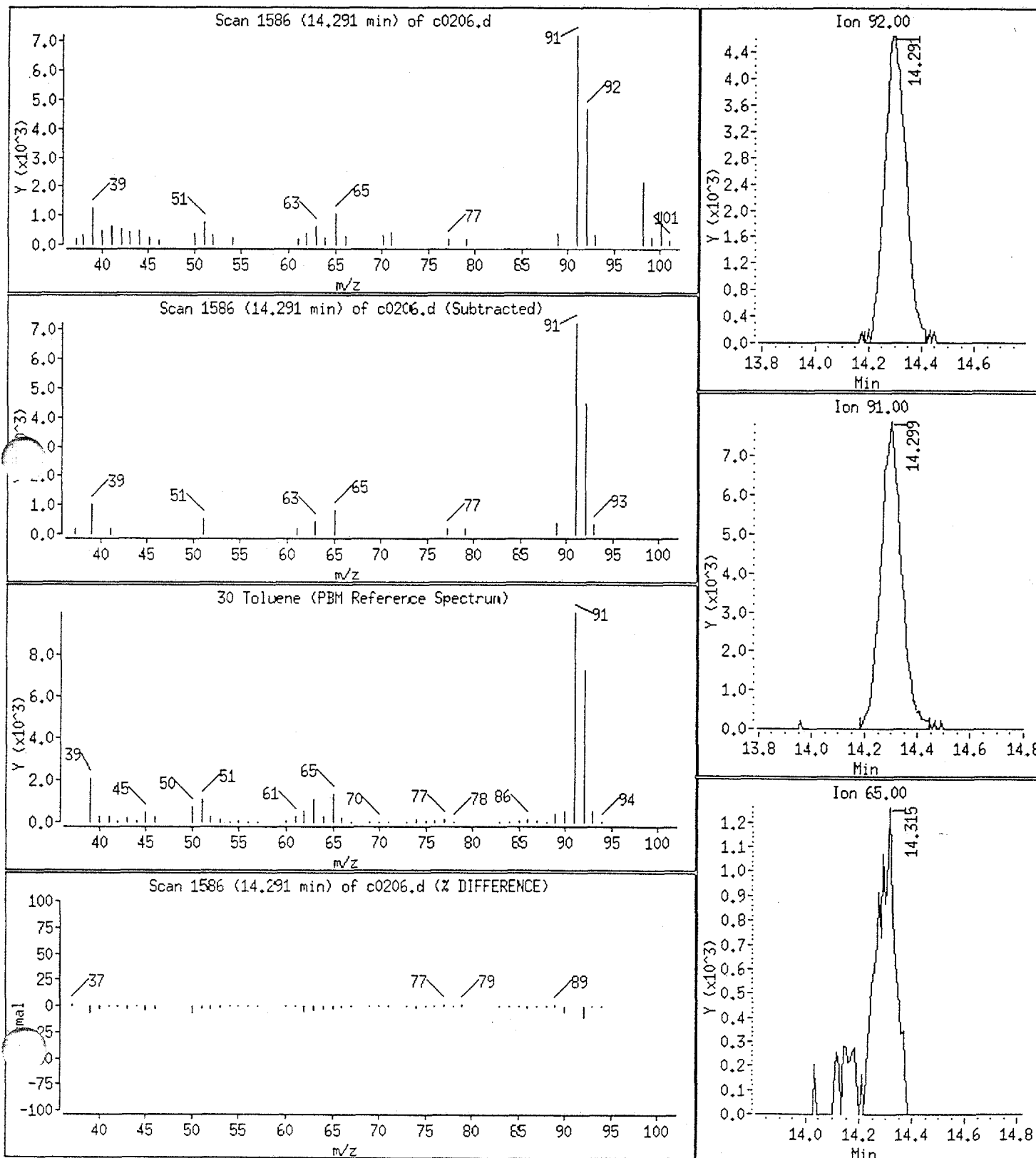
Sample ID: 15226n cljdw151

Column phase: J&amp;W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

30 Toluene



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Page 18

Date: 19-NOV-94 21:56

Instrument: msc.i

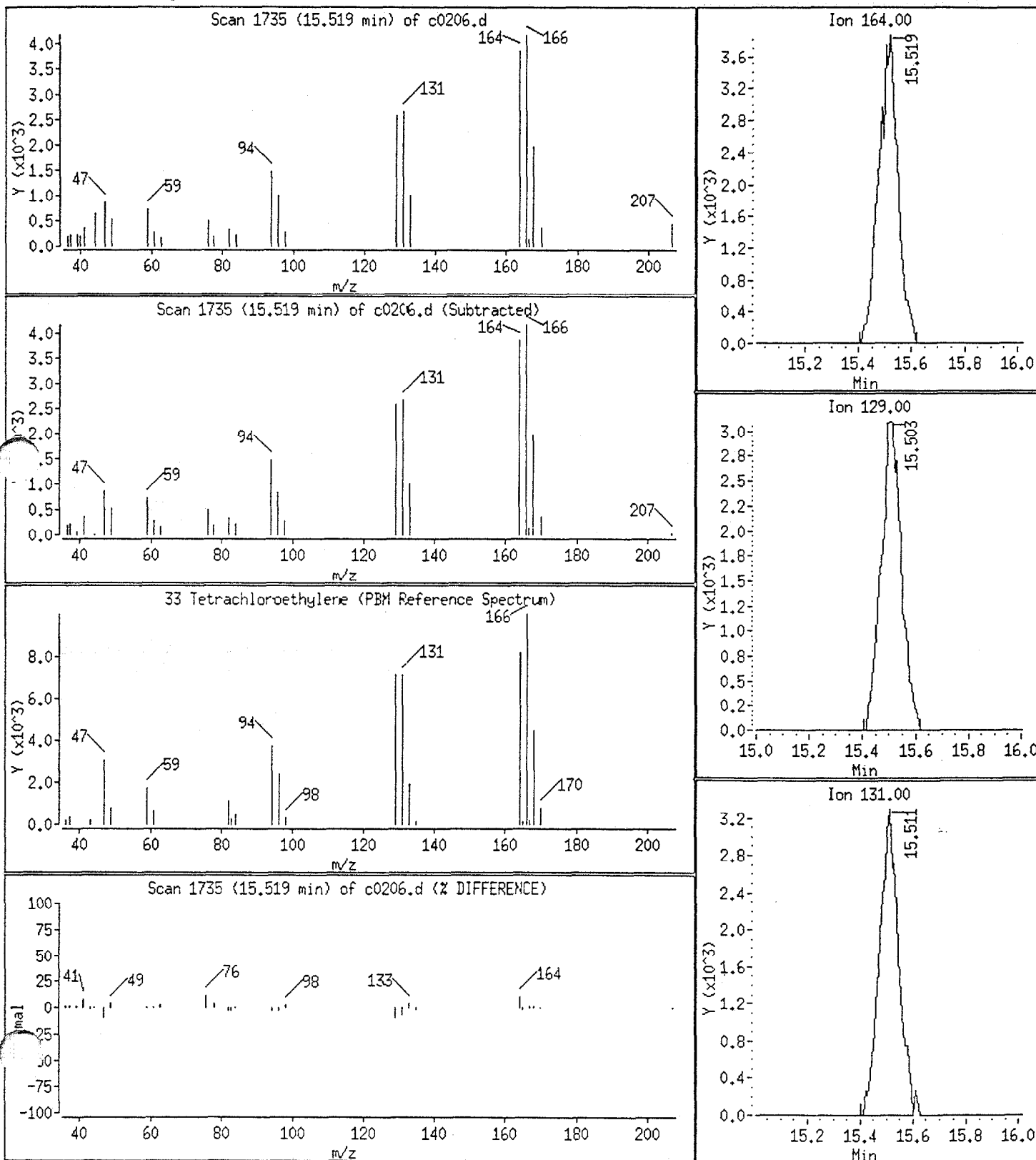
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

33 Tetrachloroethylene



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Date : 19-NOV-94 21:56

Instrument : msc.i

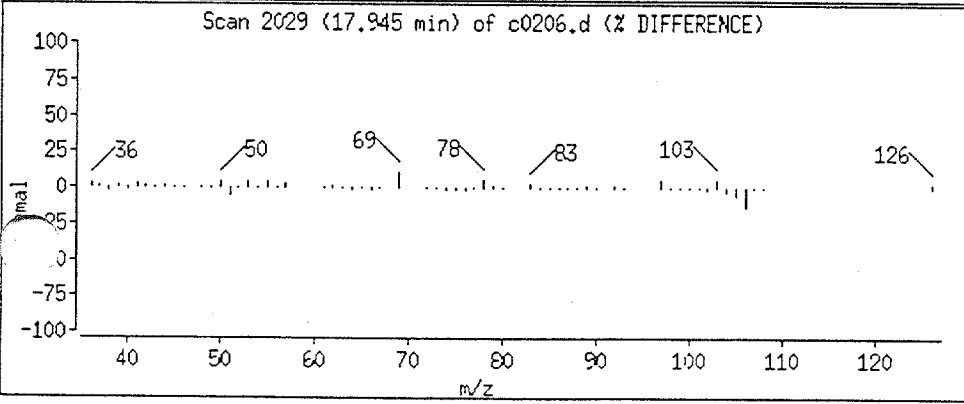
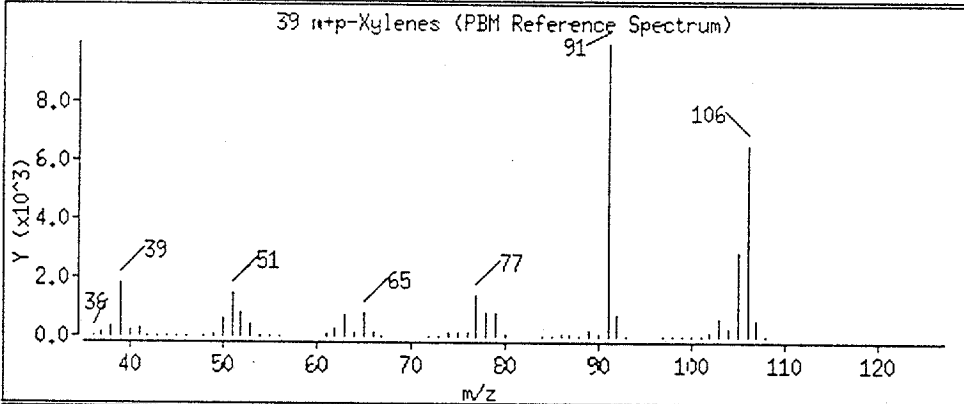
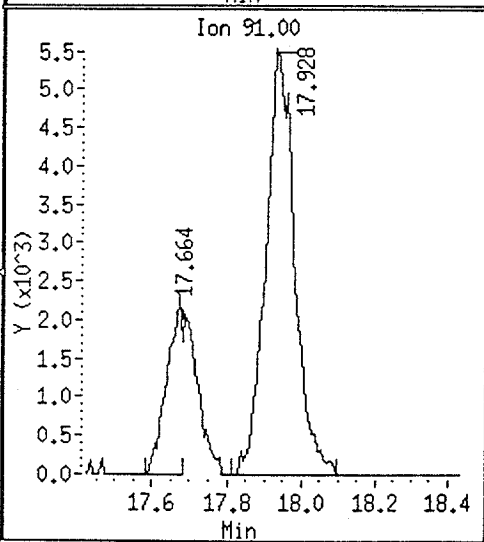
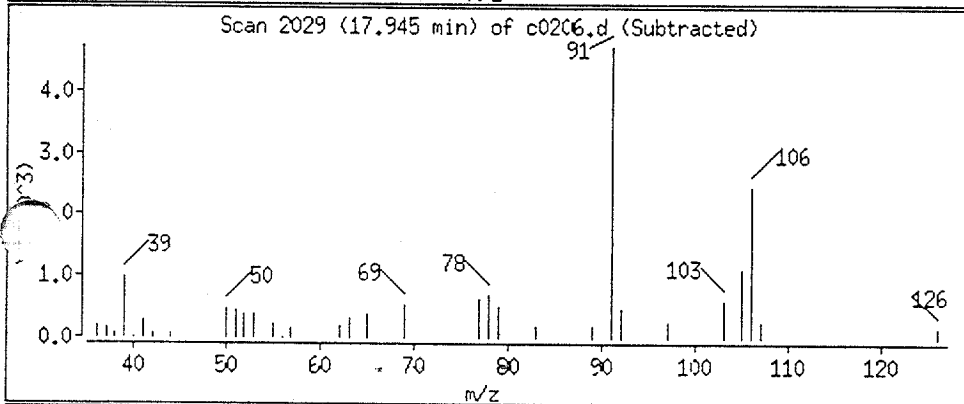
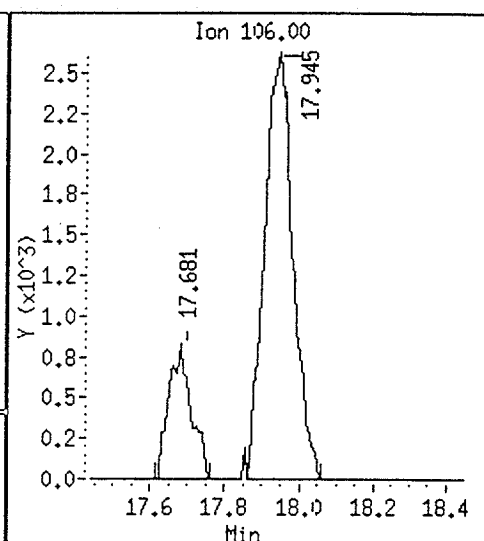
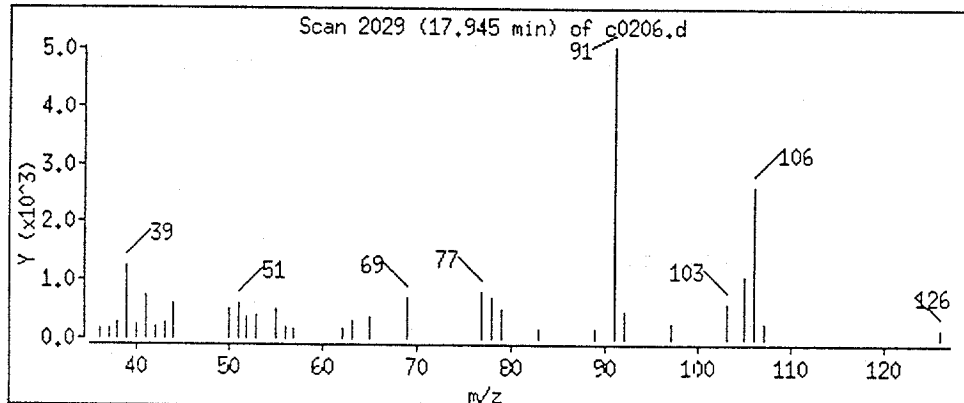
Sample ID : 15226n cljdw151

Column phase : J&W DB\_624

Column diameter : 0.53

Volume Injected (uL) : 0.0

39 m+p-Xylenes



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Page 22

Date: 19-NOV-94 21:56

Instrument: msc.i

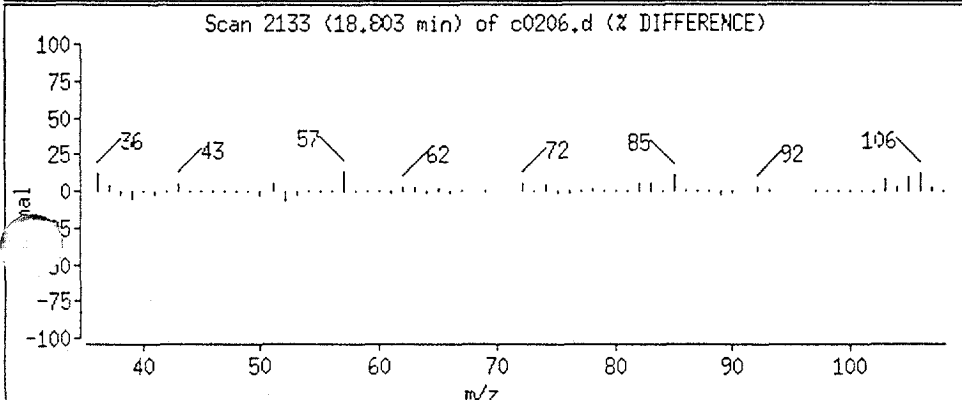
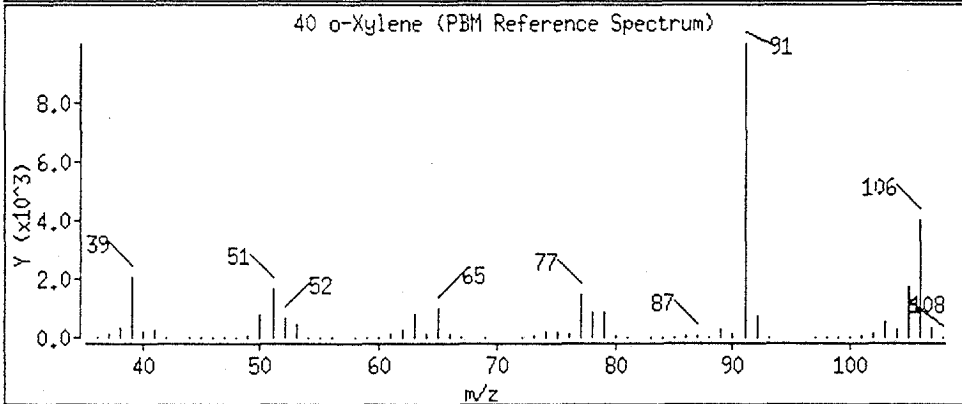
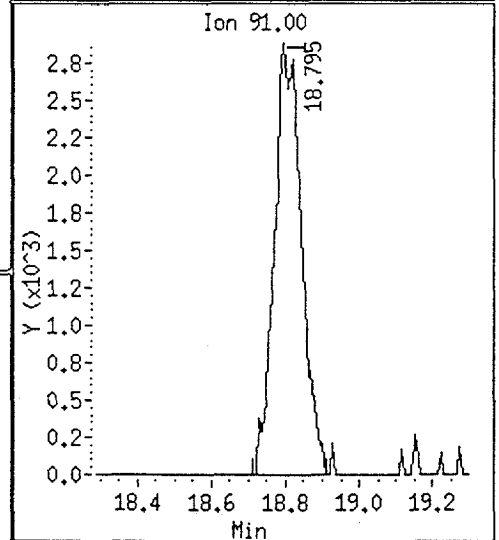
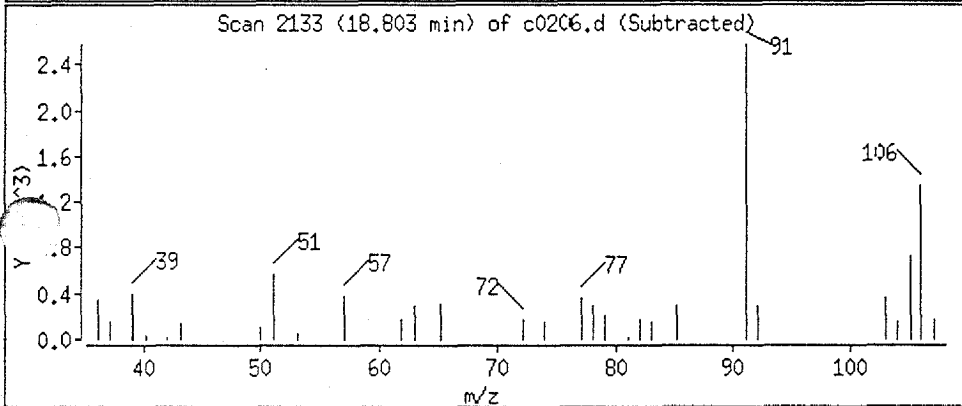
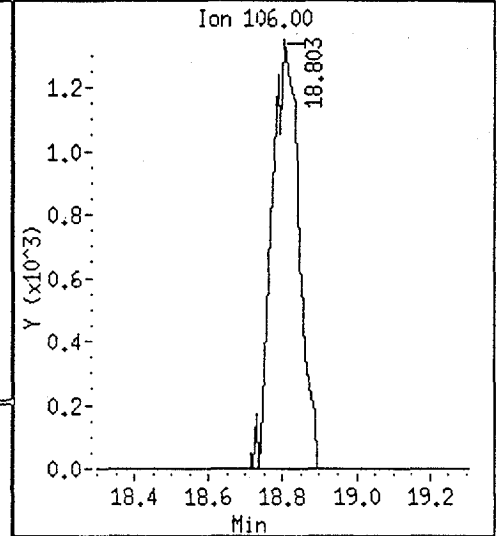
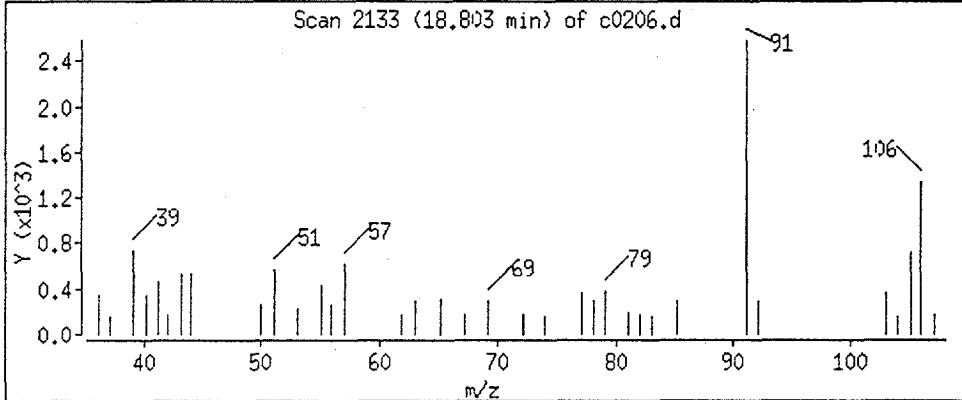
Sample ID: 15226n cljdw151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

40 o-Xylene



Data File: /chem/aux/msc.i/c111994a.b/c0206.d

Page 23

Date: 19-NOV-94 21:56

Instrument: msc.i

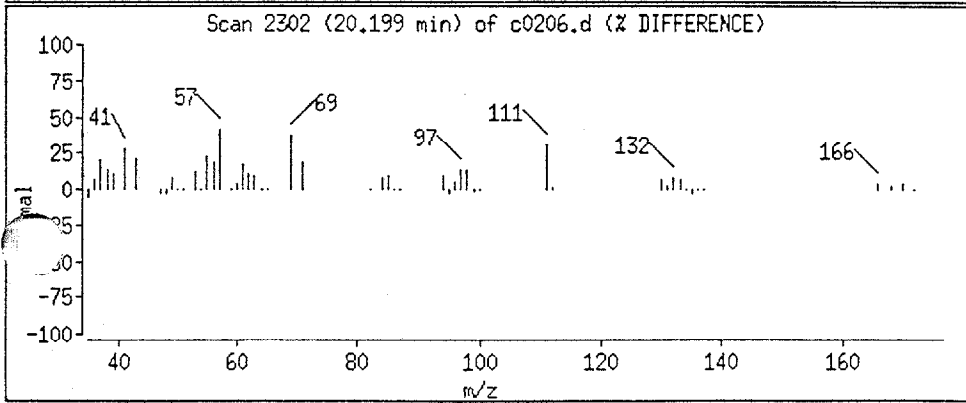
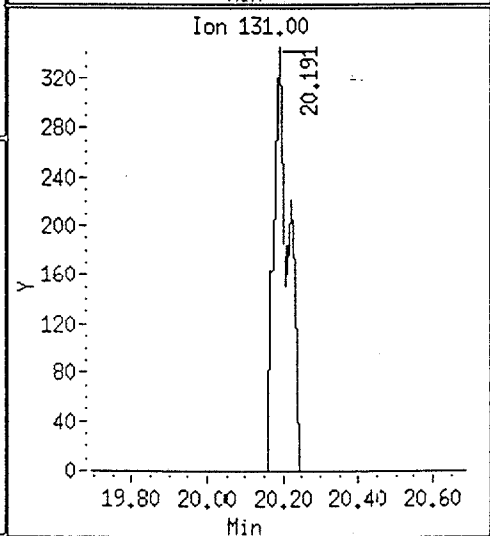
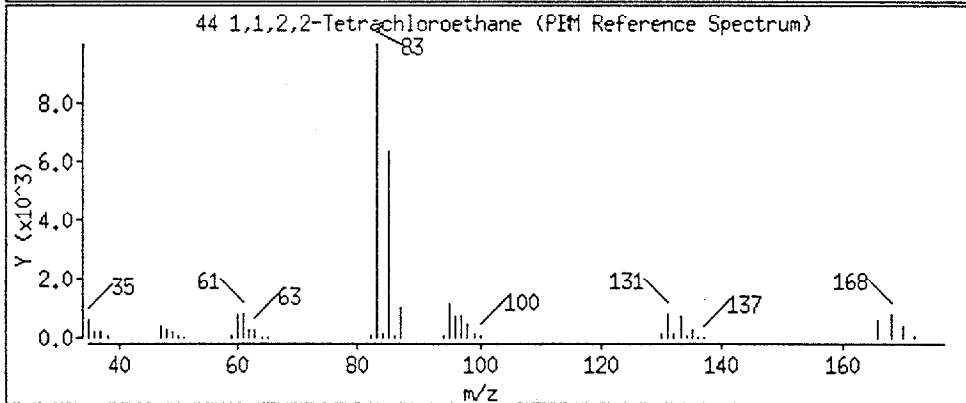
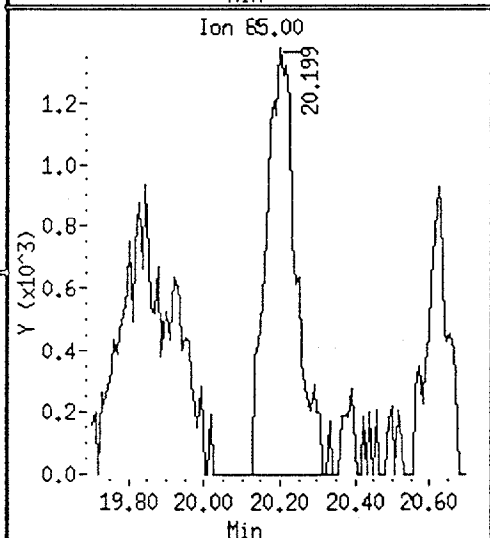
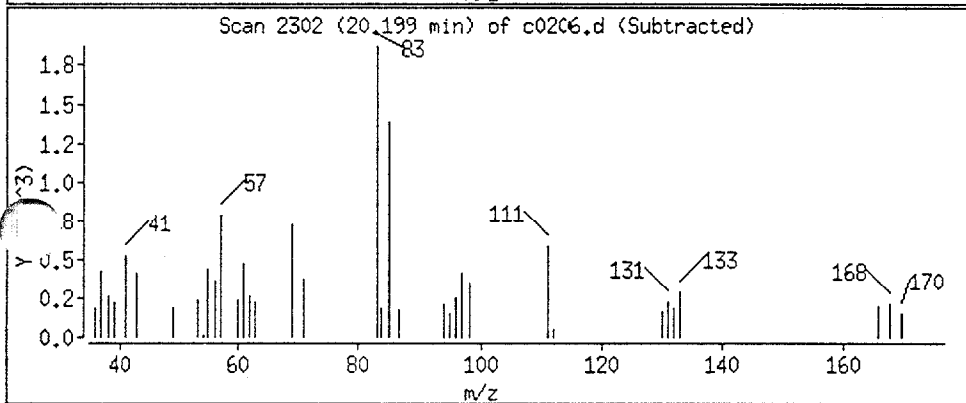
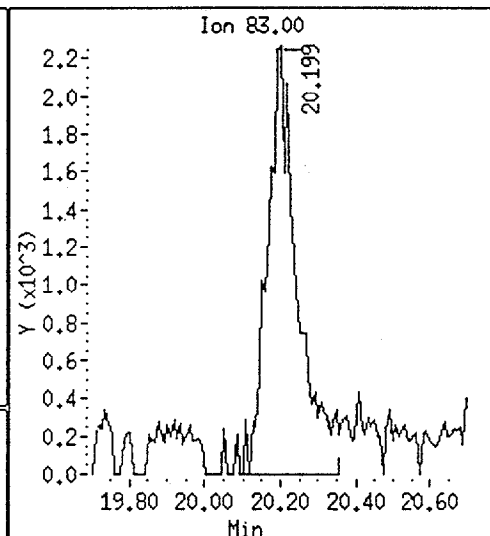
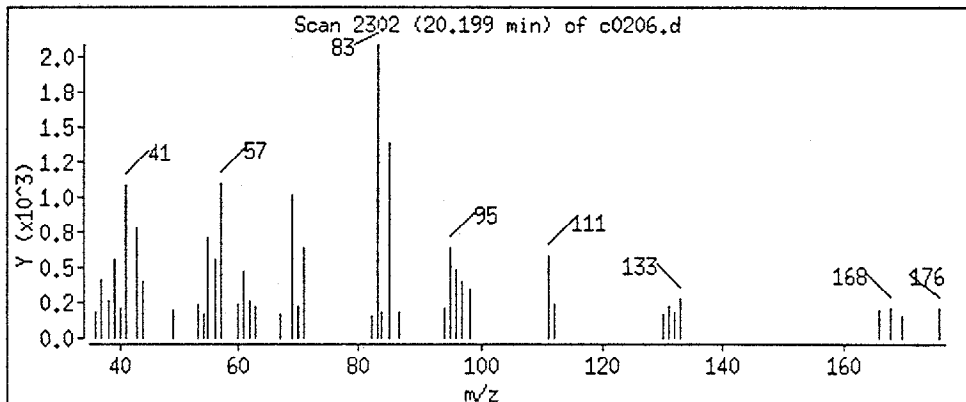
Sample ID: 15226n c1jdus151

Column phase: J&W DB\_624

Column diameter: 0.53

Volume Injected (uL): 0.0

44 1,1,2,2-Tetrachloroethane



## ORGANIC LIQUID VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ANALYTICAL SERVICES CORP.Contract: NFESCLab Code: N/ACase No.: 15226NSAS No.: N/ASDG No.: CLJDWS075

	EPA SAMPLE NO. =====	SMC1 (TOL) # =====	SMC2 (BFB) # =====	SMC3 (DCE) # =====	OTHER =====	TOT OUT =====
01	VBLK01	92	99	87		0
02	CLJDWS075	102	97	95		0
03	VSPK01	94	98	90		0
04	CLJDWS075MS	98	89	87		0
05	CLJDWS075MSD	99	90	84		0

## QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)  
 SMC2 (BFB) = Bromofluorobenzene (59-113)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring compound diluted out

## WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESCLab Code: \_\_\_\_\_ Case No.: 15226N SAS No.: \_\_\_\_\_ SDG No.: CLJDWS102 <sup>075</sup> *AS*

	EPA SAMPLE NO. =====	SMC1 (TOL) # =====	SMC2 (BFB) # =====	SMC3 (DCE) # =====	OTHER =====	TOT OUT =====
01	VBLK01	95	103	86		0
02	VSPK01	90	96	84		0
03	FB01A/B	89	102	88		0
04	RB-01A/D	93	102	86		0
05	RB-01A/DMS	89	93	86		0
06	RB-01A/DMSD	90	99	88		0
07	CLJDWS102	90	99	82		0

## QC LIMITS

SMC1 (TOL) = Toluene-d8 (88-110)  
 SMC2 (BFB) = Bromofluorobenzene (86-115)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (76-114)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring compound diluted out



SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: ANALYTICAL SERVICES CORP. Contract: NEESA

Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS075

Level: (low/med) \_\_\_\_\_

	EPA SAMPLE NO. =====	SMC1 (TOL) # =====	SMC2 (BFB) # =====	SMC3 (DCE) # =====	OTHER =====	TOT OUT =====
01	VBLK01	110	107	99		0
02	VSPK01	106	100	102		0
03	A01SS-49	120	84	100		0
04	A01SS-49MS	120	83	97		0
05	A01SS-49MSD	115	77	93		0
06	<del>A01SS-50</del>	<del>103</del>	<del>89</del>	<del>100</del>		<del>0</del>
07	<del>A01SS-54</del>	<del>117</del>	<del>86</del>	<del>107</del>		<del>0</del>
08	<del>A05SS-56</del>	<del>108</del>	<del>101</del>	<del>108</del>		<del>0</del>
09	<del>A05SS-58</del>	<del>107</del>	<del>92</del>	<del>103</del>		<del>0</del>
10	<del>A05SS-59</del>	<del>107</del>	<del>87</del>	<del>101</del>		<del>0</del>
11	<del>A05SS-60</del>	<del>101</del>	<del>89</del>	<del>100</del>		<del>0</del>
12	<del>A05SS-63</del>	<del>106</del>	<del>99</del>	<del>109</del>		<del>0</del>
13	<del>A05SS-62</del>	<del>104</del>	<del>100</del>	<del>108</del>		<del>0</del>
14	<del>A01SS-51</del>	<del>107</del>	<del>89</del>	<del>87</del>		<del>0</del>
15	<del>A01SS-52</del>	<del>107</del>	<del>86</del>	<del>90</del>		<del>0</del>
16	<del>A01SS-53</del>	<del>108</del>	<del>83</del>	<del>89</del>		<del>0</del>
17	<del>A05SS-64</del>	<del>108</del>	<del>93</del>	<del>91</del>		<del>0</del>
18	<del>A01SS-86</del>	<del>105</del>	<del>88</del>	<del>92</del>		<del>0</del>
19	<del>A05SS-66</del>	<del>104</del>	<del>98</del>	<del>99</del>		<del>0</del>
20	<del>A05SS-85</del>	<del>110</del>	<del>102</del>	<del>100</del>		<del>0</del>
21	CLJDWS151	135	70	91		0
22	<del>A05SS-65</del>	<del>98</del>	<del>98</del>	<del>103</del>		<del>0</del>
23	<del>A02SS-67</del>	<del>116</del>	<del>77</del>	<del>98</del>		<del>0</del>
24	<del>A02SS-68</del>	<del>116</del>	<del>86</del>	<del>100</del>		<del>0</del>

QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)  
 SMC2 (BFB) = Bromofluorobenzene (59-113)  
 SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

# Column to be used to flag recovery values

\* Values outside of contract required QC limits

D System Monitoring compound diluted out

ORGANIC LIQUID VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESC

Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS075

Matrix Spike - EPA Sample No.: CLJDWS075

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	2400000	0	2600000	110	30-130
Trichloroethene	2400000	0	2500000	104	30-130
Benzene	2400000	0	2400000	102	30-130
Toluene	2400000	130000	2400000	98	30-130
Chlorobenzene	2400000	0	2400000	102	30-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	2400000	2600000	108	2	20	30-130
Trichloroethene	2400000	2400000	100	6	20	30-130
Benzene	2400000	2300000	96	6	20	30-130
Toluene	2400000	2400000	95	2	20	30-130
Chlorobenzene	2400000	2400000	100	2	20	30-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits  
Spike Recovery: 0 out of 10 outside limits

COMMENTS: \_\_\_\_\_

3A  
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

00089

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESC

Lab Code: \_\_\_\_\_ Case No.: 15226N SAS No.: \_\_\_\_\_ SDG No.: CLJDWS102 <sup>075</sup>

Matrix Spike - EPA Sample No.: RB-01A/D

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	51	102	61-145
Trichloroethene	50	0	50	100	71-120
Benzene	50	0	51	102	76-127
Toluene	50	0	45	90	76-125
Chlorobenzene	50	0	49	98	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
1,1-Dichloroethene	50	51	102	0	14	61-145
Trichloroethene	50	50	100	0	14	71-120
Benzene	50	50	100	2	11	76-127
Toluene	50	46	92	2	13	76-125
Chlorobenzene	50	51	102	4	13	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

3B  
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ANALYTICAL SERVICES CORP. Contract: NEESA

Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS075

Matrix Spike - EPA Sample No.: A01SS-49 Level: (low/med) \_\_\_\_\_

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	46	0	49	107	59-172
Trichloroethene	46	1	44	93	62-137
Benzene	46	0	46	100	66-142
Toluene	46	2	56	117	59-139
Chlorobenzene	46	0	42	91	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD REC.
1,1-Dichloroethene	51	57	112	6	22 59-172
Trichloroethene	51	48	92	.4	24 62-137
Benzene	51	51	100	1	21 66-142
Toluene	51	57	108	7	21 59-139
Chlorobenzene	51	47	92	2	21 60-133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

RPD: 0 out of 5 outside limits  
Spike Recovery: 0 out of 10 outside limits

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

30  
ORGANIC LIQUID VOLATILE BLANK SPIKE RECOVERY

00091

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESC

Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS075

Matrix Spike - EPA Sample No.: VSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
1,1-Dichloroethene	2500	0	2700	106	30-130
Trichloroethene	2500	0	2600	103	30-130
Benzene	2500	0	2600	103	30-130
Toluene	2500	0	2400	95	30-130
Chlorobenzene	2500	0	2600	102	30-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: \_\_\_\_\_

3A  
WATER VOLATILE BLANK SPIKE RECOVERY

00092

Lab Name: ANALYTICAL SERVICES CORP. Contract: NFESC

Lab Code: \_\_\_\_\_ Case No.: 15226N SAS No.: \_\_\_\_\_ SDG No.: CLJDWS102

Matrix Spike - EPA Sample No.: VSPK01

COMPOUND	SPIKE ADDED (ug/L)	BLANK CONCENTRATION (ug/L)	BS CONCENTRATION (ug/L)	BS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	52	104	61-145
Trichloroethene	50	0	51	102	71-120
Benzene	50	0	50	100	76-127
Toluene	50	0	47	94	76-125
Chlorobenzene	50	0	50	100	75-130

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: \_\_\_\_\_

3B  
SOIL VOLATILE BLANK SPIKE RECOVERY

00093

Lab Name: ANALYTICAL SERVICES CORP. Contract: NEESA

Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CAJDU5075

Matrix Spike - EPA Sample No.: VSPK01

COMPOUND	SPIKE ADDED (ug/Kg)	BLANK CONCENTRATION (ug/Kg)	BS CONCENTRATION (ug/Kg)	BS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50	0	54	108	59-172
Trichloroethene	50	0	53	106	62-137
Benzene	50	0	50	100	66-142
Toluene	50	0	53	106	59-139
Chlorobenzene	50	0	52	104	60-133

# Column to be used to flag recovery and RPD values with an asterisk

\* Values outside of QC limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_

4A  
VOLATILE METHOD BLANK SUMMARY

00094  
EPA SAMPLE NO.

VBLK01

Lab Name: ANALYTICAL SERVICES CORP.

Contract: NFESC

Lab Code: N/A Case No.: 15226N

SAS No.: N/A SDG No.: CLJDWS075

Lab File ID: C0196

Lab Sample ID: N4V4035V

Date Analyzed: 11/19/94

Time Analyzed: 16:53

GC Column: DB-624 ID: .53 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSC

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
	=====	=====	=====	=====
01	CLJDWS075	JN4743V	C0197	17:25
02	CLJDWS075MSD	JN4743VR	C0200	19:03
03	VSPK01	N4V4035VS	C0198	17:58
04	CLJDWS075MS	JN4743VS	C0199	18:31

COMMENTS:

---



---



4A  
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK01

Lab Name: ANALYTICAL SERVICES CORP.Contract: NFESCLab Code: N/A Case No.: 15226NSAS No.: N/ASDG No.: CLJDWS102 <sup>075</sup> <sub>9/1</sub>Lab File ID: C0208Lab Sample ID: N1V4036VDate Analyzed: 11/19/94Time Analyzed: 23:02GC Column: DB-624 ID: .53 (mm)Heated Purge: (Y/N) NInstrument ID: MSC-L

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
	=====	=====	=====	=====
<del>01</del>	<del>FB01A/B</del>	<del>JN5026V</del>	<del>C0210</del>	<del>00:08</del>
02	RB-01A/D	JN5027V	C0211	00:40
03	CLJDWS102	JN4741V	C0214	02:18
04	RB-01A/DMSD	JN5027VR	C0213	01:45
05	VSPK01	N1V4036VS	C0209	23:35
06	RB-01A/DMS	JN5027VS	C0212	01:13

COMMENTS:

4A  
VOLATILE METHOD BLANK SUMMARY

00096  
EPA SAMPLE NO.

VBLK01

Lab Name: ANALYTICAL SERVICES CORP.

Contract: NFESC

Lab Code: N/A

Case No.: 15226N

SAS No.: N/A

SDG No.: CLJDWS075

Lab File ID: C0151

Lab Sample ID: N2V4030V

Date Analyzed: 11/17/94

Time Analyzed: 15:11

GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm)

Heated Purge: (Y/N) \_\_\_\_\_

Instrument ID: SC

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
	=====	=====	=====	=====
01	A01SS-49	JN4617V	C0153	16:22
02	<del>A01SS-50</del>	<del>JN4618V</del>	<del>C0156</del>	<del>18:05</del>
03	<del>A01SS-54</del>	<del>JN4622V</del>	<del>C0160</del>	<del>20:24</del>
04	<del>A05SS-56</del>	<del>JN4623V</del>	<del>C0161</del>	<del>20:58</del>
05	<del>A05SS-58</del>	<del>JN4624V</del>	<del>C0162</del>	<del>21:33</del>
06	<del>A05SS-59</del>	<del>JN4625V</del>	<del>C0163</del>	<del>22:08</del>
07	<del>A05SS-60</del>	<del>JN4626V</del>	<del>C0164</del>	<del>22:43</del>
08	<del>A05SS-63</del>	<del>JN4627V</del>	<del>C0165</del>	<del>23:17</del>
09	<del>A05SS-62</del>	<del>JN4631V</del>	<del>C0169</del>	<del>01:36</del>
10	A01SS-51	JN4619V	C0175	12:50
11	A01SS-52	JN4620V	C0176	13:25
12	A01SS-53	JN4621V	C0177	13:59
13	<del>A05SS-64</del>	<del>JN4628V</del>	<del>C0180</del>	<del>16:06</del>
14	A01SS-86	JN4630V	C0182	17:15
15	A05SS-66	JN4632V	C0187	20:08
16	A05SS-85	JN4633V	C0188	20:43
17	CLJDWS151	JN4742V	C0189	21:18
18	CLJDWS151	JN4742V	C0206	21:56
19	<del>A05SS-65</del>	<del>JN4629V</del>	<del>C0203</del>	<del>20:12</del>
20	A02SS-67	JN4798V	C0204	20:47
21	A02SS-68	JN4799V	C0205	21:21
22	A01SS-49MSD	JN4617VR	C0155	17:31
23	VSPK01	N2V4030VS	C0152	15:47
24	A01SS-49MS	JN4617VS	C0154	16:57

COMMENTS:

---

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: N/A Case No.: 15226 SAS No.: N/A SDG No.: C12JDU5102  
 Lab File ID: C9157 BFB Injection Date: 09/22/94  
 Instrument ID: MSC. I BFB Injection Time: 12:51  
 GC Column: DB-624 ID: 153 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	21.5
75	30.0 - 66.0% of mass 95	51.4
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	8.7
173	Less than 2.0% of mass 174	0 ( 0 ) 1
174	50.0 - 120.0% of mass 95	77.3
175	4.0 - 9.0 % of mass 174	5.8 ( 7.5 ) 1
176	93.0 - 101.0% of mass 174	75.0 ( 92.0 ) 1
177	5.0 - 9.0% of mass 176	4.8 ( 6.4 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD10	VSTD10	C9158	09/22/94	13:37
02	VSTD20	VSTD20	C9159		14:12
03	VSTD30	VSTD30	C9160		14:44
04	VSTD100	VSTD100	C9161		15:16
05	VSTD200	VSTD200	C9162		15:48
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File: /chem/aux/msc.i/c0922a94.b/c9157.d

Page 1

Date : 22-SEP-94 12:51

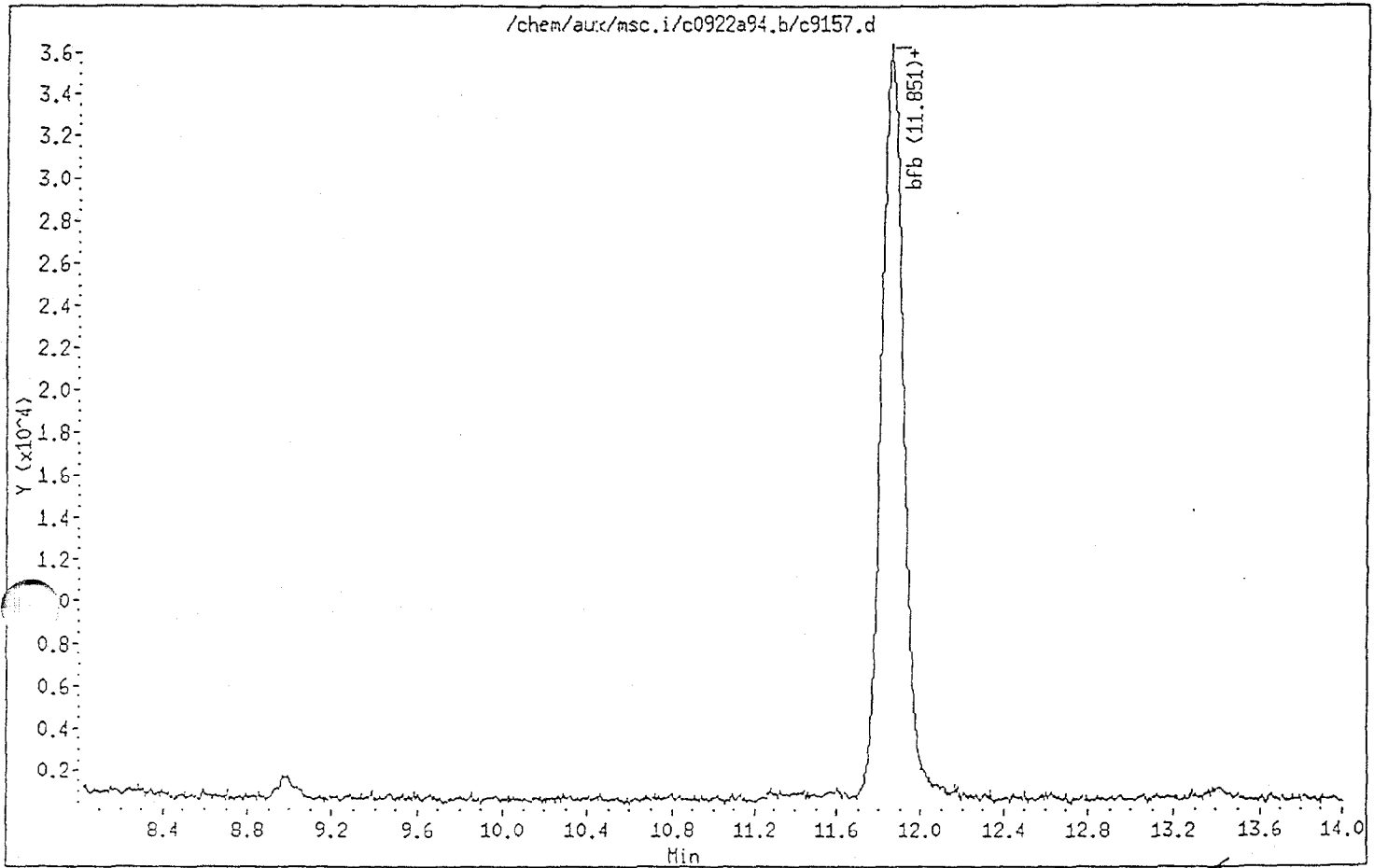
Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0



*[Handwritten signature]*

Data File: /chem/aux/msc.i/c0922a94.b/c9157.d

Page 2

Date: 22-SEP-94 12:51

Instrument: msc.i

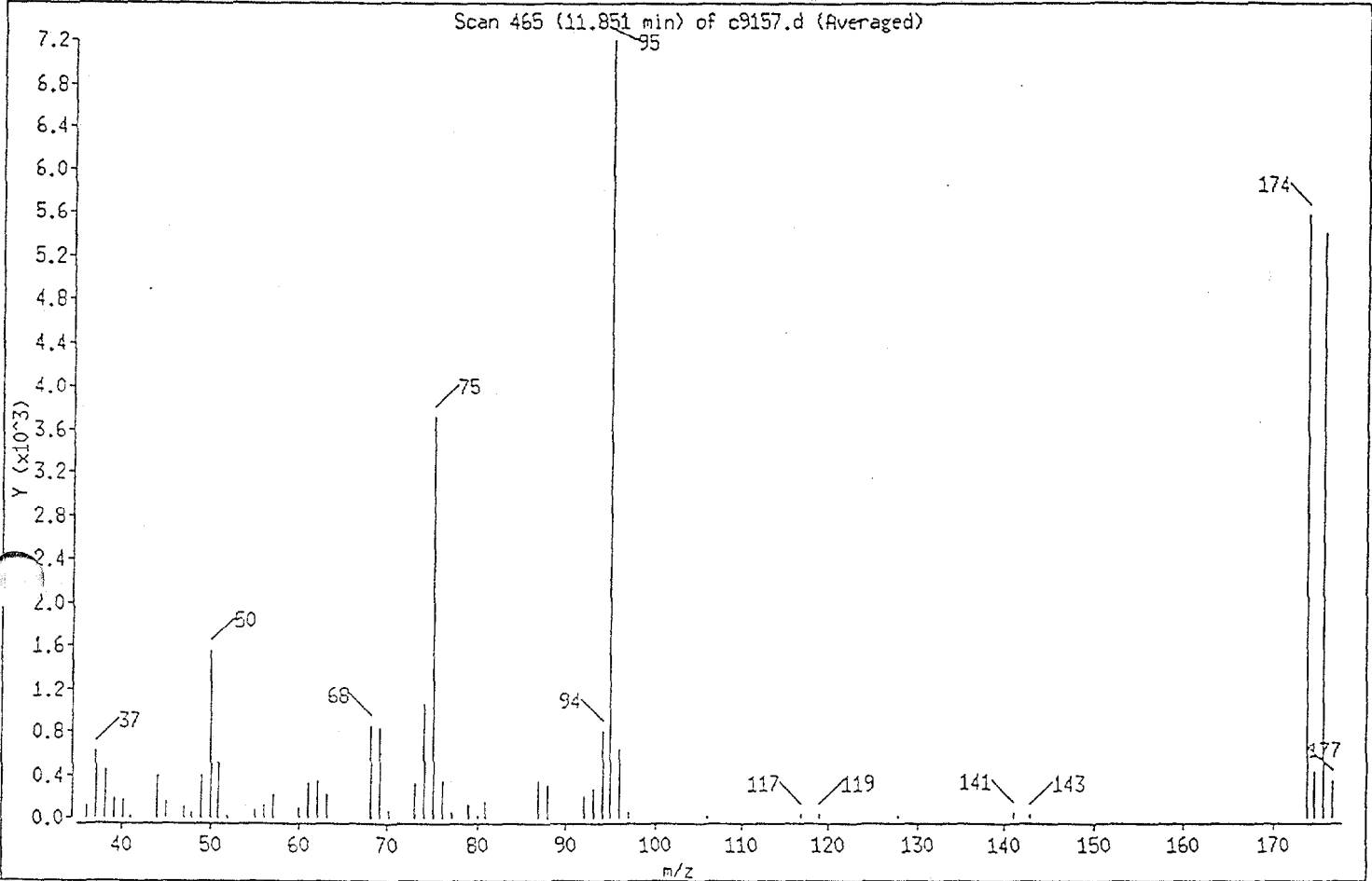
Sample ID:

Column phase:

Column diameter: 2.00

Volume Injected (uL): 0.0

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.0
50	8.00 - 40.00% of mass 95	21.5
75	30.00 - 66.00% of mass 95	51.4
96	5.00 - 9.00% of mass 95	8.7
173	Less than 2.00% of mass 174	0.0
174	50.00 - 120.00% of mass 95	77.3
175	4.00 - 9.00% of mass 174	7.5
176	93.00 - 101.00% of mass 174	97.0
177	5.00 - 9.00% of mass 176	6.4

*Handwritten signature*

Data File: /chem/aux/msc.i/c0922a94.b/c9157.d

Page 3

Date : 22-SEP-94 12:51

Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

Spectrum: Scans 465-467 (11.851 min), Subtraction Scan 446

Location of Maximum: 95.00

Number of points: 48

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	114	56.00	118	77.00	43	117.00	37
37.00	618	57.00	163	79.00	111	119.00	38
38.00	448	60.00	80	80.00	16	128.00	18
39.00	180	61.00	330	81.00	154	141.00	43
40.00	37	62.00	335	87.00	340	143.00	41
44.00	38	63.00	218	88.00	308	174.00	5574
45.00	80	68.00	844	92.00	202	175.00	418
47.00	107	69.00	830	93.00	275	176.00	5406
48.00	50	70.00	72	94.00	798	177.00	346
49.00	389	73.00	322	95.00	7207		
50.00	1551	74.00	1050	96.00	624		
51.00	506	75.00	3707	97.00	51		
55.00	60	76.00	347	106.00	17		

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: N/A Case No.: 1522611 SAS No.: N/A SDG No.: CLJDWS075  
 Lab File ID: C9962 BFB Injection Date: 11/08/94  
 Instrument ID: MSC.T BFB Injection Time: 08:38  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm) Heated Purge: (Y/N) X

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	33.1
75	30.0 - 66.0% of mass 95	60.3
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.2 ( 0.3 ) 1
174	50.0 - 120.0% of mass 95	75.9
175	4.0 - 9.0 % of mass 174	5.3 ( 7.0 ) 1
176	93.0 - 101.0% of mass 174	74.1 ( 97.6 ) 1
177	5.0 - 9.0% of mass 176	5.5 ( 7.5 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD10	VSTD10	C9964	11/08/94 ↓	10:10
02	VSTD20	VSTD20	C9965		10:45
03	VSTD100	VSTD100	C9967		11:54
04	VSTD200	VSTD200	C9968		12:29
05	VSTD50	VSTD50	C9970		13:55
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File: /chem/aux/msc.i/c110894.b/c9962.d

Page 1

Date : 08-NOV-94 08:38

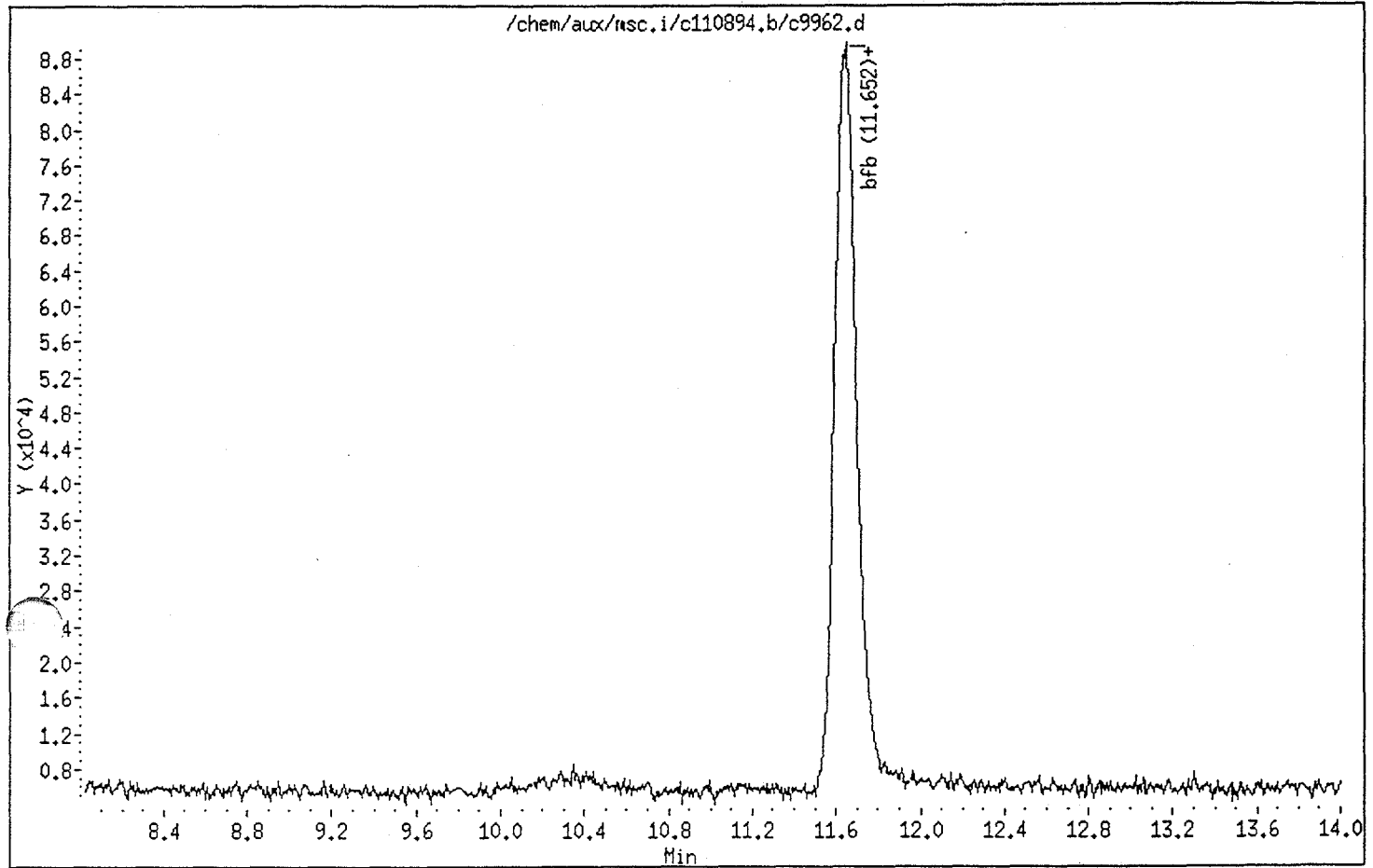
Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0





Data File: /chem/aux/msc.i/c110894.b/c9962.d

Page 2

Date : 08-NOV-94 08:38

Instrument : msc.i

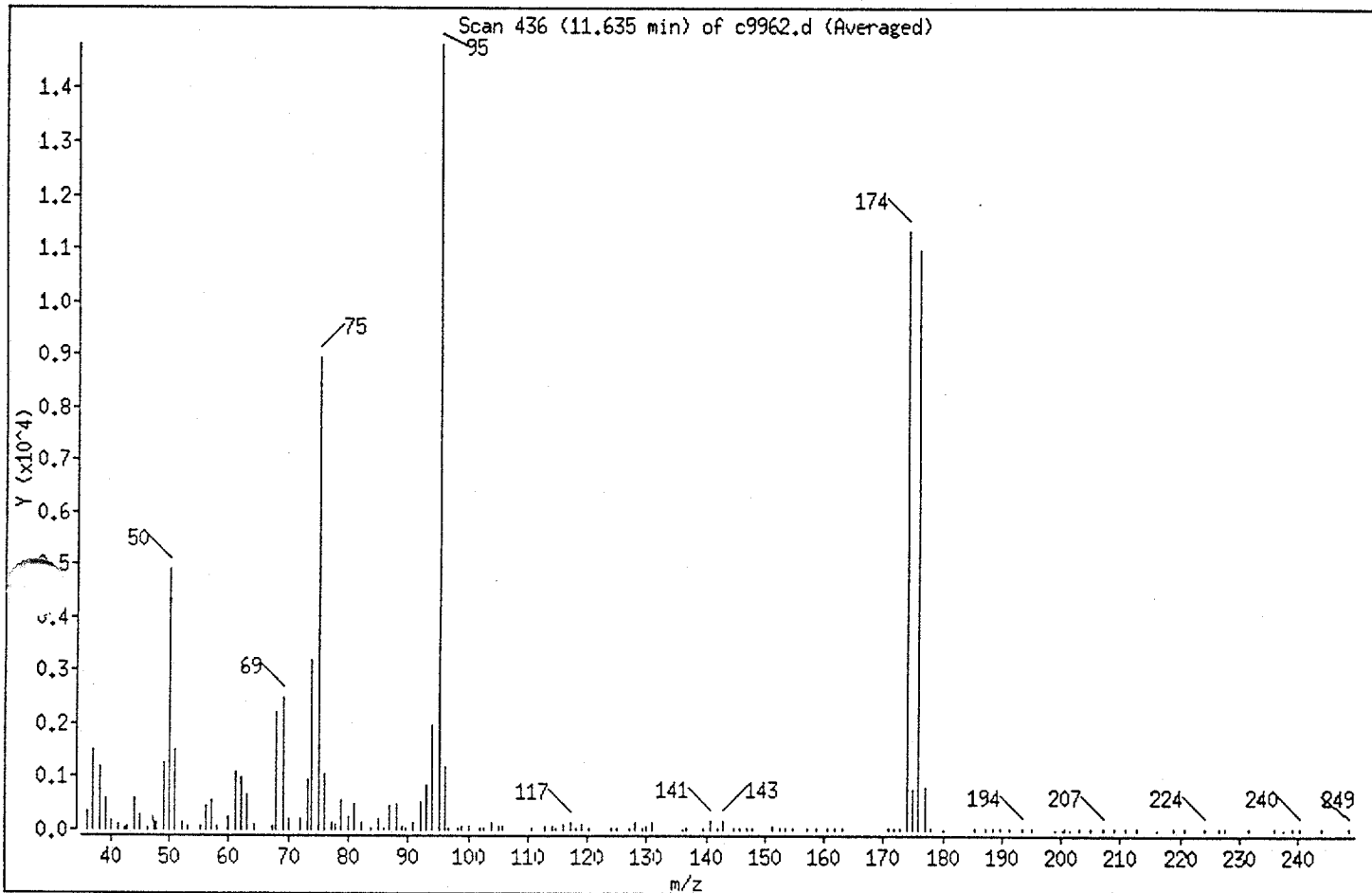
Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.0
50	8.00 - 40.00% of mass 95	33.1
75	30.00 - 66.00% of mass 95	60.3
96	5.00 - 9.00% of mass 95	7.6
173	Less than 2.00% of mass 174	0.3
174	50.00 - 120.00% of mass 95	75.9
175	4.00 - 9.00% of mass 174	7.0
176	93.00 - 101.00% of mass 174	97.6
177	5.00 - 9.00% of mass 176	7.5

Data File: /chem/aux/msc.i/c110894.b/c9962.d

Page 3

Date : 08-NOV-94 08:38

Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

Spectrum: Scans 436-438 (11.635 min), Subtraction Scan 418  
 Location of Maximum: 95.00  
 Number of points: 121

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	250	78.00	41	124.00	18	187.00	27
37.00	1502	79.00	545	125.00	24	189.00	28
38.00	1202	80.00	162	128.00	142	190.00	28
39.00	528	81.00	422	129.00	39	194.00	41
41.00	10	82.00	56	130.00	61	195.00	21
42.00	23	84.00	25	131.00	76	199.00	17
45.00	268	86.00	19	136.00	17	200.00	17
47.00	175	87.00	455	140.00	30	201.00	18
48.00	54	88.00	481	141.00	163	202.00	17
49.00	1036	89.00	55	142.00	21	203.00	31
50.00	4910	90.00	18	143.00	186	205.00	20
51.00	1420	91.00	69	145.00	42	207.00	34
52.00	76	92.00	542	146.00	19	209.00	29
55.00	64	93.00	772	147.00	28	211.00	30
56.00	382	94.00	1969	148.00	19	213.00	31
57.00	468	95.00	14822	151.00	76	216.00	17
60.00	250	96.00	1125	153.00	26	219.00	21
61.00	1022	97.00	27	154.00	25	221.00	23
62.00	989	99.00	57	155.00	19	224.00	47
63.00	675	100.00	74	157.00	30	227.00	34
64.00	110	104.00	143	161.00	31	228.00	18
67.00	85	105.00	54	162.00	22	232.00	19
68.00	2143	106.00	76	171.00	36	236.00	19
69.00	2280	111.00	23	172.00	21	238.00	17
70.00	162	113.00	84	173.00	32	239.00	18
72.00	217	114.00	73	174.00	11256	240.00	37
73.00	936	115.00	38	175.00	786	244.00	19
74.00	3086	116.00	112	176.00	10982	249.00	19
75.00	8933	117.00	127	177.00	822		
76.00	1051	118.00	51	180.00	17		
77.00	145	120.00	37	185.00	34		

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJDWS075  
 Lab File ID: CO14R BFB Injection Date: 11/17/94  
 Instrument ID: MSC.F BFB Injection Time: 13:52  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.2
75	30.0 - 66.0% of mass 95	50.1
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.8
173	Less than 2.0% of mass 174	0.2 ( 0.2 ) 1
174	50.0 - 120.0% of mass 95	80.7
175	4.0 - 9.0 % of mass 174	5.6 ( 7.0 ) 1
176	93.0 - 101.0% of mass 174	80.7 ( 100.0 ) 1
177	5.0 - 9.0% of mass 176	5.6 ( 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:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VST050	VST050	CO150	11/17/94	14:36
02	VBLK01	VBLK01	CO151	↓	15:11
03	VSPK01	VSPK01	CO152		15:47
04	AQ155-49MS	JN4617VS	CO154		16:57
05	AQ155-49MSD	JN4617VR	CO155		17:31
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File: /chem/aux/msc.i/c111794.b/c0149.d

Page 1

Date : 17-NOV-94 13:52

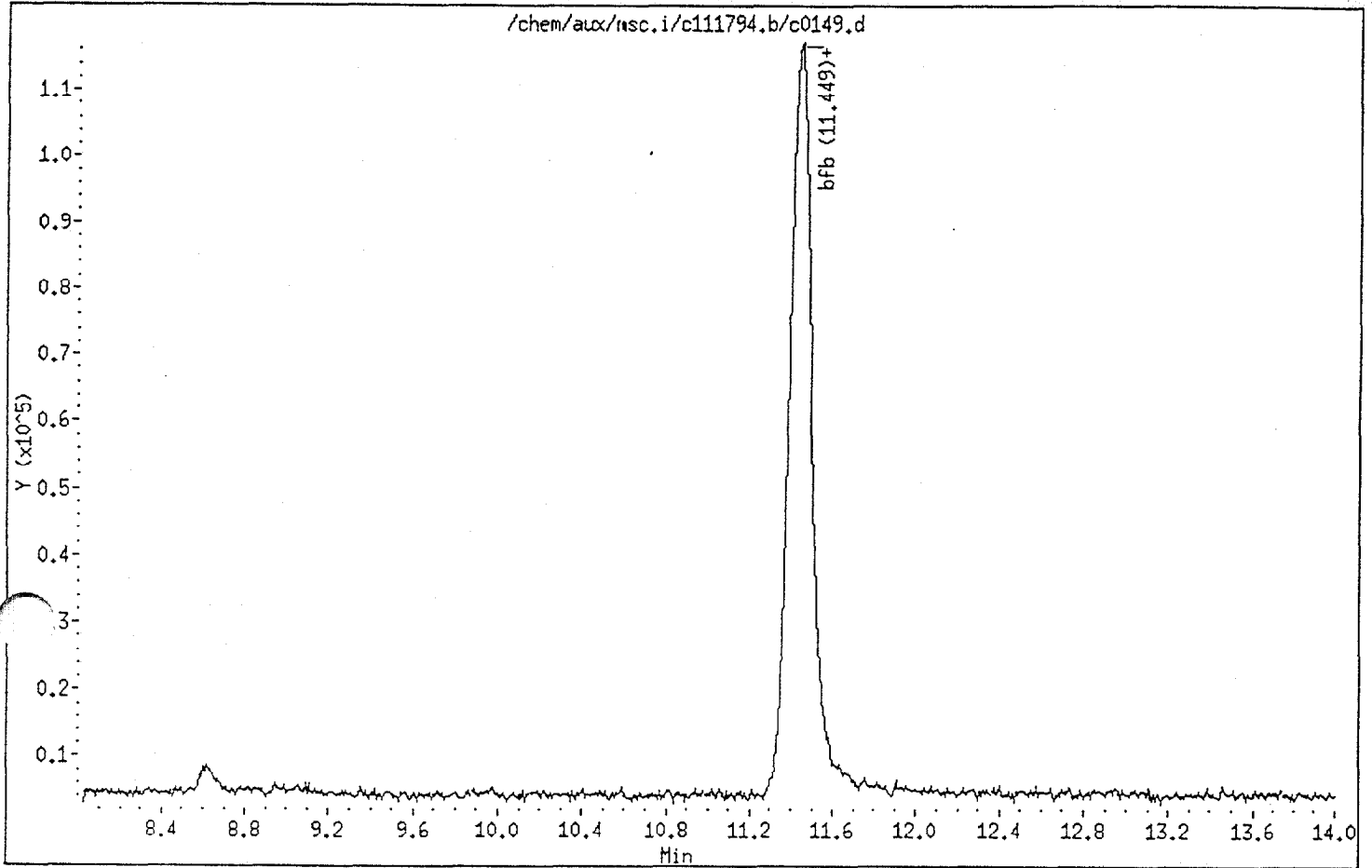
Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0



Data File: /chem/aux/msc.i/c111794.b/c0149.d

Page 2

Date : 17-NOV-94 13:52

Instrument : msc.i

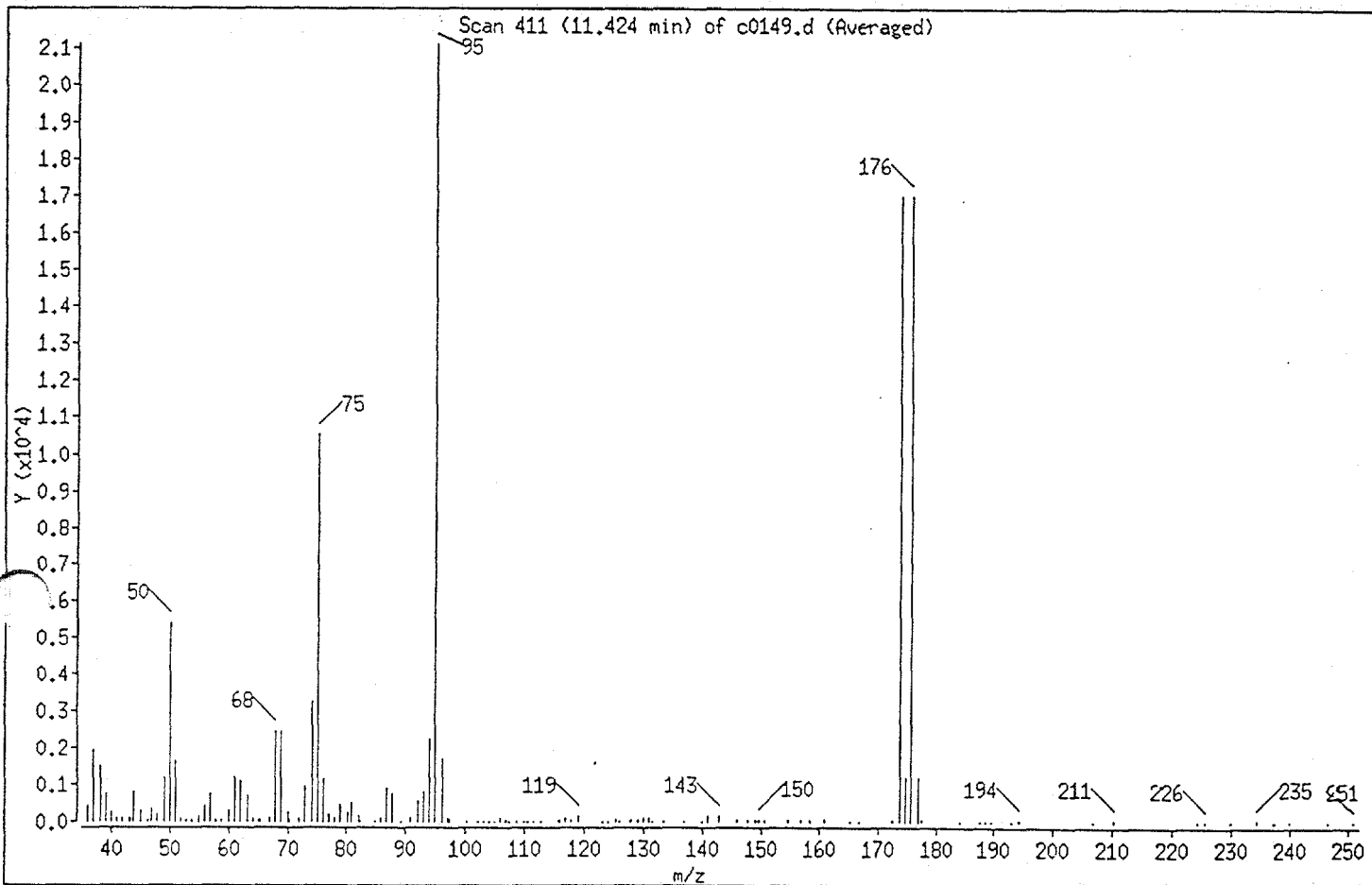
Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.0
50	8.00 - 40.00% of mass 95	25.2
75	30.00 - 66.00% of mass 95	50.1
96	5.00 - 9.00% of mass 95	7.8
173	Less than 2.00% of mass 174	0.2
174	50.00 - 120.00% of mass 95	80.7
175	4.00 - 9.00% of mass 174	7.0
176	93.00 - 101.00% of mass 174	100.0
177	5.00 - 9.00% of mass 176	6.9

Data File: /chem/aux/msc.i/c111794.b/c0149.d

Page 3

Date : 17-NOV-94 13:52

Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

Spectrum: Scans 411-413 (11.424 min), Subtraction Scan 393  
 Location of Maximum: 95.00  
 Number of points: 117

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	262	70.00	184	106.00	97	157.00	39
37.00	1945	72.00	101	107.00	42	159.00	41
38.00	1432	73.00	892	108.00	18	161.00	59
39.00	724	74.00	3249	109.00	24	166.00	17
42.00	7	75.00	10546	110.00	24	167.00	20
43.00	103	76.00	1127	112.00	18	173.00	36
44.00	225	77.00	196	113.00	21	174.00	16986
45.00	306	78.00	120	116.00	65	175.00	1183
46.00	36	79.00	406	117.00	117	176.00	16987
47.00	336	80.00	167	118.00	72	177.00	1173
48.00	222	81.00	480	119.00	73	178.00	52
49.00	1197	82.00	163	123.00	21	184.00	18
50.00	5306	83.00	16	124.00	21	188.00	22
51.00	1518	85.00	19	125.00	40	189.00	23
53.00	56	86.00	86	126.00	24	190.00	19
54.00	52	87.00	891	128.00	60	193.00	19
55.00	153	88.00	758	129.00	48	194.00	43
56.00	348	89.00	23	130.00	81	207.00	24
57.00	761	91.00	69	131.00	75	211.00	36
58.00	28	92.00	517	132.00	22	224.00	18
60.00	292	93.00	806	134.00	23	226.00	23
61.00	1142	94.00	2239	137.00	22	230.00	20
62.00	1090	95.00	21038	140.00	18	235.00	27
63.00	605	96.00	1645	141.00	145	237.00	21
64.00	92	97.00	104	143.00	123	238.00	22
65.00	53	98.00	50	148.00	53	247.00	24
66.00	53	101.00	23	149.00	25	251.00	18
67.00	111	102.00	19	150.00	64		
68.00	2438	103.00	19	151.00	26		
69.00	2322	105.00	22	155.00	47		

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLJ0WS075  
 Lab File ID: C0172 BFB Injection Date: 11/18/94  
 Instrument ID: MSC.F BFB Injection Time: 11:00  
 GC Column: \_\_\_\_\_ ID: \_\_\_\_\_ (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	29.3
75	30.0 - 66.0% of mass 95	56.5
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.4
173	Less than 2.0% of mass 174	0.9 ( 1.2 ) 1
174	50.0 - 120.0% of mass 95	79.4
175	4.0 - 9.0 % of mass 174	5.7 ( 7.1 ) 1
176	93.0 - 101.0% of mass 174	78.7 ( 99.2 ) 1
177	5.0 - 9.0% of mass 176	6.1 ( 7.8 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VST050	VST050	C0173	11/18/94	11:32
02	CLJ0WS151	JN4742V	C0189	↓	21:18
03					
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

Data File: /chem/aux/msc.i/c111894.b/c0172.d

Page 1

Date : 18-NOV-94 11:00

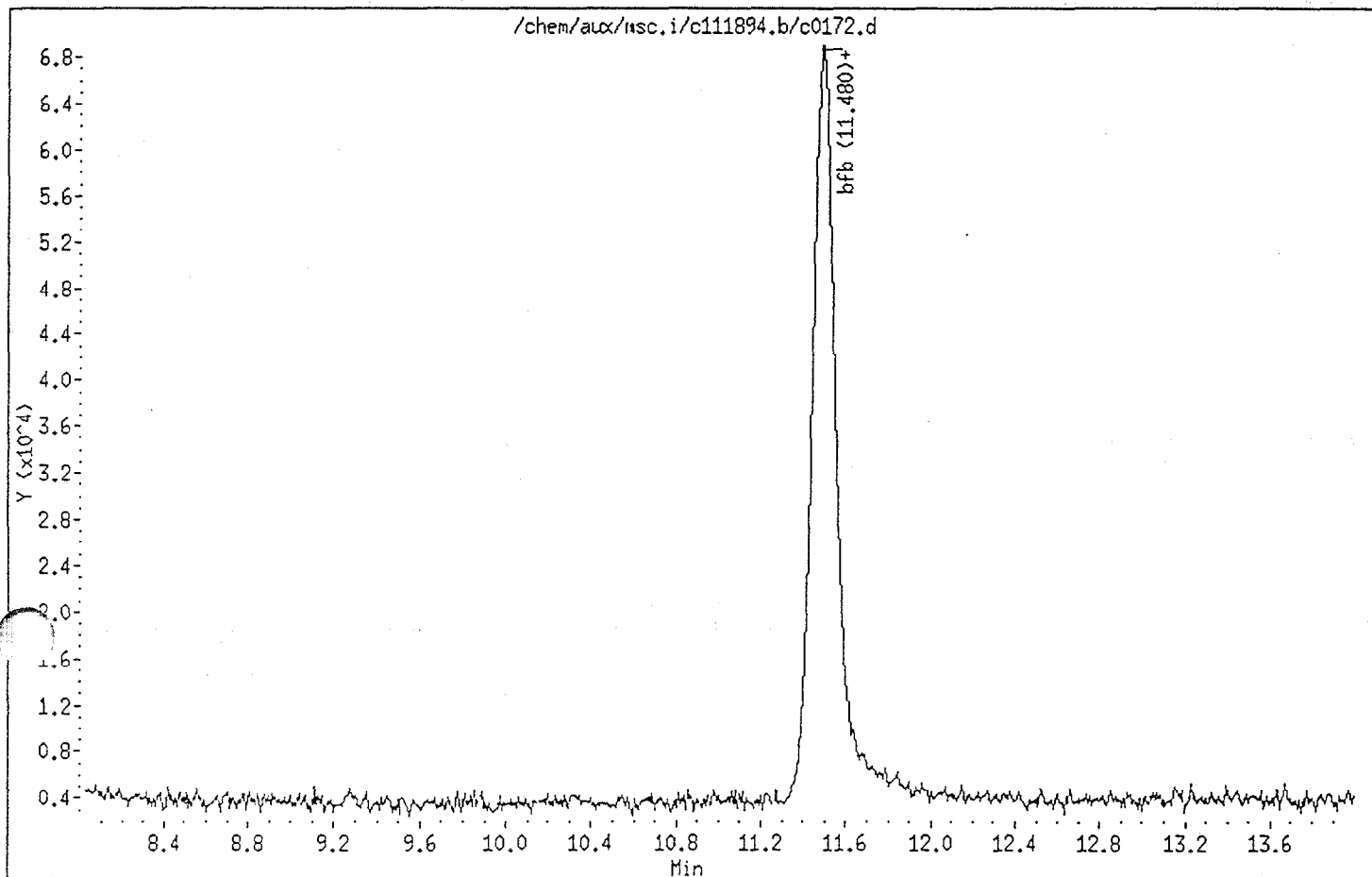
Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0





Data File: /chem/aux/msc.i/c111894.b/c0172.d

Page 2

Date : 18-NOV-94 11:00

Instrument : msc.i

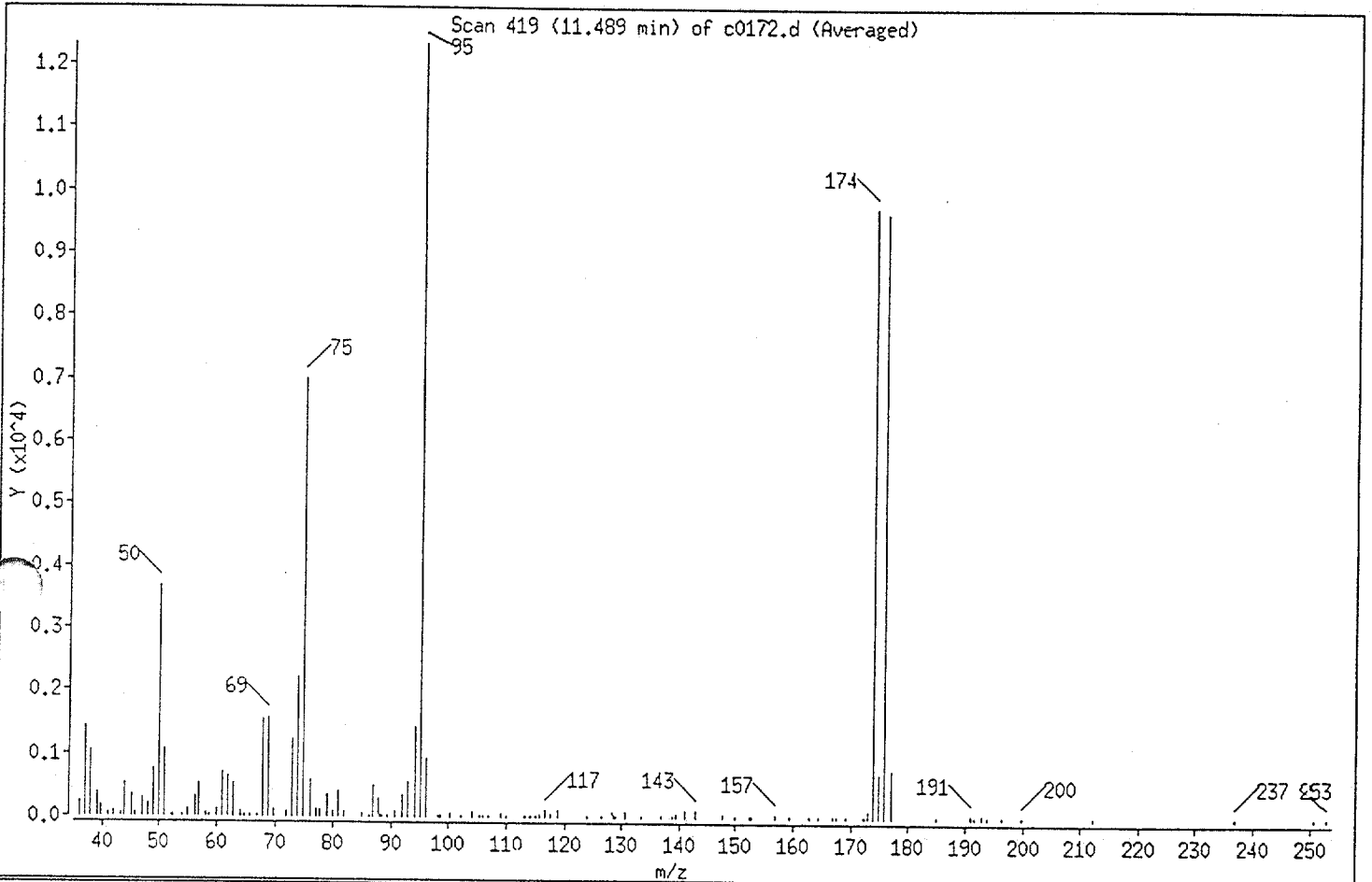
Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.0
50	8.00 - 40.00% of mass 95	29.3
75	30.00 - 66.00% of mass 95	56.5
96	5.00 - 9.00% of mass 95	6.4
173	Less than 2.00% of mass 174	1.2
174	50.00 - 120.00% of mass 95	79.4
175	4.00 - 9.00% of mass 174	7.1
176	93.00 - 101.00% of mass 174	99.2
177	5.00 - 9.00% of mass 176	7.8

Data File: /chem/aux/msc.i/c111894.b/c0172.d

Page 3

Date : 18-NOV-94 11:00

Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0

Spectrum: Scans 419-421 (11.489 min), Subtraction Scan 400  
 Location of Maximum: 95.00  
 Number of points: 101

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	149	70.00	128	104.00	100	157.00	71
37.00	1336	72.00	20	105.00	16	159.00	19
38.00	945	73.00	1031	106.00	28	163.00	19
39.00	390	74.00	2226	107.00	27	167.00	29
44.00	201	75.00	6926	109.00	44	168.00	17
45.00	335	76.00	500	110.00	38	169.00	21
46.00	54	77.00	123	113.00	20	172.00	23
47.00	280	78.00	109	114.00	21	173.00	113
48.00	133	79.00	351	115.00	19	174.00	9730
49.00	750	80.00	14	116.00	53	175.00	695
50.00	3596	81.00	397	117.00	108	176.00	9651
51.00	984	82.00	92	118.00	45	177.00	754
53.00	23	86.00	26	119.00	102	185.00	19
55.00	121	87.00	494	124.00	25	191.00	51
56.00	316	88.00	283	127.00	26	192.00	17
57.00	388	89.00	43	128.00	73	193.00	49
58.00	58	90.00	21	129.00	25	194.00	21
60.00	127	91.00	77	131.00	80	196.00	26
61.00	708	92.00	359	134.00	21	200.00	22
62.00	644	93.00	477	137.00	18	212.00	16
63.00	472	94.00	1418	139.00	19	237.00	22
64.00	91	95.00	12261	141.00	110	251.00	21
65.00	19	96.00	789	143.00	115	253.00	23
66.00	20	99.00	29	148.00	67		
68.00	1493	100.00	52	152.00	23		
69.00	1428	102.00	21	153.00	21		

5A  
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK  
BROMOFLUOROBENZENE (BFB)

Lab Name: ASC Contract: NEESA  
 Lab Code: N/A Case No.: 15226N SAS No.: N/A SDG No.: CLTDWS075  
 Lab File ID: C0194 BFB Injection Date: 11/19/94  
 Instrument ID: MSC.E BFB Injection Time: 14:48  
 GC Column: DB-624 ID: 153 (mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	25.7
75	30.0 - 66.0% of mass 95	53.1
95	Base peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	1.0 ( 1.2 ) 1
174	50.0 - 120.0% of mass 95	79.9
175	4.0 - 9.0 % of mass 174	5.4 ( 6.7 ) 1
176	93.0 - 101.0% of mass 174	77.6 ( 97.0 ) 1
177	5.0 - 9.0% of mass 176	6.3 ( 8.2 ) 2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD50	VSTD50	C0195	11/19/94	16:20
02	VBLK01	VBLK01	C0196		16:53
03	CLTDWS075	JN4743V	C0197		17:25
04	VSPK01	VSPK01	C0198		17:58
05	CLTDWS075MS	JN4743VS	C0199		18:31
06	CLTDWS075MSD	JN4743VR	C0200		↓
07	CLTDWS151D2	JN4742V	C0206	11/19/94	21:50
08	VBLK01	VBLK01	C0208		23:02
09	VSPK01	VSPK01	C0209		↓
10	RB-01A/DMS	JN5027V6	C0212	11/20/94	0113
11	RB-01A/DMSD	JN5027VR	C0213		0218 0145
12	CLTDWS102	JN4741V	C0214		11/20/94 0218
13	FR01A/B	JN5046V	C0210		0008
14	RB-01A/B	JN5027V	C0211		↓
15					
16					
17					
18					
19					
20					
21					
22					

Data File: /chem/aux/msc.i/c111994.b/c0194.d

Page 1

Date : 19-NOV-94 14:48

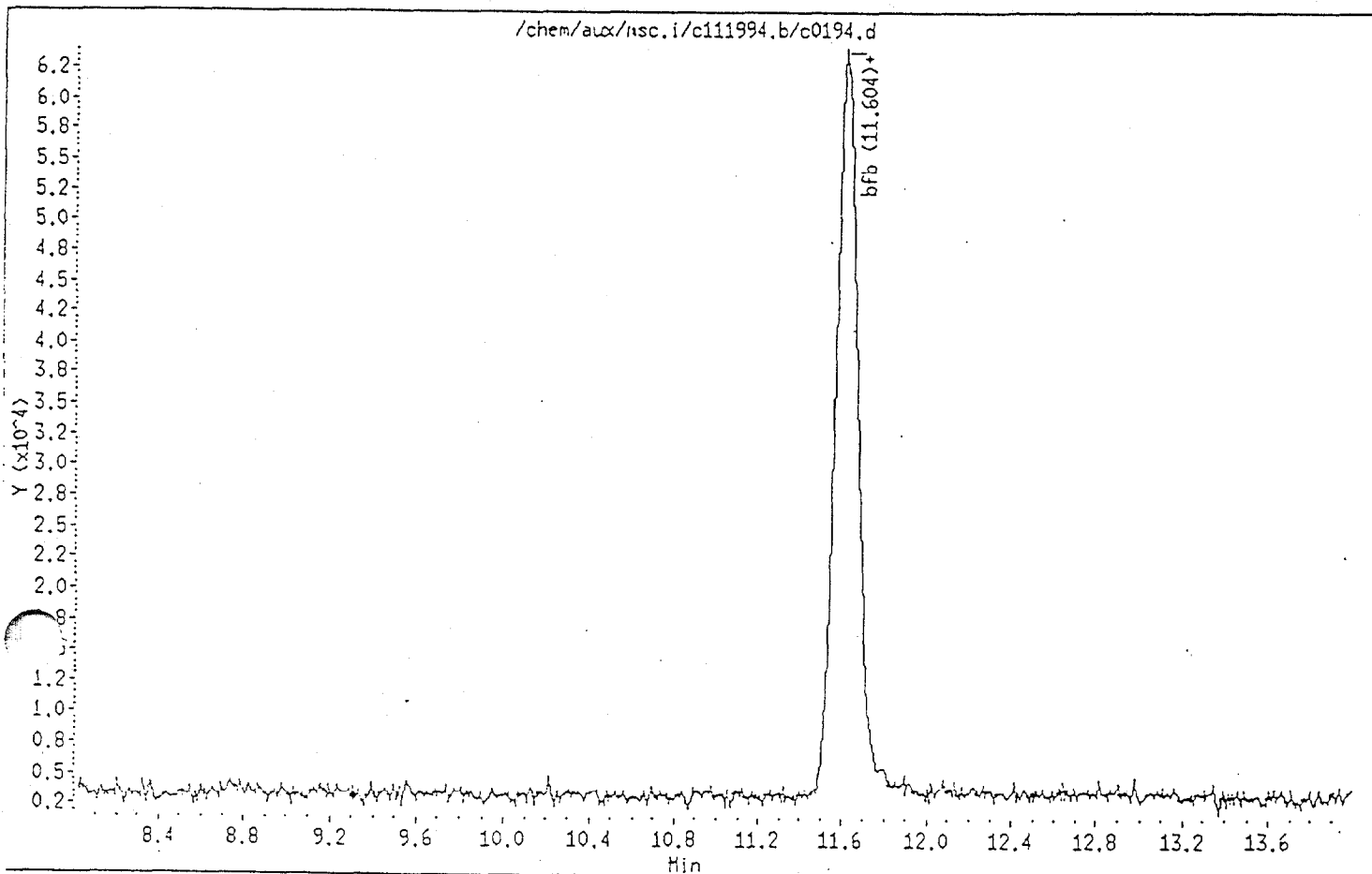
Instrument : msc.i

Sample ID :

Column phase :

Column diameter : 2.00

Volume Injected (uL) : 0.0



Data File: /chem/aux/msc.i/c111994.b/c0194.d

Page 2

Date: 19-NOV-94 14:48

Instrument: msc.i

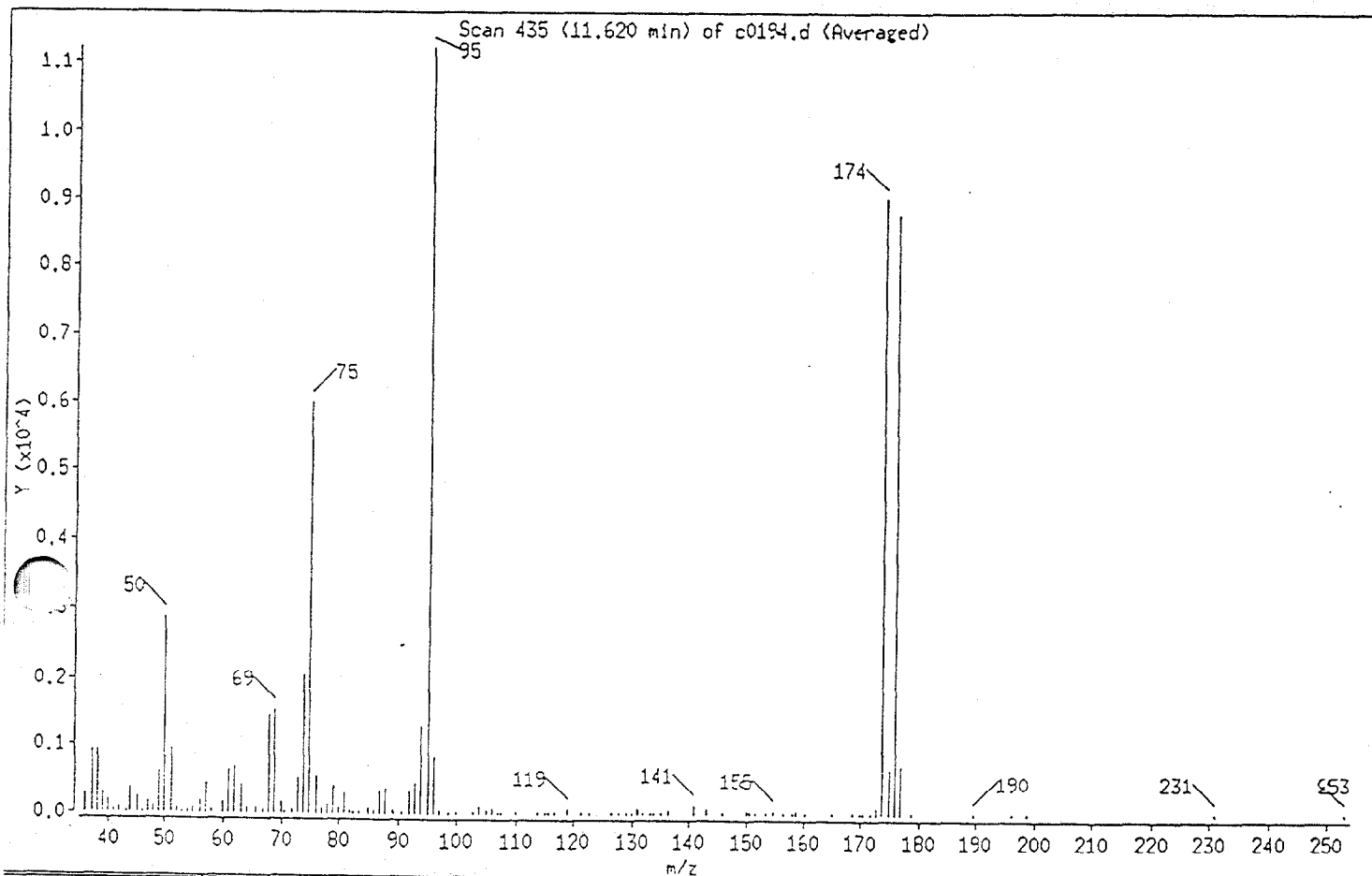
Sample ID:

Column phase:

Column diameter: 2.00

Volume Injected (uL): 0.0

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.0
50	8.00 - 40.00% of mass 95	25.7
75	30.00 - 66.00% of mass 95	53.1
96	5.00 - 9.00% of mass 95	7.6
173	Less than 2.00% of mass 174	1.2
174	50.00 - 120.00% of mass 95	79.9
175	4.00 - 9.00% of mass 174	6.7
176	93.00 - 101.00% of mass 174	97.0
177	5.00 - 9.00% of mass 176	8.2

Data File: /chem/aux/msc.1/c111994.b/c0194.d

Page 3

Date: 19-NOV-94 14:48

Instrument: msc.i

Sample ID:

Column phase:

Column diameter: 2.00

Volume Injected (uL): 0.0

Spectrum: Scans 435-437 (11.620 min), Subtraction Scan 415  
 Location of Maximum: 95.00  
 Number of points: 96

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	151	69.00	1439	100.00	18	152.00	24
37.00	933	70.00	165	103.00	16	154.00	21
38.00	862	73.00	534	104.00	55	158.00	24
39.00	299	74.00	2030	105.00	55	159.00	58
40.00	67	75.00	5930	106.00	88	161.00	21
45.00	147	76.00	426	107.00	17	165.00	18
47.00	52	77.00	70	115.00	34	169.00	19
48.00	104	78.00	125	116.00	25	170.00	21
49.00	603	79.00	393	119.00	82	171.00	20
50.00	2864	80.00	67	121.00	26	172.00	17
51.00	881	81.00	290	122.00	22	173.00	107
52.00	74	82.00	52	123.00	34	174.00	8925
53.00	17	83.00	19	127.00	19	175.00	601
54.00	57	84.00	17	128.00	16	176.00	8660
55.00	75	87.00	244	129.00	22	177.00	706
56.00	195	88.00	383	131.00	77	179.00	20
57.00	310	89.00	48	133.00	25	190.00	21
58.00	41	90.00	31	134.00	21	197.00	21
60.00	168	91.00	29	135.00	16	199.00	16
61.00	645	92.00	324	137.00	45	231.00	18
62.00	678	93.00	445	141.00	121	253.00	18
63.00	413	94.00	1308	143.00	88		
64.00	24	95.00	11164	146.00	35		
66.00	69	96.00	848	150.00	50		
68.00	1459	97.00	57	151.00	41		