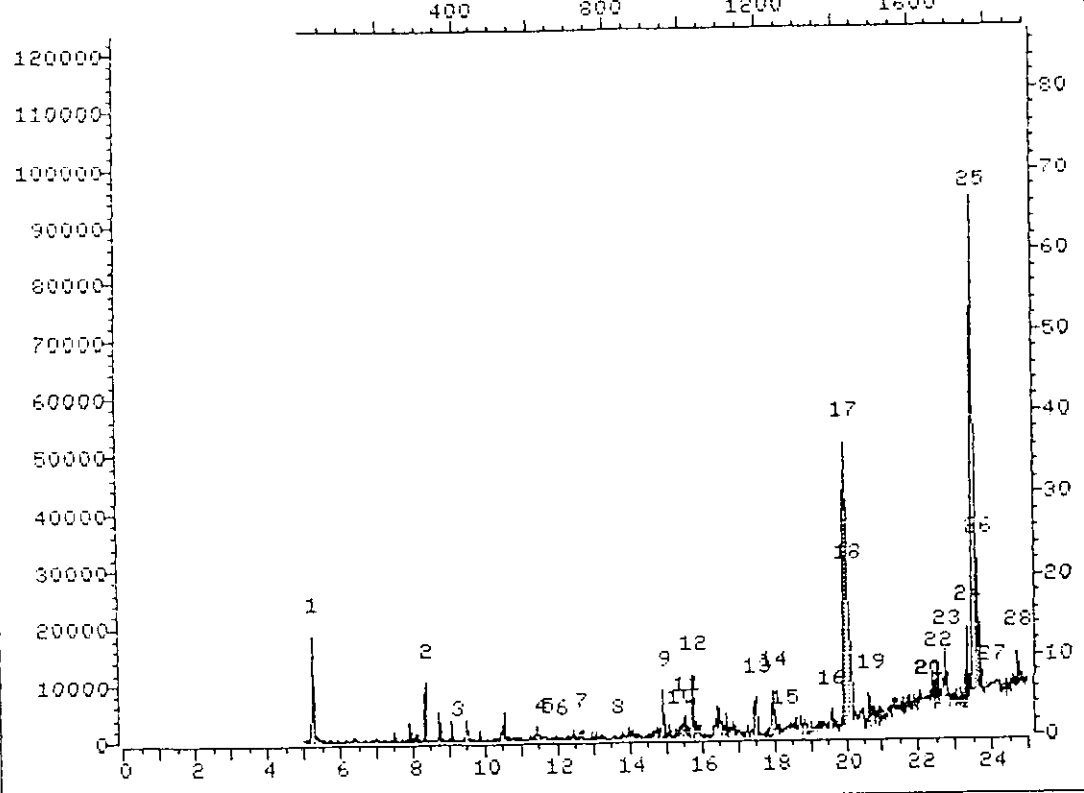


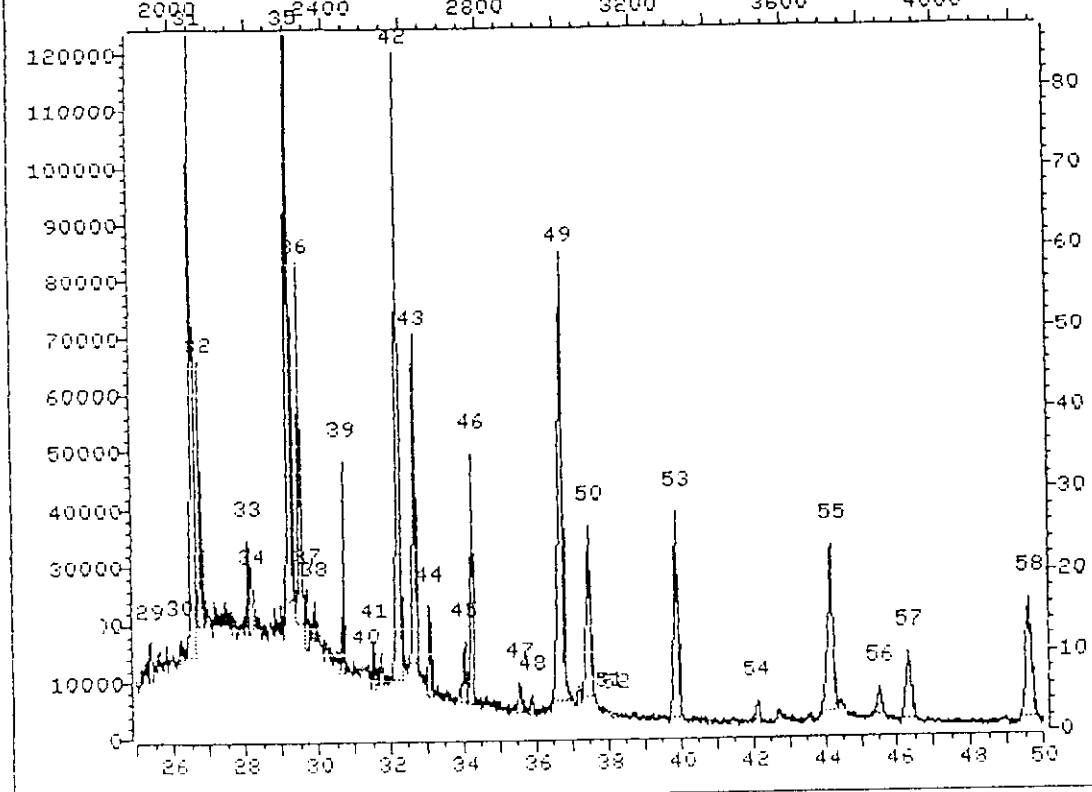
Date: 02/16/93 18:15 Inst: I

File >I3287 9999.0-354.0 amu Q148;;;HW-43 0148011 HP59711;021  
CLP TIC



0400

File >I3287 9999.0-354.0 amu Q148;;;HW-43 0148011 HP59711;021  
CLP TIC



Date: 02/16/93 18:15 Inst: I

MW-43  
HP5971I

T I C P E A K R E P O R T

PK#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
49.	36.74	712521.	59.	6.	.51	
42.	32.24	790211.	58.	5.	.51	0401
31.	26.56	551583.	45.	4.	.51	
35.	29.25	582923.	43.	5.	.51	
25.	23.51	330072.	27.	4.	.51	
55.	44.18	320544.	27.	6.	.51	
53.	39.89	237293.	20.	6.	.51	
43.	32.66	276415.	20.	5.	.51	
58.	49.61	234161.	20.	6.	.51	
50.	37.47	213064.	18.	6.	.51	
36.	29.49	230608.	17.	5.	.51	
46.	34.21	186082.	14.	5.	.51	
17.	19.94	140078.	13.	3.	.51	
51.	37.98	129673.	11.	6.	.51	
32.	26.74	128939.	11.	4.	.51	
57.	46.32	105441.	9.	6.	.51	
39.	30.66	117283.	9.	5.	.51	
1.	5.21	41495.	6.	1.	.51	
44.	33.06	63069.	5.	5.	.51	
2.	8.30	22975.	4.	1.	.51	
24.	23.29	47552.	4.	4.	.51	
9.	14.92	32574.	4.	2.	.51	
.	23.63	49123.	4.	4.	.51	
13.	17.46	26158.	3.	2.	.51	
33.	28.06	39607.	3.	5.	.51	
14.	17.93	30832.	3.	3.	.51	
45.	34.02	44786.	3.	5.	.51	
12.	15.73	24953.	3.	2.	.51	
23.	22.73	34012.	3.	4.	.51	
47.	35.54	28204.	2.	6.	.51	
41.	31.52	31402.	2.	5.	.51	
37.	29.70	31748.	2.	5.	.51	
11.	15.53	17367.	2.	2.	.51	

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range	TI/SI
1,4-DICHLOROBENZENE-D4	12.12	131205.	0.00 13.75	5.6
NAPHTHALENE-D8	15.38	170518.	13.75 17.71	2.0
ACENAPHTHENE-D10	20.05	216492.	17.71 22.00	4.4
PHENANTHRENE-D10	23.95	250076.	22.00 27.61	2.7
CHRYSENE-D12	31.28	278511.	27.61 34.73	3.4
PERYLENE-D12	38.17	244466.	34.73 49.61	2.9

ISTD peaks found: 6  
 Surrogate peaks found: 8  
 Joint target peaks expected: 5  
 Target peaks matched: 0  
 Total TIC identified: 33

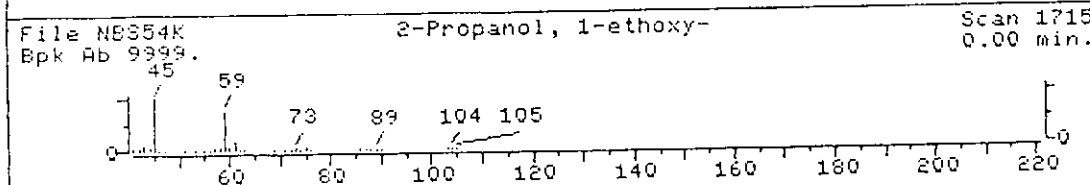
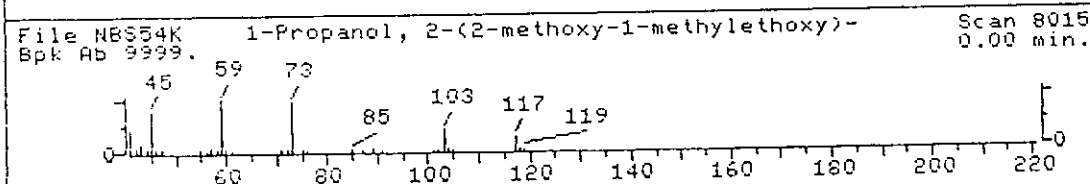
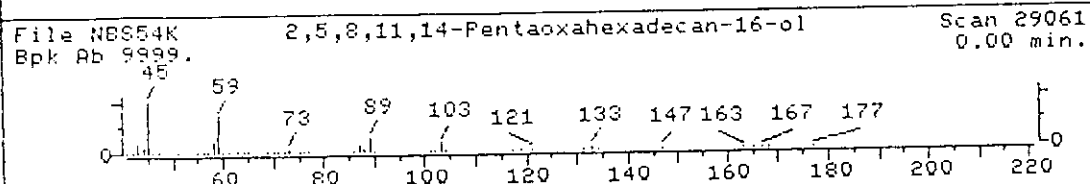
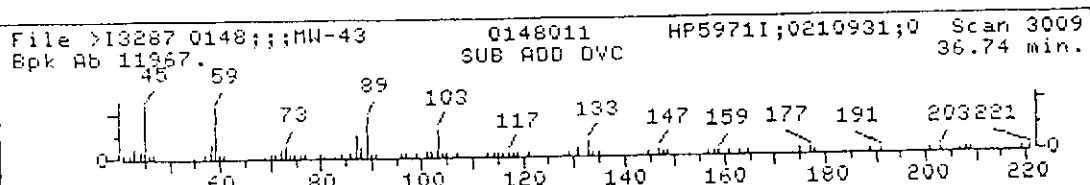
- 2,5,8,11,14-Pentaoxahexadecan-16-ol
- 1-Propanol, 2-(2-methoxy-1-methylethoxy)-
- 3. 2-Propanol, 1-ethoxy-
- 4. Ethanol, 2-[(2-methoxyethoxy)ethoxy]-
- 5. Silane, ethyldimethyl-

252 C11H24O6  
 148 C7H16O3  
 104 C5H12O2  
 164 C7H16O4  
 88 C4H12O402

Sample file: >I3287 Spectrum #: 3009  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	29	23778521	8670	NBS54K	43	86	0	0	100	38	10	15
2.	25	55956213	1970	NBS54K	55	48	2	0	95	46	7	12
3.	20*	1569024	1853	NBS54K	34	60	1	0	90	55	5	18
4.	20	112356	8547	NBS54K	33	66	0	0	82	52	5	15
5.	11*	758214	1807	NBS54K	43	55	2	0	65	61	2	18

Peak#: 49 Area: 712521. Est Conc: 59. Date: 02/16/93 18:15 Inst: I



- 2,5,8,11,14-Pentaoxahexadecan-16-ol
- 2. Ethanol, 2-[(2-methoxyethoxy)ethoxy]-
- 3. 2-Propanol, 1-ethoxy-
- 4. 2-Butanol, 3,3'-oxybis-
- 5. Silane, ethyldimethyl-

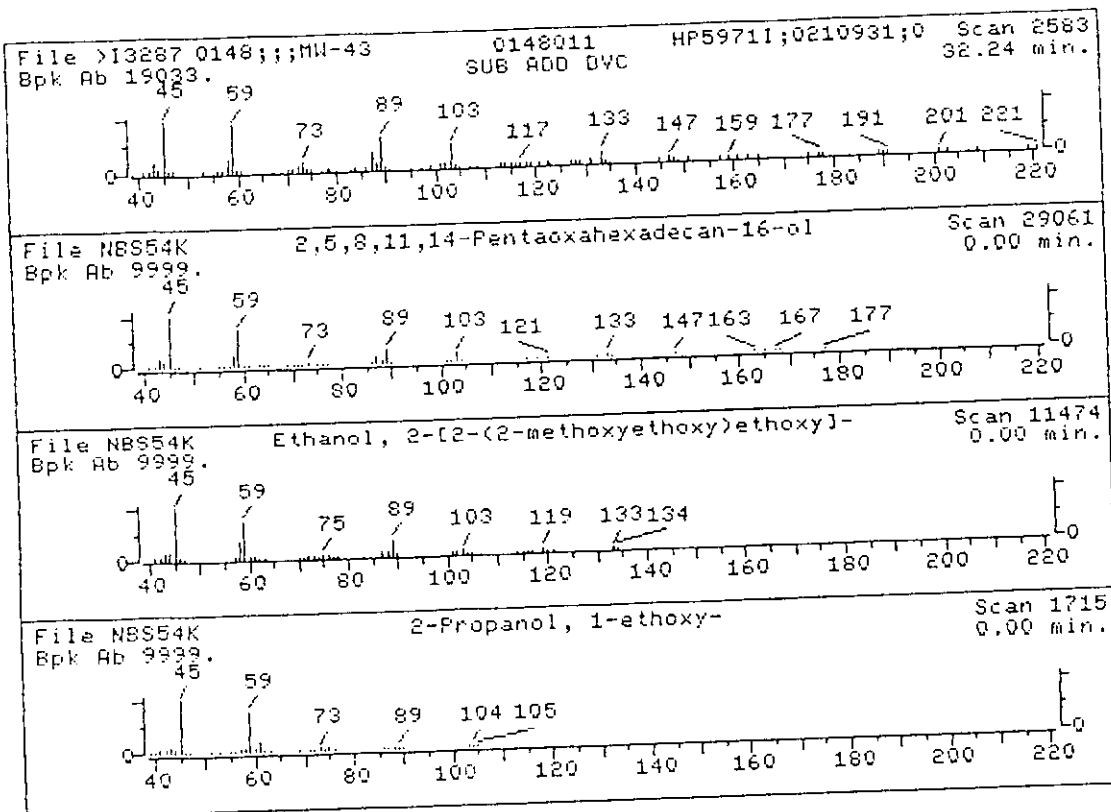
252 C11H24O6  
 164 C7H16O4  
 104 C5H12O2  
 162 C8H18O3  
 88 C4H12Si

0403

Sample file: >I3287 Spectrum #: 2583  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	38	23778521	8670	NBS54K	43	86	0	0	97	28	14	15
2.	28	112356	8547	NBS54K	39	60	0	0	80	43	8	16
3.	25*	1569024	1853	NBS54K	34	60	1	0	83	48	7	18
4.	20	54305612	2000	NBS54K	37	48	1	0	90	55	5	14
5.	20*	758214	1807	NBS54K	37	61	2	0	61	55	5	15

Peak#: 42 Area: 790211. Est Conc: 58. Date: 02/16/93 18:15 Inst: 1



- 2,5,8,11,14-Pentaoxahexadecan-16-ol
- Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-
- 3. 2,5,8,11,14,17-Hexaoxaoctadecane
- 4. 2-Propanol, 1-ethoxy-
- 5. Silane, ethyldimethyl-

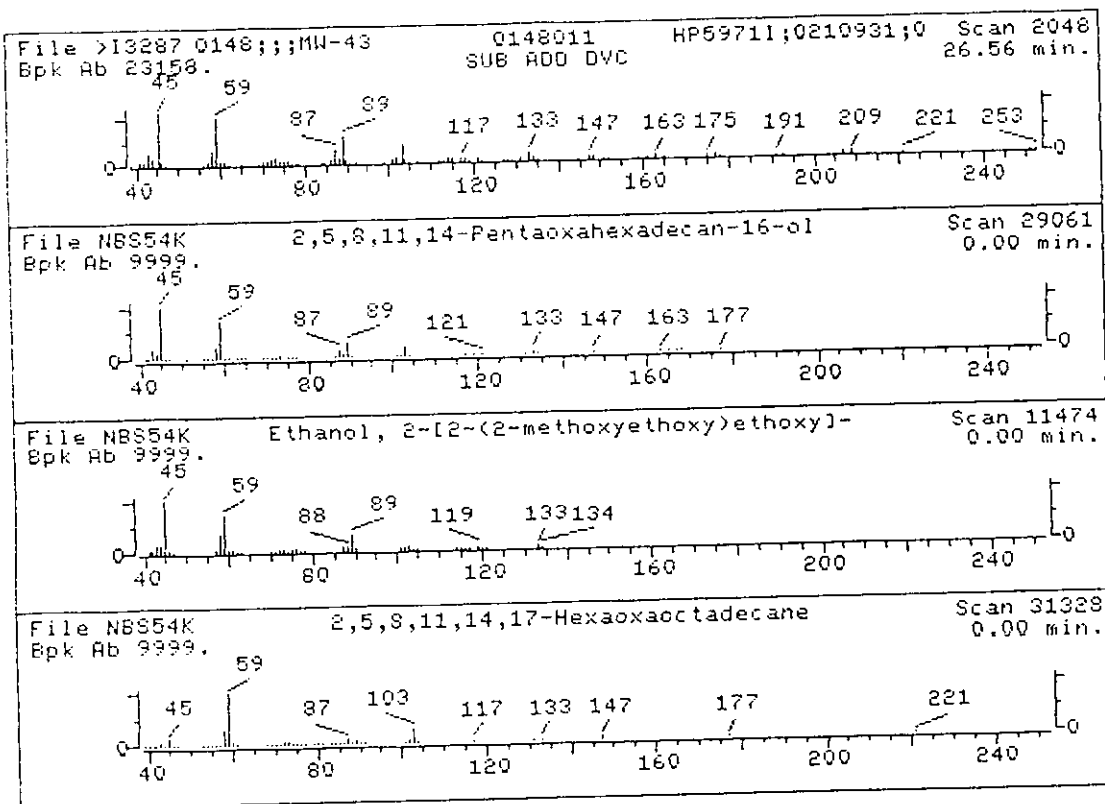
252 C11H24O6  
 164 C7H16O4  
 266 C12H26O6  
 104 C5H12O2  
 88 C4H12Si

0404

Sample file: >I3287 Spectrum #: 2048  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	70	23778521	8670	NBS54K	75	54	0	0	100	17	32	55
2.	43	112356	8547	NBS54K	49	50	1	0	85	22	17	14
3.	30	1191873	2071	NBS54K	51	65	0	0	86	49	10	22
4.	26*	1569024	1853	NBS54K	28	66	2	0	100	41	8	14
5.	25*	758214	1807	NBS54K	25	73	3	0	87	50	7	13

Peak#: 31 Area: 551583. Est Conc: 45. Date: 02/16/93 18:15 Inst: I



- 2,5,8,11,14-Pentaoxahexadecan-16-ol
- 1. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)-
- 3. 2-Propanol, 1-ethoxy-
- 4. 2,5,8,11,14,17-Hexaoxaoctadecane
- 5. 2-Butanol, 3,3'-oxybis-

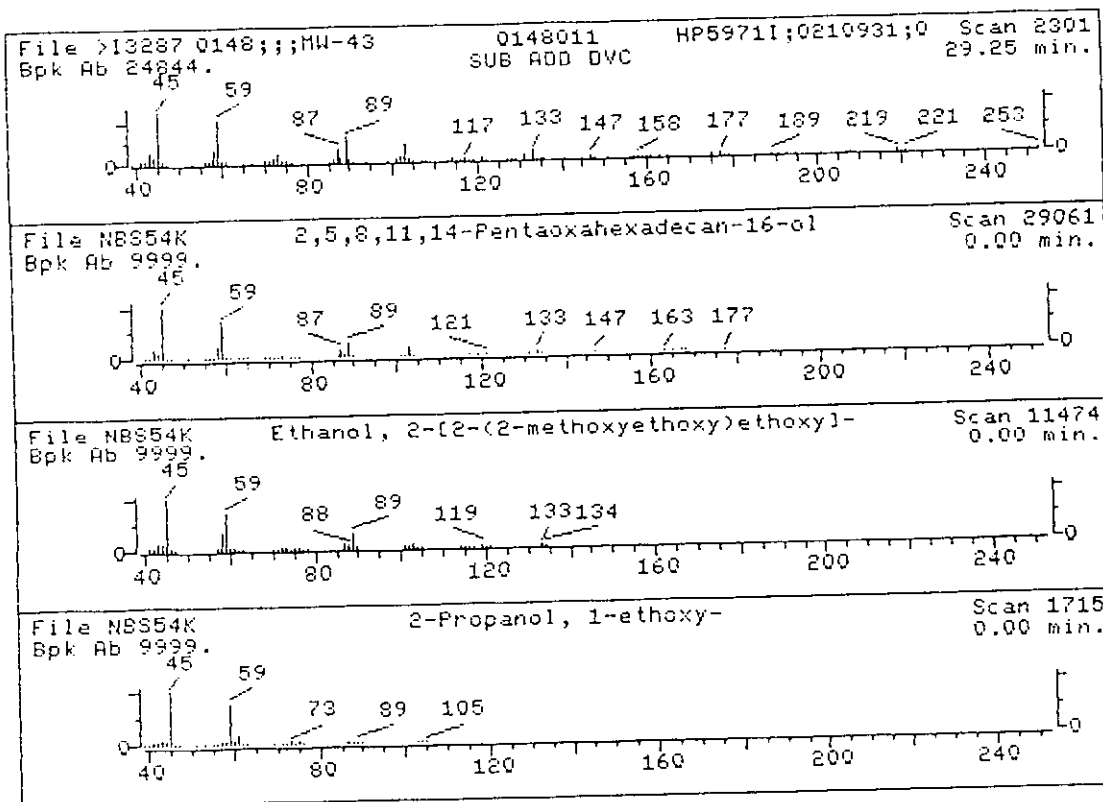
- 252 C11H24O6
- 164 C7H16O4
- 104 C5H12O2
- 266 C12H26O6
- 162 C8H18O3

0405

Sample file: >I3287 Spectrum #: 2301  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	66	23778521	8670	NBS54K	70	59	0	0	100	16	31	46
2.	30	112356	8547	NBS54K	39	60	0	0	74	38	10	16
3.	28*	1569024	1853	NBS54K	24	70	2	0	100	40	10	14
4.	25	1191873	2071	NBS54K	37	79	0	0	71	49	7	15
5.	15	54305612	2000	NBS54K	33	52	0	0	61	56	3	17

Peak#: 35 Area: 582923. Est Conc: 43. Date: 02/16/93 18:15 Inst: I



- . 2,5,8,11,14-Pentaoxahexadecan-16-ol
- . Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)]-
- 3. Propane, 1,2,3-trimethoxy-
- 4. 2-Propanol, 1-ethoxy-
- 5. 2,5,8,11,14,17-Hexaoxaoctadecane

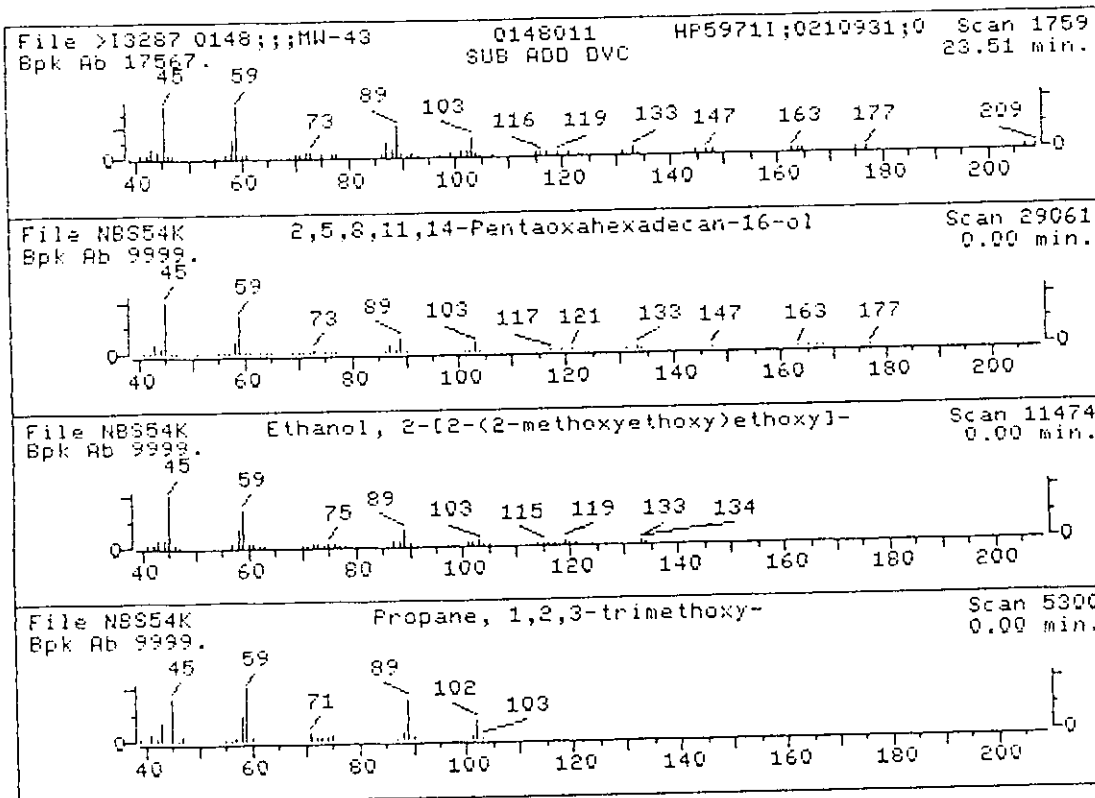
252 C11H24O6  
 164 C7H16O4  
 134 C6H14O3  
 104 C5H12O2  
 266 C12H26O6

0406

Sample file: >I3287      Spectrum #:      1759  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      43

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IU	
1.	71	23778521	8670	NBS54K	63	66	0	0	100	15	38	31
2.	64	112356	8547	NBS54K	66	33	0	0	100	22	28	43
3.	29	20637494	8497	NBS54K	61	51	2	0	71	32	12	12
4.	26*	1569024	1853	NBS54K	28	66	2	0	100	41	8	14
5.	25	1191873	2071	NBS54K	57	59	1	0	98	49	7	15

Peak#: 25 Area: 330072. Est Conc:      27. Date: 02/16/93 18:15 Inst: 1

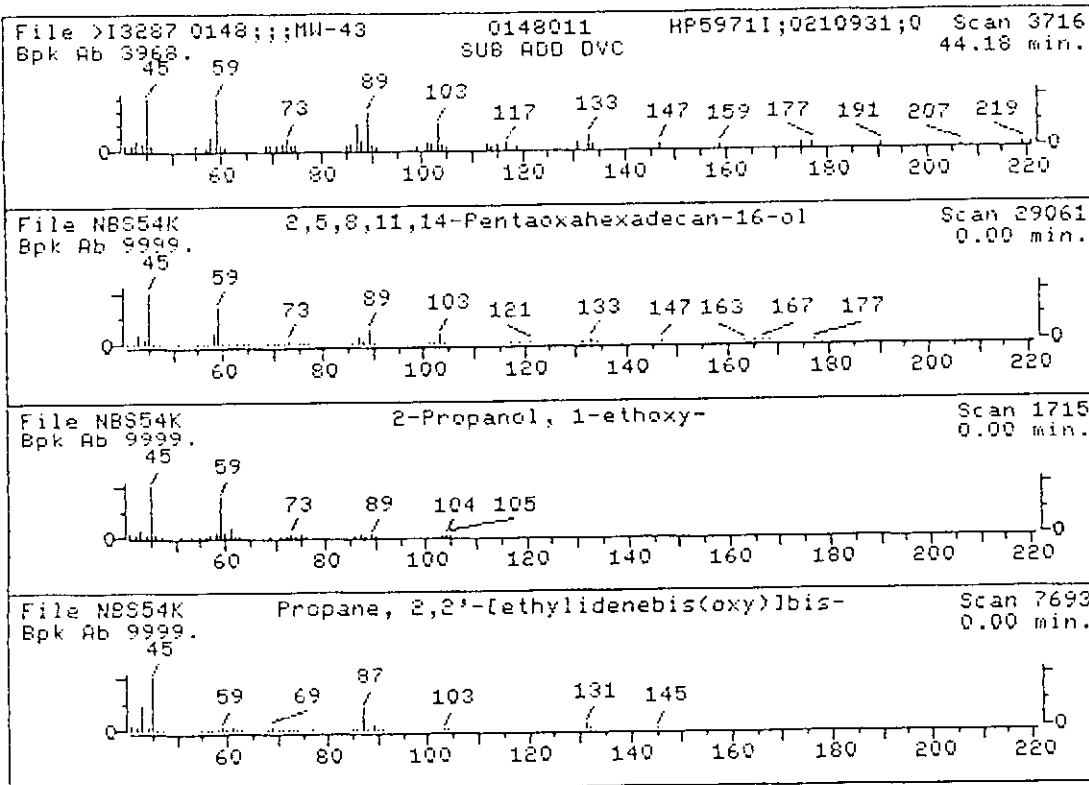


2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H24O6
2-Propanol, 1-ethoxy-	104	C5H12O2
3. Propane, 2,2'-[ethylidenebis(oxy)]bis-	146	C8H18O2
4. 1-Propanol, 2-(2-hydroxypropoxy)-	134	C6H14O3
5. Hydrazine, (1-methylpropyl)-	88	C4H12N2

Sample file: >I3287      Spectrum #:      3716  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	32	23778521	8670	NBS54K	32	97	0	0	100	35	12	15
2.	25*	1569024	1853	NBS54K	28	66	1	0	100	50	7	15
3.	15	4285590	7723	NBS54K	34	56	1	0	93	57	3	12
4.	11	106627	1939	NBS54K	28	58	0	0	99	62	2	14
5.	11*	30924142	8034	NBS54K	23	79	2	0	88	64	2	13

Peak#: 55 Area: 320544. Est Conc:      27. Date: 02/16/93 18:15 Inst: I



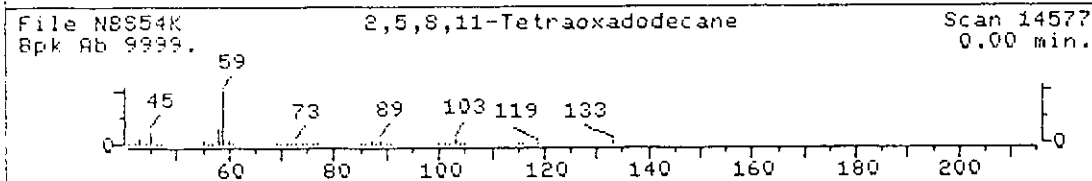
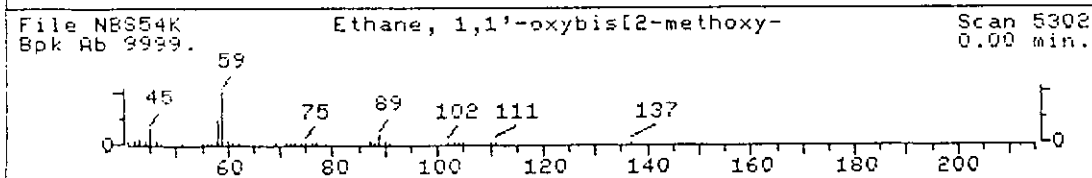
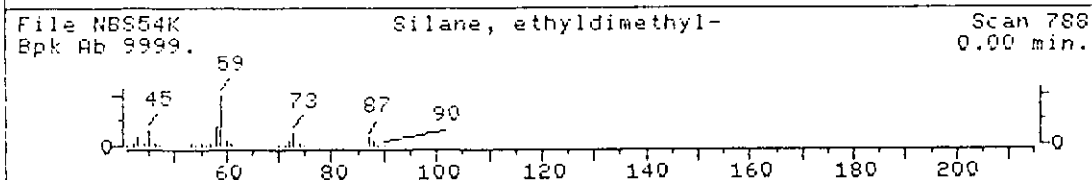
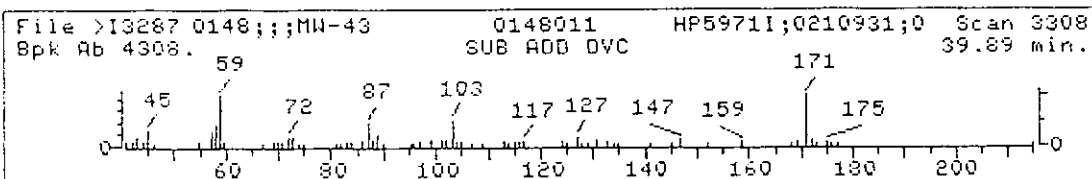


1. Silane, ethyldimethyl-	88 C4H12Si
2. Ethane, 1,1'-oxybis[2-methoxy-	134 C6H14O3
3. 2,5,8,11-Tetraoxadodecane	178 C8H18O4
4. 2,5,8,11,14-Pentaoxapentadecane	222 C10H22O5
5. 4-Hydroxy-3-hexanone	116 C6H12O2

Sample file: >13287      Spectrum #: 3308  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	18*	758214	1807	NBS54K	48	50	1	0	77	56	4	29
2.	18	111966	1938	NBS54K	43	47	0	0	95	56	4	24
3.	15	112492	2024	NBS54K	35	63	0	0	100	59	3	15
4.	15	143248	2057	NBS54K	26	84	0	0	100	56	3	13
5.	11*	4984854	1869	NBS54K	32	56	1	0	100	62	2	17

Peak#: 53 Area: 237293. Est Conc: 20. Date: 02/16/93 18:15 Inst: I



- 1. 2-Butanone, 3-hydroxy-
- 2. Propane, 1-methoxy-2-methyl-
- 3. Propane, 2-methyl-1-propoxy-
- 4. 1,3-Butanediol
- 5. 2,3-Butanediol

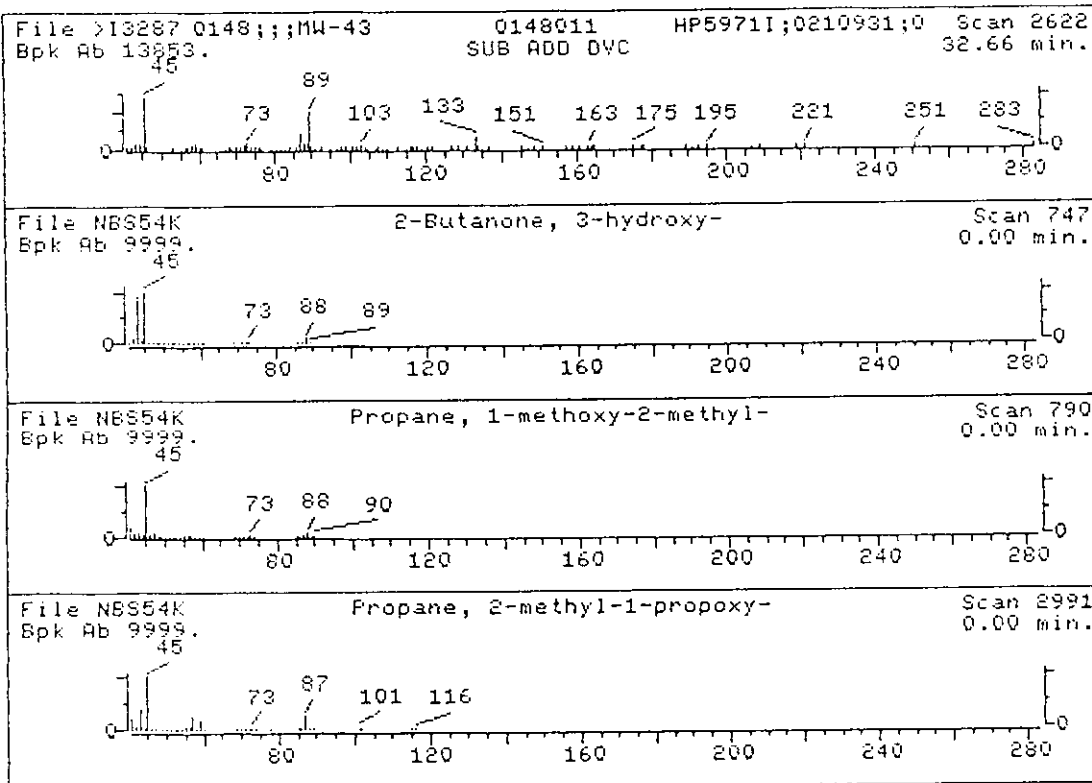
88 C4H8O2  
 88 C5H12O  
 116 C7H16O  
 90 C4H10O2  
 90 C4H10O2

0409

Sample file: >I3287      Spectrum #:      2622  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      45

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	513860	346	NBS54K	29	56	2	0	100	50	7 14
2.	25*	625445	348	NBS54K	27	55	2	0	100	50	7 14
3.	24*	15268492	7618	NBS54K	22	64	3	0	100	43	8 12
4.	15*	107880	351	NBS54K	30	45	2	0	100	56	3 15
5.	15*	513859	350	NBS54K	21	60	2	0	100	56	3 13

Peak#: 43 Area: 276415. Est Conc:      20. Date: 02/16/93 18:15 Inst: I



0410

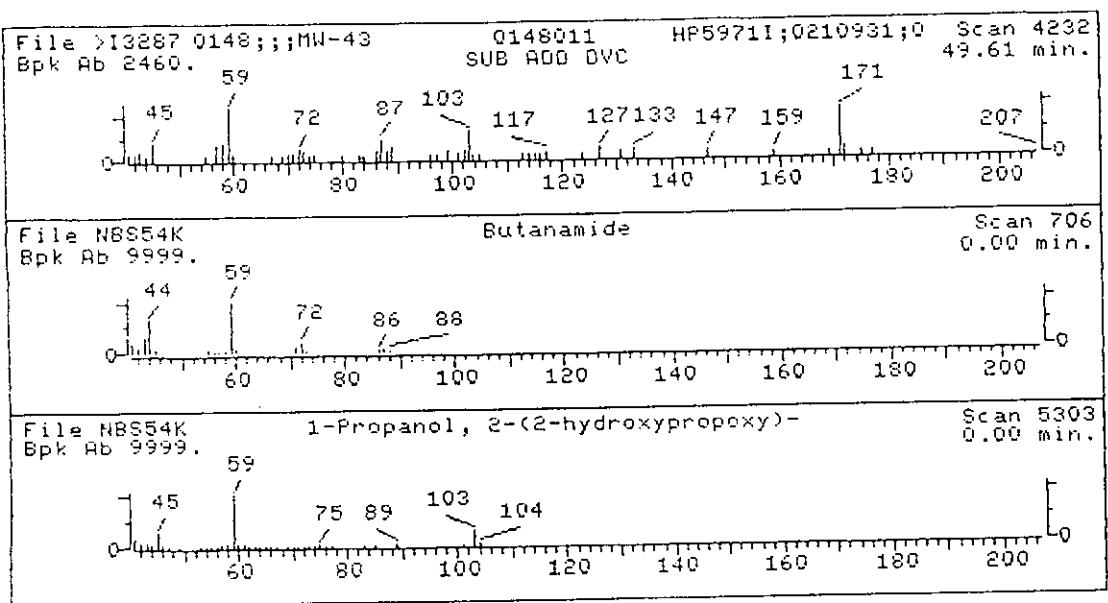
- 1. Butanamide
- 2. 1-Propanol, 2-(2-hydroxypropoxy)-

87 C4H9NO  
134 C6H14O3

Sample file: >I3287      Spectrum #: 4232  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11*	541355	1804	NBS54K	32	55	2	0	100	64	2	16
2.	11	106627	1939	NBS54K	25	61	0	0	100	65	2	12

Peak#: 58 Area: 234161. Est Conc: 20. Date: 02/16/93 18:15 Inst: I



- Propane, 1-methoxy-2-methyl-
- . 2-Butanone, 3-hydroxy-
- 3. Propane, 2-methyl-1-propoxy-
- 4. Acetaldehyde, methoxy-
- 5. 1,3-Butanediol

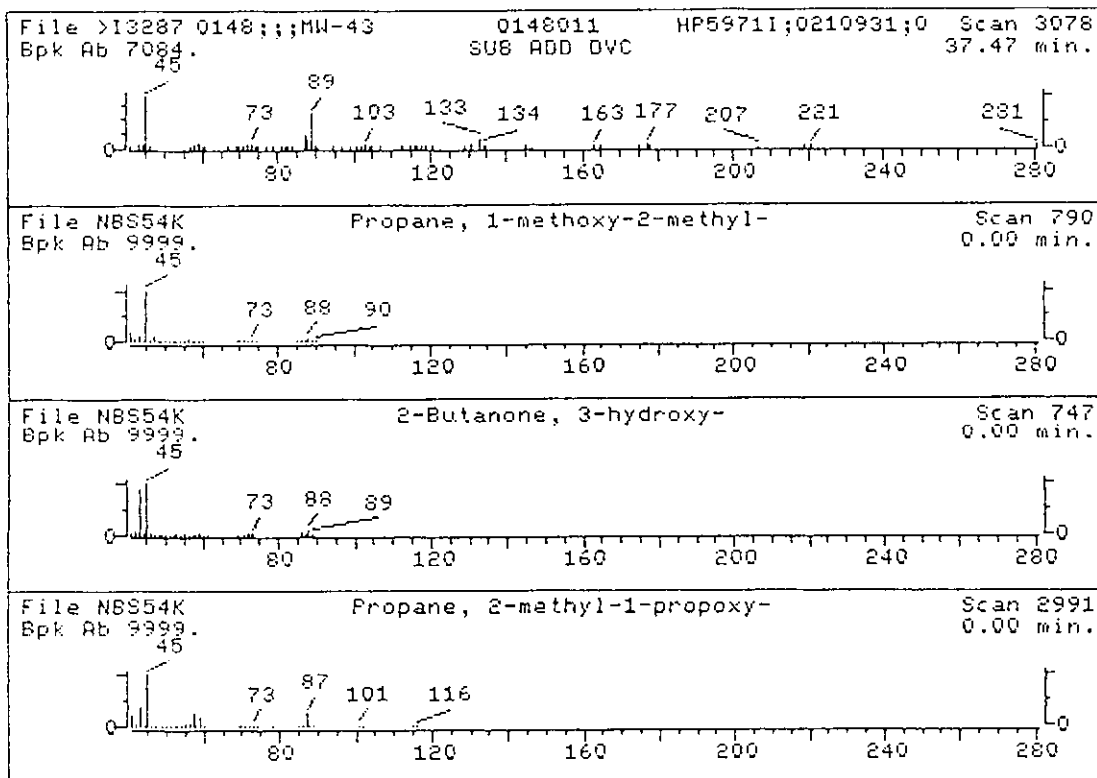
88 C5H12O  
 88 C4H8O2  
 116 C7H16O  
 74 C3H6O2  
 90 C4H10O2

0411

Sample file: >I3287      Spectrum #:      3078  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	26*	625445	348	NBS54K	27	55	2	0	100	44	8	14
2.	26*	513860	346	NBS54K	24	61	2	0	100	44	8	14
3.	26*	15268492	7618	NBS54K	22	64	3	0	100	37	10	12
4.	25*	10312831	339	NBS54K	24	28	2	0	100	50	7	14
5.	25*	107880	351	NBS54K	22	53	2	0	100	50	7	13

Peak#: 50 Area: 213064. Est Conc: 18. Date: 02/16/93 18:15 Inst: I



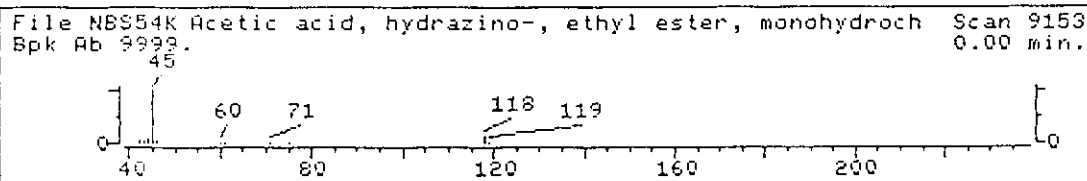
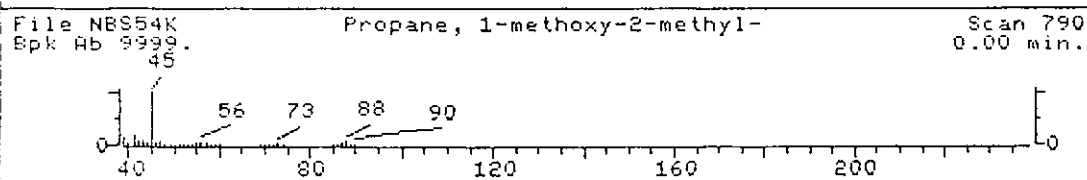
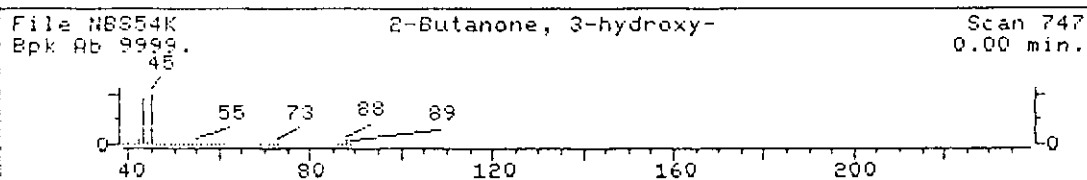
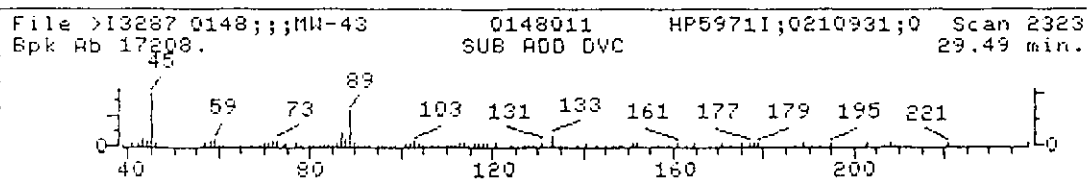
0 0412

- 2. Propane, 1-methoxy-2-methyl- 88 C5H12O
- Acetic acid, hydrazino-, ethyl ester, monohydrochloride 154 C4H11ClN2O2
- 4. 1,3-Butanediol 90 C4H10O2
- 5. Propanoic acid, 2-hydroxy-, methyl ester, (+-)- (9 CI) 104 C4H8O3

Sample file: >I3287 Spectrum #: 2323  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25*	513860	346	NBS54K	29	56	2	0	100	47	7	14
2.	25*	625445	348	NBS54K	21	61	2	0	100	47	7	13
3.	20	6945922	371	NBS54K	33	56	1	0	68	53	5	12
4.	20*	107880	351	NBS54K	24	51	2	0	100	53	5	14
5.	20*	2155308	153	NBS54K	21	57	1	0	74	52	5	14

Peak#: 36 Area: 230608. Est Conc: 17. Date: 02/16/93 18:15 Inst: I



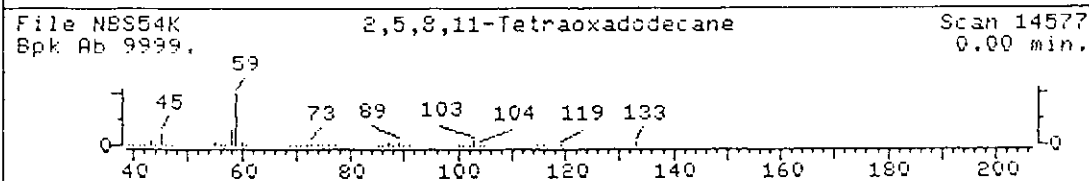
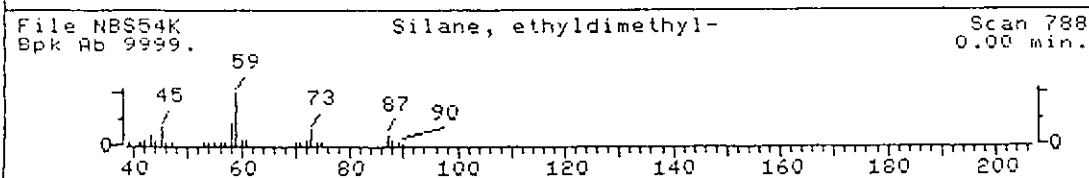
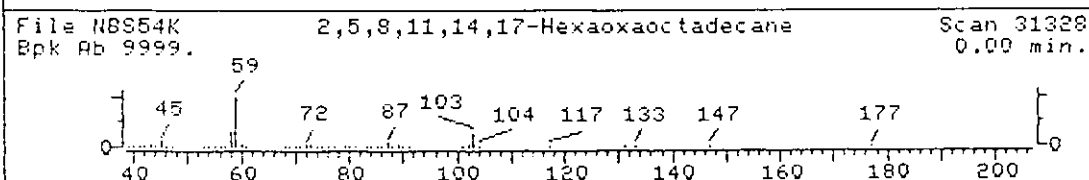
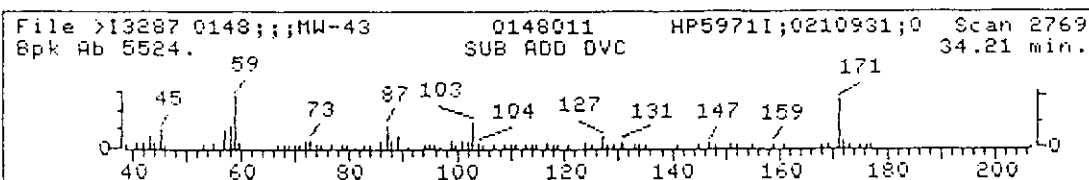
0 0413

2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6
2. Silane, ethyldimethyl-	88	C4H12Si
3. 2,5,8,11-Tetraoxadodecane	178	C8H18O4
4. 2,5,8,11,14-Pentaoxapentadecane	222	C10H22O5
5. Ethane, 1,1'-oxybis[2-methoxy-	134	C6H14O3

Sample file: >I3287      Spectrum #:      2769  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20	1191873	2071	NBS54K	36	80	0	0	100	53	5	15
2.	15*	758214	1807	NBS54K	48	50	3	0	100	56	3	15
3.	15	112492	2024	NBS54K	40	58	0	0	100	59	3	17
4.	15	143248	2057	NBS54K	26	84	0	0	100	57	3	13
5.	11	111966	1938	NBS54K	43	47	1	0	96	61	2	15

Peak#: 46 Area: 186082. Est Conc: 14. Date: 02/16/93 18:15 Inst: 1



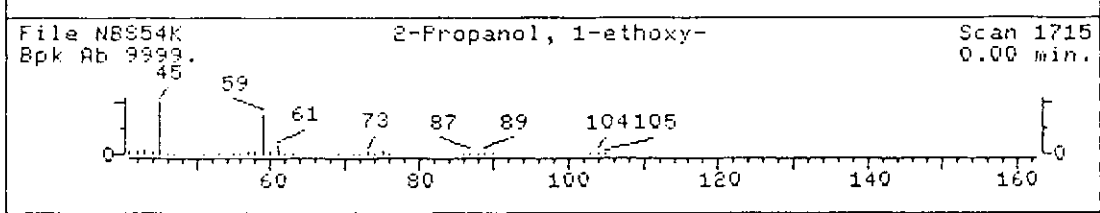
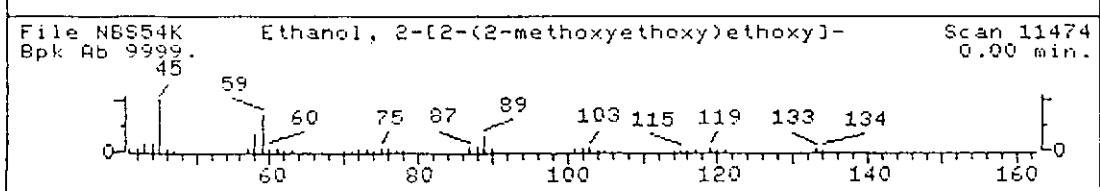
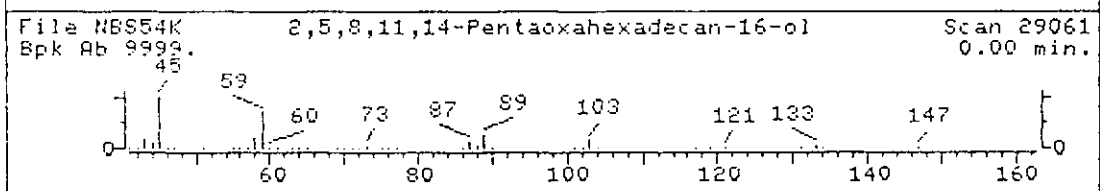
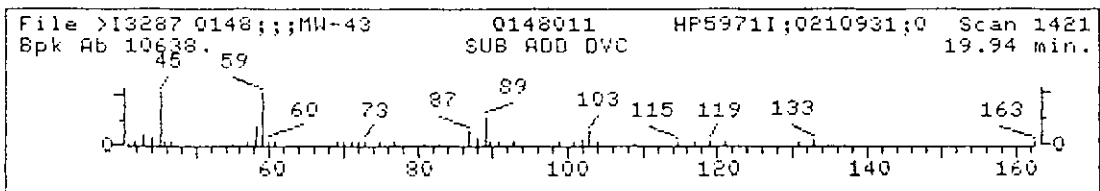
0414

- 2,5,8,11,14-Pentaoxahexadecan-16-ol 252 C11H24O6
- 1. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 C7H16O4
- 3. 2-Propanol, 1-ethoxy- 104 C5H12O2
- 4. Silane, ethyldimethyl- 88 C4H12Si
- 5. Ethane, 1,1'-oxybis[2-methoxy- 134 C6H14O3

Sample file: >I3287 Spectrum #: 1421  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	60	23778521	8670	NBS54K	65	64	2	0	100	12	30	14
2.	51	112356	8547	NBS54K	62	37	1	0	100	21	22	23
3.	31*	1569024	1853	NBS54K	39	55	1	0	100	41	12	22
4.	25*	758214	1807	NBS54K	45	53	2	0	88	50	7	19
5.	20	111966	1938	NBS54K	27	63	0	0	79	51	5	14

Peak#: 17 Area: 140078. Est Conc: 13. Date: 02/16/93 18:15 Inst: I



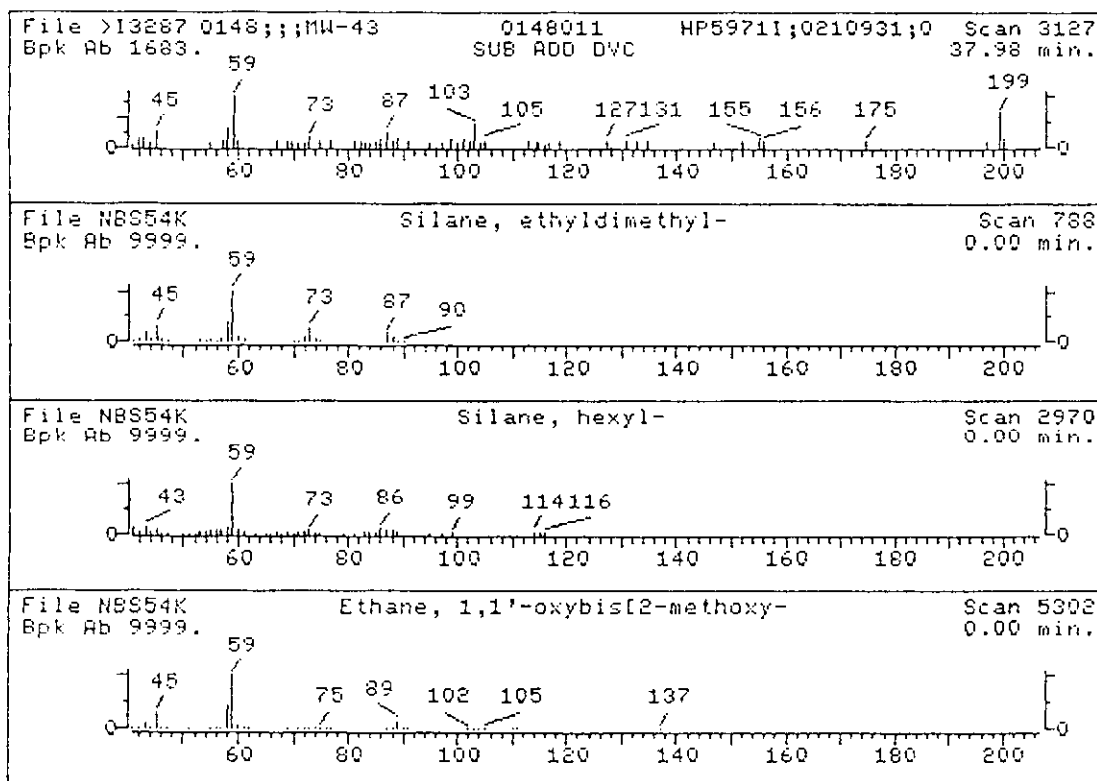
0. 0415

Silane, ethyldimethyl-	88	C4H12Si
1. Silane, hexyl-	116	C6H16Si
3. Ethane, 1,1'-oxybis[2-methoxy-	134	C6H14O3
4. 4-Hydroxy-3-hexanone	116	C6H12O2
5. Hydrazine, 1-butyl-1-methyl-	102	C5H14N2

Sample file: >I3287      Spectrum #:      3127  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	18*	758214	1807	NBS54K	51	47	2	0	67	58	4	26
2.	15*	1072146	1878	NBS54K	25	66	1	0	100	58	3	14
3.	11	111966	1938	NBS54K	37	53	1	0	83	65	2	13
4.	11*	4984854	1869	NBS54K	31	57	2	0	100	64	2	15
5.	11*	20240624	1839	NBS54K	29	62	2	0	73	65	2	14

Peak#: 51 Area: 129673. Est Conc: 11. Date: 02/16/93 18:15 Inst: I





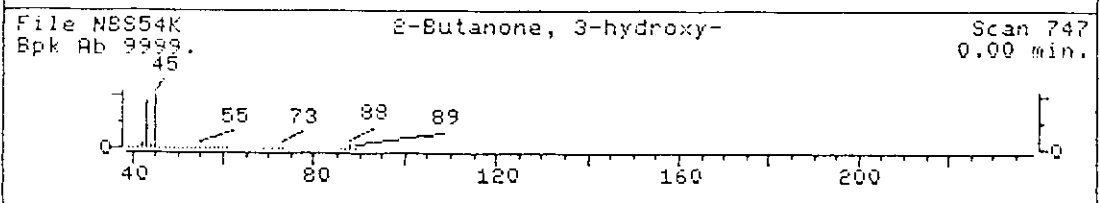
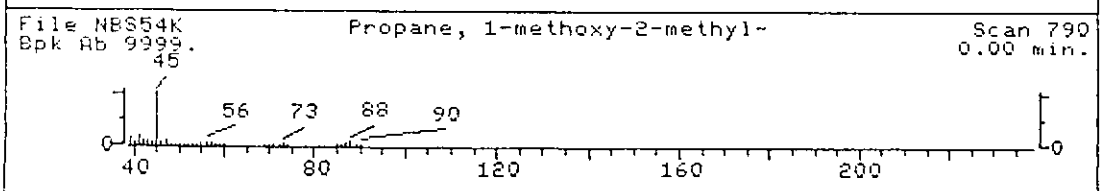
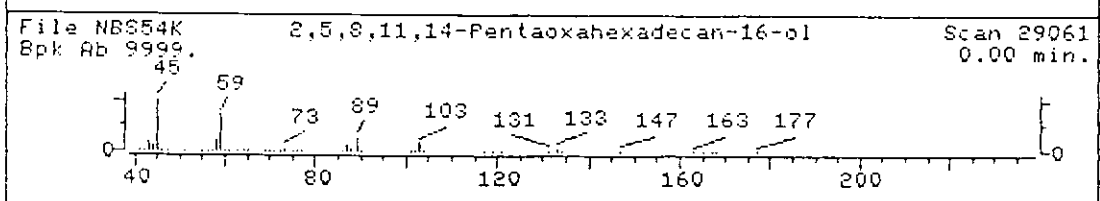
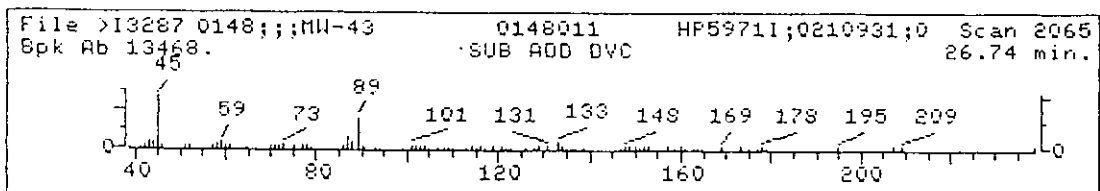
0416

- 2. Propane, 1-methoxy-2-methyl- 88 C5H12O
- . 2-Butanone, 3-hydroxy- 88 C4H8O2
- . Acetic acid, hydrazino-, ethyl ester, monohydrochloride 194 C4H11ClN2O2
- 5. Propanoic acid, 2-hydroxy-, methyl ester, (1+)- (9 CI) 104 C4H8O3

Sample file: >I3287 Spectrum #: 2065  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	43	23778521	8670	NBS54K	64	65	2	0	100	21	17	14
2.	25*	625445	348	NBS54K	23	59	2	0	100	47	7	13
3.	25*	513860	346	NBS54K	24	61	2	0	100	47	7	14
4.	20	6945922	371	NBS54K	38	51	1	0	72	53	5	14
5.	20*	2155308	153	NBS54K	27	51	2	0	100	52	5	14

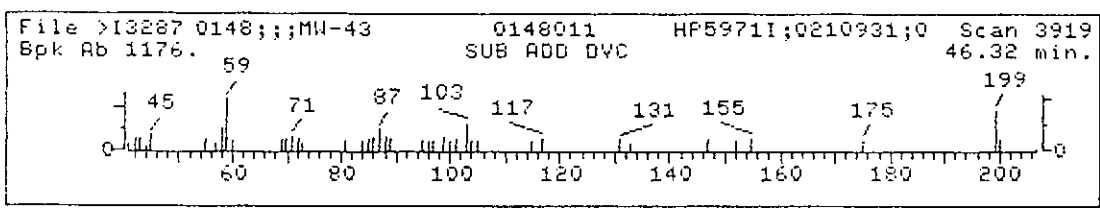
Peak#: 32 Area: 128939. Est Conc: 11. Date: 02/16/93 18:15 Inst: I



Sample file: >13287 Spectrum #: 3919

No data base entries were retrieved.

Peak#: 57 Area: 105441. Est Conc: 9. Date: 02/16/93 18:15 Inst: 1

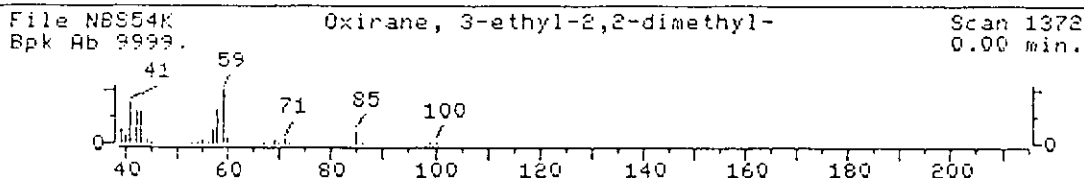
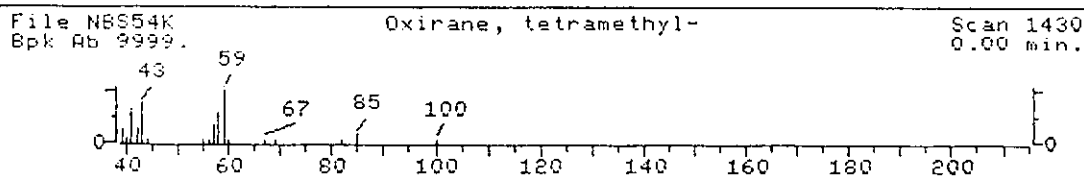
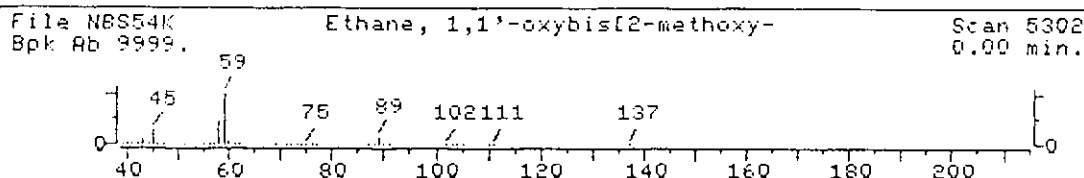
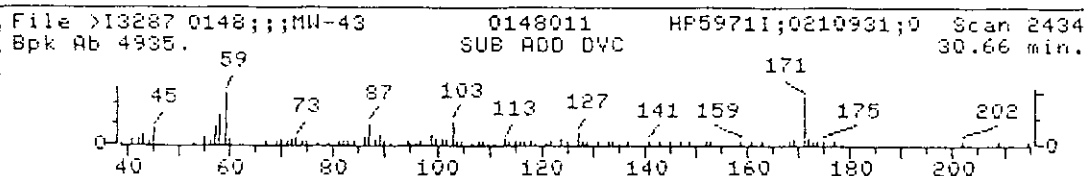


1. Ethane, 1,1'-oxybis[2-methoxy-	134 C6H14O3
2. Oxirane, tetramethyl-	100 C6H12O
3. Oxirane, 3-ethyl-2,2-dimethyl-	100 C6H12O
4. 2,5,8,11-Tetraoxadodecane	178 C8H18O4

Sample file: >I3287      Spectrum #:      2434  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15	111966	1938	NBS54K	43	47	1	0	98	59	3	15
2.	15*	5076200	1826	NBS54K	28	63	3	0	92	60	3	13
3.	15*	1192229	1823	NBS54K	29	73	2	0	83	60	3	14
4.	11	112492	2024	NBS54K	27	71	0	0	100	63	2	14

Peak#: 39 Area: 117283. Est Conc:      9. Date: 02/16/93 18:15 Inst: 1

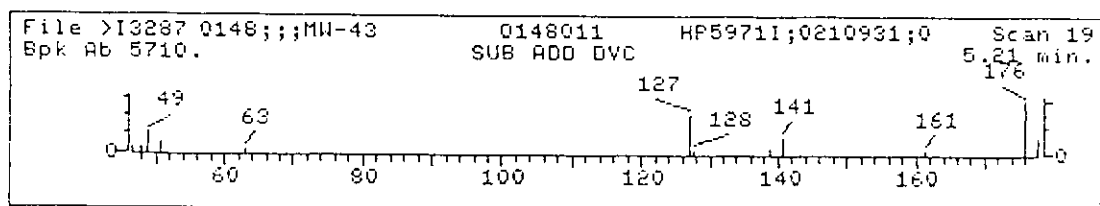


0419

Sample file: >I3287      Spectrum #:            19

No data base entries were retrieved.

Peak#:    1 Area:    41495. Est Conc:            6. Date: 02/16/93 18:15 Inst: I



0420

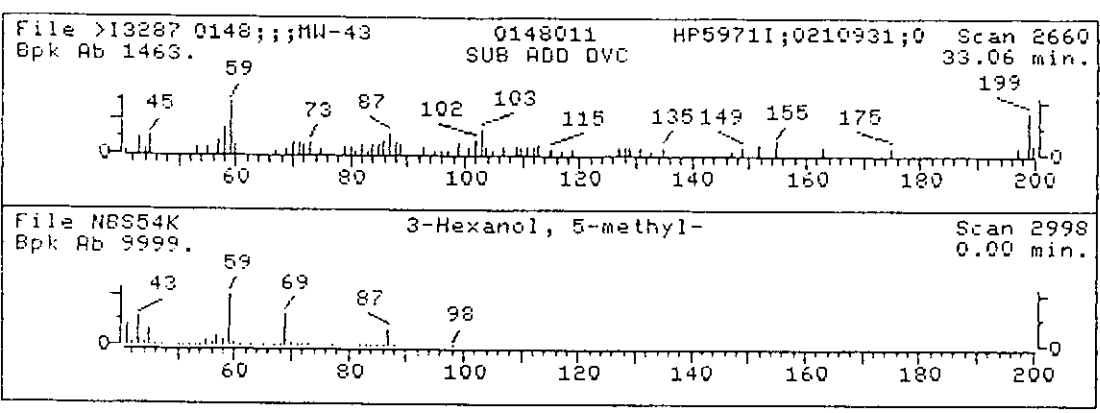
.. 3-Hexanol, 5-methyl-

116 C7H16O

Sample file: >I3287      Spectrum #:      2660  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	11	623552	1885	NBS54K	42	54	1	0	100	63	2 13

Peak#: 44 Area: 63069. Est Conc: 5. Date: 02/16/93 18:15 Inst: I



0 0421

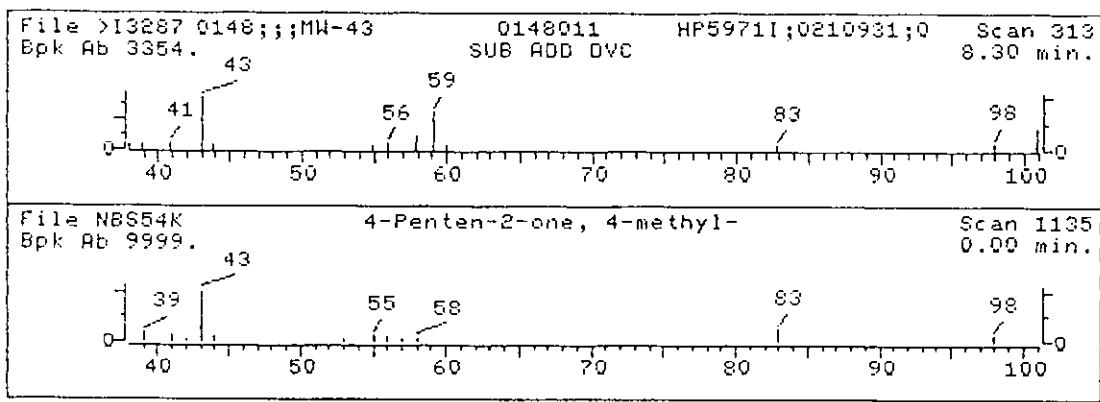
. 4-Penten-2-one, 4-methyl-

98 C6H10O

Sample file: >I3287 Spectrum #: 313  
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CDN	C_I	R_IV	
1.	27*	3744023	9897	NBS54K	31	48	2	0	78	45	8	15

Peak#: 2 Area: 22975. Est Conc: 4. Date: 02/16/93 18:15 Inst: 1



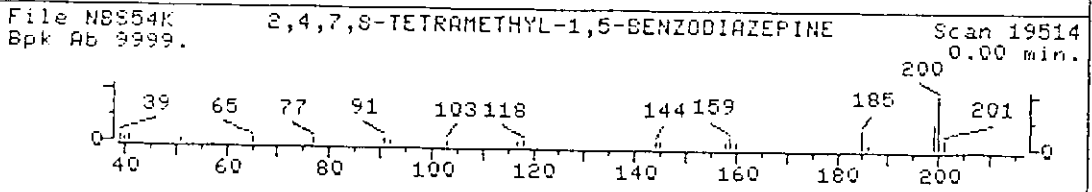
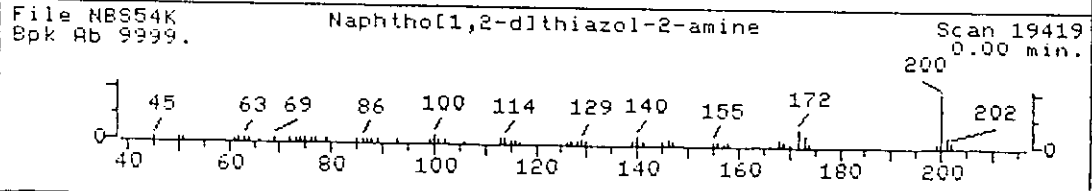
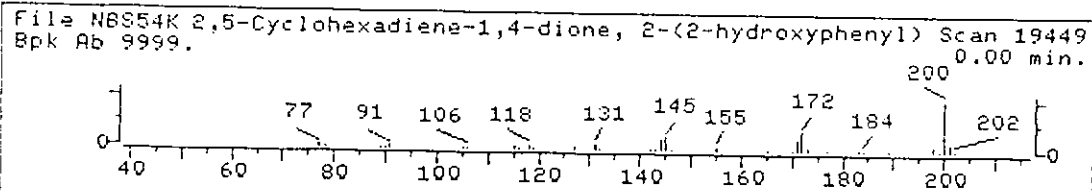
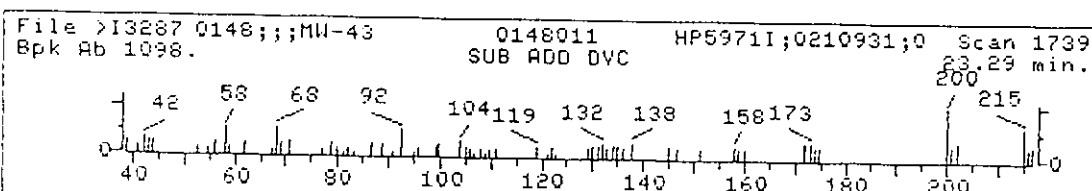
01 0422

- 1. 2,5-Cyclohexadiene-1,4-dione, 2-(2-hydroxyphenyl)- 200 C12H8O3
- 2. Naphtho[1,2-d]thiazol-2-amine 200 C11H8N2S
- 3. 2,4,7,8-TETRAMETHYL-1,5-BENZODIAZEPINE 200 C13H16N2
- 4. Thiazole, 2,2'-thiobis- 200 C6H4N2S3
- 5. DES-A-17-AZAESTRA-5(10),6,8-TRIENE-11,16-DIONE 215 C13H13NO2

Sample file: >I3287 Spectrum #: 1739  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	15*	25483663	29585	NBS54K	28	97	2	0	73	59	3	14
2.	15*	40172654	29575	NBS54K	26	96	0	0	97	58	3	18
3.	11*	19514	29613	NBS54K	35	89	2	0	100	64	2	14
4.	11*	69390096	29534	NBS54K	23	88	3	0	100	64	2	12
5.	11*	22483	29634	NBS54K	29	96	1	0	84	64	2	16

Peak#: 24 Area: 47552. Est Conc: 4. Date: 02/16/93 18:15 Inst: I



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-44

Lab Name: IEA/CT Contract: 0423  
 Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148  
 Matrix: (soil/water) WATER Lab Sample ID: 0148012  
 Sample wt/vol: 975 (g/mL) ML Lab File ID: I3288.D  
 Level: (low/med) LOW Date Received: 02/02/93 <sup>10</sup> *see 3/15/93*  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
 Concentrated Extract Volume: 1000 (UL) Date Analyzed: 02/16/93  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L		Q
108-95-2	Phenol	10	0.2	J U
111-44-4	bis(2-Chloroethyl) ether	10		U
95-57-8	2-Chlorophenol	10	0.4	J U
541-73-1	1,3-Dichlorobenzene	10		U
106-46-7	1,4-Dichlorobenzene	10		U
95-50-1	1,2-Dichlorobenzene	10		U
95-48-7	2-Methylphenol	10		U
108-60-1	2,2'-oxybis(1-Chloropropane)	10		U
106-44-5	4-Methylphenol	10		U
621-64-7	N-Nitroso-di-n-propylamine	10		U
67-72-1	Hexachloroethane	10		U
98-95-3	Nitrobenzene	10		U
78-59-1	Isophorone	10		U
88-75-5	2-Nitrophenol	10		U
105-67-9	2,4-Dimethylphenol	10		U
111-91-1	bis(2-Chloroethoxy)methane	10		U
120-83-2	2,4-Dichlorophenol	10		U
120-82-1	1,2,4-Trichlorobenzene	10		U
91-20-3	Naphthalene	10		U
106-47-8	4-Chloroaniline	10		U
87-68-3	Hexachlorobutadiene	10		U
59-50-7	4-Chloro-3-methylphenol	10		U
91-57-6	2-Methylnaphthalene	10		U
77-47-4	Hexachlorocyclopentadiene	10		U
88-06-2	2,4,6-Trichlorophenol	10		U
95-95-4	2,4,5-Trichlorophenol	26		U
91-58-7	2-Chloronaphthalene	10		U
88-74-4	2-Nitroaniline	26		U
131-11-3	Dimethylphthalate	10		U
208-96-8	Acenaphthylene	10		U
606-20-2	2,6-Dinitrotoluene	10		U
99-09-2	3-Nitroaniline	26		U
83-32-9	Acenaphthene	10		U

*cmk*  
2/25/93



1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0424

EPA SAMPLE NO.

MW-44

Lab Name: IEA/CT Contract: \_\_\_\_\_  
 Lab Code: IEACT Case No.: 0148 SAS No.: \_\_\_\_\_ SDG No.: Z0148  
 Matrix: (soil/water) WATER Lab Sample ID: 0148012  
 Sample wt/vol: 975 (g/mL) ML Lab File ID: I3288.D  
 Level: (low/med) LOW Date Received: 02/02/93 <sup>10</sup> *case 3/15/93*  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
 Concentrated Extract Volume: 1000 (UL) Date Analyzed: 02/16/93  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	0.6	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.5	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

*cmc*  
2/25/93

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

00 0425  
EPA SAMPLE NO.

MW-44

ab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148012

Sample wt/vol: 975 (g/mL) ML

Lab File ID: I3288.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 02/16/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

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

Number TICs found: 15  
amc 2/25/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	32.17	30	5
2.		29.21	34	
3.		26.53	30	
4.		26.61	23	
5.		23.48	17	
6.		44.00	8	
7.		19.94	7	
8.		32.55	6	
9.		29.42	6	
10.	UNKNOWN BENZENEDICHL ISOMER	16.90	6	✓
11.	ALDOL CONDENSATION PRODUCT	8.31	4	STAB
12.	UNKNOWN	8.71	4	STB
13.		26.70	4	J
14.	UNKNOWN ACID	20.666	3	↓
15.	UNKNOWN	14.90	2	↓
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

pac  
3/15/93

0426

QUANT REPORT

Operator ID: USER1                      Quant Rev: 2                      Quant Time: 930223 14:40  
 Output File: ^I3288::A6                      Injected at: 930216 19:17  
 Data File: >I3288::A4                      Dilution Factor: .51000  
 Name: 0148;;;MM-44                      Instrument ID: \*\*MSD  
 Misc: 0148012                      HP59711;0210931;021193;LLW;1;;;10

ID File: I\_IFI::A5  
 Title: IFS-DLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

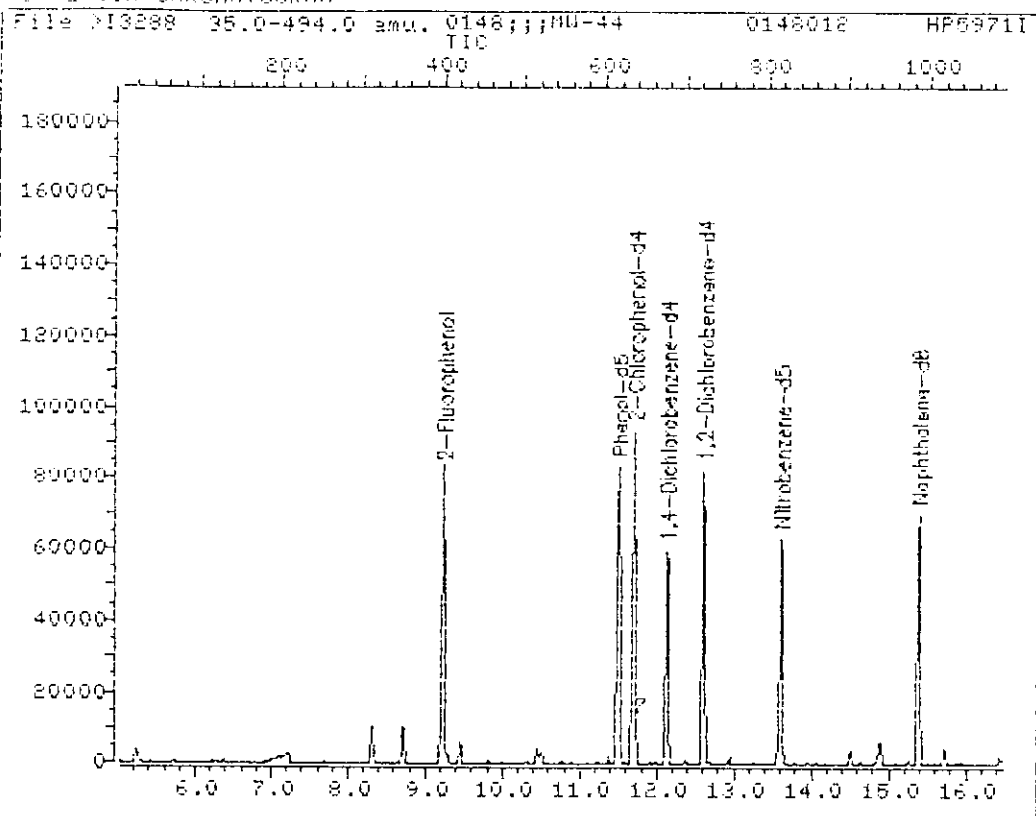
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.12	151.8	22562	40.00	ug	96
2)	2-Chlorophenol-d4	11.70	132.0	63085	48.55	ug	82
3)	2-Fluorophenol	9.23	111.8	68996	49.54	ug	72
4)	Phenol-d5	11.50	98.8	96364	49.61	ug	65
<del>5)</del>	<del>Phenol</del>	<del>11.53</del>	<del>93.9</del>	<del>478</del>	<del>.251</del>	<del>ug</del>	<del>64</del>
<del>7)</del>	<del>2-Chlorophenol</del>	<del>11.73</del>	<del>127.8</del>	<del>621</del>	<del>.426</del>	<del>ug</del>	<del>25</del>
10)	1,2-Dichlorobenzene-d4	12.61	152.0	31462	33.42	ug	95
17)	*Naphthalene-d8	15.39	135.9	83299	40.00	ug	98
)	Nitrobenzene-d5	13.60	81.8	52506	33.83	ug	72
)	*Acenaphthene-d10	20.05	163.9	48293	40.00	ug	99
35)	2-Fluorobiphenyl	18.28	171.8	90081	30.66	ug	97
51)	2,4,6-Tribromophenol	22.18	329.6	35185	51.97	ug	93
62)	*Phenanthrene-d10	23.94	187.9	90407	40.00	ug	98
✓ 61)	Di-n-butylphthalate	25.58	148.8	3410	.593	ug	78
63)	*Chrysene-d12	31.27	240.0	80035	40.00	ug	97
65)	Terphenyl-d14	28.18	244.0	61264	17.73	ug	98
<del>64)</del>	<del>Butylbenzylphthalate</del>	<del>29.54</del>	<del>148.8</del>	<del>894</del>	<del>.309</del>	<del>ug</del>	<del>88</del>
✓ 70)	bis(2-Ethylhexyl)phthalate	31.38	148.8	1761	.501	ug	75
71)	*Perylene-d12	38.15	264.0	83140	40.00	ug	95

\* Compound is ISTD

cmca/23/93

0 0427

TOTAL ION CHROMATOGRAM

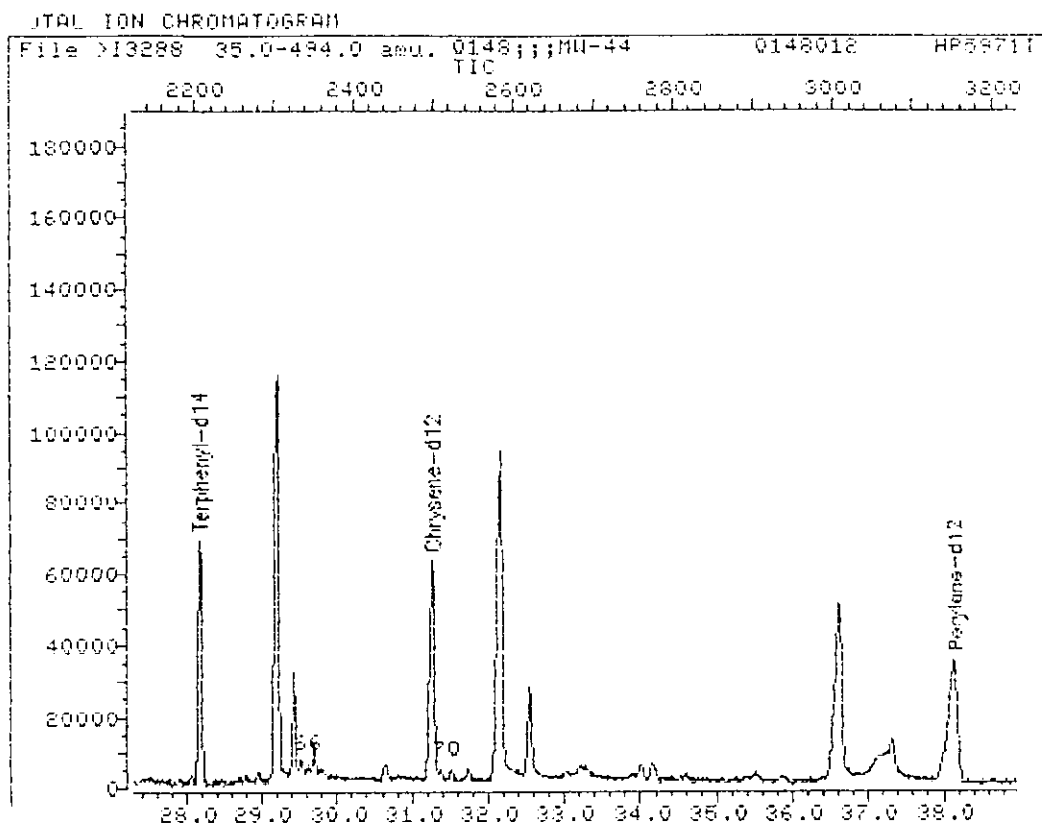


Data File: >I3288::A4 Quant Output File: ^I3288::A6  
Name: 0148;;;MW-44 Instrument ID: \*\*MSD  
Misc: 0148012 HP59711;0210931;021193;LLW;1;;;f0

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930216 09:48

Operator ID: USER1  
Quant Time : 930223 14:40  
Injected at: 930216 19:17

0429



Data File: >I3288::A4

Quant Output File: ^I3288::A6

Name: 0148;;;MU-44

Instrument ID: \*\*MSD

Misc: 0148012

HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

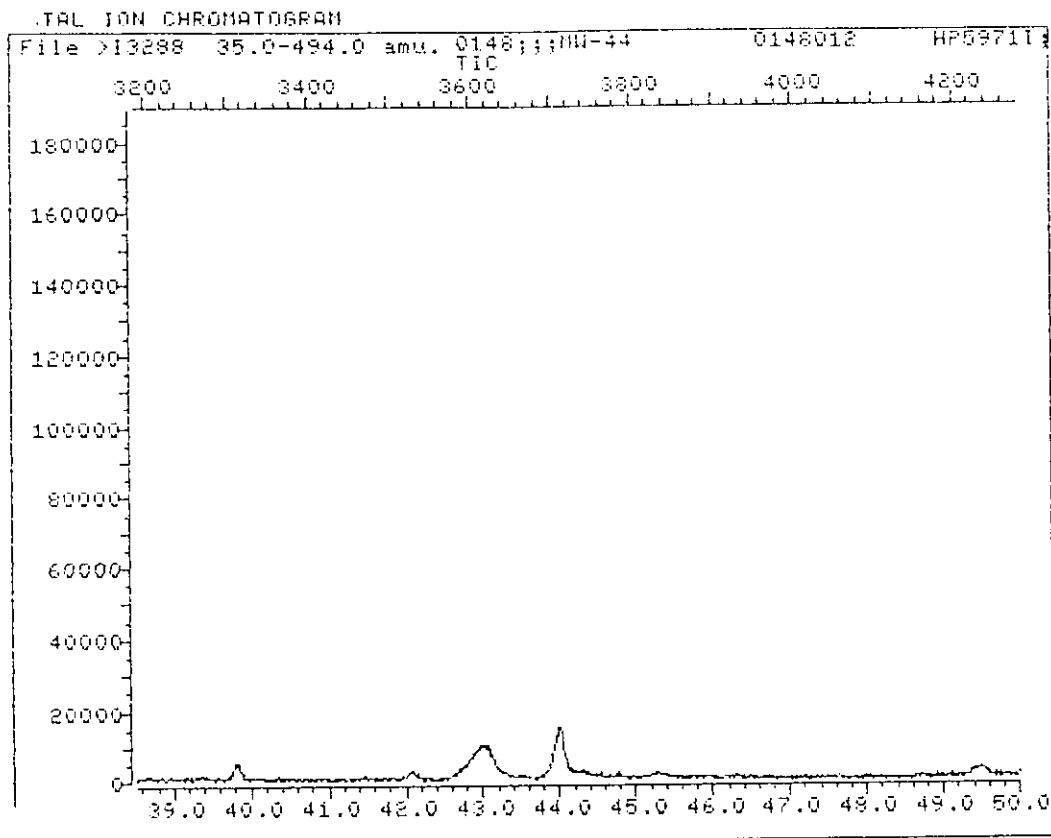
Operator ID: USER1

Quant Time : 930223 14:40

Injected at: 930216 19:17

Page 3 of 4

07 0430

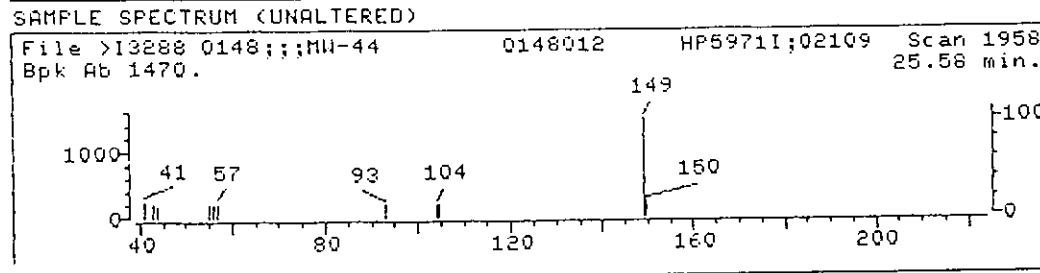
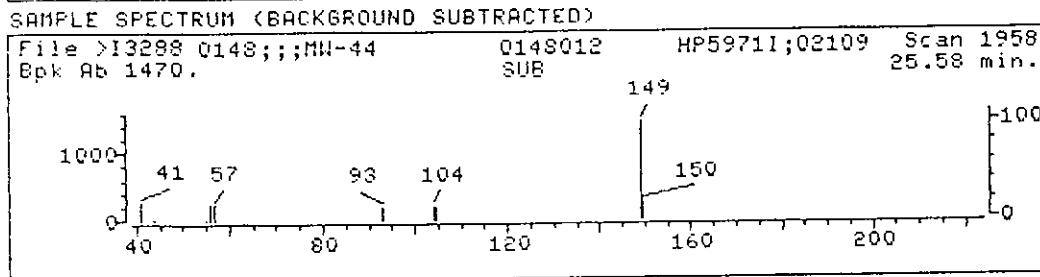
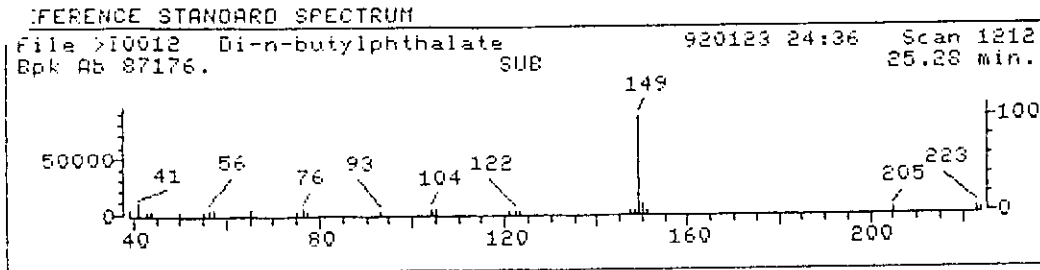


Data File: >I3288::A4 Quant Output File: ^I3288::A6  
Name: 0148;;;MW-44 Instrument ID: \*\*MSD  
Misc: 0148012 HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:40  
Injected at: 930216 19:17

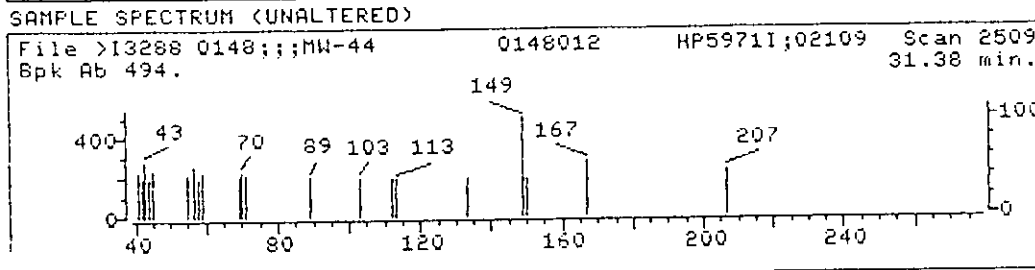
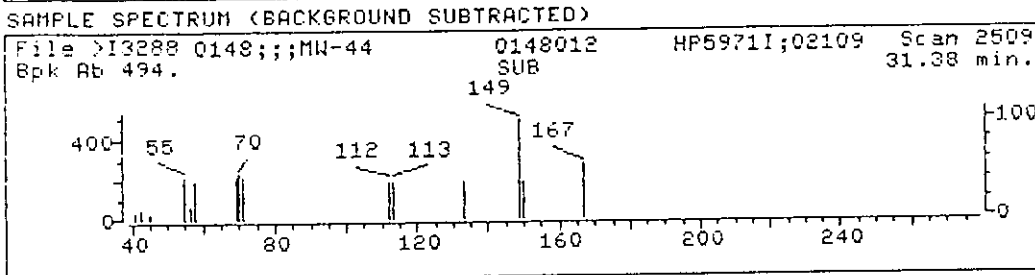
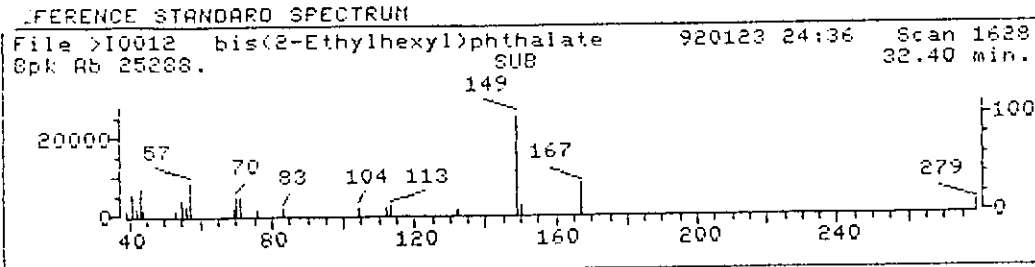
00 0431



Data File: >I3288::A5 Quant Output File: ^I3288::A6  
Name: 0148;;;MW-44 Instrument ID: \*\*MSD  
Misc: 0148012 HP59711;0210931;021193;LLW;1;;;I0  
Quant Time: 930216 20:12 Quant ID File: I\_IF1::A5  
Injected at: 930216 19:17 Last Calibration: 910116 11:52  
Last Qcal Time: 930216 08:48

Compound No : 61  
Compound Name : Di-n-butylphthalate  
Scan Number : 1958  
Retention Time: 25.58 min.  
Quant Ion : 148.8  
Area : 3410  
Concentration : .593 ug  
q-value : 78

0432



Data File: >I3288::A5 Quant Output File: ^I3288::A6  
Name: 0148;;;MW-44 Instrument ID: \*\*MSD  
Misc: 0148012 HP5971I;0210931;021193;LLW;1;;;10  
Quant Time: 930216 20:12 Quant ID File: I\_IFI::A5  
Injected at: 930216 19:17 Last Calibration: 910116 11:52  
Last Qcal Time: 930216 08:48

Compound No : 70  
Compound Name : bis(2-Ethylhexyl)phthalate  
Scan Number : 2509  
Retention Time: 31.38 min.  
Quant Ion : 148.8  
Area : 1761  
Concentration : .483 ug  
q-value : 75



00 0433

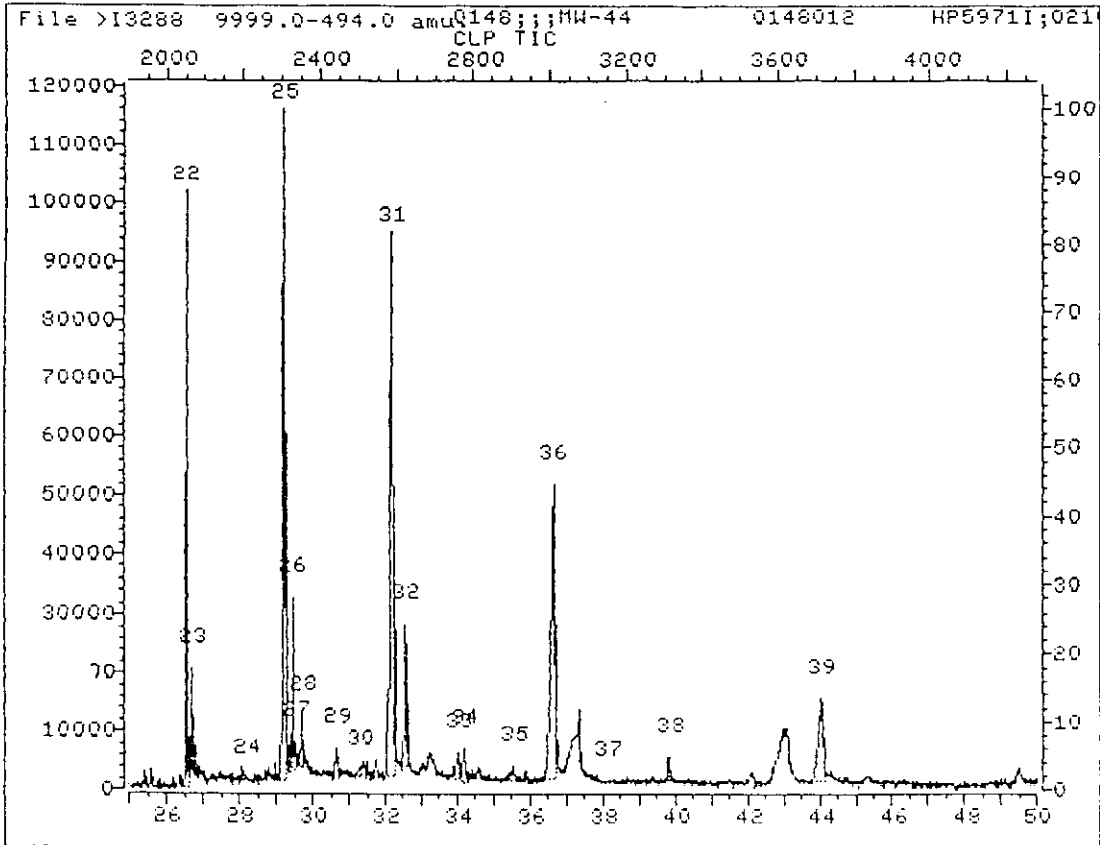
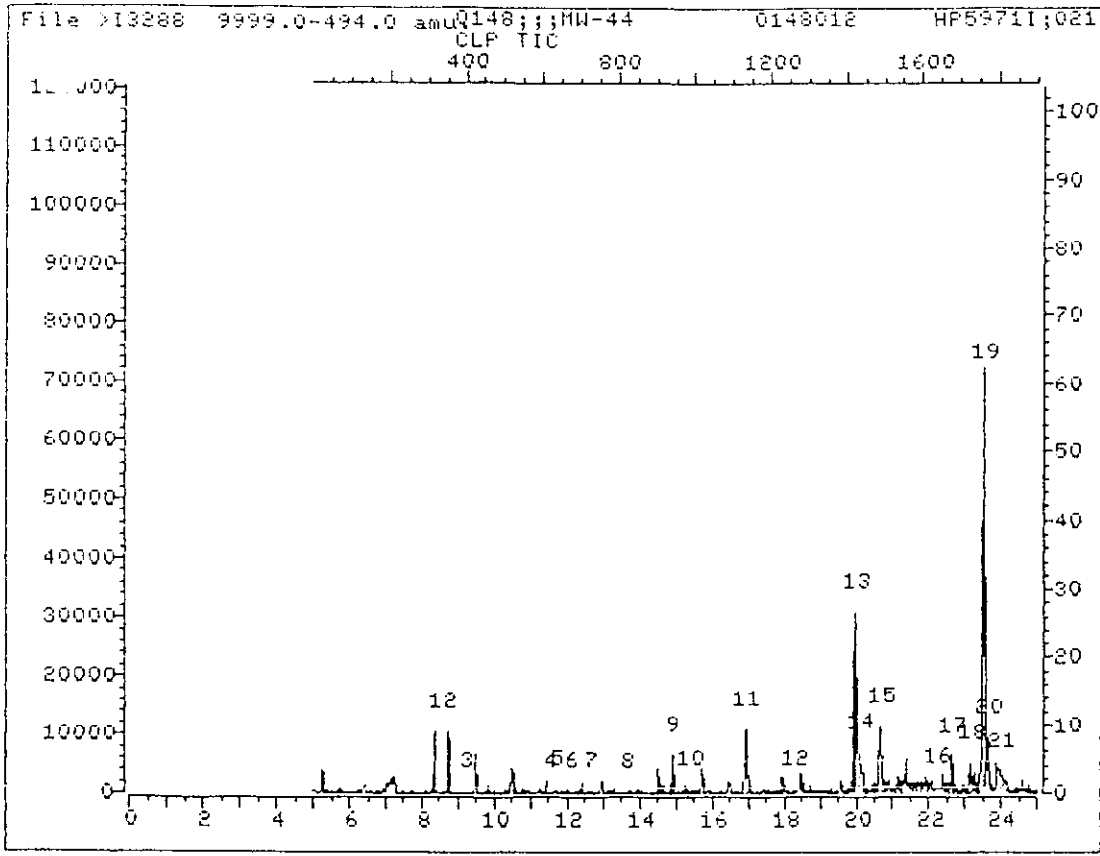
data file header from : >I3288::A5

Sample: 0148;;;MW-44 Operator: USER1 2/16/93 19:17  
Misc : 0148012 HP59711;0210931;021193;LLW;1;;;10  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 9 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

00 0434

Date: 02/16/93 19:17 Inst: 1



Date: 02/16/93 19:17 Inst: I

MW-44  
HP5971I  
0435

T I C P E A K R E P O R T

PK#	R.T.	Total Area	Est Conc.	Assoc ISTD	DF
31.	32.17	473984.	36.	5.	.51
25.	29.21	451983.	34.	5.	.51
22.	26.53	346449.	30.	4.	.51
36.	36.61	325424.	23.	6.	.51
19.	23.48	192704.	17.	4.	.51
39.	44.00	122579.	8.	6.	.51
13.	19.94	68997.	7.	3.	.51
32.	32.55	86519.	6.	5.	.51
26.	29.42	79995.	6.	5.	.51
11.	16.90	52062.	6.	2.	.51
1.	8.31	22994.	4.	1.	.51
2.	8.71	23902.	4.	1.	.51
23.	26.70	43447.	4.	4.	.51
15.	20.66	31180.	3.	3.	.51
9.	14.90	19467.	2.	2.	.51

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range	TI/SI
1 4-DICHLOROBENZENE-D4	12.12	122858.	0.00 13.76	5.4
PHTHALENE-D8	15.39	165539.	13.76 17.72	2.0
ACENAPHTHENE-D10	20.05	209014.	17.72 22.00	4.3
PHENANTHRENE-D10	23.94	234316.	22.00 27.60	2.6
CHRYSENE-D12	31.26	271636.	27.60 34.70	3.4
PERYLENE-D12	38.14	294341.	34.70 44.00	3.5

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 3  
Target peaks matched: 1  
Total TIC identified: 15

TICS : 1:50 PM MON., 22 FEB., 1993

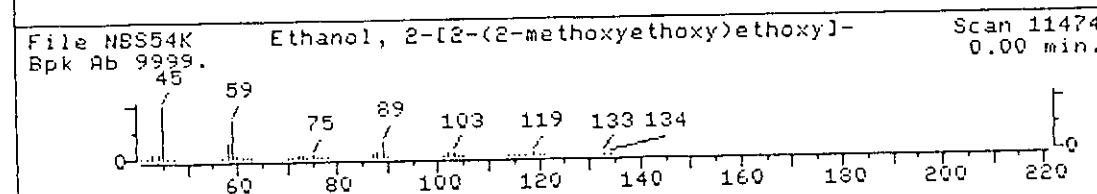
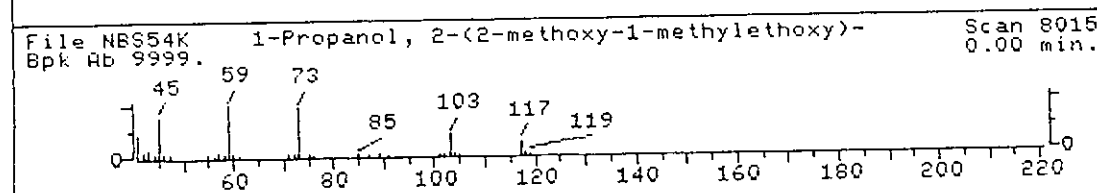
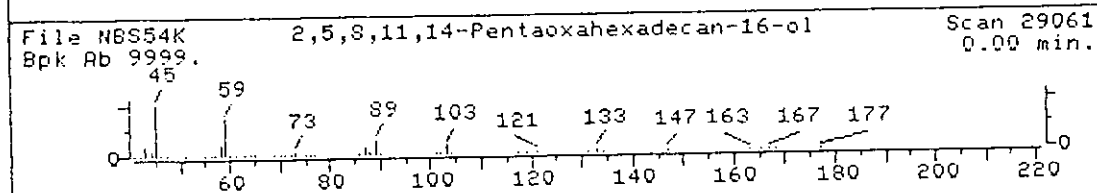
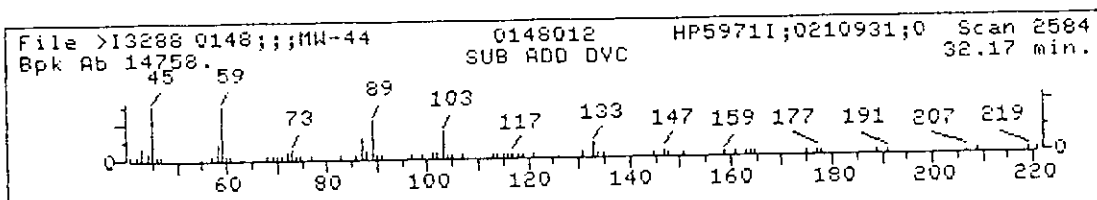
- 1. 2,5,8,11,14-Pentaoxahexadecan-16-ol
- 2. 1-Propanol, 2-(2-methoxy-1-methylethoxy)-
- 3. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-
- 4. 2-Propanol, 1-ethoxy-
- 5. Propanoic acid, 3-methoxy-, methyl ester

252 C<sub>11</sub>H<sub>24</sub>O<sub>6</sub> 0436  
 148 C<sub>7</sub>H<sub>16</sub>O<sub>3</sub>  
 164 C<sub>7</sub>H<sub>16</sub>O<sub>4</sub>  
 104 C<sub>5</sub>H<sub>12</sub>O<sub>2</sub>  
 118 C<sub>5</sub>H<sub>10</sub>O<sub>3</sub>

Sample file: >I3288 Spectrum #: 2584  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	36	23778521	8670	NBS54K	49	80	0	0	100	32	12	19
2.	26	55956213	1970	NBS54K	55	48	2	0	99	40	10	12
3.	25	112356	8547	NBS54K	33	66	0	0	86	48	7	15
4.	20*	1569024	1853	NBS54K	28	66	2	0	100	51	5	14
5.	20*	3852093	8054	NBS54K	22	80	3	0	100	52	5	12

Peak#: 31 Area: 473984. Est Conc: 36. Date: 02/16/93 19:17 Inst: 1



0437

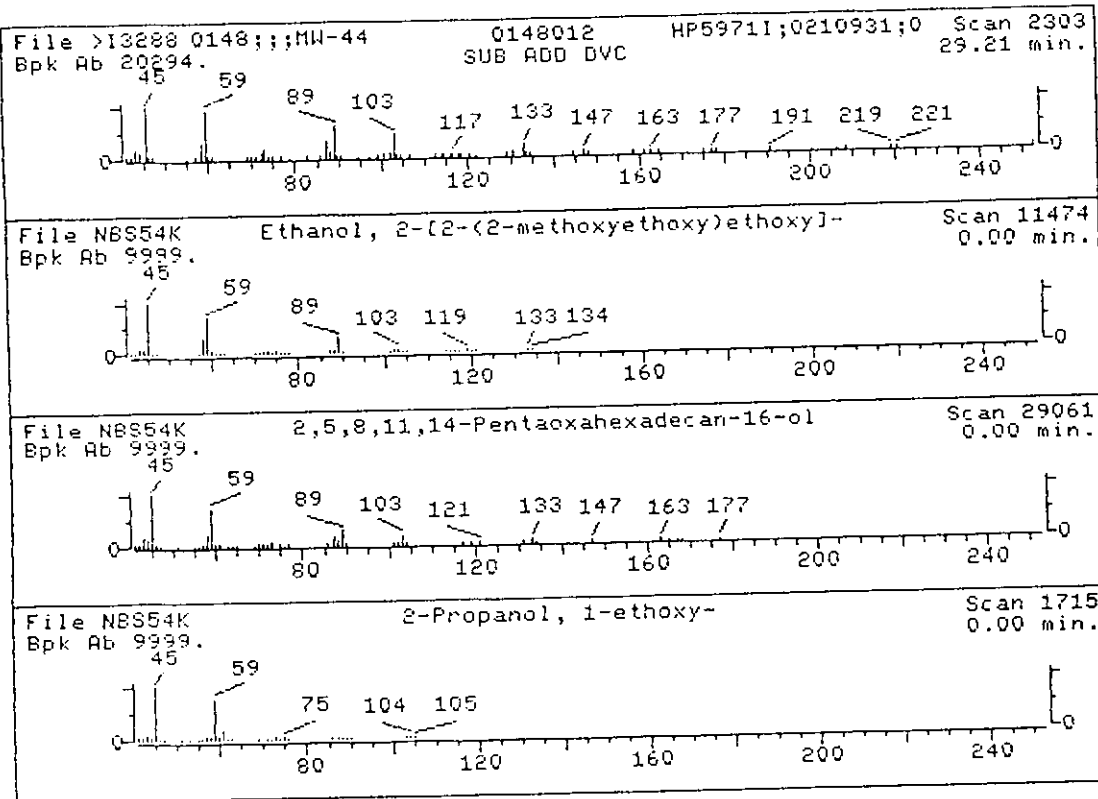
- 1. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)]-
- 2. 2,5,8,11,14-Pentaoxahexadecan-16-ol
- 3. 2-Propanol, 1-ethoxy-
- 4. 15-Crown-5
- 5. 2-Butanol, 3,3'-oxybis-

164 C7H16O4  
 252 C11H24O6  
 104 C5H12O2  
 220 C10H20O5  
 162 C8H18O3

Sample file: >I3288      Spectrum #: 2303  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	50	112356	8547	NBS54K	49	50	0	0	89	27	19	28
2.	42	23778521	8670	NBS54K	49	80	0	0	100	26	14	19
3.	26*	1569024	1853	NBS54K	24	70	2	0	100	45	8	14
4.	25	33100275	8641	NBS54K	64	67	2	0	66	50	7	14
5.	24	54305612	2000	NBS54K	42	43	0	0	92	53	7	23

Peak#: 25 Area: 451983. Est Conc: 34. Date: 02/16/93 19:17 Inst: I



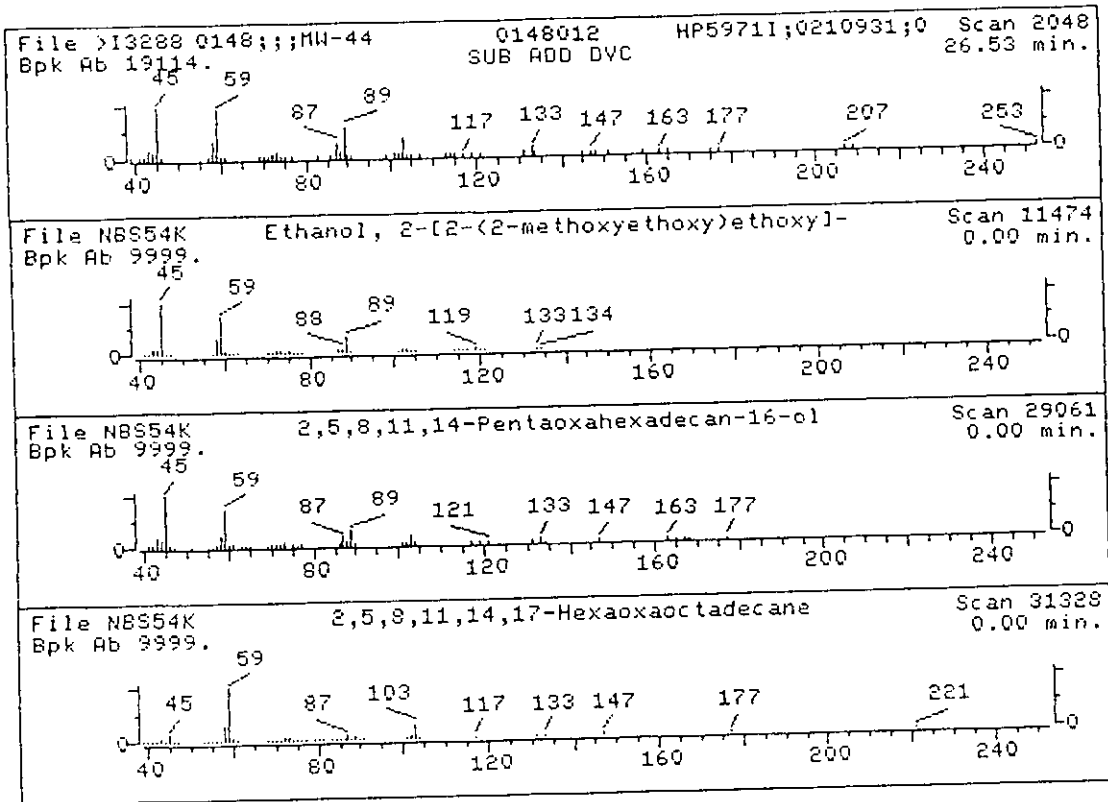
- 1. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-
- 2. 2,5,8,11,14-Pentaoxahexadecan-16-ol
- 3. 2,5,8,11,14,17-Hexaoxaoctadecane
- 4. 2-Propanol, 1-ethoxy-
- 5. Propane, 1,2,3-trimethoxy-

- 164 C7H16O4
- 252 C11H24O6
- 266 C12H26O6
- 104 C5H12O2
- 134 C6H14O3

Sample file: >I3288      Spectrum #: 2048  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	50	112356	8547	NBS54K	50	49	0	0	100	27	19	28
2.	48	23778521	8670	NBS54K	49	80	0	0	100	24	17	19
3.	30	1191873	2071	NBS54K	47	69	0	0	95	45	8	18
4.	30*	1569024	1853	NBS54K	34	60	1	0	84	45	8	18
5.	26	20637494	8497	NBS54K	61	51	2	0	66	36	10	12

Peak#: 22 Area: 346449. Est Conc: 30. Date: 02/16/93 19:17 Inst: I



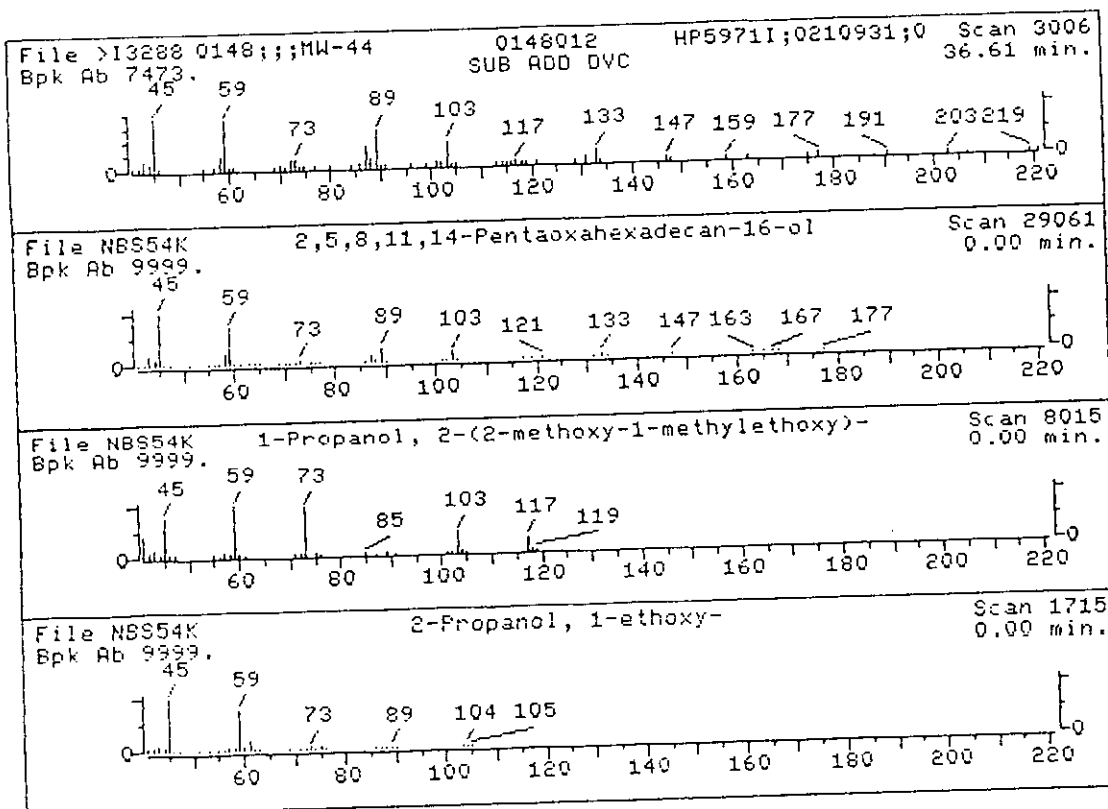
1. 2,5,8,11,14-Pentaoxahexadecan-16-ol
2. 1-Propanol, 2-(2-methoxy-1-methylethoxy)-
3. 2-Propanol, 1-ethoxy-
4. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-
5. Propanoic acid, 3-methoxy-, methyl ester

252 C11H24O6  
 148 C7H16O3  
 104 C5H12O2  
 164 C7H16O4  
 118 C5H10O3

Sample file: >I3288      Spectrum #: 3006  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	32	23778521	8670	NBS54K	38	91	0	0	100	31	12	15
2.	26	55956213	1970	NBS54K	55	48	2	0	95	39	10	12
3.	25*	1569024	1853	NBS54K	34	60	1	0	99	50	7	18
4.	25	112356	8547	NBS54K	33	66	0	0	81	47	7	15
5.	20*	3852093	8054	NBS54K	22	80	3	0	100	51	5	12

Peak#: 36 Area: 325424. Est Conc: 23. Date: 02/16/93 19:17 Inst: 1



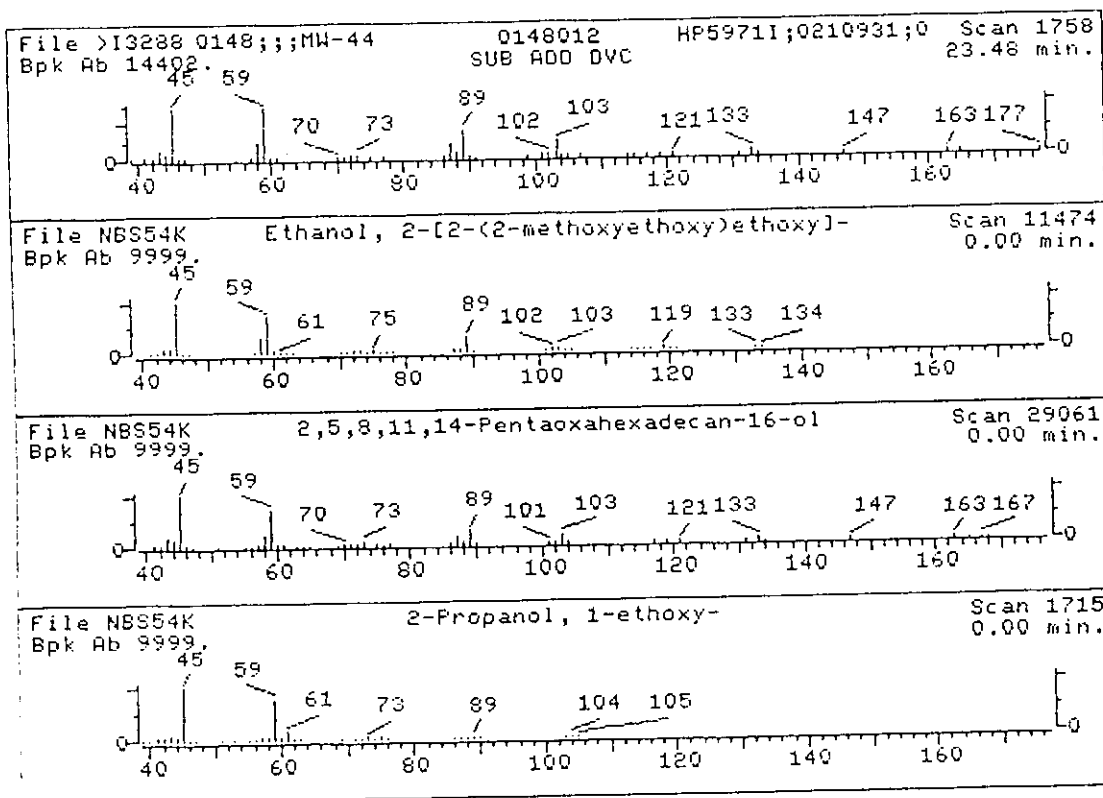
1. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)-
- 2,5,8,11,14-Pentaoxahexadecan-16-ol
3. 2-Propanol, 1-ethoxy-
4. Propane, 1,2,3-trimethoxy-
5. Silane, ethyldimethyl-

164 C7H16O4  
 252 C11H24O6  
 104 C5H12O2  
 134 C6H14O3  
 88 C4H12Si

Sample file: >I3288 Spectrum #: 1758  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	59	112356	8547	NBS54K	62	37	0	0	100	23	27	38
2.	36	23778521	8670	NBS54K	71	58	1	0	111	42	12	27
3.	30*	1569024	1853	NBS54K	34	60	1	0	89	41	8	18
4.	29	20637494	8497	NBS54K	61	51	2	0	70	32	12	12
5.	25*	758214	1807	NBS54K	34	64	2	0	84	50	7	14

Peak#: 19 Area: 192704. Est Conc: 17. Date: 02/16/93 19:17 Inst: I





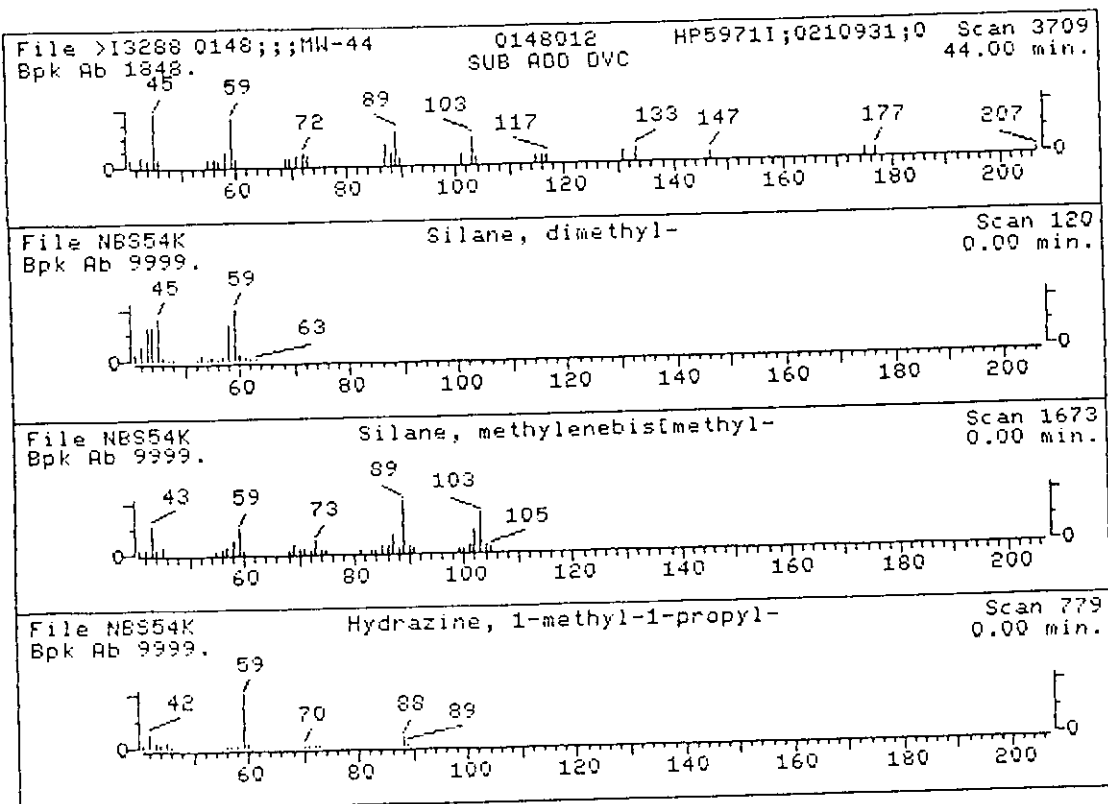
- 1. Silane, dimethyl-
- 2. Silane, methylenebis(methyl-
- 3. Hydrazine, 1-methyl-1-propyl-
- 4. Hydrazine, (1-methylpropyl)-

60 C2H8Si  
 104 C3H12Si2  
 88 C4H12N2  
 88 C4H12N2

Sample file: >I3288 Spectrum #: 3709  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	1111746	1791	NBS54K	37	72	3	0	91	48	7 13
2.	12*	5654057	8465	NBS54K	57	70	3	0	63	62	2 22
3.	11*	4986496	1806	NBS54K	25	60	1	0	91	65	2 14
4.	11*	30924142	8034	NBS54K	27	75	1	0	91	61	2 15

Peak#: 39 Area: 122579. Est Conc: 8. Date: 02/16/93 19:17 Inst: I

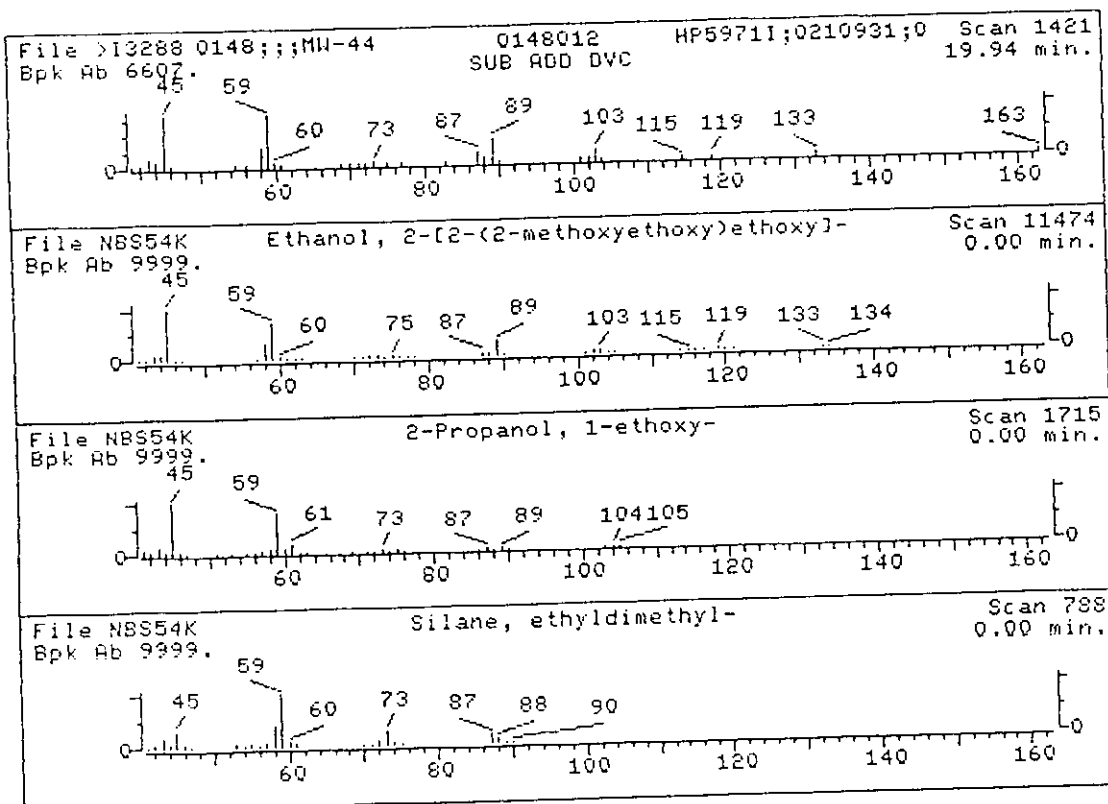


- |  |             |
|--|-------------|
| 1. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- | 164 C7H16O4 |
| 2. 2-Propanol, 1-ethoxy-                   | 104 C5H12O2 |
| 3. Silane, ethyldimethyl-                  | 88 C4H12Si  |
| 4. Ethane, 1,1'-oxybis[2-methoxy-          | 134 C6H14O3 |
| 5. 2-Butanol, 1-methoxy-                   | 104 C5H12O2 |

Sample file: >I3288 Spectrum #: 1421  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	58	112356	8547	NBS54K	62	37	1	0	100	18	25	23
2.	31*	1569024	1853	NBS54K	39	55	1	0	100	43	12	22
3.	29*	758214	1807	NBS54K	42	56	2	0	98	41	8	17
4.	25	111966	1938	NBS54K	27	63	0	0	98	48	7	14
5.	20*	53778737	1854	NBS54K	32	64	2	0	98	52	5	14

Peak#: 13 Area: 68997. Est Conc: 7. Date: 02/16/93 19:17 Inst: 1

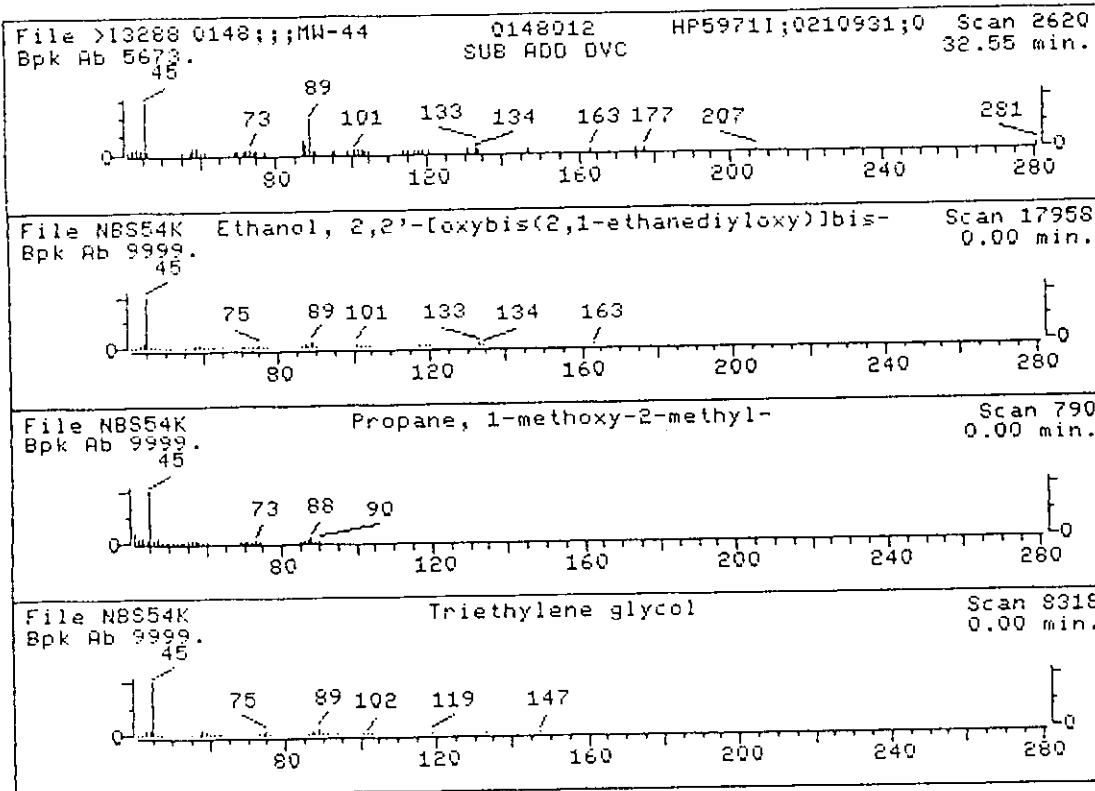


- . Ethanol, 2,2'-[oxybis(2,1-ethanediyloxy)]bis- 194 C8H18O5
- .. Propane, 1-methoxy-2-methyl- 88 C5H12O
- 3. Triethylene glycol 150 C6H14O4
- 4. 2-Butanone, 3-hydroxy- 88 C4H8O2
- 5. Acetaldehyde, methoxy- 74 C3H6O2

Sample file: >I3288      Spectrum #:      2620  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	26	112607	8603	NBS54K	27	66	0	0	100	43	8	14
2.	25*	625445	348	NBS54K	30	52	1	0	76	50	7	16
3.	25	112276	8525	NBS54K	29	55	0	0	83	47	7	15
4.	25*	513860	346	NBS54K	28	57	2	0	100	47	7	14
5.	20*	10312831	339	NBS54K	22	30	1	0	100	53	5	14

Peak#: 32 Area: 86519. Est Conc: 6. Date: 02/16/93 19:17 Inst: 1



0444

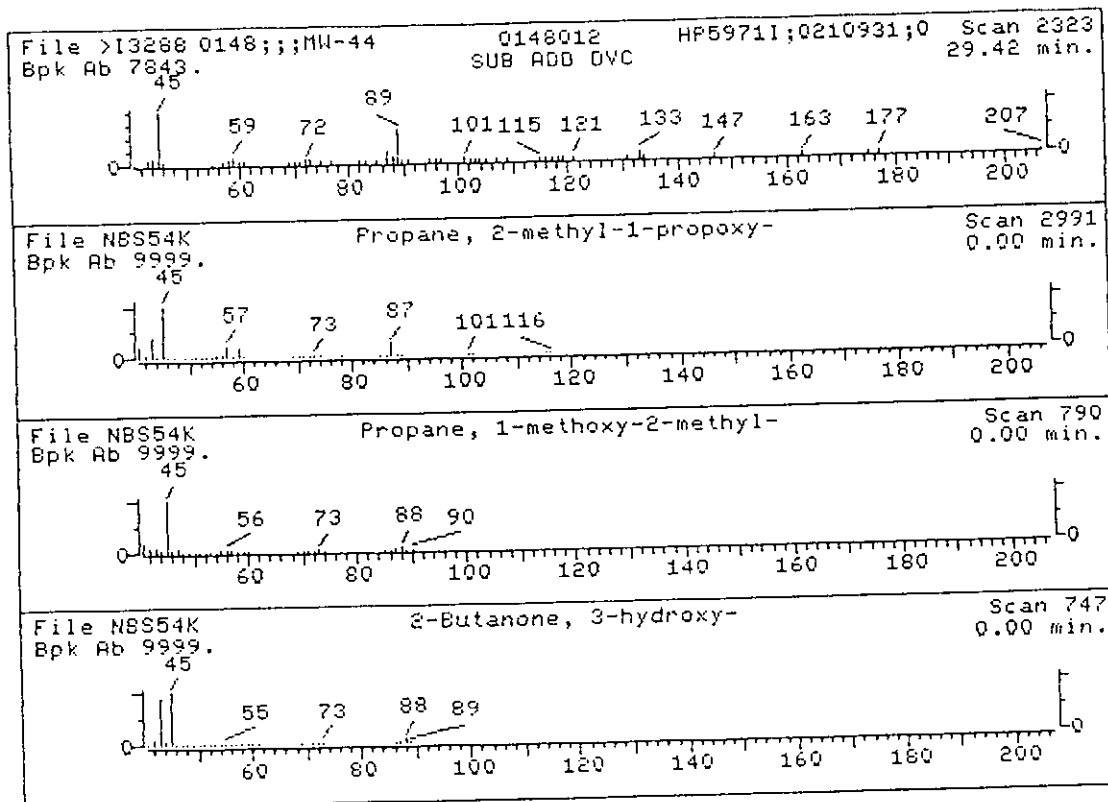
- . Propane, 2-methyl-1-propoxy-
- . Propane, 1-methoxy-2-methyl-
- 3. 2-Butanone, 3-hydroxy-
- 4. 2-Hexanol
- 5. 1,3-Butanediol

- 116 C7H16O
- 88 C5H12O
- 88 C4H8O2
- 102 C6H14O
- 90 C4H10O2

Sample file: >I3288      Spectrum #: 2323  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	26*	15268492	7618	NBS54K	24	62	2	0	72	41	8	14
2.	25*	625445	348	NBS54K	27	55	2	0	100	48	7	14
3.	25*	513860	346	NBS54K	24	61	3	0	100	47	7	12
4.	25*	626937	353	NBS54K	24	64	2	0	100	50	7	14
5.	20*	107880	351	NBS54K	26	49	2	0	100	51	5	14

Peak#: 26 Area: 79995. Est Conc:      6. Date: 02/16/93 19:17 Inst: 1

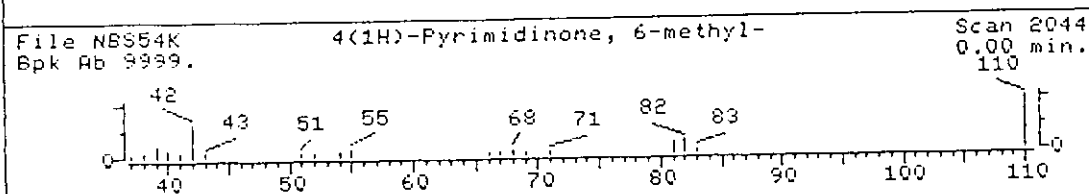
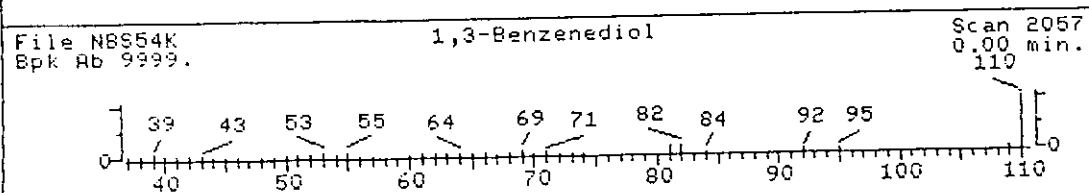
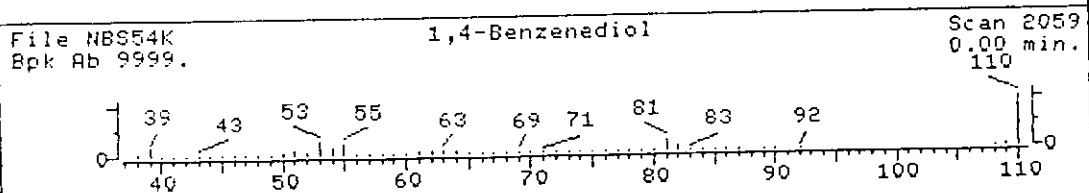
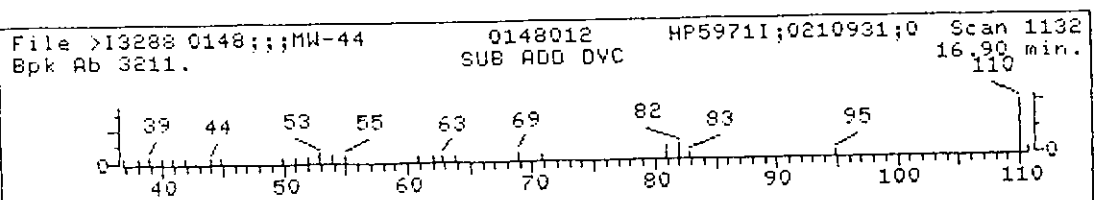


1. 1,4-Benzenediol	110 C6H6O2
2. 1,3-Benzenediol	110 C6H6O2
3. 4(1H)-Pyrimidinone, 6-methyl-	110 C5H6N2O
4. 1H-Imidazole-2-carboxaldehyde, 1-methyl-	110 C5H6N2O

Sample file: >I3288 Spectrum #: 1132  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	60*	123319	12287	NBS54K	41	52	3	0	100	13	30	14
2.	52*	108463	12286	NBS54K	35	49	2	0	100	20	20	17
3.	52*	3524876	12279	NBS54K	35	60	3	0	100	16	20	13
4.	52*	13750817	12281	NBS54K	28	63	3	0	100	20	20	13

Peak#: 11 Area: 52062. Est Conc: 6. Date: 02/16/93 19:17 Inst: I



0446

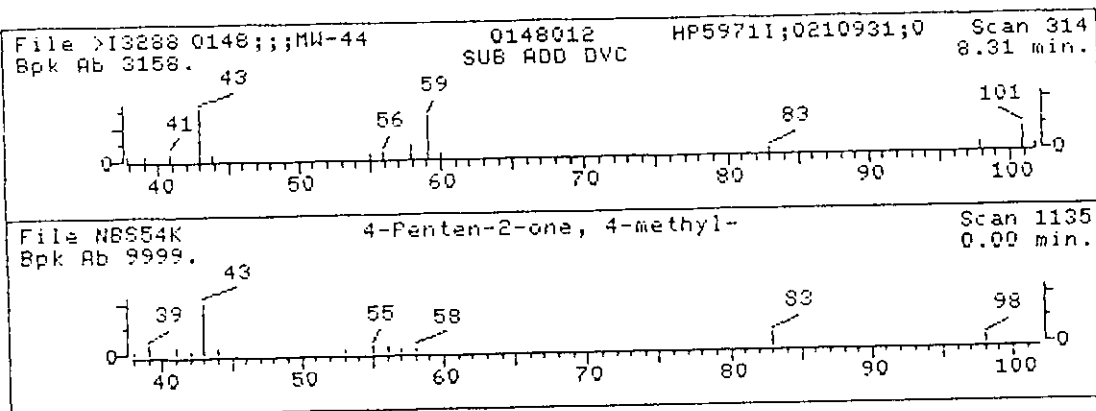
. 4-Penten-2-one, 4-methyl-

98 C6H10O

Sample file: >I3288      Spectrum #: 314  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	20*	3744023	9897	NBS54K	31	48	2	0	79	55	5 15

Peak#: 1 Area: 22994. Est Conc: 4. Date: 02/16/93 19:17 Inst: I



0447

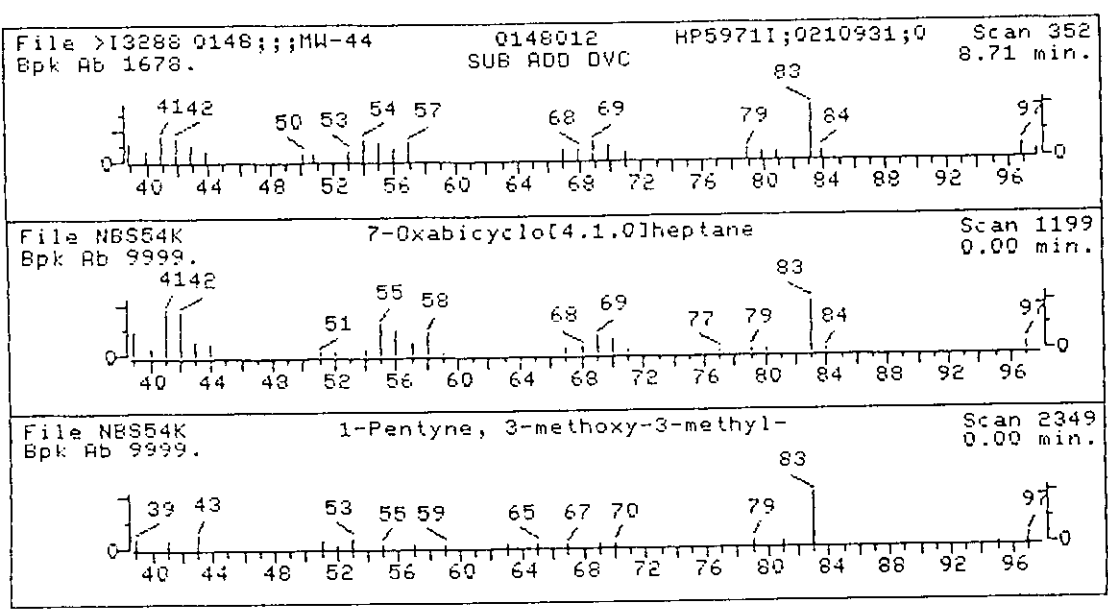
- 1. 7-Oxabicyclo[4.1.0]heptane
- 2. 1-Pentyne, 3-methoxy-3-methyl-

98 C6H10O  
112 C7H12O

Sample file: >I3288      Spectrum #: 352  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	286204	6469	NBS54K	27	73	1	0	42	52	5	15
2.	20	22802353	6484	NBS54K	46	36	2	0	98	51	5	15

Peak#: 2 Area: 23902. Est Conc: 4. Date: 02/16/93 19:17 Inst: 1



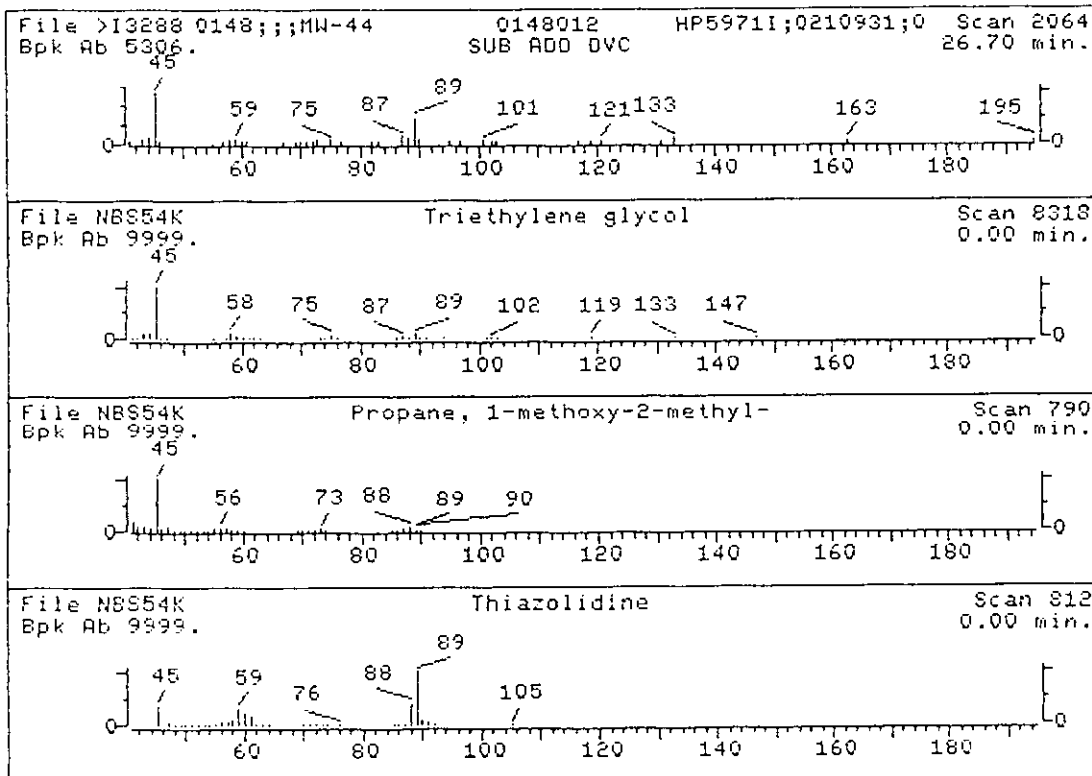
1. Triethylene glycol
2. Propane, 1-methoxy-2-methyl-
3. Thiazolidine

150 C6H14O4  
88 C5H12O  
89 C3H7NS

Sample file: >I3288 Spectrum #: 2064  
Search speed: 1 Tilting option: N No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	27	112276	8525	NBS54K	29	55	0	0	79	44	8	15
2.	25*	625445	348	NBS54K	23	59	2	0	100	45	8	13
3.	11*	504789	8463	NBS54K	27	78	3	0	51	65	2	13

Peak#: 23 Area: 43447. Est Conc: 4. Date: 02/16/93 19:17 Inst: I





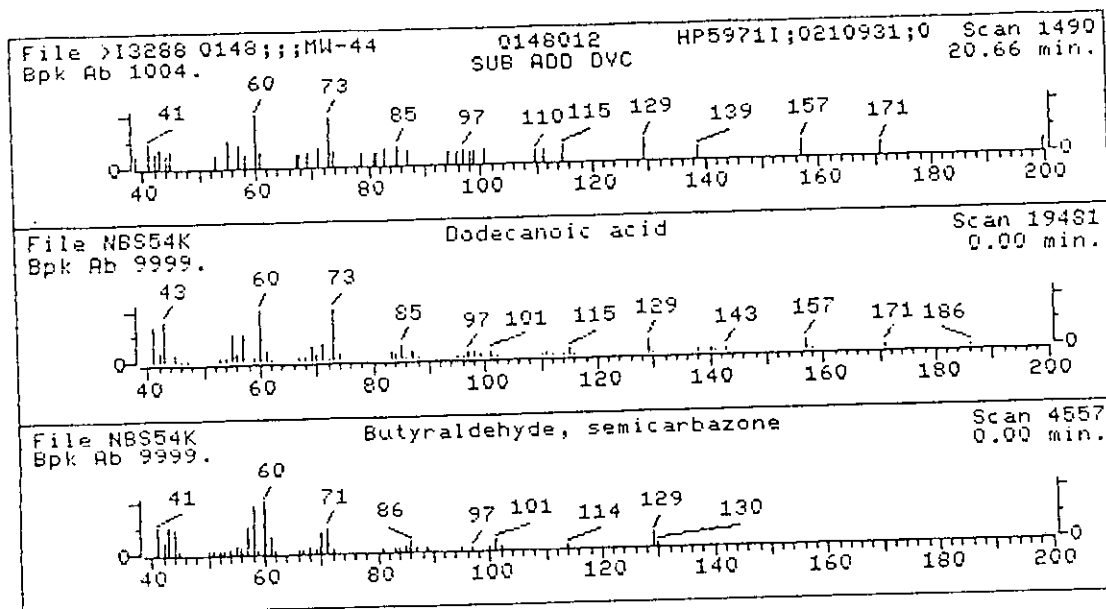
1. Dodecanoic acid
2. Butyraldehyde, semicarbazone

200 C12H24O2  
129 C5H11N3O

Sample file: >I3288      Spectrum #: 1490  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	49*	143077	2233	NBS54K	60	78	3	0	94	30	19	27
2.	20*	13183216	2141	NBS54K	24	91	3	0	81	52	5	12

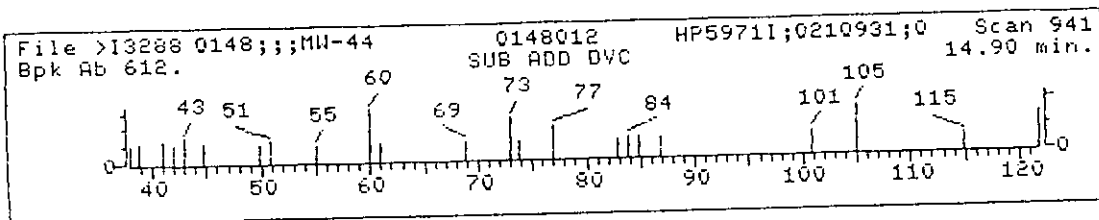
Peak#: 15 Area: 31180. Est Conc: 3. Date: 02/16/93 19:17 Inst: I



Sample file: >I3288      Spectrum #:      941

No data base entries were retrieved.

Peak#:    9    Area:    19467.    Est Conc:      2.    Date: 02/16/93    19:17    Inst: 1



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-46

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148 0451

Matrix: (soil/water) WATER

Lab Sample ID: 0148013

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3289.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL)

Date Analyzed: 02/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

CAS NO.

COMPOUND

Q

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl) ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy)methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	10	U

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-46      0452

Lab Name: IEA/CT	Contract:	
Lab Code: IEACT	Case No.: 0148	SAS No.:
Matrix: (soil/water) WATER		SDG No.: Z0148
Sample wt/vol: 1000 (g/mL) ML		Lab Sample ID: 0148013
Level: (low/med) LOW		Lab File ID: I3289.D
% Moisture: _____ decanted: (Y/N) _____		Date Received: 02/02/93
Concentrated Extract Volume: 1000(UL)		Date Extracted: 02/11/93
Injection Volume: 2.0(uL)		Date Analyzed: 02/16/93
GPC Cleanup: (Y/N) N	pH:	Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-02-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	0.5	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	10	U
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-46

0453

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148013

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3289.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 02/16/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

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

Number TICs found: 10  
CMC 2/25/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.71	7	U/B
2.	↓	17.68	7	U/B
3.	UNKNOWN CYCLOHEXEN-1-OL	9.45	4	U/B
4.	UNKNOWN	10.45	3	U/B
5.	↓	14.42	3	U/B
6.	403190 2-FLUORO-4-NITROPHENOL	14.74	3	U/B
7.	UNKNOWN	15.85	3	U/B
8.	ALDOL CONDENSATION PRODUCT	8.20	3	U/B
9.	UNKNOWN	23.47	3	U/B
10.	115968 ETHANOL 2-CHLORO-, PHOSPHATE	23.36	2	U/B
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

0454

## QUANT REPORT

Page 1

Operator ID: USER1                      Quant Rev: 7            Quant Time: 930223 14:43  
 Output File: ^I3289::A6                      Injected at: 930216 20:19  
 Data File: >I3289::A4                      Dilution Factor: .50000  
 Name: 0148;;;MW-46                      Instrument ID: \*\*MSD  
 Misc: 0148013                      HP59711;0210931;021193;LLW;1;;;10

ID File: I\_IFI::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

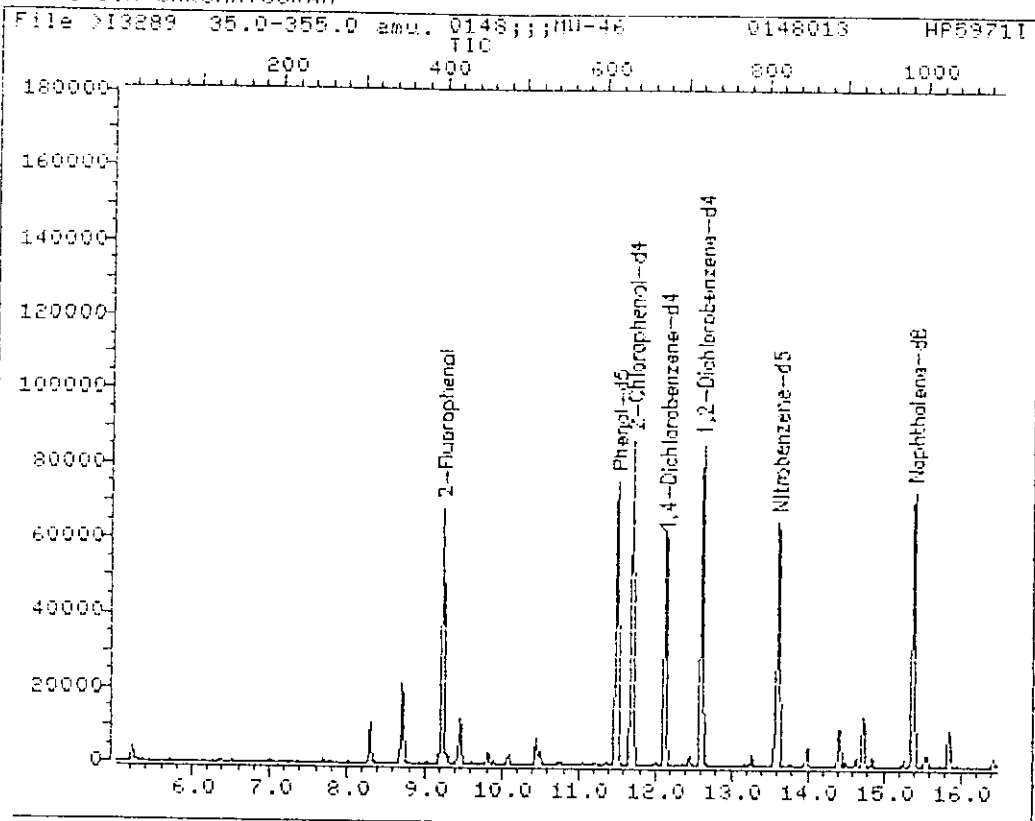
	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.13	151.8	24449	40.00	ug	94
2)	2-Chlorophenol-d4	11.70	132.0	61534	39.70	ug	80
3)	2-Fluorophenol	9.22	111.8	55949	36.35	ug	73
4)	Phenol-d5	11.50	98.8	81239	37.84	ug	62
10)	1,2-Dichlorobenzene-d4	12.61	152.0	33468	32.16	ug	96
17)	*Naphthalene-d8	15.39	135.9	91127	40.00	ug	97
18)	Nitrobenzene-d5	13.60	81.8	56329	32.53	ug	72
31)	*Acenaphthene-d10	20.05	163.9	52965	40.00	ug	92
	) 2-Fluorobiphenyl	18.28	171.8	95927	29.18	ug	96
✓ 41)	2,4,6-Tribromophenol	22.17	329.6	24716	32.63	ug	93
52)	*Phenanthrene-d10	23.94	187.9	95101	40.00	ug	98
61)	Di-n-butylphthalate	25.58	148.8	3178	.515	ug	62
63)	*Chrysene-d12	31.29	240.0	79440	40.00	ug	96
65)	Terphenyl-d14	28.18	244.0	50610	14.47	ug	97
<del>67)</del>	<del>Butylbenzylphthalate</del>	<del>27.55</del>	<del>140.0</del>	<del>522</del>	<del>.178</del>	<del>ug</del>	<del>74</del>
<del>70)</del>	<del>bis(2-Ethylhexyl)phthalate</del>	<del>31.40</del>	<del>148.8</del>	<del>2079</del>	<del>.584</del>	<del>ug</del>	<del>74</del>
71)	*Perylene-d12	38.18	264.0	84056	40.00	ug	95
<del>72)</del>	<del>Di-n-octylphthalate</del>	<del>34.83</del>	<del>148.9</del>	<del>2180</del>	<del>.283</del>	<del>ug</del>	<del>16</del>

\* Compound is ISTD

*CMC 2/20/93*

0455

TOTAL ION CHROMATOGRAM

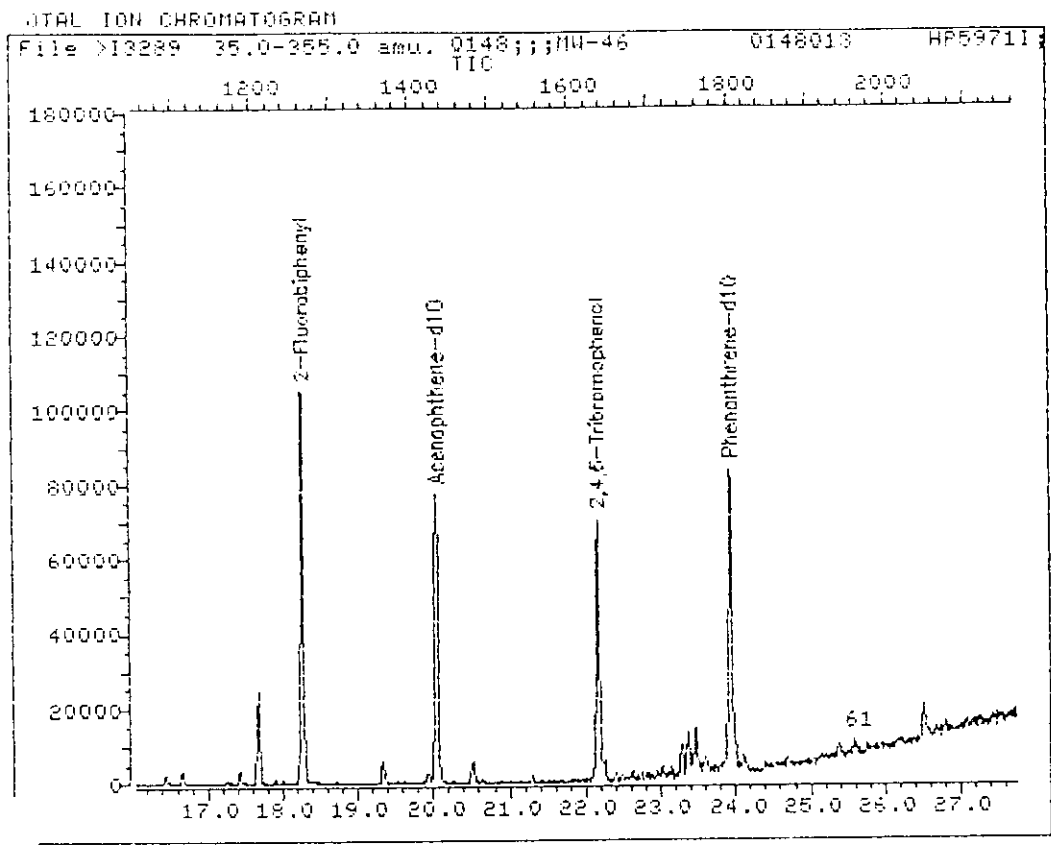


Data File: >I3289::A4                    Quant Output File: ^I3289::A6  
Name: 0148;;;MW-46                    Instrument ID: \*\*MSD  
Misc: 0148013                    HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IF1::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Qcal Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:43  
Injected at: 930216 20:19

0456



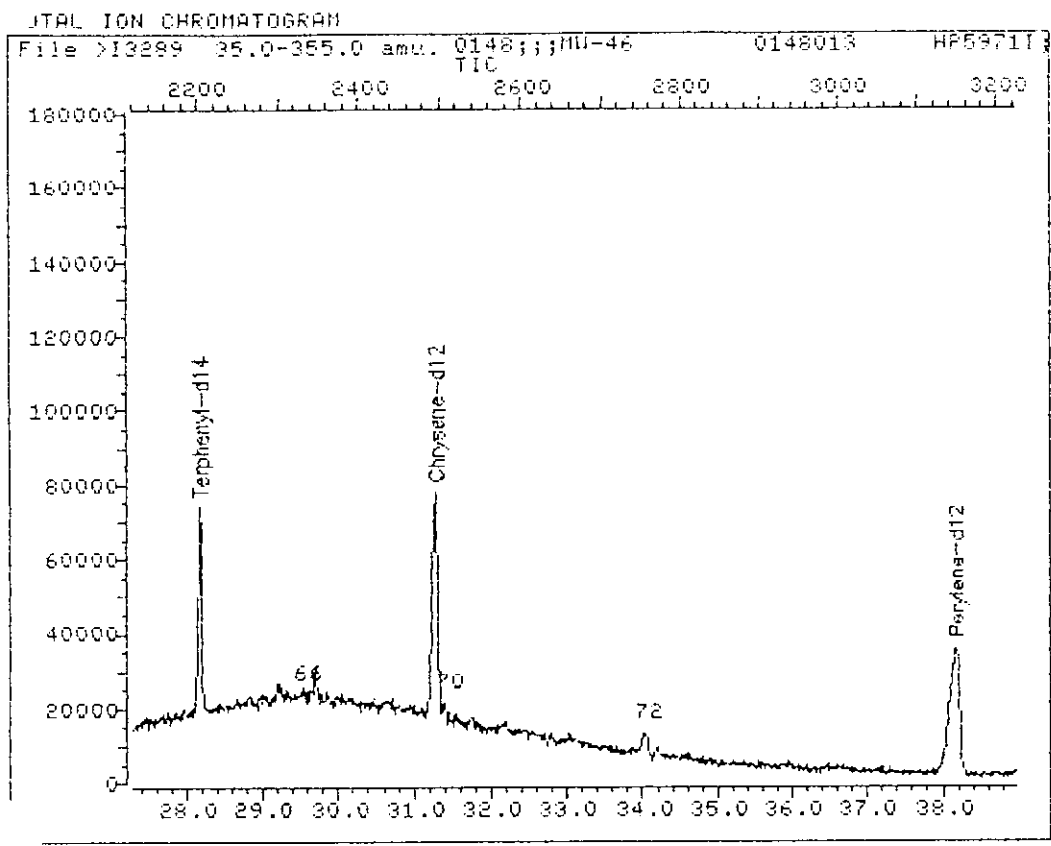
Data File: >I3289::A4                    Quant Output File: ^I3289::A6  
Name: 0148;;;MW-46                    Instrument ID: \*\*MSD  
Misc: 0148013                    HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IF1::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:43  
Injected at: 930216 20:19



0457

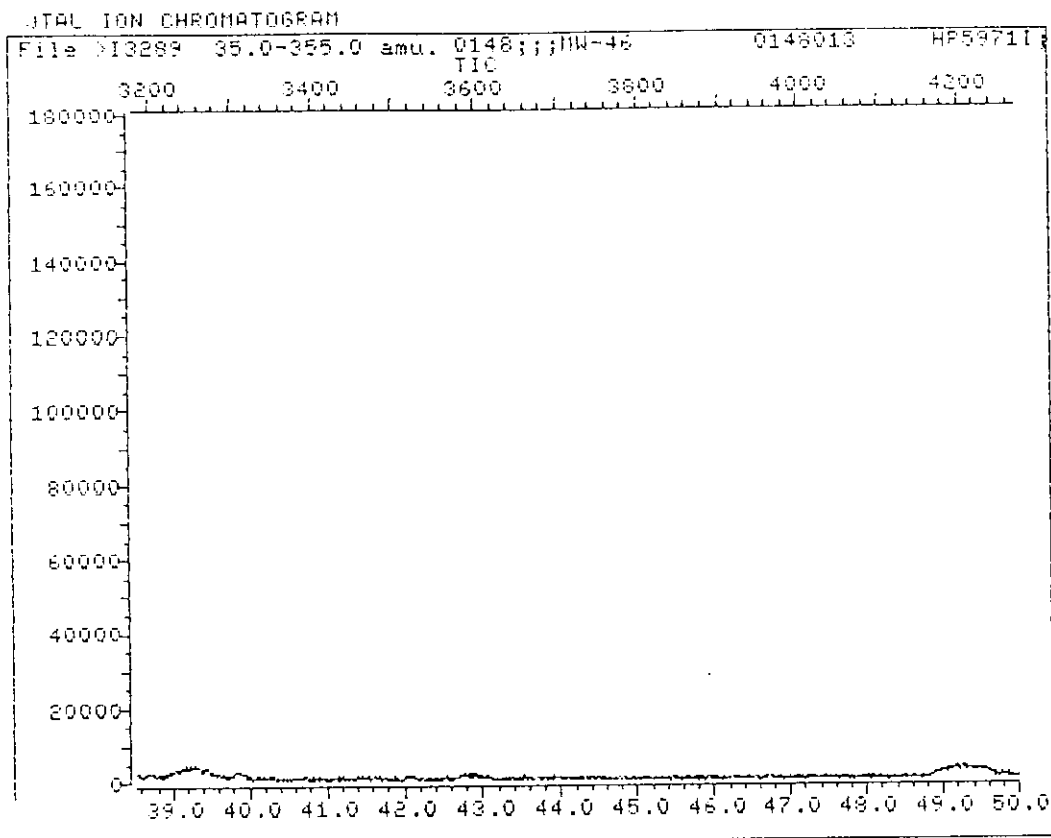


Data File: >I3289::A4 Quant Output File: ^I3289::A6  
Name: 0148;;;MW-46 Instrument ID: \*\*MSD  
Misc: 0148013 HP59711;0210931;021193;LLW;1;;;I0

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:43  
Injected at: 930216 20:19

0458

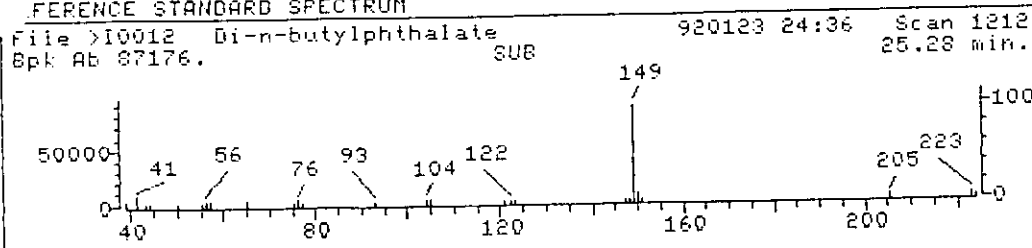


Data File: >I3289::A4 Quant Output File: ^I3289::A6  
Name: 0148;;;MW-46 Instrument ID: \*\*MSD  
Misc: 0148013 HP59711;0210931;021193;LLW;1;;;10

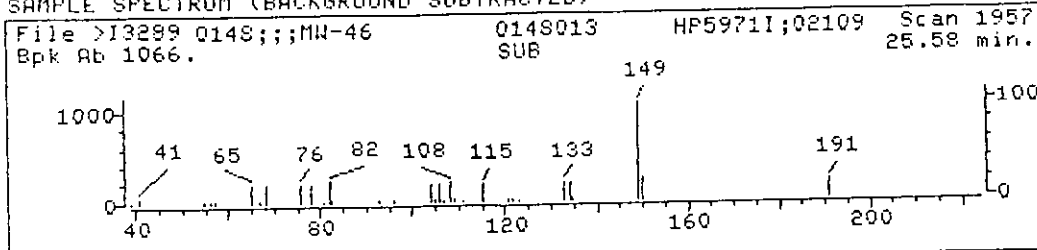
Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:43  
Injected at: 930216 20:19

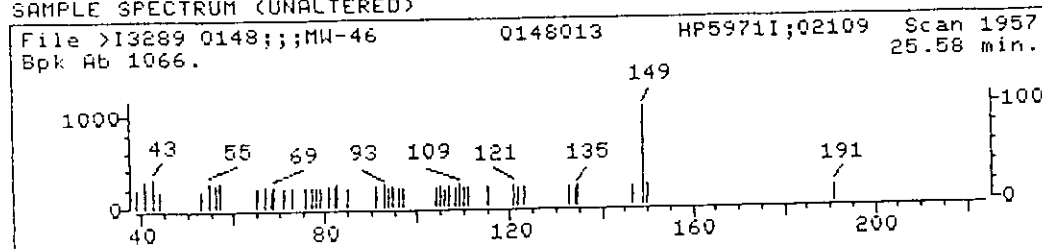
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: >I3289::A5                    Quant Output File: ^I3289::A6  
Name: 0148;;;MW-46                    Instrument ID: \*\*MSD  
Misc: 0148013                    HP5971I;0210931;021193;LLW;1;;;I0  
Quant Time: 930216 21:16                    Quant ID File: I\_IFI::A5  
Injected at: 930216 20:19                    Last Calibration: 910116 11:52  
Last Qual Time: 930216 08:48

Compound No : 61  
Compound Name : Di-n-butylphthalate  
Scan Number : 1957  
Retention Time: 25.58 min.  
Quant Ion : 148.8  
Area : 3178  
Concentration : .515 ug  
q-value : 62

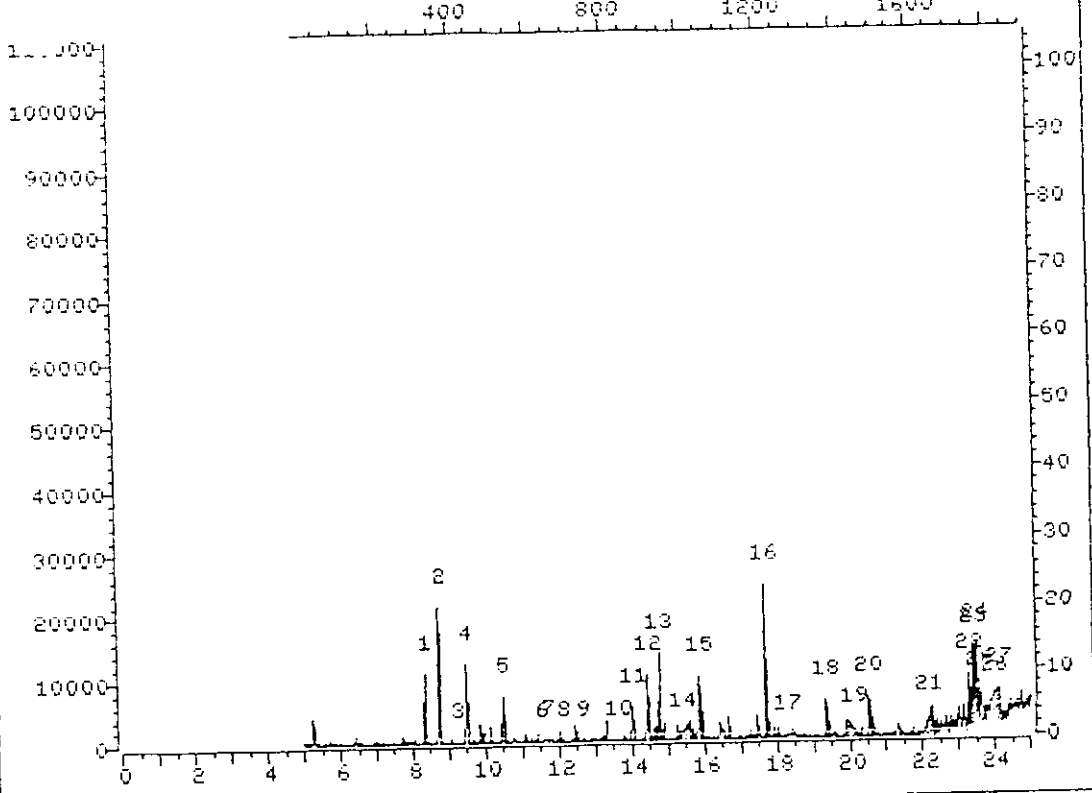
MS data file header from : >I3289::A5

Sample: 0148;;;MW-46 Operator: USER1 2/16/93 20:19  
Misc : 0148013 HP59711;0210931;021193;LLW;1;;;10  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 10 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

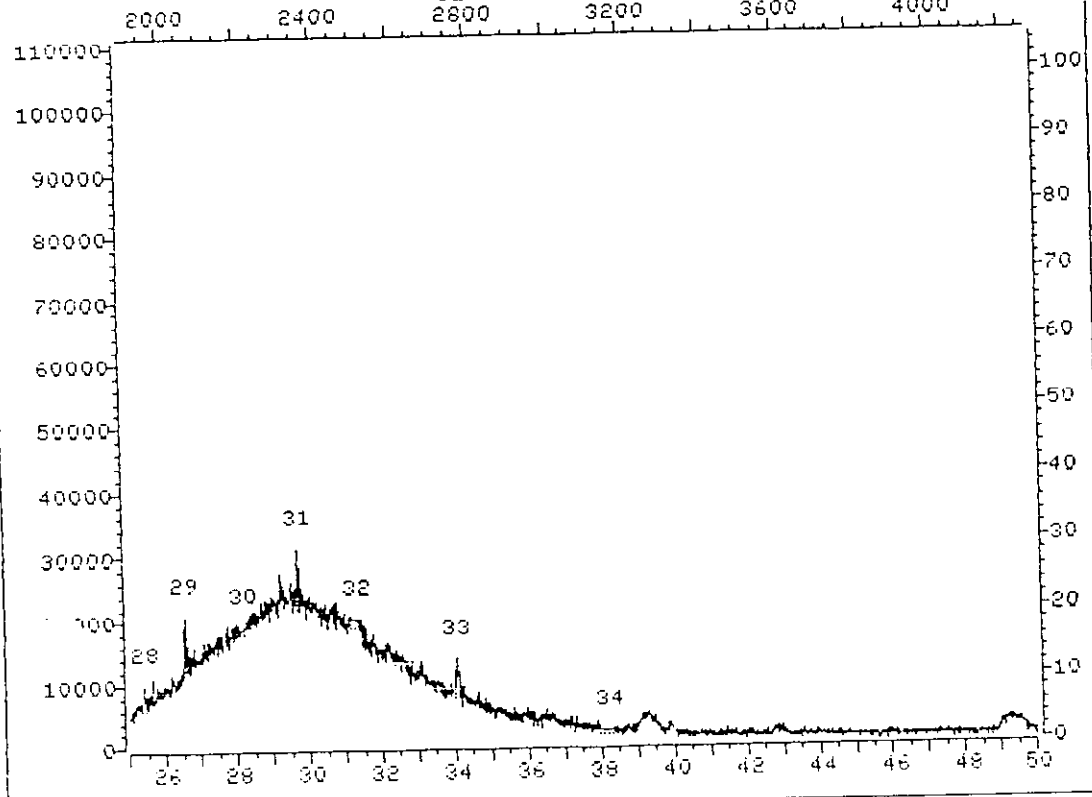
Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

Date: 02/16/93 20:19 Inst: I

File >I3289 9999.0-355.0 amu Q148;;;MN-46 0148013 HP5971I;021  
CLP TIC



File >I3289 9999.0-355.0 amu Q148;;;MN-46 0148013 HP5971I;021  
CLP TIC



MW-46  
HPSA71I

0462

Date: 02/16/93 20:19 Inst: 1

TIC PEAK REPORT

Pk#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
2.	8.71	49370.	7.	1.		.50
16.	17.68	61215.	7.	2.		.50
4.	9.45	26526.	4.	1.		.50
5.	10.45	17748.	3.	1.		.50
12.	14.42	24045.	3.	2.		.50
13.	14.74	30106.	3.	2.		.50
15.	15.85	24553.	3.	2.		.50
1.	8.30	23578.	3.	1.		.50
24.	23.47	36250.	3.	4.		.50
23.	23.36	30937.	2.	4.		.50

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range		TI/SI
1,4-DICHLOROBENZENE-D4	12.12	135129.	0.00	13.76	5.5
NAPHTHALENE-D8	15.39	177276.	13.76	17.72	1.9
ACENAPHTHENE-D10	20.05	227513.	17.72	22.00	4.3
PHENANTHRENE-D10	23.94	269094.	22.00	27.62	2.8
CHRYSENE-D12	31.29	289072.	27.62	34.74	3.6
PERYLENE-D12	38.18	307455.	34.74	38.18	3.7

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 4  
Target peaks matched: 0  
Total TIC identified: 10

TICS : 2:17 PM MON., 22 FEB., 1993

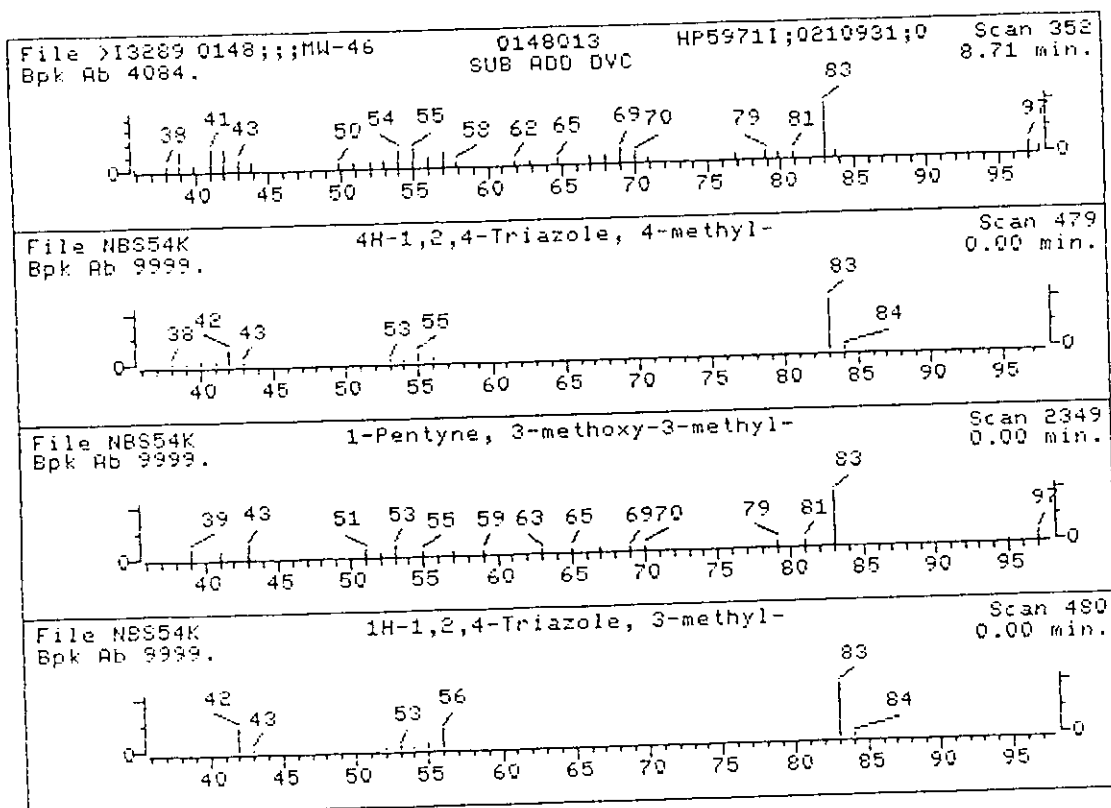
1. 4H-1,2,4-Triazole, 4-methyl-
2. 1-Pentyne, 3-methoxy-3-methyl-
3. 1H-1,2,4-Triazole, 3-methyl-

83 C3H5N3  
112 C7H12O  
83 C3H5N3

Sample file: >I3289      Spectrum #: 352  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 40

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	30*	10570408	6458	NBS54K	29	46	0	0	100	42	12	21
2.	26	22802353	6484	NBS54K	41	41	2	0	73	42	8	14
3.	25*	7170016	6459	NBS54K	22	33	1	0	84	48	7	14

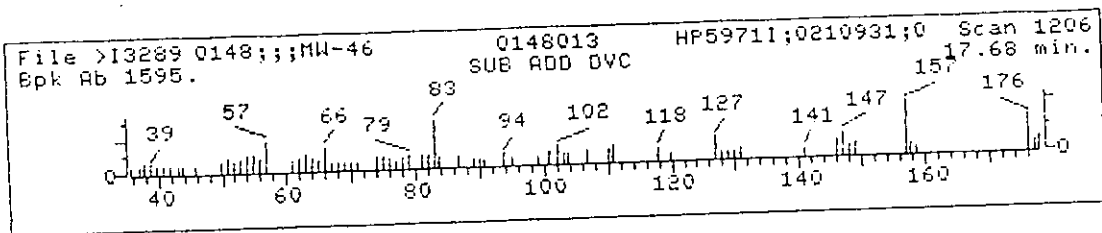
Peak#: 2 Area: 49370. Est Conc: 7. Date: 02/16/93 20:19 Inst: I



Sample file: >I3289      Spectrum #:      1206

No data base entries were retrieved.

Peak#: 16 Area: 61215. Est Conc:      7. Date: 02/16/93 20:19 Inst: 1





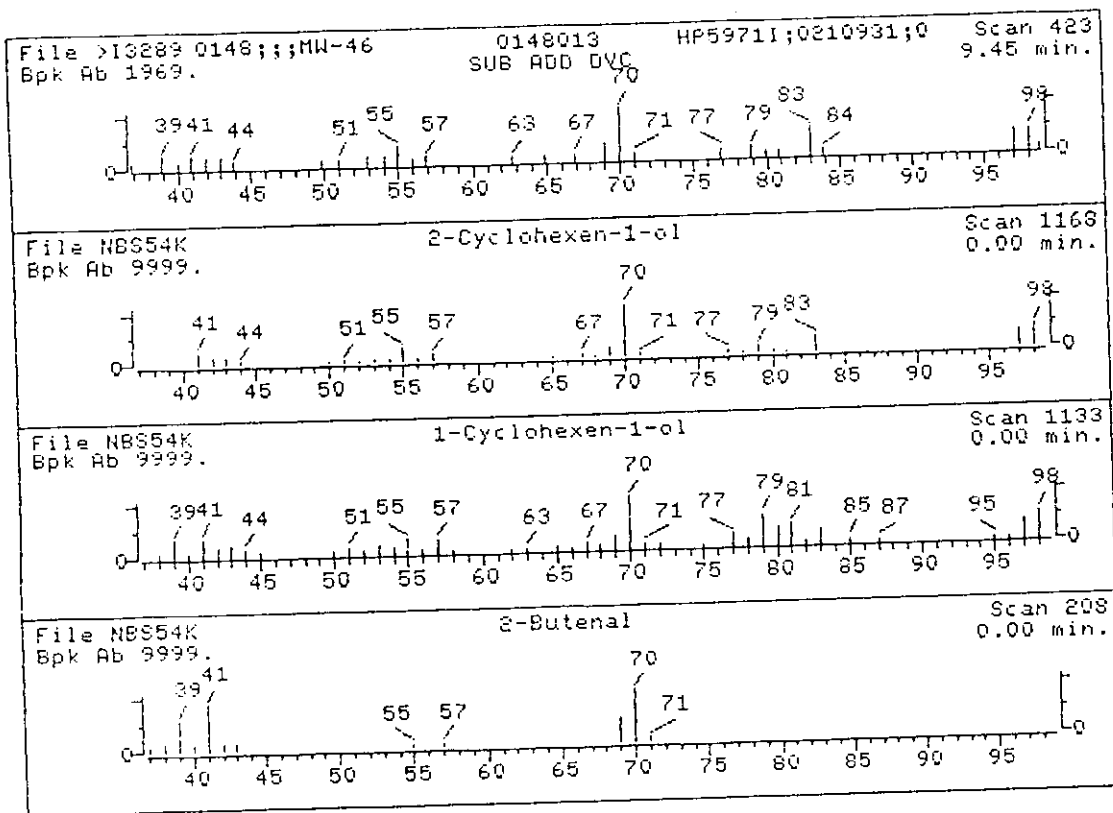
- . 2-Cyclohexen-1-ol
- . 1-Cyclohexen-1-ol
- 3. 2-Butenal
- 4. Butane, 2-isocyanato-
- 5. 1H-Pyrazole, 3-ethyl-4,5-dihydro-

- 98 C6H10O
- 98 C6H10O
- 70 C4H6O
- 99 C5H9NO
- 98 C5H10N2

Sample file: >I3289 Spectrum #: 423  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	71*	822673	4036	NBS54K	56	43	0	0	99	27	29	67
2.	42*	4065810	4033	NBS54K	47	66	3	0	79	25	17	13
3.	11*	4170303	3994	NBS54K	36	50	3	0	100	65	2	14
4.	11*	15585985	4049	NBS54K	33	50	2	0	81	63	2	16
5.	11*	5920296	9888	NBS54K	23	66	2	0	46	61	2	13

Peak#: 4 Area: 26526. Est Conc: 4. Date: 02/16/93 20:19 Inst: I



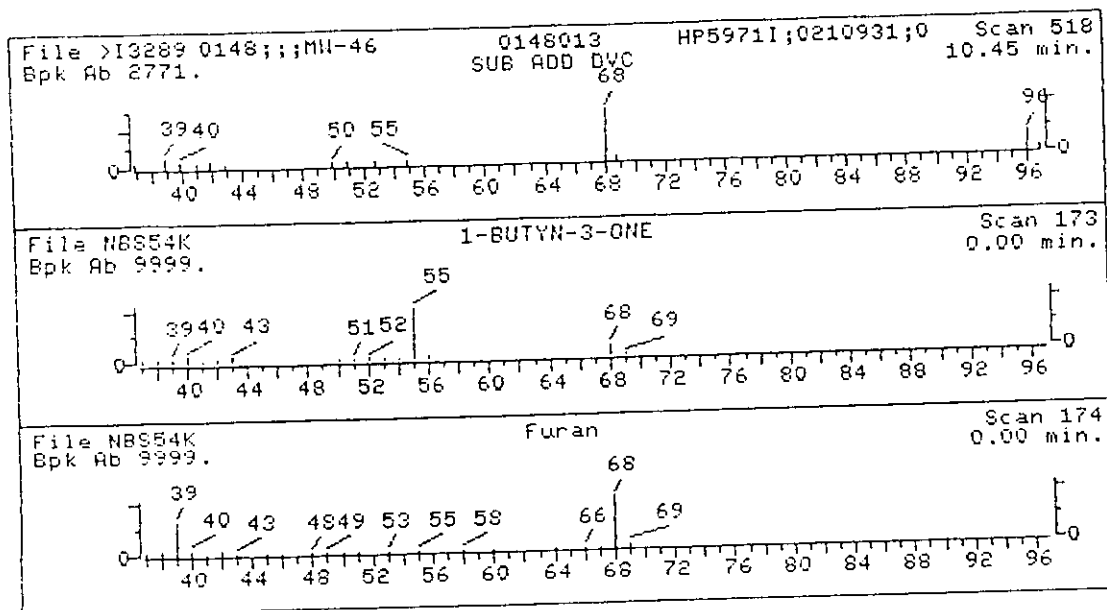
1. 1-BUTYN-3-ONE
2. Furan

68 C4H4O  
68 C4H4O

Sample file: >I3289      Spectrum #: 518  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	41*	173	185	NBS54K	22	88	3	0	100	23	17	12
2.	36*	110009	3702	NBS54K	26	46	3	0	100	26	14	13

Peak#: 5 Area: 17748. Est Conc: 3. Date: 02/16/93 20:19 Inst: 1

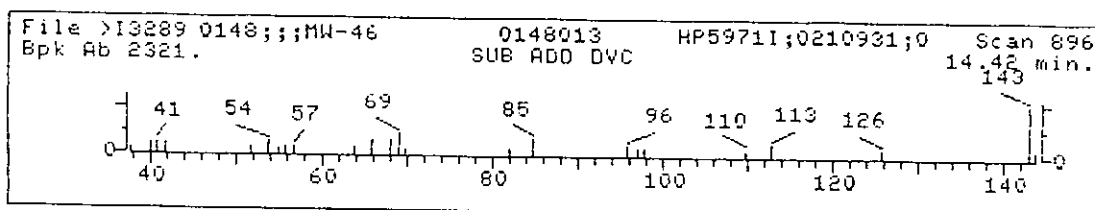


0467

Sample file: >I3289 Spectrum #: 896

No data base entries were retrieved.

Peak#: 12 Area: 24045. Est Conc: 3. Date: 02/16/93 20:19 Inst: I



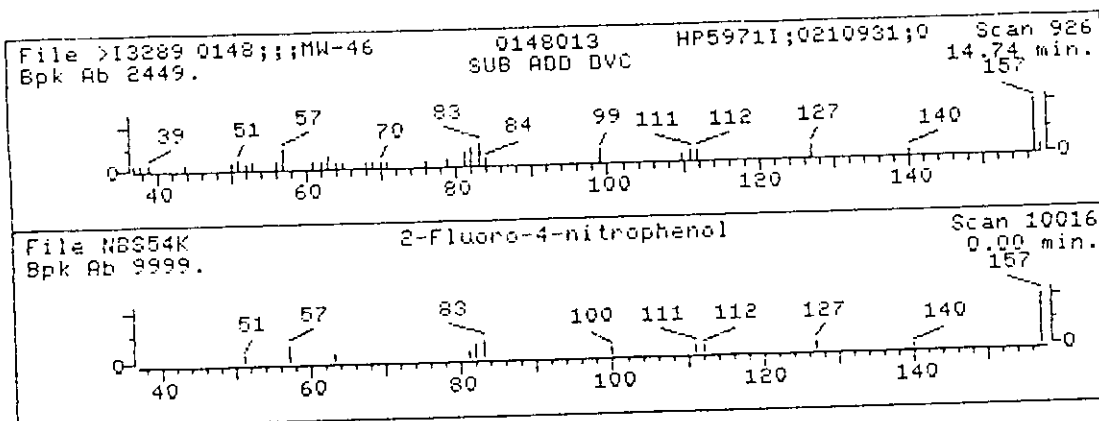
.. 2-Fluoro-4-nitrophenol

157 C6H4FN03

Sample file: >I3289      Spectrum #: 926  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	89*	403190	21881	NBS54K	74	15	1	0	100	24	47	89

Peak#: 13 Area: 30106. Est Conc: 3. Date: 02/16/93 20:19 Inst: I



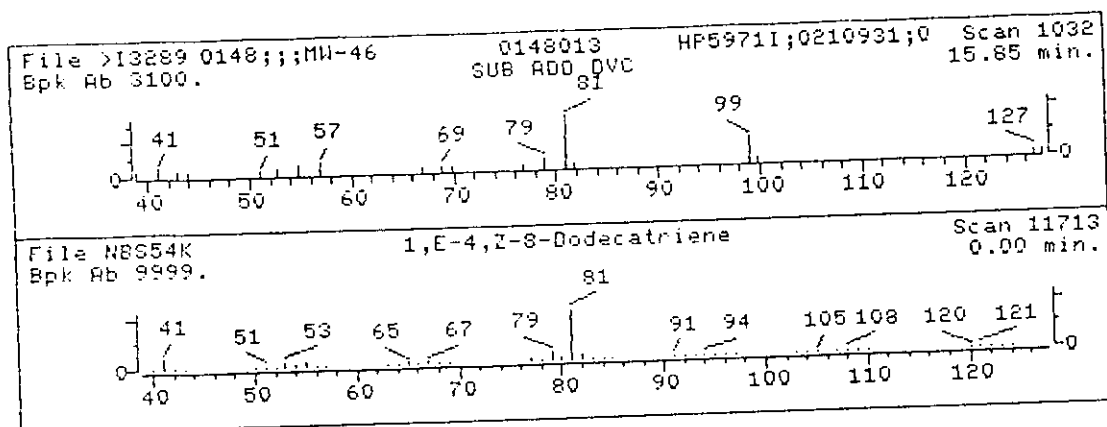
.. 1,E-4,Z-8-Dodecatriene

164 C12H20

Sample file: >I3289 Spectrum #: 1032  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	26	83489229	6118	NBS54K	36	45	2	0	100	40	10	12

Peak#: 15 Area: 24953. Est Conc: 3. Date: 02/16/93 20:19 Inst: I



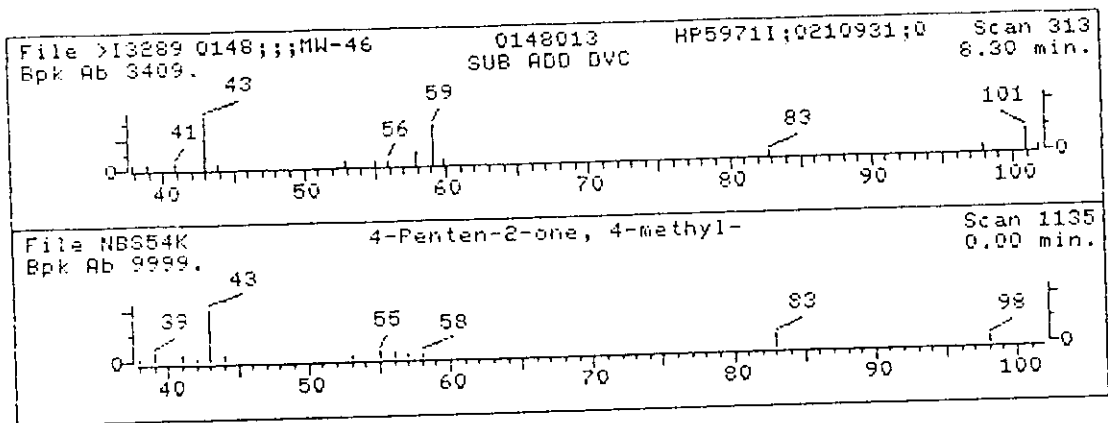
98 C6H100

4-Penten-2-one, 4-methyl-

Sample file: >I3289      Spectrum #: 313  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	3744023	9897	NBS54K	36	43	2	0	77	56	3 18

Peak#: 1 Area: 23578. Est Conc: 3. Date: 02/16/93 20:19 Inst: 1



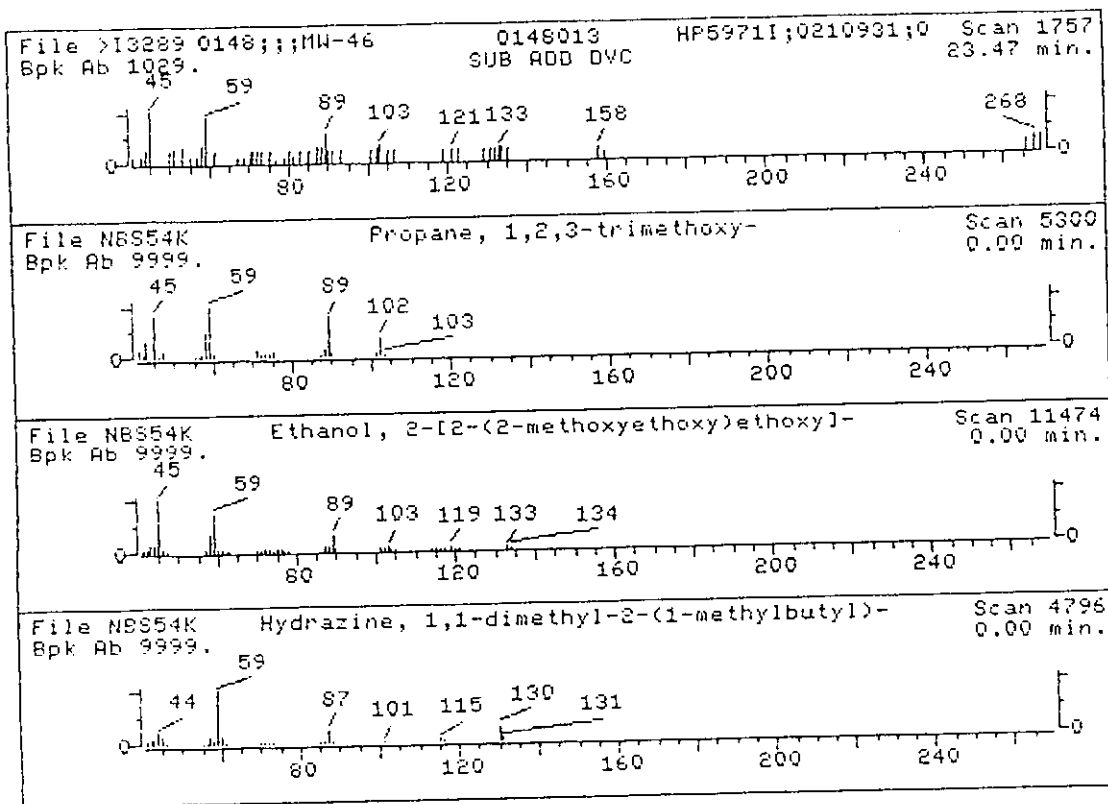
0471

- . Propane, 1,2,3-trimethoxy- 134 C6H14O3
- 2. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 C7H16O4
- 3. Hydrazine, 1,1-dimethyl-2-(1-methylbutyl)- 130 C7H18N2
- 4. 2,5,8,11,14-Pentaoxahexadecan-16-ol 252 C11H24O6

Sample file: >I3289 Spectrum #: 1757  
Search speed: 1 Tilting option: N No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25	20637494	8497	NBS54K	39	73	0	0	67	48	7	15
2.	15	112356	8547	NBS54K	25	74	0	0	100	60	3	12
3.	11*	75267979	1916	NBS54K	23	76	0	0	74	63	2	16
4.	11	23778521	8670	NBS54K	25	104	0	0	100	61	2	12

Peak#: 24 Area: 36250. Est Conc: 3. Date: 02/16/93 20:19 Inst: 1



0472

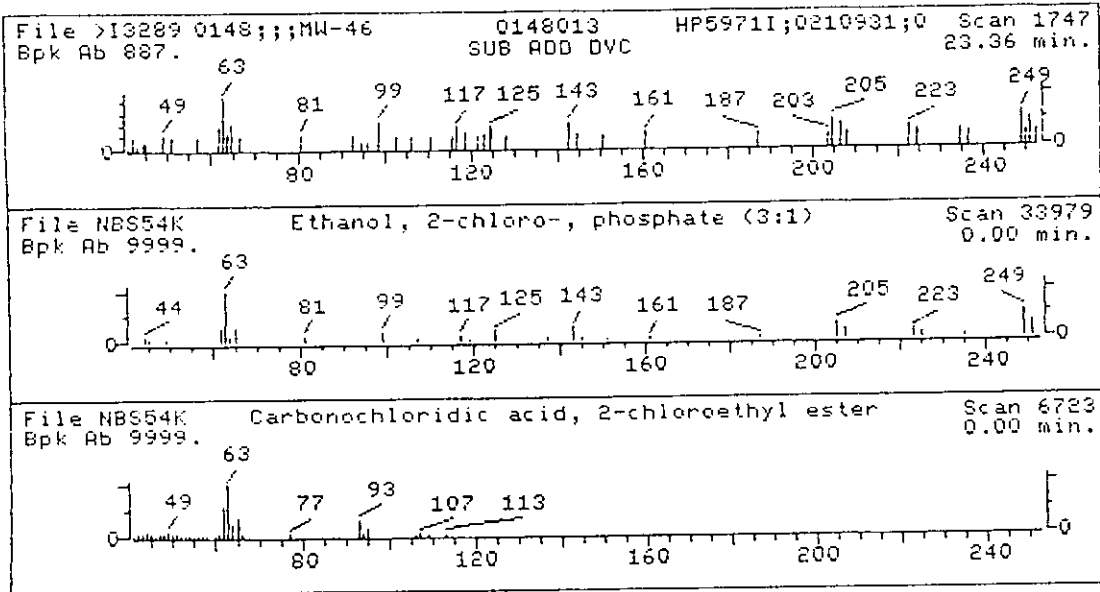
- 1. Ethanol, 2-chloro-, phosphate (3:1)
- 2. Carbonochloridic acid, 2-chloroethyl ester

284 C6H12Cl3O4P  
142 C3H4Cl2O2

Sample file: >I3289      Spectrum #: 1747  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	29	115968	2930	NBS54K	31	136	0	0	100	38	10	15
2.	11	627112	2536	NBS54K	36	76	0	0	67	65	2	15

Peak#: 23 Area: 30937. Est Conc: 2. Date: 02/16/93 20:19 Inst: I





1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0473

MW-35
-------

Lab Name: IEA/CT	Contract:	
Lab Code: IEACT	Case No.: 0148	SAS No.:
Matrix: (soil/water) WATER		SDG No.: Z0148
Sample wt/vol: 1000 (g/mL) ML		Lab Sample ID: 0148014
Level: (low/med) LOW		Lab File ID: I3303.D
% Moisture: _____ decanted: (Y/N) _____		Date Received: 02/02/93
Concentrated Extract Volume: 1000 (UL)		Date Extracted: 02/11/93
Injection Volume: 2.0 (uL)		Date Analyzed: 02/19/93
GPC Cleanup: (Y/N) N	pH:	Dilution Factor: 1.0

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	5	J
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	2	J

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0474

EPA SAMPLE NO.

MW-35

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148014

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3303.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (UL)

Date Analyzed: 02/19/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

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

CAS NO.

COMPOUND

Q

51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	1	J
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	0.8	JB
206-44-0	Fluoranthene	1	J
129-00-0	Pyrene	0.9	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.7	JB
117-84-0	Di-n-octylphthalate	10 0.4	J
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

cmc  
2/25/93

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET 0475  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-35

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148014

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3303.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 02/19/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

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

Number TICs found: 21

CMC 2/25/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN DIMETHYL NAPHTHALENE	19.53	6	✓
2.	UNKNOWN	20.94	5	
3.	UNKNOWN	18.86	4	
4.	UNKNOWN MW=1162	19.10	4	
5.	UNKNOWN MW=136	15.98	4	
6.	UNKNOWN BENZO[B]THIOPHENE METHYL	17.02	4	
7.	UNKNOWN	18.15	3	
8.	UNKNOWN	15.28	3	✓
9.	ALDOL CONDENSATION PRODUCT	8.16	3	QAB
10.	UNKNOWN C <sub>10</sub> H <sub>14</sub>	12.81	3	✓
11.	UNKNOWN	13.23	3	
12.	UNKNOWN C <sub>4</sub> ALKYL BENZENE	13.99	3	
13.	UNKNOWN	14.51	3	
14.	UNKNOWN C <sub>10</sub> H <sub>14</sub>	14.65	3	
15.	UNKNOWN	21.06	3	
16.	UNKNOWN	33.73	3	
17.	UNKNOWN	15.85	2	
18.	UNKNOWN	14.76	2	
19.	UNKNOWN MW=120	16.50	2	
20.	UNKNOWN	13.81	2	
21.	UNKNOWN	8.57	2	✓
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

0 0476

QUANT REPORT

Operator ID: USER1  
 Output File: ^I3303::A6  
 Data File: >I3303::A5  
 Name: 0148;;;MW-35  
 Misc: 0148014

Quant Rev: 7 Quant Time: 930222 17:29  
 Injected at: 930219 11:39  
 Dilution Factor: .50000  
 Instrument ID: \*\*MSD  
 HP59711;021093;021193;LLW;1;;;I02

ID File: I\_IFI::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qcal Time: 930219 10:28

Compound	R.T.	Q	ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.00	151.8		26640	40.00	ug	94
2) 2-Chlorophenol-d4	11.60	132.0		69661	40.93	ug	79
3) 2-Fluorophenol	9.15	111.8		70491	40.52	ug	72
4) Phenol-d5	11.44	98.8		102646	43.19	ug	61
<del>7) 2-Chlorophenol</del>	<del>11.63</del>	<del>127.8</del>		<del>814</del>	<del>.344</del>	<del>ug</del>	<del>45</del>
10) 1,2-Dichlorobenzene-d4	12.47	152.0		31294	28.12	ug	93
17) *Naphthalene-d8	15.25	135.9		95882	40.00	ug	97
18) Nitrobenzene-d5	13.47	81.8		52273	27.23	ug	71
<del>19) Nitrobenzene</del>	<del>13.81</del>	<del>76.8</del>		<del>1289</del>	<del>.713</del>	<del>ug</del>	<del>79</del>
<del>24) 2,4-Dimethylphenol</del>	<del>14.53</del>	<del>106.8</del>		<del>236</del>	<del>.133</del>	<del>ug</del>	<del>82</del>
<del>26) Naphthalene</del>	<del>15.25</del>	<del>127.9</del>		<del>2117</del>	<del>.461</del>	<del>ug</del>	<del>73</del>
<del>29) 4-Chloro-3-methylphenol</del>	<del>16.79</del>	<del>106.9</del>		<del>511</del>	<del>.289</del>	<del>ug</del>	<del>72</del>
30) 2-Methylnaphthalene	17.39	141.9		15844	4.73	ug	95
31) *Acenaphthene-d10	19.91	163.9		46310	40.00	ug	89
35) 2-Fluorobiphenyl	18.13	171.8		86505	30.34	ug	97
<del>36) 2-Chloronaphthalene</del>	<del>18.66</del>	<del>161.8</del>		<del>2685</del>	<del>1.03</del>	<del>ug</del>	<del>73</del>
<del>40) 2,6-Dinitrotoluene</del>	<del>19.32</del>	<del>164.8</del>		<del>2077</del>	<del>2.54</del>	<del>ug</del>	<del>76</del>
42) Acenaphthene	19.99	152.9		5152	2.20	ug	95
<del>43) 2,4-Dinitrophenol</del>	<del>20.04</del>	<del>183.8</del>		<del>389</del>	<del>.892</del>	<del>ug</del>	<del>46</del>
<del>45) Dibenzofuran</del>	<del>20.41</del>	<del>167.8</del>		<del>4117</del>	<del>1.13</del>	<del>ug</del>	<del>81</del>
<del>46) 2,4-Dinitrotoluene</del>	<del>20.79</del>	<del>164.8</del>		<del>1247</del>	<del>1.02</del>	<del>ug</del>	<del>54</del>
<del>49) Fluorene</del>	<del>21.32</del>	<del>165.9</del>		<del>6515</del>	<del>2.74</del>	<del>ug</del>	<del>94</del>
<del>50) 4-Nitroaniline</del>	<del>21.54</del>	<del>137.9</del>		<del>178</del>	<del>.258</del>	<del>ug</del>	<del>49</del>
51) 2,4,6-Tribromophenol	22.07	329.6		30258	44.78	ug	93
52) *Phenanthrene-d10	23.83	187.9		81306	40.00	ug	99
<del>53) 4,6-Dinitro-2-methylphenol</del>	<del>21.64</del>	<del>197.9</del>		<del>1210</del>	<del>1.81</del>	<del>ug</del>	<del>39</del>
<del>58) Phenanthrene</del>	<del>23.87</del>	<del>177.9</del>		<del>2491</del>	<del>.665</del>	<del>ug</del>	<del>81</del>
<del>59) Carbazole</del>	<del>24.42</del>	<del>166.8</del>		<del>254</del>	<del>.211</del>	<del>ug</del>	<del>63</del>
60) Anthracene	23.99	177.9		4876	1.27	ug	97
61) Di-n-butylphthalate	25.48	148.8		4342	.844	ug	95
62) Fluoranthene	27.04	201.9		5852	1.40	ug	93
63) *Chrysene-d12	31.12	240.0		87707	40.00	ug	98
64) Pyrene	27.64	201.9		4795	.867	ug	98
65) Terphenyl-d14	28.06	244.0		53266	13.78	ug	99
<del>67) Butylbenzylphthalate</del>	<del>29.42</del>	<del>148.8</del>		<del>320</del>	<del>.101</del>	<del>ug</del>	<del>86</del>
<del>68) 3,3'-Dichlorobenzidine</del>	<del>31.00</del>	<del>251.9</del>		<del>624</del>	<del>.609</del>	<del>ug</del>	<del>34</del>
<del>69) Benzo(a)anthracene</del>	<del>31.05</del>	<del>228.8</del>		<del>2932</del>	<del>.597</del>	<del>ug</del>	<del>81</del>
<del>70) Chrysene</del>	<del>31.18</del>	<del>228.8</del>		<del>2080</del>	<del>.698</del>	<del>ug</del>	<del>78</del>
70) bis(2-Ethylhexyl)phthalate	31.21	148.8		2673	.679	ug	85
71) *Perylene-d12	37.83	264.0		87178	40.00	ug	99

0 0477

QUANT REPORT

Page 2

Operator ID: USER1  
Output File: ^I3303::A6  
Data File: >I3303::A5  
Name: 0148;;;MW-35  
Misc: 0148014

Quant Rev: 7      Quant Time: 930222 17:29  
                  Injected at: 930219 11:39  
                  Dilution Factor: .50000  
                  Instrument ID: \*\*MSD  
                  HP5971I;021093;021193;LLW;1;;;I02

ID File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

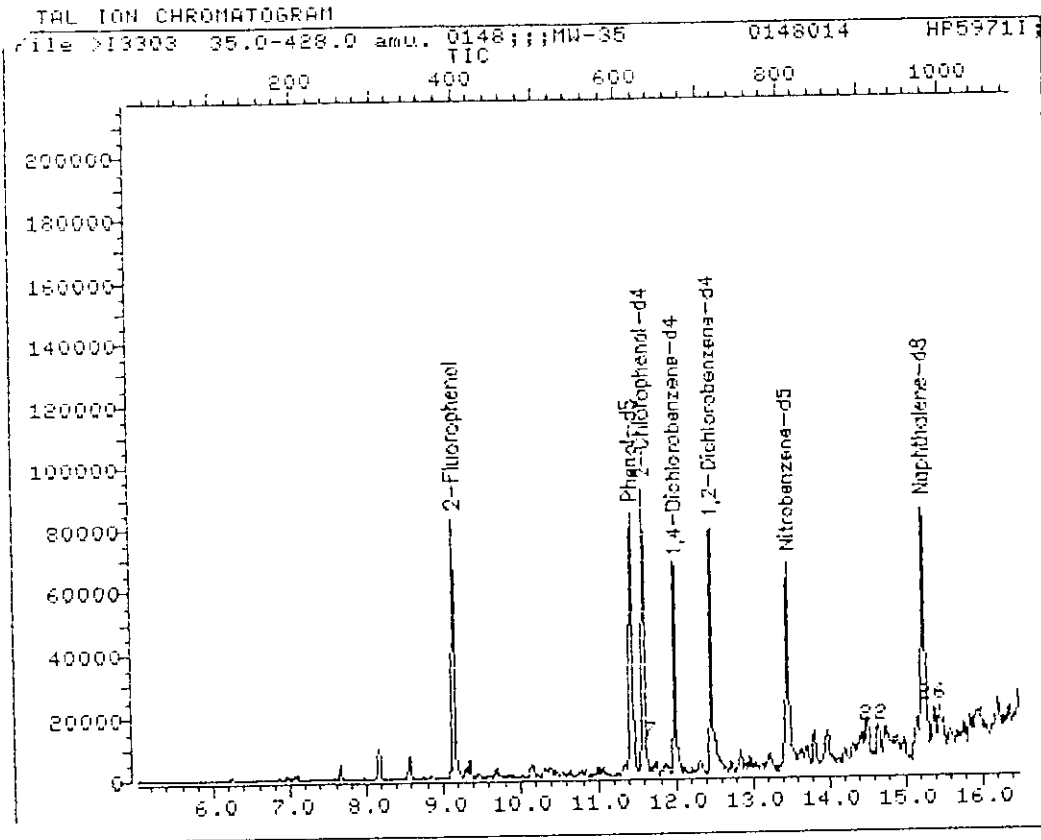
Last Qual Time: 930219 10:28

Compound	R.T.	Q ion	Area	Conc	Units	q
<del>72) Di-n-octylphthalate</del>	<del>33.77</del>	<del>148.9</del>	<del>3465</del>	<del>.451</del>	<del>ug</del>	<del>56</del>

\* Compound is ISTD

*01/28/93*

0 0478



Data File: >I3303::A5  
Name: 0148;;;MW-35  
Misc: 0148014

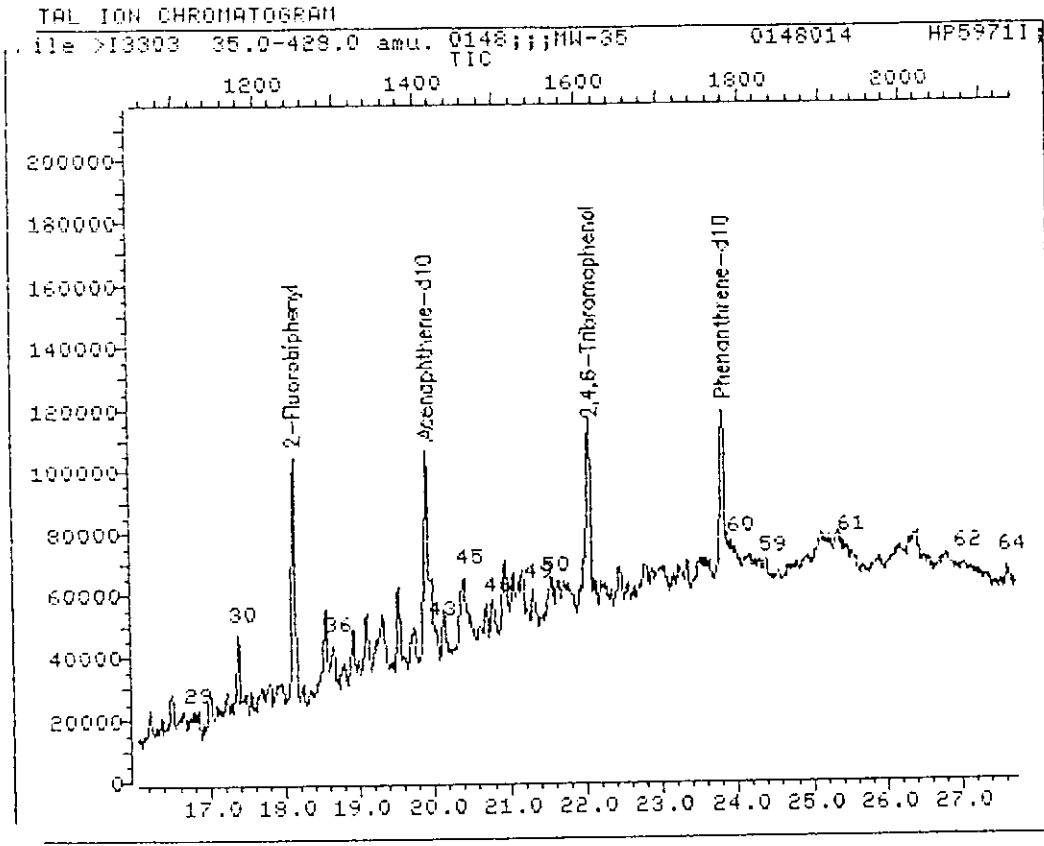
Quant Output File: ^I3303::A6  
Instrument ID: \*\*MSD  
HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930219 10:29

Operator ID: USER1  
Quant Time : 930222 17:29  
Injected at: 930219 11:39

C 0479

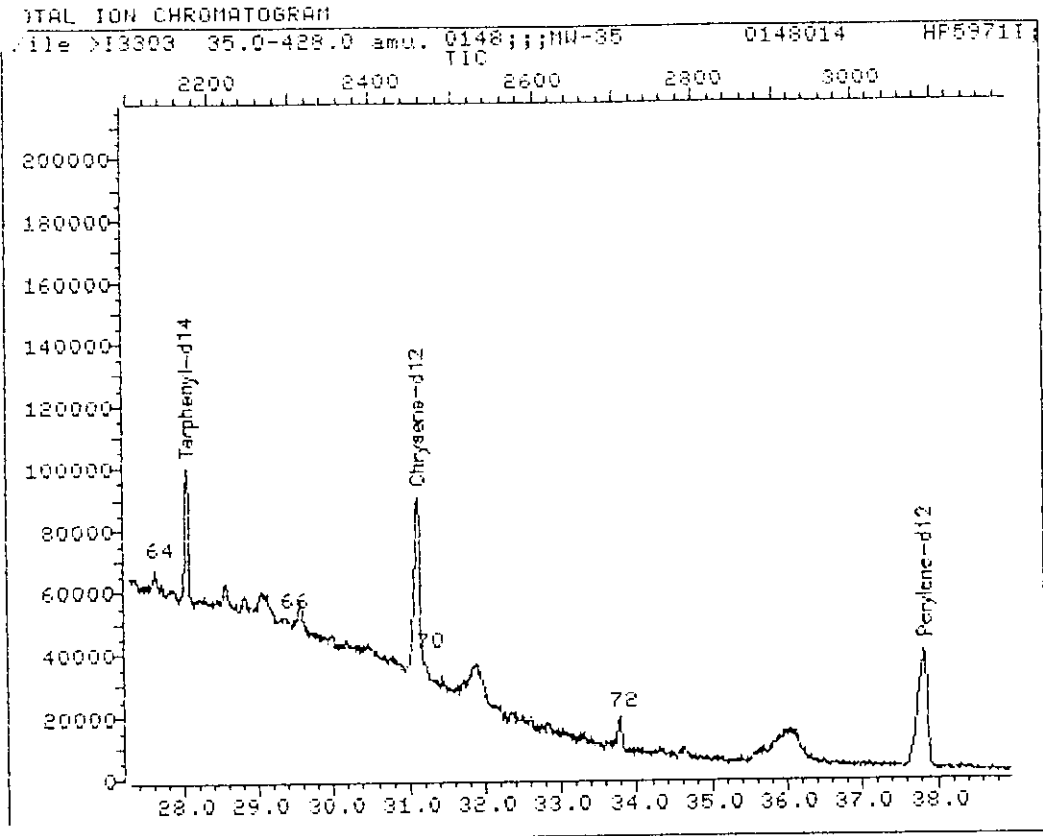


Data File: >I3303::A5 Quant Output File: ^I3303::A6  
Name: 0148;;;MW-35 Instrument ID: \*\*MSD  
Misc: 0148014 HP59711;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:29  
Injected at: 930219 11:39

0480



Data File: >I3303::A5 Quant Output File: ^I3303::A6  
Name: 0148;;;MW-35 Instrument ID: \*\*MSD  
Misc: 0148014 HP59711;021093;021193;LLW;1;;;I02

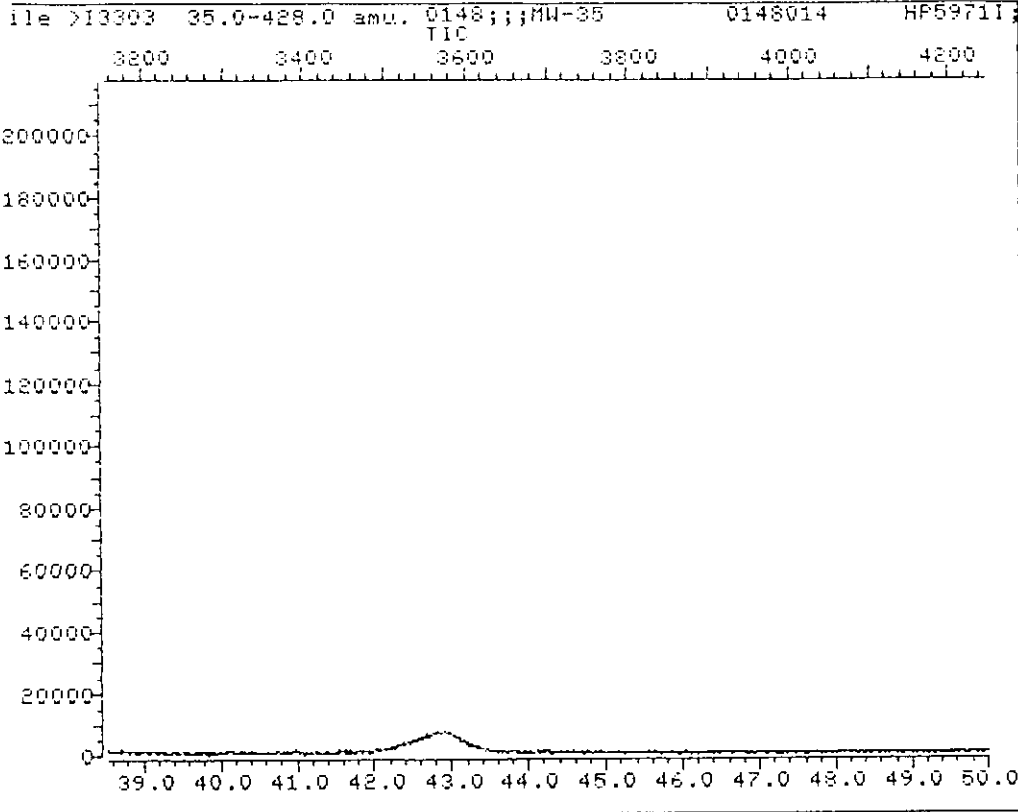
Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:29  
Injected at: 930219 11:39



0 0481

TOTAL ION CHROMATOGRAM



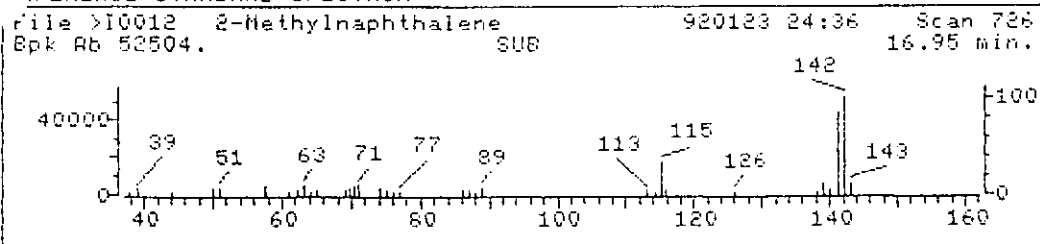
Data File: >I3303::A5 Quant Output File: ^I3303::A6  
Name: 0148;;;MW-35 Instrument ID: \*\*MSD  
Misc: 0148014 HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5  
Title: IF8-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930219 10:28

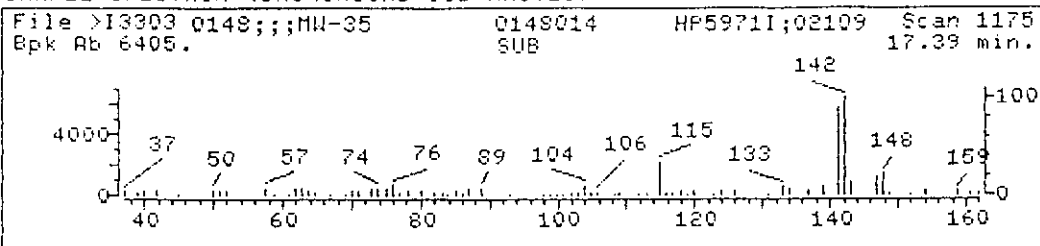
Operator ID: USER1  
Quant Time : 930222 17:29  
Injected at: 930219 11:39

0482

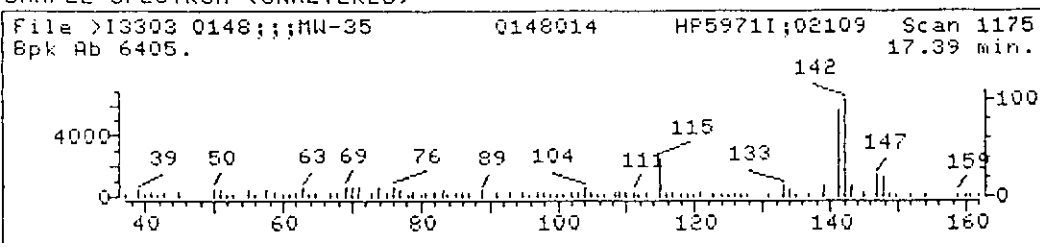
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



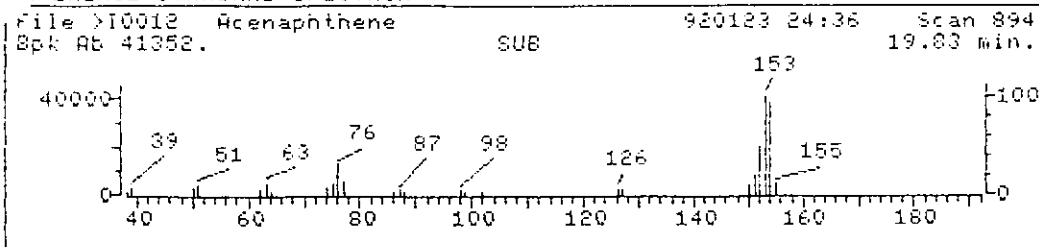
## SAMPLE SPECTRUM (UNALTERED)



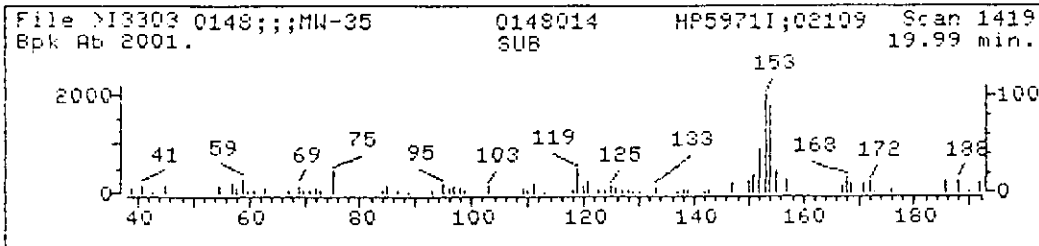
Data File: >I3303::A2 Quant Output File: ^I3303::A6  
 Name: 0148;;;MW-35 Instrument ID: \*\*MSD  
 Misc: 0148014 HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 12:43 Quant ID File: I\_IF1::A5  
 Injected at: 930219 11:39 Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 30  
 Compound Name : 2-Methylnaphthalene  
 Scan Number : 1175  
 Retention Time: 17.39 min.  
 Quant Ion : 141.9  
 Area : 15844  
 Concentration : 4.73 ug  
 q-value : 95

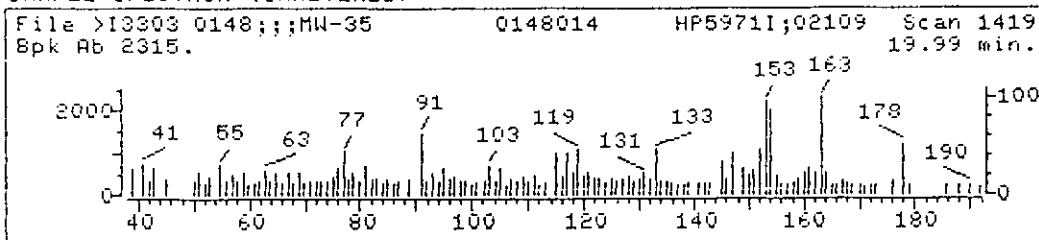
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



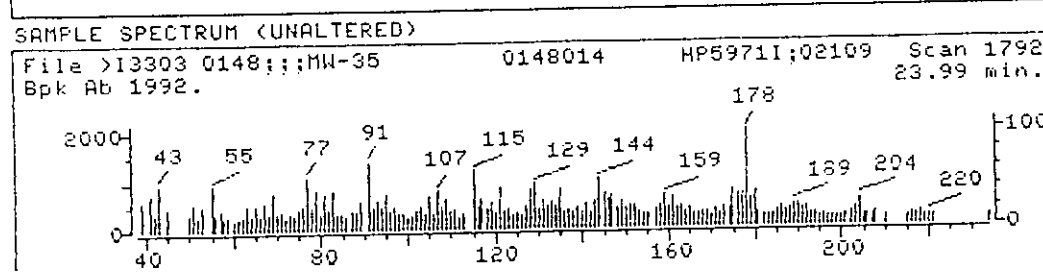
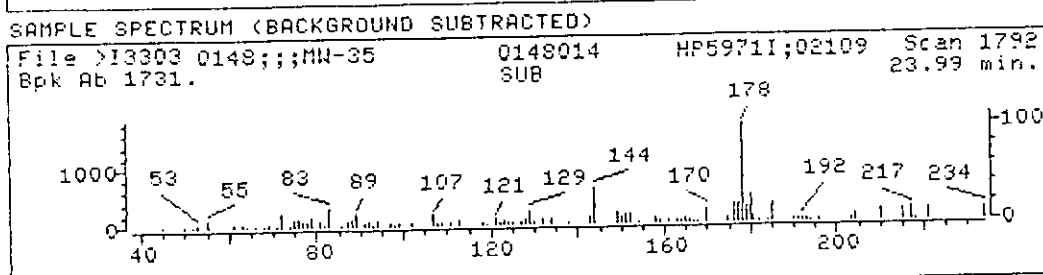
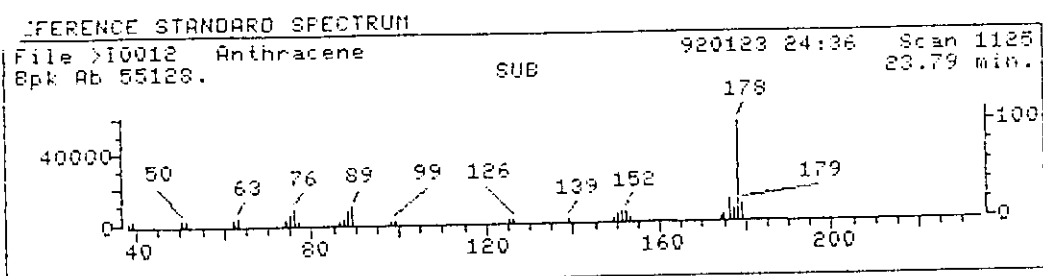
SAMPLE SPECTRUM (UNALTERED)



Data File: >I3303::A2                    Quant Output File: ^I3303::A6  
 Name: 0148;;;MW-35                    Instrument ID: \*\*MSD  
 Misc: 0148014                    HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 12:43                    Quant ID File: I\_IF1::A5  
 Injected at: 930219 11:39                    Last Calibration: 910116 11:52  
 Last Qual Time: 930219 10:28

Compound No : 42  
 Compound Name : Acenaphthene  
 Scan Number : 1419  
 Retention Time: 19.99 min.  
 Quant Ion : 152.9  
 Area : 5152  
 Concentration : 2.20 ug  
 q-value : 95

0484

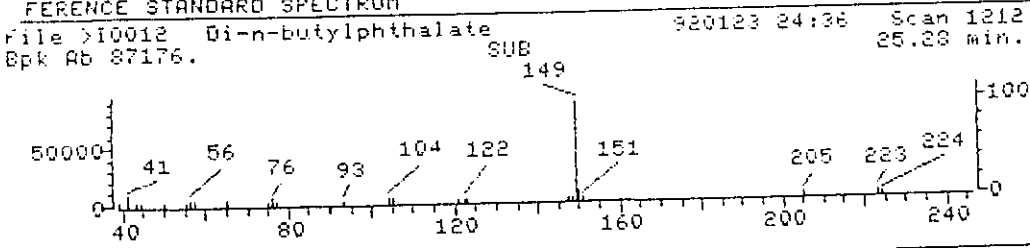


Data File: >I3303::A2 Quant Output File: ^I3303::A6  
Name: 0148;;;MW-35 Instrument ID: \*\*MSD  
Misc: 0148014 HP59711;021093;021193;LLW;1;;;102  
Quant Time: 930219 12:43 Quant ID File: I\_IFI::A5  
Injected at: 930219 11:39 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

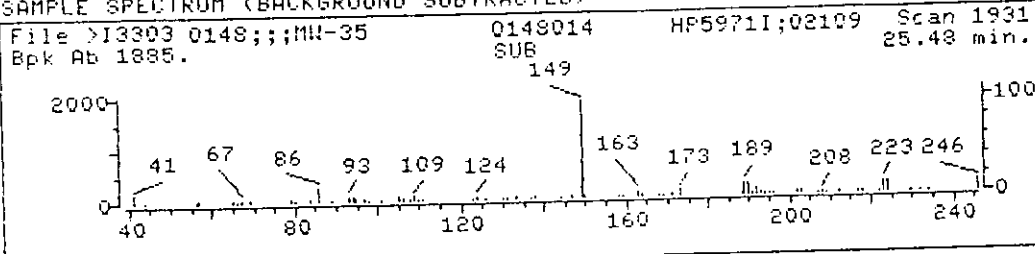
Compound No : 60  
Compound Name : Anthracene  
Scan Number : 1792  
Retention Time: 23.99 min.  
Quant Ion : 177.9  
Area : 4876  
Concentration : 1.27 ug  
q-value : 97

0485

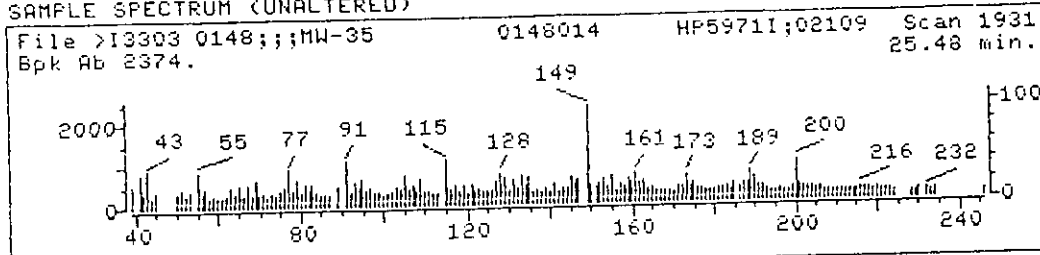
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



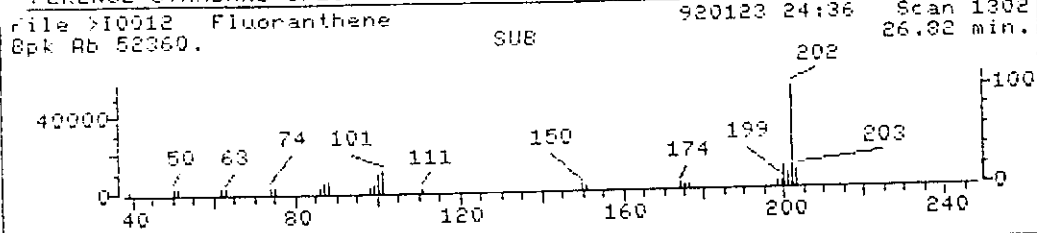
SAMPLE SPECTRUM (UNALTERED)



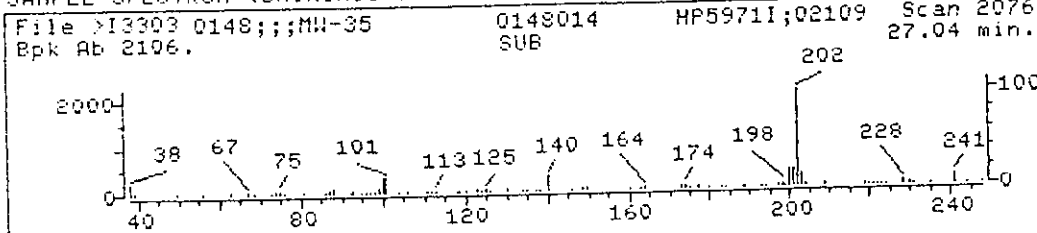
Data File: >I3303::A2                    Quant Output File: ^I3303::A6  
Name: 0148;;;MW-35                    Instrument ID: \*\*MSD  
Misc: 0148014                    HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 12:43                    Quant ID File: I\_IFI::A5  
Injected at: 930219 11:39                    Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No : 61  
Compound Name : Di-n-butylphthalate  
Scan Number : 1931  
Retention Time: 25.48 min.  
Quant Ion : 148.8  
Area : 4342  
Concentration : .844 ug  
q-value : 95

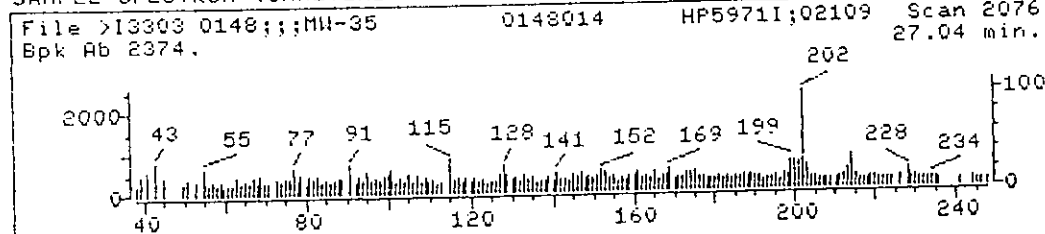
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: &gt;I3303::A2

Name: 0148;;;MW-35

Misc: 0148014

Quant Time: 930219 12:43

Injected at: 930219 11:39

Last Qcal Time: 930219 10:28

Quant Output File: ^I3303::A6

Instrument ID: \*\*MSD

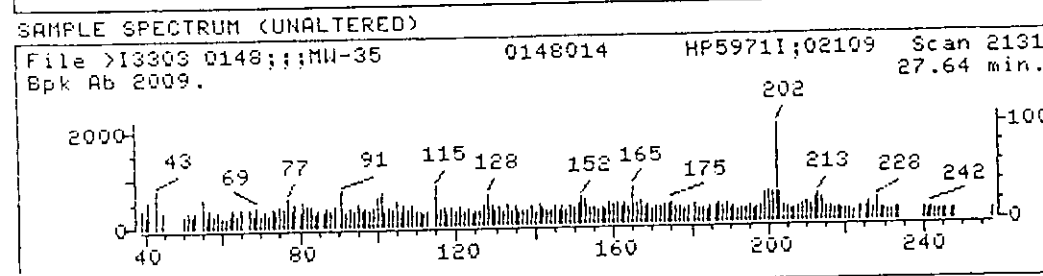
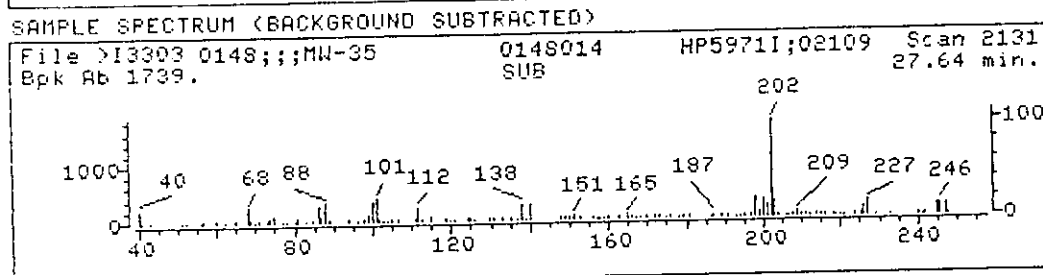
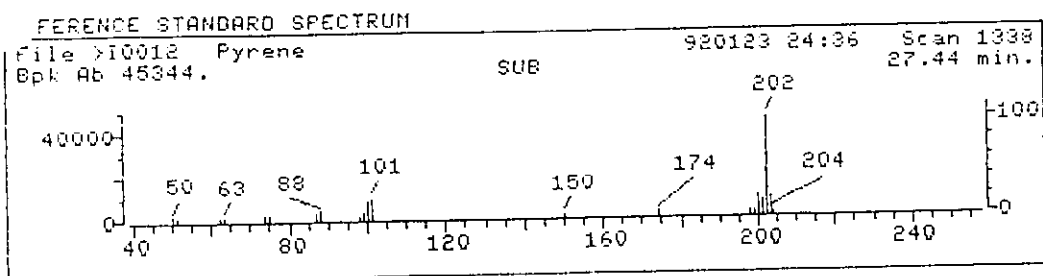
HP5971I;021093;021193;LLW;1;;;I02

Quant ID File: I\_IFI::A5

Last Calibration: 910116 11:52

Compound No : 62  
 Compound Name : Fluoranthene  
 Scan Number : 2076  
 Retention Time: 27.04 min.  
 Quant Ion : 201.9  
 Area : 5852  
 Concentration : 1.40 ug  
 q-value : 93

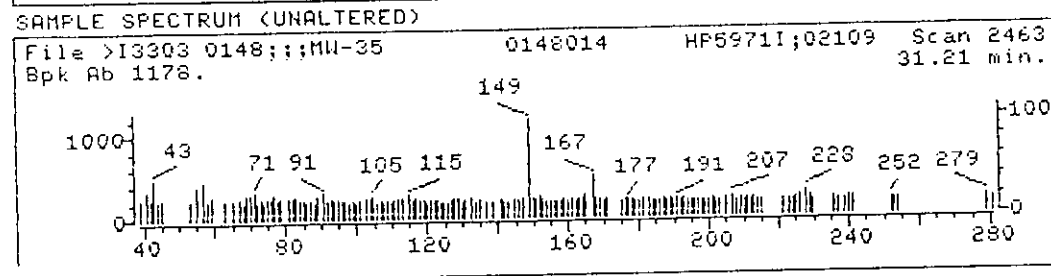
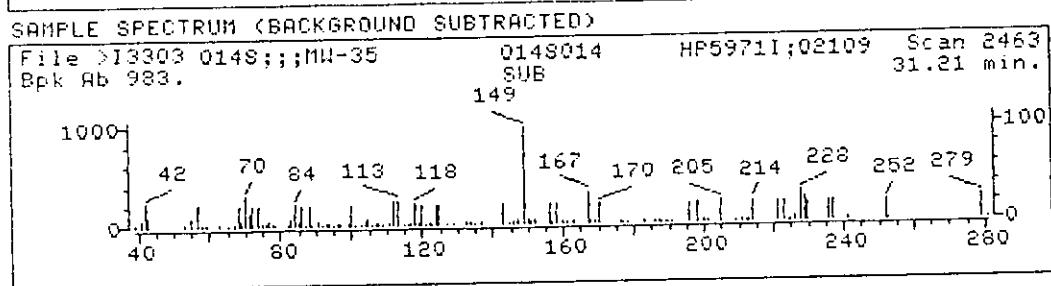
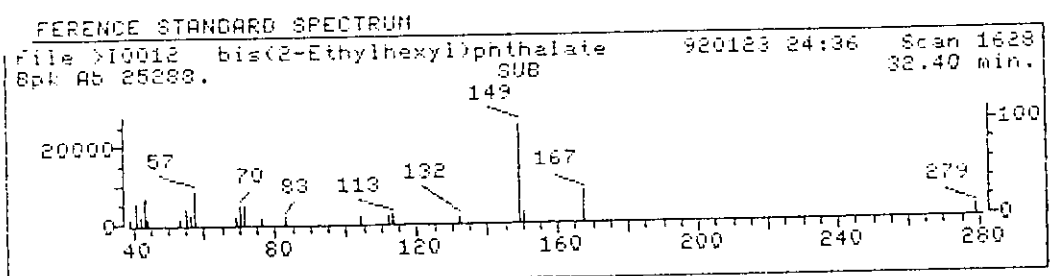
0487



Data File: >I3303::A2  
Name: 0148;;;MW-35  
Misc: 0148014  
Quant Time: 930219 12:43  
Injected at: 930219 11:39  
Last Qcal Time: 930219 10:28

Quant Output File: ^I3303::A6  
Instrument ID: \*\*MSD  
HP59711;021093;021193;LLW;1;;;102  
Quant ID File: I\_IFI::A5  
Last Calibration: 910116 11:52

Compound No : 64  
Compound Name : Pyrene  
Scan Number : 2131  
Retention Time: 27.64 min.  
Quant Ion : 201.9  
Area : 4795  
Concentration : .867 ug  
q-value : 98



Data File: >I3303::A2                    Quant Output File: ^I3303::A6  
Name: 0148;;;MW-35                    Instrument ID: \*\*MSD  
Misc: 0148014                    HP59711;021093;021193;LLW;1;;;102  
Quant Time: 930219 12:43                    Quant ID File: I\_IFI::A5  
Injected at: 930219 11:39                    Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No : 70  
Compound Name : bis(2-Ethylhexyl)phthalate  
Scan Number : 2463  
Retention Time: 31.21 min.  
Quant Ion : 148.8  
Area : 2673  
Concentration : .679 ug  
q-value : 85



0489

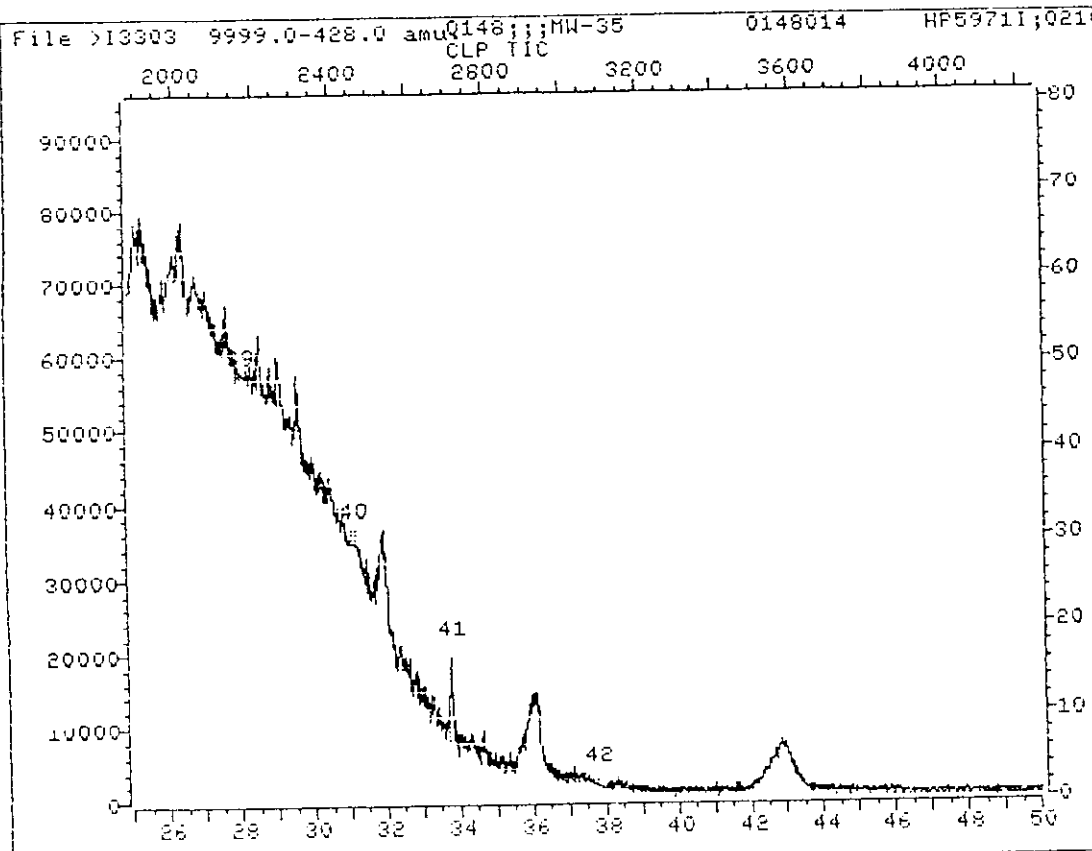
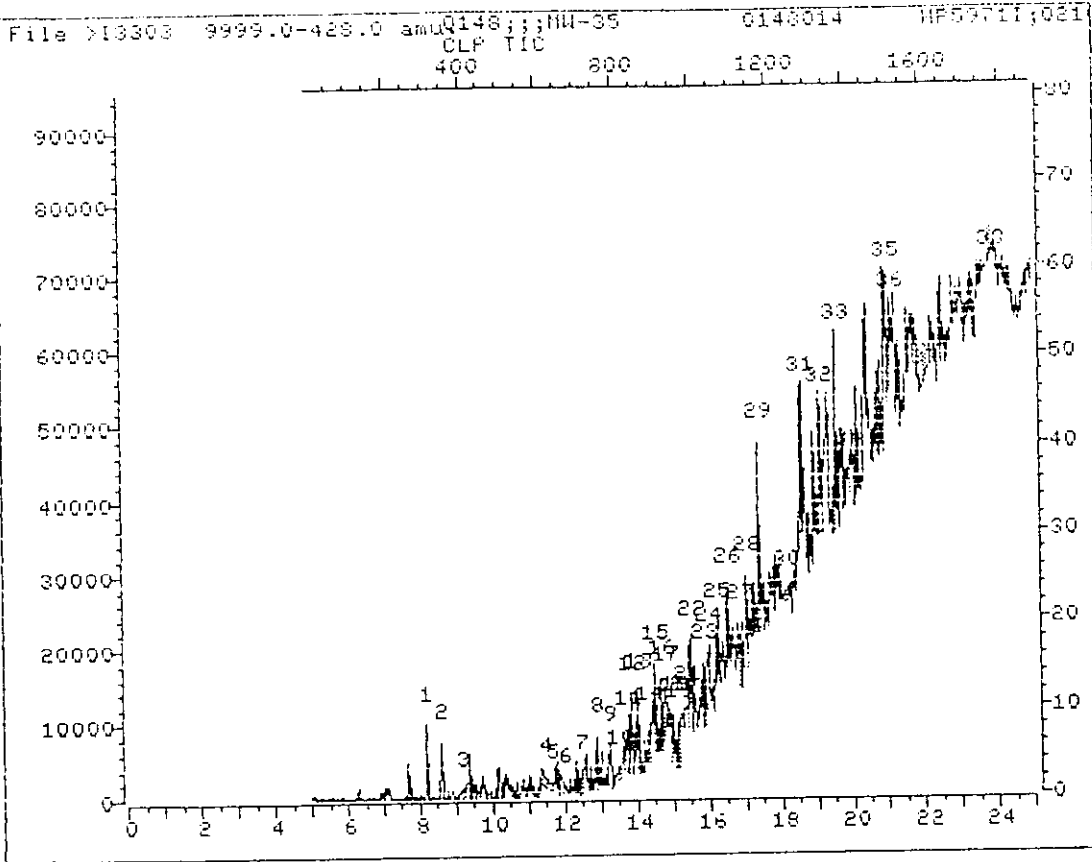
data file header from : >I3303::A2

Sample: 0148;;;MW-35 Operator: USER1 2/19/93 11:39  
Misc : 0148014 HP59711;021093;021193;LLW;1;;;I02  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 1 Equip ID: \*\*MSD  
Method file: CSCUT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

Date: 02/19/93 11:39 Inst: 1

0490



Date: 02/19/93 11:39 Inst: 1

MW-35  
HPS97II 0491

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc ISTD	UF
33.	19.53	78283.	6.	3.	.50
35.	20.94	70098.	5.	3.	.50
31.	18.56	50771.	4.	3.	.50
32.	19.10	55581.	4.	3.	.50
24.	15.98	42931.	4.	2.	.50
28.	17.02	41057.	4.	2.	.50
19.	15.15	39802.	3.	2.	.50
21.	15.38	35770.	3.	2.	.50
1.	8.16	24607.	3.	1.	.50
8.	12.84	18583.	3.	1.	.50
9.	13.23	19152.	3.	1.	.50
13.	13.99	30094.	3.	2.	.50
15.	14.51	34284.	3.	2.	.50
16.	14.65	30670.	3.	2.	.50
36.	21.06	42074.	3.	3.	.50
41.	33.78	45516.	3.	5.	.50
23.	15.85	25634.	2.	2.	.50
17.	14.76	27891.	2.	2.	.50
26.	16.50	26988.	2.	2.	.50
12.	13.81	23670.	2.	2.	.50
2.	8.57	16888.	2.	1.	.50

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range	TI/SI
1,4-DICHLOROBENZENE-D4	11.99	145230.	0.00 13.62	5.5
NAPHTHALENE-D8	15.25	230527.	13.62 17.58	2.4
ACENAPHTHENE-D10	19.91	257548.	17.58 21.87	5.6
PHENANTHRENE-D10	23.83	216290.	21.87 27.47	2.7
CHRYSENE-D12	31.12	262292.	27.47 34.45	3.0
PERYLENE-D12	37.78	162463.	34.45 37.78	1.9

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 22  
Target peaks matched: 1  
Total TIC identified: 21

TICS : 2:33 PM MON., 22 FEB., 1993

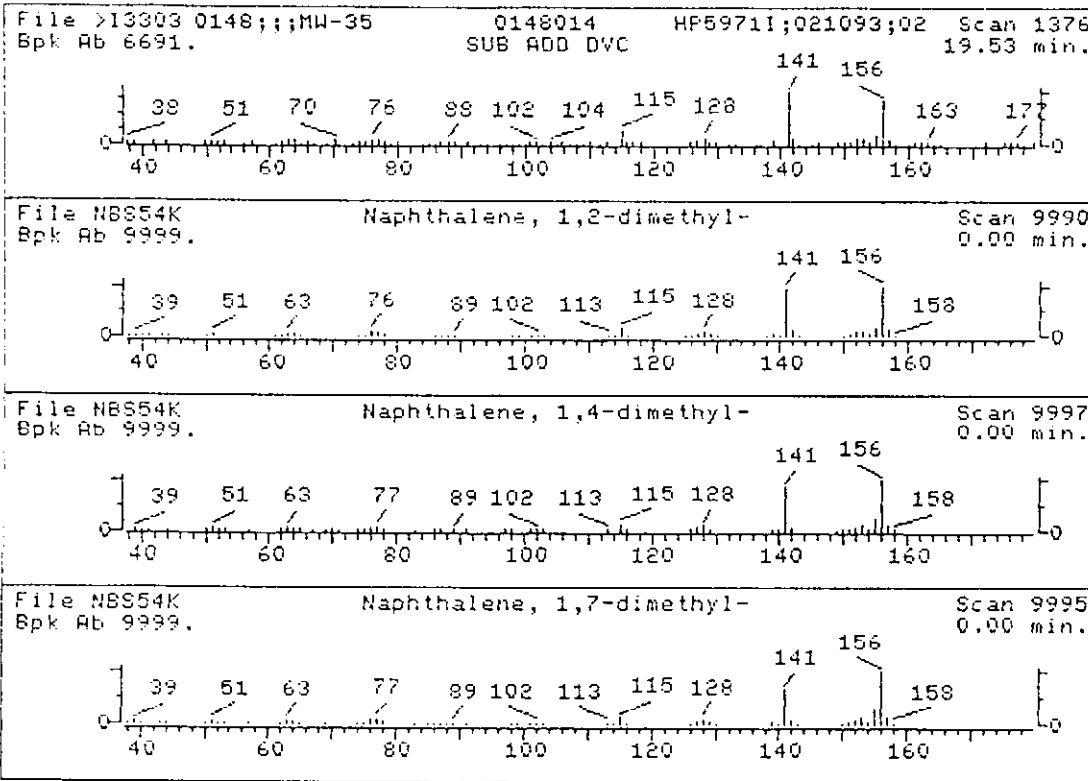
0 0492

- 1. Naphthalene, 1,2-dimethyl- 156 C12H12
- 2. Naphthalene, 1,4-dimethyl- 156 C12H12
- 3. Naphthalene, 1,7-dimethyl- 156 C12H12
- 4. Naphthalene, 2,3-dimethyl- 156 C12H12
- 5. Naphthalene, 1,8-dimethyl- 156 C12H12

Sample file: >I3303 Spectrum #: 1376  
Search speed: 1 Tilting option: N No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	92*	573988	21692	NBS54K	83	30	0	0	68	27	57	95
2.	91*	571584	21699	NBS54K	75	33	0	0	62	29	57	93
3.	75*	575371	21697	NBS54K	78	30	1	0	74	31	32	76
4.	75*	581408	21691	NBS54K	63	43	0	0	56	33	32	76
5.	71*	569415	21694	NBS54K	73	37	1	0	67	31	32	72

Peak#: 33 Area: 78283. Est Conc: 6. Date: 02/19/93 11:39 Inst: 1



0 0493

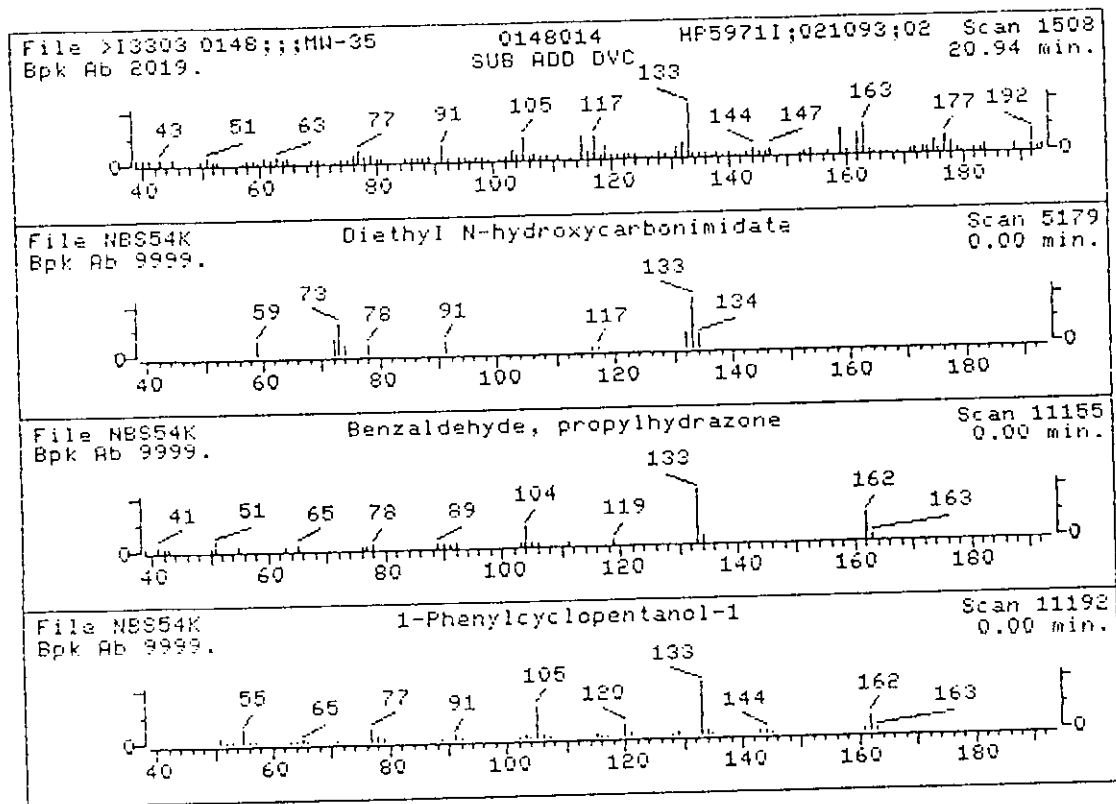
- 1. Diethyl N-hydroxycarbonimidate
- 2. Benzaldehyde, propylhydrazone
- 3. 1-Phenylcyclopentanol-1

- 133 C5H11N03
- 162 C10H14N2
- 162 C11H14O

Sample file: >13303      Spectrum #: 1508  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 50

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11*	24770465	16942	NBS54K	23	61	2	0	81	64	2 13
2.	11*	22162272	22794	NBS54K	31	71	2	0	72	62	2 14
3.	11*	10487964	16983	NBS54K	23	77	2	0	70	63	2 13

Peak#: 35 Area: 70098. Est Conc: 5. Date: 02/19/93 11:39 Inst: I



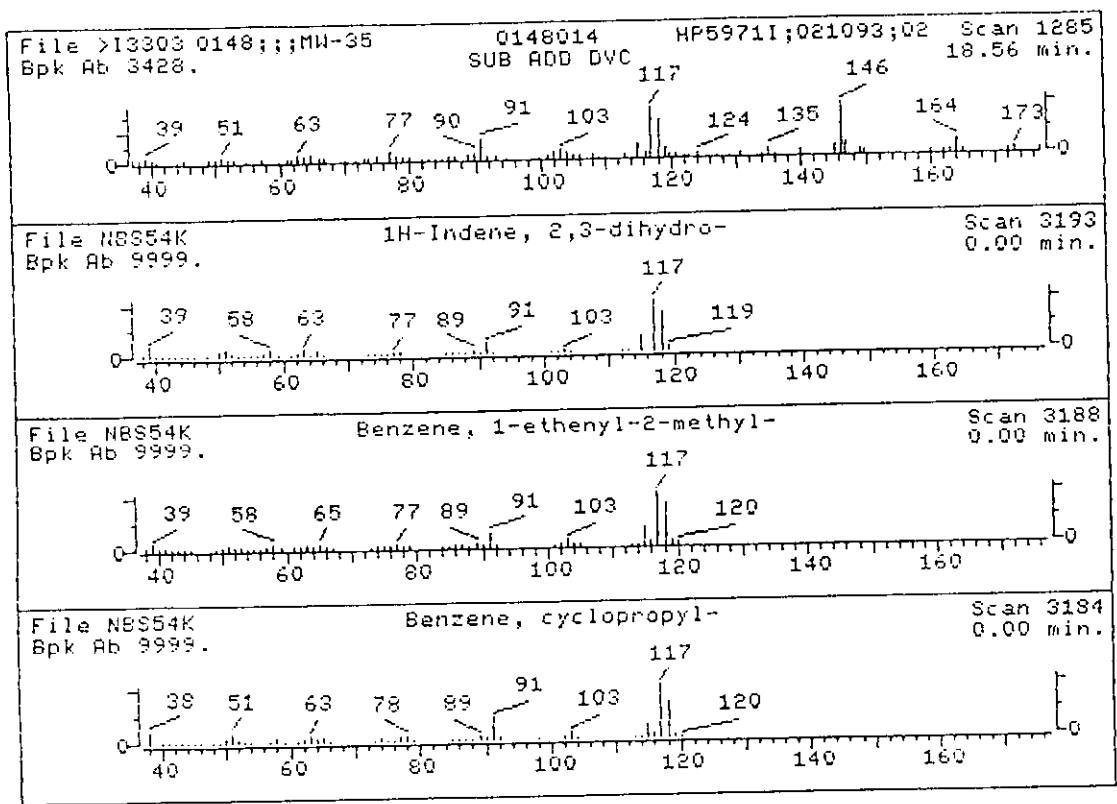
0494

- 1. 1H-Indene, 2,3-dihydro- 118 C9H10
- 2. Benzene, 1-ethenyl-2-methyl- 118 C9H10
- 3. Benzene, cyclopropyl- 118 C9H10
- 4. Benzene, 2-propenyl- 118 C9H10
- 5. Benzene, 1-ethenyl-3-methyl- 118 C9H10

Sample file: >I3303 Spectrum #: 1285  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	35*	496117	14051	NBS54K	55	43	2	0	77	50	11 32
2.	35*	611154	14047	NBS54K	47	46	1	0	77	50	11 32
3.	34*	873494	14043	NBS54K	59	51	1	0	64	51	10 53
4.	30*	300572	14045	NBS54K	48	49	2	0	72	50	10 23
5.	30*	100801	14050	NBS54K	38	58	1	0	71	50	10 21

Peak#: 31 Area: 50771. Est Conc: 4. Date: 02/19/93 11:39 Inst: 1



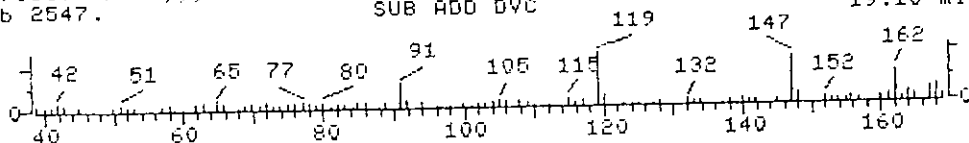
1. 1H-1,5-Benzodiazepine, 2,3,4,5-tetrahydro-2-methyl-	162	C10H14N2
2. 1H-Inden-1-one, 2,3-dihydro-7-hydroxy-3-methyl-	162	C10H10O2
3. Tricyclo[3.2.1.0 <sup>2,7</sup> ]oct-3-ene, 2,3,4,5-tetramethyl-	162	C12H18
4. 1,2,3,4-Tetrahydro-2,3-dimethylquinoxaline	162	C10H14N2
5. Pyrido[3,2-d]pyrimidin-4-ol	147	C7H5N3O

Sample file: >I3303      Spectrum #: 1336  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

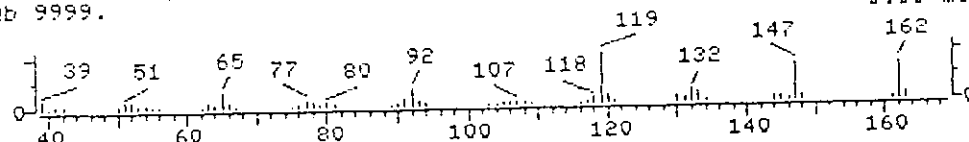
Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	36*	40358347	22798	NBS54K	37	92	3	0	80	27	14	13
2.	25*	40513506	22777	NBS54K	41	77	3	0	61	48	7	13
3.	25*	62338447	22831	NBS54K	38	75	3	0	88	48	7	13
4.	25*	13311778	22792	NBS54K	31	76	2	0	88	50	7	14
5.	25*	37538673	19930	NBS54K	32	85	3	0	88	41	8	13

Peak#: 32 Area: 55581. Est Conc: 4. Date: 02/19/93 11:39 Inst: I

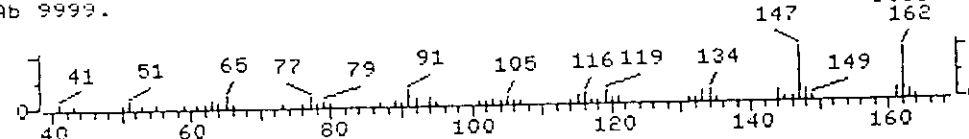
File >I3303 0148;;;MW-35      0148014      HP59711;021093;02      Scan 1336  
 Bpk Ab 2547.      SUB ADD DVC      19.10 min.



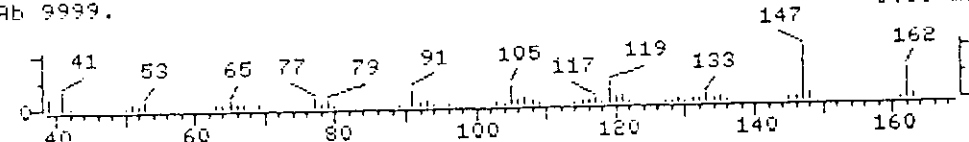
File NBS54K 1H-1,5-Benzodiazepine, 2,3,4,5-tetrahydro-2-methyl-      Scan 11164  
 Bpk Ab 9999.      0.00 min.



File NBS54K 1H-Inden-1-one, 2,3-dihydro-7-hydroxy-3-methyl-      Scan 11133  
 Bpk Ab 9999.      0.00 min.



File NBS54K Tricyclo[3.2.1.0<sup>2,7</sup>]oct-3-ene, 2,3,4,5-tetramethyl-      Scan 11251  
 Bpk Ab 9999.      0.00 min.



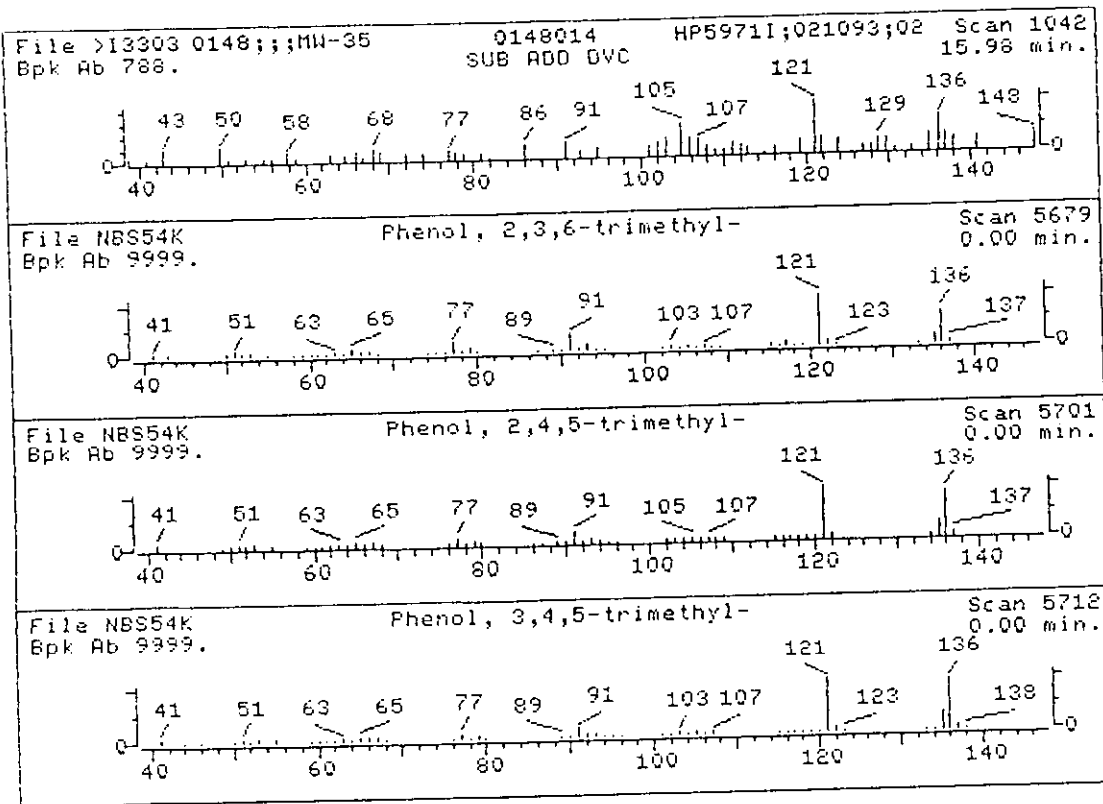
- |  |            |
|--|------------|
| 1. Phenol, 2,3,6-trimethyl-                                  | 136 C9H12O |
| Phenol, 2,4,5-trimethyl-                                     | 136 C9H12O |
| Phenol, 3,4,5-trimethyl-                                     | 136 C9H12O |
| 4. Cyclohexene, 1-methyl-3-(1-methylethenyl)-, (.+-.)- (9CI) | 136 C10H16 |
| 5. Phenol, 2,4,6-trimethyl-                                  | 136 C9H12O |

0496

Sample file: >I3303      Spectrum #: 1042  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 48

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	2416946	NBS54K	45	58	2	0	71	55	5	16
2.	20*	496786	NBS54K	34	63	2	0	75	55	5	14
3.	20*	527548	NBS54K	34	64	2	0	68	55	5	14
4.	20*	499036	NBS54K	45	78	3	0	75	55	5	13
5.	20*	527606	NBS54K	32	70	2	0	68	55	5	14

Peak#: 24 Area: 42931. Est Conc: 4. Date: 02/19/93 11:39 Inst: I





0 0497

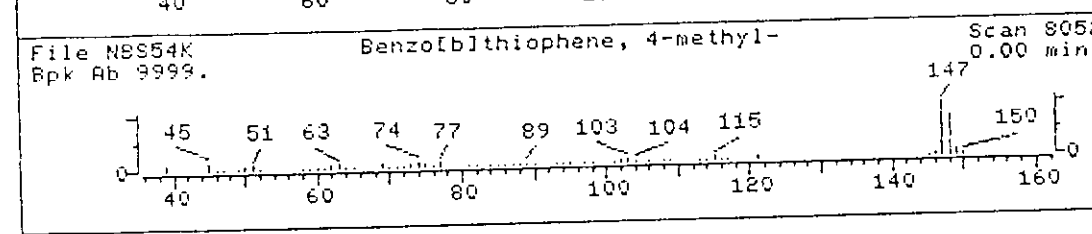
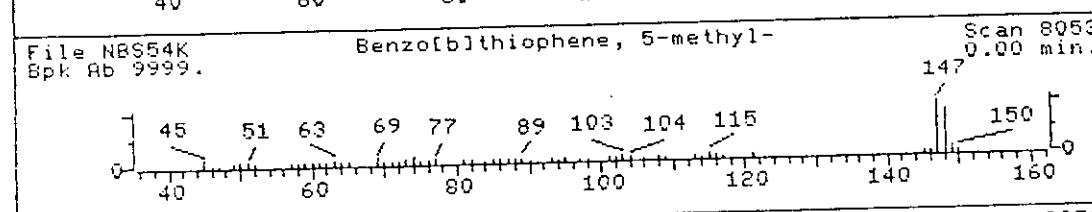
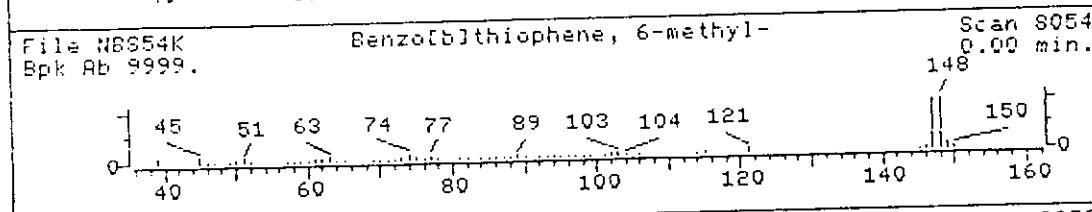
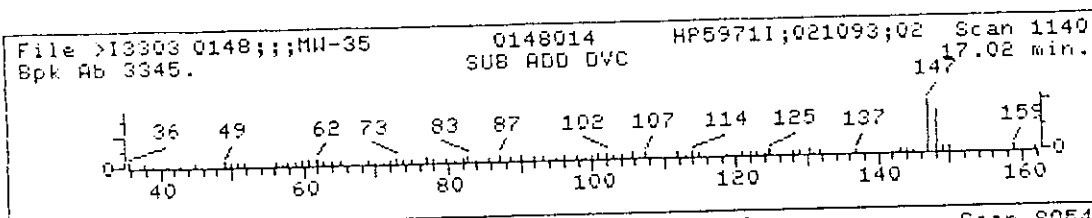
1. Benzo[blthiophene, 6-methyl-
2. Benzo[blthiophene, 5-methyl-
3. Benzo[blthiophene, 4-methyl-
4. Pyridine, 4-(1-pyrrolidinyl)-
5. Benzaldehyde, 2,4,5-trimethyl-

- 148 C9H8S
- 148 C9H8S
- 148 C9H8S
- 148 C9H12N2
- 148 C10H12O

Sample file: >I3303      Spectrum #: 1140  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 40

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	76*	16587476	20108	NBS54K	51	47	2	0	81	10	45	26
2.	67*	14315141	20107	NBS54K	51	47	2	0	97	12	34	26
3.	60*	14315118	20106	NBS54K	38	60	2	0	100	12	30	15
4.	52*	2456817	20112	NBS54K	30	81	3	0	98	17	20	13
5.	52*	5779726	20117	NBS54K	25	76	3	0	100	17	20	13

Peak#: 28 Area: 41057. Est Conc:      4. Date: 02/19/93 11:39 Inst: 1



- . 1H-Indene, 1,1-dimethyl-
- . 1H-Cyclopropa[bl]naphthalene, 1a,2,7,7a-tetrahydro-
- 3. Naphthalene, 1,2-dihydro-6-methyl-
- 4. [1,2]Azaborino[1,2-a][1,2]azaborine
- 5. 3-Mercapto-5-ethyl-1,2,4-triazole

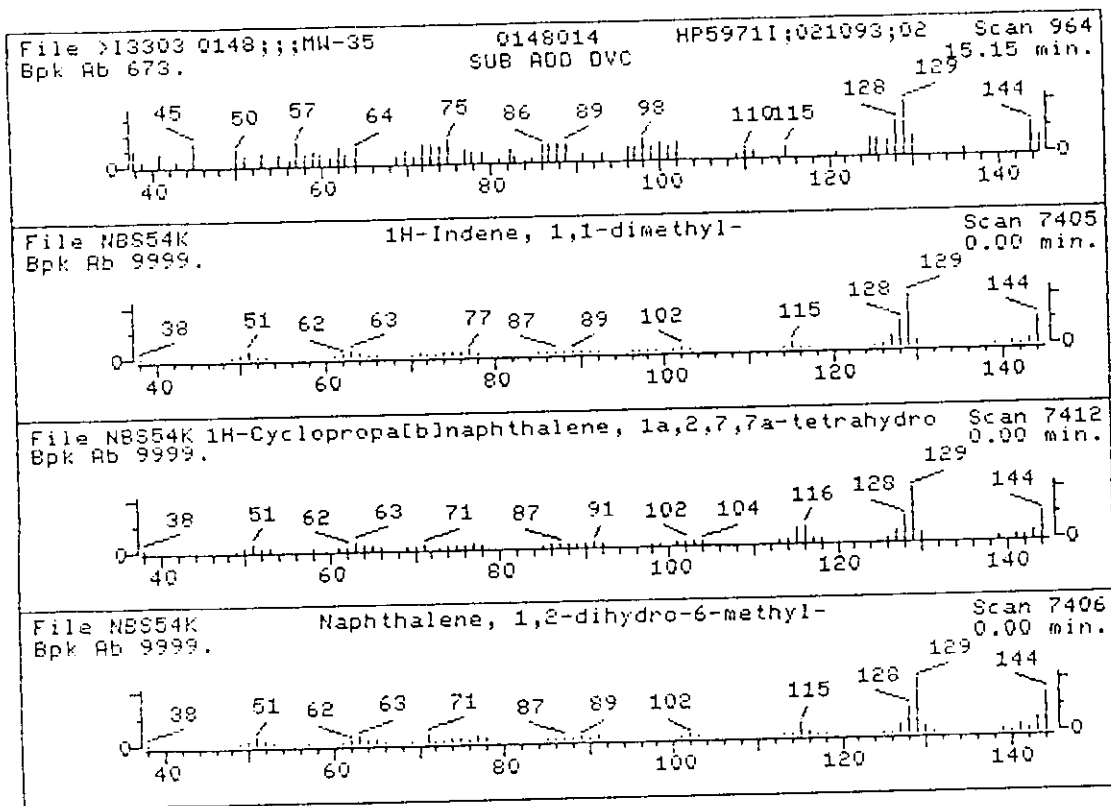
144 C11HR2  
 144 C11H12  
 144 C11H12  
 129 C8H8BN  
 129 C4H7N3S

0498

Sample file: >I3303      Spectrum #: 964  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	31*	18636550	19487	NBS54K	44	66	2	0	100	33	12	14
2.	27*	6571728	19490	NBS54K	35	77	3	0	100	40	10	13
3.	25*	2717477	19488	NBS54K	33	81	3	0	71	46	7	13
4.	20*	1425587	2513	NBS54K	34	90	3	0	100	51	5	13
5.	15*	7271456	16228	NBS54K	26	74	3	0	100	56	3	13

Peak#: 19 Area: 39802. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1



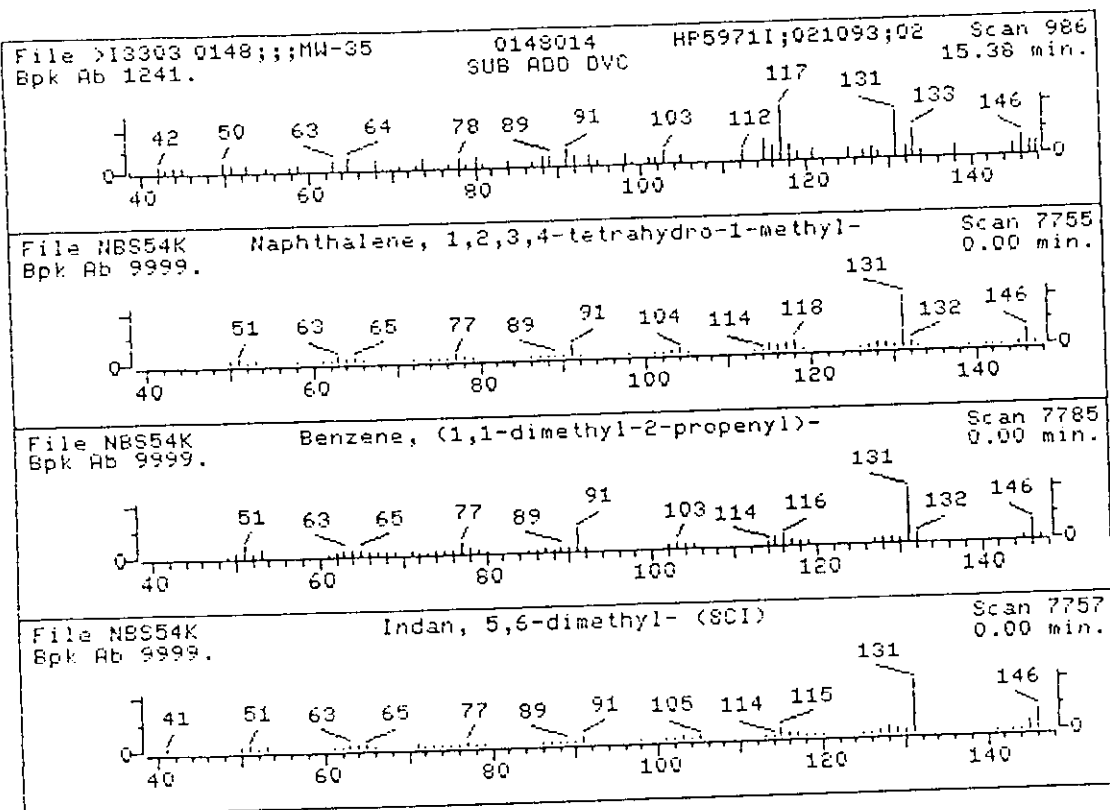
0499

- |   |            |
|---|------------|
| Naphthalene, 1,2,3,4-tetrahydro-1-methyl- | 146 C11H14 |
| 1. Benzene, (1,1-dimethyl-2-propenyl)-    | 146 C11H14 |
| 3. Indan, 5,6-dimethyl- (SCI)             | 146 C11H14 |
| 4. 1H-Indene, 2,3-dihydro-1,2-dimethyl-   | 146 C11H14 |
| 5. Benzene, 1-pentenyl-                   | 146 C11H14 |

Sample file: >13303      Spectrum #: 986  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	1559815	NBS54K	36	68	1	0	76	54	5	19
2.	18*	18321363	NBS54K	30	72	0	0	78	59	4	22
3.	15*	1075225	NBS54K	40	63	0	0	63	64	3	41
4.	15*	17057828	NBS54K	30	74	1	0	83	59	3	16
5.	15*	826186	NBS54K	23	78	1	0	100	60	3	14

Peak#: 21 Area: 35770. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1



0500

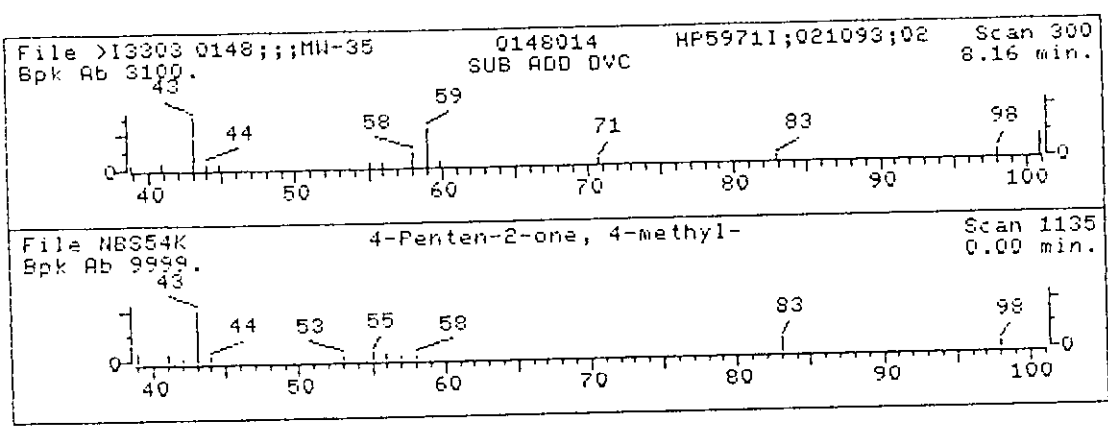
. 4-Penten-2-one, 4-methyl-

98 C6H10O

Sample file: >I3303      Spectrum #: 300  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	3744023	9897	NBS54K	26	53	2	0	85	47	7 14

Peak#: 1 Area: 24607. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1



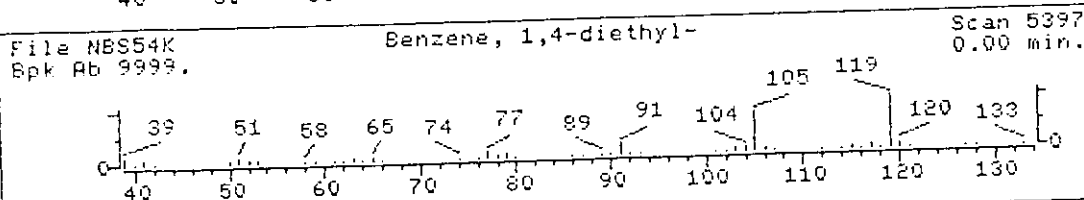
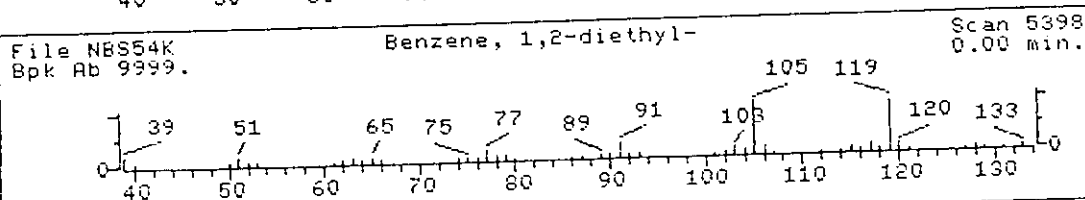
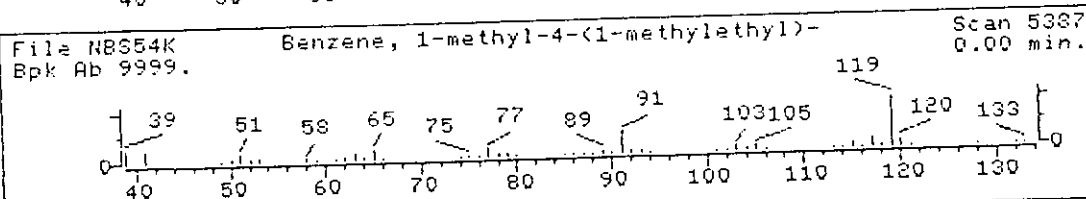
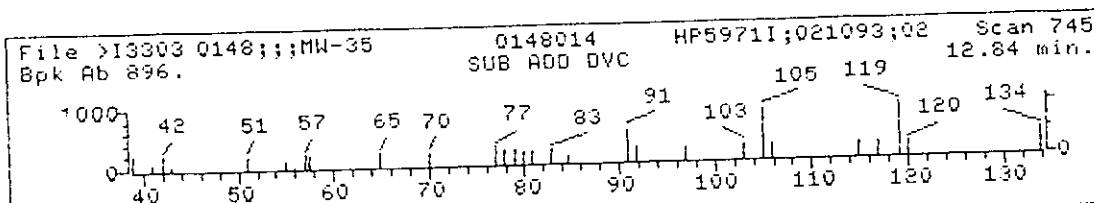
0501

- |  |            |
|--|------------|
| 1. Benzene, 1-methyl-4-(1-methylethyl)-        | 134 C10H14 |
| 2. Benzene, 1,2-diethyl-                       | 134 C10H14 |
| 3. Benzene, 1,4-diethyl-                       | 134 C10H14 |
| 4. Benzene, 1,3-diethyl-                       | 134 C10H14 |
| 5. 1,4-Cyclohexadiene, 3-ethenyl-1,2-dimethyl- | 134 C10H14 |

Sample file: >I3303      Spectrum #: 745  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	28*	99876	14244	NBS54K	39	66	2	0	100	37	10	14
2.	26*	135013	17140	NBS54K	26	80	2	0	93	44	8	14
3.	25*	105055	17139	NBS54K	26	74	2	0	100	48	7	14
4.	25*	141935	17141	NBS54K	26	76	2	0	100	46	7	14
5.	25*	62338572	14241	NBS54K	25	84	3	0	73	48	7	13

Peak#: 8 Area: 18583. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1

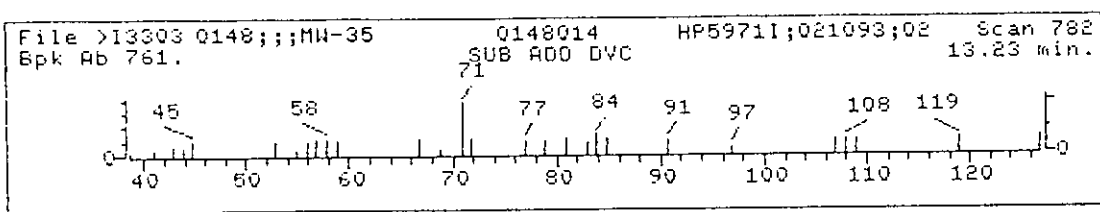


0502

Sample file: >I3303 Spectrum #: 782

No data base entries were retrieved.

Peak#: 9 Area: 19152. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1



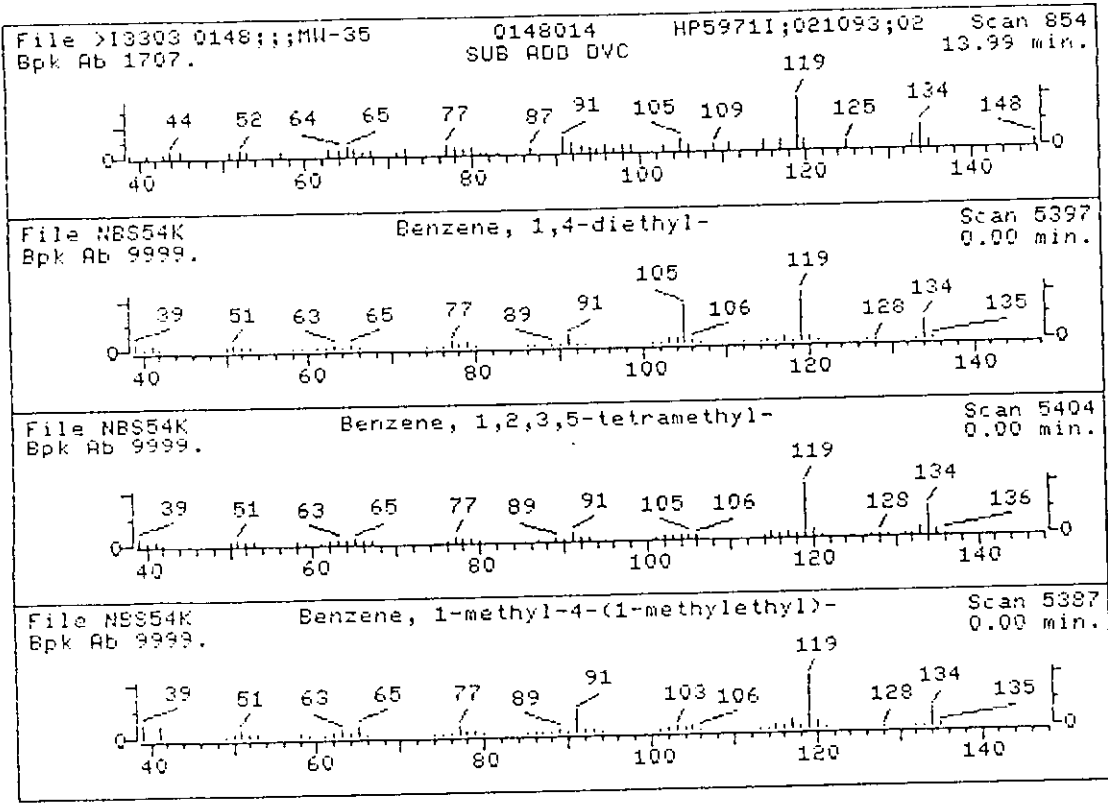
0 0503

- |   |            |
|---|------------|
| 1. Benzene, 1,4-diethyl-                | 134 C10H14 |
| 2. Benzene, 1,2,3,5-tetramethyl-        | 134 C10H14 |
| 3. Benzene, 1-methyl-4-(1-methylethyl)- | 134 C10H14 |
| 4. Benzene, 1,2,4,5-tetramethyl-        | 134 C10H14 |
| 5. Benzene, 1,2,3,4-tetramethyl-        | 134 C10H14 |

Sample file: >I3303      Spectrum #: 854  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	38*	105055	17139	NBS54K	51	49	2	0	100	36	14	25
2.	35*	527537	17143	NBS54K	25	68	0	0	77	35	12	18
3.	35*	99876	14244	NBS54K	58	47	2	0	67	47	11	35
4.	34*	95932	17144	NBS54K	31	71	1	0	76	32	12	17
5.	31*	488233	17133	NBS54K	25	69	2	0	82	35	12	14

Peak#: 13 Area: 30094. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1



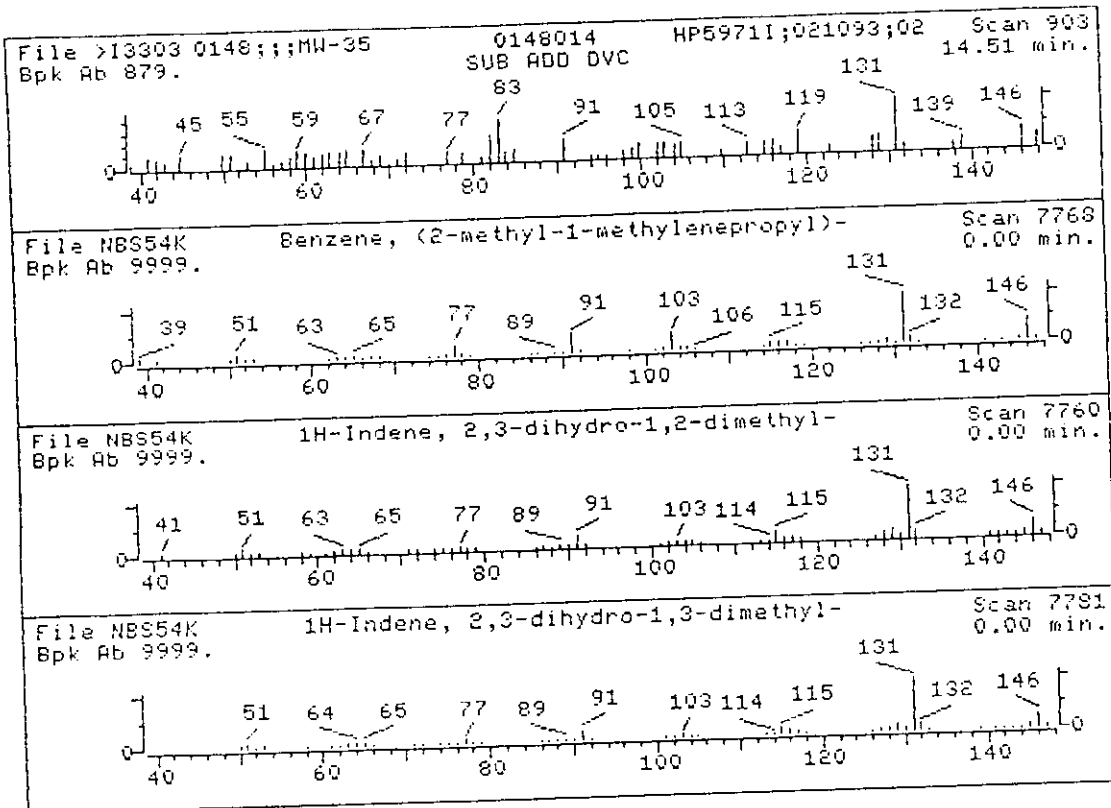
0504

- Benzene, (2-methyl-1-methylenepropyl)- 146 C11H14
- 2. 1H-Indene, 2,3-dihydro-1,2-dimethyl- 146 C11H14
- 3. 1H-Indene, 2,3-dihydro-1,3-dimethyl- 146 C11H14
- 4. Naphthalene, 1,2,3,4-tetrahydro-1-methyl- 146 C11H14
- 5. Benzene, (1,1-dimethyl-2-propenyl)- 146 C11H14

Sample file: >I3303 Spectrum #: 903  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	17498714	19777	NBS54K	42	65	2	0	69	55	5 14
2.	20*	17057828	16602	NBS54K	38	66	2	0	100	53	5 14
3.	20*	4175535	16606	NBS54K	31	70	2	0	100	55	5 14
4.	20*	1559815	16600	NBS54K	32	72	3	0	100	55	5 13
5.	20*	18321363	16607	NBS54K	31	71	2	0	100	51	5 14

Peak#: 15 Area: 34284. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1





0505

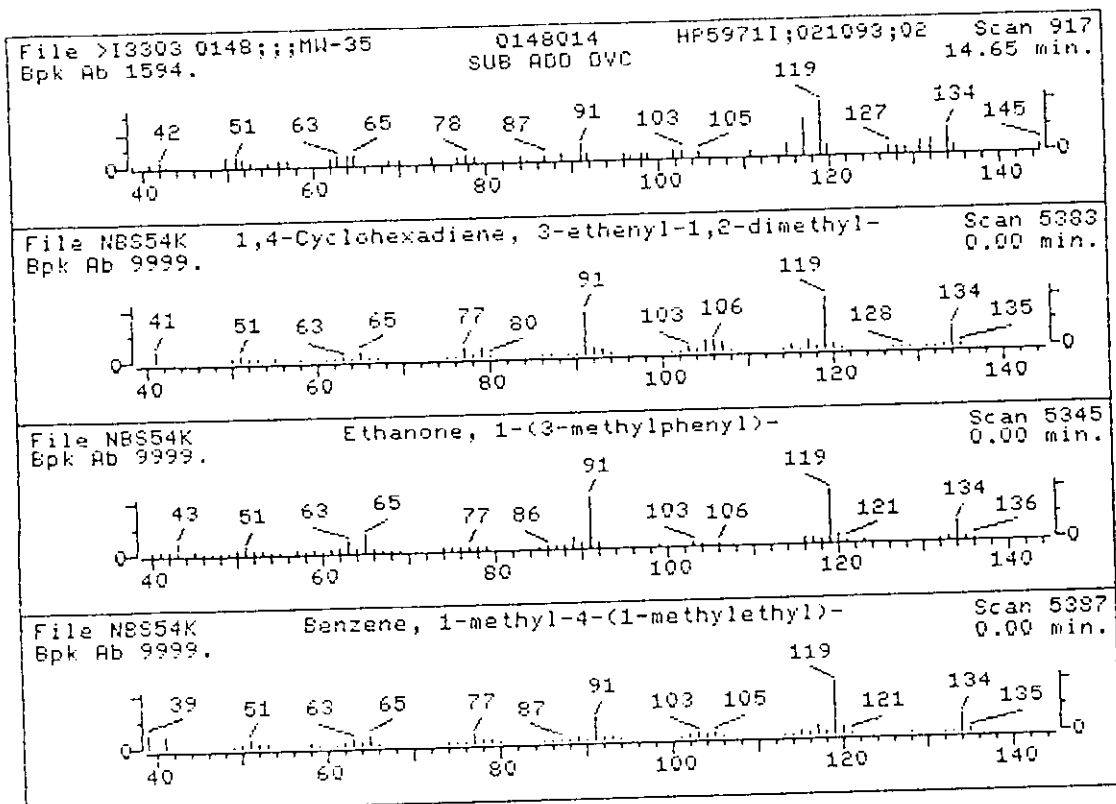
- 1. 1,4-Cyclohexadiene, 3-ethenyl-1,2-dimethyl-
- 2. Ethanone, 1-(3-methylphenyl)-
- 3. Benzene, 1-methyl-4-(1-methylethyl)-
- 4. Benzene, 1,2,3,5-tetramethyl-
- 5. Benzene, 1,2,3,4-tetramethyl-

134 C10H14  
 134 C9H10O  
 134 C10H14  
 134 C10H14  
 134 C10H14

Sample file: >I3303      Spectrum #: 917  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	62338572	14241	NBS54K	37	72	3	0	100	50	7 13
2.	25*	585740	14238	NBS54K	36	71	3	0	100	48	7 13
3.	25*	99876	14244	NBS54K	33	72	3	0	100	46	7 13
4.	25*	527537	17143	NBS54K	25	68	3	0	82	49	7 13
5.	25*	488233	17133	NBS54K	25	69	3	0	87	49	7 13

Peak#: 16 Area: 30670. Est Conc: 3. Date: 02/19/93 11:39 Inst: I



0506

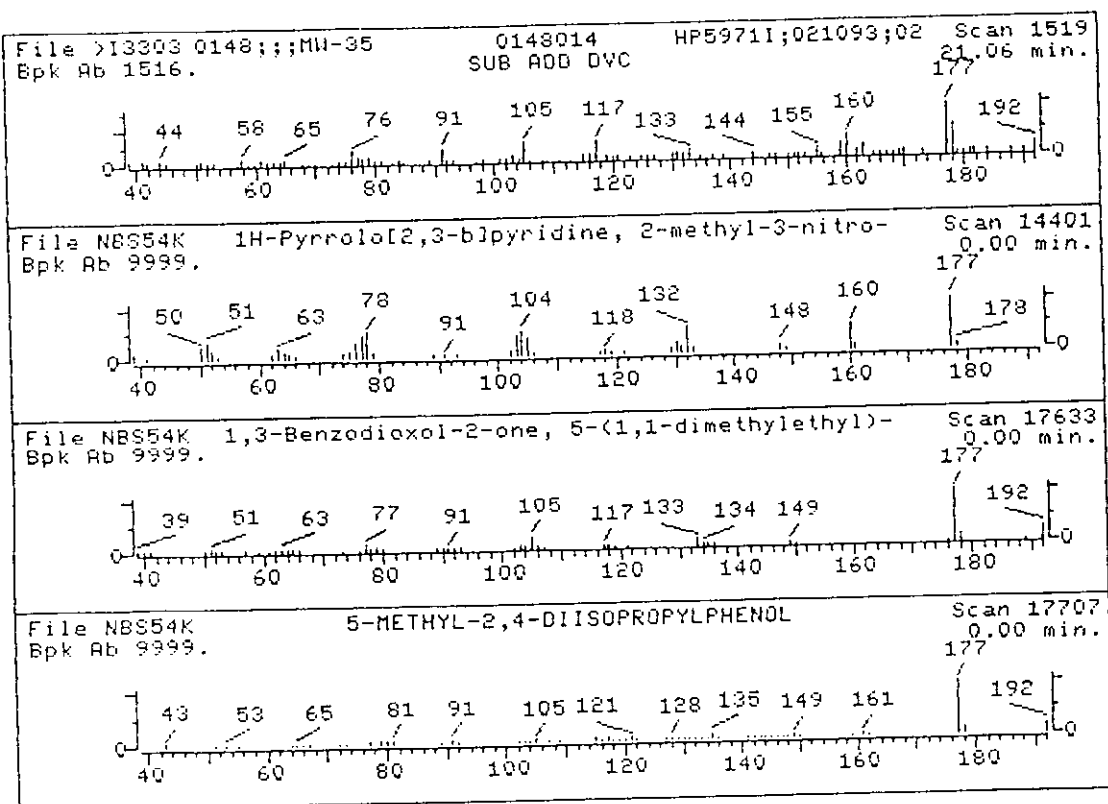
- 1. 1H-Pyrrolo[2,3-b]pyridine, 2-methyl-3-nitro-
- 2. 1,3-Benzodioxol-2-one, 5-(1,1-dimethylethyl)-
- 3. 5-METHYL-2,4-DIISOPROPYLPHENOL
- 4. Edulan ii
- 5. 2-Propanamine, N-[(3-nitrophenyl)methylene]-

- 177 C8H7N3O2
- 192 C11H12O3
- 192 C13H20O
- 192 C13H20O
- 192 C10H12N2O2

Sample file: >I3303      Spectrum #: 1519  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25*	23616504	25510	NBS54K	25	115	3	0	80	45	8	13
2.	15*	54815213	25546	NBS54K	46	58	2	0	86	58	3	17
3.	15*	17707	25550	NBS54K	24	80	2	0	100	58	3	14
4.	15*	41678302	25556	NBS54K	23	107	3	0	100	56	3	12
5.	11*	27895803	25544	NBS54K	35	75	2	0	69	62	2	14

Peak#: 36 Area: 42074. Est Conc: 3. Date: 02/19/93 11:39 Inst: I

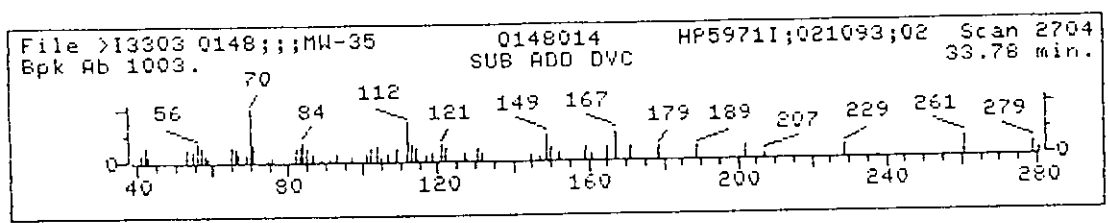


0507

Sample file: >I3303 Spectrum #: 2704

No data base entries were retrieved.

Peak#: 41 Area: 45516. Est Conc: 3. Date: 02/19/93 11:39 Inst: 1



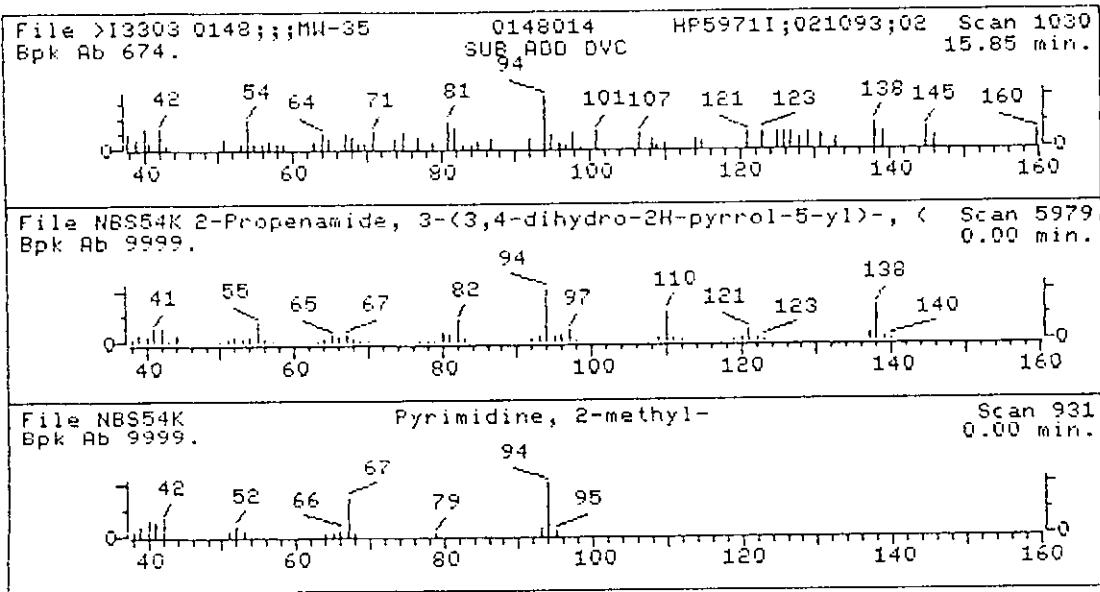
0508

- 1. 2-Propenamide, 3-(3,4-dihydro-2H-pyrrol-5-yl)-, (E)- 138 C7H10N2O
- 2. Pyrimidine, 2-methyl- 94 C5H6N2

Sample file: >I3303 Spectrum #: 1030  
Search speed: 1 Tilting option: N No. of ion ranges searched: 51

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IU
1.	20*	35663855	18137	NBS54K	27	92	3	0	67	55	5 13
2.	11*	5053430	9122	NBS54K	34	66	3	0	100	64	2 13

Peak#: 23 Area: 25634. Est Conc: 2. Date: 02/19/93 11:39 Inst: I



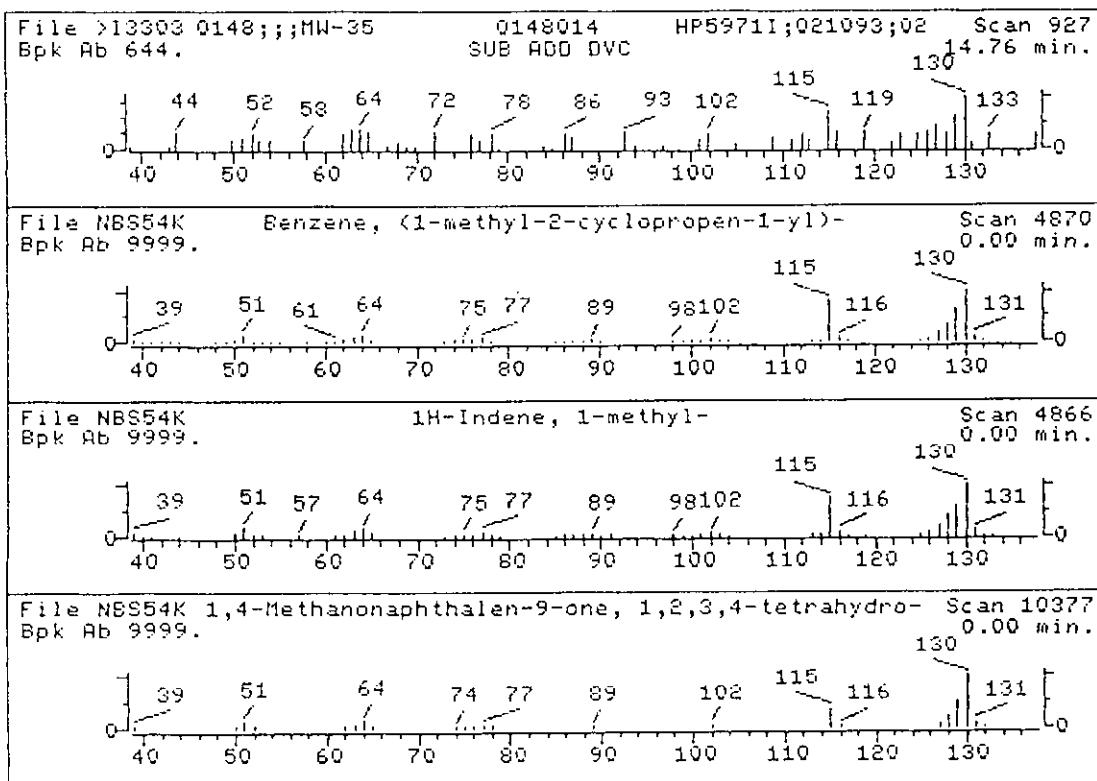
0509

- . Benzene, (1-methyl-2-cyclopropen-1-yl)- 130 C10H10
- . 1H-Indene, 1-methyl- 130 C10H10
- 3. 1,4-Methanonaphthalen-9-one, 1,2,3,4-tetrahydro- 158 C11H10O
- 4. 1H-Indene, 3-methyl- 130 C10H10
- 5. Naphthalene, 1,2-dihydro- 130 C10H10

Sample file: >I3303 Spectrum #: 927  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	40*	65051834	16376	NBS54K	43	67	0	0	90	50	12	48
2.	40*	767599	16372	NBS54K	42	67	0	0	99	50	12	44
3.	25	6165884	16417	NBS54K	42	64	0	0	100	50	7	15
4.	20*	767602	16373	NBS54K	36	70	1	0	74	55	5	19
5.	20*	447530	16369	NBS54K	27	74	0	0	82	53	5	19

Peak#: 17 Area: 27891. Est Conc: 2. Date: 02/19/93 11:39 Inst: I



0510

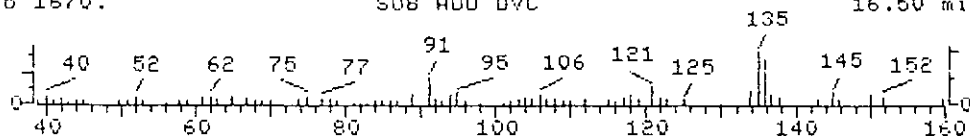
- . Benzoflthiophene, 1,3-dihydro- 136 C8H8S
- . Benzoflthiophene, 2,3-dihydro- 136 C8H8S
- 3. Benzene, (ethenylthio)- 136 C8H8S
- 4. 2-Hydroxy-3-methylbenzaldehyde 136 C8H8O2
- 5. 2-Hydroxy-4-methylbenzaldehyde 136 C8H8O2

Sample file: >I3303 Spectrum #: 1091  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

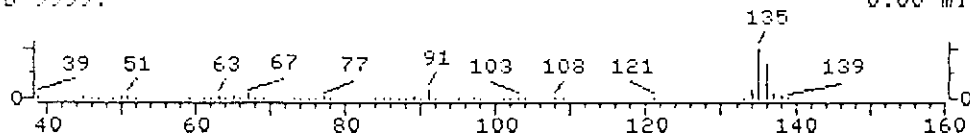
Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	47*	2471923	17556	NBS54K	39	55	2	0	100	25	17	18
2.	37*	4565326	17555	NBS54K	34	72	2	0	83	26	14	14
3.	36*	1822737	17554	NBS54K	46	64	3	0	84	29	14	13
4.	34*	824420	17536	NBS54K	54	65	3	0	81	34	12	17
5.	30*	698271	17544	NBS54K	36	62	3	0	97	33	12	13

Peak#: 26 Area: 26988. Est Conc: 2. Date: 02/19/93 11:39 Inst: I

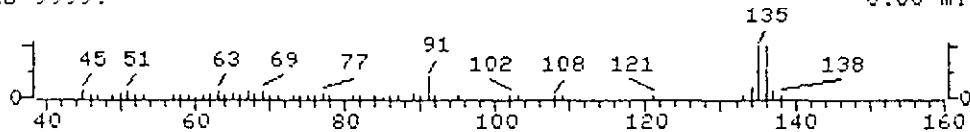
File >I3303 0148;;;HW-35 Q148Q14 HP59711;021093;02 Scan 1091  
 Bpk Ab 1670. SUB ADD DVC 16.50 min.



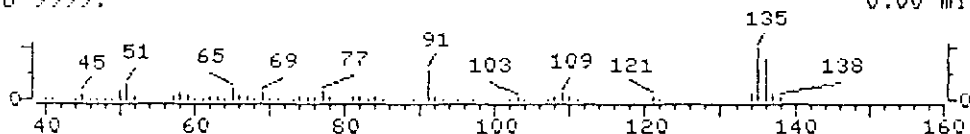
File NBS54K Benzoflthiophene, 1,3-dihydro- Scan 5644  
 Bpk Ab 9999. 0.00 min.



File NBS54K Benzoflthiophene, 2,3-dihydro- Scan 5643  
 Bpk Ab 9999. 0.00 min.



File NBS54K Benzene, (ethenylthio)- Scan 5642  
 Bpk Ab 9999. 0.00 min.



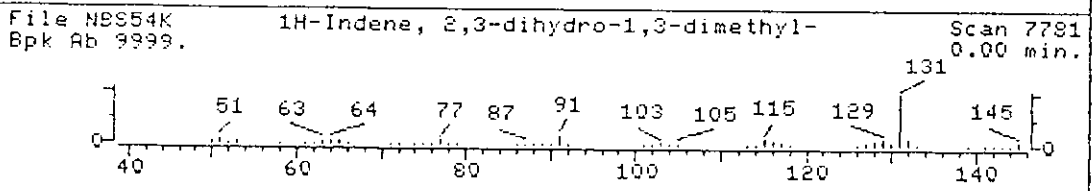
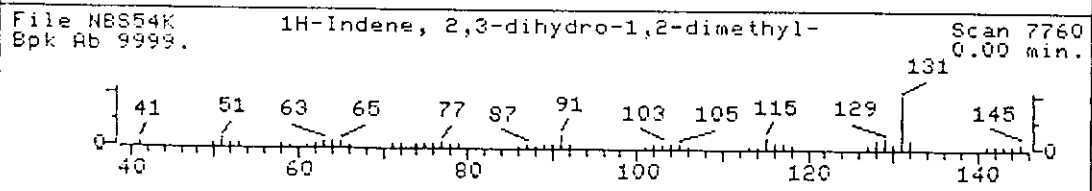
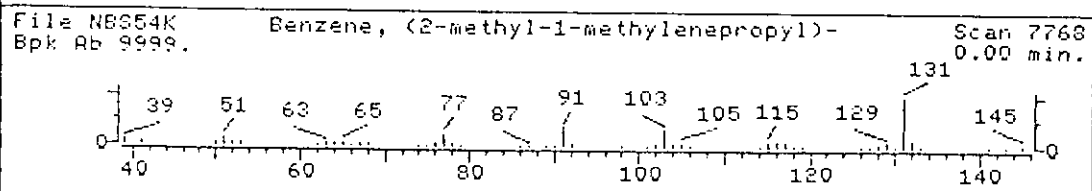
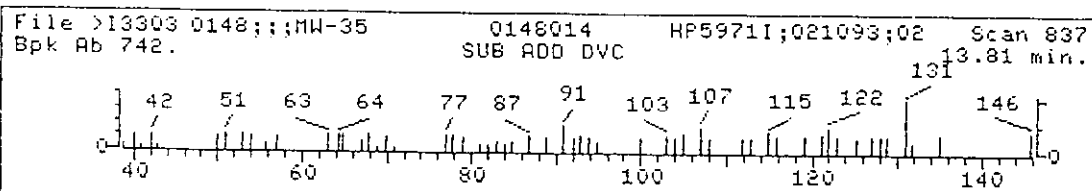
0511

- 1. Benzene, (2-methyl-1-methylenepropyl)- 146 C11H14
- 2. 1H-Indene, 2,3-dihydro-1,2-dimethyl- 146 C11H14
- 3. 1H-Indene, 2,3-dihydro-1,3-dimethyl- 146 C11H14
- 4. Benzene, (3-methyl-2-butenyl)- 146 C11H14
- 5. 3-Phenyl-4,5-dimethyl-2,1-oxaborolane 202 C13H19BO

Sample file: >I3303 Spectrum #: 837  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 53

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	21*	17498714	19777	NBS54K	35	72	0	0	86	60	5 31
2.	20*	17057828	16602	NBS54K	25	79	0	0	100	55	5 18
3.	15*	4175535	16606	NBS54K	25	76	0	0	100	57	3 18
4.	15*	4489843	19780	NBS54K	25	81	0	0	78	57	3 18
5.	15	19872	16637	NBS54K	25	86	0	0	100	59	3 12

Peak#: 12 Area: 23670. Est Conc: 2. Date: 02/19/93 11:39 Inst: I



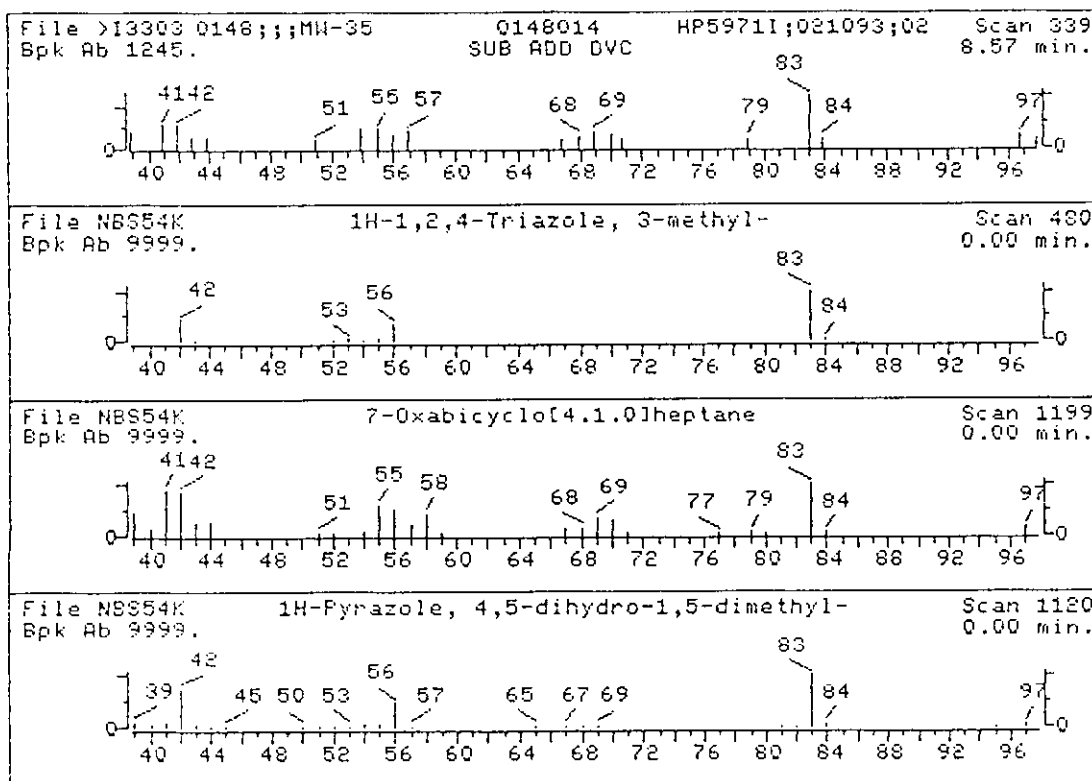
G 0512

- |   |            |
|---|------------|
| 1. 1H-1,2,4-Triazole, 3-methyl-           | 83 C3H5N3  |
| 2. 7-Oxabicyclo[4.1.0]heptane             | 98 C6H10O  |
| 3. 1H-Pyrazole, 4,5-dihydro-1,5-dimethyl- | 98 C5H10N2 |
| 4. 1-Butene, 2,3,3-trimethyl-             | 98 C7H14   |

Sample file: >I3303      Spectrum #:      339  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV
1.	26*	7170016	6459	NBS54K	24	31	2	0	75	42	8 14
2.	26*	286204	6469	NBS54K	31	84	2	0	52	45	8 14
3.	20*	5775962	6462	NBS54K	21	54	2	0	45	53	5 13
4.	15*	594569	6471	NBS54K	22	68	3	0	72	57	3 12

Peak#: 2 Area: 16888. Est Conc: 2. Date: 02/19/93 11:39 Inst: I





1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0 0513

MW-42

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148015

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3304.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (UL)

Date Analyzed: 02/19/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl) ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy)methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	10	U

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0514

MW-42

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148015

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3304.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL)

Date Analyzed: 02/19/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.7	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

10 0.7

U

cmc  
2/25/93

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0515

MW-42

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: 20148

Matrix: (soil/water) WATER

Lab Sample ID: 0148015

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3304.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (uL)

Date Analyzed: 02/19/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Number TICs found: 21  
conc 2/25/93

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	32.04	110	J
2.		36.43	100	
3.		29.11	69	
4.		26.43	76	
5.		43.68	54	
6.		23.37	40	
7.		32.42	33	
8.		37.12	25	
9.		29.32	25	
10.		19.01	20	
11.		26.60	16	
12.		39.43	9	
13.		48.82	9	
14.		33.92	5	
15.		23.49	3	
16.		15.60	4	
17.	↓	33.76	4	↓
18.	AIR/CONDENSATION PRODUCT	8.17	4	JAB
19.	UNKNOWN	8.57	4	JAB
20.	↓	30.48	3	J
21.		14.80	3	↓
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

0516

QUANT REPORT

Page 1

Operator ID: USER1                      Quant Rev: 7            Quant Time: 930222 17:46  
 Output File: ^I3304::A6                      Injected at: 930219 12:42  
 Data File: >I3304::A5                      Dilution Factor: .50000  
 Name: 0148;;;MW-42                      Instrument ID: \*\*MSD  
 Misc: 0148015            HP59711;021093;021193;LLW;1;;;102

ID File: I\_IFI::A5  
 Title: IFB-DLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

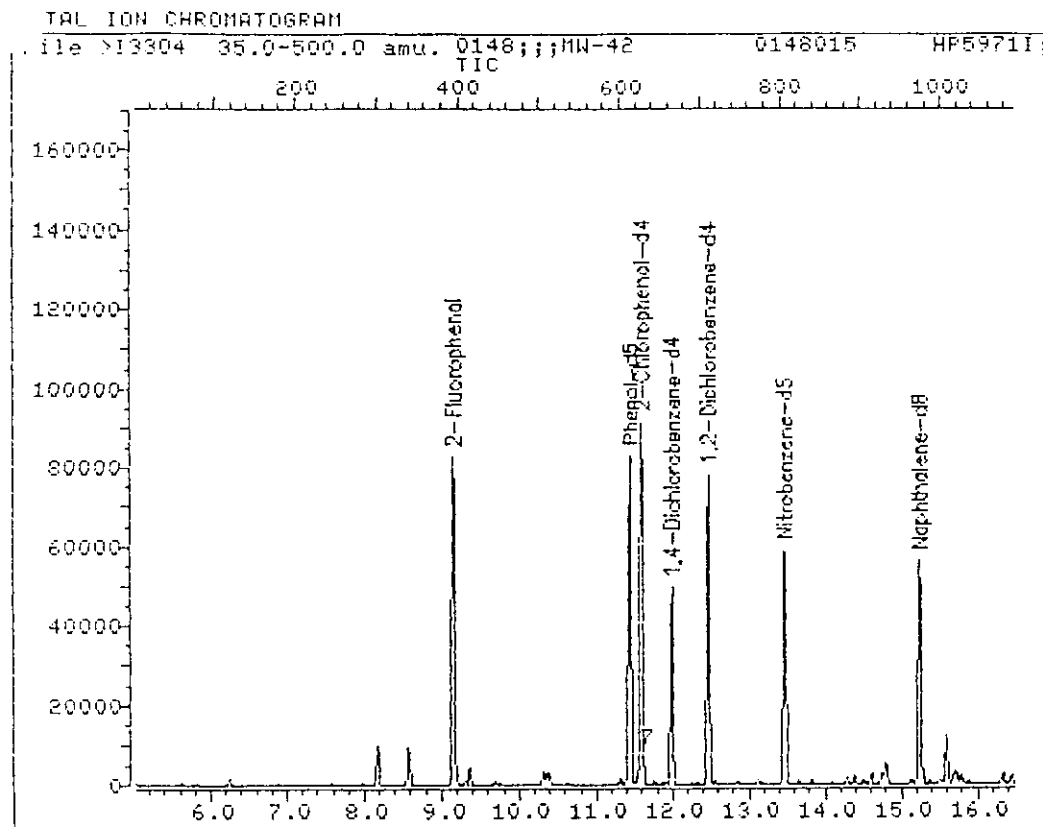
Last Qual Time: 930219 10:28

Compound	R.T.	Q	ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.00	151.8		17668	40.00	ug	94
2) 2-Chlorophenol-d4	11.60	132.0		65325	57.87	ug	82
3) 2-Fluorophenol	9.15	111.8		63257	54.83	ug	73
4) Phenol-d5	11.45	98.8		93137	59.08	ug	61
<del>7) 2-Chlorophenol</del>	<del>11.63</del>	<del>127.8</del>		<del>478</del>	<del>.404</del>	<del>ug</del>	<del>42</del>
10) 1,2-Dichlorobenzene-d4	12.47	152.0		29783	40.36	ug	96
17) *Naphthalene-d8	15.24	135.9		64201	40.00	ug	97
18) Nitrobenzene-d5	13.47	81.8		50462	39.26	ug	72
31) *Acenaphthene-d10	19.90	163.9		35826	40.00	ug	98
) 2-Fluorobiphenyl	18.13	171.8		87130	39.50	ug	96
41) 2,4,6-Tribromophenol	22.03	329.6		31912	61.04	ug	94
52) *Phenanthrene-d10	23.79	187.9		66822	40.00	ug	97
63) *Chrysene-d12	31.06	240.0		55988	40.00	ug	97
65) Terphenyl-d14	28.03	244.0		61911	25.08	ug	99
<del>66) Butylbenzylphthalate</del>	<del>29.39</del>	<del>140.0</del>		<del>1263</del>	<del>.622</del>	<del>ug</del>	<del>44</del>
70) bis(2-Ethylhexyl)phthalate	31.19	148.8		1849	.736	ug	85
71) *Perylene-d12	37.74	264.0		55618	40.00	ug	99
<del>72) Di-n-octylphthalate</del>	<del>33.75</del>	<del>143.9</del>		<del>3325</del>	<del>.672</del>	<del>ug</del>	<del>61</del>

\* Compound is ISTD

*One 2/20/02*

0517

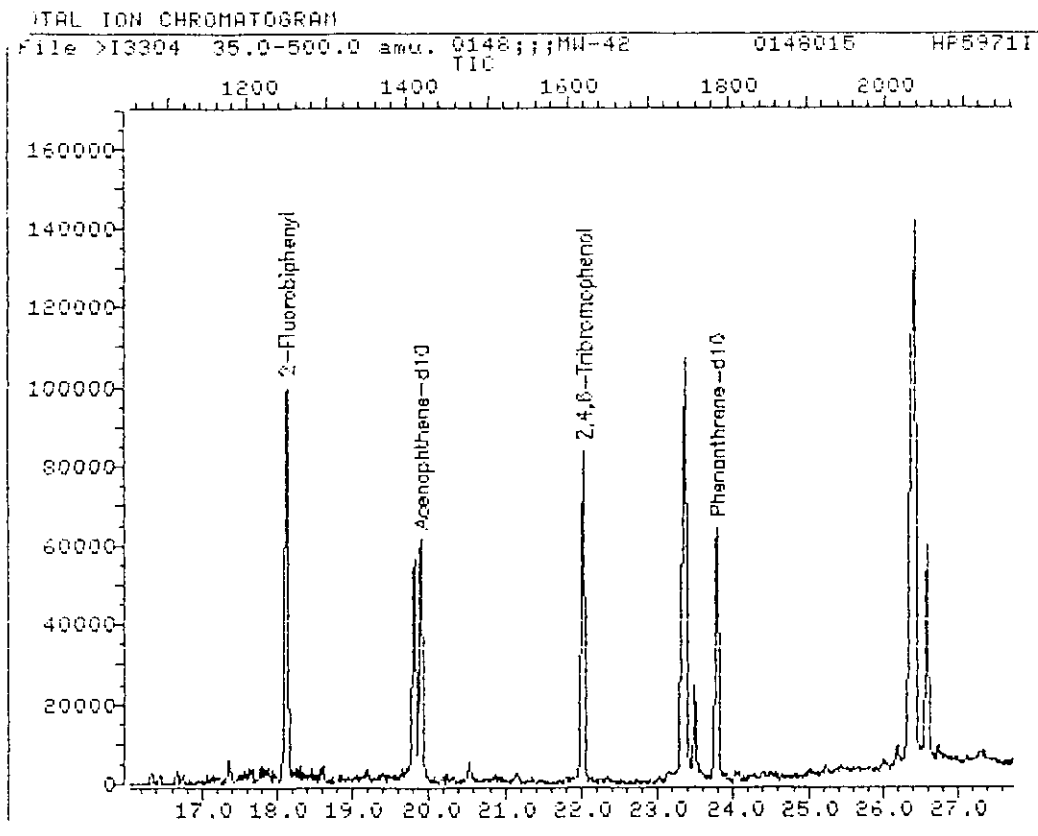


Data File: >I3304::A5 Quant Output File: ^I3304::A6  
Name: 0148;;;MW-42 Instrument ID: \*\*MSD  
Misc: 0148015 HP59711;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:46  
Injected at: 930219 12:42

0518



Data File: >I3304::A5

Quant Output File: ^I3304::A6

Name: 0148;;;MW-42

Instrument ID: \*\*MSD

Misc: 0148015

HP59711;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qual Time: 930219 10:28

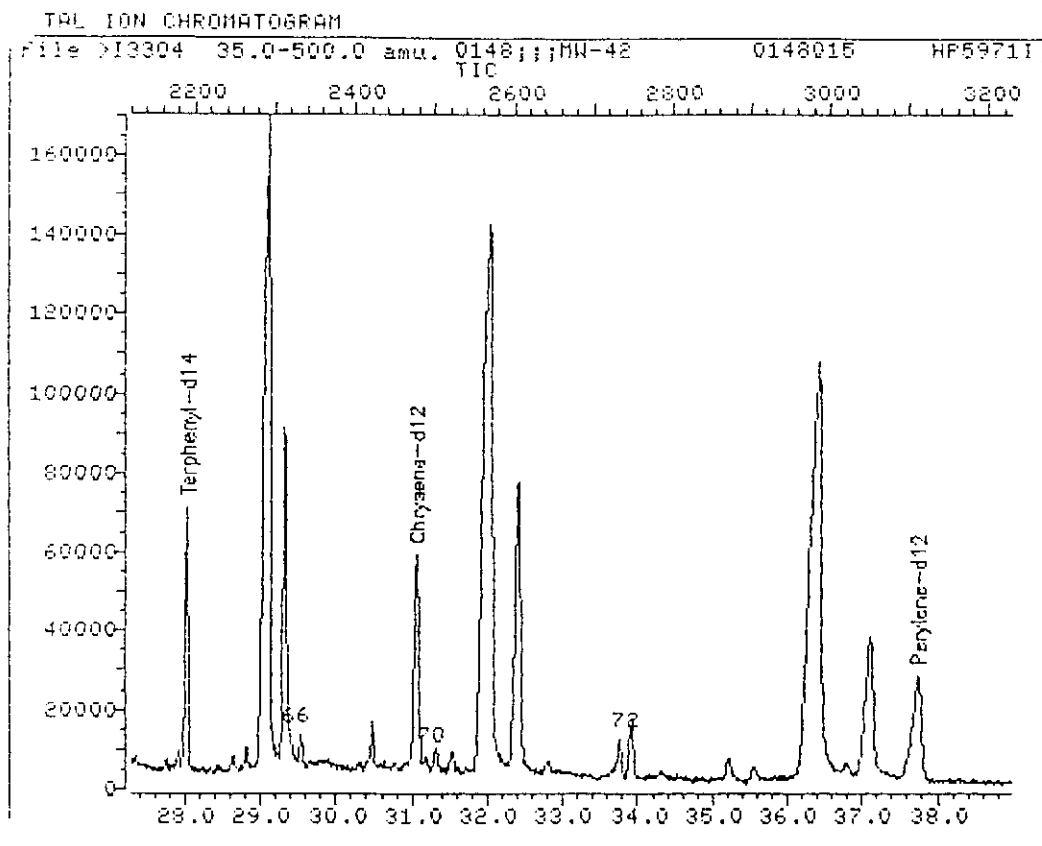
Operator ID: USER1

Quant Time : 930222 17:46

Injected at: 930219 12:42

Page 2 of 4

0519



Data File: >I3304::A5

Quant Output File: ^I3304::A6

Name: 0148;;;MW-42

Instrument ID: \*\*MSD

Misc: 0148015

HP59711;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930219 10:28

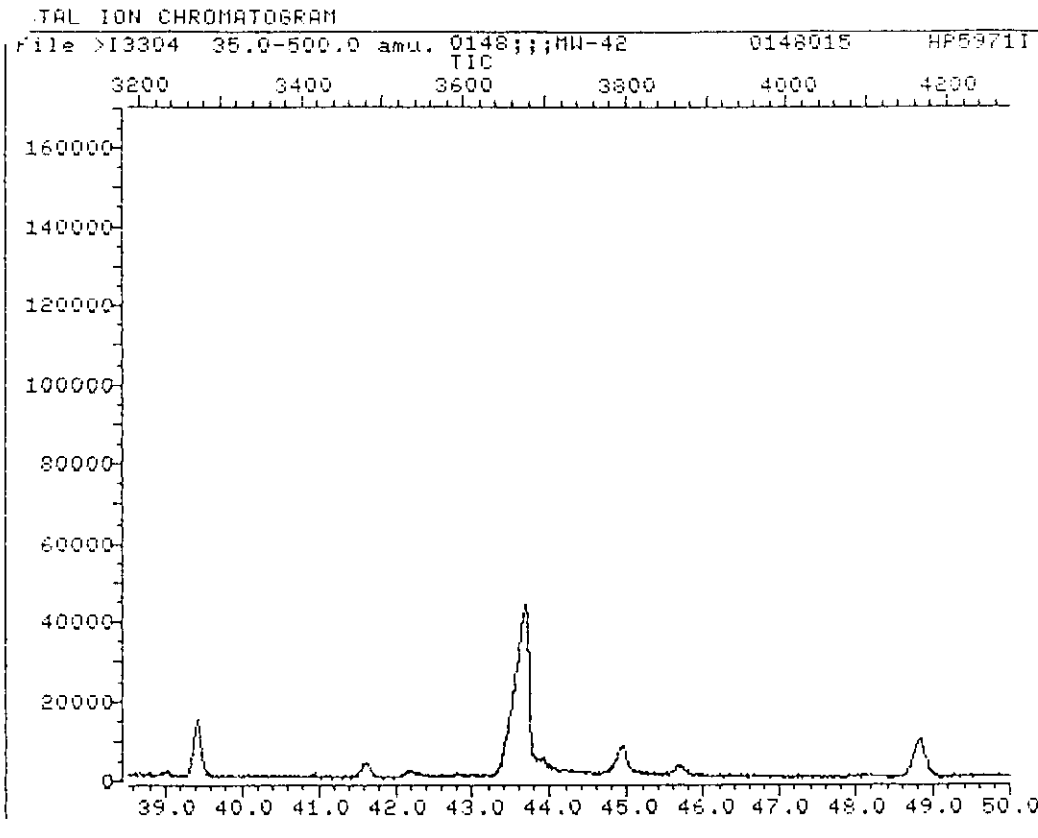
Operator ID: USER1

Quant Time : 930222 17:46

Injected at: 930219 12:42

Page 3 of 4

0520



Data File: >I3304::A5

Quant Output File: ^I3304::A6

Name: 0148;;;MW-42

Instrument ID: \*\*MSD

Misc: 0148015

HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930219 10:28

Operator ID: USER1

Quant Time : 930222 17:46

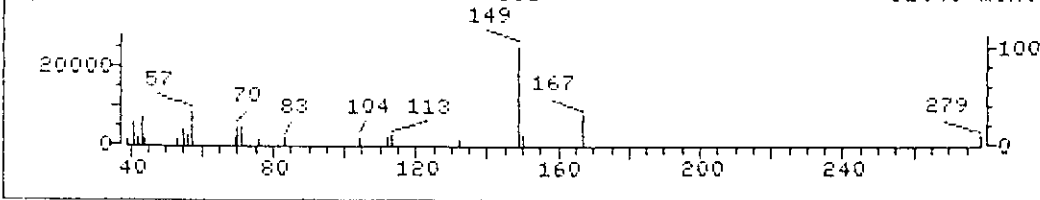
Injected at: 930219 12:42

Page 4 of 4



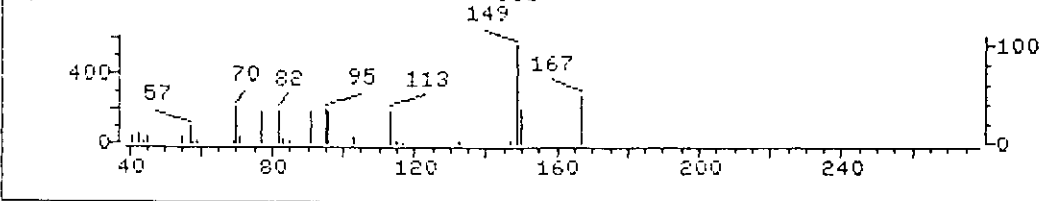
## REFERENCE STANDARD SPECTRUM

File >I0012 bis(2-Ethylhexyl)phthalate 920123 24:36 Scan 1628  
Bpk Ab 25288. SUB 32.40 min.



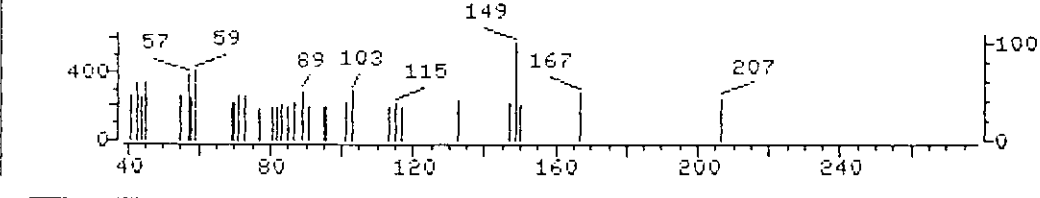
## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

File >I3304 0148;;;MW-42 0148015 HP5971I;02109 Scan 2489  
Bpk Ab 567. SUB 31.19 min.



## SAMPLE SPECTRUM (UNALTERED)

File >I3304 0148;;;MW-42 0148015 HP5971I;02109 Scan 2489  
Bpk Ab 567. SUB 31.19 min.



Data File: >I3304::A2 Quant Output File: ^I3304::A6  
Name: 0148;;;MW-42 Instrument ID: \*\*MSD  
Misc: 0148015 HP5971I;021093;021193;LLW;1;;;I02  
Quant Time: 930219 13:40 Quant ID File: I\_IFI::A5  
Injected at: 930219 12:42 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No : 70  
Compound Name : bis(2-Ethylhexyl)phthalate  
Scan Number : 2489  
Retention Time: 31.19 min.  
Quant Ion : 148.8  
Area : 1849  
Concentration : .736 ug  
q-value : 85

0522

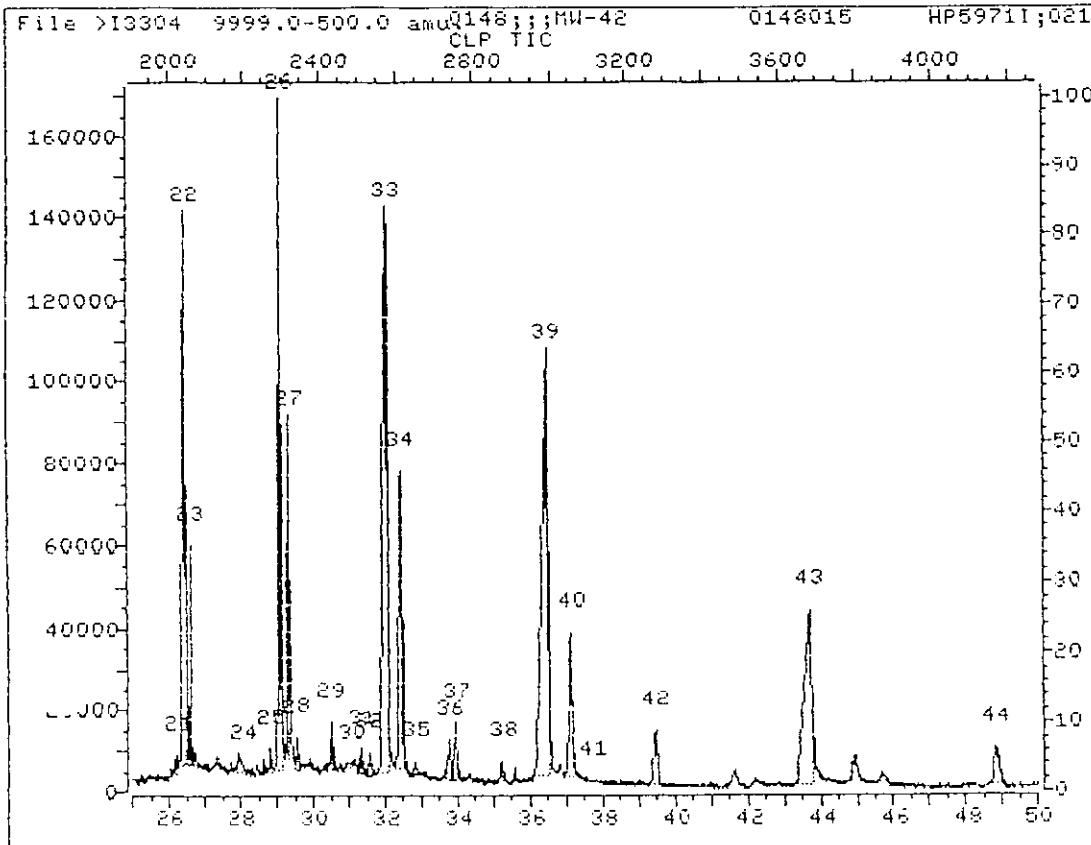
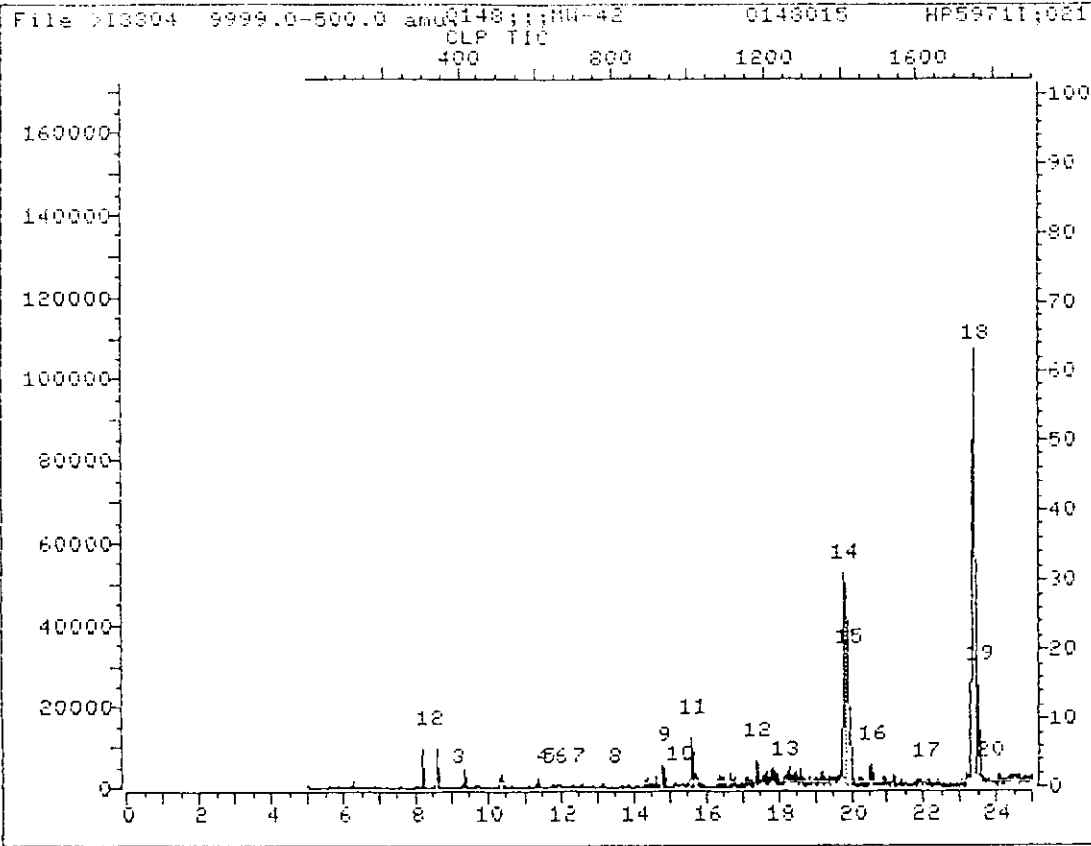
data file header from : >I3304::A2

Sample: 0148;;;MW-42 Operator: USER1 2/19/93 12:42  
Misc : 0148015 HP59711;021093;021193;LLW;1;;;102  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 2 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

0523

Date: 02/19/93 12:42 Inst: 1



Date: 02/19/93 12:42 Inst: 1

MW-42  
HP5971I  
0524

TIC PEAK REPORT

PK#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
33.	32.04	1160258.	110.	5.		.50
39.	36.43	1054901.	100.	6.		.50
26.	29.11	946839.	89.	5.		.50
22.	26.43	687126.	76.	4.		.50
43.	43.68	555387.	54.	6.		.50
18.	23.37	416254.	46.	4.		.50
34.	32.42	354835.	33.	5.		.50
40.	37.12	261945.	25.	6.		.50
27.	29.32	261080.	25.	5.		.50
14.	19.81	163599.	20.	3.		.50
23.	26.60	145088.	16.	4.		.50
42.	39.43	91173.	9.	6.		.50
44.	48.82	92296.	9.	6.		.50
37.	33.92	56011.	5.	5.		.50
19.	23.49	45890.	5.	4.		.50
11.	15.60	26023.	4.	2.		.50
36.	33.76	41326.	4.	5.		.50
1.	8.17	20013.	4.	1.		.50
2.	8.57	20253.	4.	1.		.50
29.	30.48	29664.	3.	5.		.50
9.	14.80	20940.	3.	2.		.50
30.	31.54	22670.	2.	5.		.50
.	17.36	15238.	2.	2.		.50

INTERNAL STD AREA REPORT

ISTD Compound Name	RT	Area	RT Range	TI/SI
1,4-DICHLOROBENZENE-D4	12.00	96569.	0.00 13.62	5.5
NAPHTHALENE-D8	15.24	122966.	13.62 17.57	1.9
ACENAPHTHENE-D10	19.90	162801.	17.57 21.84	4.5
PHENANTHRENE-D10	23.79	180222.	21.84 27.42	2.7
CHRYSENE-D12	31.06	213042.	27.42 34.40	3.8
PERYLENE-D12	37.73	205703.	34.40 48.82	3.7

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 3  
Target peaks matched: 0  
Total TIC identified: 23

TICS : 3:11 PM MON., 22 FEB., 1993

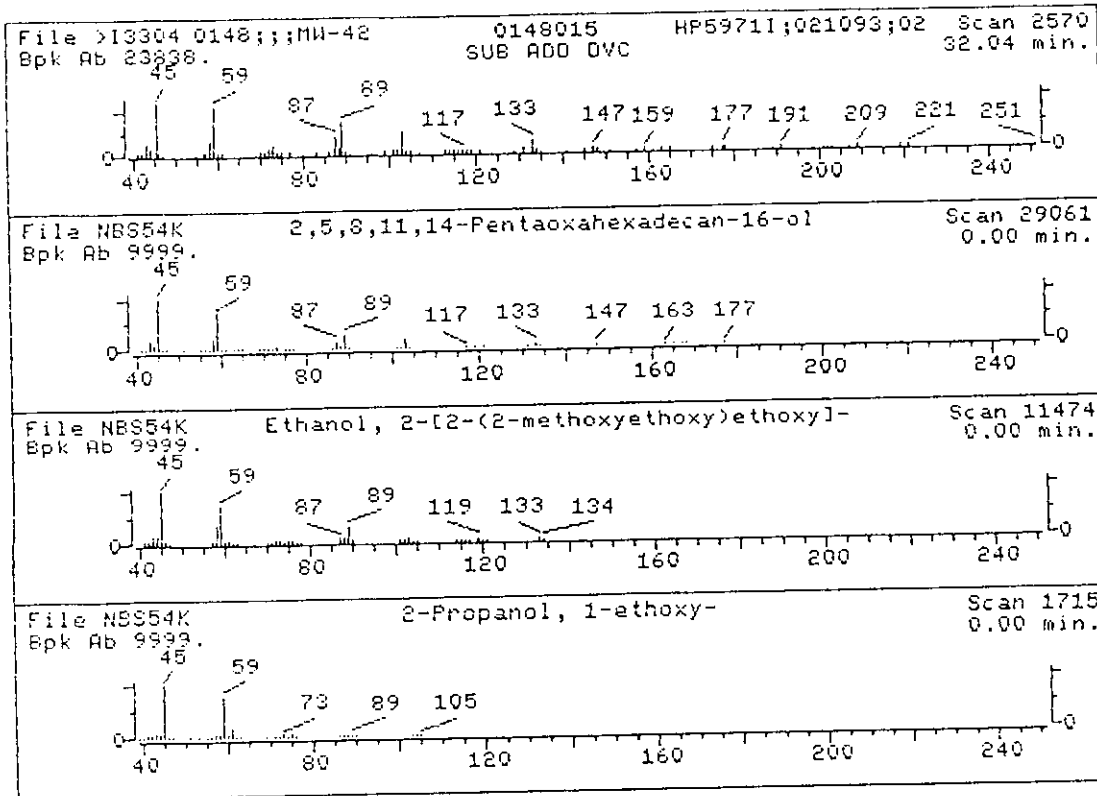
- 1. 2,5,8,11,14-Pentaoxahehexadecan-16-ol
- 2. Ethanol, 2-[[2-(2-methoxyethoxy)ethoxy]-
- 3. 2-Propanol, 1-ethoxy-
- 4. 2-Butanol, 3,3'-oxybis-
- 5. Silane, ethyldimethyl-

252 C11H24O6 0525  
 164 C7H16O4  
 104 C9H12O2  
 162 C8H18O3  
 88 C4H12Si

Sample file: >I3304      Spectrum #:      2570  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	42	23778521	8670	NBS54K	49	80	0	0	100	27	14	19
2.	28	112356	8547	NBS54K	39	60	0	0	77	43	8	16
3.	25*	1569024	1853	NBS54K	34	60	1	0	80	48	7	18
4.	20	54305612	2000	NBS54K	37	48	1	0	92	55	5	14
5.	20*	758214	1807	NBS54K	37	61	2	0	61	55	5	15

Peak#: 33 Area: 1160258. Est Conc: 110. Date: 02/19/93 12:42 Inst: 1



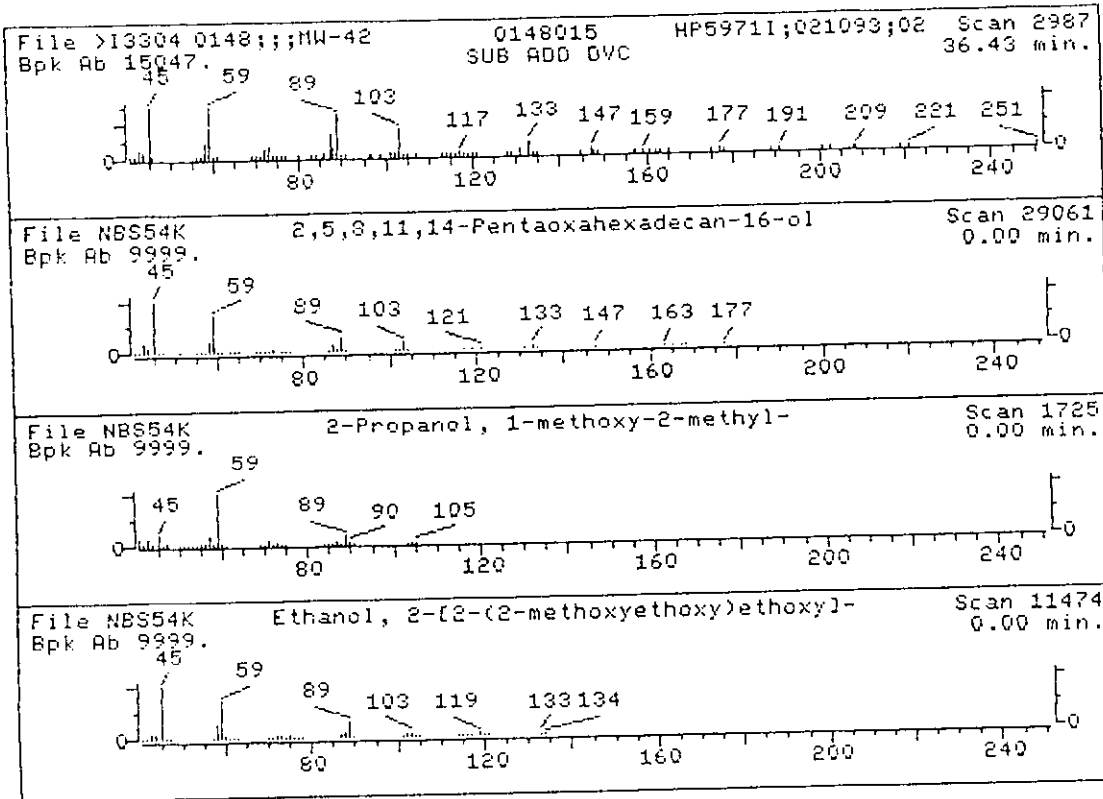
1. 2,5,8,11,14-Pentaoxahexadecan-16-ol
2. 2-Propanol, 1-methoxy-2-methyl-
3. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)]-
4. 2-Propanol, 1-ethoxy-
5. Silane, (2-methoxyethoxy)trimethyl-

292 C11H24O6  
 104 C5H12O2  
 164 C7H16O4  
 104 C5H12O2  
 148 C6H16O2Si

Sample file: >I3304      Spectrum #: 2987  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	29	23778521	8670	NBS54K	43	86	0	0	99	39	10	15
2.	25*	3587642	1855	NBS54K	22	69	3	0	528	50	7	12
3.	20	112356	8547	NBS54K	33	66	0	0	86	53	5	15
4.	15*	1569024	1853	NBS54K	34	60	1	0	85	56	3	18
5.	15*	18173745	8521	NBS54K	30	81	2	0	76	59	3	14

Peak#: 39 Area: 1054901. Est Conc: 100. Date: 02/19/93 12:42 Inst: 1



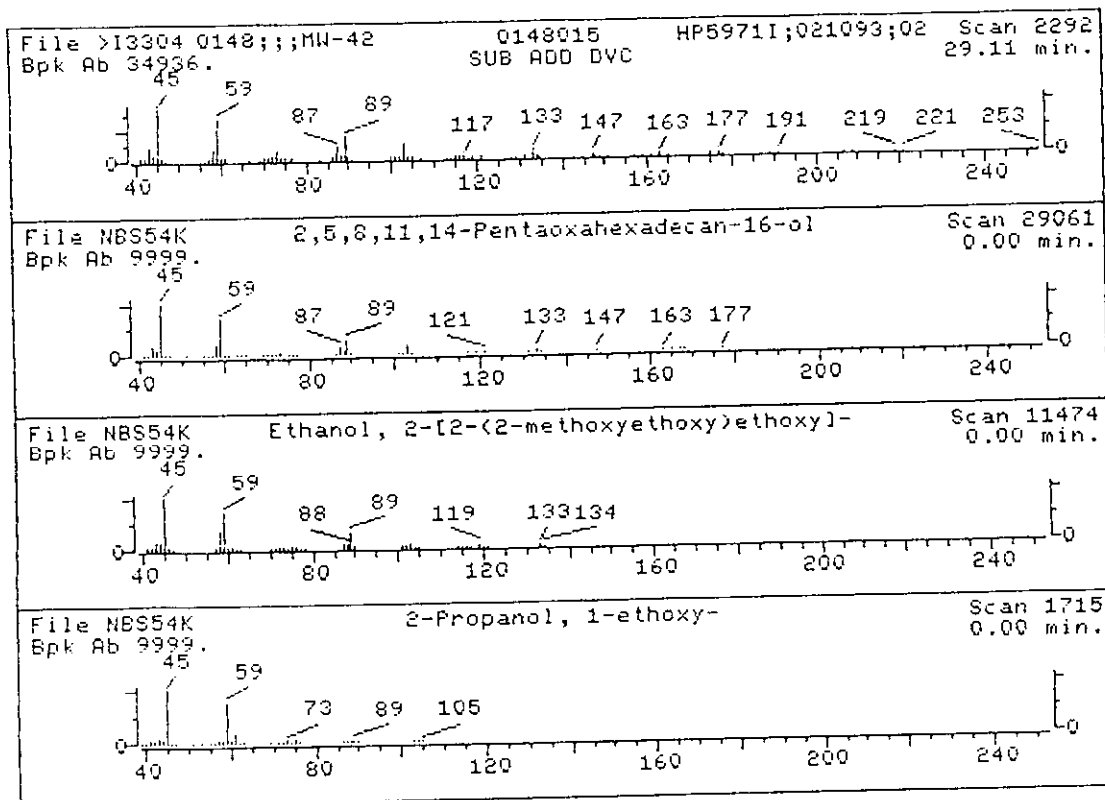
0527

- 1. 2,5,8,11,14-Pentaoxahexadecan-16-ol 252 C11H24O6
- 2. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 C7H16O4
- 3. 2-Propanol, 1-ethoxy- 104 C9H12O2
- 4. 2,5,8,11,14,17-Hexaoxaoctadecane 266 C12H26O6
- 5. Silane, ethyldimethyl- 88 C4H12Si

Sample file: >I3304 Spectrum #: 2292  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	74	23778521	8670	NBS54K	70	59	0	0	100	15	39	46
2.	30	112356	8547	NBS54K	39	60	0	0	70	36	10	16
3.	30*	1569024	1853	NBS54K	34	60	1	0	72	41	8	18
4.	25	1191873	2071	NBS54K	37	79	0	0	74	48	7	15
5.	20*	758214	1807	NBS54K	30	68	3	0	81	51	5	13

Peak#: 26 Area: 946839. Est Conc: 89. Date: 02/19/93 12:42 Inst: 1



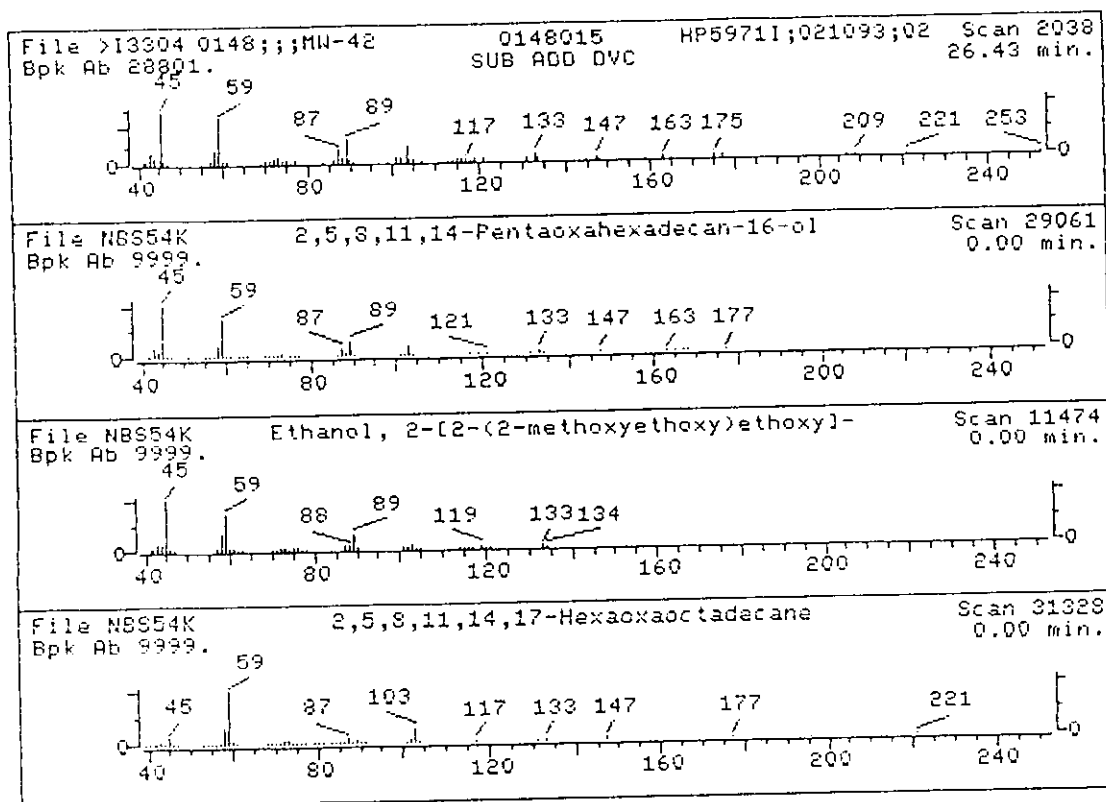
0528

- 2,5,8,11,14-Pentaoxahexadecan-16-ol 252 C11H24O6
- 1. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 C7H16O4
- 3. 2,5,8,11,14,17-Hexaoxaoctadecane 266 C12H26O6
- 4. 2-Propanol, 1-ethoxy- 104 C5H12O2
- 5. 2-Butanol, 3,3'-oxybis- 162 C8H18O3

Sample file: >I3304 Spectrum #: 2038  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	66	23778521	8670	NBS54K	70	59	0	0	100	16	31	46
2.	56	112356	8547	NBS54K	49	50	0	0	82	22	22	28
3.	30	1191873	2071	NBS54K	51	65	0	0	86	46	10	22
4.	30*	1569024	1853	NBS54K	34	60	1	0	74	41	8	18
5.	18	54305612	2000	NBS54K	42	43	0	0	68	57	4	23

Peak#: 22 Area: 687126. Est Conc: 76. Date: 02/19/93 12:42 Inst: I



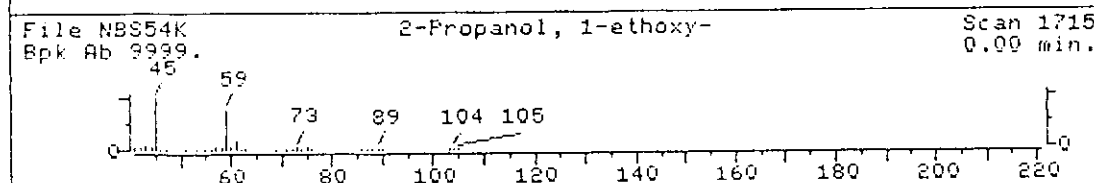
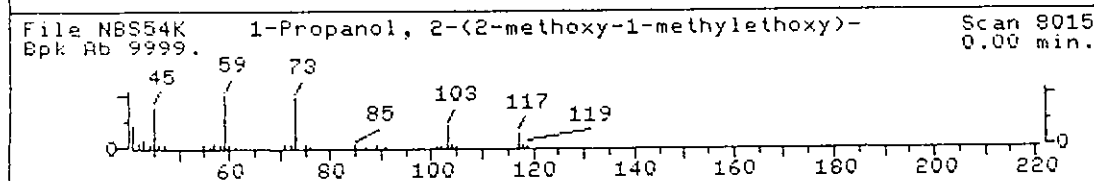
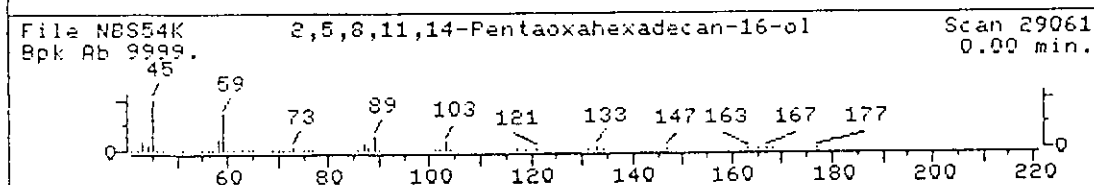
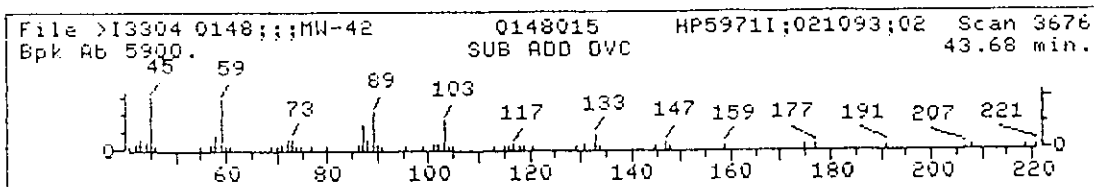


1. 2,5,8,11,14-Pentaoxahexadecan-16-ol	292	C11H24O6
2. 1-Propanol, 2-(2-methoxy-1-methylethoxy)-	148	C7H16O3
3. 2-Propanol, 1-ethoxy-	104	C5H12O2
4. 1-Propanol, 3-[3-(1-methylethoxy)propoxy]-	176	C9H20O3
5. Silane, triethyl-	116	C6H16Si

Sample file: >I3304      Spectrum #:      3676  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	32	23778521	8670	NBS54K	38	91	0	0	100	33	12	15
2.	24	55956213	1970	NBS54K	54	49	2	0	96	41	8	12
3.	20*	1569024	1853	NBS54K	34	60	1	0	100	51	5	18
4.	20	54518035	2023	NBS54K	26	73	0	0	88	55	5	13
5.	12*	617867	7614	NBS54K	39	51	1	0	66	61	2	22

Peak#: 43 Area: 555387. Est Conc: 54. Date: 02/19/93 12:42 Inst: I

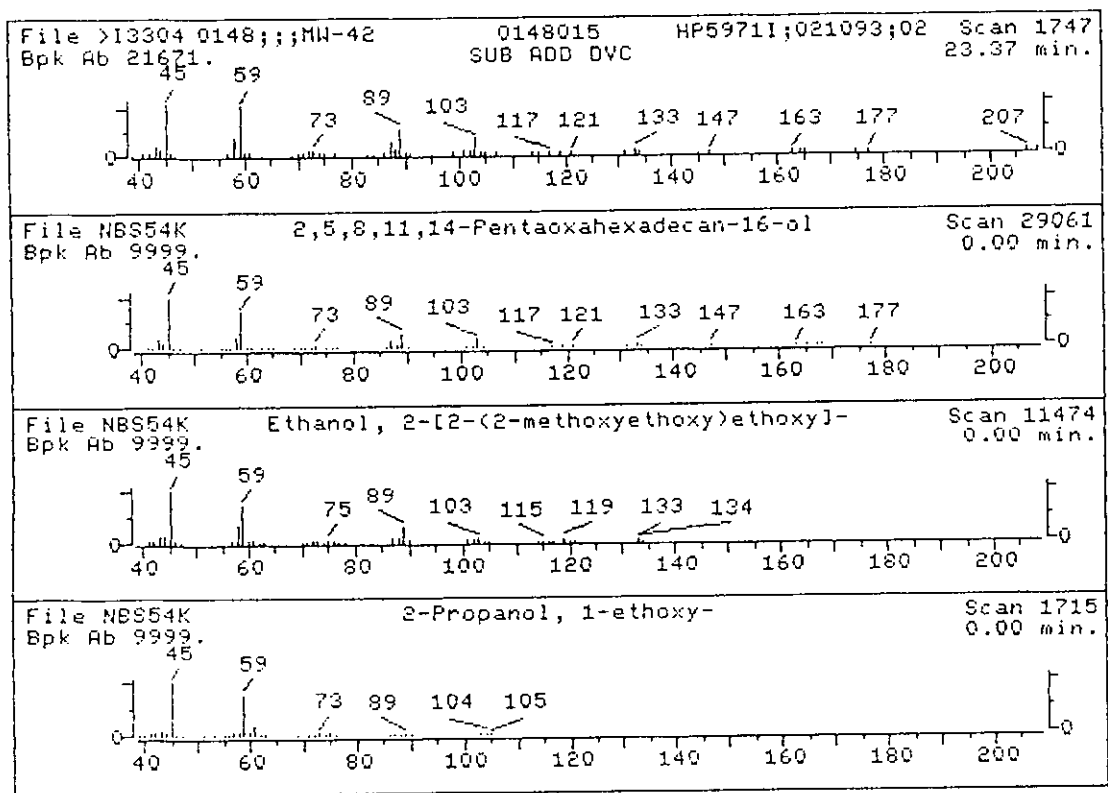


- 1. 2,5,8,11,14-Pentaoxahexadecan-16-ol 252 C11H24O6
- 2. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 C7H16O4
- 3. 2-Propanol, 1-ethoxy- 104 C5H12O2
- 4. Propane, 1,2,3-trimethoxy- 134 C6H14O3
- 5. Silane, ethyldimethyl- 88 C4H12Si

Sample file: >I3304 Spectrum #: 1747  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	76	23778521	8670	NBS54K	76	53	0	0	100	15	40	56
2.	59	112356	8547	NBS54K	56	43	0	0	100	23	27	31
3.	30*	1569024	1853	NBS54K	34	60	1	0	82	41	8	18
4.	29	20637494	8497	NBS54K	61	51	2	0	67	32	12	12
5.	25*	758214	1807	NBS54K	34	64	2	0	80	50	7	14

Peak#: 18 Area: 416254. Est Conc: 46. Date: 02/19/93 12:42 Inst: I



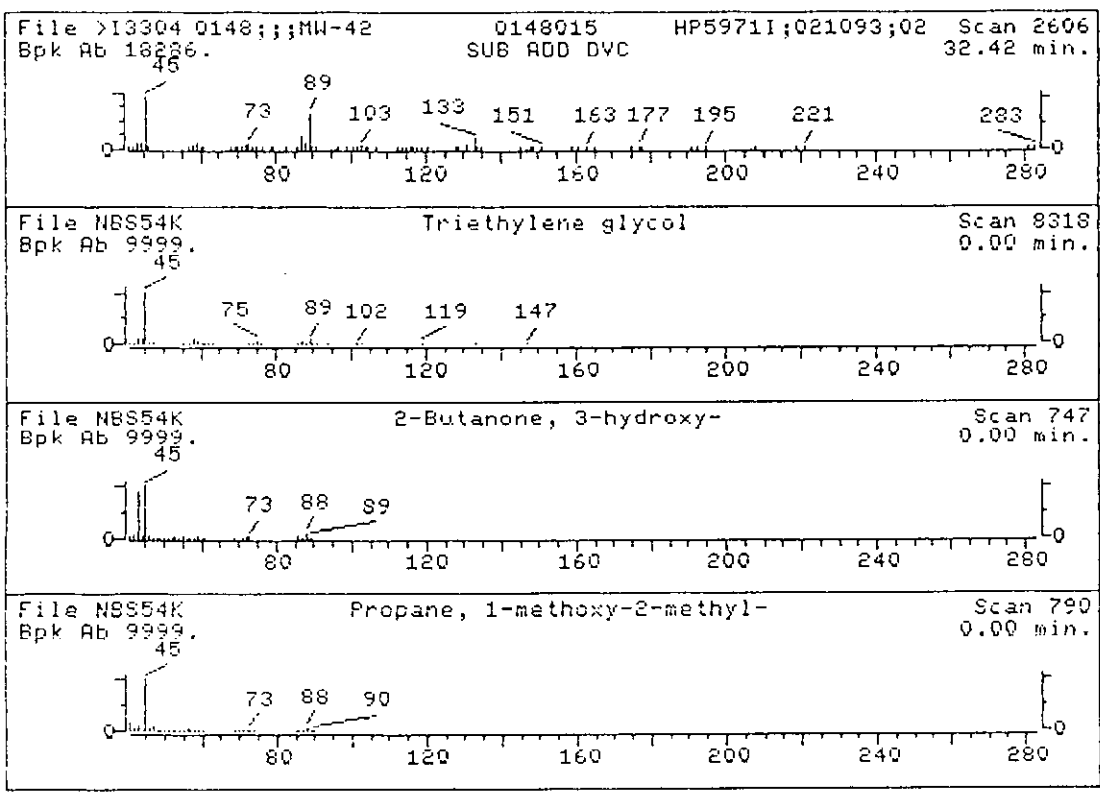
0531

- 1. Triethylene glycol 190 C6H14O4
- . 2-Butanone, 3-hydroxy- 88 C4H8O2
- . Propane, 1-methoxy-2-methyl- 88 C5H12O
- 4. Propane, 2-methyl-1-propoxy- 116 C7H16O
- 5. Propanoic acid, 2-hydroxy-, methyl ester, (.+-.)- (9 104 C4H8O3  
CI)

Sample file: >I3304 Spectrum #: 2606  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	25	112276	8525	NBS54K	34	50	1	0	73	50	7 12
2.	25*	513860	346	NBS54K	29	56	2	0	100	50	7 14
3.	25*	625445	348	NBS54K	21	61	2	0	100	50	7 13
4.	24*	15268492	7618	NBS54K	22	64	3	0	100	43	8 12
5.	20*	2155308	153	NBS54K	21	57	2	0	100	54	5 13

Peak#: 34 Area: 354835. Est Conc: 33. Date: 02/19/93 12:42 Inst: I



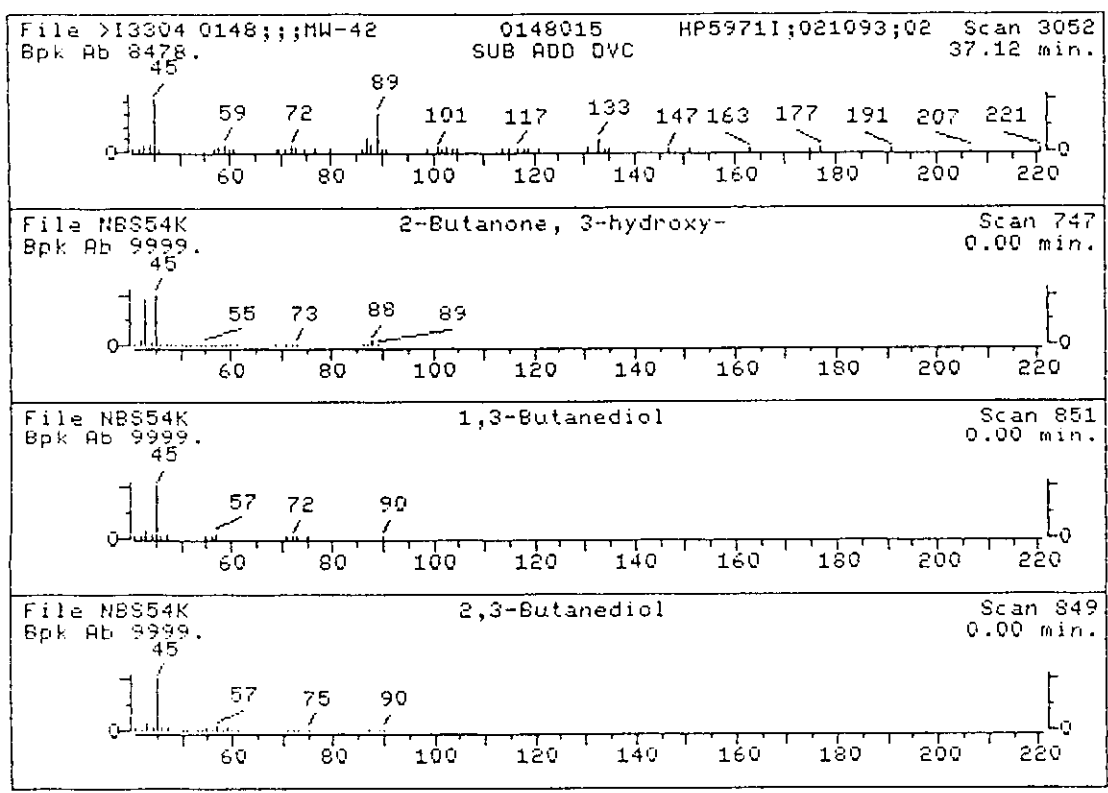
0532

- 1. 2-Butanone, 3-hydroxy- 88 C4H8O2
- 2. 1,3-Butanediol 90 C4H10O2
- 3. 2,3-Butanediol 90 C4H10O2
- 4. Propane, 1-methoxy-2-methyl- 88 C5H12O
- 5. Propanoic acid, 2-hydroxy-, methyl ester, (.+-.)- (9 C1) 104 C4H8O3

Sample file: >I3304 Spectrum #: 3052  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25*	513860	346	NBS54K	24	61	2	0	100	50	7	14
2.	20*	107880	351	NBS54K	26	49	2	0	100	55	5	14
3.	20*	513859	350	NBS54K	28	53	2	0	100	55	5	14
4.	20*	625445	348	NBS54K	27	55	2	0	100	51	5	14
5.	20*	2155308	153	NBS54K	21	57	2	0	100	55	5	13

Peak#: 40 Area: 261945. Est Conc: 25. Date: 02/19/93 12:42 Inst: I



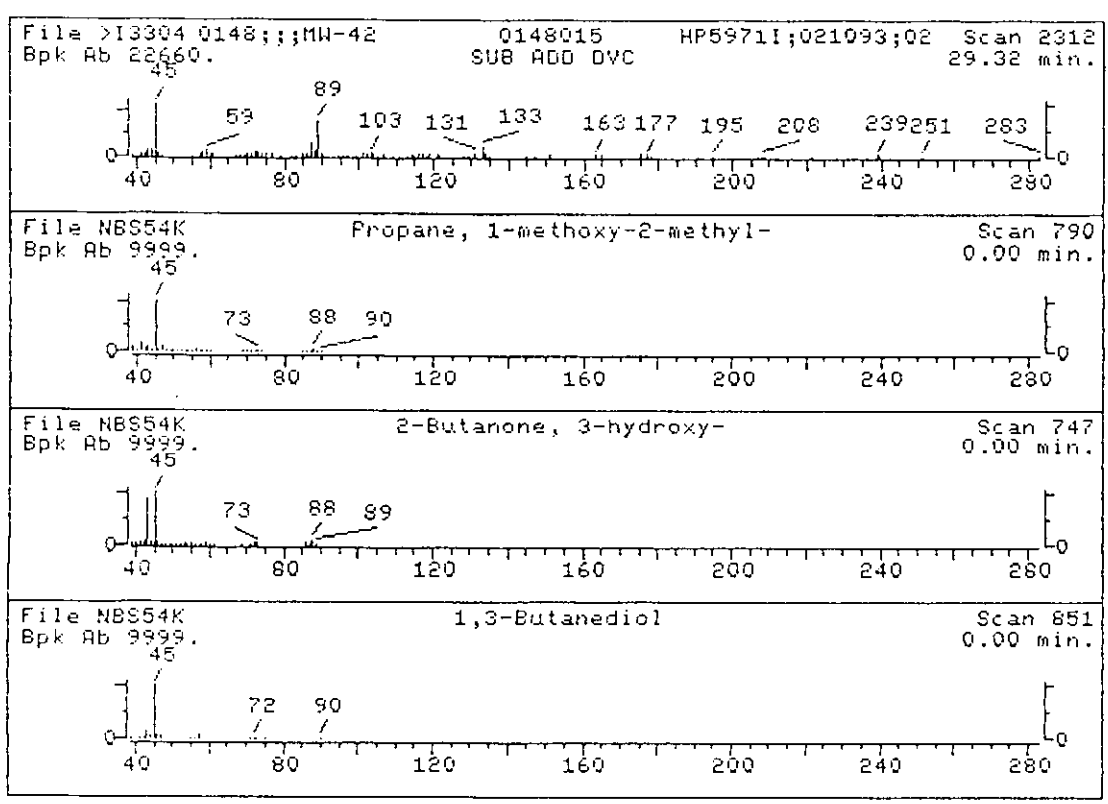
0533

- 1. Propane, 1-methoxy-2-methyl- 88 C5H12O
- 2. 2-Butanone, 3-hydroxy- 88 C4H8O2
- 3. 1,3-Butanediol 90 C4H10O2
- 4. Propanoic acid, 2-hydroxy-, methyl ester, (+-)- (9 CI) 104 C4H8O3
- 5. 2,3-Butanediol 90 C4H10O2

Sample file: >I3304 Spectrum #: 2312  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Peak #	Prob.	CAS #	CON #	RDDT	K	OK	#FLG	TILT	%	CON	C_I	R_IU
1.	25*	625445	348	NBS54K	27	55	2	0	100	49	7	14
2.	25*	513860	346	NBS54K	24	61	2	0	100	49	7	14
3.	20*	107880	351	NBS54K	24	51	2	0	100	53	5	14
4.	20*	2155308	153	NBS54K	23	55	2	0	100	53	5	13
5.	20*	513859	350	NBS54K	21	60	2	0	100	53	5	13

Peak#: 27 Area: 261080. Est Conc: 25. Date: 02/19/93 12:42 Inst: I



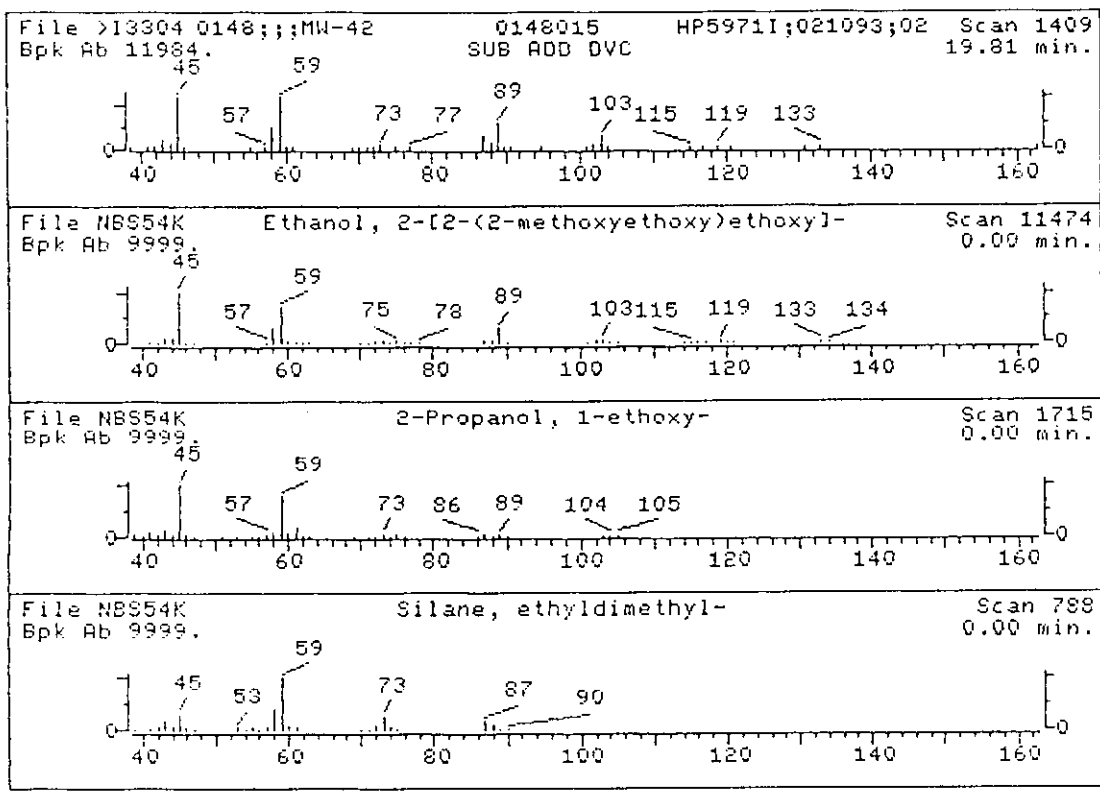
0. 0534

- 1. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 C7H16O4
- 2. 2-Propanol, 1-ethoxy- 104 C5H12O2
- 3. Silane, ethyldimethyl- 88 C4H12Si
- 4. Ethane, 1,1'-oxybis[2-methoxy- 134 C6H14O3
- 5. 2,5,8,11,14-Pentaoxapentadecane 222 C10H22O5

Sample file: >I3304 Spectrum #: 1409  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	58	112356	8547	NBS54K	62	37	1	0	98	18	25	23
2.	31*	1569024	1853	NBS54K	39	55	1	0	97	43	12	22
3.	29*	758214	1807	NBS54K	42	56	2	0	100	41	8	17
4.	25	111966	1938	NBS54K	27	63	0	0	95	48	7	14
5.	25	143248	2057	NBS54K	26	84	0	0	100	48	7	13

Peak#: 14 Area: 163599. Est Conc: 20. Date: 02/19/93 12:42 Inst: I



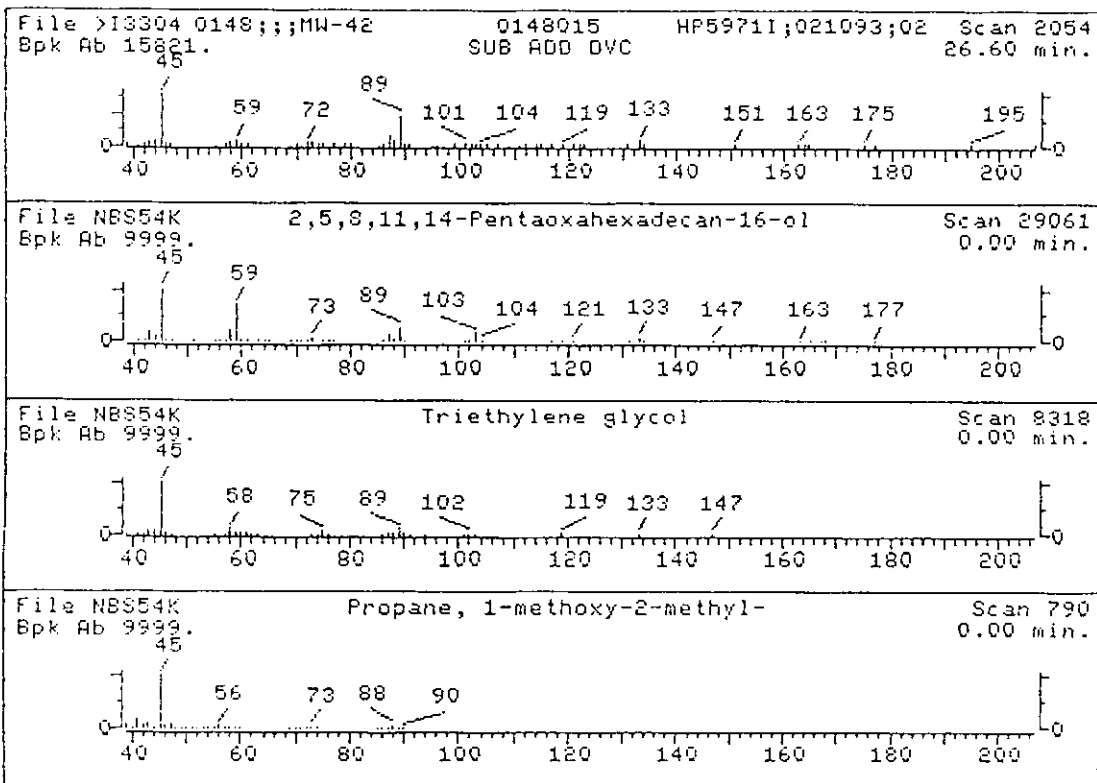
0535

1. 2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H24O6
2. Triethylene glycol	150	C6H14O4
3. Propane, 1-methoxy-2-methyl-	88	C5H12O
4. 2-Butanone, 3-hydroxy-	88	C4H8O2
5. 1,3-Butanediol	90	C4H10O2

Sample file: >I3304      Spectrum #:      2054  
Search speed: 1      Tilting option: N      No. of ion ranges searched:      43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	43	23778521	8670	NBS54K	64	65	2	0	100	21	17	14
2.	25	112276	8525	NBS54K	34	50	1	0	78	49	7	12
3.	25*	625445	348	NBS54K	23	59	2	0	100	49	7	13
4.	25*	513860	346	NBS54K	24	61	2	0	100	47	7	14
5.	20*	107880	351	NBS54K	26	49	2	0	100	53	5	14

Peak#: 23 Area: 145088. Est Conc:      16. Date: 02/19/93 12:42 Inst: 1



0536

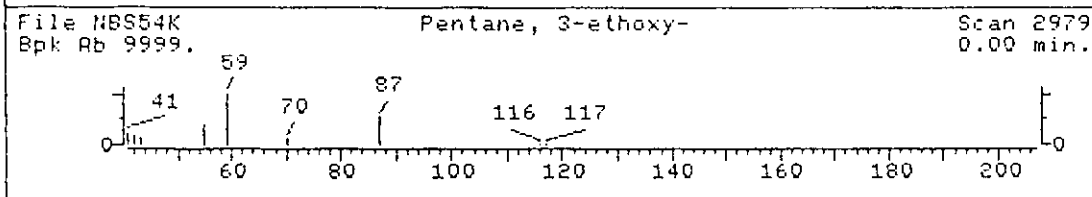
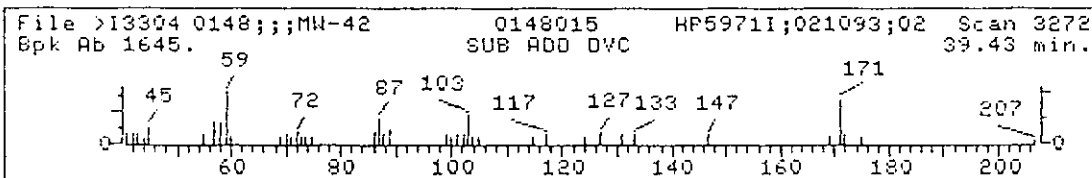
. Pentane, 3-ethoxy-

116 C7H16O

Sample file: >I3304      Spectrum #:      3272  
Search speed: 1      Tilting option: N      No. of ion ranges searched:      45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	11	36749130	7615	NBS54K	36	35	2	0	87	63	2	12

Peak#: 42 Area: 91173. Est Conc: 9. Date: 02/19/93 12:42 Inst: I





0537

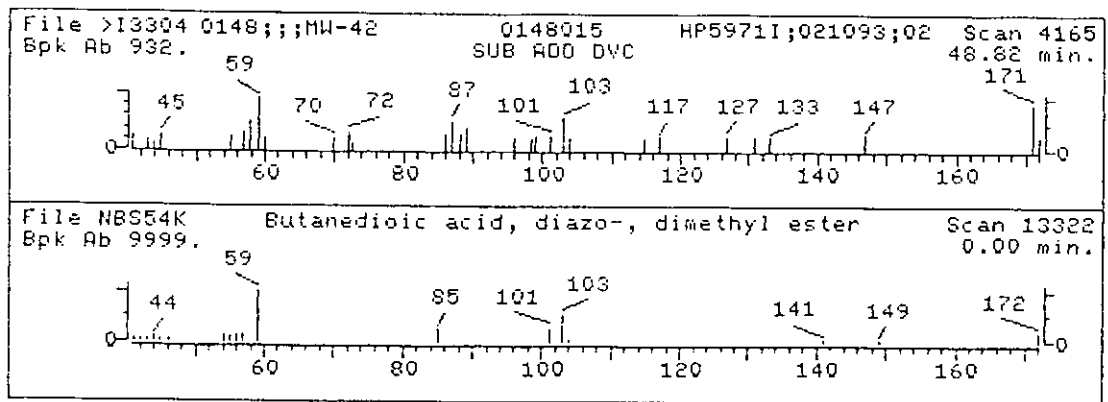
. Butanedioic acid, diazo-, dimethyl ester

172 C6H8N2O4

Sample file: >I3304      Spectrum #:      4165  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	15*	55514368	24514	NBS54K	33	84	3	0	100	57	3	13

Peak#: 44 Area: 92296. Est Conc: 9. Date: 02/19/93 12:42 Inst: I

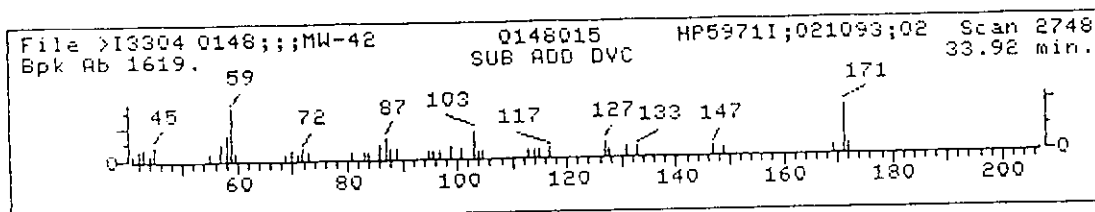


0538

Sample file: >13304 Spectrum #: 2748

No data base entries were retrieved.

Peak#: 37 Area: 56011. Est Conc: 5. Date: 02/19/93 12:42 Inst: I

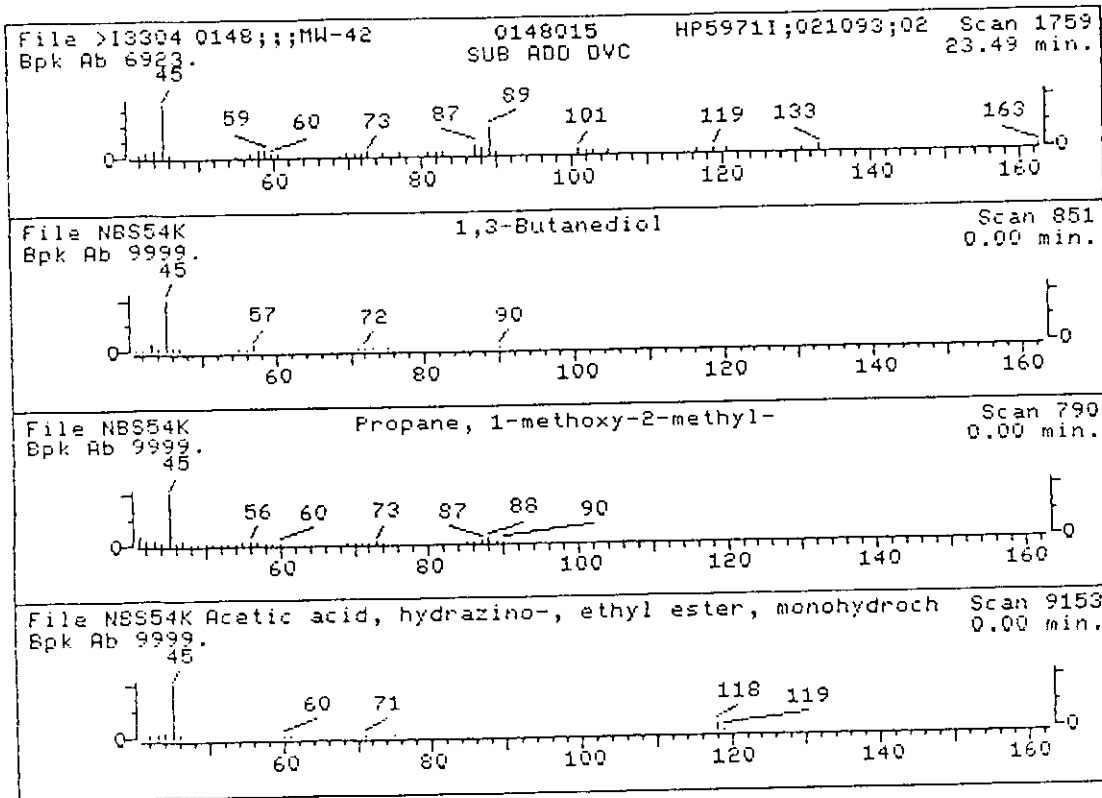


- 1. 1,3-Butanediol 90 C4H10O2
- 2. Propane, 1-methoxy-2-methyl- 88 C5H12O
- 3. Acetic acid, hydrazino-, ethyl ester, monohydrochloride 154 C4H11ClN2O2

Sample file: >I3304      Spectrum #: 1759  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	107880	351	NBS54K	26	49	2	0	100	48	7	14
2.	25*	625445	348	NBS54K	23	59	2	0	100	45	8	13
3.	20	6945922	371	NBS54K	33	56	1	0	99	51	5	12

Peak#: 19 Area: 45890. Est Conc: 5. Date: 02/19/93 12:42 Inst: 1



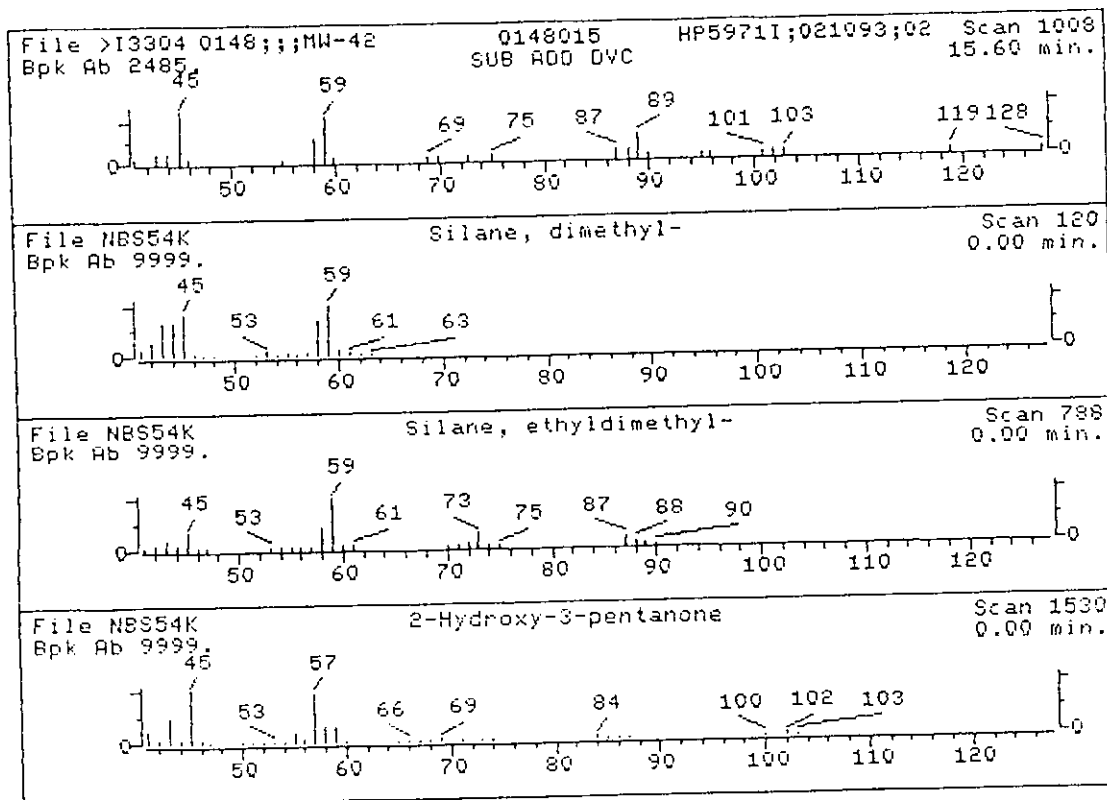
- 1. Silane, dimethyl-
- 2. Silane, ethyldimethyl-
- 3. 2-Hydroxy-3-pentanone

60 C2H8Si  
 88 C4H12Si  
 102 C5H10O2

Sample file: >I3304      Spectrum #: 1008  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	27*	1111746	1791	NBS54K	31	78	3	0	62	39	10	13
2.	26*	758214	1807	NBS54K	36	62	2	0	87	41	8	14
3.	25*	5704201	1833	NBS54K	22	87	3	0	100	49	7	12

Peak#: 11 Area: 26023. Est Conc: 4. Date: 02/19/93 12:42 Inst: I



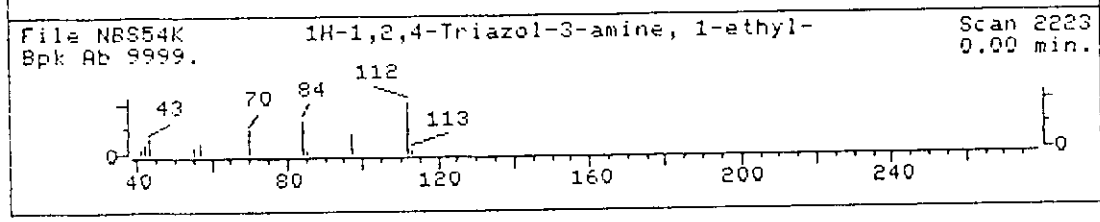
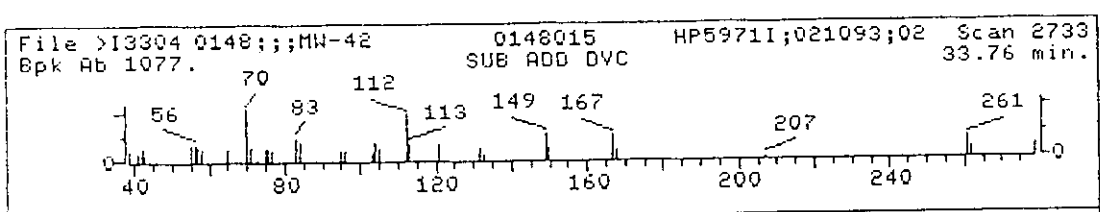
.. 1H-1,2,4-Triazol-3-amine, 1-ethyl-

112 C4H8N4

Sample file: >I3304 Spectrum #: 2733  
Search speed: 1 Tilting option: N No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11*	42786049	12575	NBS54K	24	68	3	0	87	64	2 12

Peak#: 36 Area: 41326. Est Conc: 4. Date: 02/19/93 12:42 Inst: I



0542

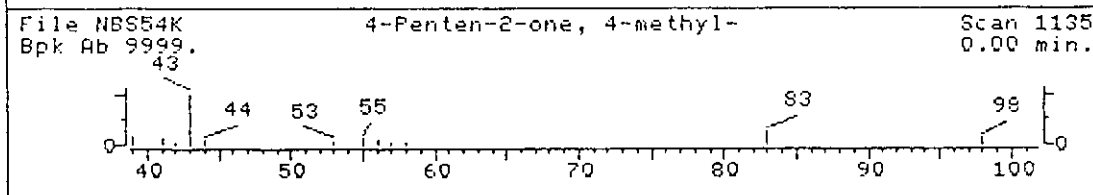
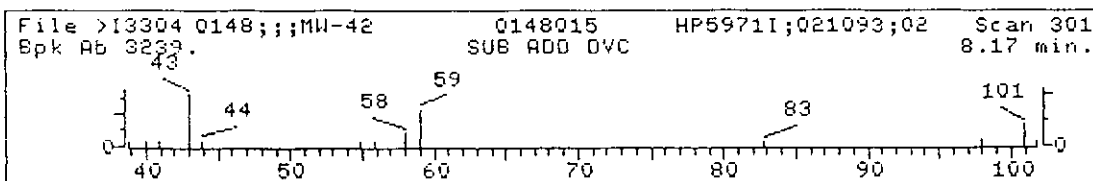
4-Penten-2-one, 4-methyl-

98 C6H10O

Sample file: >I3304 Spectrum #: 301  
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25*	3744023	9897	NBS54K	26	53	2	0	71	48	7 14

Peak#: 1 Area: 20013. Est Conc: 4. Date: 02/19/93 12:42 Inst: 1



0543

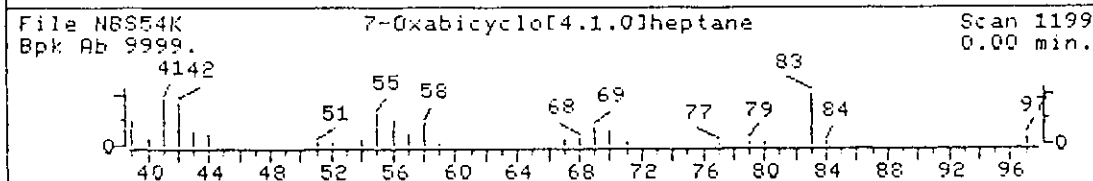
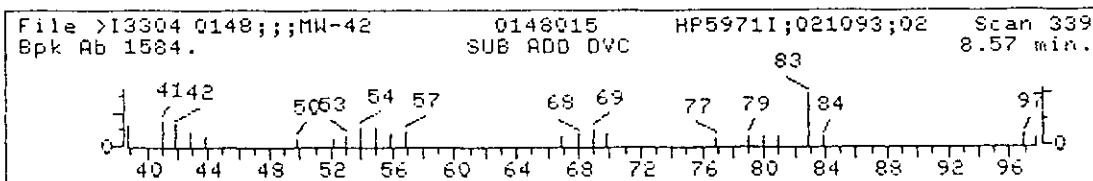
7-Oxabicyclo[4.1.0]heptane

98 C6H100

Sample file: >I3304      Spectrum #:      339  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	20*	286204	6469	NBS54K	27	73	1	0	44	52	5	15

Peak#: 2 Area: 20253. Est Conc: 4. Date: 02/19/93 12:42 Inst: I

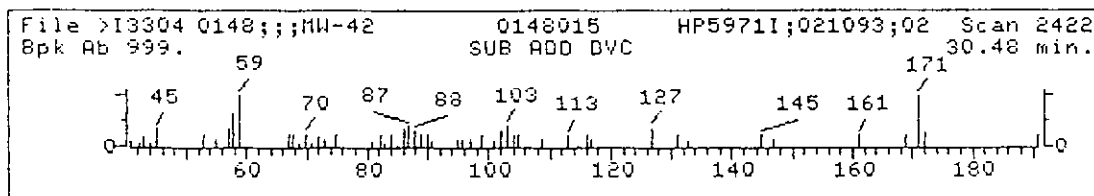


0. 0544

Sample file: >I3304 Spectrum #: 2422

No data base entries were retrieved.

Peak#: 29 Area: 29664. Est Conc: 3. Date: 02/19/93 12:42 Inst: 1



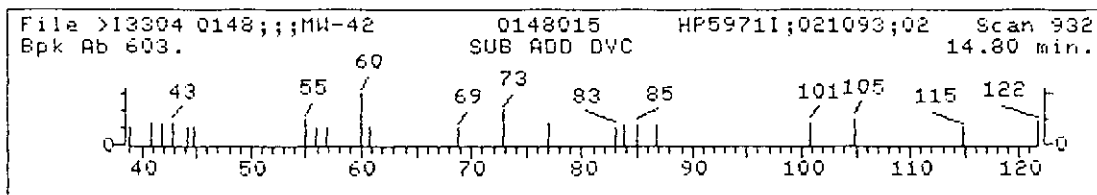


0# 0545

Sample file: >I3304 Spectrum #: 932

No data base entries were retrieved.

Peak#: 9 Area: 20940. Est Conc: 3. Date: 02/19/93 12:42 Inst: I



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MHW-2

Lab Name: IEA/CT

Contract: 0546

Lab Code: IEACT      Case No.: 0148      SAS No.:      SDG No.: Z0148

Matrix: (soil/water) WATER      Lab Sample ID: 0148016

Sample wt/vol:      975 (g/mL) ML      Lab File ID: I3305.D

Level: (low/med) LOW      Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N)\_\_\_\_      Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL)      Date Analyzed: 02/19/93

Injection Volume: 2.0(uL)      Dilution Factor: 1.0

GPC Cleanup: (Y/N) N      pH:

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

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl) ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy)methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	1	J
91-20-3-----	Naphthalene	0.7	J
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	26	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	26	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	26	U
83-32-9-----	Acenaphthene	10	U

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0547

MHW-2

ab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148016

Sample wt/vol: 975 (g/mL) ML

Lab File ID: I3305.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL)

Date Analyzed: 02/19/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	0.9	J
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	0.8	J
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	7	J
120-12-7	Anthracene	2	J
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	0.9	JB
206-44-0	Fluoranthene	16	
129-00-0	Pyrene	10	J
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	3	J
218-01-9	Chrysene	7	J
117-81-7	bis(2-Ethylhexyl)phthalate	4	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	4	J
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

J  
Gm C  
4/05/93

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0548

MHW-2

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148016

Sample wt/vol: 975 (g/mL) ML

Lab File ID: I3305.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 02/19/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Number TICs found: 21  
CmC 2/28/93

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	19.53	8	J
2.	UNKNOWN ACID	25.27	6	J
3.	UNKNOWN	8.57	6	J
4.	↓	25.45	4	J
5.	↓	16.38	4	J
6.	↓	17.37	4	J
7.	ALDOL CONDENSATION PRODUCT	8.18	4	J
8.	UNKNOWN	13.13	3	J
9.	↓	17.53	3	J
10.	↓	14.80	3	J
11.	UNKNOWN ACID	20.55	3	J
12.	UNKNOWN	23.71	3	J
13.	↓	15.14	3	J
14.	↓	11.38	3	J
15.	84651 7,10-ANTHRACENEDIONE	25.99	3	J
16.	UNKNOWN	27.31	3	J
17.	↓	16.64	3	J
18.	↓	29.57	3	J
19.	↓	33.76	3	J
20.	↓	22.35	2	J
21.	↓	26.73	2	J
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

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## QUANT REPORT

Page 1

Operator ID: USER1                      Quant Rev: 7            Quant Time: 930222 17:51  
 Output File: ^I3305::A6                      Injected at: 930219 13:42  
 Data File: >I3305::A5                      Dilution Factor: .51000  
 Name: 0148;;;MHW-2                      Instrument ID: \*\*MSD  
 Misc: 0148016            HP59711;021093;021193;LLW;1;;;102

ID File: I\_IFI::A5

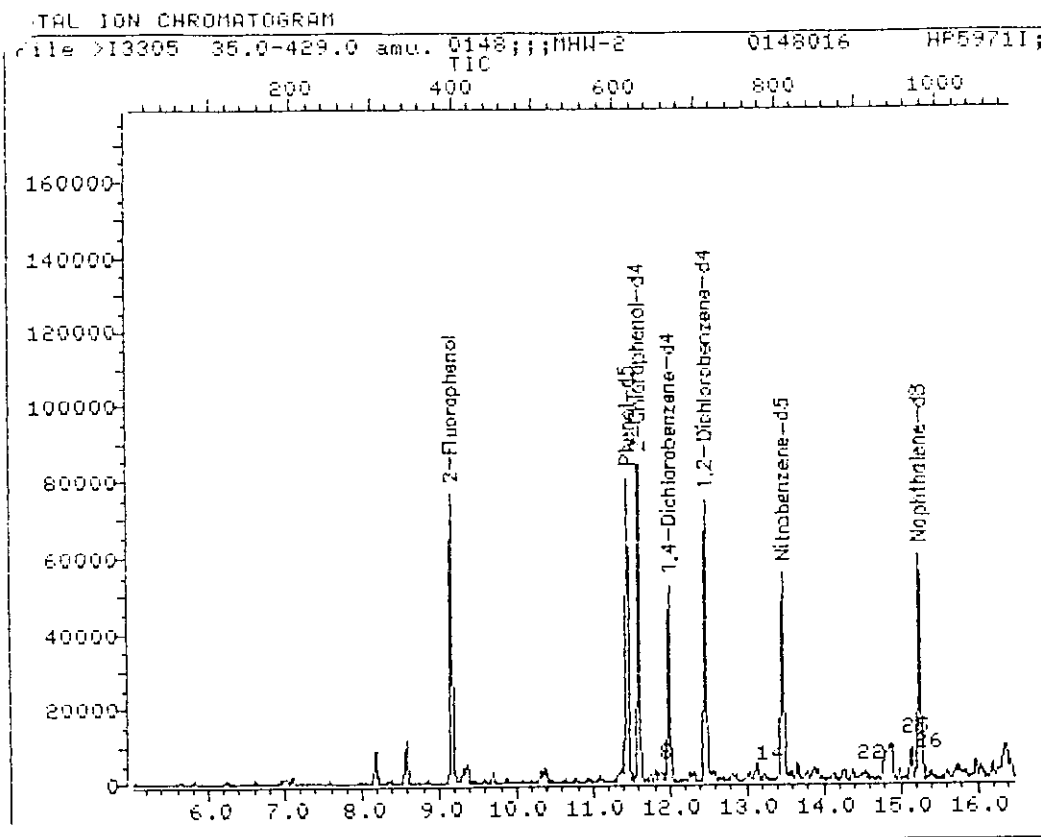
Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qual Time: 930219 10:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.00	151.8	17941	40.00	ug	94
2)	2-Chlorophenol-d4	11.60	132.0	61845	55.03	ug	80
3)	2-Fluorophenol	9.16	111.8	60345	52.54	ug	73
4)	Phenol-d5	11.46	98.8	89323	56.92	ug	60
<del>5)</del>	<del>1,3-Dichlorobenzene</del>	<del>11.98</del>	<del>145.8</del>	<del>598</del>	<del>.489</del>	<del>ug</del>	<del>55</del>
10)	1,2-Dichlorobenzene-d4	12.47	152.0	27791	37.83	ug	93
<del>14)</del>	<del>4-Methylphenol</del>	<del>13.23</del>	<del>107.8</del>	<del>1160</del>	<del>.948</del>	<del>ug</del>	<del>88</del>
17)	*Naphthalene-d8	15.25	135.9	66768	40.00	ug	97
19)	Nitrobenzene-d5	13.48	81.8	47056	35.90	ug	70
<del>21)</del>	<del>2,4-Dimethylphenol</del>	<del>14.53</del>	<del>106.8</del>	<del>551</del>	<del>.455</del>	<del>ug</del>	<del>99</del>
25)	1,2,4-Trichlorobenzene	15.14	179.7	1257	1.08	ug	90
26)	Naphthalene	15.30	127.9	2337	.745	ug	89
<del>30)</del>	<del>2-Methylnaphthalene</del>	<del>17.10</del>	<del>141.9</del>	<del>1157</del>	<del>.506</del>	<del>ug</del>	<del>83</del>
31)	*Acenaphthene-d10	19.90	163.9	38722	40.00	ug	96
35)	2-Fluorobiphenyl	18.13	171.8	82288	35.21	ug	97
<del>42)</del>	<del>Acenaphthene</del>	<del>19.97</del>	<del>152.9</del>	<del>1597</del>	<del>.033</del>	<del>ug</del>	<del>89</del>
<del>44)</del>	<del>4-Nitrophenol</del>	<del>20.61</del>	<del>108.8</del>	<del>120</del>	<del>.377</del>	<del>ug</del>	<del>35</del>
45)	Dibenzofuran	20.39	167.8	2565	.856	ug	83
47)	Diethylphthalate	21.16	148.8	2019	.757	ug	70
<del>49)</del>	<del>Fluorene</del>	<del>21.31</del>	<del>165.9</del>	<del>2575</del>	<del>1.32</del>	<del>ug</del>	<del>88</del>
51)	2,4,6-Tribromophenol	22.04	329.6	35290	63.71	ug	93
52)	*Phenanthrene-d10	23.79	187.9	72759	40.00	ug	98
58)	Phenanthrene	23.85	177.9	22365	6.80	ug	97
<del>59)</del>	<del>Carbazole</del>	<del>24.43</del>	<del>166.8</del>	<del>5298</del>	<del>5.50</del>	<del>ug</del>	<del>89</del>
60)	Anthracene	23.96	177.9	5274	1.56	ug	67
61)	Di-n-butylphthalate	25.45	148.8	3893	.862	ug	76
62)	Fluoranthene	27.03	201.9	57799	15.81	ug	98
63)	*Chrysene-d12	31.07	240.0	59093	40.00	ug	97
64)	Pyrene	27.61	201.9	37648	10.30	ug	99
65)	Terphenyl-d14	28.05	244.0	80057	31.35	ug	99
66)	Butylbenzylphthalate	29.38	148.8	3021	1.44	ug	78
68)	Benzo(a)anthracene	31.01	228.0	10295	3.17	ug	93
69)	Chrysene	31.15	228.0	19409	7.04	ug	97
70)	bis(2-Ethylhexyl)phthalate	31.19	148.8	9262	3.56	ug	97
71)	*Perylene-d12	37.74	264.0	60212	40.00	ug	99
74)	Benzo(b)fluoranthene	35.55	252.0	12409	3.65	ug	42
<del>74)</del>	<del>Benzo(k)fluoranthene</del>	<del>35.55</del>	<del>252.0</del>	<del>12409</del>	<del>4.10</del>	<del>ug</del>	<del>67</del>
<del>76)</del>	<del>Indeno(1,2,3-cd)pyrene</del>	<del>45.80</del>	<del>276.0</del>	<del>2301</del>	<del>.731</del>	<del>ug</del>	<del>30</del>
<del>78)</del>	<del>Benzo(g,h,i)perylene</del>	<del>48.26</del>	<del>276.0</del>	<del>2379</del>	<del>.774</del>	<del>ug</del>	<del>12</del>

0550

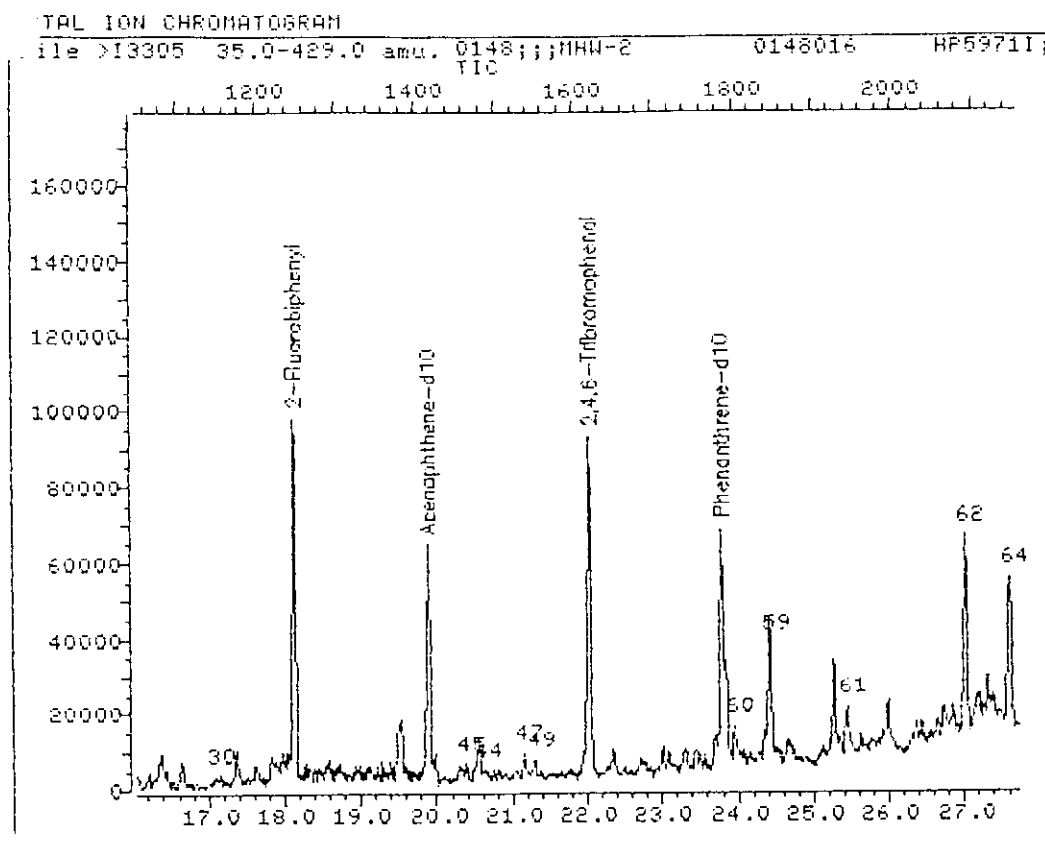


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Name: 0148;;;MHW-2 Instrument ID: \*\*MSD  
Misc: 0148016 HP5971I;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:51  
Injected at: 930219 13:42

0551



Data File: >I3305::A5

Quant Output File: ^I3305::A6

Name: 0148;;;MHW-2

Instrument ID: \*\*MSD

Misc: 0148016

HP59711;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5

Title: IFB-DLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930219 10:28

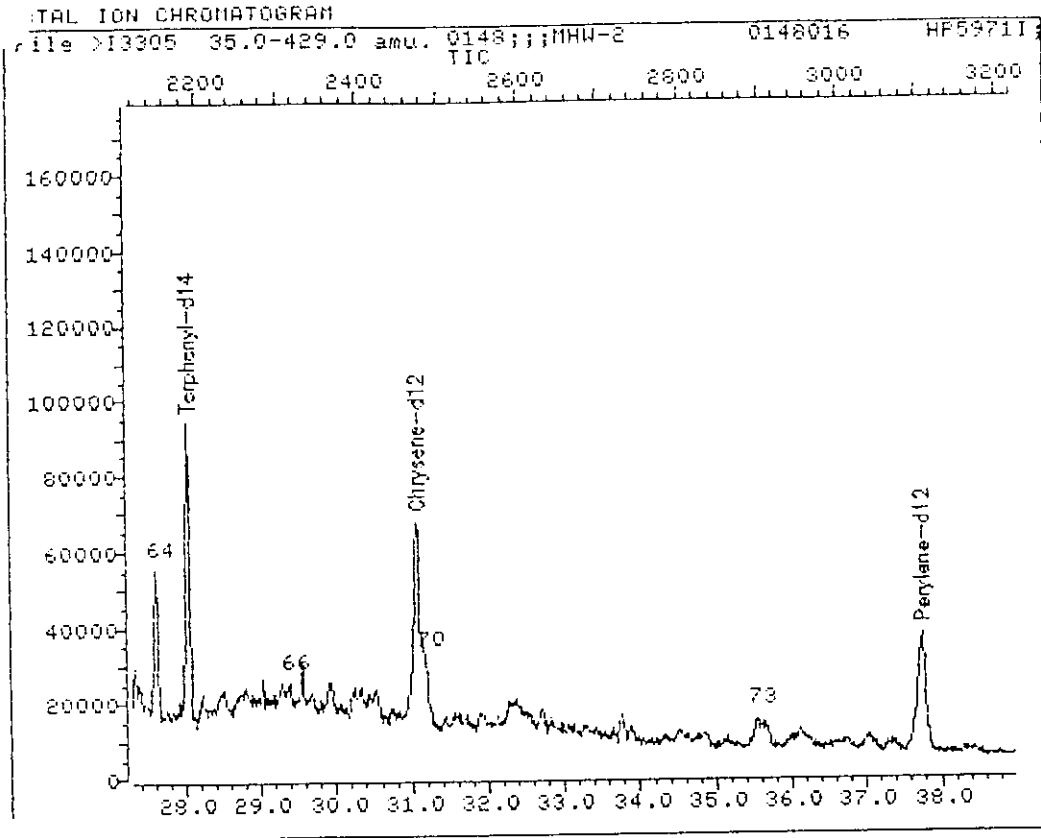
Operator ID: USER1

Quant Time : 930222 17:51

Injected at: 930219 13:42

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Data File: >I3305::A5

Quant Output File: ^I3305::A6

Name: 0148;;;MHW-2

Instrument ID: \*\*MSD

Misc: 0148016

HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930219 10:28

Operator ID: USER1

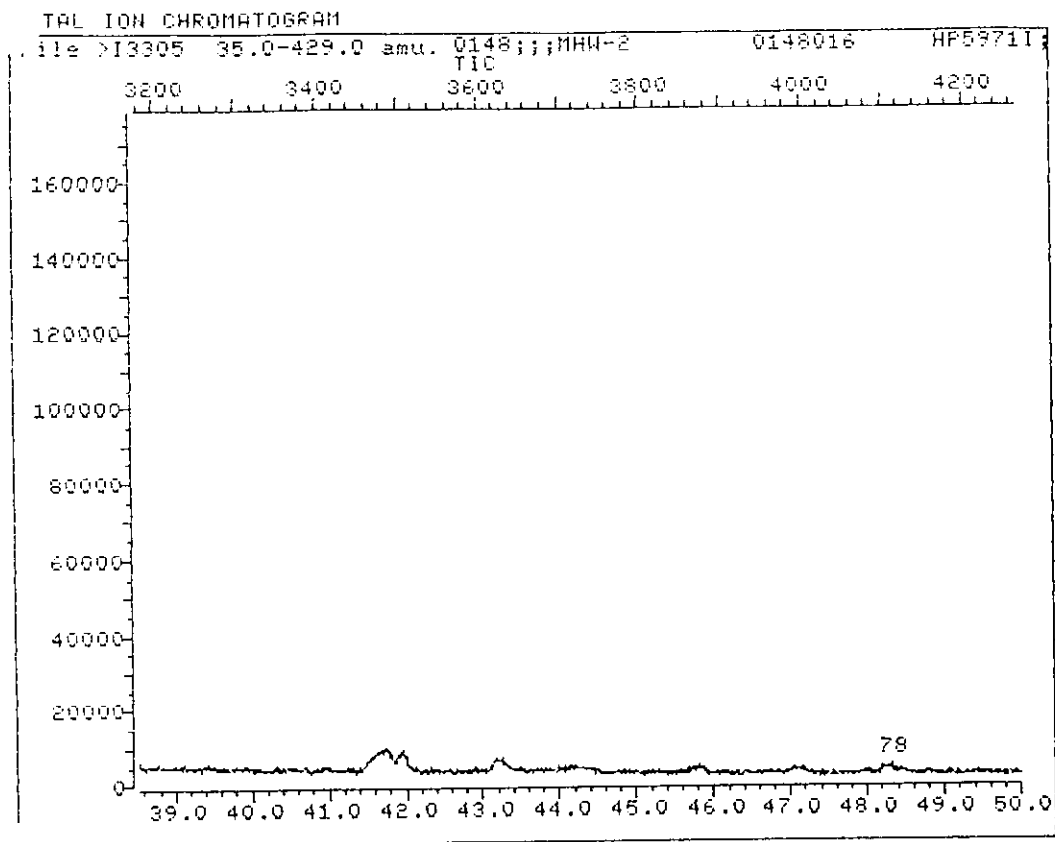
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Injected at: 930219 13:42

Page 3 of 4



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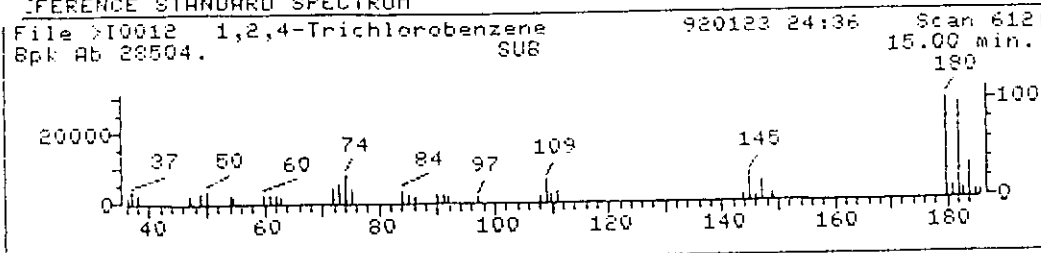


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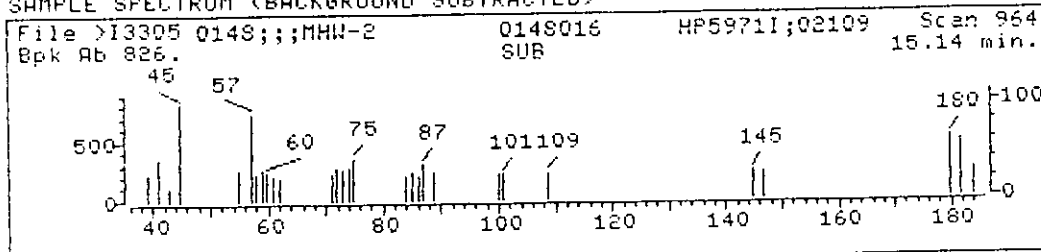
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Operator ID: USER1  
Quant Time : 930222 17:51  
Injected at: 930219 13:42

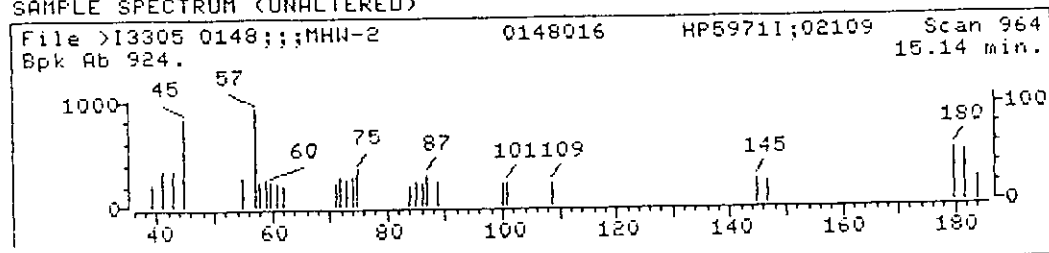
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)

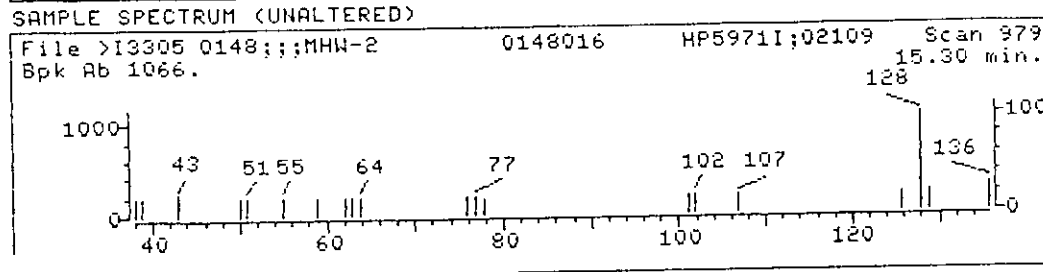
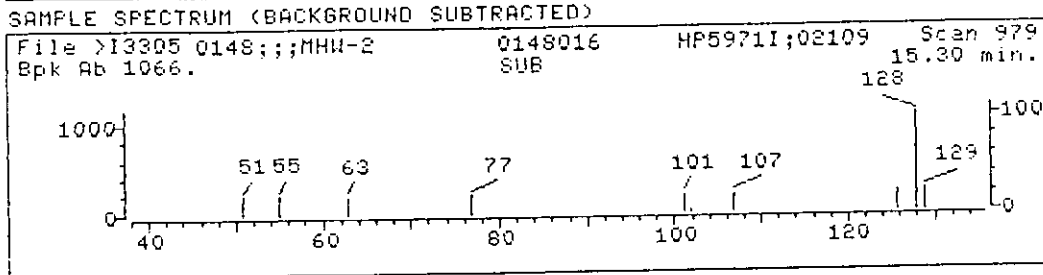
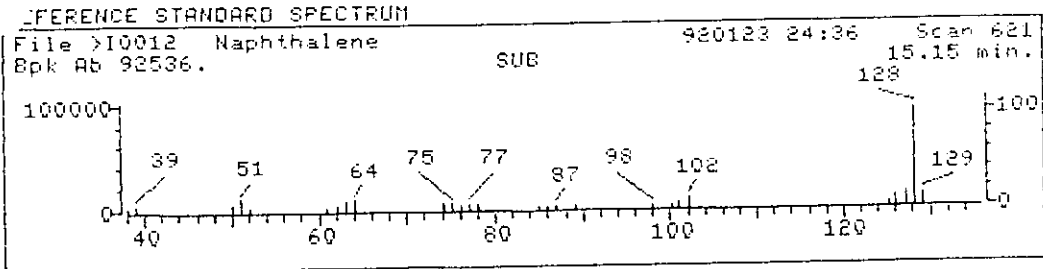


## SAMPLE SPECTRUM (UNALTERED)



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Misc: 0148016 HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 14:42 Quant ID File: I\_IFI::A5  
Injected at: 930219 13:42 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

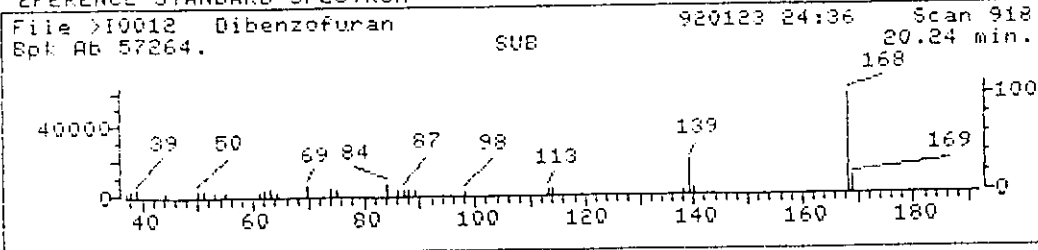
Compound No : 25  
Compound Name : 1,2,4-Trichlorobenzene  
Scan Number : 964  
Retention Time: 15.14 min.  
Quant Ion : 179.7  
Area : 1257  
Concentration : 1.08 ug  
q-value : 90



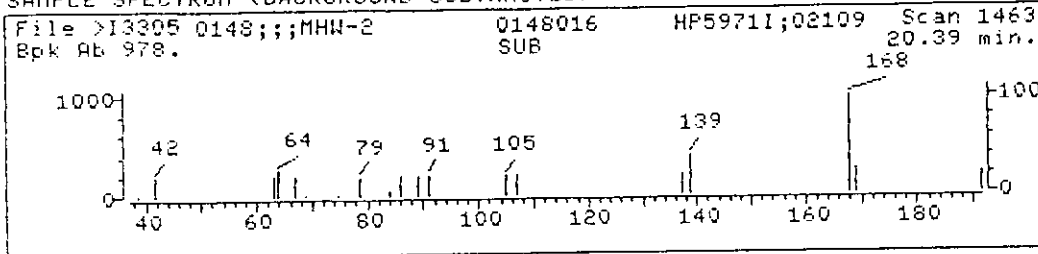
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 Misc: 0148016                    HP5971I;021093;021193;LLW;1;;;102  
 Quant Time: 930219 14:42                    Quant ID File: I\_IFI::A5  
 Injected at: 930219 13:42                    Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 26  
 Compound Name : Naphthalene  
 Scan Number : 979  
 Retention Time: 15.30 min.  
 Quant Ion : 127.9  
 Area : 2337  
 Concentration : .745 ug  
 q-value : 89

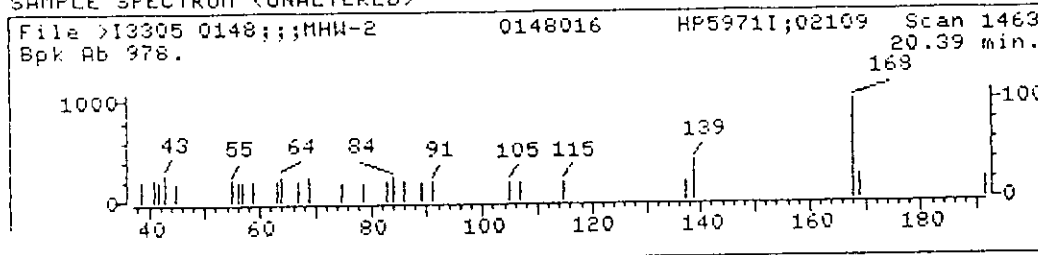
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



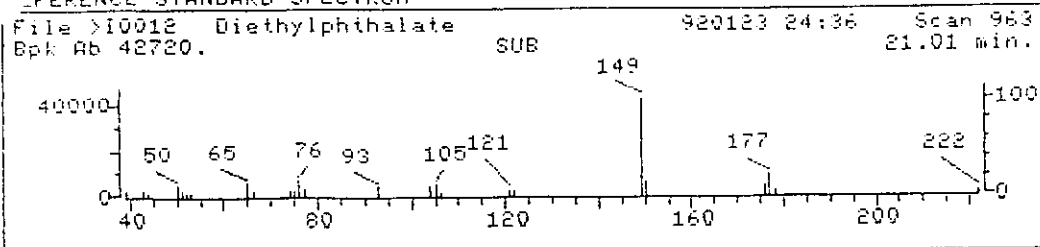
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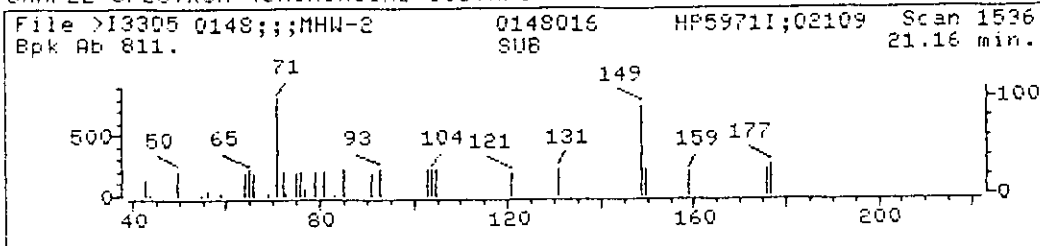
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 Quant Time: 930219 14:42                    Quant ID File: I\_IFI::A5  
 Injected at: 930219 13:42                    Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 45  
 Compound Name : Dibenzofuran  
 Scan Number : 1463  
 Retention Time: 20.39 min.  
 Quant Ion : 167.8  
 Area : 2565  
 Concentration : .856 ug  
 q-value : 83

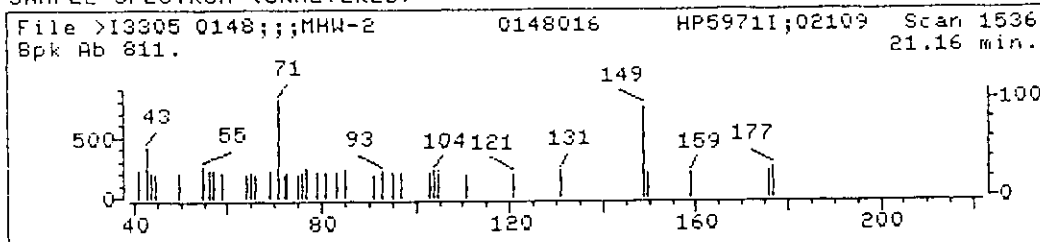
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



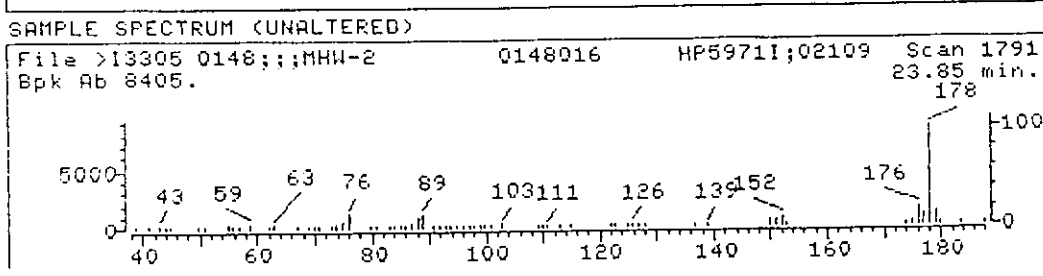
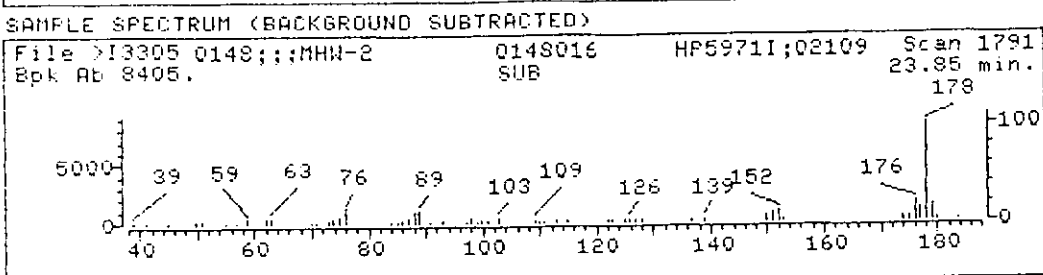
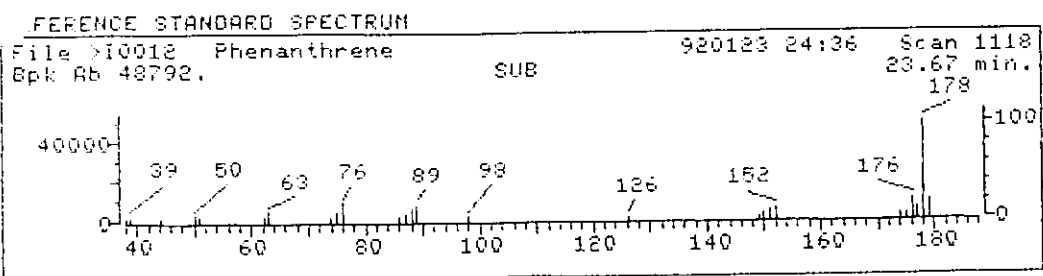
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Misc: 0148016                    HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 14:42                    Quant ID File: I\_IFI::A5  
Injected at: 930219 13:42                    Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No     :    47  
Compound Name   : Diethylphthalate  
Scan Number     : 1536  
Retention Time   : 21.16 min.  
Quant Ion        : 148.8  
Area             :       2019  
Concentration    :       .757 ug  
q-value          :       70

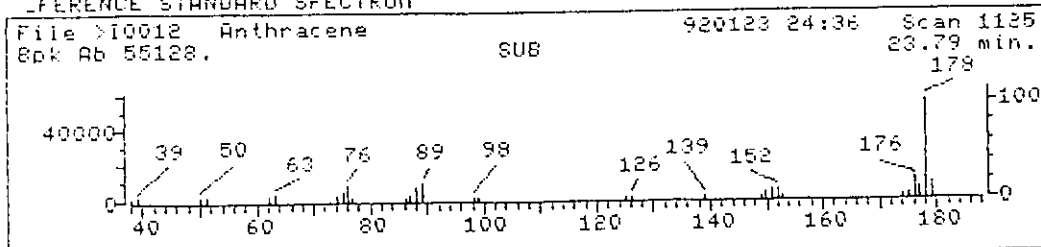
0558



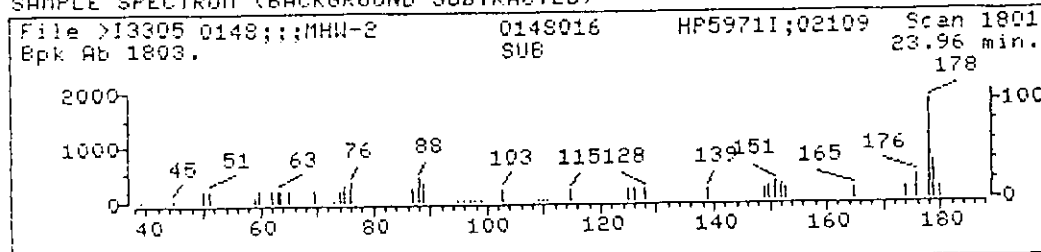
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Misc: 0148016                    HP59711;021093;021193;LLW;1;;;102  
Quant Time: 930219 14:42                    Quant ID File: I\_IFI::A5  
Injected at: 930219 13:42                    Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No : 58  
Compound Name : Phenanthrene  
Scan Number : 1791  
Retention Time: 23.85 min.  
Quant Ion : 177.9  
Area : 22365  
Concentration : 6.80 ug  
q-value : 97

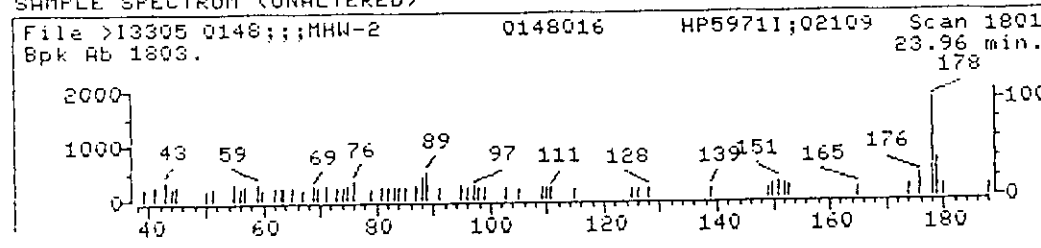
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



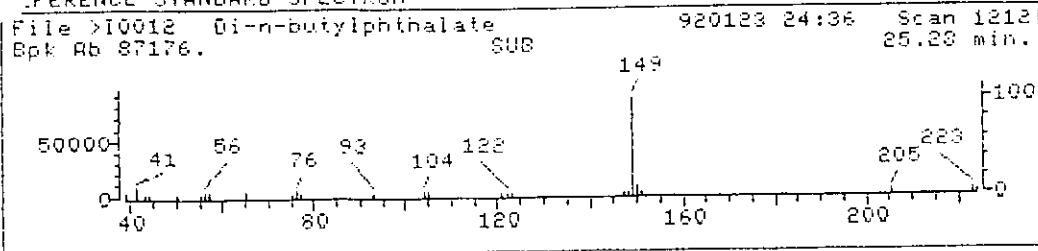
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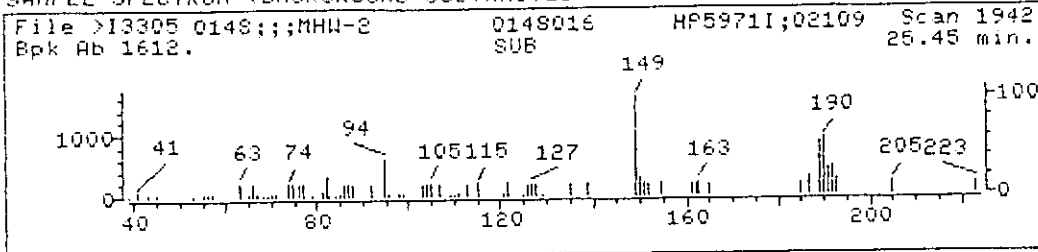
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 Misc: 0148016 HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 14:42 Quant ID File: I\_IF1::A5  
 Injected at: 930219 13:42 Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 60  
 Compound Name : Anthracene  
 Scan Number : 1801  
 Retention Time: 23.96 min.  
 Quant Ion : 177.9  
 Area : 5274  
 Concentration : 1.56 ug  
 q-value : 67

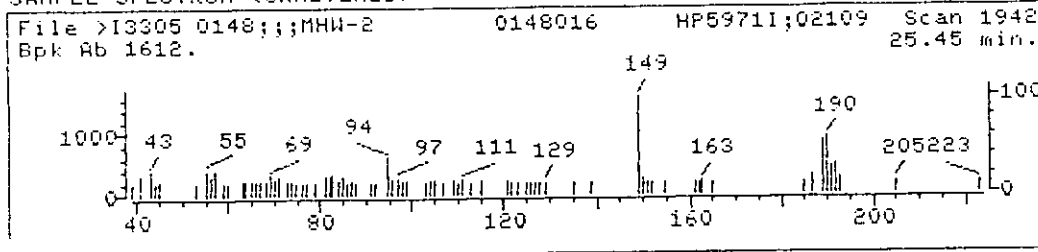
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



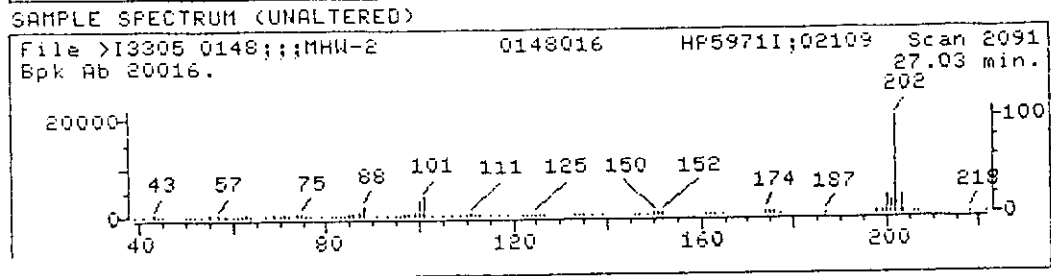
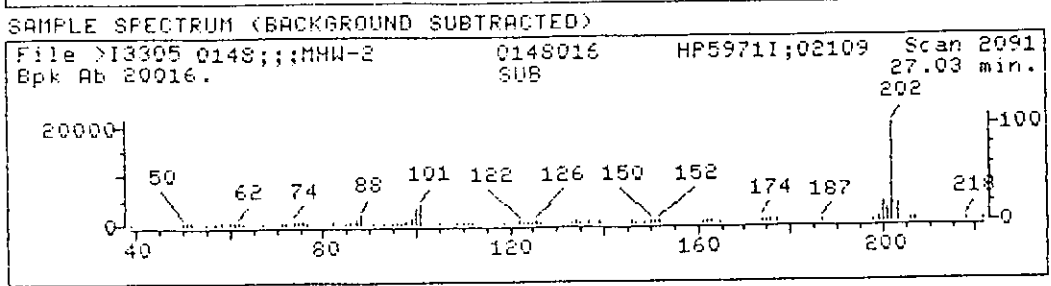
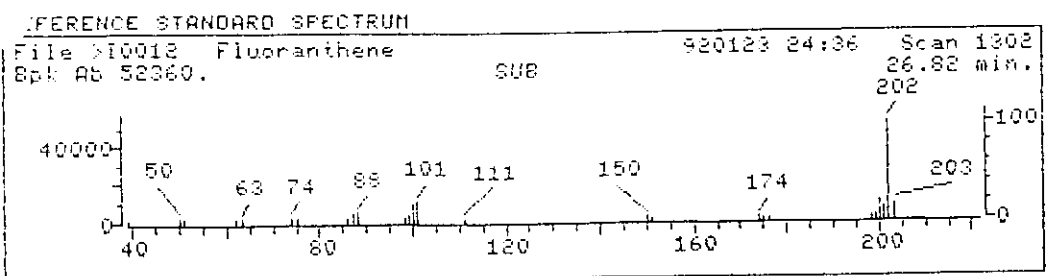
SAMPLE SPECTRUM (UNALTERED)



Data File: >I3305::A2                    Quant Output File: ^I3305::A6  
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 Misc: 0148016                    HP59711;021093;021193;LLW;1;;;102  
 Quant Time: 930219 14:42                    Quant ID File: I\_IFI::A5  
 Injected at: 930219 13:42                    Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

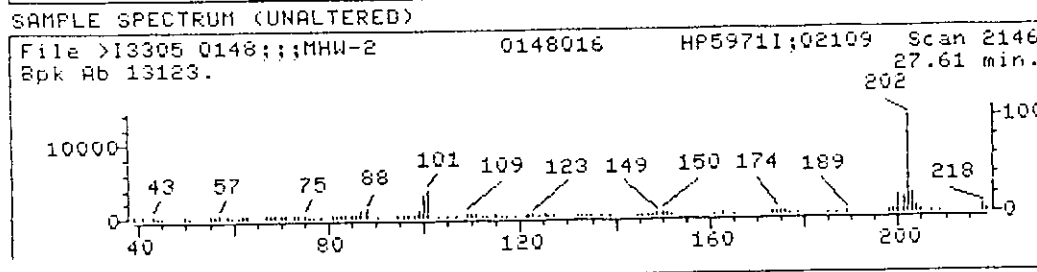
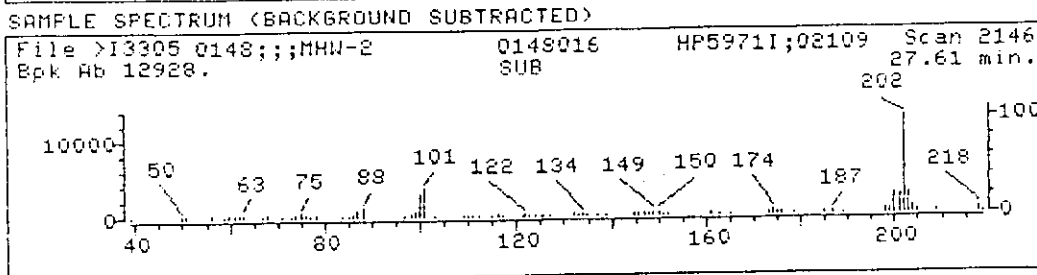
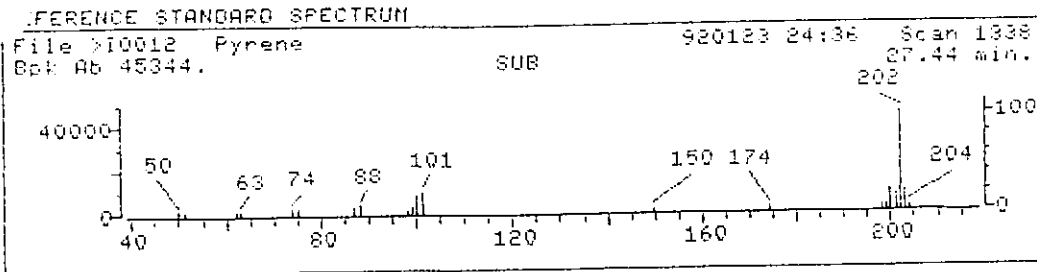
Compound No : 61  
 Compound Name : Di-n-butylphthalate  
 Scan Number : 1942  
 Retention Time: 25.45 min.  
 Quant Ion : 148.8  
 Area : 3893  
 Concentration : .862 ug  
 q-value : 76





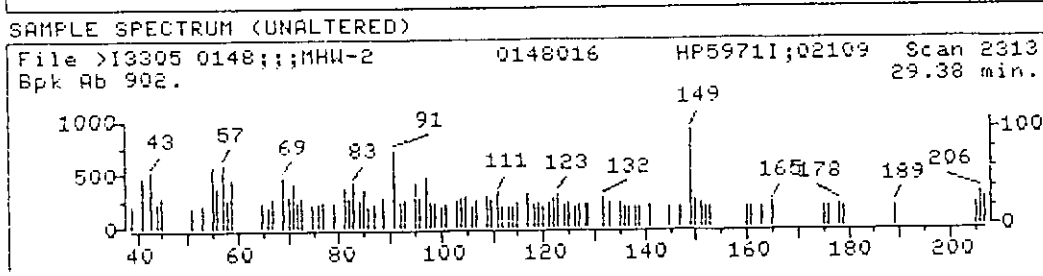
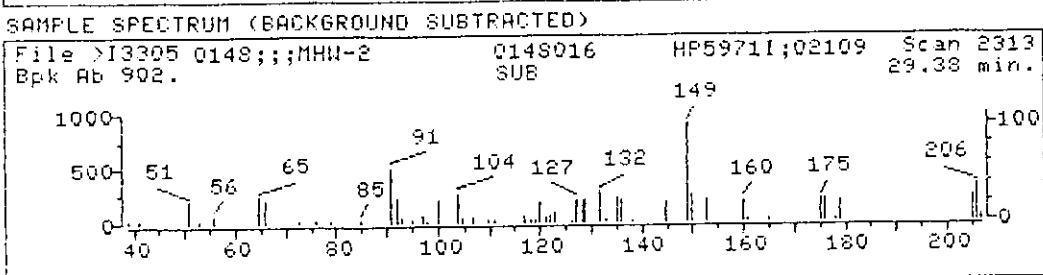
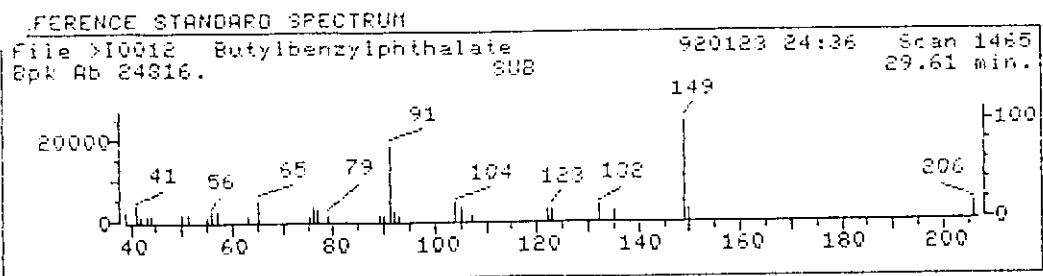
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 Misc: 0148016                    HP59711;021093;021193;LLW;1;;;102  
 Quant Time: 930219 14:42                    Quant ID File: I\_IF1::A5  
 Injected at: 930219 13:42                    Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 62  
 Compound Name : Fluoranthene  
 Scan Number : 2091  
 Retention Time: 27.03 min.  
 Quant Ion : 201.9  
 Area : 57799  
 Concentration : 15.81 ug  
 q-value : 98



Data File: >I3305::A2 Quant Output File: ^I3305::A6  
Name: 0148;;;MHW-2 Instrument ID: \*\*MSD  
Misc: 0148016 HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 14:42 Quant ID File: I\_IFI::A5  
Injected at: 930219 13:42 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

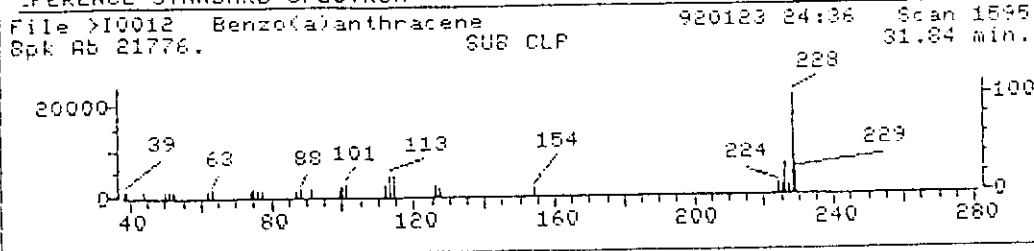
Compound No : 64  
Compound Name : Pyrene  
Scan Number : 2146  
Retention Time: 27.61 min.  
Quant Ion : 201.9  
Area : 37648  
Concentration : 10.30 ug  
q-value : 99



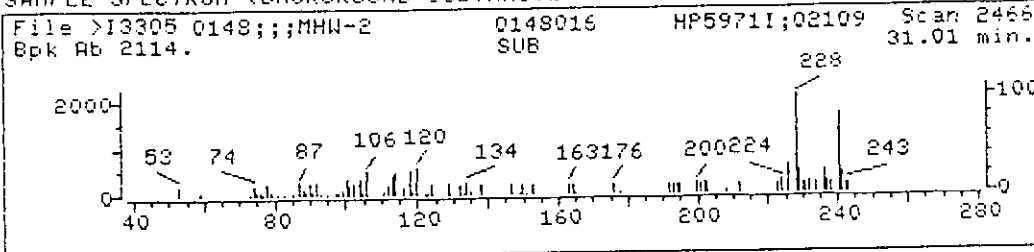
Data File: >I3305::A2                    Quant Output File: ^I3305::A6  
 Name: 0148;;;MHU-2                    Instrument ID: \*\*MSD  
 Misc: 0148016                    HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 14:42                    Quant ID File: I\_IFI::A5  
 Injected at: 930219 13:42                    Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 66  
 Compound Name : Butylbenzylphthalate  
 Scan Number : 2313  
 Retention Time: 29.38 min.  
 Quant Ion : 148.8  
 Area : 3021  
 Concentration : 1.44 ug  
 q-value : 78

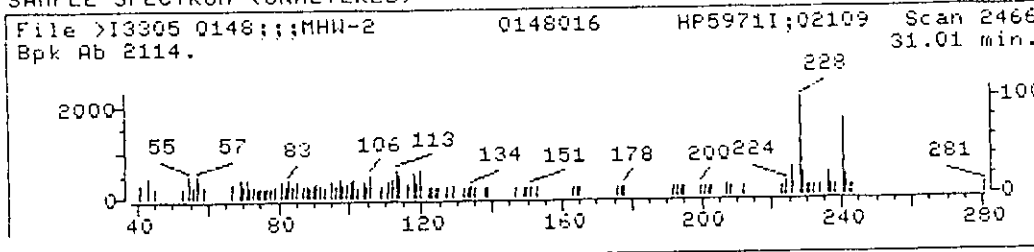
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



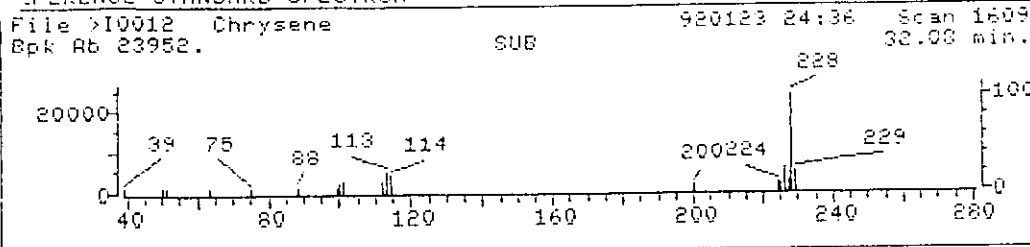
## SAMPLE SPECTRUM (UNALTERED)



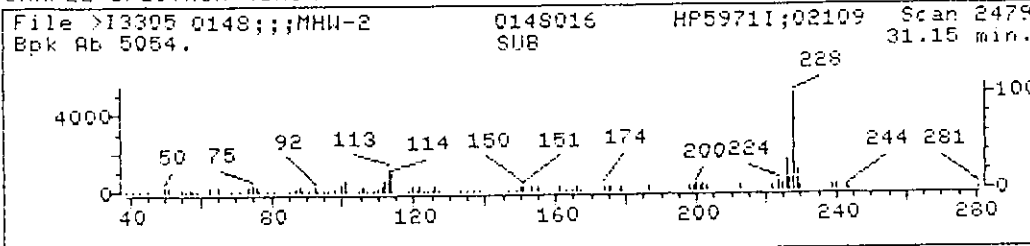
Data File: >I3305::A2 Quant Output File: ^I3305::A6  
 Name: 0148;;;MHW-2 Instrument ID: \*\*MSD  
 Misc: 0148016 HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 14:42 Quant ID File: I\_IFI::A5  
 Injected at: 930219 13:42 Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 68  
 Compound Name : Benzo(a)anthracene  
 Scan Number : 2466  
 Retention Time: 31.01 min.  
 Quant Ion : 228.0  
 Area : 10295  
 Concentration : 3.17 ug  
 q-value : 93

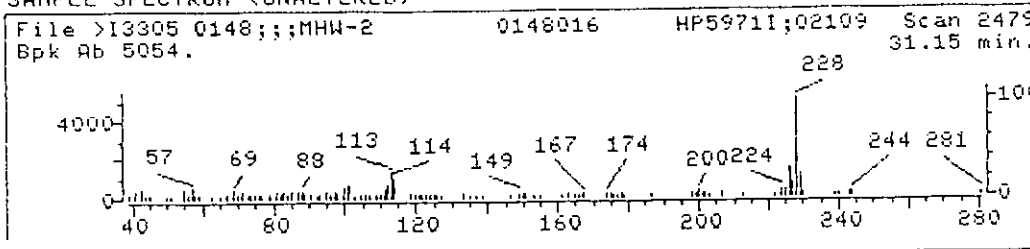
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: &gt;I3305::A2

Name: 0148;;;MHW-2

Misc: 0148016

Quant Time: 930219 14:42

Injected at: 930219 13:42

Last Qcal Time: 930219 10:28

Quant Output File: ^I3305::A6

Instrument ID: \*\*MSD

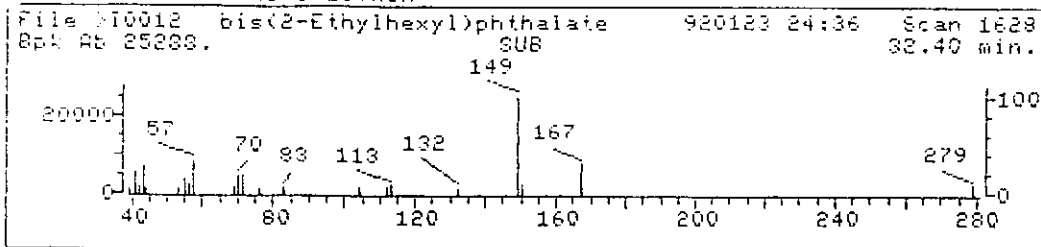
HP59711;021093;021193;LLW;1;;;I02

Quant ID File: I\_IFI::A5

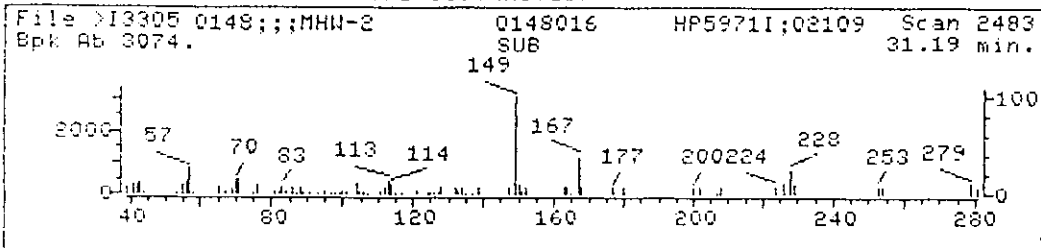
Last Calibration: 910116 11:52

Compound No : 69  
 Compound Name : Chrysene  
 Scan Number : 2479  
 Retention Time: 31.15 min.  
 Quant Ion : 228.0  
 Area : 19409  
 Concentration : 7.04 ug  
 q-value : 97

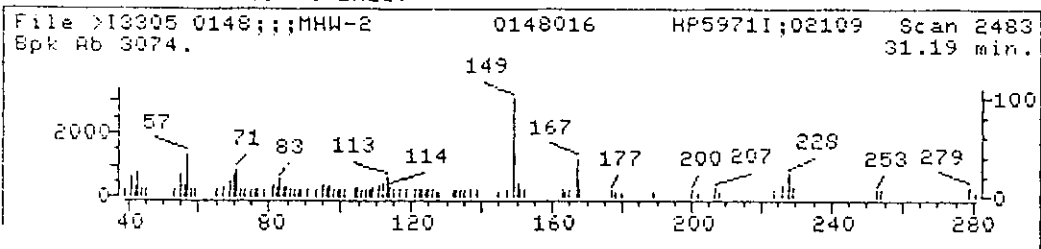
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



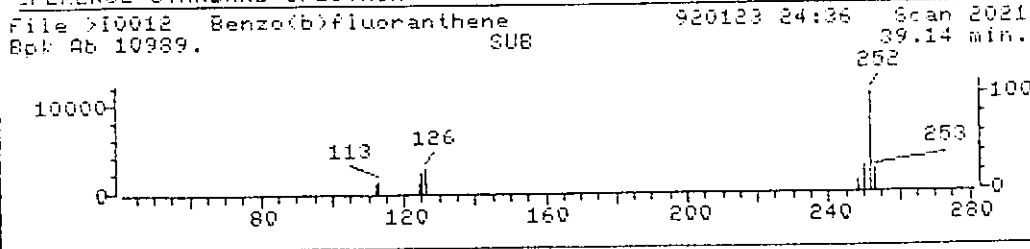
## SAMPLE SPECTRUM (UNALTERED)



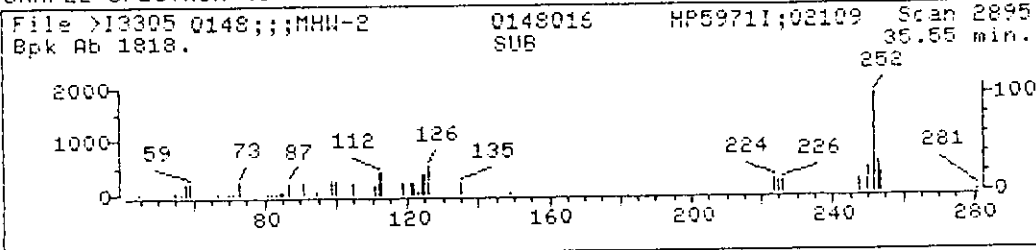
Data File: >I3305::A2 Quant Output File: ^I3305::A6  
 Name: 0148;;;MHW-2 Instrument ID: \*\*MSD  
 Misc: 0148016 HP59711;021093;021193;LLW;1;;;102  
 Quant Time: 930219 14:42 Quant ID File: I\_IF1::A5  
 Injected at: 930219 13:42 Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 70  
 Compound Name : bis(2-Ethylhexyl)phthalate  
 Scan Number : 2483  
 Retention Time: 31.19 min.  
 Quant Ion : 148.8  
 Area : 9262  
 Concentration : 3.56 ug  
 q-value : 97

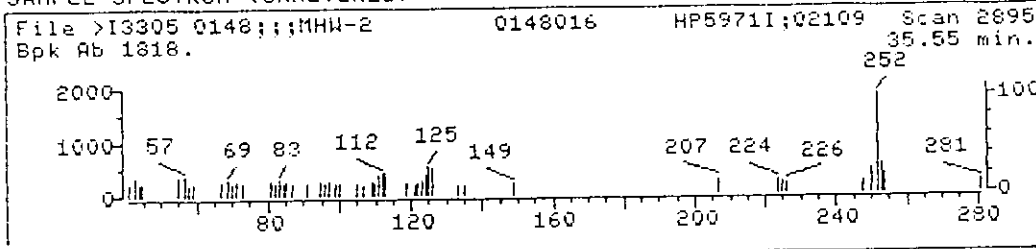
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: >I3305::A2 Quant Output File: ^I3305::A6  
Name: 0148;;;MHW-2 Instrument ID: \*\*MSD  
Misc: 0148016 HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 14:42 Quant ID File: I\_IFI::A5  
Injected at: 930219 13:42 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No : 73  
Compound Name : Benzo(b)fluoranthene  
Scan Number : 2895  
Retention Time: 35.55 min.  
Quant Ion : 252.0  
Area : 12409  
Concentration : 3.65 ug  
q-value : 42

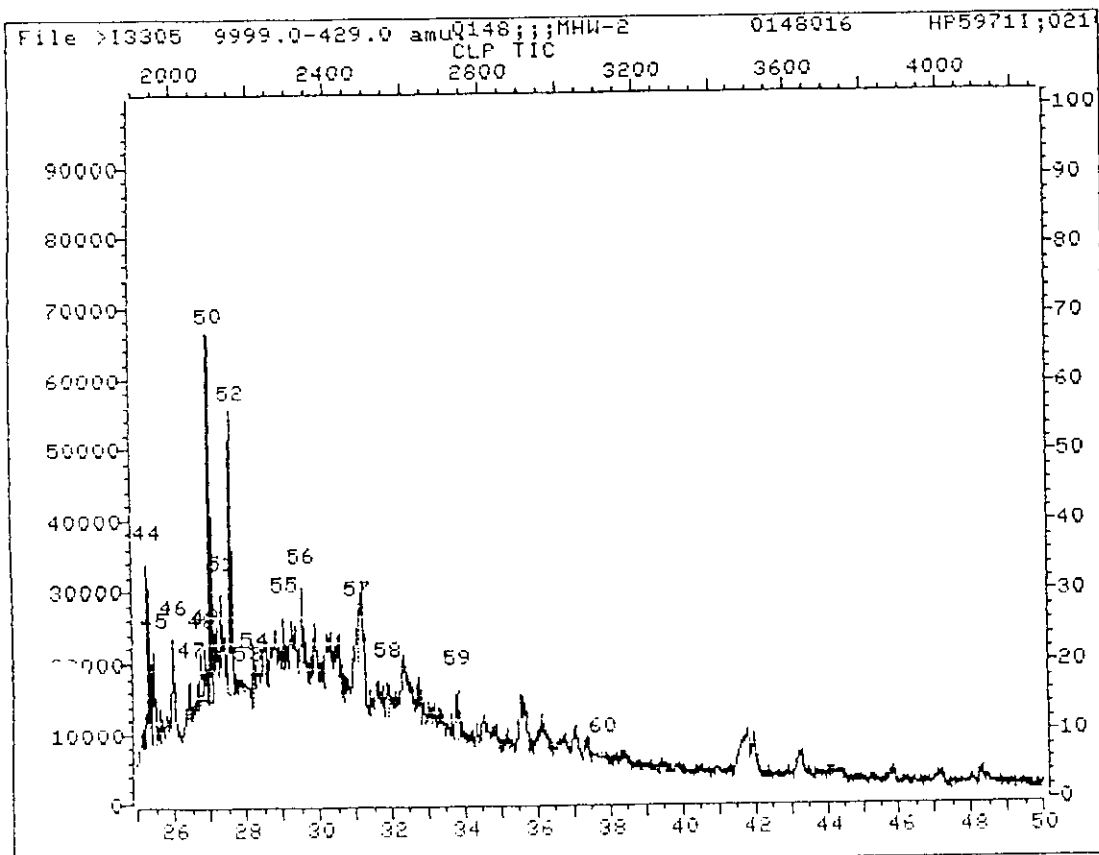
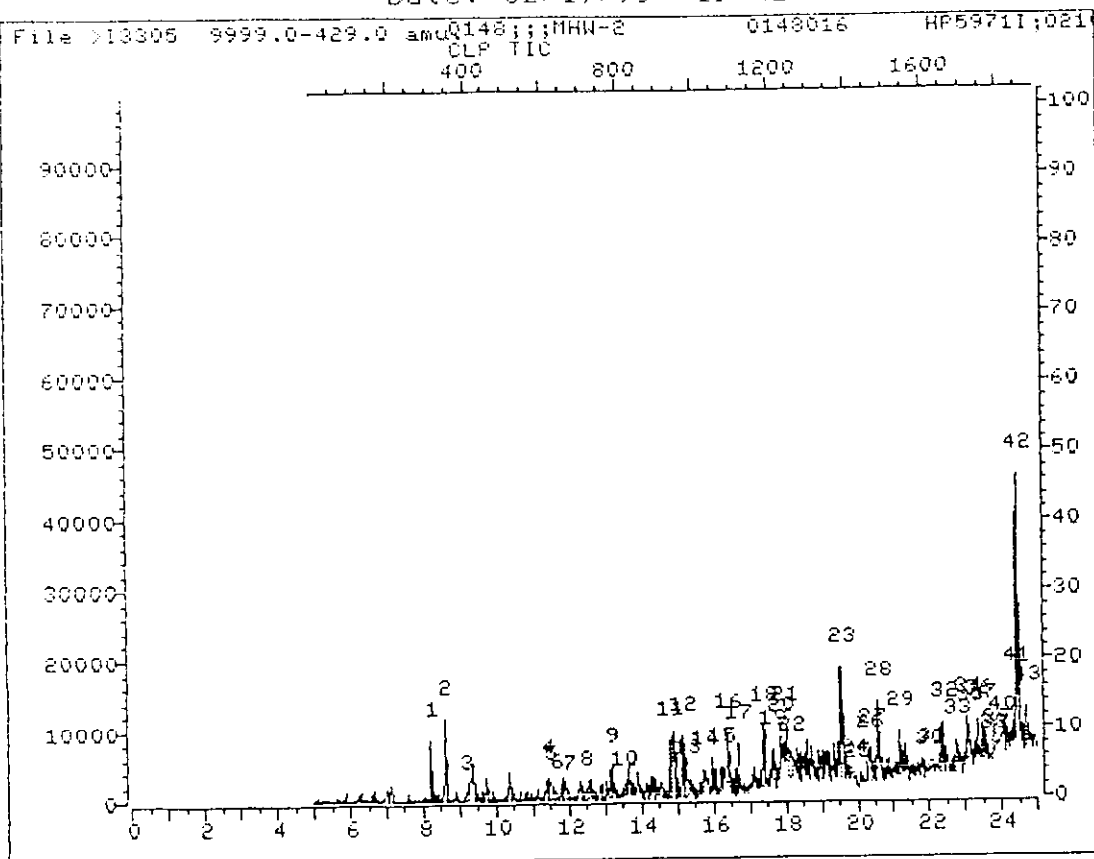
M data file header from : >I3305::A2

Sample: 0148;;;MHW-2 Operator: USER1 2/19/93 13:42  
Misc : 0148016 HP59711;021093;021193;LLW;1;;;I02  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 3 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0



Date: 02/19/93 13:42 Inst: I



Date: 02/19/93 13:42 Inst: I

MHW-Z  
HP5971E 0570

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
<del>52.</del>	<del>27.61</del>	<del>143332.</del>	<del>14.</del>	<del>5.</del>	<del>5.</del>	<del>.51</del> <i>target</i>
23.	19.53	74041.	8.	3.	3.	.51
44.	25.27	61015.	6.	4.	4.	.51
2.	8.57	26920.	6.	1.	1.	.51
45.	25.45	47525.	5.	4.	4.	.51
16.	16.38	27018.	4.	2.	2.	.51
18.	17.37	32594.	4.	2.	2.	.51
1.	8.18	21340.	4.	1.	1.	.51
9.	13.13	13781.	3.	1.	1.	.51
20.	17.83	22288.	3.	3.	3.	.51
11.	14.80	21643.	3.	2.	2.	.51
28.	20.55	24363.	3.	3.	3.	.51
38.	23.71	28069.	3.	4.	4.	.51
12.	15.14	22096.	3.	2.	2.	.51
4.	11.38	13425.	3.	1.	1.	.51
46.	25.99	29782.	3.	4.	4.	.51
51.	27.31	26769.	3.	4.	4.	.51
17.	16.64	24567.	3.	2.	2.	.51
56.	29.54	25745.	3.	5.	5.	.51
59.	33.76	32451.	3.	5.	5.	.51
32.	22.35	22260.	2.	4.	4.	.51
49.	26.73	23752.	2.	4.	4.	.51
.	31.90	23379.	2.	5.	5.	.51
40.	23.96	24439.	2.	4.	4.	.51

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range	TI/SI
1,4-DICHLOROBENZENE-D4	12.00	99780.	0.00 13.62	5.6
NAPHTHALENE-D8	15.25	153758.	13.62 17.57	2.3
ACENAPHTHENE-D10	19.90	179307.	17.57 21.84	4.6
PHENANTHRENE-D10	23.79	204180.	21.84 27.43	2.8
CHRYSENE-D12	31.07	202939.	27.43 34.41	3.4
PERYLENE-D12	37.74	234964.	34.41 48.26	3.9

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 21  
Target peaks matched: 2  
Total TIC identified: 24

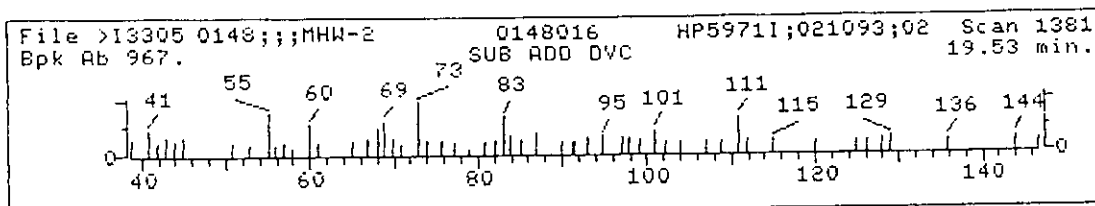
TICS : 3:45 PM MON., 22 FEB., 1993

0571

Sample file: >13305 Spectrum #: 1381

No data base entries were retrieved.

Peak#: 23 Area: 74041. Est Conc: 8. Date: 02/19/93 13:42 Inst: 1

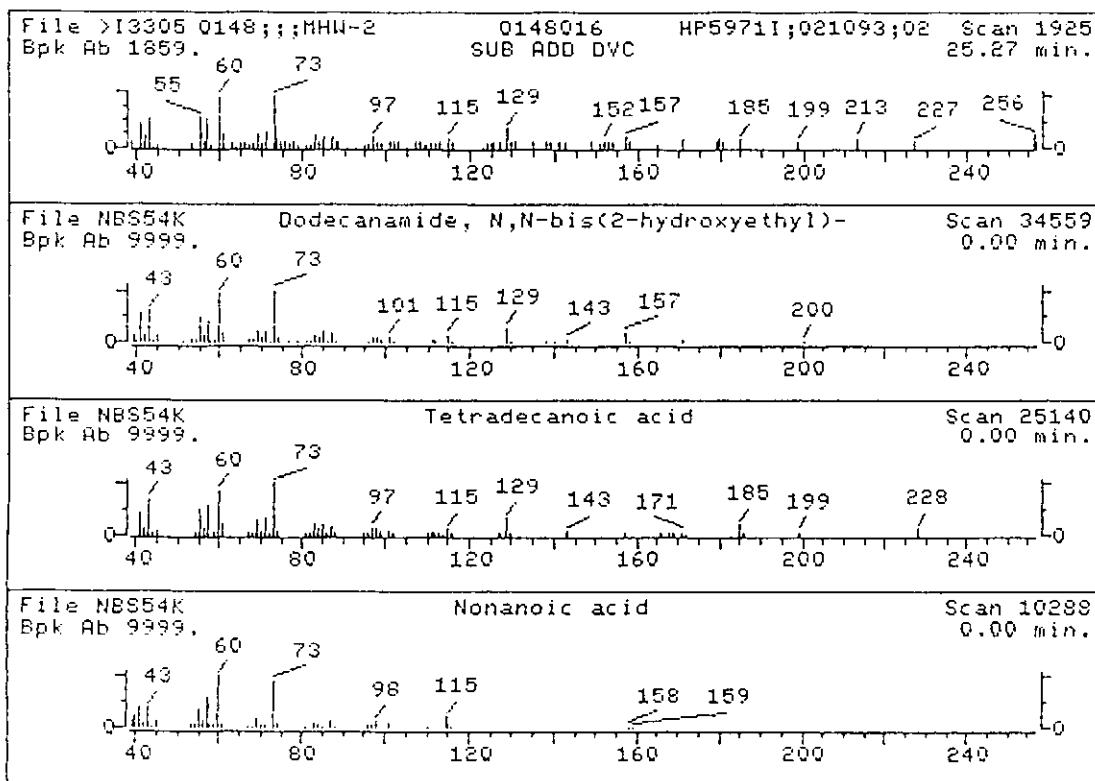


1. Dodecanamide, N,N-bis(2-hydroxyethyl)-	287	C16H33N03
2. Tetradecanoic acid	228	C14H28O2
3. Nonanoic acid	158	C9H18O2
4. Pentadecanoic acid	242	C15H30O2
5. Dodecanoic acid	200	C12H24O2

Sample file: >I3305      Spectrum #:      1925  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      43

	Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IU
1.	63	120401	2265	NBS54K	119	34	1	0	95	47	20	73
2.	30	544638	2250	NBS54K	85	57	2	0	82	47	10	23
3.	28*	112050	2182	NBS54K	59	45	2	0	85	55	8	36
4.	27	1002842	2252	NBS54K	73	79	3	0	106	39	10	13
5.	25	143077	2233	NBS54K	81	57	3	0	97	47	7	14

Peak#: 44 Area: 61015. Est Conc: 6. Date: 02/19/93 13:42 Inst: I

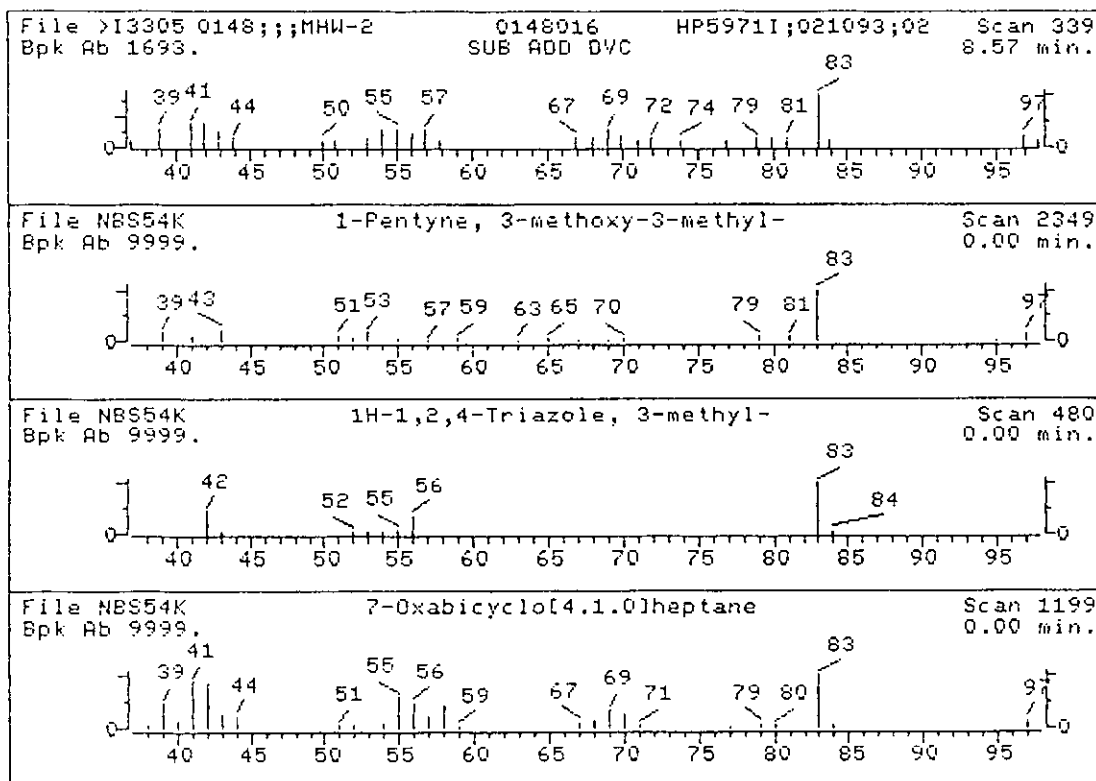


1. 1-Pentyne, 3-methoxy-3-methyl-	112 C7H12O
2. 1H-1,2,4-Triazole, 3-methyl-	83 C3H5N3
3. 7-Oxabicyclo[4.1.0]heptane	98 C6H10O

Sample file: >I3305      Spectrum #:      339  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	25	22802353	6484	NBS54K	39	43	2	0	100	48	7	13
2.	15*	7170016	6459	NBS54K	24	31	1	0	67	57	3	14
3.	12*	286204	6469	NBS54K	42	58	1	0	47	62	2	22

Peak#: 2 Area: 26920. Est Conc: 6. Date: 02/19/93 13:42 Inst: 1



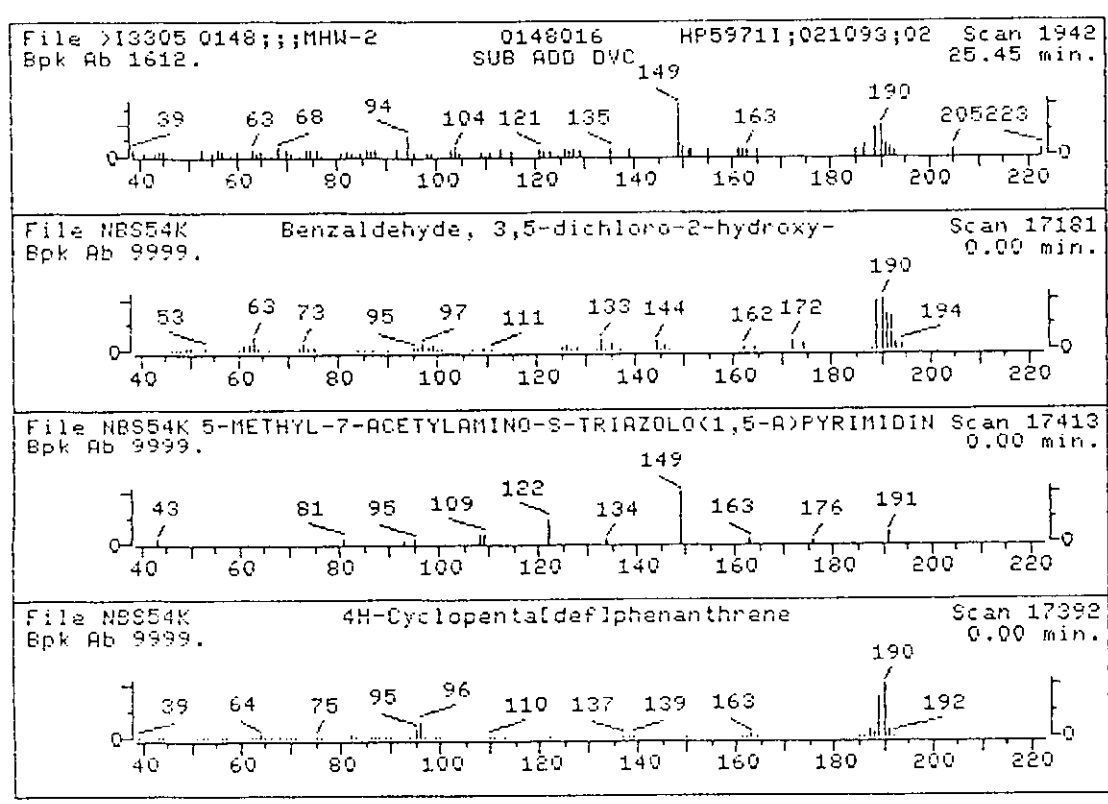
0574

- 1. Benzaldehyde, 3,5-dichloro-2-hydroxy- 190 C7H4Cl2O2
- 2. 5-METHYL-7-ACETYLAMINO-S-TRIAZOLO(1,5-A)PYRIMIDINE 191 C8H9N5O
- 3. 4H-Cyclopenta[def]phenanthrene 190 C15H10

Sample file: >I3305      Spectrum #:      1942  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	15*	90608	27590	NBS54K	40	109	3	0	57	59	3	13
2.	11*	17413	20335	NBS54K	22	57	3	0	100	62	2	12
3.	11*	203645	27690	NBS54K	26	89	3	0	57	62	2	13

Peak#: 45 Area: 47525. Est Conc: 5. Date: 02/19/93 13:42 Inst: 1

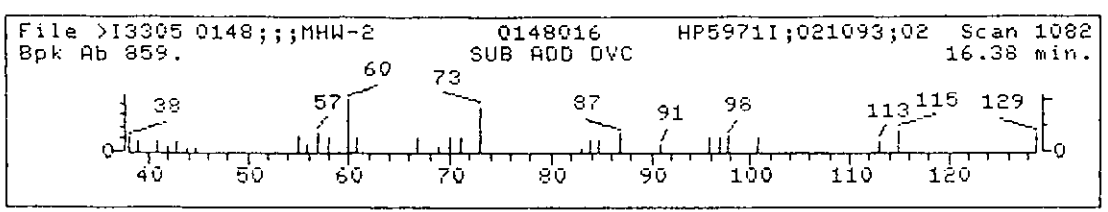


0575

Sample file: >I3305 Spectrum #: 1082

No data base entries were retrieved.

Peak#: 16 Area: 27018. Est Conc: 4. Date: 02/19/93 13:42 Inst: 1

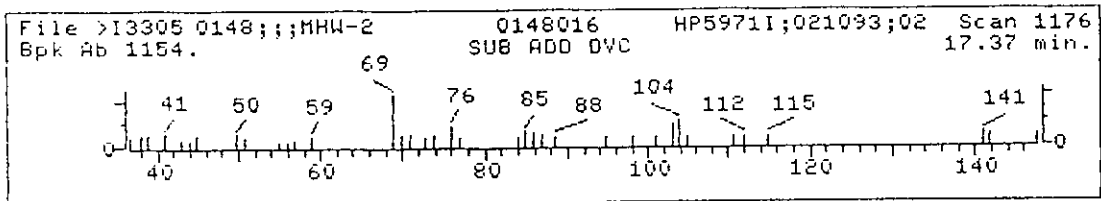


0576

Sample file: >I3305 Spectrum #: 1176

No data base entries were retrieved.

Peak#: 18 Area: 32594. Est Conc: 4. Date: 02/19/93 13:42 Inst: 1



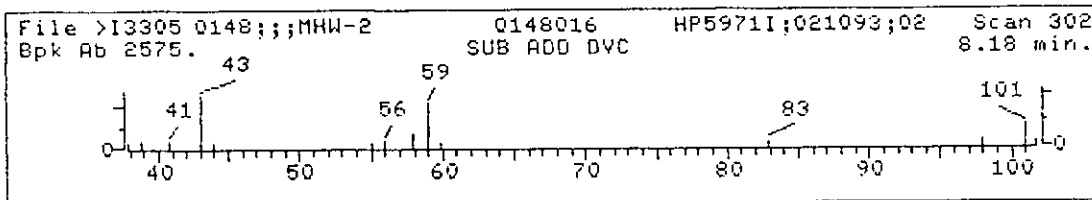


0577

Sample file: >I3305      Spectrum #:      302

No data base entries were retrieved.

Peak#:    1 Area:    21340. Est Conc:            4. Date: 02/19/93    13:42 Inst: 1

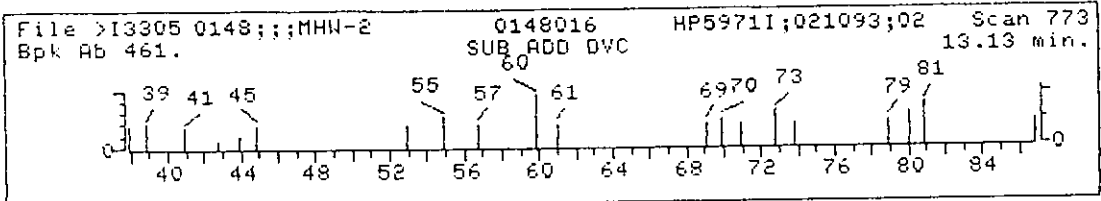


0578

Sample file: >I3305 Spectrum #: 773

No data base entries were retrieved.

Peak#: 9 Area: 13781. Est Conc: 3. Date: 02/19/93 13:42 Inst: 1

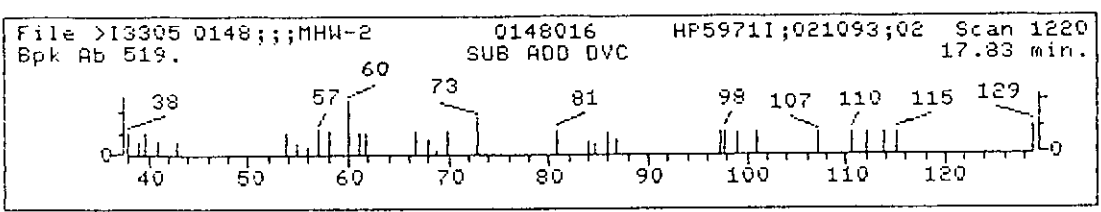


0579

Sample file: >13305 Spectrum #: 1220

No data base entries were retrieved.

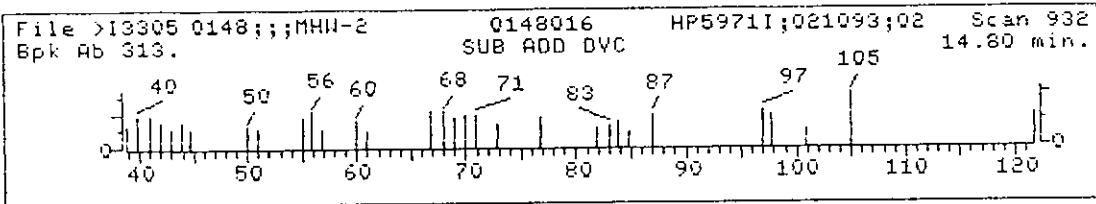
Peak#: 20 Area: 22288. Est Conc: 3. Date: 02/19/93 13:42 Inst: I



Sample file: >13305      Spectrum #:      932

No data base entries were retrieved.

Peak#: 11 Area: 21643. Est Conc:      3. Date: 02/19/93 13:42 Inst: I

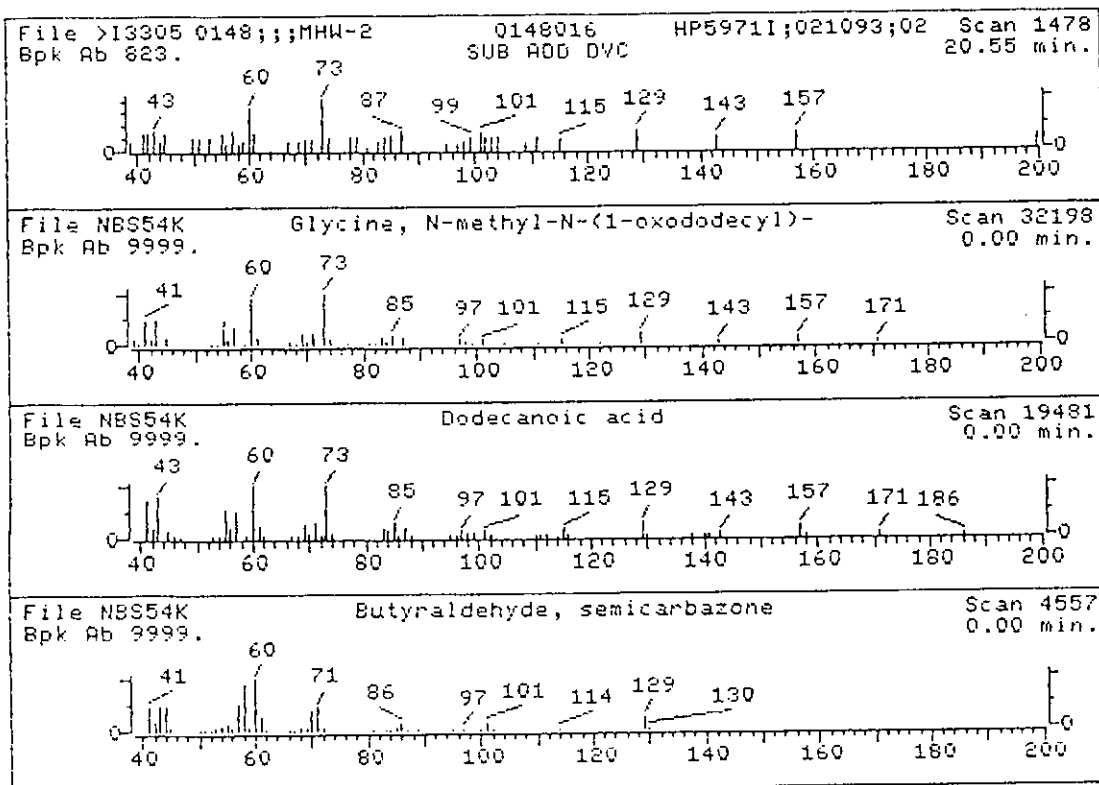


1. Glycine, N-methyl-N-(1-oxododecyl)-	271	C15H29NO3
2. Dodecanoic acid	200	C12H24O2
3. Butyraldehyde, semicarbazone	129	C5H11N3O
4. Butanoic acid, 3-methyl-	102	C5H10O2

Sample file: >I3305 Spectrum #: 1478  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	30	97789	NBS54K	50	100	0	0	72	50	10	21
2.	25*	143077	NBS54K	33	105	3	0	83	42	8	13
3.	20*	13183216	NBS54K	24	91	3	0	74	52	5	12
4.	11	503742	NBS54K	29	68	0	0	83	63	2	15

Peak#: 28 Area: 24363. Est Conc: 3. Date: 02/19/93 13:42 Inst: I



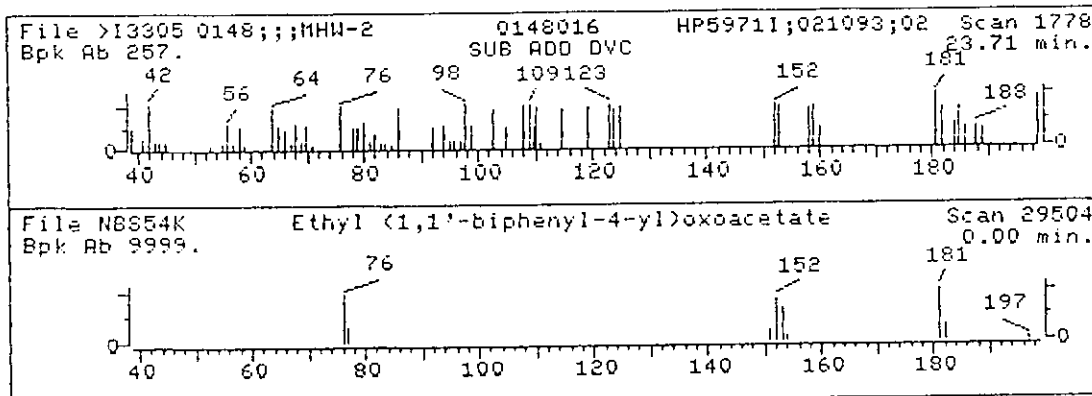
. Ethyl (1,1'-biphenyl-4-yl)oxoacetate

254 C16H14O3

Sample file: >13305      Spectrum #: 1778  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20	6244537	5491	NBS54K	42	48	2	0	84	52	5 12

Peak#: 38 Area: 28069. Est Conc: 3. Date: 02/19/93 13:42 Inst: 1

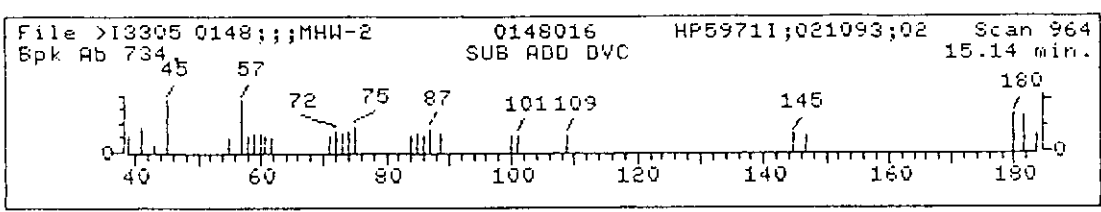


0583

Sample file: >I3305 Spectrum #: 964

No data base entries were retrieved.

Peak#: 12 Area: 22096. Est Conc: 3. Date: 02/19/93 13:42 Inst: 1



0584

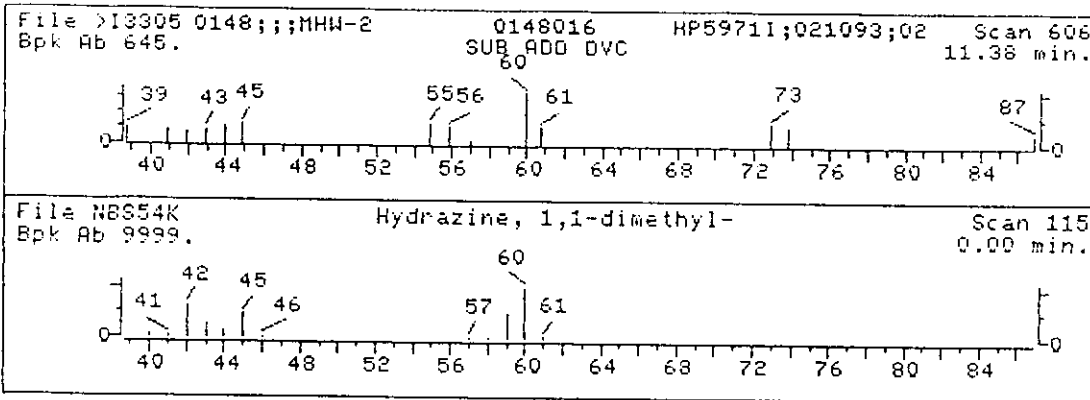
. Hydrazine, 1,1-dimethyl-

60 C2H8N2

Sample file: >I3305 Spectrum #: 606  
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	29*	57147	2093	NBS54K	25	69	3	0	100	47	7 13

Peak#: 4 Area: 13425. Est Conc: 3. Date: 02/19/93 13:42 Inst: I





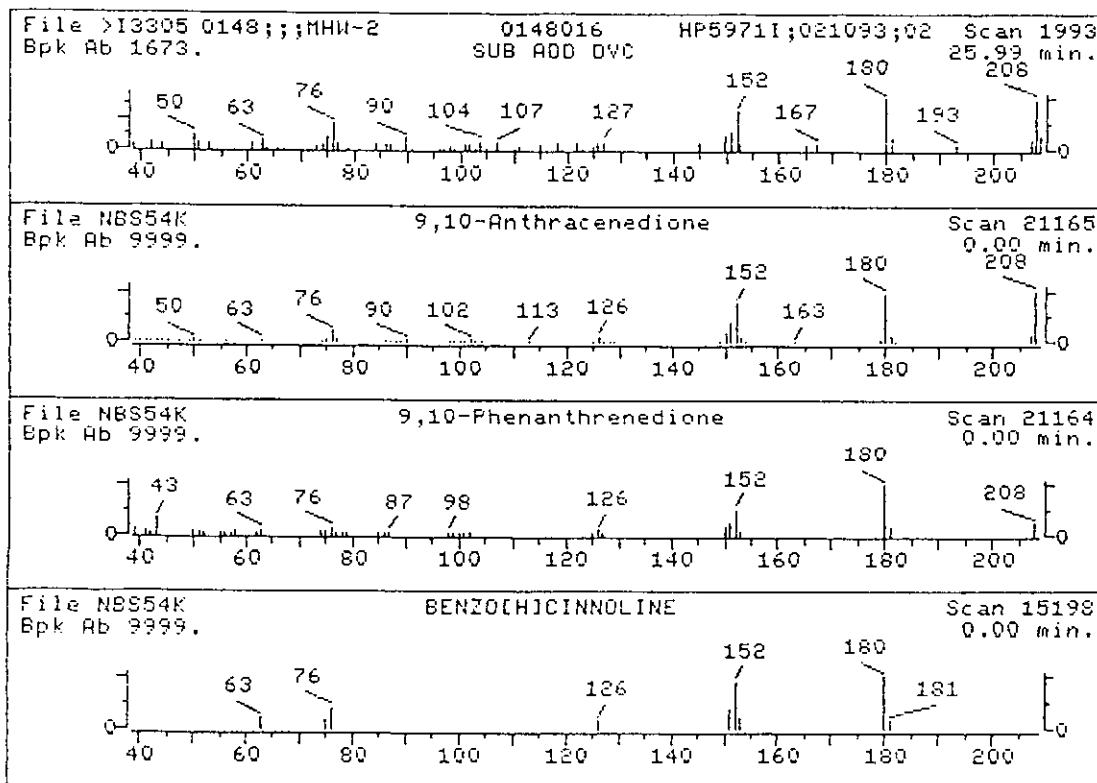
0585

- 1. 9,10-Anthracenedione 208 C14H8O2
- 2. 9,10-Phenanthrenedione 208 C14H8O2
- 3. BENZO[H]CINNOLINE 180 C12H8N2
- 4. 1,4-Anthracenedione 208 C14H8O2
- 5. 2(1H)-Pyridone, 4-hydroxy-6-methyl-3-valeryl- 209 C11H15NO3

Sample file: >I3305 Spectrum #: 1993  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	66*	84651	31133	NBS54K	69	66	2	0	88	17	31	49
2.	48*	84117	26022	NBS54K	55	68	2	0	100	34	20	32
3.	47*	15198	25969	NBS54K	53	27	1	0	71	44	16	46
4.	27*	635121	31134	NBS54K	27	112	3	0	84	38	10	13
5.	25*	7135844	26023	NBS54K	42	86	3	0	74	50	7	13

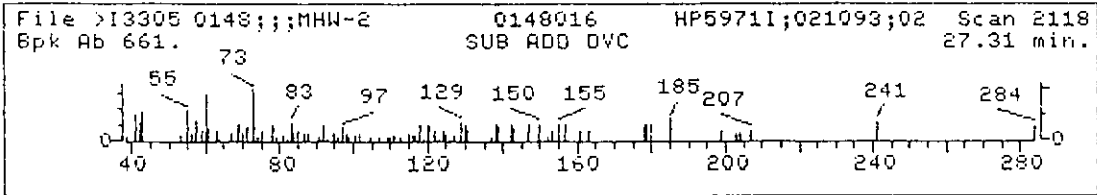
Peak#: 46 Area: 29782. Est Conc: 3. Date: 02/19/93 13:42 Inst: 1



Sample file: >I3305 Spectrum #: 2118

No data base entries were retrieved.

Peak#: 51 Area: 26769. Est Conc: 3. Date: 02/19/93 13:42 Inst: I



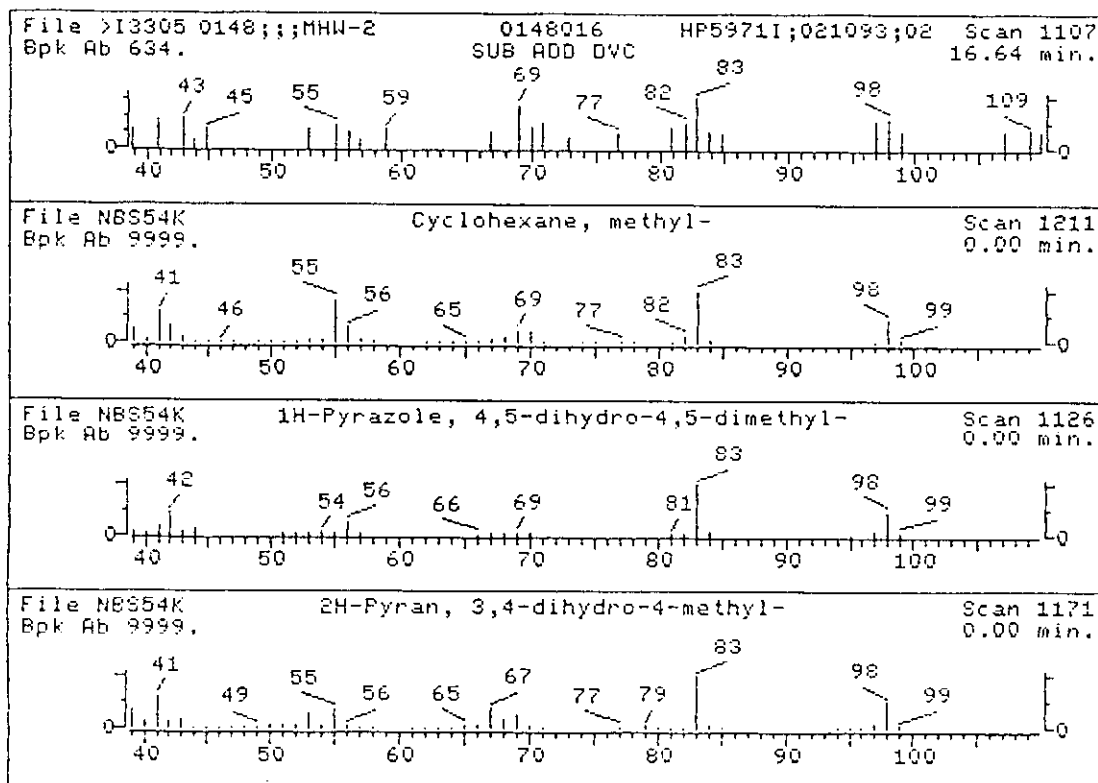
0587

1. Cyclohexane, methyl-	98 C7H14
2. 1H-Pyrazole, 4,5-dihydro-4,5-dimethyl-	98 C5H10N2
3. 2H-Pyran, 3,4-dihydro-4-methyl-	98 C6H10O
4. Silacyclopent-3-ene, 3-methyl-	98 C5H10Si

Sample file: >I3305      Spectrum #:      1107  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 52

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	20*	108872	9929	NBS54K	25	78	3	0	100	52	5	13
2.	15*	28019945	9892	NBS54K	32	61	3	0	100	60	3	13
3.	15*	2270613	9912	NBS54K	25	76	3	0	100	58	3	13
4.	15*	54077655	9893	NBS54K	28	90	3	0	54	56	3	13

Peak#: 17 Area: 24567. Est Conc: 3. Date: 02/19/93 13:42 Inst: I



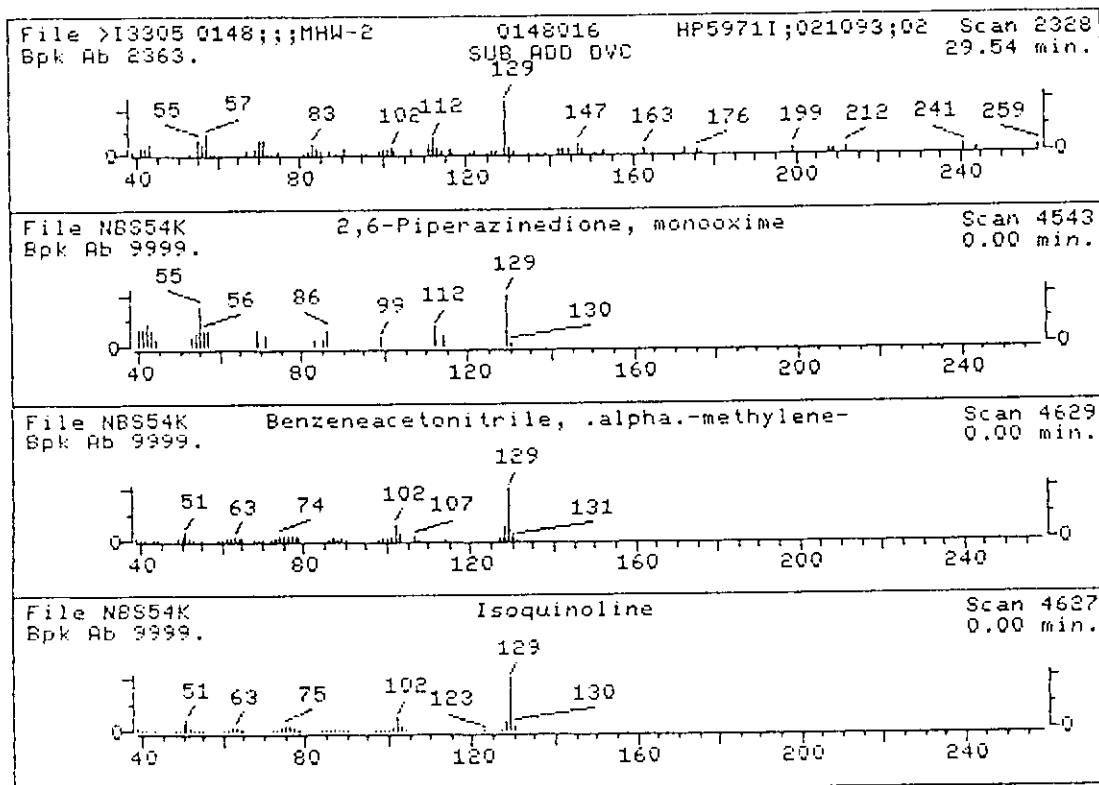
- 2,6-Piperazinedione, monooxime
- 1. Benzeneacetonitrile, .alpha.-methylene-
- 3. Isoquinoline
- 4. 2-Propenenitrile, 3-phenyl-, (E)-
- 5. Quinoline

- 129 C4H7N3O2
- 129 C9H7N
- 129 C9H7N
- 129 C9H7N
- 129 C9H7N

Sample file: >I3305      Spectrum #:      2328  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	30*	56700846	16227	NBS54K	29	93	3	0	100	31	12	13
2.	24*	495103	16237	NBS54K	22	74	3	0	100	44	8	12
3.	24*	119653	16235	NBS54K	22	77	3	0	100	44	8	12
4.	24*	1885387	16236	NBS54K	22	82	3	0	100	44	8	12
5.	24*	91225	16234	NBS54K	22	90	3	0	100	44	8	12

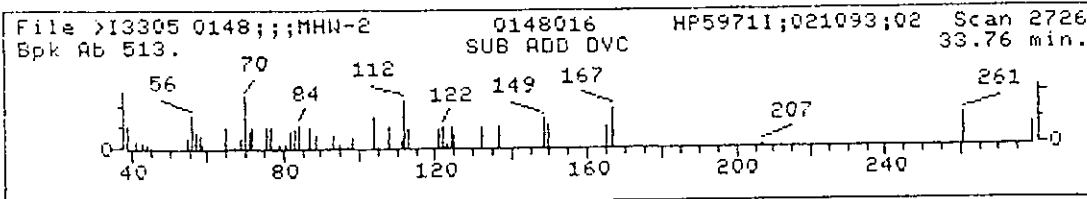
Peak#: 56 Area: 25745. Est Conc: 3. Date: 02/19/93 13:42 Inst: 1



Sample file: >I3305 Spectrum #: 2726

No data base entries were retrieved.

Peak#: 59 Area: 32451. Est Conc: 3. Date: 02/19/93 13:42 Inst: 1

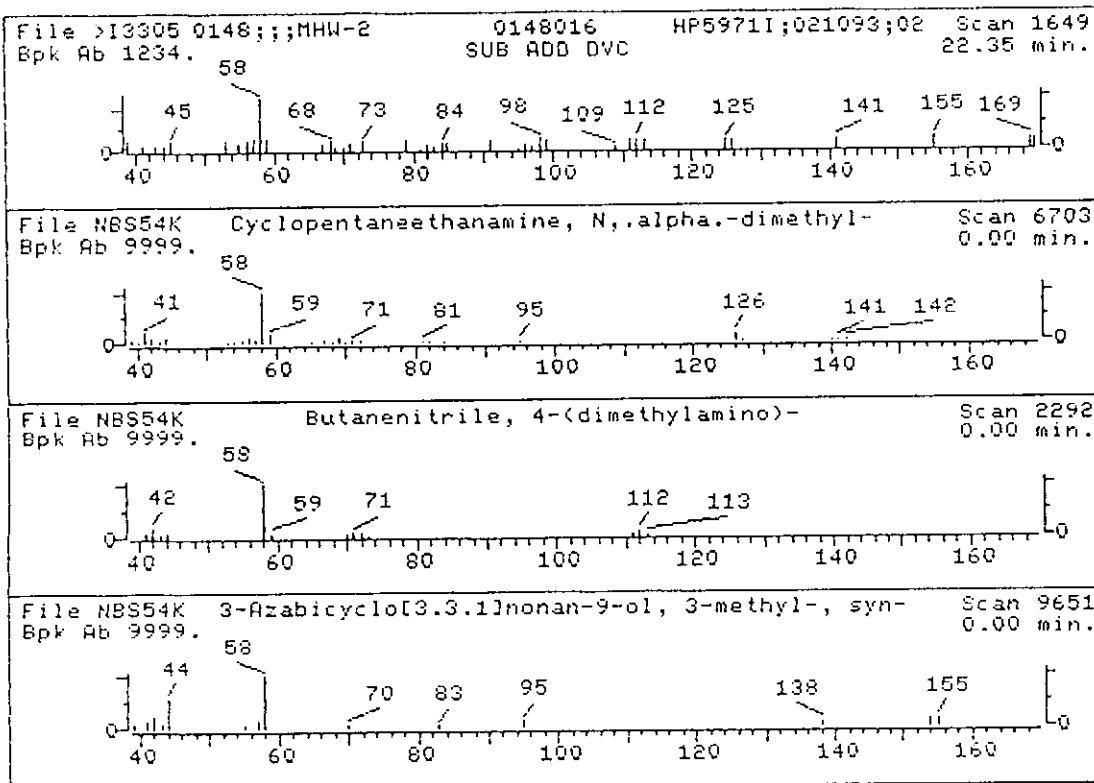


- |   |             |
|---|-------------|
| 1. Cyclopentaneethanamine, N,.alpha.-dimethyl-    | 141 C9H19N  |
| 2. Butanenitrile, 4-(dimethylamino)-              | 112 C6H12N2 |
| 3. 3-Azabicyclo[3.3.1]nonan-9-ol, 3-methyl-, syn- | 155 C9H17NO |

Sample file: >I3305      Spectrum #:      1649  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	26*	102454	1550	NBS54K	30	68	2	0	92	45	8	14
2.	25*	13989827	1459	NBS54K	24	38	2	0	100	48	7	14
3.	25*	13493408	1590	NBS54K	31	59	3	0	100	47	7	13

Peak#: 32 Area: 22260. Est Conc:      2. Date: 02/19/93 13:42 Inst: 1



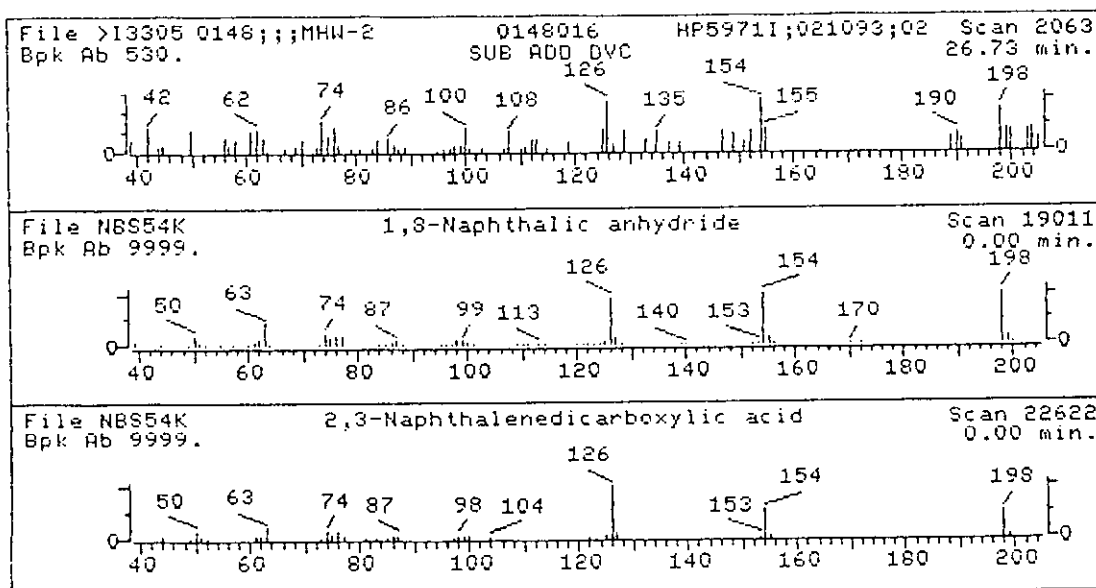
1. 1,8-Naphthalic anhydride
2. 2,3-Naphthalenedicarboxylic acid

198 C12H6O3  
216 C12H8O4

Sample file: >I3305      Spectrum #:      2063  
Search speed: 1      Tilting option: N      No. of ion ranges searched:      43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	47*	81845	29247	NBS54K	57	86	1	0	81	42	16	46
2.	15	2169871	29302	NBS54K	28	97	0	0	97	60	3	14

Peak#: 48 Area: 23752. Est Conc:      2. Date: 02/19/93 13:42 Inst: 1



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

REPLICATE

Lab Name: IEA/CT Contract: 0592  
 Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148  
 Matrix: (soil/water) WATER Lab Sample ID: 0148017  
 Sample wt/vol: 975 (g/mL) ML Lab File ID: I3306.D  
 Level: (low/med) LOW Date Received: 02/02/93  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
 Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/19/93  
 Injection Volume: 2.0(uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	10	U





1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS 0594

EPA SAMPLE NO.

REPLICATE

Lab Name: IEA/CT Contract: \_\_\_\_\_  
 Lab Code: IEACT Case No.: 0148 SAS No.: \_\_\_\_\_ SDG No.: Z0148  
 Matrix: (soil/water) WATER Lab Sample ID: 0148017  
 Sample wt/vol: 975 (g/mL) ML Lab File ID: I3306.D  
 Level: (low/med) LOW Date Received: 02/02/93  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
 Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/19/93  
 Injection Volume: 2.0(uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

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

Number TICs found: 17

*Amc2125192*

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	<del>UNKNOWN</del> UNKNOWN	31.97	51	U
2.		29.07	45	↓
3.		26.39	31	↓
4.		36.30	29	↓
5.		23.34	22	↓
6.		43.53	17	↓
7.		32.34	11	↓
8.		29.28	9	↓
9.		19.80	7	↓
10.		8.58	6	↓ JAB
11.		37.00	6	↓ J
12.		26.56	6	↓
13.	ALDEHYDE CONDENSATION PRODUCT	8.17	4	↓ JAB
14.	UNKNOWN	33.74	3	↓
15.	UNKNOWN	22.12	3	↓
16.	UNKNOWN ACID	16.34	3	↓
17.	UNKNOWN	23.47	3	↓
18.	UNKNOWN ACID	10.32	2	↓
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

0595

## QUANT REPORT

Page 1

Operator ID: USER1  
 Output File: ^I3306::A6  
 Data File: >I3306::A5  
 Name: 0148;;;REPLICATE  
 Misc: 0148017

Quant Rev: 7      Quant Time: 930222 17:55  
                   Injected at: 930219 14:43  
                   Dilution Factor: .51000  
                   Instrument ID: \*\*MSD  
 HP59711;021093;021193;LLW;1;;;102

ID File: I\_IF1::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

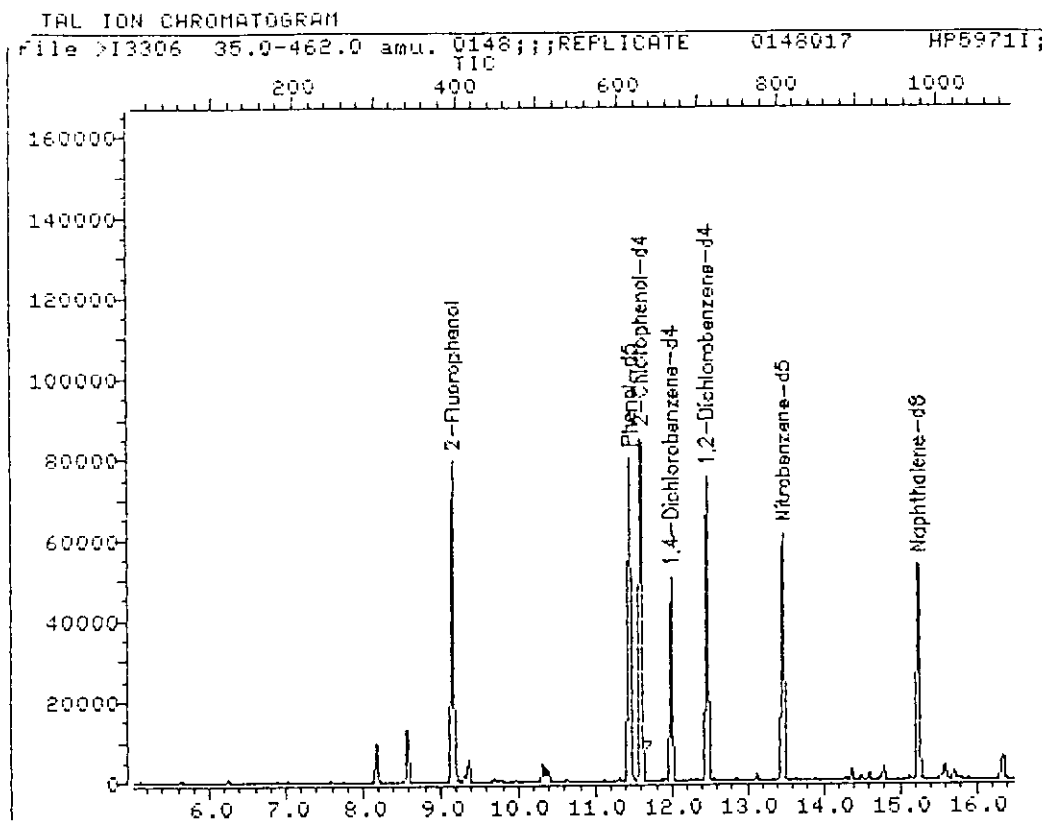
Last Qual Time: 930219 10:28

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.00	151.8	17548	40.00	ug	95
2) 2-Chlorophenol-d4	11.60	132.0	62543	56.90	ug	80
3) 2-Fluorophenol	9.16	111.8	60594	53.93	ug	73
4) Phenol-d5	11.45	98.8	88848	57.88	ug	60
<del>7) 2-Chlorophenol</del>	<del>11.64</del>	<del>127.8</del>	<del>571</del>	<del>.496</del>	<del>ug</del>	<del>42</del>
10) 1,2-Dichlorobenzene-d4	12.47	152.0	29478	41.02	ug	94
17) *Naphthalene-d8	15.24	135.9	65172	40.00	ug	98
18) Nitrobenzene-d5	13.48	81.8	50619	39.57	ug	71
31) *Acenaphthene-d10	19.90	163.9	36697	40.00	ug	99
) 2-Fluorobiphenyl	18.13	171.8	87488	39.50	ug	98
<del>47) Diethylphthalate</del>	<del>21.16</del>	<del>148.8</del>	<del>1210</del>	<del>.478</del>	<del>ug</del>	<del>46</del>
51) 2,4,6-Tribromophenol	22.03	329.6	31611	60.21	ug	93
52) *Phenanthrene-d10	23.79	187.9	67110	40.00	ug	97
61) Di-n-butylphthalate	25.44	148.8	2755	.662	ug	63
63) *Chrysene-d12	31.07	240.0	56813	40.00	ug	98
69) Terphenyl-d14	28.04	244.0	85010	34.62	ug	97
<del>66) Butylbenzylphthalate</del>	<del>29.38</del>	<del>148.8</del>	<del>1445</del>	<del>.716</del>	<del>ug</del>	<del>59</del>
70) bis(2-Ethylhexyl)phthalate	31.18	148.8	2759	1.10	ug	96
71) *Perylene-d12	37.73	264.0	57650	40.00	ug	99
<del>72) Di-n-octylphthalate</del>	<del>33.75</del>	<del>148.9</del>	<del>2401</del>	<del>.482</del>	<del>ug</del>	<del>51</del>

\* Compound is ISTD

Concentration

0596

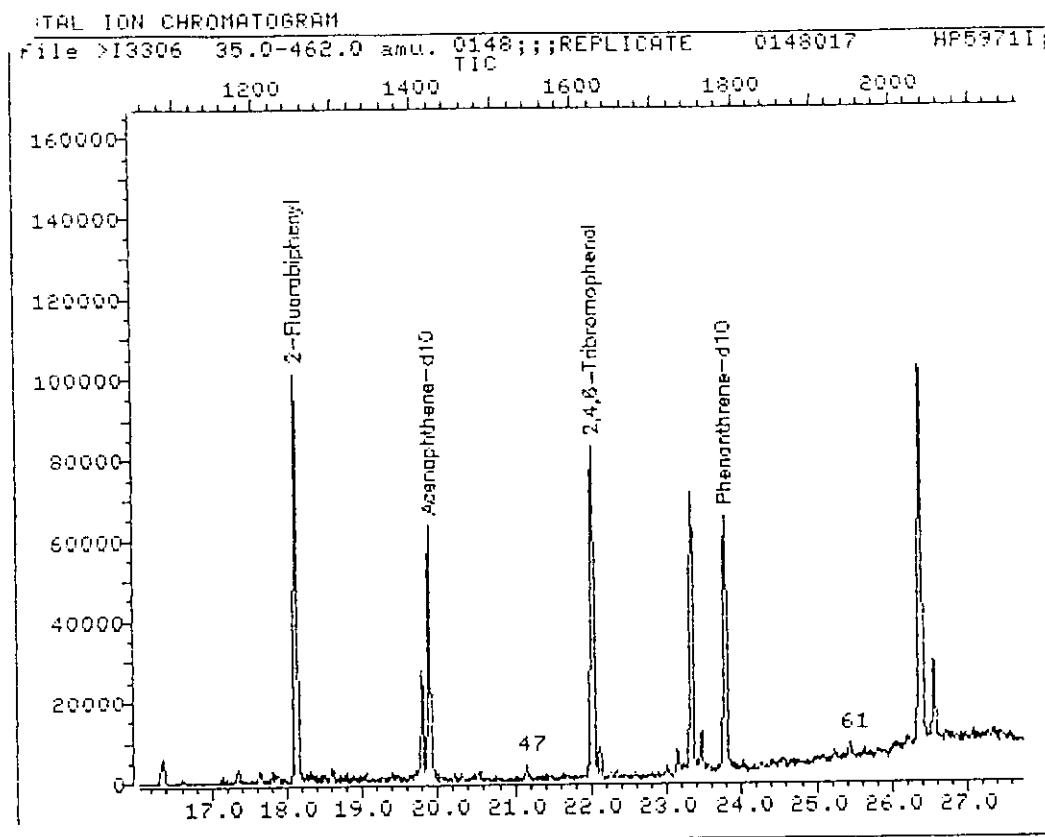


Data File: >I3306::A5 Quant Output File: ^I3306::A6  
Name: 0148;;;REPLICATE Instrument ID: \*\*MSD  
Misc: 0148017 HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:55  
Injected at: 930219 14:43

0597



Data File: >I3306::A5  
Name: 0148;;;REPLICATE  
Misc: 0148017

Quant Output File: ^I3306::A6  
Instrument ID: \*\*MSD  
HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IF1::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

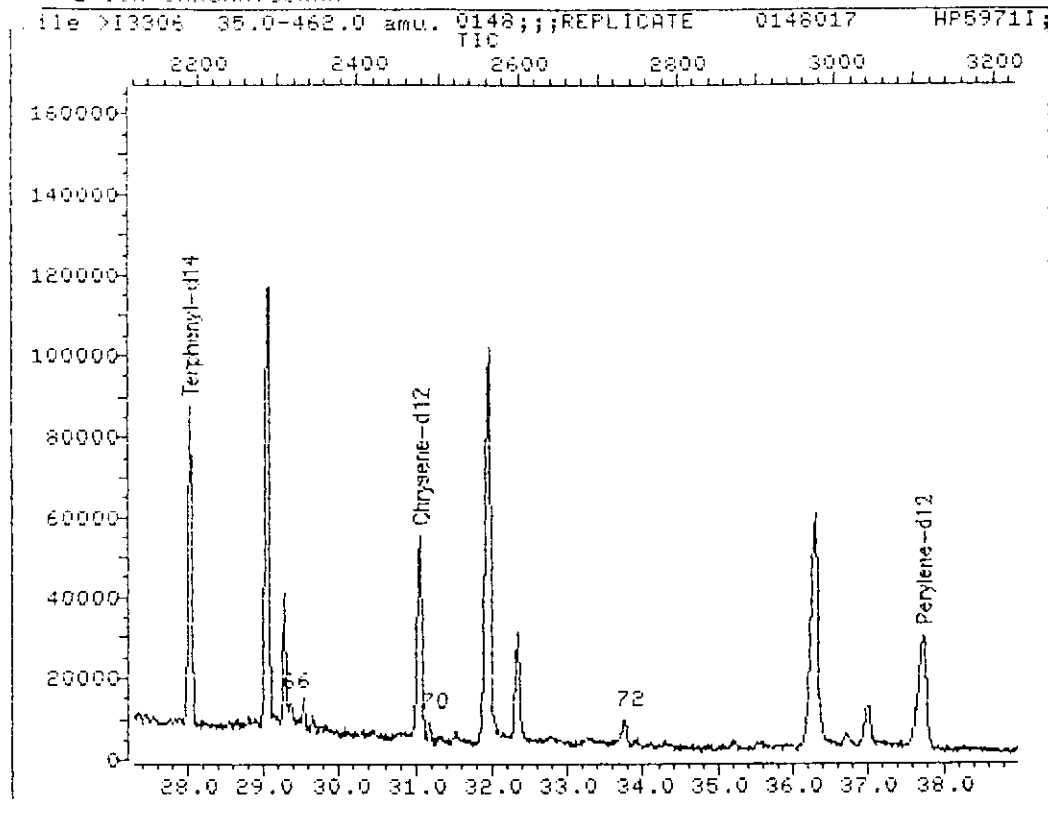
Last Qcal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:55  
Injected at: 930219 14:43

Page 2 of 4

0598

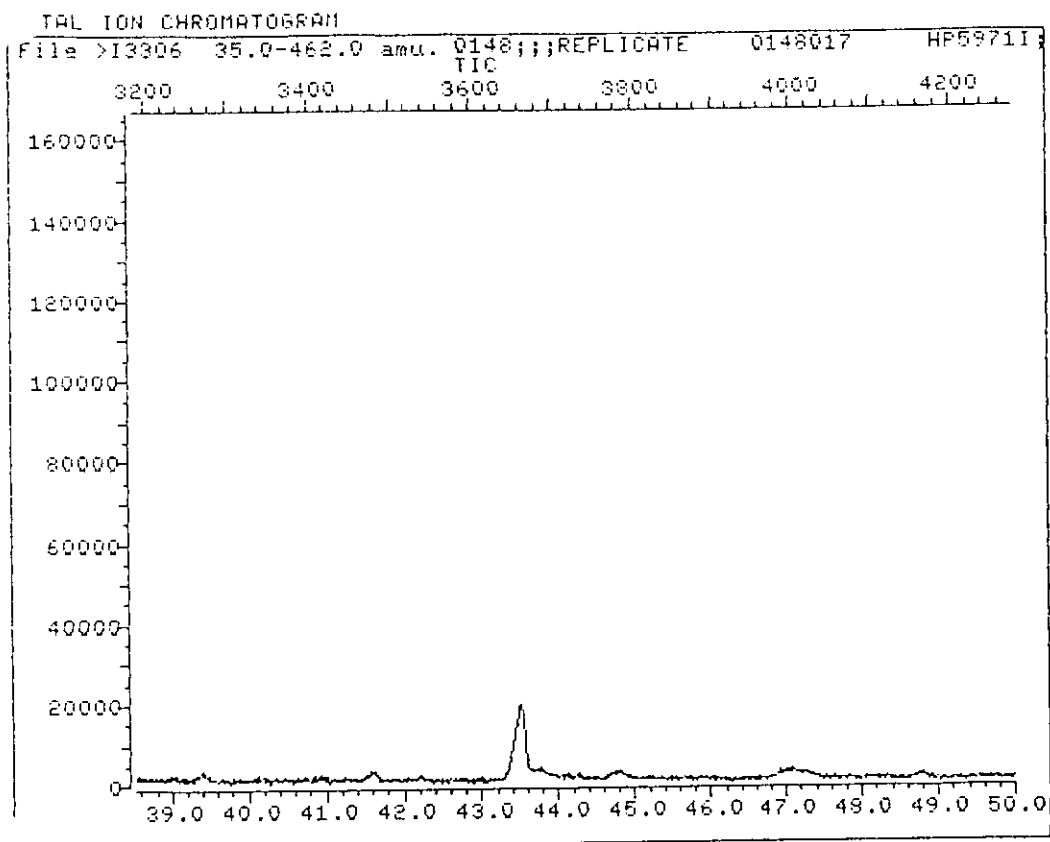
TAL ION CHROMATOGRAM



Data File: >I3306::A5                      Quant Output File: ^I3306::A6  
Name: 0148;;;REPLICATE                    Instrument ID: \*\*MSD  
Misc: 0148017                    HP59711;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52              Last Qcal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:55  
Injected at: 930219 14:43

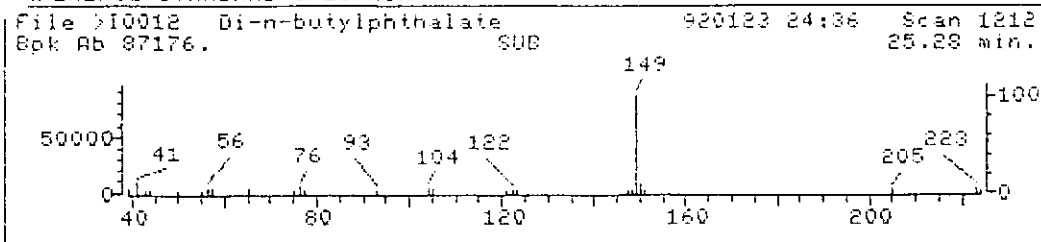


Data File: >I3306::A5                    Quant Output File: ^I3306::A6  
Name: 0148;;;REPLICATE                    Instrument ID: \*\*MSD  
Misc: 0148017                    HP5971I;021093;021193;LLW;1;;;I02

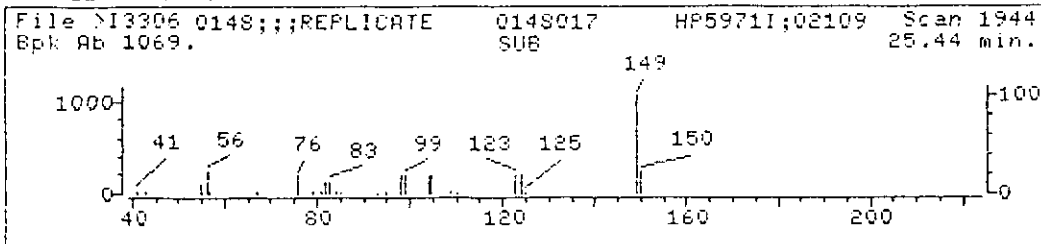
Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Qual Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 17:55  
Injected at: 930219 14:43

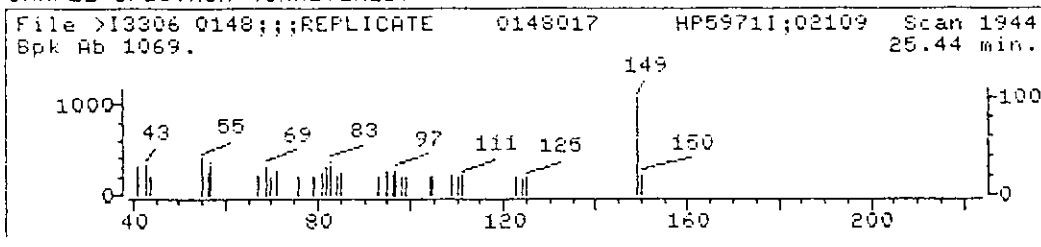
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)

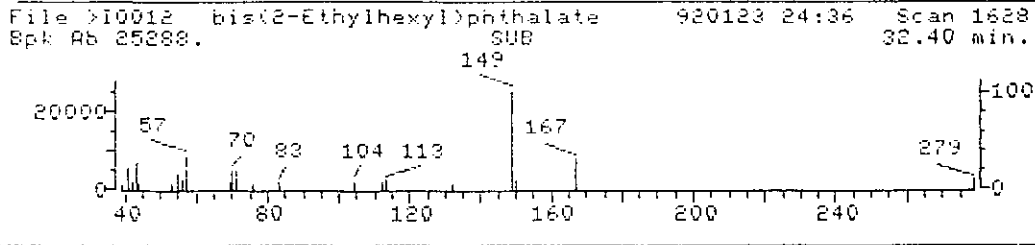


Data File: >I3306::A2 Quant Output File: ^I3306::A6  
 Name: 0148;;;REPLICATE Instrument ID: \*\*MSD  
 Misc: 0148017 HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 15:41 Quant ID File: I\_IF1::A5  
 Injected at: 930219 14:43 Last Calibration: 910116 11:52  
 Last Qual Time: 930219 10:28

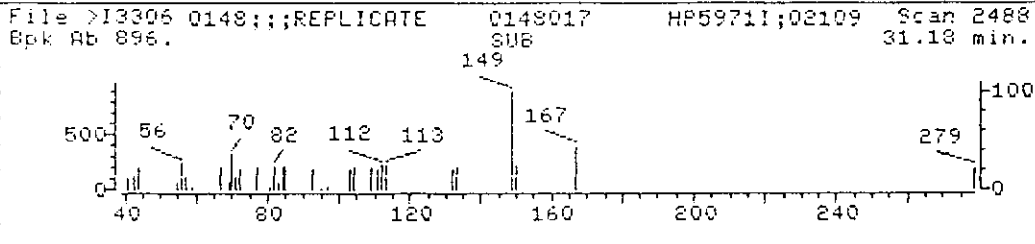
Compound No : 61  
 Compound Name : Di-n-butylphthalate  
 Scan Number : 1944  
 Retention Time: 25.44 min.  
 Quant Ion : 148.8  
 Area : 2755  
 Concentration : .662 ug  
 q-value : 63



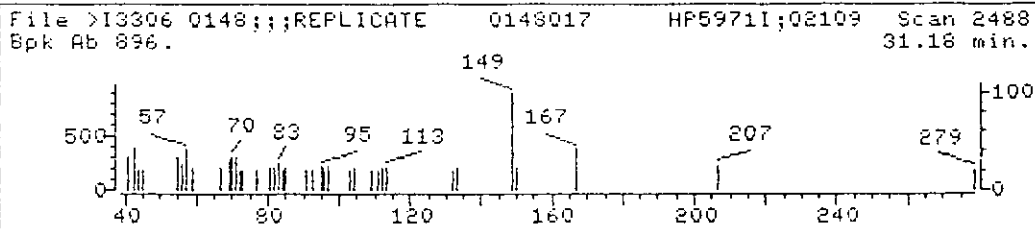
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: >I3306::A2                    Quant Output File: ^I3306::A6  
 Name: 0148;;;REPLICATE                Instrument ID: \*\*MSD  
 Misc: 0148017                    HP59711;021093;021193;LLW;1;;;102  
 Quant Time: 930219 15:41                Quant ID File: I\_IFI::A5  
 Injected at: 930219 14:43                Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No     :    70  
 Compound Name   : bis(2-Ethylhexyl)phthalate  
 Scan Number     : 2488  
 Retention Time  : 31.18 min.  
 Quant Ion        : 148.8  
 Area             :        2759  
 Concentration   :        1.10 ug  
 q-value          :        96

0602

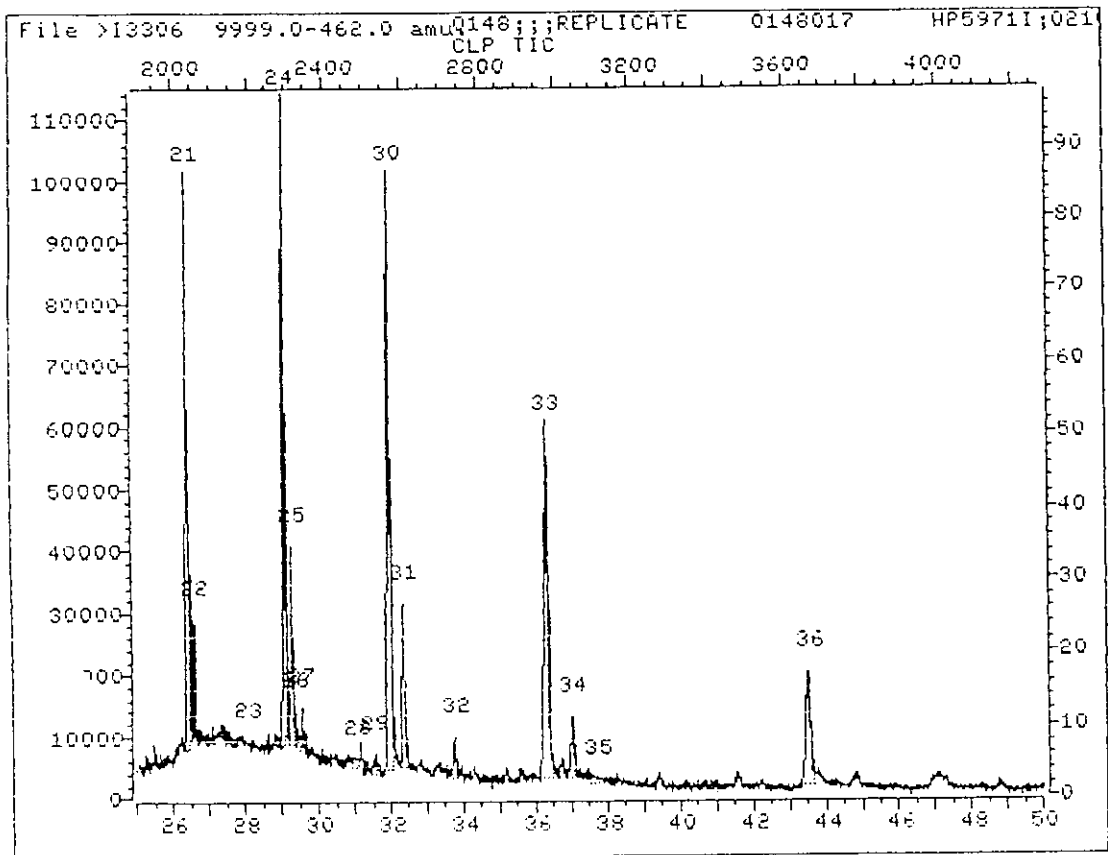
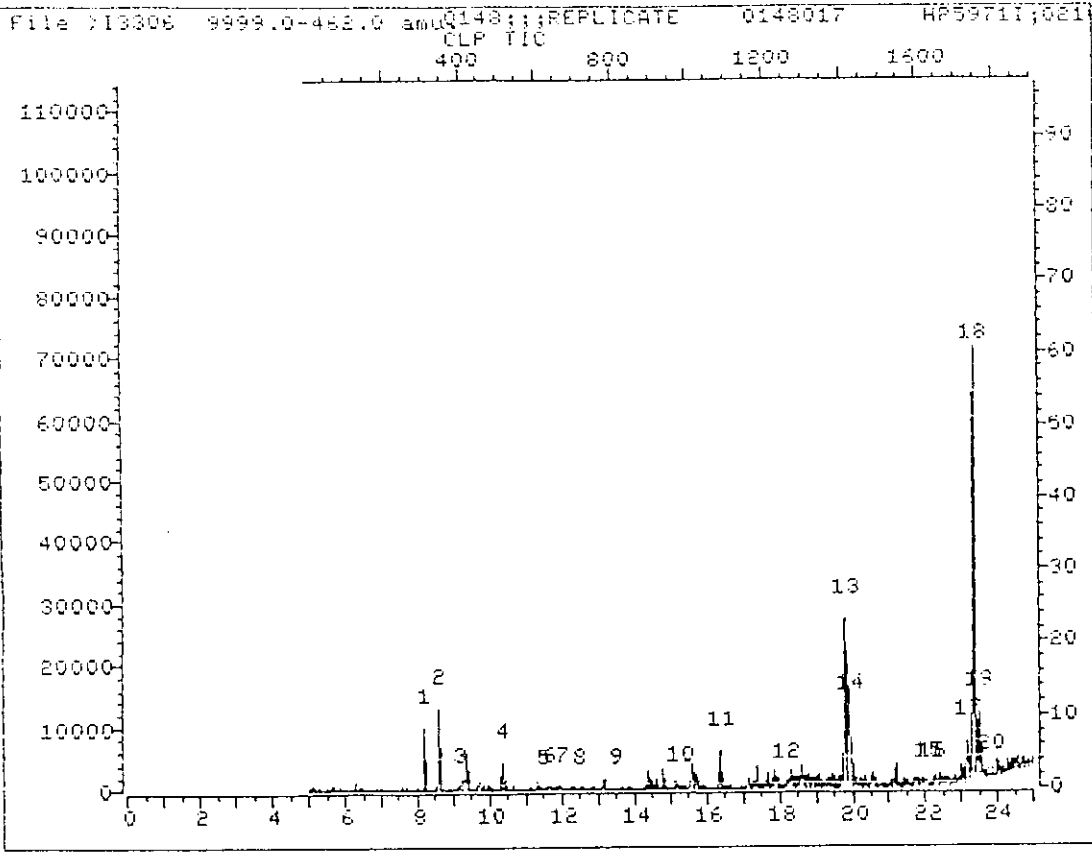
M data file header from : >I3306::A2

Sample: 0148;;;REPLICATE Operator: USER1 2/19/93 14:43  
Misc : 0148017 HP59711;021093;021193;LLW;1;;;102  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 4 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N/A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

0603

Date: 02/19/93 14:43 Inst: I



Date: 02/19/93 14:43 Inst: I

REPLICATE  
H89711

0604

T I C P E A K R E P O R T

PK#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
30.	31.97	495028.	54.	5.	5.	.51
24.	29.07	415731.	45.	5.	5.	.51
21.	26.39	327389.	39.	4.	4.	.51
33.	36.30	402787.	39.	6.	6.	.51
18.	23.34	183103.	22.	4.	4.	.51
36.	43.53	176159.	17.	6.	6.	.51
31.	32.34	101936.	11.	5.	5.	.51
25.	29.28	83980.	9.	5.	5.	.51
13.	19.80	60345.	7.	3.	3.	.51
2.	8.58	28572.	6.	1.	1.	.51
34.	37.00	57469.	6.	6.	6.	.51
22.	26.56	47134.	6.	4.	4.	.51
1.	8.17	20263.	4.	1.	1.	.51
32.	33.74	26793.	3.	5.	5.	.51
16.	22.12	21122.	3.	4.	4.	.51
11.	16.34	19875.	3.	2.	2.	.51
19.	23.47	25156.	3.	4.	4.	.51
4.	10.32	10488.	2.	1.	1.	.51

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range	TI/SI
1,4-DICHLOROBENZENE-D4	12.00	99485.	0.00 13.62	5.7
NAPHTHALENE-D8	15.24	128283.	13.62 17.57	2.0
ACENAPHTHENE-D10	19.90	167491.	17.57 21.84	4.6
PHENANTHRENE-D10	23.79	169329.	21.84 27.43	2.5
CHRYSENE-D12	31.07	188551.	27.43 34.40	3.3
PERYLENE-D12	37.73	213063.	34.40 43.53	3.7

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 5  
Target peaks matched: 0  
Total TIC identified: 18

TICS : 4:16 PM MON., 22 FEB., 1993

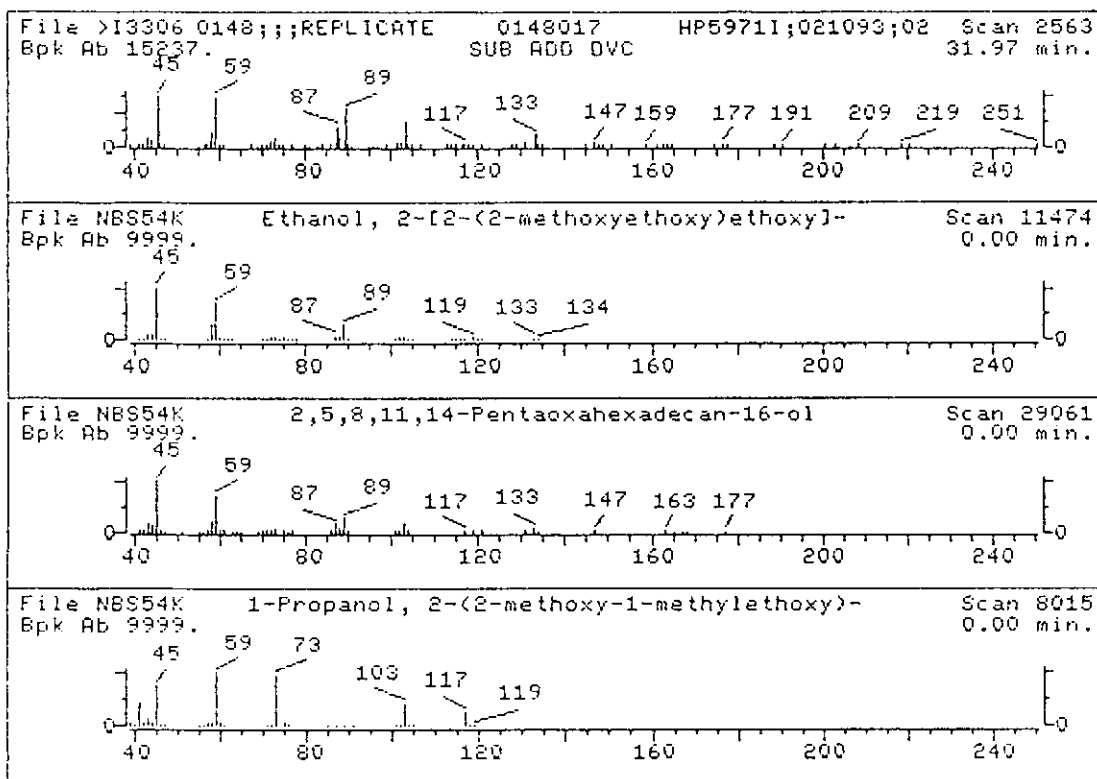
0605

- . Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]- 164 C7H16O4
- . 2,5,8,11,14-Pentaoxahexadecan-16-ol 292 C11H24O6
- 3. 1-Propanol, 2-(2-methoxy-1-methylethoxy)- 148 C7H16O3
- 4. 15-Crown-5 220 C10H20O5
- 5. 2-Propanol, 1-ethoxy- 104 C5H12O2

Sample file: >I3306 Spectrum #: 2563  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	41	112356	8547	NBS54K	49	50	0	0	93	38	14	28
2.	29	23778521	8670	NBS54K	43	86	0	0	100	36	10	15
3.	24	55956213	1970	NBS54K	55	48	2	0	96	44	8	12
4.	20	33100275	8641	NBS54K	60	71	2	0	79	55	5	12
5.	20*	1569024	1853	NBS54K	34	60	1	0	88	53	5	18

Peak#: 30 Area: 495028. Est Conc: 54. Date: 02/19/93 14:43 Inst: I

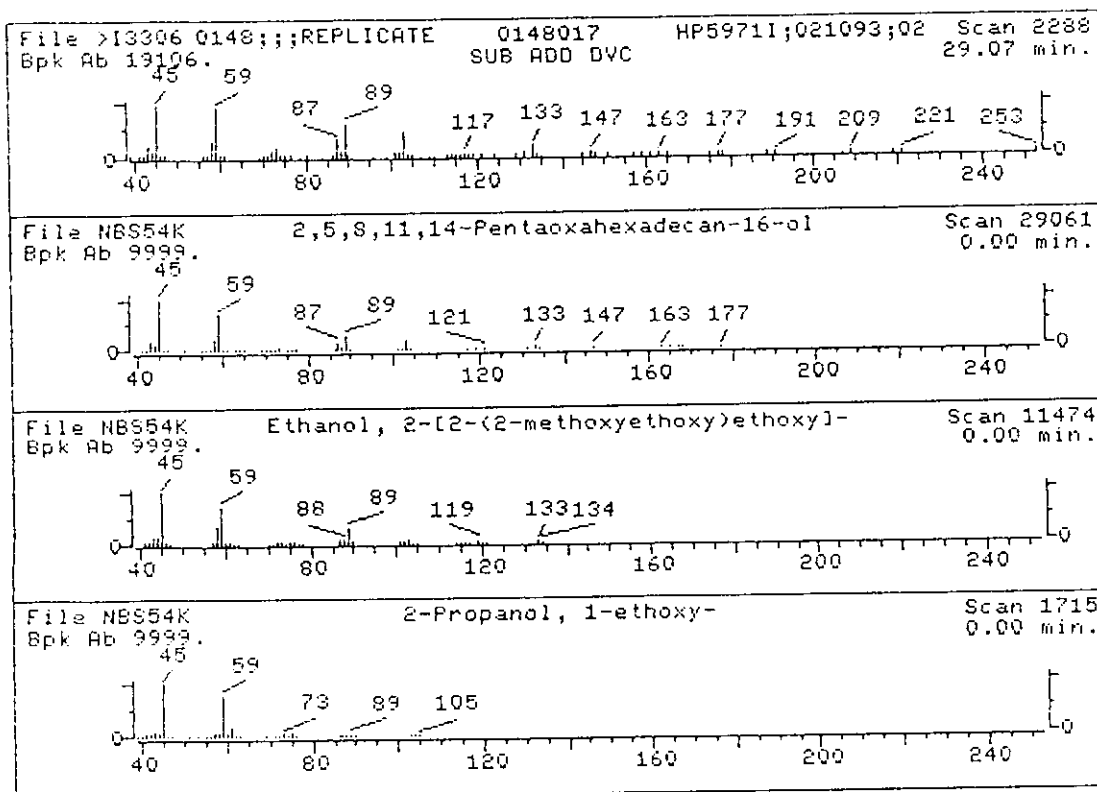


2,5,8,11,14-Pentaoxahexadecan-16-ol	292	C11H24O6
2. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H16O4
3. 2-Propanol, 1-ethoxy-	104	C9H12O2
4. 2-Butanol, 3,3'-oxybis-	162	C8H18O3
5. Propanoic acid, 3-methoxy-, methyl ester	118	C5H10O3

Sample file: >I3306      Spectrum #:      2288  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	42	23778521	8670	NBS54K	49	80	0	0	100	26	14	19
2.	30	112356	8547	NBS54K	39	60	0	0	86	40	10	16
3.	26*	1569024	1853	NBS54K	28	66	2	0	100	45	8	14
4.	20	54305612	2000	NBS54K	37	48	1	0	96	53	5	14
5.	20*	3852093	8054	NBS54K	27	75	3	0	100	53	5	13

Peak#: 24 Area: 415731. Est Conc: 45. Date: 02/19/93 14:43 Inst: 1

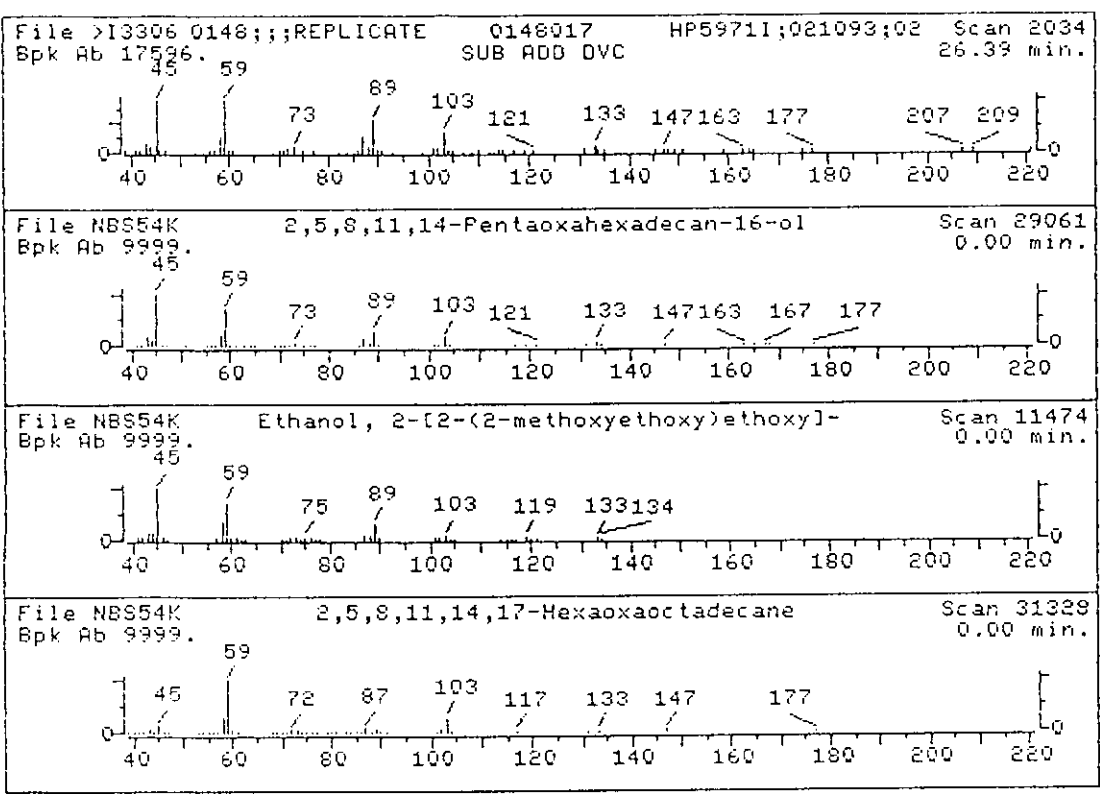


- 1. 2,5,8,11,14-Pentaoxahexadecan-16-ol 252 C11H24O6
- 2. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)]- 164 C7H16O4
- 3. 2,5,8,11,14,17-Hexaoxaoctadecane 266 C12H26O6
- 4. 2-Butanol, 3,3'-oxybis- 162 C8H18O3
- 5. 2-Butanol, 1-methoxy- 104 C5H12O2

Sample file: >I3306      Spectrum #:      2034  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	45	23778521	8670	NBS54K	44	85	0	0	100	24	17	16
2.	37	112356	8547	NBS54K	50	49	1	0	96	26	14	14
3.	29	1191873	2071	NBS54K	46	70	0	0	98	45	8	17
4.	20	54305612	2000	NBS54K	37	48	1	0	98	52	5	14
5.	15*	53778737	1854	NBS54K	32	64	2	0	98	59	3	14

Peak#: 21 Area: 327389. Est Conc: 39. Date: 02/19/93 14:43 Inst: 1

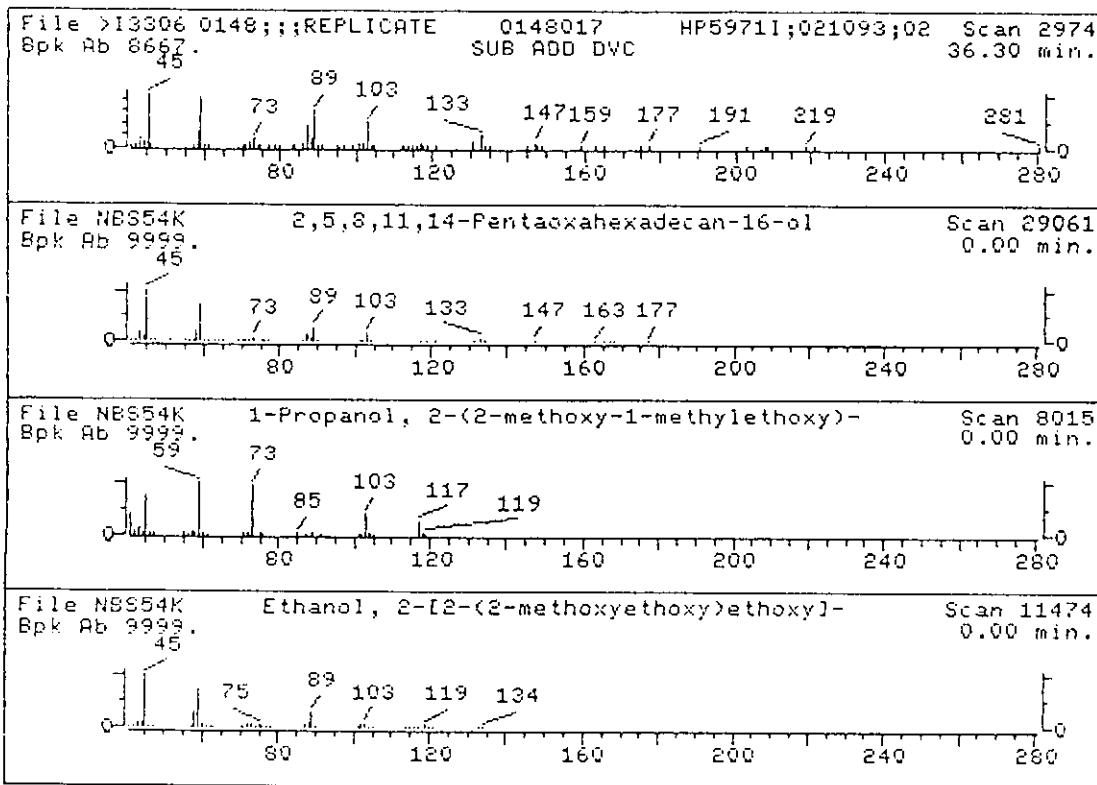


2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H24O6
1-Propanol, 2-(2-methoxy-1-methylethoxy)-	148	C7H16O3
3. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy]-	164	C7H16O4
4. 2-Propanol, 1-ethoxy-	104	C5H12O2
5. 2-Butanol, 1-methoxy-	104	C5H12O2

Sample file: >I3306      Spectrum #:      2974  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	33	23778521	8670	NBS54K	44	85	0	0	100	32	12	16
2.	26	55956213	1970	NBS54K	55	48	2	0	95	40	10	12
3.	25	112356	8547	NBS54K	33	66	0	0	88	48	7	15
4.	20*	1569024	1853	NBS54K	34	60	1	0	100	51	5	18
5.	11*	53778737	1854	NBS54K	32	64	2	0	95	64	2	14

Peak#: 33 Area: 402787. Est Conc: 39. Date: 02/19/93 14:43 Inst: I





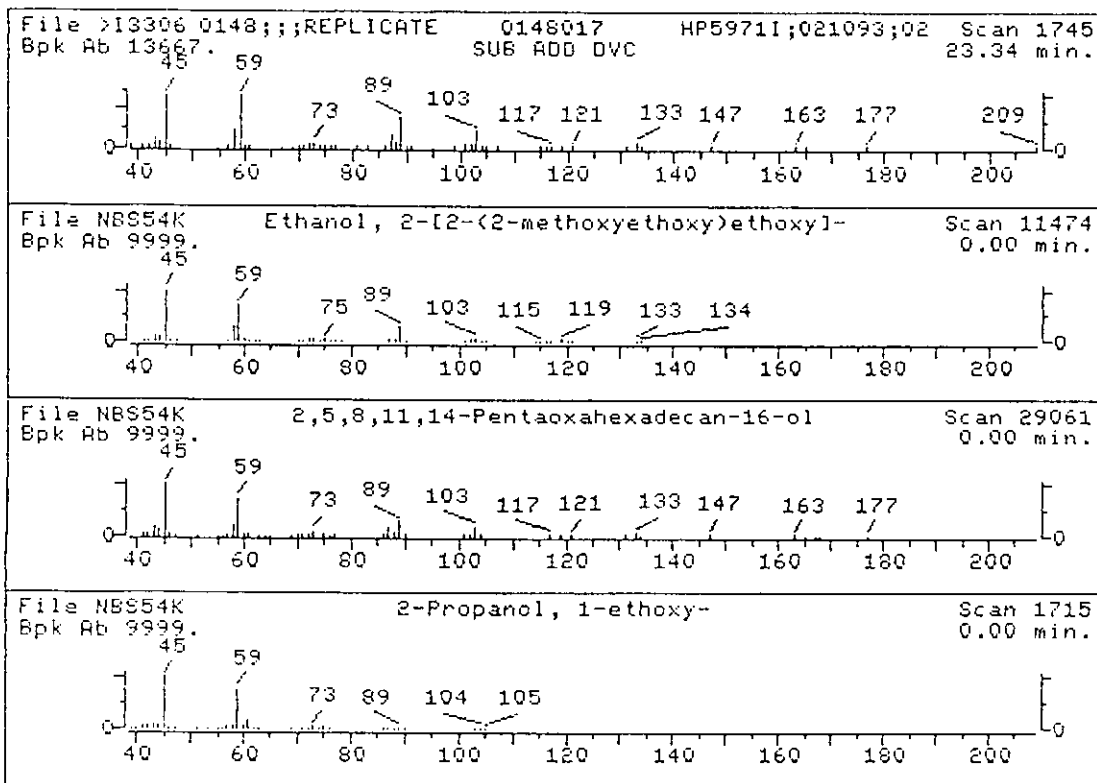
0609

Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164	C7H16O4
1. 2,5,8,11,14-Pentaoxahexadecan-16-ol	252	C11H24O6
3. 2-Propanol, 1-ethoxy-	104	C5H12O2
4. Propane, 1,2,3-trimethoxy-	134	C6H14O3
5. Silane, ethyldimethyl-	88	C4H12Si

Sample file: >I3306 Spectrum #: 1745  
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	59	112356	8547	NBS54K	62	37	0	0	100	23	27	38
2.	32	23778521	8670	NBS54K	66	63	1	0	110	42	12	23
3.	30*	1569024	1853	NBS54K	34	60	1	0	86	41	8	18
4.	29	20637494	8497	NBS54K	61	51	2	0	72	32	12	12
5.	25*	758214	1807	NBS54K	40	58	2	0	86	50	7	16

Peak#: 18 Area: 183103. Est Conc: 22. Date: 02/19/93 14:43 Inst: I

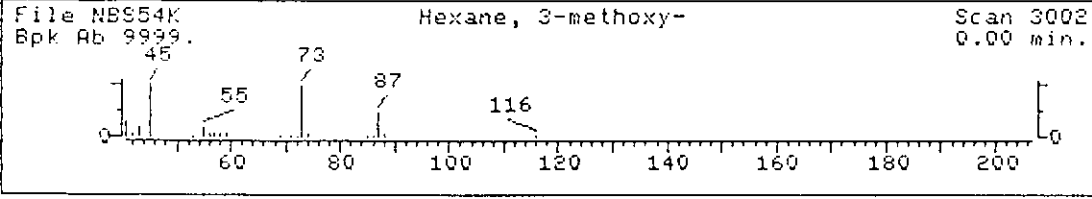
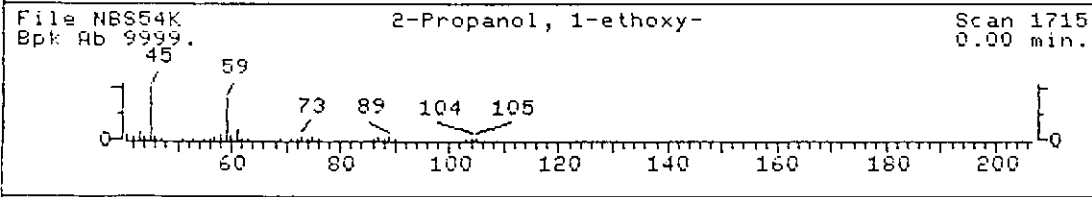
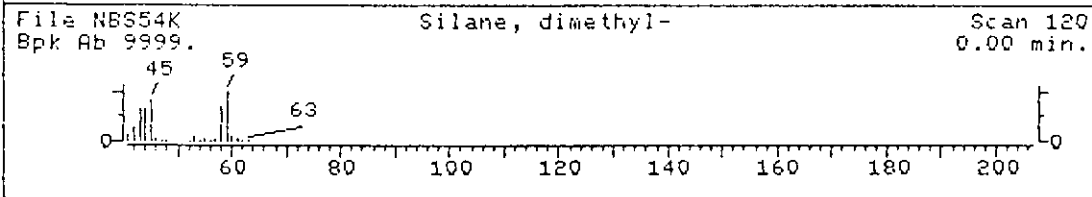
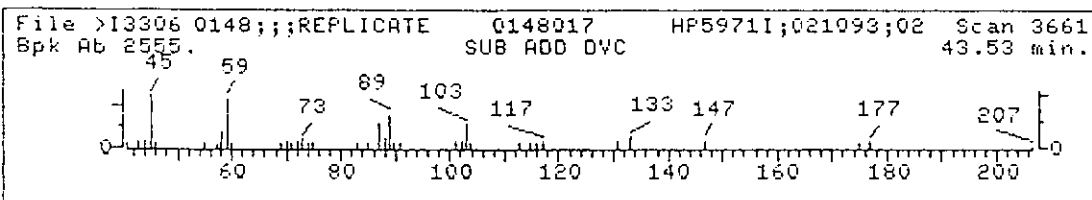


- 1. Silane, dimethyl- 60 C2H8Si
- 2. 2-Propanol, 1-ethoxy- 104 C5H12O2
- 3. Hexane, 3-methoxy- 116 C7H16O
- 4. Silane, triethyl- 116 C6H16Si

Sample file: >I3306 Spectrum #: 3661  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	20*	1111746	1791	NBS54K	32	77	3	0	92	52	5 13
2.	20*	1569024	1853	NBS54K	24	70	1	0	100	52	5 14
3.	11*	54658014	7622	NBS54K	22	63	3	0	93	63	2 12
4.	11*	617867	7614	NBS54K	24	66	3	0	67	62	2 12

Peak#: 36 Area: 176159. Est Conc: 17. Date: 02/19/93 14:43 Inst: 1

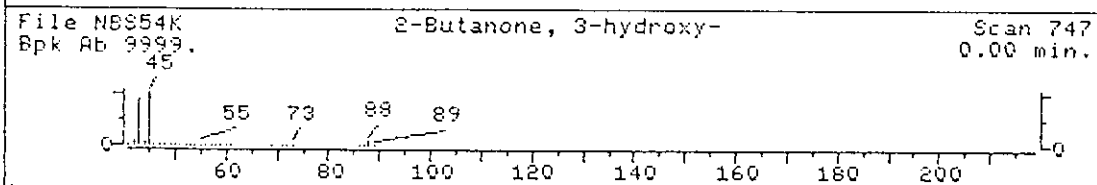
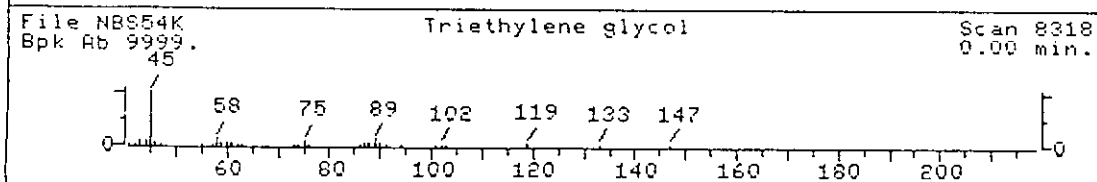
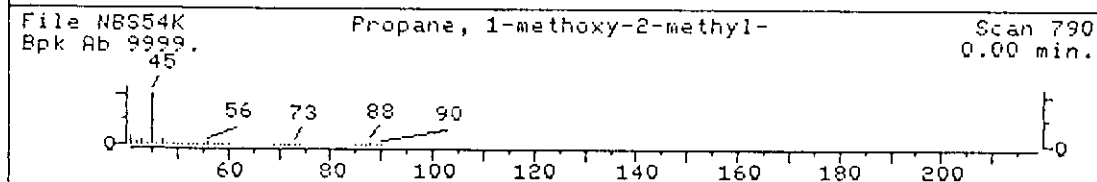
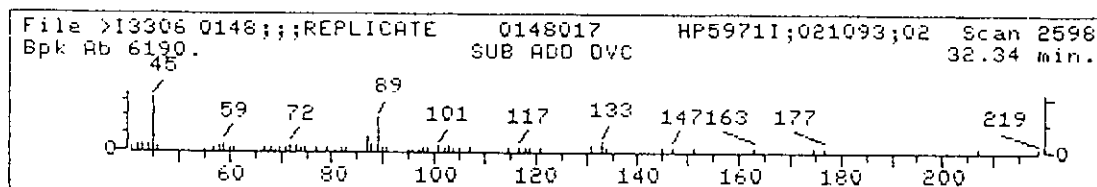


- 1. Propane, 1-methoxy-2-methyl- 88 C5H12O
- 2. Triethylene glycol 150 C6H14O4
- 3. 2-Butanone, 3-hydroxy- 88 C4H8O2
- 4. Acetaldehyde, methoxy- 74 C3H6O2
- 5. Acetic acid, hydrazino-, ethyl ester, monohydrochloride 154 C4H11ClN2O2

Sample file: >I3306      Spectrum #:      2598  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25*	625445	348	NBS54K	32	50	2	0	100	47	7	16
2.	25	112276	8525	NBS54K	29	55	0	0	77	47	7	15
3.	25*	513860	346	NBS54K	24	61	2	0	100	46	7	14
4.	20*	10312831	339	NBS54K	22	30	1	0	100	53	5	14
5.	20	6945922	371	NBS54K	33	56	1	0	99	53	5	12

Peak#: 31 Area: 101936. Est Conc: 11. Date: 02/19/93 14:43 Inst: I

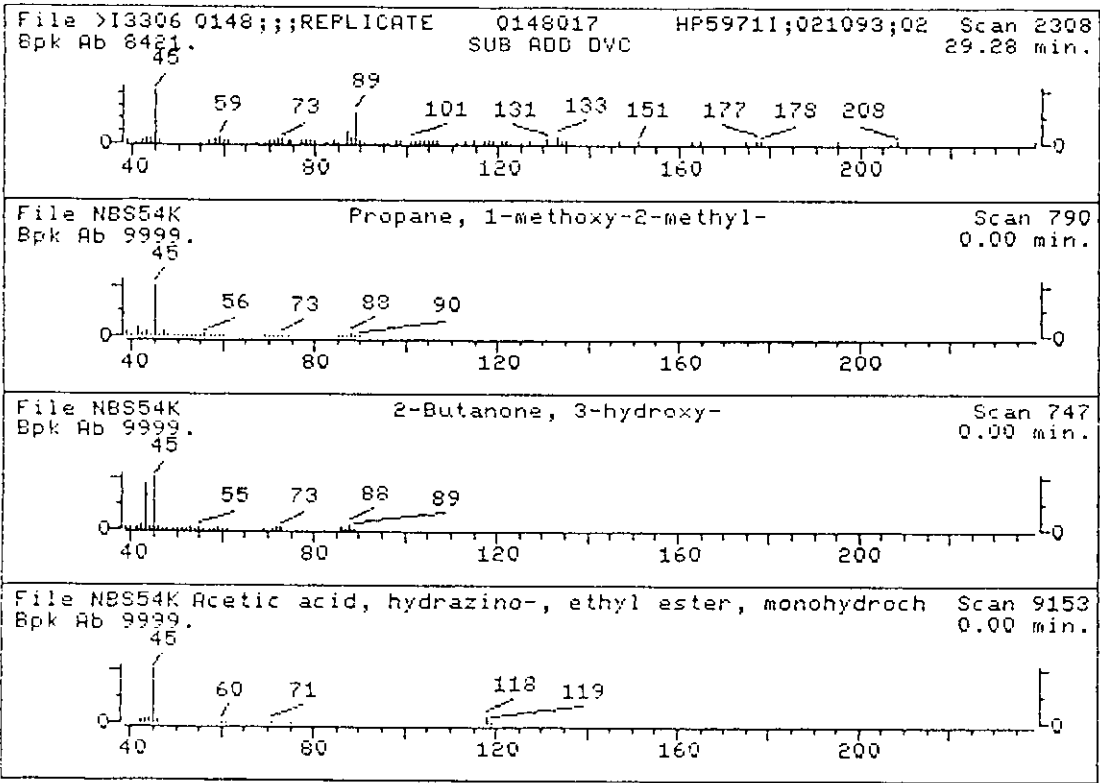


- 2. 2-Butanone, 3-hydroxy- 88 C4H8O2
- 7. Acetic acid, hydrazino-, ethyl ester, monohydrochloride 154 C4H11ClN2O2
- 4. 1,3-Butanediol 90 C4H10O2
- 5. Propanoic acid, 2-hydroxy-, methyl ester, (+-)- (9 CI) 104 C4H8O3

Sample file: >I3306 Spectrum #: 2308  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	26*	625445	348	NBS54K	27	55	2	0	100	44	8	14
2.	26*	513860	346	NBS54K	24	61	2	0	100	44	8	14
3.	25	6945922	371	NBS54K	38	51	1	0	88	50	7	14
4.	25*	107880	351	NBS54K	30	45	2	0	100	50	7	15
5.	25*	2155308	193	NBS54K	27	51	2	0	100	49	7	14

Peak#: 25 Area: 83980. Est Conc: 9. Date: 02/19/93 14:43 Inst: I

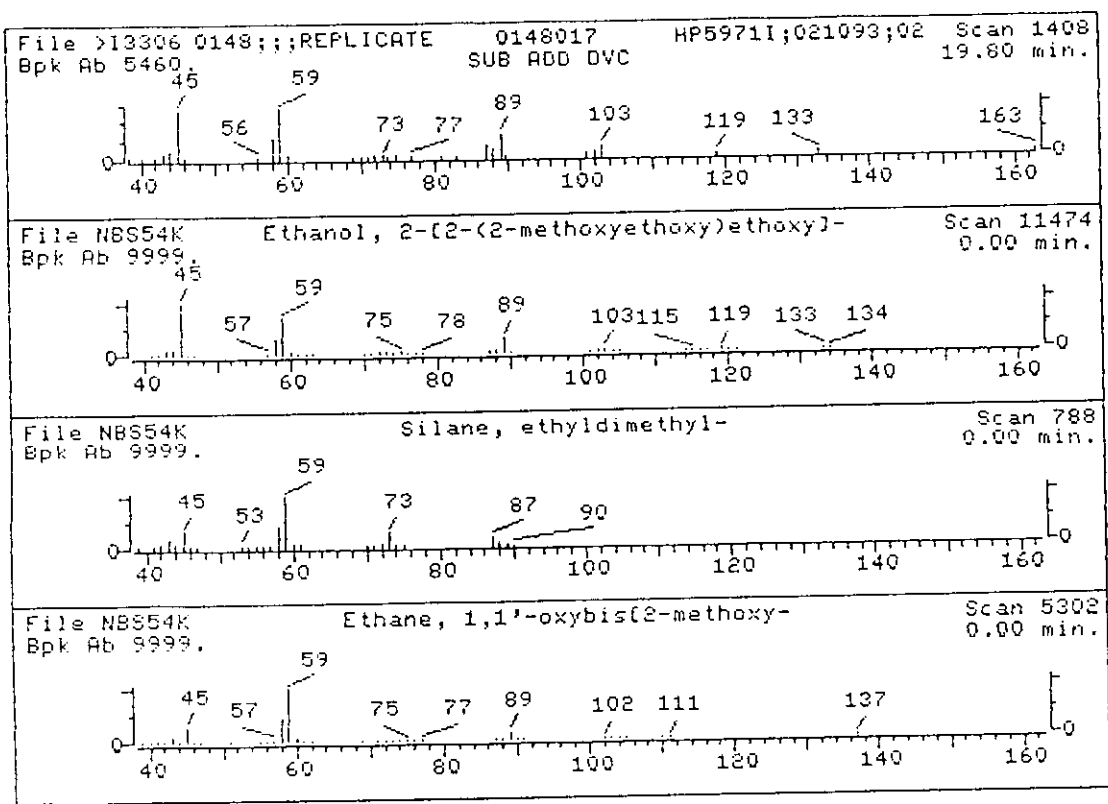


- 1. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)]- 164 C7H16O4
- 2. Silane, ethyldimethyl- 88 C4H12Si
- 3. Ethane, 1,1'-oxybis[2-methoxy- 134 C6H14O3
- 4. 2-Propanone, 1-methoxy- 88 C4H8O2
- 5. Triethylene glycol 150 C6H14O4

Sample file: >I3306 Spectrum #: 1408  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	28	112356	8547	NBS54K	55	44	2	0	129	37	10	14
2.	27*	758214	1807	NBS54K	37	61	2	0	100	42	8	15
3.	25	111966	1938	NBS54K	27	63	0	0	92	49	7	14
4.	15*	5878193	1413	NBS54K	22	54	3	0	96	58	3	12
5.	11	112276	8525	NBS54K	28	56	0	0	91	63	2	14

Peak#: 13 Area: 60345. Est Conc: 7. Date: 02/19/93 14:43 Inst: I



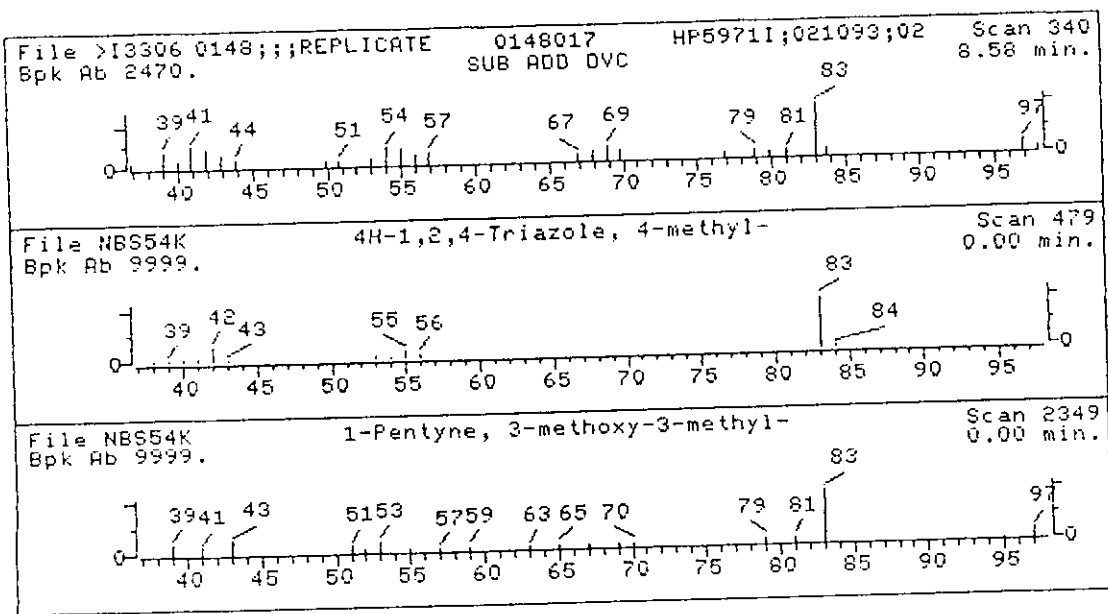
1. 4H-1,2,4-Triazole, 4-methyl-
2. 1-Pentyne, 3-methoxy-3-methyl-

83 C3H5N3  
112 C7H12O

Sample file: >I3306      Spectrum #: 340  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	26*	10570408	6458	NBS54K	21	54	1	0	100	42	8 14
2.	26	22802353	6484	NBS54K	44	38	2	0	79	45	8 14

Peak#: 2 Area: 28572. Est Conc: 6. Date: 02/19/93 14:43 Inst: I



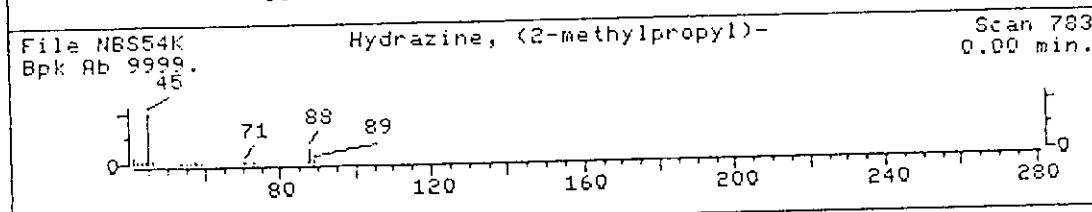
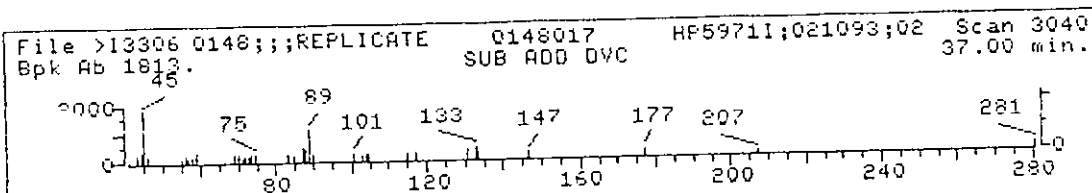
. Hydrazine, (2-methylpropyl)-

88 C4H12N2

Sample file: >I3306      Spectrum #: 3040  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 46

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	42504870	8036	NBS54K	24	57	1	0	75	52	5 14

Peak#: 34 Area: 57469. Est Conc: 6. Date: 02/19/93 14:43 Inst: I

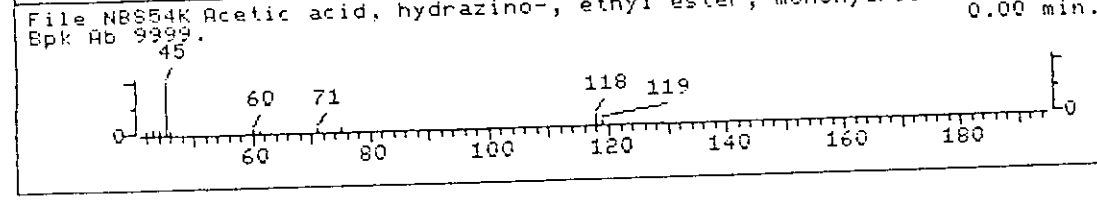
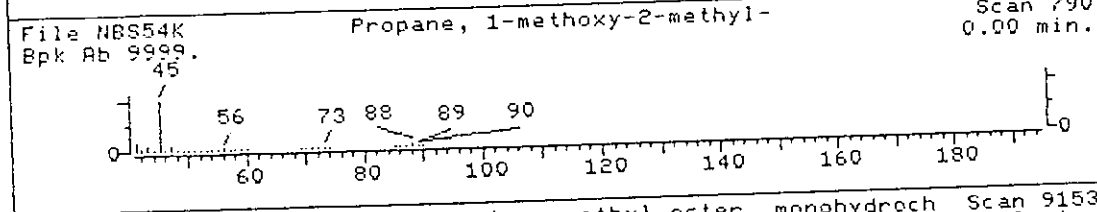
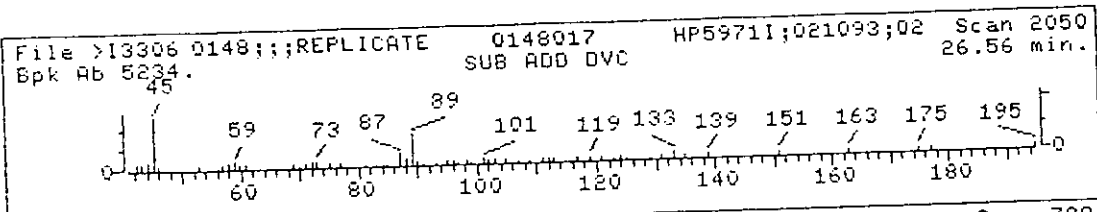


- 1. Propane, 1-methoxy-2-methyl- 88 C5H12O
- 2. Acetic acid, hydrazino-, ethyl ester, monohydrochloride 154 C4H11ClN2O2

Sample file: >I3306      Spectrum #: 2050  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	26*	625445	348	NBS54K	28	54	2	0	100	44	8	14
2.	25	6945922	371	NBS54K	33	56	1	0	100	50	7	12

Peak#: 22 Area: 47134. Est Conc:      6. Date: 02/19/93 14:43 Inst: 1





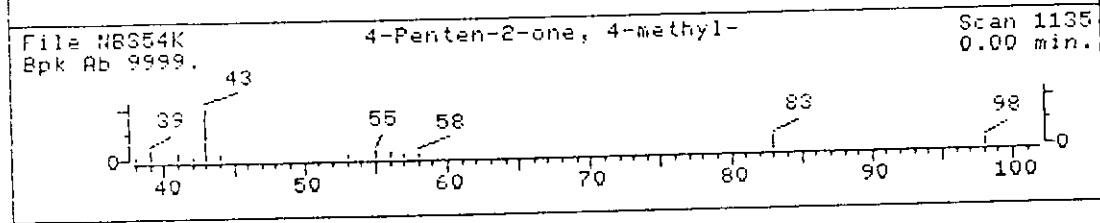
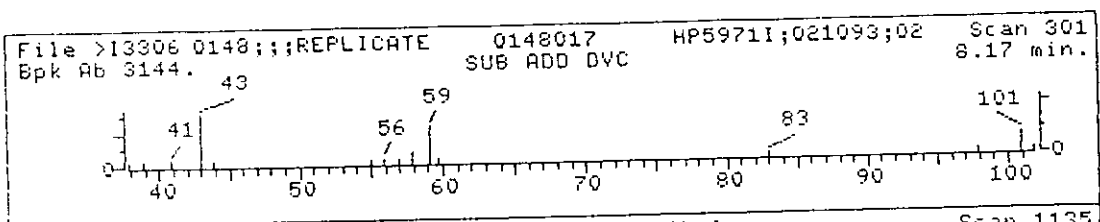
. 4-Penten-2-one, 4-methyl-

98 C6H10O

Sample file: >I3306      Spectrum #: 301  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IU
1.	25*	3744023	9897	NBS54K	36	43	2	0	71	47	7 18

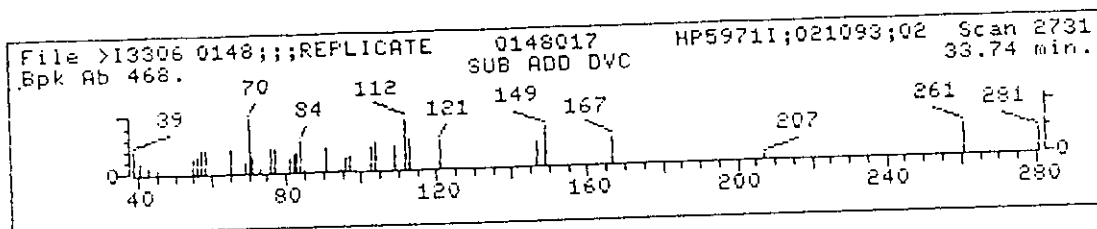
Peak#: 1 Area: 20263. Est Conc: 4. Date: 02/19/93 14:43 Inst: 1



Sample file: >I3306 Spectrum #: 2731

No data base entries were retrieved.

Peak#: 32 Area: 26793. Est Conc: 3. Date: 02/19/93 14:43 Inst: 1



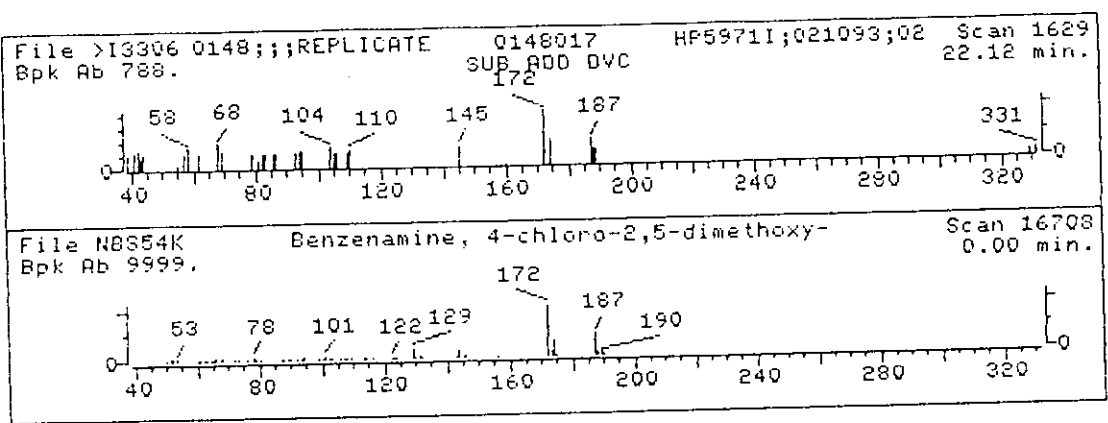
. Benzenamine, 4-chloro-2,5-dimethoxy-

187 C8H10ClNO2

Sample file: >I3306      Spectrum #: 1629  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 44

Prob.	CAS #	CDN #	ROOT	K	DK	#FLG	TILT	%	CDN	C_I	R_IV	
1.	25*	6358641	24610	NBS54K	28	89	3	0	100	41	8	13

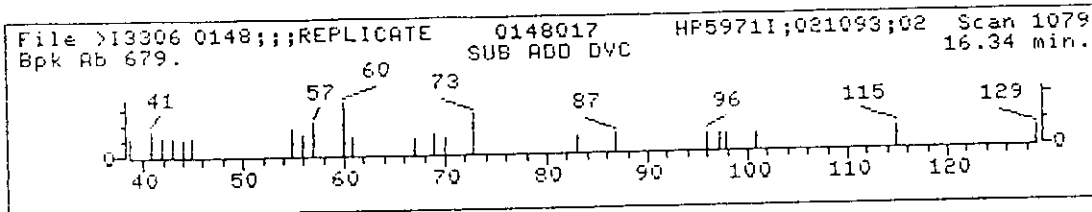
Peak#: 16 Area: 21122. Est Conc: 3. Date: 02/19/93 14:43 Inst: I



Sample file: >I3306      Spectrum #:      1079

No data base entries were retrieved.

Peak#: 11 Area: 19875. Est Conc:      3. Date: 02/19/93 14:43 Inst: 1

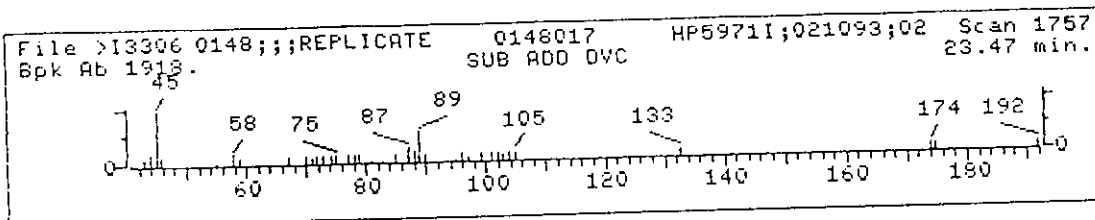


0621

Sample file: >13306 Spectrum #: 1757

No data base entries were retrieved.

Peak#: 19 Area: 25156. Est Conc: 3. Date: 02/19/93 14:43 Inst: I



0622

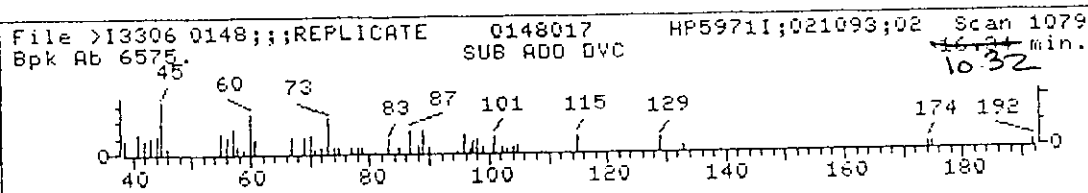
. Hydrazine, 1,2-dimethyl-

60 C2H8N2

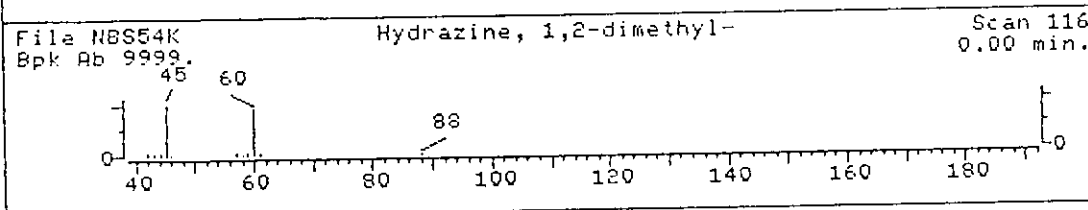
Sample file: >I3306 Spectrum #: 1079  
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25*	540738	2094	NBS54K	24	70	0	0	85	49	7	17

Peak#: 4 Area: 10488. Est Conc: 2. Date: 02/19/93 14:43 Inst: I



*amc 2/25/93*



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW-23

Lab Name: IEA/CT Contract: \_\_\_\_\_  
 Lab Code: IEACT Case No.: 0148 SAS No.: \_\_\_\_\_ SDG No.: Z0148 0623  
 Matrix: (soil/water) WATER Lab Sample ID: 0148019  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3307.D  
 Level: (low/med) LOW Date Received: 02/02/93  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
 Concentrated Extract Volume: 1000 (UL) Date Analyzed: 02/19/93  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

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

CAS NO.	COMPOUND	UG/L	Q
108-95-2	Phenol	10	U
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	23	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	4	J

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-23

Lab Name: IEA/CT Contract: \_\_\_\_\_  
 Lab Code: IEACT Case No.: 0148 SAS No.: \_\_\_\_\_ SDG No.: Z0148  
 Matrix: (soil/water) WATER Lab Sample ID: 0148019  
 Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3307.D  
 Level: (low/med) LOW Date Received: 02/02/93  
 % Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
 Concentrated Extract Volume: 1000 (UL) Date Analyzed: 02/19/93  
 Injection Volume: 2.0 (uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	4	J
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	2	J
120-12-7	Anthracene	10	U
86-74-8	Carbazole	6	J
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U



0625

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

MW-23

Lab Name: IEA/CT Contract:  
Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148  
Matrix: (soil/water) WATER Lab Sample ID: 0148019  
Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3307.D  
Level: (low/med) LOW Date Received: 02/02/93  
% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
Concentrated Extract Volume: 1000(uL) Date Analyzed: 02/19/93  
Injection Volume: 2.0(uL) Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

Number TICs found: 20

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

GC 2/25/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	31.82	46	✓
2.	UNKNOWN DIMETHYL-NAPHTHALENE	19.00	21	
3.	UNKNOWN C <sub>11</sub> H <sub>14</sub>	17.11	16	
4.	UNKNOWN TRIMETHYL-NAPHTHALENE	20.76	13	
5.	UNKNOWN METHYL-BENZO[B]THIOPHENE	17.01	12	
6.	UNKNOWN C <sub>10</sub> H <sub>12</sub>	14.65	12	
7.	UNKNOWN DIMETHYL-NAPHTHALENE	18.76	12	
8.	UNKNOWN C <sub>4</sub> ALKYL BENZENE	14.07	11	
9.	UNKNOWN C <sub>11</sub> H <sub>14</sub>	15.45	11	
10.	UNKNOWN DIMETHYL-NAPHTHALENE	19.29	10	
11.	✓ ✓ ✓	19.53	10	
12.	UNKNOWN	15.40	9	
13.	UNKNOWN C <sub>13</sub> H <sub>12</sub>	21.51	9	
14.	UNKNOWN C <sub>3</sub> ALKYL BENZENE	12.52	9	
15.	UNKNOWN C <sub>4</sub> ALKYL BENZENE	13.99	8	
16.	UNKNOWN C <sub>10</sub> H <sub>12</sub>	14.44	8	
17.	UNKNOWN	16.80	7	
18.		15.38	7	
19.	↓	28.99	6	
20.		14.88	6	✓
21.	UNKNOWN C <sub>4</sub> ALKYL BENZENE	13.26	5	
22.		17.84	5	
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

## QUANT REPORT

Page 1

Operator ID: USER1      Quant Rev: 7      Quant Time: 930222 18:00  
 Output File: >I3307::A6      Injected at: 930219 15:43  
 Data File: >I3307::A5      Dilution Factor: .50000  
 Name: 0148;;;MW-23      Instrument ID: \*\*MSD  
 Misc: 0148019      HP59711;021093;021193;LLW;1;;;I02

ID File: I\_IFI::A5

Title: IF8-DLM01.8 BNA COMPOUNDS

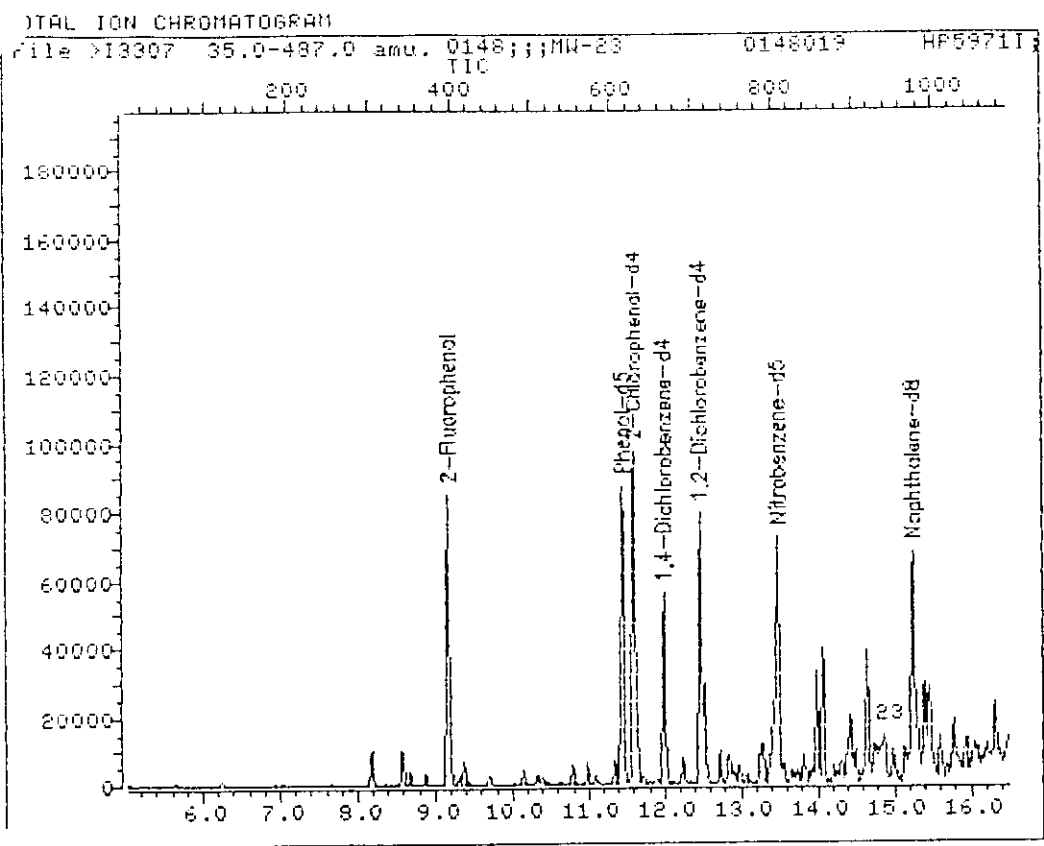
Last Calibration: 910116 11:52

Last Qual Time: 930219 10:28

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.00	151.8	19167	40.00	ug	93
2) 2-Chlorophenol-d4	11.61	132.0	67442	55.07	ug	82
3) 2-Fluorophenol	9.17	111.8	69300	55.37	ug	73
4) Phenol-d5	11.46	98.8	102710	60.06	ug	64
<del>5) Phenol</del>	<del>11.48</del>	<del>93.9</del>	<del>537</del>	<del>.357</del>	<del>ug</del>	<del>78</del>
<del>5) 1,4-Dichlorobenzene</del>	<del>12.04</del>	<del>145.7</del>	<del>398</del>	<del>.299</del>	<del>ug</del>	<del>47</del>
10) 1,2-Dichlorobenzene-d4	12.47	152.0	30827	38.50	ug	94
17) *Naphthalene-d8	15.25	135.9	67185	40.00	ug	98
19) Nitrobenzene-d5	13.48	81.8	51056	37.95	ug	70
<del>7 bis(2-Chloroethoxy)methane</del>	<del>14.08</del>	<del>92.0</del>	<del>354</del>	<del>.185</del>	<del>ug</del>	<del>74</del>
<del>19) 4-Chloro-3-methylphenol</del>	<del>17.17</del>	<del>186.9</del>	<del>243</del>	<del>.196</del>	<del>ug</del>	<del>58</del>
✓ 20) 2-Methylnaphthalene	17.40	141.9	54825	23.37	ug	96
31) *Acenaphthene-d10	19.90	163.9	39069	40.00	ug	96
35) 2-Fluorobiphenyl	18.14	171.8	87625	36.43	ug	97
<del>36) 2-Chloronaphthalene</del>	<del>19.65</del>	<del>161.0</del>	<del>2085</del>	<del>.946</del>	<del>ug</del>	<del>56</del>
<del>48) 2,6-Dinitrotoluene</del>	<del>19.51</del>	<del>164.0</del>	<del>616</del>	<del>.894</del>	<del>ug</del>	<del>74</del>
✓ 42) Acenaphthene	19.98	152.9	8905	4.51	ug	98
✓ 45) Dibenzofuran	20.40	167.8	11078	3.59	ug	94
<del>47) Diethylphthalate</del>	<del>21.16</del>	<del>148.8</del>	<del>2028</del>	<del>.739</del>	<del>ug</del>	<del>71</del>
<del>47) Fluorene</del>	<del>21.32</del>	<del>165.9</del>	<del>16186</del>	<del>8.08</del>	<del>ug</del>	<del>97</del>
51) 2,4,6-Tribromophenol	22.04	329.6	32593	57.17	ug	98
52) *Phenanthrene-d10	23.79	187.9	67753	40.00	ug	98
<del>53) 4,6-Dinitro-2-methylphenol</del>	<del>21.70</del>	<del>197.9</del>	<del>238</del>	<del>.426</del>	<del>ug</del>	<del>43</del>
✓ 58) Phenanthrene	23.85	177.9	7882	2.52	ug	92
✓ 59) Carbazole	24.43	166.8	6226	6.21	ug	89
<del>60) Anthracene</del>	<del>23.96</del>	<del>177.9</del>	<del>1282</del>	<del>.400</del>	<del>ug</del>	<del>76</del>
<del>61) Di-n-butylphthalate</del>	<del>25.45</del>	<del>148.0</del>	<del>1713</del>	<del>.399</del>	<del>ug</del>	<del>31</del>
<del>62) Fluoranthene</del>	<del>27.01</del>	<del>201.9</del>	<del>1325</del>	<del>.382</del>	<del>ug</del>	<del>1</del>
63) *Chrysene-d12	31.07	240.0	59038	40.00	ug	97
65) Terphenyl-d14	28.04	244.0	89168	34.26	ug	97
<del>66) Butylbenzylphthalate</del>	<del>29.32</del>	<del>148.8</del>	<del>984</del>	<del>.460</del>	<del>ug</del>	<del>23</del>
✓ 70) bis(2-Ethylhexyl)phthalate	31.20	148.8	6416	2.42	ug	98
71) *Perylene-d12	37.74	264.0	56449	40.00	ug	97
<del>72) Di-n-octylphthalate</del>	<del>33.74</del>	<del>148.9</del>	<del>1614</del>	<del>.324</del>	<del>ug</del>	<del>5</del>

Compound is ISTD

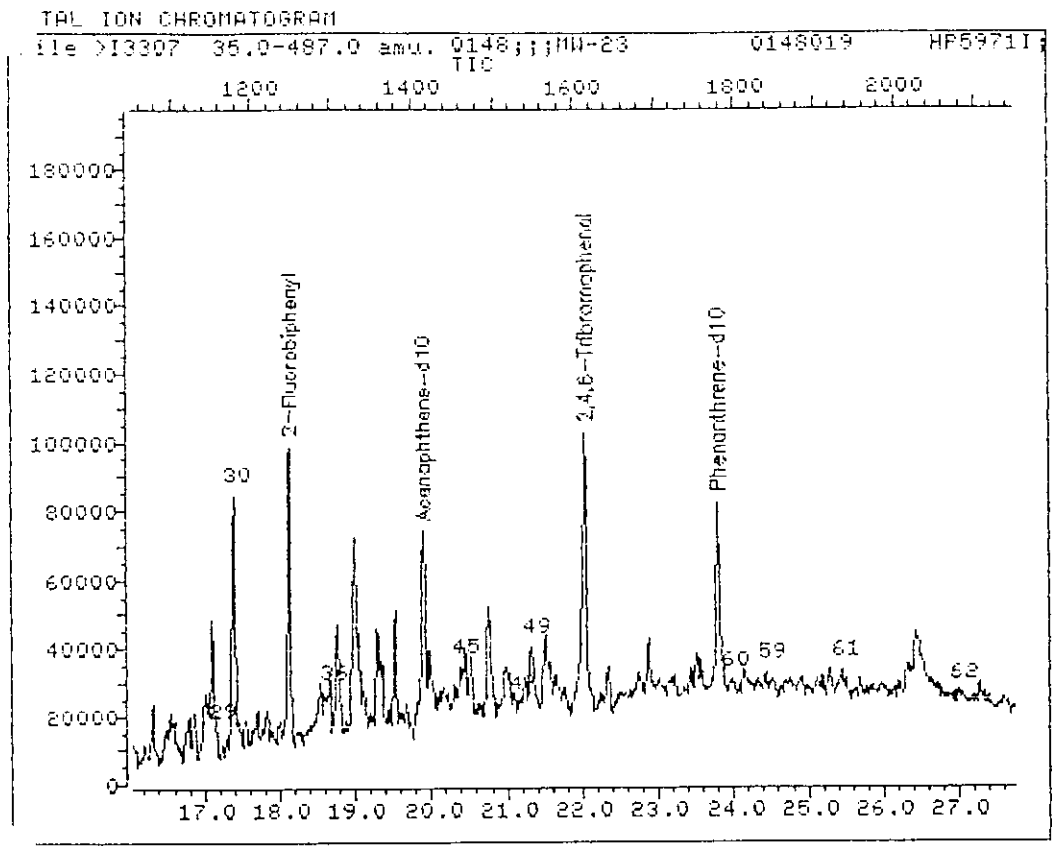
Carbazole



Data File: >I3307::A5 Quant Output File: ^I3307::A6  
Name: 0148;;;MW-23 Instrument ID: \*\*MSD  
Misc: 0148019 HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Cal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 18:00  
Injected at: 930219 15:43



Data File: >I3307::A5                    Quant Output File: ^I3307::A6  
Name: 0148;;;MW-23                    Instrument ID: \*\*MSD  
Misc: 0148019                    HP59711;021093;021193;LLW;1;;;102

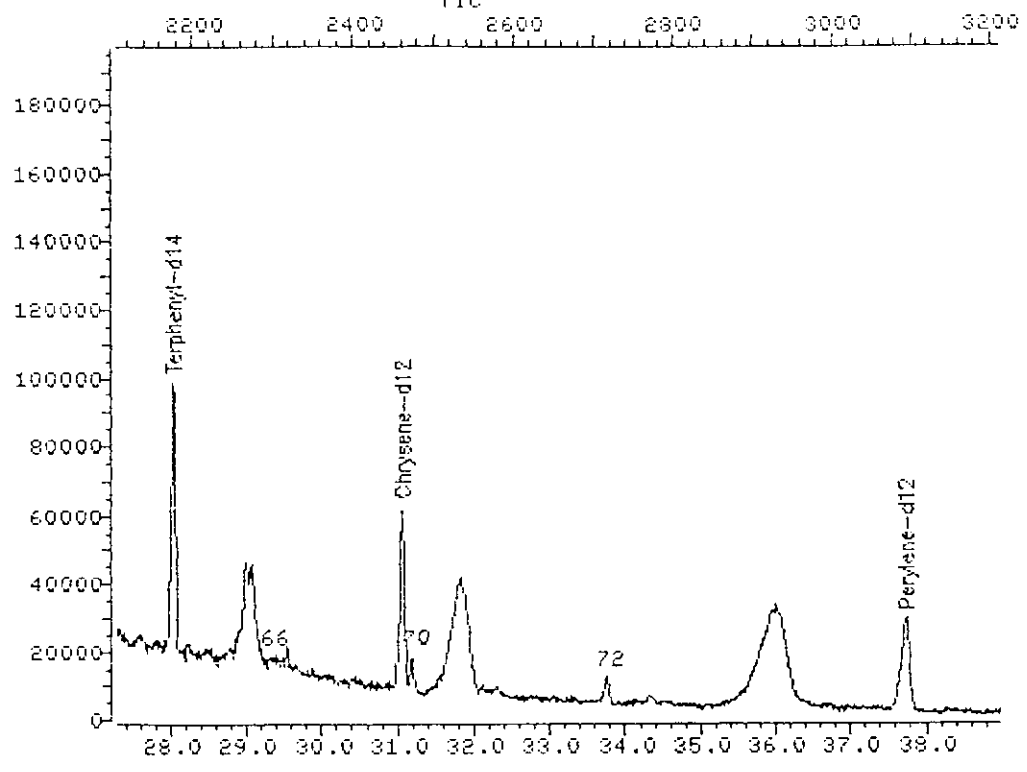
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Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Qcal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 18:00  
Injected at: 930219 15:43

0629

TAL ION CHROMATOGRAM

file >I3307 35.0-487.0 amu. 0148;;;MW-23 0148019 HP59711  
TIC



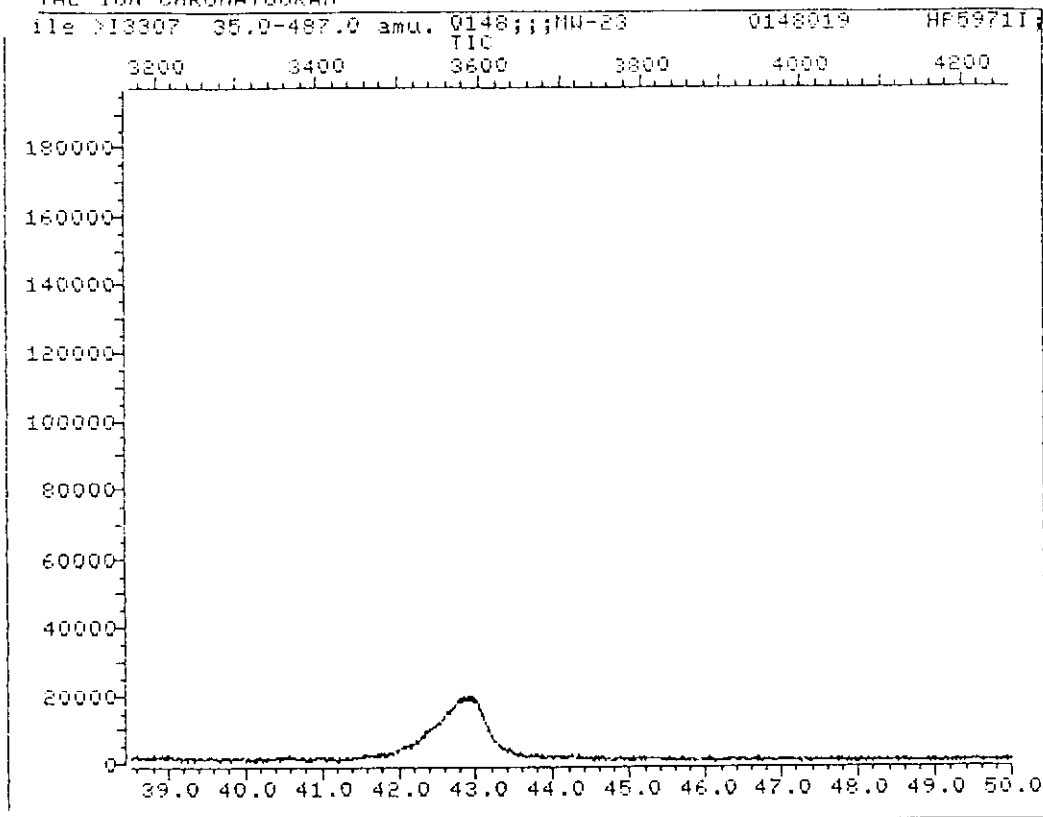
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Name: 0148;;;MW-23 Instrument ID: \*\*MSD  
Misc: 0148019 HP59711;021093;021193;LLW;1;;;102

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 18:00  
Injected at: 930219 15:43

G 0630

TAL ION CHROMATOGRAM



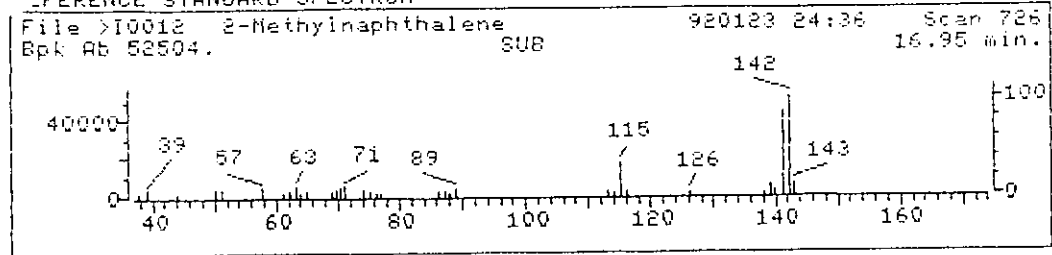
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Misc: 0148019                    HP5971I;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Cal Time: 930219 10:28

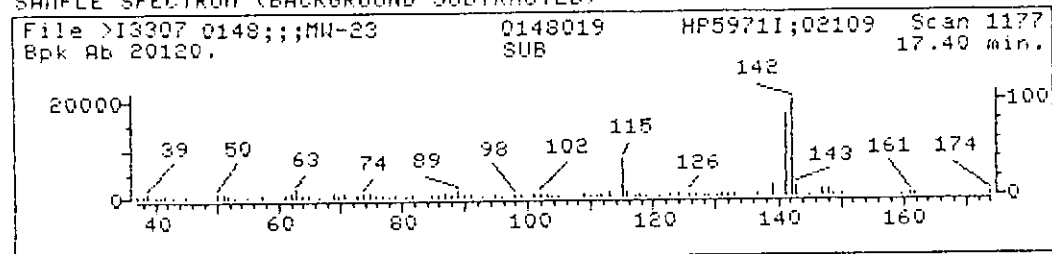
Operator ID: USER1  
Quant Time : 930222 18:00  
Injected at: 930219 15:43

00 0631

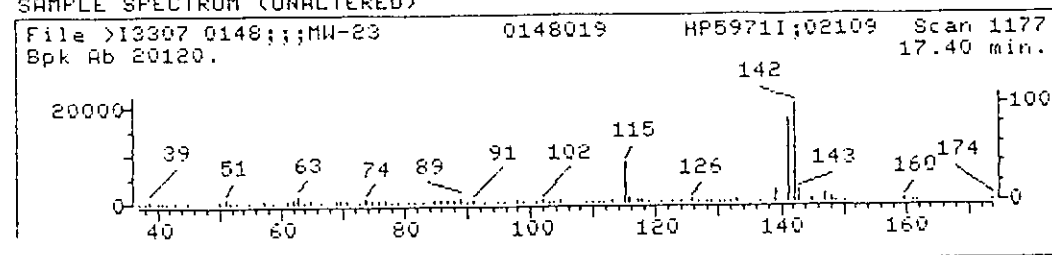
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)

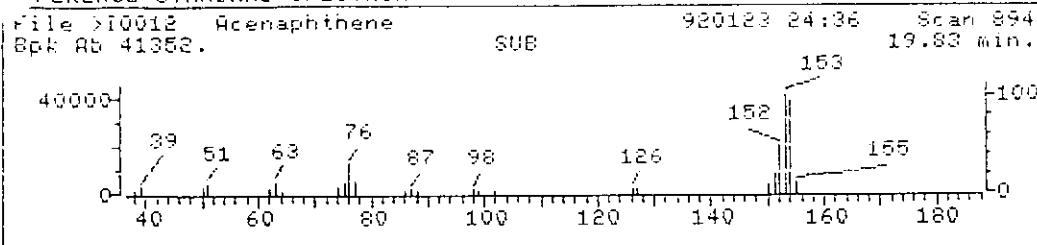


Data File: >I3307::A2 Quant Output File: ^I3307::A6  
Name: 0148;;;MW-23 Instrument ID: \*\*MSD  
Misc: 0148019 HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 16:43 Quant ID File: I\_IFI::A5  
Injected at: 930219 15:43 Last Calibration: 910116 11:52  
Last Qual Time: 930219 10:28

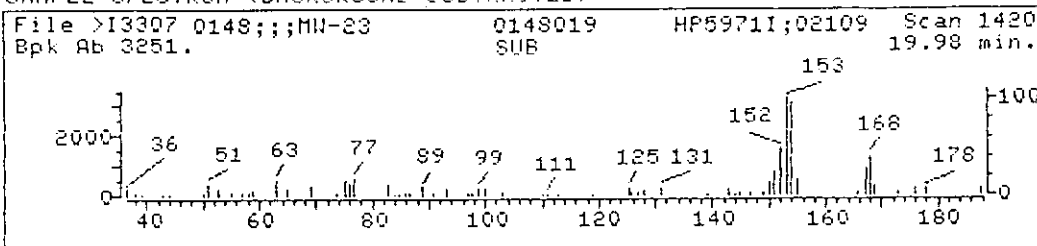
Compound No : 30  
Compound Name : 2-Methylnaphthalene  
Scan Number : 1177  
Retention Time: 17.40 min.  
Quant Ion : 141.9  
Area : 54825  
Concentration : 23.37 ug  
q-value : 96

0632

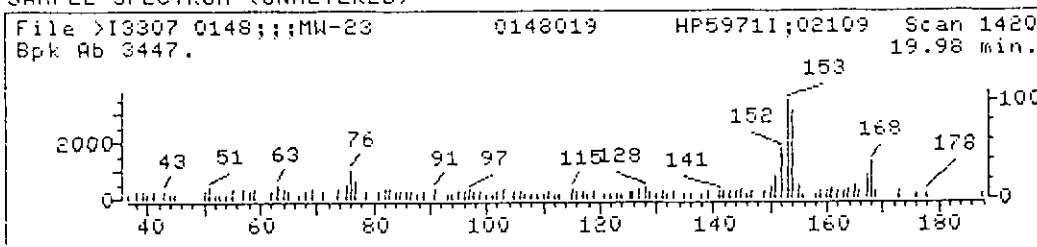
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



SAMPLE SPECTRUM (UNALTERED)



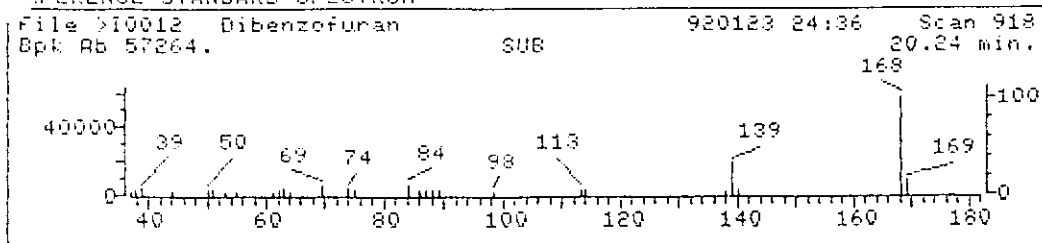
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Name: 0148;;;MW-23 Instrument ID: \*\*MSD  
Misc: 0148019 HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 16:43 Quant ID File: I\_IFI::A5  
Injected at: 930219 15:43 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No : 42  
Compound Name : Acenaphthene  
Scan Number : 1420  
Retention Time: 19.98 min.  
Quant Ion : 152.9  
Area : 8905  
Concentration : 4.51 ug  
q-value : 98

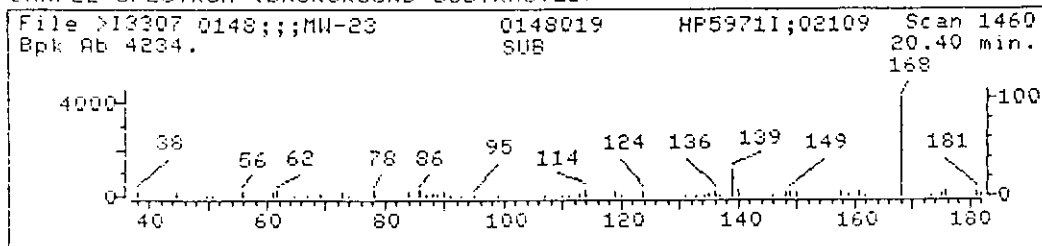


0633

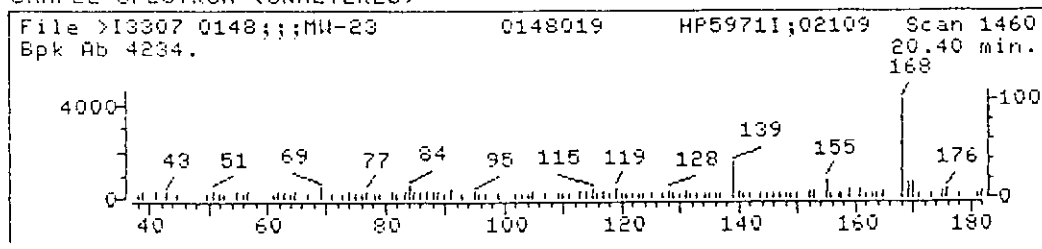
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



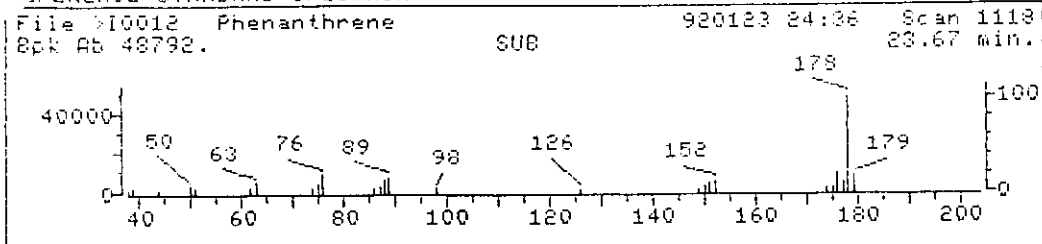
## SAMPLE SPECTRUM (UNALTERED)



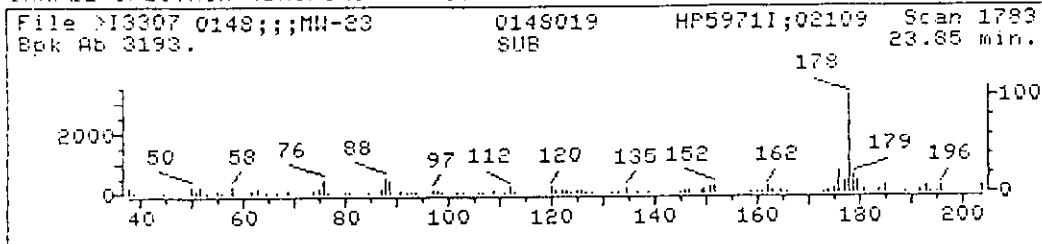
Data File: >I3307::A2 Quant Output File: ^I3307::A6  
 Name: 0148;;;MW-23 Instrument ID: \*\*MSD  
 Misc: 0148019 HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 16:43 Quant ID File: I\_IFI::A5  
 Injected at: 930219 15:43 Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 45  
 Compound Name : Dibenzofuran  
 Scan Number : 1460  
 Retention Time: 20.40 min.  
 Quant Ion : 167.8  
 Area : 11078  
 Concentration : 3.59 ug  
 q-value : 94

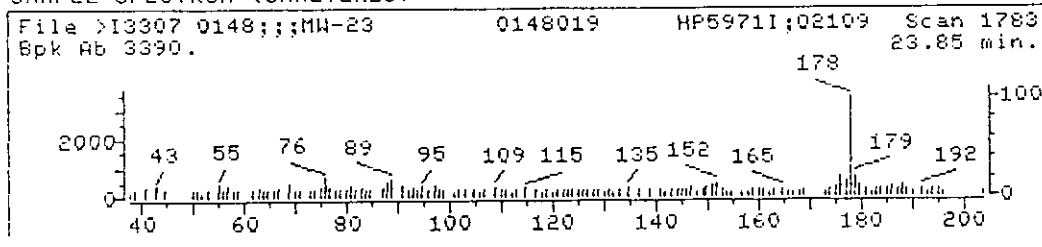
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)

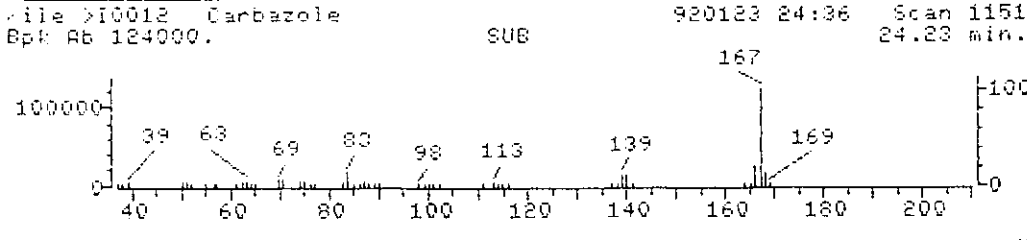


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Name: 0148;;;MW-23 Instrument ID: \*\*MSD  
Misc: 0148019 HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 16:43 Quant ID File: I\_IFI::A5  
Injected at: 930219 15:43 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

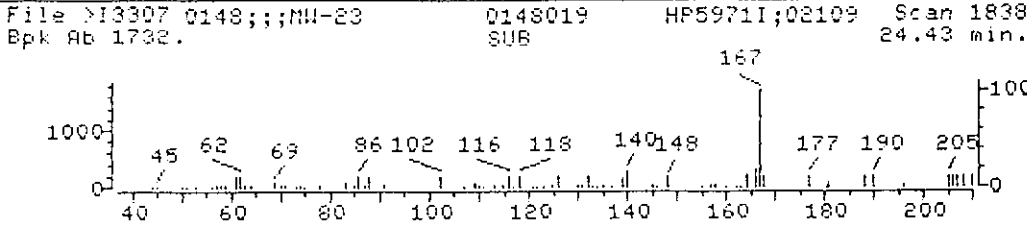
Compound No : 58  
Compound Name : Phenanthrene  
Scan Number : 1783  
Retention Time: 23.85 min.  
Quant Ion : 177.9  
Area : 7882  
Concentration : 2.52 ug  
q-value : 92

0635

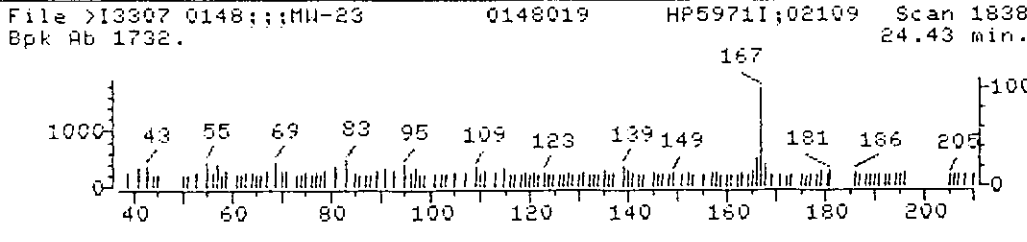
REFERENCE STANDARD SPECTRUM



SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



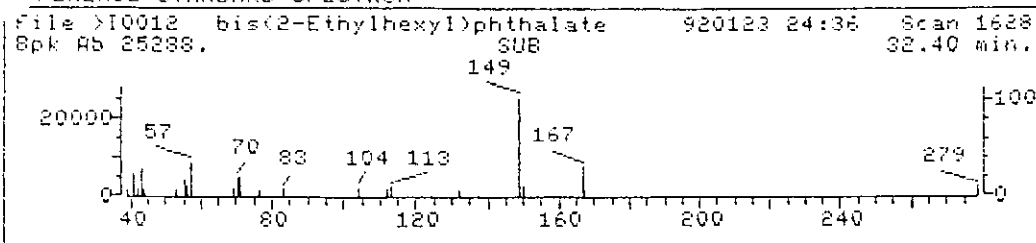
SAMPLE SPECTRUM (UNALTERED)



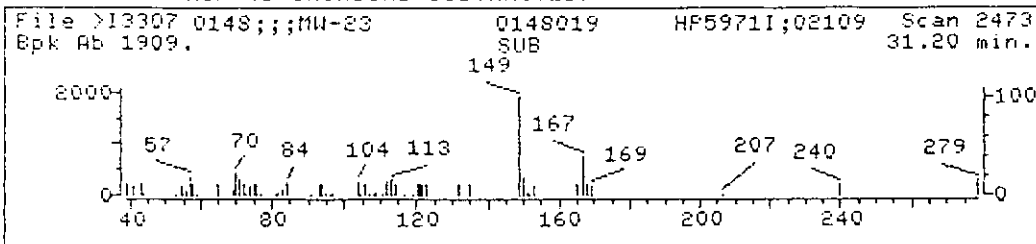
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Misc: 0148019 HP5971I;021093;021193;LLW;1;;;I02  
Quant Time: 930219 16:43 Quant ID File: I\_IFI::A5  
Injected at: 930219 15:43 Last Calibration: 910116 11:52  
Last Qcal Time: 930219 10:28

Compound No : 59  
Compound Name : Carbazole  
Scan Number : 1838  
Retention Time: 24.43 min.  
Quant Ion : 166.8  
Area : 6226  
Concentration : 6.21 ug  
q-value : 89

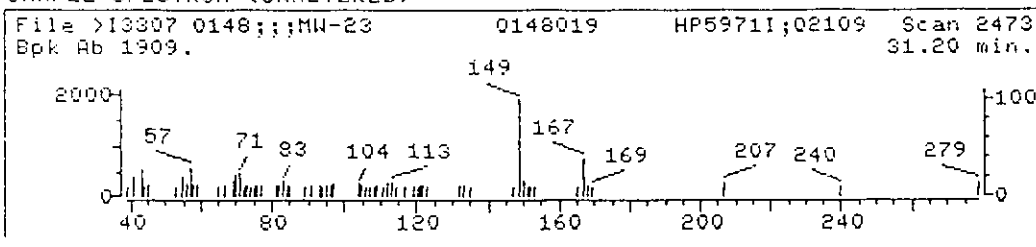
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: >I3307::A2 Quant Output File: ^I3307::A6  
 Name: 0148;;;MW-23 Instrument ID: \*\*MSD  
 Misc: 0148019 HP59711;021093;021193;LLW;1;;;I02  
 Quant Time: 930219 16:43 Quant ID File: I\_IFI::A5  
 Injected at: 930219 15:43 Last Calibration: 910116 11:52  
 Last Qcal Time: 930219 10:28

Compound No : 70  
 Compound Name : bis(2-Ethylhexyl)phthalate  
 Scan Number : 2473  
 Retention Time: 31.20 min.  
 Quant Ion : 148.8  
 Area : 6416  
 Concentration : 2.42 ug  
 q-value : 98

0637

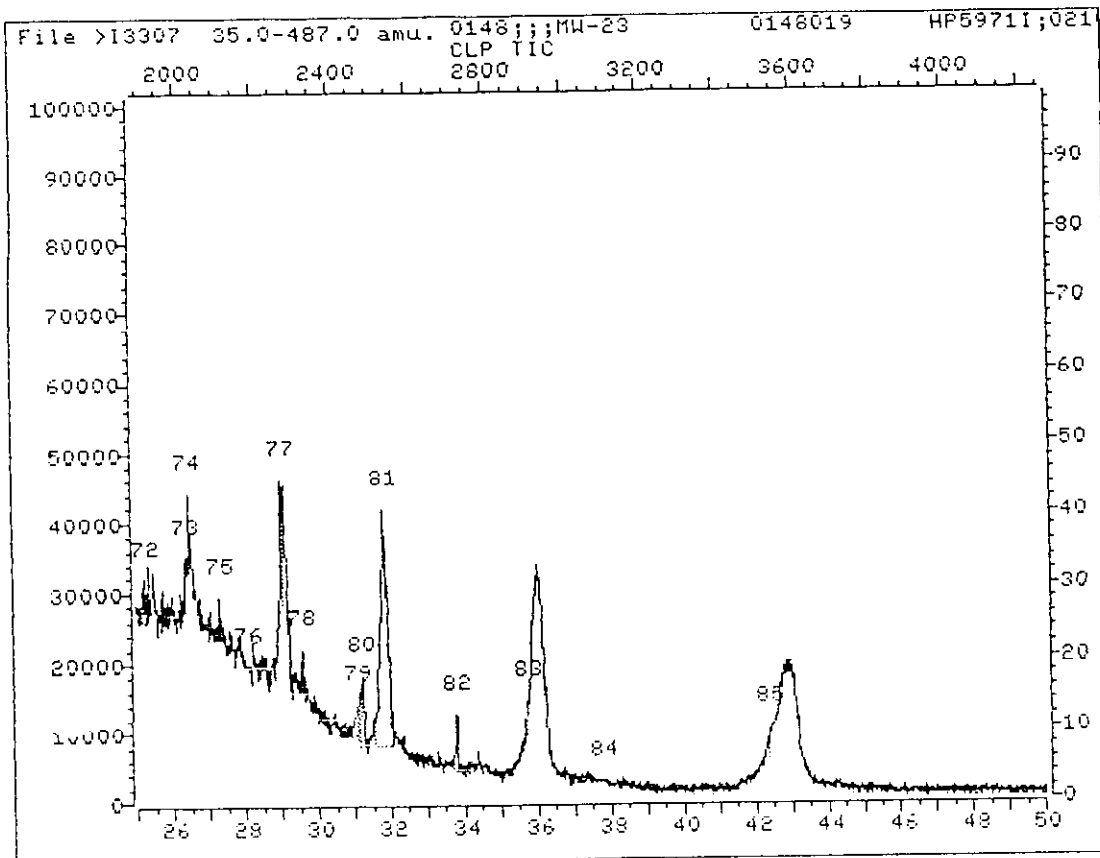
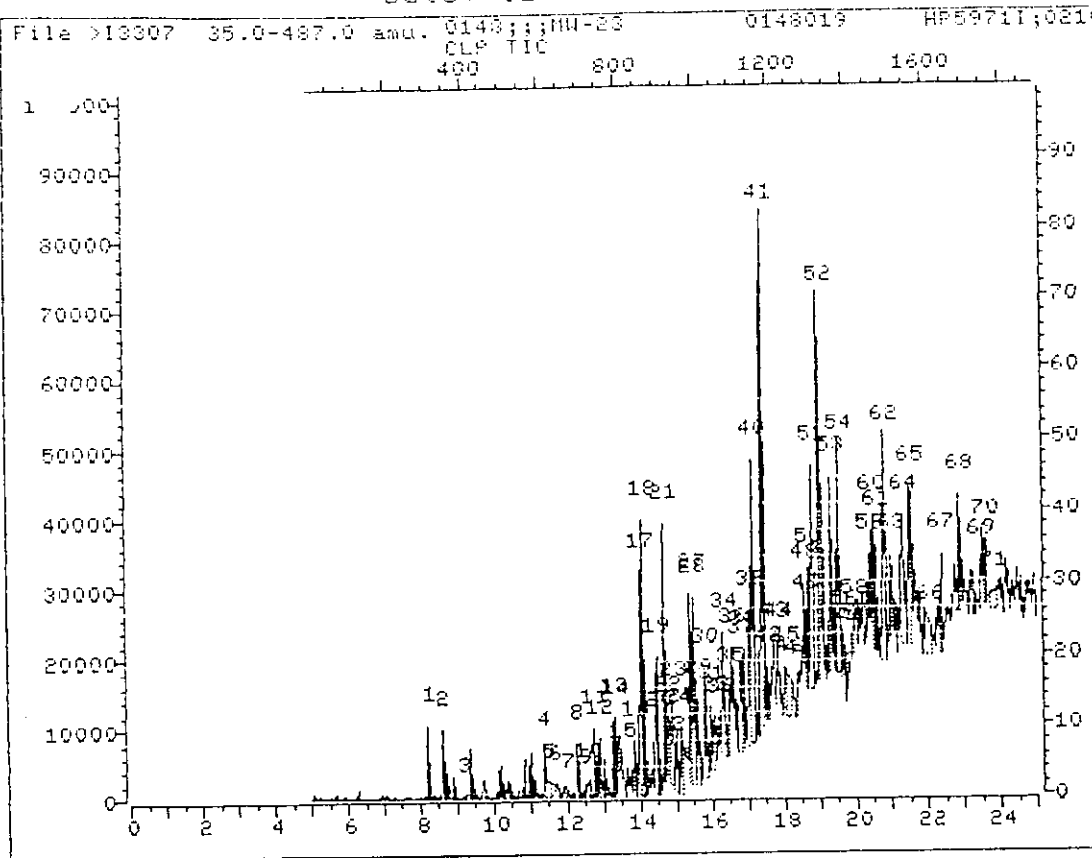
MS data file header from : >I3307::A5

Sample: 0148;;;MW-23 Operator: USER1 2/19/93 15:43  
Misc : 0148019 HP59711;021093;021193;LLW;1;;;102  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 5 Equip ID: \*\*MSD  
Method file: CSCUT Tuning file: N/A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

Date: 02/19/93 15:43 Inst: 1

0638



Date: 02/19/93 15:43 Inst: I

MW-23  
HPS971I

0639

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
81.	31.82	504923.	46.	5.		.50
52.	19.00	184064.	21.	3.		.50
40.	17.11	128812.	16.	2.		.50
62.	20.76	116537.	13.	3.		.50
39.	17.01	96136.	12.	2.		.50
21.	14.65	96929.	12.	2.		.50
51.	18.76	105493.	12.	3.		.50
18.	14.07	86226.	11.	2.		.50
28.	15.45	89328.	11.	2.		.50
53.	19.29	90670.	10.	3.		.50
54.	19.53	86278.	10.	3.		.50
27.	15.40	70789.	9.	2.		.50
65.	21.51	82103.	9.	3.		.50
10.	12.52	54179.	9.	1.		.50
17.	13.99	65517.	8.	2.		.50
19.	14.44	64308.	8.	2.		.50
37.	16.80	58000.	7.	2.		.50
30.	15.78	58346.	7.	2.		.50
<del>59.</del>	<del>19.98</del>	<del>56672.</del>	<del>6.</del>	<del>3.</del>		<del>.50</del> target
77.	28.99	69476.	6.	5.		.50
23.	14.88	47386.	6.	2.		.50
13.	13.26	29323.	5.	1.		.50
	12.84	26859.	5.	1.		.50
	18.67	41137.	5.	3.		.50
1.	8.18	22314.	4.	1.		.50
38.	16.87	34561.	4.	2.		.50
11.	12.72	20925.	4.	1.		.50
60.	20.45	37088.	4.	3.		.50
61.	20.53	38446.	4.	3.		.50
29.	15.60	32212.	4.	2.		.50
63.	20.98	31881.	4.	3.		.50
2.	8.57	22467.	4.	1.		.50
68.	22.87	46578.	4.	4.		.50
34.	16.32	34311.	4.	2.		.50
35.	16.50	35240.	4.	2.		.50
14.	13.29	16251.	3.	1.		.50
22.	14.74	20968.	3.	2.		.50
8.	12.23	19114.	3.	1.		.50
48.	18.54	22165.	3.	3.		.50
31.	15.95	24102.	3.	2.		.50
32.	16.05	24882.	3.	2.		.50
67.	22.34	31304.	3.	4.		.50
24.	15.00	24796.	3.	2.		.50
25.	15.13	26650.	3.	2.		.50
20.	14.50	22538.	3.	2.		.50

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range	TI/SI
1,4-DICHLOROBENZENE-D4	12.00	119203.	0.00 13.62	6.2
NAPHTHALENE-D8	15.25	161527.	13.62 17.58	2.4
ACENAPHTHENE-D10	19.98	176104.	17.58 21.85	4.5

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 16  
Target peaks matched: 4  
Total TIC identified: 54

0640

MW23  
HP5971 I

TICS : 4:48 PM MON., 22 FEB., 1993



0641

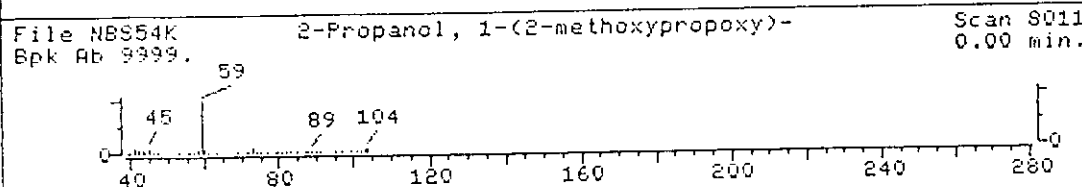
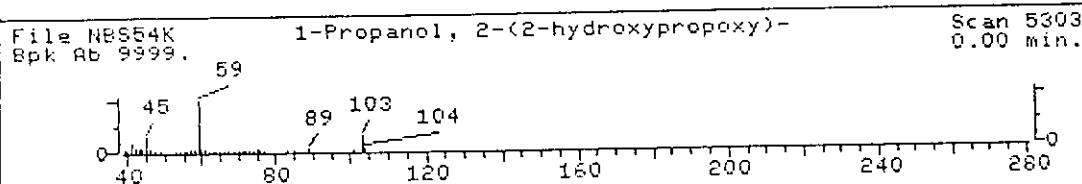
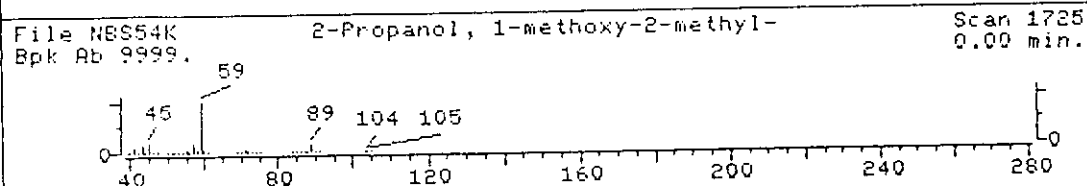
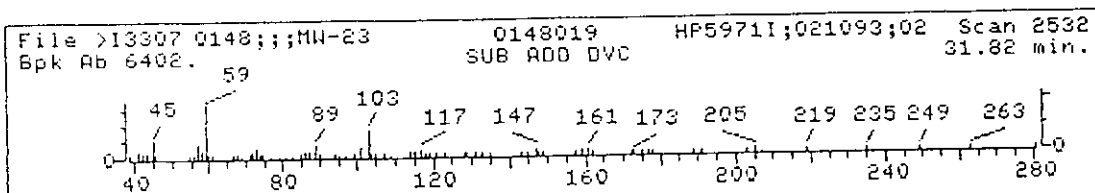
- 2-Propanol, 1-methoxy-2-methyl-
- 1. 1-Propanol, 2-(2-hydroxypropoxy)-
- 3. 2-Propanol, 1-(2-methoxypropoxy)-
- 4. Pentanamide
- 5. Pentanamide, 4-methyl-

- 104 C5H12O2
- 134 C6H14O3
- 148 C7H16O3
- 101 C5H11NO
- 115 C6H13NO

Sample file: >I3307      Spectrum #: 2532  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	26*	3587642	1855	NBS54K	29	62	2	0	100	43	8	14
2.	25	106627	1939	NBS54K	35	51	1	0	89	43	8	13
3.	24	13429077	1968	NBS54K	40	45	0	0	88	54	7	22
4.	20*	626971	1827	NBS54K	32	53	2	0	100	54	5	16
5.	20*	1119295	1866	NBS54K	31	56	3	0	100	54	5	13

Peak#: 81 Area: 504923. Est Conc: 46. Date: 02/19/93 15:43 Inst: 1

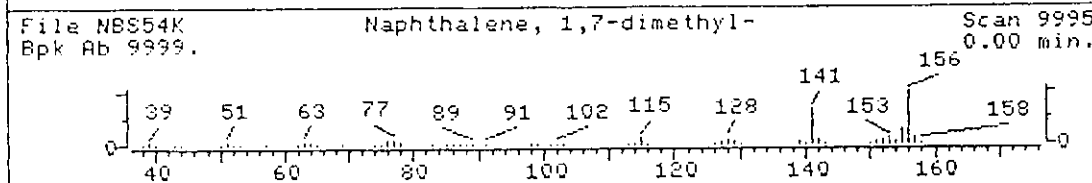
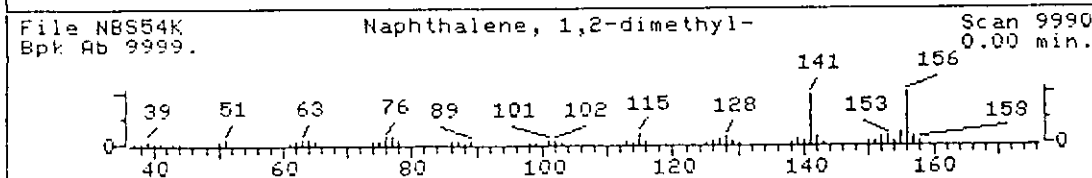
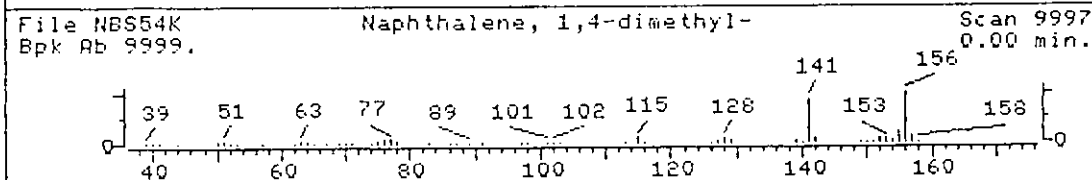
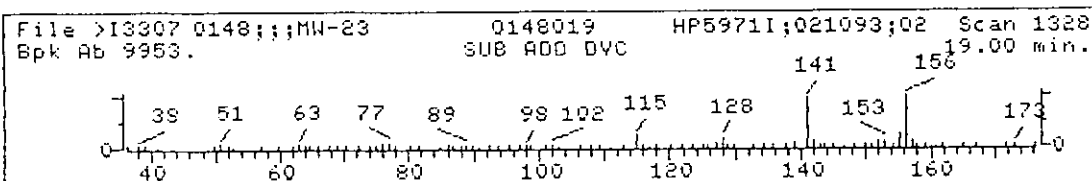


1. Naphthalene, 1,4-dimethyl-	156 C12H12
2. Naphthalene, 1,2-dimethyl-	156 C12H12
3. Naphthalene, 1,7-dimethyl-	156 C12H12
4. Naphthalene, 2,3-dimethyl-	156 C12H12
5. Naphthalene, 1,8-dimethyl-	156 C12H12

Sample file: >I3307 Spectrum #: 1328  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 40

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	96*	571584	21699	NBS54K	93	15	0	0	100	4	72	96
2.	94*	573988	21692	NBS54K	80	33	0	0	77	12	64	94
3.	93*	575371	21697	NBS54K	83	25	0	0	84	22	53	95
4.	92*	581408	21691	NBS54K	76	30	0	0	78	24	53	93
5.	89*	569415	21694	NBS54K	71	39	0	0	72	24	47	89

Peak#: 52 Area: 184064. Est Conc: 21. Date: 02/19/93 15:43 Inst: I



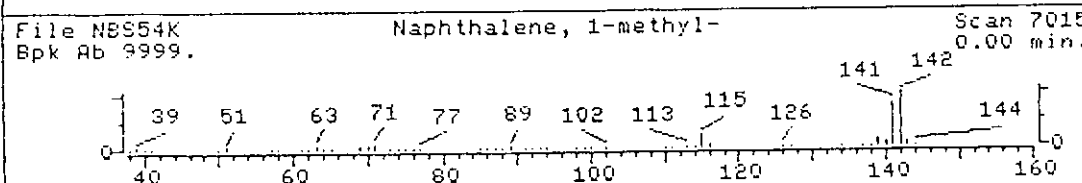
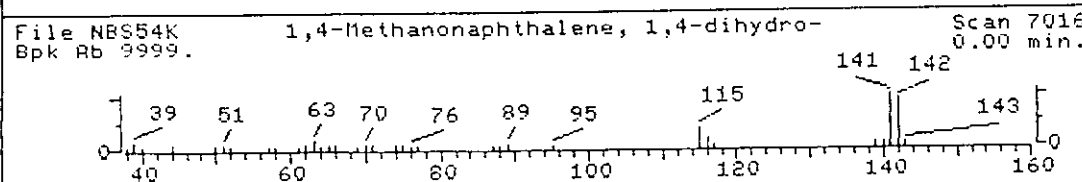
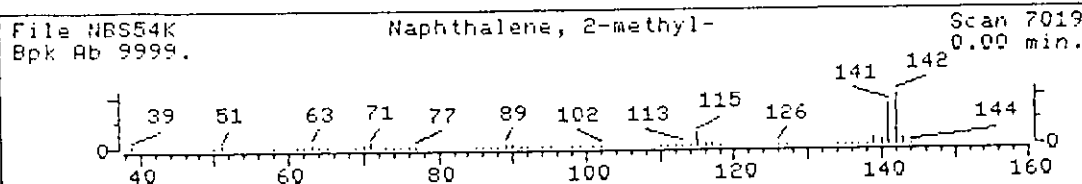
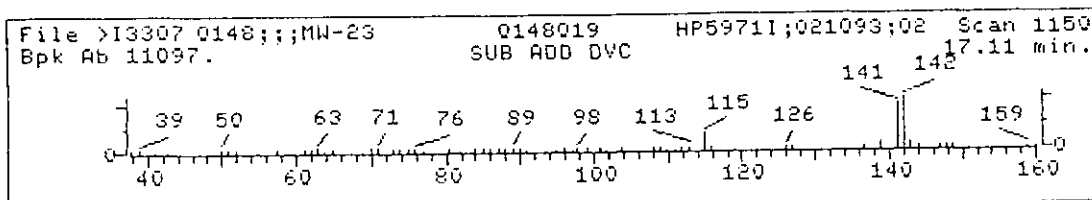
0643

- 1. Naphthalene, 2-methyl- 142 C11H10
- 2. 1,4-Methanonaphthalene, 1,4-dihydro- 142 C11H10
- 3. Naphthalene, 1-methyl- 142 C11H10
- 4. 1H-Indene, 1-ethylidene- 142 C11H10
- 5. Benzeneacetonitrile, 2-cyano- 142 C9H6N2

Sample file: >I3307 Spectrum #: 1150  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	78*	91576	19096	NBS54K	47	51	3	0	100	5	55	14
2.	78*	4453901	19093	NBS54K	39	63	2	0	82	3	55	14
3.	78*	90120	19092	NBS54K	53	47	3	0	100	5	55	17
4.	56*	2471832	19094	NBS54K	53	47	2	0	69	21	22	28
5.	32*	3759282	19087	NBS54K	45	49	2	0	85	42	12	23

Peak#: 40 Area: 128812. Est Conc: 16. Date: 02/19/93 15:43 Inst: 1



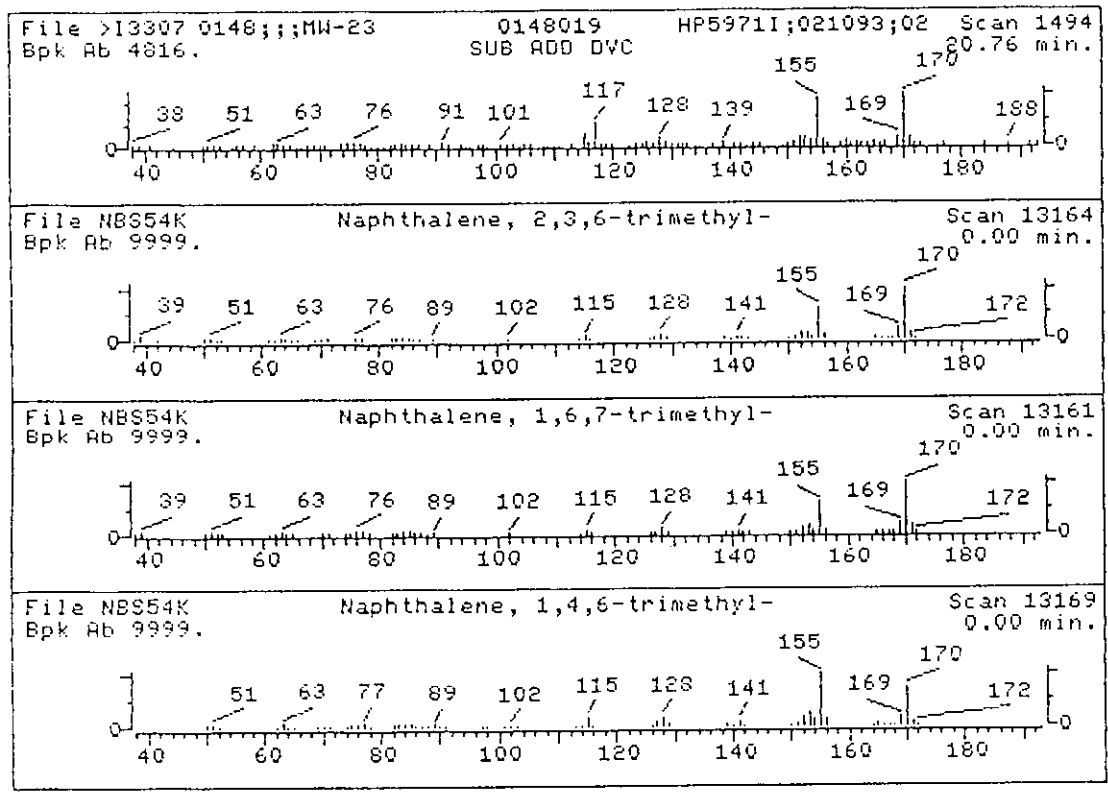
0644

- 1. Naphthalene, 2,3,6-trimethyl- 170 C13H14
- 2. Naphthalene, 1,6,7-trimethyl- 170 C13H14
- 3. Naphthalene, 1,4,6-trimethyl- 170 C13H14
- 4. Naphthalene, 1,4,5-trimethyl- 170 C13H14
- 5. 1H,3H-Thieno[3,4-c]thiophene, 4,6-dimethyl- 170 C8H10S2

Sample file: >I3307 Spectrum #: 1494  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	85*	829265	24255	NBS54K	71	38	0	0	69	39	37 89
2.	85*	2245387	24253	NBS54K	70	38	0	0	71	40	37 89
3.	69*	2131422	24259	NBS54K	75	44	1	0	66	40	28 73
4.	49*	2131411	24258	NBS54K	70	48	0	0	54	60	18 89
5.	42*	15441540	24208	NBS54K	29	103	3	0	100	22	17 13

Peak#: 62 Area: 116537. Est Conc: 13. Date: 02/19/93 15:43 Inst: 1



0645

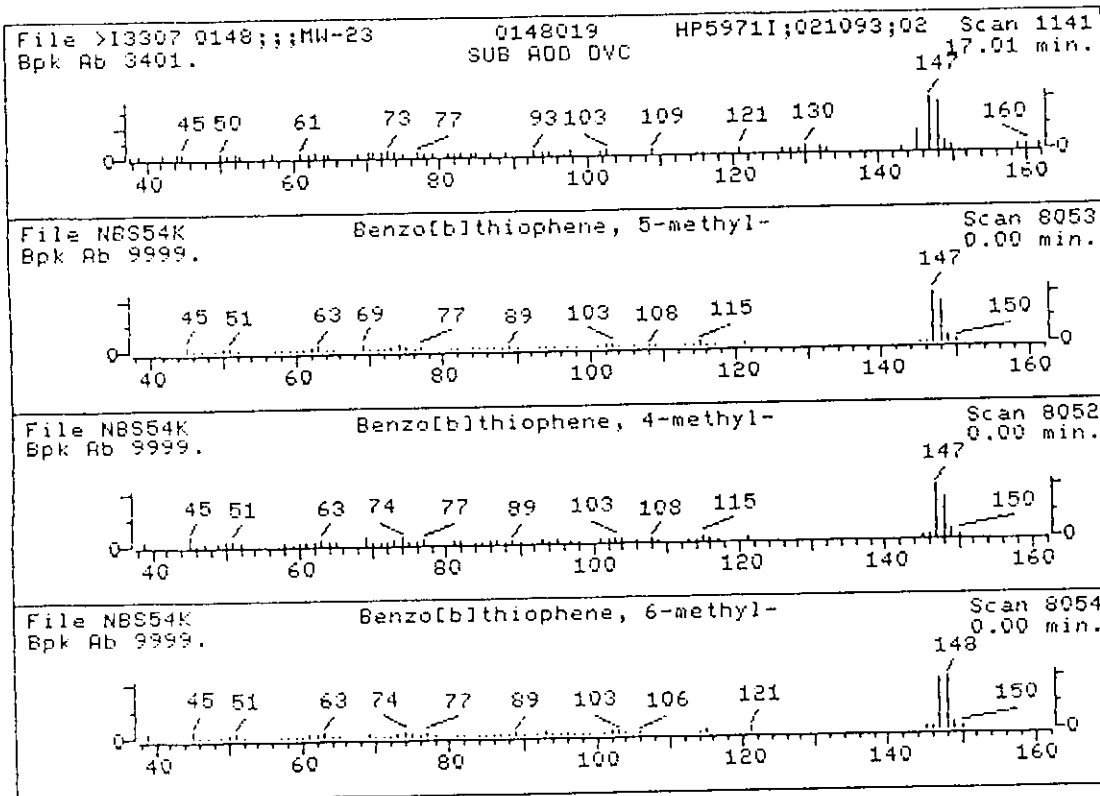
- 1. Benzo[b]thiophene, 5-methyl-
- 2. Benzo[b]thiophene, 4-methyl-
- 3. Benzo[b]thiophene, 6-methyl-
- 4. 2-Propenoic acid, 3-phenyl-
- 5. Pyridine, 4-(1-pyrrolidinyl)-

148 C9H8S  
 148 C9H8S  
 148 C9H8S  
 148 C9H8O2  
 148 C9H12N2

Sample file: >I3307      Spectrum #: 1141  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV	
1.	66*	14315141	20107	NBS54K	62	36	2	0	100	18	31	41
2.	63*	14315118	20106	NBS54K	57	41	2	0	100	18	30	34
3.	63*	16587476	20108	NBS54K	56	42	2	0	92	18	30	33
4.	52*	621829	20092	NBS54K	30	81	3	0	100	20	20	13
5.	42*	2456817	20112	NBS54K	25	86	3	0	100	22	17	13

Peak#: 39 Area: 96136. Est Conc: 12. Date: 02/19/93 15:43 Inst: I

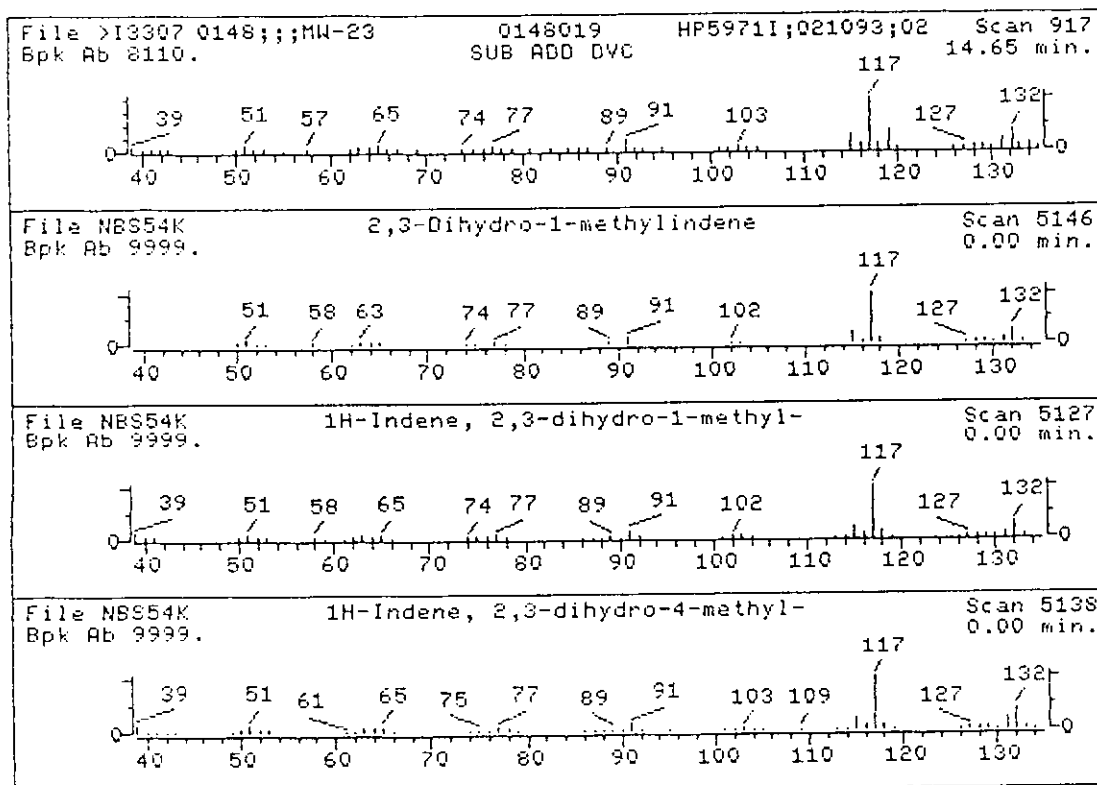


2,3-Dihydro-1-methylindene	132 C10H12
2. 1H-Indene, 2,3-dihydro-1-methyl-	132 C10H12
3. 1H-Indene, 2,3-dihydro-4-methyl-	132 C10H12
4. 1H-Indene, 2,3-dihydro-5-methyl-	132 C10H12
5. Benzene, 2-ethenyl-1,4-dimethyl-	132 C10H12

Sample file: >I3307      Spectrum #: 917  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	91*	27133933	13904	NBS54K	73	22	0	0	100	23	53	92
2.	86*	767588	13901	NBS54K	69	28	0	0	100	23	47	86
3.	82*	824226	16768	NBS54K	66	41	0	0	81	25	41	78
4.	82*	874351	16763	NBS54K	65	41	0	0	72	23	41	78
5.	66*	2039896	16758	NBS54K	75	32	1	0	52	41	24	73

Peak#: 21 Area: 96929. Est Conc: 12. Date: 02/19/93 15:43 Inst: I

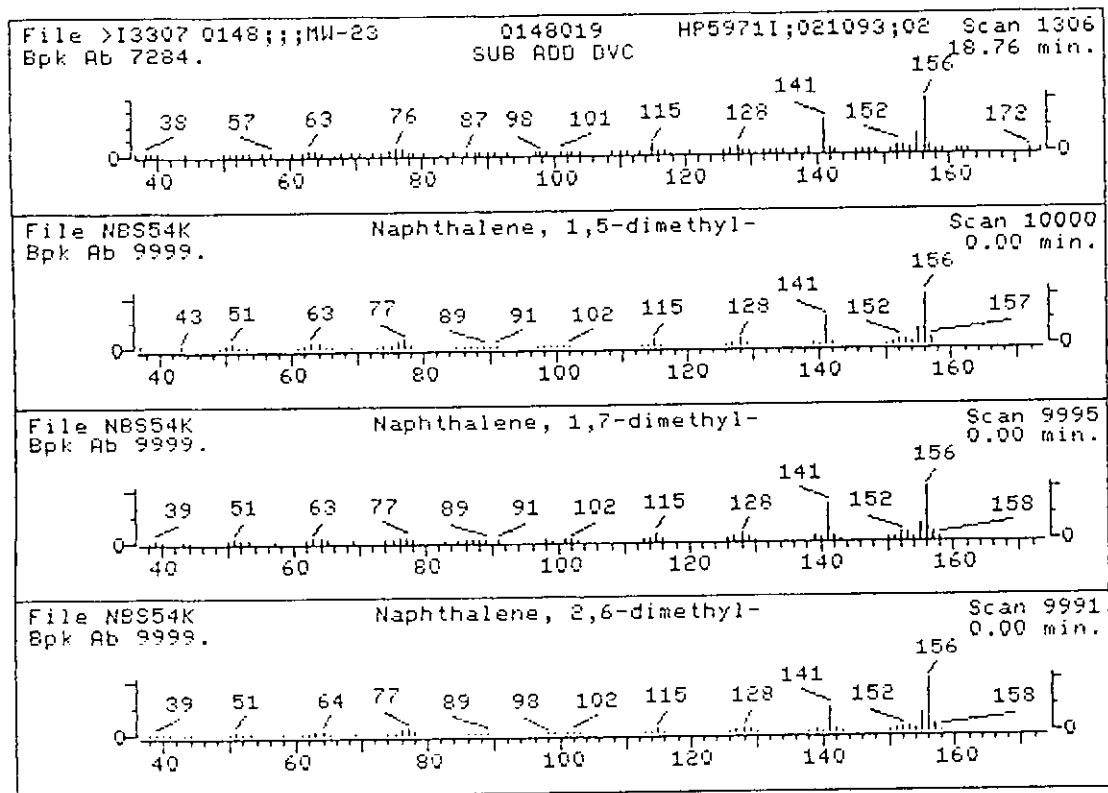


- Naphthalene, 1,5-dimethyl- 156 C12H12
- 2. Naphthalene, 1,7-dimethyl- 156 C12H12
- 3. Naphthalene, 2,6-dimethyl- 156 C12H12
- 4. Naphthalene, 1,6-dimethyl- 156 C12H12
- 5. Naphthalene, 1,8-dimethyl- 156 C12H12

Sample file: >I3307 Spectrum #: 1306  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	97*	571619	21702	NBS54K	102	7	0	0	83	6	68 97
2.	97*	575371	21697	NBS54K	100	8	0	0	87	6	68 97
3.	97*	581420	21693	NBS54K	98	7	0	0	90	6	68 97
4.	97*	575439	21701	NBS54K	99	9	0	0	87	6	68 97
5.	96*	569415	21694	NBS54K	94	16	0	0	80	6	68 96

Peak#: 51 Area: 105493. Est Conc: 12. Date: 02/19/93 15:43 Inst: I

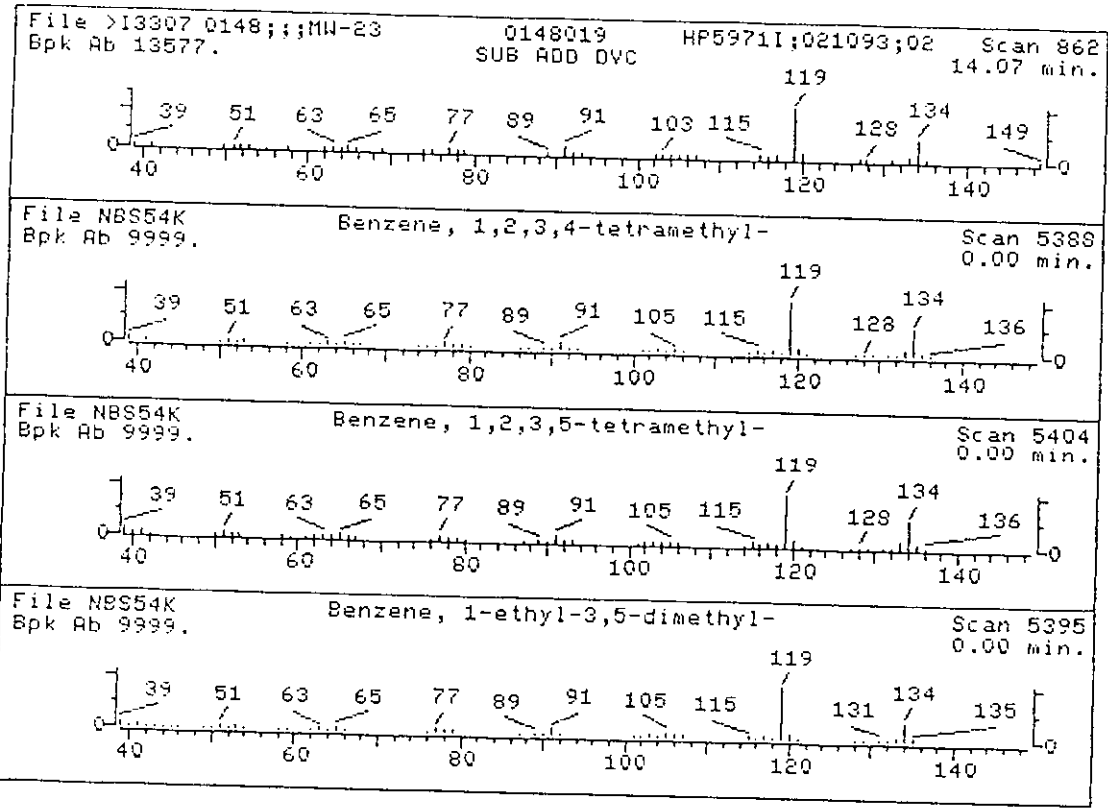


- Benzene, 1,2,3,4-tetramethyl- 134 C10H14
- 1. Benzene, 1,2,3,5-tetramethyl- 134 C10H14
- 3. Benzene, 1-ethyl-3,5-dimethyl- 134 C10H14
- 4. Benzene, 2-ethyl-1,4-dimethyl- 134 C10H14
- 5. Benzene, 1,2,4,5-tetramethyl- 134 C10H14

Sample file: >I3307 Spectrum #: 862  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU	
1.	89*	488233	17133	NBS54K	75	19	1	0	77	4	66	76
2.	89*	527537	17143	NBS54K	64	29	1	0	72	4	66	63
3.	87*	934747	14246	NBS54K	65	30	2	0	100	4	63	49
4.	83*	1758889	14249	NBS54K	65	27	2	0	100	6	54	53
5.	81*	95932	17144	NBS54K	68	34	2	0	77	7	53	49

Peak#: 18 Area: 86226. Est Conc: 11. Date: 02/19/93 15:43 Inst: I





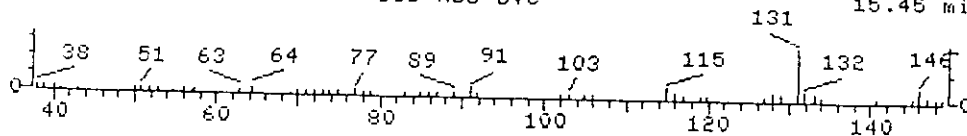
- 1. 1H-Indene, 2,3-dihydro-1,2-dimethyl- 146 C11H14
- 2. Naphthalene, 1,2,3,4-tetrahydro-1-methyl- 146 C11H14
- 3. 1H-Indene, 2,3-dihydro-1,3-dimethyl- 146 C11H14
- 4. 1H-Indene, 2,3-dihydro-1,6-dimethyl- 146 C11H14
- 5. Benzene, (1,1-dimethyl-2-propenyl)- 146 C11H14

Sample file: >I3307 Spectrum #: 993  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 42

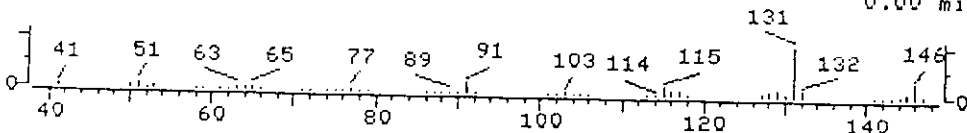
Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	83*	17057828	16602	NBS54K	77	27	2	0	77	8	54	59
2.	83*	1559815	16600	NBS54K	74	30	2	0	76	8	54	56
3.	79*	4175535	16606	NBS54K	58	43	2	0	86	8	48	35
4.	79*	17059482	16605	NBS54K	56	43	2	0	85	8	48	33
5.	71*	18321363	16607	NBS54K	56	46	2	0	73	14	38	33

Peak#: 28 Area: 89328. Est Conc: 11. Date: 02/19/93 15:43 Inst: I

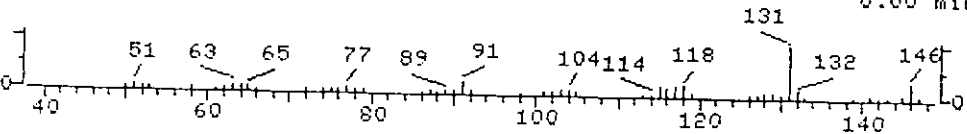
File >I3307 0148;;;MW-23 0148019 HP5971I;021093;02 Scan 993  
 Bpk Ab 5974. SUB ADD DVC 15.45 min.



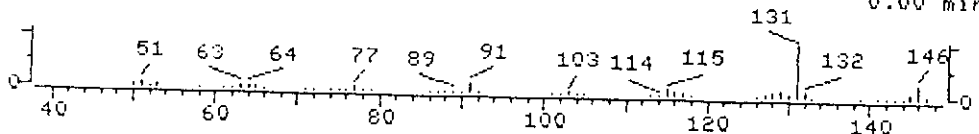
File NBS54K 1H-Indene, 2,3-dihydro-1,2-dimethyl- Scan 7760  
 Bpk Ab 9999. 0.00 min.



File NBS54K Naphthalene, 1,2,3,4-tetrahydro-1-methyl- Scan 7755  
 Bpk Ab 9999. 0.00 min.



File NBS54K 1H-Indene, 2,3-dihydro-1,3-dimethyl- Scan 7781  
 Bpk Ab 9999. 0.00 min.



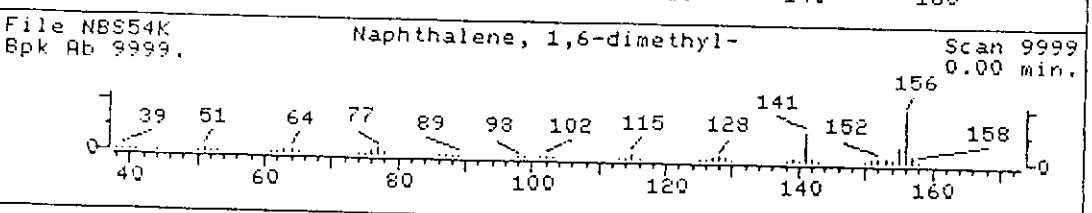
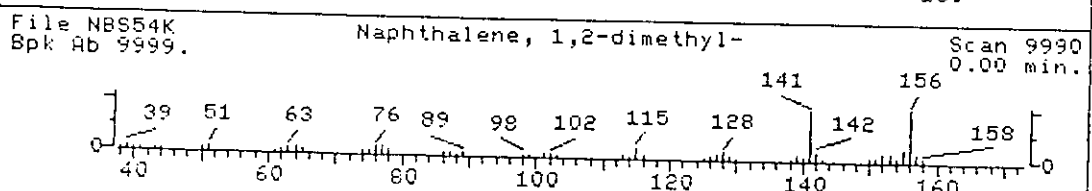
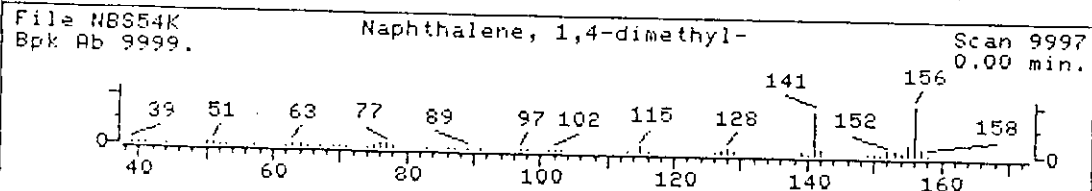
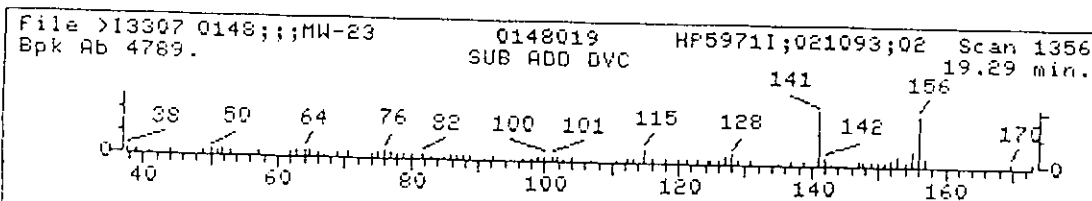
0650

- 1. Naphthalene, 1,4-dimethyl- 156 C12H12
- 2. Naphthalene, 1,2-dimethyl- 156 C12H12
- 3. Naphthalene, 1,6-dimethyl- 156 C12H12
- 4. Naphthalene, 1,8-dimethyl- 156 C12H12
- 5. Naphthalene, 2,6-dimethyl- 156 C12H12

Sample file: >I3307 Spectrum #: 1356  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	93*	571584	21699	NBS54K	87	21	1	0	84	4	68	86
2.	86*	573988	21692	NBS54K	80	33	1	0	74	10	59	77
3.	82*	575439	21701	NBS54K	69	39	0	0	66	36	37	86
4.	80*	569415	21694	NBS54K	66	44	0	0	63	30	37	78
5.	79*	581420	21693	NBS54K	68	37	0	0	66	38	37	83

Peak#: 53 Area: 90670. Est Conc: 10. Date: 02/19/93 15:43 Inst: I

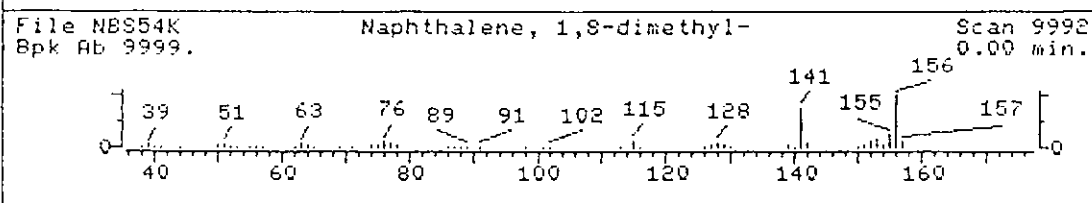
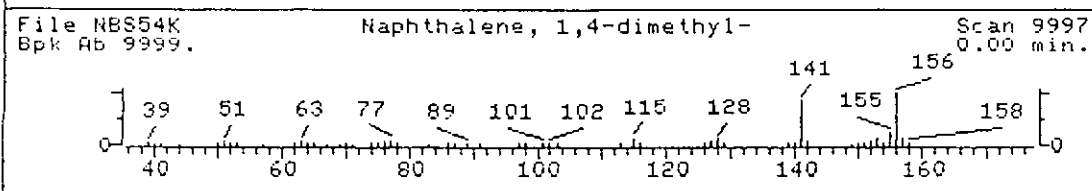
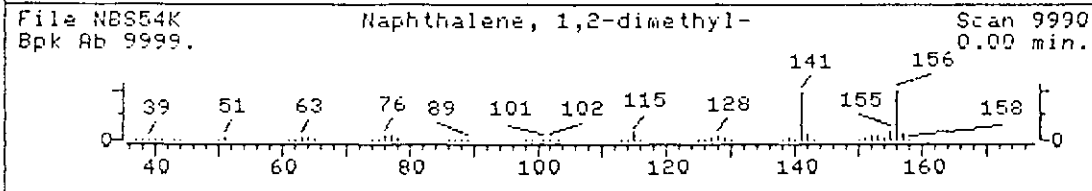
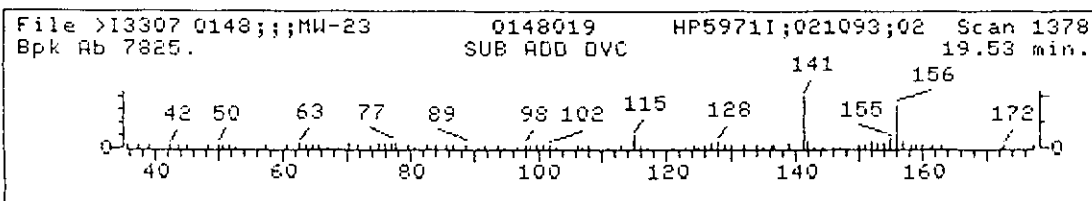


- 1. Naphthalene, 1,2-dimethyl- 156 C12H12
- 2. Naphthalene, 1,4-dimethyl- 156 C12H12
- 3. Naphthalene, 1,8-dimethyl- 156 C12H12
- 4. Naphthalene, 2,3-dimethyl- 156 C12H12
- 5. Naphthalene, 1,6-dimethyl- 156 C12H12

Sample file: >I3307 Spectrum #: 1378  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 40

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	92*	573988	21692	NBS54K	78	35	0	0	69	23	53	93
2.	89*	571584	21699	NBS54K	84	24	1	0	79	9	62	80
3.	79*	569415	21694	NBS54K	64	46	0	0	54	27	37	77
4.	78*	581408	21691	NBS54K	63	43	0	0	56	27	37	76
5.	74*	575439	21701	NBS54K	73	35	1	0	74	29	37	72

Peak#: 54 Area: 86278. Est Conc: 10. Date: 02/19/93 15:43 Inst: I

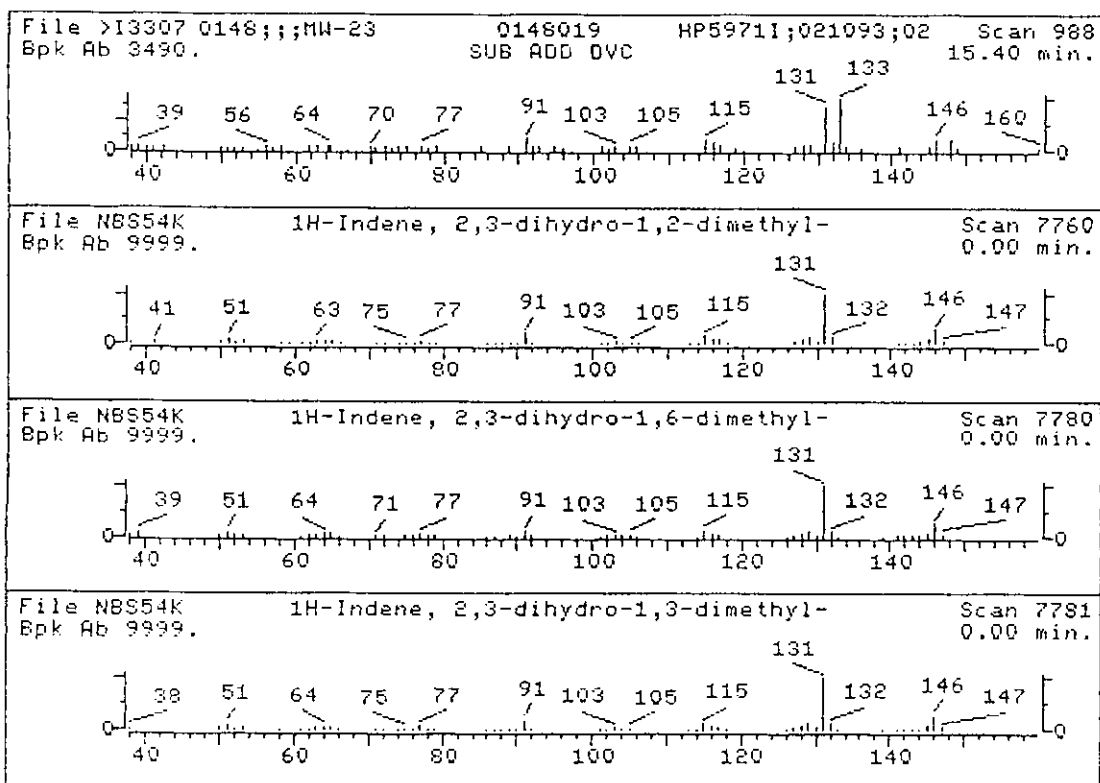


1. 1H-Indene, 2,3-dihydro-1,2-dimethyl-	146 C11H14
2. 1H-Indene, 2,3-dihydro-1,6-dimethyl-	146 C11H14
3. 1H-Indene, 2,3-dihydro-1,3-dimethyl-	146 C11H14
4. Benzene, 1-(1,1-dimethylethyl)-4-methyl-	148 C11H16
5. Benzene, 1,4-dimethyl-2-(1-methylethyl)-	148 C11H16

Sample file: >I3307 Spectrum #: 988  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 42

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	40*	17057828	16602	NBS54K	63	41	2	0	69	49	12	41
2.	35*	17059482	16605	NBS54K	56	43	2	0	77	47	11	33
3.	35*	4175535	16606	NBS54K	55	46	2	0	77	49	11	32
4.	25*	98511	16978	NBS54K	43	55	2	0	80	49	7	18
5.	24*	4132723	16971	NBS54K	40	54	1	0	79	53	7	23

Peak#: 27 Area: 70789. Est Conc: 9. Date: 02/19/93 15:43 Inst: I

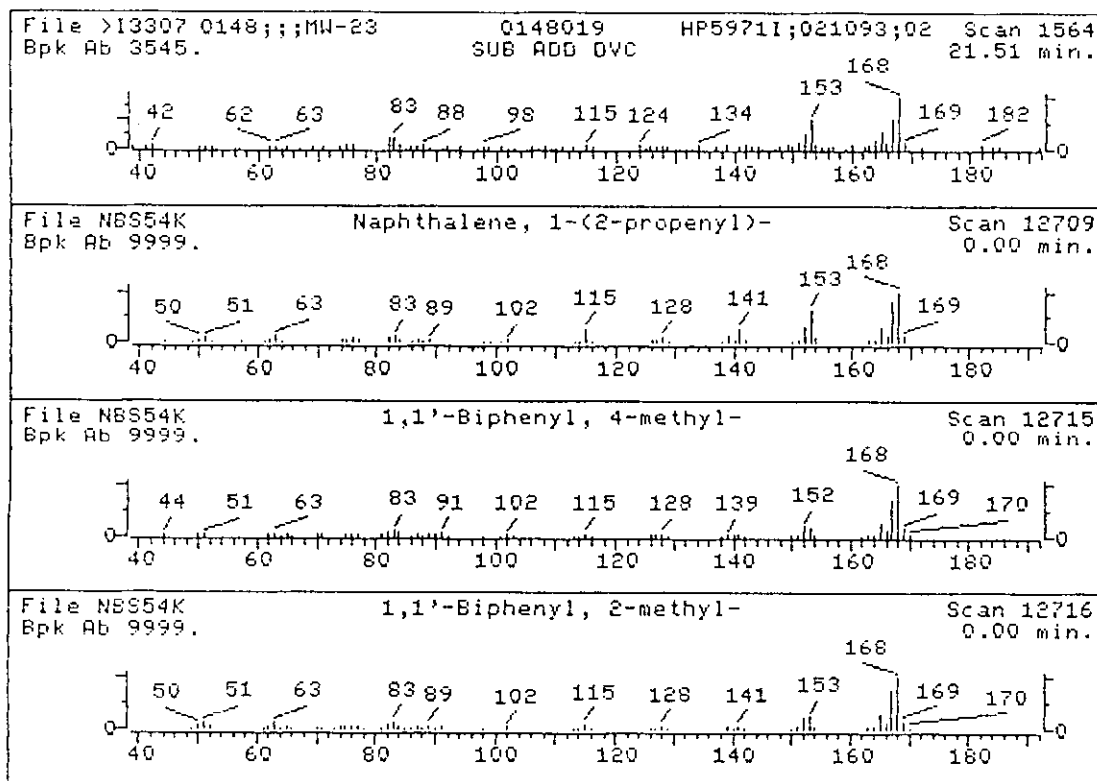


1. Naphthalene, 1-(2-propenyl)-	168 C13H12
2. 1,1'-Biphenyl, 4-methyl-	168 C13H12
3. 1,1'-Biphenyl, 2-methyl-	168 C13H12
4. 1,1'-Biphenyl, 3-methyl-	168 C13H12
5. Benzene, 1,1'-methylenebis-	168 C13H12

Sample file: >I3307      Spectrum #:      1564  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	71*	2489863	23959	NBS54K	59	62	2	0	72	11	38	36
2.	62*	644086	23965	NBS54K	44	57	0	0	80	28	25	49
3.	48*	643583	23966	NBS54K	47	63	2	0	74	24	17	19
4.	46*	643936	23961	NBS54K	52	52	1	0	81	37	17	35
5.	43*	101815	23963	NBS54K	39	62	1	0	80	30	19	21

Peak#: 65 Area: 82103. Est Conc: 9. Date: 02/19/93 15:43 Inst: I

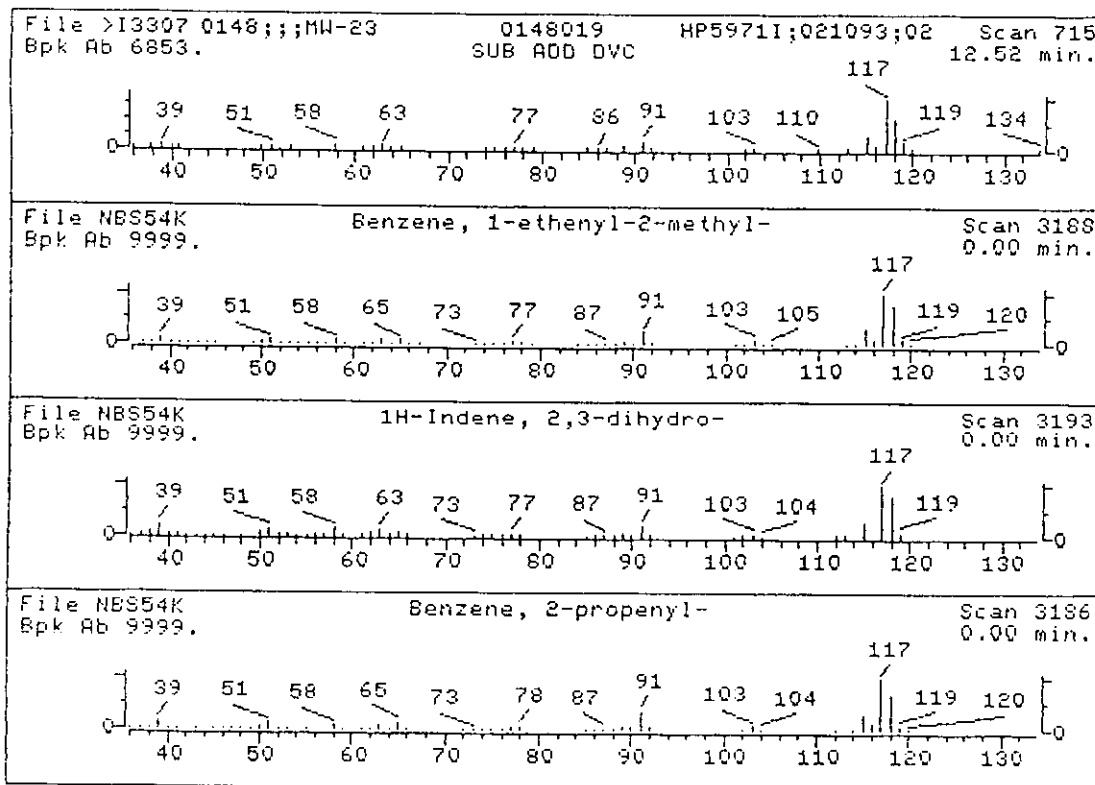


- 1. Benzene, 1-ethenyl-2-methyl- 118 C9H10
- 2. 1H-Indene, 2,3-dihydro- 118 C9H10
- 3. Benzene, 2-propenyl- 118 C9H10
- 4. Benzene, 1-ethenyl-3-methyl- 118 C9H10
- 5. Benzene, ethenylmethyl- 118 C9H10

Sample file: >I3307 Spectrum #: 715  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 40

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	71*	611154	14047	NBS54K	52	41	2	0	69	14	38 34
2.	60*	496117	14051	NBS54K	41	57	2	0	79	11	30 17
3.	60*	300572	14045	NBS54K	34	63	3	0	91	14	30 13
4.	32*	100801	14050	NBS54K	41	55	2	0	62	39	10 18
5.	31*	25013154	14049	NBS54K	41	56	2	0	62	39	10 17

Peak#: 10 Area: 54179. Est Conc: 9. Date: 02/19/93 15:43 Inst: I

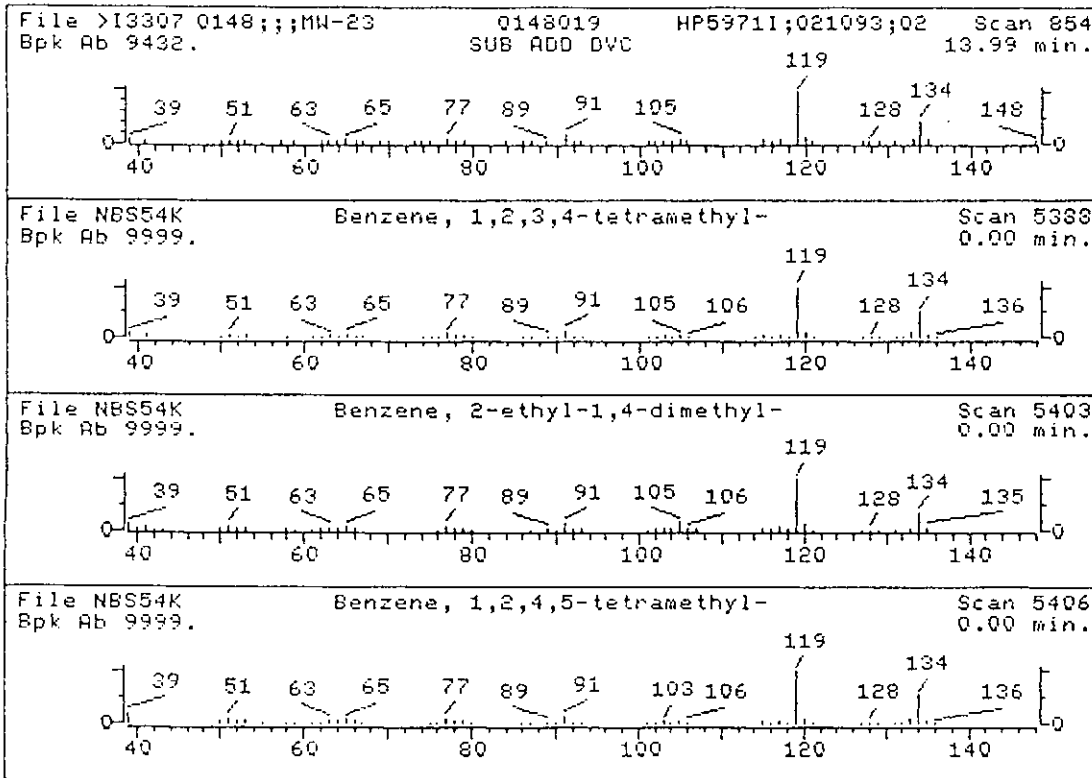


- 1. Benzene, 1,2,3,4-tetramethyl- 134 C10H14
- 2. Benzene, 2-ethyl-1,4-dimethyl- 134 C10H14
- 3. Benzene, 1,2,4,5-tetramethyl- 134 C10H14
- 4. Benzene, 1,2,3,5-tetramethyl- 134 C10H14
- 5. Benzene, 1-ethyl-3,5-dimethyl- 134 C10H14

Sample file: >I3307 Spectrum #: 854  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	89*	488233	17133	NBS54K	72	22	0	0	83	7	62 89
2.	84*	1758889	14249	NBS54K	70	22	1	0	100	9	55 69
3.	84*	95932	17144	NBS54K	68	34	1	0	73	6	55 66
4.	84*	527537	17143	NBS54K	54	39	0	0	76	9	55 66
5.	81*	934747	14246	NBS54K	66	29	2	0	100	9	53 49

Peak#: 17 Area: 65517. Est Conc: 8. Date: 02/19/93 15:43 Inst: I

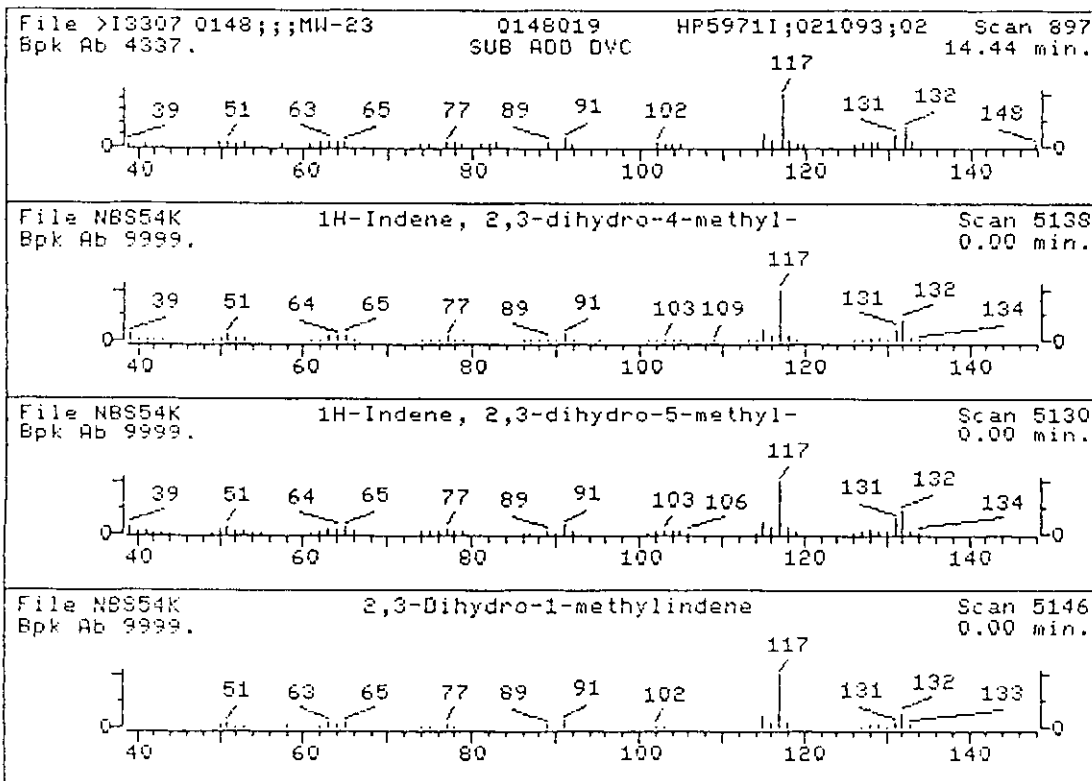


- 1H-Indene, 2,3-dihydro-4-methyl- 132 C10H12
- 1. 1H-Indene, 2,3-dihydro-5-methyl- 132 C10H12
- 3. 2,3-Dihydro-1-methylindene 132 C10H12
- 4. 1H-Indene, 2,3-dihydro-1-methyl- 132 C10H12
- 5. Benzene, 1-ethenyl-4-ethyl- 132 C10H12

Sample file: >I3307 Spectrum #: 897  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	81*	824226	16768	NBS54K	65	42	0	0	68	17	45 78
2.	70*	874351	16763	NBS54K	59	47	1	0	68	16	32 53
3.	66*	27133933	13904	NBS54K	58	37	1	0	95	18	31 49
4.	66*	767588	13901	NBS54K	58	39	1	0	93	18	31 49
5.	55*	3454077	16765	NBS54K	35	58	0	0	76	27	24 35

Peak#: 19 Area: 64308. Est Conc: 8. Date: 02/19/93 15:43 Inst: 1





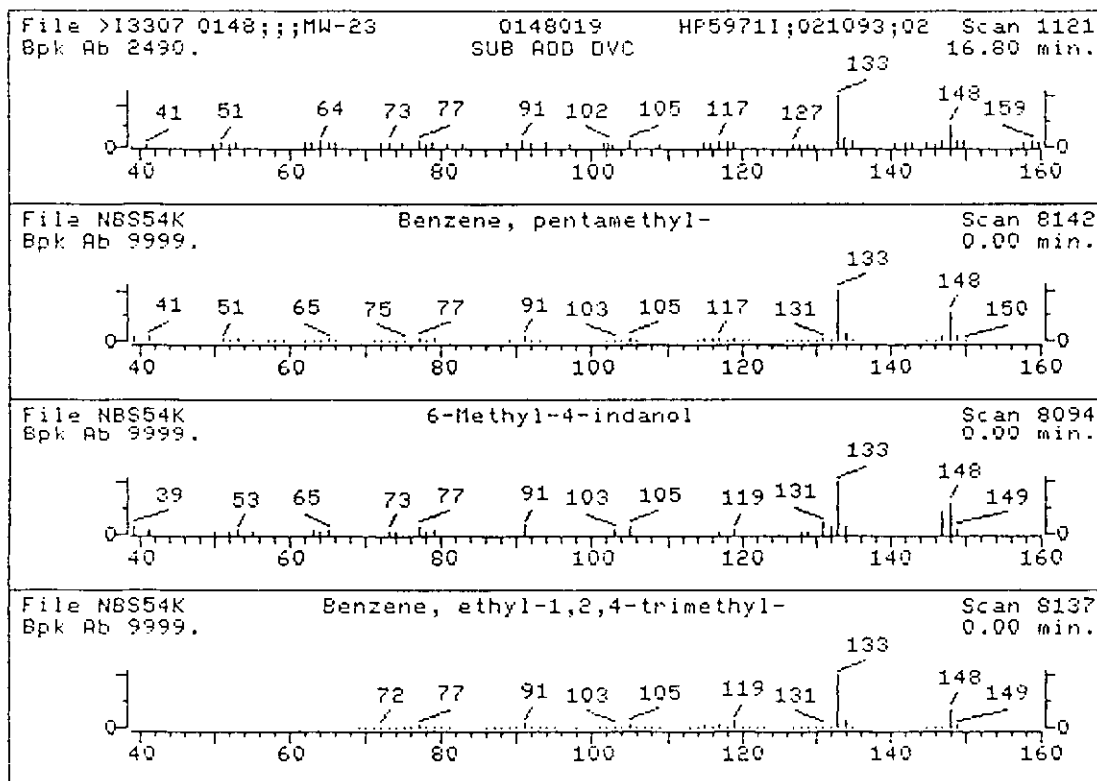
0657

Benzene, pentamethyl-	148 C11H16
1. 6-Methyl-4-indanol	148 C10H12O
3. Benzene, ethyl-1,2,4-trimethyl-	148 C11H16
4. Benzene, 1,3-diethyl-5-methyl-	148 C11H16
5. Benzene, (1,1-dimethylethyl)methyl-	148 C11H16

Sample file: >I3307      Spectrum #:      1121  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	62*	700129	20151	NBS54K	41	50	0	0	74	29	25	44
2.	51*	20294320	20133	NBS54K	63	45	3	0	71	29	24	31
3.	42*	54120626	16976	NBS54K	35	55	1	0	100	28	14	19
4.	42*	2050240	20150	NBS54K	30	80	3	0	100	24	17	13
5.	41*	27138212	16975	NBS54K	37	53	2	0	100	29	14	18

Peak#: 37 Area: 58000. Est Conc: 7. Date: 02/19/93 15:43 Inst: I



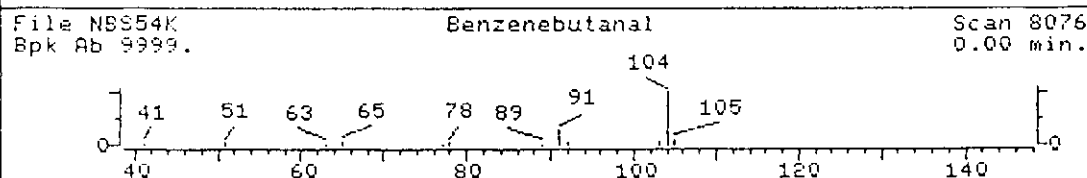
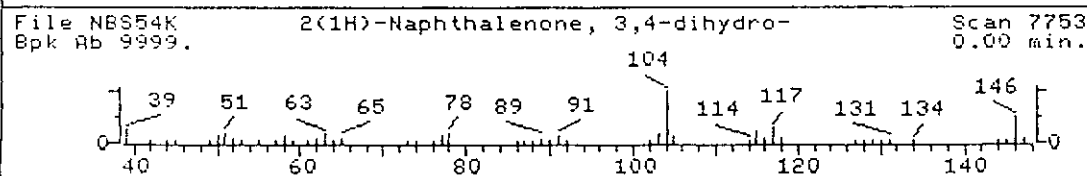
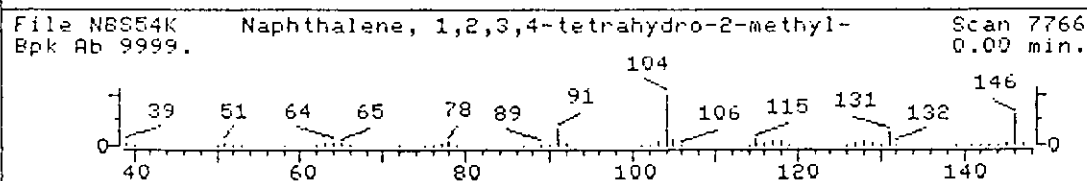
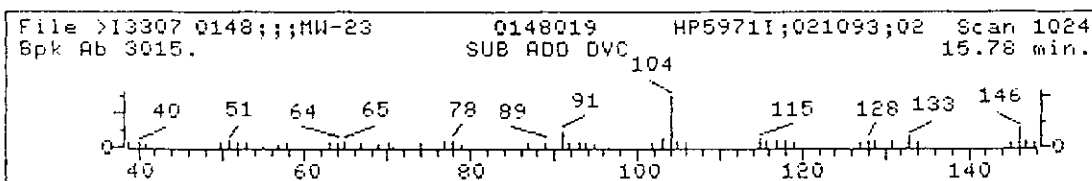
0658

1. Naphthalene, 1,2,3,4-tetrahydro-2-methyl-	146 C11H14
2. 2(1H)-Naphthalenone, 3,4-dihydro-	146 C10H10O
3. Benzenebutanal	148 C10H12O
4. Benzene, 1,1'-(1,2-cyclobutanediyl)bis-, cis-	208 C16H16

Sample file: >I3307      Spectrum #:      1024  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	42	3877198	19776	NBS54K	71	32	3	0	100	30	14	19
2.	31*	530938	19771	NBS54K	37	67	2	0	73	33	12	14
3.	24*	18328115	11396	NBS54K	38	30	1	0	95	52	7	21
4.	20	7694306	11459	NBS54K	26	60	0	0	100	55	5	13

Peak#: 30 Area: 58346. Est Conc: 7. Date: 02/19/93 15:43 Inst: 1



0659

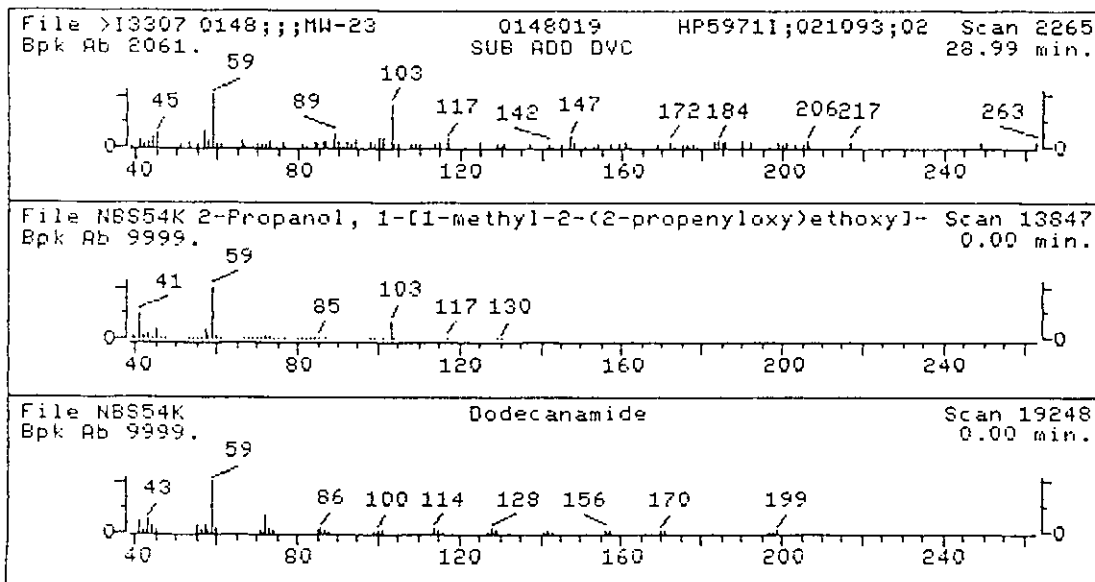
- 1. 2-Propanol, 1-[1-methyl-2-(2-propenyloxy)ethoxy]-
- 2. Dodecanamide

174 C9H18O3  
199 C12H25NO

Sample file: >I3307 Spectrum #: 2265  
Search speed: 1 Titrating option: N No. of ion ranges searched: 50

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	15	55956257	2015	NBS54K	40	55	1	0	100	58	3	12
2.	11*	1120167	2047	NBS54K	27	83	3	0	100	65	2	13

Peak#: 77 Area: 69476. Est Conc: 6. Date: 02/19/93 15:43 Inst: I



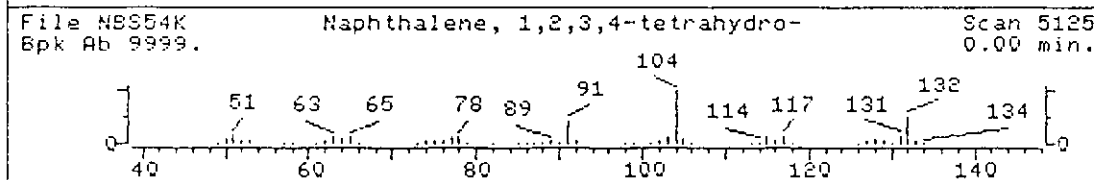
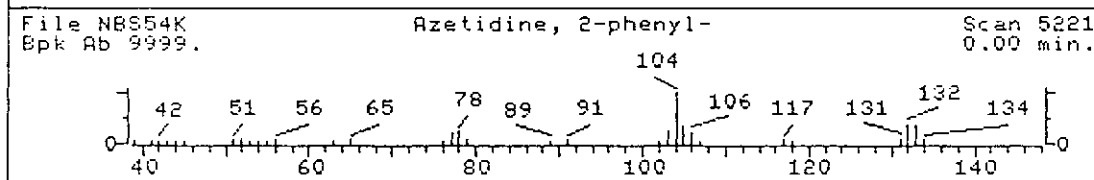
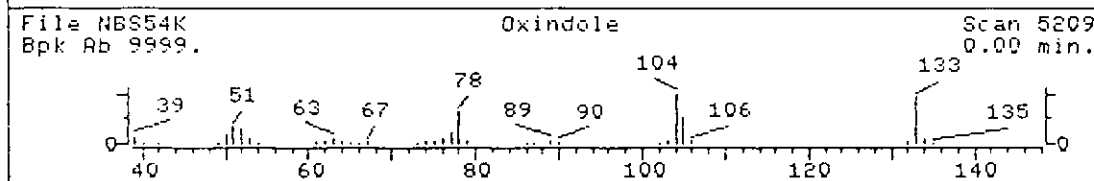
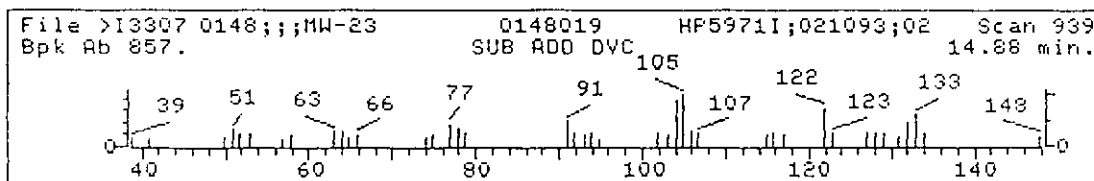
0660

- 1. Oxindole 133 C8H7NO
- 2. Azetidine, 2-phenyl- 133 C9H11N
- 3. Naphthalene, 1,2,3,4-tetrahydro- 132 C10H12
- 4. Benzene, 1-isocyanato-2-methyl- 133 C8H7NO
- 5. 2H-Inden-2-one, 1,3-dihydro- 132 C9H8O

Sample file: >I3307 Spectrum #: 939  
Search speed: 1 Tilting option: N No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	59483	16954	NBS54K	45	66	3	0	66	53	5 13
2.	20*	22610180	16775	NBS54K	27	86	2	0	86	54	5 14
3.	15*	119642	16759	NBS54K	33	74	1	0	85	59	3 18
4.	15*	614686	16951	NBS54K	28	83	2	0	64	57	3 14
5.	15*	615134	11385	NBS54K	25	83	3	0	89	59	3 13

Peak#: 23 Area: 47386. Est Conc: 6. Date: 02/19/93 15:43 Inst: I



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0661  
EPA SAMPLE NO.

MW-37-47

Lab Name: IEA/CT Contract:  
 Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148  
 Matrix: (soil/water) WATER Lab Sample ID: 0148020  
 Sample wt/vol: 975 (g/mL) ML Lab File ID: I3308.D  
 Level: (low/med) LOW Date Received: 02/02/93  
 % Moisture: \_\_\_\_\_ decanted: (Y/N)\_\_\_\_\_ Date Extracted: 02/11/93  
 Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/19/93  
 Injection Volume: 2.0(uL) Dilution Factor: 1.0  
 GPC Cleanup: (Y/N) N pH:

CNC  
2/25/93

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl)ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy)methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Napthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnapthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	26	U
91-58-7-----	2-Chloronapthalene	10	U
88-74-4-----	2-Nitroaniline	26	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	26	U
83-32-9-----	Acenaphthene	10	U

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0662  
EPA SAMPLE NO.

MW-37 47

Lab Name: IEA/CT Contract:  
Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148 CMC  
Matrix: (soil/water) WATER Lab Sample ID: 0148020 2/21/93  
Sample wt/vol: 975 (g/mL) ML Lab File ID: I3308.D  
Level: (low/med) LOW Date Received: 02/02/93  
% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93  
Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/19/93  
Injection Volume: 2.0(uL) Dilution Factor: 1.0  
GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	26	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	26	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.8	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

0663  
EPA SAMPLE NO.

MW-3747

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148020

Sample wt/vol: 975 (g/mL) ML

Lab File ID: I3308.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 02/19/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

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

Number TICs found: 12  
0mctzsp3

cmc  
2/25/93

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	26.86	13	J
2.	↓	29.04	13	↓
3.	↓	31.93	12	↓
4.	↓	23.32	6	↓
5.	↓	36.23	6	↓
6.	↓	32.34	5	↓
7.	ALDOL CONDENSATION PRODUCT	8.18	5	↓
8.	UNKNOWN	33.75	4	↓
9.	↓	29.27	4	↓
10.	↓	8.57	3	↓
11.	↓	26.55	3	↓
12.	↓	19.79	2	↓
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

0664

QUANT REPORT

Operator ID: USER1                      Quant Rev: 7            Quant Time: 930222 13:05  
 Output File: ^I3308::A6                      Injected at: 930219 16:44  
 Data File: >I3308::A2                      Dilution Factor: .51000  
 Name: 0148;;;MW-47                      Instrument ID: \*\*MSD  
 Misc: 0148020            HP5971I;021093;021193;LLW;1;;;I02

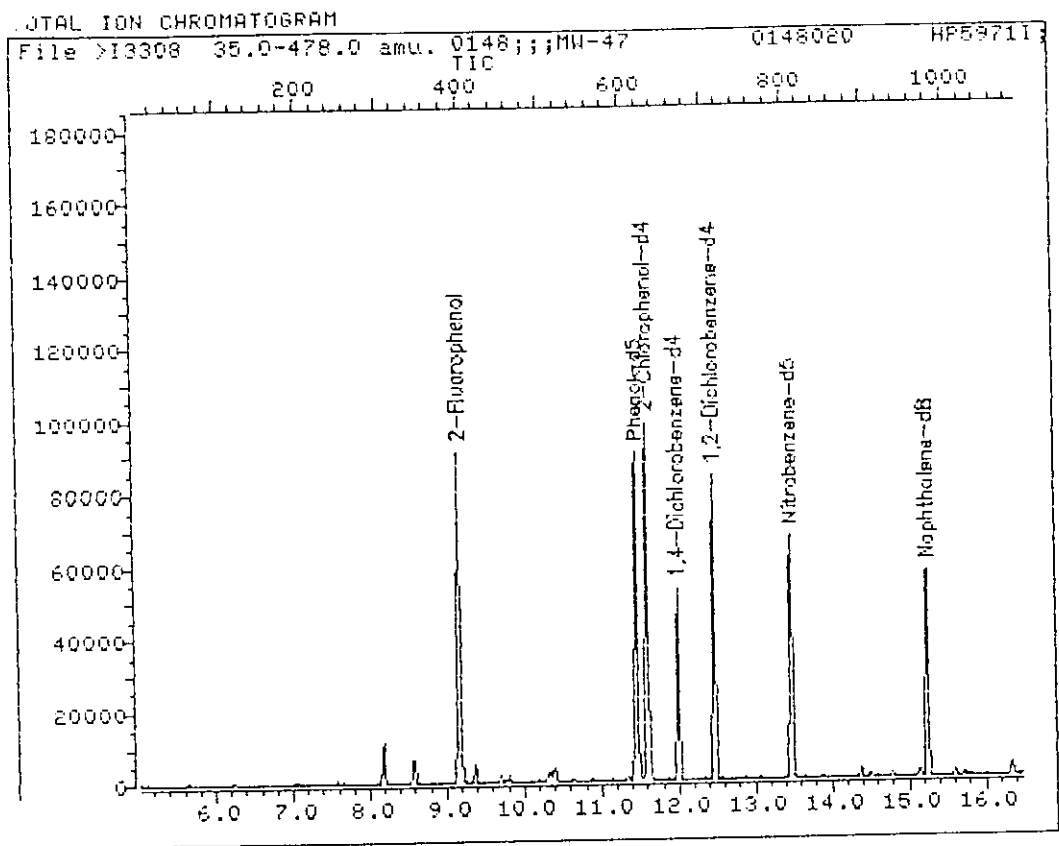
ID File: I\_IFI::A5  
 Title: IF8-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52                      Last Qual Time: 930219 10:28

Compound	R.T.	Q	ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.00	151.8		18520	40.00	ug	95
2) 2-Chlorophenol-d4	11.61	132.0		72100	62.15	ug	81
3) 2-Fluorophenol	9.17	111.8		70641	59.58	ug	74
4) Phenol-d5	11.47	98.8		104688	64.62	ug	65
10) 1,2-Dichlorobenzene-d4	12.47	152.0		33237	43.82	ug	96
17) *Naphthalene-d8	15.25	135.9		69292	40.00	ug	98
18) Nitrobenzene-d5	13.48	81.8		57243	42.09	ug	71
31) *Acenaphthene-d10	19.90	163.9		40202	40.00	ug	96
) 2-Fluorobiphenyl	18.13	171.8		97696	40.26	ug	98
31) 2,4,6-Tribromophenol	22.04	329.6		39564	68.79	ug	93
52) *Phenanthrene-d10	23.79	187.9		73983	40.00	ug	98
63) *Chrysene-d12	31.06	240.0		60586	40.00	ug	96
65) Terphenyl-d14	28.04	244.0		89775	34.28	ug	98
<del>66) Butylbenzylphthalate</del>	<del>29.38</del>	<del>148.8</del>		<del>993</del>	<del>.461</del>	<del>ug</del>	<del>39</del>
✓70) bis(2-Ethylhexyl)phthalate	31.19	148.8		2184	.819	ug	89
71) *Perylene-d12	37.73	264.0		62457	40.00	ug	96
<del>72) Di-n-octylphthalate</del>	<del>33.76</del>	<del>148.9</del>		<del>3228</del>	<del>.598</del>	<del>ug</del>	<del>61</del>

\* Compound is ISTD

cmc2/28/03



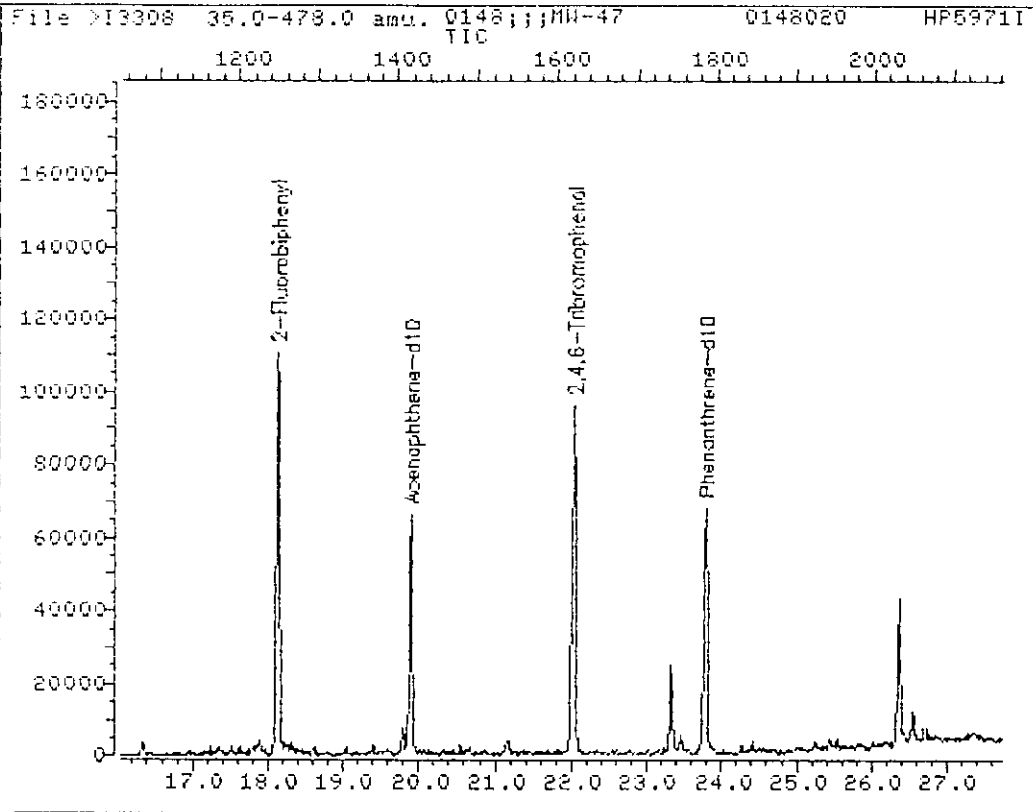


Data File: >I3308 Quant Output File: ^I3308::A6  
Name: 0148;;;MW-47 Instrument ID: \*\*MSD  
Misc: 0148020 HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930222 13:05  
Injected at: 930219 16:44

## TOTAL ION CHROMATOGRAM

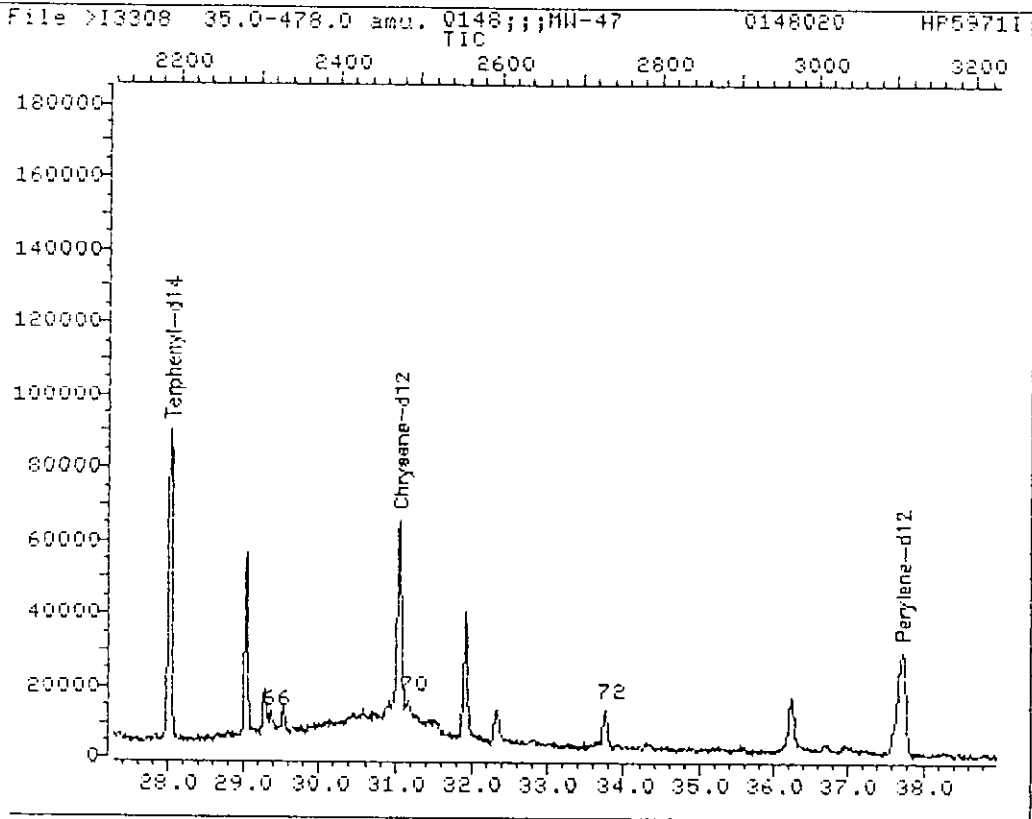


Data File: >I3308 Quant Output File: ^I3308::A6  
 Name: 0148;;;MW-47 Instrument ID: \*\*MSD  
 Misc: 0148020 HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52 Last Qcal Time: 930219 10:28

Operator ID: USER1  
 Quant Time : 930222 13:05  
 Injected at: 930219 16:44

## TOTAL ION CHROMATOGRAM



Data File: &gt;I3308

Quant Output File: ^I3308::A6

Name: 0148;;;MW-47

Instrument ID: \*\*MSD

Misc: 0148020

HP59711;021093;021193;LLW;1;;;I02

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930219 10:28

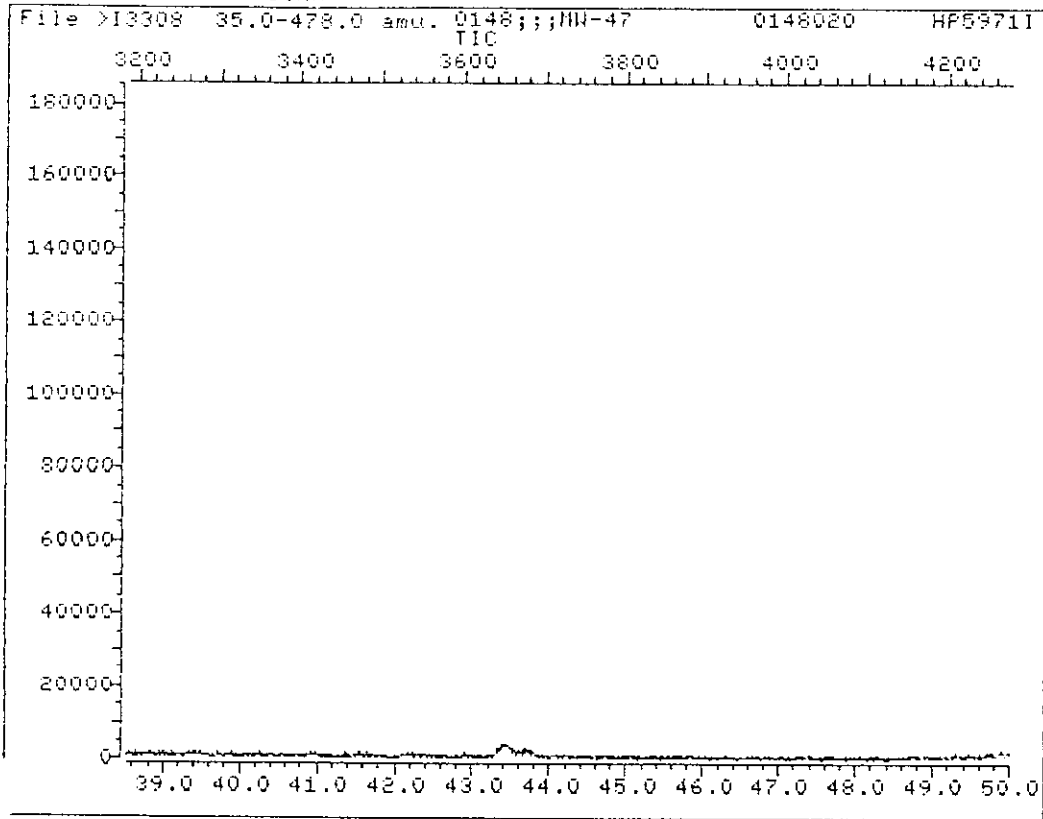
Operator ID: USER1

Quant Time : 930222 13:05

Injected at: 930219 16:44

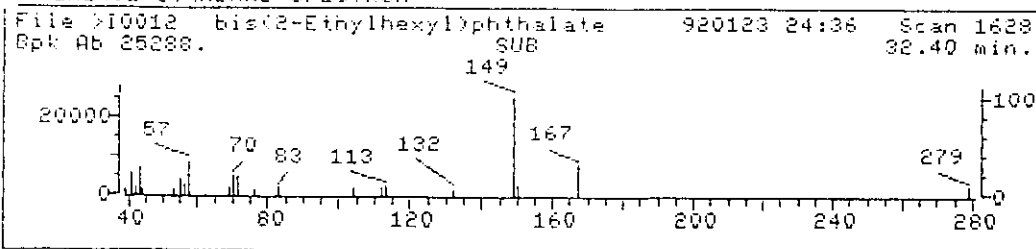
0668

TOTAL ION CHROMATOGRAM

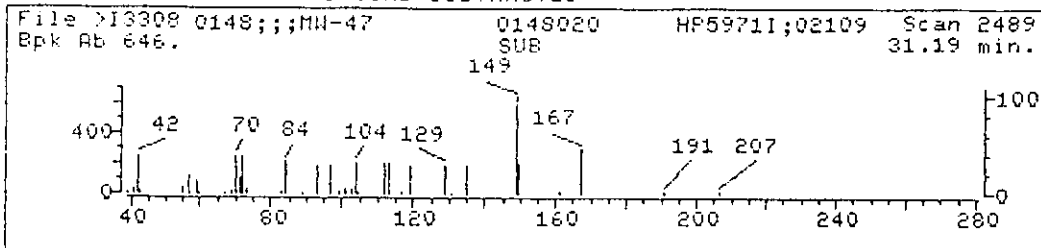


Data File: >I3308 Quant Output File: ^I3308::A6  
Name: 0148;;;MW-47 Instrument ID: \*\*MSD  
Misc: 0148020 HP59711;021093;021193;LLW;1;;;102  
  
Id File: I\_IF1::A5  
Title: IFB-DLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930219 10:28  
  
Operator ID: USER1  
Quant Time : 930222 13:05  
Injected at: 930219 16:44

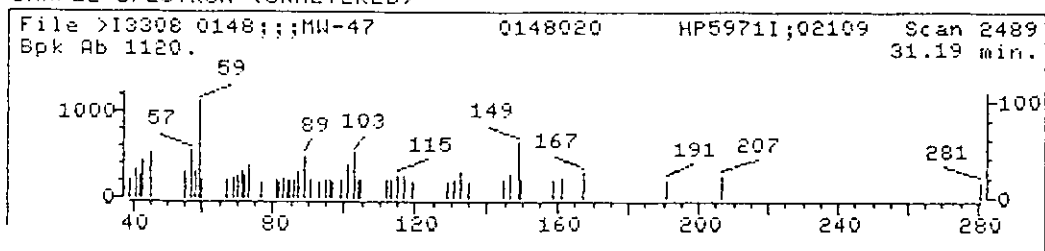
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: >I3308::A2                    Quant Output File: ^I3308::A6  
Name: 0148;;;MW-47                    Instrument ID: \*\*MSD  
Misc: 0148020                    HP59711;021093;021193;LLW;1;;;I02  
Quant Time: 930219 17:40                    Quant ID File: I\_IFI::A5  
Injected at: 930219 16:44                    Last Calibration: 910116 11:52  
Last Qual Time: 930219 10:28

Compound No    :    70  
Compound Name   : bis(2-Ethylhexyl)phthalate  
Scan Number    :    2489  
Retention Time :    31.19 min.  
Quant Ion       :    148.8  
Area            :        2184  
Concentration   :        .819 ug  
q-value         :        89

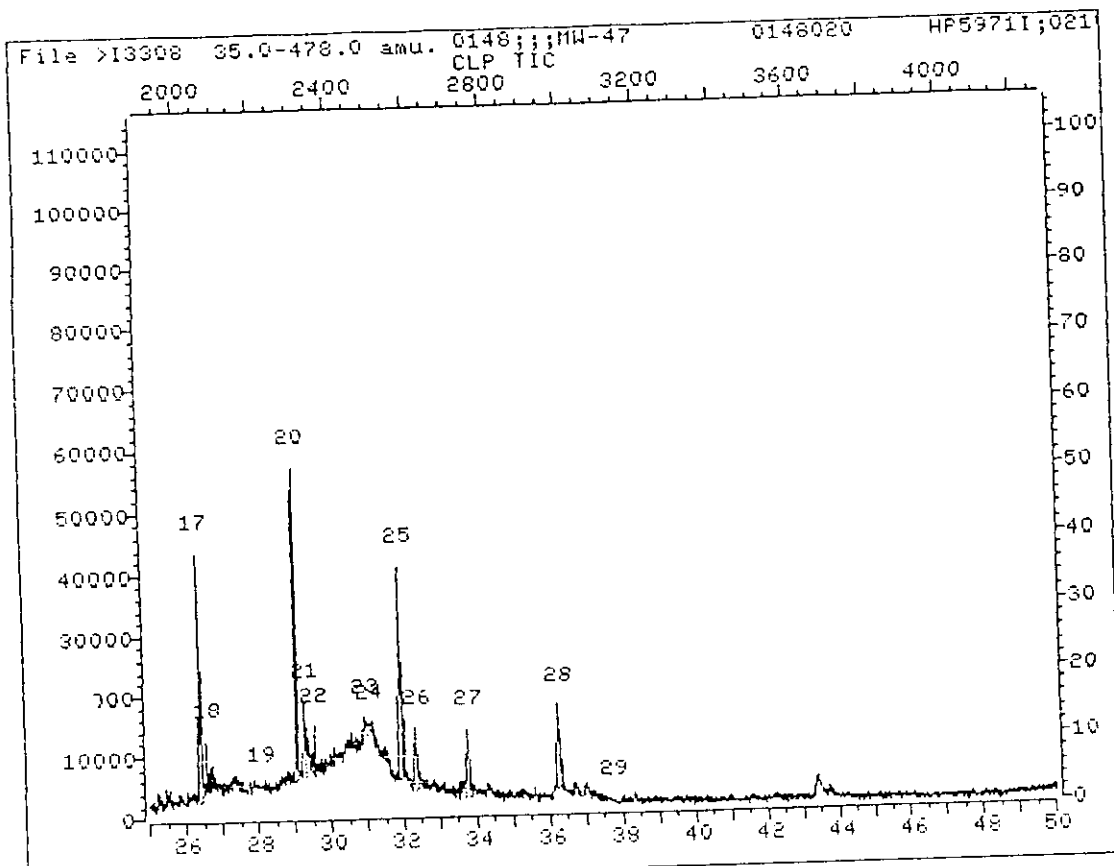
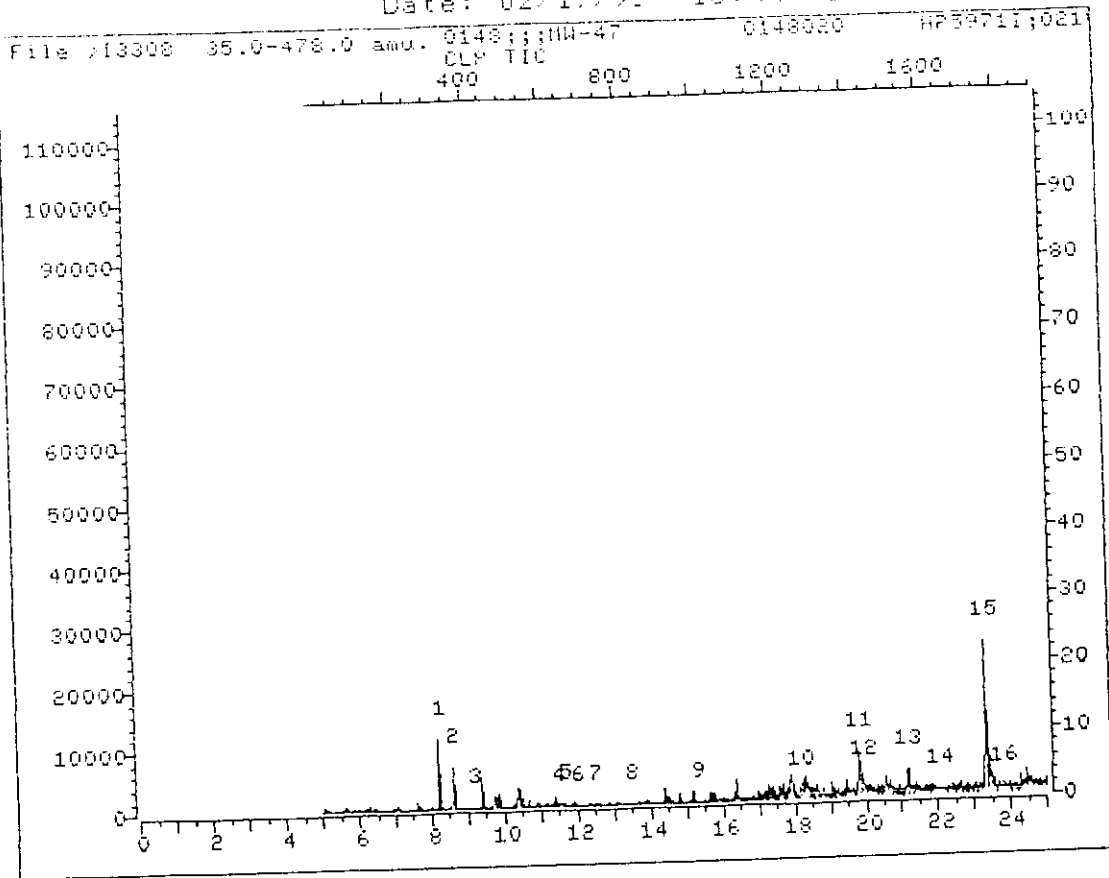
0670

MS data file header from : >13308::A9

Sample: 0148;;;MW-47 Operator: USER1 2/19/93 16:44  
Misc : 0148020 HP59711;021093;021193;LLW;1;;;102  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 6 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

Date: 02/19/93 16:44 Inst: 1



MW-470672  
HP5971I

Date: 02/19/93 16:44 Inst: 1

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
17.	26.36	122257.	13.	4.		.51
20.	29.04	137365.	13.	5.		.51
25.	31.93	122784.	12.	5.		.51
15.	23.32	55502.	6.	4.		.51
28.	36.23	63270.	6.	6.		.51
26.	32.34	49176.	5.	5.		.51
1.	8.18	23787.	5.	1.		.51
27.	33.75	46314.	4.	5.		.51
21.	29.27	42380.	4.	5.		.51
2.	8.57	15453.	3.	1.		.51
18.	26.55	24629.	3.	4.		.51
11.	19.79	19370.	2.	3.		.51

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range	TI/SI
1,4-DICHLOROBENZENE-D4	12.00	105635.	0.00 13.62	5.7
NAPHTHALENE-D8	15.25	134812.	13.62 17.57	1.9
ACENAPHTHENE-D10	19.90	174713.	17.57 21.84	4.3
PHENANTHRENE-D10	23.79	194991.	21.84 27.42	2.6
RYSENE-D12	31.06	217674.	27.42 34.39	3.6
PERYLENE-D12	37.73	228615.	34.39 37.73	3.7

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 3  
Target peaks matched: 0  
Total TIC identified: 12

TICS : 6:03 PM MON., 22 FEB., 1993



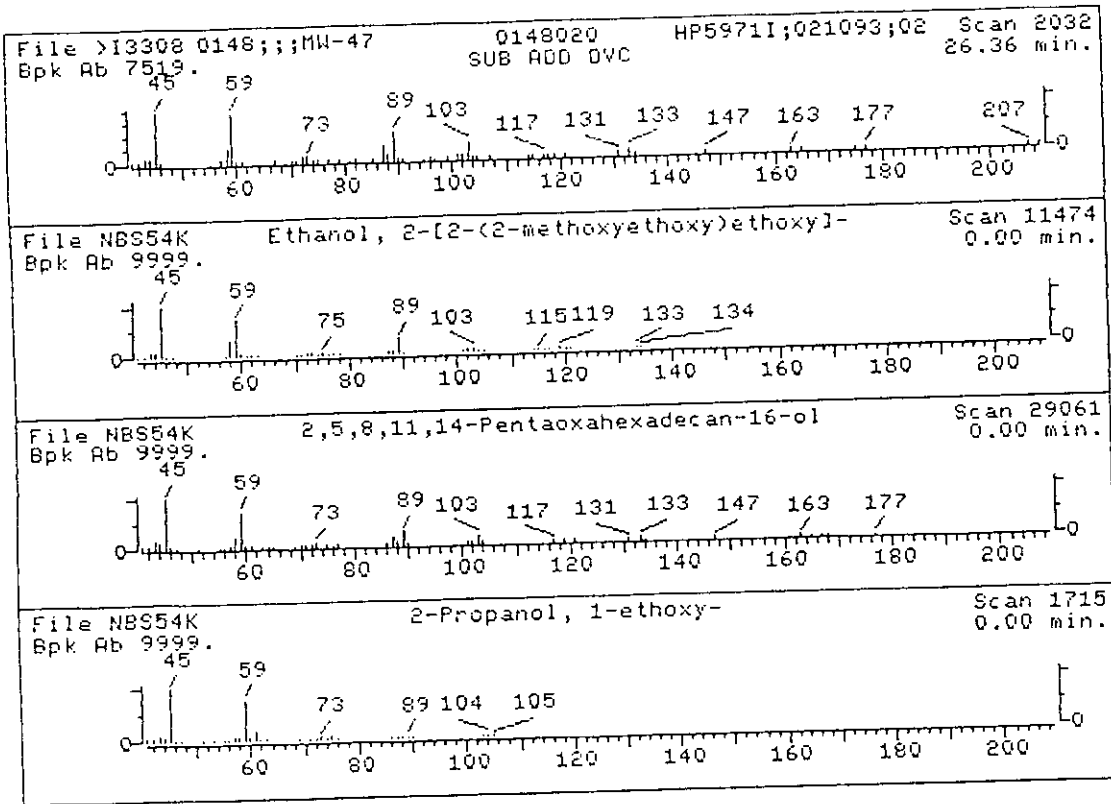
- 1. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)]-
- 2. 2,5,8,11,14-Pentaoxahexadecan-16-ol
- 3. 2-Propanol, 1-ethoxy-
- 4. 2,5,8,11,14,17-Hexaoxaoctadecane
- 5. Silane, ethyldimethyl-

164 C7H16O4  
 252 C11H24O6  
 104 C5H12O2  
 266 C12H26O6  
 88 C4H12Si

Sample file: >I3308      Spectrum #:      2032  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	58	112356	8547	NBS54K	49	50	0	0	95	20	25	28
2.	35	23778521	8670	NBS54K	74	55	2	0	135	32	12	18
3.	32*	1569024	1853	NBS54K	34	60	1	0	92	40	10	18
4.	25	1191873	2071	NBS54K	42	74	0	0	96	49	7	15
5.	25*	758214	1807	NBS54K	31	67	3	0	96	45	8	13

Peak#: 17 Area: 122257. Est Conc:      13. Date: 02/19/93 16:44 Inst: 1



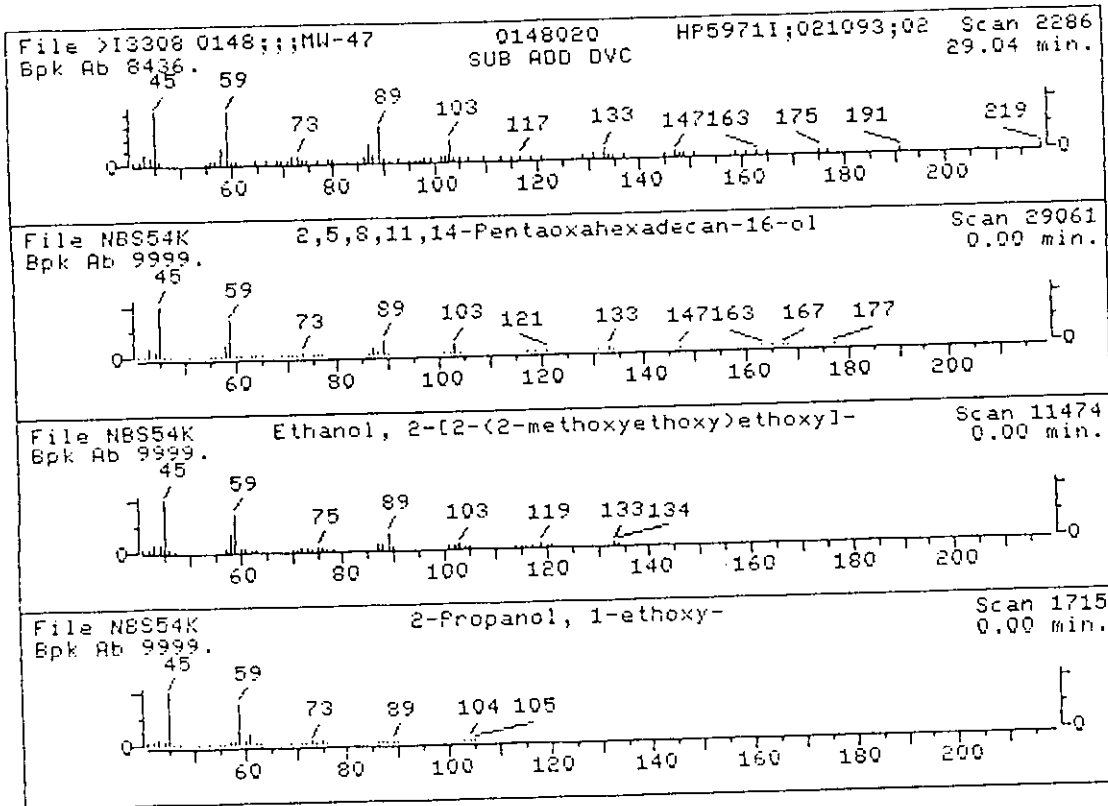
1. 2,5,8,11,14-Pentaoxahexadecan-16-ol
2. Ethanol, 2-[(2-(2-methoxyethoxy)ethoxy)-
3. 2-Propanol, 1-ethoxy-
4. 2,5,8,11,14,17-Hexaoxaoctadecane
5. Silane, ethyldimethyl-

252 C11H24O6  
 164 C7H16O4  
 104 C5H12O2  
 266 C12H26O6  
 88 C4H12Si

Sample file: >I3308      Spectrum #: 2286  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 46

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	45	23778521	8670	NBS54K	44	85	0	0	100	25	17	16
2.	43	112356	8547	NBS54K	50	49	1	0	97	25	17	14
3.	30*	1569024	1853	NBS54K	34	60	1	0	97	43	8	18
4.	25	1191873	2071	NBS54K	46	70	0	0	98	46	7	17
5.	25*	758214	1807	NBS54K	31	67	3	0	98	48	7	13

Peak#: 20 Area: 137365. Est Conc: 13. Date: 02/19/93 16:44 Inst: I



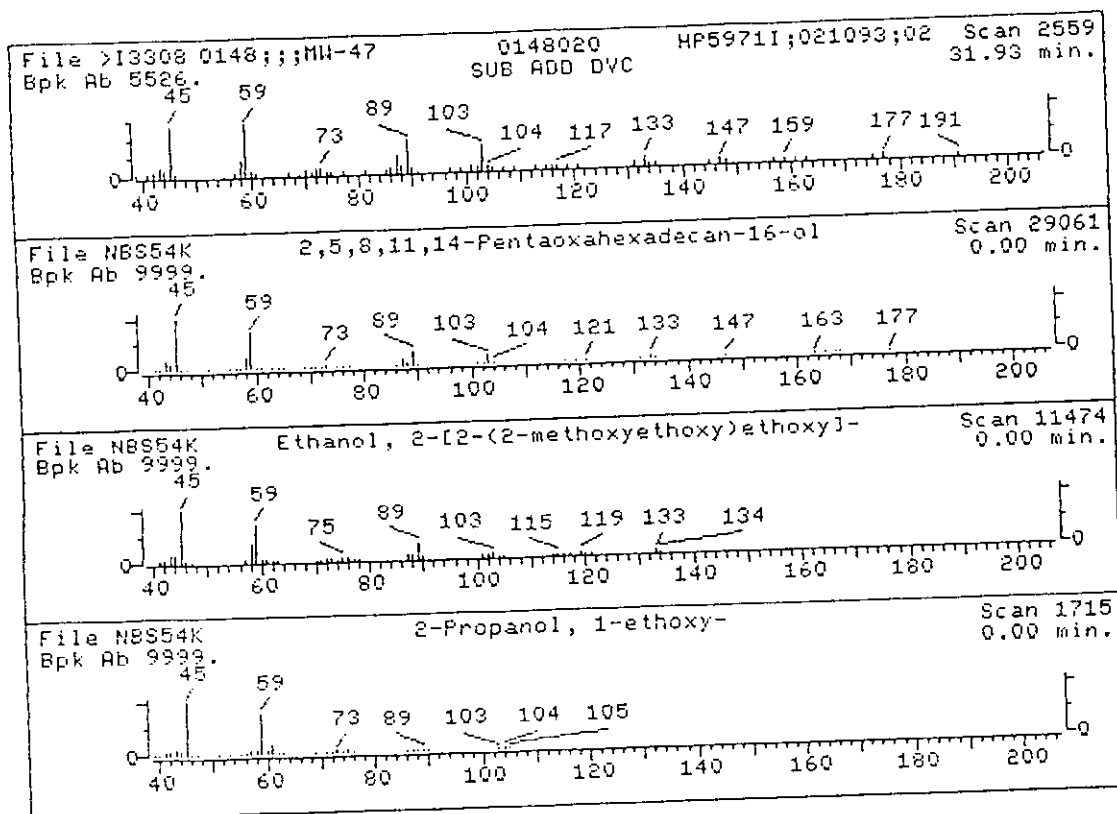
1. 2,5,8,11,14-Pentaoxahexadecan-16-ol  
 2. Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-  
 3. 2-Propanol, 1-ethoxy-  
 4. Silane, ethyldimethyl-  
 5. 2,5,8,11,14-Pentaoxapentadecane

252 C11H24O6  
 164 C7H16O4  
 104 C5H12O2  
 88 C4H12Si  
 222 C10H22O5

Sample file: >I3308 Spectrum #: 2559  
 Search speed: 1 Tilting option: N No. of ion ranges searched: 44

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	45	23778521	8670	NBS54K	44	85	0	0	96	25	17	16
2.	30	112356	8547	NBS54K	39	60	0	0	92	39	10	16
3.	30*	1569024	1853	NBS54K	34	60	1	0	96	44	8	18
4.	25*	758214	1807	NBS54K	36	62	3	0	100	49	7	13
5.	20	143248	2057	NBS54K	26	84	0	0	100	55	5	13

Peak#: 25 Area: 122784. Est Conc: 12. Date: 02/19/93 16:44 Inst: I

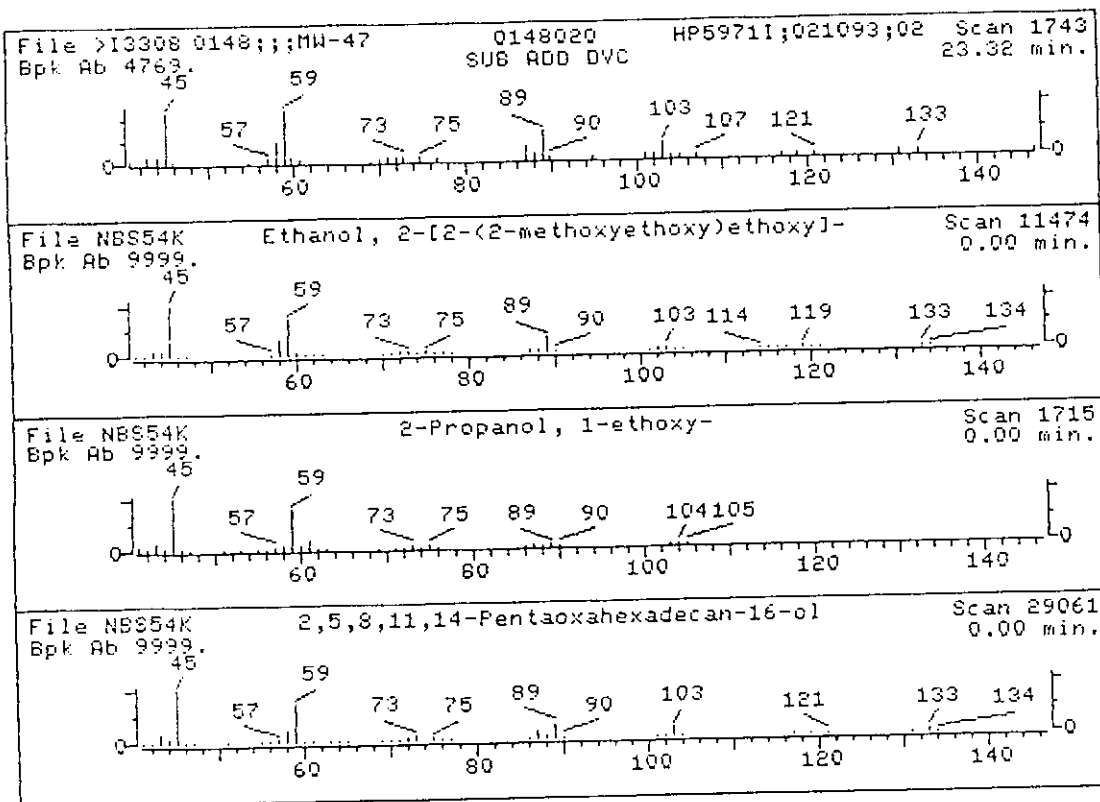


Ethanol, 2-[2-(2-methoxyethoxy)ethoxy]-	164 C7H16O4
1. 2-Propanol, 1-ethoxy-	104 C5H12O2
3. 2,5,8,11,14-Pentaoxahexadecan-16-ol	252 C11H24O6
4. Silane, ethyldimethyl-	88 C4H12Si
5. 2,5,8,11,14,17-Hexaoxaoctadecane	266 C12H26O6

Sample file: >I3308      Spectrum #:      1743  
 Search speed: 1      Tilting option: N      No. of ion ranges searched:      45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	46	112356	8547	NBS54K	55	44	1	0	94	22	17
2.	32*	1569024	1853	NBS54K	34	60	1	0	94	40	10
3.	29	23778521	8670	NBS54K	61	68	2	0	128	35	12
4.	25*	758214	1807	NBS54K	40	58	2	0	89	49	7
5.	25	1191873	2071	NBS54K	36	80	0	0	100	49	7

Peak#: 15 Area: 55502. Est Conc:      6. Date: 02/19/93 16:44 Inst: I



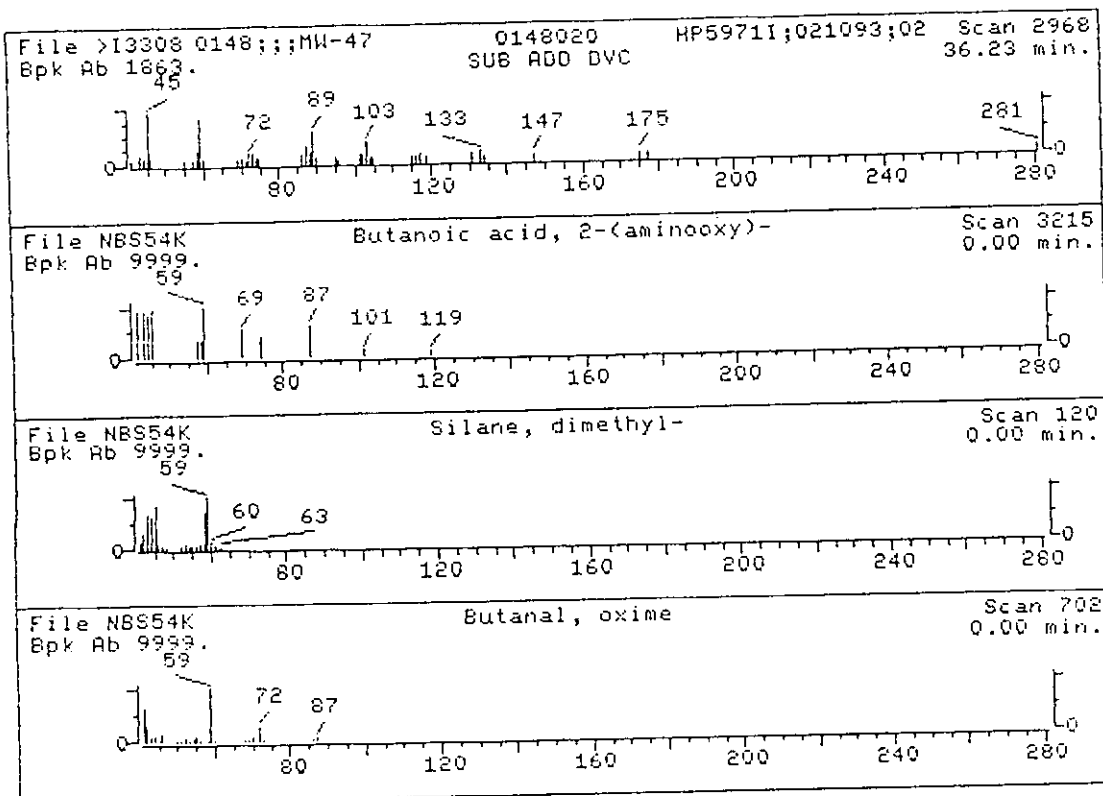
- Butanoic acid, 2-(aminooxy)-
- 1. Silane, dimethyl-
- 3. Butanal, oxime
- 4. Hydrazine, 1-methyl-1-propyl-
- 5. Silane, ethyldimethyl-

- 119 C4H9NO3
- 60 C2H8Si
- 87 C4H9NO
- 88 C4H12N2
- 88 C4H12Si

Sample file: >I3308      Spectrum #: 2968  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 49

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25*	4385959	7630	NBS54K	32	74	3	0	89	45	8	13
2.	25*	1111746	1791	NBS54K	32	77	3	0	89	48	7	13
3.	11*	110690	1803	NBS54K	26	68	2	0	75	65	2	14
4.	11*	4986496	1806	NBS54K	20	65	2	0	89	65	2	13
5.	11*	758214	1807	NBS54K	26	72	2	0	60	62	2	14

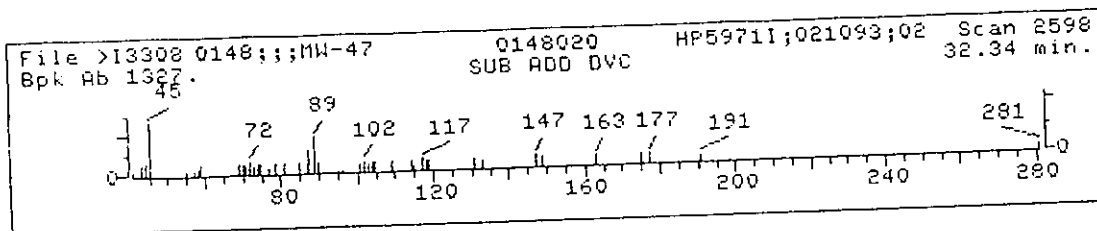
Peak#: 28 Area: 63270. Est Conc: 6. Date: 02/19/93 16:44 Inst: 1



Sample file: >13308 Spectrum #: 2598

No data base entries were retrieved.

Peak#: 26 Area: 49176. Est Conc: 5. Date: 02/19/93 16:44 Inst: 1



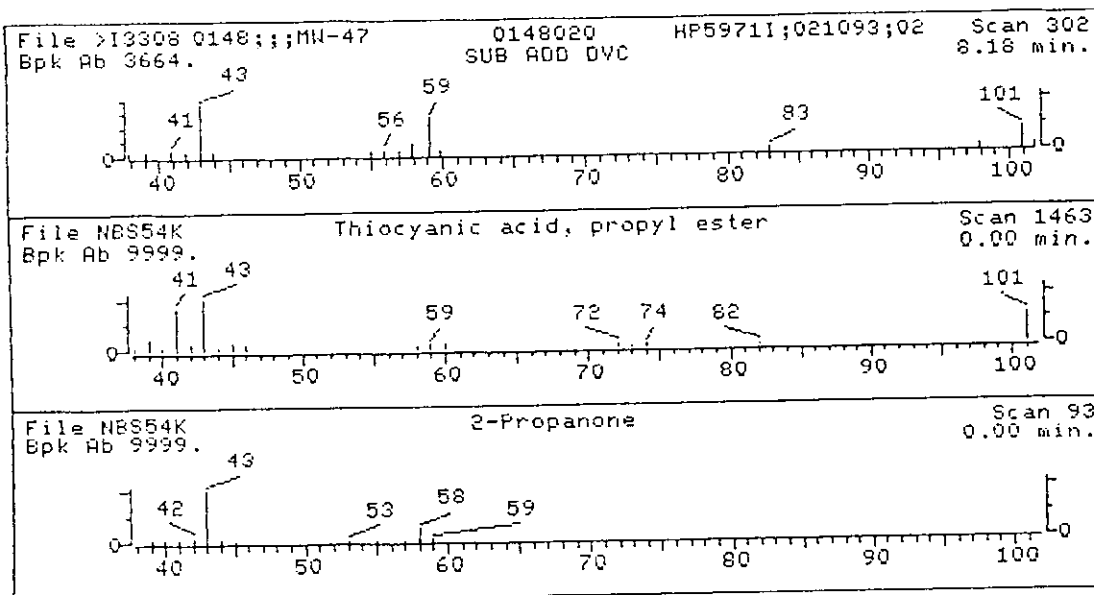
1. Thiocyanic acid, propyl ester
2. 2-Propanone

101 C4H7NS  
58 C3H6O

Sample file: >I3308      Spectrum #:      302  
Search speed: 1      Tilting option: N      No. of ion ranges searched:      42

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	30*	4251165	10744	NBS54K	26	72	3	0	68	33	12	13
2.	20*	67641	1370	NBS54K	21	50	0	0	91	51	5	15

Peak#:    1 Area:    23787. Est Conc:      5. Date: 02/19/93    16:44 Inst: I

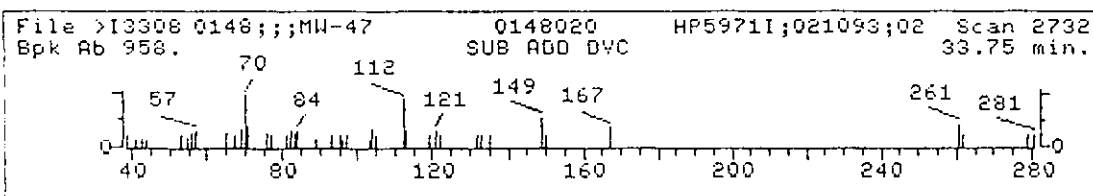


0680

Sample file: >I3308 Spectrum #: 2732

No data base entries were retrieved.

Peak#: 27 Area: 46314. Est Conc: 4. Date: 02/19/93 16:44 Inst: I





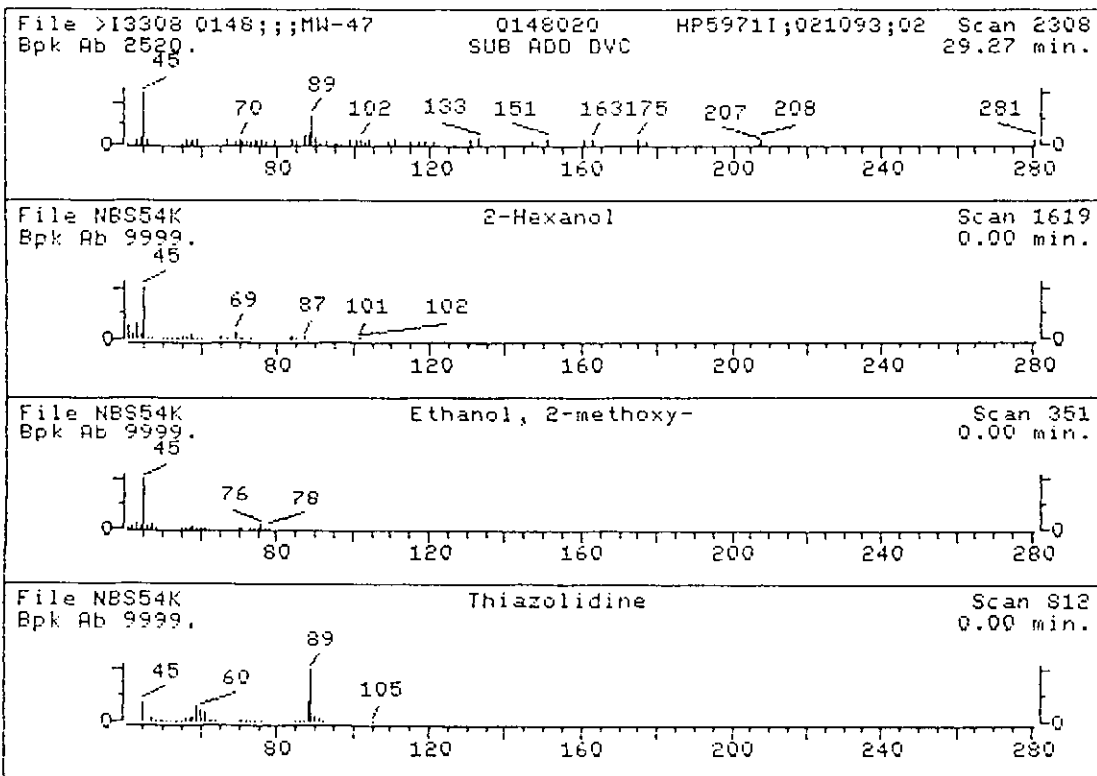
0681

- |                                 |     |          |
|---------------------------------|-----|----------|
| 1. 2-Hexanol                    | 102 | C6H14O   |
| 2. Ethanol, 2-methoxy-          | 76  | C3H8O2   |
| 3. Thiazolidine                 | 89  | C3H7NS   |
| 4. Silane, methylenebis[methyl- | 104 | C3H12Si2 |

Sample file: >I3308      Spectrum #: 2308  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV	
1.	25*	626937	353	NBS54K	29	59	3	0	100	50	7	13
2.	20*	109864	340	NBS54K	29	48	2	0	100	51	5	14
3.	20*	504789	8463	NBS54K	27	78	3	0	54	54	5	13
4.	11*	5654057	8465	NBS54K	33	94	3	0	54	62	2	13

Peak#: 21 Area: 42380. Est Conc: 4. Date: 02/19/93 16:44 Inst: I

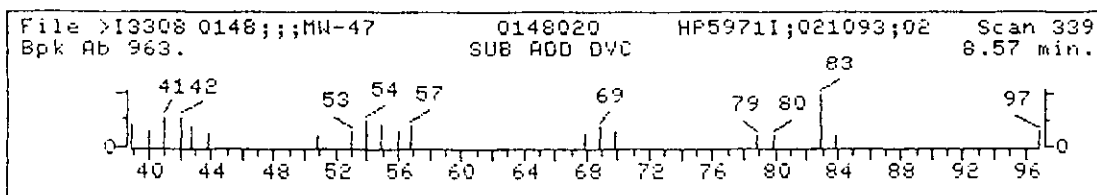


0682

Sample file: >I3308 Spectrum #: 339

No data base entries were retrieved.

Peak#: 2 Area: 15453. Est Conc: 3. Date: 02/19/93 16:44 Inst: I



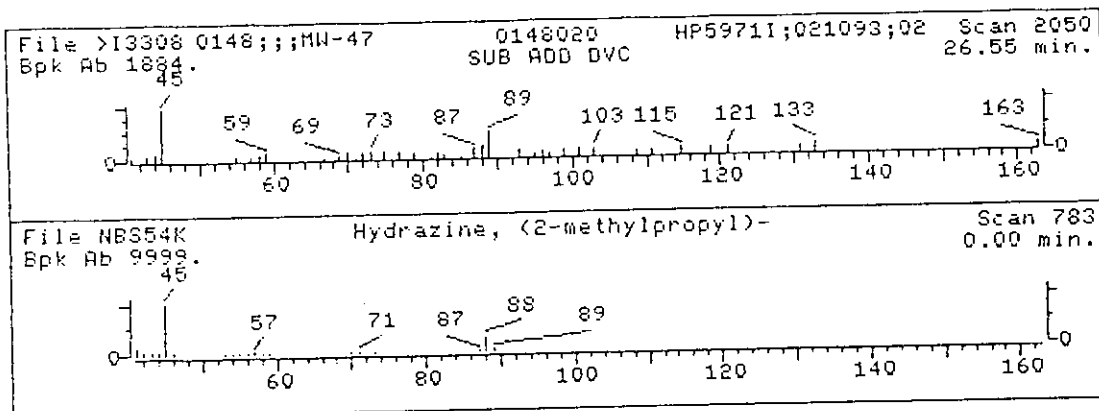
1. Hydrazine, (2-methylpropyl)-

88 C4H12N2

Sample file: >I3308      Spectrum #: 2050  
 Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	20*	42504870	8036	NBS54K	20	61	2	0	67	51	5 13

Peak#: 18 Area: 24629. Est Conc:      3. Date: 02/19/93 16:44 Inst: I



0684

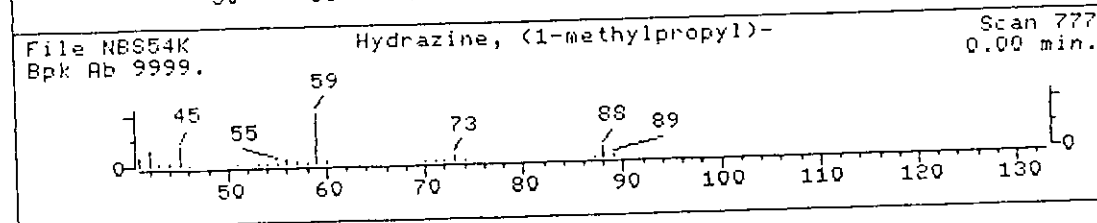
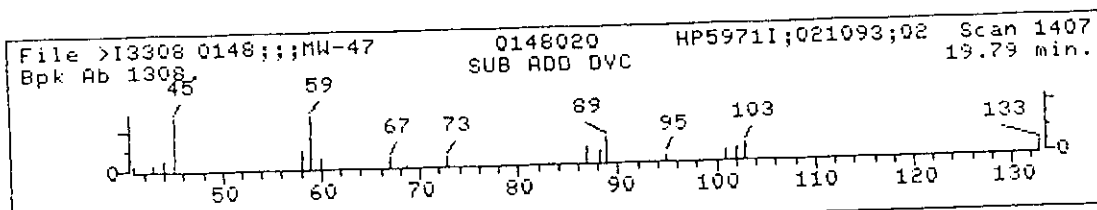
.. Hydrazine, (1-methylpropyl)-

88 C4H12N2

Sample file: >I3308      Spectrum #: 1407  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 45

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	15*	30924142	8034	NBS54K	25	77	3	0	98	58	3 13

Peak#: 11 Area: 19370. Est Conc:      2. Date: 02/19/93 16:44 Inst: 1



6B  
SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA 0 0685

Lab Name: IEA/CT Contract:  
 Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148  
 Instrument ID: HP5971I Calibration Date(s): 02/03/93  
 Calibration Times: 1702 2202

LAB FILE ID:		RRF20 =I3227.D		RRF50 =I3226.D		RRF80 =I3228.D		RRF120=I3229.D		RRF160=I3230.D		RRF		% RSD	
COMPOUND		RRF20	RRF50	RRF80	RRF120	RRF160	RRF		RRF		RRF		% RSD		
Phenol	*	2.119	1.949	1.825	1.518	1.290	1.740		1.740		1.740		19.2*		
bis(2-Chloroethyl) ether	*	2.151	1.941	1.819	1.571	1.411	1.779		1.779		1.779		16.5*		
2-Chlorophenol	*	1.396	1.333	1.310	1.198	1.051	1.258		1.258		1.258		10.8*		
1,3-Dichlorobenzene	*	1.492	1.395	1.382	1.237	1.100	1.321		1.321		1.321		11.6*		
1,4-Dichlorobenzene	*	1.497	1.393	1.365	1.208	1.009	1.294		1.294		1.294		14.7*		
1,2-Dichlorobenzene	*	1.492	1.353	1.283	1.066	0.837	1.206		1.206		1.206		21.3* <-		
2-Methylphenol	*	1.416	1.213	1.252	1.188	1.126	1.239		1.239		1.239		8.8*		
2,2'-oxybis(1-Chloropropane)		1.819	1.615	1.539	1.292	1.018	1.457		1.457		1.457		21.2		
4-Methylphenol	*	1.506	1.396	1.302	1.254	1.430	1.378		1.378		1.378		7.3*		
N-Nitroso-di-n-propylamine	*	1.056	0.946	0.916	0.875	0.644	0.887		0.887		0.887		17.1*		
Hexachloroethane	*	0.763	0.702	0.712	0.636	0.482	0.659		0.659		0.659		16.5*		
Nitrobenzene	*	0.415	0.394	0.355	0.339	0.310	0.363		0.363		0.363		11.6*		
Isophorone	*	0.939	0.858	0.866	0.859	0.686	0.842		0.842		0.842		11.1*		
2-Nitrophenol	*	0.287	0.273	0.255	0.243	0.244	0.260		0.260		0.260		7.4*		
2,4-Dimethylphenol	*	0.361	0.378	0.372	0.375	0.384	0.374		0.374		0.374		2.3*		
bis(2-Chloroethoxy)methane	*	0.638	0.601	0.582	0.572	0.379	0.554		0.554		0.554		18.3*		
2,4-Dichlorophenol	*	0.330	0.321	0.316	0.318	0.299	0.317		0.317		0.317		3.6*		
1,2,4-Trichlorobenzene	*	0.363	0.349	0.347	0.339	0.308	0.341		0.341		0.341		6.1*		
Naphthalene	*	1.059	0.973	0.962	0.892	0.763	0.930		0.930		0.930		11.9*		
4-Chloroaniline		0.215	0.147	0.101	0.125	0.392	0.196		0.196		0.196		60.1		
Hexachlorobutadiene		0.188	0.178	0.178	0.172	0.168	0.177		0.177		0.177		4.3		
4-Chloro-3-methylphenol	*	0.366	0.349	0.348	0.353	0.357	0.355		0.355		0.355		2.0*		
2-Methylnaphthalene	*	0.750	0.703	0.674	0.598	0.545	0.654		0.654		0.654		12.6*		
Hexachlorocyclopentadiene		0.381	0.358	0.375	0.388	0.354	0.371		0.371		0.371		4.0		
2,4,6-Trichlorophenol	*	0.426	0.425	0.412	0.446	0.471	0.436		0.436		0.436		5.3*		
2,4,5-Trichlorophenol	*	0.000	0.429	0.435	0.429	0.343	0.409		0.409		0.409		10.7*		
2-Chloronaphthalene	*	1.189	1.097	1.073	1.044	0.910	1.063		1.063		1.063		9.5*		
2-Nitroaniline		0.000	0.358	0.380	0.398	0.401	0.384		0.384		0.384		5.1		
Dimethylphthalate		1.409	1.359	1.358	1.352	1.364	1.368		1.368		1.368		1.7		
Acenaphthylene	*	1.935	1.744	1.647	1.428	1.215	1.594		1.594		1.594		17.5*		
2,6-Dinitrotoluene	*	0.392	0.365	0.341	0.311	0.234	0.329		0.329		0.329		18.4*		
3-Nitroaniline		0.000	0.050	0.044	0.037	0.188	0.080		0.080		0.080		90.6		
Acenaphthene	*	1.097	1.002	0.981	0.937	0.803	0.964		0.964		0.964		11.1*		
2,4-Dinitrophenol		0.000	0.194	0.231	0.263	0.287	0.244		0.244		0.244		16.6		
4-Nitrophenol		0.000	0.142	0.147	0.131	0.158	0.144		0.144		0.144		7.8		
Dibenzofuran	*	1.610	1.527	1.462	1.418	1.240	1.452		1.452		1.452		9.5*		
2,4-Dinitrotoluene	*	0.495	0.508	0.508	0.526	0.543	0.516		0.516		0.516		3.6*		

\* 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

0686

Lab Name: IEA/CT Contract:  
 Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148  
 Instrument ID: HP5971I Calibration Date(s): 02/03/93  
 Calibration Times: 1702 2202

LAB FILE ID:	RRF20 =I3227.D	RRF50 =I3226.D			RRF160=I3230.D		
RRF80 =I3228.D	RRF120=I3229.D						
COMPOUND	RRF20	RRF50	RRF80	RRF120	RRF160	RRF	% RSD
Diethylphthalate	1.481	1.362	1.337	1.310	1.219	1.342	7.0
4-Chlorophenyl-phenylether	* 0.615	0.534	0.488	0.434	0.432	0.501	15.3*
Fluorene	* 1.239	1.095	0.955	0.874	0.859	1.004	16.0*
4-Nitroaniline	0.000	0.140	0.161	0.187	0.192	0.170	14.3
4,6-Dinitro-2-methylphenol	0.000	0.170	0.185	0.198	0.137	0.173	15.3
N-Nitrosodiphenylamine (1)	0.431	0.372	0.352	0.358	0.298	0.362	13.2
4-Bromophenyl-phenylether	* 0.200	0.193	0.191	0.190	0.165	0.188	7.2*
Hexachlorobenzene	* 0.285	0.276	0.275	0.262	0.229	0.265	8.4*
Pentachlorophenol	* 0.000	0.185	0.192	0.193	0.181	0.187	3.2*
Phenanthrene	* 0.995	0.958	0.956	0.925	0.813	0.929	7.5*
Anthracene	* 1.084	0.955	0.960	0.910	0.698	0.922	15.3*
Carbazole	0.346	0.204	0.213	0.202	0.348	0.262	29.4
Di-n-butylphthalate	1.620	1.413	1.390	1.302	1.097	1.364	13.9
Fluoranthene	* 1.098	1.012	1.055	1.012	0.878	1.011	8.1*
Pyrene	* 1.407	1.379	1.330	1.273	1.400	1.358	4.1*
Butylbenzylphthalate	0.846	0.806	0.824	0.791	0.844	0.822	2.9
3,3'-Dichlorobenzidine	0.206	0.181	0.191	0.232	0.300	0.222	21.4
Benzo(a)anthracene	* 1.161	1.114	1.145	1.145	1.176	1.148	2.0*
Chrysene	* 1.097	0.929	0.854	0.790	0.915	0.917	12.5*
bis(2-Ethylhexyl)phthalate	1.185	1.018	0.915	0.811	0.992	0.984	14.0
Di-n-octylphthalate	2.140	2.000	2.048	2.051	1.782	2.004	6.7
Benzo(b)fluoranthene	* 1.171	1.127	1.225	1.503	1.563	1.318	15.2*
Benzo(k)fluoranthene	* 1.049	0.979	0.925	0.813	0.622	0.877	19.0*
Benzo(a)pyrene	* 1.102	1.048	1.071	1.106	1.097	1.085	2.3*
Indeno(1,2,3-cd)pyrene	* 0.897	0.928	1.003	1.009	1.062	0.980	6.8*
Dibenz(a,h)anthracene	* 0.898	0.796	0.882	0.897	0.873	0.869	4.8*
Benzo(g,h,i)perylene	* 0.982	0.981	0.992	0.970	0.935	0.972	2.2*
Nitrobenzene-d5	* 0.421	0.417	0.403	0.391	0.375	0.401	4.7*
2-Fluorobiphenyl	* 1.325	1.235	1.203	1.153	0.983	1.180	10.7*
Terphenyl-d14	* 0.993	0.923	0.888	0.819	0.943	0.913	7.1*
Phenol-d5	* 2.022	1.901	1.857	1.696	1.500	1.795	11.3*
2-Fluorophenol	* 1.302	1.301	1.334	1.273	1.236	1.289	2.9*
2,4,6-Tribromophenol	0.287	0.261	0.262	0.252	0.245	0.261	6.1
2-Chlorophenol-d4	* 1.304	1.273	1.275	1.180	0.971	1.201	11.4*
1,2-Dichlorobenzene-d4	* 0.996	0.900	0.876	0.757	0.564	0.818	20.3*

(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.

0687

## QUANT REPORT

Page 1

Operator ID: USER1

Quant Rev: 7

Quant Time: 930203 17:59

Output File: ^I3226::A6

Injected at: 930203 17:02

Data File: &gt;I3226::A3

Dilution Factor: 1.00000

Name: ;;;SSTD050

Instrument ID: \*\*MSD

Misc: 050PPMSTD HP59711;;;1;;;10288

ID File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Qcal Time: 930203 15:16

Last Calibration: 910116 11:52

*JMC 2/9/03*

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.30	151.8	24880	40.00	ug	94
2) 2-Chlorophenol-d4	11.82	132.0	39602	51.80	ug	83
3) 2-Fluorophenol	9.25	111.8	40471	58.76	ug	78
4) Phenol-d5	11.52	98.8	59136	60.80	ug	30
5) Phenol	11.56	93.9	60613	59.61	ug	40
6) bis(2-Chloroethyl)ether	11.76	92.7	60362	65.71	ug	66
7) 2-Chlorophenol	11.86	127.8	41465	54.81	ug	90
8) 1,3-Dichlorobenzene	12.21	145.8	43394	51.13	ug	98
9) 1,4-Dichlorobenzene	12.35	145.7	43331M	50.82	ug	89
9) 1,2-Dichlorobenzene-d4	12.78	152.0	27988	49.64	ug	93
10) 1,2-Dichlorobenzene	12.82	145.7	42067	51.07	ug	97
11) 1,2-Dichlorobenzene	13.02	107.8	37730M	51.94	ug	72
12) 2-Methylphenol	13.12	44.8	50212	76.54	ug	91
13) 2,2'-oxybis(1-Chloropropane)	13.39	107.8	43424	55.42	ug	88
14) 4-Methylphenol	13.48	69.9	29412	50.78	ug	74
15) N-Nitroso-di-n-propylamine	13.59	116.7	21844	49.31	ug	96
16) Hexachloroethane	15.58	135.9	86822	40.00	ug	97
17) *Naphthalene-d8	13.78	81.8	45265	43.58	ug	76
18) Nitrobenzene-d5	13.83	76.8	42765	47.96	ug	81
19) Nitrobenzene	14.43	81.8	93132	48.65	ug	88
20) Isophorone	14.64	138.9	29604	55.83	ug	71
21) 2-Nitrophenol	14.75	106.8	41067	48.31	ug	94
22) 2,4-Dimethylphenol	15.01	92.8	65222	56.07	ug	79
23) bis(2-Chloroethoxy)methane	15.24	161.7	34854	44.03	ug	97
24) 2,4-Dichlorophenol	15.48	179.7	37913	45.70	ug	96
25) 1,2,4-Trichlorobenzene	15.63	127.9	105625	52.55	ug	83
26) Naphthalene	15.88	126.8	15951	34.29	ug	87
27) 4-Chloroaniline	16.12	224.6	19337	35.94	ug	97
28) Hexachlorobutadiene	17.06	106.9	37839	45.95	ug	88
29) 4-Chloro-3-methylphenol	17.45	141.9	76298	51.80	ug	99
30) 2-Methylnaphthalene	20.27	163.9	47934	40.00	ug	96
31) *Acenaphthene-d10	18.05	236.6	21463	39.83	ug	95
32) Hexachlorocyclopentadiene	18.25	195.8	25467	45.37	ug	98
33) 2,4,6-Trichlorophenol	18.35	195.8	25715	43.17	ug	93
34) 2,4,5-Trichlorophenol	18.48	171.8	73976	51.27	ug	95
35) 2-Fluorobiphenyl	18.74	161.8	65746	47.72	ug	98
6) 2-Chloronaphthalene	19.09	64.9	21442	43.62	ug	66
37) 2-Nitroaniline	19.65	162.8	81436	47.10	ug	97
38) Dimethylphthalate	19.85	152.0	104515	52.71	ug	97
39) Acenaphthylene	19.84	164.8	21889	46.23	ug	79
40) 2,6-Dinitrotoluene						

## QUANT REPORT

Page 2

Operator ID: USER1  
 Output File: ^I3226::A6  
 Data File: >I3226::A3  
 Name: ;;;SSTD050  
 Misc: 050PPMSTD HP59711; ; ; ; 1; ; ; ; I0288

Quant Rev: 7 Quant Time: 930203 17:59  
 Injected at: 930203 17:02  
 Dilution Factor: 1.00000  
 Instrument ID: \*\*MSD

ID File: I\_IFI::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qual. Time: 930203 15:16

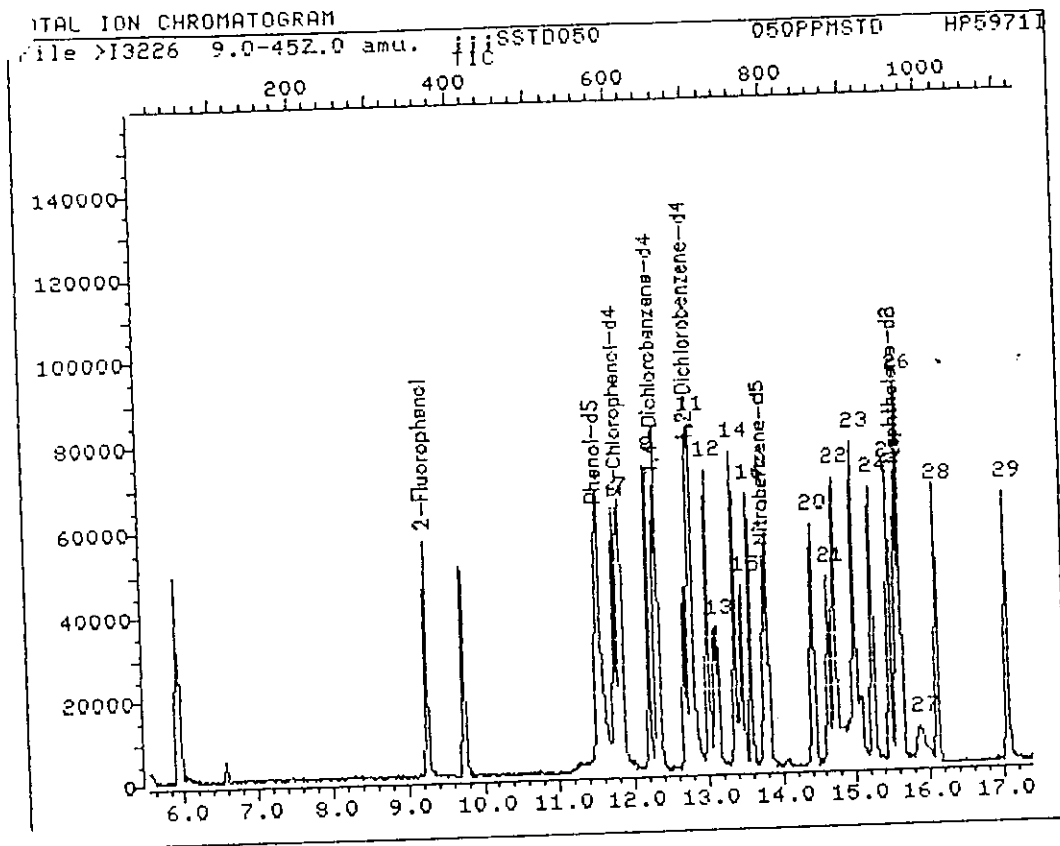
Compound	R.T.	Q ion	Area	Conc	Units	q
41) 3-Nitroaniline	20.16	137.8	2992	29.32	ug	71
42) Acenaphthene	20.35	152.9	60057	51.16	ug	98
43) 2,4-Dinitrophenol	20.46	183.8	11602	107.42	ug	87
44) 4-Nitrophenol	20.59	108.8	8504	33.04	ug	86
45) Dibenzofuran	20.77	167.8	91510	48.23	ug	94
46) 2,4-Dinitrotoluene	20.87	164.8	30418	45.13	ug	78
47) Diethylphthalate	21.52	148.8	81588	44.00	ug	97
48) 4-Chlorophenyl-phenylether	21.68	203.9	31987	50.08	ug	79
49) Fluorene	21.69	165.9	65593	53.08	ug	95
1) 4-Nitroaniline	21.86	137.9	8382	34.01	ug	77
1) 2,4,6-Tribromophenol	22.37	329.6	15629	44.69	ug	92
52) *Phenanthrene-d10	24.17	187.9	81624	40.00	ug	99
53) 4,6-Dinitro-2-methylphenol	21.94	197.9	17383	72.36	ug	80
54) N-Nitrosodiphenylamine (1)	22.01	168.9	37953	51.62	ug	96
55) 4-Bromophenyl-phenylether	22.96	247.9	19664	47.57	ug	84
56) Hexachlorobenzene	23.37	283.6	28157	47.96	ug	97
57) Pentachlorophenol	23.83	265.6	18827	52.22	ug	97
58) Phenanthrene	24.24	177.9	97720	50.56	ug	97
59) Carbazole	24.75	166.8	20769	27.63	ug	99
60) Anthracene	24.35	177.9	97480	48.70	ug	98
61) Di-n-butylphthalate	25.82	148.8	144198	49.26	ug	98
62) Fluoranthene	27.41	201.9	103299	46.44	ug	98
63) *Chrysene-d12	31.60	240.0	61937	40.00	ug	97
64) Pyrene	28.02	201.9	106746	57.12	ug	98
65) Terphenyl-d14	28.41	244.0	71459	54.63	ug	98
66) Butylbenzylphthalate	29.79	148.8	62366	54.87	ug	99
67) 3,3'-Dichlorobenzidine	31.45	251.9	14050	40.86	ug	83
68) Benzo(a)anthracene	31.53	228.0	86217	48.81	ug	98
69) Chrysene	31.70	228.0	71947	50.73	ug	99
70) bis(2-Ethylhexyl)phthalate	31.72	148.8	78823	55.52	ug	93
71) *Perylene-d12	38.73	264.0	58133	40.00	ug	95
72) Di-n-octylphthalate	34.34	148.9	145337	56.26	ug	95
73) Benzo(b)fluoranthene	36.43	252.0	81897	49.13	ug	97
<del>73) Benzo(b)fluoranthene</del>	<del>36.57</del>	<del>252.0</del>	<del>71160</del>	<del>42.68</del>	ug	90
<del>74) Benzo(k)fluoranthene</del>	<del>36.43</del>	<del>252.0</del>	<del>81897</del>	<del>53.51</del>	ug	98
i) Benzo(k)fluoranthene	36.57	252.0	71160	46.49	ug	94
75) Benzo(a)pyrene	38.38	252.0	76152	48.55	ug	95
76) Indeno(1,2,3-cd)pyrene	47.58	276.0	67429	45.19	ug	94
77) Dibenz(a,h)anthracene	47.88	278.0	57867	45.13	ug	87
78) Benzo(g,h,i)perylene	50.30	276.0	71318	49.24	ug	75

gmc

2/1/03



0689



Data File: >I3226::A3  
Name: ;;;SSTD050  
Misc: 050PPMSTD HP59711; ; ; ; 1; ; ; 10288

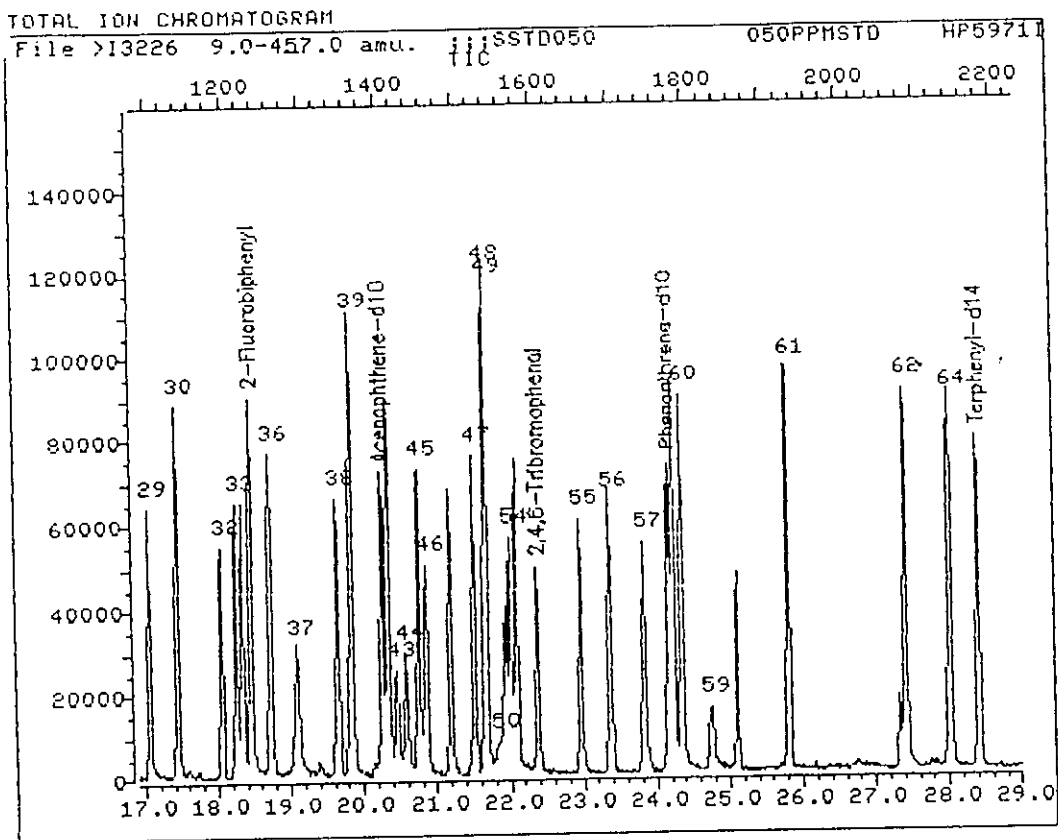
Quant Output File: ^I3226::A6  
Instrument ID: \*\*MSD

Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qcal Time: 930203 15:16

Operator ID: USER1  
Quant Time : 930203 17:59  
Injected at: 930203 17:02

0690

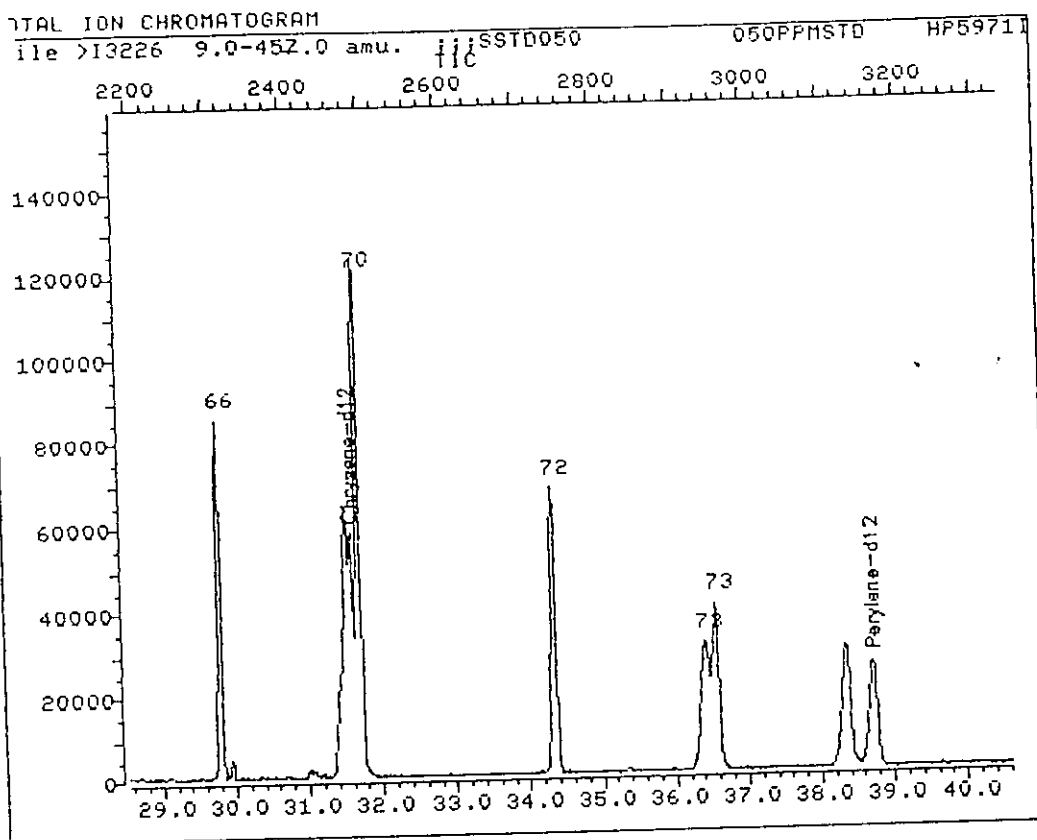


Data File: >I3226::A3                    Quant Output File: ^I3226::A6  
Name: ;;;SSTD050                    Instrument ID: \*\*MSD  
Misc: 050PPMSTD    HP59711;;;1;;;I0288

Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Qcal Time: 930203 15:16

Operator ID: USER1  
Quant Time : 930203 17:59  
Injected at: 930203 17:02

0691



Data File: >I3226::A3  
Name: ;;;SSTD050  
Misc: 050PPMSTD HP59711; ; ; ; ; 1; ; ; ; 10288

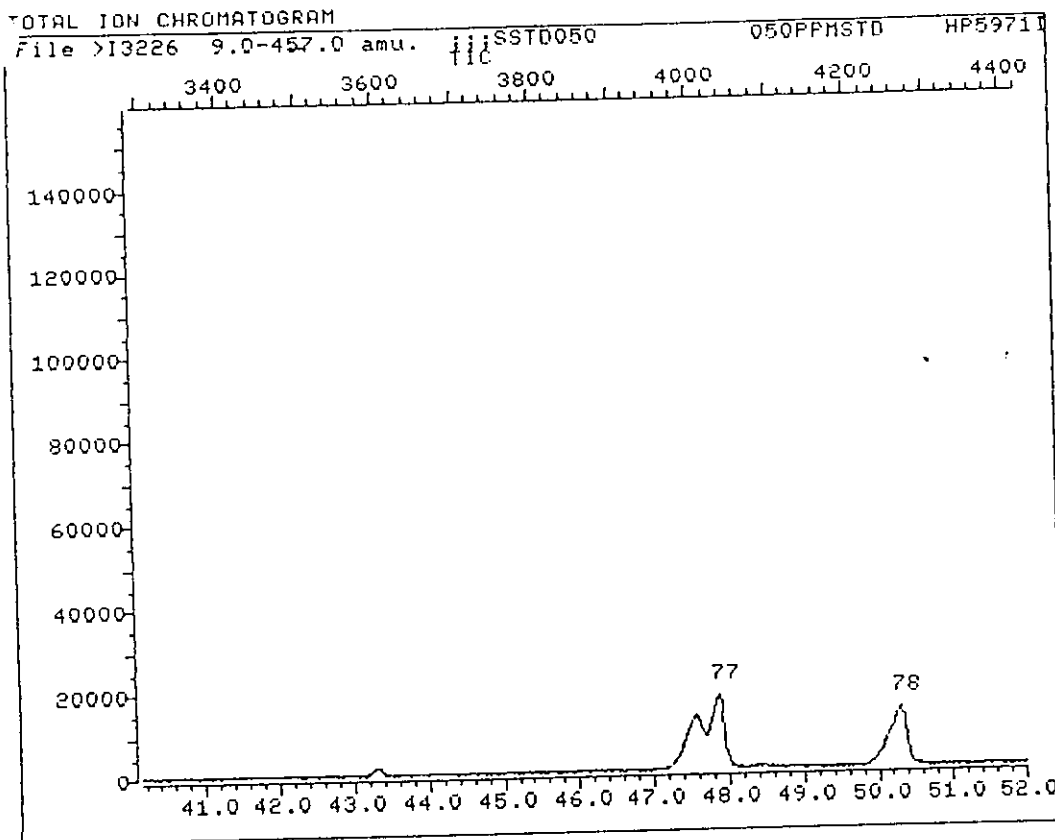
Quant Output File: ^I3226::A6  
Instrument ID: \*\*MSD

Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qcal Time: 930203 15:16

Operator ID: USER1  
Quant Time : 930203 17:59  
Injected at: 930203 17:02

0692



Data File: >I3226::A3                      Quant Output File: ^I3226::A6  
Name: ;;;SSTD050                              Instrument ID: \*\*MSD  
Misc: 050PPMSTD      HP59711;;;;1;;;I0288

Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52              Last Qcal Time: 930203 15:16

Operator ID: USER1  
Quant Time : 930203 17:59  
Injected at: 930203 17:02

## QUANT REPORT

Page 1

Operator ID: USER1

Quant Rev: 7

Quant Time: 930205 14:32

Output File: ^I3227::A6

Injected at: 930203 18:53

Data File: &gt;I3227::A3

Dilution Factor: 1.00000

Name: ;;;SSTD020

Instrument ID: \*\*MSD

Misc: 20PPMSTD HP5971I;;;LLW;1.0;;;I0288

ID File: I\_IFI::A6

Title: IFB-DLM01.8 BNA COMPOUNDS

Last Qcal Time: 930203 17:02

Last Calibration: 910116 11:52

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.30	151.8	23966	40.00	ug	95
2) 2-Chlorophenol-d4	11.81	132.0	15630	20.49	ug	86
3) 2-Fluorophenol	9.25	111.8	15604	20.01	ug	82
4) Phenol-d5	11.50	98.8	24225	21.26	ug	30
5) Phenol	11.53	93.9	25388	21.74	ug	36
6) bis(2-Chloroethyl)ether	11.74	92.7	25776	22.17	ug	66
7) 2-Chlorophenol	11.85	127.8	16728	20.94	ug	91
8) 1,3-Dichlorobenzene	12.21	145.8	17876	21.38	ug	98
9) 1,4-Dichlorobenzene	12.34	145.7	17935	21.48	ug	89
1) 1,2-Dichlorobenzene-d4	12.78	152.0	11930	22.13	ug	93
1) 1,2-Dichlorobenzene	12.81	145.7	17879	22.06	ug	95
12) 2-Methylphenol	13.01	107.8	16964	23.34	ug	77
13) 2,2'-oxybis(1-Chloropropane)	13.10	44.8	21795	22.53	ug	96
14) 4-Methylphenol	13.37	107.8	18049	21.57	ug	89
15) N-Nitroso-di-n-propylamine	13.46	69.9	12652	22.33	ug	68
16) Hexachloroethane	13.59	116.7	9140	21.72	ug	91
17) *Naphthalene-d8	15.59	135.9	85327	40.00	ug	96
18) Nitrobenzene-d5	13.77	81.8	17948	20.17	ug	73
19) Nitrobenzene	13.82	76.8	17688	21.04	ug	82
20) Isophorone	14.42	81.8	40043	21.87	ug	86
21) 2-Nitrophenol	14.64	138.9	12259	21.07	ug	71
22) 2,4-Dimethylphenol	14.73	106.8	15409	19.09	ug	99
23) bis(2-Chloroethoxy)methane	15.01	92.8	27207	21.22	ug	82
24) 2,4-Dichlorophenol	15.23	161.7	14069	20.54	ug	95
25) 1,2,4-Trichlorobenzene	15.47	179.7	15508	20.81	ug	97
26) Naphthalene	15.63	127.9	45167	21.76	ug	85
27) 4-Chloroaniline	15.83	126.8	9158	29.21	ug	89
28) Hexachlorobutadiene	16.11	224.6	8037	21.15	ug	96
29) 4-Chloro-3-methylphenol	17.06	106.9	15608	20.99	ug	89
30) 2-Methylnaphthalene	17.45	141.9	32001	21.34	ug	96
31) *Acenaphthene-d10	20.26	163.9	46570	40.00	ug	96
32) Hexachlorocyclopentadiene	18.04	236.6	8878	21.29	ug	97
33) 2,4,6-Trichlorophenol	18.25	195.8	9926	20.06	ug	95
35) 2-Fluorobiphenyl	18.47	171.8	30861	21.47	ug	96
36) 2-Chloronaphthalene	18.73	161.8	27689	21.67	ug	95
3) Dimethylphthalate	19.64	162.8	32806	20.73	ug	97
39) Acenaphthylene	19.84	152.0	45048	22.18	ug	95
40) 2,6-Dinitrotoluene	19.82	164.8	9117	21.44	ug	77
42) Acenaphthene	20.34	152.9	25540	21.89	ug	98
45) Dibenzofuran	20.76	167.8	37494	21.09	ug	96

0694

QUANT REPORT

Operator ID: USER1                      Quant Rev: 7            Quant Time: 930205 14:32  
 Output File: ^I3227::A6                      Injected at: 930203 18:53  
 Data File: >I3227::A3                      Dilution Factor: 1.00000  
 Name: ;;;SSTD020                      Instrument ID: \*\*MSD  
 Misc: 20PPMSTD    HP59711;;;LLW;1.0;;;I0288

ID File: I\_IFI::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

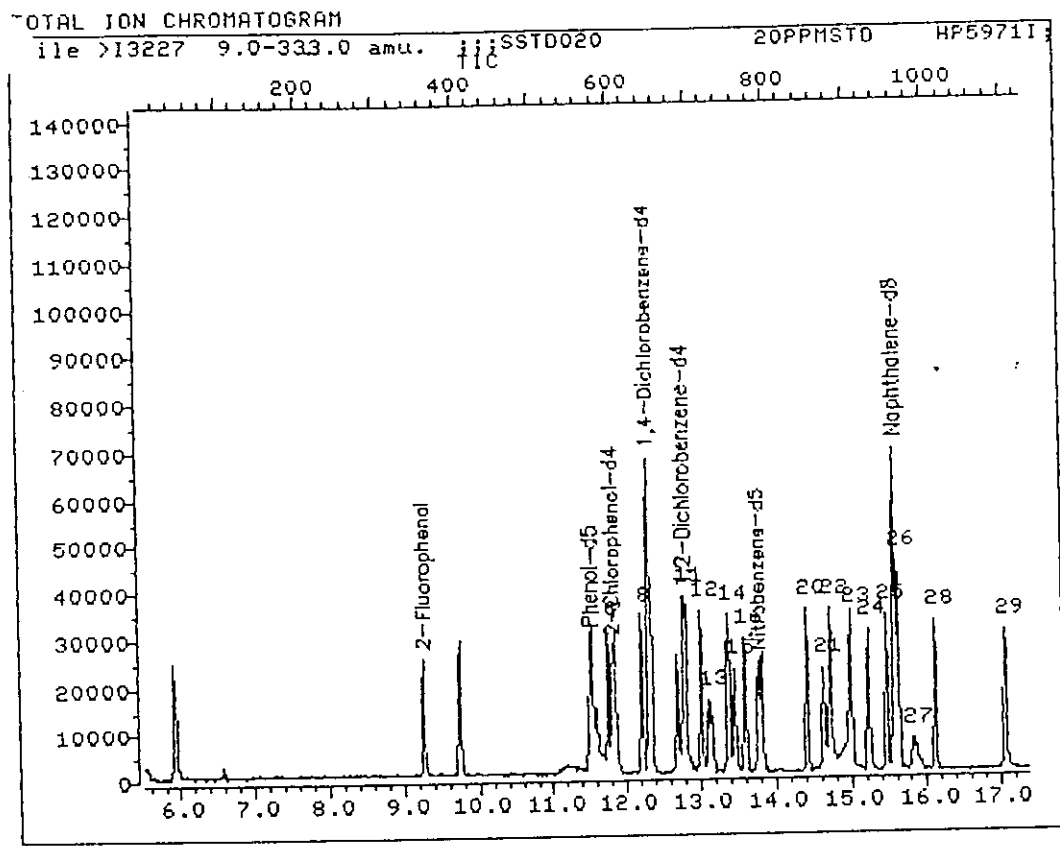
Last Qcal. Time: 930203 17:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
46)	2,4-Dinitrotoluene	20.85	164.8	11528	19.50	ug	77
47)	Diethylphthalate	21.51	148.8	34481	21.75	ug	97
48)	4-Chlorophenyl-phenylether	21.66	203.9	14326	23.05	ug	73
49)	Fluorene	21.68	165.9	28848	22.63	ug	98
51)	2,4,6-Tribromophenol	22.37	329.6	6674	21.98	ug	91
52)	*Phenanthrene-d10	24.17	187.9	80385	40.00	ug	98
54)	N-Nitrosodiphenylamine (1)	21.99	168.9	17324	23.17	ug	94
55)	4-Bromophenyl-phenylether	22.96	247.9	8036	20.75	ug	74
56)	Hexachlorobenzene	23.36	283.6	11468	20.68	ug	95
58)	Phenanthrene	24.23	177.9	39983	20.77	ug	96
59)	Carbazole	24.76	166.8	13889	33.95	ug	97
60)	Anthracene	24.35	177.9	43578	22.70	ug	98
61)	Di-n-butylphthalate	25.81	148.8	65099	22.92	ug	98
62)	Fluoranthene	27.40	201.9	44137	21.69	ug	98
63)	*Chrysene-d12	31.59	240.0	63010	40.00	ug	97
64)	Pyrene	28.00	201.9	44330	20.41	ug	99
65)	Terphenyl-d14	28.40	244.0	31273	21.51	ug	99
66)	Butylbenzylphthalate	29.79	148.8	26655	21.01	ug	99
67)	3,3'-Dichlorobenzidine	31.43	251.9	6477	22.66	ug	83
68)	Benzo(a)anthracene	31.51	228.0	36564	20.84	ug	95
69)	Chrysene	31.67	228.0	34574	23.62	ug	98
70)	bis(2-Ethylhexyl)phthalate	31.70	148.8	37327	23.27	ug	95
71)	*Perylene-d12	38.71	264.0	57803	40.00	ug	97
72)	Di-n-octylphthalate	34.32	148.9	61843	21.40	ug	93
73)	Benzo(b)fluoranthene	36.38	252.0	33847	20.78	ug	87
<del>73)</del>	<del>Benzo(b)fluoranthene</del>	<del>36.50</del>	<del>252.0</del>	<del>30311</del>	<del>18.61</del>	ug	98
<del>74)</del>	<del>Benzo(k)fluoranthene</del>	<del>36.38</del>	<del>252.0</del>	<del>33847</del>	<del>23.92</del>	ug	93
74)	Benzo(k)fluoranthene	36.50	252.0	30311	21.42	ug	97
75)	Benzo(a)pyrene	38.31	252.0	31837	21.02	ug	99
76)	Indeno(1,2,3-cd)pyrene	47.46	276.0	25917	19.33	ug	97
77)	Dibenz(a,h)anthracene	47.75	278.0	25959	22.56	ug	98
78)	Benzo(g,h,i)perylene	50.12	276.0	28395M	20.02	ug	74

*Amc*  
*2/1/83*

\* Compound is ISTD

0695



Data File: >I3227::A3  
Name: ;;;SSTD020  
Misc: 20PPMSTD HP5971I;;;LLW;1.0;;;I0288

Quant Output File: ^I3227::A6  
Instrument ID: \*\*MSD

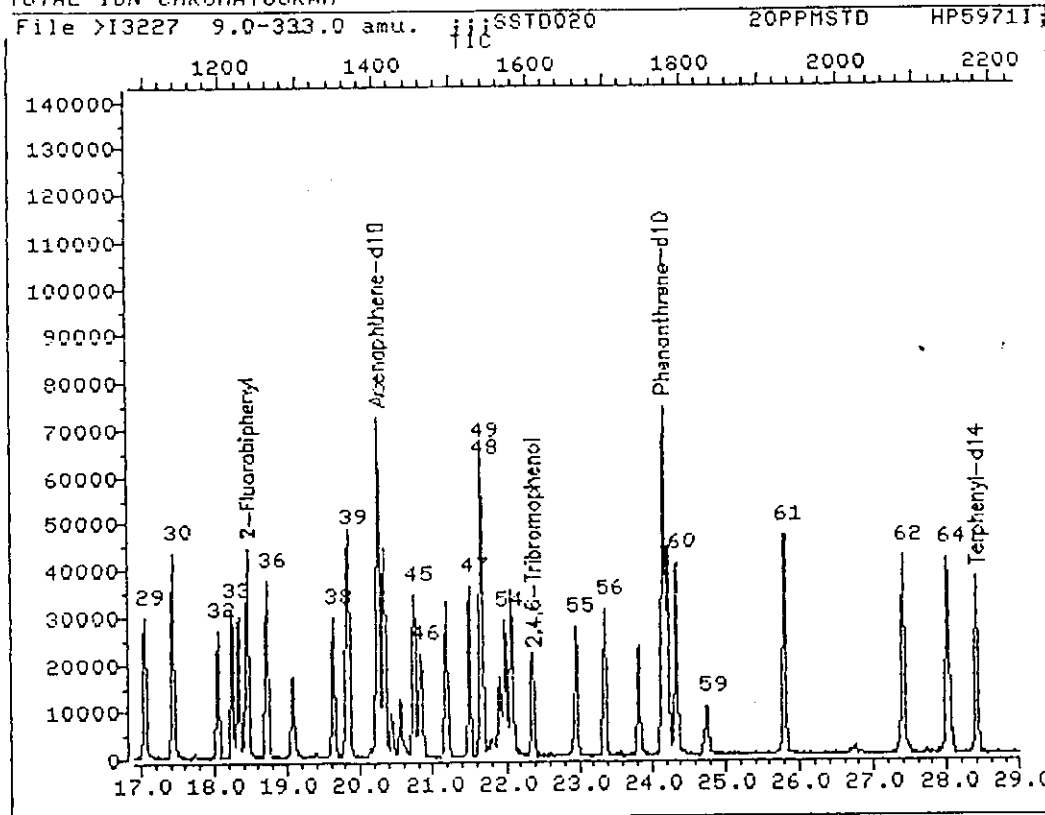
Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Operator ID: USER1  
Quant Time : 930205 14:32  
Injected at: 930203 18:53

0696

TOTAL ION CHROMATOGRAM



Data File: >I3227::A3

Quant Output File: ^I3227::A6

Name: ;;;SSTD020

Instrument ID: \*\*MSD

Misc: 20PPMSTD HP59711;;;LLW;1.0;;;I0288

Id File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Operator ID: USER1

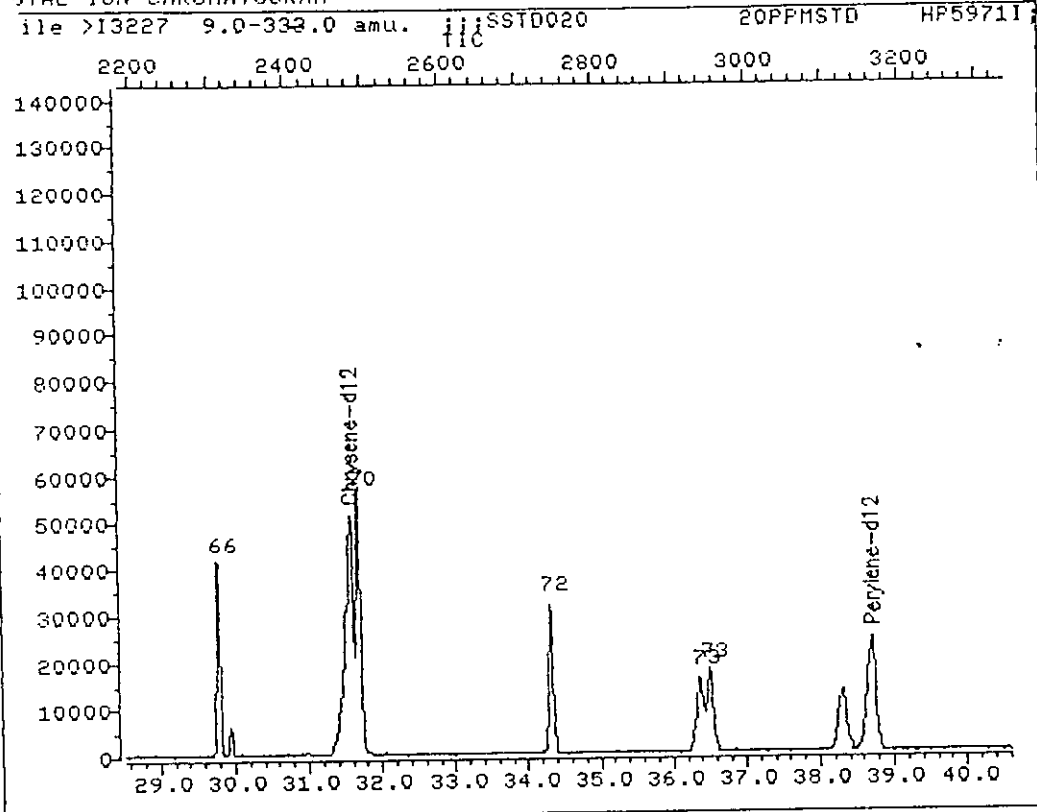
Quant Time : 930205 14:32

Injected at: 930203 18:53



0697

TOTAL ION CHROMATOGRAM



Data File: >I3227::A3

Quant Output File: ^I3227::A6

Name: ;;;SSTD020

Instrument ID: \*\*MSD

Misc: 20PPMSTD

HP59711;;;LLW;1.0;;;I0288

Id File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

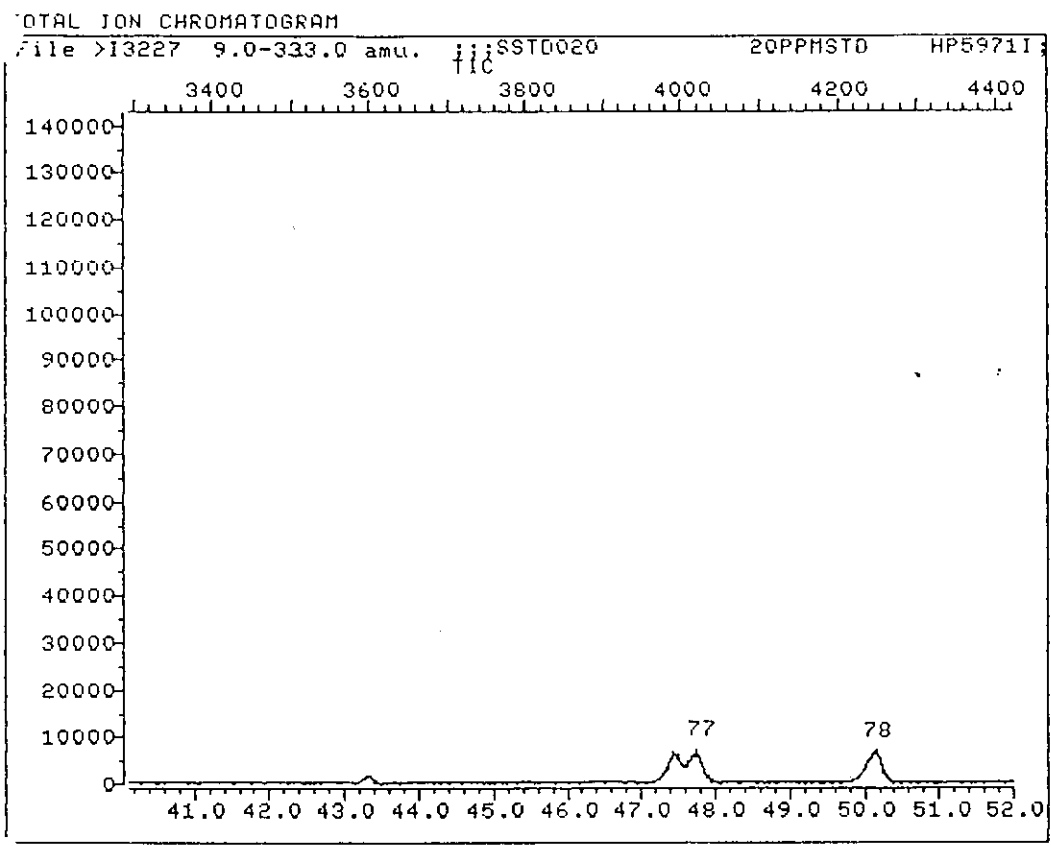
Operator ID: USER1

Quant Time : 930205 14:32

Injected at: 930203 18:53

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0698



Data File: >I3227::A3                    Quant Output File: ^I3227::A6  
Name: ;;;SSTD020                    Instrument ID: \*\*MSD  
Misc: 20PPMSTD    HP59711;;;LLW;1.0;;;I0288

Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52            Last Qcal Time: 930203 17:02

Operator ID: USER1  
Quant Time : 930205 14:32  
Injected at: 930203 18:53

## QUANT REPORT

Page 1

Operator ID: USER1

Quant Rev: 7

Quant Time: 930205 14:35

Output File: ^I3228::A6

Injected at: 930203 19:56

Data File: &gt;I3228::A3

Dilution Factor: 1.00000

Name: ;;;SSTD080

Instrument ID: \*\*MSD

Misc: 80PPMSTD HP5971I;;;LLW;1.0;;;I0288

ID File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.30	151.8	22316	40.00	ug	94
2)	2-Chlorophenol-d4	11.82	132.0	56890	80.08	ug	82
3)	2-Fluorophenol	9.26	111.8	59545	82.02	ug	73
4)	Phenol-d5	11.53	98.8	82887	78.13	ug	31
5)	Phenol	11.57	93.9	81436	74.90	ug	46
6)	bis(2-Chloroethyl)ether	11.77	92.7	81207	75.00	ug	64
7)	2-Chlorophenol	11.86	127.8	58483	78.62	ug	87
8)	1,3-Dichlorobenzene	12.21	145.8	61671	79.22	ug	98
9)	1,4-Dichlorobenzene	12.35	145.7	60939	78.40	ug	92
	) 1,2-Dichlorobenzene-d4	12.78	152.0	39083	77.84	ug	94
11)	1,2-Dichlorobenzene	12.82	145.7	57262	75.88	ug	98
12)	2-Methylphenol	13.02	107.8	55901	82.59	ug	76
13)	2,2'-oxybis(1-Chloropropane)	13.12	44.8	68696	76.27	ug	86
14)	4-Methylphenol	13.40	107.8	58098	74.58	ug	92
15)	N-Nitroso-di-n-propylamine	13.50	69.9	40861	77.44	ug	71
16)	Hexachloroethane	13.59	116.7	31756	81.04	ug	99
17)	*Naphthalene-d8	15.58	135.9	78181	40.00	ug	98
18)	Nitrobenzene-d5	13.79	81.8	62957	77.23	ug	71
19)	Nitrobenzene	13.83	76.8	55574	72.16	ug	80
20)	Isophorone	14.44	81.8	135360	80.70	ug	89
21)	2-Nitrophenol	14.64	138.9	39852	74.75	ug	73
22)	2,4-Dimethylphenol	14.75	106.8	58180	78.66	ug	98
23)	bis(2-Chloroethoxy)methane	15.01	92.8	90959	77.44	ug	79
24)	2,4-Dichlorophenol	15.25	161.7	49387	78.68	ug	97
25)	1,2,4-Trichlorobenzene	15.48	179.7	54233	79.43	ug	98
26)	Naphthalene	15.64	127.9	150453	79.09	ug	81
27)	4-Chloroaniline	15.89	126.8	15776	54.92	ug	89
28)	Hexachlorobutadiene	16.11	224.6	27844	79.95	ug	96
29)	4-Chloro-3-methylphenol	17.07	106.9	54477	79.94	ug	87
30)	2-Methylnaphthalene	17.45	141.9	105439	76.73	ug	99
31)	*Acenaphthene-d10	20.26	163.9	42964	40.00	ug	96
32)	Hexachlorocyclopentadiene	18.05	236.6	32264	83.86	ug	98
33)	2,4,6-Trichlorophenol	18.26	195.8	35369	77.47	ug	97
34)	2,4,5-Trichlorophenol	18.34	195.8	37377	81.08	ug	95
35)	2-Fluorobiphenyl	18.47	171.8	103350	77.93	ug	95
36)	2-Chloronaphthalene	18.73	161.8	92230	78.25	ug	98
37)	2-Nitroaniline	19.10	64.9	32663	84.98	ug	62
38)	Dimethylphthalate	19.66	162.8	116665	79.92	ug	97
39)	Acenaphthylene	19.86	152.0	141517	75.53	ug	98
40)	2,6-Dinitrotoluene	19.85	164.8	29342	74.78	ug	83

0700

QUANT REPORT

Operator ID: USER1  
Output File: ^I3228::A6  
Data File: >I3228::A3  
Name: ;;;SSTD080  
Misc: 80PPMSTD HP59711;;;LLW;1.0;;;I0288

Quant Rev: 7 Quant Time: 930205 14:35  
Injected at: 930203 19:56  
Dilution Factor: 1.00000  
Instrument ID: \*\*MSD

ID File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

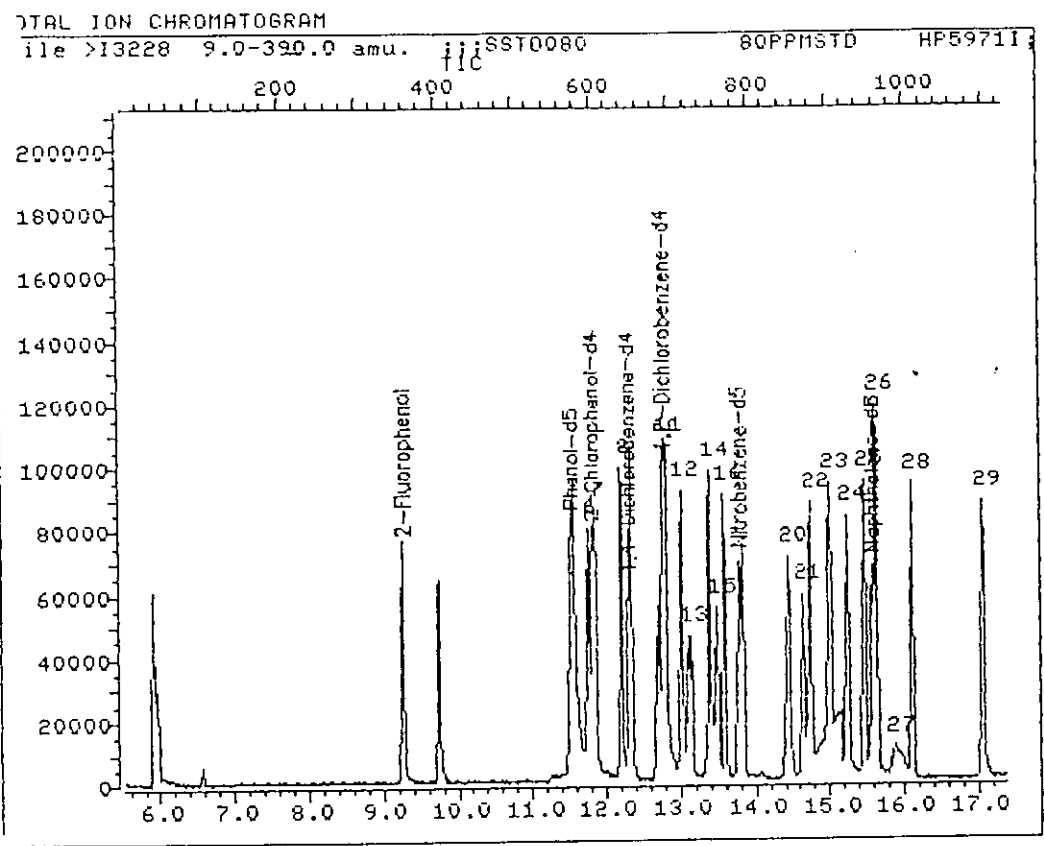
Last Cal. Time: 930203 17:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	20.16	137.8	3812	113.72	ug	71
42)	Acenaphthene	20.35	152.9	84273	78.28	ug	99
43)	2,4-Dinitrophenol	20.46	183.8	19815	95.27	ug	86
44)	4-Nitrophenol	20.61	108.8	12638	82.90	ug	87
45)	Dibenzofuran	20.77	167.8	125598	76.56	ug	97
46)	2,4-Dinitrotoluene	20.88	164.8	43684	80.11	ug	74
47)	Diethylphthalate	21.54	148.8	114862	78.53	ug	97
48)	4-Chlorophenyl-phenylether	21.67	203.9	41937	73.14	ug	81
49)	Fluorene	21.69	165.9	82084	69.81	ug	98
0)	4-Nitroaniline	21.86	137.9	13833	92.06	ug	79
1)	2,4,6-Tribromophenol	22.38	329.6	22545	80.47	ug	95
52)	*Phenanthrene-d10	24.17	187.9	72767	40.00	ug	98
53)	4,6-Dinitro-2-methylphenol	21.96	197.9	26993	87.09	ug	77
54)	N-Nitrosodiphenylamine (1)	22.01	168.9	51231	75.71	ug	96
55)	4-Bromophenyl-phenylether	22.96	247.9	27846	79.42	ug	85
56)	Hexachlorobenzene	23.37	283.6	40067	79.81	ug	99
57)	Pentachlorophenol	23.83	265.6	27954	83.28	ug	97
58)	Phenanthrene	24.24	177.9	139181	79.88	ug	97
59)	Carbazole	24.76	166.8	30963	83.61	ug	97
60)	Anthracene	24.36	177.9	139708	80.38	ug	97
61)	Di-n-butylphthalate	25.81	148.8	202282	78.68	ug	98
62)	Fluoranthene	27.42	201.9	153515	83.35	ug	98
63)	*Chrysene-d12	31.61	240.0	56767	40.00	ug	98
64)	Pyrene	28.02	201.9	150977	77.16	ug	99
65)	Terphenyl-d14	28.42	244.0	100768	76.93	ug	98
66)	Butylbenzylphthalate	29.80	148.8	93507	81.79	ug	90
67)	3,3'-Dichlorobenzidine	31.46	251.9	21675	84.16	ug	82
68)	Benzo(a)anthracene	31.53	228.0	129949	82.23	ug	99
69)	Chrysene	31.71	228.0	96963	73.52	ug	98
70)	bis(2-Ethylhexyl)phthalate	31.72	148.8	103886	71.90	ug	92
71)	*Perylene-d12	38.74	264.0	54173	40.00	ug	97
72)	Di-n-octylphthalate	34.36	148.9	221910	81.92	ug	94
73)	Benzo(b)fluoranthene	36.47	252.0	132772	86.99	ug	98
<del>73)</del>	<del>Benzo(b)fluoranthene</del>	<del>36.60</del>	<del>252.0</del>	<del>100201</del>	<del>75.55</del>	ug	<del>99</del>
<del>74)</del>	<del>Benzo(k)fluoranthene</del>	<del>36.47</del>	<del>252.0</del>	<del>132772</del>	<del>100.11</del>	ug	<del>98</del>
4)	Benzo(k)fluoranthene	36.60	252.0	100201	75.55	ug	99
75)	Benzo(a)pyrene	38.40	252.0	116031	81.75	ug	99
76)	Indeno(1,2,3-cd)pyrene	47.63	276.0	108695	86.49	ug	98
77)	Dibenz(a,h)anthracene	47.97	278.0	95579	88.62	ug	98
78)	Benzo(g,h,i)perylene	50.42	276.0	107447	80.84	ug	77

*gmc*

*2/1/93*

0701

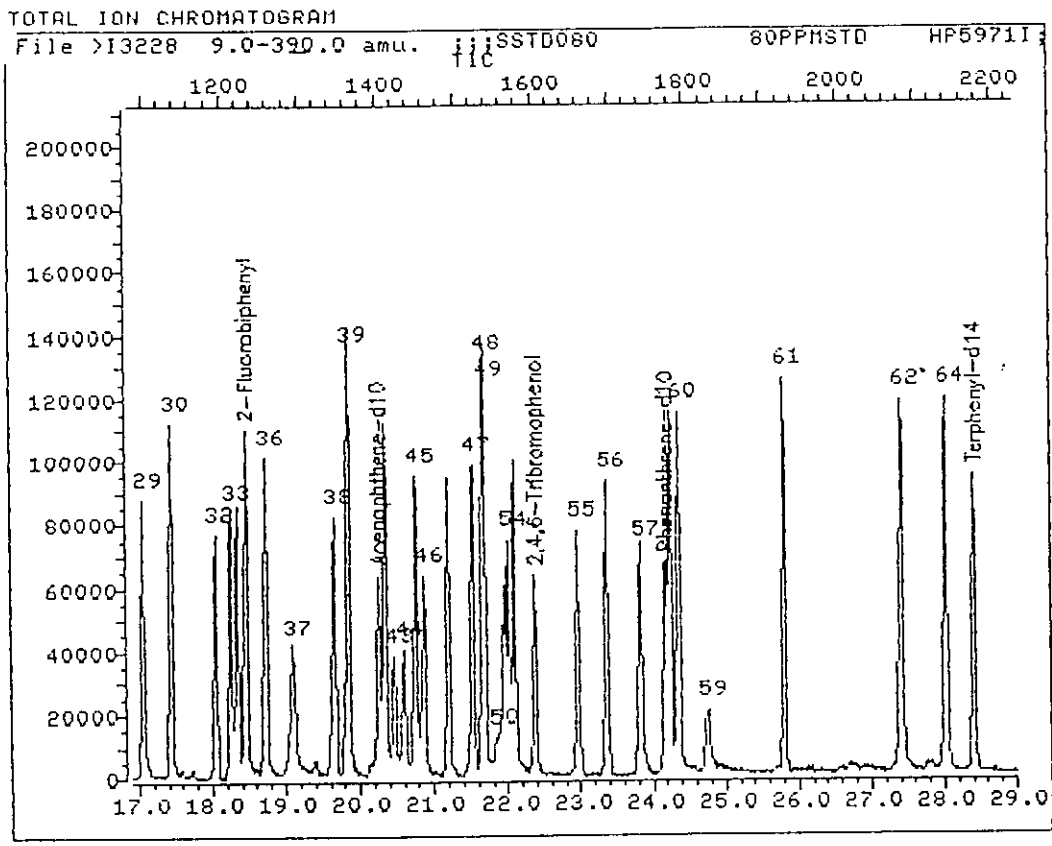


Data File: >I3228::A3                      Quant Output File: ^I3228::A6  
 Name: ;;;SSTD080                              Instrument ID: \*\*MSD  
 Misc: 80PPMSTD      HP5971I;;;LLW;1.0;;;10288

Id File: I\_IFI::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52              Last Qcal Time: 930203 17:02

Operator ID: USER1  
 Quant Time : 930205 14:35  
 Injected at: 930203 19:56

0702



Data File: >I3228::A3 Quant Output File: ^I3228::A6  
Name: ;;;SSTD080 Instrument ID: \*\*MSD  
Misc: 80PPMSTD HP5971I;;;LLW;1.0;;;I0288

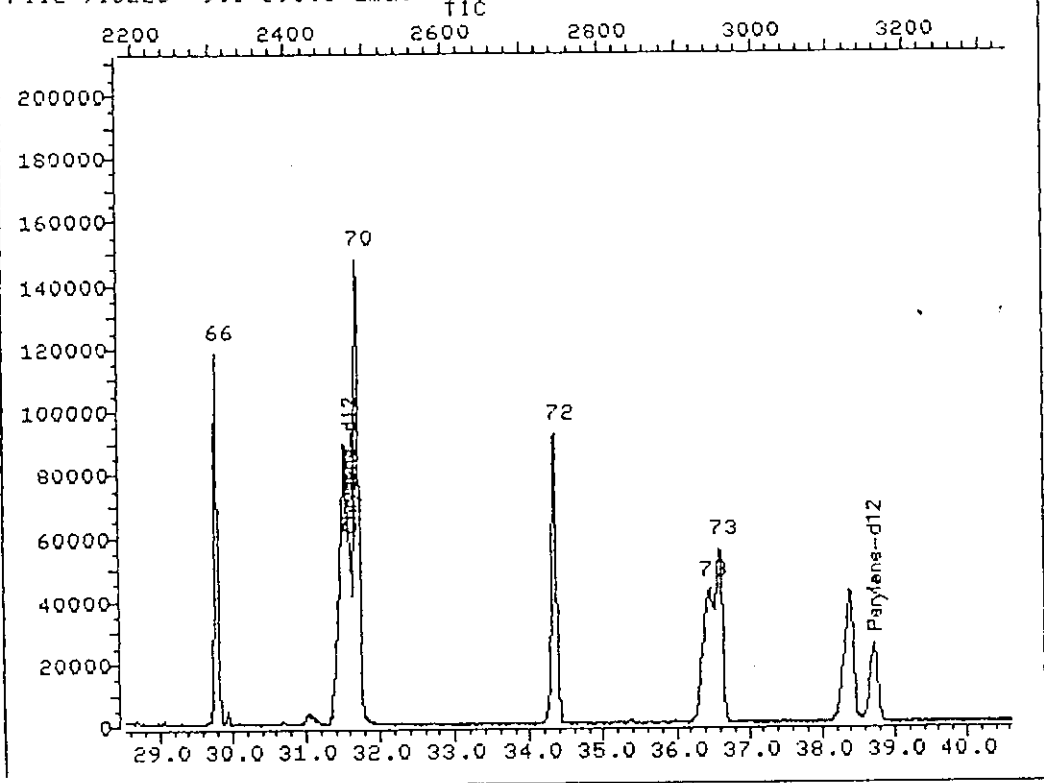
Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930203 17:02

Operator ID: USER1  
Quant Time : 930205 14:35  
Injected at: 930203 19:56

0703

OTAL ION CHROMATOGRAM

File >I3228 9.0-399.0 amu. ;;;SSTD080 80PPMSTD HP5971I



Data File: >I3228::A3                    Quant Output File: ^I3228::A6  
Name: ;;;SSTD080                    Instrument ID: \*\*MSD  
Misc: 80PPMSTD                    HP5971I;;;LLW;1.0;;;I0288

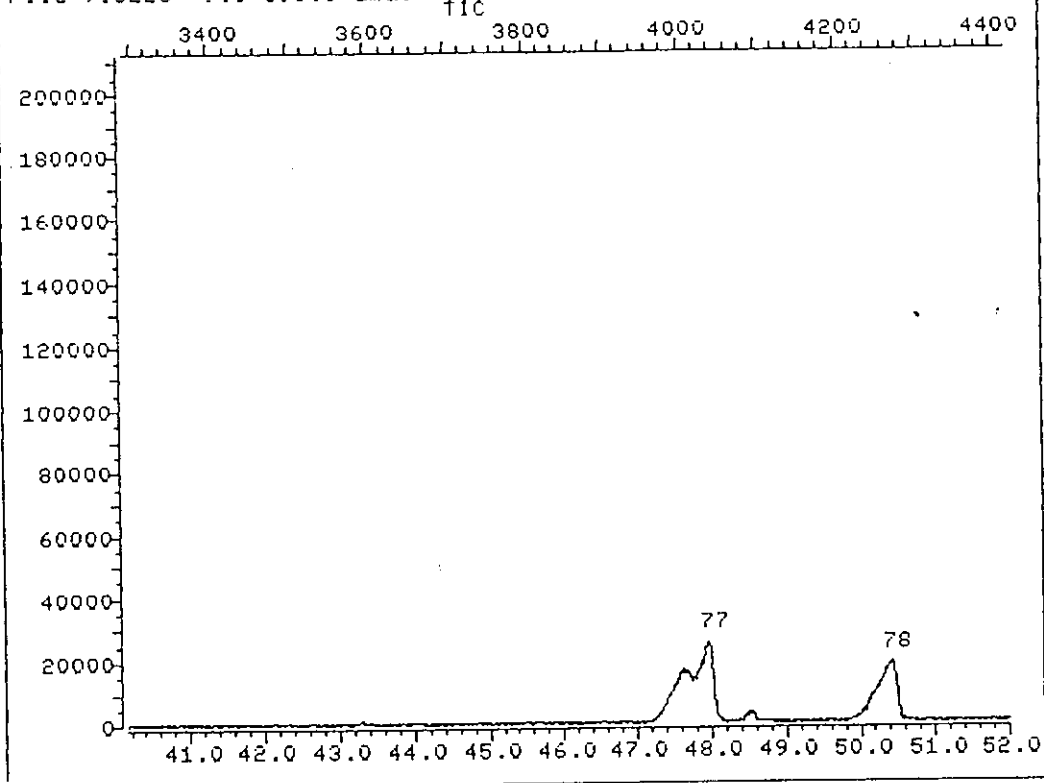
Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Qcal Time: 930203 17:02

Operator ID: USER1  
Quant Time : 930205 14:35  
Injected at: 930203 19:56

0704

OTAL ION CHROMATOGRAM

File >I3228 9.0-390.0 amu. ;;;SSTD080 80PPMSTD HP5971I



Data File: >I3228::A3

Quant Output File: ^I3228::A6

Name: ;;;SSTD080

Instrument ID: \*\*MSD

Misc: 80PPMSTD HP5971I;;;LLW;1.0;;;I0288

Id File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Operator ID: USER1

Quant Time : 930205 14:35

Injected at: 930203 19:56



0705

QUANT REPORT

Operator ID: USER1                      Quant Rev: 7                      Quant Time: 930203 21:56  
 Output File: ^I3229::A6                      Injected at: 930203 20:59  
 Data File: >I3229::A3                      Dilution Factor: 1.00000  
 Name: ;;;SSTD120                      Instrument ID: \*\*MSD  
 Misc: 120PPMSTD                      HP5971I;;;LLW;1.0;;;I0288

ID File: I\_IFI::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52                      Last Qcal Time: 930203 17:02

Compound	R.T.	Q	ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.30	151.8		24209	40.00	ug	94
2) 2-Chlorophenol-d4	11.84	132.0		85675	111.17	ug	80
3) 2-Fluorophenol	9.27	111.8		92459	117.39	ug	73
4) Phenol-d5	11.56	98.8		123146	107.01	ug	34
5) Phenol	11.60	93.9		110232	93.45	ug	58
6) bis(2-Chloroethyl)ether	11.78	92.7		114132M	97.16	ug	13
7) 2-Chlorophenol	11.88	127.8		87024	107.85	ug	83
8) 1,3-Dichlorobenzene	12.22	145.8		89852	106.40	ug	96
9) 1,4-Dichlorobenzene	12.36	145.7		87762	104.08	ug	90
10) 1,2-Dichlorobenzene-d4	12.79	152.0		54949	100.89	ug	95
11) 1,2-Dichlorobenzene	12.83	145.7		77413	94.56	ug	96
12) 2-Methylphenol	13.04	107.8		86290	117.52	ug	78
13) 2,2'-oxybis(1-Chloropropane)	13.12	44.8		93858	96.05	ug	77
14) 4-Methylphenol	13.43	107.8		91057	107.75	ug	92
15) N-Nitroso-di-n-propylamine	13.54	69.9		63569	111.06	ug	69
16) Hexachloroethane	13.59	116.7		46203	108.69	ug	98
17) *Naphthalene-d8	15.60	135.9		81202	40.00	ug	97
18) Nitrobenzene-d5	13.80	81.8		95193	112.43	ug	72
19) Nitrobenzene	13.85	76.8		82618	103.28	ug	80
20) Isophorone	14.49	81.8		209358	120.18	ug	89
21) 2-Nitrophenol	14.67	138.9		59205	106.92	ug	72
22) 2,4-Dimethylphenol	14.77	106.8		91255	118.79	ug	99
23) bis(2-Chloroethoxy)methane	15.04	92.8		139391	114.25	ug	77
24) 2,4-Dichlorophenol	15.27	161.7		77428	118.76	ug	98
25) 1,2,4-Trichlorobenzene	15.49	179.7		82534	116.38	ug	97
26) Naphthalene	15.65	127.9		217247	109.96	ug	78
27) 4-Chloroaniline	15.86	126.8		30339	101.68	ug	82
28) Hexachlorobutadiene	16.11	224.6		41935	115.94	ug	94
29) 4-Chloro-3-methylphenol	17.08	106.9		86093	121.64	ug	88
30) 2-Methylnaphthalene	17.46	141.9		145636	102.04	ug	95
31) *Acenaphthene-d10	20.27	163.9		44118	40.00	ug	95
32) Hexachlorocyclopentadiene	18.05	236.6		51413	130.13	ug	99
33) 2,4,6-Trichlorophenol	18.27	195.8		58965	125.78	ug	98
34) 2,4,5-Trichlorophenol	18.36	195.8		56765	119.92	ug	95
35) 2-Fluorobiphenyl	18.48	171.8		152651	112.10	ug	96
36) 2-Chloronaphthalene	18.75	161.8		138162	114.16	ug	97
37) 2-Nitroaniline	19.12	64.9		52687	133.49	ug	53
38) Dimethylphthalate	19.69	162.8		178944	119.37	ug	97
39) Acenaphthylene	19.88	152.0		188967	98.22	ug	97
40) 2,6-Dinitrotoluene	19.86	164.8		41218	102.30	ug	94

*gmc 2/9/93*

0706

QUANT REPORT

Operator ID: USER1                      Quant Rev: 7                      Quant Time: 930203 21:56  
Output File: ^I3229::A6                      Injected at: 930203 20:59  
Data File: >I3229::A3                      Dilution Factor: 1.00000  
Name: ;;;SSTD120                      Instrument ID: \*\*MSD  
Misc: 120PPMSTD                      HP59711;;;LLW;1.0;;;10288

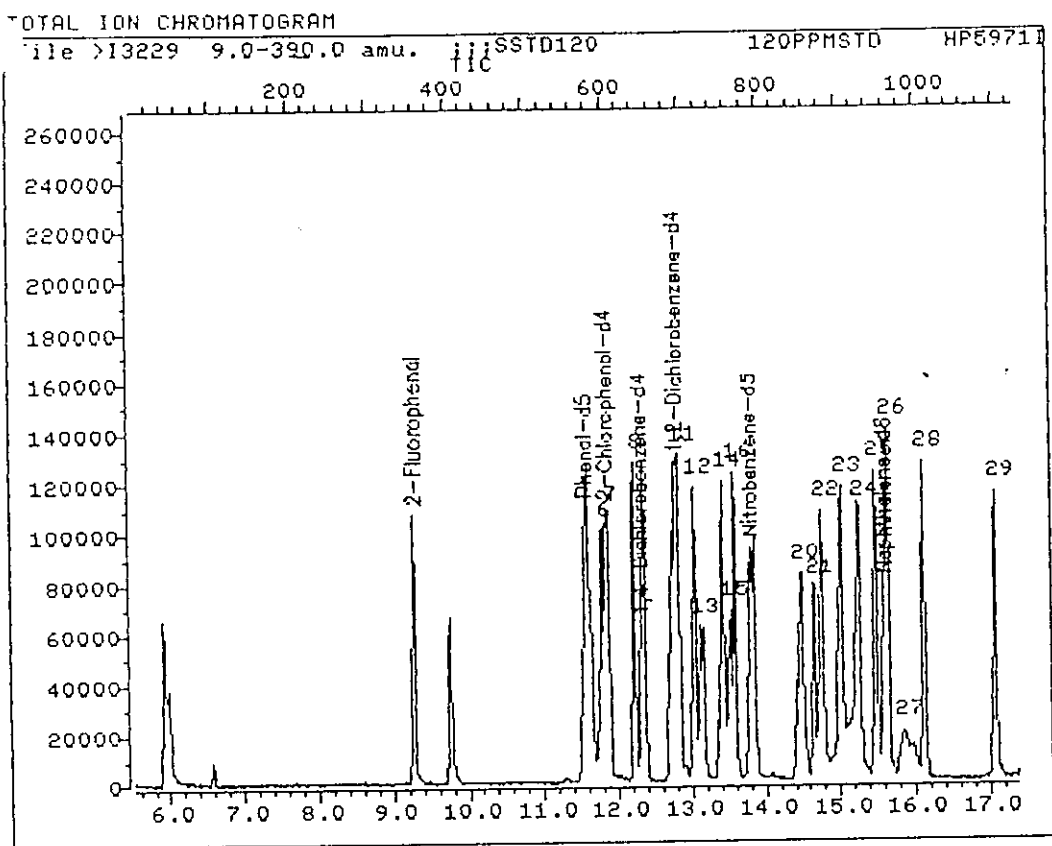
ID File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

	Compound	R.T.	Q ion	Area	Conc	Units	q
41)	3-Nitroaniline	20.17	137.8	4905	142.49	ug	64
42)	Acenaphthene	20.36	152.9	123990	112.16	ug	99
43)	2,4-Dinitrophenol	20.49	183.8	34756	162.74	ug	86
44)	4-Nitrophenol	20.64	108.8	17308	110.57	ug	90
45)	Dibenzofuran	20.78	167.8	187732	111.45	ug	96
46)	2,4-Dinitrotoluene	20.91	164.8	69562	124.23	ug	72
47)	Diethylphthalate	21.55	148.8	173373	115.44	ug	96
48)	4-Chlorophenyl-phenylether	21.69	203.9	57492	97.64	ug	90
49)	Fluorene	21.71	165.9	115687	95.81	ug	98
50)	4-Nitroaniline	21.89	137.9	24766	160.51	ug	77
51)	2,4,6-Tribromophenol	22.39	329.6	33297	115.74	ug	94
52)	*Phenanthrene-d10	24.18	187.9	74173	40.00	ug	98
53)	4,6-Dinitro-2-methylphenol	21.99	197.9	44151	139.75	ug	81
54)	N-Nitrosodiphenylamine (1)	22.04	168.9	79753	115.62	ug	97
55)	4-Bromophenyl-phenylether	22.97	247.9	42210	118.11	ug	89
56)	Hexachlorobenzene	23.38	283.6	58261	113.85	ug	99
57)	Pentachlorophenol	23.83	265.6	42919	125.43	ug	97
58)	Phenanthrene	24.26	177.9	205836	115.90	ug	97
59)	Carbazole	24.76	166.8	44912	118.98	ug	97
60)	Anthracene	24.38	177.9	202570	114.34	ug	98
61)	Di-n-butylphthalate	25.82	148.8	289680	110.54	ug	97
62)	Fluoranthene	27.44	201.9	225184	119.95	ug	98
63)	*Chrysene-d12	31.63	240.0	59123	40.00	ug	97
64)	Pyrene	28.04	201.9	225714	110.76	ug	99
65)	Terphenyl-d14	28.43	244.0	145288	106.50	ug	99
66)	Butylbenzylphthalate	29.81	148.8	140257	117.80	ug	90
67)	3,3'-Dichlorobenzidine	31.48	251.9	41149	153.41	ug	84
68)	Benzo(a)anthracene	31.57	228.0	203087	123.38	ug	99
69)	Chrysene	31.76	228.0	140087	101.99	ug	98
70)	bis(2-Ethylhexyl)phthalate	31.74	148.8	143891	95.62	ug	93
71)	*Perylene-d12	38.77	264.0	56563	40.00	ug	99
72)	Di-n-octylphthalate	34.37	148.9	348003	123.05	ug	95
73)	Benzo(b)fluoranthene	36.56	252.0	254972	159.99	ug	99
<del>73)</del>	<del>Benzo(b)fluoranthene</del>	<del>36.69</del>	<del>252.0</del>	<del>137927</del>	<del>86.54</del>	<del>ug</del>	<del>98</del>
<del>74)</del>	<del>Benzo(k)fluoranthene</del>	<del>36.56</del>	<del>252.0</del>	<del>254972</del>	<del>184.13</del>	<del>ug</del>	<del>99</del>
74)	Benzo(k)fluoranthene	36.69	252.0	137927	99.60	ug	98
75)	Benzo(a)pyrene	38.47	252.0	187601	126.59	ug	97
76)	Indeno(1,2,3-cd)pyrene	47.81	276.0	171209M	130.48	ug	98
77)	Dibenz(a,h)anthracene	48.11	278.0	152251	135.20	ug	92
78)	Benzo(g,h,i)perylene	50.60	276.0	164579	118.59	ug	77

*gmc*  
*2/9/93*

0 0707

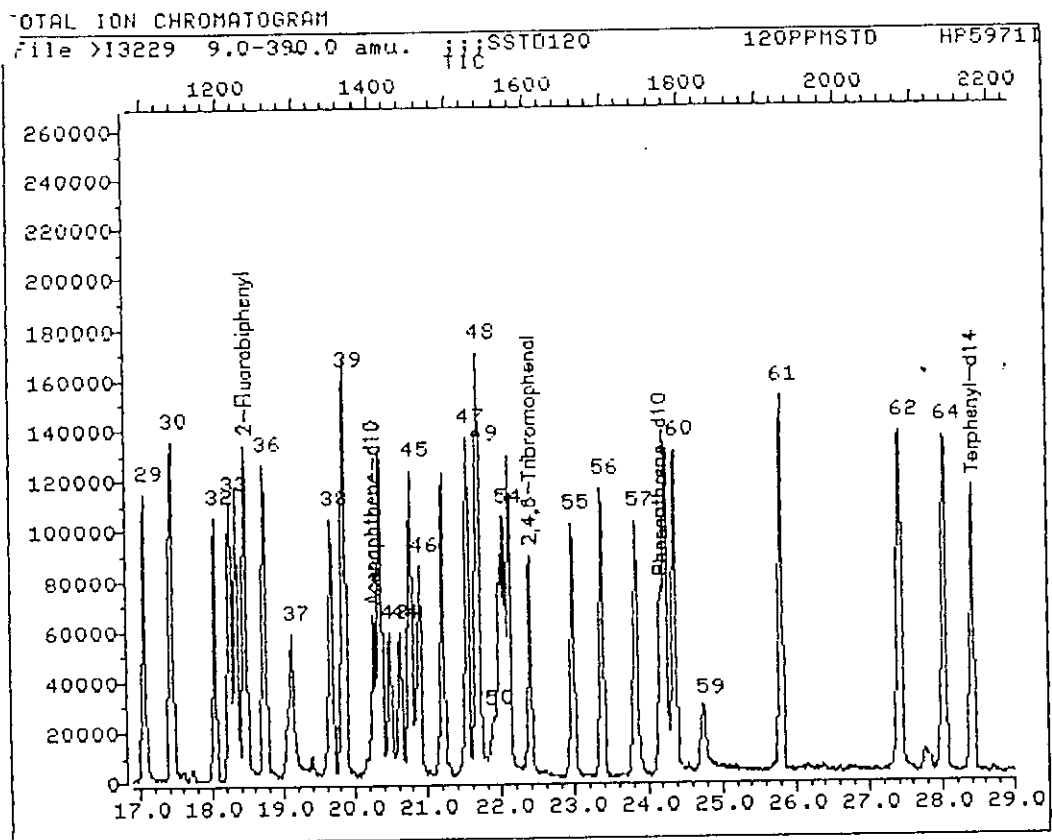


Data File: >I3229::A3                    Quant Output File: ^I3229::A6  
 Name: ;;;SSTD120                    Instrument ID: \*\*MSD  
 Misc: 120PPMSTD    HP59711; ;;;LLW;1.0; ;;;I0288

Id File: I\_IF1::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52                    Last Qcal Time: 930203 17:02

Operator ID: USER1  
 Quant Time : 930203 21:56  
 Injected at: 930203 20:59

0 0708



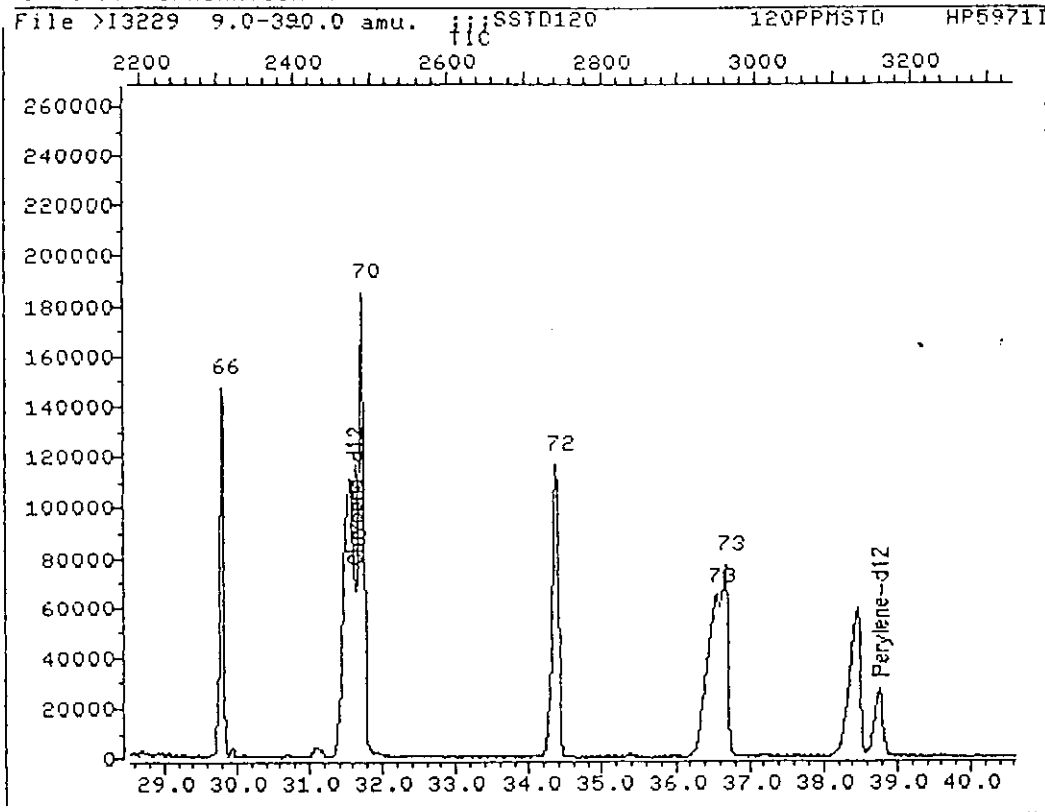
Data File: >I3229::A3 Quant Output File: ^I3229::A6  
 Name: ;;;SSTD120 Instrument ID: \*\*MSD  
 Misc: 120PPMSTD HP59711;;;LLW;1.0;;;I0288

Id File: I\_IFI::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52 Last Qcal Time: 930203 17:02

Operator ID: USER1  
 Quant Time : 930203 21:56  
 Injected at: 930203 20:59

0 0709

TOTAL ION CHROMATOGRAM



Data File: >I3229::A3

Quant Output File: ^I3229::A6

Name: ;;;SSTD120

Instrument ID: \*\*MSD

Misc: 120PPMSTD HP59711;;;LLW;1.0;;;I0288

Id File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

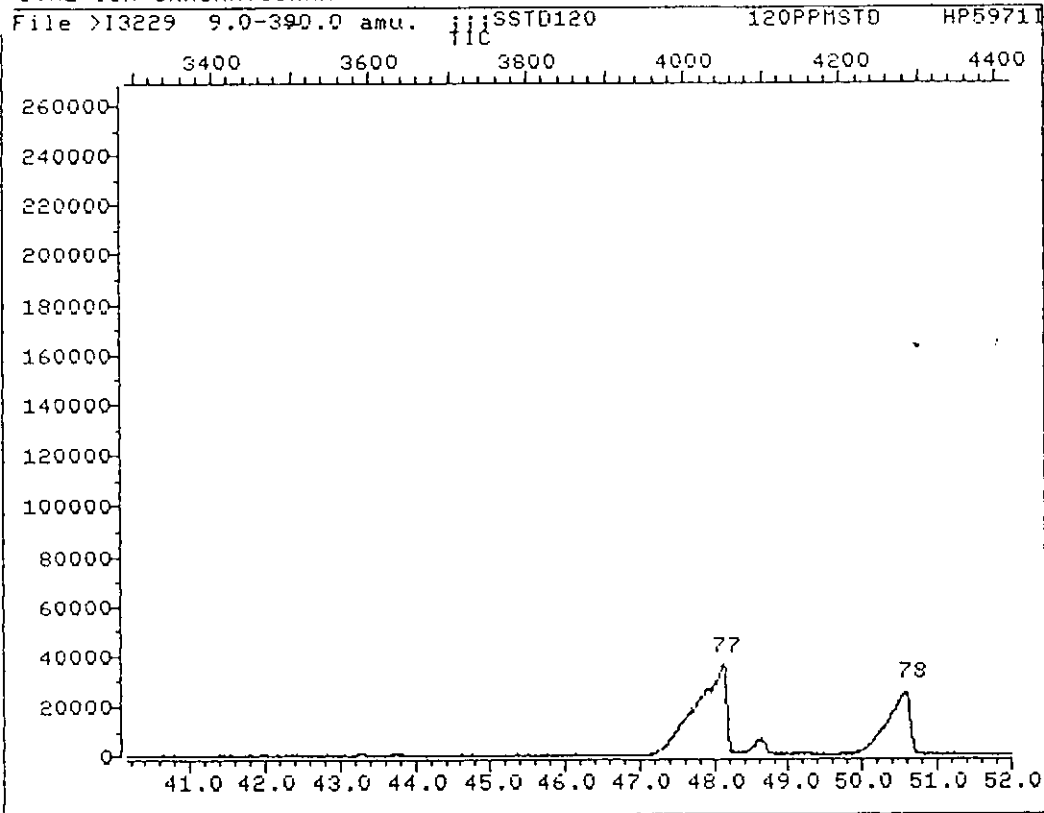
Operator ID: USER1

Quant Time : 930203 21:56

Injected at: 930203 20:59

0 0710

TOTAL ION CHROMATOGRAM



Data File: >I3229::A3

Quant Output File: ^I3229::A6

Name: ;;;SSTD120

Instrument ID: \*\*MSD

Misc: 120PPMSTD HP59711;;;LLW;1.0;;;I0288

Id File: I\_IF1::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Operator ID: USER1

Quant Time : 930203 21:56

Injected at: 930203 20:59

0711

## QUANT REPORT

Page 1

Operator ID: USER1  
 Output File: ^I3230::A6  
 Data File: >I3230::A3  
 Name: ;;;SSTD160  
 Misc: 160PPMSTD HP5971I;;;LLW;1.0;;;I0288

Quant Rev: 7  
 Quant Time: 930203 23:00  
 Injected at: 930203 22:02  
 Dilution Factor: 1.00000  
 Instrument ID: \*\*MSD

ID File: I\_IFI::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.33	151.8	29566	40.00	ug	94
2) 2-Chlorophenol-d4	11.87	132.0	114804	121.97	ug	83
3) 2-Fluorophenol	9.31	111.8	146137	151.93	ug	74
4) Phenol-d5	11.60	98.8	177361	126.19	ug	42
5) Phenol	11.65	93.9	152551	105.90	ug	70
6) bis(2-Chloroethyl)ether	11.69	92.7	166863M	116.31	ug	62
7) 2-Chlorophenol	11.92	127.8	124313	126.14	ug	87
8) 1,3-Dichlorobenzene	12.24	145.8	130038	126.09	ug	94
9) 1,4-Dichlorobenzene	12.38	145.7	119274	115.82	ug	86
10) 1,2-Dichlorobenzene-d4	12.81	152.0	66660	100.21	ug	98
11) 1,2-Dichlorobenzene	12.86	145.7	99010	99.03	ug	92
12) 2-Methylphenol	13.07	107.8	133171	148.51	ug	81
13) 2,2'-oxybis(1-Chloropropane)	13.14	44.8	120425	100.91	ug	60
14) 4-Methylphenol	13.49	107.8	169134M	163.88	ug	92
15) N-Nitroso-di-n-propylamine	13.61	69.9	76122	108.90	ug	93
16) Hexachloroethane	13.61	116.7	56983	109.76	ug	96
17) *Naphthalene-d8	15.61	135.9	102531	40.00	ug	96
18) Nitrobenzene-d5	13.85	81.8	153708	143.77	ug	73
19) Nitrobenzene	13.90	76.8	127281	126.01	ug	80
20) Isophorone	14.54	81.8	281402	127.93	ug	88
21) 2-Nitrophenol	14.69	138.9	99909	142.89	ug	82
22) 2,4-Dimethylphenol	14.82	106.8	157574	162.46	ug	87
23) bis(2-Chloroethoxy)methane	15.07	92.8	155381	100.87	ug	56
24) 2,4-Dichlorophenol	15.31	161.7	122610	148.94	ug	98
25) 1,2,4-Trichlorobenzene	15.51	179.7	126268	141.01	ug	96
26) Naphthalene	15.68	127.9	313077	125.50	ug	79
27) 4-Chloroaniline	15.87	126.8	160863	426.99	ug	84
28) Hexachlorobutadiene	16.13	224.6	68906	150.87	ug	98
29) 4-Chloro-3-methylphenol	17.12	106.9	146417	163.83	ug	85
30) 2-Methylnaphthalene	17.49	141.9	223474	124.01	ug	85
31) *Acenaphthene-d10	20.30	163.9	58922	40.00	ug	94
32) Hexachlorocyclopentadiene	18.07	236.6	83444	158.14	ug	98
33) 2,4,6-Trichlorophenol	18.30	195.8	111092	177.44	ug	98
34) 2,4,5-Trichlorophenol	18.40	195.8	80958	128.06	ug	98
35) 2-Fluorobiphenyl	18.51	171.8	231694	127.40	ug	97
36) 2-Chloronaphthalene	18.78	161.8	214422	132.66	ug	89
37) 2-Nitroaniline	19.16	64.9	94401	179.08	ug	53
38) Dimethylphthalate	19.74	162.8	321467	160.57	ug	97
39) Acenaphthylene	19.90	152.0	286442	111.48	ug	98
40) 2,6-Dinitrotoluene	19.93	164.8	55230	102.63	ug	70

0 0712

QUANT REPORT

Operator ID: USER1  
 Output File: ^I3230::A6  
 Data File: >I3230::A3  
 Name: ;;;SSTD160  
 Misc: 160PPMSTD HP5971I;;;LLW;1.0;;;I0288

Quant Rev: 7  
 Quant Time: 930203 23:00  
 Injected at: 930203 22:02  
 Dilution Factor: 1.00000  
 Instrument ID: \*\*MSD

ID File: I\_IFI::A6  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Compound	R.T.	Q ion	Area	Conc	Units	q
41) 3-Nitroaniline	20.27	137.8	44319	964.02	ug	51
42) Acenaphthene	20.41	152.9	189198	128.14	ug	97
43) 2,4-Dinitrophenol	20.55	183.8	67699	237.35	ug	89
44) 4-Nitrophenol	20.72	108.8	37250	178.17	ug	75
45) Dibenzofuran	20.82	167.8	292259	129.91	ug	82
46) 2,4-Dinitrotoluene	20.98	164.8	127956M	171.11	ug	50
47) Diethylphthalate	21.61	148.8	287421	143.29	ug	93
48) 4-Chlorophenyl-phenylether	21.73	203.9	101819	129.48	ug	90
49) Fluorene	21.75	165.9	202560	125.61	ug	98
) 4-Nitroaniline	21.93	137.9	45265	219.66	ug	72
.1) 2,4,6-Tribromophenol	22.43	329.6	57651	150.04	ug	94
52) *Phenanthrene-d10	24.22	187.9	105749	40.00	ug	99
53) 4,6-Dinitro-2-methylphenol	22.08	197.9	58038	128.85	ug	96
54) N-Nitrosodiphenylamine (1)	22.10	168.9	125932M	128.06	ug	97
55) 4-Bromophenyl-phenylether	23.00	247.9	69587	136.57	ug	98
56) Hexachlorobenzene	23.42	283.6	96722	132.57	ug	99
57) Pentachlorophenol	23.88	265.6	76355	156.52	ug	96
58) Phenanthrene	24.30	177.9	343972	135.85	ug	96
59) Carbazole	24.79	166.8	147073M	273.29	ug	96
60) Anthracene	24.43	177.9	295212	116.88	ug	98
61) Di-n-butylphthalate	25.85	148.8	463863	124.15	ug	97
62) Fluoranthene	27.48	201.9	371563	138.82	ug	99
63) *Chrysene-d12	31.68	240.0	65851	40.00	ug	98
64) Pyrene	28.08	201.9	368724	162.45	ug	98
65) Terphenyl-d14	28.46	244.0	248511	163.55	ug	98
66) Butylbenzylphthalate	29.84	148.8	222325	167.65	ug	87
67) 3,3'-Dichlorobenzidine	31.56	251.9	78893	264.07	ug	87
68) Benzo(a)anthracene	31.62	228.0	309789	168.98	ug	97
69) Chrysene	31.82	228.0	241098	157.59	ug	99
70) bis(2-Ethylhexyl)phthalate	31.77	148.8	261300	155.90	ug	89
71) *Perylene-d12	38.88	264.0	80584	40.00	ug	95
72) Di-n-octylphthalate	34.42	148.9	574471	142.57	ug	94
<del>73) Benzo(b)fluoranthene</del>	<del>36.70</del>	<del>252.0</del>	<del>583002</del>	<del>221.92</del>	ug	<del>98</del>
<del>74) Benzo(k)fluoranthene</del>	<del>36.84</del>	<del>252.0</del>	<del>288353M</del>	<del>101.56</del>	ug	<del>98</del>
75) Benzo(a)pyrene	38.61	252.0	353583	167.48	ug	98
) Indeno(1,2,3-cd)pyrene	48.18	276.0	342315M	183.11	ug	96
77) Dibenz(a,h)anthracene	48.40	278.0	281468	175.45	ug	98
78) Benzo(g,h,i)perylene	50.88	276.0	301536	152.50	ug	78

\* Compound is ISTD

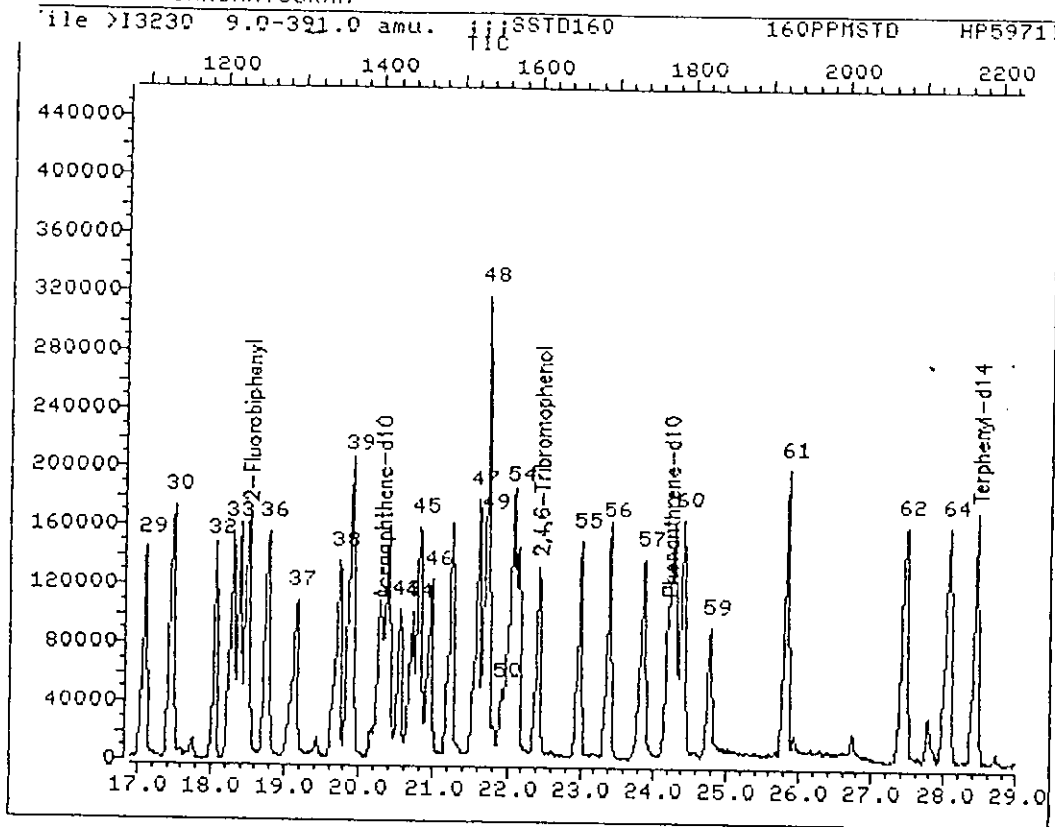
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*Handwritten initials: JMC 2/2/02*



0 0713

TOTAL ION CHROMATOGRAM



Data File: >I3230::A3

Quant Output File: ^I3230::A6

Name: ;;;SSTD160

Instrument ID: \*\*MSD

Misc: 160PPMSTD

HP59711; ; ; LLW; 1.0; ; ; I0288

Id File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Operator ID: USER1

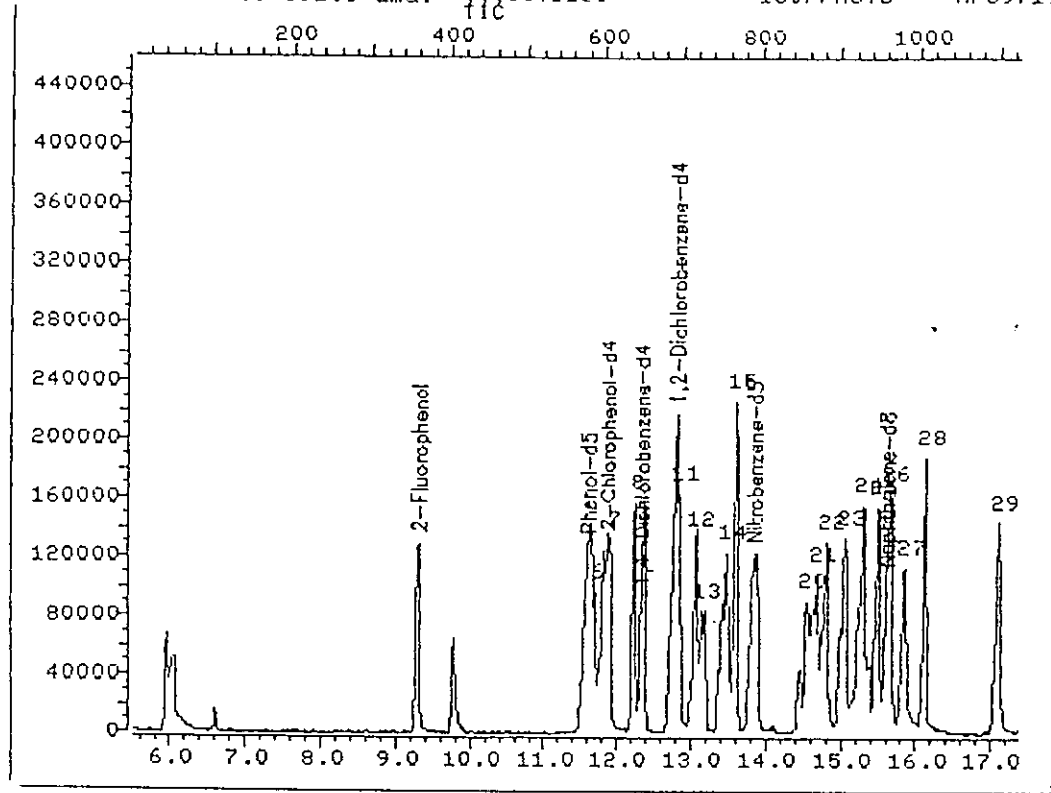
Quant Time : 930203 23:00

Injected at: 930203 22:02

0714

TOTAL ION CHROMATOGRAM

file >I3230 9.0-391.0 amu. ;;;SSTD160 160PPMSTD HP59711

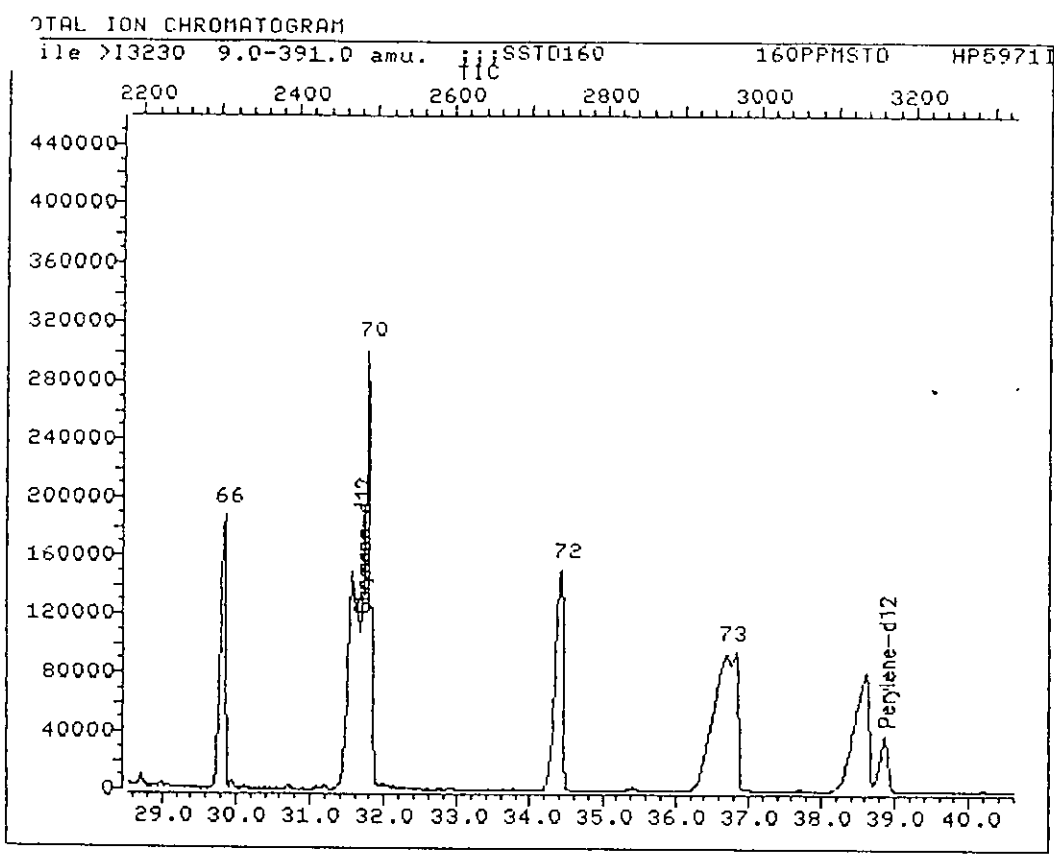


Data File: >I3230::A3                      Quant Output File: ^I3230::A6  
Name: ;;;SSTD160                              Instrument ID: \*\*MSD  
Misc: 160PPMSTD      HP59711; ;;;LLW;1.0; ;;;I0288

Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                      Last Qcal Time: 930203 17:02

Operator ID: USER1  
Quant Time : 930203 23:00  
Injected at: 930203 22:02

0 0715



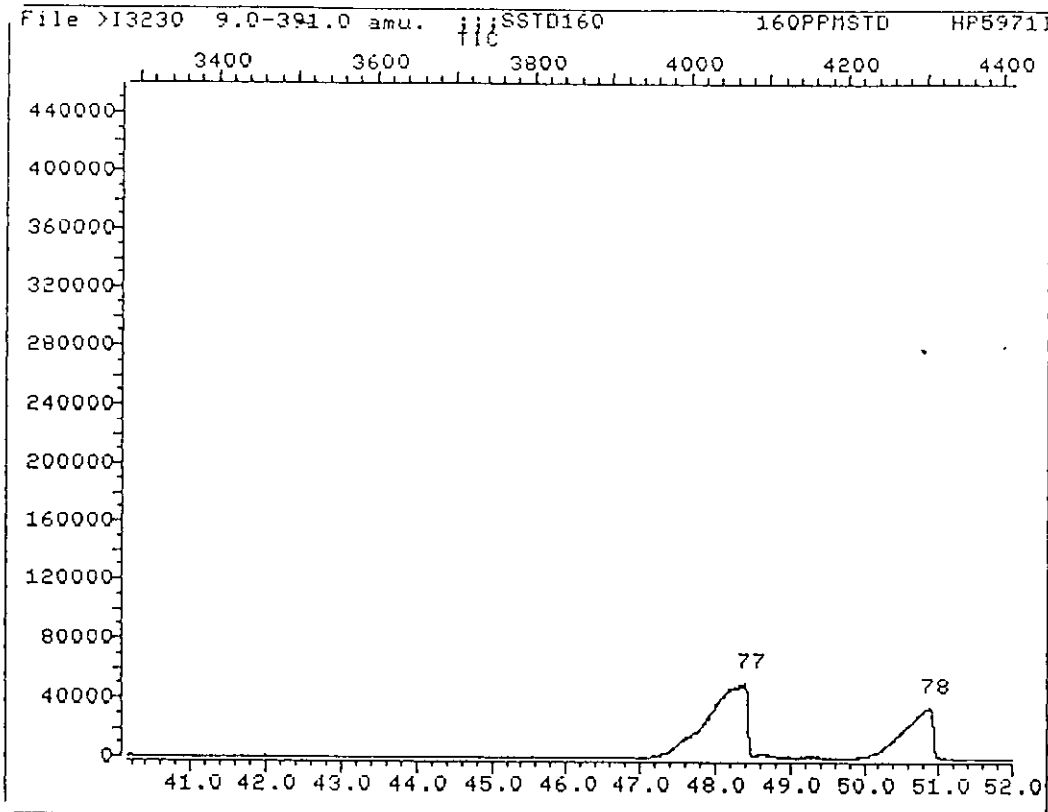
Data File: >I3230::A3 Quant Output File: ^I3230::A6  
Name: ;;;SSTD160 Instrument ID: \*\*MSD  
Misc: 160PPMSTD HP59711; ;;LLW;1.0; ;;I0288

Id File: I\_IFI::A6  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qcal Time: 930203 17:02

Operator ID: USER1  
Quant Time : 930203 23:00  
Injected at: 930203 22:02

0 0716

TOTAL ION CHROMATOGRAM



Data File: >I3230::A3

Quant Output File: ^I3230::A6

Name: ;;;SSTD160

Instrument ID: \*\*MSD

Misc: 160PPMSTD HP59711;;;LLW;1.0;;;I0288

Id File: I\_IFI::A6

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930203 17:02

Operator ID: USER1

Quant Time : 930203 23:00

Injected at: 930203 22:02

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Instrument ID: HP5971I

Calibration Date: 02/16/93

Time: 0848

Lab File ID: I3279.D

Init. Calibration Date(s): 02/03/93

Init. Calibration Times: 1702 2202

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Phenol	1.740	1.690	0.800	2.9	25.0
bis(2-Chloroethyl) ether	1.779	1.631	0.700	8.3	25.0
2-Chlorophenol	1.258	1.318	0.800	-4.8	25.0
1,3-Dichlorobenzene	1.321	1.386	0.600	-4.9	25.0
1,4-Dichlorobenzene	1.294	1.365	0.500	-5.4	25.0
1,2-Dichlorobenzene	1.206	1.325	0.400	-9.8	25.0
2-Methylphenol	1.239	1.249	0.700	-0.8	25.0
2,2'-oxybis(1-Chloropropane)	1.457	0.716		50.9	
4-Methylphenol	1.378	1.326	0.600	3.7	25.0
N-Nitroso-di-n-propylamine	0.887	0.826	0.500	6.9	25.0
Hexachloroethane	0.659	0.671	0.300	-1.8	25.0
Nitrobenzene	0.363	0.336	0.200	7.3	25.0
Isophorone	0.842	0.804	0.400	4.4	25.0
2-Nitrophenol	0.260	0.225	0.100	13.6	25.0
2,4-Dimethylphenol	0.374	0.375	0.200	-0.2	25.0
bis(2-Chloroethoxy)methane	0.554	0.550	0.300	0.9	25.0
2,4-Dichlorophenol	0.317	0.322	0.200	-1.5	25.0
1,2,4-Trichlorobenzene	0.341	0.362	0.200	-6.0	25.0
Naphthalene	0.930	0.954	0.700	-2.6	25.0
4-Chloroaniline	0.196	0.058		70.3	
Hexachlorobutadiene	0.177	0.194		-9.4	
4-Chloro-3-methylphenol	0.355	0.366	0.200	-3.1	25.0
2-Methylnaphthalene	0.654	0.696	0.400	-6.4	25.0
Hexachlorocyclopentadiene	0.371	0.326		12.1	
2,4,6-Trichlorophenol	0.436	0.445	0.200	-2.0	25.0
2,4,5-Trichlorophenol	0.409	0.484	0.200	-18.4	25.0
2-Chloronaphthalene	1.063	1.125	0.800	-5.9	25.0
2-Nitroaniline	0.384	0.334		13.0	
Dimethylphthalate	1.368	1.400		-2.3	
Acenaphthylene	1.594	1.622	1.300	-1.8	25.0
2,6-Dinitrotoluene	0.329	0.308	0.200	6.3	25.0
3-Nitroaniline	0.080	0.044		45.3	
Acenaphthene	0.964	1.001	0.800	-3.8	25.0
2,4-Dinitrophenol	0.244	0.099		59.2	
4-Nitrophenol	0.144	0.162		-12.2	
Dibenzofuran	1.452	1.506	0.800	-3.7	25.0
2,4-Dinitrotoluene	0.516	0.481	0.200	6.7	25.0

All other compounds must meet a minimum RRF of 0.010.

7C  
SEMIVOLATILE CONTINUING CALIBRATION CHECK

0718

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Instrument ID: HP5971I

Calibration Date: 02/16/93

Time: 0848

Lab File ID: I3279.D

Init. Calibration Date(s): 02/03/93

Init. Calibration Times: 1702 2202

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
Diethylphthalate	1.342	1.461		-8.9	
4-Chlorophenyl-phenylether	0.501	0.525	0.400	-4.8	25.0
Fluorene	1.004	1.012	0.900	-0.8	25.0
4-Nitroaniline	0.170	0.330		-94.3	
4,6-Dinitro-2-methylphenol	0.173	0.114		34.0	
N-Nitrosodiphenylamine (1)	0.362	0.353		2.5	
4-Bromophenyl-phenylether	0.188	0.195	0.100	-3.9	25.0
Hexachlorobenzene	0.265	0.268	0.100	-1.0	25.0
Pentachlorophenol	0.187	0.160	0.050	14.5	25.0
Phenanthrene	0.929	0.894	0.700	3.8	25.0
Anthracene	0.922	0.914	0.700	0.8	25.0
Carbazole	0.262	0.305		-16.3	
Di-n-butylphthalate	1.364	1.298		4.8	
Fluoranthene	1.011	1.017	0.600	-0.6	25.0
Pyrene	1.358	1.286	0.600	5.3	25.0
Butylbenzylphthalate	0.822	0.738		10.2	
3,3'-Dichlorobenzidine	0.222	0.207		6.5	
Benzo(a)anthracene	1.148	1.102	0.800	4.0	25.0
Chrysene	0.917	0.946	0.700	-3.1	25.0
bis(2-Ethylhexyl)phthalate	0.984	0.896		8.9	
Di-n-octylphthalate	2.004	1.836		8.4	
Benzo(b)fluoranthene	1.318	1.172	0.700	11.1	25.0
Benzo(k)fluoranthene	0.877	0.984	0.700	-12.1	25.0
Benzo(a)pyrene	1.085	1.052	0.700	3.0	25.0
Indeno(1,2,3-cd)pyrene	0.980	1.084	0.500	-10.6	25.0
Dibenz(a,h)anthracene	0.869	0.979	0.400	-12.6	25.0
Benzo(g,h,i)perylene	0.972	1.044	0.500	-7.4	25.0
Nitrobenzene-d5	0.401	0.380	0.200	5.3	25.0
2-Fluorobiphenyl	1.180	1.241	0.700	-5.2	25.0
Terphenyl-d14	0.913	0.881	0.500	3.6	25.0
Phenol-d5	1.795	1.756	0.800	2.2	25.0
2-Fluorophenol	1.289	1.259	0.600	2.3	25.0
2,4,6-Tribromophenol	0.261	0.286		-9.5	
2-Chlorophenol-d4	1.201	1.268	0.800	-5.6	25.0
1,2-Dichlorobenzene-d4	0.818	0.851	0.400	-4.0	25.0

(1) Cannot be separated from Diphenylamine  
All other compounds must meet a minimum RRF of 0.010.

## QUANT REPORT

Page 1

Operator ID: USER1  
 Output File: ^I3279::A6  
 Data File: >I3279::A5  
 Name: ;;SSTD050  
 Misc: 050PPMSTD HP59711;;;1;;;10294

Quant Rev: 7 Quant Time: 930223 11:39  
 Injected at: 930216 08:48  
 Dilution Factor: 1.00000  
 Instrument ID: \*\*MSD

ID File: I\_IFI::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.10	151.8	20683	40.00	ug	94
2) 2-Chlorophenol-d4	11.68	132.0	32780	50.00	ug	80
3) 2-Fluorophenol	9.20	111.8	32555	50.00	ug	71
4) Phenol-d5	11.49	98.8	45405	50.00	ug	54
5) Phenol	11.52	93.9	43694M43694.00	NO	CALIB	
6) bis(2-Chloroethyl)ether	11.57	92.7	42160M42160.00	NO	CALIB	
7) 2-Chlorophenol	11.72	127.8	34082	50.00	ug	84
8) 1,3-Dichlorobenzene	12.01	145.8	35826	50.00	ug	98
9) 1,4-Dichlorobenzene	12.14	145.7	35284	50.00	ug	91
10) 1,2-Dichlorobenzene-d4	12.59	152.0	22006	50.00	ug	96
11) 1,2-Dichlorobenzene	12.62	145.7	34246	50.00	ug	79
12) 2-Methylphenol	12.93	107.8	32293	50.00	ug	49
13) 2,2'-oxybis(1-Chloropropane)	12.91	44.8	18507^	50.00	ug	93
14) 4-Methylphenol	13.31	107.8	34283	50.00	ug	65
15) N-Nitroso-di-n-propylamine	13.28	69.9	21358	50.00	ug	98
16) Hexachloroethane	13.38	116.7	17344	50.00	ug	97
17) *Naphthalene-d8	15.37	135.9	74721	40.00	ug	69
18) Nitrobenzene-d5	13.59	81.8	35499	50.00	ug	79
19) Nitrobenzene	13.63	76.8	31397	50.00	ug	89
20) Isophorone	14.24	81.8	75139	50.00	ug	76
21) 2-Nitrophenol	14.45	138.9	21000	50.00	ug	95
22) 2,4-Dimethylphenol	14.62	106.8	35008	50.00	ug	73
23) bis(2-Chloroethoxy)methane	14.82	92.8	51330	50.00	ug	94
24) 2,4-Dichlorophenol	15.10	161.7	30035	50.00	ug	97
25) 1,2,4-Trichlorobenzene	15.27	179.7	33792	50.00	ug	79
26) Naphthalene	15.43	127.9	89087	50.00	ug	76
27) 4-Chloroaniline	15.80	126.8	5426	50.00	ug	96
28) Hexachlorobutadiene	15.89	224.6	18075	50.00	ug	90
29) 4-Chloro-3-methylphenol	16.97	106.9	34149	50.00	ug	96
30) 2-Methylnaphthalene	17.22	141.9	64993	50.00	ug	95
31) *Acenaphthene-d10	20.03	163.9	43101	40.00	ug	98
32) Hexachlorocyclopentadiene	17.82	236.6	17590	50.00	ug	98
33) 2,4,6-Trichlorophenol	18.08	195.8	23951	50.00	ug	95
34) 2,4,5-Trichlorophenol	18.20	195.8	26094	50.00	ug	96
35) 2-Fluorobiphenyl	18.26	171.8	66871	50.00	ug	97
36) 2-Chloronaphthalene	18.51	161.8	60630	50.00	ug	
37) 2-Nitroaniline	18.91	64.9	18005M18005.00	NO	CALIB	
38) Dimethylphthalate	19.44	162.8	75415	50.00	ug	97
39) Acenaphthylene	19.62	152.0	87389	50.00	ug	96
40) 2,6-Dinitrotoluene	19.62	164.8	16608	50.00	ug	88

## QUANT REPORT

Page 2

Operator ID: USER1  
 Output File: ^I3279::A6  
 Data File: >I3279::A5  
 Name: ;;;SSTD050  
 Misc: 050PPMSTD HP59711;;;1;;;I0294

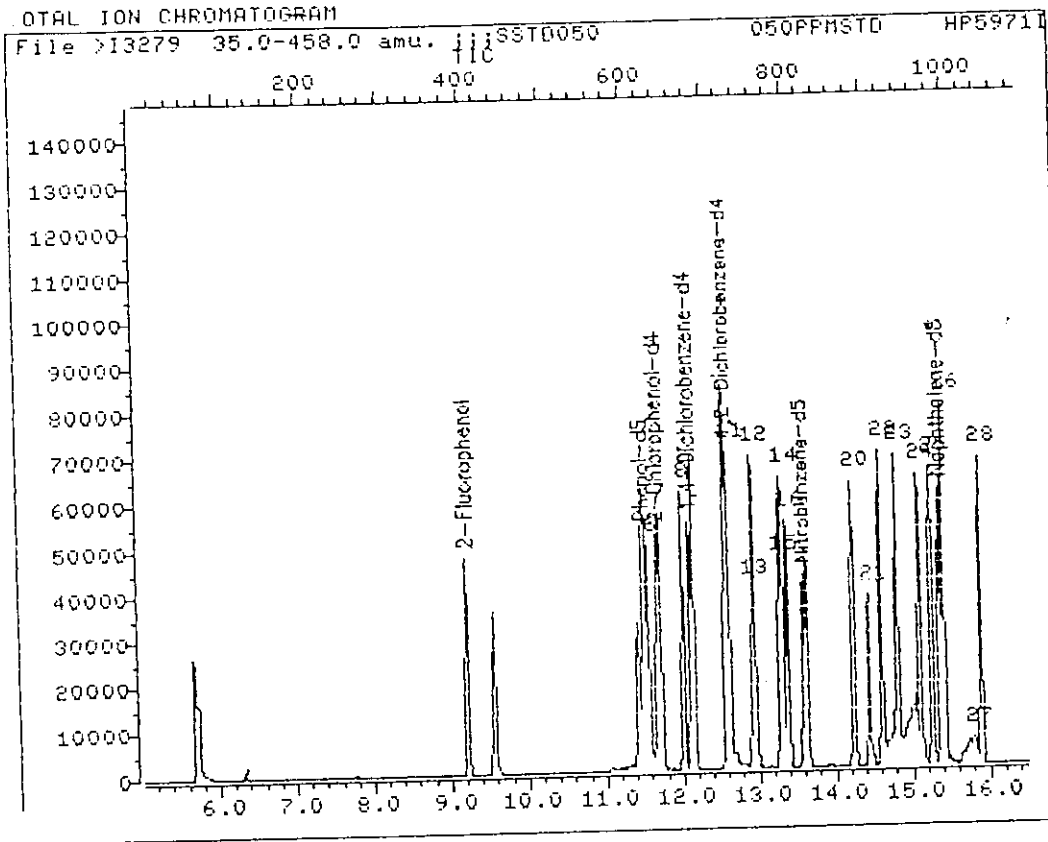
Quant Rev: 7 Quant Time: 930223 11:39  
 Injected at: 930216 08:48  
 Dilution Factor: 1.00000  
 Instrument ID: \*\*MSD

ID File: I\_IF1::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Cal Time: 930216 08:48

Compound	R.T.	Q ion	Area	Conc	Units	q
41) 3-Nitroaniline	20.03	137.8	2354	80.00	ug	75
42) Acenaphthene	20.12	152.9	53916	50.00	ug	98
43) 2,4-Dinitrophenol	20.24	183.8	5358	50.00	ug	90
44) 4-Nitrophenol	20.55	108.8	8732	50.00	ug	75
45) Dibenzofuran	20.53	167.8	81127	50.00	ug	85
46) 2,4-Dinitrotoluene	20.64	164.8	25927	50.00	ug	72
47) Diethylphthalate	21.30	148.8	78731	50.00	ug	97
48) 4-Chlorophenyl-phenylether	21.44	203.9	28276	50.00	ug	83
I) Fluorene	21.45	165.9	54545	50.00	ug	99
J) 4-Nitroaniline	21.65	137.9	17796	50.00	ug	77
51) 2,4,6-Tribromophenol	22.15	329.6	15409	50.00	ug	88
52) *Phenanthrene-d10	23.93	187.9	83757	40.00	ug	98
53) 4,6-Dinitro-2-methylphenol	21.72	197.9	11936	50.00	ug	82
54) N-Nitrosodiphenylamine (1)	21.78	168.9	36975	50.00	ug	97
55) 4-Bromophenyl-phenylether	22.73	247.9	20407	50.00	ug	83
56) Hexachlorobenzene	23.12	283.6	28055	50.00	ug	97
57) Pentachlorophenol	23.61	265.6	16787	50.00	ug	97
58) Phenanthrene	23.99	177.9	93634	50.00	ug	97
59) Carbazole	24.54	166.8	31922	50.00	ug	96
60) Anthracene	24.11	177.9	95671	50.00	ug	98
61) Di-n-butylphthalate	25.57	148.8	135937	50.00	ug	98
62) Fluoranthene	27.15	201.9	106465	50.00	ug	98
63) *Chrysene-d12	31.23	240.0	67348	40.00	ug	98
64) Pyrene	27.75	201.9	108271	50.00	ug	98
65) Terphenyl-d14	28.15	244.0	74129	50.00	ug	99
66) Butylbenzylphthalate	29.52	148.8	62112	50.00	ug	94
67) 3,3'-Dichlorobenzidine	31.11	251.9	17460	50.00	ug	81
68) Benzo(a)anthracene	31.17	228.0	92810	50.00	ug	98
69) Chrysene	31.33	228.0	79636	50.00	ug	96
70) bis(2-Ethylhexyl)phthalate	31.36	148.8	75447	50.00	ug	92
71) *Perylene-d12	38.03	264.0	65591	40.00	ug	96
72) Di-n-octylphthalate	33.86	148.9	150538	50.00	ug	96
73) Benzo(b)fluoranthene	35.84	252.0	96101	50.00	ug	98
<del>73) Benzo(b)fluoranthene</del>	<del>35.98</del>	<del>252.0</del>	<del>80681</del>	<del>41.98</del>	<del>ug</del>	<del>98</del>
<del>I) Benzo(k)fluoranthene</del>	<del>35.84</del>	<del>252.0</del>	<del>96101</del>	<del>59.56</del>	<del>ug</del>	<del>97</del>
74) Benzo(k)fluoranthene	35.98	252.0	80681	50.00	ug	98
75) Benzo(a)pyrene	37.68	252.0	86276	50.00	ug	98
76) Indeno(1,2,3-cd)pyrene	46.44	276.0	88848	50.00	ug	94
77) Dibenz(a,h)anthracene	46.72	278.0	80280	50.00	ug	98
78) Benzo(g,h,i)perylene	49.04	276.0	85601	50.00	ug	84





Data File: >I3279::A5  
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 Misc: 050PPMSTD HP59711; ; ; ; 1; ; ; ; 10294

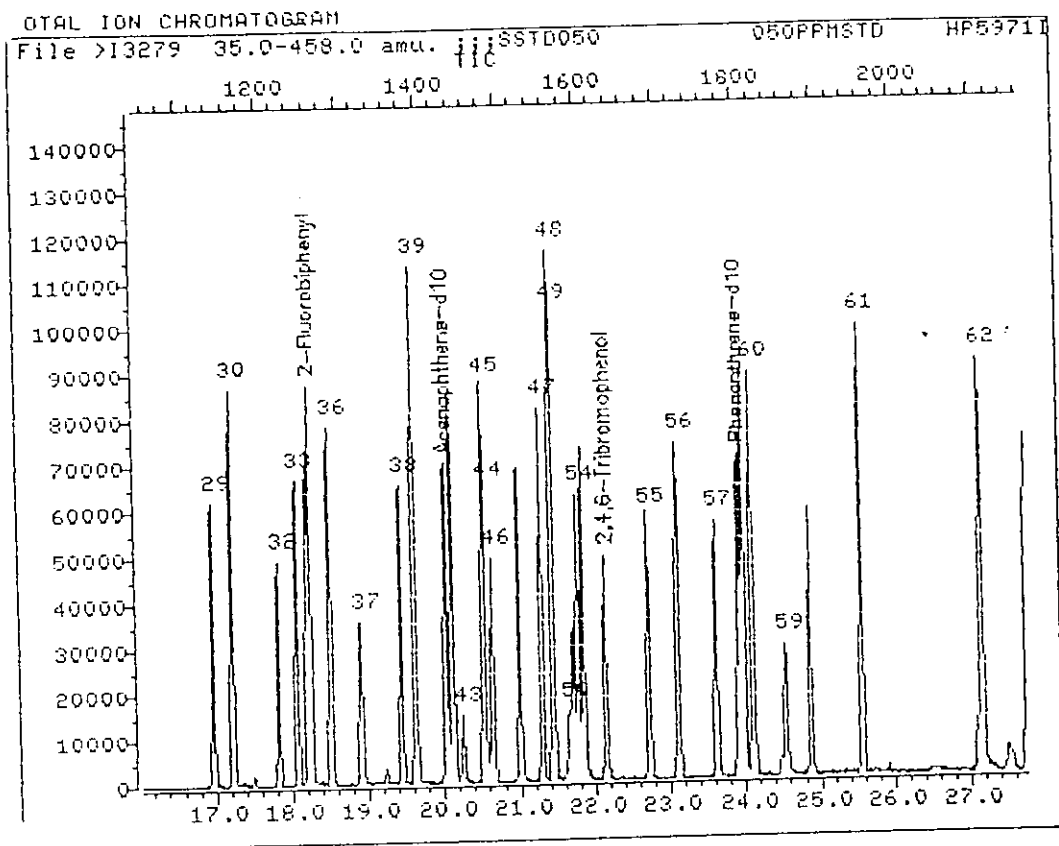
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 Instrument ID: \*\*MSD

Id File: I\_IFI::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

Operator ID: USER1  
 Quant Time : 930223 11:39  
 Injected at: 930216 08:48

0 0722

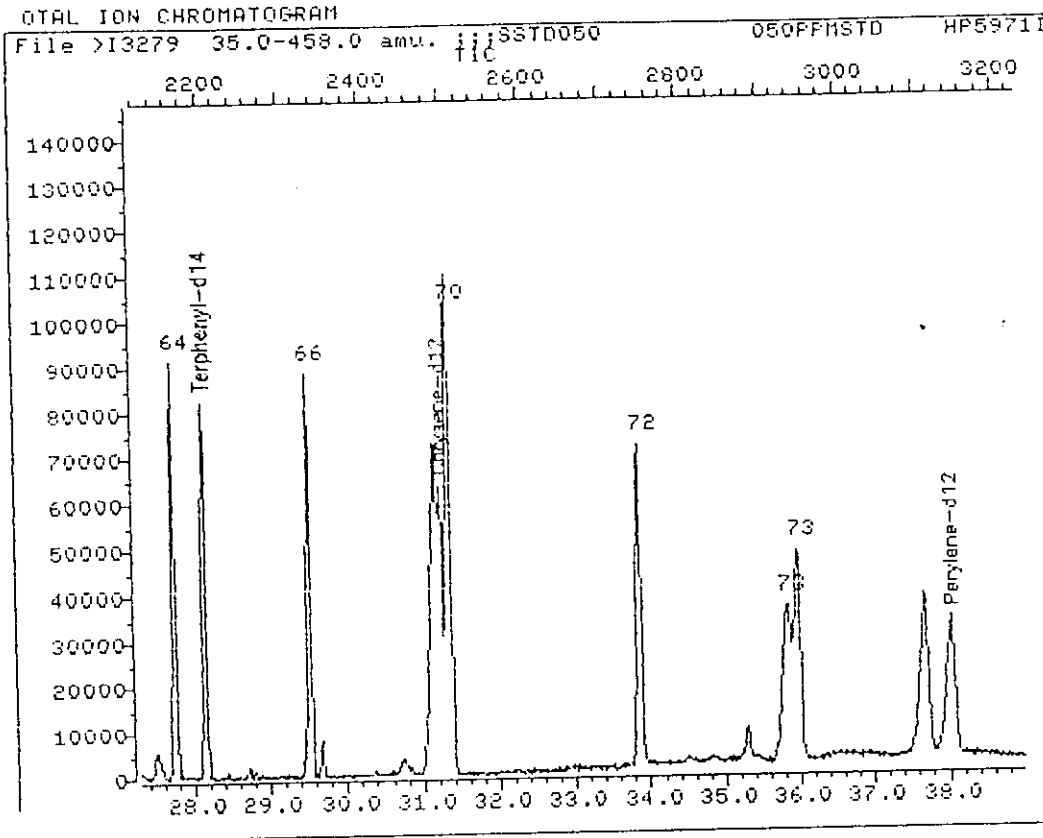


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Name: ;;;SSTD050 Instrument ID: \*\*MSD  
Misc: 050PPHSTD HP59711;;;1;;;I0294

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS Last Qcal Time: 930216 08:48  
Last Calibration: 910116 11:52

Operator ID: USER1  
Quant Time : 930223 11:39  
Injected at: 930216 08:48

0723



Data File: >I3279::A5  
Name: ;;;SSTD050  
Misc: 050PPMSTD

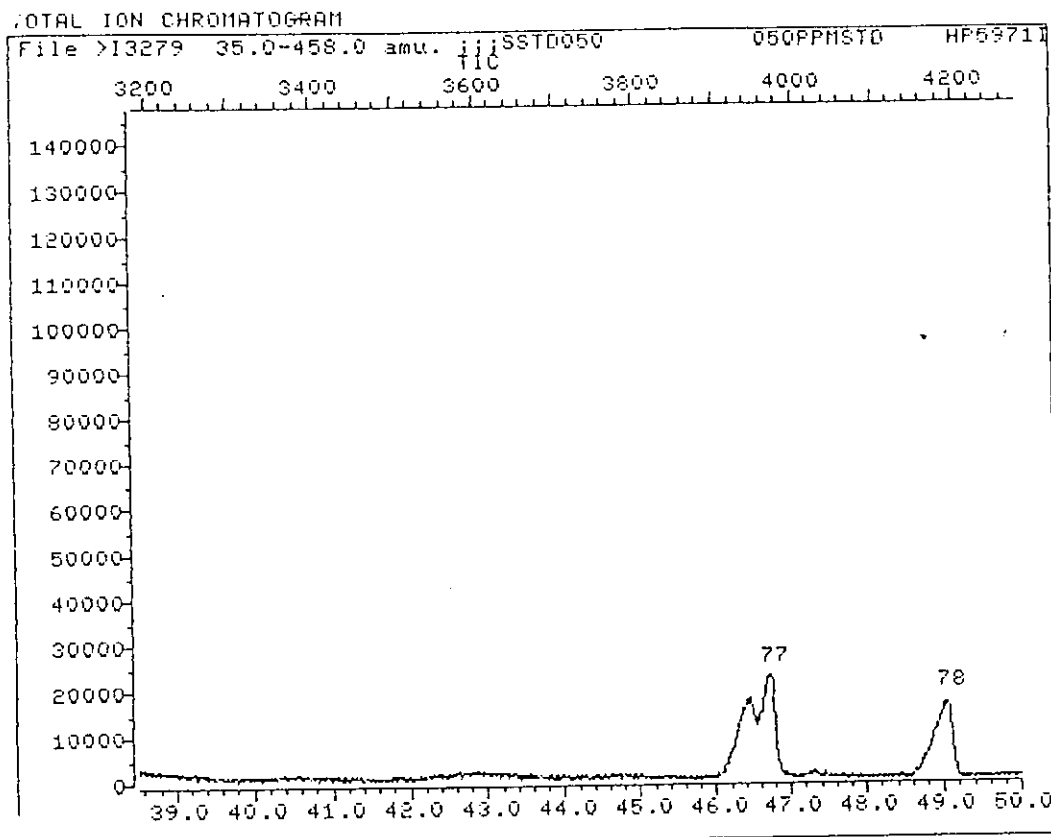
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Instrument ID: \*\*MSD  
HP59711;;;1;;;10294

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 11:39  
Injected at: 930216 08:48

0724



Data File: >I3279::A5  
Name: ;;;SSTD050  
Misc: 050PPMSTD HP59711; ; ; ; 1; ; ; ; 10294

Quant Output File: ^I3279::A6  
Instrument ID: \*\*MSD

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 11:39  
Injected at: 930216 08:48

7B  
SEMIVOLATILE CONTINUING CALIBRATION CHECK

0 0725

Lab Name: IEA/CT Contract: \_\_\_\_\_  
 Lab Code: IEACT Case No.: 0148 SAS No.: \_\_\_\_\_ SDG No.: Z0148  
 Instrument ID: HP5971I Calibration Date: 02/19/93 Time: 1028  
 Lab File ID: I3302.D Init. Calibration Date(s): 02/03/93  
 Init. Calibration Times: 1702 2202

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
bis(2-Chloroethyl) ether	1.779	1.688	0.700	5.1	25.0
2-Chlorophenol	1.258	1.339	0.800	-6.5	25.0
1,3-Dichlorobenzene	1.321	1.371	0.600	-3.7	25.0
1,4-Dichlorobenzene	1.294	1.387	0.500	-7.1	25.0
1,2-Dichlorobenzene	1.206	1.313	0.400	-8.8	25.0
2-Methylphenol	1.239	1.292	0.700	-4.3	25.0
2,2'-oxybis(1-Chloropropane)	1.457	1.162		20.2	
4-Methylphenol	1.378	1.391	0.600	-0.9	25.0
N-Nitroso-di-n-propylamine	0.887	0.893	0.500	-0.7	25.0
Hexachloroethane	0.659	0.655	0.300	0.6	25.0
Nitrobenzene	0.363	0.354	0.200	2.5	25.0
Isophorone	0.842	0.822	0.400	2.3	25.0
2-Nitrophenol	0.260	0.258	0.100	0.9	25.0
2,4-Dimethylphenol	0.374	0.370	0.200	1.1	25.0
bis(2-Chloroethoxy)methane	0.554	0.571	0.300	-3.0	25.0
2,4-Dichlorophenol	0.317	0.330	0.200	-4.2	25.0
1,2,4-Trichlorobenzene	0.341	0.356	0.200	-4.3	25.0
Naphthalene	0.930	0.959	0.700	-3.1	25.0
4-Chloroaniline	0.196	0.210		-7.3	
Hexachlorobutadiene	0.177	0.184		-3.8	
4-Chloro-3-methylphenol	0.355	0.369	0.200	-4.0	25.0
2-Methylnaphthalene	0.654	0.698	0.400	-6.8	25.0
Hexachlorocyclopentadiene	0.371	0.356		4.2	
2,4,6-Trichlorophenol	0.436	0.444	0.200	-1.9	25.0
2,4,5-Trichlorophenol	0.409	0.472	0.200	-15.3	25.0
2-Chloronaphthalene	1.063	1.129	0.800	-6.2	25.0
2-Nitroaniline	0.384	0.364		5.2	
Dimethylphthalate	1.368	1.402		-2.4	
Acenaphthylene	1.594	1.636	1.300	-2.6	25.0
2,6-Dinitrotoluene	0.329	0.353	0.200	-7.3	25.0
3-Nitroaniline	0.080	0.078		2.5	
Acenaphthene	0.964	1.010	0.800	-4.8	25.0
2,4-Dinitrophenol	0.244	0.188		22.7	
4-Nitrophenol	0.144	0.168		-16.2	
Dibenzofuran	1.452	1.578	0.800	-8.7	25.0
2,4-Dinitrotoluene	0.516	0.529	0.200	-2.6	25.0
Diethylphthalate	1.342	1.406		-4.8	

All other compounds must meet a minimum RRF of 0.010.

## SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: IEA/CT Contract:  
 Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148  
 Instrument ID: HP5971I Calibration Date: 02/19/93 Time: 1028  
 Lab File ID: I3302.D Init. Calibration Date(s): 02/03/93  
 Init. Calibration Times: 1702 2202

COMPOUND	RRF	RRF50	MIN RRF	%D	MAX %D
4-Chlorophenyl-phenylether	0.501	0.532	0.400	-6.3	25.0
Fluorene	1.004	1.025	0.900	-2.1	25.0
4-Nitroaniline	0.170	0.298		-75.1	
4,6-Dinitro-2-methylphenol	0.173	0.165		4.6	
N-Nitrosodiphenylamine (1)	0.362	0.355		2.0	
4-Bromophenyl-phenylether	0.188	0.197	0.100	-4.8	25.0
Hexachlorobenzene	0.265	0.270	0.100	-1.7	25.0
Pentachlorophenol	0.187	0.174	0.050	7.3	25.0
Phenanthrene	0.929	0.922	0.700	0.8	25.0
Anthracene	0.922	0.947	0.700	-2.7	25.0
Carbazole	0.262	0.296		-12.8	
Di-n-butylphthalate	1.364	1.266		7.2	
Fluoranthene	1.011	1.025	0.600	-1.4	25.0
Pyrene	1.358	1.262	0.600	7.1	25.0
Butylbenzylphthalate	0.822	0.725		11.8	
3,3'-Dichlorobenzidine	0.222	0.206		7.0	
Benzo(a)anthracene	1.148	1.120	0.800	2.4	25.0
Chrysene	0.917	0.952	0.700	-3.8	25.0
bis(2-Ethylhexyl)phthalate	0.984	0.898		8.8	
Di-n-octylphthalate	2.004	1.764		12.0	
Benzo(b)fluoranthene	1.318	1.151	0.700	12.7	25.0
Benzo(k)fluoranthene	0.877	1.027	0.700	-17.0	25.0
Benzo(a)pyrene	1.085	1.045	0.700	3.7	25.0
Indeno(1,2,3-cd)pyrene	0.980	1.067	0.500	-8.9	25.0
Dibenz(a,h)anthracene	0.869	0.967	0.400	-11.2	25.0
Benzo(g,h,i)perylene	0.972	1.041	0.500	-7.1	25.0
Nitrobenzene-d5	0.401	0.400	0.200	0.2	25.0
2-Fluorobiphenyl	1.180	1.231	0.700	-4.4	25.0
Terphenyl-d14	0.913	0.882	0.500	3.4	25.0
Phenol-d5	1.795	1.784	0.800	0.6	25.0
2-Fluorophenol	1.289	1.306	0.600	-1.3	25.0
2,4,6-Tribromophenol	0.261	0.292		-11.7	
2-Chlorophenol-d4	1.201	1.278	0.800	-6.4	25.0
1,2-Dichlorobenzene-d4	0.818	0.835	0.400	-2.1	25.0

(1) Cannot be separated from Diphenylamine  
 All other compounds must meet a minimum RRF of 0.010.

## QUANT REPORT

Page 1

Operator ID: USER1                      Quant Rev: 7            Quant Time: 930223 11:04  
 Output File: ^I3302::A6                      Injected at: 930219 10:28  
 Data File: >I3302::A5                      Dilution Factor: 1.00000  
 Name: ;;;SSTD050                      Instrument ID: \*\*MSD  
 Misc: 050PPMSTD            HP59711;;;;;1;;;;I0296

ID File: I\_IFI::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Cal Time: 930219 10:28

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.01	151.8	20283	40.00	ug	93
2)	2-Chlorophenol-d4	11.60	132.0	32397	50.00	ug	80
3)	2-Fluorophenol	9.15	111.8	33114	50.00	ug	75
4)	Phenol-d5	11.43	98.8	45241	50.00	ug	53
6)	bis(2-Chloroethyl)ether	11.47	92.7	42806	50.00	ug	59
7)	2-Chlorophenol	11.64	127.8	33949	50.00	ug	85
8)	1,3-Dichlorobenzene	11.91	145.8	34751	50.00	ug	96
9)	1,4-Dichlorobenzene	12.05	145.7	35160	50.00	ug	93
10)	1,2-Dichlorobenzene-d4	12.48	152.0	21181	50.00	ug	94
11)	1,2-Dichlorobenzene	12.51	145.7	33283	50.00	ug	97
12)	2-Methylphenol	12.86	107.8	32765	50.00	ug	89
13)	2,2'-oxybis(1-Chloropropane)	12.82	44.8	29469^	50.00	ug	79
14)	4-Methylphenol	13.24	107.8	35259	50.00	ug	91
15)	N-Nitroso-di-n-propylamine	13.19	69.9	22645	50.00	ug	61
16)	Hexachloroethane	13.27	116.7	16607	50.00	ug	99
17)	*Naphthalene-d8	15.26	135.9	74046	40.00	ug	97
18)	Nitrobenzene-d5	13.48	81.8	37064	50.00	ug	70
19)	Nitrobenzene	13.52	76.8	32745	50.00	ug	80
20)	Isophorone	14.13	81.8	76106	50.00	ug	89
21)	2-Nitrophenol	14.34	138.9	23867	50.00	ug	75
22)	2,4-Dimethylphenol	14.53	106.8	34256	50.00	ug	96
23)	bis(2-Chloroethoxy)methane	14.71	92.8	52840	50.00	ug	74
24)	2,4-Dichlorophenol	15.01	161.7	30550	50.00	ug	98
25)	1,2,4-Trichlorobenzene	15.16	179.7	32931	50.00	ug	96
26)	Naphthalene	15.31	127.9	88736	50.00	ug	79
27)	4-Chloroaniline	15.59	126.8	19443	50.00	ug	84
28)	Hexachlorobutadiene	15.79	224.6	17004	50.00	ug	92
29)	4-Chloro-3-methylphenol	16.89	106.9	34145	50.00	ug	90
30)	2-Methylnaphthalene	17.12	141.9	64649	50.00	ug	96
31)	*Acenaphthene-d10	19.92	163.9	42698	40.00	ug	97
32)	Hexachlorocyclopentadiene	17.71	236.6	18989	50.00	ug	99
33)	2,4,6-Trichlorophenol	17.97	195.8	23702	50.00	ug	94
34)	2,4,5-Trichlorophenol	18.11	195.8	25169	50.00	ug	94
35)	2-Fluorobiphenyl	18.14	171.8	65721	50.00	ug	97
36)	2-Chloronaphthalene	18.39	161.8	60231	50.00	ug	95
37)	2-Nitroaniline	18.79	64.9	19441	50.00	ug	55
38)	Dimethylphthalate	19.33	162.8	74802	50.00	ug	97
39)	Acenaphthylene	19.51	152.0	87304	50.00	ug	97
40)	2,6-Dinitrotoluene	19.52	164.8	18832	50.00	ug	77
41)	3-Nitroaniline	19.93	137.8	4154	80.00	ug	52

0728

QUANT REPORT

Operator ID: USER1  
Output File: ^I3302::A6  
Data File: >I3302::A5  
Name: ;;;SSTD050  
Misc: 050PPMSTD HP5971I; ; ; ; 1; ; ; ; 10296

Quant Rev: 7 Quant Time: 930223 11:04  
Injected at: 930219 10:28  
Dilution Factor: 1.00000  
Instrument ID: \*\*MSD

ID File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qcal Time: 930219 10:28

Compound	R.T.	Q ion	Area	Conc	Units	q
42) Acenaphthene	20.00	152.9	53931	50.00	ug	98
43) 2,4-Dinitrophenol	20.13	183.8	10052	50.00	ug	84
44) 4-Nitrophenol	20.47	108.8	8962	50.00	ug	76
45) Dibenzofuran	20.41	167.8	84231	50.00	ug	98
46) 2,4-Dinitrotoluene	20.54	164.8	28260	50.00	ug	71
47) Diethylphthalate	21.18	148.8	75028	50.00	ug	97
48) 4-Chlorophenyl-phenylether	21.33	203.9	28416	50.00	ug	81
49) Fluorene	21.33	165.9	54718	50.00	ug	97
50) 4-Nitroaniline	21.54	137.9	15891	50.00	ug	74
51) 2,4,6-Tribromophenol	22.03	329.6	15576	50.00	ug	91
52) *Phenanthrene-d10	23.80	187.9	81493	40.00	ug	98
53) 4,6-Dinitro-2-methylphenol	21.60	197.9	16793	50.00	ug	83
54) N-Nitrosodiphenylamine (1)	21.67	168.9	36147	50.00	ug	96
55) 4-Bromophenyl-phenylether	22.61	247.9	20040	50.00	ug	79
56) Hexachlorobenzene	22.99	283.6	27494	50.00	ug	99
57) Pentachlorophenol	23.50	265.6	17712	50.00	ug	95
58) Phenanthrene	23.86	177.9	93910	50.00	ug	98
59) Carbazole	24.42	166.8	30129	50.00	ug	96
60) Anthracene	23.98	177.9	96452	50.00	ug	98
61) Di-n-butylphthalate	25.45	148.8	128951	50.00	ug	97
62) Fluoranthene	27.03	201.9	104430	50.00	ug	98
63) *Chrysene-d12	31.08	240.0	65562	40.00	ug	98
64) Pyrene	27.63	201.9	103405	50.00	ug	99
65) Terphenyl-d14	28.04	244.0	72258	50.00	ug	99
66) Butylbenzylphthalate	29.39	148.8	59405	50.00	ug	92
67) 3,3'-Dichlorobenzidine	30.96	251.9	16920	50.00	ug	86
68) Benzo(a)anthracene	31.01	228.0	91819	50.00	ug	98
69) Chrysene	31.17	228.0	77995	50.00	ug	99
70) bis(2-Ethylhexyl)phthalate	31.20	148.8	73570	50.00	ug	94
71) *Perylene-d12	37.75	264.0	66706	40.00	ug	98
72) Di-n-octylphthalate	33.66	148.9	147127	50.00	ug	93
73) Benzo(b)fluoranthene	35.59	252.0	95979	50.00	ug	97
74) Benzo(k)fluoranthene	35.73	252.0	85602	50.00	ug	95
75) Benzo(a)pyrene	37.39	252.0	87132	50.00	ug	99
76) Indeno(1,2,3-cd)pyrene	45.95	276.0	88970M	50.00	ug	95
77) Dibenz(a,h)anthracene	46.24	278.0	80627	50.00	ug	89
78) Benzo(g,h,i)perylene	48.50	276.0	86807	50.00	ug	85

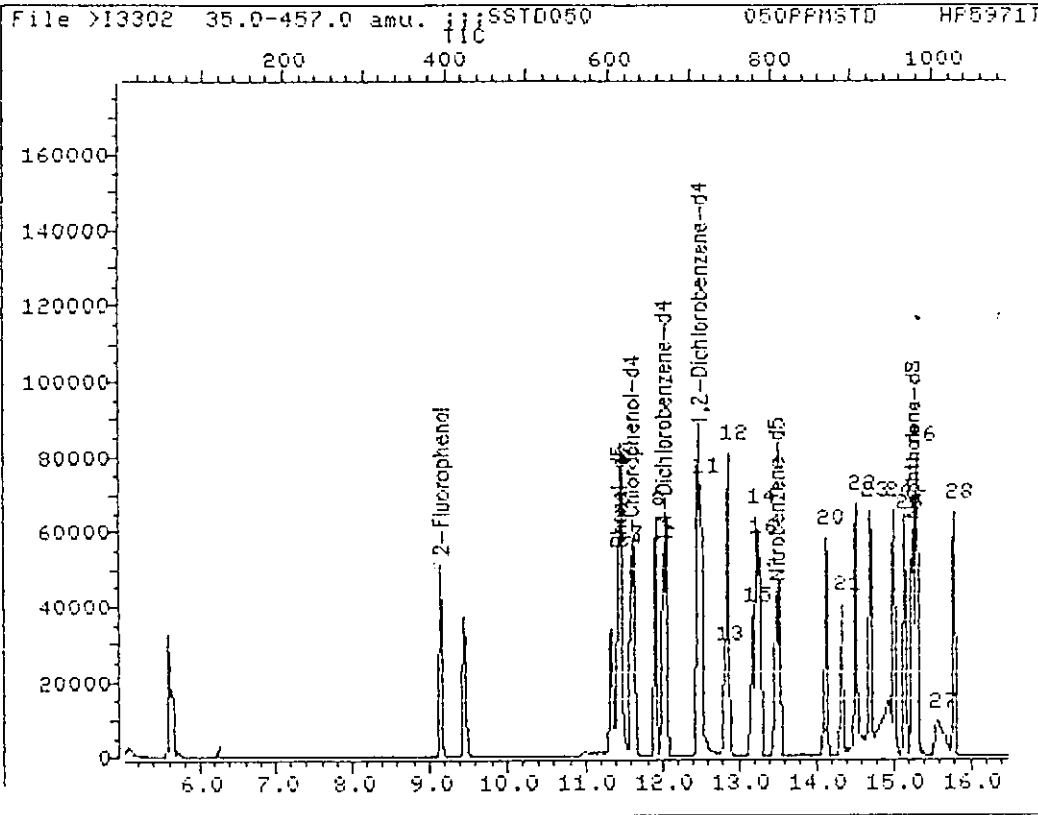
\* Compound is ISTD

CMC/28/93



0729

TOTAL ION CHROMATOGRAM

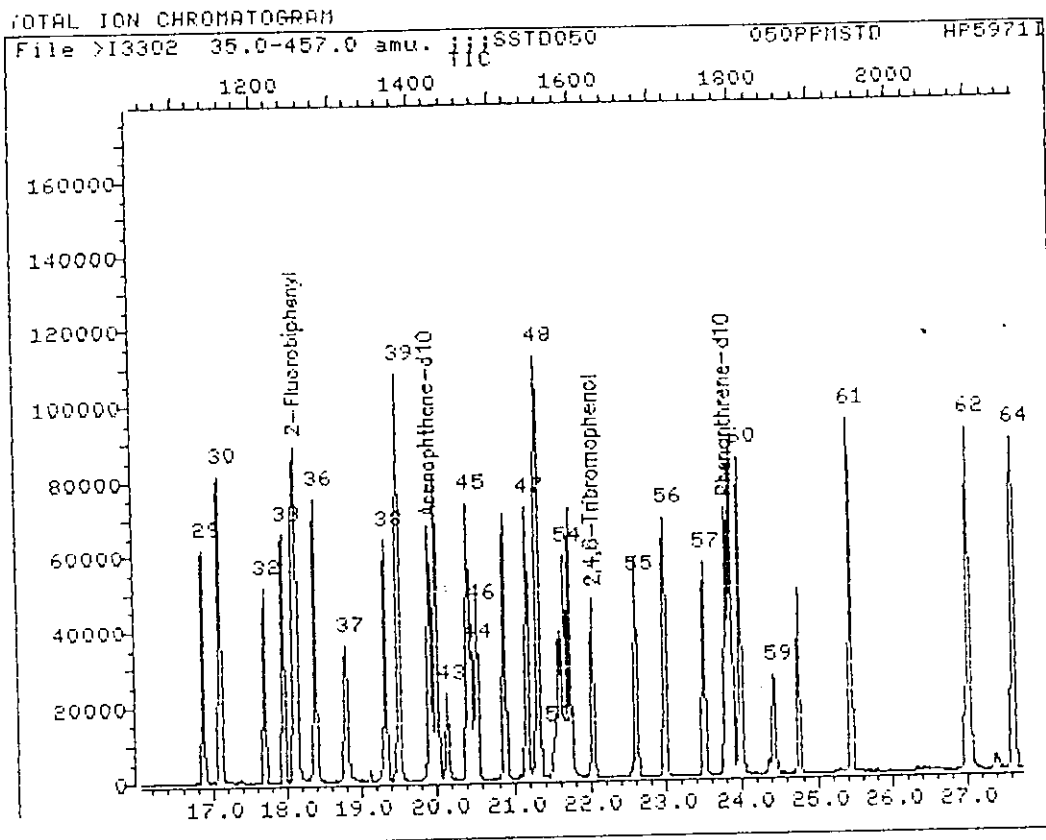


Data File: >I3302::A5 Quant Output File: ^I3302::A6  
Name: ;;;SSTD050 Instrument ID: \*\*MSD  
Misc: 050PPMSTD HP5971I; ; ; ; ; 1; ; ; ; I0296

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930223 11:04  
Injected at: 930219 10:28

0730



Data File: >I3302::A5  
Name: ;;;SSTD050  
Misc: 050PPMSTD

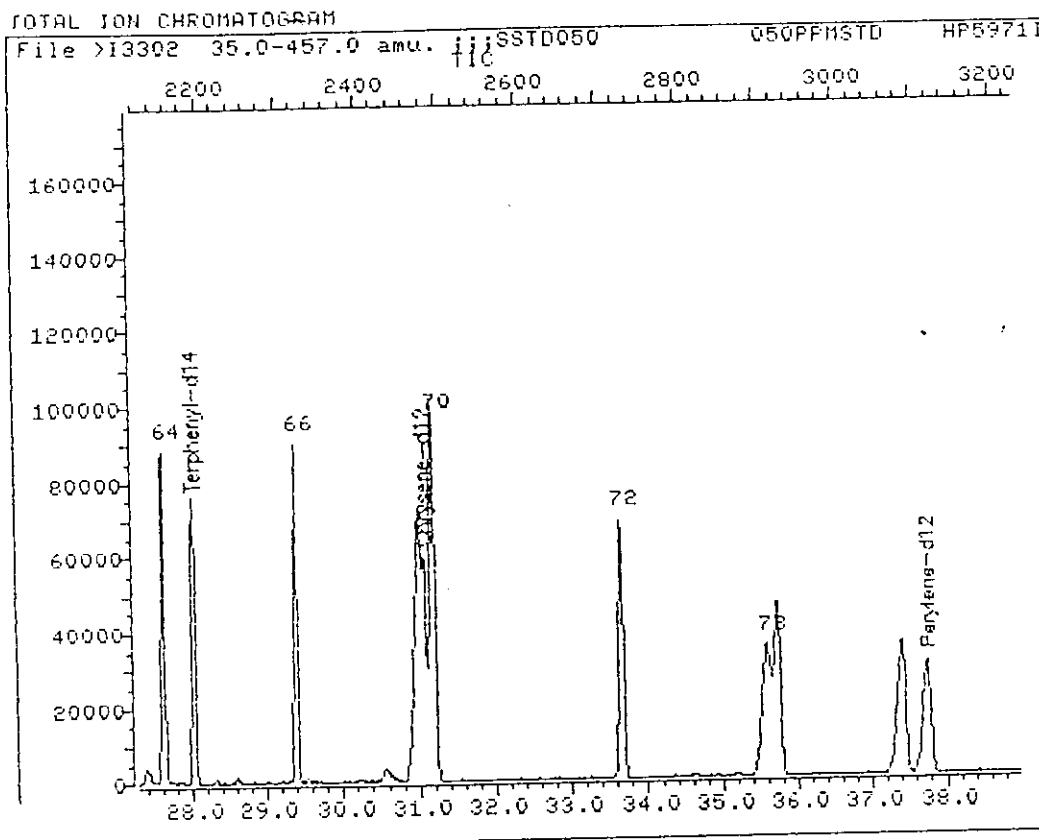
Quant Output File: ^I3302::A6  
Instrument ID: \*\*MSD  
HP59711;;;1;;;I0296

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930223 11:04  
Injected at: 930219 10:28

0731



Data File: >I3302::A5  
Name: ;;;SST0050  
Misc: 050PPMSTD

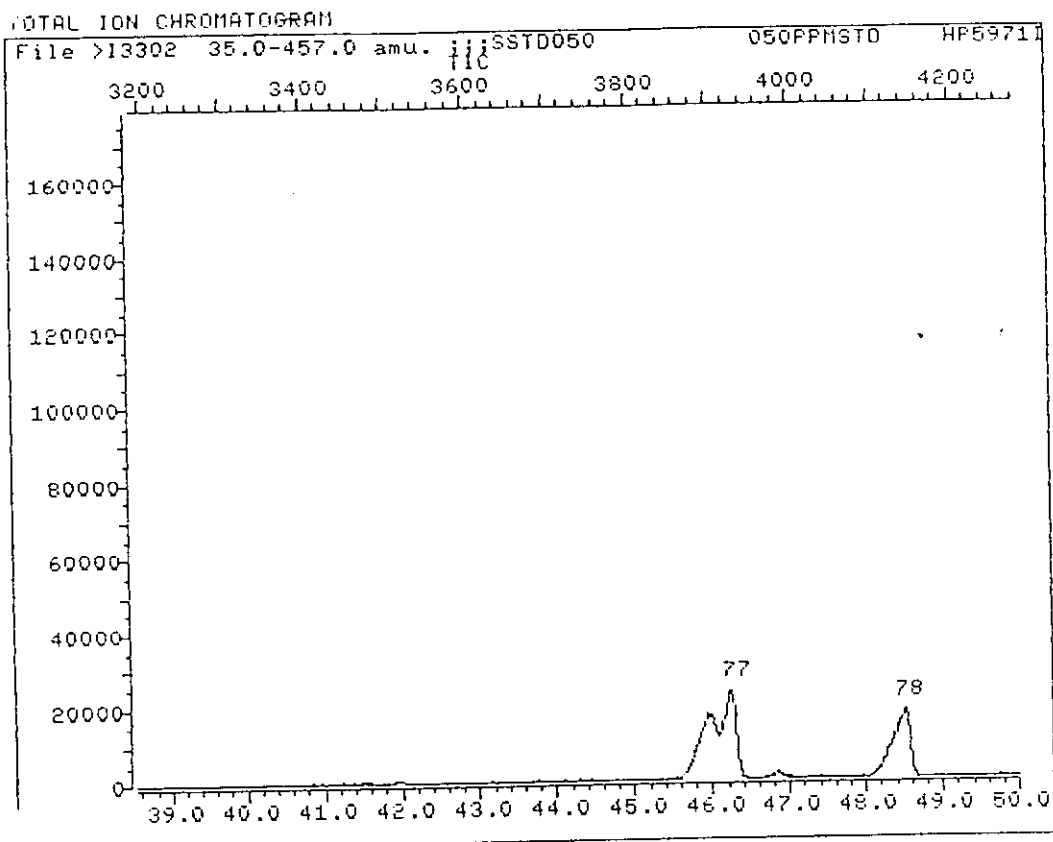
Quant Output File: ^I3302::A6  
Instrument ID: \*\*MSD  
HP5971I;;;1;;;I0296

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930219 10:28

Operator ID: USER1  
Quant Time : 930223 11:04  
Injected at: 930219 10:28

0732



Data File: >I3302::A5  
Name: ;;;SSTD050  
Misc: 050PPMSTD

Quant Output File: ^I3302::A6  
Instrument ID: \*\*MSD  
HP59711; ; ; ; 1; ; ; ; 10296

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930219 10:28

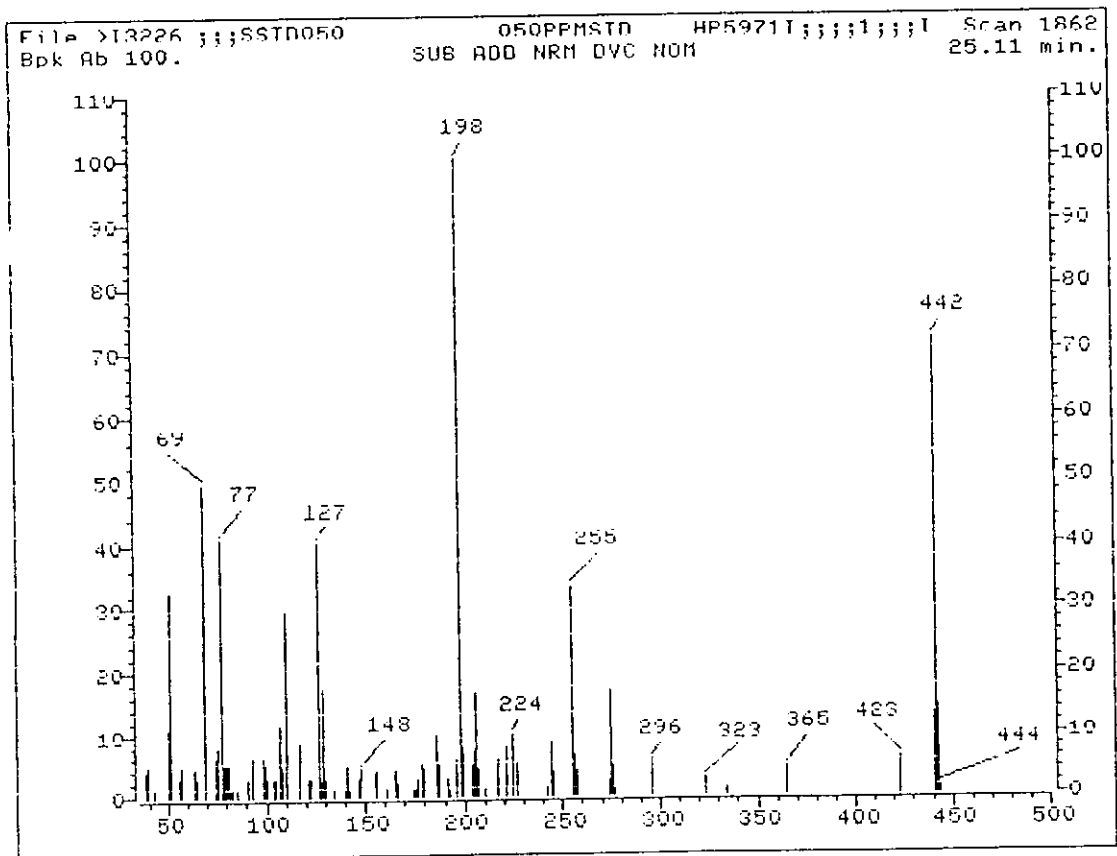
Operator ID: USER1  
Quant Time : 930223 11:04  
Injected at: 930219 10:28

MS data file header from : >I3226::A3

0733  
2/03/93 17:02

Sample: ;;;SSTD050 Operator: USER1  
SC : 050PPMSTD HP5971I;;;1;;;I0288  
s. #: 1 MS\_model: 71 SW/HW rev.: FF ALS # : 1 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

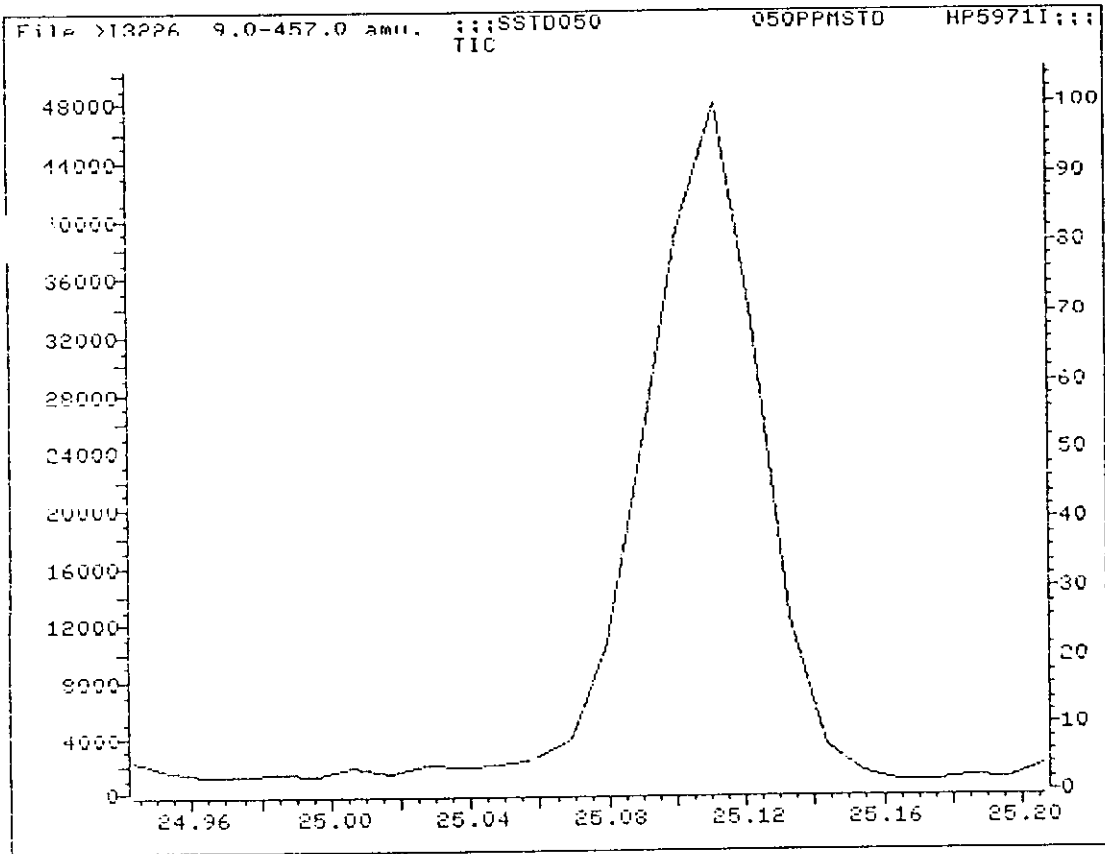




MS data file header from : >I3226::A3

Sample: ;;;SSTD050 Operator: USER1 2/03/93 17:02  
Misc : 050PPMSTD HP5971I;;;1;;;I0288  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS # : 1 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

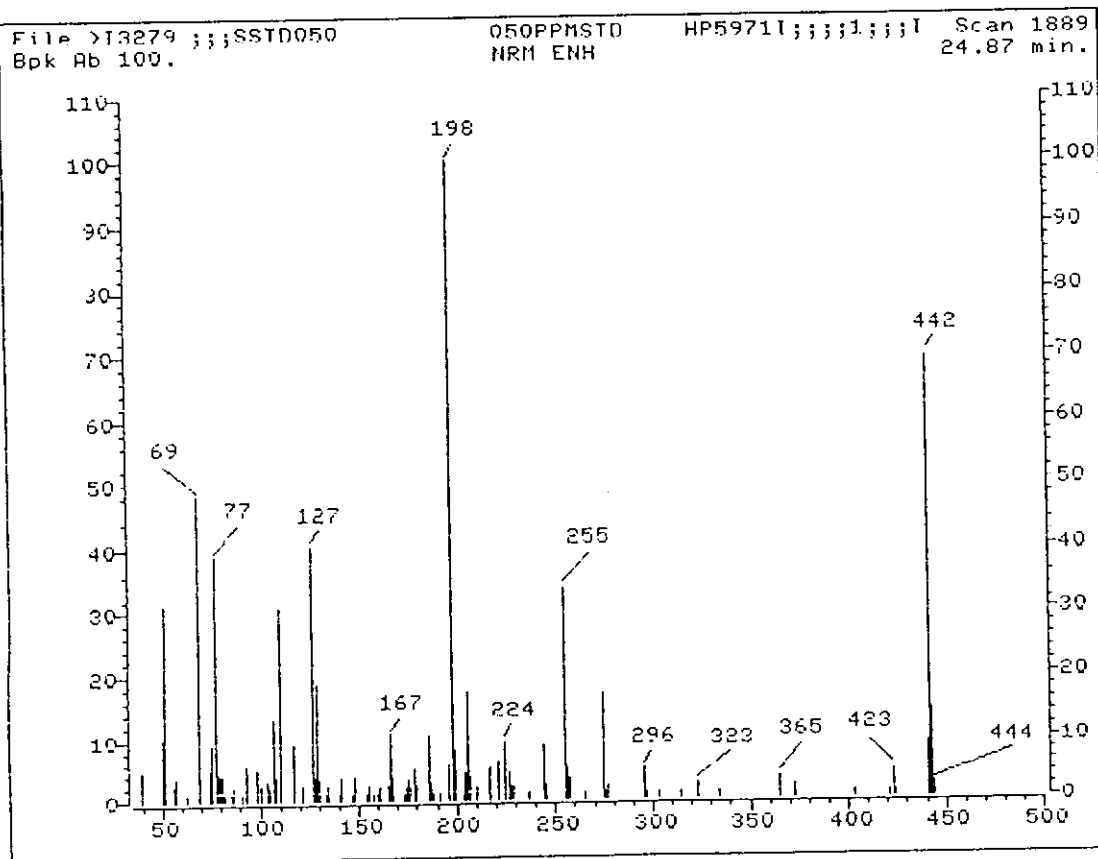


MS data file header from : >I3279::A3

Sample: ;;;SSTD050 Operator: USER1 2/16/93 8:48  
Misc : 050PPMSTD HP5971I;;;1;;;I0294  
S# : 1 MS model: 71 SW/HW rev.: FF ALS # : 1 Equip ID: \*\*MSD  
Method file: CSCYT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0

00 0736



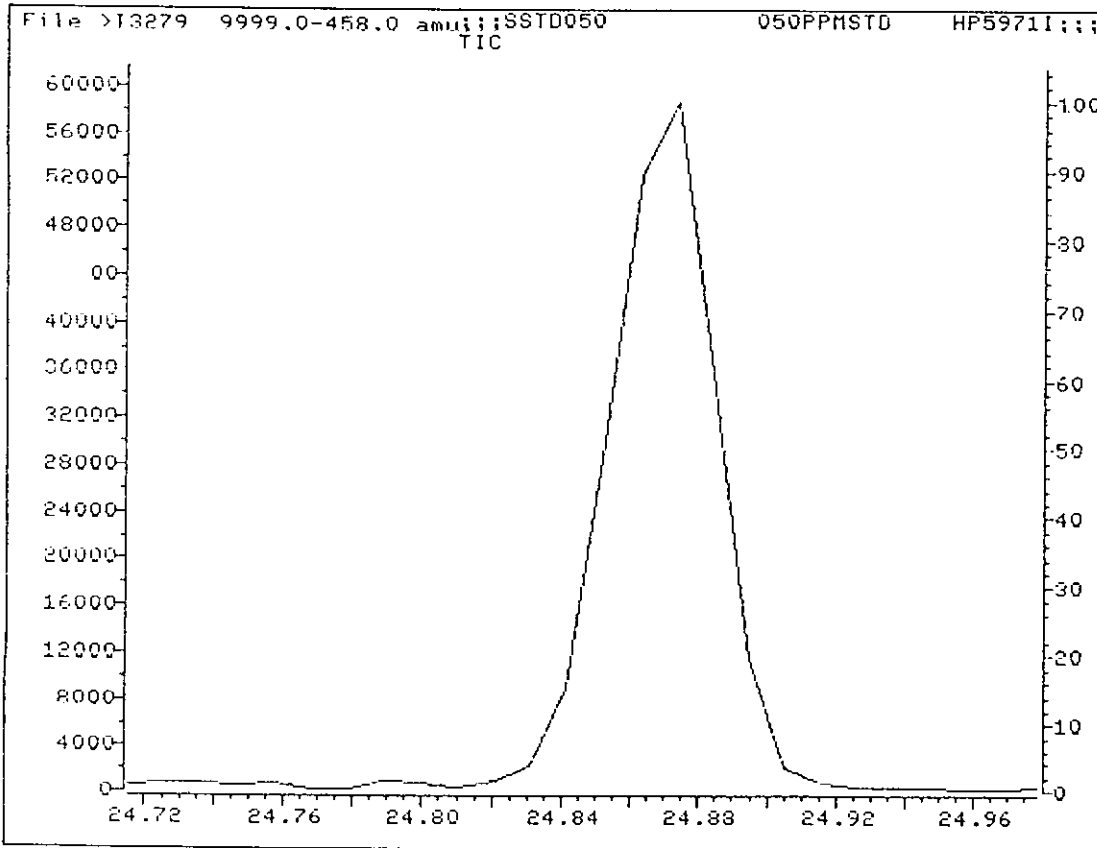




MS data file header from : >I3279::A3

Sample: ;;;SSTD050 Operator: USER1 2/16/93 8:48  
l c : 050PPMSTD\_ HP5971I;;;1;;;I0294  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS # : 1 Equip ID: \*\*05038  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

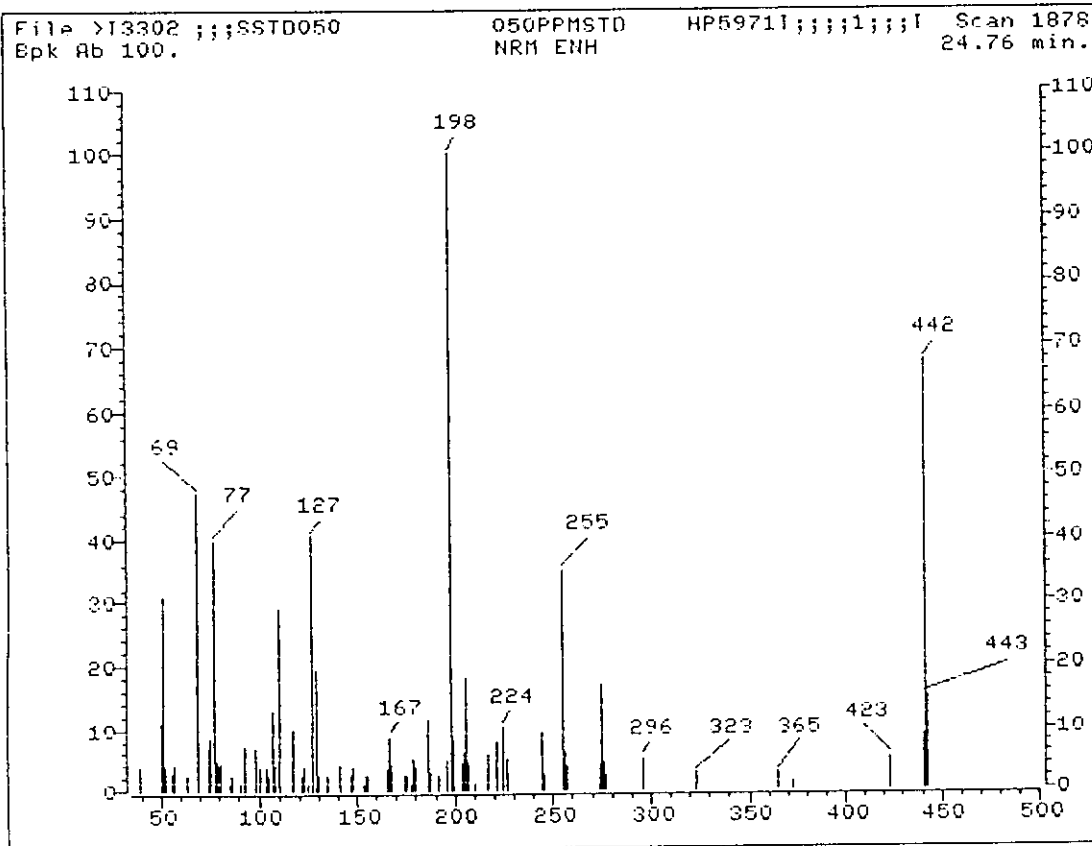
Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0



MS data file header from : >I3302::A3

Sample: ;;;SSTD050 Operator: USER1 2/19/93 10:28  
Misc : 050PPMSTD HP5971I;;;1;;;I0296  
Scan #: 1 MS model: 71 SW/HW rev.: FF ALS # : 1 Equip ID: \*\*MSD  
Method file: CSCYT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.	0739
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0	
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0	



MS data file header from : >I3302::A3

Sample: ;;;SSTD050 Operator: USER1 2/19/93 10:28  
Misc : 050PPMSTD HP5971I;;;1;;;I0296  
Scan #: 1 MS model: 71 SW/HW rev.: FF ALS # : 1 Equip ID: \*\*MSD 0740  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures : 0. 0. 0. 0. 0.  
Chromatographic times, min. : 0.0 0.0 0.0 0.0 0.0  
Chromatographic rate, deg/min: 0.0 0.0 0.0 0.0 0.0

>I3302 ;;;SSTD050 050PPMSTD HP5971I;;;1;;;I0296  
1878 NRM ENH

File: >I3302 Scan #: 1878 Retn. time: 24.76

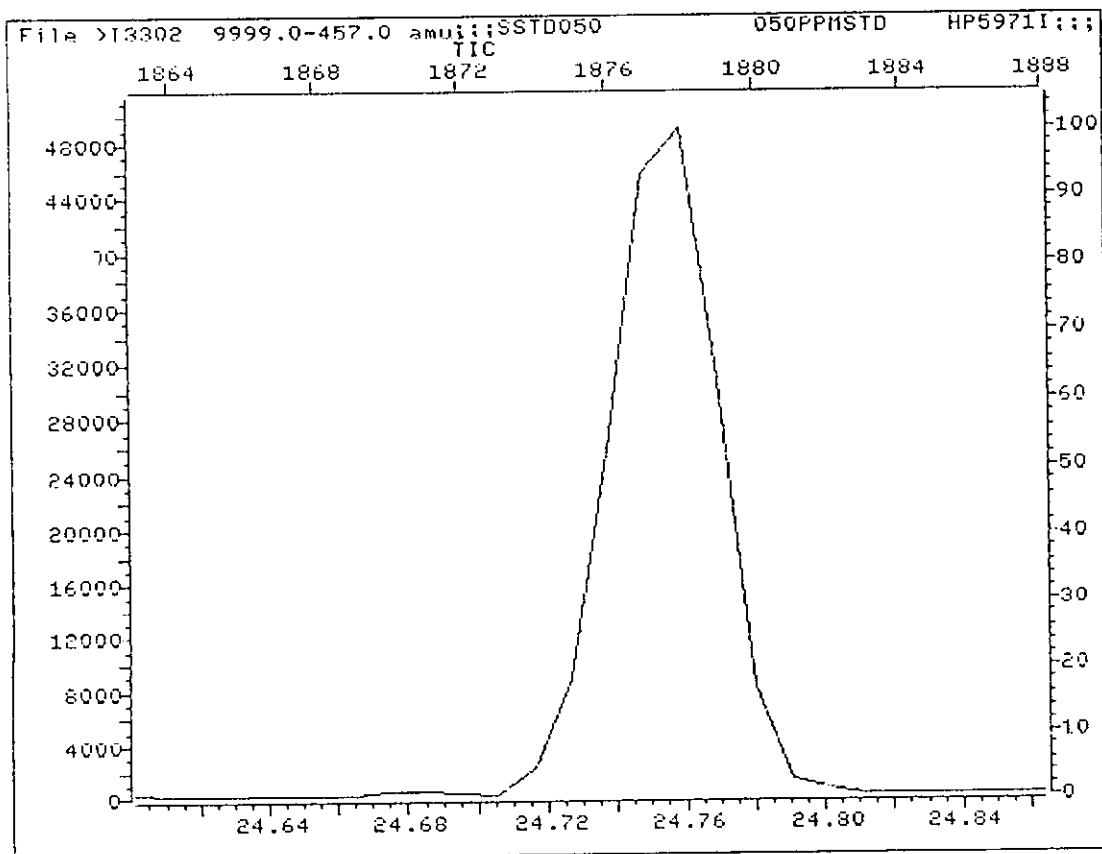
m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
38.85	3.900	91.05	1.164	129.80	2.594	186.75	2.932	245.70	2.409
49.95	10.830	92.85	7.122	134.75	2.366	191.90	2.366	254.90	34.986
50.95	30.680	97.90	6.690	140.70	4.011	195.75	4.972	255.80	6.031
51.80	3.813	98.80	5.668	146.75	2.538	197.95	100.000	257.70	3.924
55.90	2.668	100.65	3.912	147.70	3.813	198.75	8.157	273.90	4.091
56.75	4.202	103.85	3.653	152.75	1.171	203.90	4.633	274.90	16.948
62.80	2.433	104.80	2.477	154.75	2.403	205.00	6.235	275.80	4.516
68.85	47.308	106.90	12.944	155.85	2.403	205.95	18.137	276.80	2.440
73.80	6.752	107.80	4.115	164.75	3.425	206.85	4.423	295.70	5.156
74.90	8.557	109.95	29.035	166.85	8.643	210.70	1.158	322.85	2.643
77.00	39.730	110.75	6.426	167.75	4.257	216.75	5.668	364.75	2.649
.95	4.959	116.80	9.974	173.85	2.384	220.85	7.886	371.90	1.312
.75	4.929	121.85	2.353	174.85	2.581	223.90	10.288	422.90	5.163
79.85	4.245	122.75	3.690	176.95	1.152	224.70	3.906	440.95	9.013
80.75	4.577	124.75	1.177	178.80	5.070	226.75	5.002	442.05	67.576
84.90	1.134	126.90	40.500	179.80	3.813	243.90	9.414	442.95	15.038
85.80	2.397	128.90	19.400	185.85	11.508	244.80	2.464		

0741

MS data file header from : >I3302::A3

Sample: ;;;SSTD050 Operator: USER1 2/19/93 10:28  
M. : 050PPMSTD\_ HP5971I;;;1;;;I0296  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS # : 1 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK86
--------

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

0742

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: SBLK86

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3280.D

Level: (low/med) LOW

Date Received: / /

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL)

Date Analyzed: 02/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

CAS NO.	COMPOUND	UG/L	Q
---------	----------	------	---

108-95-2-----	Phenol	10	U
111-44-4-----	bis(2-Chloroethyl) ether	10	U
95-57-8-----	2-Chlorophenol	10	U
541-73-1-----	1,3-Dichlorobenzene	10	U
106-46-7-----	1,4-Dichlorobenzene	10	U
95-50-1-----	1,2-Dichlorobenzene	10	U
95-48-7-----	2-Methylphenol	10	U
108-60-1-----	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5-----	4-Methylphenol	10	U
621-64-7-----	N-Nitroso-di-n-propylamine	10	U
67-72-1-----	Hexachloroethane	10	U
98-95-3-----	Nitrobenzene	10	U
78-59-1-----	Isophorone	10	U
88-75-5-----	2-Nitrophenol	10	U
105-67-9-----	2,4-Dimethylphenol	10	U
111-91-1-----	bis(2-Chloroethoxy)methane	10	U
120-83-2-----	2,4-Dichlorophenol	10	U
120-82-1-----	1,2,4-Trichlorobenzene	10	U
91-20-3-----	Naphthalene	10	U
106-47-8-----	4-Chloroaniline	10	U
87-68-3-----	Hexachlorobutadiene	10	U
59-50-7-----	4-Chloro-3-methylphenol	10	U
91-57-6-----	2-Methylnaphthalene	10	U
77-47-4-----	Hexachlorocyclopentadiene	10	U
88-06-2-----	2,4,6-Trichlorophenol	10	U
95-95-4-----	2,4,5-Trichlorophenol	25	U
91-58-7-----	2-Chloronaphthalene	10	U
88-74-4-----	2-Nitroaniline	25	U
131-11-3-----	Dimethylphthalate	10	U
208-96-8-----	Acenaphthylene	10	U
606-20-2-----	2,6-Dinitrotoluene	10	U
99-09-2-----	3-Nitroaniline	25	U
83-32-9-----	Acenaphthene	10	U

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK86

Lab Name: IEA/CT Contract: ^ 0743

Lab Code: IEACT Case No.: 0148 SAS No.: SDG No.: Z0148

Matrix: (soil/water) WATER Lab Sample ID: SBLK86

Sample wt/vol: 1000 (g/mL) ML Lab File ID: I3280.D

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

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL) Date Analyzed: 02/16/93

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	25	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	10	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	25	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	0.6	J
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	2	J
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

1F  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET  
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK86

Lab Name: IEA/CT

Contract: 0744

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: SBLK86

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3280.D

Level: (low/med) LOW

Date Received: / /

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(uL)

Date Analyzed: 02/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_

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

Number TICs found: 4 *0m2/25/93*

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	8.67	8	MHA
2.	ALDOL CONDENSATION PRODUCT	8.26	3	
3.	UNKNOWN	9.42	3	
4.	↓	15.73	2	
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.				



0745

QUANT REPORT

Operator ID: USER1  
Output File: ^I3280::A6  
Data File: >I3280::A5  
Name: ;;SBLK 86  
Misc: 0211-806 HP59711;;;LLW;1;;;I0294

Quant Rev: 7 Quant Time: 930223 13:54  
Injected at: 930216 10:59  
Dilution Factor: .50000  
Instrument ID: \*\*MSD

ID File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Cal Time: 930216 08:48

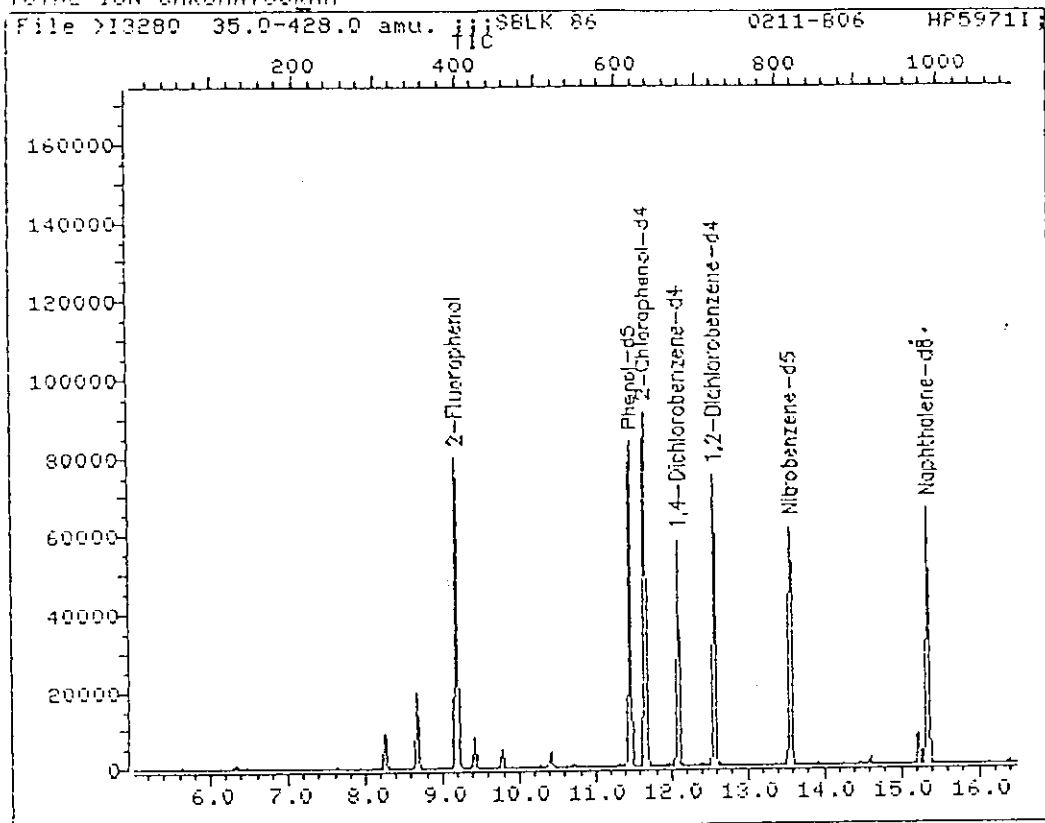
Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.09	151.8	21312	40.00	ug	95
2) 2-Chlorophenol-d4	11.67	132.0	64433	47.69	ug	80
3) 2-Fluorophenol	9.18	111.8	63112	47.04	ug	73
4) Phenol-d5	11.47	98.8	89386	47.76	ug	62
10) 1,2-Dichlorobenzene-d4	12.57	152.0	29287	32.29	ug	94
17) *Naphthalene-d8	15.35	135.9	78929	40.00	ug	97
18) Nitrobenzene-d5	13.57	81.8	48061	32.04	ug	69
31) *Acenaphthene-d10	20.01	163.9	46491	40.00	ug	98
5) 2-Fluorobiphenyl	18.23	171.8	85983	29.80	ug	97
<del>7) Diethylphthalate</del>	<del>21.26</del>	<del>148.8</del>	<del>1732</del>	<del>.516</del>	<del>ug</del>	<del>79</del>
51) 2,4,6-Tribromophenol	22.14	329.6	32168	48.38	ug	92
52) *Phenanthrene-d10	23.90	187.9	87206	40.00	ug	99
51) Di-n-butylphthalate	25.54	148.8	3549	.627	ug	77
63) *Chrysene-d12	31.20	240.0	77461	40.00	ug	98
65) Terphenyl-d14	28.15	244.0	106573	31.25	ug	99
<del>66) Butylbenzylphthalate</del>	<del>29.49</del>	<del>148.8</del>	<del>575</del>	<del>.201</del>	<del>ug</del>	<del>86</del>
70) bis(2-Ethylhexyl)phthalate	31.33	148.8	5860	1.69	ug	94
71) *Perylene-d12	38.02	264.0	79920	40.00	ug	97

\* Compound is ISTD

*mc23/03*

0746

TOTAL ION CHROMATOGRAM



Data File: >I3280::A5

Quant Output File: ^I3280::A6

Name: ;;;SBLK 86

Instrument ID: \*\*MSD

Misc: 0211-806 HP59711;;;LLW;1;;;10294

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

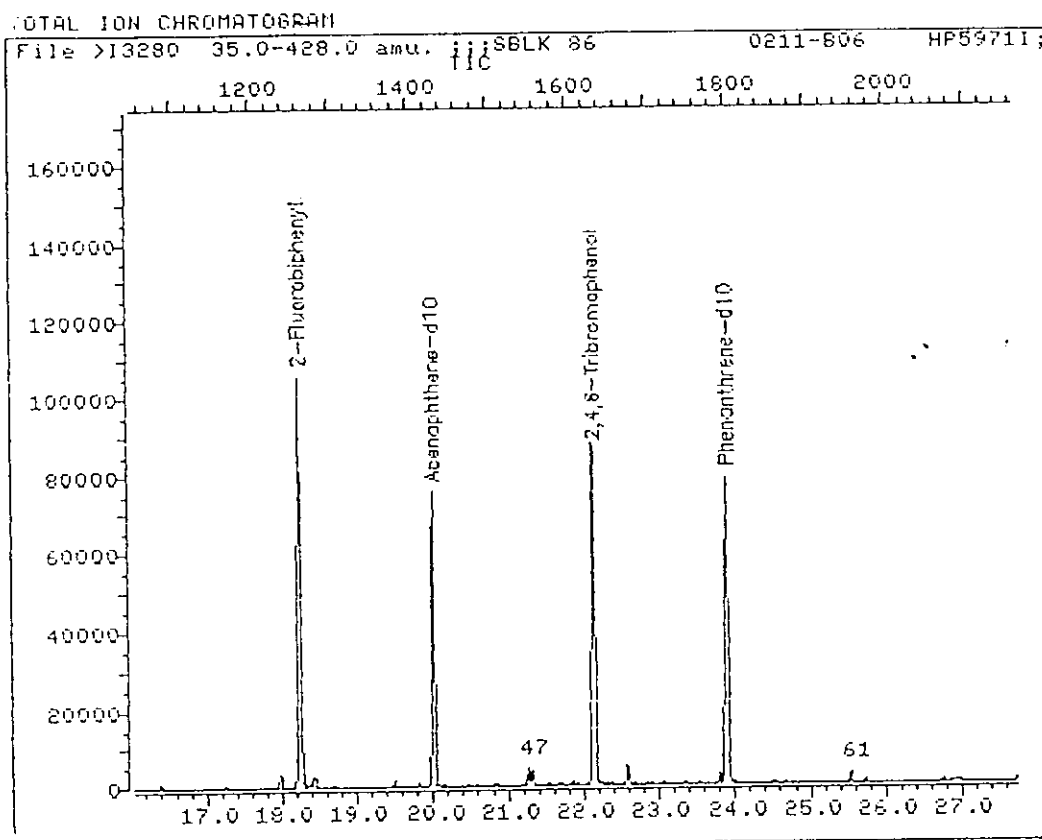
Operator ID: USER1

Quant Time : 930223 13:54

Injected at: 930216 10:59

Page 1 of 4

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Data File: >I3280::A5

Quant Output File: ^I3280::A6

Name: ;;;SBLK 86

Instrument ID: \*\*MSD

Misc: 0211-806 HP59711;;;LLW;1;;;10294

Id File: I\_IF1::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

Operator ID: USER1

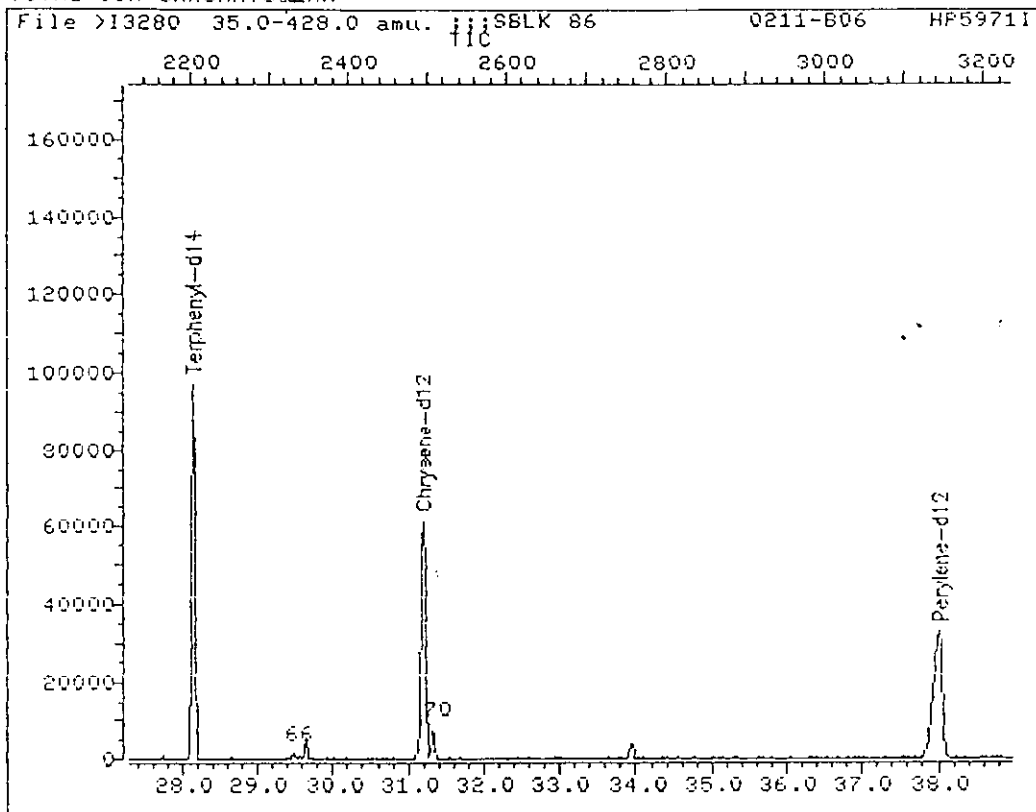
Quant Time : 930223 13:54

Injected at: 930216 10:59

Page 2 of 4

0748

TOTAL ION CHROMATOGRAM



Data File: >I3280::A5

Quant Output File: ^I3280::A6

Name: ;;;SBLK 86

Instrument ID: \*\*MSD

Misc: 0211-B06 HP59711;;;LLW;1;;;I0294

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

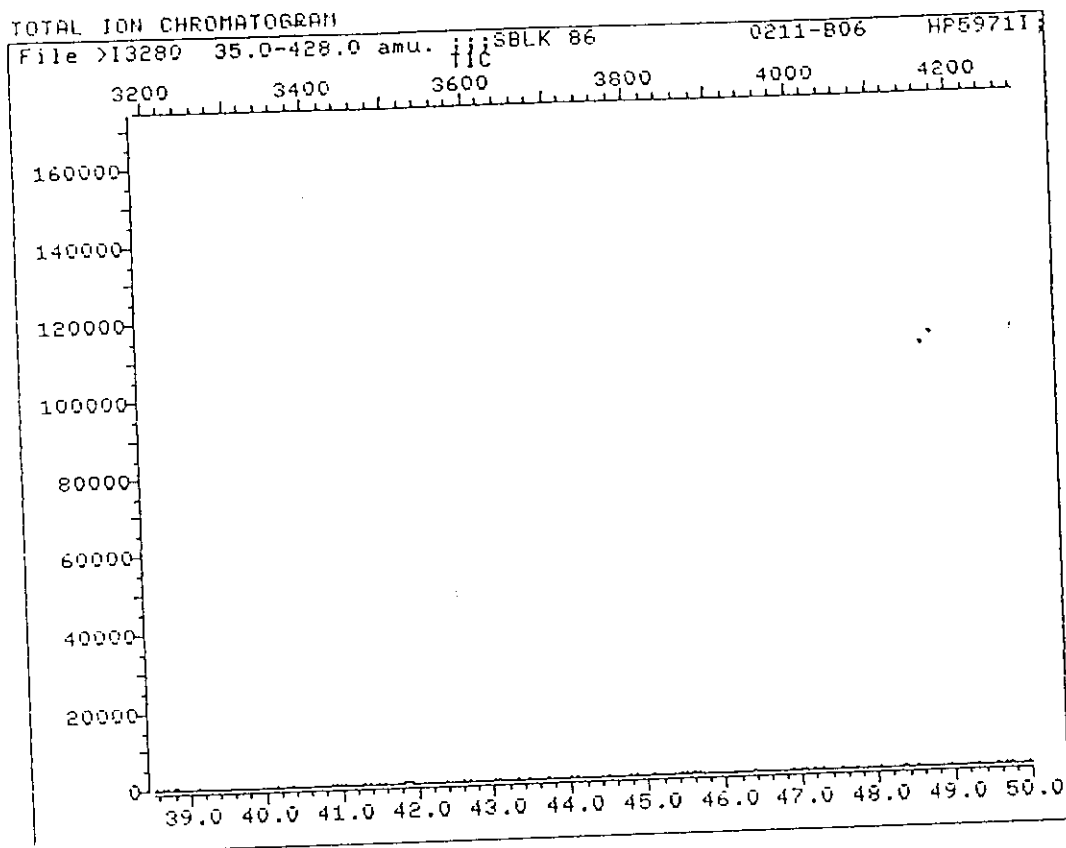
Operator ID: USER1

Quant Time : 930223 13:54

Injected at: 930216 10:59

Page 3 of 4

0749



Data File: >I3280::A5  
Name: ;;;SBLK 86  
Misc: 0211-B06

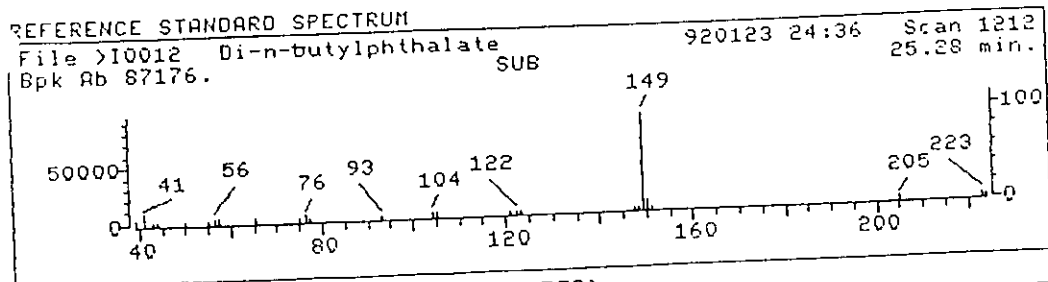
Quant Output File: ^I3280::A6  
Instrument ID: \*\*MSD

Id File: I\_IF1::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

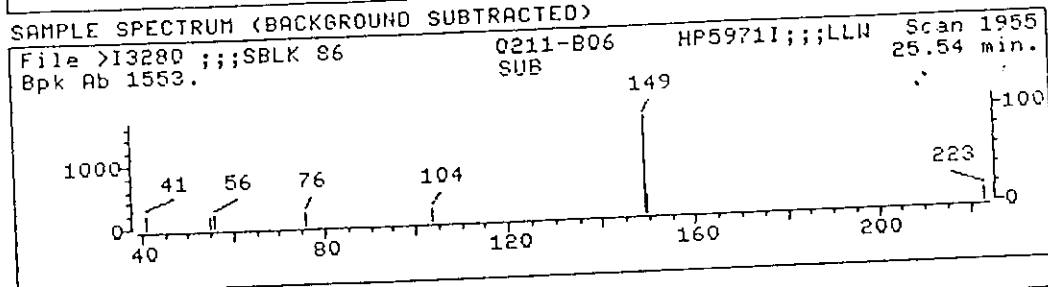
Last Qcal Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 13:54  
Injected at: 930216 10:59

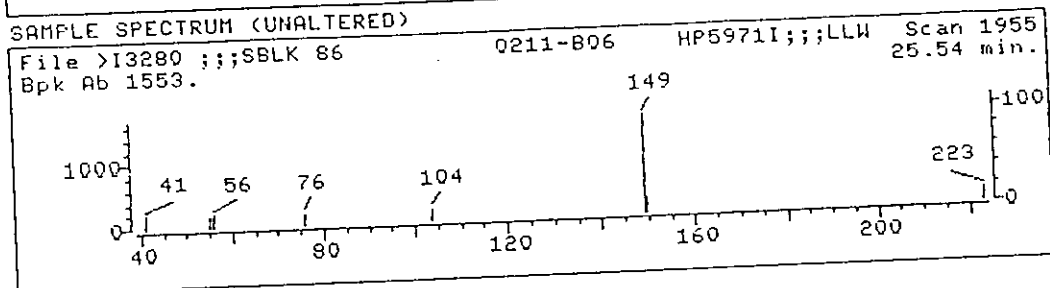
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: &gt;I3280::A3

Name: ;;;SBLK 86

Misc: 0211-B06 HP5971I;;;LLW;1;;;10294

Quant Time: 930216 11:54

Injected at: 930216 10:59

Last Qcal Time: 930216 08:48

Quant Output File: ^I3280::A6

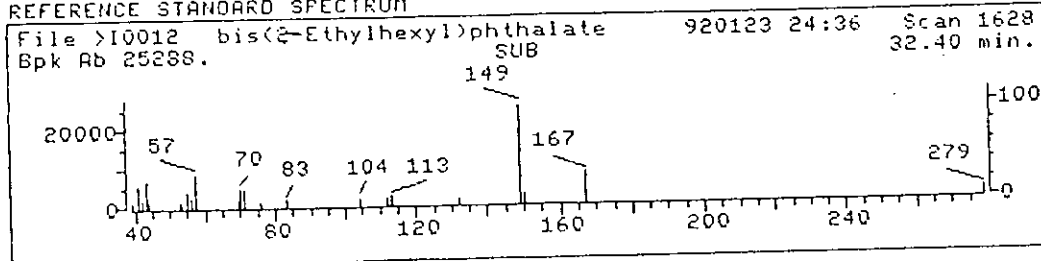
Instrument ID: \*\*MSD

Quant ID File: I\_IFI::A5

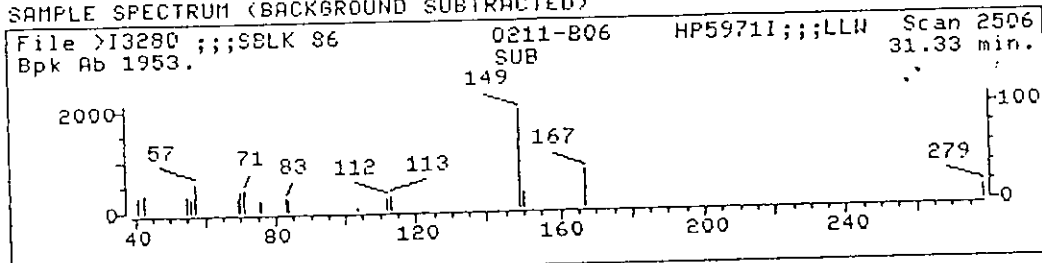
Last Calibration: 910116 11:52

Compound No : 61  
 Compound Name : Di-n-butylphthalate  
 Scan Number : 1955  
 Retention Time: 25.54 min.  
 Quant Ion : 148.8  
 Area : 3549  
 Concentration : .627 ug  
 q-value : 77

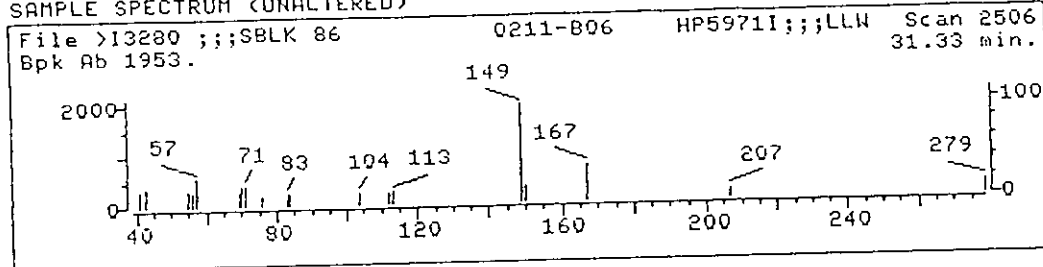
## REFERENCE STANDARD SPECTRUM



## SAMPLE SPECTRUM (BACKGROUND SUBTRACTED)



## SAMPLE SPECTRUM (UNALTERED)



Data File: >I3280::A3  
Name: ;;;SBLK 86  
Misc: 0211-B06 HP5971I;;;LLW;1;;;I0294  
Quant Time: 930216 11:54  
Injected at: 930216 10:59  
Last Qcal Time: 930216 08:48

Quant Output File: ^I3280::A6  
Instrument ID: \*\*MSD  
Quant ID File: I\_IFI::A5  
Last Calibration: 910116 11:52

Compound No : 70  
Compound Name : bis(2-Ethylhexyl)phthalate  
Scan Number : 2506  
Retention Time: 31.33 min.  
Quant Ion : 148.8  
Area : 5860  
Concentration : 1.63 ug  
q-value : 94

GC/MS Top Level. Select a softkey...

\*KSHEL

Keys

<891130.1303>

0752

MS data file header from : >I3280::A3

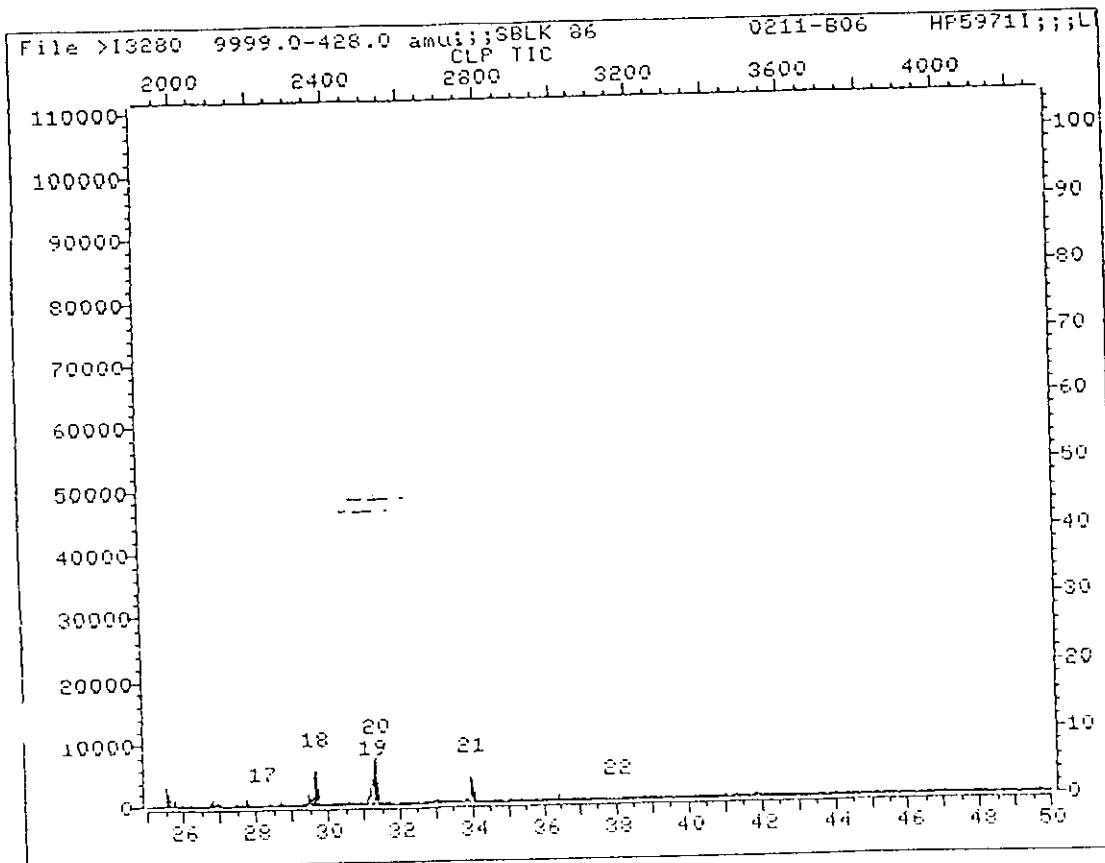
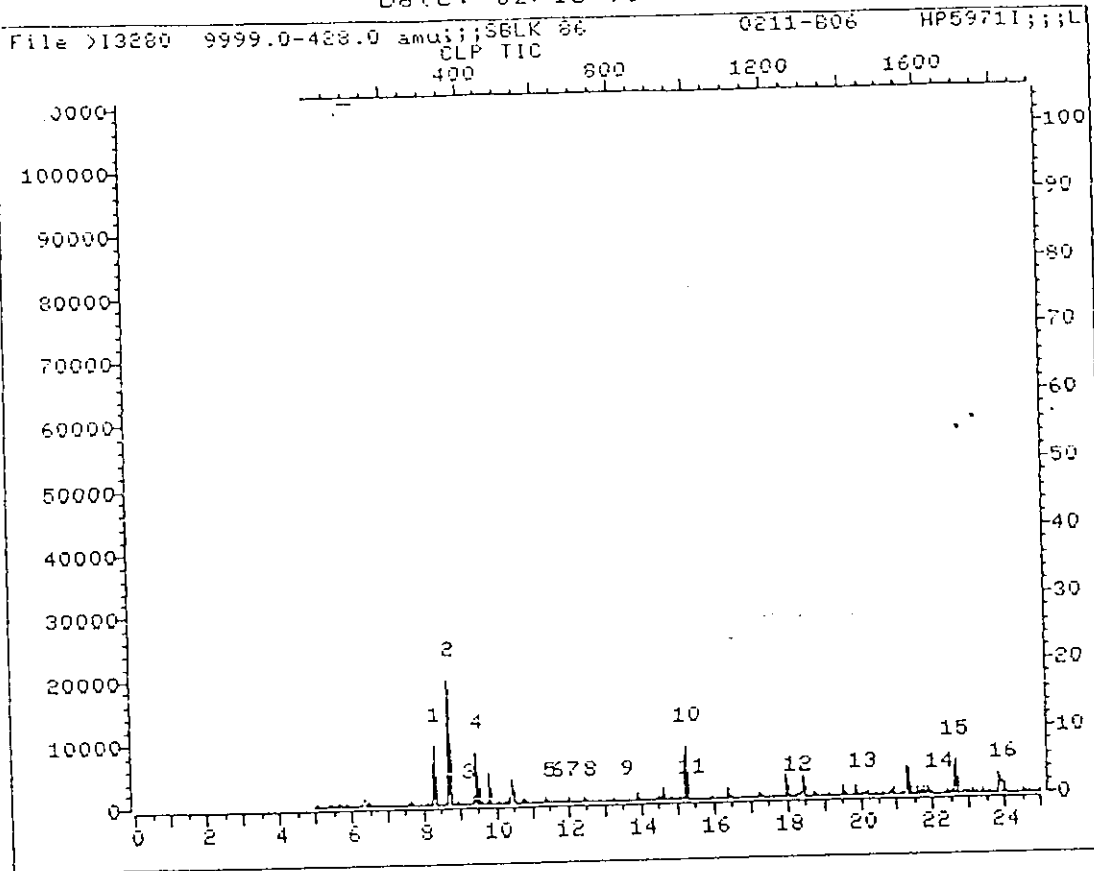
Sample: ;;SBLK 86 Operator: USER1 2/16/93 10:59  
Misc : 0211-B06 HP5971I;;;LLW;1;;;I0294  
Sys. #: 1 MS model: 71 SW/HW rev.: FF ALS #: 1 Equip ID: \*\*MSD  
Method file: CSCVT Tuning file: N / A No. of extra records: 2

Chromatographic temperatures :	0.	0.	0.	0.	0.
Chromatographic times, min. :	0.0	0.0	0.0	0.0	0.0
Chromatographic rate, deg/min:	0.0	0.0	0.0	0.0	0.0



Date: 02/16/93 10:59 Inst: I

0753



Date: 02/16/93 10:59 Inst: 1

SBLK86  
HP5971I

0 0754

T I C P E A K R E P O R T

Pk#	R.T.	Total Area	Est Conc.	Assoc	ISTD	DF
2.	8.67	44255.	8.	1.		.50
1.	8.26	19076.	3.	1.		.50
4.	9.42	15564.	3.	1.		.50
10.	15.23	16627.	2.	2.		.50

I N T E R N A L S T D A R E A R E P O R T

ISTD Compound Name	RT	Area	RT Range		TI/SI
1,4-DICHLOROBENZENE-D4	12.09	115612.	0.00	13.72	5.4
NAPHTHALENE-D8	15.35	154664.	13.72	17.68	2.0
ACENAPHTHENE-D10	20.01	194936.	17.68	21.96	4.2
PHENANTHRENE-D10	23.90	222446.	21.96	27.55	2.6
CHRYSENE-D12	31.20	250875.	27.55	34.61	3.2
PERYLENE-D12	38.01	256907.	34.61	38.02	3.2

ISTD peaks found: 6  
Surrogate peaks found: 8  
Quant target peaks expected: 4  
Target peaks matched: 1  
Total TIC identified: 4

TICS : 11:37 AM MON., 22 FEB., 1993

0755

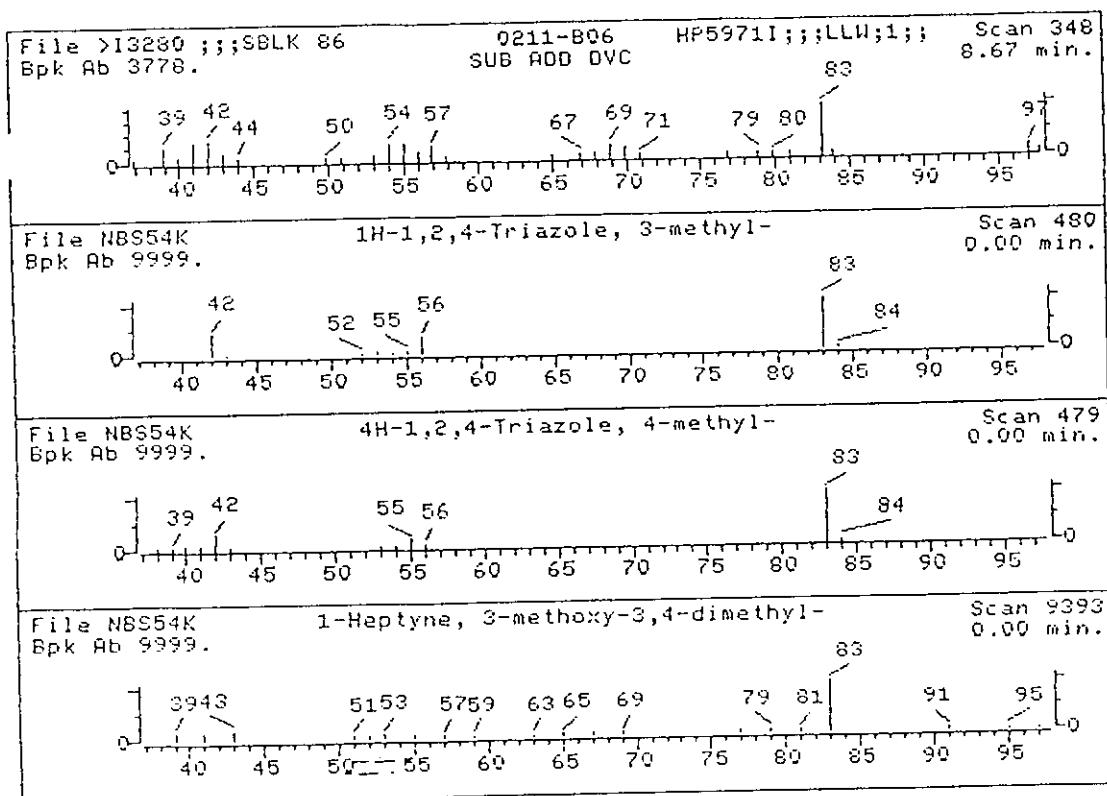
- 1H-1,2,4-Triazole, 3-methyl-
- 4H-1,2,4-Triazole, 4-methyl-
- 1-Heptyne, 3-methoxy-3,4-dimethyl-

83 C3H5N3  
83 C3H5N3  
154 C10H18O

Sample file: >I3280      Spectrum #: 348  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 41

Prob.	CAS #	CON #	ROOT	K	OK	#FLG	TILT	%	CON	C_I	R_IV	
1.	27*	7170016	6459	NBS54K	22	33	2	0	99	37	10	13
2.	26*	10570408	6458	NBS54K	21	54	1	0	100	42	8	14
3.	15	54244927	6526	NBS54K	35	39	2	0	100	58	3	12

Peak#: 2 Area: 44255. Est Conc: 8. Date: 02/16/93 10:59 Inst: 1



0756

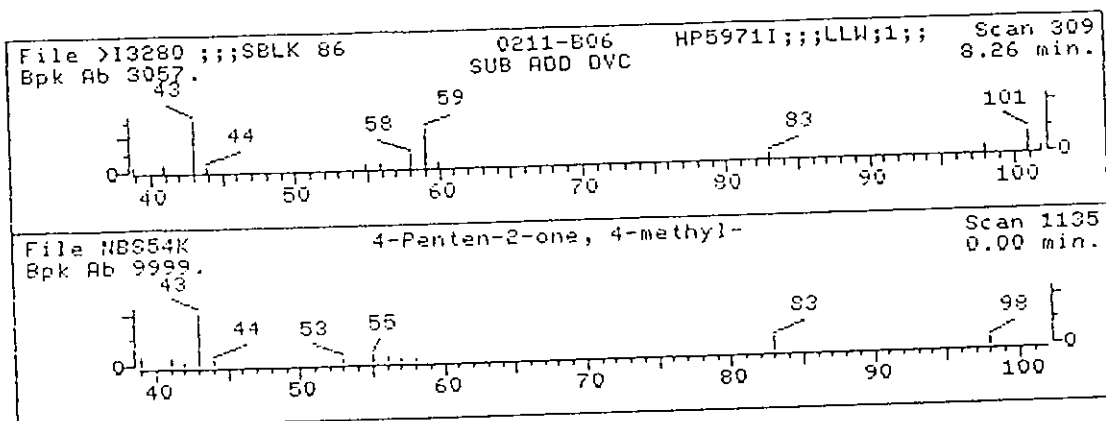
98 C6H100

1. 4-Penten-2-one, 4-methyl-

Sample file: >I3280      Spectrum #: 309  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 43

Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IU
1.	26*	3744023	9897	NBS54K	26	53	2	0	77	43	8 14

Peak#: 1 Area: 19076. Est Conc: 3. Date: 02/16/93 10:59 Inst: I



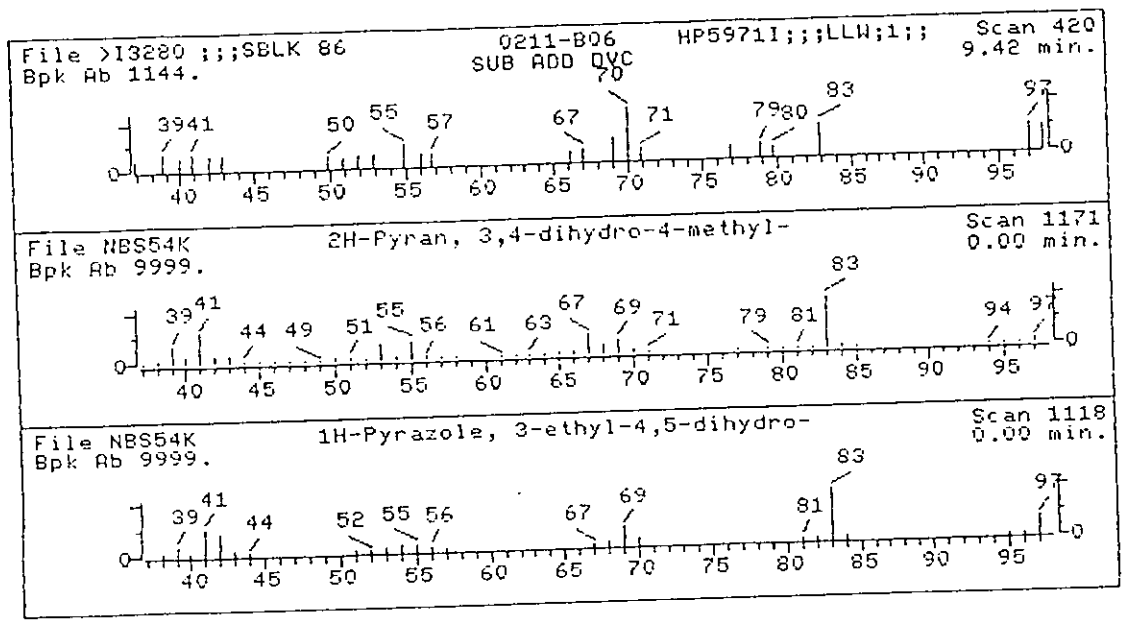
- 1. 2H-Pyran, 3,4-dihydro-4-methyl-
- 2. 1H-Pyrazole, 3-ethyl-4,5-dihydro-

98 C6H10O  
98 C5H10N2

Sample file: >I3280      Spectrum #: 420  
Search speed: 1      Tilting option: N      No. of ion ranges searched: 41

	Prob.	CAS #	CON #	ROOT	K	DK	#FLG	TILT	%	CON	C_I	R_IV
1.	11*	2270613	9912	NBS54K	25	76	3	0	58	62	2	13
2.	11*	5920296	9888	NBS54K	26	78	3	0	58	63	2	13

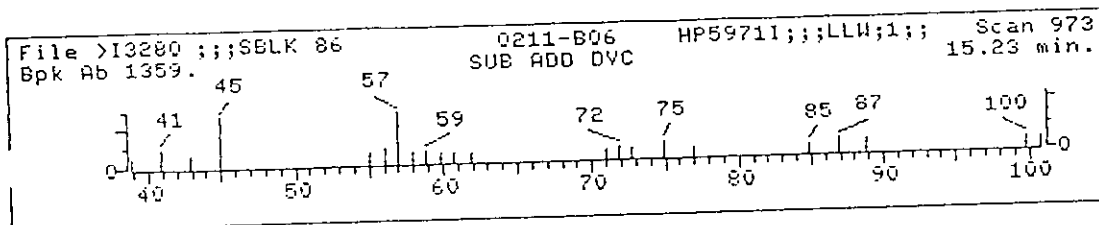
Peak#: 4 Area: 15564. Est Conc: 3. Date: 02/16/93 10:59 Inst: 1



Sample file: >I3280      Spectrum #:      973

No data base entries were retrieved.

Peak#: 10 Area: 16627. Est Conc:      2. Date: 02/16/93 10:59 Inst: I



1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MSBMW-45

0759

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148009MSB

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3281.D

Level: (low/med) LOW

Date Received: / /

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (UL)

Date Analyzed: 02/16/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

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

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	38	
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	41	
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	30	
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	
621-64-7	N-Nitroso-di-n-propylamine	34	
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	
120-82-1	1,2,4-Trichlorobenzene	30	
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	
59-50-7	4-Chloro-3-methylphenol	46	
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	25	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	25	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	25	U
83-32-9	Acenaphthene	30	

0760

EPA SAMPLE NO.

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MSBMW-45

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148009MSB

Sample wt/vol: 1000 (g/mL) ML

Lab File ID: I3281.D

Level: (low/med) LOW

Date Received: / /

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (UL)

Date Analyzed: 02/16/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N                      pH:

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

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	25	U
100-02-7	4-Nitrophenol	57	U
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	34	U
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	25	U
534-52-1	4,6-Dinitro-2-methylphenol	25	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	44	U
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	10	U
206-44-0	Fluoranthene	27	U
129-00-0	Pyrene	10	U
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.5	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U



## QUANT REPORT

Page 1

Operator ID: USER1

Quant Rev: 7

Quant Time: 930223 13:57

Output File: &lt;I3281::A6

Injected at: 930216 12:01

Data File: &gt;I3281::A5

Dilution Factor: .50000

Name: 0148;;;MSB MW-45

Instrument ID: \*\*MSD

Misc: 0148009MSB HP59711;0210931;021193;LLW;1;;;10

ID File: I\_IFI::A5

Title: IFE-DLM01.8 SNA COMPOUNDS

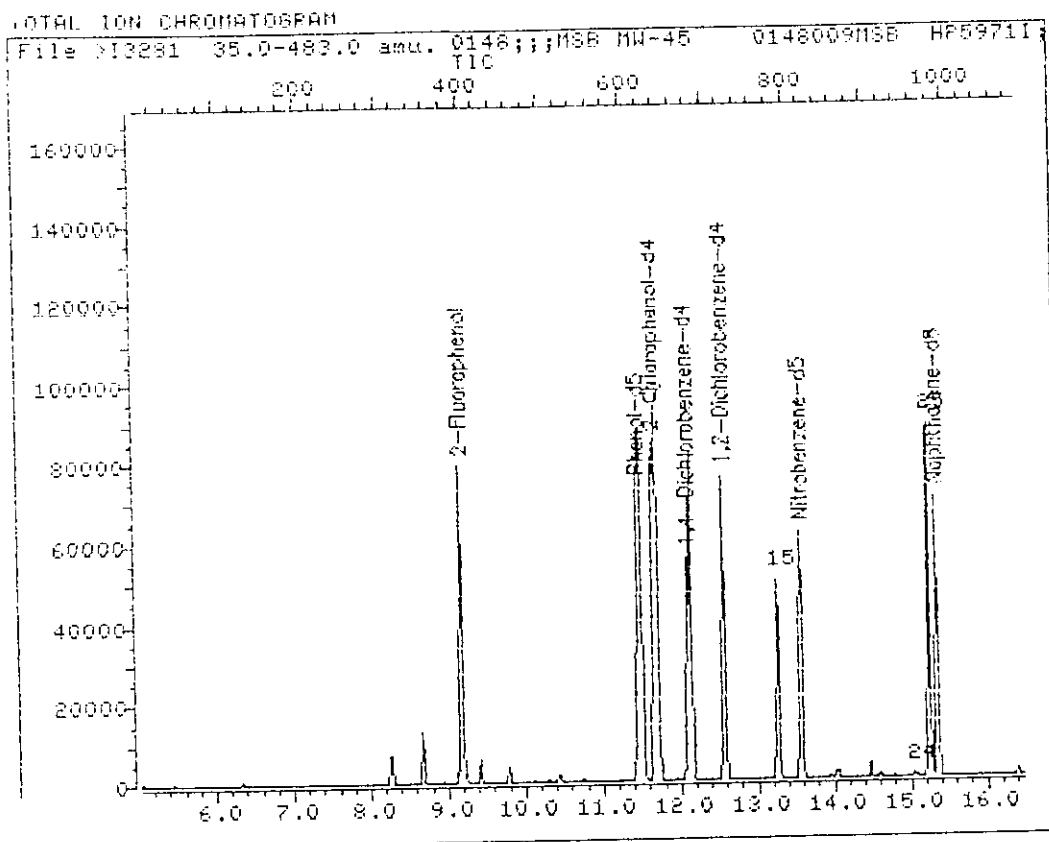
Last Qual Time: 930216 08:48

Last Calibration: 910116 11:52

Compound	R.T.	Q ion	Area	Conc	Units	Q
1) *1,4-Dichlorobenzene-d4	12.09	151.8	21886	40.00	ug	94
2) 2-Chlorophenol-d4	11.67	132.0	63209	45.56	ug	80
3) 2-Fluorophenol	9.18	111.8	62263	45.19	ug	72
4) Phenol-d5	11.46	98.8	86330	44.92	ug	63
5) Phenol	11.50	93.9	71154M	38.47	ug	
6) 2-Chlorophenol	11.71	127.8	59380	41.16	ug	85
7) 1,4-Dichlorobenzene	12.13	145.7	44091	29.52	ug	90
8) 1,2-Dichlorobenzene-d4	12.56	152.0	29810	32.00	ug	94
9) N-Nitroso-di-n-propylamine	13.27	69.9	30861	34.14	ug	67
10) *Naphthalene-d8	13.35	135.9	80760	40.00	ug	97
11) Nitrobenzene-d5	13.57	81.8	48904	31.87	ug	71
<del>12) 2,4-Dichlorophenol</del>	<del>15.06</del>	<del>161.7</del>	<del>571</del>	<del>440</del>	<del>ug</del>	<del>62</del>
13) 1,2,4-Trichlorobenzene	15.25	179.7	44170	30.23	ug	97
14) 4-Chloro-3-methylphenol	16.94	106.9	67474	45.70	ug	86
15) *Acenaphthene-d10	20.01	163.9	48978	40.00	ug	98
16) 2-Fluorobiphenyl	18.24	171.8	85071	27.99	ug	97
17) Acenaphthene	20.11	152.9	73476	29.98	ug	99
18) 4-Nitrophenol	20.52	108.8	22545	56.80	ug	67
19) 2,4-Dinitrotoluene	20.63	164.8	40071	34.00	ug	73
20) 2,4,6-Tribromophenol	22.13	329.6	32494	46.39	ug	93
21) *Phenanthrene-d10	23.90	187.9	92288	40.00	ug	97
22) Pentachlorophenol	23.59	265.6	32248	43.59	ug	98
23) *Chrysene-d12	31.20	240.0	79475	40.00	ug	97
24) Pyrene	27.73	201.9	136438	26.70	ug	98
25) Terphenyl-d14	28.15	244.0	107402	30.69	ug	99
<del>26) Butylbenzylphthalate</del>	<del>29.48</del>	<del>148.8</del>	<del>385</del>	<del>.131</del>	<del>ug</del>	<del>80</del>
27) bis(2-Ethylhexyl)phthalate	31.33	148.8	1786	.502	ug	81
28) *Perylene-d12	38.00	264.0	81360	40.00	ug	94

\* Compound is ISTD

mc 2/24/03



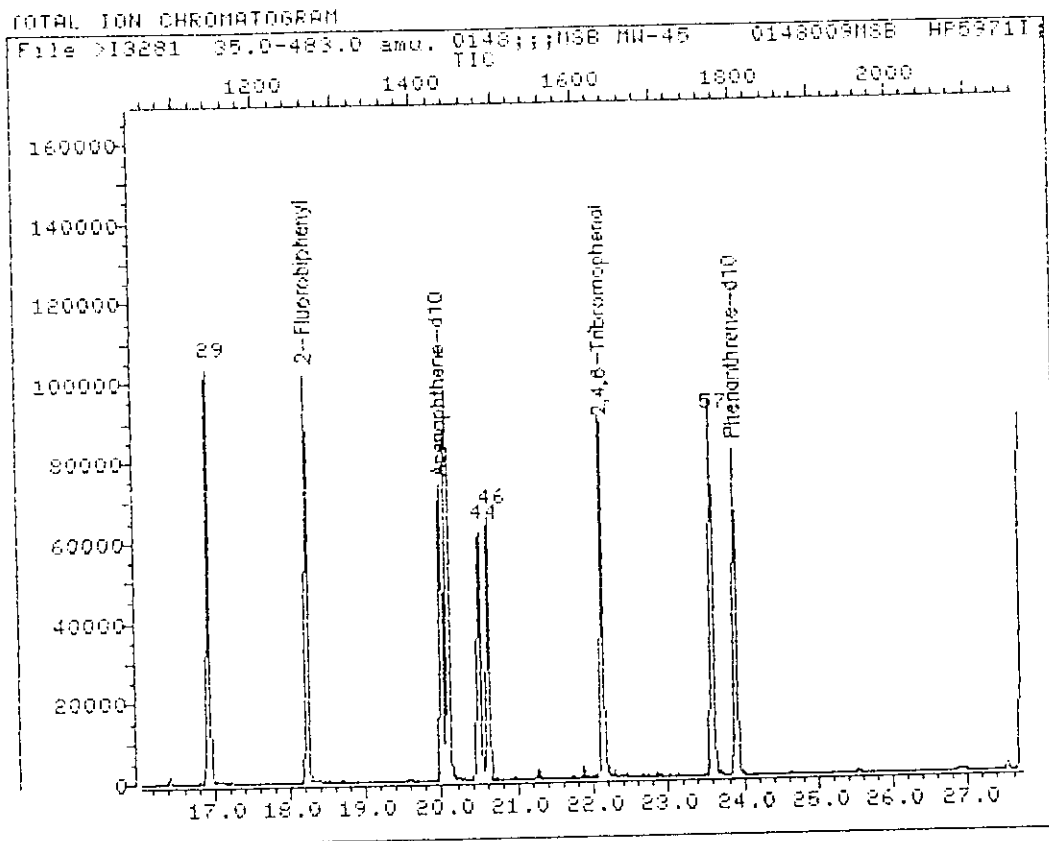
Data File: >I3281::A5 Quant Output File: ^I3281::A6  
 Name: 0148;;;MSB MW-45 Instrument ID: \*\*MSD  
 Misc: 0148009MSB HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

Operator ID: USER1  
 Quant Time : 930223 13:57  
 Injected at: 930216 12:01

0 0763



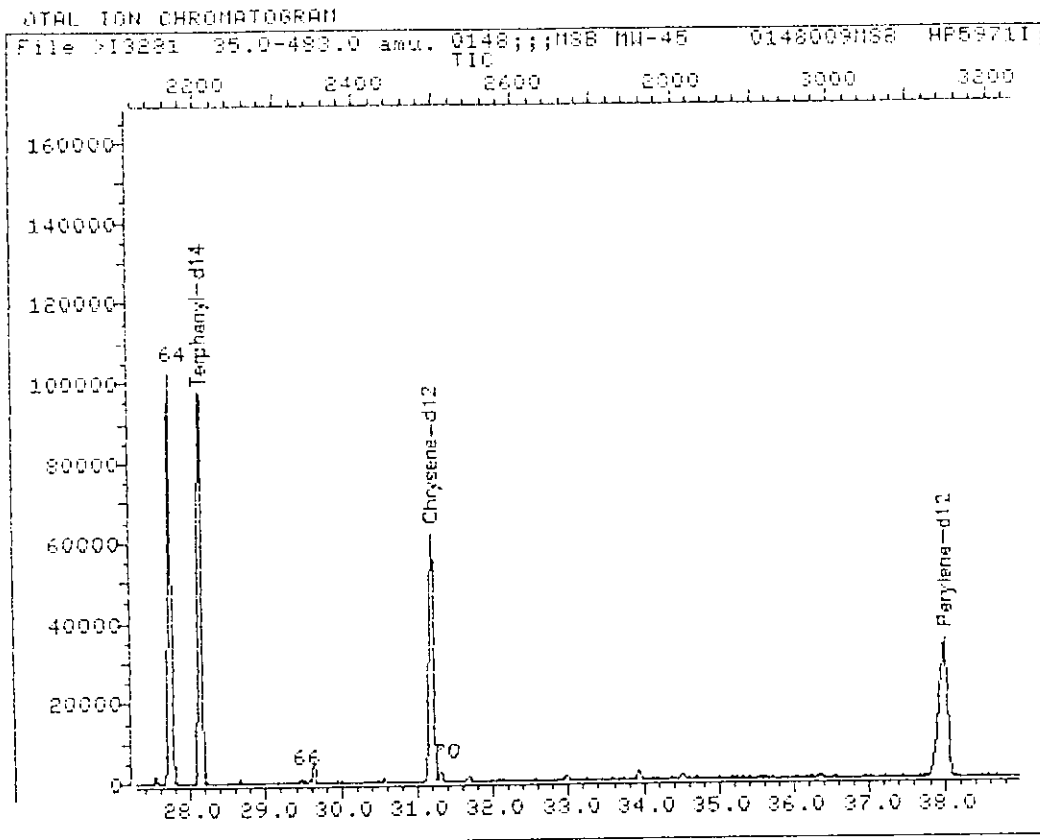
Data File: >I3281::A5 Quant Output File: ^I3281::A6  
Name: 0148;;;MSB MW-45 Instrument ID: \*\*MSD  
Misc: 0148009MSB HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 13:57  
Injected at: 930216 12:01

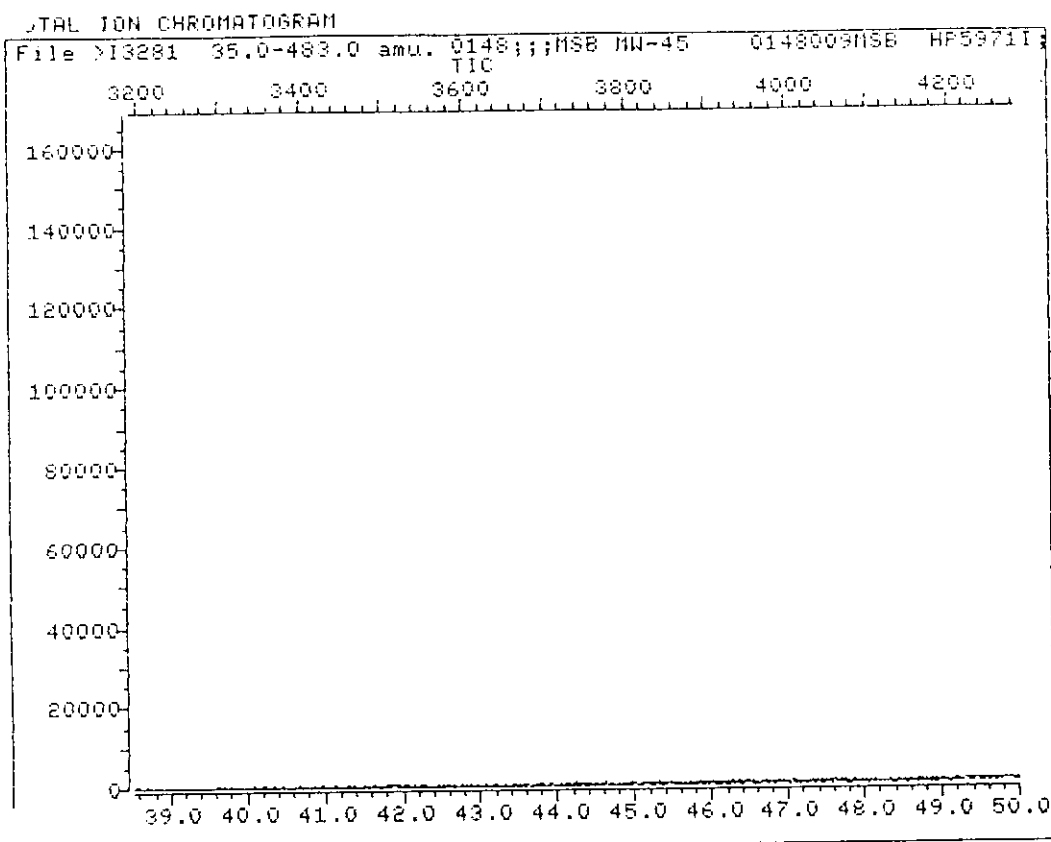
0764



Data File: >I3281::A5 Quant Output File: ^I3281::A6  
Name: 0148;;;MSB MW-45 Instrument ID: \*\*MSD  
Misc: 0148009MSB HP5971I;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 13:57  
Injected at: 930216 12:01



Data File: >I3281::A5                    Quant Output File: ^I3281::A6  
Name: 0148;;;MSB MW-45                    Instrument ID: \*\*MSD  
Misc: 0148009MSB HP59711;0210931;021193;LLW;1;;;I0

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52                    Last Cal Time: 930216 09:48

Operator ID: USER1  
Quant Time : 930223 13:57  
Injected at: 930216 12:01

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0766  
EPA SAMPLE NO.

MW-45MS

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148009MS

Sample wt/vol: 975 (g/mL) ML

Lab File ID: I3283.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N)\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL)

Date Analyzed: 02/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

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

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	38	
111-44-4	bis(2-Chloroethyl) ether	10	U
95-57-8	2-Chlorophenol	40	
541-73-1	1,3-Dichlorobenzene	10	U
106-46-7	1,4-Dichlorobenzene	31	
95-50-1	1,2-Dichlorobenzene	10	U
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	37	
67-72-1	Hexachloroethane	10	U
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy) methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	34	
91-20-3	Naphthalene	10	U
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	46	
91-57-6	2-Methylnaphthalene	10	U
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	26	U
91-58-7	2-Chloronaphthalene	10	U
88-74-4	2-Nitroaniline	26	U
131-11-3	Dimethylphthalate	10	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	26	U
83-32-9	Acenaphthene	28	

0767

EPA SAMPLE NO.

1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

MW-45MS
---------

Lab Name: IEA/CT

Contract:

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: Z0148

Matrix: (soil/water) WATER

Lab Sample ID: 0148009MS

Sample wt/vol: 975 (g/mL) ML

Lab File ID: I3283.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000(UL)

Date Analyzed: 02/16/93

Injection Volume: 2.0(uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N

pH:

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

CAS NO.

COMPOUND

Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	26	U
100-02-7	4-Nitrophenol	80	
132-64-9	Dibenzofuran	10	U
121-14-2	2,4-Dinitrotoluene	43	
84-66-2	Diethylphthalate	10	U
7005-72-3	4-Chlorophenyl-phenylether	10	U
86-73-7	Fluorene	10	U
100-01-6	4-Nitroaniline	26	U
534-52-1	4,6-Dinitro-2-methylphenol	26	U
86-30-6	N-Nitrosodiphenylamine (1)	10	U
101-55-3	4-Bromophenyl-phenylether	10	U
118-74-1	Hexachlorobenzene	10	U
87-86-5	Pentachlorophenol	51	
85-01-8	Phenanthrene	10	U
120-12-7	Anthracene	10	U
86-74-8	Carbazole	10	U
84-74-2	Di-n-butylphthalate	0.4	JB
206-44-0	Fluoranthene	10	U
129-00-0	Pyrene	20	
85-68-7	Butylbenzylphthalate	10	U
91-94-1	3,3'-Dichlorobenzidine	10	U
56-55-3	Benzo(a)anthracene	10	U
218-01-9	Chrysene	10	U
117-81-7	bis(2-Ethylhexyl)phthalate	0.6	JB
117-84-0	Di-n-octylphthalate	10	U
205-99-2	Benzo(b)fluoranthene	10	U
207-08-9	Benzo(k)fluoranthene	10	U
50-32-8	Benzo(a)pyrene	10	U
193-39-5	Indeno(1,2,3-cd)pyrene	10	U
53-70-3	Dibenz(a,h)anthracene	10	U
191-24-2	Benzo(g,h,i)perylene	10	U

## QUANT REPORT

Page 1

Operator ID: USER1

Quant Rev: 7

Quant Time: 930223 14:07

Output File: ^I3283::A6

Injected at: 930216 14:04

Data File: &gt;I3283::A4

Dilution Factor: .51000

Name: 0148;;;MW-45

Instrument ID: \*\*MSD

Misc: 0148009MS HP59711;0210931;021193;LLW;1;;;I0

ID File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Qual Time: 930216 08:48

Last Calibration: 910116 11:52

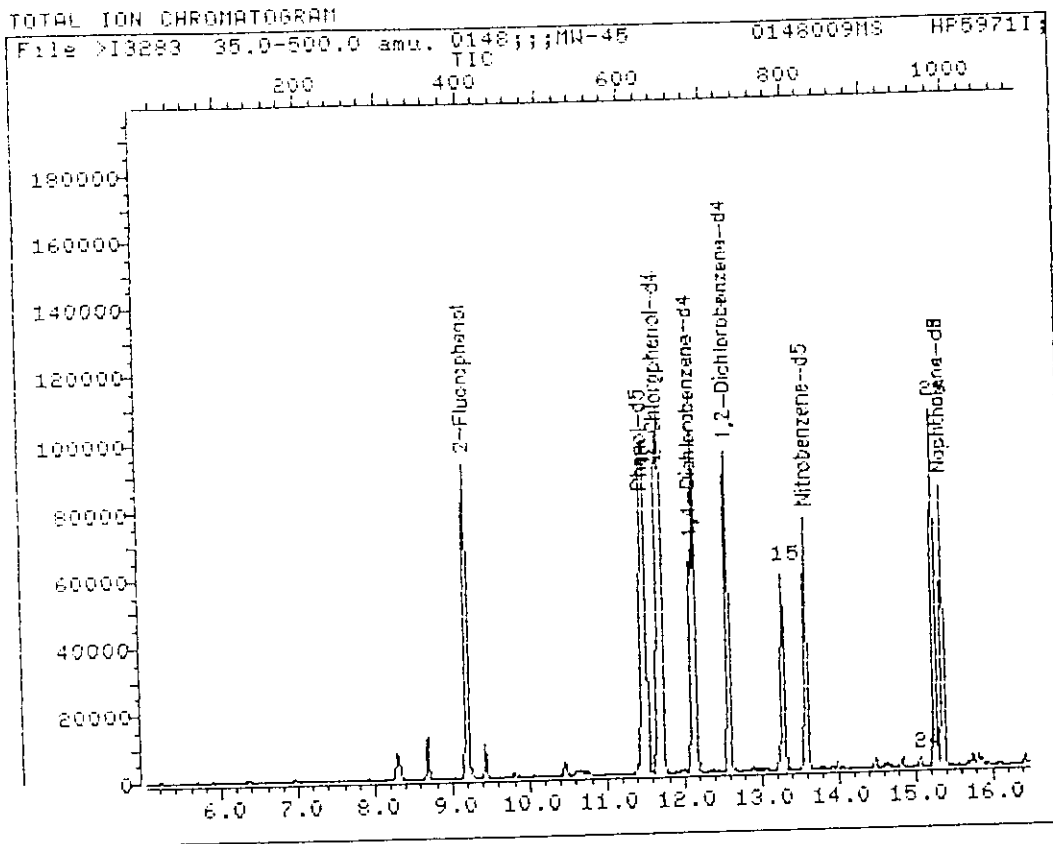
Compound	R.T.	Q ion	Area	Conc	Units	q
1) *1,4-Dichlorobenzene-d4	12.11	151.8	26583	40.00	ug	96
2) 2-Chlorophenol-d4	11.68	132.0	77306	46.79	ug	80
3) 2-Fluorophenol	9.19	111.8	75763	46.17	ug	75
4) Phenol-d5	11.48	98.8	104947	45.86	ug	64
5) Phenol	11.53	93.9	83132	37.75	ug	62
6) 2-Chlorophenol	11.73	127.8	68668	39.97	ug	86
7) 1,4-Dichlorobenzene	12.16	145.7	55072	30.97	ug	88
8) 1,2-Dichlorobenzene-d4	12.59	152.0	37938	34.20	ug	95
9) N-Nitroso-di-n-propylamine	13.30	69.9	39937	37.10	ug	68
12) *Naphthalene-d8	15.37	135.9	100458	40.00	ug	98
18) Nitrobenzene-d5	13.60	81.8	66119	35.33	ug	74
<del>24) 2,4-Dichlorophenol</del>	<del>15.09</del>	<del>161.7</del>	<del>763</del>	<del>1.482</del>	<del>ug</del>	<del>58</del>
25) 1,2,4-Trichlorobenzene	15.27	179.7	59377	33.33	ug	94
29) 4-Chloro-3-methylphenol	16.97	106.9	82697	45.93	ug	85
31) *Acenaphthene-d10	20.03	163.9	58049	40.00	ug	97
35) 2-Fluorobiphenyl	18.25	171.8	107890	30.55	ug	98
<del>37) Acenaphthylene</del>	<del>19.60</del>	<del>152.0</del>	<del>5007</del>	<del>1.08</del>	<del>ug</del>	<del>90</del>
42) Acenaphthene	20.12	152.9	78745	27.65	ug	97
44) 4-Nitrophenol	20.55	108.8	36542	79.23	ug	59
46) 2,4-Dinitrotoluene	20.66	164.8	58689	42.86	ug	76
<del>47) Diethylphthalate</del>	<del>21.30</del>	<del>140.0</del>	<del>1483</del>	<del>.337</del>	<del>ug</del>	<del>47</del>
51) 2,4,6-Tribromophenol	22.15	329.6	30973	38.06	ug	92
52) *Phenanthrene-d10	23.94	187.9	109779	40.00	ug	97
57) Pentachlorophenol	23.62	265.6	43933	50.92	ug	96
61) Di-n-butylphthalate	25.56	148.8	3154	.451	ug	72
63) *Chrysene-d12	31.25	240.0	98632	40.00	ug	98
64) Pyrene	27.77	201.9	124758	20.06	ug	99
65) Terphenyl-d14	28.18	244.0	119121	27.98	ug	98
<del>66) Butylbenzylphthalate</del>	<del>29.52</del>	<del>148.8</del>	<del>1645</del>	<del>.461</del>	<del>ug</del>	<del>48</del>
70) bis(2-Ethylhexyl)phthalate	31.35	148.8	2767	.639	ug	96
71) *Perylene-d12	38.12	264.0	107141	40.00	ug	97

\* Compound is ISTD

Amc2/23/93



0769



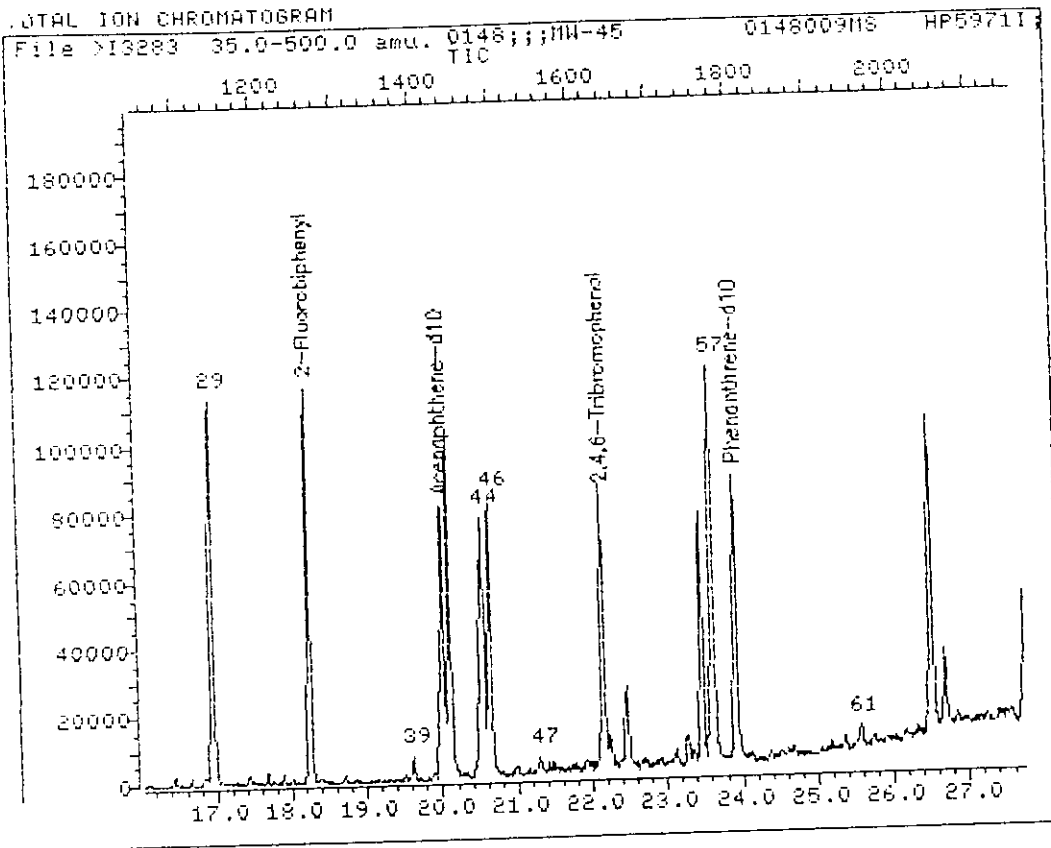
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Name: 0148;;;MW-45 Instrument ID: \*\*MSD  
Misc: 0148009MS HP5971I;0210931;021193;LLW;1;;;I0

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:07  
Injected at: 930216 14:04

0770



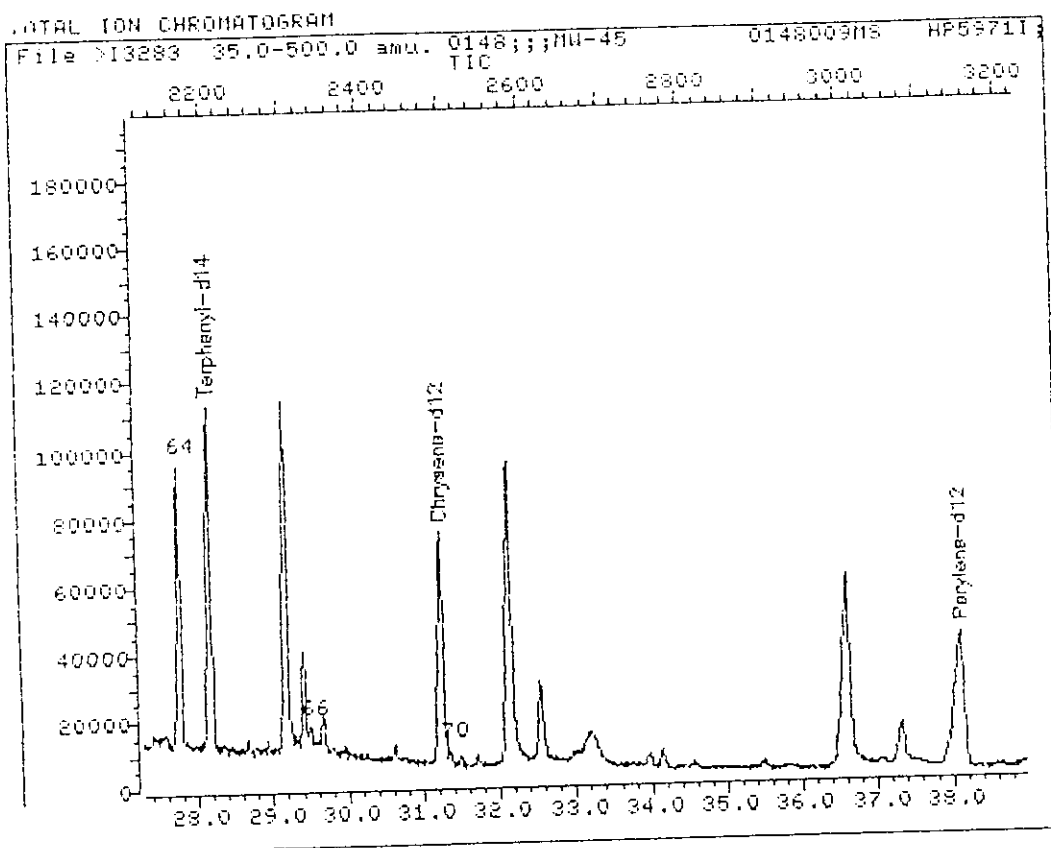
Data File: >I3283::A4  
Name: 0148;;;MW-45  
Misc: 0148009MS

Quant Output File: ^I3283::A6  
Instrument ID: \*\*MSD  
HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:07  
Injected at: 930216 14:04



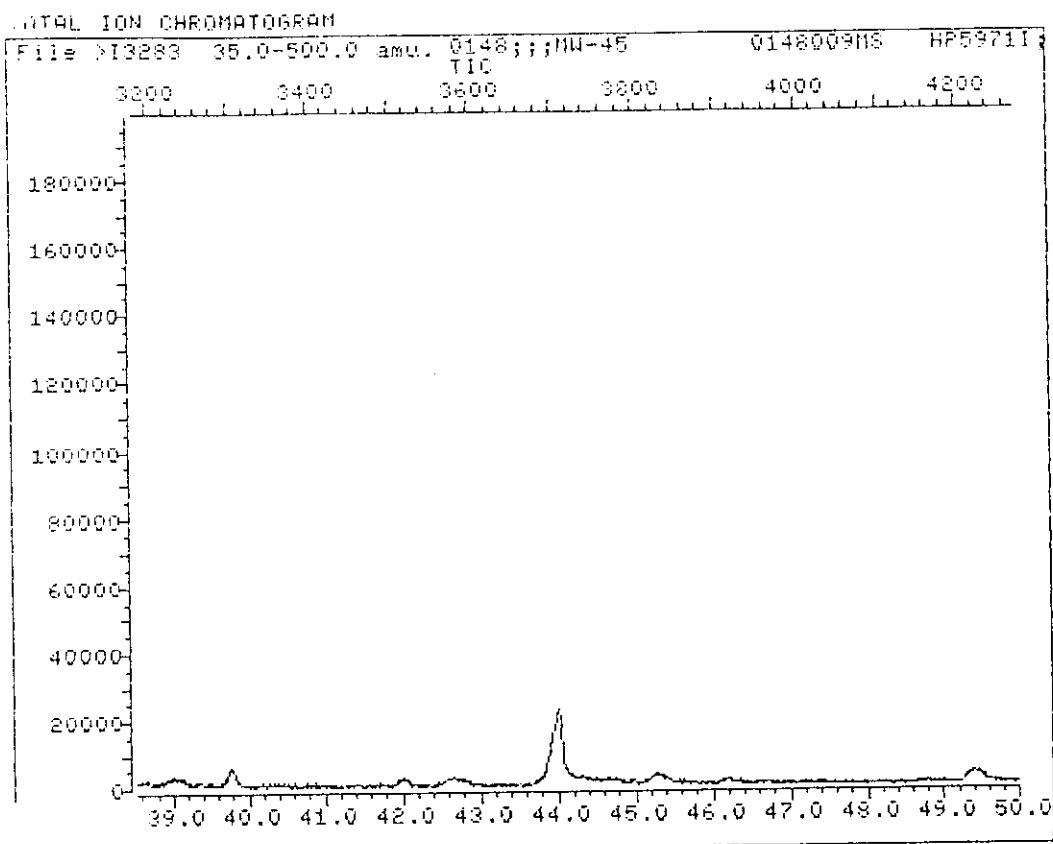
Data File: >I3283::A4 Quant Output File: ^I3283::A6  
 Name: 0148;;;MW-45 Instrument ID: \*\*MSD  
 Misc: 0148009MS HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IF1::A5  
 Title: IFB-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

Operator ID: USER1  
 Quant Time : 930223 14:07  
 Injected at: 930216 14:04

0772



Data File: >I3283::A4 Quant Output File: ^I3283::A6  
Name: 0148;;;MW-45 Instrument ID: \*\*MSD  
Misc: 0148009MS HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52 Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:07  
Injected at: 930216 14:04

1B  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

Lab Name: IEA/CT

Contract: 0773

MW-45MSD
----------

Lab Code: IEACT

Case No.: 0148

SAS No.:

SDG No.: 20148

Matrix: (soil/water) WATER

Lab Sample ID: 0148009MSD

Sample wt/vol: 975 (g/mL) ML

Lab File ID: I3284.D

Level: (low/med) LOW

Date Received: 02/02/93

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_

Date Extracted: 02/11/93

Concentrated Extract Volume: 1000 (UL)

Date Analyzed: 02/16/93

Injection Volume: 2.0 (uL)

Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol		
111-44-4	bis(2-Chloroethyl) ether	42	
95-57-8	2-Chlorophenol	10	U
541-73-1	1,3-Dichlorobenzene	44	
106-46-7	1,4-Dichlorobenzene	10	U
95-50-1	1,2-Dichlorobenzene	32	
95-48-7	2-Methylphenol	10	U
108-60-1	2,2'-oxybis(1-Chloropropane)	10	U
106-44-5	4-Methylphenol	10	U
621-64-7	N-Nitroso-di-n-propylamine	10	U
67-72-1	Hexachloroethane	35	
98-95-3	Nitrobenzene	10	U
78-59-1	Isophorone	10	U
88-75-5	2-Nitrophenol	10	U
105-67-9	2,4-Dimethylphenol	10	U
111-91-1	bis(2-Chloroethoxy)methane	10	U
120-83-2	2,4-Dichlorophenol	10	U
120-82-1	1,2,4-Trichlorobenzene	10	U
91-20-3	Naphthalene	33	
106-47-8	4-Chloroaniline	10	U
87-68-3	Hexachlorobutadiene	10	U
59-50-7	4-Chloro-3-methylphenol	10	U
91-57-6	2-Methylnaphthalene	49	
77-47-4	Hexachlorocyclopentadiene	10	U
88-06-2	2,4,6-Trichlorophenol	10	U
95-95-4	2,4,5-Trichlorophenol	10	U
91-58-7	2-Chloronaphthalene	26	U
88-74-4	2-Nitroaniline	10	U
131-11-3	Dimethylphthalate	26	U
208-96-8	Acenaphthylene	10	U
606-20-2	2,6-Dinitrotoluene	10	U
99-09-2	3-Nitroaniline	10	U
83-32-9	Acenaphthene	26	U
		29	



0775

QUANT REPORT

Page 1

Operator ID: USER1  
 Output File: ^I3284::A6  
 Data File: >I3284::A4  
 Name: 0148;;;MW-45  
 Misc: 0148009MSD HP59711;0210931;021193;LLW;1;;;I0

Quant Rev: 7 Quant Time: 930223 14:11  
 Injected at: 930216 19:08  
 Dilution Factor: .51000  
 Instrument ID: \*\*MSD

ID File: I\_IFI::A5  
 Title: IF8-OLM01.8 BNA COMPOUNDS  
 Last Calibration: 910116 11:52

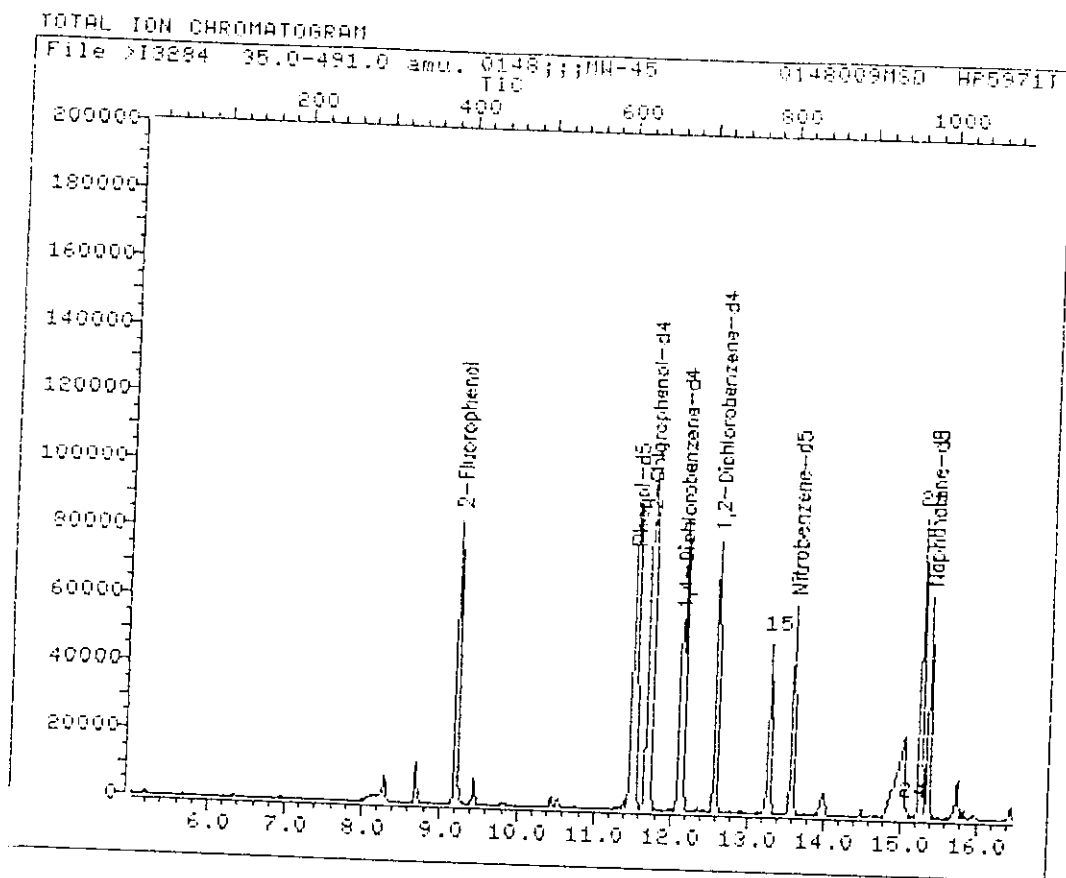
Last Qual Time: 930216 08:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.11	151.8	22213	40.00	ug	94
2)	2-Chlorophenol-d4	11.69	132.0	67110	48.61	ug	80
3)	2-Fluorophenol	9.20	111.8	66310	48.36	ug	73
4)	Phenol-d5	11.49	98.8	90307	47.22	ug	62
5)	Phenol	11.53	93.9	76534M	41.59	ug	
7)	2-Chlorophenol	11.73	127.8	62410	43.48	ug	84
9)	1,4-Dichlorobenzene	12.16	145.7	47000	31.63	ug	89
10)	1,2-Dichlorobenzene-d4	12.59	152.0	31230	33.70	ug	96
	N-Nitroso-di-n-propylamine	13.30	69.9	31382	34.89	ug	66
17)	*Naphthalene-d8	15.38	135.9	80050	40.00	ug	97
18)	Nitrobenzene-d5	13.60	81.8	52258	35.04	ug	72
<del>24)</del>	<del>2,4-Dichlorophenol</del>	<del>15.11</del>	<del>161.7</del>	<del>566</del>	<del>449</del>	<del>ug</del>	<del>56</del>
25)	1,2,4-Trichlorobenzene	15.28	179.7	47136	33.20	ug	99
29)	4-Chloro-3-methylphenol	16.98	106.9	70602	49.21	ug	86
31)	*Acenaphthene-d10	20.04	163.9	46801	40.00	ug	95
35)	2-Fluorobiphenyl	18.26	171.8	88133	30.95	ug	97
<del>39)</del>	<del>Acenaphthylene</del>	<del>19.62</del>	<del>152.0</del>	<del>3207</del>	<del>862</del>	<del>ug</del>	<del>81</del>
42)	Acenaphthene	20.12	152.9	66971	29.17	ug	98
44)	4-Nitrophenol	20.57	108.8	20706	55.69	ug	64
46)	2,4-Dinitrotoluene	20.66	164.8	41550	37.63	ug	81
51)	2,4,6-Tribromophenol	22.16	329.6	26093	39.77	ug	92
52)	*Phenanthrene-d10	23.94	187.9	88663	40.00	ug	98
57)	Pentachlorophenol	23.63	265.6	37192	53.37	ug	97
61)	Di-n-butylphthalate	25.57	148.8	2488	.441	ug	61
67)	*Chrysene-d12	31.27	240.0	78931	40.00	ug	98
64)	Pyrene	27.78	201.9	110812	22.27	ug	99
65)	Terphenyl-d14	28.19	244.0	95454	28.02	ug	99
<del>68)</del>	<del>Butylbenzylphthalate</del>	<del>29.49</del>	<del>148.8</del>	<del>894</del>	<del>313</del>	<del>ug</del>	<del>78</del>
70)	bis(2-Ethylhexyl)phthalate	31.36	148.8	6737	1.94	ug	95
71)	*Perylene-d12	38.14	264.0	81116	40.00	ug	97

\* Compound is ISTD

Cmc2/24/93

0776



Data File: >I3284::A4

Name: 0148;;;MW-45

Misc: 0148009MSD HP59711;0210931;021193;LLW;1;;;10

Quant Output File: ^I3284::A6

Instrument ID: \*\*MSD

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Cal Time: 930216 08:48

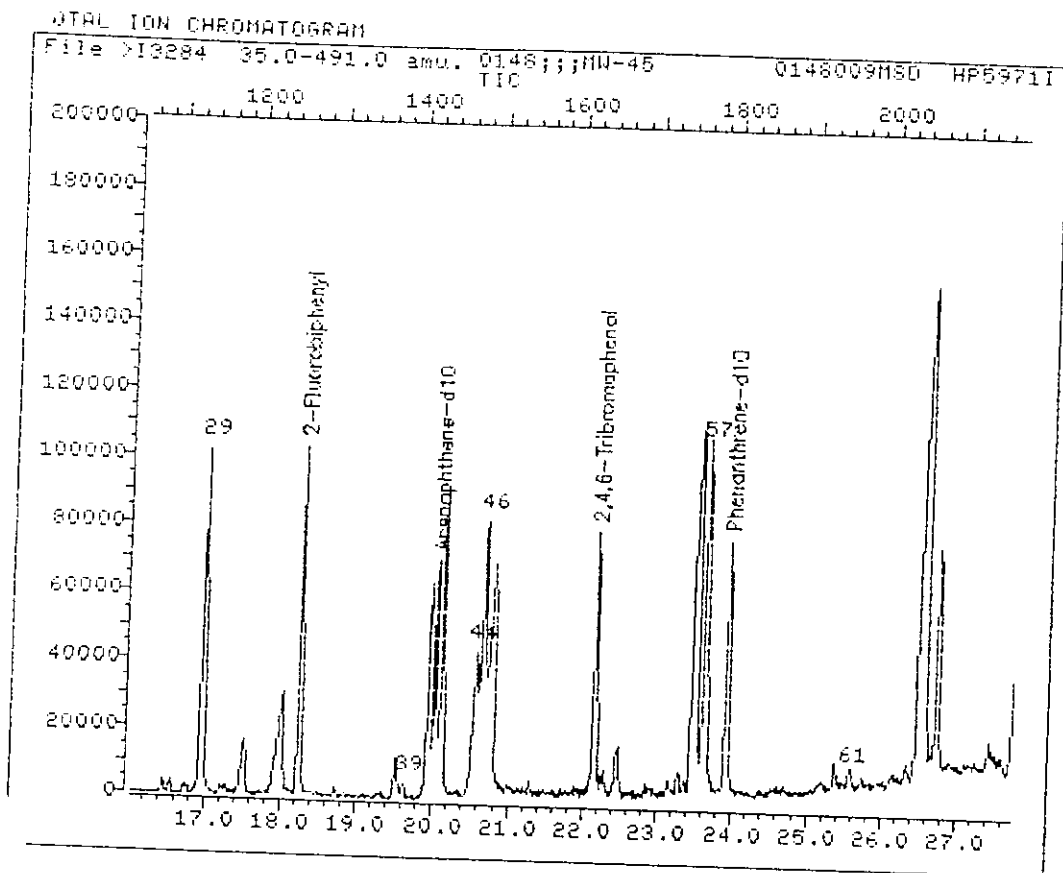
Operator ID: USER1

Quant Time : 930223 14:11

Injected at: 930216 15:08



0777



Data File: >I3284::A4

Name: 0148;;;MW-45

Misc: 0148009MSD HP59711;0210931;021193;LLW;1;;;10

Quant Output File: ^I3284::A6

Instrument ID: \*\*MSD

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

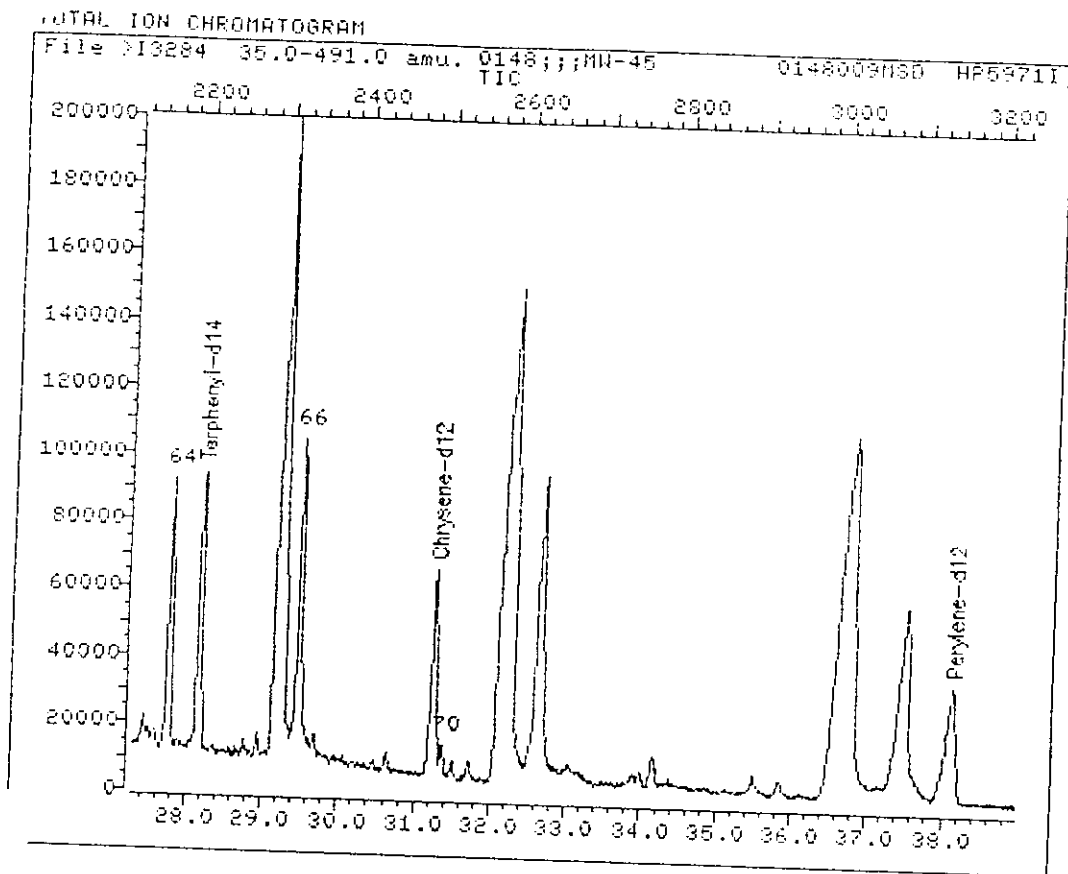
Last Qual Time: 930216 08:48

Operator ID: USER1

Quant Time : 930223 14:11

Injected at: 930216 15:08

0778



Data File: >I3284::A4

Name: 0148;;;MW-45

Misc: 0148009MSD

Quant Output File: ^I3284::A6

Instrument ID: \*\*MSD

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

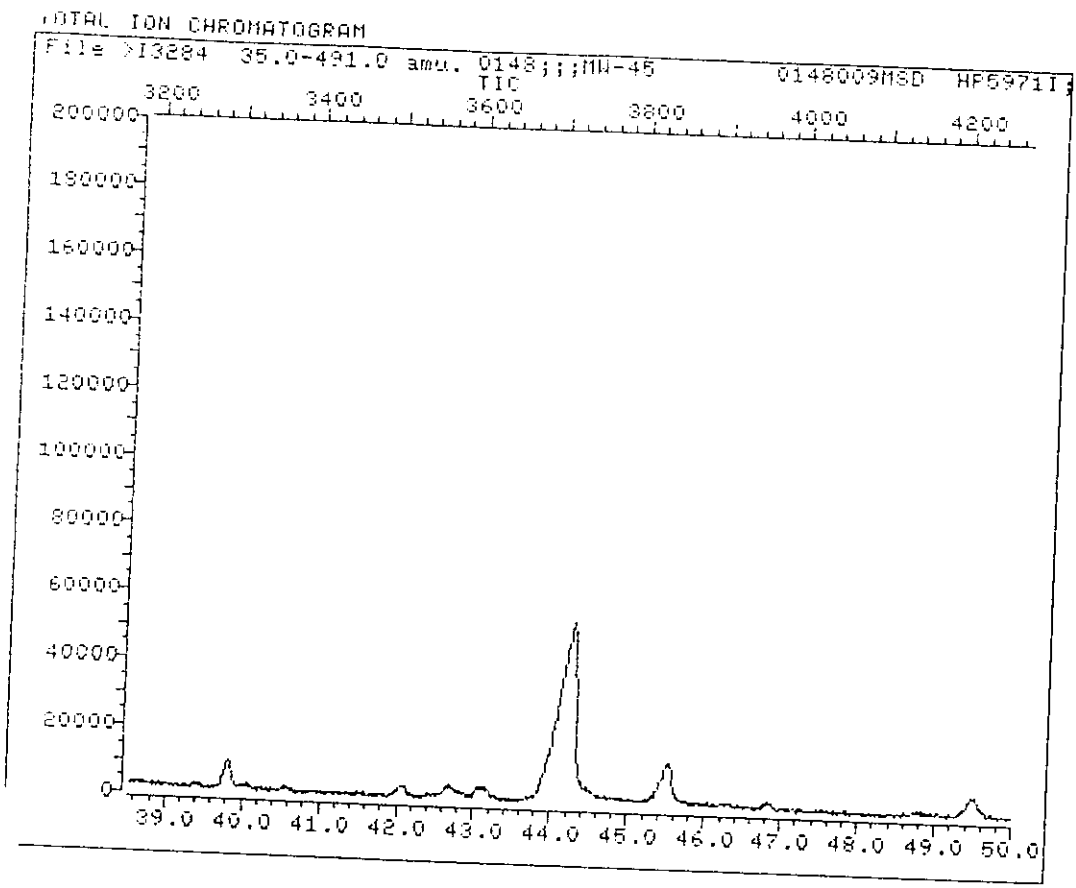
Last Qual Time: 930216 08:48

Operator ID: USER1

Quant Time : 930223 14:11

Injected at: 930216 15:08

0779



Data File: >I3284::A4

Name: 0148;;;MW-45

Misc: 0148009MSD HP5971I;0210931;021193;LLW;1;;;10

Quant Output File: ^I3284::A6

Instrument ID: \*\*MSD

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

Operator ID: USER1

Quant Time : 930223 14:11

Injected at: 930216 15:08



1C  
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

0781  
EPA SAMPLE NO.

QCCHKSTD

Lab Name: IEA/CT Contract: \_\_\_\_\_

Lab Code: IEACT Case No.: 0148 SAS No.: \_\_\_\_\_

Matrix: (soil/water) WATER SDG No.: Z0148

Sample wt/vol: 1000 (g/mL) ML Lab Sample ID: 0148009STD

Level: (low/med) LOW Lab File ID: I3285.D

% Moisture: \_\_\_\_\_ decanted: (Y/N) \_\_\_\_\_ Date Received: 02/02/93

Concentrated Extract Volume: 1000(UL) Date Extracted: 02/11/93

Injection Volume: 2.0(uL) Date Analyzed: 02/16/93

GPC Cleanup: (Y/N) N pH: \_\_\_\_\_ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
51-28-5	2,4-Dinitrophenol	200	
100-02-7	4-Nitrophenol	110	
132-64-9	Dibenzofuran	55	
121-14-2	2,4-Dinitrotoluene	89	
84-66-2	Diethylphthalate	67	
7005-72-3	4-Chlorophenyl-phenylether	66	
86-73-7	Fluorene	67	
100-01-6	4-Nitroaniline	100	
534-52-1	4,6-Dinitro-2-methylphenol	81	
86-30-6	N-Nitrosodiphenylamine (1)	55	
101-55-3	4-Bromophenyl-phenylether	54	
118-74-1	Hexachlorobenzene	56	
87-86-5	Pentachlorophenol	69	
85-01-8	Phenanthrene	54	
120-12-7	Anthracene	50	
86-74-8	Carbazole	160	
84-74-2	Di-n-butylphthalate	51	B
206-44-0	Fluoranthene	55	
129-00-0	Pyrene	60	
85-68-7	Butylbenzylphthalate	58	
91-94-1	3,3'-Dichlorobenzidine	100	
56-55-3	Benzo(a)anthracene	61	
218-01-9	Chrysene	58	
117-81-7	bis(2-Ethylhexyl)phthalate	58	B
117-84-0	Di-n-octylphthalate	51	
205-99-2	Benzo(b)fluoranthene	78	
207-08-9	Benzo(k)fluoranthene	40	
50-32-8	Benzo(a)pyrene	63	
193-39-5	Indeno(1,2,3-cd)pyrene	36	
53-70-3	Dibenz(a,h)anthracene	66	
191-24-2	Benzo(g,h,i)perylene	44	

## QUANT REPORT

Page 1

Operator ID: USER1

Quant Rev: 7

Quant Time: 930223 14:23

Output File: &lt;I3285::A6

Injected at: 930216 16:10

Data File: &gt;I3285::A4

Dilution Factor: .50000

Name: 0148;;;QC CHECK STD

Instrument ID: \*\*MSD

Misc: 0148009STD HP5971F;0210931;021193;LLW;1;;;10

ID File: I\_LIFI::A5

Title: IFS-OLM01.8 SNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qcal Time: 930216 08:48

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*1,4-Dichlorobenzene-d4	12.13	151.8	21504	40.00	ug	97
2)	2-Chlorophenol-d4	11.71	132.0	57962	42.52	ug	81
3)	2-Fluorophenol	9.21	111.8	61251	45.24	ug	73
4)	Phenol-d5	11.50	98.8	75957	40.23	ug	60
5)	Phenol	11.56	93.9	88772	48.85	ug	61
6)	bis(2-Chloroethyl)ether	11.62	92.7	94071	53.65	ug	62
7)	2-Chlorophenol	11.76	127.8	70568	49.79	ug	86
8)	1,3-Dichlorobenzene	12.04	145.8	62997	42.28	ug	94
9)	1,4-Dichlorobenzene	12.18	145.7	60564	41.27	ug	86
10)	1,2-Dichlorobenzene-d4	12.60	152.0	18776	20.52	ug	99
11)	1,2-Dichlorobenzene	12.65	145.7	49243	34.58	ug	94
12)	2-Methylphenol	12.97	107.8	60646	45.16	ug	93
13)	2,2'-oxybis(1-Chloropropane)	12.92	44.8	27655^	35.93	ug	31
14)	4-Methylphenol	13.34	107.8	59757	41.91	ug	99
15)	N-Nitroso-di-n-propylamine	13.37	69.9	39771	44.78	ug	72
16)	Hexachloroethane	13.40	116.7	29933	41.50	ug	95
17)	*Naphthalene-d8	15.40	135.9	80375	40.00	ug	97
18)	Nitrobenzene-d5	13.62	81.8	44333	29.03	ug	69
19)	Nitrobenzene	13.67	76.8	74696	55.29	ug	82
20)	Isophorone	14.30	81.8	185938	57.51	ug	91
21)	2-Nitrophenol	14.48	138.9	55177	61.07	ug	87
22)	2,4-Dimethylphenol	14.65	106.8	70900	47.07	ug	87
23)	bis(2-Chloroethoxy)methane	14.86	92.8	103915	47.05	ug	78
24)	2,4-Dichlorophenol	15.14	161.7	63165	48.88	ug	96
25)	1,2,4-Trichlorobenzene	15.30	179.7	69210	47.60	ug	99
26)	Naphthalene	15.46	127.9	167698	43.75	ug	79
27)	4-Chloroaniline	15.66	126.8	60199	257.85	ug	84
28)	Hexachlorobutadiene	15.92	224.6	38487	49.49	ug	95
29)	4-Chloro-3-methylphenol	16.99	106.9	87621	59.63	ug	86
30)	2-Methylnaphthalene	17.26	141.9	108146	38.67	ug	86
31)	*Acenaphthene-d10	20.05	163.9	39022	40.00	ug	97
32)	Hexachlorocyclopentadiene	17.83	236.6	3099	4.86	ug	97
33)	2,4,6-Trichlorophenol	18.11	195.8	59473	68.57	ug	98
34)	2,4,5-Trichlorophenol	18.23	195.8	60859	64.40	ug	99
35)	2-Fluorobiphenyl	18.29	171.8	78377	32.36	ug	96
36)	2-Chloronaphthalene	18.55	161.8	124819	56.85	ug	88
37)	2-Nitroaniline	18.95	64.9	52692M	80.81	ug	
38)	Dimethylphthalate	19.50	162.8	193904	71.00	ug	96
39)	Acenaphthylene	19.66	152.0	124522	55.15	ug	96
40)	2,6-Dinitrotoluene						

QUANT REPORT

Operator ID: USER1  
Output File: ^I3285::A6  
Data File: >I3285::A4  
Name: 0148;;;QC CHECK STD  
Misc: 0148009STD HP59711;0210931;021193;LLW;1;;;10

Quant Rev: 7 Quant Time: 930223 14:23  
Injected at: 930216 16:10  
Dilution Factor: .50000  
Instrument ID: \*\*MSD

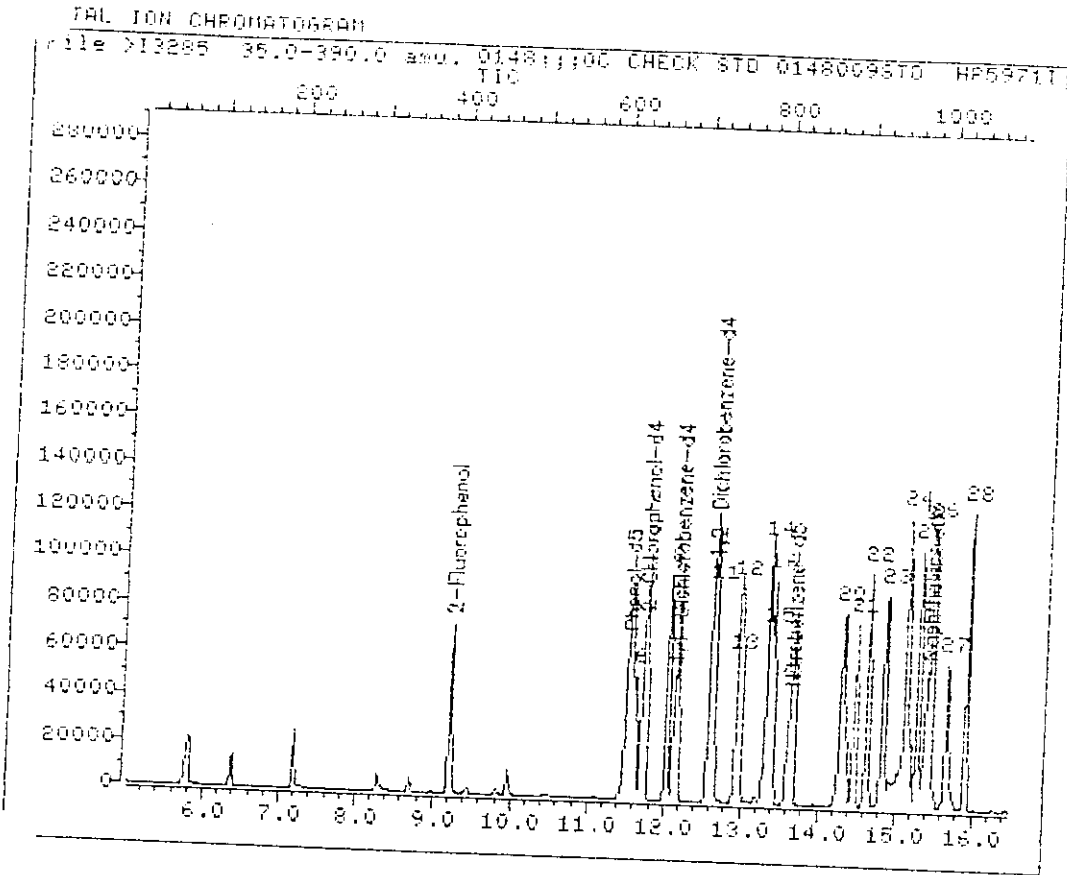
ID File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Goal Time: 930216 08:48

Compound	R.T.	Q ion	Area	Conc	Units	q
41) 3-Nitroaniline	20.08	137.8	51057	958.27	ug	63
42) Acenaphthene	20.17	152.9	118039	60.45	ug	96
43) 2,4-Dinitrophenol	20.33	183.8	39106	201.54	ug	84
44) 4-Nitrophenol	20.60	108.8	33878	107.13	ug	43
45) Dibenzofuran	20.58	167.8	162261	55.23	ug	57
46) 2,4-Dinitrotoluene	20.72	164.8	83327	88.75	ug	75
47) Diethylphthalate	21.38	148.8	192333	67.46	ug	94
48) 4-Chlorophenyl-phenylether	21.49	203.9	68019	66.42	ug	88
49) Fluorene	21.50	165.9	131855	66.75	ug	96
50) 4-Nitroaniline	21.79	137.9	64231	99.66	ug	68
51) 2,4,6-Tribromophenol	22.20	329.6	32567	58.36	ug	98
52) *Phenanthrene-d10	23.97	187.9	91743	40.00	ug	98
53) 4,6-Dinitro-2-methylphenol	21.84	197.9	42405	81.09	ug	99
54) N-Nitrosodiphenylamine (1)	21.87	168.9	89034	54.96	ug	97
55) 4-Bromophenyl-phenylether	22.77	247.9	48257	53.97	ug	96
56) Hexachlorobenzene	23.17	283.6	69068	56.19	ug	98
57) Pentachlorophenol	23.66	265.6	50621	68.82	ug	97
58) Phenanthrene	24.06	177.9	222584	54.26	ug	97
59) Carbazole	24.60	166.8	217456	155.48	ug	97
60) Anthracene	24.17	177.9	209235	49.92	ug	97
61) Di-n-butylphthalate	25.61	148.8	302234	50.75	ug	96
62) Fluoranthene	27.21	201.9	258002	55.31	ug	99
63) *Chrysene-d12	31.33	240.0	67982	40.00	ug	99
64) Pyrene	27.81	201.9	261978	59.93	ug	97
65) Terphenyl-d14	28.18	244.0	96582	32.27	ug	96
66) Butylbenzylphthalate	29.57	148.8	146932	58.59	ug	88
67) 3,3'-Dichlorobenzidine	31.22	251.9	70690	100.27	ug	83
68) Benzo(a)anthracene	31.26	228.0	227895	60.82	ug	98
69) Chrysene	31.46	228.0	187253	58.24	ug	99
70) bis(2-Ethylhexyl)phthalate	31.42	148.8	175559	57.63	ug	90
71) *Perylene-d12	38.21	264.0	82308	40.00	ug	96
72) Di-n-octylphthalate	33.97	148.9	388064	51.36	ug	94
73) Benzo(b)fluoranthene	36.11	252.0	376797M	78.11	ug	97
74) Benzo(k)fluoranthene	36.23	252.0	163272M	40.32	ug	98
75) Benzo(a)pyrene	37.93	252.0	272649	62.96	ug	98
76) Indeno(1,2,3-cd)pyrene	47.05	276.0	162967	36.54	ug	98
77) Dibenz(a,h)anthracene	47.28	278.0	265083	65.78	ug	99
78) Benzo(g,h,i)perylene	49.52	276.0	190406	44.31	ug	87

\* Compound is ISTD

0784



Data File: >I3285::A4

Quant Output File: ^I3285::A6

Name: 0148;;;QC CHECK STD

Instrument ID: \*\*MSD

Misc: 0148009STD HP59711;0210931;021193;LLW;1;;;10

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

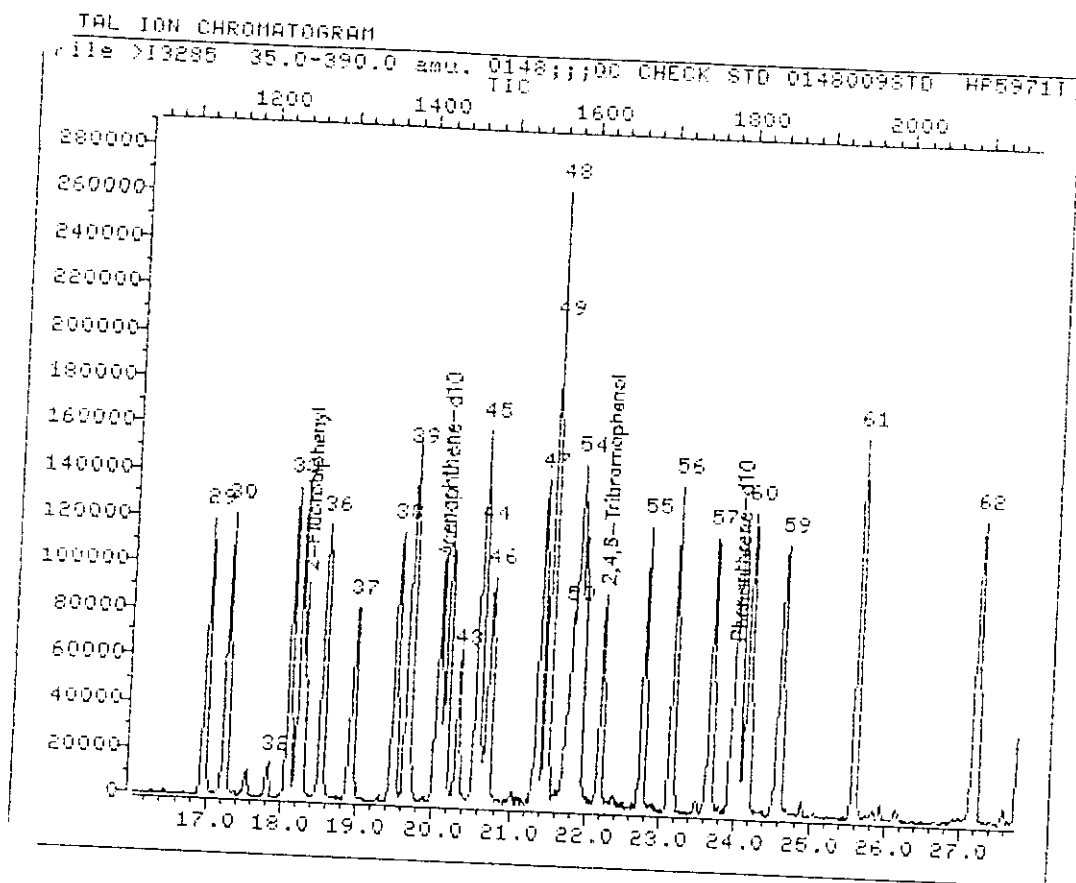
Operator ID: USER1

Quant Time : 930223 14:23

Injected at: 930216 16:10



0785



Data File: >I3285::A4

Name: 0148;;;QC CHECK STD

Misc: 0148009STD HP59711;0210931;021193;LLW;1;;;10

Quant Output File: ^I3285::A6

Instrument ID: \*\*MSD

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

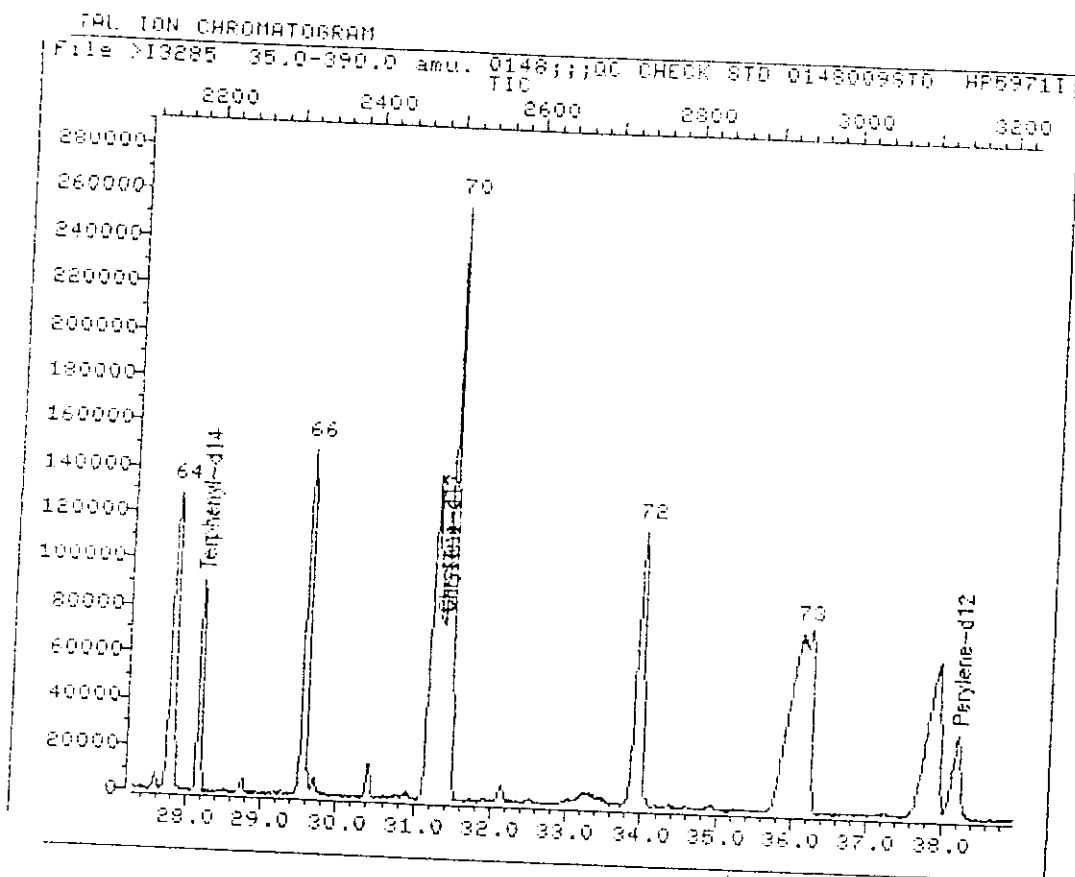
Last Qual Time: 930216 08:48

Operator ID: USER1

Quant Time : 930223 14:23

Injected at: 930216 16:10

0786



Data File: >I3285::A4  
Name: 0148;;;QC CHECK STD  
Misc: 0148009STD HP59711;0210931;021193;LLW;1;;;ID

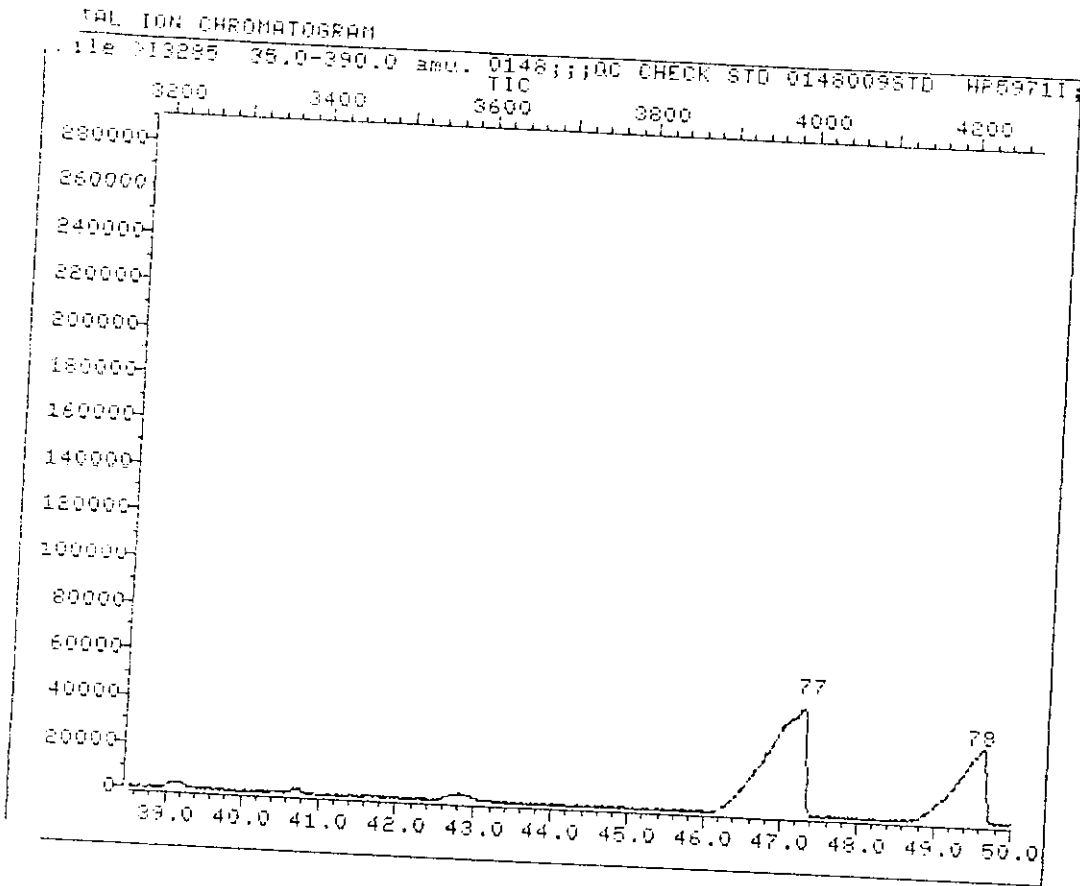
Quant Output File: ^I3285::A6  
Instrument ID: \*\*MSD

Id File: I\_IFI::A5  
Title: IFB-OLM01.8 BNA COMPOUNDS  
Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

Operator ID: USER1  
Quant Time : 930223 14:23  
Injected at: 930216 16:10

0787



Data File: >I3285::A4

Quant Output File: ^I3285::A6

Name: 0148;;;QC CHECK STD

Instrument ID: \*\*MSD

Misc: 0148009STD HP69711;0210931;021193;LLW;1;;;I0

Id File: I\_IFI::A5

Title: IFB-OLM01.8 BNA COMPOUNDS

Last Calibration: 910116 11:52

Last Qual Time: 930216 08:48

Operator ID: USER1

Quant Time : 930223 14:23

Injected at: 930216 16:10

*tillo*

ORGANIC EXTRA  
 AQUEOUS/SOLI

1706

Analysis in 16 BNA 370  
 corresponding MS/MSD 0148-009 MS/MSD

MeCl2 Lot 02B E 2 2 3  
 Hexane Lot

Alumina Lot  
 Florisil Lot

Reagent H2O Lot RW 021193  
 Acetone Lot  
 Me2SO4 Lot

Extraction Date 9/21/11  
 Finish Date 10/12/11  
 O/S# Surrogate Code 112492, 1196  
 O/S# Spike Code 112492, 1196  
 Reviewed By *[Signature]*

LMS ENT	Client	Lab ID	Sign out COC	CL2 res	Init pH H2O	Init M/Vol	Sample Color & Texture	Surr Init	Spike Init	Ext Method	Ext By	CU Conc	Int Conc	VI	Color of Ext	Conc/ Scored By	PK	X Solids Data				Location		Surr Scrn	Comments
																		Tare	Wet wt	Dry wt	% Solids	Fzr	Slot		
BLANK		021160 G	LA	NO	N/A	1000	Clear	PB	N/A	Box	PB	NO	LA	1.0 mg	Clear	PB		31	IV	8A			86		
		021160 I																							
		0148-009 MSB																							
		0148-009 MSB																							
		0148-009 STD																							
		0148-009 PB				975	Cloudy																		
		0148-009 MSB																							
		0110				1000																			
		0111				975																			
		0112																							
		0113																							
		0114					Brown																		
		0115																							
		0116				975	Clear																		
		0117					Cloudy																		
		0119				1000																			
		0200				975																			
		0201																							
		0222					Clear																		
		0223				975																			

1.0 mL Monthly RMS Sol.  
 Cx: 1081392: P.45A

0790