

VOLATILES DATA



RECRA
ENVIRONMENTAL
INC.

QC SUMMARY



2B

SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Lab Name: RECRA ENVIRON Contract: C002412Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393Level: (low/med) LOW

	EPA SAMPLE NO.	SMC1 (TOL) #	SMC2 (BFB) #	SMC3 (DCE) #	OTHER	TOT OUT
	=====	=====	=====	=====	=====	=====
01	SP1B	96	131 *	100	0	1
02	SP1BRE	96	176 *	94	0	1
03	SP1SSW	100	95	104	0	0
04	VBLK61	100	96	95	0	0

QC LIMITS

SMC1 (TOL) = Toluene-d8 (84-138)

SMC2 (BFB) = Bromofluorobenzene (59-113)

SMC3 (DCE) = 1,2-Dichloroethane-d4 (70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK61

Lab Name: RECRA ENVIRON Contract: C002412

Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393

Lab File ID: H2305 Lab Sample ID: AM002962

Date Analyzed: 08/18/93 Time Analyzed: 1330

GC Column: DB-624 ID: 0.530 (mm) Heated Purge: (Y/N) Y

Instrument ID: I50H

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
	=====	=====	=====	=====
01	SP1B	AS042456	H2308	1510
02	SP1BRE	AS042456RI	H2310	1724
03	SP1SSW	AS042455	H2307	1437

COMMENTS: VBLK61
I50H

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: RECRA ENVIRON Contract: C002412
 Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393
 Lab File ID: H1792 BFB Injection Date: 04/26/93
 Instrument ID: I50H BFB Injection Time: 0844
 GC Column: DB-624 ID: 0.530 (mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.2
75	30.0 - 60.0% of mass 95	52.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.9% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	89.7
175	5.0 - 9.0% of mass 174	7.0 (7.8)1
176	95.0 - 101.0% of mass 174	87.1 (97.1)1
177	5.0 - 9.0% of mass 176	6.2 (7.1)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD010	VSTD010	H1794	04/26/93	0922
02	VSTD020	VSTD020	H1795	04/26/93	0957
03	VSTD100	VSTD100	H1796	04/26/93	1033
04	VSTD200	VSTD200	H1797	04/26/93	1112
05	VSTD050	VSTD050	H1798	04/26/93	1258

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: RECRA ENVIRON Contract: C002412
 Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393
 Lab File ID: H2301 BFB Injection Date: 08/18/93
 Instrument ID: I50H BFB Injection Time: 1042
 GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) Y

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	22.9
75	30.0 - 60.0% of mass 95	52.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.9% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	96.2
175	5.0 - 9.0% of mass 174	6.4 (6.7)1
176	95.0 - 101.0% of mass 174	97.0 (100.8)1
177	5.0 - 9.0% of mass 176	5.6 (5.8)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050	VSTD050	H2302	08/18/93	1052
02	VBLK61	AM002962	H2305	08/18/93	1330
03	SP1SSW	AS042455	H2307	08/18/93	1437
04	SP1B	AS042456	H2308	08/18/93	1510
05	SP1BRE	AS042456RI	H2310	08/18/93	1724

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: RECRA ENVIRON Contract: C002412
 Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393
 Lab File ID (Standard): H2302 Date Analyzed: 08/18/93
 Instrument ID: I50H Time Analyzed: 1052
 GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) Y

	IS1 (BCM)		IS2 (DFB)		IS3 (CBZ)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	31358	12.55	114327	14.62	107585	19.59
UPPER LIMIT	62716	13.05	228654	15.12	215170	20.09
LOWER LIMIT	15679	12.05	57164	14.12	53792	19.09
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 SP1B	34690	12.45	128499	14.52	124648	19.47
02 SP1BRE	34093	12.34	120928	14.39	115913	19.39
03 SP1SSW	32893	12.47	120277	14.52	111088	19.49
04 VBLK61	33161	12.49	115856	14.52	109254	19.50

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

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

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

SAMPLE DATA



RECRA
ENVIRONMENTAL
INC.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SP1B

Lab Name: RECRA ENVIRON Contract: C002412
 Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393
 Matrix: (soil/water) SOIL Lab Sample ID: AS042456
 Sample wt/vol: 5.1 (g/mL) G Lab File ID: H2308
 Level: (low/med) LOW Date Received: 08/17/93
 % Moisture: not dec. 7 Date Analyzed: 08/18/93
 GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO. COMPOUND Q

74-87-3	-----Chloromethane	11	U
74-83-9	-----Bromomethane	11	U
75-01-4	-----Vinyl Chloride	11	U
75-00-3	-----Chloroethane	11	U
75-09-2	-----Methylene Chloride	11	U
67-64-1	-----Acetone	11	U
75-15-0	-----Carbon Disulfide	11	U
75-35-4	-----1,1-Dichloroethene	11	U
75-34-3	-----1,1-Dichloroethane	11	U
540-59-0	-----1,2-Dichloroethene (total)	11	U
67-66-3	-----Chloroform	11	U
107-06-2	-----1,2-Dichloroethane	11	U
78-93-3	-----2-Butanone	11	U
71-55-6	-----1,1,1-Trichloroethane	11	U
56-23-5	-----Carbon Tetrachloride	11	U
75-27-4	-----Bromodichloromethane	11	U
78-87-5	-----1,2-Dichloropropane	11	U
10061-01-5	-----cis-1,3-dichloropropene	11	U
79-01-6	-----Trichloroethene	11	U
124-48-1	-----Dibromochloromethane	11	U
79-00-5	-----1,1,2-Trichloroethane	11	U
71-43-2	-----Benzene	11	U
10061-02-6	-----trans-1,3-dichloropropene	11	U
75-25-2	-----Bromoform	11	U
108-10-1	-----4-Methyl-2-Pentanone	11	U
591-78-6	-----2-Hexanone	11	U
127-18-4	-----Tetrachloroethene	11	U
79-34-5	-----1,1,2,2-Tetrachloroethane	11	U
108-88-3	-----Toluene	11	U
108-90-7	-----Chlorobenzene	11	U
100-41-4	-----Ethylbenzene	11	U
100-42-5	-----Styrene	11	U
1330-20-7	-----Total Xylenes	11	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

0071
EPA SAMPLE NO.

SP1B

Lab Name: RECRA ENVIRON Contract: C002412
 Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393
 Matrix: (soil/water) SOIL Lab Sample ID: AS042456
 Sample wt/vol: 5.1 (g/mL) G Lab File ID: H2308
 Level: (low/med) LOW Date Received: 08/17/93
 % Moisture: not dec. 7 Date Analyzed: 08/18/93
 GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

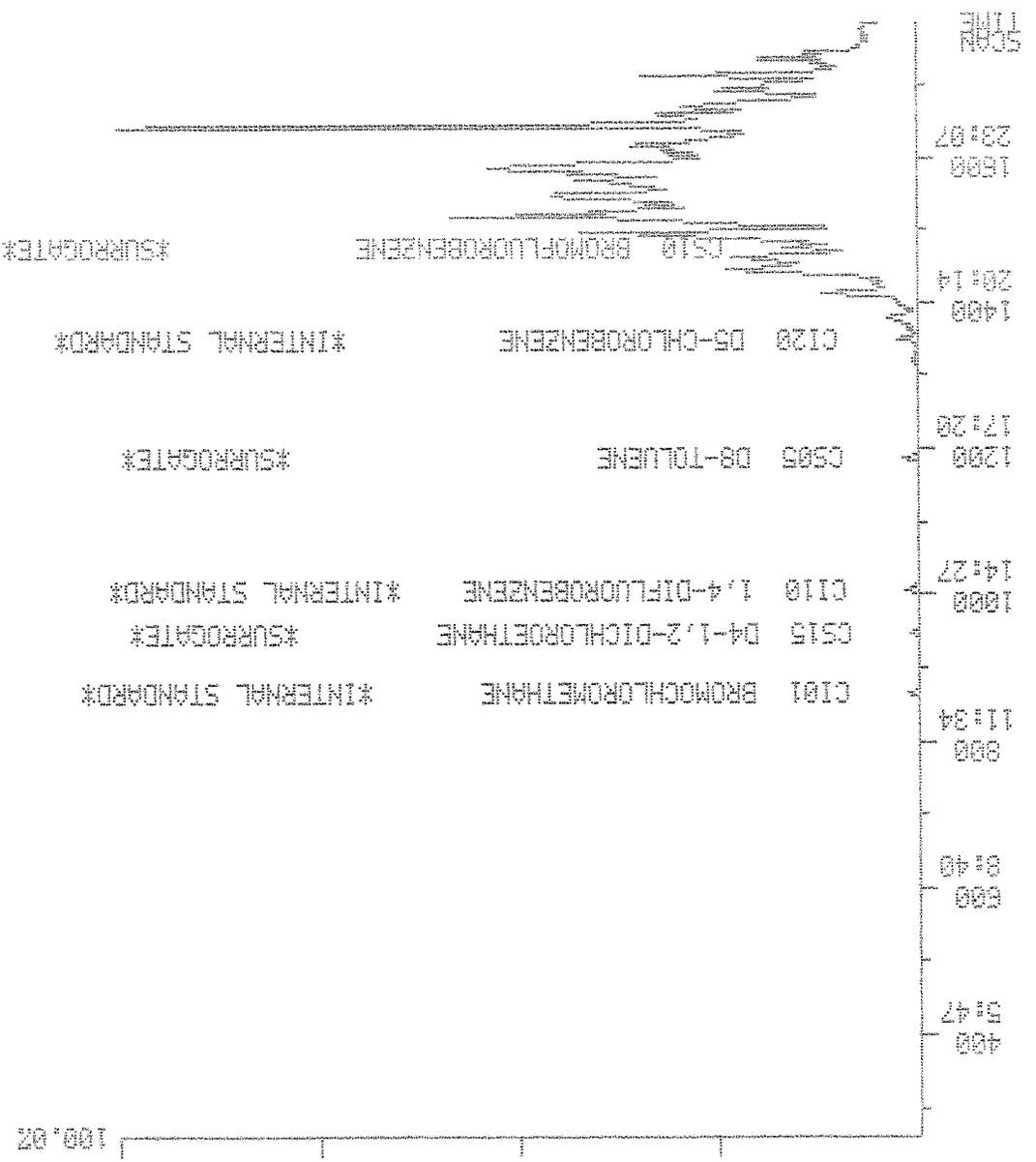
Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
1.	UNKNOWN	21.60	1600	J
2.	UNKNOWN	21.92	1400	J
3.	UNKNOWN	22.02	290	J
4.	UNKNOWN	22.35	810	J
5.	UNKNOWN	22.65	440	J
6.	UNKNOWN	22.77	290	J
7.	UNKNOWN	22.88	1400	J
8.	UNKNOWN	23.33	400	J
9.	DECAHYDRO NAPHTHALENE ISOMER	23.72	2300	J
10.	UNKNOWN	24.73	680	J

DATA FROM FILE: H2308
 SAMPLE: H5042456 JOB2646
 COND5: 150H
 SCANS 260 TO 1785 ACQUIRED: 08/18/93 15:10:00
 CALL: H2308 #3

100.02 (3526650.)



Data: H2308.TI
 08/18/93 15:10:00
 Sample: A5042456 JOB2646
 Conds.: I50H

Formula: Instrument: I50H Weight: 0.000
 Submitted by: Analyst: JJJ Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
 Resp. fac. from Library Entry

No	Name	
1	CI01	BROMOCHLOROMETHANE *INTERNAL STANDARD*
2	CI10	1,4-DIFLUOROBENZENE *INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE *INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE *SURROGATE*
5	CS05	D8-TOLUENE *SURROGATE*
6	CS10	BROMOFLUOROBENZENE *SURROGATE*
7	CO10	CHLOROMETHANE
8	CO15	BROMOMETHANE
9	CO20	VINYL CHLORIDE
10	CO25	CHLOROETHANE
11	CO30	METHYLENE CHLORIDE
12	CO35	ACETONE
13	CO40	CARBON DISULFIDE
14	CO45	1,1-DICHLOROETHENE
15	CO50	1,1-DICHLOROETHANE
16	CO57	TRANS-1,2-DICHLOROETHENE
17	CO60	CHLOROFORM
18	CO65	1,2-DICHLOROETHANE
19	CI10	2-BUTANONE
20	CI15	1,1,1-TRICHLOROETHANE
21	CI20	CARBON TETRACHLORIDE
22	CI25	VINYL ACETATE
23	CI30	BROMODICHLOROMETHANE
24	CO56	CIS-1,2-DICHLOROETHENE
25	CO36	ACROLEIN
26	CO38	ACRYLONITRILE
27	C275	TRICHLOROFLUOROMETHANE
28	CO30	ACETONITRILE
29	CI40	1,2-DICHLOROPROPANE
30	CI45	CIS-1,3-DICHLOROPROPENE
31	CI50	TRICHLOROETHENE
32	CI55	DIBROMOCHLOROMETHANE
33	CI60	1,1,2-TRICHLOROETHANE
34	CI65	BENZENE
35	CI70	TRANS-1,3-DICHLOROPROPENE
36	CI80	BROMOFORM
37	CI61	2-CHLOROETHYL VINYL ETHER
38	CI63	1,2-DIBROMOETHANE
39	C286	1,2-DIBROMO-3-CHLOROPROPANE
40	CI210	4-METHYL-2-PENTANONE
41	CI215	2-HEXANONE
42	CI220	TETRACHLOROETHENE
43	CI225	1,1,2,2-TETRACHLOROETHANE
44	CI230	TOLUENE
45	CI235	CHLOROBENZENE
46	CI240	ETHYLBENZENE
47	CI245	STYRENE

*Restart
3rd run
OUT*

*SS
ED
mm
8/18/93
R&E
TICS*

No Name
 48 C246 M, P-XYLENE
 49 C247 O-XYLENE
 50 C260 1,3-DICHLOROBENZENE

No	m/z	Scan	Time	Ref	RRT	Math	Area(Hght)	Amount	%Tot
1	128	862	12:27	1	1.000	A BB	34690.	250.000 NG	11.81
2	114	1004	14:31	2	1.000	A BB	128499.	250.000 NG	11.81
3	117	1347	19:28	3	1.000	A BB	124348.	250.000 NG	11.81
4	65	945	13:39	1	1.096	A BB	64718.	250.556 NG	11.83
5	98	1185	17:07	3	0.880	A BB	115926.	240.575 NG	11.36
6	95	1474	21:18	3	1.094	A VB	134813.	326.752 NG	15.43
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
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31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	82	1494	21:55	3	1.109	A BB	244284.	548.746 NG	25.91
44	91	1174	17:15	3	0.886	A BB	323.	0.596 NG	0.03
45	NOT FOUND								
46	106	1374	19:51	3	1.020	A BB	185.	0.939 NG	0.04
47	NOT FOUND								
48	106	1374	19:51	3	1.020	A BB	185.	0.594 NG	0.03
49	NOT FOUND								
50	NOT FOUND								

JIC
 NO NO
 Minors
 on
 mass

TIC
 8/19/93
 vby

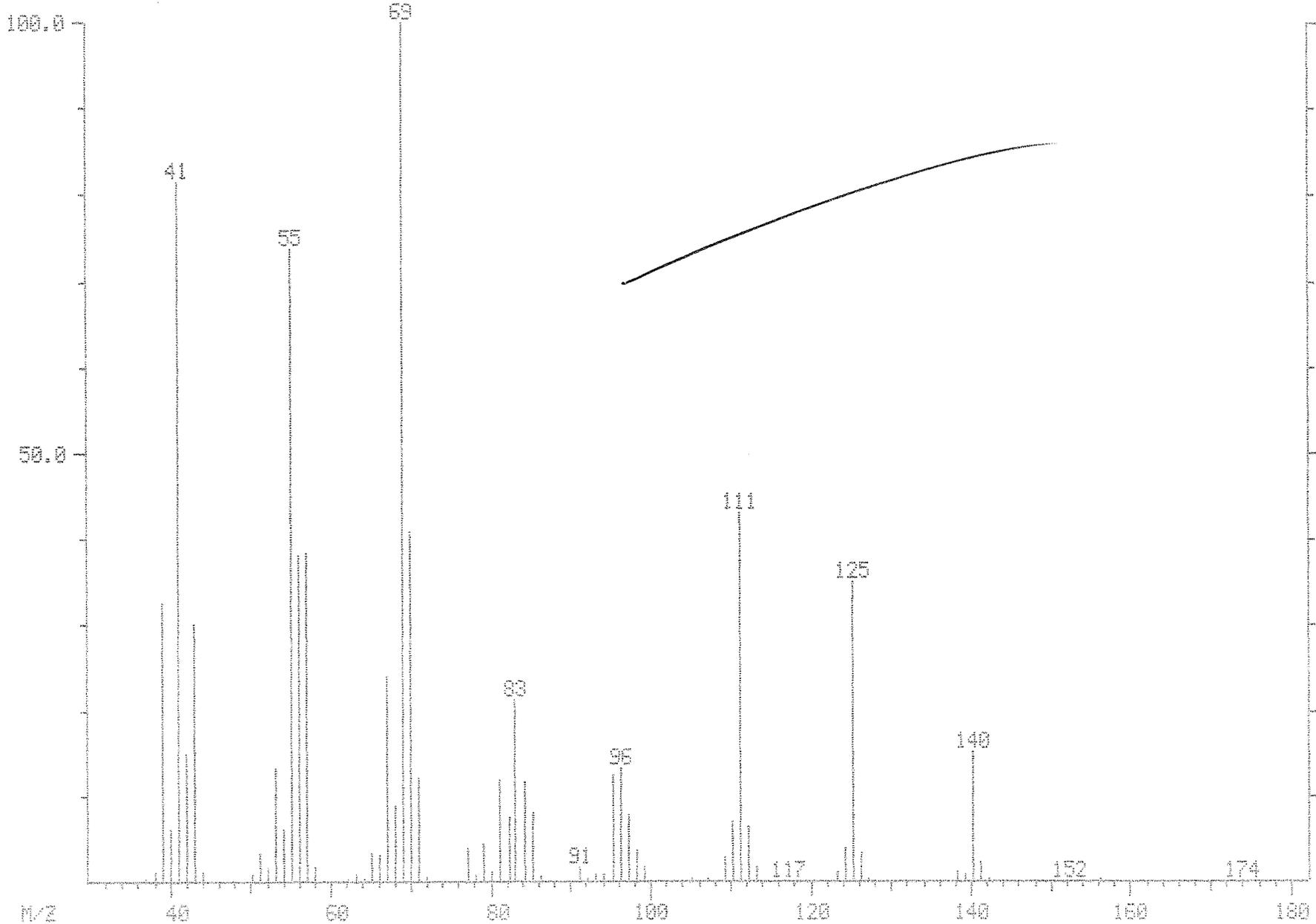
MTM
 9/14/93

MASS SPECTRUM
08/18/93 15:10:00 + 21:35
SAMPLE: A5042456 JOB2546
CONDS.: 150H
TEMP: 175 DEG. C

DATA: H2308 #1494
CALI: H2308 #3

BASE M/Z: 69
RIC: 1465370.

NAME: C225 1,1,2,2-TETRACHLOROETHANE



189440.
B.

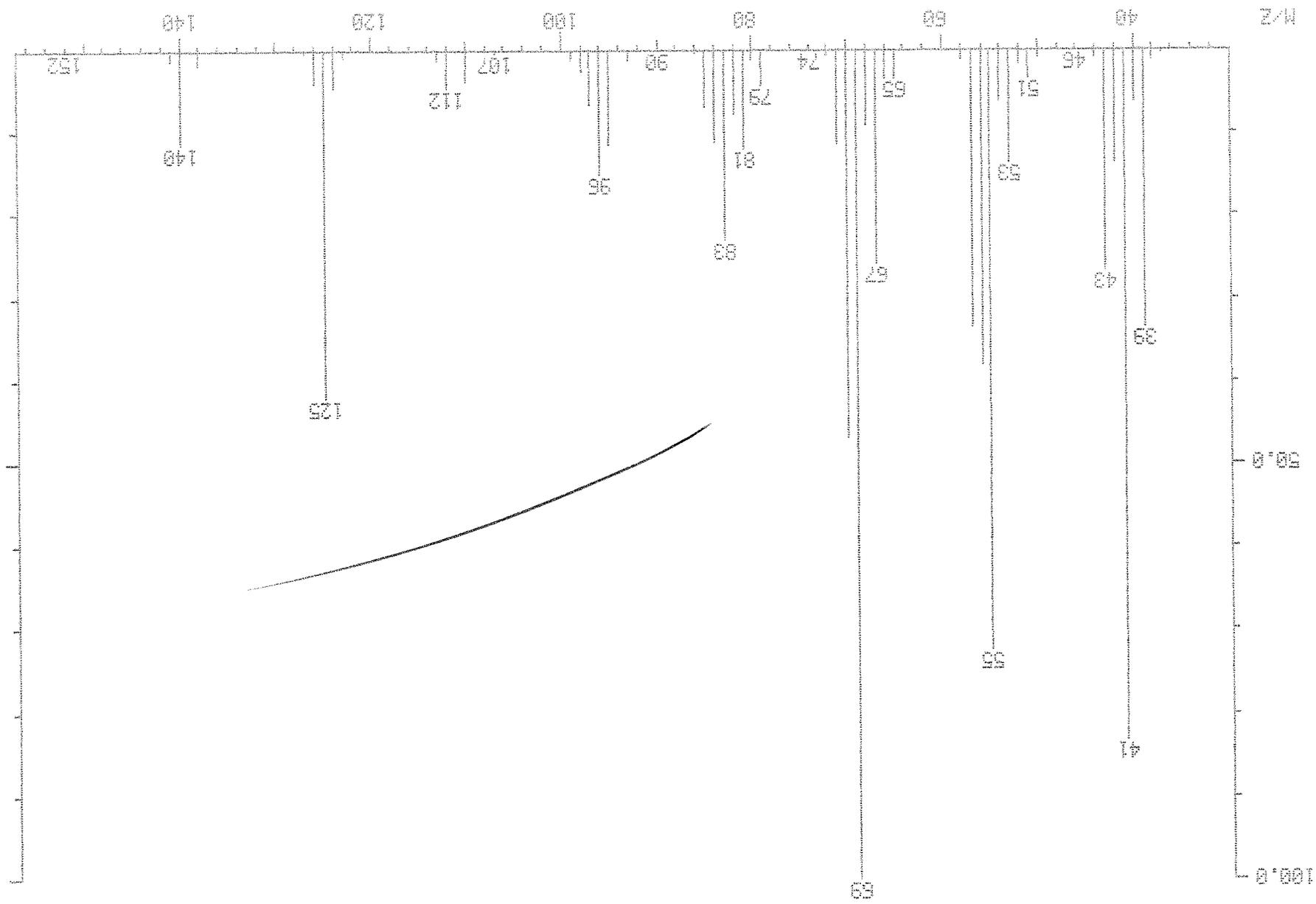
8/18/93
okj
10076

0027

ms/ms
9/19/93

120950
0.

MASS SPECTRUM
 DATA: H2308 #1494
 CALL: H2308 #3
 BASE M/Z: 69
 RIC: 862208.
 SAMPLE: 85042455 JOB2546
 CONDS.: 190H
 TEMP: 175 DEG. C
 ENHANCED (S) 158 2N 01)NAME: C225 1,1,2,2-TETRACHLOROETHANE

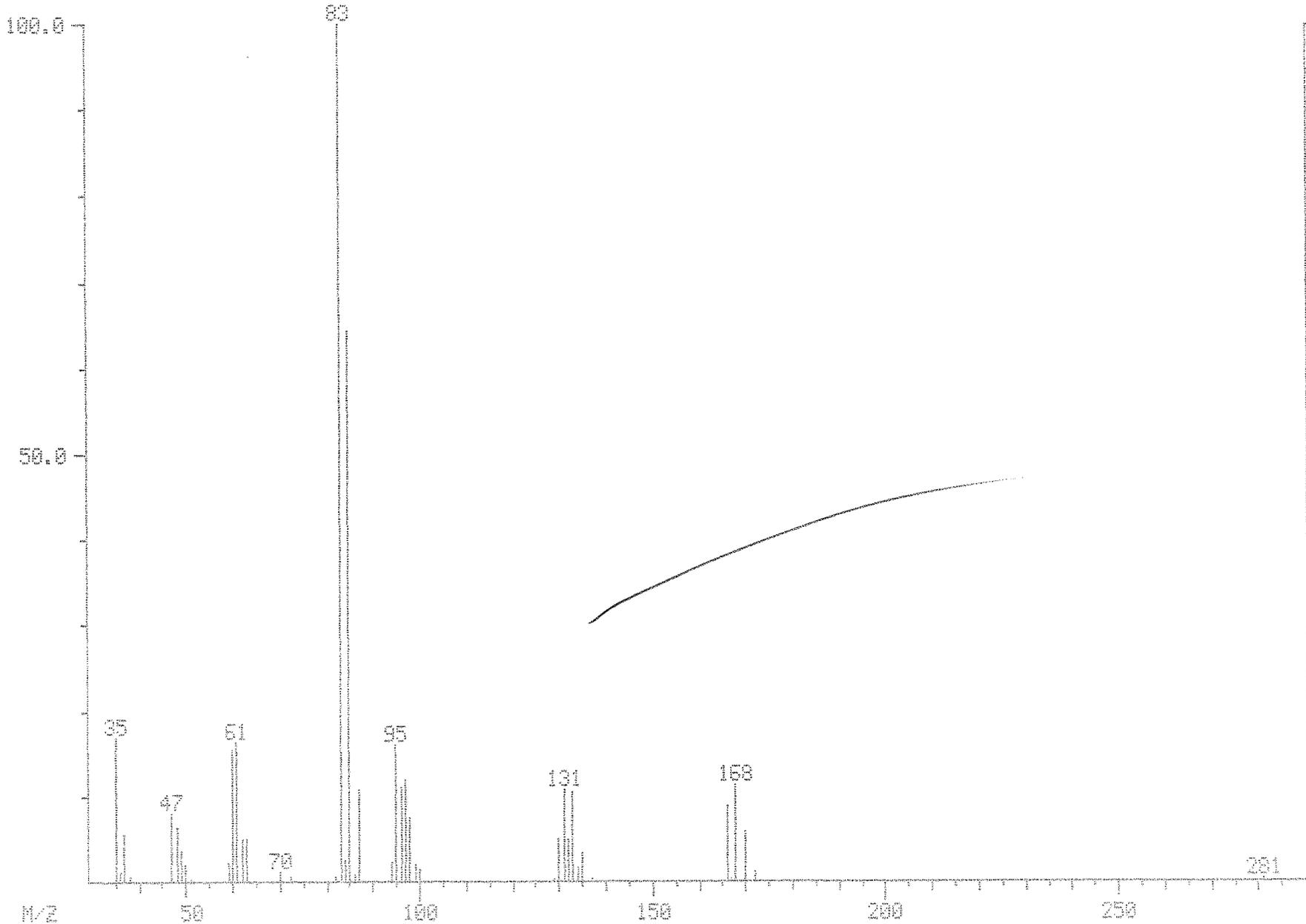


MASS SPECTRUM
08/18/93 10:52:00 + 21:35
SAMPLE: USTD050
CONDS.: I50H
TEMP: -337 DEG. C

DATA: H2302 #1494
ENHANCED (S 15B 2N 0T)

BASE M/2: 83
RIC: 71936.

NAME: C225 1,1,2,2-TETRACHLOROETHANE

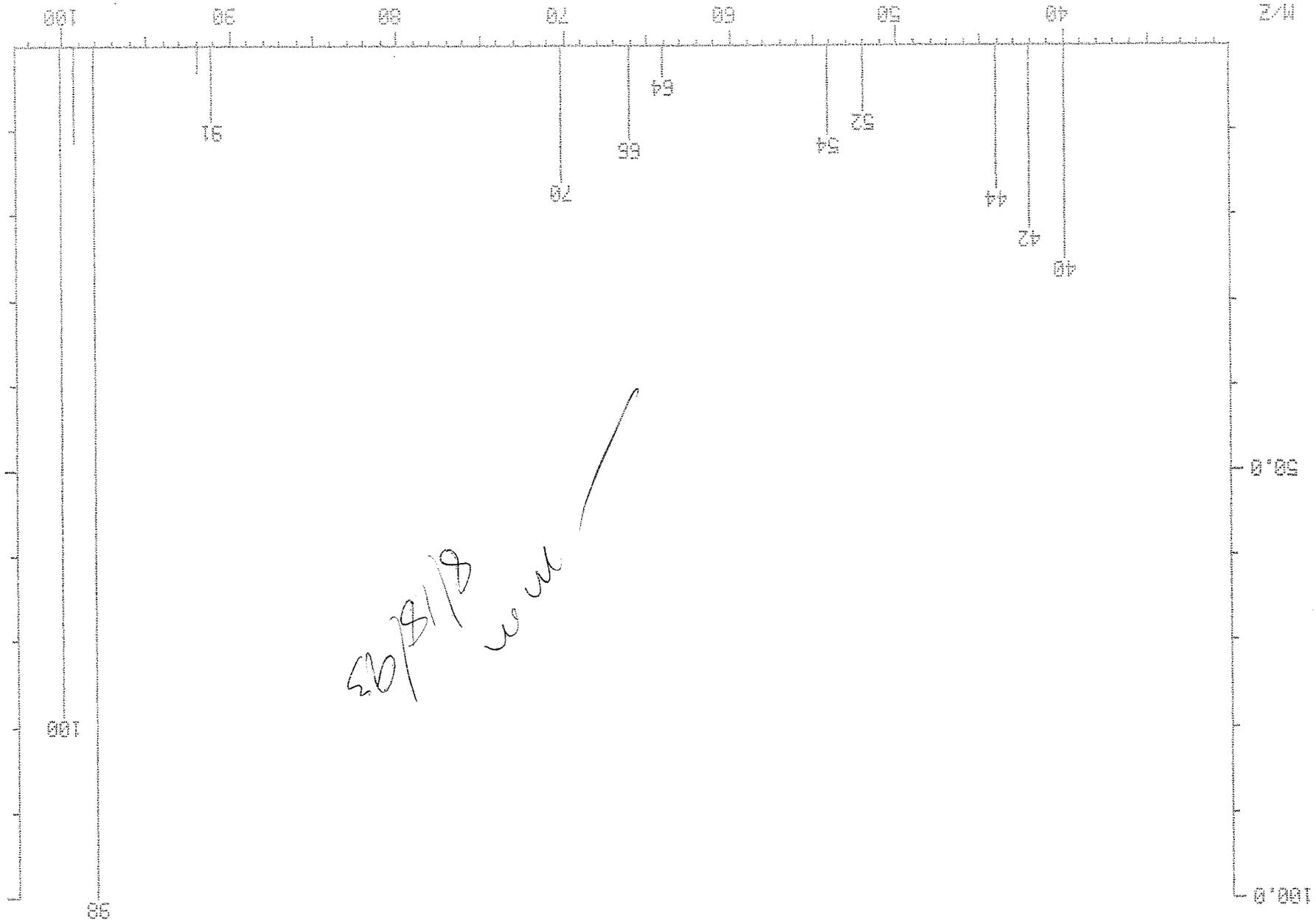


18688.
0.

8/19/93
WJ

0078

62.00



50/8/8 m m

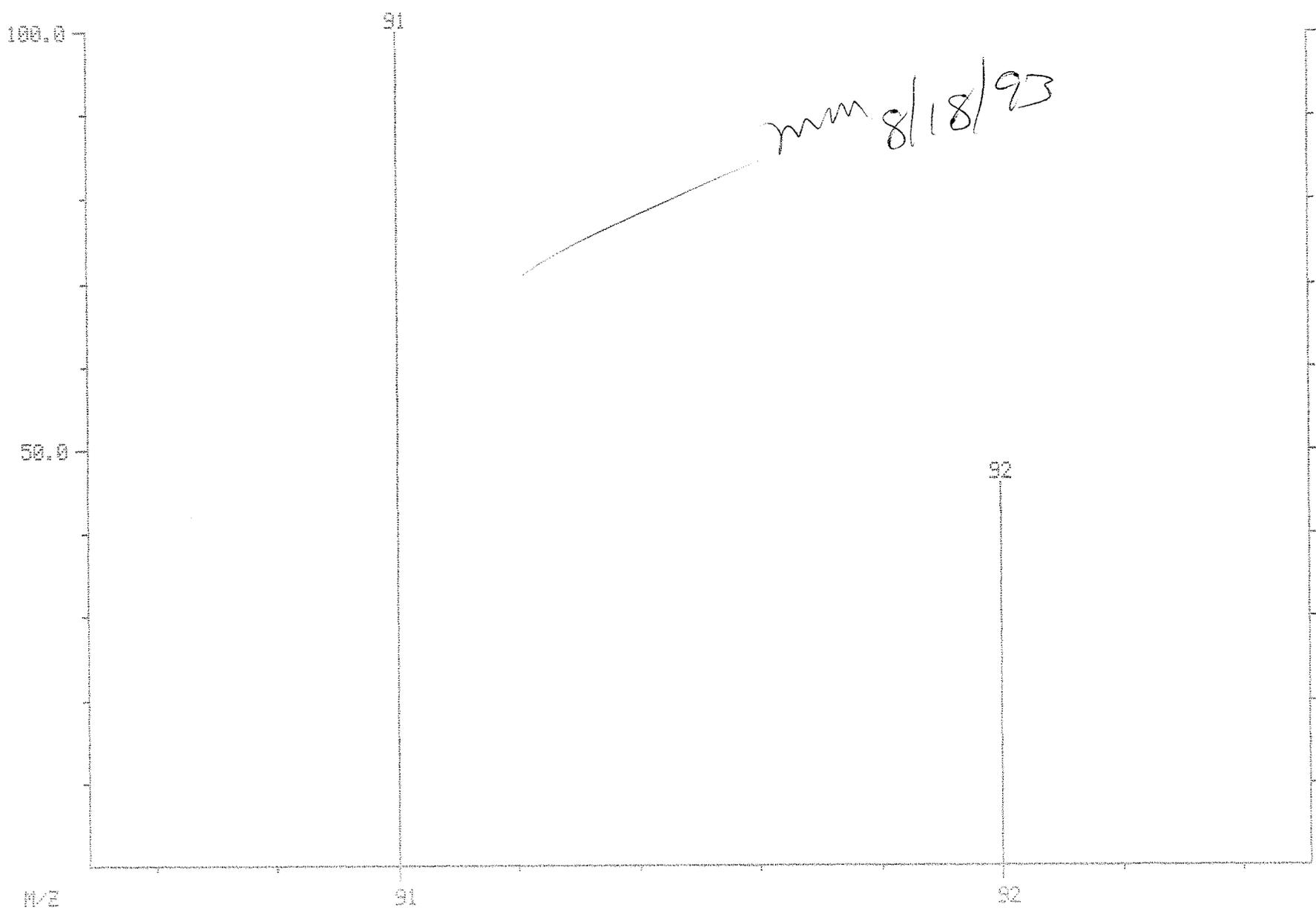
MASS SPECTRUM
 DATA: H2308 #1194
 CALI: H2308 #3
 RICI: 3084
 BASE M/Z: 98
 NAME: C230 TOLUENE
 TEMP: 131 DEG. C
 CONDS.: 150H
 SAMPLE: 45042455 J082645
 08/18/93 15:10:00 + 17:15

978.0

MASS SPECTRUM
08/18/93 15:10:00 + 17:15
SAMPLE: AS042456 JOB2546
CONDS.: I50H
TEMP: 131 DEG. C
ENHANCED (S 15B 2N 0T) NAME: C230 TOLUENE

DATA: H2308 #1194
CALI: H2308 #3

BASE M/Z: 91
RIC: 95.



65.
0.

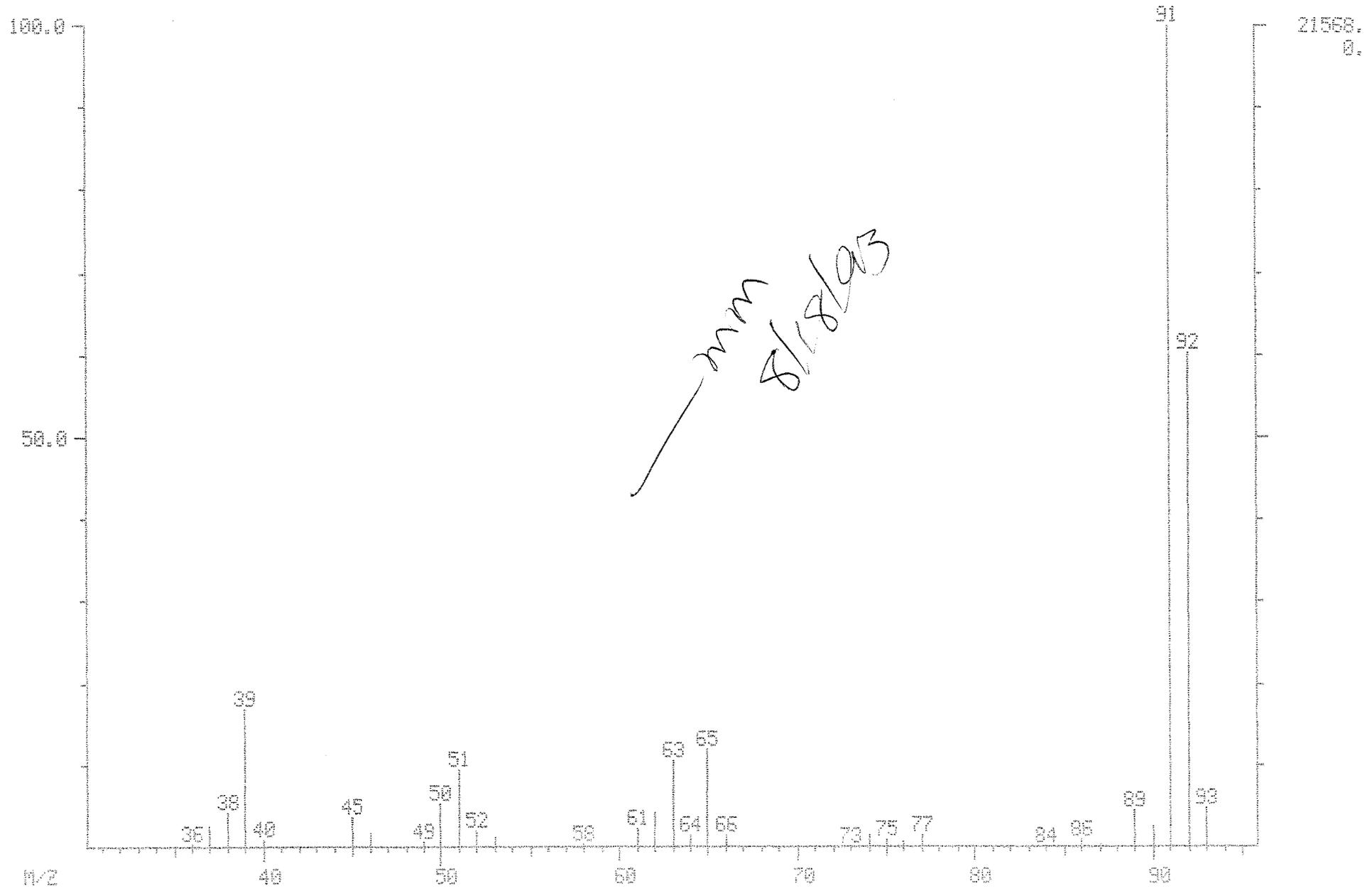
0800

MASS SPECTRUM
08/18/93 10:52:00 + 17:20
SAMPLE: USTD050
CONDS.: 150H
TEMP: -379 DEG. C

DATA: H2302 #1200
ENHANCED (S 15B 2H 0T)

BASE M/Z: 91
RIC: 55488.

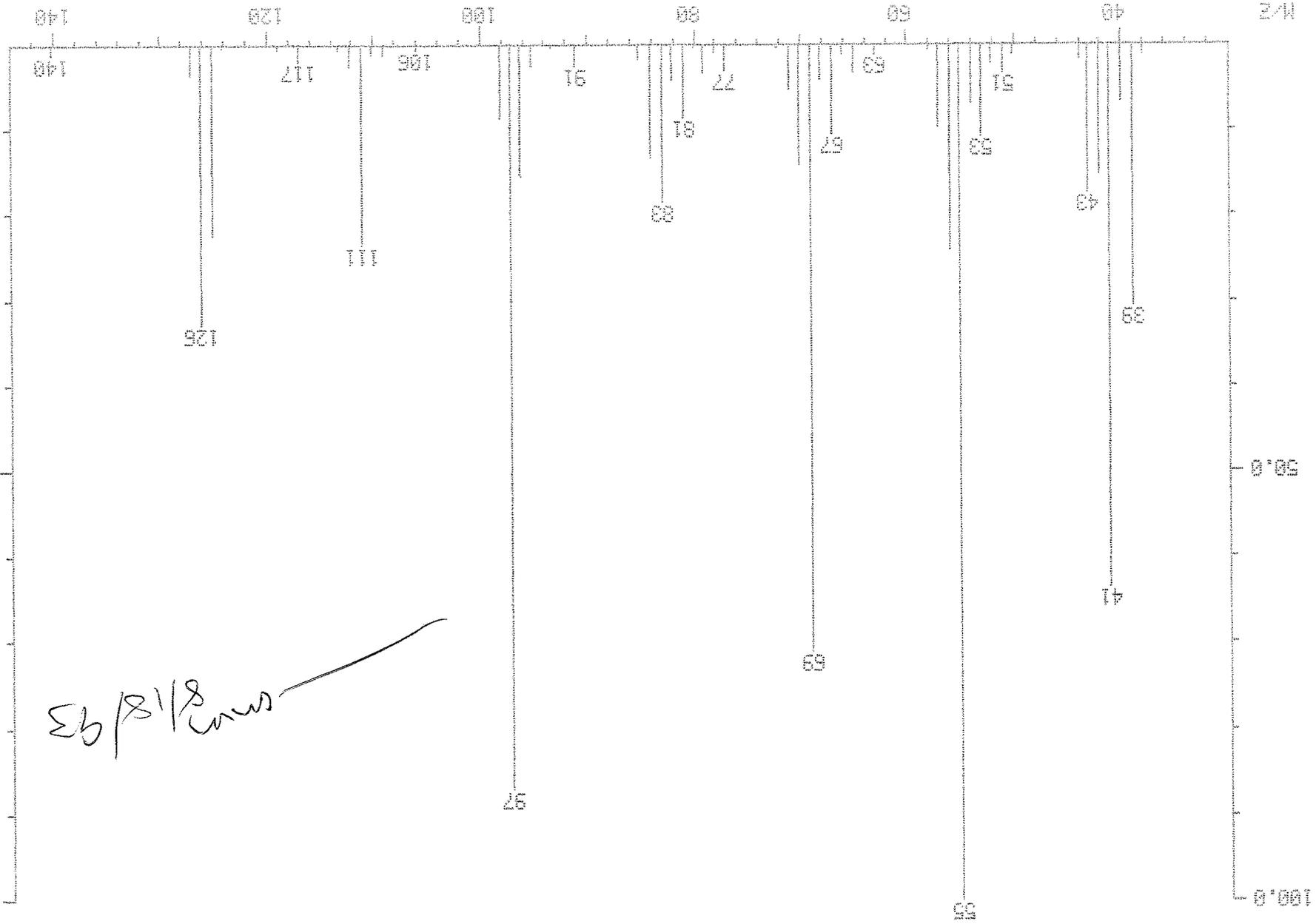
NAME: 0230 TOLUENE



0081

MASS SPECTRUM
08/18/93 15:10:00 + 19:51
SAMPLE: 45042455 JOB2646
COND.: 190H
TEMP: 157 DEG. C
NAME: C240 ETHYLBENZENE

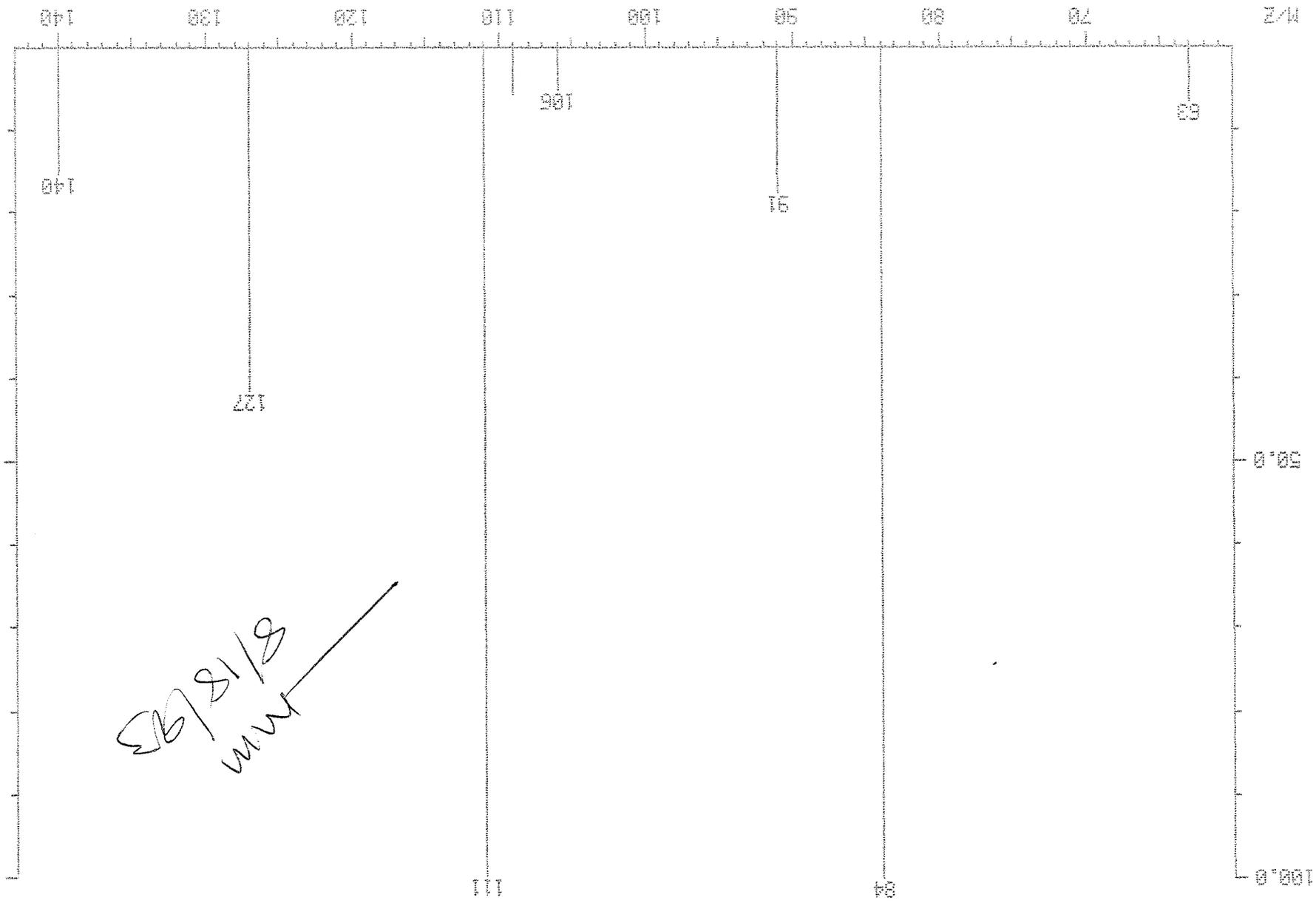
DATA: H2308 #1374
CALL: H2308 #3
RID: 95816
BASE M/Z: 55



8/18/93

00083

10000
S



BASE M/Z: 84
RICI: 3184

DATA: H2308 #1374
CALI: H2308 #3

MASS SPECTRUM
08/18/93 15:10:00 + 19:51
SAMPLE: #5042456 JOB2846
COND.: 150H
TEMP: 157 DEG. C
ENHANCED (5 158 2N 01)NAME: C240 ETHYLBENZENE

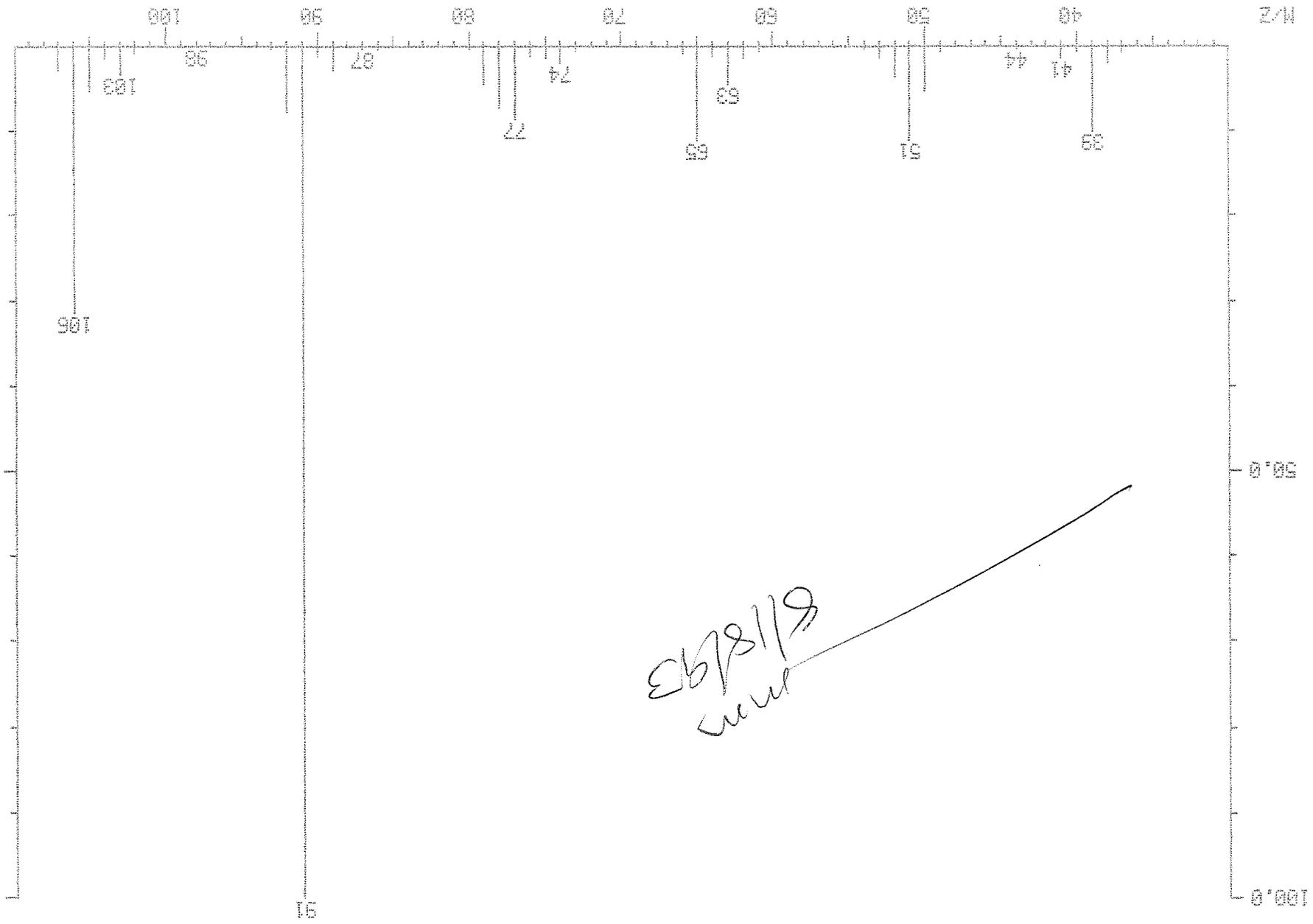
0084

29632.0

BASE M/Z: 91
RICH: 71168

DATA: H2302 #1368
ENHANCED (S 158 2N 0T)

MASS SPECTRUM
08/18/93 10:52:00 + 19:46
SAMPLE: VSTD050
COND: 150H
TEMP: 355 DEG. C
NAME: C240 ETHYLENENE



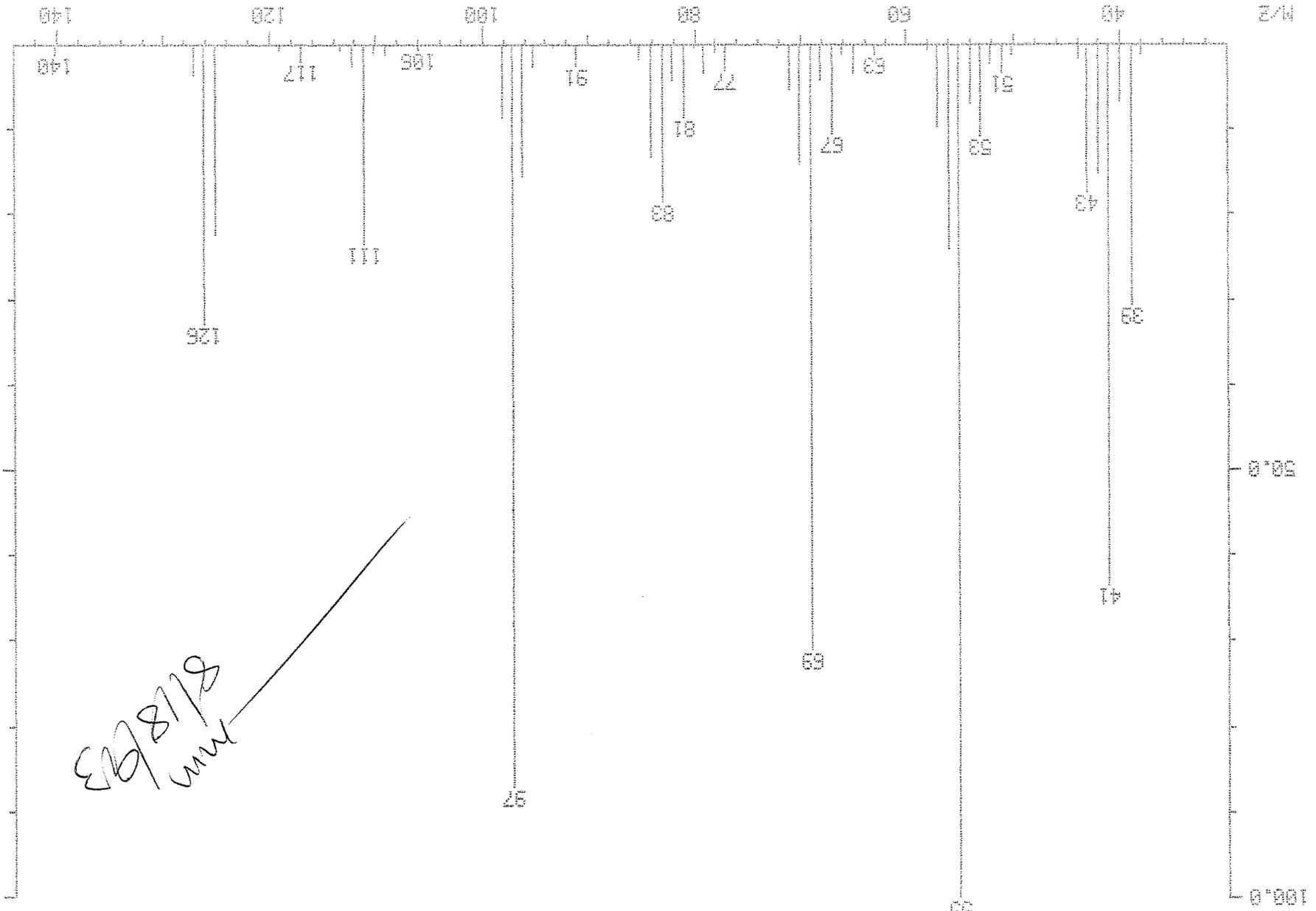
50.0

100.0

M/Z

0085

14272.0



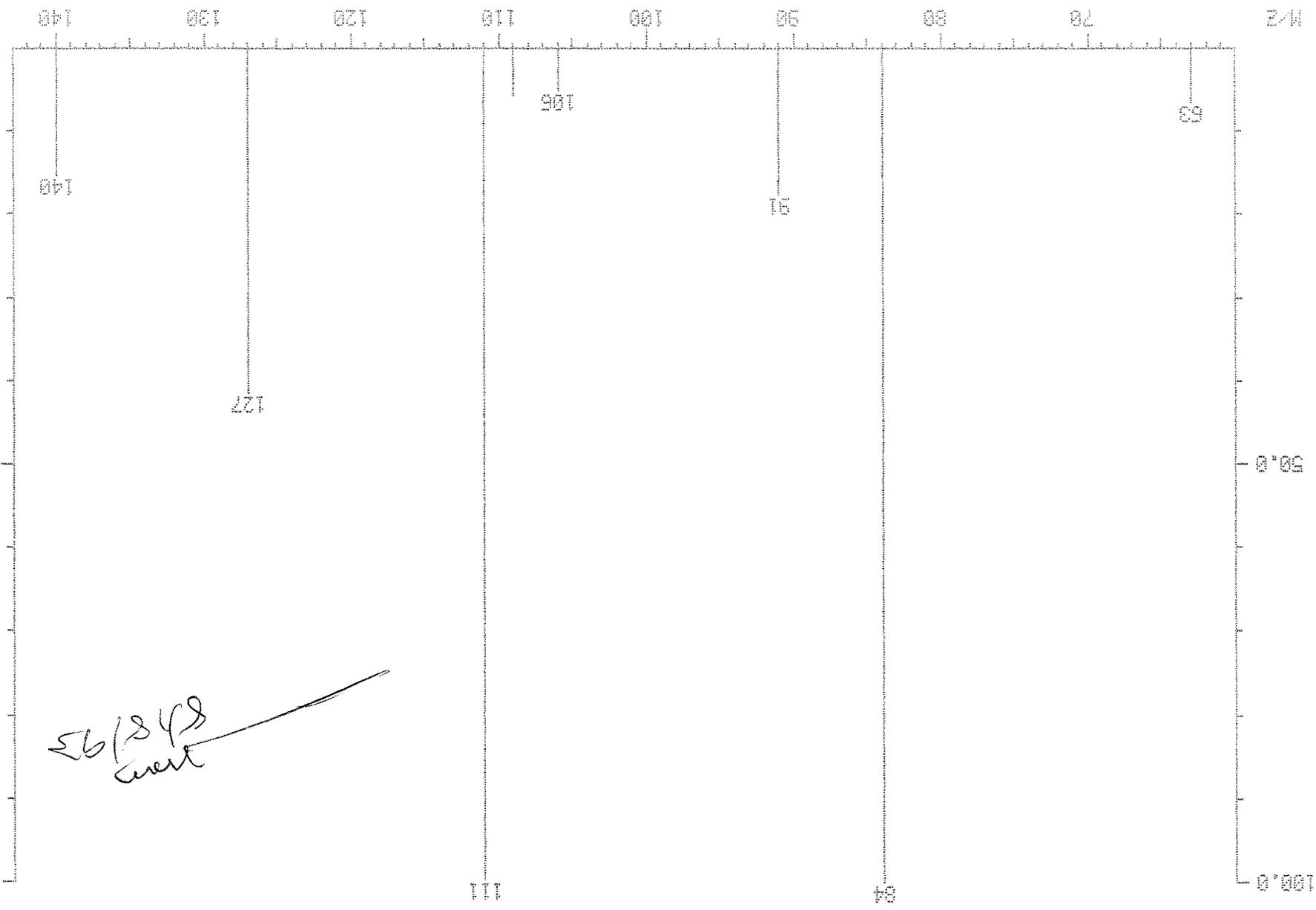
DATA: H2308 #1374
 CALL: H2308 #3
 BASE M/Z: 53
 RIC: 95616

MASS SPECTRUM
 08/18/93 15:10:00 + 19:51
 SAMPLE: 45042455 JOB2646
 COND: 1504
 TEMP: 157 DEG. C
 NAME: C245 M/P-XYLENE

8/18/93
 mm

98001

1000
5



DATA: H2308 #1374
 CALL: H2308 #3
 BASE M/Z: 84
 RIC: 3184

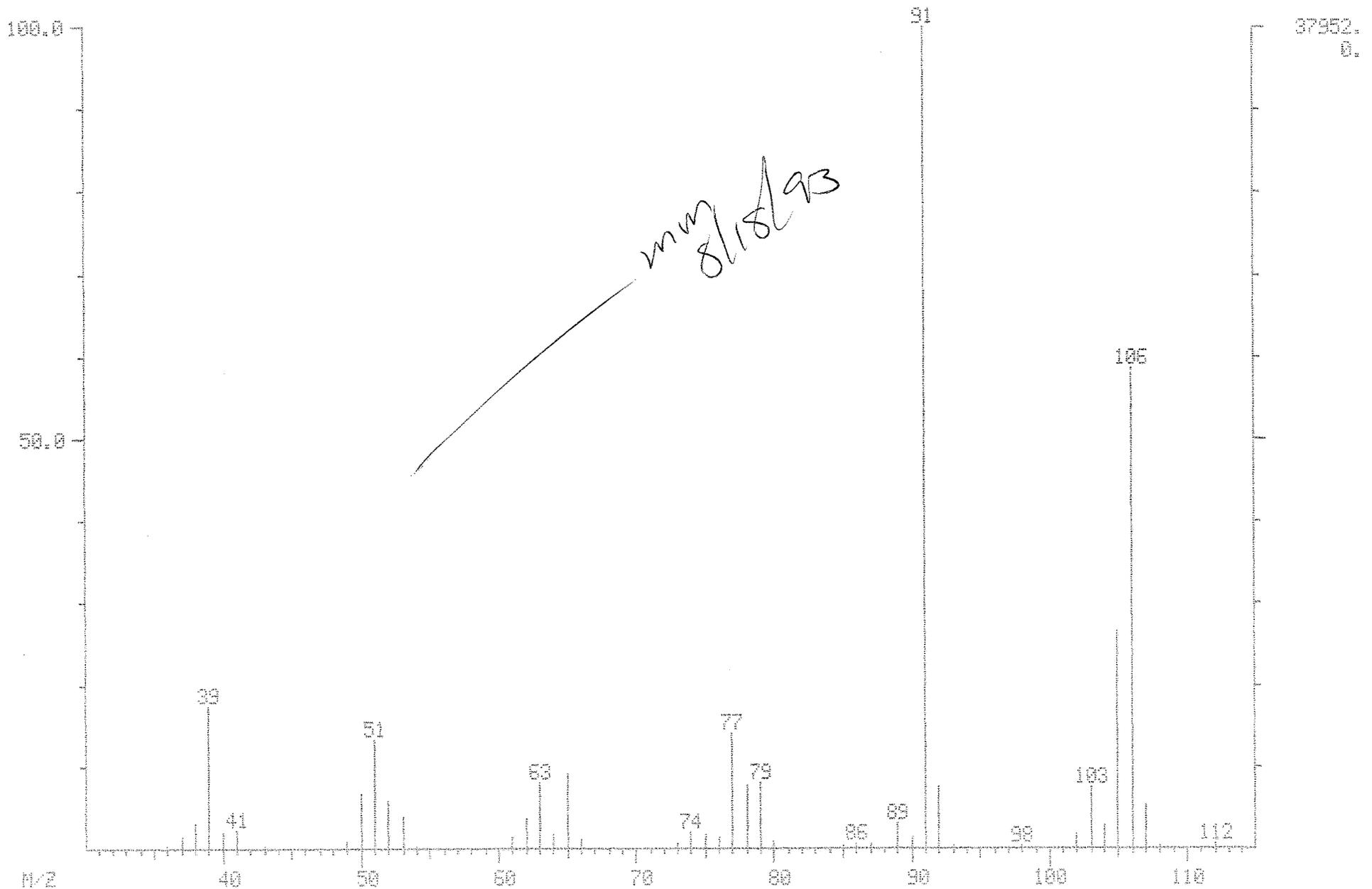
MASS SPECTRUM
 08/18/93 13:10:00 + 19:51
 SAMPLE: H5042456 JOB2848
 COND: 1504
 TEMP: 157 DEC. C
 ENHANCED (5 158 2N 0) CHANNEL: C246
 M.P.-XYLENE

MASS SPECTRUM
08/18/93 10:52:00 + 19:57
SAMPLE: VSTD050
COND.: 150H
TEMP: -353 DEG. C

DATA: H2302 #1381
ENHANCED (S 15B 2N 0T)

BASE M/Z: 91
RIC: 127360.

NAME: C245 N.P-XYLENE



0087

Data: H2308.TI
 08/18/93 15:10:00
 Sample: A5042456 JDB2646
 Conds.: I50H

Formula: Instrument: I50H Weight: 0.000
 Submitted by: Analyst: JJJ Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
 Resp. fac. from Library Entry

No	Name	
1	CI01 BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10 1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20 D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	UNKNOWN	
5	UNKNOWN	
6	UNKNOWN	
7	UNKNOWN	
8	UNKNOWN	
9	UNKNOWN	
10	UNKNOWN	
11	UNKNOWN	
12	UNKNOWN	
13	TC 21 - UNKNOWN	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	TOT	862	12:27	1	1.000	A BB	245960.	250.000 NG	0.65
2	TOT	1004	14:31	2	1.000	A BB	294665.	250.000 NG	0.65
3	TOT	1347	19:28	3	1.000	A BB	347128.	250.000 NG	0.65
4	TOT	1517	21:55	3	1.126	A VV	9094140.	6549.530	16.98
5	TOT	1524	22:01	3	1.131	A VB	1929220.	1389.410	3.60
6	TOT	1547	22:21	3	1.148	A VB	5343230.	3848.170	9.98
7	TOT	1567	22:39	3	1.163	A BB	2869250.	2066.420	5.36
8	TOT	1576	22:46	3	1.170	A BV	1931260.	1390.890	3.61
9	TOT	1583	22:53	3	1.175	A VB	9298940.	6697.030	17.36
10	TOT	1615	23:20	3	1.199	A VV	2646020.	1905.650	4.94
11	TOT	1641	23:43	3	1.218	A BV	14825500.	10677.200	27.68
12	TOT	1711	24:44	3	1.270	A BB	4478460.	3225.370	8.36
13	RIC	1495	21:36	113	0.911	A BB	10427900.	70.338	0.18

7510.126 ng

J 9/13/93

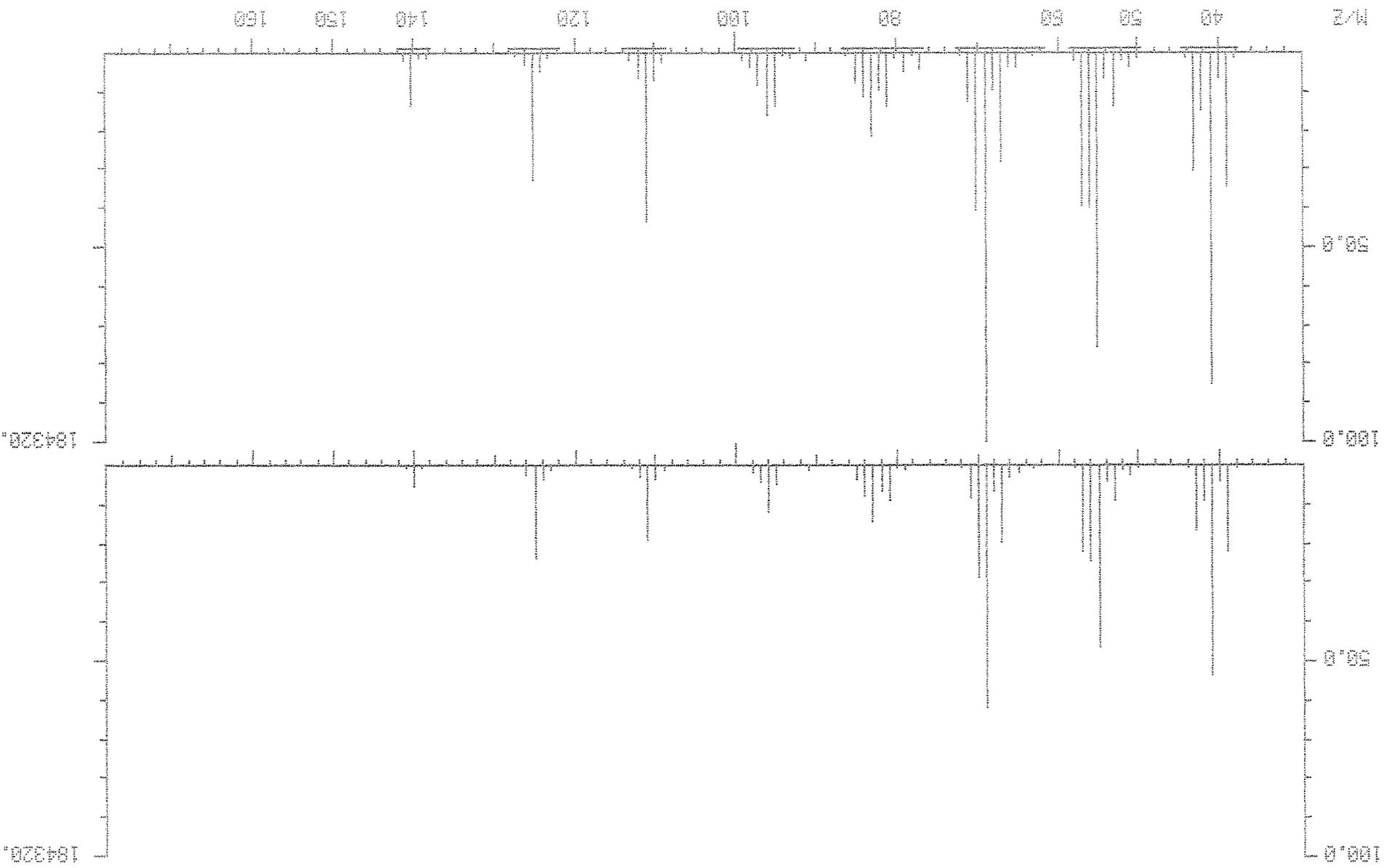
RF=1.0 DF= 1

Unknown Concentration

$$= \left[\frac{\text{ng IS} * \text{area unknown}}{\text{area IS}} \right] * \text{RF} * \text{DF}$$

DUAL MASS SPECTRUM
08/18/93 15:10:00 + 21:36
SAMPLE: H5042456 JOB2646
CONDS.: 150H
TEMP: 175 DEG. C
ENHANCED (S 158 2N 0T)

DATA: H2308 #1495
CALI: H2308 #3
BASE M/Z: 69 / 69
RIC: 885760. / 1472510.



Library Search
08/18/93 15:10:00 + 21:36
Sample: A9042456 JOB2646
Conds.: I50H
Enhanced (S 15B 2N 0T)

Data: H2308 #1495
Cali: H2308 # 3

Base m/z: 410090
RIC: 856064.

62231 spectra in LIBRARYNB searched for maximum FIT
148 matched at least 8 of the 16 largest peaks in the unknown

Rank In.	Name
1	7570 4-NONENE, 3-METHYL-, (Z)-
2	7576 CYCLOHEXANE, 1,1,2,3-TETRAMETHYL-
3	11039 CYCLOPENTANE, 1-BUTYL-2-ETHYL-
4	4619 CYCLOPENTANE, 1,1,3,4-TETRAMETHYL-, TRANS-
5	14725 CYCLOOCTANE, BUTYL-

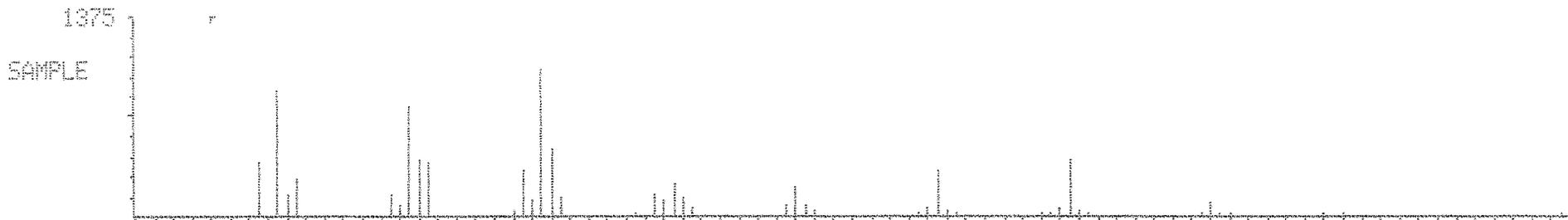
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C10. H20	140	55	668	968	668
2	C10. H20	140	69	724	967	724
3	C11. H22	154	69	641	960	641
4	C9. H18	126	41	580	957	580
5	C12. H24	168	69	631	957	631

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	63830-69-3
2	-----	-----	-----	-----	6783-92-2
3	-----	-----	-----	-----	72993-32-9
4	-----	-----	-----	-----	20309-77-7
5	-----	-----	-----	-----	16538-93-5

MID LIBRARY SEARCH (LIBRARYNB)
08/18/93 15:10:00 + 21:36
SAMPLE: A5042456 JOB2646
CONDS.: I50H
ENHANCED (S 15B 2N 0T)

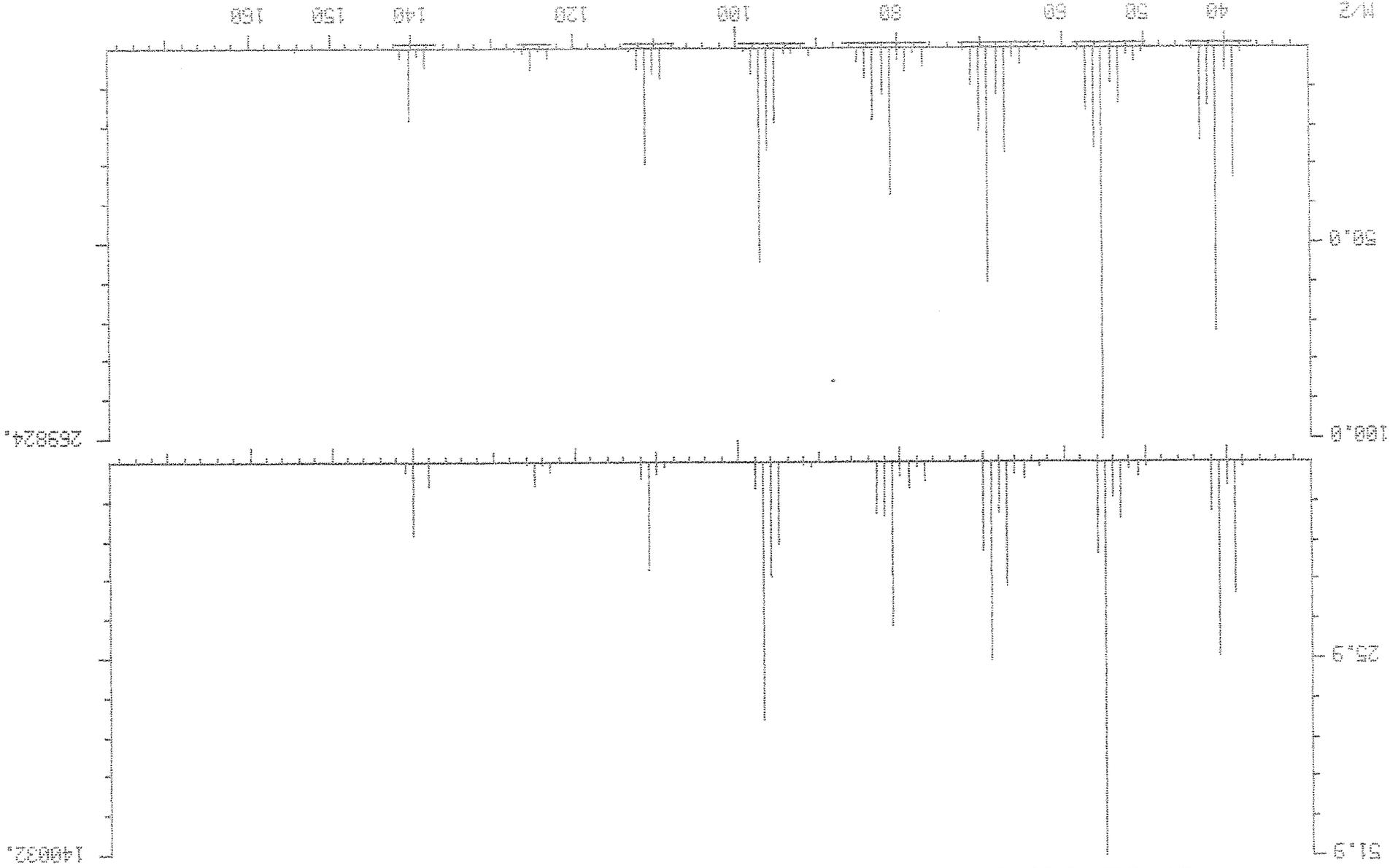
DATA: H2308 #1495
CALI: H2308 # 3

BASE M/Z: 69
RIC: 856064.



DUAL MASS SPECTRUM
08/18/93 15:10:00 + 21:35
SAMPLE: H5042456 JOB2646
COND5.: 150H
TEMP: 178 DEG. C
ENHANCED (5 150 24 0T)

DATA: H2308 #1917
CALI: H2308 #3
BASE M/Z: 55/ 55
RIC: 527744 / 2045000.



0093

Base m/z: 51
RIC: 921600

Data: H2308 #1517
Call: H2308 # 3

Library Search
08/18/93 15:10:00 + 21:55

Sample: A5042456 JDB2646

Cond: 150H

Enhanced (5.15B 2N 01)

62231 spectra in LIBRARYB searched for maximum FIT
102 matched at least 8 of the 16 largest peaks in the unknown

Rank In. Name

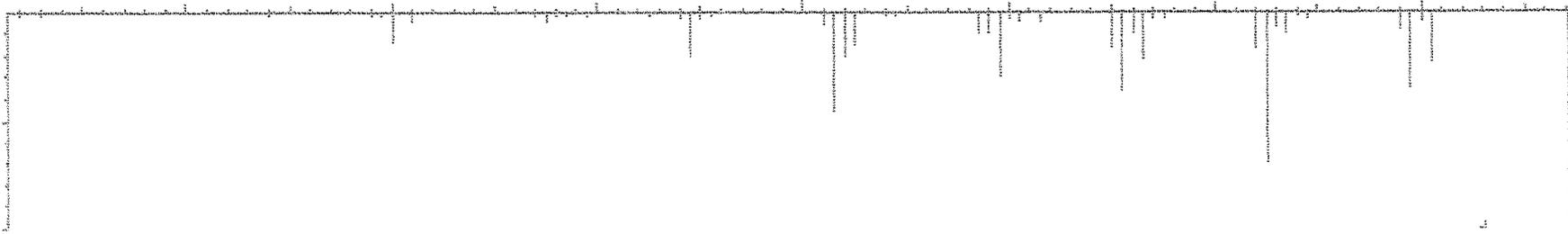
- 1 4252 CYCLOHEXANE, CYCLOPROPYL-
- 2 4253 1,6-HEPTADIENE, 3,3-DIMETHYL-
- 3 9120 CYCLOHEPTANEMETHANOL
- 4 7055 1,6-HEPTADIENE, 2,5,5-TRIMETHYL-
- 5 7056 1,4-HEPTADIENE, 3,3,6-TRIMETHYL-

Rank	Formula	M.Wt	B.Pk	Purity	FIT	RFIT
1	C9.H16	124	55	464	933	464
2	C9.H16	124	41	483	924	491
3	C8.H16.O	128	55	635	920	644
4	C10.H18	138	41	531	905	531
5	C10.H18	138	41	530	904	530

Rank	Ret. Time	B.P. Int.	US. Pat. 1	US. Pat. 2	C.A.S. #
1	-----	-----	-----	-----	32669-86-6
2	-----	-----	-----	-----	68701-61-1
3	-----	-----	-----	-----	4448-75-3
4	-----	-----	-----	-----	62238-28-2
5	-----	-----	-----	-----	74498-89-8

MID LIBRARY SEARCH (LIBRARY#B)
 08/18/93 15:16:00 + 21:55
 SAMPLE: A5042456 JOB2848
 COND5: 150H
 ENHANCED (5 158 2N 0T)
 DATA: H2308 #1517
 CALL: H2308 # 3
 RID: 921500
 BASE W/Z: 53

1432
 SAMPLE



09.H16

CYCLOHEXANE, CYCLOPROPYL-

CAS# 32669-86-6

M.WT 124
 B.PK 55
 RANK 1
 # 4252
 FIT 933



09.H16.D

1,6-HEPTADIENE, 3,3-DIMETHYL-

CAS# 68701-61-1

M.WT 124
 B.PK 41
 RANK 2
 # 4253
 FIT 924



M.WT 128
 B.PK 55
 RANK 3
 # 5120
 FIT 920

CYCLOHEPTANEMETHANOL

CAS# 4449-75-3

M/Z

40

50

60

100

120

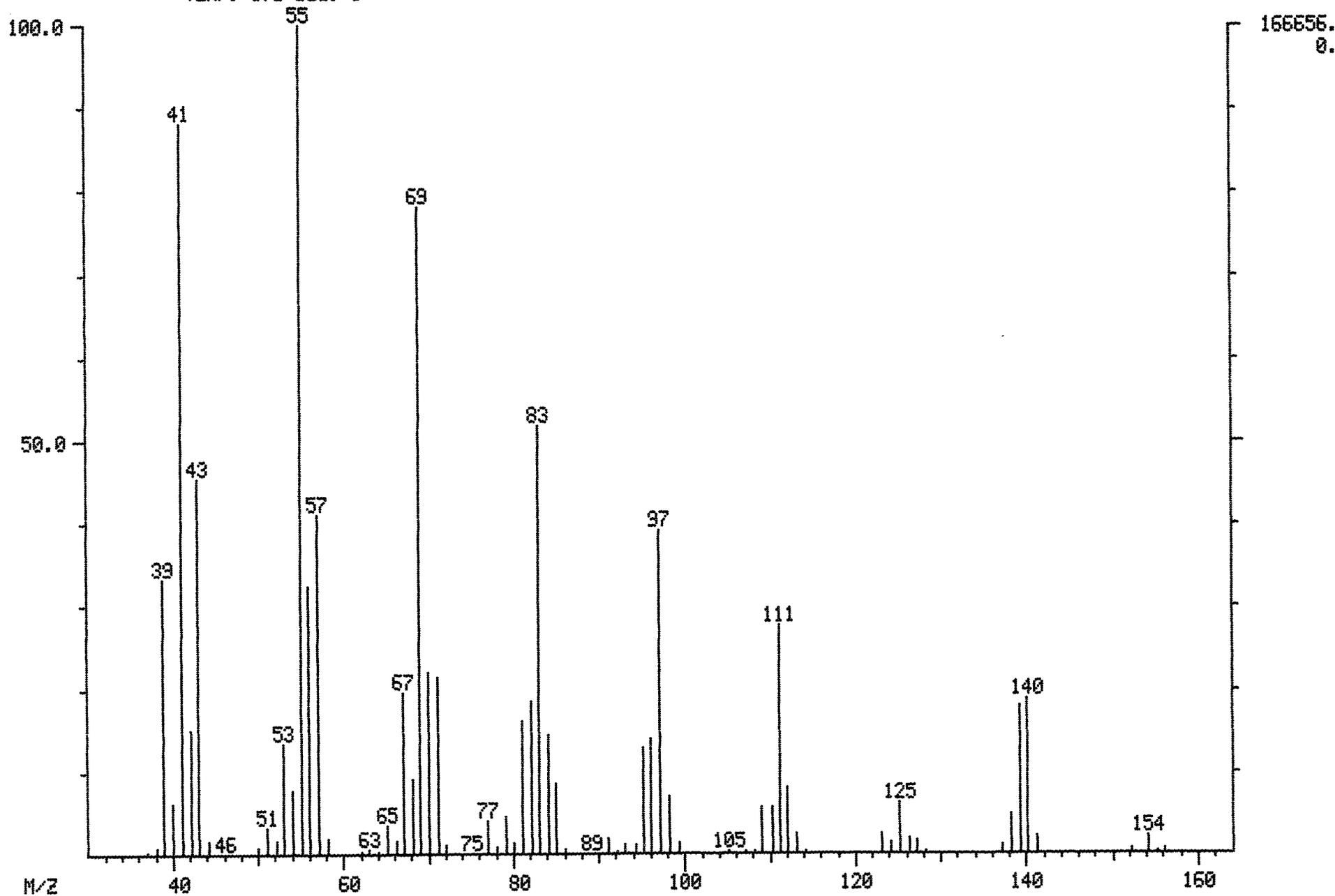
140

160

MASS SPECTRUM
08/18/93 15:10:00 + 22:01
SAMPLE: A5042456 JOB2546
CONDS.: 150H
TEMP: 179 DEG. C

DATA: H2308 #1524
CALI: H2308 #3

BASE M/Z: 55
RIC: 143700.

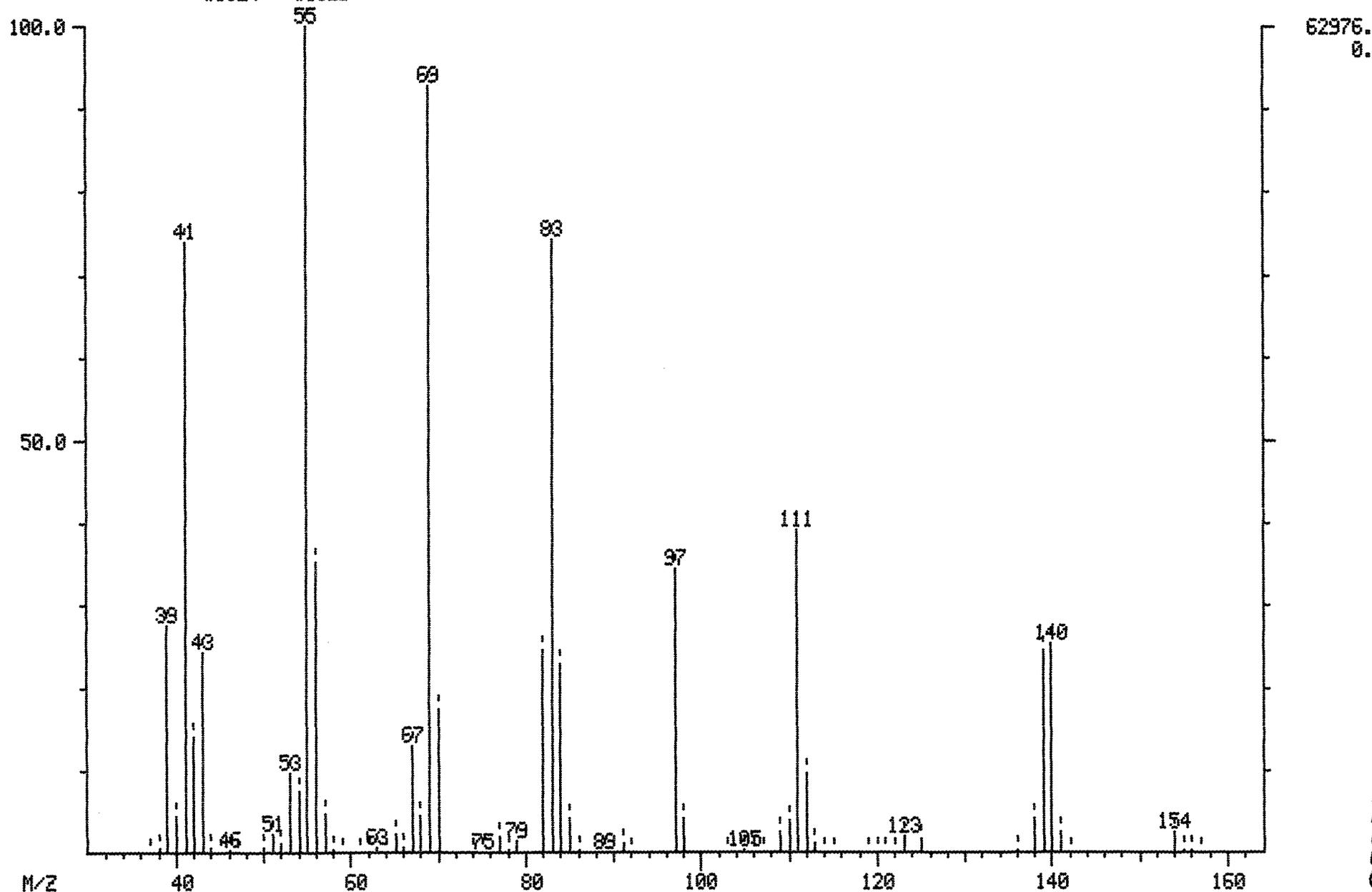


0095

MASS SPECTRUM
08/18/93 15:10:00 + 22:01
SAMPLE: A5042456 JOB2646
CONDS.: 150H
TEMP: 179 DEG. C
#1524 - #1529

DATA: H2308 #1524
CALI: H2308 #3

BASE M/2: 55
RIC: 457728.



96001

Library Search
08/18/93 15:10:00 + 22:01
Sample: AS042456 JOB2646
Conds.: I50H
#1524 - #1529

Data: H2308 #1524
Call: H2308 # 3

Base m/z: 55
RIC: 452096.

0097

53953 spectra in LIBRARYNB searched for maximum FIT
71 matched at least 8 of the 16 largest peaks in the unknown

Rank In.	Name
1 25796	2,5-PYRROLIDINEDIONE, 3-[[1-(ETHYLSULFONYL)ETHYL]-4-METHYL-
2 4072	CYCLOPENTANE, 1,1,3,4-TETRAMETHYL-, TRANS-
3 4087	CYCLOHEXANE, 1,1,3-TRIMETHYL-
4 4114	CYCLOHEXANE, 1,1,2-TRIMETHYL-
5 6523	CYCLOPROPANE, 1,1,2-TRIMETHYL-3-(2-METHYLPROPYL)-

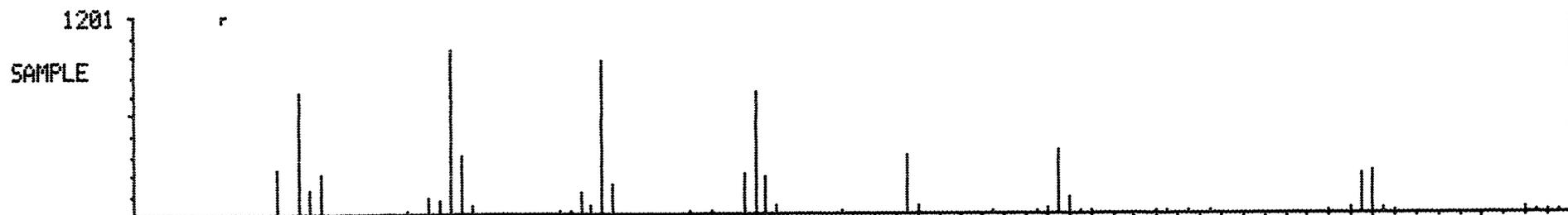
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9. H15. O4. N. S	233	69	307	1000	307
2	C9. H18	126	69	667	962	667
3	C9. H18	126	69	604	961	607
4	C9. H18	126	69	618	953	622
5	C10. H20	140	55	685	946	685

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	---	---	---	---	58467-34-8
2	---	---	---	---	20309-77-7
3	---	---	---	---	3073-66-3
4	---	---	---	---	7094-26-0
5	---	---	---	---	41977-43-9

MID LIBRARY SEARCH (LIBRARYNB)
08/18/93 15:10:00 + 22:01
SAMPLE: A5042456 JOB2646
CONDS.: 150H
#1524 - #1529

DATA: H2308 #1524
CALI: H2308 # 3

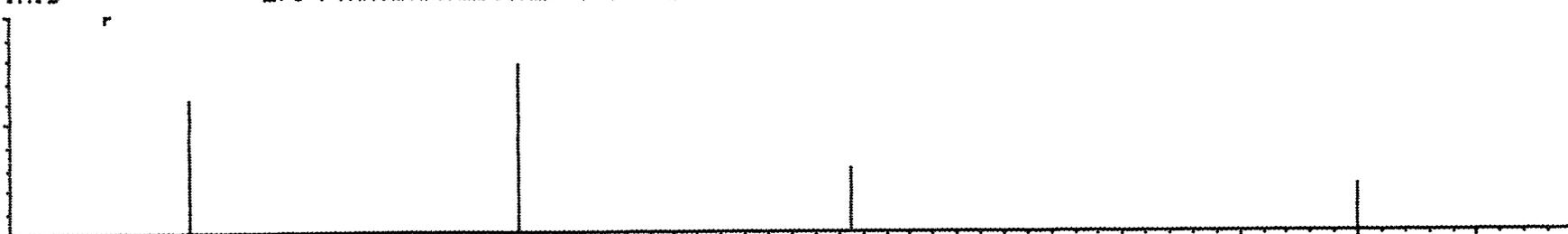
BASE M/2: 55
RIC: 452096.



C9.H15.O4.N.S

2,5-PYRROLIDINEDIONE, 3-[1-(ETHYLSULFONYL)ETHYL]-4-METHYL-

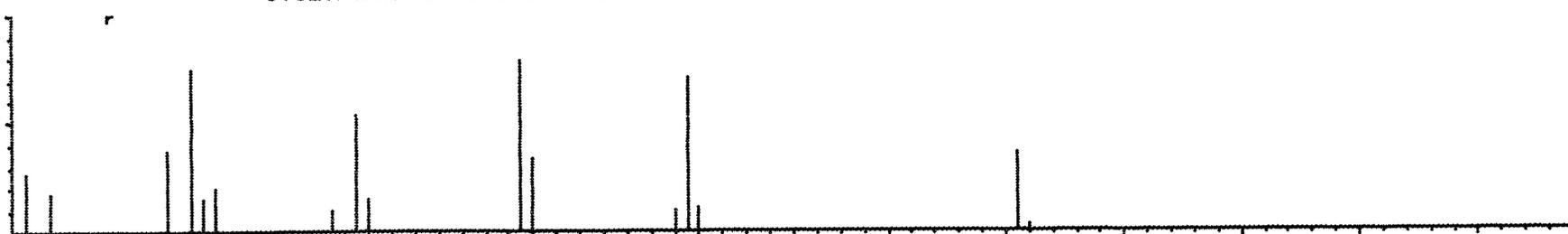
1201
M WT 233
B PK 69
RANK 1
25795
FIT 1000



C9.H18

CYCLOPENTANE, 1,1,3,4-TETRAMETHYL-, TRANS-

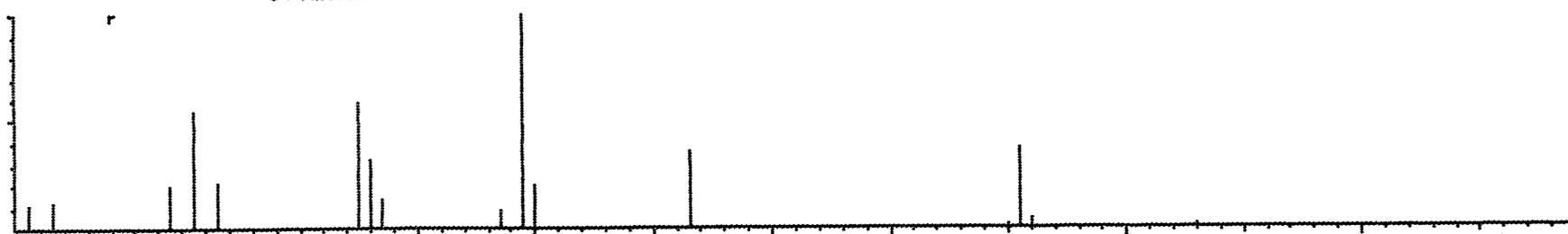
1201
M WT 126
B PK 69
RANK 2
4072
FIT 962



C9.H18

CYCLOHEXANE, 1,1,3-TRIMETHYL-

1201
M WT 126
B PK 69
RANK 3
4087
FIT 961



M/Z

40

60

80

100

120

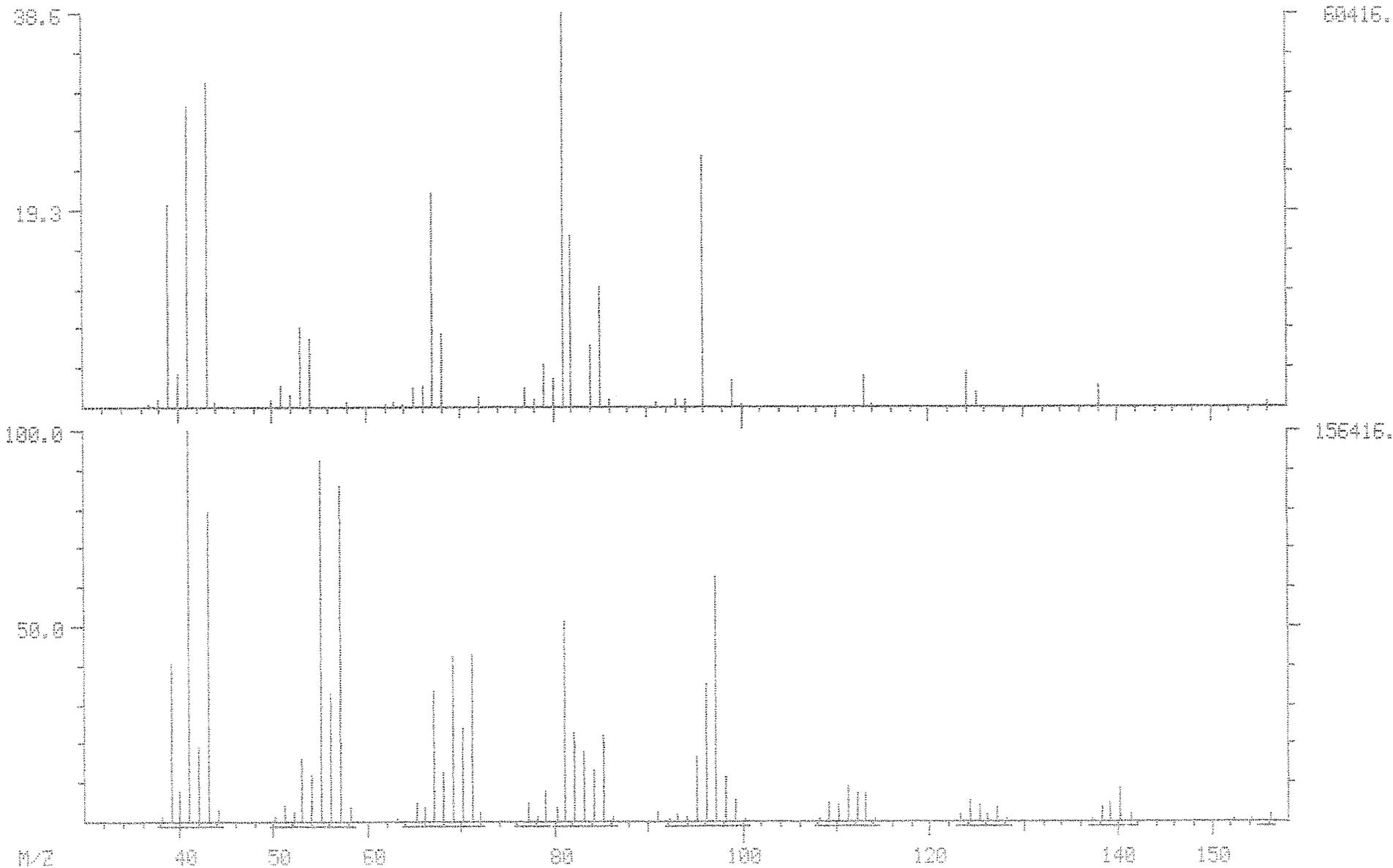
140

10098

DUAL MASS SPECTRUM
08/18/93 15:10:00 + 22:21
SAMPLE: A5042456 JOB2546
CONDS.: I50H
TEMP: 182 DEG. C
ENHANCED (S 15B 2H 0T)

DATA: H2308 #1547
CALI: H2308 #3

BASE M/Z: 81/ 41
RIC: 410112./ 1599496.



0100

Base m/z: 8101408
RIC: 401408

Data: H2308 #1547
Call: H2308 # 3

Library Search
08/18/93 15:10:00 + 22:21
Sample: A6042456 J082646
Cond: 150H

Enhanced (S 158 ZN 01)

62281 spectra in LIBRARYB searched for maximum FIT
134 matched at least 7 of the 16 largest peaks in the unknown

Rank In	Name
1	1144 2,3-HEXADIENE, 2-METHYL-
2	4270 PENTALENE, OCTAHYDRO-2-METHYL-
3	1110 2,4-HEPTADIENE, (E,E)-
4	1139 1,4-HEXADIENE, 2-METHYL-
5	1118 2-HEXYNE, 4-METHYL-

Rank	Formula	M. Wt	B. PK	Purity	Fit	RT16
1	C7.H12	96	41	556	882	594
2	C9.H16	124	81	632	880	708
3	C7.H12	96	81	617	870	644
4	C7.H12	96	81	603	867	648
5	C7.H12	96	81	596	864	610

Rank	Ret. Time	B.P. Int.	US. Pat. 1	US. Pat. 2	C.A.S. #
1	-----	-----	-----	-----	29212-09-7
2	-----	-----	-----	-----	3868-64-2
3	-----	-----	-----	-----	2384-94-3
4	-----	-----	-----	-----	1119-14-8
5	-----	-----	-----	-----	20198-49-6

MID LIBRARY SEARCH (LIBRARYB)
08/18/93 15:18:00 + 22:21
SAMPLE: 45042+56 JOB25+6
COND5: 150H
ENHANCED (5 158 2N 0T)

DATA: H2308 #1547
CALL: H2308 # 3
RICI: 401408
BASE M/Z: 81

1261
SAMPLE

07.H12

M WT 96
B PK 41
RANK 1
1144
FIT 882

2,3-HEXADIENE, 2-METHYL-

095# 29212-09-7

09.H16

M WT 124
B PK 81
RANK 2
4270
FIT 880

PENTADIENE, OCTAHYDRO-2-METHYL-

095# 3868-64-2

07.H12

M WT 96
B PK 81
RANK 3
1118
FIT 878

2,4-HEPTADIENE, (E,E)-

095# 2384-94-3

M/Z

40

50

80

100

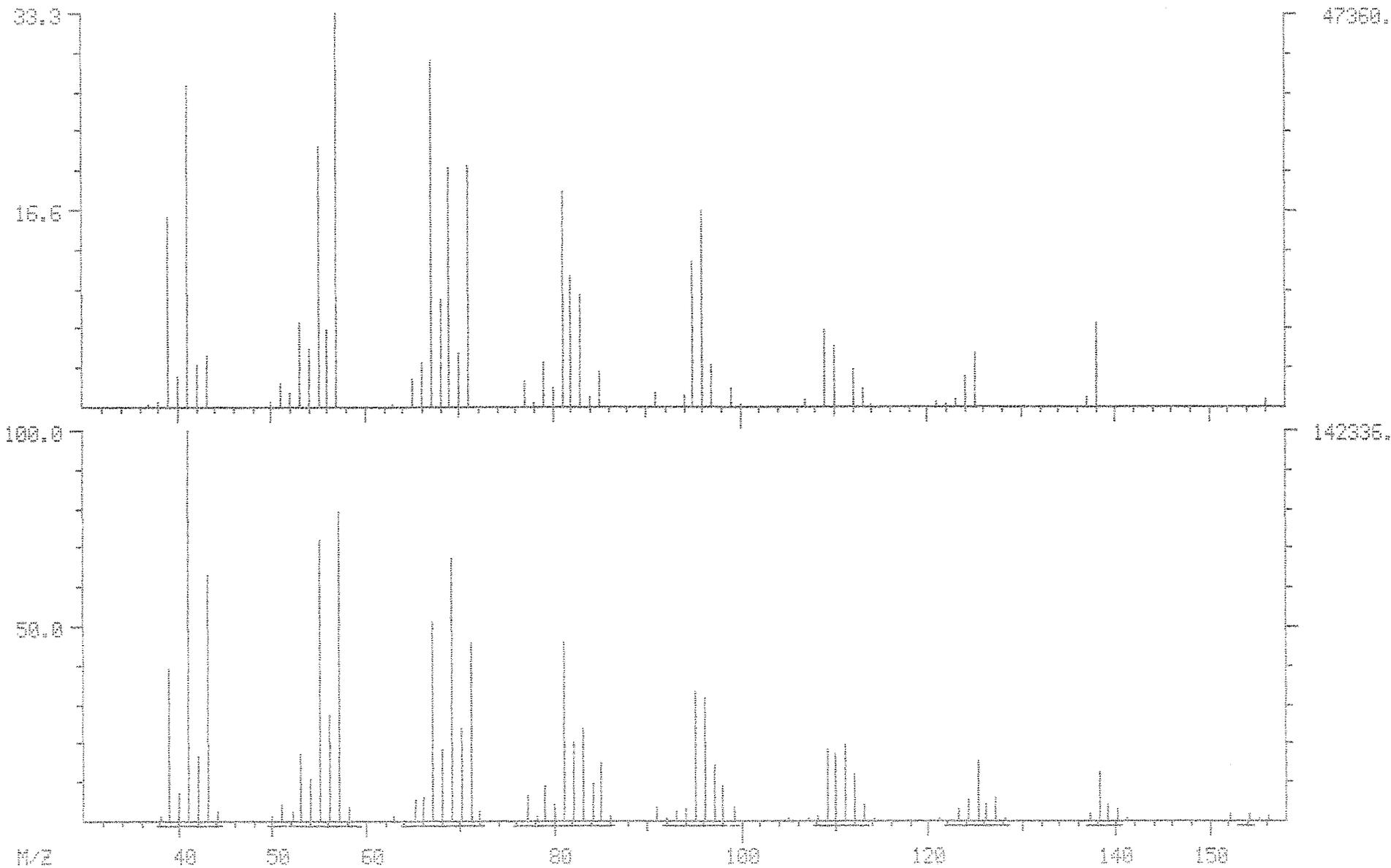
120

140

DUAL MASS SPECTRUM
08/18/93 15:10:00 + 22:40
SAMPLE: A5042455 JOB2545
CONDS.: 150H
TEMP: 185 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: H2308 #1568
CALI: H2308 #3

BASE M/Z: 57/ 41
RIC: 487936./ 1484900.



0102

Base m/z: 57
RIC: 467968

Date: H2308 #1568
Call: H2308 # 3

Library Search
08/18/93 15:10:00 + 22:40
Sample: A5042456 J082646

Conds: 150H
Enhanced (5 158 2N 0T)

6231 spectra in LIBRARYB searched for maximum FIT
96 matched at least 8 of the 16 largest peaks in the unknown

Rank In. Name

- 1 4252 CYCLOHEXANE, CYCLOPPROPYL-
- 2 18942 8-DODECENOL
- 3 32049 11-HEXADECEN-1-OL, (Z)-
- 4 25960 CIS-9-TETRADECEN-1-OL
- 5 7099 NAPHTHALENE, DECAHYDRO-, CIS-

Rank

Formula

- 1 C9H16
- 2 C12H24O
- 3 C16H32O
- 4 C14H28O
- 5 C10H18

Rank

Ret. Time

B.P. Int.

US. Pat. 1

US. Pat. 2

C.A.S. #

- 1 32669-86-6
- 2 42513-42-8
- 3 56683-34-6
- 4 35153-15-2
- 5 493-01-5

Rank

Ret. Time

B.P. Int.

US. Pat. 1

US. Pat. 2

C.A.S. #

- 1 938
- 2 601
- 3 448
- 4 453
- 5 592

Rank

Ret. Time

B.P. Int.

US. Pat. 1

US. Pat. 2

C.A.S. #

- 1 938
- 2 601
- 3 448
- 4 453
- 5 592

Rank

Ret. Time

B.P. Int.

US. Pat. 1

US. Pat. 2

C.A.S. #

- 1 938
- 2 601
- 3 448
- 4 453
- 5 592

Rank

Ret. Time

B.P. Int.

US. Pat. 1

US. Pat. 2

C.A.S. #

- 1 938
- 2 601
- 3 448
- 4 453
- 5 592

Rank

Ret. Time

B.P. Int.

US. Pat. 1

US. Pat. 2

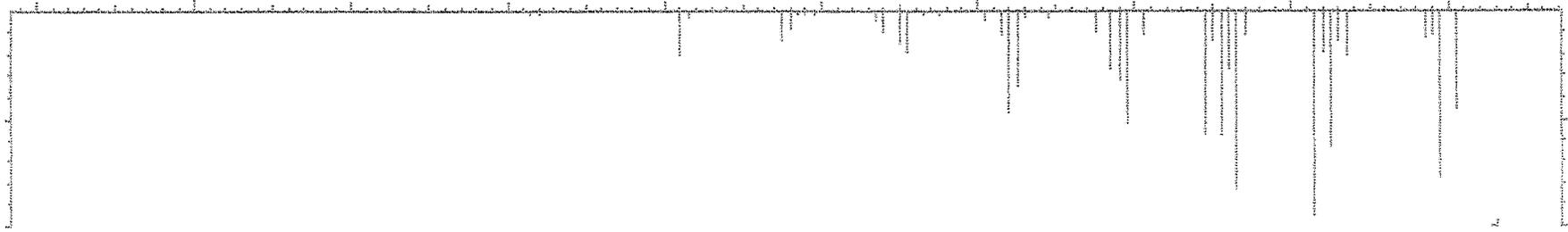
C.A.S. #

- 1 938
- 2 601
- 3 448
- 4 453
- 5 592

MID LIBRARY SEARCH (LIBRARY#)
 08/18/93 15:10:00 + 22:40
 SAMPLE: 05042456 JOB2546
 COND5: 1504
 ENHANCED (5 158 20 01)

DATA: H2308 #1558
 CALL: H2308 # 3
 RICI: 467958
 BASE M/Z: 57

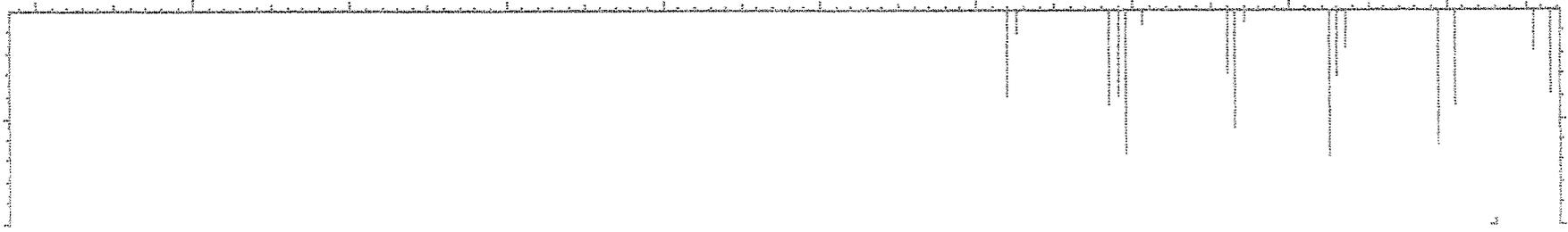
1991
 SAMPLE



CAS# 32669-86-6

CYCLOHEXANE, CYCLOPROPYL-

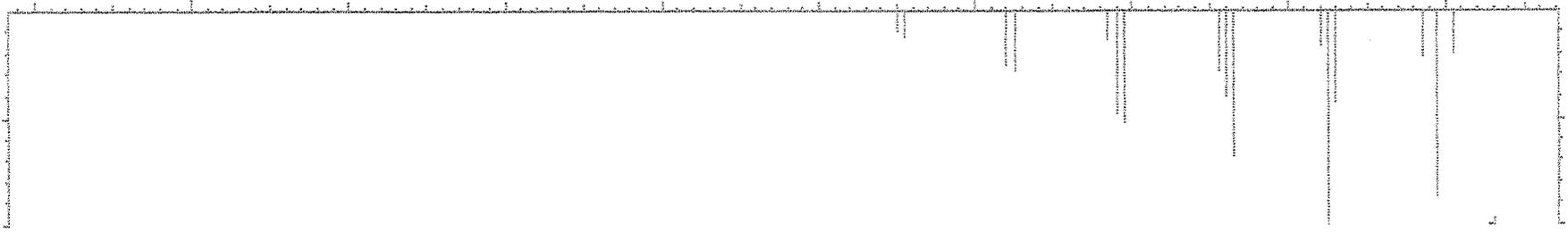
09.H15
 1991
 M MT 124
 B PK 55
 RANK 1
 # 4252
 FIT 558



CAS# 42513-42-8

8-DODECENOL

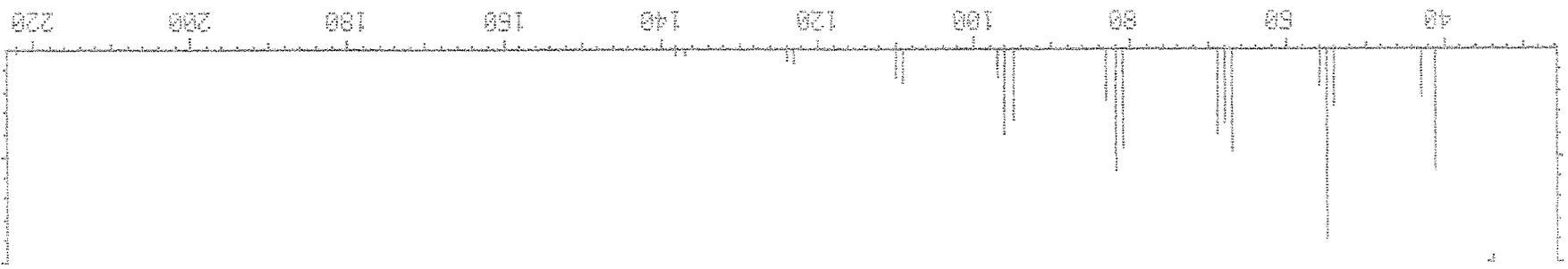
012.H24.0
 1991
 M MT 184
 B PK 55
 RANK 2
 # 18942
 FIT 947



CAS# 56683-54-6

11-HEXADECEN-1-OL, (Z)-

016.H32.0
 1991
 M MT 248
 B PK 55
 RANK 3
 # 32049
 FIT 585

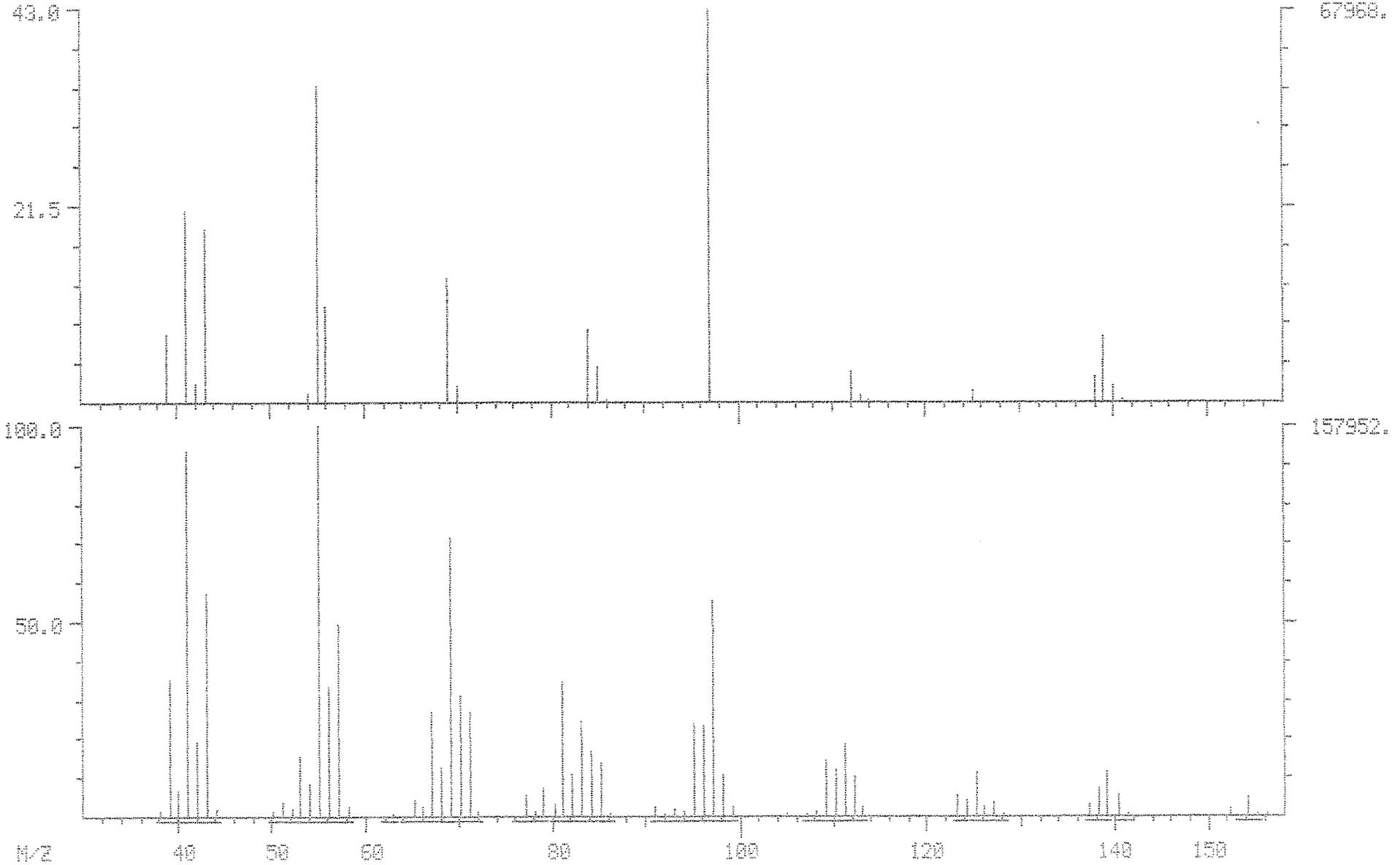


M/Z

DUAL MASS SPECTRUM
08/18/93 15:10:00 + 22:45
SAMPLE: AS042456 JOB2645
CONDS.: 150H
TEMP: 187 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: H2308 #1576
CALI: H2308 #3

BASE M/Z: 97/ 55
RIC: 291328./ 1527810.



Library Search Data: H2308 #1576 Base m/z: 97
 08/18/93 15:10:00 + 22:46 Call: H2308 # 3 RIC: 291328.
 Sample: A5042456 JOB2646
 Cond: 150H
 Enhanced (S 158 2N 0T)

62231 spectra in LIBRARYB searched for maximum FIT
 210 matched at least 7 of the 16 largest peaks in the unknown

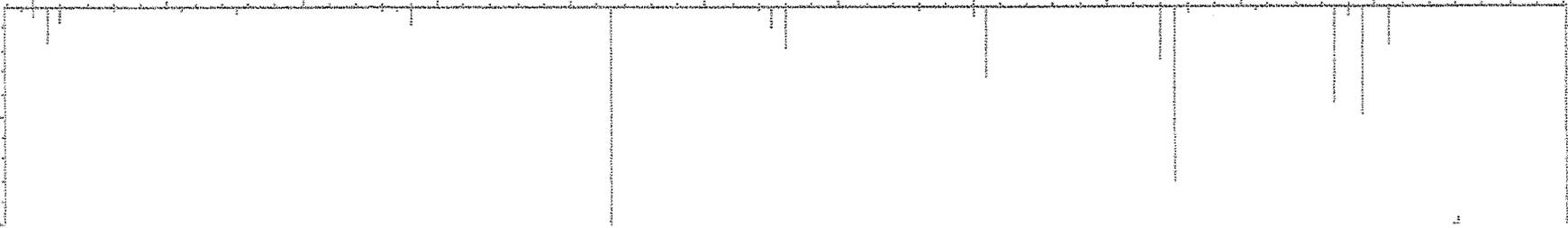
Rank In.	Name	Rank	Formula	M.Wt	B.Pk	Purity	Fit	RFit
1	3723 3-CHLORHEXANE	1	C6.H13.Cl	120	55	427	871	466
2	2684 CYCLOHEXANE, 1,3-DIMETHYL-	2	C8.H16	112	97	674	869	722
3	2658 CYCLOHEXANE, 1,3-DIMETHYL-, TRANS-	3	C8.H16	112	55	693	845	744
4	2669 CYCLOHEXANE, 1,4-DIMETHYL-	4	C8.H16	112	55	638	842	706
5	2665 CYCLOHEXANE, 1,4-DIMETHYL-, TRANS-	5	C8.H16	112	55	690	841	744

Rank	Ret. Time	B.P. Int.	US. Pat. 1	US. Pat. 2	C.A.S. #
1	-----	-----	-----	-----	2346-81-8
2	-----	-----	-----	-----	591-21-9
3	-----	-----	-----	-----	2207-03-6
4	-----	-----	-----	-----	589-90-2
5	-----	-----	-----	-----	2207-04-7

MID LIBRARY SEARCH (LIBRARYB)
09/18/93 15:10:00 + 22:45
SAMPLE: A5042455 J082646
COND5: 150H
ENHANCED (> 158 2N 0T)

DATA: H2308 #1576
CALL: H2308 # 3
BASE M/Z: 97
RICH: 291928.

1000
SAMPLE

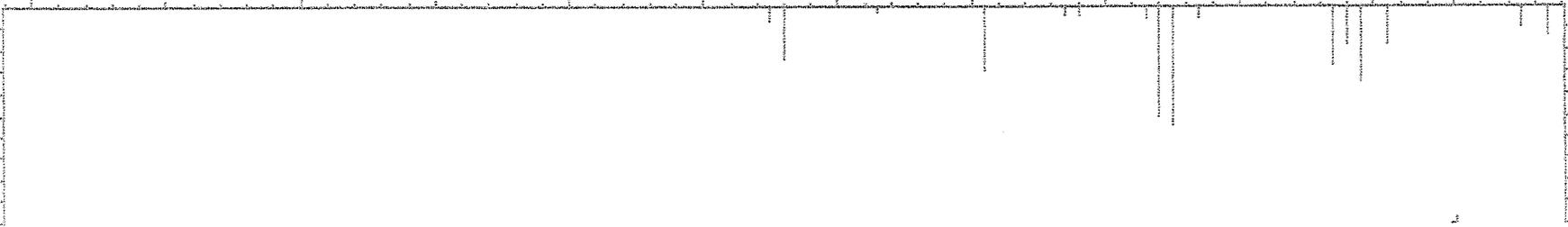


06. H13. CL

3-CHLOROHEXANE

CAS# 2346-81-8

1000
M MT 120
B PK 95
RANK 1
3723
FIT 871

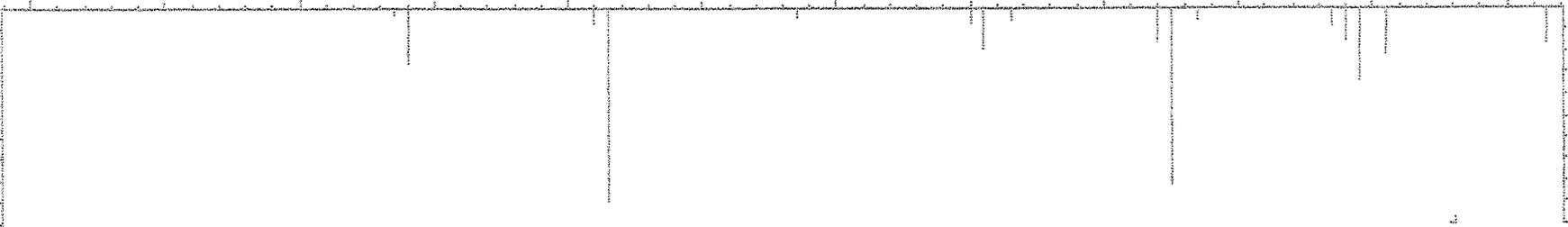


08. H16

CYCLOHEXANE, 1,3-DIMETHYL-

CAS# 591-21-9

1000
M MT 112
B PK 97
RANK 2
2684
FIT 869

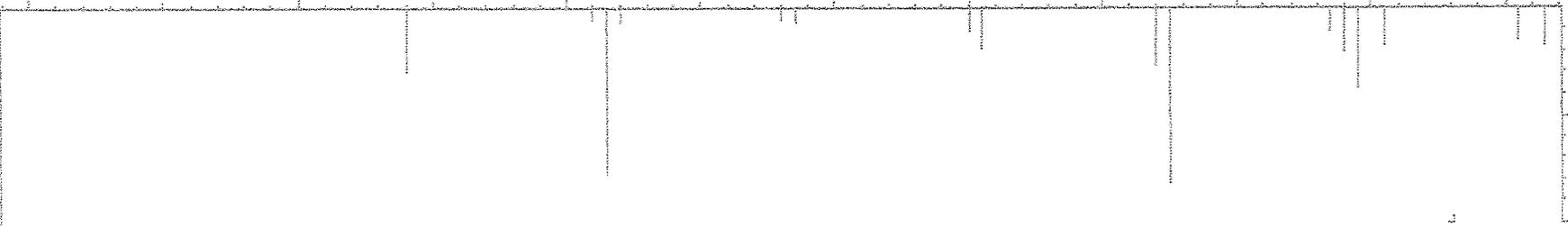


08. H16

CYCLOHEXANE, 1,3-DIMETHYL-, TRANS-

CAS# 2287-03-5

1000
M MT 112
B PK 95
RANK 3
2658
FIT 845



M/Z

40

60

80

100

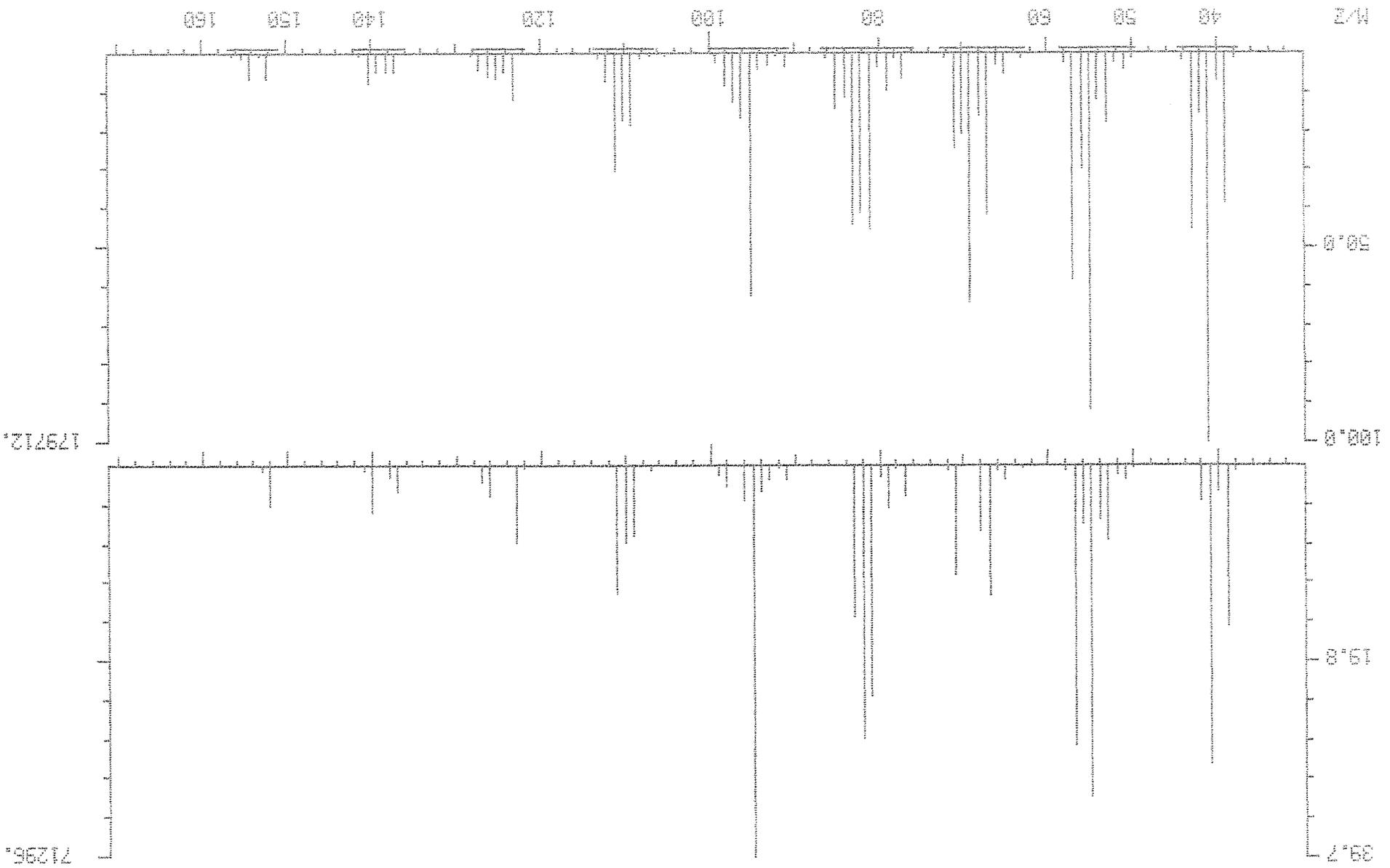
120

140

BASE M/Z: 95 / 41
RIC: 534888. / 1896210.

DATA: H2308 #1593
CALI: H2308 #3

DUAL MASS SPECTRUM
08/18/93 15:10:00 + 22:53
SAMPLE: A5042456 JOB2646
COND5: 150H
TEMP: 187 DEG. C
ENHANCED (S 158 2N 0T)



Library Search
08/18/93 15:10:00 + 22:53
Sample: A6042456 JOB2646
Conds.: I50H
Enhanced (S 15B 2N 0T)

Data: H2308 #1583
Call: H2308 # 3

Base m/z: 10109
RIC: 626688.

62231 spectra in LIBRARYNB searched for maximum FIT
152 matched at least 7 of the 16 largest peaks in the unknown

Rank In.	Name
1	2378 2,4-HEXADIENE, 3,4-DIMETHYL-, (Z,Z)-
2	2380 2,4-HEXADIENE, 3,4-DIMETHYL-, (E,Z)-
3	4241 CYCLOHEXANE, 2-PROPENYL-
4	2377 1,4-HEXADIENE, 2,3-DIMETHYL-
5	2277 1H-IMIDAZOLE, 2-PROPYL-

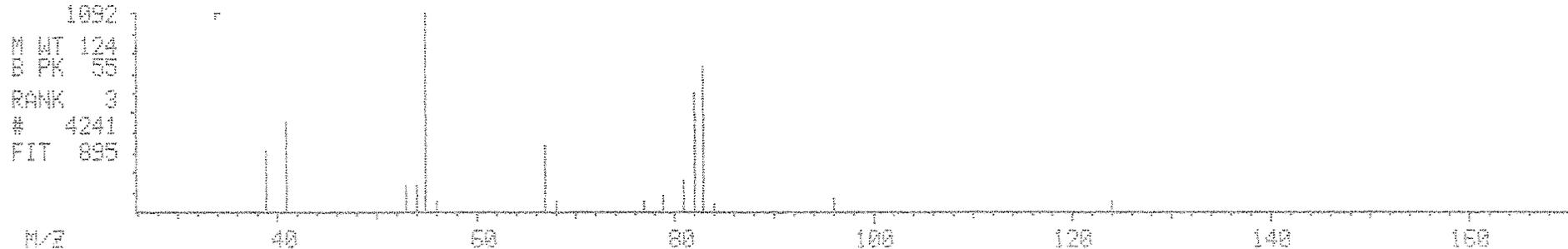
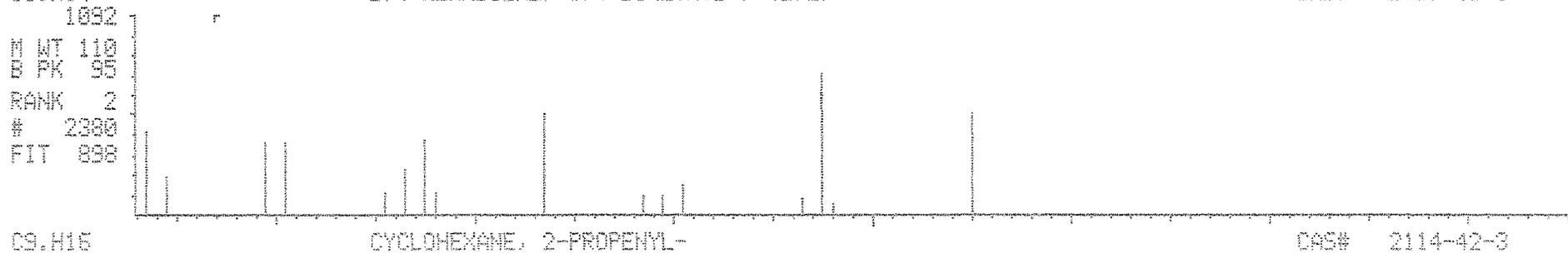
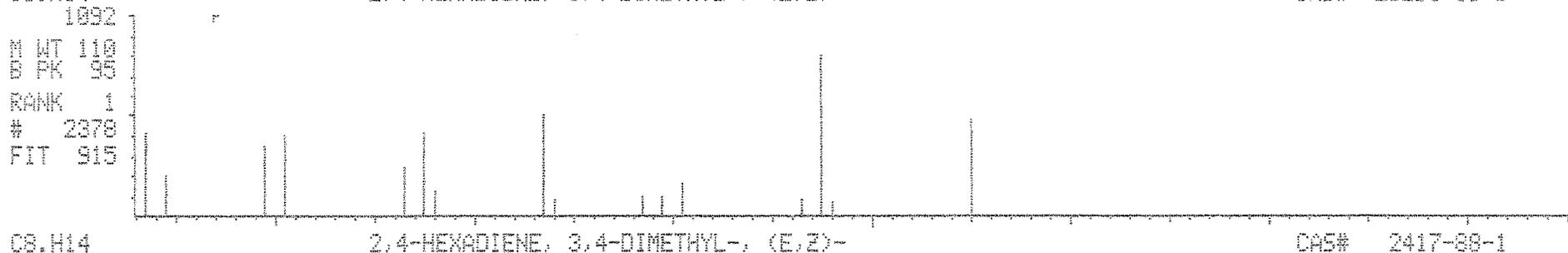
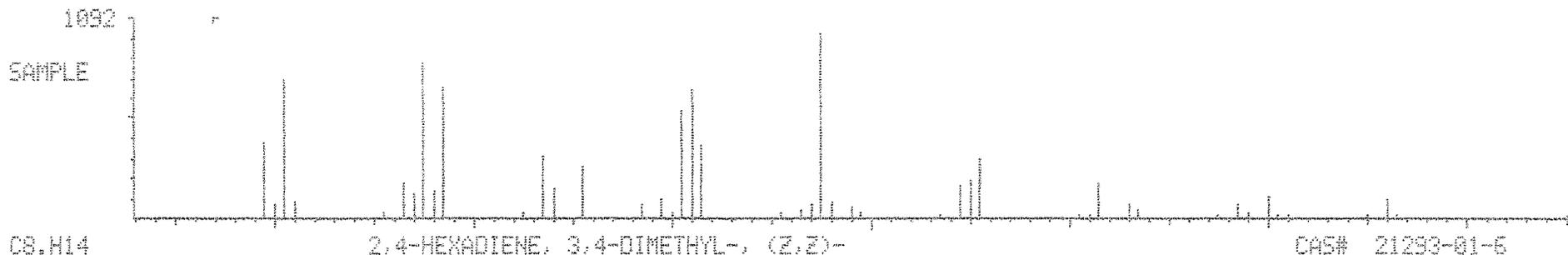
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C8. H14	110	95	460	915	460
2	C8. H14	110	95	439	898	439
3	C9. H16	124	55	418	895	435
4	C8. H14	110	95	443	893	456
5	C6. H10. N2	110	82	463	891	463

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	21293-01-6
2	-----	-----	-----	-----	2417-88-1
3	-----	-----	-----	-----	2114-42-3
4	-----	-----	-----	-----	18669-52-8
5	-----	-----	-----	-----	50995-95-4

MID LIBRARY SEARCH (LIBRARY.ND)
08/18/93 15:10:00 + 22:53
SAMPLE: A5042455 JOB2646
COMDS.: I50H
ENHANCED (S 156 2H 0T)

DATA: H2308 #1583
CALI: H2308 # 3

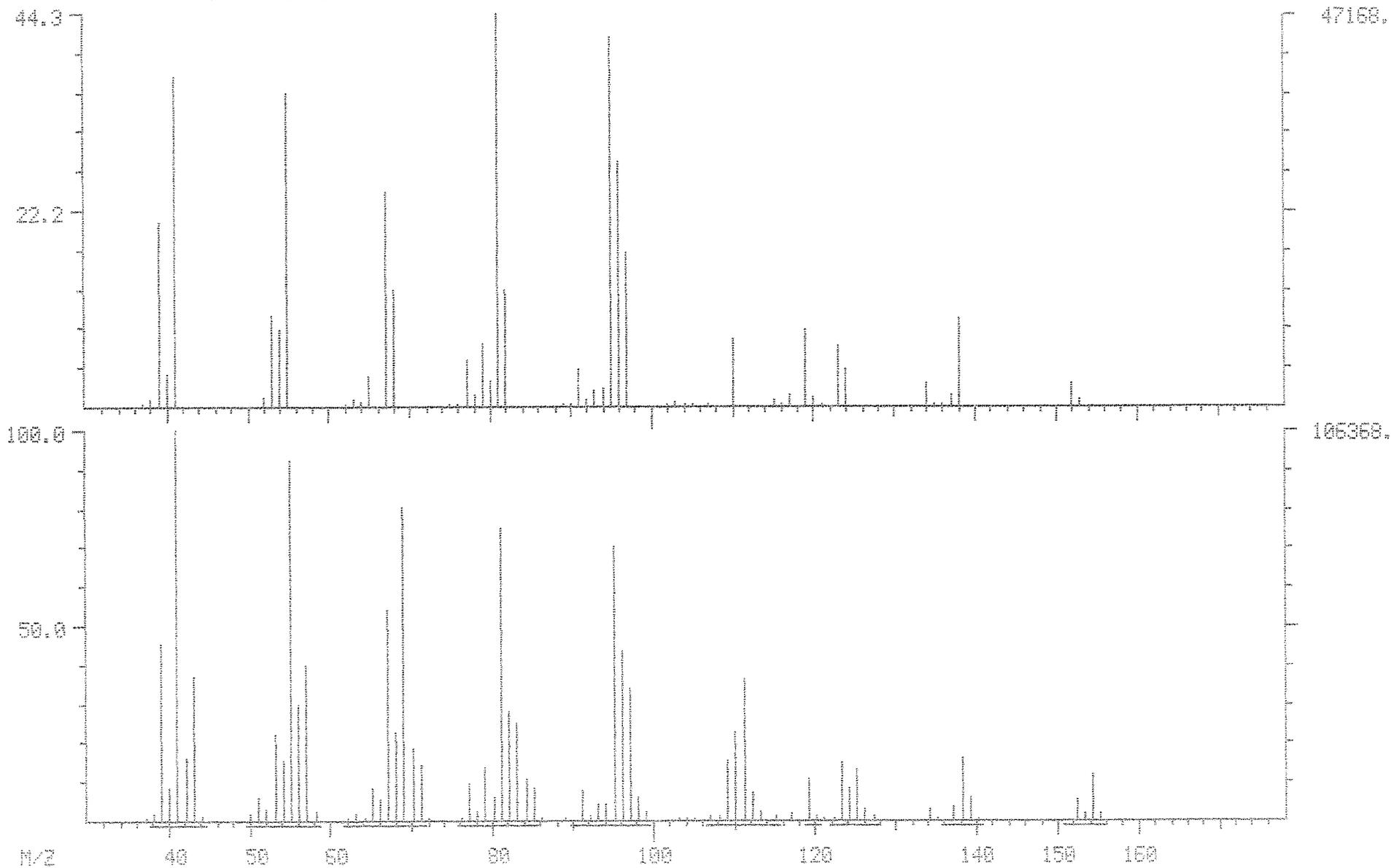
BASE M/Z: 95
RID: 626688.



DUAL MASS SPECTRUM
08/18/93 15:10:00 + 23:20
SAMPLE: A5042456 JOB2646
CONDS.: 150H
TEMP: 192 DEG. C
ENHANCED (S 15B 2H 0T)

DATA: H2308 #1615
CALI: H2308 #3

BASE M/Z: 81/ 41
RIC: 408576./ 1251330.



Library Search
08/18/93 15:10:00 + 23:20
Sample: A9042456 JOB2646
Conds.: I50H
Enhanced (8 15B 2N 0T)

Data: H2308 #1615
Cali: H2308 # 3

Base m/z: 81
RIC: 404992.

0112

62231 spectra in LIBRARYNB searched for maximum FIT
103 matched at least 8 of the 16 largest peaks in the unknown

Rank In.	Name
1	4274 4,5--NONADIENE
2	2371 1,4--HEPTADIENE, 3--METHYL--
3	1093 PENTADIENAL, 2--METHYL--
4	1105 2,5--HEPTADIENE, (E,E)--
5	7034 CYCLOHEXENE, 4--METHYL--1--(1--METHYLETHYL)--

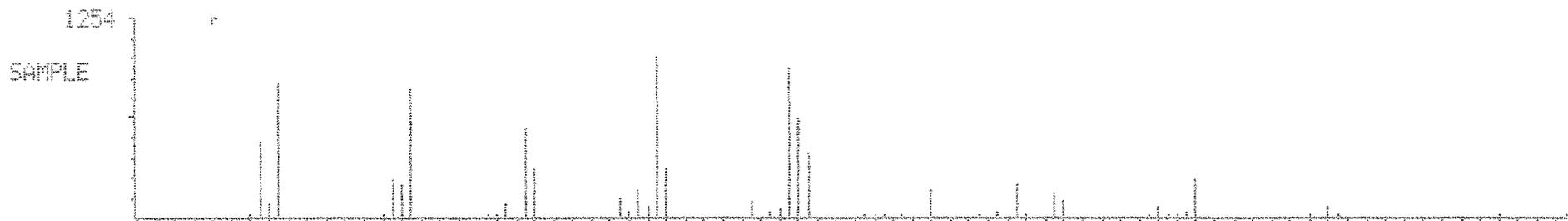
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9. H16	124	67	669	954	669
2	C8. H14	110	81	568	938	578
3	C6. H8. O	96	96	382	926	382
4	C7. H12	96	81	508	925	516
5	C10. H18	138	95	669	920	692

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	821-74-9
2	-----	-----	-----	-----	1603-01-6
3	-----	-----	-----	-----	3937-51-7
4	-----	-----	-----	-----	39619-60-8
5	-----	-----	-----	-----	500-00-5

MID LIBRARY SEARCH (LIBRARY#B)
08/18/93 15:10:00 + 23:20
SAMPLE: A5042456 JOB2546
COND5.: I50M
ENHANCED (S 15B 2N 0T)

DATA: H2308 #1615
CALI: H2308 # 3

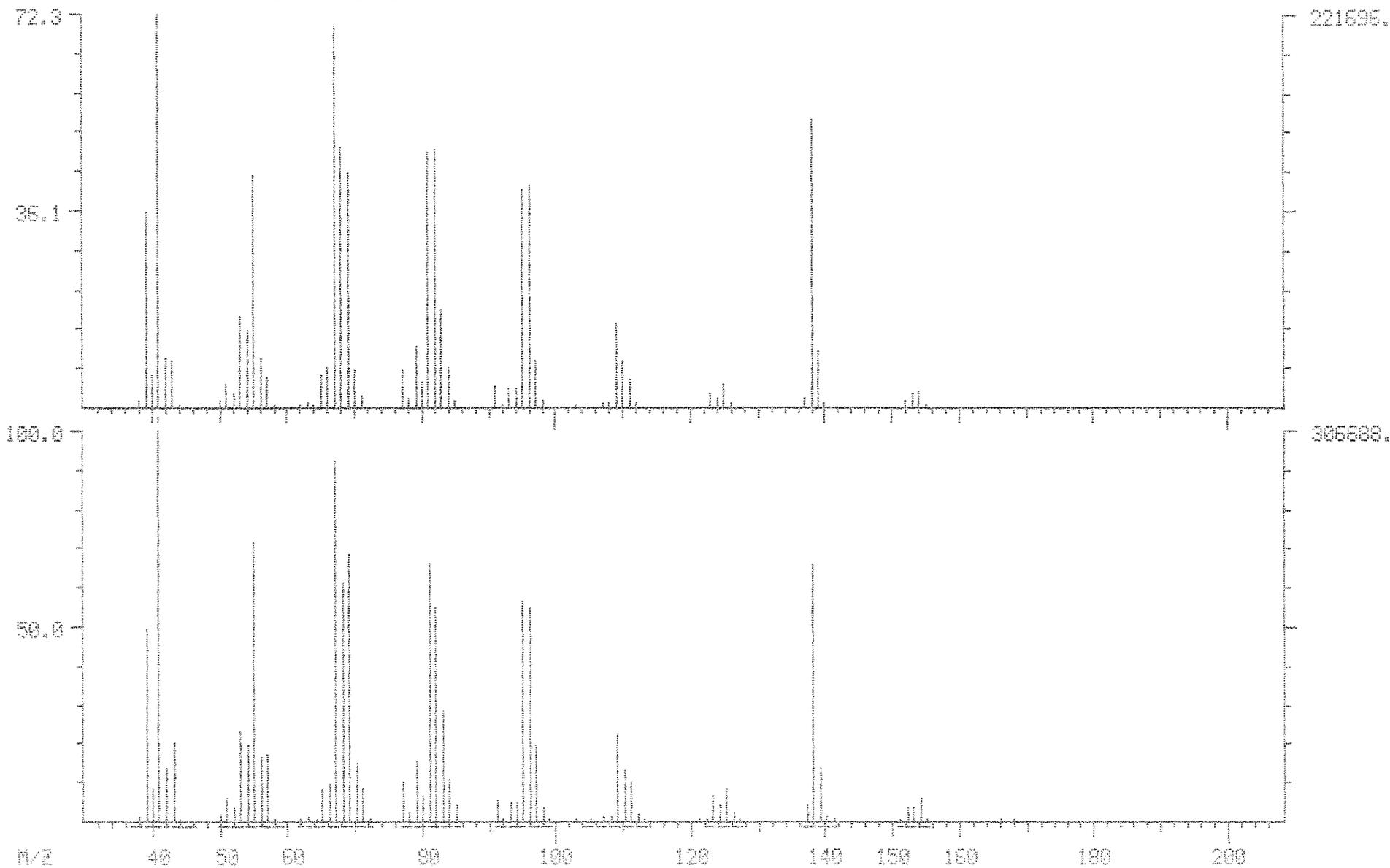
BASE M/Z: 81
RIC: 404992.



DUAL MASS SPECTRUM
08/18/93 15:10:00 + 23:43
SAMPLE: AS042456 JOB2646
COND5.: 150H
TEMP: 196 DEG. C
ENHANCED (S 15B 2M 0T)

DATA: H2308 #1641
CALI: H2308 #3

BASE M/Z: 41/ 41
RIC: 2392060./ 3526660.



Library Search
08/18/93 15:10:00 + 23:43
Sample: A5042456 JOB2646
Conds.: 150H
Enhanced (S 15B 2N 0T)

Data: H2308 #1641
Cali: H2308 # 3

Base m/z: 410115
RIC: 2301950.

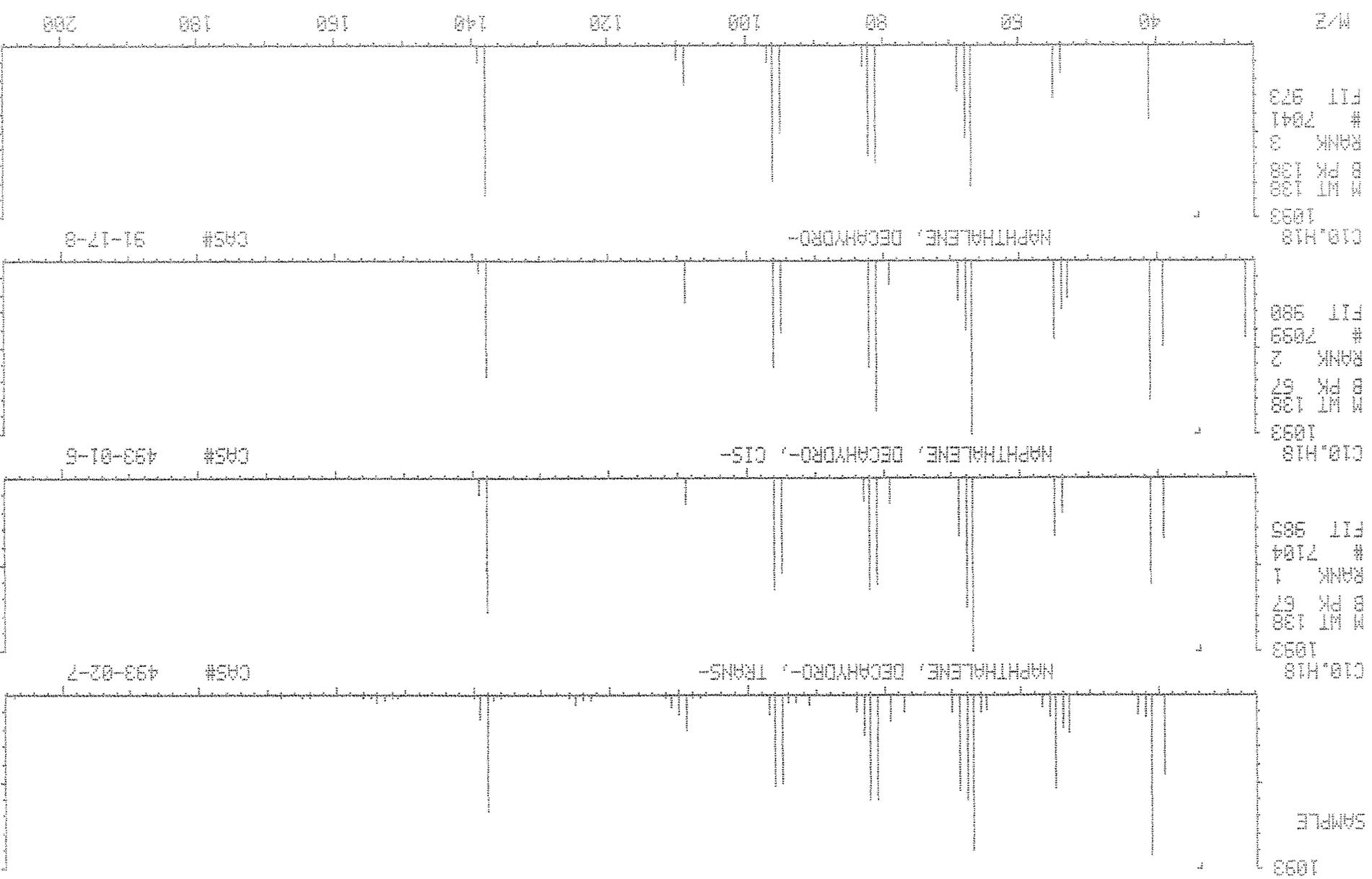
62231 spectra in LIBRARYNS searched for maximum FIT
130 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	7104	NAPHTHALENE, DECAHYDRO-, TRANS-
2	7099	NAPHTHALENE, DECAHYDRO-, CIS-
3	7041	NAPHTHALENE, DECAHYDRO-
4	4274	4, 5-NONADIENE
5	18957	7-DODECENOL

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C10. H18	138	67	794	985	794
2	C10. H18	138	67	779	980	779
3	C10. H18	138	138	776	973	776
4	C9. H16	124	67	574	971	574
5	C12. H24. O	184	55	629	964	629

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	493-02-7
2	-----	-----	-----	-----	493-01-6
3	-----	-----	-----	-----	91-17-8
4	-----	-----	-----	-----	821-74-9
5	-----	-----	-----	-----	16695-40-2

MID LIBRARY SEARCH (LIBRARYB)
 08/18/93 15:10:00 + 23:43
 SAMPLE: A5042456 J082646
 COND#: 1504
 ENHANCED (5 158 2M 0T)
 DATA: H2308 #1641
 CALL: H2308 # 3
 BASE M/Z: 41
 RIC: 2301950.



CASE# 493-02-7

NAPHTHALENE, DECAHYDRO-, TRANS-

CASE# 493-01-6

NAPHTHALENE, DECAHYDRO-, CIS-

CASE# 91-17-8

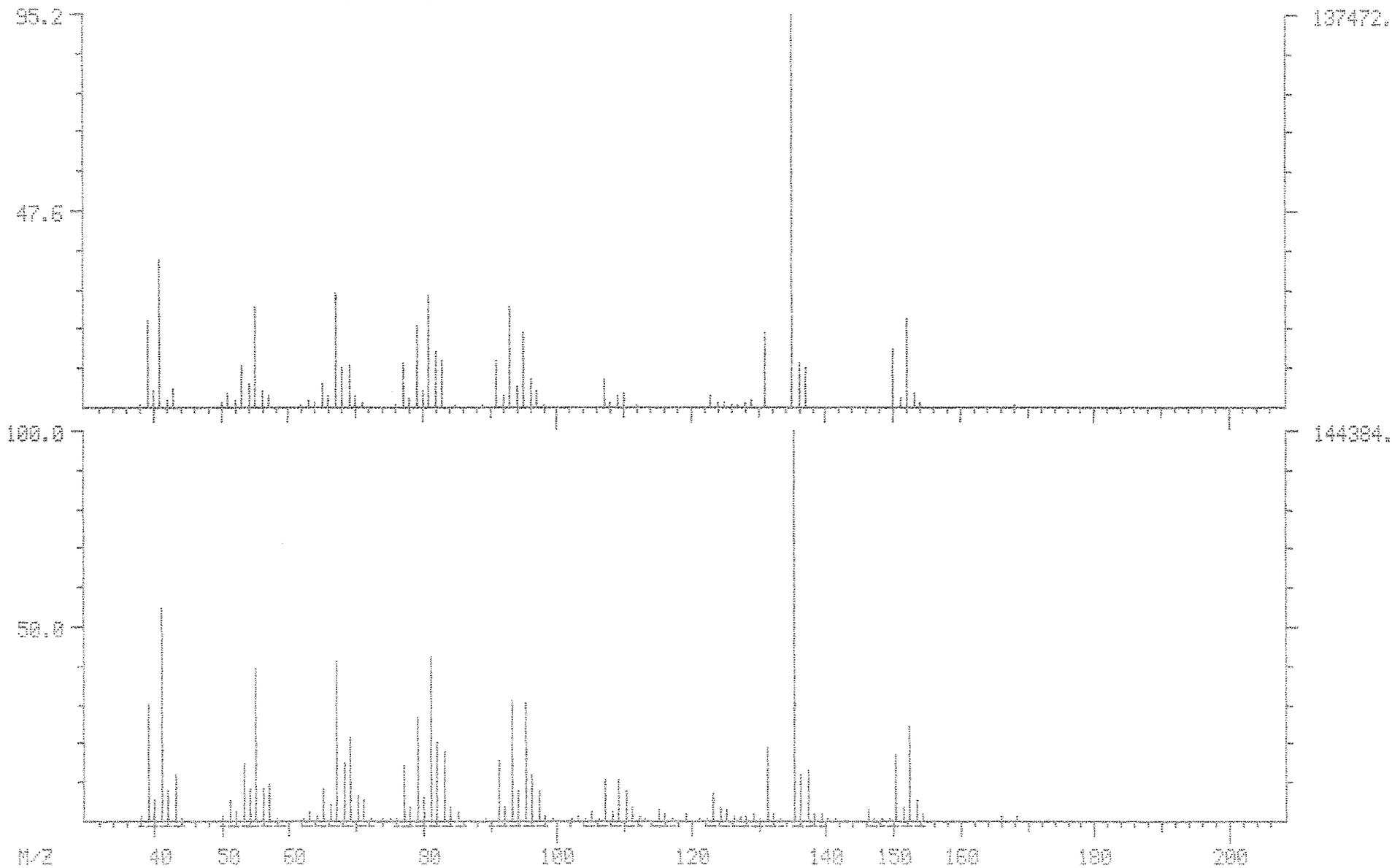
NAPHTHALENE, DECAHYDRO-

M/Z 40 60 80 100 120 140 150 160 180 200

DUAL MASS SPECTRUM
08/18/93 15:10:00 + 24:44
SAMPLE: AS042456 JOB2646
CONDS.: 150H
TEMP: 200 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: H2308 #1711
CALI: H2308 #3

BASE M/Z: 135/ 135
RIC: 793600./ 1206270.



Library Search
08/18/93 15:10:00 + 24:44
Sample: A5042456 JOB2646
Conds.: I50H
Enhanced (S 15B 2N OT)

Data: H2308 #1711
Cali: H2308 # 3

Base m/z: 135 **0118**
RIC: 750592.

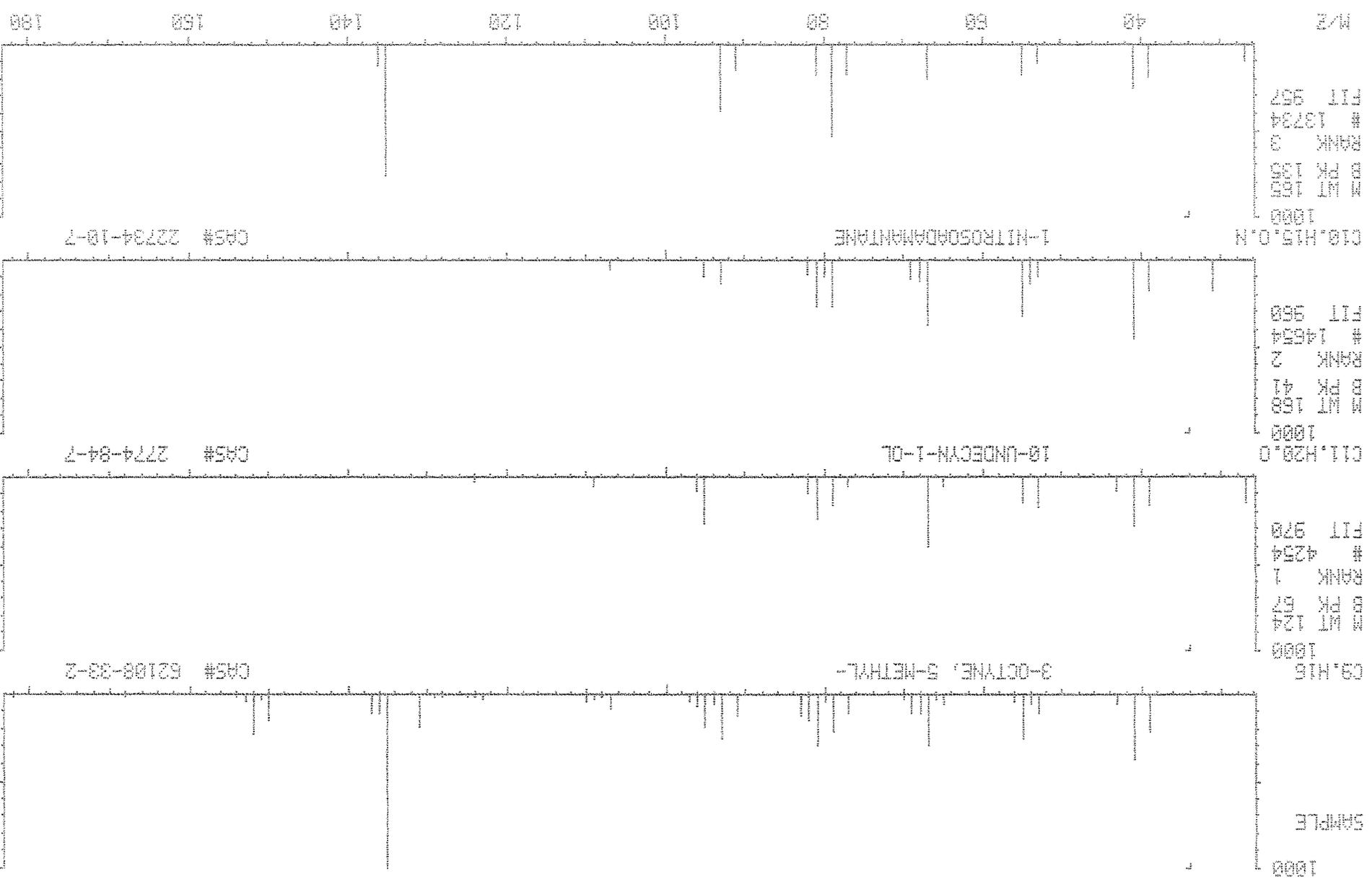
62231 spectra in LIBRARYNB searched for maximum FIT
54 matched at least 7 of the 16 largest peaks in the unknown

Rank In.	Name
1	4254 3-OCTYNE, 5-METHYL-
2	14654 10-UNDECYN-1-OL
3	13734 1-NITROSOADAMANTANE
4	18068 TRICYCLO[3.3.1.1 ^{3,7}]DECANE, 2-NITRO-
5	26251 TRICYCLO[3.3.1.1 ^{3,7}]DECANE, 2-BROMO-

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9.H16	124	67	298	970	298
2	C11.H20.O	168	41	344	960	344
3	C10.H15.O.N	165	135	548	957	548
4	C10.H15.O2.N	181	135	544	915	579
5	C10.H15.BR	214	135	529	914	550

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	62108-33-2
2	-----	-----	-----	-----	2774-84-7
3	-----	-----	-----	-----	22734-10-7
4	-----	-----	-----	-----	54564-31-7
5	-----	-----	-----	-----	7314-85-4

MID LIBRARY SEARCH (LIBRARYB) DATA: HZ308 #1711
 08/18/93 15:10:00 + 24:44 CALL: HZ308 # 3
 SAMPLE: H5042455 JOBZ645 RICI: 750592.
 CONDS: 150H
 ENHANCED (5 150 20 01) BASE M/Z: 135



SAMPLE
1000

C9.H15
1000
M WT 124
B PK 57
RANK 1
4254
FIT 970

C11.H20.O
1000
M WT 158
B PK 41
RANK 2
14534
FIT 950

C10.H15.O.N
1000
M WT 158
B PK 155
RANK 3
13734
FIT 957

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

SP1BRE

Lab Name: RECRA ENVIRON Contract: C002412

Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393

Matrix: (soil/water) SOIL Lab Sample ID: AS042456RI

Sample wt/vol: 5.2 (g/mL) G Lab File ID: H2310

Level: (low/med) LOW Date Received: 08/17/93

% Moisture: not dec. 7 Date Analyzed: 08/18/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

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

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

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SP1BRE

Lab Name: RECRA ENVIRON Contract: C002412

Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393

Matrix: (soil/water) SOIL Lab Sample ID: AS042456RI

Sample wt/vol: 5.2 (g/mL) G Lab File ID: H2310

Level: (low/med) LOW Date Received: 08/17/93

% Moisture: not dec. 7 Date Analyzed: 08/18/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 10

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	21.87	3500	J
2.	UNKNOWN	21.97	720	J
3.	UNKNOWN	22.30	2300	J
4.	UNKNOWN	22.85	3400	J
5.	UNKNOWN	23.20	490	J
6.	UNKNOWN	23.32	980	J
7.	DECAHYDRO NAPHTHALENE ISOMER	23.68	5400	J
8.	UNKNOWN	23.92	790	J
9.	UNKNOWN	24.07	1700	J
10.	UNKNOWN	24.68	1800	J

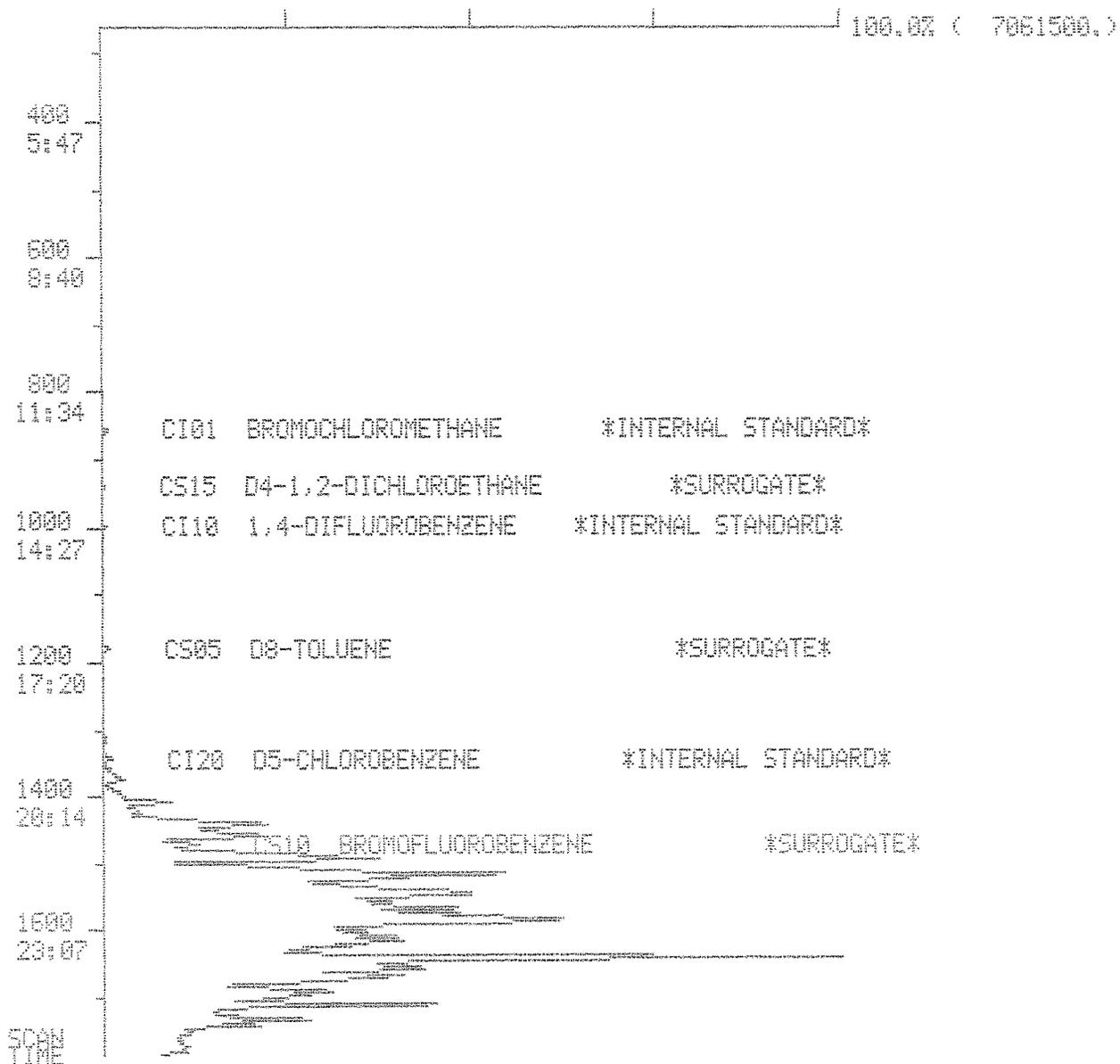
DATA FROM FILE: H2310

SCANS 260 TO 1785 ACQUIRED: 08/18/93 17:24:00

CALI: H2310 #3

SAMPLE: AS042456RE JOB2646

COND.: I50H



Data: H2310.TI
08/18/93 17:24:00
Sample: A504245&RE JOB2646
Conds.: I50H

Formula: Instrument: I50H Weight: 0.000
Submitted by: Analyst: MM Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name	
1	CI01	BROMOCHLOROMETHANE *INTERNAL STANDARD*
2	CI10	1,4-DIFLUOROBENZENE *INTERNAL STANDARD*
3	CI20	D5-CHLOROBENZENE *INTERNAL STANDARD*
4	CS15	D4-1,2-DICHLOROETHANE *SURROGATE*
5	CS05	D6-TOLUENE *SURROGATE*
6	CS10	BROMOFLUOROBENZENE *SURROGATE*
7	CO10	CHLOROMETHANE
8	CO15	BROMOMETHANE
9	CO20	VINYL CHLORIDE
10	CO25	CHLOROETHANE
11	CO30	METHYLENE CHLORIDE
12	CO35	ACETONE
13	CO40	CARBON DISULFIDE
14	CO45	1,1-DICHLOROETHENE
15	CO50	1,1-DICHLOROETHANE
16	CO57	TRANS-1,2-DICHLOROETHENE
17	CO60	CHLOROFORM
18	CO65	1,2-DICHLOROETHANE
19	C110	2-BUTANONE
20	C115	1,1,1-TRICHLOROETHANE
21	C120	CARBON TETRACHLORIDE
22	C125	VINYL ACETATE
23	C130	BROMODICHLOROMETHANE
24	CO56	CIS-1,2-DICHLOROETHENE
25	CO36	ACROLEIN
26	CO38	ACRYLONITRILE
27	C275	TRICHLOROFLUOROMETHANE
28	CO300	ACETONITRILE
29	C140	1,2-DICHLOROPROPANE
30	C145	CIS-1,3-DICHLOROPROPENE
31	C150	TRICHLOROETHENE
32	C155	DIBROMOCHLOROMETHANE
33	C160	1,1,2-TRICHLOROETHANE
34	C165	BENZENE
35	C170	TRANS-1,3-DICHLOROPROPENE
36	C180	BROMOFORM
37	C161	2-CHLOROETHYL VINYL ETHER
38	C163	1,2-DIBROMOETHANE
39	C286	1,2-DIBROMO-3-CHLOROPROPANE
40	C210	4-METHYL-2-PENTANONE
41	C215	2-HEXANONE
42	C220	TETRACHLOROETHENE
43	C225	1,1,2,2-TETRACHLOROETHANE
44	C230	TOLUENE
45	C235	CHLOROBENZENE
46	C240	ETHYLBENZENE
47	C245	STYRENE

O.K.
3/9/93

SS
CD
mm
8/18/93
TCS
R&E

No Name
 48 C246 M, P-XYLENE
 49 C247 O-XYLENE
 50 C260 1,3-DICHLORO BENZENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	853	12:20	1	1.000	A BB	34093.	250.000 NG	9.23
2	114	995	14:23	2	1.000	A BB	120928.	250.000 NG	9.23
3	117	1341	19:23	3	1.000	A BB	115913.	250.000 NG	9.23
4	65	936	13:32	1	1.097	A BB	59472.	234.278 NG	8.65
5	98	1177	17:01	3	0.878	A BB	107455.	239.223 NG	8.83
6	95	1469	21:14	3	1.095	A VB	169264.	440.105 NG	16.25
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
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37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	83	1490	21:32	3	1.111	A BB	433884.	1043.650 NG	38.54
44	NOT FOUND								
45	NOT FOUND								
46	106	1358	19:46	3	1.020	A BB	229.	1.247 NG	0.05
47	NOT FOUND								
48	106	1368	19:46	3	1.020	A BB	229.	0.789 NG	0.03
49	NOT FOUND								
50	NOT FOUND								

TIC

NO-MINORS

SCAN

9/14/93

Data: H2310.TI
08/18/93 17:24:00
Sample: A6042456RE JOB2646
Conds.: I50H
Formula:
Submitted by:

Instrument: I50H
Analyst: MM

Weight: 0.000
Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
51	C267 1,4-DICHLOROBENZENE
52	C249 1,2-DICHLOROBENZENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT	FOUND							
52	NOT	FOUND							

MASS SPECTRUM

08/18/93 17:24:00 + 21:32

SAMPLE: ASD42456RE JOB2646

COND5.: I50H

TEMP: 174 DEG. C

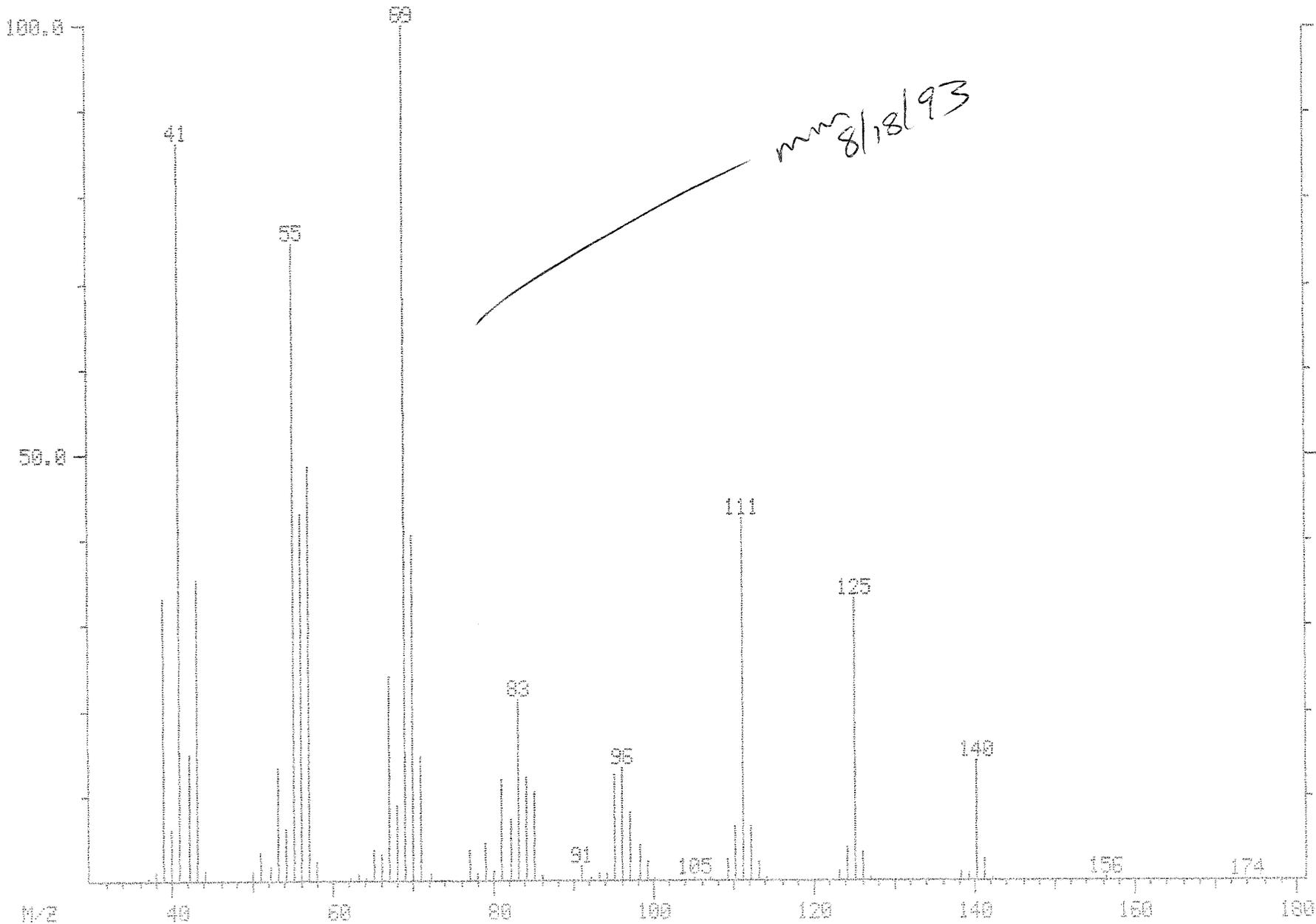
NAME: C225 1,1,2,2-TETRACHLOROETHANE

DATA: H2310 #1490

CALI: H2310 #3

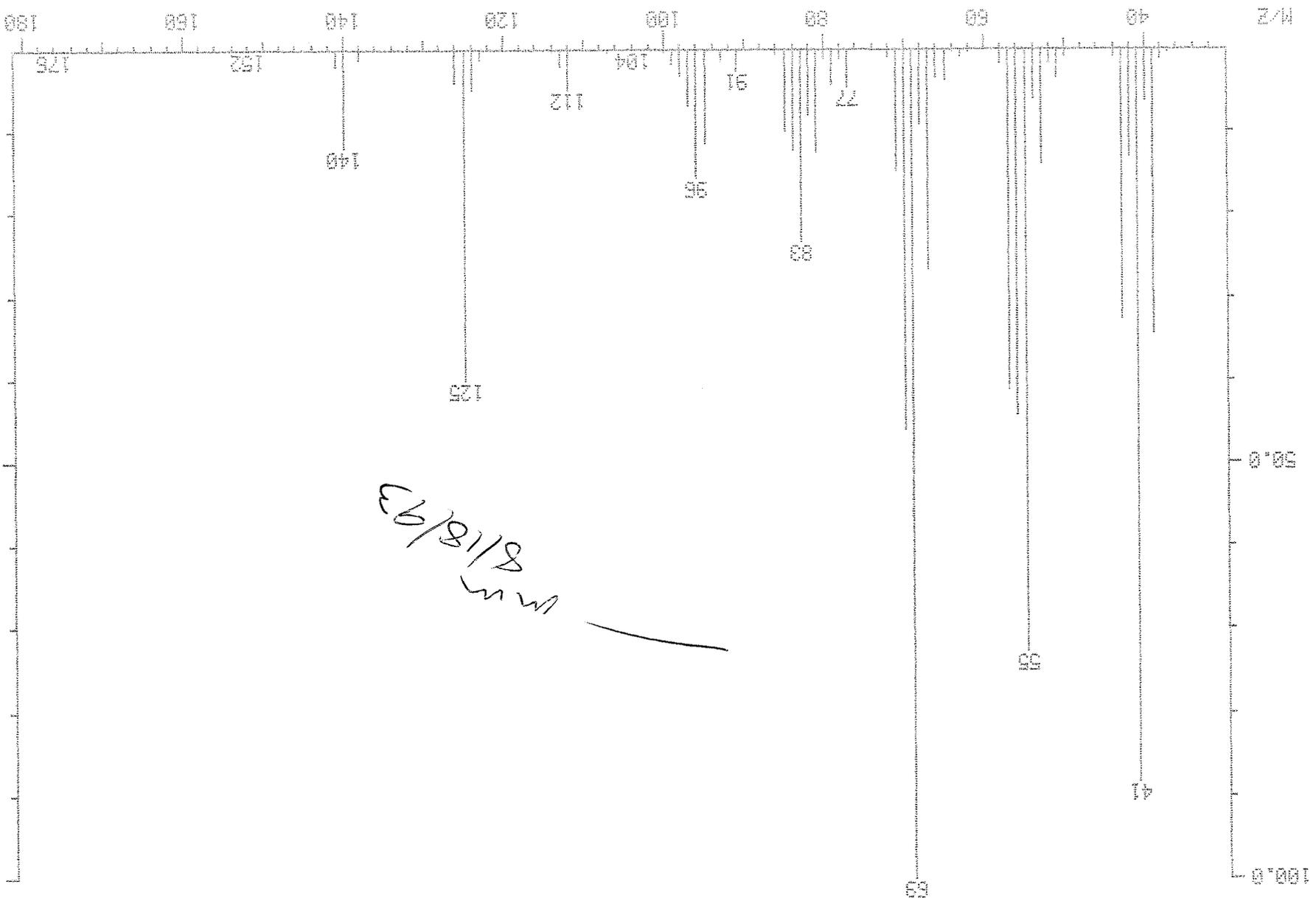
BASE M/Z: 69

RIC: 2613250.



323584.
0.

42101



mm 8/18/93

MASS SPECTRUM
 DATA: H2310 #1490
 CALL: H2310 #3
 BASE M/Z: 59
 RICI: 1529710.
 09/18/93 17:24:00 + 21:32
 SAMPLE: 95042456RE JOB2645
 COND#: 1504
 TEMP: 124 DEG. C
 ENHANCED (5 150 2N 01)NAME: C225 1,1,2,2-TETRACHLOROETHANE

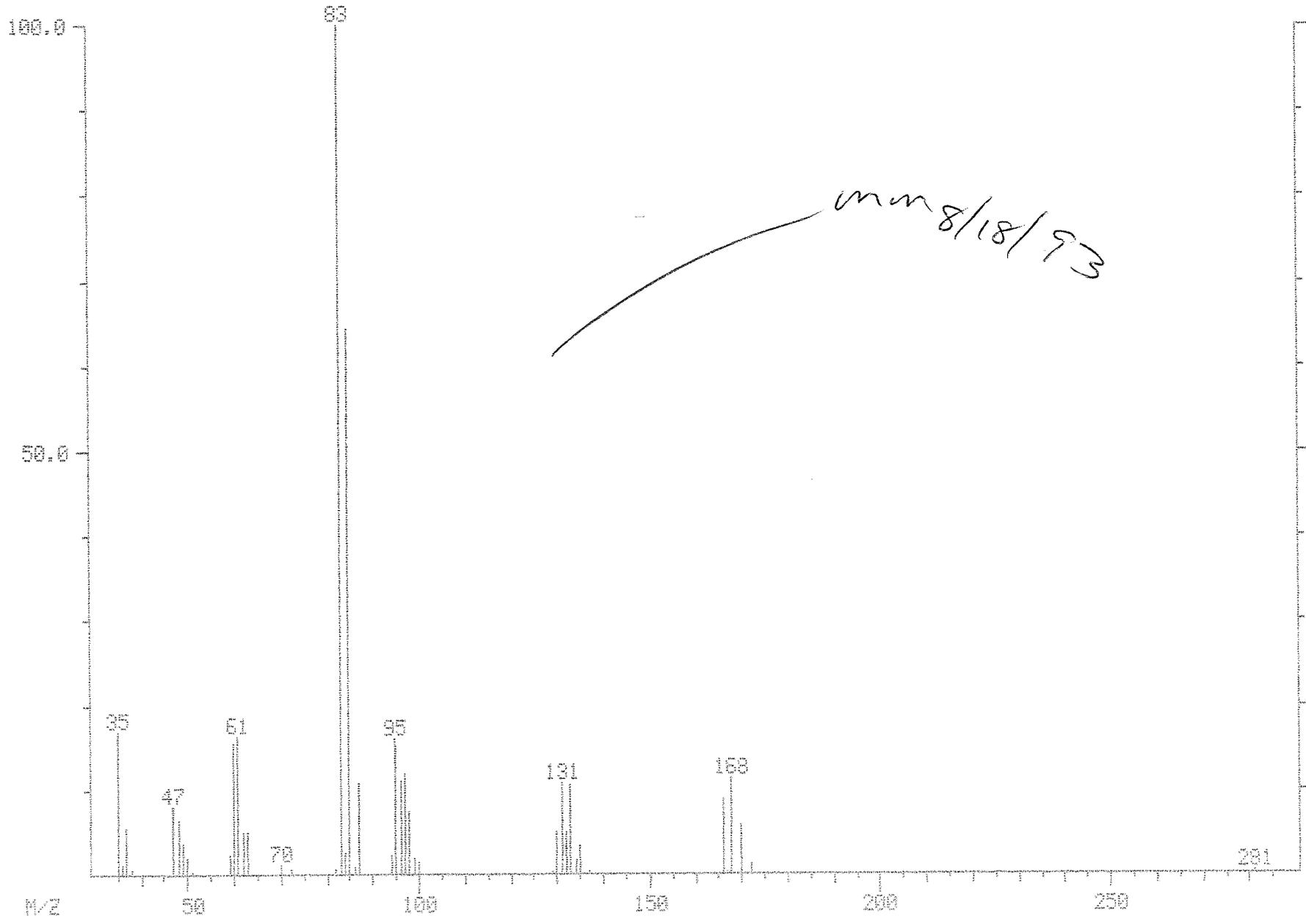
200704

MASS SPECTRUM
08/18/93 10:52:00 + 21:35
SAMPLE: USTD050
CONDS.: 150H
TEMP: -337 DEG. C

DATA: H2302 #1494
ENHANCED (S 15B 2N 0T)

BASE M/Z: 83
RIC: 71935.

NAME: C225 1,1,2,2-TETRACHLOROETHANE



18688.
0.

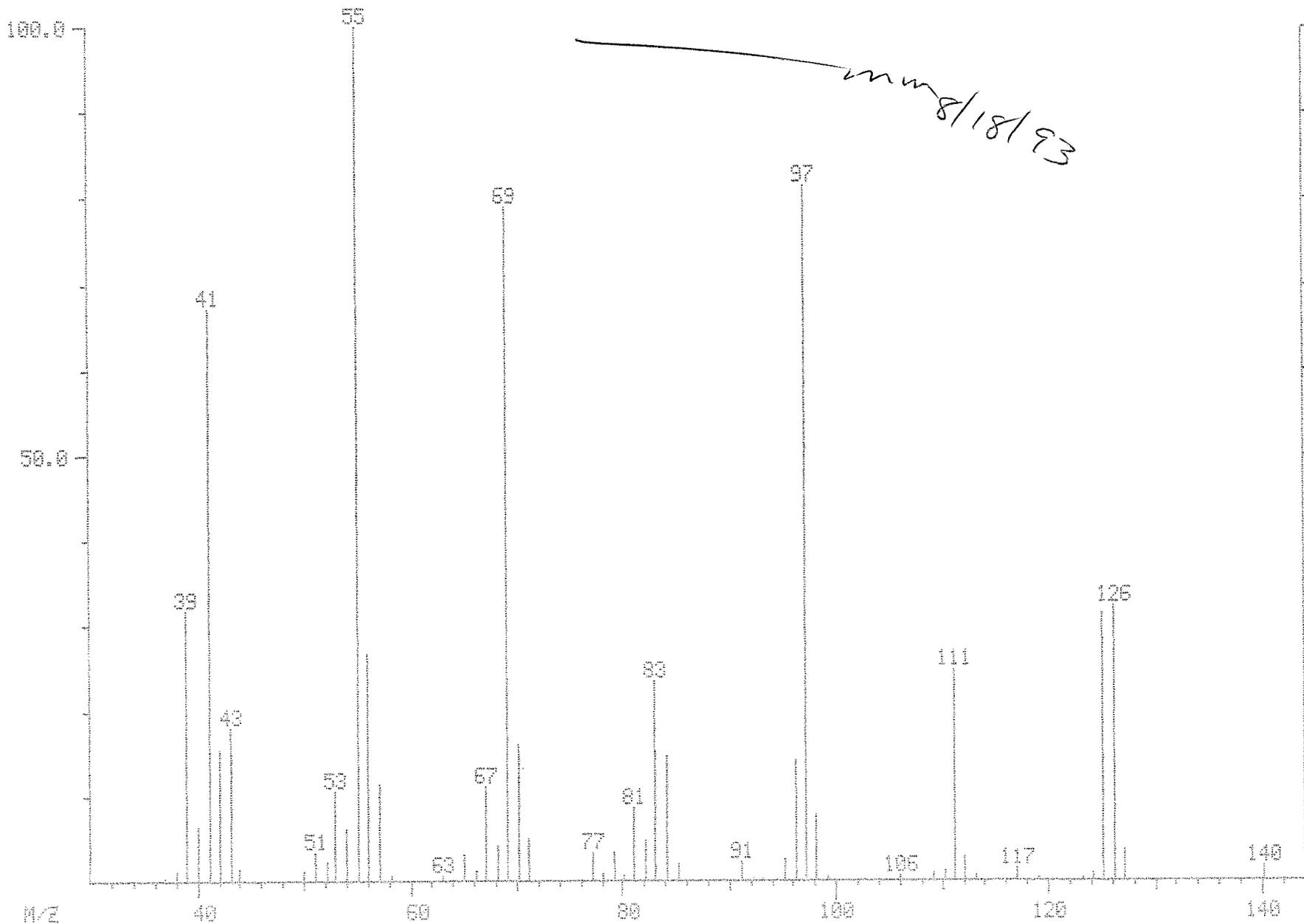
0128

MASS SPECTRUM
08/18/93 17:24:00 + 19:45
SAMPLE: ASD4245ERE JOB2646
CONDS.: 150H
TEMP: 155 DEG. C

DATA: H2310 #1368
CALI: H2310 #3

BASE M/Z: 55
RIC: 131584.

NAME: C240 ETHYLBENZENE



18848.
0.

10129

MASS SPECTRUM

08/18/93 17:24:00 + 19:46

SAMPLE: A5042456RE JOB2645

CONDS.: 150H

TEMP: 156 DEG. C

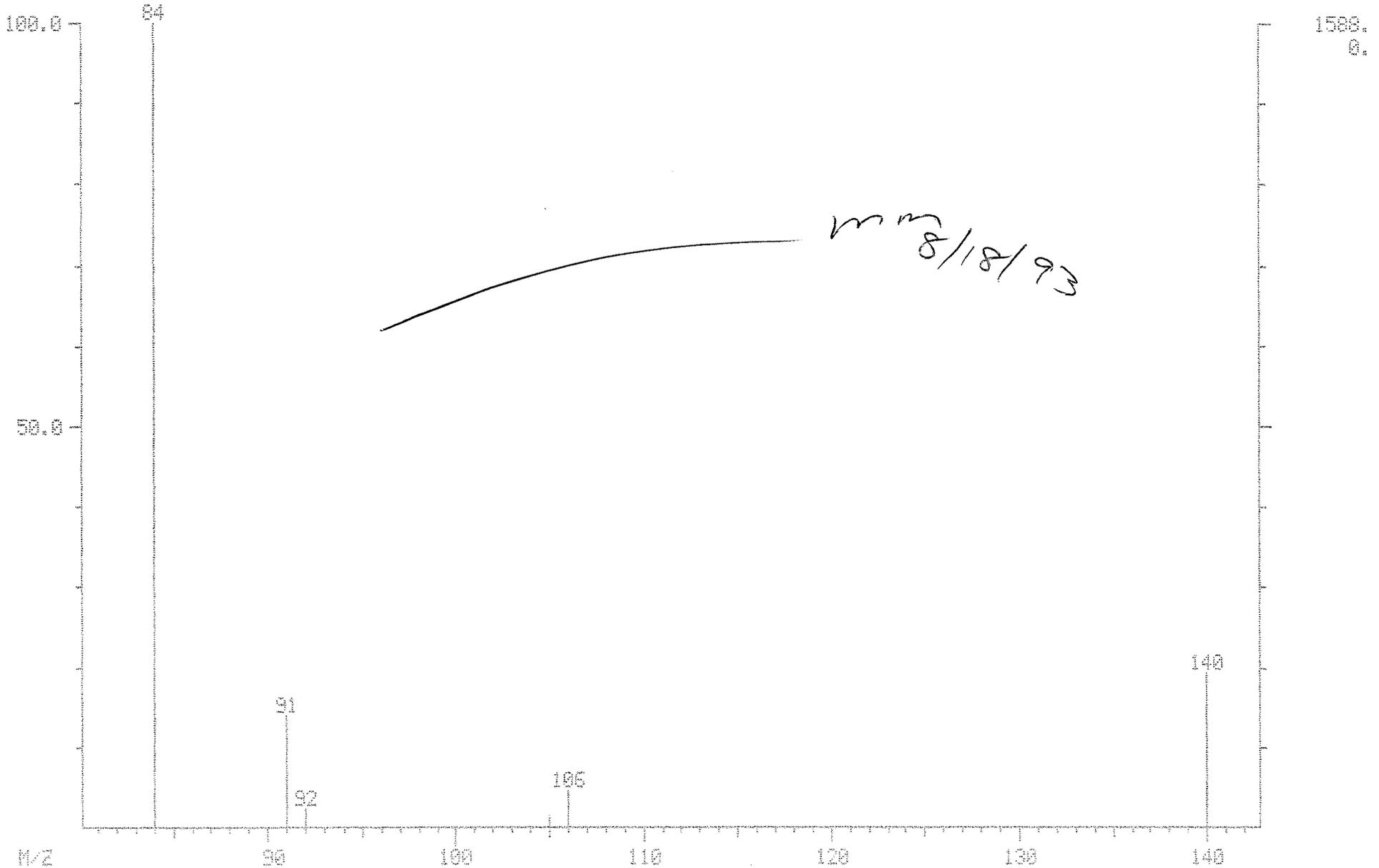
ENHANCED (S 15B 2M 0T)NAME: C240 ETHYLBENZENE

DATA: H2310 #1368

CALI: H2310 #3

BASE M/Z: 84

RIC: 2248.

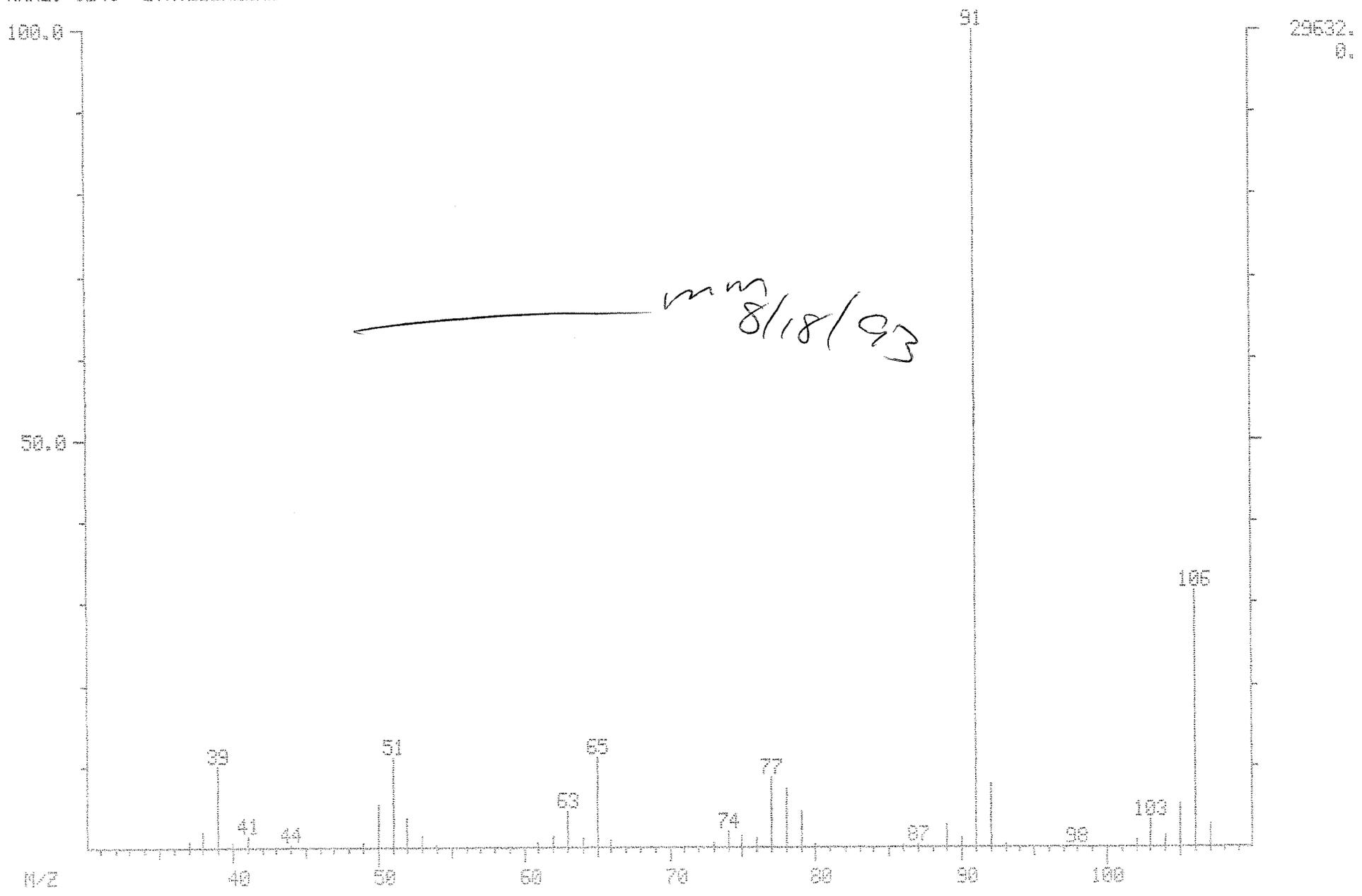


MASS SPECTRUM
08/18/93 10:52:00 + 19:46
SAMPLE: VSTD050
CONDS.: 150H
TEMP: -355 DEG. C

DATA: H2302 #1368
ENHANCED (S 15B 2M 0T)

BASE M/Z: 91
RIC: 71168.

NAME: C240 ETHYLBENZENE



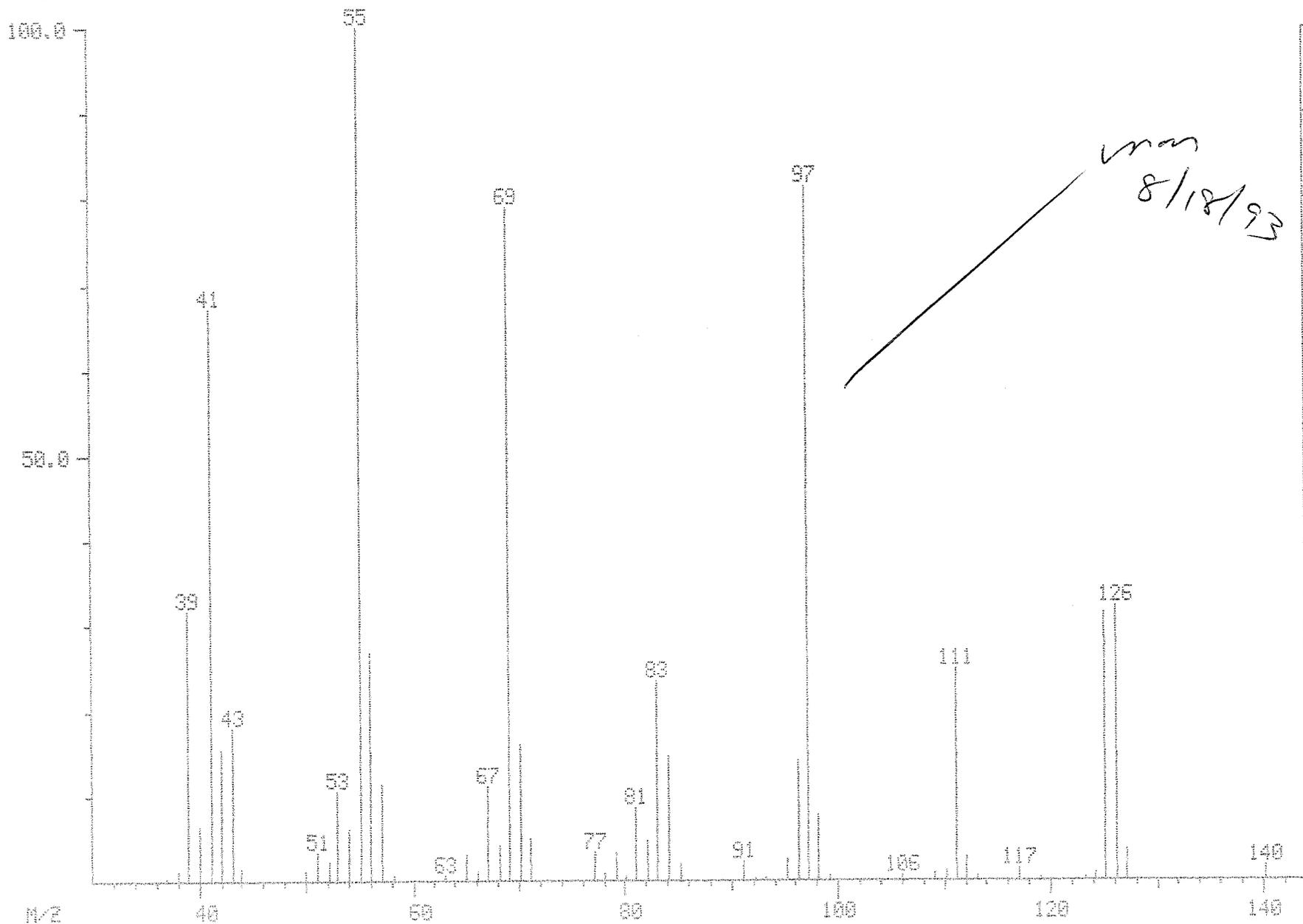
0131

MASS SPECTRUM
08/18/93 17:24:00 + 19:45
SAMPLE: A504245ERE JOB2545
CONDS.: I50H
TEMP: 155 DEG. C

DATA: H2310 #1368
CALI: H2310 #3

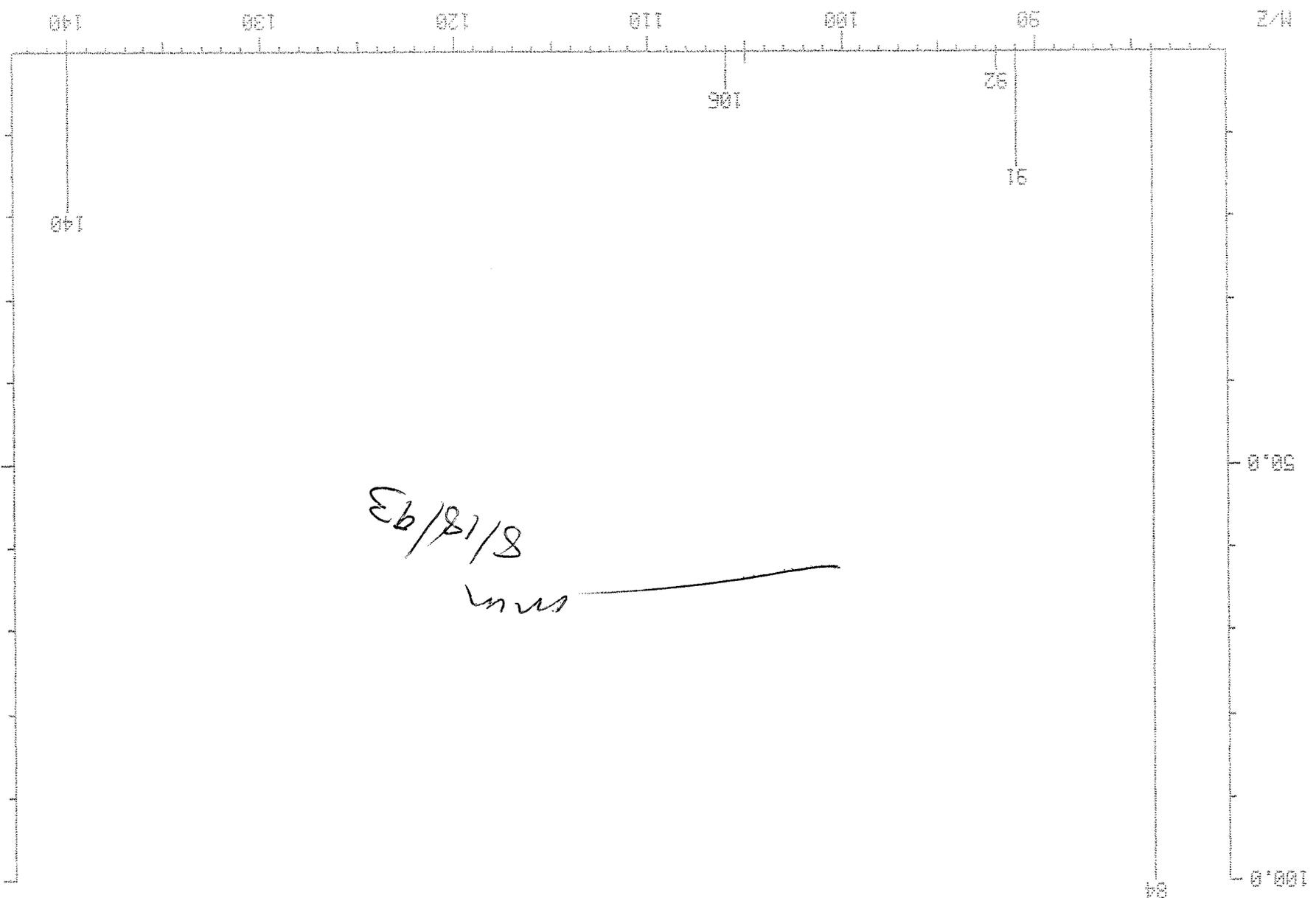
BASE M/Z: 55
RIC: 131584.

NAME: C246 M.P.-XYLENE



18848.
6.

0133



Eb/81/8

MASS SPECTRUM
 08/18/99 17:24:00 + 15:45
 SAMPLE: 4504249ERE JOBZ645
 COND.: 190H
 TEMP: 156 DEG. C
 ENHANCED (5.198 2N 0T)NAME: C245 M.F.-XYLENE

DATA: H2310 #1368
 CALL: H2310 #3
 BASE M/Z: 84
 RICI: 2248.

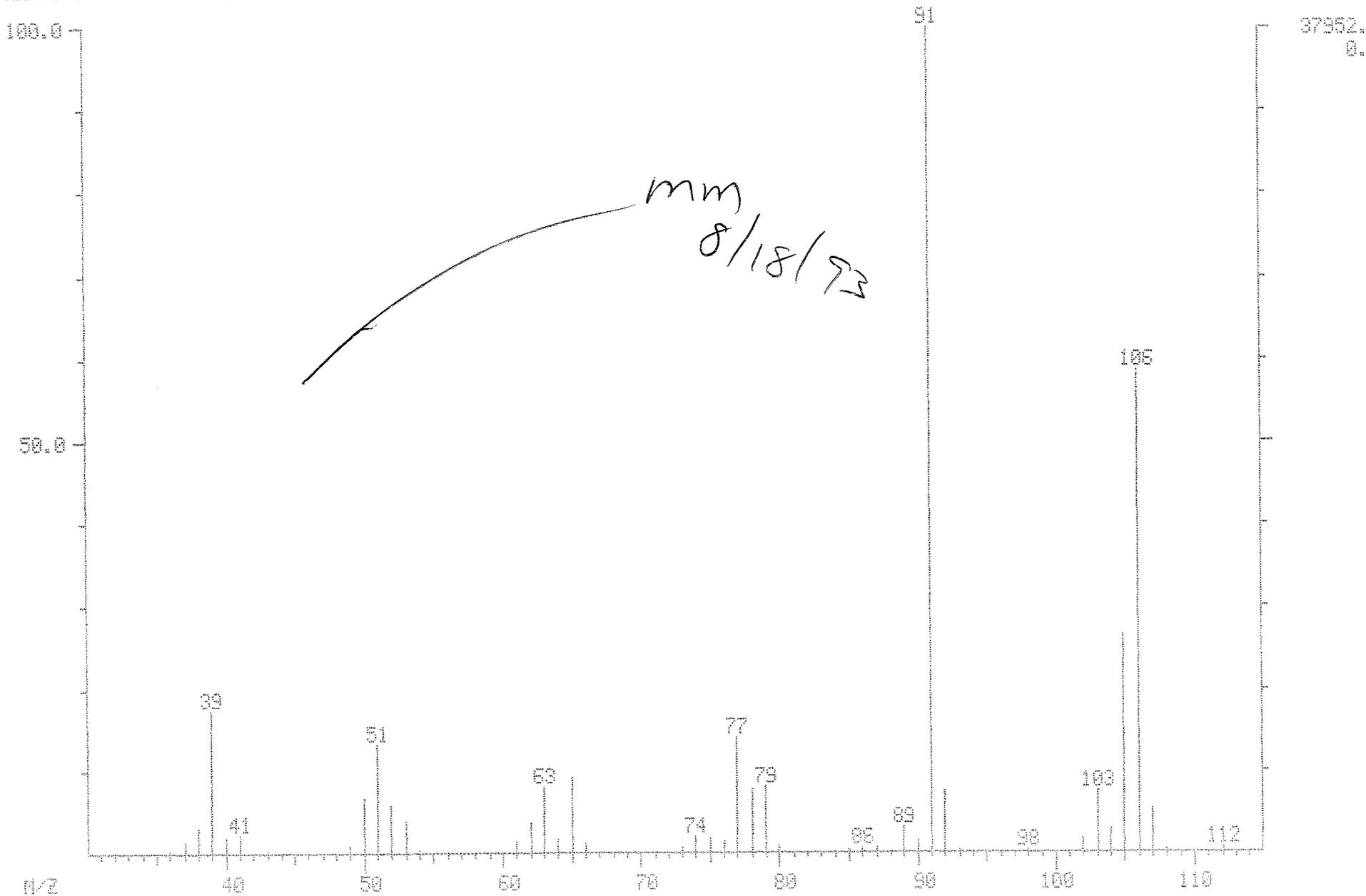
1588.
 9.

MASS SPECTRUM
08/18/93 10:52:00 + 19:57
SAMPLE: VSTD050
CONDS.: I50H
TEMP: -353 DEG. C

DATA: M2302 #1381
ENHANCED (S 15B 2N 8T)

BASE M/Z: 91
RIC: 127350.

NAME: C246 M,P-XYLENE



10134

Quantitation Report File: H2310

Data: H2310.TI

08/16/93 17:24:00

Sample: A9042456RE JOB2646

Conds.: I50H

Formula:

Instrument: I50H

Weight: 0.000

Submitted by:

Analyst: MM

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name	
1	CI01 BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10 1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	CI20 D5-CHLOROBENZENE	*INTERNAL STANDARD*
4	UNKNOWN	
5	UNKNOWN	
6	UNKNOWN	
7	UNKNOWN	
8	UNKNOWN	
9	UNKNOWN	
10	UNKNOWN	
11	UNKNOWN	
12	UNKNOWN	
13	UNKNOWN	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	TOT	854	12:20	1	1.000	A BB	229158.	250.000 NG	0.24
2	TOT	995	14:23	2	1.000	A BB	283539.	250.000 NG	0.24
3	TOT	1341	19:23	3	1.000	A BB	333440.	250.000 NG	0.24
4	TOT	1513	21:52	3	1.128	A VB	22798300.	17093.200	16.67
5	TOT	1520	21:58	3	1.133	A VB	4669440.	3500.960	3.41
6	TOT	1543	22:18	3	1.151	A BB	14649300.	10983.500	10.71
7	TOT	1581	22:51	3	1.179	A VB	22024200.	16512.800	16.10
8	TOT	1605	23:12	3	1.197	A VV	3158020.	2367.750	2.31
9	TOT	1613	23:19	3	1.203	A VV	6344700.	4757.000	4.64
10	TOT	1639	23:41	3	1.222	A BV	34940900.	26197.300	25.54
11	TOT	1655	23:55	3	1.234	A VB	5124100.	3841.840	3.75
12	TOT	1665	24:04	3	1.242	A VB	10745900.	8056.780	7.86
13	TOT	1708	24:41	3	1.274	A BV	11345900.	8506.690	8.29

RF=1.0

DF= 1

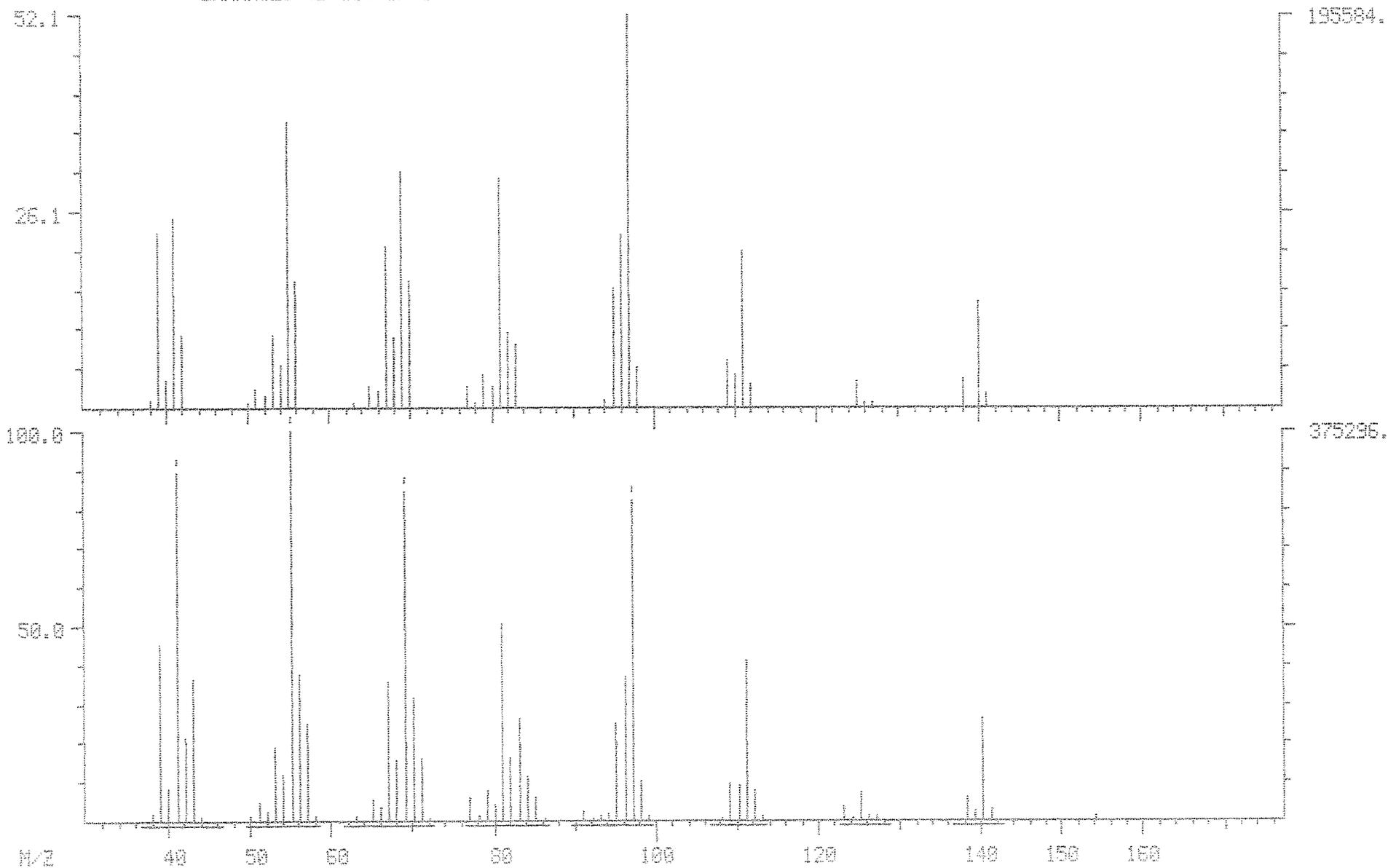
Unknown Concentration

$$= \left[\frac{\text{ng IS} * \text{area unknown}}{\text{area IS}} \right] * \text{RF} * \text{DF}$$

DUAL MASS SPECTRUM
08/18/93 17:24:00 + 21:52
SAMPLE: A5042456RE JOB2646
CONDS.: 150H
TEMP: 177 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1513
CALI: H2310 #3

BASE M/Z: 97/ 55
RIC: 1640450./ 3796990.



Library Search
08/18/93 17:24:00 + 21:52
Sample: AS042456RE JOB2646
Conds.: I50H
Enhanced (S 15B 2N 0T)

Data: H2310 #1513
Cali: H2310 # 3

Base m/z: 90137
RIC: 1626110.

62231 spectra in LIBRARYNB searched for maximum FIT
56 matched at least 8 of the 16 largest peaks in the unknown

Rank In.	Name
1	4253 1,6-HEPTADIENE, 3,3-DIMETHYL-
2	8042 CYCLOOCTANEMETHANOL
3	5120 CYCLOHEPTANEMETHANOL
4	17943 1,1'-BICYCLOHEXYL, 2-METHYL-, TRANS-
5	7096 BICYCLO[3.1.1]HEPTANE, 2,6,6-TRIMETHYL-

Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9.H16	124	41	439	916	446
2	C9.H18.O	142	69	528	892	538
3	C8.H16.O	128	55	585	890	593
4	C13.H24	180	55	605	884	624
5	C10.H18	138	55	457	874	484

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	68701-61-1
2	-----	-----	-----	-----	3637-63-6
3	-----	-----	-----	-----	4448-75-3
4	-----	-----	-----	-----	50991-09-8
5	-----	-----	-----	-----	473-55-2

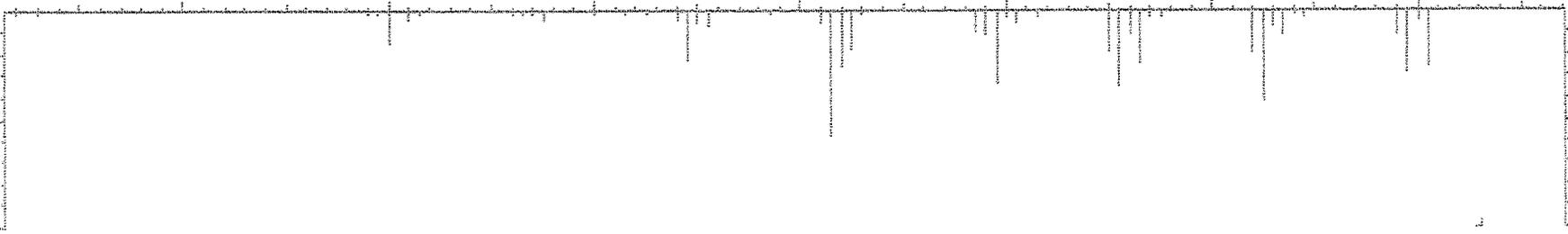
BASE M/Z: 97
RICI: 1626110.

DATA: HZ310 #1513
CALL: HZ310 # 3

MID LIBRARY SEARCH (LIBRARY)
08/18/93 17:24:00 + 21:52
SAMPLE: 45042450RE JOB2545
CONDOS: 150H
ENHANCED (S 150 2N 01)

1753

SAMPLE



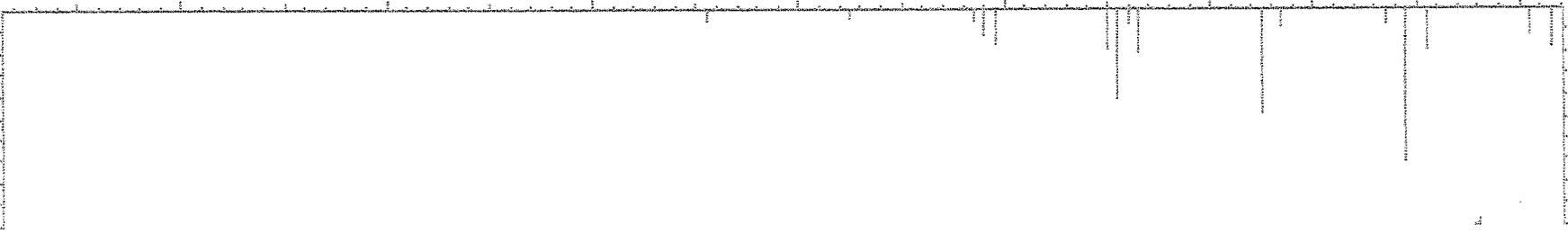
CAS# 58701-61-1

1,6-HEPTADIENE, 3,3-DIMETHYL-

C9.H16

1753

N MT 124
B PK 41
RANK 1
4253
FIT 916



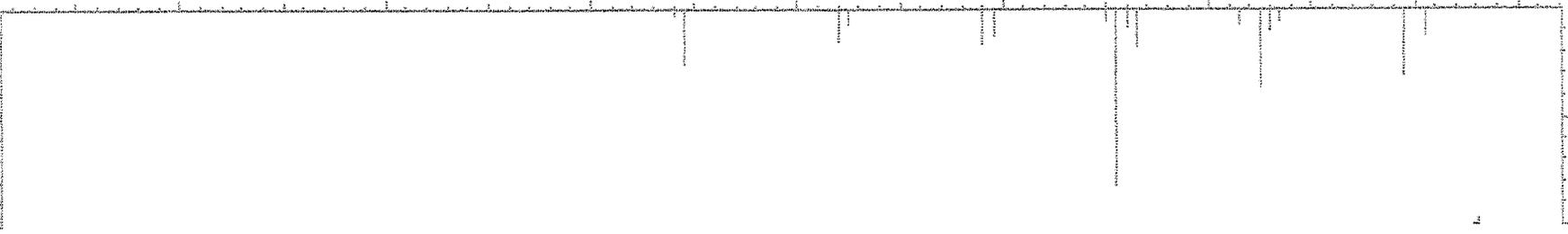
CAS# 3687-63-6

CYCLOOCTANEMETHANOL

C9.H18.O

1753

N MT 142
B PK 89
RANK 2
8042
FIT 892



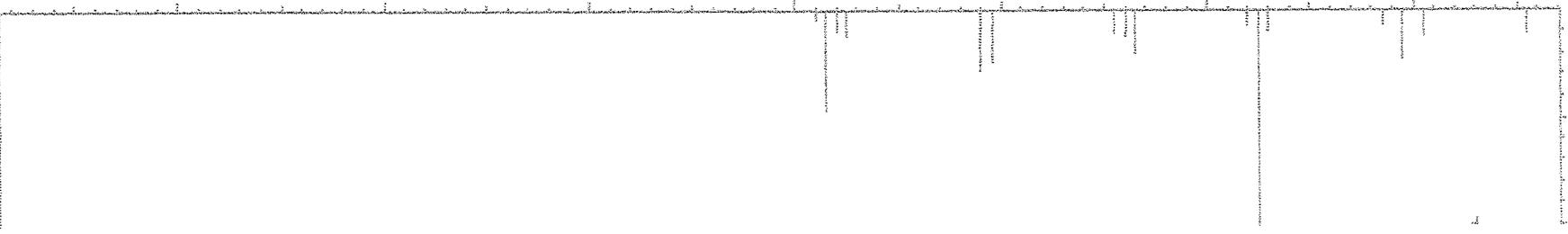
CAS# 4448-75-3

CYCLOHEPTANEMETHANOL

C9.H18.O

1753

N MT 120
B PK 53
RANK 3
5120
FIT 890



M/Z

40

60

80

100

120

140

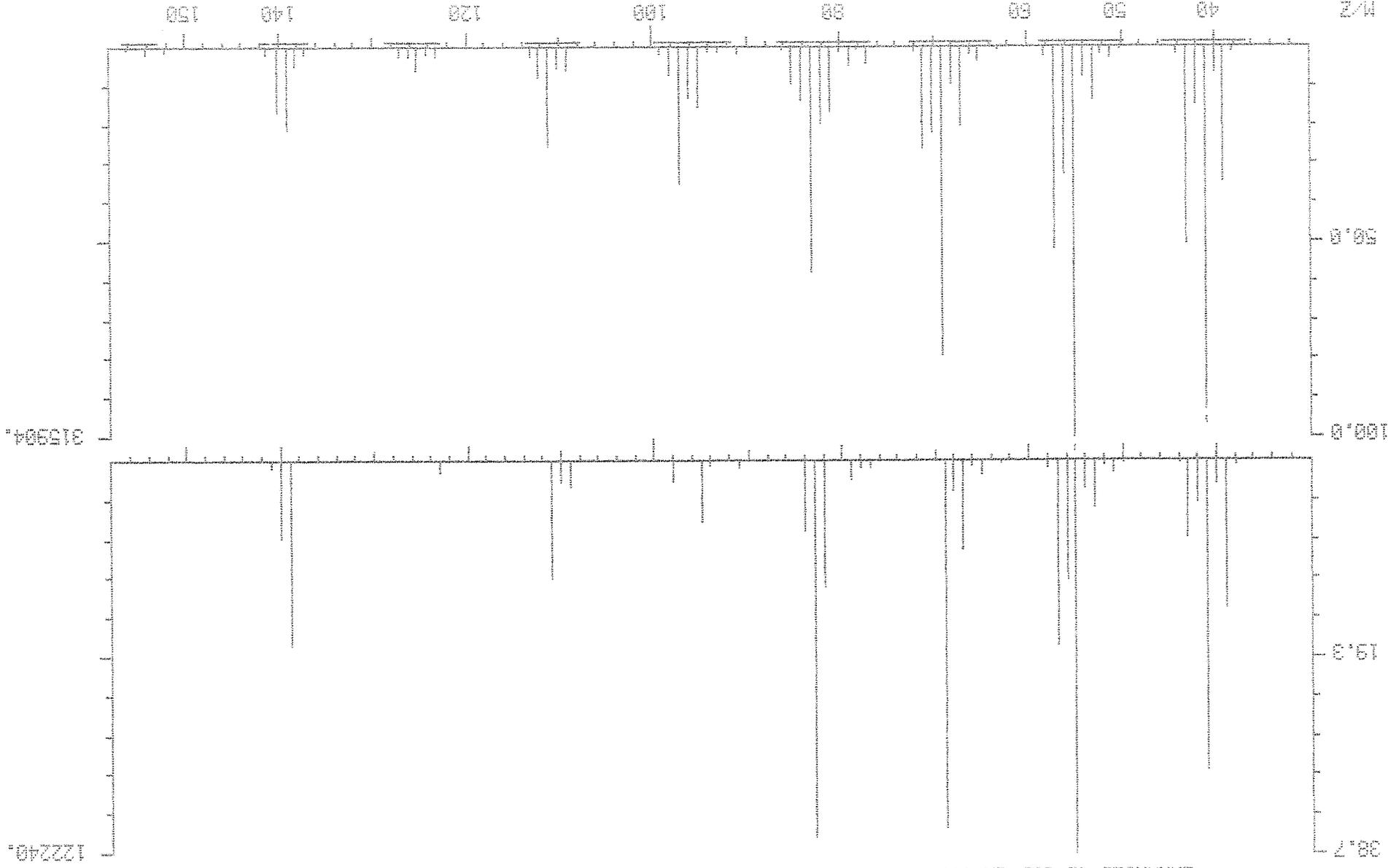
160

0139

DATA: HZ310 #1521
BASE M/Z: 55 / 55
RIC: 951295 / 2838340

CALI: HZ310 #3

DUAL MASS SPECTRUM
08/18/93 17:24:00 + 21:59
SAMPLE: A5M4245BRE JOB2645
CONDS: 150H
TEMP: 178 DEG. C
ENHANCED (S 158 ZN 0T)



Library Search
 08/18/93 17:24:00 + 21:59
 Sample: A8042456RE J082646
 Conds.: I50H
 Enhanced (S 15B 2N 0T)

Data: H2310 #1521
 Cali: H2310 # 3

Base m/z: 55
 RIC: 934912.

62231 spectra in LIBRARYNB searched for maximum FIT
 343 matched at least 7 of the 16 largest peaks in the unknown

Rank In.	Name
1	7454 1-PROPANONE, 1-CYCLOHEXYL-
2	7518 2,4,6-TRIMETHYL-3-HEPTENE
3	7541 CYCLOHEXANE, (1-METHYLPROPYL)-
4	10767 CYCLOHEXANECARBOXYLIC ACID, ETHENYL ESTER
5	4626 CYCLOPENTANE, (2-METHYLPROPYL)-

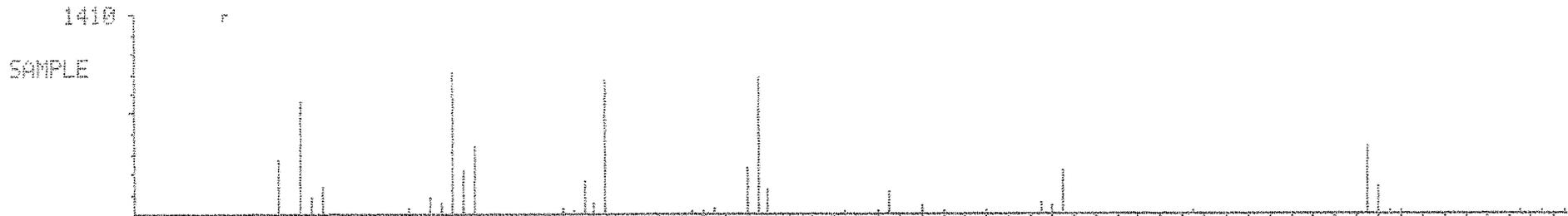
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9. H16. O	140	83	552	931	568
2	C10. H20	140	83	570	927	599
3	C10. H20	140	55	709	921	713
4	C9. H14. O2	154	83	481	909	498
5	C9. H18	126	41	624	881	660

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	1123-86-0
2	-----	-----	-----	-----	- -
3	-----	-----	-----	-----	7058-01-7
4	-----	-----	-----	-----	4840-76-0
5	-----	-----	-----	-----	3788-32-7

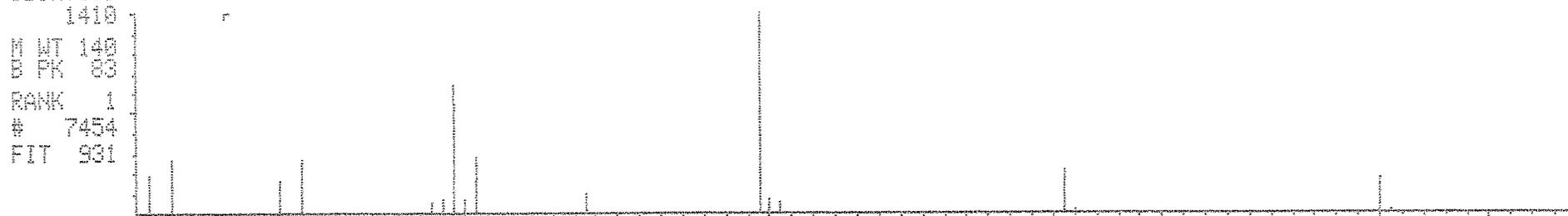
MID LIBRARY SEARCH (LIBRARY.MB)
08/18/93 17:24:00 + 21:59
SAMPLE: A504245ERE JOB2646
COND5.: I50H
ENHANCED (S 15B 2N 0T)

DATA: HZ310 #1521
CALI: HZ310 # 3

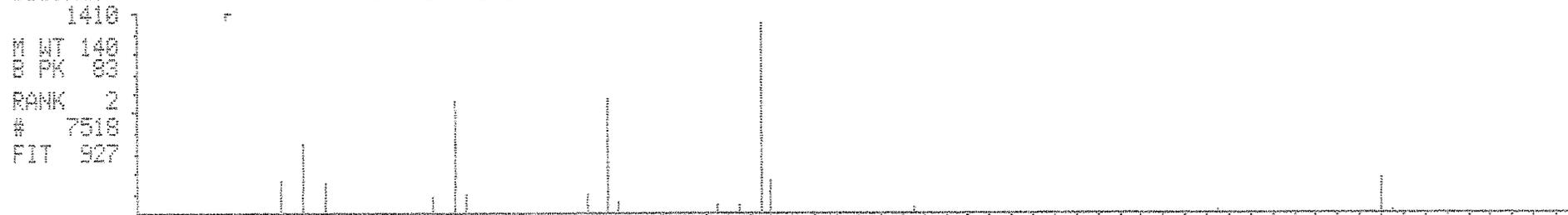
BASE M/Z: 55
RIC: 934912.



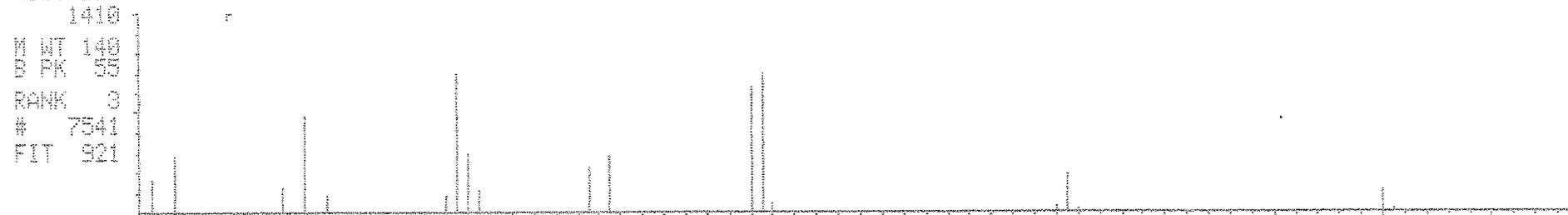
09.H16.0 1-PROPANONE, 1-CYCLOHEXYL- CAS# 1123-86-0



010.H20 2,4,6-TRIMETHYL-3-HEPTENE CAS# - -



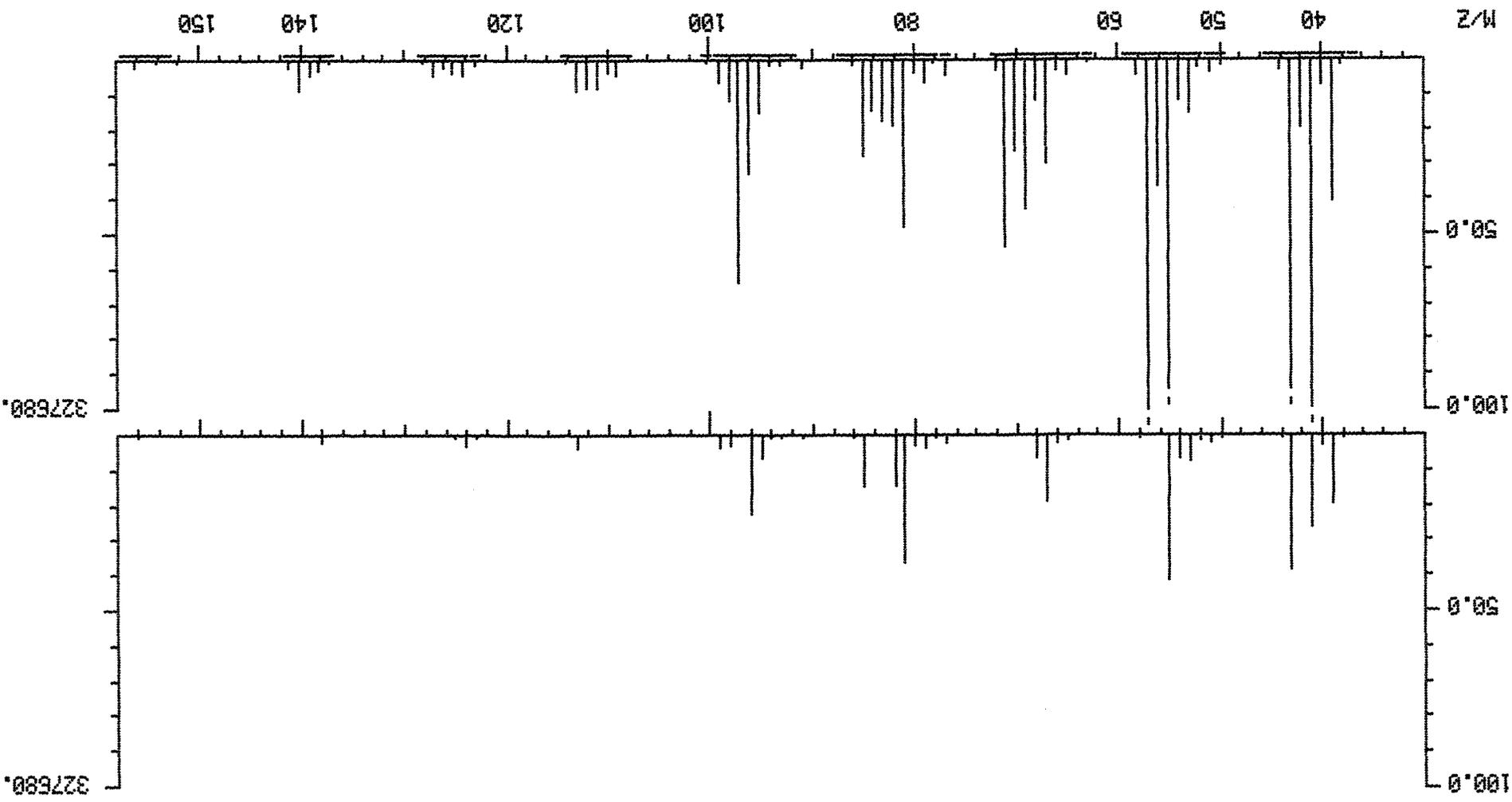
010.H20 CYCLOHEXANE, (1-METHYLPROPYL)- CAS# 7058-01-7



M/Z 40 60 80 100 120 140

DUAL MASS SPECTRUM
08/18/93 17:24:00 + 22:18
SAMPLE: A504245ERE J082646
CONDS.: 150H
TEMP: 182 DEG. C
ENHANCED (S 158 2N 0T)

DATA: H2310 #1543
CALI: H2310 #3
BASE M/Z: 55/ 57
RIC: 990208./ 3502080.



0142

Library Search
 08/18/93 17:24:00 + 22:18
 Sample: AS042456RE JOB2646
 Conds.: I50H
 Enhanced (S 15B 2N 0T)

Data: H2310 #1543
 Cali: H2310 # 3

Base m/z: 55
 RIC: 972800.

53953 spectra in LIBRARYNB searched for maximum FIT
 78 matched at least 8 of the 16 largest peaks in the unknown

Rank In.	Name
1	1004 PENTADIENAL, 2-METHYL-
2	9821 CYCLOHEXANEMETHYL ACETATE
3	1032 CYCLOHEXENE, 1-METHYL-
4	1010 (Z)-2-BUTENYLCYCLOPROPANE
5	3740 BICYCLO[3.3.1]NONANE

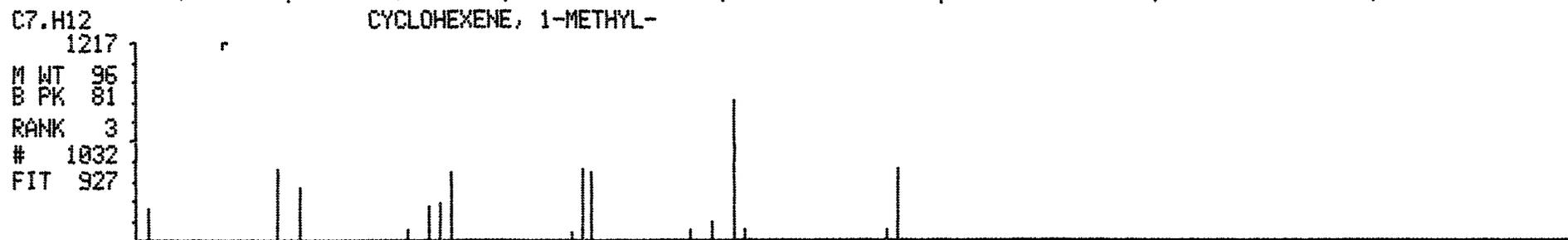
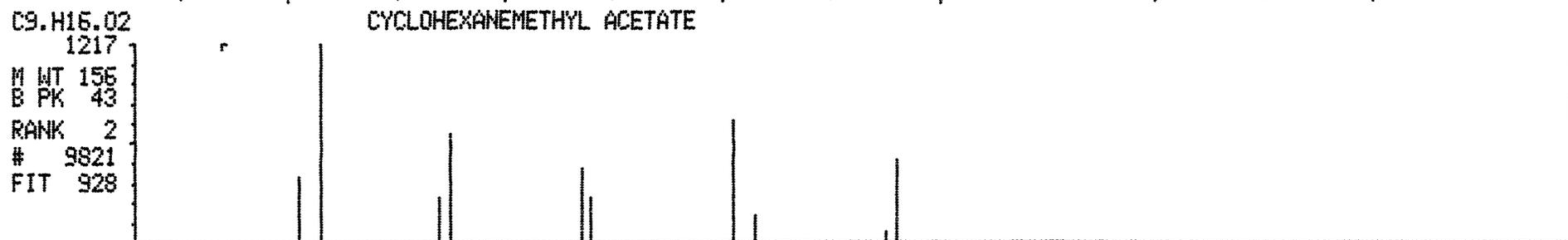
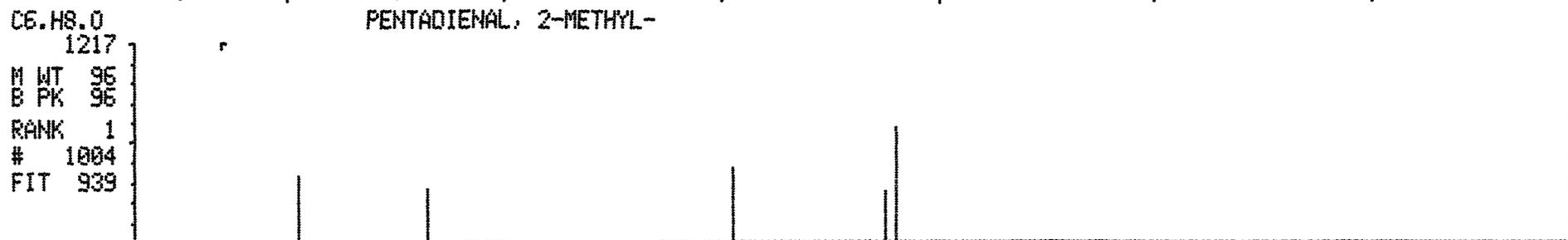
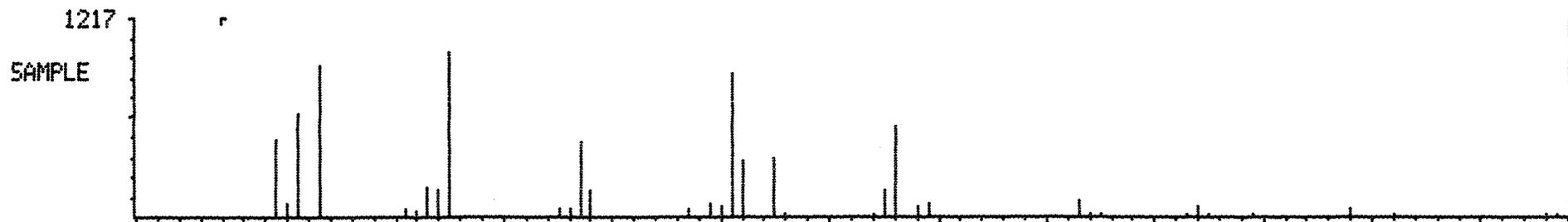
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C6. H8. O	96	96	344	939	344
2	C9. H16. O2	156	43	601	928	631
3	C7. H12	96	81	662	927	662
4	C7. H12	96	55	490	919	514
5	C9. H16	124	81	667	918	684

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	---	---	---	---	3937-51-7
2	---	---	---	---	937-55-3
3	---	---	---	---	591-49-1
4	---	---	---	---	- -
5	---	---	---	---	280-65-9

MID LIBRARY SEARCH (LIBRARYNB)
08/18/93 17:24:00 + 22:18
SAMPLE: A5042456RE JOB2646
CONDS.: I50H
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1543
CALI: H2310 # 3

BASE M/Z: 55
RIC: 972800.

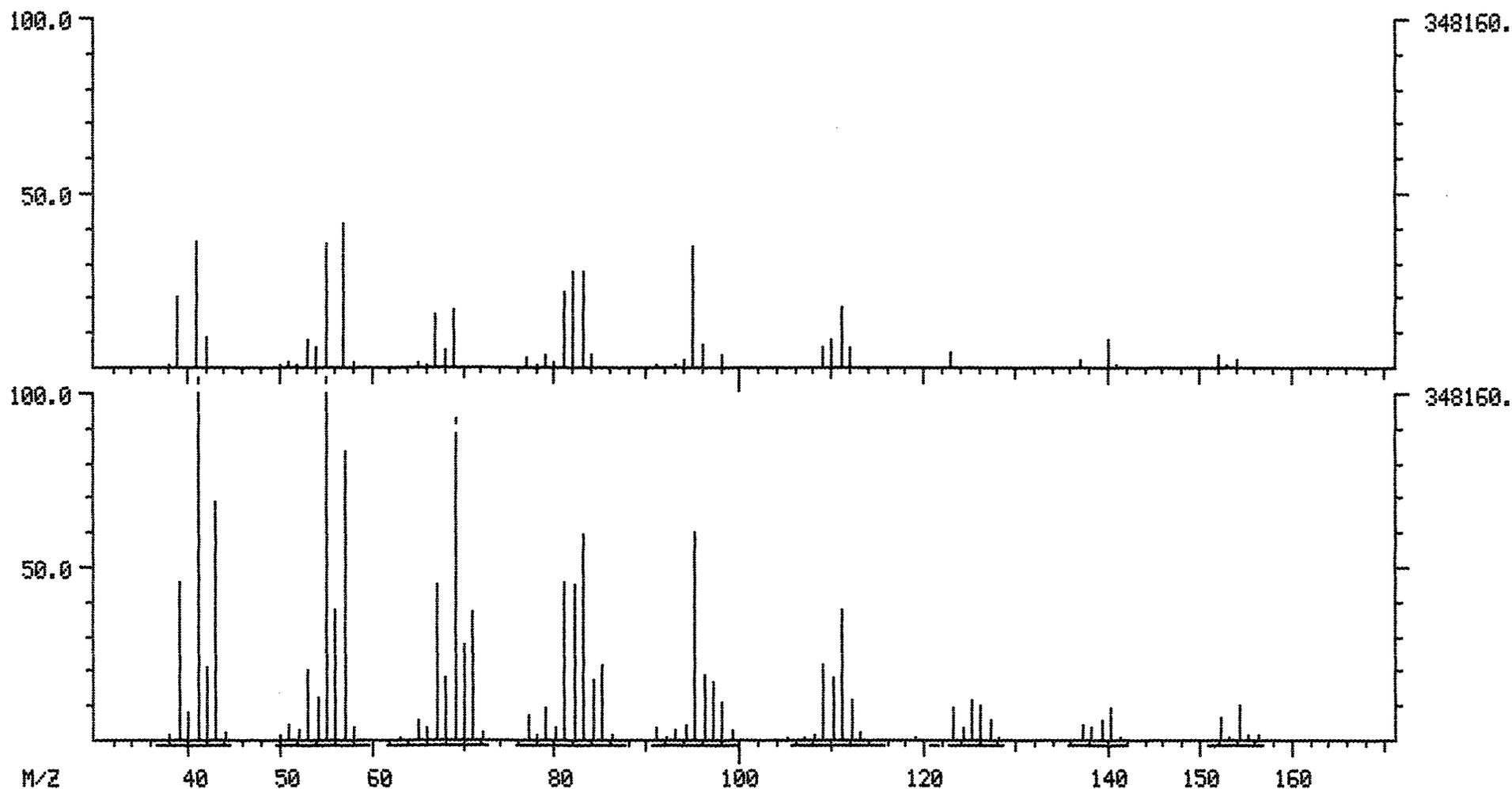


M/Z 40 60 80 100 120 140

DUAL MASS SPECTRUM
08/18/93 17:24:00 + 22:51
SAMPLE: AS042456RE JOB2646
CONDS.: I50H
TEMP: 187 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1581
CALI: H2310 #3

BASE M/Z: 57/ 55
RIC: 1390590./ 4358140.



Library Search
 08/18/93 17:24:00 + 22:51
 Sample: AS042456RE JOB2646
 Conds.: I50H
 Enhanced (S 15B 2N 0T)

Data: H2310 #1581
 Cali: H2310 # 3

Base m/z: 57
 RIC: 1372160.

53953 spectra in LIBRARYNB searched for maximum FIT
 265 matched at least 7 of the 16 largest peaks in the unknown

Rank In.	Name
1	6155 BICYCLO[3.1.1]HEPTANE, 2,6,6-TRIMETHYL-
2	2705 CYCLOHEXANEMETHANOL
3	8900 2,4-DECADIENAL, (E,Z)-
4	25796 2,5-PYRROLIDINEDIONE, 3-[[1-(ETHYLSULFONYL)ETHYL]-4-METHYL-
5	9001 NAPHTHALENE, DECAHYDRO-2-METHYL-

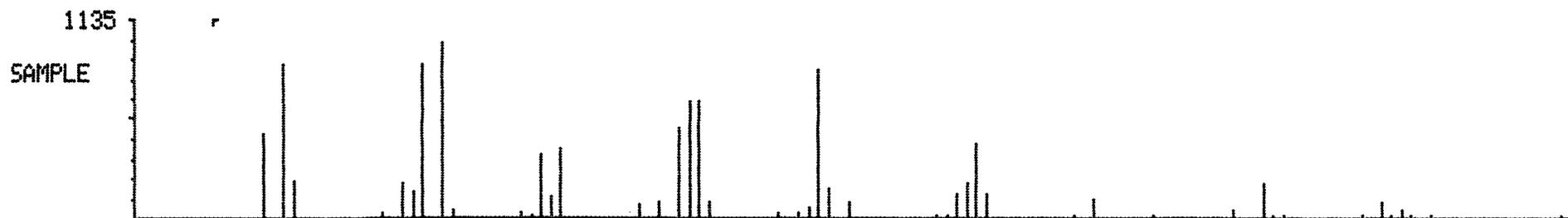
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C10. H18	138	41	615	970	619
2	C7. H14. O	114	55	418	942	430
3	C10. H16. O	152	41	570	937	570
4	C9. H15. O4. N. S	233	41	118	934	126
5	C11. H20	152	95	564	929	564

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	---	---	---	---	473-55-2
2	---	---	---	---	100-49-2
3	---	---	---	---	25152-83-4
4	---	---	---	---	58467-34-8
5	---	---	---	---	2958-76-1

MID LIBRARY SEARCH (LIBRARYNB)
08/18/93 17:24:00 + 22:51
SAMPLE: A5042456RE JOB2646
CONDS.: I50H
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1581
CALI: H2310 # 3

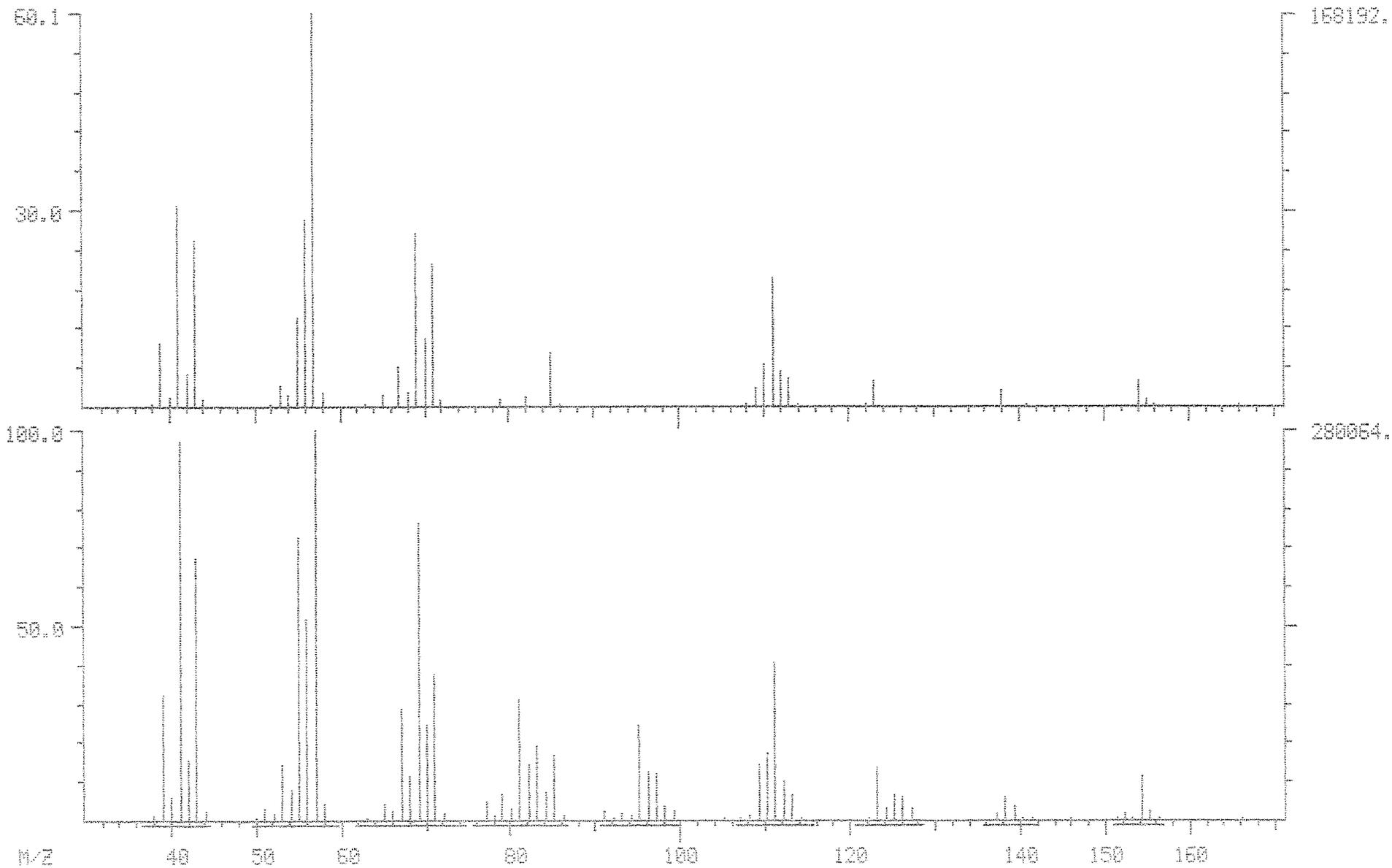
BASE M/Z: 57
RIC: 1372160.



DUAL MASS SPECTRUM
08/18/99 17:24:00 + 23:12
SAMPLE: ASD42456RE JOB2646
CONDS.: 150H
TEMP: 191 DEG. C
ENHANCED (S 15B 2H 0T)

DATA: H2310 #1605
CALI: H2310 #3

BASE M/Z: 57/ 57
RIC: 888832./ 2764900.



Library Search
 08/18/93 17:24:00 + 23:12
 Sample: A5042456RE JOB2646
 Conds.: I50H
 Enhanced (S 15B 2N 0T)

Data: H2310 #1605
 Cali: H2310 # 3

Base m/z: 57
 RIC: 871424.

62231 spectra in LIBRARYNB searched for maximum FIT
 67 matched at least 8 of the 16 largest peaks in the unknown

Rank In.	Name
1	15346 HEXANE, 2,2,3,4,5,5-HEXAMETHYL-, (DL)-
2	5160 PENTANE, 2,2,3,4-TETRAMETHYL-
3	8099 OCTANE, 2,6-DIMETHYL-
4	4635 1-HEXENE, 2,5,5-TRIMETHYL-
5	19023 DECANE, 2,6,7-TRIMETHYL-

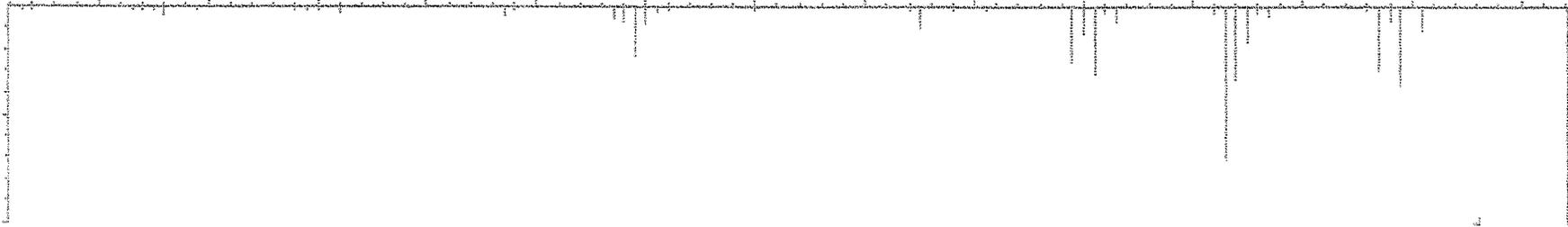
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C12. H26	170	57	420	959	420
2	C9. H20	128	57	610	892	616
3	C10. H22	142	57	624	886	641
4	C9. H18	126	57	678	881	700
5	C13. H28	184	57	605	880	634

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	55258-15-6
2	-----	-----	-----	-----	1186-53-4
3	-----	-----	-----	-----	2051-30-1
4	-----	-----	-----	-----	62185-56-2
5	-----	-----	-----	-----	62108-25-2

MID LIBRARY SEARCH (LIBRARYB)
 08/18/93 17:24:00 + 23:12
 SAMPLE: H5042455RE J082846
 COND5: 150H
 ENHANCED (> 150 2M 0T)

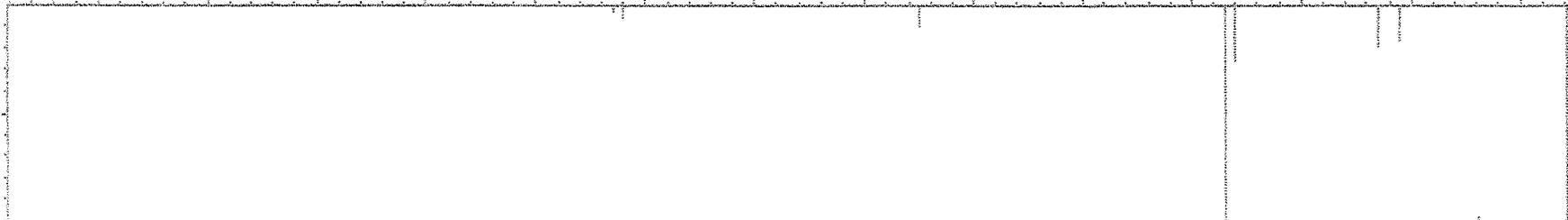
DATA: H2310 #1605
 CALL: H2310 # 3
 RICI: 871424
 BASE M/Z: 57

1428
 SAMPLE



C12.H26
 HEXANE, 2,2,3,4,5,5-HEXAMETHYL-, (DL)- CAS# 55258-15-6

1428
 N MT 170
 B PK 57
 RANK 1
 # 15346
 FIT 999



C9.H20
 PENTANE, 2,2,3,4-TETRAMETHYL- CAS# 1186-53-4

1428
 N MT 128
 B PK 57
 RANK 2
 # 5168
 FIT 992



C10.H22
 OCTANE, 2,6-DIMETHYL- CAS# 2051-30-1

1428
 N MT 142
 B PK 57
 RANK 3
 # 8059
 FIT 886

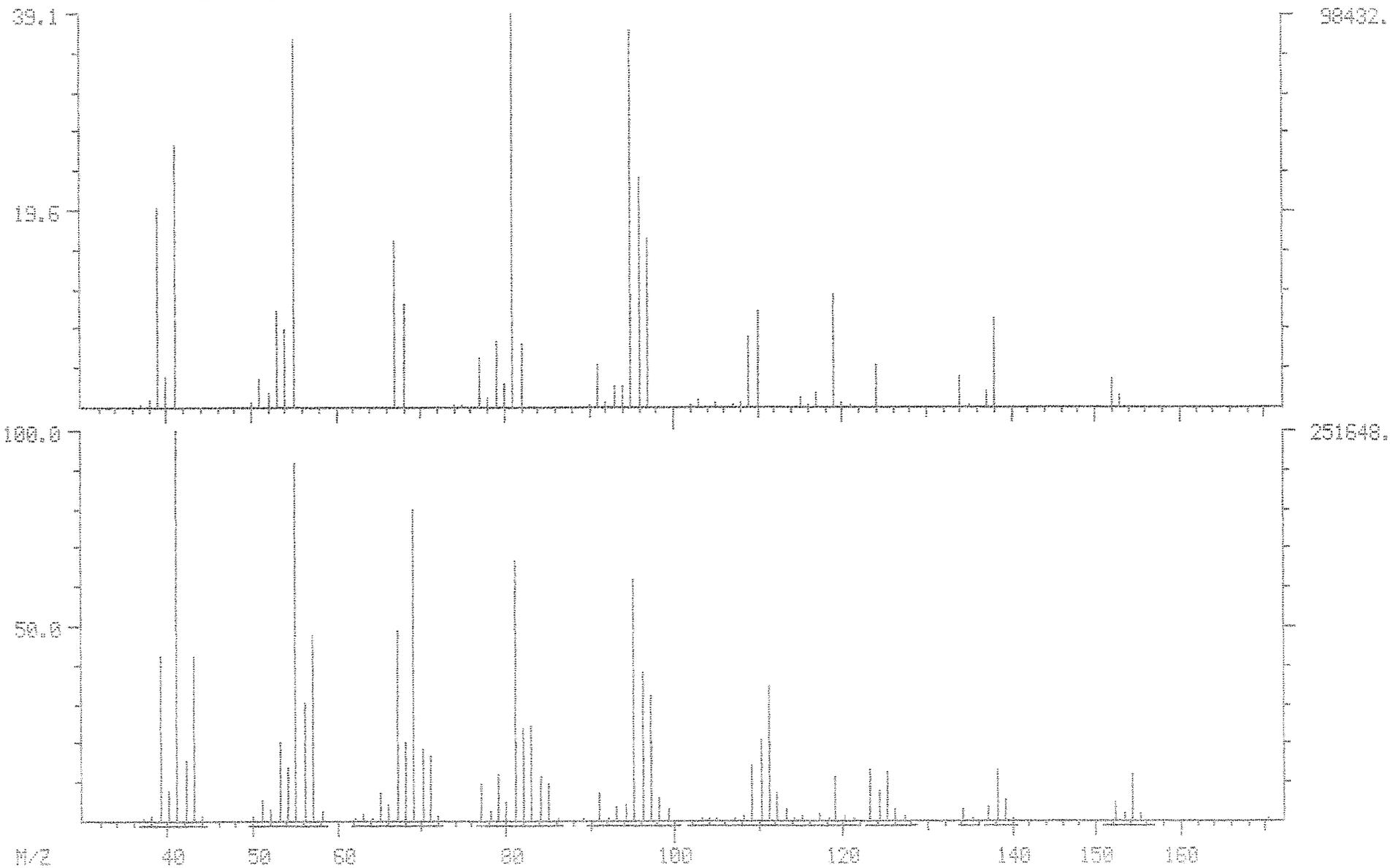


M/Z 40 50 60 80 100 120 140 160

DUAL MASS SPECTRUM
08/18/93 17:24:00 + 23:18
SAMPLE: A5042456RE JOB2646
CONDS.: 150H
TEMP: 192 DEG. C
ENHANCED (S 15B 2M 0T)

DATA: H2310 #1612
CALI: H2310 #3

BASE M/Z: 81/ 41
RIC: 845824./ 2946720.



Library Search
08/18/93 17:24:00 + 23:18
Sample: A5042456RE JOB2646
Conds.: I50H
Enhanced (S 15B 2N 0T)

Data: H2310 #1612
Call: H2310 # 3

Base m/z: 81
RIC: 840704.

10152

62231 spectra in LIBRARYNB searched for maximum FIT
94 matched at least 8 of the 16 largest peaks in the unknown

Rank In.	Name
1	4274 4,5-NONADIENE
2	6969 2-CYCLOHEXEN-1-ONE, 4-ETHYL-4-METHYL-
3	7078 CYCLOHEXANE, 1-METHYL-4-(1-METHYLETHENYL)-, TRANS-
4	4248 ETHYLIDENECYCLOHEPTANE
5	7048 2-DECYNE

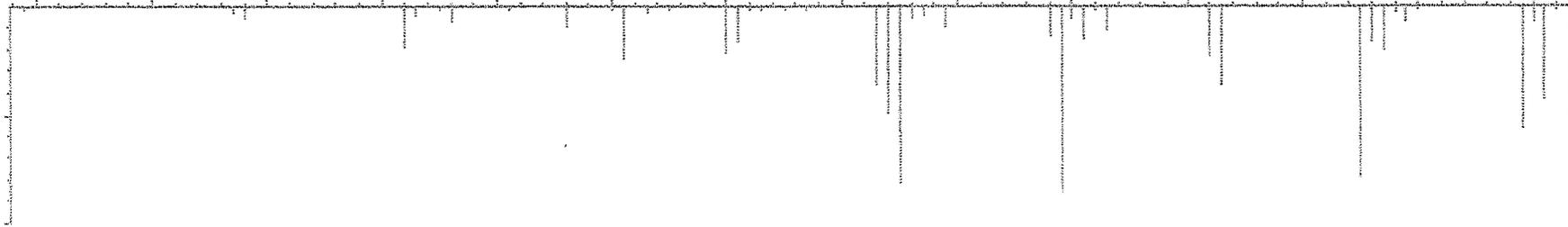
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9. H16	124	67	601	915	611
2	C9. H14. O	138	81	629	904	655
3	C10. H18	138	81	628	899	659
4	C9. H16	124	67	608	889	621
5	C10. H18	138	67	588	884	620

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	821-74-9
2	-----	-----	-----	-----	17429-32-2
3	-----	-----	-----	-----	1124-25-0
4	-----	-----	-----	-----	10494-87-8
5	-----	-----	-----	-----	2384-70-5

MID LIBRARY SEARCH (LIBRARYB)
08/18/93 12:24:00 + 23:18
SAMPLE: H5042456RE JOB2646
COND#: 150H
ENHANCED (5 150 2N 0T)

DATA: H2310 #1512
CALL: H2310 # 3
R/C: 840704
BASE M/Z: 81

1180
SAMPLE



09.H16

4,5-NONADIENE

CAS#

821-74-9

1180
M WT 124
B PK 57
RANK 1
4274
FIT 915



09.H14.0

2-CYCLOHEXEN-1-ONE, 4-ETHYL-4-METHYL-

CAS#

17429-92-2

1180
M WT 138
B PK 81
RANK 2
5939
FIT 504



09.H18

CYCLOHEXENE, 1-METHYL-4-(1-METHYLETHENYL)-, TRANS-

CAS#

1124-25-0

1180
M WT 138
B PK 81
RANK 3
7078
FIT 899



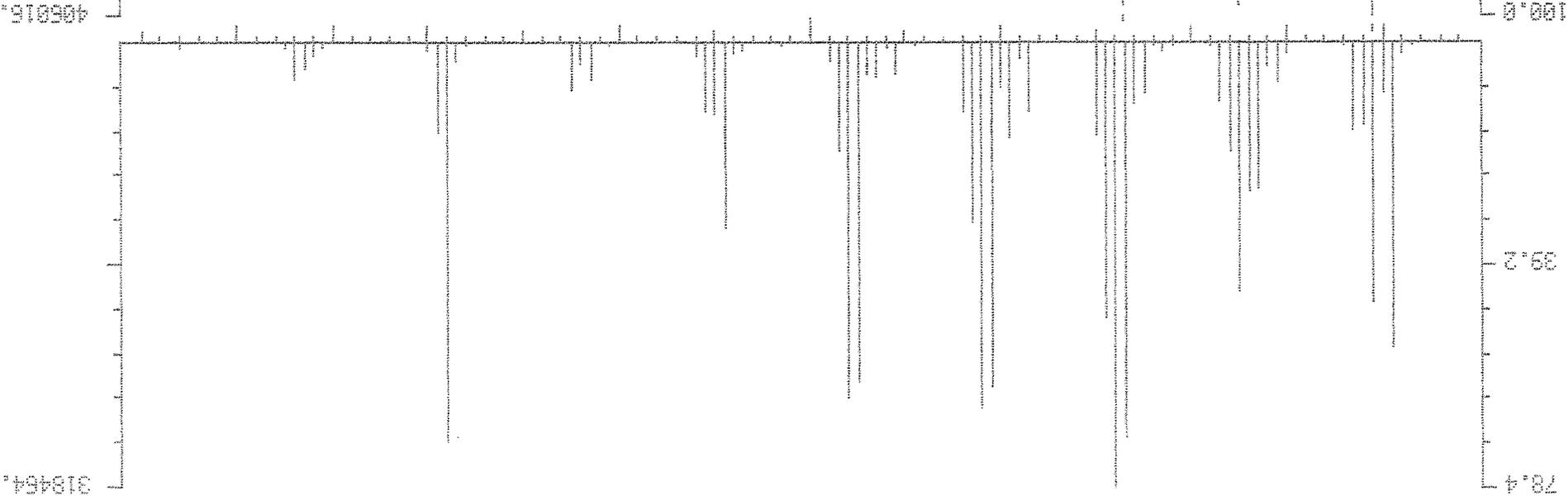
DUAL MASS SPECTRUM
08/18/93 17:24:00 + 23:41
SAMPLE: A504245BRE JOB2545
COND5.: 150H
TEMP: 150 DEG. C
ENHANCED (5 150 2N 01)

DATA: H2310 #1639

CALLI: H2310 #3

BASE M/Z: 68 / 41

RIC: 4358140 / 7053310



Library Search
08/18/93 17:24:00 + 23:41
Sample: AS042456RE JOB2646
Conds.: I50H
Enhanced (S 15B 2N 0T)

Data: H2310 #1639
Call: H2310 # 3

Base m/z: 68
RIC: 4116480.

62231 spectra in LIBRARYND searched for maximum FIT
176 matched at least 8 of the 16 largest peaks in the unknown

Rank	In.	Name
1	7104	NAPHTHALENE, DECAHYDRO-, TRANS-
2	7041	NAPHTHALENE, DECAHYDRO-
3	7099	NAPHTHALENE, DECAHYDRO-, CIS-
4	2341	BICYCLO[2.2.1]HEPTANE, 2-METHYL-, EXO-
5	7111	SPIRO[4.5]DECANE

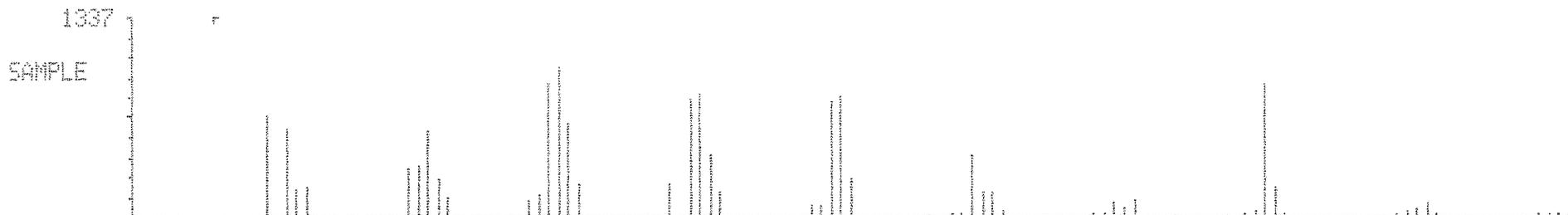
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C10.H18	138	67	745	978	745
2	C10.H18	138	138	740	976	740
3	C10.H18	138	67	724	971	724
4	C8.H14	110	67	504	965	510
5	C10.H18	138	96	723	953	723

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	493-02-7
2	-----	-----	-----	-----	91-17-8
3	-----	-----	-----	-----	493-01-6
4	-----	-----	-----	-----	872-78-6
5	-----	-----	-----	-----	176-63-6

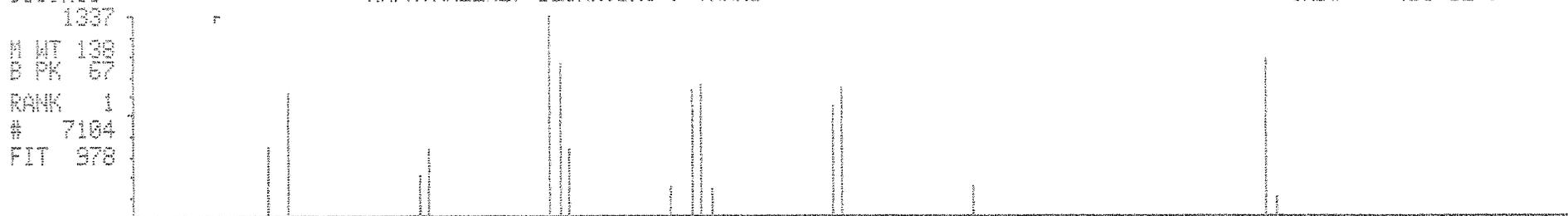
MID LIBRARY SEARCH (LIBRARYNE)
08/18/93 17:24:00 + 23:41
SAMPLE: A504245ERE JOB2646
CONDS.: 150H
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1639
CALI: H2310 # 3

BASE M/Z: 68
RIC: 4116480.

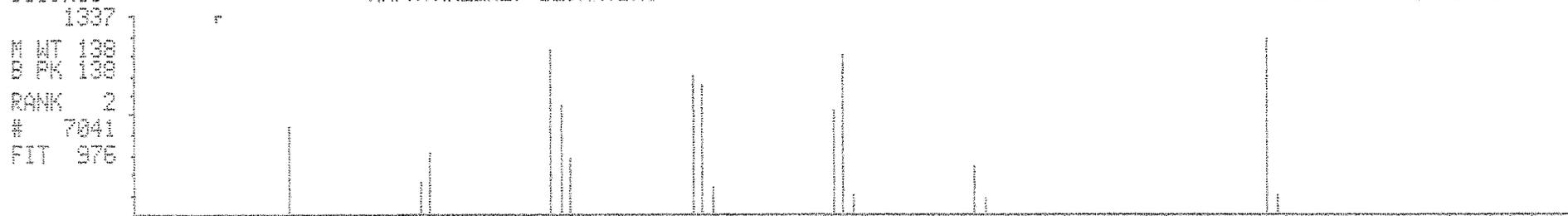


010.H18 NAPHTHALENE, DECAHYDRO-, TRANS- CAS# 493-02-7



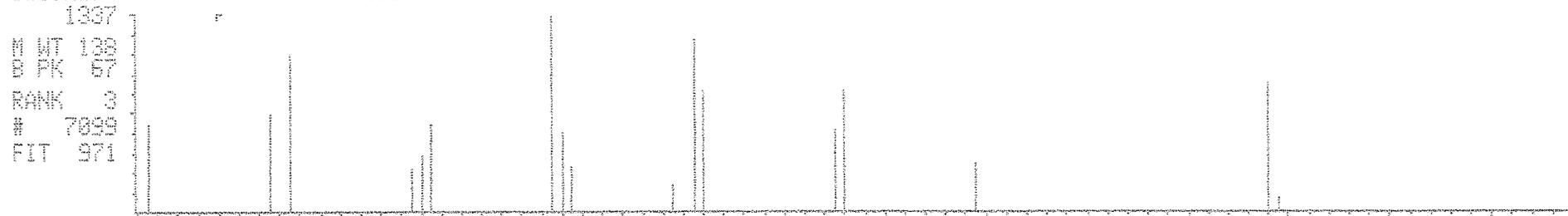
M WT 138
B PK 67
RANK 1
7104
FIT 978

010.H18 NAPHTHALENE, DECAHYDRO- CAS# 91-17-8



M WT 138
B PK 138
RANK 2
7041
FIT 976

010.H18 NAPHTHALENE, DECAHYDRO-, CIS- CAS# 493-01-6



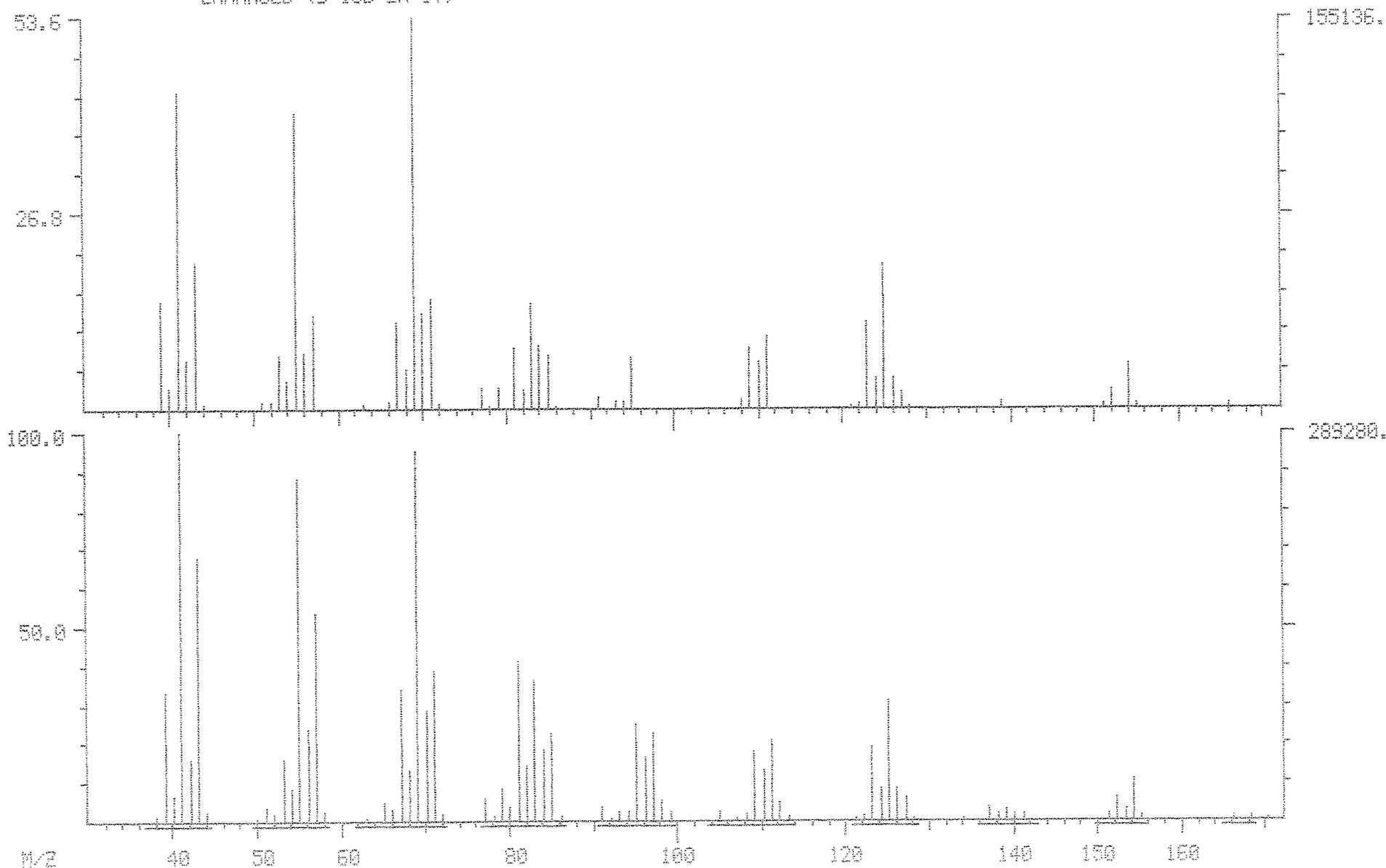
M WT 138
B PK 67
RANK 3
7099
FIT 971

M/Z 40 60 80 100 120 140 160

DUAL MASS SPECTRUM
08/19/93 17:24:00 + 23:55
SAMPLE: A5042456RE JOB2646
COND5.: I50H
TEMP: 198 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1655
CALI: H2310 #3

BASE M/Z: 69/ 41
RIC: 1167360./ 3047420.



Library Search
08/18/93 17:24:00 + 23:55
Sample: A8042456RE JDB2646
Conds.: I50H
Enhanced (S 15B 2N 0T)

Data: H2310 #1655
Call: H2310 # 3

Base m/z: 67
RIC: 1128450.

0158

62231 spectra in LIBRARYNB searched for maximum FIT
341 matched at least 7 of the 16 largest peaks in the unknown

Rank In.	Name
1	14750 4-NONENE, 2,3,3-TRIMETHYL-, (E)-
2	7570 4-NONENE, 3-METHYL-, (Z)-
3	11087 4-OCTENE, 2,3,7-TRIMETHYL-, [5-(E)]-
4	2647 CYCLOPROPANE, (1,2-DIMETHYLPROPYL)-
5	4623 2,2-DIMETHYL-3-HEPTENE TRANS

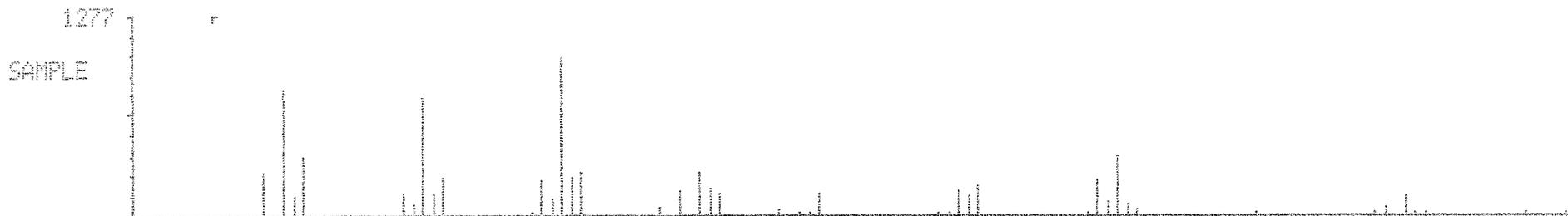
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C12. H24	168	69	538	950	549
2	C10. H20	140	55	537	938	547
3	C11. H22	154	69	514	932	524
4	C8. H16	112	69	500	919	508
5	C9. H18	126	69	488	918	501

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	63830-67-1
2	-----	-----	-----	-----	63830-69-3
3	-----	-----	-----	-----	52763-13-0
4	-----	-----	-----	-----	6976-27-8
5	-----	-----	-----	-----	19550-75-5

MID LIBRARY SEARCH (LIBRARYNB)
08/18/93 17:24:00 + 23:55
SAMPLE: A5042456RE JOB2546
CONDS.: 150H
ENHANCED (S 15B 2N 8T)

DATA: H2310 #1655
CALI: H2310 # 3

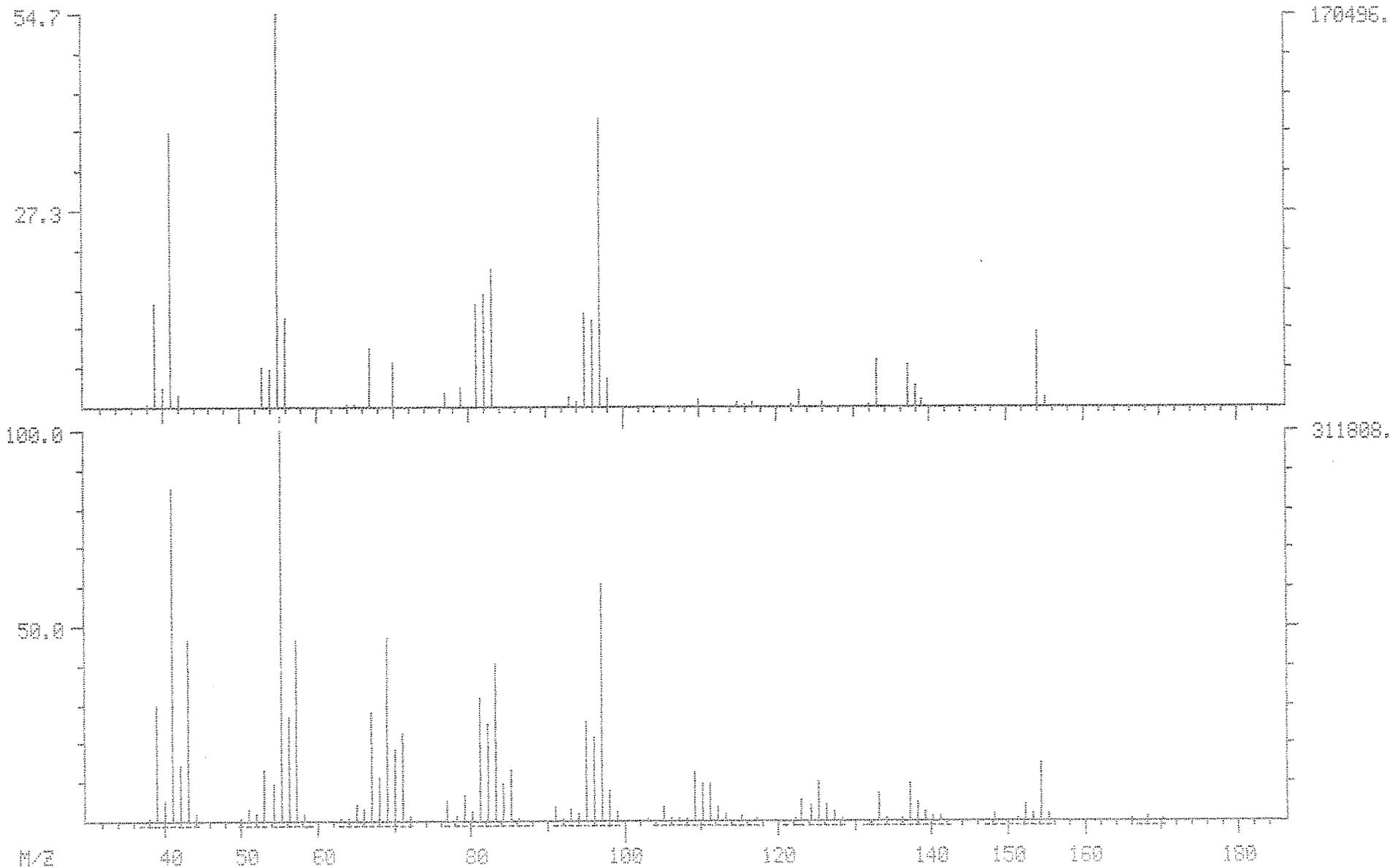
BASE M/Z: 69
RIC: 1128450.



DUAL MASS SPECTRUM
08/18/93 17:24:00 + 24:04
SAMPLE: A5042456RE JOB2545
CONDS.: I50H
TEMP: 199 DEG. C
ENHANCED (S 15B 2H 0T)

DATA: H2310 #1665
CALI: H2310 #3

BASE M/Z: 55/ 55
RIC: 960512./ 2846720.



Library Search Data: H2310 #1665 Base m/z: 55
08/18/93 17:24:00 + 24:04 Call: H2310 # 3 RIC: 959488

Sample: A5042456RE J082646

Conds: 150H

Enhanced (S 15B 2N 0T)

62231 spectra in LIBRARYB searched for maximum FIT
172 matched at least 7 of the 16 largest peaks in the unknown

Rank In. Name

- 1 1093 PENTADIENAL, 2-METHYL-
- 2 3040 CYCLOHEXANEMETHANOL
- 3 5120 CYCLOHEPTANEMETHANOL
- 4 5047 CYCLOHEXANEMETHANOL, 2-METHYL-
- 5 4241 CYCLOHEXANE, 2-PROPENYL-

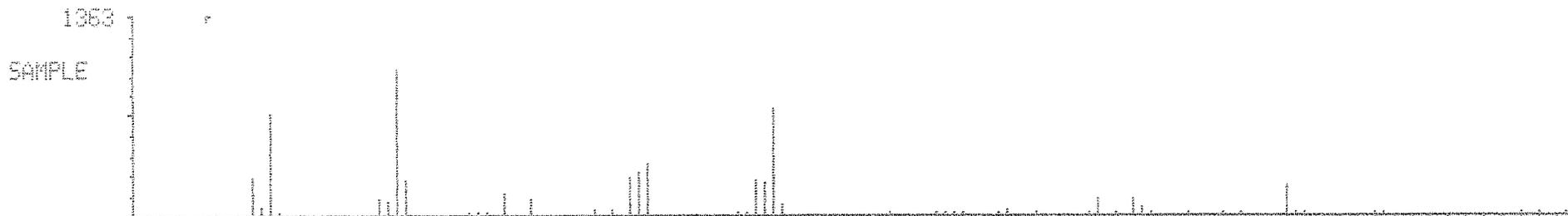
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C6.H8.O	96	96	210	919	210
2	C7.H14.O	114	55	451	898	482
3	C8.H16.O	128	55	587	878	641
4	C8.H16.O	128	55	545	864	596
5	C9.H16	124	55	457	863	482

Rank	Ret. Time	B. P. Int.	US. Pat. 1	US. Pat. 2	C. A. S. #
1	-----	-----	-----	-----	3937-51-7
2	-----	-----	-----	-----	100-49-2
3	-----	-----	-----	-----	4448-75-3
4	-----	-----	-----	-----	2105-40-0
5	-----	-----	-----	-----	2114-42-3

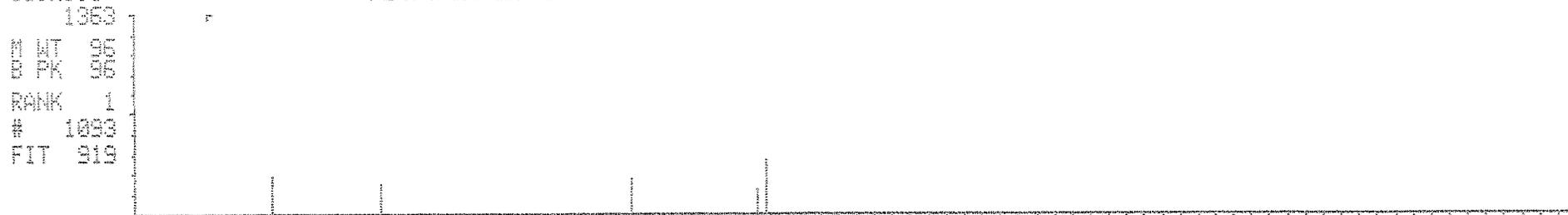
MID LIBRARY SEARCH (LIBRARYNB)
08/18/93 17:24:00 + 24:04
SAMPLE: A5042456RE JOB2646
CONDS.: I50H
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1655
CALI: H2310 # 3

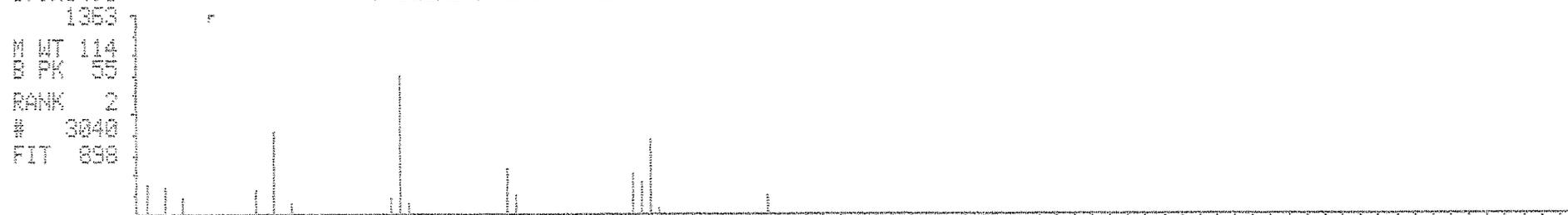
BASE M/Z: 55
RIC: 959488.



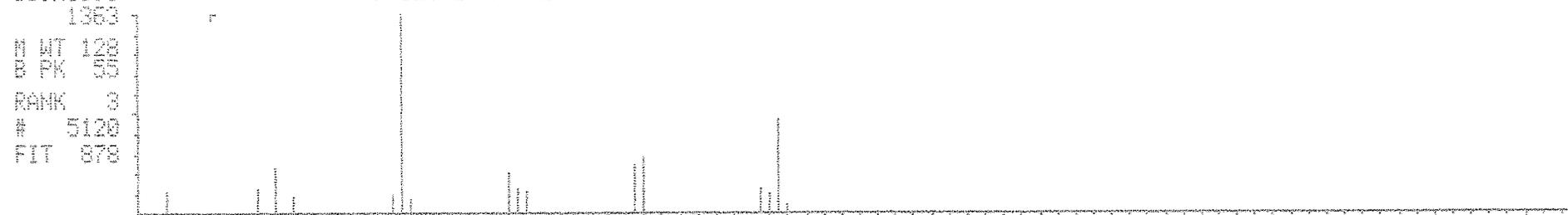
06.H8.0 PENTADIENAL, 2-METHYL- CAS# 3937-51-7



07.H14.0 CYCLOHEXANEMETHANOL CAS# 100-49-2



08.H16.0 CYCLOHEPTANEMETHANOL CAS# 4448-75-3



M/Z

40

60

80

100

120

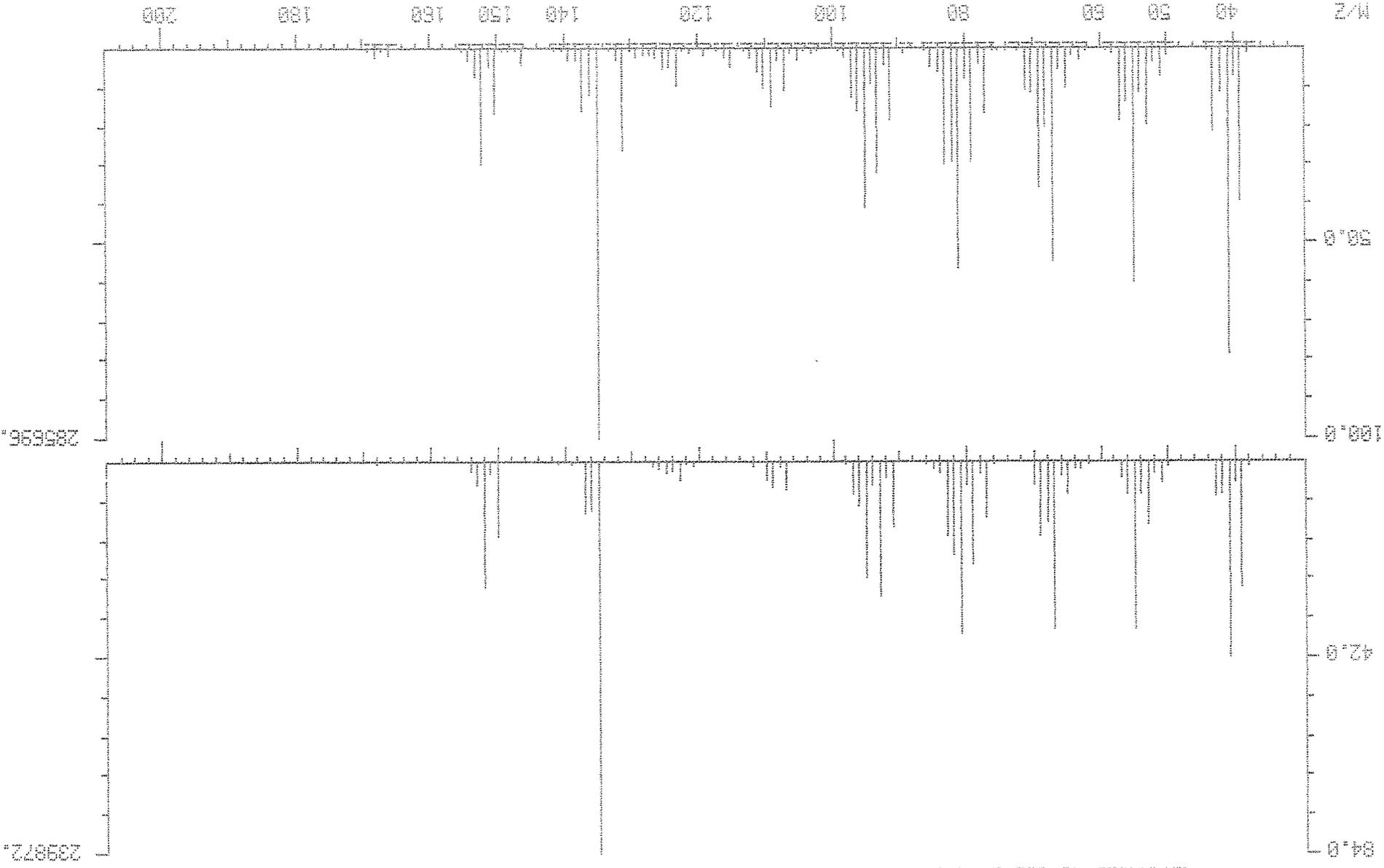
140

160

180

DATA: H2310 #1708
BASE M/Z: 135 / 135
CALI: H2310 #3
RIC: 1859580 / 3174400

DUAL MASS SPECTRUM
08/18/93 17:24:00 + 24:41
SAMPLE: #5042459E JOB2646
COND5: 150H
TEMP: 159 DEG. C
ENHANCED (S 158 2N 0T)



Library Search
08/18/93 17:24:00 + 24:41
Sample: A5042456RE JOB2646
Conds.: I50H
Enhanced (S 15B 2N 0T)

Data: H2310 #1708
Cali: H2310 # 3

Base m/z: 135 **0164**
RIC: 1779710.

62231 spectra in LIBRARYNB searched for maximum FIT
118 matched at least 7 of the 16 largest peaks in the unknown

Rank In.	Name
1	4254 3-OCTYNE, 5-METHYL-
2	7096 BICYCLO[3.1.1]HEPTANE, 2,6,6-TRIMETHYL-
3	14654 10-UNDECYN-1-OL
4	13734 1-NITROSCADAMANTANE
5	2325 TRANS-BICYCLO[5.1.0]OCTANE

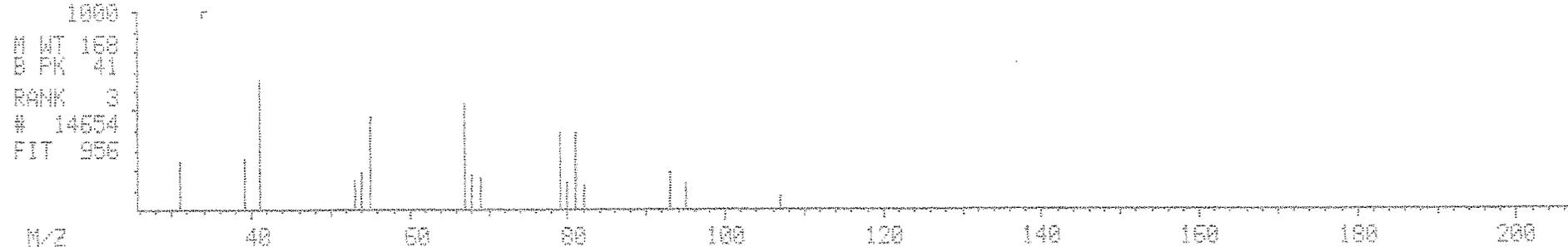
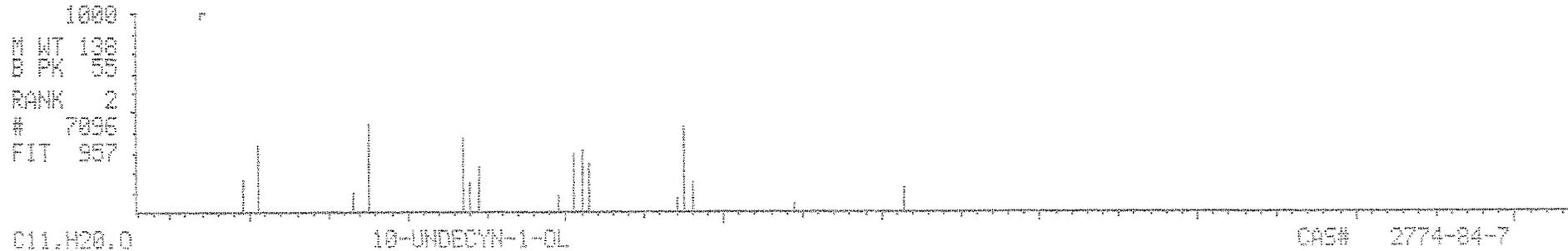
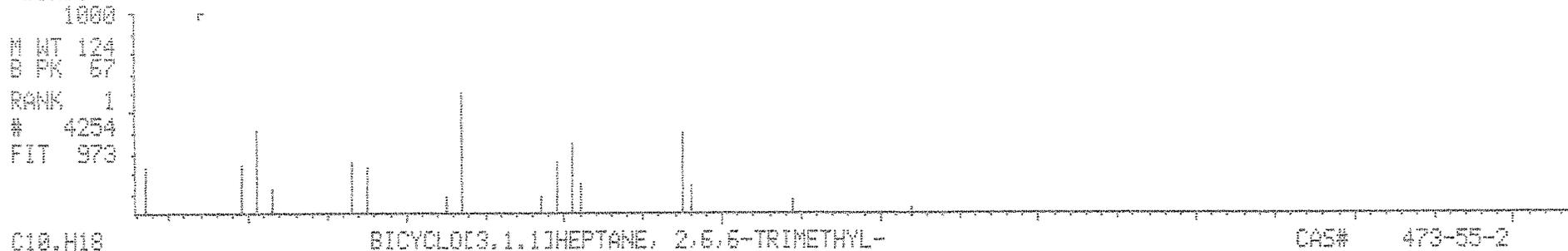
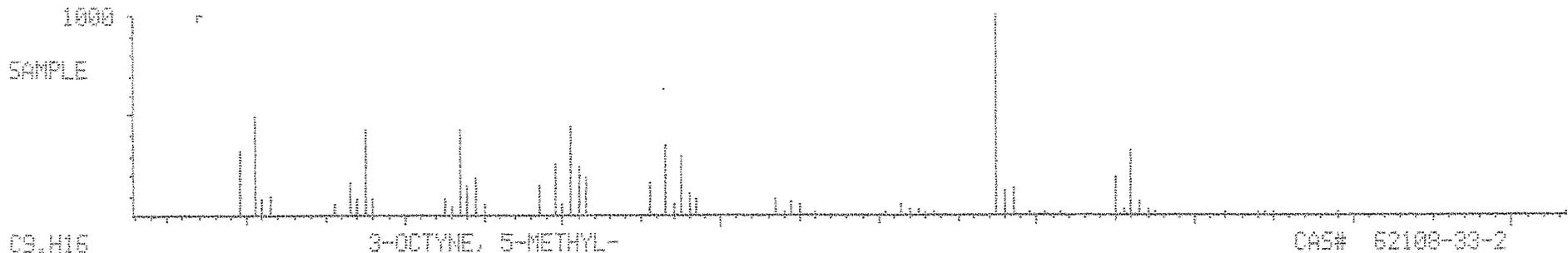
Rank	Formula	M. Wt	B. Pk	Purity	Fit	RFit
1	C9. H16	124	67	349	973	349
2	C10. H18	138	55	384	957	384
3	C11. H20. O	168	41	389	956	389
4	C10. H15. O. N	165	135	516	952	516
5	C8. H14	110	67	296	933	296

Rank	Ret. Time	B. P. Int.	US. Par. 1	US. Par. 2	C. A. S. #
1	-----	-----	-----	-----	62108-33-2
2	-----	-----	-----	-----	473-55-2
3	-----	-----	-----	-----	2774-84-7
4	-----	-----	-----	-----	22734-10-7
5	-----	-----	-----	-----	21370-66-1

MID LIBRARY SEARCH (LIBRARYNB)
08/18/93 17:24:00 + 24:41
SAMPLE: A5042456RE JOB254E
CONDS.: 150H
ENHANCED (S 15B 2N 0T)

DATA: H2310 #1708
CALI: H2310 # 3

BASE M/Z: 135
RIC: 1779710.



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SP1SSW

Lab Name: RECRA ENVIRON Contract: C002412
 Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393
 Matrix: (soil/water) SOIL Lab Sample ID: AS042455
 Sample wt/vol: 5.1 (g/mL) G Lab File ID: H2307
 Level: (low/med) LOW Date Received: 08/17/93
 % Moisture: not dec. 3 Date Analyzed: 08/18/93
 GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0
 Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO. COMPOUND Q

74-87-3	-----Chloromethane	10	U
74-83-9	-----Bromomethane	10	U
75-01-4	-----Vinyl Chloride	10	U
75-00-3	-----Chloroethane	10	U
75-09-2	-----Methylene Chloride	10	U
67-64-1	-----Acetone	10	U
75-15-0	-----Carbon Disulfide	10	U
75-35-4	-----1,1-Dichloroethene	10	U
75-34-3	-----1,1-Dichloroethane	10	U
540-59-0	-----1,2-Dichloroethene (total)	10	U
67-66-3	-----Chloroform	10	U
107-06-2	-----1,2-Dichloroethane	10	U
78-93-3	-----2-Butanone	10	U
71-55-6	-----1,1,1-Trichloroethane	10	U
56-23-5	-----Carbon Tetrachloride	10	U
75-27-4	-----Bromodichloromethane	10	U
78-87-5	-----1,2-Dichloropropane	10	U
10061-01-5	-----cis-1,3-dichloropropene	10	U
79-01-6	-----Trichloroethene	10	U
124-48-1	-----Dibromochloromethane	10	U
79-00-5	-----1,1,2-Trichloroethane	10	U
71-43-2	-----Benzene	10	U
10061-02-6	-----trans-1,3-dichloropropene	10	U
75-25-2	-----Bromoform	10	U
108-10-1	-----4-Methyl-2-Pentanone	10	U
591-78-6	-----2-Hexanone	10	U
127-18-4	-----Tetrachloroethene	10	U
79-34-5	-----1,1,2,2-Tetrachloroethane	10	U
108-88-3	-----Toluene	10	U
108-90-7	-----Chlorobenzene	10	U
100-41-4	-----Ethylbenzene	10	U
100-42-5	-----Styrene	10	U
1330-20-7	-----Total Xylenes	10	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SP1SSW

Lab Name: RECRA ENVIRON Contract: C002412

Lab Code: RECNY Case No.: RA093 SAS No.: _____ SDG No.: 81393

Matrix: (soil/water) SOIL Lab Sample ID: AS042455

Sample wt/vol: 5.1 (g/mL) G Lab File ID: H2307

Level: (low/med) LOW Date Received: 08/17/93

% Moisture: not dec. 3 Date Analyzed: 08/18/93

GC Column: DB-624 ID: 0.530 (mm) Dilution Factor: 1.0

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

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

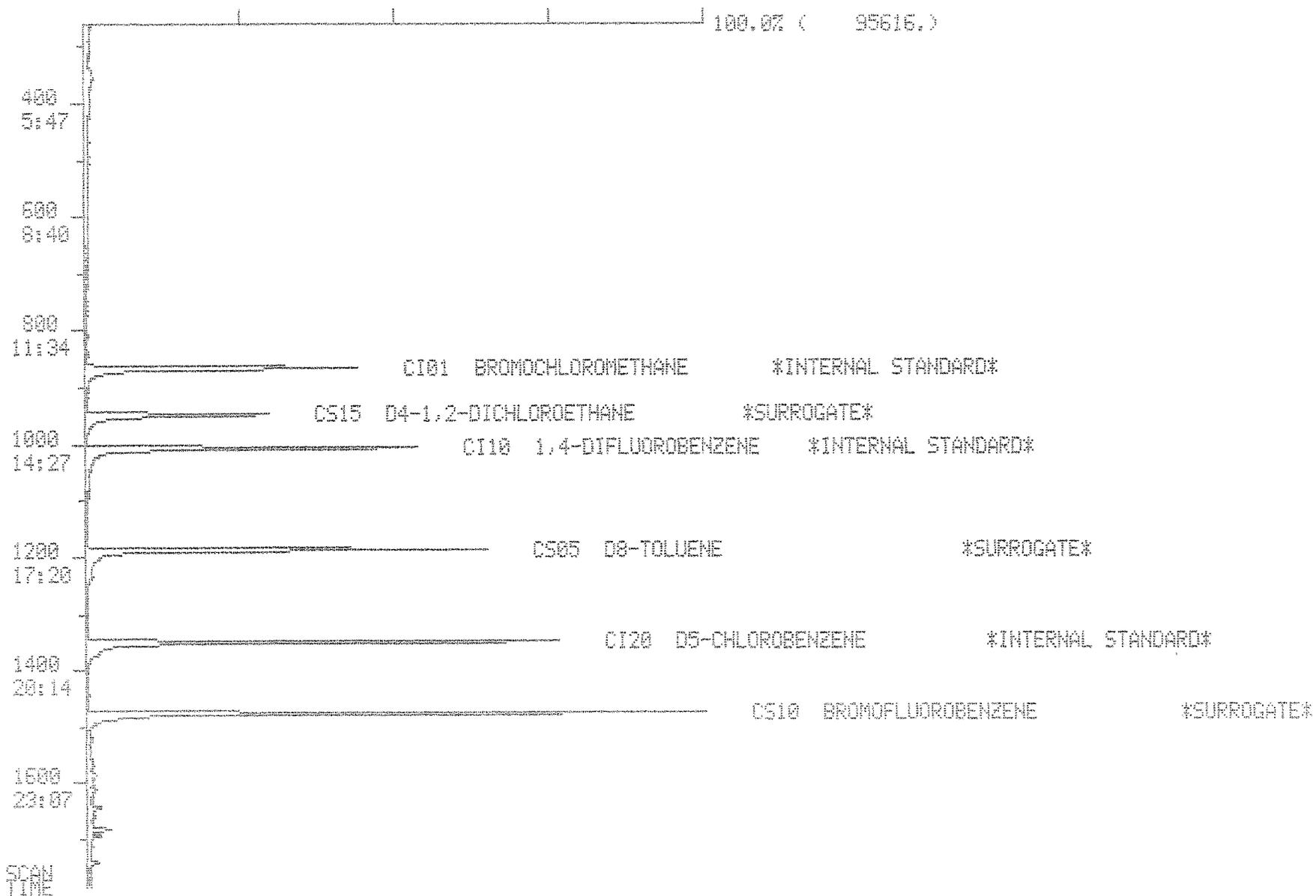
DATA FROM FILE: H2387

SCANS 260 TO 1785 ACQUIRED: 08/18/93 14:37:00

CALI: H2387 #3

SAMPLE: A5042455 JOB2646

CONDS.: 15MH



Data: H2307.TI

08/18/93 14:37:00

Sample: A5042455 J082646

Conds.: IS0H

Formula:

Instrument: IS0H

Submitted by:

Analyst: JUL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	BROMOCHLOROMETHANE
2	1,4-DIFLUOROBENZENE
3	D5-CHLOROBENZENE
4	D4-1,2-DICHLOROETHANE
5	D8-TOLUENE
6	BROMOFLUOROBENZENE
7	CHLOROMETHANE
8	BROMOMETHANE
9	VINYL CHLORIDE
10	CHLOROETHANE
11	METHYLENE CHLORIDE
12	ACETONE
13	CARBON DISULFIDE
14	1,1-DICHLOROETHENE
15	1,1-DICHLOROETHANE
16	TRANS-1,2-DICHLOROETHENE
17	CHLORFORM
18	1,2-DICHLOROETHANE
19	2-BUTANONE
20	1,1,1-TRICHLOROETHANE
21	CARBON TETRACHLORIDE
22	VINYL ACETATE
23	BROMODICHLOROMETHANE
24	CIS-1,2-DICHLOROETHENE
25	ACROLEIN
26	ACRYLONITRILE
27	TRICHLOROFLUOROMETHANE
28	ACETONITRILE
29	1,2-DICHLOROPROPANE
30	CIS-1,3-DICHLOROPROPENE
31	TRICHLOROETHENE
32	DIBROMOCHLOROMETHANE
33	1,1,2-TRICHLOROETHANE
34	BENZENE
35	TRANS-1,3-DICHLOROPROPENE
36	BROMOFORM
37	2-CHLOROETHYL VINYL ETHER
38	1,2-DIBROMOETHANE
39	1,2-DIBROMO-3-CHLOROPROPANE
40	4-METHYL-2-PENTANONE
41	2-HEXANONE
42	TETRACHLOROETHENE
43	1,1,2,2-TETRACHLOROETHANE
44	TOLUENE
45	CHLOROBENZENE
46	ETHYLBENZENE
47	STYRENE

Clear

SS
ED
8/18/93
Na H₂O
TIC
RFE

No Name
 48 C246 M, P--XYLENE
 49 C247 O--XYLENE
 50 C260 1,3-DICHLOROBENZENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	863	12:28	1	1.000	A BB	32893.	250.000 NG	16.70
2	114	1004	14:31	2	1.000	A BB	120277.	250.000 NG	16.70
3	117	1348	19:29	3	1.000	A BB	111088.	250.000 NG	16.70
4	65	946	13:40	1	1.096	A BB	63646.	259.861 NG	17.36
5	98	1185	17:07	3	0.879	A BB	107405.	249.496 NG	16.67
6	95	1474	21:18	3	1.093	A BB	87214.	236.614 NG	15.81
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
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35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	91	1193	17:14	3	0.885	A BB	342	0.706 NG	0.05
45	NOT FOUND								
46	104	1373	19:50	3	1.019	A BB	156	0.886 NG	0.04
47	NOT FOUND								
48	104	1373	19:50	3	1.019	A BB	156	0.561 NG	0.04
49	NOT FOUND								
50	NOT FOUND								

AD
 40
 minutes
 SCAN

9/19/93

Quantitation Report File: H2307

Data: H2307.TI

08/18/93 14:37:00

Sample: A5042455 JOB2646

Conds.: I50H

Formula:

Instrument: I50H

Weight: 0.000

Submitted by:

Analyst: JJJ

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No Name

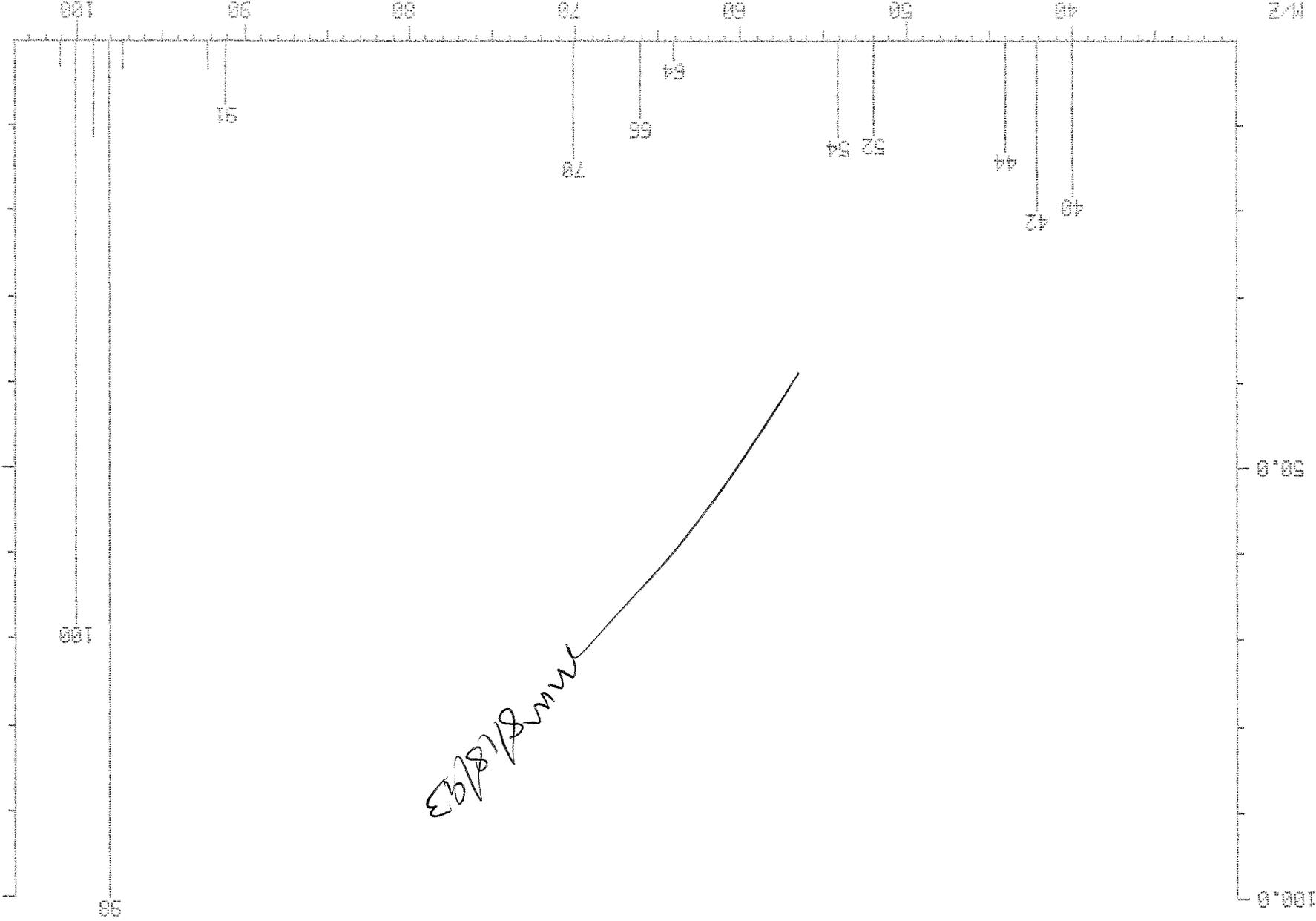
51 C267 1,4-DICHLOROBENZENE

52 C249 1,2-DICHLOROBENZENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT	FOUND							
52	NOT	FOUND							

0172

1440
0.



BASE M/Z: 98
R10: 4264

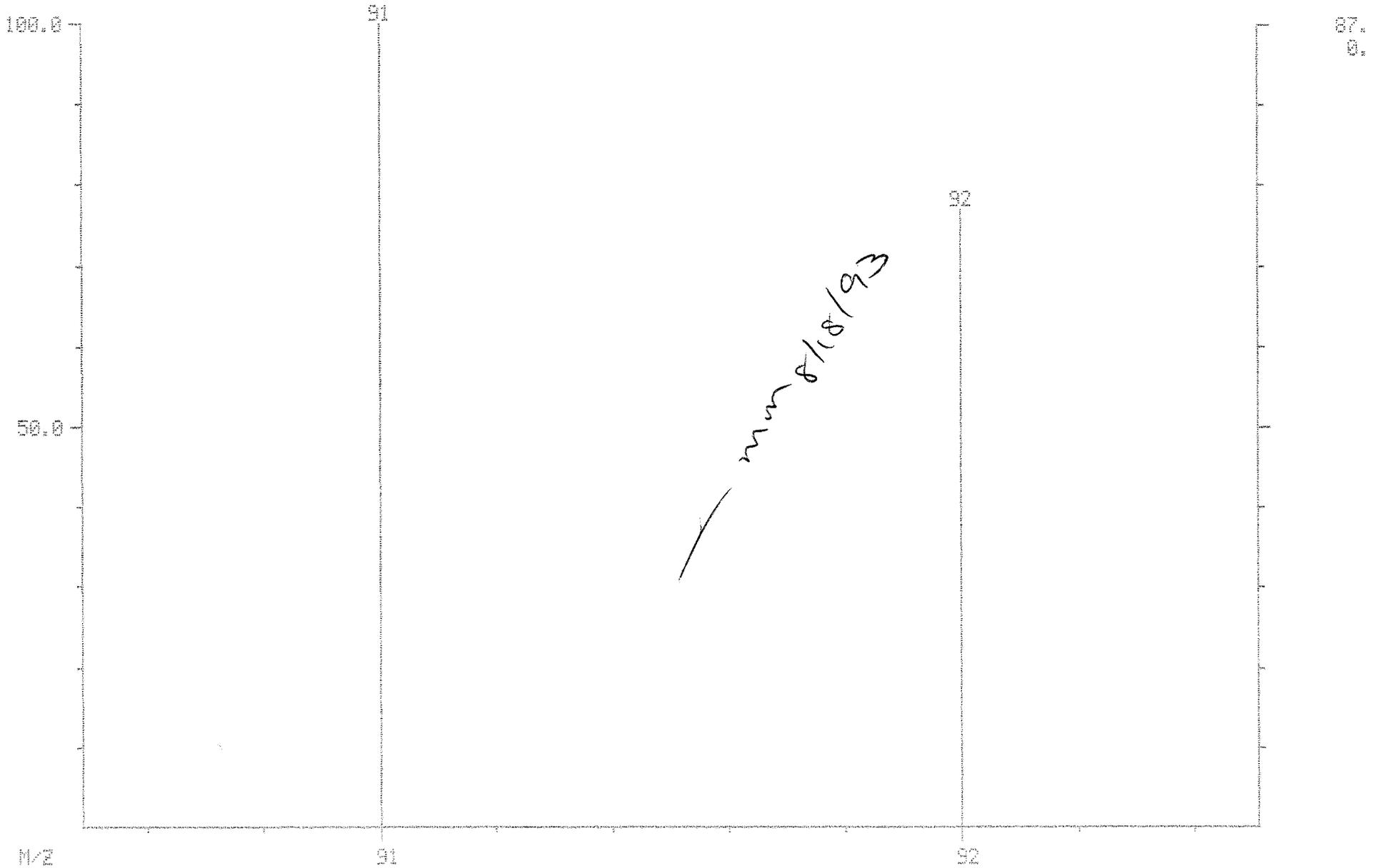
DATA: H2307 #1130
CALL: H2307 #3

MASS SPECTRUM
08/18/93 14:37:00 + 17:14
SAMPLE: R5042455 JOB2646
COND: 150H
TEMP: 131 DEG. C
NAME: C230 TOLUENE

MASS SPECTRUM
08/18/93 14:37:00 + 17:14
SAMPLE: A5042455 JOB2646
CONDS.: 150H
TEMP: 131 DEG. C
ENHANCED (S 15B 2M 0T)NAME: C230 TOLUENE

DATA: H2307 #1193
CALI: H2307 #3

BASE M/Z: 91
RIC: 154.

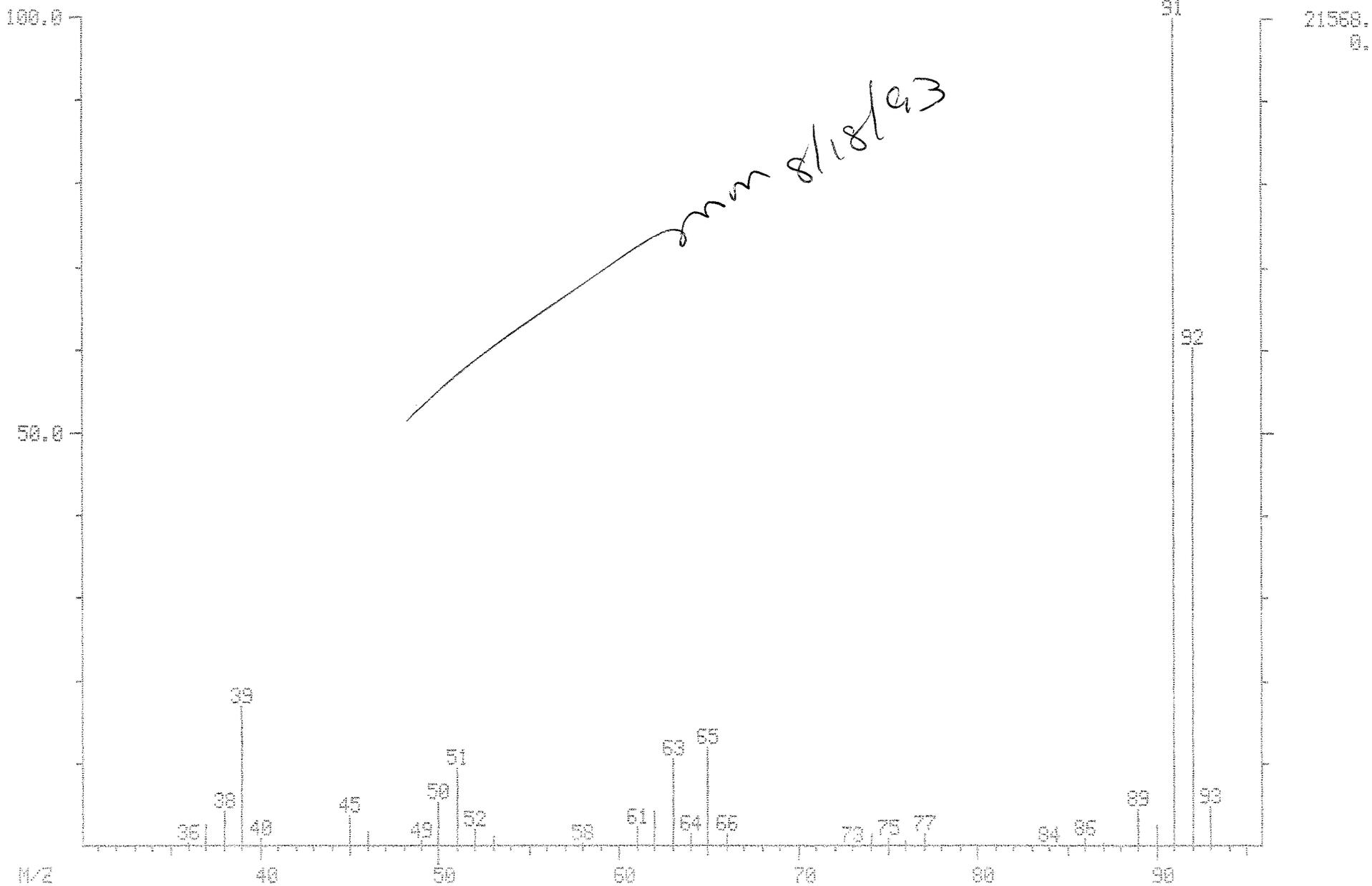


MASS SPECTRUM
08/18/93 10:52:00 + 17:20
SAMPLE: USTD050
COND5.: I50H
TEMP: -379 DEG. C

DATA: H2302 #1200
ENHANCED (S 156 2N 0T)

BASE M/Z: 91
RIC: 55488.

NAME: C230 TOLUENE



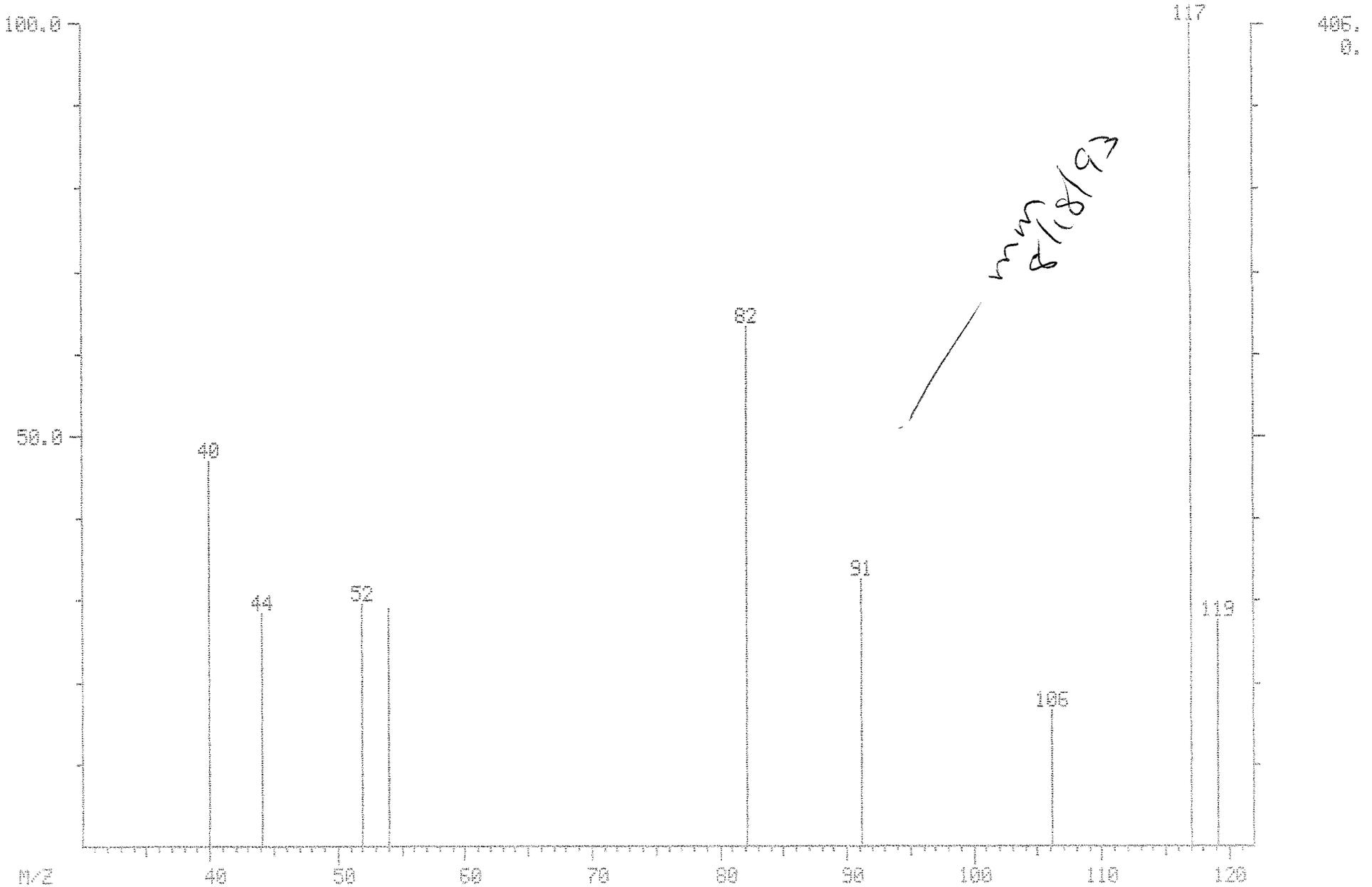
0174

MASS SPECTRUM
08/18/93 14:37:00 + 19:50
SAMPLE: A5042455 JOB2646
CONDS.: I50H
TEMP: 157 DEG. C

DATA: H2307 #1373
CALL: H2307 #3

BASE M/Z: 117
RIC: 1518.

NAME: C240 ETHYLBENZENE



10175

MASS SPECTRUM

08/18/93 14:37:00 + 19:50

SAMPLE: A5042455 JOB2646

CONDS.: 150H

TEMP: 157 DEG. C

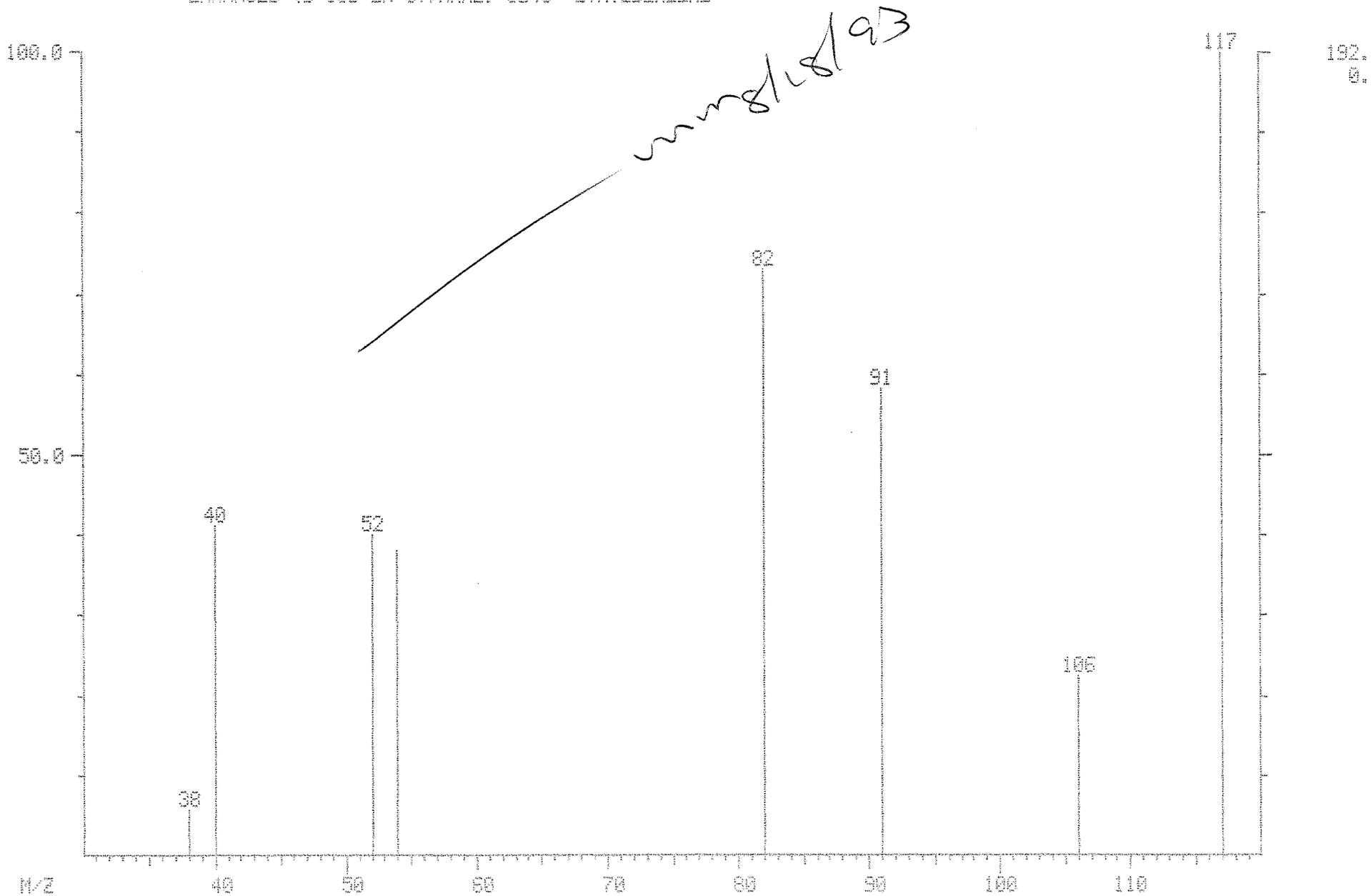
ENHANCED (S 15B 2N 0T)NAME: C240 ETHYLBENZENE

DATA: H2307 #1373

CALI: H2307 #3

BASE M/Z: 117

RIC: 727.

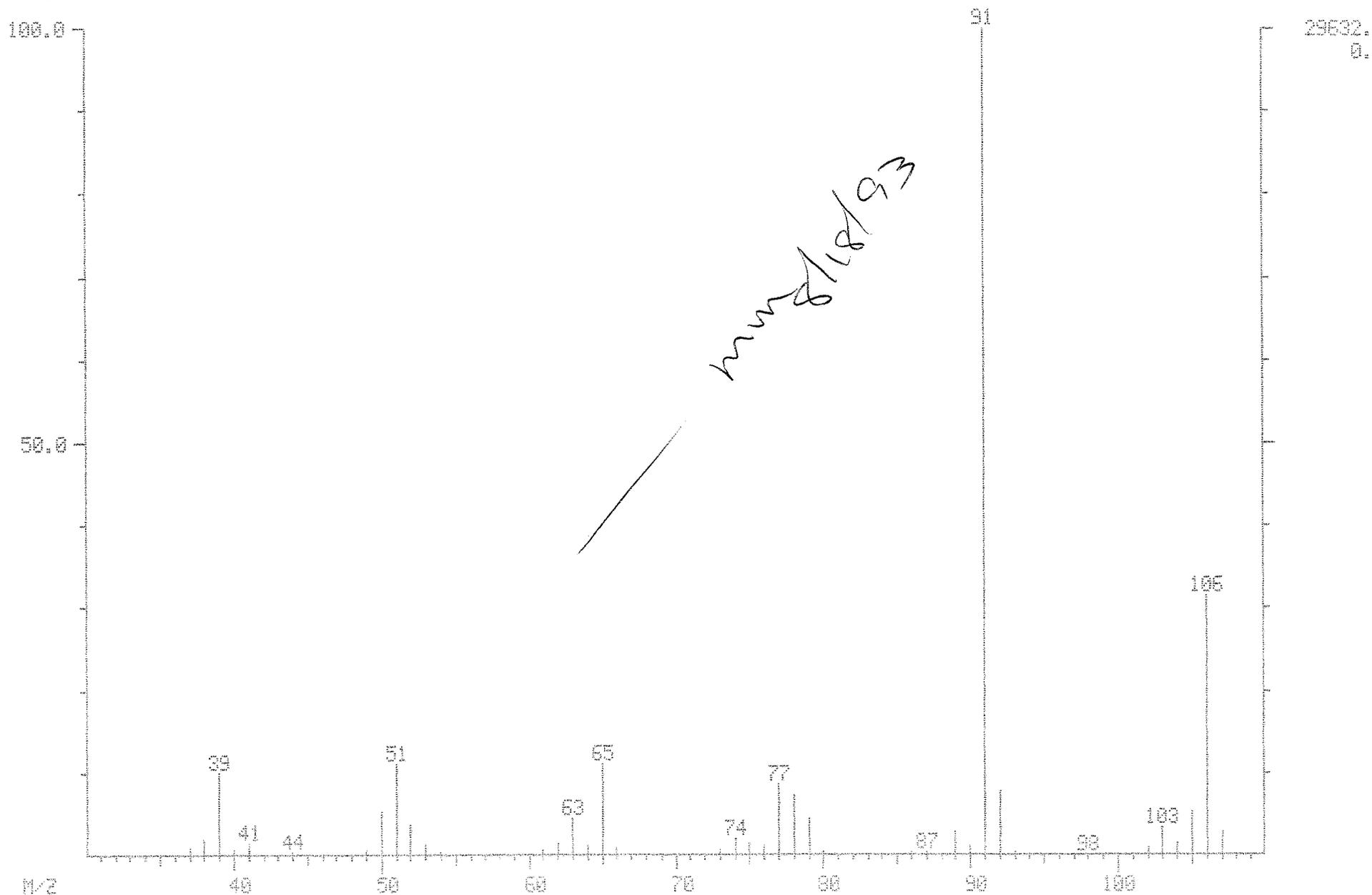


MASS SPECTRUM
08/18/93 10:52:00 + 19:46
SAMPLE: USTD050
CONDS.: 150H
TEMP: -355 DEG. C

DATA: H2302 #1368
ENHANCED (5 15B 2N 0T)

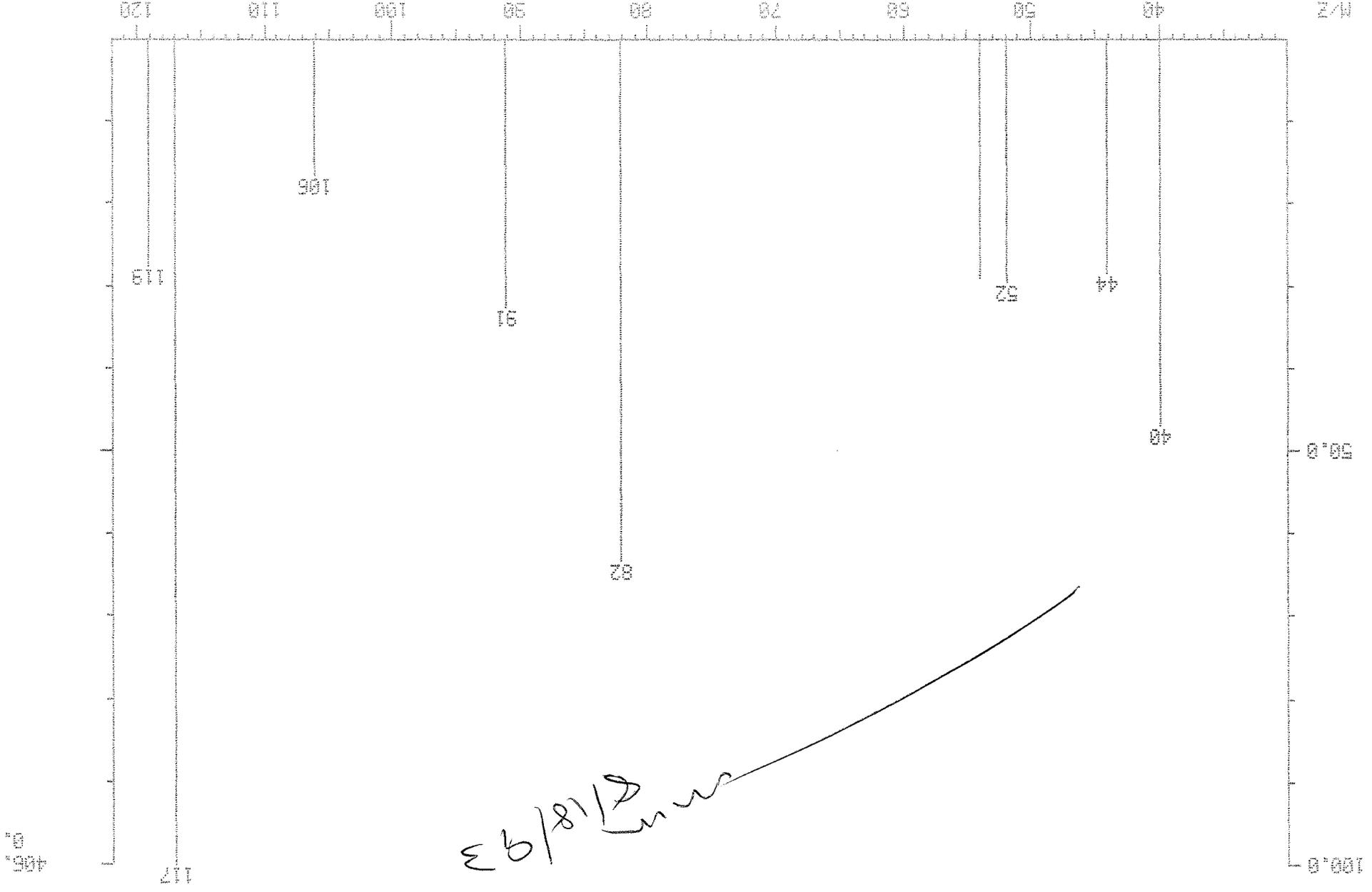
BASE M/Z: 91
RIC: 71168.

NAME: C240 ETHYLBENZENE



101777

8178



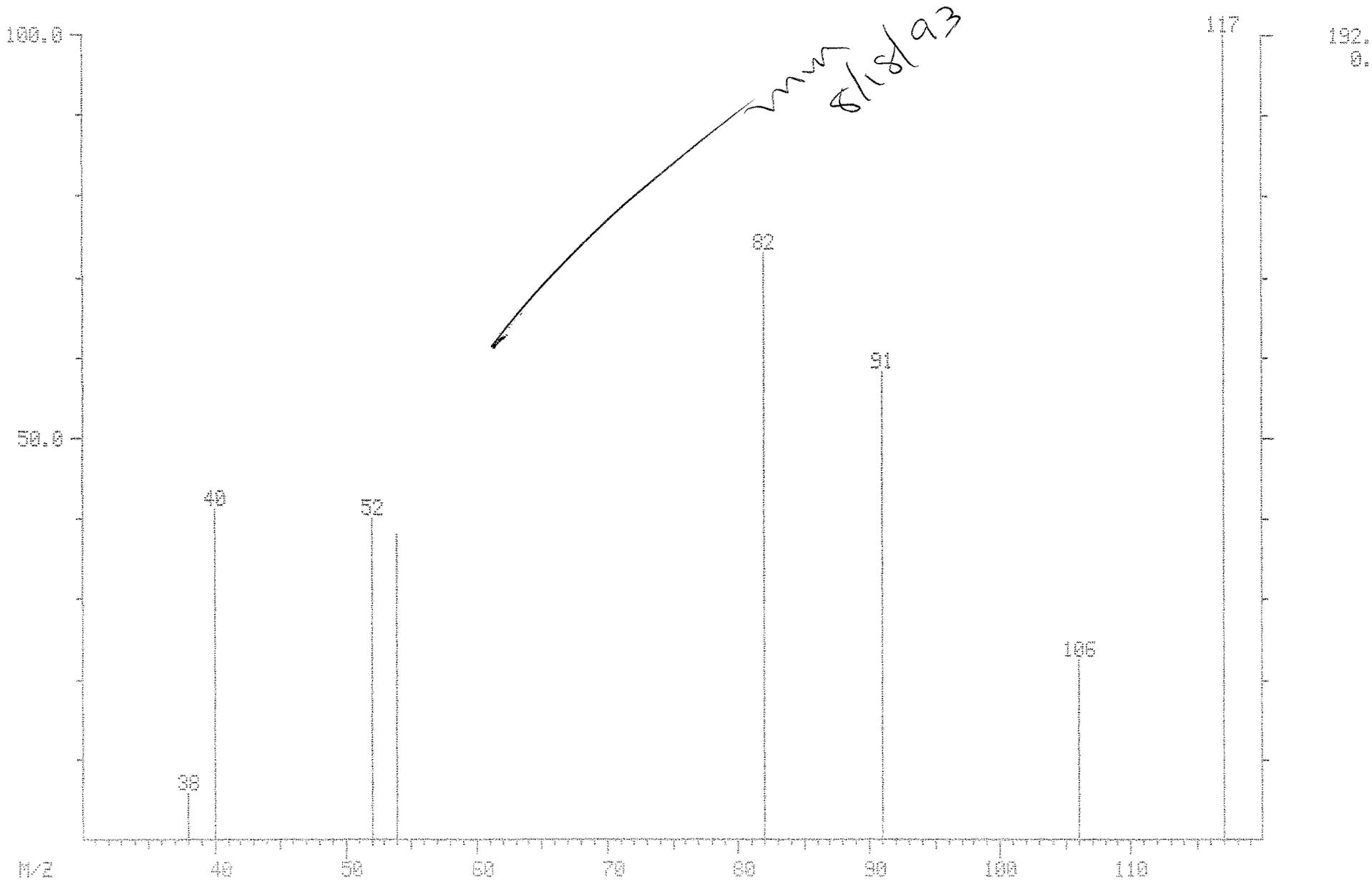
MASS SPECTRUM
 DATA: H2387 #1373
 CALL: H2387 #3
 BASE M/Z: 117
 RIC: 1318.
 08/18/93 14:37:00 + 19:50
 SAMPLE: H5042455 JOB2645
 COND.: 150H
 TEMP: 157 DEG. C
 NAME: C246 M,P-XYLENE

sum 2/18/93

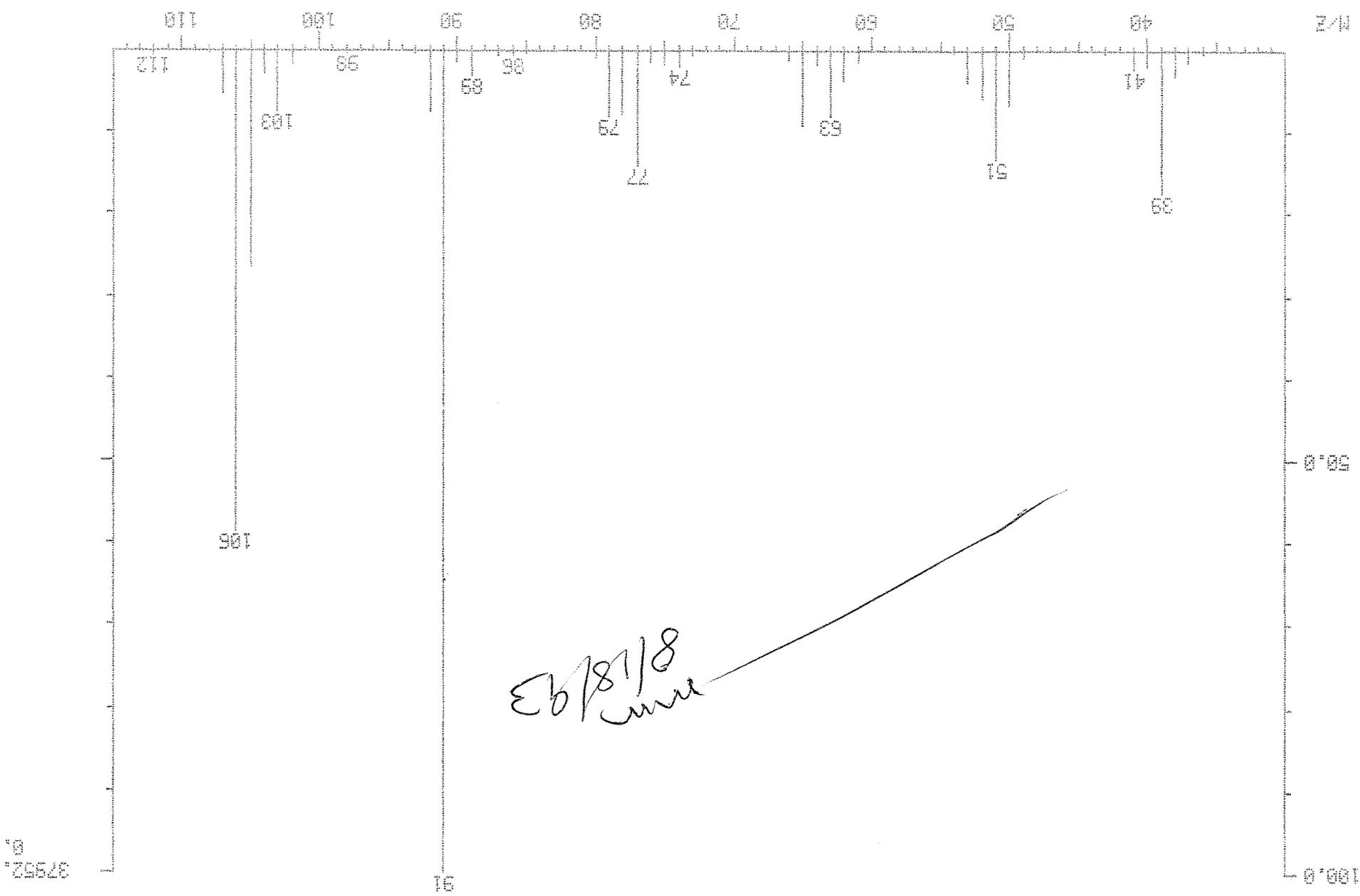
MASS SPECTRUM
08/18/93 14:37:00 + 19:50
SAMPLE: A5042455 JOB2646
CONDS.: 150H
TEMP: 157 DEG. C
ENHANCED (S 150 2N 0T)NAME: C246 M.P.-XYLENE

DATA: H2307 #1373
CALI: H2307 #3

BASE M/Z: 117
RIC: 727.



0180



37552.0

DATA: H2302 #1381
ENHANCED (S 158 ZN 0T)
BASE M/Z: 91
RIC: 127360

08/18/93 10:52:00 + 19:57
SAMPLE: V51D050
COND: 150H
TEMP: -353 DEG. C
NAME: C246 M/P-XYLENE

8/18/93 mm

MASS SPECTRUM

Quantitation Report File: H2307

Data: H2307.TI
 08/18/93 14:37:00
 Sample: A9042455 JOB2646
 Cnds.: I50H

Formula: Instrument: I50H Weight: 0.000
 Submitted by: Analyst: JVL Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name	
1	0-00-0	CI01 BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	0-00-0	CI10 1,4-DIFLUOROBENZENE	*INTERNAL STANDARD*
3	0-00-0	CI20 D5-CHLOROBENZENE	*INTERNAL STANDARD*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	TOT	863	12:28	1	1.000	A BB	246598.	250.000 NG	33.33
2	TOT	1004	14:31	2	1.000	A BB	282424.	250.000 NG	33.33
3	TOT	1348	19:29	3	1.000	A BB	327361.	250.000 NG	33.33

$$RF=1.0 \quad DF= \underline{1}$$

$$\text{Unknown Concentration}$$

$$= \left[\frac{\text{ng IS} * \text{area unknown}}{\text{area IS}} \right] * RF * DF$$