UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: SEP 07 1989

SUBJECT: Review of Region 5 data for ESTWING MFG. CO.

FROM: Curtis Ross, Director
Region 5 Central Regional Laboratory

To: Data User:

Attached are the results for:

CRL Data Set Numbers: SF 6437
Sample Numbers: 89FM26895-97; D95; 11R66
Parameter(s): PCB / Pesticides
Laboratory: CRL

Results Status:

( ) DATA ACCEPTABLE FOR USE*
( ) DATA QUALIFIED AS TO USE
( ) DATA UNACCEPTABLE FOR USE

* For data acceptability requirements, refer to the method capability statement for the methods referenced.

Comments by the Quality Control Coordinator:

If there are any questions regarding the data, refer them to Steve Parker, the Quality Control Coordinator, at 353-3805.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
(5SCRL)

Sylvia Griffin 07/1989

RECEIVED BY/DATE:

U.S. EPA CENTRAL
REGIONAL LAB

Comments:

DATA SET	SITE	DU/ACT.
SF 6437	ESTWING MFG. CO.	TFA 302

SAMPLES	PARAMETER(S)
89 FM 26 & 95-97; D95 89 FM 11 R66	PCB/Pesticides

SAMPLED	RECEIVED	DUE	LAB
8/9/89	8/10/89	8/31/89	CRL

SHIPPED	DATA RECEIVED	CONTRACT

TEAM LEADER	SECTION CHIEF	QC COORD.	DATA COORD.

Comments By Reviewer:

1) All QC data and instrument audits are acceptable.
2) No PCB's or Pesticides detected in the samples.

Data are acceptable for use.

DATA MANAGEMENT COORDINATOR

RECEIVED **TRANSMITTED**

CLERICAL SUPPORT

RECEIVED **COMPLETED**

(✓) REVIEWED ( ) UNREVIEWED TEAM LEADER/DATE L Evangelista 8/21/89

( ) REVIEWED ( ) UNREVIEWED SECTION CHIEF/DATE CK

( ) REVIEWED ( ) UNREVIEWED QC COORDINATOR/DATE

REVIEWED BY CONTRACT COORDINATOR/DATE

RECEIVED **TRANSMITTED** 9-7-89 **DATA MANAGEMENT COORDINATOR** Sylvia Griffin

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC FORM

DIVISION/BRANCH: FIT Sampling Date: 8/9/89 Arrival Date: 8/10/89 Analysis Due Date: 8/31/89

Sample#,

D.U. Number: TFA Group# SF 6437 Activity#: Study: Estwing MFG Co.

ALL UNITS ARE MICROGRAMS PER LITER OR MILLIGRAMS PER KILOGRAM. Sample type: water

Pesticide / Sample #	Y-BHC Lindane	Heptachlor	Aldrin	Heptachlor Epoxide	Endosulfan I	Dieldrin	Endrin	Endosulfan II	pp-DDE	Beta-BHC	Delta-BHC	Alpha-BHC	pp-DDD	pp-DDT	Methoxychlor	Endosulfan Sulfate	Endrin Aldehyde	Endrin Ketone	T-Chlordane	Toxaphene
1. 89FM26595	.002 u	.03 u	.02 u	.01 u	.01 u	.01 u	.01 u	.01 u	.02 u	.02 u	.02 u	.02 u	.04 u	.02 u	.02 u	.13 u	.05 u	.03 u		
2. 89FM26095	.002 u	.03 u	.02 u	.01 u	.01 u	.01 u	.01 u	.01 u	.02 u	.02 u	.02 u	.02 u	.04 u	.02 u	.02 u	.13 u	.05 u	.03 u		
3. 89FM26596	.002 u	.03 u	.02 u	.01 u	.01 u	.01 u	.01 u	.01 u	.02 u	.02 u	.02 u	.02 u	.04 u	.02 u	.02 u	.13 u	.05 u	.03 u		
4. 89FM26597	.002 u	.03 u	.02 u	.01 u	.01 u	.01 u	.01 u	.01 u	.02 u	.02 u	.02 u	.02 u	.04 u	.02 u	.02 u	.13 u	.05 u	.03 u		
5. 89FM11R66	.002 u	.03 u	.02 u	.01 u	.01 u	.01 u	.01 u	.01 u	.02 u	.02 u	.02 u	.02 u	.04 u	.02 u	.02 u	.13 u	.05 u	.03 u		
6.																				
7.																				
8.																				
9.																				
10.																				
11.																				
12.																				
13.																				

Melissa Feliciano
8/25/89

Form # 1:

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

DIVISION/BRANCH: FIT Sampling Date: 8 19 89 (Month Day Year) Arrival Date: 8 10 89 (Month Day Year) Analysis Due Date: 8 13 89 (Month Day)

D.U. Number: TFA Group #: SF 6437 Activity #: Study: Estwing MFG Co.

All units are micrograms per liter or milligram per kilograms Sample Type: Water, Sediment, Oil, Sludge

#	Sample #	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor 1232	Aroclor 1221	Aroclor	Dibuthyl phthalate	Diethyl Hexyl phthalate	
1	89FM26S95	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U				
2	89FM26D95	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U				
3	89FM26S96	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U				
4	89FM26S97	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U				
5	89FM16R66	.2 U	.2 U	.2 U	.2 U	.2 U	.2 U				
6								Nydia Feliciano			
7								8/25/89			
8											
9											
0											
1											
2											
3											
4											
5											
6											
7											
8											
9											
0											
1											
2											

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: PESTICIDES AND PCB'S

TFA302

DIVISION/BRANCH FIT SUPERFUND SAMPLE DATE 8/9/89 LAB ARRIVAL DATE 8/10/89 DUE DATE 8/~~30~~ 31/89

DU NUMBER TFA DATA SET NUMBER 6437 STUDY Estwing Mfg Co. PRIORITY — CONTRACTOR —

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER TRIHALOMETHANES UG/L PES17414	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES 17134	WATER HERBICIDES UG/L PES 17424	WATER OIL AND GREASE MG/L PES 17439
89FM26S95	RW1 5-053150-1		X	X		
89FM26S96	MSD RW2 5-053166-7 5-053175-77		X	X		
89FM26S97	RW3 5-053184-5		X	X		
89FM26D95	DUP 5-053158-9		X	X		
89FM11R66	BLNK 5-053192-3		X	X		

USEPA REGION V CRL 08/30/89 15:23:09
SF6437 ESTWING MFG CO PAGE 01

WORKLIST : PPNF0006
TEST : PPWSO

WL#	ID	REP	COMMENTS
1	LRB		
2	LF1		
3	LF2		
4	LF3		
5	LF4		
6	S9000645	01	$95
7	S9000646	01	D95
8	S9000647	01	S96
9	S9000648	01	S97
10	S9000649	01	R66

8/31/89
8/31/89

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: AUGUST 25, 1989

SUBJECT: DATA SET SF 6437
ESTWING MFG CO.

FROM: NIDIA FELICIANO

TO: LINDA EVANGELISTA

This analysis report consists of five samples plus Q.C.. Samples were analyzed for Pesticides and PCB's using the CRL Method 608 DNS. The gas chromatographic analysis was followed using a Hewlett Packard 5890A GC-EC.

The internal standard areas are within the limits with a coefficient of variation of .09.

Pesticides and PCB's matrix spikes recoveries are acceptable. Surrogate recoveries are on the high side, ranged from 162% to 192%. Sample 89FM26D95 was reanalyzed because a very high surrogate percent recovery, result came out the same; 960%.
At this point we do not have an explanation for this phenomena.
No other problem were encountered during analysis.

DDT and Endrin degradation are within the limits for both columns. Method blank is relatively free of contaminants. Field blank show some contaminants which we consider field contamination.

A peak with a RT 23.83min is present in all the samples. It elutes at the same RT as Endosulfan Sulfate on the mix phase, but has not been confirmed on the single phase.

Samples are negative for Pesticides and PCB's.

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

___ Graph

___ Mail receipts

___ Sample tags

II. Image Quality (Pages follow / No. of pages 1)

✓ Resolution / Contrast

Sequence Sheet - Quantitation

3F6437

	SAMPLE NAME	METHOD NAME	DATA FILE	AMOUNT INJECTED	INT.STD. AMOUNT	DILUTION FACTOR	SAMPLE WEIGHT
1	HEXANE	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
2	METHOD BLANK	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
3	89FM11R66	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
4	ENDRIN	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
5	DDT	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
6	PES A 1	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
7	PES A 2	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
8	PES A 3	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
9	PES A 4	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
10	PES A 5	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
11	89FM26S96 MS	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
12	89FM26S96 MSD	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
13	PEST B 3	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
14	A1242 2	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
15	A1242 3	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
16	A1242 4	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
17	A1242 5	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
18	A1242 6	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
19	89FM26S96 MS PCB	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
20	89FM26S96 MSDPCB	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
21	PES A 3	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
22	PES B 3	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
23	DDT	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
24	ENDRIN	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
25	89FM26S95	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
26	89FM26S96	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
27	89FM26S97	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
28	89FM26D95	F:ZERO	[redacted]	5.0000	1.0000	10.00	1.000
29	PEST A 3	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
30	PEST B 3	F:ZERO	[redacted]	5.0000	1.0000	1.00	1.000
31	HEXANE	F:ZERO		5.0000	1.0000	1.00	1.000
32	A1242 2	F:ZERO		5.0000	1.0000	1.00	1.000
33	A1242 3	F:ZERO		5.0000	1.0000	1.00	1.000
34	A1242 4	F:ZERO		5.0000	1.0000	1.00	1.000
35	A1242 5	F:ZERO		5.0000	1.0000	1.00	1.000
36	A1242 6	F:ZERO		5.0000	1.0000	1.00	1.000
37	HEXANE	F:ZERO		5.0000	1.0000	1.00	1.000
38	PE A1242	F:ZERO		5.0000	1.0000	1.00	1.000
39	PE A1242 DUPL.	F:ZERO		5.0000	1.0000	1.00	1.000
40	STOCK 50PPM	F:ZERO		5.0000	1.0000	1.00	1.000
41	INT 5 PPM	F:ZERO		5.0000	1.0000	1.00	1.000
42	AMPULE A1242 5000PPM	F:ZERO		5.0000	1.0000	1.00	1.000

3F6437

Task # 1141

PCB/PEST EXTRACTION

DATA SET(S) SF 6437 DATE EXTRACTED: 15 Aug 89
SAMPLE TYPE(S) water DATE CONCENTRATED: 16 Aug 89
EXTRACTION SYSTEM Sep. F. DATE COMPLETED: 16 Aug 89
SOLVENT SYSTEM CH_2Cl_2 VOLUMES USED

SAMPLE #	SAMPLE AMOUNT	CONC. EXTRACT	DILUTIONS 1ST	2ND	3RD	FINAL VOL	INSTDS MRX/OTHER	pH
Pest / PCB 89FM26S95	950 ml	10 ml				10 ml		6.0
Pest / PCB 89FM26S96	1L	10 ml						6.0
Pesticides 89FM26S96MS	950 ml	10 ml						6.0
Pesticides 89FM26S96MSD	950 ml	10 ml						6.0
PCB 89FM26S96MS	950 ml	10 ml						6.0
PCB 89FM26S96MSD	950 ml	10 ml						6.0
Pest / PCB 89FM26S97	950 ml	10 ml						6.0
Pest / PCB 89FM26D95	1L	10 ml						6.0
Pest / PCB 89FM11R66	1L	10 ml						5.5
Pest / PCB Method Blank	1L	10 ml						6.0

: PREPARATION DATE : VOLUME

MATRIX SPIKE SOLUTION: added 1 ml of MS-Pest pesticide Solution to MS + MSD samples. Added 1 ml of MS-PCB solution to PCB-MS and MSD samples.
SURROGATES: Added 1 ml of DBC solution to all above samples.

PREP. CHEMIST M.J.H. and J.F. ANALYST Midia Feliciano

5F6437

Sequence - Confirmation

	SAMPLE NAME	METHOD NAME	DATA FILE	AMOUNT INJECTED	INT.STD. AMOUNT	DILUTION FACTOR	SAMPLE WEIGHT
1	HEXANE	S:ZERO		5.0000	1.0000	1.00	1.000
2	METHOD BLANK	S:ZERO		5.0000	1.0000	1.00	1.000
3	89FM11R66	S:ZERO		5.0000	1.0000	10.00	1.000
4	89EB25S08	S:ZERO		5.0000	1.0000	1.00	1.000
5	HEXANE	S:ZERO		5.0000	1.0000	1.00	1.000
6	ENDRIN	S:ZERO		5.0000	1.0000	1.00	1.000
7	DDT	S:ZERO		5.0000	1.0000	1.00	1.000
8	PES A 4	S:ZERO		5.0000	1.0000	1.00	1.000
9	89FM26S96 MS	S:ZERO		5.0000	1.0000	10.00	1.000
10	89FM26S96 MSD	S:ZERO		5.0000	1.0000	10.00	1.000
11	PEST B 3	S:ZERO		5.0000	1.0000	1.00	1.000
12	A1242 4	S:ZERO		5.0000	1.0000	1.00	1.000
13	89FM26S96 MS PCB	S:ZERO		5.0000	1.0000	10.00	1.000
14	89FM26S96 MSDPCB	S:ZERO		5.0000	1.0000	10.00	1.000
15	PES A 3	S:ZERO		5.0000	1.0000	1.00	1.000
16	PES B 3	S:ZERO		5.0000	1.0000	1.00	1.000
17	DDT	S:ZERO		5.0000	1.0000	1.00	1.000
18	ENDRIN	S:ZERO		5.0000	1.0000	1.00	1.000
19	89FM26S95	S:ZERO		5.0000	1.0000	10.00	1.000
20	89FM26S96	S:ZERO		5.0000	1.0000	10.00	1.000
21	89FM26S97	S:ZERO		5.0000	1.0000	10.00	1.000
22	89FM26D95	S:ZERO		5.0000	1.0000	10.00	1.000
23	PES A 3	S:ZERO		5.0000	1.0000	1.00	1.000
24	PES B 3	S:ZERO		5.0000	1.0000	1.00	1.000

5F6437

point	value
1	2456450
2	2335384
3	2213206
4	2270733
5	2388271
6	2532776
7	2662612
8	2972536
9	2783012
10	2522766
11	2424170
12	2480434
13	2492730
14	2425904
15	2577767
16	2578447
17	2400285
18	2938788
19	2401539
20	2918595
21	2459069
22	3356993
23	2591794
24	2393592
25	2498977
26	2546489
27	2608295
28	2779643
29	2684937

DATA POINT	DATA ENTERED	DEVIATION
1	2456450	-119280.8275862069
2	2335384	-240346.8275862069
3	2213206	-362524.8275862069
4	2270733	-304997.8275862069
5	2388271	-187459.8275862069
6	2532776	-42954.8275862069
7	2662612	86881.1724137931
8	2972536	396805.1724137931
9	2783012	207281.1724137931
10	2522766	-52964.8275862069
11	2424170	-151560.8275862069
12	2480434	-95296.8275862069
13	2492730	-83000.8275862069
14	2425904	-149826.8275862069
15	2577767	2036.172413793101
16	2578447	2716.172413793101
17	2400285	-175445.8275862069
18	2938788	363057.1724137931
19	2401539	-174191.8275862069
20	2918595	342864.1724137931
21	2459069	-116661.8275862069
22	3356993	781262.1724137931
23	2591794	16063.1724137931
24	2393592	-182138.8275862069
25	2498977	-76753.8275862069
26	2546489	-29241.8275862069
27	2608295	32564.1724137931
28	2779643	203912.1724137931
29	2684937	109206.1724137931

The number of data points= 29

The sum of the data= 74696194

The mean= 2575730.827586207

The standard deviation is= 237430.1667834827

The coefficient of variation is= 9.217972788173113D-02

AQC DATA

DATE: 8/24/89
DATA SET: SF6437

BLANK DATA:

	CONC. OF AROCLOR (PPB)				CONC. OF PEST (PPB)
	1242	1248	1254	1260	
Method Blank	<2	<2	<2	<2	NONE

SPIKE DATA:

	COMPOUND:	CONC. (ug) of PEST/PCB				% RECOVERY	
		SPIKE ADDED	SPIKE RESULT	SPIKE DUP. RESULT	RPD	SPIKE RECOVERY	SPIKE DUPLICATE RECOVERY
PESTICIDES:	LINDANE	.06	.05	.05	0	83	83
	HEPTACHLOR	.06	.05	.05	0	83	83
	ALDRIN	.10	.09	.08	11	90	80
	ENDOSULFAN-1	.12	.12	.12	0	100	100
	DIELDRIN	.12	.12	.13	8	100	108
	ENDRIN	.22	.24	.26	8	109	118
	P,P'-DDT	.30	.31	.34	9	103	113
	P,P'-METHOXYCHLOR	.35	.41	.45	9	117	128
	DIBUTYL CHLORENDATE	.50	.91	.92	1	182	184
PCB:	AROCLOR 1242	3.00	2.73	2.95	7	91	98

COMMENTS:

11/86
JFP

5F6437

DBC PERCENT RECOVERIES

SAMPLES	(DBC %)
Method Blank	172
89FM26S95	192
89FM26D95	960*
89FM26S96	162
89FM26S97	168
89FM11R66	162
89FM26S96 PES MS	182
89FM26S96 PES MSD	184
89FM26S96 PCB MS	178
89FM26S96 PCB MSD	176

*sample was reanalyzed and surrogate recovery was still high

5F6437

PERCENT COLUMN DEGRADATION

QUANTITATION COLUMN

FILE NAME	ENDRIN(%)
A:AD4	7.4
A:AD24	7.1
	DDT(%)
A:AD5	4.2
A:AD23	3.9

CONFIRMATION COLUMN

FILE NAME	ENDRIN(%)
A:ES6	0
A:ES18	0
	DDT(%)
A:ES7	2.6
A:ES17	2.4

********* AREA PERCENT REPORT *********

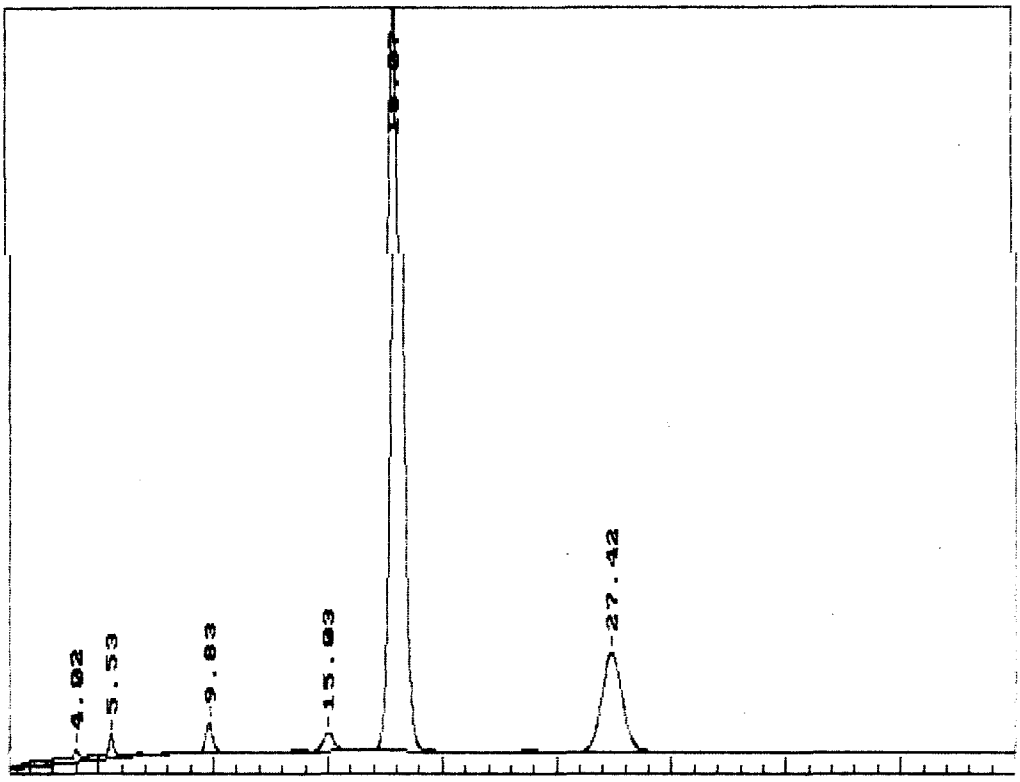
```
******************** 08-19-1989 08:05:34 Version 4.1 *********************
* Sample Name: DDT                                  Data File: A:SD5        *
* Date: 08-18-1989 14:37:33 Method: F:ZERO                                  *
* Interface: 0   Cycle#:  5   Operator NF  Channel#: 0    Vial#: N.A.       *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
****************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE     *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                           *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM         *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                         *
****************************************************************************
Starting Delay:   1.00                          Run Time:   45.00
```

Pk No.	Ret Time		Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
6	4.02		198057	1.4642	2	4206	1.906	47.1
7	5.53		206429	1.5261	3	8456	1.987	24.4
11	9.83	DDE	238053	1.7599	1	10846	2.291	21.9
13	15.03	DDD	221990	1.6411	1	6667	2.136	33.3
14	18.07	DDT	10391402	76.8216	1	275281	100.000	37.7
16	27.42	IST	2270733	16.7871	1	36309	21.852	62.5

DDT percent degradation = 4.23%

Total Area: 13526665 Area Reject: 99999 One sample per 1.000 sec.

Data File = A:SD5.PTS Printed on 08-19-1989 at 08:06:01
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 55615 uv High Value: 337624 uv Scale factor: 1.0



********* AREA PERCENT REPORT *********

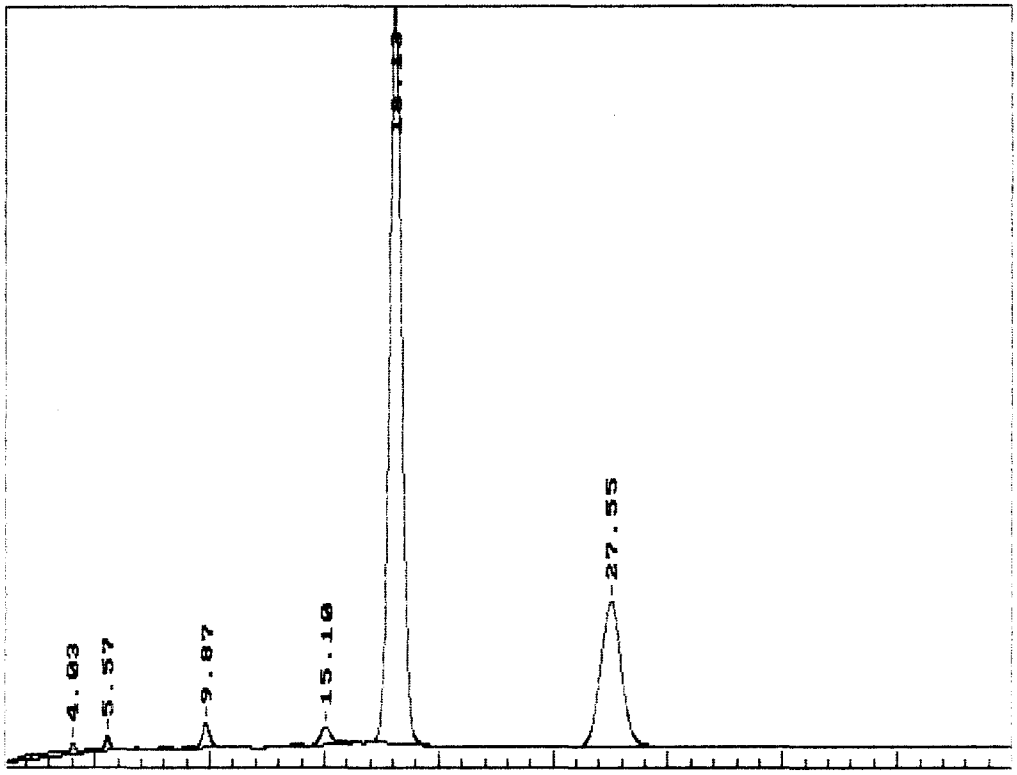
```
******************** 08-19-1989 08:07:51 Version 4.1 **********************
* Sample Name: DDT                                  Data File: A:SD23       *
* Date: 08-19-1989 04:34:16 Method: F:ZERO                                  *
* Interface: 0   Cycle#:  23   Operator NF  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE     *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                           *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM         *
* Misc. Information: GC #1 SF 6437;ESTWING MFG. CO.                         *
*****************************************************************************
Starting Delay:    1.00                          Run Time:    45.00
```

Pk No.	Ret Time		Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
5	4.03		176786	1.2403	2	4084	1.733	43.3
6	5.57		102966	0.7224	2	4986	1.009	20.7
10	9.87	DDE	195405	1.3709	2	8858	1.915	22.1
13	15.10	DDD	220096	1.5441	3	6435	2.157	34.2
15	18.13	DDT	10201511	71.5707	1	270249	100.000	37.7
17	27.55	ISTD	3356993	23.5516	1	53303	32.907	63.0

DDT Degradation = 3.9%

Total Area: 14253757 Area Reject: 99999 One sample per 1.000 sec.

Data File = A:SD23.PTS Printed on 08-19-1989 at 08:08:20
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 57387 uv High Value: 334469 uv Scale factor: 1.0



********* AREA PERCENT REPORT *********

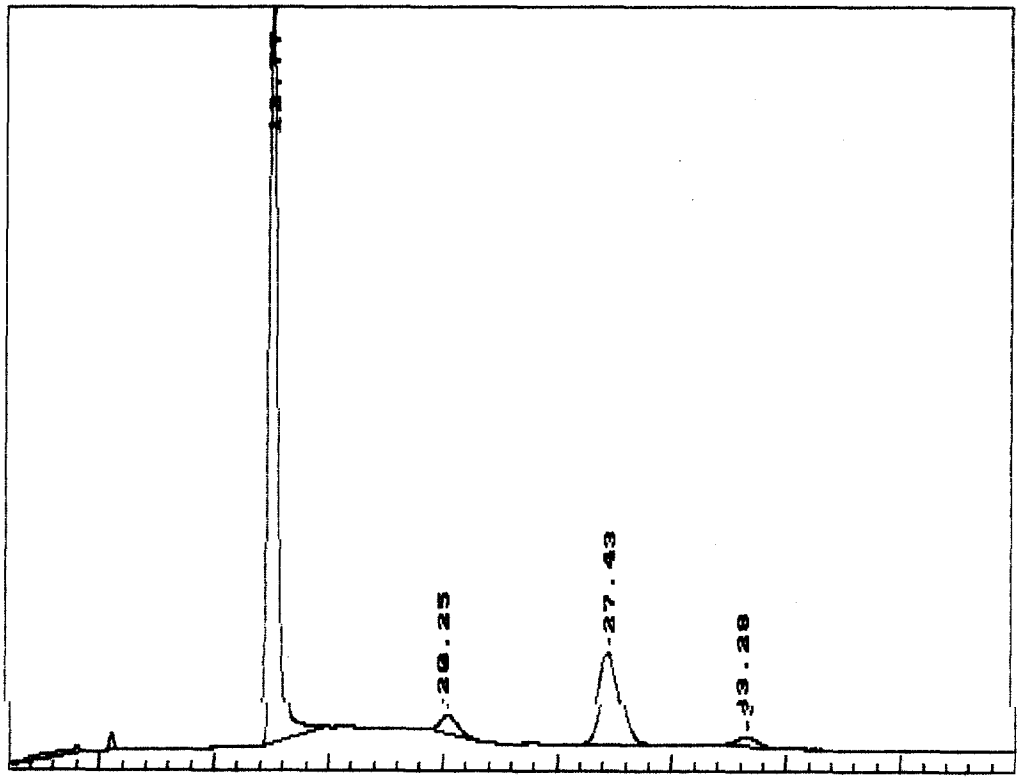
```
******************** 08-19-1989 08:03:38 Version 4.1 **********************
* Sample Name: ENDRIN                          Data File: A:SD4            *
* Date: 08-18-1989 13:51:02 Method: F:ZERO                                 *
* Interface: 0   Cycle#:  4    Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
****************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE    *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                          *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM        *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                        *
****************************************************************************
Starting Delay:   1.00                          Run Time:   45.00
```

Pk No.	Ret Time		Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
9	12.77	ENDRIN	7972954	73.6414	1	286094	100.000	27.9
10	20.25	ED-MD	383218	3.5396	1	7001	4.806	54.7
12	27.43	1ST	2213206	20.4420	1	35561	27.759	62.2
13	33.28	ED-KET	257355	2.3770	1	3792	3.228	67.9

Ending Percent separation = 7.4 %

Total Area: 10826733 Area Reject: 99999 One sample per 1.000 sec.

Data File = A:SD4.PTS Printed on 08-19-1989 at 08:04:02
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 55117 uv High Value: 350095 uv Scale factor: 1.0



********* AREA PERCENT REPORT *********

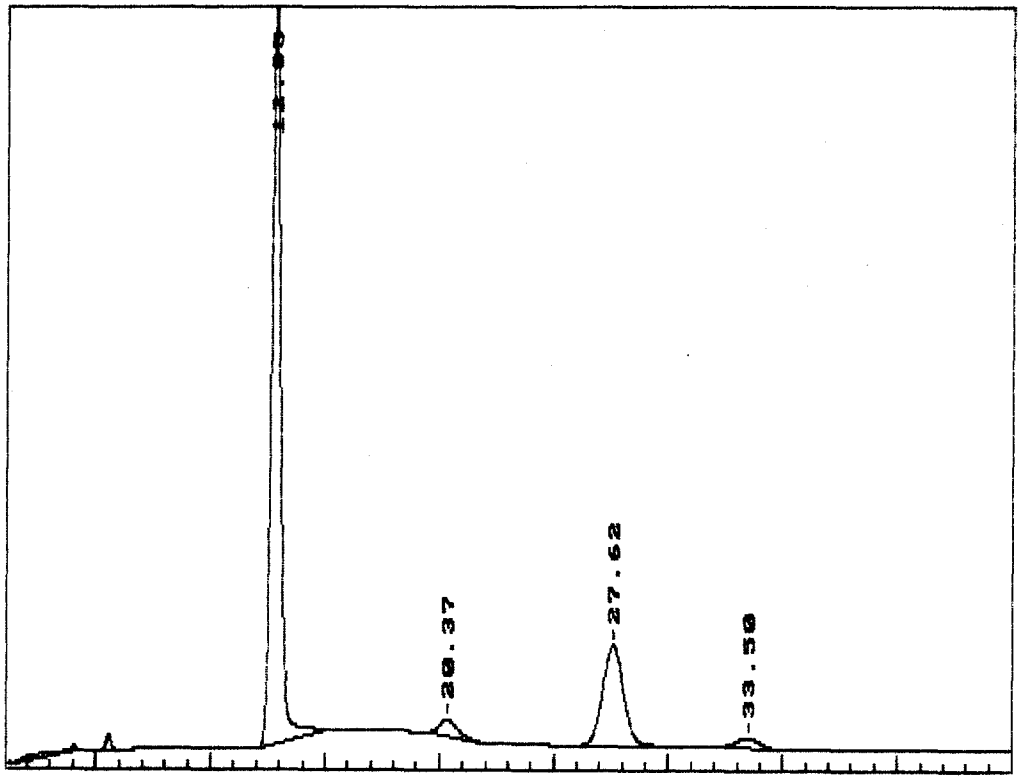
```
******************** 08-19-1989 08:09:59 Version 4.1 **********************
* Sample Name: ENDRIN                          Data File: A:SD24          *
* Date: 08-19-1989 05:20:42 Method: F:ZERO                                *
* Interface: 0   Cycle#:  24   Operator NF  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
***************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE   *
*            Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                         *
*            Detector 0: ECD QUANT          Detector 1: ECD CONFM         *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                       *
***************************************************************************
Starting Delay:    1.00                          Run Time:    45.00
```

Pk No.	Ret Time		Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
9	12.85	Endrin	8472431	72.3316	1	302987	100.000	28.0
10	20.37	ED-ALD	380751	3.2506	1	6962	4.494	54.7
11	27.62	ED-KET	2591794	22.1269	1	41496	30.591	62.5
12	33.50	ED-KET	268343	2.2909	1	3960	3.167	67.8

Endrin Percent Degradation = 7.1 %

Total Area: 11713319 Area Reject: 99999 One sample per 1.000 sec.

Data File = A:SD24.PTS Printed on 08-19-1989 at 08:10:24
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 56713 uv High Value: 367970 uv Scale factor: 1.0



********* AREA PERCENT REPORT *********

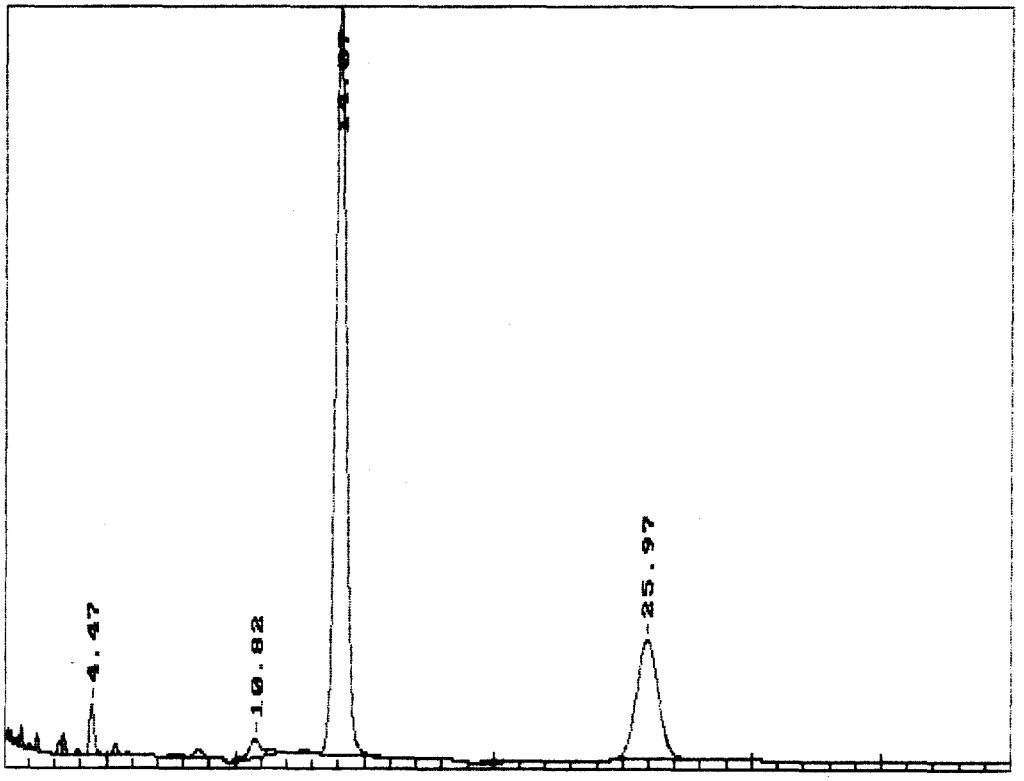
********** 08-19-1989 13:20:03 Version 4.1 **********
* Sample Name: DDT Data File: a:es7 *
* Date: 08-18-1989 13:17:31 Method: S:ZERO *
* Interface: 0 Cycle#: 7 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~SB4FY89~~ SF6437 *
****
Starting Delay: 1.00 Run Time: 40.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
12	4.47	213440	2.2331	2	16417	3.088	13.0
19	10.82 DDE	189559	1.9832	2	5775	2.743	32.8
22	14.07 DDT	6911797	72.3128	2	236530	100.000	29.2
24	25.97 ISTD	2243392	23.4709	1	38180	32.457	58.8

DDT percent Degradation = 2.66%

Total Area: 9558188 Area Reject: 99999 One sample per 1.000 sec.

Data File = a:es7.PTS Printed on 08-19-1989 at 13:20:24
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 22707 uv High Value: 261852 uv Scale factor: 1.0



********* AREA PERCENT REPORT *********

********** 08-19-1989 13:22:11 Version 4.1 **********
* Sample Name: DDT Data File: a:es17 *
* Date: 08-18-1989 19:55:58 Method: S:ZERO *
* Interface: 0 Cycle#: 17 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~9B4FY89~~ JF6437 *
****

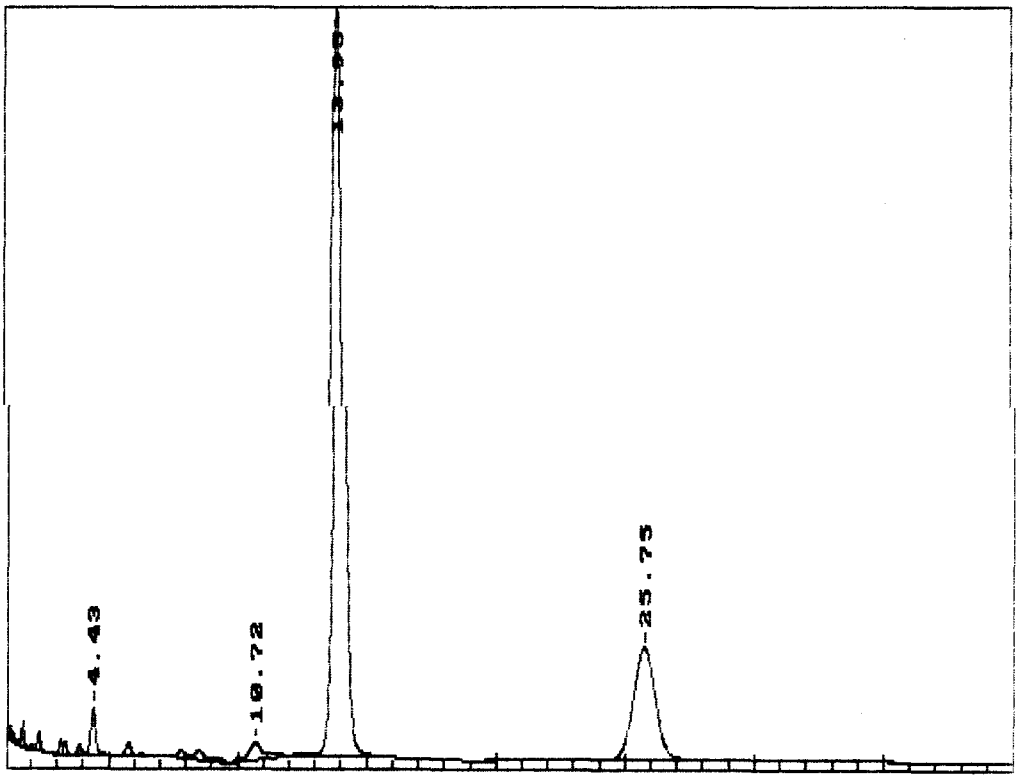
Starting Delay: 1.00 Run Time: 40.00

Pk No.	Ret Time		Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
12	4.43		221087	2.1608	2	16382	2.928	13.5
19	10.72	DDE	189754	1.8546	2	5577	2.513	34.0
22	13.95	DDT	7551568	73.8051	2	257277	100.000	29.4
24	25.75	ISTD	2269365	22.1796	1	38769	30.052	58.5

DDT percent degradation = 2.45

Total Area: 10231774 Area Reject: 99999 One sample per 1.000 sec.

Data File = a:es17.PTS Printed on 08-19-1989 at 13:22:36
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 22071 uv High Value: 282197 uv Scale factor: 1.0



********* AREA PERCENT REPORT *********

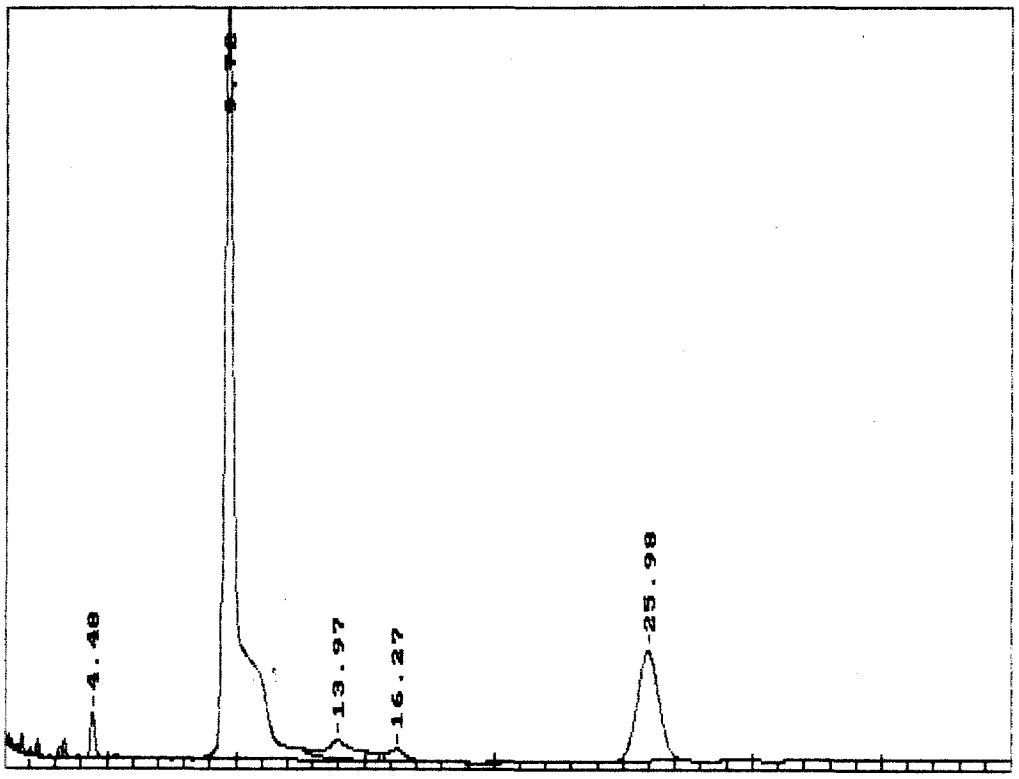
```
******************** 08-19-1989 13:18:09 Version 4.1 **********************
* Sample Name: ENDRIN                                Data File: a:es6        *
* Date: 08-18-1989 12:24:44 Method: S:ZERO                                   *
* Interface: 0   Cycle#:  6    Operator NF  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100               *
*****************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY     *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                      *
*             Detector 0: ECD QUANT          Detector 1: ECD CONF            *
* Misc. Information: ~~QB4FY87~~  SF8437                                     *
*****************************************************************************
Starting Delay:   1.00                          Run Time:   40.00
```

Pk No.	Ret Time		Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
13	4.48	.	206218	1.7492	2	15875	2.369	13.0
18	9.72	ENDRIN	8706669	73.8543	3	255612	100.000	34.1
19	13.97		508353	4.3121	4	6435	5.839	79.0
20	16.27		178626	1.5152	4	3864	2.052	46.2
22	25.98		2189121	18.5692	1	37363	25.143	58.6

zero degradation for Endrin

Total Area: 11788987 Area Reject: 99999 One sample per 1.000 sec.

Data File = a:es6.PTS Printed on 08-19-1989 at 13:18:35
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23157 uv High Value: 280075 uv Scale factor: 1.0



********* AREA PERCENT REPORT *********

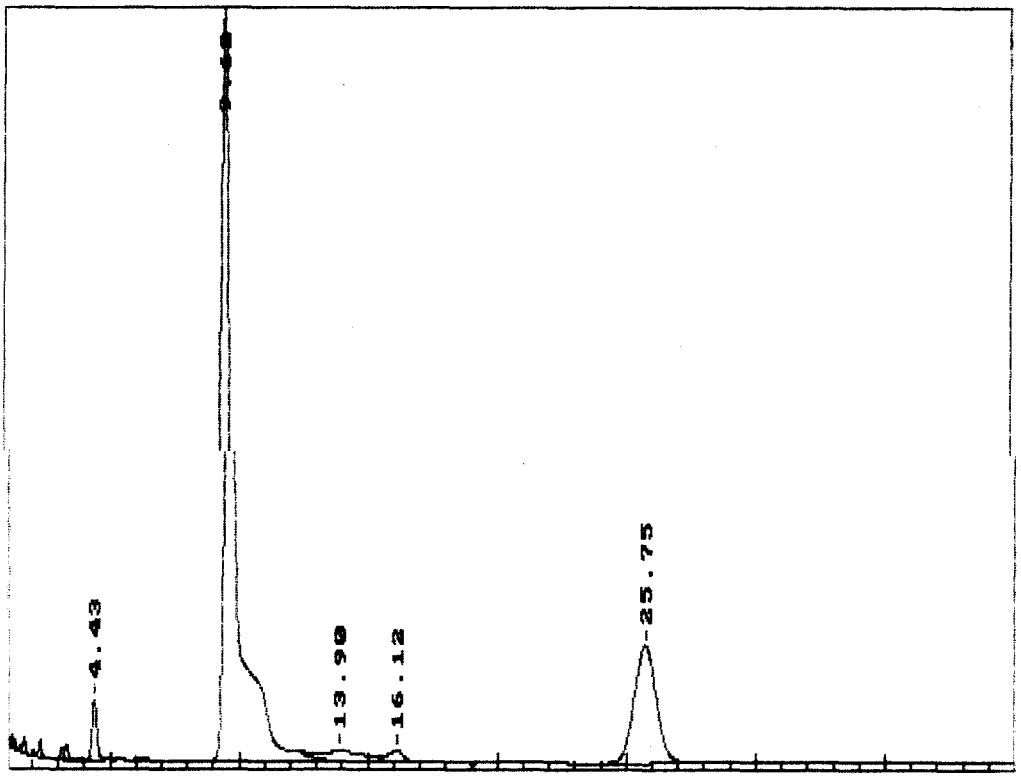
```
******************** 08-19-1989 13:24:18 Version 4.1 **********************
* Sample Name: ENDRIN                                Data File: a:es18      *
* Date: 08-18-1989 20:37:24 Method: S:ZERO                                  *
* Interface: 0   Cycle#:  18   Operator NF  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY    *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                     *
*            Detector 0: ECD QUANT          Detector 1: ECD CONF            *
* Misc. Information: ~~QB4FY87~~ SF6437                                     *
*****************************************************************************
Starting Delay:   1.00                          Run Time:   40.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
12	4.43	266370	2.3130	2	21219	3.210	12.6
15	9.62	8297334	72.0500	3	261692	100.000	31.7
16	13.90	355214	3.0845	4	3572	4.281	99.4
17	16.12	180319	1.5658	4	4007	2.173	45.0
18	25.75	2416846	20.9867	1	41188	29.128	58.7

zero degradation for Endrin

Total Area: 11516081 Area Reject: 99999 One sample per 1.000 sec.

Data File = a:es18.PTS Printed on 08-19-1989 at 13:24:39
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 22959 uv High Value: 285787 uv Scale factor: 1.0



Matrix Spike
Method Blank

***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 07:45:45 Version 4.1 **********

* Sample Name: METHOD BLANK Data File: A:SD2 *
* Date: 08-18-1989 12:18:02 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 2 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.58	ALPHA BHC	0.0035	0.3909%	10237	994	10.3	2	6	18	0	3.3857E-07
9	4.03	HEPTACHLOR	0.0064	0.7230%	67444	4033	16.7	3	6	18	2.031	9.5048E-08
10	4.90	ALDRIN D.C.	0.0055	0.6166%	20180	658	30.7	4	6	18	2.770	2.7092E-07
12	6.90	HEPTACHLOR EPOXIDE	0.0008	0.0902%	3180	122	26.1	1	12	18	0	2.5147E-07
15	10.45	DIELDRIN D.C.	0.0034	0.3800%	43097	1444	29.8	2	15	18	0	7.8170E-08
18	27.47	ISTD	1.0000	0.0000%	2456450	36369	67.5	2	18	18	0	4.0709E-07
19	31.83	DIBUTYLCHLOR	0.8671	97.7992%	5963951	73039	81.7	2	19	18	0	1.4539E-07

TOTAL AMOUNT = 0.8866

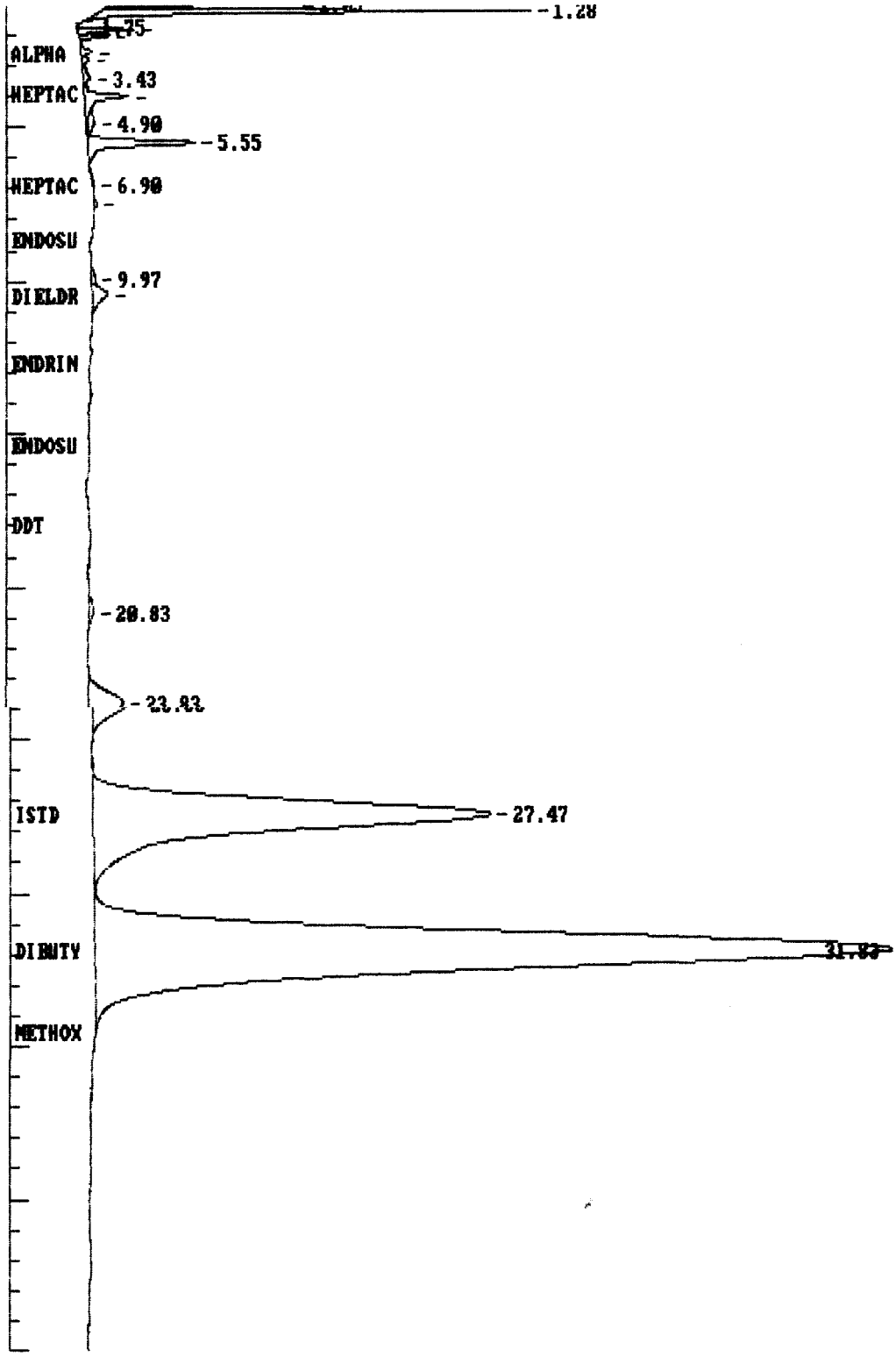
DBC % Recovery =

$$\frac{.86}{.5} \times 100$$

= 172 %

peaks area are below the low standard

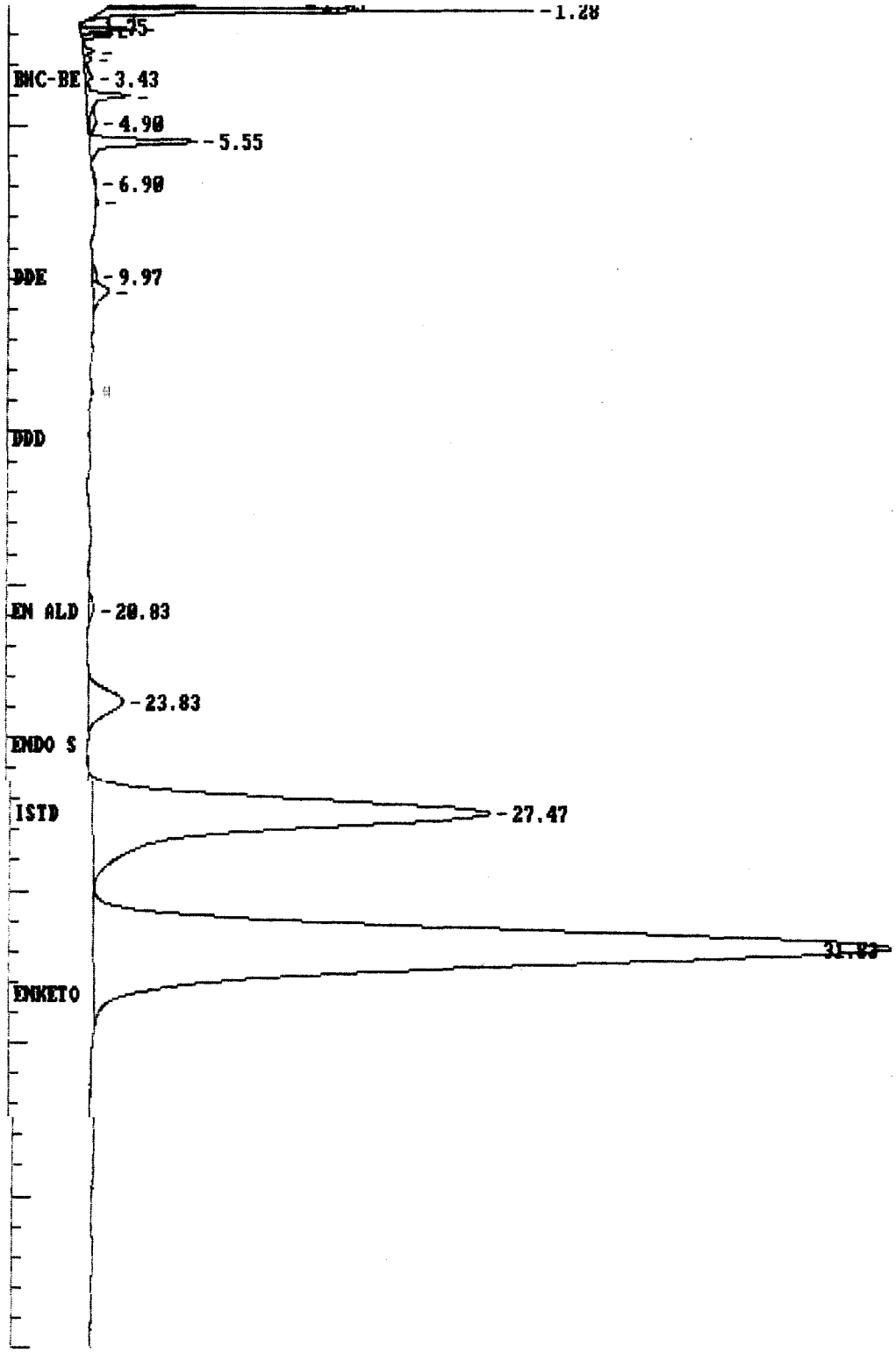
Data File = A:SD2.PTS Printed on 08-19-1989 at 07:46:12
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 60772 uv High Value: 135146 uv Scale factor: 1.0



```
*****   INTERNAL STANDARD TABLE   *****
******************** 08-19-1989 07:47:20 Version 4.1 **********************
* Sample Name: METHOD BLANK                    Data File: A:SD2          *
* Date: 08-18-1989 12:18:02 Method: A:PESB 08-19-1989 07:44:44  #  126   *
* Interface: 0   Cycle#:  2    Operator NF  Channel#: 0    Vial#: N.A.  *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE  *
*            Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                       *
*          Detector 0: ECD QUANT          Detector 1: ECD CONFM         *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                     *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    45.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:       10.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	3.43	BHC-BETA BL STD	0.0018	0.1594%	14508	628	23.1	2	8	18	0	1.2663E-07
9	4.03	BHC-DELTA D.C	0.0069	0.5986%	67444	4033	16.7	3	9	18	0	1.0230E-07
14	9.97	DDE D.C	0.0006	0.0511%	5580	271	20.6	2	14	18	0	1.0550E-07
16	20.83	EN ALDEHYDE BL. STD	0.0013	0.1121%	10695	327	32.7	1	16	18	0	1.2076E-07
18	27.47	ISTD	1.0000	0.0000%	2456450	36369	67.5	2	18	18	0	4.0709E-07
19	31.83	~~ENKETONE~~ DDC	1.1419	99.0789%	5963951	73039	81.7	2	18	18	-4.574	1.9147E-07
		TOTAL AMOUNT =	1.1525									

Data File = A:SD2.PTS Printed on 08-19-1989 at 07:47:51
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 60772 uv High Value: 135146 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

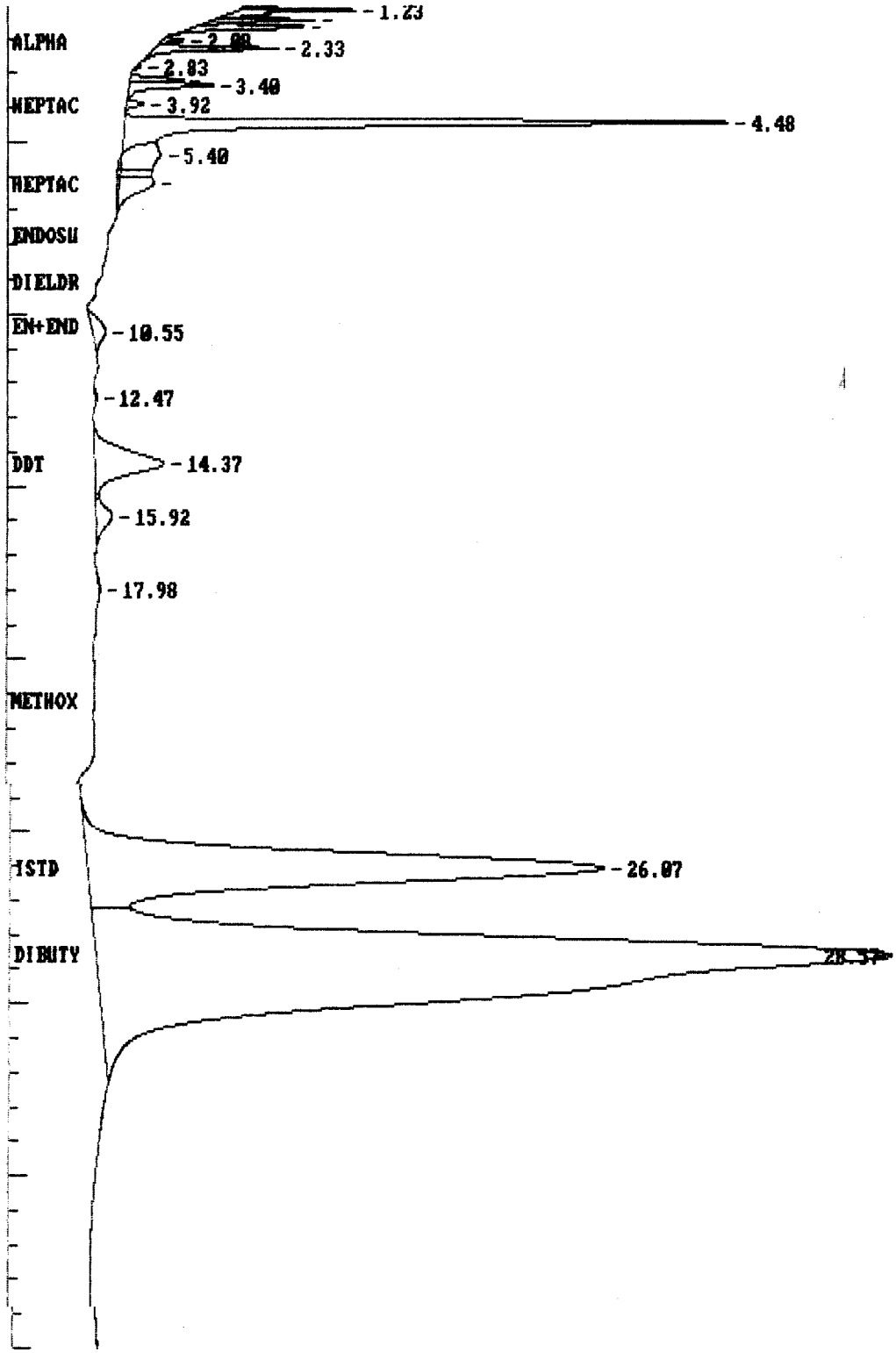
******************** 08-19-1989 13:08:54 Version 4.1 **********************
* Sample Name: METHOD BLANK Data File: a:es2 *
* Date: 08-18-1989 09:28:57 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*
* Interface: 0 Cycle#: 2 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~0D4FY09~~ 5F6437 *
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
4	2.08	ALPHA BHC	0.0008	0.1051%	9595	1604	6.0	2	4	18	0	8.4671E-08
5	2.33	LINDANE	0.0079	1.0207%	78395	9359	8.4	2	4	18	-4.210	1.0068E-07
9	3.92	HEPTACHLOR	0.0011	0.1452%	13547	1320	10.3	2	9	18	0	8.2902E-08
12	6.23	HEPTACHLOR EPOXIDE	0.0079	1.0272%	94692	2784	34.0	4	12	18	0	8.3880E-08
13	10.55	EN+ENDII	0.0039	0.5063%	41211	1009	40.8	1	12	18	1.550	9.5000E-08
15	14.37	DDT	0.0291	3.7627%	236605	5167	45.8	2	15	18	0	1.2297E-07
18	26.07	ISTD	1.0000	0.0000%	2367213	38902	60.9	2	18	18	0	4.2244E-07
19	28.57	DIBUTYLCHLOR	0.7225	93.4329%	6408663	60021	106.8	2	19	18	0	1.1274E-07

TOTAL AMOUNT = 0.7733

Data File = a:es2.PTS Printed on 08-19-1989 at 13:10:05
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 22255 uv High Value: 83494 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 13:11:11 Version 4.1 **********

* Sample Name: METHOD BLANK Data File: a:es2 *

* Date: 08-18-1989 09:28:57 Method: A:PESB-2 08-19-1989 12:59:47 # 105 *

* Interface: 0 Cycle#: 2 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS *

* Detector 0: ECD QUANT Detector 1: ECD CONF *

* Misc. Information: ~~QB4FY87~~ SF6437 *

Starting Delay: 1.00 Ending retention time: 40.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 5.00 Dilution factor: 10.00

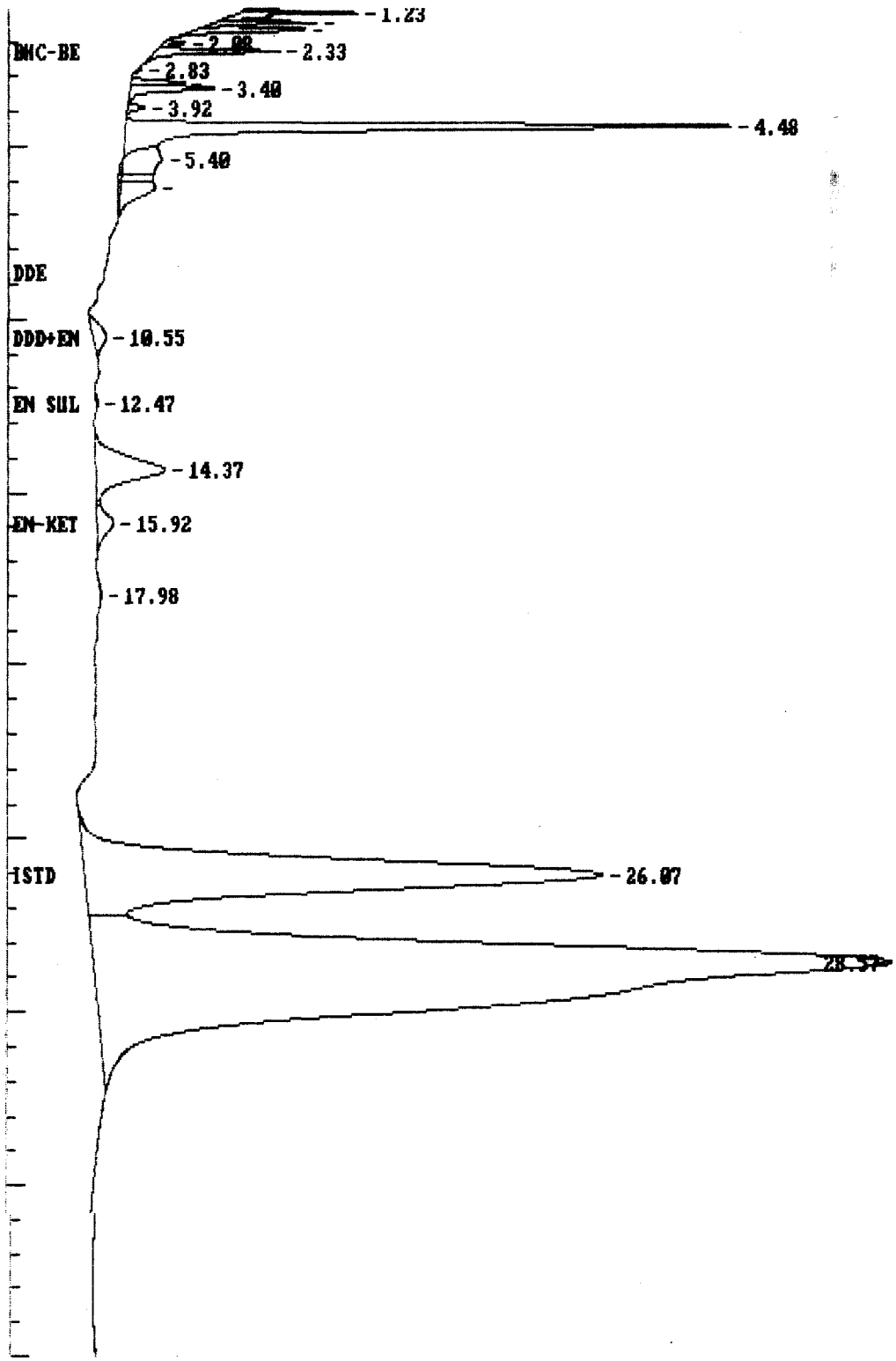
Internal Standard Amount: 1

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.33	BHC-BETA	0.0089	39.3253%	78395	9359	8.4	2	5	18	0	1.1409E-07
13	10.55	DDD+EN-ALD	0.0048	21.0950%	41211	1009	40.8	1	13	18	0	1.1643E-07
14	12.47	EN SULFATE	0.0002	0.9417%	1807	99	18.3	1	14	18	0	1.1857E-07
16	15.92	EN-KETONE	0.0088	38.6379%	50200	1189	42.2	2	16	18	0	1.7506E-07
18	26.07	ISTD	1.0000	0.0000%	2367213	38902	60.9	2	18	18	0	4.2244E-07

TOTAL AMOUNT = 0.0227

Data File = a:es2.PTS Printed on 08-19-1989 at 13:11:36
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 22255 uv High Value: 83494 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-18-1989 13:30:42 Version 4.1 **********

* Sample Name: 89FM26S96 MS Data File: a:sd11 *
* Date: 08-18-1989 19:16:33 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 11 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

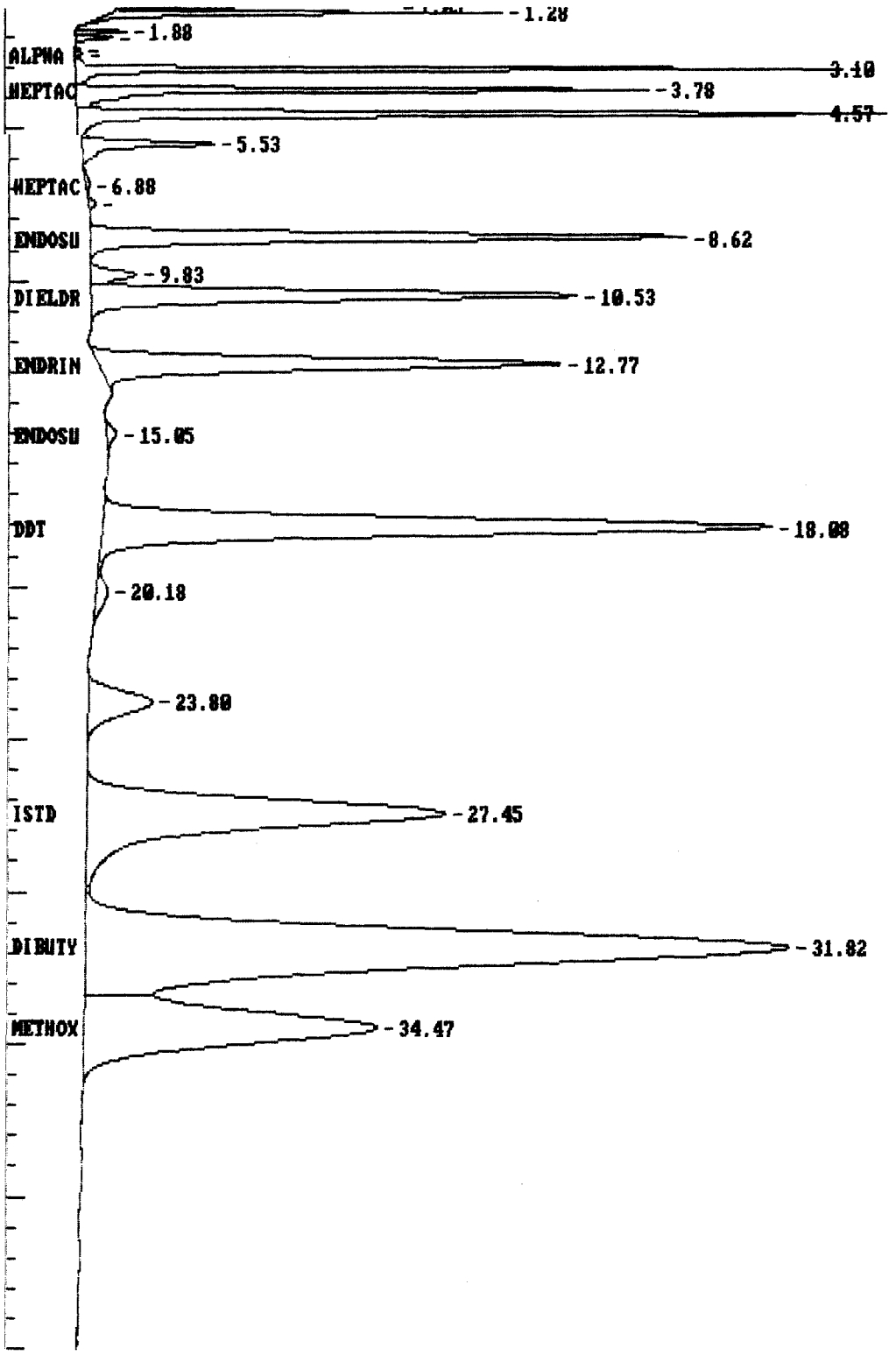
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.58	~~ALPHA-BHC~~	~~0.0033~~	0.1389%	6375	762	8.4	2	6	21	0	5.1736E-07
7	3.10	LINDANE	0.0599	2.5227%	627119	80668	7.8	2	7	21	0	9.5536E-08
8	3.78	HEPTACHLOR	0.0583	2.4538%	637040	60112	10.6	2	8	21	0	9.1479E-08
9	4.57	ALDRIN	0.0931	3.9215%	960138	85146	11.3	2	9	21	0	9.7000E-08
11	6.88	~~HEPTACHLOR EPOXI~~DE	~~0.0018~~	0.0744%	13132	410	32.0	2	11	21	0	1.3450E-07
13	8.62	ENDOSULFAN I	0.1220	5.1359%	1205535	62694	19.2	1	13	21	0	1.0118E-07
15	10.53	DIELDRIN	0.1298	5.4638%	1207743	51127	23.6	2	15	21	0	1.0744E-07
16	12.77	ENDRIN	0.2457	10.3447%	1337862	48563	27.5	1	16	21	0	1.8364E-07
17	15.05	~~ENDOSU~~LI	~~0.0090~~	0.3777%	34013	1005	33.8	1	17	21	0	2.6371E-07
18	18.08	DDT	0.3182	13.3998%	2738772	70413	38.9	2	18	21	0	1.1620E-07
21	27.45	ISTD	1.0000	0.0000%	2522766	37717	66.9	2	21	21	0	3.9639E-07
22	31.82	DIBUTYLCHLOR	0.9153	38.5405%	6141796	74046	82.9	2	22	21	0	1.4903E-07
23	34.47	METHOXYCHLOR	0.4186	17.6263%	2344620	30765	76.2	2	23	21	0	1.7854E-07

TOTAL AMOUNT = 2.3749

Data File = a:sd11.PTS Printed on 08-18-1989 at 13:31:24
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 62177 uv High Value: 147619 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-18-1989 13:33:04 Version 4.1 **********

* Sample Name: 89FM26S96 MSD Data File: a:sd12 *
* Date: 08-18-1989 20:03:02 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 12 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

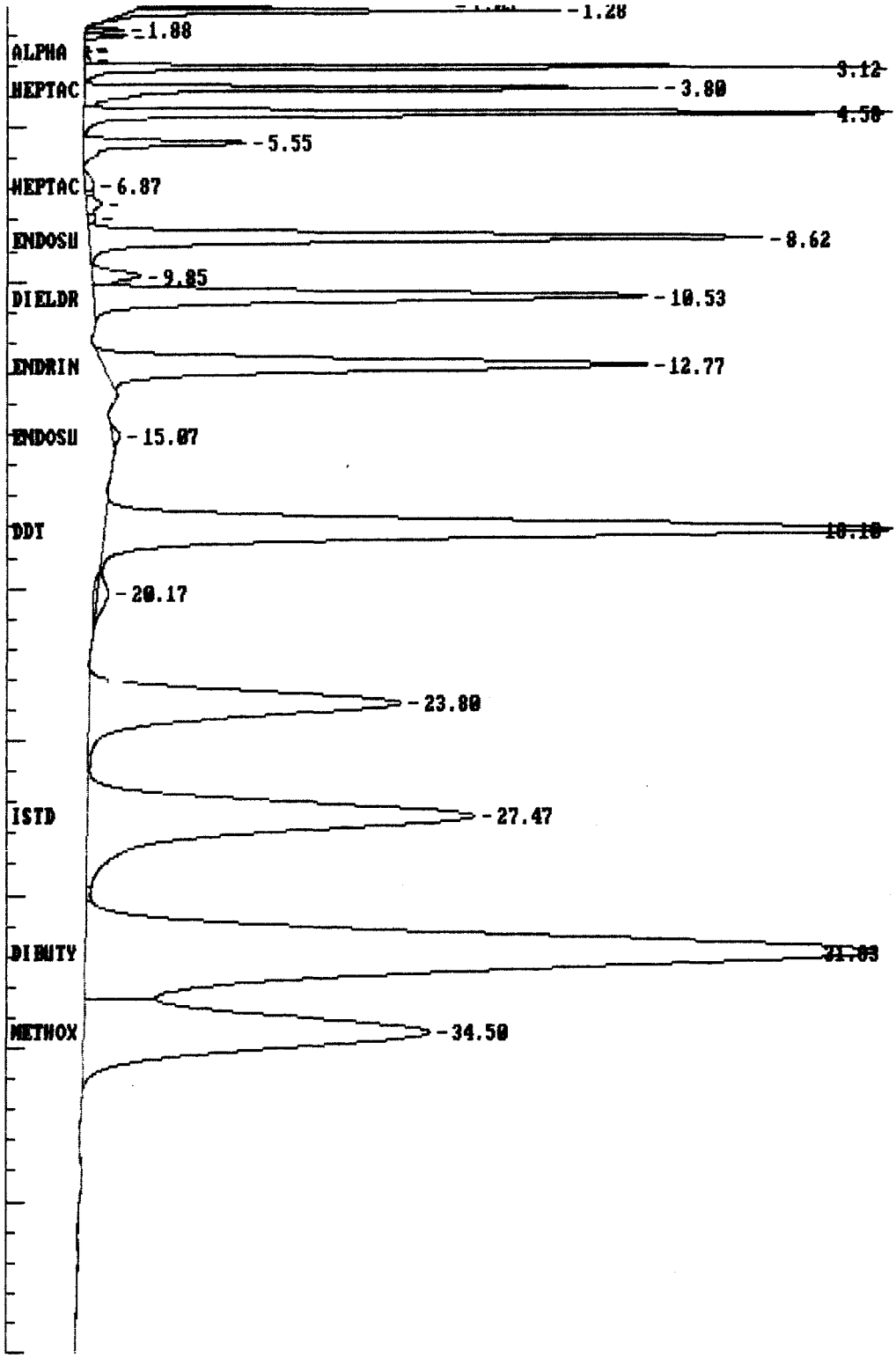
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.57	~~ALPHA-BHC~~	~~0.0031~~	0.1264%	4005	624	6.4	2	6	23	0	7.7686E-07
8	3.12	LINDANE	0.0551	2.2376%	552281	73223	7.5	2	8	23	0	9.9706E-08
9	3.80	HEPTACHLOR	0.0544	2.2096%	570862	53509	10.7	2	9	23	0	9.5254E-08
10	4.58	ALDRIN	0.0844	3.4311%	832777	75324	11.1	2	10	23	0	1.0139E-07
12	6.87	~~HEPTACHLOR EPOXIDE~~	~~0.0029~~	0.1191%	24559	836	29.4	2	12	23	0	1.1933E-07
15	8.62	ENDOSULFAN I	0.1291	5.2464%	1226113	62886	19.5	2	15	23	0	1.0530E-07
17	10.53	DIELDRIN	0.1370	5.5650%	1224243	51669	23.7	2	17	23	0	1.1187E-07
18	12.77	ENDRIN	0.2664	10.8237%	1396528	50690	27.6	1	18	23	0	1.9073E-07
19	15.07	~~ENDOSU II~~	~~0.0076~~	0.3074%	19250	706	27.3	1	19	23	0	3.9297E-07
20	18.10	DDT	0.3418	13.8886%	2836059	73634	38.5	3	20	23	0	1.2052E-07
23	27.47	ISTD	1.0000	0.0000%	2424170	36149	67.1	2	23	23	0	4.1251E-07
24	31.83	DIBUTYLCHLOR	0.9223	37.4765%	5945685	73816	80.5	2	24	23	0	1.5512E-07
25	34.50	METHOXYCHLOR	0.4570	18.5688%	2454006	32217	76.2	2	25	23	0	1.8621E-07

TOTAL AMOUNT = 2.4610

Data File = a:sd12.PTS Printed on 08-18-1989 at 13:33:38
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 63259 uv High Value: 139426 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 13:29:51 Version 4.1 **********

* Sample Name: 89FM26S96 MS Data File: a:es9 *
* Date: 08-18-1989 14:24:07 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*
* Interface: 0 Cycle#: 9 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~[illegible]~~ SF 6437 *

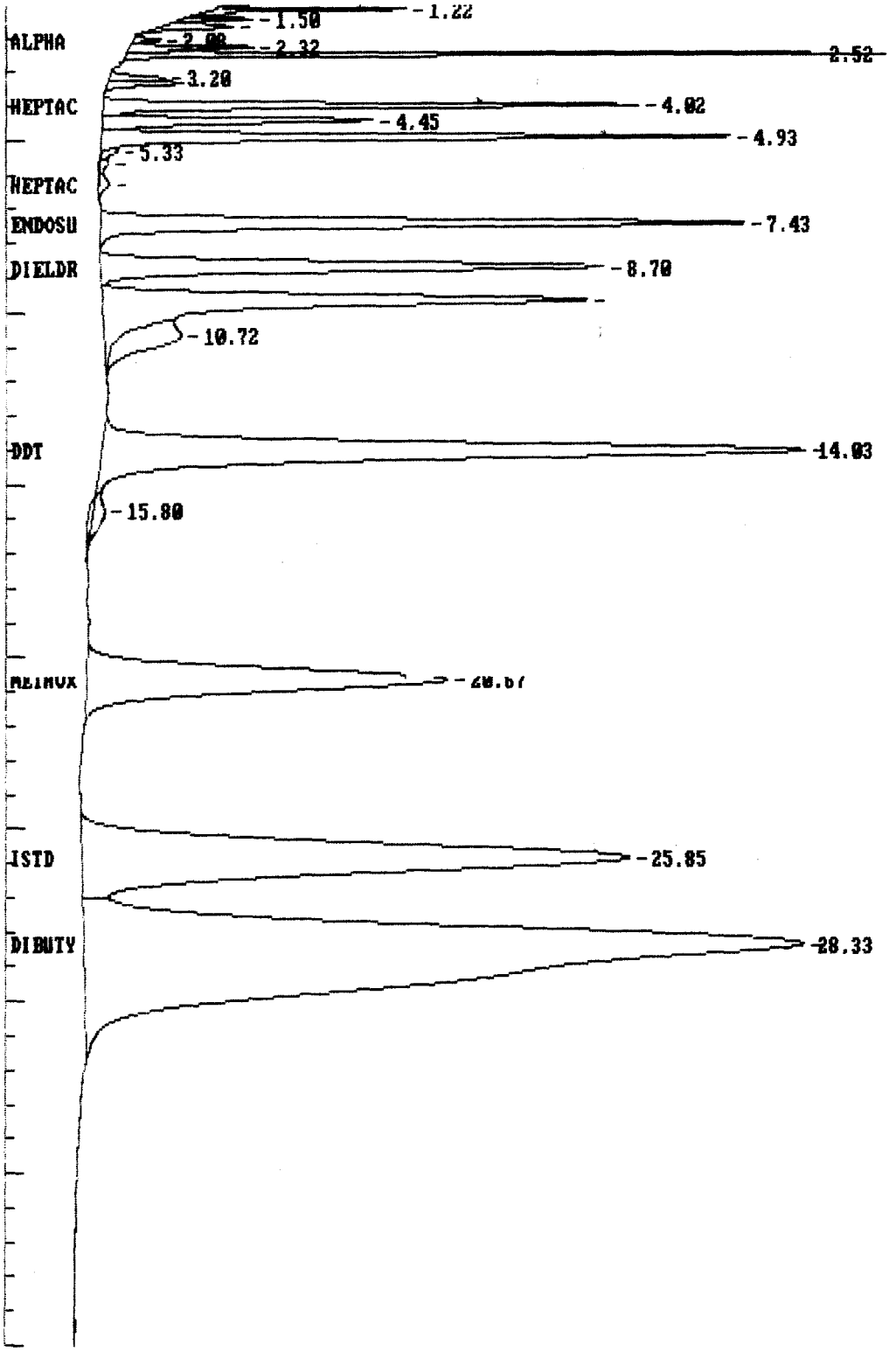
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
4	2.08	~~ALPHA BHC~~	~~0.0014~~	0.0918%	16908	2187	7.7	2	4	22	0	8.0874E-08
6	2.52	LINDANE	0.0350	2.3503%	363950	61907	5.9	2	6	22	0	9.6163E-08
9	4.02	HEPTACHLOR	0.0349	2.3432%	440659	43516	10.1	2	9	22	0	7.9184E-08
11	4.93	ALDRIN	0.0565	3.7914%	593443	51122	11.6	3	11	22	0	9.5137E-08
14	6.28	~~HEPTACHLOR EPOXIDE~~	~~0.0017~~	0.1140%	21183	836	25.3	4	14	22	0	8.0119E-08
15	7.43	ENDOSULFAN I	0.0755	5.0704%	882806	52328	16.9	1	15	22	0	8.5527E-08
16	8.70	DIELDRIN	0.0785	5.2719%	807635	40856	19.8	2	16	22	0	9.7204E-08
17	9.67	EN+~~GNB11~~	0.0973	6.5310%	1071782	39343	27.2	3	17	22	0	9.0740E-08
19	14.03	DDT	0.2177	14.6170%	1853120	57204	32.4	3	19	22	0	1.1746E-07
21	20.67	METHOXYCHLOR	0.2616	17.5683%	1329407	29343	45.3	1	21	22	0	1.9679E-07
22	25.85	ISTD	1.0000	0.0000%	2608783	44513	58.6	2	22	22	0	3.8332E-07
23	28.33	DIBUTYLCHLOR	0.6292	42.2507%	5842741	58507	99.9	2	23	22	0	1.0768E-07

TOTAL AMOUNT = 1.4891

Data File = a:es9.PTS Printed on 08-19-1989 at 13:30:27
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 24682 uv High Value: 90542 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-20-1989 06:07:29 Version 4.1 **********

* Sample Name: 89FM26S96 MSD Data File: a:es10 *
* Date: 08-18-1989 15:05:35 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*
* Interface: 0 Cycle#: 10 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~OP4FY89~~ SF6437 *

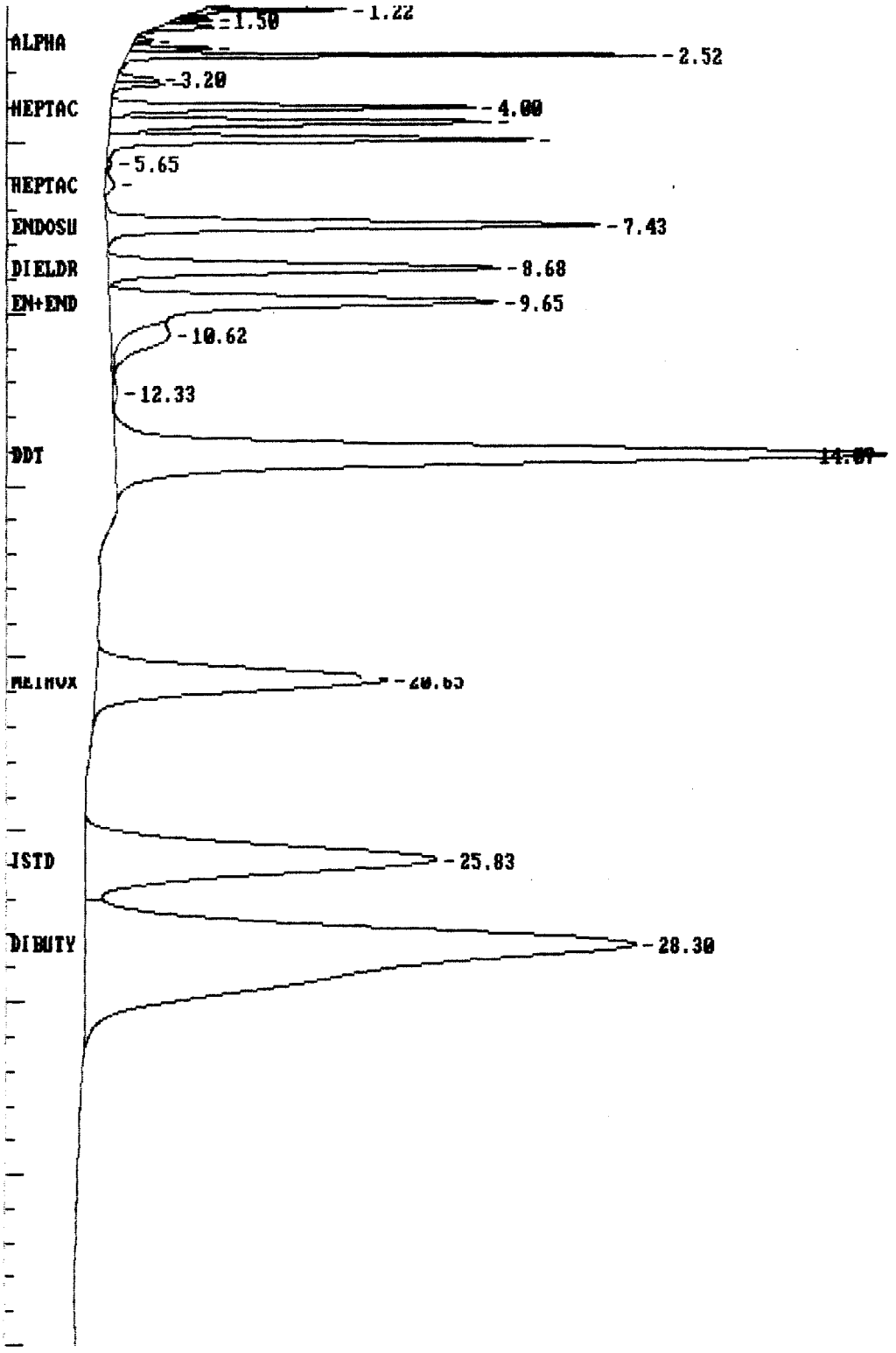
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
4	2.07	~~ALPHA-BHC~~	~~0.0013~~	0.0705%	13585	1835	7.4	2	4	21	0	9.8008E-08
6	2.52	LINDANE	0.0388	2.0565%	333119	55506	6.0	2	6	21	0	1.1654E-07
9	4.00	HEPTACHLOR	0.0371	1.9651%	386572	38249	10.1	2	9	21	0	9.5959E-08
11	4.93	ALDRIN	0.0612	3.2443%	531190	44542	11.9	3	11	21	0	1.1529E-07
13	6.25	~~HEPTACHLOR EPOXIDE~~	~~0.0020~~	0.1082%	21045	852	24.7	2	13	21	0	9.7093E-08
14	7.43	ENDOSULFAN I	0.0919	4.8675%	886521	51811	17.1	2	14	21	0	1.0365E-07
15	8.68	DIELDRIN	0.0957	5.0713%	812672	41202	19.7	2	15	21	0	1.1780E-07
16	9.65	EN+~~ENDTI~~	0.1228	6.5049%	1116657	40801	27.4	3	16	21	0	1.0996E-07
19	14.07	DDT	0.4187	22.1815%	2941620	81179	36.2	2	19	21	0	1.4234E-07
20	20.65	METHOXYCHLOR	0.3327	17.6260%	1395188	30611	45.6	1	20	21	0	2.3848E-07
21	25.83	ISTD	1.0000	0.0000%	2152723	36941	58.3	2	21	21	0	4.6453E-07
22	28.30	DIBUTYLCHLOR	0.6853	36.3042%	5251603	57915	90.7	2	22	21	0	1.3050E-07

TOTAL AMOUNT = 1.8877

Data File = a:es10.PTS Printed on 08-20-1989 at 06:08:14
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 24240 uv High Value: 109465 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 07:16:07 Version 4.1 **********

* Sample Name: 89FM26S96 MS PCB Data File: a:sd19 *
* Date: 08-19-1989 01:28:22 Method: A:AR042 08-19-1989 07:01:37 # 145 *
* Interface: 0 Cycle#: 19 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.27	A42	2.2967	12.0047%	765079	99460	7.7	2	5	31	0	3.0020E-06
7	2.90	B42	2.3564	12.3167%	1409849	152105	9.3	2	7	31	0	1.6714E-06
10	3.73	C42	2.5573	13.3668%	2685642	278685	9.6	2	11	31	.4081	9.5222E-07
11	4.08	D42	2.6353	13.7742%	1281868	108498	11.8	2	11	31	0	2.0558E-06
13	4.70	E42	3.0935	16.1695%	2205131	109610	20.1	3	13	31	0	1.4029E-06
15	5.53	F42	3.5580	18.5972%	1947570	119932	16.2	2	15	31	0	1.8269E-06
18	6.95	G42	2.6346	13.7709%	2328746	95056	24.5	3	18	31	0	1.1314E-06
31	27.45	ISTD	1.0000	0.0000%	2938788	41574	70.7	2	31	31	0	3.4028E-07

TOTAL AMOUNT = 19.1319

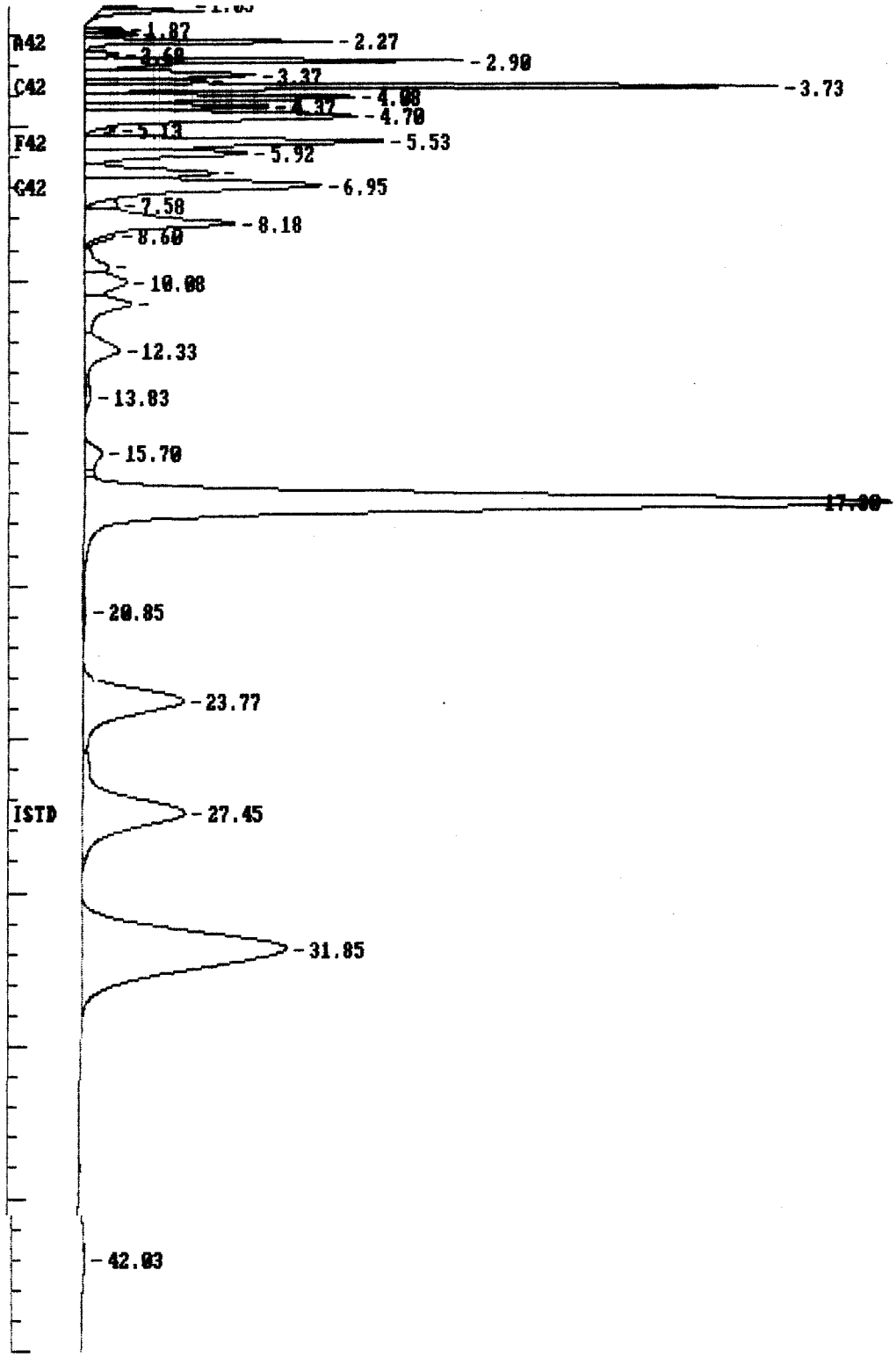
average = 2.73 ug/l

% Recovery = $\frac{2.73}{*\ 3} \times 100$

= 91 %

* amount added

Data File = a:sd19.PTS Printed on 08-19-1989 at 07:16:43
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64023 uv High Value: 391933 uv Scale factor: 1.0



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*****   INTERNAL STANDARD TABLE   *****
******************** 08-19-1989 07:18:02 Version 4.1 **********************
* Sample Name: 89FM26S96 MSDPCB                    Data File: a:sd20        *
* Date: 08-19-1989 02:14:50 Method: A:AR042 08-19-1989 07:01:37  #  145    *
* Interface: 0   Cycle#:  20   Operator NF  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE     *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                           *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM         *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                         *
*****************************************************************************
Starting Delay:    1.00                      Ending retention time:   45.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        5.00                 Dilution factor:       10.00
Internal Standard Amount:  1
Sample Weight:          0.950000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.27	A42	3.3688	13.5923%	893280	116702	7.7	2	5	29	0	3.7713E-06
7	2.88	B42	3.3780	13.6295%	1603707	174419	9.2	2	7	29	0	2.1064E-06
10	3.73	C42	3.5004	14.1234%	2933037	303502	9.7	2	11	29	.4081	1.1934E-06
11	4.08	D42	3.6390	14.6827%	1407965	121287	11.6	2	11	29	0	2.5846E-06
13	4.68	E42	3.6323	14.6557%	2096224	105076	19.9	2	13	29	0	1.7328E-06
14	5.53	F42	~~4.0697~~	16.4210%	1804560	109160	16.5	2	14	29	0	2.2553E-06
17	6.95	G42	3.1960	12.8954%	2228056	93048	23.9	3	17	29	0	1.4345E-06
29	27.43	ISTD	1.0000	0.0000%	2401539	37170	64.6	1	29	29	0	4.1640E-07

TOTAL AMOUNT = 24.7844

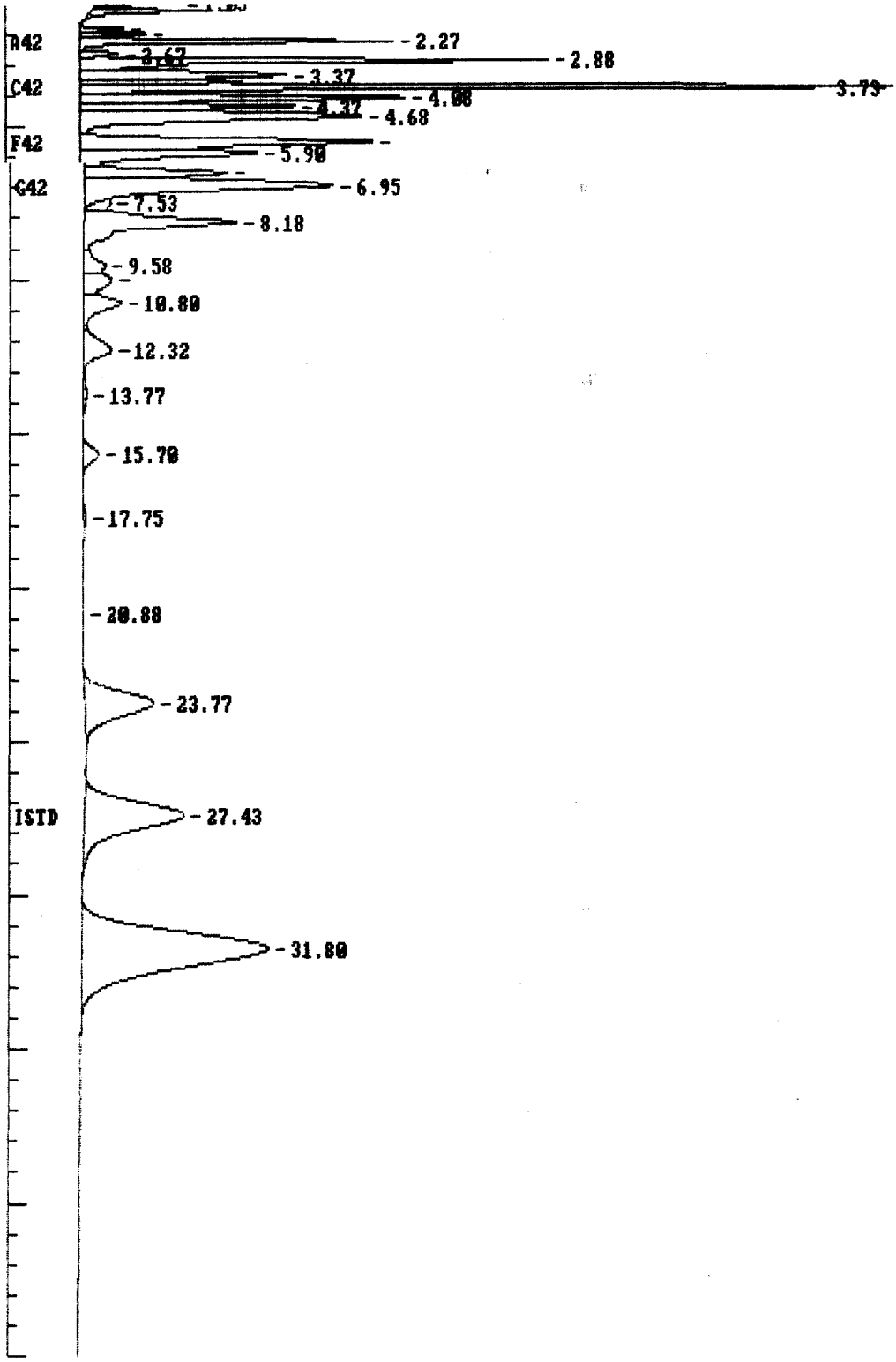
average = $\frac{20.71}{7}$ = 2.95

% Recovery = $\frac{2.95}{*3}$ x100

= 98 %

* amount added

Data File = a:sd20.PTS Printed on 08-19-1989 at 07:18:37
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64097 uv High Value: 369221 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-19-1989 07:32:05 Version 4.1 **********

* Sample Name: 89FM26S96 MS PCB Data File: a:sd19 *
* Date: 08-19-1989 01:28:22 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 19 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
10	3.73	HEPTACHLOR	0.2097	6.9655%	2685642	278685	9.6	2	10	31	0	7.8078E-08
13	4.70	ALDRIN	0.1799	5.9759%	2205131	109610	20.1	3	13	31	0	8.1582E-08
18	6.95	HEPTACHLOR EPOXIDE	0.1879	6.2402%	2328746	95056	24.5	3	18	31	0	8.0669E-08
20	8.18	ENDOSULFAN I	0.1491	4.9539%	1716609	60227	28.5	3	20	31	0	8.6876E-08
24	10.82	DIELDRIN	0.0580	1.9282%	636826	18615	34.2	2	24	31	0	9.1153E-08
25	12.33	ENDRIN	0.0964	3.2031%	587998	13877	42.4	3	25	31	0	1.6399E-07
27	15.70	ENDOSU II	0.0299	0.9936%	282359	7135	39.6	2	27	31	0	1.0594E-07
28	17.30	DDT	1.2004	39.8742%	12466615	325981	38.2	3	28	31	0	9.6288E-08
31	27.45	ISTD	1.0000	0.0000%	2938788	41574	70.7	2	31	31	0	3.4028E-07
32	31.85	DIBUTYLCHLOR	0.8991	29.8655%	7030658	82699	85.0	1	32	31	0	1.2788E-07

TOTAL AMOUNT = 3.0104

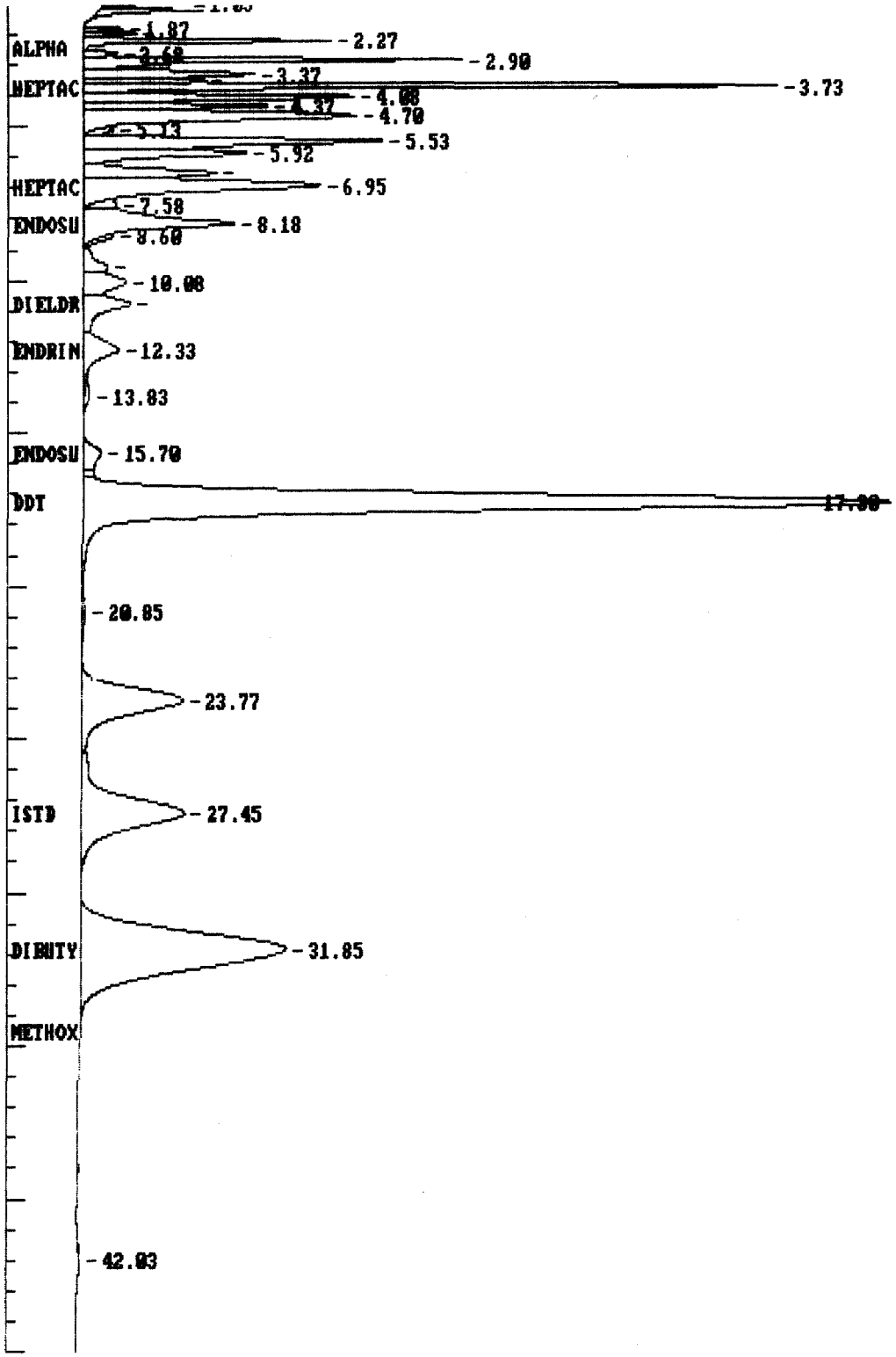
DBC % Recovery

$$= \frac{.89}{*\ .5} \times 100$$

$$= 178\ \%$$

* amount added

Data File = a:sd19.PTS Printed on 08-19-1989 at 07:32:42
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64023 uv High Value: 391933 uv Scale factor: 1.0



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****** INTERNAL STANDARD TABLE ******
******************** 08-19-1989 07:35:55 Version 4.1 **********************
* Sample Name: 89FM26S96 MSDPCB                    Data File: a:sd20        *
* Date: 08-19-1989 02:14:50 Method: A:PESA 08-18-1989 13:07:32  #  184     *
* Interface: 0   Cycle#:  20   Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE   *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                         *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM       *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                       *
*************************************************************************
Starting Delay:    1.00                      Ending retention time:    45.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        5.00                 Dilution factor:       10.00
Internal Standard Amount:  1
Sample Weight:          0.950000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
10	3.73	HEPTAGHLOR	0.2801	14.5214%	2933037	303502	9.7	2	10	29	0	9.5492E-08
13	4.68	ALDRIN	0.2086	10.8177%	2096224	105076	19.9	2	13	29	0	9.9535E-08
17	6.95	HEPTAGHLOR EPOXIDE	0.2199	11.3986%	2228056	93048	23.9	3	17	29	0	9.8674E-08
19	8.18	ENDOSULFAN I	0.1645	8.5311%	1547597	56845	27.2	2	19	29	0	1.0632E-07
22	10.80	DIELDRIN	0.0470	2.4344%	423039	13718	30.8	2	22	29	0	1.1099E-07
23	12.32	ENDRIN	0.0806	4.1780%	396328	10213	38.8	2	23	29	0	2.0333E-07
25	15.70	ENDOSU II	0.0276	1.4302%	208705	5860	35.6	1	25	29	0	1.3218E-07
26	17.75	DDT	0.0184	0.9563%	31046	907	34.2	1	26	29	0	5.9411E-07
29	27.43	ISTD	1.0000	0.0000%	2401539	37170	64.6	1	29	29	0	4.1640E-07
30	31.80	DIBUTYLCHLOR	0.8821	45.7323%	5639157	69757	80.8	1	30	29	0	1.5642E-07

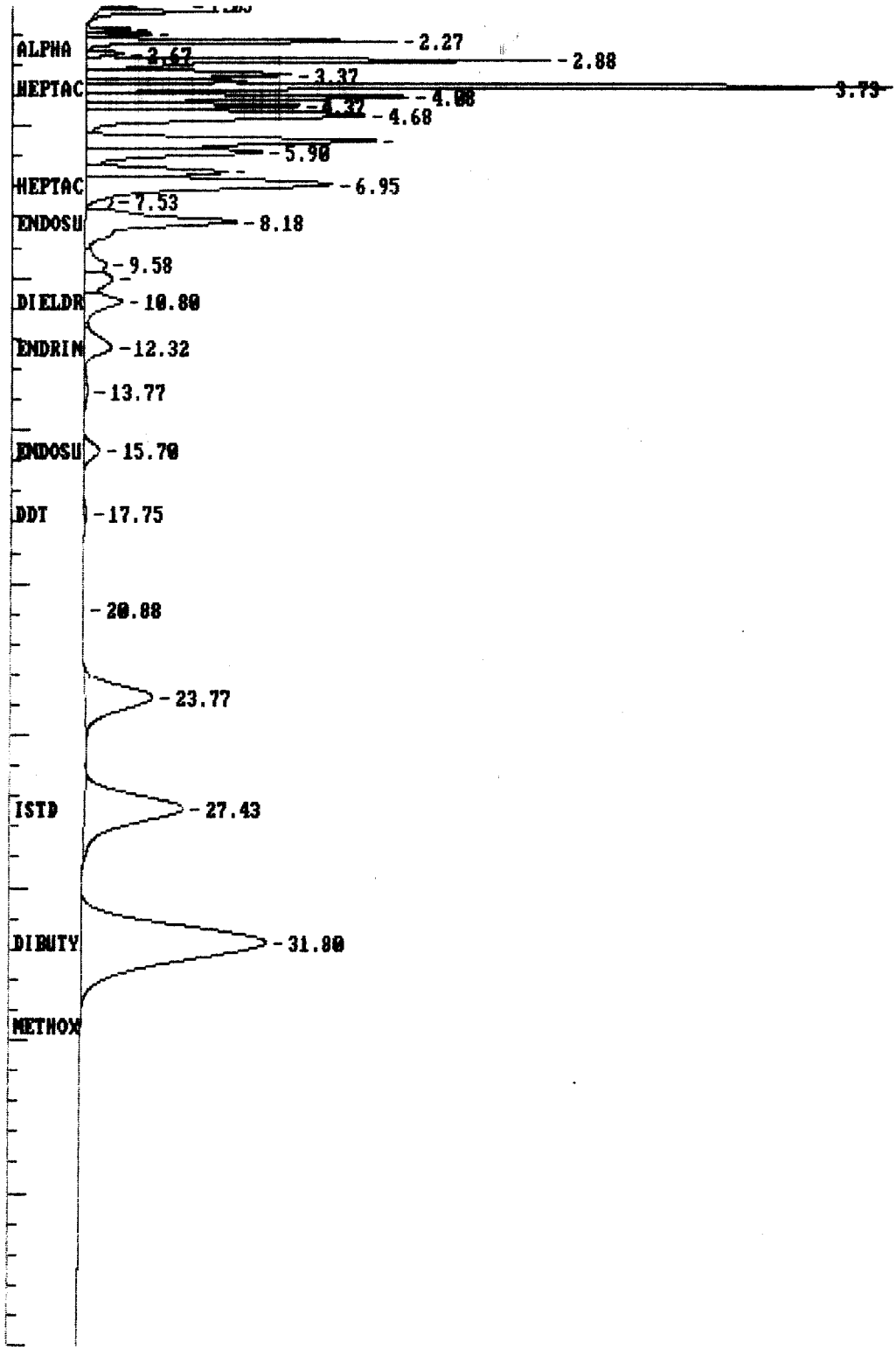
TOTAL AMOUNT = 1.9288

DBC % Recovery

$$= \frac{.88}{.5} \times 100$$

$$= 176\ \%$$

Data File = a:sd20.PTS Printed on 08-19-1989 at 07:36:27
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64097 uv High Value: 369221 uv Scale factor: 1.0

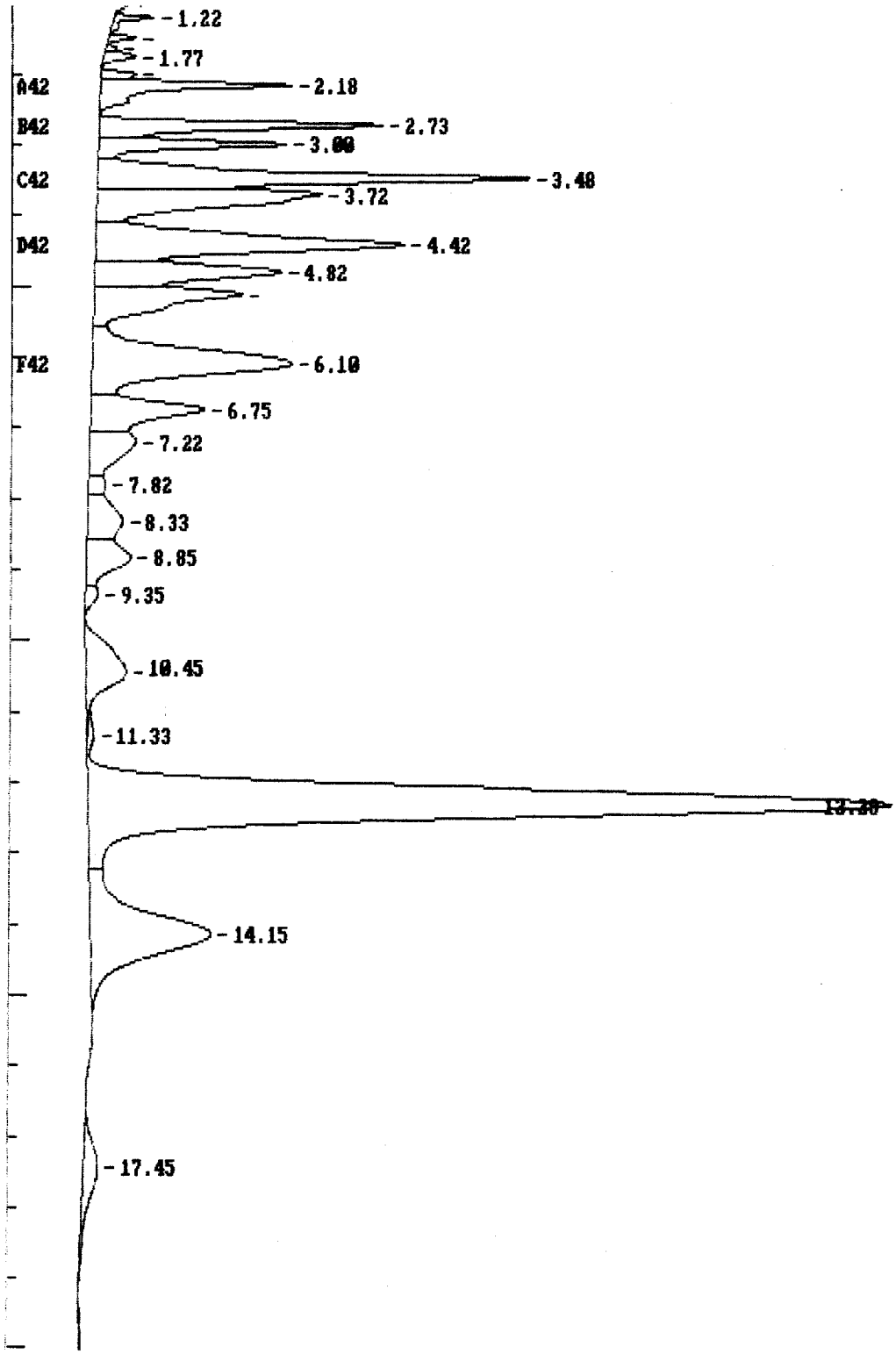


```
*****   EXTERNAL STANDARD TABLE   *****
******************** 08-20-1989 06:17:27 Version 4.1 ********************
* Sample Name: 89FM26S96 MS PCB                    Data File: a:es13      *
* Date: 08-18-1989 17:10:03 Method: A:AR042-2 08-19-1989 13:07:52  #  56  *
* Interface: 0   Cycle#:  13   Operator NF  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY  *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                   *
*             Detector 0: ECD QUANT          Detector 1: ECD CONF         *
* Misc. Information: ~~GE4FY89~~ 3F6437                                   *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    40.00
Area reject:        0                      One sample per    1.000 sec.
Amount injected:        5.00               Dilution factor:        10.00
Sample Weight:          0.950000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
6	2.18	A42	0.3176	15.3893%	709979	80648	8.8	2	6	0	4.4735E-07
7	2.73	B42	0.2793	13.5309%	990353	119105	8.3	2	7	0	2.8197E-07
9	3.48	C42	0.2784	13.4876%	2096699	181556	11.5	2	9	0	1.3276E-07
11	4.42	D42	0.4900	23.7427%	2229144	129722	17.2	2	11	0	2.1982E-07
12	4.82	E42	0.3448	16.7055%	1192545	78484	15.2	2	12	0	2.8911E-07
14	6.10	F42	0.3538	17.1439%	2174372	84051	25.9	2	14	0	1.6272E-07

TOTAL AMOUNT = 2.0638

Data File = a:es13.PTS Printed on 08-20-1989 at 06:18:02
Start time: 1.00 min. Stop time: 20.00 min. Offset: 0 mv.
Low Value: 25107 uv High Value: 367470 uv Scale factor: 1.0

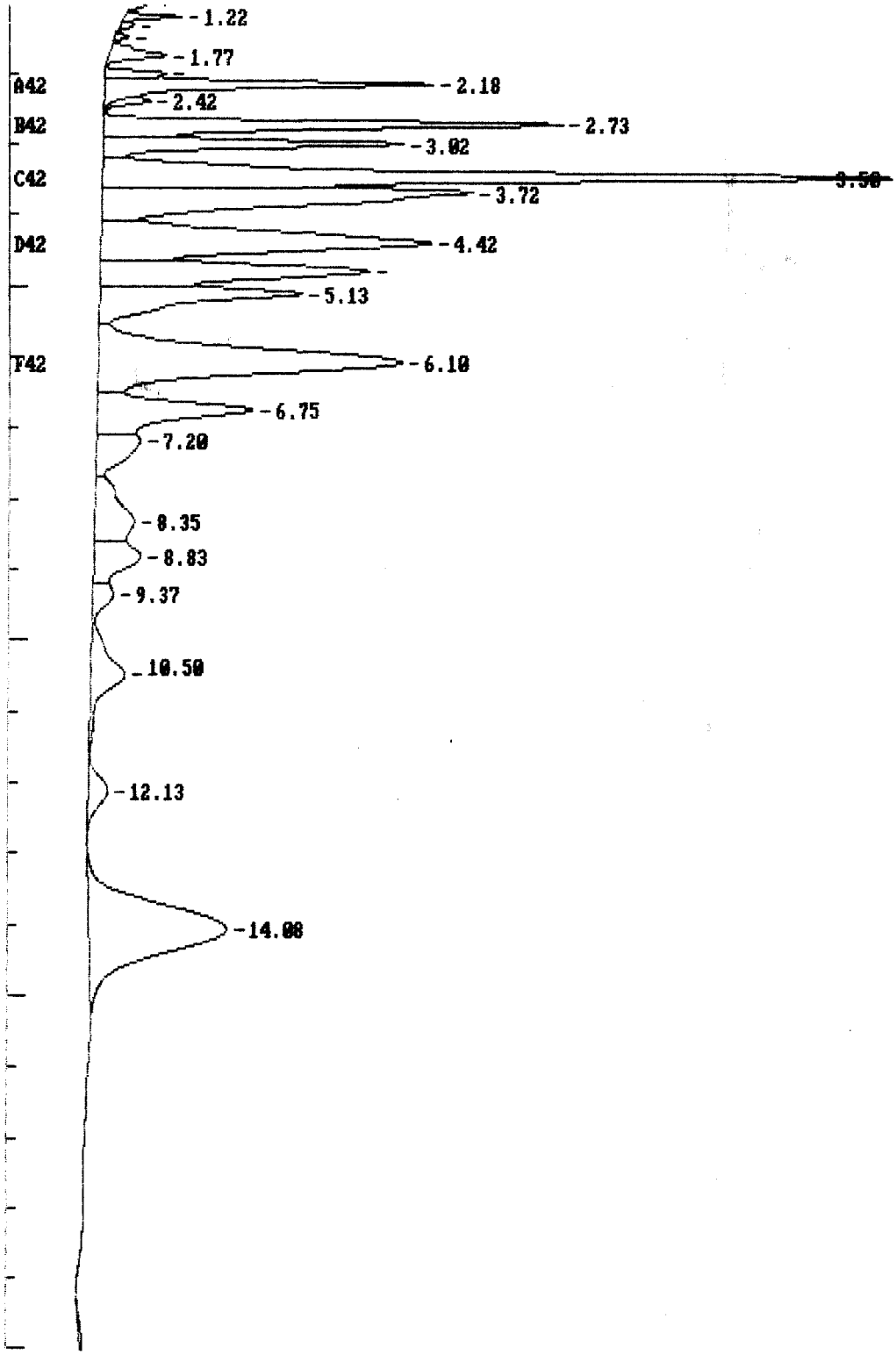


```
******   EXTERNAL STANDARD TABLE   ******
******************** 08-20-1989 06:19:39 Version 4.1 *********************
* Sample Name: 89FM26S96 MSDPCB                    Data File: a:es14       *
* Date: 08-18-1989 17:51:30 Method: A:AR042-2 08-19-1989 13:07:52  #  56  *
* Interface: 0   Cycle#:  14   Operator NF  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY  *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                   *
*             Detector 0: ECD QUANT            Detector 1: ECD CONF       *
* Misc. Information: ~~QE4FY89~~ SF6437                                   *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    40.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:       10.00
Sample Weight:          0.950000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
6	2.18	A42	0.3331	15.9303%	744630	96367	7.7	3	6	0	4.4735E-07
8	2.73	B42	0.3211	15.3544%	1138635	134351	8.5	2	8	0	2.8197E-07
10	3.50	C42	0.3365	16.0948%	2534984	231511	10.9	2	10	0	1.3276E-07
12	4.42	D42	0.4022	19.2332%	1829568	96703	18.9	2	12	0	2.1982E-07
13	4.82	E42	0.3381	16.1711%	1169613	78860	14.8	2	13	0	2.8911E-07
15	6.10	F42	0.3600	17.2163%	2212347	88769	24.9	2	15	0	1.6272E-07

TOTAL AMOUNT = 2.0910

Data File = a:es14.PTS Printed on 08-20-1989 at 06:20:45
Start time: 1.00 min. Stop time: 20.00 min. Offset: 0 mv.
Low Value: 24084 uv High Value: 262446 uv Scale factor: 1.0



Samples

***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 07:57:47 Version 4.1 **********

* Sample Name: 89FM11R66 Data File: A:SD3 *
* Date: 08-18-1989 13:07:44 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 3 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.50	ALPHA BHC N.C.	0.0466	5.2759%	506006	39777	12.7	1	6	19	0	9.2077E-08
8	3.05	LINDANE N.C.	0.0050	0.5631%	33574	4597	7.3	2	8	19	0	1.4810E-07
10	3.73	HEPTACHLOR B.L. STD	0.0009	0.1006%	4831	690	7.0	1	10	19	0	1.8394E-07
12	4.78	ALDRIN N.C.	0.0089	1.0129%	55615	3637	15.3	1	12	19	0	1.6083E-07
14	6.58	HEPTACHLOR EPOXIDE B.L. STD	0.0007	0.0824%	2271	169	13.4	1	14	19	0	3.2028E-07
16	8.48	ENDOSULFAN I B.L. STD	0.0032	0.3601%	32108	1404	22.9	2	16	19	0	9.9034E-08
17	10.45	DIELDRIN B.L. STD	0.0006	0.0660%	15951	474	33.7	1	17	19	0	3.6566E-08
19	27.47	ISTD	1.0000	0.0000%	2335384	35387	66.0	1	19	19	0	4.2820E-07
20	31.80	DIBUTYLCHLOR	0.8172	92.5391%	5351213	67438	79.3	1	20	19	0	1.5272E-07

TOTAL AMOUNT = 0.8831

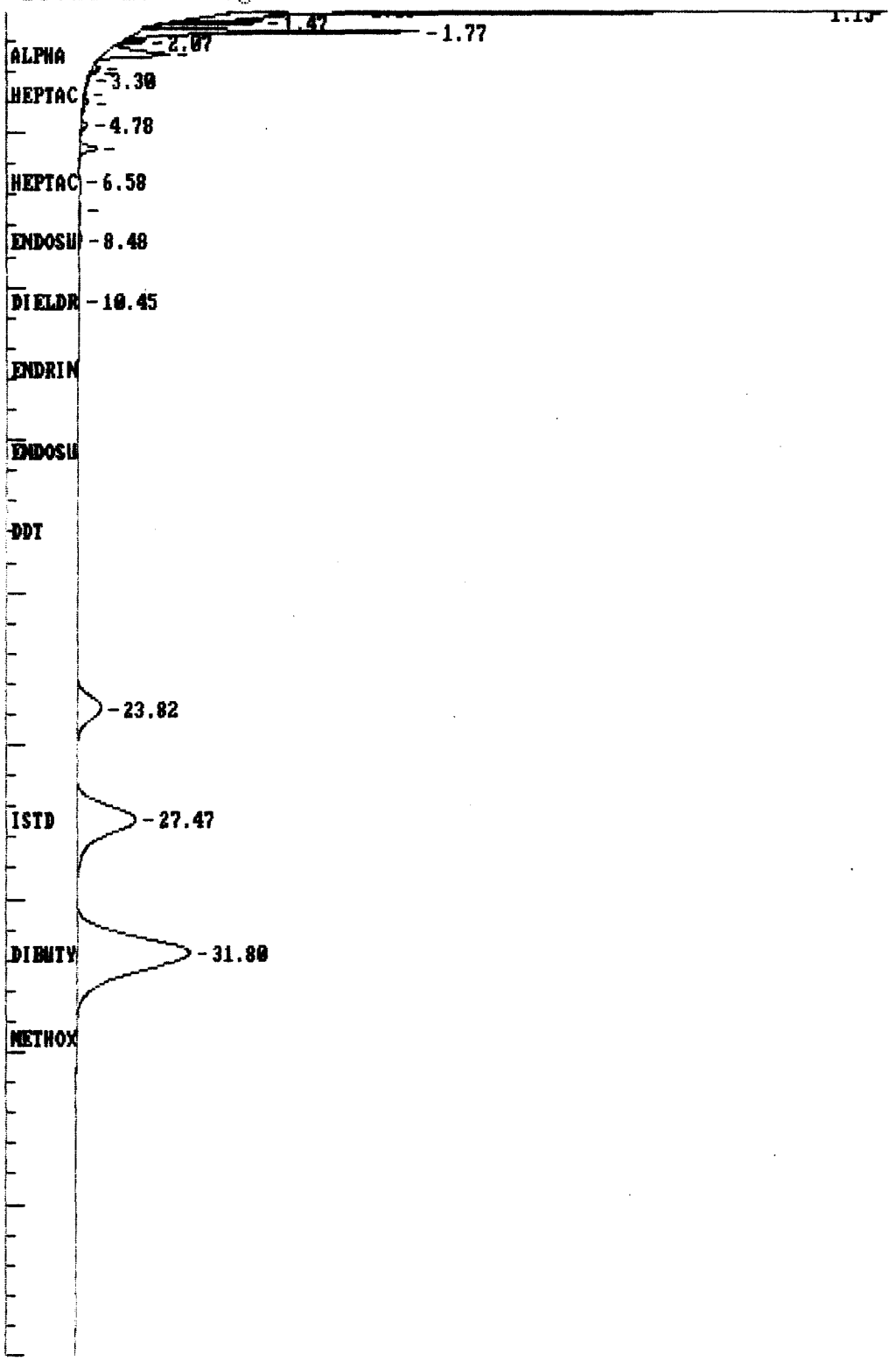
DBC % Recovery

$= \frac{.81}{.5} \times 100$

$= 162\ \%$

peak areas are below the low standard

Data File = A:SD3.PTS Printed on 08-19-1989 at 07:58:18
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 61963 uv High Value: 546815 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 07:59:08 Version 4.1 **********

* Sample Name: 89FM11R66 Data File: A:SD3 *
* Date: 08-18-1989 13:07:44 Method: A:PESB 08-19-1989 07:44:44 # 126 *
* Interface: 0 Cycle#: 3 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *

***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 07:59:50 Version 4.1 **********

* Sample Name: 89FM11R66 Data File: A:SD3 *
* Date: 08-18-1989 13:07:44 Method: A:PESB 08-19-1989 07:44:44 # 126 *
* Interface: 0 Cycle#: 3 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

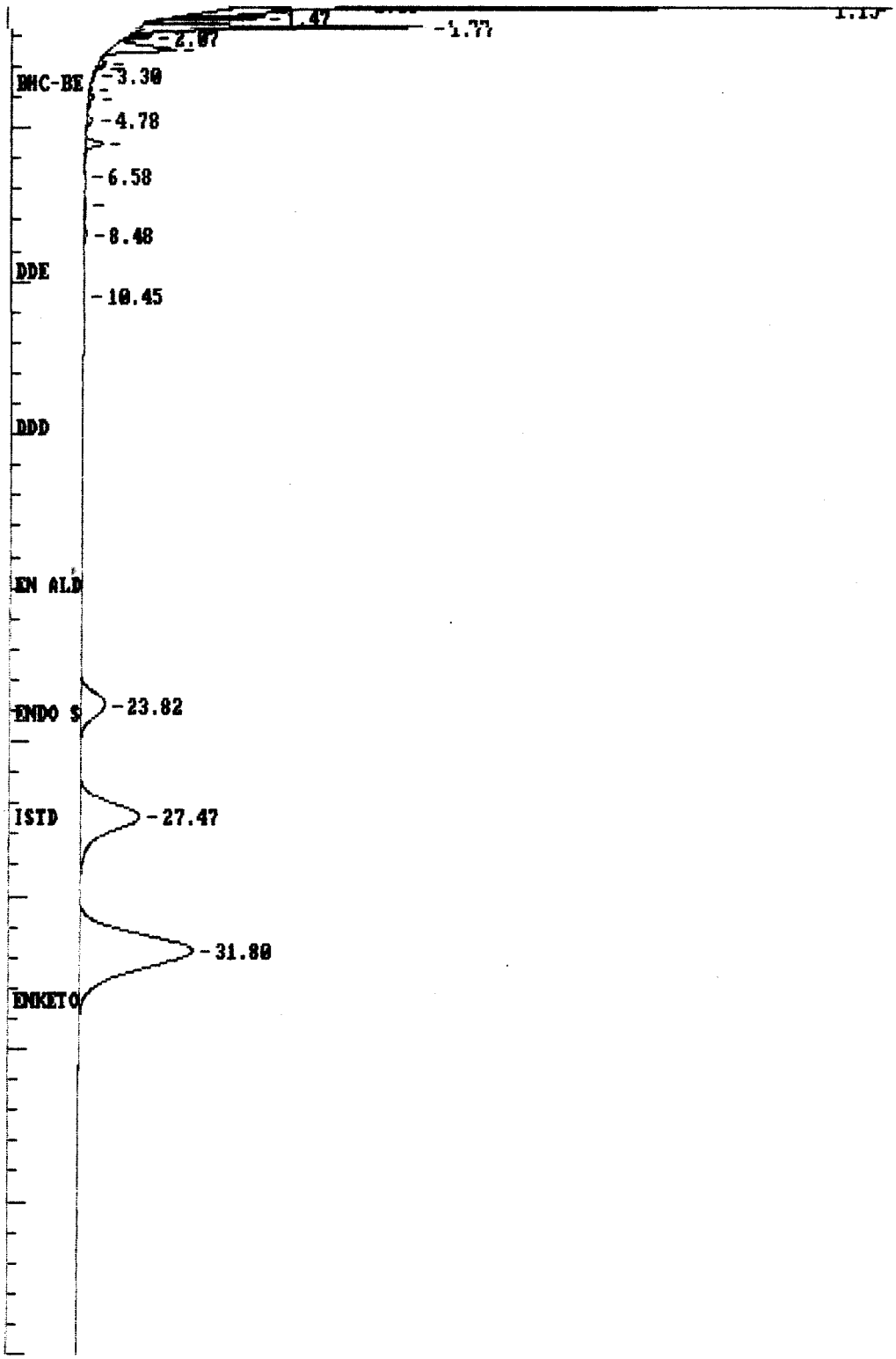
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
11	4.03	BHC-DELTA B.L. STD	0.0049	0.3995%	45335	3379	13.4	1	11	19	0	1.0760E-07
18	23.82	ENDO SULFATE N.C	0.1384	11.3315%	788474	14353	54.9	1	11	19	-1.183	1.7547E-07
19	27.47	ISTD	1.0000	0.0000%	2335384	35387	66.0	1	19	19	0	4.2820E-07
20	31.80	~~ENKETONE~~ DBC	1.0777	88.2690%	5351213	67438	79.3	1	19	19	-4.674	2.0139E-07

TOTAL AMOUNT = 1.2209

Data File = A:SD3.PTS Printed on 08-19-1989 at 08:00:19
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 61963 uv High Value: 546815 uv Scale factor: 1.0

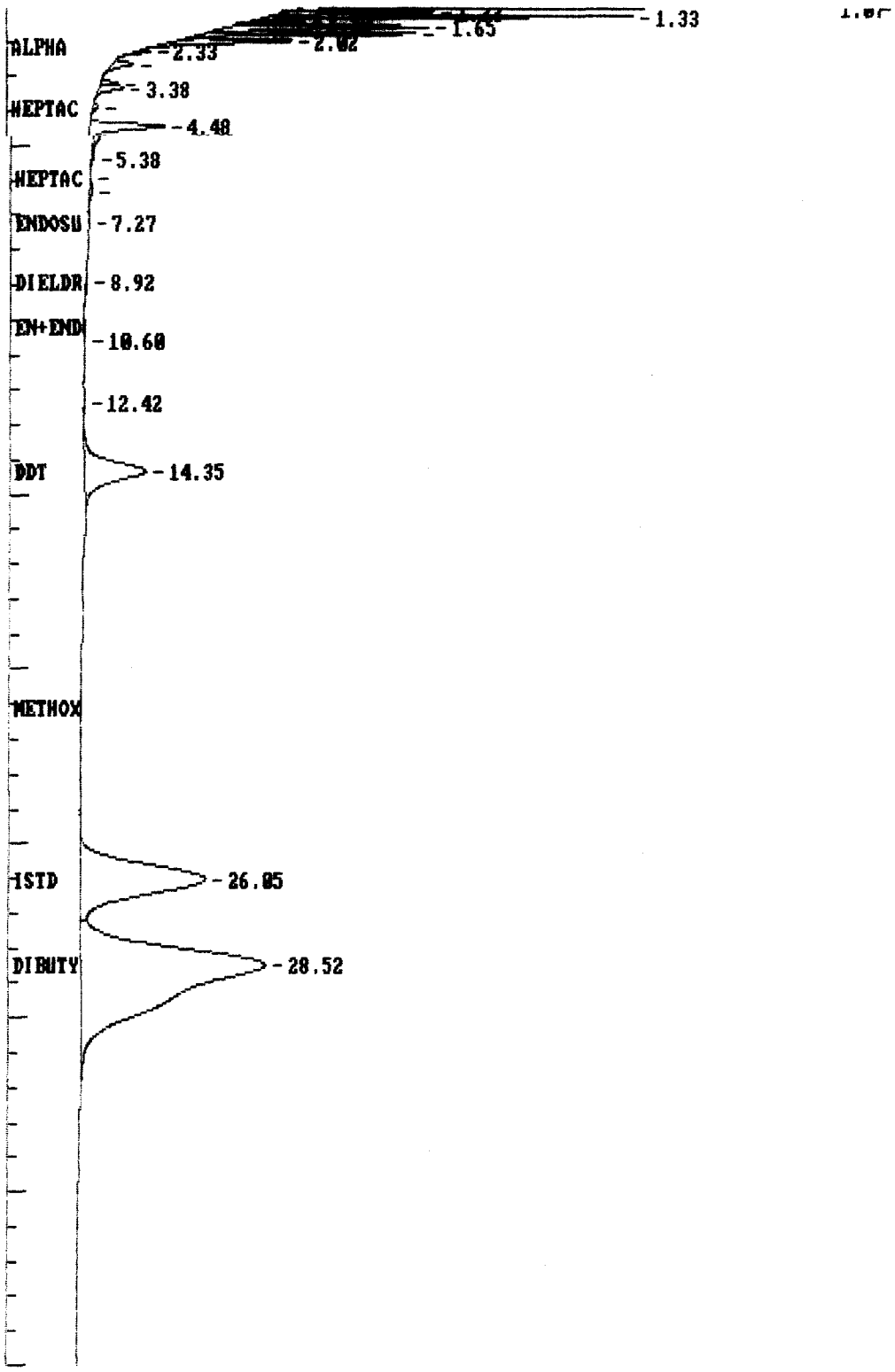


```
*****   INTERNAL STANDARD TABLE   *****
******************** 08-19-1989 13:12:57 Version 4.1 **********************
* Sample Name: 89FM11R66                          Data File: a:es3          *
* Date: 08-18-1989 10:15:17 Method: A:PESA-CON 08-19-1989 12:51:43  #  139*
* Interface: 0   Cycle#:  3    Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY  *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                   *
*             Detector 0: ECD QUANT          Detector 1: ECD CONF         *
* Misc. Information: Q84FY89  SF6437                                      *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    40.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:       10.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
12	3.90	HEPTACHLOR	0.0016	0.2210%	18717	1784	10.5	1	12	22	0	8.6081E-08
15	5.93	HEPTACHLOR EPOXIDE	0.0002	0.0335%	2802	235	11.9	2	15	22	0	8.7097E-08
17	7.27	ENDOSULFAN I	0.0005	0.0647%	5070	221	23.0	1	17	22	0	9.2976E-08
18	8.92	DIELDRIN	0.0012	0.1620%	11175	253	44.2	1	18	22	0	1.0567E-07
19	10.60	EN+ENDII	0.0009	0.1287%	9513	250	38.0	1	18	22	3.622	9.8644E-08
21	14.35	DDT	0.0933	12.8018%	730825	18819	38.8	1	21	22	0	1.2769E-07
22	26.05	ISTD	1.0000	0.0000%	2279780	38510	59.2	2	22	22	0	4.3864E-07
23	28.52	DIBUTYLCHLOR	0.6312	86.5883%	5391900	57050	94.5	2	23	22	0	1.1706E-07

TOTAL AMOUNT = 0.7290

Data File = a:es3.PTS Printed on 08-19-1989 at 13:13:26
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23461 uv High Value: 276438 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 13:14:30 Version 4.1 **********

* Sample Name: 89FM11R66 Data File: a:es3 *

* Date: 08-18-1989 10:15:17 Method: A:PESB-2 08-19-1989 12:59:47 # 105 *

* Interface: 0 Cycle#: 3 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS *

* Detector 0: ECD QUANT Detector 1: ECD CONF *

* Misc. Information: ~~GB4FY87~~ 3FG437 *

****

Starting Delay: 1.00 Ending retention time: 40.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 5.00 Dilution factor: 10.00

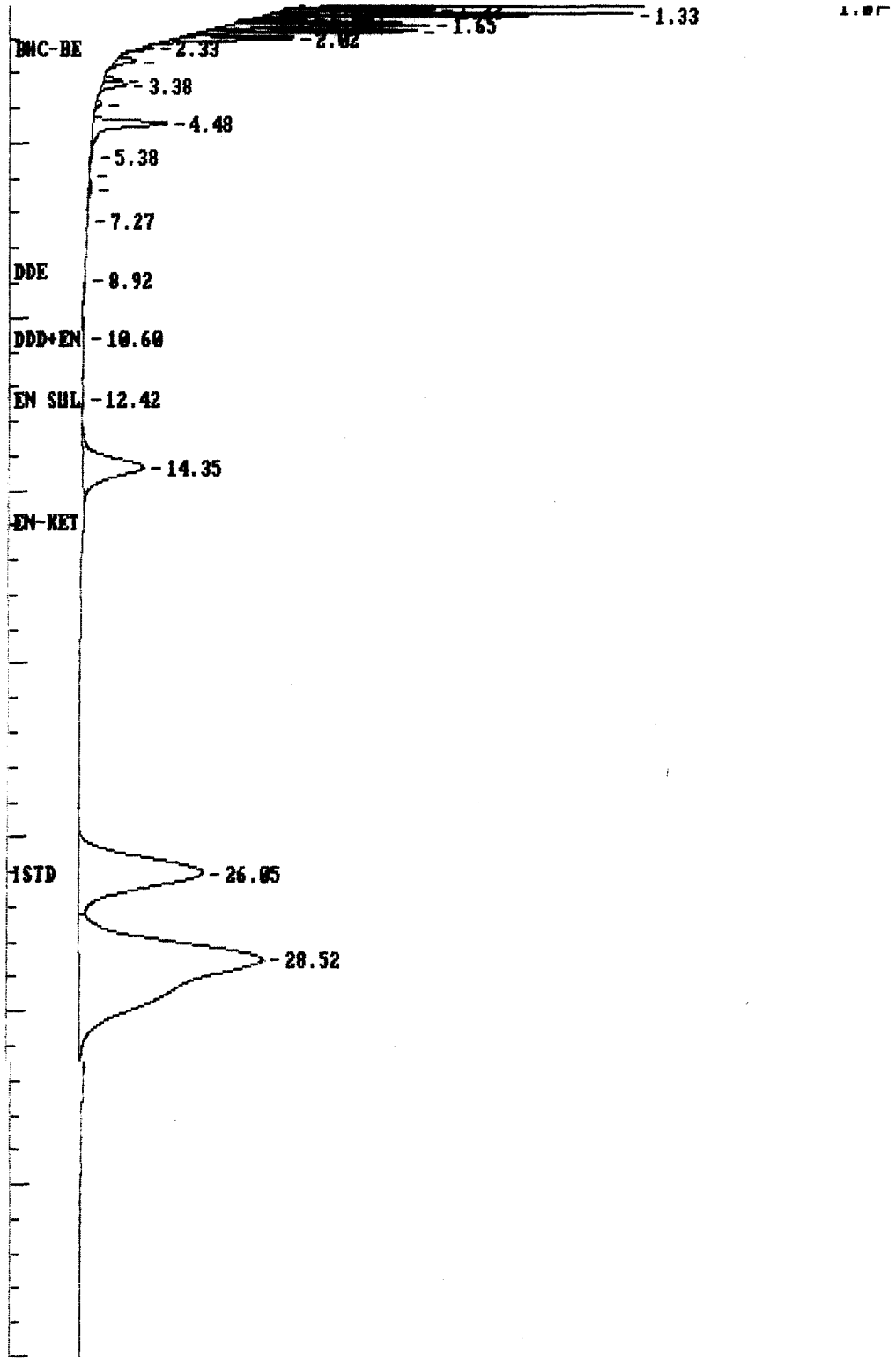
Internal Standard Amount: 1

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	2.33	BHC-BETA	0.0031	25.1833%	25897	4627	5.6	1	8	22	0	1.1847E-07
9	2.68	BHC-DELTA	0.0062	50.5416%	69089	6659	10.4	1	8	22	2.387	8.9122E-08
18	8.92	DDE	0.0012	9.6934%	11175	253	44.2	1	8	22	2.798	1.0568E-07
19	10.60	DDD+EN-ALD	0.0012	9.4398%	9513	250	38.0	1	19	22	0	1.2089E-07
20	12.42	EN SULFATE	0.0006	5.1418%	5088	200	25.4	1	20	22	0	1.2312E-07
22	26.05	ISTD	1.0000	0.0000%	2279780	38510	59.2	2	22	22	0	4.3864E-07

TOTAL AMOUNT = 0.0122

Data File = a:es3.PTS Printed on 08-19-1989 at 13:14:57
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23461 uv High Value: 276438 uv Scale factor: 1.0



```
*****   INTERNAL STANDARD TABLE   *****
******************** 08-19-1989 08:19:23 Version 4.1 **********************
* Sample Name: 89FM26S95                          Data File: A:SD25        *
* Date: 08-19-1989 06:07:11 Method: A:PESA 08-18-1989 13:07:32  #  184     *
* Interface: 0   Cycle#:  25   Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE   *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                         *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM       *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                       *
*************************************************************************
Starting Delay:    1.00                      Ending retention time:    45.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        5.00                 Dilution factor:       10.00
Internal Standard Amount:  1
Sample Weight:          0.950000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.60	ALPHA BHC BL STD	0.0036	0.3623%	9241	989	9.3	2	5	17	0	3.8772E-07
6	3.03	LINDANE BL STD	0.0037	0.3756%	18826	1024	18.4	2	6	17	0	1.9728E-07
8	3.78	HEPTACHLOR BL STD	0.0008	0.0770%	3128	334	9.4	2	8	17	0	2.4326E-07
10	4.75	ALDRIN D.C	0.0042	0.4209%	3418	248	13.8	4	10	17	0	1.2178E-06
12	6.90	HEPTACHLOR EPOXIDE BL STD	0.0015	0.1527%	9862	303	32.5	1	12	17	0	1.5309E-07
14	10.57	DIELDRIN BL STD	0.0019	0.1910%	27499	709	38.8	1	14	17	0	6.8688E-08
15	12.42	ENDRIN BL STD	0.0072	0.7302%	6485	291	22.3	1	15	17	0	1.1135E-06
17	27.67	ISTD	1.0000	0.0000%	2393592	35966	66.6	1	17	17	0	4.1778E-07
18	32.05	DIBUTYLCHLOR	0.9661	97.6904%	6143083	75752	81.1	1	18	17	0	1.5726E-07

TOTAL AMOUNT = 0.9889

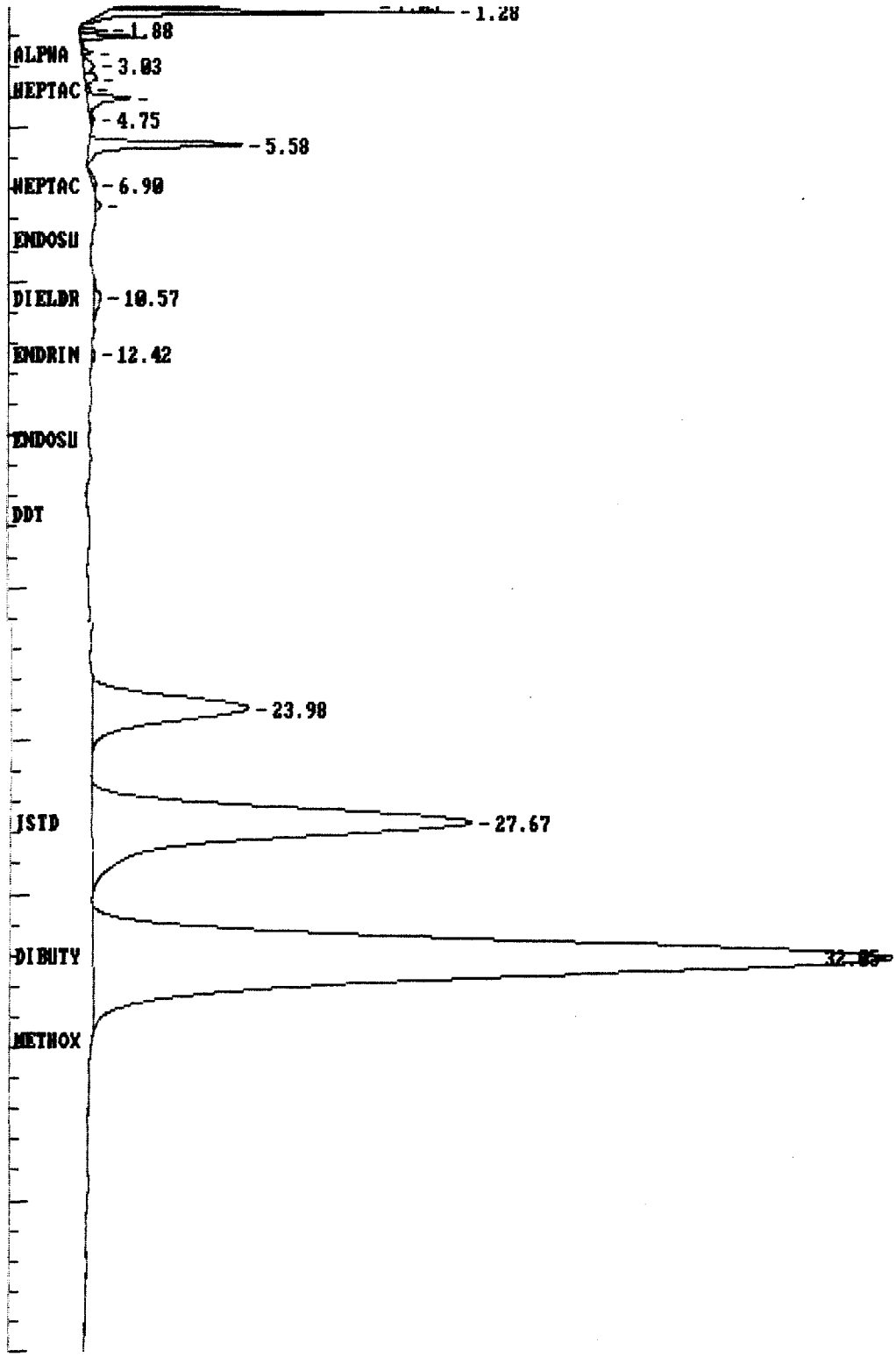
DBC % Recovery

$$= \frac{.96}{.5} \times 100$$

$$= 192\%$$

* peak areas are below the low standard

Data File = A:SD25.PTS Printed on 08-19-1989 at 08:20:49
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 63187 uv High Value: 140156 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-19-1989 08:22:04 Version 4.1 **********

* Sample Name: 89FM26S95 Data File: A:SD25 *

* Date: 08-19-1989 06:07:11 Method: A:PESB 08-19-1989 07:44:44 # 126 *

* Interface: 0 Cycle#: 25 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *

* Detector 0: ECD QUANT Detector 1: ECD CONFM *

* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

****

Starting Delay: 1.00 Ending retention time: 45.00

Area reject: 0 One sample per 1.000 sec.

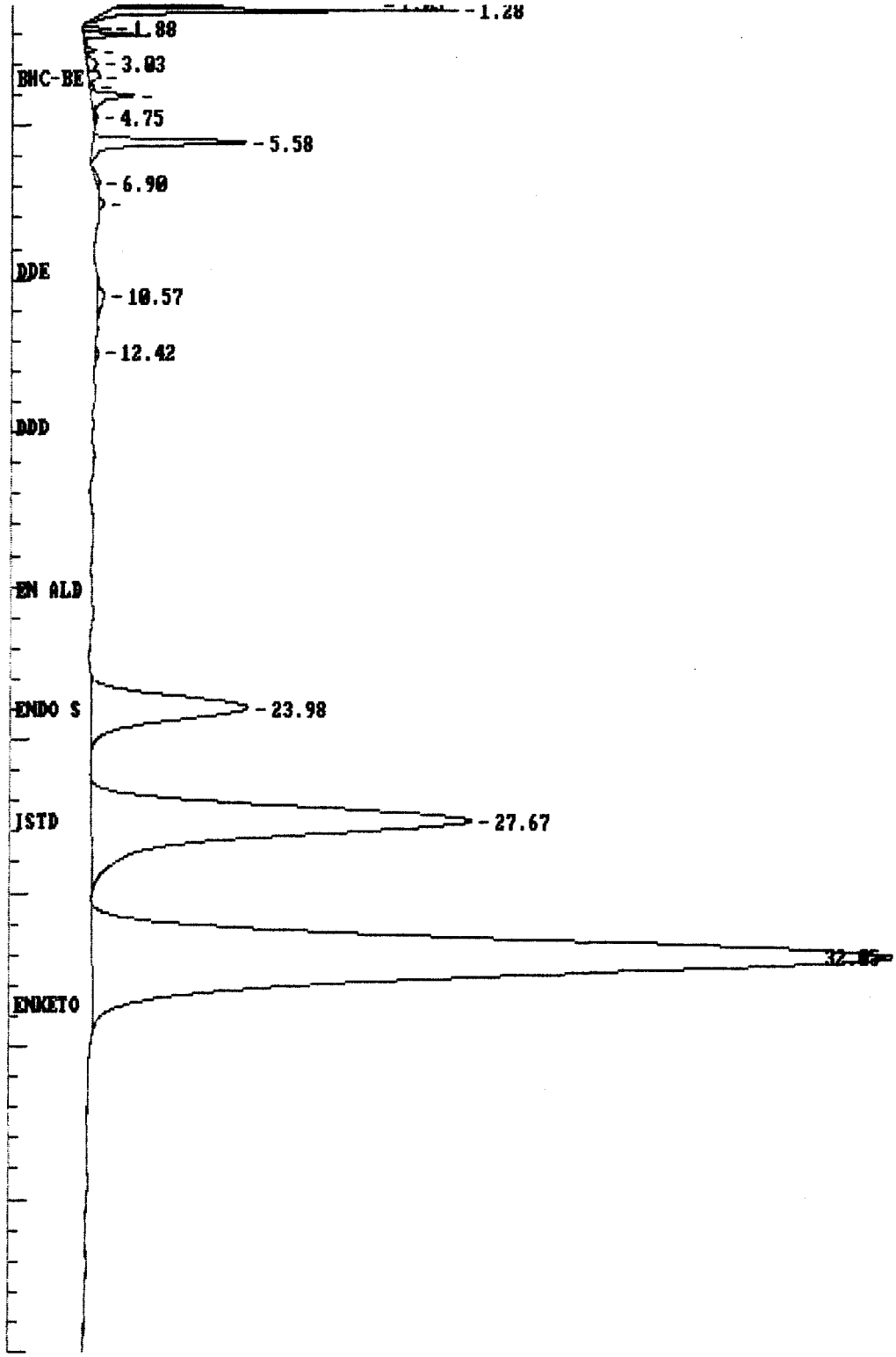
Amount injected: 5.00 Dilution factor: 10.00

Internal Standard Amount: 1

Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
7	3.45	BHC-BETA PCL STDD	0.0027	0.1920%	20021	1062	18.8	2	7	17	0	1.3680E-07
9	4.07	BHC-DELTA B2 STD	0.0067	0.4708%	60764	4066	14.9	3	9	17	0	1.1051E-07
16	23.98	ENDO SULFATE N.C.	0.1461	10.2443%	810741	14849	54.6	1	16	17	0	1.8021E-07
17	27.67	ISTD	1.0000	0.0000%	2393592	35966	66.6	1	17	17	0	4.1778E-07
18	32.05	~~ENKETONE~~ DDC	1.2706	89.0928%	6143083	75752	81.1	1	17	17	-4.619	2.0684E-07
		TOTAL AMOUNT =	1.4262									

Data File = A:SD25.PTS Printed on 08-19-1989 at 08:22:38
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 63187 uv High Value: 140156 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-20-1989 06:24:52 Version 4.1 **********

* Sample Name: 89FM26S95 Data File: a:es19 *
* Date: 08-18-1989 21:18:52 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*
* Interface: 0 Cycle#: 19 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~QE4FY87~~ SF6437 *

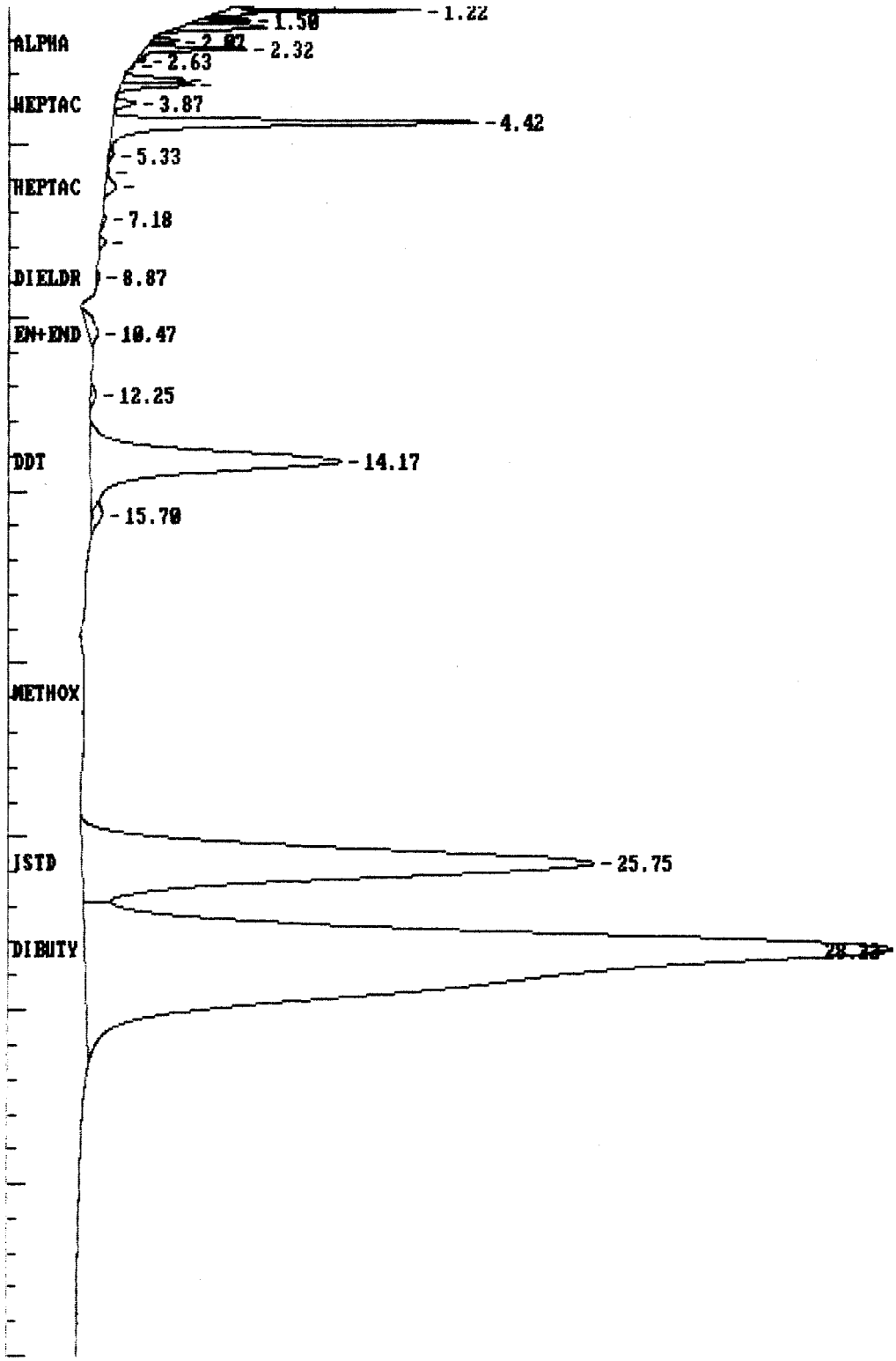
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	HEIGHT BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
4	2.07	ALPHA BHC	0.0012	0.1458%	13141	2091	6.3	2	4	22	0	9.3326E-08
6	2.63	LINDANE	0.0005	0.0618%	4682	754	6.2	4	6	22	0	1.1097E-07
10	3.87	HEPTACHLOR	0.0016	0.1867%	17190	1546	11.1	2	10	22	0	9.1376E-08
14	6.25	HEPTACHLOR EPOXIDE	0.0017	0.2035%	18523	804	23.1	2	14	22	0	9.2455E-08
15	7.18	ENDOSULFAN I	0.0005	0.0538%	4587	249	18.4	1	15	22	0	9.8695E-08
17	8.87	DIELDRIN	0.0005	0.0549%	4120	232	17.8	1	17	22	0	1.1217E-07
18	10.47	EN+ENDII	0.0031	0.3739%	30047	660	45.5	1	18	22	0	1.0471E-07
20	14.17	DDT	0.1073	12.7572%	791913	18937	41.8	3	20	22	0	1.3554E-07
22	25.75	ISTD	1.0000	0.0000%	2260714	38530	58.7	2	22	22	0	4.4234E-07
23	28.22	DIBUTYLCHLOR	0.7250	86.1624%	5834164	60881	95.8	2	23	22	0	1.2426E-07

TOTAL AMOUNT = 0.8414

Data File = a:es19.PTS Printed on 08-20-1989 at 06:25:33
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23865 uv High Value: 85325 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-20-1989 06:26:48 Version 4.1 **********

* Sample Name: 89FM26S95 Data File: a:es19 *
* Date: 08-18-1989 21:18:52 Method: A:PESB-2 08-19-1989 12:59:47 # 105 *
* Interface: 0 Cycle#: 19 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~QB4FY89~~ SF 6437 *

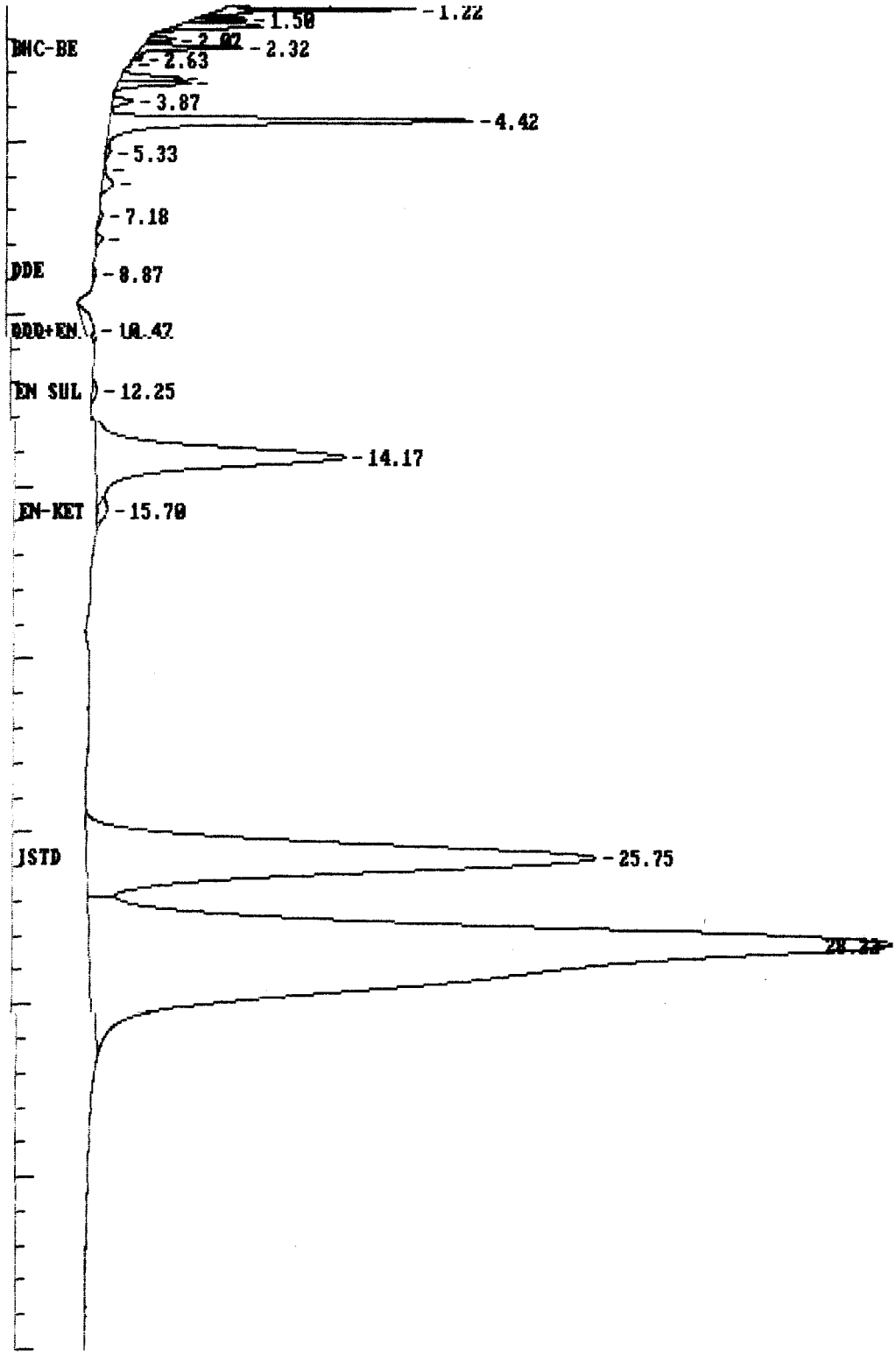
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.32	BHC-BETA	0.0075	40.7951%	59811	7765	7.7	3	5	22	0	1.2576E-07
6	2.63	BHC-DELTA	0.0004	2.4026%	4682	754	6.2	4	6	22	0	9.4604E-08
17	8.87	DDE	0.0005	2.5066%	4120	232	17.8	1	6	22	1.734	1.1218E-07
18	10.47	DDD+EN-ALD	0.0039	20.9125%	30047	660	45.5	1	18	22	0	1.2833E-07
19	12.25	EN SULFATE	0.0014	7.7070%	10873	373	29.2	1	19	22	0	1.3069E-07
21	15.70	EN-KETONE	0.0047	25.6762%	24534	729	33.7	4	21	22	0	1.9296E-07
22	25.75	ISTD	1.0000	0.0000%	2260714	38530	58.7	2	22	22	0	4.4234E-07

TOTAL AMOUNT = 0.0184

Data File = a:es19.PTS Printed on 08-20-1989 at 06:27:22
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23865 uv High Value: 85325 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-20-1989 08:45:37 Version 4.1 **********

* Sample Name: 89FM26D95 Data File: A:SD28 *
* Date: 08-19-1989 08:26:33 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 28 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG. CO. *

****

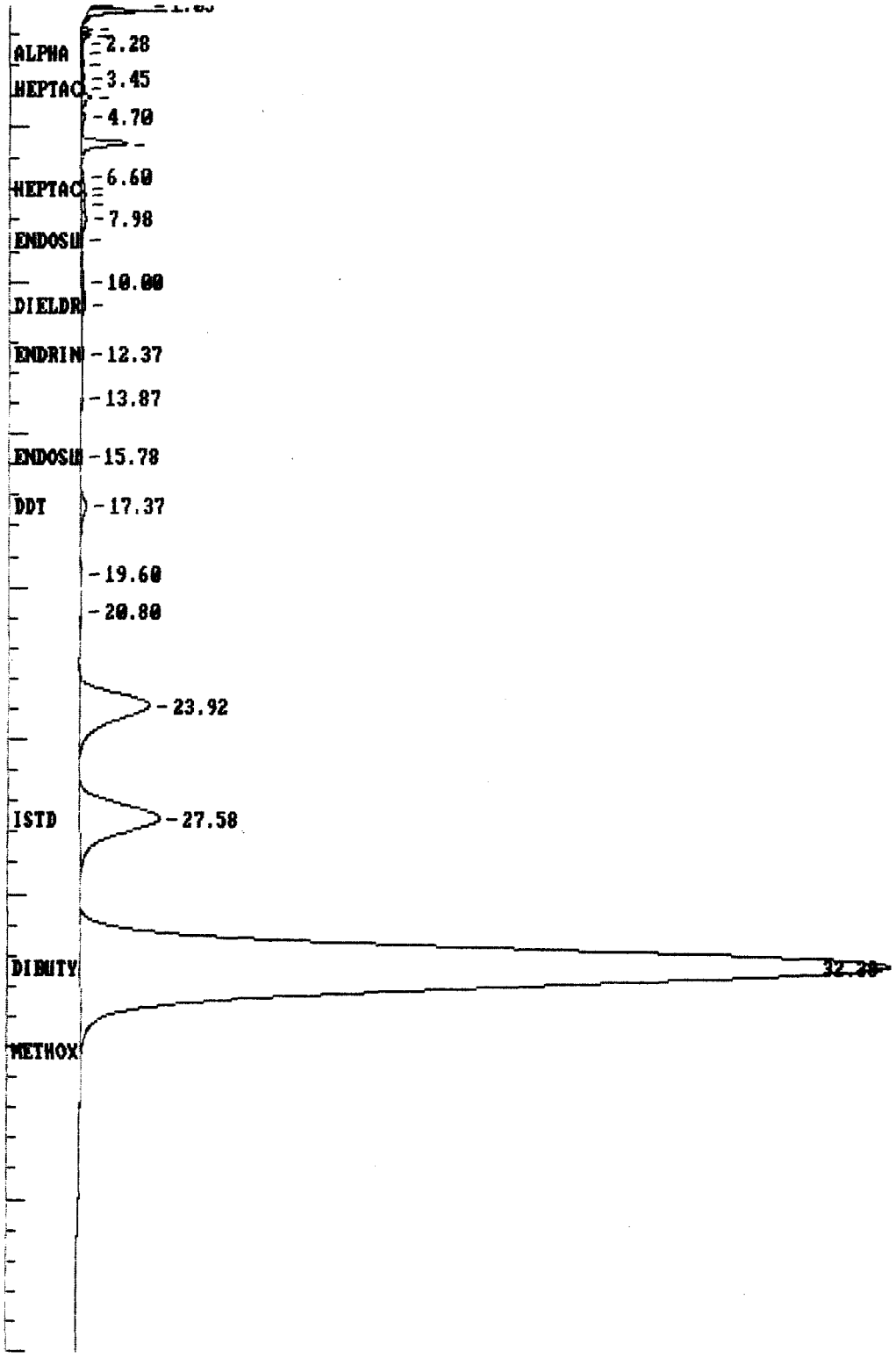
Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.58	ALPHA BHC N.C.	0.0032	0.0644%	6997	723	9.7	2	6	28	0	4.5231E-07
7	3.02	LINDANE N.C.	0.0033	0.0675%	18039	1037	17.4	2	7	28	0	1.8393E-07
9	3.77	HEPTACHLOR BL. STD	0.0016	0.0330%	14226	1231	11.6	2	9	28	0	1.1423E-07
11	4.70	ALDRIN BL STD	0.0080	0.1630%	51225	1886	27.2	2	11	28	0	1.5645E-07
14	6.95	HEPTACHLOR EPOXIDE BL STD	0.0036	0.0740%	36346	2223	16.4	2	14	28	0	1.0010E-07
18	8.65	ENDOSULFAN I BL STD	0.0011	0.0228%	13772	765	18.0	2	18	28	0	8.1579E-08
20	10.82	DIELDRIN BL STD	0.0063	0.1272%	74700	1766	42.3	2	20	28	0	8.3714E-08
21	12.37	ENDRIN N.C.	0.0100	0.2027%	25963	1033	25.1	1	21	28	0	3.8403E-07
23	15.78	ENDOSU II N.C.	0.0083	0.1688%	32796	782	41.9	1	23	28	0	2.5315E-07
24	17.37	DDT BL STD	0.0273	0.5561%	130256	2948	44.2	1	24	28	0	2.0996E-07
28	27.58	ISTD	1.0000	0.0000%	2608295	40397	64.6	1	28	28	0	3.8339E-07
29	32.38	DIBUTYLCHLOR	4.8449	98.5205%	34720852	409716	84.7	1	29	28	0	1.3954E-07

TOTAL AMOUNT = 4.9176

peak areas are below the low standard

Data File = A:SD28.PTS Printed on 08-19-1989 at 08:50:25
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64713 uv High Value: 475890 uv Scale factor: 1.0

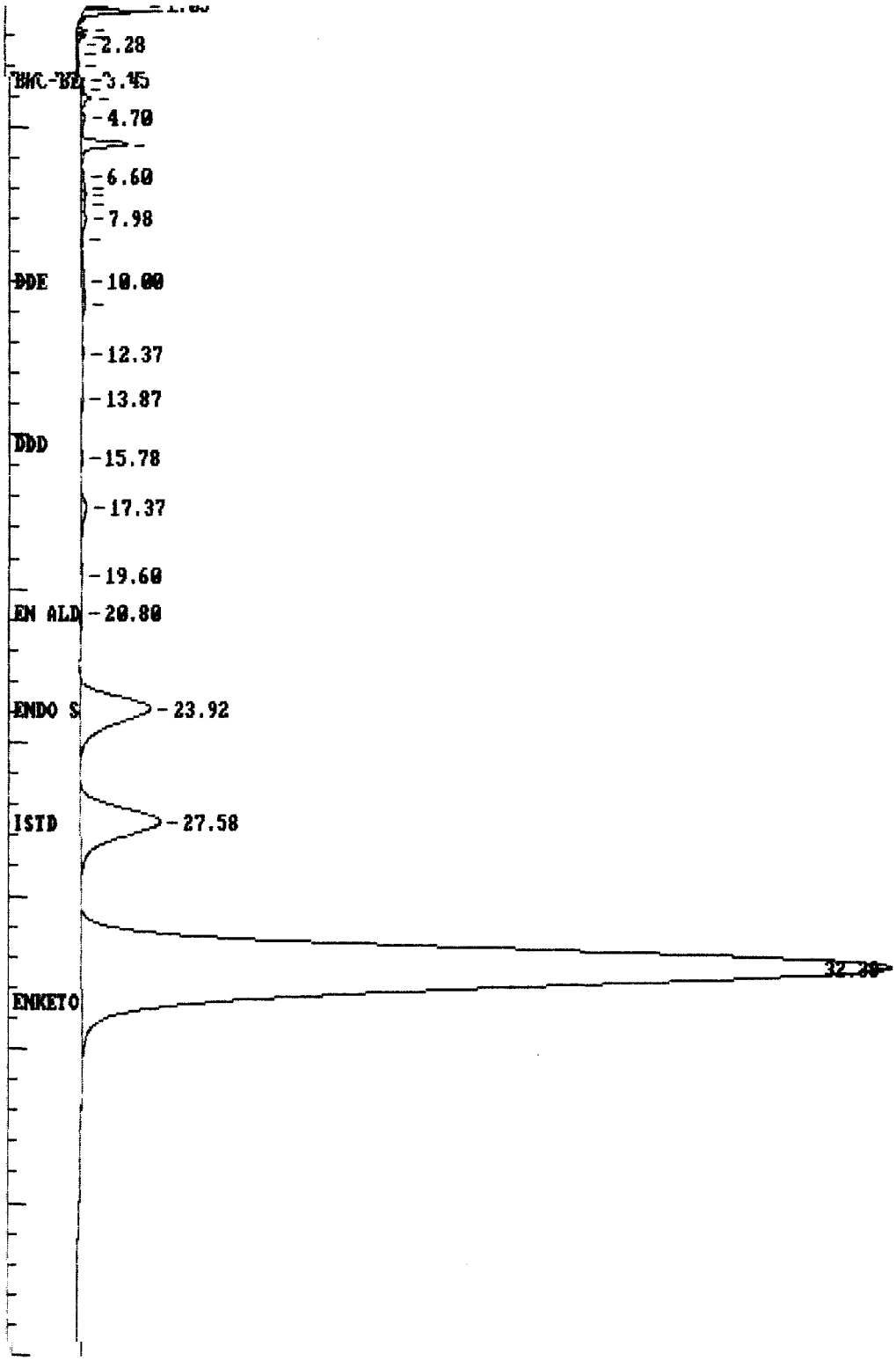


```
*****   INTERNAL STANDARD TABLE   *****
******************** 08-20-1989 08:46:51 Version 4.1 **********************
* Sample Name: 89FM26D95                          Data File: A:SD28        *
* Date: 08-19-1989 08:26:33 Method: A:PESB 08-19-1989 07:44:44  #  126     *
* Interface: 0   Cycle#:  28   Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE   *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                         *
*            Detector 0: ECD QUANT          Detector 1: ECD CONFM         *
* Misc. Information: GC #1 SF 6437;ESTWING MFG. CO.                       *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    45.00
Area reject:        0                      One sample per    1.000 sec.
Amount injected:        5.00               Dilution factor:        10.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	3.45	BHC-BETA BL STD	0.0029	0.0433%	24066	1211	19.9	2	8	28	0	1.1926E-07
10	4.05	BHC-DELTA N.C	0.0081	0.1226%	84353	5172	16.3	2	10	28	0	9.6340E-08
19	10.00	DDE BL STD	0.0044	0.0660%	44018	1165	37.8	2	19	28	0	9.9361E-08
23	15.78	DDD BL. STD	0.0037	0.0560%	32796	782	41.9	1	19	28	3.299	1.1312E-07
26	20.80	EN ALDEHYDE BLSTD	0.0024	0.0367%	21373	560	38.1	1	26	28	0	1.1373E-07
27	23.92	ENDO SULFATE N.C.	0.3434	5.1829%	2185872	35801	61.1	1	27	28	0	1.5711E-07
28	27.58	ISTD	1.0000	0.0000%	2608295	40397	64.6	1	28	28	0	3.8339E-07
29	32.38	ENKETONE DBC	6.2610	94.4924%	34720852	409716	84.7	1	28	28	-3.336	1.8032E-07

TOTAL AMOUNT = 6.6259

Data File = A:SD28.PTS Printed on 08-19-1989 at 10:01:52
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64713 uv High Value: 475890 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-20-1989 08:41:02 Version 4.1 **********

* Sample Name: 89FM26D95 Data File: A:ES22 *

* Date: 08-18-1989 23:23:16 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*

* Interface: 0 Cycle#: 22 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS *

* Detector 0: ECD QUANT Detector 1: ECD CONF *

* Misc. Information: ~~QB4FY89~~ SF6937 *

****

Starting Delay: 1.00 Ending retention time: 40.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 5.00 Dilution factor: 10.00

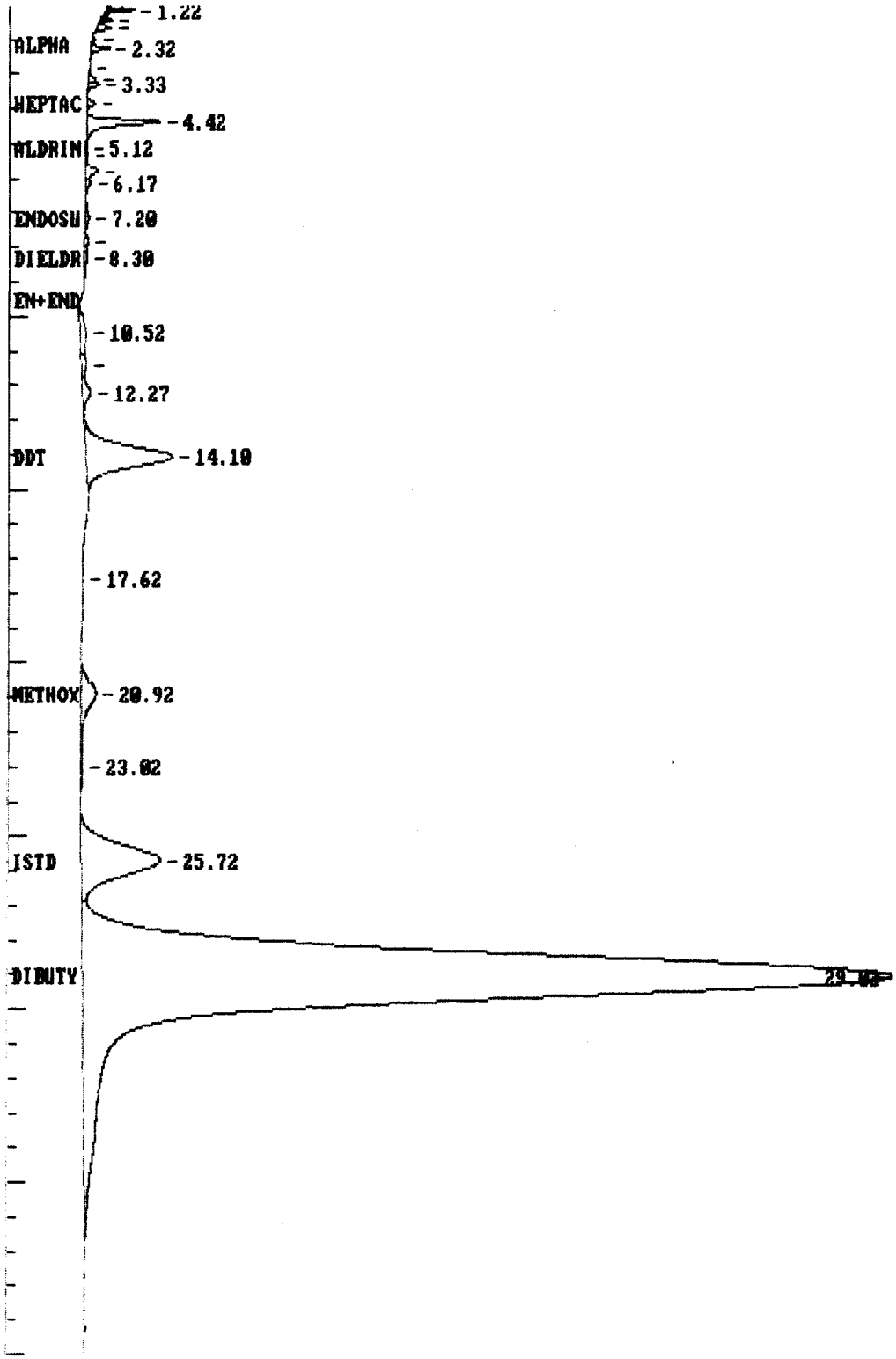
Internal Standard Amount: 1

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
9	3.88	HEPTACHLOR	0.0034	0.0746%	42301	4288	9.9	2	9	25	0	7.9959E-08
11	5.12	ALDRIN	0.0002	0.0040%	1866	240	7.8	2	11	25	0	9.6068E-08
13	5.82	HEPTACHLOR EPOXIDE	0.0076	0.1680%	94123	6225	15.1	2	13	25	0	8.0903E-08
15	7.20	ENDOSULFAN I	0.0061	0.1345%	70592	2207	32.0	2	15	25	0	8.6364E-08
17	8.30	DIELDRIN	0.0046	0.1007%	46492	1286	36.2	2	17	25	0	9.8156E-08
21	14.10	DDT	0.2157	4.7573%	1818297	43712	41.6	1	21	25	0	1.1861E-07
23	20.92	METHOXYCHLOR	0.0946	2.0877%	476272	7750	61.5	3	23	25	0	1.9872E-07
25	25.72	ISTD	1.0000	0.0000%	2454326	40024	61.3	2	25	25	0	4.0744E-07
26	29.02	DIBUTYLCHLOR	4.2012	92.6733%	38636592	412874	93.6	2	26	25	0	1.0874E-07

TOTAL AMOUNT = 4.5334

Data File = A:ES22.PTS Printed on 08-20-1989 at 08:43:43
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 24008 uv High Value: 439587 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-20-1989 06:56:59 Version 4.1 **********

* Sample Name: 89FM26D95 Data File: a:es22 *
* Date: 08-18-1989 23:23:16 Method: A:PESB-2 08-19-1989 12:59:47 # 105 *
* Interface: 0 Cycle#: 22 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~QB4EY89~~ SF6437 *

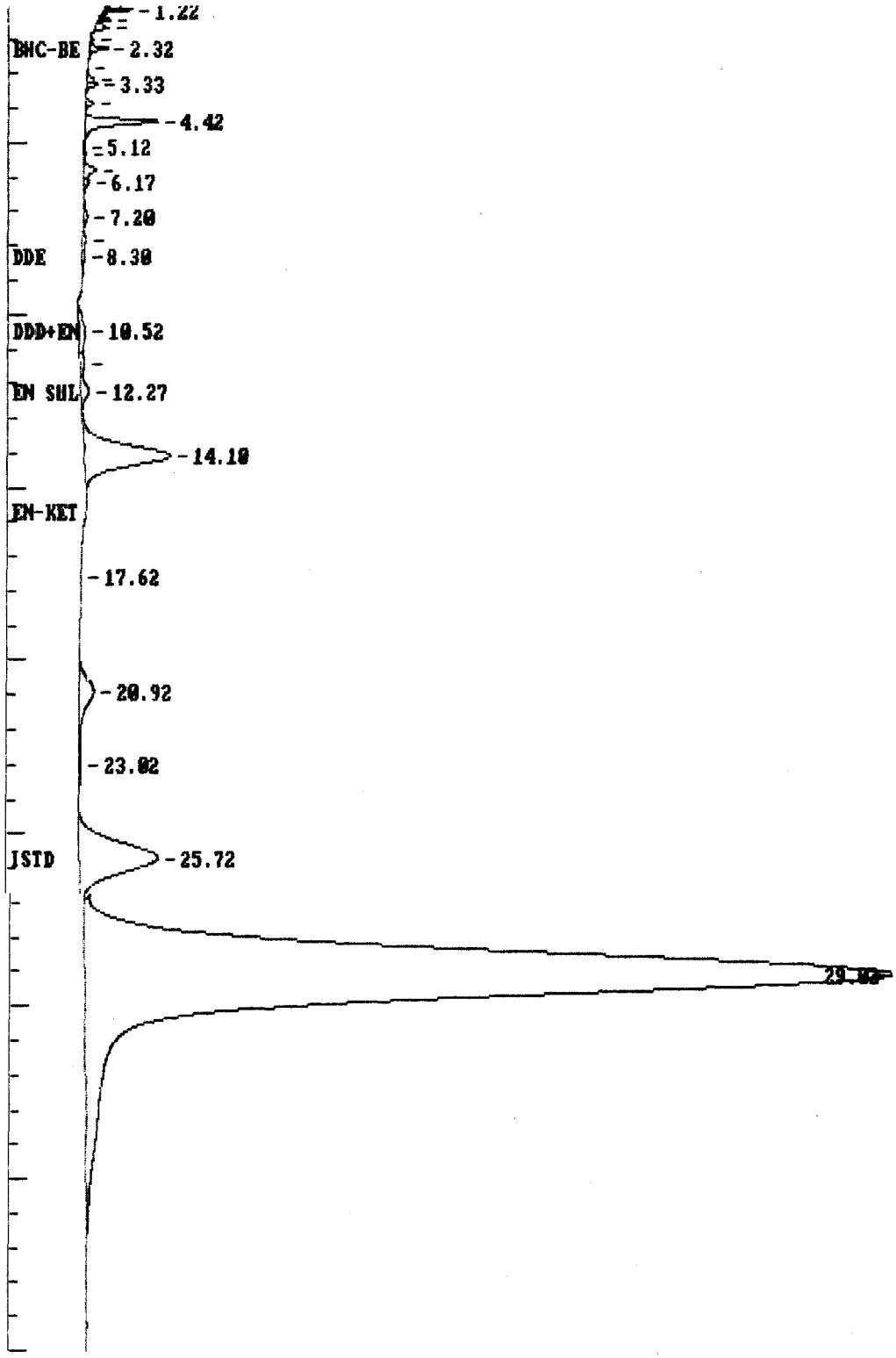
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.32	BHC-BETA	0.0085	18.6661%	77657	9225	8.4	2	5	25	0	1.1004E-07
17	8.30	DDE	0.0046	9.9683%	46492	1286	36.2	2	17	25	0	9.8160E-08
18	10.52	DDD+EN-ALD	0.0185	40.4297%	164833	3027	54.5	2	18	25	0	1.1229E-07
20	12.27	EN SULFATE	0.0142	30.9359%	123846	4004	30.9	2	20	25	0	1.1436E-07
25	25.72	ISTD	1.0000	0.0000%	2454326	40024	61.3	2	25	25	0	4.0744E-07

TOTAL AMOUNT = 0.0458

Data File = a:es22.PTS Printed on 08-20-1989 at 06:57:32
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 24008 uv High Value: 439587 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-20-1989 07:08:01 Version 4.1 **********

* Sample Name: 89FM26D95 Re-analyze Data File: A:AM10 *
* Date: 08-24-1989 07:35:14 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 10 Operator KG Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. ~~SF 6440;A~~ *

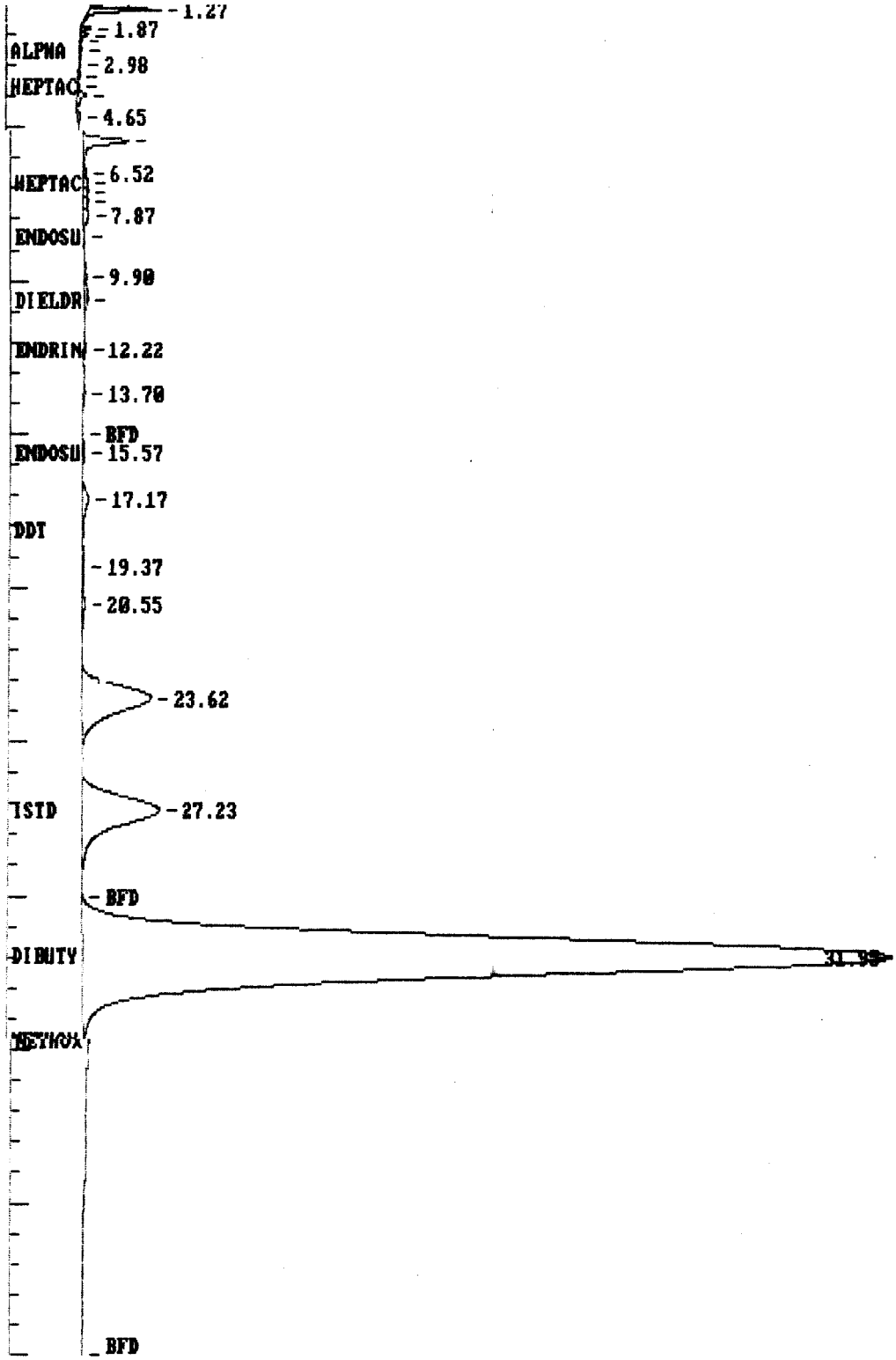
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.55	ALPHA BHC	0.0040	0.0794%	17581	1540	11.4	2	5	27	0	2.2589E-07
6	2.98	LINDANE	0.0037	0.0745%	23140	1183	19.6	2	6	27	0	1.6108E-07
8	3.72	HEPTACHLOR	0.0012	0.0236%	8999	916	9.8	2	8	27	0	1.3111E-07
10	4.65	ALDRIN	0.0062	0.1247%	30806	1604	19.2	1	10	27	0	2.0244E-07
13	6.83	HEPTACHLOR EPOXIDE	0.0045	0.0909%	47481	2587	18.4	2	13	27	0	9.5761E-08
17	8.55	ENDOSULFAN I	0.0013	0.0263%	16032	834	19.2	2	17	27	0	8.2059E-08
19	10.63	DIELDRIN	0.0078	0.1568%	91803	2041	45.0	2	19	27	0	8.5463E-08
20	12.22	ENDRIN	0.0102	0.2042%	27797	1117	24.9	1	20	27	0	3.6753E-07
22	15.57	ENDOSU II	0.0083	0.1666%	33548	819	41.0	1	22	27	0	2.4841E-07
27	27.23	ISTD	1.0000	0.0000%	2640741	40849	64.6	1	27	27	0	3.7868E-07
28	31.95	DIBUTYLCHLOR	4.9555	99.0531%	35952300	428361	83.9	1	28	27	0	1.3784E-07

TOTAL AMOUNT = 5.0029

Data File = A:AM10.PTS Printed on 08-20-1989 at 07:08:36
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 63969 uv High Value: 495080 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 08:26:25 Version 4.1 **********

* Sample Name: 89FM26S96 Data File: A:SD26 *
* Date: 08-19-1989 06:53:39 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 26 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.60	ALPHA BHC	0.0033	0.3886%	5993	1034	5.8	1	6	20	0	5.4572E-07
7	3.03	LINDANE	0.0037	0.4428%	19788	1613	12.3	2	7	20	0	1.8832E-07
9	3.77	HEPTACHLOR	0.0007	0.0880%	3042	409	7.4	2	9	20	0	2.4344E-07
11	4.78	ALDRIN	0.0040	0.4694%	1311	102	12.9	1	11	20	0	3.0133E-06
13	6.93	HEPTACHLOR EPOXIDE	0.0010	0.1230%	5282	155	34.1	1	13	20	0	1.9603E-07
16	10.55	DIELDRIN	-0.0009	-0.1112%	2915	175	16.6	1	16	20	0	-3.2110E-07
17	12.42	ENDRIN	0.0066	0.7870%	3466	186	18.6	1	17	20	0	1.9108E-06
18	15.82	ENDOSU II	0.0057	0.6797%	1673	85	19.6	1	18	20	0	3.4195E-06
20	27.68	ISTD	1.0000	0.0000%	2498977	37906	65.9	2	20	20	0	4.0016E-07
21	32.07	DIBUTYLCHLOR	0.8175	97.1328%	5448592	68537	79.5	2	21	20	0	1.5004E-07

TOTAL AMOUNT = 0.8416

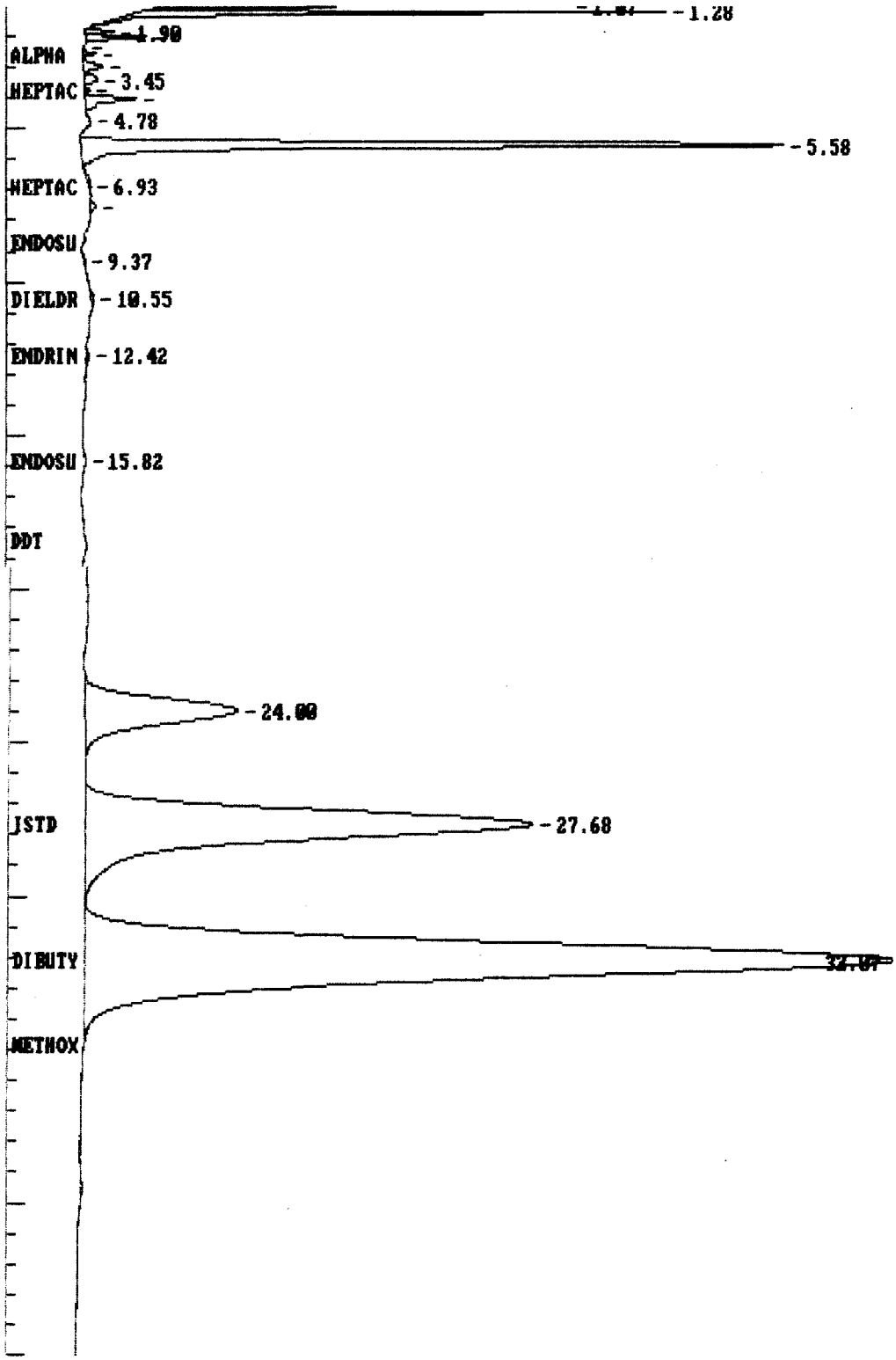
DBC % Recovery =

$= \frac{.81}{.5} \times 100$

$= 162\ \%$

+ peak areas below low standard

Data File = A:SD26.PTS Printed on 08-19-1989 at 08:28:04
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64190 uv High Value: 133349 uv Scale factor: 1.0



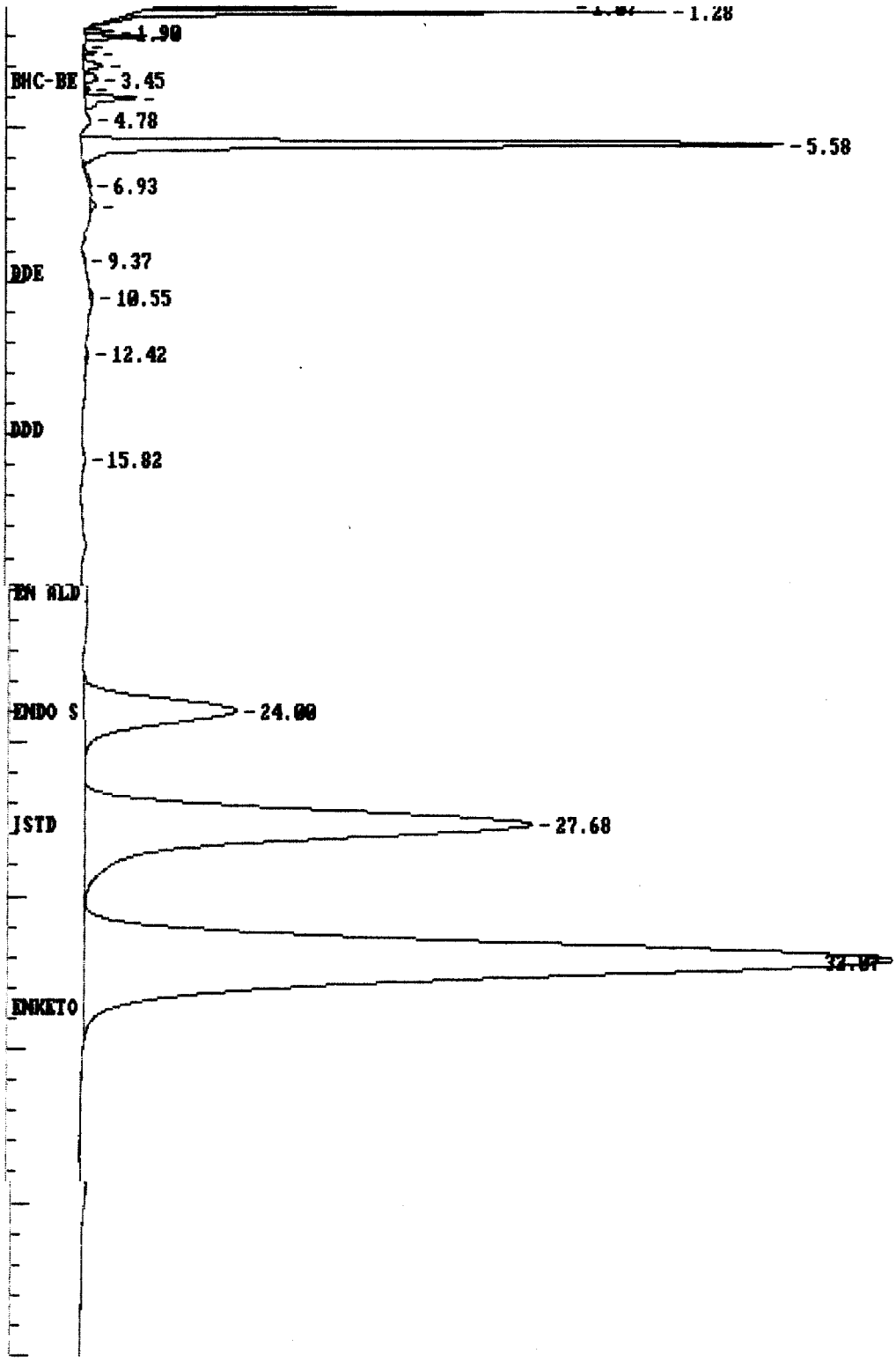
```
*****   INTERNAL STANDARD TABLE   *****
******************** 08-19-1989 08:29:53 Version 4.1 **********************
* Sample Name: 89FM26S96                          Data File: A:SD26        *
* Date: 08-19-1989 06:53:39 Method: A:PESB 08-19-1989 07:44:44  #  126     *
* Interface: 0   Cycle#:  26   Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE   *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                         *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM       *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                       *
*************************************************************************
Starting Delay:    1.00                      Ending retention time:    45.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        5.00                 Dilution factor:       10.00
Internal Standard Amount:  1
Sample Weight:          0.950000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	3.45	BHC-BETA	0.0024	0.1964%	18148	1146	15.8	2	8	20	0	1.3103E-07
10	4.07	BHC-DELTA N.C.	0.0057	0.4744%	54279	4382	12.4	2	10	20	0	1.0585E-07
15	9.37	DDE	0.0002	0.0151%	1679	79	21.3	1	10	20	-3.737	1.0917E-07
19	24.00	ENDO SULFATE N.C.	0.1232	10.1742%	713785	12923	55.2	1	19	20	0	1.7261E-07
20	27.68	ISTD	1.0000	0.0000%	2498977	37906	65.9	2	20	20	0	4.0016E-07
21	32.07	~~ENKETONE~~ N.C.	1.0795	89.1399%	5448592	68537	79.5	2	20	20	-4.627	1.9812E-07

TOTAL AMOUNT = 1.2110

peak areas below the low standard

Data File = A:SD26.PTS Printed on 08-19-1989 at 08:30:45
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64190 uv High Value: 133349 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-20-1989 06:29:49 Version 4.1 **********

* Sample Name: 89FM26S96 Data File: a:es20 *
* Date: 08-18-1989 22:00:20 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*
* Interface: 0 Cycle#: 20 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~DB4EV89~~ SF6437 *

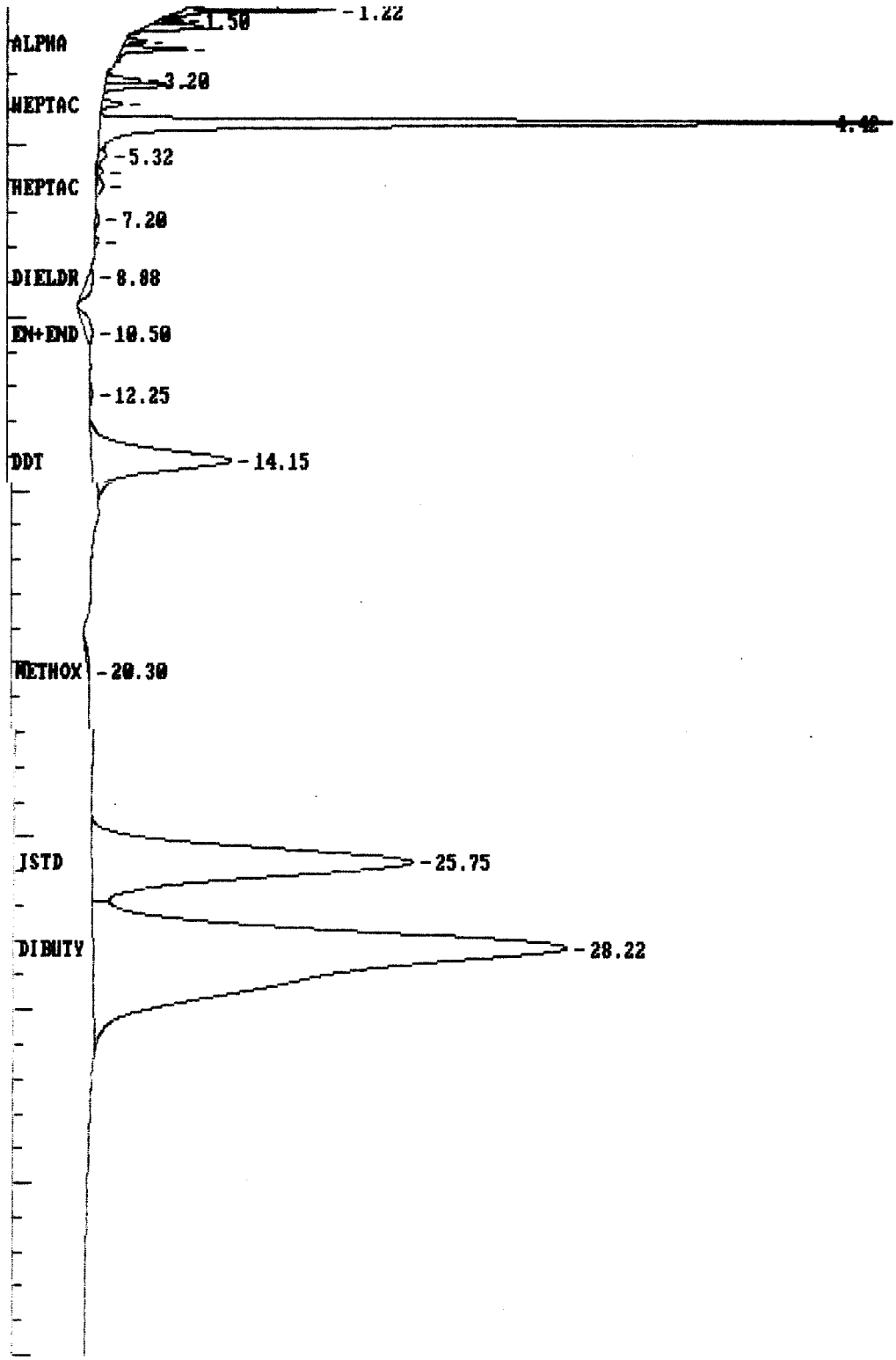
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
4	2.08	ALPHA BHC	0.0018	0.2493%	19592	2484	7.9	2	4	20	0	9.1323E-08
5	2.32	LINDANE	0.0069	0.9601%	63455	7709	8.2	2	4	20	-4.894	1.0859E-07
8	3.87	HEPTACHLOR	0.0022	0.3107%	24938	2426	10.3	1	8	20	0	8.9414E-08
12	6.20	HEPTACHLOR EPOXIDE	0.0020	0.2849%	22599	929	24.3	4	12	20	0	9.0470E-08
13	7.20	ENDOSULFAN I	0.0011	0.1503%	11173	472	23.7	1	13	20	0	9.6577E-08
15	8.88	DIELDRIN	0.0043	0.5923%	38728	644	60.1	1	15	20	0	1.0976E-07
16	10.50	ENDRIN	0.0037	0.5102%	35738	665	53.8	1	16	20	0	1.0246E-07
18	14.15	DDT	0.0922	12.8443%	695019	16315	42.6	1	18	20	0	1.3263E-07
19	20.30	METHOXYCHLOR	0.0024	0.3276%	10582	80	132.4	1	19	20	0	2.2221E-07
20	25.75	ISTD	1.0000	0.0000%	2194785	37442	58.6	2	20	20	0	4.5563E-07
21	28.22	DIBUTYLCHLOR	0.6012	83.7703%	4944422	55311	89.4	2	21	20	0	1.2160E-07

TOTAL AMOUNT = 0.7177

Data File = a:es20.PTS Printed on 08-20-1989 at 06:30:29
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23961 uv High Value: 119031 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-20-1989 06:31:40 Version 4.1 **********

* Sample Name: 89FM26S96 Data File: a:es20 *

* Date: 08-18-1989 22:00:20 Method: A:PESB-2 08-19-1989 12:59:47 # 105 *

* Interface: 0 Cycle#: 20 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS *

* Detector 0: ECD QUANT Detector 1: ECD CONF *

* Misc. Information: ~~QB4FY89~~ SFG437 *

****

Starting Delay: 1.00 Ending retention time: 40.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 5.00 Dilution factor: 10.00

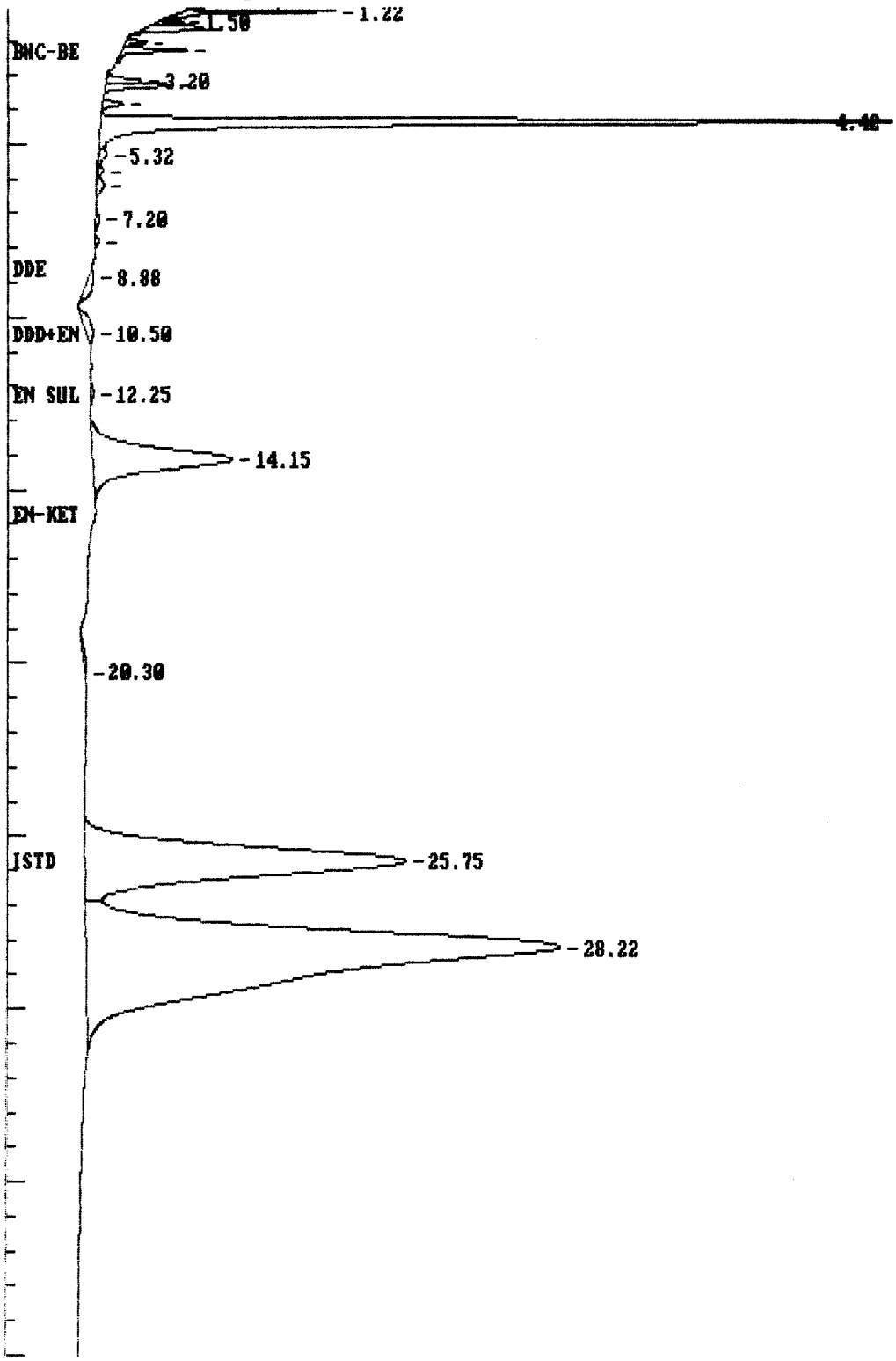
Internal Standard Amount: 1

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.32	BHC-BETA	0.0078	44.5174%	63455	7709	8.2	2	5	20	0	1.2306E-07
15	8.88	DDE	0.0043	24.2357%	38728	644	60.1	1	5	20	3.151	1.0977E-07
16	10.50	DDD+EN-ALD	0.0045	25.5846%	35738	665	53.8	1	16	20	0	1.2557E-07
17	12.25	EN SULFATE	0.0010	5.6624%	7767	300	25.9	1	17	20	0	1.2788E-07
20	25.75	ISTD	1.0000	0.0000%	2194785	37442	58.6	2	20	20	0	4.5563E-07

TOTAL AMOUNT = 0.0175

Data File = a:es20.PTS Printed on 08-20-1989 at 06:32:11
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23961 uv High Value: 119031 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 08:32:37 Version 4.1 **********

* Sample Name: 89FM26S97 Data File: A:SD27 *
* Date: 08-19-1989 07:40:08 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 27 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.58	ALPHA BHC	0.0031	0.3608%	4050	546	7.4	1	5	19	0	7.6492E-07
7	3.15	LINDANE	0.0030	0.3502%	12320	967	12.7	2	7	19	0	2.4411E-07
9	3.80	HEPTACHLOR	0.0007	0.0857%	3049	334	9.1	2	9	19	0	2.4138E-07
12	6.93	HEPTACHLOR EPOXIDE	0.0013	0.1569%	8745	190	46.1	1	12	19	0	1.5409E-07
14	8.78	ENDOSULFAN I	0.0002	0.0202%	3394	215	15.8	1	14	19	0	5.1189E-08
15	10.57	DIELDRIN	-0.0003	-0.0302%	9267	420	22.1	1	15	19	0	-2.7981E-08
16	12.43	ENDRIN	0.0071	0.8310%	6416	273	23.5	1	16	19	0	1.1121E-06
19	27.65	ISTD	1.0000	0.0000%	2546489	38499	66.1	2	19	19	0	3.9270E-07
20	32.02	DIBUTYLCHLOR	0.8434	98.2253%	5723442	71636	79.9	2	20	19	0	1.4736E-07

TOTAL AMOUNT = 0.8586

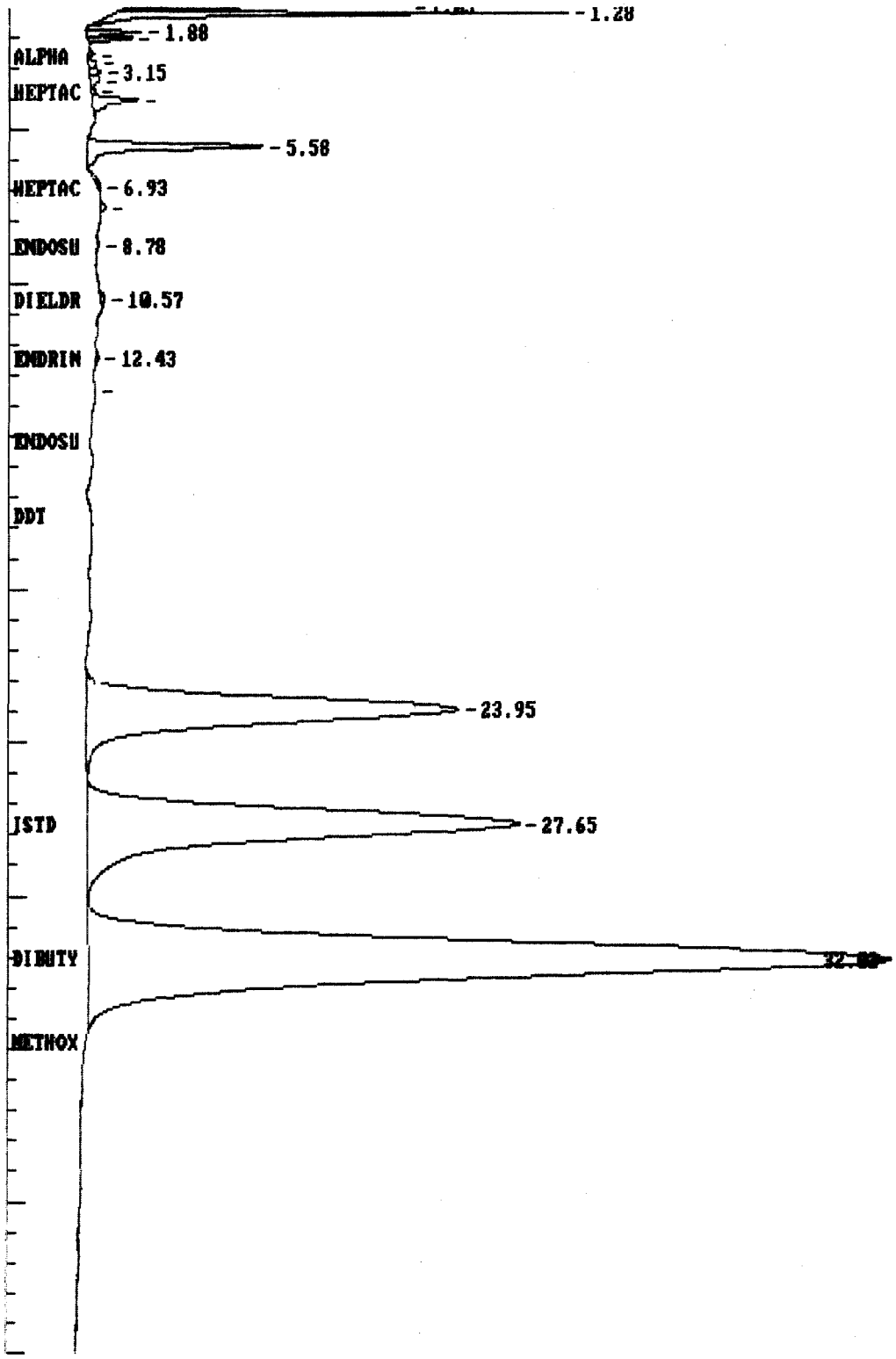
ΔBC % Recovery =

$$= \frac{.84}{.5} \times 100$$

= 168 %

peak areas below the low standard

Data File = A:SD27.PTS Printed on 08-19-1989 at 08:33:17
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64192 uv High Value: 136774 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-19-1989 08:34:32 Version 4.1 **********

* Sample Name: 89FM26S97 Data File: A:SD27 *
* Date: 08-19-1989 07:40:08 Method: A:PESB 08-19-1989 07:44:44 # 126 *
* Interface: 0 Cycle#: 27 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

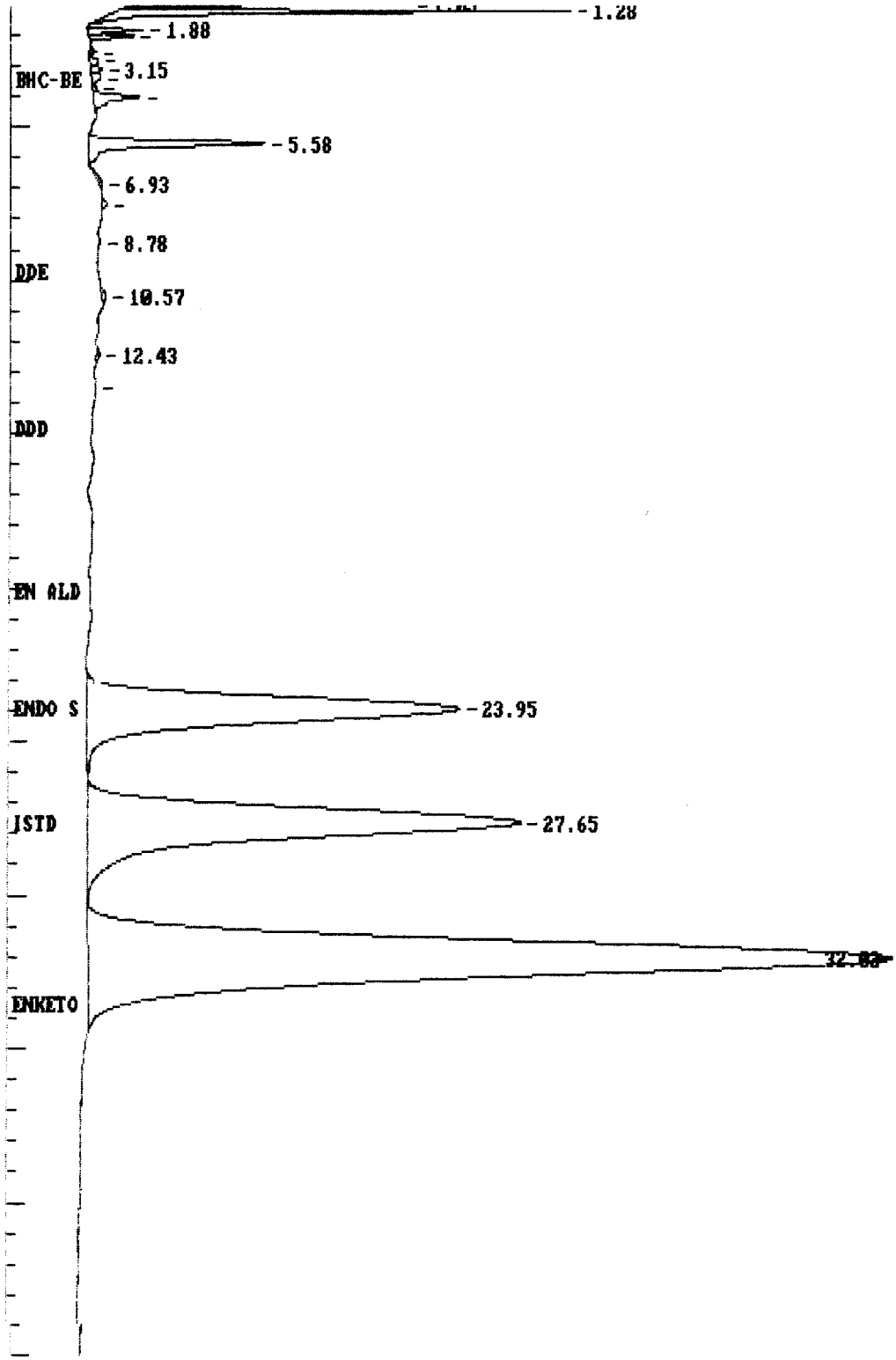
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	3.43	BHC-BETA	0.0019	0.1295%	14492	798	18.2	2	8	19	0	1.2858E-07
10	4.07	BHC-DELTA	0.0061	0.4209%	58309	4147	14.1	2	10	19	0	1.0387E-07
18	23.95	ENDO SULFATE N.C	0.3182	22.1149%	1878559	33148	56.7	2	18	19	0	1.6939E-07
19	27.65	ISTD	1.0000	0.0000%	2546489	38499	66.1	2	19	19	0	3.9270E-07
20	32.02	~~ENKETONE~~ DBC	1.1128	77.3346%	5723442	71636	79.9	2	19	19	-4.661	1.9442E-07

TOTAL AMOUNT = 1.4389

Data File = A:SD27.FTS Printed on 08-19-1989 at 08:35:11
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 64192 uv High Value: 136774 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

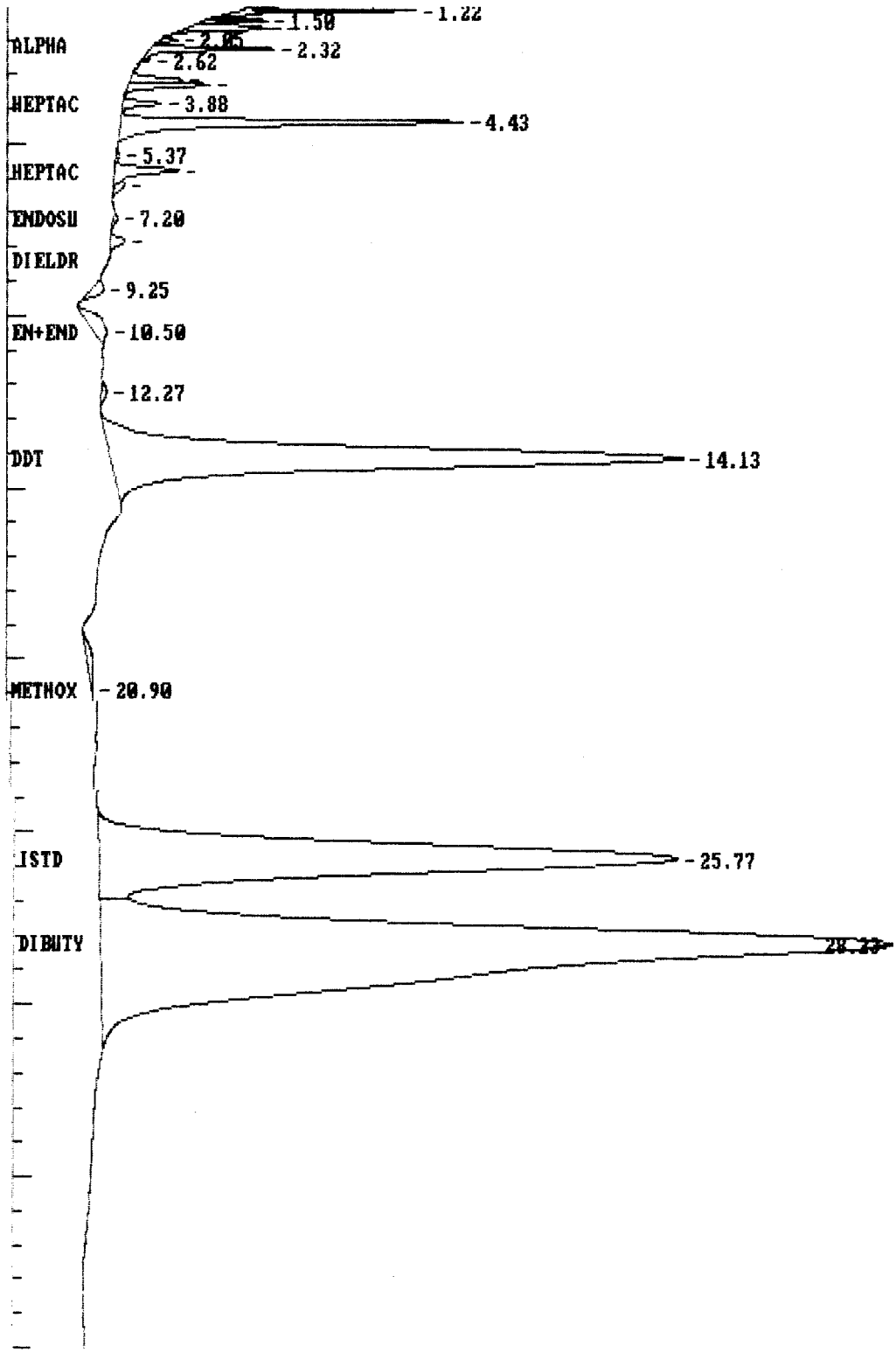
******************* 08-20-1989 06:33:47 Version 4.1 *********************
* Sample Name: 89FM26S97 Data File: a:es21 *
* Date: 08-18-1989 22:41:50 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*
* Interface: 0 Cycle#: 21 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS *
* Detector 0: ECD QUANT Detector 1: ECD CONF *
* Misc. Information: ~~8D4FY87~~ 5F6437 *
****

Starting Delay: 1.00 Ending retention time: 40.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 10.00
Internal Standard Amount: 1
Sample Weight: 0.950000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.62	LINDANE	0.0004	0.0522%	4285	642	6.7	4	6	21	0	1.0144E-07
9	3.88	HEPTACHLOR	0.0024	0.2862%	28516	2828	10.1	2	9	21	0	8.3530E-08
12	5.82	HEPTACHLOR EPOXIDE	0.0057	0.6838%	67338	4626	14.6	3	12	21	0	8.4516E-08
14	7.20	ENDOSULFAN I	0.0005	0.0545%	5024	298	16.9	1	14	21	0	9.0221E-08
17	10.50	EN+ENDII	0.0047	0.5639%	49034	948	51.7	1	17	21	0	9.5720E-08
19	14.13	DDT	0.2142	25.7330%	1728577	41648	41.5	1	19	21	0	1.2391E-07
20	20.90	METHOXYCHLOR	0.0049	0.5944%	23831	82	289.3	1	20	21	0	2.0759E-07
21	25.77	ISTD	1.0000	0.0000%	2473056	42178	58.6	2	21	21	0	4.0436E-07
22	28.23	DIBUTYLCHLOR	0.5995	72.0321%	5277925	57754	91.4	2	22	21	0	1.1359E-07

TOTAL AMOUNT = 0.8323

Data File = a:es21.PTS Printed on 08-20-1989 at 06:34:19
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23819 uv High Value: 82782 uv Scale factor: 1.0

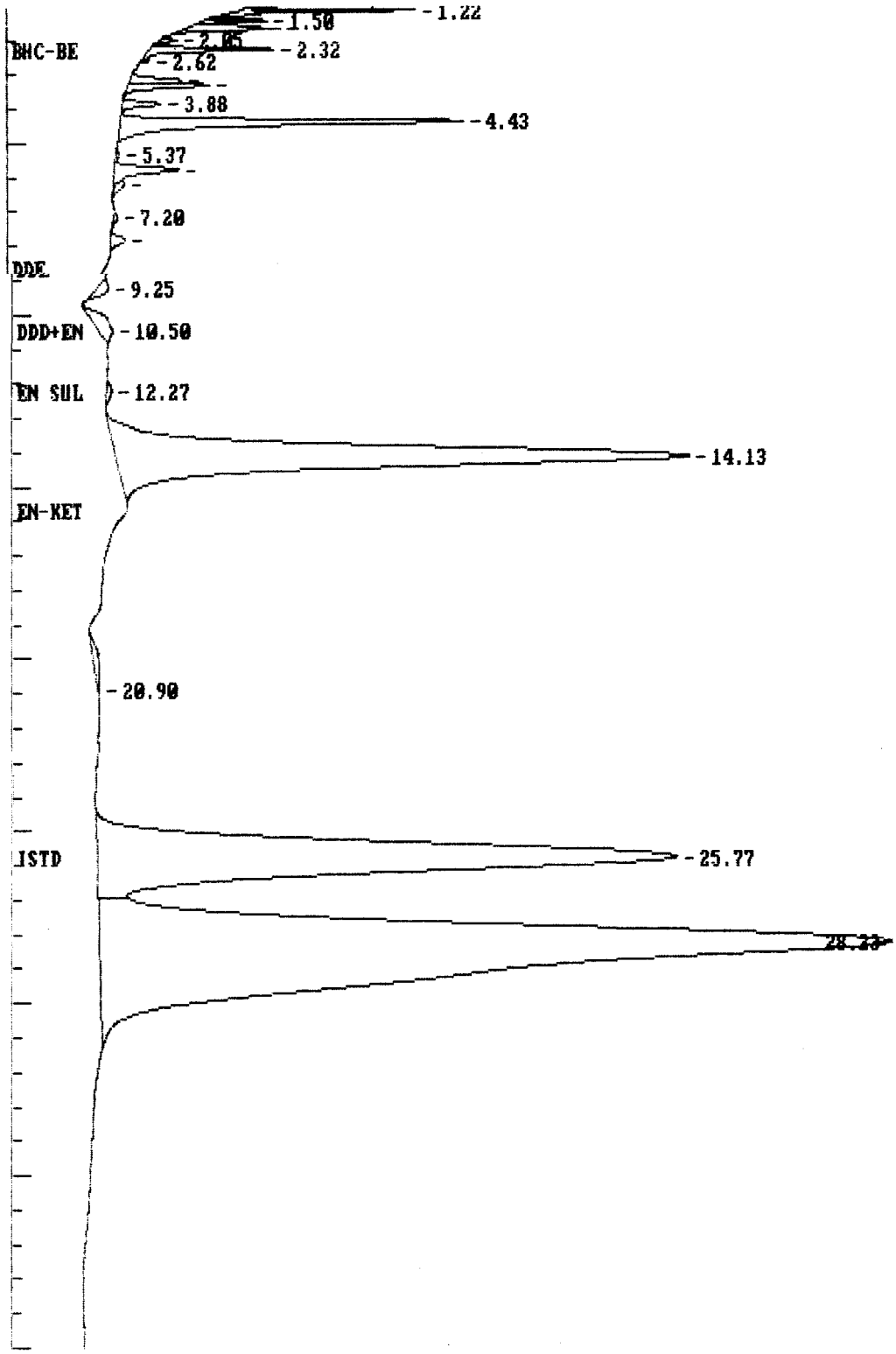


```
****** INTERNAL STANDARD TABLE ******
******************** 08-20-1989 06:51:07 Version 4.1 ********************
* Sample Name: 89FM26S97                          Data File: a:es21        *
* Date: 08-18-1989 22:41:50 Method: A:PESB-2 08-19-1989 12:59:47  #  105   *
* Interface: 0   Cycle#:  21   Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY  *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                   *
*            Detector 0: ECD QUANT            Detector 1: ECD CONF        *
* Misc. Information: G~~B4FY89~~ SF6937                                   *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    40.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:       10.00
Internal Standard Amount:  1
Sample Weight:          0.950000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.32	BHC-BETA	0.0079	50.9653%	68476	9077	7.5	3	5	21	0	1.1496E-07
6	2.62	BHC-DELTA	0.0004	2.3994%	4285	642	6.7	4	6	21	0	8.6481E-08
17	10.50	DDD+EN-ALD	0.0058	37.2407%	49034	948	51.7	1	17	21	0	1.1731E-07
18	12.27	EN SULFATE	0.0015	9.3946%	12146	426	28.5	1	18	21	0	1.1947E-07
21	25.77	ISTD	1.0000	0.0000%	2473056	42178	58.6	2	21	21	0	4.0436E-07

TOTAL AMOUNT = 0.0154

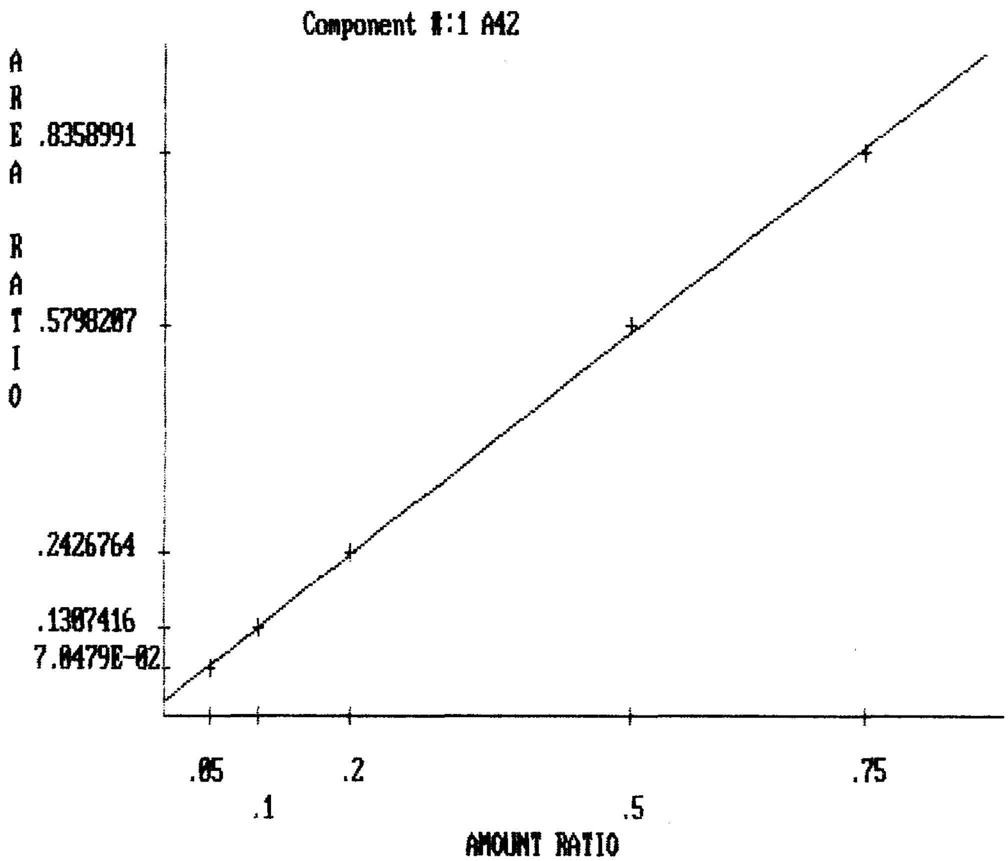
Data File = a:es21.PTS Printed on 08-20-1989 at 06:51:37
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23819 uv High Value: 82782 uv Scale factor: 1.0



Standards

5FG 437

Method A:AR042
Sample PCB
Operator NF
Run date 08-19-1989 07:01:37 version: 145
Printed on 08-19-1989 AT 11:27:50
Straight Line fit



Component 1 = A42
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0500	175685	0.0500	0.0705
2	0.1000	317167	0.1000	0.1307
3	0.2000	625563	0.2000	0.2427
4	0.5000	1495037	0.5000	0.5798
5	0.7500	2006396	0.7500	0.8359

Y = SLOPE * X + INTERCEPT

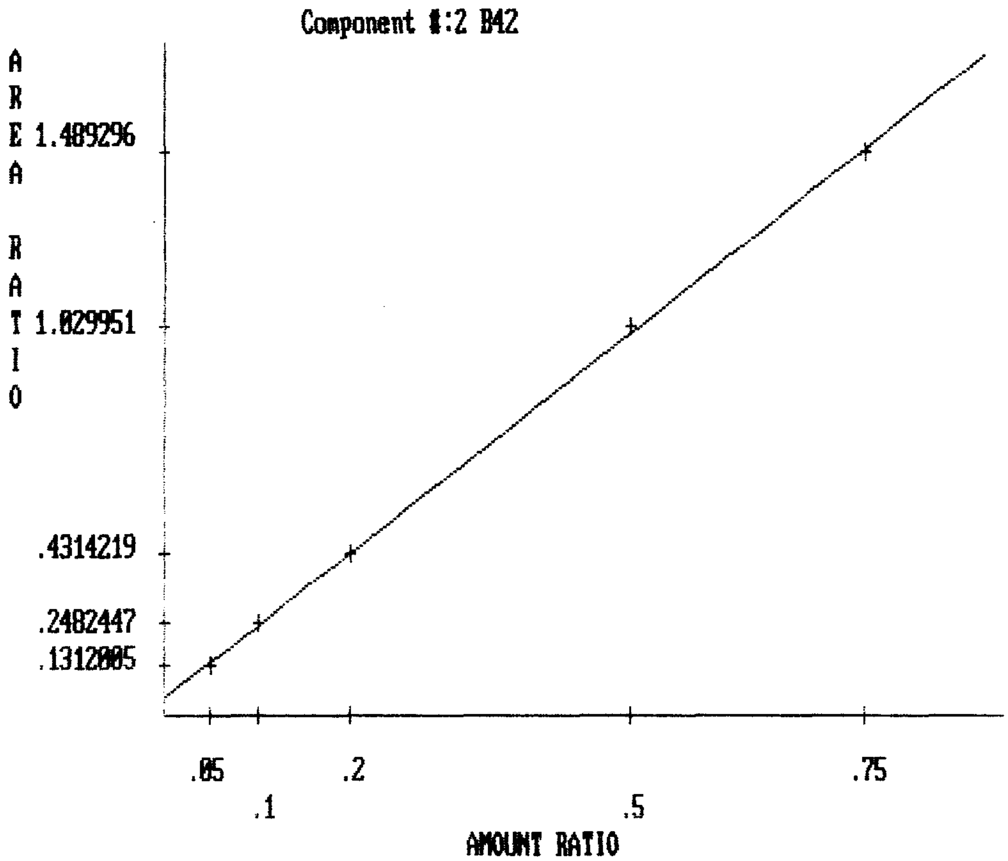
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area ratio = 1.0960E+00 * Amt ratio + 2.1201E-02

Amt ratio = 9.1240E-01 * Area ratio + -1.9344E-02

Correlation Coefficient = 0.9995

SF6437
A:AR042
V.145



Component 2 = B42

INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0500	327048	0.0500	0.1312
2	0.1000	602218	0.1000	0.2482
3	0.2000	1112105	0.2000	0.4314
4	0.5000	2655674	0.5000	1.0300
5	0.7500	3574736	0.7500	1.4893

Y = SLOPE * X + INTERCEPT

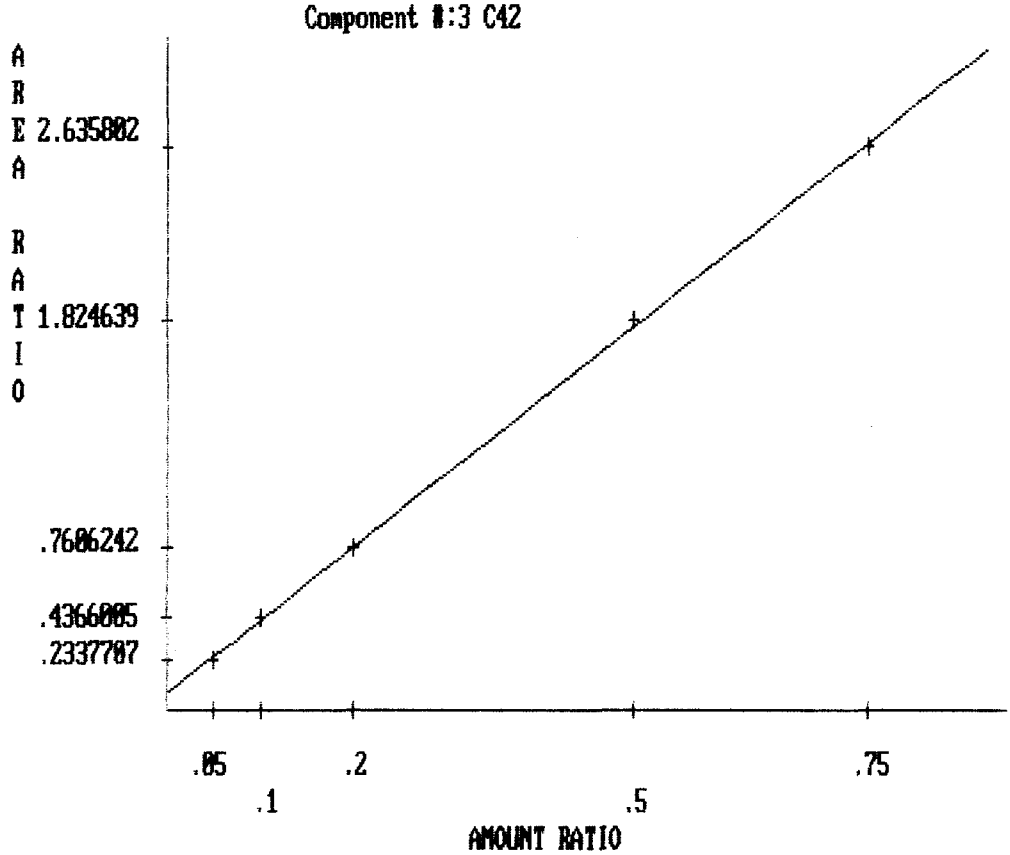
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area ratio = 1.9376E+00 * Amt ratio + 4.5984E-02

Amt ratio = 5.1610E-01 * Area ratio + -2.3732E-02

Correlation Coefficient = 0.9996

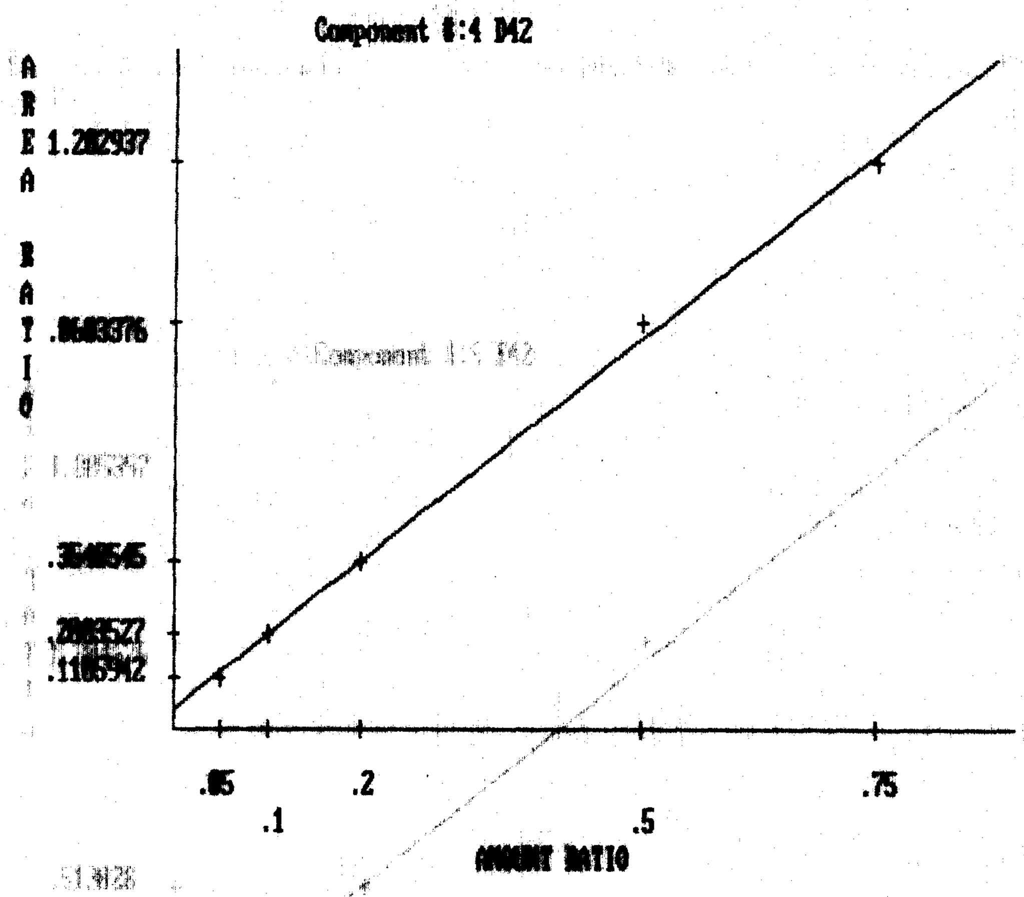
SF6437
A: AR042
v. 14B



Component 3 = C42
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0500	582727	0.0500	0.2338
2	0.1000	1059151	0.1000	0.4366
3	0.2000	1960712	0.2000	0.7606
4	0.5000	4704734	0.5000	1.8246
5	0.7500	6326676	0.7500	2.6358

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 3.4317E+00 * Amt ratio + 8.0148E-02
Amt ratio = 2.9140E-01 * Area ratio + -2.3355E-02
Correlation Coefficient = 0.9996



Component 4 = D42
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0500	275682	0.0500	0.1106
2	0.1000	486036	0.1000	0.2004
3	0.2000	714732	0.2000	0.3549
4	0.5000	2218335	0.5000	0.8603
5	0.7500	2887391	0.7500	1.2029

Y = SLOPE * X + INTERCEPT

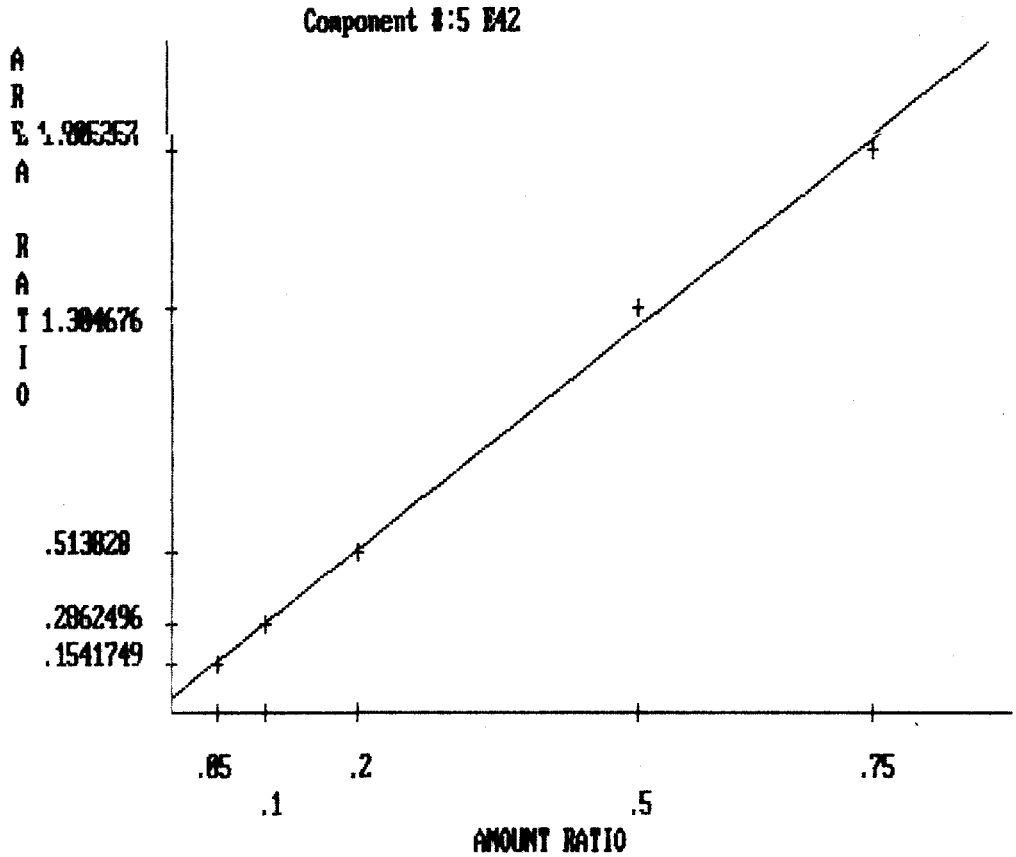
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area ratio = 1.5739E+00 * Amt ratio + 4.2152E-02

Amt ratio = 6.3535E-01 * Area ratio + -2.6781E-02

Correlation Coefficient = 0.9983

SF6437
A:AR047
V.145

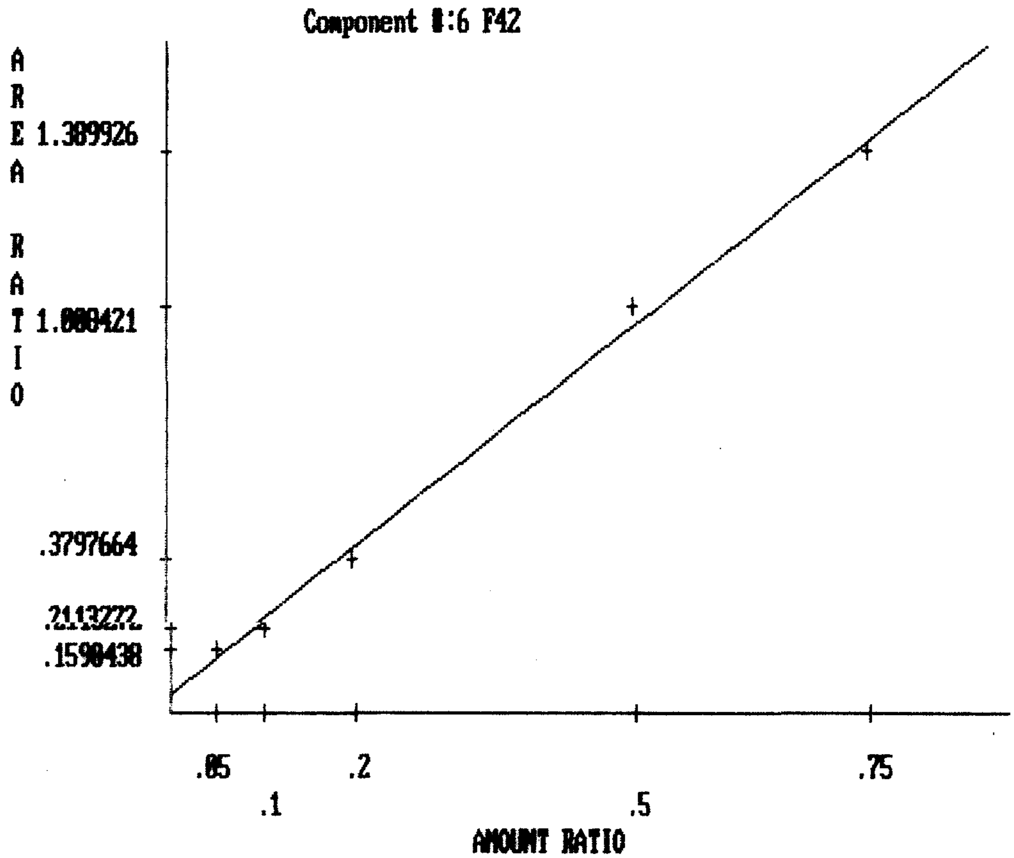


Component 5 = E42
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0500	384317	0.0500	0.1542
2	0.1000	694414	0.1000	0.2862
3	0.2000	1324529	0.2000	0.5138
4	0.5000	3364039	0.5000	1.3047
5	0.7500	4333370	0.7500	1.8054

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 2.3934E+00 * Amt ratio + 4.6957E-02
Amt ratio = 4.1781E-01 * Area ratio + -1.9619E-02
Correlation Coefficient = 0.9974

SF 6437
M:AR047
V.145

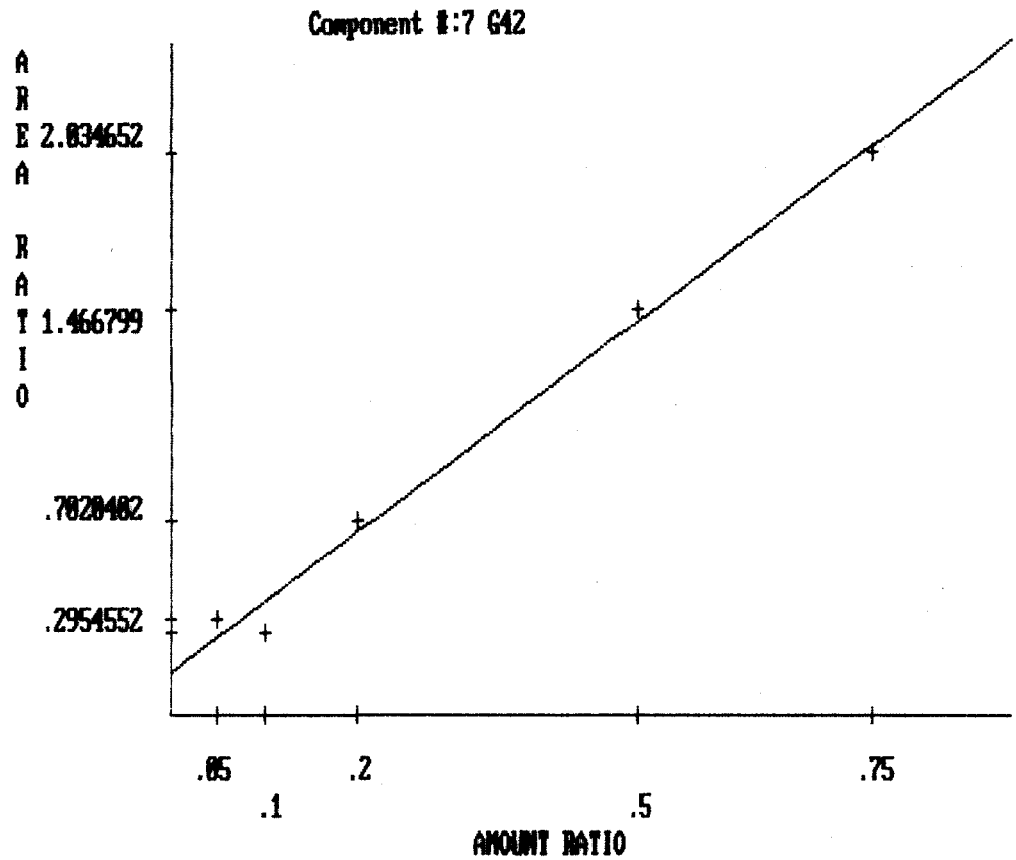


Component 6 = F42
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0500	398447	0.0500	0.1598
2	0.1000	512660	0.1000	0.2113
3	0.2000	978949	0.2000	0.3798
4	0.5000	2600159	0.5000	1.0084
5	0.7500	3336219	0.7500	1.3899

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 1.8243E+00 * Amt ratio + 4.6095E-02
Amt ratio = 5.4817E-01 * Area ratio + -2.5268E-02
Correlation Coefficient = 0.9959

SF6437
A: AR042
V.145

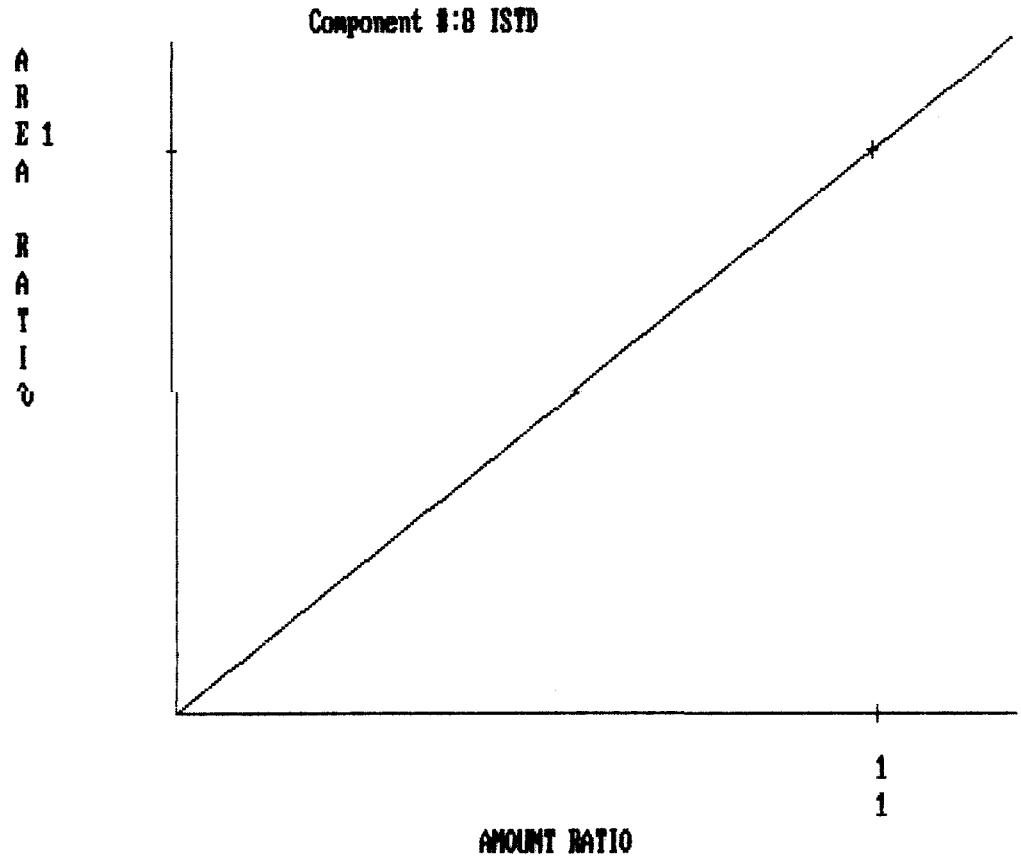


Component 7 = G42
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0500	866598	0.0500	0.3477
2	0.1000	716746	0.1000	0.2955
3	0.2000	1809696	0.2000	0.7020
4	0.5000	3782064	0.5000	1.4668
5	0.7500	4883744	0.7500	2.0347

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 2.5377E+00 * Amt ratio + 1.5725E-01
Amt ratio = 3.9406E-01 * Area ratio + -6.1965E-02
Correlation Coefficient = 0.9908

SF6437
A:ARD42
V.145



Component 8 = ISTD
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	1.0000	2492730	1.0000	1.0000
2	1.0000	2425904	1.0000	1.0000
3	1.0000	2577767	1.0000	1.0000
4	1.0000	2578447	1.0000	1.0000
5	1.0000	2400285	1.0000	1.0000

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 1.0000E+00 * Amt ratio + 0.0000E+00
Amt ratio = 1.0000E+00 * Area ratio + 0.0000E+00
Correlation Coefficient = 0.0000

NEW TIMED EVENTS FROM A:ET14

***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 07:02:54 Version 4.1 **********

* Sample Name: A1242 2 Data File: a:sd14 *
* Date: 08-18-1989 21:35:58 Method: A:AR042 08-19-1989 07:01:37 # 145 *
* Interface: 0 Cycle#: 14 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

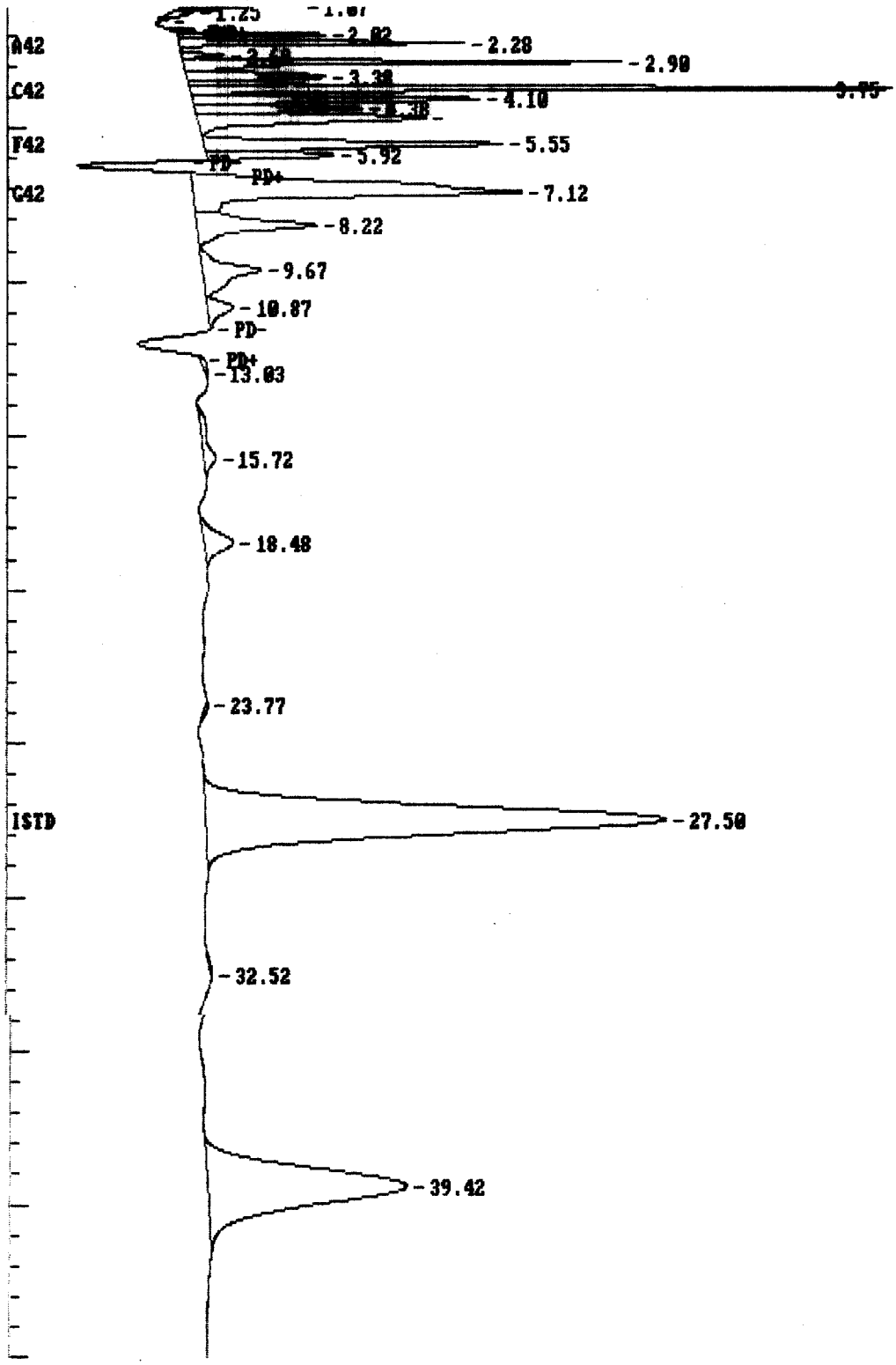
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.28	A42	0.0450	12.5112%	175685	24744	7.1	2	6	25	0	2.5592E-07
8	2.90	B42	0.0440	12.2380%	327048	37925	8.6	2	8	25	0	1.3448E-07
11	3.75	C42	0.0448	12.4568%	582727	60845	9.6	2	12	25	.4464	7.6821E-08
12	4.10	D42	0.0435	12.1001%	275682	24890	11.1	2	12	25	0	1.5773E-07
14	4.70	E42	0.0448	12.4653%	384317	19795	19.4	2	14	25	0	1.1656E-07
15	5.55	F42	0.0624	17.3508%	398447	25876	15.4	2	15	25	0	1.5649E-07
17	7.12	G42	0.0750	20.8777%	866598	28373	30.5	2	17	25	0	8.6578E-08
25	27.50	ISTD	1.0000	0.0000%	2492730	39892	62.5	1	25	25	0	4.0117E-07

TOTAL AMOUNT = 0.3594

Data File = a:sd14.PTS Printed on 08-19-1989 at 07:03:25
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 51647 uv High Value: 122222 uv Scale factor: 1.0



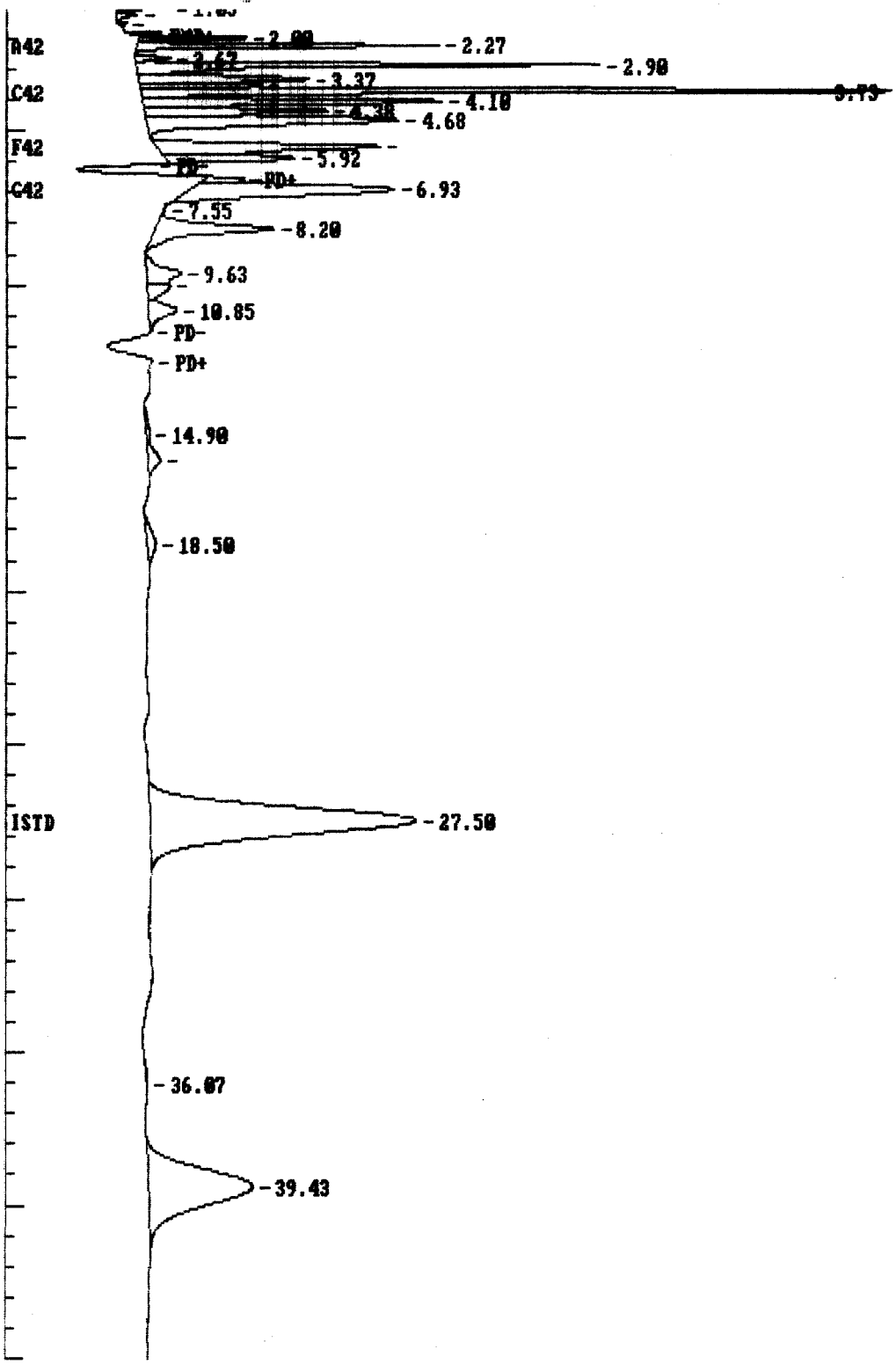
NEW TIMED EVENTS FROM A:ET14

```
******   INTERNAL STANDARD TABLE   ******
******************** 08-19-1989 07:05:25 Version 4.1 *********************
* Sample Name: A1242 3                          Data File: a:sd15         *
* Date: 08-18-1989 22:22:28 Method: A:AR042 08-19-1989 07:01:37  #  145   *
* Interface: 0   Cycle#:  15   Operator NF  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE   *
*            Solvent Description: ULTRA HIGH PURITY NITROGEN              *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                         *
*           Detector 0: ECD QUANT          Detector 1: ECD CONFM          *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                       *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    45.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:        1.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.27	A42	0.0999	15.2885%	317167	43840	7.2	2	6	27	0	3.1512E-07
8	2.90	B42	0.1044	15.9678%	602218	67256	9.0	2	8	27	0	1.7334E-07
11	3.73	C42	0.1039	15.8890%	1059151	108925	9.7	2	12	27	0	9.8070E-08
12	4.10	D42	0.1005	15.3752%	486036	43466	11.2	2	12	27	0	2.0680E-07
14	4.68	E42	0.1000	15.2936%	694414	36667	18.9	2	14	27	0	1.4398E-07
15	5.53	F42	0.0906	13.8552%	512660	32395	15.8	2	15	27	0	1.7668E-07
18	6.93	G42	0.0545	8.3307%	716746	30066	23.8	2	18	27	0	7.5983E-08
27	27.50	ISTD	1.0000	0.0000%	2425904	38746	62.6	1	27	27	0	4.1222E-07

TOTAL AMOUNT = 0.6537

Data File = a:sd15.PTS Printed on 08-19-1989 at 07:05:59
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 51957 uv High Value: 170213 uv Scale factor: 1.0



NEW TIMED EVENTS FROM A:ET16

***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 07:07:35 Version 4.1 **********

* Sample Name: A1242 4 Data File: a:sd16 *
* Date: 08-18-1989 23:08:58 Method: A:AR042 08-19-1989 07:01:37 # 145 *
* Interface: 0 Cycle#: 16 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

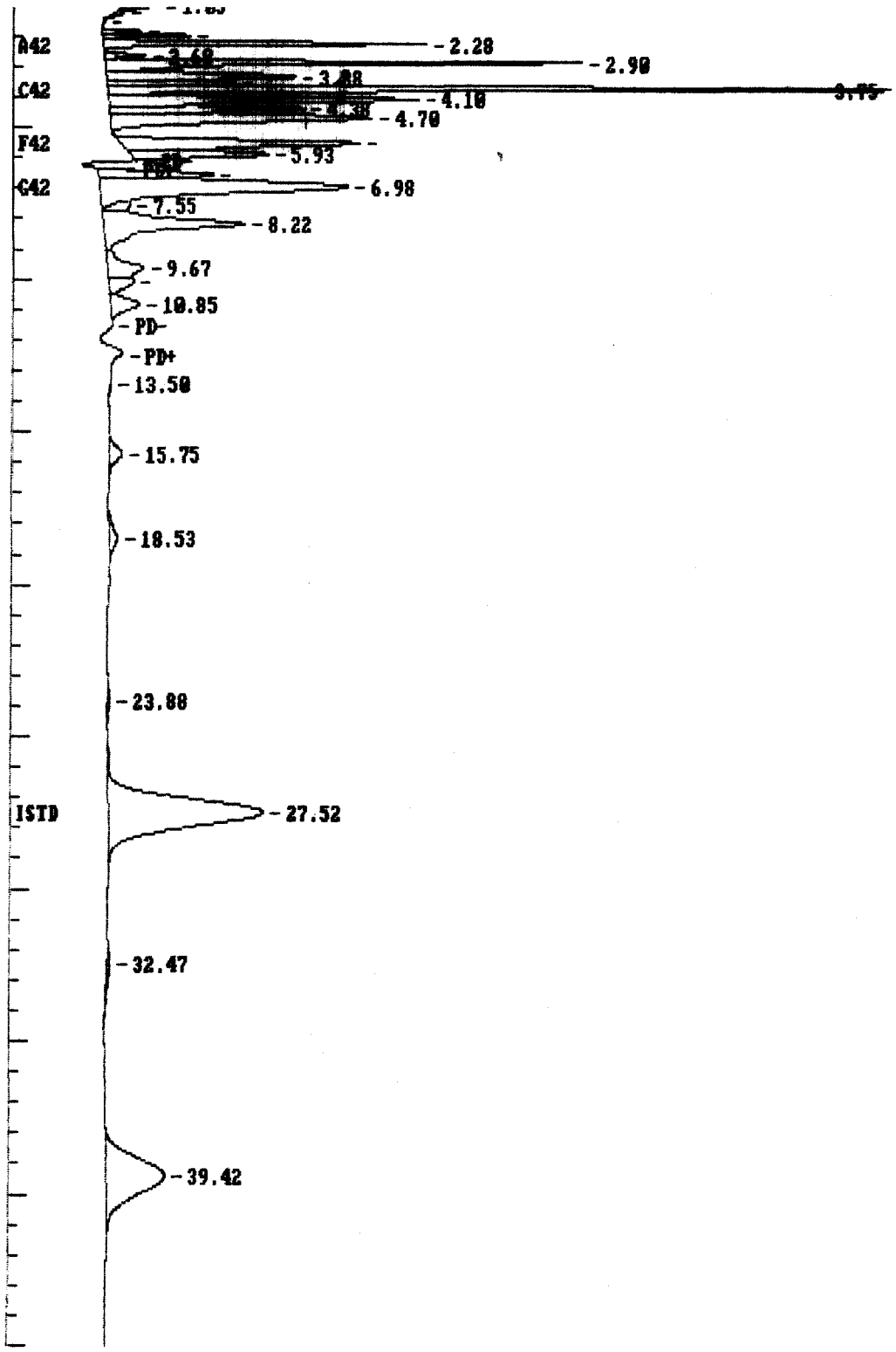
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.28	A42	0.2021	14.5313%	625563	85412	7.3	2	6	28	0	3.2303E-07
8	2.90	B42	0.1989	14.3047%	1112105	125809	8.8	2	8	28	0	1.7887E-07
11	3.75	C42	0.1983	14.2593%	1960712	206663	9.5	2	12	28	.4464	1.0113E-07
12	4.10	D42	0.1987	14.2868%	914732	81770	11.2	2	12	28	0	2.1719E-07
14	4.70	E42	0.1951	14.0271%	1324529	68862	19.2	2	14	28	0	1.4727E-07
15	5.55	F42	0.1829	13.1531%	978949	62990	15.5	2	15	28	0	1.8684E-07
18	6.98	G42	0.2147	15.4376%	1809696	65617	27.6	3	18	28	0	1.1863E-07
28	27.52	ISTD	1.0000	0.0000%	2577767	40822	63.1	1	28	28	0	3.8793E-07

TOTAL AMOUNT = 1.3906

Data File = a:sd16.PTS Printed on 08-19-1989 at 07:08:22
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 55426 uv High Value: 268575 uv Scale factor: 1.0

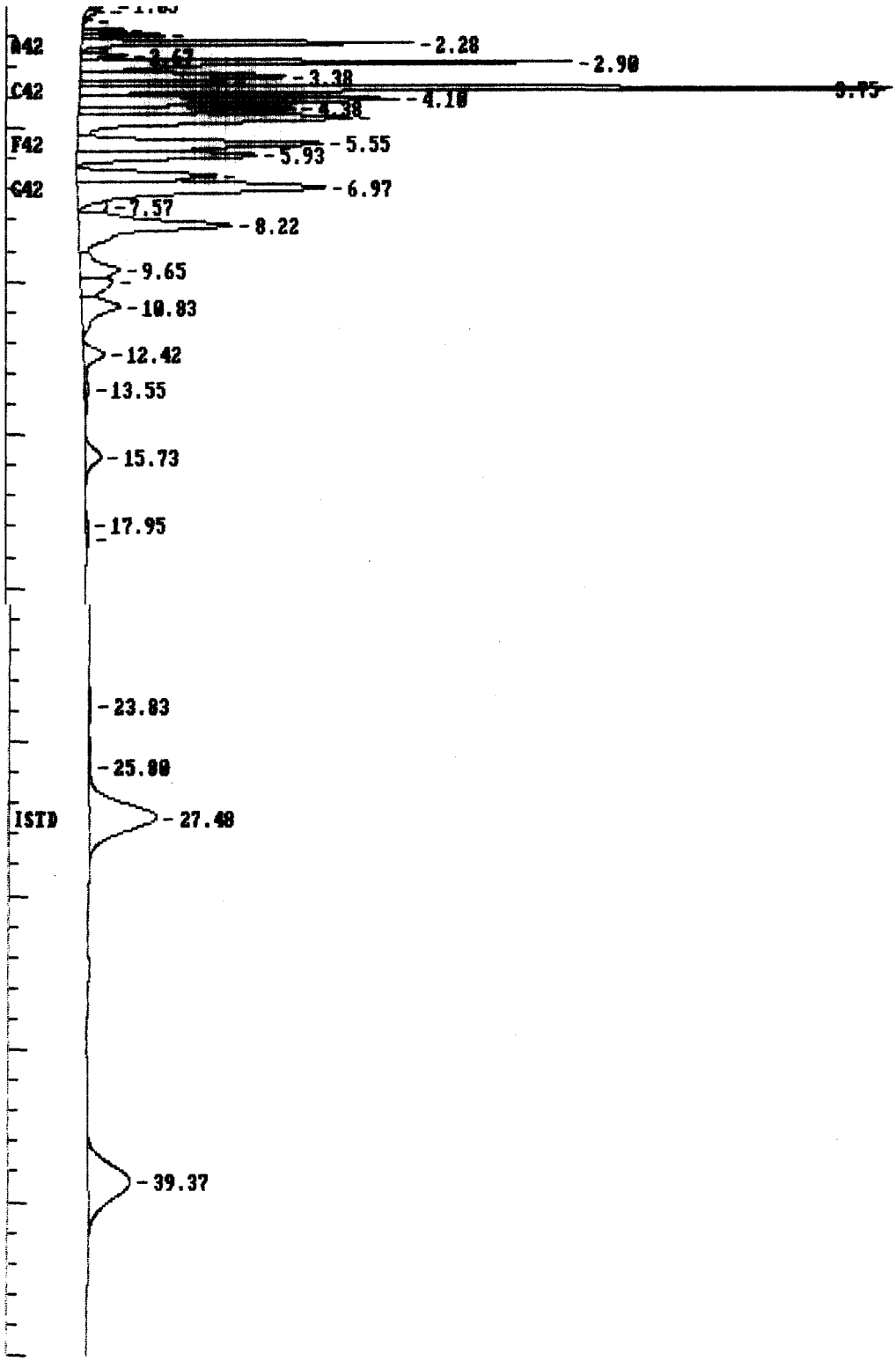


```
****** INTERNAL STANDARD TABLE ******
******************** 08-19-1989 07:09:41 Version 4.1 *********************
* Sample Name: A1242 5                          Data File: a:sd17          *
* Date: 08-18-1989 23:55:27 Method: A:AR042 08-19-1989 07:01:37  #  145   *
* Interface: 0   Cycle#:  17   Operator NF  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE  *
*            Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                        *
*           Detector 0: ECD QUANT            Detector 1: ECD CONFM       *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                      *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    45.00
Area reject:        0                      One sample per    1.000 sec.
Amount injected:        5.00               Dilution factor:        1.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.28	A42	0.5087	14.1083%	1495037	197710	7.5	2	6	31	0	3.4092E-07
8	2.90	B42	0.5078	14.0487%	2655674	295538	9.0	2	8	31	0	1.9122E-07
11	3.75	C42	0.5083	14.0633%	4704734	489797	9.6	2	12	31	.4464	1.0805E-07
12	4.10	D42	0.5198	14.3809%	2218335	192972	11.5	2	12	31	0	2.3433E-07
14	4.70	E42	0.5255	14.5374%	3364039	165356	20.3	2	14	31	0	1.5621E-07
15	5.55	F42	0.5275	14.5936%	2600159	148452	17.5	2	15	31	0	2.0288E-07
18	6.97	G42	0.5160	14.2759%	3782064	149728	25.3	3	18	31	0	1.3644E-07
31	27.48	ISTD	1.0000	0.0000%	2578447	40407	63.8	2	31	31	0	3.8783E-07

TOTAL AMOUNT = 3.6147

Data File = a:sd17.PTS Printed on 08-19-1989 at 07:10:12
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 56726 uv High Value: 548442 uv Scale factor: 1.0



****** INTERNAL STANDARD TABLE ******

********** 08-19-1989 07:11:26 Version 4.1 **********

* Sample Name: A1242 6 Data File: a:sd18 *

* Date: 08-19-1989 00:41:54 Method: A:AR042 08-19-1989 07:01:37 # 145 *

* Interface: 0 Cycle#: 18 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *

* Detector 0: ECD QUANT Detector 1: ECD CONFM *

* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

****

Starting Delay: 1.00 Ending retention time: 45.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 5.00 Dilution factor: 1.00

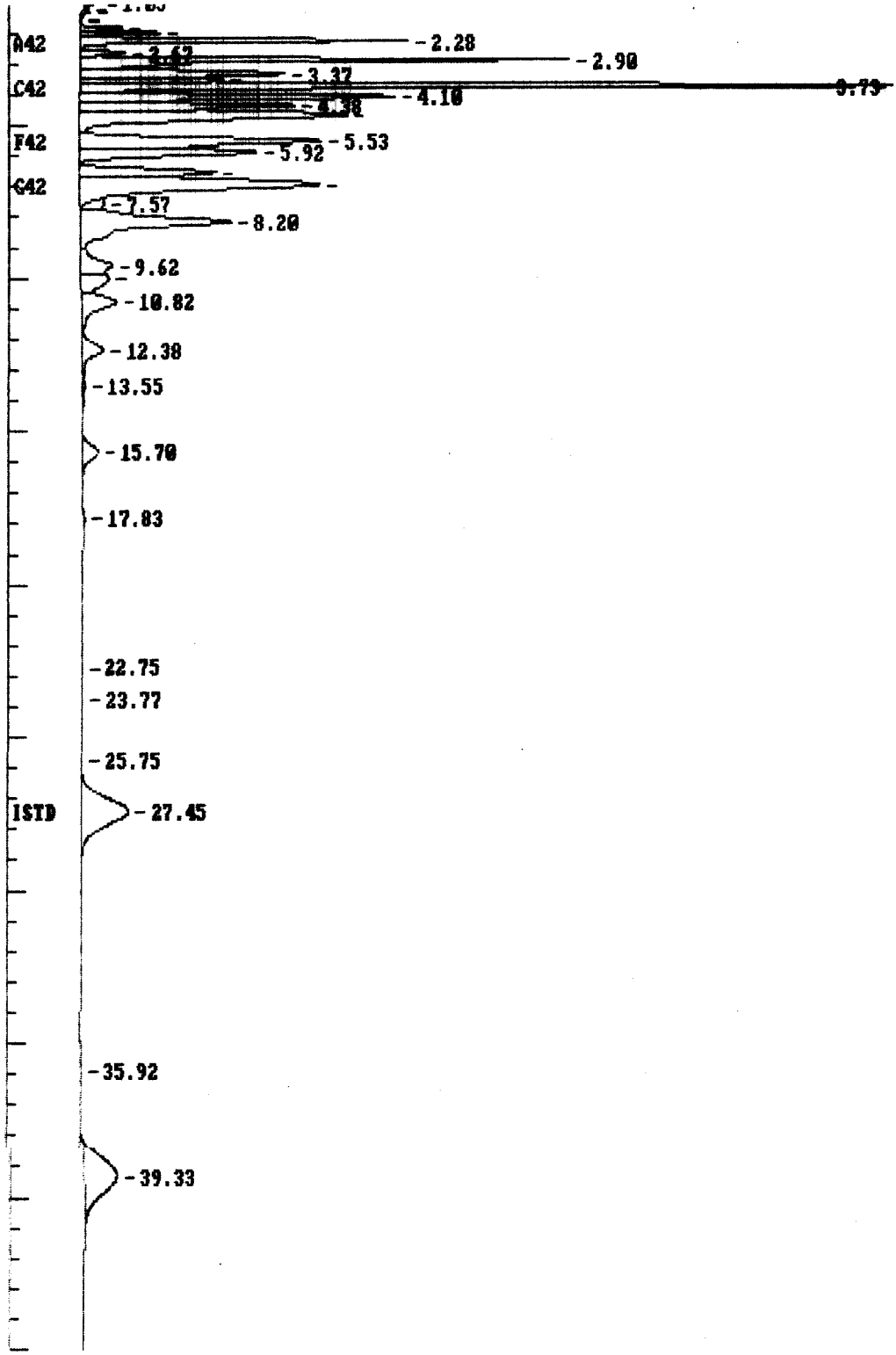
Internal Standard Amount: 1

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	2.28	A42	0.7433	14.3457%	2006396	268254	7.5	2	8	33	0	3.7048E-07
10	2.90	B42	0.7449	14.3758%	3574736	399954	8.9	2	10	33	0	2.0838E-07
13	3.73	C42	0.7447	14.3725%	6326676	665660	9.5	2	14	33	0	1.1771E-07
14	4.10	D42	0.7375	14.2331%	2887391	257849	11.2	2	14	33	0	2.5542E-07
16	4.68	E42	0.7347	14.1786%	4333370	219067	19.8	2	16	33	0	1.6954E-07
17	5.53	F42	0.7366	14.2167%	3336219	198216	16.8	2	17	33	0	2.2080E-07
20	6.97	G42	0.7398	14.2775%	4883744	197093	24.8	3	20	33	0	1.5148E-07
33	27.45	ISTD	1.0000	0.0000%	2400285	37921	63.3	2	33	33	0	4.1662E-07

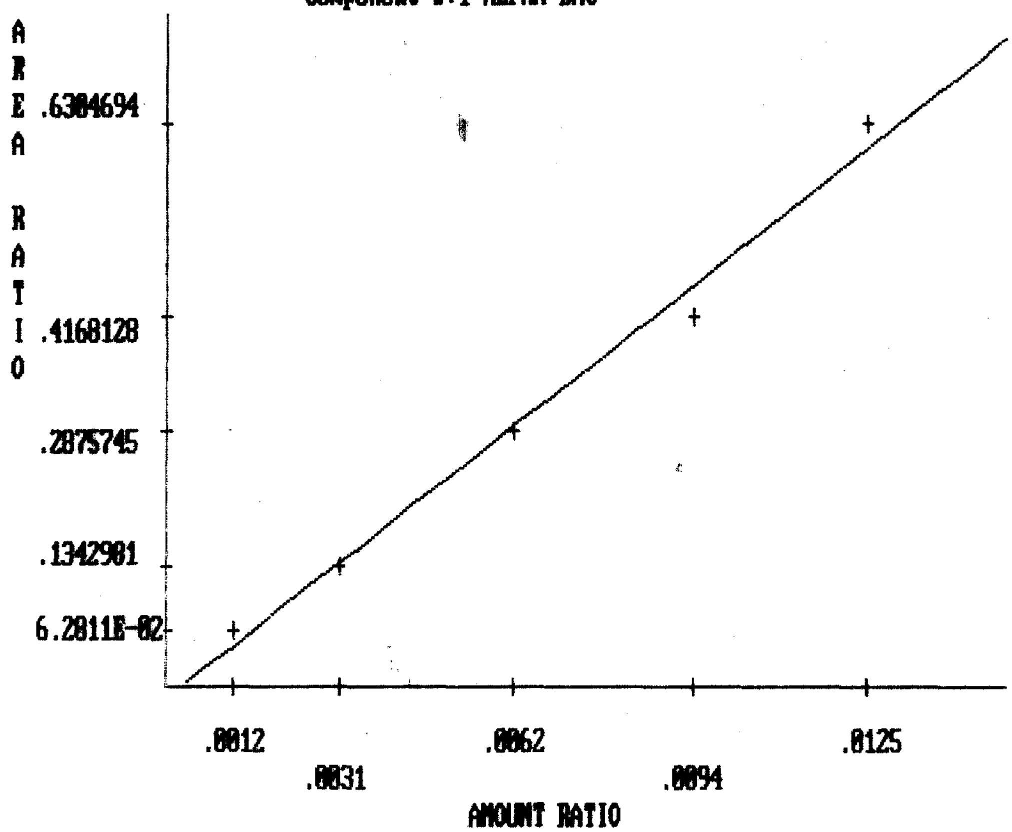
TOTAL AMOUNT = 5.1816

Data File = a:sd18.PTS Printed on 08-19-1989 at 07:11:55
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 59326 uv High Value: 725758 uv Scale factor: 1.0



Method A:PESA
Sample PESTICIDES
Operator NF
Run date 08-18-1989 13:07:32 version: 184
Printed on 08-18-1989 AT 13:35:05
Straight Line fit

Component #:1 ALPHA BHC

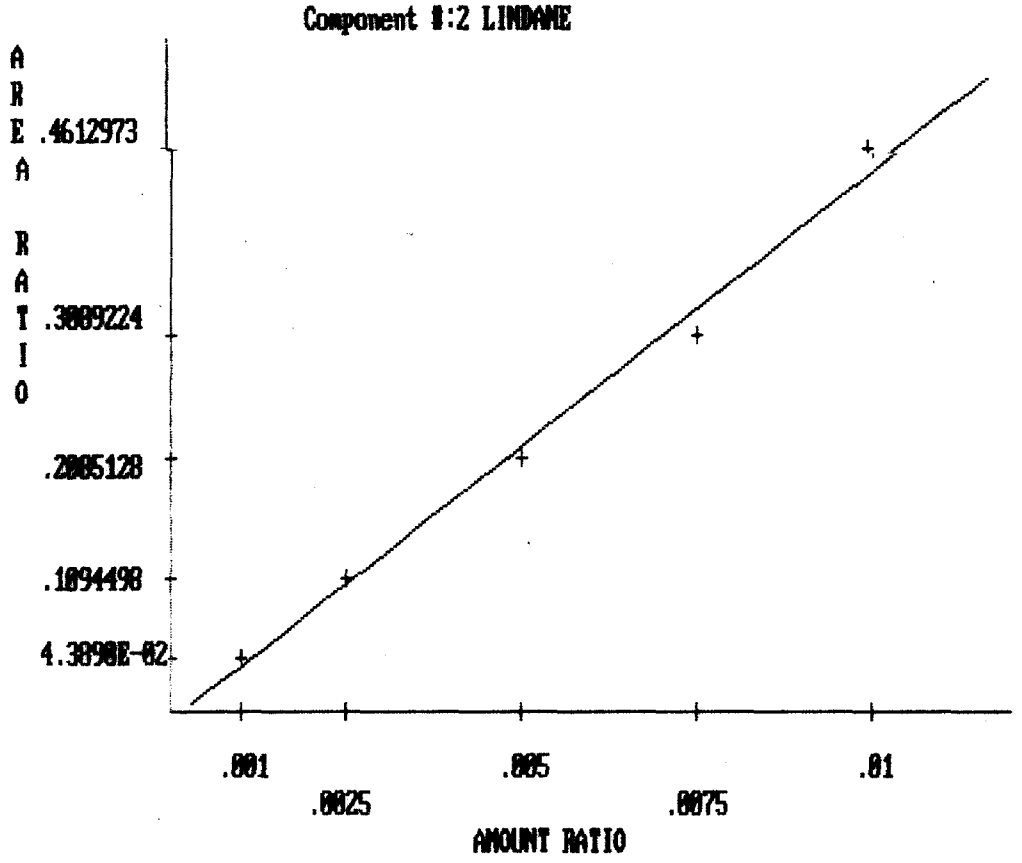


Component 1 = ALPHA BHC
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0012	150010	0.0012	0.0628
2	0.0031	340147	0.0031	0.1343
3	0.0062	765699	0.0062	0.2876
4	0.0094	1238991	0.0094	0.4168
5	0.0125	1754604	0.0125	0.6305

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 4.9275E+01 * Amt ratio + -1.2911E-02
Amt ratio = 2.0294E-02 * Area ratio + 2.6203E-04
Correlation Coefficient = 0.9893

SF6437
A:PESA
V.184

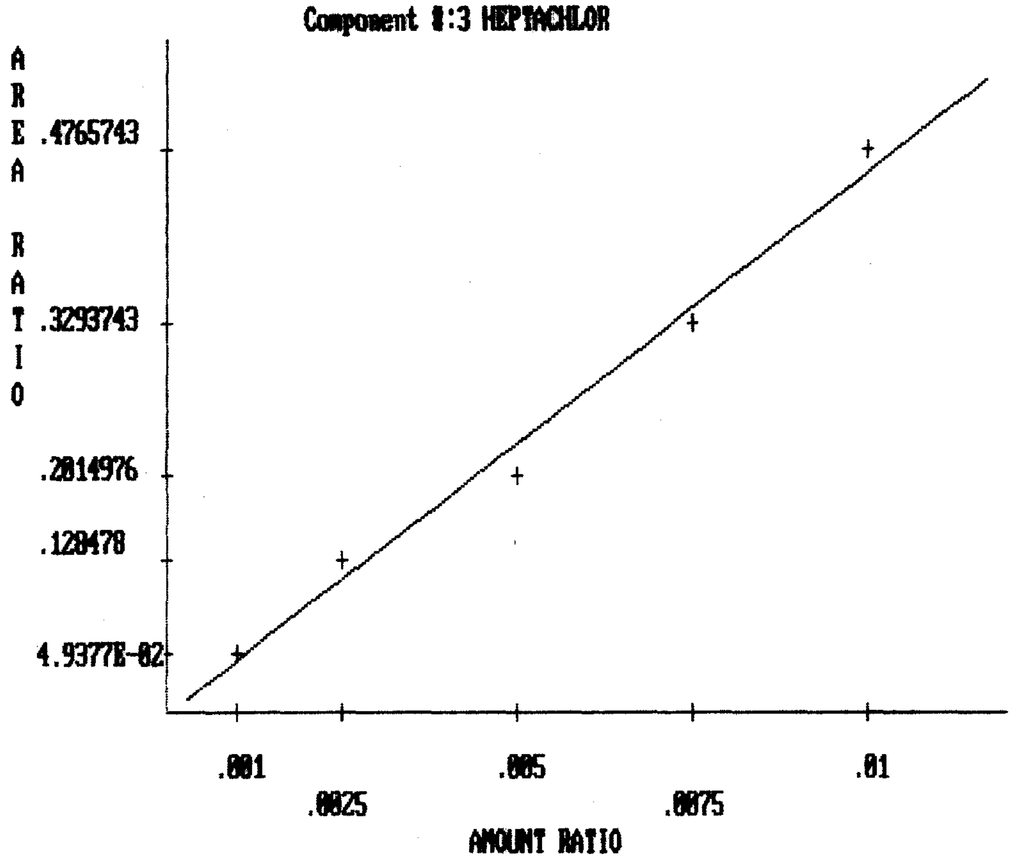


Component 2 = LINDANE
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0010	104821	0.0010	0.0439
2	0.0025	277212	0.0025	0.1094
3	0.0050	555189	0.0050	0.2085
4	0.0075	918283	0.0075	0.3089
5	0.0100	1283796	0.0100	0.4613

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 4.5088E+01 * Amt ratio + -8.0434E-03
Amt ratio = 2.2179E-02 * Area ratio + 1.7839E-04
Correlation Coefficient = 0.9914

SF 6437
A: PESA
V 184

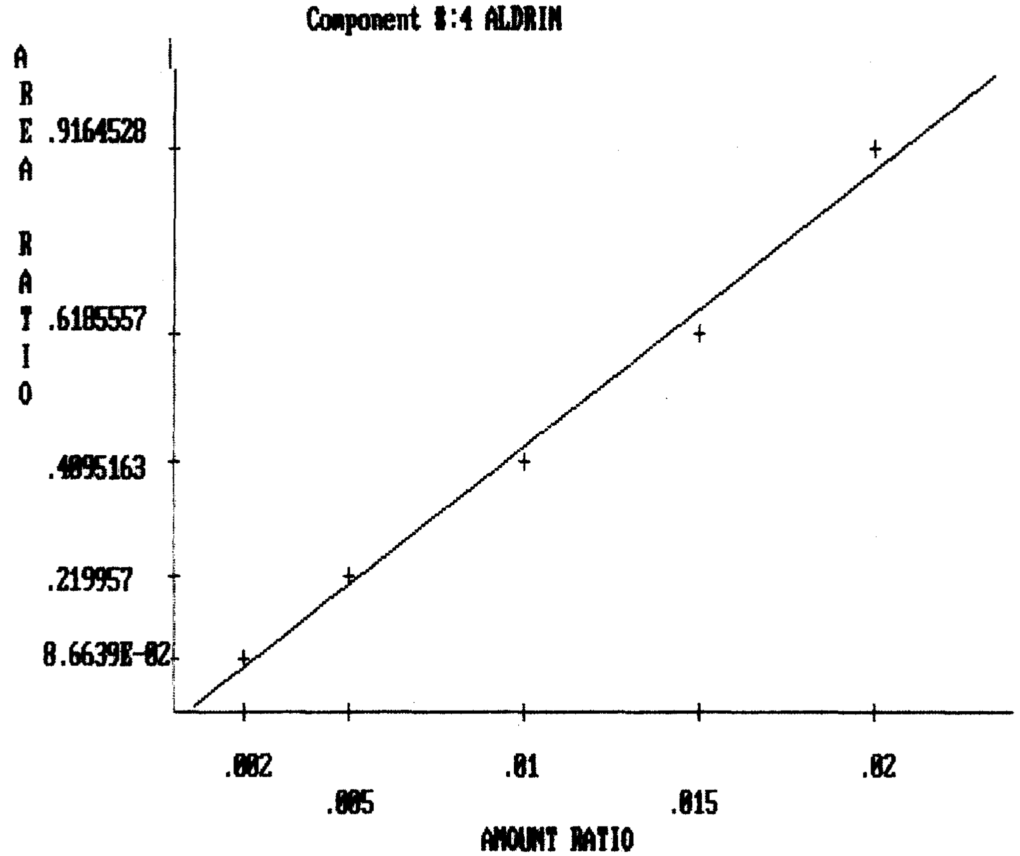


Component 3 = HEPTACHLOR
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0010	117927	0.0010	0.0494
2	0.0025	325406	0.0025	0.1285
3	0.0050	536510	0.0050	0.2015
4	0.0075	979077	0.0075	0.3294
5	0.0100	1326312	0.0100	0.4766

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 4.5976E+01 * Amt ratio + -2.0170E-03
Amt ratio = 2.1750E-02 * Area ratio + 4.3870E-05
Correlation Coefficient = 0.9868

SF6437
A: PESA
V. 174

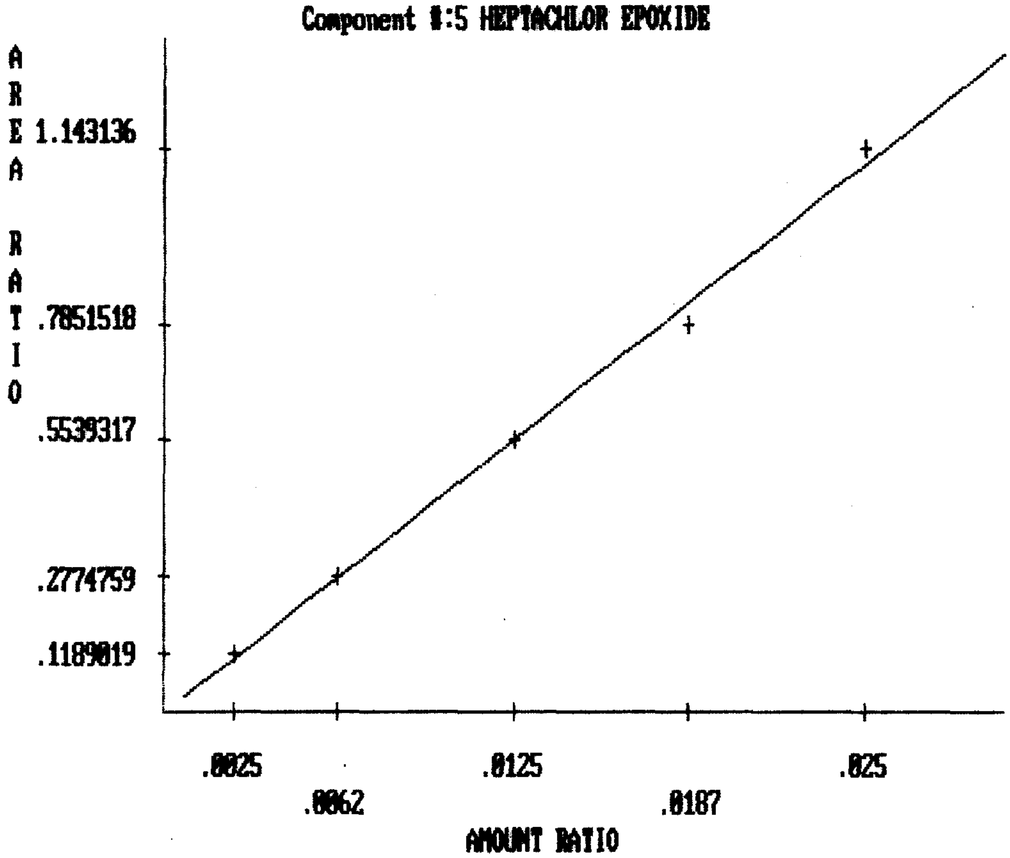


Component 4 = ALDRIN
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0020	206918	0.0020	0.0866
2	0.0050	557102	0.0050	0.2200
3	0.0100	1090383	0.0100	0.4095
4	0.0150	1838679	0.0150	0.6186
5	0.0200	2550499	0.0200	0.9165

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 4.4859E+01 * Amt ratio + -1.6310E-02
Amt ratio = 2.2292E-02 * Area ratio + 3.6359E-04
Correlation Coefficient = 0.9918

SF6437
R:PESA
V.184

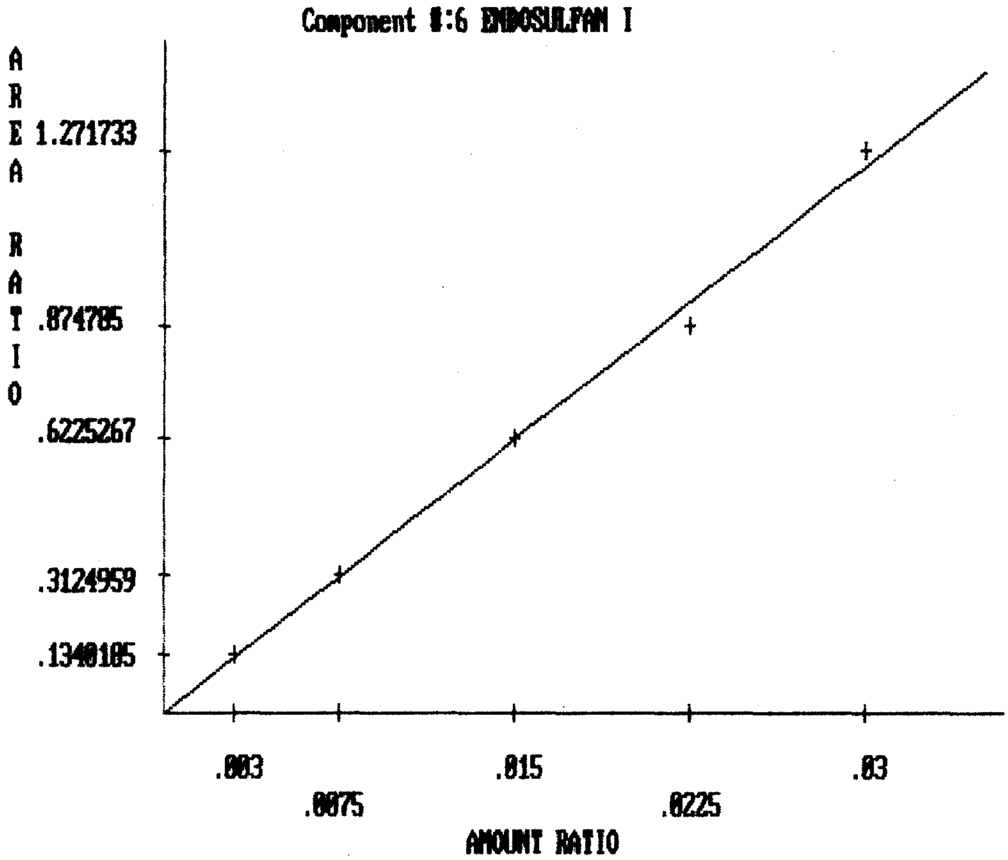


Component 5 = HEPTACHLOR EPOXIDE
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0025	283970	0.0025	0.1189
2	0.0062	702784	0.0062	0.2775
3	0.0125	1474905	0.0125	0.5539
4	0.0187	2333892	0.0187	0.7852
5	0.0250	3181360	0.0250	1.1431

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 4.4529E+01 * Amt ratio + -2.2664E-03
Amt ratio = 2.2457E-02 * Area ratio + 5.0896E-05
Correlation Coefficient = 0.9952

SF6437
A:PESA
v.184



Component 6 = ENDOSULFAN I

INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0030	320073	0.0030	0.1340
2	0.0075	791482	0.0075	0.3125
3	0.0150	1657547	0.0150	0.6225
4	0.0225	2600330	0.0225	0.8748
5	0.0300	3539248	0.0300	1.2717

Y = SLOPE * X + INTERCEPT

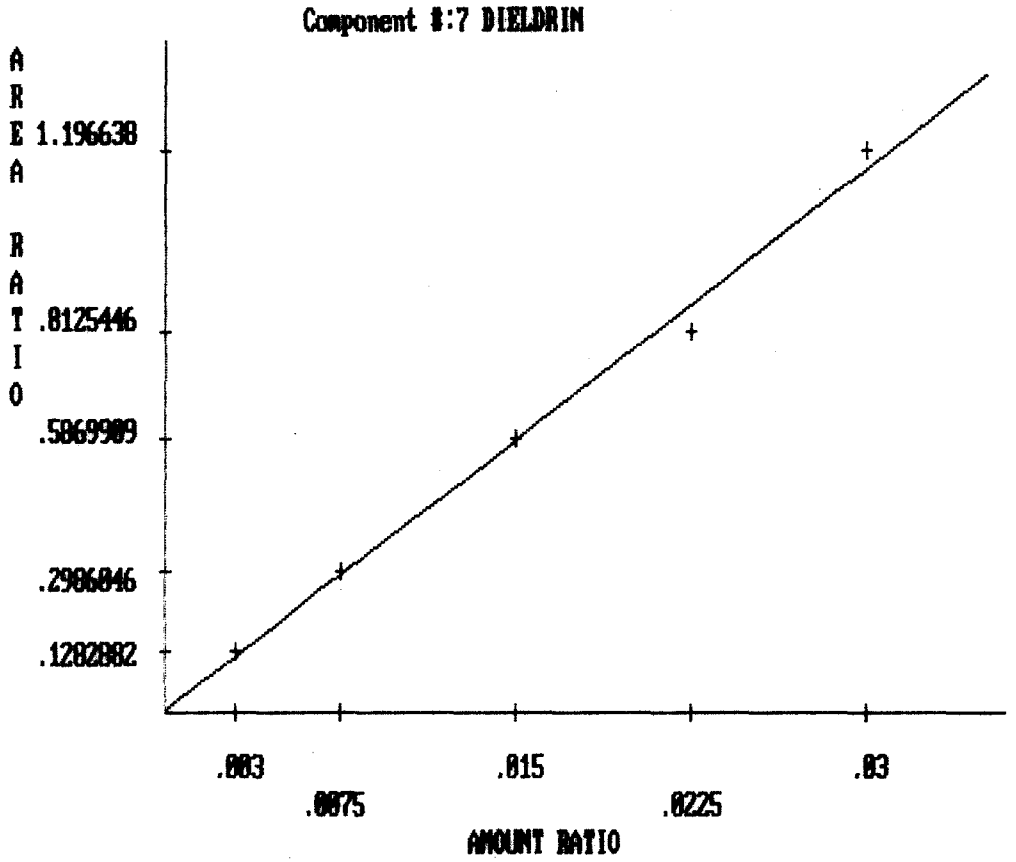
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

Area ratio = 4.1183E+01 * Amt ratio + 6.5309E-04

Amt ratio = 2.4282E-02 * Area ratio + -1.5858E-05

Correlation Coefficient = 0.9949

SF6437
A:PESA
v.184

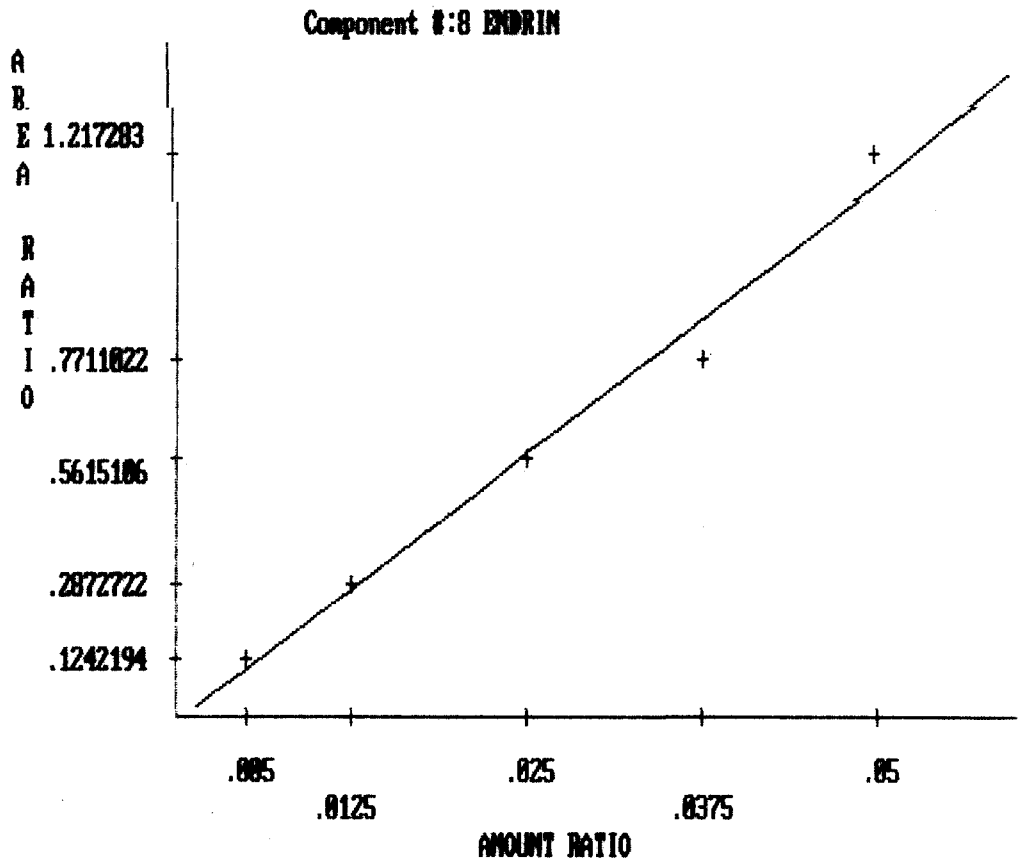


Component 7 = DIELDRIN
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0030	306387	0.0030	0.1283
2	0.0075	756299	0.0075	0.2986
3	0.0150	1562929	0.0150	0.5870
4	0.0225	2415318	0.0225	0.8125
5	0.0300	3330257	0.0300	1.1966

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 3.8463E+01 * Amt ratio + 4.5866E-03
Amt ratio = 2.5999E-02 * Area ratio + -1.1925E-04
Correlation Coefficient = 0.9932

SF6437
H:PESA
V.184

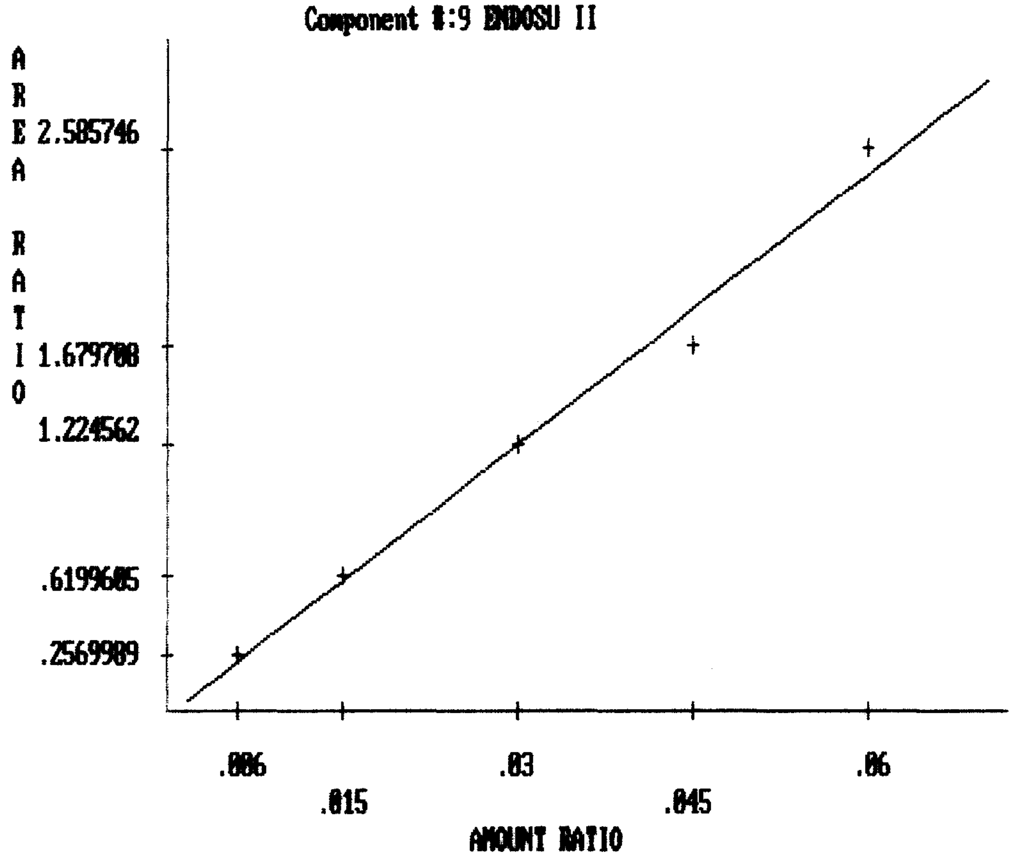


Component 8 = ENDRIN
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0050	296670	0.0050	0.1242
2	0.0125	727596	0.0125	0.2873
3	0.0250	1495085	0.0250	0.5615
4	0.0375	2292129	0.0375	0.7711
5	0.0500	3387713	0.0500	1.2173

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 2.3290E+01 * Amt ratio + -1.3267E-02
Amt ratio = 4.2937E-02 * Area ratio + 5.6966E-04
Correlation Coefficient = 0.9825

3F6437
A:PEST
V.144

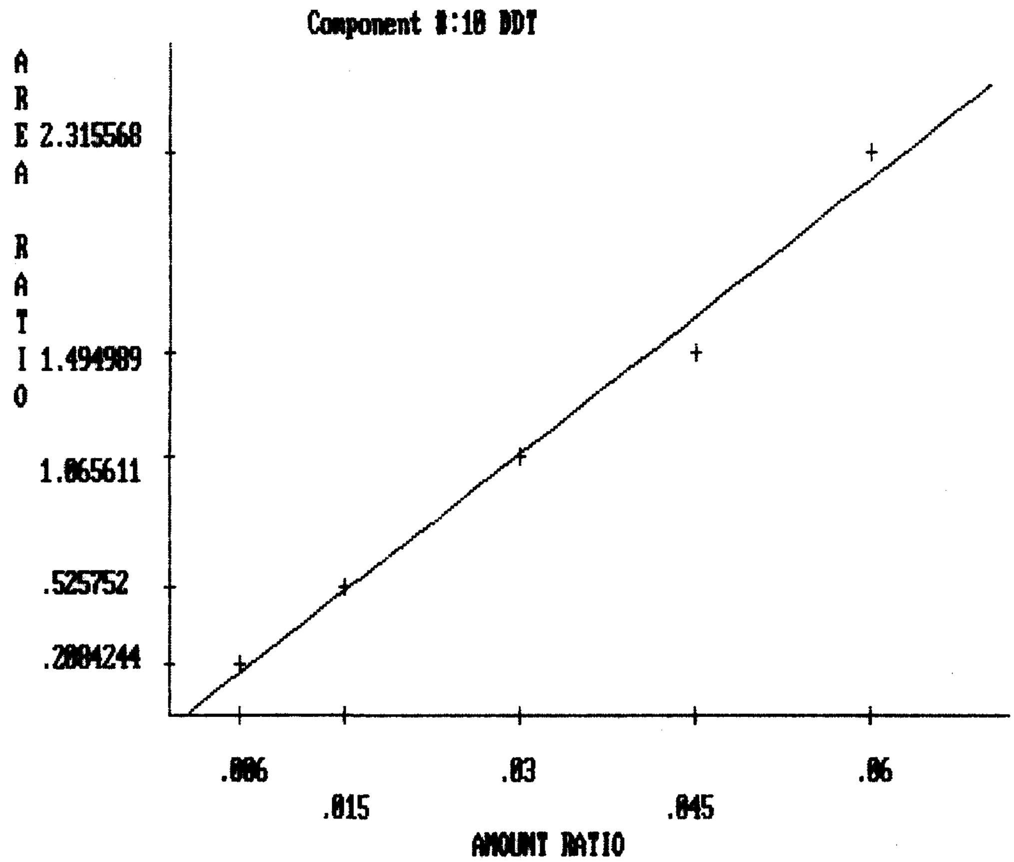


Component 9 = ENDOSU II
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0060	613783	0.0060	0.2570
2	0.0150	1570221	0.0150	0.6200
3	0.0300	3260533	0.0300	1.2246
4	0.0450	4992991	0.0450	1.6797
5	0.0600	7196163	0.0600	2.5857

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 4.1516E+01 * Amt ratio + -2.1894E-02
Amt ratio = 2.4087E-02 * Area ratio + 5.2736E-04
Correlation Coefficient = 0.9873

3F 6437
A:PESA
V.184

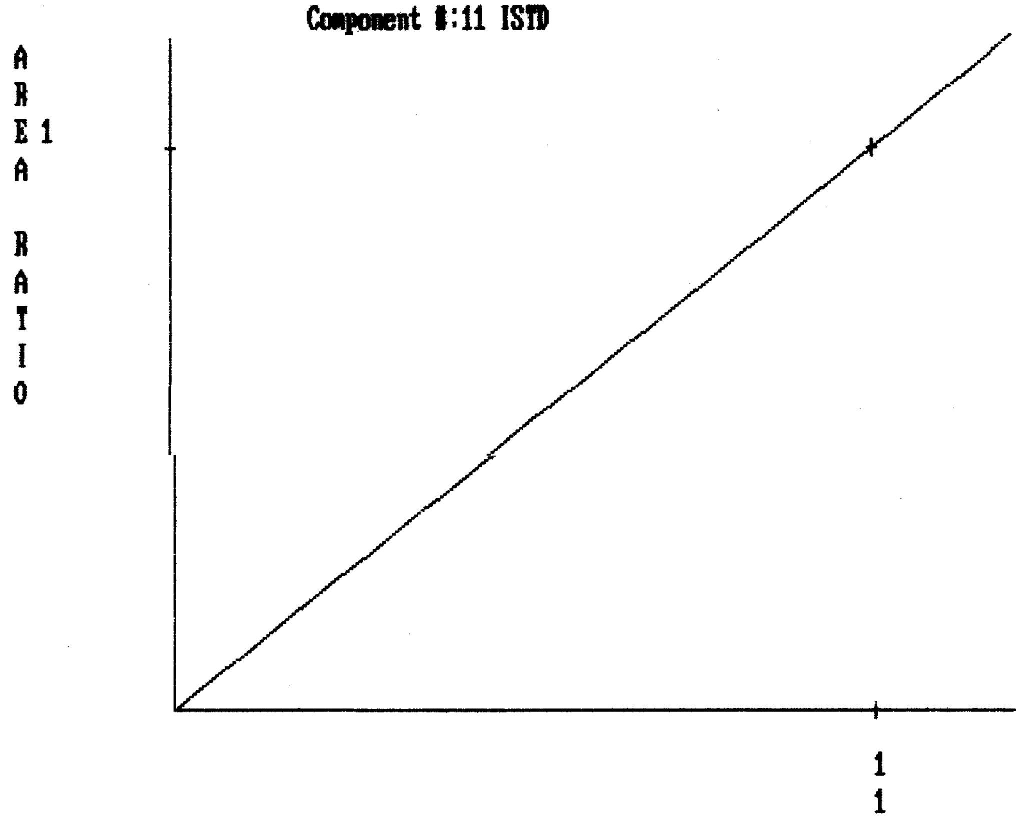


Component 10 = DDT
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0060	497774	0.0060	0.2084
2	0.0150	1331612	0.0150	0.5258
3	0.0300	2837308	0.0300	1.0656
4	0.0450	4443908	0.0450	1.4950
5	0.0600	6444252	0.0600	2.3156

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 3.7665E+01 * Amt ratio + -5.3069E-02
Amt ratio = 2.6550E-02 * Area ratio + 1.4090E-03
Correlation Coefficient = 0.9873

SF6437
N:PESA
v.184



Component 11 = ISTD

INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	1.0000	2388271	1.0000	1.0000
2	1.0000	2532776	1.0000	1.0000
3	1.0000	2662612	1.0000	1.0000
4	1.0000	2972536	1.0000	1.0000
5	1.0000	2783012	1.0000	1.0000

Y = SLOPE * X + INTERCEPT

DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD

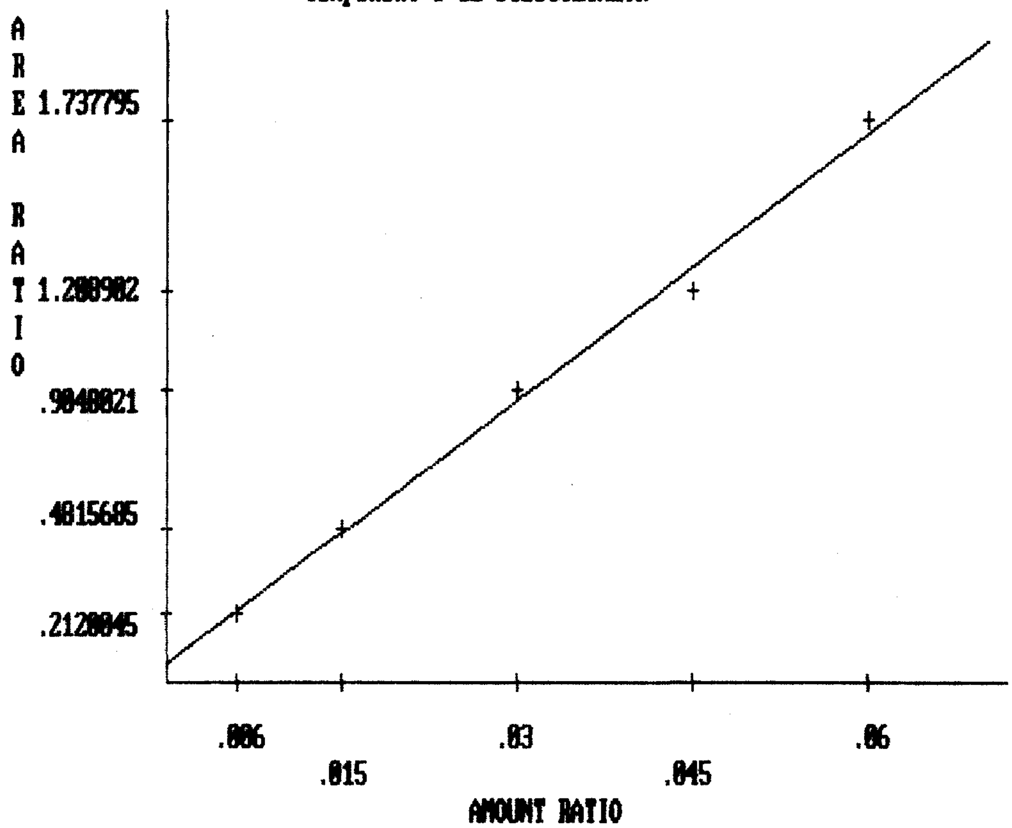
Area ratio = 1.0000E+00 * Amt ratio + 0.0000E+00

Amt ratio = 1.0000E+00 * Area ratio + 0.0000E+00

Correlation Coefficient = 0.0000

SF6437
A:PESA
v.184

Component #:12 DIBUTYLCHLOR

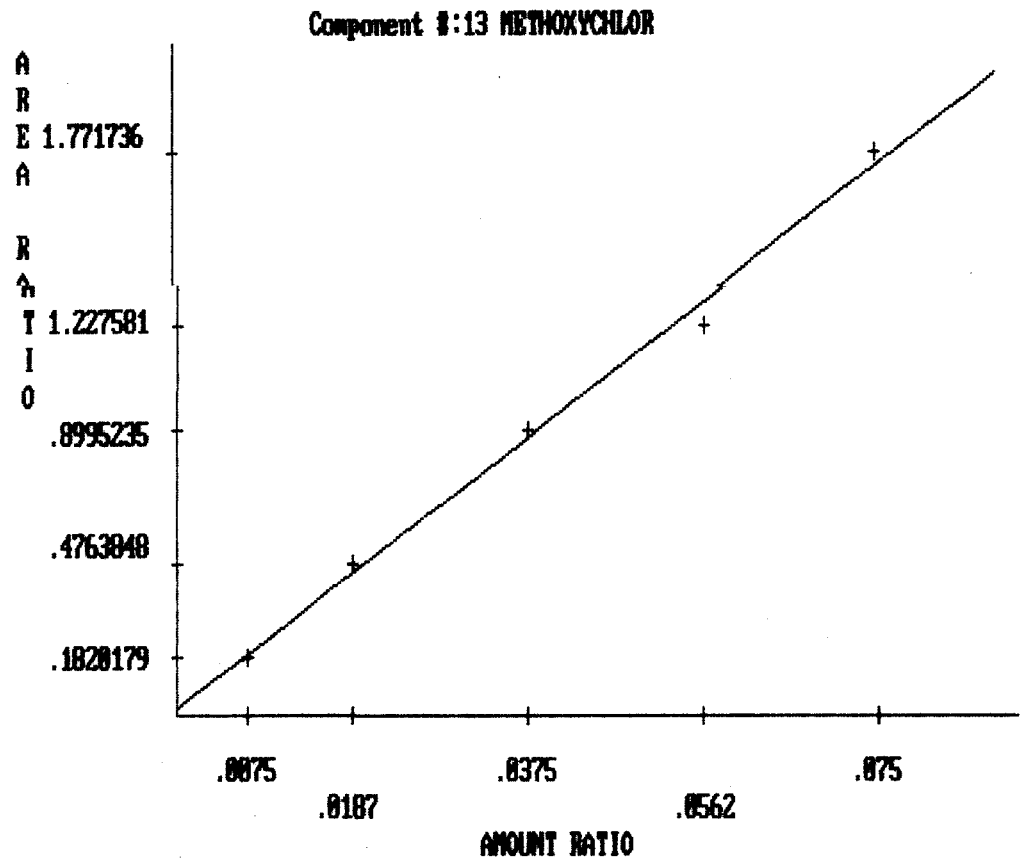


Component 12 = DIBUTYLCHLOR
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0060	506324	0.0060	0.2120
2	0.0150	1219705	0.0150	0.4816
3	0.0300	2409137	0.0300	0.9048
4	0.0450	3593505	0.0450	1.2089
5	0.0600	4836305	0.0600	1.7378

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 2.7362E+01 * Amt ratio + 5.5329E-02
Amt ratio = 3.6547E-02 * Area ratio + -2.0221E-03
Correlation Coefficient = 0.9939

8F6437
A:PESA
V.184



Component 13 = METHOXYCHLOR
INTERNAL STANDARD CALIBRATION

LEVEL	AMOUNT	AREA	AMOUNT Ratio	AREA Ratio
1	0.0075	434708	0.0075	0.1820
2	0.0187	1206576	0.0187	0.4764
3	0.0375	2395082	0.0375	0.8995
4	0.0562	3649028	0.0562	1.2276
5	0.0750	4930762	0.0750	1.7717

Y = SLOPE * X + INTERCEPT
DDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDDD
Area ratio = 2.2757E+01 * Amt ratio + 2.4389E-02
Amt ratio = 4.3943E-02 * Area ratio + -1.0717E-03
Correlation Coefficient = 0.9944

***** INTERNAL STANDARD TABLE *****

********** 08-18-1989 13:19:32 Version 4.1 **********

* Sample Name: PES A 1 Data File: a:sd6 *
* Date: 08-18-1989 15:24:03 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 6 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

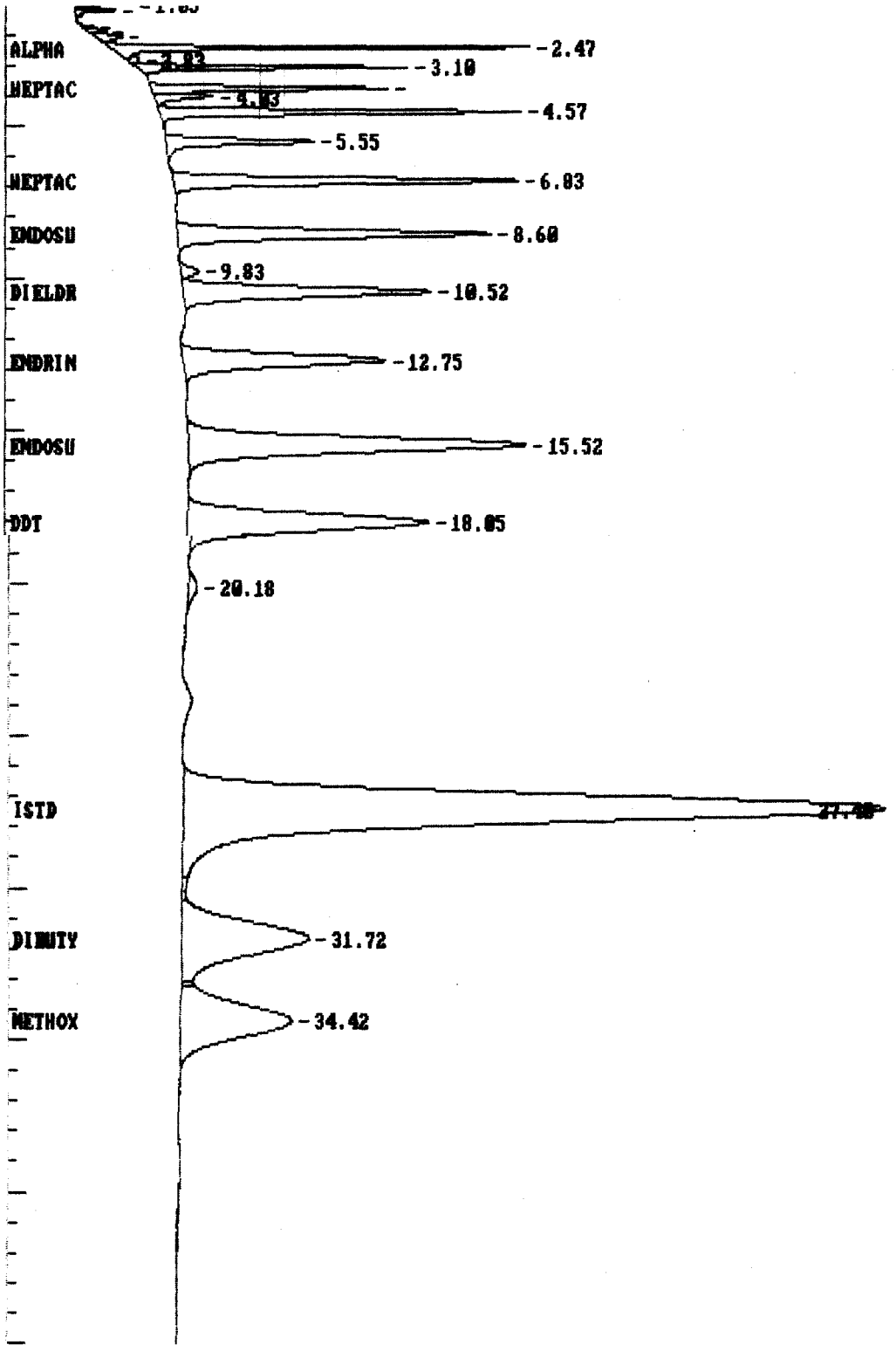
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.47	ALPHA BHC	0.0015	3.2357%	150010	21835	6.9	3	6	21	0	1.0244E-08
8	3.10	LINDANE	0.0012	2.4252%	104821	14112	7.4	2	8	21	0	1.0988E-08
9	3.78	HEPTACHLOR	0.0011	2.3537%	117927	12397	9.5	2	9	21	0	9.4791E-09
11	4.57	ALDRIN	0.0023	4.8322%	206918	18868	11.0	2	11	21	0	1.1091E-08
13	6.83	HEPTACHLOR EPOXIDE	0.0027	5.7295%	283970	18041	15.7	1	13	21	0	9.5824E-09
14	8.60	ENDOSULFAN I	0.0032	6.8185%	320073	16409	19.5	1	14	21	0	1.0118E-08
16	10.52	DIELDRIN	0.0032	6.7717%	306387	12954	23.7	2	16	21	0	1.0497E-08
17	12.75	ENDRIN	0.0059	12.4296%	296670	10571	28.1	1	17	21	0	1.9898E-08
18	15.52	ENDOSU II	0.0067	14.1447%	613783	17639	34.8	1	18	21	0	1.0945E-08
19	18.05	DDT	0.0069	14.6182%	497774	12637	39.4	1	19	21	0	1.3947E-08
21	27.40	ISTD	1.0000	0.0000%	2388271	36786	64.9	2	21	21	0	4.1871E-07
22	31.72	DIBUTYLCHLOR	0.0057	12.0566%	506324	6656	76.1	2	22	21	0	1.1309E-08
23	34.42	METHOXYCHLOR	0.0069	14.5845%	434708	5825	74.6	2	23	21	0	1.5934E-08

TOTAL AMOUNT = 0.0475

Data File = a:sd6.PTS Printed on 08-18-1989 at 13:20:10
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 56050 uv High Value: 98326 uv Scale factor: 1.0



NEW TIMED EVENTS FROM A:ET7

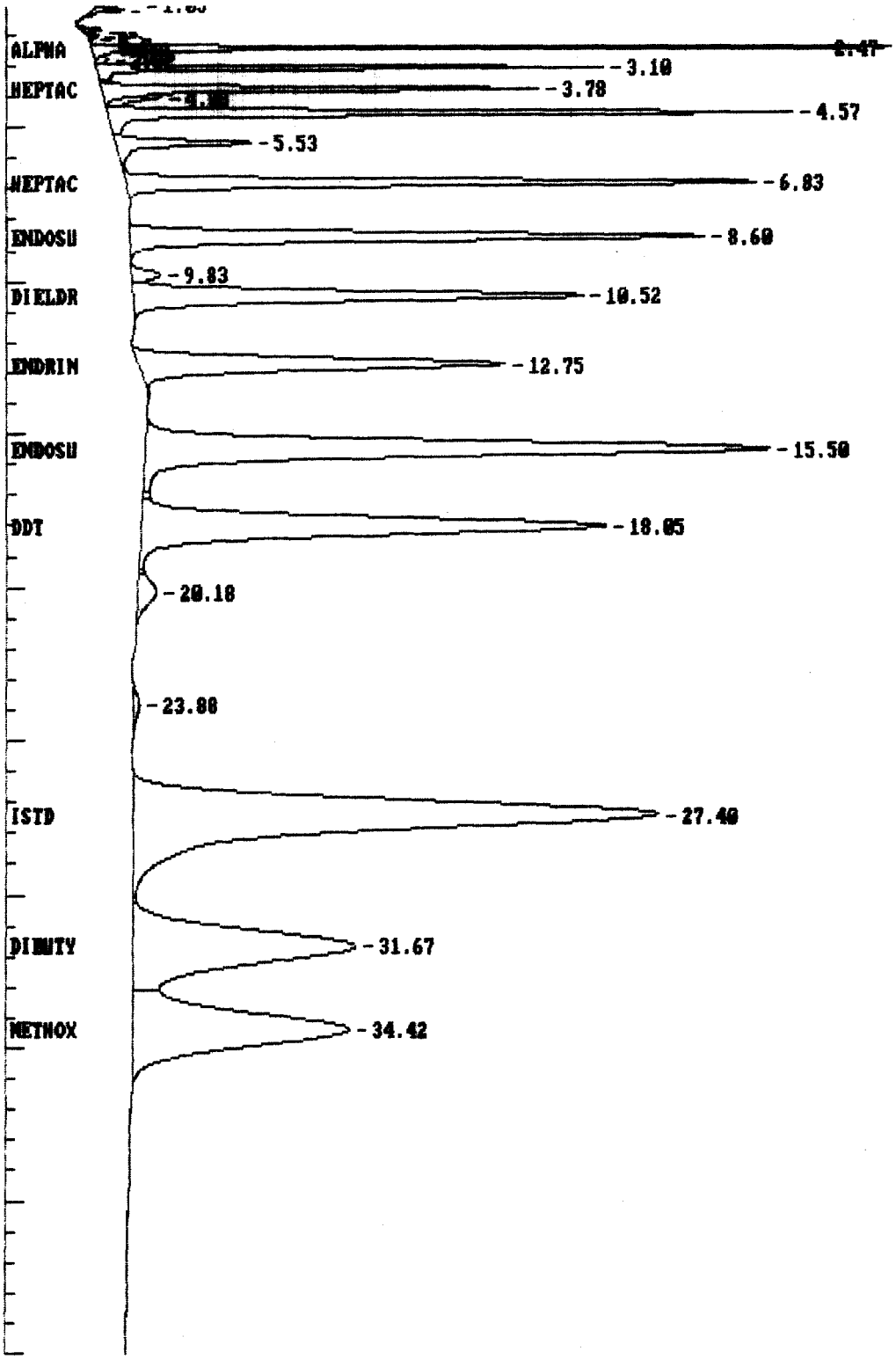
***** INTERNAL STANDARD TABLE *****

```
******************** 08-18-1989 13:10:13 Version 4.1 **********************
* Sample Name: PES A 2                          Data File: a:sd7          *
* Date: 08-18-1989 16:10:34 Method: A:PESA 08-18-1989 13:07:32  #  184    *
* Interface: 0   Cycle#:  7    Operator NF  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE   *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                         *
*             Detector 0: ECD QUANT          Detector 1: ECD CONFM        *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                       *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    45.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:        1.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.47	ALPHA BHC	0.0030	2.6121%	340147	56954	6.0	3	6	22	0	8.7829E-09
8	3.10	LINDANE	0.0026	2.2785%	277212	36074	7.7	2	8	22	0	9.4003E-09
9	3.78	HEPTACHLOR	0.0028	2.4817%	325406	31082	10.5	3	9	22	0	8.7223E-09
11	4.57	ALDRIN	0.0053	4.6051%	557102	48709	11.4	2	11	22	0	9.4541E-09
13	6.83	HEPTACHLOR EPOXIDE	0.0063	5.4930%	702784	44881	15.7	2	13	22	0	8.9391E-09
14	8.60	ENDOSULFAN I	0.0076	6.6207%	791482	40923	19.3	1	14	22	0	9.5670E-09
16	10.52	DIELDRIN	0.0076	6.6837%	756299	32050	23.6	2	16	22	0	1.0107E-08
17	12.75	ENDRIN	0.0129	11.2829%	727596	26092	27.9	1	17	22	0	1.7735E-08
18	15.50	ENDOSU II	0.0155	13.5181%	1570221	44560	35.2	2	18	22	0	9.8461E-09
19	18.05	DDT	0.0154	13.4369%	1331612	33143	40.2	2	19	22	0	1.1541E-08
22	27.40	ISTD	1.0000	0.0000%	2532776	37469	67.6	2	22	22	0	3.9482E-07
23	31.67	DIBUTYLCHLOR	0.0156	13.6207%	1219705	15919	76.6	2	23	22	0	1.2772E-08
24	34.42	METHOXYCHLOR	0.0199	17.3666%	1206576	15482	77.9	2	24	22	0	1.6461E-08

TOTAL AMOUNT = 0.1144

Data File = a:sd7.PTS Printed on 08-18-1989 at 13:16:02
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 57708 uv High Value: 115805 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-18-1989 13:22:04 Version 4.1 **********

* Sample Name: PES A 3 Data File: a:sd8 *
* Date: 08-18-1989 16:57:02 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 8 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

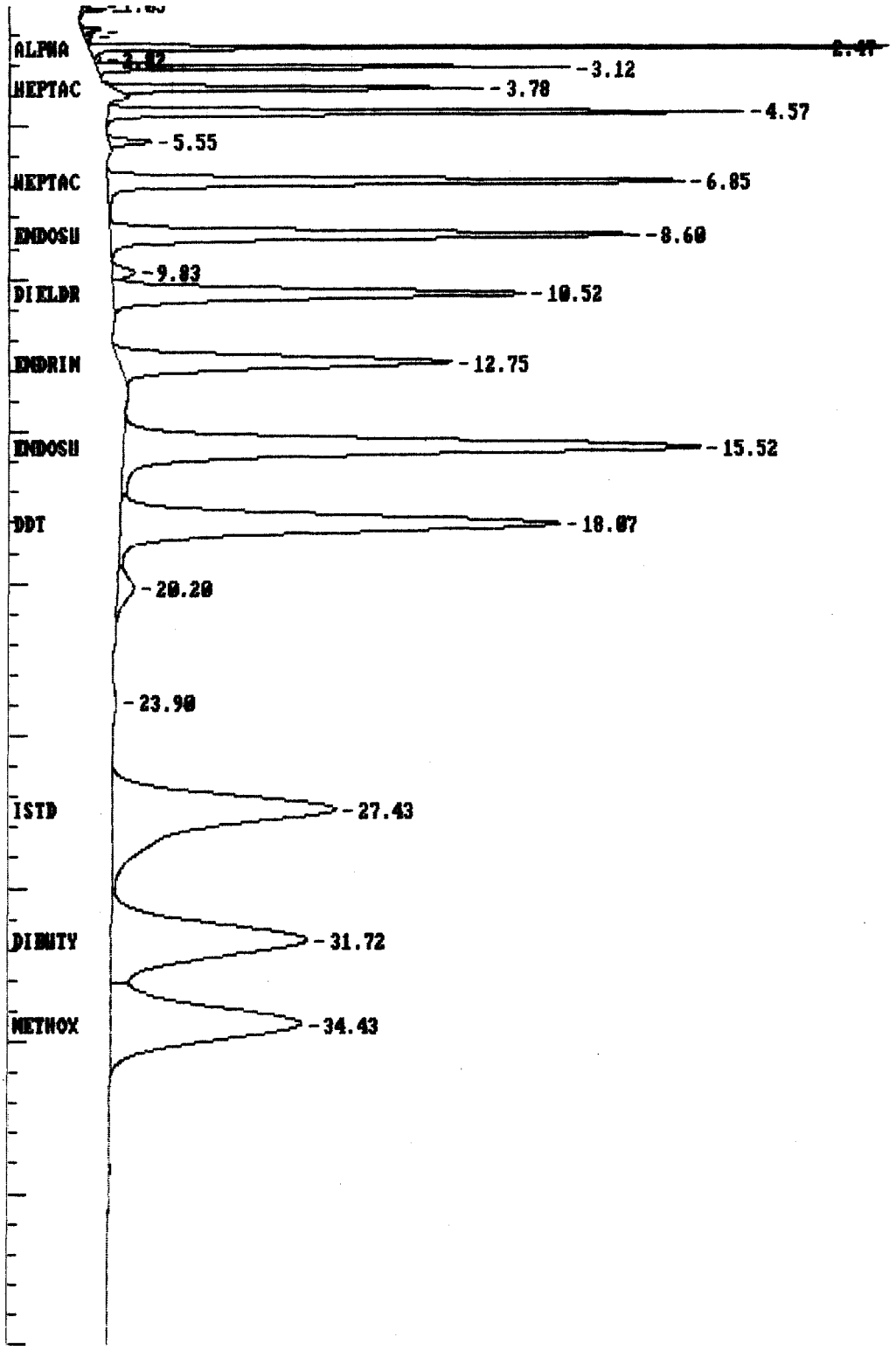
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.47	ALPHA BHC	0.0061	2.7536%	765699	131434	5.8	3	6	21	0	7.9641E-09
8	3.12	LINDANE	0.0048	2.1688%	555189	77529	7.2	2	8	21	0	8.6510E-09
9	3.78	HEPTACHLOR	0.0044	1.9988%	536510	60465	8.9	1	9	21	0	8.2506E-09
10	4.57	ALDRIN	0.0095	4.2864%	1090383	104281	10.5	1	10	21	0	8.7057E-09
12	6.85	HEPTACHLOR EPOXIDE	0.0125	5.6402%	1474905	94633	15.6	2	12	21	0	8.4688E-09
13	8.60	ENDOSULFAN I	0.0151	6.8185%	1657547	86768	19.1	2	13	21	0	9.1099E-09
15	10.52	DIELDRIN	0.0151	6.8373%	1562929	67701	23.1	2	15	21	0	9.6881E-09
16	12.75	ENDRIN	0.0247	11.1438%	1495085	54600	27.4	1	16	21	0	1.6507E-08
17	15.52	ENDOSU II	0.0300	13.5573%	3260533	94695	34.4	2	17	21	0	9.2082E-09
18	18.07	DDT	0.0297	13.4116%	2837308	72145	39.3	2	18	21	0	1.0468E-08
21	27.43	ISTD	1.0000	0.0000%	2662612	36715	72.5	2	21	21	0	3.7557E-07
22	31.72	DIBUTYLCHLOR	0.0310	14.0189%	2409137	32178	74.9	2	22	21	0	1.2887E-08
23	34.43	METHOXYCHLOR	0.0385	17.3649%	2395082	31344	76.4	2	23	21	0	1.6056E-08

TOTAL AMOUNT = 0.2215

Data File = a:sd8.PTS Printed on 08-18-1989 at 13:22:47
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 56378 uv High Value: 189478 uv Scale factor: 1.0



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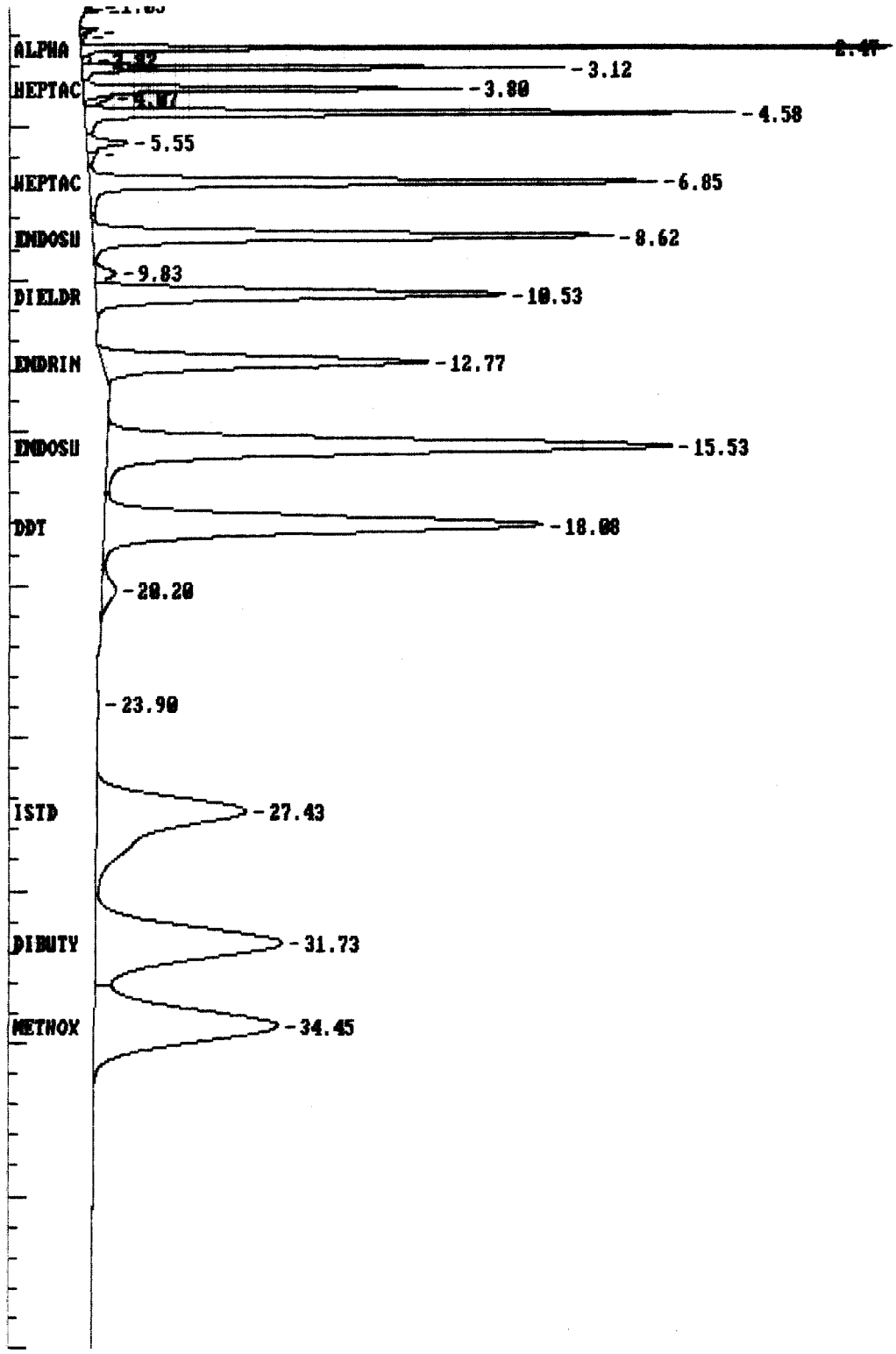
*****   INTERNAL STANDARD TABLE   *****
******************** 08-18-1989 13:24:32 Version 4.1 **********************
* Sample Name: PES A 4                          Data File: a:sd9          *
* Date: 08-18-1989 17:43:32 Method: A:PESA 08-18-1989 13:07:32  #  184    *
* Interface: 0   Cycle#:  9    Operator NF  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE  *
*            Solvent Description: ULTRA HIGH PURITY NITROGEN             *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                        *
*            Detector 0: ECD QUANT            Detector 1: ECD CONFM      *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                      *
*************************************************************************
Starting Delay:    1.00                      Ending retention time:    45.00
Area reject:        0                        One sample per   1.000 sec.
Amount injected:        5.00                 Dilution factor:        1.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.47	ALPHA BHC	0.0087	2.8331%	1238991	211214	5.9	3	6	23	0	7.0387E-09
8	3.12	LINDANE	0.0070	2.2837%	918283	125552	7.3	2	8	23	0	7.6555E-09
9	3.80	HEPTACHLOR	0.0072	2.3416%	979077	98559	9.9	3	9	23	0	7.3619E-09
11	4.58	ALDRIN	0.0142	4.5976%	1838679	169195	10.9	2	11	23	0	7.6971E-09
14	6.85	HEPTACHLOR EPOXIDE	0.0177	5.7446%	2333892	147605	15.8	2	14	23	0	7.5767E-09
15	8.62	ENDOSULFAN I	0.0212	6.8953%	2600330	135292	19.2	2	15	23	0	8.1626E-09
17	10.53	DIELDRIN	0.0210	6.8240%	2415318	106504	22.7	2	17	23	0	8.6970E-09
18	12.77	ENDRIN	0.0337	10.9407%	2292129	84888	27.0	1	18	23	0	1.4693E-08
19	15.53	ENDOSU II	0.0410	13.3151%	4992991	146916	34.0	2	19	23	0	8.2089E-09
20	18.08	DDT	0.0411	13.3521%	4443908	114319	38.9	2	20	23	0	9.2489E-09
23	27.43	ISTD	1.0000	0.0000%	2972536	39074	76.1	2	23	23	0	3.3641E-07
24	31.73	DIBUTYLCHLOR	0.0422	13.6962%	3593505	48587	74.0	2	24	23	0	1.1732E-08
25	34.45	METHOXYCHLOR	0.0529	17.1760%	3649028	47737	76.4	2	25	23	0	1.4489E-08

TOTAL AMOUNT = 0.3078

Data File = a:sd9.PTS Printed on 08-18-1989 at 13:25:22
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 57862 uv High Value: 269477 uv Scale factor: 1.0



NEW TIMED EVENTS FROM A:ET10

***** INTERNAL STANDARD TABLE *****

********** 08-18-1989 13:26:59 Version 4.1 **********

* Sample Name: PES A 5 Data File: a:sd10 *
* Date: 08-18-1989 18:30:01 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 10 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

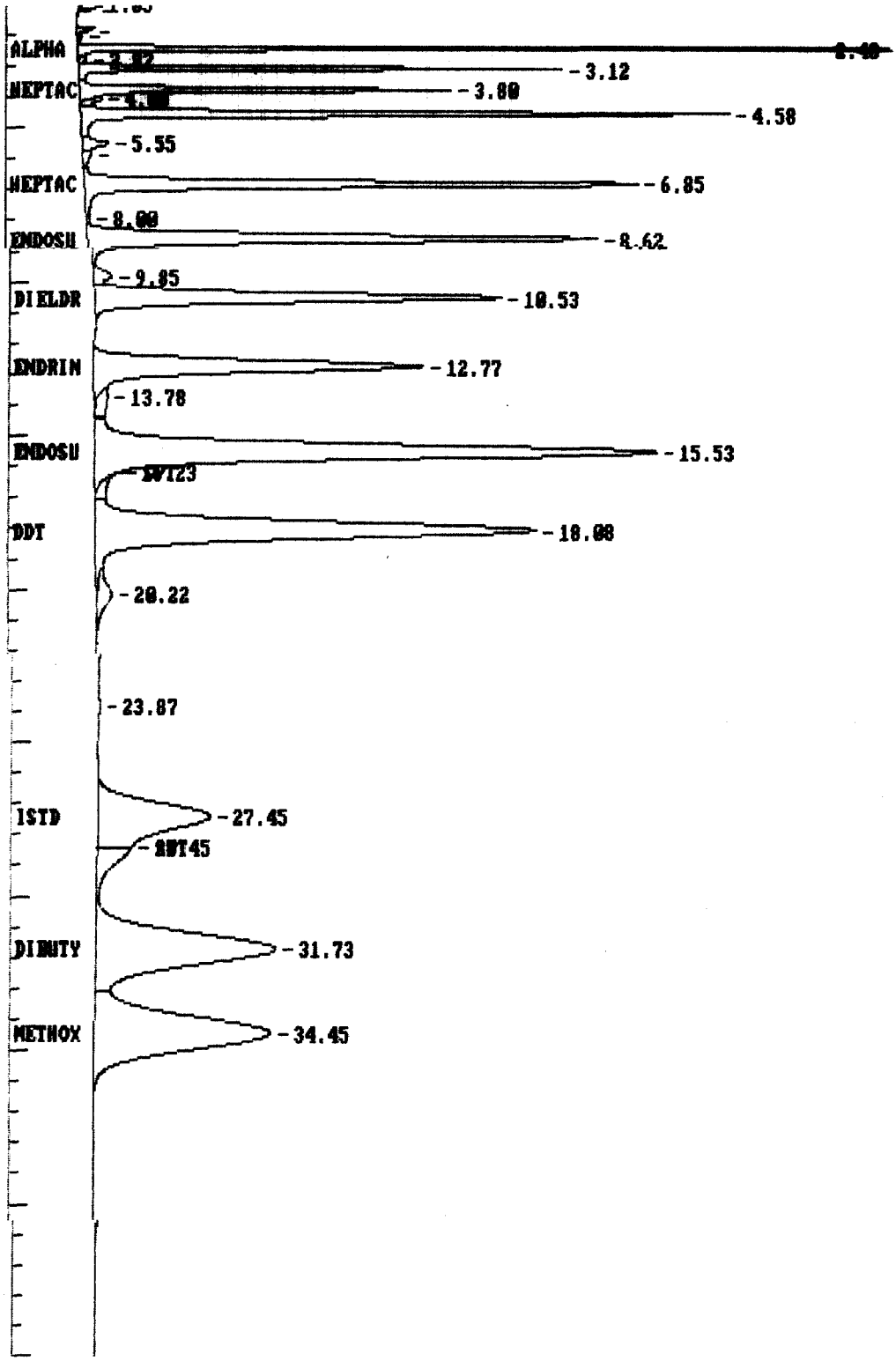
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.48	ALPHA BHC	0.0131	2.8443%	1754604	297992	5.9	3	6	26	0	7.4415E-09
8	3.12	LINDANE	0.0104	2.2676%	1283796	176812	7.3	2	8	26	0	8.1083E-09
9	3.80	HEPTACHLOR	0.0104	2.2676%	1326312	135794	9.8	3	9	26	0	7.8485E-09
11	4.58	ALDRIN	0.0208	4.5295%	2550499	236997	10.8	2	11	26	0	8.1526E-09
14	6.85	HEPTACHLOR EPOXIDE	0.0257	5.6034%	3181360	202317	15.7	3	14	26	0	8.0854E-09
16	8.62	ENDOSULFAN I	0.0309	6.7234%	3539248	186502	19.0	2	16	26	0	8.7205E-09
18	10.53	DIELDRIN	0.0310	6.7512%	3330257	148775	22.4	2	18	26	0	9.3062E-09
19	12.77	ENDRIN	0.0528	11.5096%	3387713	120244	28.2	3	19	26	0	1.5596E-08
21	15.53	ENDOSU II	0.0628	13.6829%	7196327	205275	35.1	3	21	26	0	8.7284E-09
23	18.08	DDT	0.0629	13.6993%	6444252	161182	40.0	3	23	26	0	9.7587E-09
26	27.45	ISTD	1.0000	0.0000%	2783012	41212	67.5	2	26	26	0	3.5932E-07
28	31.73	DIBUTYLCHLOR	0.0615	13.3948%	4836305	65873	73.4	2	28	26	0	1.2714E-08
29	34.45	METHOXYCHLOR	0.0768	16.7264%	4930762	64409	76.6	2	29	26	0	1.5572E-08

TOTAL AMOUNT = 0.4591

Data File = a:sd10.PTS Printed on 08-18-1989 at 13:27:36
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 56828 uv High Value: 355337 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-20-1989 11:36:46 Version 4.1 **********

* Sample Name: PES A 3 Data File: A:ES8 *

* Date: 08-18-1989 13:48:57 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*

* Interface: 0 Cycle#: 8 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS *

* Detector 0: ECD QUANT Detector 1: ECD CONF *

* Misc. Information: ~~QB4FY89~~ SF6437 ~~QB4FY89~~ *

****

Starting Delay: 1.00 Ending retention time: 40.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 5.00 Dilution factor: 1.00

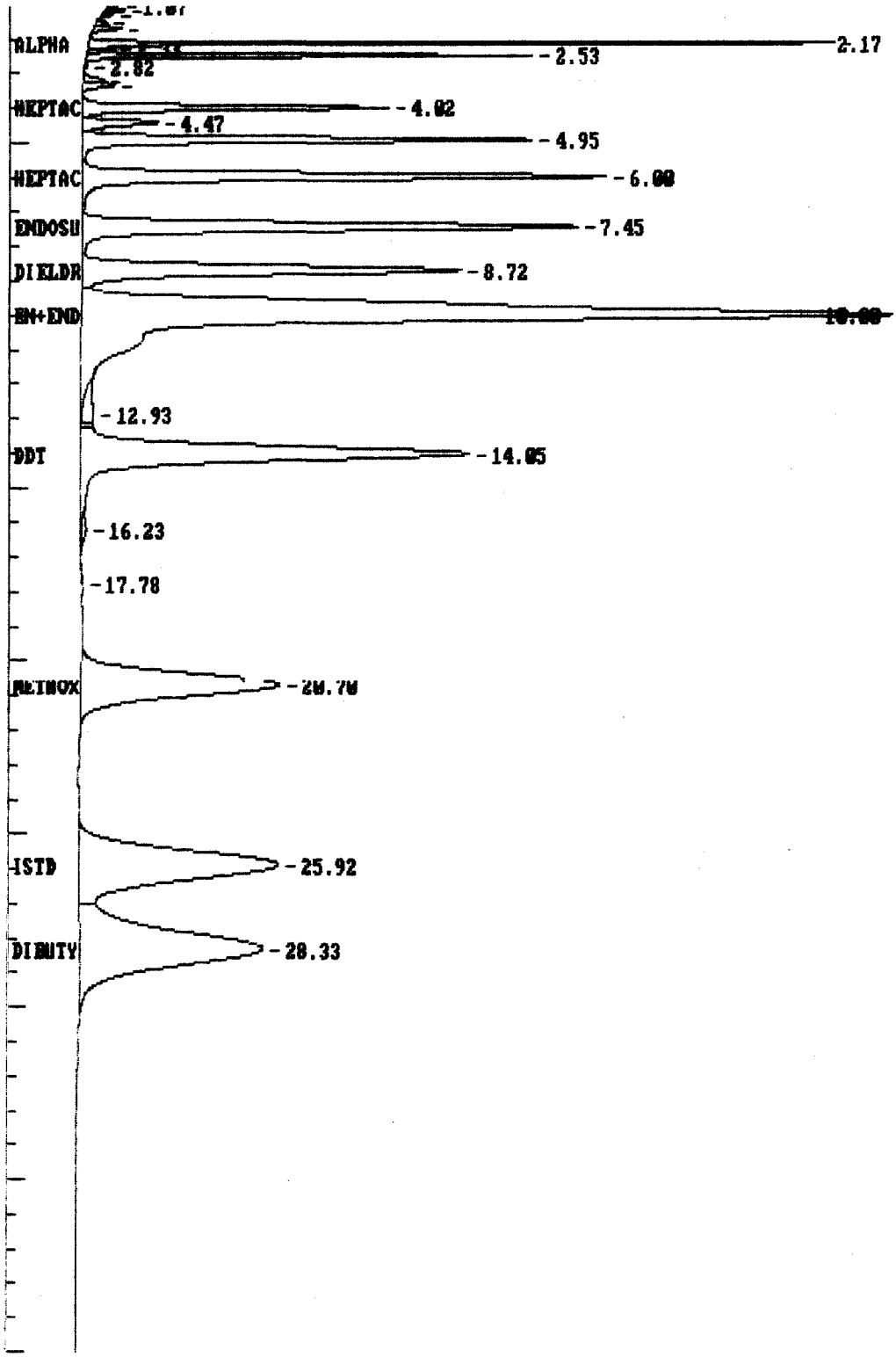
Internal Standard Amount: 1

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.17	ALPHA BHC	0.0062	2.8029%	831553	171771	4.8	3	6	24	0	7.4559E-09
8	2.53	LINDANE	0.0050	2.2604%	563990	102708	5.5	3	8	24	0	8.8654E-09
12	4.02	HEPTACHLOR	0.0050	2.2604%	684922	70419	9.7	2	12	24	0	7.3001E-09
14	4.95	ALDRIN	0.0100	4.5208%	1140140	103475	11.0	2	14	24	0	8.7709E-09
15	6.00	HEPTACHLOR EPOXIDE	0.0125	5.6510%	1692321	120536	14.0	2	15	24	0	7.3863E-09
16	7.45	ENDOSULFAN I	0.0150	6.7812%	1902378	114077	16.7	2	16	24	0	7.8849E-09
17	8.72	DIELDRIN	0.0150	6.7812%	1673841	87222	19.2	2	17	24	0	8.9614E-09
18	10.00	EN+ENDII	0.0550	24.8644%	6574627	186981	35.2	3	18	24	0	8.3655E-09
20	14.05	DDT	0.0300	13.5624%	2770412	89407	31.0	3	20	24	0	1.0829E-08
23	20.70	METHOXYCHLOR	0.0375	16.9530%	2066989	45671	45.3	1	23	24	0	1.8142E-08
24	25.92	ISTD	1.0000	0.0000%	2688256	45817	58.7	2	24	24	0	3.7199E-07
25	28.33	DIBUTYLCHLOR	0.0300	13.5624%	3021921	42259	71.5	2	25	24	0	9.9275E-09

TOTAL AMOUNT = 0.2212

Data File = A:ES8.PTS Printed on 08-20-1989 at 11:48:39
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23840 uv High Value: 211441 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-20-1989 06:22:06 Version 4.1 **********

* Sample Name: PES A 3 Data File: a:es15 *

* Date: 08-18-1989 18:33:00 Method: A:PESA-CON 08-19-1989 12:51:43 # 139*

* Interface: 0 Cycle#: 15 Operator NF Channel#: 0 Vial#: N.A. *

* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT-PACKARD Column Type: MIXED PHASE-PRIMARY *

* Solvent Description: ULTRA HIGH PURITY NITROGEN *

* Conditions: ISOTHERMAL AT 200 CELSIUS *

* Detector 0: ECD QUANT Detector 1: ECD CONF *

* Misc. Information: ~~BB4FY89~~ F6437 *

****

Starting Delay: 1.00 Ending retention time: 40.00

Area reject: 0 One sample per 1.000 sec.

Amount injected: 5.00 Dilution factor: 1.00

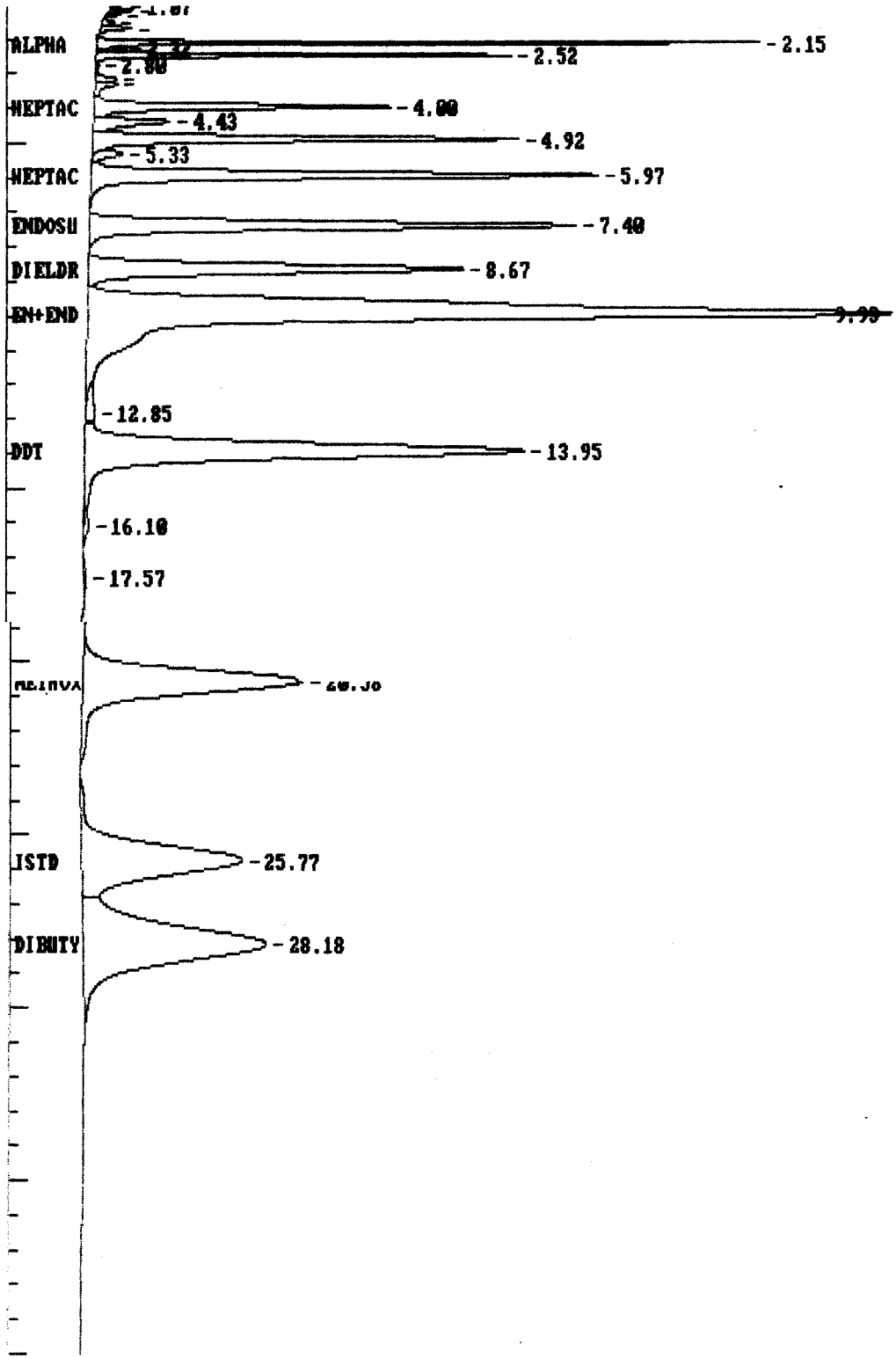
Internal Standard Amount: 1

Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
6	2.15	ALPHA BHC	0.0068	2.5034%	753656	149310	5.0	3	6	25	0	9.0499E-09
8	2.52	LINDANE	0.0056	2.0609%	521809	93421	5.6	3	8	25	0	1.0761E-08
12	4.00	HEPTACHLOR	0.0062	2.2692%	697759	66784	10.4	2	12	25	0	8.8608E-09
14	4.92	ALDRIN	0.0116	4.2476%	1087056	95982	11.3	3	14	25	0	1.0646E-08
16	5.97	HEPTACHLOR EPOXIDE	0.0147	5.3847%	1636398	114312	14.3	2	16	25	0	8.9654E-09
17	7.40	ENDOSULFAN I	0.0173	6.3492%	1807501	109798	16.5	2	17	25	0	9.5706E-09
18	8.67	DIELDRIN	0.0172	6.3118%	1580983	84463	18.7	2	18	25	0	1.0877E-08
19	9.93	EN+ENDII	0.0633	23.2450%	6237220	181429	34.4	3	19	25	0	1.0154E-08
21	13.95	DDT	0.0401	14.7336%	3054111	99038	30.8	3	21	25	0	1.3144E-08
24	20.58	METHOXYCHLOR	0.0534	19.5845%	2423098	49688	48.8	1	24	25	0	2.2021E-08
25	25.77	ISTD	1.0000	0.0000%	2214744	36184	61.2	2	25	25	0	4.5152E-07
26	28.18	DIBUTYLCHLOR	0.0363	13.3101%	3009508	41238	73.0	2	26	25	0	1.2050E-08

TOTAL AMOUNT = 0.2725

Data File = a:es15.PTS Printed on 08-20-1989 at 06:22:53
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 23398 uv High Value: 207278 uv Scale factor: 1.0

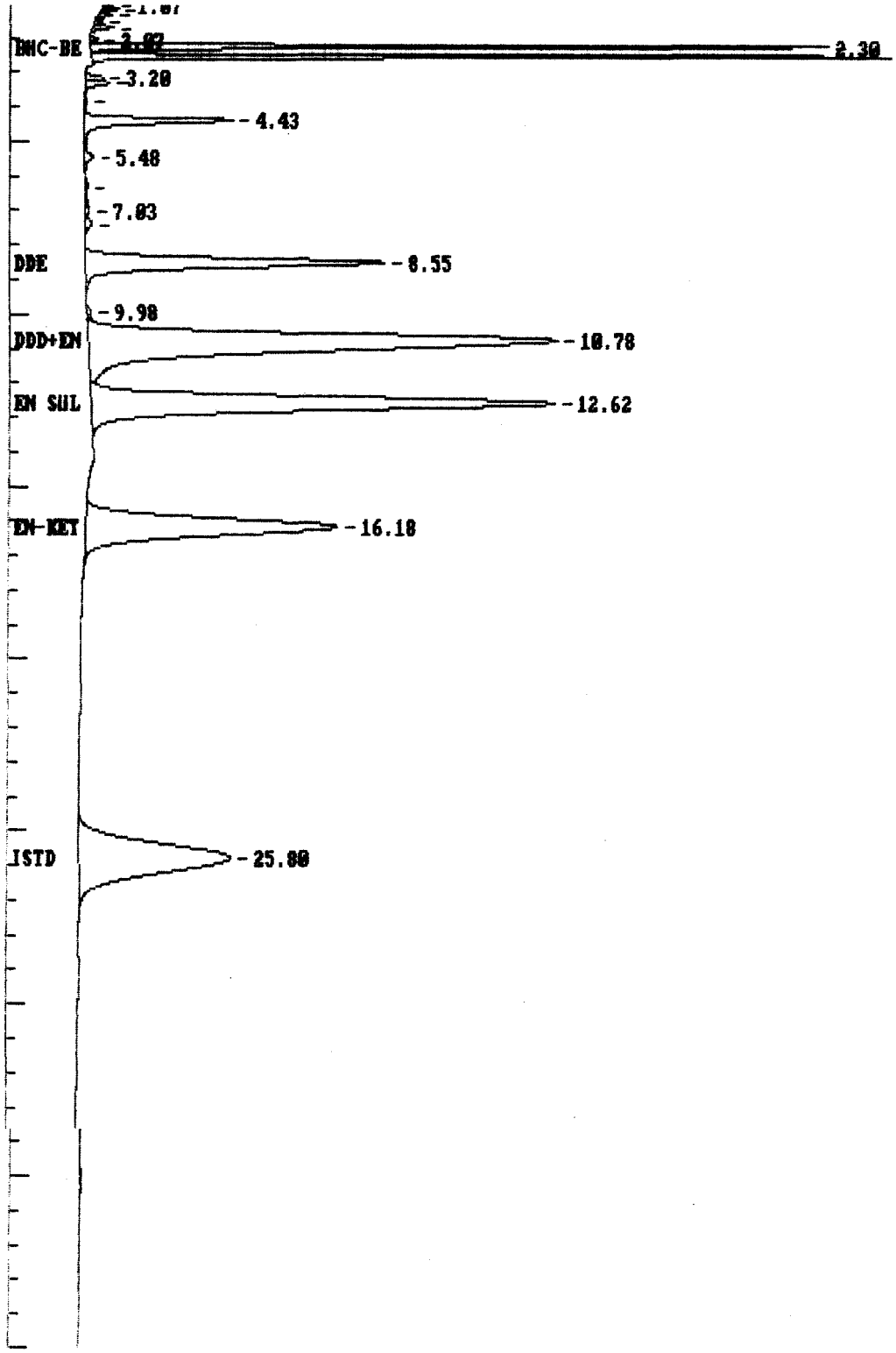


```
******   INTERNAL STANDARD TABLE   ******
******************** 08-20-1989 06:11:10 Version 4.1 **********************
* Sample Name: PEST B 3                          Data File: a:es11         *
* Date: 08-18-1989 15:47:07 Method: A:PESB-2 08-19-1989 12:59:47  #  105   *
* Interface: 0   Cycle#:  11   Operator NF  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY  *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN            *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                   *
*             Detector 0: ECD QUANT          Detector 1: ECD CONF         *
* Misc. Information: ~~QB4FY89~~ SF 6437                                  *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:    40.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:        1.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
7	2.30	BHC-BETA	0.0125	7.4627%	1045003	187466	5.6	2	7	22	0	1.1962E-08
8	2.58	BHC-DELTA	0.0100	5.9701%	1111290	203303	5.5	2	8	22	0	8.9986E-09
17	8.55	DDE	0.0150	8.9552%	1405826	76173	18.5	1	17	22	0	1.0670E-08
19	10.78	DDD+EN-ALD	0.0500	29.8508%	4096316	119268	34.3	2	19	22	0	1.2206E-08
20	12.62	EN SULFATE	0.0400	23.8806%	3217803	117756	27.3	2	20	22	0	1.2431E-08
21	16.18	EN-KETONE	0.0400	23.8806%	2179397	64114	34.0	1	21	22	0	1.8354E-08
22	25.80	ISTD	1.0000	0.0000%	2257916	38604	58.5	1	22	22	0	4.4289E-07

TOTAL AMOUNT = 0.1675

Data File = a:es11.PTS Printed on 08-20-1989 at 06:11:52
Start time: 1.00 min. Stop time: 40.00 min. Offset: 0 mv.
Low Value: 24017 uv High Value: 230374 uv Scale factor: 1.0

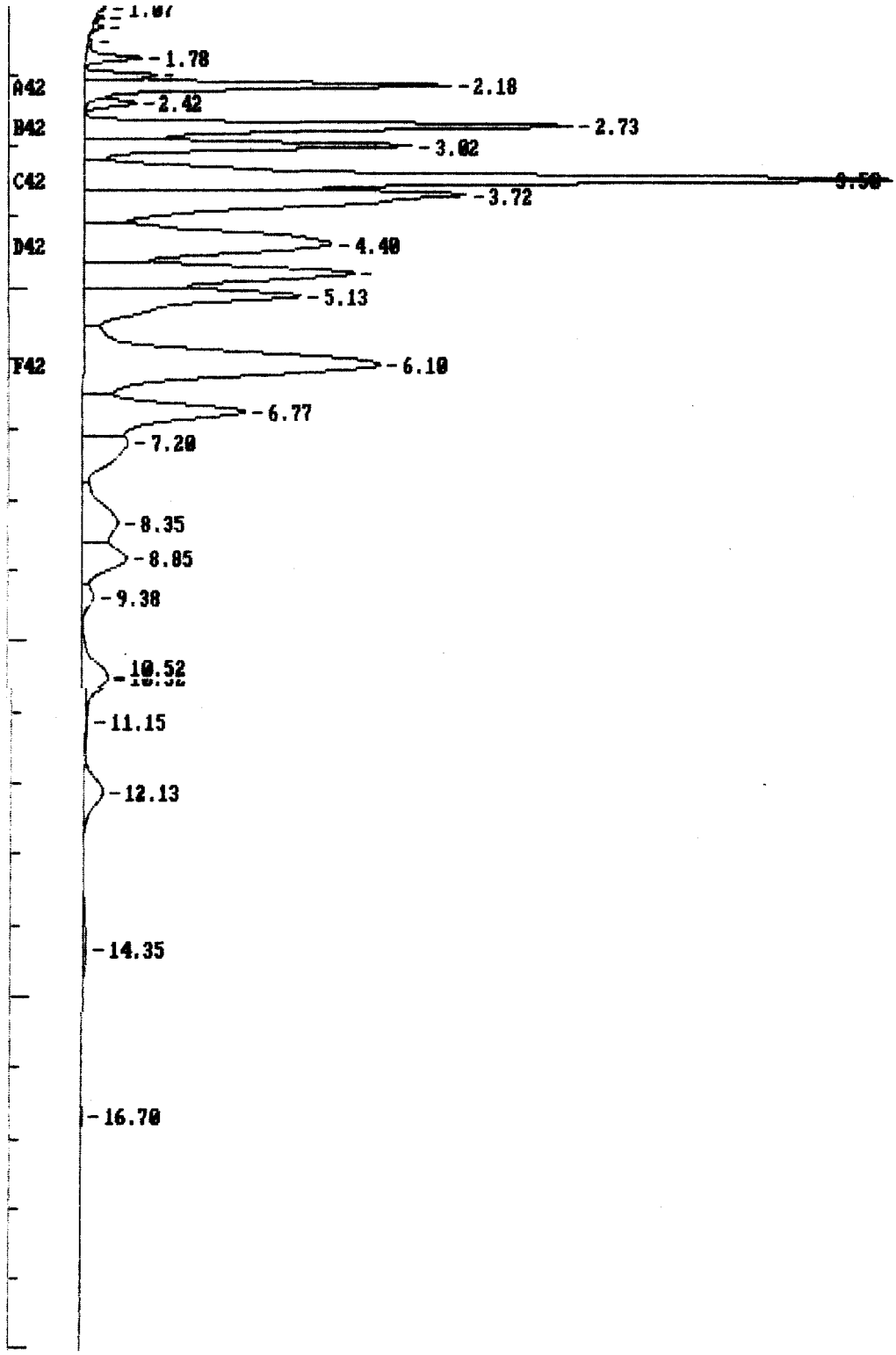


```
******   EXTERNAL STANDARD TABLE   ******
******************** 08-20-1989 06:14:55 Version 4.1 ********************
* Sample Name: A1242 4                          Data File: a:es12        *
* Date: 08-18-1989 16:28:35 Method: A:AR042-2 08-19-1989 13:07:52  #  56  *
* Interface: 0   Cycle#:  12   Operator NF  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HEWLETT-PACKARD      Column Type: MIXED PHASE-PRIMARY *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN           *
* Conditions: ISOTHERMAL AT 200 CELSIUS                                  *
*             Detector 0: ECD QUANT            Detector 1: ECD CONF      *
* Misc. Information: ~~QB4FY89~~ 3F6437                                  *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:   40.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:      1.00
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	% DELTA RET TIME	CONC/AREA
7	2.18	A42	0.0500	16.6667%	1176526	164916	7.1	3	7	0	4.2498E-08
9	2.73	B42	0.0500	16.6667%	1866539	219714	8.5	2	9	0	2.6788E-08
11	3.50	C42	0.0500	16.6667%	3964384	364478	10.9	2	11	0	1.2612E-08
13	4.40	D42	0.0500	16.6667%	2394326	111814	21.4	2	13	0	2.0883E-08
14	4.82	E42	0.0500	16.6667%	1820494	122225	14.9	2	14	0	2.7465E-08
16	6.10	F42	0.0500	16.6667%	3234438	133779	24.2	2	16	0	1.5459E-08

TOTAL AMOUNT = 0.3000

Data File = a:es12.PTS Printed on 08-20-1989 at 06:15:35
Start time: 1.00 min. Stop time: 20.00 min. Offset: 0 mv.
Low Value: 23914 uv High Value: 390996 uv Scale factor: 1.0



SF6437

Component	File A:SD8 Peak Area	File A:SD21 Peak Area	% RPD	File A:SD29 Peak Area	% RPD
Pesticides Mix A					
Alpha BHC	765699	764615	.14	768914	.41
Lindane	555189	583057	4.89	587465	5.64
Heptachlor	536510	669543	* 22.06	673976	* 22.71
Aldrin	1090383	1130742	3.63	1125572	3.17
Hept. Epox.	1474905	1469540	.36	1500245	1.70
Endosulfan I	1657547	1651023	.39	1707225	2.95
Dieldrin	1562929	1560966	.12	1721869	9.67
Endrin	1495085	1570880	4.94	1601160	6.85
Endosulfan II	3260533	3278887	.56	3294817	1.04
ODT	2837308	2761702	2.70	2873920	1.28
DBC	2409137	2443184	1.40	2433021 ~~2410213~~	.98
Methoxychlor	2395082	2362891	1.35	2483380	3.61

* Heptachlor RPD: baseline was drawn by the system differently for SD21 + SD29 from that of SD8.

NEW TIMED EVENTS FROM A:S21

***** INTERNAL STANDARD TABLE *****

********** 08-23-1989 07:40:54 Version 4.1 **********

* Sample Name: PES A 3 Data File: a:sd21 *
* Date: 08-19-1989 03:01:21 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 21 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

****

* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

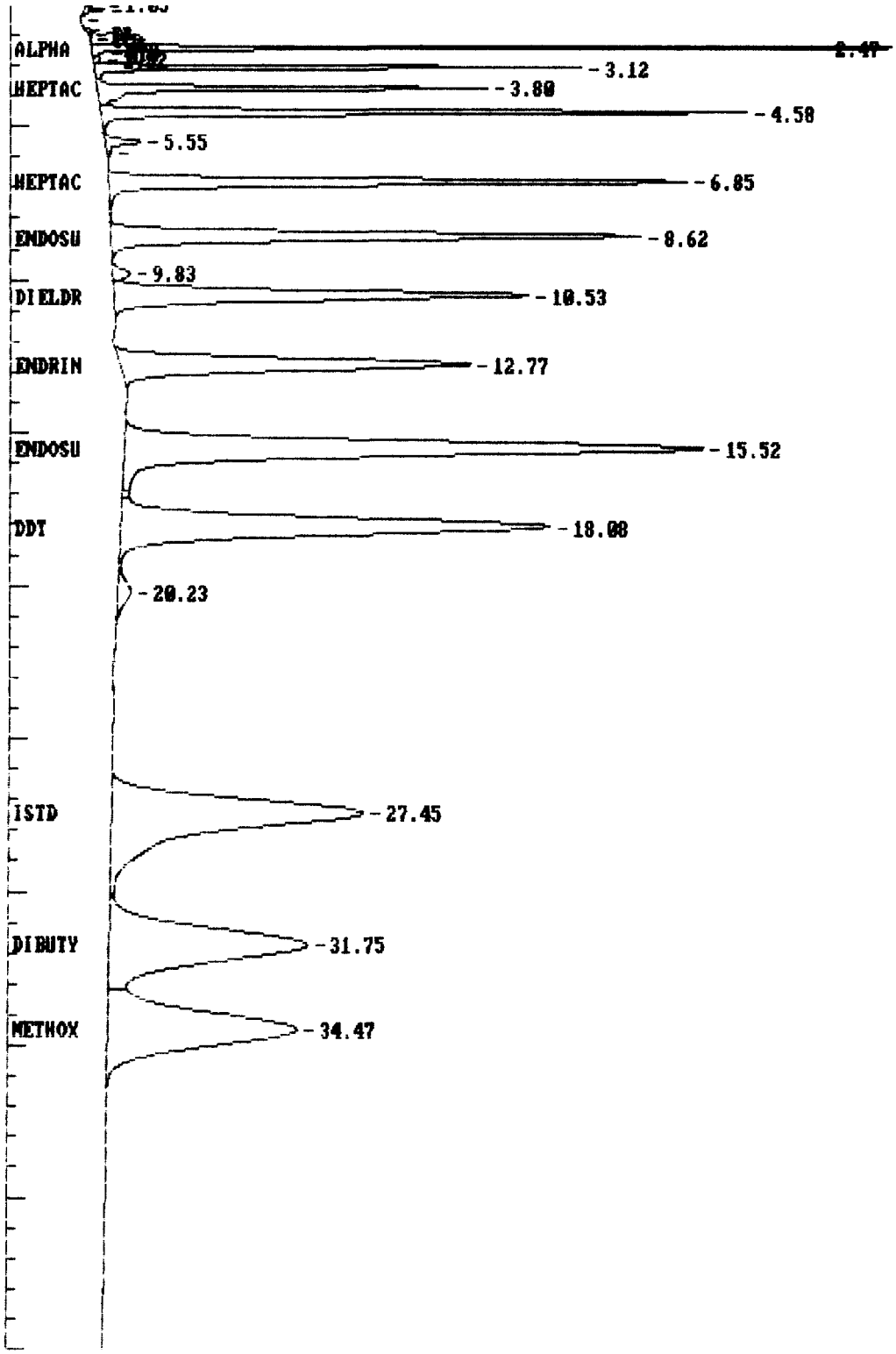
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
5	2.47	ALPHA BHC	0.0056	2.7357%	764615	130949	5.8	3	5	20	0	7.2641E-09
7	3.12	LINDANE	0.0046	2.2602%	583052	79647	7.3	2	7	20	0	7.8702E-09
8	3.80	HEPTACHLOR	0.0050	2.4680%	669543	63828	10.5	2	8	20	0	7.4836E-09
9	4.58	ALDRIN	0.0090	4.4135%	1130742	105803	10.7	2	9	20	0	7.9244E-09
12	6.85	HEPTACHLOR EPOXIDE	0.0113	5.5690%	1469540	94676	15.5	2	12	20	0	7.6938E-09
13	8.62	ENDOSULFAN I	0.0137	6.7267%	1651023	86719	19.0	2	13	20	0	8.2718E-09
15	10.53	DIELDRIN	0.0137	6.7587%	1560966	67808	23.0	2	15	20	0	8.7907E-09
16	12.77	ENDRIN	0.0236	11.6110%	1570880	57386	27.4	1	16	20	0	1.5006E-08
17	15.52	ENDOSU II	0.0275	13.5273%	3278887	94607	34.7	2	17	20	0	8.3760E-09
18	18.08	DDT	0.0264	13.0114%	2761702	70238	39.3	2	18	20	0	9.5653E-09
20	27.45	ISTD	1.0000	0.0000%	2932064	41227	71.1	2	20	20	0	3.4106E-07
21	31.75	DIBUTYLCHLOR	0.0284	14.0039%	2443184	32489	75.2	2	21	20	0	1.1637E-08
22	34.47	METHOXYCHLOR	0.0343	16.9146%	2362891	30980	76.3	2	22	20	0	1.4533E-08

TOTAL AMOUNT = 0.2030

Data File = a:sd21.PTS Printed on 08-23-1989 at 07:41:33
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 59107 uv High Value: 191793 uv Scale factor: 1.0



NEW TIMED EVENTS FROM A:
NEW TIMED EVENTS FROM A:S29

***** INTERNAL STANDARD TABLE *****

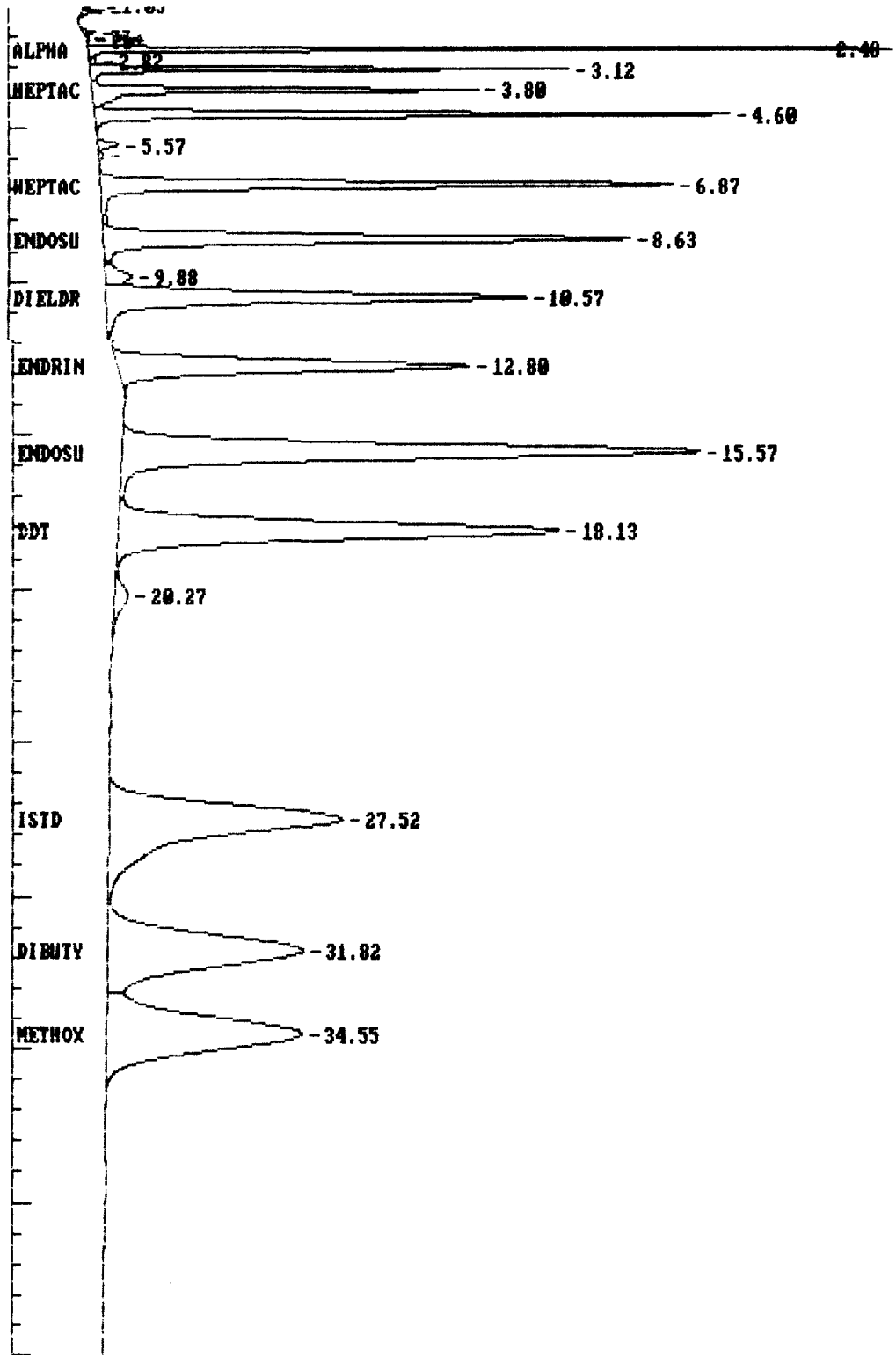
********** 08-23-1989 08:31:48 Version 4.1 **********
* Sample Name: PEST A 3 Data File: a:sd29 *
* Date: 08-19-1989 09:13:00 Method: A:PESA 08-18-1989 13:07:32 # 184 *
* Interface: 0 Cycle#: 29 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437:ESTWING MFG. CO. *
****

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
4	2.48	ALPHA BHC	0.0059	2.6720%	768914	134131	5.7	3	4	19	0	7.6417E-09
6	3.12	LINDANE	0.0049	2.2127%	587465	79640	7.4	2	6	19	0	8.2827E-09
7	3.80	HEPTACHLOR	0.0053	2.4182%	673976	64326	10.5	2	7	19	0	7.8899E-09
8	4.60	ALDRIN	0.0094	4.2703%	1125572	105685	10.7	2	8	19	0	8.3428E-09
11	6.87	HEPTACHLOR EPOXIDE	0.0122	5.5351%	1500245	95291	15.7	2	11	19	0	8.1131E-09
12	8.63	ENDOSULFAN I	0.0149	6.7747%	1707225	87755	19.5	2	12	19	0	8.7263E-09
14	10.57	DIELDRIN	0.0160	7.2696%	1721869	70042	24.6	2	14	19	0	9.2841E-09
15	12.80	ENDRIN	0.0253	11.5063%	1601160	58607	27.3	1	15	19	0	1.5803E-08
16	15.57	ENDOSU II	0.0291	13.2236%	3294817	96306	34.2	2	16	19	0	8.8257E-09
17	18.13	DDT	0.0289	13.1239%	2873920	73541	39.1	2	17	19	0	1.0042E-08
19	27.52	ISTD	1.0000	0.0000%	2779643	38868	71.5	2	19	19	0	3.5976E-07
20	31.82	DIBUTYLCHLOR	0.0300	13.6278%	2433021	32621	74.6	2	20	19	0	1.2317E-08
21	34.55	METHOXYCHLOR	0.0382	17.3658%	2483380	32544	76.3	2	21	19	0	1.5377E-08

TOTAL AMOUNT = 0.2199

Data File = a:sd29.PTS Printed on 08-23-1989 at 08:32:31
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 60043 uv High Value: 195721 uv Scale factor: 1.0



Component Pesticide Mix B	Initial Cal. File A:5013	File A:5022	%RPD	File A:5030	%RPD
Beta-BHC	996764	970480	1.64	984969	1.19
Delta-BHC	987167	1001802	1.41	1001907	1.48
DDE	1435636	1457560	1.51	1445379	.67
DDD	2101670	2123919	1.05	2118719	.80
Endrin Ald.	2090492	2068888	1.03	2057388	1.59
Endr. Sulfate	2421231	2497548	3.10	2515903	3.83
Endrin Ketone	2109506	2179223	3.25	2184508	3.49

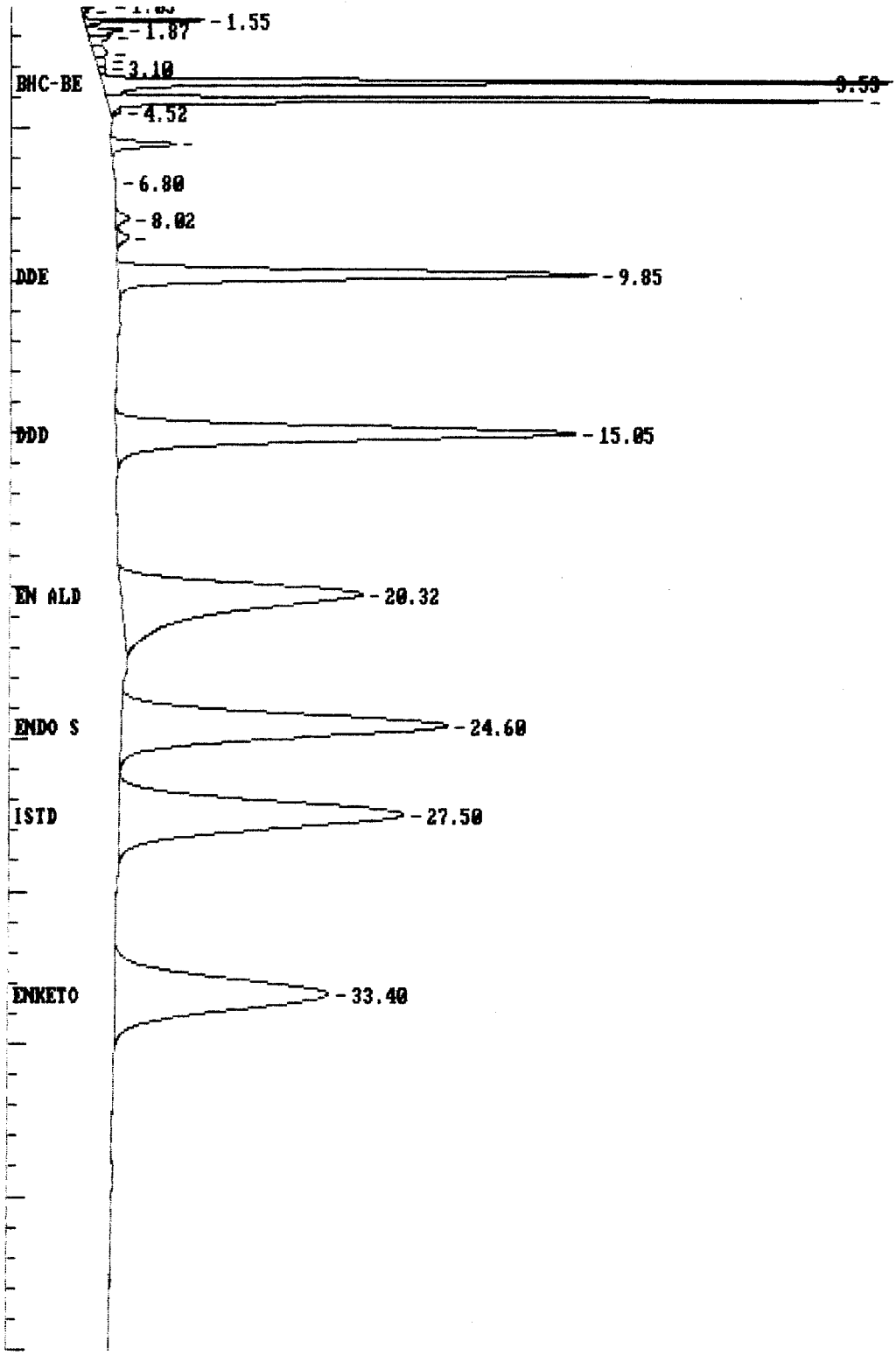
INTERNAL STANDARD TABLE

```
********************* 08-19-1989 08:12:03 Version 4.1 ************************
* Sample Name: PEST B 3                          Data File: A:SD13            *
* Date: 08-18-1989 20:49:31 Method: A:PESB 08-19-1989 07:44:44  #  126       *
* Interface: 0   Cycle#:  13   Operator NF  Channel#: 0    Vial#: N.A.       *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100               *
*****************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE      *
*            Solvent Description: ULTRA HIGH PURITY NITROGEN                 *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                            *
*           Detector 0: ECD QUANT          Detector 1: ECD CONFM             *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                          *
*****************************************************************************
Starting Delay:    1.00                    Ending retention time:    45.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:        1.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
9	3.53	BHC-BETA	0.0125	7.4627%	996764	110745	9.0	2	9	20	0	1.2541E-08
10	4.12	BHC-DELTA	0.0100	5.9701%	987107	105694	9.3	3	10	20	0	1.0131E-08
16	9.85	DDE	0.0150	8.9552%	1435636	66976	21.4	1	16	20	0	1.0448E-08
17	15.05	DDD	0.0250	14.9254%	2101670	64381	32.6	1	17	20	0	1.1895E-08
18	20.32	EN ALDEHYDE	0.0250	14.9254%	2090492	33913	61.6	1	18	20	0	1.1959E-08
19	24.60	ENDO SULFATE	0.0400	23.8806%	2421231	45836	52.8	1	19	20	0	1.6521E-08
20	27.50	ISTD	1.0000	0.0000%	2480434	39879	62.2	1	20	20	0	4.0316E-07
21	33.40	ENKETONE	0.0400	23.8806%	2109506	29952	70.4	1	21	20	0	1.8962E-08

TOTAL AMOUNT = 0.1675

Data File = A:SD13.PTS Printed on 08-19-1989 at 08:12:38
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 58052 uv High Value: 171758 uv Scale factor: 1.0

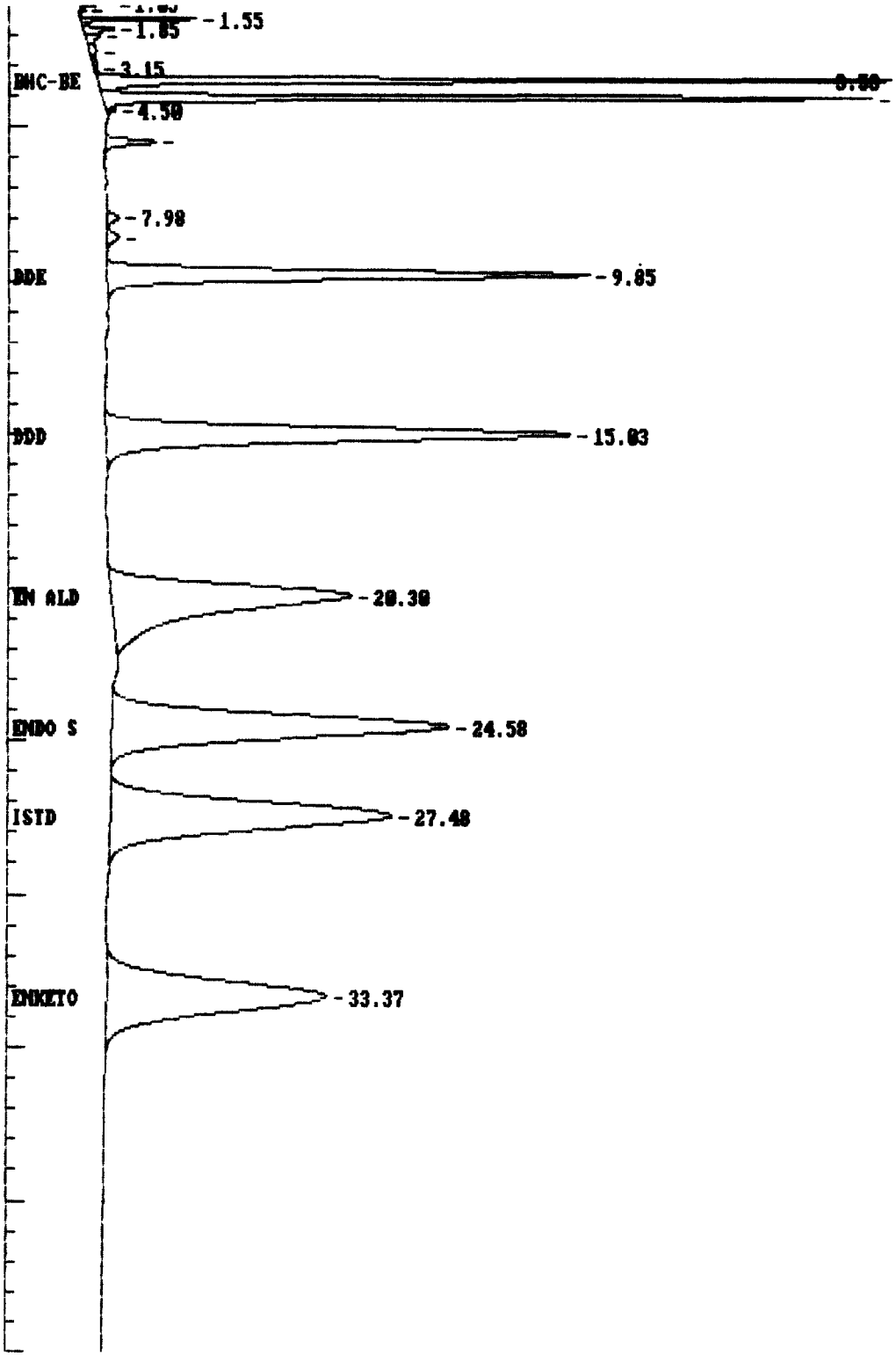


```
*****   INTERNAL STANDARD TABLE   *****
******************** 08-23-1989 08:50:23 Version 4.1 ********************
* Sample Name: PES B 3                          Data File: a:sd22        *
* Date: 08-19-1989 03:47:48 Method: A:PESB 08-19-1989 07:44:44  #  126   *
* Interface: 0   Cycle#:  22   Operator NF  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE  *
*              Solvent Description: ULTRA HIGH PURITY NITROGEN           *
* Conditions: ISOTHERMAL AT 200 CELSIUS  INJ 250C                        *
*            Detector 0: ECD QUANT          Detector 1: ECD CONFM        *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO.                      *
*************************************************************************
Starting Delay:    1.00                    Ending retention time:   45.00
Area reject:        0                      One sample per   1.000 sec.
Amount injected:        5.00               Dilution factor:        1.00
Internal Standard Amount:  1
Sample Weight:          1.000000
```

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	3.53	BHC-BETA	0.0124	7.2217%	980480	111330	8.8	2	8	18	0	1.2650E-08
9	4.12	BHC-DELTA	0.0102	5.9607%	1001802	107741	9.3	3	9	18	0	1.0219E-08
14	9.85	DDE	0.0154	8.9444%	1457560	67638	21.5	1	14	18	0	1.0539E-08
15	15.03	DDD	0.0255	14.8386%	2123919	65029	32.7	1	15	18	0	1.1999E-08
16	20.30	EN ALDEHYDE	0.0250	14.5314%	2068888	33731	61.3	1	16	18	0	1.2063E-08
17	24.58	ENDO SULFATE	0.0416	24.2336%	2497548	47286	52.8	1	17	18	0	1.6664E-08
18	27.48	ISTD	1.0000	0.0000%	2459069	39490	62.3	1	18	18	0	4.0666E-07
19	33.37	ENKETONE	0.0417	24.2695%	2179223	30834	70.7	1	19	18	0	1.9127E-08

TOTAL AMOUNT = 0.1717

Data File = a:sd22.PTS Printed on 08-23-1989 at 08:50:59
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 59749 uv High Value: 173666 uv Scale factor: 1.0



***** INTERNAL STANDARD TABLE *****

********** 08-19-1989 11:24:40 Version 4.1 **********

* Sample Name: PEST B 3 Data File: A:SD30 *
* Date: 08-19-1989 09:59:26 Method: A:PESB 08-19-1989 07:44:44 # 126 *
* Interface: 0 Cycle#: 30 Operator NF Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

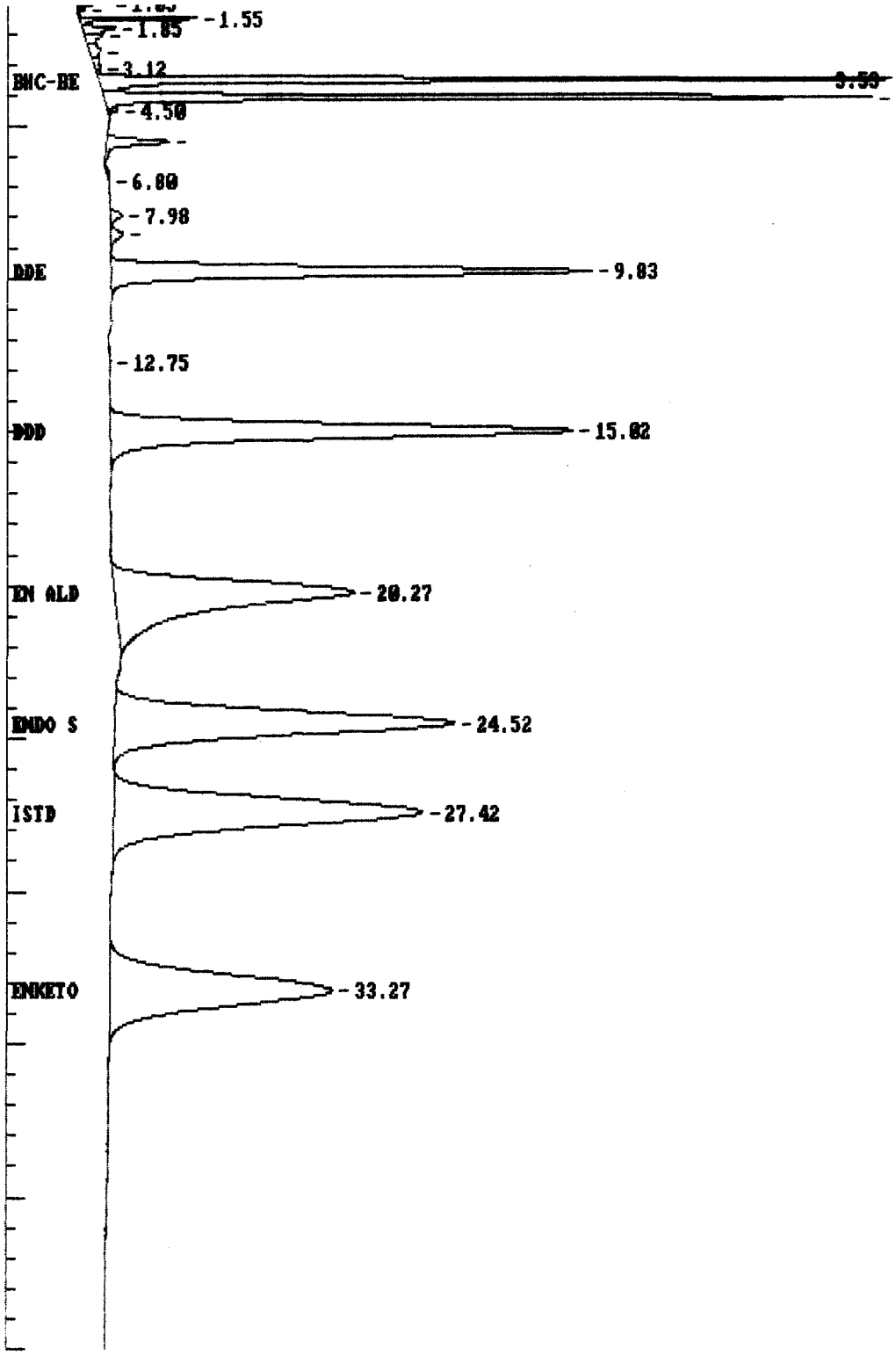
* Instrument Type: HEWLETT PACKARD 5890 Column Type: MIXED PHASE/SINGLE *
* Solvent Description: ULTRA HIGH PURITY NITROGEN *
* Conditions: ISOTHERMAL AT 200 CELSIUS INJ 250C *
* Detector 0: ECD QUANT Detector 1: ECD CONFM *
* Misc. Information: GC #1 SF 6437;ESTWING MFG, CO. *

Starting Delay: 1.00 Ending retention time: 45.00
Area reject: 0 One sample per 1.000 sec.
Amount injected: 5.00 Dilution factor: 1.00
Internal Standard Amount: 1
Sample Weight: 1.000000

PEAK NUM	RET TIME	PEAK NAME	CONCENTRATION in UG/L	NORMALIZED CONC	AREA	HEIGHT	AREA/ HEIGHT	BL	REF PEAK	INT.STD PEAK	% DELTA RET TIME	CONC/AREA
8	3.53	BHC-BETA	0.0114	7.2490%	984969	111377	8.8	2	8	20	0	1.1585E-08
9	4.12	BHC-DELTA	0.0094	5.9566%	1001902	107757	9.3	3	9	20	0	9.3590E-09
15	9.83	DDE	0.0140	8.8627%	1445379	67354	21.5	1	15	20	0	9.6525E-09
17	15.02	DDD	0.0233	14.7907%	2118719	64874	32.7	1	17	20	0	1.0989E-08
18	20.27	EN ALDEHYDE	0.0227	14.4393%	2057380	33656	61.1	1	18	20	0	1.1048E-08
19	24.52	ENDO SULFATE	0.0384	24.3925%	2515903	47659	52.8	1	19	20	0	1.5262E-08
20	27.42	ISTD	1.0000	0.0000%	2684937	43296	62.0	1	20	20	0	3.7245E-07
21	33.27	ENKETONE	0.0383	24.3092%	2184508	31096	70.2	1	21	20	0	1.7518E-08

TOTAL AMOUNT = 0.1574

Data File = A:SD30.PTS Printed on 08-19-1989 at 11:25:35
Start time: 1.00 min. Stop time: 45.00 min. Offset: 0 mv.
Low Value: 58737 uv High Value: 173068 uv Scale factor: 1.0



U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

___ Graph

✓ Mail receipts

___ Sample tags

II. Image Quality (Pages follow)

___ Resolution / Contrast

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: 9/18/89

SUBJECT: Review of Region 5 data for PSTwins Mfg. Co

FROM: Curtis Ross, Director
Region 5 Central Regional Laboratory

To: Data User:

Attached are the results for:

CRL Data Set Numbers: SF6437
Sample Numbers: 89FM26595-597, 89FM26D95, 89FM11R66 (5)
Parameter(s): ABN-WATER
Laboratory: CRL/WESTON ESAT

Results Status:

(X) DATA ACCEPTABLE FOR USE*
( ) DATA QUALIFIED AS TO USE
( ) DATA UNACCEPTABLE FOR USE

* For data acceptability requirements, refer to the method capability statement for the methods referenced.

Comments by the Quality Control Coordinator:

If there are any questions regarding the data, refer them to Steve Parker, the Quality Control Coordinator, at 353-3805.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
(5SCRL)

TRANSMITTED BY
SEP 18 1989
U.S. EPA CENTRAL REGIONAL LAB

RECEIVED BY/DATE: 9/19/89

Comments:

ESAT CONTRACT **TID NO:** 08-11
TASK NO: ~~1140~~ 1139
RLJ 5/30/89

DATASET CUSTODY TRANSFER FORM

Analytical testing was completed on Aug 15, 1989 for:

DATASET NO: SF6437 **SITE NAME:** Estwing Mfg. CO.

PARAMETER : ABN

MATRIX : WATER **SF DU/ACT NO: TFA** 202 **Y** ____ **/C** ____

SAMPLE NUMBERS: 89FM26S95-S97, 89FM26D95, 89FM11R66 **NUMBER OF SAMPLES:** 5

ESAT APPROVALS:

Kelly M. Head 8/28/89 — (ANALYST DATE)
Mona Wilson - for Carsten Falkenberg 8/30/89 — (TEAM LEADER DATE)
Richard [illegible] 8/29/89 — (QC COORDINATOR DATE)
[illegible] 8/30/89 — (ESAT TEAM MANAGER DATE)

COMMENTS: ____

The subject dataset was transferred to the custody of the U.S. EPA Region V Central Regional Laboratory in its entirety on the date indicated below.

Kelly M. Head 8/30/89 — (DELIVERED BY DATE)
Babu Parmeshwar 11:10 am 8/30/89 — (RECEIVED BY DATE)

EPA APPROVALS:

A. Alwan 9/1/89 — (EPA TASK MONITOR DATE)

[X] Reviewed
[ ] Unreviewed
[X] Accepted
[ ] Rejected
[ ] Returned/____ (Date)

COMMENTS: Rating 3 & 3
LIMS 9/8, 1 hr
9/13

(SECTION CHIEF DATE) [ ] Reviewed [ ] Unreviewed

(ESAT DPO DATE) ____/____/____ (DATA COORD'R REC'D TRANSMTD)

DOC.NO.: ESAT-05-0003-FORM
REVISION NO.: 05 (04/05/89) **FILE LOCATION NUMBER:** 5.6.1

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

METH BLNK

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: METH BLNK

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH310

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	2.	IU
111-44-4	bis(2-Chloroethyl)Ether	2.	IU
95-57-8	2-Chlorophenol	2.	IU
541-73-1	1,3-Dichlorobenzene	2.	IU
106-46-7	1,4-Dichlorobenzene	2.	IU
100-51-6	Benzyl alcohol	2.	IU
95-50-1	1,2-Dichlorobenzene	3.	IU
95-48-7	2-Methylphenol	1.	IU
39638-32-9	bis(2-chloroisopropyl)ether	3.	IU X
106-44-5	4-Methylphenol	1.	IU
621-64-7	N-Nitroso-Di-n-propylamine	2.	IU X
67-72-1	Hexachloroethane	2.	IU
98-95-3	Nitrobenzene	3.	IU
78-59-1	Isophorone	3.	IU
88-75-5	2-Nitrophenol	2.	IU
105-67-9	2,4-Dimethylphenol	2.	IU
65-85-0	Benzoic acid	30.	IU
111-91-1	bis(2-Chloroethoxy)methane	3.	IU
120-83-2	2,4-Dichlorophenol	2.	IU
120-82-1	1,2,4-Trichlorobenzene	2.	IU
91-20-3	Naphthalene	2.	IU
106-47-8	4-Chloroaniline	2.	IU
87-68-3	Hexachlorobutadiene	3.	IU
59-50-7	4-Chloro-3-methylphenol	2.	IU
91-57-6	2-Methylnaphthalene	2.	IU
77-47-4	Hexachlorocyclopentadiene	2.	IU
88-06-2	2,4,6-Trichlorophenol	2.	IU
95-95-4	2,4,5-Trichlorophenol	2.	IU
91-58-7	2-Chloronaphthalene	2.	IU
88-74-4	2-Nitroaniline	3.	IU
131-11-3	Dimethylphthalate	2.	IU
208-96-8	Acenaphthylene	2.	IU
606-20-2	2,6-Dinitrotoluene	1.	IU

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

METH BLNK

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: METH BLNK

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH310

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	3.	U
83-32-9	Acenaphthene	2.	U
51-28-5	2,4-Dinitrophenol	15.	U
100-02-7	4-Nitrophenol	2.	U
132-64-9	Dibenzofuran	1.	U
121-14-2	2,4-Dinitrotoluene	1.	U
84-66-2	Diethylphthalate	1.	U
7005-72-3	4-Chlorophenyl-phenylether	1.	U
86-73-7	Fluorene	1.	U
100-01-6	4-Nitroaniline	3.	U
534-52-1	4,6-Dinitro-2-methylphenol	15.	U
86-30-6	N-Nitrosodiphenylamine (1)	2.	U
101-55-3	4-Bromophenyl-phenylether	2.	U
118-74-1	Hexachlorobenzene	2.	U
87-86-5	Pentachlorophenol	2.	U
85-01-8	Phenanthrene	1.	U
120-12-7	Anthracene	3.	U
84-74-2	Di-n-butylphthalate	2.	U
206-44-0	Fluoranthene	2.	U
129-00-0	Pyrene	2.	U
85-68-7	Butylbenzylphthalate	4.	U
56-55-3	Benzo(a)anthracene	2.	U
218-01-9	Chrysene	2.	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U
117-84-0	Di-n-octylphthalate	2.	U
205-99-2	Benzo(b)fluoranthene	2.	U
207-08-9	Benzo(k)fluoranthene	2.	U
50-32-8	Benzo(a)pyrene	2.	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U
53-70-3	Dibenzo(a,h)anthracene	3.	U
191-24-2	Benzo(g,h,i)perylene	4.	U

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S95

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S95

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH315

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/16/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
108-95-2	Phenol	2.	U
111-44-4	bis(2-Chloroethyl)Ether	2.	U
95-57-8	2-Chlorophenol	2.	U
541-73-1	1,3-Dichlorobenzene	2.	U
106-46-7	1,4-Dichlorobenzene	2.	U
100-51-6	Benzyl alcohol	2.	U
95-50-1	1,2-Dichlorobenzene	3.	U
95-48-7	2-Methylphenol	1.	U
39638-32-9	bis(2-chloroisopropyl)ether	3.	U
106-44-5	4-Methylphenol	1.	U
621-64-7	N-Nitroso-Di-n-propylamine	2.	U
67-72-1	Hexachloroethane	2.	U
98-95-3	Nitrobenzene	3.	U X
78-59-1	Isophorone	3.	U
88-75-5	2-Nitrophenol	2.	U
105-67-9	2,4-Dimethylphenol	2.	U
65-85-0	Benzoic acid	30.	U
111-91-1	bis(2-Chloroethoxy)methane	3.	U
120-83-2	2,4-Dichlorophenol	2.	U
120-82-1	1,2,4-Trichlorobenzene	2.	U
91-20-3	Naphthalene	2.	U
106-47-8	4-Chloroaniline	2.	U
87-68-3	Hexachlorobutadiene	3.	U
59-50-7	4-Chloro-3-methylphenol	2.	U
91-57-6	2-Methylnaphthalene	2.	U
77-47-4	Hexachlorocyclopentadiene	2.	U
88-06-2	2,4,6-Trichlorophenol	2.	U
95-95-4	2,4,5-Trichlorophenol	2.	U
91-58-7	2-Chloronaphthalene	2.	U
88-74-4	2-Nitroaniline	3.	U
131-11-3	Dimethylphthalate	2.	U
208-96-8	Acenaphthylene	2.	U
606-20-2	2,6-Dinitrotoluene	1.	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S95

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S95

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH315

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/16/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	3.	U
83-32-9	Acenaphthene	2.	U
51-28-5	2,4-Dinitrophenol	15.	U
100-02-7	4-Nitrophenol	2.	U
132-64-9	Dibenzofuran	1.	U
121-14-2	2,4-Dinitrotoluene	1.	U
84-66-2	Diethylphthalate	1.	U
7005-72-3	4-Chlorophenyl-phenylether	1.	U
86-73-7	Fluorene	1.	U
100-01-6	4-Nitroaniline	3.	U
534-52-1	4,6-Dinitro-2-methylphenol	15.	U
86-30-6	N-Nitrosodiphenylamine (1)	2.	U
101-55-3	4-Bromophenyl-phenylether	2.	U
118-74-1	Hexachlorobenzene	2.	U
87-86-5	Pentachlorophenol	2.	U
85-01-8	Phenanthrene	1.	U
120-12-7	Anthracene	3.	U
84-74-2	Di-n-butylphthalate	2.	U
206-44-0	Fluoranthene	2.	U
129-00-0	Pyrene	2.	U
85-68-7	Butylbenzylphthalate	4.	U
56-55-3	Benzo(a)anthracene	2.	U
218-01-9	Chrysene	2.	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U
117-84-0	Di-n-octylphthalate	2.	U
205-99-2	Benzo(b)fluoranthene	2.	U
207-08-9	Benzo(k)fluoranthene	2.	U
50-32-8	Benzo(a)pyrene	2.	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U
53-70-3	Dibenzo(a,h)anthracene	3.	U
191-24-2	Benzo(g,h,i)perylene	4.	U

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26D95

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26D95

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH314

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
108-95-2	Phenol	2.	U	X
111-44-4	bis(2-Chloroethyl)Ether	2.	U	
95-57-8	2-Chlorophenol	2.	U	
541-73-1	1,3-Dichlorobenzene	2.	U	
106-46-7	1,4-Dichlorobenzene	2.	U	
100-51-6	Benzyl alcohol	2.	U	
95-50-1	1,2-Dichlorobenzene	3.	U	
95-48-7	2-Methylphenol	1.	U	
39638-32-9	bis(2-chloroisopropyl)ether	3.	U	X
106-44-5	4-Methylphenol	1.	U	
621-64-7	N-Nitroso-Di-n-propylamine	2.	U	X
67-72-1	Hexachloroethane	2.	U	
98-95-3	Nitrobenzene	3.	U	
78-59-1	Isophorone	3.	U	
88-75-5	2-Nitrophenol	2.	U	
105-67-9	2,4-Dimethylphenol	2.	U	
65-85-0	Benzoic acid	30.	U	
111-91-1	bis(2-Chloroethoxy)methane	3.	U	
120-83-2	2,4-Dichlorophenol	2.	U	
120-82-1	1,2,4-Trichlorobenzene	2.	U	
91-20-3	Naphthalene	2.	U	
106-47-8	4-Chloroaniline	2.	U	
87-68-3	Hexachlorobutadiene	3.	U	
59-50-7	4-Chloro-3-methylphenol	2.	U	
91-57-6	2-Methylnaphthalene	2.	U	
77-47-4	Hexachlorocyclopentadiene	2.	U	
88-06-2	2,4,6-Trichlorophenol	2.	U	
95-95-4	2,4,5-Trichlorophenol	2.	U	
91-58-7	2-Chloronaphthalene	2.	U	
88-74-4	2-Nitroaniline	3.	U	
131-11-3	Dimethylphthalate	2.	U	
208-96-8	Acenaphthylene	2.	U	
606-20-2	2,6-Dinitrotoluene	1.	U	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26D95

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26D95

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH314

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	3.	U
83-32-9	Acenaphthene	2.	U
51-28-5	2,4-Dinitrophenol	15.	U
100-02-7	4-Nitrophenol	2.	U
132-64-9	Dibenzofuran	1.	U
121-14-2	2,4-Dinitrotoluene	1.	U
84-66-2	Diethylphthalate	1.	U
7005-72-3	4-Chlorophenyl-phenylether	1.	U
86-73-7	Fluorene	1.	U
100-01-6	4-Nitroaniline	3.	U
534-52-1	4,6-Dinitro-2-methylphenol	15.	U
86-30-6	N-Nitrosodiphenylamine (1)	2.	U
101-55-3	4-Bromophenyl-phenylether	2.	U
118-74-1	Hexachlorobenzene	2.	U
87-86-5	Pentachlorophenol	2.	U
85-01-8	Phenanthrene	1.	U
120-12-7	Anthracene	3.	U
84-74-2	Di-n-butylphthalate	2.	U
206-44-0	Fluoranthene	2.	U
129-00-0	Pyrene	2.	U
85-68-7	Butylbenzylphthalate	4.	U
56-55-3	Benzo(a)anthracene	2.	U
218-01-9	Chrysene	2.	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U
117-84-0	Di-n-octylphthalate	2.	U
205-99-2	Benzo(b)fluoranthene	2.	U
207-08-9	Benzo(k)fluoranthene	2.	U
50-32-8	Benzo(a)pyrene	2.	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U
53-70-3	Dibenzo(a,h)anthracene	3.	U
191-24-2	Benzo(g,h,i)perylene	4.	U

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S96

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S96

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH313

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
108-95-2	Phenol	2.	U	
111-44-4	bis(2-Chloroethyl)Ether	2.	U	
95-57-8	2-Chlorophenol	2.	U	
541-73-1	1,3-Dichlorobenzene	2.	U	
106-46-7	1,4-Dichlorobenzene	2.	U	
100-51-6	Benzyl alcohol	2.	U	
95-50-1	1,2-Dichlorobenzene	3.	U	
95-48-7	2-Methylphenol	1.	U	
39638-32-9	bis(2-chloroisopropyl)ether	3.	U	
106-44-5	4-Methylphenol	1.	U	
621-64-7	N-Nitroso-Di-n-propylamine	2.	U	X
67-72-1	Hexachloroethane	2.	U	
98-95-3	Nitrobenzene	3.	U	
78-59-1	Isophorone	3.	U	
88-75-5	2-Nitrophenol	2.	U	
105-67-9	2,4-Dimethylphenol	2.	U	
65-85-0	Benzoic acid	30.	U	X
111-91-1	bis(2-Chloroethoxy)methane	3.	U	
120-83-2	2,4-Dichlorophenol	2.	U	
120-82-1	1,2,4-Trichlorobenzene	2.	U	
91-20-3	Naphthalene	2.	U	
106-47-8	4-Chloroaniline	2.	U	
87-68-3	Hexachlorobutadiene	3.	U	
59-50-7	4-Chloro-3-methylphenol	2.	U	
91-57-6	2-Methylnaphthalene	2.	U	
77-47-4	Hexachlorocyclopentadiene	2.	U	
88-06-2	2,4,6-Trichlorophenol	2.	U	
95-95-4	2,4,5-Trichlorophenol	2.	U	
91-58-7	2-Chloronaphthalene	2.	U	
88-74-4	2-Nitroaniline	3.	U	
131-11-3	Dimethylphthalate	2.	U	
208-96-8	Acenaphthylene	2.	U	
606-20-2	2,6-Dinitrotoluene	1.	U	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S96

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S96

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH313

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	3.	U
83-32-9	Acenaphthene	2.	U
51-28-5	2,4-Dinitrophenol	15.	U
100-02-7	4-Nitrophenol	2.	U X
132-64-9	Dibenzofuran	1.	U
121-14-2	2,4-Dinitrotoluene	1.	U
84-66-2	Diethylphthalate	1.	U
7005-72-3	4-Chlorophenyl-phenylether	1.	U
86-73-7	Fluorene	1.	U
100-01-6	4-Nitroaniline	3.	U
534-52-1	4,6-Dinitro-2-methylphenol	15.	U
86-30-6	N-Nitrosodiphenylamine (1)	2.	U
101-55-3	4-Bromophenyl-phenylether	2.	U
118-74-1	Hexachlorobenzene	2.	U
87-86-5	Pentachlorophenol	2.	U
85-01-8	Phenanthrene	1.	U
120-12-7	Anthracene	3.	U
84-74-2	Di-n-butylphthalate	2.	U
206-44-0	Fluoranthene	2.	U
129-00-0	Pyrene	2.	U
85-68-7	Butylbenzylphthalate	4.	U
56-55-3	Benzo(a)anthracene	2.	U
218-01-9	Chrysene	2.	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U
117-84-0	Di-n-octylphthalate	2.	U
205-99-2	Benzo(b)fluoranthene	2.	U
207-08-9	Benzo(k)fluoranthene	2.	U
50-32-8	Benzo(a)pyrene	2.	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U
53-70-3	Dibenzo(a,h)anthracene	3.	U
191-24-2	Benzo(g,h,i)perylene	4.	U

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S97

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S97

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH316

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/16/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L		Q
108-95-2	Phenol	2.	U	
111-44-4	bis(2-Chloroethyl)Ether	2.	U	X
95-57-8	2-Chlorophenol	2.	U	
541-73-1	1,3-Dichlorobenzene	2.	U	
106-46-7	1,4-Dichlorobenzene	2.	U	
100-51-6	Benzyl alcohol	2.	U	
95-50-1	1,2-Dichlorobenzene	3.	U	
95-48-7	2-Methylphenol	1.	U	
39638-32-9	bis(2-chloroisopropyl)ether	3.	U	X
106-44-5	4-Methylphenol	1.	U	
621-64-7	N-Nitroso-Di-n-propylamine	2.	U	X
67-72-1	Hexachloroethane	2.	U	
98-95-3	Nitrobenzene	3.	U	
78-59-1	Isophorone	3.	U	
88-75-5	2-Nitrophenol	2.	U	
105-67-9	2,4-Dimethylphenol	2.	U	
65-85-0	Benzoic acid	30.	U	X
111-91-1	bis(2-Chloroethoxy)methane	3.	U	
120-83-2	2,4-Dichlorophenol	2.	U	
120-82-1	1,2,4-Trichlorobenzene	2.	U	
91-20-3	Naphthalene	2.	U	
106-47-8	4-Chloroaniline	2.	U	
87-68-3	Hexachlorobutadiene	3.	U	
59-50-7	4-Chloro-3-methylphenol	2.	U	
91-57-6	2-Methylnaphthalene	2.	U	
77-47-4	Hexachlorocyclopentadiene	2.	U	
88-06-2	2,4,6-Trichlorophenol	2.	U	
95-95-4	2,4,5-Trichlorophenol	2.	U	
91-58-7	2-Chloronaphthalene	2.	U	
88-74-4	2-Nitroaniline	3.	U	
131-11-3	Dimethylphthalate	2.	U	
208-96-8	Acenaphthylene	2.	U	
606-20-2	2,6-Dinitrotoluene	1.	U	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S97

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S97

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH316

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/16/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	3.	U
83-32-9	Acenaphthene	2.	U
51-28-5	2,4-Dinitrophenol	15.	U
100-02-7	4-Nitrophenol	2.	U
132-64-9	Dibenzofuran	1.	U
121-14-2	2,4-Dinitrotoluene	1.	U
84-66-2	Diethylphthalate	1.	U
7005-72-3	4-Chlorophenyl-phenylether	1.	U
86-73-7	Fluorene	1.	U
100-01-6	4-Nitroaniline	3.	U
534-52-1	4,6-Dinitro-2-methylphenol	15.	U
86-30-6	N-Nitrosodiphenylamine (1)	2.	U
101-55-3	4-Bromophenyl-phenylether	2.	U
118-74-1	Hexachlorobenzene	2.	U
87-86-5	Pentachlorophenol	2.	U
85-01-8	Phenanthrene	1.	U
120-12-7	Anthracene	3.	U
84-74-2	Di-n-butylphthalate	2.	U
206-44-0	Fluoranthene	2.	U
129-00-0	Pyrene	2.	U
85-68-7	Butylbenzylphthalate	4.	U
56-55-3	Benzo(a)anthracene	2.	U
218-01-9	Chrysene	2.	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U
117-84-0	Di-n-octylphthalate	2.	U
205-99-2	Benzo(b)fluoranthene	2.	U
207-08-9	Benzo(k)fluoranthene	2.	U
50-32-8	Benzo(a)pyrene	2.	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U
53-70-3	Dibenzo(a,h)anthracene	3.	U
191-24-2	Benzo(g,h,i)perylene	4.	U

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM11R66

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM11R66

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH317

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/16/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
108-95-2	Phenol	2.	U	X
111-44-4	bis(2-Chloroethyl)Ether	2.	U	X
95-57-8	2-Chlorophenol	2.	U	
541-73-1	1,3-Dichlorobenzene	2.	U	
106-46-7	1,4-Dichlorobenzene	2.	U	
100-51-6	Benzyl alcohol	2.	U	X
95-50-1	1,2-Dichlorobenzene	3.	U	
95-48-7	2-Methylphenol	1.	U	
39638-32-9	bis(2-chloroisopropyl)ether	3.	U	
106-44-5	4-Methylphenol	1.	U	
621-64-7	N-Nitroso-Di-n-propylamine	2.	U	X
67-72-1	Hexachloroethane	2.	U	
98-95-3	Nitrobenzene	3.	U	
78-59-1	Isophorone	3.	U	
88-75-5	2-Nitrophenol	2.	U	
105-67-9	2,4-Dimethylphenol	2.	U	
65-85-0	Benzoic acid	30.	U	X
111-91-1	bis(2-Chloroethoxy)methane	3.	U	
120-83-2	2,4-Dichlorophenol	2.	U	
120-82-1	1,2,4-Trichlorobenzene	2.	U	
91-20-3	Naphthalene	2.	U	
106-47-8	4-Chloroaniline	2.	U	
87-68-3	Hexachlorobutadiene	3.	U	
59-50-7	4-Chloro-3-methylphenol	2.	U	
91-57-6	2-Methylnaphthalene	2.	U	
77-47-4	Hexachlorocyclopentadiene	2.	U	
88-06-2	2,4,6-Trichlorophenol	2.	U	
95-95-4	2,4,5-Trichlorophenol	2.	U	
91-58-7	2-Chloronaphthalene	2.	U	
88-74-4	2-Nitroaniline	3.	U	
131-11-3	Dimethylphthalate	2.	U	
208-96-8	Acenaphthylene	2.	U	
606-20-2	2,6-Dinitrotoluene	1.	U	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM11R66

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM11R66

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH317

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/16/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
99-09-2	3-Nitroaniline	3.	U
83-32-9	Acenaphthene	2.	U
51-28-5	2,4-Dinitrophenol	15.	U
100-02-7	4-Nitrophenol	2.	U
132-64-9	Dibenzofuran	1.	U
121-14-2	2,4-Dinitrotoluene	1.	U
84-66-2	Diethylphthalate	1.	U
7005-72-3	4-Chlorophenyl-phenylether	1.	U
86-73-7	Fluorene	1.	U
100-01-6	4-Nitroaniline	3.	U
534-52-1	4,6-Dinitro-2-methylphenol	15.	U
86-30-6	N-Nitrosodiphenylamine (1)	2.	U
101-55-3	4-Bromophenyl-phenylether	2.	U
118-74-1	Hexachlorobenzene	2.	U
87-86-5	Pentachlorophenol	2.	U
85-01-8	Phenanthrene	1.	U
120-12-7	Anthracene	3.	U
84-74-2	Di-n-butylphthalate	2.	U
206-44-0	Fluoranthene	2.	U
129-00-0	Pyrene	2.	U
85-68-7	Butylbenzylphthalate	4.	U
56-55-3	Benzo(a)anthracene	2.	U
218-01-9	Chrysene	2.	U
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U
117-84-0	Di-n-octylphthalate	2.	U
205-99-2	Benzo(b)fluoranthene	2.	U
207-08-9	Benzo(k)fluoranthene	2.	U
50-32-8	Benzo(a)pyrene	2.	U
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U
53-70-3	Dibenzo(a,h)anthracene	3.	U
191-24-2	Benzo(g,h,i)perylene	4.	U

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

1B
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S96M

Lab Name: SCRL US EPA 312/353-9065 Contract: ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S96M

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH311

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted: 8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
108-95-2	Phenol	24.		
111-44-4	bis(2-Chloroethyl)Ether	2.	U	X
95-57-8	2-Chlorophenol	49.		
541-73-1	1,3-Dichlorobenzene	2.	U	
106-46-7	1,4-Dichlorobenzene	49.		
100-51-6	Benzyl alcohol	2.	U	
95-50-1	1,2-Dichlorobenzene	3.	U	
95-48-7	2-Methylphenol	1.	U	
39638-32-9	bis(2-chloroisopropyl)ether	3.	U	X
106-44-5	4-Methylphenol	1.	U	
621-64-7	N-Nitroso-Di-n-propylamine	69.		
67-72-1	Hexachloroethane	2.	U	
98-95-3	Nitrobenzene	3.	U	
78-59-1	Isophorone	3.	U	
88-75-5	2-Nitrophenol	2.	U	
105-67-9	2,4-Dimethylphenol	2.	U	
65-85-0	Benzoic acid	30.	U	
111-91-1	bis(2-Chloroethoxy)methane	3.	U	
120-83-2	2,4-Dichlorophenol	2.	U	
120-82-1	1,2,4-Trichlorobenzene	69.		
91-20-3	Naphthalene	2.	U	
106-47-8	4-Chloroaniline	2.	U	
87-68-3	Hexachlorobutadiene	3.	U	
59-50-7	4-Chloro-3-methylphenol	57.		
91-57-6	2-Methylnaphthalene	2.	U	
77-47-4	Hexachlorocyclopentadiene	2.	U	
88-06-2	2,4,6-Trichlorophenol	2.	U	
95-95-4	2,4,5-Trichlorophenol	2.	U	
91-58-7	2-Chloronaphthalene	2.	U	
88-74-4	2-Nitroaniline	3.	U	
131-11-3	Dimethylphthalate	2.	U	
208-96-8	Acenaphthylene	2.	U	
606-20-2	2,6-Dinitrotoluene	1.	U	

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S96M

Lab Name: SCRL US EPA 312/353-9065 Contract: ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S96M

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH311

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted: 8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH: NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
99-09-2	3-Nitroaniline	3.	U	
83-32-9	Acenaphthene	54.		
51-28-5	2,4-Dinitrophenol	15.	U	
100-02-7	4-Nitrophenol	17.		
132-64-9	Dibenzofuran	1.	U	
121-14-2	2,4-Dinitrotoluene	43.		
84-66-2	Diethylphthalate	1.	U	
7005-72-3	4-Chlorophenyl-phenylether	1.	U	
86-73-7	Fluorene	1.	U	
100-01-6	4-Nitroaniline	3.	U	
534-52-1	4,6-Dinitro-2-methylphenol	15.	U	
86-30-6	N-Nitrosodiphenylamine (1)	2.	U	
101-55-3	4-Bromophenyl-phenylether	2.	U	
118-74-1	Hexachlorobenzene	2.	U	
87-86-5	Pentachlorophenol	49.		
85-01-8	Phenanthrene	1.	U	
120-12-7	Anthracene	3.	U	
84-74-2	Di-n-butylphthalate	2.	U	
206-44-0	Fluoranthene	2.	U	X
129-00-0	Pyrene	67.		
85-68-7	Butylbenzylphthalate	4.	U	
56-55-3	Benzo(a)anthracene	2.	U	
218-01-9	Chrysene	2.	U	
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U	
117-84-0	Di-n-octylphthalate	2.	U	
205-99-2	Benzo(b)fluoranthene	2.	U	
207-08-9	Benzo(k)fluoranthene	2.	U	
50-32-8	Benzo(a)pyrene	2.	U	
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U	
53-70-3	Dibenzo(a,h)anthracene	3.	U	
191-24-2	Benzo(g,h,i)perylene	4.	U	

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S96D

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S96D

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH312

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
108-95-2	Phenol	23.		
111-44-4	bis(2-Chloroethyl)Ether	2.	U	X
95-57-8	2-Chlorophenol	51.		
541-73-1	1,3-Dichlorobenzene	2.	U	
106-46-7	1,4-Dichlorobenzene	48.		
100-51-6	Benzyl alcohol	2.	U	
95-50-1	1,2-Dichlorobenzene	3.	U	
95-48-7	2-Methylphenol	1.	U	
39638-32-9	bis(2-chloroisopropyl)ether	3.	U	X
106-44-5	4-Methylphenol	1.	U	
621-64-7	N-Nitroso-Di-n-propylamine	66.		
67-72-1	Hexachloroethane	2.	U	
98-95-3	Nitrobenzene	3.	U	
78-59-1	Isophorone	3.	U	
88-75-5	2-Nitrophenol	2.	U	
105-67-9	2,4-Dimethylphenol	2.	U	
65-85-0	Benzoic acid	30.	U	
111-91-1	bis(2-Chloroethoxy)methane	3.	U	
120-83-2	2,4-Dichlorophenol	2.	U	
120-82-1	1,2,4-Trichlorobenzene	68.		
91-20-3	Naphthalene	2.	U	
106-47-8	4-Chloroaniline	2.	U	
87-68-3	Hexachlorobutadiene	3.	U	
59-50-7	4-Chloro-3-methylphenol	55.		
91-57-6	2-Methylnaphthalene	2.	U	
77-47-4	Hexachlorocyclopentadiene	2.	U	
88-06-2	2,4,6-Trichlorophenol	2.	U	
95-95-4	2,4,5-Trichlorophenol	2.	U	
91-58-7	2-Chloronaphthalene	2.	U	
88-74-4	2-Nitroaniline	3.	U	
131-11-3	Dimethylphthalate	2.	U	
208-96-8	Acenaphthylene	2.	U	
606-20-2	2,6-Dinitrotoluene	1.	U	

1C
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26S96D

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix: (soil/water) WATER Lab Sample ID: 89FM26S96D

Sample wt/vol: 1000 (g/mL) mL Lab File ID: >KH312

Level: (low/med) LOW Date Received: 8/10/89

% Moisture: not dec.____ dec. ____ Date Extracted:8/15/89

Extraction: (Sepf/Cont/Sonc) SEPF Date Analyzed: 8/15/89

GPC Cleanup: (Y/N) N pH:NA Dilution Factor: 1.00000

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q	
99-09-2	3-Nitroaniline	3.	U	
83-32-9	Acenaphthene	49.		
51-28-5	2,4-Dinitrophenol	15.	U	
100-02-7	4-Nitrophenol	19.		
132-64-9	Dibenzofuran	1.	U	
121-14-2	2,4-Dinitrotoluene	41.		
84-66-2	Diethylphthalate	1.	U	
7005-72-3	4-Chlorophenyl-phenylether	1.	U	
86-73-7	Fluorene	1.	U	
100-01-6	4-Nitroaniline	3.	U	
534-52-1	4,6-Dinitro-2-methylphenol	15.	U	
86-30-6	N-Nitrosodiphenylamine (1)	2.	U	
101-55-3	4-Bromophenyl-phenylether	2.	U	
118-74-1	Hexachlorobenzene	2.	U	
87-86-5	Pentachlorophenol	48.		
85-01-8	Phenanthrene	1.	U	
120-12-7	Anthracene	3.	U	
84-74-2	Di-n-butylphthalate	2.	U	
206-44-0	Fluoranthene	2.	U	X
129-00-0	Pyrene	59.		
85-68-7	Butylbenzylphthalate	4.	U	
56-55-3	Benzo(a)anthracene	2.	U	
218-01-9	Chrysene	2.	U	
117-81-7	bis(2-Ethylhexyl)phthalate	1.	U	
117-84-0	Di-n-octylphthalate	2.	U	
205-99-2	Benzo(b)fluoranthene	2.	U	
207-08-9	Benzo(k)fluoranthene	2.	U	
50-32-8	Benzo(a)pyrene	2.	U	
193-39-5	Indeno(1,2,3-cd)pyrene	4.	U	
53-70-3	Dibenzo(a,h)anthracene	3.	U	
191-24-2	Benzo(g,h,i)perylene	4.	U	

(1) - Cannot be separated from Diphenylamine

TENTATIVELY IDENTIFIED COMPOUNDS YES [ ] NO [X]

Date: 8/30/89

To: Al Alwan

From: Kelly Head

Kelly R. Head
8/30/89

Re: Dataset SF6437 Narrative

Five (5) low level water samples (89FM26S95-89FM26S97, 89FM26D95, 89FM11R66) from dataset SF6437 were submitted for acid base neutral (ABN) analysis by GC/MS utilizing EPA METHOD 625NS.

All samples were extracted within seven (7) days of receipt.

The tune was acceptable with DFTPP meeting all QC requirements (FORM 5). The initial calibration (8/15/89) reported seven RSDs greater than 35% (FORM 6): benzoic acid (%RSD=62%, average RF=0.19), 2,4-dinitrophenol (%RSD=38%, average RF=0.04), butylbenzylphthalate (%RSD=38%, average RF=0.38), benzo(a)anthracene (%RSD=36%, average RF=0.41) bis(2-ethylhexylphthalate (%RSD=45, average RF=.40), dibenzo(a,h)anthracene (%RSD=62%, average RF=.55), and benzo(g,h,i)perylene (%RSD=52%, average RF=.70). None of these compounds was present in any of the samples.

No continuing calibration was needed. All of the samples were analyzed behind an initial calibration.

All internal standard areas and retention times were within QC limits (FORM 8B).

Two samples reported surrogates outside QC limits. Sample 89FM26S97 reported 2-fluorobiphenyl below its QC range. Sample 89FM11R66 reported nitrobenzene-d5 and 2-fluorobiphenyl below their respective QC ranges (FORM 2C).

Sample 89FM26S96 was used for the matrix spike and matrix spike duplicate (FORM 3C). All % recoveries and %RPDs are within QC limits for the matrix spike and matrix spike duplicate samples.

One method blank was extracted with the samples. No target compounds or TICs were detected.

One field blank (89FM11R66) was associated with the samples. No target compounds or TICs were detected.

Sample 89FM26S95 and its duplicate (89FM26D95) correlated very well. No target compounds or TICs were detected in either of these samples.

No target compounds or TICs were detected in samples 89FM26S96 or 89FM26S97.

USEPA REGION V CRL
DATA SET SF-7437

09/01/89 17:52:04
PAGE 01

WORKLIST : ABKH009
TEST : ABWS0

WL#	ID	REP	COMMENTS
1	LRB		
2	LF1		
3	LF2		
4	S9000645	01	-S95
5	S9000646	01	-D95
6	S9000647	01	-S96
7	S9000648	01	-S97
8	S9000649	01	-R66

1 hr

Lowell 2 done 9/13/89

A78
475

ABN's.

TFA302

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH FIT SUPERFUND SAMPLE DATE 8/9/89 LAB ARRIVAL DATE 8/10/89 DUE DATE 8/31/89

DU NUMBER TFA DATA SET NUMBER 6437 STUDY Estwing Mfg Co. PRIORITY — CONTRACTOR —

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER VOLATILE ORGANICS SCAN UG/L TOX 17664	WATER ABN ORGANICS SCAN UG/L TOX 17674	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
89FM26S95	RW1 5-053154-56	X	X		
89FM26S96	MSD/RW2 5-053170-72 5-053178-82	X	X		
89FM26S97	RW3 5-053188-90	X	X		
89FM26D95	DUP 5-053162-64	X	X		
89FM11R66	BLANK 5-053190-8	X	X		
89FM26S95	RW1 5-053149		X		
89FM26D95	DUPLICATE 5-053157		X		
89FM26S96	RW2/MSD 5-053165 5-053173-74		X		
89FM26S97	RW3 5-053183		X		
89FM11R66	BLANK 5-053191		X		
			Kelly R. Head 8/30/89		

```
:P//////////6437
  RU,BLIST,S_6437
:

 Sequence File: S_6437::C7
 -----------------------------------------

 Tune File: MT5996

 CR List: C7,C1,D1
 CR Cut-off:  5500 blocks.
                                                   Report Data Archive
                                                  Quant | | ID Archive
 Number of samples:  11                  Sample Size | | | | Output Archive
                                            Bottle | | | | | | |
 Samp Data File     Sample Name                  | | | | | | |    Quant ID
  No. Method File   Misc Data                     | | | | | | |    Quant Output
 ---- ------------ ------------------------ ---------------  ------------
 001) >KH307       TOX STD100    8/15/89     01 3 Y M N N N    IDKH96::C2
      TOXIC6       SF6437                       Dil=1.00000    ^KH307::C6
 002) >KH308       TOX STD050    8/15/89     02 3 Y M N N N    IDKH96::C2
      TOXIC6       SF6437                       Dil=1.00000    ^KH308::C6
 003) >KH309       TOX STD025    8/15/89     03 3 Y M N N N    IDKH96::C2
      TOXIC6       SF6437                       Dil=1.00000    ^KH309::C6
 004) >KH310       METH BLNK     8/15/89     04 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000
 005) >KH311       89FM26S96M    8/15/89     05 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000
 006) >KH312       89FM26S96D    8/15/89     06 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000
 007) >KH313       89FM26S96     8/15/89     07 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000
 008) >KH314       89FM26D95     8/15/89     08 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000
 009) >KH315       89FM26S95     8/15/89     09 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000
 010) >KH316       89FM26S97     8/15/89     10 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000
 011) >KH317       89FM11R66     8/15/89     11 3 N M N N N    IDKH96::C2
      TOXIC6       SF6437  1L                   Dil=1.00000

 End of sequence file.

:P
  RU,BLIST,S_6437
```

ROY F. WESTON, INC.
C/O ESAT Project
Room 671
536 South Clark Street
Chicago IL 60605
(312)-353-2895

Dataset No: SF6437

Task No: 1140

SEMIVOLATILE ORGANIC DELIVERABLES CHECK-OFF LIST

PRESENT	NOT REQD	
[✓]	[ ]	DATA USERS REPORT
[✓] (3 COPIES)	[ ]	DATASET CUSTODY TRANSFER FORM
[✓] (1 COPY)	[ ]	SAMPLE REPORT LOG
[✓]	[ ]	NARRATIVE
[✓]	[ ]	RUN SEQUENCE
[✓]	[ ]	ABN BENCH SHEET

AOC

PRESENT	NOT REQD	
[✓] (1 COPY)	[ ]	SURROGATE RECOVERY (FORM II)
[✓] (1 COPY)	[ ]	MATRIX SPIKE/DUP (FORM III)
[✓]	[ ]	MS/MSD RAW DATA
[✓]	[ ]	METHOD BLANK (FORM IV)
[✓]	[ ]	MASS CAL/TUNING (FORM V)
[✓]	[ ]	MASS CAL RAW DAT
[ ]	[✓]	MDL RESULTS

CALIBRATION DATA

PRESENT	NOT REQD	
[✓]	[ ]	INITIAL CAL RRF (FORM VI) ?
[✓]	[ ]	ICV RAW DATA ?
[ ]	[✓]	CONT CAL VERIFIC (FORM VII)
[ ]	[✓]	CCV RAW DATA
[✓] (1 COPY)	[ ]	INT STD AREA & RT (FORM VIII)

SAMPLE DATA

PRESENT	NOT REQD	
[✓]	[ ]	ID FILE (SHORT) (HP ONLY)
[✓]	[✓]	TCL RESULTS (FORM I)
[ ]	[✓]	TIC RESULTS (FORM I-TIC)
[✓]	[ ]	SAMPLE RAW DATA
[ ]	[✓]	SAMPLE TAGS STAYS WITH EXTRACTED SAMPLE
[✓] (2 COPIES)	[ ]	ARCHIVE REFERENCE
[✓]	[ ]	CONTROL CHART SUMMARY

ROY F. WESTON, INC.
C/O ESAT Project
Room 962
536 South Clark Street
Chicago IL 60605
(312)-353-2895

RAW DATA ARCHIVING AND DATASET RECONSTRUCTION FORM

DISK OR TAPE NUMBERS: 55+56

RUN DATE(S): 8/15/89
INST.NO.: H2 5996
ANALYST(S): KDH

SAMPLE SUMMARY MATRIX

DATASET NUMBER:	5F6437				
TASK NUMBER:	1140				
DU/ACTIVITY NO:	TFA302				
PARAMETER:	ABN				
MATRIX:	WATER				
NUMBER SAMPLES:	5				
DATE RECEIVED:	8/10/89				
DATE EXTRACTED:	8/16/89				
NOTBK NO/PG NO:	NA				
DATE ASSAYED:	8/15/89				

FILE IDENTIFICATION SUMMARY

TUNING FILE: 7KH306
BLANK FILE: 7KH310
RUN SEQUENCE FILE: 5-6437

PRIMARY COLUMN

INITIAL CALIBRATION FILE: 7KH307-7KH309
CONTINUING CALIBRATION FILES: NA
STANDARDS FILES: NA
SAMPLE FILES: 7KH311-7KH317

ID/METHOD FILES: 5DKH96

CONFIRMATORY COLUMN

INITIAL CALIBRATION FILE:
CONTINUING CALIBRATION FILES:
STANDARDS FILES:
SAMPLE FILES: NA

ID/METHOD FILES:

DOC.NO.: ESAT-05-15-FORM
REVISION NO.: NEW
CENTRAL FILE NO.: 5.5.1

Task # 1140

A/BN BENCH SHEET

DATA SET: SF6437 SAMPLE TYPE: Water EXTRACTION METHOD:

SAMPLE #	SAMPLE AMOUNT	FINAL VOL.	SOLVENT EXTRACT.	DILUTION w/HEXANE 1st	2nd	3rd	EXTR VOL.
ABN 89FM26S95	1000 ml	1 ml					
ABN 89FM26S96	1000 ml ~~950~~	1 ml					
ABN 89FM26S96 MS	1020 ml	1 ml					
ABN 89FM26S96 MSD	1000 ml	1 ml					
89FM26S97	1000 ml	1 ml					
89FM26D95	1010 ml	1 ml					
89FM11R66	1020 ml	1 ml					

DATE EXTRACTED: 15 Aug 89 PREP. CHEM.: JH / JZ.

DATE CONCENTRATED: 16 Aug 89 PREP. CHEM.: JH / JZ.

DATE RECEIVED: 16 Aug 89 GC/MS CHEM.: KCA

REMARKS: Added 0.75 ml of surrogate standard solution to all samples and 0.75 ml of matrix spiking solution to MS + MSD samples.

5B

SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Lab File ID: >KH306 DFTPP Injection Date: 8/15/89

Instrument ID: 96 2 DFTPP Injection Time: 13:42

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	52.8
68	Less than 2.0% of mass 69	0.0(0.0)1
69	Mass 69 relative abundance	67.
70	Less than 2.0% of mass 69	0.0(0.0)1
127	40.0 - 60.0% of mass 198	48.4
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 30.0% of mass 198	20.8
365	Greater than 1.00% of mass 198	2.40
441	Present, but less than mass 443	7.4
442	Greater than 40.0% of mass 198	53.0
443	17.0 - 23.0% of mass 442	9.1(17.2)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	TOX STD100	TOX STD100	>KH307	8/15/89	15:30
02	TOX STD050	TOX STD050	>KH308	8/15/89	16:42
03	TOX STD025	TOX STD025	>KH309	8/15/89	17:53
04	METH BLNK	METH BLNK	>KH310	8/15/89	19:04
05	89FM26S96M	89FM26S96M	>KH311	8/15/89	20:14
06	89FM26S96D	89FM26S96D	>KH312	8/15/89	21:25
07	89FM26S96	89FM26S96	>KH313	8/15/89	22:36
08	89FM26D95	89FM26D95	>KH314	8/15/89	23:47
09	89FM26S95	89FM26S95	>KH315	8/16/89	0:58
10	89FM26S97	89FM26S97	>KH316	8/16/89	2:09
11	89FM11R66	89FM11R66	>KH317	8/16/89	3:20
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

FORM V SV 1/87 Rev.

8B
SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Lab File ID (Standard): >KH308 Date Analyzed: 8/15/89

Instrument ID: 96 2 Time Analyzed: 16:42

		IS1(DCB) AREA #	RT	IS2(PHN) AREA #	RT	IS3(PRY) AREA #	RT
	12 HOUR STD	39435.	8.73	67070.	29.27	3346.	41.88
	UPPER LIMIT	78870.	9.23	134140.	29.77	6692.	42.38
	LOWER LIMIT	19718.	8.23	33535.	28.77	1673.	41.38
	EPA SAMPLE NO.						
01	METH BLNK	45643.	8.72	69097.	29.25	5807.	41.86
02	89FM26S96M	42942.	8.70	68370.	29.21	4464.	41.82
03	89FM26S96D	42642.	8.69	66455.	29.21	5040.	41.83
04	89FM26S96	41521.	8.68	61936.	29.20	3371.	41.83
05	89FM26D95	41781.	8.68	60475.	29.21	4519.	41.88
06	89FM26S95	42899.	8.70	63446.	29.23	2825.	41.87
07	89FM26S97	40953.	8.69	58367.	29.24	3475.	41.90
08	89FM11R66	40322.	8.72	57151.	29.24	4276.	41.90
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IS1 (DCB) = d4-1,4-Dichlorobenzene
IS2 (PHN) = d-10-Phenanthrene
IS3 (PRY) = d12-Perylene

UPPER LIMIT = + 100%
of internal stansard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag internal standard area values with an asterisk

3C

WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Matrix Spike - EPA Sample No.: 89FM26S96

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Phenol	61.00	0.00	24.00	39	12-110
2-Chlorophenol	63.00	0.00	49.00	78	27-123
1,4-Dichlorobenzene	64.00	0.00	49.00	77	36- 97
N-Nitroso-Di-n-prop.(1)	77.00	0.00	69.00	89	41-116
1,2,4-Trichlorobenzene	80.00	0.00	69.00	85	39- 98
4-Chloro-3-methylphenol	60.00	0.00	57.00	95	23-110
Acenaphthene	63.00	0.00	54.00	85	46-118
4-Nitrophenol	40.00	0.00	17.00	43	10-110
2,4-Dinitrotoluene	45.00	0.00	43.00	96	24- 96
Pentachlorophenol	48.00	0.00	49.00	102	9-103
Pyrene	65.00	0.00	67.00	103	26-127

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	61.00	23.00	37	5	42	12-110
2-Chlorophenol	63.00	51.00	80	2	40	27-123
1,4-Dichlorobenzene	64.00	48.00	75	2	28	36- 97
N-Nitroso-Di-n-prop.(1)	77.00	66.00	85	4	38	41-116
1,2,4-Trichlorobenzene	80.00	68.00	84	1	28	39- 98
4-Chloro-3-methylphenol	60.00	55.00	91	4	42	23-110
Acenaphthene	63.00	49.00	78	8	31	46-118
4-Nitrophenol	40.00	19.00	46	6	50	10-110
2,4-Dinitrotoluene	45.00	41.00	92	4	38	24- 96
Pentachlorophenol	48.00	48.00	100	1	50	9-103
Pyrene	65.00	59.00	90	13	31	26-127

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

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

RPD: 0 out of 11 outside limits
Spike Recovery: 0 out of 22 outside limits

COMMENTS: _____

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Instrument ID: 96 2 Calibration Date(s):8/15/89 8/15/89

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 35.0%

LAB FILE ID: RRF25 =>KH309 RRF50 =>KH308
RRF100=>KH307

COMPOUND	RRF25	RRF50	RRF100			$\overline{RRF}$	% RSD
Phenol *	1.703	1.898	1.902	0.000	0.000	1.834	6.2*
bis(2-Chloroethyl)ether	1.515	1.617	1.611	0.000	0.000	1.581	3.6
2-Chlorophenol	1.308	1.379	1.438	0.000	0.000	1.375	4.7
1,3-Dichlorobenzene	1.292	1.362	1.409	0.000	0.000	1.354	4.3
1,4-Dichlorobenzene *	1.480	1.401	1.515	0.000	0.000	1.465	4.0*
Benzyl_alcohol	.699	.738	.778	0.000	0.000	.739	5.3
1,2-Dichlorobenzene	1.378	1.424	1.416	0.000	0.000	1.406	1.8
2-Methylphenol	1.079	1.158	1.167	0.000	0.000	1.135	4.3
bis(2-chloroisopropyl)ether	.409	.438	.414	0.000	0.000	.420	3.6
4-Methylphenol	1.064	1.139	1.125	0.000	0.000	1.109	3.6
N-Nitroso-di-n-propylamine #	1.008	1.105	.795	0.000	0.000	.970	16.4#
Hexachloroethane	.525	.575	.545	0.000	0.000	.548	4.6
Nitrobenzene	.578	.597	.605	0.000	0.000	.594	2.3
Isophorone	2.442	2.570	2.145	0.000	0.000	2.386	9.1
2-Nitrophenol *	.469	.532	.562	0.000	0.000	.521	9.1*
2,4-Dimethylphenol	.780	.841	.832	0.000	0.000	.818	4.0
Benzoic_acid	.129	.321	.111	0.000	0.000	.187	62.3
bis(2-Chloroethoxy)methane	1.450	1.580	1.493	0.000	0.000	1.508	4.4
2,4-Dichlorophenol *	.827	.896	.872	0.000	0.000	.865	4.1*
1,2,4-Trichlorobenzene	.980	1.030	.951	0.000	0.000	.987	4.1
Naphthalene	2.946	3.150	2.922	0.000	0.000	3.006	4.2
4-Chloroaniline	.387	.400	.368	0.000	0.000	.385	4.1
Hexachlorobutadiene *	.700	.725	.650	0.000	0.000	.692	5.5*
4-Chloro-3-methylphenol *	.879	.988	.865	0.000	0.000	.911	7.4*
2-Methylnaphthalene	1.718	1.767	1.629	0.000	0.000	1.705	4.1
Hexachlorocyclopentadiene #	.489	.590	.572	0.000	0.000	.550	9.7#
2,4,6-Trichlorophenol *	.499	.551	.466	0.000	0.000	.505	8.5*
2,4,5-Trichlorophenol	.474	.536	.479	0.000	0.000	.496	6.9
2-Chloronaphthalene	1.680	1.684	1.407	0.000	0.000	1.590	10.0
2-Nitroaniline	.340	.422	.395	0.000	0.000	.386	10.9
Dimethylphthalate	1.817	1.920	1.508	0.000	0.000	1.748	12.3
Acenaphthylene	1.408	1.371	1.978	0.000	0.000	1.586	21.5
2,6-Dinitrotoluene	.173	.208	.303	0.000	0.000	.228	29.5
3-Nitroaniline	.139	.176	.264	0.000	0.000	.193	33.5
Acenaphthene *	1.019	.971	1.364	0.000	0.000	1.118	19.1*
2,4-Dinitrophenol #	.028	.039	.060	0.000	0.000	.042	38.5#
4-Nitrophenol #	.114	.131	.171	0.000	0.000	.139	21.1#

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Instrument ID: 96 2 Calibration Date(s):8/15/89 8/15/89

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 35.0%

LAB FILE ID: RRF25 =>KH309 RRF50 =>KH308
RRF100=>KH307

COMPOUND	RRF25	RRF50	RRF100			$\overline{RRF}$	% RSD
Dibenzofuran	1.286	1.214	1.662	0.000	0.000	1.387	17.4
2,4-Dinitrotoluene	.184	.235	.341	0.000	0.000	.253	31.5
Diethylphthalate	1.146	1.081	1.432	0.000	0.000	1.220	15.3
4-Chlorophenyl-phenylether	.455	.438	.573	0.000	0.000	.488	15.1
Fluorene	.936	.935	1.210	0.000	0.000	1.027	15.4
4-Nitroaniline	.108	.135	.191	0.000	0.000	.145	29.0
4,6-Dinitro-2-methylphenol	.042	.061	.084	0.000	0.000	.062	34.3
N-Nitrosodiphenylamine (1) *	.200	.171	.175	0.000	0.000	.182	8.6*
4-Bromophenyl-phenylether	.208	.226	.318	0.000	0.000	.250	23.6
Hexachlorobenzene	.333	.344	.381	0.000	0.000	.353	7.2
Pentachlorophenol *	.086	.126	.158	0.000	0.000	.123	29.6*
Phenanthrene	1.019	1.115	1.313	0.000	0.000	1.149	13.0
Anthracene	.996	1.044	1.239	0.000	0.000	1.093	11.8
Di-n-butylphthalate	1.313	1.433	1.510	0.000	0.000	1.418	7.0
Fluoranthene *	.920	.990	.846	0.000	0.000	.919	7.9*
Pyrene	.931	1.050	.762	0.000	0.000	.914	15.8
Butylbenzylphthalate	.477	.445	.215	0.000	0.000	.379	37.8
Benzo(a)anthracene	.527	.467	.243	0.000	0.000	.413	36.2
Chrysene	.322	.343	.205	0.000	0.000	.290	25.6
bis(2-Ethylhexyl)phthalate	.514	.488	.191	0.000	0.000	.398	45.2
Di-n-octylphthalate *	3.375	4.601	2.249	0.000	0.000	3.408	34.5*
Benzo(b)fluoranthene	1.954	2.126	1.553	0.000	0.000	1.878	15.7
Benzo(k)fluoranthene	1.596	1.406	1.163	0.000	0.000	1.388	15.6
Benzo(a)pyrene *	1.062	1.151	1.015	0.000	0.000	1.076	6.4*
Indeno(1,2,3-cd)pyrene	.341	.654	.556	0.000	0.000	.517	30.9
Dibenzo(a,h)anthracene	.233	.501	.911	0.000	0.000	.548	62.3
Benzo(g,h,i)perylene	.336	.704	1.061	0.000	0.000	.700	51.8
Nitrobenzene-d5	1.321	1.423	1.412	0.000	0.000	1.385	4.0
2-Fluorobiphenyl	2.016	2.148	1.757	0.000	0.000	1.974	10.1
Terphenyl-d14	.655	.663	.447	0.000	0.000	.588	20.8
Phenol-d5	1.604	1.687	1.789	0.000	0.000	1.693	5.5
2-Fluorophenol	1.499	1.508	1.643	0.000	0.000	1.550	5.2
2,4,6-Tribromophenol	.150	.164	.203	0.000	0.000	.173	15.9

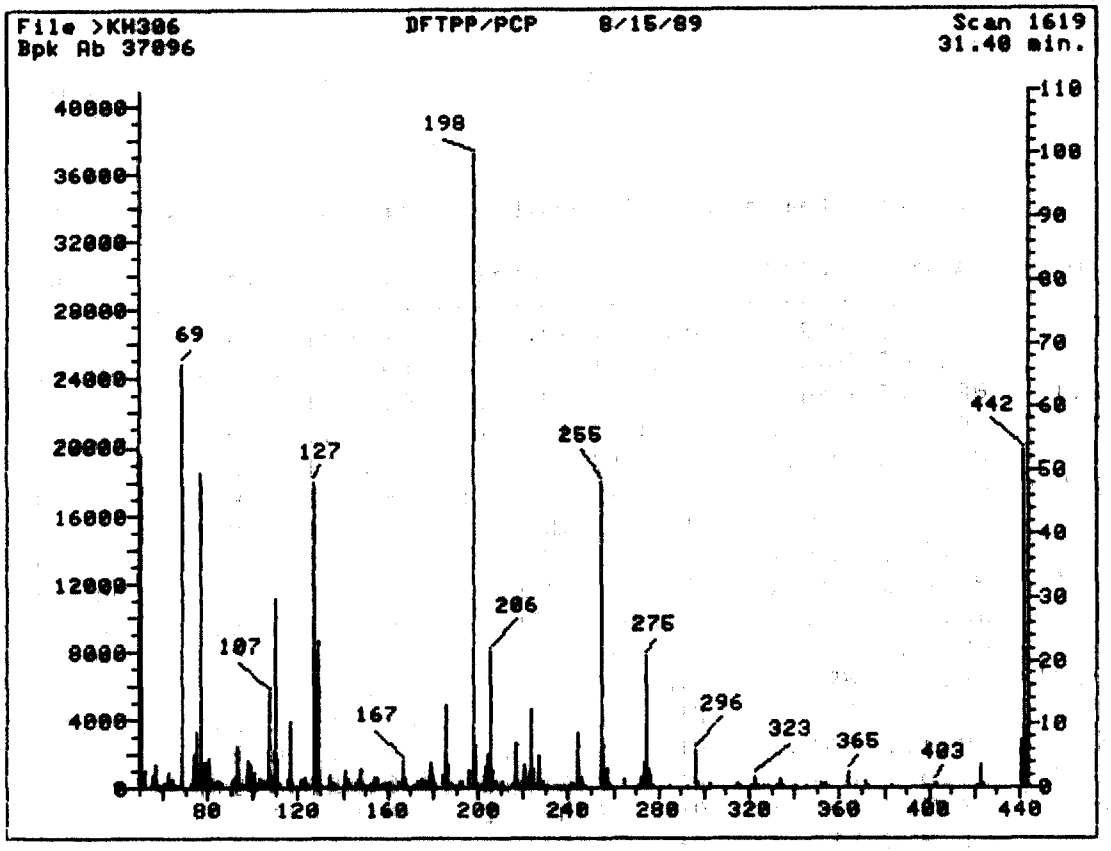
(1) Cannot be separated from Diphenylamine

GC/MS PERFORMANCE STANDARD

Decafluorotriphenylphospine (DFTPP)

m/z	Ion Abundance Criteria	% Relative Abundance Base Peak	% Relative Abundance Appropriate Peak	Status
51	30-60% of mass 198	52.79	52.79	Ok
68	Less than 2% of mass 69	0.00	0.00	Ok
69	(reference only)	66.85	66.85	Ok
70	Less than 2% of mass 69	0.00	0.00	Ok
127	40-60% of mass 198	48.39	48.39	Ok
197	Less than 1% of mass 198	0.00	0.00	Ok
198	Base peak, 100% relative abundance	100.00	100.00	Ok
199	5-9% of mass 198	6.80	6.80	Ok
275	10-30% of mass 198	20.85	20.85	Ok
365	Greater than 1% of mass 198	2.40	2.40	Ok
441	0-100% of mass 443	7.41	81.25	Ok
442	Greater than 40% of mass 198	53.01	53.01	Ok
443	17-23% of mass 442	9.12	17.20	Ok

Injection Date: 08/15/89
Injection Time: 13:42
Data File: >KH306
Scan: 1619


File >KH306
Bpk Ab 37896
DFTPP/PCP 8/15/89
Scan 1619
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>KH306 DFTPP/PCP 8/15/89
1619 NRM

File: >KH306 Scan #: 1619 Retn. time: 31.40

m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.	m/z	Int.
49.15	.421	100.85	2.399	157.85	.596	208.95	.340	275.90	3.003
49.95	14.276	102.85	.828	158.95	.445	209.85	.288	276.90	2.132
50.95	52.793	103.85	1.291	159.85	.660	210.85	1.127	277.80	.345
52.05	2.561	105.05	1.119	160.95	1.059	215.05	.404	282.90	.156
55.05	.439	105.95	.585	161.85	.429	215.85	.553	284.90	.466
55.85	1.954	106.95	14.975	164.85	.925	216.85	7.214	290.00	.116
56.95	3.809	107.85	2.208	165.85	.806	217.85	.798	292.80	.456
57.75	.248	109.95	29.928	166.85	4.248	218.95	.102	294.90	.189
58.05	.218	110.85	4.677	167.95	1.750	220.85	3.639	295.90	6.073
59.45	.340	112.05	.658	168.95	.259	221.80	1.251	297.00	.919
60.95	.814	115.95	1.348	169.70	.111	222.80	1.580	301.85	.151
61.85	.795	116.95	10.341	170.80	.175	223.90	12.548	302.95	.677
63.05	2.262	117.80	.884	171.70	.307	224.90	3.132	304.05	.183
63.95	.528	119.80	.261	172.00	.345	225.90	.237	313.85	.412
64.95	1.278	121.80	1.402	172.90	.536	226.90	5.154	314.85	.669
65.90	.235	122.90	1.550	173.80	1.065	227.80	.623	315.85	.445
66.20	.232	123.90	.849	174.90	1.477	228.10	.709	320.85	.240
67.00	.461	124.80	.512	176.00	.569	229.00	.938	322.95	1.803
67.30	.348	125.40	.199	176.90	.981	230.90	.531	324.05	.453
68.90	66.854	125.70	.321	178.10	.442	234.90	.450	326.90	.423
73.00	.658	126.90	48.393	178.80	3.930	235.80	.345	328.00	.423
73.90	5.435	127.90	3.682	180.00	2.014	237.00	.353	331.90	.248
74.90	8.715	128.90	23.143	180.90	.841	238.90	.310	332.20	.183
75.90	3.006	129.90	1.987	183.70	.181	240.00	.146	332.80	.253
76.90	50.054	131.00	.458	184.90	2.138	240.20	.159	334.00	1.391
77.90	3.397	133.80	.499	185.90	13.144	240.40	.162	334.90	.299
79.00	3.914	134.00	.488	186.90	3.836	240.90	.334	340.80	.248
79.90	2.976	134.90	1.890	187.90	.326	241.90	.733	345.80	.469
80.90	4.877	135.80	.806	188.90	.838	242.90	.666	351.95	.609
81.90	1.418	136.90	.728	190.90	.237	243.90	8.874	352.95	.407
82.90	.698	138.00	.154	191.10	.237	245.00	1.057	353.85	.731
83.90	.199	138.90	.205	191.90	.979	246.00	1.879	364.85	2.399
84.90	1.027	139.80	.173	192.90	1.035	247.10	.456	372.05	1.186
85.90	.906	140.30	.275	193.90	.186	247.85	.162	372.95	.323
86.90	.550	140.90	2.582	195.95	2.577	252.85	.197	383.00	.391
89.00	.167	142.10	1.210	197.85	100.000	254.85	48.307	402.00	.364
90.00	.170	142.90	.766	198.85	6.799	255.85	6.863	402.90	.728
90.90	.922	145.85	.588	199.95	.558	256.85	.650	403.95	.170
91.95	1.275	146.85	1.391	200.75	.105	257.85	2.946	421.05	.340
92.85	6.489	147.85	2.990	201.25	.313	258.95	.660	421.95	.464
93.95	.679	148.85	.728	201.75	.423	264.95	1.324	422.95	3.669
95.15	.216	151.05	.369	202.85	.731	265.95	.197	423.95	.741
95.85	.305	152.95	.787	203.85	3.259	270.85	.216	441.00	7.408
96.95	.259	153.85	.588	204.85	5.375	272.95	1.550	442.00	53.008
97.85	4.545	154.85	1.747	205.85	21.525	273.80	4.041	443.00	9.117
98.85	3.682	155.85	1.766	206.95	2.890	274.90	20.849	443.90	.881
99.75	.159	157.15	.394	208.05	.879				

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOILCase No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

	EPA SAMPLE NO.	S1 (NBZ)#	S2 (FBP)#	S3 (TPH)#	S4 (PHL)#	S5 (2FP)#	S6 (TBP)#	OTHER	TOT OUT
01	METH BLNK	52	45	116	23	42	63		0
02	89FM26S96M	62	60	119	29	50	80		0
03	89FM26S96D	63	58	112	29	55	80		0
04	89FM26S96	55	50	119	24	46	73		0
05	89FM26D95	59	51	114	26	49	75		0
06	89FM26S95	49	46	108	23	43	63		0
07	89FM26S97	36	31 *	114	16	30	57		1
08	89FM11R66	31 *	31 *	104	13	27	45		2
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		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(35-114)
S2 (FBP)	= 2-Fluorobiphenyl	(43-116)
S3 (TPH)	= Terphenyl-d14	(33-141)
S4 (PHL)	= Phenol-d5	(10-94)
S5 (2FP)	= 2-Fluorophenol	(21-100)
S6 (TBP)	= 2,4,6-Tribromophenol	(10-123)

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

FORM II SV-1 1/87 Rev.

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name:5SCRL US EPA 312/353-9065 Contract:ESAT

Lab Code: CHICAGOIL Case No.: SF6437 SAS No.: EST.MFG SDG No.: TFA302

Lab File ID: >KH310 Lab Sample ID: METH BLNK

Date Extracted 8/15/89 Extraction:(SepF/Cont/Sonc) SEPF

Date Analyzed: 8/15/89 Time Analyzed: 19:04

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: 96 2

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	89FM26S96M	89FM26S96M	>KH311	8/15/89
02	89FM26S96D	89FM26S96D	>KH312	8/15/89
03	89FM26S96	89FM26S96	>KH313	8/15/89
04	89FM26D95	89FM26D95	>KH314	8/15/89
05	89FM26S95	89FM26S95	>KH315	8/16/89
06	89FM26S97	89FM26S97	>KH316	8/16/89
07	89FM11R66	89FM11R66	>KH317	8/16/89
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COMMENTS: _____

FORM IV SV 1/87 Rev.

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: HP-5996 SAUGET STUDY

Contractor: SSCRL-USEPACHICAGOIL Calibration Date: ~~08/25/89~~ 9/2/89

Contract No: (312) 353-9065

Minimum $\overline{RF}$ for SPCC is 0.050 Maximum % RSD for CCC is 30.00%

Compound	Laboratory ID: XH309 RF 25.00	XH308 RF 50.00	XH307 RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC	
2-Fluorophenol	1.49910	1.50813	1.64332	.607	1.55018	5.212			
Phenol-d5	1.60426	1.68655	1.78902	.893	1.69327	5.466			
Phenol	1.70246	1.89793	1.90229	.898	1.83423	6.222	*		
bis(2-Chloroethyl)Ether	1.51508	1.61732	1.61097	.919	1.58112	3.623			
2-Chlorophenol	1.30784	1.37910	1.43793	.933	1.37496	4.738			
1,3-Dichlorobenzene	1.29244	1.36153	1.40863	.986	1.35420	4.316			
1,4-Dichlorobenzene	1.47980	1.40104	1.51514	1.006	1.46535	3.987	*		
Benzyl Alcohol	.69954	.73792	.77824	1.070	.73857	5.328			
1,2-Dichlorobenzene	1.37774	1.42394	1.41565	1.080	1.40578	1.752			
2-Methylphenol	1.07871	1.15813	1.16654	1.136	1.13446	4.272			
bis(2-Chloroisopropyl)ether	.40902	.43761	.41383	1.144	.42015	3.643			
4-Methylphenol	1.06416	1.13947	1.12492	1.204	1.10952	3.601			
N-Nitroso-Di-n-propylamine	1.00797	1.10541	.79537	1.202	.96959	16.352		**	
Hexachloroethane	.52470	.57502	.54482	1.212	.54818	4.621			
d8-Naphthalene	3.13477	3.09162	2.91956	1.579	3.04865	3.735			(Conc=50.0,50.0,50.0)
Nitrobenzene-d5	1.32138	1.42262	1.41225	1.244	1.38542	4.020			
Nitrobenzene	.57834	.59736	.60541	1.252	.59370	2.341			
Isophorone	2.44152	2.57041	2.14497	1.367	2.38563	9.145			
2-Nitrophenol	.46872	.53163	.56201	1.404	.52079	9.136	*		
2,4-Dimethylphenol	.78027	.84057	.83197	1.453	.81761	3.989			
Benzoic Acid	.12853	.32131	.11137	1.517	.18707	62.315			
bis(2-Chloroethoxy)Methane	1.45013	1.58027	1.49254	1.497	1.50765	4.402			
2,4-Dichlorophenol	.82669	.89601	.87251	1.525	.86507	4.075	*		
1,2,4-Trichlorobenzene	.97960	1.03018	.95118	1.563	.98699	4.054			
Naphthalene	2.94556	3.14964	2.92205	1.588	3.00575	4.164			
4-Chloroaniline	.38719	.39949	.36823	1.639	.38497	4.091			
Hexachlorobutadiene	.69939	.72512	.65024	1.703	.69178	5.508	*		
4-Chloro-3-methylphenol	.87890	.98760	.86501	1.926	.91052	7.371	*		
2-Methylnaphthalene	1.71808	1.76729	1.62926	1.955	1.70488	4.103			
d10-Acenaphthene	1.24942	1.26218	.93438	2.530	1.14866	16.165			(Conc=50.0,50.0,50.0)

RF - Response Factor (Subscript is amount in NG/UL)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: HP-5996 SAUGET STUDY

Contractor: SSCRL-USEPACHICAGOIL Calibration Date: [illegible]

Contract No: (312) 353-9065

Minimum $\overline{RF}$ for SPCC is 0.050 Maximum % RSD for CCC is 30.00%

Laboratory ID:	XH309	XH308	XH307					
Compound	RF 25.00	RF 50.00	RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Hexachlorocyclopentadiene	.40954	.59006	.57159	2.091	.55040	9.722		**
2,4,6-Trichlorophenol	.49867	.55060	.46559	2.134	.50492	8.476	*	
2,4,5-Trichlorophenol	.47371	.53546	.47852	2.151	.49590	6.927		
2-Chloronaphthalene	1.68000	1.68386	1.40728	2.213	1.59038	9.971		
2-Fluorobiphenyl	2.01561	2.14829	1.75739	2.183	1.97377	10.071		
2-Nitroaniline	.33997	.42226	.39449	2.300	.38558	10.858		
Dimethylphthalate	1.81708	1.92022	1.50797	2.447	1.74843	12.270		
Acenaphthylene	1.40753	1.37137	1.97832	.727	1.58574	21.470		
3-Nitroaniline	.13854	.17547	.26396	.754	.19266	33.454		
Acenaphthene	1.01929	.97128	1.36348	.759	1.11802	19.135	*	
2,4-Dinitrophenol	.02778	.03890	.05973	.770	.04214	38.488		**
4-Nitrophenol	.11437	.13080	.17138	.793	.13885	21.135		
Dibenzofuran	1.28609	1.21369	1.66218	.786	1.38732	17.355		
2,4-Dinitrotoluene	.18415	.23508	.34056	.797	.25327	31.498		
2,6-Dinitrotoluene	.17262	.20833	.30285	.735	.22793	29.522		
Diethylphthalate	1.14567	1.08136	1.43251	.849	1.21985	15.326		
4-Chlorophenyl-phenylether	.45470	.43750	.57263	.850	.48828	15.065		
Fluorene	.93569	.93510	1.20971	.843	1.02683	15.424		
4-Nitroaniline	.10834	.13516	.19074	.855	.14475	29.038		
4,6-Dinitro-2-methylphenol	.04187	.06068	.08452	.863	.06236	34.275		
N-Nitrosodiphenylamine	.19983	.17097	.17489	.871	.18190	8.607	*	
2,4,6-Tribromophenol	.15001	.16454	.20321	.885	.17259	15.931		
4-Bromophenyl-phenylether	.20753	.22575	.31782	.928	.25037	23.616		
Hexaflorobenzene	.33267	.34403	.38090	.947	.35253	7.152		
Pentachlorophenol	.08546	.12639	.15839	.982	.12341	29.618	*	
Phenanthrene	1.01909	1.11482	1.31257	1.004	1.14883	13.027		
Anthracene	.99582	1.04416	1.23884	1.012	1.09294	11.770		
Di-n-butylphthalate	1.31271	1.43258	1.50965	1.096	1.41831	6.997		
Fluoranthene	.91981	.99047	.84598	1.136	.91875	7.864	*	
d12-Chrysene	.36648	.33347	.18124	1.252	.29373	33.640		(Conc=50.0,50.0,50.0)

RF - Response Factor (Subscript is amount in NG/UL)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

Initial Calibration Data
HSL Compounds

Case No: _____ Instrument ID: HP-5996 SAUGET STUDY

Contractor: SSCRL-USEPACHICAGOIL Calibration Date: ~~08/25/89~~ 8/23/89

Contract No: (312) 353-9065

KDH 8/25/89

Minimum $\overline{RF}$ for SPCC is 0.050 Maximum % RSD for CCC is 30.00%

Laboratory ID:	>KH309	>KH308	>KH307					
Compound	RF 25.00	RF 50.00	RF 100.00	$\overline{RRT}$	$\overline{RF}$	% RSD	CCC	SPCC
Pyrene	.93068	1.05040	.76229	1.153	.91446	15.828		
Terphenyl-d14	.65470	.66271	.44691	1.169	.58810	20.804		
Butylbenzylphthalate	.47698	.44476	.21469	1.210	.37881	37.761		
Benzo(a)Anthracene	.52657	.46748	.24339	1.250	.41248	36.217		
Bis(2-Ethylhexyl)Phthalate	.51437	.48821	.19066	1.263	.39775	45.209		
Chrysene	.32206	.34312	.20525	1.254	.29014	25.598		
Di-n-octylphthalate	3.37477	4.60102	2.24898	.929	3.40825	34.516	*	
Benzo(b)fluoranthene	1.95405	2.12612	1.55321	.960	1.87779	15.655		
Benzo(k)Fluoranthene	1.59590	1.40586	1.16293	.962	1.38823	15.633		
Benzo(a)Pyrene	1.06174	1.15152	1.01520	.993	1.07616	6.439	*	
Indeno(1,2,3-cd)Pyrene	.34133	.65392	.55584	1.157	.51703	30.920		
Dibenzo(a,h)Anthracene	.23344	.50060	.91152	1.162	.54852	62.272		
Benzo(g,h,i)Perylene	.33559	.70353	1.06129	1.204	.70014	51.828		

RF - Response Factor (Subscript is amount in NG/UL)

$\overline{RRT}$ - Average Relative Retention Time (RT Std/RT Istd)

$\overline{RF}$ - Average Response Factor

%RSD - Percent Relative Standard Deviation

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

QUANT REPORT

Operator ID: KELLY Quant Rev: 6 Quant Time: 890815 16:38
Output File: ^KH307::C6 Injected at: 890815 15:30
Data File: >KH307::C7 Dilution Factor: 1.00000
Name: TOX STD100 8/15/89
Misc: SF6437 BTL# 1

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.71	152.0	79565	50.00	NG/UL	96
2)	2-Fluorophenol	5.29	112.0	261502	127.41	NG/UL	95
3)	Phenol-d5	7.80	99.0	284686	112.08	NG/UL	97
4)	Phenol	7.83	94.0	302712	101.74	NG/UL	88
5)	bis(2-Chloroethyl)Ether	8.03	93.0	256353	102.21	NG/UL	98
6)	2-Chlorophenol	8.13	128.0	228818	106.93	NG/UL	98
7)	1,3-Dichlorobenzene	8.59	146.0	224156	103.25	NG/UL	99
8)	1,4-Dichlorobenzene	8.77	146.0	241105	99.71	NG/UL	97
9)	Benzyl Alcohol	9.35	108.0	123842	101.25	NG/UL	96
10)	1,2-Dichlorobenzene	9.42	146.0	225273	100.87	NG/UL	98
11)	2-Methylphenol	9.91	108.0	185632	101.86	NG/UL	98
12)	bis(2-Chloroisopropyl)ether	9.98	121.0	65853	115.83	NG/UL	99
13)	4-Methylphenol	10.53	108.0	179009	96.16	NG/UL	99
14)	N-Nitroso-Di-n-propylamine	10.51	70.0	126568	72.93	NG/UL	89
15)	Hexachloroethane	10.56	201.0	86697	111.77	NG/UL	97
16)	d8-Naphthalene	13.77	136.0	232295	40.56	NG/UL	92
17)	Nitrobenzene-d5	10.86	82.0	224732	86.40	NG/UL	90
18)	Nitrobenzene	10.93	123.0	96339	96.68	NG/UL	87
19)	Isophorone	11.94	82.0	341329	76.86	NG/UL	95
20)	2-Nitrophenol	12.24	139.0	89432	86.00	NG/UL	91
21)	2,4-Dimethylphenol	12.68	122.0	132391	87.28	NG/UL	96
22)	Benzoic Acid	13.44	105.0	17722	40.82	NG/UL	88
23)	bis(2-Chloroethoxy)Methane	13.07	93.0	237508	84.65	NG/UL	99
24)	2,4-Dichlorophenol	13.31	162.0	138843	87.22	NG/UL	90
25)	1,2,4-Trichlorobenzene	13.63	180.0	151361	90.91	NG/UL	94
26)	Naphthalene	13.86	128.0	464986	83.18	NG/UL	98
27)	4-Chloroaniline	14.28	127.0	58596	81.47	NG/UL	92
28)	Hexachlorobutadiene	14.85	225.0	103473	94.94	NG/UL	94
29)	4-Chloro-3-methylphenol	16.80	107.0	137649	81.46	NG/UL	88
30)	2-Methylnaphthalene	17.05	142.0	259264	79.13	NG/UL	93
31)	d10-Acenaphthene	22.06	164.0	74344M	30.99	NG/UL	
32)	Hexachlorocyclopentadiene	18.23	237.0	90957	94.91	NG/UL	96
33)	2,4,6-Trichlorophenol	18.62	196.0	74090M	77.80	NG/UL	93
34)	2,4,5-Trichlorophenol	18.76	196.0	76147	80.54	NG/UL	96
35)	2-Chloronaphthalene	19.31	162.0	223941	71.32	NG/UL	90
36)	2-Fluorobiphenyl	19.04	172.0	279654	71.44	NG/UL	93
37)	2-Nitroaniline	20.06	138.0	62775M	72.79	NG/UL	
38)	Dimethylphthalate	21.35	163.0	239964	74.85	NG/UL	90
39)	*d-10-Phenanthrene	29.26	188.0	78482M	50.00	NG/UL	96
40)	Acenaphthylene	21.28	152.0	310525	155.17	NG/UL	94
41)	3-Nitroaniline	22.09	138.0	41432M	145.62	NG/UL	93
42)	Acenaphthene	22.21	153.0	214018	149.63	NG/UL	97
43)	2,4-Dinitrophenol	22.55	184.0	9375M	104.42	NG/UL	69

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-Nitrophenol	23.20	109.0	26901	138.07	NG/UL	75
45)	Dibenzofuran	23.01	168.0	260903	141.66	NG/UL	90
46)	2,4-Dinitrotoluene	23.34	165.0	53456	136.73	NG/UL	88
47)	2,6-Dinitrotoluene	21.51	165.0	47536	147.82	NG/UL	98
48)	Diethylphthalate	24.86	149.0	224852	145.14	NG/UL	89
49)	4-Chlorophenyl-phenylether	24.87	204.0	89883	140.93	NG/UL	94
50)	Fluorene	24.66	166.0	189881	131.91	NG/UL	98
51)	4-Nitroaniline	25.05	138.0	29940	128.41	NG/UL	90
52)	4,6-Dinitro-2-methylphenol	25.26	198.0	13266M	113.20	NG/UL	98
53)	N-Nitrosodiphenylamine	25.47	169.0	27452	106.94	NG/UL	95
54)	2,4,6-Tribromophenol	25.88	330.0	31896	162.24	NG/UL	91
55)	4-Bromophenyl-phenylether	27.16	248.0	49887	146.79	NG/UL	89
56)	Hexachlorobenzene	27.71	284.0	59787	146.35	NG/UL	94
57)	Pentachlorophenol	28.71	265.8	24861M	134.91	NG/UL	95
58)	Phenanthrene	29.38	178.0	206026	127.38	NG/UL	98
59)	Anthracene	29.61	178.0	194453	130.48	NG/UL	99
60)	Di-n-Butylphthalate	32.06	149.0	236961M	125.32	NG/UL	97
61)	Fluoranthene	33.22	202.0	132788	95.65	NG/UL	90
62)	d12-Chrysene	36.59	240.0	14224	22.62	NG/UL	95
63)	Pyrene	33.71	202.0	119652	88.86	NG/UL	97
64)	Terphenyl-d14	34.18	244.0	70148	73.81	NG/UL	94
65)	Butylbenzylphthalate	35.36	149.0	33698	47.24	NG/UL	67
66)	Benzo(a)Anthracene	36.56	228.0	38203	45.78	NG/UL	93
67)	Bis(2-Ethylhexyl)Phthalate	36.91	149.0	29927	38.42	NG/UL	96
68)	Chrysene	36.66	228.0	32217M	44.32	NG/UL	95
69)	*d12-Perylene	41.85	264.0	5131	50.00	NG/UL	93
70)	Di-n-octylphthalate	38.88	149.0	23079	38.94	NG/UL	91
71)	Benzo(b)fluoranthene	40.18	252.0	15939	64.72	NG/UL	93
72)	Benzo(k)Fluoranthene	40.27	252.0	11934M	68.41	NG/UL	93
73)	Benzo(a)Pyrene	41.57	252.0	10418	102.78	NG/UL	96
74)	Indeno(1,2,3-cd)Pyrene	48.38	276.0	5704	193.23	NG/UL	83
75)	Dibenzo(a,h)Anthracene	48.65	278.0	9354M	268.46	NG/UL	90
76)	Benzo(g,h,i)Perylene	50.39	276.0	10891M	320.34	NG/UL	86

* Compound is ISTD

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

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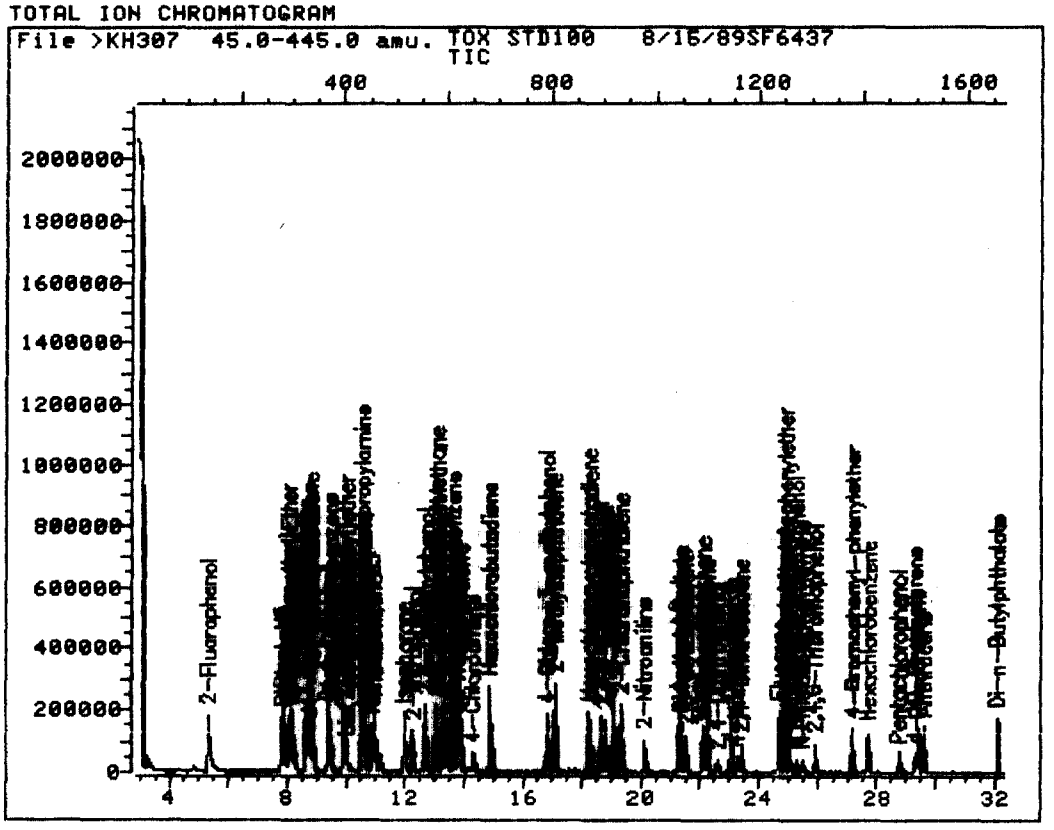
___ Mail receipts

___ Sample tags

II. Image Quality (Pages follow / No. of pages 12)

✓ Resolution / Contrast

TOTAL ION CHROMATOGRAM



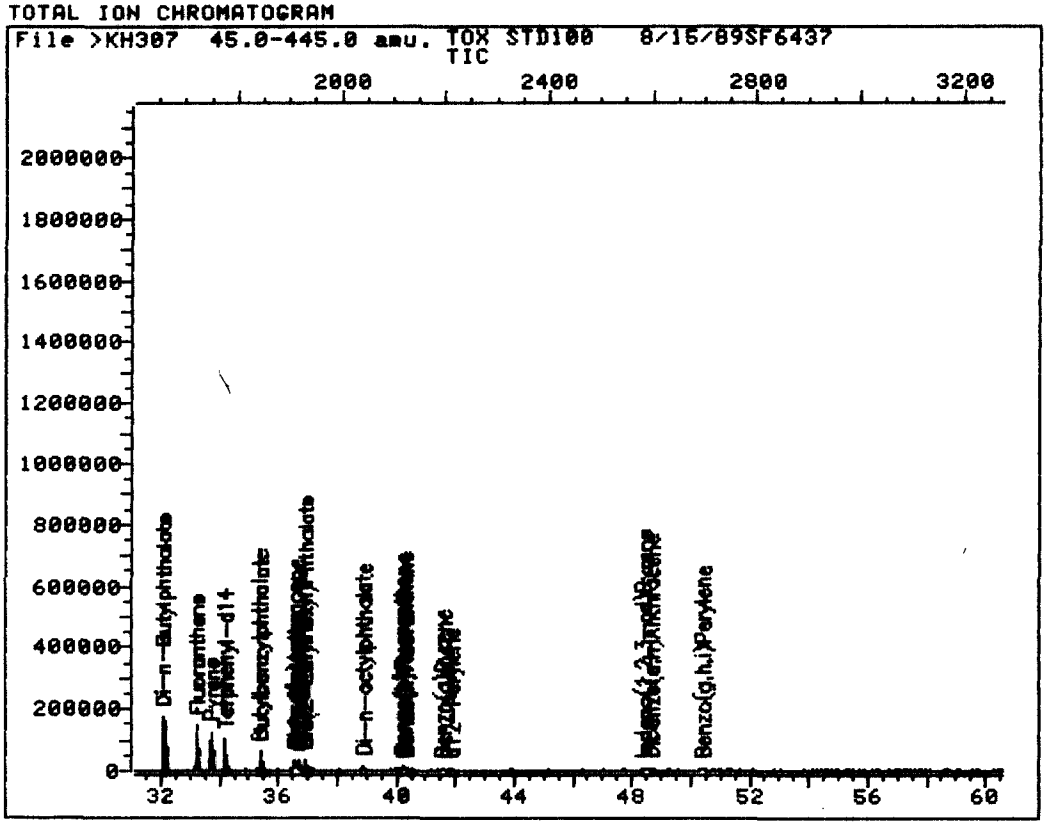
Data File: >KH307::C7 Quant Output File: ^KH307::C6
Name: TOX STD100 8/15/89
Misc: SF6437 BTL# 1

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 16:38
Injected at: 890815 15:30

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >KH307::C7 Quant Output File: ^KH307::C6
Name: TOX STD100 8/15/89
Misc: SF6437 BTL# 1

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 16:38
Injected at: 890815 15:30

TIC page 2 of 2

QUANT REPORT

Operator ID: KELLY Quant Rev: 6 Quant Time: 890815 17:49
Output File: ^KH308::C6 Injected at: 890815 16:42
Data File: >KH308::C7 Dilution Factor: 1.00000
Name: TOX STD050 8/15/89
Misc: SF6437 BTL# 2

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.73	152.0	39435	50.00	NG/UL	96
2)	2-Fluorophenol	5.30	112.0	59473	58.47	NG/UL	93
3)	Phenol-d5	7.78	99.0	66509	52.83	NG/UL	95
4)	Phenol	7.83	94.0	74845	50.75	NG/UL	89
5)	bis(2-Chloroethyl)Ether	8.01	93.0	63779	51.30	NG/UL	92
6)	2-Chlorophenol	8.13	128.0	54385	51.28	NG/UL	98
7)	1,3-Dichlorobenzene	8.61	146.0	53692	49.90	NG/UL	98
8)	1,4-Dichlorobenzene	8.79	146.0	55250	46.10	NG/UL	93
9)	Benzyl Alcohol	9.33	108.0	29100	48.00	NG/UL	95
10)	1,2-Dichlorobenzene	9.42	146.0	56153	50.73	NG/UL	98
11)	2-Methylphenol	9.91	108.0	45671	50.56	NG/UL	92
12)	bis(2-Chloroisopropyl)ether	9.98	121.0	17257	61.24	NG/UL	98
13)	4-Methylphenol	10.50	108.0	44935	48.70	NG/UL	96
14)	N-Nitroso-Di-n-propylamine	10.48	70.0	43592	50.68	NG/UL	93
15)	Hexachloroethane	10.58	201.0	22676	58.98	NG/UL	97
16)	d8-Naphthalene	13.77	136.0	121918	42.95	NG/UL	92
17)	Nitrobenzene-d5	10.85	82.0	56101	43.52	NG/UL	89
18)	Nitrobenzene	10.92	123.0	23557	47.70	NG/UL	79
19)	Isophorone	11.92	82.0	101364	46.06	NG/UL	99
20)	2-Nitrophenol	12.24	139.0	20965	40.67	NG/UL	97
21)	2,4-Dimethylphenol	12.68	122.0	33148	44.09	NG/UL	93
22)	Benzoic Acid	13.19	105.0	12671M	58.88	NG/UL	95
23)	bis(2-Chloroethoxy)Methane	13.05	93.0	62318	44.81	NG/UL	98
24)	2,4-Dichlorophenol	13.30	162.0	35334	44.78	NG/UL	89
25)	1,2,4-Trichlorobenzene	13.63	180.0	40625	49.23	NG/UL	96
26)	Naphthalene	13.86	128.0	124206	44.83	NG/UL	98
27)	4-Chloroaniline	14.30	127.0	15754	44.19	NG/UL	94
28)	Hexachlorobutadiene	14.87	225.0	28595	52.94	NG/UL	97
29)	4-Chloro-3-methylphenol	16.80	107.0	38946	46.50	NG/UL	91
30)	2-Methylnaphthalene	17.05	142.0	69693	42.92	NG/UL	98
31)	d10-Acenaphthene	22.07	164.0	49774M	41.86	NG/UL	
32)	Hexachlorocyclopentadiene	18.25	237.0	23269	48.99	NG/UL	99
33)	2,4,6-Trichlorophenol	18.62	196.0	21709	45.99	NG/UL	83
34)	2,4,5-Trichlorophenol	18.78	196.0	21116	45.06	NG/UL	93
35)	2-Chloronaphthalene	19.30	162.0	66403	42.67	NG/UL	94
36)	2-Fluorobiphenyl	19.04	172.0	84718	43.66	NG/UL	94
37)	2-Nitroaniline	20.06	138.0	16652M	38.96	NG/UL	
38)	Dimethylphthalate	21.35	163.0	75724	47.65	NG/UL	81
39)	*d-10-Phenanthrene	29.27	188.0	67070	50.00	NG/UL	98
40)	Acenaphthylene	21.29	152.0	91978	53.78	NG/UL	97
41)	3-Nitroaniline	22.07	138.0	11769	48.40	NG/UL	93
42)	Acenaphthene	22.21	153.0	65144	53.30	NG/UL	95
43)	2,4-Dinitrophenol	22.55	184.0	2609M	34.00	NG/UL	

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-Nitrophenol	23.20	109.0	8773M	52.69	NG/UL	
45)	Dibenzofuran	23.00	168.0	81402	51.72	NG/UL	91
46)	2,4-Dinitrotoluene	23.34	165.0	15767	47.19	NG/UL	95
47)	2,6-Dinitrotoluene	21.51	165.0	13973	50.84	NG/UL	98
48)	Diethylphthalate	24.83	149.0	72527	54.78	NG/UL	91
49)	4-Chlorophenyl-phenylether	24.87	204.0	29343	53.84	NG/UL	98
50)	Fluorene	24.66	166.0	62717	50.98	NG/UL	97
51)	4-Nitroaniline	25.03	138.0	9065	45.49	NG/UL	83
52)	4,6-Dinitro-2-methylphenol	25.24	198.0	4070	40.64	NG/UL	91
53)	N-Nitrosodiphenylamine	25.49	169.0	11467	52.27	NG/UL	87
54)	2,4,6-Tribromophenol	25.89	330.0	11036	65.69	NG/UL	95
55)	4-Bromophenyl-phenylether	27.17	248.0	15141	52.13	NG/UL	89
56)	Hexachlorobenzene	27.70	284.0	23074	66.09	NG/UL	99
57)	Pentachlorophenol	28.72	265.8	8477	53.83	NG/UL	93
58)	Phenanthrene	29.39	178.0	74771	54.09	NG/UL	98
59)	Anthracene	29.60	178.0	70032	54.99	NG/UL	96
60)	Di-n-Butylphthalate	32.08	149.0	96083	59.46	NG/UL	95
61)	Fluoranthene	33.25	202.0	66431M	55.99	NG/UL	92
62)	d12-Chrysene	36.64	240.0	22366	41.63	NG/UL	95
63)	Pyrene	33.73	202.0	70450	61.22	NG/UL	95
64)	Terphenyl-d14	34.21	244.0	44448	54.73	NG/UL	99
65)	Butylbenzylphthalate	35.41	149.0	29830M	48.93	NG/UL	
66)	Benzo(a)Anthracene	36.59	228.0	31354M	43.97	NG/UL	96
67)	Bis(2-Ethylhexyl)Phthalate	36.96	149.0	32744M	49.19	NG/UL	89
68)	Chrysene	36.69	228.0	23013M	37.04	NG/UL	93
69)	*d12-Perylene	41.88	264.0	3346	50.00	NG/UL	93
70)	Di-n-octylphthalate	38.91	149.0	15395	39.83	NG/UL	83
71)	Benzo(b)fluoranthene	40.23	252.0	7114	44.30	NG/UL	86
72)	Benzo(k)Fluoranthene	40.32	252.0	4704M	41.35	NG/UL	87
73)	Benzo(a)Pyrene	41.62	252.0	3853M	58.29	NG/UL	
74)	Indeno(1,2,3-cd)Pyrene	48.45	276.0	2188M	113.66	NG/UL	
75)	Dibenzo(a,h)Anthracene	48.66	278.0	1675M	73.72	NG/UL	
76)	Benzo(g,h,i)Perylene	50.43	276.0	2354M	106.18	NG/UL	

* Compound is ISTD

U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

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II. Image Quality (Pages follow / No. of pages 2)

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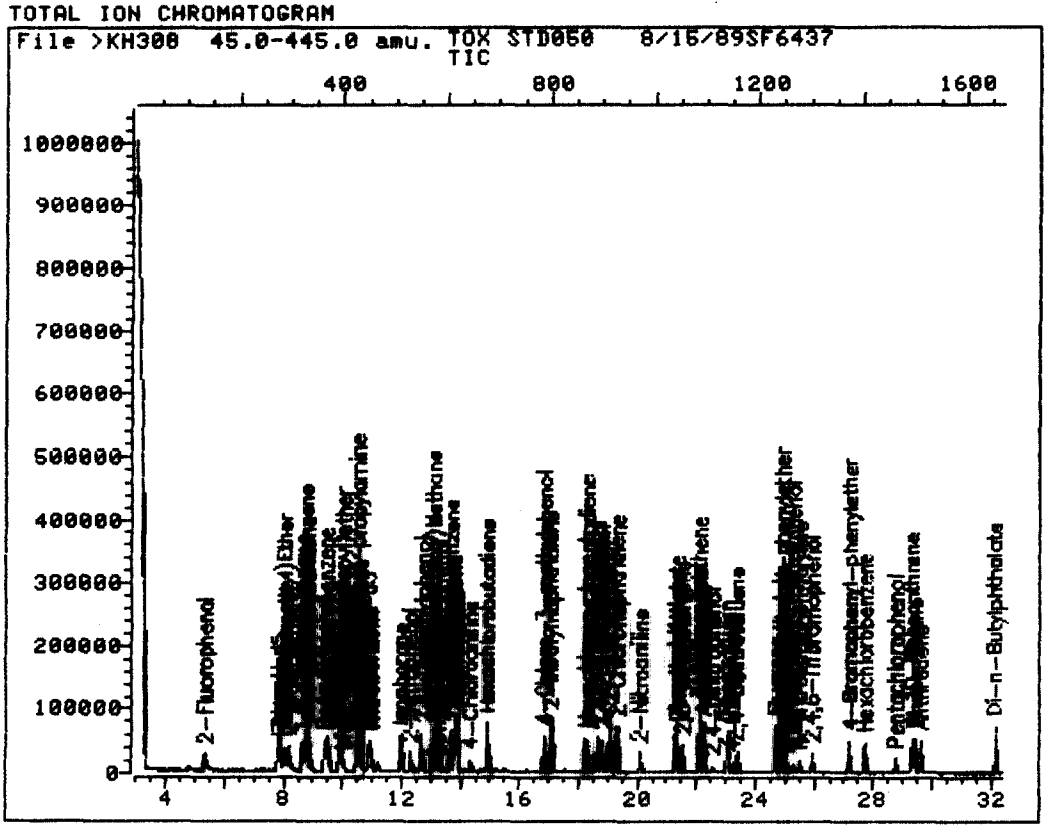
TOTAL ION CHROMATOGRAM



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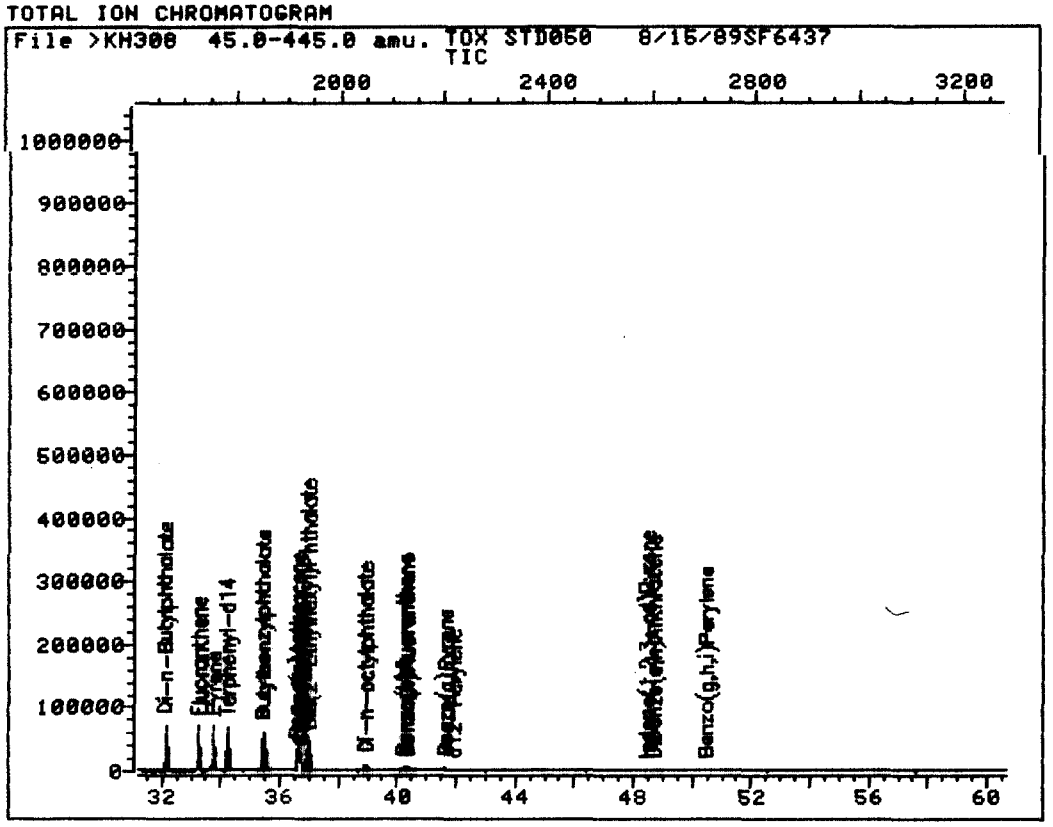
Misc: SF6437 BTL# 2

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 17:49
Injected at: 890815 16:42

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



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Misc: SF6437 BTL# 2

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 17:49
Injected at: 890815 16:42

TIC page 2 of 2

QUANT REPORT

Operator ID: KELLY Quant Rev: 6 Quant Time: 890815 19:00
Output File: ^KH309::C6 Injected at: 890815 17:53
Data File: >KH309::C7 Dilution Factor: 1.00000
Name: TOX STD025 8/15/89
Misc: SF6437 BTL# 3

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.71	152.0	37656	50.00	NG/UL	97
2)	2-Fluorophenol	5.29	112.0	13736	14.14	NG/UL	99
3)	Phenol-d5	7.78	99.0	30205	25.13	NG/UL	95
4)	Phenol	7.81	94.0	32054	22.76	NG/UL	84
5)	bis(2-Chloroethyl)Ether	8.01	93.0	28526	24.03	NG/UL	99
6)	2-Chlorophenol	8.13	128.0	24624	24.31	NG/UL	95
7)	1,3-Dichlorobenzene	8.59	146.0	24334	23.68	NG/UL	90
8)	1,4-Dichlorobenzene	8.76	146.0	27863	24.35	NG/UL	98
9)	Benzyl Alcohol	9.31	108.0	13171	22.75	NG/UL	96
10)	1,2-Dichlorobenzene	9.42	146.0	25940	24.54	NG/UL	95
11)	2-Methylphenol	9.89	108.0	20310	23.55	NG/UL	91
12)	bis(2-Chloroisopropyl)ether	9.96	121.0	7701	28.62	NG/UL	96
13)	4-Methylphenol	10.47	108.0	20036	22.74	NG/UL	99
14)	N-Nitroso-Di-n-propylamine	10.46	70.0	18978	23.10	NG/UL	98
15)	Hexachloroethane	10.56	201.0	9879	26.91	NG/UL	89
16)	d8-Naphthalene	13.75	136.0	118043	43.55	NG/UL	94
17)	Nitrobenzene-d5	10.83	82.0	24879	20.21	NG/UL	93
18)	Nitrobenzene	10.90	123.0	10889	23.09	NG/UL	89
19)	Isophorone	11.90	82.0	45969	21.87	NG/UL	97
20)	2-Nitrophenol	12.24	139.0	8825	17.93	NG/UL	96
21)	2,4-Dimethylphenol	12.64	122.0	14691	20.46	NG/UL	95
22)	Benzoic Acid	13.06	105.0	2420M	11.78	NG/UL	90
23)	bis(2-Chloroethoxy)Methane	13.03	93.0	27303	20.56	NG/UL	98
24)	2,4-Dichlorophenol	13.27	162.0	15565	20.66	NG/UL	87
25)	1,2,4-Trichlorobenzene	13.61	180.0	18444	23.41	NG/UL	93
26)	Naphthalene	13.82	128.0	55459	20.96	NG/UL	96
27)	4-Chloroaniline	14.28	127.0	7290	21.42	NG/UL	95
28)	Hexachlorobutadiene	14.84	225.0	13179	25.55	NG/UL	89
29)	4-Chloro-3-methylphenol	16.76	107.0	16549	20.69	NG/UL	95
30)	2-Methylnaphthalene	17.03	142.0	32348	20.86	NG/UL	95
31)	d10-Acenaphthene	22.05	164.0	47048M	41.44	NG/UL	
32)	Hexachlorocyclopentadiene	18.22	237.0	9217	20.32	NG/UL	95
33)	2,4,6-Trichlorophenol	18.59	196.0	9389	20.83	NG/UL	80
34)	2,4,5-Trichlorophenol	18.74	196.0	8919	19.93	NG/UL	95
35)	2-Chloronaphthalene	19.28	162.0	31631	21.29	NG/UL	94
36)	2-Fluorobiphenyl	19.02	172.0	37950	20.48	NG/UL	94
37)	2-Nitroaniline	20.04	138.0	6401M	15.68	NG/UL	
38)	Dimethylphthalate	21.31	163.0	34212	22.55	NG/UL	80
39)	*d-10-Phenanthrene	29.24	188.0	60330	50.00	NG/UL	98
40)	Acenaphthylene	21.27	152.0	42458	27.60	NG/UL	92
41)	3-Nitroaniline	22.05	138.0	4179M	19.11	NG/UL	85
42)	Acenaphthene	22.19	153.0	30747	27.97	NG/UL	97
43)	2,4-Dinitrophenol	22.50	184.0	838	12.14	NG/UL	82

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-Nitrophenol	23.17	109.0	3450M	23.03	NG/UL	
45)	Dibenzofuran	22.98	168.0	38795	27.40	NG/UL	88
46)	2,4-Dinitrotoluene	23.31	165.0	5555	18.48	NG/UL	99
47)	2,6-Dinitrotoluene	21.46	165.0	5207	21.06	NG/UL	89
48)	Diethylphthalate	24.81	149.0	34559	29.02	NG/UL	92
49)	4-Chlorophenyl-phenylether	24.85	204.0	13716	27.98	NG/UL	99
50)	Fluorene	24.63	166.0	28225	25.51	NG/UL	97
51)	4-Nitroaniline	24.99	138.0	3268	18.23	NG/UL	95
52)	4,6-Dinitro-2-methylphenol	25.22	198.0	1263M	14.02	NG/UL	67
53)	N-Nitrosodiphenylamine	25.46	169.0	6028	30.55	NG/UL	89
54)	2,4,6-Tribromophenol	25.87	330.0	4525	29.94	NG/UL	91
55)	4-Bromophenyl-phenylether	27.15	248.0	6260	23.96	NG/UL	88
56)	Hexachlorobenzene	27.68	284.0	10035	31.96	NG/UL	89
57)	Pentachlorophenol	28.72	265.8	2578	18.20	NG/UL	81
58)	Phenanthrene	29.37	178.0	30741	24.72	NG/UL	96
59)	Anthracene	29.58	178.0	30039	26.22	NG/UL	96
60)	Di-n-Butylphthalate	32.08	149.0	39598	27.24	NG/UL	97
61)	Fluoranthene	33.24	202.0	27746M	26.00	NG/UL	93
62)	d12-Chrysene	36.63	240.0	22110	45.75	NG/UL	93
63)	Pyrene	33.73	202.0	28074	27.12	NG/UL	96
64)	Terphenyl-d14	34.20	244.0	19749	27.03	NG/UL	94
65)	Butylbenzylphthalate	35.40	149.0	14388M	26.24	NG/UL	66
66)	Benzo(a)Anthracene	36.60	228.0	15884M	24.76	NG/UL	91
67)	Bis(2-Ethylhexyl)Phthalate	36.95	149.0	15516M	25.92	NG/UL	94
68)	Chrysene	36.70	228.0	9715M	17.39	NG/UL	95
69)	*d12-Perylene	41.93	264.0	4875	50.00	NG/UL	97
70)	Di-n-octylphthalate	38.92	149.0	8226	14.61	NG/UL	85
71)	Benzo(b)fluoranthene	40.22	252.0	4763	20.36	NG/UL	91
72)	Benzo(k)Fluoranthene	40.31	252.0	3890M	23.47	NG/UL	91
73)	Benzo(a)Pyrene	41.63	252.0	2588M	26.87	NG/UL	
74)	Indeno(1,2,3-cd)Pyrene	48.51	276.0	832M	29.66	NG/UL	
75)	Dibenzo(a,h)Anthracene	48.74	278.0	569M	17.19	NG/UL	
76)	Benzo(g,h,i)Perylene	50.42	276.0	818M	25.32	NG/UL	

* Compound is ISTD

U.S. Environmental Protection Agency Region V

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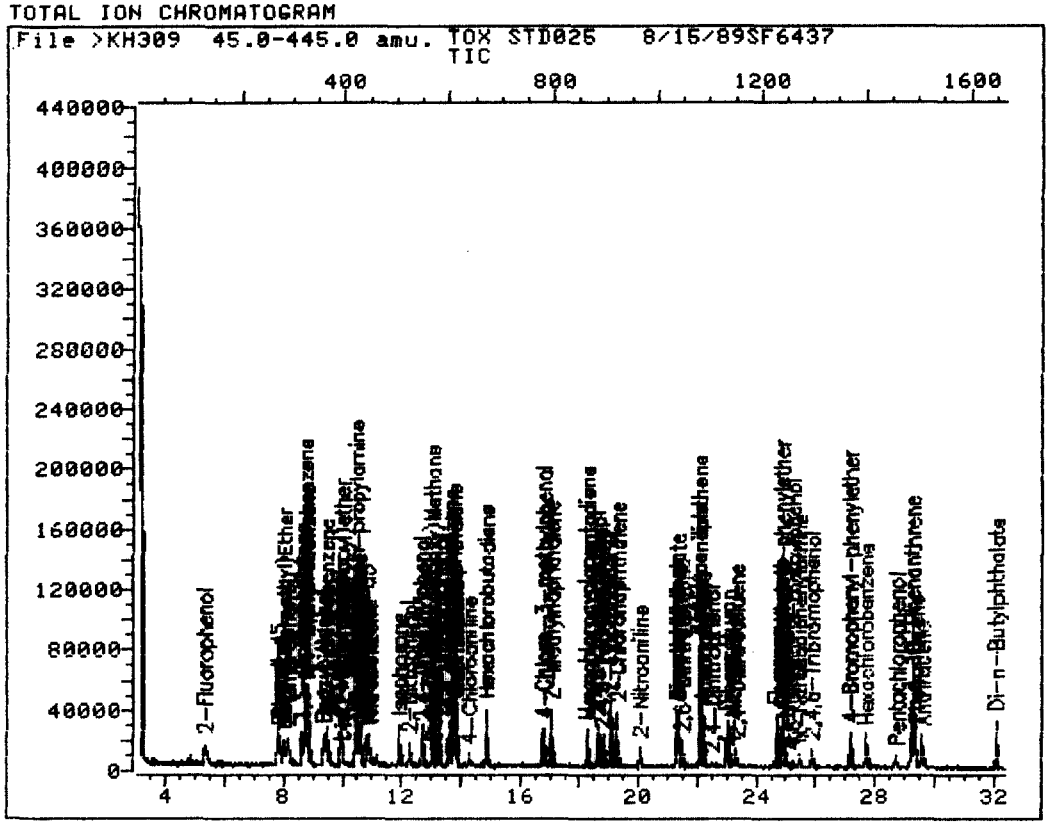
TOTAL ION CHROMATOGRAM



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Misc: SF6437 BTL# 3

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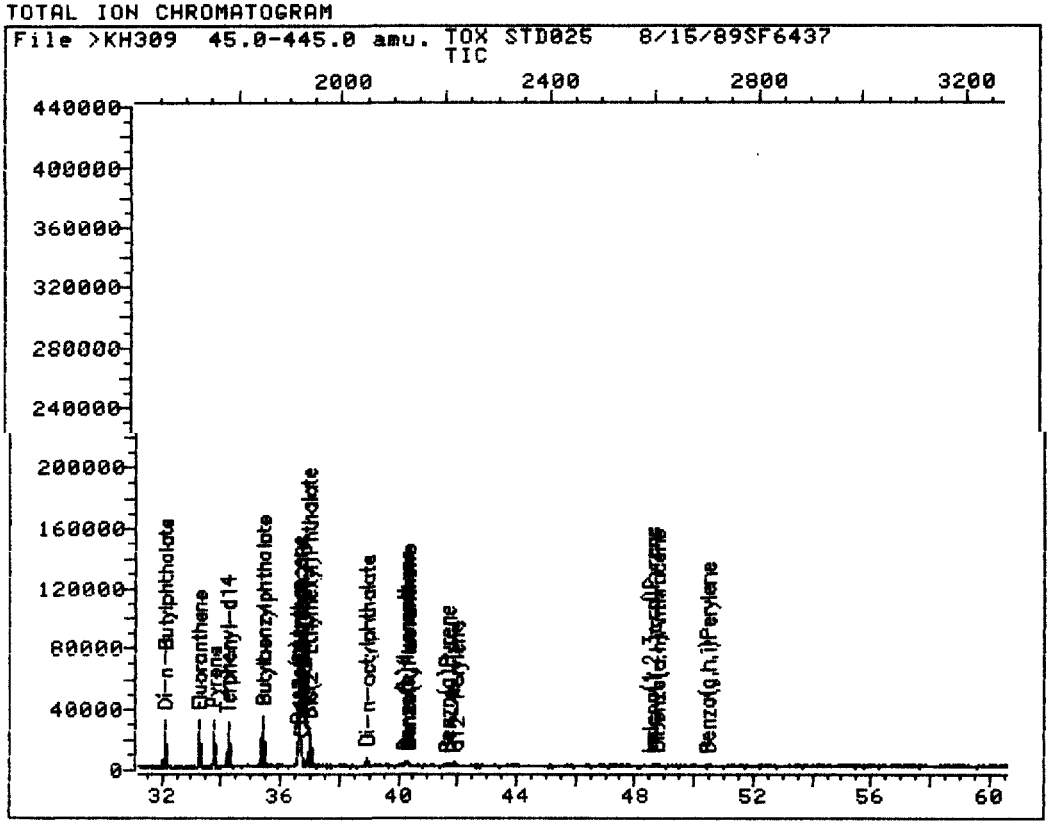
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 19:00
Injected at: 890815 17:53

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



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Misc: SF6437 BTL# 3

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Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 19:00
Injected at: 890815 17:53

TIC page 2 of 2

QUANT REPORT

Operator ID: KELLY Quant Rev: 6 Quant Time: 890815 19:00
Output File: ^KH309::C6 Injected at: 890815 17:53
Data File: >KH309::C7 Dilution Factor: 1.00000
Name: TOX STD025 8/15/89
Misc: SF6437 BTL# 3

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.71	152.0	37656	50.00	NG/UL	97
2)	2-Fluorophenol	5.29	112.0	13736	14.14	NG/UL	99
3)	Phenol-d5	7.78	99.0	30205	25.13	NG/UL	95
4)	Phenol	7.81	94.0	32054	22.76	NG/UL	84
5)	bis(2-Chloroethyl)Ether	8.01	93.0	28526	24.03	NG/UL	99
6)	2-Chlorophenol	8.13	128.0	24624	24.31	NG/UL	95
7)	1,3-Dichlorobenzene	8.59	146.0	24334	23.68	NG/UL	90
8)	1,4-Dichlorobenzene	8.76	146.0	27863	24.35	NG/UL	98
9)	Benzyl Alcohol	9.31	108.0	13171	22.75	NG/UL	96
10)	1,2-Dichlorobenzene	9.42	146.0	25940	24.54	NG/UL	95
11)	2-Methylphenol	9.89	108.0	20310	23.55	NG/UL	91
12)	bis(2-Chloroisopropyl)ether	9.96	121.0	7701	28.62	NG/UL	96
13)	4-Methylphenol	10.47	108.0	20036	22.74	NG/UL	99
14)	N-Nitroso-Di-n-propylamine	10.46	70.0	18978	23.10	NG/UL	98
15)	Hexachloroethane	10.56	201.0	9879	26.91	NG/UL	89
16)	d8-Naphthalene	13.75	136.0	118043	43.55	NG/UL	94
17)	Nitrobenzene-d5	10.83	82.0	24879	20.21	NG/UL	93
18)	Nitrobenzene	10.90	123.0	10889	23.09	NG/UL	89
19)	Isophorone	11.90	82.0	45969	21.87	NG/UL	97
20)	2-Nitrophenol	12.24	139.0	8825	17.93	NG/UL	96
21)	2,4-Dimethylphenol	12.64	122.0	14691	20.46	NG/UL	95
22)	Benzoic Acid	13.06	105.0	2420M	11.78	NG/UL	90
23)	bis(2-Chloroethoxy)Methane	13.03	93.0	27303	20.56	NG/UL	98
24)	2,4-Dichlorophenol	13.27	162.0	15565	20.66	NG/UL	87
25)	1,2,4-Trichlorobenzene	13.61	180.0	18444	23.41	NG/UL	93
26)	Naphthalene	13.82	128.0	55459	20.96	NG/UL	96
27)	4-Chloroaniline	14.28	127.0	7290	21.42	NG/UL	95
28)	Hexachlorobutadiene	14.84	225.0	13179	25.55	NG/UL	89
29)	4-Chloro-3-methylphenol	16.76	107.0	16549	20.69	NG/UL	95
30)	2-Methylnaphthalene	17.03	142.0	32348	20.86	NG/UL	95
31)	d10-Acenaphthene	22.05	164.0	47048M	41.44	NG/UL	
32)	Hexachlorocyclopentadiene	18.22	237.0	9217	20.32	NG/UL	95
33)	2,4,6-Trichlorophenol	18.59	196.0	9389	20.83	NG/UL	80
34)	2,4,5-Trichlorophenol	18.74	196.0	8919	19.93	NG/UL	95
35)	2-Chloronaphthalene	19.28	162.0	31631	21.29	NG/UL	94
36)	2-Fluorobiphenyl	19.02	172.0	37950	20.48	NG/UL	94
37)	2-Nitroaniline	20.04	138.0	6401M	15.68	NG/UL	
38)	Dimethylphthalate	21.31	163.0	34212	22.55	NG/UL	80
39)	*d-10-Phenanthrene	29.24	188.0	60330	50.00	NG/UL	98
40)	Acenaphthylene	21.27	152.0	42458	27.60	NG/UL	92
41)	3-Nitroaniline	22.05	138.0	4179M	19.11	NG/UL	85
42)	Acenaphthene	22.19	153.0	30747	27.97	NG/UL	97
43)	2,4-Dinitrophenol	22.50	184.0	838	12.14	NG/UL	82

	Compound	R.T.	Q ion	Area	Conc	Units	q
44)	4-Nitrophenol	23.17	109.0	3450M	23.03	NG/UL	
45)	Dibenzofuran	22.98	168.0	38795	27.40	NG/UL	88
46)	2,4-Dinitrotoluene	23.31	165.0	5555	18.48	NG/UL	99
47)	2,6-Dinitrotoluene	21.46	165.0	5207	21.06	NG/UL	89
48)	Diethylphthalate	24.81	149.0	34559	29.02	NG/UL	92
49)	4-Chlorophenyl-phenylether	24.85	204.0	13716	27.98	NG/UL	99
50)	Fluorene	24.63	166.0	28225	25.51	NG/UL	97
51)	4-Nitroaniline	24.99	138.0	3268	18.23	NG/UL	95
52)	4,6-Dinitro-2-methylphenol	25.22	198.0	1263M	14.02	NG/UL	67
53)	N-Nitrosodiphenylamine	25.46	169.0	6028	30.55	NG/UL	89
54)	2,4,6-Tribromophenol	25.87	330.0	4525	29.94	NG/UL	91
55)	4-Bromophenyl-phenylether	27.15	248.0	6260	23.96	NG/UL	88
56)	Hexachlorobenzene	27.68	284.0	10035	31.96	NG/UL	89
57)	Pentachlorophenol	28.72	265.8	2578	18.20	NG/UL	81
58)	Phenanthrene	29.37	178.0	30741	24.72	NG/UL	96
59)	Anthracene	29.58	178.0	30039	26.22	NG/UL	96
60)	Di-n-Butylphthalate	32.08	149.0	39598	27.24	NG/UL	97
61)	Fluoranthene	33.24	202.0	27746M	26.00	NG/UL	93
62)	d12-Chrysene	36.63	240.0	22110	45.75	NG/UL	93
63)	Pyrene	33.73	202.0	28074	27.12	NG/UL	96
64)	Terphenyl-d14	34.20	244.0	19749	27.03	NG/UL	94
65)	Butylbenzylphthalate	35.40	149.0	14388M	26.24	NG/UL	66
66)	Benzo(a)Anthracene	36.60	228.0	15884M	24.76	NG/UL	91
67)	Bis(2-Ethylhexyl)Phthalate	36.95	149.0	15516M	25.92	NG/UL	94
68)	Chrysene	36.70	228.0	9715M	17.39	NG/UL	95
69)	*d12-Perylene	41.93	264.0	4875	50.00	NG/UL	97
70)	Di-n-octylphthalate	38.92	149.0	8226	14.61	NG/UL	85
71)	Benzo(b)fluoranthene	40.22	252.0	4763	20.36	NG/UL	91
72)	Benzo(k)Fluoranthene	40.31	252.0	3890M	23.47	NG/UL	91
73)	Benzo(a)Pyrene	41.63	252.0	2588M	26.87	NG/UL	
74)	Indeno(1,2,3-cd)Pyrene	48.51	276.0	832M	29.66	NG/UL	
75)	Dibenzo(a,h)Anthracene	48.74	278.0	569M	17.19	NG/UL	
76)	Benzo(g,h,i)Perylene	50.42	276.0	818M	25.32	NG/UL	

* Compound is ISTD

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Superfund Document Management System (SDMS)

Lab Data Reference Sheet

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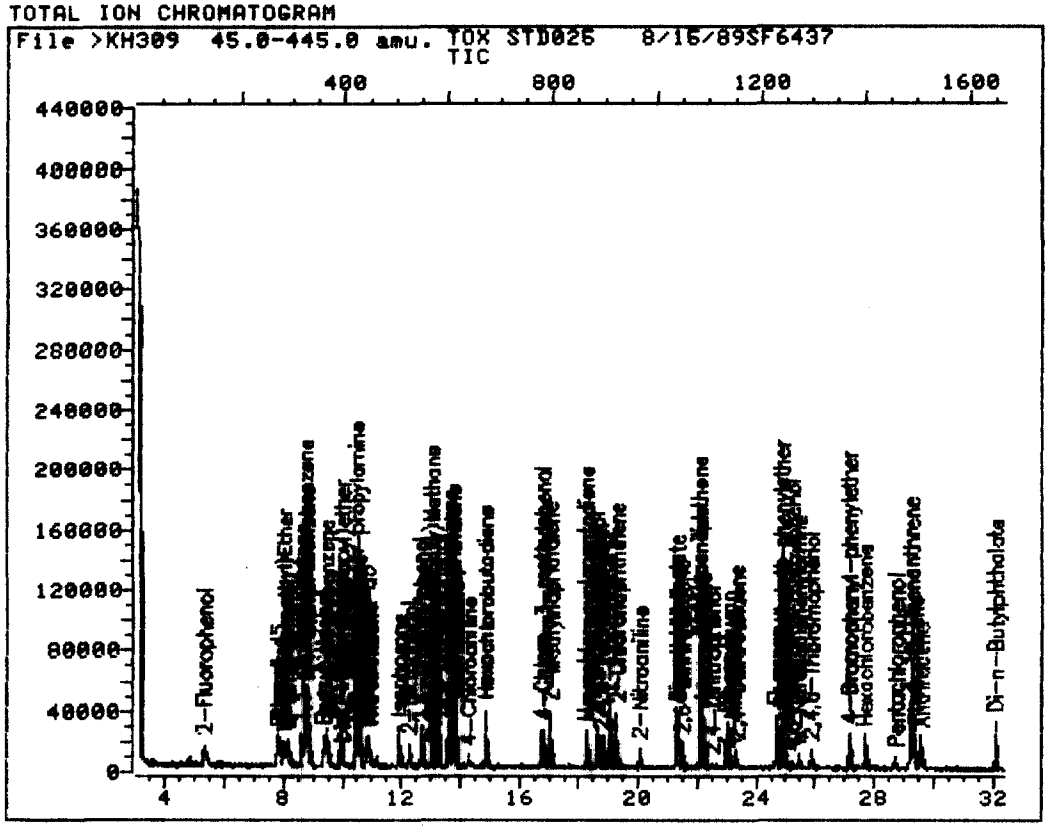
II. Image Quality (Pages follow / No. of pages 2)

✓ Resolution / Contrast

TOTAL ION CHROMATOGRAM



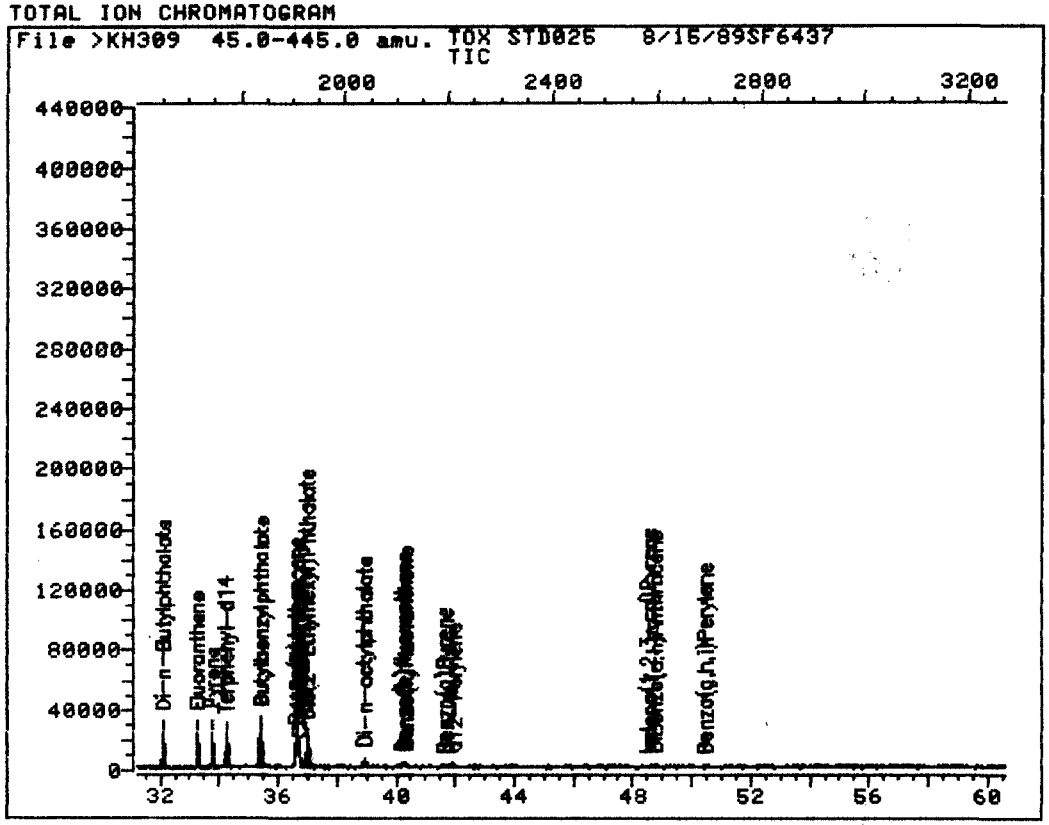
Data File: >KH309::C7 Quant Output File: ^KH309::C6
Name: TOX STD025 8/15/89
Misc: SF6437 BTL# 3

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 19:00
Injected at: 890815 17:53

TIC page 1 of 2

TOTAL ION CHROMATOGRAM



Data File: >KH309::C7 Quant Output File: ^KH309::C6
Name: TOX STD025 8/15/89
Misc: SF6437 BTL# 3

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890814 10:50

Operator ID: KELLY
Quant Time: 890815 19:00
Injected at: 890815 17:53

TIC page 2 of 2

Quant ID File: IDKH96::C2

Title: HP BNA STD REV E KELLY 06\23\89

Last EDIT Date: 890814 10:55 Last Calib Date: 890823 10:42

RT Window (+/- min): .50
Max Hits/Compound: 1
Minimum Area: 1000
Peak/Base Peak Ratio: 30.00 %
Slope Sensitivity: .200
Subtraction Method: 1
Ignore max check: NO
Auto Qdel Method: 5
Units of Conc: NG/UL

Number of Compounds: 76

Comp No.	Compound Name	(Type)	Retention Time Min.	(Rel)	R.F.	Conc.	
1)	*d4-1,4-Dichlorobenzene	(I)	8.69	(1.000)	1.00000	50.00	**
2)	2-Fluorophenol	(S)	5.27	(.607)	1.29367	50.00	
3)	Phenol-d5	(S)	7.76	(.893)	1.69327	50.00	
4)	Phenol	(M)	7.80	(.898)	1.83423	50.00	**
5)	bis(2-Chloroethyl)Ether	(T)	7.98	(.919)	1.58112	50.00	**
6)	2-Chlorophenol	(M)	8.10	(.933)	1.37496	50.00	**
7)	1,3-Dichlorobenzene	(T)	8.56	(.986)	1.35420	50.00	**
8)	1,4-Dichlorobenzene	(M)	8.74	(1.006)	1.46535	50.00	**
9)	Benzyl Alcohol	(T)	9.30	(1.070)	.73857	50.00	**
10)	1,2-Dichlorobenzene	(T)	9.38	(1.080)	1.40578	50.00	**
11)	2-Methylphenol	(T)	9.87	(1.136)	1.13446	50.00	**
12)	bis(2-Chloroisopropyl)ether	(T)	9.94	(1.144)	.42015	50.00	**
13)	4-Methylphenol	(T)	10.46	(1.204)	1.10952	50.00	**
14)	N-Nitroso-Di-n-propylamine	(M)	10.44	(1.202)	.96959	50.00	**
15)	Hexachloroethane	(T)	10.53	(1.212)	.54818	50.00	**
16)	d8-Naphthalene	(T)	13.71	(1.579)	3.04865	50.00	**
17)	Nitrobenzene-d5	(S)	10.81	(1.244)	1.38542	50.00	
18)	Nitrobenzene	(T)	10.88	(1.252)	.59370	50.00	**
19)	Isophorone	(T)	11.88	(1.367)	2.38563	50.00	**
20)	2-Nitrophenol	(T)	12.19	(1.404)	.52079	50.00	**
21)	2,4-Dimethylphenol	(T)	12.62	(1.453)	.81761	50.00	**
22)	Benzoic Acid	(T)	13.18	(1.517)	.18707	50.00	**
23)	bis(2-Chloroethoxy)Methane	(T)	13.00	(1.497)	1.50765	50.00	**
24)	2,4-Dichlorophenol	(T)	13.25	(1.525)	.86507	50.00	**
25)	1,2,4-Trichlorobenzene	(M)	13.57	(1.563)	.98699	50.00	**
26)	Naphthalene	(T)	13.80	(1.588)	3.00575	50.00	**
27)	4-Chloroaniline	(T)	14.24	(1.639)	.38497	50.00	**
28)	Hexachlorobutadiene	(T)	14.80	(1.703)	.69178	50.00	**
29)	4-Chloro-3-methylphenol	(M)	16.73	(1.926)	.91052	50.00	**
30)	2-Methylnaphthalene	(T)	16.98	(1.955)	1.70488	50.00	**
31)	d10-Acenaphthene	(T)	21.98	(2.530)	1.14866	50.00	**
32)	Hexachlorocyclopentadiene	(T)	18.17	(2.091)	.55040	50.00	**
33)	2,4,6-Trichlorophenol	(T)	18.54	(2.134)	.50492	50.00	**
34)	2,4,5-Trichlorophenol	(T)	18.69	(2.151)	.49590	50.00	**
35)	2-Chloronaphthalene	(T)	19.23	(2.213)	1.59038	50.00	**
36)	2-Fluorobiphenyl	(S)	18.96	(2.183)	1.97377	50.00	
37)	2-Nitroaniline	(T)	19.98	(2.300)	.38558	50.00	**
38)	Dimethylphthalate	(T)	21.26	(2.447)	1.74843	50.00	**
39)	*d-10-Phenanthrene	(I)	29.23	(1.000)	1.00000	50.00	**

40)	Acenaphthylene	(T)	21.26(	.727)	1.58574	50.00	**
41)	3-Nitroaniline	(T)	22.05(	.754)	.19266	50.00	**
42)	Acenaphthene	(M)	22.18(	.759)	1.11802	50.00	**
43)	2,4-Dinitrophenol	(T)	22.51(	.770)	.04214	50.00	**
44)	4-Nitrophenol	(M)	23.17(	.793)	.13885	50.00	**
45)	Dibenzofuran	(T)	22.97(	.786)	1.38732	50.00	**
46)	2,4-Dinitrotoluene	(M)	23.31(	.797)	.25327	50.00	**
47)	2,6-Dinitrotoluene	(T)	21.47(	.735)	.22793	50.00	**
48)	Diethylphthalate	(T)	24.81(	.849)	1.21985	50.00	**
49)	4-Chlorophenyl-phenylether	(T)	24.84(	.850)	.48828	50.00	**
50)	Fluorene	(T)	24.63(	.843)	1.02683	50.00	**
51)	4-Nitroaniline	(T)	25.00(	.855)	.14475	50.00	**
52)	4,6-Dinitro-2-methylphenol	(T)	25.21(	.863)	.06236	50.00	**
53)	N-Nitrosodiphenylamine	(T)	25.45(	.871)	.18190	50.00	**
54)	2,4,6-Tribromophenol	(S)	25.85(	.885)	.17259	50.00	
55)	4-Bromophenyl-phenylether	(T)	27.13(	.928)	.25037	50.00	**
56)	Hexachlorobenzene	(T)	27.67(	.947)	.35253	50.00	**
57)	Pentachlorophenol	(M)	28.69(	.982)	.12341	50.00	**
58)	Phenanthrene	(T)	29.35(	1.004)	1.14883	50.00	**
59)	Anthracene	(T)	29.57(	1.012)	1.09294	50.00	**
60)	Di-n-Butylphthalate	(T)	32.04(	1.096)	1.41831	50.00	**
61)	Fluoranthene	(T)	33.20(	1.136)	.91875	50.00	**
62)	d12-Chrysene	(T)	36.58(	1.252)	.29373	50.00	**
63)	Pyrene	(M)	33.69(	1.153)	.91446	50.00	**
64)	Terphenyl-d14	(S)	34.16(	1.169)	.58810	50.00	
65)	Butylbenzylphthalate	(T)	35.35(	1.210)	.37881	50.00	**
66)	Benzo(a)Anthracene	(T)	36.54(	1.250)	.41248	50.00	**
67)	Bis(2-Ethylhexyl)Phthalate	(T)	36.90(	1.263)	.39775	50.00	**
68)	Chrysene	(T)	36.65(	1.254)	.29014	50.00	**
69)	*d12-Perylene	(I)	41.85(	1.000)	1.00000	50.00	**
70)	Di-n-octylphthalate	(T)	38.86(	.929)	3.40825	50.00	**
71)	Benzo(b)fluoranthene	(T)	40.17(	.960)	1.87779	50.00	**
72)	Benzo(k)Fluoranthene	(T)	40.26(	.962)	1.38823	50.00	**
73)	Benzo(a)Pyrene	(T)	41.57(	.993)	1.07616	50.00	**
74)	Indeno(1,2,3-cd)Pyrene	(T)	48.40(	1.157)	.51703	50.00	**
75)	Dibenzo(a,h)Anthracene	(T)	48.63(	1.162)	.54852	50.00	
76)	Benzo(g,h,i)Perylene	(T)	50.37(	1.204)	.70014	50.00	**

* Compound is ISTD
** Compound uses different Quant parameters

QUANT REPORT

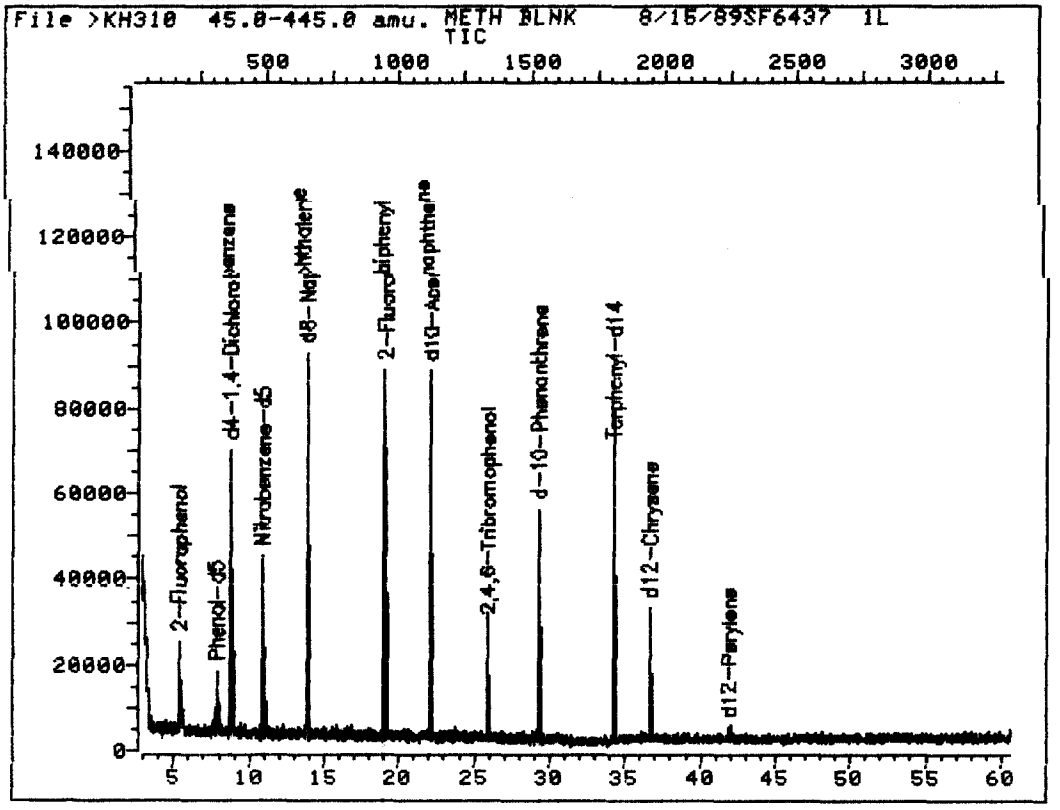
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 10:43
Output File: ^KH310::SK Injected at: 890815 19:04
Data File: >KH310::C7 Dilution Factor: 1.00000
Name: METH BLNK 8/15/89
Misc: SF6437 1L BTL# 4

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.72	152.0	45643	50.00	NG/UL	98
2)	2-Fluorophenol	5.30	112.0	39906	33.79	NG/UL	97
3)	Phenol-d5	7.79	99.0	29072	18.81	NG/UL	99
16)	d8-Naphthalene	13.74	136.0	136512	49.05	NG/UL	96
17)	Nitrobenzene-d5	10.84	82.0	53145	42.02	NG/UL	90
31)	d10-Acenaphthene	22.05	164.0	55286	52.73	NG/UL	95
36)	2-Fluorobiphenyl	19.02	172.0	77538	43.03	NG/UL	94
39)	*d-10-Phenanthrene	29.25	188.0	69097	50.00	NG/UL	99
54)	2,4,6-Tribromophenol	25.87	330.0	10580	44.36	NG/UL	98
62)	d12-Chrysene	36.60	240.0	27683	68.20	NG/UL	93
64)	Terphenyl-d14	34.17	244.0	59030	72.63	NG/UL	99
69)	*d12-Perylene	41.86	264.0	5807	50.00	NG/UL	93

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH310::C7 Quant Output File: ^KH310::SK
Name: METH BLNK 8/15/89
Misc: SF6437 1L BTL# 4

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 10:43
Injected at: 890815 19:04

QUANT REPORT

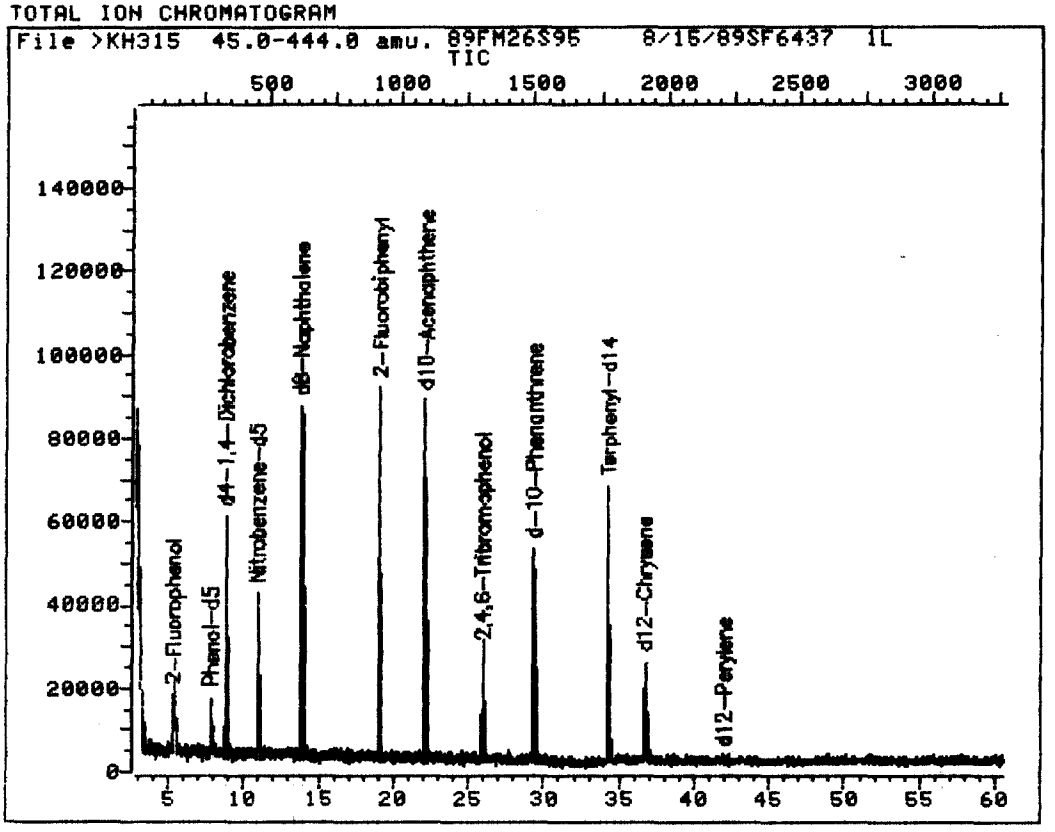
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 11:35
Output File: ^KH315::SK Injected at: 890816 00:58
Data File: >KH315::C6 Dilution Factor: 1.00000
Name: 89FM26S95 8/15/89
Misc: SF6437 1L BTL# 9

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.70	152.0	42899	50.00	NG/UL	95
2)	2-Fluorophenol	5.26	112.0	37993	34.23	NG/UL	87
3)	Phenol-d5	7.76	99.0	26746	18.41	NG/UL	97
16)	d8-Naphthalene	13.72	136.0	128669	49.19	NG/UL	97
17)	Nitrobenzene-d5	10.81	82.0	47064	39.59	NG/UL	84
31)	d10-Acenaphthene	22.03	164.0	51648	52.41	NG/UL	91
36)	2-Fluorobiphenyl	19.00	172.0	75388	44.52	NG/UL	95
39)	*d-10-Phenanthrene	29.23	188.0	63446	50.00	NG/UL	98
54)	2,4,6-Tribromophenol	25.85	330.0	9738	44.47	NG/UL	96
62)	d12-Chrysene	36.58	240.0	22965	61.61	NG/UL	92
64)	Terphenyl-d14	34.15	244.0	50623	67.84	NG/UL	98
69)	*d12-Perylene	41.87	264.0	2825	50.00	NG/UL	83

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH315::C6 Quant Output File: ^KH315::SK
Name: 89FM26S95 8/15/89
Misc: SF6437 1L BTL# 9

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 11:35
Injected at: 890816 00:58

QUANT REPORT

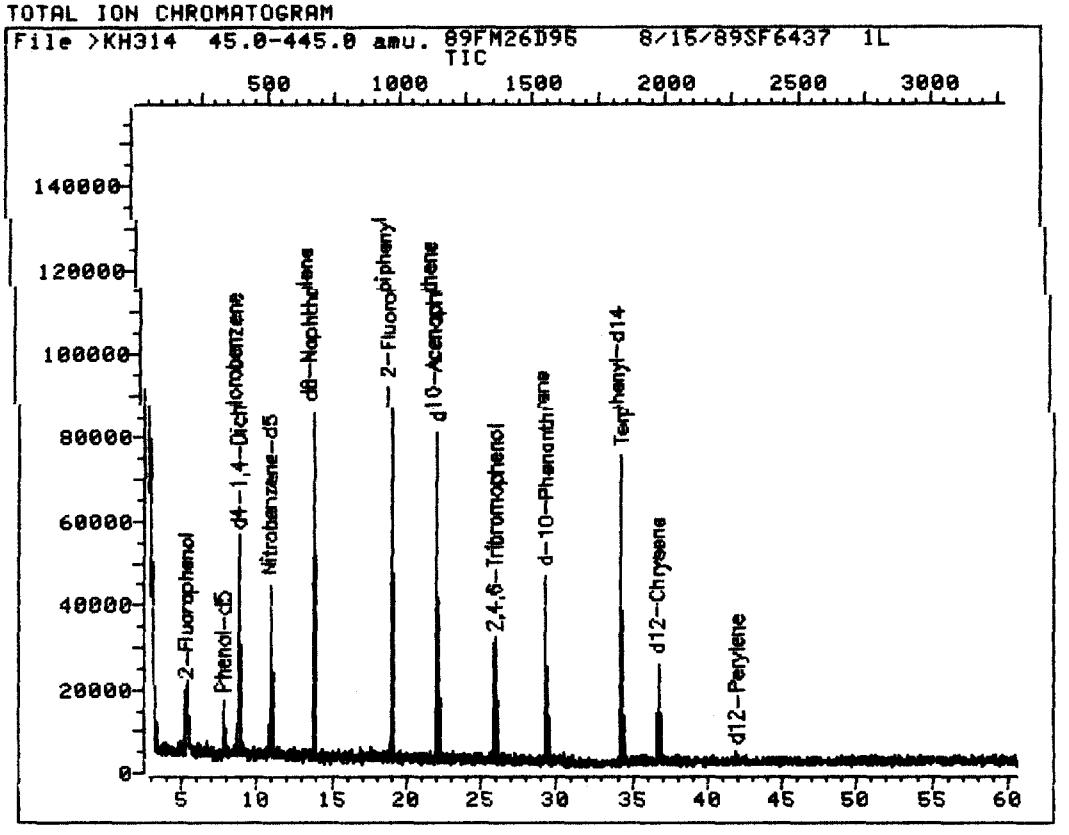
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 11:26
Output File: ^KH314::SK Injected at: 890815 23:47
Data File: >KH314::C7 Dilution Factor: 1.00000
Name: 89FM26D95 8/15/89
Misc: SF6437 1L BTL# 8

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.68	152.0	41781	50.00	NG/UL	92
2)	2-Fluorophenol	5.26	112.0	42676M	39.48	NG/UL	
3)	Phenol-d5	7.75	99.0	29926	21.15	NG/UL	96
16)	d8-Naphthalene	13.72	136.0	126031	49.47	NG/UL	95
17)	Nitrobenzene-d5	10.80	82.0	55597	48.02	NG/UL	84
31)	d10-Acenaphthene	22.01	164.0	50477	52.59	NG/UL	94
36)	2-Fluorobiphenyl	18.99	172.0	81673	49.52	NG/UL	91
39)	*d-10-Phenanthrene	29.21	188.0	60475	50.00	NG/UL	98
54)	2,4,6-Tribromophenol	25.84	330.0	11027	52.83	NG/UL	93
62)	d12-Chrysene	36.58	240.0	23307	65.60	NG/UL	91
64)	Terphenyl-d14	34.17	244.0	51127	71.88	NG/UL	93
69)	*d12-Perylene	41.88	264.0	4519	50.00	NG/UL	98

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH314::C7 Quant Output File: ^KH314::SK
Name: 89FM26D95 8/15/89
Misc: SF6437 1L BTL# 8

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 11:26
Injected at: 890815 23:47

QUANT REPORT

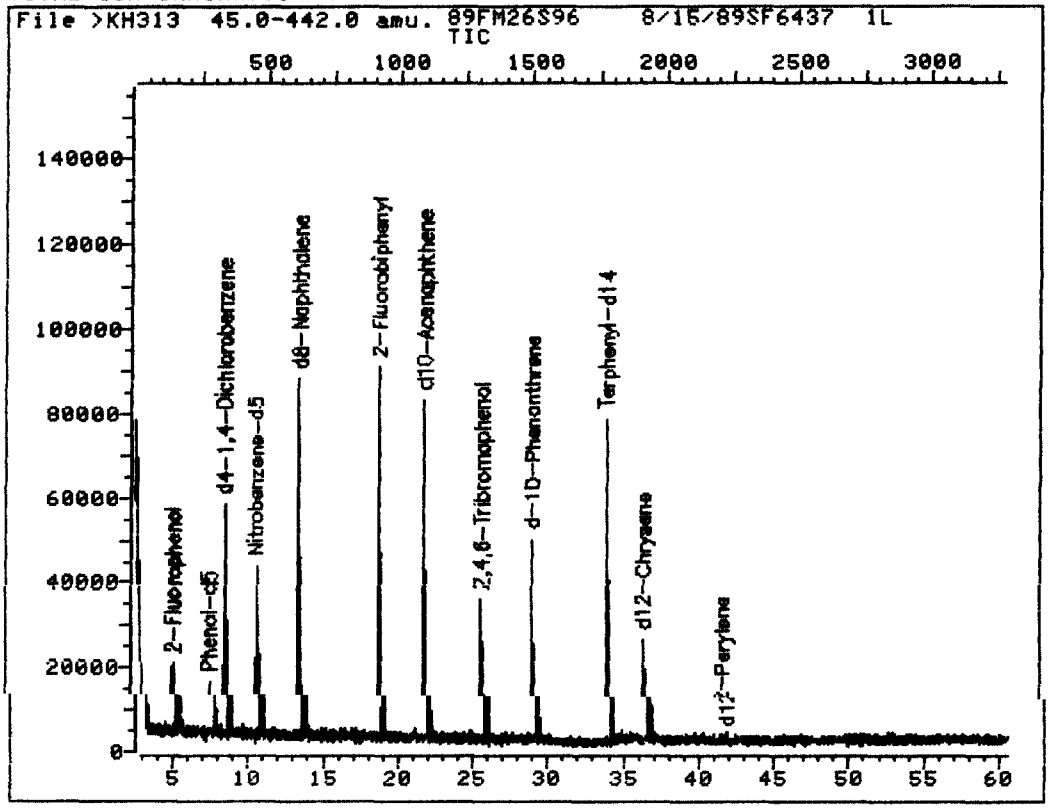
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 11:16
Output File: ^KH313::SK Injected at: 890815 22:36
Data File: >KH313::C6 Dilution Factor: 1.00000
Name: 89FM26S96 8/15/89
Misc: SF6437 1L BTL# 7

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.68	152.0	41521	50.00	NG/UL	95
2)	2-Fluorophenol	5.30	112.0	39662M	36.92	NG/UL	98
3)	Phenol-d5	7.73	99.0	27318	19.43	NG/UL	99
16)	d8-Naphthalene	13.70	136.0	122862	48.53	NG/UL	98
17)	Nitrobenzene-d5	10.80	82.0	50954	44.29	NG/UL	89
31)	d10-Acenaphthene	22.02	164.0	49998	52.42	NG/UL	94
36)	2-Fluorobiphenyl	18.99	172.0	78374	47.82	NG/UL	94
39)	*d-10-Phenanthrene	29.20	188.0	61936	50.00	NG/UL	97
54)	2,4,6-Tribromophenol	25.84	330.0	11027	51.58	NG/UL	96
62)	d12-Chrysene	36.57	240.0	22922	63.00	NG/UL	94
64)	Terphenyl-d14	34.14	244.0	54371	74.63	NG/UL	95
69)	*d12-Perylene	41.83	264.0	3371M	50.00	NG/UL	

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH313::C6 Quant Output File: ^KH313::SK
Name: 89FM26S96 8/15/89
Misc: SF6437 1L BTL# 7

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 11:16
Injected at: 890815 22:36

QUANT REPORT

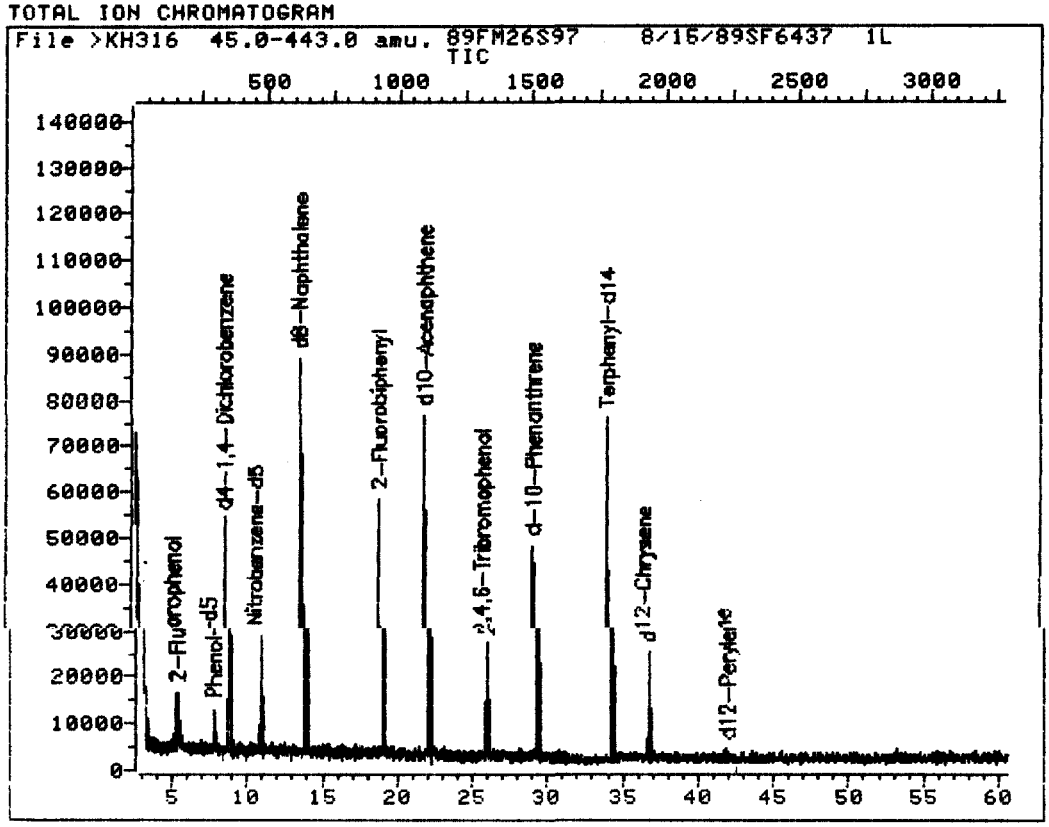
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 11:45
Output File: ^KH316::SK Injected at: 890816 02:09
Data File: >KH316::C6 Dilution Factor: 1.00000
Name: 89FM26S97 8/15/89
Misc: SF6437 1L BTL#10

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.69	152.0	40953	50.00	NG/UL	95
2)	2-Fluorophenol	5.29	112.0	25723	24.28	NG/UL	94
3)	Phenol-d5	7.76	99.0	18005	12.98	NG/UL	99
16)	d8-Naphthalene	13.73	136.0	119026	47.67	NG/UL	96
17)	Nitrobenzene-d5	10.80	82.0	33548	29.56	NG/UL	83
31)	d10-Acenaphthene	22.04	164.0	46637	49.57	NG/UL	89
36)	2-Fluorobiphenyl	19.01	172.0	49065	30.35	NG/UL	92
39)	*d-10-Phenanthrene	29.24	188.0	58367	50.00	NG/UL	97
54)	2,4,6-Tribromophenol	25.86	330.0	8081	40.11	NG/UL	97
62)	d12-Chrysene	36.60	240.0	21975	64.09	NG/UL	96
64)	Terphenyl-d14	34.18	244.0	49231	71.71	NG/UL	99
69)	*d12-Perylene	41.90	264.0	3475M	50.00	NG/UL	

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH316::C6 Quant Output File: ^KH316::SK
Name: 89FM26S97 8/15/89
Misc: SF6437 1L BTL#10

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 11:45
Injected at: 890816 02:09

QUANT REPORT

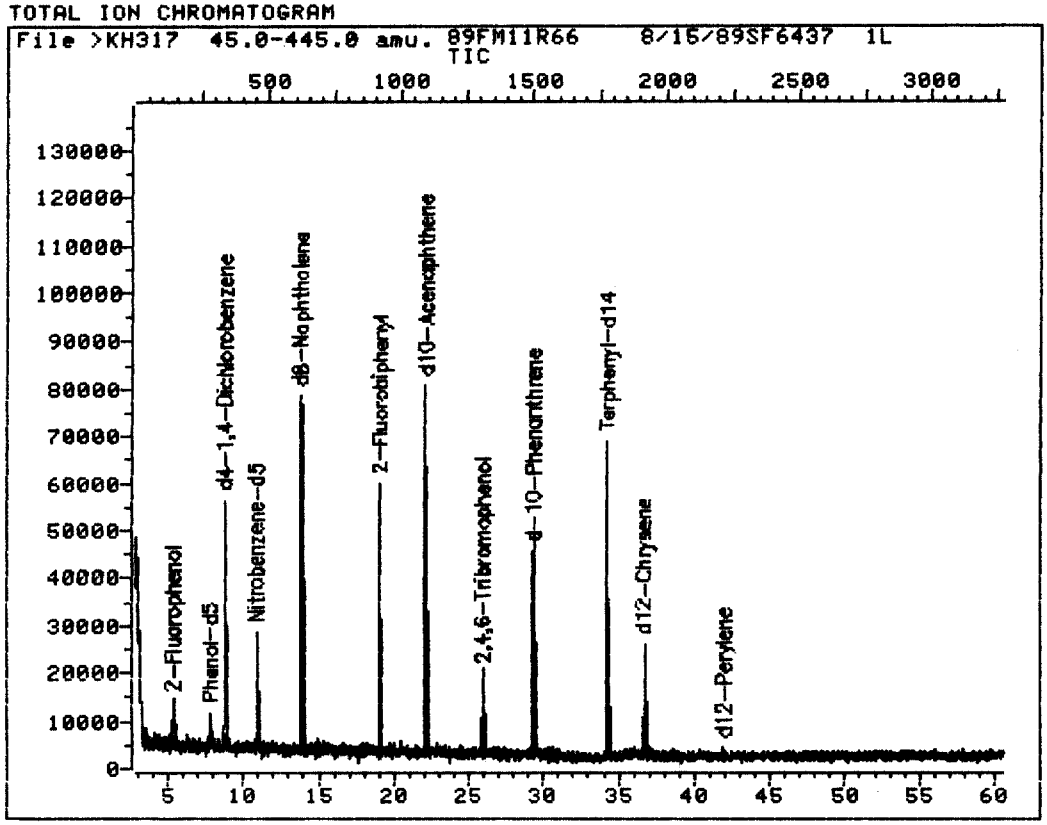
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 11:54
Output File: ^KH317::SK Injected at: 890816 03:20
Data File: >KH317::C7 Dilution Factor: 1.00000
Name: 89FM11R66 8/15/89
Misc: SF6437 1L BTL#11

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.72	152.0	40322	50.00	NG/UL	87
2)	2-Fluorophenol	5.29	112.0	22534M	21.60	NG/UL	94
3)	Phenol-d5	7.79	99.0	14980	10.97	NG/UL	87
16)	d8-Naphthalene	13.73	136.0	117126	47.64	NG/UL	99
17)	Nitrobenzene-d5	10.82	82.0	28316	25.34	NG/UL	84
31)	d10-Acenaphthene	22.04	164.0	46487	50.18	NG/UL	88
36)	2-Fluorobiphenyl	19.01	172.0	47544	29.87	NG/UL	93
39)	*d-10-Phenanthrene	29.24	188.0	57151	50.00	NG/UL	99
54)	2,4,6-Tribromophenol	25.86	330.0	6214	31.50	NG/UL	95
62)	d12-Chrysene	36.60	240.0	22965	68.40	NG/UL	96
64)	Terphenyl-d14	34.18	244.0	43695	65.00	NG/UL	99
69)	*d12-Perylene	41.90	264.0	4276	50.00	NG/UL	92

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH317::C7 Quant Output File: ^KH317::SK
Name: 89FM11R66 8/15/89
Misc: SF6437 1L BTL#11

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 11:54
Injected at: 890816 03:20

QUANT REPORT

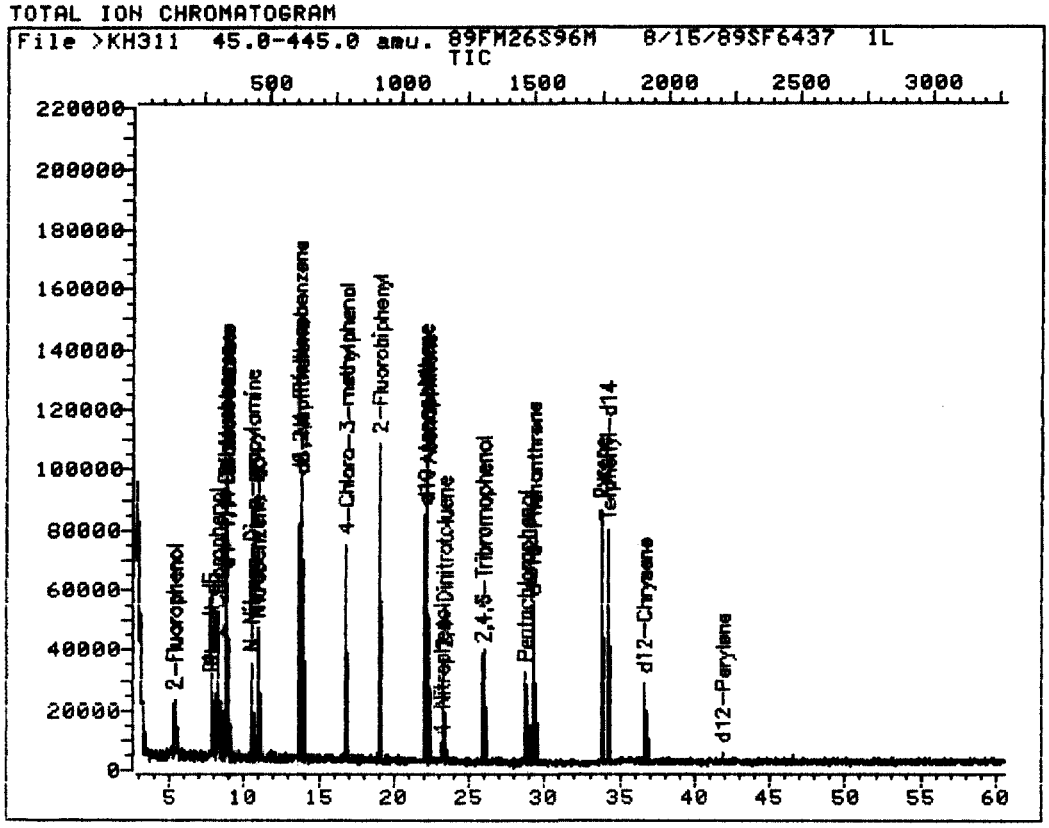
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 10:54
Output File: ^KH311::SK Injected at: 890815 20:14
Data File: >KH311::C7 Dilution Factor: 1.00000
Name: 89FM26S96M 8/15/89
Misc: SF6437 1L BTL# 5

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.70	152.0	42942	50.00	NG/UL	97
2)	2-Fluorophenol	5.30	112.0	44077	39.67	NG/UL	94
3)	Phenol-d5	7.76	99.0	33894	23.31	NG/UL	99
4)	Phenol	7.80	94.0	37701	23.93	NG/UL	85
6)	2-Chlorophenol	8.12	128.0	58080	49.18	NG/UL	99
8)	1,4-Dichlorobenzene	8.75	146.0	62069	49.32	NG/UL	97
14)	N-Nitroso-Di-n-propylamine	10.44	70.0	57234	68.73	NG/UL	99
16)	d8-Naphthalene	13.72	136.0	131736	50.31	NG/UL	91
17)	Nitrobenzene-d5	10.81	82.0	59686	50.16	NG/UL	88
25)	1,2,4-Trichlorobenzene	13.60	180.0	58264	68.73	NG/UL	98
29)	4-Chloro-3-methylphenol	16.75	107.0	44777	57.26	NG/UL	89
31)	d10-Acenaphthene	22.01	164.0	55967	56.73	NG/UL	93
36)	2-Fluorobiphenyl	18.98	172.0	98542	58.13	NG/UL	94
39)	*d-10-Phenanthrene	29.21	188.0	68370	50.00	NG/UL	98
42)	Acenaphthene	22.17	153.0	81891	53.57	NG/UL	95
44)	4-Nitrophenol	23.14	109.0	3299M	17.38	NG/UL	
46)	2,4-Dinitrotoluene	23.28	165.0	15026M	43.39	NG/UL	95
54)	2,4,6-Tribromophenol	25.83	330.0	13326	56.47	NG/UL	82
57)	Pentachlorophenol	28.66	265.8	8308M	49.23	NG/UL	94
62)	d12-Chrysene	36.56	240.0	24740	61.60	NG/UL	94
63)	Pyrene	33.66	202.0	84213	67.35	NG/UL	94
64)	Terphenyl-d14	34.13	244.0	59855	74.43	NG/UL	98
69)	*d12-Perylene	41.82	264.0	4464	50.00	NG/UL	78

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH311::C7 Quant Output File: ^KH311::SK
Name: 89FM26S96M 8/15/89
Misc: SF6437 1L BTL# 5

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 10:54
Injected at: 890815 20:14

QUANT REPORT

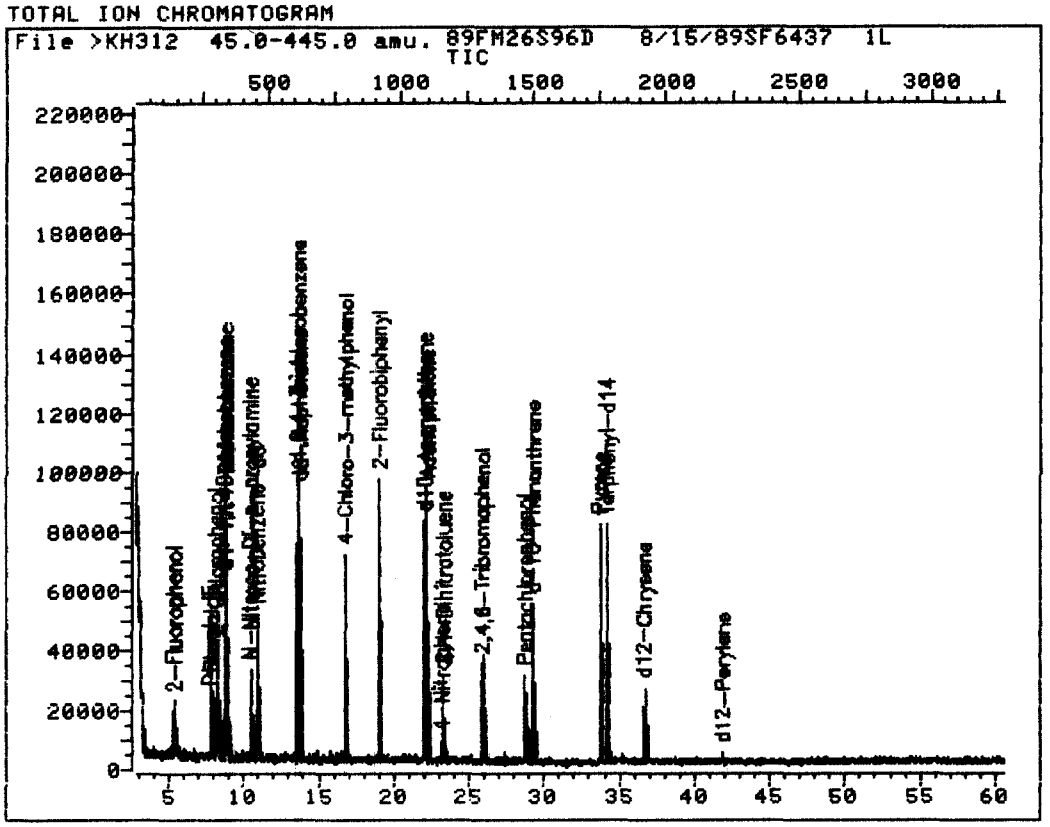
Operator ID: KELLY Quant Rev: 6 Quant Time: 890823 11:05
Output File: ^KH312::SK Injected at: 890815 21:25
Data File: >KH312::C7 Dilution Factor: 1.00000
Name: 89FM26S96D 8/15/89
Misc: SF6437 1L BTL# 6

ID File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

	Compound	R.T.	Q ion	Area	Conc	Units	q
1)	*d4-1,4-Dichlorobenzene	8.69	152.0	42642	50.00	NG/UL	92
2)	2-Fluorophenol	5.33	112.0	48616M	44.06	NG/UL	90
3)	Phenol-d5	7.76	99.0	33604	23.27	NG/UL	92
4)	Phenol	7.80	94.0	35665	22.80	NG/UL	95
6)	2-Chlorophenol	8.11	128.0	59768	50.97	NG/UL	97
8)	1,4-Dichlorobenzene	8.75	146.0	60210	48.18	NG/UL	95
14)	N-Nitroso-Di-n-propylamine	10.44	70.0	54361	65.74	NG/UL	97
16)	d8-Naphthalene	13.72	136.0	130714	50.27	NG/UL	92
17)	Nitrobenzene-d5	10.81	82.0	60848	51.50	NG/UL	80
25)	1,2,4-Trichlorobenzene	13.59	180.0	56874	67.57	NG/UL	91
29)	4-Chloro-3-methylphenol	16.75	107.0	42827	55.15	NG/UL	90
31)	d10-Acenaphthene	22.01	164.0	54116	55.24	NG/UL	88
36)	2-Fluorobiphenyl	18.98	172.0	93696	55.66	NG/UL	93
39)	*d-10-Phenanthrene	29.21	188.0	66455	50.00	NG/UL	96
42)	Acenaphthene	22.17	153.0	73310	49.34	NG/UL	98
44)	4-Nitrophenol	23.14	109.0	3419M	18.53	NG/UL	
46)	2,4-Dinitrotoluene	23.28	165.0	13959M	41.47	NG/UL	87
54)	2,4,6-Tribromophenol	25.83	330.0	13017	56.75	NG/UL	96
57)	Pentachlorophenol	28.66	265.8	7952M	48.48	NG/UL	90
62)	d12-Chrysene	36.58	240.0	23797	60.96	NG/UL	94
63)	Pyrene	33.67	202.0	71106	58.50	NG/UL	93
64)	Terphenyl-d14	34.15	244.0	55053	70.43	NG/UL	96
69)	*d12-Perylene	41.84	264.0	5040	50.00	NG/UL	86

* Compound is ISTD

TOTAL ION CHROMATOGRAM



Data File: >KH312::C7 Quant Output File: ^KH312::SK
Name: 89FM26S96D 8/15/89
Misc: SF6437 1L BTL# 6

Id File: IDKH96::C2
Title: HP BNA STD REV E KELLY 06\23\89
Last Calibration: 890823 10:42

Operator ID: KELLY
Quant Time: 890823 11:05
Injected at: 890815 21:25

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: SEP 07 1989

SUBJECT: Review of Region 5 data for ESTWING MFG. CO.

FROM: Curtis Ross, Director
Region 5 Central Regional Laboratory

To: Data User: FIT

Attached are the results for:

CRL Data Set Numbers: SF 6437
Sample Numbers: 89 FM 26 $95 - 97; D95; 11R66
Parameter(s): PCB / Pesticides
Laboratory: CRL

Results Status:

( ) DATA ACCEPTABLE FOR USE*
( ) DATA QUALIFIED AS TO USE
( ) DATA UNACCEPTABLE FOR USE

* For data acceptability requirements, refer to the method capability statement for the methods referenced.

Comments by the Quality Control Coordinator:

If there are any questions regarding the data, refer them to Steve Parker, the Quality Control Coordinator, at 353-3805.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
(5SCRL)

TRANSMITTED BY
Sylvia Griffin
SEP 07 1989
U.S. EPA CENTRAL
REGIONAL LAB

RECEIVED BY/DATE: Mary [illegible] 9/13/89
Comments:

SU, P/D

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: 9/18/89

SUBJECT: Review of Region 5 data for Estwing Mfg. Co.

FROM: Curtis Ross, Director CR
Region 5 Central Regional Laboratory

To: Data User:

Attached are the results for:

CRL Data Set Numbers: SF-6437
Sample Numbers: 89FM26595 - 89FM26597, 89FM26D95, 89FM11R66 (5)
Parameter(s): VOA / water
Laboratory: CRL / Weston ESAT

Results Status:

(X) DATA ACCEPTABLE FOR USE*
( ) DATA QUALIFIED AS TO USE
( ) DATA UNACCEPTABLE FOR USE

* For data acceptability requirements, refer to the method capability statement for the methods referenced.

Comments by the Quality Control Coordinator:

If there are any questions regarding the data, refer them to ~~Steve Parker~~, David A. Payne, the Quality Control Coordinator, at 353-3805.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
(5SCRL)

RECEIVED BY
OCT 18 1989
U.S. EPA CENTRAL REGIONAL LAB

RECEIVED BY/DATE: 9/21/89

Comments:

ESAT CONTRACT **TID NO:** 0810
TASK NO: 1137

DATASET CUSTODY TRANSFER FORM

Analytical testing was completed on Aug 11, 1989 for:

DATASET NO: SF-6437 **SITE NAME:** Estwing Mfg. Co.

PARAMETER : VOA

MATRIX : water **SF DU/ACT NO: TFA** 302 **Y**____ **/C**____

SAMPLE NUMBERS: 89FM26595 - 89FM26597, 89FM26D95, 89FM11R66 **NUMBER OF SAMPLES:** 5

ESAT APPROVALS:

David Kusel 8/22/89
(ANALYST DATE)

C. Alhenburg 8/23/89
(TEAM LEADER DATE)

W. Sea Wilson for R. Johnson 8/23/89
(QC COORDINATOR DATE)

Vann C Allen 8/23/85
(ESAT TEAM MANAGER DATE)

COMMENTS:

The subject dataset was transferred to the custody of the U.S. EPA Region V Central Regional Laboratory in its entirety on the date indicated below.

David Kusel 8/23/89
(DELIVERED BY DATE)

Al Alwan 8/23/89
(RECEIVED BY DATE)

EPA APPROVALS:

A. Alwan 8/28
(EPA TASK MONITOR DATE)

[X] Reviewed
[ ] Unreviewed
[X] Accepted
[ ] Rejected
[ ] Returned/_____
(Date)

COMMENTS: Rating 3 & 3.

LIMS DATA ENTRY COMPLETED ON 9/14/89 (AK)

[ ] Reviewed [ ] Unreviewed

(SECTION CHIEF DATE)

(ESAT DPO DATE)

____/____/____
(DATA COORD'R REC'D TRANSMTD)

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0810BLK1

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 0810BLK1

Sample wt/vol: 20 (g/mL) ML Lab File ID: 0810BLK1

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	1	U
75-35-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	2	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	2	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	2	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	2	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	2	U

0810BLK1 (cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------O-&/or P-Xylene	2	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0810BLK1

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 0810BLK1

Sample wt/vol: 20 (g/mL) ML Lab File ID: 0810BLK1

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

0811BLK1

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 0811BLK1

Sample wt/vol: 20 (g/mL) ML Lab File ID: 0811BLK1

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/11/89

Column: (pack/cap) PACK Dilution Factor: 1

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	1	U
75-35-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	2	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	2	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	2	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	2	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	2	U

0811 BLK1 (cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------O-&/or P-Xylene	2	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

0811BLK1

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 0811BLK1

Sample wt/vol: 20 (g/mL) ML Lab File ID: 0811BLK1

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/11/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM11R66

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26R66

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437R66

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	1	U
75-35-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	1	
107-06-2	1,2-Dichloroethane	2	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	2	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	2	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	2	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	2	U

89FM11R66 (cont)

108-38-3--------M-Xylene	2	U
95-47-6---------O-&/or P-Xylene	2	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM11R66

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26R66

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437R66

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 1

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	UNKNOWN	6.03	1	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26595

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26595

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437595

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column: (pack/cap) PACK Dilution Factor: 1

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	1	U
75-35-3	1,1-Dichloroethane	2	
540-59-0	1,2-Dichloroethene (total)	1	
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	2	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	2	
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	2	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	2	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	1	J
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	2	U

89FM26595 (Cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------O-&/or P-Xylene	2	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM26595

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26595

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437595

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26D95

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26D95

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437D95

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column: (pack/cap) PACK Dilution Factor: 1

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	1	U
75-35-3	1,1-Dichloroethane	2	
540-59-0	1,2-Dichloroethene (total)	1	
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	2	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	2	
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	2	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	2	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	1	J
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	2	U

89FM26D95 (cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------O-&/or P-Xylene	2	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM26D95

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26D95

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437D95

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26596

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26596

Sample wt/vol: _____ (g/mL) ML Lab File ID: 6437596

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	4	
75-35-3	1,1-Dichloroethane	6	
540-59-0	1,2-Dichloroethene (total)	5	
67-66-3	Chloroform	1	
107-06-2	1,2-Dichloroethane	2	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	22	
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	5	
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	2	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	2	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	2	U

89FM26596 (Cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------0-&/or P-Xylene	2	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM26596

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26596

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437596

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26597

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26597

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437597

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column: (pack/cap) PACK Dilution Factor: 1

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	2	U
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	1	U
75-35-3	1,1-Dichloroethane	1	U
540-59-0	1,2-Dichloroethene (total)	1	U
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	2	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	2	U
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	2	U
71-43-2	Benzene	1	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	2	U
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U
100-41-4	Ethylbenzene	1	U
100-42-5	Styrene	2	U

89FM26597 (cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------O-&/or P-Xylene	2	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

89FM26597

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26597

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437597

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/10/89

Column (pack/cap) PACK Dilution Factor: 1

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26596MS

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26596MS

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437596M

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/11/89

Column: (pack/cap) PACK Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	10	
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	13	
75-35-3	1,1-Dichloroethane	15	
540-59-0	1,2-Dichloroethene (total)	15	
67-66-3	Chloroform	11	
107-06-2	1,2-Dichloroethane	11	
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	29	
56-23-5	Carbon Tetrachloride	9	
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	8	
78-87-5	1,2-Dichloropropane	9	
10061-01-5	cis-1,3-Dichloropropene	10	
79-01-6	Trichloroethene	14	
124-48-1	Dibromochloromethane	9	
79-00-5	1,1,2-Trichloroethane	10	
71-43-2	Benzene	9	
10061-02-6	Trans-1,3-Dichloropropene	7	
110-75-8	2-Chloroethylvinylether	10	
75-25-2	Bromoform	8	
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	10	
79-34-5	1,1,2,2-Tetrachloroethane	11	
108-88-3	Toluene	10	
108-90-7	Chlorobenzene	10	
100-41-4	Ethylbenzene	9	
100-42-5	Styrene	2	U

89FM26596MS (cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------0-&/or P-Xylene	2	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

89FM26596MSD

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: 89FM26596MSD

Sample wt/vol: 20 (g/mL) ML Lab File ID: 6437596D

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/11/89

Column: (pack/cap) PACK Dilution Factor: 1

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	2	U
74-83-9	Bromomethane	2	U
75-01-4	Vinyl Chloride	2	U
75-00-3	Chloroethane	2	U
75-09-2	Methylene Chloride	11	
67-64-1	Acetone	75	U
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	U
107-13-1	Acrylonitrile	50	U
75-35-4	1,1-Dichloroethene	15	
75-35-3	1,1-Dichloroethane	17	
540-59-0	1,2-Dichloroethene (total)	16	
67-66-3	Chloroform	12	
107-06-2	1,2-Dichloroethane	10	
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	32	
56-23-5	Carbon Tetrachloride	10	
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	9	
78-87-5	1,2-Dichloropropane	10	
10061-01-5	cis-1,3-Dichloropropene	11	
79-01-6	Trichloroethene	16	
124-48-1	Dibromochloromethane	9	
79-00-5	1,1,2-Trichloroethane	9	
71-43-2	Benzene	10	
10061-02-6	Trans-1,3-Dichloropropene	8	
110-75-8	2-Chloroethylvinylether	10	
75-25-2	Bromoform	8	
108-10-1	4-Methyl-2-Pentanone	3	U
591-78-6	2-Hexanone	3	U
127-18-4	Tetrachloroethene	12	
79-34-5	1,1,2,2-Tetrachloroethane	11	
108-88-3	Toluene	11	
108-90-7	Chlorobenzene	11	
100-41-4	Ethylbenzene	11	
100-42-5	Styrene	2	U

89FM26596 MSD (cont.)

108-38-3--------M-Xylene	2	U
95-47-6---------0-&/or P-Xylene	2	U

Date: 8/22/89
To: Alwan Alwan
From: David Kusel
Re: Dataset SF-6437
Estwing Mfg. Co.

Five (5) low level water samples from dataset SF-6437 were submitted for volatile organic analysis (VOA) by GC/MS utilizing EPA method 624NS.

All samples were analyzed within seven (7) days of receipt.

The tunings were acceptable with BFB meeting all QC requirements (Form 5A). The initial calibration (Forms 6A) was acceptable with all compounds having RSDs less than 35% except acrolein (%RSD=37% / avg. RF=0.023) and vinyl acetate (%RSD=46% / avg. RF=0.361). The continuing calibrations were acceptable (Form 7A) with all compounds having %Ds less than 35%.

All internal standard areas and retention times were within QC limits (Form 8A).

All surrogates were within QC limits for all samples (Form 2A) except 1,2-dichloroethane-d4 for sample 89FM26596MSD (125%).

Sample 89FM26595 was used for the matrix spike and matrix spike duplicate analyses (Form 3A). All % recoveries met their respective criteria. All % RPDs were outside their respective QC limits except for chlorobenzene.

There were two (2) method blanks (0810BLK1 and 0811BLK1) associated with the samples. No TCL compounds or TICs were detected in either method blank.

There was one (1) Field Blank (89FM11R66) associated with the samples. The Field Blank contained chloroform at its MDL level. The Field Blank contained one TIC at 6:02.

Sample 89FM26595 and its duplicate 89FM26D95 correlated very well. Both samples contained the following TCL compounds: 1,1-dichloroethane (2ppb), 1,2-dichloroethene (1ppb), 1,1,1-trichloroethane (2ppb) and tetrachloroethene (1ppb). No TICs were detected in either sample.

Sample 89FM26596 contained the following TCL compounds: 1,1-dichloroethene (4ppb), 1,1-dichloroethane (6ppb), 1,2-dichloroethene (5ppb), chloroform (1ppb), 1,1,1-trichloroethane (22ppb) and trichloroethene (5ppb). No TICs were detected in the sample.

Sample 89FM26597 contained no TCL compounds or TICs.

USEPA REGION V CRL
DATA SET SF-6437

17

Level 1 & 2 done on 9/15/89 1155 AM

08/29/89 16:35:29
PAGE 01

WORKLIST : VODTK028
TEST : VOWS0

WL#	ID	REP	COMMENTS
1	LRB		
2	LF1		
3	LF2		
4	S9000645	01	— S95
5	S9000646	01	— D95
6	S9000647	01	— S96
7	S9000648	01	— S97
8	S9000649	01	— R66

30 mins Jason (Data Entry)

David
Please enter these on the WL MS thanks
tl 8/29

1 hr
K. Turner

Indicate which sample.
DJK
DK

DATE: 8/23/89

TO: Alwan Alwan

FROM: David Kusel

RE: Discrepency between Sample Tags and EPA Assignment Sheet for SF-6437

The sample identification on the sample tags differed from what appeared on the EPA assignment sheet. The decision was made to use the sample identifications that were on the sample tags.

Sample Tag ID	Assignment Sheet ID
89FM26595	89FM26S95
89FM26596	89FM26S96
89FM26597	89FM26S97

VOA's

TFA302

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

DIVISION/BRANCH FIT SUPERFUND SAMPLE DATE 8/9/89 LAB ARRIVAL DATE 8/10/89 DUE DATE 8/31/89

DU NUMBER TFA DATA SET NUMBER 6437 STUDY Estwing Mfg Co. PRIORITY — CONTRACTOR

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER VOLATILE ORGANICS SCAN UG/L TOX 17564	WATER ABN ORGANICS SCAN UG/L TOX 17574	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
89FM26S95	RW1 5-053154-56	X			
89FM26S96	MSD/RW2 5-053170-72 5-053178-82	X			
89FM26S97	RW3 5-053188-90	X			
89FM26D95	DUP 5-053162-64	X			
89FM11R66	BLANK 5-053196-8	X			
89FM26S95	RW1 5-053149		X		
89FM26D95	DUPLICATE 5-053157		X		
89FM26S96	RW2/MSD 5-053165 5-053173-74		X		
89FM26S97	RW3 5-053183		X		
89FM11R66	BLANK 5053191		X		
		Davis 8/11/89			

ROY F. WESTON, INC.
C, J ESAT Project
Room 962
536 South Clark Street
Chicago IL 60605
(312)-353-2895

RAW DATA ARCHIVING AND DATASET RECONSTRUCTION FORM

DISK OR TAPE NUMBERS: Tape 18

RUN DATE(S): 8/10,11/89
INST.NO.: TNICOST
ANALYST(S): David Kusel

SAMPLE SUMMARY MATRIX

DATASET NUMBER:	6437				
TASK NUMBER:	1137				
DU/ACTIVITY NO:	IFA302				
PARAMETER:	VOA				
MATRIX:	water				
NUMBER SAMPLES:	5				
DATE RECEIVED:	8/10/89				
DATE EXTRACTED:					
NOTBK NO/PG NO:					
DATE ASSAYED:					

FILE IDENTIFICATION SUMMARY

TUNING FILE: 0810BFB1, 0811BFB1
BLANK FILE: 0810BLK1, 0811BLK1
RUN SEQUENCE FILE:

PRIMARY COLUMN

INITIAL CALIBRATION FILE: IC0731
CONTINUING CALIBRATION FILES: CC0810, CC0811
OK ~~STANDARDS FILES~~: S 6437595, 6437D95, 6437596, 6437597, 6437596M
SAMPLE FILES: S 6437596D, MDL0811

ID/METHOD FILES:

CONFIRMATORY COLUMN

INITIAL CALIBRATION FILE:
CONTINUING CALIBRATION FILES:
STANDARDS FILES:
SAMPLE FILES:

ID/METHOD FILES:

DOC.NO.: ESAT-05-15-FORM
REVISION NO.: NEW
CENTRAL FILE NO.: 5.5.1

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MDL0811

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix: (soil/water) WATER Lab Sample ID: MDL0811

Sample wt/vol: 20 (g/mL) ML Lab File ID: MDL0811

Level: (low/med) LOW Date Received: 08/10/89

% Moisture: not dec. 100 Date Analyzed: 08/11/89

Column: (pack/cap) PACK Dilution Factor: 1

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

CAS NO.	COMPOUND		Q
74-87-3	Chloromethane	2	
74-83-9	Bromomethane	2	
75-01-4	Vinyl Chloride	2	
75-00-3	Chloroethane	2	
75-09-2	Methylene Chloride	0.9	J
67-64-1	Acetone	43	J
107-02-8	Acrolein	100	U
75-15-0	Carbon Disulfide	2	
107-13-1	Acrylonitrile	41	J
75-35-4	1,1-Dichloroethene	0.7	J
75-35-3	1,1-Dichloroethane	0.9	J
540-59-0	1,2-Dichloroethene (total)	0.7	J
67-66-3	Chloroform	0.9	J
107-06-2	1,2-Dichloroethane	1	J
78-93-3	2-Butanone	15	J
71-55-6	1,1,1-Trichloroethane	0.7	J
56-23-5	Carbon Tetrachloride	0.5	J
108-05-4	Vinyl Acetate	2	J
75-27-4	Bromodichloromethane	0.7	J
78-87-5	1,2-Dichloropropane	0.8	J
10061-01-5	cis-1,3-Dichloropropene	0.7	J
79-01-6	Trichloroethene	0.8	J
124-48-1	Dibromochloromethane	0.7	J
79-00-5	1,1,2-Trichloroethane	0.9	J
71-43-2	Benzene	0.9	J
10061-02-6	Trans-1,3-Dichloropropene	0.5	J
110-75-8	2-Chloroethylvinylether	2	U
75-25-2	Bromoform	0.5	J
108-10-1	4-Methyl-2-Pentanone	3	
591-78-6	2-Hexanone	4	
127-18-4	Tetrachloroethene	0.8	J
79-34-5	1,1,2,2-Tetrachloroethane	0.9	J
108-88-3	Toluene	1	
108-90-7	Chlorobenzene	0.8	J
100-41-4	Ethylbenzene	0.9	J
100-42-5	Styrene	2	

MDLC811 (cont.)

108-38-3--------M-Xylene	2	
95-47-6---------O-&/or P-Xylene	3	

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Lab File ID: 0731BFB1 BFB Injection Date: 07/31/89

Instrument ID: INCOS1 BFB Injection Time: 1342

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	27.4
75	30.0 - 60.0% of mass 95	55.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.6
173	Less than 2.0% of mass 174	0.5 (0.8)1
174	Greater than 50.0% of mass 95	61.4
175	5.0 - 9.0% of mass 174	4.3 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	60.0 (97.8)1
177	5.0 - 9.0% of mass 176	3.5 (5.9)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	IC10731	IC10731	IC10731	07/31/89	0821
02	IC20731	IC20731	IC20731	07/31/89	0908
03	IC30731	IC30731	IC30731	07/31/89	0954
04	IC40731	IC40731	IC40731	07/31/89	1039
05	IC50731	IC50731	IC50731	07/31/89	1125

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Lab File ID: 0810BFB1 BFB Injection Date: 08/10/89

Instrument ID: INCOS1 BFB Injection Time: 1305

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	28.6
75	30.0 - 60.0% of mass 95	56.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	5.2
173	Less than 2.0% of mass 174	0.5 (0.7)1
174	Greater than 50.0% of mass 95	75.1
175	5.0 - 9.0% of mass 174	5.5 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	75.1 (100.0)1
177	5.0 - 9.0% of mass 176	6.2 (8.3)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	0810BLK1	0810BLK1	0810BLK1	08/10/89	1338
02	CC0810	CC0810	CC0810	08/10/89	1427
03	89FM26595	89FM26595	6437595	08/10/89	1937
04	89FM26D95	89FM26D95	6437D95	08/10/89	2021
05	89FM26596	89FM26596	6437596	08/10/89	2105
06	89FM26597	89FM26597	6437597	08/10/89	2149
07	89FM11R66	89FM26R66	6437R66	08/10/89	2233

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Lab File ID: 0811BFB1 BFB Injection Date: 08/11/89

Instrument ID: INCOS1 BFB Injection Time: 0736

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	25.8
75	30.0 - 60.0% of mass 95	52.6
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.2 (0.3)1
174	Greater than 50.0% of mass 95	67.4
175	5.0 - 9.0% of mass 174	4.9 (7.3)1
176	Greater than 95.0%, but less than 101.0% of mass 174	66.1 (98.1)1
177	5.0 - 9.0% of mass 176	5.2 (7.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	0811BLK1	0811BLK1	0811BLK1	08/11/89	0808
02	CC0811	CC0811	CC0811	08/11/89	0859
03	89FM26596MS	89FM26596MS	6437596M	08/11/89	1157
04	89FM26596MSD	89FM26596MSD	6437596D	08/11/89	1242
05	MDL0811	MDL0811	MDL0811	08/11/89	1408

ASK DESC:VO NUMBER OF ENTRIES: 2 CURRENT INDEX: 9 10 AUG 89

ENTRY NO.: 1 FILE NAME: 0810BLK1
SAMPLE: CLP,0810,,0810BLK1,L,W,,V,BLANK,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 1

ENTRY NO.: 2 FILE NAME: CC0810
SAMPLE: CLP,0810,,CC0810,L,W,,V,CAL,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 2

```
ASK     DESC:VO   NUMBER OF ENTRIES: 10 CURRENT INDEX:  2                                                    10 AUG 89
ENTRY NO.:  1                    FILE NAME:   6436R69
SAMPLE: CLP,6436,,89FB11R96,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA:                         ANALYST : DTK            WEIGHT:   1.000
SUBMITTED BY: CRL                ACCT. NO: TFA302         PROC:DOTCA
AS-DESC: VO   GC-DESC: VO   SEQ-DESC: VO    VIAL NO:  3
ENTRY NO.:  2                    FILE NAME:   6436S17
SAMPLE: CLP,6436,,89FB27S17,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA:                         ANALYST : DTK            WEIGHT:   1.000
SUBMITTED BY: CRL                ACCT. NO: TFA302         PROC:DOTCA
AS-DESC: VO   GC-DESC: VO   SEQ-DESC: VO    VIAL NO:  4
ENTRY NO.:  3                    FILE NAME:   643618
SAMPLE: CLP,6436,,89FB2718,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA:                         ANALYST : DTK            WEIGHT:   1.000
SUBMITTED BY: CRL                ACCT. NO: TFA302         PROC:DOTCA
AS-DESC: VO   GC-DESC: VO   SEQ-DESC: VO    VIAL NO:  5
ENTRY NO.:  4                    FILE NAME:   6436D18
SAMPLE: CLP,6436,,89FB27D18,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA:                         ANALYST : DTK            WEIGHT:   1.000
SUBMITTED BY: CRL                ACCT. NO: TFA302         PROC:DOTCA
AS-DESC: VO   GC-DESC: VO   SEQ-DESC: VO    VIAL NO:  6
ENTRY NO.:  5                    FILE NAME:   6436S19
SAMPLE: CLP,6436,,89FB27S19,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA:                         ANALYST : DTK            WEIGHT:   1.000
SUBMITTED BY: CRL                ACCT. NO: TFA302         PROC:DOTCA
AS-DESC: VO   GC-DESC: VO   SEQ-DESC: VO    VIAL NO:  7
ENTRY NO.:  6                    FILE NAME:   6437595
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA:                         ANALYST : DTK            WEIGHT:   1.000
SUBMITTED BY: CRL                ACCT. NO: TFA302         PROC:DOTCA
AS-DESC: VO   GC-DESC: VO   SEQ-DESC: VO    VIAL NO:  8


MORE TO COME, TYPE <CR> TO CONTINUE...
```

ASK DESC:VO NUMBER OF ENTRIES: 10 CURRENT INDEX: 2 10 AUG 89

ENTRY NO.: 7 FILE NAME: 6437D35
SAMPLE: CLP,6437,,89FM26D35,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 9

ENTRY NO.: 8 FILE NAME: 6437596
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 10

ENTRY NO.: 9 FILE NAME: 6437597
SAMPLE: CLP,6437,,89FM26597,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 1

ENTRY NO.: 10 FILE NAME: 6437R66
SAMPLE: CLP,6437,,89FM11R66,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 2

ASK DESC:VO NUMBER OF ENTRIES: 2 CURRENT INDEX: 11 11 AUG 89

ENTRY NO.: 1 FILE NAME: 0811BLK1
SAMPLE: CLP,0811,,0811BLK1,L,W,,V,BLANK,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 1

ENTRY NO.: 2 FILE NAME: CC0811
SAMPLE: CLP,0811,,CC0811,L,W,,V,CAL,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 2

ASK DESC:VO NUMBER OF ENTRIES: 6 CURRENT INDEX: 4 11 AUG 89

1

ENTRY NO.: 1 FILE NAME: 6436S17M **
SAMPLE: CLP,6436,,89FB27S17MS,L,W,,V,MS,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 3

ENTRY NO.: 2 FILE NAME: 6436S17D **
SAMPLE: CLP,6436,,89FB27S17MSD,L,W,,V,MSD,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 4

ENTRY NO.: 3 FILE NAME: 6437S96M **
SAMPLE: CLP,6437,,89FM26S96MS,L,W,,V,MS,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 5

ENTRY NO.: 4 FILE NAME: 6437S96D **
SAMPLE: CLP,6437,,89FM26S96MSD,L,W,,V,MSD,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 6

ENTRY NO.: 5 FILE NAME: 6436S17A
SAMPLE: CLP,6436,,89FB27S17MS,L,W,,V,MS,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 7

ENTRY NO.: 6 FILE NAME: MDL0811
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
FORMULA: ANALYST : DTK WEIGHT: 1.000
SUBMITTED BY: CRL ACCT. NO: TFA302 PROC:DOTCA
AS-DESC: VO GC-DESC: VO SEQ-DESC: VO VIAL NO: 8

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Lab File ID (Standard): CC0810 Date Analyzed: 08/10/89

Instrument ID: INCOS1 Time Analyzed: 1427

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

		IS1(BCM) AREA #	RT	IS2 (~~DFB~~) (BCP) AREA #	RT	IS3 (~~CBZ~~) (DCB) AREA #	RT
	12 HOUR STD	13300	9.84	66200	19.04	41400	23.04
	UPPER LIMIT	26600	10.34	132400	19.54	82800	23.54
	LOWER LIMIT	6650	9.34	33100	18.54	20700	22.54
	EPA SAMPLE NO.						
01	89FM11R66	13200	9.84	63300	19.04	41800	23.04
02	89FM26595	13200	9.84	65900	19.04	40700	23.04
03	89FM26596	11400	9.84	57000	19.07	35700	23.04
04	89FM26597	13400	9.84	67800	19.04	44100	23.04
05	89FM26D95	13600	9.84	65700	19.04	41200	23.04
06	0810BLK1	14900	9.87	73700	19.04	42200	23.04

IS1 (BCM) = Bromochloromethane
~~IS2 (DFB) = 1,4-Difluorobenzene~~
~~IS3 (CBZ) = Chlorobenzene~~
IS2 (BCP) = 2-Bromo-1-chloropropane
IS3 (DCB) = 1,4-Dichlorobutane

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

(4 crossouts K. Turner 8/21/89)

FORM VIII VOA 1/87 Rev.

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Lab File ID (Standard): CC0811 Date Analyzed: 08/11/89

Instrument ID: INCOS1 Time Analyzed: 0859

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

		IS1(BCM) AREA #	RT	IS2 (~~DFB~~) (BCP) AREA #	RT	IS3 (~~CBZ~~) (DCB) AREA #	RT
	12 HOUR STD	11600	9.84	59500	19.07	39200	23.04
	UPPER LIMIT	23200	10.34	119000	19.57	78400	23.54
	LOWER LIMIT	5800	9.34	29750	18.57	19600	22.54
	EPA SAMPLE NO.						
01	MDL0811	11800	9.84	61100	19.04	39000	23.07
02	89FM26596MS	11200	9.87	59900	19.04	36700	23.04
03	89FM26596MSD	10300	9.84	56800	19.04	33100	23.04
04	0811BLK1	12100	9.84	61100	19.04	38200	23.04

IS1 (BCM) = Bromochloromethane
~~IS2 (DFB) = 1,4-Difluorobenzene~~
~~IS3 (CBZ) = Chlorobenzene~~
IS2 (BCP) = 2-Bromo-1-chloropropane
IS3 (DCB) = 1,4-Dichlorobutane

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk
(4 crossouts K. Turner 8/21/89)

FORM VIII VOA 1/87 Rev.

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

	EPA SAMPLE NO.	S1 (TOL) #	S2 (~~BFB~~) # (Ben)	S3 (DCE) #	OTHER	TOT OUT
01	89FM11R66	94	99	98		0
02	89FM26595	103	98	102		0
03	89FM26596	106	104	104		0
04	89FM26597	96	97	106		0
05	89FM26D95	98	96	98		0
06	MDL0811	106	102	103		0
07	89FM26596MS	107	100	108		0
08	89FM26596MSD	125 *	113	108		1
09	0810BLK1	111	97	90		0
10	0811BLK1	111	105	101		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(80-120)
~~S2 (BFB) = Bromofluorobenzene~~	(80-120)
S3 (DCE) = 1,2-Dichloroethane-d4	(80-120)

S2 (Ben) = Benzene-D6

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

(2 crossouts K. Turner 8/21/89)

FORM II VOA-1 1/87 Rev.

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Instrument ID: INCOS1 Calibration date: 08/10/89 Time: 1427

Lab File ID: CC0810 Init. Calib. Date(s): 07/31/89 07/31/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF15 ~~RRF50~~ KAT 8/31/89	%D	
Chloromethane	#	4.351	3.552	18.4	#
Bromomethane		3.421	3.107	9.2	
Vinyl Chloride	*	4.323	3.642	15.8	*
Chloroethane		2.897	2.362	18.5	
Methylene Chloride		2.661	2.563	3.7	
Acetone		0.207	0.179	13.5	
Acrolein		0.023	0.024	-4.3	
Carbon Disulfide		1.579	1.612	-2.1	
Acrylonitrile		0.188	0.179	4.8	
1,1-Dichloroethene	*	2.845	2.856	-0.4	*
1,1-Dichloroethane	#	7.980	7.041	11.8	#
1,2-Dichloroethene (total)		2.788	2.818	-1.1	
Chloroform	*	7.734	6.999	9.5	*
1,2-Dichloroethane		3.369	2.883	14.4	
2-Butanone		0.011	0.012	-9.1	
1,1,1-Trichloroethane		1.192	1.247	-4.6	
Carbon Tetrachloride		1.047	1.090	-4.1	
Vinyl Acetate		0.316	0.359	-13.6	
Bromodichloromethane		0.856	0.854	0.2	
1,2-Dichloropropane	*	0.755	0.759	-0.5	*
cis-1,3-Dichloropropene		0.749	0.767	-2.4	
Trichloroethene		0.706	0.821	-16.3	
Dibromochloromethane		0.405	0.441	-8.9	
1,1,2-Trichloroethane		0.283	0.308	-8.8	
Benzene		1.849	1.935	-4.7	
Trans-1,3-Dichloropropene		0.447	0.465	-4.0	
2-Chloroethylvinylether		0.143	0.145	-1.4	
Bromoform	#	0.147	0.174	-18.4	#
4-Methyl-2-Pentanone		0.216	0.233	-7.9	
2-Hexanone		0.298	0.332	-11.4	
Tetrachloroethene		0.995	1.250	-25.6	
1,1,2,2-Tetrachloroethane	#	0.398	0.406	-2.0	#
Toluene	*	1.816	2.032	-11.9	*
Chlorobenzene	#	1.980	2.287	-15.5	#
Ethylbenzene	*	1.030	1.204	-16.9	*
Styrene		2.016	2.429	-20.5	
M-Xylene		1.401	1.415	-1.0	
O-&/or P-Xylene		1.304	1.366	-4.8	
Toluene-d8		2.690	2.957	-9.9	

Benzene-d6	2.000	2.134	-6.7
1,2-Dichloroethane-d4	3.350	2.765	17.5

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Instrument ID: INCOS1 Calibration date: 08/11/89 Time: 0859

Lab File ID: CC0811 Init. Calib. Date(s): 07/31/89 07/31/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF15 ~~RRF50~~ KAT 8/21/89	%D	
Chloromethane	#	4.351	4.320	0.7	#
Bromomethane		3.421	3.627	-6.0	
Vinyl Chloride	*	4.323	4.374	-1.2	*
Chloroethane		2.897	3.028	-4.5	
Methylene Chloride		2.661	2.737	-2.9	
Acetone		0.207	0.190	8.2	
Acrolein		0.023	0.023	0.0	
Carbon Disulfide		1.579	1.369	13.3	
Acrylonitrile		0.188	0.179	4.8	
1,1-Dichloroethene	*	2.845	2.899	-1.9	*
1,1-Dichloroethane	#	7.980	7.686	3.7	#
1,2-Dichloroethene (total)		2.788	2.970	-6.5	
Chloroform	*	7.734	7.593	1.8	*
1,2-Dichloroethane		3.369	3.180	5.6	
2-Butanone		0.011	0.012	-9.1	
1,1,1-Trichloroethane		1.192	1.285	-7.8	
Carbon Tetrachloride		1.047	1.149	-9.7	
Vinyl Acetate		0.316	0.374	-18.4	
Bromodichloromethane		0.856	0.942	-10.1	
1,2-Dichloropropane	*	0.755	0.830	-9.9	*
cis-1,3-Dichloropropene		0.749	0.825	-10.2	
Trichloroethene		0.706	0.838	-18.7	
Dibromochloromethane		0.405	0.444	-9.6	
1,1,2-Trichloroethane		0.283	0.320	-13.1	
Benzene		1.849	2.042	-10.4	
Trans-1,3-Dichloropropene		0.447	0.481	-7.6	
2-Chloroethylvinylether		0.143	0.154	-7.7	
Bromoform	#	0.147	0.168	-14.3	#
4-Methyl-2-Pentanone		0.216	0.220	-1.9	
2-Hexanone		0.298	0.297	0.3	
Tetrachloroethene		0.995	1.189	-19.5	
1,1,2,2-Tetrachloroethane	#	0.398	0.414	-4.0	#
Toluene	*	1.816	2.072	-14.1	*
Chlorobenzene	#	1.980	2.303	-16.3	#
Ethylbenzene	*	1.030	1.209	-17.4	*
Styrene		2.016	2.277	-13.0	
M-Xylene		1.401	1.312	6.4	
O-&/or P-Xylene		1.304	1.207	7.4	
Toluene-d8		2.690	2.718	-1.0	

7A

Benzene-d6	2.000	2.013	-0.7
1,2-Dichloroethane-d4	3.350	2.869	14.4

6A
VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Instrument ID: INCOS1 Calibration Date(s): 07/31/89 07/31/89

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) PACK

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

(10 CROSSOUTS K. TURNER 8/21/89)

LAB FILE ID: ~~RRF20~~ = IC10731 RRF05 ~~RRF50~~ = IC20731 RRF10
~~RRF100~~= IC30731 RRF15 ~~RRF150~~= IC40731 RRF20 ~~RRF200~~= IC50731 RRF25

COMPOUND		RRF05 ~~RRF20~~	RRF10 ~~RRF50~~	RRF15 ~~RRF100~~	RRF20 ~~RRF150~~	RRF25 ~~RRF200~~	$\overline{RRF}$	% RSD	
Chloromethane	#	4.562	3.885	3.800	4.718	4.792	4.351	10.9	#
Bromomethane		3.716	3.073	2.976	3.700	3.640	3.421	10.7	
Vinyl Chloride	*	4.437	3.855	3.712	4.775	4.836	4.323	12.0	*
Chloroethane		3.007	2.547	2.473	3.265	3.193	2.897	12.7	
Methylene Chloride		1.828	2.660	2.847	2.977	2.994	2.661	18.2	
Acetone		0.213	0.198	0.203	0.209	0.214	0.207	3.3	
Acrolein		0.028	0.025	0.024	0.008	0.029	0.023	37.1	
Carbon Disulfide		1.558	1.497	1.450	1.515	1.875	1.579	10.8	
Acrylonitrile		0.189	0.172	0.180	0.199	0.200	0.188	6.4	
1,1-Dichloroethene	*	1.851	2.700	2.892	3.149	3.634	2.845	23.1	*
1,1-Dichloroethane	#	5.399	7.871	8.257	8.915	9.457	7.980	19.6	#
1,2-Dichloroethene (total)		1.775	2.702	2.871	3.106	3.484	2.788	22.9	
Chloroform	*	5.276	7.597	7.928	8.833	9.034	7.734	19.4	*
1,2-Dichloroethane		2.201	3.300	3.634	3.982	3.729	3.369	20.7	
2-Butanone		0.011	0.010	0.010	0.011	0.011	0.011	5.0	
1,1,1-Trichloroethane		0.838	1.205	1.187	1.272	1.456	1.192	18.8	
Carbon Tetrachloride		0.640	1.036	1.065	1.138	1.357	1.047	24.8	
Vinyl Acetate		0.519	0.405	0.243	0.146	0.268	0.316	46.3	
Bromodichloromethane		0.583	0.833	0.891	0.968	1.003	0.856	19.4	
1,2-Dichloropropane	*	0.559	0.779	0.759	0.824	0.855	0.755	15.4	*
cis-1,3-Dichloropropene		0.536	0.720	0.770	0.827	0.894	0.749	18.1	
Trichloroethene		0.504	0.696	0.698	0.767	0.867	0.706	18.8	
Dibromochloromethane		0.249	0.376	0.430	0.482	0.489	0.405	24.3	
1,1,2-Trichloroethane		0.192	0.286	0.305	0.314	0.319	0.283	18.6	
Benzene		1.378	1.871	1.802	1.998	2.197	1.849	16.4	
Trans-1,3-Dichloropropene		0.298	0.426	0.459	0.519	0.532	0.447	21.0	
2-Chloroethylvinylether		0.108	0.143	0.152	0.160	0.152	0.143	14.3	
Bromoform	#	0.090	0.137	0.157	0.174	0.179	0.147	24.5	#
4-Methyl-2-Pentanone		0.250	0.191	0.190	0.219	0.229	0.216	11.9	
2-Hexanone		0.327	0.278	0.265	0.309	0.310	0.298	8.5	
Tetrachloroethene		0.758	1.020	0.945	1.083	1.171	0.995	15.7	
1,1,2,2-Tetrachloroethane	#	0.295	0.379	0.417	0.469	0.429	0.398	16.5	#
Toluene	*	1.419	1.828	1.726	1.986	2.121	1.816	14.8	*
Chlorobenzene	#	1.538	1.995	1.933	2.187	2.249	1.980	14.1	#
Ethylbenzene	*	0.822	1.008	0.971	1.132	1.218	1.030	14.8	*
Styrene		2.351	1.785	1.787	1.952	2.205	2.016	12.6	
M-Xylene		2.016	1.155	1.162	1.316	1.357	1.401	25.4	
O-&/or P-Xylene		1.774	1.129	1.072	1.255	1.289	1.304	21.3	

6A

Toluene-d8	2.818	2.739	2.442	2.585	2.866	2.690	6.5
Benzene-d6	2.000	2.051	1.812	1.953	2.182	2.000	6.8
1,2-Dichloroethane-d4	3.027	3.208	3.451	3.595	3.468	3.350	6.8

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Matrix Spike - EPA Sample No.: 89FM26596

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	10.0	4.06	12.5	84	61-145
Trichloroethene	10.0	5.41	14.2	88	71-120
Benzene	10.0	0	9.12	91	76-127
Toluene	10.0	0	9.63	96	76-125
Chlorobenzene	10.0	0	9.80	98	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	10.0	14.9	108	+25 *	14	61-145
Trichloroethene	10.0	15.6	102	+15 *	14	71-120
Benzene	10.0	10.4	104	+13 *	11	76-127
Toluene	10.0	11.2	112	+15 *	13	76-125
Chlorobenzene	10.0	10.8	108	+10	13	75-130

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

* Values outside of QC limits

RPD: 4 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP,6437,,89FM26596,L,W,,V,EPA,
% RPD BASED ON % RECOVERY

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Lab File ID: 0810BLK1 Lab Sample ID: 0810BLK1

Date Analyzed: 08/10/89 Time Analyzed: 1338

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: INCOS1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	89FM11R66	89FM26R66	6437R66	2233
02	89FM26595	89FM26595	6437595	1937
03	89FM26596	89FM26596	6437596	2105
04	89FM26597	89FM26597	6437597	2149
05	89FM26D95	89FM26D95	6437D95	2021

COMMENTS: CLP,0810,,0810BLK1,L,W,,V,BLANK,
45'(3MIN) TO 220'@ 8'/MIN

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: USEPA-REGION V Contract: TFA302

Lab Code: CRL Case No.: 6437 SAS No.: NA SDG No.: NA

Lab File ID: 0811BLK1 Lab Sample ID: 0811BLK1

Date Analyzed: 08/11/89 Time Analyzed: 0808

Matrix: (soil/water) WATER Level:(low/med) LOW

Instrument ID: INCOS1

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MDL0811	MDL0811	MDL0811	1408
02	89FM26596MS	89FM26596MS	6437596M	1157
03	89FM26596MSD	89FM26596MSD	6437596D	1242

COMMENTS: CLP,0811,,0811BLK1,L,W,,V,BLANK,
45'(3MIN) TO 220'@ 8'/MIN

BROMOFLUOROBENZENE

Tuning Report
07/31/89 13:42:00 + 12:06
Instrument: INCOS1
#351 to #375 summed - #379
Case Number:

Data: 0731BFB2 # 363
Cali: CALI0419 # 3
Analyst: DTK
Laboratory:

Base m/z: 95
RIC: 166912.
Acct. No.: TFA302
Contract:

Ion Abundance Criteria

m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	8960.	27.4	15.0	40.0	95	27.4	PASS
75	18112.	55.3	30.0	60.0	95	55.3	PASS
95	32736.	100.0	100.0	---	---	100.0	PASS
96	2804.	8.6	5.0	9.0	95	8.6	PASS
173	163.	0.5	---	2.0	174	0.8	PASS
174	20096.	61.4	50.0	---	95	61.4	PASS
175	1402.	4.3	5.0	9.0	174	7.0	PASS
176	19648.	60.0	95.0	101.0	174	97.8	PASS
177	1164.	3.6	5.0	9.0	176	5.9	PASS

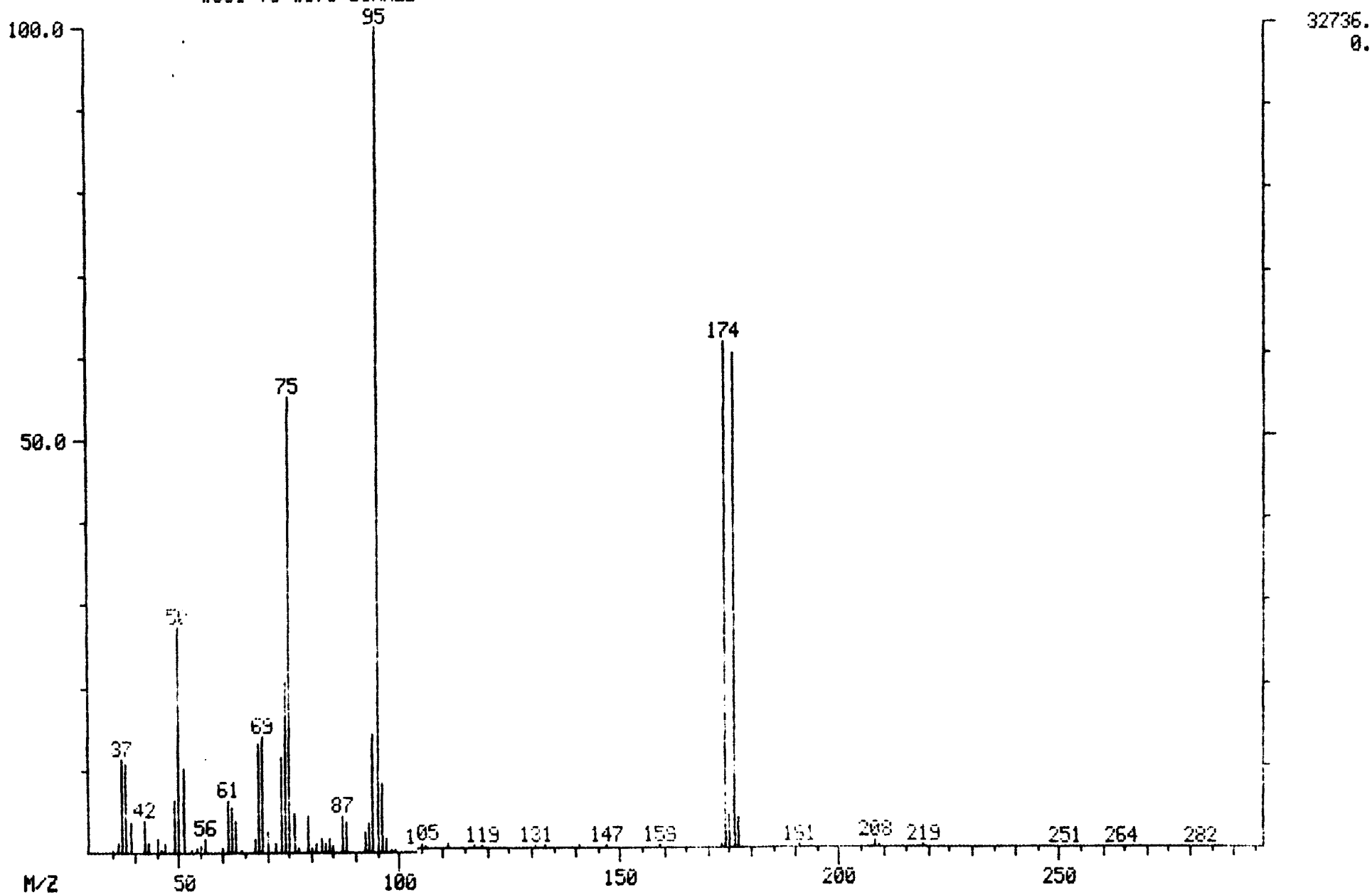
Mass List Data: 0731BFB2 # 363 Base m/z: 95
07/31/89 13:42:00 + 12:06 Cali: CALI0419 # 3 RIC: 166912.
Sample: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION_V
Conds.: 150' TO 220'@ 15'/MIN
#351 to #375 summed - #379

34		0.00	0.	Minima	Min Inten:		16.
283				Maxima	#	0	
Mass		% RA	Inten.	Mass		% RA	Inten.
34?		0.11	36.	96	S	8.57	2804.
35?		0.32	104.	97		1.54	503.
36?	S	1.13	369.	98		0.24	80.
37?		11.39	3728.	99		0.28	92.
38?		10.79	3532.	104		0.05	17.
39?	S	3.69	1208.	105		0.46	151.
42?	S	3.92	1284.	106		0.22	73.
43?	S	1.16	379.	109		0.11	36.
45?	S	1.61	527.	111		0.42	137.
46?		0.20	64.	113		0.12	39.
47?		0.97	317.	115		0.10	32.
48?		0.13	42.	117		0.36	117.
49?		6.24	2044.	119		0.36	118.
50?	S	27.37	8960.	124		0.05	17.
51?		10.30	3372.	128		0.08	27.
52?		0.09	30.	131		0.35	113.
53?		0.47	154.	133		0.27	90.
54?		0.49	162.	136		0.06	19.
55?	S	0.74	241.	141		0.36	119.
56?	S	1.69	553.	147	S	0.36	117.
60?		0.42	137	149		0.06	20.
61?		6.26	2048.	150		0.05	16.
62?		5.55	1816	159		0.20	67.
63?		3.98	1304	169		0.05	16.
64?		0.16	51.	173		0.50	163.
65?		0.05	17.	174		61.39	20096.
67?		1.60	523.	175		4.28	1402.
68?		13.20	4320	176		60.02	19648.
69	S	13.95	4568.	177		3.56	1164.
70	S	2.42	791.	187		0.10	34.
72		1.04	340.	191		0.20	64.
73	S	11.52	3772.	196		0.06	20.
74	S	20.65	6760.	204		0.05	17.
75	S	55.33	18112.	208		0.93	303.
76		4.78	1564.	209		0.30	98.
77		0.53	174.	213		0.05	16.
78		0.07	22.	219		0.15	49.
79		4.34	1422.	251		0.05	17.
80		0.68	223.	259		0.06	20.
81	S	1.15	377.	264		0.06	21.
82		1.71	560.	282		0.13	44.
83	S	0.99	324.	283		0.09	30.
84		1.60	524.				
85	S	0.73	238.				
87		4.42	1446.				
88	S	3.67	1200.				
92		2.49	814.				
93		3.67	1200.				
94		14.30	4680.				
95		100.00	32736.				

MASS SPECTRUM
07/31/89 13:42:00 + 12:06
SAMPLE: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION V
CONDS.: 150' TO 220'@ 15'/MIN
TEMP: 219 DEG. C
#351 TO #375 SUMMED - #379

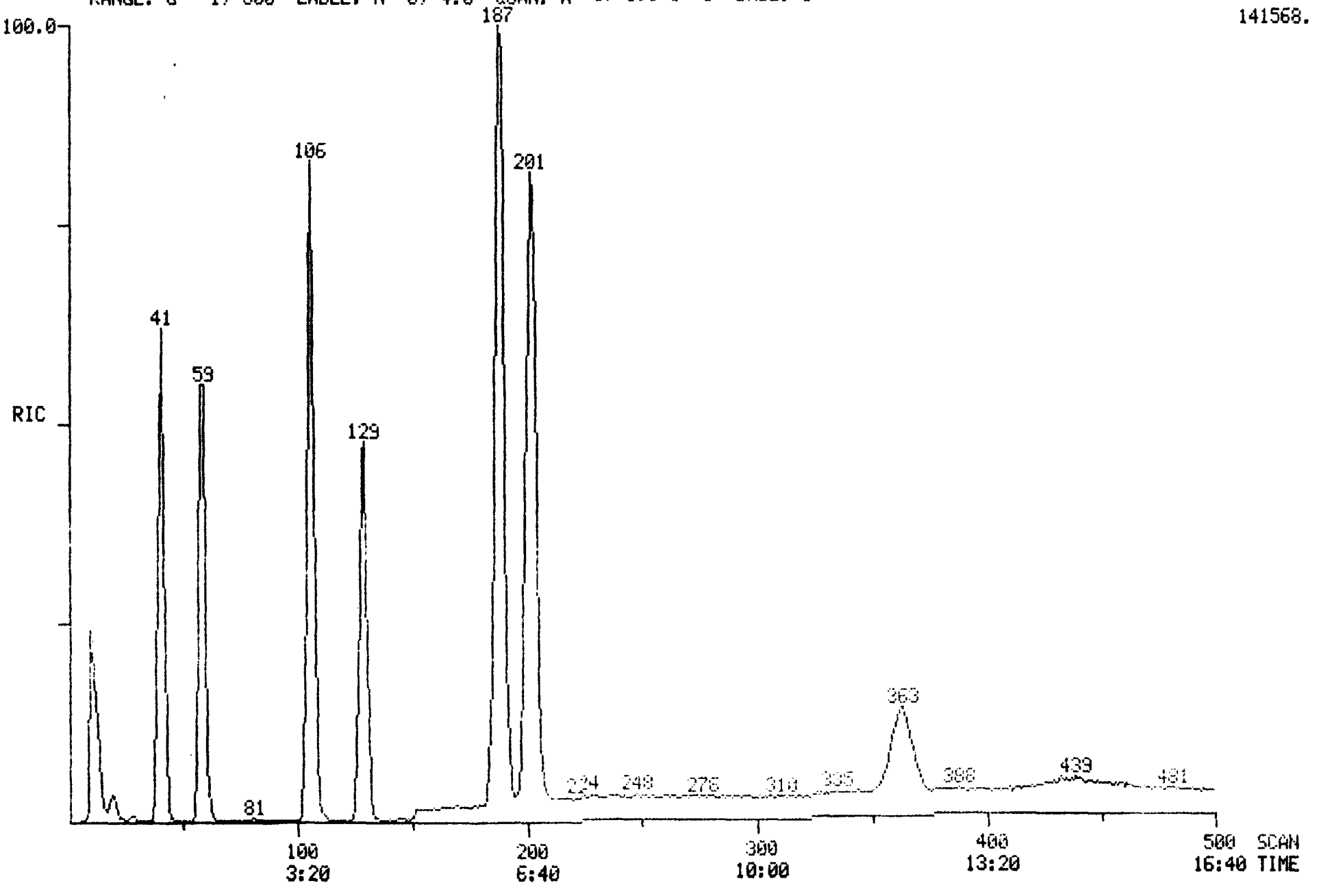
DATA: 07318FB2 #363
CALI: CALI0419 #3

BASE M/Z: 95
RIC: 166912.



RIC
07/31/89 13:42:00
SAMPLE: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION_V
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1, 500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 0731BFB2 #351 SCANS 1 TO 500
CALI: CALI0419 #3



BROMOFLUOROBENZENE

Tuning Report
08/10/89 13:05:00 + 12:04
Instrument: INCOS1
#350 to #374 summed - #376
Case Number:

Data: 0810BFB1 # 362
Cali: CALI0419 # 3
Analyst: DTK
Laboratory:

Base m/z 95
RIC: 146944.
Acct. No TFA302
Contract

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	7968.	28.6	15.0	40.0	95	28.6	PASS
75	15632.	56.0	30.0	60.0	95	56.0	PASS
95	27904.	100.0	100.0	---	---	100.0	PASS
96	1460.	5.2	5.0	9.0	95	5.2	PASS
173	144.	0.5	---	2.0	174	0.7	PASS
174	20960.	75.1	50.0	---	95	75.1	PASS
175	1524.	5.5	5.0	9.0	174	7.3	PASS
176	20960.	75.1	95.0	101.0	174	100.0	PASS
177	1748.	6.3	5.0	9.0	176	8.3	PASS

Mass List Data: 0810BFB1 # 362 Base m/z 95
08/10/89 13:05:00 + 12:04 Cali: CALI0419 # 3 RIC: 146944
Sample: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION_V
Conds.: 150' TO 220'@ 15'/MIN
#350 to #374 summed - #376

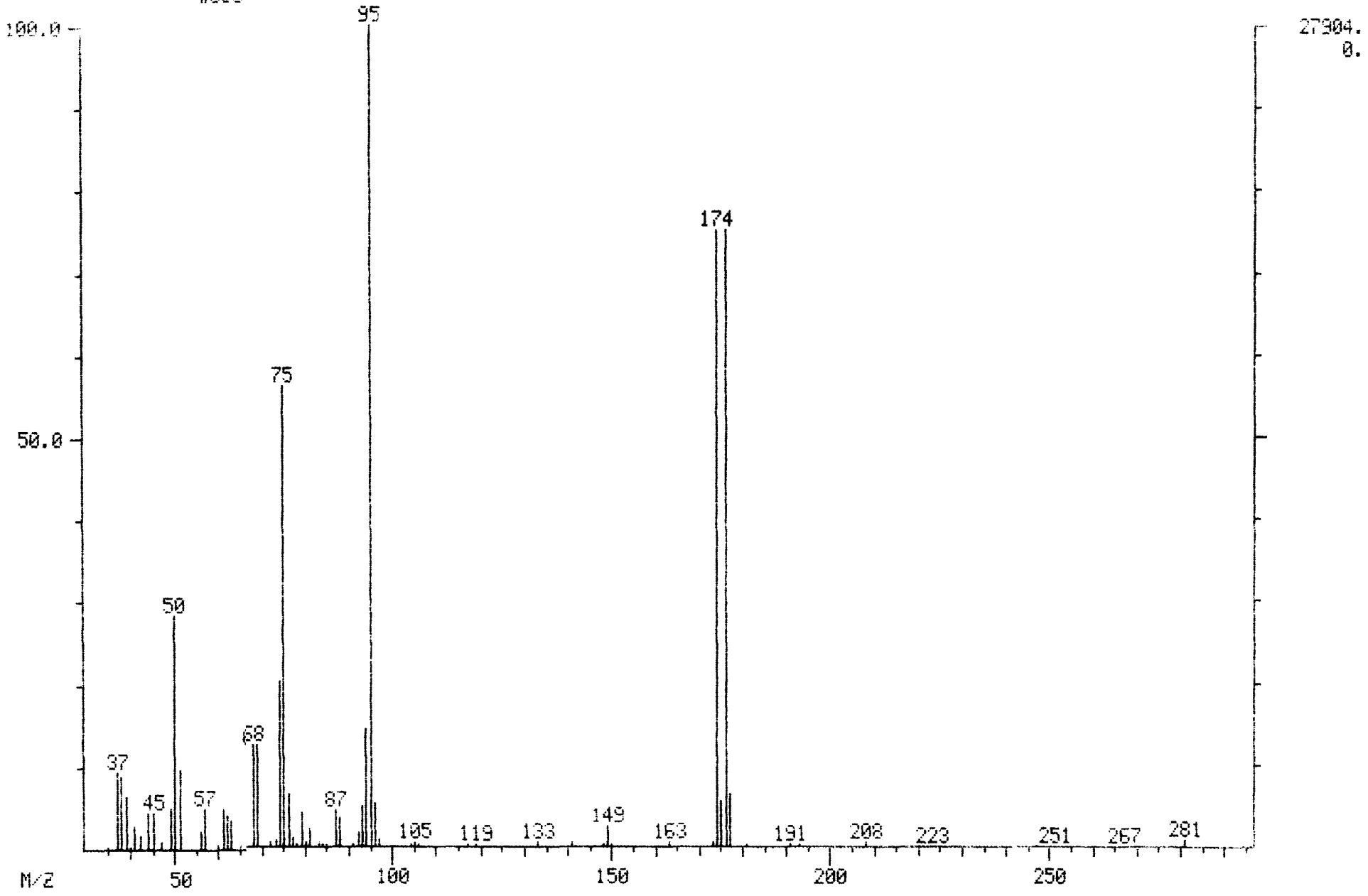
35 0.00 0. Minima Min Inten: 0.
281 Maxima # 0

Mass		% RA	Inten.	Mass		% RA	Inten.
35?		0.16	45.	99		0.06	16.
37?		9.27	2588.	104		0.19	53.
38?		8.89	2480.	105		0.47	130.
39?	S	6.24	1740.	106		0.14	40.
40?	S	0.28	77.	109		0.06	16.
41?	S	2.76	770.	110		0.06	18.
42?	S	1.71	477.	111		0.09	24.
44?	S	4.34	1212.	112		0.05	15.
45?	S	4.53	1264.	113		0.06	17.
47?		0.74	207.	115		0.11	30.
49?		4.85	1354.	117		0.18	49.
50?	S	28.56	7968.	119		0.31	87.
51?		9.70	2708.	120		0.07	19.
54?		0.06	16.	121		0.06	17.
55?	S	0.09	26.	123		0.06	16
56?	S	2.11	590.	127		0.06	16.
57?	S	5.05	1410.	133		0.43	121.
60?		0.50	140.	138		0.07	19.
61?		4.90	1368.	141		0.47	132.
62?		4.20	1172.	142		0.08	22.
63?		3.55	990.	143		0.06	16.
64?		0.06	17.	148		0.28	77.
65?		0.64	179.	149	S	2.55	711.
68?		12.41	3464.	150		0.22	60.
69	S	12.39	3456.	154		0.06	18.
72	S	0.59	165.	159		0.05	15.
73	S	0.92	258.	163		0.51	141.
74	S	20.13	5616.	165		0.05	15.
75	S	56.02	15632.	173		0.52	144.
76		6.27	1750.	174	S	75.11	20960.
77		1.13	315.	175		5.46	1524.
78		0.40	113.	176	S	75.11	20960
79		4.18	1166.	177		6.26	1748.
80		0.49	138.	181		0.24	66.
81	S	2.26	631.	185		0.05	15.
83		0.53	147.	187		0.11	30.
84		0.23	64.	191		0.25	69.
85	S	0.21	59.	193		0.19	53.
86		0.07	19.	205		0.05	15.
87		4.31	1204.	208		0.66	183.
88	S	3.50	976.	209		0.05	15.
89		0.13	37.	223		0.05	15.
91		0.37	104.	249		0.06	16.
92		1.72	480.	251		0.11	32.
93		4.85	1354.	261		0.05	15.
94		14.32	3996.	267		0.11	31.
95	S	100.00	27904.	281		0.78	218.
96	S	5.23	1460.				
97		0.79	221.				
98		0.05	15.				

MASS SPECTRUM
08/10/89 13:05:00 + 12:04
SAMPLE: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION_V
CONDS.: 150' TO 220'@ 15'/MIN
TEMP: 219 DEG. C
#350 TO #374 SUMMED - #376

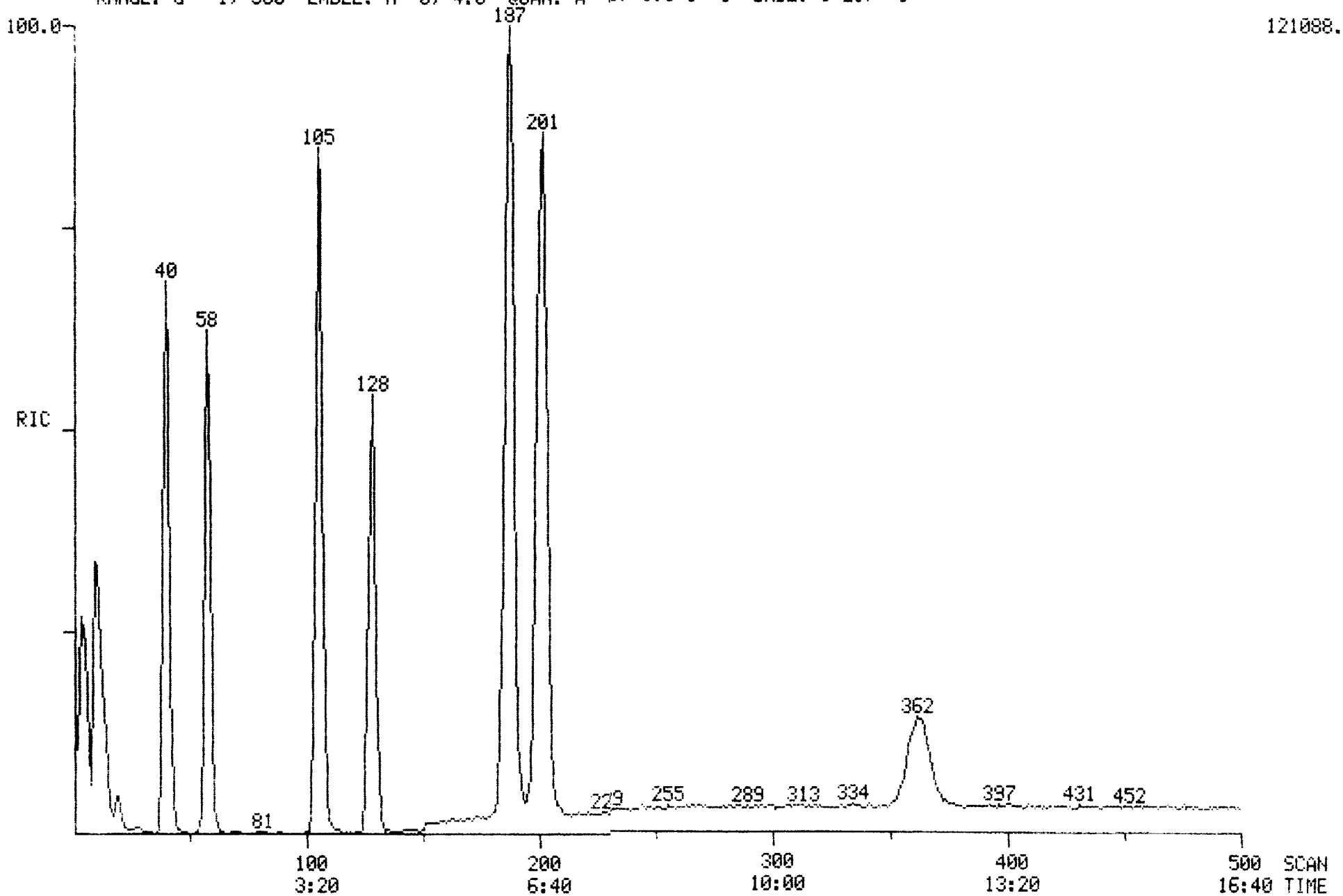
DATA: 0810BFB1 #362
CALI: CALI0418 #3

BASE M/Z: 95
RIC: 146944.



RIC
08/10/89 13:05:00
SAMPLE: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION_V
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1, 500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 0810BFB1 #350 SCANS 1 TO 500
CALI: CALI0419 #3



BROMOFLUOROBENZENE

Tuning Report
08/11/89 7:36:00 + 12:02
Instrument: INCOS1
#351 to #371 summed - #376
Case Number:

Data: 0811BFB1 # 361
Cali: CALI0419 # 3
Analyst: DTK
Laboratory:

Base m/z. 95
RIC: 134656.
Acct. No. TFA302
Contract:

m/z	Intensity	% RA	Ion Abundance Criteria Min %	Max %	Mass	Actual	Status
50	7208.	25.8	15.0	40.0	95	25.8	PASS
75	14704.	52.6	30.0	60.0	95	52.6	PASS
95	27936.	100.0	100.0	---	---	100.0	PASS
96	2088.	7.5	5.0	9.0	95	7.5	PASS
173	62.	0.2	---	2.0	174	0.3	PASS
174	18816.	67.4	50.0	---	95	67.4	PASS
175	1370.	4.9	5.0	9.0	174	7.3	PASS
176	18464.	66.1	95.0	101.0	174	98.1	PASS
177	1448	5.2	5.0	9.0	176	7.8	PASS

Mass List Data: 0811BFB1 # 361 Base m/z 95
08/11/89 7:36.00 + 12:02 Cali: CALI0419 # 3 RIC: 134656.
Sample: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION_V
Conds.: 150' TO 220'@ 15'/MIN
#351 to #371 summed - #376

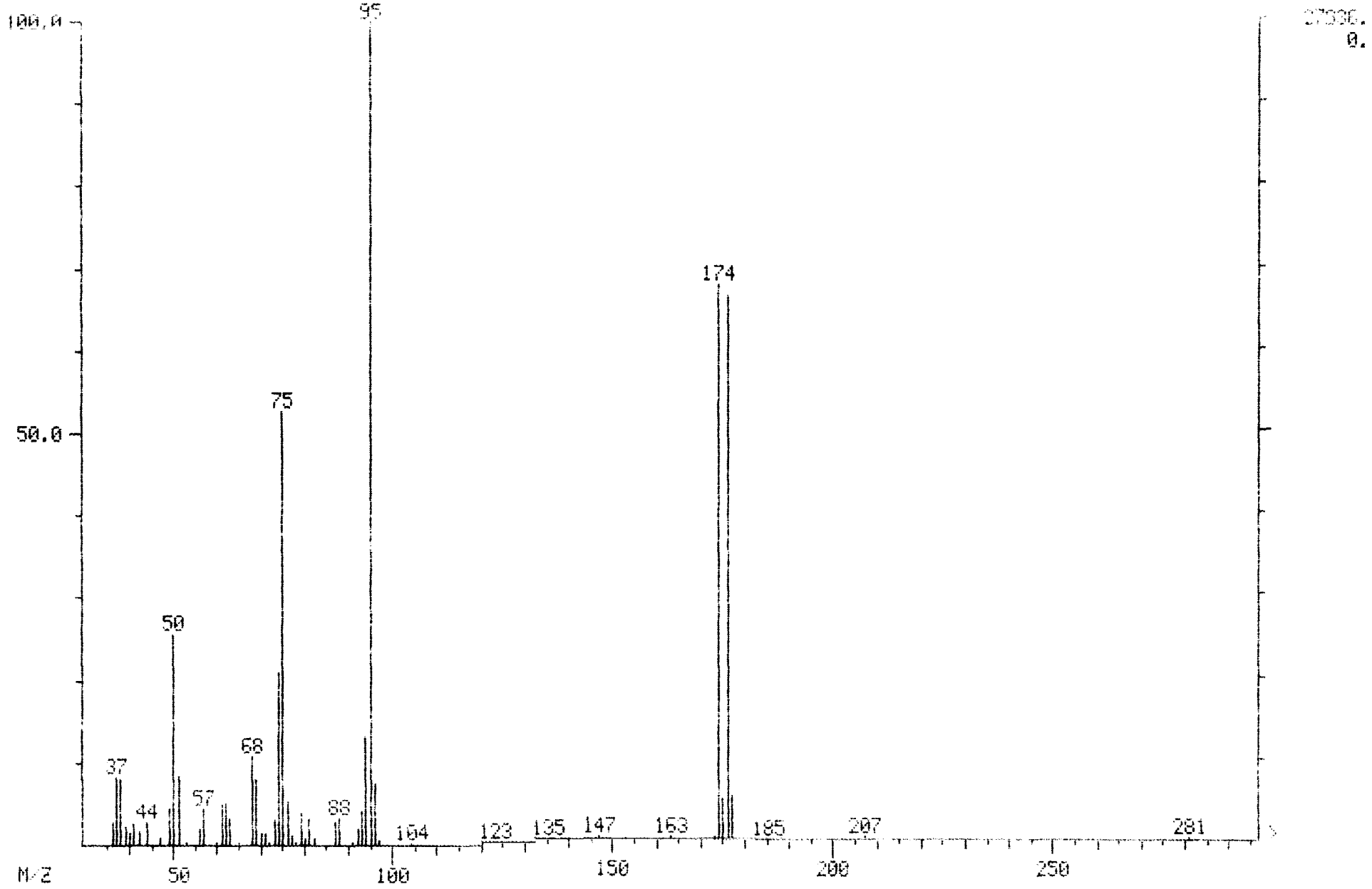
34 0.00 0. Minima Min Inten 0.
300 Maxima # 0

Mass		% RA	Inten.	Mass		% RA	Inten.
34?		0.05	15.	96		7.47	2088.
35?		0.06	16.	97		0.54	152.
36?		2.81	785.	99		0.06	16.
37?		8.39	2344.	103		0.06	16.
38?		8.00	2236.	104		0.31	87.
39?	S	2.14	598.	106		0.07	19.
40?	S	1.47	411.	109		0.12	34.
41?	S	2.51	702.	112		0.07	19.
42?	S	1.53	427.	118		0.06	18.
44?	S	2.70	753.	119		0.06	16.
46?		0.06	16.	123		0.07	19.
47?		0.70	195.	125		0.06	16.
48?		0.06	17.	126		0.05	15.
49?		4.54	1268.	135		0.06	16.
50?	S	25.80	7208.	137		0.05	15.
51?		8.25	2304.	143		0.08	22.
52?		0.13	35.	147		0.23	65.
53?		0.25	69.	148		0.06	18.
54?		0.13	35.	150		0.12	33.
56?	S	1.87	523.	159		0.06	16.
57?	S	4.41	1232.	163		0.17	47.
60?		0.16	44.	173		0.22	62.
61?		4.97	1388.	174		67.35	18816.
62?		5.30	1480.	175		4.90	1370.
63?		3.24	905.	176		66.09	18464.
64?		0.05	15.	177		5.18	1448.
65?		0.18	50.	178		0.11	31.
68?	S	10.78	3012.	185		0.06	18.
69	S	8.08	2256.	188		0.06	17.
70		1.29	360.	207	S	0.24	67.
71	S	1.31	367.	208		0.05	15.
72		0.36	100.	279		0.07	20.
73	S	3.02	844.	281		0.19	54.
74		20.96	5856.	300		0.07	19.
75	S	52.63	14704.				
76		5.38	1504.				
77		1.18	329.				
78		0.25	69.				
79		3.77	1054.				
80		0.73	204.				
81		3.30	921.				
82		0.69	194.				
84		0.07	20.				
87		2.73	762.				
88	S	3.42	956.				
91		0.30	84.				
92		1.89	527.				
93		4.15	1160.				
94		13.23	3696.				
95		100.00	27936.				

MASS SPECTRUM
08/11/89 7:36:00 + 12:02
SAMPLE: 50NG BFB INCOS-50 GC/MS/DS USEPA-REGION.V
CONDS.: 150' TO 220'@ 15'/MIN
TEMP: 219 DEG. C
#351 TO #371 SUMMED - #376

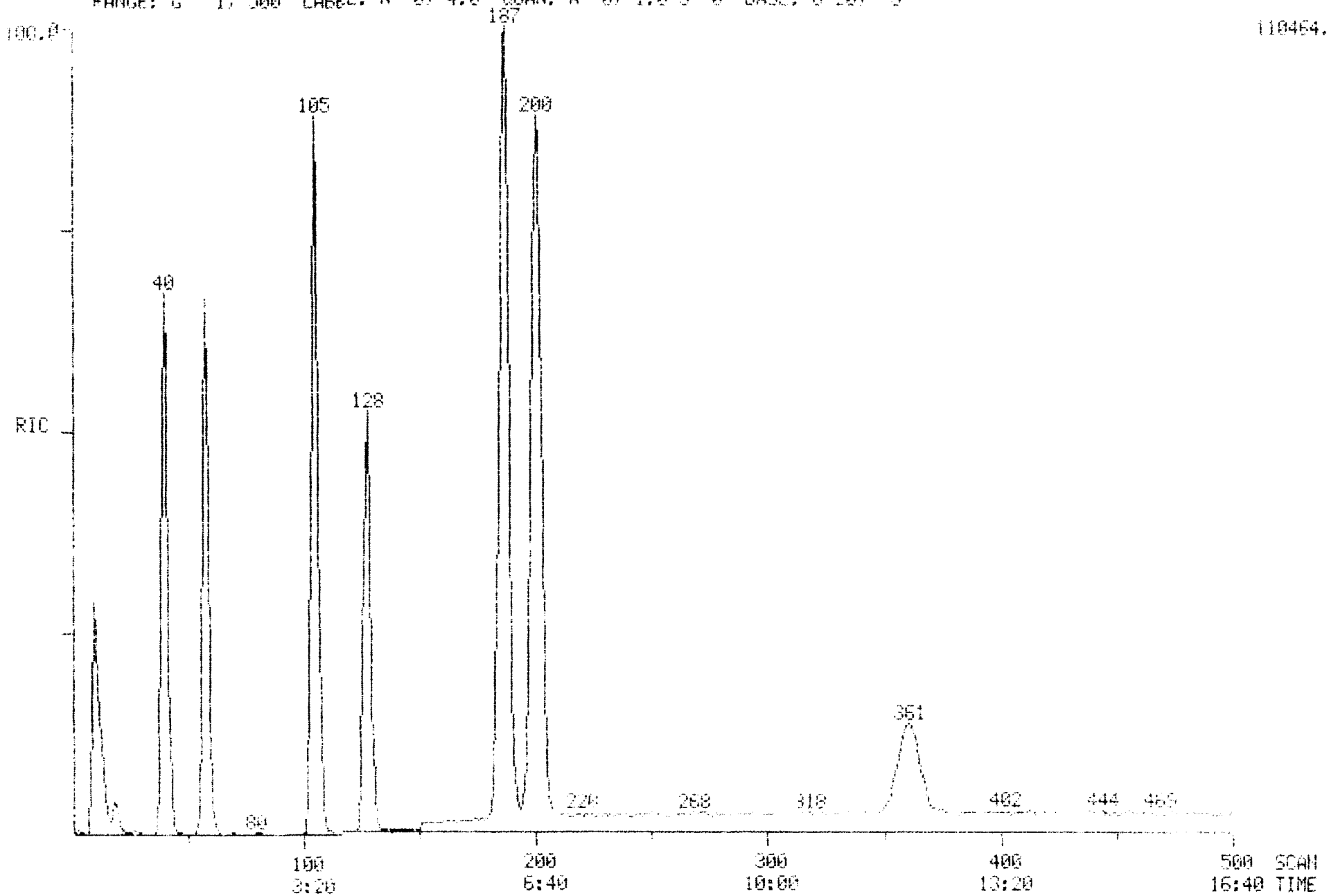
DATA: 0811BFB1 #361
CALI: CALI0413 #3

BASE M/Z: 95
RIC: 134656.



RIC
03/11/93 7:36:00
SAMPLE: 50NG BFB INC05-50 GC/MS/DS USEPA-RSGION_V
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1, 500 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 0311BFB1 #251 SCANS 1 TO 500
CALI: CALI04/9 #2



Quantitation Report File: IC10731

Data: IC10731.TI
07/31/89 8:21:00
Sample: CLP,0731,,IC10731,L,W,,V,IC-020,
Conds.: 150' TO 220'@ 15'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C038	ACROLEIN	
14	C040	CARBON DISULFIDE	
15	C043	ACRYLONITRILE	
16	C045	1,1-DICHLOROETHENE	
17	C050	1,1-DICHLOROETHANE	
18	C053	1,2-DICHLOROETHENE (TOTAL)	
19	C060	CHLOROFORM	
20	C065	1,2-DICHLOROETHANE	
21	C110	2-BUTANONE	
22	C115	1,1,1-TRICHLOROETHANE	
23	C120	CARBON TETRACHLORIDE	
24	C125	VINYL ACETATE	
25	C130	BROMODICHLOROMETHANE	
26	C140	1,2-DICHLOROPROPANE	
27	C143	CIS-1,3-DICHLOROPROPENE	
28	C150	TRICHLOROETHENE	
29	C155	DIBROMOCHLOROMETHANE	
30	C160	1,1,2-TRICHLOROETHANE	
31	C165	BENZENE	
32	C172	TRANS-1,3-DICHLOROPROPENE	
33	C175	2-CHLOROETHYLVINYLETHER	
34	C180	BROMOFORM	
35	C210	2-HEXANONE	
36	C205	4-METHYL-2-PENTANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C260	M-XYLENE	
43	C270	O-&/OR P-XYLENE	
44	C245	STYRENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	297	9:54	1	1.000	A BB	8816.	10.000	UG/L	1.08
2	77	572	19:04	2	1.000	A BB	45626.	10.000	UG/L	1.08
3	55	693	23:06	3	1.000	A BB	29260.	10.000	UG/L	1.08
4	65	379	12:38	1	1.276	A BB	26689.	8.567	UG/L	0.93
5	84	524	17:28	2	0.916	A BB	91266.	9.658	UG/L	1.04
6	98	718	23:56	3	1.036	A BB	82450.	10.961	UG/L	1.19
7	50	48	1:36	1	0.162	A BB	40220.	9.151	UG/L	0.99
8	94	79	2:38	1	0.266	A BB	32758.	10.095	UG/L	1.09
9	62	102	3:24	1	0.343	A BB	39120.	9.656	UG/L	1.04
10	64	133	4:26	1	0.448	A BB	26507.	9.585	UG/L	1.04
11	84	199	6:38	1	0.670	A BB	8059.	3.081	UG/L	0.33
12	43	216	7:12	1	0.727	A BB	42258.	186.635	UG/L	20.18
13	56	218	7:16	1	0.734	A BB	5558.	223.354	UG/L	24.16
14	76	245	8:10	1	0.825	A BV	10303.	7.317	UG/L	0.79
15	53	238	7:56	1	0.801	A BB	37404.	181.679	UG/L	19.65
16	96	283	9:26	1	0.953	A BB	8159.	3.095	UG/L	0.33
17	63	321	10:42	1	1.081	A BB	23801.	3.124	UG/L	0.34
18	96	344	11:28	1	1.158	A BB	7823.	2.871	UG/L	0.31
19	83	361	12:02	1	1.215	A BB	23257.	3.190	UG/L	0.34
20	62	382	12:44	1	1.286	A BB	9700.	2.847	UG/L	0.31
21	72	380	12:40	2	0.664	A BB	3923.	64.734	UG/L	7.00
22	97	421	14:02	2	0.736	A BB	19108.	3.299	UG/L	0.36
23	117	433	14:26	2	0.757	A VB	14593.	2.933	UG/L	0.32
24	43	437	14:34	2	0.764	A BB	53320.	20.898	UG/L	2.26
25	83	450	15:00	2	0.787	A BB	13301.	3.116	UG/L	0.34
26	63	490	16:20	2	0.857	A BB	12760.	3.294	UG/L	0.36
27	75	498	16:36	2	0.871	A BB	14673.	3.714	UG/L	0.40
28	130	514	17:08	2	0.899	A BB	11487.	3.248	UG/L	0.35
29	129	524	17:48	2	0.934	A BB	5682.	2.786	UG/L	0.30
30	97	526	17:52	2	0.937	A BB	4391.	2.831	UG/L	0.31
31	78	528	17:36	2	0.923	A BB	31429.	3.367	UG/L	0.36
32	79	536	17:52	2	0.937	A BB	5436.	2.303	UG/L	0.25
33	63	568	18:56	2	0.993	A BB	2455.	3.175	UG/L	0.34
34	173	614	20:28	2	1.073	A BB	2059.	2.815	UG/L	0.30
35	43	628	20:56	3	0.906	A BB	14360.	13.511	UG/L	1.46
36	43	673	22:26	3	0.971	A BB	10979.	16.240	UG/L	1.76
37	164	684	22:48	3	0.987	A BB	11083.	3.885	UG/L	0.42
38	83	683	22:46	3	0.986	A BB	4321.	3.363	UG/L	0.36
39	92	723	24:06	3	1.043	A BB	20753.	3.716	UG/L	0.40
40	112	759	25:18	3	1.095	A BB	22501.	3.745	UG/L	0.40
41	106	820	27:20	3	1.183	A BB	12027.	3.846	UG/L	0.42
42	106	953	31:46	3	1.375	A BB	58983.	13.996	UG/L	1.51
43	106	985	32:50	3	1.421	A BB	64876.	16.832	UG/L	1.82
44	104	945	31:30	3	1.364	A BB	51602.	8.151	UG/L	0.88

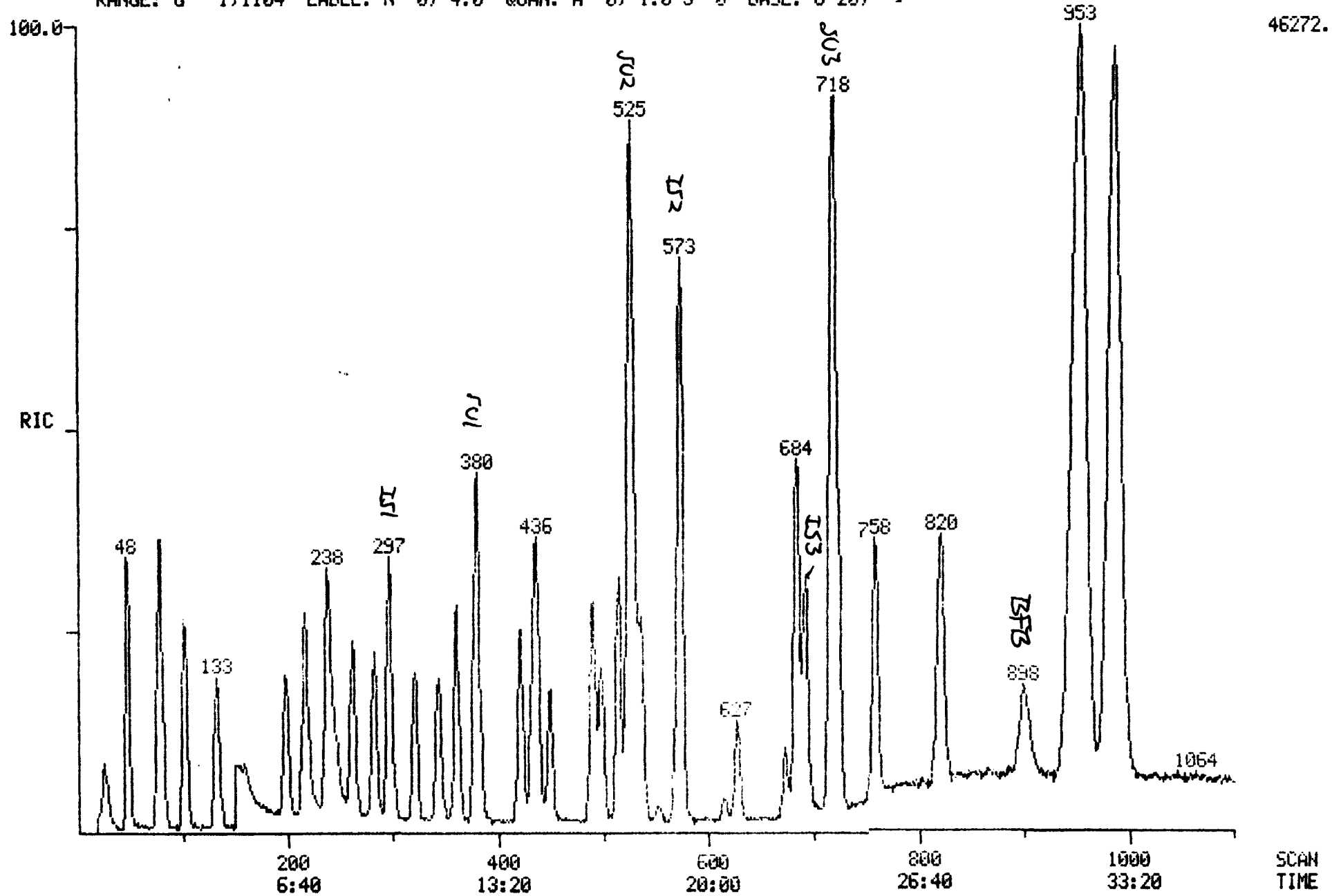
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	8.57	10.00	3.027	3.534	0.86
5	17:26	1.00	0.917	1.00	9.66	10.00	2.000	2.071	0.97
6	23:52	1.00	1.038	1.00	10.96	10.00	2.818	2.571	1.10
7	1:38	0.98	0.181	0.90	9.15	10.00	4.562	4.985	0.92
8	2:36	1.01	0.285	0.93	10.10	10.00	3.716	3.680	1.01
9	3:22	1.01	0.361	0.95	9.66	10.00	4.437	4.596	0.97
10	4:22	1.02	0.462	0.97	9.59	10.00	3.007	3.137	0.96

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.02	0.681	0.98	3.08	5.00	1.828	2.967	0.62
12	7:06	1.01	0.757	0.96	186.63	225.00	0.213	0.257	0.83
13	7:06	1.02	0.757	0.97	223.35	225.00	0.028	0.028	0.99
14	8:06	1.01	0.833	0.99	7.32	7.50	1.558	1.597	0.98
15	7:48	1.02	0.826	0.97	181.68	225.00	0.189	0.234	0.81
16	9:22	1.01	0.955	1.00	3.10	5.00	1.851	2.990	0.62
17	10:40	1.00	1.090	0.99	3.12	5.00	5.399	8.643	0.62
18	11:24	1.01	1.170	0.99	2.87	5.00	1.775	3.091	0.57
19	12:02	1.00	1.229	0.99	3.19	5.00	5.276	8.270	0.64
20	12:44	1.00	1.312	0.98	2.85	5.00	2.201	3.865	0.57
21	12:36	1.01	0.664	1.00	64.73	75.00	0.011	0.013	0.86
22	14:02	1.00	0.731	1.01	3.30	5.00	0.838	1.269	0.66
23	14:26	1.00	0.752	1.01	2.93	5.00	0.640	1.090	0.59
24	14:34	1.00	0.764	1.00	20.90	22.50	0.519	0.559	0.93
25	15:00	1.00	0.780	1.01	3.12	5.00	0.583	0.936	0.62
26	16:20	1.00	0.854	1.00	3.29	5.00	0.559	0.849	0.66
27	16:34	1.00	0.868	1.00	3.71	6.00	0.536	0.866	0.62
28	17:06	1.00	0.898	1.00	3.25	5.00	0.504	0.775	0.65
29	17:48	1.00	0.930	1.00	2.79	5.00	0.249	0.447	0.56
30	17:54	1.00	0.937	1.00	2.83	5.00	0.192	0.340	0.57
31	17:36	1.00	0.924	1.00	3.37	5.00	1.378	2.046	0.67
32	17:52	1.00	0.937	1.00	2.30	4.00	0.298	0.517	0.58
33	18:56	1.00	0.995	1.00	3.18	5.00	0.108	0.169	0.64
34	20:30	1.00	1.076	1.00	2.82	5.00	0.090	0.160	0.56
35	20:56	1.00	0.907	1.00	13.51	15.00	0.327	0.363	0.90
36	22:28	1.00	0.974	1.00	16.24	15.00	0.250	0.231	1.08
37	22:48	1.00	0.990	1.00	3.89	5.00	0.758	0.975	0.78
38	22:48	1.00	0.988	1.00	3.36	5.00	0.295	0.439	0.67
39	24:04	1.00	1.046	1.00	3.72	5.00	1.419	1.909	0.74
40	25:14	1.00	1.097	1.00	3.74	5.00	1.538	2.054	0.75
41	27:16	1.00	1.186	1.00	3.85	5.00	0.822	1.069	0.77
42	31:42	1.00	1.378	1.00	14.00	10.00	2.016	1.440	1.40
43	32:44	1.00	1.425	1.00	16.83	12.50	1.774	1.317	1.35
44	31:24	1.00	1.367	1.00	8.15	7.50	2.351	2.164	1.09

RIC
07/31/89 8:21:00
SAMPLE: CLP,0731,,IC10731,L,W,,V,IC-020,
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: IC10731 #1
CALI: IC10731 #3

SCANS 1 TO 1100



Quantitation Report File: IC20731

Data: IC20731.TI
07/31/89 9:08:00
Sample: CLP,0731,,IC20731,L,W,,V,IC-050,
Conds.: 150' TO 220'@ 15'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C038	ACROLEIN	
14	C040	CARBON DISULFIDE	
15	C043	ACRYLONITRILE	
16	C045	1,1-DICHLOROETHENE	
17	C050	1,1-DICHLOROETHANE	
18	C053	1,2-DICHLOROETHENE (TOTAL)	
19	C060	CHLOROFORM	
20	C065	1,2-DICHLOROETHANE	
21	C110	2-BUTANONE	
22	C115	1,1,1-TRICHLOROETHANE	
23	C120	CARBON TETRACHLORIDE	
24	C125	VINYL ACETATE	
25	C130	BROMODICHLOROMETHANE	
26	C140	1,2-DICHLOROPROPANE	
27	C143	CIS-1,3-DICHLOROPROPENE	
28	C150	TRICHLOROETHENE	
29	C155	DIBROMOCHLOROMETHANE	
30	C160	1,1,2-TRICHLOROETHANE	
31	C165	BENZENE	
32	C172	TRANS-1,3-DICHLOROPROPENE	
33	C175	2-CHLOROETHYLVINYLETHER	
34	C180	BROMOFORM	
35	C210	2-HEXANONE	
36	C205	4-METHYL-2-PENTANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C260	M-XYLENE	
44	C270	O-&/OR P-XYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	297	9:54	1	1.000	A BB	9130.	10.000	UG/L	0.82
2	77	573	19:06	2	1.000	A BB	50143.	10.000	UG/L	0.82
3	55	693	23:06	3	1.000	A BB	33445.	10.000	UG/L	0.82
4	65	379	12:38	1	1.276	A BB	29294.	9.080	UG/L	0.75
5	84	524	17:28	2	0.914	A BB	102850.	9.904	UG/L	0.81
6	98	718	23:56	3	1.036	A BB	91619.	10.655	UG/L	0.88
7	50	48	1:36	1	0.162	A BB	53203.	11.689	UG/L	0.96
8	94	79	2:38	1	0.266	A BB	42083.	12.523	UG/L	1.03
9	62	102	3:24	1	0.343	A BB	52789.	12.581	UG/L	1.03
10	64	132	4:24	1	0.444	A BB	34877.	12.178	UG/L	1.00
11	84	198	6:36	1	0.667	A BB	24286.	8.965	UG/L	0.74
12	43	216	7:12	1	0.727	A BB	54314.	231.628	UG/L	19.05
13	56	216	7:12	1	0.727	A BV	6815.	264.424	UG/L	21.74
14	76	245	8:10	1	0.825	A BB	13669.	9.374	UG/L	0.77
15	53	238	7:56	1	0.801	A BB	47140.	221.095	UG/L	18.18
16	96	283	9:26	1	0.953	A BB	24654.	9.032	UG/L	0.74
17	63	321	10:42	1	1.081	A BB	71861.	9.107	UG/L	0.75
18	96	343	11:26	1	1.155	A BB	24671.	8.742	UG/L	0.72
19	83	360	12:00	1	1.212	A BB	69362.	9.186	UG/L	0.76
20	62	382	12:44	1	1.286	A BB	30129.	8.538	UG/L	0.70
21	72	380	12:40	2	0.663	A BB	4980.	74.777	UG/L	6.15
22	97	421	14:02	2	0.735	A BB	60416.	9.492	UG/L	0.78
23	117	433	14:26	2	0.756	A VB	51934.	9.499	UG/L	0.78
24	43	437	14:34	2	0.763	A BB	60850.	21.702	UG/L	1.78
25	83	450	15:00	2	0.785	A BB	41770.	8.904	UG/L	0.73
26	63	490	16:20	2	0.855	A BB	39072.	9.178	UG/L	0.75
27	75	498	16:36	2	0.869	A BB	43303.	9.973	UG/L	0.82
28	130	514	17:08	2	0.897	A BB	34909.	8.982	UG/L	0.74
29	129	534	17:48	2	0.932	A BB	18870.	8.420	UG/L	0.69
30	97	536	17:52	2	0.935	A BB	14331.	8.407	UG/L	0.69
31	78	529	17:38	2	0.923	A BB	93807.	9.144	UG/L	0.75
32	75	536	17:52	2	0.935	A BB	17084.	6.586	UG/L	0.54
33	63	568	18:56	2	0.991	A BB	7179.	8.449	UG/L	0.69
34	173	615	20:30	2	1.073	A BB	6845.	8.515	UG/L	0.70
35	43	628	20:56	3	0.906	A BB	18590.	15.303	UG/L	1.26
36	43	674	22:28	3	0.973	A BB	12759.	16.511	UG/L	1.36
37	164	685	22:50	3	0.988	A BB	34106.	10.460	UG/L	0.86
38	83	684	22:48	3	0.987	A BB	12669.	8.625	UG/L	0.71
39	92	724	24:08	3	1.045	A BB	61124.	9.575	UG/L	0.79
40	112	758	25:16	3	1.094	A BB	66732.	9.716	UG/L	0.80
41	106	819	27:18	3	1.182	A BB	33708.	9.431	UG/L	0.78
42	104	946	31:32	3	1.365	A BB	59712.	8.252	UG/L	0.68
43	106	954	31:48	3	1.377	A BB	77240.	16.034	UG/L	1.32
44	106	985	32:50	3	1.421	A BB	94763.	21.510	UG/L	1.77

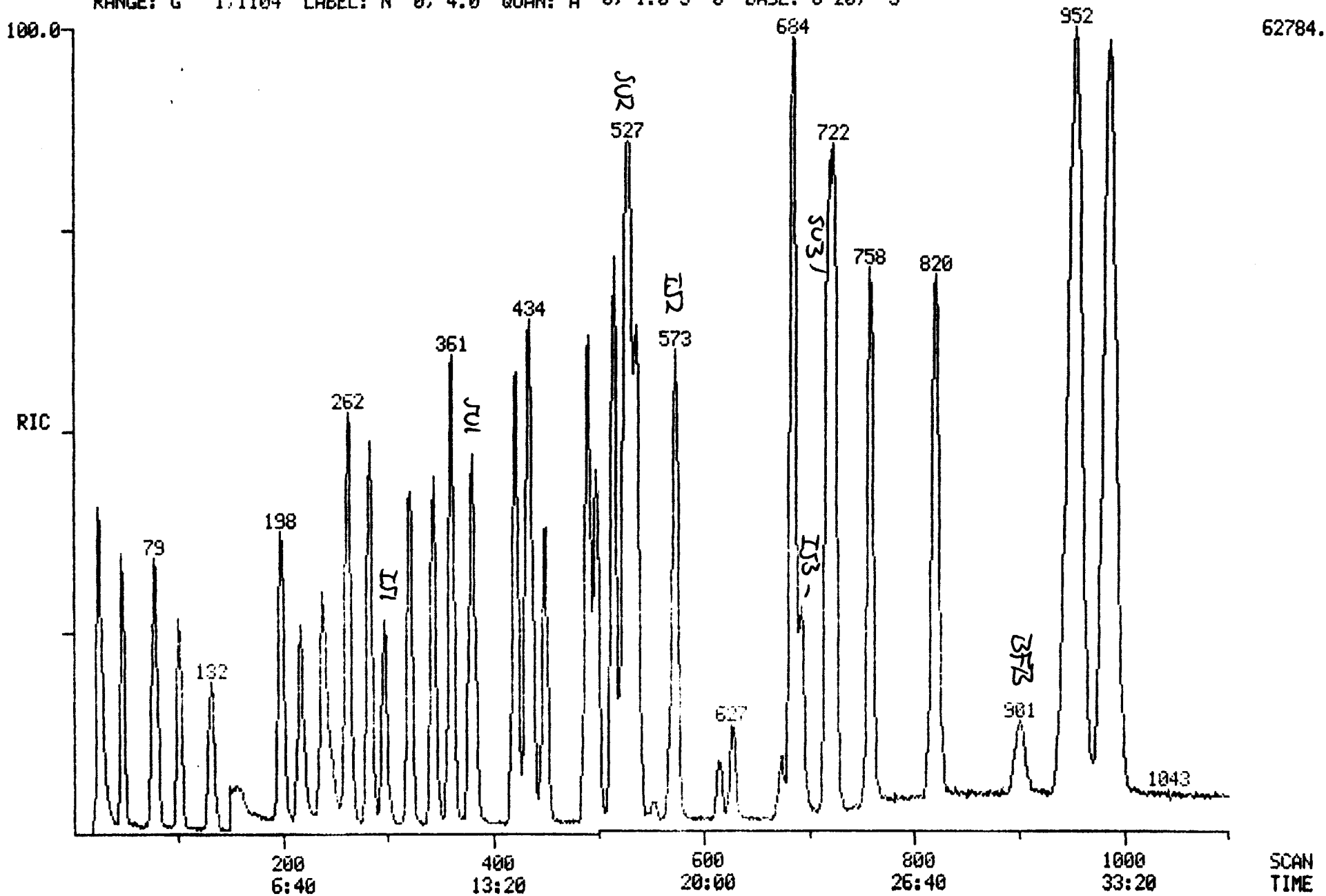
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	9.08	10.00	3.208	3.534	0.91
5	17:26	1.00	0.917	1.00	9.90	10.00	2.051	2.071	0.99
6	23:52	1.00	1.038	1.00	10.66	10.00	2.739	2.571	1.07
7	1:38	0.98	0.181	0.90	11.69	15.00	3.885	4.985	0.78
8	2:36	1.01	0.285	0.93	12.52	15.00	3.073	3.680	0.83
9	3:22	1.01	0.361	0.95	12.58	15.00	3.855	4.596	0.84
10	4:22	1.01	0.462	0.96	12.18	15.00	2.547	3.137	0.81

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.02	0.681	0.98	8.96	10.00	2.660	2.967	0.90
12	7:06	1.01	0.757	0.96	231.63	300.00	0.198	0.257	0.77
13	7:06	1.01	0.757	0.96	264.42	300.00	0.025	0.028	0.88
14	8:06	1.01	0.833	0.99	9.37	10.00	1.497	1.597	0.94
15	7:48	1.02	0.826	0.97	221.10	300.00	0.172	0.234	0.74
16	9:22	1.01	0.955	1.00	9.03	10.00	2.700	2.990	0.90
17	10:40	1.00	1.090	0.99	9.11	10.00	7.871	8.643	0.91
18	11:24	1.00	1.170	0.99	8.74	10.00	2.702	3.091	0.87
19	12:02	1.00	1.229	0.99	9.19	10.00	7.597	8.270	0.92
20	12:44	1.00	1.312	0.98	8.54	10.00	3.300	3.865	0.85
21	12:36	1.01	0.664	1.00	74.78	100.00	0.010	0.013	0.75
22	14:02	1.00	0.731	1.00	9.49	10.00	1.205	1.269	0.95
23	14:26	1.00	0.752	1.00	9.50	10.00	1.036	1.090	0.95
24	14:34	1.00	0.764	1.00	21.70	30.00	0.405	0.559	0.72
25	15:00	1.00	0.780	1.01	8.90	10.00	0.833	0.936	0.89
26	16:20	1.00	0.854	1.00	9.18	10.00	0.779	0.849	0.92
27	16:34	1.00	0.868	1.00	9.97	12.00	0.720	0.866	0.83
28	17:06	1.00	0.898	1.00	8.98	10.00	0.696	0.775	0.90
29	17:48	1.00	0.930	1.00	8.42	10.00	0.376	0.447	0.84
30	17:54	1.00	0.937	1.00	8.41	10.00	0.286	0.340	0.84
31	17:36	1.00	0.924	1.00	9.14	10.00	1.871	2.046	0.91
32	17:52	1.00	0.937	1.00	6.59	8.00	0.426	0.517	0.82
33	18:56	1.00	0.995	1.00	8.45	10.00	0.143	0.169	0.84
34	20:30	1.00	1.076	1.00	8.51	10.00	0.137	0.160	0.85
35	20:56	1.00	0.707	1.00	15.30	20.00	0.278	0.363	0.77
36	22:28	1.00	0.974	1.00	16.51	20.00	0.191	0.231	0.83
37	22:48	1.00	0.990	1.00	10.46	10.00	1.020	0.975	1.05
38	22:48	1.00	0.988	1.00	8.62	10.00	0.379	0.439	0.86
39	24:04	1.00	1.046	1.00	9.58	10.00	1.828	1.909	0.96
40	25:14	1.00	1.097	1.00	9.72	10.00	1.995	2.054	0.97
41	27:16	1.00	1.186	1.00	9.43	10.00	1.008	1.069	0.94
42	31:24	1.00	1.367	1.00	8.25	10.00	1.785	2.164	0.83
43	31:42	1.00	1.378	1.00	16.03	20.00	1.155	1.440	0.80
44	32:44	1.00	1.425	1.00	21.51	25.10	1.129	1.317	0.86

RIC
07/31/89 9:08:00
SAMPLE: CLP,0731,,IC20731,L,W,,V,IC-050,
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: IC20731 #1
CALI: IC20731 #3

SCANS 1 TO 1100



Quantitation Report File: IC30731

Data: IC30731.TI
07/31/89 9:54:00
Sample: CLP,0731,,IC30731,L,W,,V,IC-100,
Conds.: 150' TO 220'@ 15'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C038	ACROLEIN	
14	C040	CARBON DISULFIDE	
15	C043	ACRYLONITRILE	
16	C045	1,1-DICHLOROETHENE	
17	C050	1,1-DICHLOROETHANE	
18	C053	1,2-DICHLOROETHENE (TOTAL)	
19	C060	CHLOROFORM	
20	C065	1,2-DICHLOROETHANE	
21	C110	2-BUTANONE	
22	C115	1,1,1-TRICHLOROETHANE	
23	C120	CARBON TETRACHLORIDE	
24	C125	VINYL ACETATE	
25	C130	BROMODICHLOROMETHANE	
26	C140	1,2-DICHLOROPROPANE	
27	C143	CIS-1,3-DICHLOROPROPENE	
28	C150	TRICHLOROETHENE	
29	C155	DIBROMOCHLOROMETHANE	
30	C160	1,1,2-TRICHLOROETHANE	
31	C165	BENZENE	
32	C172	TRANS-1,3-DICHLOROPROPENE	
33	C175	2-CHLOROETHYLVINYLETHER	
34	C180	BROMOFORM	
35	C210	2-HEXANONE	
36	C205	4-METHYL-2-PENTANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C260	M-XYLENE	
44	C270	O-&/OR P-XYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	297	9:54	1	1.000	A BB	10035.	10.000 UG/L	0.64
2	77	573	19:06	2	1.000	A BB	58605.	10.000 UG/L	0.64
3	55	694	23:08	3	1.000	A BB	40041.	10.000 UG/L	0.64
4	65	379	12:38	1	1.276	A BB	34627.	9.765 UG/L	0.62
5	84	525	17:30	2	0.916	A BB	106215.	8.751 UG/L	0.56
6	98	717	23:54	3	1.033	A BB	97784.	9.499 UG/L	0.61
7	50	48	1:36	1	0.162	A BB	76263.	15.244 UG/L	0.97
8	94	79	2:38	1	0.266	A BB	59737.	16.174 UG/L	1.03
9	62	102	3:24	1	0.343	A BB	74501.	16.155 UG/L	1.03
10	64	133	4:26	1	0.448	A BB	49643.	15.771 UG/L	1.01
11	84	198	6:36	1	0.667	A BB	42854.	14.392 UG/L	0.92
12	43	216	7:12	1	0.727	A BB	76281.	295.971 UG/L	18.93
13	56	218	7:16	1	0.734	A BV	8887.	313.756 UG/L	20.07
14	76	245	8:10	1	0.825	A BB	18186.	11.346 UG/L	0.73
15	53	238	7:56	1	0.801	A BB	67808.	289.350 UG/L	18.51
16	96	282	9:24	1	0.949	A BB	43530.	14.509 UG/L	0.93
17	63	321	10:42	1	1.081	A BB	124286.	14.330 UG/L	0.92
18	96	343	11:26	1	1.155	A BB	43217.	13.932 UG/L	0.89
19	83	360	12:00	1	1.212	A BB	119344.	14.380 UG/L	0.92
20	62	382	12:44	1	1.286	A BB	54707.	14.104 UG/L	0.90
21	72	378	12:36	2	0.660	A BB	7013.	90.095 UG/L	5.76
22	97	421	14:02	2	0.735	A BB	104378.	14.031 UG/L	0.90
23	117	433	14:26	2	0.756	A VB	93603.	14.649 UG/L	0.94
24	43	437	14:34	2	0.763	A BB	53320.	16.270 UG/L	1.04
25	83	450	15:00	2	0.785	A BB	78345.	14.289 UG/L	0.91
26	63	490	16:20	2	0.855	A BB	66705.	13.407 UG/L	0.86
27	75	497	16:34	2	0.867	A BB	81188.	15.998 UG/L	1.02
28	130	514	17:08	2	0.897	A BB	61367.	13.510 UG/L	0.86
29	129	533	17:46	2	0.930	A BB	37796.	14.429 UG/L	0.92
30	97	536	17:52	2	0.935	A BB	26789.	13.446 UG/L	0.86
31	78	529	17:38	2	0.923	A BB	158379.	13.208 UG/L	0.84
32	75	536	17:52	2	0.935	A BB	32314.	10.659 UG/L	0.68
33	63	568	18:56	2	0.991	A BB	13378.	13.472 UG/L	0.86
34	173	615	20:30	2	1.073	A BB	13801.	14.689 UG/L	0.94
35	43	627	20:54	3	0.903	A BB	26536.	18.244 UG/L	1.17
36	43	674	22:28	3	0.971	A BB	18982.	20.518 UG/L	1.31
37	164	685	22:50	3	0.987	A BB	56774.	14.544 UG/L	0.93
38	83	684	22:48	3	0.986	A BB	25073.	14.258 UG/L	0.91
39	92	723	24:06	3	1.042	A BB	103684.	13.567 UG/L	0.87
40	112	758	25:16	3	1.092	A BB	116101.	14.119 UG/L	0.90
41	106	820	27:20	3	1.182	A BB	58347.	13.635 UG/L	0.87
42	104	946	31:32	3	1.363	A BB	89453.	10.325 UG/L	0.66
43	106	954	31:48	3	1.375	A BB	139581.	24.202 UG/L	1.55
44	106	986	32:52	3	1.421	A BB	161448.	30.609 UG/L	1.96

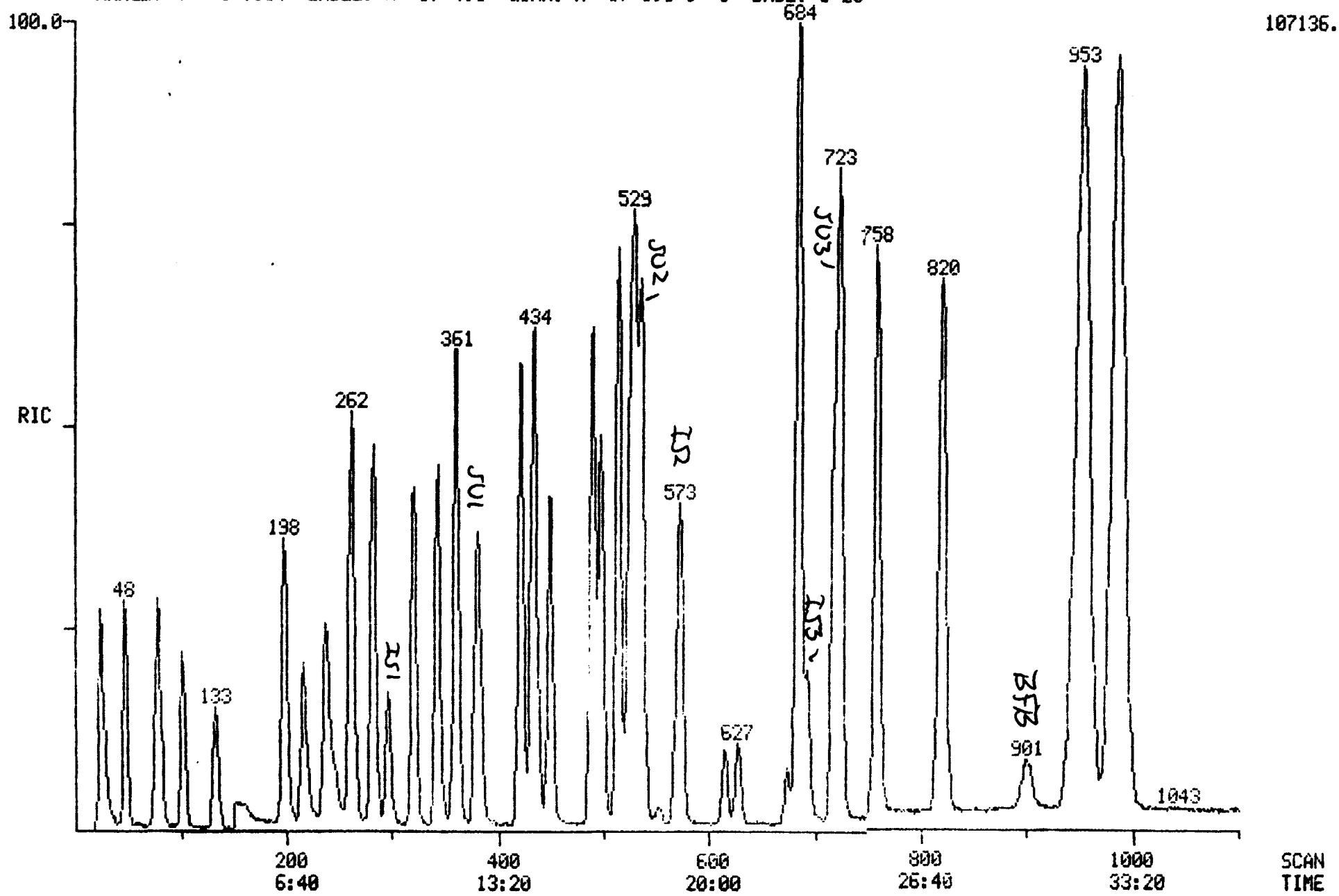
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	9.77	10.00	3.451	3.534	0.98
5	17:26	1.00	0.917	1.00	8.75	10.00	1.812	2.071	0.88
6	23:52	1.00	1.038	1.00	9.50	10.00	2.442	2.571	0.95
7	1:38	0.98	0.181	0.90	15.24	20.00	3.800	4.985	0.76
8	2:36	1.01	0.285	0.93	16.17	20.00	2.976	3.680	0.81
9	3:22	1.01	0.361	0.95	16.15	20.00	3.712	4.596	0.81
10	4:22	1.02	0.462	0.97	15.77	20.00	2.473	3.137	0.79

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.02	0.681	0.98	14.39	15.00	2.847	2.967	0.96
12	7:06	1.01	0.757	0.96	295.97	375.00	0.203	0.257	0.79
13	7:06	1.02	0.757	0.97	313.76	375.00	0.024	0.028	0.84
14	8:06	1.01	0.833	0.99	11.35	12.50	1.450	1.597	0.91
15	7:48	1.02	0.826	0.97	289.35	375.00	0.180	0.234	0.77
16	9:22	1.00	0.955	0.99	14.51	15.00	2.892	2.990	0.97
17	10:40	1.00	1.090	0.99	14.33	15.00	8.257	8.643	0.96
18	11:24	1.00	1.170	0.99	13.93	15.00	2.871	3.091	0.93
19	12:02	1.00	1.229	0.99	14.38	15.00	7.928	8.270	0.96
20	12:44	1.00	1.312	0.98	14.10	15.00	3.634	3.865	0.94
21	12:36	1.00	0.664	0.99	90.09	125.00	0.010	0.013	0.72
22	14:02	1.00	0.731	1.00	14.03	15.00	1.187	1.269	0.94
23	14:26	1.00	0.752	1.00	14.65	15.00	1.065	1.090	0.98
24	14:34	1.00	0.764	1.00	16.27	37.50	0.243	0.559	0.43
25	15:00	1.00	0.780	1.01	14.29	15.00	0.891	0.936	0.95
26	16:20	1.00	0.854	1.00	13.41	15.00	0.759	0.849	0.89
27	16:34	1.00	0.868	1.00	16.00	18.00	0.770	0.866	0.89
28	17:06	1.00	0.898	1.00	13.51	15.00	0.698	0.775	0.90
29	17:48	1.00	0.930	1.00	14.43	15.00	0.430	0.447	0.96
30	17:54	1.00	0.937	1.00	13.45	15.00	0.305	0.340	0.90
31	17:36	1.00	0.924	1.00	13.21	15.00	1.802	2.046	0.88
32	17:52	1.00	0.937	1.00	10.66	12.00	0.459	0.517	0.89
33	18:56	1.00	0.995	1.00	13.47	15.00	0.152	0.169	0.90
34	20:30	1.00	1.076	1.00	14.69	15.00	0.157	0.160	0.98
35	20:56	1.00	1.107	1.00	18.24	25.00	0.265	0.363	0.73
36	22:28	1.00	0.974	1.00	20.52	25.00	0.190	0.231	0.82
37	22:48	1.00	0.990	1.00	14.54	15.00	0.945	0.975	0.97
38	22:48	1.00	0.988	1.00	14.26	15.00	0.417	0.439	0.95
39	24:04	1.00	1.046	1.00	13.57	15.00	1.726	1.909	0.90
40	25:14	1.00	1.097	1.00	14.12	15.00	1.933	2.054	0.94
41	27:16	1.00	1.186	1.00	13.63	15.00	0.971	1.069	0.91
42	31:24	1.00	1.367	1.00	10.33	12.50	1.787	2.164	0.83
43	31:42	1.00	1.378	1.00	24.20	30.00	1.162	1.440	0.81
44	32:44	1.00	1.425	1.00	30.61	37.60	1.072	1.317	0.81

RIC
07/31/89 9:54:00
SAMPLE: CLP,0731,,IC30731,L,W,,V,IC-100,
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: IC30731 #1
CALI: IC30731 #3

SCANS 1 TO 1100



Quantitation Report File: IC40731

Data: IC40731.TI
07/31/89 10:39:00
Sample: CLP,0731,,IC40731,L,W,,V,IC-150,
Conds.: 150' TO 220'@ 15'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

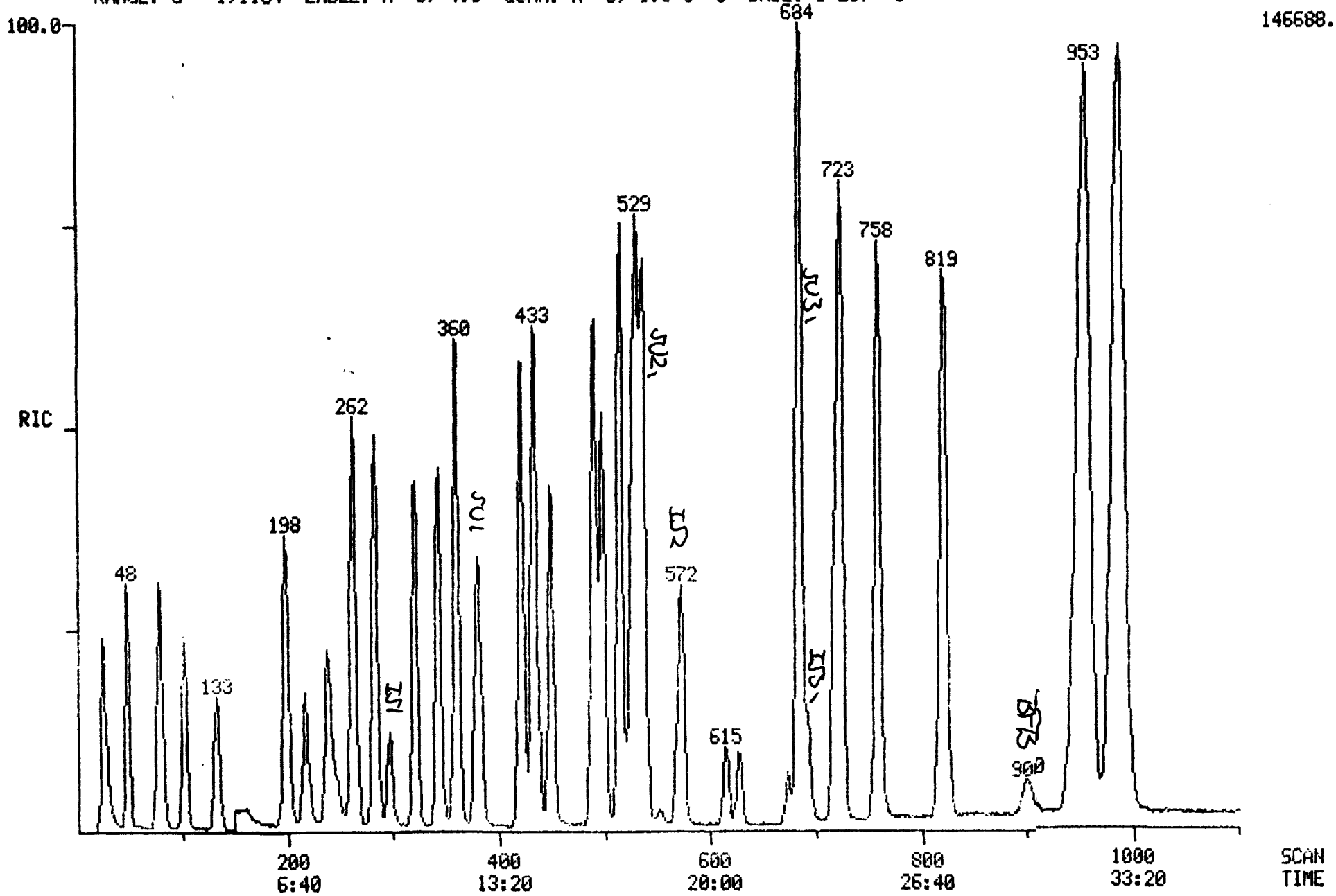
No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C038	ACROLEIN	
14	C040	CARBON DISULFIDE	
15	C043	ACRYLONITRILE	
16	C045	1,1-DICHLOROETHENE	
17	C050	1,1-DICHLOROETHANE	
18	C053	1,2-DICHLOROETHENE (TOTAL)	
19	C060	CHLOROFORM	
20	C065	1,2-DICHLOROETHANE	
21	C110	2-BUTANONE	
22	C115	1,1,1-TRICHLOROETHANE	
23	C120	CARBON TETRACHLORIDE	
24	C125	VINYL ACETATE	
25	C130	BROMODICHLOROMETHANE	
26	C140	1,2-DICHLOROPROPANE	
27	C143	CIS-1,3-DICHLOROPROPENE	
28	C150	TRICHLOROETHENE	
29	C155	DIBROMOCHLOROMETHANE	
30	C160	1,1,2-TRICHLOROETHANE	
31	C165	BENZENE	
32	C172	TRANS-1,3-DICHLOROPROPENE	
33	C175	2-CHLOROETHYLVINYLETHER	
34	C180	BROMOFORM	
35	C210	2-HEXANONE	
36	C205	4-METHYL-2-PENTANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C260	M-XYLENE	
44	C270	O-&/OR P-XYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	297	9:54	1	1.000	A BB	9585.	10.000	UG/L	0.55
2	77	572	19:04	2	1.000	A BB	56840.	10.000	UG/L	0.55
3	55	693	23:06	3	1.000	A BB	36596.	10.000	UG/L	0.55
4	65	379	12:38	1	1.276	A BB	34459.	10.174	UG/L	0.56
5	84	524	17:28	2	0.916	A VB	110983.	9.428	UG/L	0.52
6	98	717	23:54	3	1.035	A BB	94612.	10.056	UG/L	0.56
7	50	48	1:36	1	0.162	A BB	113068.	23.662	UG/L	1.31
8	94	79	2:38	1	0.266	A BB	88664.	25.132	UG/L	1.39
9	62	102	3:24	1	0.343	A BB	114421.	25.975	UG/L	1.44
10	64	133	4:26	1	0.448	A BB	78241.	26.022	UG/L	1.44
11	84	198	6:36	1	0.667	A BB	57073.	20.066	UG/L	1.11
12	43	216	7:12	1	0.727	A BB	90320.	366.889	UG/L	20.28
13	56	216	7:12	1	0.727	A BB	3453.	127.631	UG/L	7.05
14	76	246	8:12	1	0.828	A BB	21785.	14.229	UG/L	0.79
15	53	237	7:54	1	0.798	A BB	85649.	382.633	UG/L	21.15
16	96	282	9:24	1	0.949	A BB	60372.	21.067	UG/L	1.16
17	63	321	10:42	1	1.081	A BB	170901.	20.630	UG/L	1.14
18	96	342	11:24	1	1.152	A BB	59546.	20.097	UG/L	1.11
19	83	360	12:00	1	1.212	A BB	169346.	21.363	UG/L	1.18
20	62	382	12:44	1	1.286	A BB	76334.	20.604	UG/L	1.14
21	72	378	12:36	2	0.661	A BB	9299.	123.171	UG/L	6.81
22	97	421	14:02	2	0.736	A BB	144571.	20.037	UG/L	1.11
23	117	433	14:26	2	0.757	A VB	129421.	20.883	UG/L	1.15
24	43	437	14:34	2	0.764	A BB	37286.	11.731	UG/L	0.65
25	83	449	14:58	2	0.785	A BB	110003.	20.686	UG/L	1.14
26	63	490	16:20	2	0.857	A BB	93679.	19.412	UG/L	1.07
27	75	497	16:34	2	0.869	A BB	112788.	22.914	UG/L	1.27
28	130	514	17:08	2	0.899	A BB	87178.	19.787	UG/L	1.09
29	129	533	17:46	2	0.932	A BB	54841.	21.587	UG/L	1.19
30	97	536	17:52	2	0.937	A BB	35747.	18.499	UG/L	1.02
31	78	529	17:38	2	0.925	A BB	227109.	19.528	UG/L	1.08
32	75	536	17:52	2	0.937	A BB	47188.	16.048	UG/L	0.89
33	63	568	18:56	2	0.993	A BB	18219.	18.916	UG/L	1.05
34	173	615	20:30	2	1.075	A BB	19823.	21.752	UG/L	1.20
35	43	627	20.54	3	0.905	A BB	33929.	25.524	UG/L	1.41
36	43	674	22:28	3	0.973	A BB	23990.	28.372	UG/L	1.57
37	164	684	22:48	3	0.987	A BB	79265.	22.217	UG/L	1.23
38	83	684	22:48	3	0.987	A BB	34295.	21.338	UG/L	1.18
39	92	723	24:06	3	1.043	A BB	145396.	20.815	UG/L	1.15
40	112	758	25:16	3	1.094	A BB	160070.	21.298	UG/L	1.18
41	106	819	27:18	3	1.182	A BB	82850.	21.183	UG/L	1.17
42	104	946	31:32	3	1.365	A BB	107144.	13.532	UG/L	0.75
43	106	953	31:46	3	1.375	A BB	192699.	36.558	UG/L	2.02
44	106	985	32:50	3	1.421	A BB	230095.	47.731	UG/L	2.64

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.17	10.00	3.595	3.534	1.02
5	17:26	1.00	0.917	1.00	9.43	10.00	1.953	2.071	0.94
6	23:52	1.00	1.038	1.00	10.06	10.00	2.585	2.571	1.01
7	1:38	0.98	0.181	0.90	23.66	25.00	4.718	4.985	0.95
8	2:36	1.01	0.285	0.93	25.13	25.00	3.700	3.680	1.01
9	3:22	1.01	0.361	0.95	25.98	25.00	4.775	4.596	1.04
10	4:22	1.02	0.462	0.97	26.02	25.00	3.265	3.137	1.04

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.02	0.681	0.98	20.07	20.00	2.977	2.967	1.00
12	7:06	1.01	0.757	0.96	366.89	450.00	0.209	0.257	0.82
13	7:06	1.01	0.757	0.96	127.63	450.00	0.008	0.028	0.28
14	8:06	1.01	0.833	0.99	14.23	15.00	1.515	1.597	0.95
15	7:48	1.01	0.826	0.97	382.63	450.00	0.199	0.234	0.85
16	9:22	1.00	0.955	0.99	21.07	20.00	3.149	2.990	1.05
17	10:40	1.00	1.090	0.99	20.63	20.00	8.915	8.643	1.03
18	11:24	1.00	1.170	0.98	20.10	20.00	3.106	3.091	1.00
19	12:02	1.00	1.229	0.99	21.36	20.00	8.833	8.270	1.07
20	12:44	1.00	1.312	0.98	20.60	20.00	3.982	3.865	1.03
21	12:36	1.00	0.664	0.99	123.17	150.00	0.011	0.013	0.82
22	14:02	1.00	0.731	1.01	20.04	20.00	1.272	1.269	1.00
23	14:26	1.00	0.752	1.01	20.88	20.00	1.138	1.090	1.04
24	14:34	1.00	0.764	1.00	11.73	45.00	0.146	0.559	0.26
25	15:00	1.00	0.780	1.01	20.69	20.00	0.968	0.936	1.03
26	16:20	1.00	0.854	1.00	19.41	20.00	0.824	0.849	0.97
27	16:34	1.00	0.868	1.00	22.91	24.00	0.827	0.866	0.95
28	17:06	1.00	0.898	1.00	19.79	20.00	0.767	0.775	0.99
29	17:48	1.00	0.930	1.00	21.59	20.00	0.482	0.447	1.08
30	17:54	1.00	0.937	1.00	18.50	20.00	0.314	0.340	0.92
31	17:36	1.00	0.924	1.00	19.53	20.00	1.998	2.046	0.98
32	17.52	1.00	0.937	1.00	16.05	16.00	0.519	0.517	1.00
33	18:56	1.00	0.995	1.00	18.92	20.00	0.160	0.169	0.95
34	20:30	1.00	1.076	1.00	21.75	20.00	0.174	0.160	1.09
35	20:56	1.00	0.907	1.00	25.52	30.00	0.309	0.363	0.85
36	22:28	1.00	0.974	1.00	28.37	30.00	0.219	0.231	0.95
37	22:48	1.00	0.990	1.00	22.22	20.00	1.083	0.975	1.11
38	22:48	1.00	0.988	1.00	21.34	20.00	0.469	0.439	1.07
39	24:04	1.00	1.046	1.00	20.82	20.00	1.986	1.909	1.04
40	25:14	1.00	1.097	1.00	21.30	20.00	2.187	2.054	1.06
41	27:16	1.00	1.186	1.00	21.18	20.00	1.132	1.069	1.06
42	31:24	1.00	1.367	1.00	13.53	15.00	1.952	2.164	0.90
43	31:42	1.00	1.378	1.00	36.56	40.00	1.316	1.440	0.91
44	32:44	1.00	1.425	1.00	47.73	50.10	1.255	1.317	0.95

RIC DATA: IC40731 #1 SCANS 1 TO 1100
07/31/89 10:39:00 CALI: IC40731 #3
SAMPLE: CLP,0731,,IC40731,L,W,,V,IC-150,
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: IC50731

Data: IC50731.TI
07/31/89 11:25:00
Sample: CLP,0731,,IC50731,L,W,,V,IC-200,
Conds.: 150' TO 220'@ 15'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

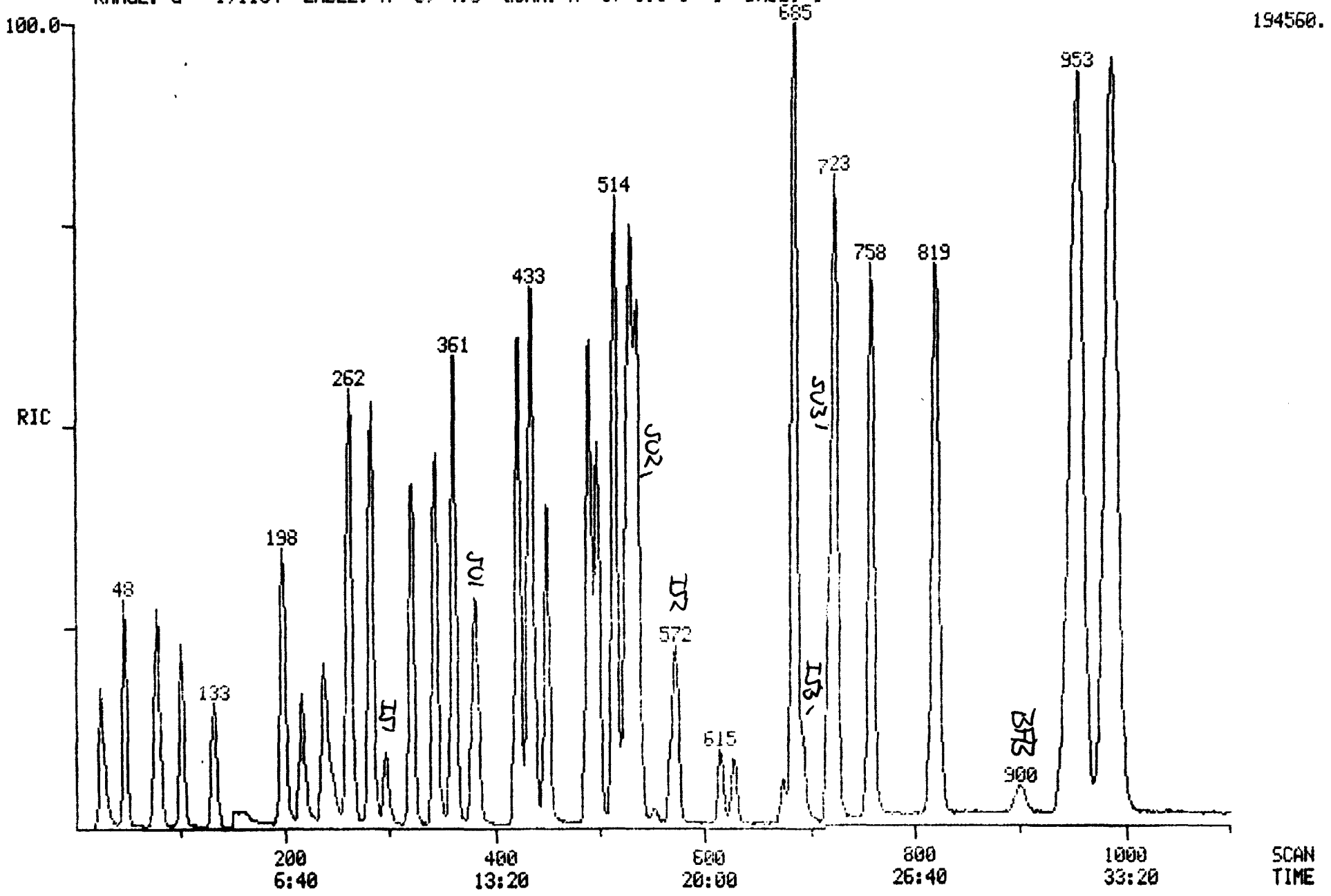
No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	C120	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C038	ACROLEIN	
14	C040	CARBON DISULFIDE	
15	C043	ACRYLONITRILE	
16	C045	1,1-DICHLOROETHENE	
17	C050	1,1-DICHLOROETHANE	
18	C053	1,2-DICHLOROETHENE (TOTAL)	
19	C060	CHLOROFORM	
20	C065	1,2-DICHLOROETHANE	
21	C110	2-BUTANONE	
22	C115	1,1,1-TRICHLOROETHANE	
23	C120	CARBON TETRACHLORIDE	
24	C125	VINYL ACETATE	
25	C130	BROMODICHLOROMETHANE	
26	C140	1,2-DICHLOROPROPANE	
27	C143	CIS-1,3-DICHLOROPROPENE	
28	C150	TRICHLOROETHENE	
29	C155	DIBROMOCHLOROMETHANE	
30	C160	1,1,2-TRICHLOROETHANE	
31	C165	BENZENE	
32	C172	TRANS-1,3-DICHLOROPROPENE	
33	C175	2-CHLOROETHYLVINYLETHER	
34	C180	BROMOFORM	
35	C210	2-HEXANONE	
36	C205	4-METHYL-2-PENTANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C245	STYRENE	
43	C260	M-XYLENE	
44	C270	O-&/OR P-XYLENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	297	9:54	1	1.000	A BB	9653.	10.000	UG/L	0.38
2	77	573	19:06	2	1.000	A BB	54460.	10.000	UG/L	0.38
3	55	693	23:06	3	1.000	A BB	36860.	10.000	UG/L	0.38
4	65	379	12:38	1	1.276	A BB	33476.	9.814	UG/L	0.37
5	84	524	17:28	2	0.914	A VB	118843.	10.537	UG/L	0.40
6	98	718	23:56	3	1.036	A BB	105640.	11.148	UG/L	0.43
7	50	48	1:36	1	0.162	A BB	138763.	28.836	UG/L	1.10
8	94	79	2:38	1	0.266	A BB	105402.	29.667	UG/L	1.13
9	62	102	3:24	1	0.343	A BB	140039.	31.568	UG/L	1.21
10	64	133	4:26	1	0.448	A BB	92468.	30.539	UG/L	1.17
11	84	197	6:34	1	0.663	A BB	72249.	25.224	UG/L	0.96
12	43	216	7:12	1	0.727	A BB	108437.	437.398	UG/L	16.71
13	56	217	7:14	1	0.731	A BV	14785.	542.625	UG/L	20.73
14	76	245	8:10	1	0.825	A BB	31678.	20.546	UG/L	0.78
15	53	237	7:54	1	0.798	A BB	101334.	449.539	UG/L	17.17
16	96	282	9:24	1	0.949	A BB	87687.	30.384	UG/L	1.16
17	63	320	10:40	1	1.077	A BB	228229.	27.357	UG/L	1.05
18	96	343	11:26	1	1.155	A BB	84077.	28.178	UG/L	1.08
19	83	361	12:02	1	1.215	A BB	218016.	27.310	UG/L	1.04
20	62	382	12:44	1	1.286	A BB	89994.	24.121	UG/L	0.92
21	72	380	12:40	2	0.663	A BB	10800.	149.304	UG/L	5.70
22	97	422	14:04	2	0.736	A BB	198197.	28.670	UG/L	1.10
23	117	433	14:26	2	0.756	A VB	184713.	31.107	UG/L	1.19
24	43	437	14:34	2	0.763	A BB	76567.	25.142	UG/L	0.96
25	83	449	14:58	2	0.784	A BB	136505.	26.792	UG/L	1.02
26	63	489	16:18	2	0.853	A BB	116446.	25.185	UG/L	0.96
27	75	497	16:34	2	0.867	A BB	146019.	30.962	UG/L	1.18
28	130	514	17:08	2	0.897	A BB	118006.	27.955	UG/L	1.07
29	129	534	17:48	2	0.932	A BB	66548.	27.339	UG/L	1.04
30	97	537	17:54	2	0.937	A BB	43420.	23.452	UG/L	0.90
31	78	529	17:38	2	0.923	A BB	299175.	26.849	UG/L	1.03
32	75	536	17:52	2	0.935	A BB	57998.	20.586	UG/L	0.79
33	63	568	18:56	2	0.991	A BB	20644.	22.371	UG/L	0.85
34	173	615	20:30	2	1.073	A BB	24410.	27.957	UG/L	1.07
35	43	627	20:54	3	0.905	A BB	39949.	29.837	UG/L	1.14
36	43	674	22:28	3	0.973	A BB	29593.	34.748	UG/L	1.33
37	164	685	22:50	3	0.988	A BB	107940.	30.038	UG/L	1.15
38	83	684	22:48	3	0.987	A BB	39529.	24.418	UG/L	0.93
39	92	723	24:06	3	1.043	A BB	195409.	27.775	UG/L	1.06
40	112	758	25:16	3	1.094	A BB	207202.	27.372	UG/L	1.05
41	106	820	27:20	3	1.183	A BB	112265.	28.499	UG/L	1.09
42	104	945	31:30	3	1.364	A BB	142204.	17.831	UG/L	0.68
43	106	954	31:48	3	1.377	A BB	250142.	47.116	UG/L	1.80
44	106	986	32:52	3	1.423	A BB	297933.	61.361	UG/L	2.34

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	9.81	10.00	3.468	3.534	0.98
5	17:26	1.00	0.917	1.00	10.54	10.00	2.182	2.071	1.05
6	23:52	1.00	1.038	1.00	11.15	10.00	2.866	2.571	1.11
7	1:38	0.98	0.181	0.90	28.84	30.00	4.792	4.985	0.96
8	2:36	1.01	0.285	0.93	29.67	30.00	3.640	3.680	0.99
9	3:22	1.01	0.361	0.95	31.57	30.00	4.836	4.596	1.05
10	4:22	1.02	0.462	0.97	30.54	30.00	3.193	3.137	1.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.01	0.681	0.97	25.22	25.00	2.994	2.967	1.01
12	7:06	1.01	0.757	0.96	437.40	525.00	0.214	0.257	0.83
13	7:06	1.02	0.757	0.97	542.63	525.00	0.029	0.028	1.03
14	8:06	1.01	0.833	0.99	20.55	17.50	1.875	1.597	1.17
15	7:48	1.01	0.826	0.97	449.54	525.00	0.200	0.234	0.86
16	9:22	1.00	0.955	0.99	30.38	25.00	3.634	2.990	1.22
17	10:40	1.00	1.090	0.99	27.36	25.00	9.457	8.643	1.09
18	11:24	1.00	1.170	0.99	28.18	25.00	3.484	3.091	1.13
19	12:02	1.00	1.229	0.99	27.31	25.00	9.034	8.270	1.09
20	12:44	1.00	1.312	0.98	24.12	25.00	3.729	3.865	0.96
21	12:36	1.01	0.664	1.00	149.30	175.00	0.011	0.013	0.85
22	14:02	1.00	0.731	1.01	28.67	25.00	1.456	1.269	1.15
23	14:26	1.00	0.752	1.00	31.11	25.00	1.357	1.090	1.24
24	14:34	1.00	0.764	1.00	25.14	52.50	0.268	0.559	0.48
25	15:00	1.00	0.780	1.00	26.79	25.00	1.003	0.936	1.07
26	16:20	1.00	0.854	1.00	25.18	25.00	0.855	0.849	1.01
27	16:34	1.00	0.868	1.00	30.96	30.00	0.894	0.866	1.03
28	17:06	1.00	0.898	1.00	27.96	25.00	0.867	0.775	1.12
29	17:48	1.00	0.930	1.00	27.34	25.00	0.489	0.447	1.09
30	17:54	1.00	0.937	1.00	23.45	25.00	0.319	0.340	0.94
31	17:36	1.00	0.924	1.00	26.85	25.00	2.197	2.046	1.07
32	17:52	1.00	0.937	1.00	20.59	20.00	0.532	0.517	1.03
33	18:56	1.00	0.995	1.00	22.37	25.00	0.152	0.169	0.89
34	20:30	1.00	1.076	1.00	27.96	25.00	0.179	0.160	1.12
35	20:56	1.00	1.097	1.00	29.84	35.00	0.310	0.363	0.85
36	22:28	1.00	0.974	1.00	34.75	35.00	0.229	0.231	0.99
37	22:48	1.00	0.990	1.00	30.04	25.00	1.171	0.975	1.20
38	22:48	1.00	0.988	1.00	24.42	25.00	0.429	0.439	0.98
39	24:04	1.00	1.046	1.00	27.78	25.00	2.121	1.909	1.11
40	25:14	1.00	1.097	1.00	27.37	25.00	2.249	2.054	1.09
41	27:16	1.00	1.186	1.00	28.50	25.00	1.218	1.069	1.14
42	31:24	1.00	1.367	1.00	17.83	17.50	2.205	2.164	1.02
43	31:42	1.00	1.378	1.00	47.12	50.00	1.357	1.440	0.94
44	32:44	1.00	1.425	1.00	61.36	62.70	1.289	1.317	0.98

RIC DATA: IC50731 #1 SCANS 1 TO 1100
07/31/89 11:25:00 CALI: IC50731 #3
SAMPLE: CLP,0731,,IC50731,L,W,,V,IC-200,
CONDS.: 150' TO 220'@ 15'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: CC0810

Data: CC0810.TI
08/10/89 14:27:00
Sample: CLP,0810,,CC0810,L,W,,V,CAL,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from average of the 5 closest data points in .RL

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C040	CARBON DISULFIDE	
14	C043	ACRYLONITRILE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C053	1,2-DICHLOROETHENE (TOTAL)	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C110	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C143	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C172	TRANS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C210	2-HEXANONE	
35	C205	4-METHYL-2-PENTANONE	
36	C220	TETRACHLOROETHENE	
37	C225	1,1,2,2-TETRACHLOROETHANE	
38	C230	TOLUENE	
39	C235	CHLOROBENZENE	
40	C240	ETHYL BENZENE	
41	C245	STYRENE	
42	C260	M-XYLENE	
43	C270	O-&/OR P-XYLENE	
44	C038	ACROLEIN	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	295	9:50	1	1.000	A BB	13264.	10.000 UG/L	0.53
2	77	571	19:02	2	1.000	A BB	66181.	10.000 UG/L	0.53
3	55	691	23:02	3	1.000	A BB	41405.	10.000 UG/L	0.53
4	65	378	12:36	1	1.281	A BB	36681.	8.255 UG/L	0.43
5	84	523	17:26	2	0.916	A VB	141210.	10.670 UG/L	0.56
6	98	716	23:52	3	1.036	A BB	122419.	10.991 UG/L	0.58
7	50	48	1:36	1	0.163	A BB	94226.	16.326 UG/L	0.86
8	94	78	2:36	1	0.264	A BB	82430.	18.167 UG/L	0.95
9	62	101	3:22	1	0.342	A BB	96623.	16.851 UG/L	0.89
10	64	132	4:24	1	0.447	A BB	62667.	16.309 UG/L	0.86
11	84	196	6:32	1	0.664	A BB	51001.	14.449 UG/L	0.76
12	43	214	7:08	1	0.725	A BB	89068.	323.652 UG/L	17.01
13	76	244	8:08	1	0.827	A BB	26724.	12.759 UG/L	0.67
14	53	236	7:52	1	0.800	A BB	88995.	357.129 UG/L	18.77
15	96	281	9:22	1	0.953	A BB	56826.	15.058 UG/L	0.79
16	63	319	10:38	1	1.081	A BB	140089.	13.236 UG/L	0.70
17	96	341	11:22	1	1.156	A BB	56063.	15.163 UG/L	0.80
18	83	359	11:58	1	1.217	A BV	139245.	13.574 UG/L	0.71
19	62	381	12:42	1	1.292	A BB	57356.	12.835 UG/L	0.67
20	72	378	12:36	2	0.662	A BB	10122.	143.723 UG/L	7.55
21	97	420	14:00	2	0.736	A BV	123822.	15.703 UG/L	0.83
22	117	432	14:24	2	0.757	A VB	108161.	15.609 UG/L	0.82
23	43	436	14:32	2	0.764	A BB	89007.	42.558 UG/L	2.24
24	83	448	14:56	2	0.785	A BB	84787.	14.975 UG/L	0.79
25	63	488	16:16	2	0.855	A BB	75369.	15.077 UG/L	0.79
26	75	496	16:32	2	0.869	A BB	91410.	18.437 UG/L	0.97
27	130	513	17:06	2	0.898	A BB	81529.	17.442 UG/L	0.92
28	129	532	17:44	2	0.932	A BB	43796.	16.327 UG/L	0.86
29	97	535	17:50	2	0.937	A BB	30592.	16.318 UG/L	0.86
30	78	527	17:34	2	0.923	A BB	192108.	15.699 UG/L	0.83
31	75	535	17:50	2	0.937	A BB	36939.	12.489 UG/L	0.66
32	63	567	18:54	2	0.993	A BB	14419.	15.239 UG/L	0.80
33	173	614	20:28	2	1.075	A BB	17271.	17.694 UG/L	0.93
34	43	626	20:52	3	0.906	A BB	34408.	27.907 UG/L	1.47
35	43	672	22:24	3	0.973	A BB	24083.	26.968 UG/L	1.42
36	164	683	22:46	3	0.988	A BB	77654.	18.842 UG/L	0.99
37	83	682	22:44	3	0.987	A BB	25234.	15.319 UG/L	0.81
38	92	721	24:02	3	1.043	A BB	126227.	16.788 UG/L	0.88
39	112	757	25:14	3	1.096	A BB	142051.	17.324 UG/L	0.91
40	106	817	27:14	3	1.182	A BB	74781.	17.529 UG/L	0.92
41	104	942	31:24	3	1.363	A BB	125726.	15.061 UG/L	0.79
42	106	950	31:40	3	1.375	A BB	175762.	30.294 UG/L	1.59
43	106	982	32:44	3	1.421	A BB	212690.	39.398 UG/L	2.07
44	56	216	7:12	1	0.732	A BV	11897.	394.461 UG/L	20.73

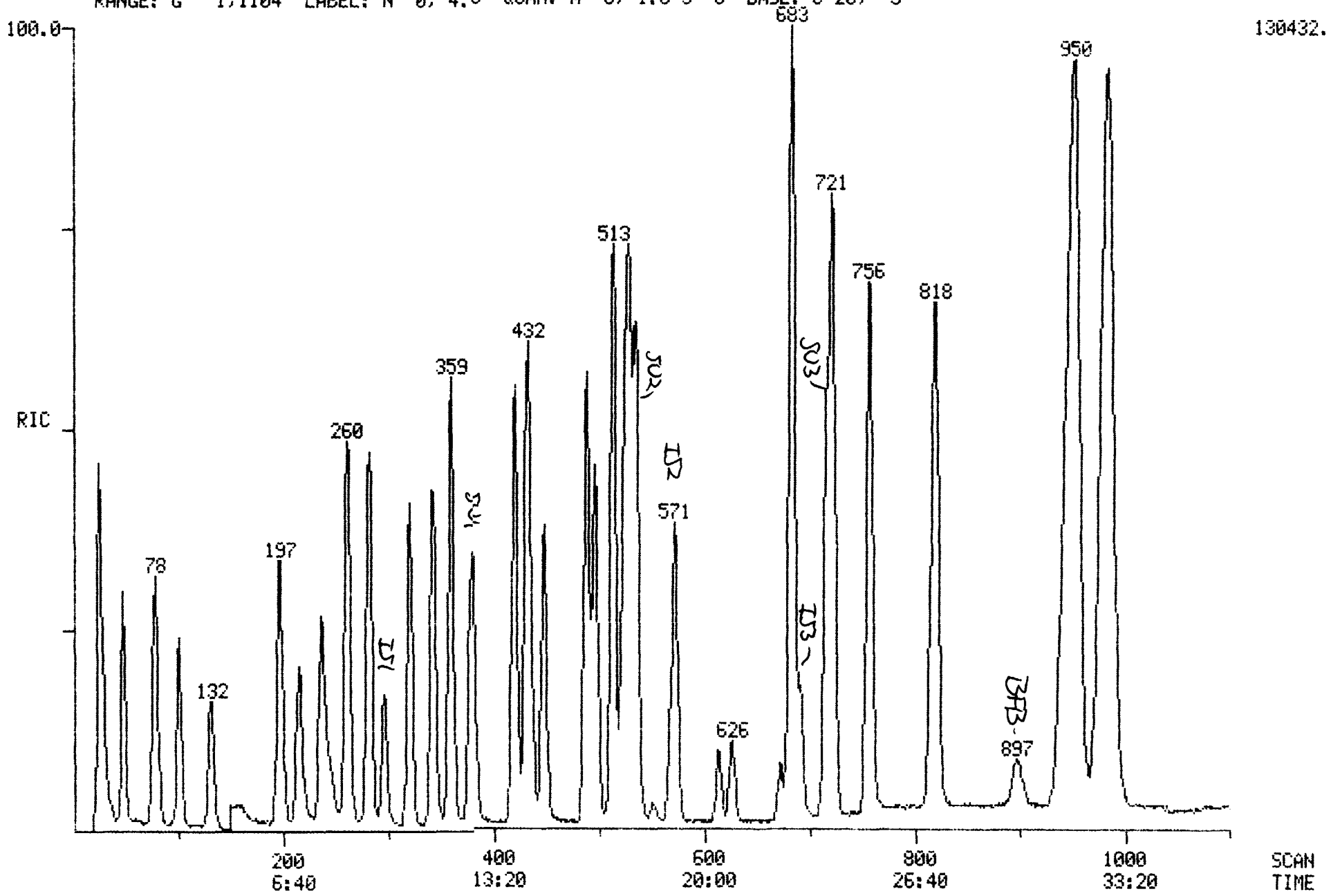
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	8.26	10.00	2.765	3.350	0.83
5	17:26	1.00	0.917	1.00	10.67	10.00	2.134	2.000	1.07
6	23:52	1.00	1.038	1.00	10.99	10.00	2.957	2.690	1.10
7	1:38	0.98	0.181	0.90	16.33	20.00	3.552	4.351	0.82
8	2:36	1.00	0.285	0.93	18.17	20.00	3.107	3.421	0.91
9	3:22	1.00	0.361	0.95	16.85	20.00	3.642	4.323	0.84
10	4:22	1.01	0.462	0.97	16.31	20.00	2.362	2.897	0.82

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.01	0.681	0.98	14.45	15.00	2.563	2.661	0.96
12	7:06	1.00	0.757	0.96	323.65	375.00	0.179	0.207	0.86
13	8:06	1.00	0.833	0.99	12.76	12.50	1.612	1.579	1.02
14	7:48	1.01	0.826	0.97	357.13	375.00	0.179	0.188	0.95
15	9:22	1.00	0.955	1.00	15.06	15.00	2.856	2.845	1.00
16	10:40	1.00	1.090	0.99	13.24	15.00	7.041	7.980	0.88
17	11:24	1.00	1.170	0.99	15.16	15.00	2.818	2.788	1.01
18	12:02	0.99	1.229	0.99	13.57	15.00	6.999	7.734	0.90
19	12:44	1.00	1.312	0.98	12.83	15.00	2.883	3.369	0.86
20	12:36	1.00	0.664	1.00	143.72	125.00	0.012	0.011	1.15
21	14:02	1.00	0.731	1.01	15.70	15.00	1.247	1.191	1.05
22	14:26	1.00	0.752	1.01	15.61	15.00	1.090	1.047	1.04
23	14:34	1.00	0.764	1.00	42.56	37.50	0.359	0.316	1.13
24	15:00	1.00	0.780	1.01	14.98	15.00	0.854	0.856	1.00
25	16:20	1.00	0.854	1.00	15.08	15.00	0.759	0.755	1.01
26	16:34	1.00	0.868	1.00	18.44	18.00	0.767	0.749	1.02
27	17:06	1.00	0.898	1.00	17.44	15.00	0.821	0.706	1.16
28	17:48	1.00	0.930	1.00	16.33	15.00	0.441	0.405	1.09
29	17:54	1.00	0.937	1.00	16.32	15.00	0.308	0.283	1.09
30	17:36	1.00	0.924	1.00	15.70	15.00	1.935	1.849	1.05
31	17:52	1.00	0.937	1.00	12.49	12.00	0.465	0.447	1.04
32	18:56	1.00	0.995	1.00	15.24	15.00	0.145	0.143	1.02
33	20:30	1.00	1.076	1.00	17.69	15.00	0.174	0.147	1.18
34	20:56	1.00	0.907	1.00	27.91	25.00	0.332	0.298	1.12
35	22:28	1.00	0.974	1.00	26.97	25.00	0.233	0.216	1.08
36	22:48	1.00	0.990	1.00	18.84	15.00	1.250	0.995	1.26
37	22:48	1.00	0.988	1.00	15.32	15.00	0.406	0.398	1.02
38	24:04	1.00	1.046	1.00	16.79	15.00	2.032	1.816	1.12
39	25:14	1.00	1.097	1.00	17.32	15.00	2.287	1.980	1.15
40	27:16	1.00	1.186	1.00	17.53	15.00	1.204	1.030	1.17
41	31:24	1.00	1.367	1.00	15.06	12.50	2.429	2.016	1.20
42	31:42	1.00	1.378	1.00	30.29	30.00	1.415	1.401	1.01
43	32:44	1.00	1.425	1.00	39.40	37.60	1.366	1.304	1.05
44	7:06	1.01	0.757	0.97	394.46	375.00	0.024	0.023	1.05

RIC
08/10/89 14:27:00
SAMPLE: CLP,0810,,CC0810,L,W,,V,CAL,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CC0810 #1
CALI: CC0810 #3

SCANS 1 TO 1100



Quantitation Report File: CC0811

Data: CC0811.TI
08/11/89 8:59:00
Sample: CLP,0811,,CC0811,L,W,,V,CAL,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from average of the 5 closest data points in .RL

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C040	CARBON DISULFIDE	
14	C043	ACRYLONITRILE	
15	C045	1,1-DICHLOROETHENE	
16	C050	1,1-DICHLOROETHANE	
17	C053	1,2-DICHLOROETHENE (TOTAL)	
18	C060	CHLOROFORM	
19	C065	1,2-DICHLOROETHANE	
20	C110	2-BUTANONE	
21	C115	1,1,1-TRICHLOROETHANE	
22	C120	CARBON TETRACHLORIDE	
23	C125	VINYL ACETATE	
24	C130	BROMODICHLOROMETHANE	
25	C140	1,2-DICHLOROPROPANE	
26	C143	CIS-1,3-DICHLOROPROPENE	
27	C150	TRICHLOROETHENE	
28	C155	DIBROMOCHLOROMETHANE	
29	C160	1,1,2-TRICHLOROETHANE	
30	C165	BENZENE	
31	C172	TRANS-1,3-DICHLOROPROPENE	
32	C175	2-CHLOROETHYLVINYLETHER	
33	C180	BROMOFORM	
34	C210	2-HEXANONE	
35	C205	4-METHYL-2-PENTANONE	
36	C220	TETRACHLOROETHENE	
37	C225	1,1,2,2-TETRACHLOROETHANE	
38	C230	TOLUENE	
39	C235	CHLOROBENZENE	
40	C240	ETHYL BENZENE	
41	C260	M-XYLENE	
42	C270	O-&/OR P-XYLENE	
43	C038	ACROLEIN	
44	C245	STYRENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	295	9:50	1	1.000	A BB	11557.	10.000	UG/L	0.52
2	77	572	19:04	2	1.000	A BB	59476.	10.000	UG/L	0.52
3	55	691	23:02	3	1.000	A BB	39211.	10.000	UG/L	0.52
4	65	378	12:36	1	1.281	A BB	33158.	8.565	UG/L	0.45
5	84	523	17:26	2	0.914	A VB	119719.	10.066	UG/L	0.53
6	98	716	23:52	3	1.036	A BB	106560.	10.102	UG/L	0.53
7	50	48	1:36	1	0.163	A BB	99856.	19.857	UG/L	1.04
8	94	79	2:38	1	0.268	A BB	83824.	21.202	UG/L	1.11
9	62	101	3:22	1	0.342	A BB	101104.	20.237	UG/L	1.06
10	64	132	4:24	1	0.447	A BB	69998.	20.907	UG/L	1.09
11	84	197	6:34	1	0.668	A BB	47454.	15.429	UG/L	0.81
12	43	215	7:10	1	0.729	A BB	82143.	342.572	UG/L	17.87
13	76	244	8:08	1	0.827	A BB	19779.	10.838	UG/L	0.57
14	53	236	7:52	1	0.800	A BB	77432.	356.621	UG/L	18.61
15	96	281	9:22	1	0.953	A BB	50258.	15.285	UG/L	0.80
16	63	319	10:38	1	1.081	A BB	133237.	14.448	UG/L	0.75
17	96	342	11:24	1	1.159	A BB	51479.	15.979	UG/L	0.83
18	83	359	11:58	1	1.217	A BB	131624.	14.726	UG/L	0.77
19	62	381	12:42	1	1.292	A BV	55132.	14.159	UG/L	0.74
20	72	377	12:34	2	0.659	A BB	9054.	143.052	UG/L	7.46
21	97	420	14:00	2	0.734	A BB	114599.	16.172	UG/L	0.84
22	117	432	14:24	2	0.755	A VB	102509.	16.461	UG/L	0.86
23	43	436	14:32	2	0.762	A BB	83482.	44.416	UG/L	2.32
24	83	448	14:56	2	0.783	A BB	84028.	16.514	UG/L	0.86
25	63	488	16:16	2	0.853	A BB	74045.	16.482	UG/L	0.86
26	75	496	16:32	2	0.867	A BB	88280.	19.813	UG/L	1.03
27	130	513	17:06	2	0.897	A BB	74735.	17.791	UG/L	0.93
28	129	533	17:46	2	0.932	A BB	39643.	16.445	UG/L	0.86
29	97	535	17:50	2	0.935	A BB	28576.	16.961	UG/L	0.88
30	78	528	17:36	2	0.923	A BB	182147.	16.563	UG/L	0.86
31	75	535	17:50	2	0.935	A BB	34350.	12.923	UG/L	0.67
32	63	567	18:54	2	0.991	A BB	13707.	16.119	UG/L	0.84
33	173	614	20:28	2	1.073	A BB	14985.	17.083	UG/L	0.89
34	43	626	20:52	3	0.906	A BB	29115.	24.935	UG/L	1.30
35	43	672	22:24	3	0.973	A BB	21549.	25.480	UG/L	1.33
36	164	683	22:46	3	0.988	A BB	69909.	17.911	UG/L	0.93
37	83	682	22:44	3	0.987	A BB	24355.	15.613	UG/L	0.81
38	92	722	24:04	3	1.045	A BB	121891.	17.119	UG/L	0.89
39	112	757	25:14	3	1.096	A BB	135445.	17.442	UG/L	0.91
40	106	818	27:16	3	1.184	A BB	71112.	17.602	UG/L	0.92
41	106	951	31:42	3	1.376	A BB	154334.	28.089	UG/L	1.47
42	106	982	32:44	3	1.421	A BB	177986.	34.814	UG/L	1.82
43	56	217	7:14	1	0.736	A BB	9872.	375.648	UG/L	19.60
44	104	943	31:26	3	1.365	A BB	111623.	14.120	UG/L	0.74

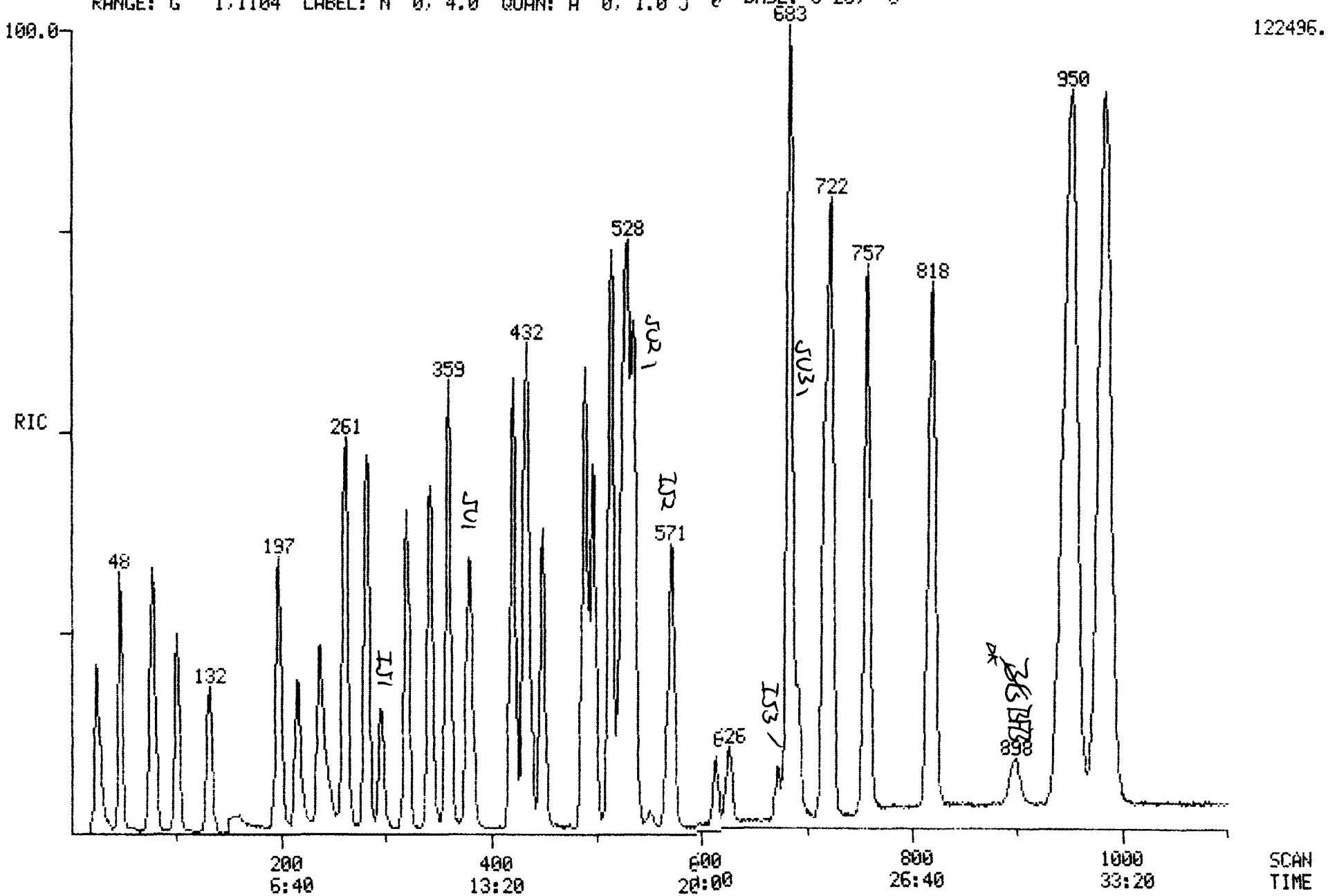
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	8.56	10.00	2.869	3.350	0.86
5	17:26	1.00	0.917	1.00	10.07	10.00	2.013	2.000	1.01
6	23:52	1.00	1.038	1.00	10.10	10.00	2.718	2.690	1.01
7	1:38	0.98	0.181	0.90	19.86	20.00	4.320	4.351	0.99
8	2:36	1.01	0.285	0.94	21.20	20.00	3.627	3.421	1.06
9	3:22	1.00	0.361	0.95	20.24	20.00	4.374	4.323	1.01
10	4:22	1.01	0.462	0.97	20.91	20.00	3.028	2.897	1.05

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.01	0.681	0.98	15.43	15.00	2.737	2.661	1.03
12	7:06	1.01	0.757	0.96	342.57	375.00	0.190	0.207	0.91
13	8:06	1.00	0.833	0.99	10.84	12.50	1.369	1.579	0.87
14	7:48	1.01	0.826	0.97	356.62	375.00	0.179	0.188	0.95
15	9:22	1.00	0.955	1.00	15.28	15.00	2.899	2.845	1.02
16	10:40	1.00	1.090	0.99	14.45	15.00	7.686	7.980	0.96
17	11:24	1.00	1.170	0.99	15.98	15.00	2.970	2.788	1.07
18	12:02	0.99	1.229	0.99	14.73	15.00	7.593	7.734	0.98
19	12:44	1.00	1.312	0.98	14.16	15.00	3.180	3.369	0.94
20	12:36	1.00	0.664	0.99	143.05	125.00	0.012	0.011	1.14
21	14:02	1.00	0.731	1.00	16.17	15.00	1.285	1.191	1.08
22	14:26	1.00	0.752	1.00	16.46	15.00	1.149	1.047	1.10
23	14:34	1.00	0.764	1.00	44.42	37.50	0.374	0.316	1.18
24	15:00	1.00	0.780	1.00	16.51	15.00	0.942	0.856	1.10
25	16:20	1.00	0.854	1.00	16.48	15.00	0.830	0.755	1.10
26	16:34	1.00	0.868	1.00	19.81	18.00	0.825	0.749	1.10
27	17:06	1.00	0.898	1.00	17.79	15.00	0.838	0.706	1.19
28	17:48	1.00	0.930	1.00	16.45	15.00	0.444	0.405	1.10
29	17:54	1.00	0.937	1.00	16.96	15.00	0.320	0.283	1.13
30	17:36	1.00	0.924	1.00	16.56	15.00	2.042	1.849	1.10
31	17:52	1.00	0.937	1.00	12.92	12.00	0.481	0.447	1.08
32	18:56	1.00	0.995	1.00	16.12	15.00	0.154	0.143	1.07
33	20:30	1.00	1.076	1.00	17.08	15.00	0.168	0.147	1.14
34	20:56	1.00	0.907	1.00	24.93	25.00	0.297	0.298	1.00
35	22:28	1.00	0.974	1.00	25.48	25.00	0.220	0.216	1.02
36	22:48	1.00	0.990	1.00	17.91	15.00	1.189	0.995	1.19
37	22:48	1.00	0.988	1.00	15.61	15.00	0.414	0.398	1.04
38	24:04	1.00	1.046	1.00	17.12	15.00	2.072	1.816	1.14
39	25:14	1.00	1.097	1.00	17.44	15.00	2.303	1.980	1.16
40	27:16	1.00	1.186	1.00	17.60	15.00	1.209	1.030	1.17
41	31:42	1.00	1.378	1.00	28.09	30.00	1.312	1.401	0.94
42	32:44	1.00	1.425	1.00	34.81	37.60	1.207	1.304	0.93
43	7:06	1.02	0.757	0.97	375.65	375.00	0.023	0.023	1.00
44	31:24	1.00	1.367	1.00	14.12	12.50	2.277	2.016	1.13

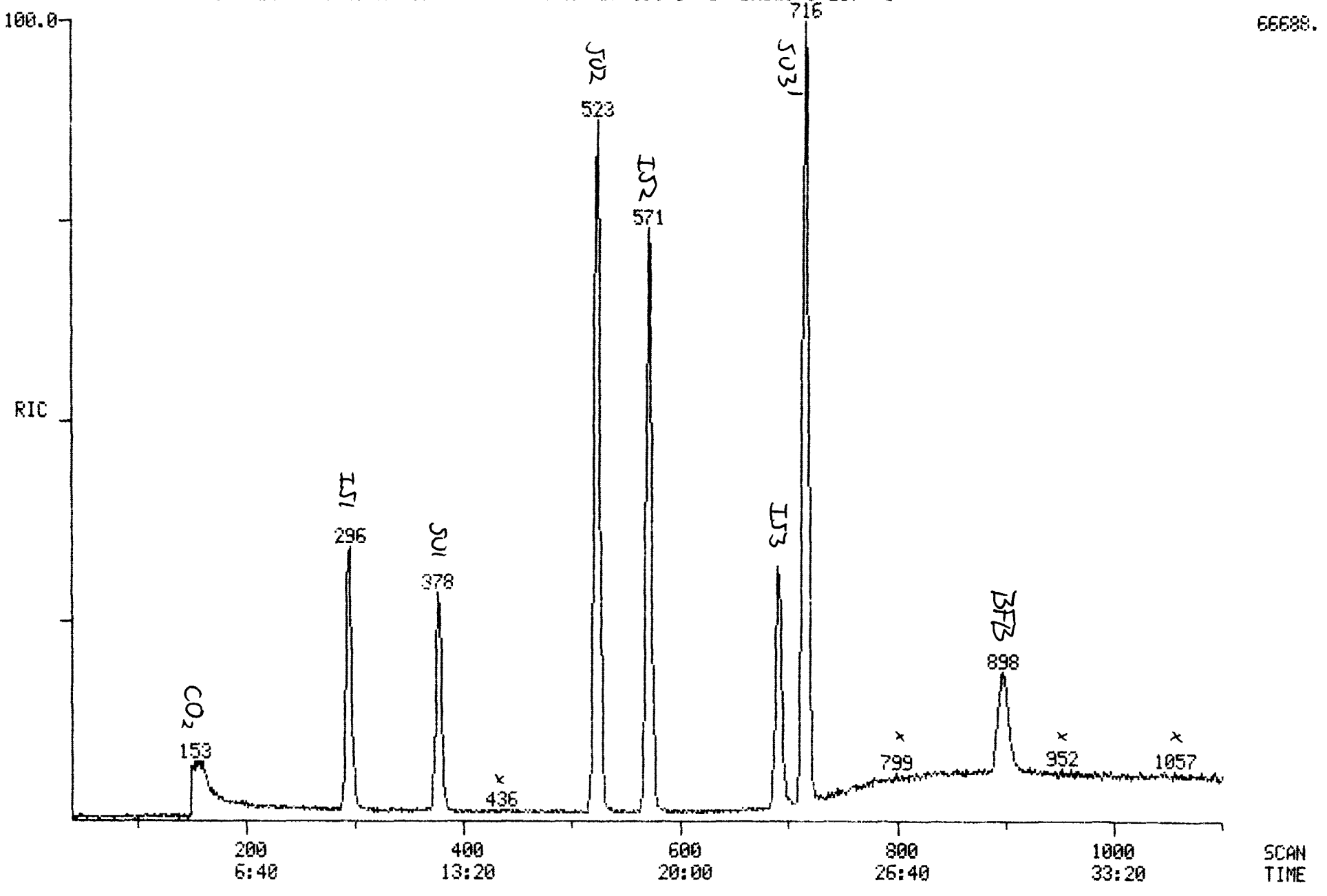
RIC
08/11/89 8:59:00
SAMPLE: CLP.0811,,CC0811,L,W,,V,CAL,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: CC0811 #1
CALI: CC0811 #3

SCANS 1 TO 1100



RIC DATA: 0810BLK1 #1 SCANS 40 TO 1100
08/10/89 13:38:00 CALI: 0810BLK1 #3
SAMPLE: CLP,0810,,0810BLK1,L,W,,U,BLANK,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 0810BLK1

Data: 0810BLK1.TI
08/10/89 13:38:00
Sample: CLP,0810,,0810BLK1,L,W,,V,BLANK,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No. TFA302

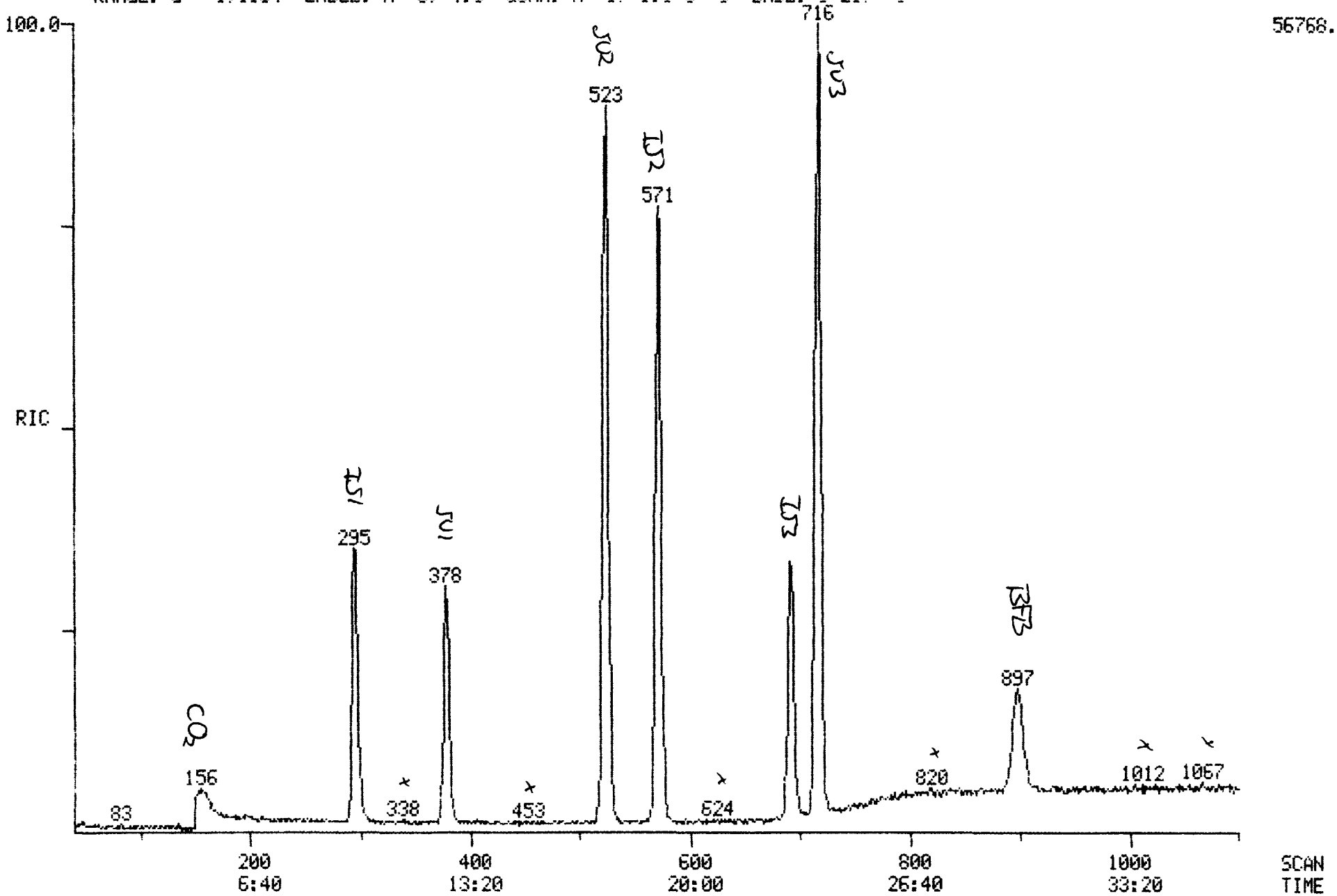
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	296	9:52	1	1.000	A BB	14929.	10.000 UG/L	16.74
2	77	571	19:02	2	1.000	A BB	73717.	10.000 UG/L	16.74
3	55	691	23:02	3	1.000	A BB	42165.	10.000 UG/L	16.74
4	65	378	12:36	1	1.277	A BB	36990.	8.959 UG/L	15.00
5	84	523	17:26	2	0.916	A BB	152617.	9.703 UG/L	16.25
6	98	716	23:52	3	1.036	A BB	137943.	11.065 UG/L	18.53

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	8.96	10.00	2.478	2.765	0.90
5	17:26	1.00	0.917	1.00	9.70	10.00	2.070	2.134	0.97
6	23:52	1.00	1.038	1.00	11.07	10.00	3.272	2.957	1.11

RIC DATA: 0811BLK1 #1 SCANS 40 TO 1100
08/11/89 8:08:00 CALI: 0811BLK1 #3
SAMPLE: CLP,0811,,0811BLK1,L,W,,V,BLANK,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 0811BLK1

Data: 0811BLK1.TI
08/11/89 8:08:00
Sample: CLP,0811,,0811BLK1,L,W,,V,BLANK,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

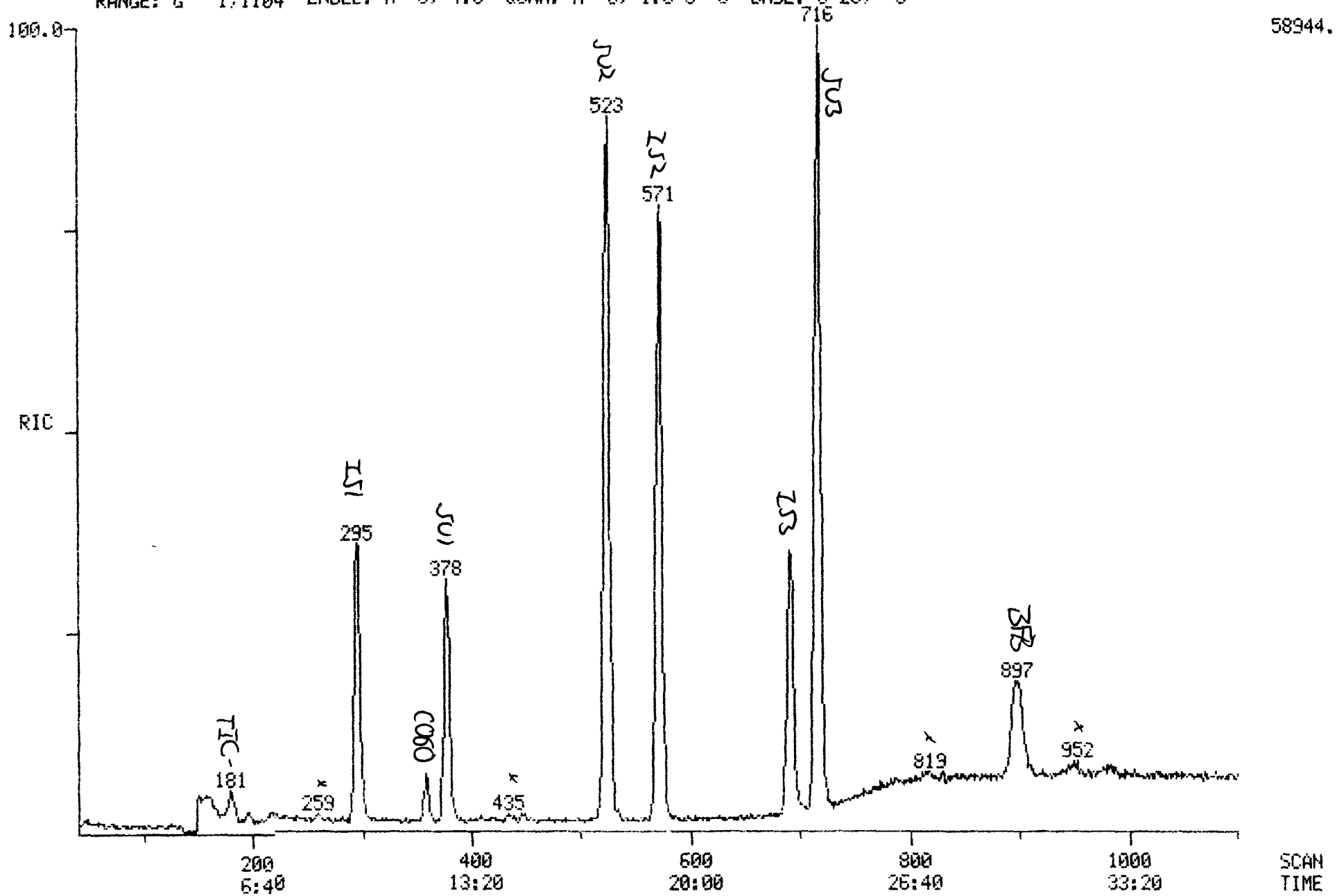
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	295	9:50	1	1.000	A BB	12092.	10.000 UG/L	16.20
2	77	571	19:02	2	1.000	A BB	61124.	10.000 UG/L	16.20
3	55	691	23:02	3	1.000	A BB	38161.	10.000 UG/L	16.20
4	65	378	12:36	1	1.281	A BB	35015.	10.093 UG/L	16.35
5	84	523	17:26	2	0.916	A BB	128943.	10.480 UG/L	16.98
6	98	716	23:52	3	1.036	A BB	115592.	11.146 UG/L	18.06

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1 00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.09	10.00	2.896	2.869	1.01
5	17:26	1.00	0.917	1.00	10.48	10.00	2.110	2.013	1.05
6	23:52	1.00	1.038	1.00	11.15	10.00	3.029	2.718	1.11

RIC DATA: 6437R66 #359 SCANS 40 TO 1100
08/10/89 22:33:00 CALI: 6437R66 #3
SAMPLE: CLP,6437,,89FM11R66,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 6437R66

Data: 6437R66.TI
08/10/89 22:33:00
Sample: CLP,6437,,89FM11R66,L,W,,V,EPA,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No. TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	CO60	CHLOROFORM	

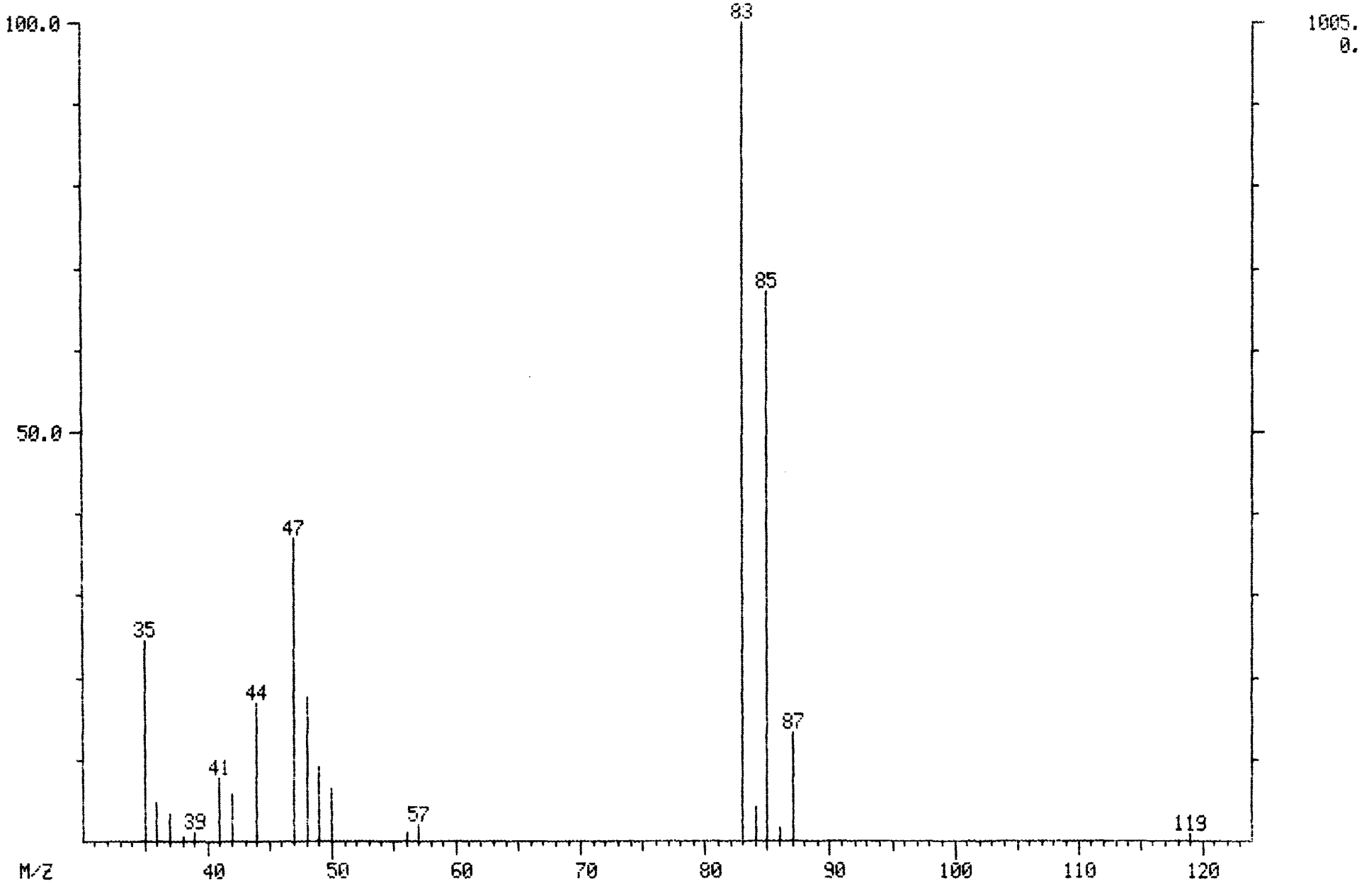
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	295	9:50	1	1.000	A BB	13210.	10.000	UG/L	16.73
2	77	571	19:02	2	1.000	A BB	63270.	10.000	UG/L	16.73
3	55	691	23:02	3	1.000	A BB	41799.	10.000	UG/L	16.73
4	65	377	12:34	1	1.278	A BB	35761.	9.789	UG/L	16.38
5	84	523	17:26	2	0.916	A BB	134198.	9.941	UG/L	16.64
6	98	716	23:52	3	1.036	A BB	116260.	9.407	UG/L	15.74
7	83	359	11:58	1	1.217	A BB	5726.	0.619	UG/L	1.04

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	0.99	1.302	0.98	9.79	10.00	2.707	2.765	0.98
5	17:26	1.00	0.917	1.00	9.94	10.00	2.121	2.134	0.99
6	23:52	1.00	1.038	1.00	9.41	10.00	2.781	2.957	0.94
7	12:02	0.99	1.229	0.99	0.62	15.00	0.289	6.999	0.04

MASS SPECTRUM
08/10/89 22:33:00 + 11:58
SAMPLE: CLP,6437,,89FM11R66,L.W.,V.EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 116 DEG. C
ENHANCED (S 150 2N 0T)

DATA: 6437R66 #359
CALI: 6437R66 #3

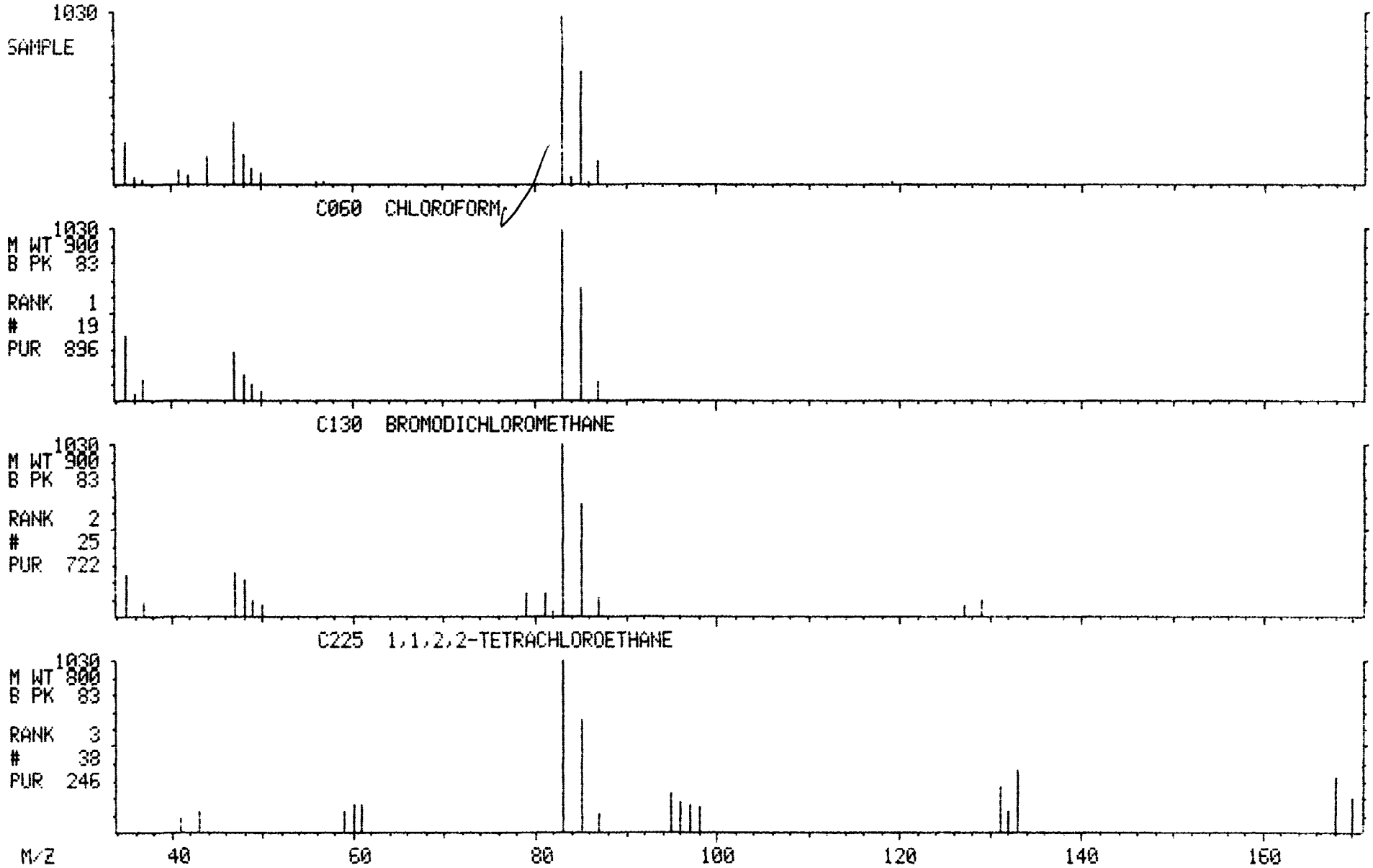
BASE M/Z: 83
RIC: 3268.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 22:33:00 + 11:58
SAMPLE: CLP,6437,,89FM11R66,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437R66 # 359
CALI: 6437R66 # 3

BASE M/Z: 83
RIC: 3248.



Quantitation Report File: 6437R66T

Data: 6437R66.TI
08/10/89 22:33:00
Sample: CLP,6437,,89FM11R66,L,W,,V,EPA,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name
1	CI01 BROMOCHLOROMETHANE *INTERNAL STANDARD*
2	UNKNOWN

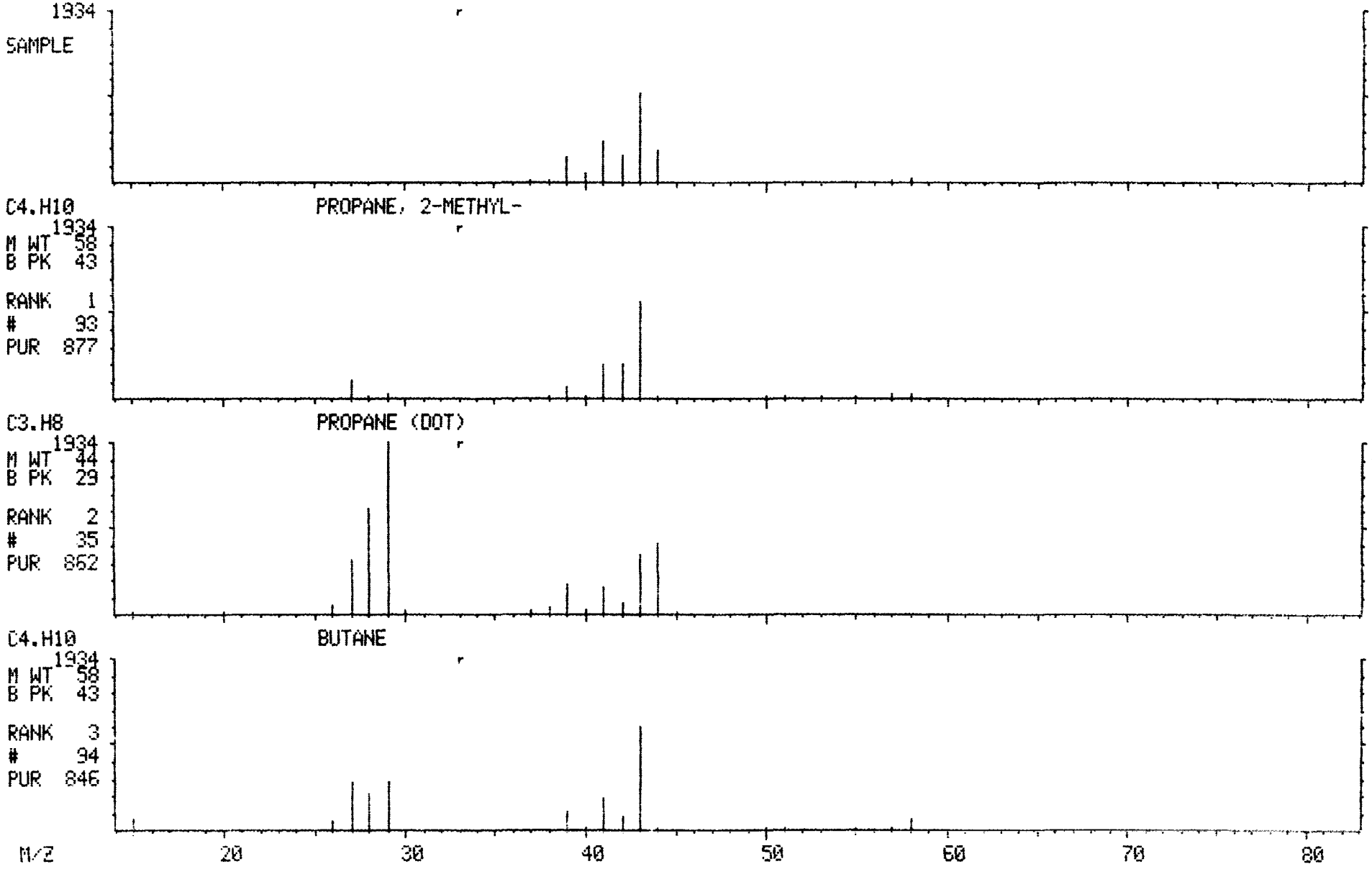
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	295	9:50	1	1.000	A BB	126229.	10.000 UG/L	47.15
2	RIC	181	6:02	1	0.614	A BB	14147.	11.208	52.85

2) $\frac{14147}{1} \times \frac{10}{126229} = 1$ ug/L

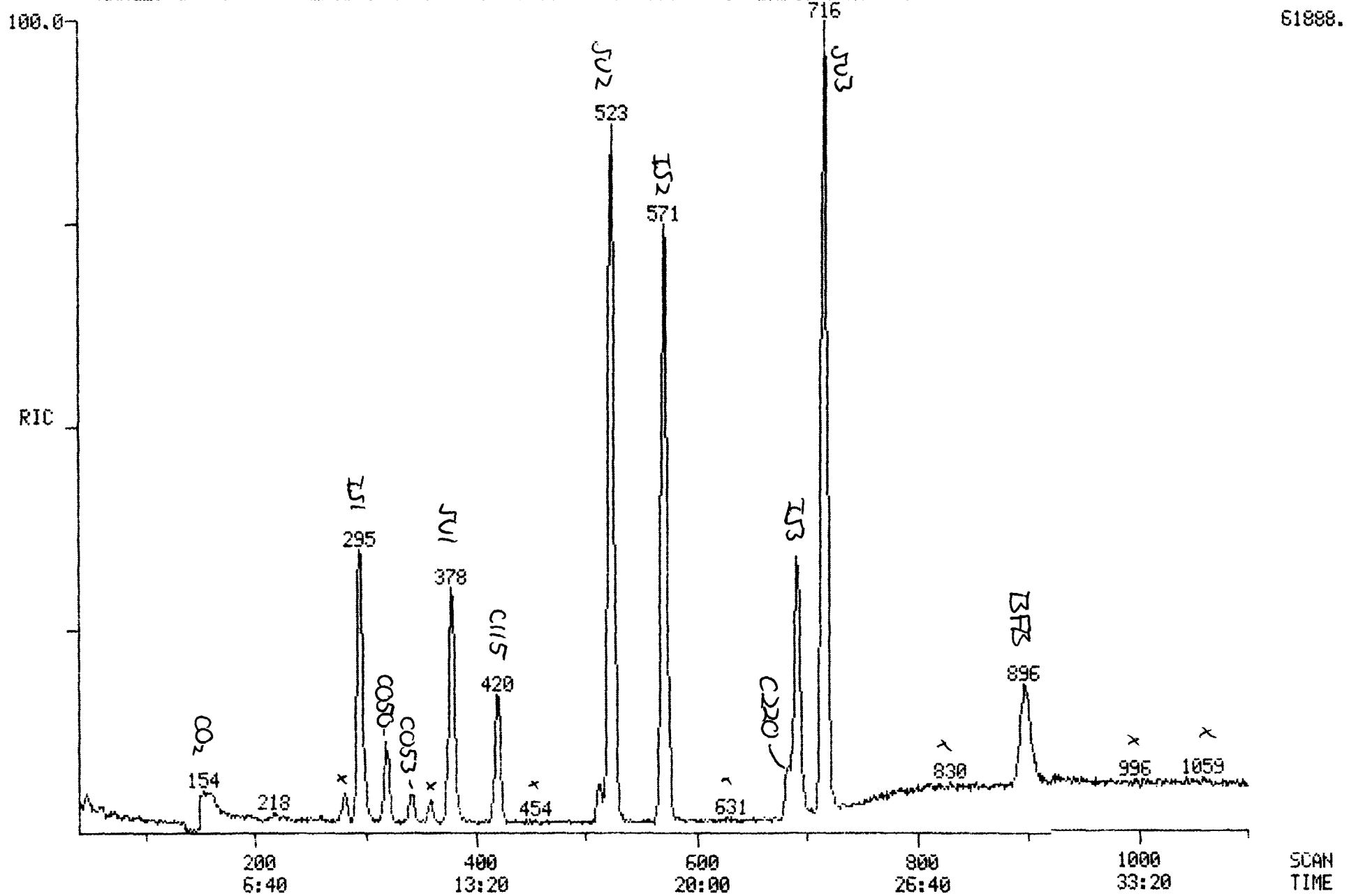
MID LIBRARY SEARCH (LIBRARYNB)
08/10/89 22:33:00 + 6:02
SAMPLE: CLP,6437,,89FM11R66,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437R66 # 181
CALI: 6437R66 # 3

BASE M/Z: 43
RIC: 2176.



RIC DATA: 6437595 #1 SCANS 40 TO 1100
08/10/89 19:37:00 CALI: 6437595 #3
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 6437595

Data: 6437595.TI
08/10/89 19:37:00
Sample: CLP,6437,,89FM26595,L,W,,V,EPA,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C050	1,1-DICHLOROETHANE	
8	C053	1,2-DICHLOROETHENE (TOTAL)	
9	C115	1,1,1-TRICHLOROETHANE	
10	C220	TETRACHLOROETHENE	

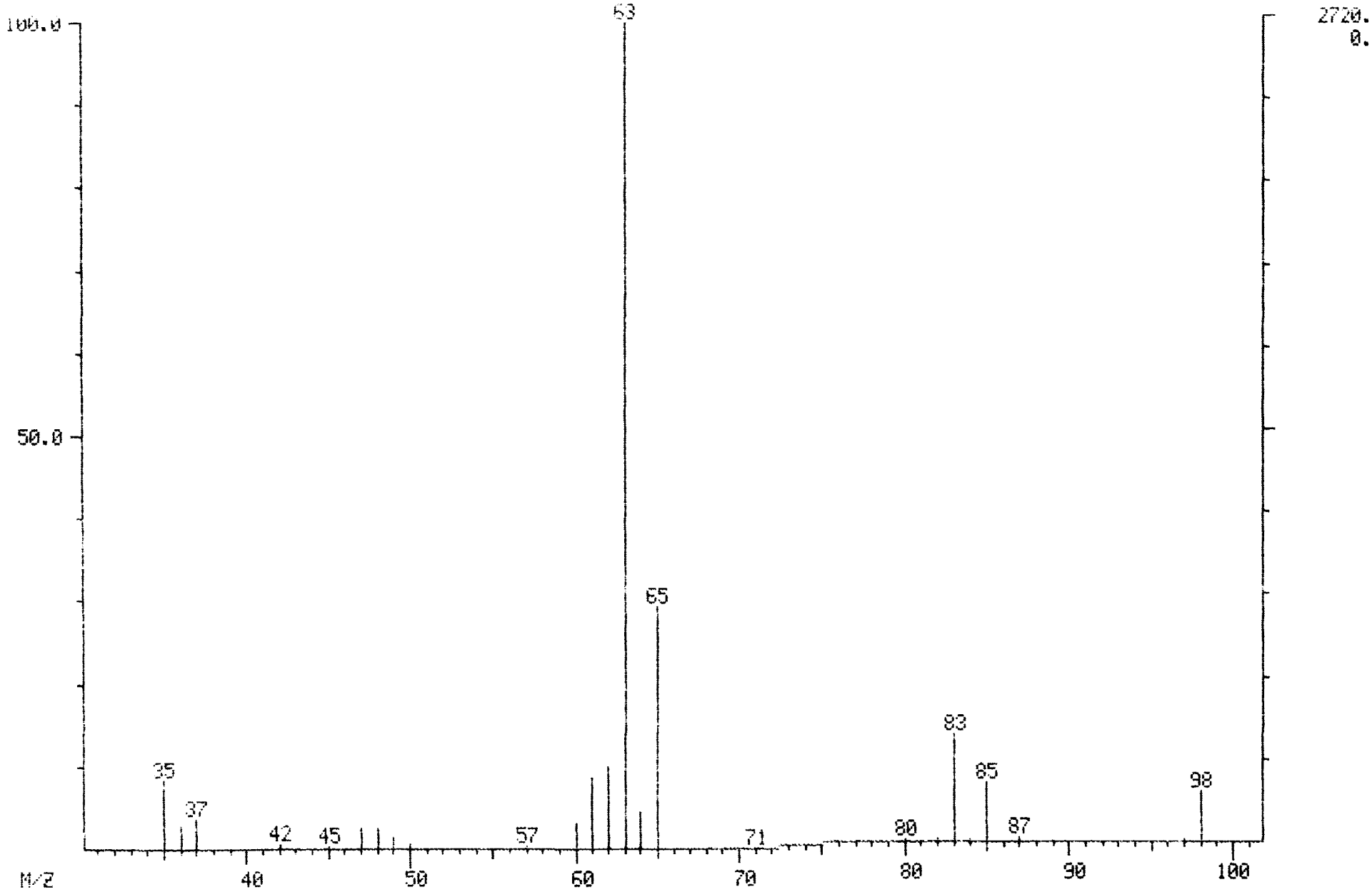
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	295	9:50	1	1.000	A BB	13244.	10.000 UG/L	15.35
2	77	571	19:02	2	1.000	A BB	65859.	10.000 UG/L	15.35
3	55	691	23:02	3	1.000	A BB	40711.	10.000 UG/L	15.35
4	65	378	12:36	1	1.281	A BB	37416.	10.216 UG/L	15.68
5	84	523	17:26	2	0.916	A BB	137038.	9.752 UG/L	14.97
6	98	716	23:52	3	1.036	A BB	123582.	10.267 UG/L	15.76
7	63	319	10:38	1	1.081	A BB	16158.	1.733 UG/L	2.66
8	96	341	11:22	1	1.156	A BB	2479.	0.664 UG/L	1.02
9	97	420	14:00	2	0.736	A BB	16418.	1.999 UG/L	3.07
10	164	683	22:46	3	0.988	A BB	2684.	0.527 UG/L	0.81

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.22	10.00	2.825	2.765	1.02
5	17:26	1.00	0.917	1.00	9.75	10.00	2.081	2.134	0.98
6	23:52	1.00	1.038	1.00	10.27	10.00	3.036	2.957	1.03
7	10:40	1.00	1.090	0.99	1.73	15.00	0.813	7.041	0.12
8	11:24	1.00	1.170	0.99	0.66	15.00	0.125	2.818	0.04
9	14:02	1.00	0.731	1.01	2.00	15.00	0.166	1.247	0.13
10	22:48	1.00	0.990	1.00	0.53	15.00	0.044	1.250	0.04

MASS SPECTRUM
08/10/89 19:37:00 + 10:38
SAMPLE: CLP,6437,,89FM26595,L,W,,U,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 105 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437595 #319
CALI: 6437595 #3

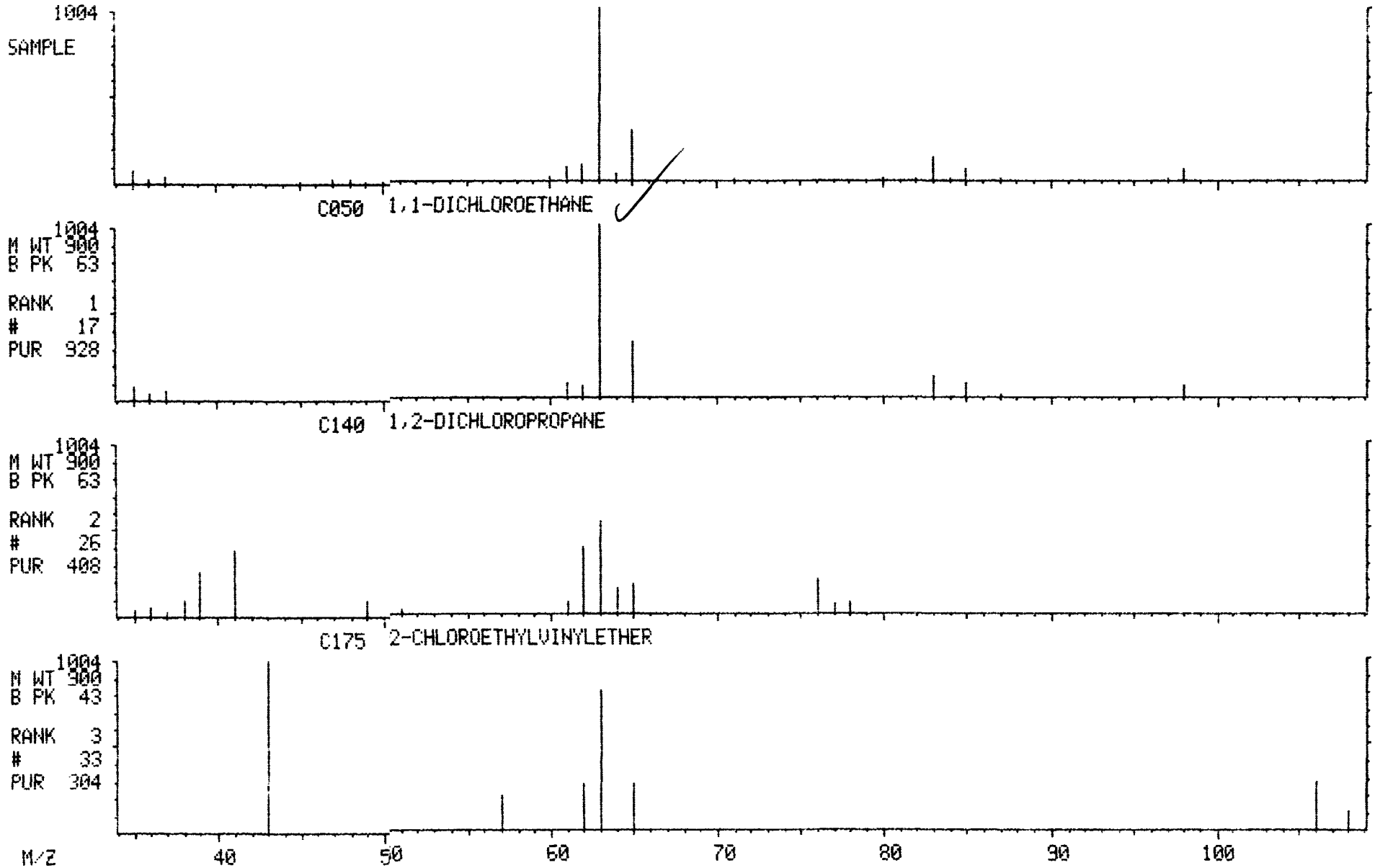
BASE M/Z: 63
RIC: 5600.



MID LIBRARY SEARCH (LIBRARYVP)
08/10/89 19:37:00 + 10:38
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437595 # 319
CALI: 6437595 # 3

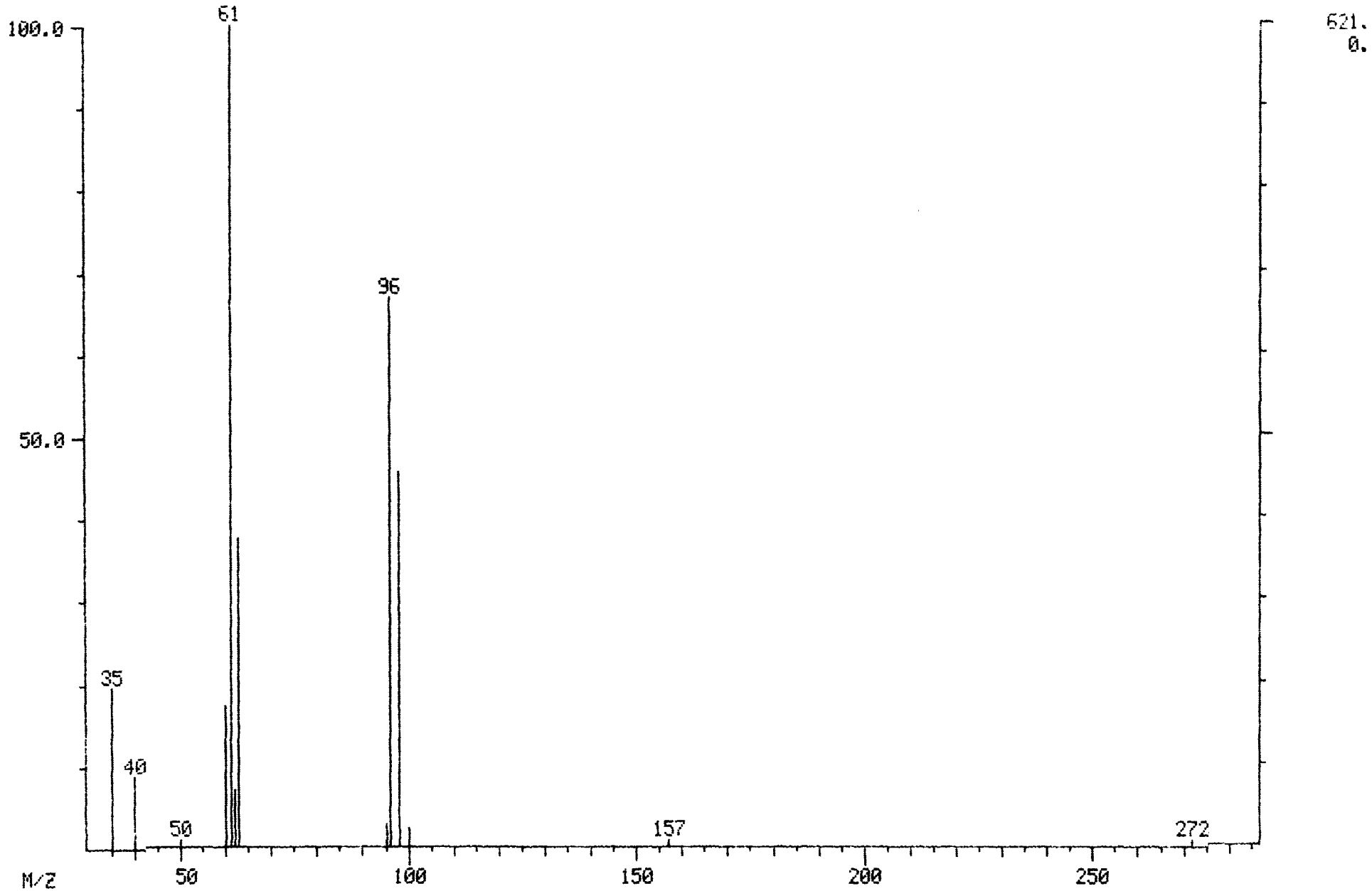
BASE M/Z: 63
RIC: 5576.



MASS SPECTRUM
08/10/89 19:37:00 + 11:22
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 111 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437595 #341
CALI: 6437595 #3

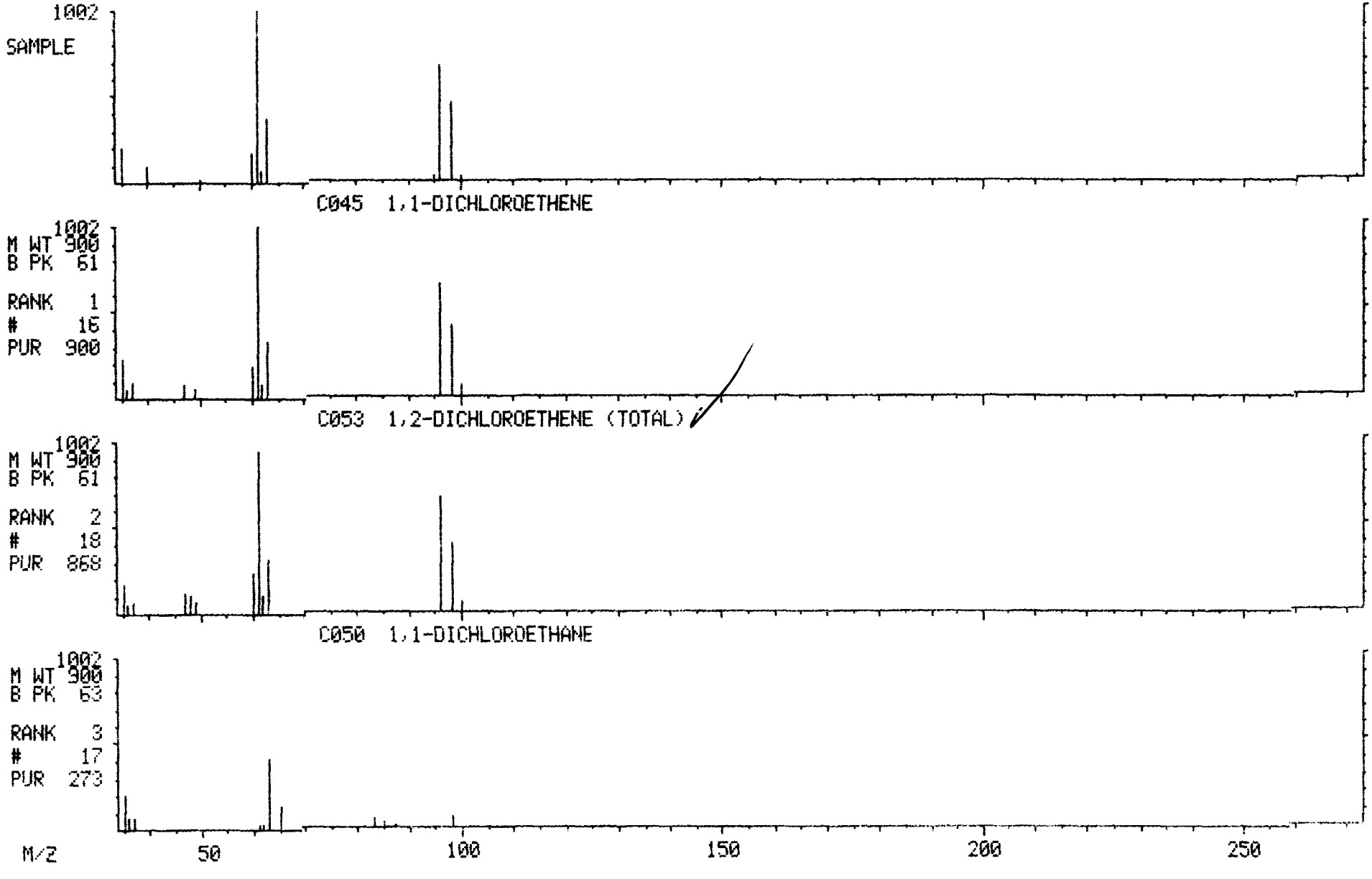
BASE M/Z: 61
RIC: 1930.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 19:37:00 + 11:22
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (9 15B 2N 0T)

DATA: 6437595 # 341
CALI: 6437595 # 3

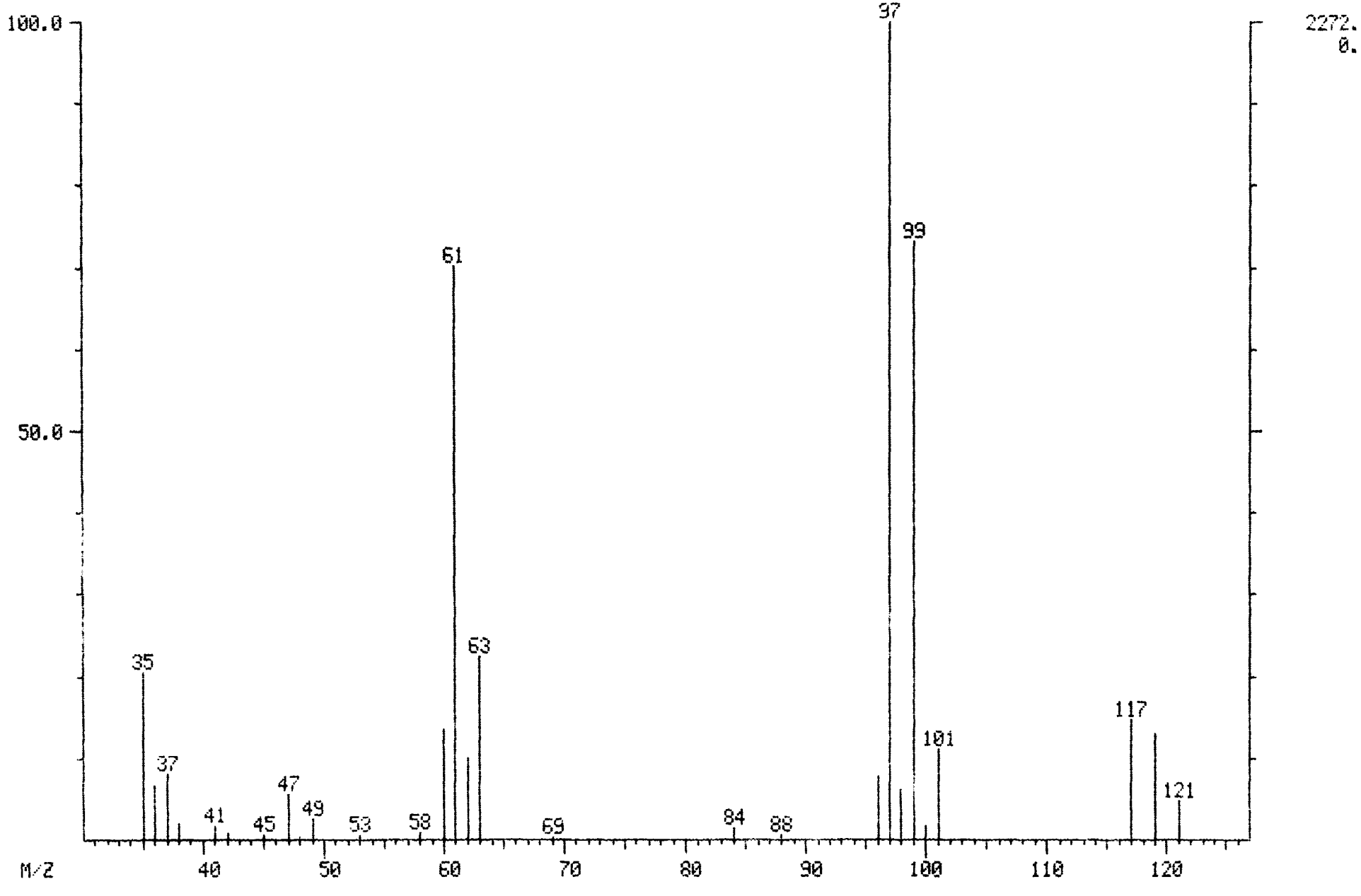
BASE M/Z: 61
RIC: 1930.



MASS SPECTRUM
08/10/89 19:37:00 + 14:00
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 132 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437595 #420
CALI: 6437595 #3

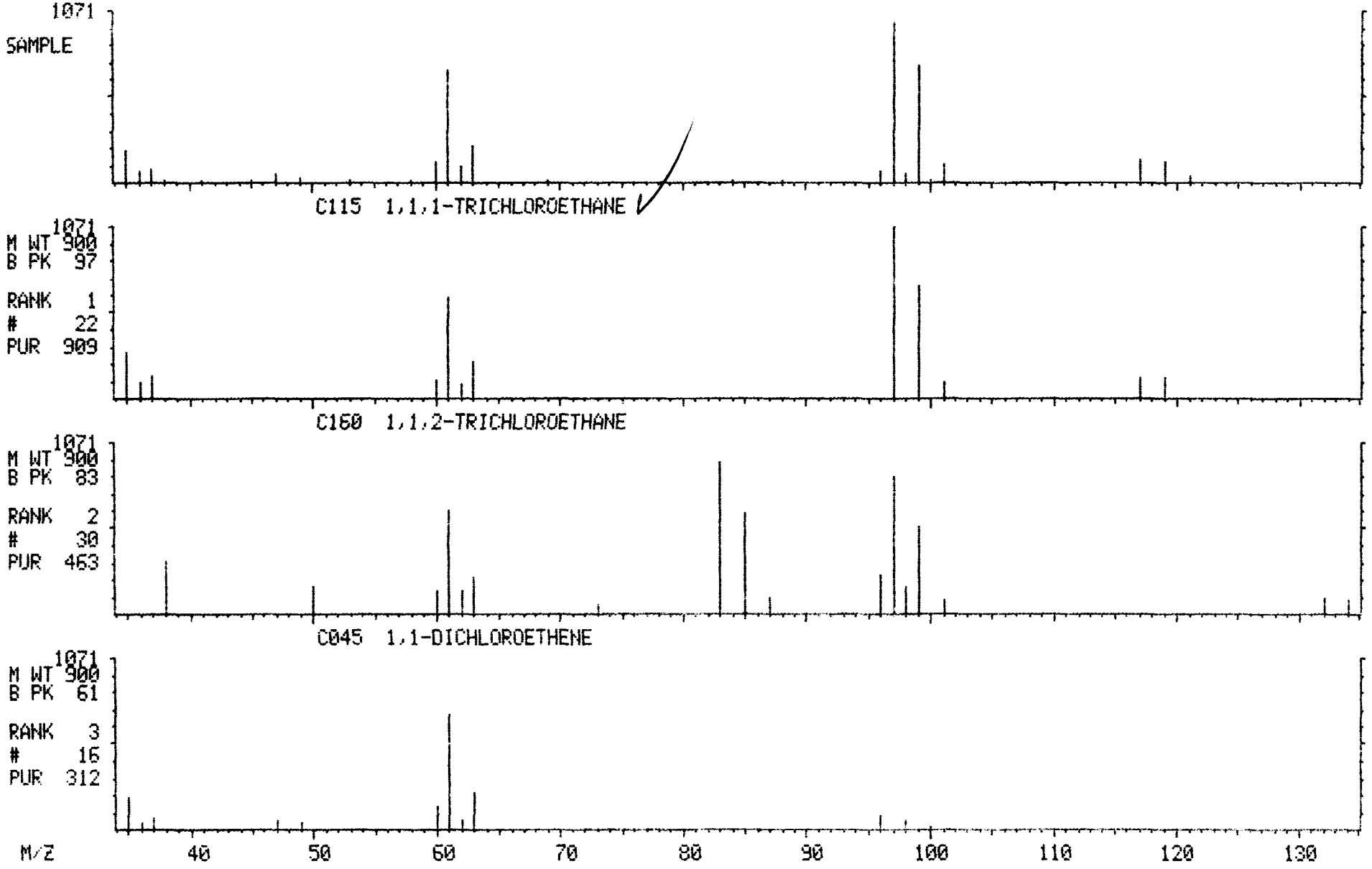
BASE M/Z: 97
RIC: 9120.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 19:37:00 + 14:00
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437595 # 420
CALI: 6437595 # 3

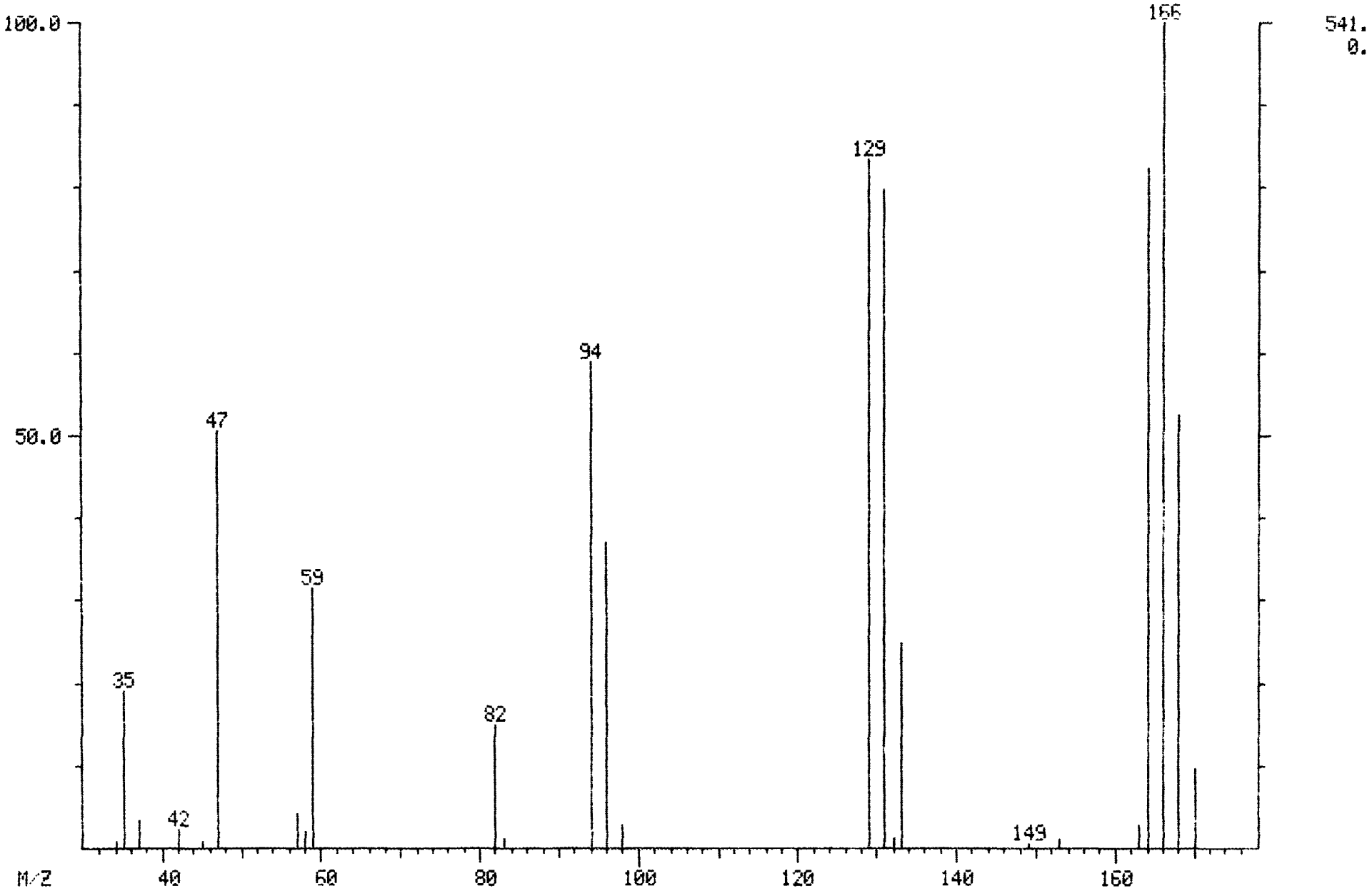
BASE M/Z: 97
RIC: 9104.



MASS SPECTRUM
08/10/89 19:37:00 + 22:46
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 202 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437595 #683
CALI: 6437595 #3

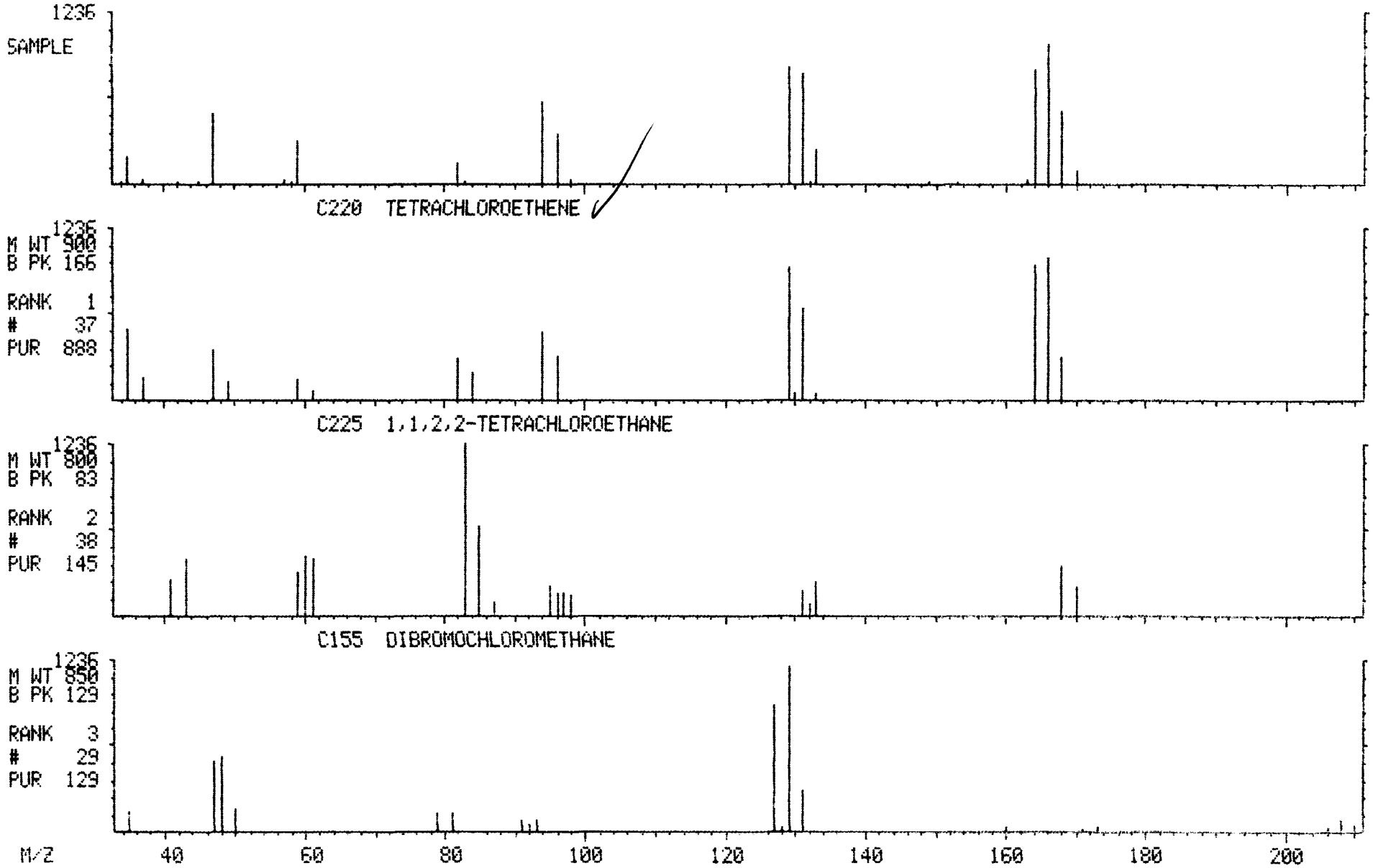
BASE M/Z: 166
RIC: 3620.



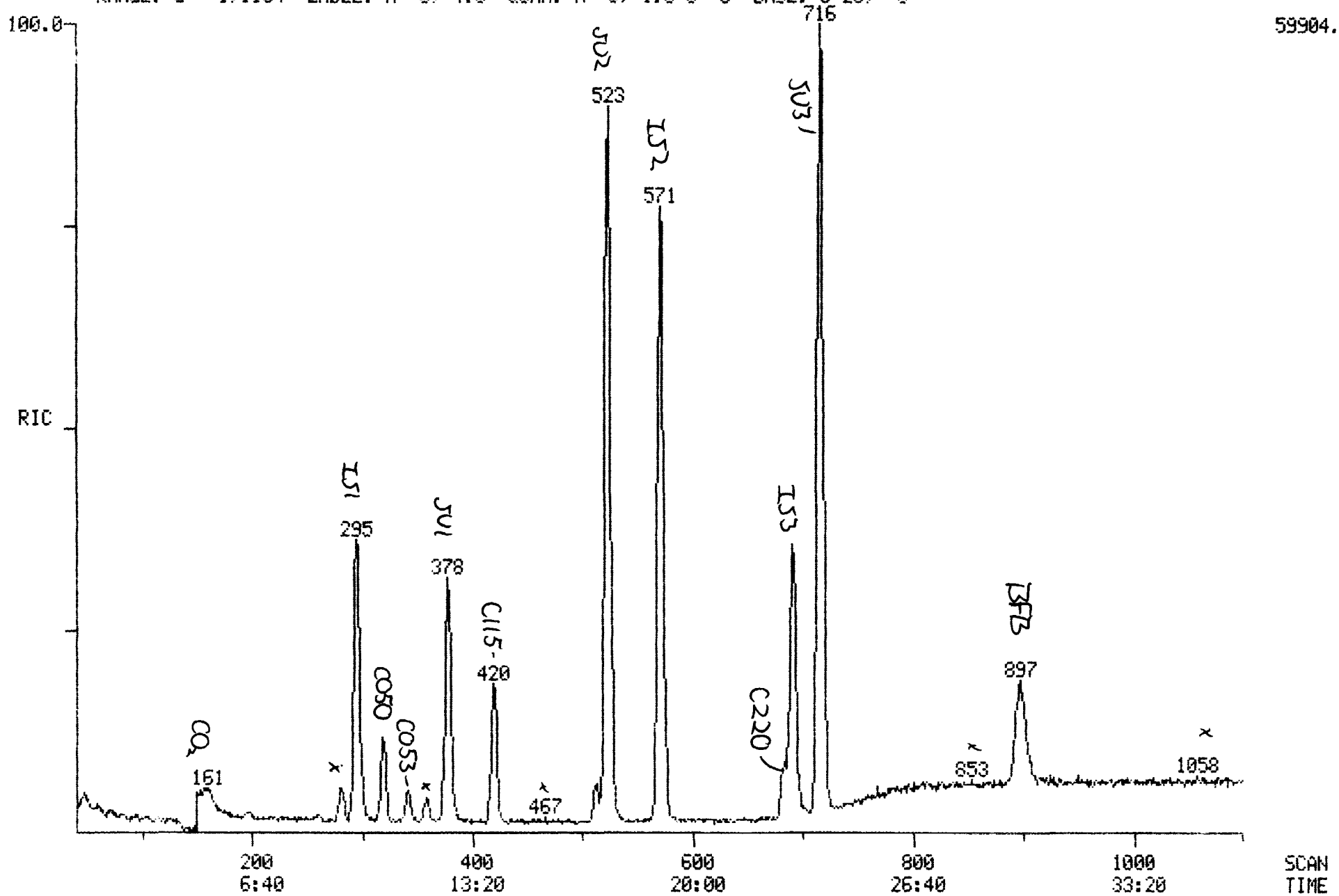
MID LIBRARY SEARCH (LIBRARYVP)
08/10/89 19:37:00 + 22:46
SAMPLE: CLP,6437,,89FM26595,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437595 # 683
CALI: 6437595 # 3

BASE M/Z: 166
RIC: 3620.



RIC DATA: 6437D95 #359 SCANS 40 TO 1100
08/10/89 20:21:00 CALI: 6437D95 #3
SAMPLE: CLP,6437,,89FM26D95,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 6437D95

Data: 6437D95.TI
08/10/89 20:21:00
Sample: CLP,6437,,89FM26D95,L,W,,V,EPA,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No. TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C050	1,1-DICHLOROETHANE	
8	C053	1,2-DICHLOROETHENE (TOTAL)	
9	C115	1,1,1-TRICHLOROETHANE	
10	C220	TETRACHLOROETHENE	

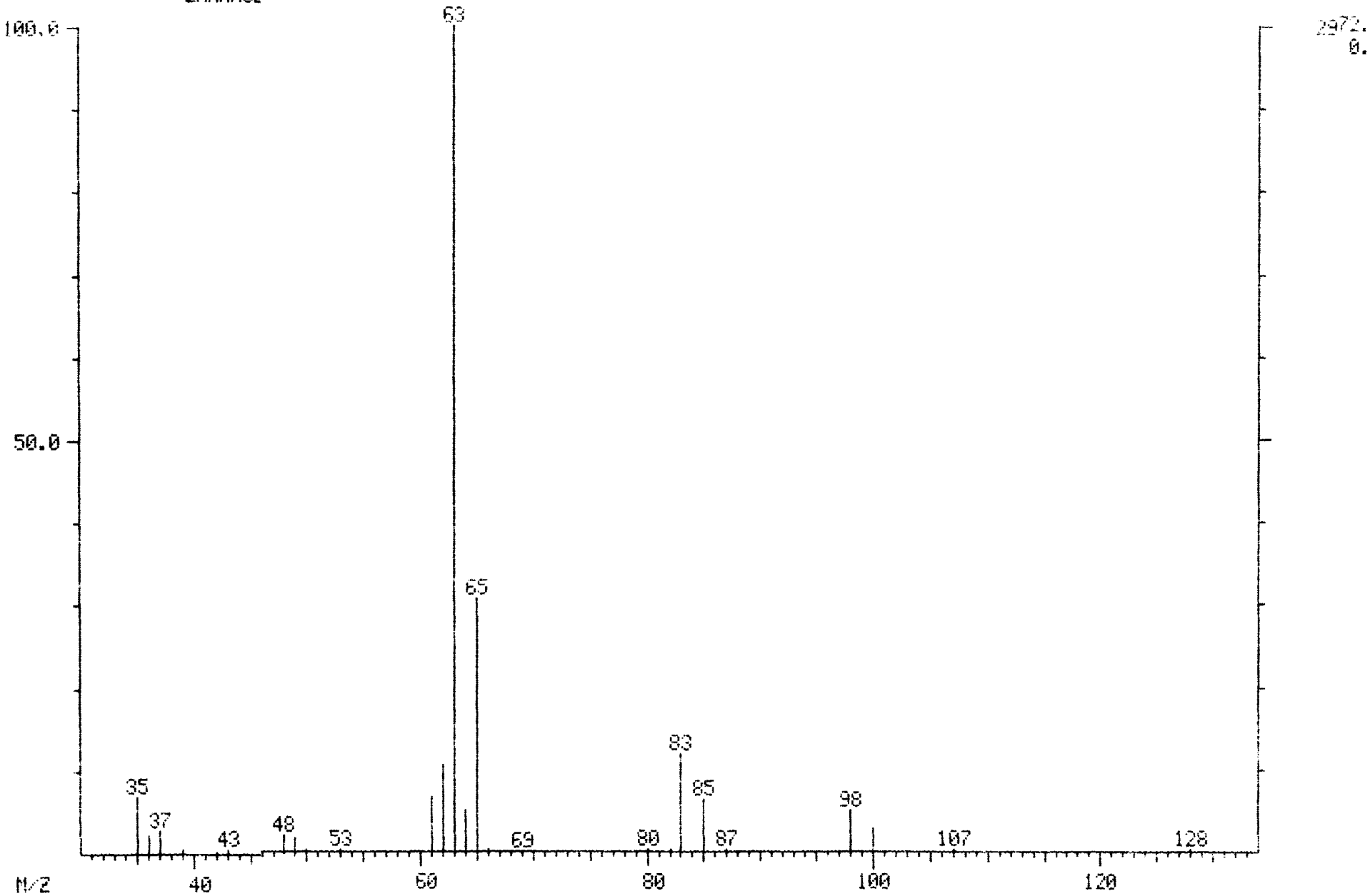
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	295	9:50	1	1.000	A BB	13577.	10.000 UG/L	15.55
2	77	571	19:02	2	1.000	A BB	65737.	10.000 UG/L	15.55
3	55	691	23:02	3	1.000	A BB	41236.	10.000 UG/L	15.55
4	65	378	12:36	1	1.281	A BB	36961.	9.844 UG/L	15.30
5	84	523	17:26	2	0.916	A BB	134514.	9.590 UG/L	14.91
6	98	716	23:52	3	1.036	A BB	120020.	9.844 UG/L	15.30
7	63	319	10:38	1	1.081	A BB	17024.	1.781 UG/L	2.77
8	96	342	11:24	1	1.159	A BB	2525.	0.660 UG/L	1.03
9	97	420	14:00	2	0.736	A BB	16875.	2.058 UG/L	3.20
10	164	682	22:44	3	0.987	A BB	2809.	0.545 UG/L	0.85

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	9.84	10.00	2.722	2.765	0.98
5	17:26	1.00	0.917	1.00	9.59	10.00	2.046	2.134	0.96
6	23:52	1.00	1.038	1.00	9.84	10.00	2.911	2.957	0.98
7	10:40	1.00	1.090	0.99	1.78	15.00	0.836	7.041	0.12
8	11:24	1.00	1.170	0.99	0.66	15.00	0.124	2.818	0.04
9	14:02	1.00	0.731	1.01	2.06	15.00	0.171	1.247	0.14
10	22:48	1.00	0.990	1.00	0.54	15.00	0.045	1.250	0.04

MASS SPECTRUM
08/10/89 20:21:00 + 10:38
SAMPLE: CLP,6437,,89FM26D95,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 105 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437D95 #319
CALI: 6437D95 #3

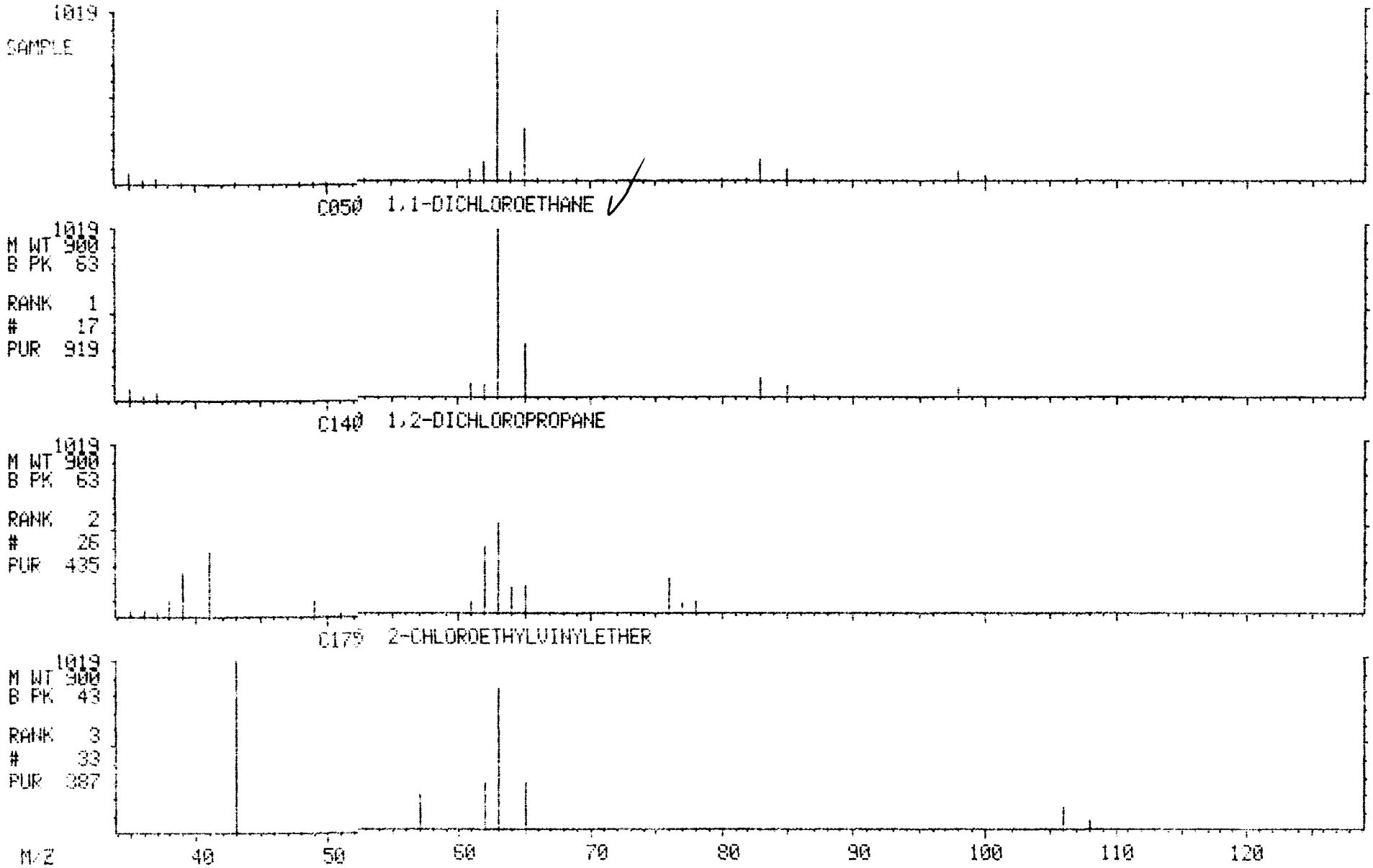
BASE M/Z: 63
RIC: 5880.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 20:21:00 + 10:30
SAMPLE: CLP,6437,,89FM26035,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 150 2N 0T)

DATA: 6437095 # 319
CALI: 6437095 # 3

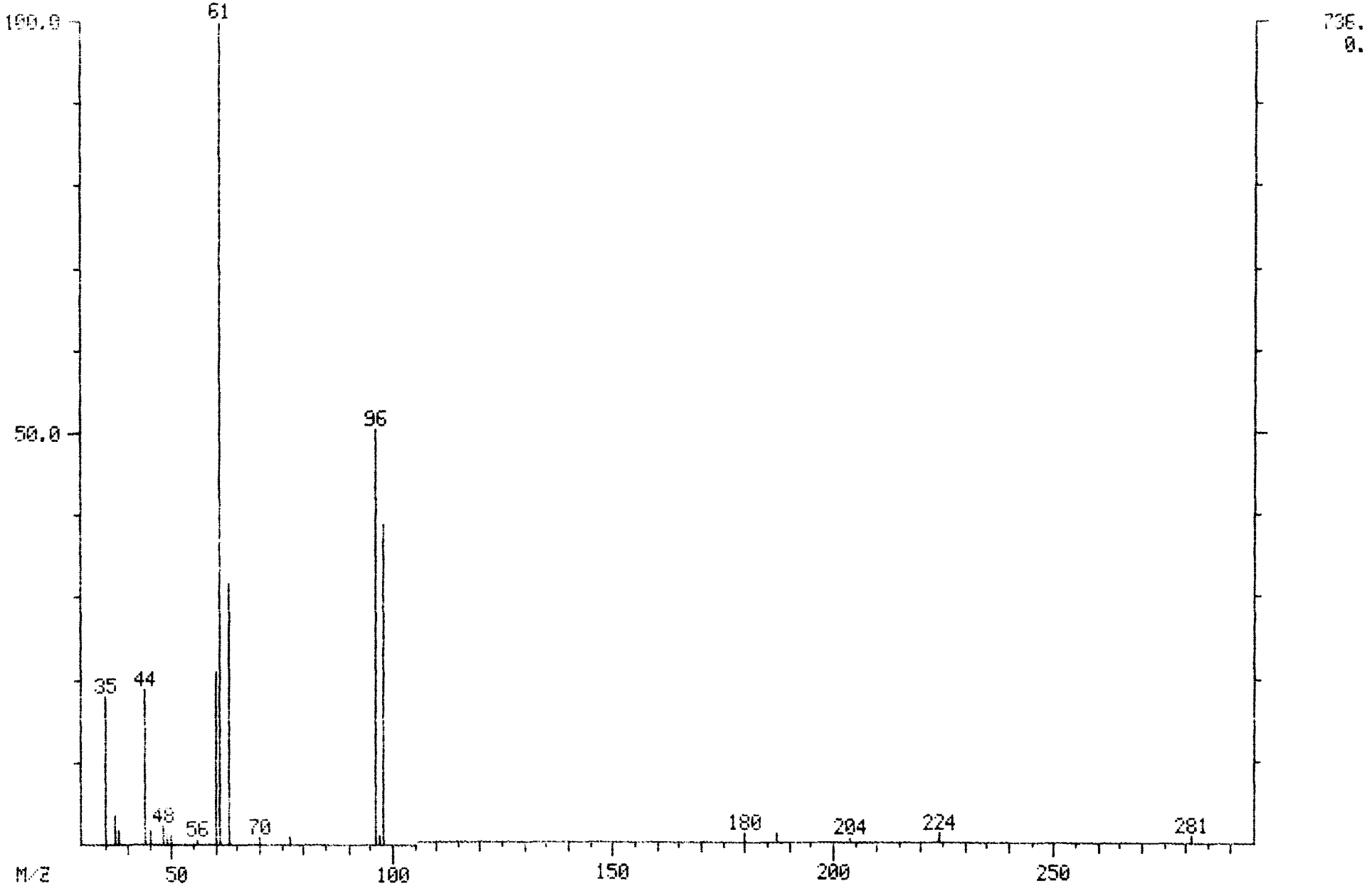
BASE M/Z: 63
RIC: 5872.



MASS SPECTRUM
08/10/89 20:21:00 + 11:24
SAMPLE: CLP.6437,,89FM26D95.L.W.,V.EPA.
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 111 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437D95 #342
CALI: 6437D95 #3

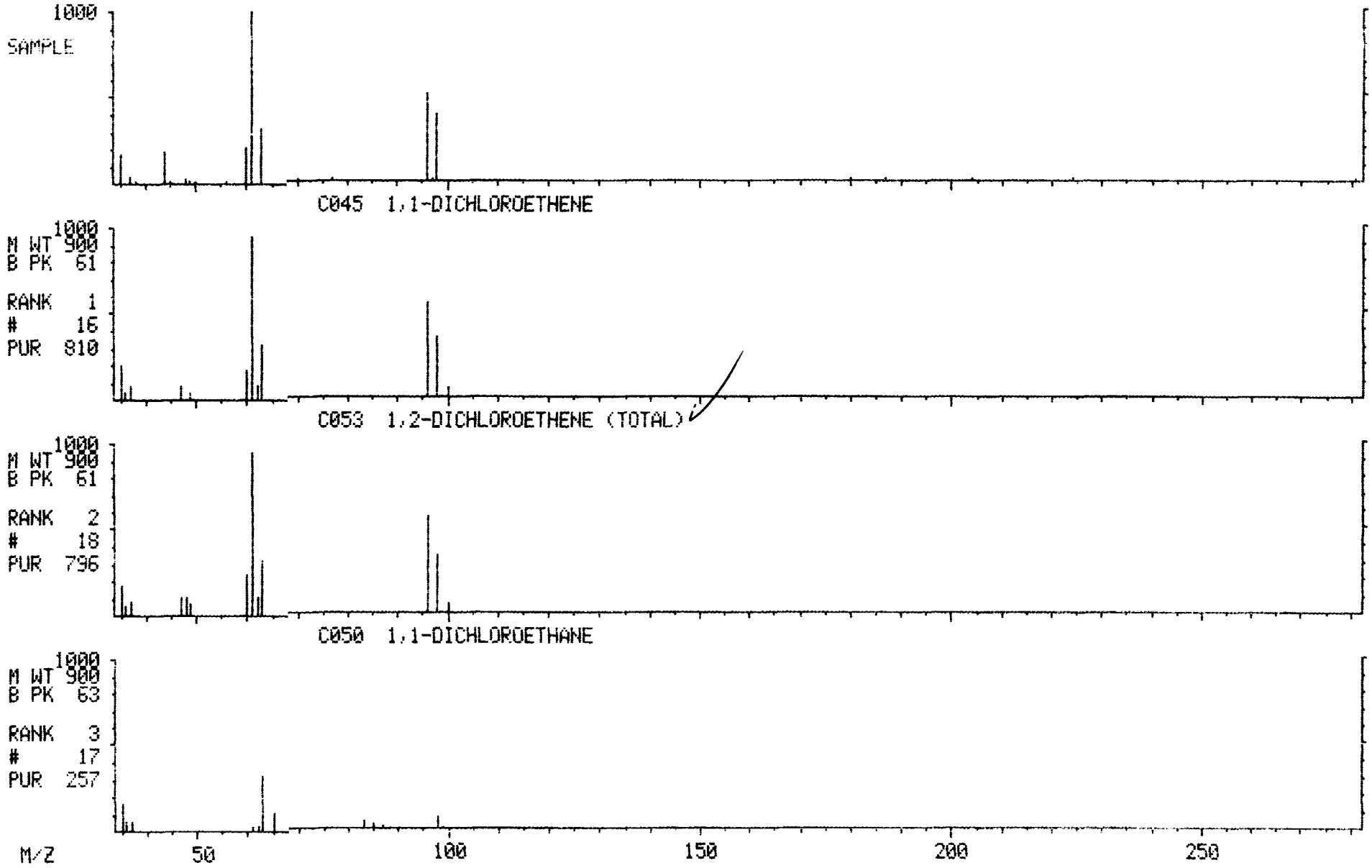
BASE M/Z: 61
RIC: 2208.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 20:21:00 + 11:24
SAMPLE: CLP,6437,,89FM26D95,L,W,,U,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437D95 # 342
CALI: 6437D95 # 3

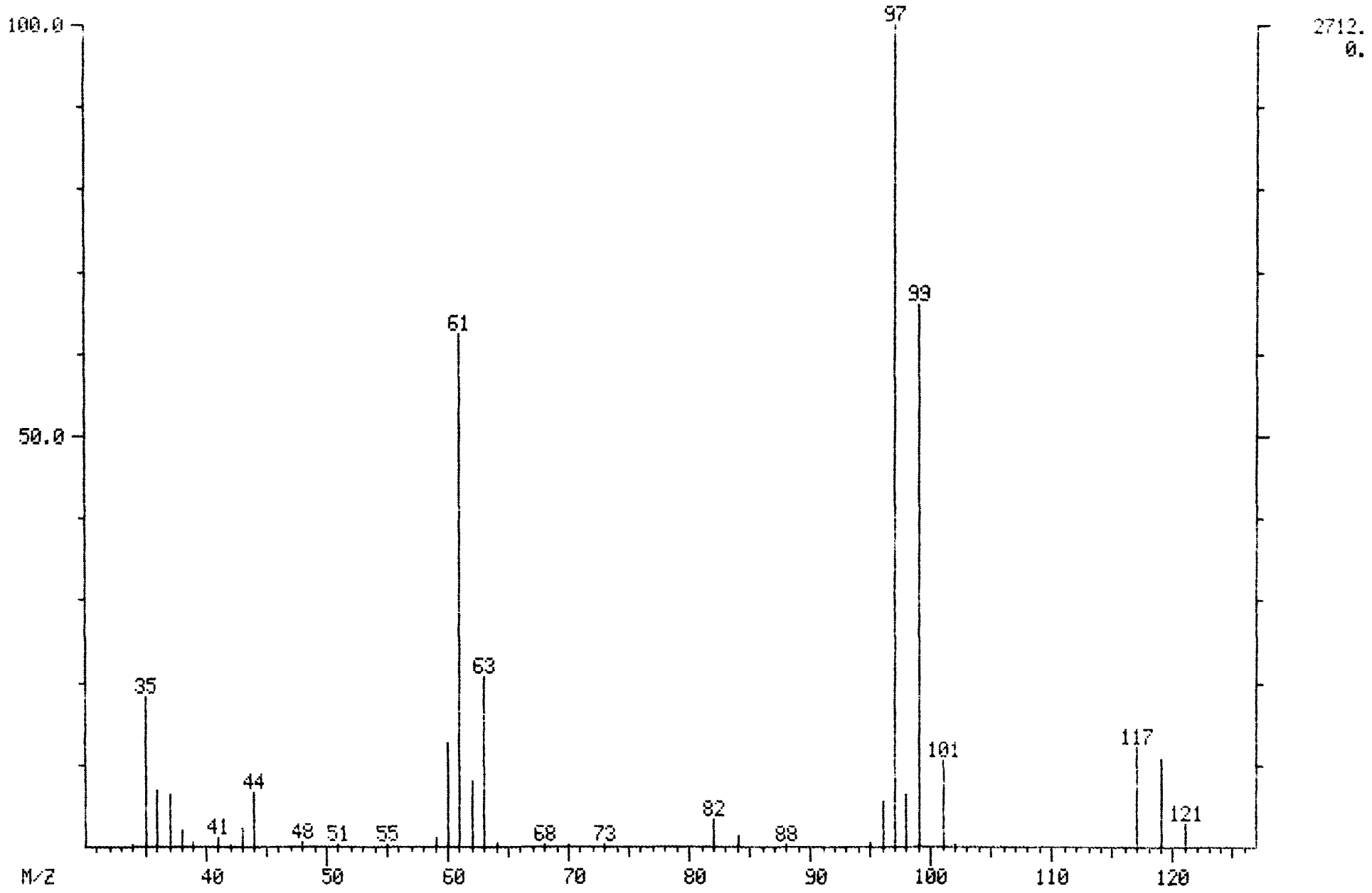
BASE M/Z: 61
RIC: 2212.



MASS SPECTRUM
08/10/89 20:21:00 + 14:00
SAMPLE: CLP,6437,,89FM26D95,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 132 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437D95 #420
CALI: 6437D95 #3

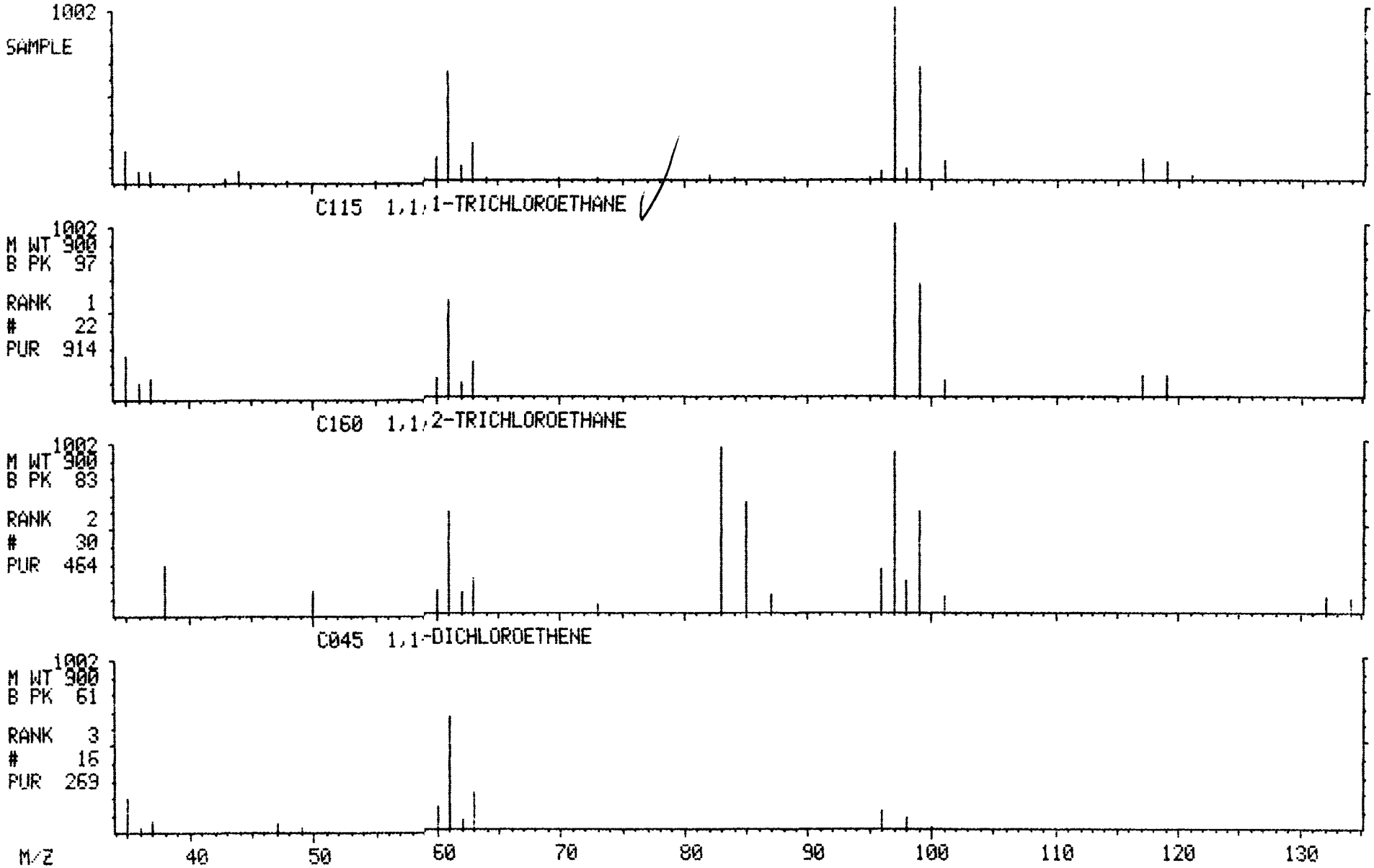
BASE M/Z: 97
RIC: 10096.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 20:21:00 + 14:00
SAMPLE: CLP,6437,,89FM26D95,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437D95 # 420
CALI: 6437D95 # 3

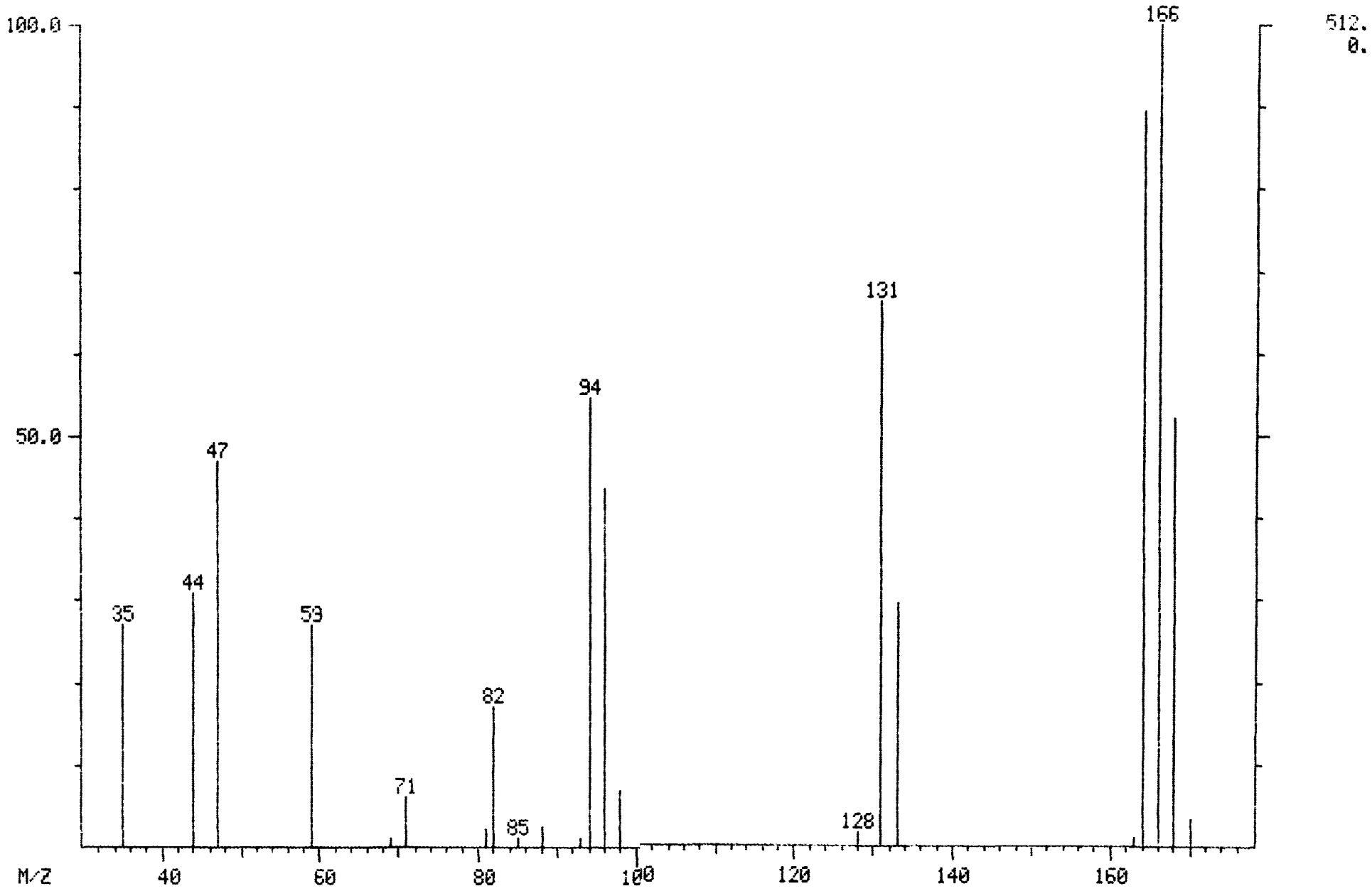
BASE M/Z: 97
RIC: 9952.



MASS SPECTRUM
08/10/89 20:21:00 + 22:44
SAMPLE: CLP,6437,,89FM26D95,L,N,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 202 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437D95 #682
CALI: 6437D95 #3

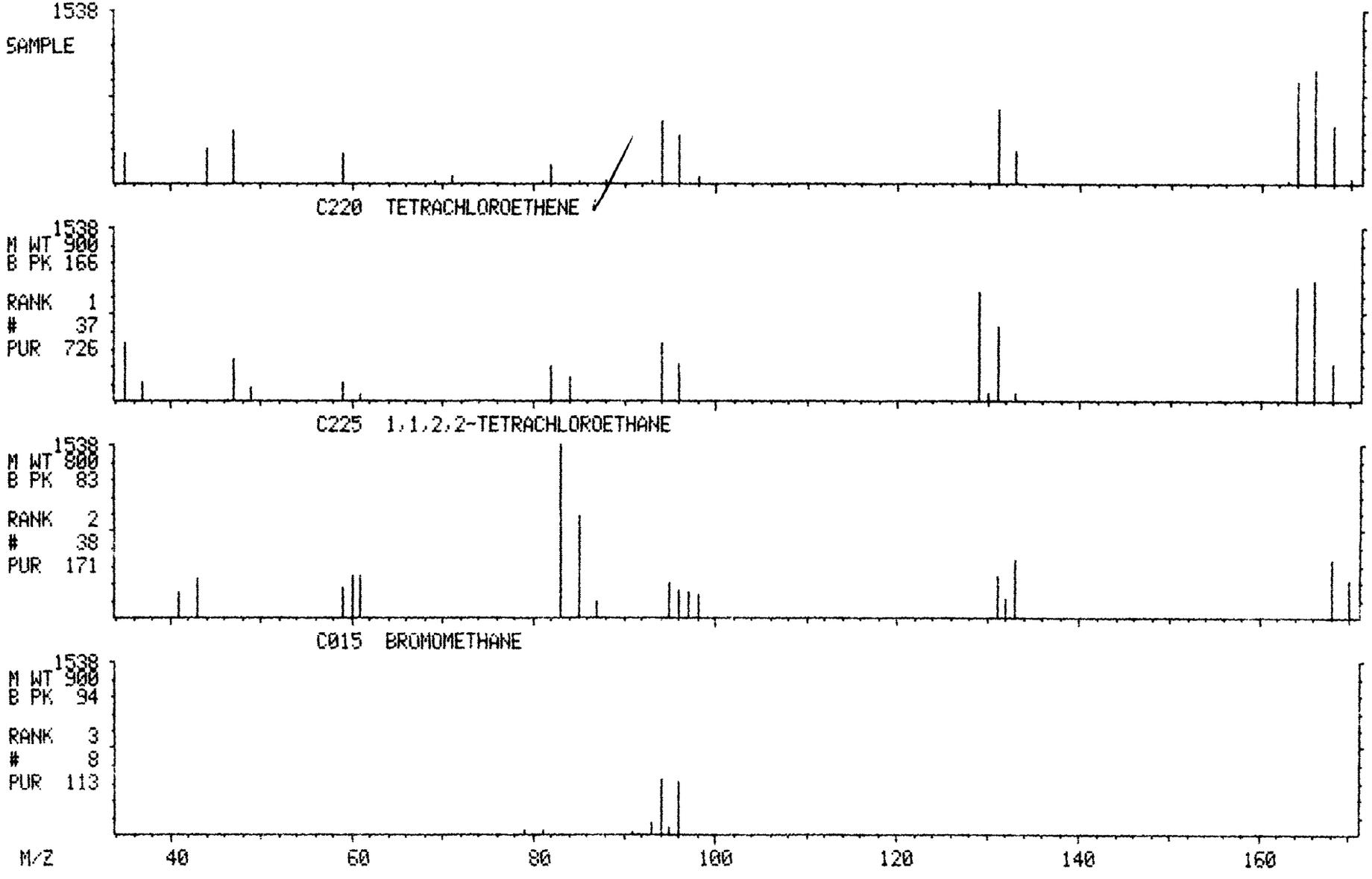
BASE M/Z: 166
RIC: 3140.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 20:21:00 + 22:44
SAMPLE: CLP,6437,,89FM26D95,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

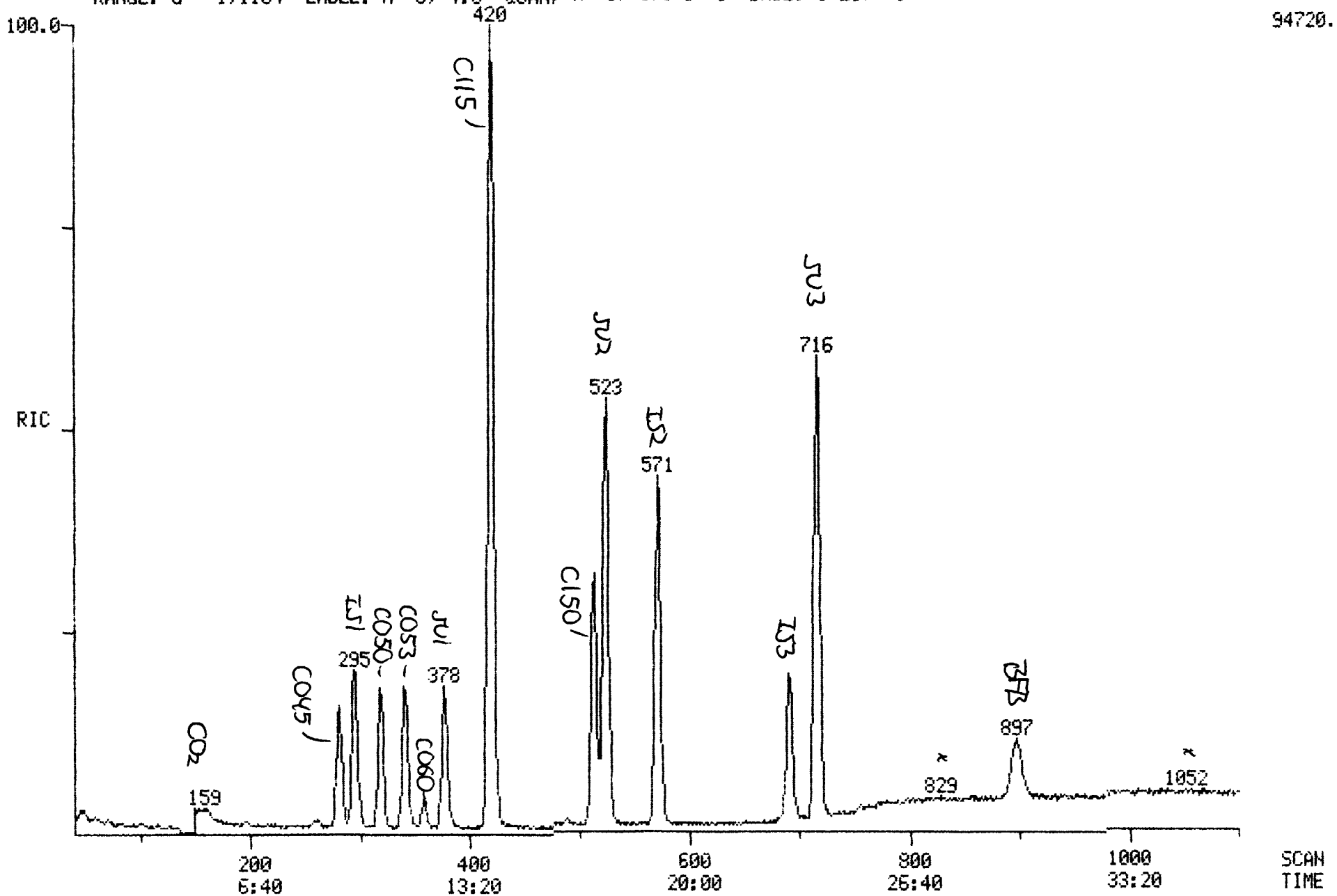
DATA: 6437D95 # 582
CALI: 6437D95 # 3

BASE M/Z: 166
RIC: 3140.



RIC
08/10/89 21:05:00
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 6437596 #359 SCANS 40 TO 1100
CALI: 6437596 #3



Quantitation Report File: 6437596

Data: 6437596.TI
08/10/89 21:05:00
Sample: CLP,6437,,89FM26596,L,W,,V,EPA,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No. TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C045	1,1-DICHLOROETHENE	
8	C050	1,1-DICHLOROETHANE	
9	C053	1,2-DICHLOROETHENE (TOTAL)	
10	C060	CHLOROFORM	
11	C115	1,1,1-TRICHLOROETHANE	
12	C150	TRICHLOROETHENE	

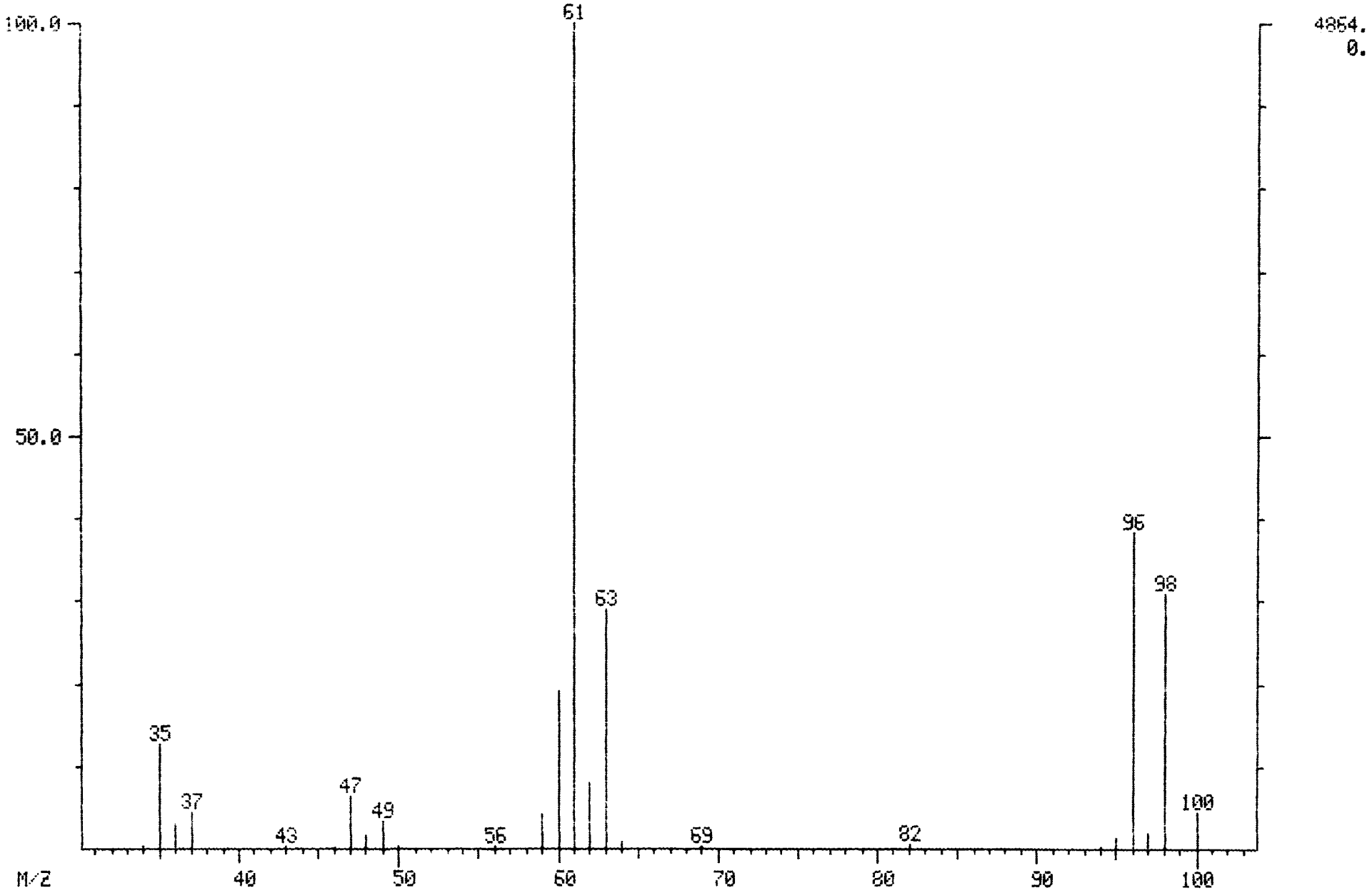
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	295	9:50	1	1.000	A BB	11390.	10.000 UG/L	9.56
2	77	572	19:04	2	1.000	A BB	56966.	10.000 UG/L	9.56
3	55	691	23:02	3	1.000	A BB	35746.	10.000 UG/L	9.56
4	65	378	12:36	1	1.281	A BB	32684.	10.377 UG/L	9.92
5	84	523	17:26	2	0.914	A BB	126738.	10.427 UG/L	9.97
6	98	716	23:52	3	1.036	A BB	112539.	10.648 UG/L	10.18
7	96	281	9:22	1	0.953	A BB	13198.	4.057 UG/L	3.88
8	63	319	10:38	1	1.081	A BB	44304.	5.525 UG/L	5.28
9	96	341	11:22	1	1.156	A BB	17268.	5.381 UG/L	5.14
10	83	359	11:58	1	1.217	A BB	6323.	0.793 UG/L	0.76
11	97	420	14:00	2	0.734	A BB	156035.	21.960 UG/L	21.00
12	130	513	17:06	2	0.897	A BB	25325.	5.413 UG/L	5.18

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.38	10.00	2.870	2.765	1.04
5	17:26	1.00	0.917	1.00	10.43	10.00	2.225	2.134	1.04
6	23:52	1.00	1.038	1.00	10.65	10.00	3.148	2.957	1.06
7	9:22	1.00	0.955	1.00	4.06	15.00	0.772	2.856	0.27
8	10:40	1.00	1.090	0.99	5.52	15.00	2.593	7.041	0.37
9	11:24	1.00	1.170	0.99	5.38	15.00	1.011	2.818	0.36
10	12:02	0.99	1.229	0.99	0.79	15.00	0.370	6.999	0.05
11	14:02	1.00	0.731	1.00	21.96	15.00	1.826	1.247	1.46
12	17:06	1.00	0.898	1.00	5.41	15.00	0.296	0.821	0.36

MASS SPECTRUM
08/10/89 21:05:00 + 9:22
SAMPLE: CLP,6437,,89FM26596,L,W,,U,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 95 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437596 #281
CALI: 6437596 #3

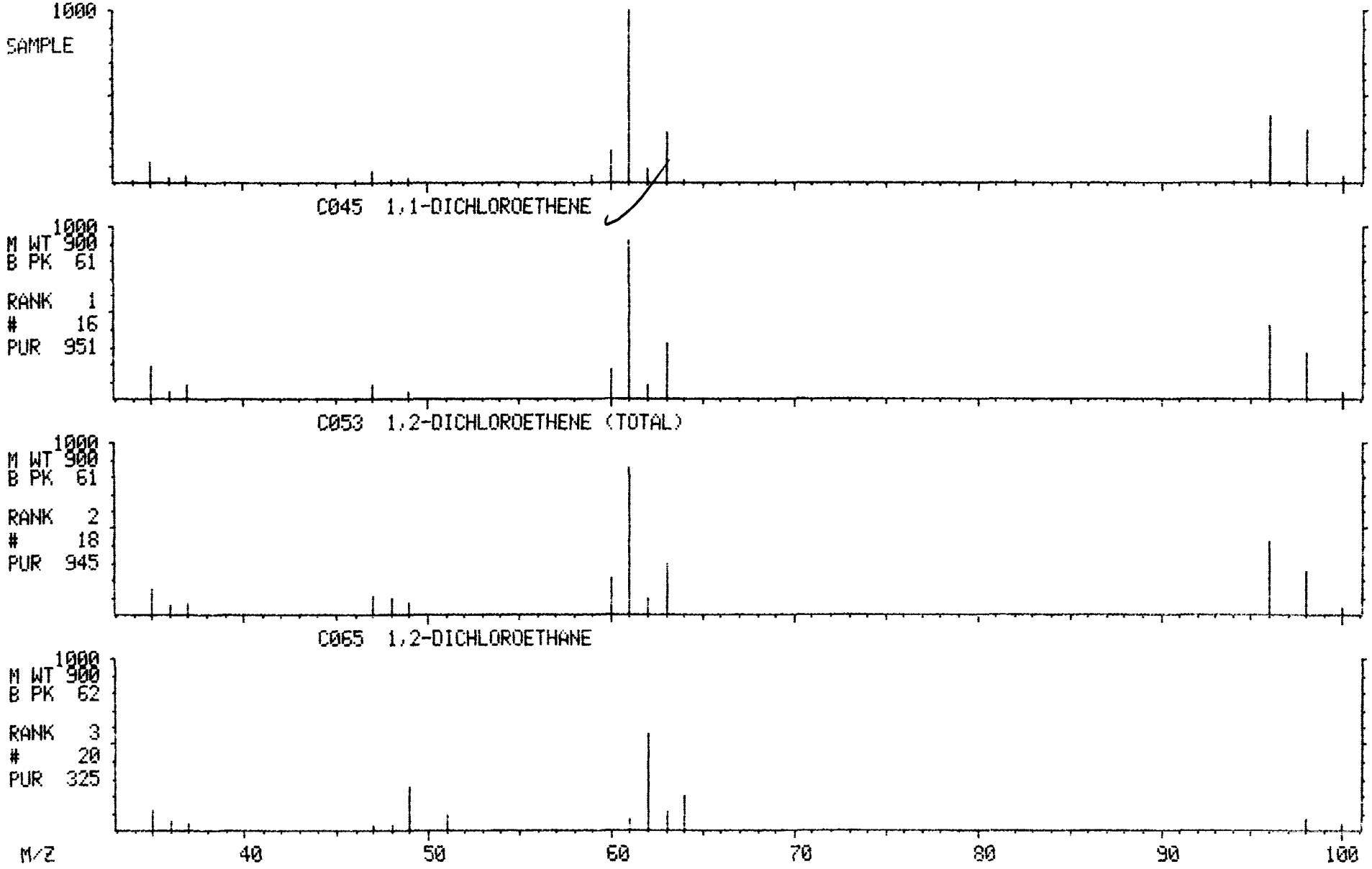
BASE M/Z: 61
RIC: 13232.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 21:05:00 + 9:22
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437596 # 281
CALI: 6437596 # 3

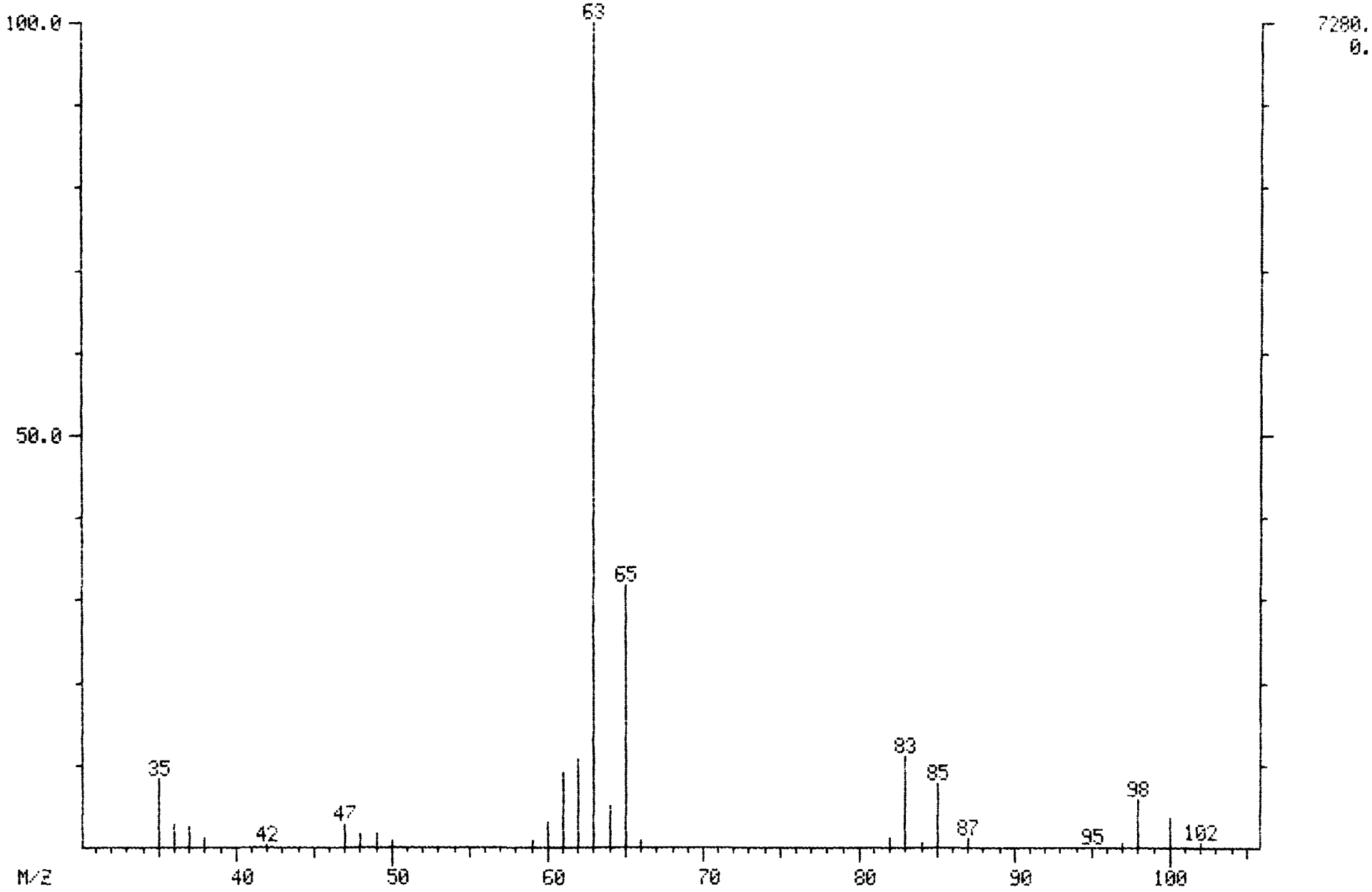
BASE M/Z: 61
RIC: 13200.



MASS SPECTRUM
08/10/89 21:05:00 + 10:38
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 105 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437596 #319
CALI: 6437596 #3

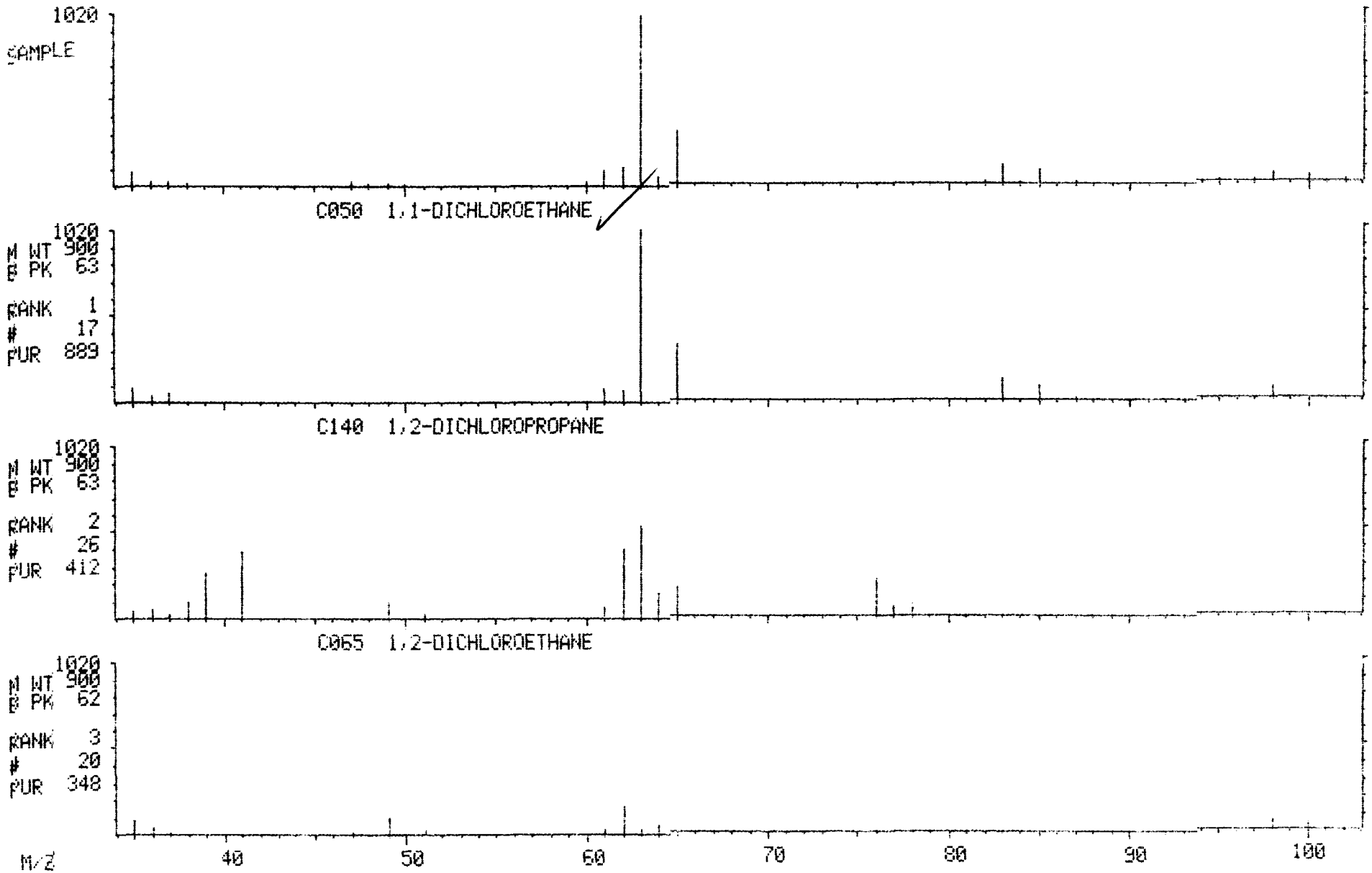
BASE M/Z: 63
RIC: 15696.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 21:05:00 + 10:38
SAMPLE: CLP,6437,,89FM26596,L,W,,U,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437596 # 319
CALI: 6437596 # 3

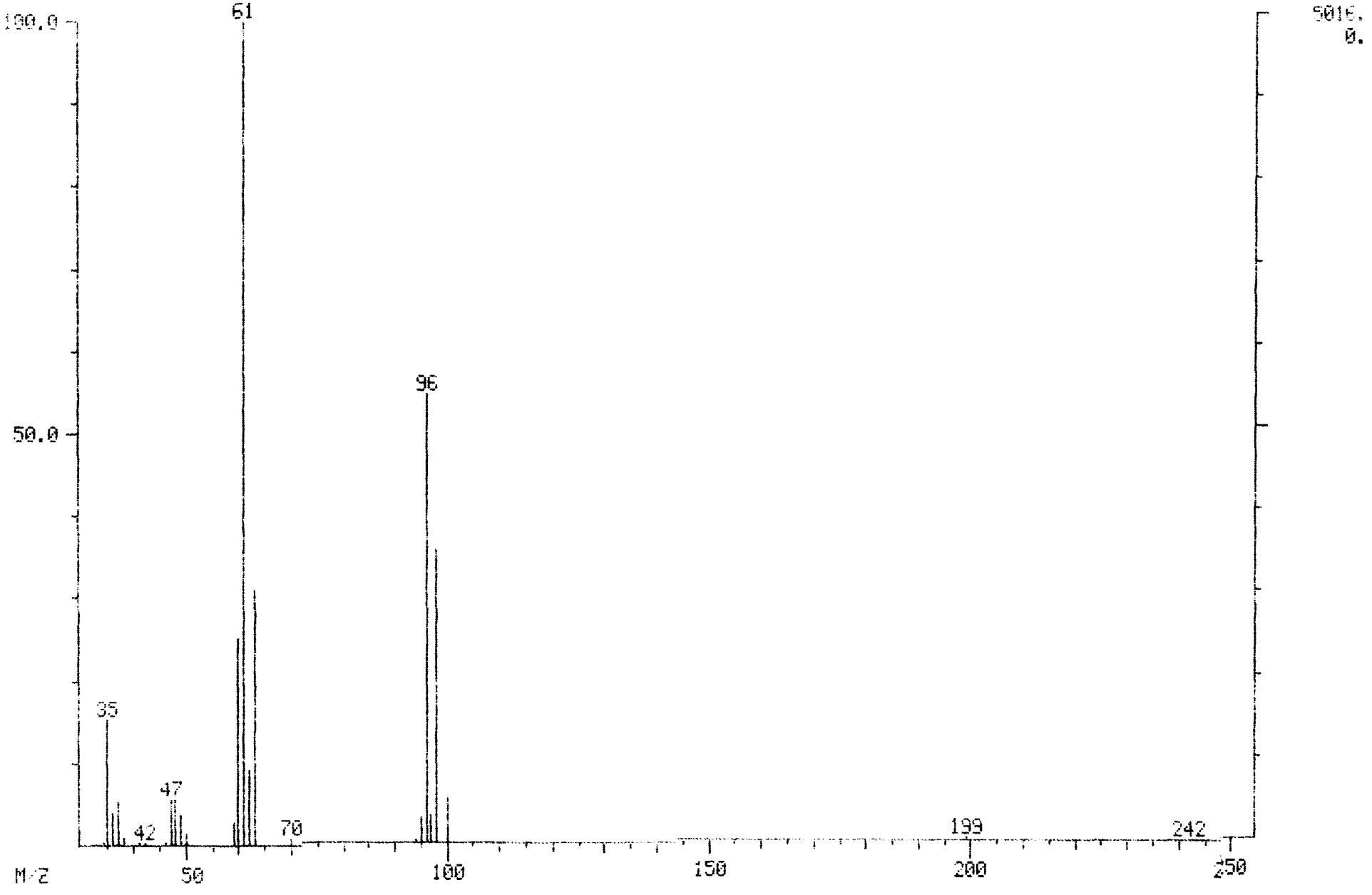
BASE M/Z: 63
RIC: 15552.



MASS SPECTRUM
08/10/89 21:05:00 + 11:22
SAMPLE: CLP/6437/,89FM26596.L.W.,U.EPA/
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 111 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437596 #341
CALI: 6437596 #3

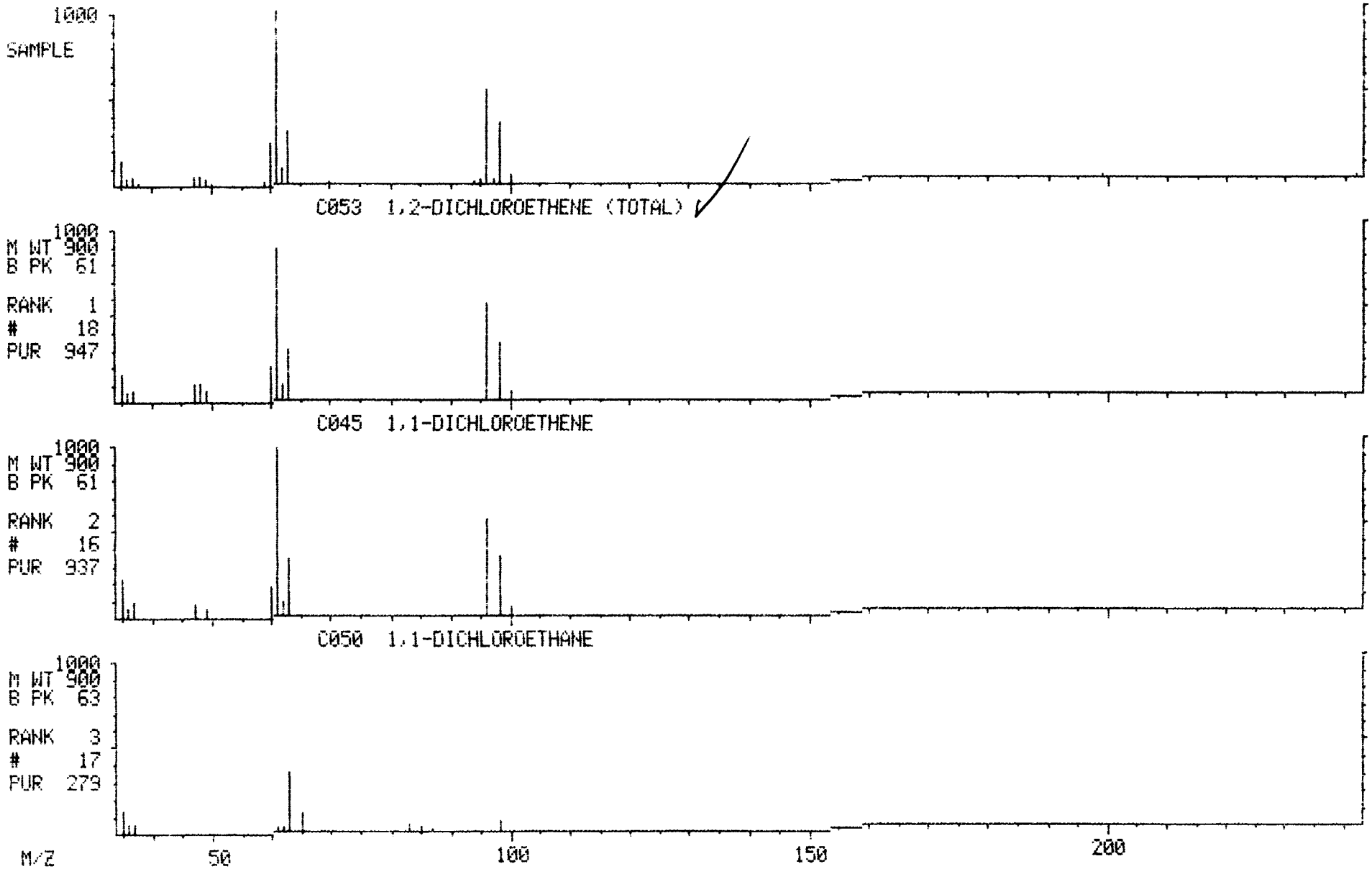
BASE M/Z: 61
RIC: 15744.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 21:05:00 + 11:22
SAMPLE: CLP,6437,,89FM26596,L,W,,U,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437596 # 341
CALI: 6437596 # 3

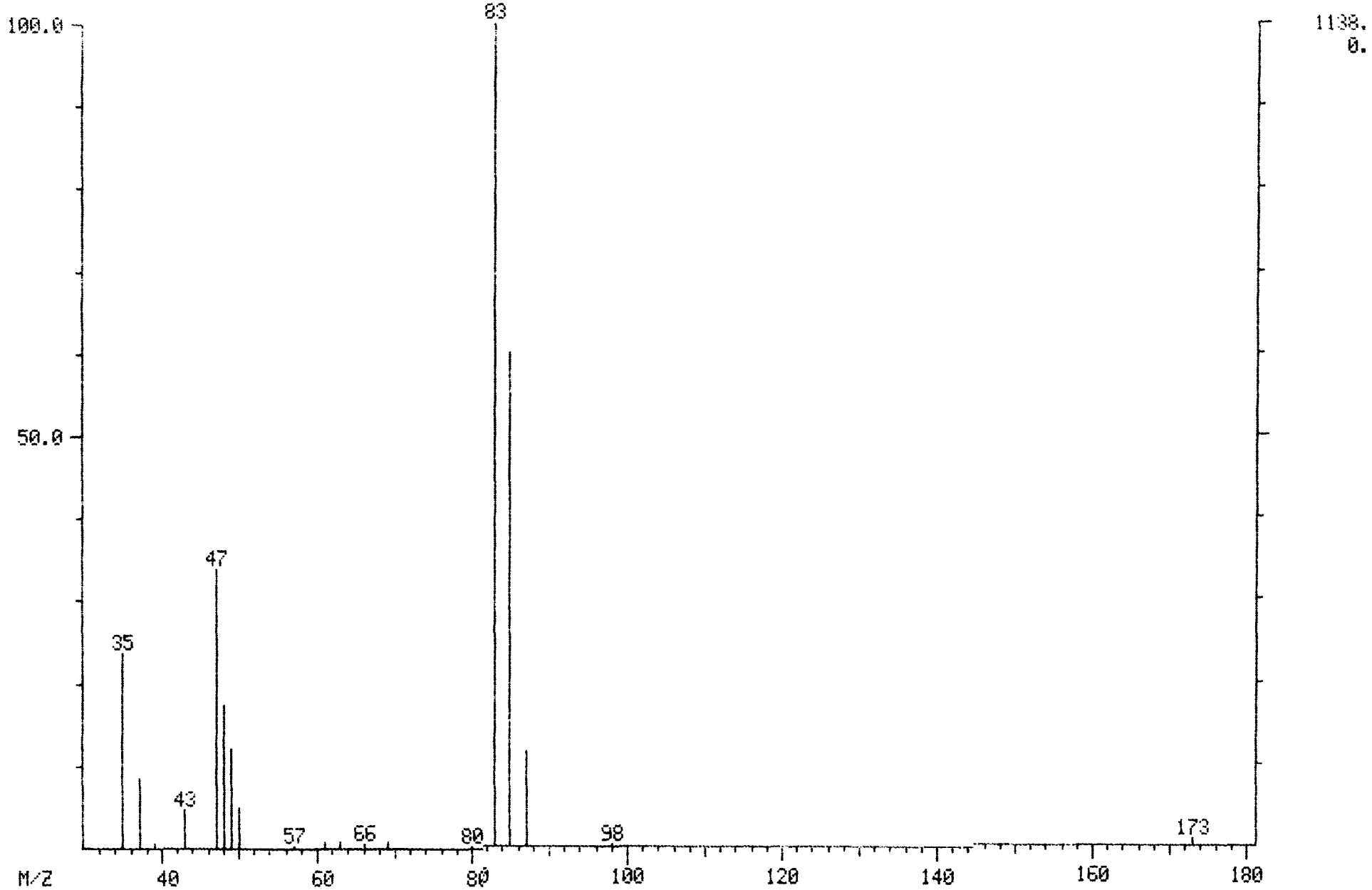
BASE M/Z: 61
RIC: 15696.



MASS SPECTRUM
08/10/89 21:05:00 + 11:58
SAMPLE: CLP,6437,,89FM26596,L,W,.V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 116 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437596 #359
CALI: 6437596 #3

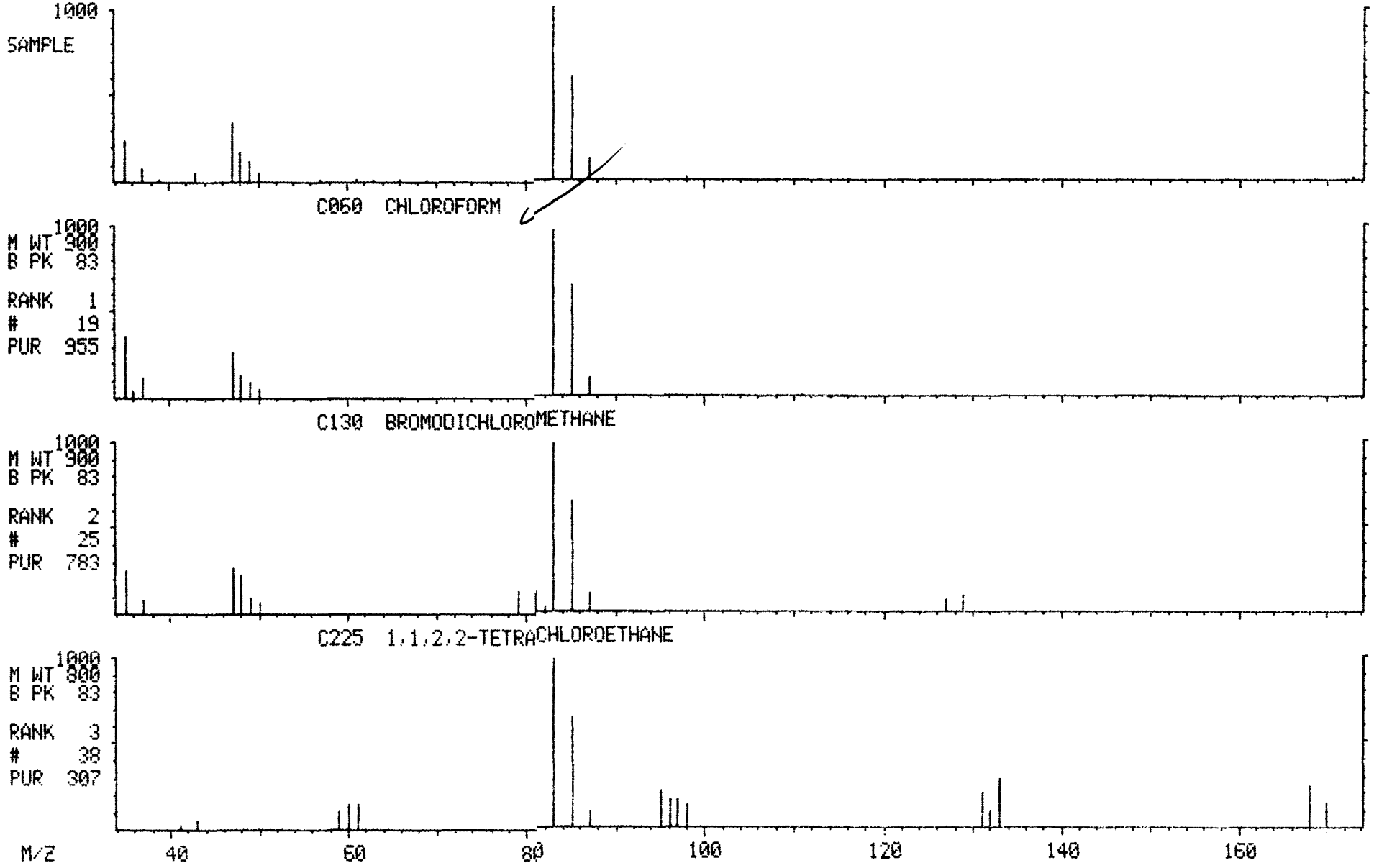
BASE M/Z: 83
RIC: 3212.



MID LIBRARY SEARCH (LIBRARYVP)
08/10/89 21:05:00 + 11:58
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437596 # 359
CALI: 6437596 # 3

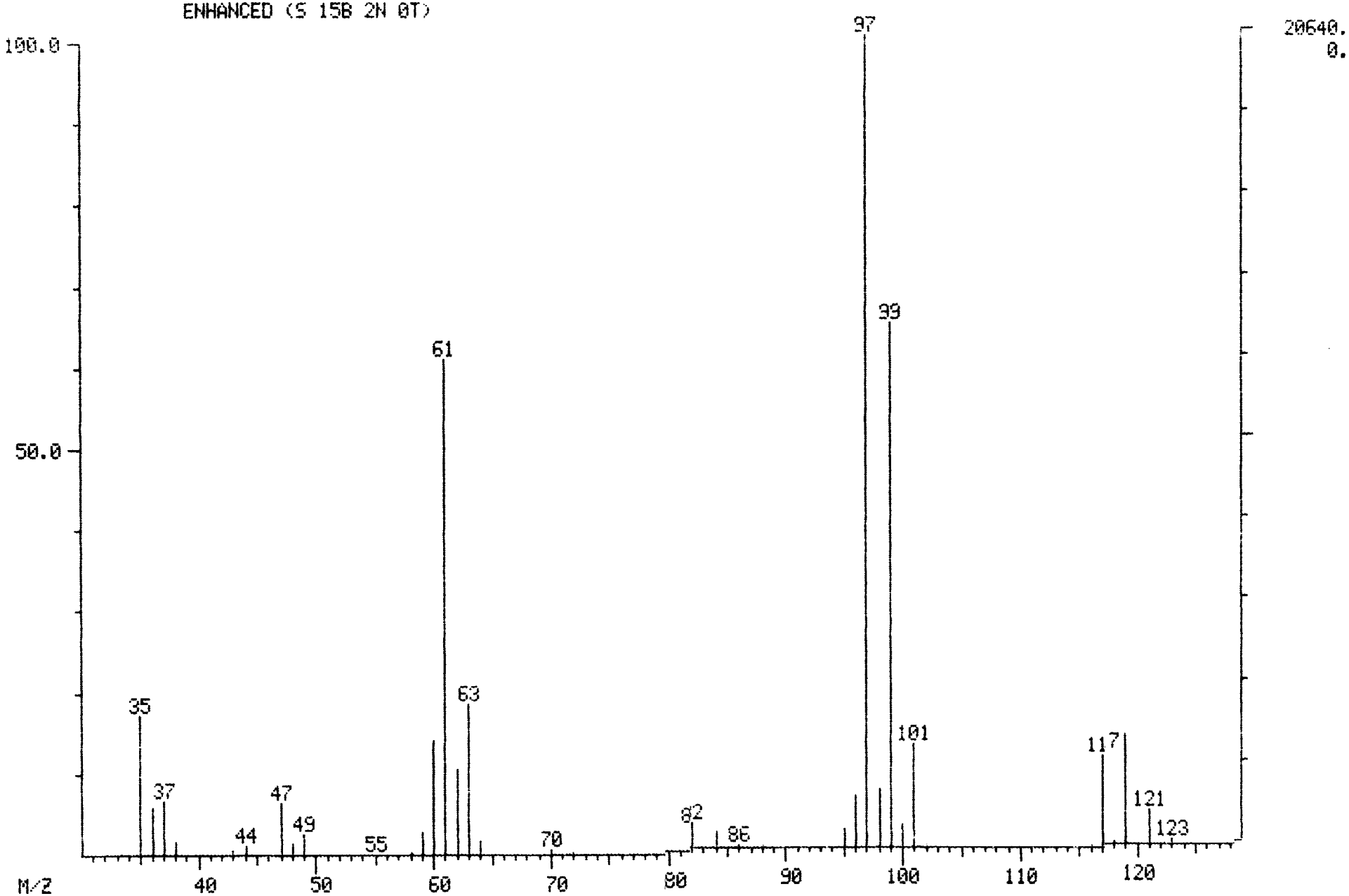
BASE M/Z: 83
RIC: 3212.



MASS SPECTRUM
08/10/89 21:05:00 + 14:00
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 132 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 6437596 #420
CALI: 6437596 #3

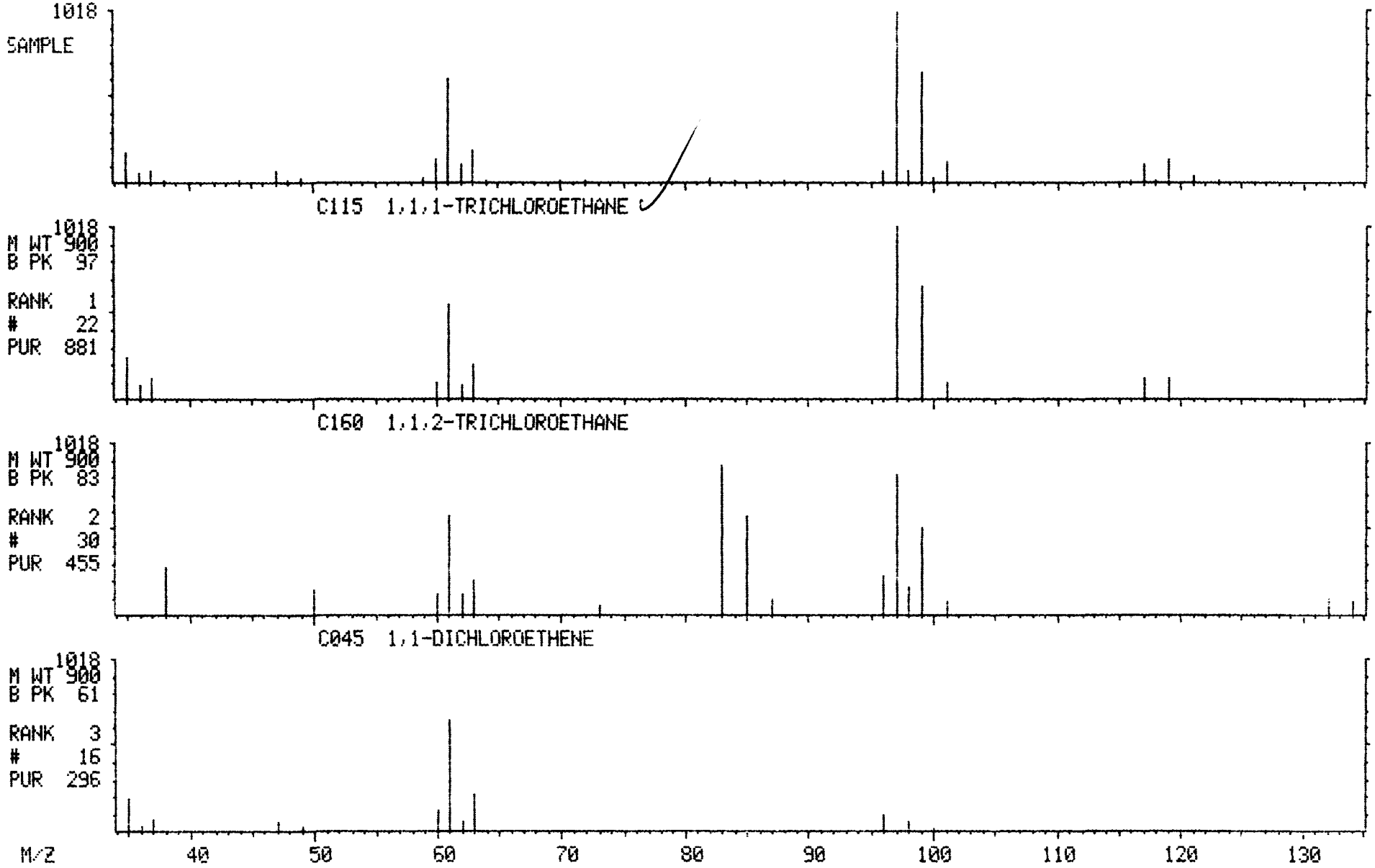
BASE M/Z: 97
RIC: 79488.



MID LIBRARY SEARCH (LIBRARYUP)
08/10/89 21:05:00 + 14:00
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437596 # 420
CALI: 6437596 # 3

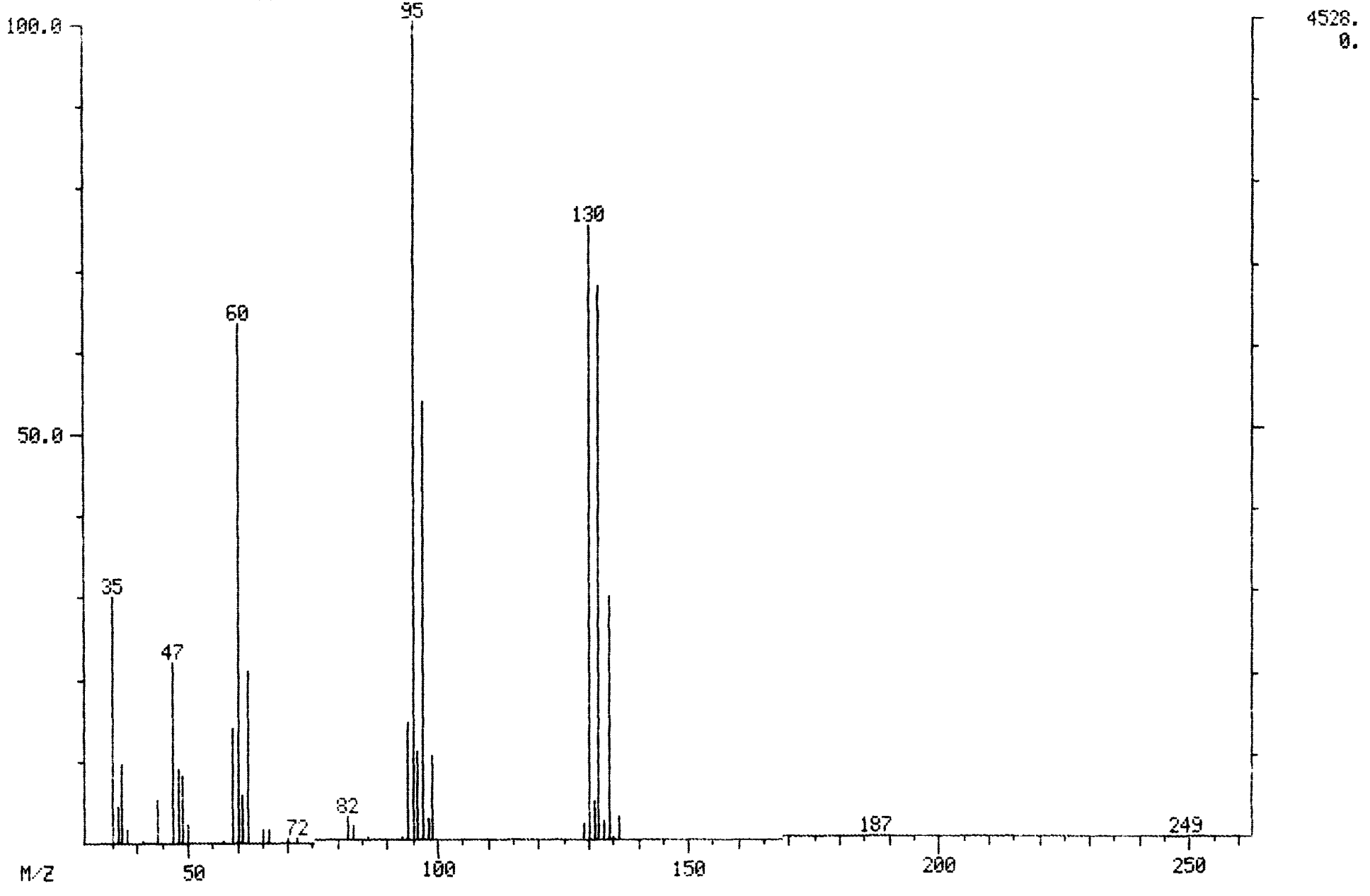
BASE M/Z: 97
RIC: 78848.



MASS SPECTRUM
08/10/89 21:05:00 + 17:06
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 157 DEG. C
ENHANCED (6 15B 2N 0T)

DATA: 6437596 #513
CALI: 6437596 #3

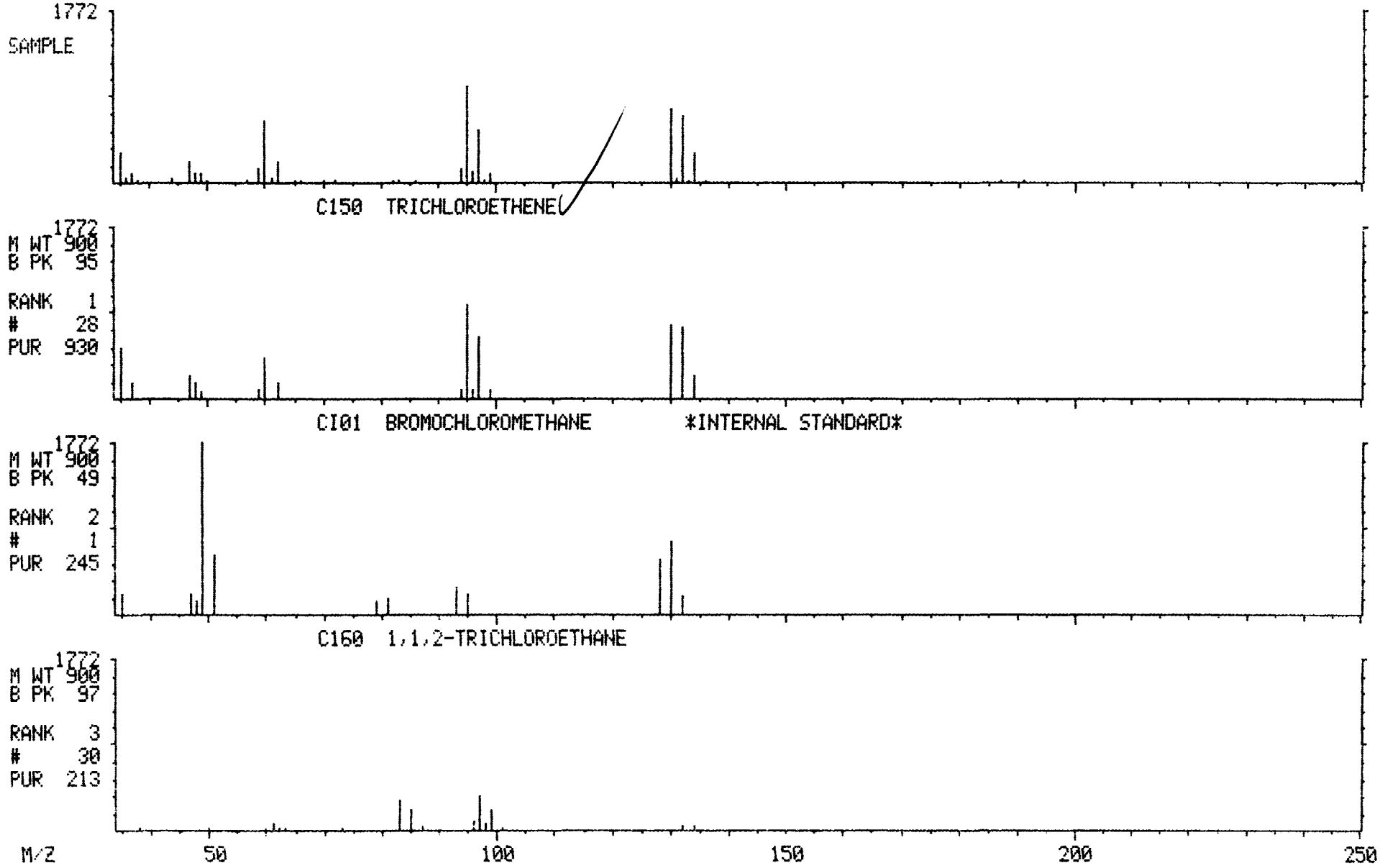
BASE M/Z: 95
RIC: 26528.



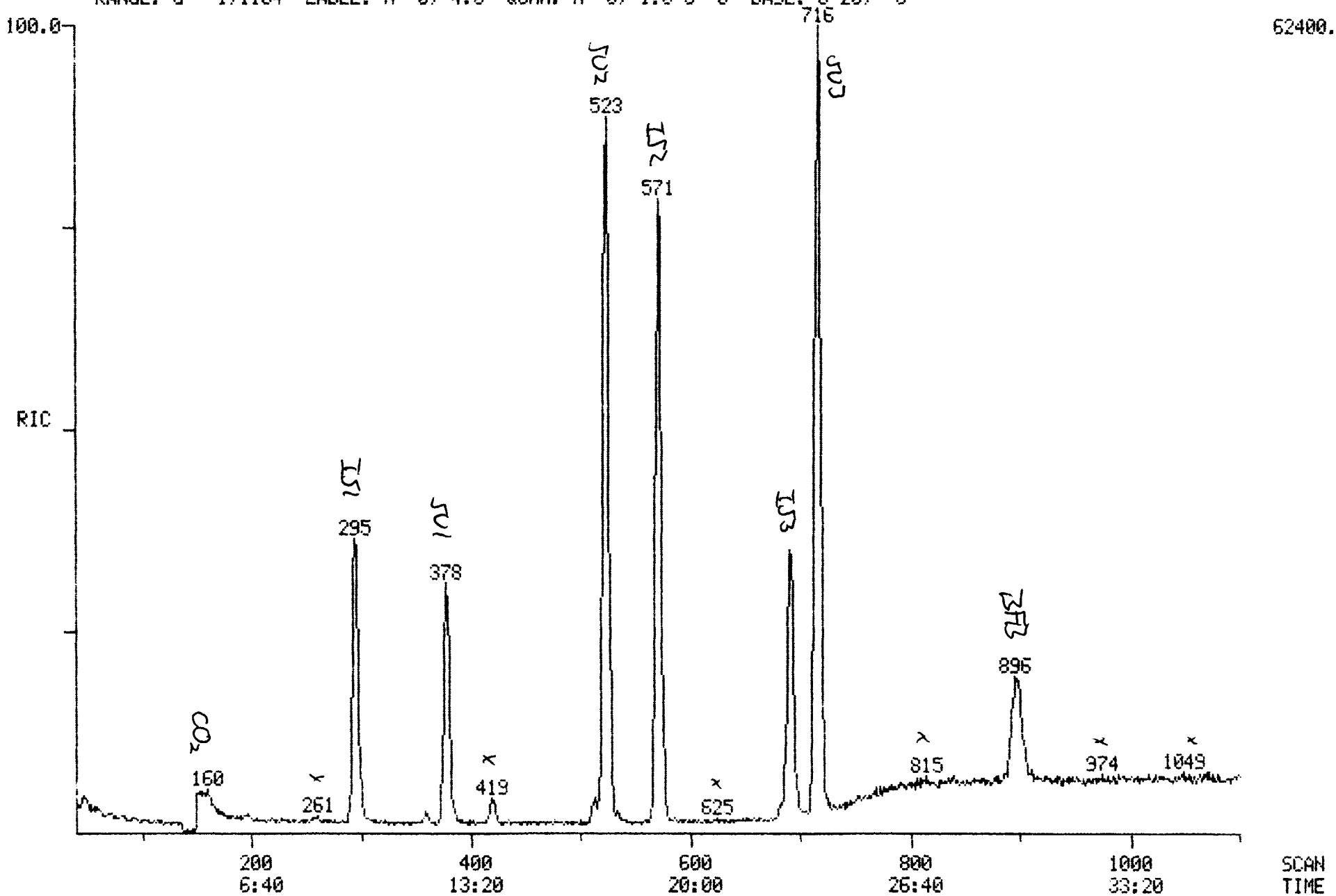
MID LIBRARY SEARCH (LIBRARYVP)
08/10/89 21:05:00 + 17:06
SAMPLE: CLP,6437,,89FM26596,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
ENHANCED (S 15B 2N 0T)

DATA: 6437596 # 513
CALI: 6437596 # 3

BASE M/Z: 95
RIC: 26368.



RIC DATA: 6437597 #359 SCANS 40 TO 1100
08/10/89 21:49:00 CALI: 6437597 #3
SAMPLE: CLP,6437,,89FM26597,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 6437597

Data: 6437597.TI
08/10/89 21:49:00
Sample: CLP,6437,,89FM26597,L,W,,V,EPA,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

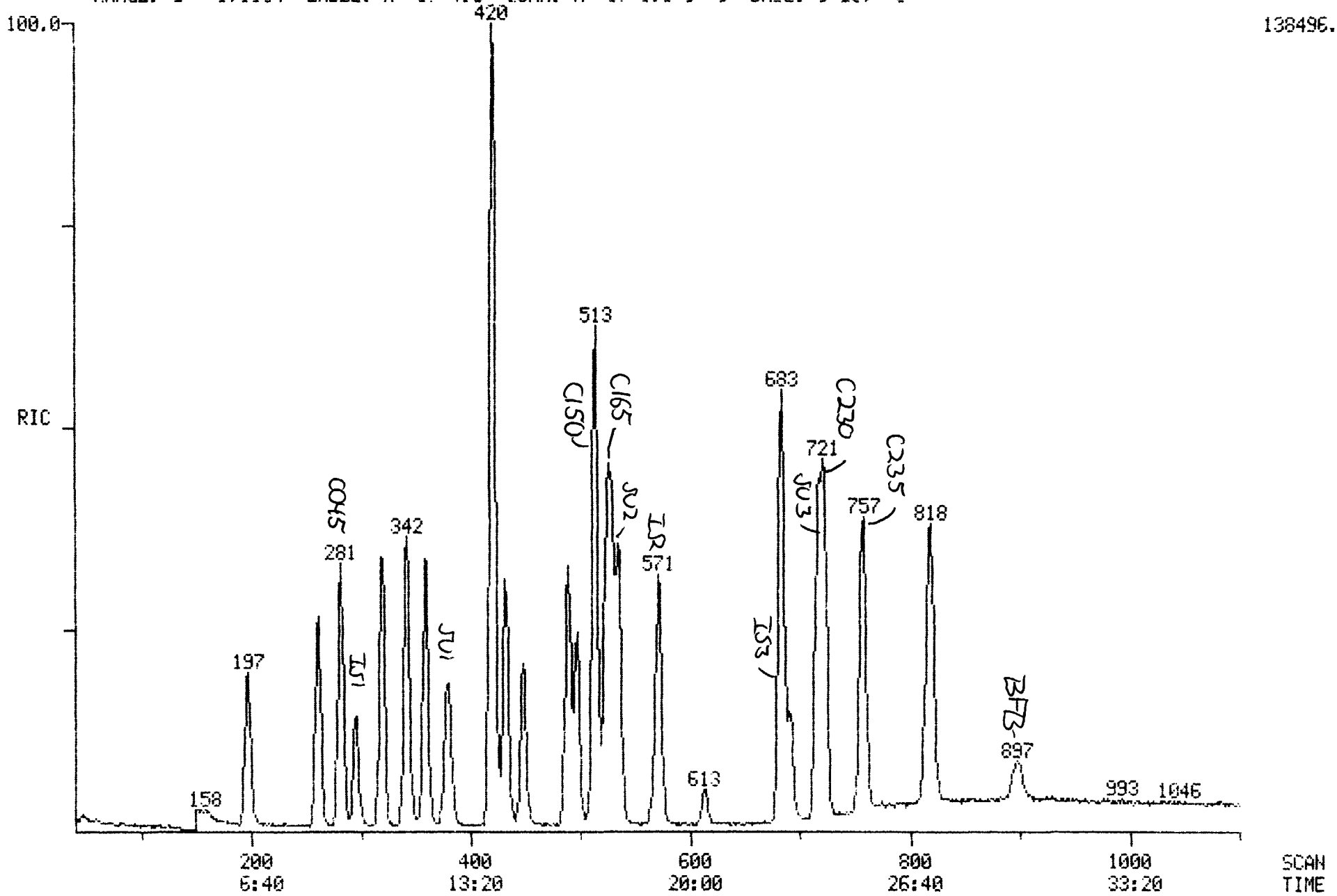
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	295	9:50	1	1.000	A BB	13358.	10.000 UG/L	16.70
2	77	571	19:02	2	1.000	A BB	67764.	10.000 UG/L	16.70
3	55	691	23:02	3	1.000	A BB	44135.	10.000 UG/L	16.70
4	65	378	12:36	1	1.281	A BB	39004.	10.558 UG/L	17.63
5	84	523	17:26	2	0.916	A BB	140702.	9.731 UG/L	16 25
6	98	716	23:52	3	1.036	A BB	125029.	9.581 UG/L	16.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.56	10.00	2.920	2.765	1.06
5	17:26	1.00	0.917	1.00	9.73	10.00	2.076	2.134	0.97
6	23:52	1.00	1.038	1.00	9.58	10.00	2.833	2.957	0.96

RIC DATA: 6437596M #1 SCANS 40 TO 1100
08/11/89 11:57:00 CALI: 6437596M #3
SAMPLE: CLP,6437,,89FM26596MS,L,W,,V,MS,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 6437596M

Data: 6437596M.TI
08/11/89 11:57:00
Sample: CLP,6437,,89FM26596MS,L,W,,V,MS,
Conds. 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C030	METHYLENE CHLORIDE	
8	C045	1,1-DICHLOROETHENE	
9	C050	1,1-DICHLOROETHANE	
10	C053	1,2-DICHLOROETHENE (TOTAL)	
11	C060	CHLOROFORM	
12	C065	1,2-DICHLOROETHANE	
13	C115	1,1,1-TRICHLOROETHANE	
14	C120	CARBON TETRACHLORIDE	
15	C130	BROMODICHLOROMETHANE	
16	C140	1,2-DICHLOROPROPANE	
17	C143	CIS-1,3-DICHLOROPROPENE	
18	C150	TRICHLOROETHENE	
19	C155	DIBROMOCHLOROMETHANE	
20	C160	1,1,2-TRICHLOROETHANE	
21	C165	BENZENE	
22	C172	TRANS-1,3-DICHLOROPROPENE	
23	C175	2-CHLOROETHYLVINYLETHER	
24	C180	BROMOFORM	
25	C220	TETRACHLOROETHENE	
26	C225	1,1,2,2-TETRACHLOROETHANE	
27	C230	TOLUENE	
28	C235	CHLOROBENZENE	
29	C240	ETHYL BENZENE	

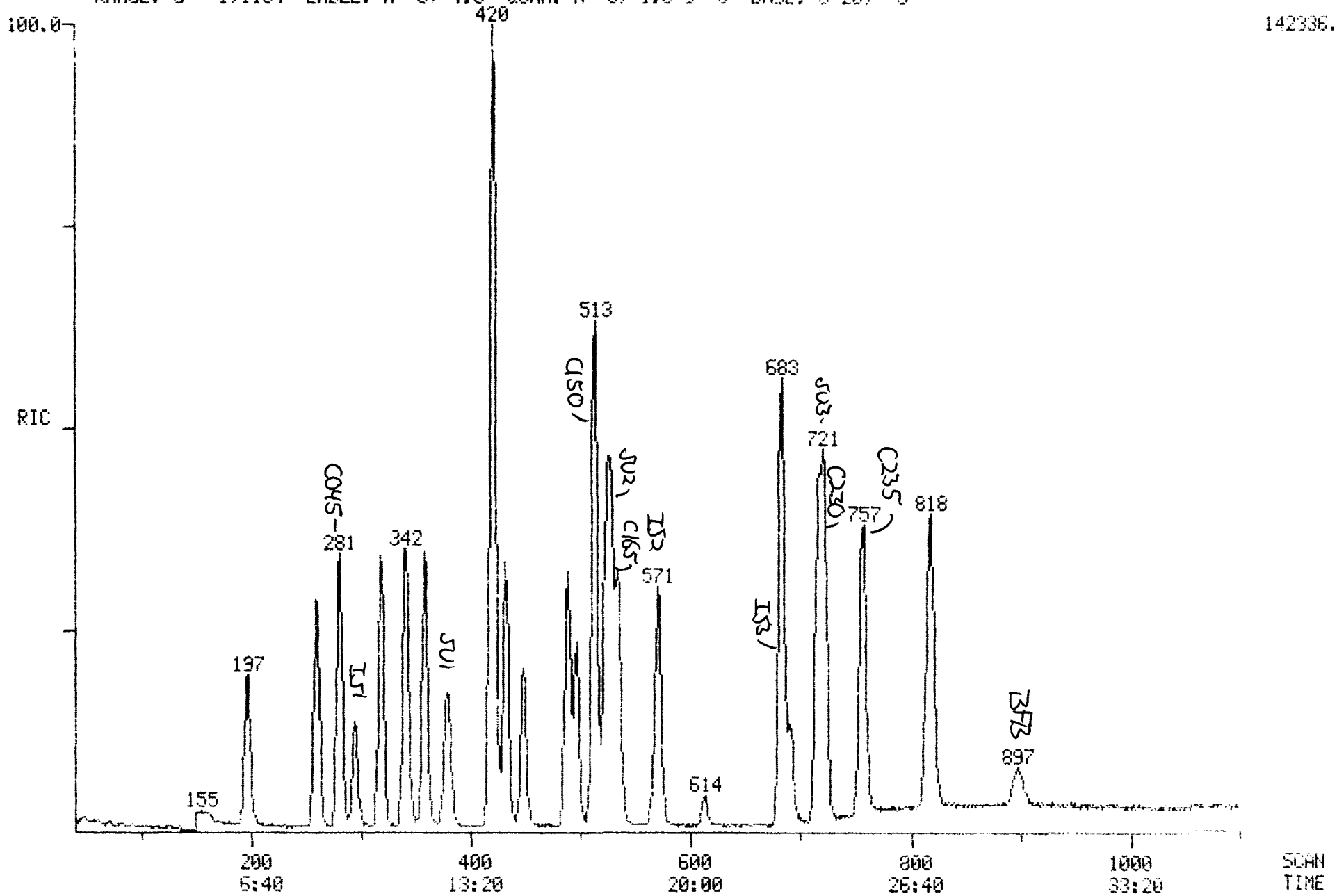
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	296	9:52	1	1.000	A BB	11199.	10.000 UG/L	3.17
2	77	571	19:02	2	1.000	A BB	59887.	10.000 UG/L	3.17
3	55	691	23:02	3	1.000	A BB	36722.	10.000 UG/L	3.17
4	65	378	12:36	1	1.277	A BB	34616.	10.773 UG/L	3.41
5	84	523	17:26	2	0.916	A VB	120275.	9.978 UG/L	3.16
6	98	716	23:52	3	1.036	A BB	106829.	10.705 UG/L	3.39
7	84	197	6:34	1	0.666	A BB	29738.	9.700 UG/L	3.07
8	96	281	9:22	1	0.949	A BB	40544.	12.487 UG/L	3.95
9	63	319	10:38	1	1.078	A BB	126968.	14.751 UG/L	4.67
10	96	342	11:24	1	1.155	A BB	48416.	14.558 UG/L	4.61
11	83	359	11:58	1	1.213	A BB	90742.	10.671 UG/L	3.38
12	62	381	12:42	1	1.287	A BB	37443.	10.513 UG/L	3.33
13	97	420	14:00	2	0.736	A BB	225151.	29.268 UG/L	9.26
14	117	432	14:24	2	0.757	A VB	59832.	8.695 UG/L	2.75

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
15	83	448	14:56	2	0.785	A BB	47516.	8.424 UG/L	2.67
16	63	488	16:16	2	0.855	A BB	46065.	9.268 UG/L	2.93
17	75	496	16:32	2	0.869	A BB	48687.	9.859 UG/L	3.12
18	130	513	17:06	2	0.898	A BB	71161.	14.185 UG/L	4.49
19	129	533	17:46	2	0.933	A BB	23384.	8.787 UG/L	2.78
20	97	535	17:50	2	0.937	A BB	18456.	9.622 UG/L	3.05
21	78	528	17:36	2	0.925	A BB	111498	9.119 UG/L	2.89
22	75	535	17:50	2	0.937	A BB	21265.	7.378 UG/L	2.34
23	63	566	18:52	2	0.991	A BB	8761.	9.522 UG/L	3.01
24	173	613	20:26	2	1.074	A BB	8277.	8.228 UG/L	2.60
25	164	684	22:48	3	0.990	A BB	42697.	9.782 UG/L	3.10
26	83	682	22:44	3	0.987	A BB	16433.	10.807 UG/L	3.42
27	92	722	24:04	3	1.045	A BB	73316.	9.634 UG/L	3.05
28	112	757	25:14	3	1.096	A BB	82841.	9.796 UG/L	3.10
29	106	817	27:14	3	1.182	A BB	41712.	9.395 UG/L	2.97

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.77	10.00	3.091	2.869	1.08
5	17:26	1.00	0.917	1.00	9.98	10.00	2.008	2.013	1.00
6	23:52	1.00	1.038	1.00	10.70	10.00	2.909	2.718	1.07
7	6:30	1.01	0.681	0.98	9.70	15.00	1.770	2.737	0.65
8	9:22	1.00	0.955	0.99	12.49	15.00	2.413	2.899	0.83
9	10:40	1.00	1.090	0.99	14.75	15.00	7.558	7.686	0.98
10	11:24	1.00	1.170	0.99	14.56	15.00	2.882	2.970	0.97
11	12:02	0.99	1.229	0.99	10.67	15.00	5.402	7.593	0.71
12	12:44	1.00	1.312	0.98	10.51	15.00	2.229	3.180	0.70
13	14:02	1.00	0.731	1.01	29.27	15.00	2.506	1.285	1.95
14	14:26	1.00	0.752	1.01	8.70	15.00	0.666	1.149	0.58
15	15.00	1.00	0.780	1.01	8.42	15.00	0.529	0.942	0.56
16	16:20	1.00	0.854	1.00	9.27	15.00	0.513	0.830	0.62
17	16:34	1.00	0.868	1.00	9.86	18.00	0.452	0.825	0.55
18	17:06	1.00	0.898	1.00	14.18	15.00	0.792	0.838	0.95
19	17:48	1.00	0.930	1.00	8.79	15.00	0.260	0.444	0.59
20	17:54	1.00	0.937	1.00	9.62	15.00	0.205	0.320	0.64
21	17.36	1.00	0.924	1.00	9.12	15.00	1.241	2.042	0.61
22	17:52	1.00	0.937	1.00	7.38	12.00	0.296	0.481	0.61
23	18:56	1.00	0.995	1.00	9.52	15.00	0.098	0.154	0.63
24	20:30	1.00	1.076	1.00	8.23	15.00	0.092	0.168	0.55
25	22:48	1.00	0.990	1.00	9.78	15.00	0.775	1.189	0.65
26	22:48	1.00	0.988	1.00	10.81	15.00	0.298	0.414	0.72
27	24:04	1.00	1.046	1.00	9.63	15.00	1.331	2.072	0.64
28	25:14	1.00	1.097	1.00	9.80	15.00	1.504	2.303	0.65
29	27:16	1.00	1.186	1.00	9.39	15.00	0.757	1.209	0.63

RIC
08/11/89 12:42:00
SAMPLE: CLP,6437,,89FM26596MSD,L,W,,V,MSD,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 6437596D #1
CALI: 6437596D #3
SCANS 40 TO 1100



Quantitation Report File: 6437596D

Data: 6437596D.TI
08/11/89 12:42:00
Sample: CLP,6437,,89FM26596MSD,L,W,,V,MSD,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C030	METHYLENE CHLORIDE	
8	C045	1,1-DICHLOROETHENE	
9	C050	1,1-DICHLOROETHANE	
10	C053	1,2-DICHLOROETHENE (TOTAL)	
11	C060	CHLOROFORM	
12	C065	1,2-DICHLOROETHANE	
13	C115	1,1,1-TRICHLOROETHANE	
14	C120	CARBON TETRACHLORIDE	
15	C130	BROMODICHLOROMETHANE	
16	C140	1,2-DICHLOROPROPANE	
17	C143	CIS-1,3-DICHLOROPROPENE	
18	C150	TRICHLOROETHENE	
19	C155	DIBROMOCHLOROMETHANE	
20	C160	1,1,2-TRICHLOROETHANE	
21	C165	BENZENE	
22	C172	TRANS-1,3-DICHLOROPROPENE	
23	C175	2-CHLOROETHYLVINYLETHER	
24	C180	BROMOFORM	
25	C220	TETRACHLOROETHENE	
26	C225	1,1,2,2-TETRACHLOROETHANE	
27	C230	TOLUENE	
28	C235	CHLOROBENZENE	
29	C240	ETHYL BENZENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	295	9:50	1	1.000	A BB	10339.	10.000 UG/L	2.93
2	77	571	19:02	2	1.000	A BB	56751.	10.000 UG/L	2.93
3	55	691	23:02	3	1.000	A BB	33145.	10.000 UG/L	2.93
4	65	378	12:36	1	1.281	A BB	32105.	10.823 UG/L	3.18
5	84	523	17:26	2	0.916	A VB	129255.	11.315 UG/L	3.32
6	98	716	23:52	3	1.036	A BB	112961.	12.541 UG/L	3.68
7	84	196	6:32	1	0.664	A BB	29854.	10.548 UG/L	3.09
8	96	281	9:22	1	0.953	A BB	44682.	14.906 UG/L	4.37
9	63	319	10:38	1	1.081	A BB	131964.	16.606 UG/L	4.87
10	96	341	11:22	1	1.156	A BB	50068.	16.307 UG/L	4.78
11	83	359	11:58	1	1.217	A BB	91498.	11.655 UG/L	3.42
12	62	381	12:42	1	1.292	A BB	34161.	10.389 UG/L	3.05
13	97	420	14:00	2	0.736	A BB	234333.	32.145 UG/L	9.43
14	117	432	14:24	2	0.757	A VB	66854.	10.252 UG/L	3.01

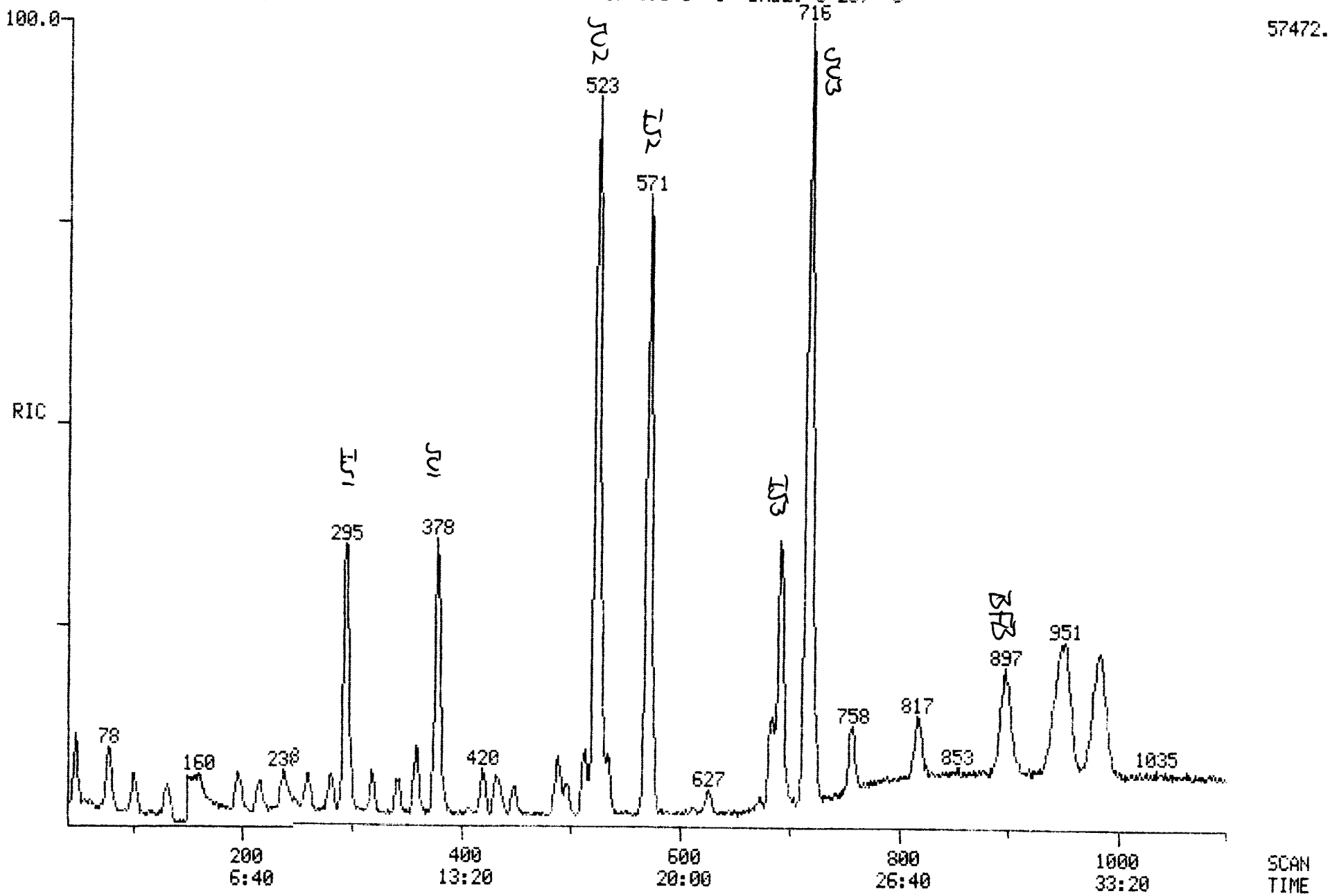
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
15	83	448	14:56	2	0.785	A BB	48328.	9.041	UG/L	2.65
16	63	488	16:16	2	0.855	A BB	45648.	9.691	UG/L	2.84
17	75	496	16:32	2	0.869	A BB	49542.	10.586	UG/L	3.11
18	130	513	17:06	2	0.898	A BB	74071.	15.580	UG/L	4.57
19	129	532	17:44	2	0.932	A BB	22251.	8.823	UG/L	2.59
20	97	534	17:48	2	0.935	A BB	16835.	9.261	UG/L	2.72
21	78	528	17:36	2	0.925	A BB	120293.	10.382	UG/L	3.05
22	75	535	17:50	2	0.937	A BB	20734.	7.591	UG/L	2.23
23	63	566	18:52	2	0.991	A BB	8313.	9.534	UG/L	2.80
24	173	614	20:28	2	1.075	A BB	7497.	7.865	UG/L	2.31
25	164	683	22:46	3	0.988	A BB	45180.	11.468	UG/L	3.36
26	83	683	22:46	3	0.988	A BB	14489.	10.557	UG/L	3.10
27	92	722	24:04	3	1.045	A BB	76731.	11.171	UG/L	3.28
28	112	757	25:14	3	1.096	A BB	82482.	10.806	UG/L	3.17
29	106	817	27:14	3	1.182	A BB	44179.	11.025	UG/L	3.23

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.82	10.00	3.105	2.869	1.08
5	17:26	1.00	0.917	1.00	11.31	10.00	2.278	2.013	1.13
6	23:52	1.00	1.038	1.00	12.54	10.00	3.408	2.718	1.25
7	6:30	1.01	0.681	0.98	10.55	15.00	1.925	2.737	0.70
8	9:22	1.00	0.955	1.00	14.91	15.00	2.881	2.899	0.99
9	10:40	1.00	1.090	0.99	16.61	15.00	8.509	7.686	1.11
10	11:24	1.00	1.170	0.99	16.31	15.00	3.228	2.970	1.09
11	12:02	0.99	1.229	0.99	11.66	15.00	5.900	7.593	0.78
12	12:44	1.00	1.312	0.98	10.39	15.00	2.203	3.180	0.69
13	14:02	1.00	0.731	1.01	32.14	15.00	2.753	1.285	2.14
14	14:26	1.00	0.752	1.01	10.25	15.00	0.785	1.149	0.68
15	15:00	1.00	0.780	1.01	9.04	15.00	0.568	0.942	0.60
16	16:20	1.00	0.854	1.00	9.69	15.00	0.536	0.830	0.65
17	16:34	1.00	0.868	1.00	10.59	18.00	0.485	0.825	0.59
18	17:06	1.00	0.898	1.00	15.58	15.00	0.870	0.838	1.04
19	17:48	1.00	0.930	1.00	8.82	15.00	0.261	0.444	0.59
20	17:54	0.99	0.937	1.00	9.26	15.00	0.198	0.320	0.62
21	17:36	1.00	0.924	1.00	10.38	15.00	1.413	2.042	0.69
22	17:52	1.00	0.937	1.00	7.59	12.00	0.304	0.481	0.63
23	18:56	1.00	0.995	1.00	9.53	15.00	0.098	0.154	0.64
24	20:30	1.00	1.076	1.00	7.86	15.00	0.088	0.168	0.52
25	22:48	1.00	0.990	1.00	11.47	15.00	0.909	1.189	0.76
26	22:48	1.00	0.988	1.00	10.56	15.00	0.291	0.414	0.70
27	24.04	1.00	1.046	1.00	11.17	15.00	1.543	2.072	0.74
28	25:14	1.00	1.097	1.00	10.81	15.00	1.659	2.303	0.72
29	27:16	1.00	1.186	1.00	11.02	15.00	0.889	1.209	0.73

RIC
08/11/89 14:08:00
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
RANGE: G 1,1104 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: MDL0811 #1
CALI: MDL0811 #3

SCANS 40 TO 1100



Quantitation Report File: MDL0811

Data: MDL0811.TI
08/11/89 14:08:00
Sample: CLP,0811,,MDL0811,L,W,,V,EPA,
Conds.: 45'(3MIN) TO 220'@ 8'/MIN
Formula: Instrument: INCOS1 Weight: 1.000
Submitted by: CRL Analyst: DTK Acct. No.: TFA302

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

No	Name		
1	CI01	BROMOCHLOROMETHANE	*INTERNAL STANDARD*
2	CI10	2-BROMO-1-CHLOROPROPANE	*INTERNAL STANDARD*
3	CI20	1,4-DICHLOROBUTANE	*INTERNAL STANDARD*
4	CS15	1,2-DICHLOROETHANE-D4	*SURROGATE*
5	CS10	BENZENE-D6	*SURROGATE*
6	CS05	TOLUENE-D8	*SURROGATE*
7	C010	CHLOROMETHANE	
8	C015	BROMOMETHANE	
9	C020	VINYL CHLORIDE	
10	C025	CHLOROETHANE	
11	C030	METHYLENE CHLORIDE	
12	C035	ACETONE	
13	C038	~~ACROLEIN~~ ND	
14	C040	CARBON DISULFIDE	
15	C043	ACRYLONITRILE	
16	C045	1,1-DICHLOROETHENE	
17	C050	1,1-DICHLOROETHANE	
18	C053	1,2-DICHLOROETHENE (TOTAL)	
19	C060	CHLOROFORM	
20	C065	1,2-DICHLOROETHANE	
21	C110	2-BUTANONE	
22	C115	1,1,1-TRICHLOROETHANE	
23	C120	CARBON TETRACHLORIDE	
24	C125	VINYL ACETATE	
25	C130	BROMODICHLOROMETHANE	
26	C140	1,2-DICHLOROPROPANE	
27	C143	CIS-1,3-DICHLOROPROPENE	
28	C150	TRICHLOROETHENE	
29	C155	DIBROMOCHLOROMETHANE	
30	C160	1,1,2-TRICHLOROETHANE	
31	C165	BENZENE	
32	C172	TRANS-1,3-DICHLOROPROPENE	
33	C175	~~2-CHLOROETHYLVINYLETHER~~ ND	
34	C180	BROMOFORM	
35	C210	2-HEXANONE	
36	C205	4-METHYL-2-PENTANONE	
37	C220	TETRACHLOROETHENE	
38	C225	1,1,2,2-TETRACHLOROETHANE	
39	C230	TOLUENE	
40	C235	CHLOROBENZENE	
41	C240	ETHYL BENZENE	
42	C260	M-XYLENE	
43	C270	O-&/OR P-XYLENE	
44	C245	STYRENE	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	295	9:50	1	1.000	A BB	11801.	10.000	UG/L	4.86
2	77	571	19:02	2	1.000	A BB	61056.	10.000	UG/L	4.86
3	55	692	23:04	3	1.000	A BB	39001.	10.000	UG/L	4.86
4	65	378	12:36	1	1.281	A BB	34812.	10.282	UG/L	5.00
5	84	523	17:26	2	0.916	A BB	125687.	10.227	UG/L	4.97
6	98	716	23:52	3	1.035	A BB	112670.	10.630	UG/L	5.17
7	50	47	1:34	1	0.159	A BB	10733.	2.105	UG/L	1.02
8	94	78	2:36	1	0.264	A BB	8892.	2.078	UG/L	1.01
9	62	100	3:20	1	0.339	A BV	9473.	1.835	UG/L	0.89
10	64	132	4:24	1	0.447	A BB	7014.	1.963	UG/L	0.95
11	84	196	6:32	1	0.664	A BB	3032.	0.939	UG/L	0.46
12	43	215	7:10	1	0.729	A BB	9542.	42.661	UG/L	20.73
~~13~~	~~56~~	~~228~~	~~7:36~~	~~1~~	~~0.773~~	~~A BB~~	~~48.~~	~~1.786~~	~~UG/L~~	~~0.87~~ ND
14	76	245	8:10	1	0.831	A BB	2442.	1.511	UG/L	0.73
15	53	238	7:56	1	0.807	A BB	8601.	40.793	UG/L	19.82
16	96	281	9:22	1	0.953	A BB	2416.	0.706	UG/L	0.34
17	63	319	10:38	1	1.081	A BB	7828.	0.863	UG/L	0.42
18	96	342	11:24	1	1.159	A BB	2564.	0.732	UG/L	0.36
19	83	359	11:58	1	1.217	A BB	8343.	0.931	UG/L	0.45
20	62	382	12:44	1	1.295	A BB	3730.	0.994	UG/L	0.48
21	72	378	12:36	2	0.662	A BB	1095.	14.726	UG/L	7.16
22	97	420	14:00	2	0.736	A BB	5476.	0.698	UG/L	0.34
23	117	431	14:22	2	0.755	A BB	3776.	0.538	UG/L	0.26
24	43	437	14:34	2	0.765	A BB	5234.	2.290	UG/L	1.11
25	83	448	14:56	2	0.785	A BB	4005.	0.696	UG/L	0.34
26	63	488	16:16	2	0.855	A BB	4079.	0.805	UG/L	0.39
27	75	497	16:34	2	0.870	A BB	3715.	0.738	UG/L	0.36
28	130	512	17:04	2	0.897	A BB	4064.	0.795	UG/L	0.39
29	129	533	17:46	2	0.933	A BB	1912.	0.705	UG/L	0.34
30	97	535	17:50	2	0.937	A BB	1855.	0.949	UG/L	0.46
31	78	528	17:36	2	0.925	A BB	11588.	0.930	UG/L	0.45
32	75	534	17:48	2	0.935	A BB	1567.	0.533	UG/L	0.26
~~33~~	~~63~~	~~571~~	~~19:02~~	~~2~~	~~1.000~~	~~A BB~~	~~1431.~~	~~1.525~~	~~UG/L~~	~~0.74~~ ND
34	173	613	20:26	2	1.074	A BB	521.	0.508	UG/L	0.25
35	43	626	20:52	3	0.905	A BB	4351.	3.756	UG/L	1.83
36	43	672	22:24	3	0.971	A BB	2776.	3.238	UG/L	1.57
37	164	683	22:46	3	0.987	A BB	3926.	0.847	UG/L	0.41
38	83	683	22:46	3	0.987	A BB	1467.	0.908	UG/L	0.44
39	92	722	24:04	3	1.043	A BB	8612.	1.066	UG/L	0.52
40	112	757	25:14	3	1.094	A BB	7360.	0.820	UG/L	0.40
41	106	818	27:16	3	1.182	A BB	4010.	0.851	UG/L	0.41
42	106	951	31:42	3	1.374	A BB	12560.	2.455	UG/L	1.19
43	106	982	32:44	3	1.419	A BB	13093.	2.781	UG/L	1.35
44	104	942	31:24	3	1.361	A BV	14179.	1.596	UG/L	0.78

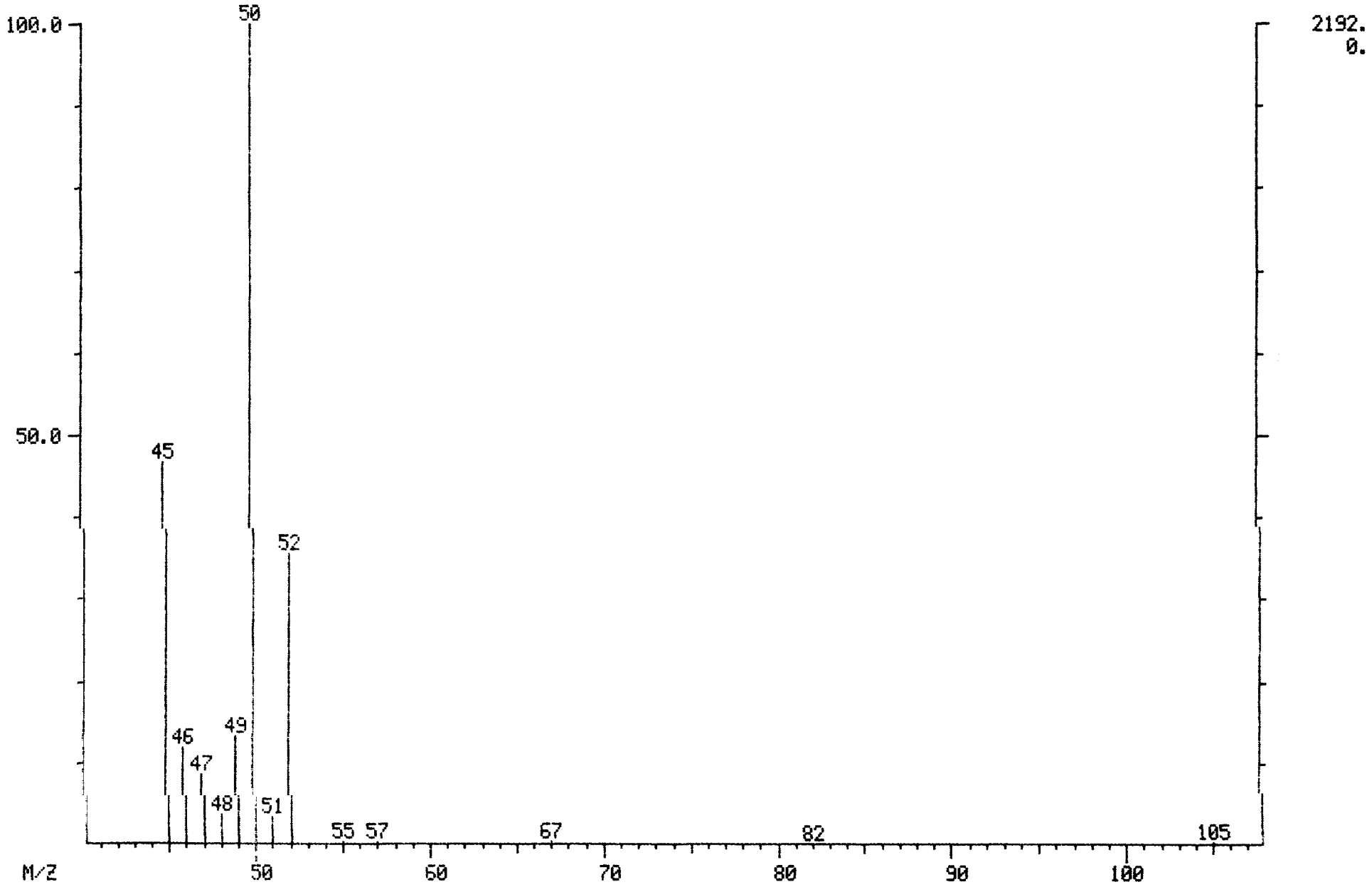
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	9:52	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
2	19:06	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
3	23:08	1.00	1.000	1.00	10.00	10.00	1.000	1.000	1.00
4	12:38	1.00	1.302	0.98	10.28	10.00	2.950	2.869	1.03
5	17:26	1.00	0.917	1.00	10.23	10.00	2.059	2.013	1.02
6	23:52	1.00	1.038	1.00	10.63	10.00	2.889	2.718	1.06
7	1:38	0.96	0.181	0.88	2.11	20.00	0.455	4.320	0.11
8	2:36	1.00	0.285	0.93	2.08	20.00	0.377	3.627	0.10
9	3:22	0.99	0.361	0.94	1.84	20.00	0.401	4.374	0.09
10	4:22	1.01	0.462	0.97	1.96	20.00	0.297	3.028	0.10

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
11	6:30	1.01	0.681	0.98	0.94	15.00	0.171	2.737	0.06
12	7:06	1.01	0.757	0.96	42.66	375.00	0.022	0.190	0.11
13	7:06	1.07	0.757	1.02	1.79	375.00	0.000	0.023	0.00
14	8:06	1.01	0.833	1.00	1.51	12.50	0.166	1.369	0.12
15	7:48	1.02	0.826	0.98	40.79	375.00	0.019	0.179	0.11
16	9:22	1.00	0.955	1.00	0.71	15.00	0.136	2.899	0.05
17	10:40	1.00	1.090	0.99	0.86	15.00	0.442	7.686	0.06
18	11:24	1.00	1.170	0.99	0.73	15.00	0.145	2.970	0.05
19	12:02	0.99	1.229	0.99	0.93	15.00	0.471	7.593	0.06
20	12:44	1.00	1.312	0.99	0.99	15.00	0.211	3.180	0.07
21	12:36	1.00	0.664	1.00	14.73	125.00	0.001	0.012	0.12
22	14:02	1.00	0.731	1.01	0.70	15.00	0.060	1.285	0.05
23	14:26	1.00	0.752	1.00	0.54	15.00	0.041	1.149	0.04
24	14:34	1.00	0.764	1.00	2.29	37.50	0.023	0.374	0.06
25	15:00	1.00	0.780	1.01	0.70	15.00	0.044	0.942	0.05
26	16:20	1.00	0.854	1.00	0.80	15.00	0.045	0.830	0.05
27	16:34	1.00	0.868	1.00	0.74	18.00	0.034	0.825	0.04
28	17:06	1.00	0.898	1.00	0.79	15.00	0.044	0.838	0.05
29	17:48	1.00	0.930	1.00	0.70	15.00	0.021	0.444	0.05
30	17:54	1.00	0.937	1.00	0.95	15.00	0.020	0.320	0.06
31	17:36	1.00	0.924	1.00	0.93	15.00	0.127	2.042	0.06
32	17:52	1.00	0.937	1.00	0.53	12.00	0.021	0.481	0.04
33	18:56	1.01	0.995	1.01	1.53	15.00	0.016	0.154	0.10
34	20:30	1.00	1.076	1.00	0.51	15.00	0.006	0.168	0.03
35	20:56	1.00	0.907	1.00	3.76	25.00	0.045	0.297	0.15
36	22:28	1.00	0.974	1.00	3.24	25.00	0.028	0.220	0.13
37	22:48	1.00	0.990	1.00	0.85	15.00	0.067	1.189	0.06
38	22:48	1.00	0.988	1.00	0.91	15.00	0.025	0.414	0.06
39	24:04	1.00	1.046	1.00	1.07	15.00	0.147	2.072	0.07
40	25:14	1.00	1.097	1.00	0.82	15.00	0.126	2.303	0.05
41	27:16	1.00	1.186	1.00	0.85	15.00	0.069	1.209	0.06
42	31:42	1.00	1.378	1.00	2.45	30.00	0.107	1.312	0.08
43	32:44	1.00	1.425	1.00	2.78	37.60	0.089	1.207	0.07
44	31:24	1.00	1.367	1.00	1.60	12.50	0.291	2.277	0.13

MASS SPECTRUM
08/11/89 14:08:00 + 1:34
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 45 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #47
CALI: MDL0811 #3

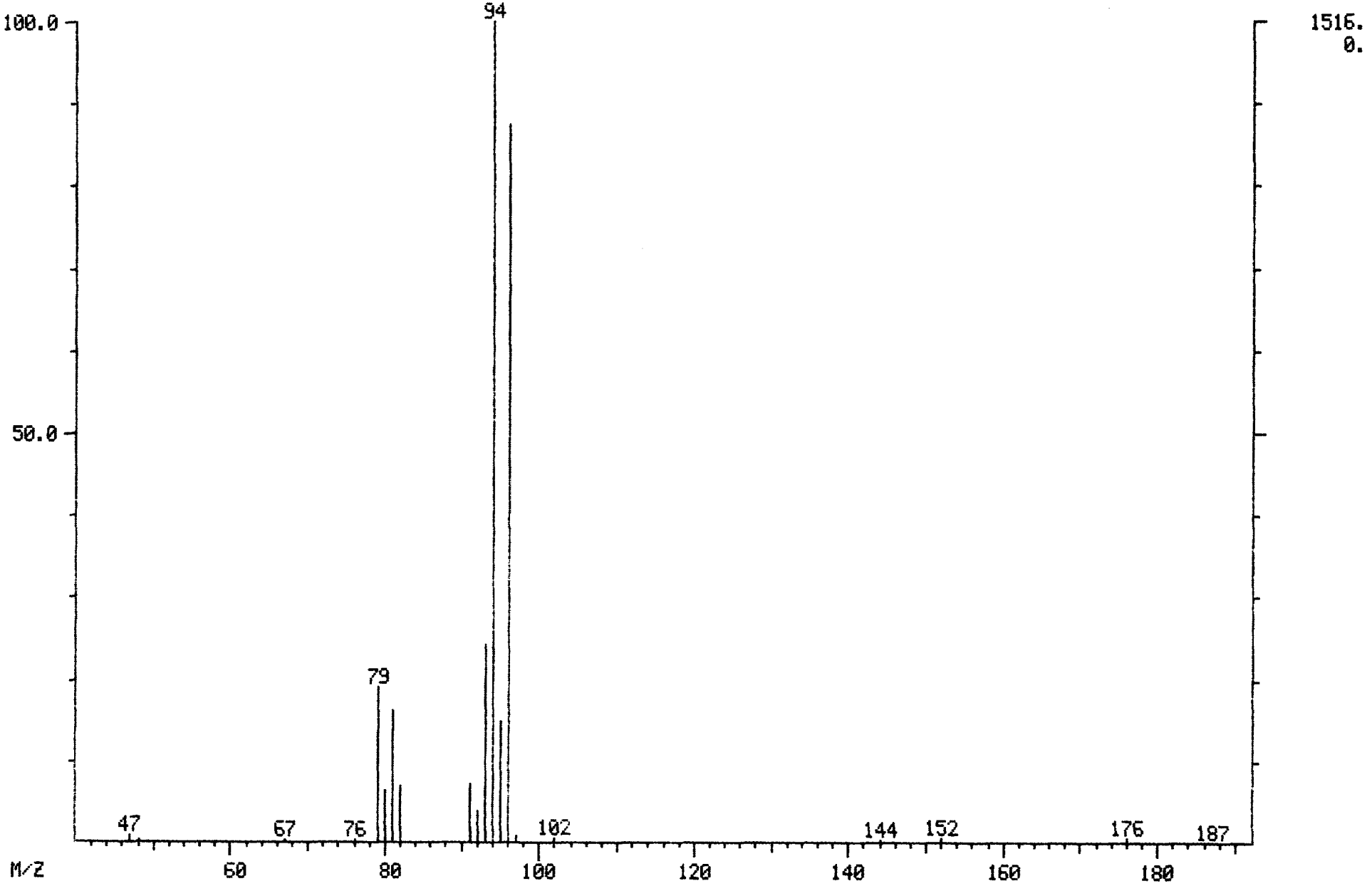
BASE M/Z: 50
RIC: 4928.



MASS SPECTRUM
08/11/89 14:08:00 + 2:36
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 44 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #78
CALI: MDL0811 #3

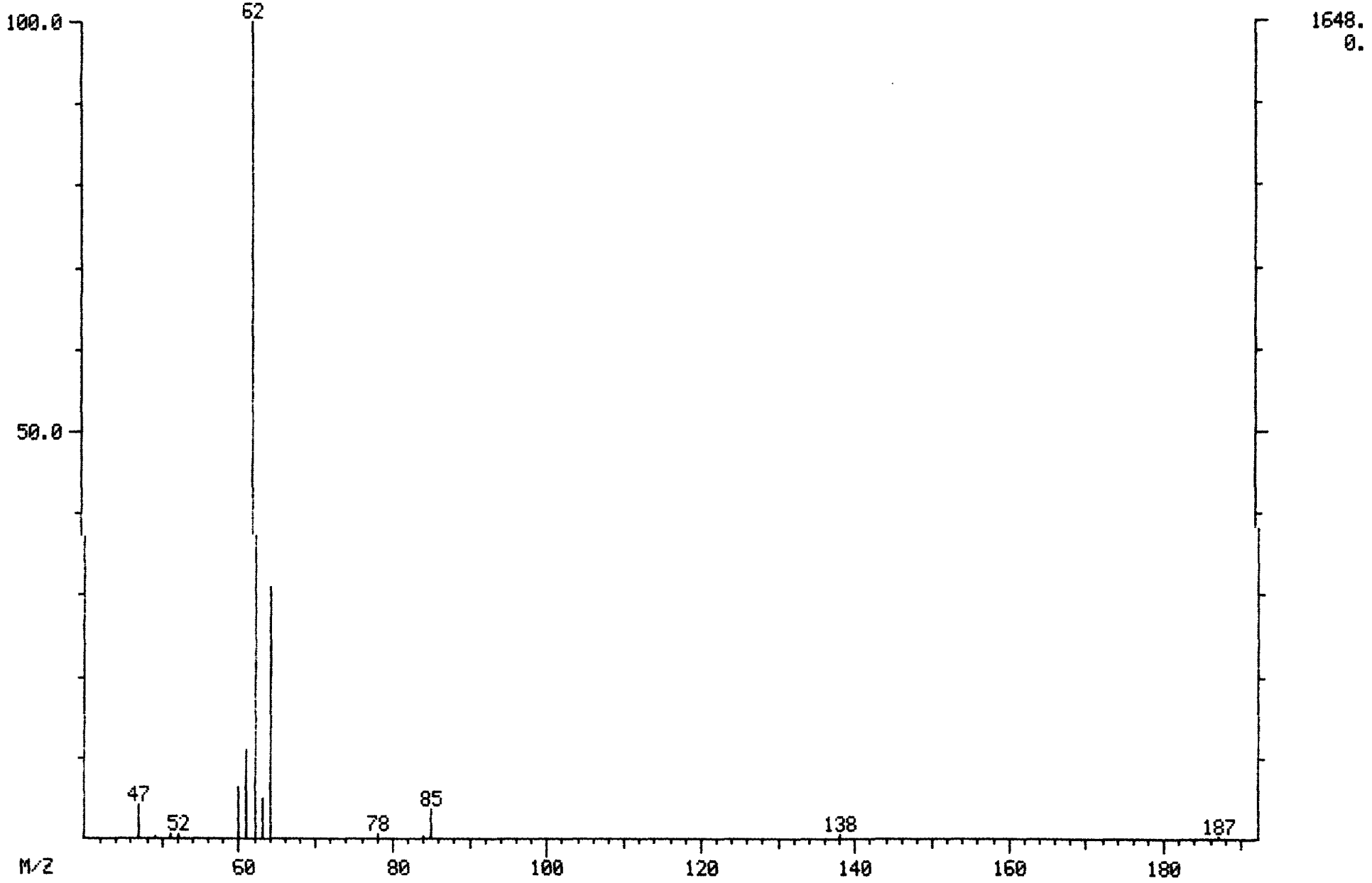
BASE M/Z: 94
RIC: 4424.



MASS SPECTRUM
08/11/89 14:08:00 + 3:20
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 47 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #100
CALI: MDL0811 #3

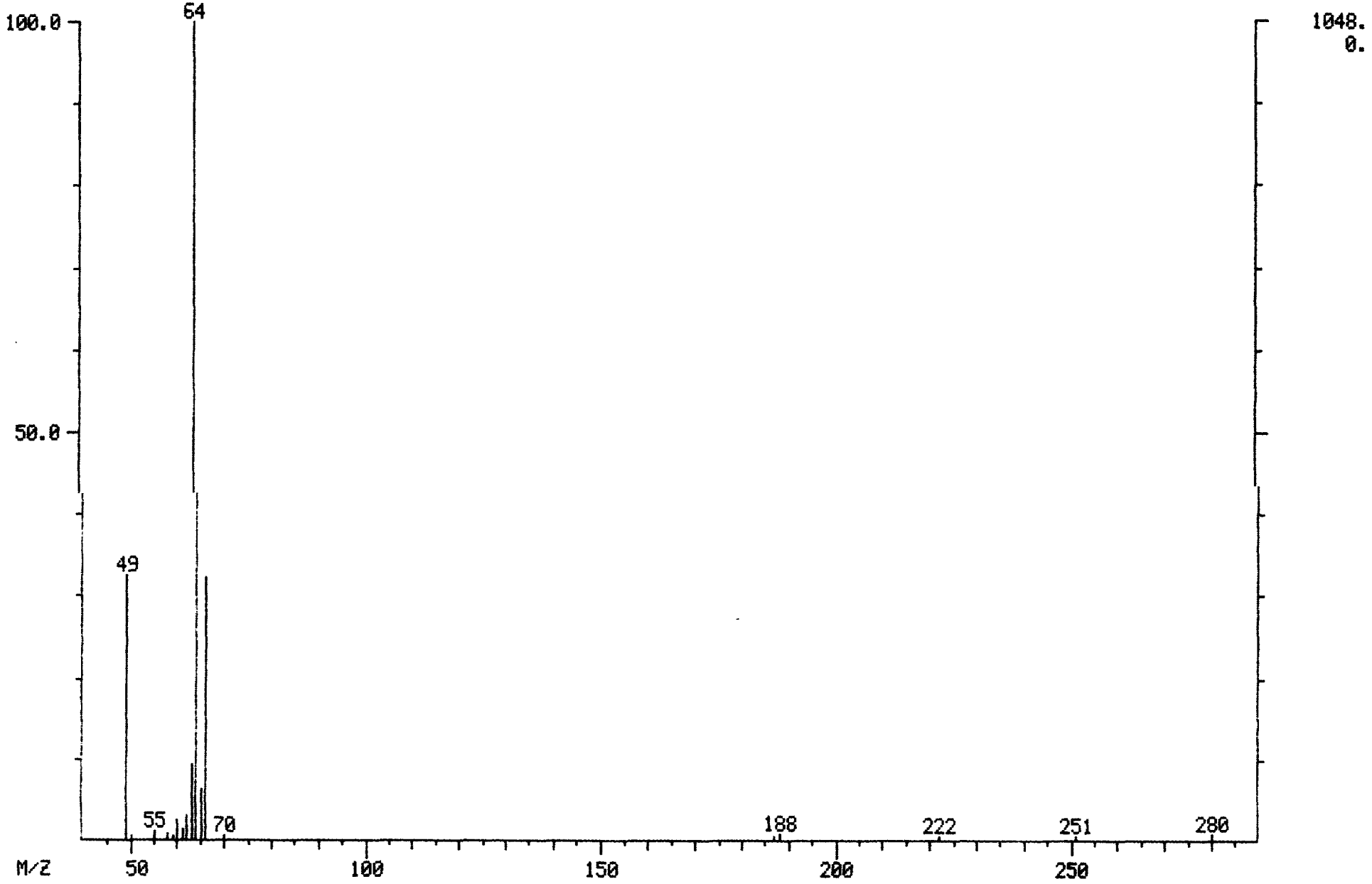
BASE M/Z: 62
RIC: 2708.



MASS SPECTRUM
08/11/89 14:08:00 + 4:24
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 55 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #132
CALI: MDL0811 #3

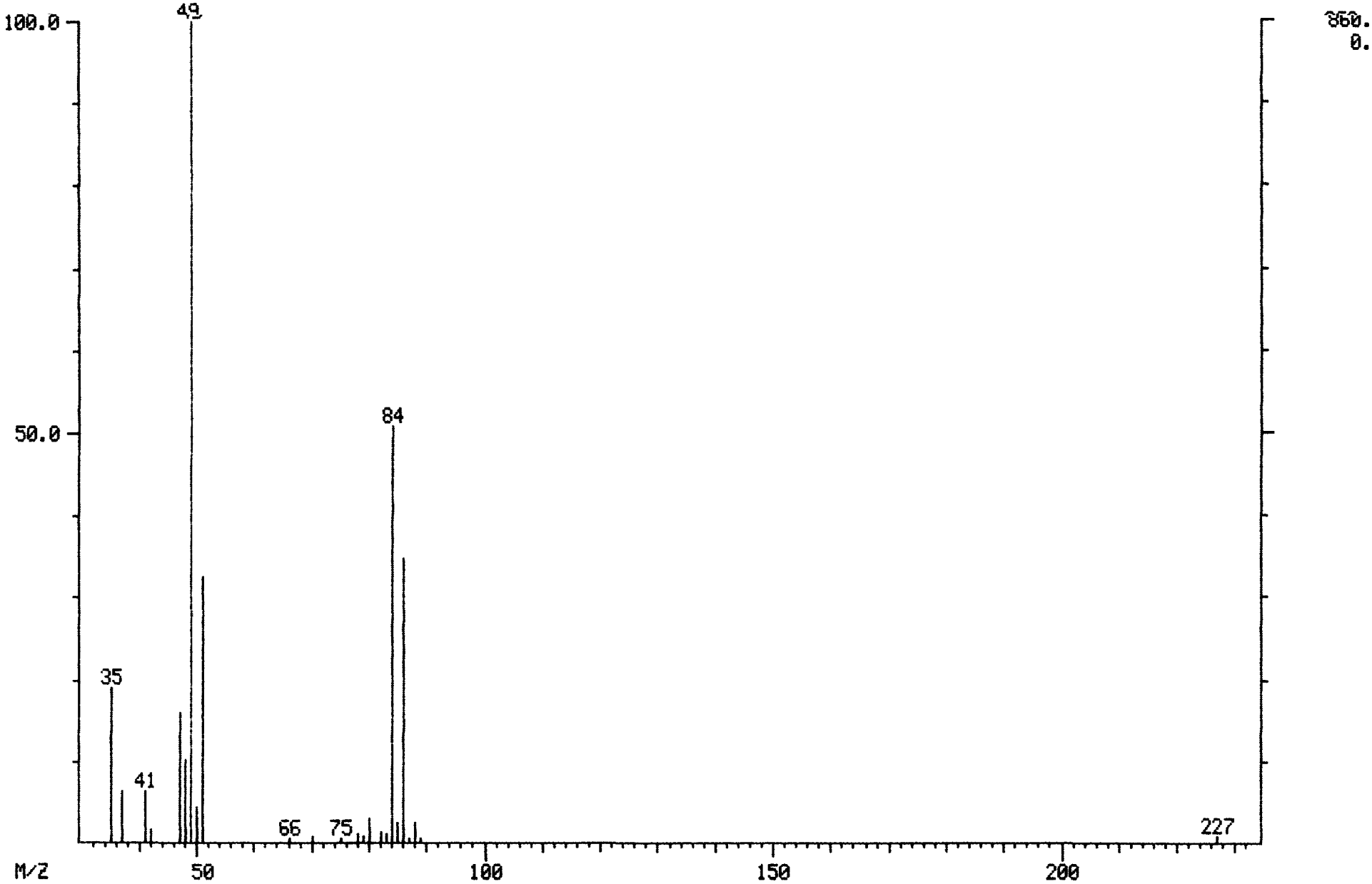
BASE M/Z: 64
RIC: 2040.



MASS SPECTRUM
08/11/89 14:08:00 + 6:32
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 72 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #196
CALI: MDL0811 #3

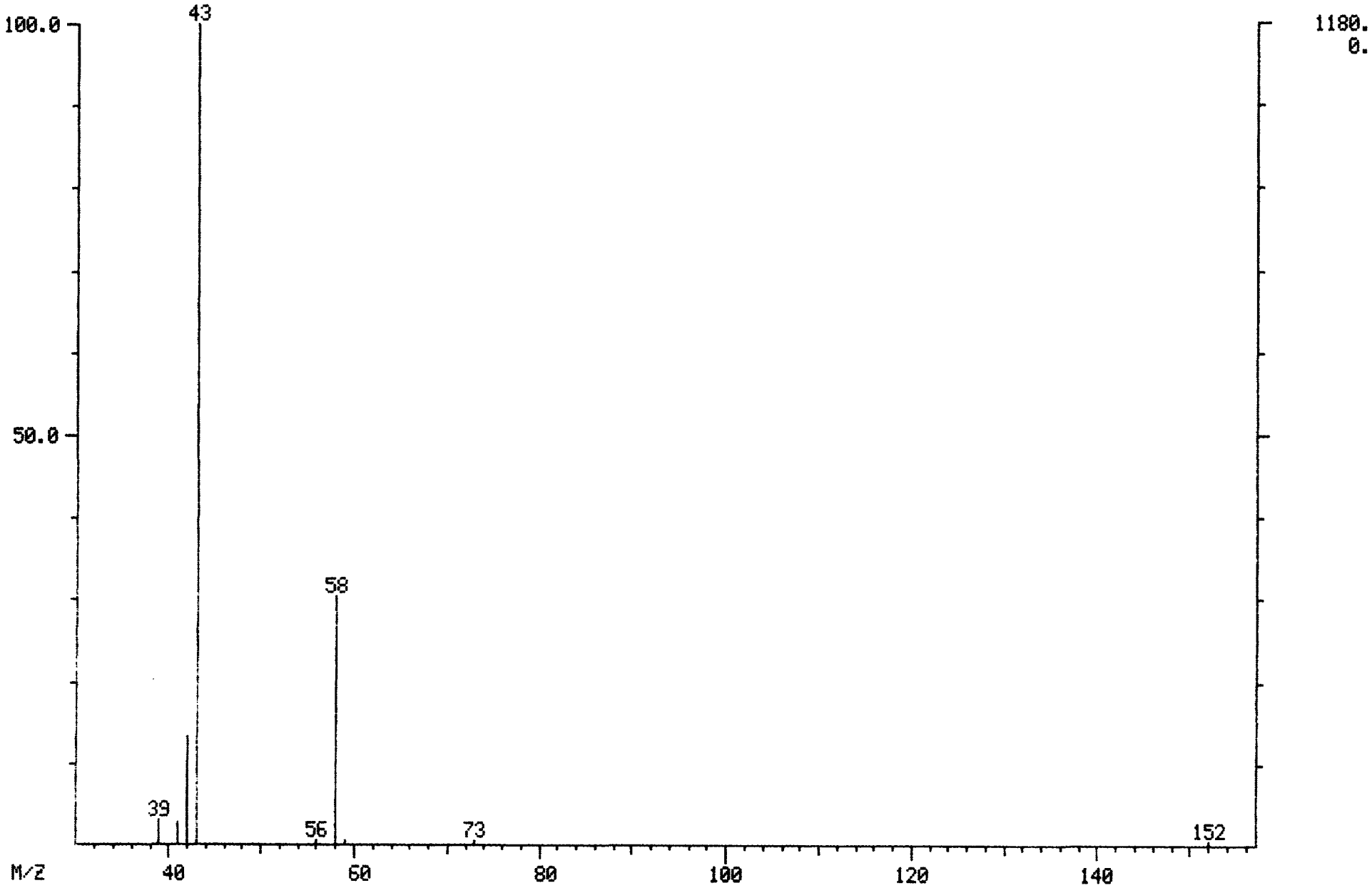
BASE M/Z: 49
RIC: 2576.



MASS SPECTRUM
08/11/89 14:08:00 + 7:10
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 77 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #215
CALI: MDL0811 #3

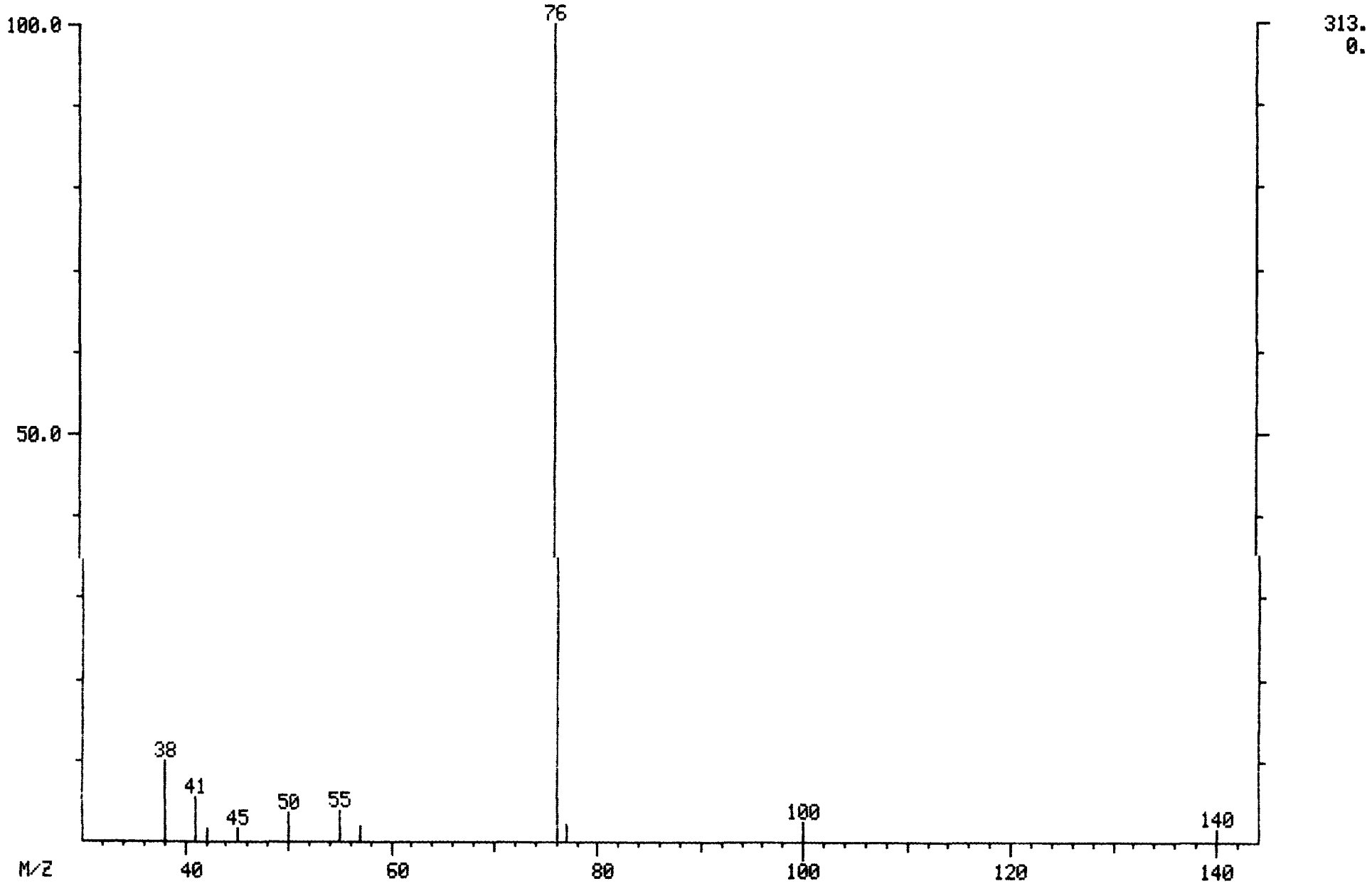
BASE M/Z: 43
RIC: 1794.



MASS SPECTRUM
08/11/89 14:08:00 + 8:10
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 85 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #245
CALI: MDL0811 #3

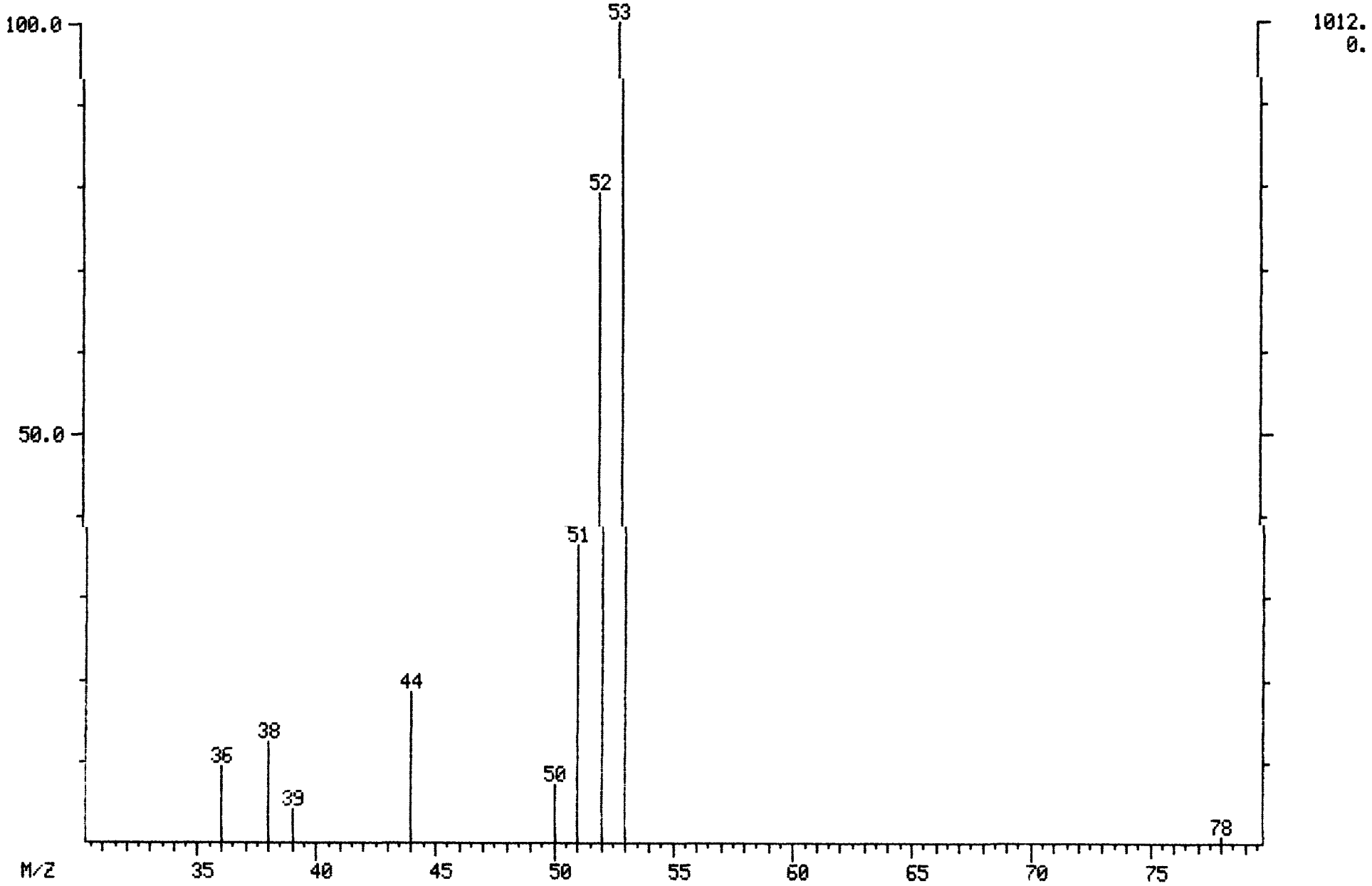
BASE M/Z: 76
RIC: 420.



MASS SPECTRUM
08/11/89 14:08:00 + 7:56
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 83 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #238
CALI: MDL0811 #3

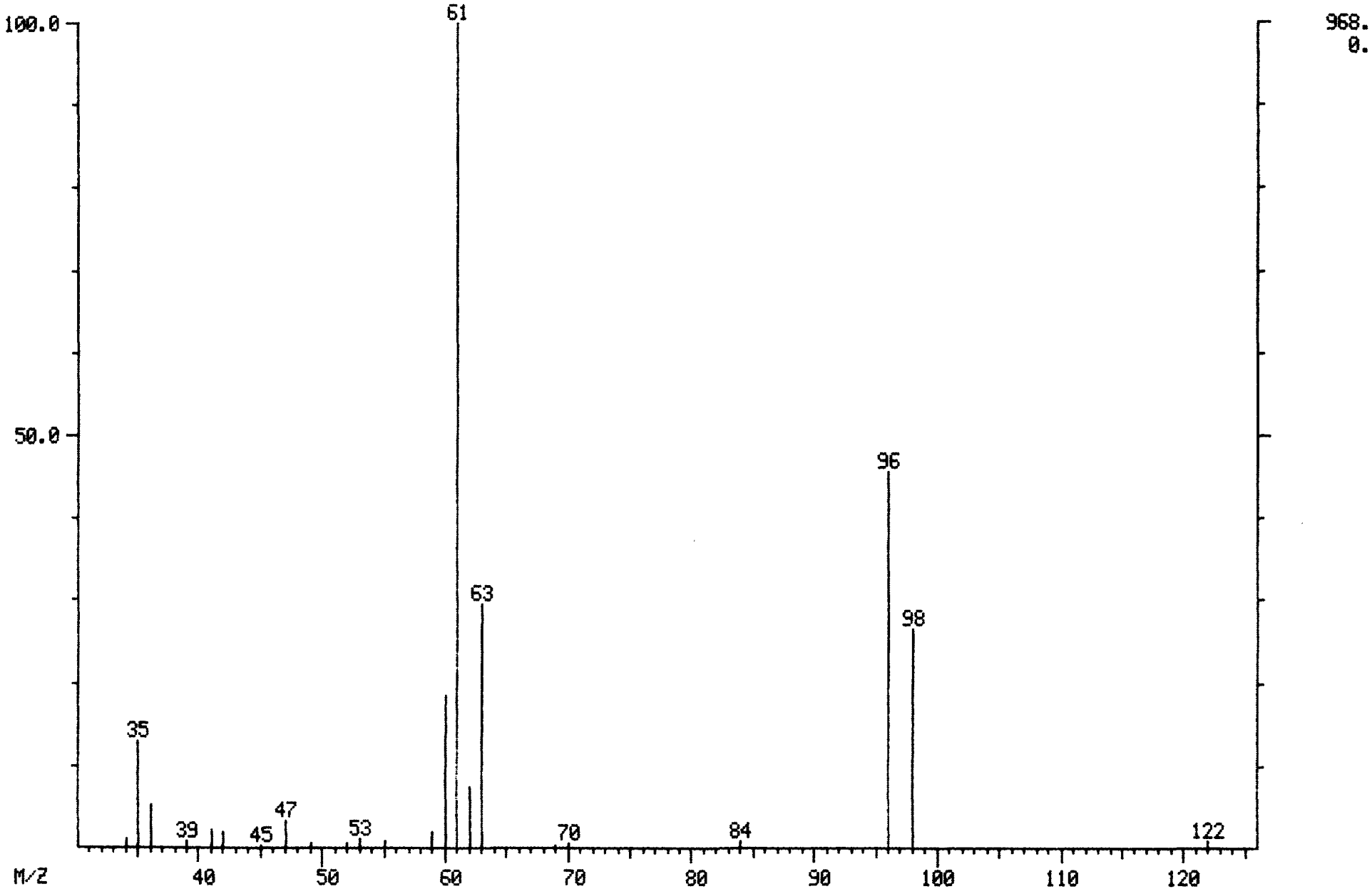
BASE M/Z: 53
RIC: 2716.



MASS SPECTRUM
08/11/89 14:08:00 + 9:22
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 95 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #281
CALI: MDL0811 #3

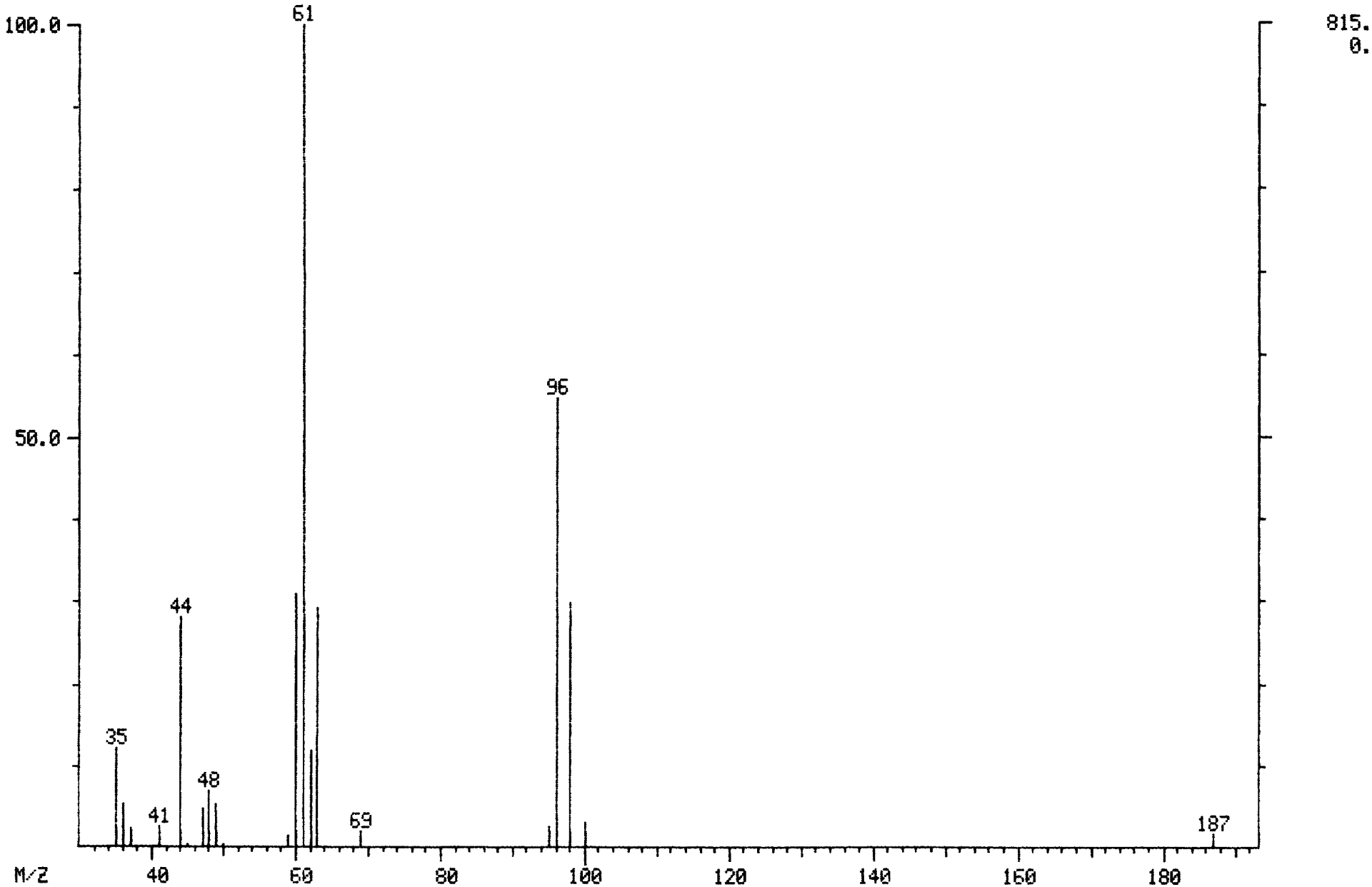
BASE M/Z: 61
RIC: 2560.



MASS SPECTRUM
08/11/89 14:08:00 + 11:24
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 111 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #342
CALI: MDL0811 #3

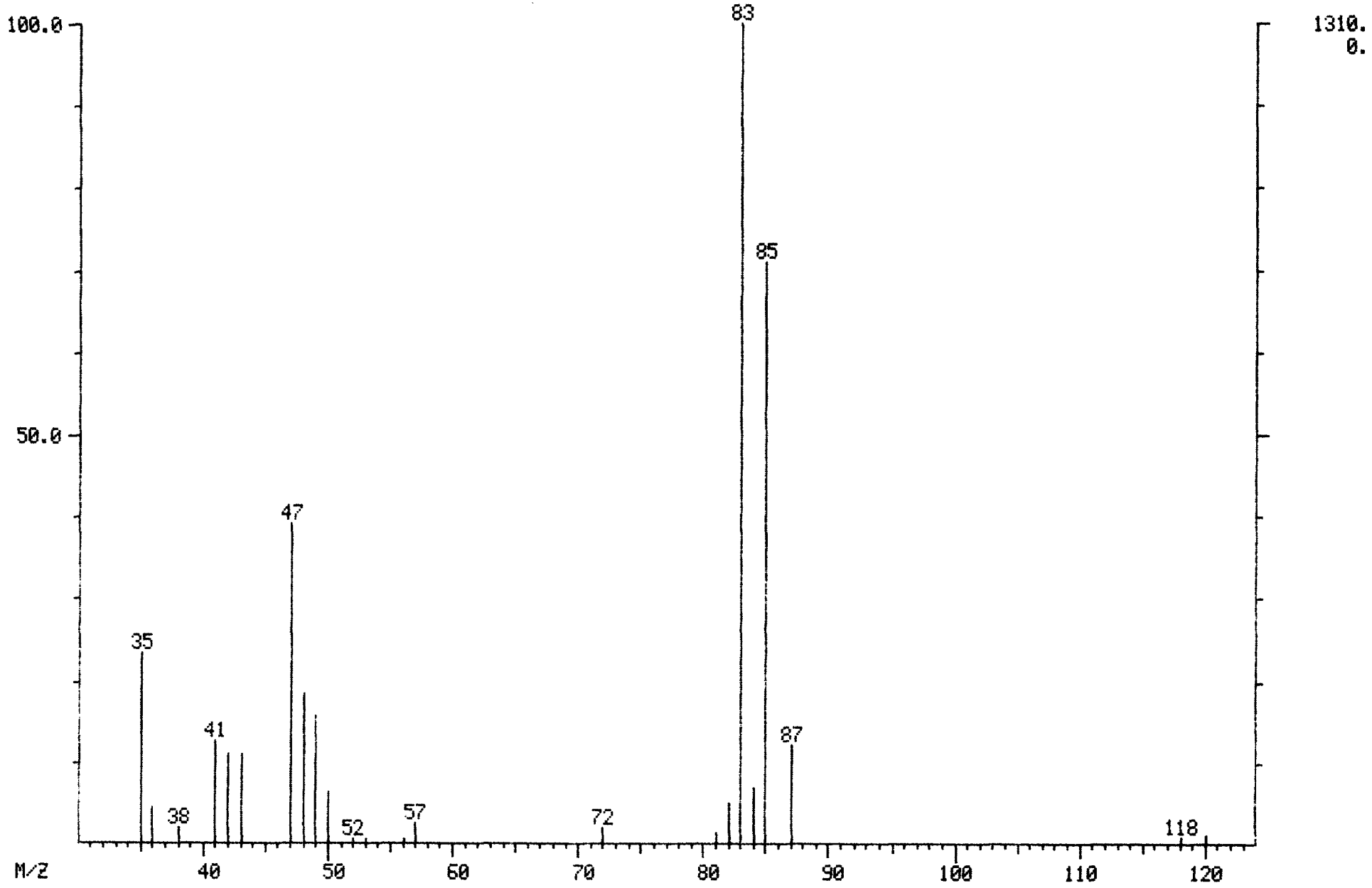
BASE M/Z: 61
RIC: 2736.



MASS SPECTRUM
08/11/89 14:08:00 + 11:58
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 116 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #359
CALI: MDL0811 #3

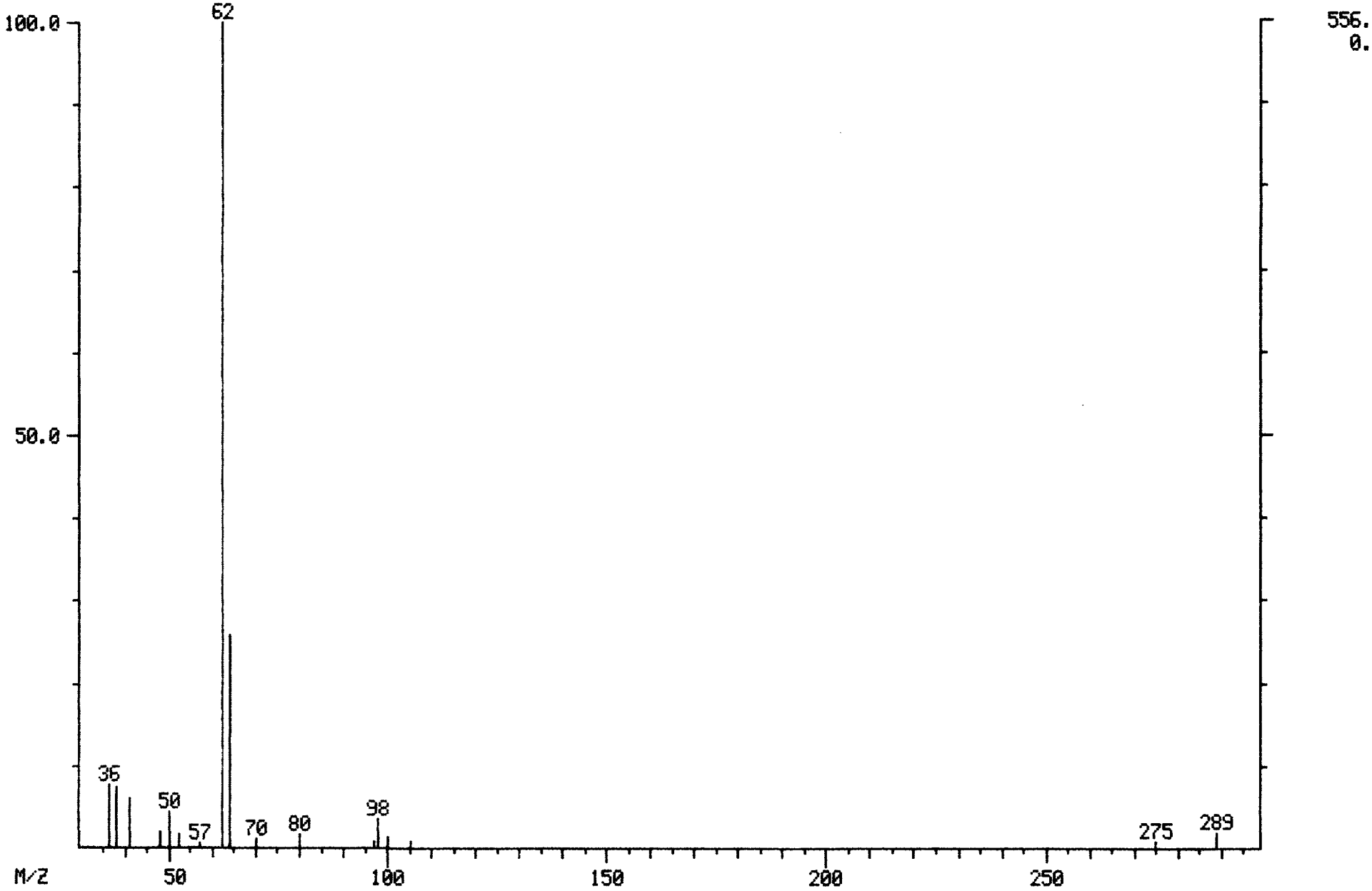
BASE M/Z: 83
RIC: 4568.



MASS SPECTRUM
08/11/89 14:08:00 + 12:44
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 122 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #382
CALI: MDL0811 #3

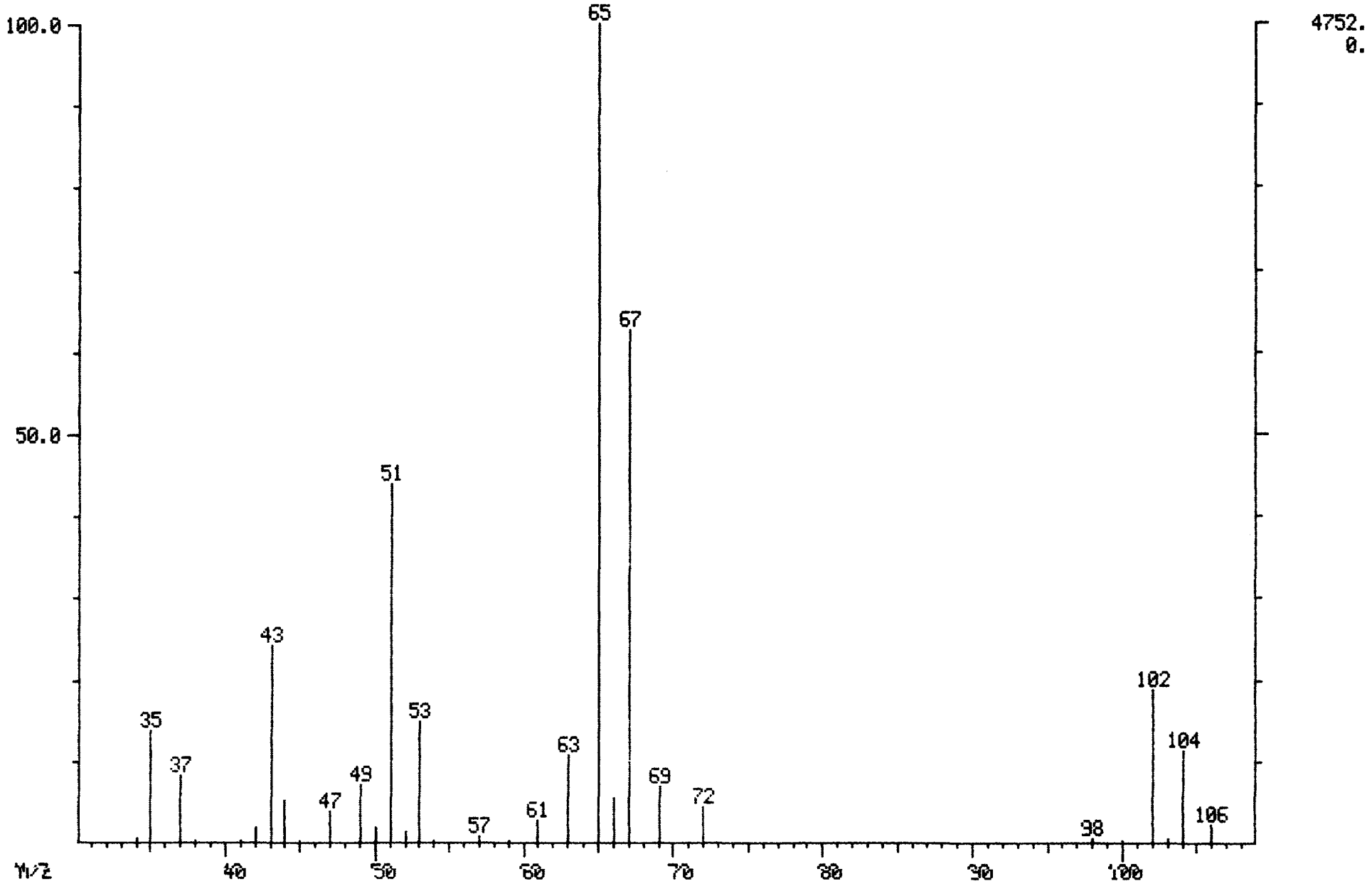
BASE M/Z: 62
RIC: 935.



MASS SPECTRUM
08/11/89 14:08:00 + 12:36
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 121 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #378
CALI: MDL0811 #3

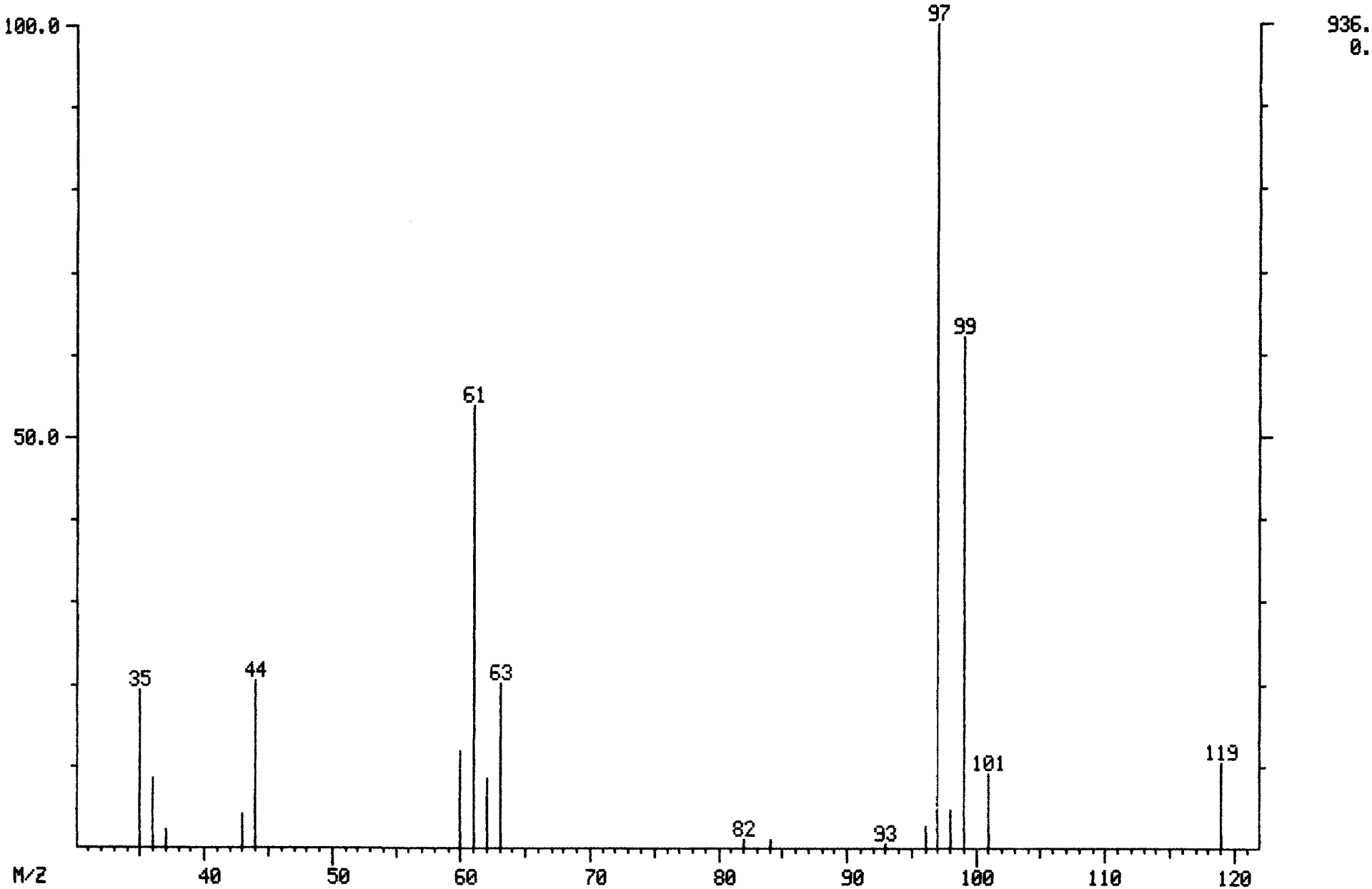
BASE M/Z: 65
RIC: 16960.



MASS SPECTRUM
08/11/89 14:08:00 + 14:00
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 132 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #420
CALI: MDL0811 #3

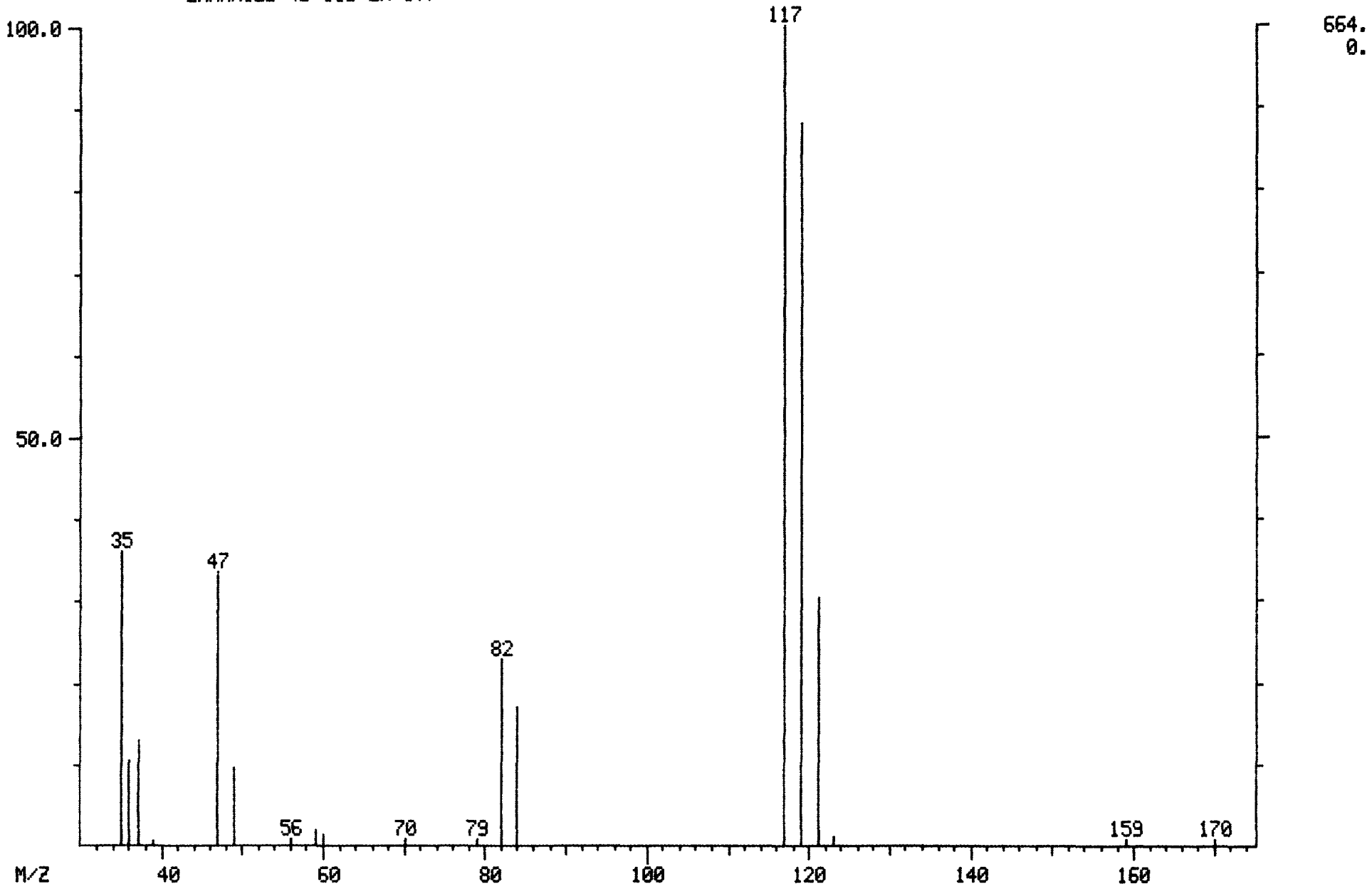
BASE M/Z: 97
RIC: 3200.



MASS SPECTRUM
08/11/89 14:08:00 + 14:22
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 135 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #431
CALI: MDL0811 #3

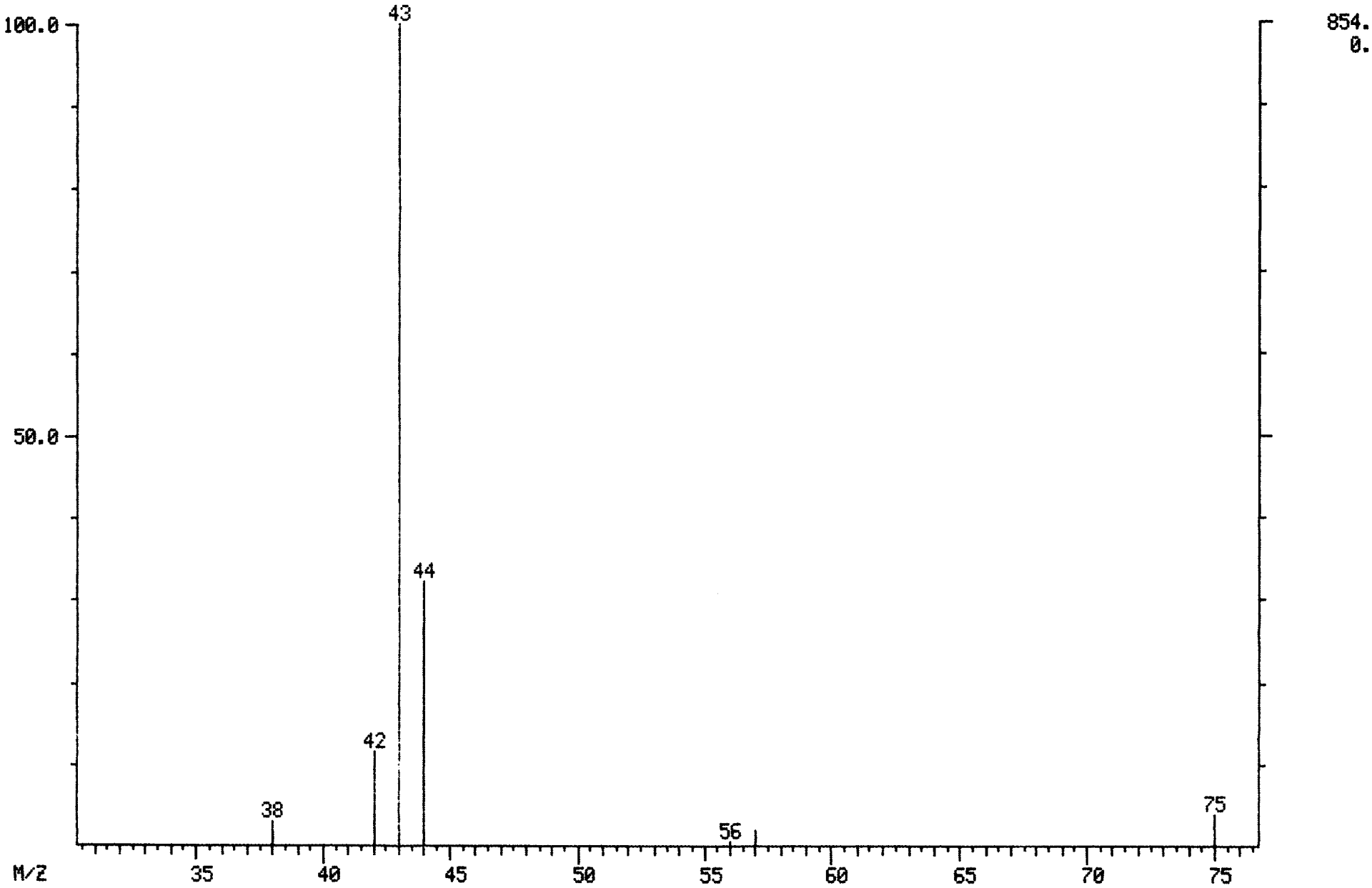
BASE M/Z: 117
RIC: 2456.



MASS SPECTRUM
08/11/89 14:08:00 + 14:34
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 136 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #437
CALI: MDL0811 #3

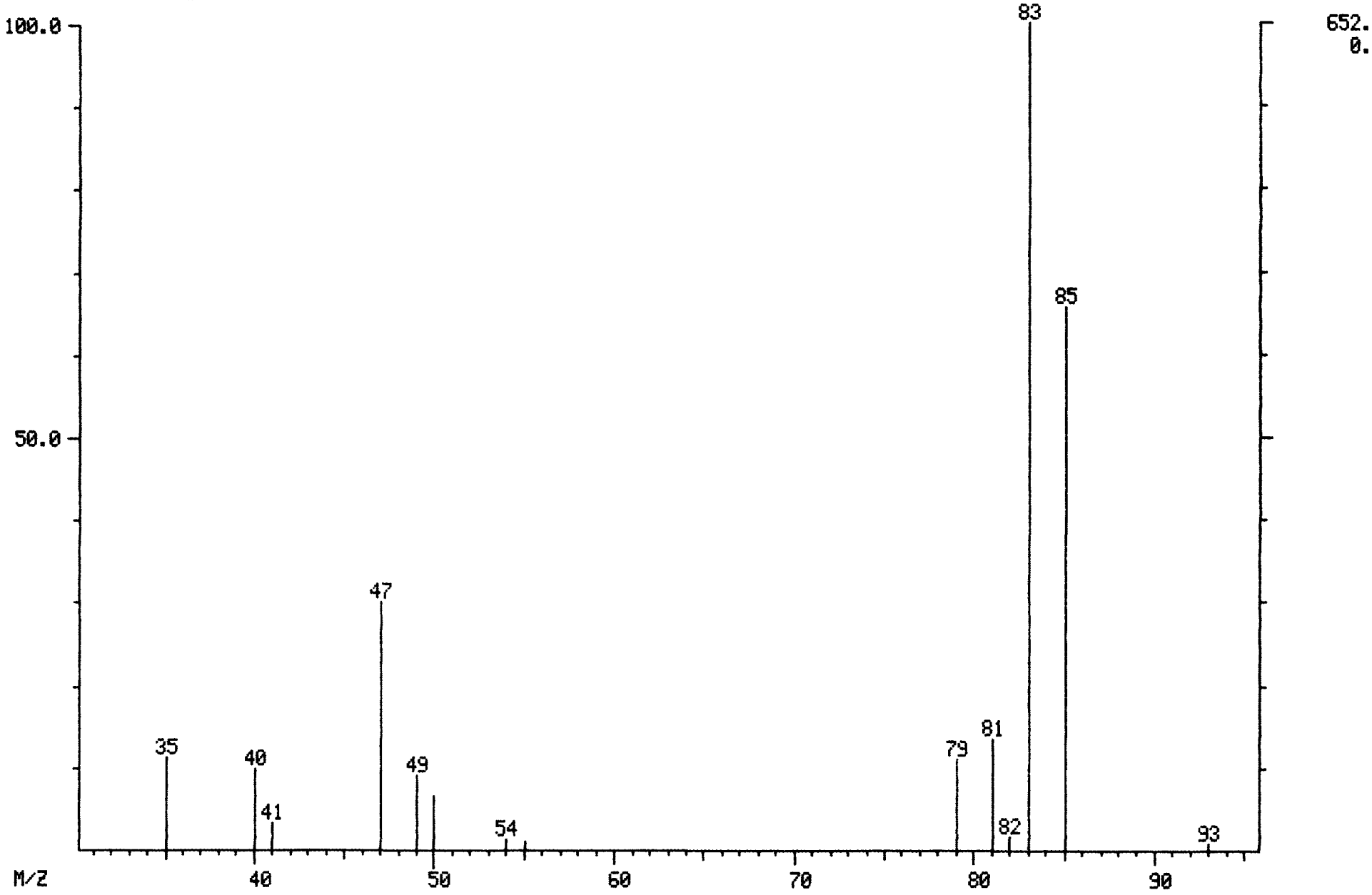
BASE M/Z: 43
RIC: 1310.



MASS SPECTRUM
08/11/89 14:08:00 + 14:56
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 140 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #448
CALI: MDL0811 #3

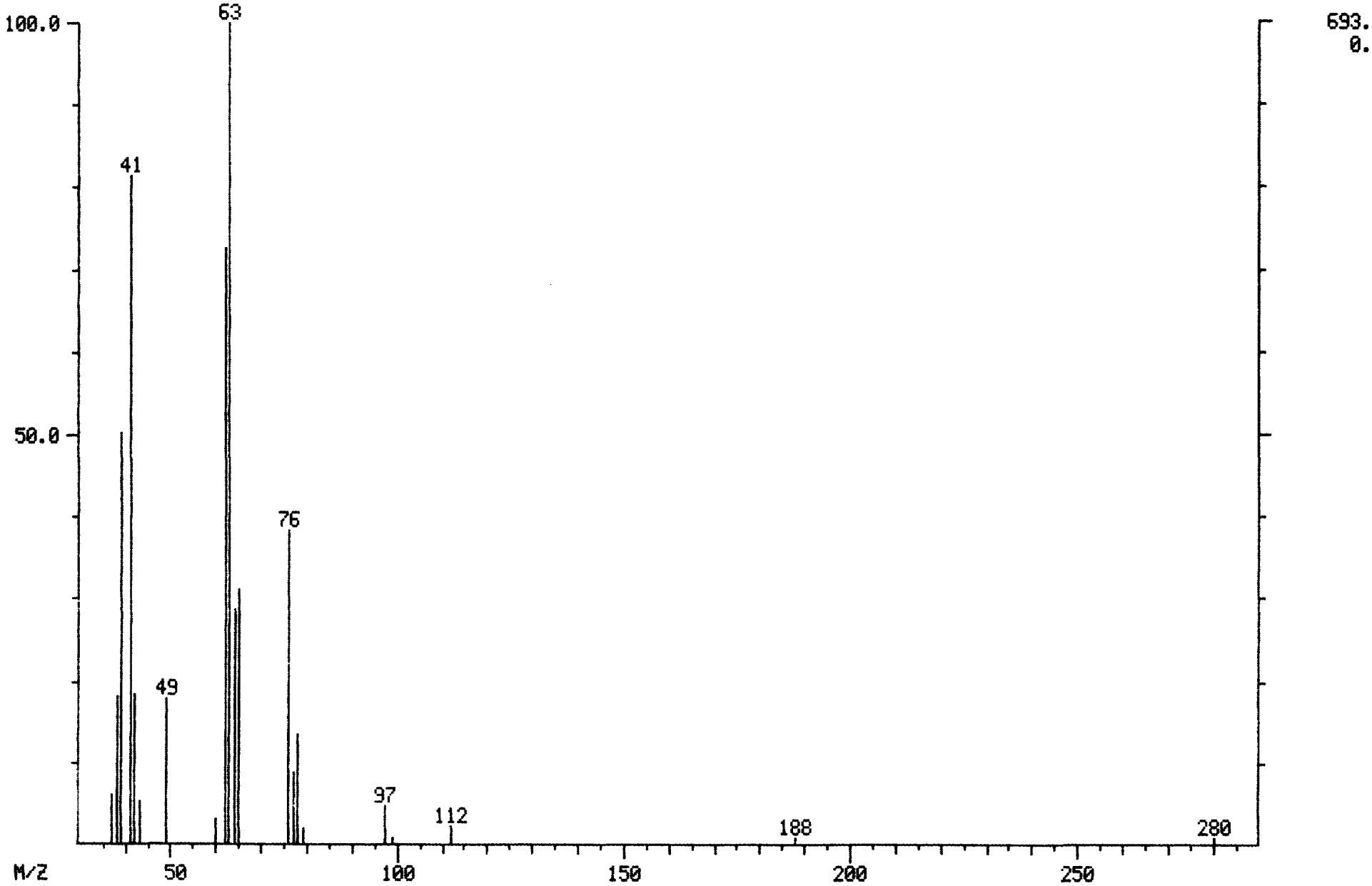
BASE M/Z: 83
RIC: 1732.



MASS SPECTRUM
08/11/89 14:08:00 + 16:16
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 150 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #488
CALI: MDL0811 #3

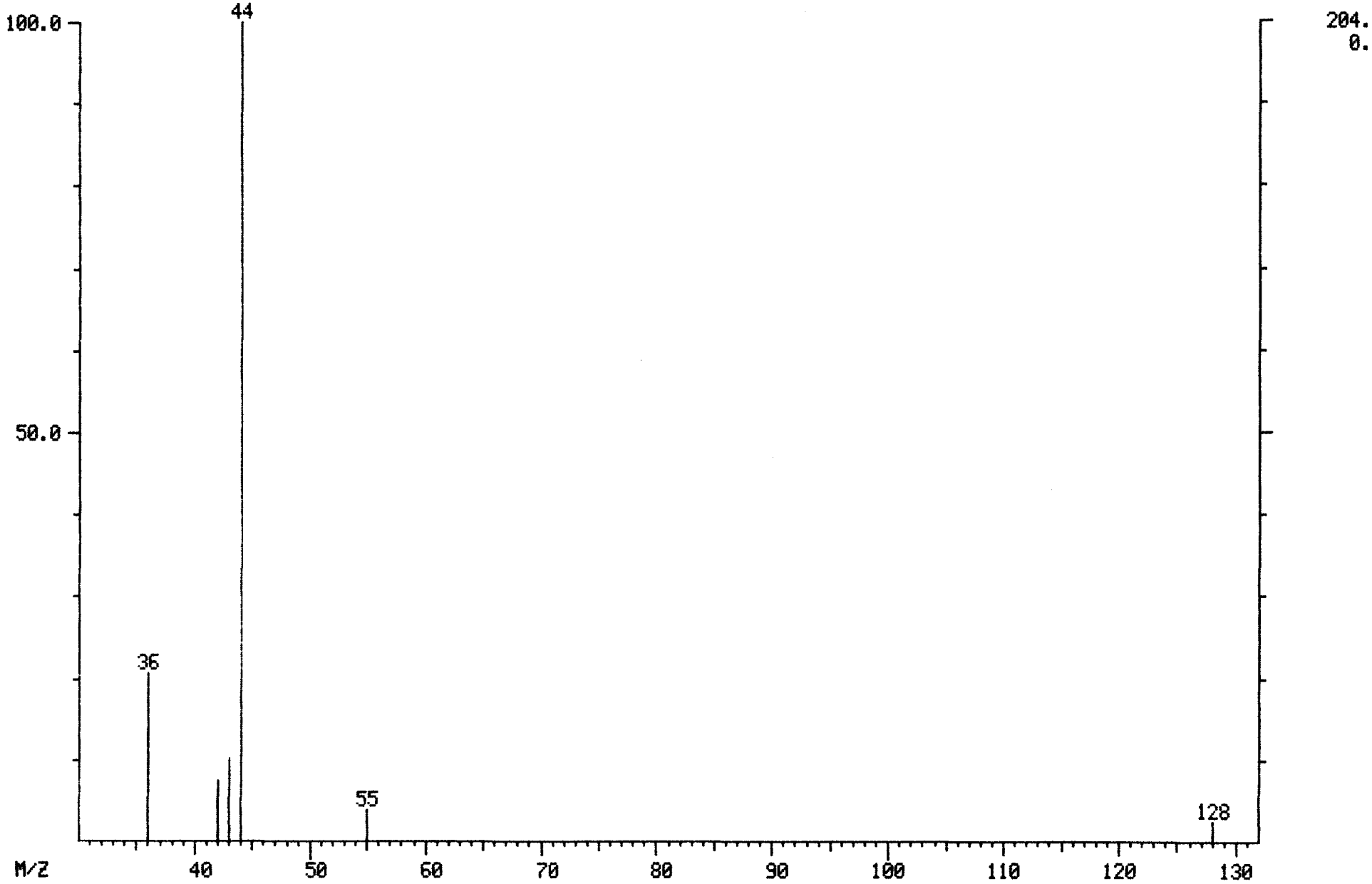
BASE M/Z: 63
RIC: 3524.



MASS SPECTRUM
08/11/89 14:08:00 + 15:34
SAMPLE: CLP.0811..MDL0811.L.W..U.EPA.
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 144 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #467
CALI: MDL0811 #3

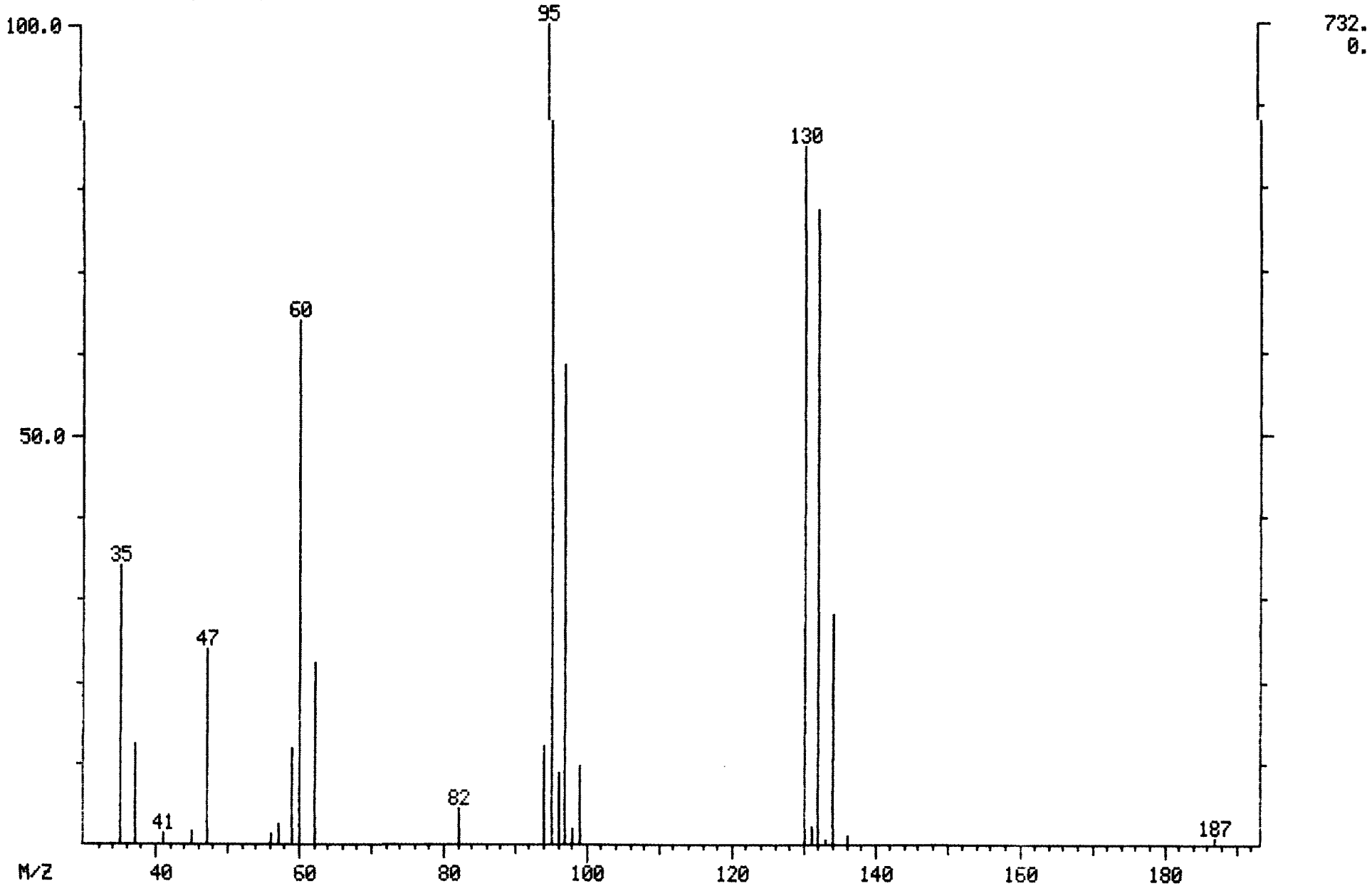
BASE M/Z: 44
RIC: 295.



MASS SPECTRUM
08/11/89 14:08:00 + 17:04
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 157 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #512
CALI: MDL0811 #3

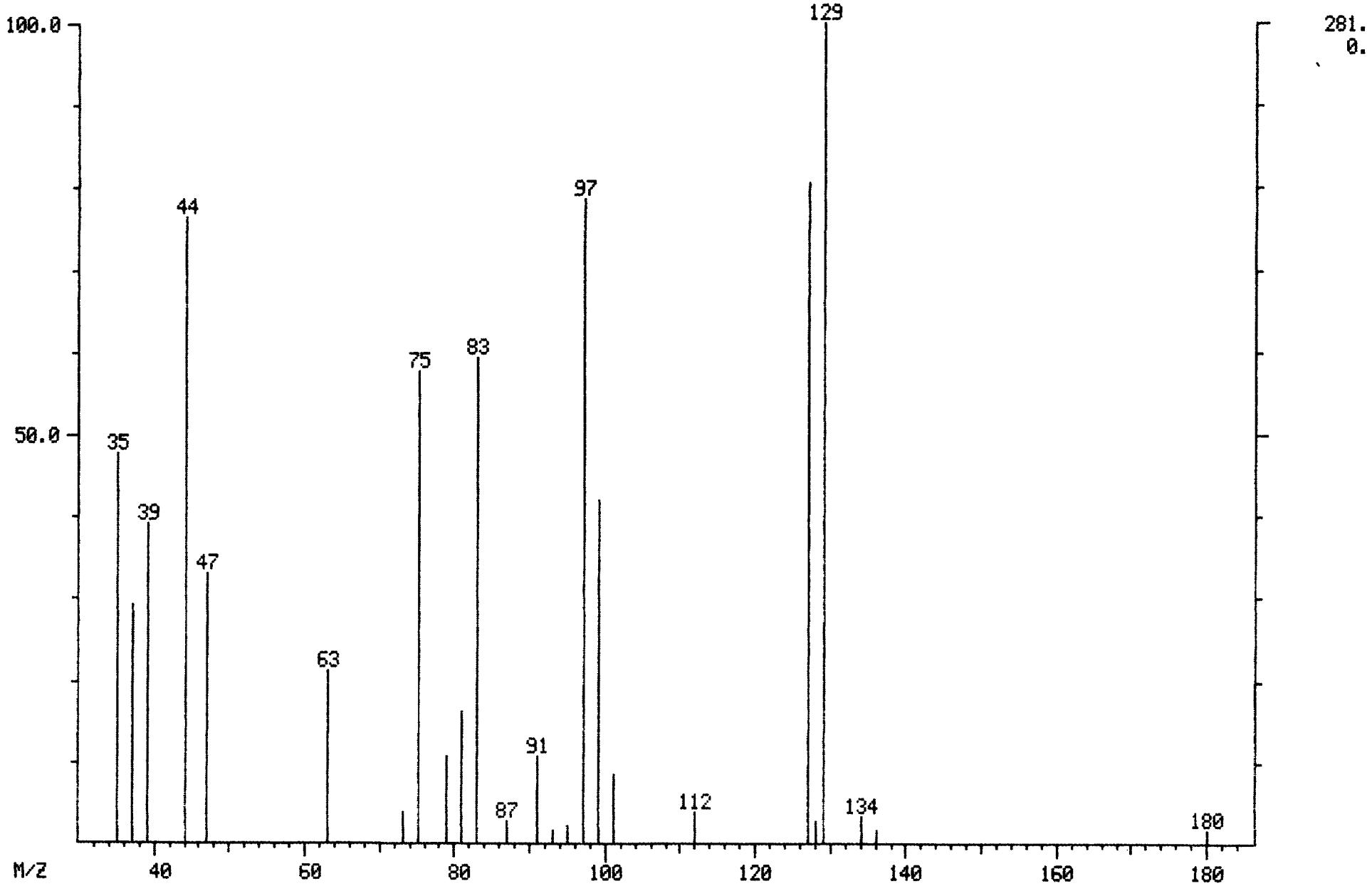
BASE M/Z: 95
RIC: 4160.



MASS SPECTRUM
08/11/89 14:08:00 + 17:46
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 162 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #533
CALI: MDL0811 #3

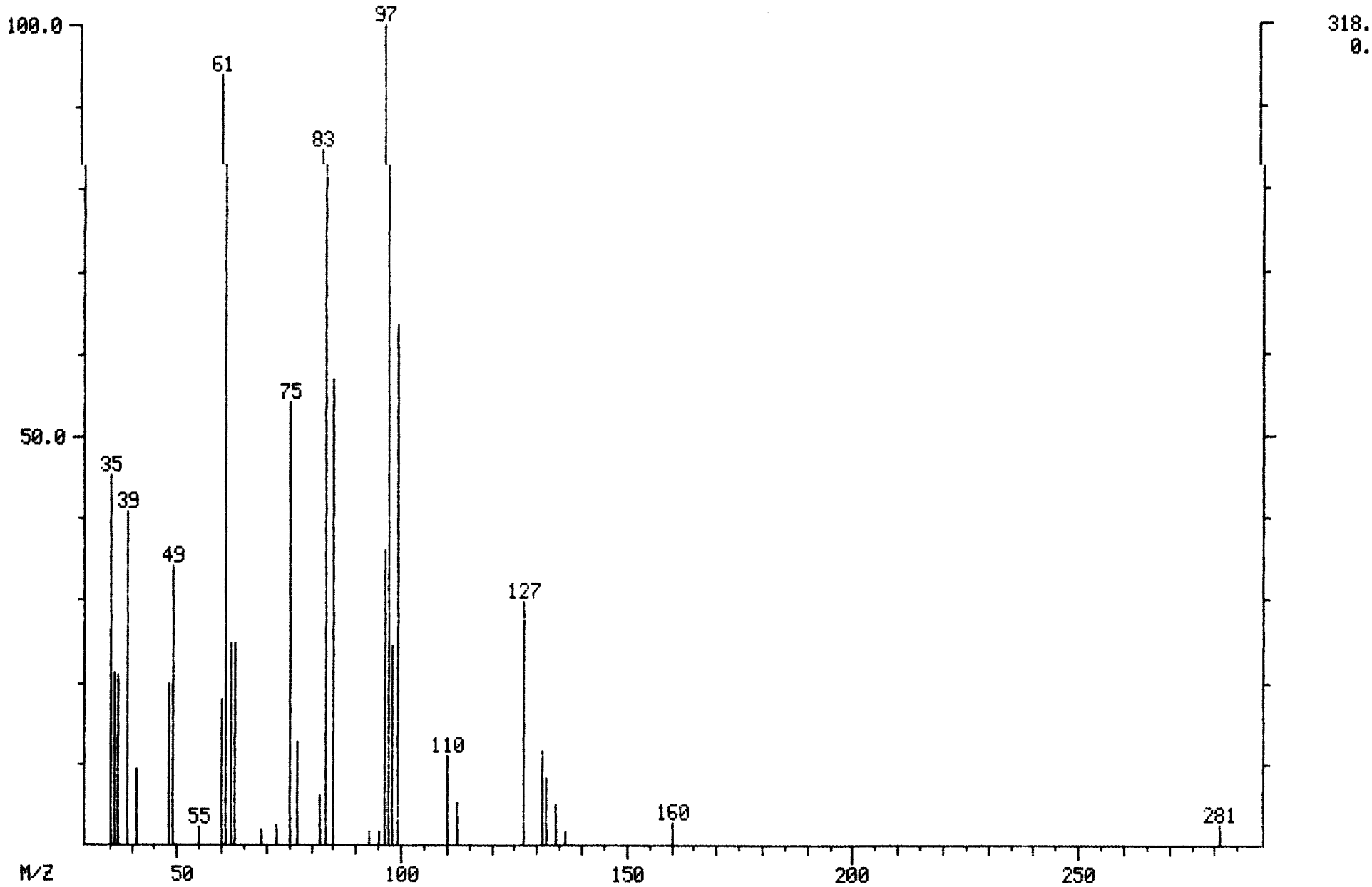
BASE M/Z: 129
RIC: 2068.



MASS SPECTRUM
08/11/89 14:08:00 + 17:50
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 163 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #535
CALI: MDL0811 #3

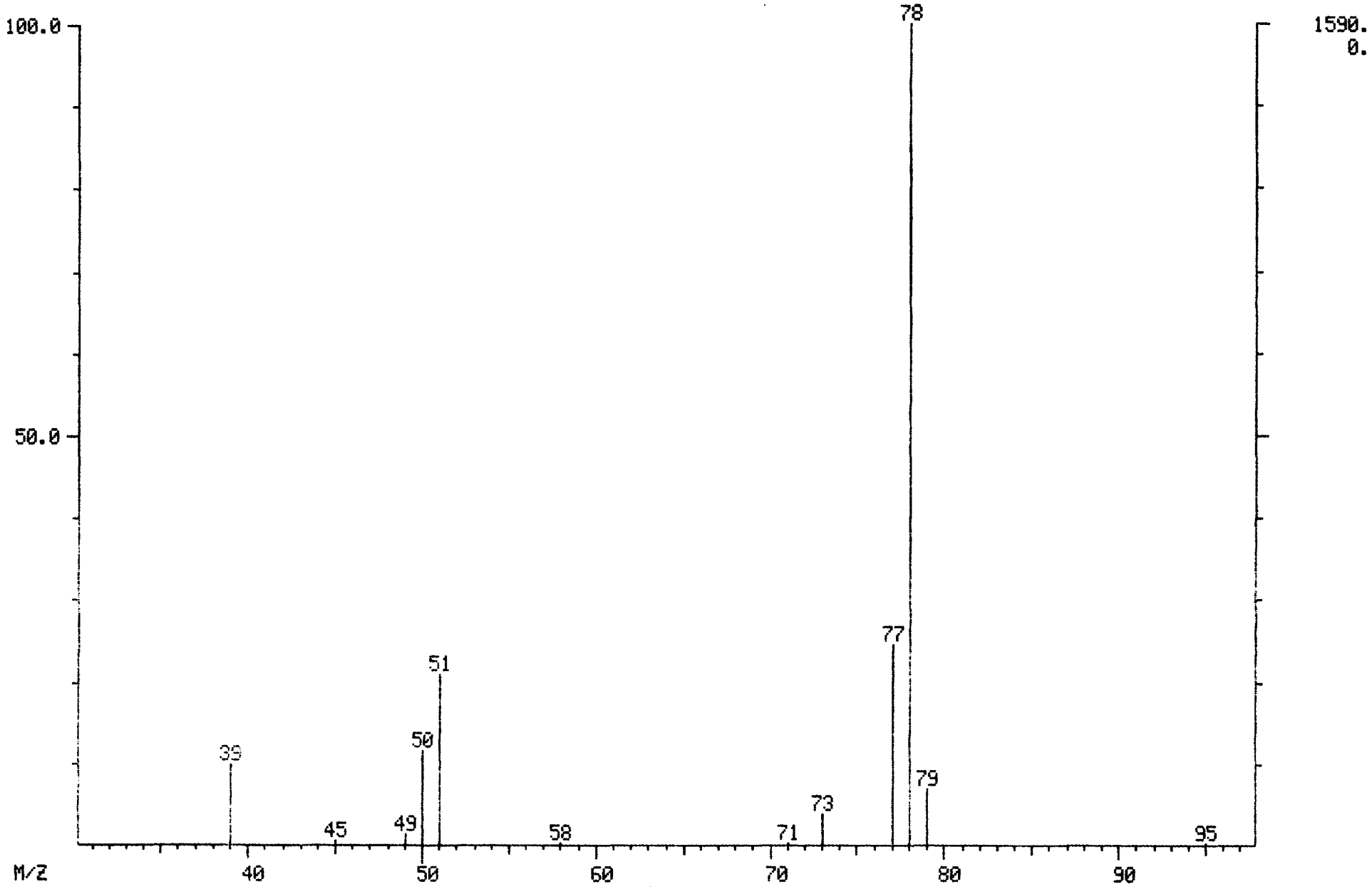
BASE M/Z: 97
RIC: 2812.



MASS SPECTRUM
08/11/89 14:08:00 + 17:36
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 161 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #528
CALI: MDL0811 #3

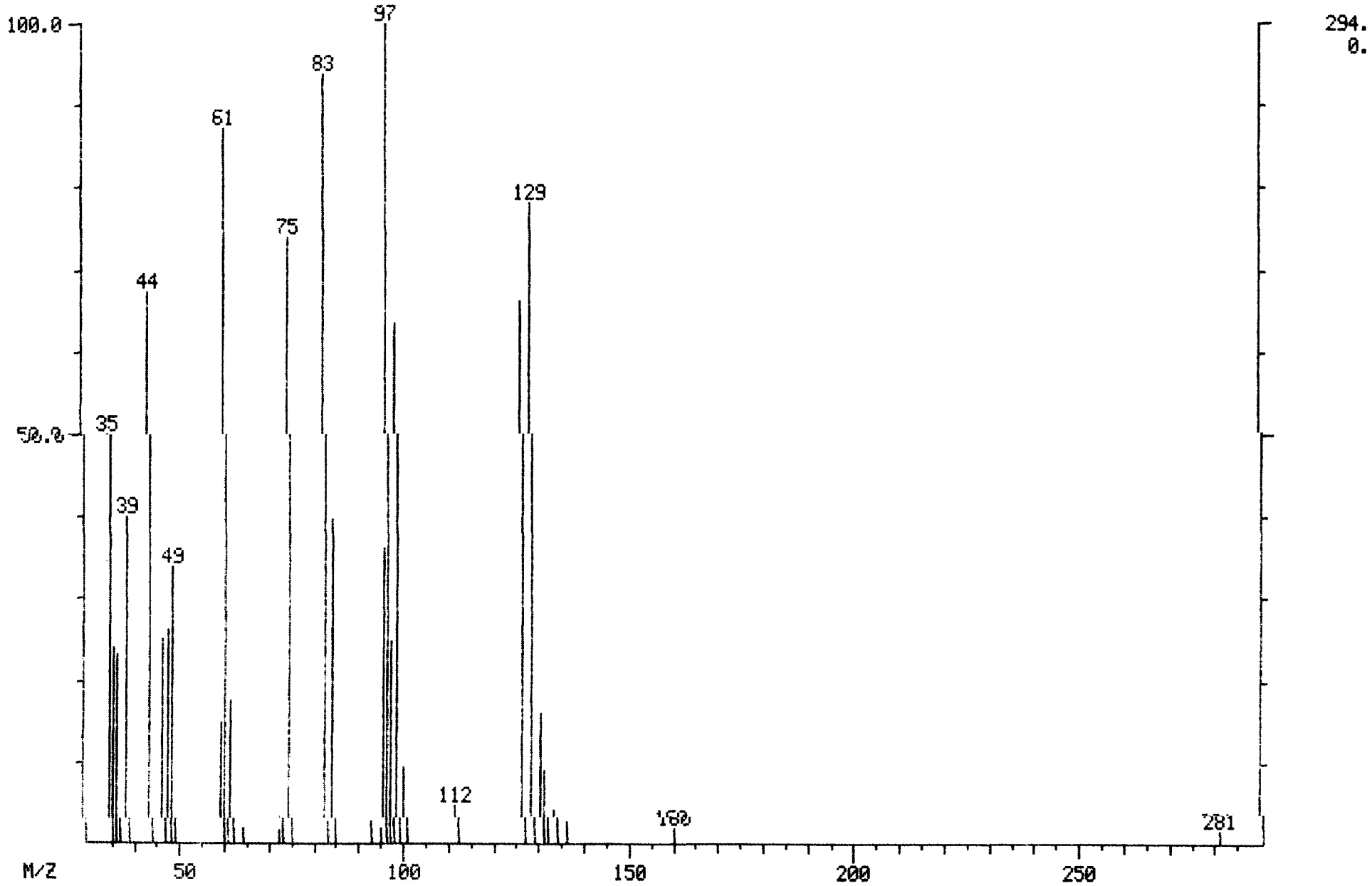
BASE M/Z: 78
RIC: 2880.



MASS SPECTRUM
08/11/89 14:08:00 + 17:48
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 162 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #534
CALI: MDL0811 #3

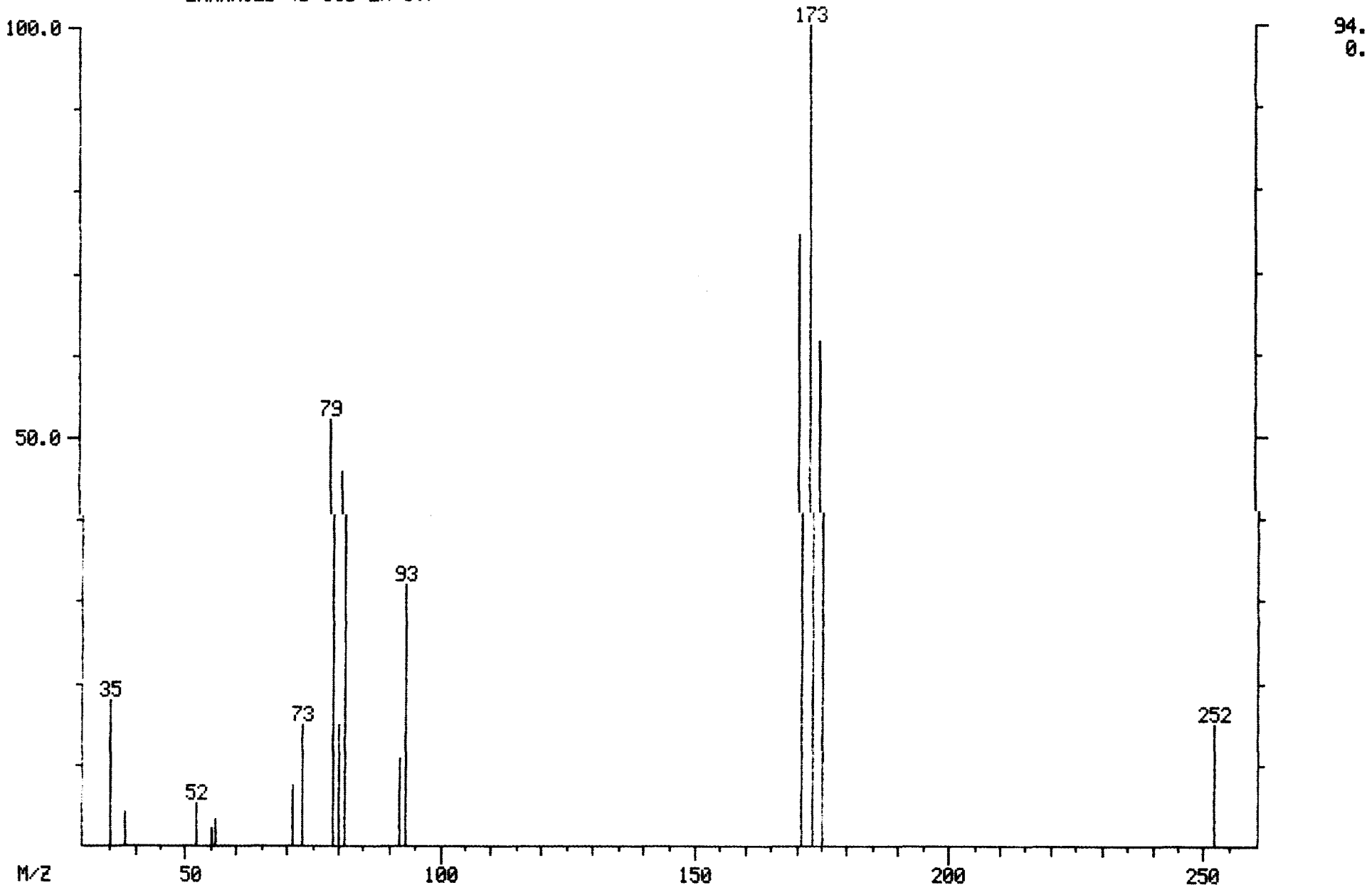
BASE M/Z: 97
RIC: 3096.



MASS SPECTRUM
08/11/89 14:08:00 + 20:26
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 183 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #613
CALI: MDL0811 #3

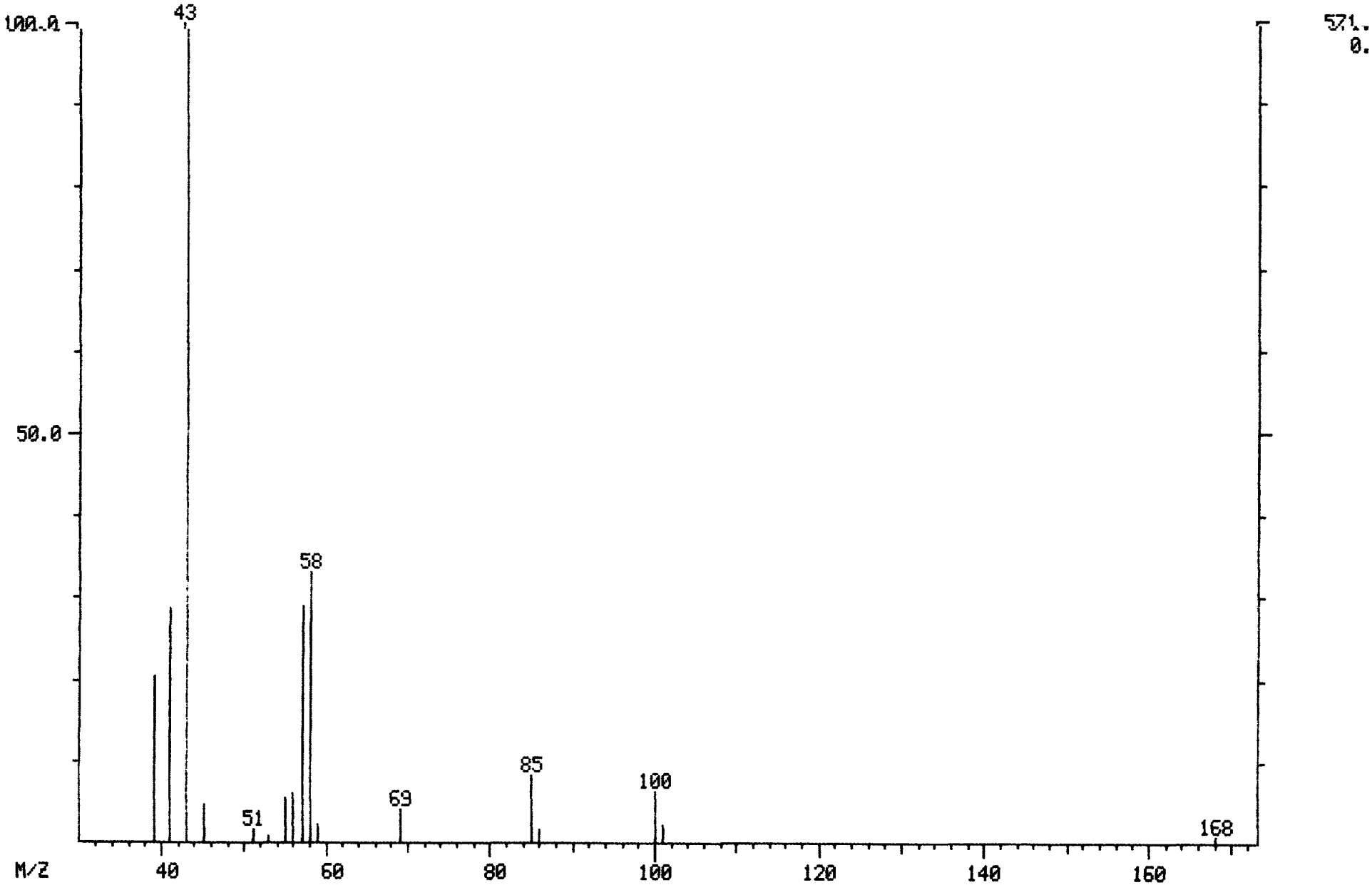
BASE M/Z: 173
RIC: 434.



MASS SPECTRUM
08/11/89 14:08:00 + 20:52
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 187 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #626
CALI: MDL0811 #3

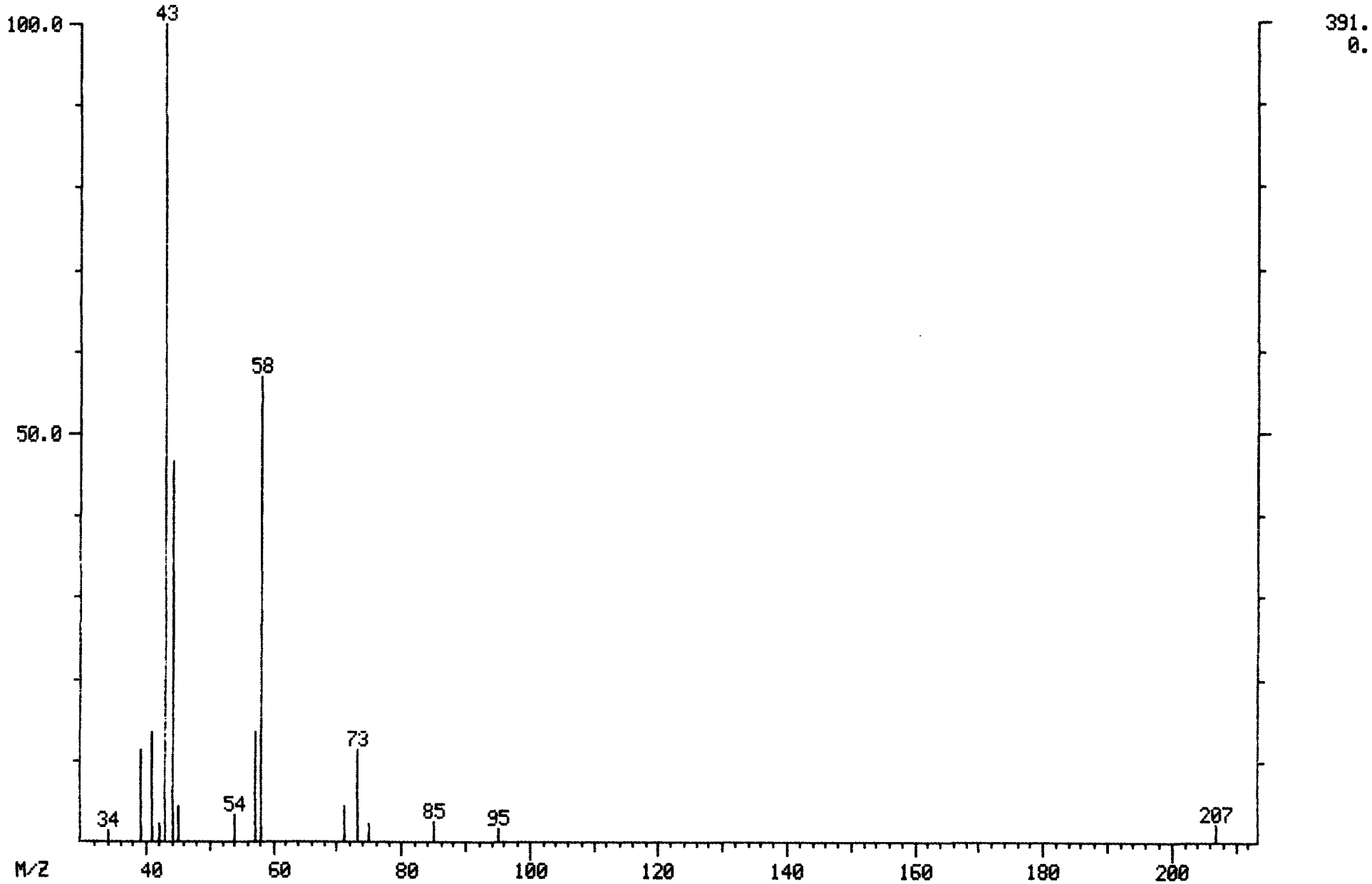
BASE M/Z: 43
RIC: 1466.



MASS SPECTRUM
08/11/89 14:08:00 + 22:24
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 199 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #672
CALI: MDL0811 #3

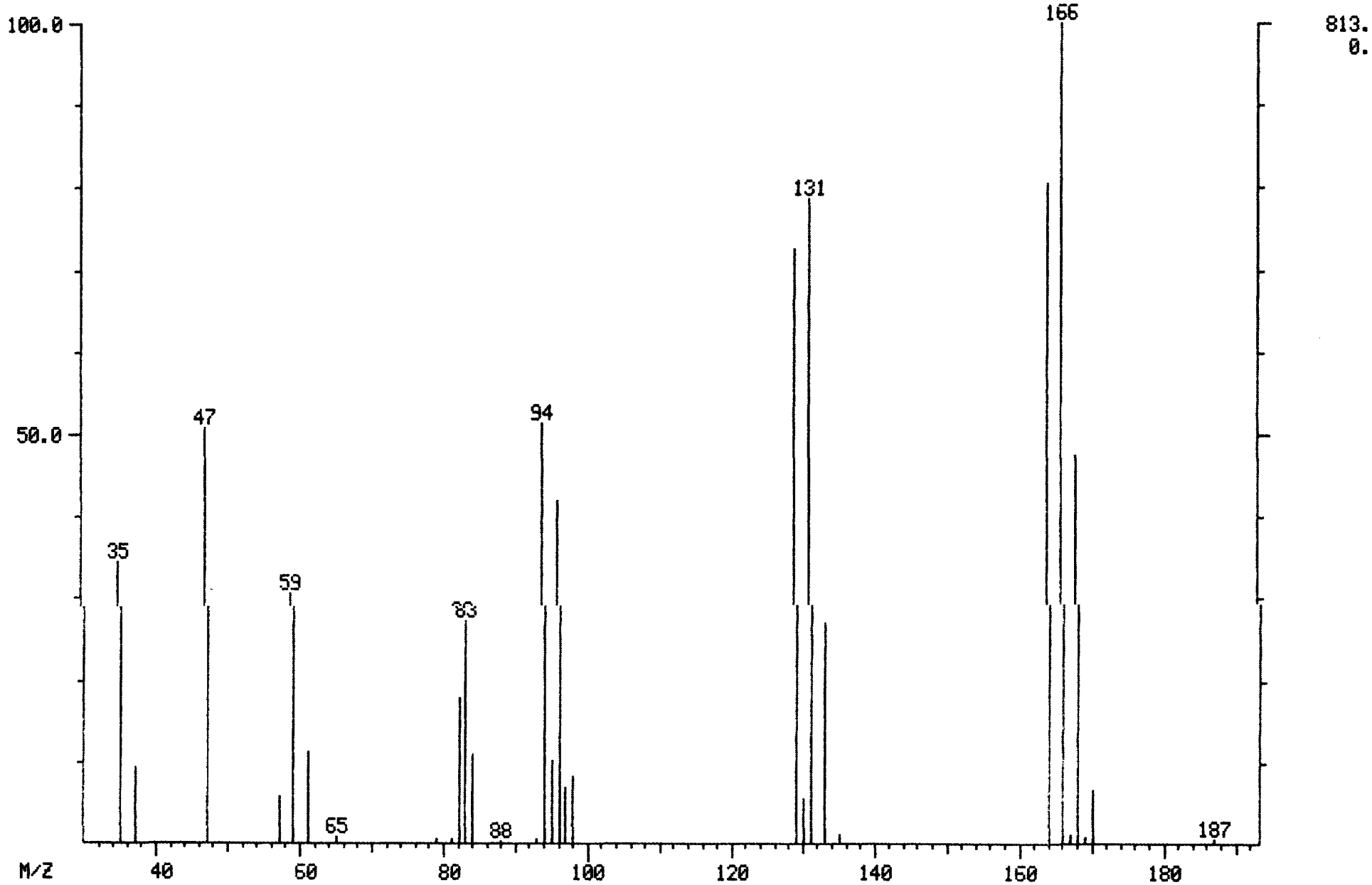
BASE M/Z: 43
RIC: 1088.



MASS SPECTRUM
08/11/89 14:08:00 + 22:46
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 202 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #683
CALI: MDL0811 #3

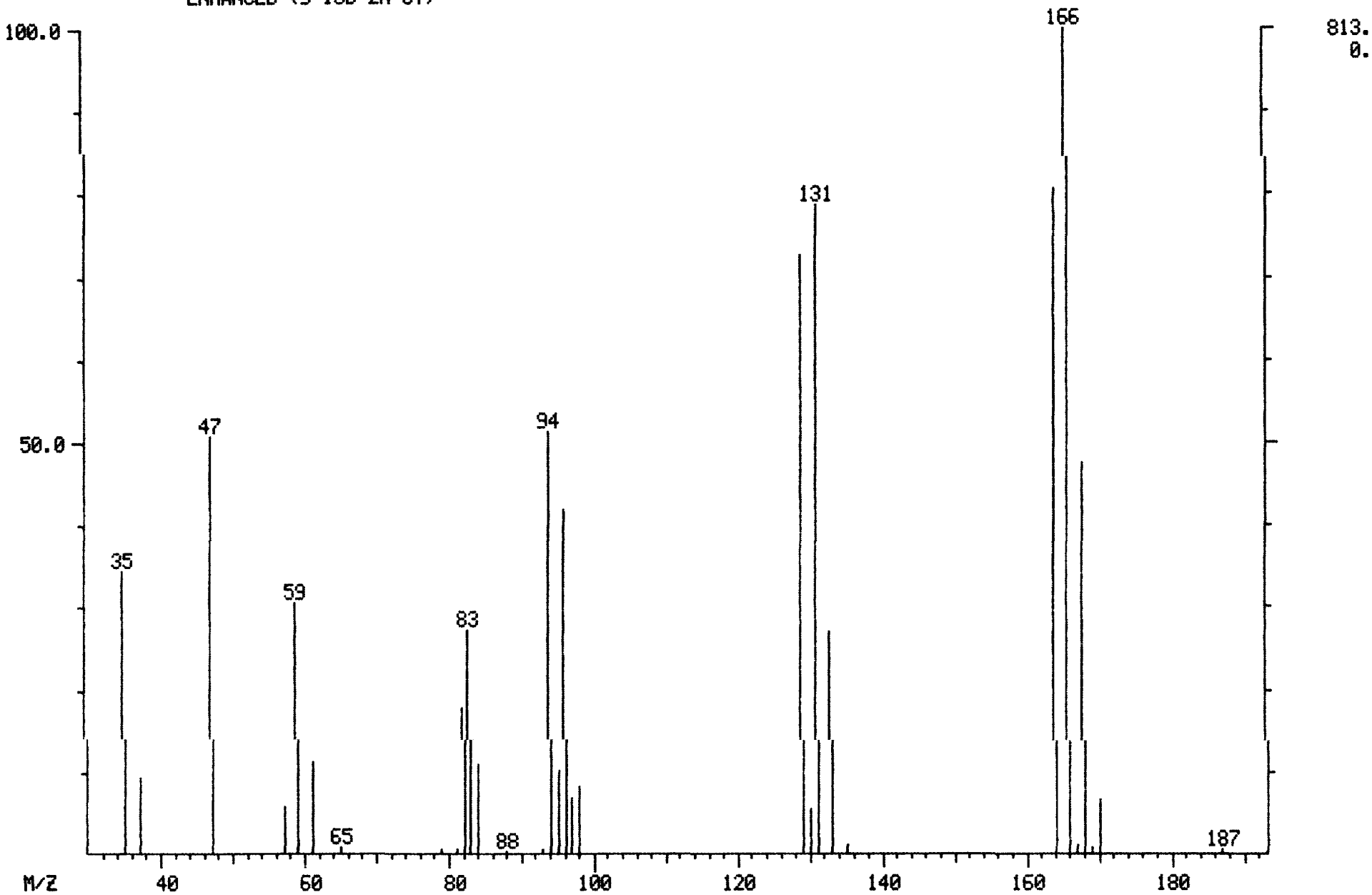
BASE M/Z: 166
RIC: 6056.



MASS SPECTRUM
08/11/89 14:08:00 + 22:46
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 202 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #683
CALI: MDL0811 #3

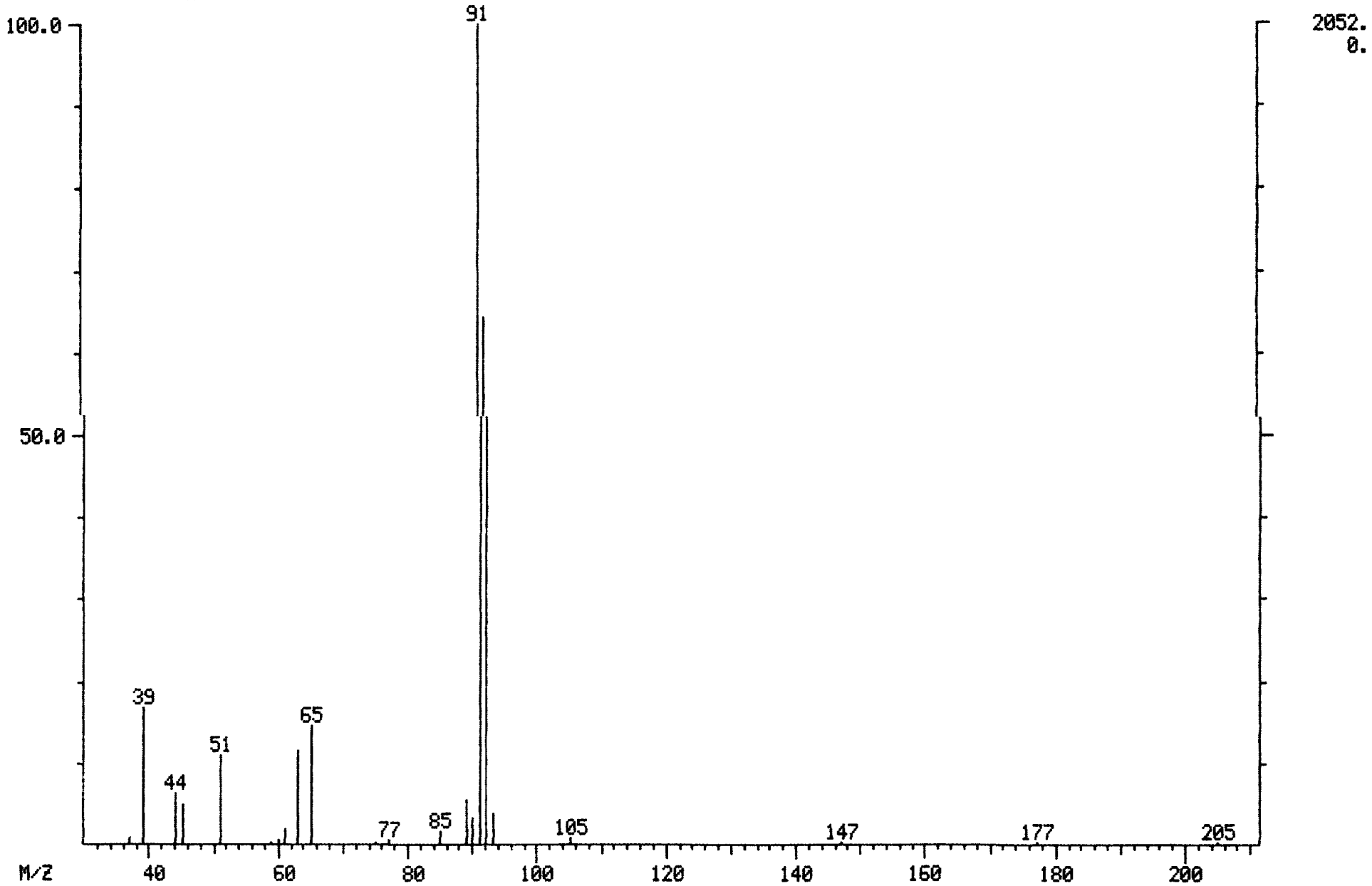
BASE M/Z: 166
RIC: 6056.



MASS SPECTRUM
08/11/89 14:08:00 + 24:04
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 212 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #722
CALI: MDL0811 #3

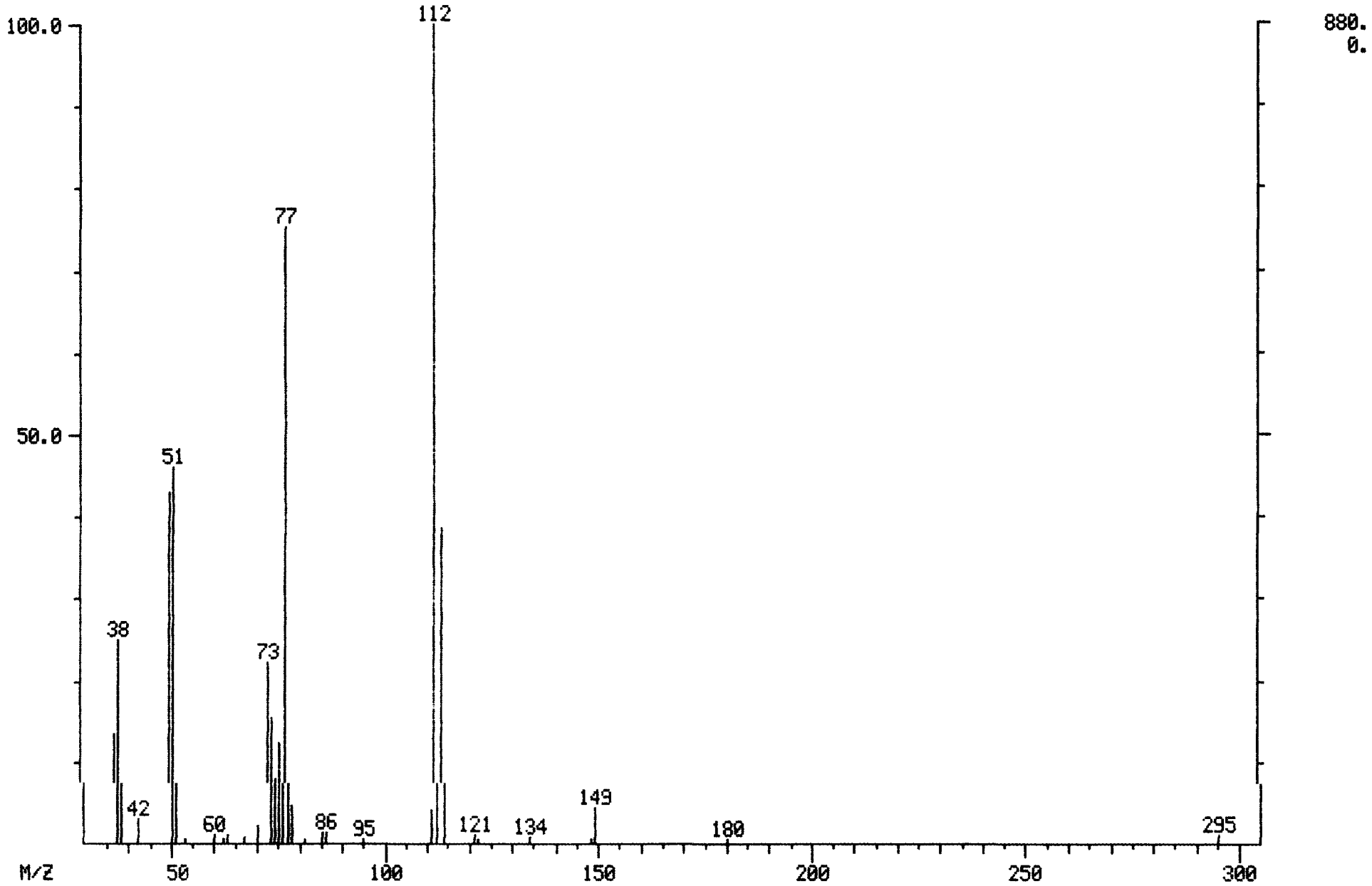
BASE M/Z: 91
RIC: 5136.



MASS SPECTRUM
08/11/89 14:08:00 + 25:14
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #757
CALI: MDL0811 #3

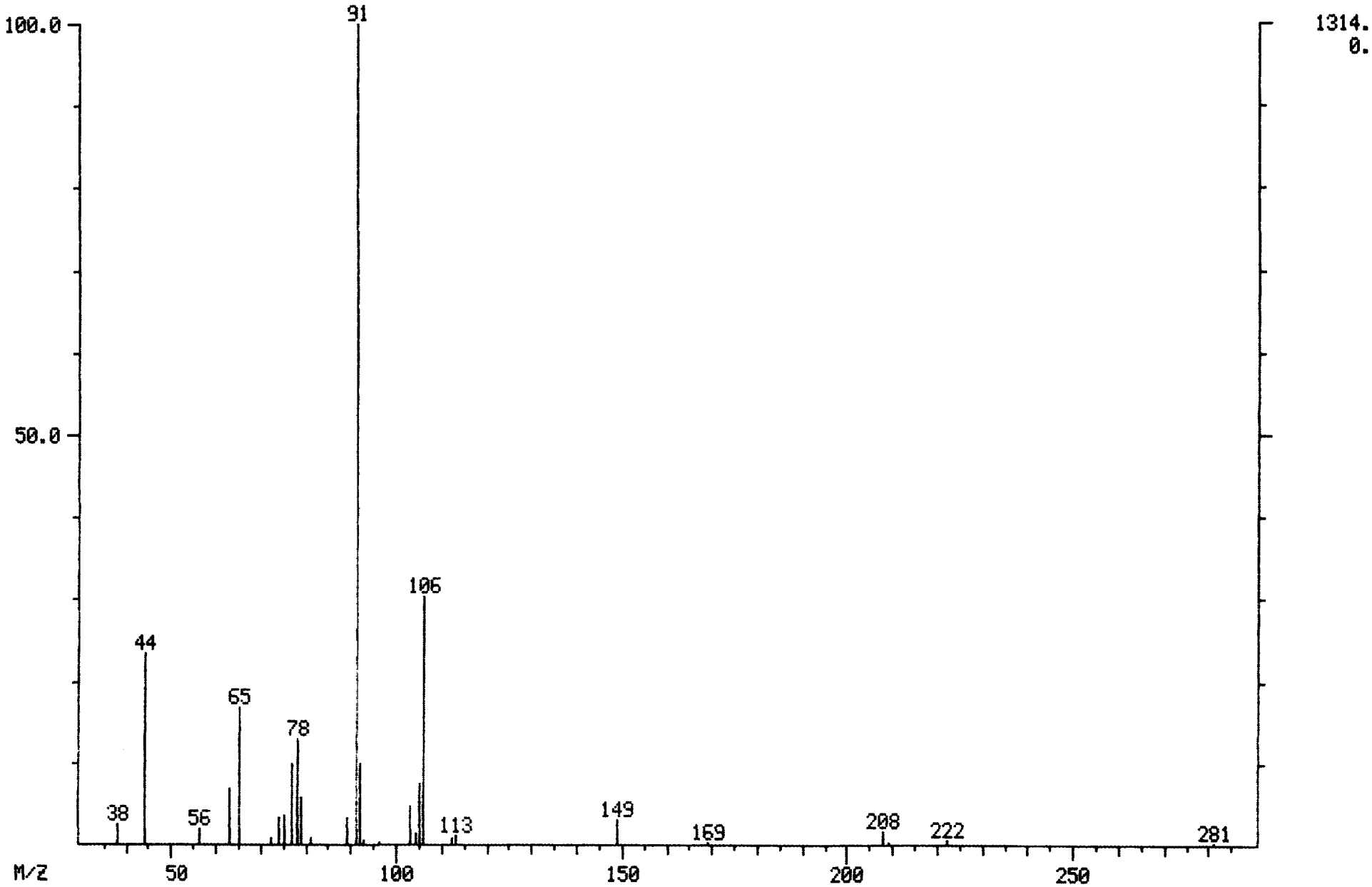
BASE M/Z: 112
RIC: 3804.



MASS SPECTRUM
08/11/89 14:08:00 + 27:16
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 220 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #818
CALI: MDL0811 #3

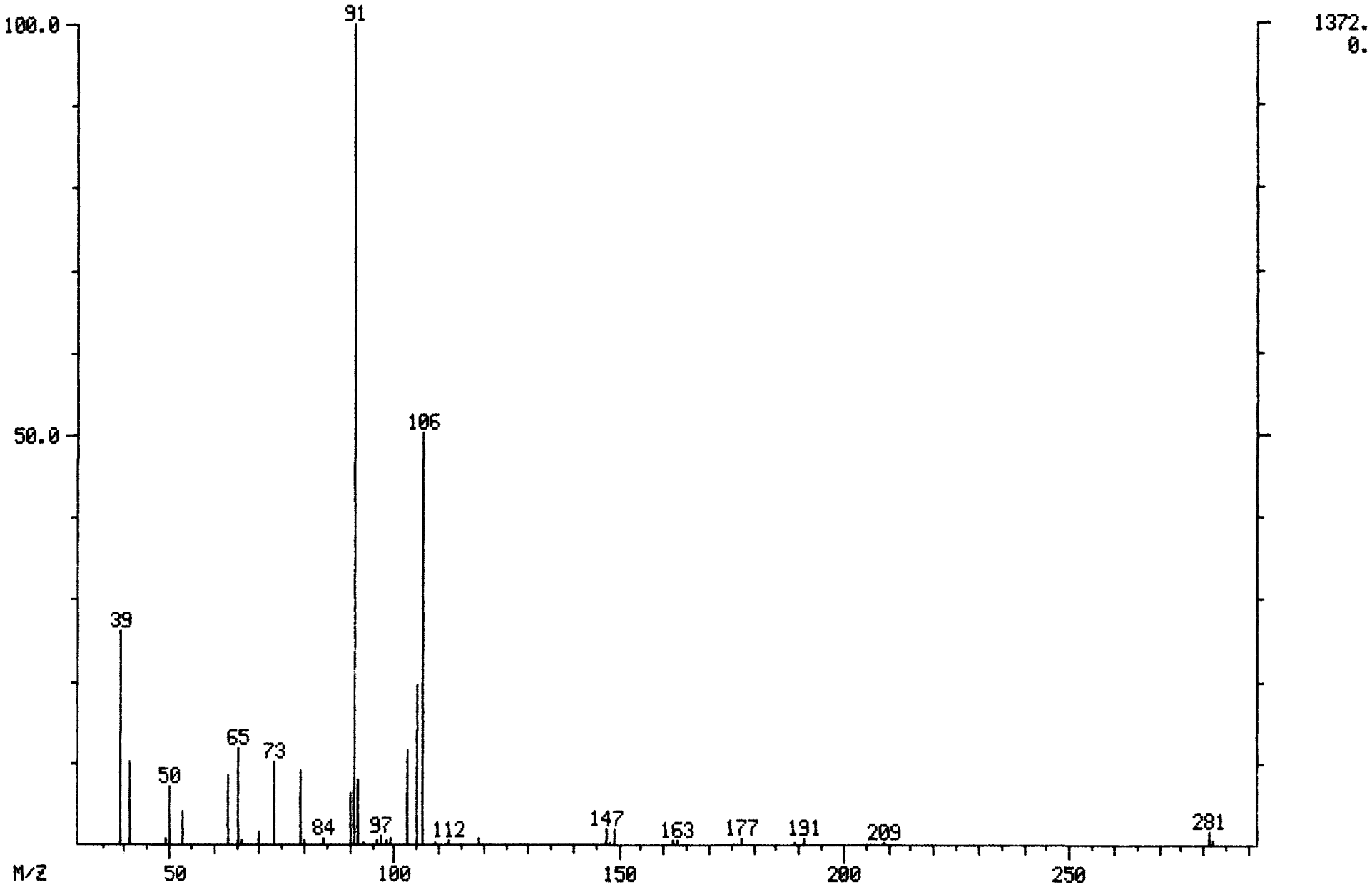
BASE M/Z: 91
RIC: 3368.



MASS SPECTRUM
08/11/89 14:08:00 + 31:42
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #951
CALI: MDL0811 #3

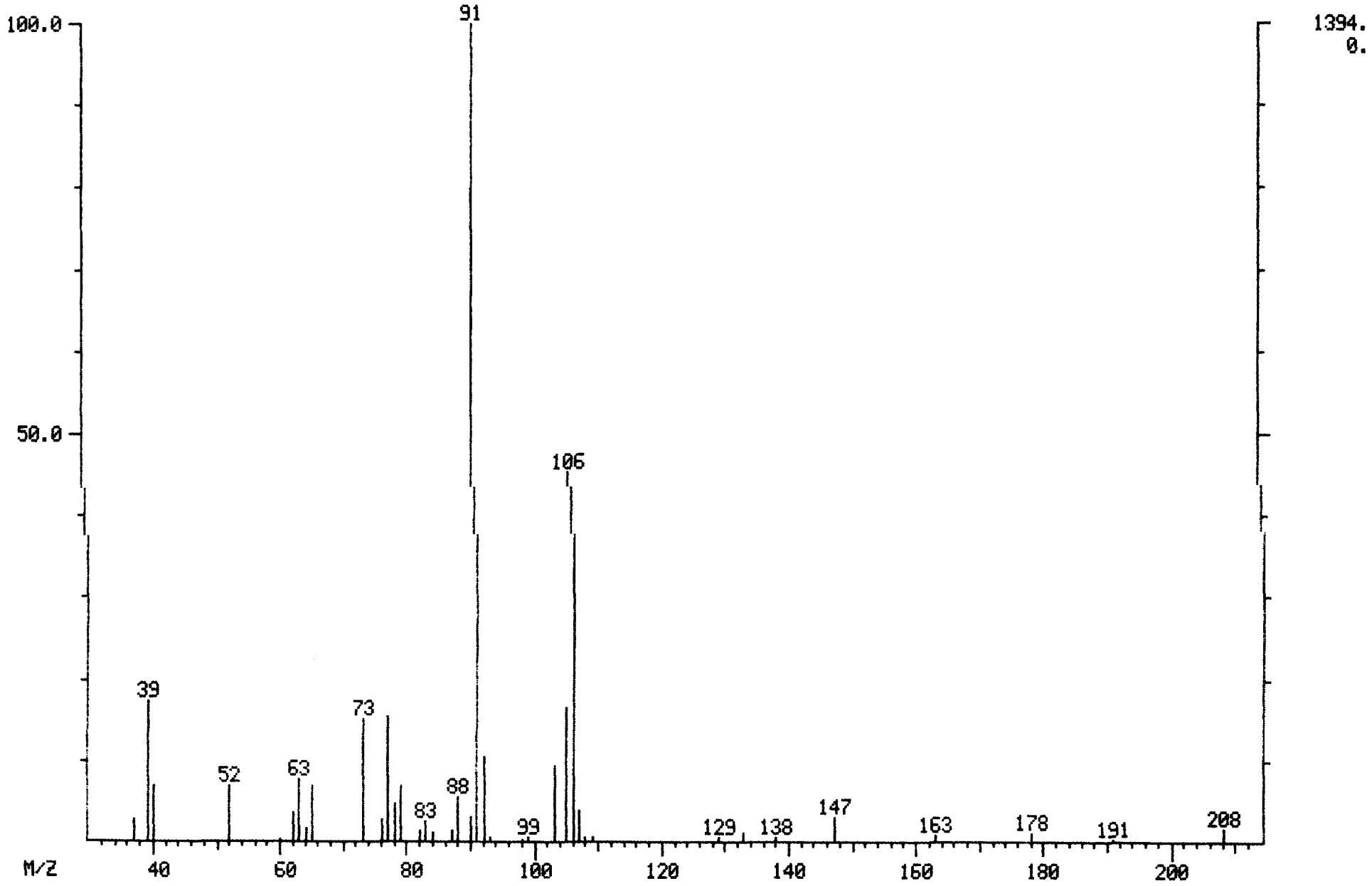
BASE M/Z: 91
RIC: 4152.



MASS SPECTRUM
08/11/89 14:08:00 + 32:44
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #982
CALI: MDL0811 #3

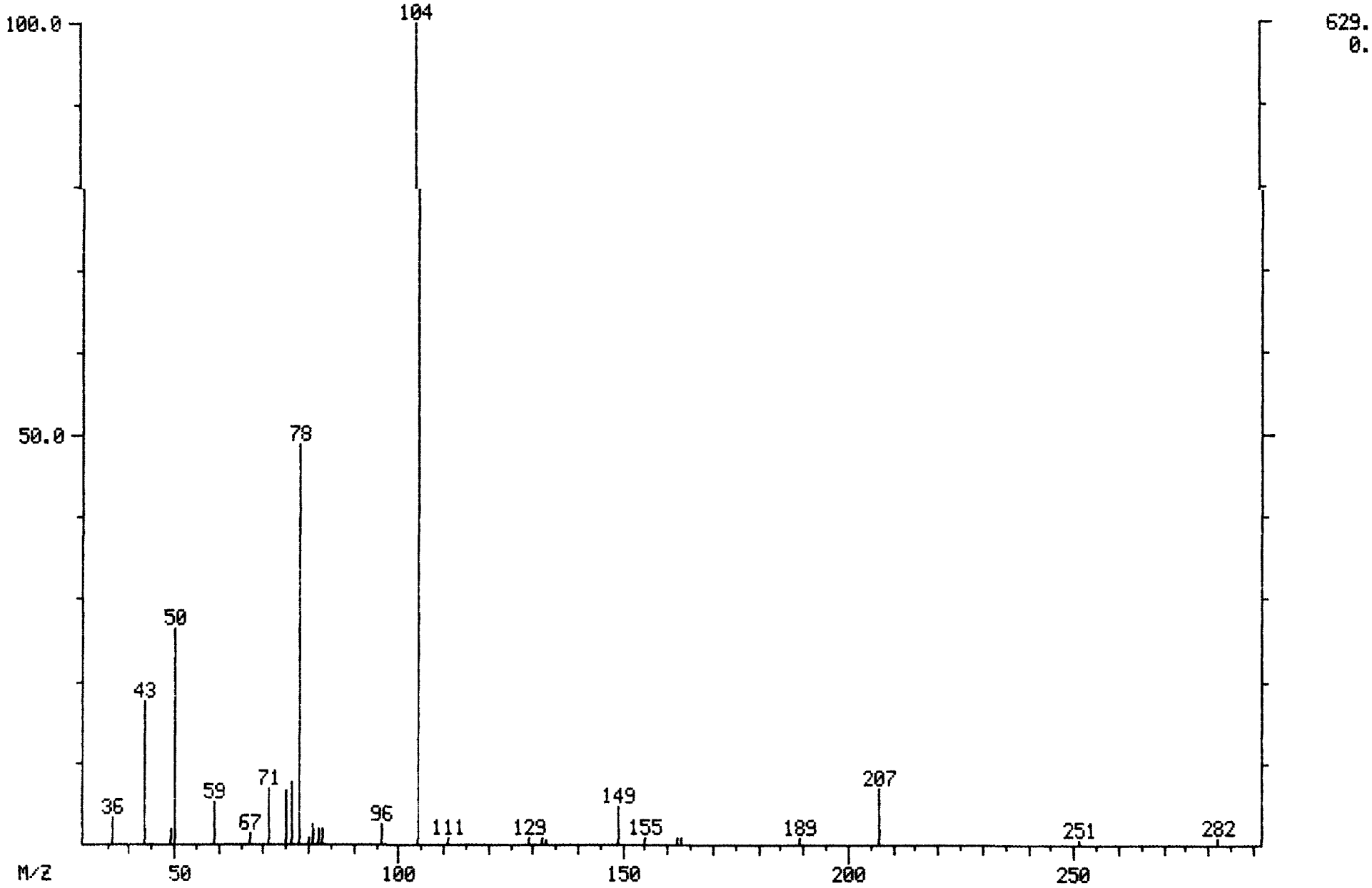
BASE M/Z: 91
RIC: 4352.



MASS SPECTRUM
08/11/89 14:08:00 + 31:24
SAMPLE: CLP,0811,,MDL0811,L,W,,V,EPA,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: MDL0811 #942
CALI: MDL0811 #3

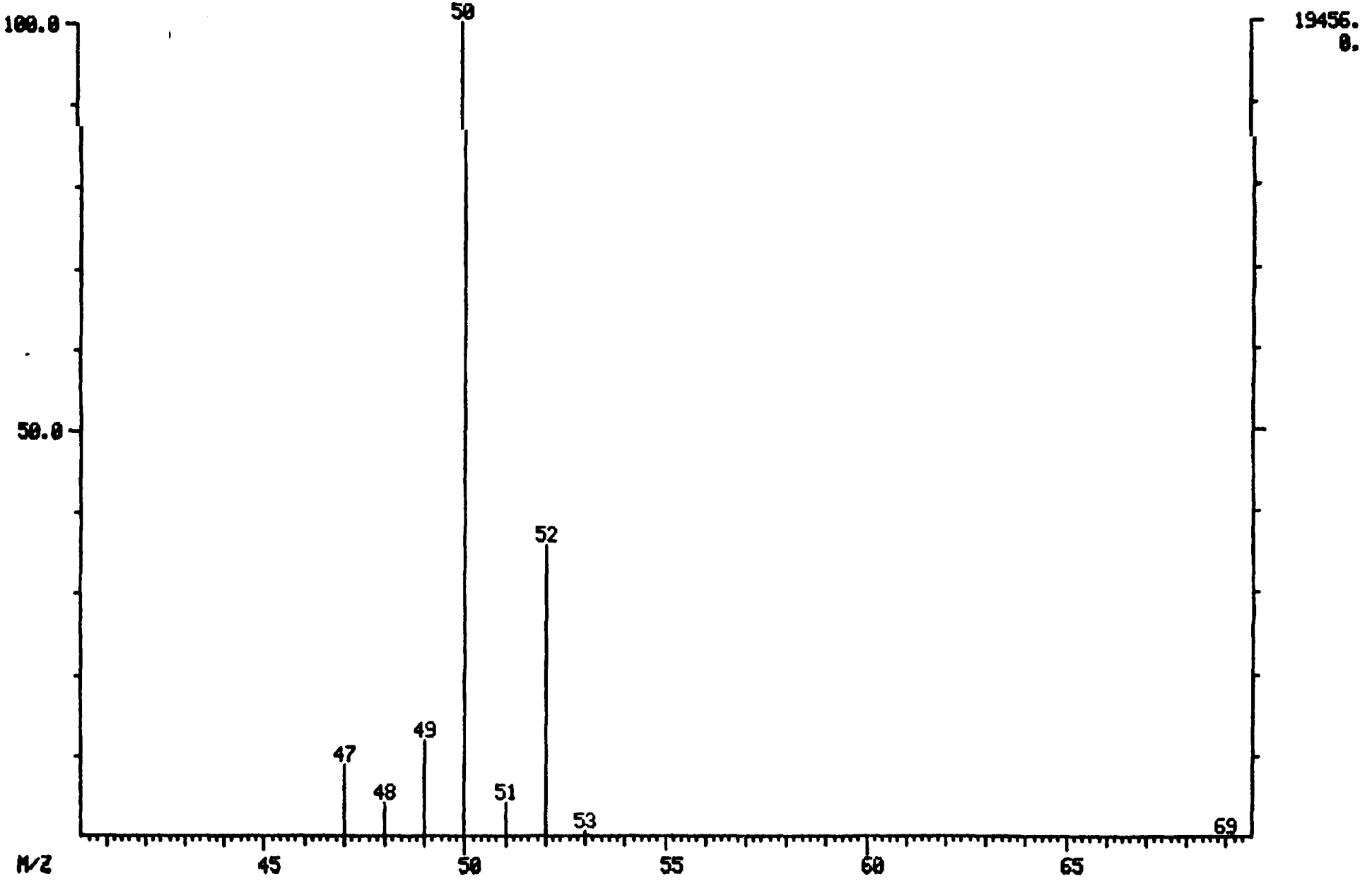
BASE M/Z: 104
RIC: 1614.



MASS SPECTRUM
05/04/89 12:56:00 + 1:36
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 44 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #48
CALI: IC30504 #3

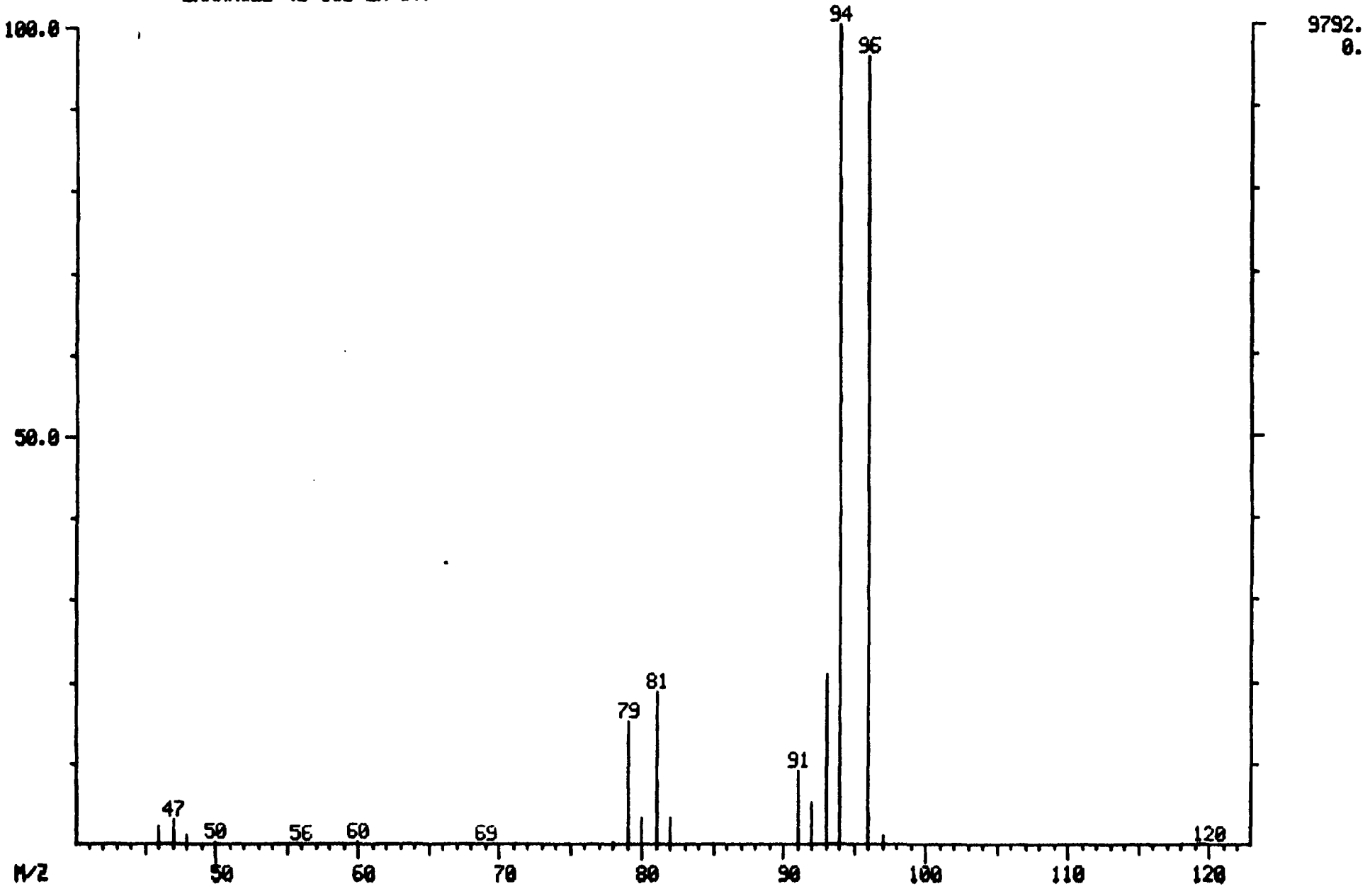
BASE M/Z: 50
RIC: 32256.



MASS SPECTRUM
05/04/89 12:56:00 + 2:38
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 45 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #79
CALI: IC30504 #3

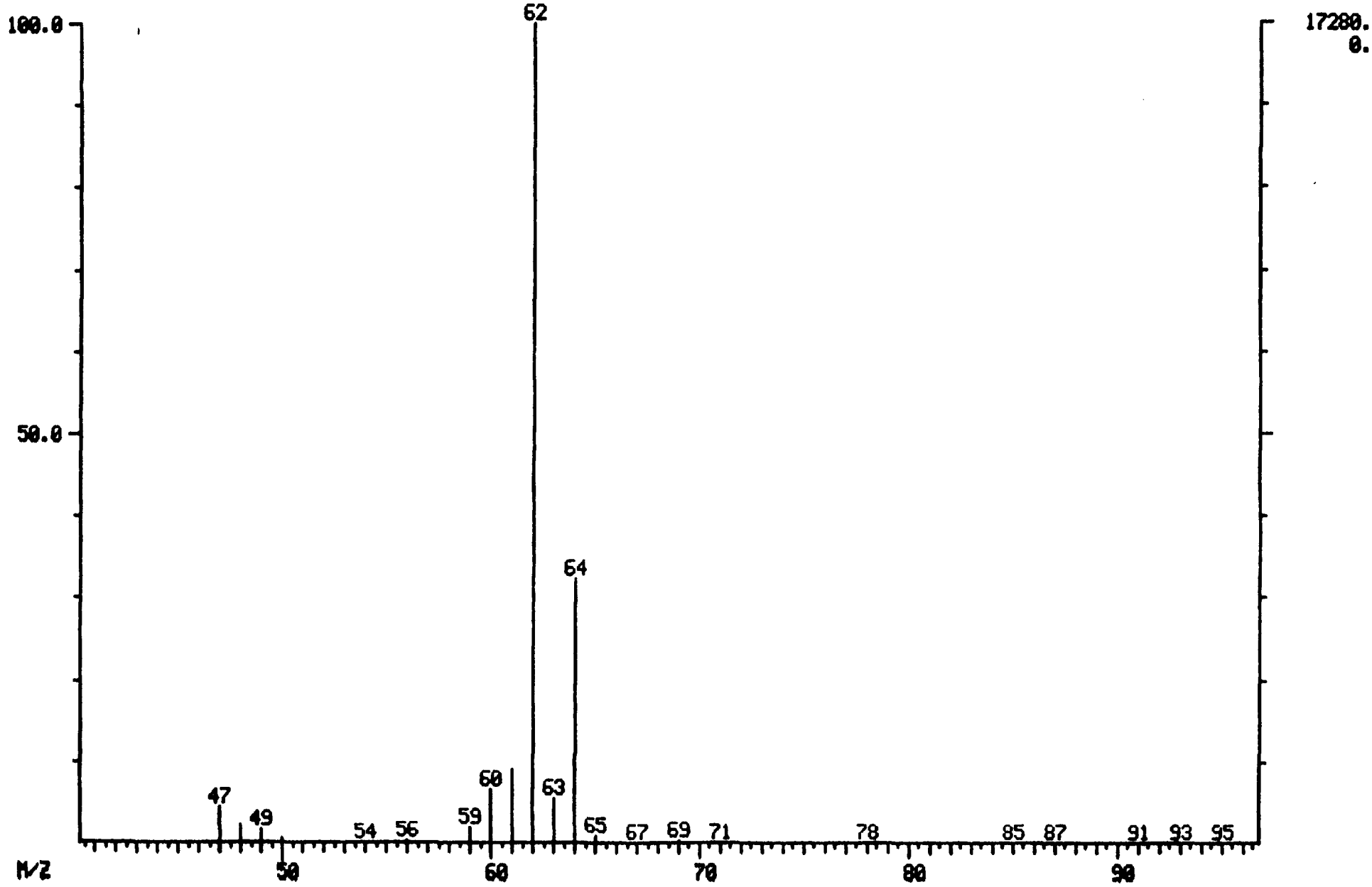
BASE M/Z: 94
RIC: 27488.



MASS SPECTRUM
05/04/89 12:56:00 + 3:24
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 47 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #102
CALI: IC30504 #3

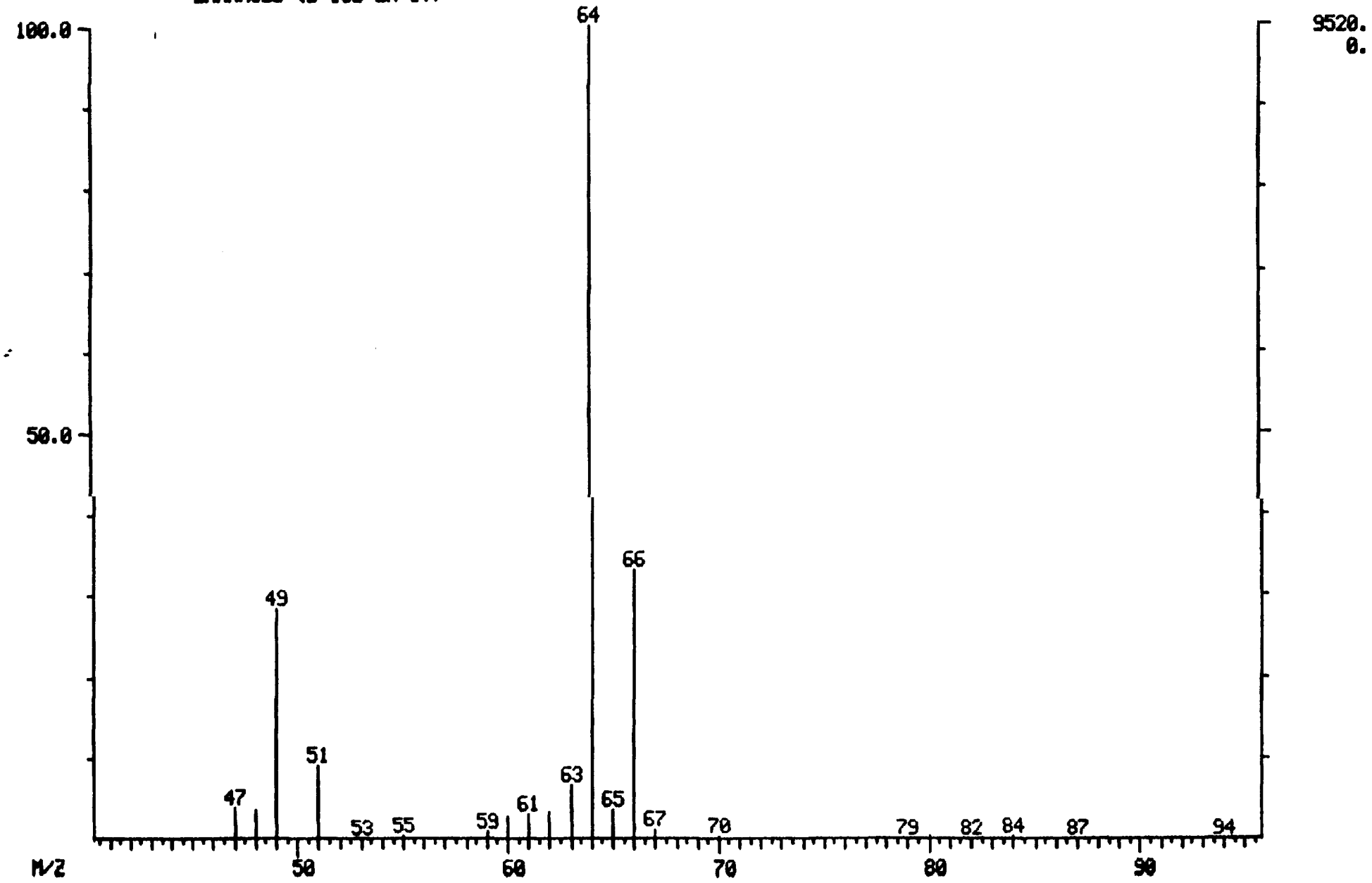
BASE M/Z: 62
RIC: 28672.



MASS SPECTRUM
05/04/89 12:56:00 + 4:26
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 55 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #133
CALI: IC30504 #3

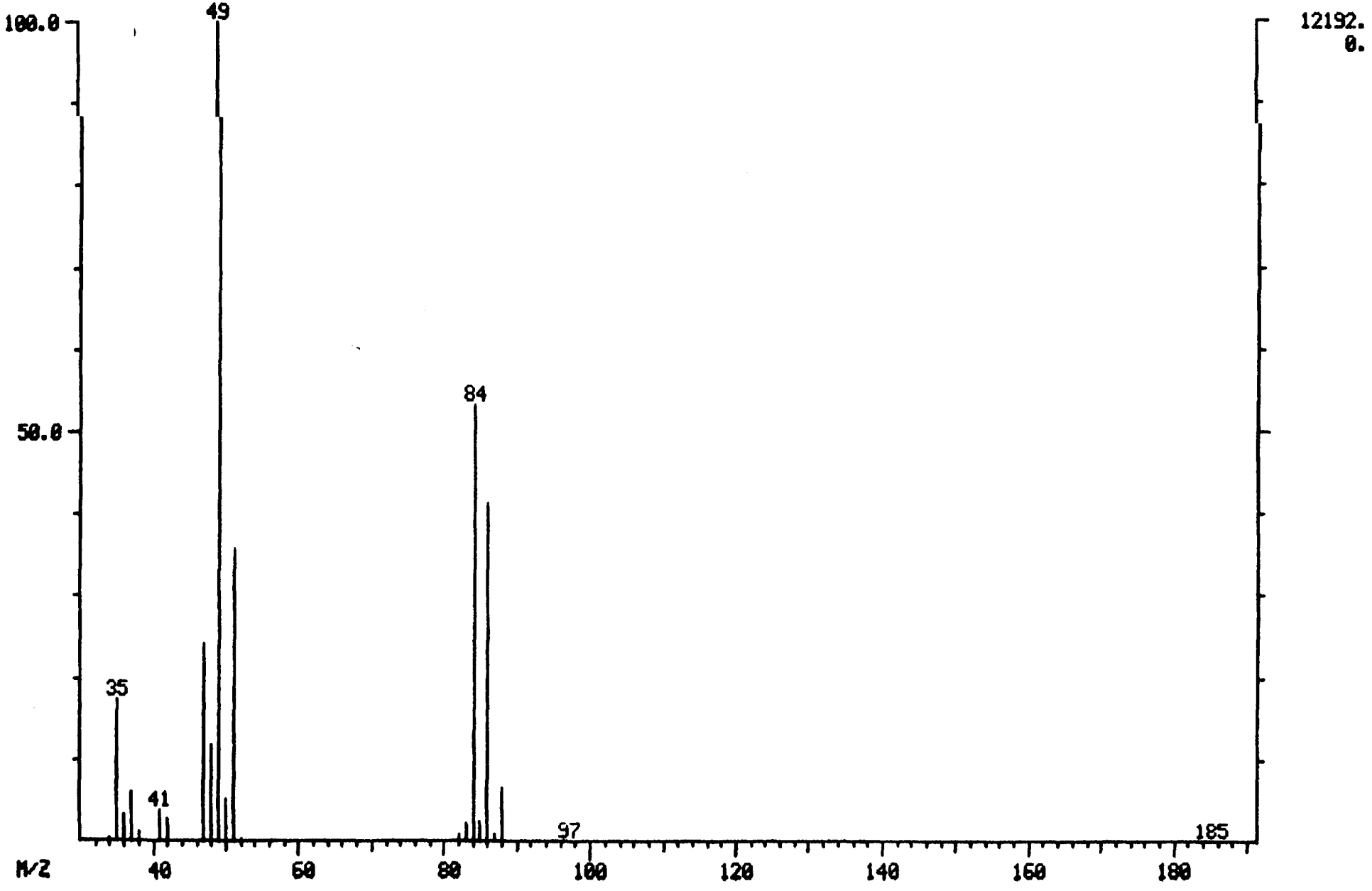
BASE M/Z: 64
RIC: 19136.



MASS SPECTRUM
05/04/89 12:56:00 + 6:36
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 73 DEG. C
ENHANCED (S 158 2N 0T)

DATA: IC30504 #198
CALI: IC30504 #3

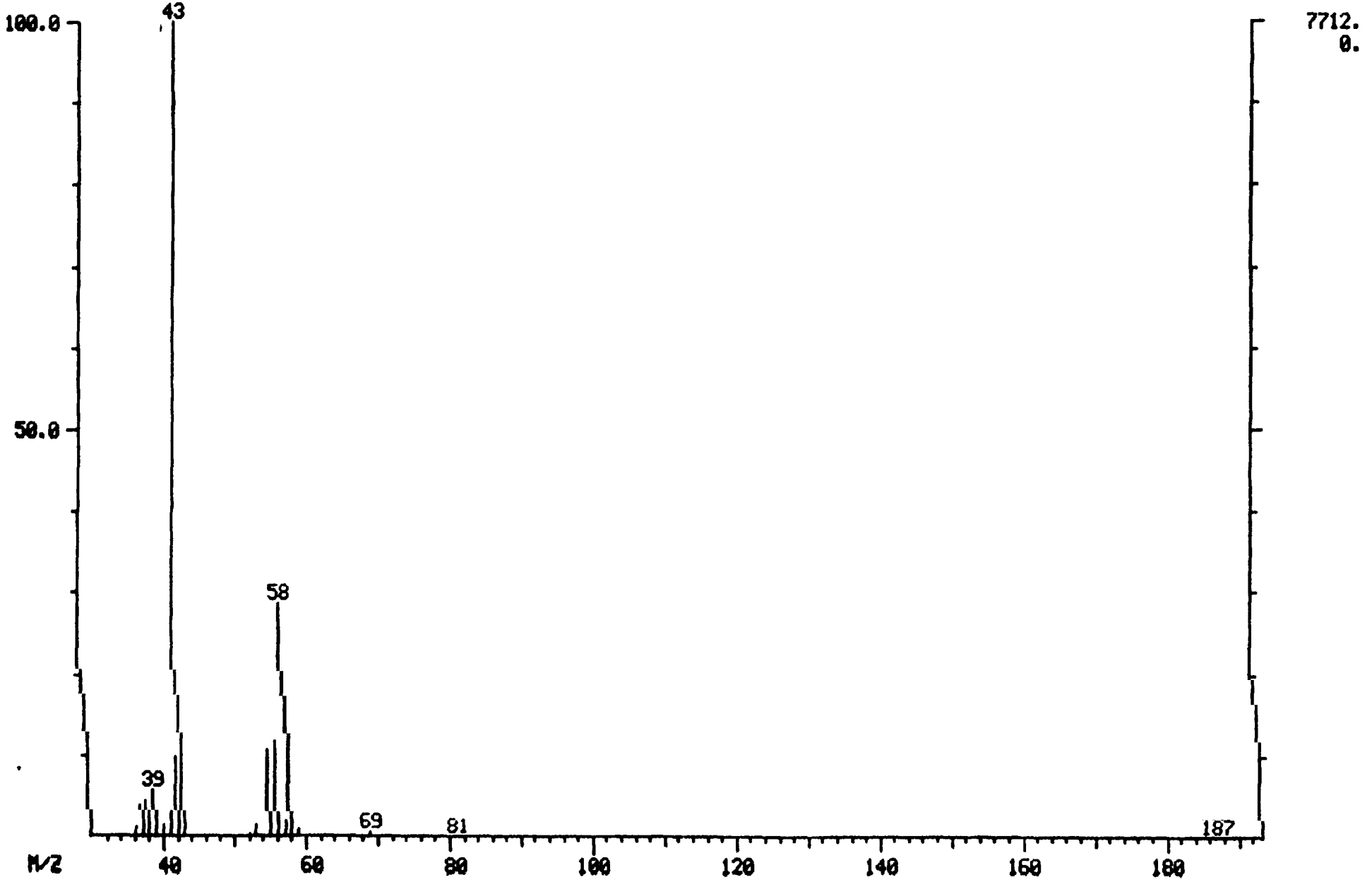
BASE M/Z: 49
RIC: 39104.



MASS SPECTRUM
05/04/89 12:56:00 + 7:10
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 77 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #215
CALI: IC30504 #3

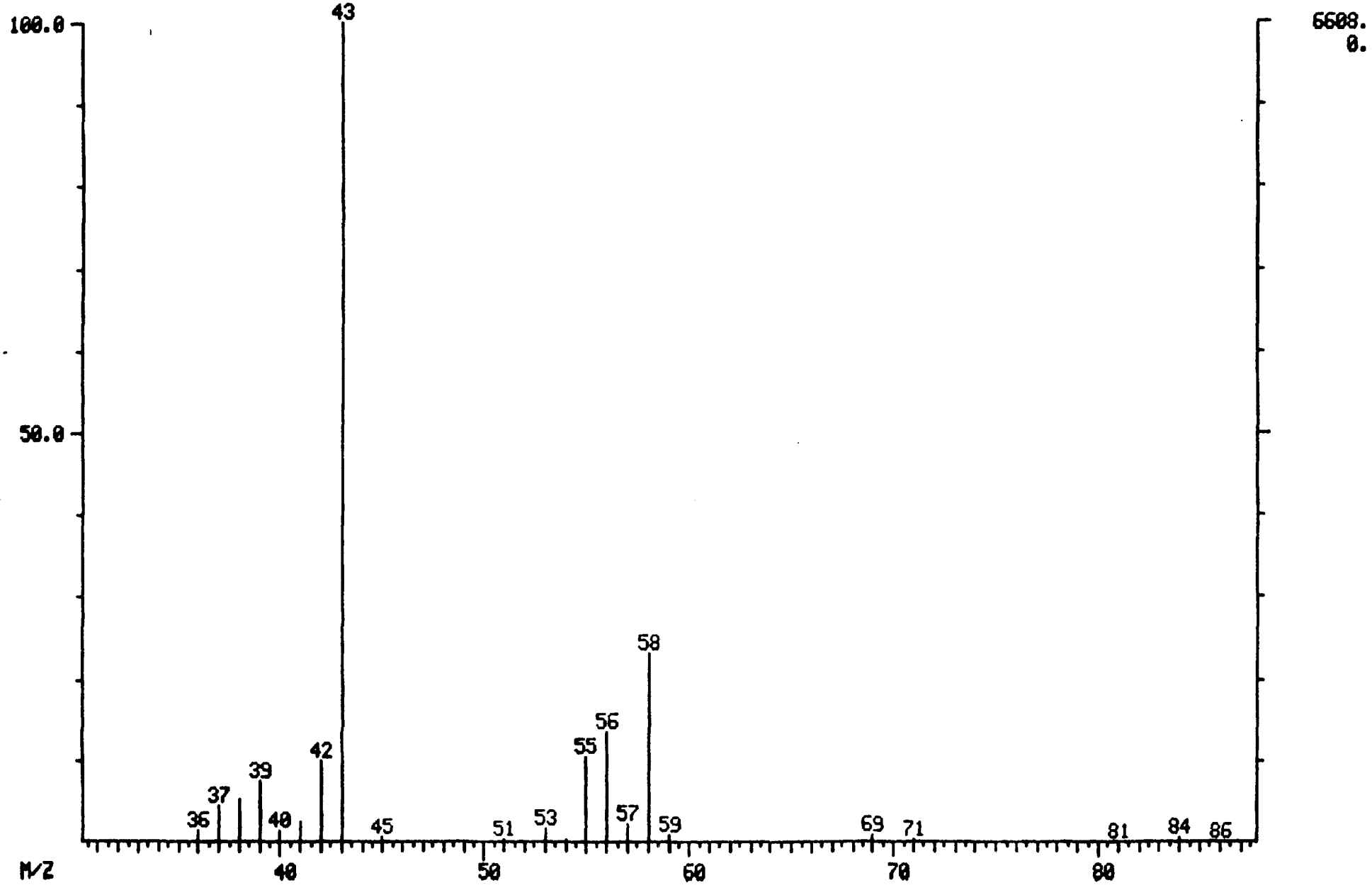
BASE M/Z: 43
RIC: 14352.



MASS SPECTRUM
05/04/89 12:56:00 + 7:12
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 78 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #216
CALI: IC30504 #3

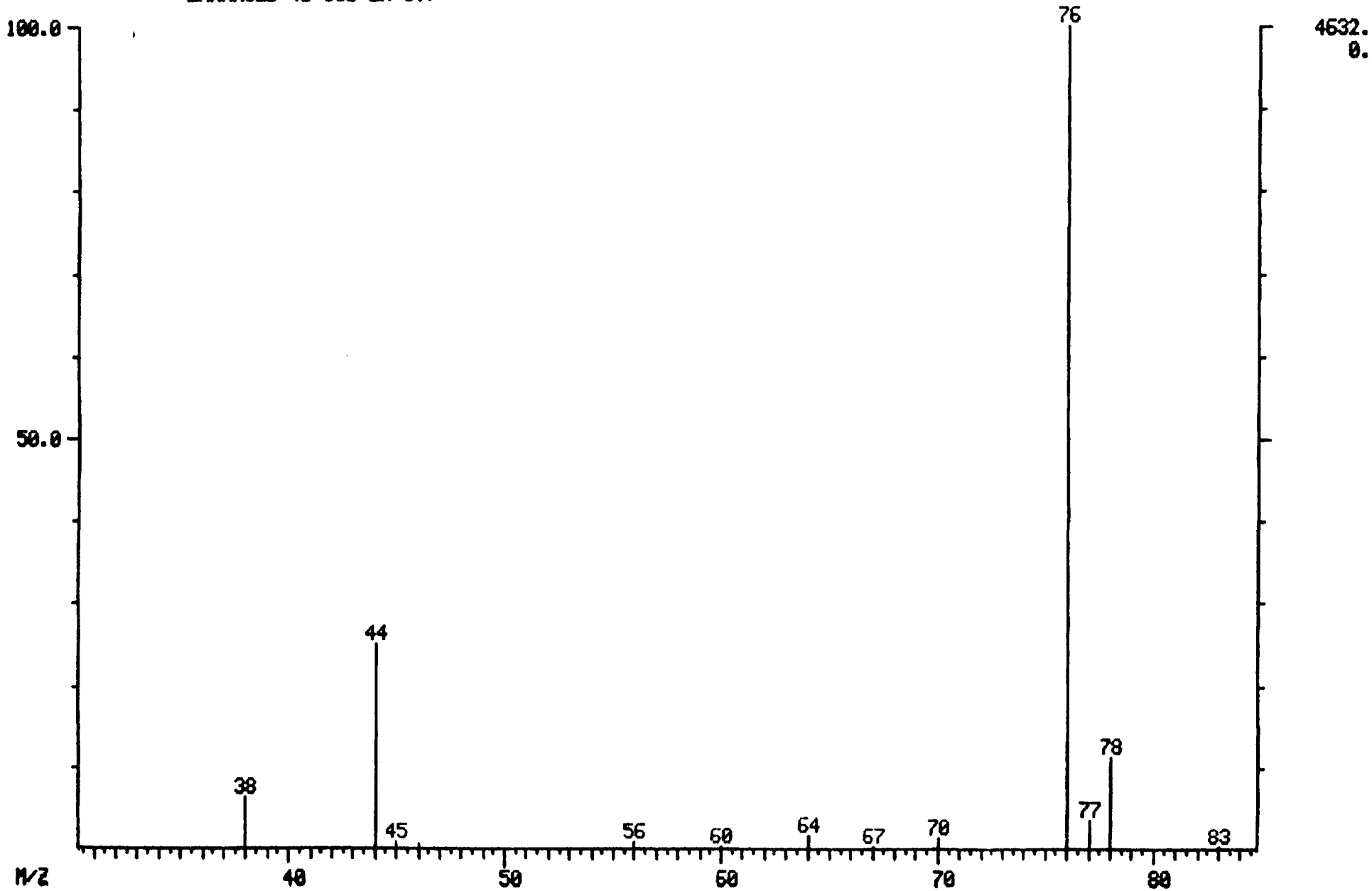
BASE M/Z: 43
RIC: 12400.



MASS SPECTRUM
05/04/89 12:56:00 + 8:10
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 85 DEG. C
ENHANCED (S 158 2N 0T)

DATA: IC30504 #245
CALI: IC30504 #3

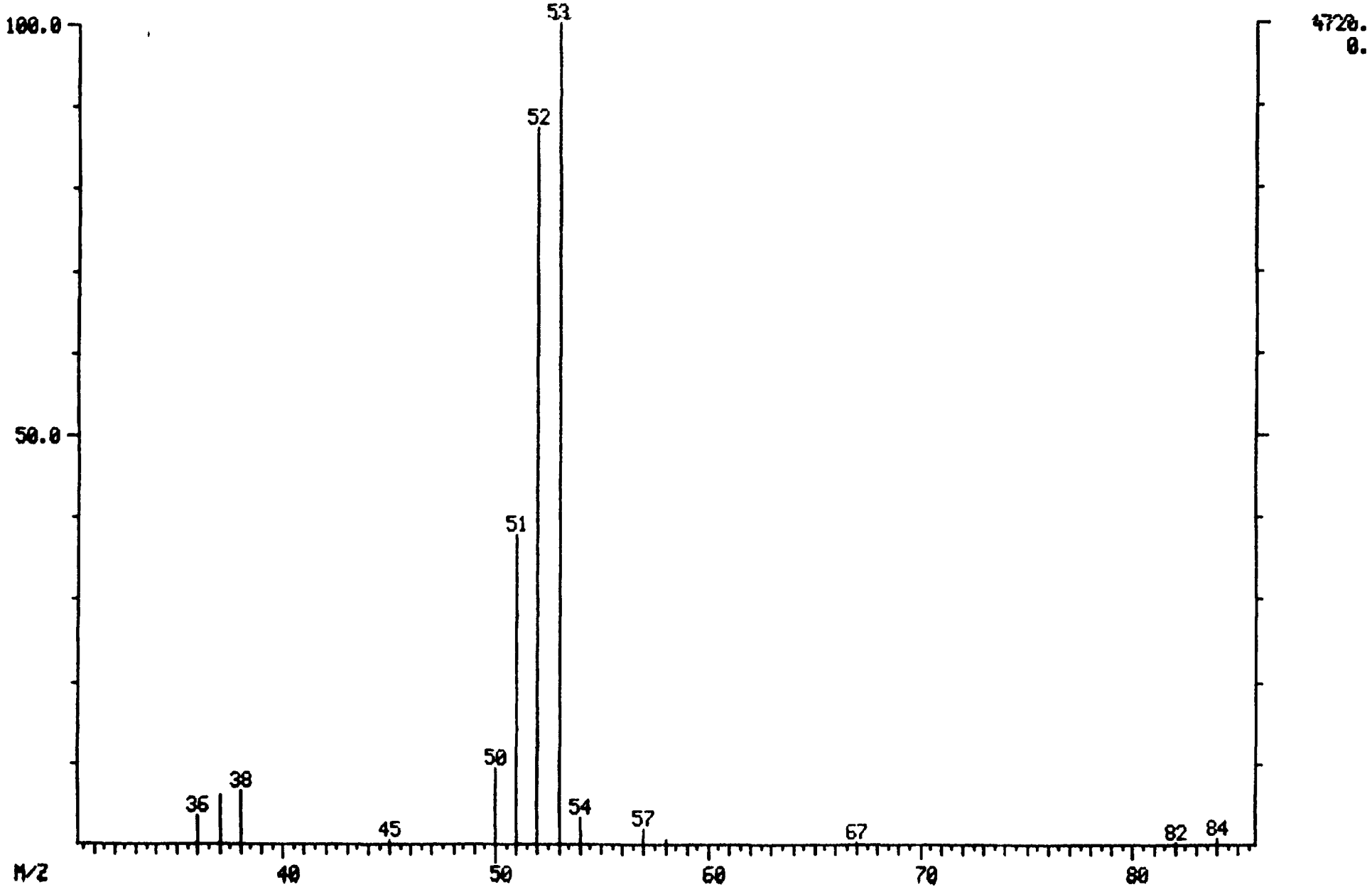
BASE M/Z: 76
RIC: 7048.



MASS SPECTRUM
05/04/89 12:56:00 + 7:54
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 83 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #237
CALI: IC30504 #3

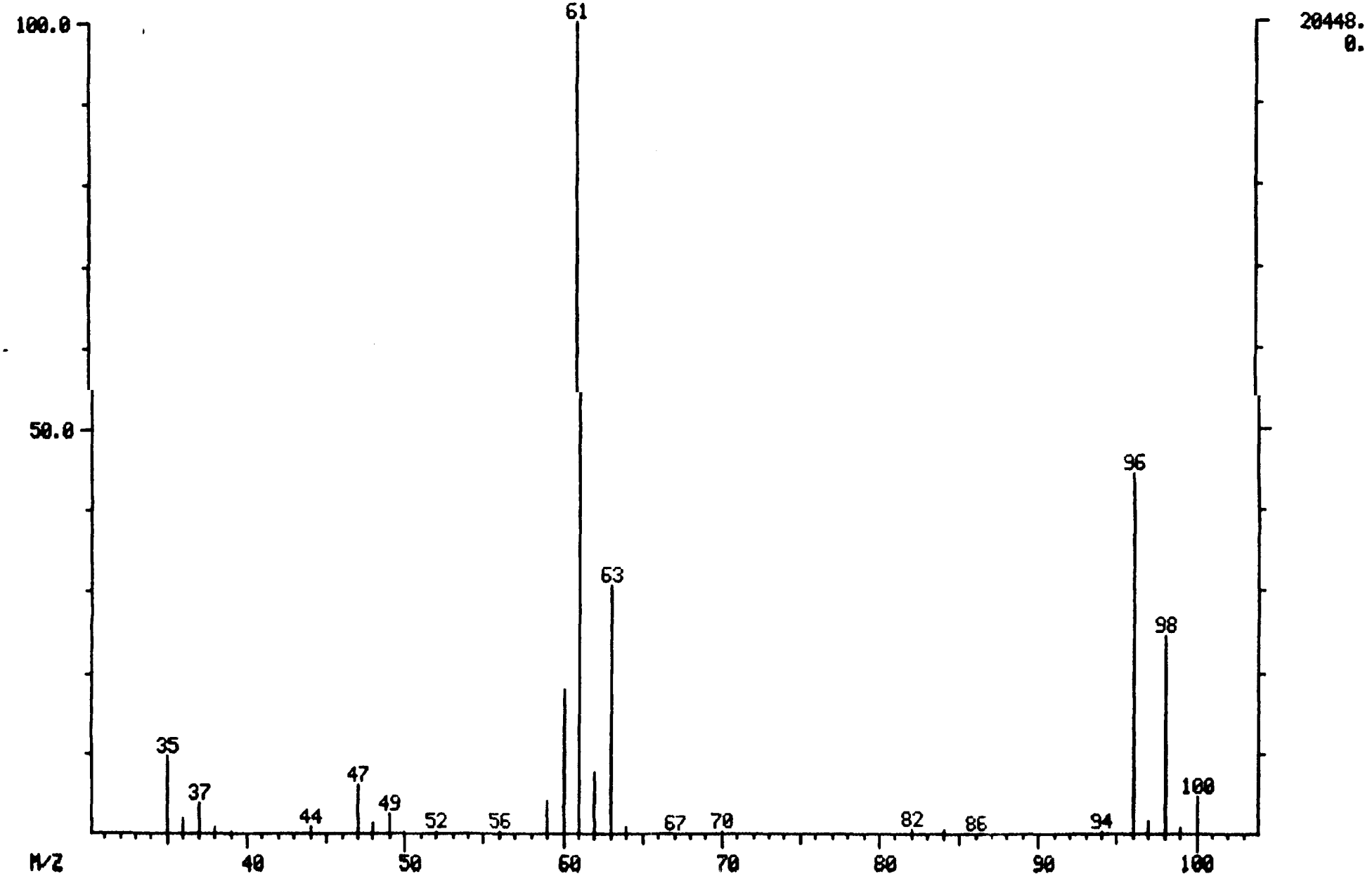
BASE M/Z: 53
RIC: 12224.



MASS SPECTRUM
05/04/89 12:56:00 + 9:24
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 95 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #282
CALI: IC30504 #3

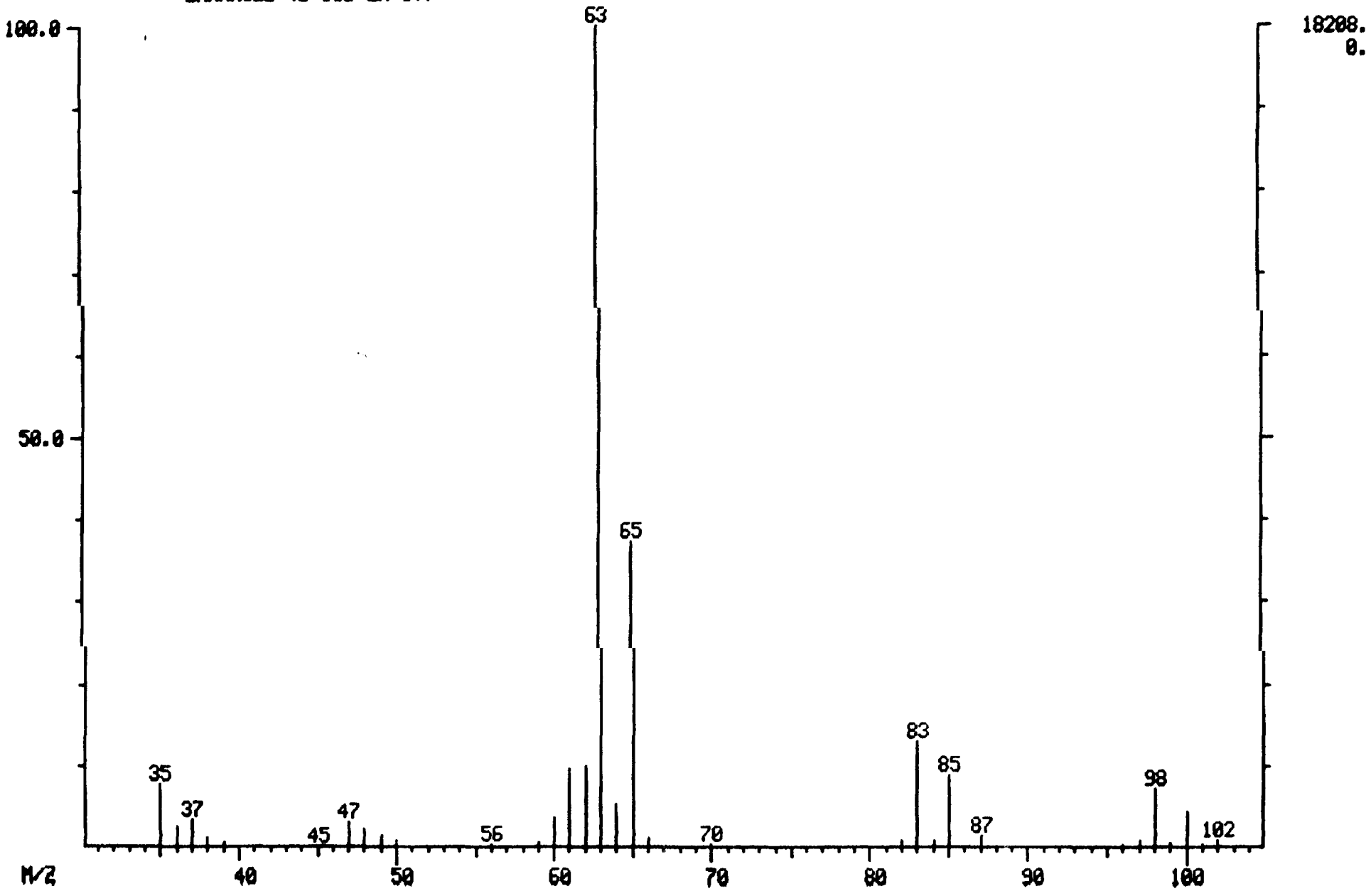
BASE M/Z: 61
RIC: 54720.



MASS SPECTRUM
05/04/89 12:56:00 + 10:42
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 106 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #321
CALI: IC30504 #3

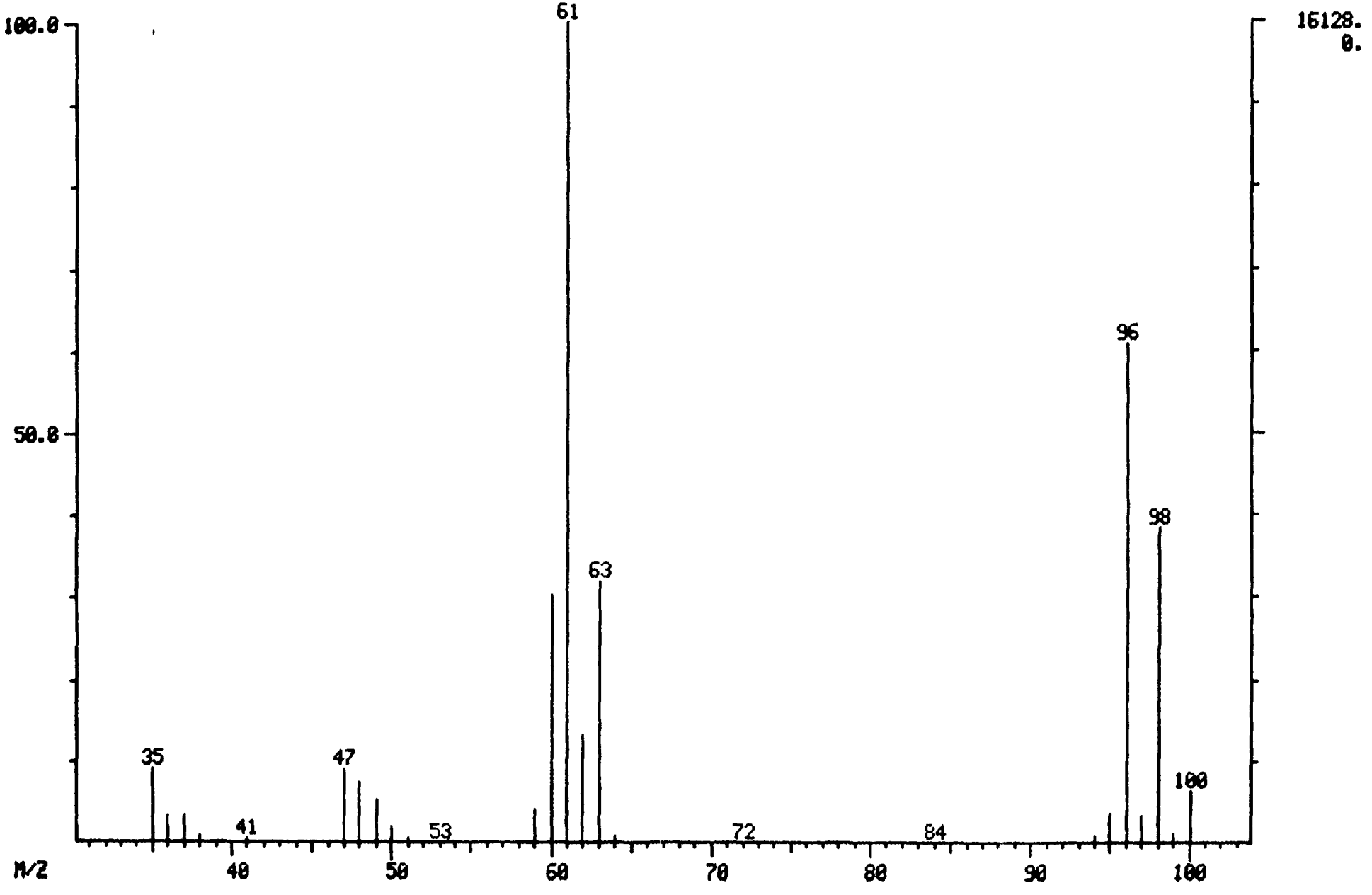
BASE M/Z: 63
RIC: 41792.



MASS SPECTRUM
05/04/89 12:56:00 + 11:26
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 111 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #343
CALI: IC30504 #3

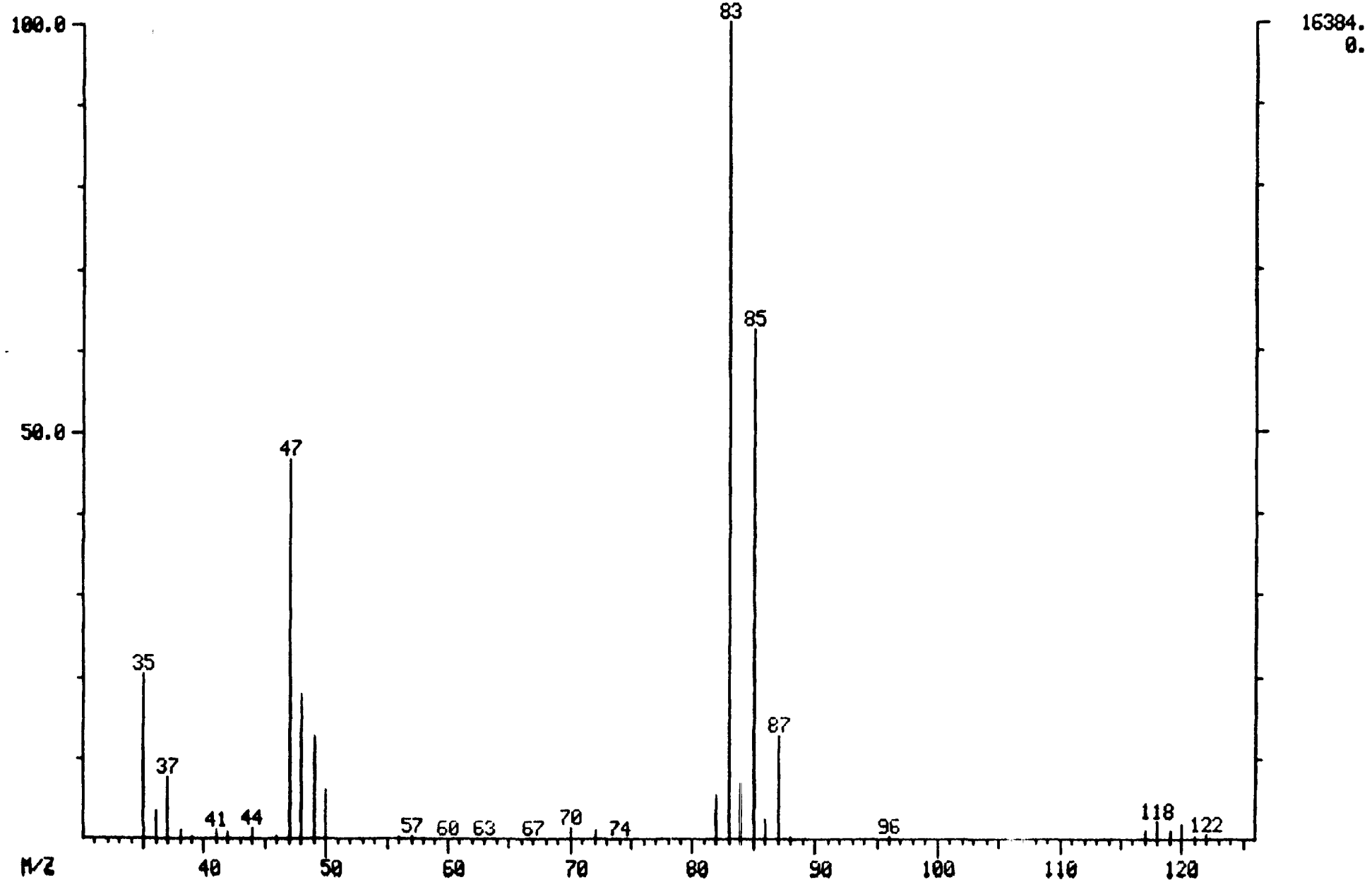
BASE M/Z: 61
RIC: 54336.



MASS SPECTRUM
05/04/89 12:56:00 + 12:04
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 116 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #362
CALI: IC30504 #3

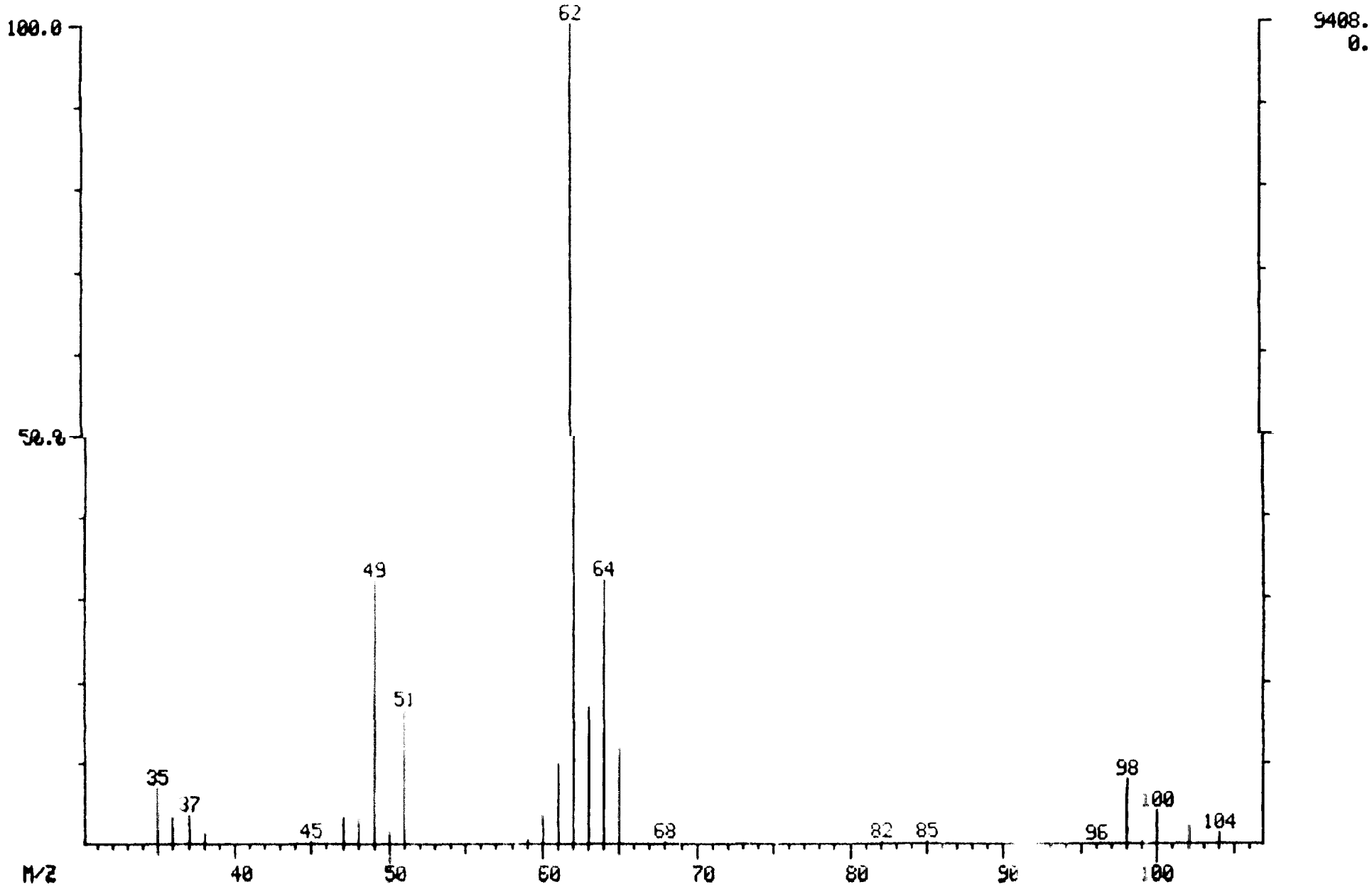
BASE M/Z: 83
RIC: 52672.



MASS SPECTRUM
05/04/89 12:56:00 + 12:46
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8 /MIN
TEMP: 122 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #383
CALI: IC30504 #3

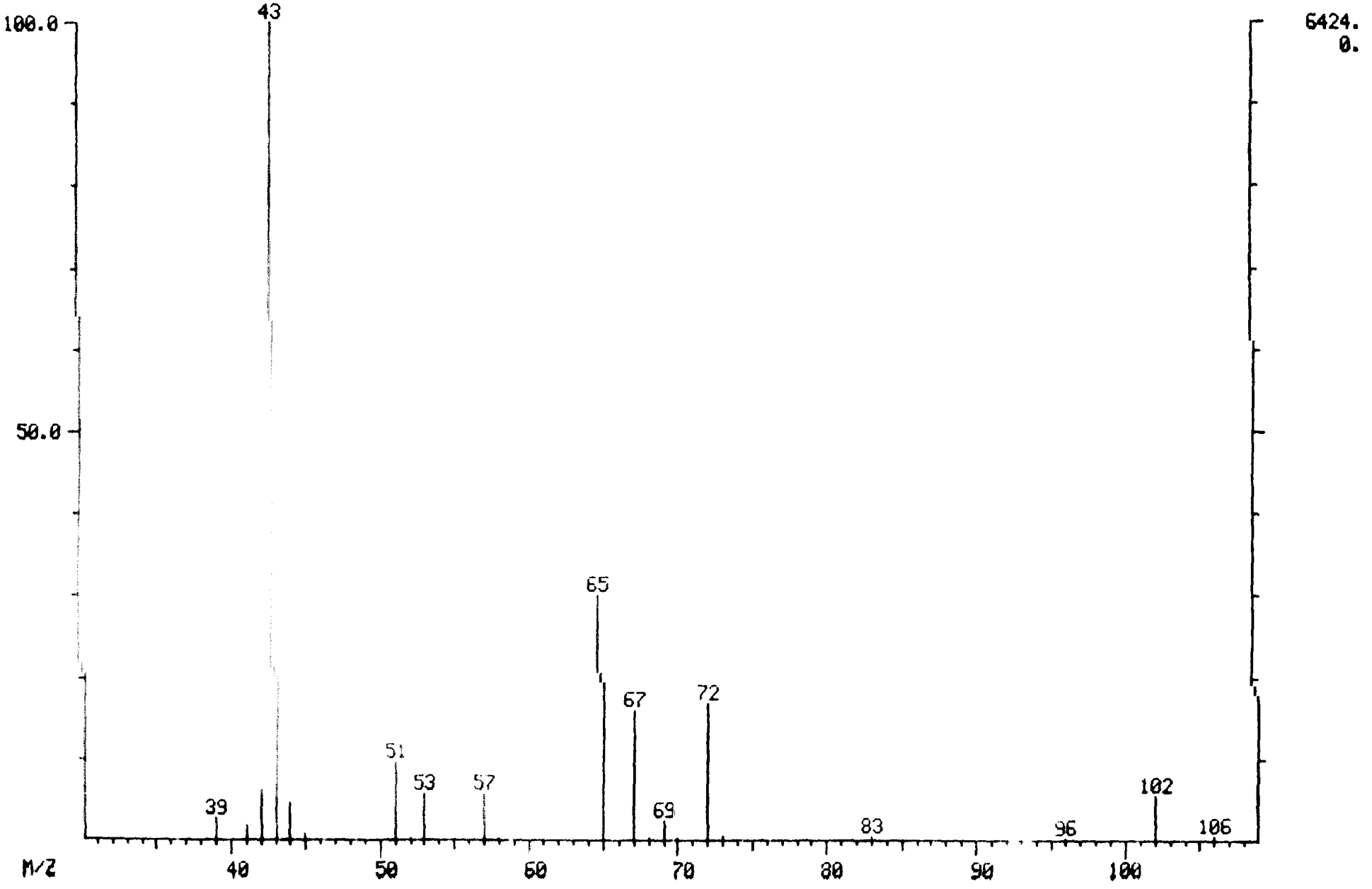
BASE M/Z: 62
RIC: 24896.



MASS SPECTRUM
05/04/89 12:56:00 + 12:36
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 121 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #378
CALI: IC30504 #3

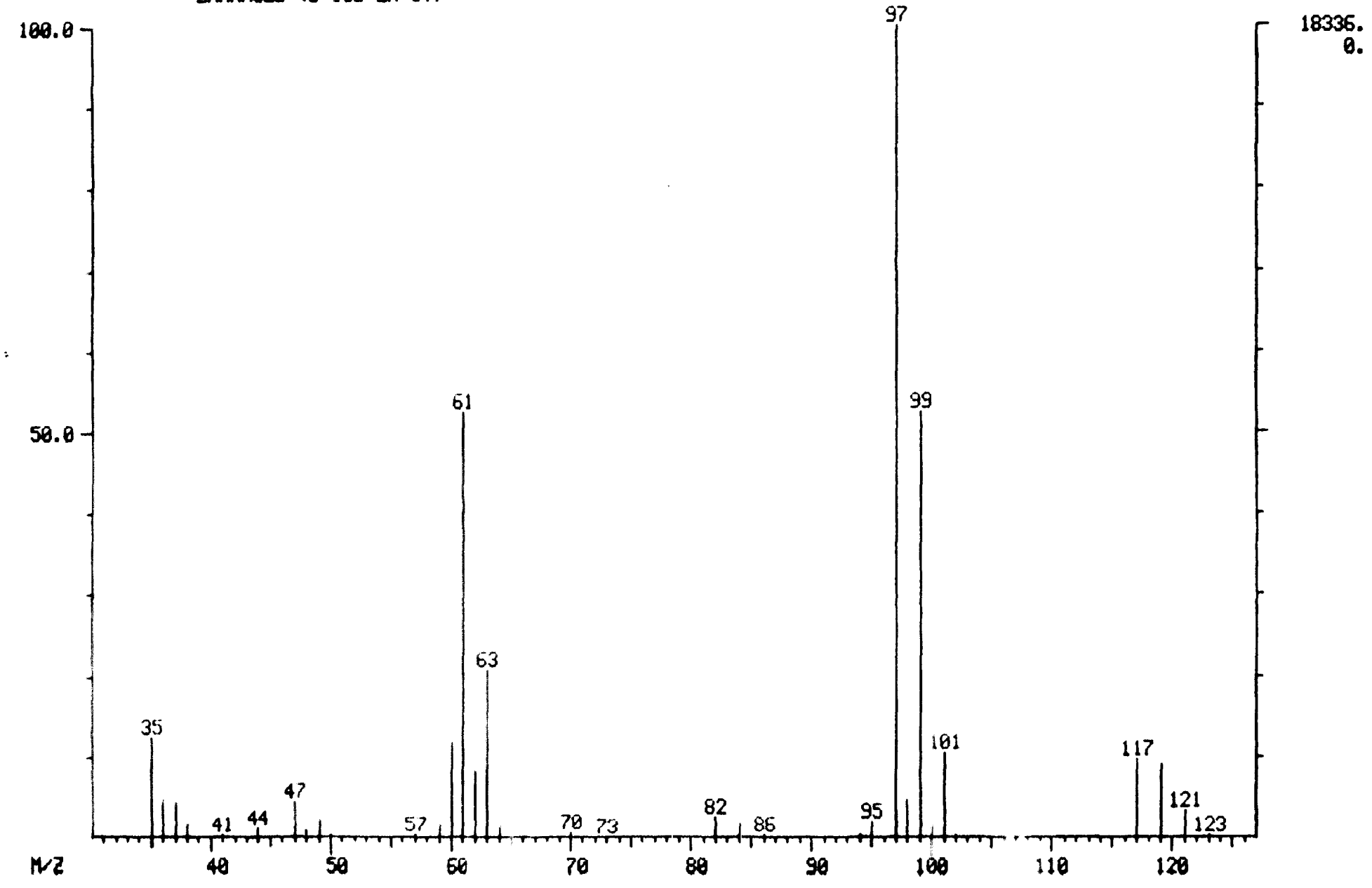
BASE M/Z: 43
RIC: 13632.



MASS SPECTRUM
05/04/89 12:56:00 + 14:04
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 132 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #422
CALI: IC30504 #3

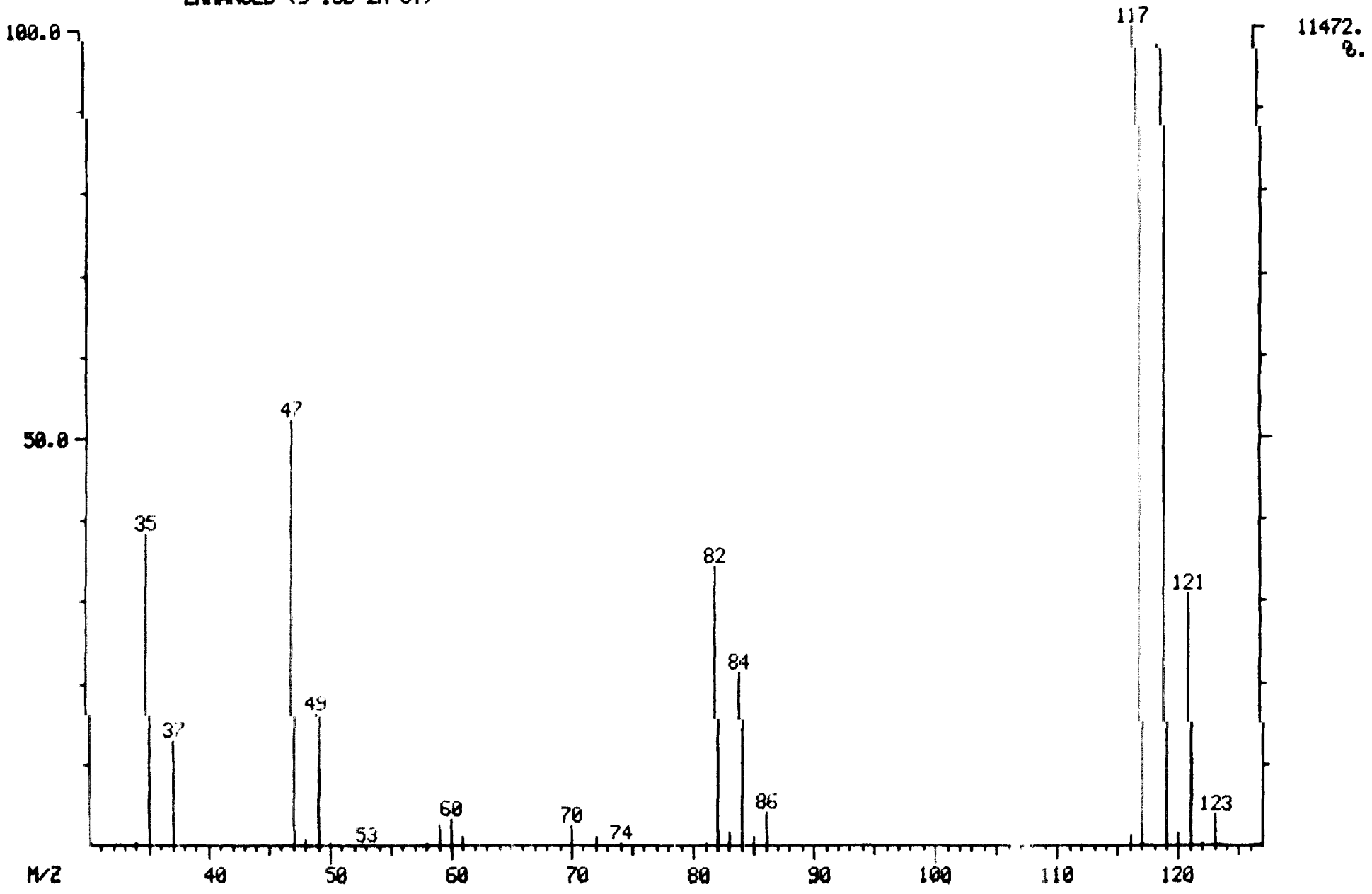
BASE M/Z: 97
RIC: 60352.



MASS SPECTRUM
05/04/89 12:56:00 + 14:28
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8 /MIN
TEMP: 136 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #434
CALI: IC30504 #3

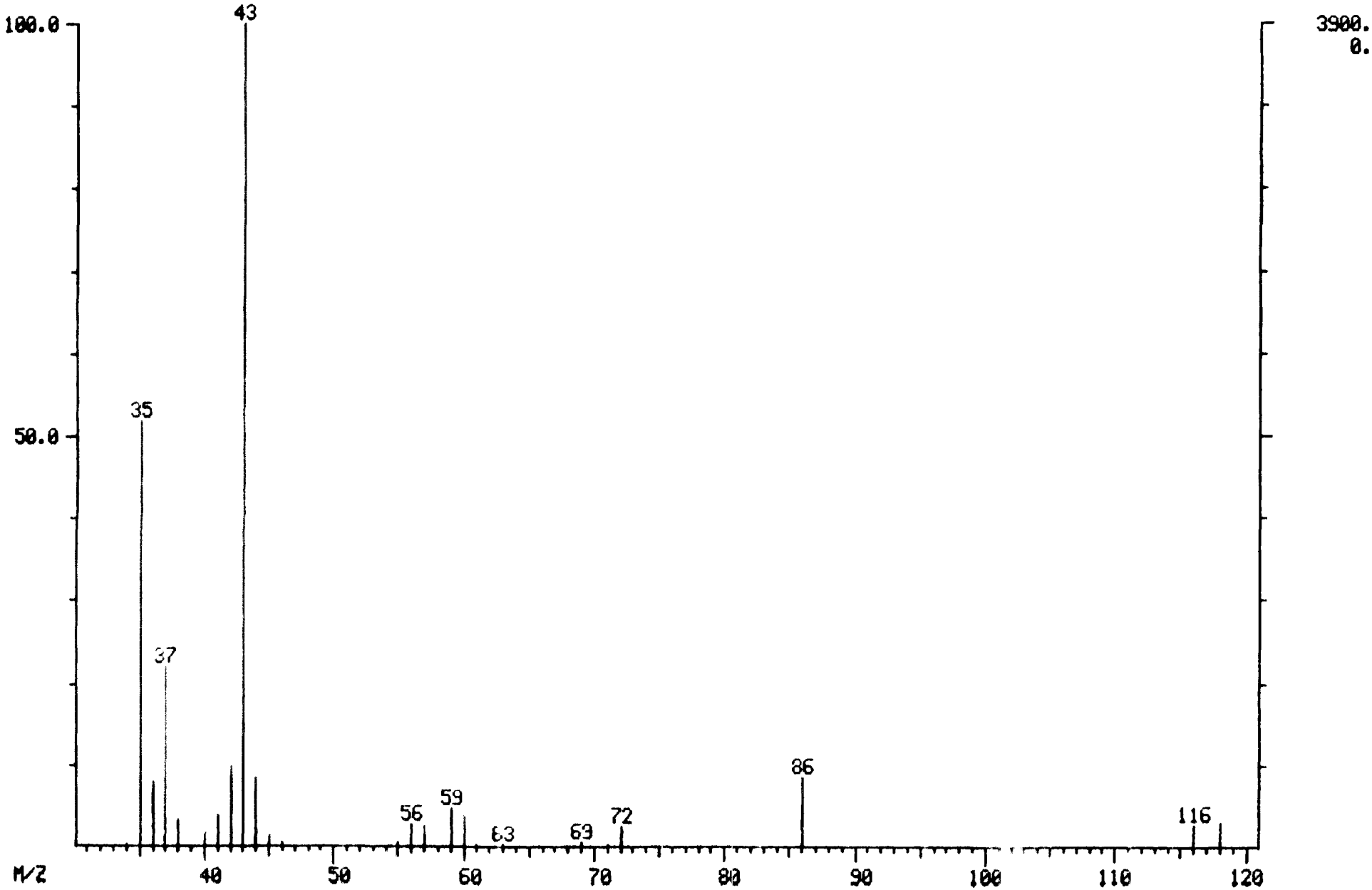
BASE M/Z: 117
RIC: 49408.



MASS SPECTRUM
05/04/89 12:56:00 + 14:34
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 137 DEG. C
ENHANCED (5 15B 2N 0T)

DATA: IC30504 #437
CALI: IC30504 #3

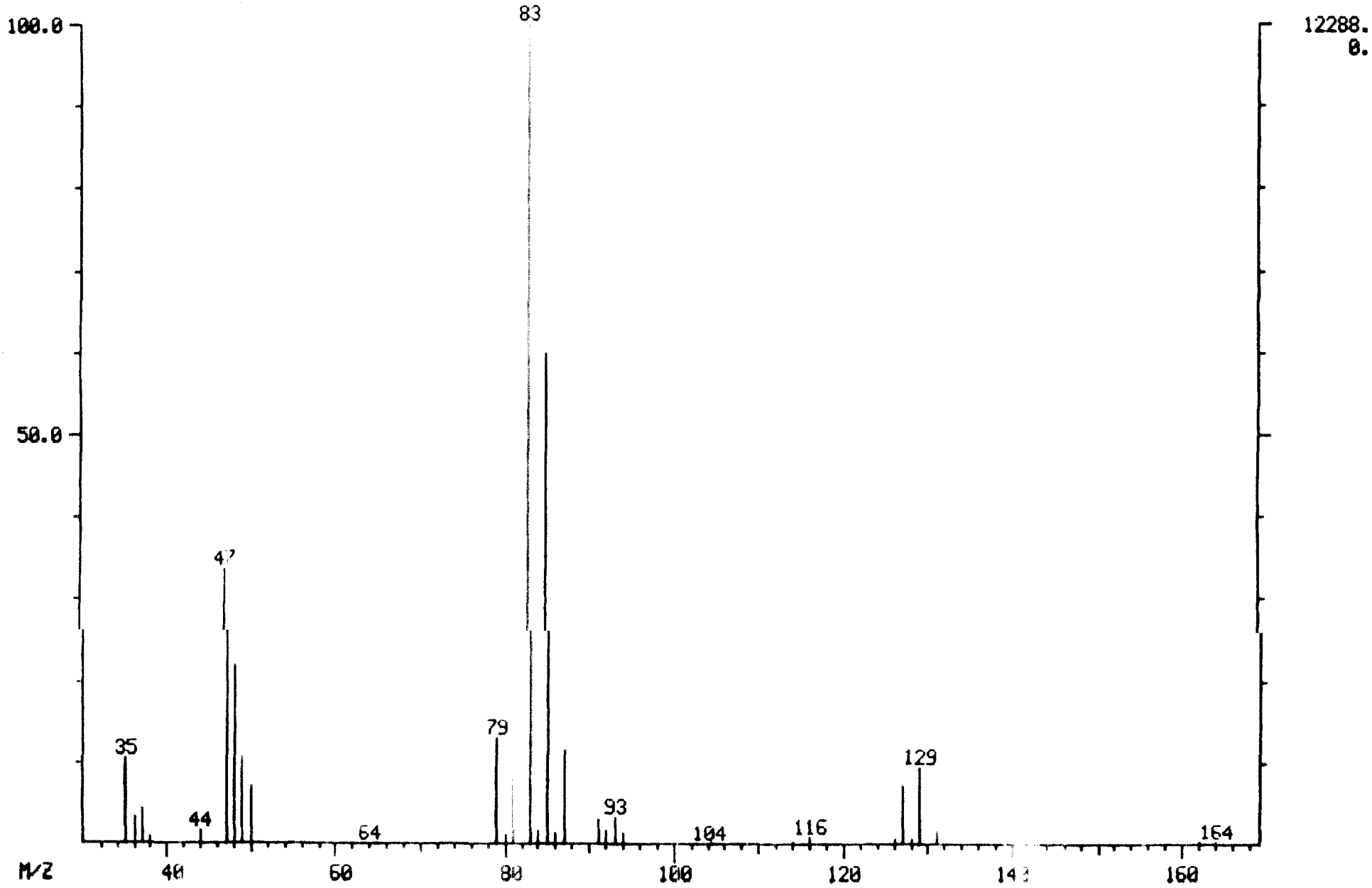
BASE M/Z: 43
RIC: 9552.



MASS SPECTRUM
05/04/89 12:56:00 + 15:00
SAMPLE: CLP,0504,,IC30504,L,W,.V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 140 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #450
CALI: IC30504 #3

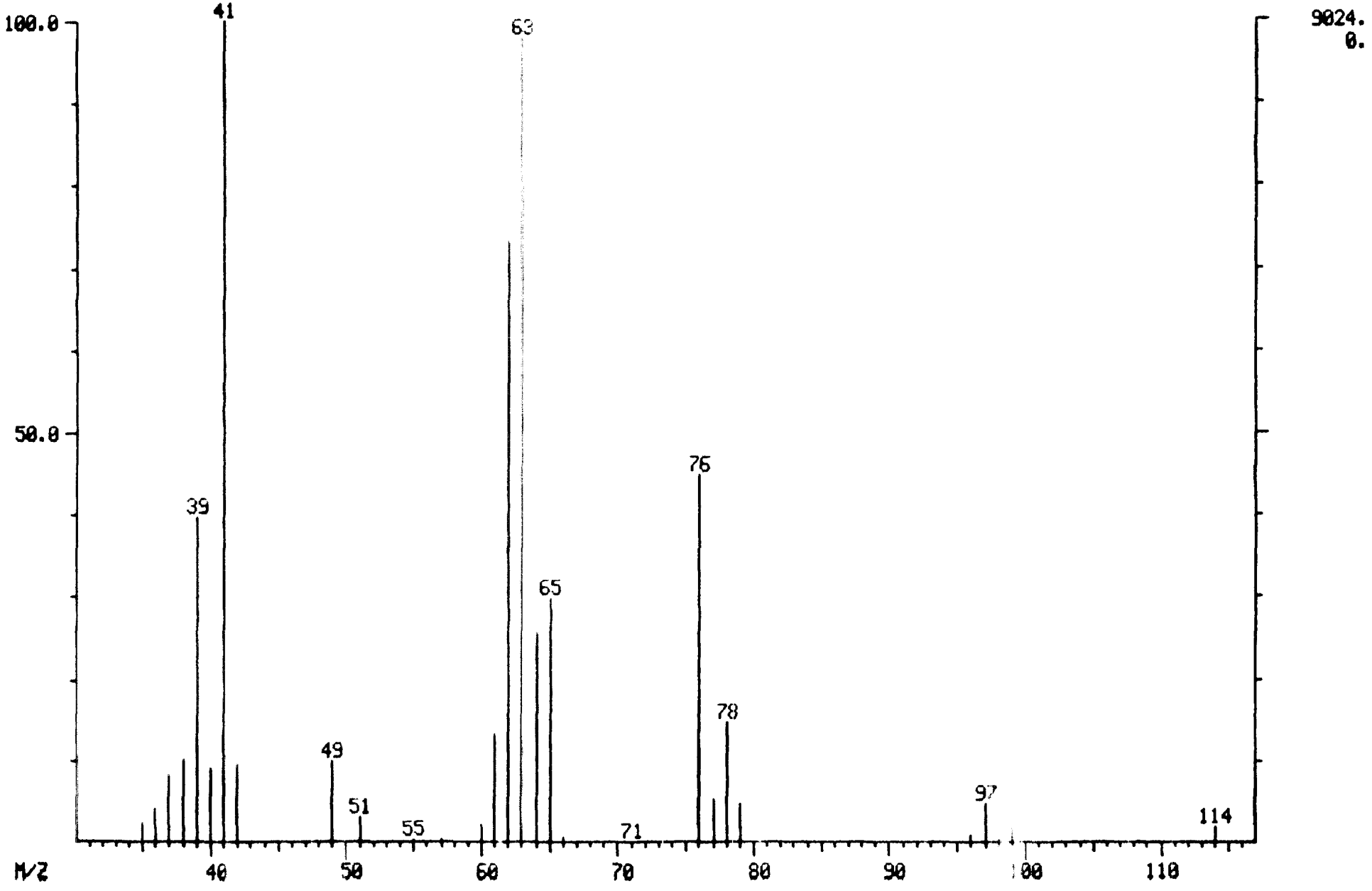
BASE M/Z: 83
RIC: 40000.



MASS SPECTRUM
05/04/89 12:56:00 + 16:22
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 151 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #491
CALI: IC30504 #3

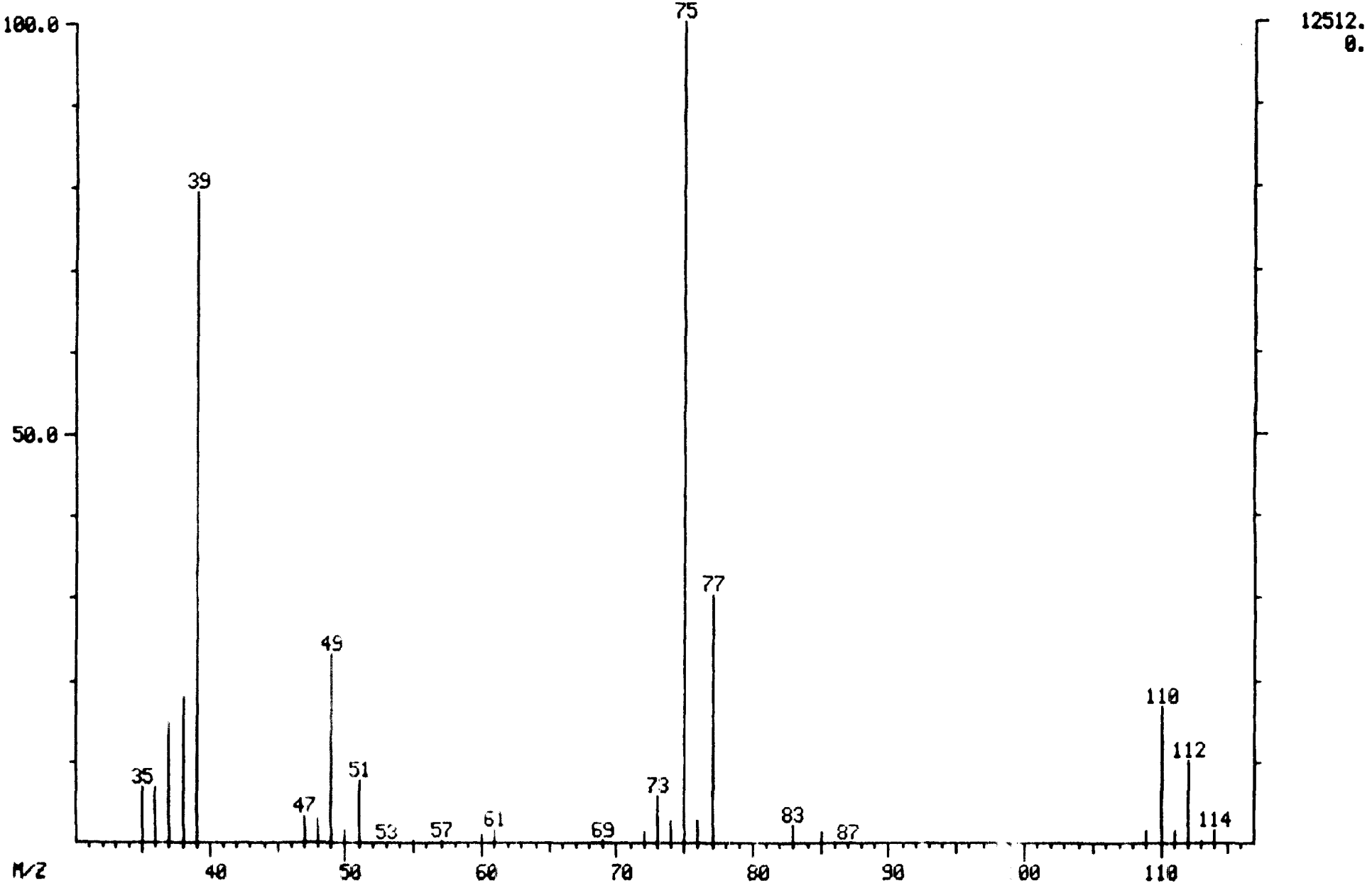
BASE M/Z: 41
RIC: 46976.



MASS SPECTRUM
05/04/89 12:56:00 + 16:38
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 153 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #499
CALI: IC30504 #3

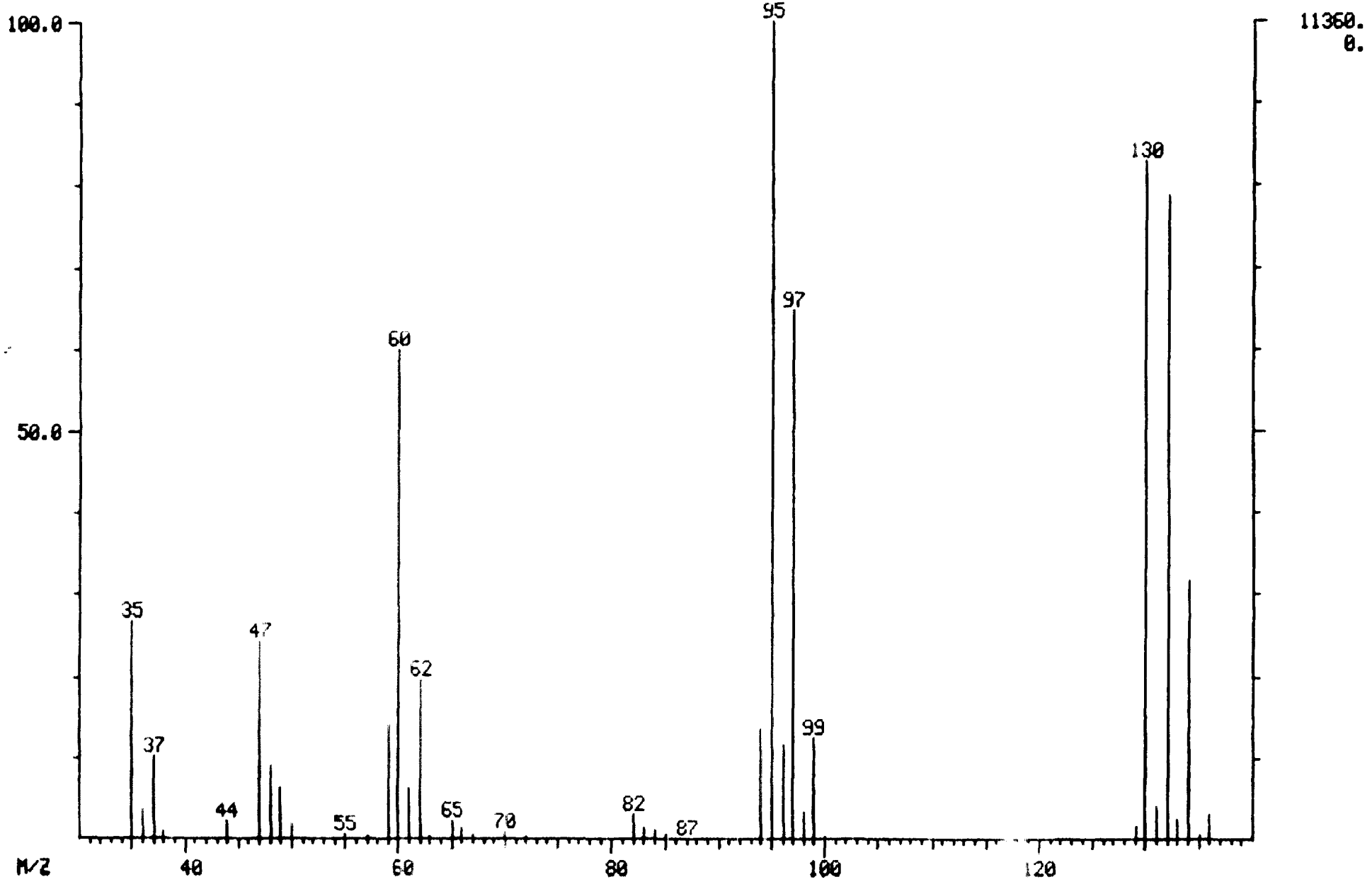
BASE M/Z: 75
RIC: 43712.



MASS SPECTRUM
05/04/89 12:56:00 + 17:10
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 157 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #515
CALI: IC30504 #3

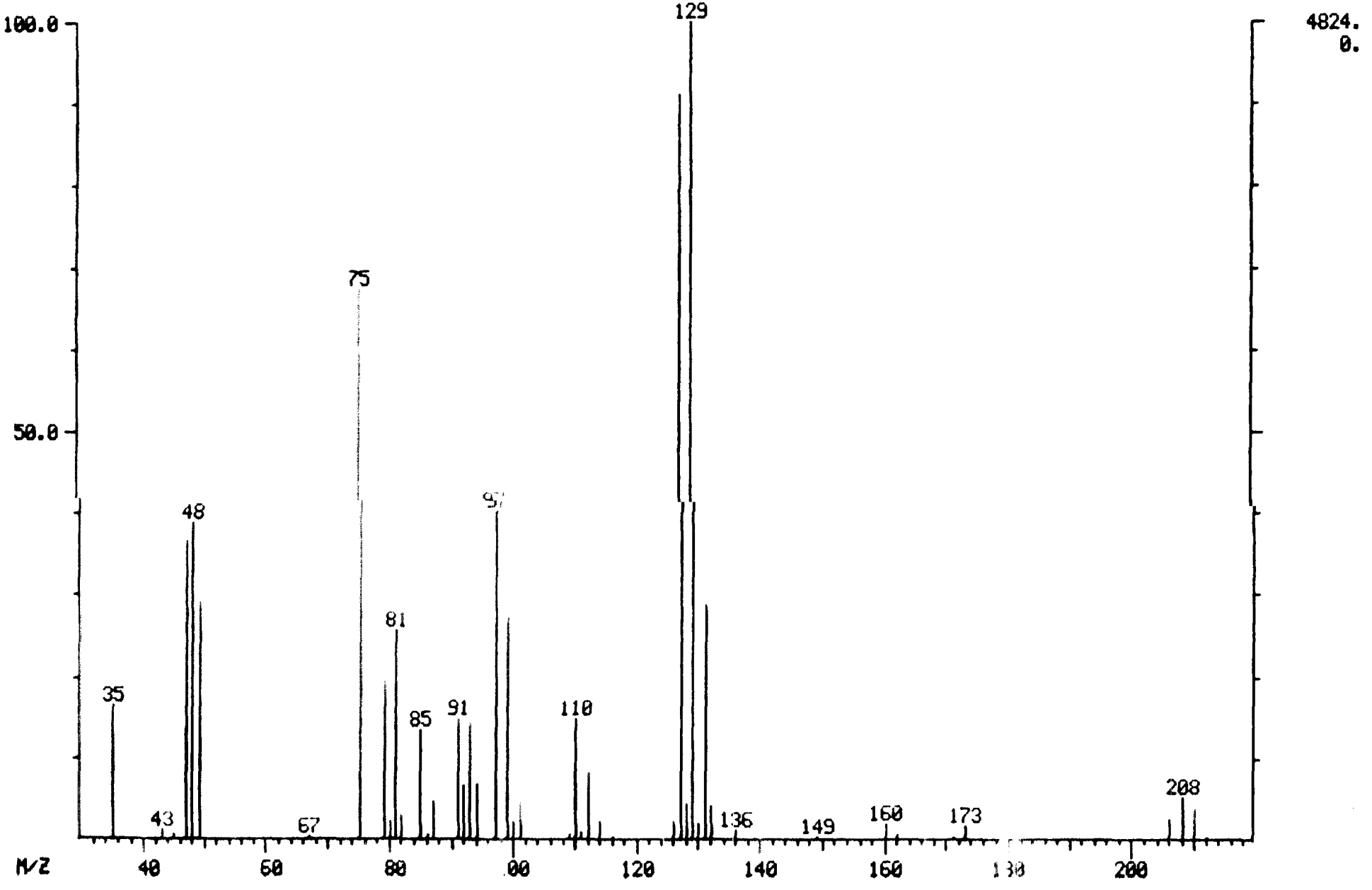
BASE M/Z: 95
RIC: 69248.



MASS SPECTRUM
05/04/89 12:56:00 + 17:50
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 163 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #535
CALI: IC30504 #3

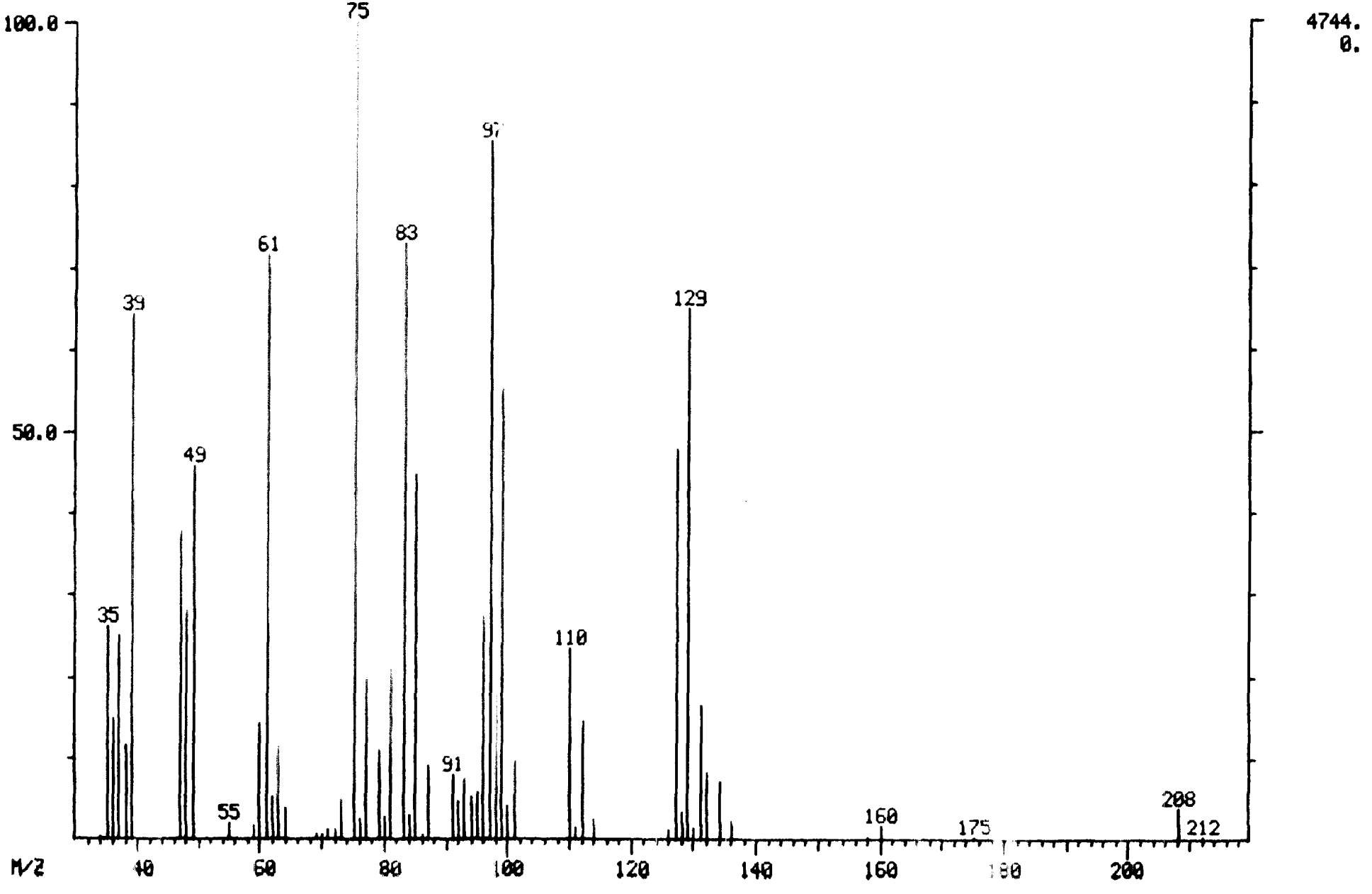
BASE M/Z: 129
RIC: 31648.



MASS SPECTRUM
05/04/89 12:56:00 + 17:54
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 163 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #537
CALI: IC30504 #3

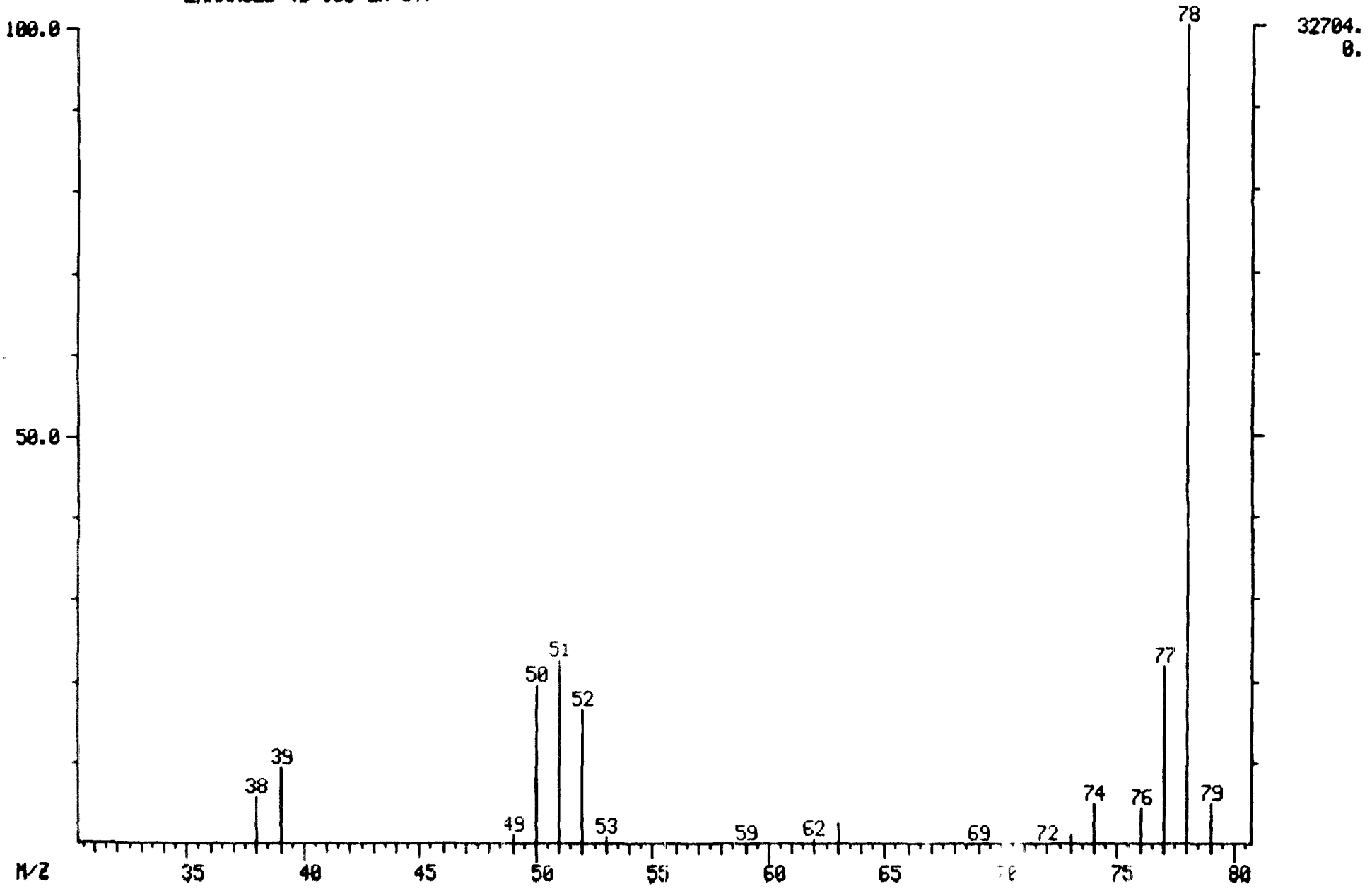
BASE M/Z: 75
RIC: 51840.



MASS SPECTRUM
05/04/89 12:56:00 + 17:40
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 161 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #530
CALI: IC30504 #3

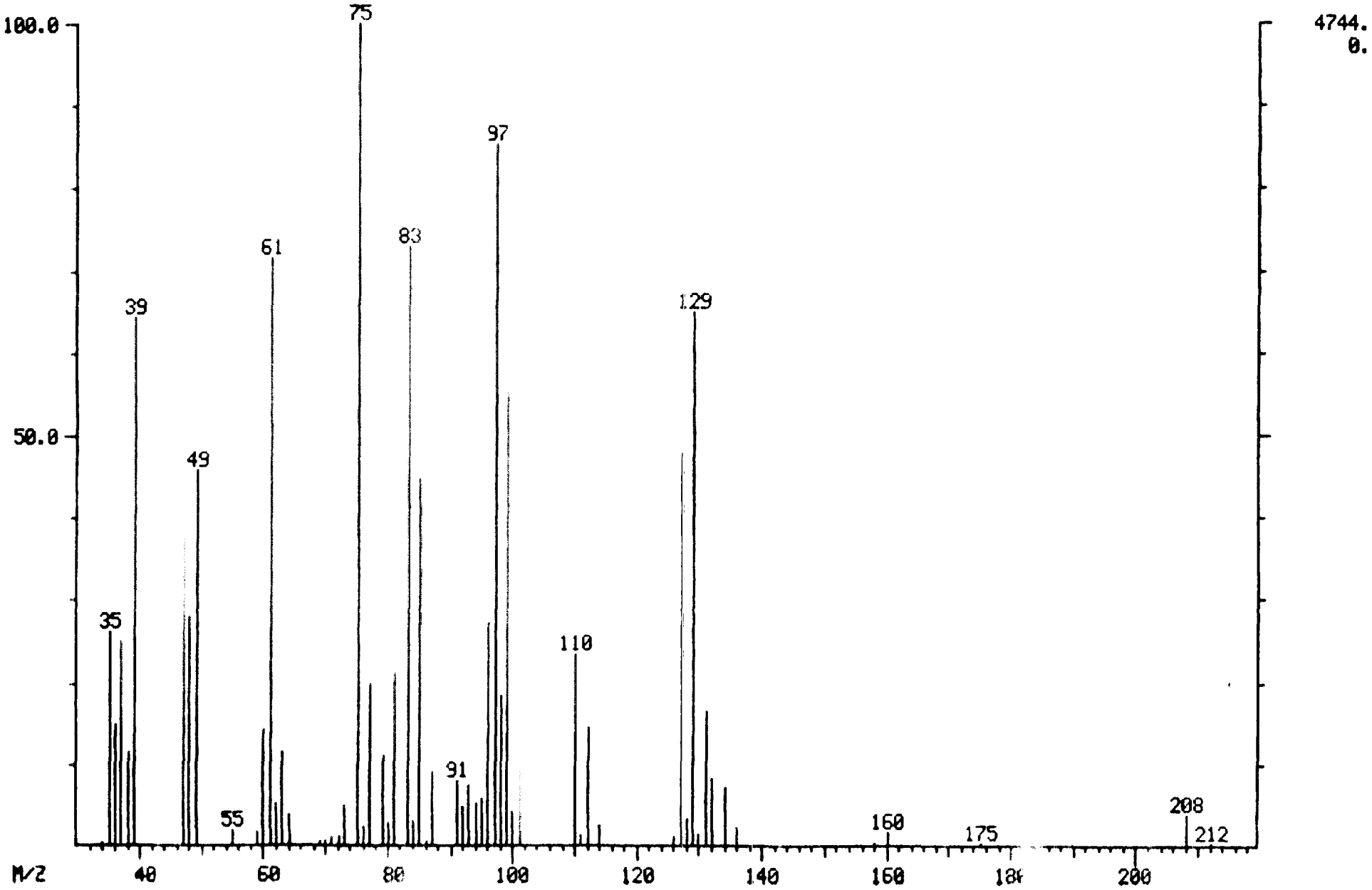
BASE M/Z: 78
RIC: 70912.



MASS SPECTRUM
05/04/89 12:56:00 + 17:54
SAMPLE: CLP,0504,,IC30504,L,W.,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 163 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #537
CALI: IC30504 #3

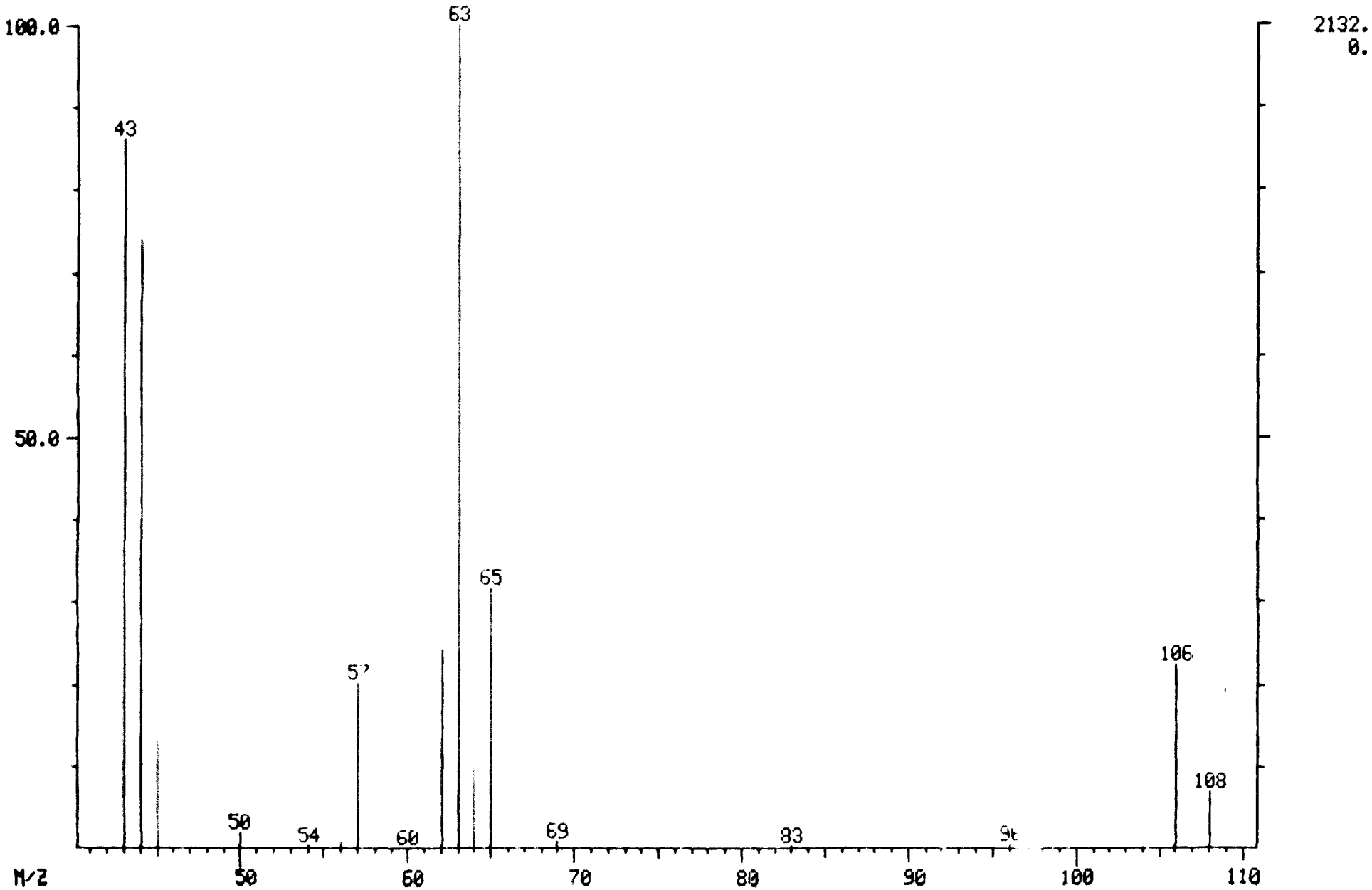
BASE M/Z: 75
RIC: 51840.



MASS SPECTRUM
05/04/89 12:56:00 + 18:58
SAMPLE: CLP,0504,,IC30504,L,W ,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 172 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #569
CALI: IC30504 #3

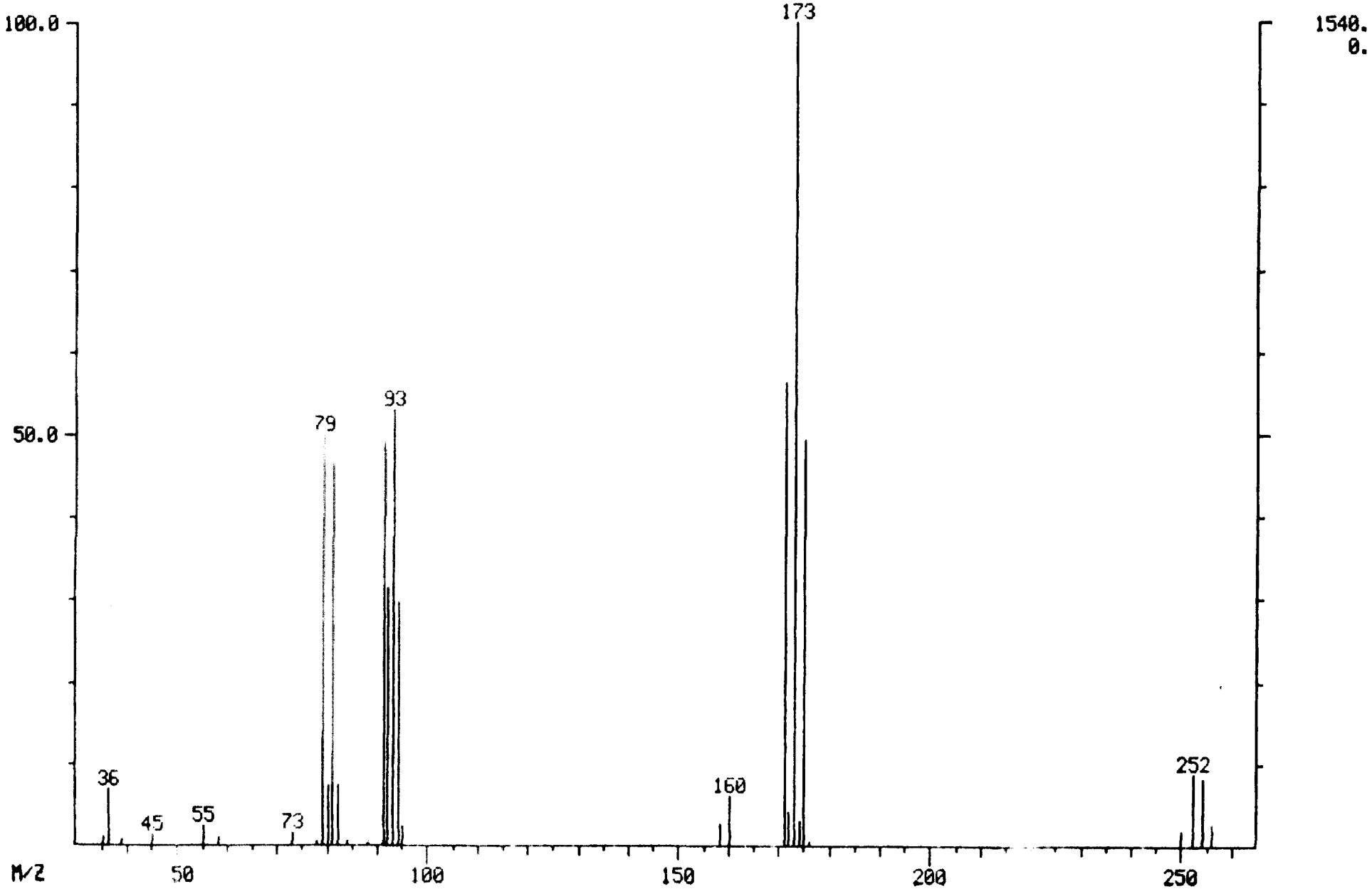
BASE M/Z: 63
RIC: 8400.



MASS SPECTRUM
05/04/89 12:56:00 + 20:34
SAMPLE: CLP,0504,,IC30504,L,W,,U,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 184 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #617
CALI: IC30504 #3

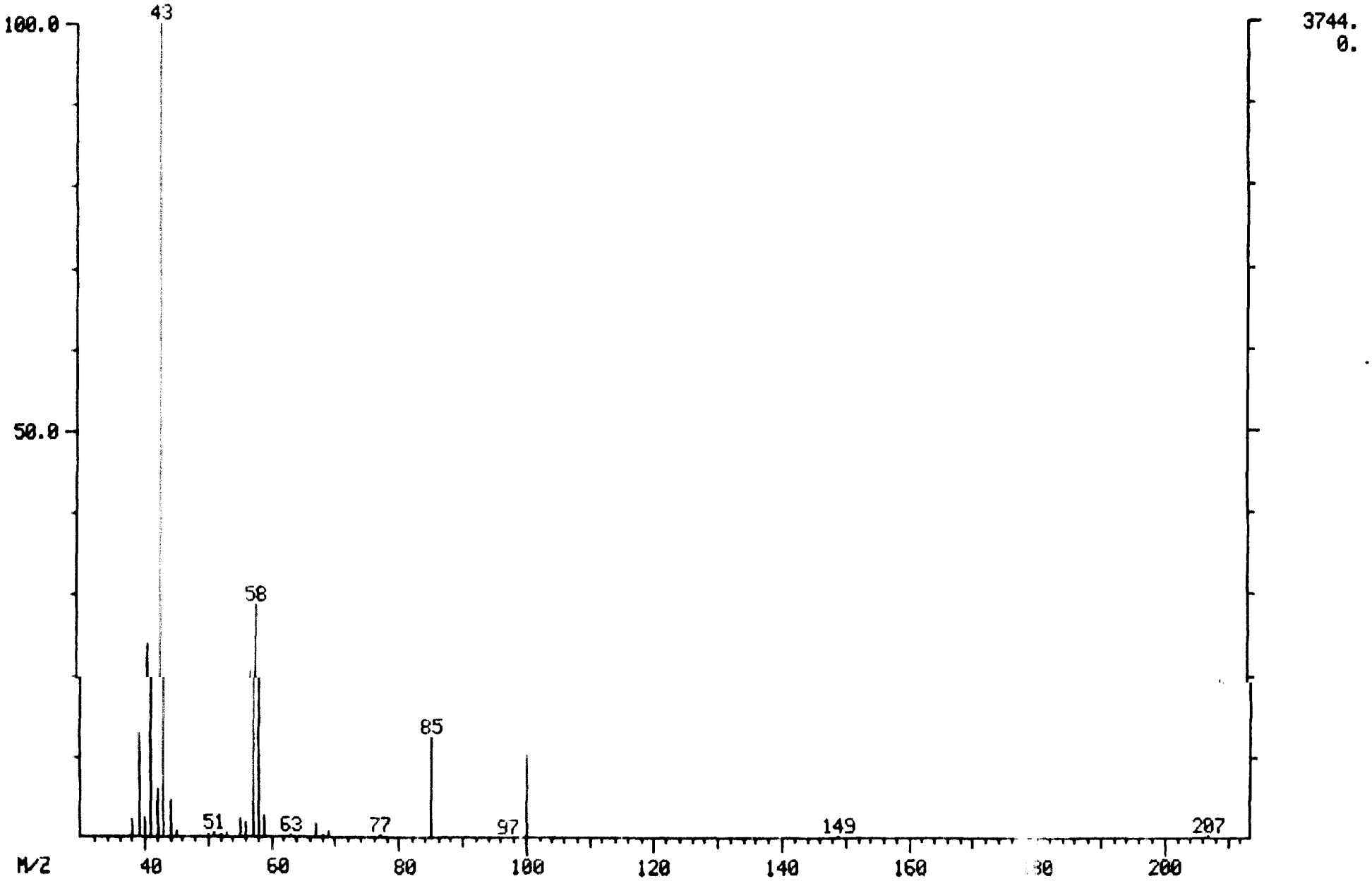
BASE M/Z: 173
RIC: 8304.



MASS SPECTRUM
05/04/89 12:56:00 + 20:58
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 188 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #629
CALI: IC30504 #3

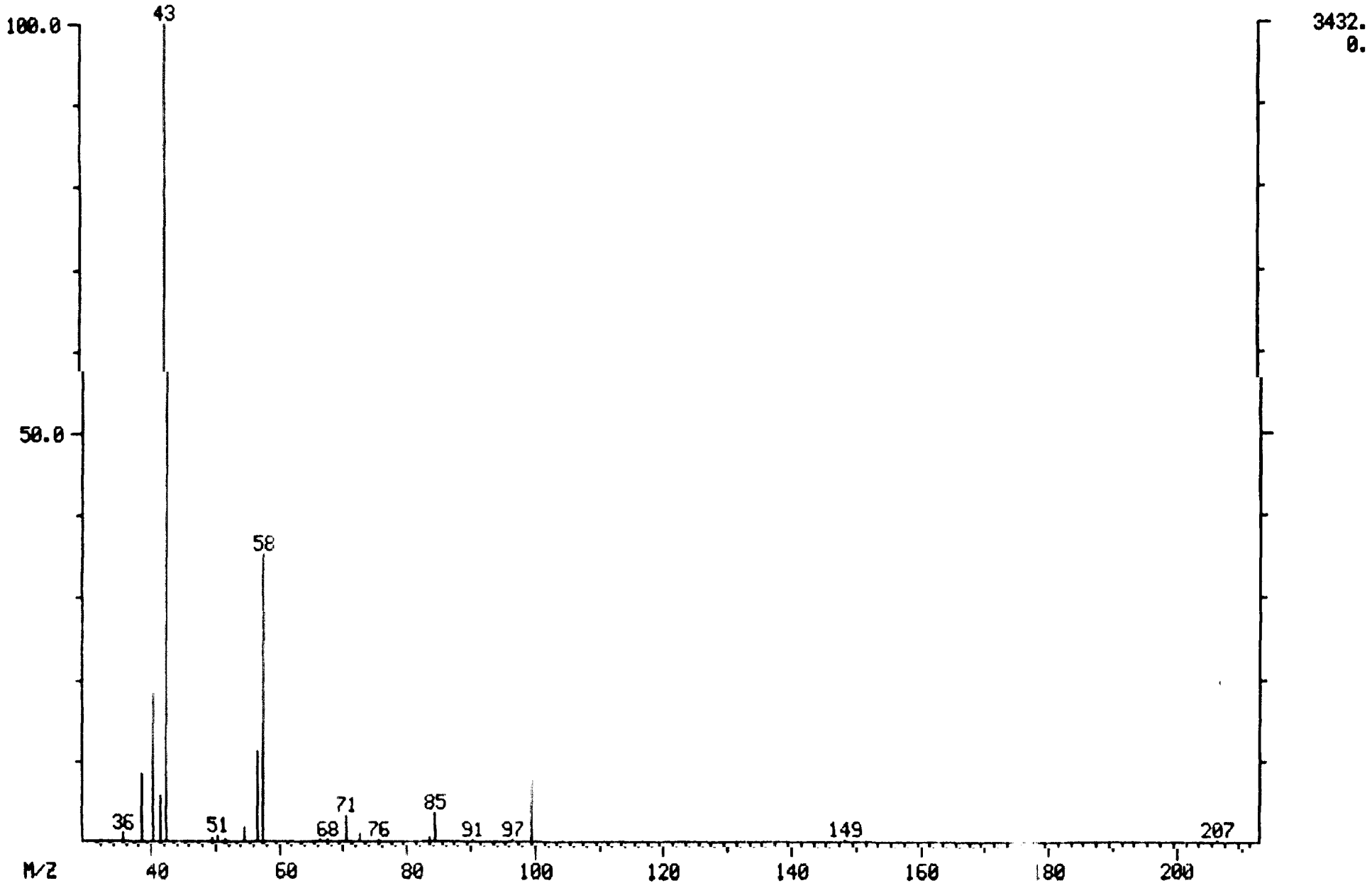
BASE M/Z: 43
RIC: 8976.



MASS SPECTRUM
05/04/89 12:56:00 + 22:30
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 200 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #675
CALI: IC30504 #3

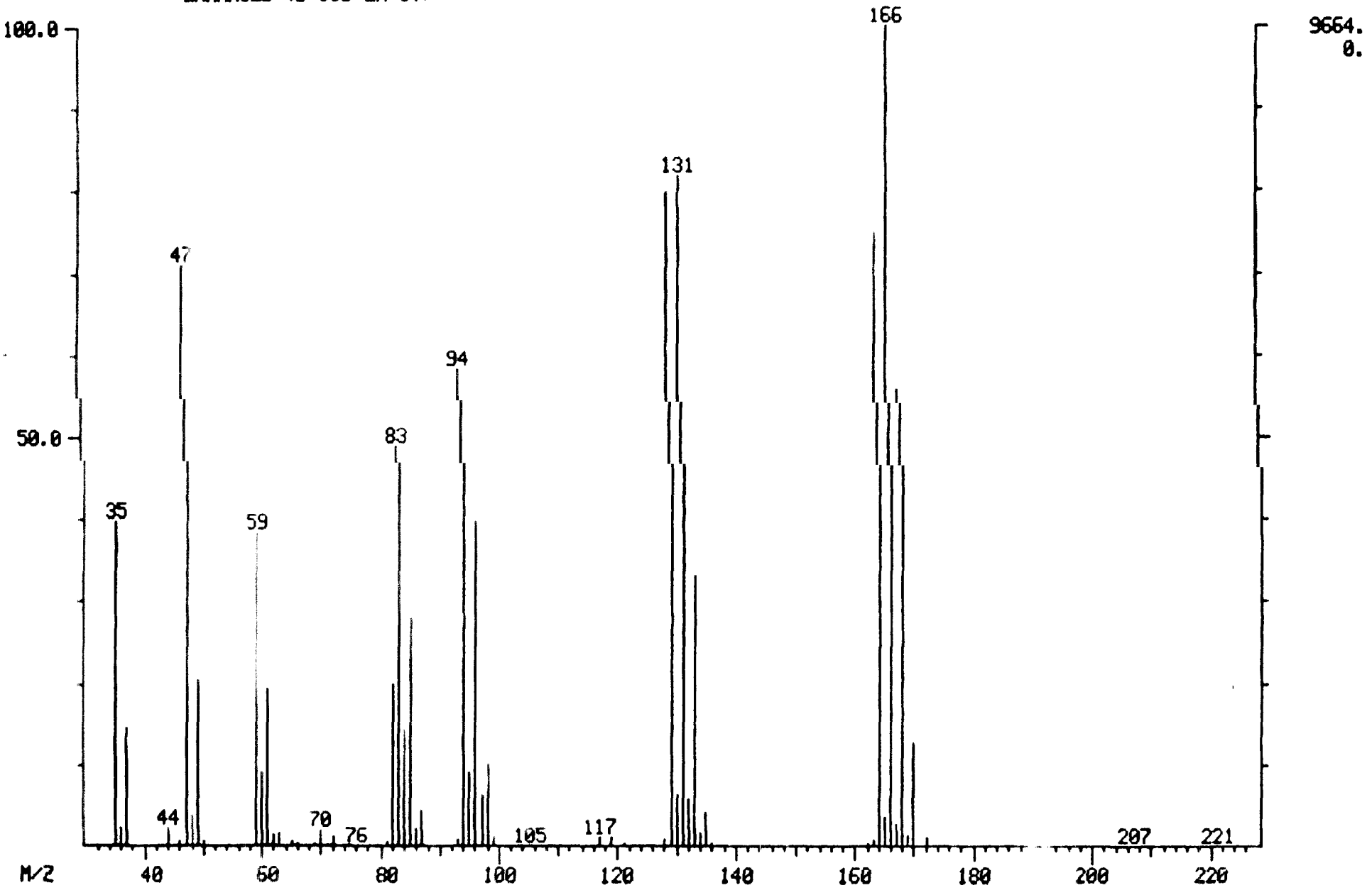
BASE M/Z: 43
RIC: 6960.



MASS SPECTRUM
05/04/89 12:56:00 + 22:50
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 203 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #685
CALI: IC30504 #3

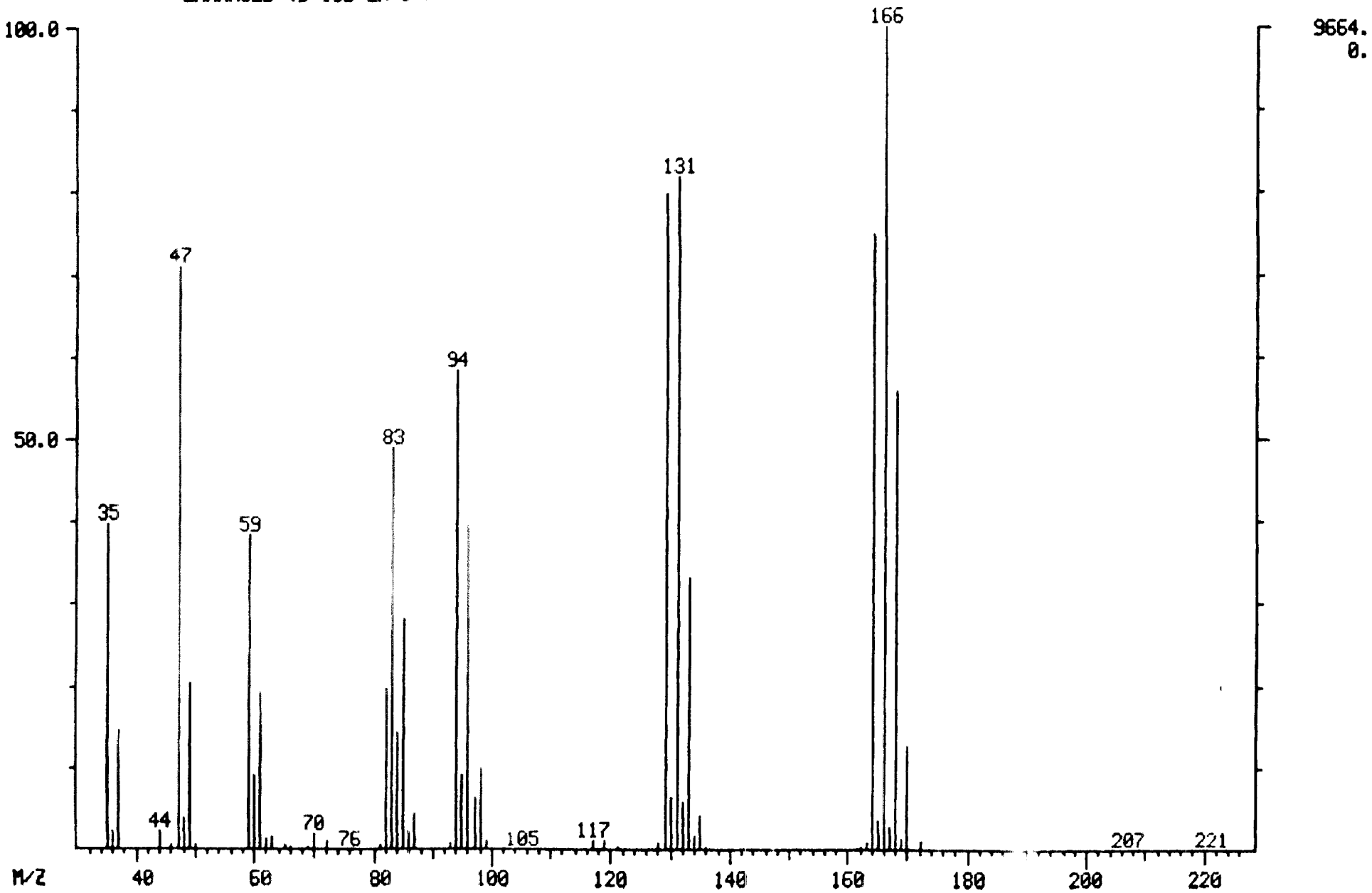
BASE M/Z: 166
RIC: 91264.



MASS SPECTRUM
05/04/89 12:56:00 + 22:50
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 203 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #685
CALI: IC30504 #3

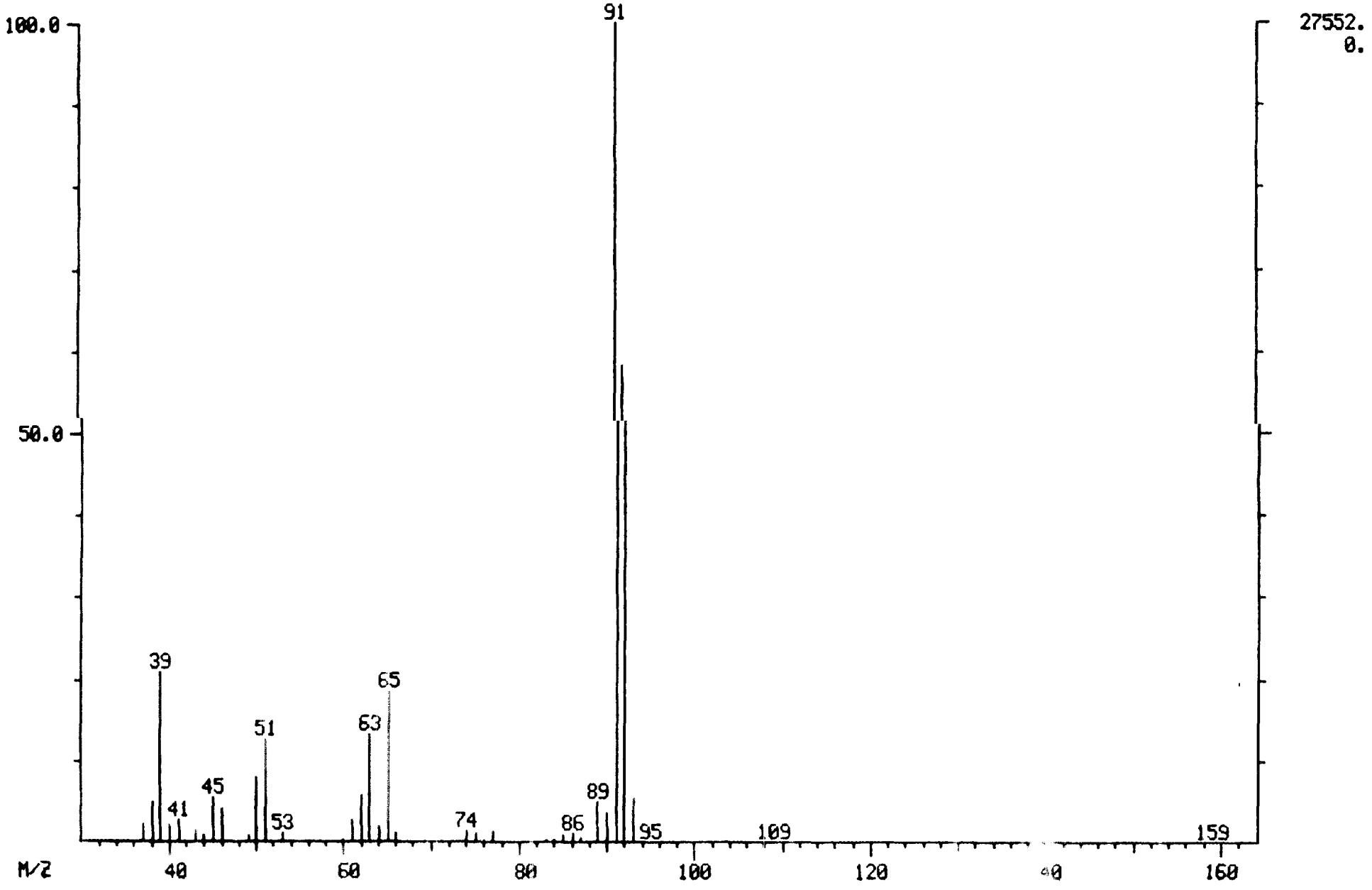
BASE M/Z: 166
RIC: 91264.



MASS SPECTRUM
05/04/89 12:56:00 + 24:08
SAMPLE: CLP,0504,,IC30504,L,W,,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 213 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #724
CALI: IC30504 #3

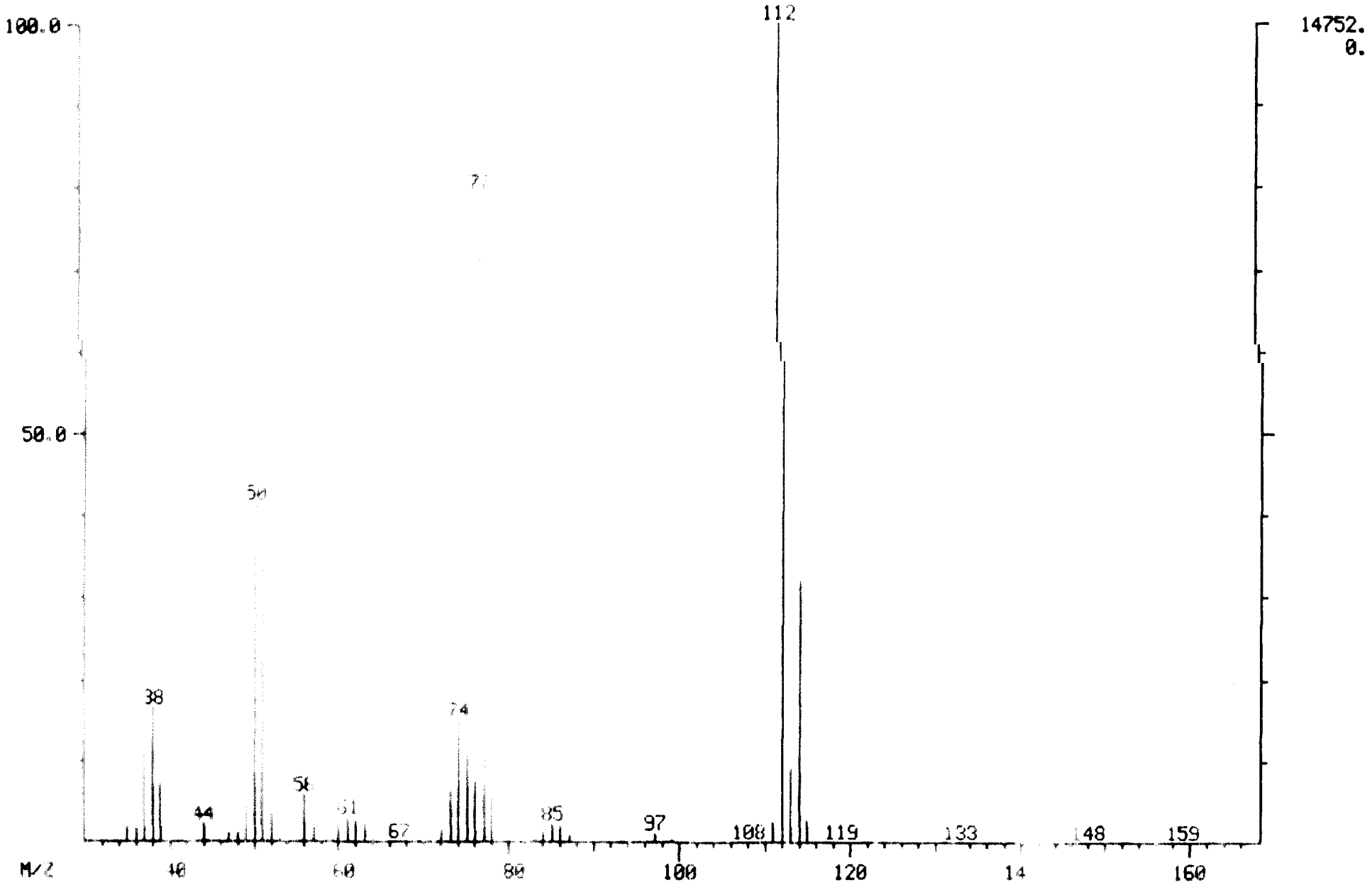
BASE M/Z: 91
RIC: 80384.



MASS SPECTRUM
05/04/89 12:56:00 + 25:18
SAMPLE: CLP,0504,,IC30504,[illegible],IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 220 DEG. C
ENHANCED (S 15B 2N 0)

DATA: IC30504 #259
CALI: IC30504 #3

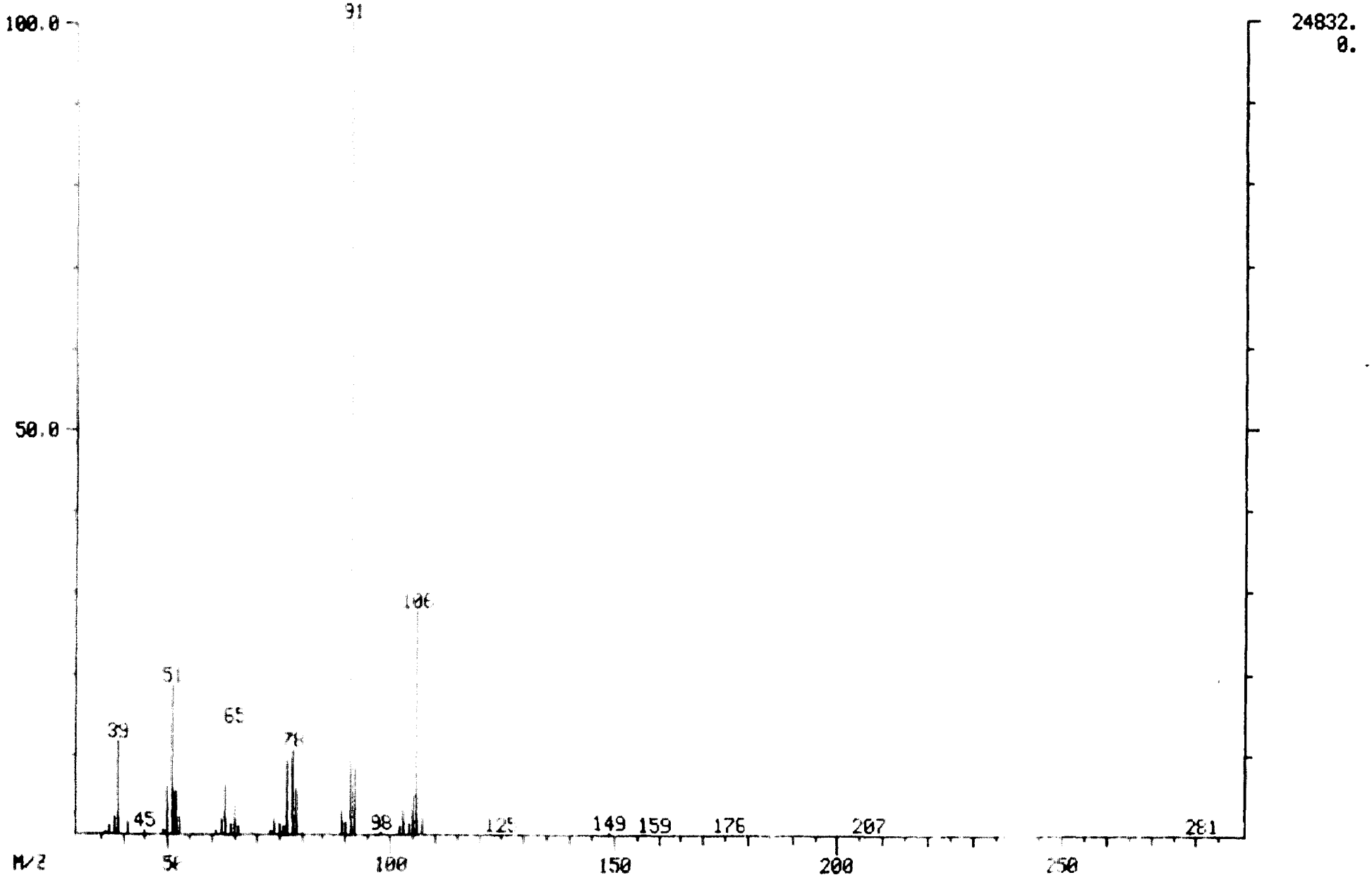
BASE M/Z: 112
RIC: 63808.



MASS SPECTRUM
05/04/89 12:56:00 + 27:20
SAMPLE: CLP,0504,,IC30504,L,W,,U,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 158 2N 01)

DATA: IC30504 #820
CALI: IC30504 #3

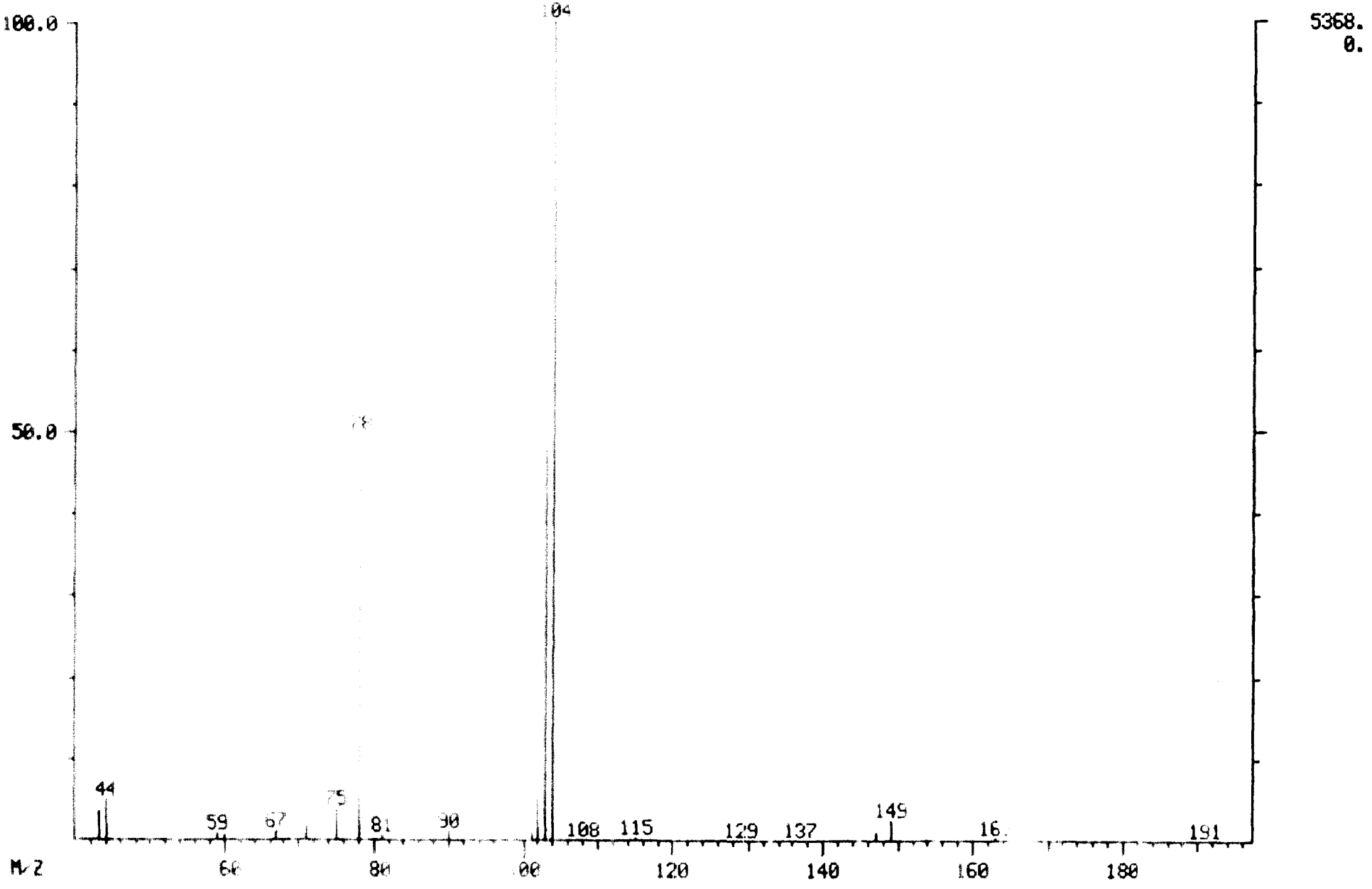
BASE M/Z: 91
RIC: 65280.



MASS SPECTRUM
05/04/89 12:56:00 + 31:32
SAMPLE: CLP,0504,,IC30504,L,W ,V,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #946
CALI: IC30504 #3

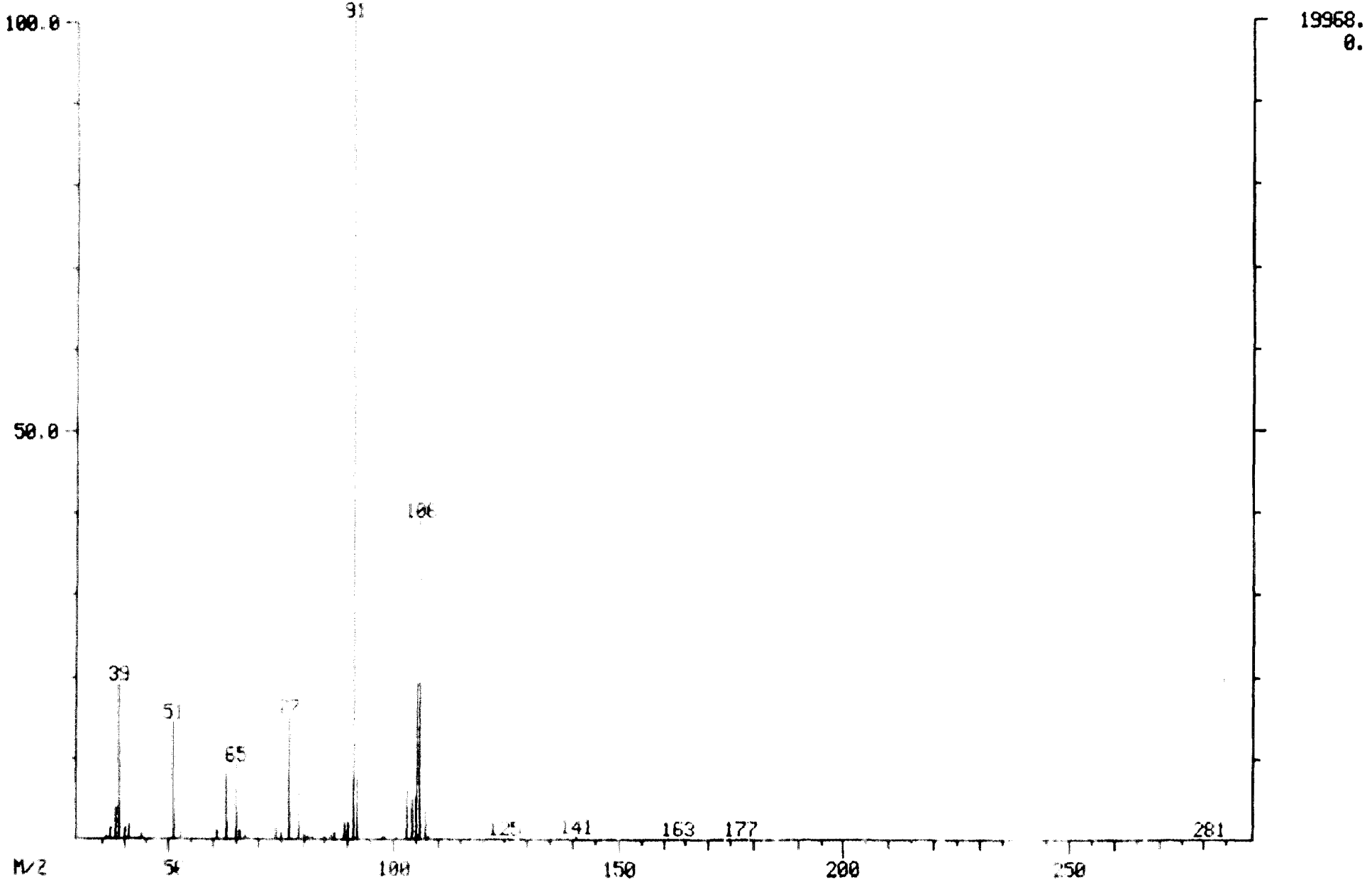
BASE M/Z: 104
RIC: 12144.



MASS SPECTRUM
05/04/89 12:56:00 + 31:50
SAMPLE: CLP,0504,,IC30504,C.W.,U.IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: IC30504 #355
CALI: IC30504 #3

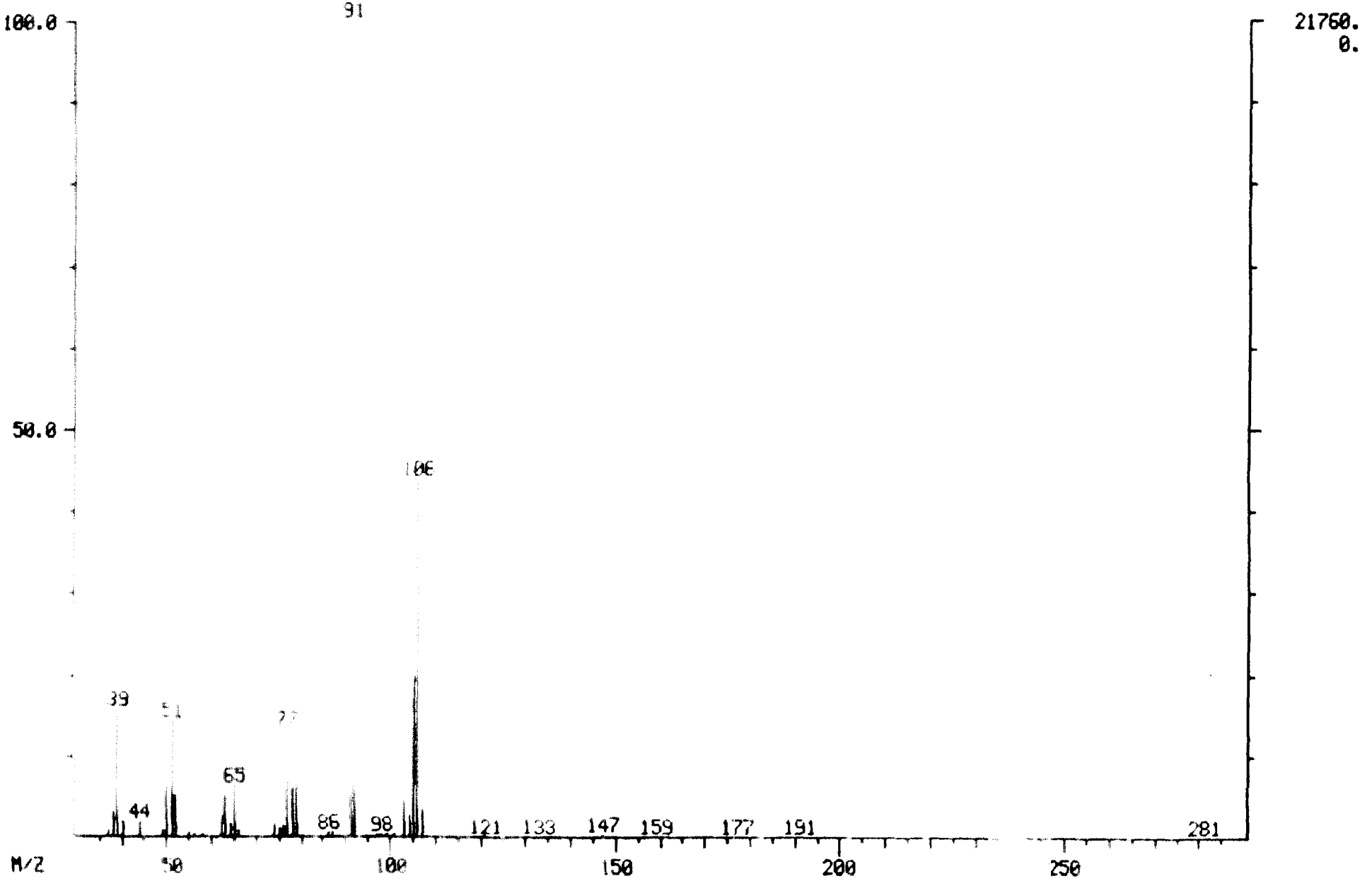
BASE M/Z: 91
RIC: 56192.



MASS SPECTRUM
05/04/89 12:56:00 + 32:54
SAMPLE: CLP,0504,,IC30504,L/W, U,IC-100,
CONDS.: 45'(3MIN) TO 220'@ 8'/MIN
TEMP: 219 DEG. C
ENHANCED (S 158 2N 01)

DATA: IC30504 #987
CALI: IC30504 #3

BASE M/Z: 91
RIC: 61635.



U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

I. Unscannable item due to format

___ Graph

✓ Mail receipts

___ Sample tags

II. Image Quality (Pages follow)

___ Resolution / Contrast

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FIL0656
PROJECT NAME: F05-8805 005 / CASE 12503
SAMPLERS: (Signature) Andrea L. Davis

Cooler #: 113
Supergrad 6437

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ABN/Pest/PCB 1 l. Amber	40 ml. VOA					REMARKS: Tag numbers	low Conc. Matrix
M26597	8/9/89	1250		✓	RW3	6	3	3					053183-185, 188-190	DRK. WATER
M11R66	8/9/89	1130		✓	Blank	6	3	3					053191-193, 196-198	DI WATER

Lot #:
1 l. SEE C.O.C. # 05-01178
40 ml. " "

(OTR in Cooler # 17)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Andrea L. Davis	8/9/89 1530	William Sanger			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		William Sanger	8/10/89 2:07pm	Shipped FED EX TO CRL AirBill # - 2734235652 Custody Seals - 95557, 95558

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-01176

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FIL0656
PROJECT NAME: F05-8805-005/CASE 12503
SAMPLERS: (Signature) Andrea L. Davis

Cooler #: 228
Superfund 6437

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ABN/PEST/PCB/1l Ambers	40 ml. VOA					REMARKS: TAG numbers	low CONC. MATRIX
M26597 6	AD 8/9/89	1120		✓	RW2 & MSD	16	8	8					053165-167, 170-182	DRK. WATER

LOT #:
1 l. SEE C.O.C # 05-01178
40 ml. " "

(OTR in Cooler #17)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Andrea L. Davis	8/9/89 1530	William Sanger Jr.			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) William Sanger Jr.	Date / Time 8/10/89 2:07pm	Remarks Shipped FED EX TO CRL AirBill # - 2734235652 Custody Seals - 95556 95556	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-01175

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 5
230 South Dearborn Street
Chicago, Illinois 60604

CHAIN OF CUSTODY RECORD

PROJ. NO.: FIL0656
PROJECT NAME: F05-8805-005/CASE 12503
SAMPLERS: (Signature) Andrea L. Davis

Cooler #: 17
Superfund 6437

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	ABN/PEST/PCB (1 l. Amber)	40 ml. VOA					REMARKS: TAG numbers	LOW CONC. MATRIX
M26595	8/9/89	1040		✓	RW1	6	3	3					053149-151, 154-156	DRK. WATER
M26095	8/9/89	~~1100~~ 1100		✓	DUP	6	3	3					053157-159, 162-164	DRK. WATER

H9158574 (BIK-1)
LOT #: H9158604 (RW3) (BIK-2)
1 l. H9158604 (RW1, DUP) (BIK-2) AD
H9158574 (RW2) (MSD-3)
~~H9061044 (MSD-2)~~
40 ml.
(RW1-1) B8176034/B8235144 (~~RW1~~ BIK-2/RW1-2 DUP, RW3)
B8302194 (RW2)
B8302164 (BIK-1)
B8176034, B8302164, B8302204, B8134014, B8302134 (MSD)

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Andrea L. Davis	8/9/89 1530	William Sayer Jr.			
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) William Sayer Jr.	Date / Time 8/10/89 2:07pm	Remarks Shipped FED EX to CRL AirBill # - 2734235652 Custody SEALS - 95553, 95554	

Distribution: White — Accompanies Shipment; Pink — Coordinator Field Files; Yellow — Laboratory File

05-01178

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: PESTICIDES AND PCB'S

TFA302

DIVISION/BRANCH Fit Superfund SAMPLE DATE 8/9/89 LAB ARRIVAL DATE 8/10/89 DUE DATE 8/~~30~~ 31/89

DU NUMBER TFA DATA SET NUMBER 6437 STUDY Estwing Mfg Co PRIORITY — CONTRACTOR —

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER TRIHALOMETHANES UG/L PES17414		WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144		WATER CHLORINATED PESTICIDES UG/L PES 17134		WATER HERBICIDES UG/L PES 17424		WATER OIL AND GREASE MG/L PES 17439	
89FM26S95	PW1 5-053150-1			X		X					
89FM26S96	MSD PW2 5-053166-7 5-053175-77			X		X					
89FM26S97	PW3 5-053184-5			X		X					
89FM26D95	DUP 5-053158-9			X		X					
89FM26B66	BLANK 5-053192-3			X		X					

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: TOXIC SUBSTANCES

TFA 362

DIVISION/BRANCH FIT SUPERFUND SAMPLE DATE 8/9/89 LAB ARRIVAL DATE 8/10/89 DUE DATE 8/31/89

DU NUMBER TFA DATA SET NUMBER 6437 STUDY Estwing Mfg Co PRIORITY — CONTRACTOR —

CRL LOG NUMBER	SAMPLE DESCRIPTION	WATER VOLATILE ORGANICS SCAN UG/L TOX 17564	WATER ABN ORGANICS SCAN UG/L TOX 17574	SEDIMENTS SOLIDS VOLATILE ORGANICS SCAN MG/KG (DRY) TOX 215622	SEDIMENTS SOLIDS ABN ORGANICS SCAN MG/KG (DRY) TOX 215722
89FM26S95	RW1 5-053154-56	X	X		
89FM26S96	MSD/RW2 5-053120-22 5-053178-82	X	X		
89FM26S97	RW3 5-053188-90	X	X		
89FM26D95	DUP 5-053162-64	X	X		
89FM11R66	BLANK 5-053196-8	X	X		
89FM26S95	RW1 5-053149		X		
89FM26D95	DUPLICATE 5-053157		X		
89FM26S96	RW2/MSD 5-053165 5-053173-74		X		
89FM26S97	RW3 5-053183		X		
89FM11R66	BLANK 5-053191		X		