FIT

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"Your Full Service Chemistry Laboratory" / West Coast Technical Service Inc.
17605 Fabrica Way / Cerritos, California 90701 / (213) 921-9831 or (714) 523-9200

IEL

F3-8201-32

Report

ORIGINAL

Stauffer (Frank) DE-7 (DAU)

Prepared For A. STONE

Date

U.S. Environmental Protection Agency
Curtis Building 6th & Walnut St., 35A-30
Philadelphia, PA 19106

April 22, 1982

Attn: Jeffrey Hass

RECEIVED
MAY 11 198
ecology & environment, Philadelp

Date Received	P.O. No.	Job No.
3-26-82	6502	23352

Description of Samples

Enclosed is the data for EPA Samples numbers C5047, C5048. Case number 904. Chain of Custody was received. At the time of the analyses, Decafluorobiphenyl (surrogate) was not available for the standard solutions, therefore it was not quantitated in the reported data. Phenol D5 (surrogate) was not detected in the samples analyzed, but it was noted to be spiked at 400,000ug/kg.

We would appreciate a telephone call if you have any questions regarding this report.

I certify that this report truly represents the findings of work performed by me, or under my direct supervision.

Richard Amano
Senior Chemist

ARI 00376

Reviewed and Approved

D.J. Northington, Ph.D.
Technical Director

8201-32-13

ORGANIC BENCH SHEET

ORIGINAL

Project # 633 NEIC Sample # 260 Region Sample # SO-2

Analyst SDT/MD Date Extracted 3/16/82

Hazardous Spot Test Results negative

Initial pH 5.8

H - Volatile Organics (VOA)

H1 Sample Aliquot/Solvent	NA g/	ml Hexadecane
H2 Sample Aliquot/Solvent	1.0 g/ 10	ml Methanol

J - Base/Neutral, Acid, TCDD Extracts

Amount Surrogate Added per Aliquot 0.1 ml HWHAIB

Amount Spike Added per Aliquot — Spike Codes —

J1 Sample Aliquot/Solvent	~~10~~ 0.5g/10 ml CH_2Cl_2	
J2 Sample Aliquot/Solvent	~~10~~ 0.5g/10 ml CH_2Cl_2	pH Adj.-NO ✓ YES ___ 6N NOAH 6N H_2SO_4
JC Combination of J1 & J2	g/ ml CH_2Cl_2	Shipping Volume ___

(J1) or JC Base/Neutral, Acid, TCDD G.C. Screening

Run # G5657 Date 3/25/82 Analyst SDT/MD

Needs Concentration NO X YES ___

K - Pesticides/ PCB Extraction

K1 Sample Aliquot/Solvent	1.0 g/ 10 ml Hexane
K2 Sample Aliquot/Solvent	1.0 g/ 10 ml Hexane

COMMENTS X The sample is comprised of small styrofoam-like balls which are soluble in CH_2Cl_2. The sample to ~~solvent~~ solution ratio of 1g:10 ml formed an unmanagably thick gel, because of that ~~it~~ the ratio was lowered to 0.5 g:10 ml successfully. MD 3/22/82

PREPARATION PARAMETER RESULTS AND EXTRACTS

ORGANIC

(Red)

NEIC Sample No. 633-260 Region Sample No. SO-2

Sample Description Waste PVC from off grade bath pit - Earth Lagoon (Project: Stauffer Chemical) 633:261

Collection Date 3-9-82 TIME 12:10 Reagent Blank

PARAMETER	AQUEOUS, NO. 1	SOLID, NO. 2	NON-AQUEOUS, NO. 3
Percentage of sample (by volume)	0	100%	0
% moisture	N/A N/A	20	N/A
pH		5.8	N/A
Alkalinity	mg/l as $CaCO_3$	104 ug/g as $CaCO_3$	N/A
Acidity	mg/L as $CaCO_3$	200 ug/g as $CaCO_3$	N/A
Conductivity	TDS_1 = mg/L	TDS_1 = ~~484786~~ KO ug/g	N/A
	TDS_2 = mg/L	TDS_2 = 79295 KO ug/g	N/A
Oxidants (spot test)		ND	N/A
Oxidants	mg/L	NA ug/g	N/A
Sulfide (spot test)		ND	N/A
Sulfide	mg/L	NA ug/g	N/A
Cyanide (spot test)		ND	N/A
Cyanide	mg/L	NA ug/g	N/A
Description		~~COARSE PVC, FROM OFF GRADE~~ SOLID WHITE, GRANULAR	

N/A - not applicable to this phase or sample

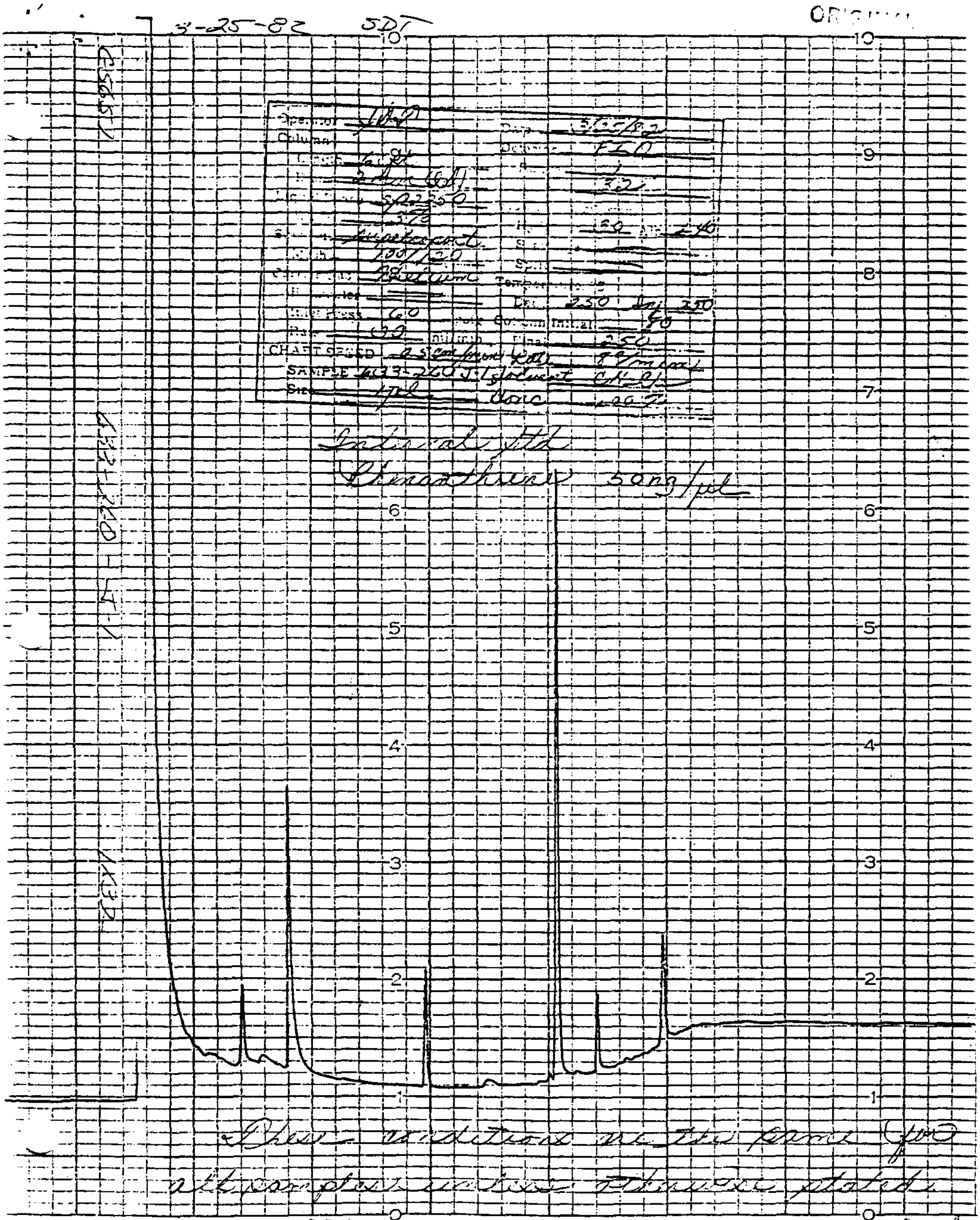
N/D - not detected

PARAMETER	ALIQUOT[a]	EXTRACT[b]	SHIPPED[c]
H2 - Volatile Organics	1.0g	10 ml MEOH	10 ml
J2 - Base/neutral, Acid, TCDD	0.5g	10 ml CH_2Cl_2	10 ml
JC - Combination of pH adjusted & pH unadjusted Base/Neutral, Acid, TCDD (50/50)			
K2 - Pesticides, PCB	1.0g	10 ml HEXANE	10 ml
L - Other			

COMMENTS:

AR100378

a Amount of original sample taken for preparation
b Volume of total prepared extract. Takes into account all dilutions.
c Volume of weight of prepared extract sent to designated laboratory.


3-25-82 SDT
CHART SPEED
SAMPLE
Internal std
Phenanthrene 50ng/µl
These conditions are the same for all samples unless otherwise stated.

AR100379

QUANTITATION REPORT FILE: 23352F1

DATA: 23352F1.TI
04/18/82 19:43:00
SAMPLE: C05047
CONDS.: EXT 4/14/82 0.25G TO 5MLS
FORMULA: SENS213 INSTRUMENT: 4021 WEIGHT: 0.000
SUBMITTED BY: BNAP047 ANALYST: RA #592 ACCT. NO.: FC112581

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

NO	NAME
1	2,4,6-PHENOL D3 (INTERNAL STANDARD)
2	61B N-NITROSO-DIMETHYLAMINE
3	10B BIS (2-CHLOROETHYL) ETHER
4	24A 2-CHLOROPHENOL
5	26B 1,3-DICHLOROBENZENE
6	27B 1,4-DICHLOROBENZENE
7	1,2-DICHLOROBENZENE
8	42B BIS (2-CHLOROISOPROPYL) ETHER
9	12B HEXACHLOROETHANE
10	PHENOL
11	PHENOL D-5 (SURROGATE)
12	2-FLUOROPHENOL (SURROGATE)
13	PYRIDINE D6 (SURROGATE)
14	NAPHTHALENE D8 (INTERNAL STANDARD)
15	63B N-NITROSO-DI-N-PROPYLAMINE
16	NITROBENZENE
17	ISOPHORONE
18	57A 2-NITROPHENOL
19	34A 2,4-DIMETHYLPHENOL
20	43B BIS (2-CHLOROETHOXY) METHANE
21	31A 2,4-DICHLOROPHENOL
22	8B 1,2,4-TRICHLOROBENZENE
23	55B NAPHTHALENE
24	52B HEXACHLOROBUTADIENE
25	22A 4-CHLORO-M-CRESOL
26	53B HEXACHLOROCYCLOPENTADIENE
27	21A 2,4,6-TRICHLOROPHENOL
28	20B 2-CHLORONAPHTHALENE
29	77B ACENAPHTHALENE
30	71B DIMETHYLPHTHALATE
31	36B 2,6-DINITROTOLUENE
32	NITROBENZENE D-5 (SURROGATE)
33	2-FLUORBIPHENYL (SURROGATE)
34	PHENANTHRENE D10 (INTERNAL STANDARD)
35	1B ACENAPHTHENE
36	59A 2,4-DINITROPHENOL
37	35B 2,4-DINITROTOLUENE
38	4-NITROPHENOL
39	80B FLUORENE
40	40B 4-CHLOROPHENYLPHENYL ETHER
41	70B DIETHYLPHTHALATE
42	60A 4,6-DINITRO-O-CRESOL
43	62B N-NITROSODIPHENYLAMINE
44	37B 1,2-DIPHENYLHYDRAZINE
45	41B 4-BROMOPHENOXYBENZENE
46	9B HEXACHLOROBENZENE
47	64A PENTACHLOROPHENOL

AR100380

ORIGINAL

NO	NAME
48	81B PHENANTHRENE
49	78B ANTHRACENE
50	68B DI-N-BUTYLPHTHALATE
51	39B FLUORANTHENE
52	84B PYRENE
53	ALPHA BHC
54	GAMMA & BETA BHC
55	DELTA-BHC
56	HEPTACHLOR
57	ALDRIN
58	PYRENE D10 (SURROGATE)
59	CHRYSENE D12 (INTERNAL STANDARD)
60	5B BENZIDINE
61	67B BUTYLBENZYLPHTHALATE
62	72B BENZO (A) ANTHRACENE
63	75B CHRYSENE
64	28B 3,3'-DICHLOROBENZIDINE
65	66B BIS (2-ETHYLHEXYL) PHTHALATE
66	69B DI-N-OCTYLPHTHALATE
67	4,4'-DDE
68	DIELDRIN
69	4,4'-DDD
70	4,4'-DDT
71	BETA ENDOSULFAN
72	ENDOSULFAN SULFATE
73	ENDRIN
74	ALPHA ENDOSULFAN
75	BENZO (A) PYRENE D-12 (INTERNAL STANDARD)
76	74B BENZO (B) FLUORANTHENE
77	73B BENZO (A) PYRENE
78	83B INDENO-1,2,3 (C,D) PYRENE
79	82B DIBENZO (A,H) ANTHRACENE
80	79B BENZO (G,H,I) PERYLENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
1	97	352	6:27	1	1.000	A BB	13569.	20.000 UG/L	8.38
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	77	431	7:54	1	1.224	A BB	476.	~~2.436 UG/L~~	1.02
9	NOT FOUND								
10	NOT FOUND								
11	99	448	8:13	1	1.273	A BB	185.	~~0.286 UG/L~~	0.09
12	112	273	5:00	1	0.776	* VV	595.	~~1.148 UG/L~~	0.49
13	NOT FOUND	→ SCAN 262					3740!		
14	136	537	9:51	14	1.000	* BV	38756.	20.000 UG/L	8.38
15	NOT FOUND								
16	NOT FOUND								
17	73	463	8:29	14	0.862	* VV	342.	~~0.439 UG/L~~	0.18
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								

-72 1,440,000

2-FLUOROPHENOL

AMT = $\frac{3740! \times 20}{13569 \times .765}$

AR100381

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
22	NOT FOUND								
23	128	545	9:59	14	1.015	* VB	839.	~~0.416 UG/L~~	0.17
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	188	963	17:39	34	1.000	* BV	35649.	20.000 UG/L	8.38
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	149	855	15:40	34	0.888	* VB	35961.	~~22.771 UG/L~~	9.54
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	178	965	17:41	34	1.002	A BB	217.	~~0.131 UG/L~~	0.05
49	178	965	17:41	34	1.002	A BB	217.	~~0.130 UG/L~~	0.05
50	149	1066	19:33	34	1.107	* VV	20116.	~~7.435 UG/L~~	3.12
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	NOT FOUND								
55	NOT FOUND								
56	NOT FOUND								
57	NOT FOUND								
58	212	1154	21:09	34	1.198	* BV	20037.	26.844 UG/L	11.25
59	208	1321	24:13	59	1.000	A BB	23604.	20.000 UG/L	8.38
60	184	1154	21:09	59	0.874	A BB	82.	~~0.635 UG/L~~	0.27
61	149	1275	23:20	59	0.964	* VB	20028.	~~15.512 UG/L~~	6.50
62	NOT FOUND								
63	NOT FOUND								
64	NOT FOUND								
65	149	1364	25:00	59	1.033	* VB	41569.	~~23.065 UG/L~~	10.00
66	149	1444	26:28	59	1.093	* VB	41189.	~~16.627 UG/L~~	6.97
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	NOT FOUND								
71	NOT FOUND								
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	264	1492	27:21	75	1.000	A BB	22494.	40.000 UG/L	16.76
76	NOT FOUND								
77	NOT FOUND								

NO2Φ-DS scan 448 mle 128 19631

NITROBENZENE DS — 73

1,460,000

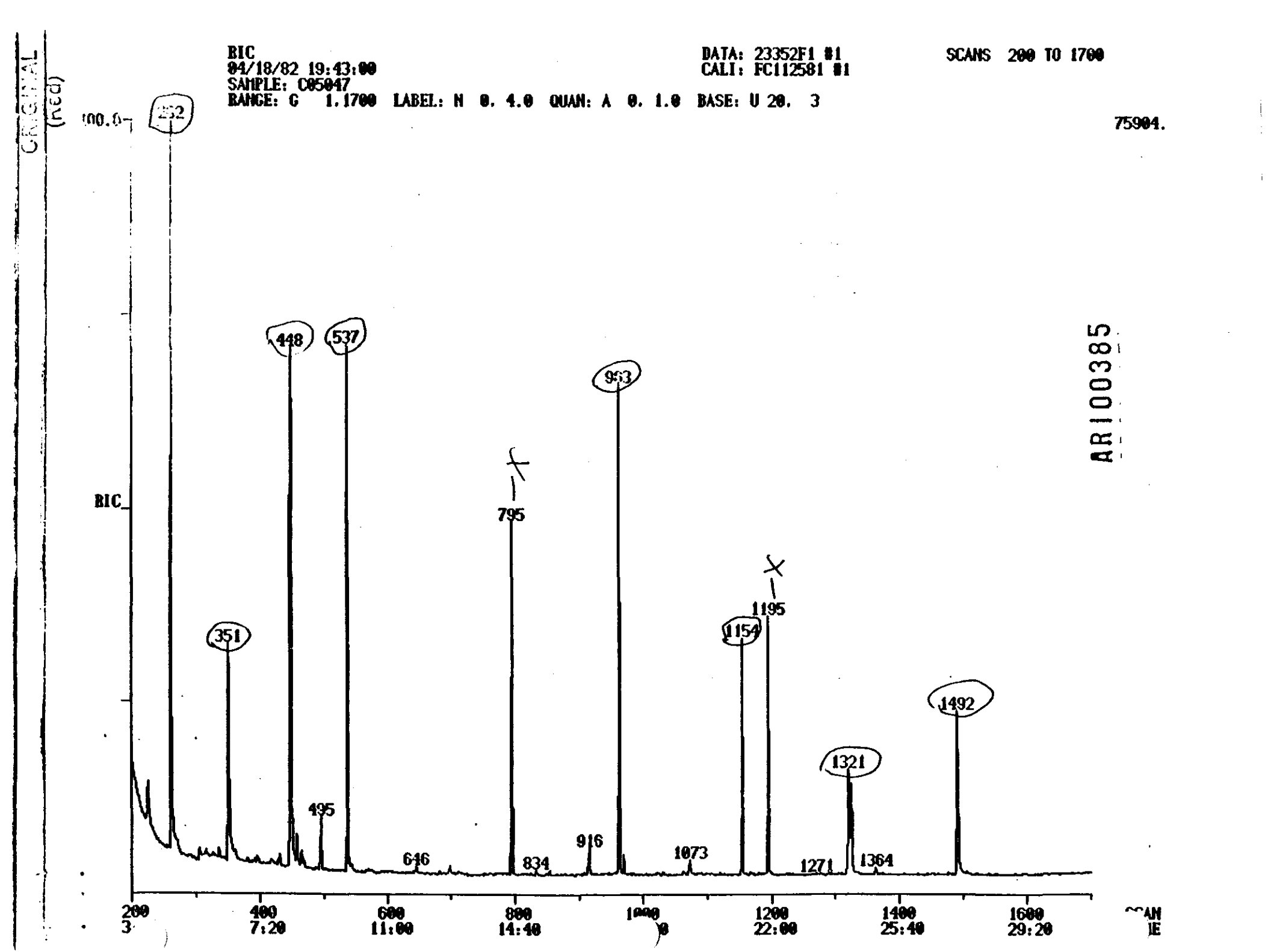
AMT - $\frac{19631 \times 20}{33756 \times 0.138} = 73.$

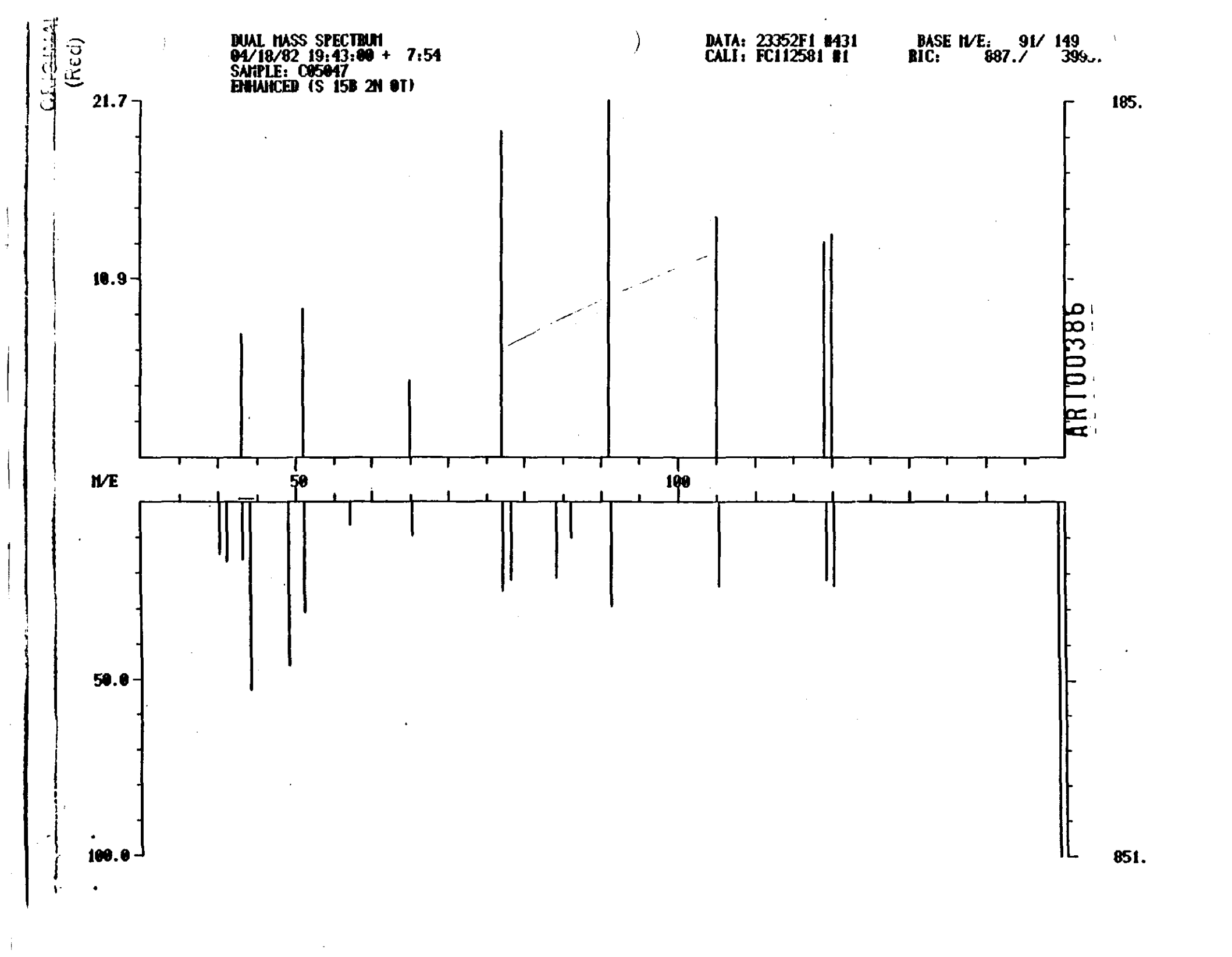
AR100382

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
78	NOT FOUND								
79	NOT FOUND								
80	NOT FOUND								

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	7:00	0.92	1.000	1.00	20.00	20.00	1.000	1.000	1.00
2	4:21		0.597			50.00		0.411	
3	7:12		0.990			50.00		1.130	
4	7:13		0.992			50.00		0.960	
5	7:20		1.025			50.00		0.828	
6	7:26		1.025			50.00		1.078	
7	7:51		1.078			50.00		0.890	
8	8:12	0.96	1.126	1.09	2.44	50.00	0.014	0.288	0.05
9	8:26		1.159			50.00		0.604	
10	8:26		1.159			50.00		0.232	
11	8:38	0.95	1.186	1.07	0.21	50.00	0.005	1.324	0.00
12	5:24	0.93	0.720	1.08	1.15	50.00	0.018	0.765	0.02
13	4:13		0.590			50.00		0.369	
14	9:55	0.99	1.000	1.00	20.00	20.00	1.000	1.000	1.00
15	8:31		0.842			50.00		0.023	
16	8:40		0.857			50.00		0.110	
17	8:38	0.98	0.853	1.01	0.44	50.00	0.004	0.402	0.01
18	9:20		0.922			50.00		0.144	
19	9:50		0.971			50.00		0.338	
20	9:54		0.978			50.00		0.478	
21	9:59		0.987			50.00		0.302	
22	10:03		0.993			50.00		0.379	
23	10:10	0.98	1.005	1.01	0.42	50.00	0.009	1.040	0.01
24	10:38		1.051			50.00		0.166	
25	11:49		1.168			50.00		0.276	
26	12:19		1.217			50.00		0.106	
27	12:32		1.239			50.00		0.200	
28	12:52		1.272			50.00		0.676	
29	13:47		1.362			50.00		0.570	
30	14:03		1.388			50.00		0.612	
31	14:07		1.395			50.00		0.104	
32	8:37		0.855			50.00		0.138	
33	12:46		1.265			50.00		0.322	
34	17:35	1.00	1.000	1.00	20.00	20.00	1.000	1.000	1.00
35	14:16		0.804			50.00		0.586	
36	14:33		0.820			50.00		0.028	
37	14:59		0.844			50.00		0.142	
38	15:09		0.853			50.00		0.067	
39	15:29		0.873			50.00		0.719	
40	15:39		0.882			50.00		0.394	
41	15:43	1.00	0.885	1.00	22.77	50.00	0.404	0.886	0.46
42	15:55		0.897			50.00		0.045	
43	16:02		0.904			50.00		0.211	
44	15:55		0.897			50.00		0.011	
45	16:48		0.946			50.00		0.213	
46	17:00		0.958			50.00		0.316	
47	17:35		0.991			50.00		0.125	
48	17:51	0.99	1.006	1.00	0.13	50.00	0.002	0.932	0.00
49	17:57	0.99	1.011	0.99	0.13	50.00	0.002	0.934	0.00
50	19:46	0.99	1.114	0.99	7.43	50.00	0.226	1.518	0.15
51	20:44		1.168			50.00		0.971	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
52	21:15		1.197			50.00		1.028	
53	16:51		0.949			50.00		0.157	
54	17:35		0.991			100.00		0.127	
55	18:09		1.023			50.00		0.096	
56	19:05		1.075			50.00		0.118	
57	20:39		1.163			50.00		0.023	
58	21:15	1.00	1.197	1.00	26.84	50.00	0.225	0.419	0.54
59	24:11	1.00	1.000	1.00	20.00	20.00	1.000	1.000	1.00
60	21:19	0.99	0.076	1.00	0.64	50.00	0.001	0.110	0.01
61	23:25	1.00	0.962	1.00	15.51	50.00	0.339	1.094	0.31
62	24:19		0.999			50.00		0.934	
63	24:23		1.002			50.00		0.686	
64	24:28		1.006			50.00		0.311	
65	25:01	1.00	1.029	1.00	23.86	50.00	0.704	1.476	0.48
66	26:29	1.00	1.089	1.00	16.63	50.00	0.698	2.099	0.33
67	21:54		0.901			50.00		0.339	
68	21:52		0.899			50.00		0.395	
69	22:42		0.933			50.00		0.512	
70	23:25		0.962			50.00		0.406	
71	21:21		0.878			50.00		0.036	
72	23:20		0.959			50.00		0.087	
73	22:19		0.917			50.00		0.164	
74	22:29		0.924			50.00		0.040	
75	27:18	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
76	24:20		0.952			50.00		0.757	
77	24:20		0.992			50.00		0.757	
78	29:52		1.098			50.00		0.443	
79	29:52		1.098			50.00		1.814	
80	30:16		1.103			50.00		2.258	

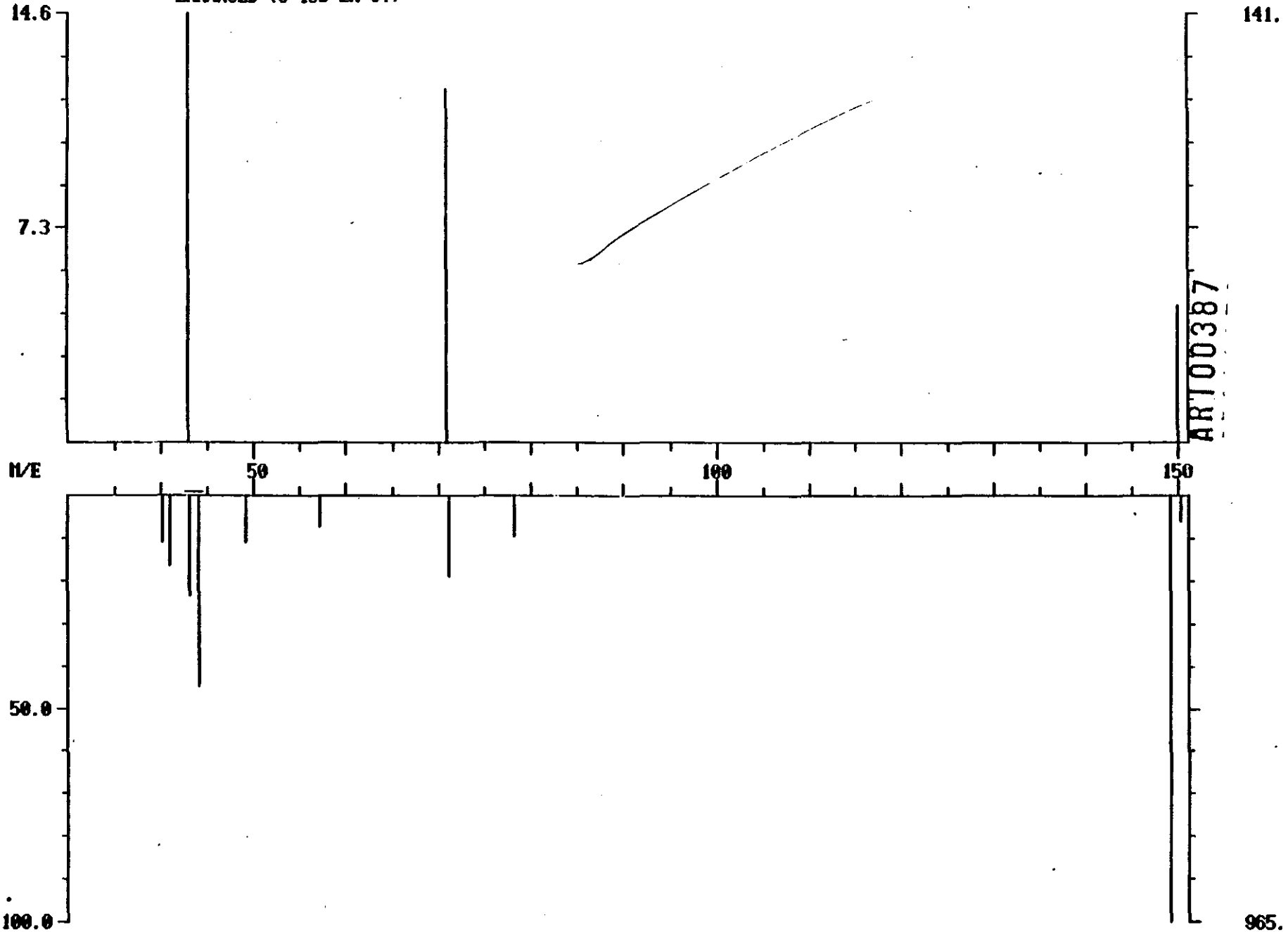

ORIGINAL (red)
RIC
04/18/82 19:43:00
SAMPLE: C05047
RANGE: G 1.1700 LABEL: N 0. 4.0 QUAN: A 0. 1.0 BASE: U 20. 3
DATA: 23352F1 #1
CALI: FC112581 #1
SCANS 200 TO 1700
100.0
75904.
RIC
AR100385
252
448
537
963
795
351
1154
1195
1492
1321
495
646
834
916
1073
1271
1364
200
400
600
800
1000
1200
1400
1600
3
7:20
11:00
14:40
22:00
25:40
29:20


DUAL MASS SPECTRUM
04/18/82 19:43:00 + 7:54
SAMPLE: C05047
ENHANCED (S 15B 2N 0T)
DATA: 23352F1 #431
CALI: FC112581 #1
BASE M/E: 91/ 149
RIC: 887./ 399.
21.7
10.9
185.
851.
M/E
50
100
50.0
100.0
ARI00389

DUAL MASS SPECTRUM
04/18/82 19:43:00 + 15:40
SAMPLE: C05047
ENHANCED (S 15B 2N 0T)

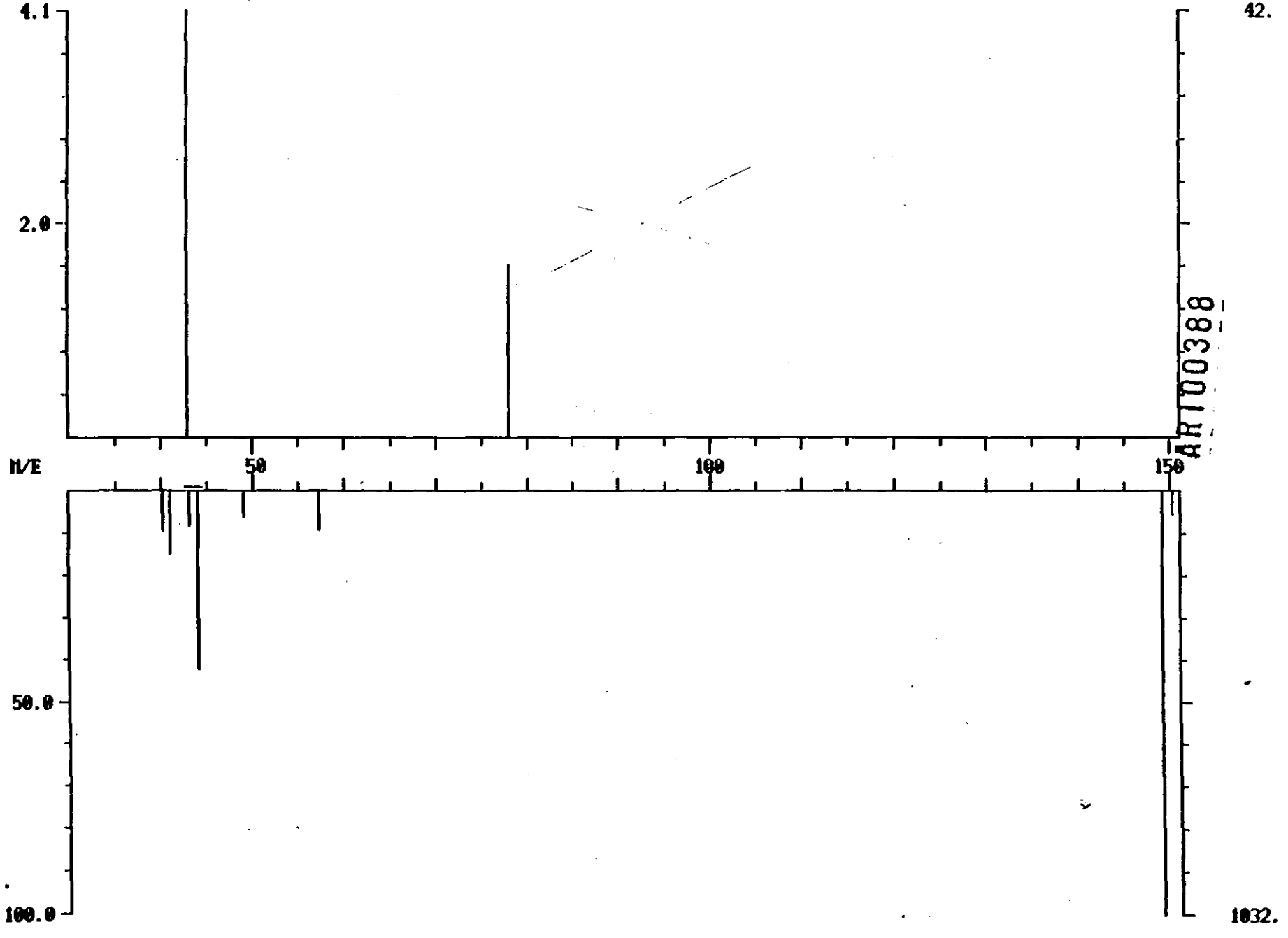
DATA: 23352F1 #855
CALI: FC112581 #1

BASE M/E: 43/ 149
RIC: 301./ 2399.



DUAL MASS SPECTRUM
04/18/82 19:43:00 + 19:33
SAMPLE: C05047
ENHANCED (S 15B 2N 0T)

DATA: 23352F1 #1066 BASE M/E: 43/ 149
CALI: FC112581 #1 RIC: 58./ 2019.

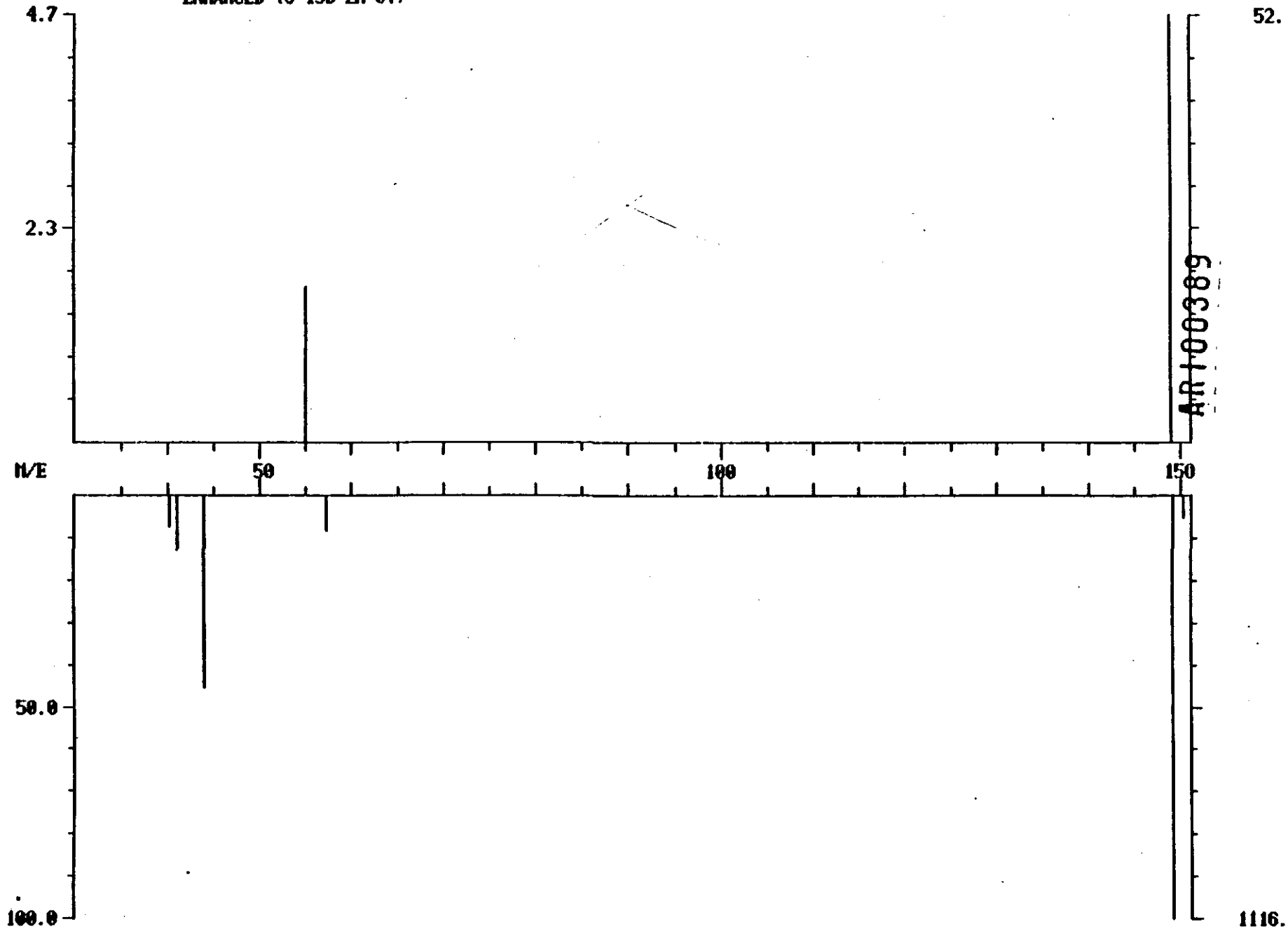


ART00388

DUAL MASS SPECTRUM
04/18/82 19:43:00 + 23:20
SAMPLE: C05047
ENHANCED (S 15B 2N 0T)

DATA: 23352F1 #1273
CALI: FC112581 #1

BASE M/E: 149/ 149
RIC: 70./ 1995.

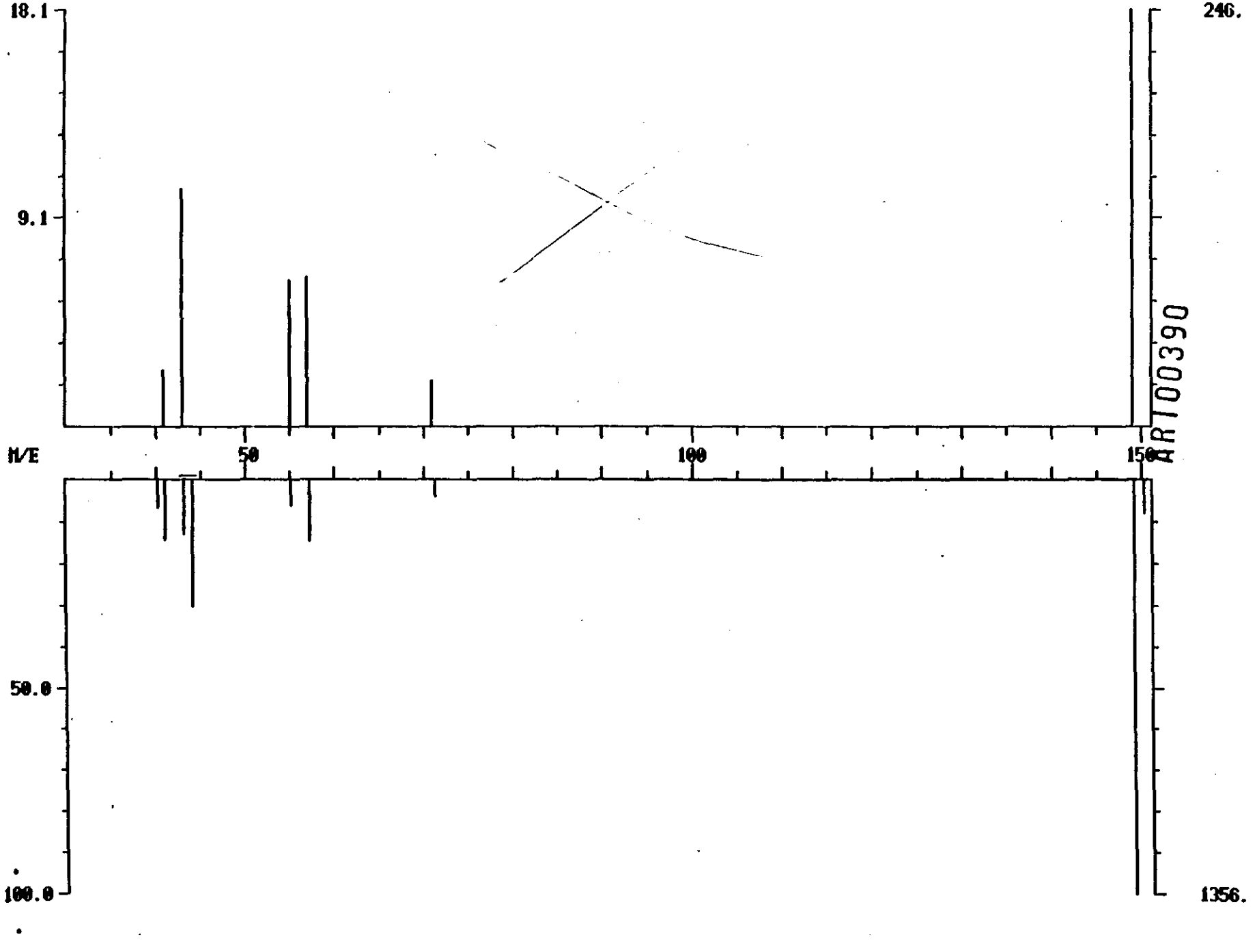


AR100389

DUAL MASS SPECTRUM
04/18/82 19:43:00 + 25:00
SAMPLE: C05047
ENHANCED (S 15B 2H 0T)

DATA: 23352F1 #1364
CALI: FC112581 #1

BASE M/E: 149/ 149
RIC: 619./ 2675.

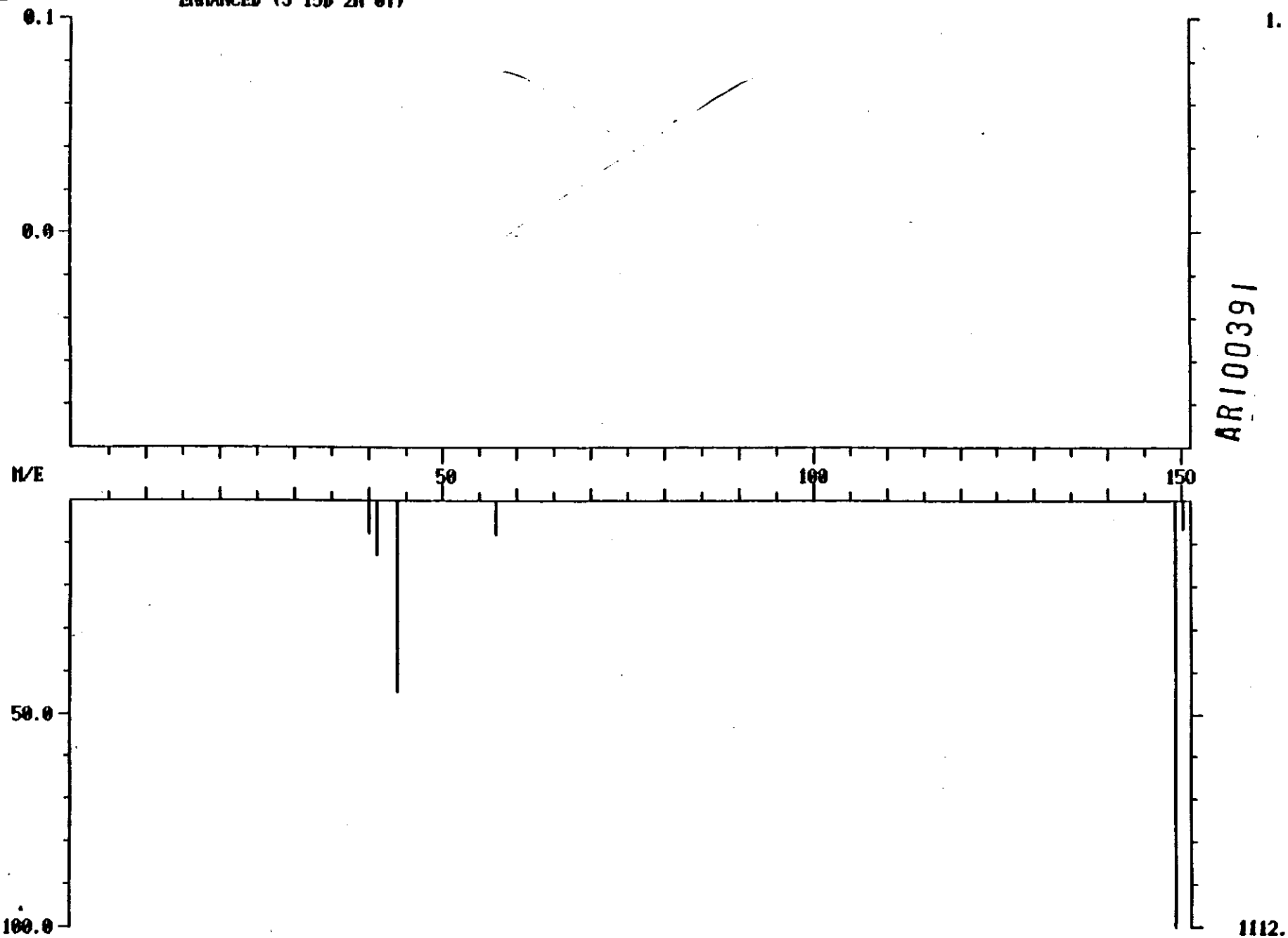


ART00390

ORIGINAL (Red)

DUAL MASS SPECTRUM
04/18/82 19:43:00 + 26:28
SAMPLE: C05047
ENHANCED (S 15B 2N 0T)

DATA: 23352F1 #1444 BASE M/E: 0/ 149
CALI: FC112581 #1 BIC: 0./ 2091.



AR100391

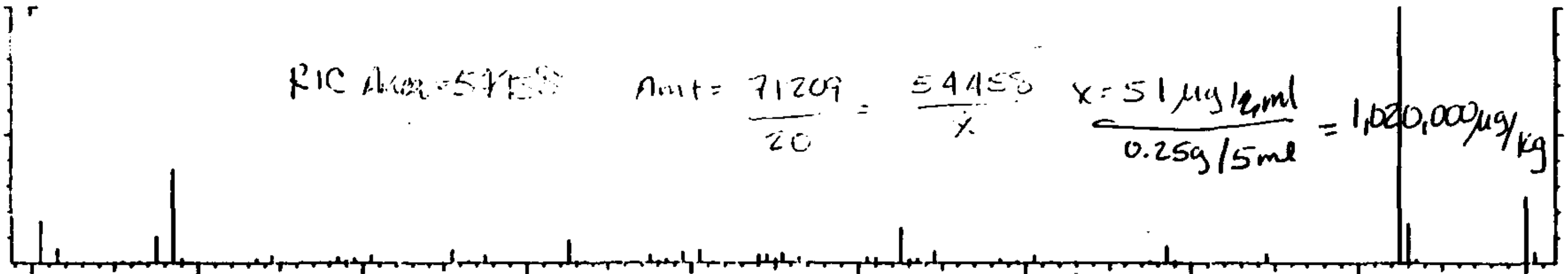
ORIGINAL (Red)

LIBRARY SEARCH
04/18/82 19:43:00 + 14:34
SAMPLE: C05047
ENHANCED (S 15B 2N 0T)

DATA: 23352F1 # 795
CALI: FC112581 # 1

BASE M/E: 205
RIC: 22943.

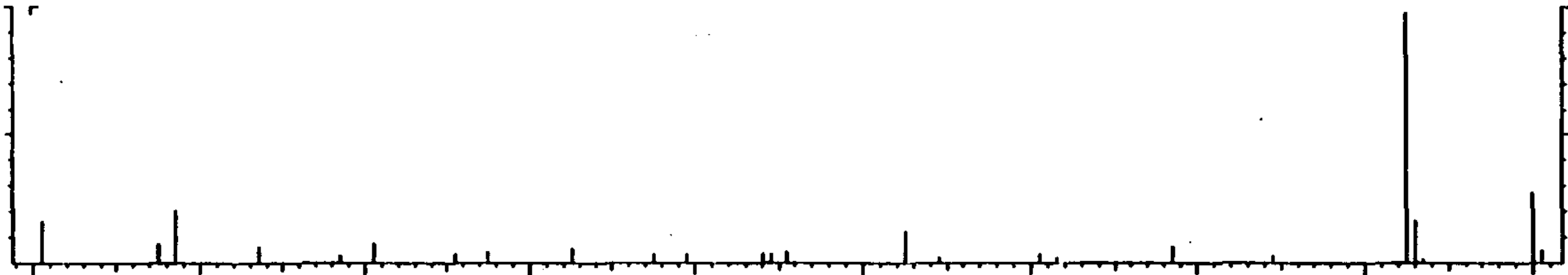
SAMPLE



RIC Area = 54455   Amt = $\frac{71209}{20} = \frac{54455}{x}$ x = 51 μg/ml ; $\frac{51 \mu g/ml}{0.25g/5ml}$ = 1,020,000 μg/kg ✓

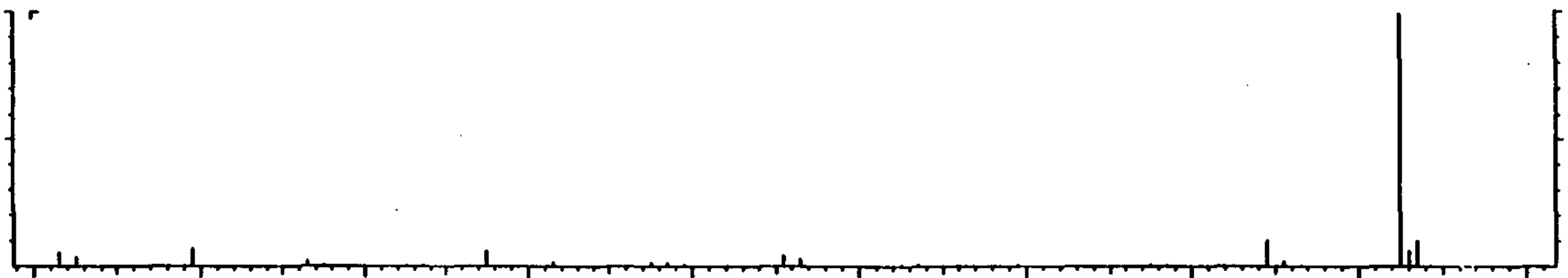
C15.H24.0   PHENOL, 2, 6-BIS(1, 1-DIMETHYLETHYL)-4-METHYL-

M WT 220
B PK 205
RANK 1
IN 1642
FIT 987



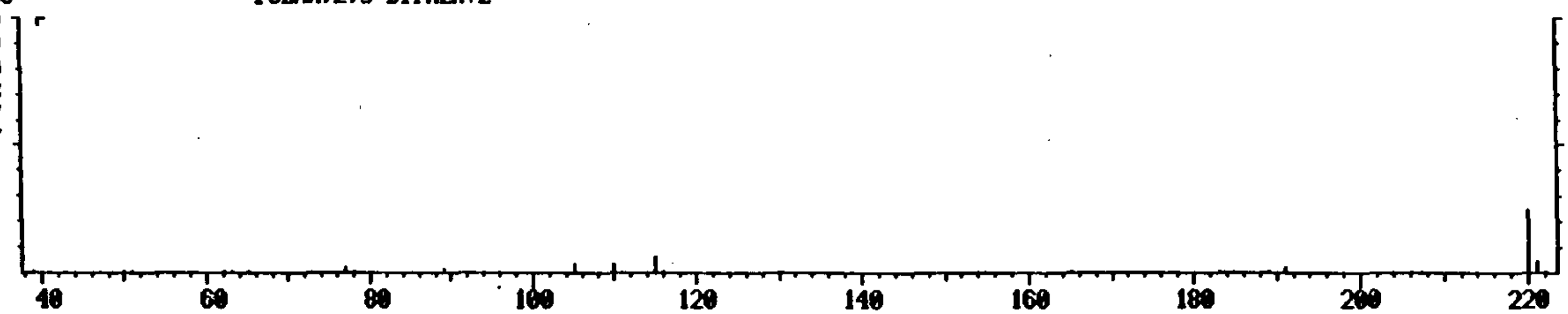
C7.H20.02.SI3   1, 3-DIOXA-2, 4, 6-TRISILACYCLOHEXANE, 2, 2, 4, 4, 6, 6-HEXAMETHYL-

M WT 220
B PK 205
RANK 2
IN 12170
FIT 839



C16.H12.0   FURAN, 2, 5-DIPHENYL-

M WT 220
B PK 220
RANK 3
IN 4497
FIT 837



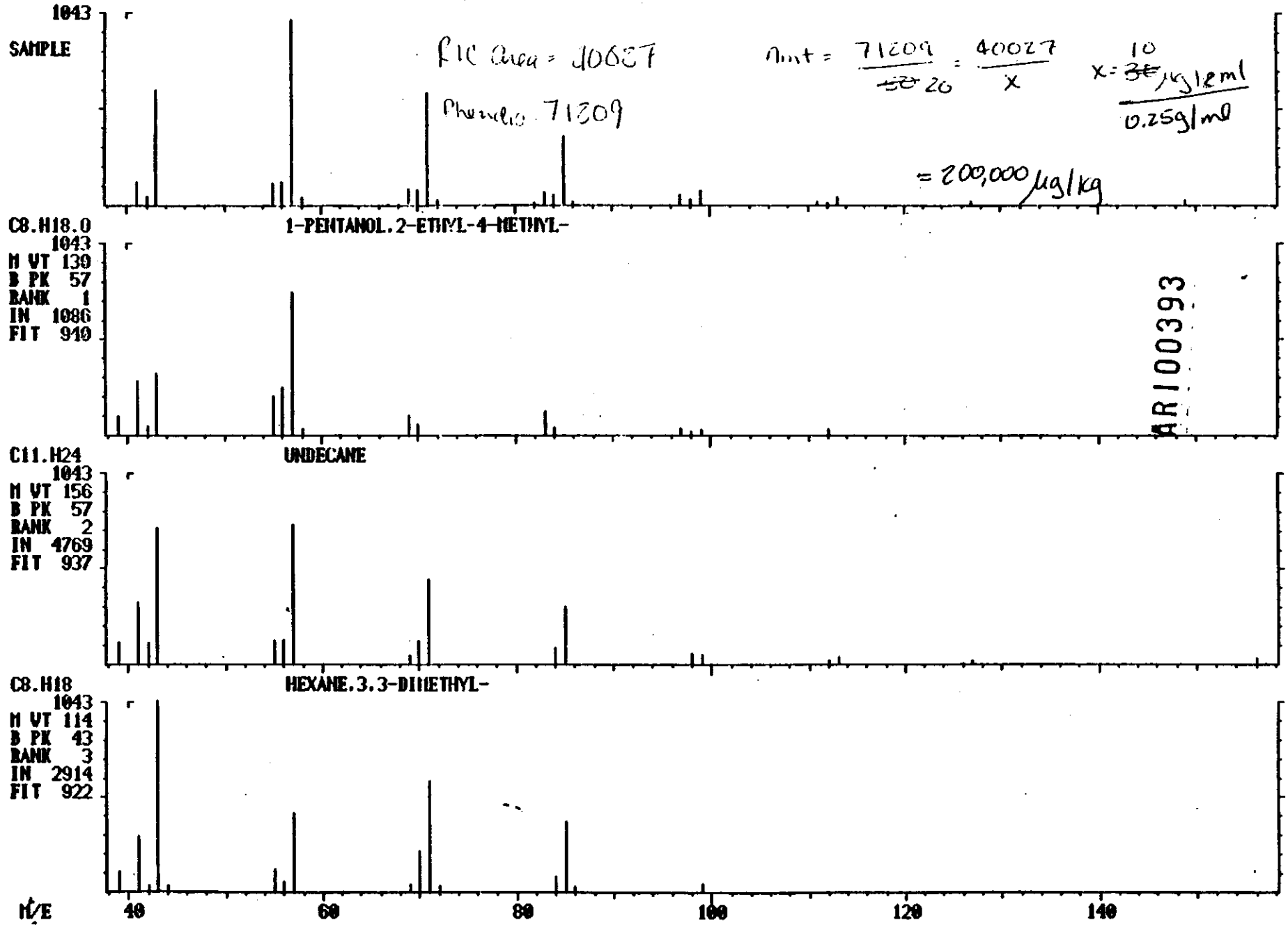
AR100392

ORIGINAL (red)

LIBRARY SEARCH
04/18/02 19:43:00 + 21:54
SAMPLE: C05047
ENHANCED (S 15B 2N 0T)

DATA: 23352F1 #1195
CALI: FC112581 # 1

BASE M/E: 57
RIC: 17631.



QUANTITATION REPORT FILE: 23352V1

DATA: 23352V1.TI
04/06/92 10:35:00
SAMPLE: LAB BLANK
CONDS.: VOA
FORMULA: BFB05 INSTRUMENT: 4021 WEIGHT: 0.000
SUBMITTED BY: VOL023 ANALYST: DF #507 ACCT. NO.: FC112581

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

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	45V CHLOROMETHANE
3	46V BROMOMETHANE
4	83V VINYL CHLORIDE
5	16V CHLOROETHANE
6	44V METHYLENE CHLORIDE
7	2V ACROLEIN
8	3V ACRYLONITRILE
9	49V TRICHLOROFLUOROMETHANE
10	29V 1,1-DICHLOROETHYLENE
11	13V 1,1-DICHLOROETHANE
12	30V TRANS-1,2-DICHLOROETHYLENE
13	23V CHLOROFORM
14	18V 1,2-DICHLOROETHANE
15	11V 1,1,1-TRICHLOROETHANE
16	6V CARBON TETRACHLORIDE
17	40V BROMODICHLOROMETHANE
18	1,2-DICHLOROETHANE D-4 (SURROGATE)
19	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
20	32V 1,2-DICHLOROPROPANE
21	33V TRANS-1,3-DICHLOROPROPENE
22	87V TRICHLOROETHYLENE
23	4V BENZENE
24	33V CIS-1,3-DICHLOROPROPENE
25	14V 1,1,2-TRICHLOROETHANE
26	51V DIBROMOCHLOROMETHANE
27	47V BROMOFORM
28	85V TETRACHLOROETHYLENE
29	15V 1,1,2,2-TETRACHLOROETHANE
30	86V TOLUENE
31	87V CHLOROBENZENE
32	38V ETHYLBENZENE
33	BENZENE D-6 (SURROGATE)
34	1-CHLORO-2-BROMOPROPANE (SURROGATE)
35	ETHYLBENZENE D-10 (SURROGATE)

X - Spectra not confirmed by FIT or RRT

CONCENTRATION CORRECTION RELATIVE TO SAMPLES

Agb

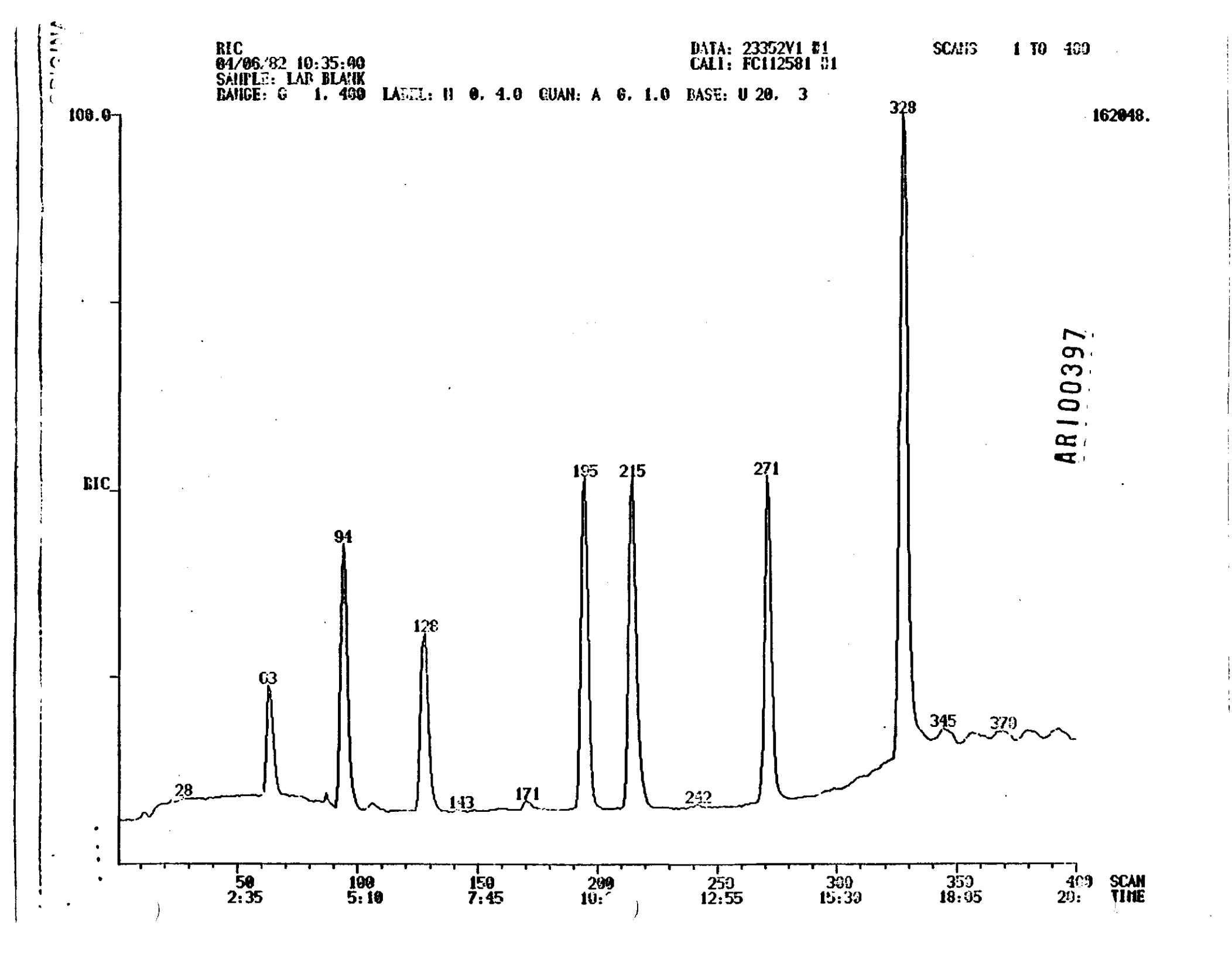
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
1	128	94	4:51	1	1.000	A BB	24973.	50.020 UG/L	15.45
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	63	3:15	1	0.670	A BB	16298.	13.636 UG/L	4.21 Med_2 6.8
7	56	71	3:40	1	0.755	A BB	360.	~~14.824 UG/L~~	4.58
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT		%TOT	
11	NOT FOUND										
12	NOT FOUND										
13	NOT FOUND										
14	NOT FOUND										
15	NOT FOUND										
16	NOT FOUND										
17	NOT FOUND										
18	65	138	6:37	1	1.362	A BE	60563.	47.658	UG/L	14.72	23.819
19	55	271	14:30	19	1.800	A BB	116851.	50.030	UG/L	15.45	
20	NOT FOUND										
21	NOT FOUND										
22	NOT FOUND										
23	NOT FOUND										
24	NOT FOUND										
25	NOT FOUND										
26	NOT FOUND										
27	NOT FOUND										
28	NOT FOUND										
29	NOT FOUND										
30	NOT FOUND										
31	NOT FOUND										
32	NOT FOUND										
33	84	155	10:34	19	0.720	A BB	136507.	48.407	UG/L	14.96	24.204
34	77	215	11:26	19	0.793	* VB	87852.	49.607	UG/L	15.33	24.804
35	98	328	16:57	19	1.210	A BB	255299.	49.515	UG/L	15.30	24.758

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	4:54	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:14		0.253			50.00		0.404	
3	1:45		0.358			50.00		0.993	
4	2:01		0.411			50.00		0.904	
5	2:29		0.505			50.00		0.573	
6	3:21	0.97	0.684	0.98	13.64	50.00	0.653	2.393	0.27
7	3:40	1.00	0.747	1.01	14.82	400.00	0.002	0.049	0.04
8	3:56		0.800			400.00		0.371	
9	4:27		0.905			50.00		2.218	
10	4:45		0.968			50.00		0.818	
11	5:29		1.116			50.00		3.574	
12	5:56		1.211			50.00		2.464	
13	6:12		1.263			50.00		4.916	
14	6:43		1.368			50.00		0.128	
15	7:36		1.547			50.00		3.344	
16	7:51		1.600			50.00		2.958	
17	8:07		1.655			50.00		3.578	
18	6:40	0.99	1.353	1.00	47.64	50.00	2.425	2.545	0.95
19	14:03	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	9:09		0.651			50.00		0.650	
21	9:18		0.662			50.00		0.979	
22	9:46		0.695			50.00		0.500	
23	10:14		0.728			50.00		1.189	
24	10:14		0.728			50.00		0.468	
25	10:14		0.728			50.00		0.519	
26	10:04		0.717			50.00		0.523	
27	12:02		0.857			50.00		0.406	
28	13:54		0.989			50.00		0.430	
29	13:48		0.982			50.00		0.506	

ORIGINAL
(Red)

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
30	14:59		1.006			50.00		1.190	
31	15:49		1.125			50.06		1.102	
32	17:09		1.221			50.60		0.533	
33	10:03	0.99	0.721	1.00	40.41	50.00	1.168	1.207	0.97
34	11:06	1.00	0.799	1.00	49.61	50.00	0.752	0.759	0.99
35	17:00	1.00	1.210	1.00	49.52	50.00	2.105	2.206	0.99


RIC
04/06/82 10:35:00
SAMPLE: LAB BLANK
RANGE: G 1. 400 LABEL: H 0. 4.0 QUAN: A 6. 1.0 BASE: U 20. 3
DATA: 23352V1 01
CAL1: FC112581 01
SCANS 1 TO 400
100.0
162048.
RIC
AR100397
28
63
94
128
143
171
195
215
242
271
328
345
370
50
2:35
100
5:10
150
7:45
200
10:
250
12:55
300
15:30
350
18:05
400
20:
SCAN
TIME

FINAL (Red)

FINAL MASS SPECTRUM
04/05/92 10:35:00 + 3:15
SAMPLE: LAB BLANK
BACKGROUND (S 15B 2N 0T)

DATA: 23352V1 GC3
CALI: FC112581 01

BASE M/E: 49/
BIC: 21663./ 30847.

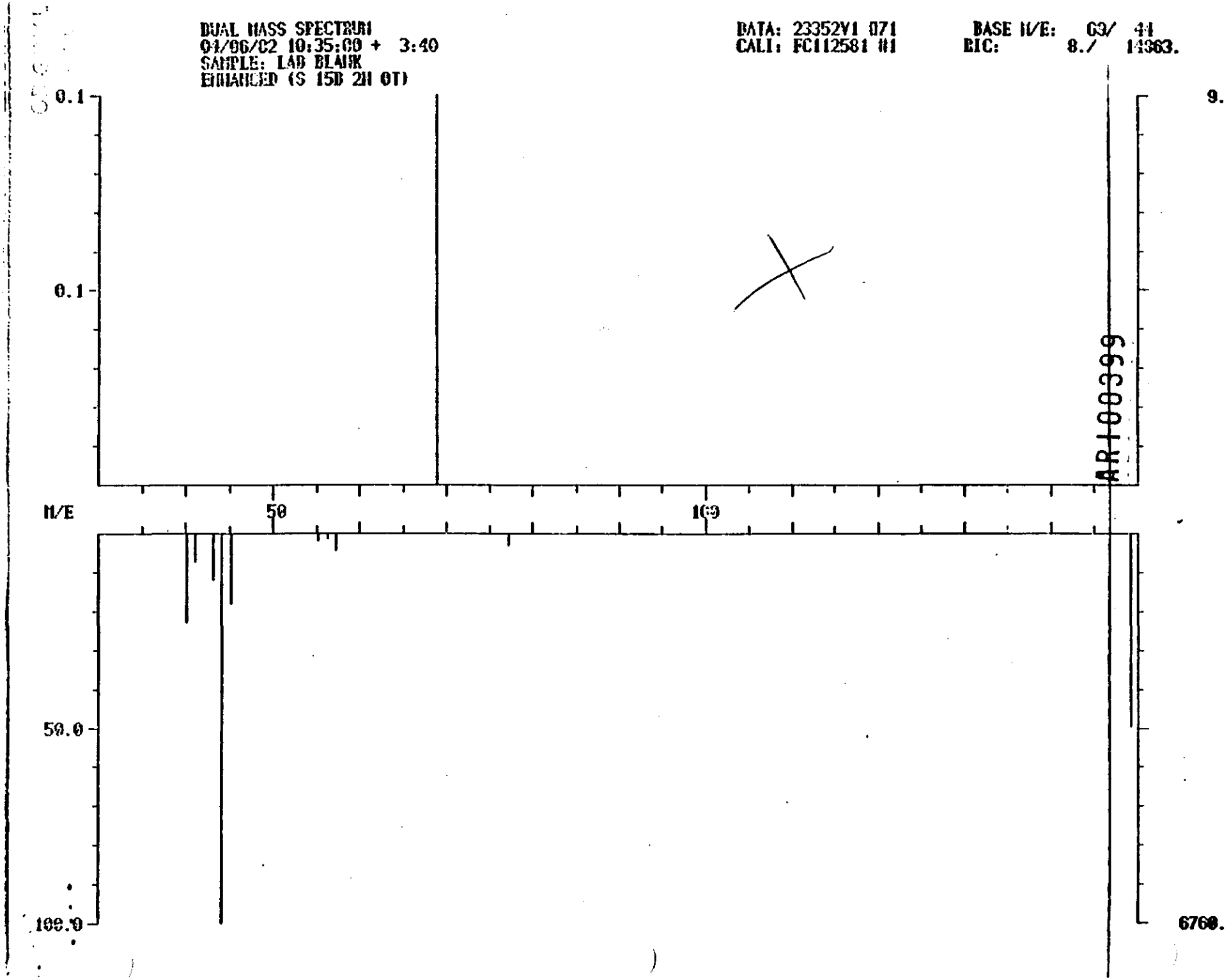
91.5
45.8
50.0
100.0

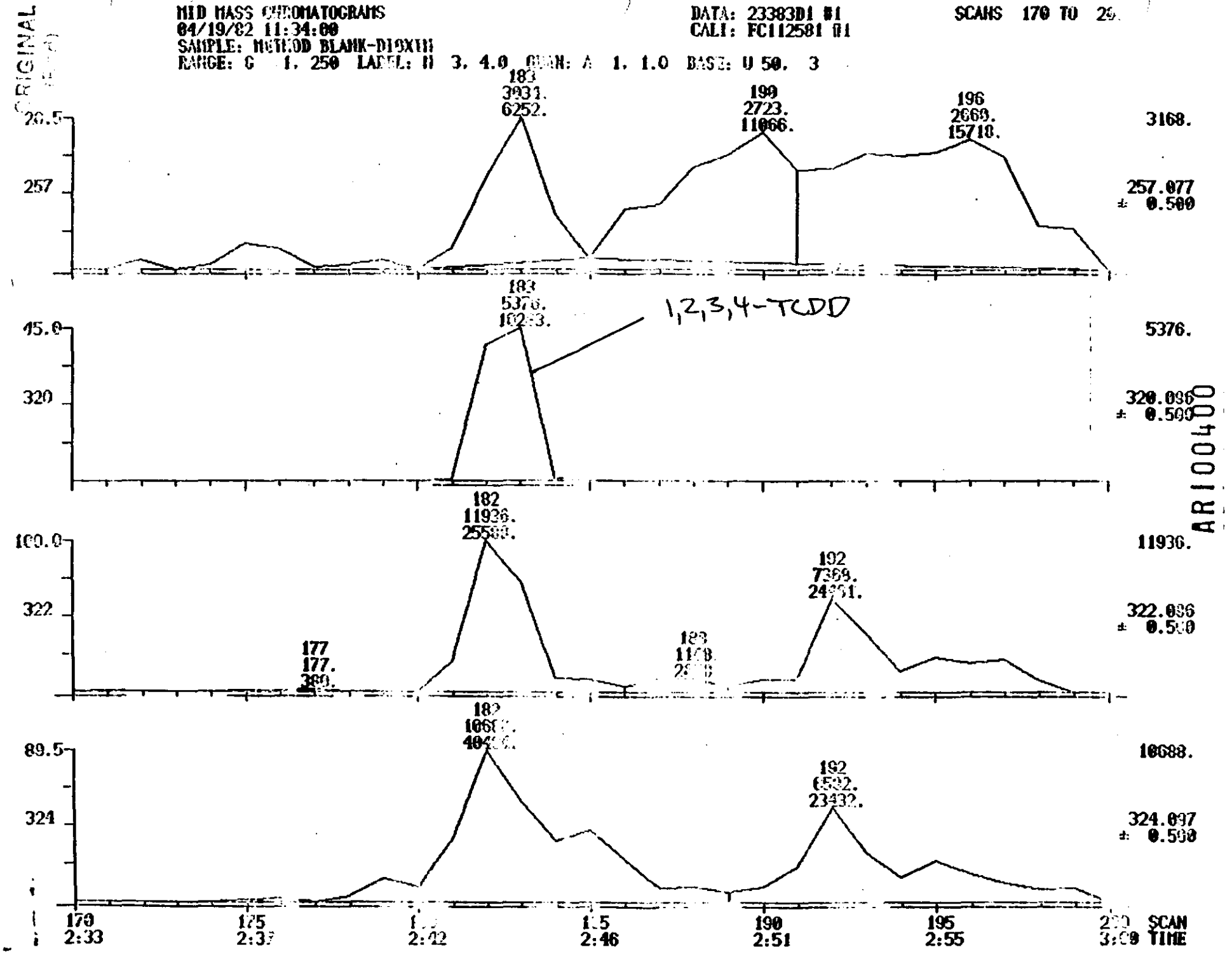
8960.
9792.

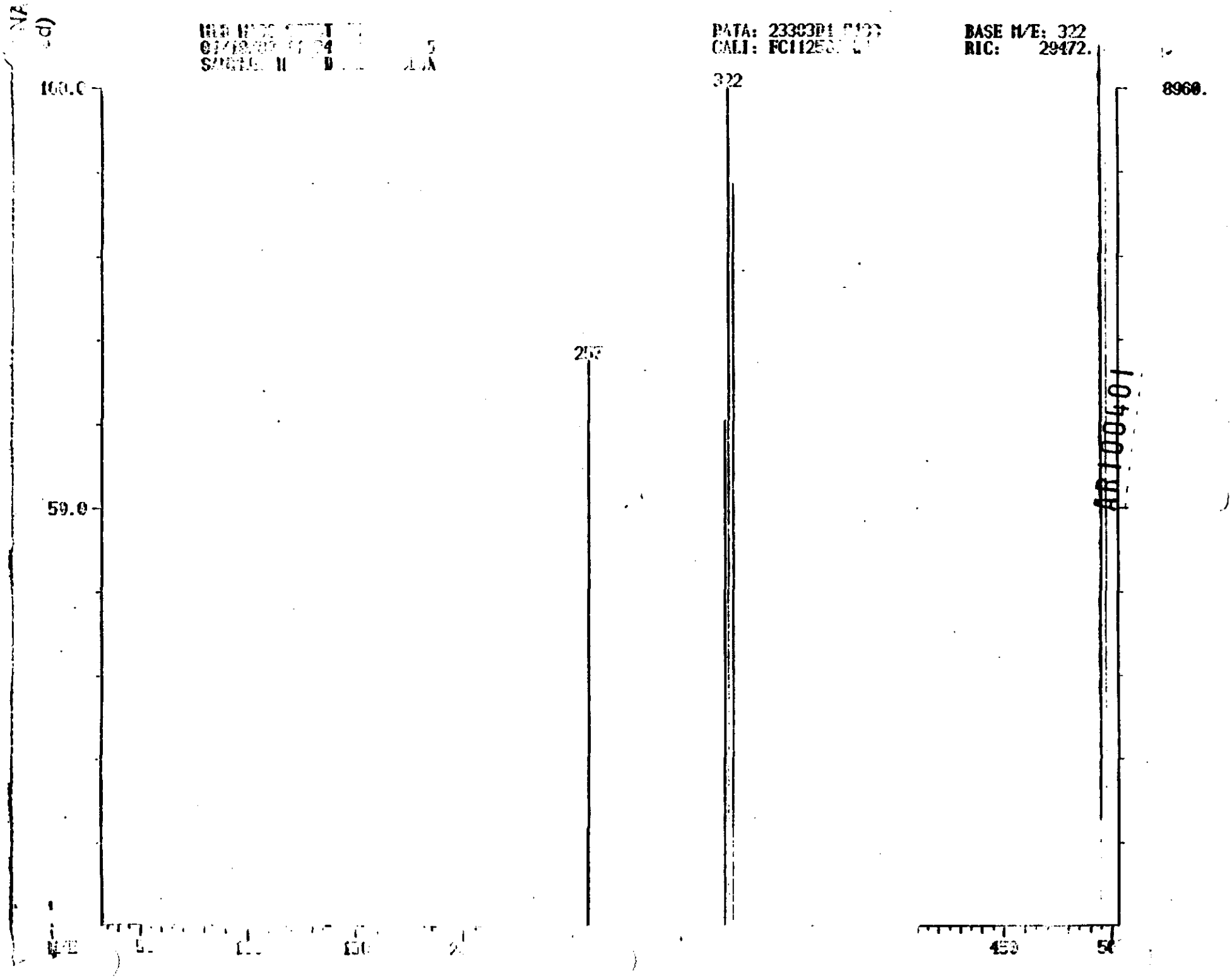
Methylene Chloride

AR100398

M/E
50
100


DUAL MASS SPECTRUM
04/06/02 10:35:00 + 3:40
SAMPLE: LAB BLANK
ENHANCED (S 15D 2H 0T)
DATA: 23352V1 071
CALI: FC112581 H1
BASE M/E: 69/ 44
RIC: 8./ 14963.
0.1
0.1
9.
AR100399
M/E
50
100
50.0
100.0
6760.


ORIGINAL
MID MASS CHROMATOGRAMS
04/19/82 11:34:00
SAMPLE: METHOD BLANK-D19X1H
DATA: 23383D1 #1
CALI: FC112581 01
SCANS 170 TO 29
RANGE: G 1. 250 LABEL: H 3. 4.0 GAIN: A 1. 1.0 BASE: U 50. 3
183
3931.
6252.
190
2723.
11066.
196
2669.
15710.
3168.
257
257.077
± 0.500
183
5376.
1,2,3,4-TCDD
5376.
320
320.036
± 0.500
182
11936.
11936.
322
322.036
± 0.500
177
177.
192
192
324
324.097
± 0.500
170
2:33
175
190
2:51
195
2:55
SCAN
TIME
AR100400


DATA: 23303B1
CALI: FC1125
BASE M/E: 322
RIC: 29472.
8960.
322
100.0
59.0
257
1040.0
450

ORIGIN

QUANTITATION REPORT FILE: 23352V4

DATA: 23352V4.TI
04/06/82 13:40:00
SAMPLE: SD-2 633-260 1.0G IN 10MLS MEOH CS047
CONDS.: EXT 3/16/82 1ML IN 50MLS H20
FORMULA: BFB005 INSTRUMENT: 4021 WEIGHT: 0.000
SUBMITTED BY: VOL023 ANALYST: DP #537 ACCT. NO.: FC112581

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

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	45V CHLOROMETHANE
3	46V BROMOMETHANE
4	82V VINYL CHLORIDE
5	16V CHLOROETHANE
6	44V METHYLENE CHLORIDE
7	2V ACROLEIN
8	3V ACRYLONITRILE
9	49V TRICHLOROFLUOROMETHANE
10	29V 1,1-DICHLOROETHYLENE
11	13V 1,1-DICHLOROETHANE
12	30V TRANS-1,2-DICHLOROETHYLENE
13	23V CHLOROFORM
14	10V 1,2-DICHLOROETHANE
15	11V 1,1,1-TRICHLOROETHANE
16	6V CARBON TETRACHLORIDE
17	48V BROMODICHLOROMETHANE
18	1,2-DICHLOROETHANE D-4 (SURROGATE)
19	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
20	32V 1,2-DICHLOROPROPANE
21	33V TRANS-1,3-DICHLOROPROPENE
22	87V TRICHLOROETHYLENE
23	4V BENZENE
24	33V CIS-1,3-DICHLOROPROPENE
25	14V 1,1,2-TRICHLOROETHANE
26	51V DIBROMOCHLOROMETHANE
27	47V BROMOFORM
28	85V TETRACHLOROETHYLENE
29	15V 1,1,2,2-TETRACHLOROETHANE
30	86V TOLUENE
31	87V CHLOROBENZENE
32	38V ETHYLBENZENE
33	BENZENE D-6 (SURROGATE)
34	1-CHLORO-2-BROMOPROPANE (SURROGATE)
35	ETHYLBENZENE D-10 (SURROGATE)

X - Spectra not confirmed by FIT or RRT

ug/g

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
1	128	94	4:51	1	1.000	A BB	23461.	50.000 UG/L	1.69
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	64	3:18	1	0.681	A BB	29519.	26.288 UG/L	0.89
7	56	71	3:40	1	0.755	A BB	209.	~~12.645 UG/L~~	0.43
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								

Meck 13.144

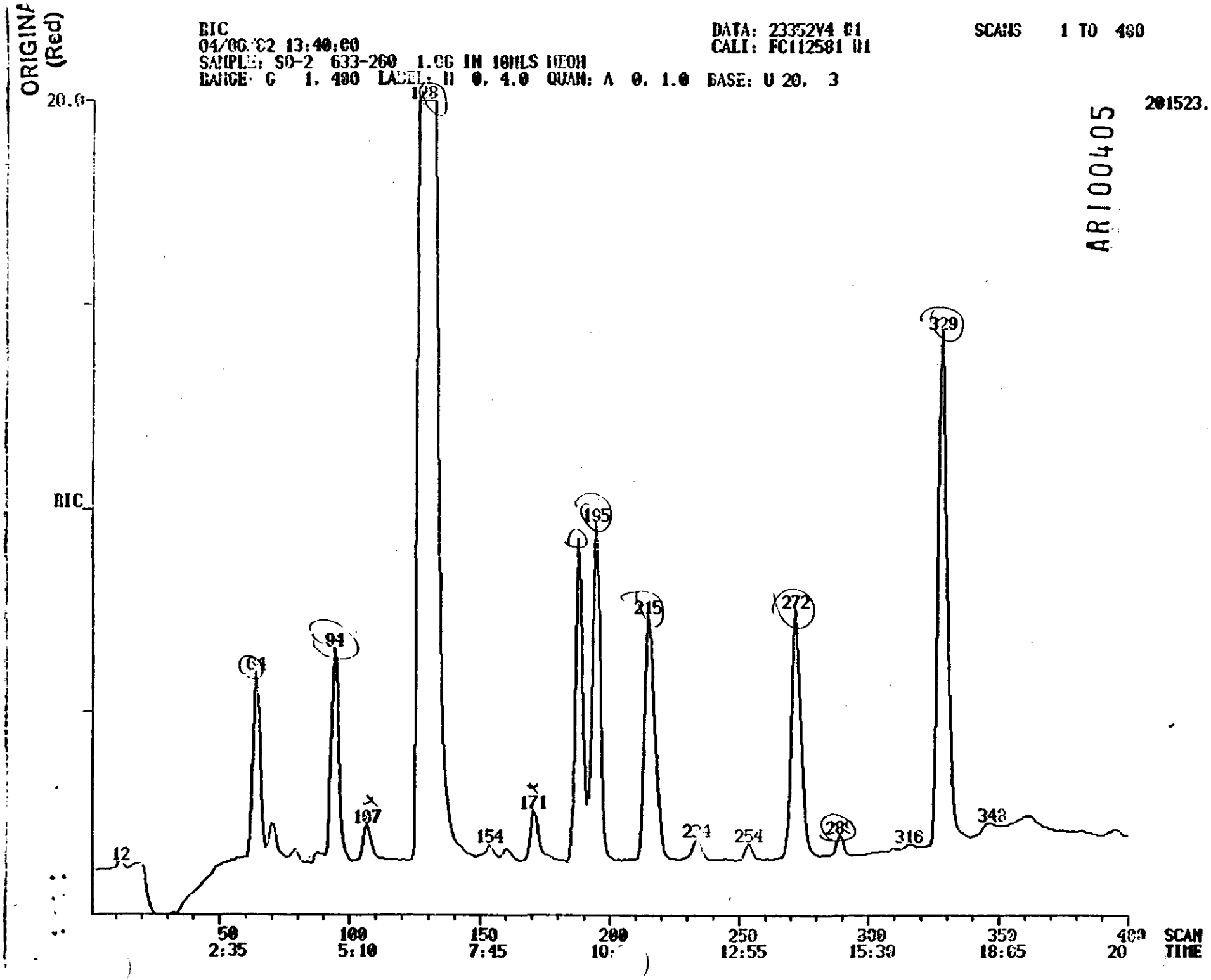
AR100402

NO.	MZE	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT	
11	NOT FOUND									
12	NOT FOUND									
13	83	~~119~~	6:39	1	1.266	A BB	61.	~~0.827 UG/L~~	0.00	
14	98	129	6:40	1	1.372	A BB	147068.	2457.190 UG/L	83.03	1,2-DICHLOROETHANE 1228.6
15	NOT FOUND									
16	NOT FOUND									
17	NOT FOUND									
18	65	127	6:34	1	1.351	A BB	156797.	131.283 UG/L	4.44	CS1C4
19	55	272	14:03	19	1.000	A BB	106354.	50.000 UG/L	1.69	
20	63	177	9:09	19	0.651	A BB	165.	~~0.115 UG/L~~	0.00	
21	NOT FOUND									
22	130	108	9:43	19	0.691	A BB	47838.	44.976 UG/L	1.52	TCE 2249
23	78	196	10:08	19	0.721	A BB	441.	~~0.175 UG/L~~	0.01	
24	NOT FOUND									
25	97	188	9:43	19	0.691	A BB	34951.	~~31.645 UG/L~~	1.07	
26	NOT FOUND									
27	NOT FOUND									
28	NOT FOUND									
29	NOT FOUND									
30	91	289	14:56	19	1.062	A BB	8818.	3.459 UG/L	0.12	TOLUENE 1730
31	NOT FOUND									
32	106	332	17:09	19	1.221	A BB	5518.	4.857 UG/L	0.16	ERC
33	84	195	10:04	19	0.717	A BB	125315.	48.824 UG/L	1.65	24412
34	77	215	11:06	19	0.790	A BB	76085.	47.153 UG/L	1.59	23576
35	98	329	17:00	19	1.210	A BB	239034.	50.937 UG/L	1.72	25465

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	4:54	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:14		0.253			50.00		0.404	
3	1:45		0.358			50.00		0.993	
4	2:01		0.411			50.00		0.904	
5	2:29		0.505			50.00		0.573	
6	3:21	0.98	0.684	1.00	26.29	50.00	1.258	2.393	0.53
7	3:40	1.00	0.747	1.01	12.65	400.00	0.002	0.049	0.03
8	3:56		0.000			400.00		0.371	
9	4:27		0.905			50.00		2.218	
10	4:45		0.968			50.00		0.818	
11	5:29		1.116			50.00		3.574	
12	5:56		1.211			50.00		2.464	
13	6:12	0.99	1.263	1.00	0.03	50.00	0.003	4.916	0.00
14	6:43	0.99	1.368	1.00	2457.19	50.00	6.269	0.128	49.14
15	7:36		1.547			50.00		3.344	
16	7:51		1.600			50.00		2.958	
17	8:07		1.653			50.00		3.578	
18	6:40	0.98	1.358	0.99	131.28	50.00	6.683	2.545	2.63
19	14:03	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	9:09	1.00	0.651	1.00	0.12	50.00	0.002	0.650	0.00
21	9:18		0.662			50.00		0.979	
22	9:45	0.99	0.695	0.99	44.98	50.00	0.450	0.500	0.90
23	10:14	0.99	0.728	0.99	0.17	50.00	0.004	1.189	0.00
24	10:14		0.726			50.00		0.400	
25	10:14	0.95	0.728	0.95	31.64	50.00	0.329	0.519	0.63
26	10:04		0.717			50.00		0.523	
27	12:02		0.857			50.00		0.406	
28	13:54		0.989			50.00		0.430	
29	13:48		0.982			50.00		0.306	

AR100403

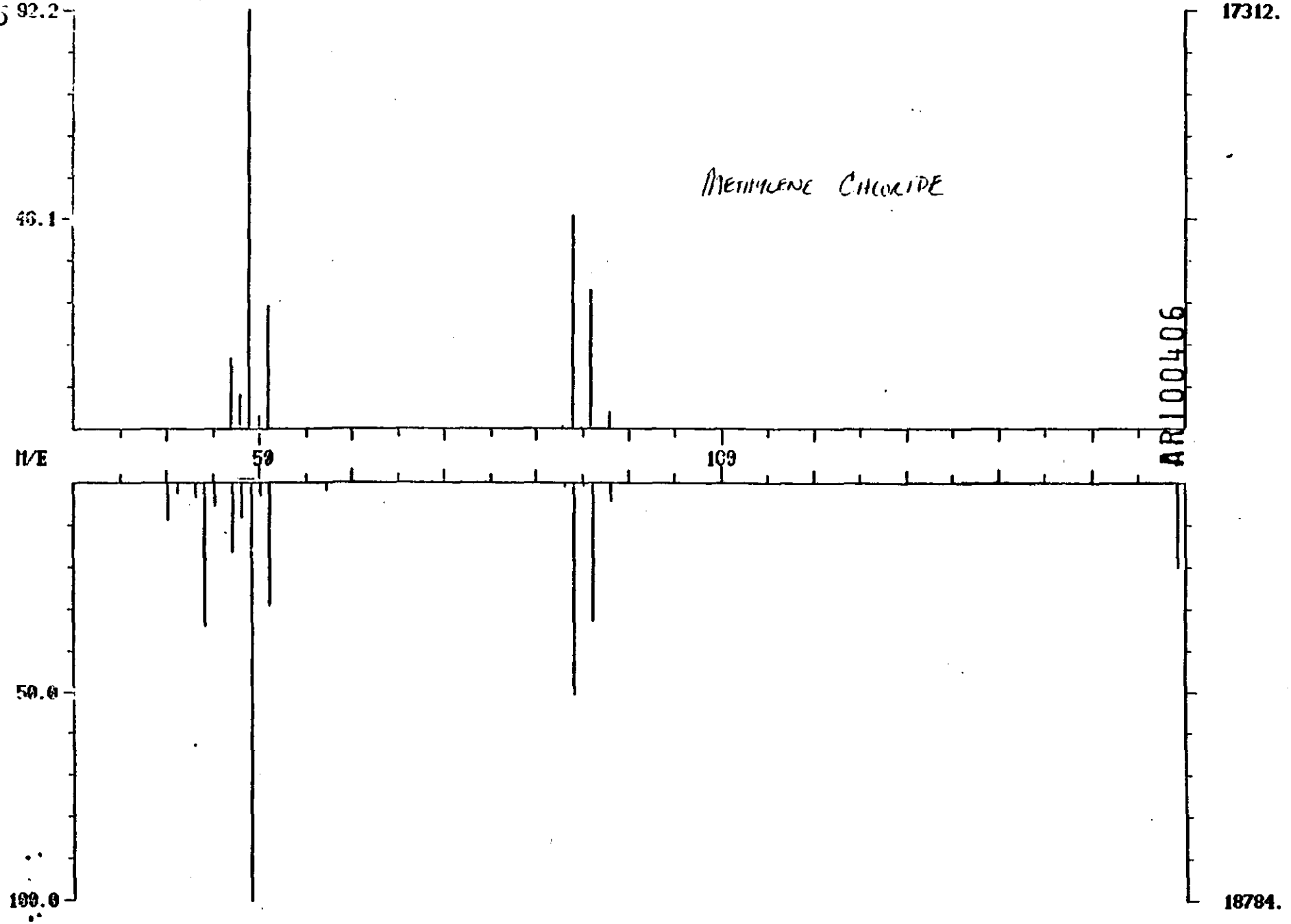
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
30	14:53	1.00	1.066	1.00	3.46	50.00	0.003	1.190	0.07
31	15:49		1.125			50.00		1.102	
32	17:09	1.00	1.321	1.00	4.06	50.00	0.052	0.533	0.10
33	10:08	0.99	0.721	0.99	46.62	50.00	1.179	1.207	0.98
34	11:06	1.00	0.720	1.00	47.15	50.00	0.715	0.758	0.94
35	17:00	1.00	1.210	1.00	50.94	50.00	2.340	2.206	1.02

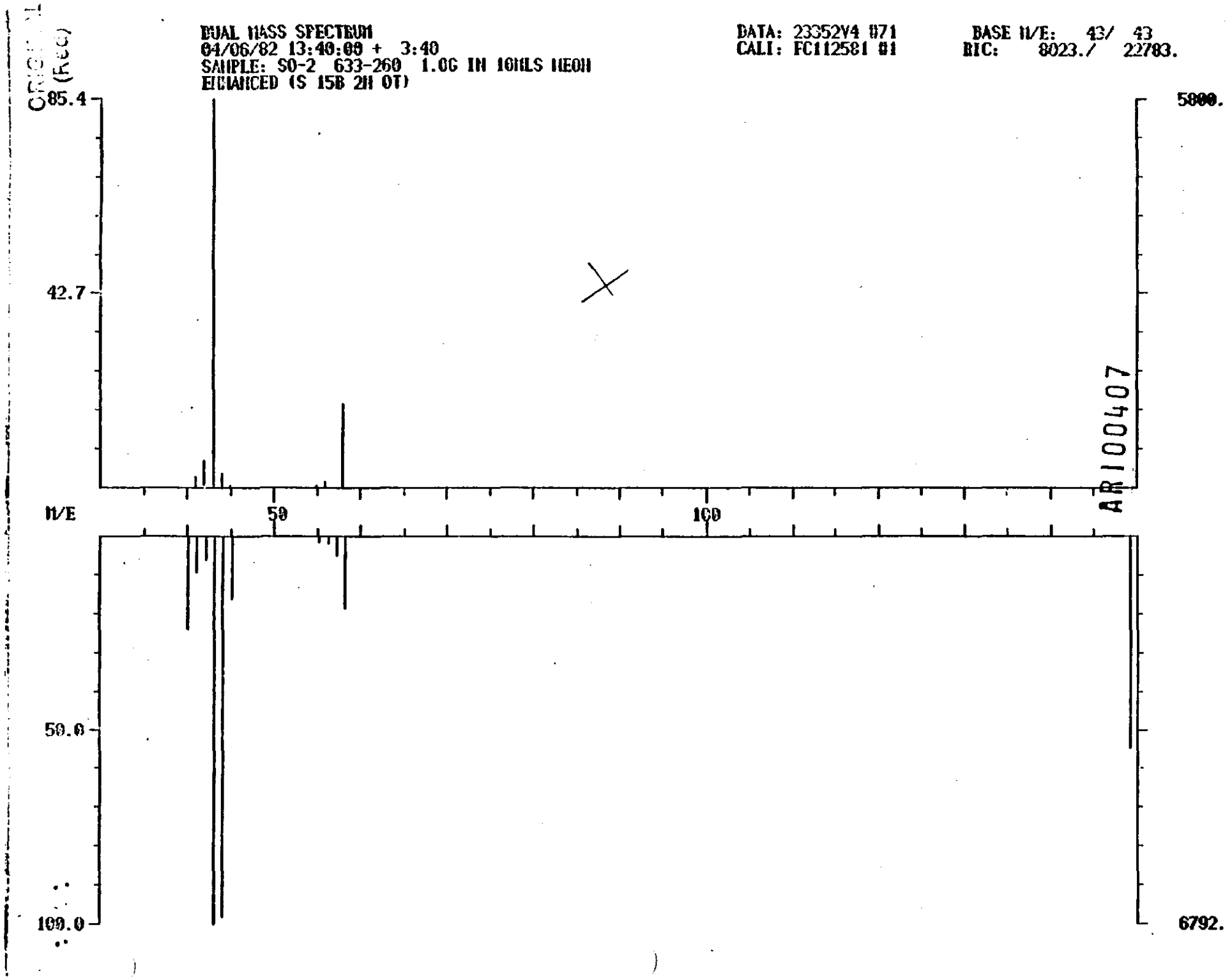

ORIGINAL (Red)
BIC
04/06/02 13:40:00
SAMPLE: SO-2 633-260 1.0G IN 10MLS MEOH
DATA: 23352V4 01
CALI: FC112581 01
SCANS 1 TO 480
RANGE: G 1. 480 LABEL: H 0. 4.0 QUAN: A 0. 1.0 BASE: U 20. 3
20.0
201523.
AR100405
BIC
12
64
94
107
128
154
171
195
215
224
254
272
289
316
329
348
50 2:35
100 5:10
150 7:45
200 10:
250 12:55
300 15:30
350 18:05
400 20
SCAN TIME

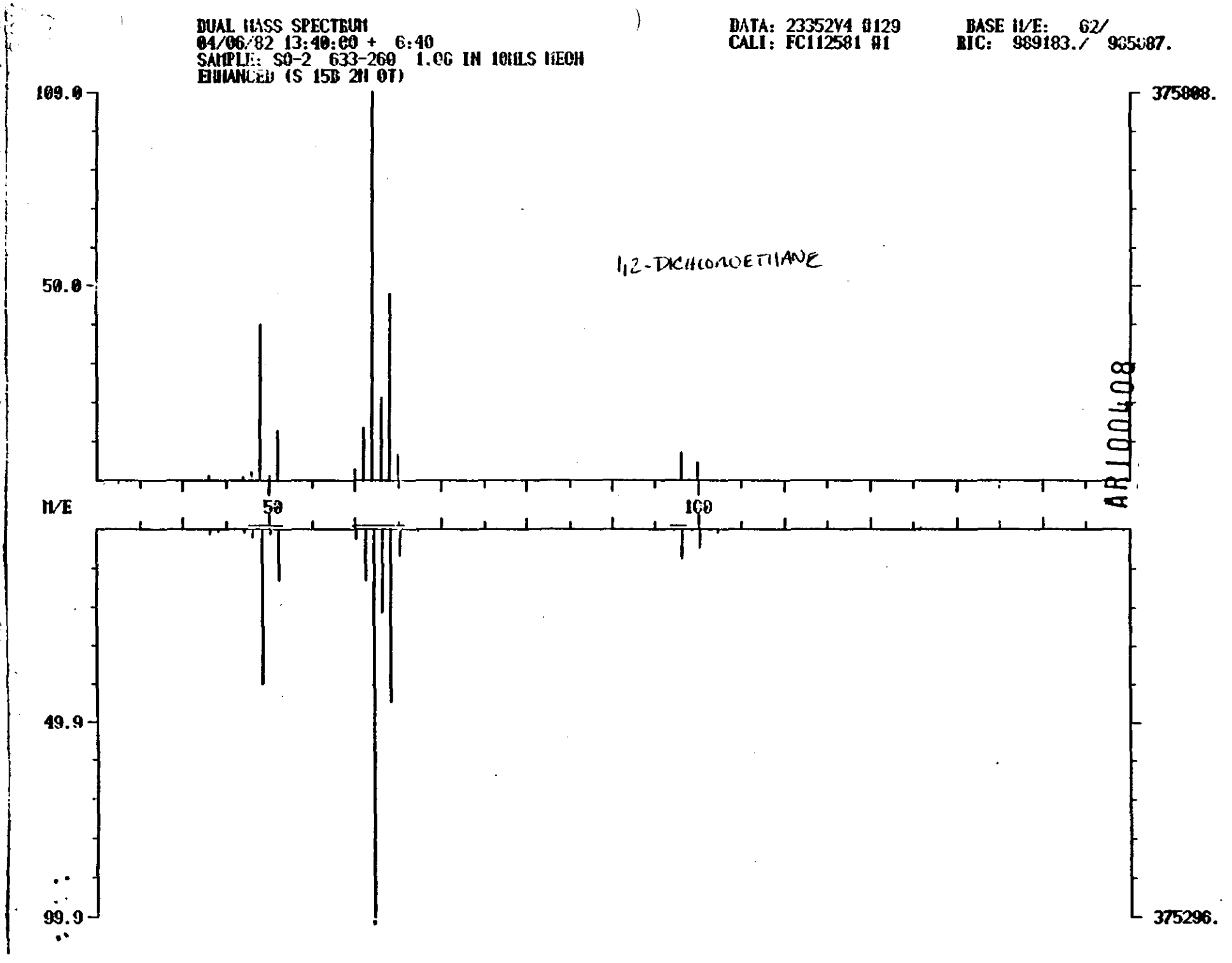
DUAL MASS SPECTRUM
04/06/92 13:40:00 + 3:18
SAMPLE: SO-2 633-260 1.0G IN 10ML5 MEOH
ENHANCED (S 15B 2N 0T)

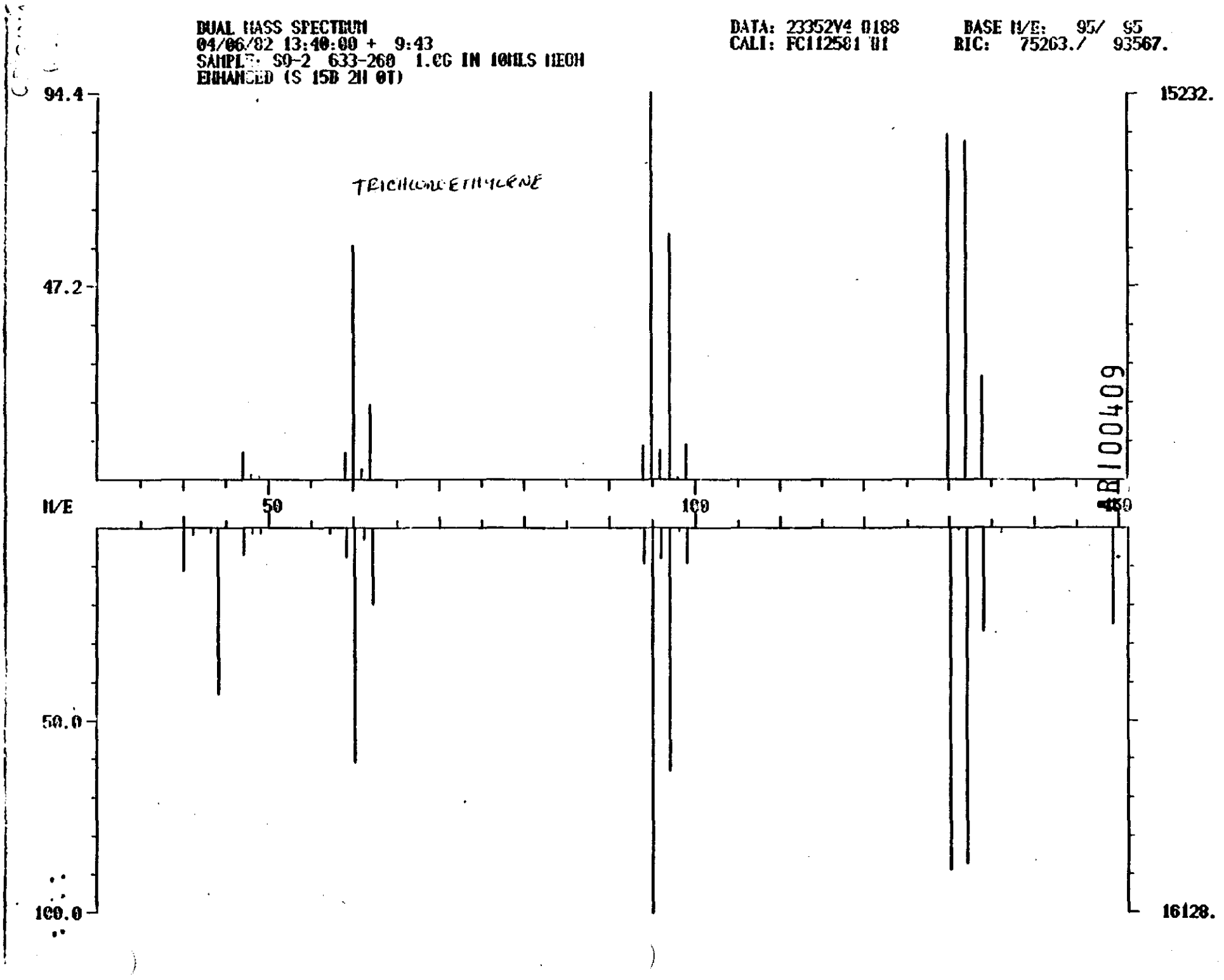
DATA: 23352V4 864
CALI: FC112581 81

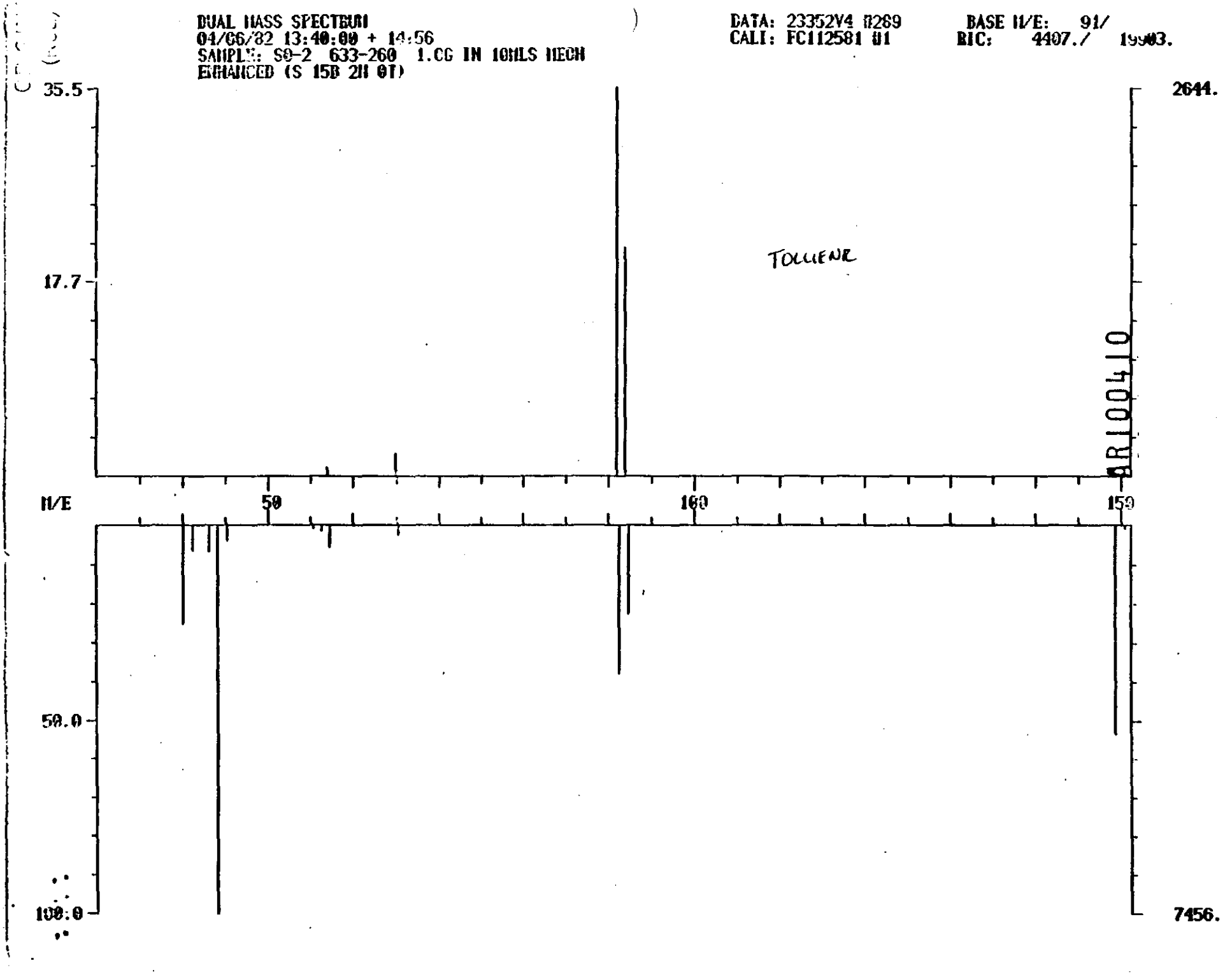
BASE M/E: 42/
RIC: 42495./ 69...

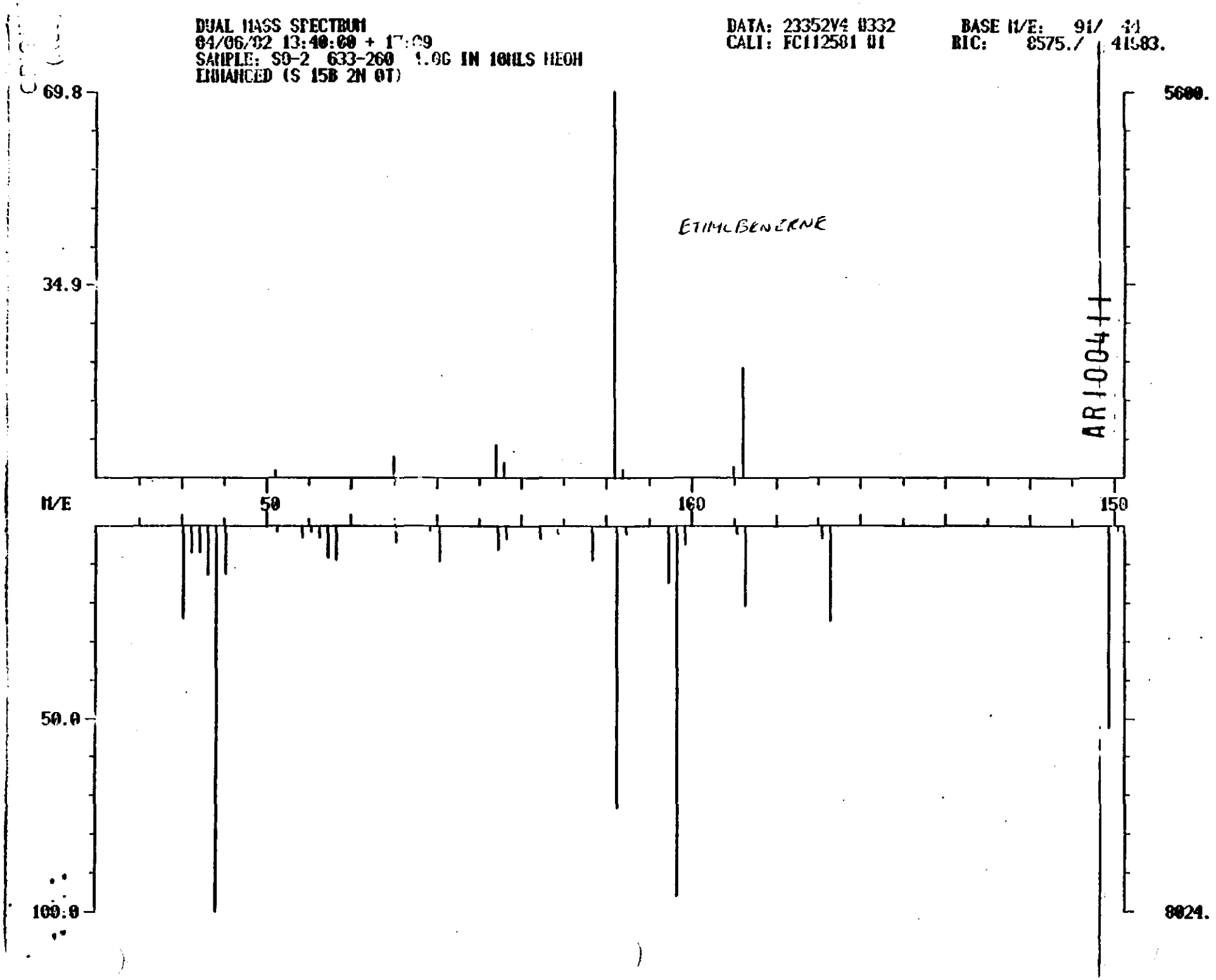


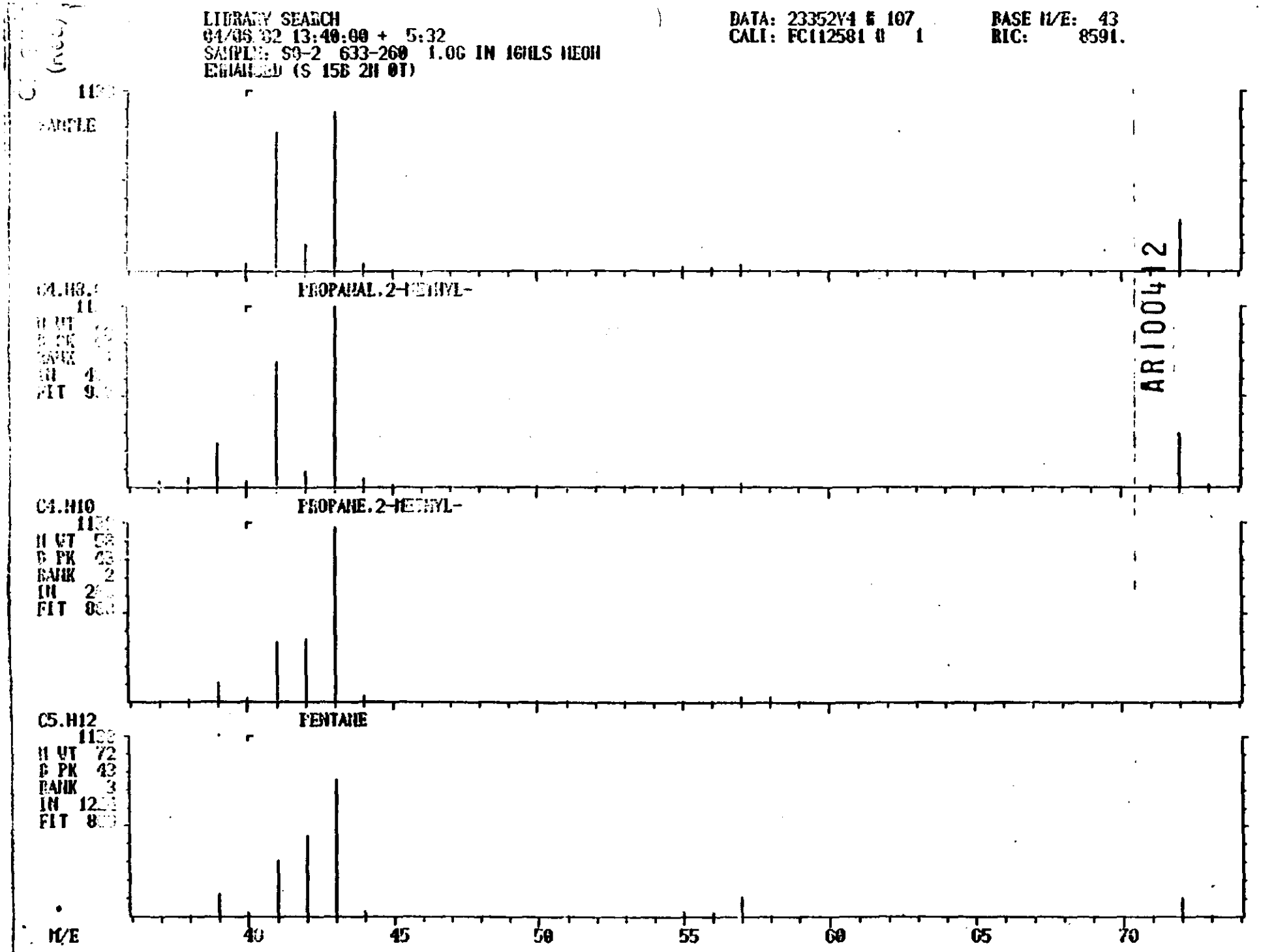

DUAL MASS SPECTRUM
04/06/82 13:40:00 + 3:40
SAMPLE: SO-2 633-260 1.0G IN 10MLS MEOH
ENHANCED (S 15B 2H 0T)
DATA: 23352V4 071
CALI: FC112581 01
BASE M/E: 43/ 43
RIC: 8023./ 22783.
85.4
42.7
5000.
6792.
M/E
50
100
AR100407


DUAL MASS SPECTRUM
04/06/82 13:40:00 + 6:40
SAMPLE: S0-2 633-260 1.0G IN 10MLS MEOH
ENHANCED (S 15B 2N 0T)
DATA: 23352V4 0129
CALI: FC112581 01
BASE M/E: 62/
RIC: 989183./ 965087.
109.0
50.0
99.9
375808.
375296.
M/E
50
100
1,2-DICHLOROETHANE
AR100408


DUAL MASS SPECTRUM
04/06/82 13:40:00 + 9:43
SAMPLE: S9-2 633-260 1.CC IN 10ML5 MEOH
ENHANCED (S 15B 2H 0T)
DATA: 23352V4 0188
CALI: FC112581 01
BASE M/E: 95/ 95
RIC: 75263./ 93567.
94.4
47.2
15232.
TRICHLOROETHYLENE
M/E
50
100
150
50.0
100.0
16128.
AB100409


DUAL MASS SPECTRUM
04/06/82 13:40:00 + 14:56
SAMPLE: S0-2 633-260 1.0G IN 10HLS MECH
ENHANCED (S 15B 2H 0T)
DATA: 23352V4 0269
CALI: FC112581 01
BASE M/E: 91/
RIC: 4407./ 19903.
35.5
17.7
2644.
TOLUENE
AR100410
M/E
50
100
150
50.0
100.0
7456.


DUAL MASS SPECTRUM
04/06/02 13:40:00 + 17:09
SAMPLE: S9-2 633-260 1.0G IN 10ULS MEOH
ENHANCED (S 15B 2N 0T)
DATA: 23352V4 0332
CALI: FC112581 01
BASE M/E: 91/ 44
RIC: 8575./ 41983.
69.8
34.9
5600.
8024.
M/E
50
100
150
50.0
100.0
ETHYLBENZENE
AR1004


LIBRARY SEARCH
04/06/92 13:40:00 + 5:32
SAMPLE: SO-2 633-260 1.0G IN 16ULS MEOH
ENHANCED (S 15B 2H 0T)
DATA: 23352V4 B 107
CALI: FC112581 0 1
BASE M/E: 43
RIC: 8591.
SAMPLE
PROPANAL,2-METHYL-
C4.H10
PROPANE,2-METHYL-
C5.H12
PENTANE
M/E
40
45
50
55
60
65
70
AR100412

LIBRARY SEARCH
04/06/92 13:40:00 + 8:50
SAMPLE: S9-2 633-260 1.0G IN 10MLS MEOH
ENHANCED (S 15B 2N 0T)

DATA: 23352V4 # 171
CALI: FC112581 0 1

BASE M/E: 43
RIC: 10847.

SAMPLE

C5.H10.O 2-BUTANONE,3-METHYL-

M WT 86
B PK 43
RANK 1
IN 2929
FIT 905

C4.H6.O2 ACETICACIDETHENYLESTER

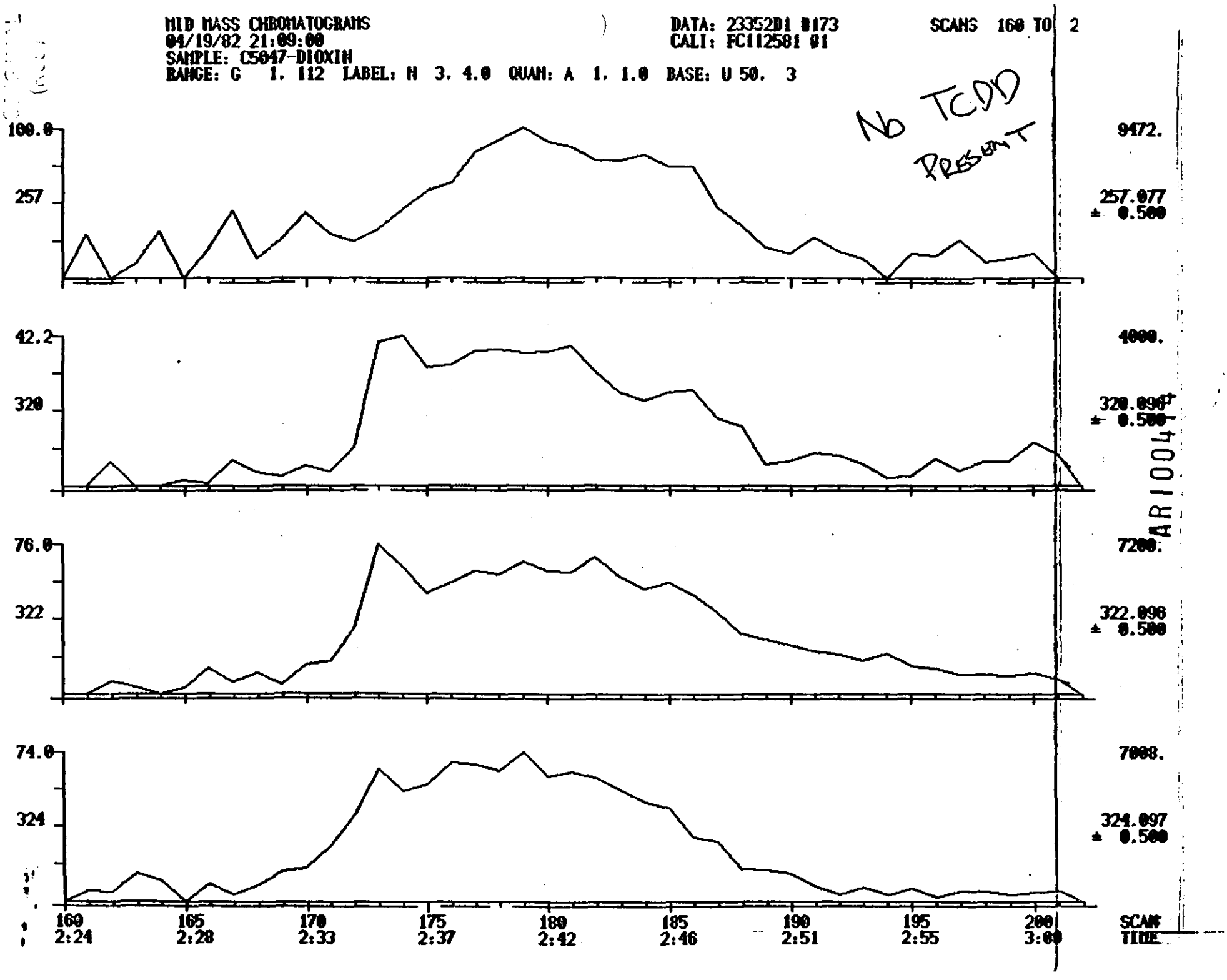
M WT 86
B PK 43
RANK 2
IN 1145
FIT 807

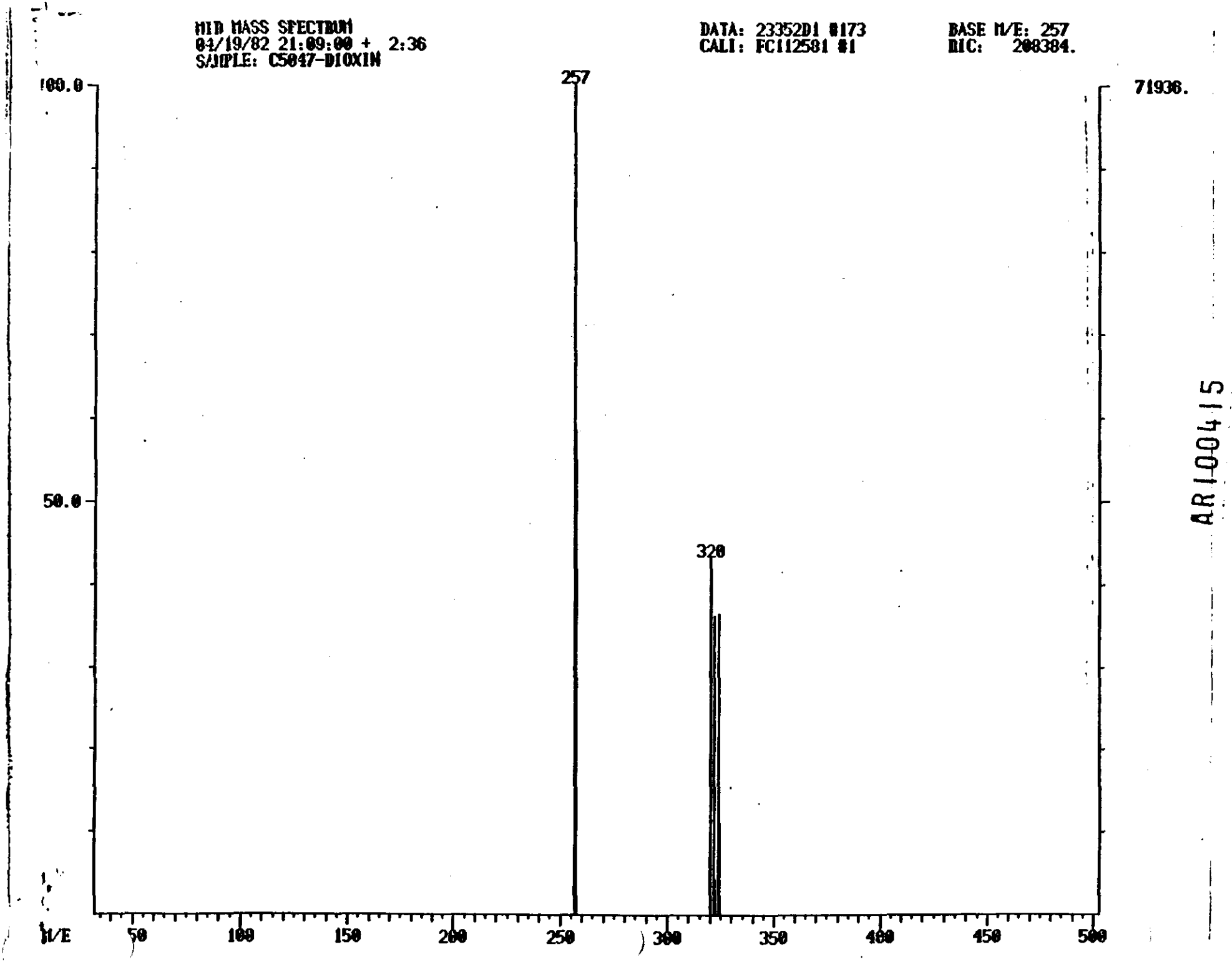
C4.H6.O2 ETHANONE,1-OXIRANYL-

M WT 86
B PK 43
RANK 3
IN 7792
FIT 809

M/E 40 50 60 70 80

AR100413


MID MASS CHROMATOGRAMS
04/19/82 21:09:00
SAMPLE: C5047-DIOXIN
RANGE: G 1. 112 LABEL: N 3. 4.0 QUAN: A 1. 1.0 BASE: U 50. 3
DATA: 23352D1 #173
CALI: FC112581 #1
SCANS 160 TO 2
NO TCDD PRESENT
100.0
257
9472.
257.077
± 0.500
42.2
320
4000.
320.096
± 0.500
76.0
322
7200.
322.096
± 0.500
74.0
324
7000.
324.097
± 0.500
160 2:24
165 2:28
170 2:33
175 2:37
180 2:42
185 2:46
190 2:51
195 2:55
200 3:00
SCAN TIME
ARI0047


MID MASS SPECTRUM
04/19/82 21:09:00 + 2:36
SAMPLE: C5047-DIOXIN
DATA: 23352D1 #173
CALI: FC112581 #1
BASE M/E: 257
RIC: 208384.
100.0
50.0
257
320
71936.
M/E
50
100
150
200
250
300
350
400
450
500

AR100415

QUANTITATION REPORT FILE: 23352F2

DATA: 23352F2.TI
04/18/82 20:23:00
SAMPLE: C05048
CONDS.: EXT 4/14/82 0.0G TO 5MLS
FORMULA: SENS213 INSTRUMENT: 4021 WEIGHT: 0.000
SUBMITTED BY: BNAP047 ANALYST: RA #592 ACCT. NO.: FC112581

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

NO	NAME
1	2,4,6-PHENOL D3 (INTERNAL STANDARD)
2	61B N-NITROSO-DIMETHYLAMINE
3	18B BIS (2-CHLOROETHYL) ETHER
4	24A 2-CHLOROPHENOL
5	26B 1,3-DICHLOROBENZENE
6	27B 1,4-DICHLOROBENZENE
7	1,2-DICHLOROBENZENE
8	42B BIS (2-CHLOROISOPROPYL) ETHER
9	12B HEXACHLOROETHANE
10	PHENOL
11	PHENOL D-5 (SURROGATE)
12	2-FLUOROPHENOL (SURROGATE)
13	PYRIDINE D6 (SURROGATE)
14	NAPHTHALENE D8 (INTERNAL STANDARD)
15	63C N-NITROSO-DI-N-PROPYLAMINE
16	NITROBENZENE
17	ISOPHORONE
18	57A 2-NITROPHENOL
19	34A 2,4-DIMETHYLPHENOL
20	43B BIS (2-CHLOROETHOXY) METHANE
21	31A 2,4-DICHLOROPHENOL
22	8B 1,2,4-TRICHLOROBENZENE
23	55B NAPHTHALENE
24	52B HEXACHLOROBUTADIENE
25	22A 4-CHLORO-M-CRESOL
26	53B HEXACHLOROCYCLOPENTADIENE
27	21A 2,4,6-TRICHLOROPHENOL
28	20B 2-CHLORONAPHTHALENE
29	77B ACENAPHTHALENE
30	71B DIMETHYLPHTHALATE
31	36B 2,6-DINITROTOLUENE
32	NITROBENZENE D-5 (SURROGATE)
33	2-FLUORBIPHENYL (SURROGATE)
34	PHENANTHRENE D10 (INTERNAL STANDARD)
35	1B ACENAPHTHENE
36	59A 2,4-DINITROPHENOL
37	35B 2,4-DINITROTOLUENE
38	4-NITROPHENOL
39	80B FLUORENE
40	40B 4-CHLOROPHENYLPHENYL ETHER
41	70B DIETHYLPHTHALATE
42	60A 4,6-DINITRO-O-CRESOL
43	62B N-NITROSODIPHENYLAMINE
44	37B 1,2-DIPHENYLHYDRAZINE
45	41B 4-BROMOPHENOXYBENZENE
46	9B HEXACHLOROBENZENE
47	64A PENTACHLOROPHENOL

AR100416

ORIGINAL

NO	NAME
48	81B PHENANTHRENE
49	78B ANTHRACENE
50	68B DI-N-BUTYLPHTHALATE
51	39B FLUORANTHENE
52	84B PYRENE
53	ALPHA BHC
54	GAMMA & BETA BHC
55	DELTA-BHC
56	HEPTACHLOR
57	ALDRIN
58	PYRENE D10 (SURROGATE)
59	CHRYSENE D12 (INTERNAL STANDARD)
60	5B BENZIDINE
61	67B BUTYLBENZYLPHTHALATE
62	72B BENZO (A) ANTHRACENE
63	76B CHRYSENE
64	28B 3,3'-DICHLOROBENZIDINE
65	66B BIS (2-ETHYLHEXYL) PHTHALATE
66	69B DI-N-OCTYLPHTHALATE
67	4,4'-DDE
68	DIELDRIN
69	4,4'-DDD
70	4,4'-DDT
71	BETA ENDOSULFAN
72	ENDOSULFAN SULFATE
73	ENDRIN
74	ALPHA ENDOSULFAN
75	BENZO (A) PYRENE D-12 (INTERNAL STANDARD)
76	74B BENZO (B) FLUORANTHENE
77	73B BENZO (A) PYRENE
78	83B INDENO-1,2,3 (C,D) PYRENE
79	82B DIBENZO (A,H) ANTHRACENE
80	79B BENZO (G,H,I) PERYLENE

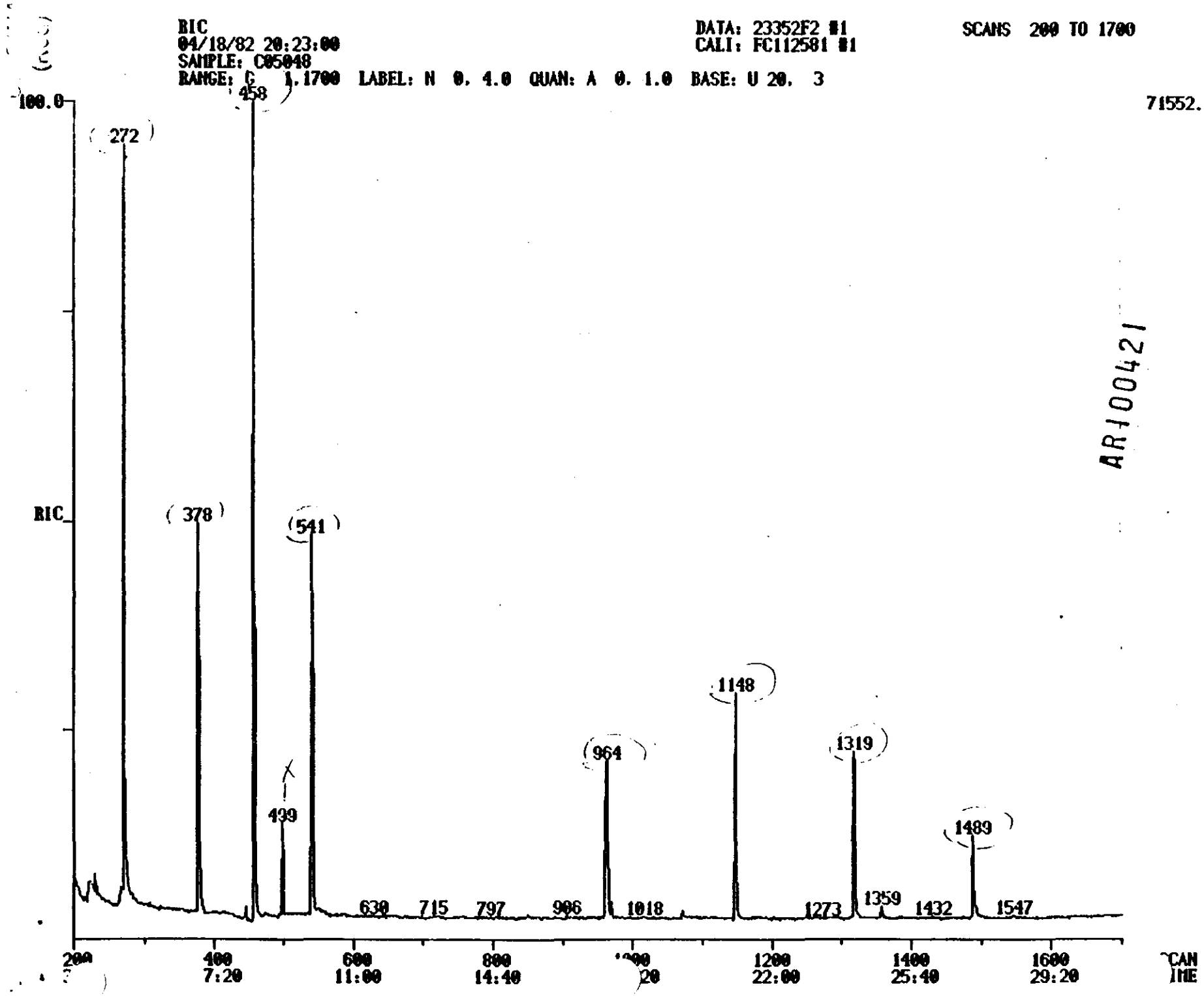
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT	
1	97	378	6:56	1	1.000	A BB	14515.	20.000 UG/L	4.23	
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	NOT FOUND									
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	99	458	8:24	1	1.212	A BB	211.	~~0.220 UG/L~~	0.05	
12	112	271	4:58	1	0.717	* BV	49912.	89.949 UG/L	19.81	1,800,000
13	NOT FOUND									
14	136	541	9:55	14	1.000	* BV	43507.	20.000 UG/L	4.23	
15	NOT FOUND									
16	NOT FOUND									
17	82	458	8:24	14	0.847	* BV	49873.	~~55.887 UG/L~~	11.81	~~ZERO~~
18	NOT FOUND									
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									

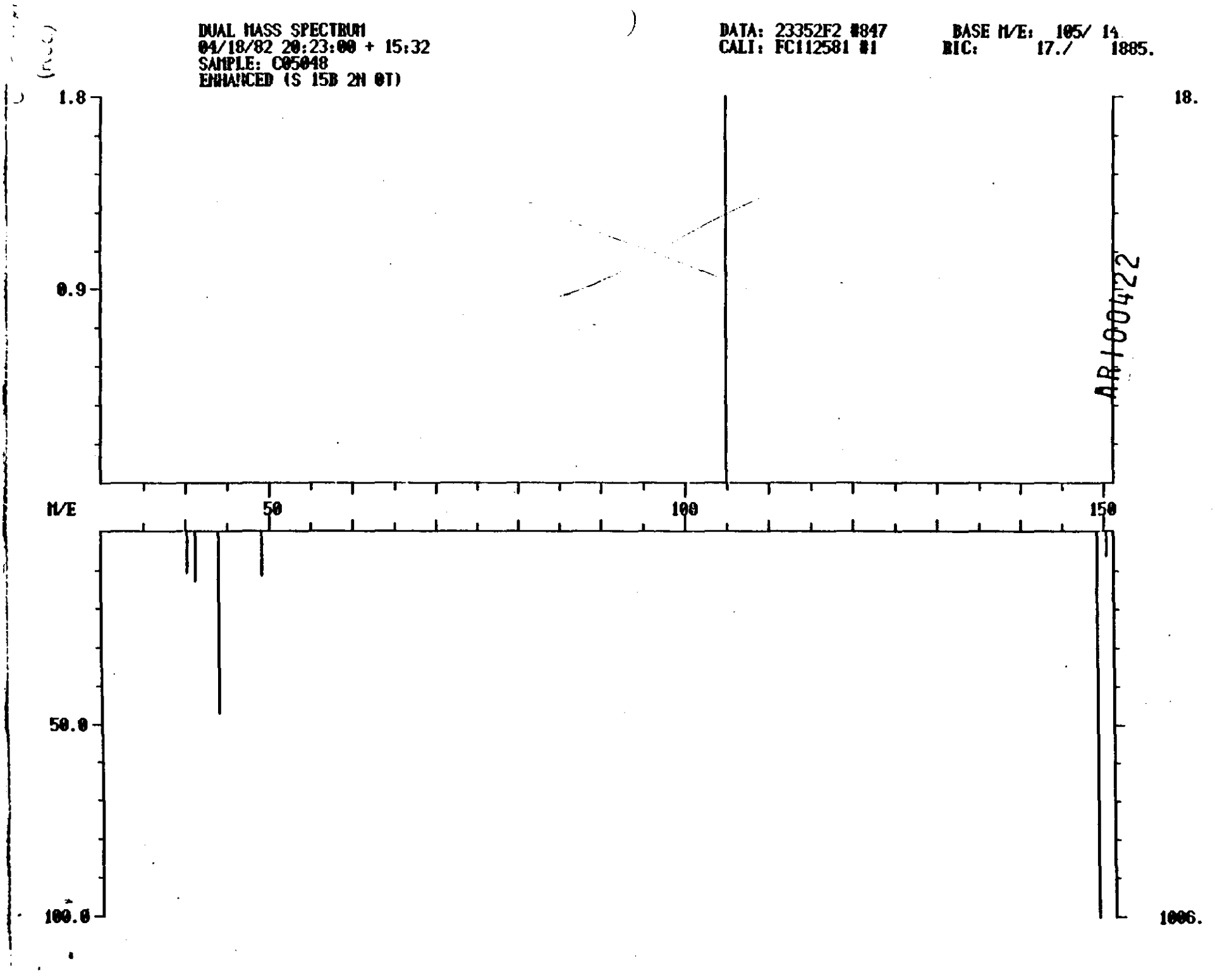
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT	
22	NOT FOUND									
23	128	544	9:58	14	1.006	A BB	220.	~~0.897 UG/L~~	0.02	
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	NOT FOUND									
28	NOT FOUND									
29	NOT FOUND									
30	NOT FOUND									
31	NOT FOUND									
32	128	458	8:24	14	0.847	A BB	19344.	64.438 UG/L	13.62	1,280,000
33	NOT FOUND									
34	128	963	17:39	34	1.000	A BB	32493.	20.000 UG/L	4.23	
35	NOT FOUND									
36	NOT FOUND									
37	NOT FOUND									
38	NOT FOUND									
39	NOT FOUND									
40	NOT FOUND									
41	149	847	15:32	34	0.880	* VB	37118.	~~25.781 UG/L~~	5.45	
42	NOT FOUND									
43	NOT FOUND									
44	NOT FOUND									
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	NOT FOUND									
49	NOT FOUND									
50	149	1078	19:46	34	1.119	* VB	18138.	~~7.354 UG/L~~	1.55	
51	NOT FOUND									
52	NOT FOUND									
53	NOT FOUND									
54	NOT FOUND									
55	NOT FOUND									
56	NOT FOUND									
57	NOT FOUND									560,000
58	212	1149	21:03	34	1.192	A BB	19203.	28.225 UG/L	5.96	
59	240	1319	24:11	59	1.000	* VB	17515.	20.000 UG/L	4.23	
60	184	1149	21:03	59	0.870	A BB	69.	~~0.721 UG/L~~	0.15	
61	149	1275	23:22	59	0.967	* VB	38648.	~~48.339 UG/L~~	8.52	
62	NOT FOUND									
63	NOT FOUND									
64	NOT FOUND									
65	149	1358	24:54	59	1.030	* VV	32129.	~~24.856 UG/L~~	5.25	
66	149	1435	26:18	59	1.088	* VV	28194.	~~15.338 UG/L~~	3.24	
67	NOT FOUND									
68	NOT FOUND									
69	NOT FOUND									
70	NOT FOUND									
71	NOT FOUND									
72	NOT FOUND									
73	NOT FOUND									
74	NOT FOUND									
75	264	1489	27:18	75	1.000	A BB	11398.	40.000 UG/L	8.45	
76	NOT FOUND									
77	NOT FOUND									

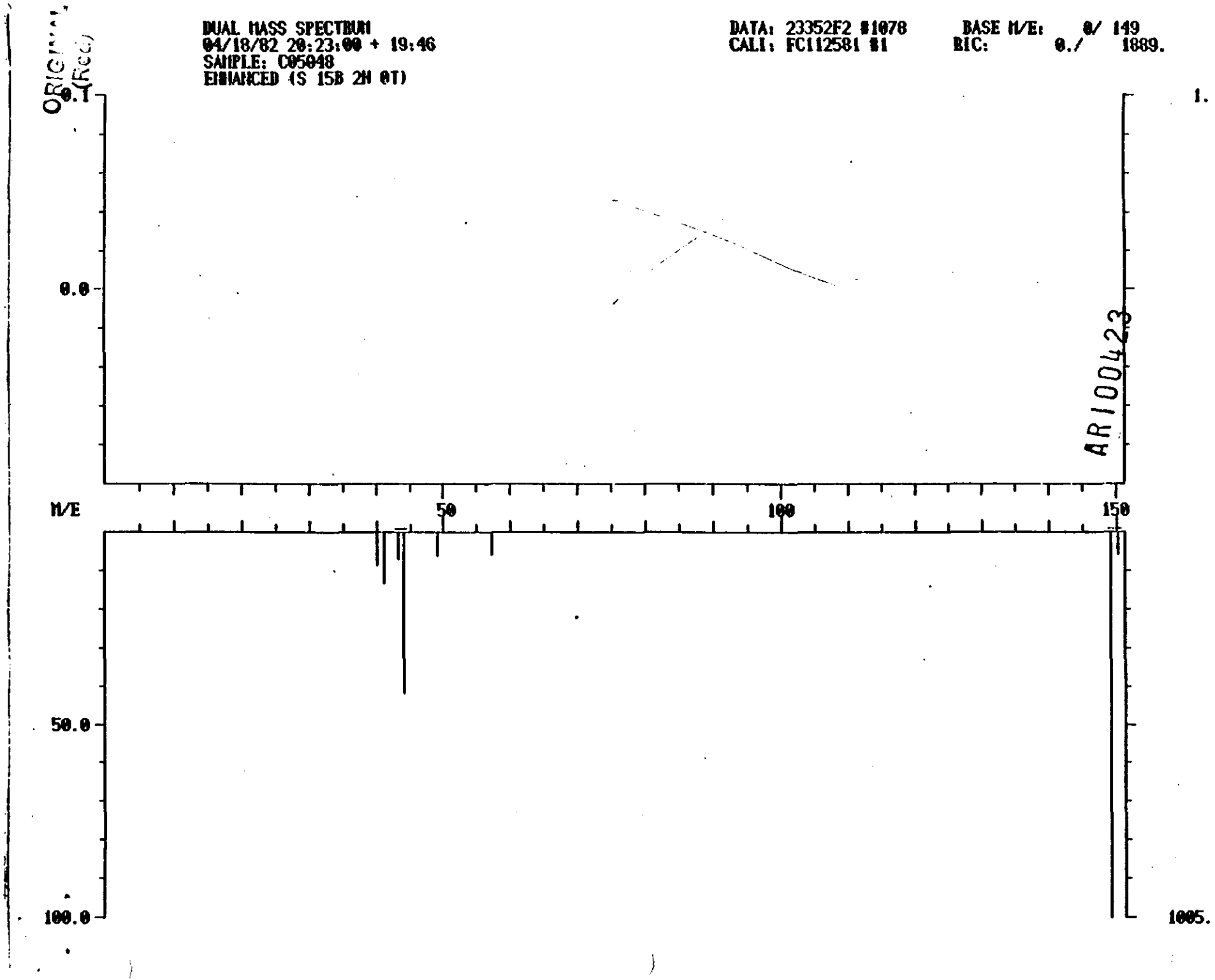
.NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
78	NOT FOUND								
79	NOT FOUND								
80	NOT FOUND								

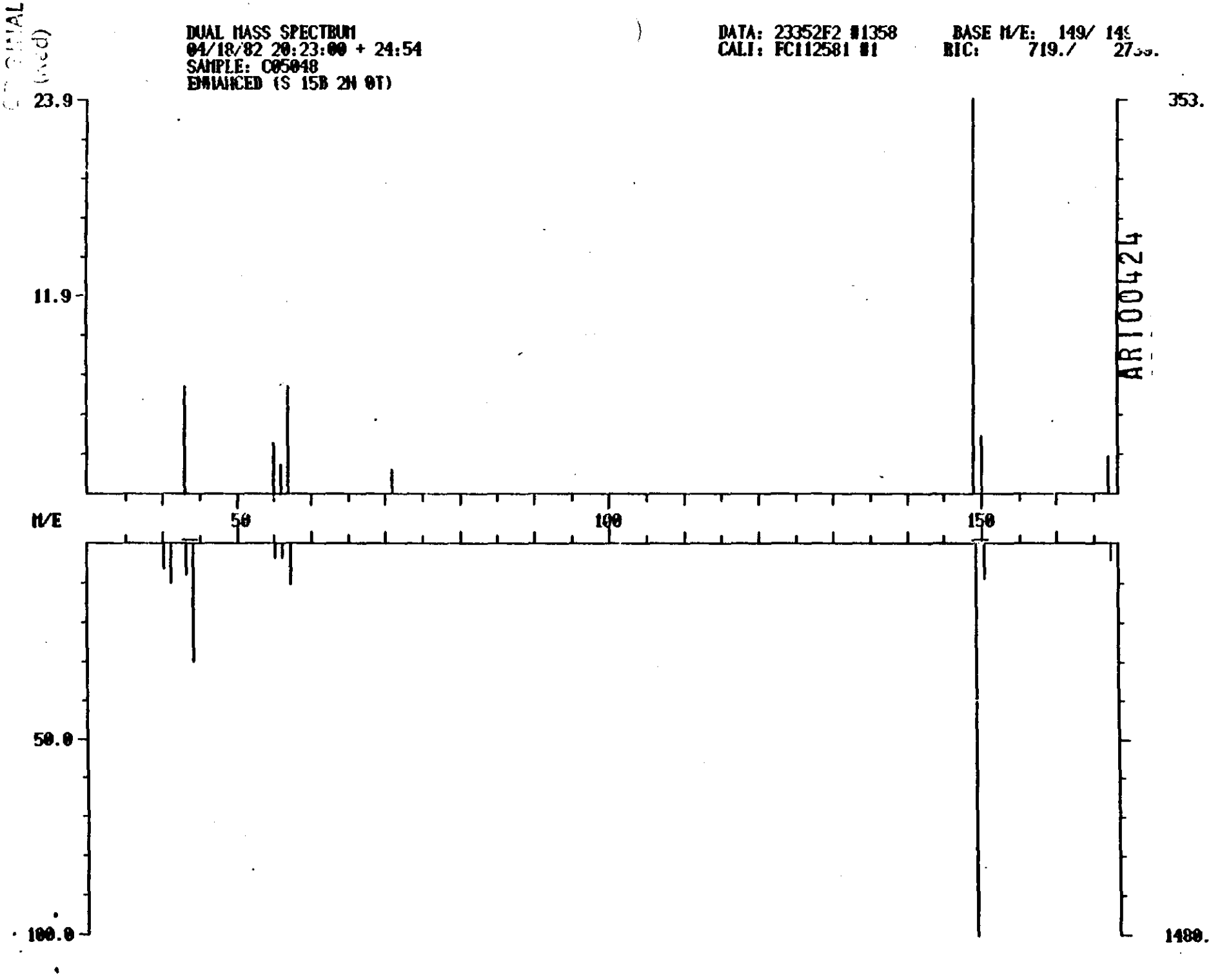
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	7:00	0.99	1.000	1.00	20.00	20.00	1.000	1.000	1.00
2	4:21		0.597			50.00		0.411	
3	7:12		0.990			50.00		1.130	
4	7:13		0.992			50.00		0.968	
5	7:28		1.025			50.00		0.828	
6	7:28		1.025			50.00		1.078	
7	7:51		1.078			50.00		0.890	
8	8:12		1.126			50.00		0.288	
9	8:26		1.159			50.00		0.604	
10	8:26		1.159			50.00		0.232	
11	8:38	0.97	1.186	1.02	0.22	50.00	0.006	1.324	0.00
12	5:24	0.92	0.720	1.00	89.95	50.00	1.375	0.765	1.80
13	4:13		0.590			50.00		0.369	
14	9:55	1.00	1.000	1.00	20.00	20.00	1.000	1.000	1.00
15	8:31		0.842			50.00		0.023	
16	8:40		0.857			50.00		0.110	
17	8:38	0.97	0.853	0.99	55.89	50.00	0.449	0.402	1.12
18	9:20		0.922			50.00		0.144	
19	9:50		0.971			50.00		0.338	
20	9:54		0.978			50.00		0.478	
21	9:59		0.987			50.00		0.302	
22	10:03		0.993			50.00		0.379	
23	10:10	0.98	1.005	1.00	0.10	50.00	0.002	1.040	0.00
24	10:38		1.051			50.00		0.166	
25	11:49		1.168			50.00		0.276	
26	12:19		1.217			50.00		0.106	
27	12:32		1.239			50.00		0.200	
28	12:52		1.272			50.00		0.676	
29	13:47		1.362			50.00		0.570	
30	14:03		1.388			50.00		0.612	
31	14:07		1.395			50.00		0.184	
32	8:37	0.97	0.855	0.99	64.44	50.00	0.178	0.138	1.29
33	12:46		1.265			50.00		0.322	
34	17:35	1.00	1.000	1.00	20.00	20.00	1.000	1.000	1.00
35	14:16		0.804			50.00		0.586	
36	14:33		0.820			50.00		0.028	
37	14:59		0.844			50.00		0.142	
38	15:09		0.853			50.00		0.067	
39	15:29		0.873			50.00		0.719	
40	15:39		0.882			50.00		0.394	
41	15:43	0.99	0.885	0.99	25.78	50.00	0.457	0.886	0.52
42	15:55		0.897			50.00		0.045	
43	16:02		0.904			50.00		0.211	
44	15:55		0.897			50.00		0.011	
45	16:48		0.946			50.00		0.213	
46	17:00		0.958			50.00		0.316	
47	17:35		0.991			50.00		0.125	
48	17:51		1.006			50.00		0.932	
49	17:57		1.011			50.00		0.934	
50	19:46	1.00	1.114	1.01	7.35	50.00	0.223	1.518	0.15
51	20:44		1.168			50.00		0.971	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
52	21:15		1.197			50.00		1.028	
53	16:51		0.949			50.00		0.157	
54	17:35		0.991			100.00		0.127	
55	18:09		1.023			50.00		0.096	
56	19:05		1.075			50.00		0.118	
57	20:39		1.163			50.00		0.023	
58	21:15	0.99	1.197	1.00	28.23	50.00	0.236	0.419	0.56
59	24:11	1.00	1.000	1.00	20.00	20.00	1.000	1.000	1.00
60	21:19	0.99	0.876	0.99	0.72	50.00	0.002	0.110	0.01
61	23:25	1.00	0.962	1.00	40.34	50.00	0.883	1.094	0.81
62	24:19		0.999			50.00		0.934	
63	24:23		1.002			50.00		0.886	
64	24:28		1.006			50.00		0.311	
65	25:01	0.99	1.029	1.00	24.86	50.00	0.734	1.476	0.50
66	26:29	0.99	1.089	1.00	15.34	50.00	0.644	2.099	0.31
67	21:54		0.901			50.00		0.339	
68	21:52		0.899			50.00		0.395	
69	22:42		0.933			50.00		0.512	
70	23:25		0.962			50.00		0.406	
71	21:21		0.878			50.00		0.036	
72	22:20		0.919			50.00		0.087	
73	22:19		0.917			50.00		0.164	
74	22:27		0.924			50.00		0.042	
75	27:10	1.00	1.117	1.00	40.00	40.00	1.000	1.000	1.00
76	21:20		0.868			50.00		0.757	
77	24:28		0.992			50.00		0.757	
78	29:52		1.088			50.00		0.443	
79	29:52		1.088			50.00		1.814	
80	30:16		1.103			50.00		2.258	


RIC
04/18/82 20:23:00
SAMPLE: C05048
RANGE: C 1.1700 LABEL: N 0. 4.0 QUAN: A 0. 1.0 BASE: U 20. 3
DATA: 23352F2 #1
CALI: FC112581 #1
SCANS 200 TO 1700
71552.
100.0
RIC
272
458
378
541
439
964
1148
1319
1489
630
715
797
906
1018
1273
1359
1432
1547
200
400
7:20
600
11:00
800
14:40
1000
18:20
1200
22:00
1400
25:40
1600
29:20
SCAN
TIME
AR100421


DUAL MASS SPECTRUM
04/18/82 20:23:00 + 15:32
SAMPLE: C05048
ENHANCED (S 15B 2N 0T)
DATA: 23352F2 #847
CALI: FC112581 #1
BASE M/E: 105/ 14
RIC: 17./ 1885.
1.8
0.9
18.
M/E
50
100
150
50.0
100.0
1006.
AR+00422

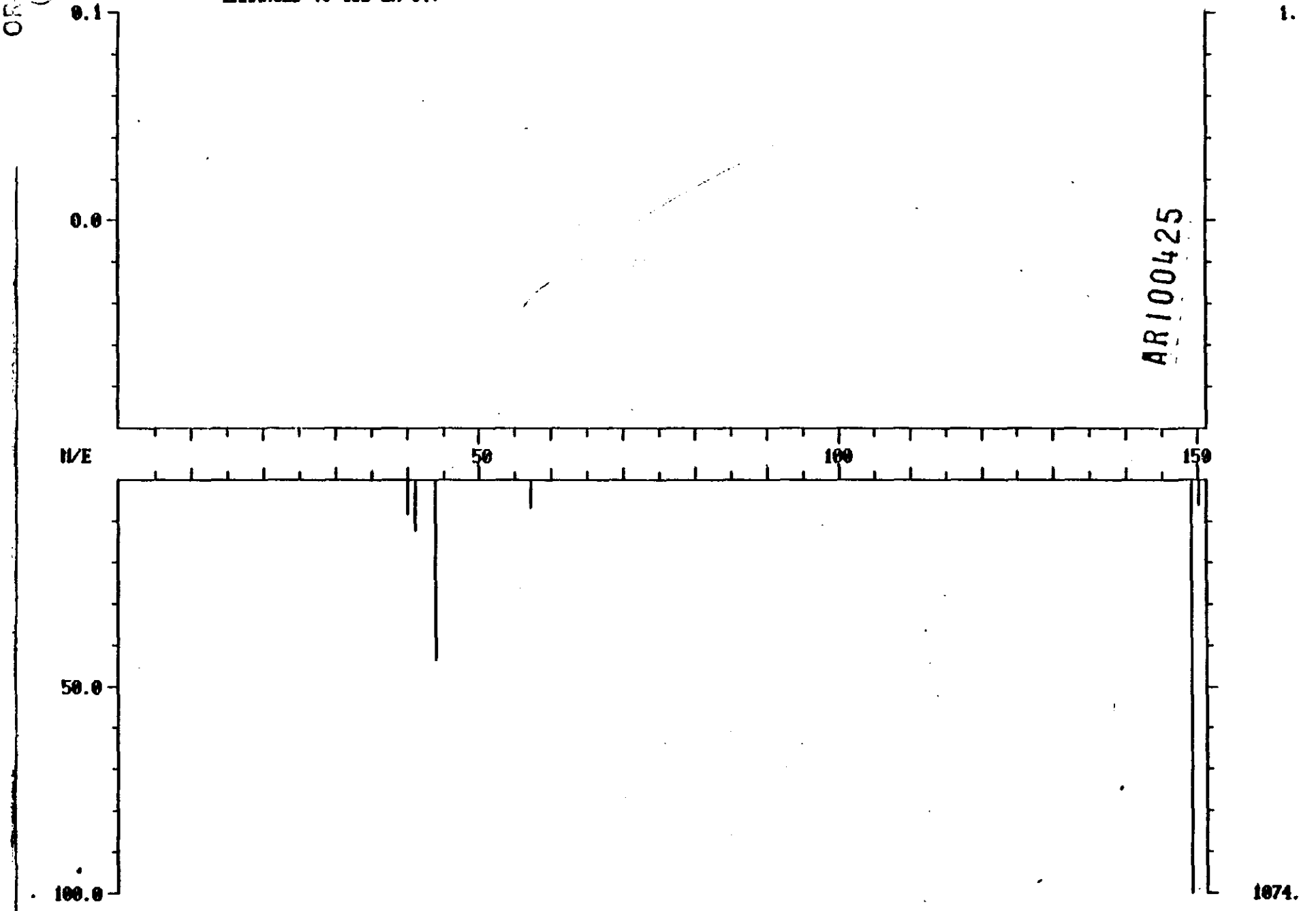

DUAL MASS SPECTRUM
04/18/82 20:23:00 + 19:46
SAMPLE: C05048
ENHANCED (S 15B 2N 0T)
DATA: 23352F2 #1078
CALI: FC112581 #1
BASE M/E: 0/ 149
RIC: 0./ 1889.
ORIGINAL (Rec.)
0.1
0.0
1.
AR100423
M/E
50
100
150
50.0
100.0
1005.


DUAL MASS SPECTRUM
04/18/82 20:23:00 + 24:54
SAMPLE: C05048
ENHANCED (S 15B 2N 0T)
DATA: 23352F2 #1358
CALI: FC112581 #1
BASE M/E: 149/ 149
RIC: 719./ 2755.
23.9
11.9
353.
1480.
M/E
50
100
150
50.0
100.0
AR100424

DUAL MASS SPECTRUM
04/18/82 20:23:00 + 26:18
SAMPLE: C05048
ENHANCED (S 15B 2N 0T)

DATA: 23352F2 #1435
CALI: FC112581 #1

BASE M/E: 0/ 149
RIC: 0./ 1897.



AR100425

ORIGINAL

QUANTITATION REPORT FILE: 23352V3

DATA: 23352V3.TI
04/26/82 13:00:00
SAMPLE: REAGENT BLANK 633-261 C5046
CONDS.: 1ML EXTRACT IN 50MLS H2O
FORMULA: BFB30S INSTRUMENT: 4021 WEIGHT: 9.00
SUBMITTED BY: VOL023 ANALYST: DP 0507 ACCT. NO.: PC11581

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

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	45V CHLOROMETHANE
3	46V BROMOMETHANE
4	08V VINYL CHLORIDE
5	16V CHLOROETHANE
6	44V METHYLENE CHLORIDE
7	2V ACROLEIN
8	3V ACRYLONITRILE
9	49V TRICHLOROFLUOROMETHANE
10	29V 1,1-DICHLOROETHYLENE
11	13V 1,1-DICHLOROETHANE
12	38V TRANS-1,2-DICHLOROETHYLENE
13	23V CHLOROFORM
14	18V 1,2-DICHLOROETHANE
15	11V 1,1,1-TRICHLOROETHANE
16	6V CARBON TETRACHLORIDE
17	48V BROMODICHLOROMETHANE
18	1,2-DICHLOROETHANE D-4 (SURROGATE)
19	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
20	32V 1,2-DICHLOROPROPANE
21	33V TRANS-1,3-DICHLOROPROPENE
22	87V TRICHLOROETHYLENE
23	4V BENZENE
24	33V CIS-1,3-DICHLOROPROPENE
25	14V 1,1,2-TRICHLOROETHANE
26	51V DIBROMOCHLOROMETHANE
27	47V BROMOFORM
28	85V TETRACHLOROETHYLENE
29	15V 1,1,2,2-TETRACHLOROETHANE
30	86V TOLUENE
31	87V CHLOROBENZENE
32	39V ETHYLBENZENE
33	BENZENE D-6 (SURROGATE)
34	1-CHLORO-2-BROMOPROPANE (SURROGATE)
35	ETHYLBENZENE D-10 (SURROGATE)

X - Spectra not confirmed by FIT or RRT

DL = 1 µg/L * 0.05 L/1 mL Meoh * 10 mL's Meoh/1 g = 0.5 µg/g

µg/g

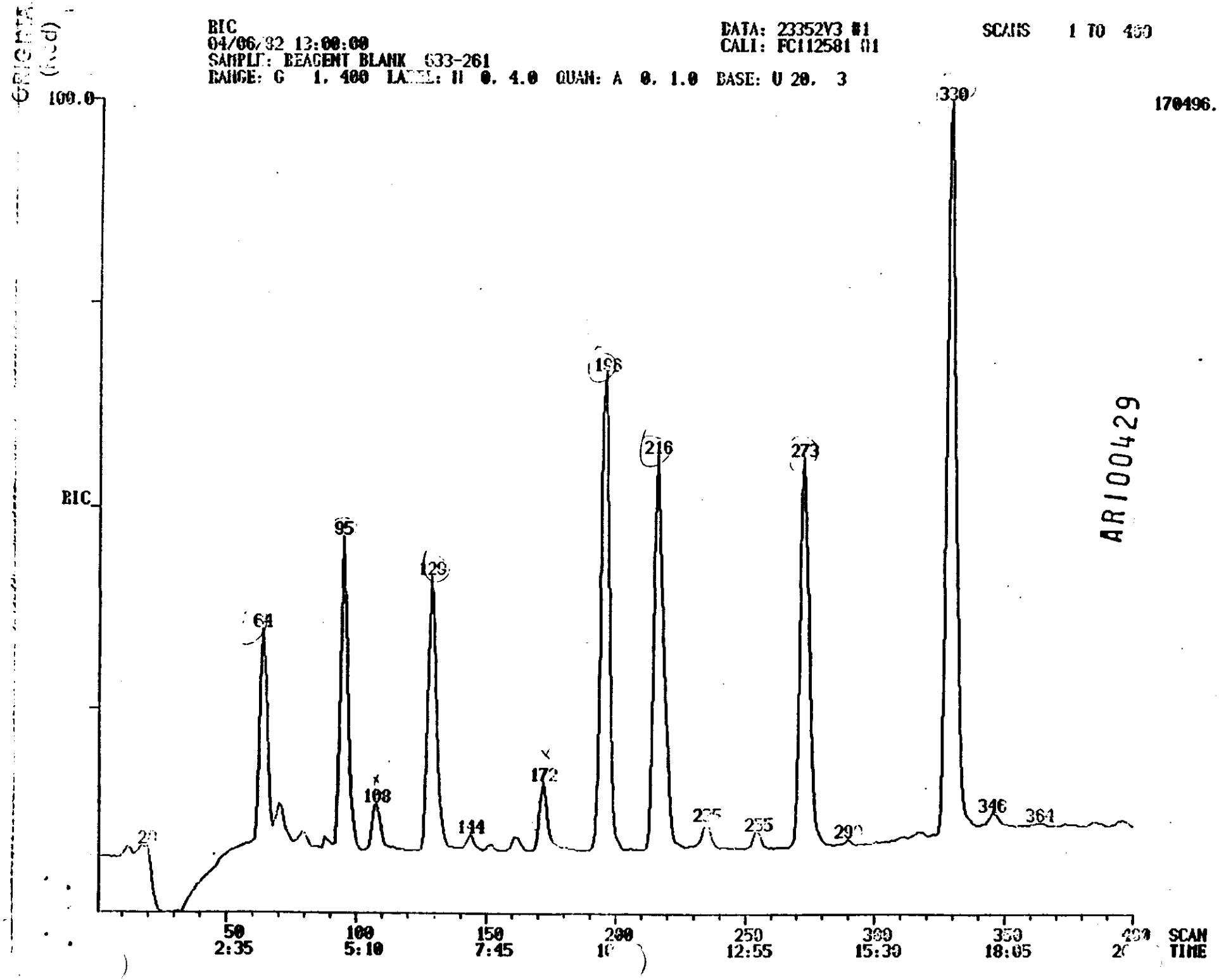
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
1	120	95	4:54	1	1.000	A BB	29255.	50.030 UG/L	15.52
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	64	3:18	1	0.674	A BB	30457.	21.752 UG/L	6.75 µg/g 10.8 %
7	56	76	3:56	1	0.800	A BB	59.	~~2.091 UG/L~~	0.65
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								

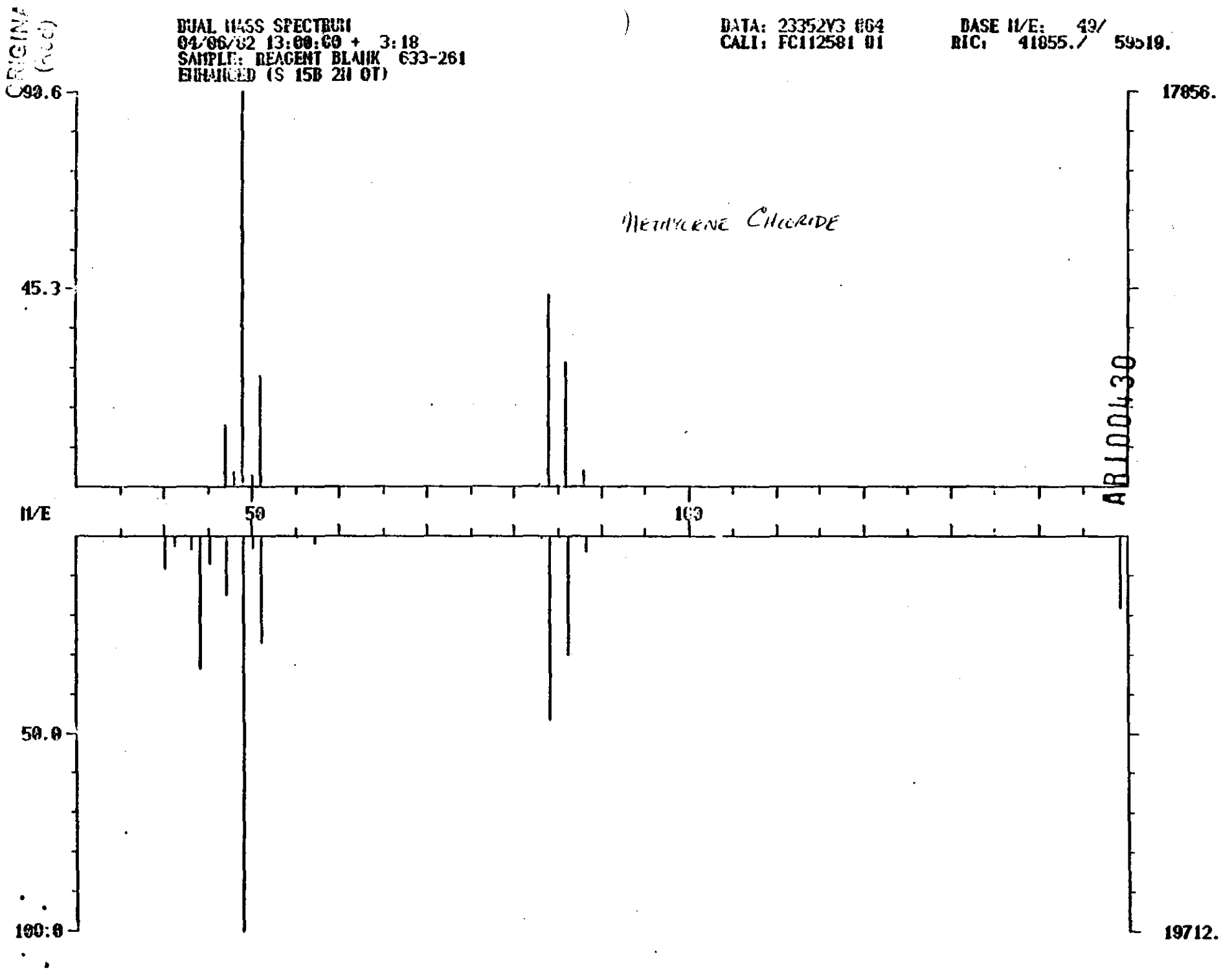
AR100426

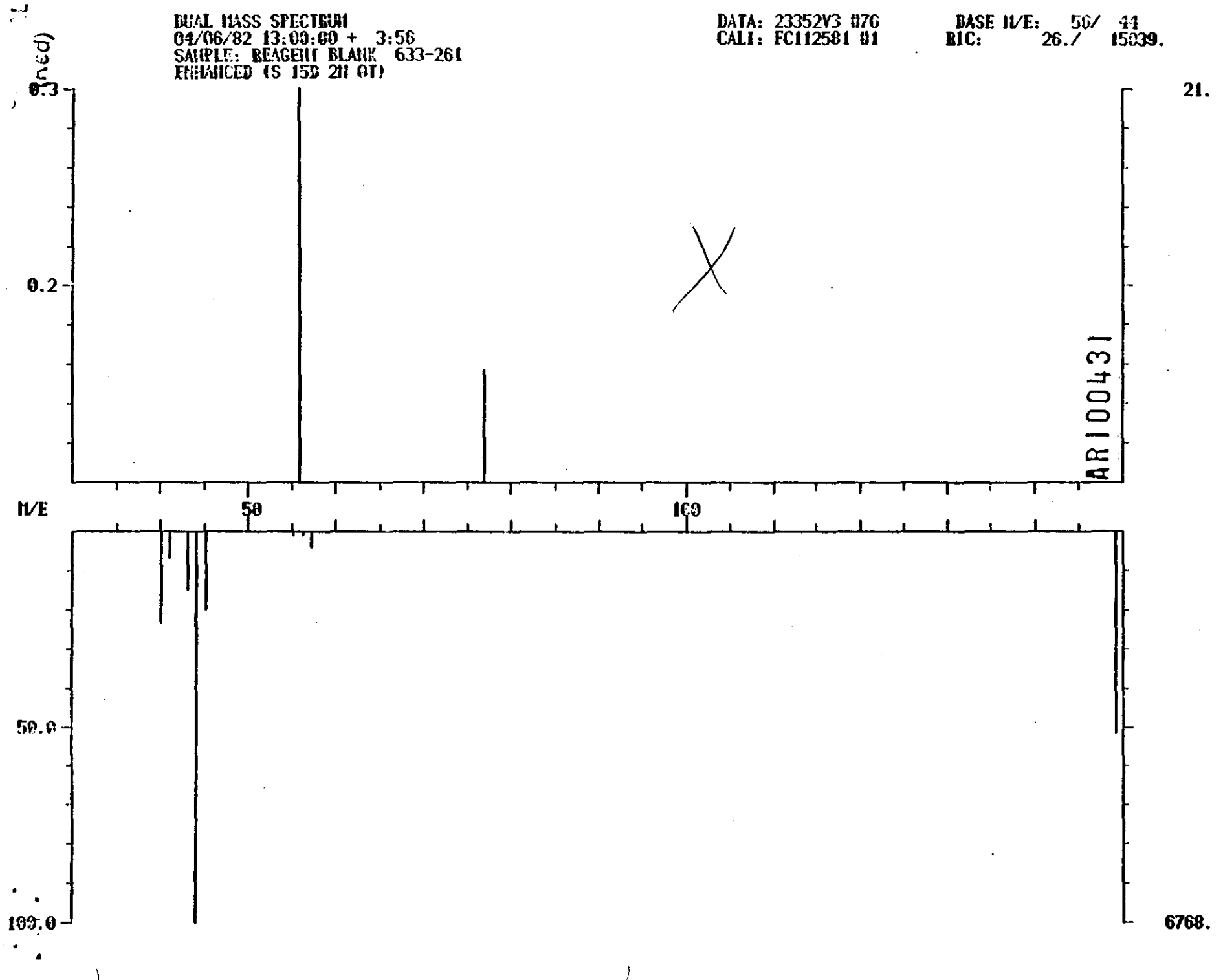
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT		%TOT	
11	NOT FOUND										
12	NOT FOUND										
13	NOT FOUND										
14	NOT FOUND										
15	NOT FOUND										
16	NOT FOUND										
17	NOT FOUND										
18	65	129	6:40	1	1.358	A BB	70095.	47.056	UG/L	14.61	23.533
19	55	273	14:06	19	1.000	A BB	134058.	50.000	UG/L	15.52	
20	NOT FOUND										
21	NOT FOUND										
22	NOT FOUND										
23	78	196	10:08	19	0.718	A BB	61.	~~0.019~~	~~UG/L~~	0.01	
24	NOT FOUND										
25	NOT FOUND										
26	NOT FOUND										
27	NOT FOUND										
28	NOT FOUND										
29	NOT FOUND										
30	91	238	14:59	19	1.062	A BB	1766.	~~0.556~~	~~UG/L~~	0.17	
31	NOT FOUND										
32	106	232	17:09	19	1.216	A BB	5732.	4.009	UG/L	1.24	RT 2.004
33	84	156	10:38	19	0.718	A BB	159359.	49.257	UG/L	15.29	24.625
34	77	216	11:10	19	0.791	* SV	96978.	47.732	UG/L	14.82	23.866
35	98	339	17:03	19	1.209	A BB	293496.	49.617	UG/L	15.40	24.809

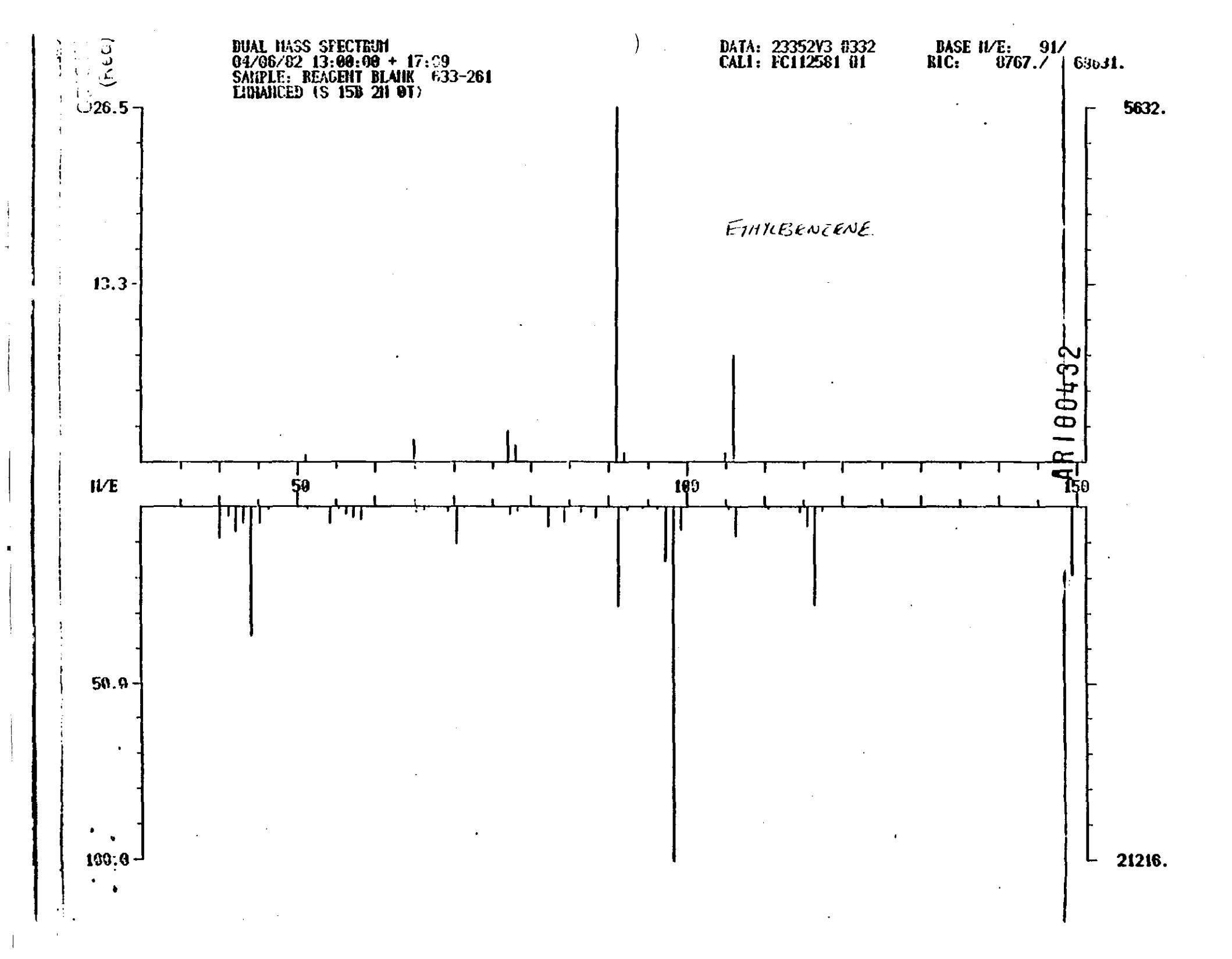
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	4:54	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:14		0.253			50.00		0.404	
3	1:45		0.358			50.00		0.993	
4	2:01		0.411			50.00		0.904	
5	2:29		0.505			50.00		0.573	
6	3:21	0.98	0.664	0.98	21.75	50.00	1.041	2.393	0.44
7	3:40	1.07	0.747	1.07	2.09	400.00	0.000	0.049	0.01
8	3:56		0.800			400.00		0.371	
9	4:27		0.905			50.00		2.218	
10	4:45		0.968			50.00		0.818	
11	5:29		1.116			50.00		3.574	
12	5:56		1.211			50.00		2.464	
13	6:12		1.263			50.00		4.916	
14	6:43		1.368			50.00		0.128	
15	7:36		1.547			50.00		3.344	
16	7:51		1.600			50.00		2.958	
17	8:07		1.653			50.00		3.578	
18	6:40	1.00	1.353	1.00	47.07	50.00	2.396	2.545	0.94
19	14:03	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	9:09		0.651			50.00		0.650	
21	9:18		0.662			50.00		0.979	
22	9:46		0.695			50.00		0.500	
23	10:14	0.99	0.728	0.99	0.02	50.00	0.000	1.109	0.00
24	10:14		0.728			50.00		0.460	
25	10:14		0.728			50.00		0.519	
26	10:04		0.717			50.00		0.523	
27	12:02		0.857			50.00		0.406	
28	13:54		0.989			50.00		0.430	
29	13:40		0.902			50.00		0.506	

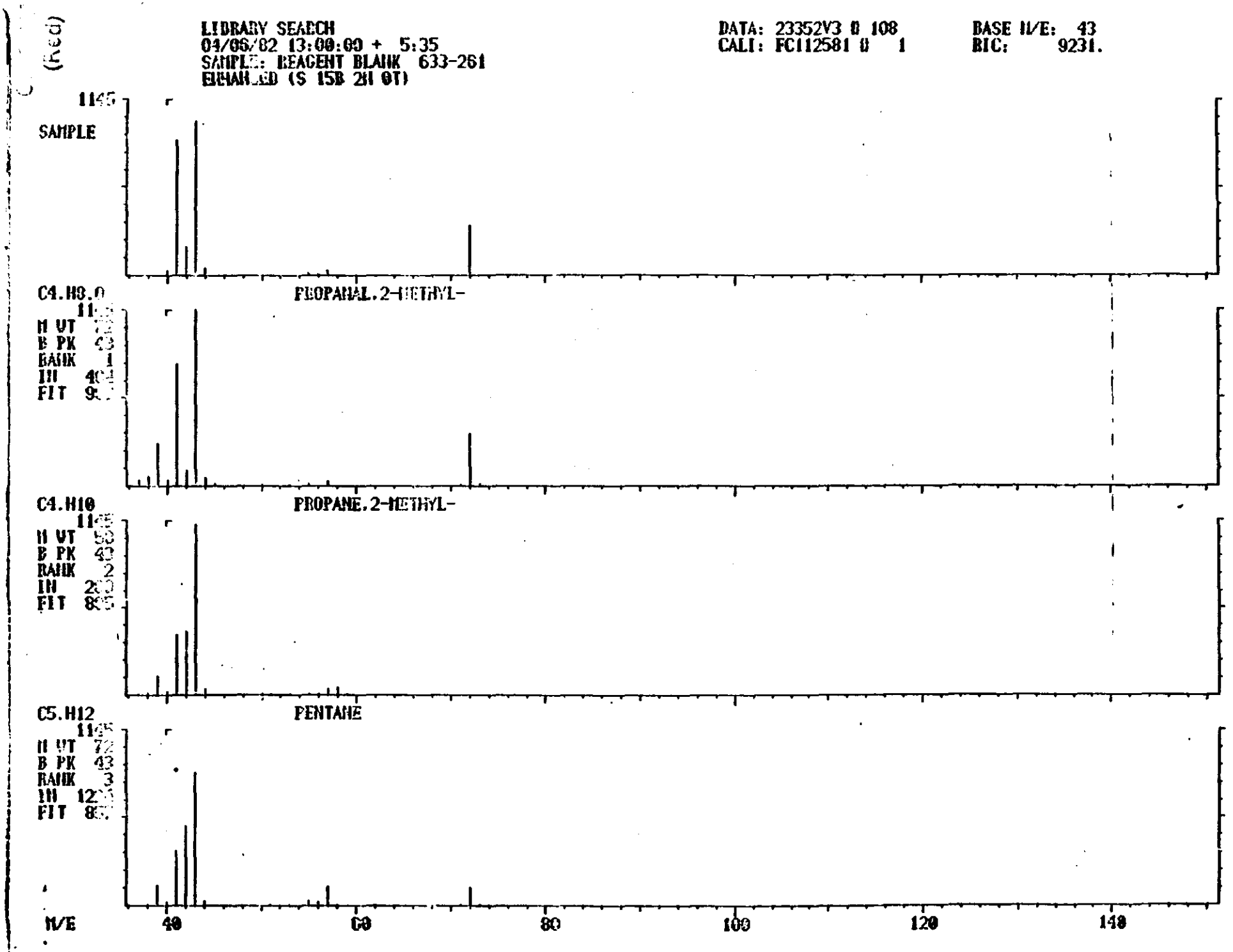
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
30	14:59	1.00	1.966	1.00	0.56	50.00	0.013	1.190	0.01
31	15:49		1.125			50.00		1.102	
32	17:09	1.00	1.221	1.00	4.01	50.00	0.043	0.533	0.08
33	10:00	1.00	0.721	1.00	49.26	50.00	1.189	1.207	0.98
34	11:06	1.00	0.796	1.00	47.73	50.00	0.723	0.758	0.95
35	17:00	1.00	1.210	1.00	49.62	50.00	2.189	2.206	0.99


BIC
04/06/92 13:00:00
SAMPLE: REAGENT BLANK 633-261
RANGE: G 1. 400 LA[illegible]: H 0. 4.0 QUAN: A 0. 1.0 BASE: U 20. 3
DATA: 23352V3 #1
CALI: FC112581 01
SCANS 1 TO 400
100.0
170496.
BIC
64
95
108
129
144
172
198
216
273
330
346
364
AR100429
50
2:35
100
5:10
150
7:45
250
12:55
300
15:30
350
18:05
SCAN
TIME


ORIGINAL (poor)
DUAL MASS SPECTRUM
04/06/82 13:00:00 + 3:18
SAMPLE: REAGENT BLANK 633-261
ENHANCED (S 15B 2H 0T)
DATA: 23352V3 004
CALI: FC112581 01
BASE M/E: 49/
RIC: 41855./ 59519.
99.6
45.3
17856.
Methylene Chloride
AR1004430
M/E
50
100
50.0
100.0
19712.


DUAL MASS SPECTRUM
04/06/82 13:09:00 + 3:56
SAMPLE: REAGENT BLANK 633-261
ENHANCED (S 15B 2H 0T)
DATA: 23352V3 B7C
CALI: FC112581 B1
BASE M/E: 50/ 44
RIC: 26./ 15039.
0.3
0.2
21.
AR100431
M/E
50
100
50.0
100.0
6768.


DUAL MASS SPECTRUM
04/06/82 13:00:00 + 17:09
SAMPLE: REAGENT BLANK 633-261
ENHANCED (S 15B 2H 0T)
DATA: 23352V3 #332
CAL1: FC112581 01
BASE M/E: 91/
BIC: 0767./
68631.
5632.
21216.
26.5
13.3
50.0
100.0
M/E
50
100
150
ETHYLBENZENE
AR100432


LIBRARY SEARCH
04/06/82 13:00:00 + 5:35
SAMPLE: REAGENT BLANK 633-261
ENHANCED (S 15B 2H 0T)
DATA: 23352V3 B 108
CALI: FC112581 B 1
BASE M/E: 43
RIC: 9231.
SAMPLE
C4.H8.O
PROPANAL,2-METHYL-
M WT
B PK
RANK
IN
FIT
C4.H10
PROPANE,2-METHYL-
M WT
B PK
RANK
IN
FIT
C5.H12
PENTANE
M WT
B PK
RANK
IN
FIT
M/E
40
60
80
100
120
140

AR100433

LIBRARY SEARCH
04/06/82 13:00:00 + 8:53
SAMPLE: REAGENT BLANK 633-261
ENHANCED (S 15B 2H 0T)

DATA: 23352V3 B 172
CALI: FC112581 0 1

BASE M/E: 43
RIC: 12751.

SAMPLE

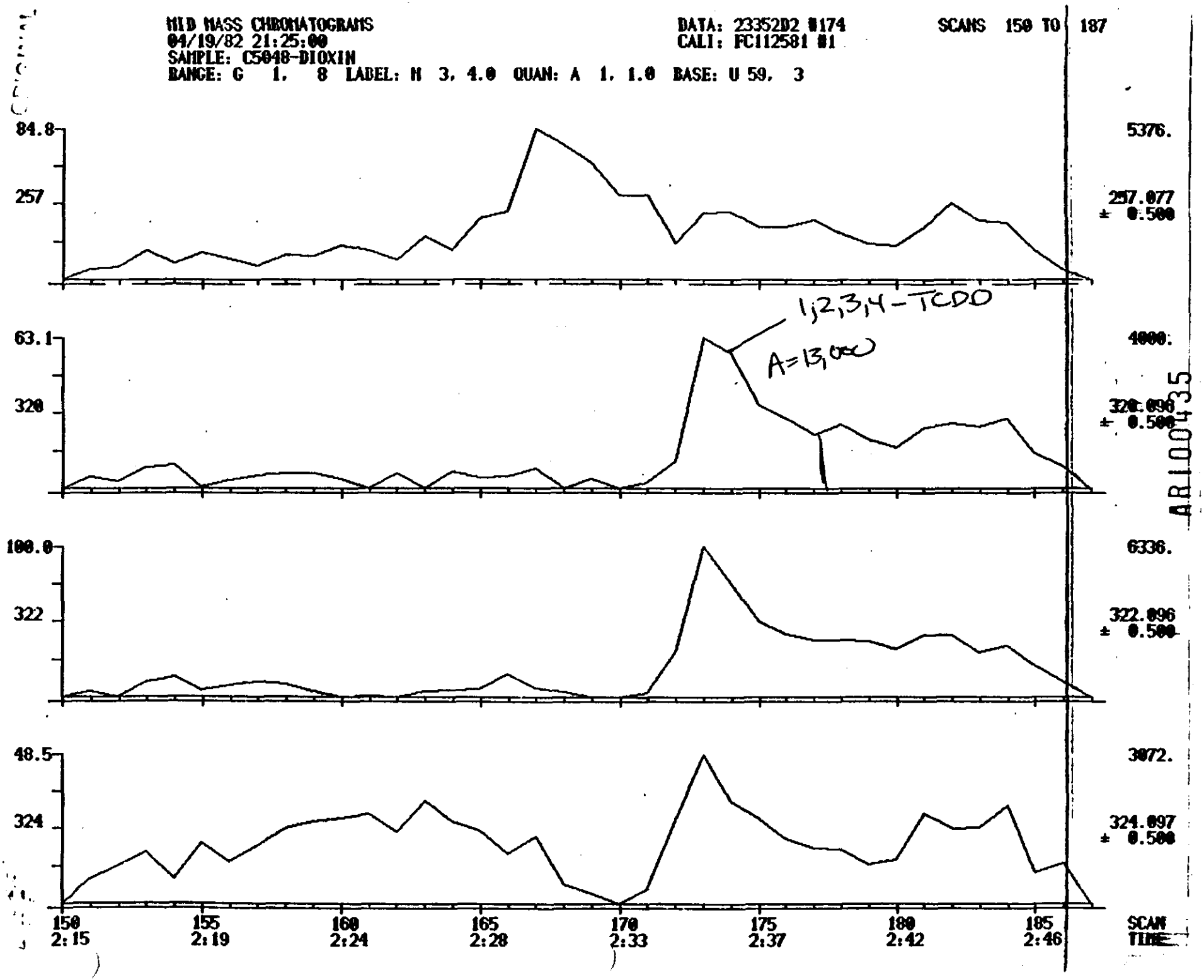
C5.H10.O 2-BUTANONE,3-METHYL-
M WT 86
B PK 43
BANK 1
IN 292
FIT 9

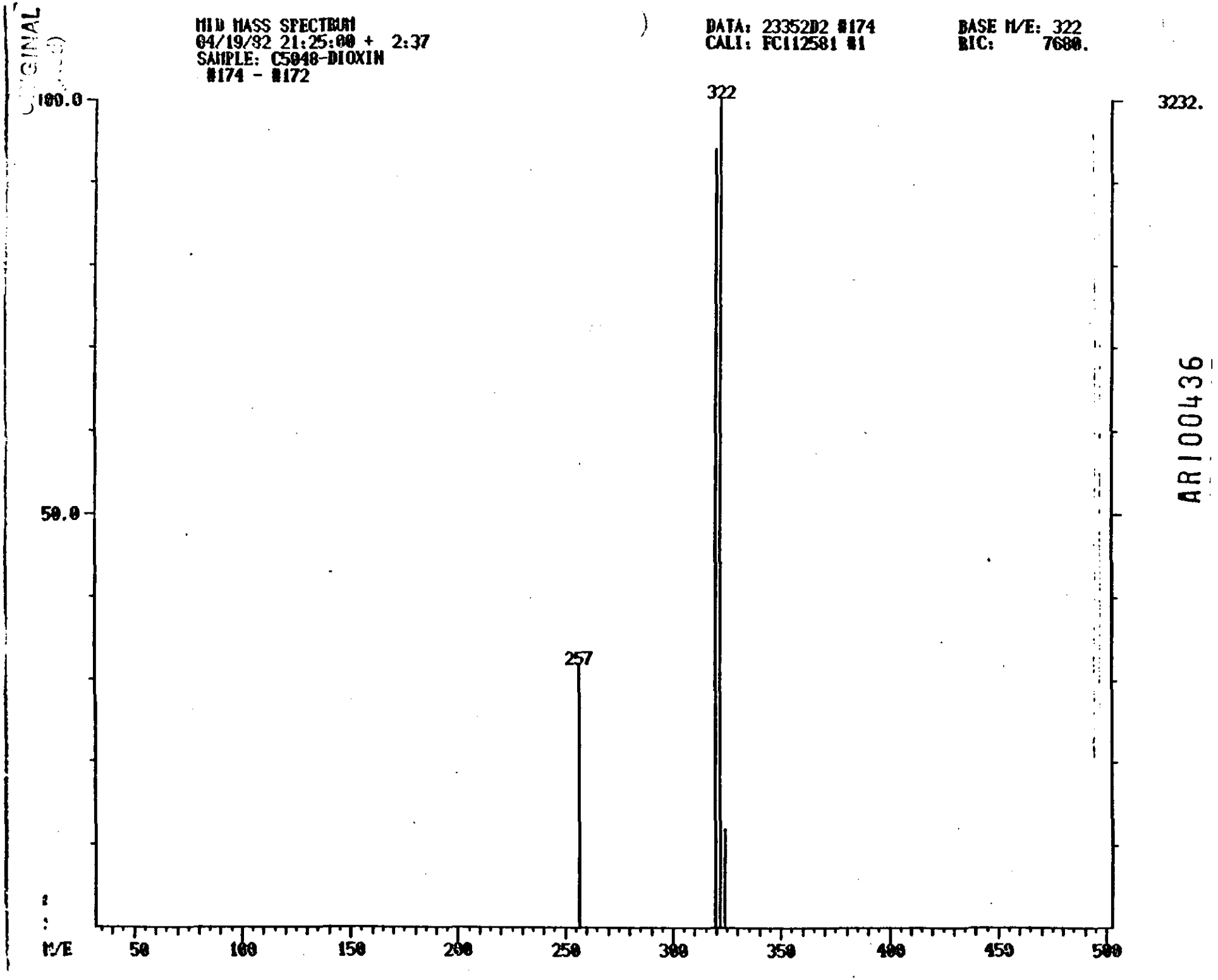
C4.H6.O2 2,3-BUTANEDIONE
M WT 86
B PK 43
BANK 2
IN 220
FIT 9

C4.H6.O2 ACETICACIDETHENYLESTER
M WT 86
B PK 43
BANK 3
IN 11
FIT 9

M/E 40 50 60 70 80

AR100434


MID MASS CHROMATOGRAMS
04/19/82 21:25:00
SAMPLE: C5048-DIOXIN
RANGE: G 1. 8 LABEL: M 3. 4.0 QUAN: A 1. 1.0 BASE: U 59. 3
DATA: 23352D2 #174
CALI: FC112581 #1
SCANS 150 TO 187
84.8
257
5376.
257.077
± 0.500
1,2,3,4-TCDO
A=13,000
63.1
320
4000.
320.096
± 0.500
100.0
322
6336.
322.096
± 0.500
48.5
324
3072.
324.097
± 0.500
150 2:15
155 2:19
160 2:24
165 2:28
170 2:33
175 2:37
180 2:42
185 2:46
SCAN TIME
AR100435


ORIGINAL
MID MASS SPECTRUM
04/19/92 21:25:00 + 2:37
SAMPLE: C5048-DIOXIN
#174 - #172
DATA: 23352D2 #174
CALI: FC112581 #1
BASE M/E: 322
RIC: 7680.
100.0
50.0
322
257
3232.
M/E
50
100
150
200
250
300
350
400
450
500
AR100436

Aluminum 5% SP2250/ .95% SP2401 @ 200°C Sample	CAL	PEST STD CAL CHECK	23427 23352 23383 23424 M.B. 0.0g→10ml	CORRECTED VALUES ug/kg	23352 C5047 1.0g→10ml	CORRECTED VALUES ug/kg	23352 C5048 0.0g→10ml	CORRECTED VALUES ug/kg	PEST STD CAL CHECK	(cont'd)
Date Extracted			4/12/82 →	-	4/12/82 →	-	4/12/82 →	-		
Date Analyzed	4/13/82	4/13/82	4/13/82 →		4/13/82 →		4/13/82 →		4/13/82	
Log #	2628	2629	2635 →		2636 →		2637 →		2639	
Run #	5	6	13 →		15 →		16 →		18	
Injection Factor										
a-BHC (RT)	.2 (133)	.201 (133)	.002 (135)	2 (135)	.005 (136)	5 (136)	.023 (134)	23 (134)	.211 (134)	
g-BHC (RT)	.2 (166)	.194 (166)	.005 (167)	5 (167)	.008 (166)	8 (166)	.017 (166)	17 (166)	.204 (166)	
b-BHC (RT)	.87 (188)	.848 (188)	.057 (180)	57 (180)	.059 (178)	59 (178)	.201 (178)	201 (178)	.891 (188)	
Heptachlor (RT)	.2 (202)	.199 (201)							.193 (202)	
d-BHC (RT)	.51 (217)	.503 (217)							.556 (217)	
Aldrin (RT)	.2 (242)	.197 (243)	.003 (261)	3 (261)	.009 (260)	9 (260)	.004 (260)	4 (260)	.205 (243)	
Heptachlor Epoxide (RT)	.2 (357)	.196 (357)	.002 (391)	2 (391)	.002 (391)	2 (391)	.002 (388)	2 (388)	.204 (357)	
a-Endosulfan (RT)	.424 (447)	.416 (447)							.424 (447)	
DDE (RT)	.2 (509)	.194 (508)							.198 (510)	
Dieldrin (RT)	.2 (540)	.193 (540)							.2 (540)	
Endrin (RT)	.51 (653)	.521 (652)							.527 (654)	
DDD (RT)	.3 (776)	.296 (775)							.309 (777)	
b-Endosulfan (RT)										
DDT (RT)	.57 (928)	.534 (928)							.549 (930)	
Endrin Aldehyde (RT)	.23 (1028)	.227 (1028)					.003 (1067)	3 (1067)	.228 (1027)	
Endosulfate (RT)	1.11 (1240)	1.1 (1241)			.034 (1197)	34 (1197)			1.11 (1240)	
PCB's										
1016										
1221										
1242										
1248										
1254										
1260										
METHOXYCH (RT)	1.0 (1741)	.985 (1741)	331 (1660)	331 (1660)	.078 (1660)	78 (1660)	.033 (1660)	33 (1660)	.965 (1743)	

AR100437

P.E.PEST/MIXPHS 200ISO 82 APR 013 11:26:420

ORIGINAL (Red)

CHANNEL 4 RUN 5 FILE 7 METHOD 5

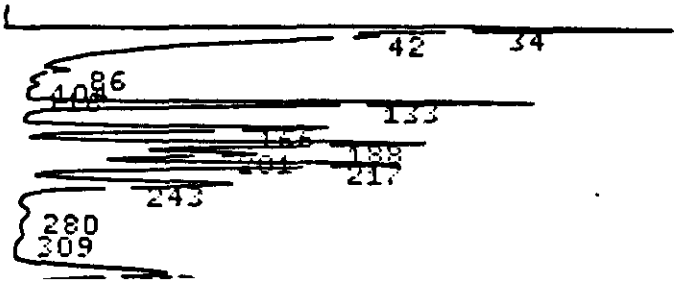
INDEX 1 CALIBRATION

NAME	CONC	RT	AREA		KF
1		86	6266	\	
2		105	2635	\	
3		117	3491	\	
A-BHC	.2	134	185348	⊥	926700
G-BHC	.2	166	129409	⊥	647000
B-BHC	.87	188	173041	⊥	198900
HEPT	.2	202	106765	⊥	533800
D-BHC	.51	218	148567	⌟	291300
ALDRIN	.2	242	95946	⊥	479700
10		281	7610	⊥	
11		309	4790	⊥	
HEPT-EPOX	.2	358	105874	L	529300
A-ENDO	.424	448	73066	⌟	172300
DDE	.2	510	101062	⊥	505300
DIELDRIN	.2	540	121034	⌟	605200
ENDRIN	.51	654	126056	⌟	247200
17		710	1998	⊥	
DDD-B-END	.3	777	130519	L	435100
DDT	.57	930	147739	⊥	259200
END-ALD	.23	1030	85525	⌟	371800
END-SULF	1.11	1240	225855	S	203500
22		1510	10750	\	
METHOXY	1	1743	109694	\	109700
TOTALS	6.922		2103040		

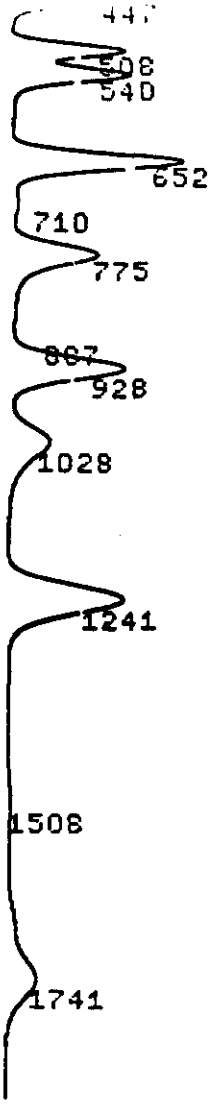
NEW FILE

NAME	RT	KF
A-BHC	133	926700
G-BHC	166	647000
B-BHC	188	198900
HEPT	202	533800
D-BHC	217	291300
ALDRIN	242	479700
HEPT-EPOX	357	529300
A-ENDO	447	172300
DDE	509	505300
DIELDRIN	540	605200
ENDRIN	653	247200
DDD-B-END	776	435100
DDT	928	259200
END-ALD	1028	371800
END-SULF	1240	203500
METHOXY	1741	109700

PEST STD CAL CHK CK



AR100438



ORIGINAL
(Red)

P.E.PEST,MIXPHS 200ISO 82 APR 013 12:09:330

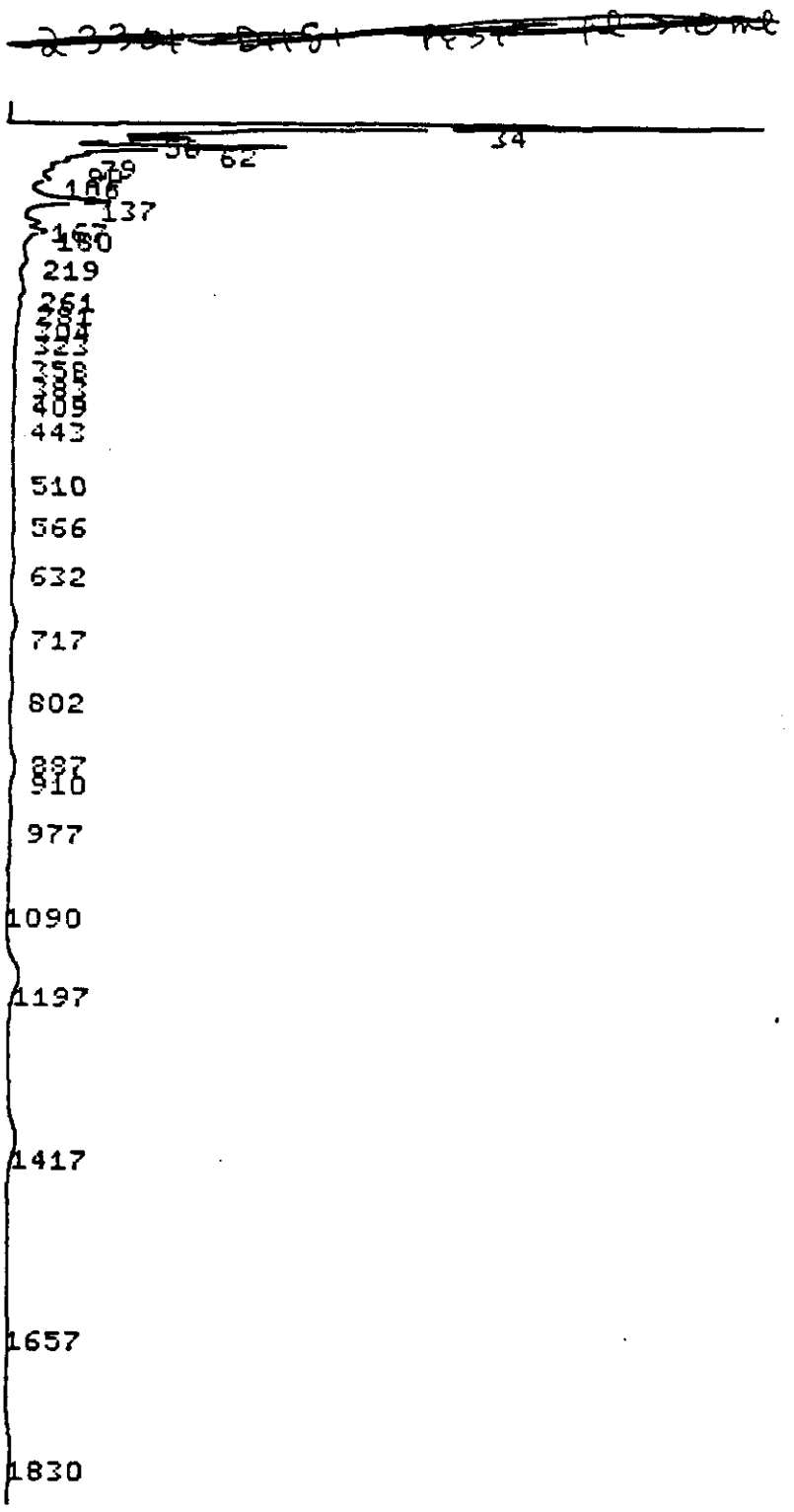
CHANNEL 4 RUN 6 FILE 7 METHOD 5

INDEX 2

NAME	CONC	RT	AREA		KF
1		86	6590	\	
2		104	2542	\	
A-BHC	.201	133	185896	⌟	926700
G-BHC	.194	166	125538	⊥	647000
B-BHC	.848	188	168587	⊥	198900
HEPT	.199	201	106263	⊥	533800
D-BHC	.507	217	147815	⌟	291300
ALDRIN	.197	243	94384	⊥	479700
9		280	7412	⊥	
10		309	4671	⊥	
HEPT-EPOX	.196	357	103680	L	529300
A-ENDO	.416	447	71746	⌟	172300
DDE	.194	508	97937	⊥	505300
DIELDRIN	.193	540	116652	⌟	605200
ENDRIN	.521	652	128863	⌟	247200
16		710	2109	⊥	
DDD-B-END	.296	775	128889	L	435100
DDT	.534	928	138446	⊥	259200
END-ALD	.227	1028	84485	⌟	371800

AR100439

END-SULF	1.1	1241	223840	S 203500
21		1508	11385	
METHOXY	.985	1741	108027	109700
TOTALS	6.806		2065757	

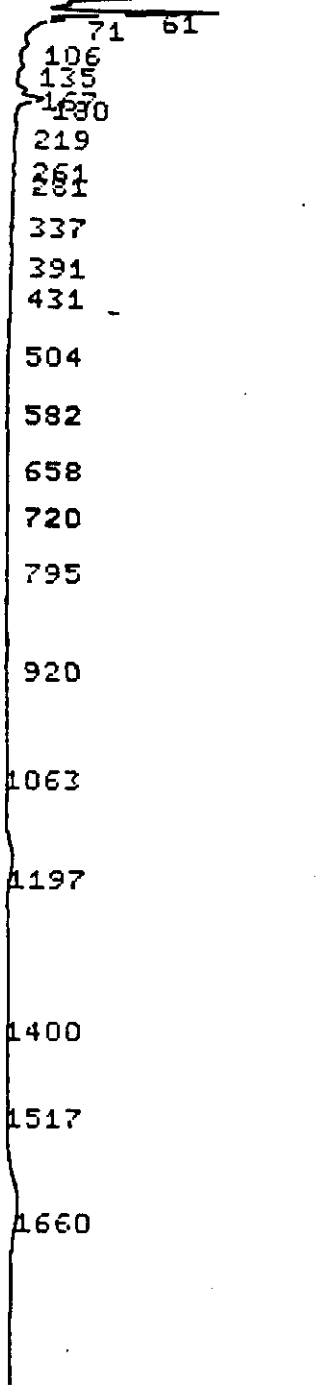


AR100440

P.E.PEST,MIXPHS 200ISO 82 APR 013 12:37:010

CHANNEL 4 RUN 7 FILE 7 METHOD 5

M.B. 23427 23383
23352 23427



P.E.PEST,MIXPHS 200ISO 82 APR 013 14:52:100

CHANNEL 4 RUN 13 FILE 7 METHOD 5

INDEX 8

NAME	CONC	RT	AREA	KF
1		106	1857	
A-BHC	.002	135	1983	926700
G-BHC	.005	167	3081	647000
B-BHC	.057	180	11261	198900

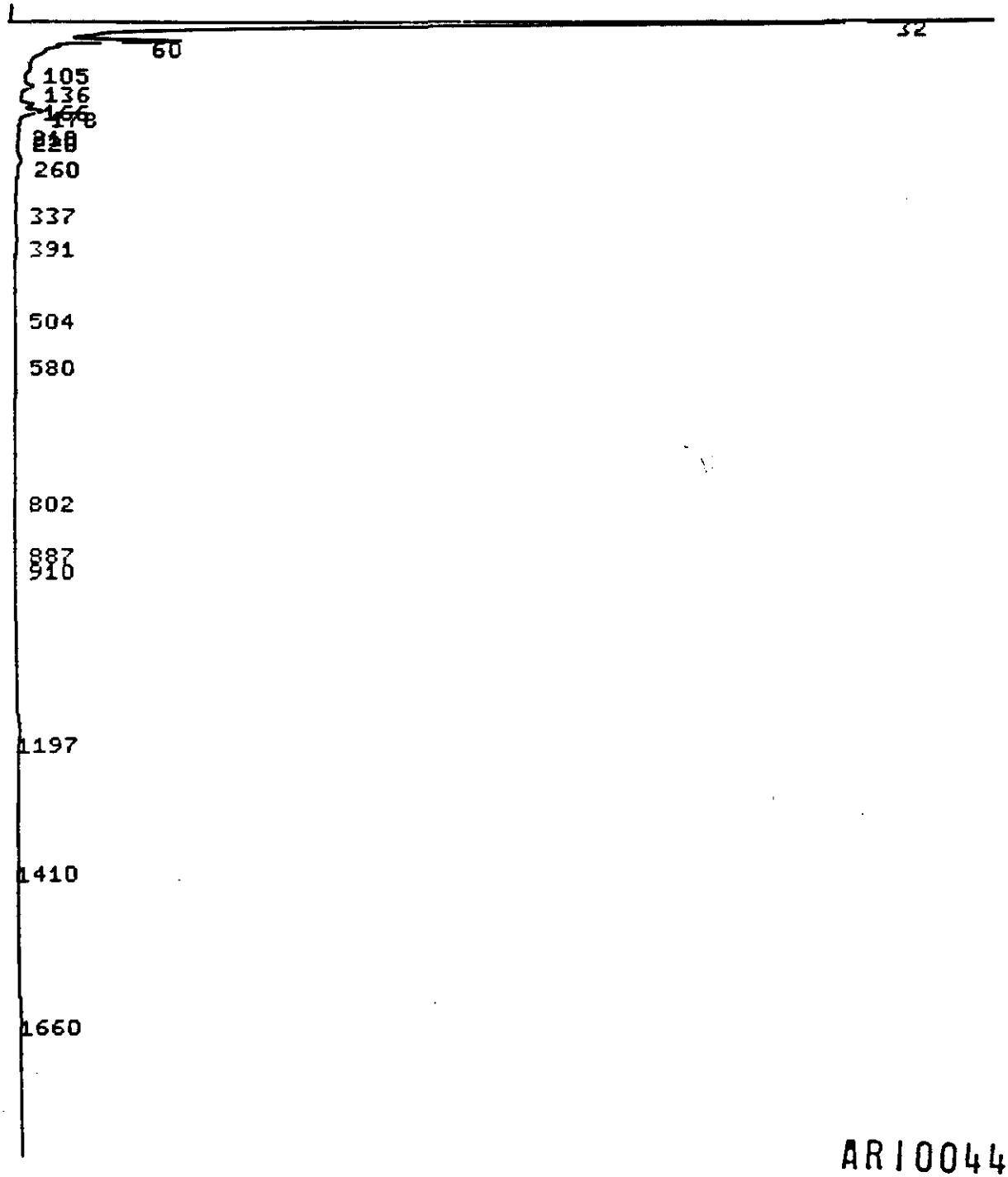
AR100441

P.E. PEST, MIXPHS 200ISO 82 APR 013 15:16:150
CHANNEL 4 RUN 14 FILE 7 METHOD 5

INDEX 9

NAME	CONC	RT	AREA		KF
1		13	1117	L	
TOTALS			1117		

23352-C5047 1.0g → 10ml



AR100443

P.E.PEST.MIXPHS 200ISO 82 APR 013 15:40:440

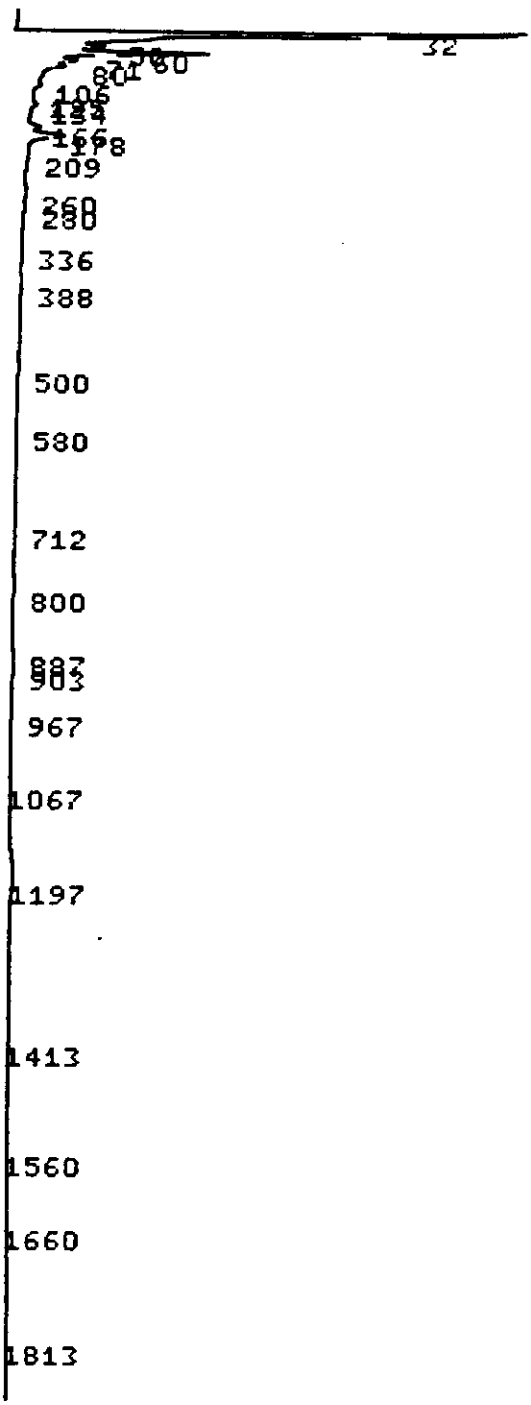
ORIGINAL
(illegible)

CHANNEL 4 RUN 15 FILE 7 METHOD 5

INDEX 10

NAME	CONC	RT	AREA		KF
1		105	1175	\	
A-BHC	.005	136	5072	\	926700
G-BHC	.008	166	5090	\	647000
B-BHC	.059	178	11765	\	198900
ALDRIN	.009	260	4518		479700
HEPT-EPOX	.002	391	1015	L	529300
END-SULF	.034	1197	6944		203500
METHOXY	.078	1660	8526	_	109700
TOTALS	.196		44105		

23352 - C5048 0.0g → 10 ml



AR100444

P.E.PEST,MIXPHS 200ISO 82 APR 013 16:05:540

CHANNEL 4 RUN 16 FILE 7 METHOD 5

INDEX 11

NAME	CONC	RT	AREA		KF
1		106	16671	1	
2		125	4191	1	
A-BHC	.023	134	21774	⌟	926700
G-BHC	.017	166	11351	1	647000
B-BHC	.201	178	39933	S	198900
ALDRIN	.004	260	1808	1	479700
HEPT-EPOX	.002	388	1227		529300
END-ALD	.003	1067	1134	1	371800
METHOXY	.033	1660	3603	↖	109700
TOTALS	.284		101692		

1670

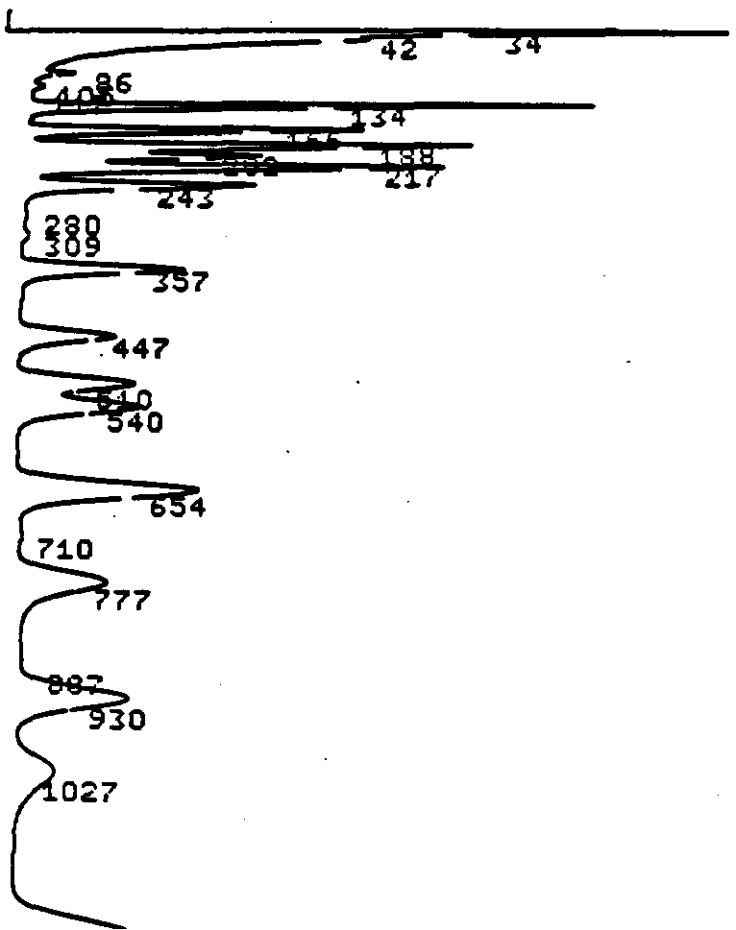
E. PEST, MIXPHS 200ISO 82 APR 013 16:30:470

ANNEL 4 RUN 17 FILE 7 METHOD 5

DEX 12

ME	CONC	RT	AREA		KF
1		108	169541	⊥	
BHC	.559	138	518463	S	926700
BHC	.099	178	19712	\	198900
BHC	.016	210	4779	\	291300
DRIN	.055	261	26586	⊥	479700
6		280	5616	L	
7		329	2962	⊥	
PT-EPOX	.021	366	11226	⊥	529300
9		386	6100	⊥	
DRIN	.006	712	1405	⊥	247200
D-B-END	.004	762	1636	L	435100
D-ALD	.007	1063	2596	⊥	371800
13		1130	3034	⊥	
D-SULF	.028	1197	5795	S	203500
15		1363	1036	\	
THOXY	.252	1667	27676	S	109700
TALS	1.048		808163		

DEST STD CAL CHECK



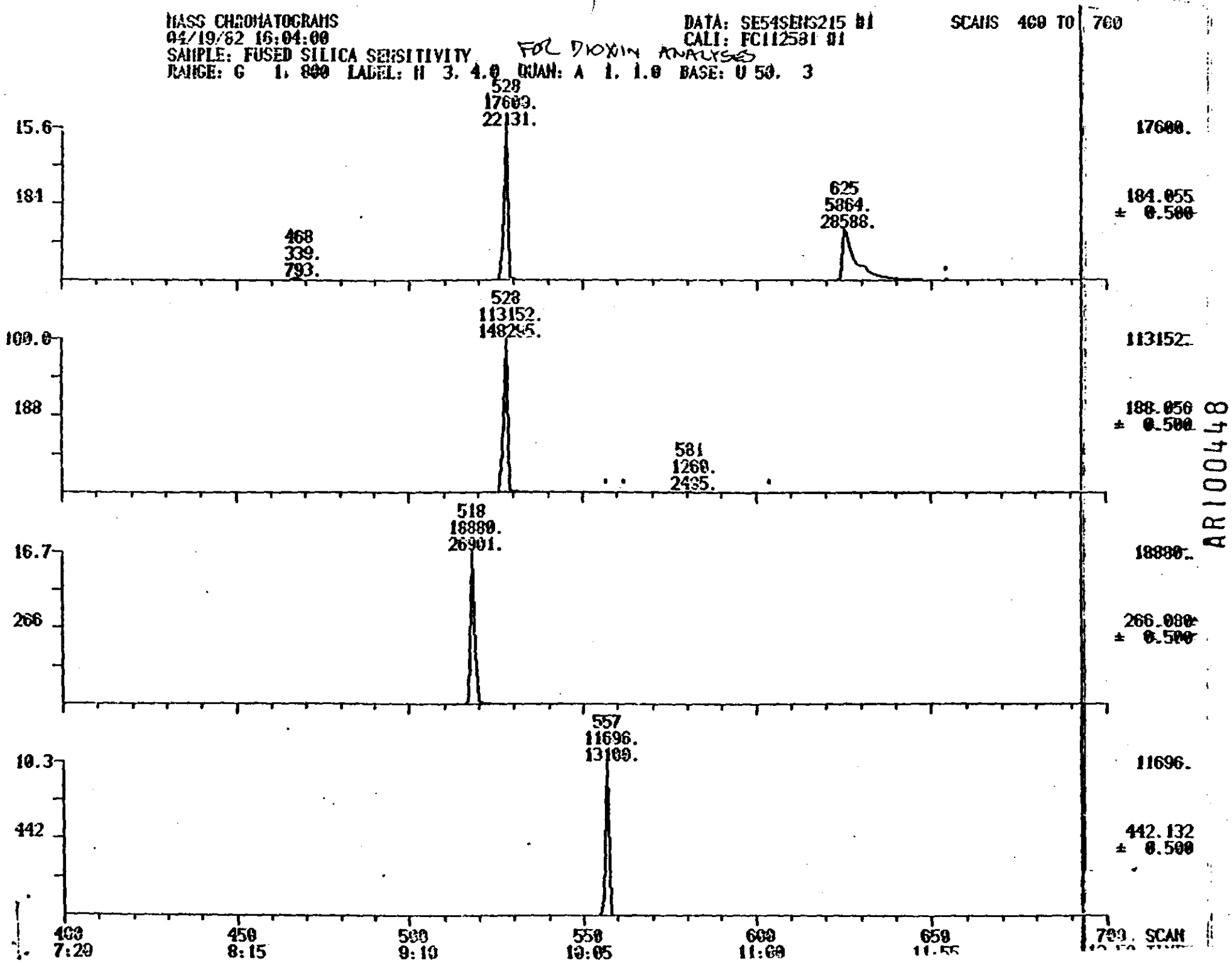
AR100446

P. E. PEST, MIXPHS 200ISO 82 APR 013 16:55:470

CHANNEL 4 RUN 18 FILE 7 METHOD 5

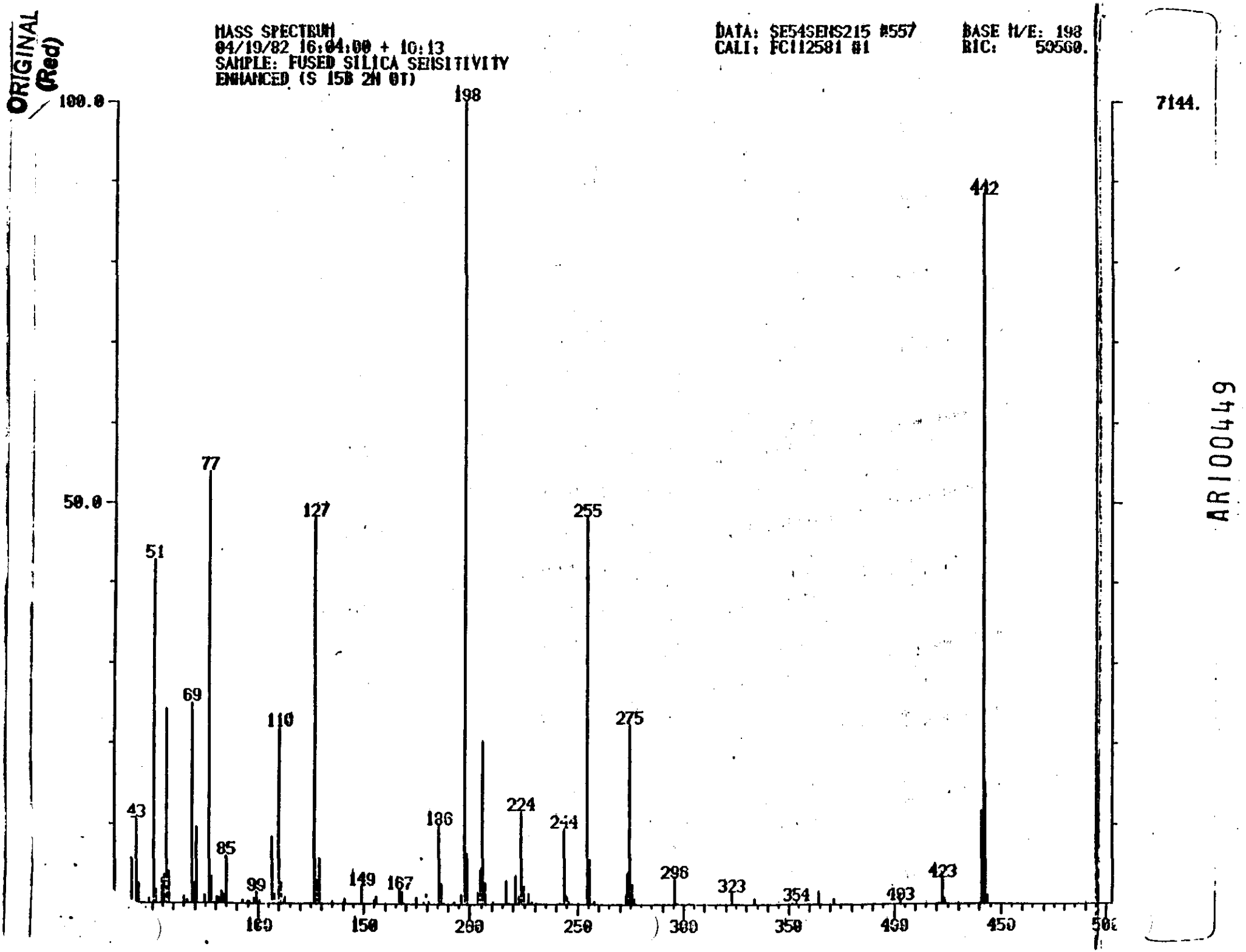
INDEX 13

NAME	CONC	RT	AREA		KF
1		86	6718	\	
2		105	2727	\	
3		117	2946	\	
A-BHC	.211	134	195647	_	926700
G-BHC	.204	166	132075	|	647000
B-BHC	.891	188	177222	|	198900
HEPT	.193	202	103244	|	533800
D-BHC	.556	217	161933	_	291300
ALDRIN	.205	243	98207	|	479700
10		280	1869	|	
11		309	3904	|	
HEPT-EPOX	.204	357	108261	_	529300
A-ENDO	.424	447	73090	_	172300
DDE	.198	510	100152	|	505300
DIELDRIN	.2	540	121234	_	605200
ENDRIN	.527	654	130334	_	247200
17		710	1809	|	
DDD-B-END	.309	777	134457	L	435100
DDT	.549	930	142381	|	259200
END-ALD	.228	1027	84717	L	371800
END-SULF	1.11	1240	225785	S	203500
22		1510	10484	\	
METHOXY	.965	1743	105831	\	109700
TOTALS	6.973		2125027		


MASS CHROMATOGRAMS
04/19/82 16:04:00
SAMPLE: FUSED SILICA SENSITIVITY FOR DIOXIN ANALYSES
RANGE: G 1. 800 LABEL: H 3. 4.0 QUAN: A 1. 1.0 BASE: U 50. 3
DATA: SE54SENS215 01
CALI: FC112581 01
SCANS 460 TO 700
528
17609.
22131.
625
5864.
28588.
468
339.
793.
15.6
181
17600.
184.055
± 0.500
528
113152.
148295.
581
1260.
2435.
109.0
188
113152.
188.056
± 0.500
518
18880.
26901.
16.7
266
18880.
266.080
± 0.500
557
11696.
13109.
10.3
442
11696.
442.132
± 0.500
460
7:20
500
8:15
540
9:10
580
10:05
620
11:00
660
11:55
700 SCAN

AR100448

ORIGINAL (Red)



AR100449

DATA: SE54SENS215 ● 557 BASE M/E: 198
CALI: FC112581 ● 1 RIC: 50560.

...T
...92 16:04:00 + 10:13
...E: FUSED SILICA SENSITIVITY
...NCED (S 15B 2N 0T)

41 0.00 0.00 0. MINIMA MIN INTEN: 8.
444 ● 0 MAXIMA

MASS	% RA	% RIC	INTEN.	MASS	% RA	% RIC	INTEN.
41.00	5.59	0.79	399.	186.00	9.78	1.38	699.
43.00	10.50	1.48	750.	187.00	2.59	0.37	185.
44.00	2.46	0.35	176.	188.00	0.21	0.03	15.
49.00	0.50	0.07	36.	193.00	0.22	0.03	16.
51.00	42.83	6.05	3060.	196.00	1.08	0.15	77.
52.00	1.68	0.24	120.	198.00	100.00	14.13	7144.
55.00	3.18	0.45	227.	199.00	6.44	0.91	460.
56.00	3.53	0.50	252.	204.00	1.53	0.22	109.
57.00	24.24	3.43	1732.	205.00	4.33	0.61	309.
58.00	4.03	0.57	288.	206.00	20.13	2.84	1438.
65.00	0.91	0.13	65.	207.00	2.65	0.37	189.
67.00	0.41	0.06	29.	211.00	0.27	0.04	19.
69.00	25.03	3.54	1788.	217.00	2.79	0.39	199.
70.00	2.49	0.35	178.	221.00	3.42	0.48	244.
71.00	9.46	1.34	676.	223.00	1.02	0.14	73.
75.00	0.98	0.14	70.	224.00	11.44	1.62	817.
77.00	53.92	7.62	3852.	225.00	2.30	0.32	164.
78.00	3.39	0.48	242.	227.00	1.30	0.18	93.
81.00	0.84	0.12	60.	229.00	0.34	0.05	24.
82.00	0.71	0.10	51.	242.00	0.14	0.02	10.
83.00	1.61	0.23	115.	244.00	9.31	1.32	665.
84.00	1.18	0.17	84.	245.00	0.97	0.14	69.
85.00	5.92	0.84	423.	246.00	0.24	0.03	17.
93.00	0.41	0.06	29.	255.00	48.15	6.80	3440.
95.00	0.32	0.05	23.	256.00	5.75	0.81	411.
96.00	0.27	0.04	19.	258.00	0.48	0.07	34.
98.00	0.71	0.10	51.	273.00	1.20	0.17	86.
99.00	1.46	0.21	104.	274.00	3.89	0.55	278.
101.00	0.36	0.05	26.	275.00	22.31	3.15	1594.
107.00	8.36	1.18	597.	276.00	2.59	0.37	185.
108.00	1.26	0.18	90.	277.00	0.67	0.09	48.
110.00	21.86	3.09	1562.	296.00	3.19	0.45	228.
111.00	2.74	0.39	196.	297.00	0.18	0.03	13.
112.00	0.42	0.06	30.	303.00	0.15	0.02	11.
113.00	0.67	0.09	48.	323.00	1.39	0.20	99.
127.00	48.21	6.81	3444.	334.00	0.70	0.10	50.
128.00	3.32	0.47	237.	352.00	0.15	0.02	11.
129.00	5.61	0.79	401.	354.00	0.25	0.04	18.
135.00	0.18	0.03	13.	365.00	1.44	0.20	103.
141.00	0.59	0.08	42.	372.00	0.74	0.10	53.
149.00	2.11	0.30	151.	403.00	0.25	0.04	10.
155.00	0.42	0.06	30.	421.00	0.20	0.03	14.
156.00	0.80	0.11	57.	423.00	3.11	0.44	222.
167.00	1.68	0.24	120.	424.00	0.46	0.07	33.
168.00	1.60	0.23	114.	441.00	11.66	1.65	833.
169.00	0.13	0.02	9.	442.00	88.24	12.47	6304.
175.00	0.79	0.11	56.	443.00	15.12	2.14	1080.
179.00	0.76	0.11	54.	444.00	1.11	0.16	79.
180.00	1.29	0.18	92.				
181.00	0.48	0.07	34.				

ORIGINAL
(Red)

ST
82 16:04:00 + 10:13 DATA: SE54SENS215 * 557 BASE M/E: 198
E: FUSED SILICA SENSITIVITY CALI: FC112581 * 1 RIC: 50560.
#ICED (S 15B 2N 0T)

350	0.00	0.00	0.	MINIMA	MIN INTEN: 0.
400			* 0	MAXIMA	100% RA AT M/E: 442
MASS	% RA	% RIC	INTEN.		
352.00	0.17	0.02	11.		
354.00	0.29	0.04	18.		
365.00	1.63	0.20	103.		
372.00	0.84	0.10	53.		

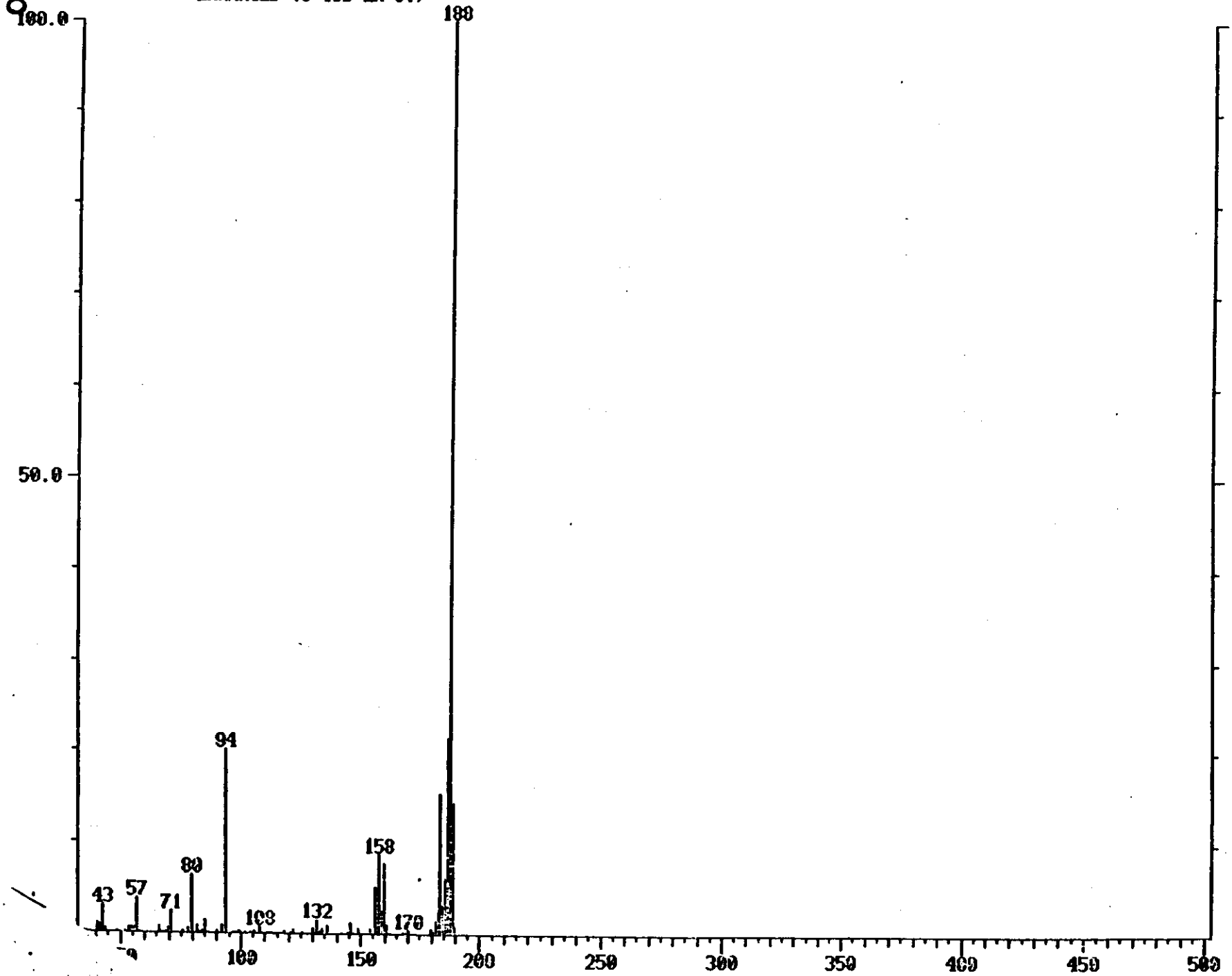
AR100451

ORIGINAL (Red)

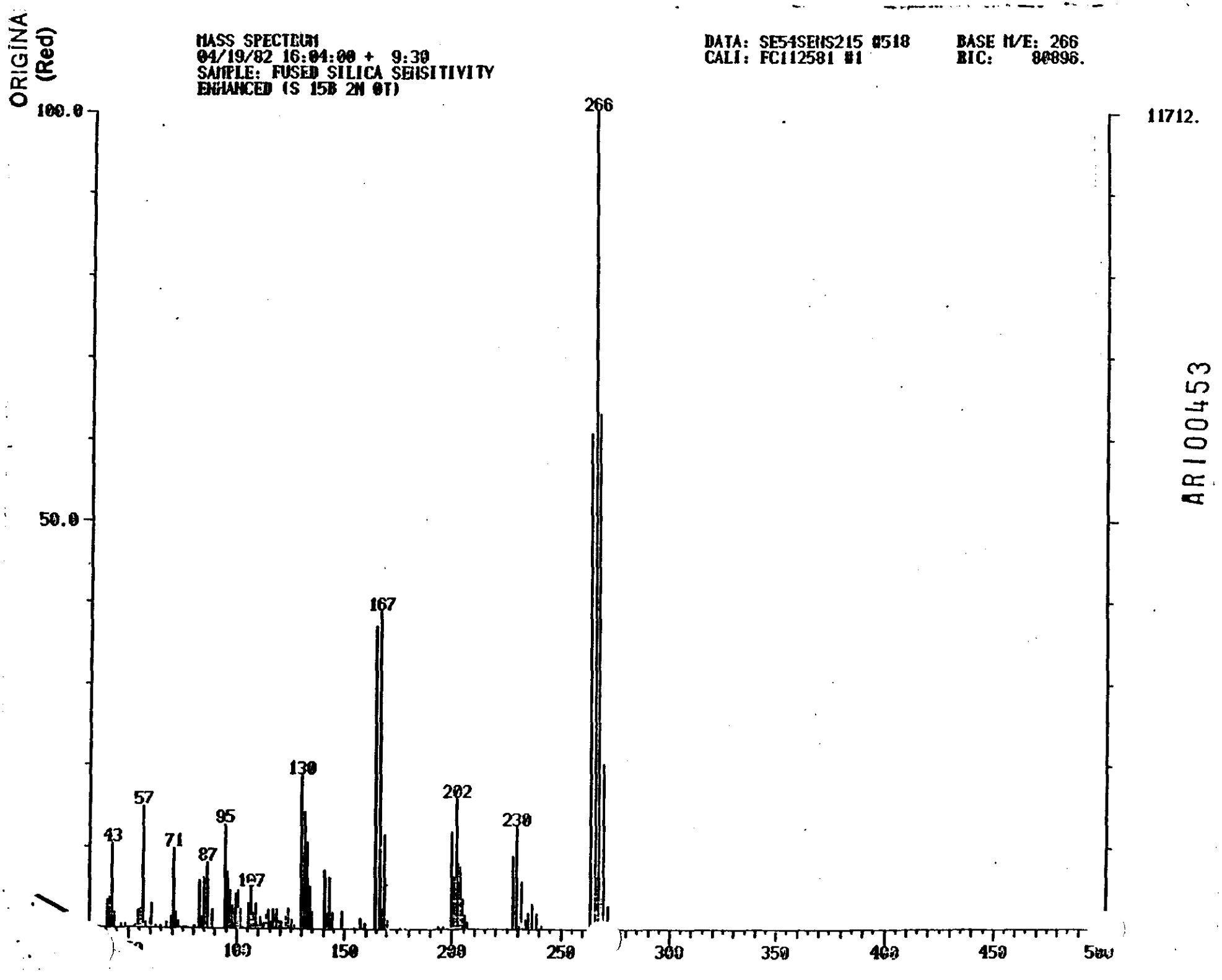
MASS SPECTRUM
01/19/82 16:04:00 + 9:41
SAMPLE: FUSED SILICA SENSITIVITY
ENHANCED (S 15B 2N 0T)

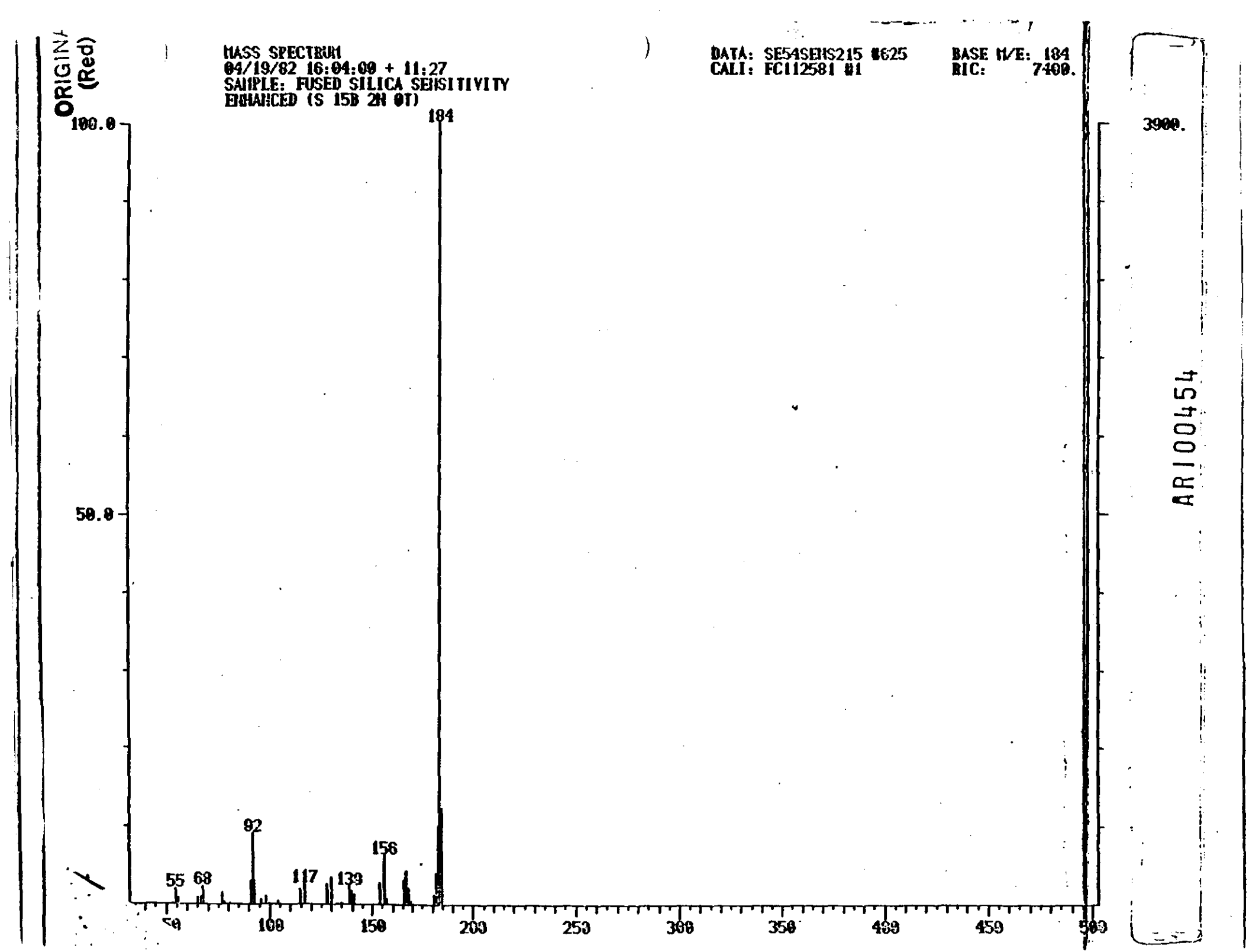
DATA: SE54SENS215 #528
CALI: FC112581 01

BASE M/E: 188
RIC: 167936.



AR100452


ORIGINA
(Red)
MASS SPECTRUM
04/19/82 16:04:00 + 9:30
SAMPLE: FUSED SILICA SENSITIVITY
ENHANCED (S 15B 2M 0T)
DATA: SE54SENS215 0518
CALI: FC112581 01
BASE M/E: 266
BIC: 80896.
100.0
50.0
266
11712.
167
130
57
202
95
230
43
71
87
107
100
150
200
250
300
350
400
450
500
AR100453


ORIGINAL (Red)
MASS SPECTRUM
04/19/82 16:04:09 + 11:27
SAMPLE: FUSED SILICA SENSITIVITY
ENHANCED (S 15B 2N 0T)
DATA: SE54SENS215 #625
CALI: FC112581 #1
BASE M/E: 184
RIC: 7400.
100.0
50.0
3900.
184
82
156
55
68
117
139
50
100
150
200
250
300
350
400
450
500
AR100454

Q QUANTITATION REPORT FILE: BNAP047

ORIGINAL
(Red)

DATA: BNAP047.TI
04/18/82 12:27:00
SAMPLE: 50UG/ML 6502 FUSED SILICA STANDARD
CONDS.: FSCC
FORMULA: SENS213 INSTRUMENT: 4021 WEIGHT: 0.000
SUBMITTED BY: BNAP047 ANALYST: DP #592 ACCT. NO.: FC112581

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

NO	NAME
1	2,4,6-PHENOL D3 (INTERNAL STANDARD)
2	18B BIS (2-CHLOROETHYL) ETHER
3	24A 2-CHLOROPHENOL
4	27B 1,4-DICHLOROBENZENE
5	1,2-DICHLOROBENZENE
6	42B BIS (2-CHLOROISOPROPYL) ETHER
7	12B HEXACHLOROETHANE
8	PHENOL
9	PHENOL D-5 (SURROGATE)
10	PYRIDINE D6 (SURROGATE)
11	NAPHTHALENE D8 (INTERNAL STANDARD)
12	63B N-NITROSO-DI-N-PROPYLAMINE
13	NITROBENZENE
14	ISOPHORONE
15	57A 2-NITROPHENOL
16	34A 2,4-DIMETHYLPHENOL
17	43B BIS (2-CHLOROETHOXY) METHANE
18	31A 2,4-DICHLOROPHENOL
19	88 1,2,4-TRICHLOROBENZENE
20	55B NAPHTHALENE
21	52B HEXACHLOROBUTADIENE
22	22A 4-CHLORO-M-CRESOL
23	53B HEXACHLOROCYCLOPENTADIENE
24	21A 2,4,6-TRICHLOROPHENOL
25	20B 2-CHLORONAPHTHALENE
26	77B ACENAPHTHALENE
27	71B DIMETHYLPHTHALATE
28	36B 2,6-DINITROTOLUENE
29	NITROBENZENE D-5 (SURROGATE)
30	2-FLUORBIPHENYL (SURROGATE)
31	PHENANTHRENE D10 (INTERNAL STANDARD)
32	1B ACENAPHTHENE
33	59A 2,4-DINITROPHENOL
34	35B 2,4-DINITROTOLUENE
35	4-NITROPHENOL
36	80B FLUORENE
37	42B 4-CHLOROPHENYLPHENYL ETHER
38	70B DIETHYLPHTHALATE
39	60A 4,6-DINITRO-O-CRESOL
40	62B N-NITROSODIPHENYLAMINE
41	37B 1,2-DIPHENYLHYDRAZINE
42	41B 4-BROMOPHENOXYBENZENE
43	9B HEXACHLOROBENZENE
44	64A PENTACHLOROPHENOL
45	81B PHENANTHRENE
46	78B ANTHRACENE
47	69B DI-N-BUTYLPHTHALATE

AR100455

ORIGINA
(Red)

NO	NAME
49	39B FLUORANTHENE
49	84B PYRENE
50	ALPHA BHC
51	GAMMA & BETA BHC
52	DELTA-BHC
53	HEPTACHLOR
54	ALDRIN
55	PYRENE D10 (SURROGATE)
56	CHRYSENE D12 (INTERNAL STANDARD)
57	5B BENZIDINE
58	67B BUTYLBENZYLPHTHALATE
59	28B 3,3'-DICHLOROBENZIDINE
60	66B BIS (2-ETHYLHEXYL) PHTHALATE
61	69B DI-N-OCTYLPHTHALATE
62	4,4'-DDE
63	DIELDRIN
64	4,4'-DDD
65	4,4'-DDT
66	BETA ENDOSULFAN
67	ENDOSULFAN SULFATE
68	ENDRIN
69	ALPHA ENDOSULFAN
70	BENZO (A) PYRENE D-12 (INTERNAL STANDARD)
71	74B BENZO (B) FLUORANTHENE
72	73B BENZO (A) PYRENE
73	85B INDENO-1,2,3 (C,D) PYRENE
74	82B DIBENZO (A,H) ANTHRACENE
75	79B BENZO (G,H,I) PERYLENE
76	61B N-NITROSO-DIMETHYLAMINE
77	26B 1,3-DICHLOROBENZENE
78	2-FLUOROPHENOL (SURROGATE)
79	72B BENZO (A) ANTHRACENE
80	76B CHRYSENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
1	97	387	7:06	1	1.000	A BB	11461.	20.000 UG/L	0.54
2	93	383	7:01	1	0.990	A BB	33168.	72.974 UG/L	1.99
3	128	384	7:02	1	0.992	A BB	27866.	55.578 UG/L	1.51
4	146	400	7:20	1	1.034	* VB	32238.	60.193 UG/L	1.64
5	146	419	7:41	1	1.083	A BB	24040.	55.916 UG/L	1.52
6	77	443	8:07	1	1.145	A BB	7645.	61.249 UG/L	1.67
7	117	454	8:19	1	1.173	A BB	16541.	54.219 UG/L	1.48
8	94	454	8:19	1	1.173	A BB	6478.	59.021 UG/L	1.61
9	NOT FOUND								
10	56	227	4:10	1	0.587	* VV	2849.	13.473 UG/L	0.37
11	136	549	10:04	11	1.000	A BB	37212.	20.000 UG/L	0.54
12	130	458	8:24	11	0.834	A BB	2111.	31.175 UG/L	0.85
13	123	460	8:35	11	0.852	A BB	10629.	30.869 UG/L	0.84
14	82	466	8:33	11	0.849	A BB	31201.	35.307 UG/L	0.96
15	139	506	9:17	11	0.922	A BB	11497.	28.508 UG/L	0.78
16	122	529	9:42	11	0.964	A BB	39812.	52.690 UG/L	1.43
17	93	535	9:48	11	0.974	* BB	51158.	56.383 UG/L	1.53
18	162	540	9:54	11	0.984	* BV	29955.	43.152 UG/L	1.17
19	180	545	9:59	11	0.993	A BB	39447.	54.055 UG/L	1.47
20	128	552	10:07	11	1.005	A BB	106435.	48.421 UG/L	1.32
21	225	579	10:37	11	1.055	A BB	15090.	47.222 UG/L	1.29

AR100456

ORIGINA
(Red)

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
22	142	645	11:49	11	1.175	A BB	28424.	46.902 UG/L	1.28
23	237	609	12:16	11	1.219	A BB	6778.	19.180 UG/L	0.52
24	196	689	12:38	11	1.255	A BB	20348.	51.215 UG/L	1.39
25	162	701	12:51	11	1.277	A BB	77372.	65.659 UG/L	1.79
26	152	755	13:50	11	1.375	A BB	64418.	65.218 UG/L	1.77
27	163	766	14:03	11	1.395	A BB	71866.	72.354 UG/L	1.97
28	165	763	14:05	11	1.401	A BB	11923.	55.609 UG/L	1.51
29	128	466	8:33	11	0.849	A BB	12883.	104.818 UG/L	2.85
30	172	638	12:43	11	1.271	A BB	92548.	154.438 UG/L	4.20
31	188	969	17:46	31	1.000	A BB	38008.	20.000 UG/L	0.54
32	154	778	14:16	31	0.803	A BB	55128.	53.676 UG/L	1.46
33	184	797	14:37	31	0.822	A BB	1040.	11.951 UG/L	0.33
34	165	817	14:59	31	0.843	A BB	14743.	46.649 UG/L	1.27
35	139	829	15:12	31	0.856	A BB	5358.	27.206 UG/L	0.74
36	166	845	15:29	31	0.872	* BV	68840.	43.001 UG/L	1.17
37	204	856	15:42	31	0.883	* BB	36730.	47.000 UG/L	1.28
38	149	861	15:47	31	0.889	* VB	85260.	44.013 UG/L	1.20
39	198	870	15:57	31	0.898	A BB	2161.	16.436 UG/L	0.45
40	168	875	16:02	31	0.903	* VB	20403.	42.078 UG/L	1.15
41	77	870	15:57	31	0.898	* BV	705.	36.205 UG/L	0.99
42	248	918	16:50	31	0.947	A BB	20570.	43.750 UG/L	1.19
43	284	932	17:05	31	0.962	A BB	31820.	53.846 UG/L	1.47
44	266	963	17:39	31	0.994	A BB	9522.	28.869 UG/L	0.79
45	178	973	17:50	31	1.004	* VV	89201.	50.271 UG/L	1.37
46	178	978	17:56	31	1.009	* VV	98736.	46.176 UG/L	1.26
47	149	1073	19:47	31	1.114	* VB	162651.	49.507 UG/L	1.35
48	202	1134	20:47	31	1.170	* VB	99676.	44.357 UG/L	1.21
49	282	1160	21:16	31	1.197	* VV	97809.	41.466 UG/L	1.13
50	181	922	16:54	31	0.951	A BB	14097.	40.100 UG/L	1.09
51	181	964	17:40	31	0.995	A BB	22471.	73.162 UG/L	1.99
52	181	995	18:14	31	1.027	A BB	8486.	34.442 UG/L	0.94
53	272	1044	19:08	31	1.077	A BB	10957.	45.162 UG/L	1.23
54	263	1128	20:41	31	1.164	A BB	2238.	38.636 UG/L	1.05
55	212	1157	21:13	31	1.194	A BB	64511.	81.061 UG/L	2.21
56	240	1328	24:21	56	1.000	A BB	29030.	20.000 UG/L	0.54
57	184	1167	21:24	56	0.879	A BB	2256.	6.413 UG/L	0.17
58	149	1281	23:29	56	0.965	* VB	77653.	49.669 UG/L	1.35
59	252	1338	24:32	56	1.008	* BV	22261.	47.463 UG/L	1.29
60	149	1366	25:03	56	1.029	* VB	113708.	59.344 UG/L	1.62
61	149	1449	26:34	56	1.091	* VB	154751.	51.978 UG/L	1.41
62	246	1195	21:54	56	0.900	A BB	21612.	40.985 UG/L	1.12
63	79	1194	21:53	56	0.899	A BB	23646.	45.880 UG/L	1.25
64	235	1241	22:45	56	0.934	A BB	34706.	49.860 UG/L	1.36
65	235	1279	23:27	56	0.963	A BB	24978.	38.457 UG/L	1.05
66	195	1167	21:24	56	0.879	A BB	2280.	45.601 UG/L	1.24
67	272	1276	23:24	56	0.961	A BB	5834.	46.439 UG/L	1.26
68	81	1217	22:19	56	0.916	A BB	10696.	37.052 UG/L	1.01
69	195	1228	22:31	56	0.925	A BB	2587.	44.928 UG/L	1.22
70	264	1495	27:29	70	1.000	A BB	26203.	40.000 UG/L	1.09
71	252	1338	24:32	70	0.893	* BV	22261.	39.594 UG/L	1.08
72	252	1338	24:32	70	0.893	* BV	22261.	39.594 UG/L	1.08
73	276	1629	29:52	70	1.087	A BB	13754.	25.894 UG/L	0.70
74	278	1629	29:52	70	1.087	A BB	56324.	49.240 UG/L	1.34
75	276	1650	30:15	70	1.101	A BB	68259.	46.981 UG/L	1.28
76	74	221	4:03	1	0.571	A BB	10105.	51.007 UG/L	1.39
77	140	392	7:11	1	1.013	A BB	23375.	43.644 UG/L	1.19

AR100457

ORIGINA
(Red)

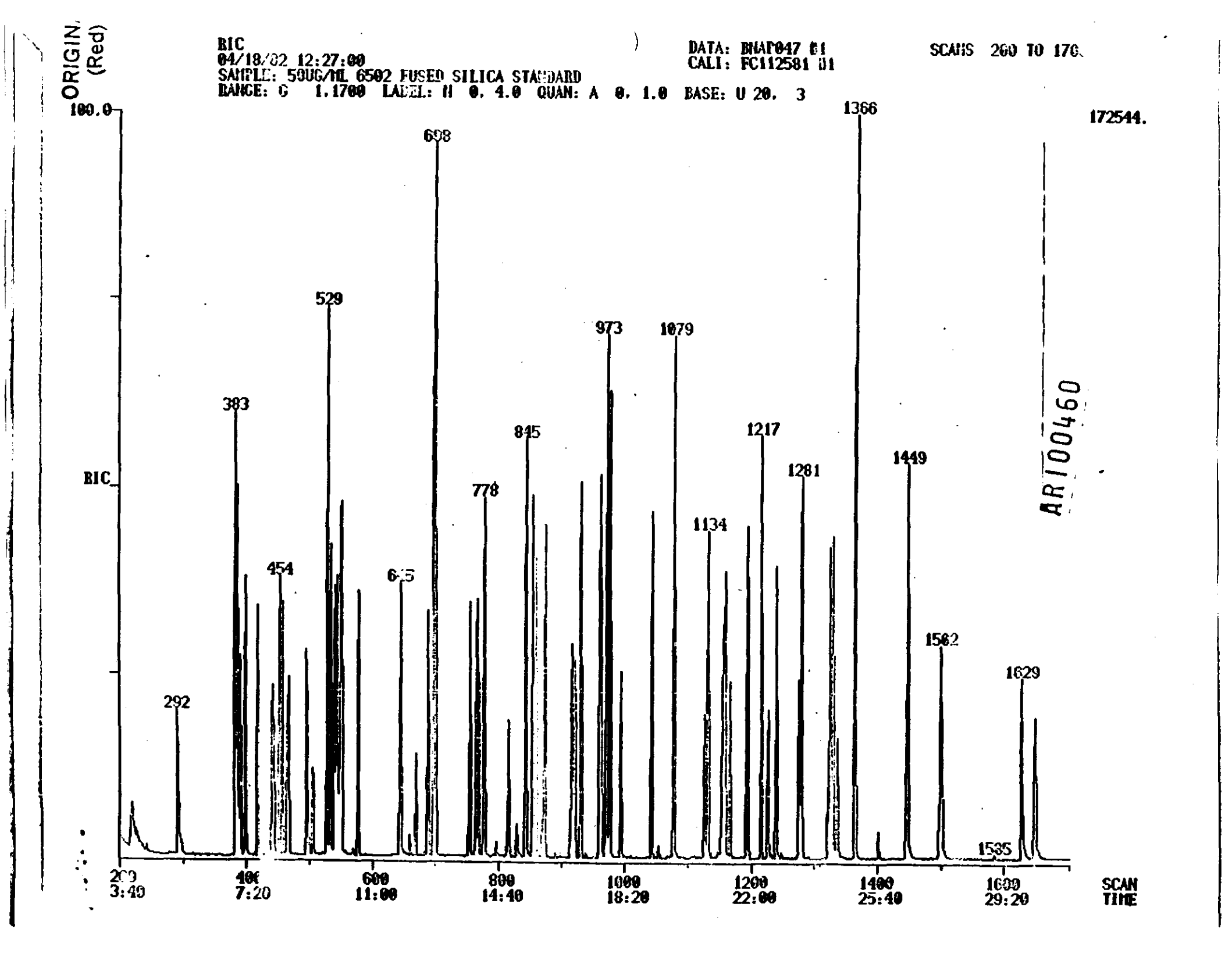
NO	TYPE	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT		%TOT
78	112	292	5:21	1	0.755	A BB	20474.	46.729	UG/L	1.27
79	228	1326	24:19	56	0.998	A BB	70164.	58.577	UG/L	1.59
80	228	1331	24:24	56	1.002	A BB	67440.	54.419	UG/L	1.48

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	7:00	1.01	1.000	1.00	20.00	20.00	1.000	1.000	1.00
2	7:12	0.97	0.990	1.00	72.97	50.00	1.158	0.793	1.46
3	7:13	0.97	0.992	1.00	55.58	50.00	0.973	0.875	1.11
4	7:28	0.98	1.025	1.01	60.19	50.00	1.125	0.935	1.20
5	7:51	0.98	1.078	1.00	55.92	50.00	0.839	0.750	1.12
6	8:12	0.99	1.126	1.02	61.25	50.00	0.267	0.218	1.22
7	8:26	0.99	1.159	1.01	54.22	50.00	0.577	0.532	1.08
8	8:26	0.99	1.159	1.01	59.02	50.00	0.226	0.192	1.18
9	8:38		1.186			50.00		1.324	
10	4:13	0.99	0.590	0.99	13.47	50.00	0.099	0.369	0.27
11	9:55	1.01	1.000	1.00	20.00	20.00	1.000	1.000	1.00
12	8:31	0.98	0.842	0.99	31.18	50.00	0.023	0.036	0.62
13	8:40	0.99	0.857	0.99	30.87	50.00	0.114	0.185	0.62
14	8:38	0.99	0.853	0.99	35.31	50.00	0.335	0.475	0.71
15	9:20	0.99	0.922	1.00	28.51	50.00	0.124	0.217	0.57
16	9:50	0.99	0.971	0.99	52.69	50.00	0.428	0.406	1.05
17	9:54	0.99	0.978	1.00	56.38	50.00	0.550	0.488	1.13
18	9:59	0.99	0.987	1.00	43.15	50.00	0.322	0.373	0.86
19	10:03	0.99	0.993	1.00	54.06	50.00	0.424	0.392	1.08
20	10:10	0.99	1.005	1.00	48.42	50.00	1.144	1.181	0.97
21	10:38	1.00	1.051	1.00	47.22	50.00	0.171	0.181	0.94
22	11:49	1.00	1.168	1.01	46.90	50.00	0.306	0.326	0.94
23	12:19	1.00	1.217	1.00	19.18	50.00	0.073	0.190	0.38
24	12:32	1.01	1.239	1.01	51.22	50.00	0.219	0.214	1.02
25	12:52	1.00	1.272	1.00	65.66	50.00	0.832	0.633	1.31
26	13:47	1.00	1.362	1.01	65.22	50.00	0.692	0.531	1.30
27	14:03	1.00	1.388	1.01	72.35	50.00	0.772	0.534	1.45
28	14:07	1.00	1.395	1.00	55.61	50.00	0.128	0.115	1.11
29	8:37	0.99	0.855	0.99	104.82	50.00	0.138	0.066	2.10
30	12:46	1.00	1.265	1.00	154.43	50.00	0.995	0.322	3.09
31	17:35	1.01	1.000	1.00	20.00	20.00	1.000	1.000	1.00
32	14:16	1.00	0.804	1.00	53.68	50.00	0.580	0.540	1.07
33	14:33	1.00	0.820	1.00	11.95	50.00	0.011	0.046	0.24
34	14:59	1.00	0.844	1.00	46.65	50.00	0.155	0.166	0.93
35	15:09	1.00	0.853	1.00	27.21	50.00	0.056	0.104	0.54
36	15:29	1.00	0.873	1.00	43.00	50.00	0.724	0.842	0.86
37	15:39	1.00	0.882	1.00	47.00	50.00	0.387	0.411	0.94
38	15:43	1.00	0.885	1.00	44.01	50.00	0.897	1.019	0.88
39	15:55	1.00	0.897	1.00	16.49	50.00	0.023	0.069	0.33
40	16:02	1.00	0.904	1.00	42.08	50.00	0.215	0.255	0.84
41	15:55	1.00	0.897	1.00	36.20	50.00	0.000	0.011	0.72
42	16:49	1.00	0.946	1.00	43.75	50.00	0.216	0.247	0.87
43	17:00	1.01	0.958	1.00	53.85	50.00	0.335	0.311	1.08
44	17:35	1.00	0.991	1.00	28.87	50.00	0.100	0.174	0.58
45	17:51	1.00	1.026	1.00	50.27	50.00	0.939	0.934	1.01
46	17:57	1.00	1.011	1.00	46.10	50.00	1.039	1.125	0.92
47	19:46	1.00	1.114	1.00	49.51	50.00	1.712	1.729	0.99
48	20:44	1.00	1.160	1.00	44.36	50.00	1.049	1.182	0.89
49	21:15	1.00	1.197	1.00	41.41	50.00	1.029	1.243	0.83
50	16:51	1.00	0.949	1.00	40.10	50.00	0.148	0.185	0.80
51	17:35	1.01	0.991	1.00	73.16	100.00	0.118	0.162	0.73

AR100458

ORIGIN/
(Red)

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
52	18:09	1.01	1.023	1.00	34.44	50.00	0.089	0.130	0.69
53	19:05	1.00	1.075	1.00	45.16	50.00	0.115	0.128	0.90
54	20:39	1.00	1.163	1.00	38.64	50.00	0.024	0.030	0.77
55	21:15	1.00	1.197	1.00	81.06	50.00	0.679	0.419	1.62
56	24:11	1.01	1.000	1.00	20.00	20.00	1.000	1.000	1.00
57	21:19	1.00	0.876	1.00	6.41	50.00	0.031	0.242	0.13
58	23:25	1.00	0.962	1.00	49.67	50.00	1.070	1.077	0.99
59	24:28	1.00	1.006	1.00	47.46	50.00	0.307	0.323	0.95
60	25:01	1.00	1.029	1.00	59.34	50.00	1.567	1.320	1.19
61	26:29	1.00	1.089	1.00	51.98	50.00	2.132	2.051	1.04
62	21:54	1.00	0.901	1.00	40.98	50.00	0.298	0.363	0.82
63	21:52	1.00	0.899	1.00	45.88	50.00	0.326	0.355	0.92
64	22:42	1.00	0.933	1.00	49.86	50.00	0.478	0.480	1.00
65	23:25	1.00	0.962	1.00	38.46	50.00	0.344	0.447	0.77
66	21:21	1.00	0.878	1.00	45.60	50.00	0.031	0.034	0.91
67	23:20	1.00	0.959	1.00	46.44	50.00	0.080	0.087	0.93
68	22:19	1.00	0.917	1.00	37.05	50.00	0.147	0.199	0.74
69	22:29	1.00	0.924	1.00	44.93	50.00	0.035	0.038	0.90
70	27:23	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
71	24:26	1.00	0.992	1.00	39.59	50.00	0.680	0.858	0.79
72	24:28	1.00	0.992	1.00	39.59	50.00	0.680	0.858	0.79
73	29:52	1.00	1.080	1.00	25.88	50.00	0.420	0.811	0.52
74	29:52	1.00	1.080	1.00	49.24	50.00	1.720	1.746	0.98
75	30:16	1.00	1.103	1.00	46.98	50.00	2.004	2.210	0.94
76	4:21	0.93	0.597	0.96	51.81	50.00	0.353	0.346	1.02
77	7:20	0.96	1.625	0.99	43.64	50.00	0.816	0.935	0.87
78	5:24	0.99	0.720	1.65	46.73	50.00	0.715	0.765	0.93
79	24:19	1.00	0.999	1.00	58.58	50.00	0.967	0.825	1.17
80	24:23	1.00	1.002	1.00	54.42	50.00	0.929	0.854	1.09


ORIGIN (Red)
BIC
04/18/82 12:27:00
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RANGE: G 1.1700 LABEL: H 0. 4.0 QUAN: A 0. 1.0 BASE: U 20. 3
DATA: BNAP047 01
CALI: FC112581 01
SCANS 200 TO 170
100.0
172544.
BIC
292
383
454
529
615
698
778
845
973
1079
1134
1217
1281
1366
1449
1562
1629
1535
AR100460
200
3:40
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1200
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1400
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1600
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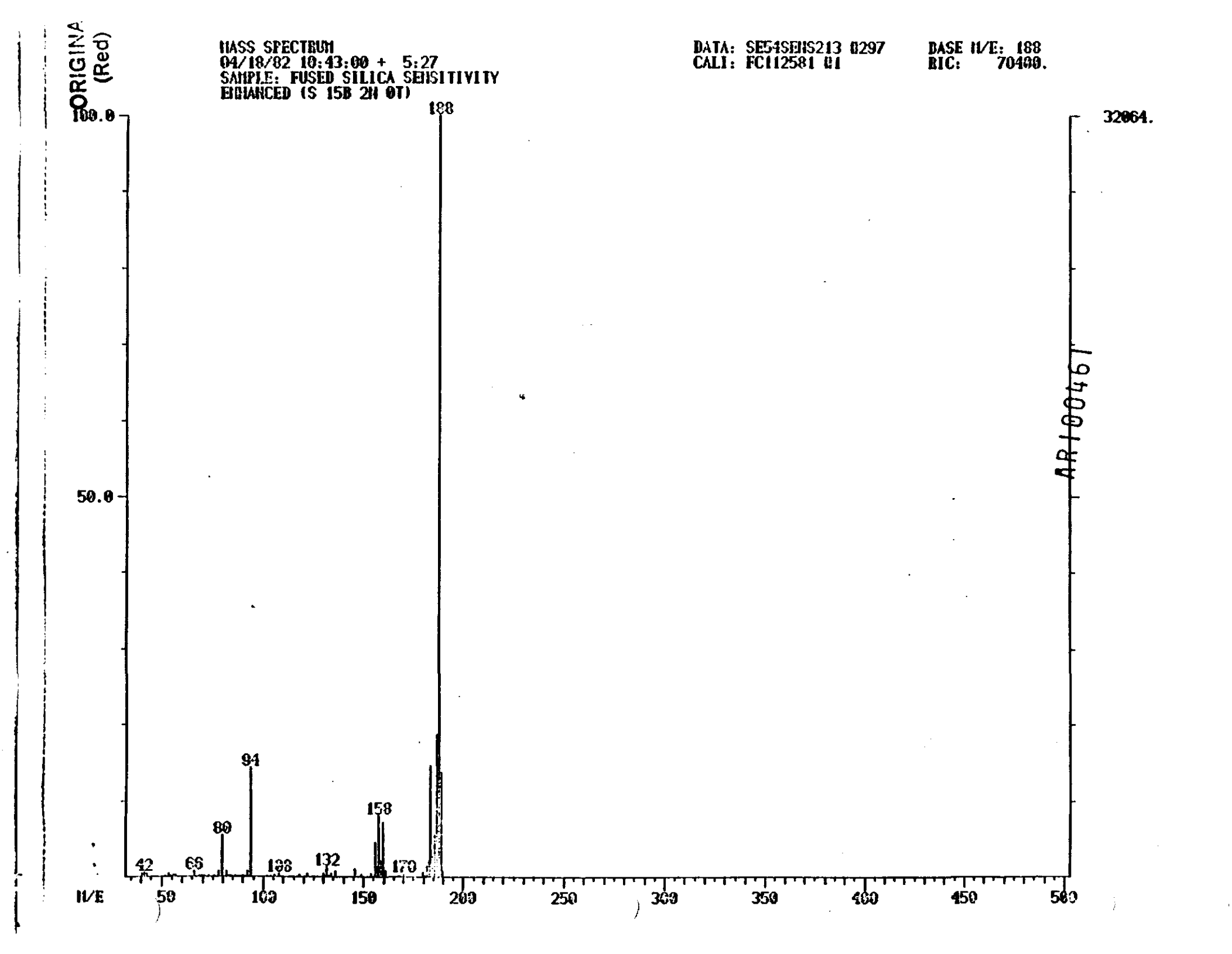
SCAN TIME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MASS SPECTRUM
04/18/82 10:43:00 + 5:27
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ENHANCED (S 15B 2N 0T)
DATA: SE54SENS213 0297
CALI: FC112581 01
BASE M/E: 188
BIC: 70400.
100.0
50.0
32064.
188
94
80
158
42
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132
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M/E
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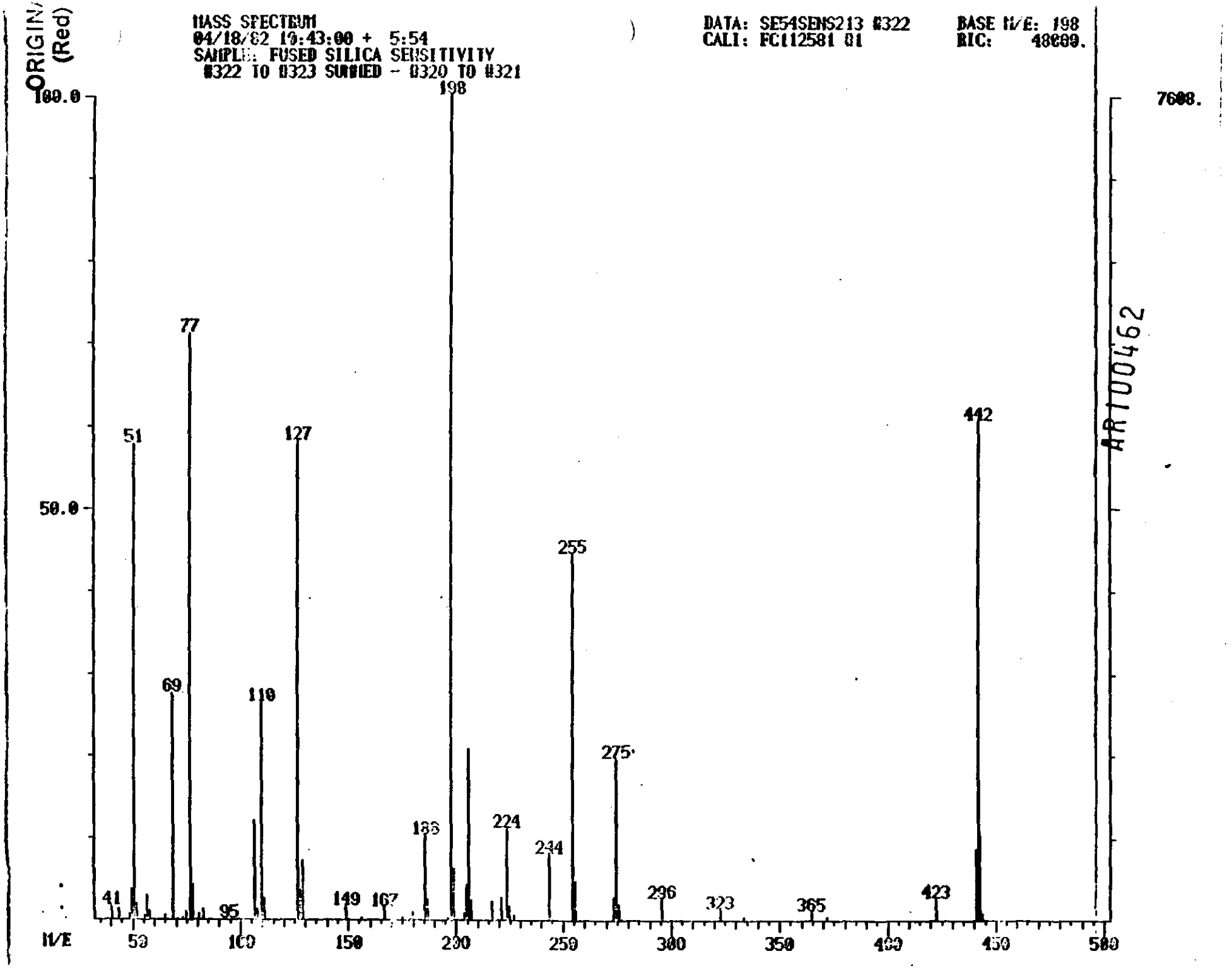
AR100461

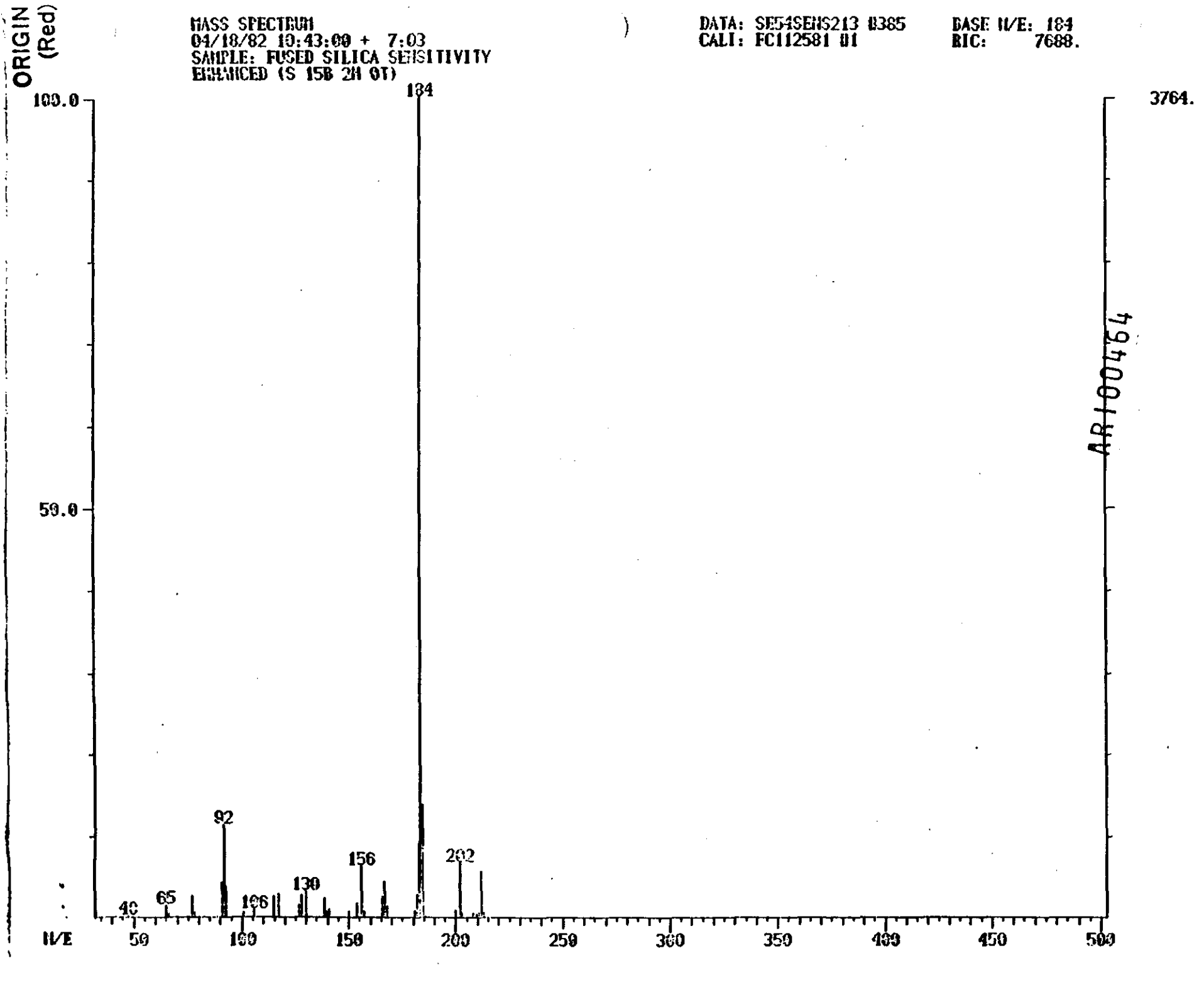

ORIGINAL (Red)
MASS SPECTRUM
04/18/82 10:43:00 + 5:54
SAMPLE: FUSED SILICA SENSITIVITY
#322 TO #323 SUBTRACTED - #320 TO #321
DATA: SE54SENS213 #322
CALI: FC112581 01
BASE M/E: 198
RIC: 48000.
100.0
50.0
7688.
M/E
50
100
150
200
250
300
350
400
450
500
198
77
51
127
442
255
69
110
275
224
244
188
296
423
323
365
149
167
95
41
AR100462

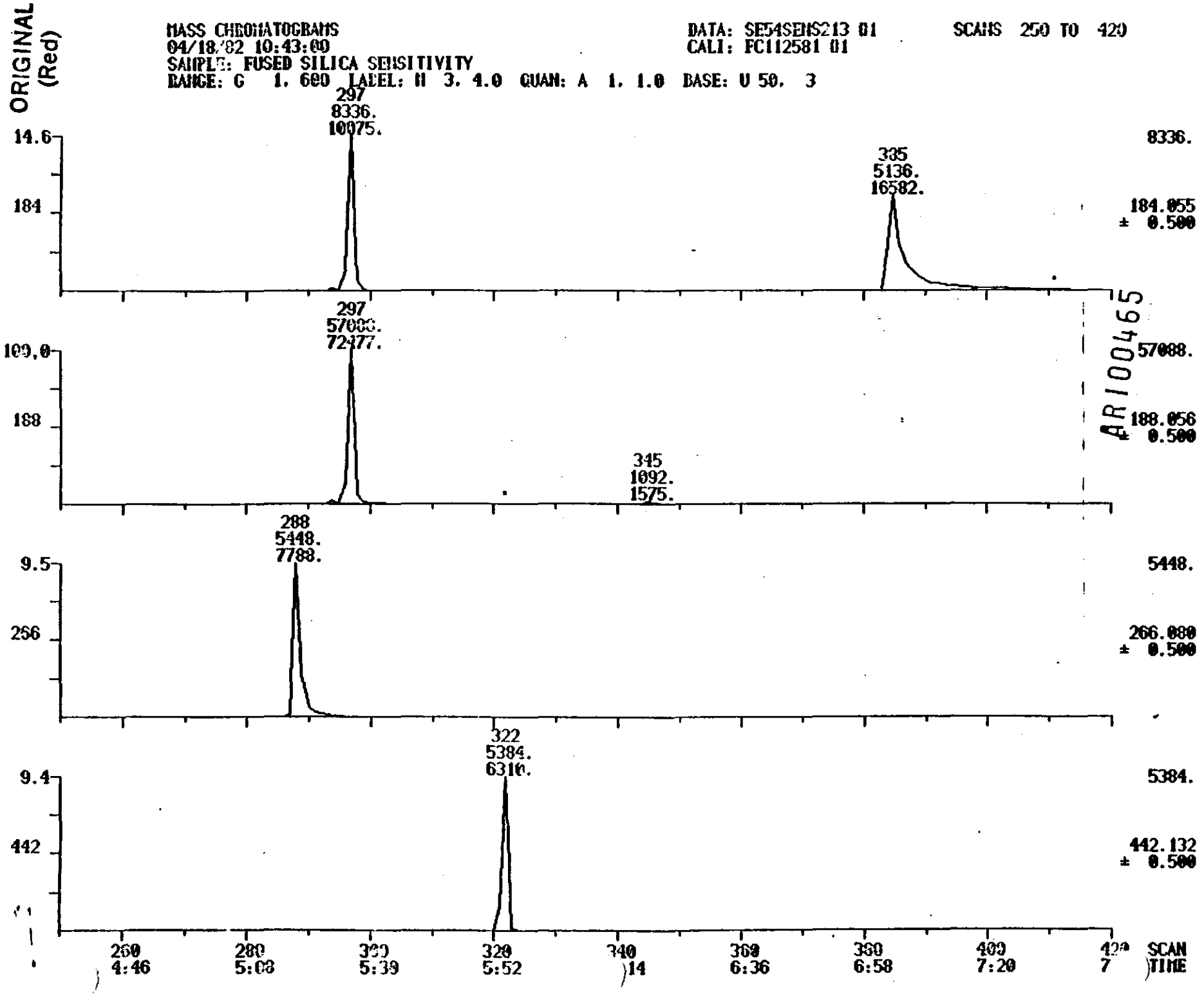
ORIGINA
(Red)

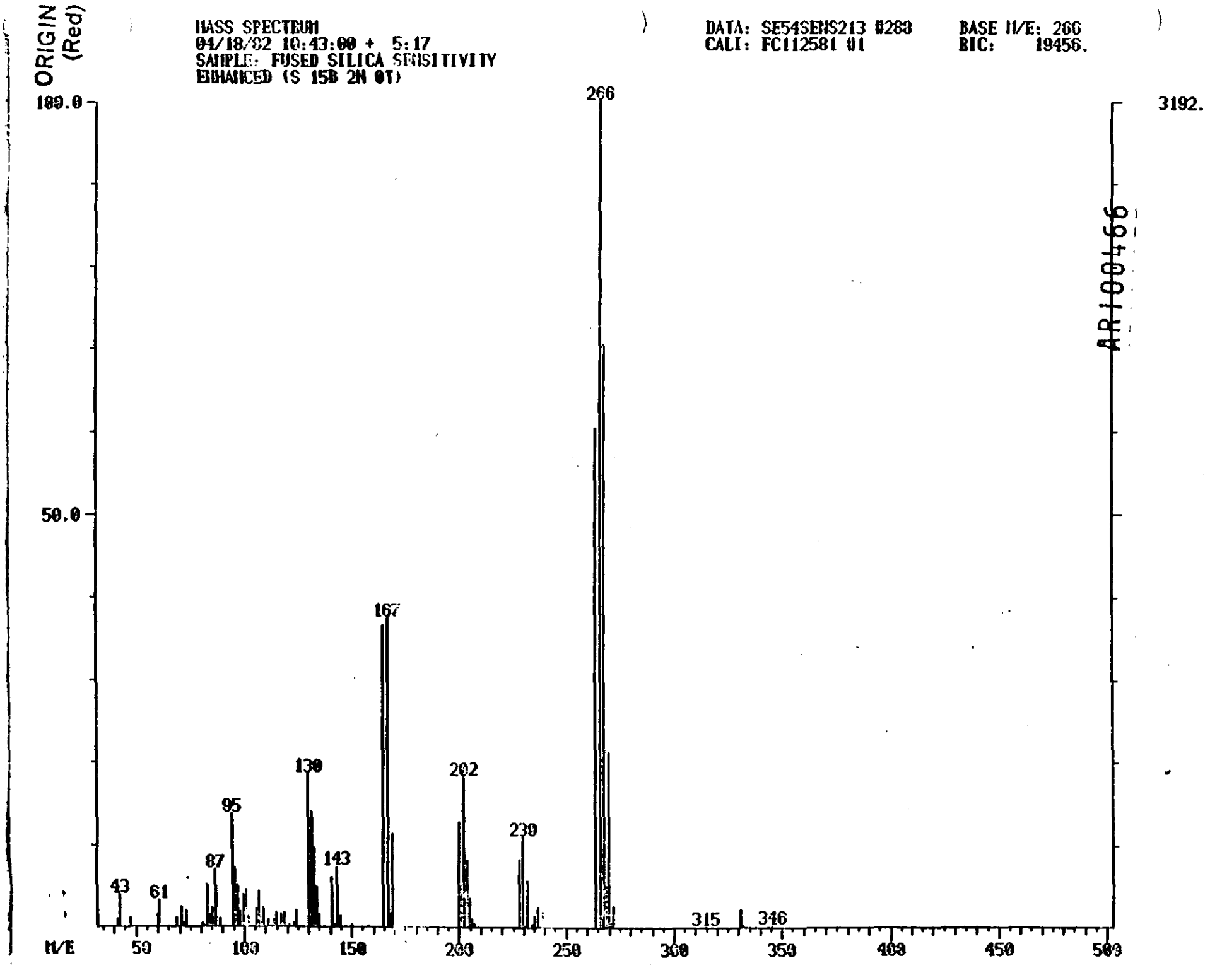
MASS LIST DATA: SE54SENS213 # 332 BASE PVE: 100
04/18/92 10:43:00 + 5:54 CALI: FC112591 # 1 RIC: 40000.
SAMPLE: FUSED SILICA SENSITIVITY
#322 TO #323 SUMMED - #320 TO #321

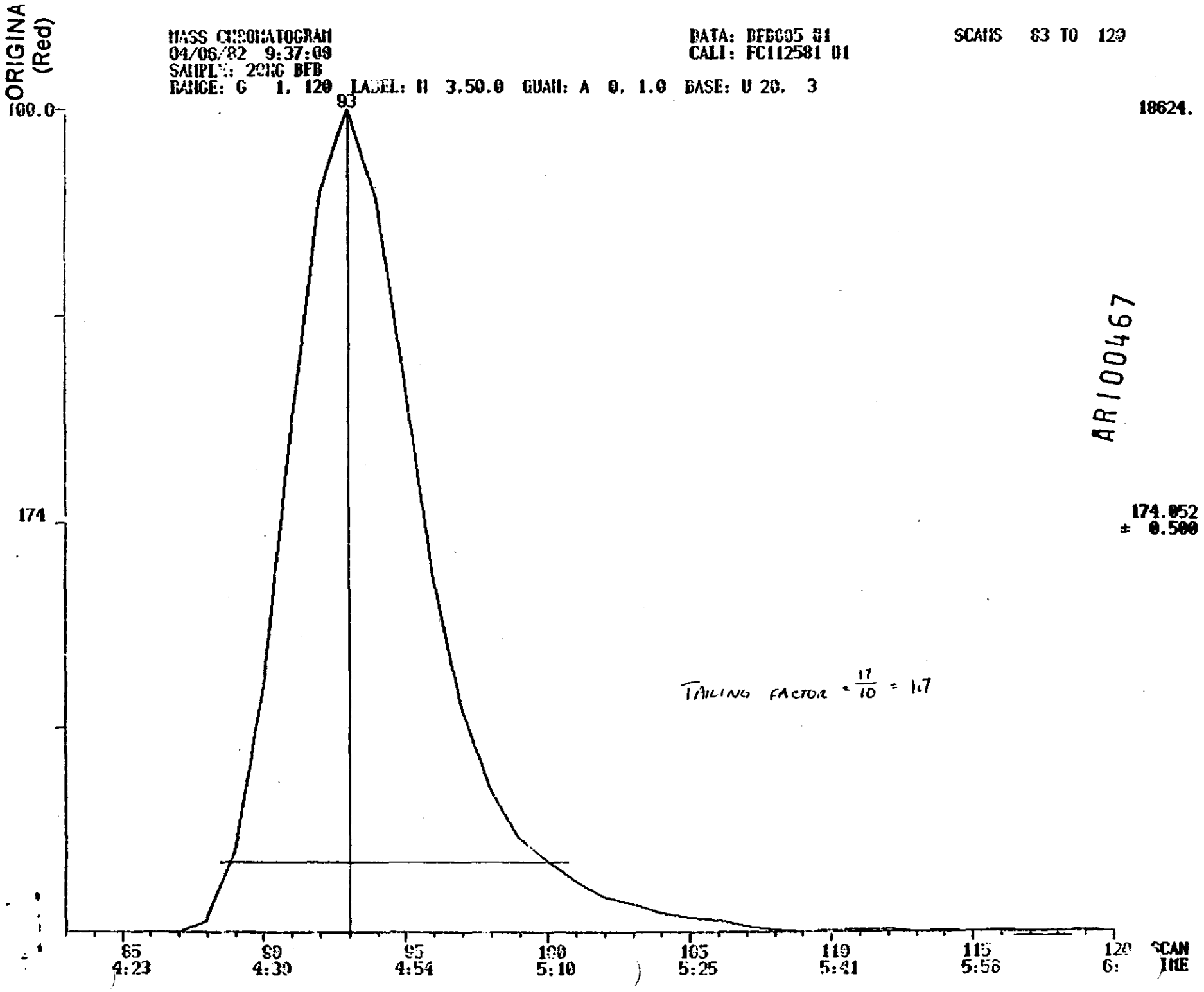
41 0.00 0.00 0. MINIMA MIN INTEN: 0.
444 # 0 MAXIMA

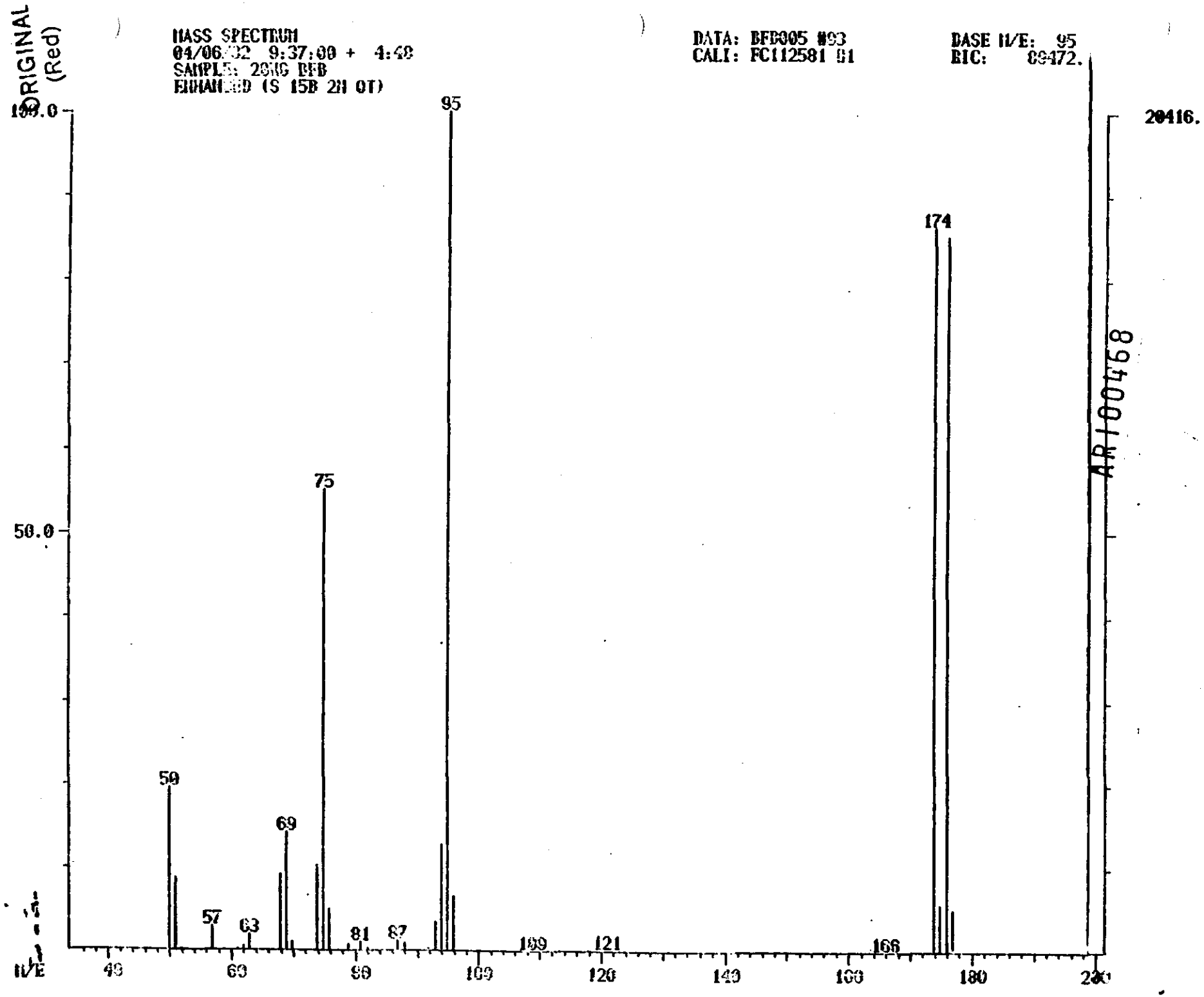
MASS		% RA	% RIC	INTEN.	MASS		% RA	% RIC	INTEN.
41.00	S	1.51	0.24	115.	255.00		44.43	7.04	3380.
44.00	S	1.34	0.21	102.	256.00		4.77	0.76	363.
49.00	S	0.74	0.12	56.	258.00		0.18	0.03	14.
50.00		3.68	0.58	280.	273.00		0.67	0.11	51.
51.00	S	57.83	9.17	4400.	274.00		2.85	0.45	217.
52.00		1.92	0.30	146.	275.00		19.64	3.11	1494.
56.00	S	0.58	0.09	44.	276.00		2.01	0.32	153.
57.00	S	2.92	0.46	222.	277.00		0.20	0.03	15.
58.00		1.13	0.18	86.	296.00		2.58	0.41	196.
65.00		0.62	0.10	47.	323.00		1.27	0.20	97.
69.00	S	27.55	4.37	2096.	334.00		0.37	0.06	28.
71.00	S	0.09	0.01	7.	365.00		1.06	0.17	81.
73.00	S	0.22	0.04	17.	372.00		0.38	0.06	29.
75.00		1.05	0.17	80.	423.00		2.55	0.40	194.
77.00	S	71.19	11.28	5416.	441.00		8.62	1.37	656.
78.00		4.25	0.67	323.	442.00	S	60.46	9.58	4600.
81.00	S	0.68	0.11	52.	443.00	S	10.34	1.64	787.
83.00		1.27	0.20	97.	444.00		0.84	0.13	64.
86.00	S	0.13	0.02	10.					
95.00	S	0.03	0.00	2.					
107.00		12.09	1.92	920.					
108.00		1.34	0.21	102.					
110.00		26.47	4.20	2014.					
111.00		2.73	0.43	208.					
127.00		58.04	9.20	4416.					
128.00		3.71	0.59	282.					
129.00		7.28	1.15	554.					
149.00	S	1.52	0.24	116.					
150.00	S	0.11	0.02	8.					
156.00		0.32	0.05	24.					
167.00		1.39	0.22	106.					
175.00		0.35	0.06	27.					
179.00		0.34	0.05	26.					
180.00		0.97	0.15	74.					
186.00		10.19	1.61	775.					
187.00		2.54	0.40	193.					
196.00		0.35	0.06	27.					
198.00		100.00	15.85	7608.					
199.00		6.23	0.99	474.					
204.00		0.84	0.13	64.					
205.00		4.22	0.67	321.					
206.00		20.77	3.29	1580.					
207.00		2.41	0.38	183.					
217.00		2.27	0.36	173.					
221.00		2.64	0.42	201.					
224.00		11.12	1.76	846.					
225.00		1.72	0.27	131.					
227.00		0.55	0.09	42.					
244.00		7.90	1.25	601.					
245.00		0.38	0.06	29.					


ORIGIN
(Red)
MASS SPECTRUM
04/18/82 10:43:00 + 7:03
SAMPLE: FUSED SILICA SENSITIVITY
ENHANCED (S 15B 2H 0T)
DATA: SE54SENS213 B385
CALI: FC112581 01
BASE M/E: 184
RIC: 7688.
100.0
50.0
184
3764.
92
156
202
130
65
40
166
M/E
50
100
150
200
250
300
350
400
450
500
AR100464


ORIGINAL
(Red)
MASS CHROMATOGRAMS
04/18/82 10:43:00
SAMPLE: FUSED SILICA SENSITIVITY
RANGE: G 1. 600 LABEL: H 3. 4.0 QUAN: A 1. 1.0 BASE: U 50. 3
DATA: SE54SENS213 01
CALI: FC112581 01
SCANS 250 TO 420
297
8336.
10075.
335
5136.
16582.
14.6
184
8336.
184.055
± 0.500
297
57088.
72477.
345
1092.
1575.
100.0
188
57088.
188.056
± 0.500
AR100465
288
5448.
7788.
9.5
266
5448.
266.080
± 0.500
322
5384.
6310.
9.4
442
5384.
442.132
± 0.500
260
4:46
280
5:08
300
5:30
320
5:52
340
6:14
360
6:36
380
6:58
400
7:20
420
7
SCAN
TIME


ORIGIN
(Red)
MASS SPECTRUM
04/18/02 10:43:00 + 5:17
SAMPLE: FUSED SILICA SENSITIVITY
ENHANCED (S 15B 2N 0T)
DATA: SE54SENS213 #283
CALI: FC112581 01
BASE M/E: 266
BIC: 19456.
100.0
50.0
3192.
AR100466
266
167
139
202
95
239
87
143
43
61
315
346
M/E
50
100
150
200
250
300
350
400
450
500


ORIGINA
(Red)
MASS CHROMATOGRAM
04/06/82 9:37:09
SAMPLE: 20NG BFB
RANGE: G 1. 120 LABEL: N 3.50.0 QUAN: A 0. 1.0 BASE: U 20. 3
DATA: BFB005 01
CALI: FC112581 01
SCANS 83 TO 120
100.0
93
18624.
174
AR100467
174.052
± 0.500
TAILING FACTOR = 17/10 = 1.7
65
4:23
90
4:39
95
4:54
100
5:10
105
5:25
110
5:41
115
5:56
120
6:
SCAN
TIME


ORIGINAL (Red)
MASS SPECTRUM
04/06/92 9:37:00 + 4:48
SAMPLE: 2616 BFB
DATA: BFB005 #93
CALI: FC112581 B1
BASE M/E: 95
BIC: 89472.
20416.
100.0
50.0
95
174
75
59
69
57
63
81
87
109
121
166
M/E
40
60
80
100
120
140
160
180
200
AR100458

ORIGINAL
(Red)

MS [illegible] DATA: [illegible] PAGE [illegible]: [illegible]
[illegible] 9:07:00 + 4:45 CALI: FC112581 # 1 [illegible]: [illegible]
SAMPLE: 20NG [illegible]
[illegible] (S 1.5G [illegible] ST)

22[illegible]	0.00	0.00	0.	MINIMA MIN INTEN: 0.
224			# 0	MAXIMA
MASS	% RA	% RIC	INTEN.	
50.00	19.67	4.49	4216.	
51.00	8.69	1.90	1774.	
52.00	0.19	0.04	39.	
57.00	2.05	0.55	501.	
61.00	0.11	0.03	23.	
62.00	0.41	0.09	83.	
63.00	1.07	0.43	302.	
68.00	9.14	2.09	1866.	
69.00	14.24	3.25	2908.	
70.00	0.93	0.21	190.	
74.00	10.23	2.33	2088.	
75.00	55.09	12.57	11248.	
76.00	5.02	1.14	1024.	
79.00	0.73	0.17	149.	
80.00	0.03	0.01	7.	
81.00	0.93	0.21	189.	
82.00	0.24	0.05	49.	
87.00	1.12	0.26	229.	
88.00	0.88	0.20	179.	
92.00	0.31	0.07	64.	
93.00	3.41	0.78	697.	
94.00	12.75	2.91	2604.	
95.00	100.00	22.82	20416.	
96.00	6.56	1.50	1340.	
[illegible]9.00	0.06	0.01	13.	
[illegible]9.00	0.00	0.00	1.	
116.00	0.08	0.02	16.	
121.00	0.10	0.02	20.	
122.00	0.01	0.00	3.	
165.00	0.07	0.02	14.	
167.00	0.03	0.01	6.	
174.00	86.36	19.71	17632.	
175.00	5.53	1.26	1129.	
176.00	85.37	19.46	17480.	
177.00	4.92	1.12	1005.	
223.00	0.08	0.02	16.	
224.00	0.08	0.02	16.	

AR100469

QUANTITATION REPORT FILE: VOL023

ORIGINA
(Red)

DATA: VOL023.TI
04/06/82 11:25:00
SAMPLE: 6502 VOLATILE SCREENING STANDARD
CONDS.: VCA
FORMULA: BFBC05 INSTRUMENT: 4021 WEIGHT: 0.000
SUBMITTED BY: VOL002 ANALYST: DP #597 ACCT. NO.: FC112591

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

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	45V CHLOROMETHANE
3	46V BROMOMETHANE
4	60V VINYL CHLORIDE
5	16V CHLOROETHANE
6	44V METHYLENE CHLORIDE
7	2V ACROLEIN
8	3V ACRYLONITRILE
9	49V TRICHLOROFLUOROMETHANE
10	29V 1,1-DICHLOROETHYLENE
11	13V 1,1-DICHLOROETHANE
12	30V TRANS-1,2-DICHLOROETHYLENE
13	23V CHLOROFORM
14	10V 1,2-DICHLOROETHANE
15	11V 1,1,1-TRICHLOROETHANE
16	6V CARBON TETRACHLORIDE
17	48V BROMODICHLOROMETHANE
18	1,2-DICHLOROETHANE D-4 (SURROGATE)
19	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
20	32V 1,2-DICHLOROPROPANE
21	33V TRANS-1,3-DICHLOROPROPENE
22	87V TRICHLOROETHYLENE
23	4V BENZENE
24	33V CIS-1,3-DICHLOROPROPENE
25	14V 1,1,2-TRICHLOROETHANE
26	51V DIBROMOCHLOROMETHANE
27	47V BROMOFORM
28	85V TETRACHLOROETHYLENE
29	15V 1,1,2,2-TETRACHLOROETHANE
30	86V TOLUENE
31	07V CHLOROBENZENE
32	38V ETHYLBENZENE
33	BENZENE D-6 (SURROGATE)
34	1-CHLORO-2-BROMOPROPANE (SURROGATE)
35	ETHYLBENZENE D-10 (SURROGATE)

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
1	128	93	4:54	1	1.000	A BB	28062.	50.000 UG/L	2.04
2	50	24	1:14	1	0.253	A BB	11330.	50.000 UG/L	2.04
3	94	34	1:45	1	0.350	A BB	27878.	50.000 UG/L	2.04
4	62	39	2:01	1	0.411	A BB	25365.	50.000 UG/L	2.04
5	64	48	2:29	1	0.505	A BB	16075.	50.000 UG/L	2.04
6	84	65	3:21	1	0.604	A BB	67157.	50.000 UG/L	2.04
7	56	71	3:40	1	0.747	* BV	10915.	400.000 UG/L	16.33
8	53	76	3:56	1	0.800	A BB	03209.	400.000 UG/L	16.33
9	101	86	4:27	1	0.905	A BB	62231.	50.000 UG/L	2.04
10	96	92	4:45	1	0.969	A BB	22944.	50.000 UG/L	2.04

AR100470

ORIGINAL
(Red)

NO	NAME	SCAN	TIME	REF	RRT	METH	AREA	AMOUNT	%TOT
11	63	106	5:29	1	1.116	* BV	100307.	50.000 UG/L	2.04
12	61	115	5:56	1	1.211	A BB	69141.	50.000 UG/L	2.04
13	83	120	6:12	1	1.263	A BB	137940.	50.000 UG/L	2.04
14	99	130	6:43	1	1.368	A BB	3579.	50.000 UG/L	2.04
15	97	147	7:36	1	1.547	A BB	93855.	50.000 UG/L	2.04
16	117	152	7:51	1	1.600	* VB	03007.	50.000 UG/L	2.04
17	83	157	8:07	1	1.653	A BB	180417.	50.000 UG/L	2.04
18	65	139	6:40	1	1.358	A BB	71428.	50.000 UG/L	2.04
19	55	272	14:03	19	1.000	A BB	130561.	50.000 UG/L	2.04
20	63	177	9:09	19	0.651	A BB	84868.	50.000 UG/L	2.04
21	75	180	9:18	19	0.662	A BB	127852.	50.000 UG/L	2.04
22	130	189	9:46	19	0.695	A BB	65287.	50.000 UG/L	2.04
23	78	198	10:14	19	0.728	A BB	155207.	50.000 UG/L	2.04
24	75	198	10:14	19	0.728	A BB	60018.	50.000 UG/L	2.04
25	97	198	10:14	19	0.728	* VB	67793.	50.000 UG/L	2.04
26	127	195	10:04	19	0.717	A BB	60271.	50.000 UG/L	2.04
27	173	233	12:02	19	0.857	A BB	52982.	50.000 UG/L	2.04
28	164	269	13:54	19	0.989	A BB	56155.	50.000 UG/L	2.04
29	85	267	13:49	19	0.982	A BB	66098.	50.000 UG/L	2.04
30	91	280	14:59	19	1.066	A BB	156457.	50.000 UG/L	2.04
31	112	306	15:49	19	1.125	A BB	143939.	50.000 UG/L	2.04
32	106	332	17:09	19	1.221	A BB	69638.	50.000 UG/L	2.04
33	84	196	10:38	19	0.721	A BB	157545.	50.000 UG/L	2.04
34	77	215	11:86	19	0.790	* VB	98937.	50.000 UG/L	2.04
35	98	329	17:30	19	1.210	A BB	208045.	50.000 UG/L	2.04

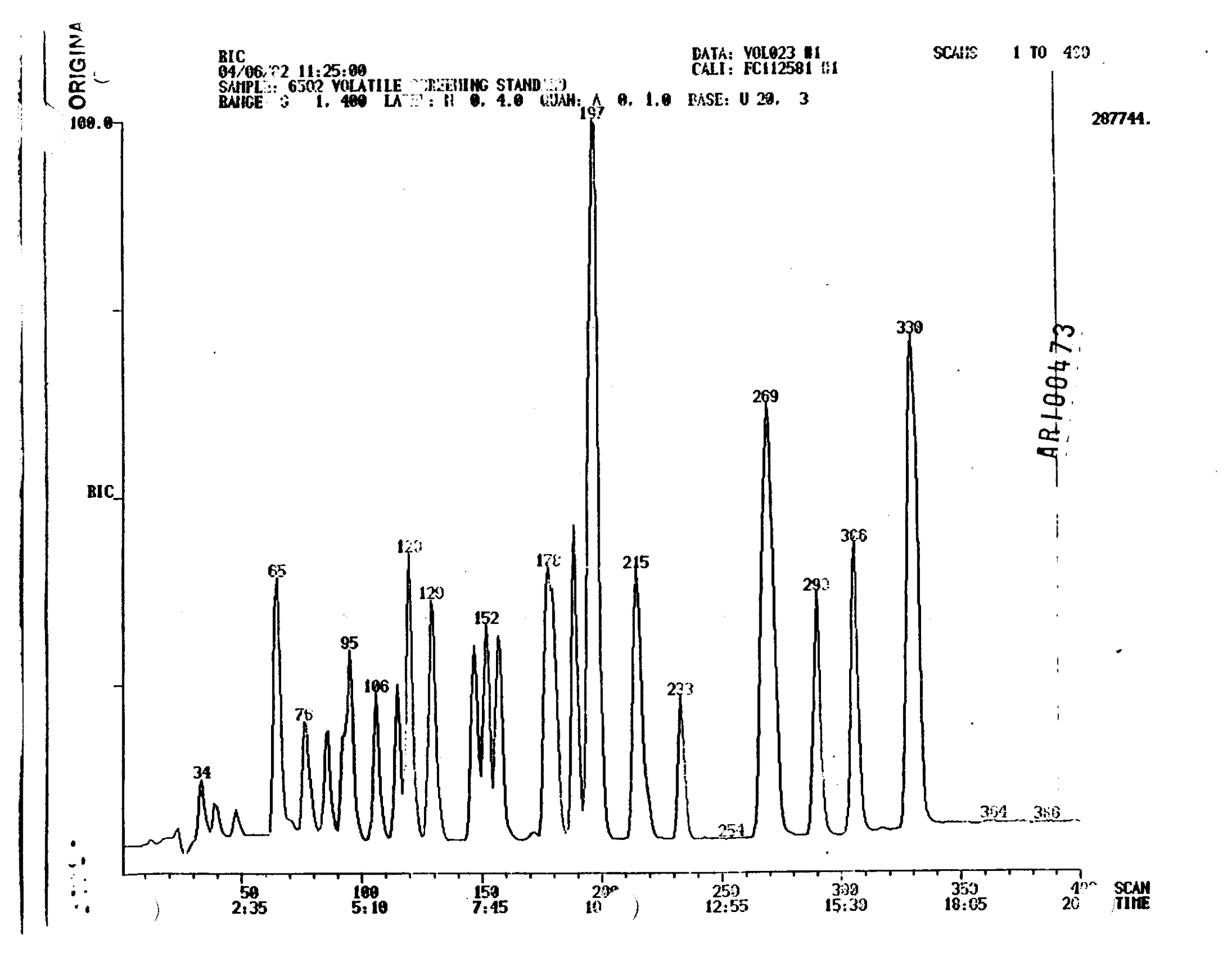
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	4:54	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:14	1.00	0.253	1.00	50.00	50.00	0.404	0.404	1.00
3	1:45	1.00	0.358	1.00	50.00	50.00	0.993	0.993	1.00
4	2:01	1.00	3.411	1.00	50.00	50.00	0.904	0.904	1.00
5	2:29	1.00	0.505	1.00	50.00	50.00	0.573	0.573	1.00
6	3:21	1.00	0.684	1.00	50.00	50.00	2.393	2.393	1.00
7	3:40	1.00	0.747	1.00	400.00	400.00	0.049	0.049	1.00
8	3:56	1.00	0.000	1.00	400.00	400.00	0.371	0.371	1.00
9	4:27	1.00	0.995	1.00	50.00	50.00	2.218	2.218	1.00
10	4:45	1.00	0.968	1.00	50.00	50.00	0.818	0.818	1.00
11	5:29	1.00	1.116	1.00	50.00	50.00	3.574	3.574	1.00
12	5:56	1.00	1.211	1.00	50.00	50.00	2.464	2.464	1.00
13	6:12	1.00	1.263	1.00	50.00	50.00	4.916	4.916	1.00
14	6:43	1.00	1.368	1.00	50.00	50.00	0.128	0.128	1.00
15	7:36	1.00	1.547	1.00	50.00	50.00	3.344	3.344	1.00
16	7:51	1.00	1.600	1.00	50.00	50.00	2.956	2.959	1.00
17	8:07	1.00	1.653	1.00	50.00	50.00	3.578	3.578	1.00
18	6:40	1.00	1.358	1.00	50.00	50.00	2.545	2.545	1.00
19	14:03	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
20	9:09	1.00	0.651	1.00	50.00	50.00	0.650	0.650	1.00
21	9:18	1.00	0.662	1.00	50.00	50.00	0.979	0.979	1.00
22	9:46	1.00	0.695	1.00	50.00	50.00	0.500	0.500	1.00
23	10:14	1.00	0.728	1.00	50.00	50.00	1.189	1.189	1.00
24	10:14	1.00	0.728	1.00	50.00	50.00	0.460	0.460	1.00
25	10:14	1.00	0.728	1.00	50.00	50.00	0.519	0.519	1.00
26	10:04	1.00	0.717	1.00	50.00	50.00	0.523	0.523	1.00
27	12:02	1.00	0.857	1.00	50.00	50.00	0.406	0.406	1.00
28	13:54	1.00	0.989	1.00	50.00	50.00	0.430	0.430	1.00
29	13:49	1.00	0.982	1.00	50.00	50.00	0.506	0.506	1.00

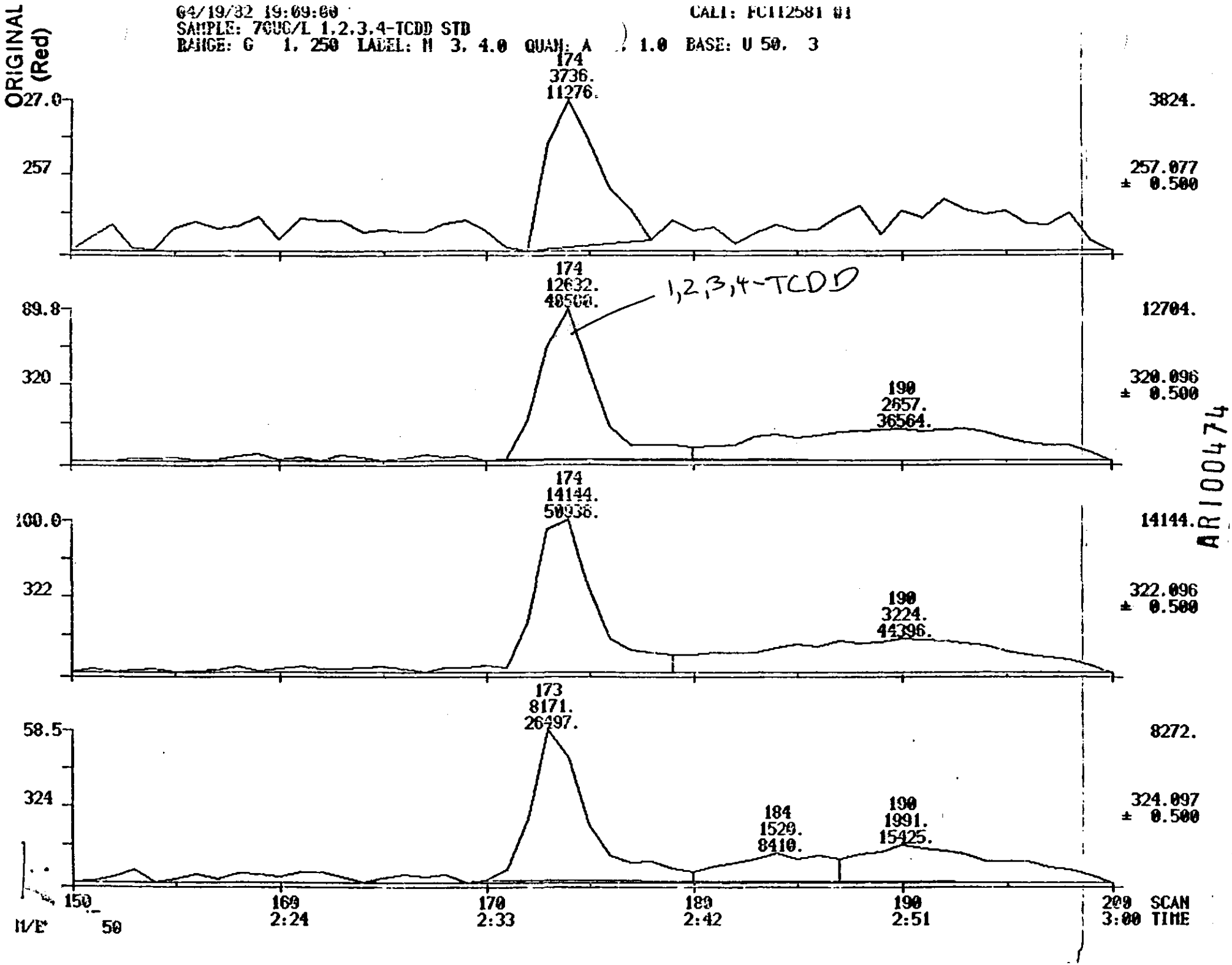
AR100471

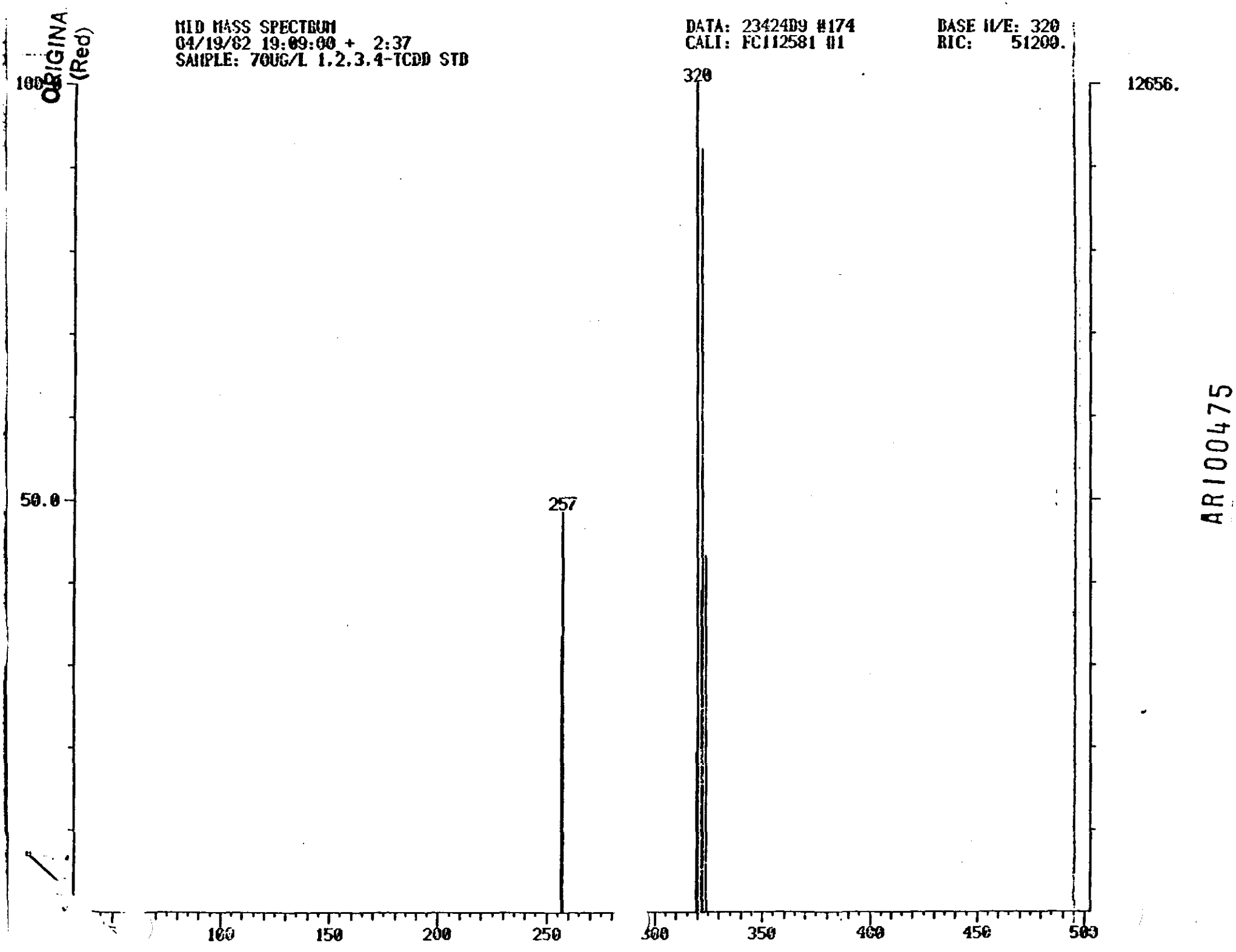
ORIGINAL
(Red)

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
30	14:59	1.00	1.065	1.00	50.00	50.00	1.190	1.190	1.00
31	15:49	1.00	1.125	1.00	50.00	50.00	1.102	1.102	1.00
32	17:09	1.00	1.221	1.00	50.00	50.00	0.533	0.533	1.00
33	10:00	1.00	0.721	1.00	50.00	50.00	1.207	1.207	1.00
34	11:09	1.00	0.799	1.00	50.00	50.00	0.758	0.758	1.00
35	17:00	1.00	1.210	1.00	50.00	50.00	2.206	2.236	1.00

AR100472


ORIGINA
BIC
04/06/92 11:25:00
SAMPLE: 6502 VOLATILE SCREENING STANDARD
RANGE: 1. 400 LAB: B 0. 4.0 QUAN: A 0. 1.0 BASE: U 20. 3
DATA: VOL023 #1
CALI: FC112581 #1
SCANS 1 TO 400
287744.
100.0
BIC
AR100473
34
65
75
95
106
120
129
152
178
197
215
233
254
269
293
306
330
354
386
50
2:35
100
5:10
150
7:45
250
12:55
300
15:30
350
18:05
SCAN
TIME


ORIGINAL (Red)
04/19/32 19:09:00
SAMPLE: 70UG/L 1,2,3,4-TCDD STD
CALI: FC112581 01
RANGE: G 1. 250 LABEL: N 3. 4.0 QUAN: A . 1.0 BASE: U 50. 3
174
3736.
11276.
27.0
257
3824.
257.077
± 0.500
174
12632.
40500.
1,2,3,4-TCDD
89.8
320
12704.
320.096
± 0.500
190
2657.
36564.
174
14144.
50936.
100.0
322
14144.
322.096
± 0.500
190
3224.
44396.
173
8171.
26497.
58.5
324
8272.
324.097
± 0.500
184
1529.
8410.
190
1991.
15425.
150
160
170
180
190
200 SCAN
M/E 50
2:24
2:33
2:42
2:51
3:00 TIME
AR100474


ORIGINA
(Red)
MID MASS SPECTRUM
04/19/82 19:09:00 + 2:37
SAMPLE: 70UG/L 1.2.3.4-TCDD STD
DATA: 23424D9 #174
CALI: FC112581 01
BASE M/E: 320
RIC: 51200.
320
12656.
50.0
257
100
150
200
250
300
350
400
450
500

AR100475

Table 3. FSCC Ongoing QC Data

Lab WCTS

ORIGINAL (Red)

Name	INITIAL RRF	4-18-82 SWNP047	AVERAGE	RRF on Given Date		
N-Nitrosodimethylamine	0.467	0.353	0.411			
Bis(2-chloroethyl)ether	1.101	1.158	1.130			
2-Chlorophenol	0.964	0.973	0.968			
1,3-Dichlorobenzene	0.840	0.816	0.828			
1,4-Dichlorobenzene	1.030	1.125	1.078			
1,2-Dichlorobenzene	0.942	0.857	0.890			
Bis(2-chloroisopropyl)ether	0.308	0.267	0.288			
Ethane, hexachloro-	0.432	0.577	0.604			
N-nitroso-di-N-propylamine	0.023	0.023	0.023			
Nitrobenzene	0.106	0.114	0.110			
Isophorone	0.470	0.335	0.402			
2-Nitrophenol	0.164	0.124	0.144			
2,4-Dimethylphenol	0.298	0.378	0.338			
Bis(2-chloroethoxy)methane	0.406	0.550	0.478			
2,4-Dichlorophenol	0.282	0.322	0.302			
1,2,4-Trichlorobenzene	0.334	0.424	0.379			
Naphthalene	0.936	1.144	1.040			
Hexachlorobutadiene	0.160	0.171	0.166			
4-Chloro-M-cresol	0.246	0.306	0.276			
Hexachlorocyclopentadiene	0.134	0.078	0.106			
2,4,6-Trichlorophenol	0.182	0.219	0.200			
2-Chloronaphthalene	0.520	0.832	0.676			
Acenaphthylene	0.447	0.692	0.570			
Dimethyl phthalate	0.453	0.772	0.612			
2,6-Dinitrotoluene	0.084	0.128	0.106			
Acenaphthene	0.571	0.586	0.584			
2,4-Dinitrophenol	0.046	0.011	0.028			
2,4-Dinitrotoluene	0.130	0.155	0.142			
4-Nitrophenol	0.078	0.056	0.067			
Fluorene	0.714	0.724	0.719			
4-Chlorophenyl phenylether	0.400	0.387	0.394			
Diethyl Phthalate	0.876	0.897	0.886			
4,6-Dinitro-O-cresol	0.067	0.023	0.045			
Diphenylamine	0.207	0.215	0.211			
Azobenzene	0.014	0.008	0.011			
4-Bromophenyl phenyl ether	0.210	0.216	0.213			
Hexachlorobenzene	0.297	0.335	0.316			
Pentachlorophenol	0.150	0.100	0.125			
Phenanthrene	0.925	0.939	0.932			
Anthracene	0.830	1.037	0.934			
Dibutyl phthalate	1.324	1.712	1.518			
Fluoranthene	0.893	1.049	0.971			
Pyrene	1.026	1.029	1.028			
Benzidine	0.190	0.031	0.110			
Butyl benzyl phthalate	1.117	1.070	1.094			
Benz(a)anthracene	0.702	0.967	0.834			
Chrysene	0.844	0.929	0.886			
3,3'-Dichlorobenzidine	0.345	0.367	0.311			
Bis(2-ethylhexyl)phthalate	1.386	1.567	1.476			
Di-N octyl phthalate	2.046	2.137	2.092			
Benzo(b+k)Fluoranthenes	0.834	0.680	0.757			
Benzo(a)pyrene	0.834	0.680	0.757			
Indeno(1,2,3-cd)pyrene	0.466	0.420	0.443			
Dibenzo(a,h)anthracene	1.908	1.720	1.814			
Benzo(ghi)perylene	2.451	2.084	2.268			
PHENOL	0.239	0.226	0.232			

AR100476

ORIGINAL
(Red)

Table 1. FSCC Ongoing QC Data — Pesticides

Lab WCTS

Name	INITIAL RRF	RRF on Given Date				
		4-18-82 BNAP047	AVERAGE			
Alpha-BHC	0.166	0.148	0.157			
Gamma-BHC	0.136	0.118	0.127			
Beta-BHC						
Delta-BHC	0.104	0.089	0.096			
Heptachlor	0.122	0.115	0.118			
Aldrin	0.022	0.024	0.023			
4,4'-DDE	0.380	0.298	0.339			
Dieldrin	0.464	0.326	0.395			
4,4'-DDD	0.546	0.478	0.512			
4,4'-DDT	0.469	0.344	0.406			
Beta endosulfan	0.040	0.031	0.036			
Endosulfan sulfate	0.094	0.080	0.087			
Endrin	0.182	0.147	0.164			
Alpha endosulfan	0.044	0.035	0.040			

Notes to Table 3:

RRF: Report the average RRF from the most recent initial calibration

Other columns: Report the date, the RRF obtained on that date, and the data file name. Use letters (A,B,C) for more than one data point on a single day.

AR100477

ORIGINAL (Red)

Internal Standard Response Verification Data Sheet

Method FSCC Fraction B/N/A

ISA Benzo(a)pyrene-D12 Level 40 ug/L ISB Benzanthracene-D12 Level 20 ug/L ISC --- Level ---

Sample/Run	Date	Operator	ISA Resp	ISA RRT*	ISB Resp	ISB RRT*	ISC Resp	ISC RRT*	R_1	R_2
C5047	4/18/82	Rich A.	0.63	1.0	1.0	0.65	---	---	0.63	---
C5048	4/18/82	Rich A.	0.35	1.0	1.0	0.65	---	---	0.35	---

R_1 = (resp ISA) / (resp/ISB)
R_2 = (resp ISB) / (resp/ISC)
*RRT = relative retention time referencing latest eluting standard

Example 3-8

022

AR100478

ORIGINAL (Red)

Internal Standard Response Verification Data Sheet

Method FSCC Fraction B/N/A

ISA Phenol D3 Level 20 ug/L ISB Naphthalene D8 Level 20 ug/L ISC Chrysene D12 Level 20 ug/L

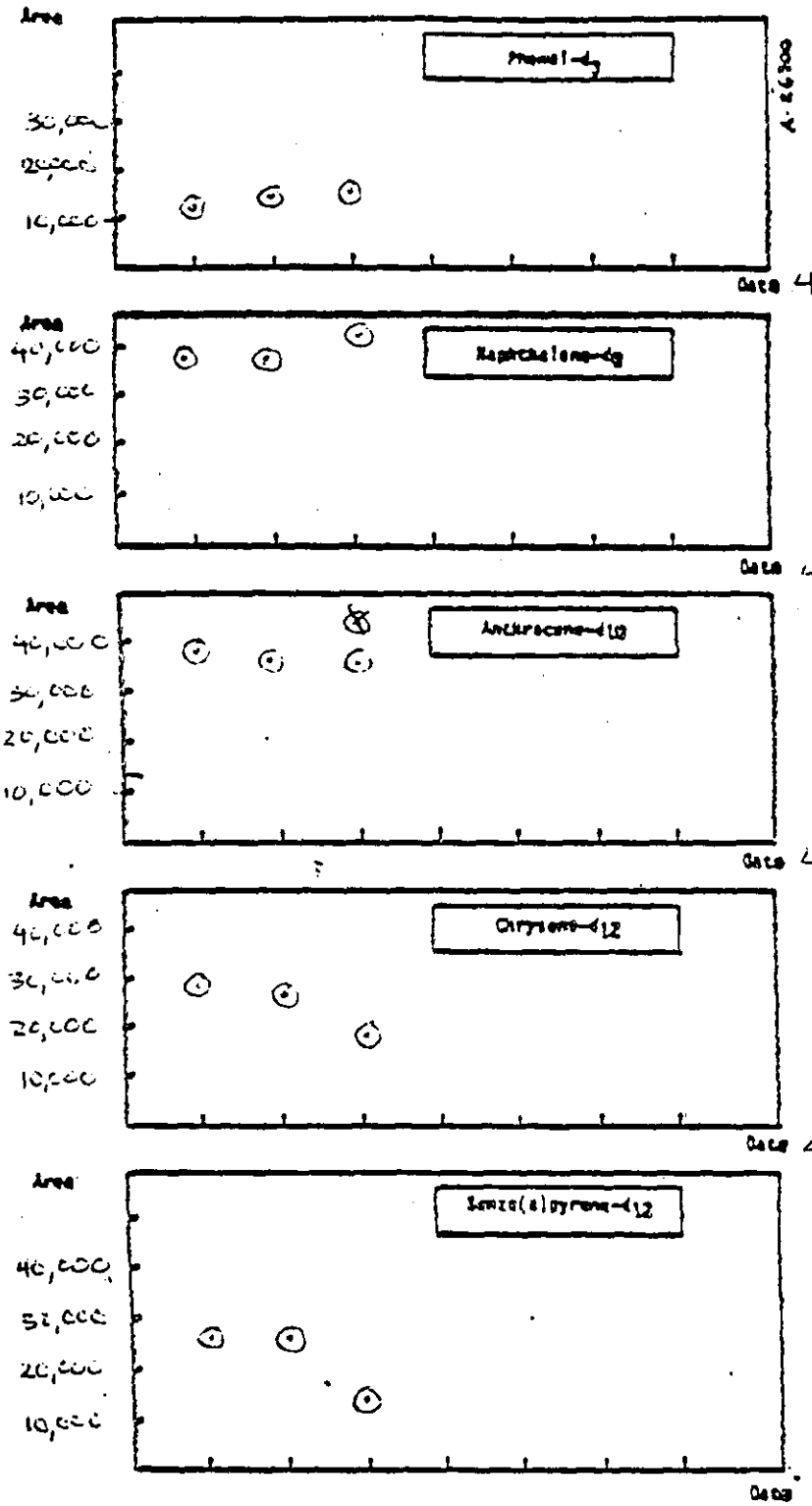
Sample/Run	Date	Operator	ISA Resp	ISA RRT*	ISB Resp	ISB RRT*	ISC Resp	ISC RRT*	R_1	R_2
C5047	4/18/82	Rich A	0.38	0.24	1.09	0.36	0.66	0.88	0.35	1.65
C5048	4/18/82	Rich A	0.45	0.25	1.33	0.36	054	0.88	0.34	2.46

Example 3-6

220

R_1 = (resp ISA) / (resp/ISB)
R_2 = (resp ISB) / (resp/ISC)
*RRT = relative retention time referencing latest eluting standard

AR100479



FSCC Ongoing QC Data — Area Counts for the Internal Standards Versus Time

Form IX

ORIGINAL
(Red)

FORM IA

GC/MS PERFORMANCE STANDARD - Decafluorotriphenylphosphine

Date 4/18/82 Run no. SES4SCNS213 Analyst RICH A

m/e	Ion Abundance Criteria	SPEC # 332	SPEC #	SPEC #
51	30-60% of mass 198	58		
68	less than 2% of mass 69	ND		
70	less than 2% of mass 69	ND		
127	40-60% of mass 198	58		
197	less than 1% of mass 198	ND		
198	base peak, 100% relative abundance	100		
199	5-9% of mass 198	6		
275	10-30% of mass 198	20		
365	1% of mass 198	1		
441	less than mass 443	9		
442	greater than 40% of mass 198	60		
443	17-23% of mass 442	10		

Comments:

Colum description SE54 - 30M FUSED SILICA

Temperature ——— Isothermal ——— Program 30°C (4 min) - 270°C AT 10°C/MIN

Example 37.

AR100481

VOA Bottle ORIGINAL (Rec)
empty, baked

F3-8201-32

ADS

4/5/82

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number CH904-C0112B

DE-7

Filled with Mead's Lab H2O

Laboratory Name Mead CompuChem

Lab Sample ID NO. 13357

QC Report NO. 18-50

	VOLATILES	ug/l
2V	acrolein	ND
3V	acrylonitrile	ND
4V	benzene	ND
6V	carbon tetrachloride	ND
7V	chlorobenzene	ND
10V	1,2-dichloroethane	ND
11V	1,1,1-trichloroethane	ND
13V	1,1-dichloroethane	ND
14V	1,1,2-trichloroethane	ND
15V	1,1,2,2-tetrachloroethane	ND
16V	chloroethane	ND
19V	2-chloroethylvinyl ether	ND
23V	chloroform	ND
29V	1,1-dichloroethylene	ND
30V	1,2-trans-dichloroethylene	ND
32V	1,2-dichloropropane	ND
33V	1,3-dichloropropylene	ND
38V	ethylbenzene	ND
44V	methylene chloride	ND
45V	methyl chloride	ND
46V	methyl bromide	ND
47V	bromoform	ND
48V	dichlorobromomethane	ND
49V	trichlorofluoromethane	ND
50V	dichlorodifluoromethane	ND
51V	chlorodibromomethane	ND
85V	tetrachloroethylene	ND
86V	toluene	ND
87V	trichloroethylene	ND
88V	vinyl chloride	ND

ND = NOT DETECTED

	PESTICIDES	
89P	aldrin	
90P	dieldrin	
91P	chlordane	
92P	4,4'-DDT	
93P	4,4'-DDE	
94P	4,4'-DDD	
95P	alpha-endosulfan	
96P	beta-endosulfan	
97P	endosulfan sulfate	
98P	endrin	
99P	endrin aldehyde	
100P	heptachlor	
101P	heptachlor epoxide	
102P	alpha-BHC	
103P	beta-BHC	
104P	delta-BHC	
105P	gamma-BHC	
106P	PCB-1242	
107P	PCB-1254	
108P	PCB-1221	
109P	PCB-1232	
110P	PCB-1248	
111P	PCB-1260	
112P	PCB-1016	
113P	toxaphene	

	DIOXINS
129B	2,3,7,8-tetrachlorodibenzo-p-dioxin

*Less than 10 ug/l

(pesticides less than, 1ug/l)

ORIGINAL
(Red)

ORGANICS ANALYSIS DATA SHEET - Page 3

Lab Name: MEAD COMPUCHEM

QC Report No. 18-50

13357
Sample Number
CH904-SO128

A. Surrogate Spike Results				
			(Surrogates Only)	
Compound	Fraction	Conc.(ug/l)	Spike Added (ug/l)	% Recovery
d_6-Benzene	VOA	21.44	20	107
d_8-Toluene	VOA	22.39	20	112
Fluorophenol	ACID	NA	100	
d_6-Phenol	ACID		100	
Pentafluorophenol	ACID		100	
d_5-Nitrobenzene	BN		100	
Fluorobiphenyl	BN		100	
d_8-Naphthalene	BN		100	

AR100483

ORIGINAL
(Red)

QUALITY CONTROL NOTICE

The volatile analysis of sample 13357 shows the presence of the laboratory artifact siloxane at scan 912. The presence of this compound has resulted from the addition of an antifoaming agent and may or may not actually be present in this sample. Siloxane has not been listed as one of the non-priority pollutant compounds identified in this sample.

Paul Mick

Director, Quality Assurance

ORIGINAL
(Red)

ORGANICS ANALYSIS DATA SHEET - Page 4

Lab Name: MEAD COMPUCHEM

QC REPORT NO: 18-50

13357

SAMPLE NUMBER
C# 904-C01128

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRACTION	% MAXIMUM SCORE ATTAINED MASS MATCHING ROUTINES (SPECIFY)
1		None found		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
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26				
27				
28				
29				
30				

VOA bottle baked

ORGANICS ANALYSIS DATA SHEET-Page 2 | Sample Number CH904-C01129 | ORIGIN (Red)

Laboratory Name Mead CompuChem

Lab Sample ID NO. 13358

QC Report NO. 18-50

	VOLATILES	ug/l
2V	acrolein	ND
3V	acrylonitrile	ND
4V	benzene	ND
6V	carbon tetrachloride	ND
7V	chlorobenzene	ND
10V	1,2-dichloroethane	ND
11V	1,1,1-trichloroethane	ND
13V	1,1-dichloroethane	ND
14V	1,1,2-trichloroethane	ND
15V	1,1,2,2-tetrachloroethane	ND
16V	chloroethane	ND
19V	2-chloroethylvinyl ether	ND
23V	chloroform	ND
29V	1,1-dichloroethylene	ND
30V	1,2-trans-dichloroethylene	ND
32V	1,2-dichloropropane	ND
33V	1,3-dichloropropylene	ND
38V	ethylbenzene	ND
44V	methylene chloride	ND
45V	methyl chloride	ND
46V	methyl bromide	ND
47V	bromoform	ND
48V	dichlorobromomethane	ND
49V	trichlorofluoromethane	ND
50V	dichlorodifluoromethane	ND
51V	chlorodibromomethane	ND
85V	tetrachloroethylene	ND
86V	toluene	ND
87V	trichloroethylene	ND
88V	vinyl chloride	ND

ND = NOT DETECTED

	PESTICIDES	ug/l
89P	aldrin	
90P	dieldrin	
91P	chlordane	
92P	4,4'-DDT	
93P	4,4'-DDE	
94P	4,4'-DDD	
95P	alpha-endosulfan	
96P	beta-endosulfan	
97P	endosulfan sulfate	
98P	endrin	
99P	endrin aldehyde	
100P	heptachlor	
101P	heptachlor epoxide	
102P	alpha-BHC	
103P	beta-BHC	
104P	delta-BHC	
105P	gamma-BHC	
106P	PCB-1242	
107P	PCB-1254	
108P	PCB-1221	
109P	PCB-1232	
110P	PCB-1248	
111P	PCB-1260	
112P	PCB-1016	
113P	toxaphene	

	DIOXINS
129B	2,3,7,8-tetrachlorodibenzo-p-dioxin

*Less than 10 ug/l

(pesticides less than, 1ug/l)

ORIGINAL
(Red)

ORGANICS ANALYSIS DATA SHEET - Page 3

Lab Name: MEAD COMPUCHEM

QC Report No. 18-50

13358
Sample Number
CH904-C0112

A. Surrogate Spike Results				
			(Surrogates Only)	
Compound	Fraction	Conc.(ug/l)	Spike Added (ug/l)	% Recovery
d_6-Benzene	VOA	21.49	20	107
d_8-Toluene	VOA	21.95	20	110
Fluorophenol	ACID	NA	100	
d_5-Phenol	ACID		100	
Pentafluorophenol	ACID		100	
d_5-Nitrobenzene	BN		100	
Fluorobiphenyl	BN		100	
d_8-Naphthalene	BN		100	

AR100487

ORIGINAL
(Red)

QUALITY CONTROL NOTICE

The volatile analysis of sample 13358 shows the presence of the laboratory artifact siloxane at scan 881. The presence of this compound has resulted from the addition of an antifoaming agent and may or may not actually be present in this sample. Siloxane has not been listed as one of the non-priority pollutant compounds identified in this sample.

Paul Mills

Director, Quality Assurance

ORIGINA
(Red)

ORGANICS ANALYSIS DATA SHEET - Page 4

Lab Name: MEAD COMPUCHEM

QC REPORT NO: 18-50

13358

SAMPLE NUMBER
C#904-CS4129

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRACTION	% MAXIMUM SCORE ATTAINED MASS MATCHING ROUTINES (SPECIFY)
1		None Found		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
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16				
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18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

VOA Bottle
Not baked, Frozen

ORGANICS ANALYSIS DATA SHEET-Page 2 Sample Number C#904-C01130

ORIGINAL (Re

Laboratory Name Mead CompuChem

Lab Sample ID NO. 13359

QC Report NO. 18-50

	VOLATILES	ug/l
2V	acrolein	ND
3V	acrylonitrile	ND
4V	benzene	ND
6V	carbon tetrachloride	ND
7V	chlorobenzene	ND
10V	1,2-dichloroethane	ND
11V	1,1,1-trichloroethane	ND
13V	1,1-dichloroethene	ND
14V	1,1,2-trichloroethane	ND
15V	1,1,2,2-tetrachloroethene	ND
16V	chloroethane	ND
19V	2-chloroethylvinyl ether	ND
23V	chloroform	ND
29V	1,1-dichloroethylene	ND
30V	1,2-trans-dichloroethylene	ND
32V	1,2-dichloropropene	ND
33V	1,3-dichloropropylene	ND
38V	ethylbenzene	ND
44V	methylene chloride	ND
45V	methyl chloride	ND
46V	methyl bromide	ND
47V	bromoform	ND
48V	dichlorobromomethene	ND
49V	trichlorofluoromethane	ND
50V	dichlorodifluoromethane	ND
51V	chlorodibromomethane	ND
85V	tetrachloroethylene	ND
86V	toluene	ND
87V	trichloroethylene	ND
88V	vinyl chloride	ND

ND = NOT DETECTED

	PESTICIDES	ug/l
89P	aldrin	
90P	dieldrin	
91P	chlordane	
92P	4,4'-DDT	
93P	4,4'-DDE	
94P	4,4'-DDD	
95P	alpha-endosulfan	
96P	beta-endosulfan	
97P	endosulfan sulfate	
98P	endrin	
99P	endrin aldehyde	
100P	heptachlor	
101P	heptachlor epoxide	
102P	alpha-BHC	
103P	beta-BHC	
104P	delta-BHC	
105P	gamma-BHC	
106P	PCB-1242	
107P	PCB-1254	
108P	PCB-1221	
109P	PCB-1232	
110P	PCB-1248	
111P	PCB-1260	
112P	PCB-1016	
113P	toxaphene	

	DIOXINS	
129B	2,3,7,8-tetrachlorodibenzo-p-dioxin	

*Less than 10 ug/l

(pesticides less than, 1ug/l)

AR100490

ORIGINAL (Red)

Lab Name: MEAD COMPUCHEM

QC Report No. 18-50

13359
Sample Number
C#904-C0130

A. Surrogate Spike Results				
			(Surrogates Only)	
Compound	Fraction	Conc.(ug/l)	Spike Added (ug/l)	% Recovery
d_6-Benzene	VOA	22.61	20	113
d_8-Toluene	VOA	23.43	20	117
Fluorophenol	ACID	NA	100	
d_5-Phenol	ACID		100	
Pentafluorophenol	ACID		100	
d_5-Nitrobenzene	BN		100	
Fluorobiphenyl	BN		100	
d_8-Naphthalene	BN		100	

AR100491

ORIGI
(Red

QUALITY CONTROL NOTICE

The volatile analysis of sample 13359 shows the presence of the laboratory artifact siloxane at scan 913. The presence of this compound has resulted from the addition of an antifoaming agent and may or may not actually be present in this sample. Siloxane has not been listed as one of the non-priority pollutant compounds identified in this sample.

Paul Mick

Director, Quality Assurance

AR100492

ORIGINAL (Red)

ORGANICS ANALYSIS DATA SHEET - Page 4

Lab Name: MEAD COMPUCHEM

QC REPORT NO: 18-SO

13359

SAMPLE NUMBER SH904-CA130

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRACTION	% MAXIMUM SCORE ATTAINED MASS MATCHING ROUTINES (SPECIFY)
1		None found		
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
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29				
30				

AR100493

VOA Bottle
Not baked, filled at least with trip lab water

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number C#904-C01131

Laboratory Name Mead CompuChem

Lab Sample ID NO. 13360

QC Report NO. 18-60

ORIGINAL (Red)

	VOLATILES	ug/l
2V	acrolein	ND
3V	acrylonitrile	ND
4V	benzene	ND
6V	carbon tetrachloride	ND
7V	chlorobenzene	ND
10V	1,2-dichloroethane	ND
11V	1,1,1-trichloroethane	ND
13V	1,1-dichloroethane	ND
14V	1,1,2-trichloroethane	ND
15V	1,1,2,2-tetrachloroethane	ND
16V	chloroethane	ND
19V	2-chloroethylvinyl ether	ND
23V	chloroform	ND
29V	1,1-dichloroethylene	ND
30V	1,2-trans-dichloroethylene	ND
32V	1,2-dichloropropane	ND
33V	1,3-dichloropropylene	ND
38V	ethylbenzene	ND
44V	methylene chloride	ND
45V	methyl chloride	ND
46V	methyl bromide	ND
47V	bromoform	ND
48V	dichlorobromomethane	ND
49V	trichlorofluoromethane	ND
50V	dichlorodifluoromethane	ND
51V	chlorodibromomethane	ND
85V	tetrachloroethylene	ND
86V	toluene	ND
87V	trichloroethylene	ND
88V	vinyl chloride	ND

ND = NOT DETECTED

	PESTICIDES	ug/l
89P	aldrin	
90P	dieldrin	
91P	chlordane	
92P	4,4'-DDT	
93P	4,4'-DDE	
94P	4,4'-DDD	
95P	alpha-endosulfan	
96P	beta-endosulfan	
97P	endosulfan sulfate	
98P	endrin	
99P	endrin aldehyde	
100P	heptachlor	
101P	heptachlor epoxide	
102P	alpha-BHC	
103P	beta-BHC	
104P	delta-BHC	
105P	gamma-BHC	
106P	PCB-1242	
107P	PCB-1254	
108P	PCB-1221	
109P	PCB-1232	
110P	PCB-1248	
111P	PCB-1260	
112P	PCB-1016	
113P	toxaphene	

DIOXINS

129B	2,3,7,8-tetrachlorodibenzo-p-dioxin	

*Less than 10 ug/l

(pesticides less than, 1ug/l)

AR100494

ORIGINAL (Red)

ORGANICS ANALYSIS DATA SHEET - Page 3

Lab Name: MEAD COMPUCHEM

QC Report No. 18-50

13360
Sample Number
C#904-C01131

A. Surrogate Spike Results				
			(Surrogates Only)	
Compound	Fraction	Conc.(ug/l)	Spike Added (ug/l)	% Recovery
d_6-Benzene	VOA	21.24	20	107
d_8-Toluene	VOA	22.00	20	110
Fluorophenol	ACID	NA	100	
d_5-Phenol	ACID		100	
Pentafluorophenol	ACID		100	
d_5-Nitrobenzene	BN		100	
Fluorobiphenyl	BN		100	
d_8-Naphthalene	BN		100	

AR100495

ORIGINA
(Red)

QUALITY CONTROL NOTICE

The volatile analysis of sample 13360 shows the presence of the laboratory artifact siloxane at scan 881. The presence of this compound has resulted from the addition of an antifoaming agent and may or may not actually be present in this sample. Siloxane has not been listed as one of the non-priority pollutant compounds identified in this sample.

Paul Mick

Director, Quality Assurance

AR100496

ORIGINAL
(Red)

ORGANICS ANALYSIS DATA SHEET - Page 4

Lab Name: MEAD COMPUCHEM

QC REPORT NO: VB-50

13360
SAMPLE NUMBER
C# 904-C01131

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRACTION	% MAXIMUM SCORE ATTAINED-MASS MATCHING ROUTINES (SPECIFY)
1		None Found		
2				
3				
4				
5				
6				
7				
8				
9				
10				
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30				

AR100497

Fisher Scientific Company

ORIGINA
(Red)

Chemical Manufacturing Division
P.O. Box 375
1 Reagent Lane
Fair Lawn, New Jersey 07410
(201) 796-7100

Instruments, Apparatus, Furniture, Chemicals and Diagnostics for Laboratories

Dr. Stan Bamble
Ecology and Enamel Co.
8021 Route 130
Pennsauken,N.J. 08110

Catalog No. W-5 Name & Grade: Water,HPLC Grade

Lot No. All lots

P.O.No.

This is to certify that units of the above-mentioned lot number were tested and found to comply with the specifications of the grade listed. The following are the specifications tested:

Appearance	Clear,colorless,liquid
Color (APHA)	Not more than 5
Residue after Evaporation	Not more than 0.0001%
HPLC Suitability Test (Gradient Elution Run)	Pass Test
Total Organic Carbon	Not more than 180 ppb
pH at 25°C	Not more than 7.0

REPORTED BY: Gin C. Ho
Gin C. Ho
Analytical Laboratory Supervisor

APPROVED BY: Gaston L. Pillori
Gaston L. Pillori
Manager of Quality Assurance

Signed: 3/9/82

Fisher Scientific Company

ORIGINAL
(Red)

Chemical Manufacturing Division
P.O Box 375
1 Reagent Lane
Fair Lawn, New Jersey 07410
(201) 796-7100

Instruments, Apparatus, Furniture, Chemicals and Diagnostics for Laboratories

Dr. Stan Bamble
Ecology and Enamel Co.
8021 Route 130
Pennsauken,N.J. 08110

Catalog No. CS-999 Name & Grade: Diagnostic Grade Water

Lot No. All

P.O.No. _____

This is to certify that units of the above-mentioned lot number were tested and found to comply with the specifications of the grade listed. The following are the specifications tested:

Appearance	Clear,colorless,liquid
Color	5 APHA Maximum
Specific Conductance at 25°C	2.0×10^{-6} ohm^{-1}cm^{-1} Maximum
pH at 25°C	5.4 - 7.0
Permanganate Time	60 Minutes Minimum
Silicate (as SiO2)	0.03 ppm Maximum
Heavy Metals (as Pb)	0.05 ppm Maximum
Ammonia (as NH_4)	1 ppm Maximum
Chloride (Cl)	2 ppm Maximum
Calcium (Ca)	1 ppm Maximum
Copper (Cu)	1 ppm Maximum
Iron (Fe)	1 ppm Maximum
Sodium (Na)	1 ppm Maximum
Suitability for Enzyme Analysis:	
LDH	To Pass Test
SGOT	To Pass Test
CPK	To Pass Test
Microbiological Analysis	To Pass Test

REPORTED BY: _____
Gin C. Ho
Analytical Laboratory Supervisor

APPROVED BY: _____
Gaston L. Pillori
Manager of Quality Assurance

Signed: 3/9/82

Fisher Scientific Company

ORIGINAL
(Red)

Chemical Manufacturing Division
P.O. Box 375
1 Reagent Lane
Fair Lawn, New Jersey 07410
(201) 796-7100

Instruments, Apparatus, Furniture, Chemicals and Diagnostics for Laboratories.

Analytical Control Laboratory Analysis

Dr. Stan Bumble
Ecology and Environment,Inc.
8021 Rte 130
Pensauken,N.J. 08110

Catalog No. A-200 Name & Grade: Nitric Acid,ACS

Lot No. All

P.O.No.

This is to certify that units of the above-mentioned lot number were tested and found to comply with the specifications of the grade listed. The following are the specifications tested:

Appearance	Colorless and free from suspended matter or sediment
Color (APHA)	Not more than 10
Assay	Not less than 69.0% nor more than 71.0% HNO_3
Arsenic (As)	Not more than 0.004 ppm
Chloride (Cl)	Not more than 0.1 ppm
Copper (Cu)	Not more than 0.1 ppm
Heavy Metals (as Pb)	Not more than 0.2 ppm
Iron (Fe)	Not more than 0.2 ppm
Nickel (Ni)	Not more than 0.1 ppm
Phosphate (PO_4)	Not more than 0.2 ppm
Residue after Ignition	Not more than 4 ppm
Sulfate (SO_4)	Not more than 0.8 ppm
Chromium (Cr)	Not more than 0.3 ppm
Mercury (Hg)	5 ppb

REPORTED BY: Gin C. Ho
Gin C. Ho
Analytical Laboratory Supervisor

APPROVED BY: R.V. DeDonn
Gaston L. Pillori
Manager of Quality Assurance

Signed: Feb.1,1982

for inorganics

ORIGIN
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Fisher Scientific Company

Chemical Manufacturing Division

SPECIFICATIONS AND ANALYTICAL METHODS SHEET

Item Catalog No., Name and Grade			Page No.
A-200 Nitric Acid, ACS			1 of 4
Item Formula	**Formula Weight**	**Effective Date**	**Supersedes**
HNO_3	63.01	1/27/82	8/13/79

PRECAUTIONS

STRONG CORROSIVE. Take proper precautions.
Note: This material may darken during storage due to a photochemical reaction.

Requirements:

Appearance	Colorless and free from suspended matter or sediment
Color (APHA)	Not more than 10
Assay	Not less than 69.0% nor more than 71.0% HNO_3
Arsenic (As)	Not more than 0.004 ppm
Chloride (Cl)	Not more than 0.1 ppm
Copper (Cu)	Not more than 0.1 ppm
Heavy Metals (as Pb)	Not more than 0.2 ppm
Iron (Fe)	Not more than 0.2 ppm
Nickel (Ni)	Not more than 0.1 ppm
Phosphate (PO_4)	Not more than 0.2 ppm
Residue after Ignition	Not more than 4 ppm
Sulfate (SO_4)	Not more than 0.8 ppm
Chromium (Cr)	Not more than 0.3 ppm (Internal)
Mercury (Hg)	5 ppb

Tests:

Appearance - Mix the acid in the original container and transfer 10 ml to a test tube (20 mm x 150 mm) and compare with distilled water in a similar tube. The liquids should be equally clear and free from suspended matter, and on looking across the columns by transmitted light, there should be no apparent difference in color between the two liquids.

Color (APHA) - For the standard dilute 2 ml of platinum-cobalt stock solution (APHA No. 500) to 100 ml with water. Compare this solution (APHA No. 10) with 100 ml of the sample in 100 ml Nessler tubes, viewed vertically over a white background.

Assay - Tare a small glass-stoppered flask containing about 15 ml of

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emical Manufacturing Division

SAMS continued

Item Catalog No.	Effective Date	Supersedes	Page No.
A-200	1/27/82	8/13/79	2 of 4

water. Quickly add about 2 ml of the sample, stopper, cool, and weigh accurately. Dilute with about 40 ml of water, add methyl orange indicator solution, and titrate with 1.0N sodium hydroxide. Run in duplicate. One milliliter of 1.0N sodium hydroxide corresponds to 0.06301 grams of HNO_3.

Calculation:

$$\%HNO_3 = \frac{\text{Titer} \times \text{Normality} \times 0.06301 \times 100}{\text{Sample Weight}}$$

Arsenic - To 525 ml (740 grams sample) in a 250 ml beaker add 5 ml of sulfuric acid, and evaporate to a volume of about 5 ml on a steam bath. Transfer the beaker to a hot plate in a hood and heat to dense fumes of sulfur trioxide. Cool, cautiously wash down the beaker with about 10 ml of water, evaporate again to dens fumes of sulfur trioxide, and continue the fuming for 15 minutes. Cool, wash down the beaker with about 10 ml of water and repeat the fuming. Cool, cautiously wash the solution into a generator flask with sufficient water to make 35 ml, add 0.5 gram of hydrazine sulfate and, determine the arsenic content by the A.C.S. silver diethyldithiocarbamate method. Any red color in the sample solution should not exceed that produced in a control solution containing 0.003 mg of arsenic ion (As).

Chloride - Dilute 70 ml (100 grams sample) with 10 ml of water and add 1 ml of silver nitrate reagent solution. Prepare a standard containing 0.01 mg of chloride ion (Cl) in 20 ml of water and add 1 ml of silver nitrate reagent solution. Evaporate the solutions to dryness on the steam bath. Dissolve the residues in 0.5 ml of ammonium hydroxide, dilute to 20 ml with water, and add 1.5 ml of nitric acid. Any turbidity in the solution of the sample should not exceed that in the standard.

Solution A - Evaporate 176 ml (250 grams sample) to dryness on a steam bath. Add 3 ml of nitric acid, and digest for 2 minutes on a steam bath. Transfer the solution to a 25 ml volumetric flask, rinse the beaker and transfer the rinsings to the flask, dilute to the 25 ml mark (1 ml = 10 grams). This solution will be used in the determination of Copper, Nickel and Chromium.

Copper and Nickel - Observe the absorption for Solution A on a suitable Atomic Absorption Spectrophotometer at the following wavelengths using established parameters. The absorption found should be less than that of a 1 ppm copper ion (Cu) and 1 ppm nickel (Ni) control.

Copper - 324.8nn Nickel - 232.0nm

Chromium - Observe the absorption for solution A on a suitable A.A. spectrophotometer using established parameters. The absorption of the sample should be less than a 3.0 ppm Cr control. Chromium 357.9 nm

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Chemical Manufacturing Division

SAMS continued

Item Catalog No.	Effective Date	Supersedes	Page No.
A-200	1/27/82	8/13/79	3 of 4

Heavy Metals - To 70 ml (100 grams sample) in a beaker add about 10 mg of sodium carbonate, evaporate to dryness on the steam bath, dissolve the residue in about 20 ml of water, and dilute to 25 ml. For the standard dilute a solution containing 0.02 mg of lead ion (Pb) to 25 ml. Adjust the pH of the standard and sample solutions to between 3 and 4 (using a pH meter) with 1N acetic acid or ammonium hydroxide (10% NH_3), dilute to 40 ml, and mix. Add 10 ml of freshly prepared hydrogen sulfide water to each and mix. Any color in the solution of the sample should not exceed that in the standard.

Iron - Evaporate 35 ml (50 grams sample) to dryness, dissolve the residue in 2 ml of hydrochloric acid, dilute to 50 ml, and add 30 to 50 mg of ammonium peroxydisulfate crystals and 3 ml of ammonium thiocyanate reagent solution. Any red color should not exceed that produced by 0.01 mg of iron (Fe) in an equal volume of solution containing the quantities of reagents used in the test.

Phosphate - Evaporate 70 ml (100 grams sample) to dryness. Warm the residue with 1 ml of 25% sulfuric acid and a few ml of water. Transfer to a Nessler tube and dilute to 25 ml. Add 1 ml each of phosphate reagents "A" and "B" and heat to 60°C for 10 minutes. Any blue color produced is not greater than a blank containing 0.02 mg of phosphate ion (PO_4) and the quantity of reagents used in the test.

Residue after Ignition - To 174 ml (250 grams sample) in a tared dish add 0.05 ml of sulfuric acid, evaporate as far as possible on the steam bath, and heat gently to volatilize the excess sulfuric acid. Finally, ignite at 800° ± 25°C for 15 minutes. The weight of the residue should not exceed 0.0010 gram.

Sulfate - Add about 10 mg of sodium carbonate to 35 ml (53 grams sample). Evaporate to dryness, dissolve in 4 ml of water plus 1 ml of dilute hydrochloric acid (1 + 19), and filter if necessary through a small filter. Wash with two 2-ml portions of water, dilute to 10 ml, and add 1 ml of barium chloride reagent solution. Any turbidity should not exceed that produced by 0.04 mg of sulfate ion (SO_4) in an equal volume of solution containing the quantities of reagents used in the test. The comparison should be made 10 minutes after the barium chloride is added to the sample and standard solutions.

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Chemical Manufacturing Division

SAMS continued

Item Catalog No.	Effective Date	Supersedes	Page No.
A-200	1/27/82	8/13/79	4 of 4

Mercury (By Flameless A.A.):

Prepare three 125 ml conical flasks as follows:

A. 5.0 gram sample (3.6 ml) + 10 ml of 25% NaOH + 5 ml of H_2O + 0.5 ml of H_2SO_4 (conc.) + 5 ml of 4% $KMnO_4$.

B. 5.0 gram sample (3.6 ml) + 0.05 microgram of Mercury + 10 ml of 25% NaOH + 5 ml of H_2O + 0.5 ml of H_2SO_4 (conc.) + 5 ml of 4% $KMnO_4$.

C. 5.0 gram sample (3.6 ml) + 0.10 microgram of Mercury + 10 ml of 25% NaOH + 5 ml of H_2O + 0.5 ml of H_2SO_4 (conc.) + 5 ml of 4% $KMnO_4$.

Let the mixture stand for 15 minutes at room temperature. Then, keep on the steam bath for 15 minutes. Let it cool to room temperature before running mercury by Flameless A.A. Using established parameters on the A.A., determine absorbance for mercury in each flask by the Flameless A.A. as follows:

Transfer the content of the flask to an aeration vessel, rinse the flask with 1 ml of 10% hydroxylamine hydrochloride in HCl, and add to the aeration vessel. Drop by drop, add 10% of hydroxylamine hydrochloride until $KMnO_4$ color discharges. Add 3.3 ml of 10% $SuCl_2$ in conc. HCl to the aeration vessel, and immediately connect it to the instrument. Bubbling is continued until the maximum absorbance has been reached.

After determination of absorbance for mercury in each flask, calculate mercury content in the sample by plotting absorbance vs. mercury concentration.

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SAMPLE ANALYTICAL DATA
QUALITY ASSURANCE REVIEW

1. Site: _____ TDD Number _____

2. Date: _____

3. ☐ Contract Lab _____ ☐ NEIC

4. Sample Concentration:

   ☐ Organics ☐ High ☐ Low

   ☐ Inorganics ☐ Medium

5. Lot No. bottles: VOA _____, extractable organics, 1/2 gallon amber _____, inorganics, 1 liter PE _____, 8 oz. _____

6. Source of blank water _____

7. Of compounds noted above, indicate the pattern of contamination for each blank contaminant found. Circle one.

	SAMPLE BLANK	LAB BLANK*	SAMPLES (Indicate contaminant, indicate fraction of contaminated samples)
A.	X		
B.		X	
C.			X ( )
D.	X	X	
E.	X		X ( )
F.	X	X	X ( )

*Lab (Reagent) blank data provided ☐ Yes ☐ No

Key to probably source of contamination

A. Sample blank water
B. Lab water
C. Sample (i.e. actual level of pollution)
D. Both lab and sample blank water (same contaminant)
E. Bottle (or sampling)
F. Laboratory
G. Inconclusive due to no lab blank

Comments: _____

---

8. Surrogate Spike Recoveries (avg.)

	< 40%	40-80%	80-120%	> 120%
Base/Neutral	☐	☐	☐	☐
Acid Extractables	☐	☐	☐	☐
VOA	☐	☐	☐	☐

If inorganic, attach a copy of inorganic blank analysis.

AR100505

ORIGINAL
(Red)

3308 East Chapel Hill/Nelson Highway
P.O. Box 12652
Research Triangle Park, NC 27709

Telephone: 919-549-8263
800-334-8525

Mead CompuChem

April 8, 1982

RECEIVED EEB

APR 13 1982

U.S. Environmental Protection Agency
HWI/Sample Management Office
Post Office Box 818
Alexandria, Virginia 22313

Attention: Mr. W. Topping
Contracting Officer

Stauffer, DE-7

Subject: Report of Quality Control Data - EPA Contract 68-01-6432

Dear Mr. Topping:

Enclosed herewith are the results of analytical work performed in accordance with the referenced contract.

This report includes results associated with the analysis of a matrix spike and duplicate sample. Data contained herein constitutes the quality control associated with EPA Case Number 904 received by Mead CompuChem 3-12-82.

If you have any questions regarding this package, please contact me at 1/800/334-8525 or 919/549-8263.

Very truly yours,

Richard L Blaem

Kevin McConnaghy
for Government Market Manager

KMcC:cw

Enclosures: See Attached

cc: Warren Arrington

AR100506

ORIGINAL
(Red)

MeadCompuChem

Enclosures:

Results of Matrix Spike (Low or Medium) Level (Soil or Water)
EPA# for VOA 13407 , BN/A 13407 , Pest. 13407
CC# for VOA C01193, BN/A C01193, Pest. C01193

Results of Duplicate (Low or Medium) Level (Soil or Water)
EPA# for VOA 13407, BN/A 13407, Pest. 13407
CC# for VOA C01193 BN/A C01193 Pest. C01193

NOTE: Quality Control information contained in this report applies to:

EPA#s: C01190 C01136 C01135 C01193

CC#s: 13404 13405 13406 13407

AR100507

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGINAL (Red)

Laboratory Name Mead CompuChem

Case Number 904

Lab Sample ID NO. 13410 SPIKE

QC Report No. 44-40

		ug/g
	VOLATILES	
107-02-8	acrolein	10U
107-13-1	acrylonitrile	10U
71-43-2	benzene	3.2
56-23-5	carbon tetrachloride	1U
108-90-7	chlorobenzene	3.3
107-06-2	1,2-dichloroethane	1U
71-55-6	1,1,1-trichloroethane	1U
75-34-3	1,1-dichloroethane	1U
79-00-5	1,1,2-trichloroethane	1U
79-34-5	1,1,2,2-tetrachloroethane	1U
75-00-3	chloroethane	1U
110-75-8	2-chloroethylvinyl ether	1U
67-66-3	chloroform	1U
75-35-4	1,1-dichloroethene	1U
156-60-5	1,2-trans-dichloroethene	1U
78-87-5	1,2-dichloropropane	1U
10061-0X-XX	1,3-dichloropropiene	1U
100-41-4	ethylbenzene	1U
75-09-2	methylene chloride	1U
74-87-3	chloromethane	1U
74-83-9	bromomethane	1U
75-25-2	bromoform	1U
75-27-4	dichlorobromomethane	1U
75-69-4	trichlorofluoromethane	1U
75-71-8	dichlorodifluoromethane	1U
124-48-1	chlorodibromomethane	1U
127-18-4	tetrachloroethylene	1U
108-88-3	toluene	3.4
79-01-6	trichloroethylene	1U
75-01-4	vinyl chloride	1U

ORIGINA (Red)

Lab Name: Mead CompuChem Case No: 904

Lab Sample I.D. No. 13410 SPIKE

QC Report No: 44 - 40

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
d_6-Benzene	VOA	11.5	10.0 ug/g	115
d_8-Toluene	VOA	11.8	10.0 ug/g	118

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORIGIN
(Red)

ORGANICS ANALYSIS DATA SHEET - Page 4

Lab Name: Mead CompuChem Case No. 904

Lab Sample I.D. No. 13410 SPIKE

QC Report No: 44- 40

Sample Number

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRAC-TION	% Pur.	Est. Conc.
1			BN		
2			BN		
3			BN		
4			BN		
5			BN		
6			BN		
7			BN		
8			BN		
9			BN		
10			BN		
11			ACID		
12			ACID		
13			ACID		
14			ACID		
15			ACID		
16			ACID		
17			ACID		
18			ACID		
19			ACID		
20			ACID		
21		none	VOA		
22			VOA		
23			VOA		
24			VOA		
25			VOA		
26			VOA		
27			VOA		
28			VOA		
29			VOA		
30			VOA		

Sample No: 13410/13407 C01193

Lab Standard ID: 13404-13407

U. S. ENVIRONMENTAL PROTECTION AGENCY
HWI SAMPLE MANAGEMENT OFFICE

Lab Name: Pilot Computing
Report No: 44-40
Page 1 of 2

ORIGINAL (Red)

QUALITY CONTROL REPORT

A. MATRIX SPIKE ANALYSIS

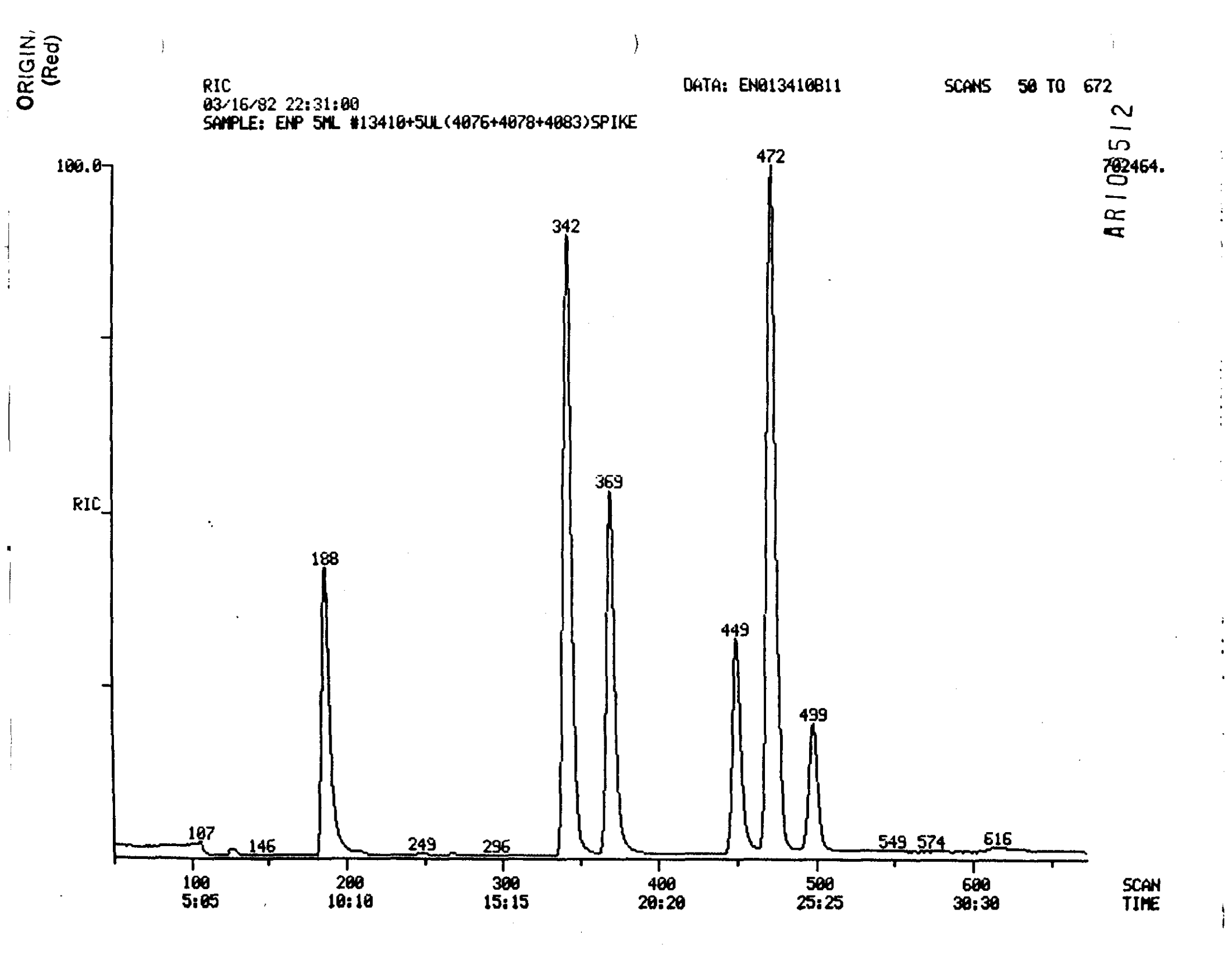
COMPOUND (including surrogates)					CONCENTRATION (ug/g)			
P.	P.	#		COMPOUND NAME	Sample Result (SR)	Spiked Sample Result (SSR)	Spike Added (SA)	% Recovery*
0	0	4	V	benzene	ND	3.2	2.5	128
0	0	7	V	chlorobenzene	ND	3.3	2.5	132
0	8	6	V	toluene	ND	3.4	2.5	136

This QC Report also covers the following sample numbers:

*% Recovery = $\frac{(SSR - SR)}{(SA)} \times 100$

2/15/80

AR100511


ORIGIN,
(Red)
RIC
03/16/82 22:31:00
SAMPLE: ENP 5ML #13410+5UL(4076+4078+4083)SPIKE
DATA: EN013410B11
SCANS 50 TO 672
AR10512
702464.
100.0
RIC
107
146
188
249
296
342
369
449
472
499
549
574
616
100
5:05
200
10:10
300
15:15
400
20:20
500
25:25
600
30:30
SCAN
TIME

ORIGINAL
(Red)

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: EN013410B11

DATA: EN013410B11.TI
[illegible]/16/82 22:31:00
[illegible]PLE: ENP 5ML #13410+5UL(4076+4078+4083)SPIKE
SUBMITTED BY: 11 ANALYST: REL

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CHLOROMETHANE
3	VINYL CHLORIDE
4	CHLOROETHANE
5	BROMOMETHANE
6	ACROLEIN
7	ACRYLONITRILE
8	BROMOCHLOROMETHANE (INTERNAL STANDARD)
9	METHYLENE CHLORIDE
10	TRICHLOROFLUOROMETHANE
11	1,1-DICHLOROETHYLENE
12	1,1-DICHLOROETHANE
13	TRANS-1,2-DICHLOROETHYLENE
14	CHLOROFORM
15	1,2-DICHLOROETHANE
16	1,1,1-TRICHLOROETHANE
17	CARBON TETRACHLORIDE
18	BROMODICHLOROMETHANE
[illegible]	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
[illegible]	1,2-DICHLOROPROPANE
21	TRANS-1,3-DICHLOROPROPENE
22	TRICHLOROETHYLENE
23	BENZENE
24	CIS-1,3-DICHLOROPROPENE
25	1,1,2-TRICHLOROETHANE
26	DIBROMOCHLOROMETHANE
27	BROMOFORM
28	1,1,2,2-TETRACHLOROETHYLENE
29	1,1,2,2-TETRACHLOROETHANE
30	TOLUENE
31	CHLOROBENZENE
32	ETHYLBENZENE
33	2-CHLOROETHYL VINYL ETHER
34	2-BROMO-1-CHLOROPROPANE(INTERNAL STANDARD)
35	D6 BENZENE
36	D8 TOLUENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	130	187	9:30	1	1.000	A BB	311200.	10.000 UG/GM	13.54
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
[illegible]	NOT FOUND								
[illegible]	NOT FOUND								
[illegible]	130	187	9:30	8	1.000	A BB	311200.	10.000 UG/GM	13.54

ORIGIN
(Red)

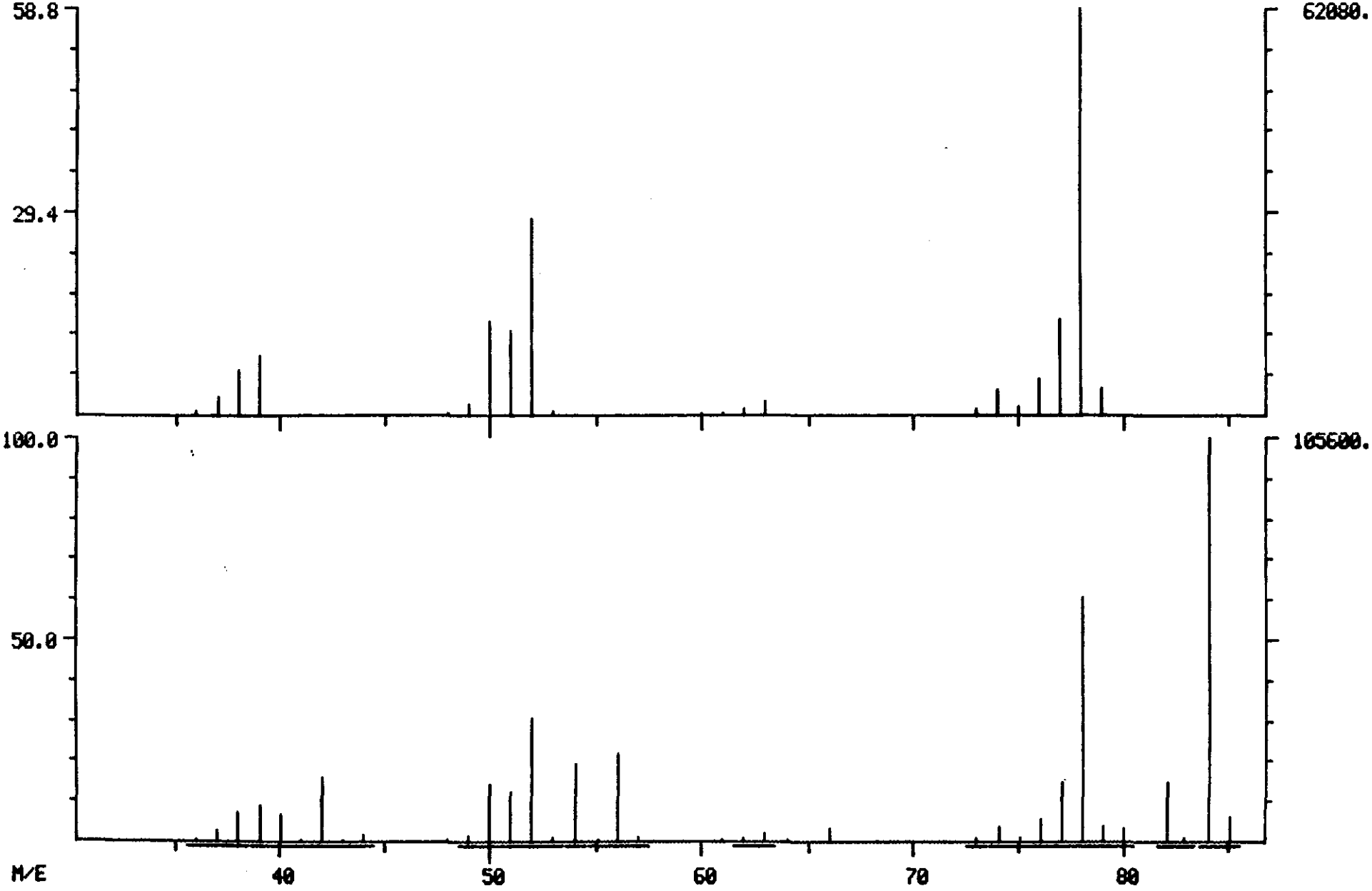
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT	
9	84	127	6:27	8	0.679	A BB	7295.	0.185	UG/GM	0.25	
10	101	168	8:32	8	0.898	A BB	182.	0.003	UG/GM	0.00	
11	96	187	9:30	8	1.000	A BB	168.	0.007	UG/GM	0.01	
12	NOT FOUND										
13	NOT FOUND										
14	NOT FOUND										
15	NOT FOUND										
16	97	269	13:40	8	1.439	A BB	3633.	0.079	UG/GM	0.11	
17	NOT FOUND										
18	NOT FOUND										
19	55	449	22:49	19	1.000	A BB	426120.	10.000	UG/GM	13.54	
20	NOT FOUND										
21	NOT FOUND										
22	NOT FOUND										
23	78	345	17:32	19	0.768	A BB	352247.	3.219	UG/GM	4.36	YES
24	NOT FOUND										
25	NOT FOUND										
26	NOT FOUND										
27	NOT FOUND										
28	NOT FOUND										
29	NOT FOUND										
30	92	475	24:09	19	1.058	A BB	208498.	3.444	UG/GM	4.66	YES
31	112	499	25:22	19	1.111	A BB	262664.	3.279	UG/GM	4.44	YES
32	106	548	27:51	19	1.220	A BB	977.	0.027	UG/GM	0.04	
33	63	370	18:48	19	0.824	A BB	9779.	0.285	UG/GM	0.39	
34	77	369	18:45	34	1.000	A BB	550101.	10.000	UG/GM	13.54	
35	84	342	17:23	34	0.927	A BB	1387860.	11.535	UG/GM	15.62	
36	100	471	23:57	34	1.276	A BB	801928.	11.792	UG/GM	15.97	

ORIGINAL
(Red)

φ47-

DUAL MASS SPECTRUM
03/16/82 22:31:00 + 17:32
SAMPLE: ENP 5ML #13410+5UL(4076+4078+4083)SPIKE
ENHANCED (S 15B 2N)

DATA: EN013410B11 #345 BASE M/E: 78/ 84
RIC: 175615./ 392703.

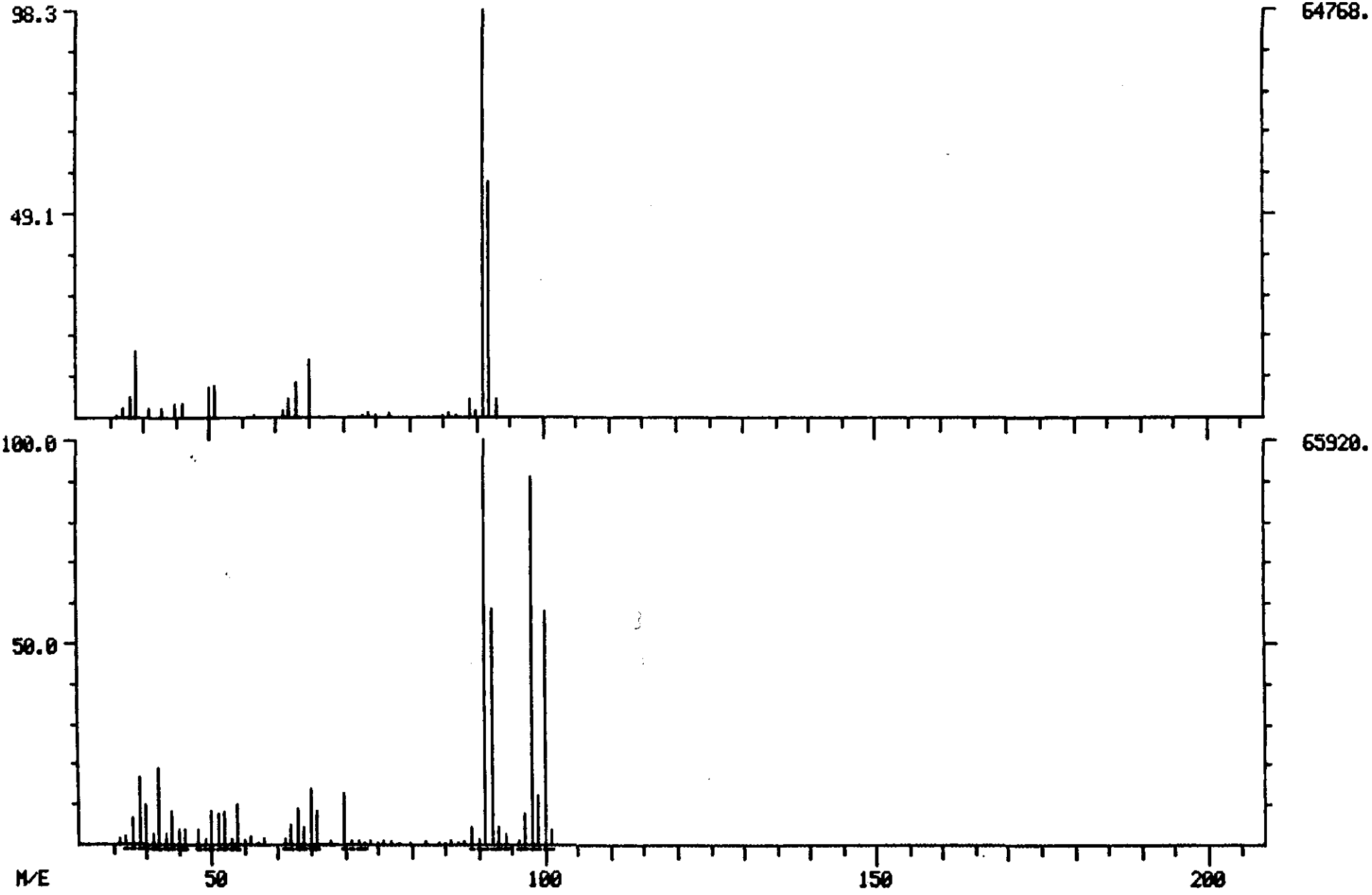


AR100515

ORIGINAL
(Red)

DUAL MASS SPECTRUM
03/16/82 22:31:00 + 24:09
SAMPLE: ENP 5ML #13410+5UL(4076+4078+4083)SPIKE
ENHANCED (S 158 2N)

DATA: EN013410B11 #475 BASE M/E: 91/ 91
RIC: 164095./ 356863.



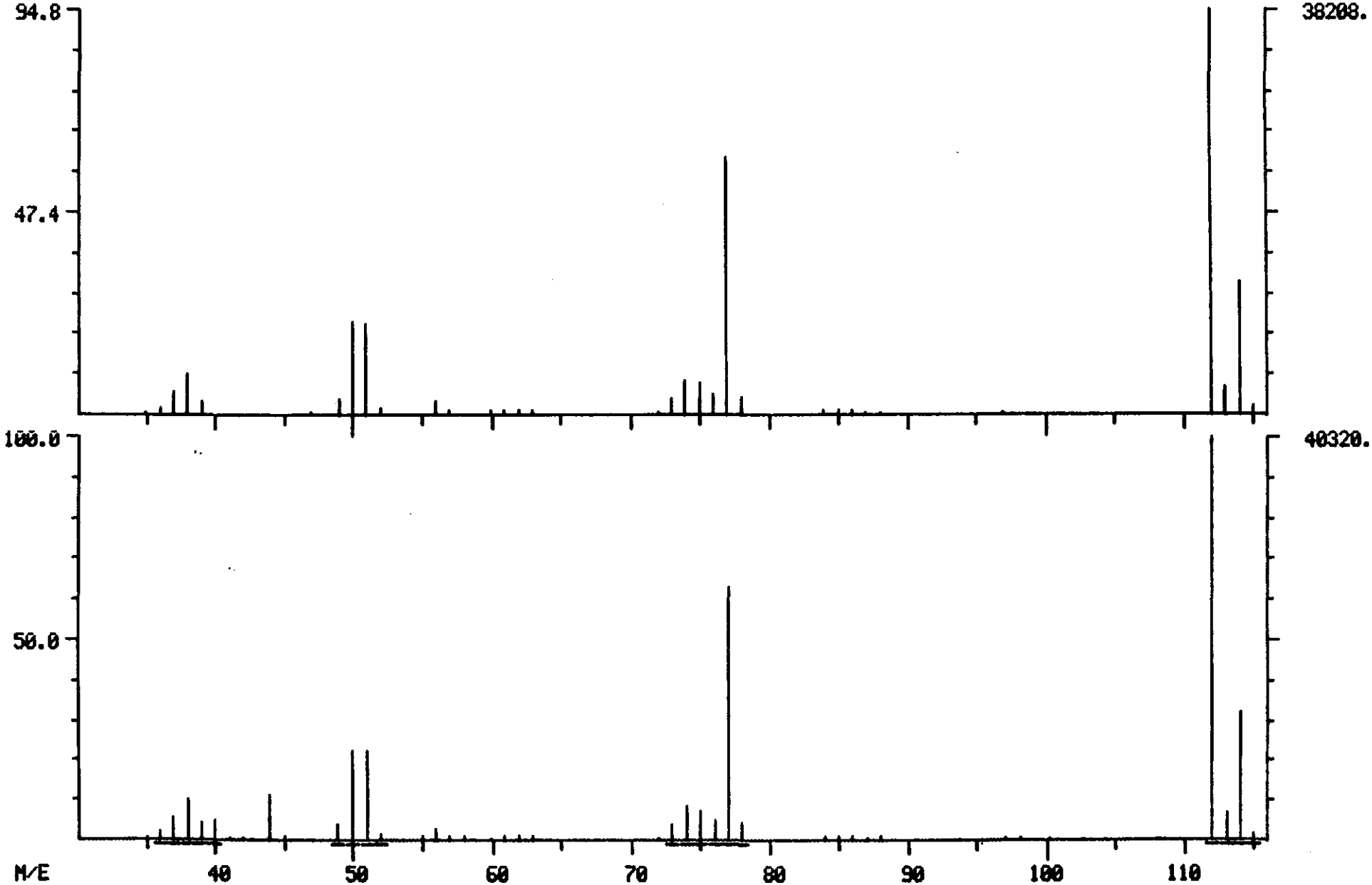
AR100516

ORIGINAL
(Red)

4-5

DUAL MASS SPECTRUM
03/16/82 22:31:00 + 25:22
SAMPLE: ENP 5ML #13410+5UL(4076+4078+4083)SPIKE
ENHANCED (S 150 2N)

DATA: EN013410B11 #499 BASE M/E: 112/ 112
RIC: 123263./ 138239.



AR100517

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGINA

Laboratory Name Mead CompuChem

Case Number 904

Lab Sample ID NO. 13411 DUPLICATE

QC Report No. 44-40

		ug/g
	VOLATILES	
107-02-8	acrolein	10U
107-13-1	acrylonitrile	10U
71-43-2	benzene	1U
56-23-5	carbon tetrachloride	1U
108-90-7	chlorobenzene	1U
107-06-2	1,2-dichloroethane	1U
71-55-6	1,1,1-trichloroethane	1U
75-34-3	1,1-dichloroethane	1U
79-00-5	1,1,2-trichloroethane	1U
79-34-5	1,1,2,2-tetrachloroethane	1U
75-00-3	chloroethane	1U
110-75-8	2-chloroethylvinyl ether	1U
67-66-3	chloroform	1U
75-35-4	1,1-dichloroethene	1U
156-60-5	1,2-trans-dichloroethene	1U
78-87-5	1,2-dichloropropane	1U
10061-0X-XX	1,3-dichloropropiene	1U
100-41-4	ethylbenzene	1U
75-09-2	methylene chloride	1U
74-87-3	chloromethane	1U
74-83-9	bromomethane	1U
75-25-2	bromoform	1U
75-27-4	dichlorobromomethane	1U
75-69-4	trichlorofluoromethane	1U
75-71-8	dichlorodifluoromethane	1U
124-48-1	chlorodibromomethane	1U
127-18-4	tetrachloroethylene	1U
108-88-3	toluene	1U
79-01-6	trichloroethylene	1U
75-01-4	vinyl chloride	1U

Lab Name: Mead ComouChem Case No: 904

Lab Sample I.D. No. 13411 DUPLICATE

QC Report No: 44 - 40

ORIGINA (Red)

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
d_6-Benzene	VOA	11.6	10.0 ug/g	116
d_8-Toluene	VOA	11.9	10.0 ug/g	119

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORGANICS ANALYSIS DATA SHEET - Page 4

ORIGINAL

Lab Name: Mead CompuChem Case No. 904

Lab Sample I.D. No. 13411 DUPLICATE

QC Report No: 44-40

Sample Number

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRAC-TION	% Pur.	Est. Conc.
1			BN		
2			BN		
3			BN		
4			BN		
5			BN		
6			BN		
7			BN		
8			BN		
9			BN		
10			BN		
11			ACID		
12			ACID		
13			ACID		
14			ACID		
15			ACID		
16			ACID		
17			ACID		
18			ACID		
19			ACID		
20			ACID		
21		none	VOA		
22			VOA		
23			VOA		
24			VOA		
25			VOA		
26			VOA		
27			VOA		
28			VOA		
29			VOA		
30			VOA		

ORIGINAL (Red)

Sample No: 13411/13407 C01193

Lab Standard ID: 13404-13407

U. S. ENVIRONMENTAL PROTECTION AGENCY
HWI SAMPLE MANAGEMENT OFFICE

Lab Name: Head Compu/Chem
Report No: 44-40
Page 2 of 2

QUALITY CONTROL REPORT

B. DUPLICATE ANALYSIS

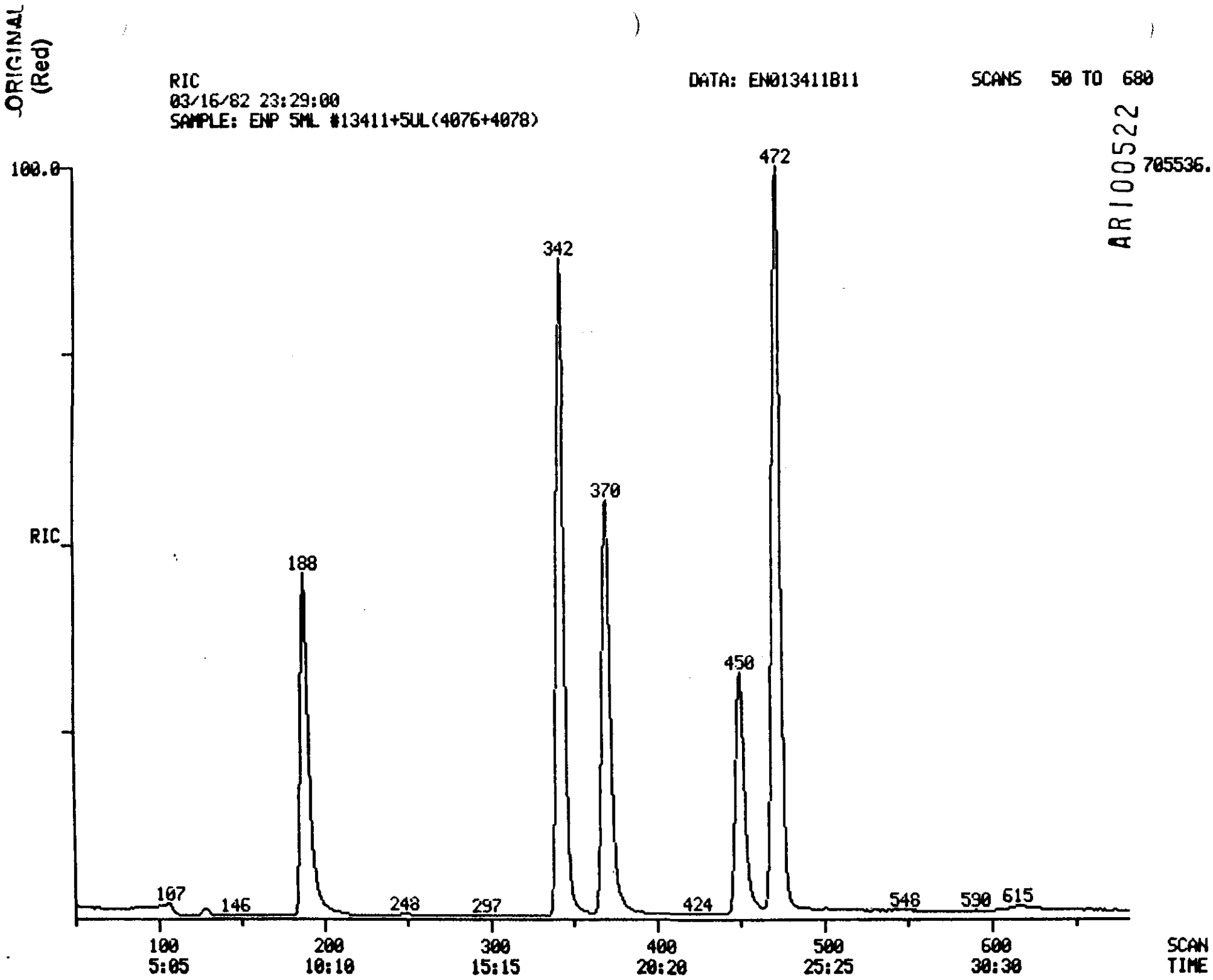
COMPOUND (including surrogates)					CONCENTRATION (ug/l)		Relative Percent Difference (RPD)*
P.	P.			#	COMPOUND NAME	Aliquot 1 (D_1)	Aliquot 2 (D_2)	
				V	d_6 - benzene	11.6	11.7	1
				V	d_8 - toluene	11.9	12.0	1

This QC Report also covers the following sample numbers:

*RPD = $\frac{(D_1 - D_2)}{[(D_1 + D_2)/2]} \times 100$

1/15/80

AR100521


ORIGINAL
(Red)
RIC
03/16/82 23:29:00
SAMPLE: ENP 5ML #13411+5UL(4076+4078)
DATA: EN013411B11
SCANS 50 TO 680
AR100522
705536.
100.0
RIC
472
342
370
188
450
107
146
248
297
424
548
590
615
100
5:05
200
10:10
300
15:15
400
20:20
500
25:25
600
30:30
SCAN
TIME

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: EN013411B11

ORIGINAL
(Red)

DATA: EN013411B11.TI
[illegible]/16/82 23:29:00
[illegible]MPLE: ENP 5ML #13411+5UL(4076+4078)
SUBMITTED BY: 11 ANALYST: REL

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CHLOROMETHANE
3	VINYL CHLORIDE
4	CHLOROETHANE
5	BROMOMETHANE
6	ACROLEIN
7	ACRYLONITRILE
8	BROMOCHLOROMETHANE (INTERNAL STANDARD)
9	METHYLENE CHLORIDE
10	TRICHLOROFLUOROMETHANE
11	1,1-DICHLOROETHYLENE
12	1,1-DICHLOROETHANE
13	TRANS-1,2-DICHLOROETHYLENE
14	CHLOROFORM
15	1,2-DICHLOROETHANE
16	1,1,1-TRICHLOROETHANE
17	CARBON TETRACHLORIDE
18	BROMODICHLOROMETHANE
19	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
20	1,2-DICHLOROPROPANE
21	TRANS-1,3-DICHLOROPROPENE
22	TRICHLOROETHYLENE
23	BENZENE
24	CIS-1,3-DICHLOROPROPENE
25	1,1,2-TRICHLOROETHANE
26	DIBROMOCHLOROMETHANE
27	BROMOFORM
28	1,1,2,2-TETRACHLOROETHYLENE
29	1,1,2,2-TETRACHLOROETHANE
30	TOLUENE
31	CHLOROBENZENE
32	ETHYLBENZENE
33	2-CHLOROETHYL VINYL ETHER
34	2-BROMO-1-CHLOROPROPANE(INTERNAL STANDARD)
35	D6 BENZENE
36	D8 TOLUENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	130	188	9:33	1	1.000	A BB	344646.	10.000 UG/GM	15.59
2	50	32	1:38	1	0.170	A BB	114.	0.002 UG/GM	0.00
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	130	188	9:33	8	1.000	A BB	344646.	10.000 UG/GM	15.59

AR100523

ORIGIN

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
9	84	128	6:30	8	0.681	A BB	7988.	0.183	UG/GM	0.28
10	101	168	8:32	8	0.894	A BB	265.	0.004	UG/GM	0.01
11	96	187	9:30	8	0.995	A BB	211.	0.008	UG/GM	0.01
12	NOT	FOUND								
13	NOT	FOUND								
14	NOT	FOUND								
15	NOT	FOUND								
16	97	268	13:37	8	1.426	A BB	2270.	0.045	UG/GM	0.07
17	NOT	FOUND								
18	NOT	FOUND								
19	55	450	22:52	19	1.000	A BB	441717.	10.000	UG/GM	15.59
20	NOT	FOUND								
21	NOT	FOUND								
22	NOT	FOUND								
23	78	343	17:26	19	0.762	A BB	13878.	0.122	UG/GM	0.19
24	NOT	FOUND								
25	NOT	FOUND								
26	NOT	FOUND								
27	NOT	FOUND								
28	164	446	22:40	19	0.991	A BB	351.	0.010	UG/GM	0.02
29	NOT	FOUND								
30	92	476	24:12	19	1.058	A BB	3847.	0.061	UG/GM	0.10
31	NOT	FOUND								
32	NOT	FOUND								
33	63	370	18:48	19	0.822	A BB	10598.	0.297	UG/GM	0.46
34	77	369	18:45	34	1.000	A BB	583756.	10.000	UG/GM	15.59
35	84	342	17:23	34	0.927	A BB	1476360.	11.563	UG/GM	18.03
36	100	472	24:00	34	1.279	A BB	855572.	11.855	UG/GM	18.48

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGIN
(F

Laboratory Name Mead ComboChem

Case Number 904

Lab Sample ID NO. 13412 COMPOSITE BLANK

QC Report No. 44-40

	VOLATILES	ug/g
107-02-8	acrolein	10U
107-13-1	acrylonitrile	10U
71-43-2	benzene	1U
56-23-5	carbon tetrachloride	1U
108-90-7	chlorobenzene	1U
107-06-2	1,2-dichloroethane	1U
71-55-6	1,1,1-trichloroethane	1U
75-34-3	1,1-dichloroethane	1U
79-00-5	1,1,2-trichloroethane	1U
79-34-5	1,1,2,2-tetrachloroethane	1U
75-00-3	chloroethane	1U
110-75-8	2-chloroethylvinyl ether	1U
67-66-3	chloroform	1U
75-35-4	1,1-dichloroethene	1U
156-60-5	1,2-trans-dichloroethene	1U
78-87-5	1,2-dichloropropane	1U
10061-0X-XX	1,3-dichloropropiene	1U
100-41-4	ethylbenzene	1U
75-09-2	methylene chloride	1U
74-87-3	chloromethane	1U
74-83-9	bromomethane	1U
75-25-2	bromoform	1U
75-27-4	dichlorobromomethane	1U
75-69-4	trichlorofluoromethane	1U
75-71-8	dichlorodifluoromethane	1U
124-48-1	chlorodibromomethane	1U
127-18-4	tetrachloroethylene	1U
108-88-3	toluene	1U
79-01-6	trichloroethylene	1U
75-01-4	vinyl chloride	1U

AR100525

ORGANICS ANALYSIS DATA SHEET - Page 3

ORIGIN
(Red)

Lab Name: Mead CompuChem Case No: 904

Lab Sample I.D. No. 13411 BLANK

QC Report No: 44 - 40

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
d_6-Benzene	VOA	11.1	10.0 ug/g	111
d_8-Toluene	VOA	11.3	10.0 ug/g	113

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORGANICS ANALYSIS DATA SHEET - Page 4

ORIGINA
(Red)

Lab Name: Mead CompuChem Case No. 904

Lab Sample I.D. No. 13411 BLANK

C Report No: 44- 40

Sample Number

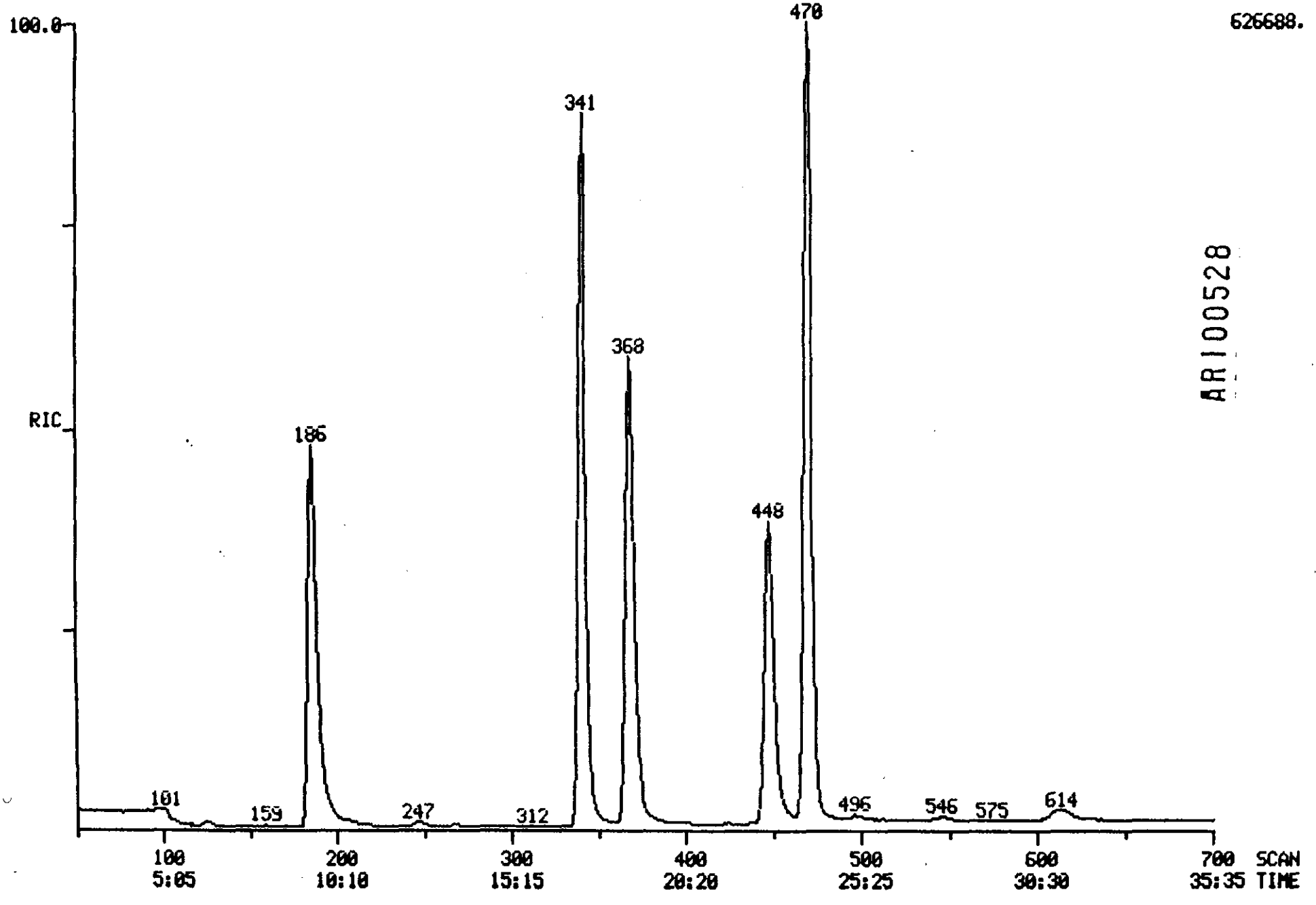
B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRAC-TION	% Pur.	Est. Conc.
1			BN		
2			BN		
3			BN		
4			BN		
5			BN		
6			BN		
7			BN		
8			BN		
9			BN		
10			BN		
11			ACID		
12			ACID		
13			ACID		
14			ACID		
15			ACID		
16			ACID		
17			ACID		
18			ACID		
19			ACID		
20			ACID		
21		none	VOA		
22			VOA		
23			VOA		
24			VOA		
25			VOA		
26			VOA		
27			VOA		
28			VOA		
29			VOA		
30			VOA		

ORIGINAL
(Red)

RIC
03/16/82 20:45:00
SAMPLE: ENP 5ML #13412+5UL(4076+4078)

DATA: EN013412B11 SCANS 50 TO 700



AR100528

ORIGINAL
(Red)

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: EN013412B11

DATA: EN013412B11.TI
/16/82 20:45:00
MPLE: ENP 5ML #13412+5UL(4076+4078)
SUBMITTED BY: 11 ANALYST: REL

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CHLOROMETHANE
3	VINYL CHLORIDE
4	CHLOROETHANE
5	CHLOROETHANE
6	BROMOMETHANE
7	ACROLEIN
8	ACRYLONITRILE
9	BROMOCHLOROMETHANE (INTERNAL STANDARD)
10	METHYLENE CHLORIDE
11	TRICHLOROFLUOROMETHANE
12	1,1-DICHLOROETHYLENE
13	1,1-DICHLOROETHANE
14	TRANS-1,2-DICHLOROETHYLENE
15	CHLOROFORM
16	1,2-DICHLOROETHANE
17	1,1,1-TRICHLOROETHANE
18	CARBON TETRACHLORIDE
?	BROMODICHLOROMETHANE
20	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
21	1,2-DICHLOROPROPANE
22	TRANS-1,3-DICHLOROPROPENE
23	TRICHLOROETHYLENE
24	BENZENE
25	CIS-1,3-DICHLOROPROPENE
26	1,1,2-TRICHLOROETHANE
27	DIBROMOCHLOROMETHANE
28	BROMOFORM
29	1,1,2,2-TETRACHLOROETHYLENE
30	1,1,2,2-TETRACHLOROETHANE
31	TOLUENE
32	CHLOROBENZENE
33	ETHYLBENZENE
34	2-CHLOROETHYL VINYL ETHER
35	2-BROMO-1-CHLOROPROPANE(INTERNAL STANDARD)
36	D6 BENZENE
37	D8 TOLUENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	130	186	9:27	1	1.000	A BB	327594.	10.000 UG/GM	15.79
2	50	33	1:41	1	0.177	A BB	116.	0.002 UG/GM	0.00
3	NOT FOUND								
4	64	84	4:16	1	0.452	A BV	152.	0.009 UG/GM	0.01
5	64	88	4:28	1	0.473	A VB	44.	0.003 UG/GM	0.00
6	NOT FOUND								
7	NOT FOUND								

AR100529

ORIGINAL (Red)

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
8	NOT FOUND								
9	130	186	9:27	9	1.000	A BB	327594.	10.000 UG/GM	15.79
10	84	125	6:21	9	0.672	A BB	4258.	0.102 UG/GM	0.16
11	101	165	8:23	9	0.887	A BB	338.	0.005 UG/GM	0.01
12	96	187	9:30	9	1.005	A BB	265.	0.010 UG/GM	0.02
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	97	267	13:34	9	1.435	A BB	2145.	0.044 UG/GM	0.07
18	NOT FOUND								
19	NOT FOUND								
20	55	448	22:46	20	1.000	A BB	457082.	10.000 UG/GM	15.79
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	78	341	17:20	20	0.761	A VB	13769.	0.117 UG/GM	0.19
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	164	444	22:34	20	0.991	A BB	1496.	0.040 UG/GM	0.06
30	83	439	22:19	20	0.980	A BB	3222.	0.081 UG/GM	0.13
31	92	473	24:03	20	1.056	A BB	4102.	0.063 UG/GM	0.10
32	112	497	25:16	20	1.109	A BB	5937.	0.069 UG/GM	0.11
33	106	547	27:48	20	1.221	A BB	3204.	0.083 UG/GM	0.13
34	63	368	18:42	20	0.821	A BB	9608.	0.261 UG/GM	0.41
35	77	368	18:42	35	1.000	A BB	535042.	10.000 UG/GM	15.79
36	84	341	17:20	35	0.927	A BB	1301140.	11.119 UG/GM	17.55
37	100	470	23:53	35	1.277	A BB	749342.	11.329 UG/GM	17.89

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGINA
(Red)

Laboratory Name Mead CanauChem

Case Number 904

Lab Sample ID NO. EB8203/7C INSTRUMENT BLANK

QC Report No. 44-40

13404-13406

	VOLATILES	ug/ml or ug/g (Circle One)
107-02-8	acrolein	10U
107-13-1	acrylonitrile	10U
71-43-2	benzene	1U
56-23-5	carbon tetrachloride	1U
108-90-7	chlorobenzene	1U
107-06-2	1,2-dichloroethane	1U
71-55-6	1,1,1-trichloroethane	1U
75-34-3	1,1-dichloroethane	1U
79-00-5	1,1,2-trichloroethane	1U
79-34-5	1,1,2,2-tetrachloroethane	1U
75-00-3	chloroethane	1U
110-75-8	2-chloroethylvinyl ether	1U
67-66-3	chloroform	1U
75-35-4	1,1-dichloroethene	1U
156-60-5	1,2-trans-dichloroethene	1U
78-87-5	1,2-dichloropropane	1U
10061-XX-XX	1,3-dichloropropylene	1U
100-41-4	ethylbenzene	1U
75-09-2	methylene chloride	1U
74-87-3	chloromethane	1U
74-83-9	bromomethane	1U
75-25-2	bromoform	1U
75-27-4	dichlorobromomethane	1U
75-69-4	trichlorofluoromethane	1U
75-71-8	dichlorodifluoromethane	1U
124-48-1	chlorodibromomethane	1U
127-18-4	tetrachloroethylene	1U
108-88-3	toluene	1U
79-01-6	trichloroethylene	1U
75-01-4	vinyl chloride	1U

AR100531

ORIGINA
(Red)

Lab Name: Mead CompuChem Case No: 904

Lab Sample I.D. No. EB8203I7C11 INSTRUMENT BLANK

QC Report No: 44-40

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
d_6-Benzene	VOA	11.8	10.0 ug/ml	118
d_8-Toluene	VOA	11.9	10.0 ug/ml	119

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORGANICS ANALYSIS DATA SHEET - Page 4

ORIGIN (Red)

Lab Name: Mead CompuChem Case No.

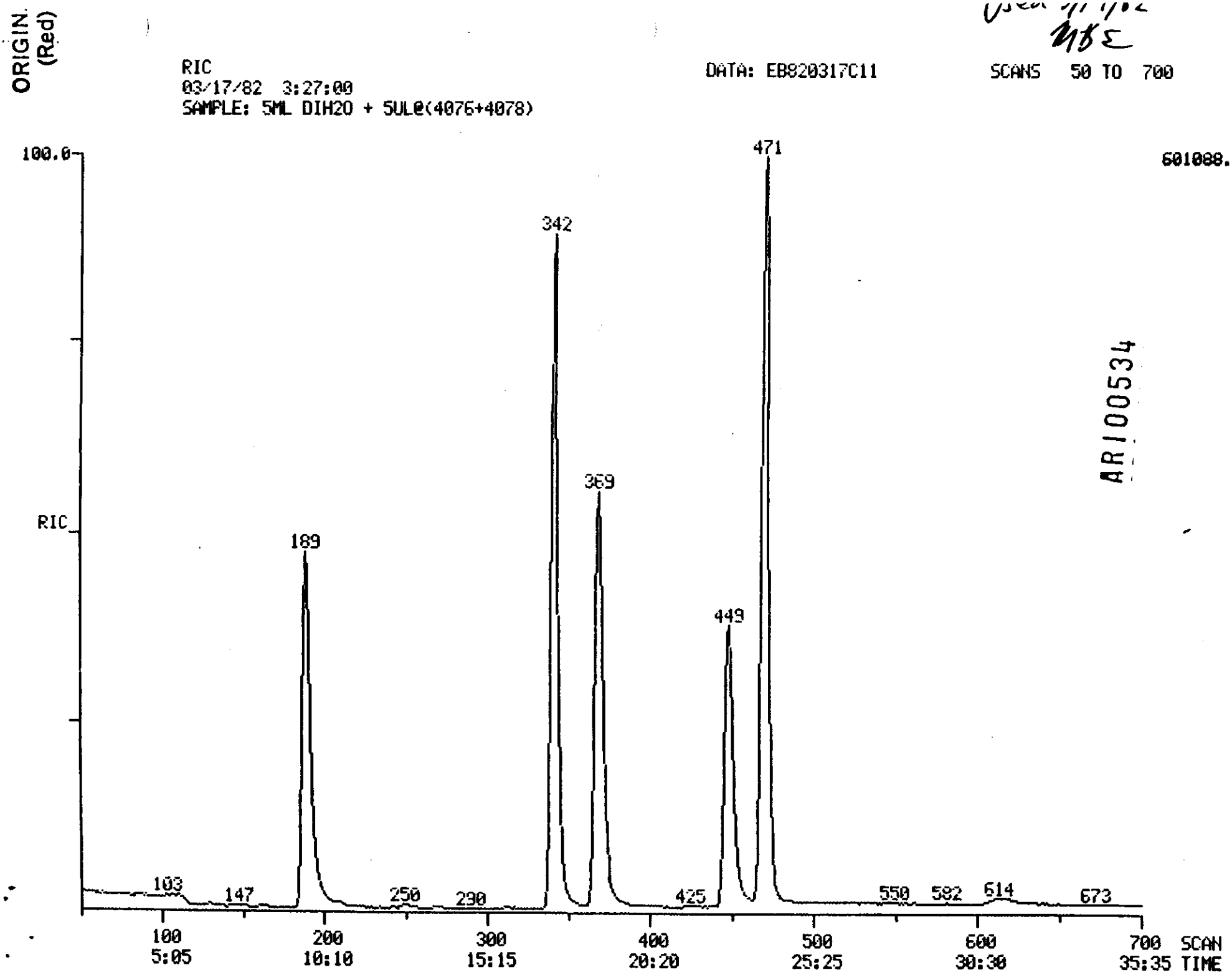
Lab Sample I.D. No. INTRUMENT BLANK

QC Report No: 44-

Sample Number

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRAC-TION	% Pur.	Est. Conc.
1			BN		
2			BN		
3			BN		
4			BN		
5			BN		
6			BN		
7			BN		
8			BN		
9			BN		
10			BN		
11			ACID		
12			ACID		
13			ACID		
14			ACID		
15			ACID		
16			ACID		
17			ACID		
18			ACID		
19			ACID		
20			ACID		
21		None	VOA		
22			VOA		
23			VOA		
24			VOA		
25			VOA		
26			VOA		
27			VOA		
28			VOA		
29			VOA		
30			VOA		


ORIGIN
(Red)
RIC
03/17/82 3:27:00
SAMPLE: 5ML DIH2O + 5UL@(4076+4078)
DATA: EB820317C11
SCANS 50 TO 700
100.0
601088.
RIC
471
342
369
189
449
103
147
250
230
425
550
582
614
673
100
5:05
200
10:10
300
15:15
400
20:20
500
25:25
600
30:30
700 SCAN
35:35 TIME
AR100534

ORIGINAL
(Red)

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: EB820317C11

DATA: EB820317C11.TI
[illegible]/17/82 3:27:00
SAMPLE: 5ML DIH2O + 5UL@(4076+4078)
SUBMITTED BY: 11 ANALYST: MBE

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CHLOROMETHANE
3	VINYL CHLORIDE
4	CHLOROETHANE
5	BROMOMETHANE
6	ACROLEIN
7	ACRYLONITRILE
8	BROMOCHLOROMETHANE (INTERNAL STANDARD)
9	METHYLENE CHLORIDE
10	CARBON TETRACHLORIDE
11	BROMODICHLOROMETHANE
12	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
13	BENZENE
14	CIS-1,3-DICHLOROPROPENE
15	1,1,2,2-TETRACHLOROETHYLENE
16	CHLOROBENZENE
17	2-CHLOROETHYL VINYL ETHER
19	2-BROMO-1-CHLOROPROPANE(INTERNAL STANDARD)
	D6 BENZENE
20	D8 TOLUENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	130	189	9:36	1	1.000	A BB	280484.	10.000 UG/GM	15.58
2	50	33	1:41	1	0.175	A BB	932.	0.019 UG/GM	0.03
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	130	189	9:36	8	1.000	A BB	280484.	10.000 UG/GM	15.58
9	84	129	6:33	8	0.683	A BB	1653.	0.046 UG/GM	0.07
10	NOT FOUND								
11	NOT FOUND								
12	55	449	22:49	12	1.000	A BB	430490.	10.000 UG/GM	15.58
13	78	342	17:23	12	0.762	A BB	12869.	0.116 UG/GM	0.18
14	75	341	17:20	12	0.759	A BB	223.	0.012 UG/GM	0.02
15	164	445	22:37	12	0.991	A BB	874.	0.025 UG/GM	0.04
16	112	497	25:16	12	1.107	A BB	583.	0.007 UG/GM	0.01
17	63	369	18:45	12	0.822	A BB	8417.	0.242 UG/GM	0.38
18	77	369	18:45	18	1.000	A BB	493446.	10.000 UG/GM	15.58
19	84	342	17:23	18	0.927	A BB	1272600.	11.791 UG/GM	18.37
20	100	471	23:57	18	1.276	A BB	728295.	11.939 UG/GM	18.60

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGIN
(Red)

Laboratory Name Mead CompuChem

Case Number 904

Lab Sample ID NO. EB3203168 INSTRUMENT BLANK

QC Report No. 44-40

13407

	VOLATILES	ug/ml or ug/g (Circle One)
107-02-8	acrolein	10U
107-13-1	acrylonitrile	10U
71-43-2	benzene	1U
56-23-5	carbon tetrachloride	1U
108-90-7	chlorobenzene	1U
107-06-2	1,2-dichloroethane	1U
71-55-6	1,1,1-trichloroethane	1U
79-34-3	1,1-dichloroethane	1U
79-00-5	1,1,2-trichloroethane	1U
79-34-5	1,1,2,2-tetrachloroethane	1U
75-00-3	chloroethane	1U
110-75-8	2-chloroethylvinyl ether	1U
67-66-3	chloroform	1U
75-35-4	1,1-dichloroethene	1U
156-60-5	1,2-trans-dichloroethene	1U
78-87-5	1,2-dichloropropane	1U
10061-XX-XX	1,3-dichloropropylene	1U
100-41-4	ethylbenzene	1U
75-09-2	methylene chloride	1U
74-87-3	chloromethane	1U
74-83-9	bromomethane	1U
75-25-2	bromoform	1U
75-27-4	dichlorobromomethane	1U
75-69-4	trichlorofluoromethane	1U
75-71-8	dichlorodifluoromethane	1U
124-48-1	chlorodibromomethane	1U
127-18-4	tetrachloroethylene	1U
108-88-3	toluene	1U
79-01-6	trichloroethylene	1U
75-01-4	vinyl chloride	1U

AR100536

ORIGINAL (Red)

Lab Name: Mead CompuChem Case No: 904

Lab Sample I.D. No. EB8303161 INSTRUMENT BLANK

QC Report No: 44-40

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
d_6-Benzene	VOA	11.6	10.0 ug/ml	116
d_8-Toluene	VOA	12.4	10.0 ug/ml	124

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORGANICS ANALYSIS DATA SHEET - Page 4

ORIGIN (Red)

Lab Name: Mead CompuChem Case No. 904

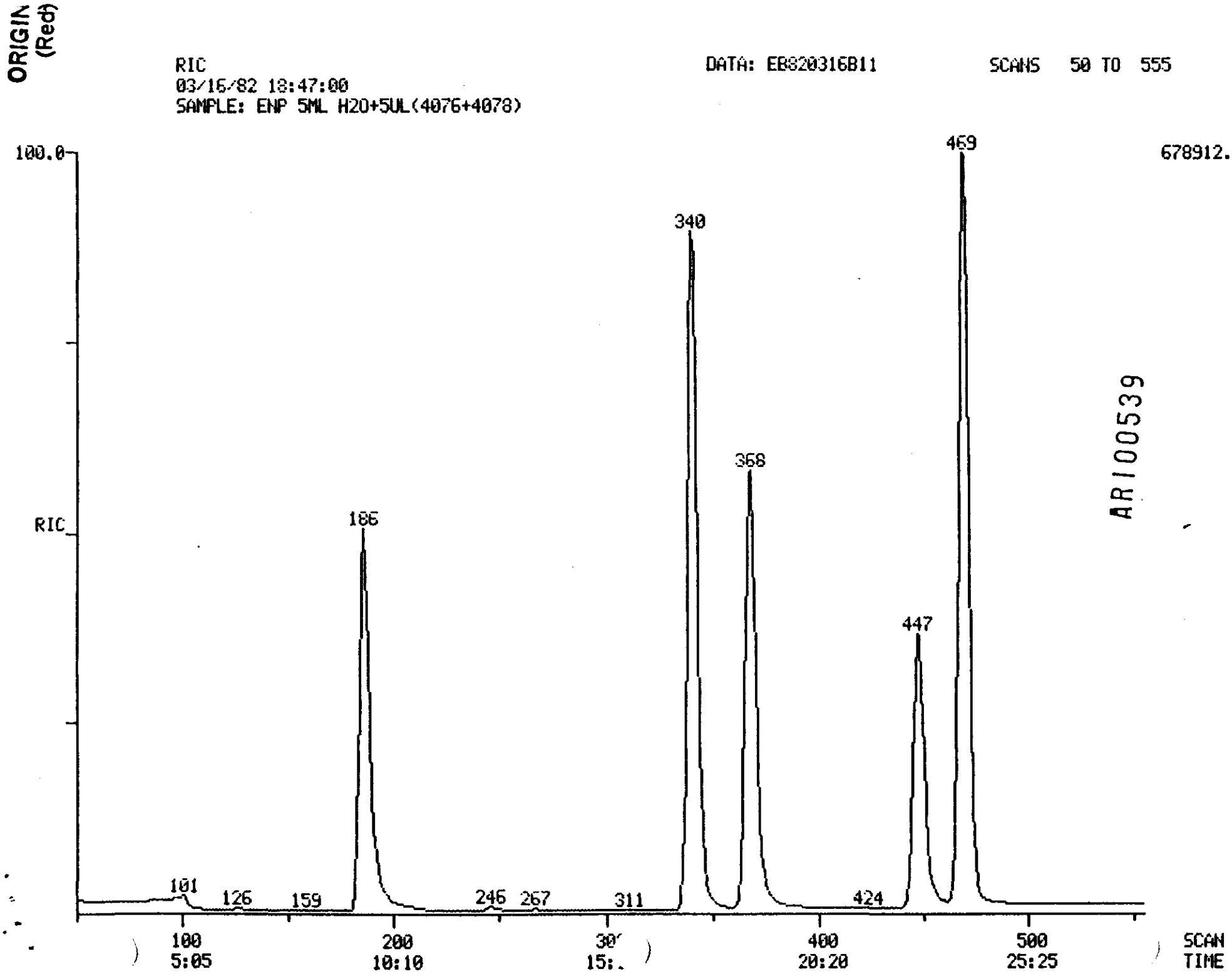
Lab Sample I.D. No. EB220316B11 INTERMENT BLANK

QC Report No: 44-40

Sample Number

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRAC-TION	% Pur.	Est. Conc.
1			BN		
2			BN		
3			BN		
4			BN		
5			BN		
6			BN		
7			BN		
8			BN		
9			BN		
10			BN		
11			ACID		
12			ACID		
13			ACID		
14			ACID		
15			ACID		
16			ACID		
17			ACID		
18			ACID		
19			ACID		
20			ACID		
21		None	VOA		
22			VOA		
23			VOA		
24			VOA		
25			VOA		
26			VOA		
27			VOA		
28			VOA		
29			VOA		
30			VOA		


ORIGIN
(Red)
RIC
03/16/82 18:47:00
SAMPLE: ENP 5ML H2O+5UL(4076+4078)
DATA: EB820316B11
SCANS 50 TO 555
100.0
678912.
RIC
469
340
368
186
447
101
126
159
246
267
311
424
AR100539
100
5:05
200
10:10
400
20:20
500
25:25
SCAN
TIME

'INNIGAN ORGANICS IN WATER ANALYZER
)UANTITATION REPORT FILE: EB820316B11

ORIGINA
(Red)

)ATA: EB820316B11.TI
)3/16/82 18:47:00
SAMPLE: ENP 5ML H20+5UL(4076+4078)
SUBMITTED BY: 11 ANALYST: REL

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	BROMOCHLOROMETHANE (INTERNAL STANDARD)
2	CHLOROMETHANE
3	VINYL CHLORIDE
4	CHLOROETHANE
5	CHLOROETHANE
6	BROMOMETHANE
7	ACRYLONITRILE
8	BROMOCHLOROMETHANE (INTERNAL STANDARD)
9	METHYLENE CHLORIDE
10	1,1-DICHLOROETHYLENE
11	1,2-DICHLOROETHANE
12	1,4-DICHLOROBUTANE (INTERNAL STANDARD)
13	BENZENE
14	CIS-1,3-DICHLOROPROPENE
15	2-CHLOROETHYL VINYL ETHER
16	2-BROMO-1-CHLOROPROPANE(INTERNAL STANDARD)
17	D6 BENZENE
18	D8 TOLUENE

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT	
1	130	186	9:27	1	1.000	A BB	353701.	10.000	UG/GM	15.51	
2	NOT FOUND										
3	NOT FOUND										
4	64	86	4:22	1	0.462	A BB	360.	0.014	UG/GM	0.02	
5	64	89	4:31	1	0.478	A BB	105.	0.004	UG/GM	0.01	
6	94	47	2:23	1	0.253	A BB	61.	0.001	UG/GM	0.00	
7	NOT FOUND										
8	130	186	9:27	8	1.000	A BB	353701.	10.000	UG/GM	15.51	
9	84	126	6:24	8	0.677	A BB	1926.	0.037	UG/GM	0.06	
10	96	186	9:27	8	1.000	A BB	210.	0.007	UG/GM	0.01	
11	62	244	12:24	8	1.312	A BB	1206.	0.024	UG/GM	0.04	
12	55	447	22:43	12	1.000	A BB	470606.	10.000	UG/GM	15.51	
13	78	340	17:17	12	0.761	A BB	13071.	0.103	UG/GM	0.16	
14	75	340	17:17	12	0.761	A BB	304.	0.013	UG/GM	0.02	
15	63	367	18:39	12	0.821	A BB	10046.	0.289	UG/GM	0.45	NO
16	77	367	18:39	16	1.000	A BB	592458.	10.000	UG/GM	15.51	
17	84	340	17:17	16	0.926	A BB	1441780.	11.565	UG/GM	17.93	
18	100	469	23:50	16	1.278	A BB	831248.	12.435	UG/GM	19.28	

AR100540

U.S. ENVIRONMENTAL PROTECTION AGENCY-HWI Sample Management Office
P.O. Box 818, Alexandria, VA 22313 - 703/683-0885

Sample Number

ORIGINAL (Red)

ORGANICS ANALYSIS DATA SHEET - Page 1

Laboratory Name Mead CompuChem
Case Number 904
Lab Sample ID NO. 13413 SPIKE
QC Report No. 43-37

		ug/g
	ACID COMPOUNDS	
88-06-2	2,4,6-trichlorophenol	10U
59-50-7	p-chloro-m-cresol	32
95-57-8	2-chlorophenol	36
122-83-2	2,4-dichlorophenol	10U
105-67-9	2,4-dimethylphenol	10U
88-75-5	2-nitrophenol	10U
100-02-7	4-nitrophenol	120
51-88-5	2,4-dinitrophenol	40U
534-52-1	4,6 dinitro-o-cresol	20U
87-86-5	pentachlorophenol	42
108-95-2	phenol	20
	BASE/NEUTRAL COMPOUNDS	
83-32-9	acenaphthene	39
92-87-5	benzidine	25U
120-82-1	1,2,4-trichlorobenzene	36
118-74-1	hexachlorobenzene	10U
67-72-1	hexachloroethane	10U
111-44-4	bis(2-chloroethyl)ether	10U
91-58-7	2-chloronaphthalene	10U
95-50-1	1,2-dichlorobenzene	10U
541-73-1	1,3-dichlorobenzene	10U
106-46-7	1,4-dichlorobenzene	33
91-94-1	3,3'-dichlorobenzidine	10U
121-14-2	2,4-dinitrotoluene	34
606-20-2	2,6-dinitrotoluene	10U
	1,2-diphenylhydrazine	10U
122-66-7	(as azobenzene)	10U
206-44-0	fluoranthene	10U
7005-72-3	4-chlorophenyl phenyl ether	10U

		ug/g
	BASE/NEUTRAL COMPOUNDS	
101-55-3	4-bromophenyl phenyl ether	10U
39638-32-9	bis-(2-chloroisopropyl)ether	10U
111-91-1	bis(2-chloroethoxy)methane	10U
87-68-3	hexachlorobutadiene	10U
77-47-4	hexachlorocyclopentadiene	10U
78-59-1	isophorone	10U
91-20-3	naphthalene	10U
98-95-3	nitrobenzene	10U
NA	N-nitrosodimethylamine	NA
86-30-6	N-nitrosodiphenylamine	10U
621-64-7	N-nitrosodi-n-propylamine	110
117-81-7	bis(2-ethylhexyl)phthalate	10U
85-68-7	butyl benzyl phthalate	10U
84-74-2	di-n-butyl phthalate	42
117-84-0	di-n-octyl phthalate	41
84-66-2	diethyl phthalate	10U
131-11-3	dimethyl phthalate	10U
56-55-3	benzo(a)anthracene	46
50-33-8	benzo(a)pyrene	10U
205-99-2	3,4-benzofluoranthene	25U
207-08-9	benzo(k)fluoranthene	10U
318-01-9	chrysene	46
208-96-8	acenaphthylene	10U
120-12-7	anthracene	10U
181-24-2	benzo(ghi)perylene	25U
86-73-7	fluorene	10U
85-01-8	phenanthrene	25U
53-70-3	dibenzo(a,h)anthracene	25U
193-39-5	indeno(1,2,3-cd)pyrene	25U
129-00-0	pyrene	45

II

ORIGINAL (Red)

Lab Name: Mead CompuChem Case No: 904

Lab Sample I.D. No. 1343SPIKE

QC Report No: 43 - 37

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
2-Fluorophenol	Acid	27	50.0 ug/g	54
d_6-Phenol	Acid	20	50.0 ug/g	40
Pentafluorophenol	Acid	20	50.0 ug/g	40
d_5-Nitrobenzene	B/N	42	50.0 ug/g	84
2-Fluorophenol	B/N	45	50.0 ug/g	90

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORIGINAL (Red)

AR100543

ORGANICS ANALYSIS DATA SHEET - Page 4

LAB NAME: _____

LAB SAMPLE I.D. # 13413 Acid

SAMPLE # [ ]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

ITEM	SCAN NUMBER	CAS #	COMPOUND NAME	FRACTION	% PURITY	ESTIMATE CONC.(ug/g)
1			NONE	ACID		
2				ACID		
3				ACID		
4				ACID		
5				ACID		
6				ACID		
7				ACID		
8				ACID		
9				ACID		
10				ACID		

ORIGINAL (Red)

AR100541

ORGANICS ANALYSIS DATA SHEET - Page 4

LAB NAME: _____

LAB SAMPLE I.D. # 13413R

SAMPLE # [ ]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

ITEM	SCAN NUMBER	CAS #	COMPOUND NAME	FRACTION	% PURITY	ESTIMATE CONC.(ug/g)
1	402	123-37-0	Phenol, 2,6-Bis(1,1-Dimethylethyl)-4-Methyl	B/N	80	9.5
2				B/N		
3				B/N		
4				B/N		
5				B/N		
6				B/N		
7				B/N		
8				B/N		
9				B/N		
10				B/N		

Sample No: 13413 / 13407 C01193 U. S. ENVIRONMENTAL PROTECTION AGENCY
HWI SAMPLE MANAGEMENT OFFICE

Lab Name: Mead CompuChem
Report No: 43-37
Page 1 of 2

Lab Standard ID: 13404-13407

ORIGINAL (Red)

AR100545

QUALITY CONTROL REPORT

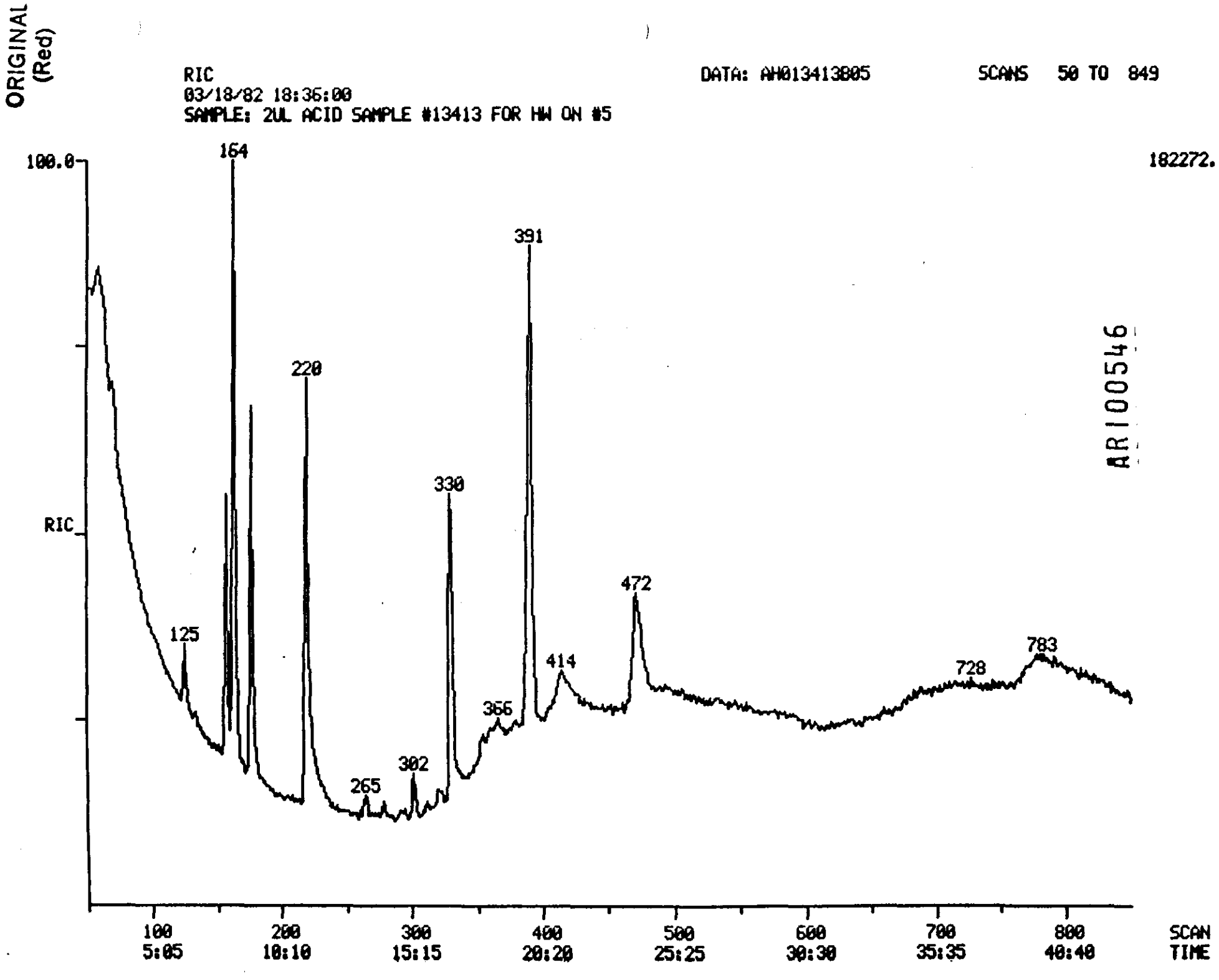
A. MATRIX SPIKE ANALYSIS

COMPOUND (including surrogates)					CONCENTRATION (ug/g)			
P.	P.	#		COMPOUND NAME	Sample Result (SR)	Spiked Sample Result (SSR)	Spike Added (SA)	% Recovery*
0	2	2	A	p-chloro-m-cresol	NA	32	50	64
0	2	4	A	2-chlorophenol	NA	36	50	72
0	5	8	A	4-nitrophenol	NA	120	300	40
0	6	4	A	pentachlorophenol	NA	42	50	84
0	6	5	A	phenol	NA	20	50	40
0	0	1	B	acenaphthene	NA	39	50	78
0	0	8	B	1,2,4-trichlorobenzene	NA	36	50	72
0	2	7	B	1,4-dichlorobenzene	NA	33	50	66
0	3	5	B	2,4-dinitrotoluene	NA	34	50	68
0	6	3	B	N-nitrosodi-n-propylamine	NA	110	200	55
0	6	8	B	di-n-butyl phthalate	NA	42	50	84
0	6	9	B	di-n-octyl phthalate	NA	41	50	82
0	7	6	B	benzo(a)anthracene/chrysene II	NA	46	50	92
0	8	4	B	pyrene	NA	45	50	90

This QC Report also covers the following sample numbers:

*% Recovery = $\frac{(SSR - SR)}{(SA)} \times 100$

2/15/80


ORIGINAL
(Red)
RIC
03/18/82 18:36:00
SAMPLE: 2UL ACID SAMPLE #13413 FOR HW ON #5
DATA: AH013413805
SCANS 50 TO 849
100.0
182272.
RIC
164
391
220
330
125
472
414
783
728
366
302
265
AR100546
100
5:05
200
10:10
300
15:15
400
20:20
500
25:25
600
30:30
700
35:35
800
40:40
SCAN
TIME

ORIGIN/
(Red)

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: AH013413B05

DATA: AH013413B05.TI
3/18/82 18:36:00
AMPLE: 2UL ACID SAMPLE #13413 FOR HW ON #5
SUBMITTED BY: #5 ANALYST: BJW

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LINEAR FIT TO WHOLE . RL

NO	NAME	
1		D-8 NAPHTHALENE (INTERNAL STANDARD)
2		FLUOROPHENOL (SURROGATE STANDARD)
3		D-6 PHENOL (SURROGATE STANDARD)
4		PENTAFLUOROPHENOL (SURROGATE STANDARD)
5		2-FLUOROBIPHENYL (SURROGATE)
6		D-5 NITROBENZENE (SURROGATE)
7		D-8 NAPHTHALENE (INTERNAL STANDARD)
8	601	2-CHLOROPHENOL
9	606	2-NITROPHENOL
10	610	PHENOL
11	603	2,4-DIMETHYLPHENOL
12	602	2,4-DICHLOROPHENOL
13		D10-ANTHRACENE (INTERNAL STANDARD)
14	611	2,4,6-TRICHLOROPHENOL
15	608	P-CHLORO-M-CRESOL
16	605	2,4-DINITROPHENOL
17	604	4,6-DINITRO-O-CRESOL
18	609	PENTACHLOROPHENOL
9	607	4-NITROPHENOL

D8 %

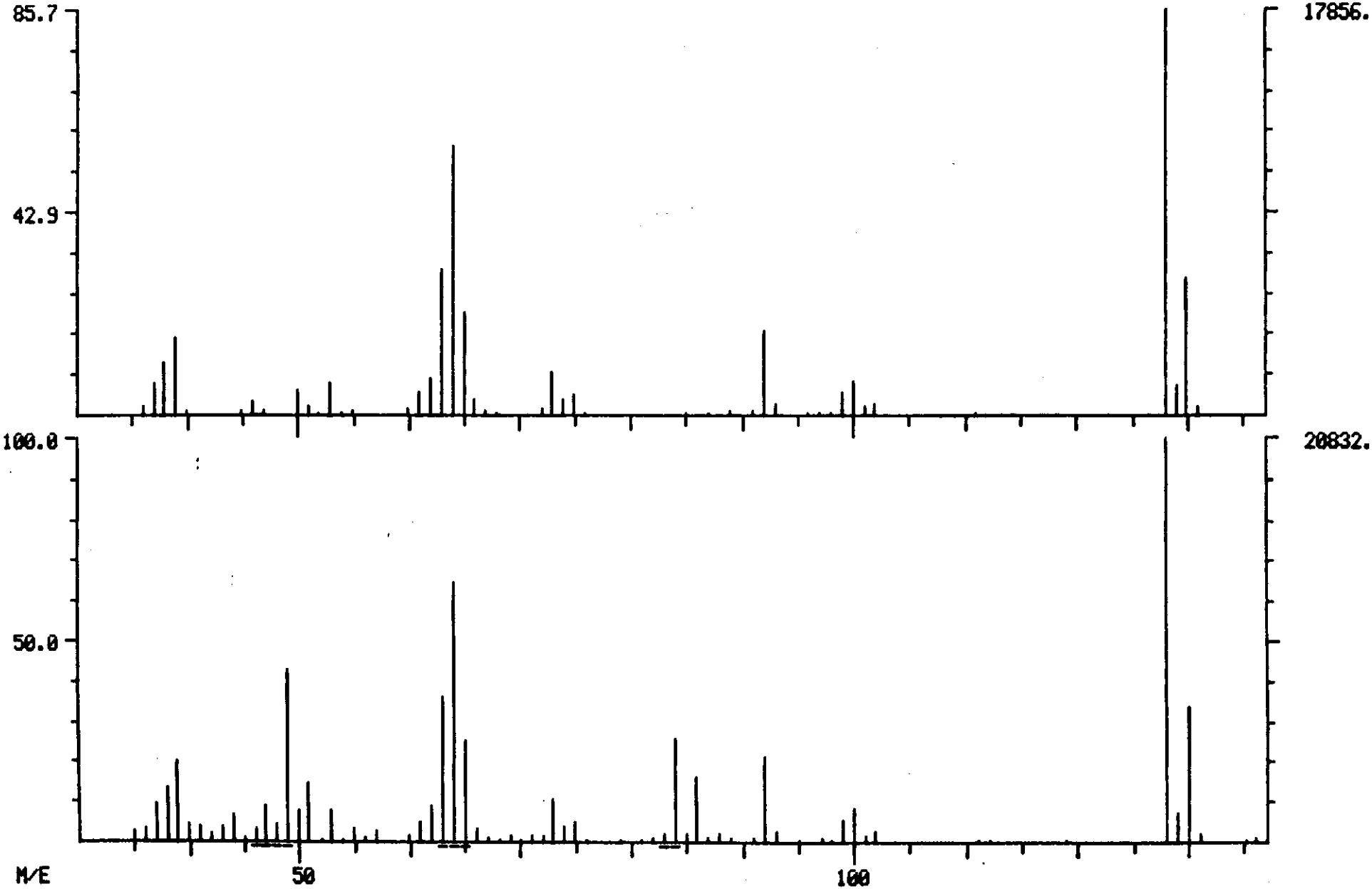
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	136	164	8:20	1	1.000	A BB	150881.	40.000 NG/UL	10.73
2	112	158	8:02	1	0.963	A BB	45502.	26.820 NG/UL	7.19
3	99	220	11:11	1	1.341	A BV	42179.	19.937 NG/UL	5.35
4	184	221	11:14	1	1.348	A BB	19992.	20.284 NG/UL	5.44
5	172	226	11:29	1	1.378	A BB	3585.	1.120 NG/UL	0.30
6	82	164	8:20	1	1.000	A VB	11164.	4.291 NG/UL	1.15
7	136	164	8:20	7	1.000	A BB	150881.	~~40.000 NG/UL~~	~~10.73~~
8	128	177	9:00	7	1.079	A BB	60413.	35.937 NG/UL	9.64 - Wes
9	NOT FOUND								
10	94	220	11:11	7	1.341	A BV	41083.	19.661 NG/UL	5.27 - Yes
11	NOT FOUND								
12	NOT FOUND								
13	188	390	19:49	13	1.000	A BB	181127.	40.000 NG/UL	10.73
14	196	300	15:15	13	0.769	A BB	200.	0.197 NG/UL	0.05
15	142	330	16:46	13	0.846	A BV	36526.	32.692 NG/UL	8.77 - Yes
16	NOT FOUND								
17	NOT FOUND								
18	266	472	24:00	13	1.210	A BB	25600.	42.375 NG/UL	11.37 - Yes
19	65	778	39:33	13	1.995	A BB	15722 ~~6710~~.	~~49.490 NG/UL~~	~~13.28 - Yes~~
								117	

AR100547

ORIGINAL
(Red)

DUAL MASS SPECTRUM
03/18/82 18:36:00 + 9:00
SAMPLE: 2UL ACID SAMPLE #13413 FOR HW ON #5
ENHANCED (S 15B 2N)

DATA: AH013413B05 #177 BASE M/E: 128/ 128
RIC: 77055./ 122495.



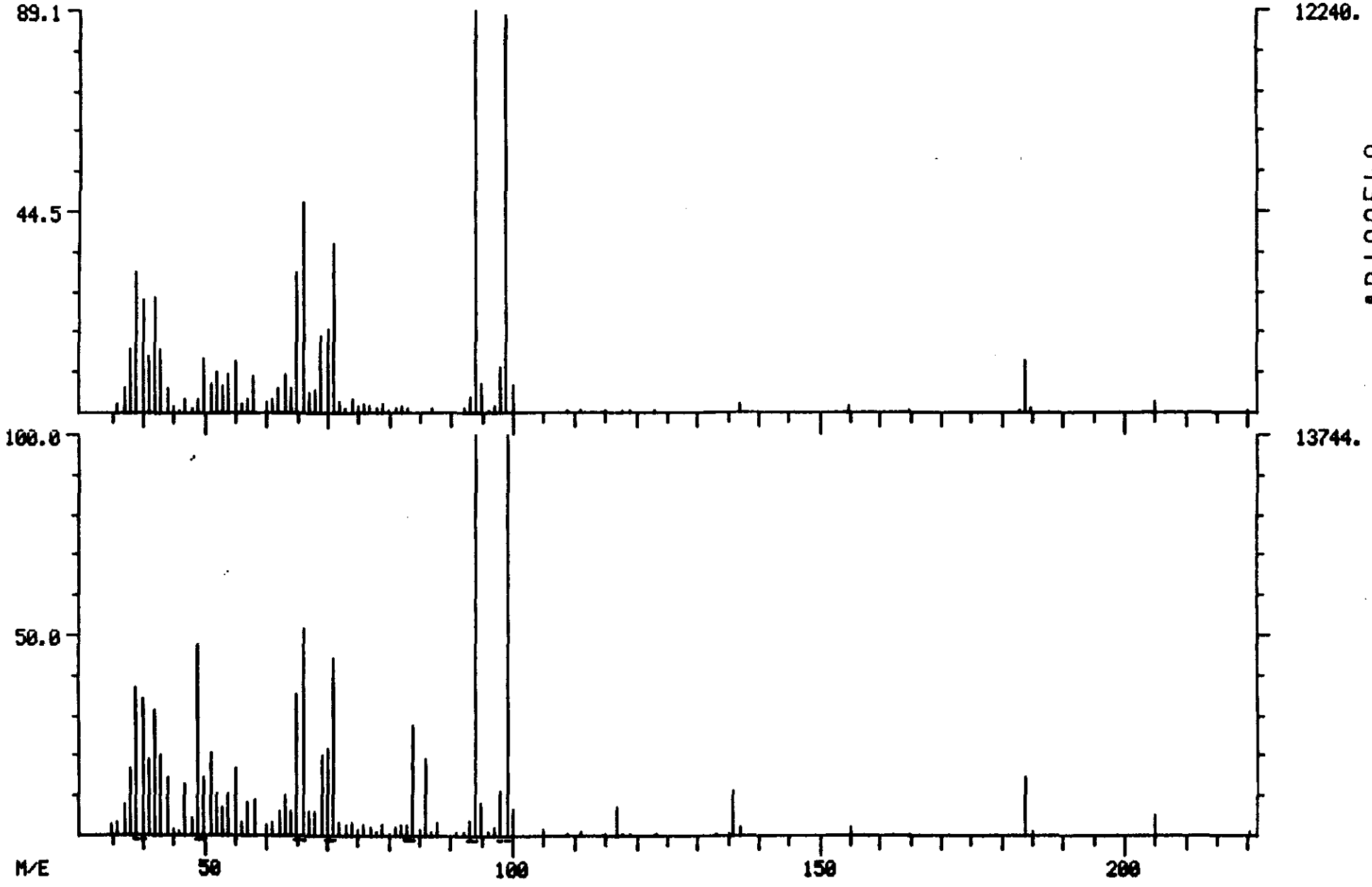
AR100548

ORIGIN, (Red)

b6

DUAL MASS SPECTRUM
03/18/82 18:36:00 + 11:11
SAMPLE: 2UL ACID SAMPLE #13413 FOR HW ON #5
ENHANCED (S 15B 2N)

DATA: AH013413B05 #220 BASE M/E: 94/ 99
RIC: 88319./ 129151.

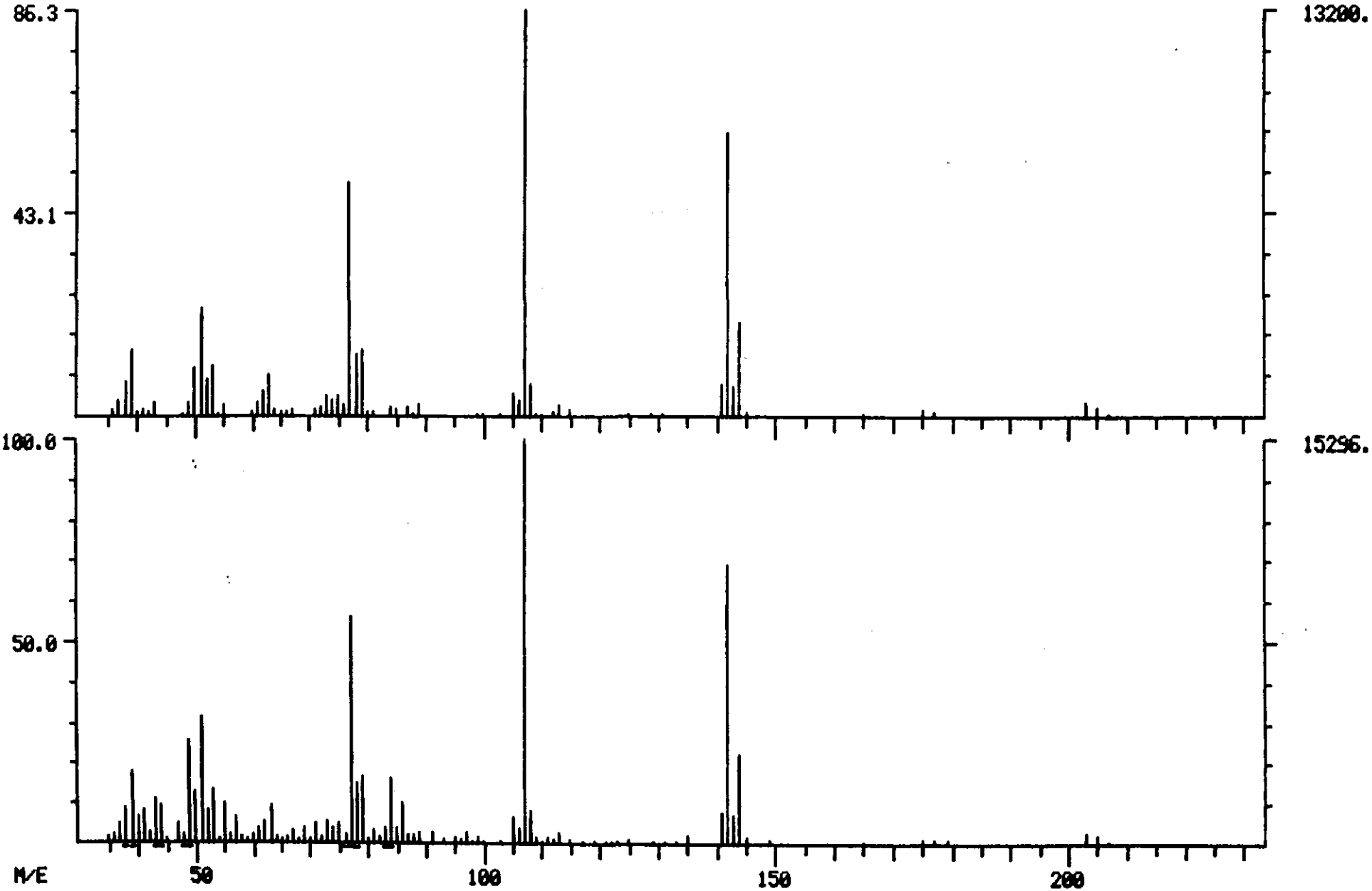


AR100549

ORIGINAL
(Red)

DUAL MASS SPECTRUM
03/18/82 18:36:00 + 16:46
SAMPLE: 2UL ACID SAMPLE #13413 FOR HW ON #5
ENHANCED (S 15B 2N)

DATA: AH013413B05 #330 BASE M/E: 107/ 107
RIC: 66047./ 101631.



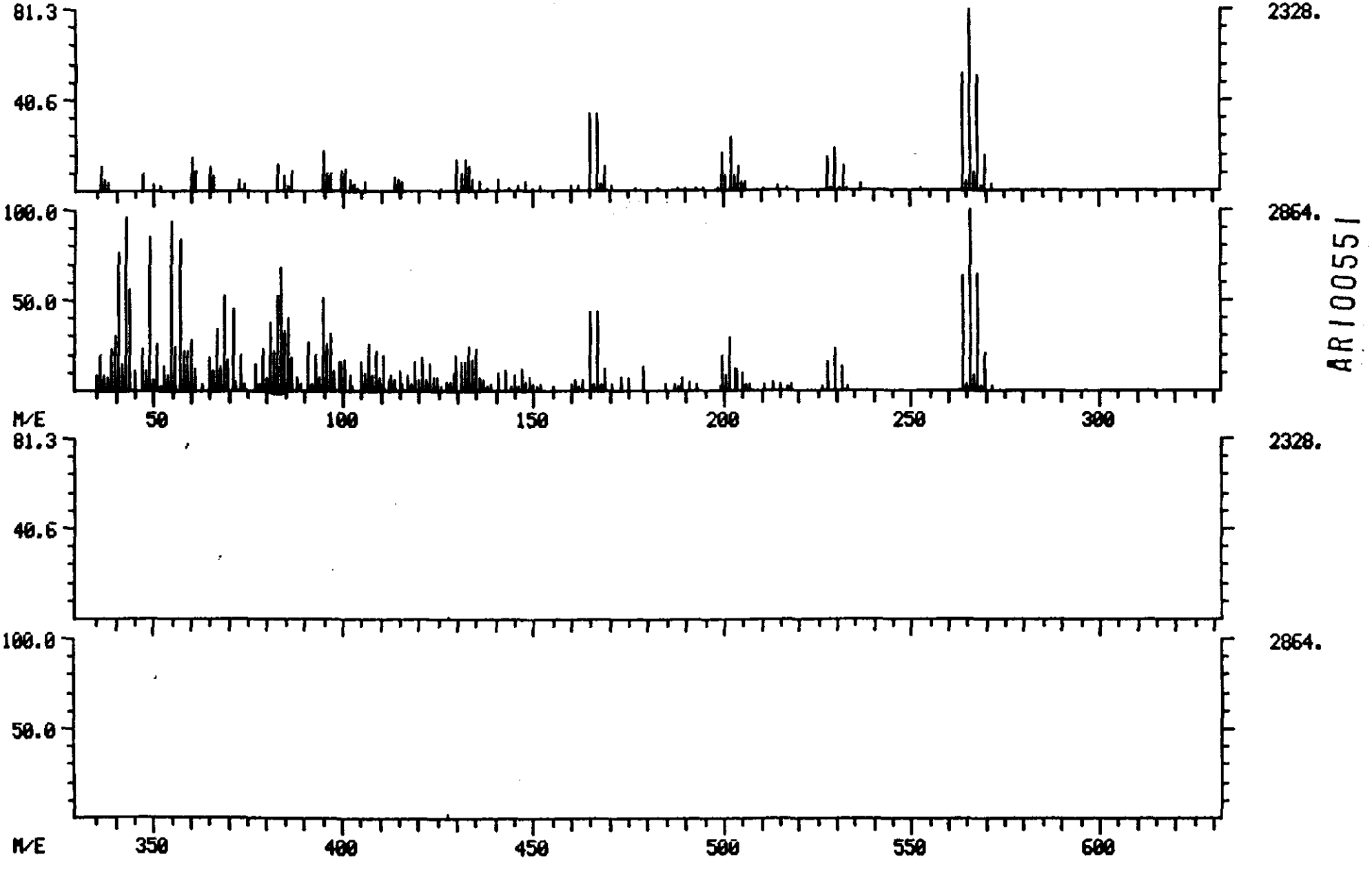
AR100550

ORIGINAL
(Red)

69

DUAL MASS SPECTRUM
03/18/82 18:36:00 + 24:00
SAMPLE: 2UL ACID SAMPLE #13413 FOR HW ON #5
ENHANCED (S 15B 2N)

DATA: AH013413B05 #472 BASE M/E: 266/ 266
RIC: 20319./ 77695.

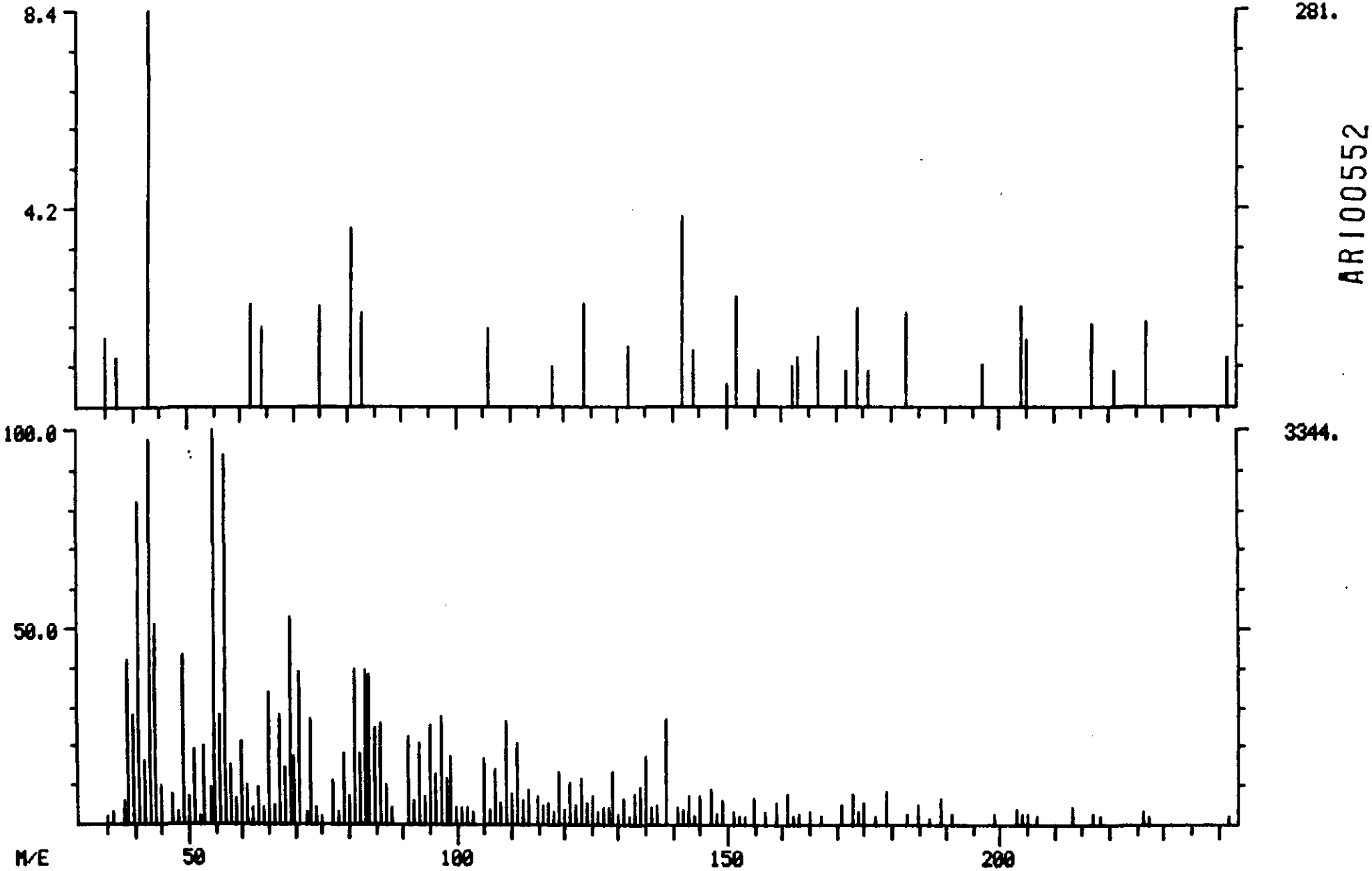


AR100551

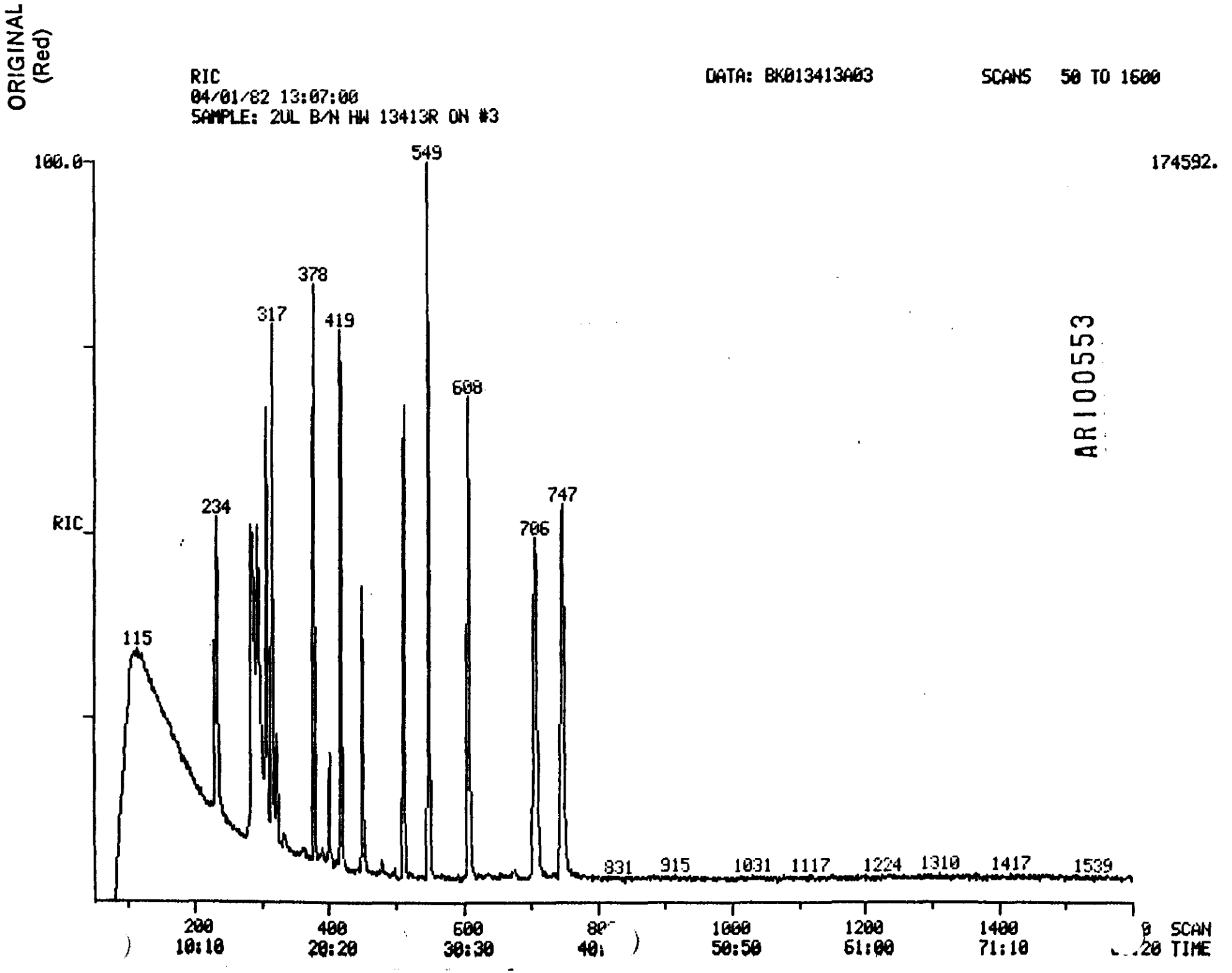
ORIGINAL (Red)

DUAL MASS SPECTRUM
03/18/82 18:36:00 + 39:33
SAMPLE: 2UL ACID SAMPLE #13413 FOR HW ON #5
ENHANCED (S 15B 2N)

DATA: AH013413B05 #778 BASE M/E: 43/ 55
RIC: 1887./ 61951.



AR100552


ORIGINAL
(Red)
RIC
04/01/82 13:07:00
SAMPLE: 2UL B/N HW 13413R ON #3
DATA: BK013413A03
SCANS 50 TO 1600
100.0
174592.
549
378
317
419
608
234
747
706
115
RIC
831
915
1031
1117
1224
1310
1417
1539
AR100553
200
10:10
400
20:20
600
30:30
1000
50:50
1200
61:00
1400
71:10
SCAN
TIME

ORIGINAL
(R

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: BK013413A03

DATA: BK013413A03.TI
04/01/82 13:07:00
SAMPLE: 2UL B/N HW 13413R ON #3
SUBMITTED BY: #3 ANALYST: SRS

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LINEAR FIT TO WHOLE . RL

NO		NAME
1		D-8 NAPHTHALENE (INTERNAL STANDARD)
2		D-5 NITROBENZENE (SURROGATE STANDARD)
3		2-FLUOROBIPHENYL (SURROGATE STANDARD)
4		D-8 NAPHTHALENE (INTERNAL STANDARD)
5	421	1,3-DICHLOROBENZENE
6	422	1,4-DICHLOROBENZENE
7	436	HEXACHLOROETHANE
8	411	BIS (2-CHLOROETHYL) ETHER
9	420	1,2-DICHLOROBENZENE
10	412	BIS (2-CHLOROISOPROPYL) ETHER
11	442	N-NITROSO-DI-N-PROPYLAMINE
12	440	NITROBENZENE
13	434	HEXACHLOROBUTADIENE
14	446	1,2,4-TRICHLOROBENZENE
15	439	NAPHTHALENE
16	410	BIS (2-CHLOROETHOXY) METHANE
17	438	ISOPHORONE
18	416	2-CHLORONAPHTHALENE
19	402	ACENAPHTHYLENE
20		D-10 ANTHRACENE (INTERNAL STANDARD)
21		ACENAPHTHENE
22		DIMETHYL PHTHALATE
23		2,6-DINITROTOLUENE
24		4-CHLOROPHENYL PHENYL ETHER
25		FLUORENE
26		2,4-DINITROTOLUENE
27		DIETHYL PHTHALATE
28		1,2-DIPHENYLHYDRAZINE
29		N-NITROSODIPHENYL AMINE
30		HEXACHLOROBENZENE
31		4-BROMOPHENYL PHENYL ETHER
32		ANTHRACENE AND/OR PHENANTHRENE
33		DI-N-BUTYL PHTHALATE
34		FLUORANTHENE
35		PYRENE
36		2,4-DINITROTOLUENE (SECONDARY ION)
37		D-12 CHRYSENE (INTERNAL STANDARD)
38	404	BENZIDINE
39	415	BUTYL BENZYL PHTHALATE
40	413	BIS (2-ETHYLHEXYL) PHTHALATE
41	413	BIS (2-HEXYLETHYL) PHTHALATE (SECONDARY ION)
42	405/418	BENZO (A) ANTHRACENE AND/OR CHRYSENE
43	423	3,3' DICHLOROBENZIDINE
44	429	DI-OCTYL PHTHALATE
45	407/409	BENZO (B AND/OR K) FLUORANTHENE(S)
46	406	BENZO (A) PYRENE

AR100551

ORIGINAL
(Red)

NO	NAME
47	437 INDENO (1,2,3-CD) PYRENE
	419 DIBENZO (A,H) ANTHRACENE
49	408 BENZO(G,H,I) PERYLENE

1.0 + 2/3

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	136	317	16:07	1	1.000	A BB	139688.	40.000 NG/UL	5.87
2	82	295	15:00	1	0.931	A BB	75994.	41.912 NG/UL	6.15
3	172	378	19:13	1	1.192	A BB	107008.	44.682 NG/UL	6.56
4	136	317	16:07	4	1.000	A BB	139688.	40.000 NG/UL	5.87
5	NOT FOUND								
6	146	234	11:54	4	0.738	A BB	60471.	32.966 NG/UL	4.84 yes
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	45	253	12:52	4	0.798	A BB	545.	0.287 NG/UL	0.04
11	130	286	14:32	4	0.902	A BB	27558.	107.051 NG/UL	15.71 yes
12	NOT FOUND								
13	NOT FOUND								
14	180	308	15:39	4	0.972	A BB	40993.	36.586 NG/UL	5.37 yes
15	128	317	16:07	4	1.000	A BB	1852.	0.446 NG/UL	0.07
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	188	513	26:05	20	1.000	A BB	129249.	40.000 NG/UL	5.87
21	154	419	21:18	20	0.817	A BB	83539.	39.429 NG/UL	5.79 yes
22	NOT FOUND								
	NOT FOUND								

AR100555

ORIGINA.
(Red)

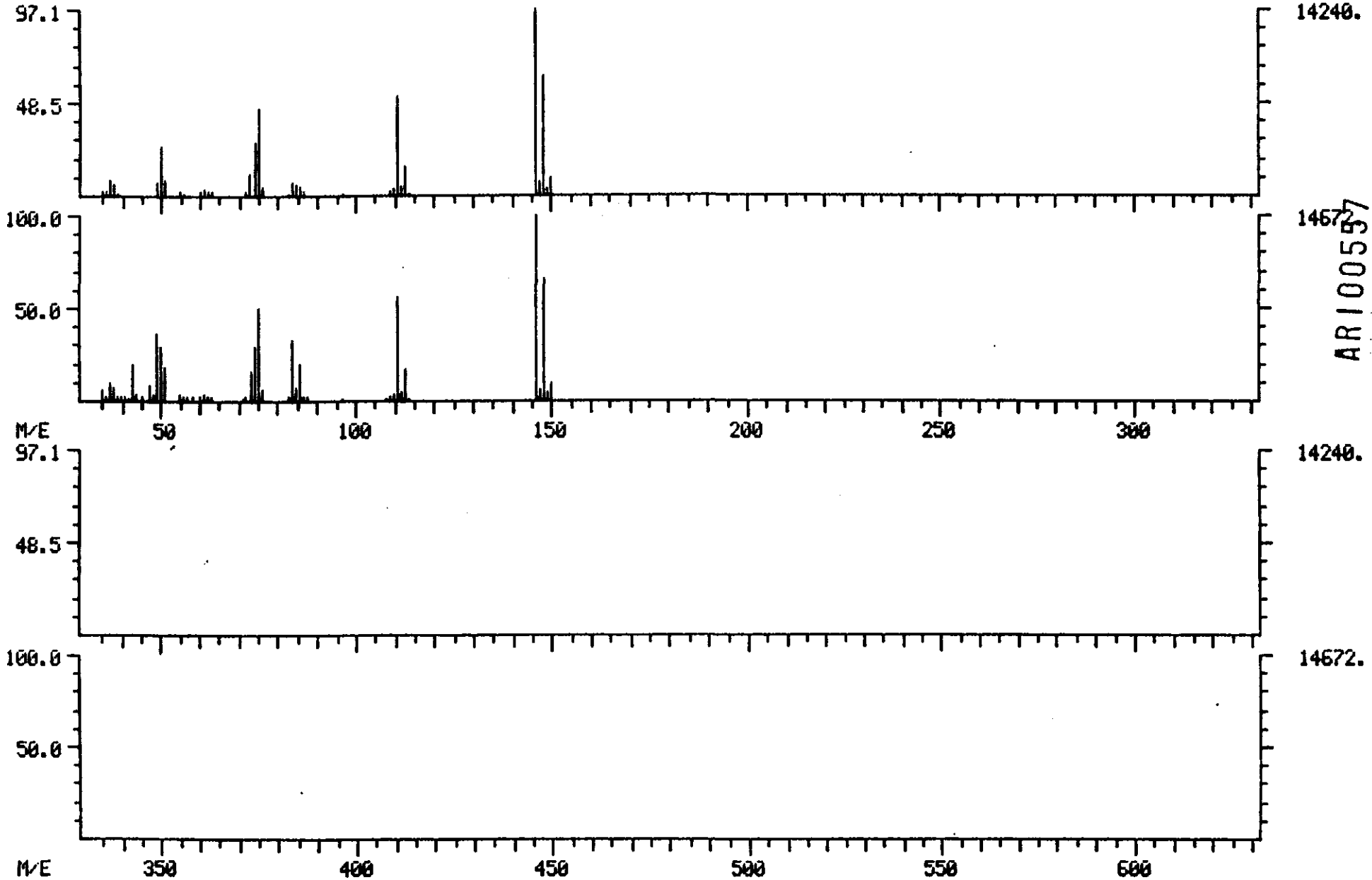
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
24	NOT FOUND								
25	NOT FOUND								
26	165	451	22:56	20	0.879	A BB	28921.	10.372 NG/UL	1.52 yes
27	NOT FOUND								
28	77	460	23:23	20	0.897	A BV	468.	0.135 NG/UL	0.02
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	149	549	27:54	20	1.070	A BB	249726.	42.080 NG/UL	6.18 yes
34	202	591	30:03	20	1.152	A BB	294.	0.098 NG/UL	0.01
35	202	608	30:54	20	1.185	A BB	145310.	44.559 NG/UL	6.54 yes
36	89	451	22:56	20	0.879	A BB	31537.	33.844 NG/UL	4.97 yes
37	240	704	35:47	37	1.000	A BB	84830.	40.000 NG/UL	5.87
38	NOT FOUND								
39	149	657	33:24	37	0.933	A BB	152.	0.064 NG/UL	0.01
40	NOT FOUND								
41	NOT FOUND								
42	228	707	35:56	37	1.004	A BB	101152.	45.913 NG/UL	6.74 yes
43	NOT FOUND								
44	149	747	37:58	37	1.061	A BB	262790.	40.821 NG/UL	5.99 yes
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

ORIGINAL
(Red)

4/22

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 11:54
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #234 BASE M/E: 146/ 146
RIC: 66175./ 91391.



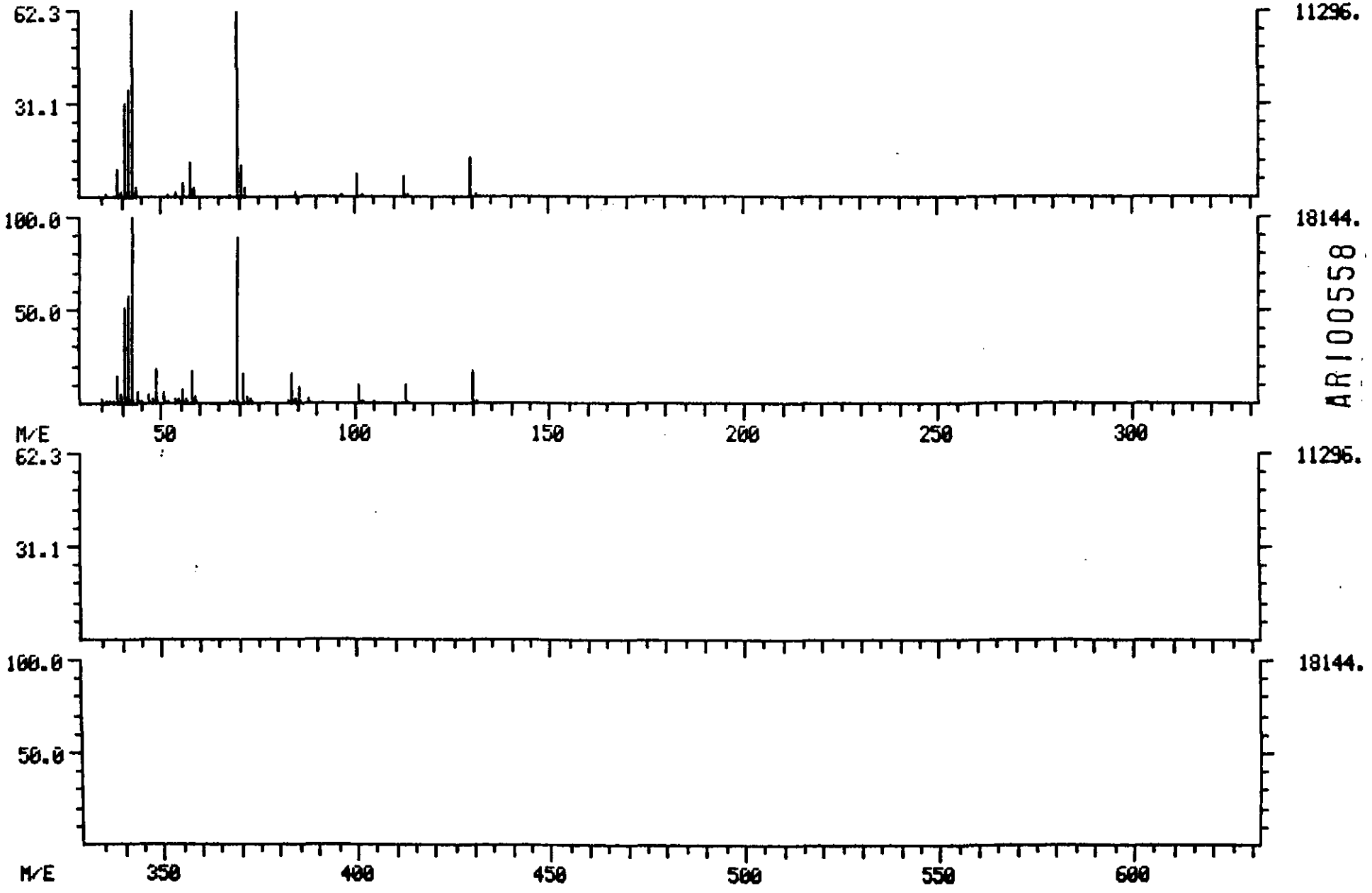
ARI00537

ORIGINAL
(Red)

4 1 2

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 14:32
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #286 BASE M/E: 43/ 43
RIC: 49727./ 90239.



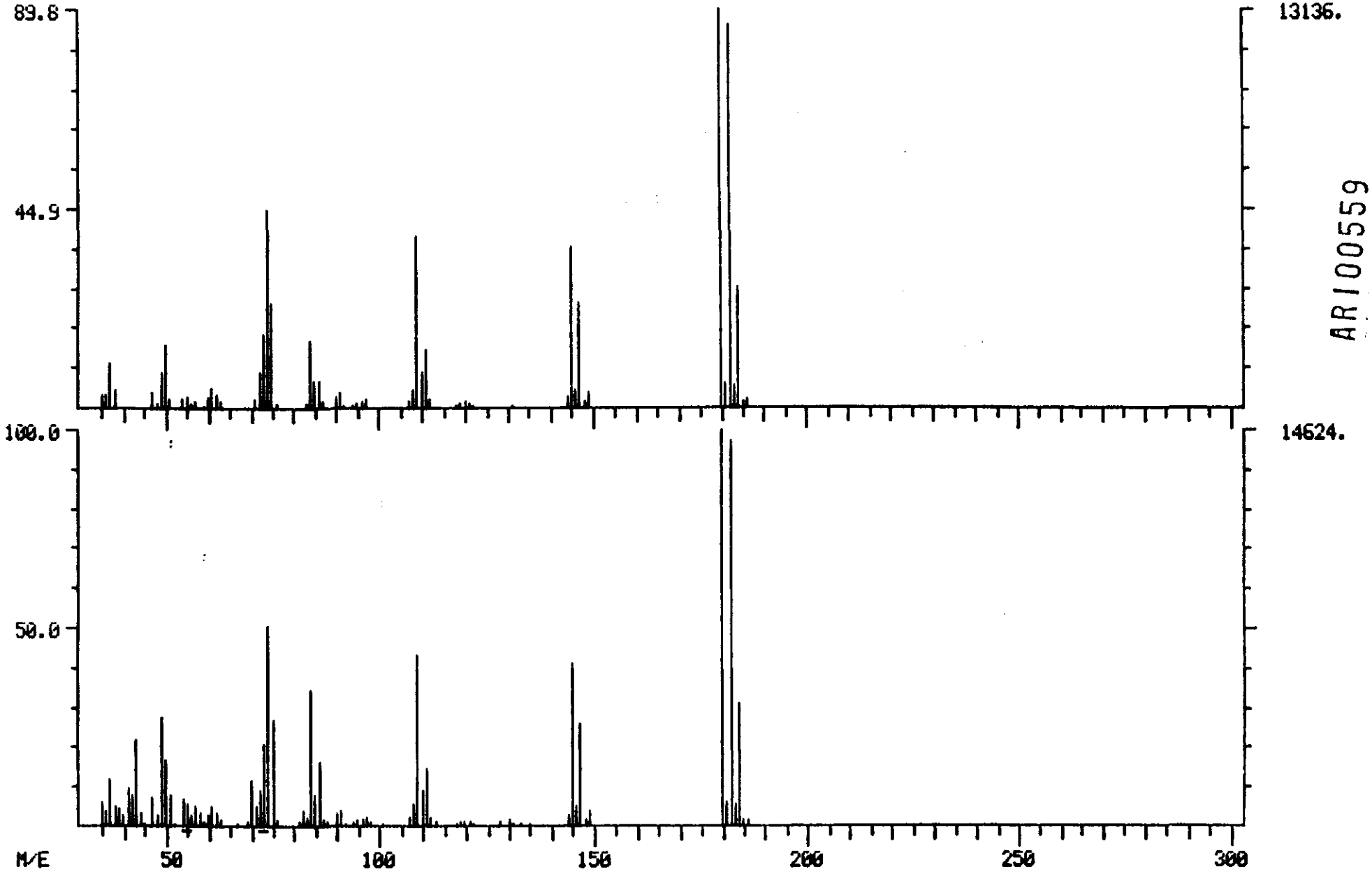
AR100558

ORIGINAL
(Red)

4/6

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 15:39
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #308 BASE M/E: 180/ 180
RIC: 83071./ 117503.



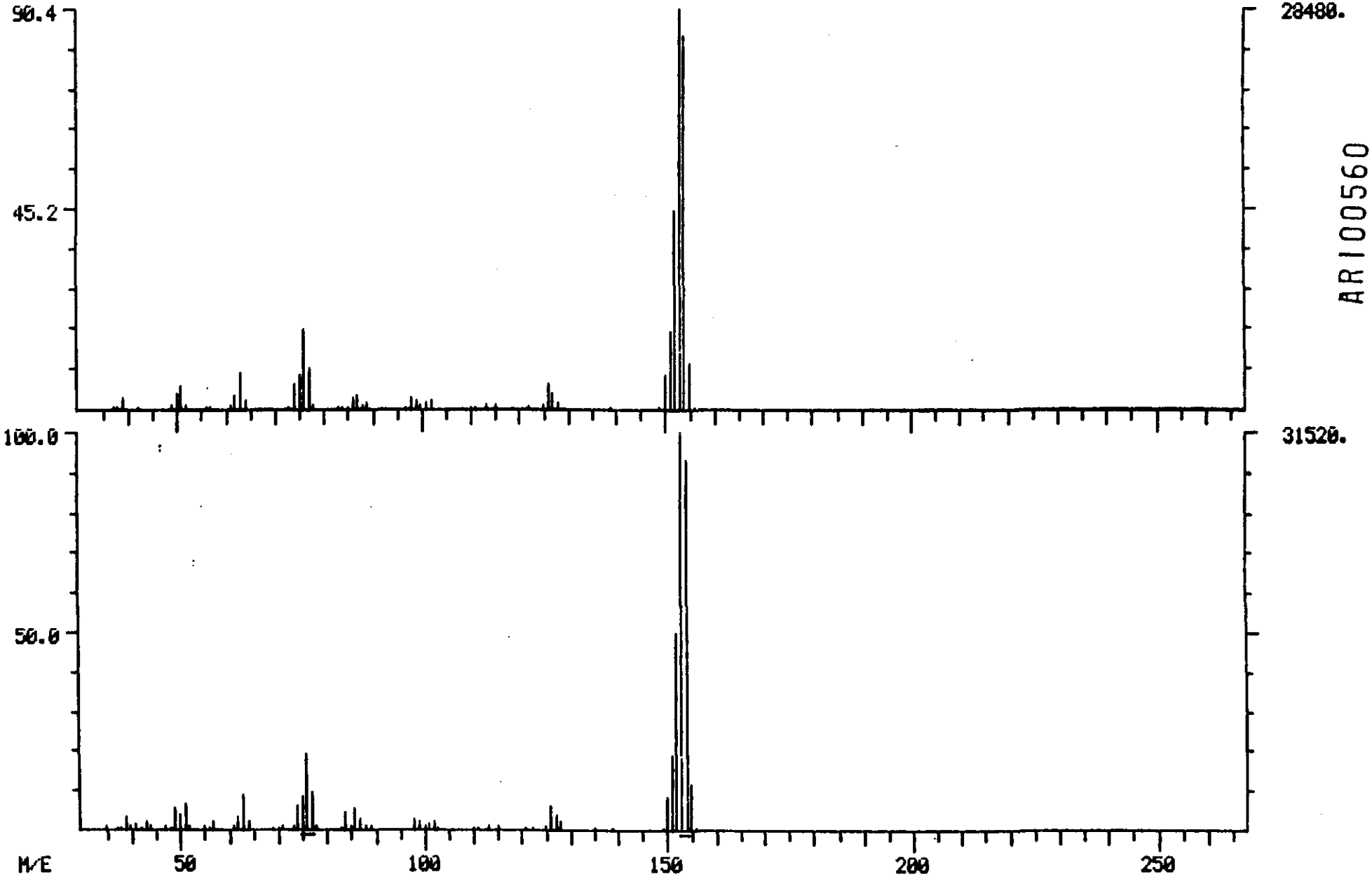
AR100559

ORIGINAL
(Red)

401

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 21:18
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #419 BASE M/E: 153/ 153
RIC: 114687./ 135167.



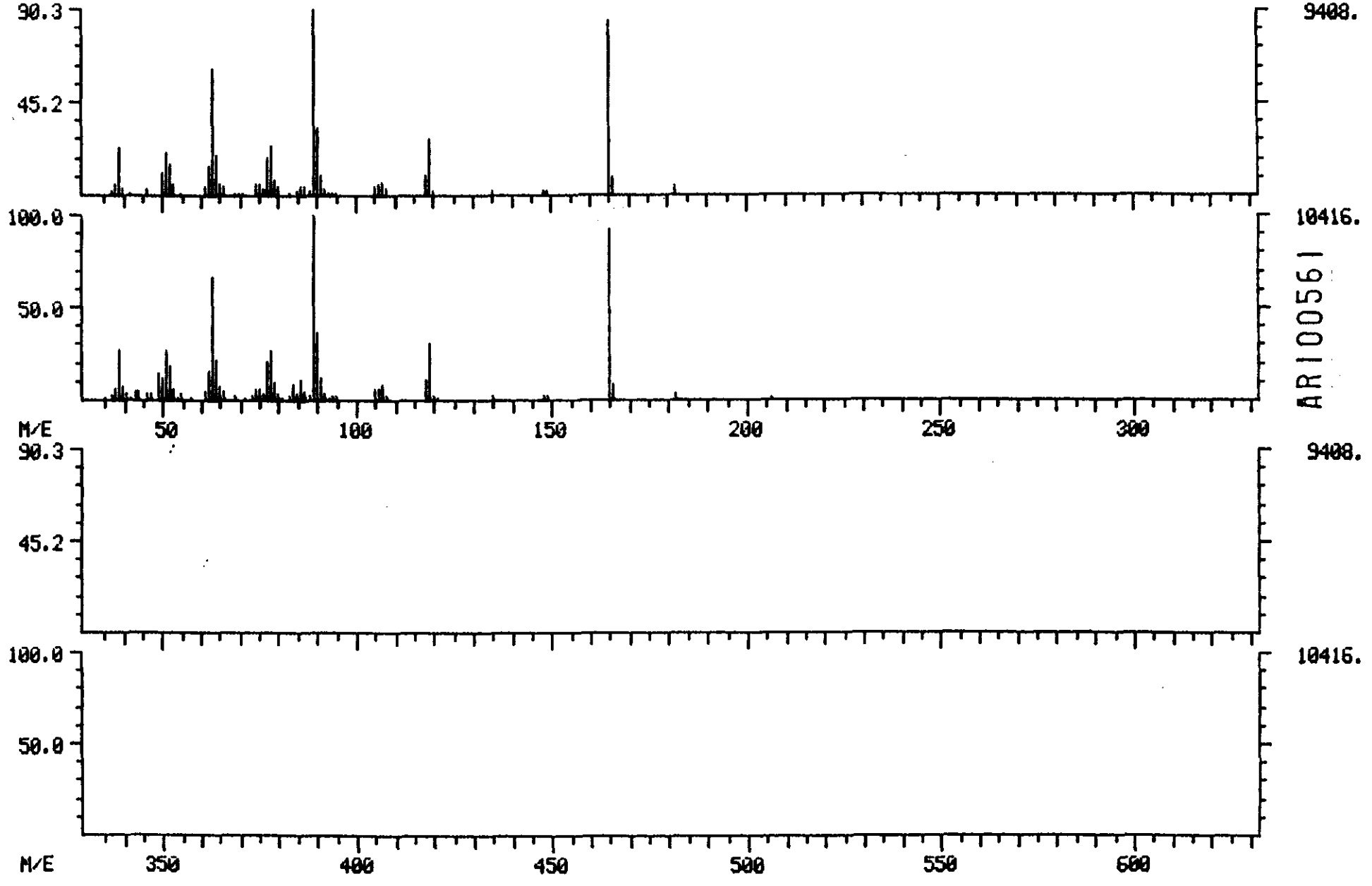
AR100560

ORIGINAL
(Red)

427

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 22:56
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #451 BASE M/E: 89/ 89
RIC: 62015./ 75391.



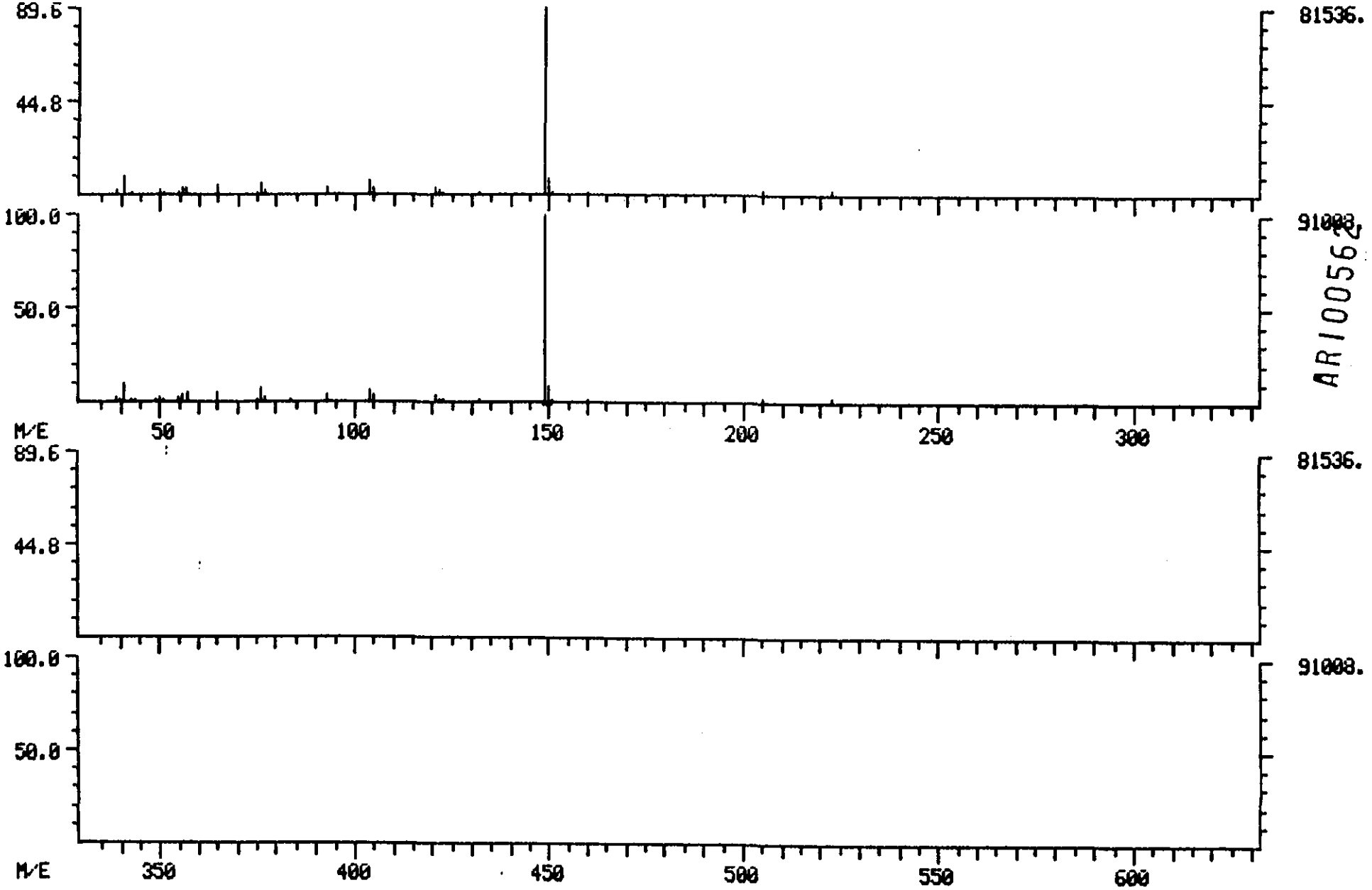
AR100561

ORIGINAL
(Red)

426

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 27:54
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #549 BASE M/E: 149/ 149
RIC: 150271./ 174591.



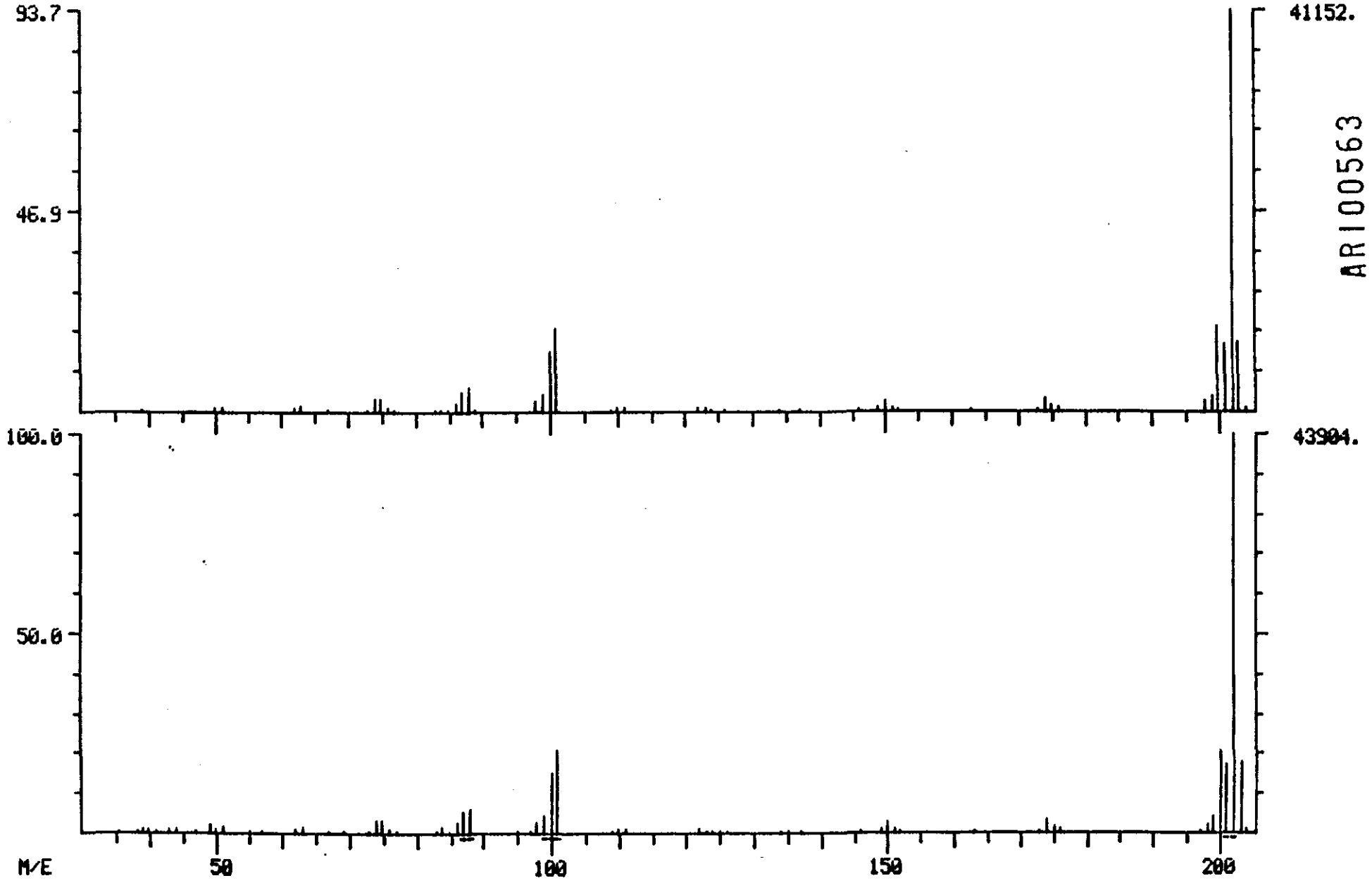
AR100562

ORIGINAL
(Red)

445

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 30:54
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #608 BASE M/E: 202/ 202
RIC: 105855./ 119295.



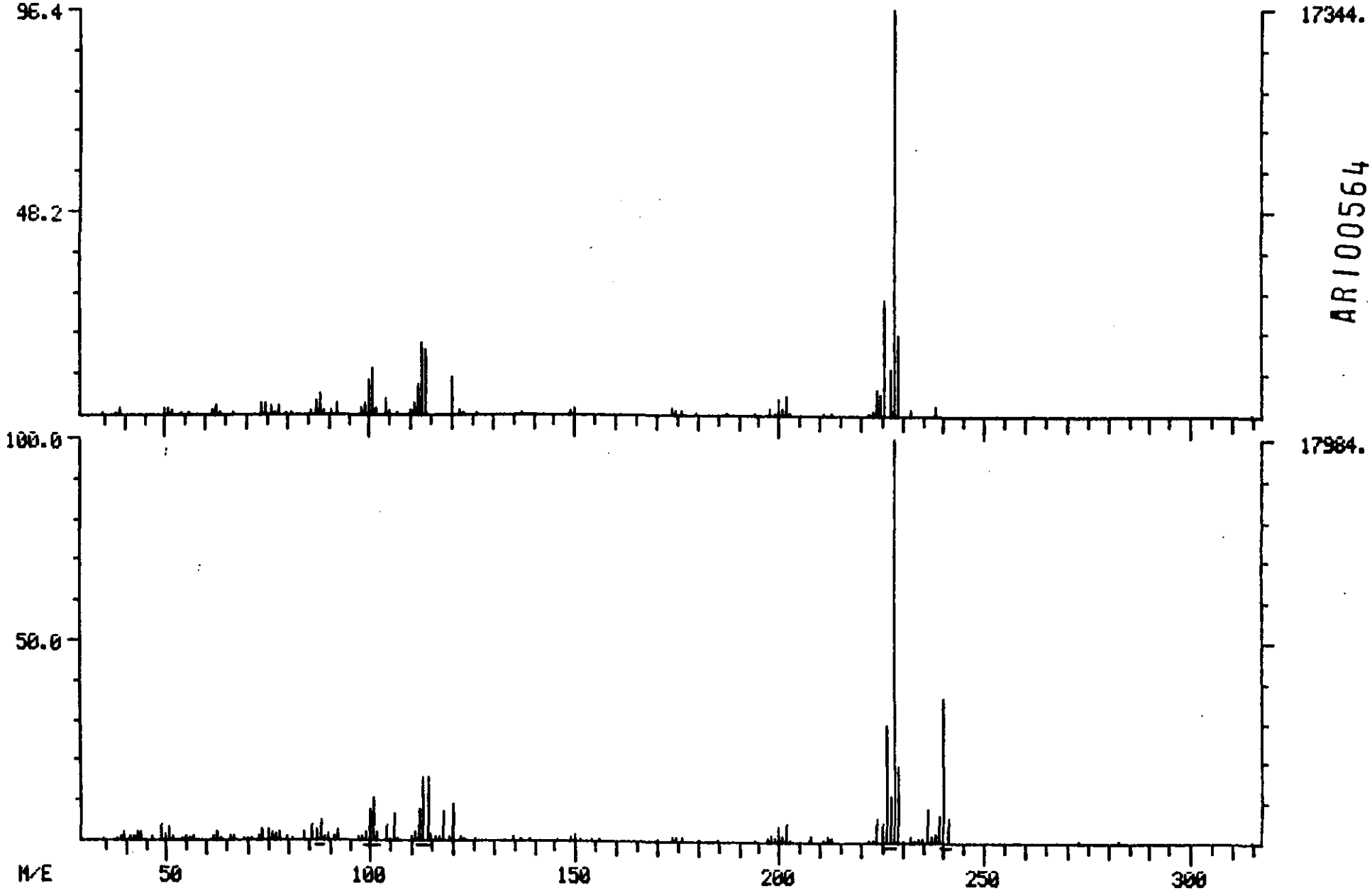
AR100563

ORIGINAL
(Red)

405/418

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 35:56
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N)

DATA: BK013413A03 #707 BASE M/E: 228/ 228
RIC: 57023./ 79999.



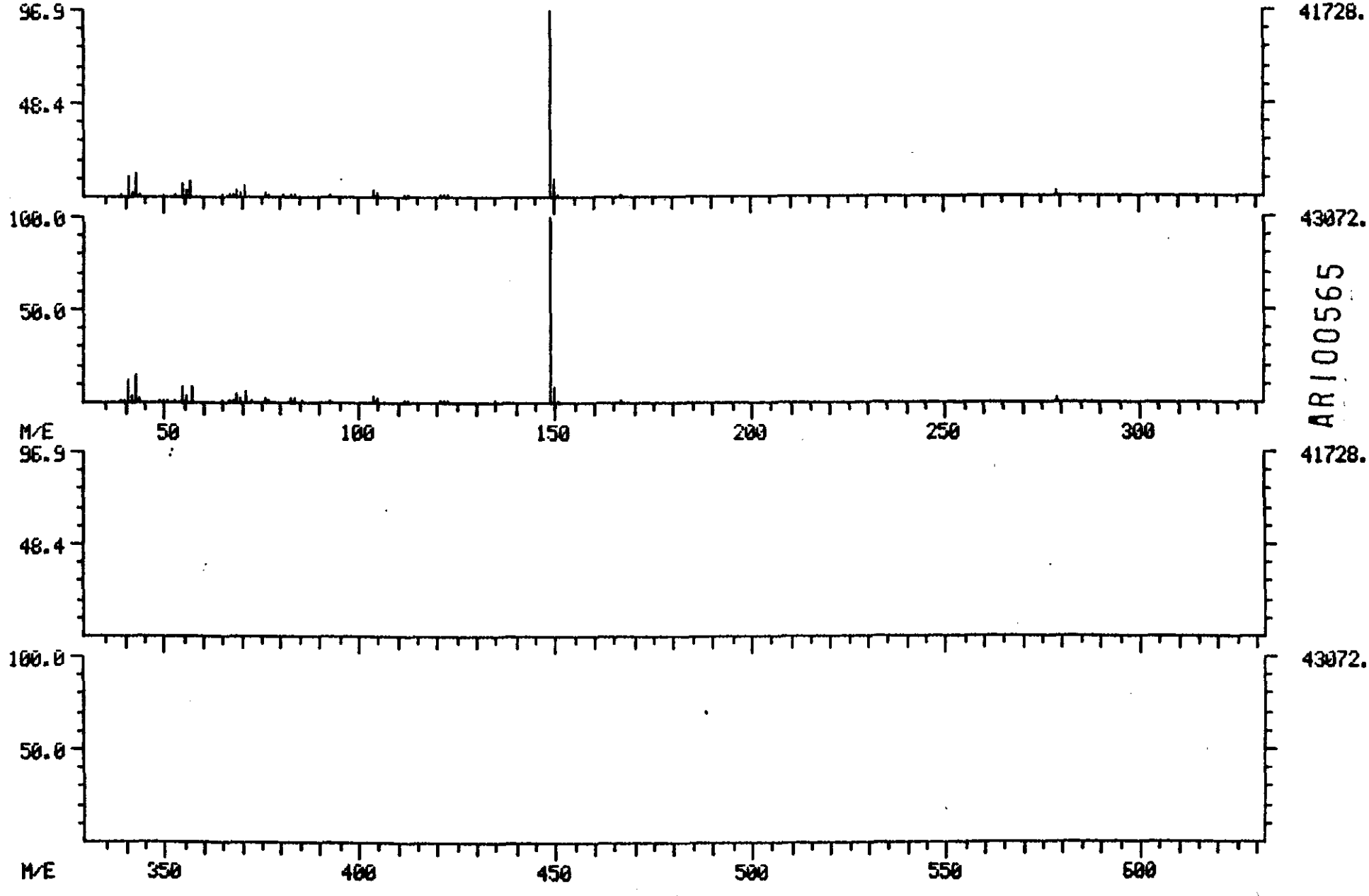
AR100564

ORIGINA
(Red)

4/29

DUAL MASS SPECTRUM
04/01/82 13:07:00 + 37:58
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 158 2N)

DATA: BK013413A03 #747 BASE M/E: 149/ 149
RIC: 84479./ 94719.

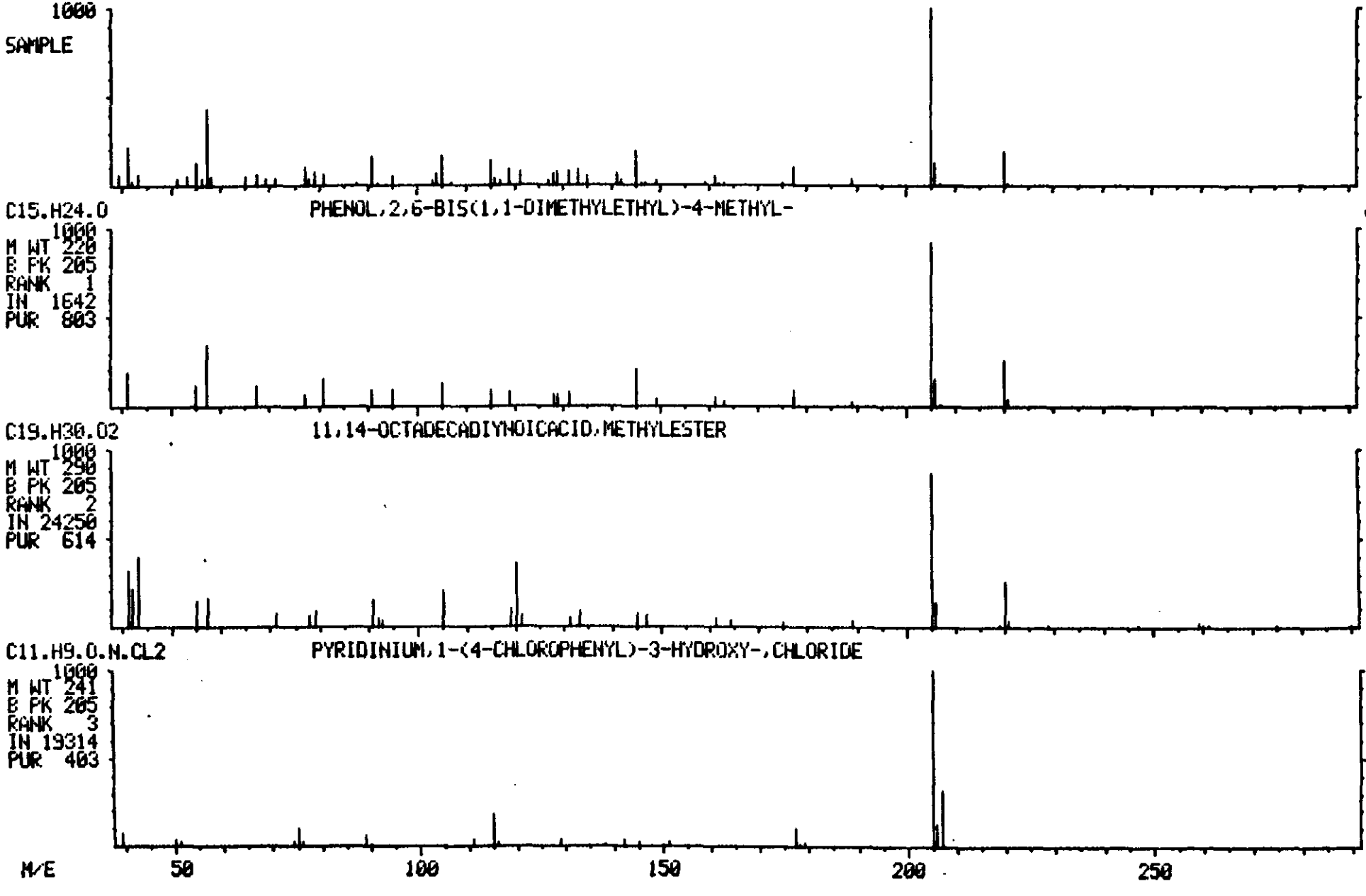


AR100565

ORIGINAL
(Red)

LIBRARY SEARCH
04/01/82 13:07:00 + 20:26
SAMPLE: 2UL B/N HW 13413R ON #3
ENHANCED (S 15B 2N 0T)

DATA: BK013413A03 # 402 BASE M/E: 205
RIC: 22687.



ORIGINAL
(Red)

U.S. ENVIRONMENTAL PROTECTION AGENCY-HWI Sample Management Office
P.O. Box 818, Alexandria, VA 22313 - 703/683-0885

Sample Number

ORGANICS ANALYSIS DATA SHEET - Page 1

Laboratory Name Mesc. CompuChem
Lab Sample ID NO. 13414 DUPLICATE

Case Number 904
QC Report No. 43-37

		ug/g
	ACID COMPOUNDS	
88-06-2	2,4,6-trichlorophenol	10U
59-50-7	p-chloro-m-cresol	20U
95-57-8	2-chlorophenol	10U
122-83-2	2,4-dichlorophenol	10U
105-67-9	2,4-dimethylphenol	10U
88-75-5	2-nitrophenol	10U
100-02-7	4-nitrophenol	90U
51-88-5	2,4-dinitrophenol	40U
534-52-1	4,6 dinitro-o-cresol	20U
87-86-5	pentachlorophenol	25U
108-95-2	phenol	10U
	BASE/NEUTRAL COMPOUNDS	
83-32-9	acenaphthene	10U
92-87-5	benzidine	25U
120-82-1	1,2,4-trichlorobenzene	10U
118-74-1	hexachlorobenzene	10U
67-72-1	hexachloroethane	10U
111-44-4	bis(2-chloroethyl)ether	10U
91-58-7	2-chloronaphthalene	10U
95-50-1	1,2-dichlorobenzene	10U
541-73-1	1,3-dichlorobenzene	10U
106-46-7	1,4-dichlorobenzene	10U
91-94-1	3,3'-dichlorobenzidine	10U
121-14-2	2,4-dinitrotoluene	10U
606-20-2	2,6-dinitrotoluene	10U
	1,2-diphenylhydrazine	10U
122-66-7	(as azobenzene)	10U
206-44-0	fluoranthene	10U
7005-72-3	4-chlorophenyl phenyl ether	10U

		ug/g
	BASE/NEUTRAL COMPOUNDS	
101-55-3	4-bromophenyl phenyl ether	10U
39638-32-9	bis-(2-chloroisopropyl)ether	10U
111-91-1	bis(2-chloroethoxy)methane	10U
87-68-3	hexachlorobutadiene	10U
77-47-4	hexachlorocyclopentadiene	10U
78-59-1	isophorone	10U
91-20-3	naphthalene	10U
98-95-3	nitrobenzene	10U
NA	N-nitrosodimethylamine	NA
86-30-6	N-nitrosodiphenylamine	10U
621-64-7	N-nitrosodi-n-propylamine	10U
117-81-7	bis(2-ethylhexyl)phthalate	10U
85-68-7	butyl benzyl phthalate	10U
84-74-2	di-n-butyl phthalate	10U
117-84-0	di-n-octyl phthalate	10U
84-66-2	diethyl phthalate	10U
131-11-3	dimethyl phthalate	10U
56-55-3	benzo(a)anthracene	10U
50-33-8	benzo(a)pyrene	10U
205-99-2	3,4-benzofluoranthene	25U
207-08-9	benzo(k)fluoranthene	10U
318-01-9	chrysene	10U
208-96-8	acenaphthylene	10U
120-12-7	anthracene	10U
181-24-2	benzo(ghi)perylene	25U
86-73-7	fluorene	10U
85-01-8	phenanthrene	25U
53-70-3	dibenzo(a,h)anthracene	25U
183-39-5	indeno(1,2,3-cd)pyrene	25U
129-00-0	pyrene	25U

AR100567

ORIGINAL (Red)

Lab Name: Mead CompuChem Case No: 904

Lab Sample I.D. No. 1341 DUPLICATE

QC Report No: 43 - 37

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
2-Fluorophenol	Acid	35	50.0 ug/g	50
d_6-Phenol	Acid	18	50.0 ug/g	39
Pentafluorophenol	Acid	14	50.0 ug/g	28
d_5-Nitrobenzene	B/N	38	50.0 ug/g	76
2-Fluorophenol	B/N	42	50.0 ug/g	84

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORIGINAL (Red)

AR100569

ORGANICS ANALYSIS DATA SHEET - Page 4

LAB NAME: _____

LAB SAMPLE I.D. # 13414 ACID

SAMPLE # _____

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

ITEM	SCAN NUMBER	CAS #	COMPOUND NAME	FRACTION	% PURITY	ESTIMATE CONC.(ug/g)
1			NONE	ACID		
2				ACID		
3				ACID		
4				ACID		
5				ACID		
6				ACID		
7				ACID		
8				ACID		
9				ACID		
10				ACID		

ORIGINAL (Red)

AR10057-

ORGANICS ANALYSIS DATA SHEET - Page 4

LAB NAME: _____

LAB SAMPLE I.D. # 13414R

SAMPLE # [ ]

ESTIMATED CONCENTRATION OF TENTATIVELY IDENTIFIED COMPOUNDS

ITEM	SCAN NUMBER	CAS #	COMPOUND NAME	FRACTION	% PURITY	ESTIMATE CONC.(ug/g)
1	400	128-37-0	Phenol, 2,6-Bis(1,1-Dimethylethyl)-4-Methyl	B/N	82	16
2				B/N		
3				B/N		
4				B/N		
5				B/N		
6				B/N		
7				B/N		
8				B/N		
9				B/N		
10				B/N		

ORIGINAL (Red)

Sample No: [illegible]

Lab Standard ID: 13404-13407

U. S. ENVIRONMENTAL PROTECTION AGENCY
HWI SAMPLE MANAGEMENT OFFICE

Lab Name: [illegible]
Report No: 43-37
Page 2 of 2

QUALITY CONTROL REPORT

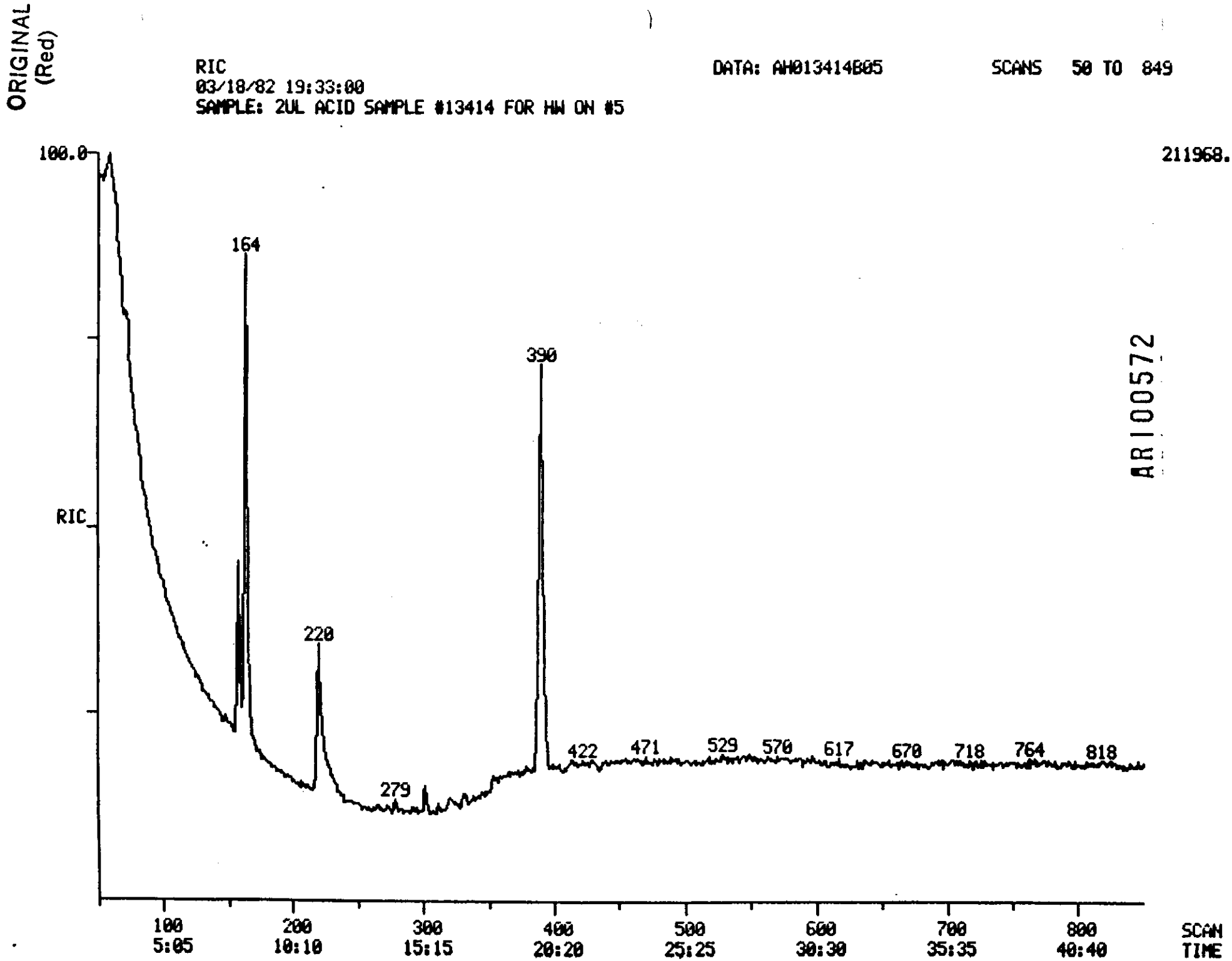
B. DUPLICATE ANALYSIS

COMPOUND (including surrogates)				CONCENTRATION (ug/l)		Relative Percent Difference (RPD)*
P.	P.	#	COMPOUND NAME	Aliquot 1 (D_1)	Aliquot 2 (D_2)	
		A	2-fluorophenol	25	23	8
		A	d_6-phenol	18	16	12
		A	pentafluorophenol	14	15	7
		B	d_5-nitrobenzene	38	41	8
		B	2-fluorobiphenyl	42	40	5

This QC Report also covers the following sample numbers:

$$*RPD = \frac{(D_1 - D_2)}{\left[(D_1 + D_2)/2\right]} \times 100$$

AR100571


ORIGINAL
(Red)
RIC
03/18/82 19:33:00
SAMPLE: 2UL ACID SAMPLE #13414 FOR HW ON #5
DATA: AH013414B05
SCANS 50 TO 849
100.0
211968.
RIC
164
220
279
390
422
471
529
570
617
670
718
764
818
AR100572
100
5:05
200
10:10
300
15:15
400
20:20
500
25:25
600
30:30
700
35:35
800
40:40
SCAN
TIME

ORIGINAL
(Red)

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: AH013414B05

DATA: AH013414B05.TI
3/18/82 19:33:00
SAMPLE: 2UL ACID SAMPLE #13414 FOR HW ON #5
SUBMITTED BY: #5 ANALYST: BJW

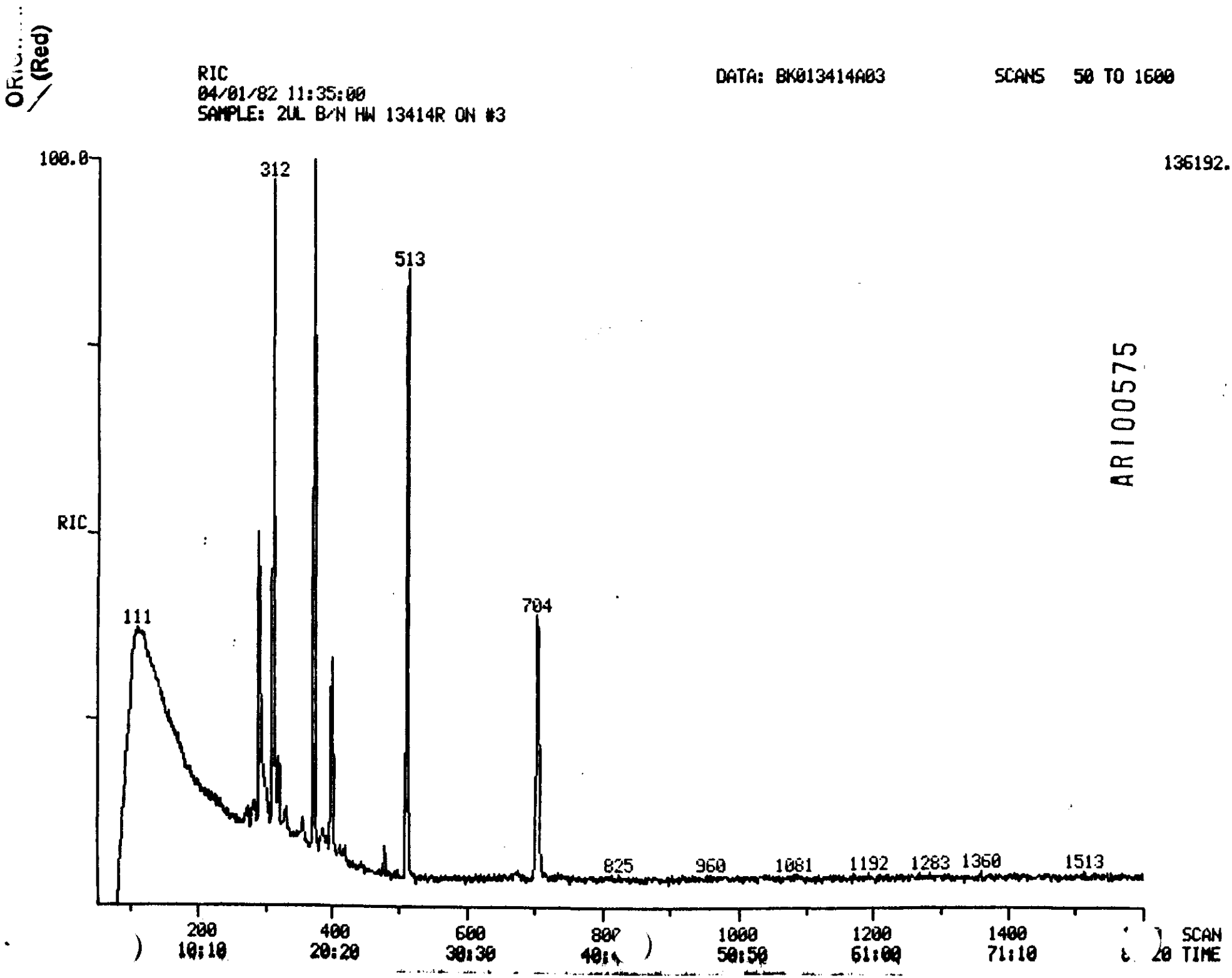
AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LINEAR FIT TO WHOLE .RL

NO	NAME
1	D-8 NAPHTHALENE (INTERNAL STANDARD)
2	FLUOROPHENOL (SURROGATE STANDARD)
3	D-6 PHENOL (SURROGATE STANDARD)
4	PENTAFLUOROPHENOL (SURROGATE STANDARD)
5	2-FLUOROBIPHENYL (SURROGATE)
6	D-5 NITROBENZENE (SURROGATE)
7	D-8 NAPHTHALENE (INTERNAL STANDARD)
8	601 2-CHLOROPHENOL
9	606 2-NITROPHENOL
10	610 PHENOL
11	603 2,4-DIMETHYLPHENOL
12	602 2,4-DICHLOROPHENOL
13	D10-ANTHRACENE (INTERNAL STANDARD)
14	611 2,4,6-TRICHLOROPHENOL
15	608 P-CHLORO-M-CRESOL
16	605 2,4-DINITROPHENOL
17	604 4,6-DINITRO-O-CRESOL
18	609 PENTACHLOROPHENOL
19	607 4-NITROPHENOL

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	136	164	8:20	1	1.000	A BB	139595.	40.000 NG/UL	21.12
2	112	158	8:02	1	0.963	A BB	38545.	24.570 NG/UL	12.97
3	99	220	11:11	1	1.341	A BB	34945.	17.851 NG/UL	9.43
4	184	222	11:17	1	1.354	A BB	12682.	13.884 NG/UL	7.33
5	172	226	11:29	1	1.378	A BB	3333.	1.126 NG/UL	0.59
6	82	164	8:20	1	1.000	A VV	11223.	4.663 NG/UL	2.46
7	136	164	8:20	7	1.000	A BB	143053.	40.000 NG/UL	21.12
8	NOT FOUND								
9	NOT FOUND								
10	94	220	11:11	7	1.341	A BB	386.	0.195 NG/UL	0.10
11	NOT FOUND								
12	NOT FOUND								
13	188	390	19:49	13	1.000	A BB	167870.	40.000 NG/UL	21.12
14	NOT FOUND								
15	142	330	16:46	13	0.846	A BB	149.	0.144 NG/UL	0.08
16	NOT FOUND								
17	NOT FOUND								

ORIGINAL
(Red)

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
18	NOT FOUND									
19	65	777	39:30	13	1.992	A VB	842.	6.952	NG/UL	3.67 - ND


RIC
04/01/82 11:35:00
SAMPLE: 2UL B/N HW 13414R ON #3
DATA: BK013414A03
SCANS 50 TO 1600
100.0
136192.
312
513
704
111
RIC
825
960
1081
1192
1283
1360
1513
AR100575
200
10:10
400
20:20
600
30:30
800
40:40
1000
50:50
1200
61:00
1400
71:10
SCAN
TIME

ORIGINAL

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: BK013414A03

DATA: BK013414A03.TI
04/01/82 11:35:00
SAMPLE: 2UL B/N HW 13414R ON #3
SUBMITTED BY: #3 ANALYST: SRS

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LINEAR FIT TO WHOLE . RL

NO	NAME
1	D-8 NAPHTHALENE (INTERNAL STANDARD)
2	D-5 NITROBENZENE (SURROGATE STANDARD)
3	2-FLUOROBIPHENYL (SURROGATE STANDARD)
4	D-8 NAPHTHALENE (INTERNAL STANDARD)
5	421 1,3-DICHLOROBENZENE
6	422 1,4-DICHLOROBENZENE
7	436 HEXACHLOROETHANE
8	411 BIS (2-CHLOROETHYL) ETHER
9	420 1,2-DICHLOROBENZENE
10	412 BIS (2-CHLOROISOPROPYL) ETHER
11	442 N-NITROSO-DI-N-PROPYLAMINE
12	440 NITROBENZENE
13	434 HEXACHLOROBUTADIENE
14	446 1,2,4-TRICHLOROBENZENE
15	439 NAPHTHALENE
16	410 BIS (2-CHLOROETHOXY) METHANE
17	438 ISOPHORONE
18	416 2-CHLORONAPHTHALENE
19	402 ACENAPHTHYLENE
20	D-10 ANTHRACENE (INTERNAL STANDARD)
21	ACENAPHTHENE
22	DIMETHYL PHTHALATE
23	2,6-DINITROTOLUENE
24	4-CHLOROPHENYL PHENYL ETHER
25	FLUORENE
26	2,4-DINITROTOLUENE
27	DIETHYL PHTHALATE
28	1,2-DIPHENYLHYDRAZINE
29	N-NITROSODIPHENYL AMINE
30	HEXACHLOROBENZENE
31	4-BROMOPHENYL PHENYL ETHER
32	ANTHRACENE AND/OR PHENANTHRENE
33	DI-N-BUTYL PHTHALATE
34	FLUORANTHENE
35	PYRENE
36	2,4-DINITROTOLUENE (SECONDARY ION)
37	D-12 CHRYSENE (INTERNAL STANDARD)
38	404 BENZIDINE
39	415 BUTYL BENZYL PHTHALATE
40	413 BIS (2-ETHYLHEXYL) PHTHALATE
41	413 BIS (2-HEXYLETHYL) PHTHALATE (SECONDARY ION)
42	405/418 BENZO (A) ANTHRACENE AND/OR CHRYSENE
43	423 3,3' DICHLOROBENZIDINE
44	429 DI-OCTYL PHTHALATE
45	407/409 BENZO (B AND/OR K) FLUORANTHENE(S)
46	406 BENZO (A) PYRENE

AR100576

ORIGINAL
(Red)

NO	NAME
47	437 INDENO (1, 2, 3-CD) PYRENE
48	419 DIBENZO (A, H) ANTHRACENE
?	408 BENZO(G, H, I) PERYLENE

I_0 1268.

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	136	312	15:52	1	1.000	A BB	145101.	40.000 NG/UL	16.50
2	82	291	14:48	1	0.933	A BB	71679.	38.185 NG/UL	15.75
3	172	374	19:01	1	1.199	A BB	105236.	42.297 NG/UL	17.44
4	136	312	15:52	4	1.000	A BB	145101.	40.000 NG/UL	16.50
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	128	312	15:52	4	1.000	A BB	3042.	0.706 NG/UL	0.29

ORIGINAL
(Red)

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	188	512	26:02	20	1.000	A BB	134750.	40.000 NG/UL	16.50
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	149	462	23:29	20	0.902	A BB	164.	0.053 NG/UL	0.02
28	77	462	23:29	20	0.902	A BV	885.	0.244 NG/UL	0.10
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	149	549	27:54	20	1.072	A BB	1941.	0.365 NG/UL	0.15
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	240	704	35:47	37	1.000	A BB	82936.	40.000 NG/UL	16.50
38	NOT FOUND								
39	NOT FOUND								
40	149	674	34:16	37	0.957	A BB	1360.	0.357 NG/UL	0.15
41	NOT FOUND								
42	228	702	35:41	37	0.997	A BB	159.	0.078 NG/UL	0.03
43	NOT FOUND								
44	149	746	37:55	37	1.060	A BB	1069.	0.176 NG/UL	0.07
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								

Sample Number

ORIGINAL (Red)

ORGANICS ANALYSIS DATA SHEET - Page 1

Laboratory Name: Mead CompuChem

Case Number: 904

Lab Sample ID NO.: BLANK 13415

QC Report No.: 43-37

		ug/g
	ACID COMPOUNDS	
88-06-2	2,4,6-trichlorophenol	10U
59-50-7	p-chloro-m-cresol	20U
95-57-8	2-chlorophenol	10U
120-83-2	2,4-dichlorophenol	10U
105-67-9	2,4-dimethylphenol	10U
88-75-5	2-nitrophenol	10U
100-02-7	4-nitrophenol	90U
51-28-5	2,4-dinitrophenol	40U
534-52-1	4,6 dinitro-o-cresol	20U
87-86-5	pentachlorophenol	25U
108-95-2	phenol	10U
	BASE/NEUTRAL COMPOUNDS	
83-32-9	acenaphthene	10U
92-87-5	benzidine	25U
120-82-1	1,2,4-trichlorobenzene	10U
118-74-1	hexachlorobenzene	10U
67-72-1	hexachloroethane	10U
111-44-4	bis(2-chloroethyl)ether	10U
91-58-7	2-chloronaphthalene	10U
95-50-1	1,2-dichlorobenzene	10U
541-73-1	1,3-dichlorobenzene	10U
106-46-7	1,4-dichlorobenzene	10U
91-94-1	3,3'-dichlorobenzidine	10U
121-14-2	2,4-dinitrotoluene	10U
606-20-2	2,6-dinitrotoluene	10U
	1,2-diphenylhydrazine	10U
122-66-7	(as azobenzene)	10U
206-44-0	fluoranthene	10U
7005-72-3	4-chlorophenyl phenyl ether	10U

		ug/g
	BASE/NEUTRAL COMPOUNDS	
101-55-3	4-bromophenyl phenyl ether	10U
39638-32-9	bis-(2-chloroisopropyl)ether	10U
111-91-1	bis(2-chloroethoxy)methane	10U
87-68-3	hexachlorobutadiene	10U
77-47-4	hexachlorocyclopentadiene	10U
78-59-1	isophorone	10U
91-20-3	naphthalene	10U
98-95-3	nitrobenzene	10U
NA	N-nitrosodimethylamine	NA
86-30-6	N-nitrosodiphenylamine	10U
621-64-7	N-nitrosodi-n-propylamine	10U
117-81-7	bis(2-ethylhexyl)phthalate	10U
85-68-7	butyl benzyl phthalate	10U
84-74-2	di-n-butyl phthalate	10U
117-84-0	di-n-octyl phthalate	10U
84-66-2	diethyl phthalate	10U
131-11-3	dimethyl phthalate	10U
56-55-3	benzo(a)anthracene	10U
50-33-8	benzo(a)pyrene	10U
205-99-2	3,4-benzofluoranthene	25U
207-08-9	benzo(k)fluoranthene	10U
218-01-9	chrysene	10U
208-96-8	acenaphthylene	10U
120-12-7	anthracene	10U
191-24-2	benzo(ghi)perylene	25U
86-73-7	fluorene	10U
85-01-8	phenanthrene	25U
53-70-3	dibenzo(a,h)anthracene	25U
193-39-5	indeno(1,2,3-cd)pyrene	25U
129-00-0	pyrene	25U

AR100579

ORIGINAL (Red)

Lab Name: Mead CompuChem Case No: 904

Lab Sample I.D. No. 1345BLANK

QC Report No: 43 - 37

Sample Number

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Conc (ug/l)	(Surrogates only) Spike Added (ug/l)	(Surrogates only) % Recovery
2-Fluorophenol	Acid	25	50.0 ug/g	50
d_6-Phenol	Acid	17	50.0 ug/g	34
Pentafluorophenol	Acid	15	50.0 ug/g	30
d_5-Nitrobenzene	B/N	38	50.0 ug/g	76
2-Fluorophenol	B/N	40	50.0 ug/g	80

Form 1 (continued) Data Reporting Qualifiers

For reporting results to EPA, the following results qualifiers are used. Additional flags or footnotes explaining results are encouraged. Definition of such flags must be explicit however.

(a) Value - If the result is a value greater than or equal to the detection limit, report the value.

(b) U - Indicates compound was analyzed for but not detected. Report the minimum detection limit value with the U, e.g., 10U. The footnote should read: U - Compound was analyzed for but not detected. The number is the minimum detection limit.

(c) K - If the mass spectral data indicate the presence of a compound that meets the identification criteria but the quantitative results is less than the specified detection limit but greater than zero, report the detection limit as K, e.g., 10K. The footnote should read: K- Actual value, within the limitations of this method, is less than the value given.

(d) J - Indicates as estimated value which is used when estimating a concentration for tentatively identified compounds, e.g., 1200J. The footnote should read: J - Estimated value.

(e) Other - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described in a page attached to the data summary report.

(f) ** - This flag applies to pesticides parameters where the identification has been performed using two column confirmation (as specified in Method 608) but the level is too low for verification of the compound by mass spectrometry.

ORGANICS ANALYSIS DATA SHEET - Page 4

ORIGINA
(Red)

Lab Name: Mead CompuChem Case No. 904

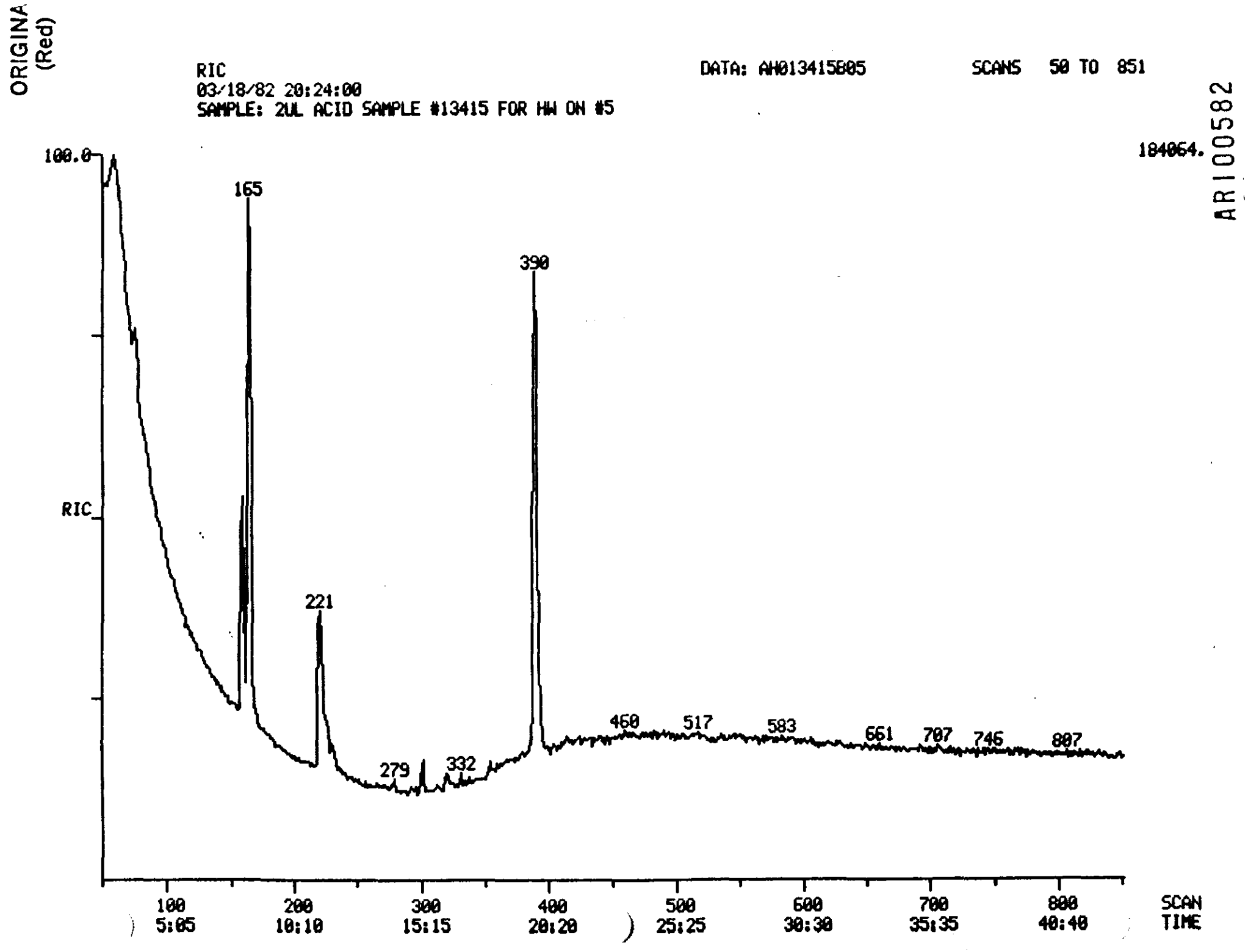
Lab Sample I.D. No. 13415 BLANK

QC Report No: 43-37

Sample Number

B. TENTATIVELY IDENTIFIED COMPOUNDS

	CAS #	COMPOUND NAME	FRAC-TION	% Pur.	Est. Conc.
1		NONE	BN		
2			BN		
3			BN		
4			BN		
5			BN		
6			BN		
7			BN		
8			BN		
9			BN		
10			BN		
11		NONE	ACID		
12			ACID		
13			ACID		
14			ACID		
15			ACID		
16			ACID		
17			ACID		
18			ACID		
19			ACID		
20			ACID		
21			VOA		
22			VOA		
23			VOA		
24			VOA		
25			VOA		
26			VOA		
27			VOA		
28			VOA		
29			VOA		
30			VOA		


ORIGINAL
(Red)
RIC
03/18/82 20:24:00
SAMPLE: 2UL ACID SAMPLE #13415 FOR HW ON #5
DATA: AH013415805
SCANS 50 TO 851
AR100582
100.0
184064.
RIC
165
221
279
332
390
460
517
583
661
707
746
807
100
5:05
200
10:10
300
15:15
400
20:20
500
25:25
600
30:30
700
35:35
800
40:40
SCAN
TIME

FINNIGAN ORGANICS IN WATER ANALYZER
QUANTITATION REPORT FILE: AH013415B05

DATA: AH013415B05.TI
03/19/82 20:24:00
SAMPLE: 2UL ACID SAMPLE #13415 FOR HW ON #5
SUBMITTED BY: #5 ANALYST: BJW

AR1005833

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LINEAR FIT TO WHOLE . RL

NO	NAME	
1		D-8 NAPHTHALENE (INTERNAL STANDARD)
2		FLUOROPHENOL (SURROGATE STANDARD)
3		D-6 PHENOL (SURROGATE STANDARD)
4		PENTAFLUOROPHENOL (SURROGATE STANDARD)
5		2-FLUOROBIPHENYL (SURROGATE)
6		D-5 NITROBENZENE (SURROGATE)
7		D-8 NAPHTHALENE (INTERNAL STANDARD)
8	601	2-CHLOROPHENOL
9	606	2-NITROPHENOL
10	610	PHENOL
11	603	2, 4-DIMETHYLPHENOL
12	602	2, 4-DICHLOROPHENOL
13		D10-ANTHRACENE (INTERNAL STANDARD)
14	611	2, 4, 6-TRICHLOROPHENOL
15	608	P-CHLORO-M-CRESOL
16	605	2, 4-DINITROPHENOL
17	604	4, 6-DINITRO-O-CRESOL
18	609	PENTACHLOROPHENOL
1	607	4-NITROPHENOL
2	607	4-NITROPHENOL

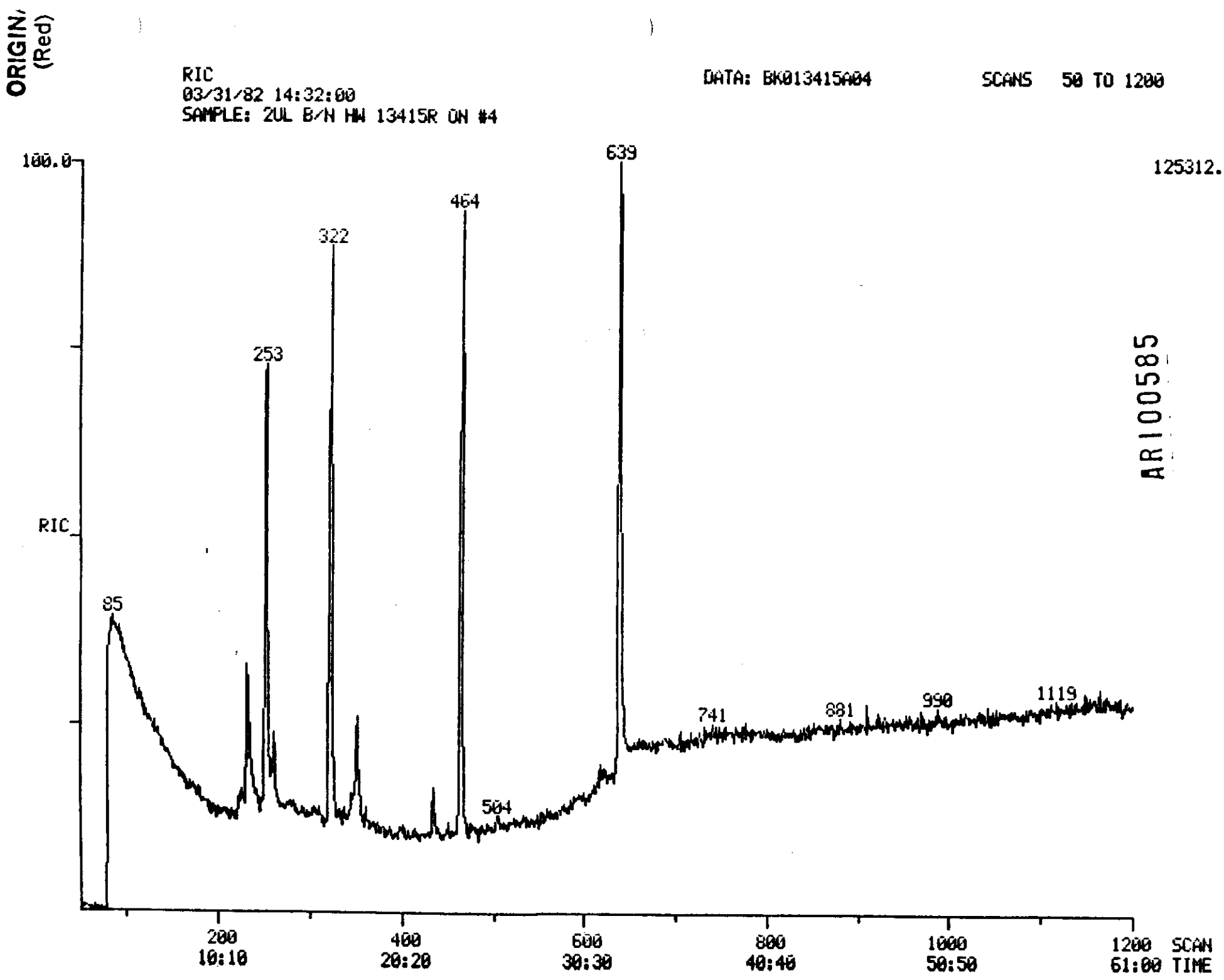
D8 -9%

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	136	165	8:23	1	1.000	A BB	138171.	40.000	NG/UL	20.97
2	112	160	8:08	1	0.970	A BB	38302.	24.668	NG/UL	12.93
3	99	220	11:11	1	1.333	A BB	33206.	17.137	NG/UL	8.98
4	184	222	11:17	1	1.345	A BB	13403.	14.827	NG/UL	7.77
5	172	226	11:29	1	1.370	A BB	3652.	1.246	NG/UL	0.65
6	82	166	8:26	1	1.006	A BB	10677.	4.481	NG/UL	2.35
7	136	165	8:23	7	1.000	A BB	140164.	40.000	NG/UL	20.97
8	NOT FOUND									
9	NOT FOUND									
10	94	220	11:11	7	1.333	A BB	369.	0.190	NG/UL	0.10
11	NOT FOUND									
12	NOT FOUND									
13	188	390	19:49	13	1.000	A BB	172443.	40.000	NG/UL	20.97
14	196	300	15:15	13	0.769	A BB	191.	0.197	NG/UL	0.10
15	NOT FOUND									
16	NOT FOUND									

ORIGINAL
(Red)

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
17	NOT FOUND								
18	NOT FOUND								
19	65	776	39:27	13	1.990	A BV	568.	4.573 NG/UL	2.40
20	65	780	39:39	13	2.000	A VV	431.	3.473 NG/UL	1.82

ORIGINAL
(Red)


ORIGIN
(Red)
RIC
03/31/82 14:32:00
SAMPLE: 2UL B/N HW 13415R ON #4
DATA: BK013415A04
SCANS 50 TO 1200
100.0
125312.
639
464
322
253
85
504
741
881
990
1119
RIC
AR100585
200
10:10
400
20:20
600
30:30
800
40:40
1000
50:50
1200 SCAN
61:00 TIME

ORIGINAL
(Red)

.GAN ORGANICS IN WATER ANALYZER
.ANTITATION REPORT FILE: BK013415A04

DATA: BK013415A04.TI
03/31/82 14:32:00
\MPLE: 2UL B/N HW 13415R ON #4
UBMITTED BY: #4 ANALYST: SRS

AMOUNT=AREA(HGHT) * REF. AMNT/(REF. AREA(HGHT)* RESP. FACT)
RESP. FAC. FROM LINEAR FIT TO WHOLE .RL

NO		NAME
1		D-8 NAPHTHALENE (INTERNAL STANDARD)
2		D-5 NITROBENZENE (SURROGATE STANDARD)
3		2-FLUOROBIPHENYL (SURROGATE STANDARD)
4		D-8 NAPHTHALENE (INTERNAL STANDARD)
5	421	1,3-DICHLOROBENZENE
6	422	1,4-DICHLOROBENZENE
7	436	HEXACHLOROETHANE
8	411	BIS (2-CHLOROETHYL) ETHER
9	420	1,2-DICHLOROBENZENE
10	412	BIS (2-CHLOROISOPROPYL) ETHER
11	442	N-NITROSO-DI-N-PROPYLAMINE
12	440	NITROBENZENE
13	434	HEXACHLOROBUTADIENE
14	446	1,2,4-TRICHLOROBENZENE
15	439	NAPHTHALENE
16	410	BIS (2-CHLOROETHOXY) METHANE
17	438	ISOPHORONE
18	416	2-CHLORONAPHTHALENE
19	402	ACENAPHTHYLENE
0		D-10 ANTHRACENE (INTERNAL STANDARD)
21		ACENAPHTHENE
22		DIMETHYL PHTHALATE
23		2,6-DINITROTOLUENE
24		4-CHLOROPHENYL PHENYL ETHER
25		FLUORENE
26		2,4-DINITROTOLUENE
27		DIETHYL PHTHALATE
28		1,2-DIPHENYLHYDRAZINE
29		N-NITROSODIPHENYL AMINE
30		HEXACHLOROBENZENE
31		4-BROMOPHENYL PHENYL ETHER
32		ANTHRACENE AND/OR PHENANTHRENE
33		DI-N-BUTYL PHTHALATE
34		FLUORANTHENE
35		PYRENE
36		2,4-DINITROTOLUENE (SECONDARY ION)
37		D-12 CHRYSENE (INTERNAL STANDARD)
38	404	BENZIDINE
39	415	BUTYL BENZYL PHTHALATE
40	413	BIS (2-ETHYLHEXYL) PHTHALATE
41	413	BIS (2-HEXYLETHYL) PHTHALATE (SECONDARY ION)
42	405/418	BENZO (A) ANTHRACENE AND/OR CHRYSENE
43	423	3,3' DICHLOROBENZIDINE
44	429	DI-OCTYL PHTHALATE
5	407/409	BENZO (B AND/OR K) FLUORANTHENE(S)
6	406	BENZO (A) PYRENE

AR100586

ORIGINAL
(Red)

	NAME	
47	437	INDENO (1,2,3-CD) PYRENE
48	419	DIBENZO (A,H) ANTHRACENE
49	408	BENZO(G,H,I) PERYLENE

1.-5%

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	136	252	12:49	1	1.000	A BB	83868.	40.000 NG/UL	16.52
2	82	232	11:48	1	0.921	A BB	33672.	37.511 NG/UL	15.49
3	172	322	16:22	1	1.278	A BB	76134.	40.258 NG/UL	16.63
4	136	252	12:49	4	1.000	A BB	83868.	40.000 NG/UL	16.52
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	45	191	9:43	4	0.758	A BB	450.	0.275 NG/UL	0.11
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	93	251	12:46	4	0.996	A BB	321.	0.313 NG/UL	0.13
17	82	274	13:56	4	1.087	A VB	1231.	1.080 NG/UL	0.45
18	NOT FOUND								
19	NOT FOUND								

ORIGIN
(Rec)

	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
20	188	463	23:32	20	1.000	A BB	109823.	40.000	NG/UL	16.52
21	NOT FOUND									
22	NOT FOUND									
3	165	379	19:16	20	0.819	A BB	166.	0.448	NG/UL	0.19
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	149	415	21:06	20	0.896	A BB	833.	0.270	NG/UL	0.11
28	77	412	20:57	20	0.890	A BB	882.	0.281	NG/UL	0.12
29	NOT FOUND									
30	NOT FOUND									
31	NOT FOUND									
32	NOT FOUND									
33	149	504	25:37	20	1.089	A BB	3517.	0.646	NG/UL	0.27
34	NOT FOUND									
35	NOT FOUND									
36	NOT FOUND									
37	240	639	32:29	37	1.000	A BB	114140.	40.000	NG/UL	16.52
38	NOT FOUND									
39	149	608	30:54	37	0.951	A BB	793.	0.315	NG/UL	0.13
40	149	623	31:40	37	0.975	A BB	1323.	0.312	NG/UL	0.13
41	167	623	31:40	37	0.975	A BB	488.	0.367	NG/UL	0.15
42	NOT FOUND									
43	NOT FOUND									
44	149	666	33:51	37	1.042	A BB	408.	0.061	NG/UL	0.03
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	NOT FOUND									
49	NOT FOUND									

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGIN/
(Red)

Laboratory Name Mead CompuChem

Case Number 904

Lab Sample ID NO. 13428 SPIKE

QC Report No. 45-37

		ug/g
	PESTICIDES	
309-00-2	aldrin	3.79
60-57-1	dieldrin	3.93
57-74-9	chlordane	0.1U
50-29-3	4,4'-DDT	0.1U
72-55-9	4,4'-DDE	0.1U
72-54-8	4,4'-DDD	0.1U
115-29-7	endosulfan I	0.1U
115-29-7	endosulfan II	0.1U
1031-07-8	endosulfan sulfate	0.1U
72-20-8	endrin	0.1U
7421-43-4	endrin aldehyde	0.1U
76-44-8	heptachlor	3.60
1024-57-3	heptachlor epoxide	0.1U
319-84-6	BHC-Alpha	0.1U
319-85-7	BHC-Beta	0.1U
319-86-8	BHC-Delta	0.1U
58-89-9	BHC-Gama	0.1U
53469-21-9	PCB-1242	0.1U
11097-69-7	PCB-1254	0.1U
11104-28-2	PCB-1221	0.1U
11141-16-5	PCB-1232	0.1U
12672-24-6	PCB-1248	0.1U
11096-82-5	PCB-1260	0.1U
12674-11-2	PCB-1016	0.1U
8001-35-2	toxaphene	0.4U
	DIOXINS	
1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

*Less than 10 ug/l

(pesticides less than, 0.1 ug/l)

AR100589

Sample No: 13428/13407

Lab Standard ID: 13404-13407

U. S. ENVIRONMENTAL PROTECTION AGENCY
HWI SAMPLE MANAGEMENT OFFICE

Lab Name: Mead Compu/Chem
Report No: 45-37
Page 1 of 2

ORIGINAL (Red)

QUALITY CONTROL REPORT

A. MATRIX SPIKE ANALYSIS

COMPOUND (including surrogates) P. P. #	COMPOUND NAME	CONCENTRATION (ug/g) Sample Result (SR)	Spiked Sample Result (SSR)	Spike Added (SA)	% Recovery*
0 8 9 P	aldrin	NS	3.79	4.28	89
0 9 0 P	dieldrin	NS	3.93	4.08	96
1 0 0 P	heptachlor	NS	3.60	4.04	89

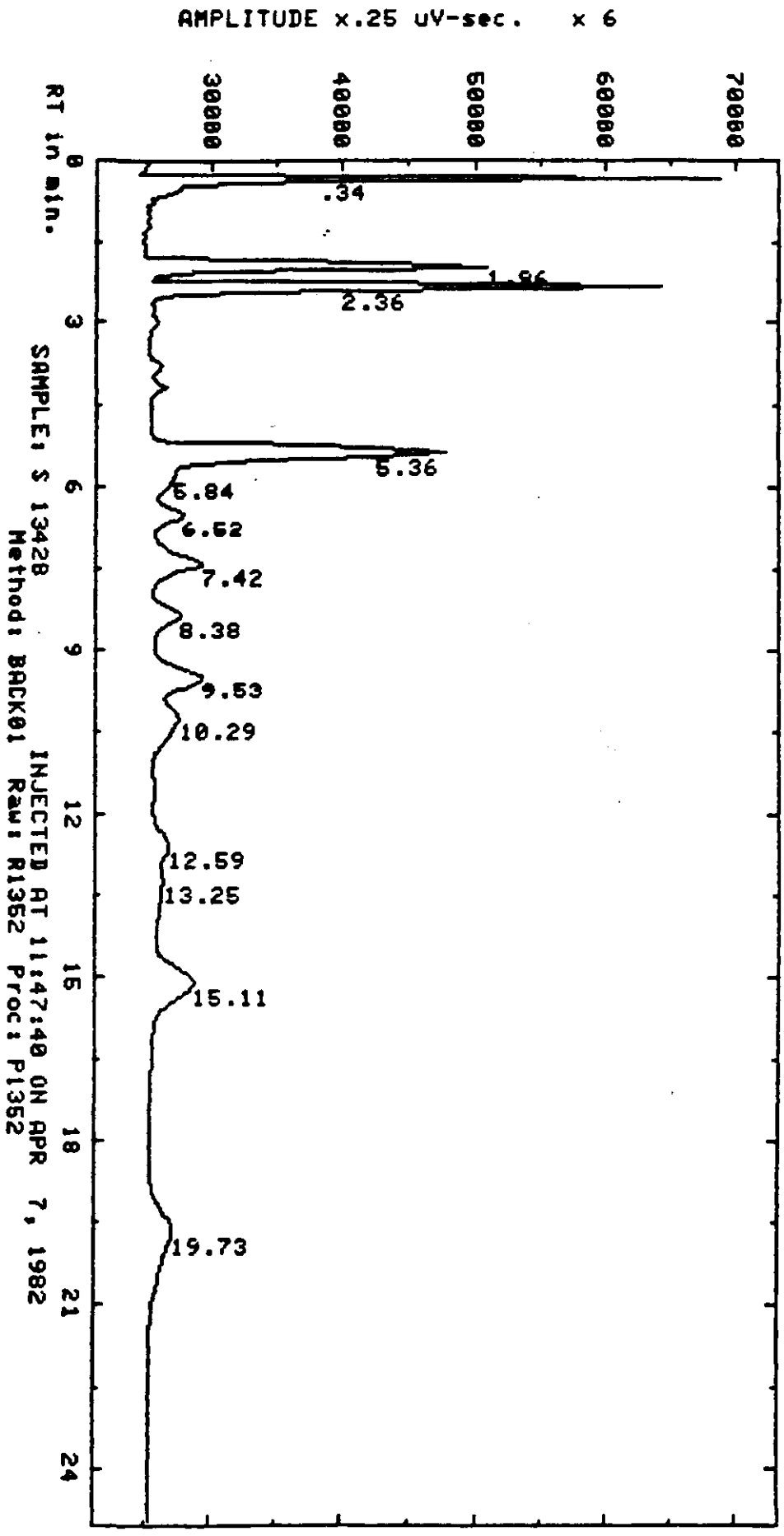
This QC Report also covers the following sample numbers:

*% Recovery = $\frac{(SSR - SR)}{(SA)} \times 100$

2/15/80

AR100590

ORIGINA
(Red)


AMPLITUDE x.25 uV-sec. x 6
30000
40000
50000
60000
70000
RT in min.
0
3
6
9
12
15
18
21
24
.34
1.96
2.36
5.36
5.84
6.52
7.42
8.38
9.53
10.29
12.59
13.25
15.11
19.73
SAMPLE: S 13428
Method: BACK01
INJECTED AT 11:47:40 ON APR 7, 1982
Raw: R1362 Proc: P1362

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGINAL (Red)

Laboratory Name Mead CompuChem

Case Number 904

Lab Sample ID NO. 13429 DUPLICATE

QC Report No. 45-37

		ug/g
	PESTICIDES	
309-00-2	aldrin	0.1U
60-57-1	dieldrin	0.1U
57-74-9	chlordane	0.1U
50-29-3	4,4'-DDT	0.1U
72-55-9	4,4'-DDE	0.1U
72-54-8	4,4'-DDD	0.1U
115-29-7	endosulfan I	0.1U
115-29-7	endosulfan II	0.1U
1031-07-8	endosulfan sulfate	0.1U
78-20-8	endrin	0.1U
7421-43-4	endrin aldehyde	0.1U
76-44-8	heptachlor	0.1U
1024-57-3	heptachlor epoxide	0.1U
319-84-6	BHC-Alpha	0.1U
319-85-7	BHC-Beta	0.1U
319-86-8	BHC-Delta	0.1U
58-89-9	BHC-Gama	0.1U
53469-21-9	PCB-1242	0.1U
11097-69-7	PCB-1254	0.1U
11104-28-2	PCB-1221	0.1U
11141-16-5	PCB-1232	0.1U
12672-24-6	PCB-1248	0.1U
11096-82-5	PCB-1260	0.1U
12674-11-2	PCB-1016	0.1U
8001-35-2	toxaphene	0.4U
	DIOXINS	
1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

*Less than 10 ug/l

(pesticides less than, 0.1 ug/l)

AR100592

Sample [illegible] 13404/13407

Lab Standard ID: 13404-13407

U. S. ENVIRONMENTAL PROTECTION AGENCY
HWI SAMPLE MA[illegible]GEMENT OFFICE

[illegible] Name: [illegible]

Report No: 45-[illegible]

Page 2 of [illegible]

ORIGINAL (Red)

QUALITY CONTROL REPORT

B. DUPLICATE ANALYSIS

COMPOUND (including surrogates)		CONCENTRATION (ug/l)		Relative Percent Difference (RPD)*
P. P. #	COMPOUND NAME	Aliquot 1 (D_1)	Aliquot 2 (D_2)	
	pesticides + PCB's	ND	ND	0

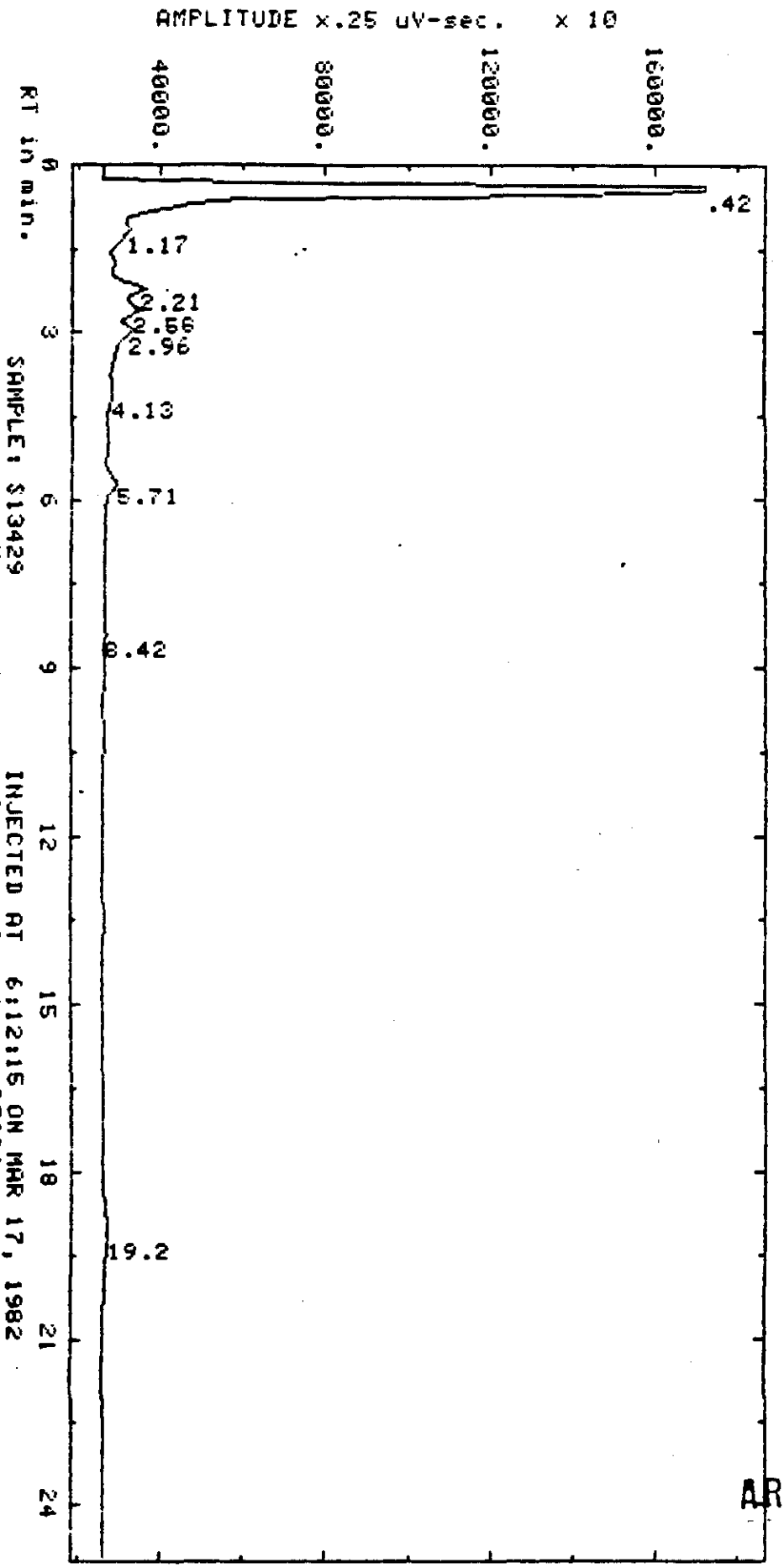
AR100593

This QC Report also covers the following sample numbers:

*RPD = $\frac{(D_1 - D_2)}{[(D_1 + D_2)/2]} \times 100$

2/15/80

ORIGINAL
(Red)



AR100594

ORGANICS ANALYSIS DATA SHEET-Page 2

Sample Number

ORIGINAL (Red)

Laboratory Name Mead CompuChem

Case Number 904

Lab Sample ID NO. BLANK 13419

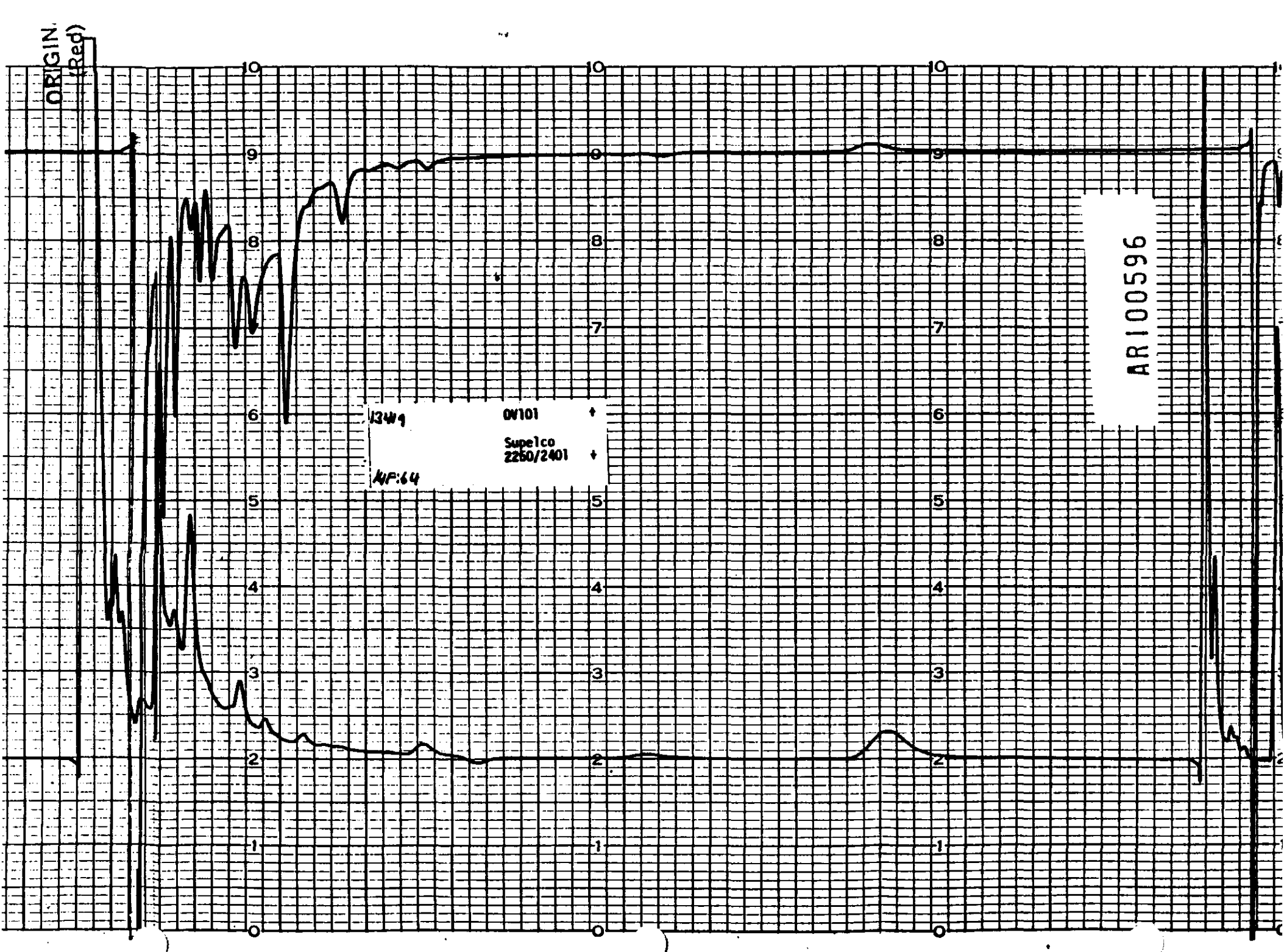
QC Report No. 45-37

		ug/g
	PESTICIDES	
309-00-2	aldrin	0.1U
60-57-1	dieldrin	0.1U
57-74-9	chlordane	0.1U
50-29-3	4,4'-DDT	0.1U
72-55-9	4,4'-DDE	0.1U
72-54-8	4,4'-DDD	0.1U
115-29-7	endosulfan I	0.1U
115-29-7	endosulfan II	0.1U
1031-07-8	endosulfan sulfate	0.1U
72-20-8	endrin	0.1U
7421-43-4	endrin aldehyde	0.1U
76-44-8	heptachlor	0.1U
1024-57-3	heptachlor epoxide	0.1U
319-84-6	BHC-Alpha	0.1U
319-85-7	BHC-Beta	0.1U
319-86-8	BHC-Delta	0.1U
58-89-9	BHC-Gamma	0.1U
53469-21-9	PCB-1242	0.1U
11097-69-7	PCB-1254	0.1U
11104-28-2	PCB-1221	0.1U
11141-16-5	PCB-1232	0.1U
12672-24-6	PCB-1248	0.1U
11096-82-5	PCB-1260	0.1U
12674-11-2	PCB-1016	0.1U
8001-35-2	toxaphene	0.4U
	DIOXINS	
1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.1U

*Less than 10 ug/l

(pesticides less than, 0.1 ug/l)

AR100595


ORIGIN
(Red)
AR100596
13W1
OV101
Supelco
2250/2401
MF:64

Environmental Protection Agency
Office of Forcement

ORIGINAL
(Red)

National Enforcement Investigation Center
Denver Federal Center, Bldg. 53, 25227
Denver, CO 80225

PREPARED HAZARDOUS WASTE EXTRACT CUSTODY RECORD

Region no.	Regional Contact
III	LINDA YOUNG 215-597-1268

NEIC project no.: 633

Project Name: STAUFFER CHEMICAL - DE-7 DELAWARE CITY PVC PLANT

NEIC sample no.	Region Sample no.	SAMPLE DESCRIPTION	Collection Date	Collection Time	A Total Metals	B Acid-Extractable Metals	C Total Mercury	D Strong Acid Anions	H Volatile Organics	J Base/Neutral Acid, TCDD	JC Comb. Base/Neutral Acid, TCDD	K Pesticides, PCB	L Other	Sample Phase No.	COMMENTS
260	SO-2	waste PVC from off grade Bath Pit - EARTH LAGOON	3-9-82	12:10					X	X		X			S/NC5047
261	-	REAGENT BLANK							X	X		X			S/NC5048

Samples received cold intact, custody Seal on ice chest intact, No Tags or Seals on samples.

Shipped by (signature)	date / time	Received by (signature)	date / time
SEALED FOR SHIPMENT VIA FEDERAL EXPRESS	3-25-82 / 14:30	(LK)	
Relinquished by (sign.)	**date / time**	**Received by (signature)**	**date / time**
Diana Hudson	3-25-82 / 14:30	Linda R. Kostenbauer	3/26/82 / 1109

SAMPLE PHASES: 1 aqueous
2 solid
3 non-aqueous

AR100597

PREPARATION PARAMETER RESULTS AND EXTRACTS

ORGANIC

ORIGINAL (Red)

NEIC Sample No. 633-261 Region Sample No. —

Sample Description REAGENT BLANK

Collection Date — TIME — Reagent Blank 633-261

PARAMETER	AQUEOUS, NO. 1		SOLID, NO. 2		NON-AQUEOUS, NO. 3
Percentage of sample (by volume)	N/A		N/A		N/A
% moisture	N/A				N/A
pH					N/A
Alkalinity		mg/l as $CaCO_3$		ug/g as $CaCO_3$	N/A
Acidity		mg/L as $CaCO_3$		ug/g as $CaCO_3$	N/A
Conductivity	TDS_1 =	mg/L	TDS_1 =	ug/g	N/A
	TDS_2 =	mg/L	TDS_2 =	ug/g	N/A
Oxidants (spot test)					N/A
Oxidants		mg/L		ug/g	N/A
Sulfide (spot test)					N/A
Sulfide		mg/L		ug/g	N/A
Cyanide (spot test)					N/A
Cyanide		mg/L		ug/g	N/A
Description					

N/A - not applicable to this phase or sample

N/D - not detected

PARAMETER	ALIQUOT[a]	EXTRACT[b]	SHIPPED[c]
H2 - Volatile Organics	0.0	10ml ~~ether~~ MEOH	10ml
J2 - Base/neutral, Acid, TCDD	0.0	10ml CH_2Cl_2	10ml
JC - Combination of pH adjusted & pH unadjusted Base/Neutral, Acid, TCDD (50/50)			
K2 - Pesticides, PCB	0.0	10ml HEXANE	10ml
L - Other			

COMMENTS:

AR100598

a Amount of original sample taken for preparation
b Volume of total prepared extract. Takes into account all dilutions.
c Volume of weight of prepared extract sent to designated laboratory

ORGANIC BENCH SHEET

(Red)

Project # 633 NEIC Sample # 261 Region Sample # REAGENT BLANK

Analyst SDT/MD Date Extracted 3/16/82

Hazardous Spot Test Results N/A

Initial pH N/A

H - Volatile Organics (VOA)

H1	Sample Aliquot/Solvent	N/A g/	ml Hexadecane
H2	Sample Aliquot/Solvent	0.0 g/ 10	ml Methanol

J - Base/Neutral, Acid, TCDD Extracts

Amount Surrogate Added per Aliquot 0.1 ml HW 11A13

Amount Spike Added per Aliquot N/A Spike Codes

J1	Sample Aliquot/Solvent	0.0 g/ 10	ml CH_2Cl_2	6N NOAH
J2	Sample Aliquot/Solvent	0.0 g/ 10	ml CH_2Cl_2	pH Adj. NO ~~YES~~ 6N H_2SO_4
JC	Combination of J1 & J2	g/	ml CH_2Cl_2	Shipping Volume

(J1) or JC Base/Neutral, Acid, TCDD G.C. Screening

Run # G5656 Date 3/25/82 Analyst SDT/MD

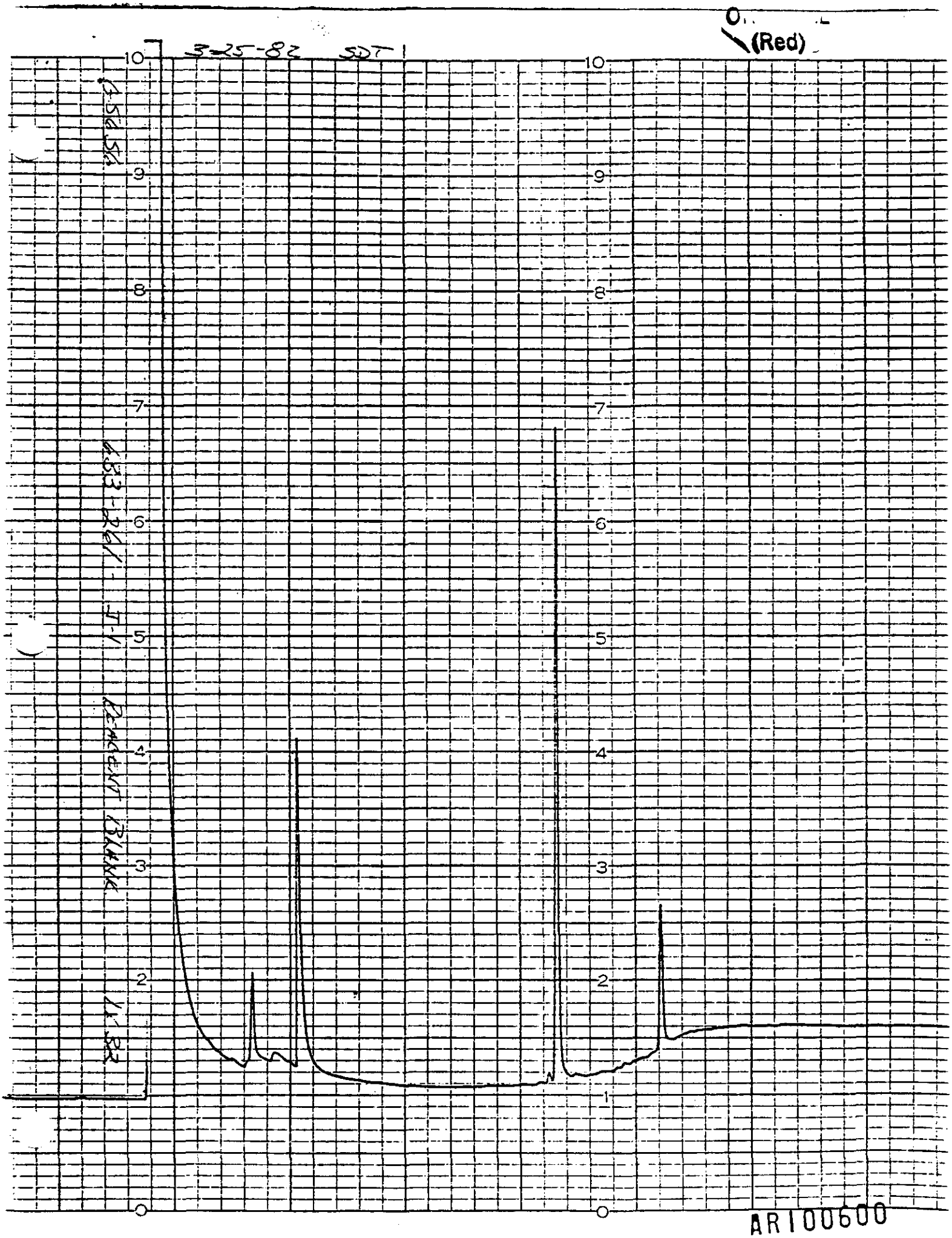
Needs Concentration NO X YES

K - Pesticides/ PCB Extraction

K1	Sample Aliquot/Solvent	0.0 g/ 10	ml Hexane
K2	Sample Aliquot/Solvent	0.0 g/ 10	ml Hexane

COMMENTS Reagent Blank

AR100599



AR100600

(ATTACHMENT B)

SAMPLE ANALYTICAL DATA QUALITY ASSURANCE REVIEW

ORIGINAL (Red)

1. Site: Delaware City PVC Plant TDD Number F3 8201-32
2. Date: May 10 1982
3. ☒ Contract Lab Meade Technology Labs ☐ NEIC
4. ☒ Organics ☐ Inorganics — Sample Concentration: ☐ High ☒ Low ☐ Medium
5. Lot No. bottles: VOA ____, extractable organics, 1/2 gallon amber ____, inorganics, 1 liter PE ____
6. Source of blank water Meade Labs
7. Results Blanks Analysis:

Contaminants Found: None	Concentration Found: Trace <10 ug/l	>/= 10 ug/l
☐ CH_2Cl_2	☐	☐
☐ phthalate esters	☐	☐
☐ toluene	☐	☐
☐ other ____	☐	☐

8. Of compounds noted above, indicate the pattern of contamination for each blank contaminant found. Circle one.

	FIELD BLANK	LAB BLANK*	SAMPLES (Indicate contaminant, indicate fraction of contaminated samples)
A.	X		
B.		X	
C.			X ( )
D.	X	X	
E.	X		X ( )
F.	X	X	X ( )

*Lab (Reagent) blank data provided ☐ Yes ☒ No

Key to probably source of contamination

A. Field blank water (or sampling)
B. Lab water
C. Sample (i.e. actual level of pollution)
D. Both lab and sample blank water
E. Bottle (or sampling)
F. Laboratory

9. Surrogate Spike Recoveries (avg.)

	< 40%	40-80%	80-120%	> 120%
Base/Neutral	☐	☒	☐	☐
Acid Extractables	☐	☒	☐	☐
VOA	☐	☐	☐	☒

(ATTACHMENT B)

SAMPLE ANALYTICAL DATA QUALITY ASSURANCE REVIEW

(Rec)

Site: Delaware City PVC Plant TDD Number F3821-32

2. Date: May 9 and 10, 1982

3. ☒ Contract Lab: Meade Technology Labs ☐ NEIC

4. ☒ Organics ☐ Inorganics

Sample Concentration: ☐ High ☐ Low ☒ Medium

5. Lot No. bottles: VOA _____, extractable organics, 1/2 gallon amber _____, inorganics, 1 liter PE _____

6. Source of blank water Meade Lab.

7. Results Blanks Analysis:

Contaminants Found: None		Concentration Found: Trace <10 ug/l	>/= 10 ug/l
☐	CH_2Cl_2	☐	☐
☐	phthalate esters	☐	☐
☐	toluene	☐	☐
☒	Three other Tentatively identified compounds (CAS # 35421-93-2, CAS # 17851-53-5 CAS # 108-32-0	☐	☒

8. Of compounds noted above, indicate the pattern of contamination for each blank contaminant found. Circle one.

	FIELD BLANK	LAB BLANK*	SAMPLES (Indicate contaminant, indicate fraction of contaminated samples)
A.	X		
B.		X	
C.			X ( )
D.	X	X	
E.	X		X ( )
F.	X	X	X ( )

*Lab (Reagent) blank data provided ☐ Yes ☒ No

Key to probably source of contamination

A. Field blank water (or sampling)
B. Lab water
C. Sample (i.e. actual level of pollution)
D. Both lab and sample blank water
E. Bottle (or sampling)
F. Laboratory

9. Surrogate Spike Recoveries (avg.)

	< 40%	40-80%	80-120%	> 120%
Base/Neutral	☐	☒	☒	☐
Acid Extractables	☐	☒	☐	☐
VOA	☐	☐	☒	☐

1. COST CENTER	ACKNOWLEDGMENT OF COMPLETION FOR TDD	2.
EP 152-13	☒ Complete ☐ Interim UNCONTROLLED HAZARDOUS WASTE SITE PROJECT **ecology and environment, inc.**	No. F3-8111-04A 102

3A. RESPONSE:

Hydrogeological Review
Stauffer Chemical Site
DE-7

ORIGINAL
(Red)

ORIGINAL
(Red)

☒ FORMAL REPORT
☐ LETTER REPORT
☐ FORMAL BRIEFING
☐ OTHER (SPECIFY) : _____

3B. TECHNICAL LABOR HOURS EXPENDED 251 hours

4. DPO ACTION ☐ Accepted ☐ Accepted with exceptions ☐ Rejected

5. COMMENTS: _____

6. I certify that the attached materials meet and comply with all requirements of the subject TDD.

Joseph A. McMahon
(FITL Signature)

7. Date: 3/18/82

8. I acknowledge that I have been provided with the materials and services specified in the subject TDD within its original or revised time frames.

_____
(Authorizing DPO Signature)

9. Date: _____

Sheet 1 White – FITL Copy
Sheet 2 Canary – DPO Copy
Sheet 3 Pink – Contracting Officer's Copy (Washington, D.C.)
Sheet 4 Goldenrod – Project Officer's Copy (Washington, D.C.)
☐ Photocopy to E & E NPM (Washington, D. C.)

AR100603

A. Stone

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region III – 6th & Walnut Sts.
Philadelphia, Pa. 19106

ORIGINAL (Red)

SUBJECT: Stauffer/Formosa Meeting concerning the Delaware City PVC Plant, DE

DATE: 3-15-82

FROM: Chris Hladchuk, DE Project Officer
Superfund/RCRA Compliance Section

TO: files

Date: Feb 23, 1982

Attendance:	Representing	Phone #
Chris Hladchuk *	EPA III	215-597-2193
P.E. Roggi	Formosa	201-966-1041
Charles Markowitz	Formosa	302-834-4575
Frank Doyle*	Formosa	302-834-4574
J.D. Sheehan	Stauffer	203-222-3222
Alton Day Stone	E&E	609-665-1515
C.K.Lee	E&E	609-665-1515
Dan Mc Grade*	Stauffer	203-222-3222
Paul Roux	Roux & Assoc.	203-254-1439
Edgar Conant	Cons-Stauffer	201-226-9002
Stephen Platt	EPA III	215-597-9017
Walter Lee	EPA III	215-596-9405

* Prime contact person

Summary of the Meeting

- review of aerial photos to identify past disposal pratices and delineate potential "hot spots" on site for future monitoring

- discussion of safety procedures on site

From March 1 to May 1, 1982 the Formosa Plant would be closed, except for a skeleton crew. A state RCRA inspection will be conducted at Formosa when the site is operating at capacity in May. The state will conduct a RCRA inspection at the Stauffer site on March 9th.

A sampling inspection will be conducted jointly by E&E and the state on March 9, 10, and 12, at the PVC plant. Samples will be split with Stauffer, and arrangements will be made to coordinate the sampling with a team from Stauffer.

During January 1982 Stauffer had contracted a drill rig and sampled various points within the identified disposal areas and potential disposal sites. The analytical results from this work was not completed in time for our meeting on Feb 23,but tentative results were presented. Samples were also

8201-32-07

taken from Dragon Creek Run. These results and other information will be formalized in a report and made available to EPA at a later date.

Review of Disposal Areas

Area D-4 Disposal Sludge Pits (off-grade resin)

material was not disposed here after 1976. In 1979 the site was closed with a PVC liner, fill was placed over the liner and storm runoff diversion measures were taken. No lining is present on the sides or bottom, approximate depth is 15 ft.

1982 samples : 4 borings were taken at depths of 3-20 ft.
average conc - 100 ppm VCM and EDC
high conc - 380 ppm VCM
low conc - .4ppm VCM
soil below site contained ∠1ppm EDC,VCM

Area D1, D3, part of A, A2

various soil borings were taken at 6-8 feet depths. These showed no concentrations of VCM or EDC.

Area D2

contaminated soils were found, but not waste.

sample X - .5ppm EDC
sample X1- 100ppb EDC

This site was once used as an open storage for drums, but no drums were buried on site. SW corner was used to store construction equipment. SE corner once held a PVC disposal pit, but they believe that the site was excavated in 1978-79.

Area A

6 borings of soil were taken to 8 ft depths, which showed no VCM or EDC contamination.

Earth Lagoons

active site
1) off-grade batch resins of PVC powder (100 microns in particle size) no permament disposal
2) also served for overflow from the NPDES discharge from the aeration lagoons, has settling and collection system capabilitites.
3) indefinite info received that these lagoons may have been asphalted
4) less than 90 days storage
5) slurry composition of PVC approximatedly 50% water - same waste disposed of at D4
6) VCM might be contained in the PVC off-grade batch waste. EPA has set standards of less than 400 ppm of VCM, after steam stripping.

Aeration Lagoons

accepts NPDES permitted process water and stormwater from the RV pond

reduces organic loading from the effluent. Concrete lined. Discharges to claification system, which discharges to pit for pH adjustment, which discharges to Delaware via NPDES permit. PH pit is lined.

Stormwater RV Lagoon

accepts runoff and stormwater drainage from a 25 acre site. The overflow is treated in an aerated lagoon, then discharged to a tributary of Dragon Creek. This system has occasionally overflowed, last overflow occurred last summer- 1981. The lagoon is maintained in a partially emptied state. The drainage ways were never dredged.

Area C

construction parking lot

Area C1

fill dirt was added to the site

Area C3

trailer storage area for construction equipment

Area above C3- dumping, probable leachate

EII plant- stormwater piping was not connected prior to 1978.
PVC resin possibly got into stormwater drain. Pipes are presently connected.

Disturbed Area B

3rd company - Hoechst
Joint venture between Stauffer and Hoechst until 1970. They manufacture clear , rigid vinyl products. Liquids and debris on site may be caused from poor drainage.
Old dumpsite area may be an outlet for stormwater or possibly a septic tile drainage field.

Ground Scarring

baseball infield

Stauffer Open Storage

unknown, possibly drum storage

Light material being removed

open sulfur storage in bulk piles. Presently empty. Ground staining caused by sulfur.

CDS Plant -- Carbon Disulfide

Sulfur melted and reacted with natural gas to form SO_2 and water. SO_2 is discharged to the atmosphere in concentrations of 200ppm.