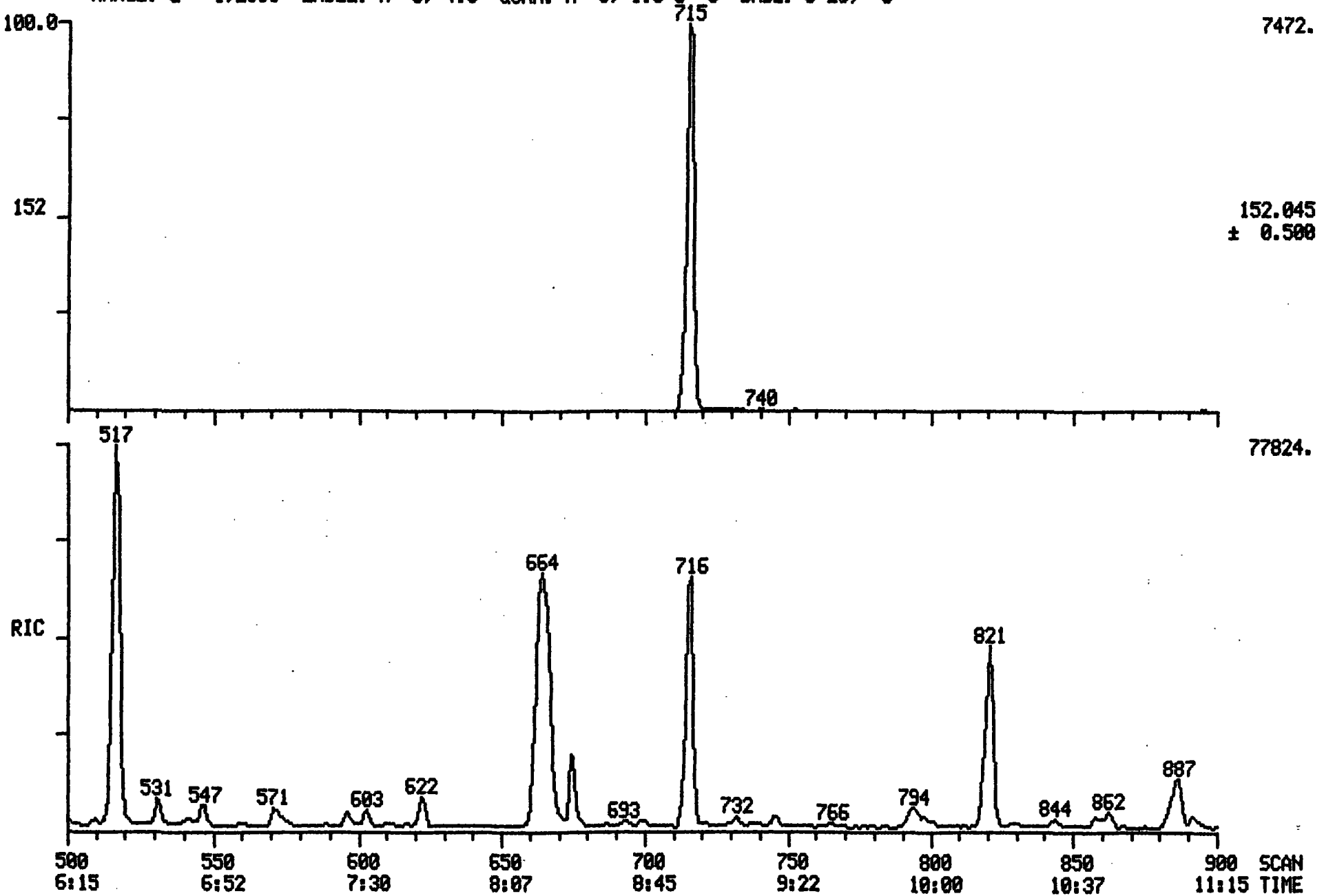
00698

US EPA RECORDS CENTER REGION 5
513846

RIC+MASS CHROMATOGRAM
06/01/88 19:30:00
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1.2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R969 #1 SCANS 500 TO 900
CALI: 053188CR #4



DATA REDUCED BY: AR DATE: 6-7-86 DATA FILE: 559436R969
DATA REVIEWED BY: ____ DATE: ____

00699

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-09 BNA H2O 100%/2ML RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MK

#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	312	B	2	9.5	108-87-2	CYCLOHEXANE, METHYL-
2	368	B	2	7.0	108-88-3	BENZENE, METHYL- (VOA)
3	391	CB	1	7.7	00-00-0	OXYGENATED HYDROCARBON
4	434	CB	1	7.1	00-00-0	OXYGENATED HYDROCARBON
5	468	CB	1	18.	00-00-0	OXYGENATED HYDROCARBON
6	622	IB	1	4.8	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-
7	674	I	2	8.7	108-47-4	PYRIDINE, 2,4-DIMETHYL-
8	887		1	8.5	00-00-0	UNKNOWN
9	907		1	4.3	00-00-0	UNKNOWN
10	1028	I	1	5.2	120-71-8	BENZENAMINE, 2-METHOXY-5-METHYL-

edit complete

DATA FILE: S59436R969

00700

ENSECO TIC REPORT (PAGE 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	980	903	1	3:53	0.440	35639.	11353.	9.460	NB	1138.
2	993	956	1	4:35	0.518	26486.	12820.	7.030	NB	850.
3	933	833	1	4:53	0.551	28975.	9792.	7.691	BC	2.
4	924	733	1	5:25	0.611	26603.	8288.	7.061	BC	2.
5	800	766	1	5:50	0.658	67087.	24079.	17.807	BC	2.
6	922	740	1	7:46	0.873	17917.	5843.	4.756	NB	6445.
7	990	894	1	8:25	0.946	32745.	13402.	8.692	NB	1746.
8	860	577	2	11:05	0.934	40271.	9216.	8.483	UK	1.
9	847	630	2	11:20	0.955	20610.	5082.	4.342	UK	1.
10	915	763	2	12:50	1.082	24682.	5271.	5.199	NB	5324.

TIC SELECTION REPORT

DATA FILE: S59436R969

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 50 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 3 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
335	74975.	19.900
517	243353.	64.592
664	270849.	71.890
716	150701.	39.999
794	22922.	6.084
821	115637.	30.693
954	189890.	39.999
1176	171203.	36.063
1311	201403.	42.304
1614	190431.	39.999
1950	126093.	26.485
2168	143573.	46.453
2186	20834.	6.741
2449	123627.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 11

INTERNAL STANDARD DATA IS LISTED BELOW. IS FOR WHICH RIC SIZE DIFFERS FROM THE ESTIMATED RIC SIZE BY MORE THAN 60 % ARE CONSIDERED TO HAVE INTERFERENCES, AND ARE NOT USED FOR QUANTITATION.

#	LIB	LIB#	RIC SIZE	ESTIMATED RIC SIZE	INTERFERENCE
1	S1	1	150701.	136027.	
2	S2	1	189890.	125889.	
3	S3	1	201403.	99024.	*
4	S4	1	190431.	124425.	
5	S5	1	143573.	85095.	*
6	S6	1	123627.	92243.	

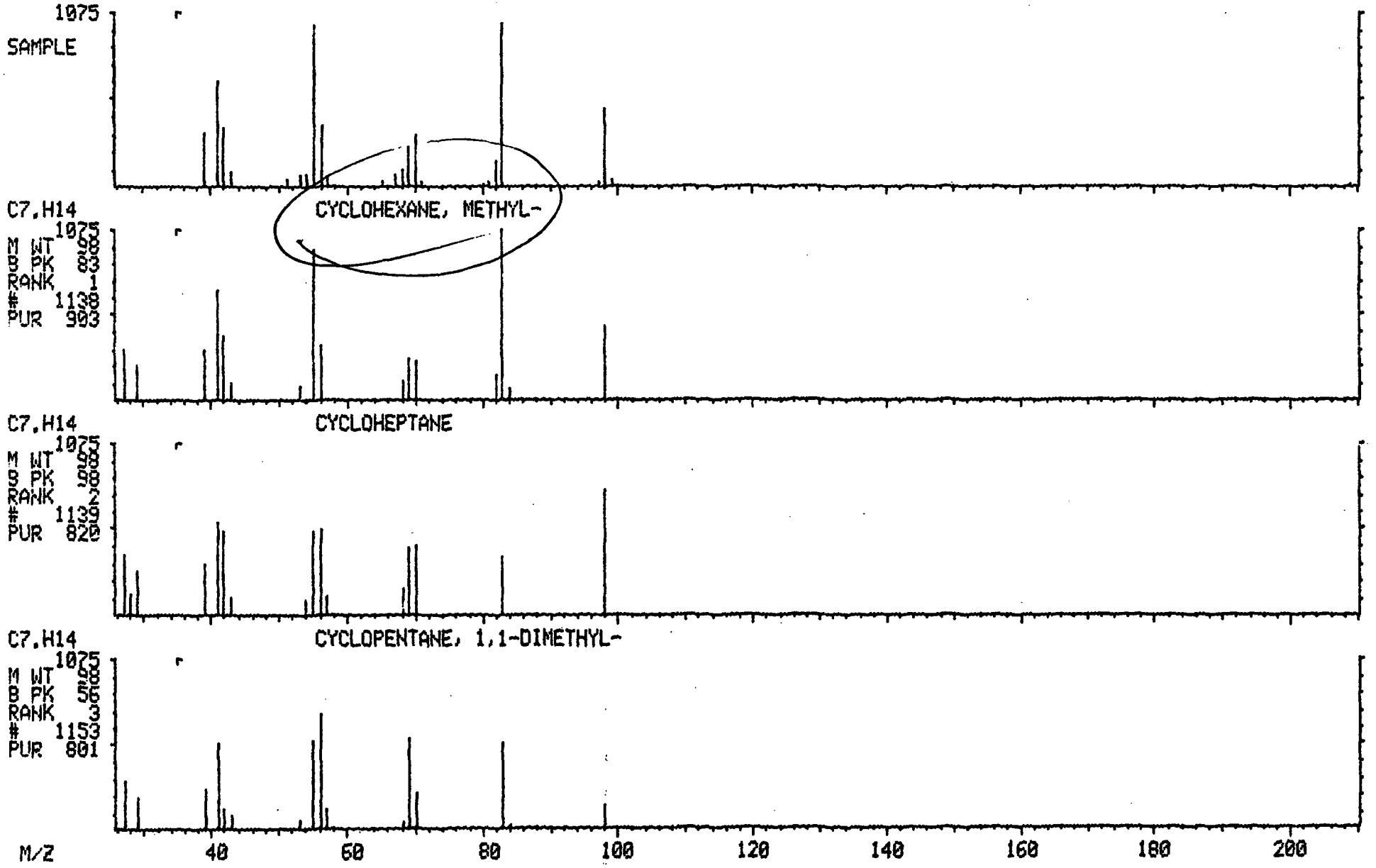
SIZE = AREA

00702

LIBRARY SEARCH
06/01/88 19:30:00 + 3:54
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 # 312
CALI: 053188CR # 4

BASE M/Z: 83
RIC: 10431.

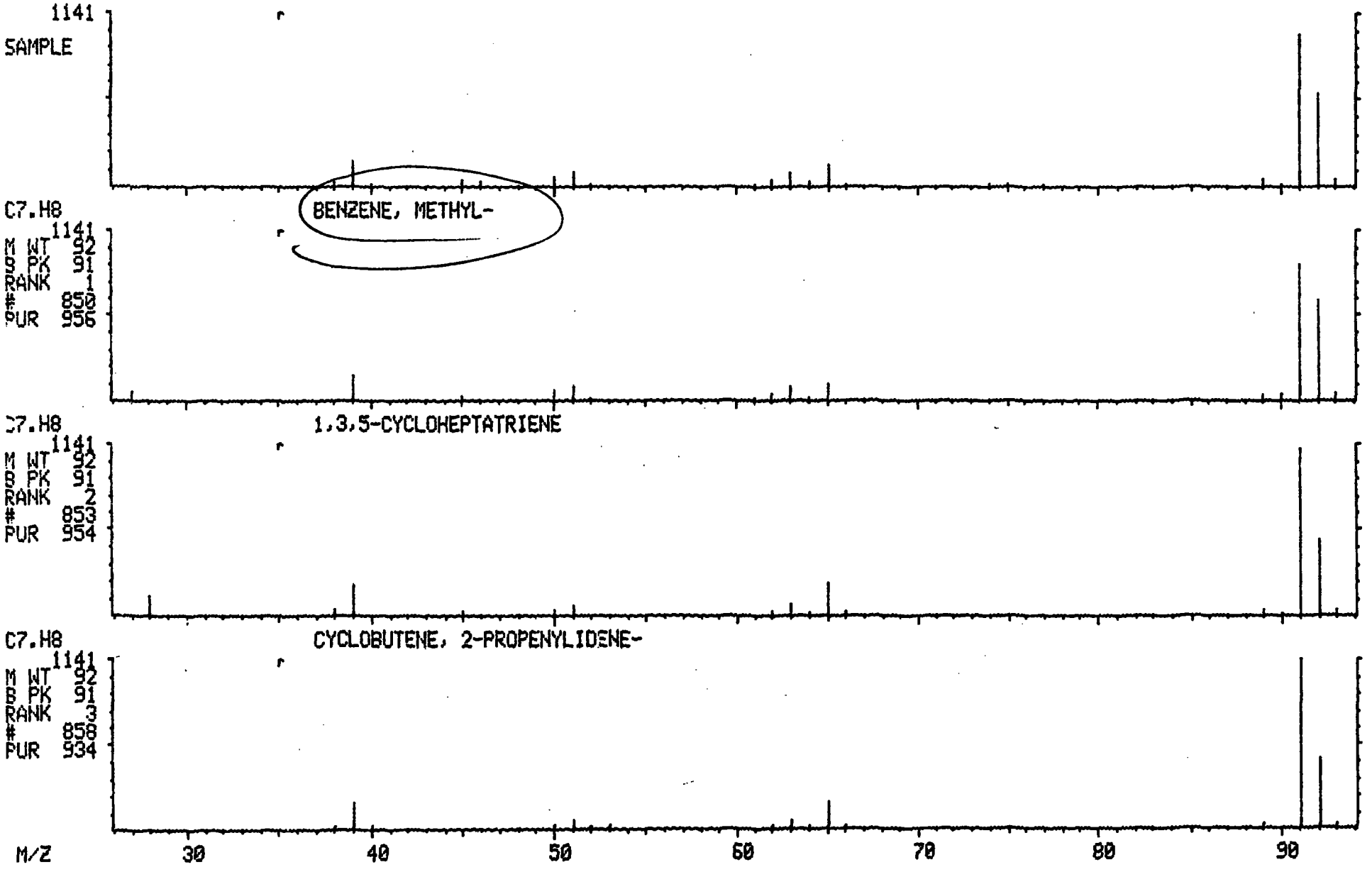


00703

LIBRARY SEARCH
06/01/88 19:30:00 + 4:36
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559435R969 # 368
CALI: 053188CR # 4

BASE M/Z: 91
RIC: 9823.



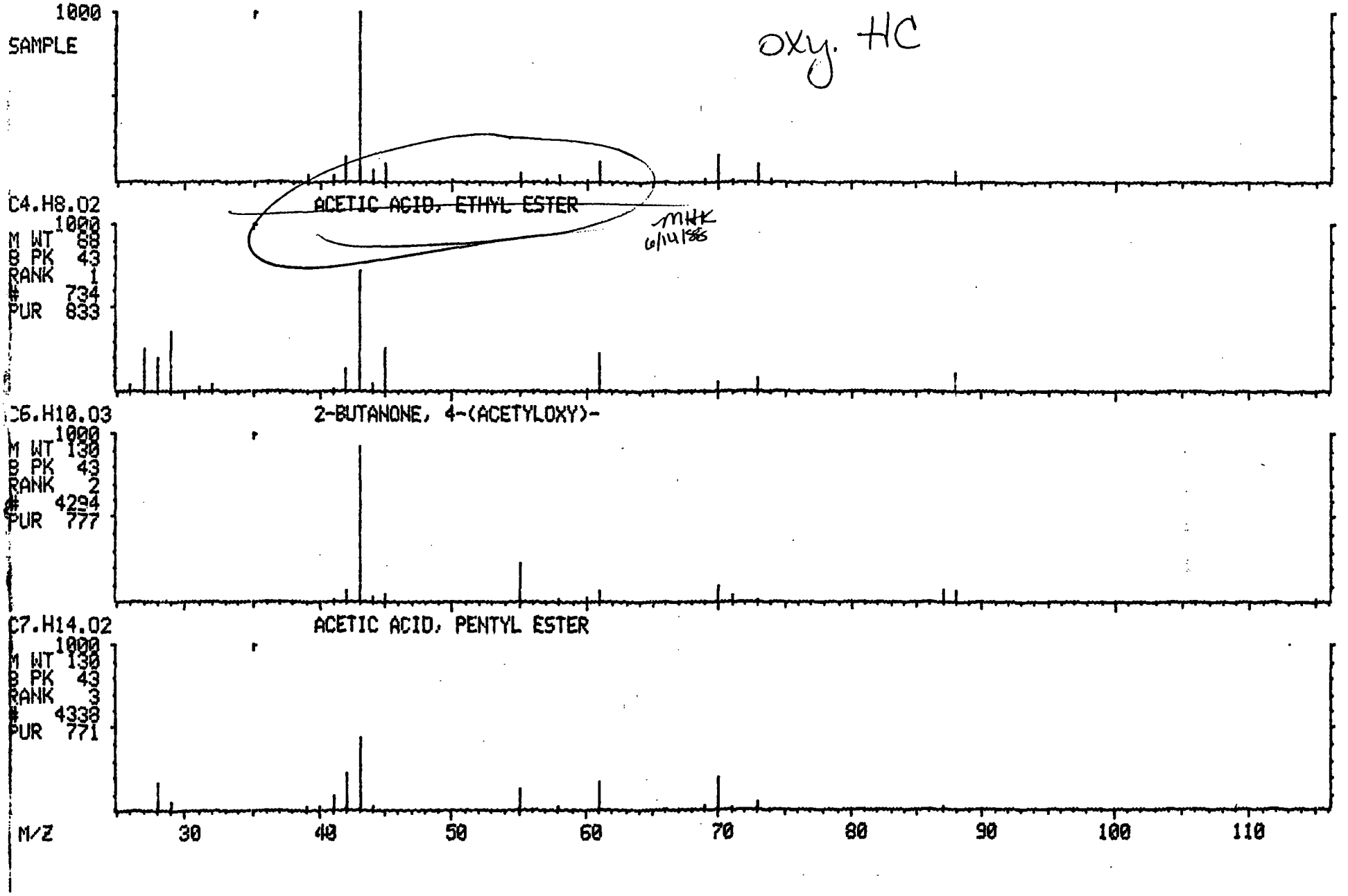
00704

LIBRARY SEARCH
06/01/88 19:30:00 + 4:53
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 # 391
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 7951.

oxy. HC



MHK
6/14/88

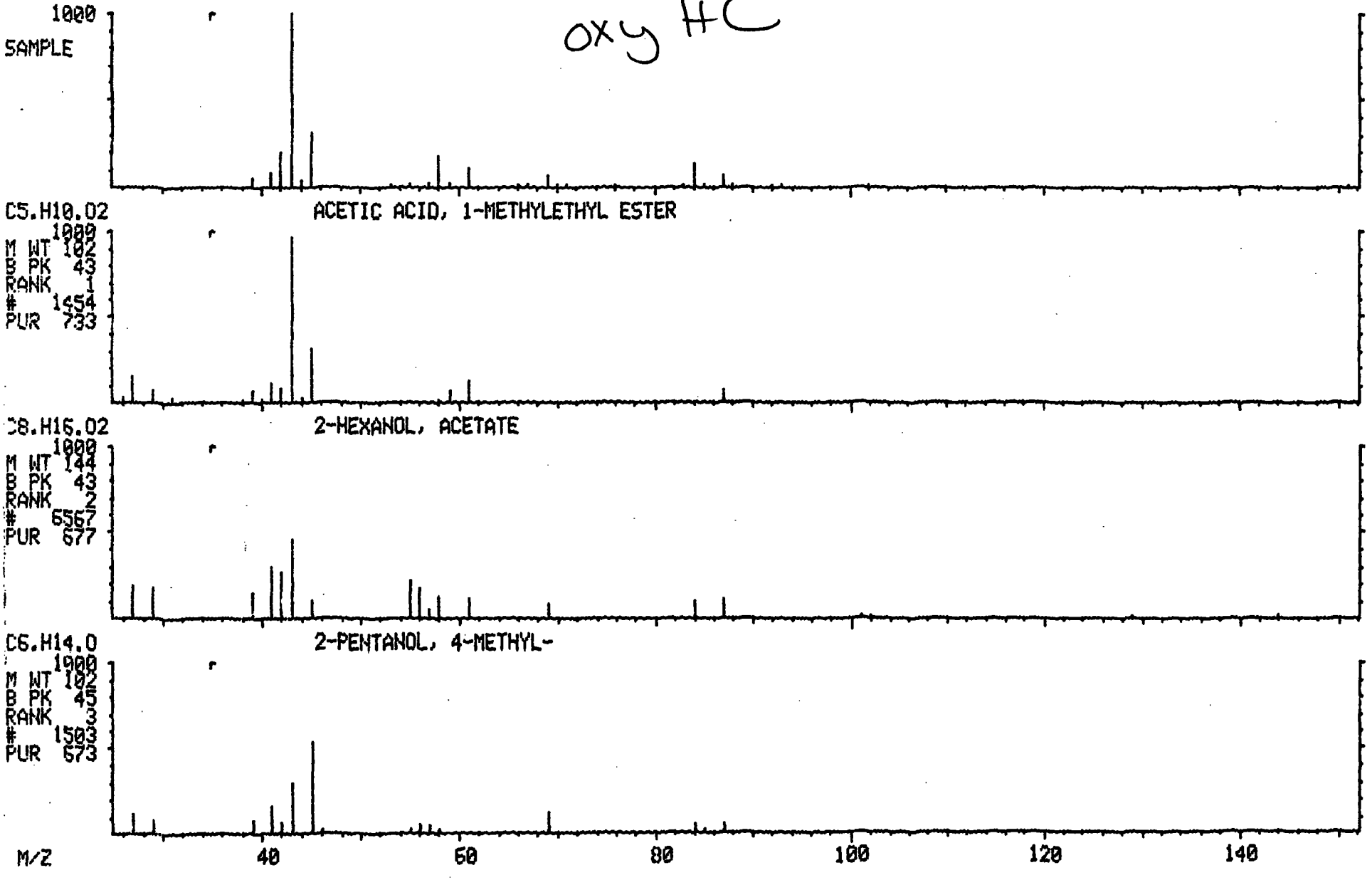
00705

LIBRARY SEARCH
06/01/88 19:30:00 + 5:25
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: 5T
ENHANCED (S 15B 2N 0T)

DATA: 559436R969 # 434
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 7479.

oxy HC

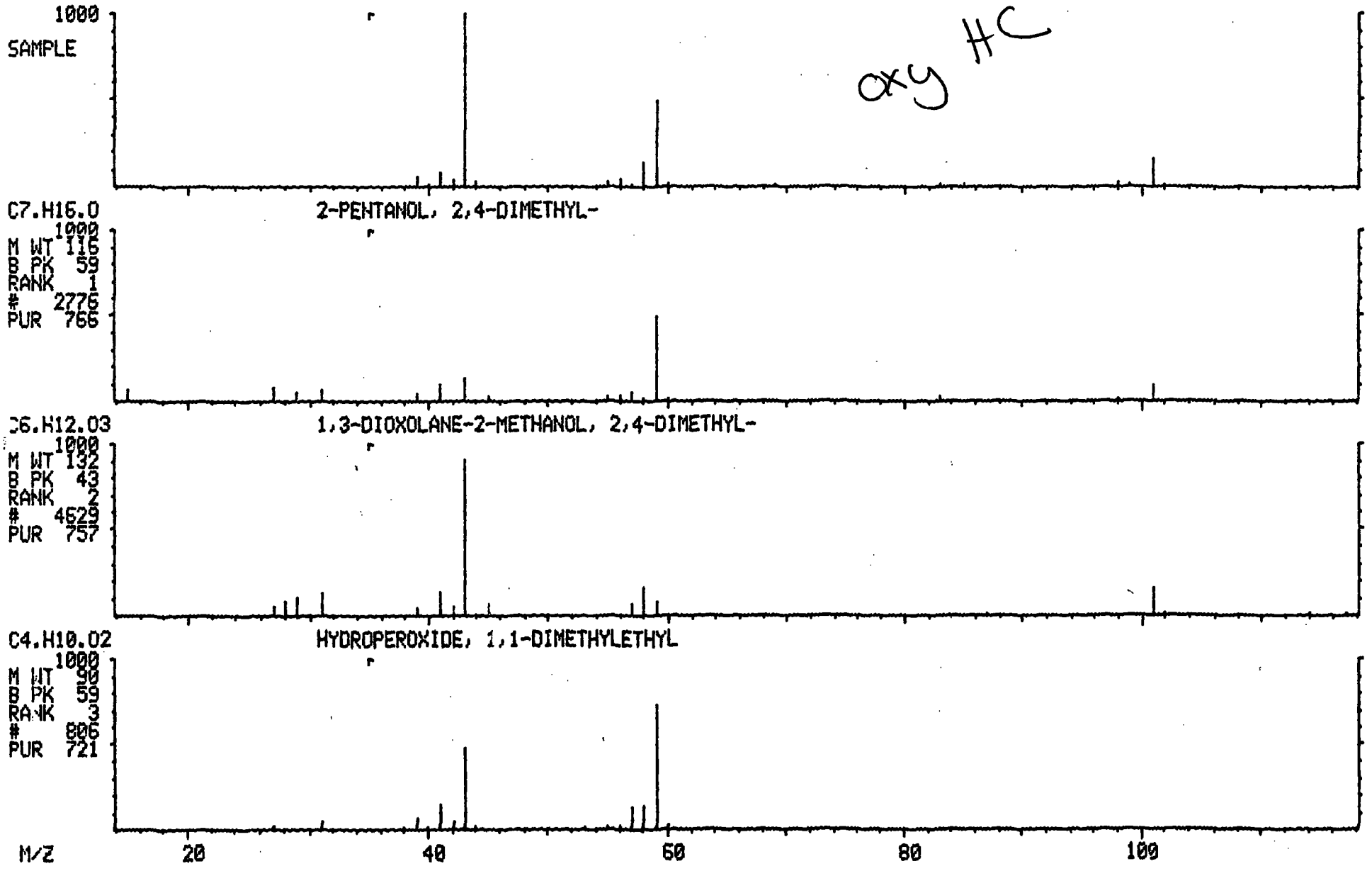


00706

LIBRARY SEARCH
06/01/88 19:30:00 + 5:51
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 # 468
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 22047.

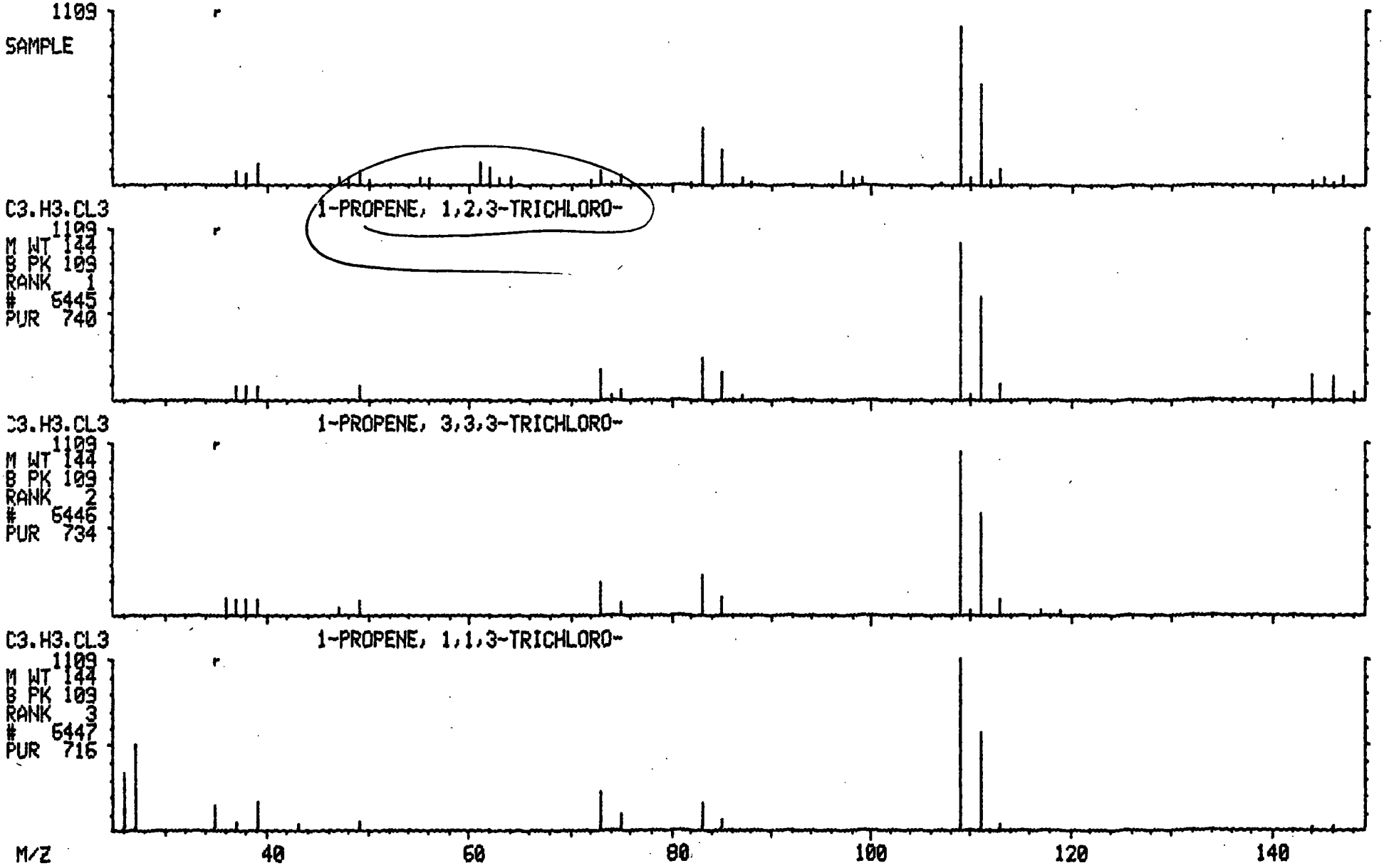


00707

LIBRARY SEARCH
06/01/88 19:30:00 + 7:46
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 # 622
CALI: 053188CR # 4

BASE M/Z: 109
RIC: 5239.

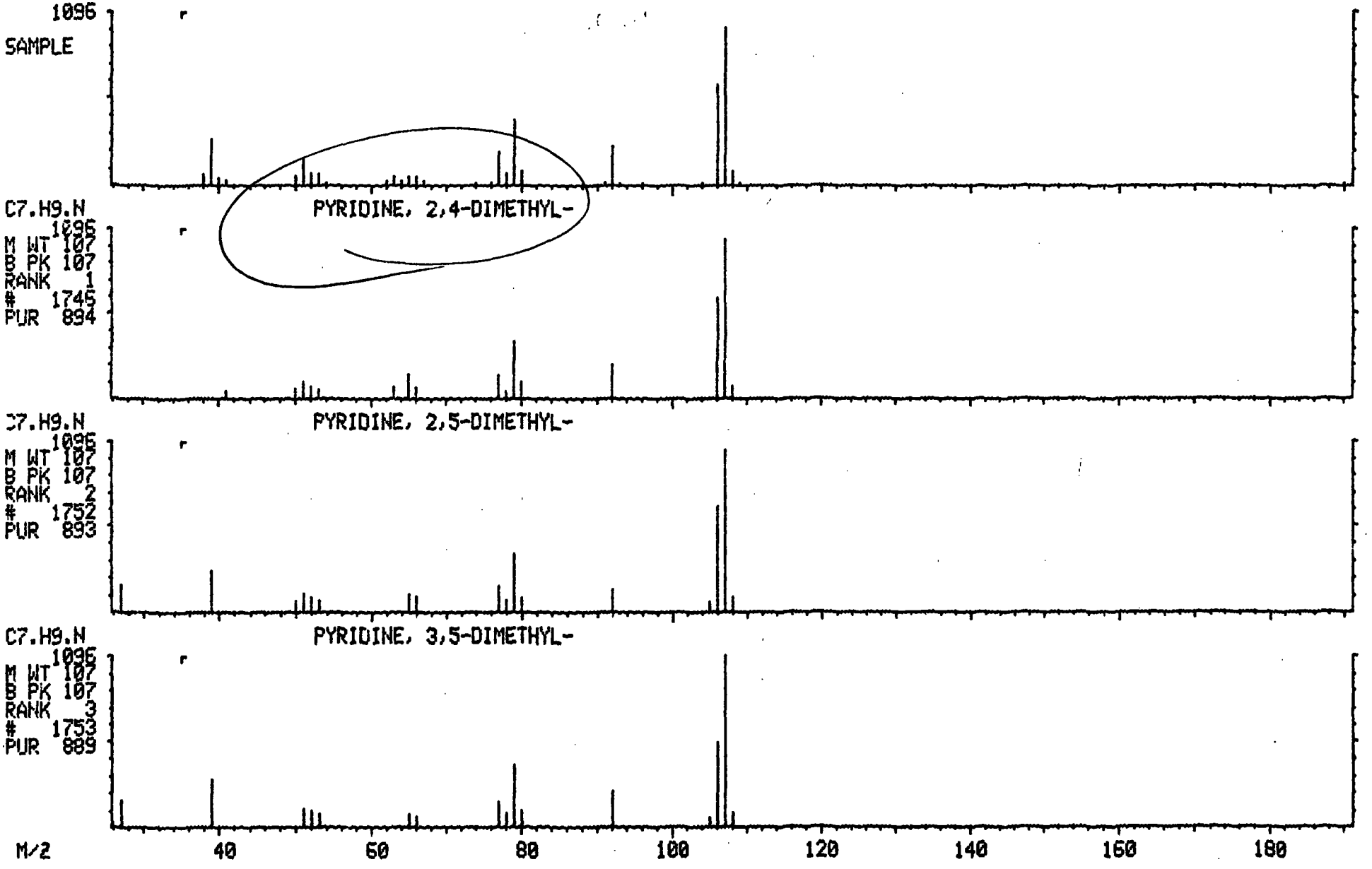


00708

LIBRARY SEARCH
06/01/88 19:30:00 + 8:25
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: 5T
ENHANCED (S 15B 2N 0T)

DATA: 559436R969 # 674
CALI: 053188CR # 4

BASE M/Z: 107
RIC: 10767.

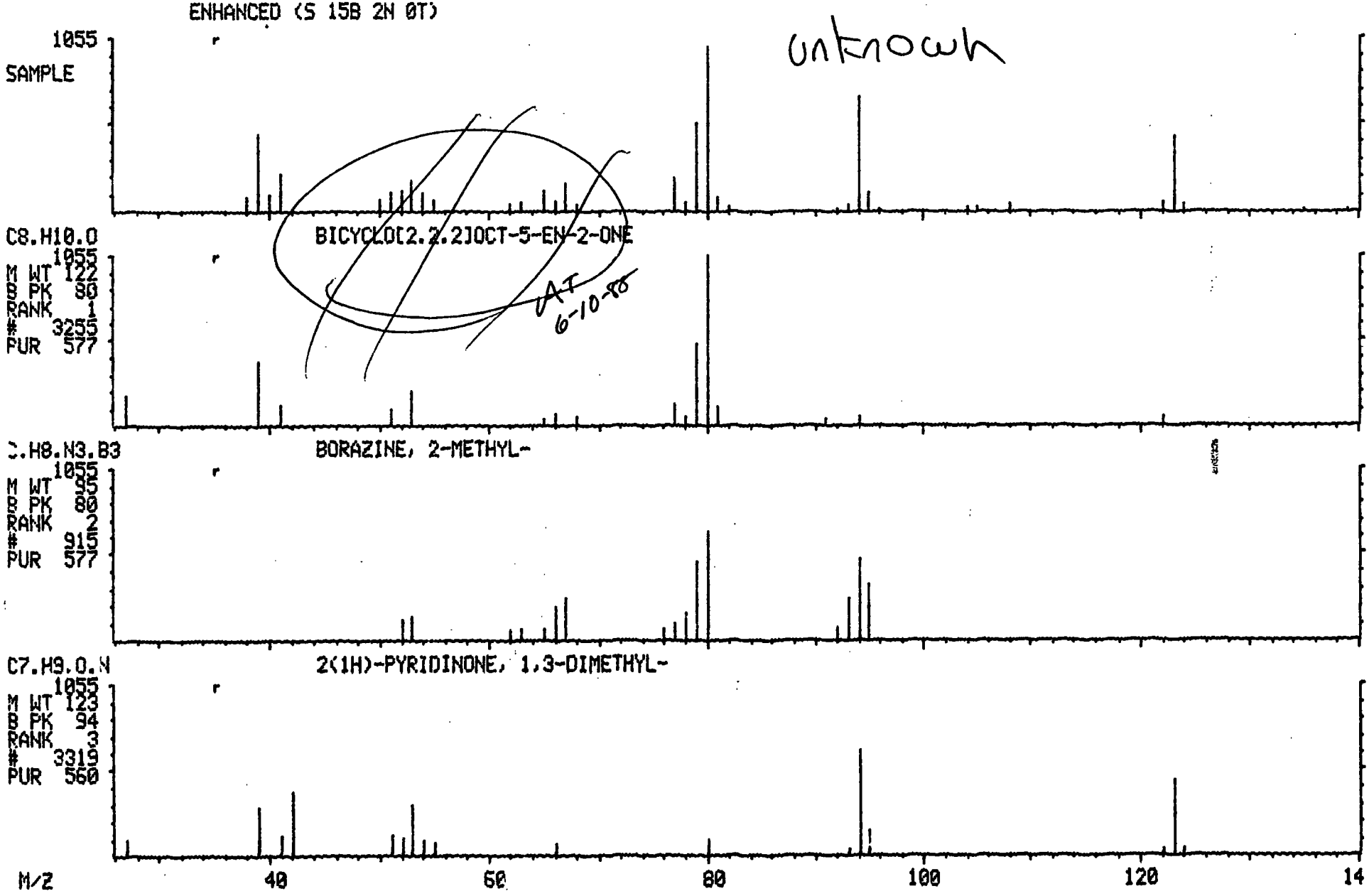


00709

LIBRARY SEARCH
06/01/88 19:30:00 + 11:05
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R969 # 887
CALI: 053188CR # 4

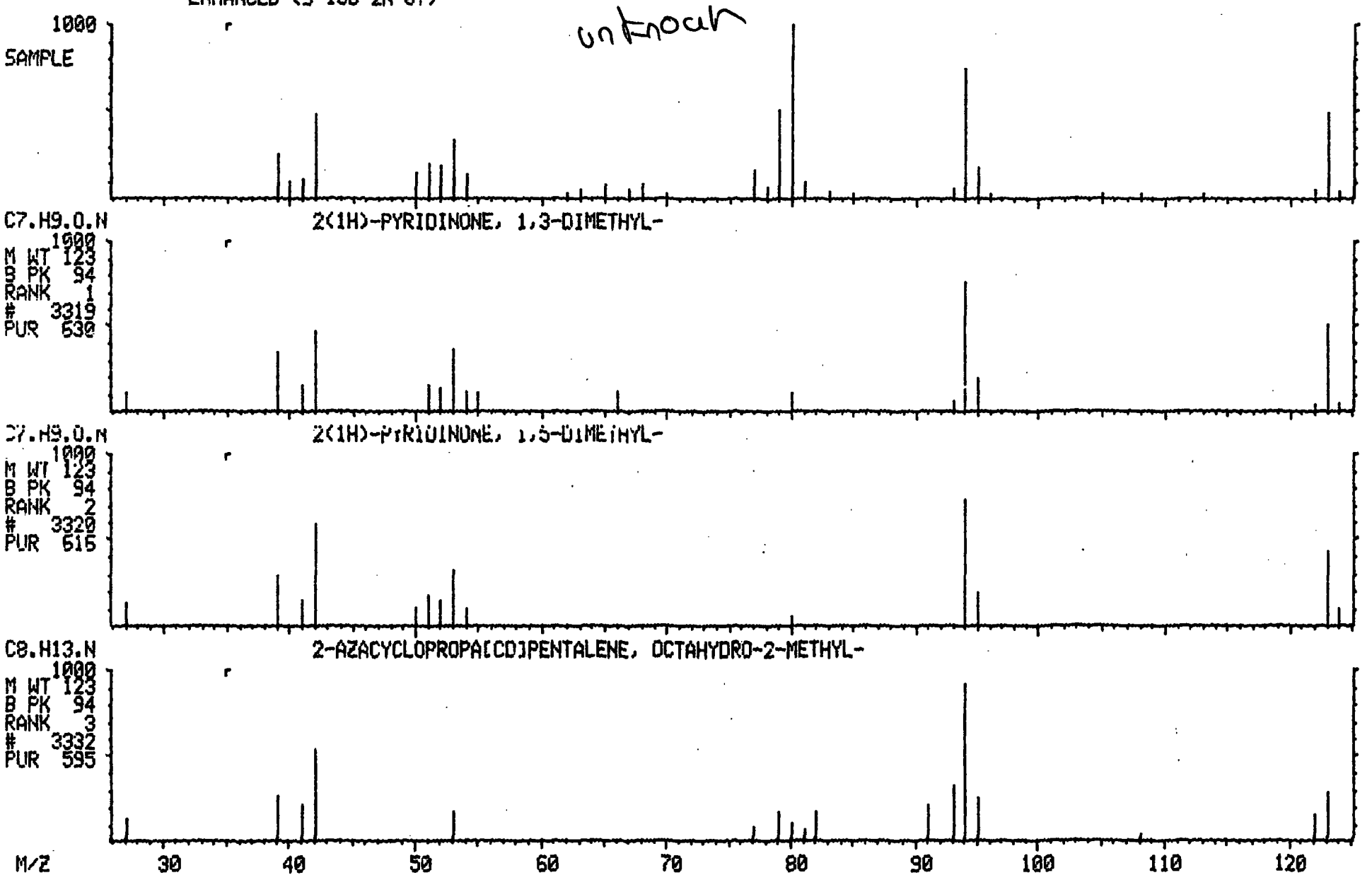
BASE M/Z: 80
RIC: 7991.



60710

LIBRARY SEARCH
06/01/88 19:30:00 + 11:20
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 # 907 BASE M/Z: 80
CALI: 053188CR # 4 RIC: 4503.

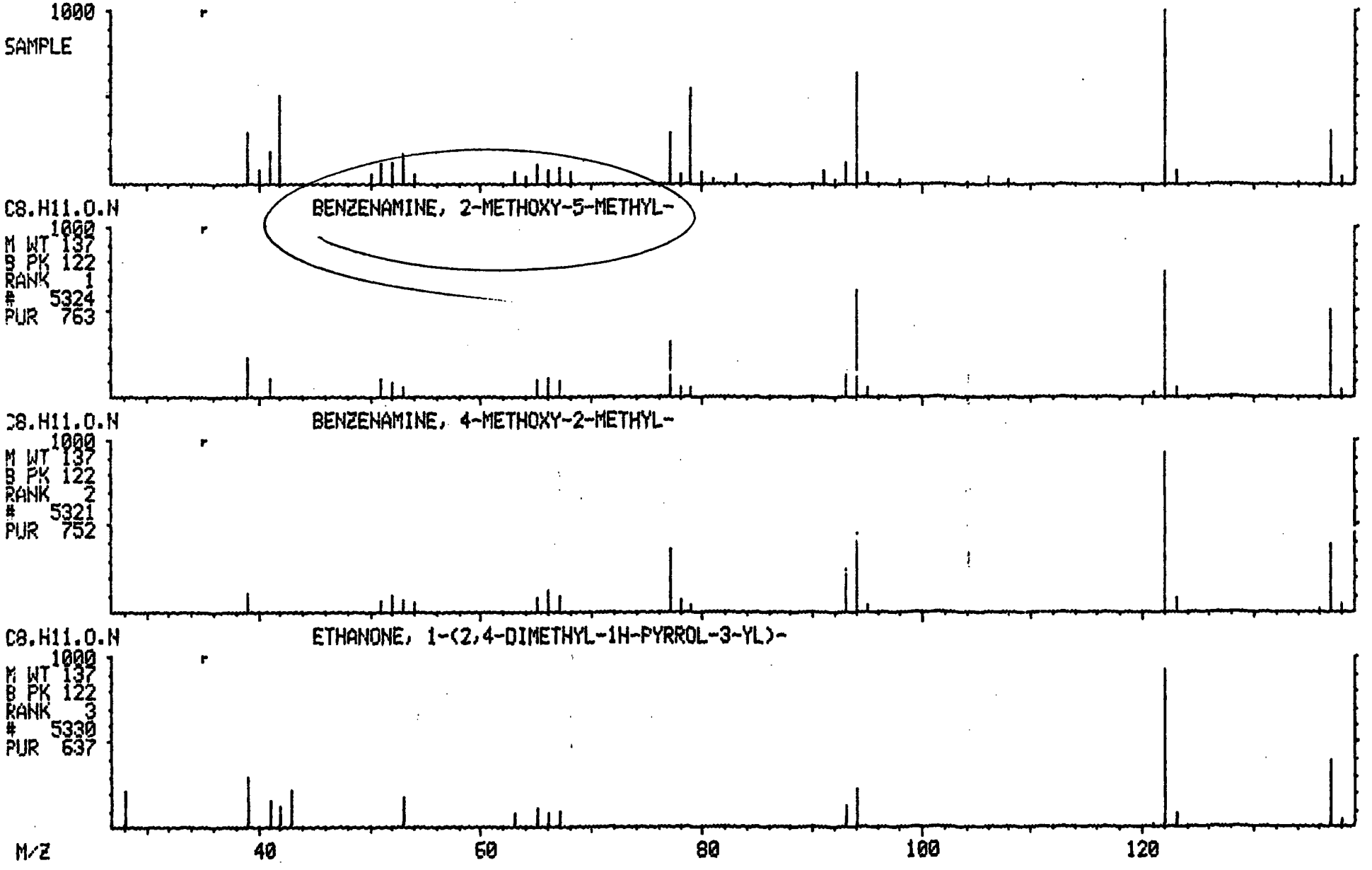


00711

LIBRARY SEARCH
06/01/88 19:30:00 + 12:51
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 #1028
CALI: 053188CR # 4

BASE M/Z: 122
RIC: 4695.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 17:49:04
DATA FILE: S59436R969
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00712

< ---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	6	2	318	ISO1/TCO1
3	3	1	49	14	5	1	50	ISO2/TCO2

26 COMPOUNDS PROCESSED, 10 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT ><							------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-715	716	716	.	1	980	.	152	715	-1	1
2	S1	4	-335	339	335	-4	1	989	.	84	335	.	1
3	S1	20	-337	341	.	.	.	.	.	79	.	.	.
4	S1	30	-431	434	439	5	1	927	.	93	439	.	1
5	S1	62	-496	499	.	.	.	.	.	93	.	.	.
6	S1	64	-526	528	.	.	.	.	.	107	530	.	1
7	S1	73	-558	560	.	.	.	.	.	106	.	.	.
8	S1	83	-594	596	596	.	1	992	.	107	596	.	1
9	S1	87	-615	617	617	.	1	974	.	107	617	.	1
10	S1	88	-635	637	.	.	.	.	.	107	.	.	.
11	S1	89	-643	645	.	.	.	.	.	107	.	.	.
12	S1	92	-663	664	663	-1	2	997	.	107	663	.	1
13	S1	122	-700	701	.	.	.	.	.	107	.	.	.
14	S2	1	-954	954	954	.	1	995	.	136	954	.	1
15	S3	1	-1311	1311	1311	.	1	989	.	164	1311	.	1
16	S1	137	-731	732	732	.	1	983	.	106	732	.	1
17	S1	142	-745	746	745	-1	1	956	.	106	745	.	1
18	S1	187	-799	800	.	.	.	.	.	108	.	.	.
19	S1	202	-822	822	.	.	.	.	.	106	.	.	.
20	S1	203	-827	827	.	.	.	.	.	106	829	.	1
21	S1	204	-847	847	.	.	.	.	.	122	.	.	.
22	S2	27	-898	898	.	.	.	.	.	107	897	.	1
23	S2	37	-922	922	.	.	.	.	.	107	.	.	.
24	S2	47	-937	937	.	.	.	.	.	107	.	.	.
25	S2	57	-955	955	.	.	.	.	.	107	954	.	1
26	S2	150	-1118	1118	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59436R969

Data: S59436R969.TI
06/01/88 19:30:00
Sample: 59436-09 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
1	CI30 1,4-DICHLOROBENZENE-D4	152	IS1# 01	3855-82-1
2	PYRIDINE-D5	84	S1# 04	
3	PYRIDINE	79	S1# 20	110-86-1
4	2-PICOLINE	93	S1# 30	109-06-8
5	3 & 4-PICOLINE	93	S1# 62	
6	2,6-LUTIDINE	107	S1# 64	
7	2-ETHYL PYRIDINE	106	S1# 73	
8	2,4 & 2,5-LUTIDINE	107	S1# 83	
9	2,3-LUTIDINE	107	S1# 87	
10	3-ETHYL PYRIDINE	107	S1# 88	
11	4-ETHYL PYRIDINE	107	S1# 89	
12	3,5-LUTIDINE	107	S1# 92	
13	3,4-LUTIDINE	107	S1#122	
14	CI40 NAPHTHALENE-D8	136	IS2# 01	1146-65-2
15	CI50 ACENAPHTHENE-D10	164	IS3# 01	15067-26-2
16	2-METHYL-5-ETHYL PYRIDINE	106	S1#137	
17	2-METHYL-3-ETHYL PYRIDINE	106	S1#142	
18	M AND P CRESOLS	108	S2#187	
19	3-ETHYL-4-METHYL PYRIDINE	106	S1#202	
20	3-ETHYL-5-METHYL PYRIDINE	106	S1#203	
21	2,6-DIMETHYL PHENOL	122	S1#204	
22	2,5-DIMETHYL PHENOL	107	S2# 27	
23	3,5-DIMETHYL PHENOL	107	S2# 37	
24	2,3-DIMETHYL PHENOL	107	S2# 47	
25	3,4-DIMETHYL PHENOL	107	S2# 57	
26	1-METHYLNAPHTHALENE	142	S2#150	90-12-0

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	715	8:56	1	1.000	A BV	22239.	40.000 UG/ML	25.86
2	84	335	4:11	1	0.469	A BB	26868.	21.635 UG/ML	13.99
3	NOT FOUND								
4	93	439	5:29	1	0.614	A VB	623.	0.581 UG/ML	0.38
5	NOT FOUND								
6	107	530	6:37	1	0.741	A BB	225.	0.198 UG/ML	0.13
7	NOT FOUND								
8	107	596	7:27	1	0.834	A BB	1851.	1.973 UG/ML	1.28
9	107	617	7:43	1	0.863	A BB	437.	0.436 UG/ML	0.28
10	NOT FOUND								
11	NOT FOUND								
12	107	663	8:17	1	0.927	A BV	6092.	6.847 UG/ML	4.43
13	NOT FOUND								
14	136	954	11:55	14	1.000	A BB	85474.	40.000 UG/ML	25.86
15	164	1311	16:23	15	1.000	A BB	39510.	40.000 UG/ML	25.86
16	106	732	9:09	1	1.024	A BB	1207.	1.004 UG/ML	0.65
17	106	745	9:19	1	1.042	A BB	1178.	1.402 UG/ML	0.91

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
18	NOT FOUND								
19	NOT FOUND								
20	106	829	10:22	1	1.159	A BB	84.	0.113 UG/ML	0.07
21	NOT FOUND								
22	107	897	11:13	14	0.940	A BB	47.	0.062 UG/ML	0.04
23	NOT FOUND								
24	NOT FOUND								
25	107	954	11:55	1	1.334	A BB	467.	0.451 UG/ML	0.29
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:11	1.00	0.468	1.00	21.63	50.00	0.967	2.234	0.43
3	4:13		0.471						
4	5:23	1.02	0.602	1.02	0.58	50.00	0.022	1.929	0.01
5	6:12		0.693						
6	6:34	1.01	0.735	1.01	0.20	50.00	0.008	2.046	0.00
7	6:58		0.779						
8	7:25	1.00	0.830	1.00	1.97	50.00	0.067	1.688	0.04
9	7:41	1.00	0.859	1.00	0.44	50.00	0.016	1.803	0.01
10	7:56		0.887						
11	8:02		0.898						
12	8:17	1.00	0.926	1.00	6.85	50.00	0.219	1.600	0.14
13	8:45		0.978						
14	11:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	16:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	9:08	1.00	1.021	1.00	1.00	50.00	0.043	2.162	0.02
17	9:19	1.00	1.041	1.00	1.40	50.00	0.042	1.512	0.03
18	9:59		1.116						
19	10:16		1.148						
20	10:20	1.00	1.155	1.00	0.11	50.00	0.003	1.339	0.00
21	10:35		1.183						
22	11:13	1.00	0.940	1.00	0.06	50.00	0.000	0.355	0.00
23	11:31		0.965						
24	11:43		0.981						
25	11:56	1.00	1.334	1.00	0.45	50.00	0.017	1.861	0.01
26	13:58		1.171						

TCA FINISHED, 10 FOUND
FINISHED AT: 6/03/88 17:51:51

RF 2.Ø2
SV 2.ØØ

00715

RMAL QUANTITATION SUMMARY FILE: S59436R969
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

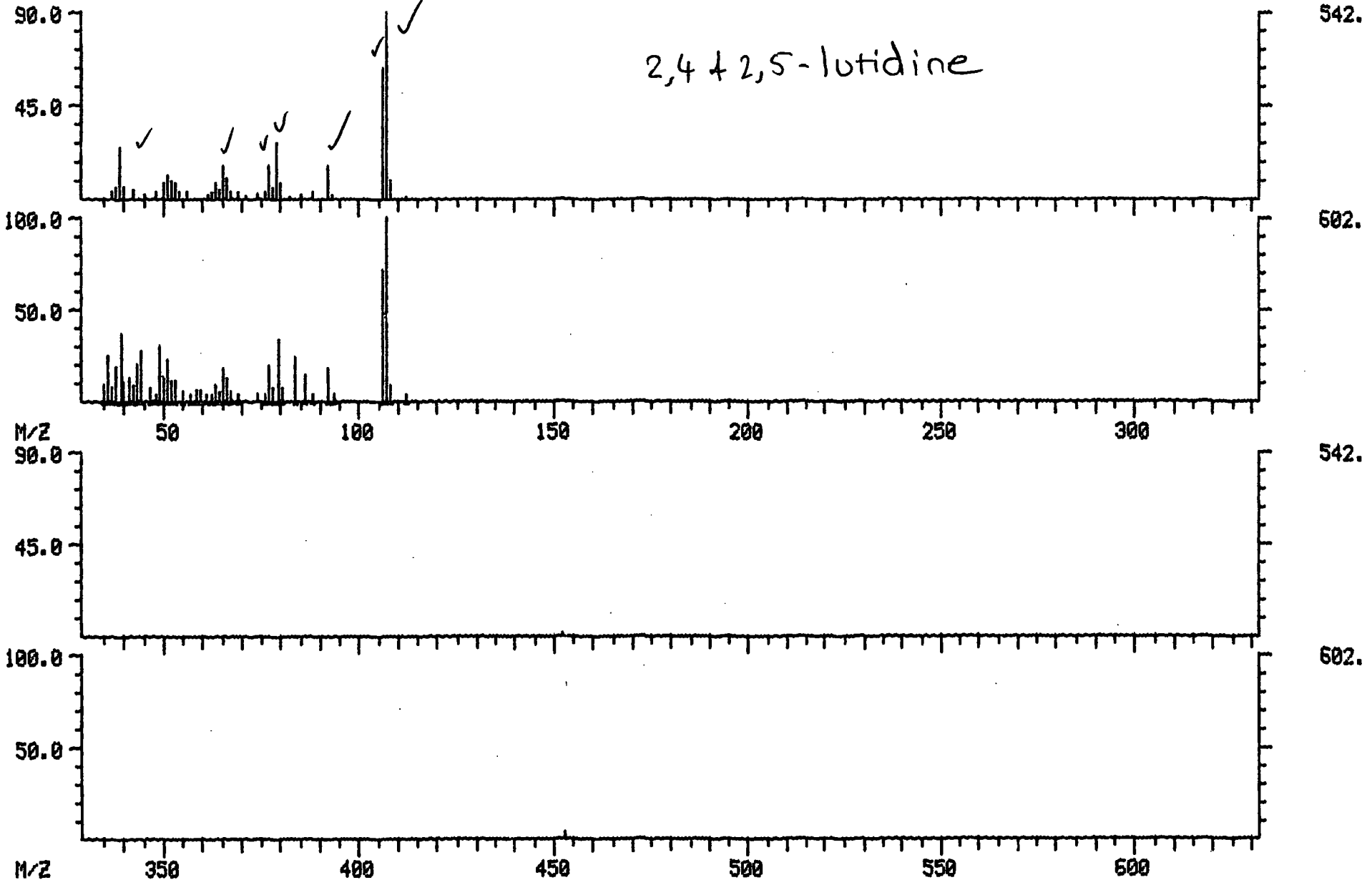
UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	715	1	22239.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	954	2	85474.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	39510.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	335	1	26868.	0.967	21.635
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93		1	NOT FOUND		
7	S1# 62	3 & 4-PICOLINE	93		1	NOT FOUND		
8	S1# 64	2,6-LUTIDINE	107		1	NOT FOUND		
9	S1# 73	2-ETHYL PYRIDINE	106		1	NOT FOUND		
10	S1# 83	2,4 & 2,5-LUTIDINE	107	596	1	1851.	0.067 ✓	1.973
11	S1# 87	2,3-LUTIDINE	107		1	NOT FOUND		
12	S1# 88	3-ETHYL PYRIDINE	107		1	NOT FOUND		
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107	663	1	6092.	0.219 ✓	~~6.847~~ OK
15	S1#122	3,4-LUTIDINE	107		1	NOT FOUND		
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106	732	1	1207.	0.043 ✓	1.004
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106	745	1	1178.	0.042 ✓	1.402
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106		1	NOT FOUND		
20	S1#203	3-ETHYL-5-METHYL PYRIDIN	106		1	NOT FOUND		
21	S1#204	2,6-DIMETHYL PHENOL	122		1	NOT FOUND		
22	S2# 27	2,5-DIMETHYL PHENOL	107		2	NOT FOUND		
23	S2# 37	3,5-DIMETHYL PHENOL	107		2	NOT FOUND		
24	S2# 47	2,3-DIMETHYL PHENOL	107		2	NOT FOUND		
25	S2# 57	3,4-DIMETHYL PHENOL	107		1	NOT FOUND		
26	S2#150	1-METHYLNAPHTHALENE	142		2	NOT FOUND		

00716

DUAL MASS SPECTRUM
06/01/88 19:30:00 + 7:27
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 #596 BASE M/Z: 107/ 107
CALI: 053188CR #4 RIC: 2379./ 4091.



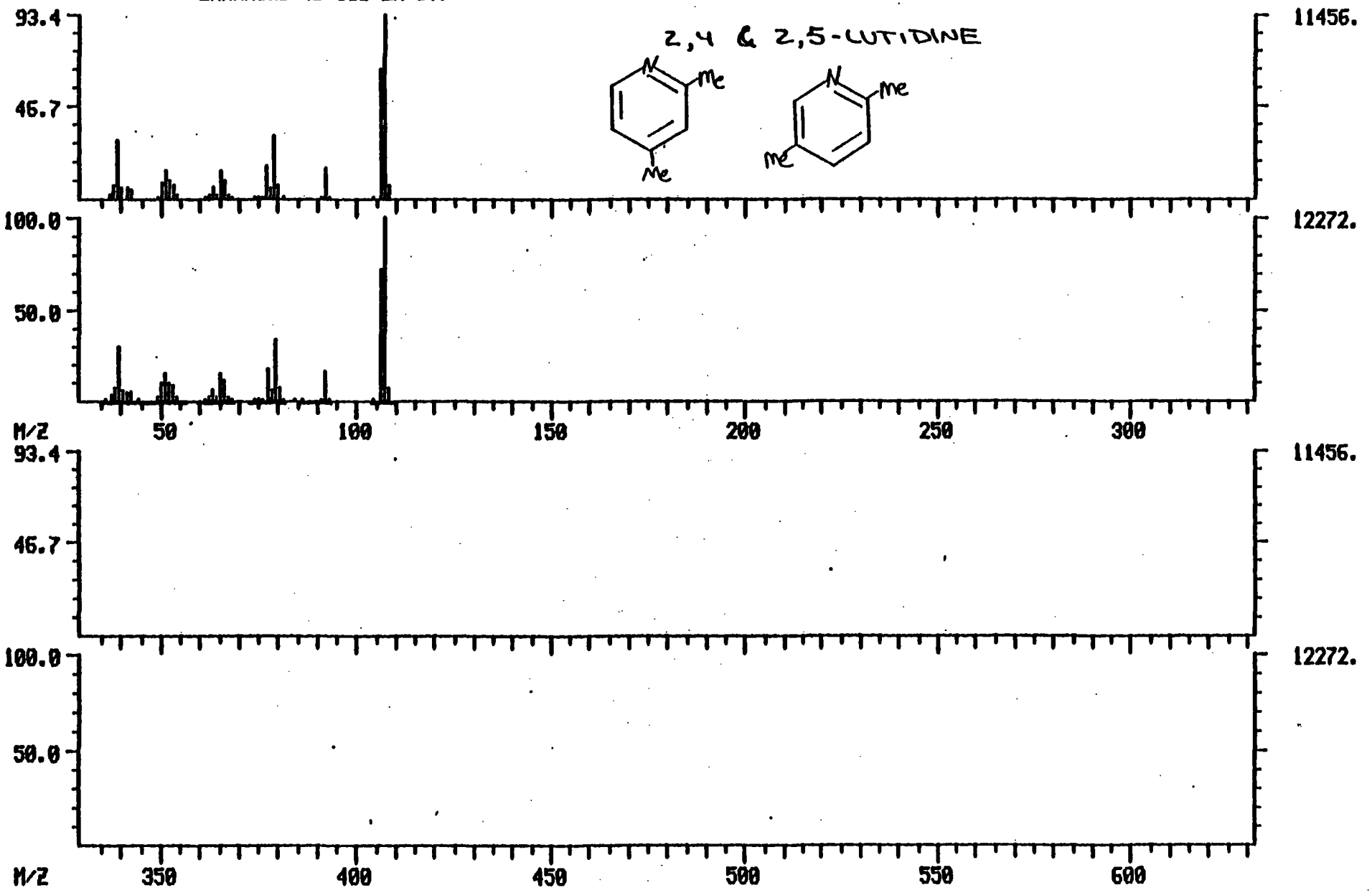
00717

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:25
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #593
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47359./ 52223.

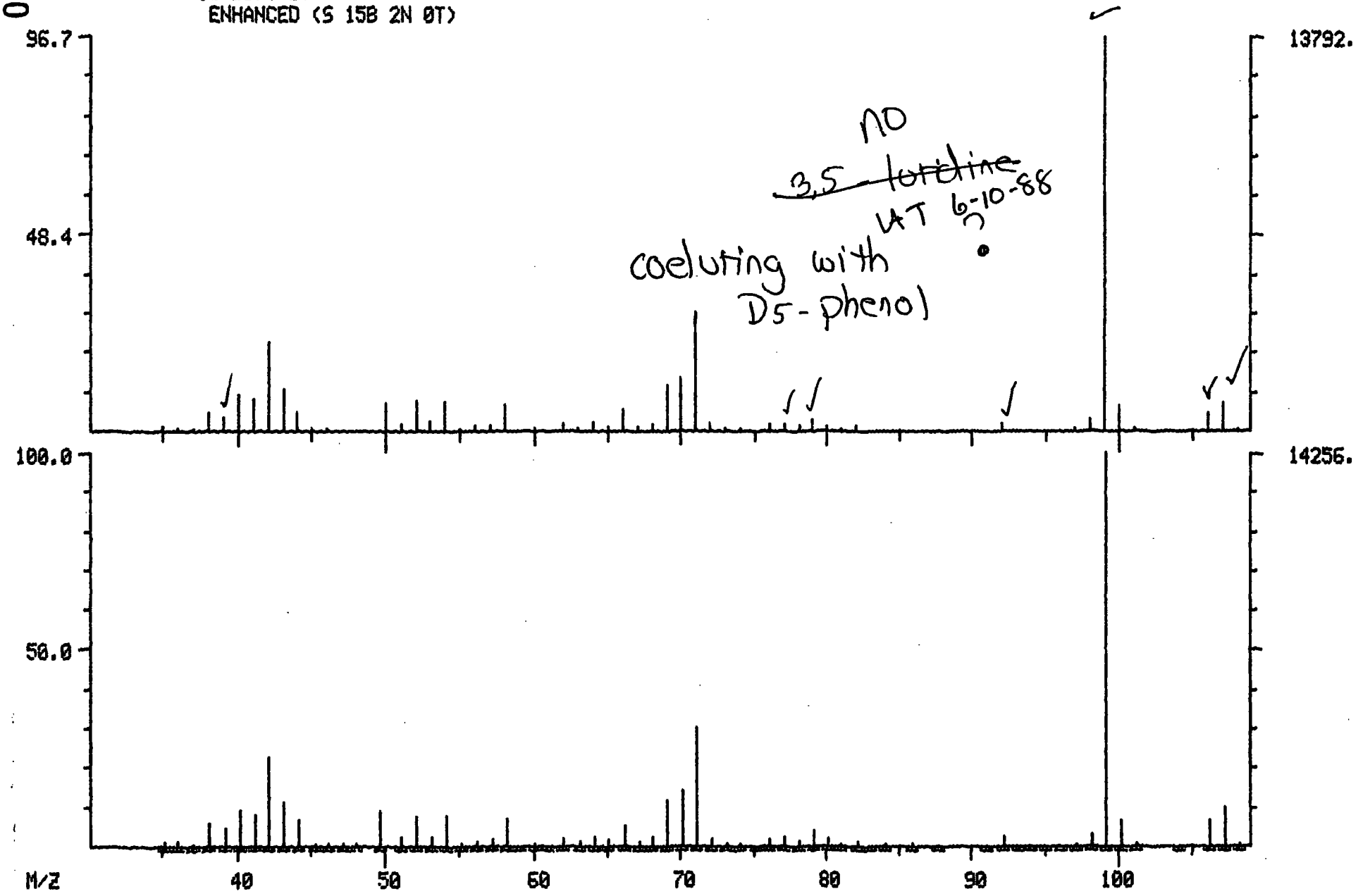
SPECTRUM FROM THE STANDARD



00718

DUAL MASS SPECTRUM
06/01/88 19:30:00 + 8:17
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R969 #663 BASE M/Z: 99/ 99
CALI: 053188CR #4 RIC: 42815./ 47231.



00719

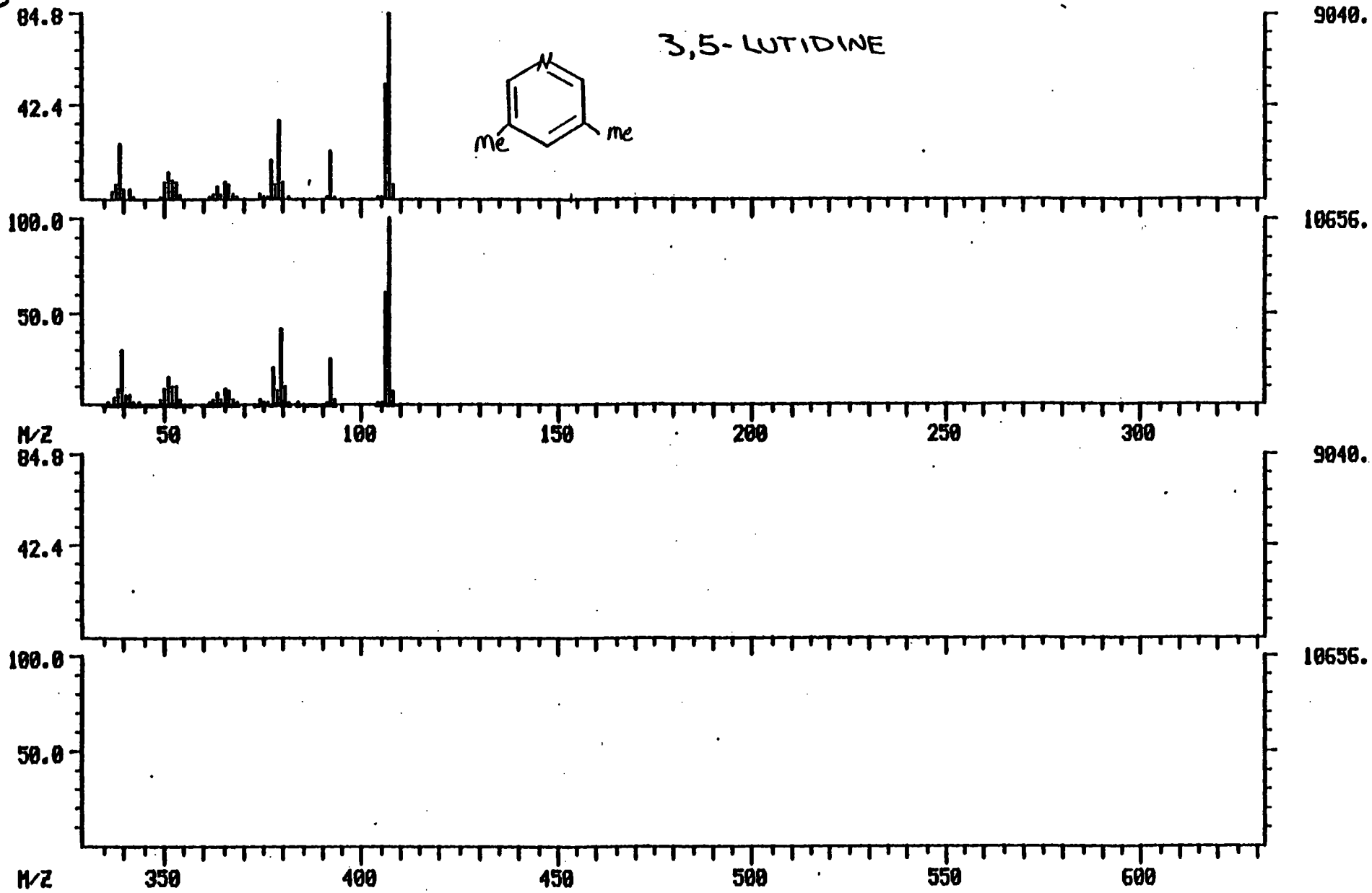
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:16
SAMPLE: 50PPM PYRIDINE STD 10/26/87
COND5.: 5T
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #661
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 37567./ 45567.

SPECTRUM FROM THE STANDARD

3,5-LUTIDINE

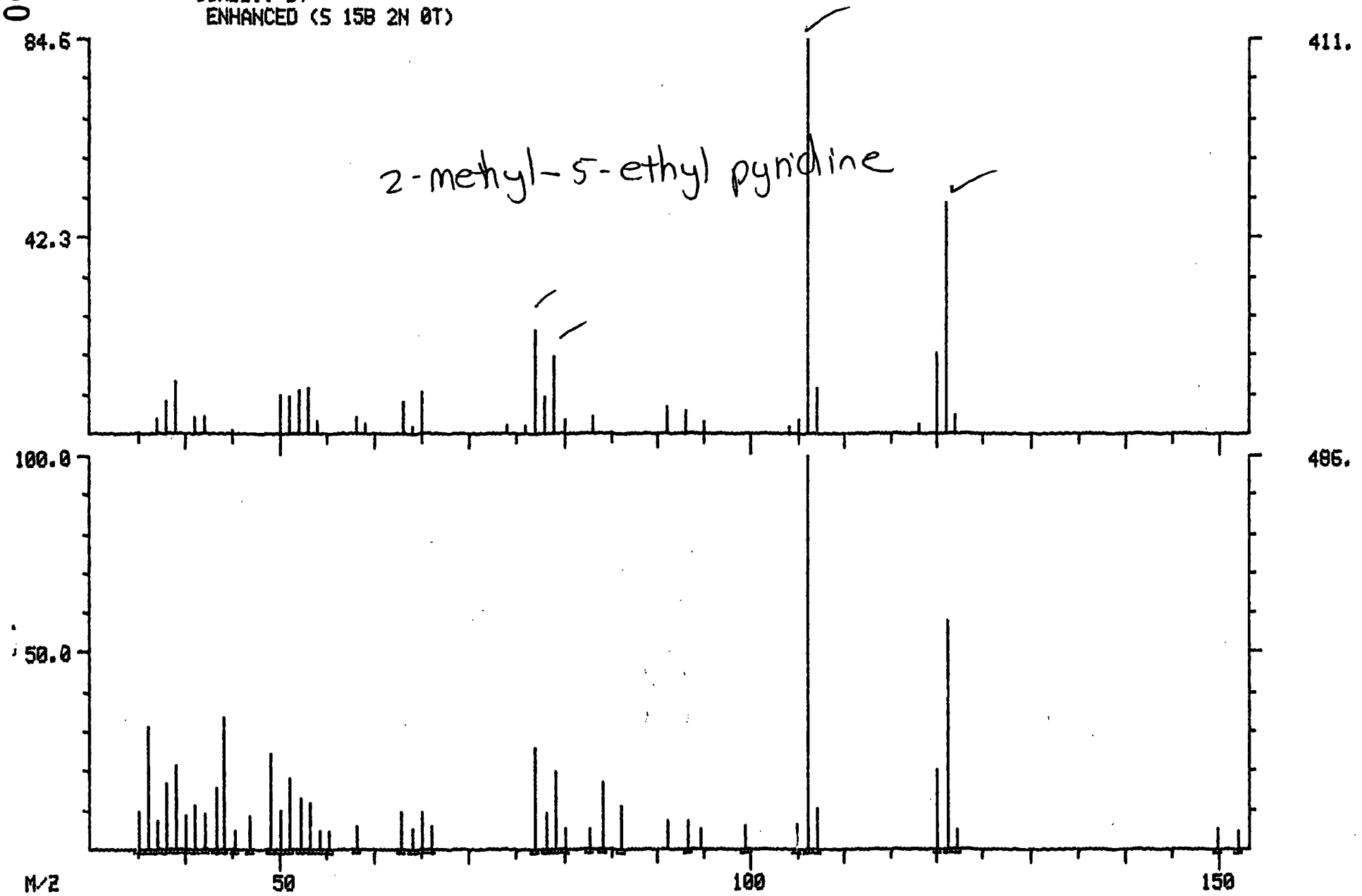


00720

DUAL MASS SPECTRUM
06/01/88 19:30:00 + 9:09
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R969 #732
CALI: 053188CR #4

BASE M/Z: 106/ 106
RIC: 1603./ 3039.

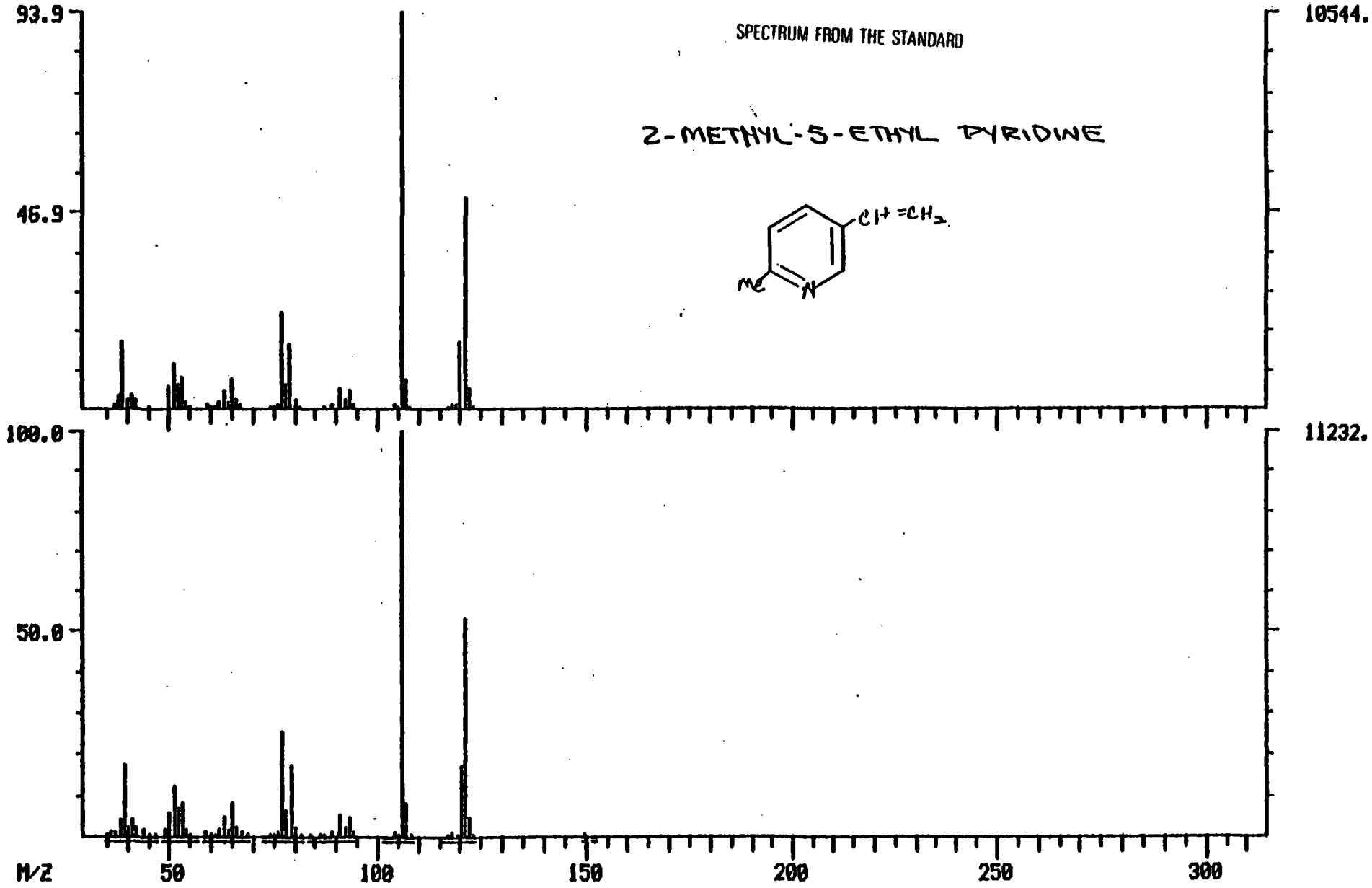


00721

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 9:07
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #730
CALI: 060288CR #5

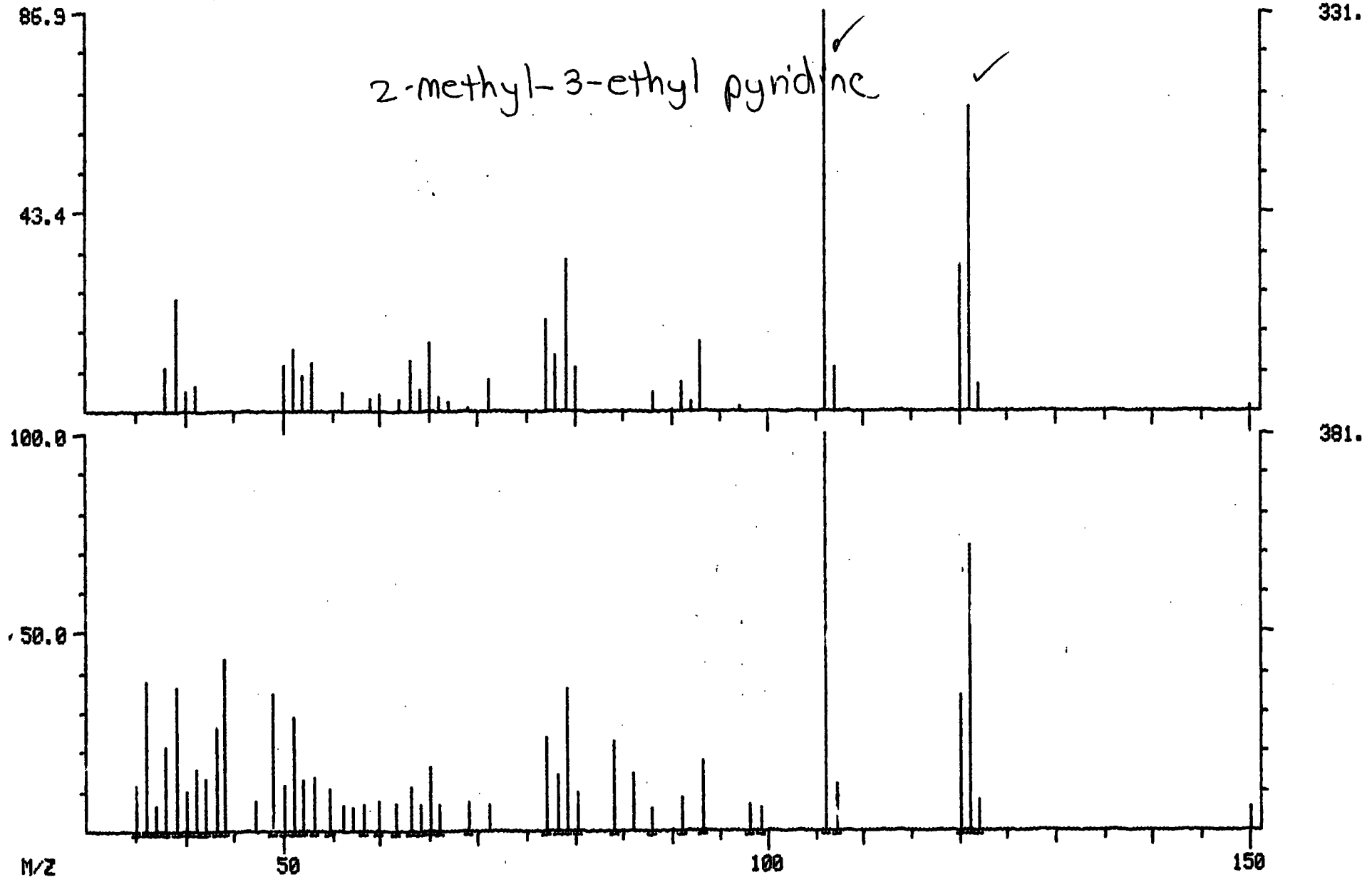
BASE M/Z: 106/ 106
RIC: 36671./ 40191.



00722

DUAL MASS SPECTRUM
06/01/88 19:30:00 + 9:19
SAMPLE: 59436-09 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R969 #745 BASE M/Z: 106/ 106
CALI: 053188CR #4 RIC: 1697./ 3139.



00723

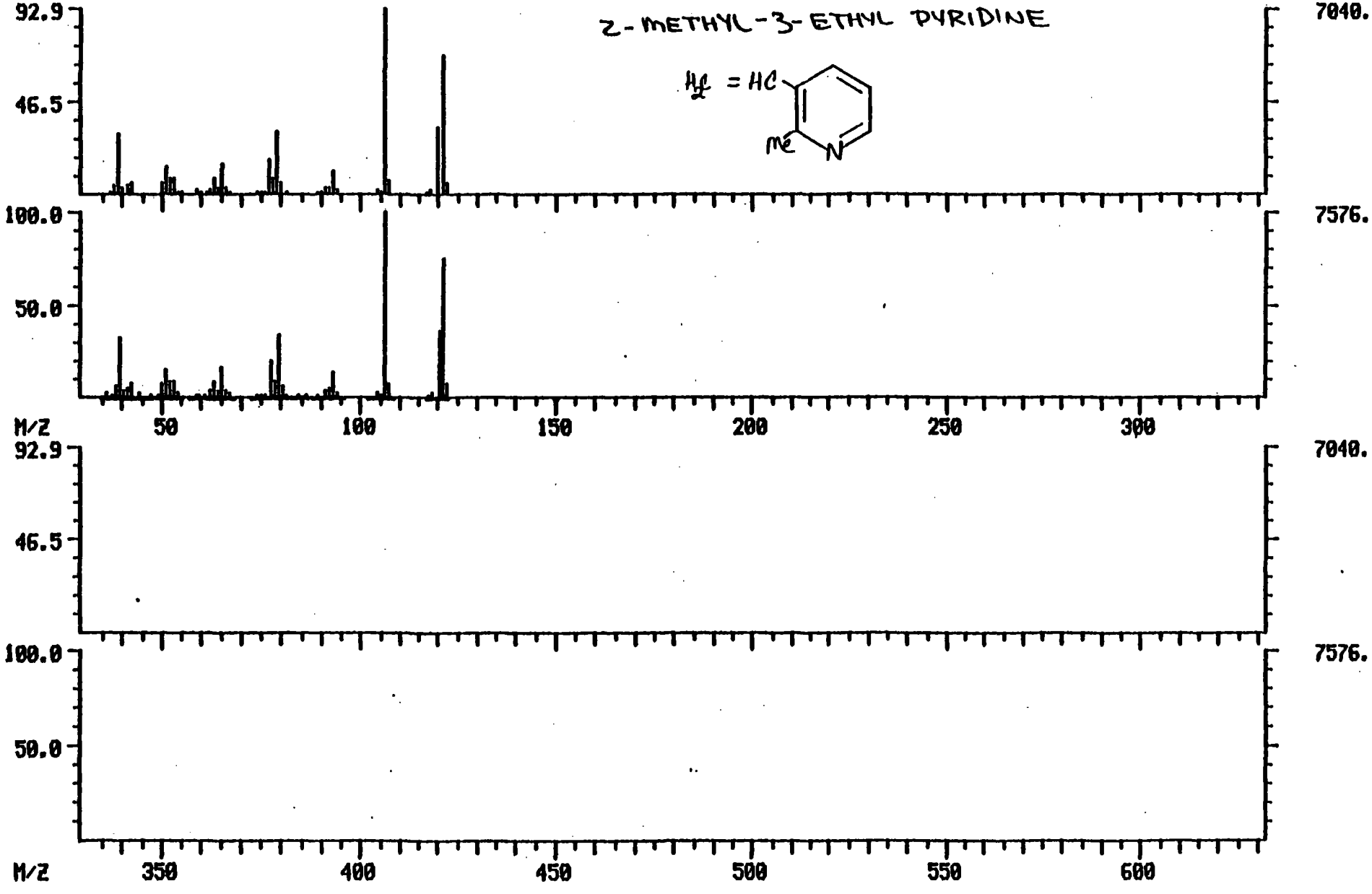
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 9:17
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #743
CALI: 060288CR #5

BASE M/Z: 106/ 106
RIC: 33215./ 37055.

SPECTRUM FROM THE STANDARD

2-METHYL-3-ETHYL PYRIDINE



RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: D: S59436X826. STARTED : 6/03/88 12:15:37

00724

6/3/88 1:09:14 SCAN 1 OF 3900 $ORF = \frac{ng}{ml} \times \frac{0.5 ml}{3.77 L} = 0.133 \, ng/L$

Acquisition started

Acquire Run 2: S59436X826 ACQUIRING
06/03/88 1:09:00 + 0:03 Free sectors: 22083 Scan: 7 of 3900
Sample: 59436-09 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc: PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc: PA GC elapsed time : 0: 3 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: P1 Mass intervals: 3
Scan time: 0.500 s Samp. int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	225.500	226.500	0.105	1	100	0	1	1	Pos
2	227.500	228.500	0.105	1	100	0	1	1	Pos
3	239.500	240.500	0.105	1	100	0	1	1	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

6/3/88 1:37:38 SCAN 3407 OF 3900

MID scan Desc: P2 Mass intervals: 3
Scan time: 0.500 s Samp. Int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

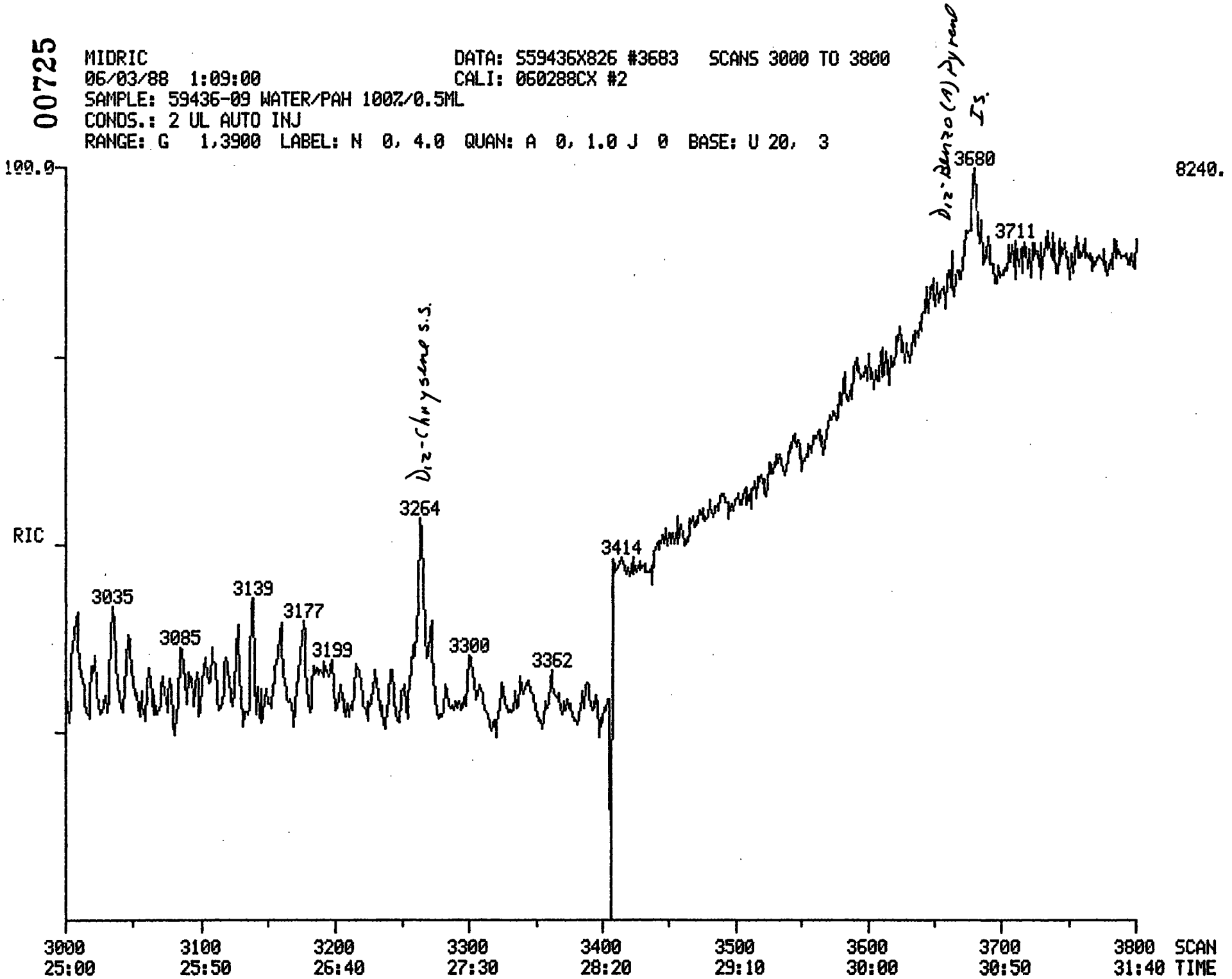
6/3/88 1:41:48
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode Scans Secs Out of % Peaks per scan per sec

00725

MIDRIC
06/03/88 1:09:00
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436X826 #3683 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X826

00726

Data: S59436X826.TI
06/03/88 1:09:00
Sample: 59436-09 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE	250 PH# 10
11	BENZO(J)FLUORANTHENE	252 PH# 11
12	BENZO(J)FLUORANTHENE	250 PH# 12
13	BENZO(A)PYRENE	252 PH# 13
14	BENZO(A)PYRENE	250 PH# 14

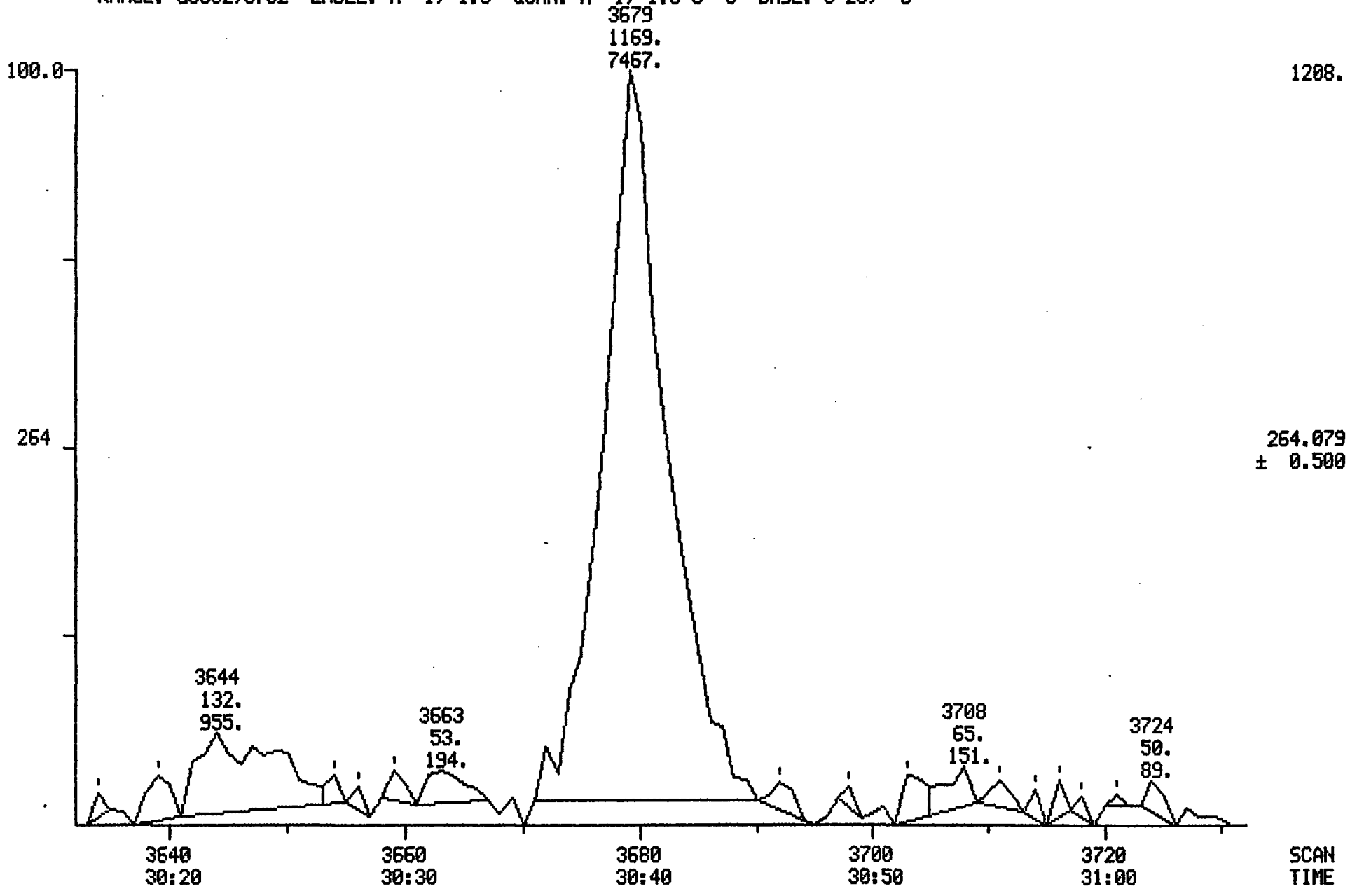
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3679	30:39	1	1.000	A BB	7467. 60%	80.000	NG/ML	20.79
2	240	3264	27:12	1	0.887	A BV	8534.	59.580	NG/ML	15.48
3	228	3258	27:09	1	0.886	A BV	2937.	19.431	NG/ML	5.05
4	226	3258	27:09	1	0.886	A BV	1540.	44.038	NG/ML	11.44
5	228	3272	27:16	1	0.889	A VB	3937.	24.874	NG/ML	6.46
6	226	3272	27:16	1	0.889	A VB	1875.	45.060	NG/ML	11.71
7	252	3593	29:56	1	0.977	A VV	3906.	24.911	NG/ML	6.47
8	250	3583	29:51	1	0.974	A BB	1016.	26.869	NG/ML	6.98
9	252	3593	29:56	1	0.977	A VV	3906.	24.911	NG/ML	6.47
10	250	3590	29:55	1	0.976	A BB	308.	8.145	NG/ML	2.12
11	252	3612	30:06	1	0.982	A BB	316.	2.263	NG/ML	0.59
12	250	3614	30:07	1	0.982	A BB	238.	7.715	NG/ML	2.00
13	252	3690	30:45	1	1.003	A VB	1131.	8.714	NG/ML	2.26
14	250	3690	30:45	1	1.003	A BB	370.	8.355	NG/ML	2.17

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:41	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:11	1.00	0.886	1.00	59.58	80.00	1.143	1.535	0.74
3	27:08	1.00	0.885	1.00	19.43	80.00	0.393	1.619	0.24
4	27:08	1.00	0.885	1.00	44.04	80.00	0.206	0.375	0.55
5	27:15	1.00	0.888	1.00	24.87	80.00	0.527	1.696	0.31
6	27:15	1.00	0.888	1.00	45.06	80.00	0.251	0.446	0.56
7	29:56	1.00	0.976	1.00	24.91	80.00	0.523	1.680	0.31
8	29:56	1.00	0.976	1.00	26.87	80.00	0.136	0.405	0.34
9	29:59	1.00	0.977	1.00	24.91	80.00	0.523	1.680	0.31
10	29:59	1.00	0.977	1.00	8.15	80.00	0.041	0.405	0.10
11	29:41	1.01	0.982	1.00	2.26	80.00	0.042	1.496	0.03

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	29:41	1.01	0.982	1.00	7.72	80.00	0.032	0.330	0.10
13	30:44	1.00	1.002	1.00	8.71	80.00	0.151	1.390	0.11
14	30:44	1.00	1.002	1.00	8.35	80.00	0.050	0.474	0.10

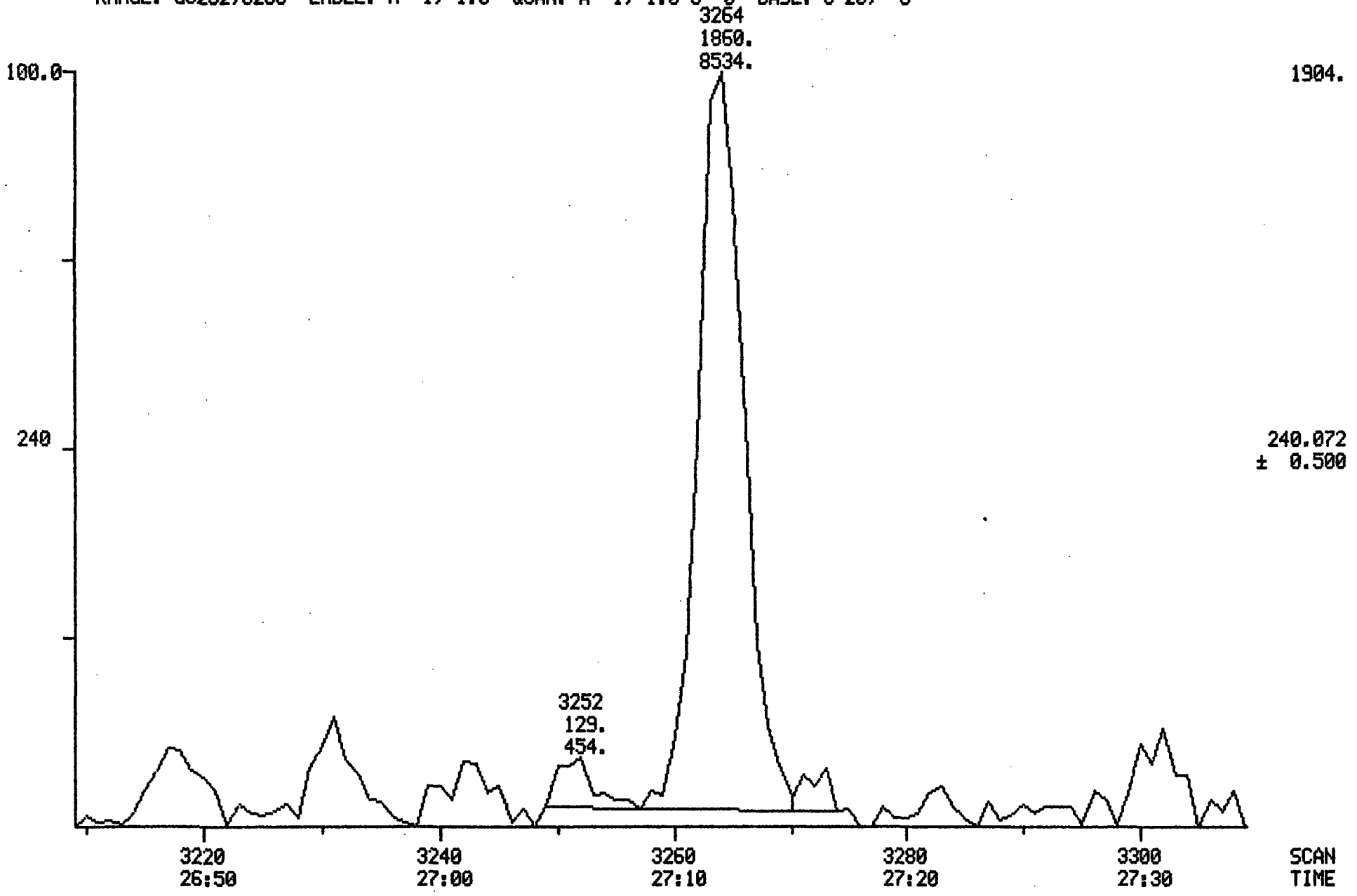
00728

MIDMASS CHROMATOGRAM DATA: S59436X826 #3682 SCANS 3632 TO 3732
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3632,3732 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



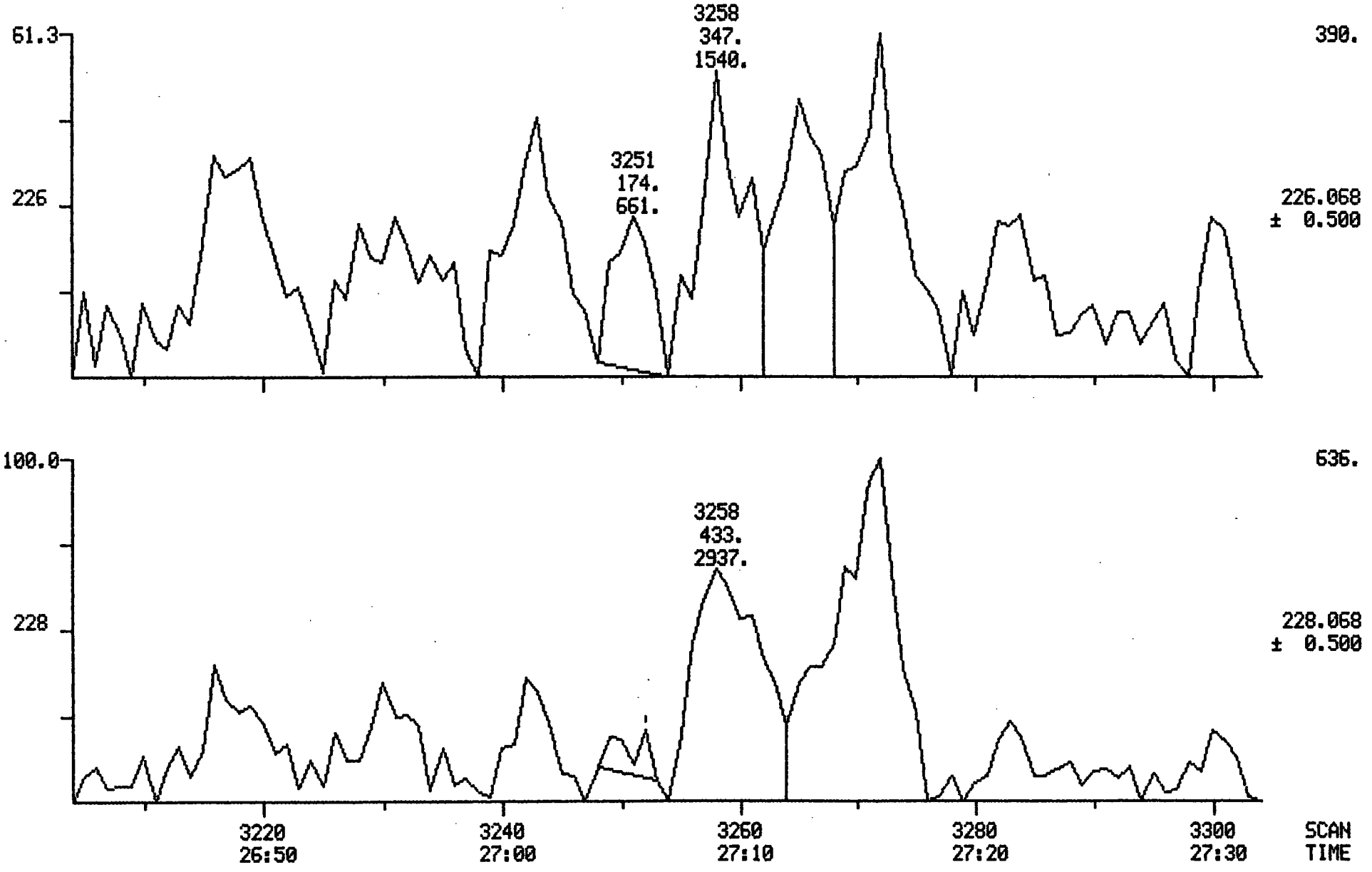
00729

MIDMASS CHROMATOGRAM DATA: S59436X826 #3259 SCANS 3209 TO 3309
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3252,3266 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



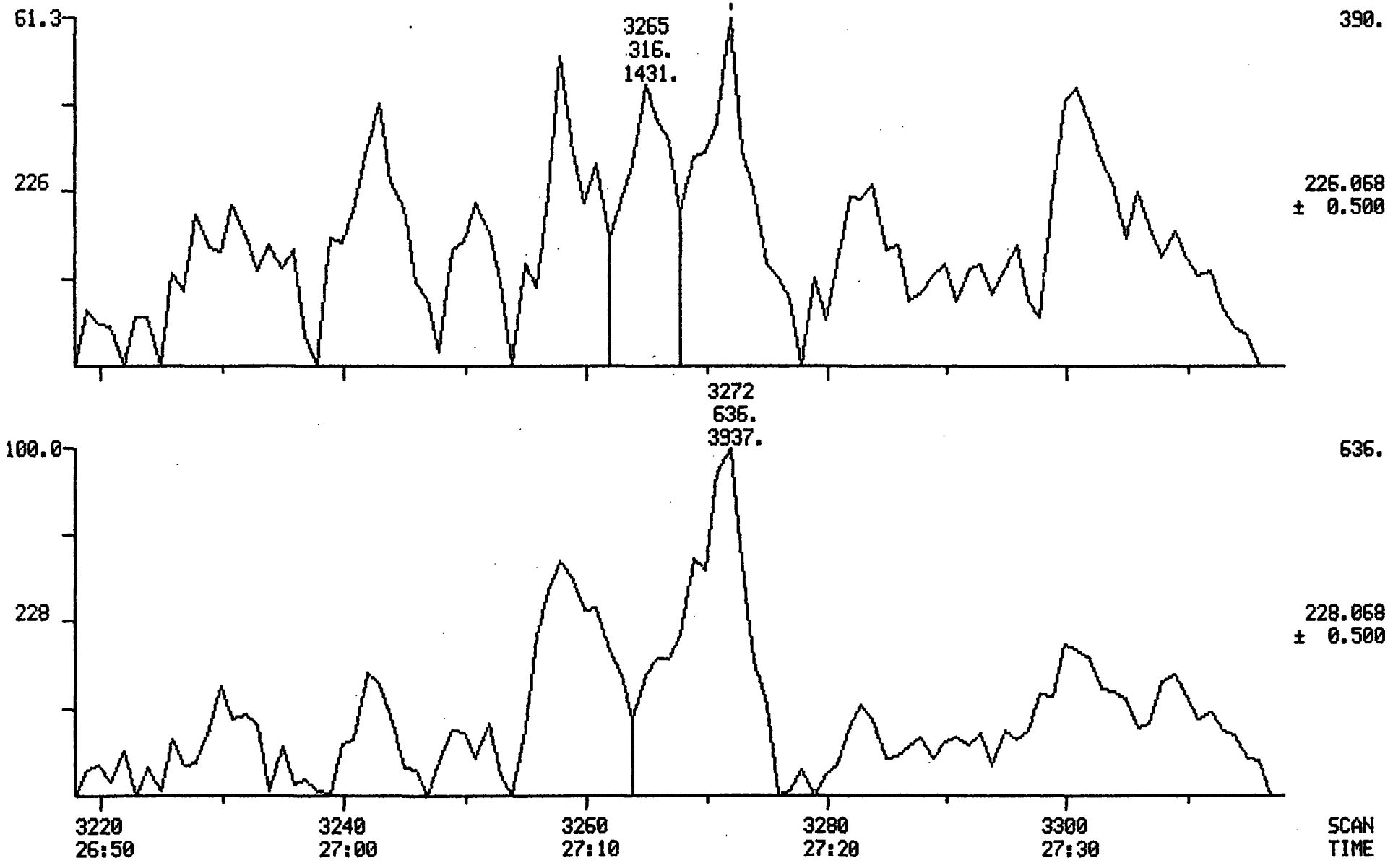
00730

MIDMASS CHROMATOGRAMS DATA: S59436X826 #3254 SCANS 3204 TO 3304
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3247,3261 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



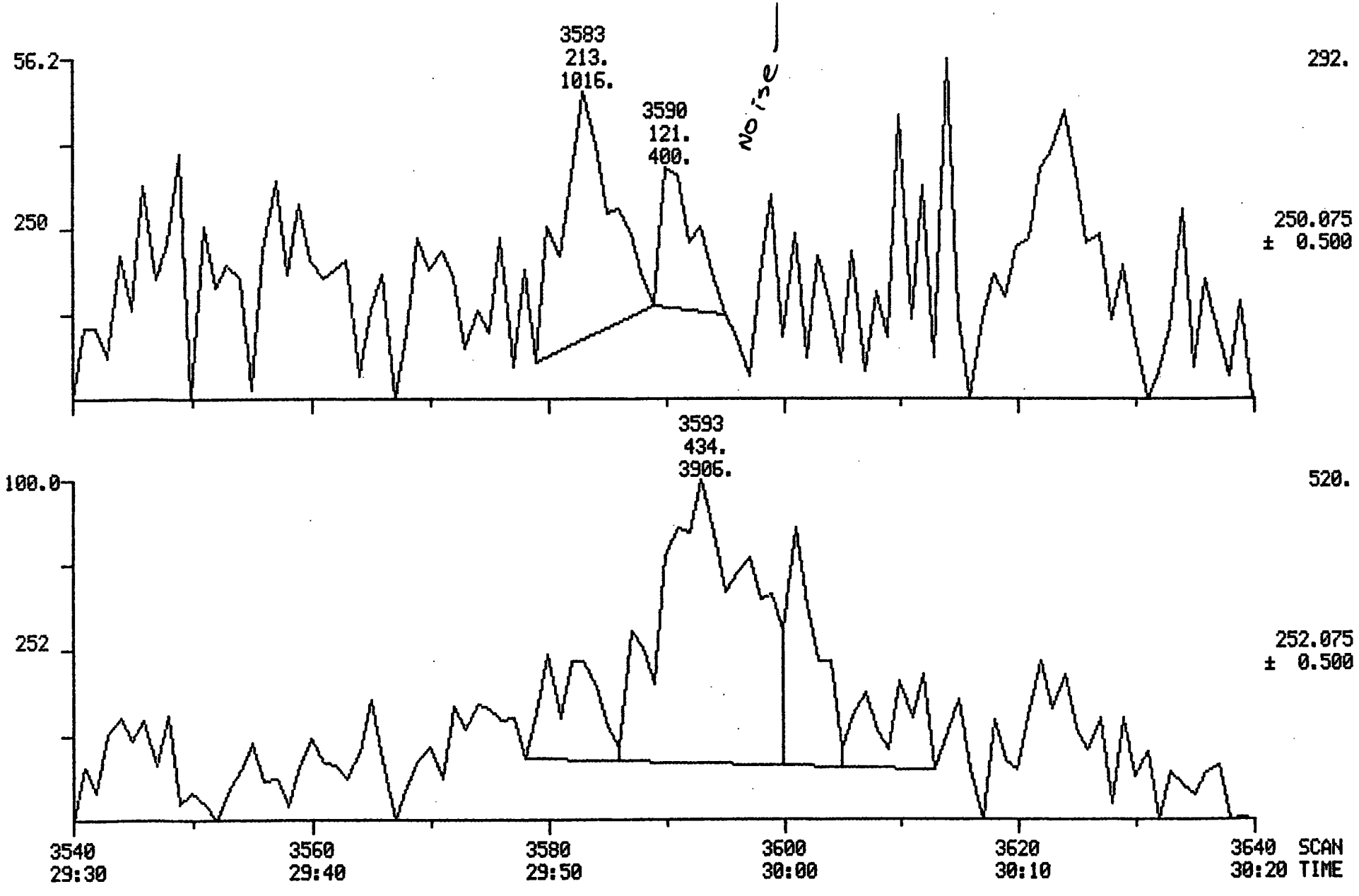
00731

MIDMASS CHROMATOGRAMS DATA: S59436X826 #3268 SCANS 3218 TO 3318
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3261,3275 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



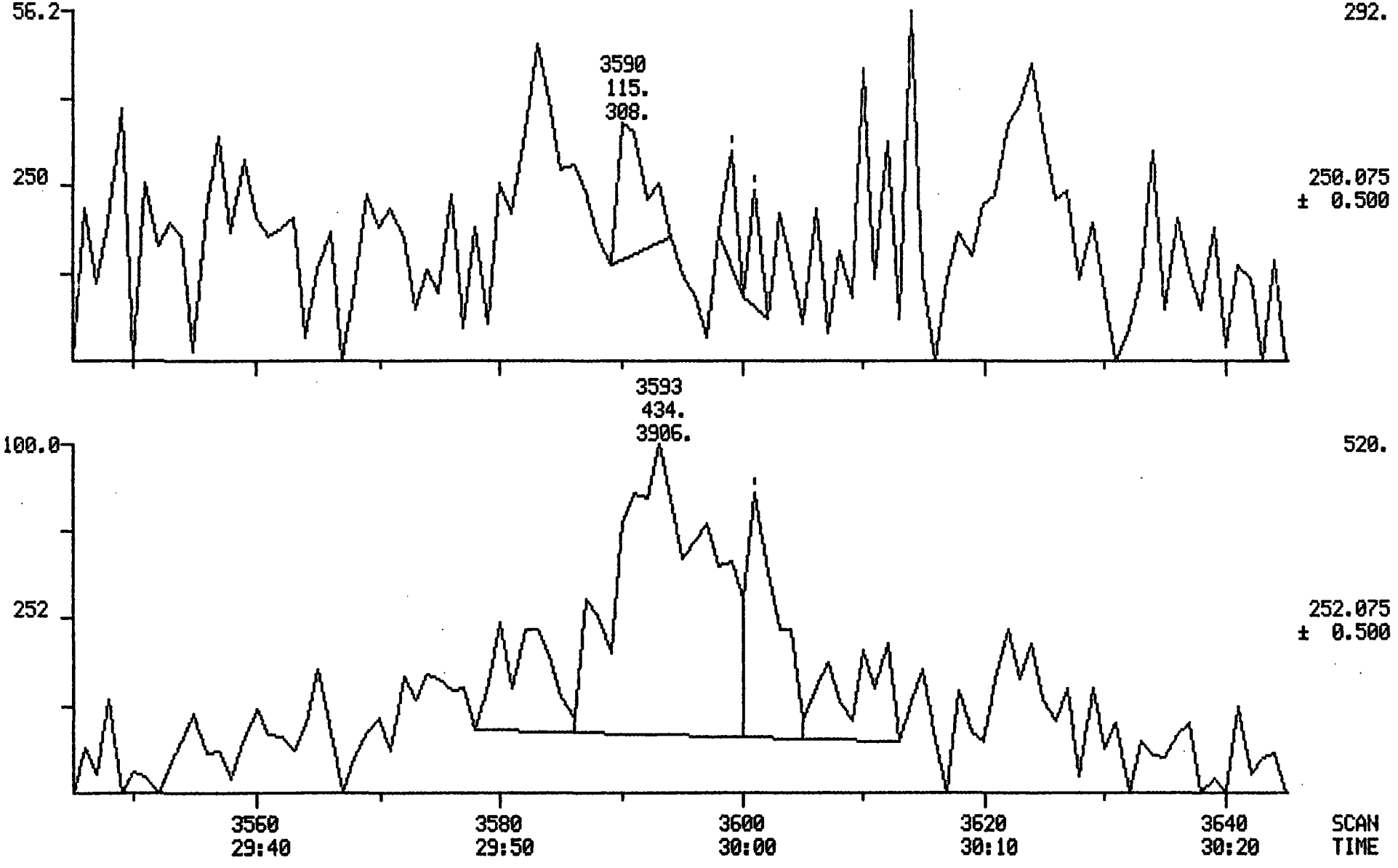
00732

MIDMASS CHROMATOGRAMS DATA: S59436X826 #3590 SCANS 3540 TO 3640
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3583,3597 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



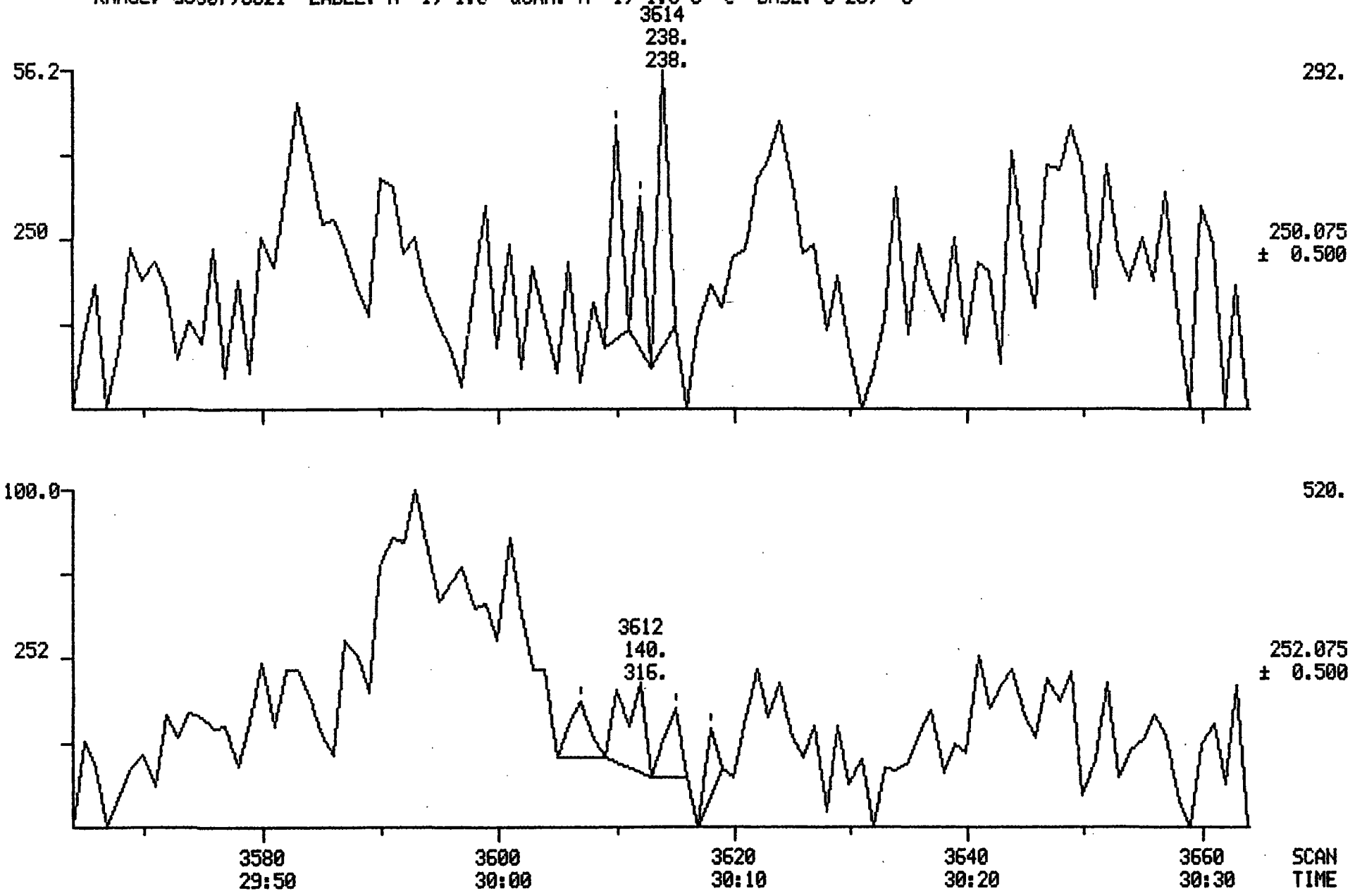
00733

MIDMASS CHROMATOGRAMS DATA: S59436X826 #3595 SCANS 3545 TO 3645
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3588,3602 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



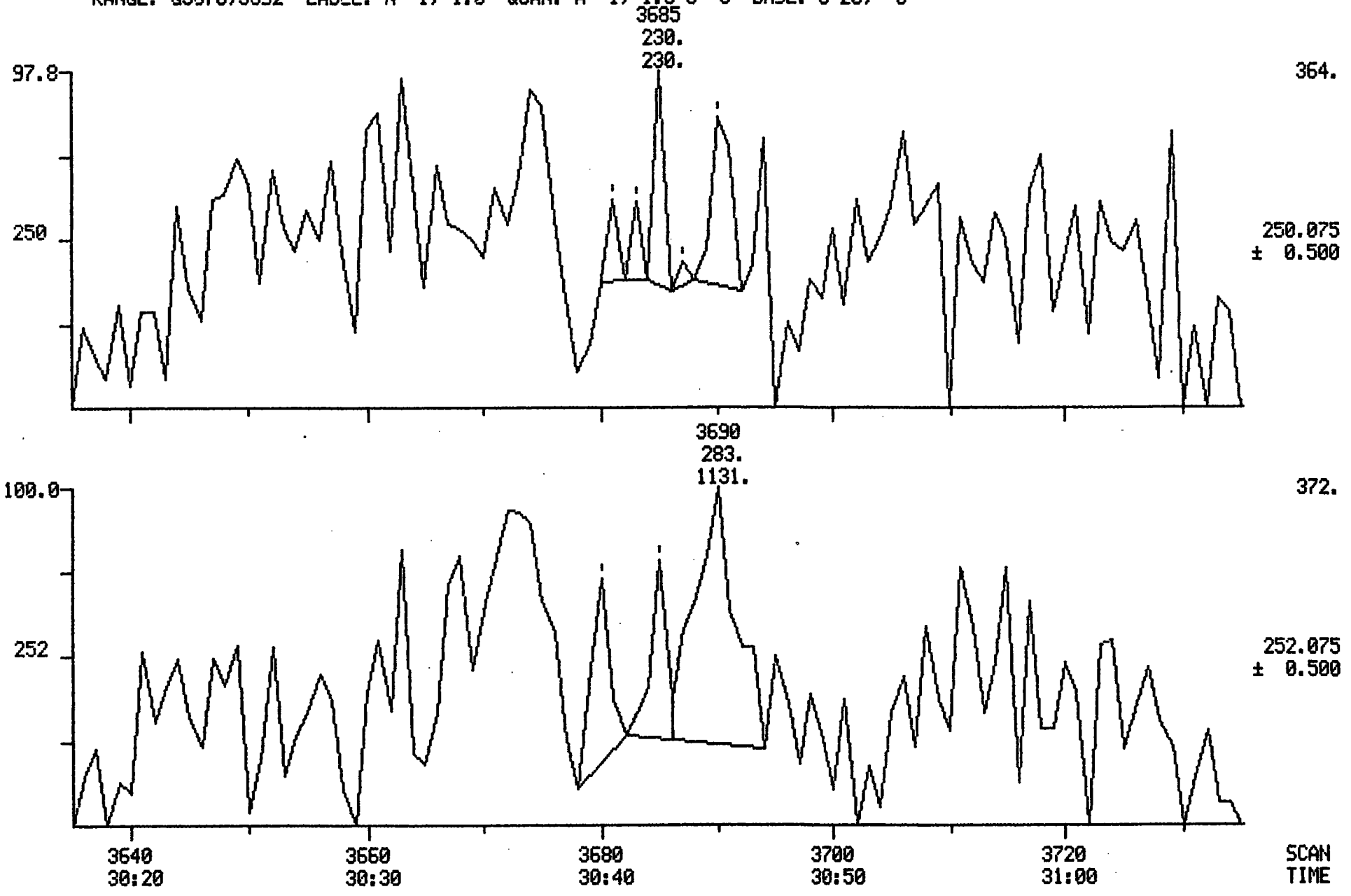
00734

MIDMASS CHROMATOGRAMS DATA: S59436X826 #3614 SCANS 3564 TO 3664
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3507,3621 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00735

MIDMASS CHROMATOGRAMS DATA: S59436X826 #3685 SCANS 3635 TO 3735
06/03/88 1:09:00 CALI: 060288CX #2
SAMPLE: 59436-09 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3678,3692 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X826

Data: S59436X826.TI
06/03/88 1:09:00
Sample: 59436-09 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE	250 PH# 10
11	BENZO(J)FLUORANTHENE	252 PH# 11
12	BENZO(J)FLUORANTHENE	250 PH# 12
13	BENZO(A)PYRENE	252 PH# 13
14	BENZO(A)PYRENE	250 PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3679	30:39	1	1.000	A BB	7467.	80.000	NG/ML	20.79
2	240	3264	27:12	1	0.887	A BV	8534.	59.580	NG/ML	15.48
3	228	3258	27:09	1	0.886	A BV	2937.	19.431	NG/ML	5.05
4	226	3258	27:09	1	0.886	A BV	1540.	44.038	NG/ML	11.44
5	228	3272	27:16	1	0.889	A VB	3937.	24.874	NG/ML	6.46
6	226	3272	27:16	1	0.889	A VB	1875.	45.060	NG/ML	11.71
7	252	3593	29:56	1	0.977	A VV	3906.	24.911	NG/ML	6.47
8	250	3583	29:51	1	0.974	A BB	1016.	26.869	NG/ML	6.98
9	252	3593	29:56	1	0.977	A VV	3906.	24.911	NG/ML	6.47
10	250	3590	29:55	1	0.976	A BB	308.	8.145	NG/ML	2.12
11	252	3612	30:06	1	0.982	A BB	316.	2.263	NG/ML	0.59
12	250	3614	30:07	1	0.982	A BB	238.	7.715	NG/ML	2.00
13	252	3690	30:45	1	1.003	A VB	1131.	8.714	NG/ML	2.26
14	250	3690	30:45	1	1.003	A BB	370.	8.355	NG/ML	2.17

59436 - 09

20%

00737

DBC

A) $\frac{28.0'}{29.5'}(100) = 95\%$ ✓

B) $\frac{27.5'}{32.5'}(100) = 85\%$ ✓

DBC Recovery = 85% ✓
NO HSL Pests / PCBs detected ✓

AREA PERCENT REPORT

```
******************** 05-13-1988 08:50:05 Version 4.1 ********************
* Sample Name: 59436 09 20%                          Data File: J:AB13336 *
* Date: 05-13-1988 08:49:50 Method: M:ABPI                                *
* Interface: 10  Cycle#:  36   Operator SS  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                      *
*            Detector 0: ECD                    Detector 1:              *
* Misc. Information: 4 UL INJECTION                          LPT1:        *
*************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

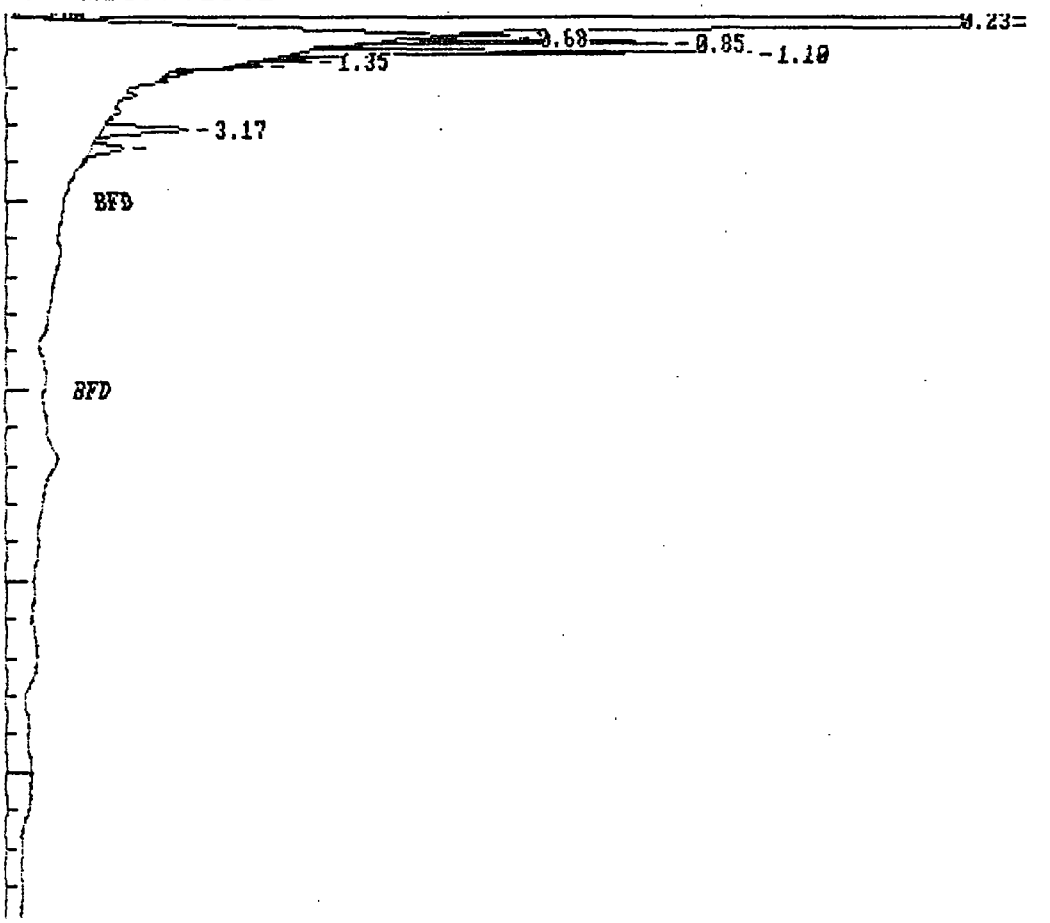
00738

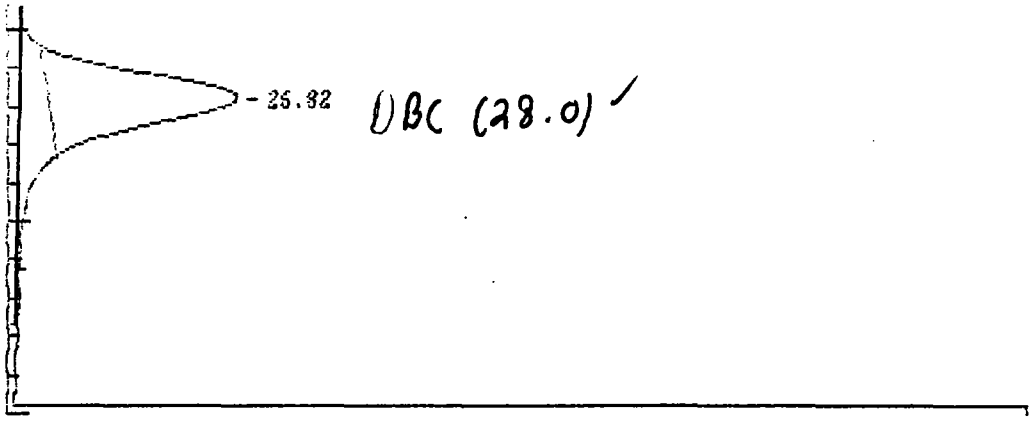
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	1012074	86.8002	1	213917	100.000	4.7
2	0.68	2061	0.1768	1	583	0.204	3.5
3	0.85	9588	0.8223	1	2154	0.947	4.5
4	1.10	17084	1.4652	1	3155	1.688	5.4
5	1.35	1664	0.1427	1	370	0.164	4.5
6	1.50	1545	0.1325	1	317	0.153	4.9
8	3.17	6761	0.5798	1	586	0.668	11.5
9	3.65	3184	0.2731	1	233	0.315	13.7
10	26.82 OBC	112021	9.6074	1	1301	11.068	86.1

SS
5/23/88

Total Area: 1165981 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13336.ATB
Data File = J:AB13336.PTS Printed on 05-13-1988 at 08:50:31
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




- 26.32
DBC (28.0)

AREA PERCENT REPORT

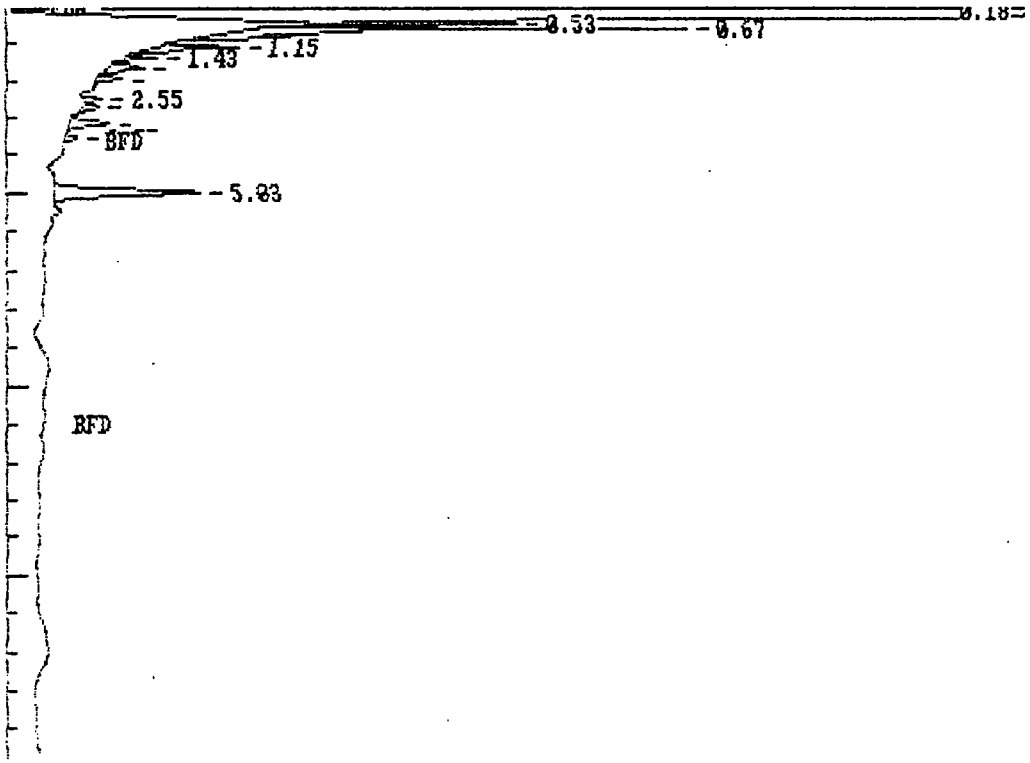
```
****************** 05-13-1988 08:02:14 Version 4.1 ******************
* Sample Name: 59436 09 20%                    Data File: J:BB13336   *
* Date: 05-13-1988 08:01:57 Method: M:BBPI                            *
* Interface: 12  Cycle#:  36  Operator SS  Channel#: 0   Vial#: 00740 *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100        *
***********************************************************************
* Instrument Type: HP 5880A            Column Type: 6FT X 2MM ID GLASS *
*          Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEG ISOTHERMAL                                      *
*          Detector 0:                      Detector 1: ECD           *
* Misc. Information: 4 UL INJ                                         *
***********************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

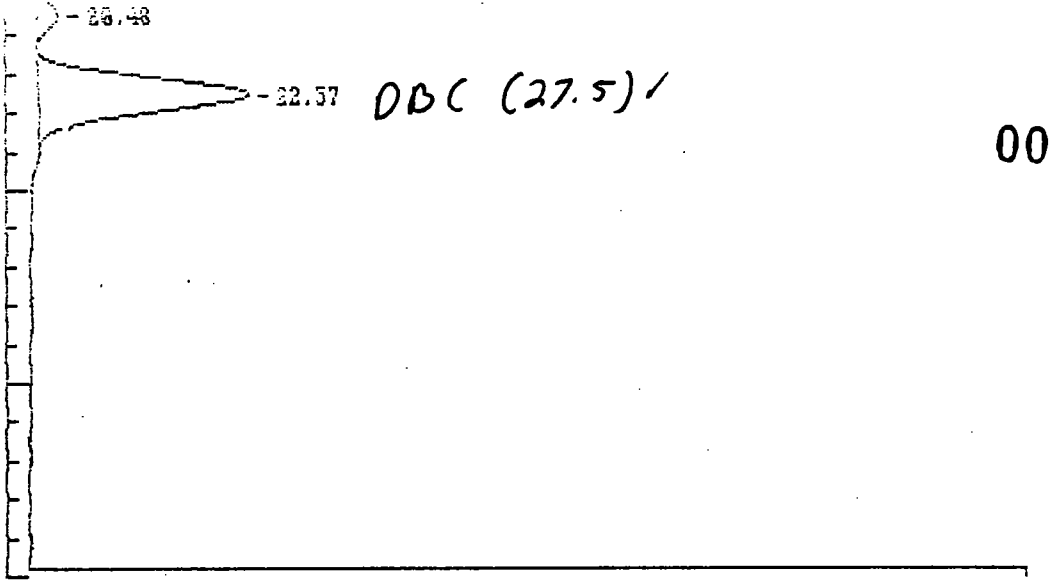
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	2024874	84.3627	1	396700	100.000	5.1
2	0.53	10367	0.4319	1	3894	0.512	2.7
3	0.67	44972	1.8737	1	8205	2.221	5.5
4	1.15	11165	0.4651	1	1633	0.551	6.8
5	1.43 α-BHC	2440	0.1017	1	687	0.121	3.6
6	1.70	7752	0.3230	1	730	0.383	10.6
7	2.00	2639	0.1099	1	493	0.130	5.4
8	2.55	2169	0.0904	1	354	0.107	6.1
9	2.75 Aldrin	3437	0.1432	1	349	0.170	9.8
10	3.18	6873	0.2864	1	750	0.339	9.2
11	3.57	2146	0.0894	1	259	0.106	8.3
12	5.03	33612	1.4004	1	2738	1.660	12.3
13	20.48	16293	0.6788	1	366	0.805	44.5
14	22.57 DDE/p.p'	231463	9.6435	1	3941	11.431	58.7

CS 5/23/88

Total Area: 2400201 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13336.ATB
Data File = J:BB13336.PTS Printed on 05-13-1988 at 08:02:41
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts





00741

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-10

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-10
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59436
Contract No. : N/A
Date Sample Rec: 04/20/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	04/28/88
Conc./Dilution Factor :	1.0
pH :	7.00
Percent Moisture :	100%
Percent Moisture (Decanted) :	N/A

CAS Number		Value	ug/L	CAS Number		Value	ug/L
74-83-3	Chloromethane		10 U	79-34-5	1,1,2,2-Tetrachloroethane		5 U
74-83-9	Bromomethane		10 U	78-87-5	1,2-Dichloropropane		5 U
75-01-4	VinylChloride		10 U	10061-02-6	Trans-1,3-Dichloropropene		5 U
75-00-3	Chloroethane		10 U	79-10-6	Trichloroethene		5 U
75-09-2	MethyleneChloride		5 U	124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	3.5	J B	79-00-5	1,1,2-Trichloroethane		5 U
75-15-0	CarbonDisulfide		5 U	71-43-2	Benzene		5 U
75-35-4	1,1-Dichloroethene		5 U	10061-01-5	cis-1,3-Dichloropropene		5 U
75-34-3	1,1-Dichloroethane		5 U	110-75-8	2-Chloroethylvinylether		10 U
156-60-5	Trans-1,2-Dichloroethene		5 U	75-25-2	Bromoform		5 U
67-66-3	Chloroform		5 U	591-78-6	2-Hexanone		10 U
107-06-2	1,2-Dichloroethane		5 U	108-10-1	4-Methyl-2-Pentanone		10 U
78-93-3	2-Butanone		10 U	127-18-4	Tetrachloroethene		5 U
71-55-6	1,1,1-Trichloroethane		5 U	108-88-3	Toluene		5 U
56-23-5	CarbonTetrachloride		5 U	108-90-7	Chlorobenzene		5 U
108-05-4	VinylAcetate		10 U	100-41-4	Ethylbenzene		5 U
75-27-4	Bromodichloromethane		5 U	100-42-5	Styrene		5 U
					Total Xylenes		5 U

U - compound was not detected
J - concentration detected is less than the required detection limit
B - compound was detected in the blank
sp - compound was a spike

10/85 Rev

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-10

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1.	No Volatiles Detected	VOA		
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59436

Organics Analysis Data Sheet

Sample Number
59436-10

00744

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/23/88	Separatory Funnel Extraction	No
Date Analyzed	06/02/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.02		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L	CAS Number	Compound	Value	ug/L
108-95-2	Phenol		10 U				
111-44-4	bis(-2-Chloroethyl)Ether		10 U	83-32-9	Acenaphthene		10 U
95-57-8	2-Chlorophenol		10 U	51-28-5	2,4-Dinitrophenol		51 U
541-73-1	1,3-Dichlorobenzene		10 U	100-02-7	4-Nitrophenol		51 U
106-46-7	1,4-Dichlorobenzene		10 U	132-64-9	Dibenzofuran		10 U
100-51-6	Benzyl Alcohol		10 U	121-14-2	2,4-Dinitrotoluene		10 U
95-50-1	1,2-Dichlorobenzene		10 U	606-20-2	2,6-Dinitrotoluene		10 U
95-48-7	2-Methylphenol		10 U	84-66-2	Diethylphthalate		10 U
39638-32-9	bis(2-chloroisopropyl)Ether		10 U	7005-72-3	4-Chlorophenyl-phenylether		10 U
106-44-5	4-Methylphenol		10 U	86-73-7	Fluorene		10 U
621-64-7	N-Nitro-Di-n-Propylamine		10 U	100-01-6	4-Nitroaniline		51 U
67-72-1	Hexachloroethane		10 U	534-52-1	4,6-Dinitro-2-Methylphenol		51 U
98-95-3	Nitrobenzene		10 U	86-30-6	N-Nitrosidiphenylamine (1)		10 U
78-59-1	Isophorone		10 U	101-55-3	4-Bromophenyl-phenylether		10 U
88-75-5	2-Nitrophenol		10 U	118-74-1	Hexachlorobenzene		10 U
105-67-9	2,4-Dimethylphenol		10 U	87-86-5	Pentachlorophenol		51 U
65-85-0	Benzoic Acid		51 U	85-01-8	Phenanthrene		10 U
111-91-1	bis(2-Chloroethoxy) Methane		10 U	120-12-7	Anthracene		10 U
120-83-2	2,4-Dichlorophenol		10 U	84-74-2	Di-N-Butylphthalate		10 U
120-82-1	1,2,4-Trichlorobenzene		10 U	206-44-0	Fluoranthene		10 U
91-20-3	Naphthalene		10 U	129-00-0	Pyrene		10 U
106-47-8	4-Chloroaniline		10 U	85-68-7	Butylbenzylphthalate		10 U
87-68-3	Hexachlorobutadiene		10 U	91-94-1	3,3'-Dichlorobenzidine		20 U
59-50-7	4-Chloro-3-Methylphenol		10 U	56-55-3	Benzo(a)Anthracene		10 U
91-57-6	2-Methylnaphthalene		10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	3.3	J B
77-47-4	Hexachlorocyclopentadiene		10 U	218-01-9	Chrysene		10 U
88-06-2	2,4,6-Trichlorophenol		10 U	117-84-0	Di-n-Octylphthalate		10 U
95-95-4	2,4,5-Trichlorophenol		51 U	205-99-2	Benzo(b)Fluoranthene		10 U
91-58-7	2-Chloronaphthalene		10 U	207-08-9	Benzo(k)Fluoranthene		10 U
88-74-4	2-Nitroaniline		51 U	50-32-8	Benzo(a)Pyrene		10 U
131-11-4	Dimethyl Phthalate		10 U	193-39-5	Indeno(1,2,3-cd)Pyrene		10 U
208-96-8	Acenaphthylene		10 U	53-70-3	Dibenzo(a,h)Anthracene		10 U
99-09-2	3-Nitroaniline		51 U	191-24-2	Benzo(g,h,i)Perylene		10 U

(1)-Cannot be separated from diphenylamine.

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-10

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1. 108-87-2	Methyl Cyclohexane	BNA	316	11 B
2. 108-88-3	Methyl Benzene	BNA	370	6.0 B
3.	Oxygenated Hydrocarbon	BNA	394	15 B
4.	Oxygenated Hydrocarbon	BNA	435	10 B
5.	Oxygenated Hydrocarbon	BNA	469	22 B
6. 79-34-5	1,1,2,2-Tetrachloroethane	BNA	572	4.0
7. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	622	7.0 B
8. 108-47-4	2,4-Dimethyl Pyridine	BNA	675	8.9
9. 1824-81-3	6-Methyl-2-Pyridinamine	BNA	794	6.8
10.	Amine	BNA	886	9.0
11.	Amine	BNA	907	4.2
12. 120-71-8	2-Methoxy-5-Methyl Benzenamine	BNA	1028	5.2
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-10
Date Analyzed: 06/02/88

Units: ug/L
Run Factor: 2.02

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	69.4	69	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
	10 U	Pyridine	110-86-1
	10 U	2-Picoline	109-06-8
	10 U	3 & 4-Picoline	
	10 U	2,6-Lutidine	
	10 U	2-Ethyl Pyridine	
5.0	J	2,4 & 2,5-Lutidine	
	10 U	2,3-Lutidine	
	10 U	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
18.0		3,5-Lutidine	
	10 U	3,4-Lutidine	
2.8	J	2-Methyl-5-Ethyl Pyridine	
3.5	J	2-Methyl-3-Ethyl Pyridine	
	10 U	M and P Cresols	
8.1	J	3-Ethyl-4-Methyl Pyridine	
	10 U	3-Ethyl-5-Methyl Pyridine	
	10 U	2,6-Dimethyl Phenol	
	10 U	2,5-Dimethyl Phenol	
	10 U	3,5-Dimethyl Phenol	
	10 U	2,3-Dimethyl Phenol	
	10 U	3,4-Dimethyl Phenol	
	10 U	1-Methylnaphthalene	90-12-0

J = Value below detection limit.

FORM I

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-10
Date Analyzed: 06/03/88

Units: ug/L
Run Factor: 0.132

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	159.0	199 *	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
	10 U	Benzo(A)Anthracene
	10 U	Chrysene
	10 U	Benzo(B)Fluoranthene
	10 U	Benzo(K)Fluoranthene
	10 U	Benzo(A)Pyrene

FORM I

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-10 RR
Date Analyzed: 06/03/88

Units: ug/L
Run Factor: 0.132

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	121.0	151 *	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
	10 U	Benzo(A)Anthracene
	10 U	Chrysene
3.3	J	Benzo(B)Fluoranthene
2.1	J	Benzo(K)Fluoranthene
	10 U	Benzo(A)Pyrene

FORM I

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59436

Sample Number: 59436-10

00749

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/23/88
Date Analyzed :05/07/88
Conc./Dil Factor : 50.5
Percent Moisture :

GPC Cleanup :No
Separatory Funnel Extract.:Yes
Cont. Liquid/Liquid Extr. :No
Sonication Extraction :No

CAS Number	Compound	Value	ug/ L
319-84-6	Alpha-BHC		0.05 U
319-85-7	Beta-BHC		0.05 U
319-86-8	Delta-BHC		0.05 U
58-89-9	Gamma-BHC(Lindane)		0.05 U
76-44-8	Heptachlor		0.05 U
309-00-2	Aldrin		0.05 U
1204-57-3	Heptachlor Epoxide		0.05 U
959-98-8	Endosulfan I		0.05 U
60-57-1	Dieldrin		0.10 U
72-55-9	4,4'-DDE		0.10 U
72-20-8	Endrin		0.10 U
33213-65-9	Endosulfan II		0.10 U
72-54-8	4,4'-DDD		0.10 U
1031-07-8	Endosulfan Sulfate		0.10 U
50-29-3	4,4'-DDT		0.10 U
72-43-5	Methoxychlor		0.51 U
53494-70-5	Endrin Ketone		0.10 U
57-74-9	Chlordane		0.51 U
8001-35-2	Toxaphene		1.00 U
12674-11-2	Aroclor-1016		0.51 U
11104-28-2	Aroclor-1221		0.51 U
11141-16-5	Aroclor-1232		0.51 U
53469-21-9	Aroclor-1242		0.51 U
12672-29-6	Aroclor-1248		0.51 U
11097-69-1	Aroclor-1254		1.00 U
11096-82-5	Arolcor-1260		1.00 U

Vi = Volume of extract injected (ul) Vi = 2ul/4ul
Vs = Volume of water extracted (ml) Vs = 990 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

OK

00750

4/28/88 22:28:16 SCAN 1 OF 730
Acquisition started

Acquire
04/28/88 22:27:00 + 0:03
Sample: 59436-10 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 3:S59436W907
Free sectors: 22614
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.025
Acct. No: 59436

*** GC descriptor: V3 ***

GC temperature: 61 DegC
Elapsed time : 0: 7 min

Injector: 50 DegC
Interface: 220 DegC

Seq. #	Temp (DegC)	Rate (C/min)	Time (minutes) period	total
1	60- 60	-	2.0	2.0
2	60-250	7.0	27.1	29.1
3	250-250	-	10.0	39.1
4	250-250	-	0.0	39.1

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

Scan time (s)
Up: 2.95 L*
Down: 0.00 L

Hold time (s)
Top: 0.00
Bottom: 0.05

Cent S/P: 10 Actual: 67
Frag S/P: 10 Actual: 10

Samp int (ms): 0.200
Samp int (ms): 1.400

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	812	u
Zero scale mass	1	u
Intensity/ion	2	
Peak width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(ms)	4	

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	126.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.88	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2106.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

4/28/88 23:04:50
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	49.0	2190.0	2.2	19976.	27.	9.

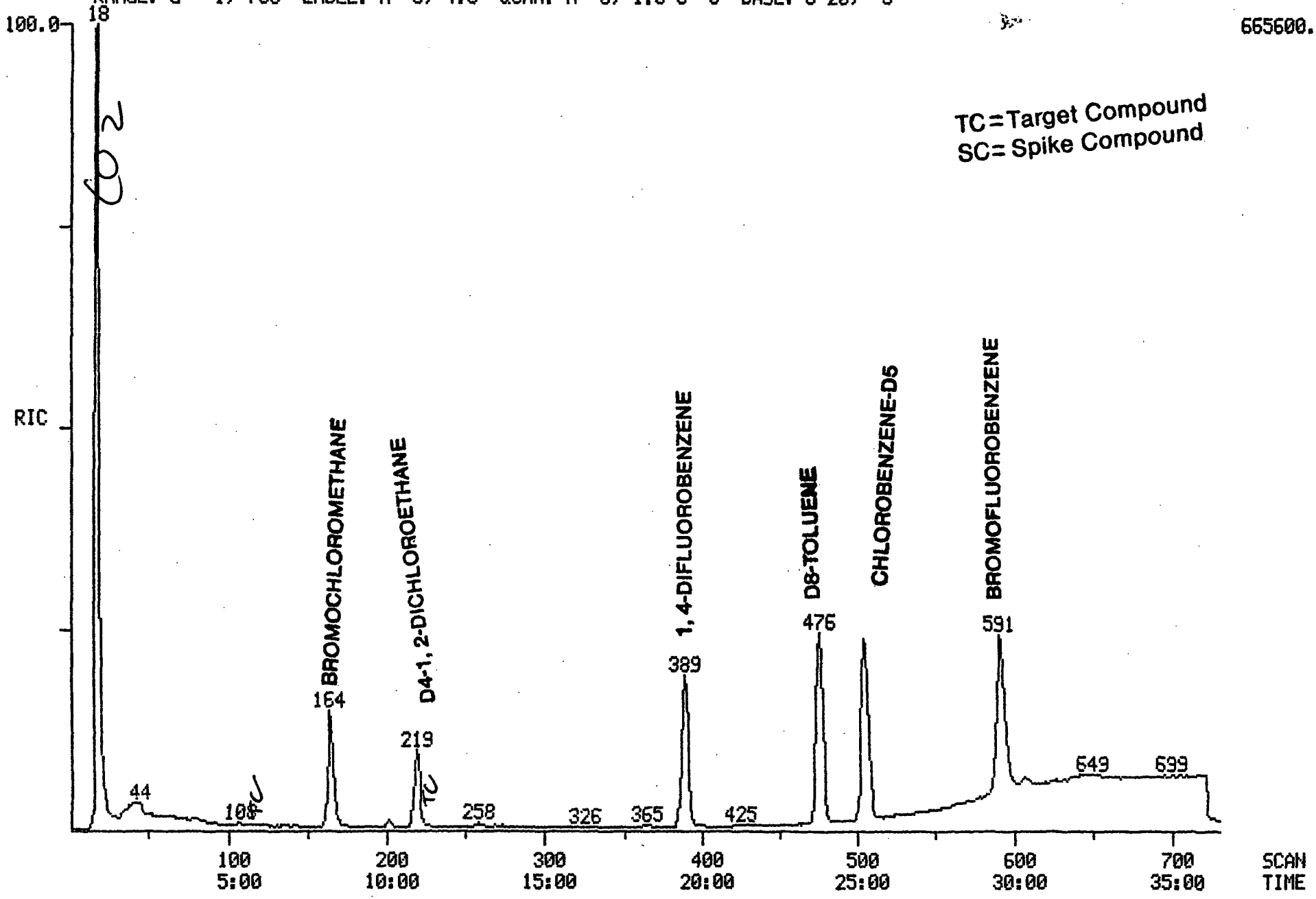
00751

RIC
04/28/88 22:27:00
SAMPLE: 59436-10 VOA H2O 100%/5ML
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436W907 #4 SCANS 1 TO 730
CALI: 042888CW #1

TIC=Tentatively Identified Compound

TC=Target Compound
SC=Spike Compound



PROCEDURE: TCA DIAGNOSTIC REPORT 4/29/88 4:37:46
DATA FILE: S59436W907
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00752

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	3	8	0	ISO1/TCO1
3	3	2	0	18	6	3	166	ISO2/TCO2
3	3	1	0	12	6	12	88	ISO3/TCO3
1	1	1	0	7	2	1	0	ISO4/TCO4

41 COMPOUNDS PROCESSED, 12 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-163	164	164	.	1	963	.	128	164	.	1
2	V1	10	-33	34	.	.	.	.	.	50	35	.	1
3	V1	15	-48	49	.	.	.	.	.	94	.	.	.
4	V1	25	-59	60	.	.	.	.	.	62	.	.	.
5	V1	35	-73	74	.	.	.	.	.	64	.	.	.
6	V1	45	-107	108	108	.	1	977	.	84	108	.	1
7	V1	50	-116	117	117	.	8	1000	.	58	117	.	1
8	V1	65	-133	134	.	.	.	.	.	76	.	.	.
9	V1	80	-154	155	.	.	.	.	.	96	.	.	.
10	V2	1	-388	389	389	.	1	996	.	114	389	.	1
11	V3	1	-503	504	504	.	2	994	.	117	504	.	1
12	V1	90	-180	180	.	.	.	.	.	63	.	.	.
13	V1	95	-194	194	.	.	.	.	.	96	.	.	.
14	V1	100	-206	206	.	.	.	.	.	83	.	.	.
15	V1	2	-219	219	219	.	1	989	.	65	219	.	1
16	V2	10	-219	219	219	.	3	950	.	72	219	.	1
17	V1	110	-221	221	.	.	.	.	.	62	.	.	.
18	V2	15	-249	249	.	.	.	.	.	97	.	.	.
19	V2	20	-258	258	.	.	.	.	.	117	.	.	.
20	V2	25	-260	260	257	-3	1	969	.	43	.	.	.
21	V2	30	-268	268	.	.	.	.	.	83	.	.	.
22	V2	35	-299	299	.	.	.	.	.	63	.	.	.
23	V2	40	-305	305	.	.	.	.	.	75	.	.	.
24	V2	45	-317	317	.	.	.	.	.	130	.	.	.
25	V2	60	-330	330	.	.	.	.	.	78	330	.	1
26	V2	50	-331	331	.	.	.	.	.	129	.	.	.
27	V2	65	-334	335	.	.	.	.	.	75	.	.	.
28	V2	55	-334	335	.	.	.	.	.	97	.	.	.
29	V2	80	-394	395	.	.	.	.	.	173	.	.	.
30	V3	10	-405	405	406	1	3	923	.	58	.	.	.
31	V3	15	-442	442	441	-1	4	952	.	58	.	.	.
32	V3	25	-448	448	.	.	.	.	.	83	.	.	.
33	V3	20	-449	449	.	.	.	.	.	164	.	.	.
34	V3	2	-476	476	476	.	1	992	.	98	476	.	1
35	V3	35	-480	480	.	.	.	.	.	92	.	.	.
36	V3	40	-507	508	.	.	.	.	.	112	.	.	.
37	V3	50	-550	550	.	.	.	.	.	106	.	.	.
38	V3	3	-591	591	591	.	1	991	.	95	591	.	1
39	V3	55	-612	612	.	.	.	.	.	104	.	.	.
40	V3	60	-616	616	.	.	.	.	.	106	.	.	.
41	V3	75	-629	629	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59436W907

00753

Data: S59436W907.TI
04/28/88 22:27:00
Sample: 59436-10 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.025
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	Name				
1	CI01 BROMOCHLOROMETHANE	128	IV1#	01	74-97-5
2	C010 CHLOROMETHANE	50	V1#	10SP	74-87-3
3	C015 BROMOMETHANE	94	V1#	15	74-83-9
4	C020 VINYL CHLORIDE	62	V1#	25	75-01-4
5	C025 CHLOROETHANE	64	V1#	35	75-00-3
6	C030 METHYLENE CHLORIDE	84	V1#	45	75-09-2
7	C035 ACETONE	58	V1#	50	67-64-1
8	C040 CARBON DISULFIDE	76	V1#	65	75-15-0
9	C045 1,1-DICHLOROETHENE	61	V1#	80	75-35-4
10	CI10 1,4-DIFLUOROBENZENE	114	IV2#	01	540-36-3
11	CI20 CHLOROBENZENE-D5	117	IV3#	01	3114-55-4
12	C050 1,1-DICHLOROETHANE	63	V1#	90	75-34-3
13	TRANS-1,2-DICHLOROETHENE	61	V1#	95	156-60-5
14	C060 CHLOROFORM	83	V1#	100CC	67-66-3
15	CS15 1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
16	C110 2-BUTANONE	72	V2#	10	78-93-3
17	C065 1,2-DICHLOROETHANE	62	V1#	110	107-06-2
18	C115 1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
19	C120 CARBONTETRACHLORIDE	117	V2#	20	56-23-5
20	C125 VINYL ACETATE	43	V2#	25	108-05-4
21	C130 BROMODICHLOROMETHANE	83	V2#	30	75-27-4
22	C140 1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
23	C143 CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
24	C150 TRICHLOROETHENE	130	V2#	45	79-01-6
25	C165 BENZENE	78	V2#	60	71-43-2
26	C155 DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
27	C172 TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
28	C160 1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
29	C180 BROMOFORM	173	V2#	80	75-25-2
30	C205 4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
31	C210 2-HEXANONE	58	V3#	15	591-78-6
32	C225 1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5
33	C220 TETRACHLOROETHENE	164	V3#	20	127-18-4
34	CS05 TOLUENE-D8	98	SV3#	02	2037-26-5
35	C230 TOLUENE	92	V3#	35	108-88-3
36	C235 CHLOROBENZENE	112	V3#	40	108-90-7
37	C240 ETHYLBENZENE	106	V3#	50	100-41-4
38	CS10 BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
39	C245 STYRENE	104	V3#	55	100-42-5
40	M-XYLENE	106	V3#	60	108-38-3
41	O+P XYLENES	106	V3#	75	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	164	8:12	1	1.000	A BB	42997.	50.000 UG/L	16.32
2	50	35	1:45	1	0.213	A BB	66.	0.031 UG/L	0.01
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	108	5:24	1	0.659	A BB	1101.	0.564 UG/L	0.18
7	58	117	5:51	1	0.713	A BB	530.	3.471 UG/L	1.13
8	NOT FOUND								
9	NOT FOUND								
10	114	389	19:27	10	1.000	A BB	229656.	50.000 UG/L	16.32
11	117	504	25:12	11	1.000	A BB	217865.	50.000 UG/L	16.32
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	219	10:57	1	1.335	A BB	82008.	46.800 UG/L	15.27
16	72	219	10:57	10	0.563	A BB	272.	1.624 UG/L	0.53
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	78	330	16:30	10	0.848	A BB	150.	0.032 UG/L	0.01
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	98	476	23:48	11	0.944	A BB	241207.	51.423 UG/L	16.78
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	95	591	29:33	11	1.173	A BB	141233.	52.498 UG/L	17.13
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:39	1.06	0.201	1.06	0.03	50.00	0.002	2.442	0.00
3	2:24		0.293						
4	2:57		0.360						
5	3:39		0.445						
6	5:21	1.01	0.652	1.01	0.56	50.00	0.026	2.269	0.01
7	5:48	1.01	0.707	1.01	3.47	50.00	0.012	0.178	0.07
8	6:39		0.811						
9	7:42		0.939						
10	19:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	9:00		1.098						
13	9:42		1.183						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	10:18		1.256						
15	10:57	1.00	1.335	1.00	46.80	50.00	1.907	2.038	0.94
16	10:57	1.00	0.563	1.00	1.62	50.00	0.001	0.036	0.03
17	11:03		1.348						
18	12:27		0.640						
19	12:54		0.663						
20	13:00		0.668						
21	13:24		0.689						
22	14:57		0.769						
23	15:15		0.784						
24	15:51		0.815						
25	16:30	1.00	0.848	1.00	0.03	50.00	0.001	1.029	0.00
26	16:33		0.851						
27	16:42		0.859						
28	16:42		0.859						
29	19:42		1.013						
30	20:15		0.804						
31	22:06		0.877						
32	22:24		0.889						
33	22:27		0.891						
34	23:48	1.00	0.944	1.00	51.42	50.00	1.107	1.076	1.03
35	24:00		0.952						
36	25:21		1.006						
37	27:30		1.091						
38	29:33	1.00	1.173	1.00	52.50	50.00	0.648	0.617	1.05
39	30:36		1.214						
40	30:48		1.222						
41	31:27		1.248						

TCA FINISHED, 12 FOUND
FINISHED AT: 4/29/88 4:42:01

00756

RMAL QUANTITATION SUMMARY FILE: S59436W907
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	164	1	42997.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	229656.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	217865.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	476	3	241207.	1.107	51.423
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	141233.	0.648	52.498
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	219	1	82008.	1.907	46.800
7	V1# 10	C010 CHLOROMETHANE	50		1	NOT FOUND		
8	V1# 15	C015 BROMOMETHANE	94		1	NOT FOUND		
9	V1# 25	C020 VINYL CHLORIDE	62		1	NOT FOUND		
10	V1# 35	C025 CHLOROETHANE	64		1	NOT FOUND		
11	V1# 45	C030 METHYLENE CHLORIDE	84		1	NOT FOUND		
12	V1# 50	C035 ACETONE	58	117	1	530.	0.012	3.471
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96		1	NOT FOUND		
15	V1# 90	C050 1,1-DICHLOROETHANE	63		1	NOT FOUND		
16	V1# 95	TRANS-1,2-DICHLOROETHENE	96		1	NOT FOUND		
17	V1#100	C060 CHLOROFORM	83		1	NOT FOUND		
18	V1#110	C065 1,2-DICHLOROETHANE	62		1	NOT FOUND		
19	V2# 10	C110 2-BUTANONE	72	219	2	272.	0.001	~~1.624~~
20	V2# 15	C115 1,1,1-TRICHLOROETHA	97		2	NOT FOUND		
21	V2# 20	C120 CARBONTETRACHLORIDE	117		2	NOT FOUND		
22	V2# 25	C125 VINYL ACETATE	43		2	NOT FOUND		
23	V2# 30	C130 BROMODICHLOROMETHAN	83		2	NOT FOUND		
24	V2# 35	C140 1,2-DICHLOROPROPANE	63		2	NOT FOUND		
25	V2# 40	C143 CIS-1,3-DICHLOROPRO	75		2	NOT FOUND		
26	V2# 45	C150 TRICHLOROETHENE	130		2	NOT FOUND		
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78		2	NOT FOUND		
30	V2# 65	C172 TRANS-1,3-DICHLOROP	75		2	NOT FOUND		
31	V2# 80	C180 BROMOFORM	173		2	NOT FOUND		
32	V3# 10	C205 4-METHYL-2-PENTANON	58		3	NOT FOUND		
33	V3# 15	C210 2-HEXANONE	58		3	NOT FOUND		
34	V3# 20	C220 TETRACHLOROETHENE	164		3	NOT FOUND		
35	V3# 25	C225 1,1,2,2-TETRACHLORO	83		3	NOT FOUND		
36	V3# 35	C230 TOLUENE	92		3	NOT FOUND		
37	V3# 40	C235 CHLOROBENZENE	112		3	NOT FOUND		
38	V3# 50	C240 ETHYLBENZENE	106		3	NOT FOUND		
39	V3# 55	C245 STYRENE	104		3	NOT FOUND		
40	V3# 60	M-XYLENE	106		3	NOT FOUND		
41	V3# 75	O+P XYLENES	106		3	NOT FOUND		

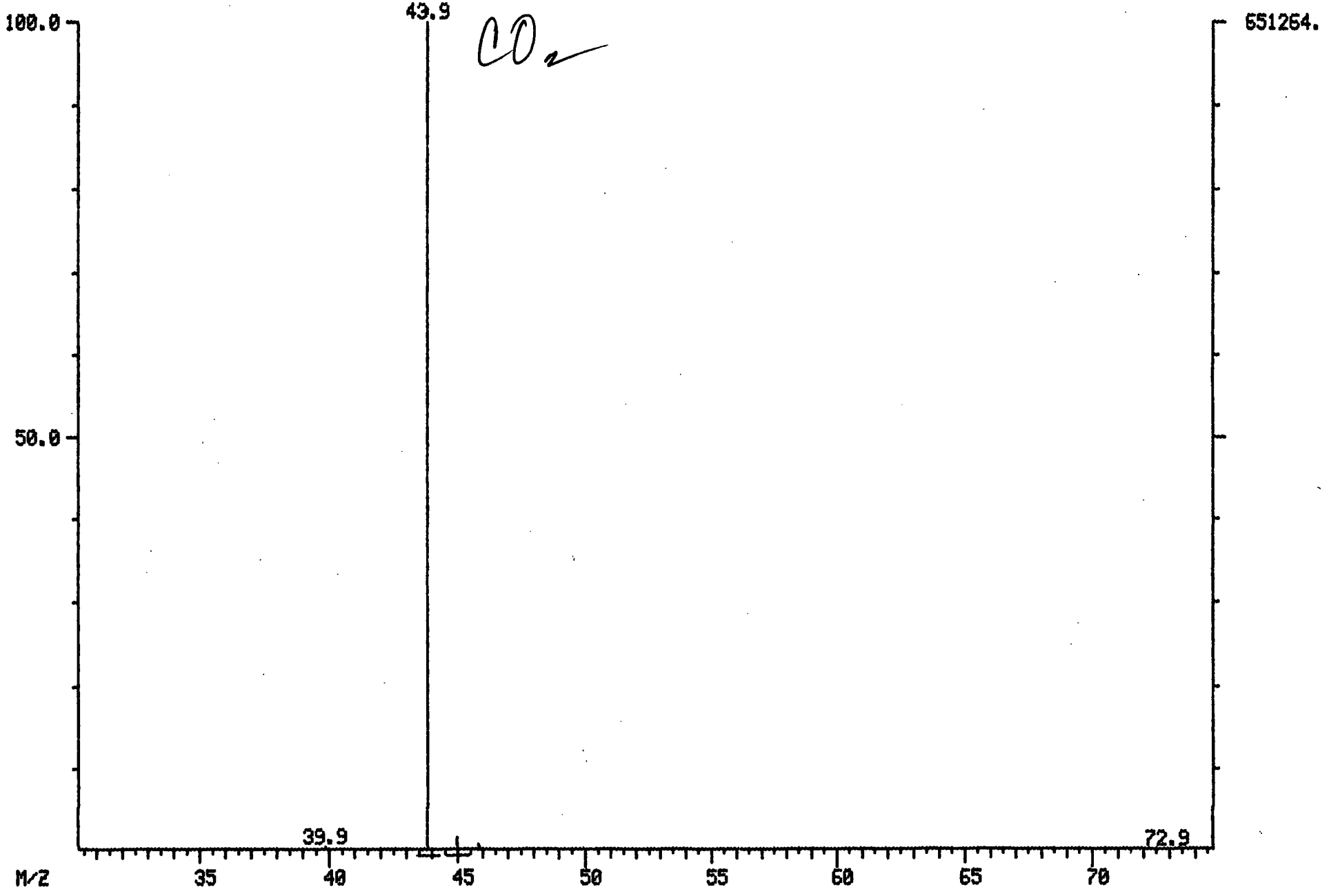
6.9.88

00757

MASS SPECTRUM
04/28/88 22:27:00 + 0:54
SAMPLE: 59436-10 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 60 DEG. C

DATA: 559436W907 #18
CALI: 042888CW #1

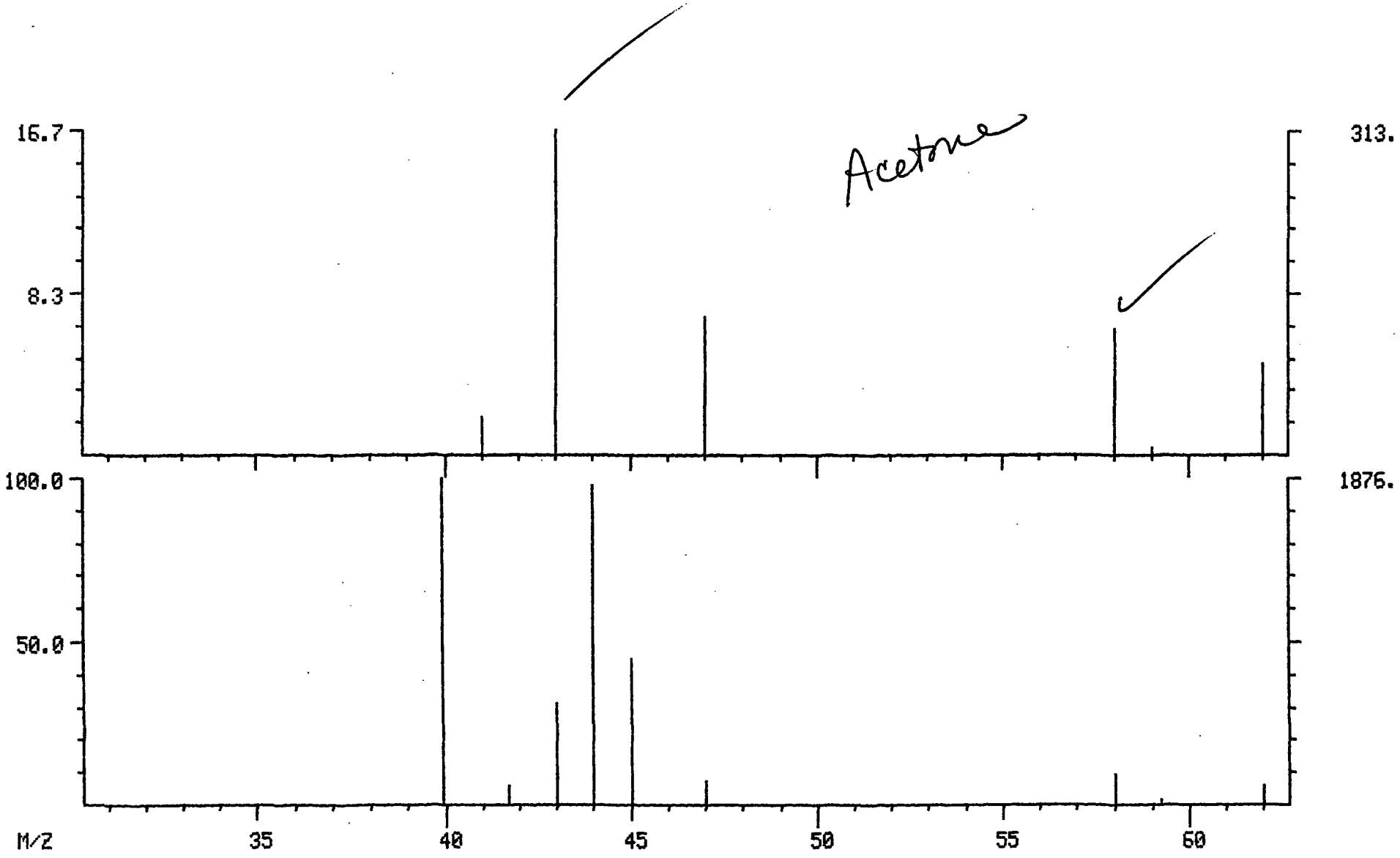
BASE M/Z: 44
RIC: 665600.



00758

DUAL MASS SPECTRUM
04/28/88 22:27:00 + 5:51
SAMPLE: 59436-10 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 87 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W907 #117 BASE M/Z: 43/ 40
CALI: 042888CW #1 RIC: 700./ 5695.

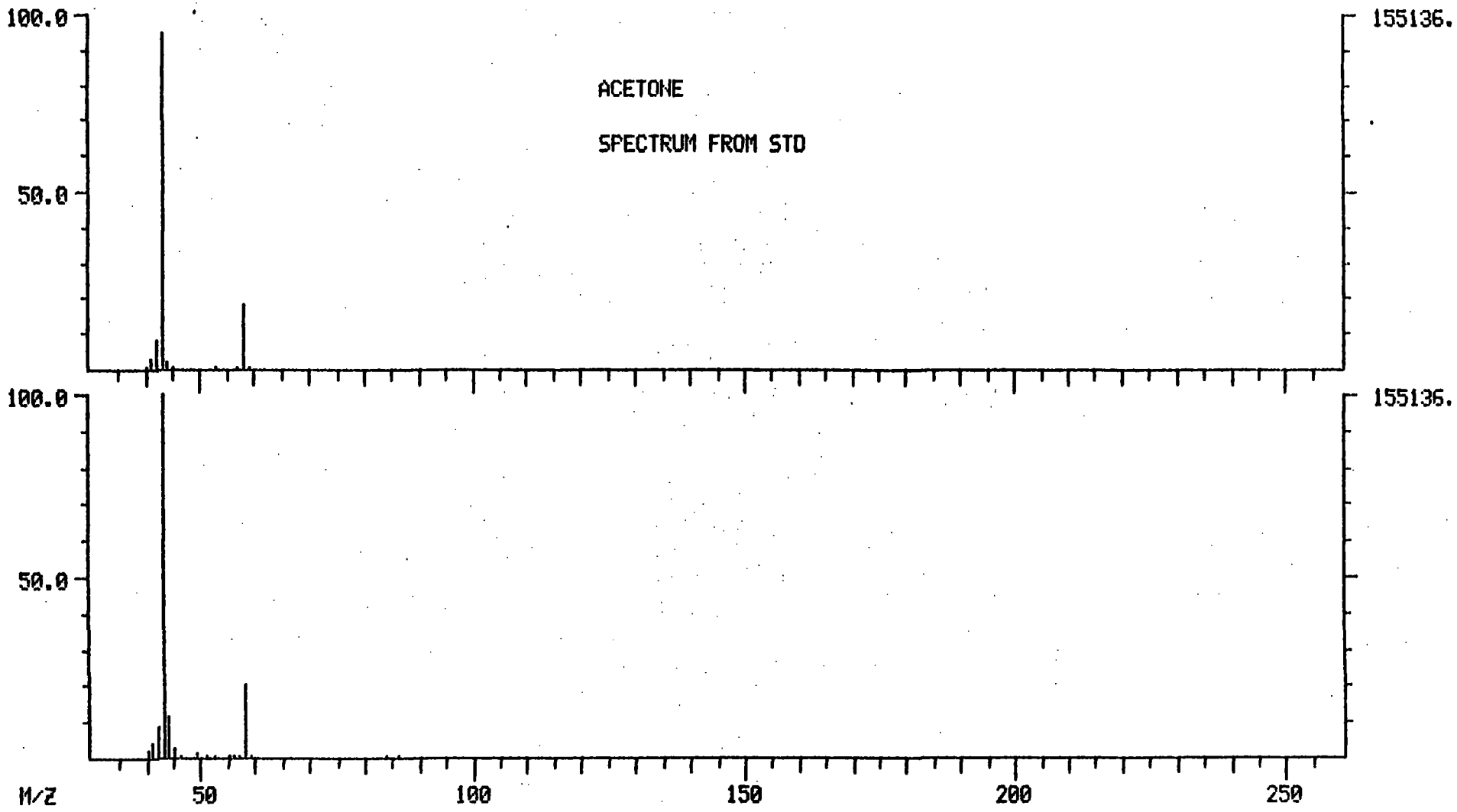


00759

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 7:37
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #150
CALI: STDJ198 #1

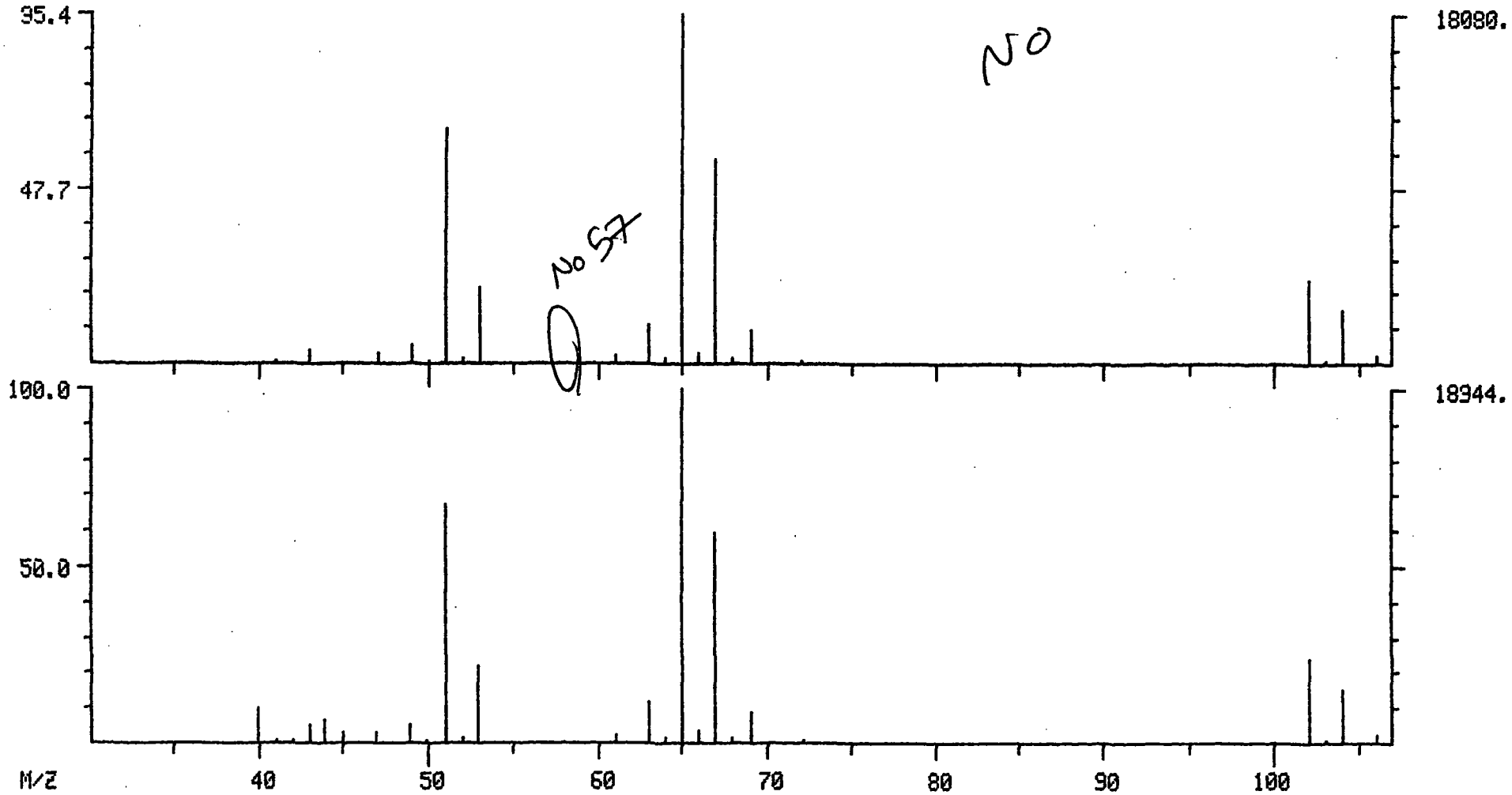
BASE M/Z: 43/ 43
RIC: 199935./ 247807.



00760

DUAL MASS SPECTRUM
04/28/88 22:27:00 + 10:57
SAMPLE: 59436-10 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 123 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W907 #219 BASE M/Z: 65/ 65
CALI: 042888CW #1 RIC: 60543./ 67327.

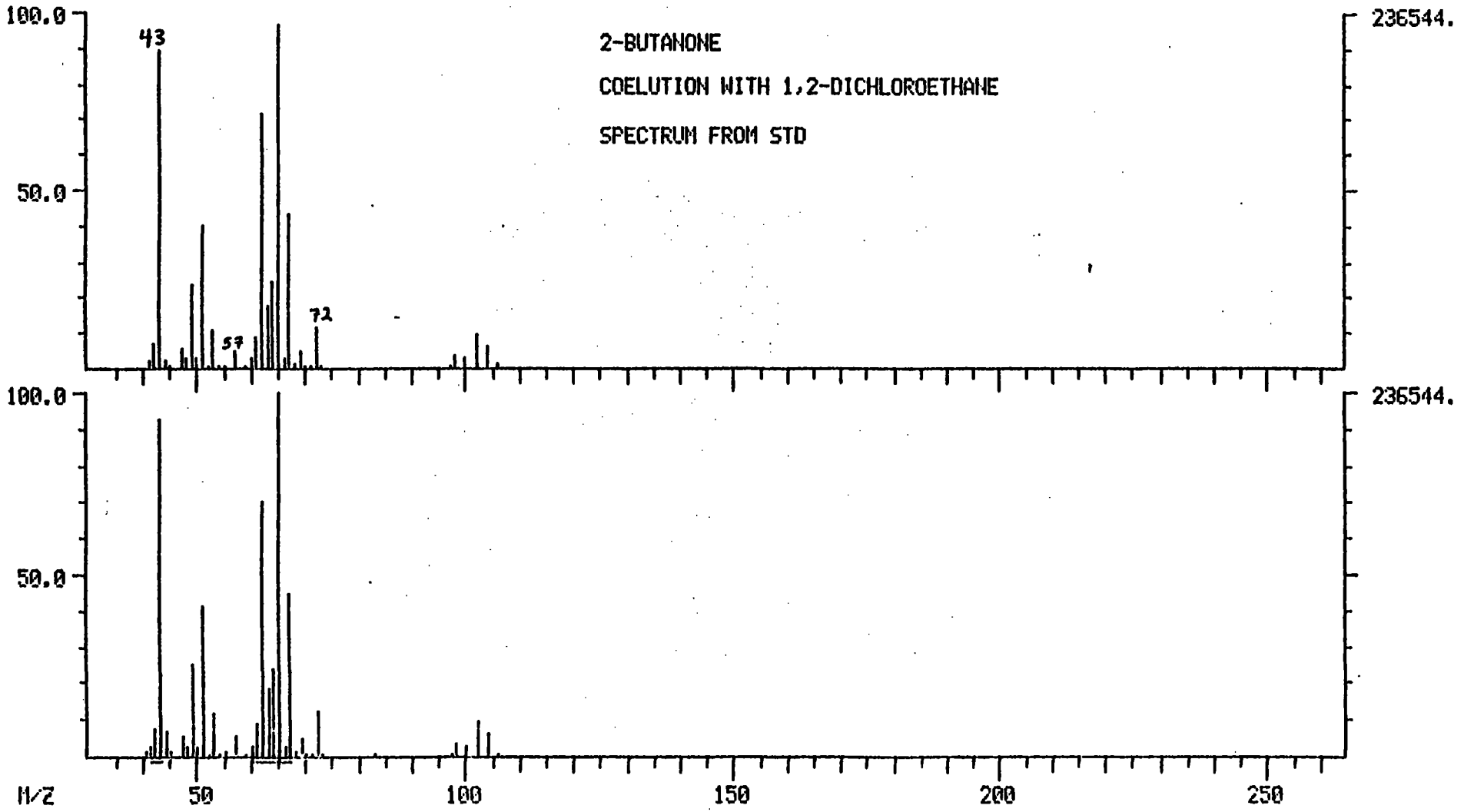


00761

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 13:13
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #260
CALI: STDJ198 #1

BASE M/Z: 65/ 65
RIC: 1191930./ 1241080.



6/2/88 9:45:13 SCAN 1 OF 2850
Acquisition started

00762

Acquire Run 0:S59436R977 ACQUIRING
06/02/88 9:43:00 + 0:07 Free sectors: 27313 Scan: 10 of 2850
Sample: 59436-10 BNA H20 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No: 59436

********** GC PARAMETERS **********

Loaded GC Desc:ST Current GC oven tmp: 30 DegC Injector : 250 DegC
Current GC Desc:ST GC elapsed time : 0: 7 min Int.oven : 275 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********

Low mass: 35 Up: 0.70 L* Top: 0.00
High mass: 500 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 10 Samp Int (ms): 0.150 Peak Width: 1000.
Frag S/P: 10 Actual: 10 Samp Int (ms): 0.150 Inten/ion: 2

Min Peak Width: 3 Min Frag Width %: 80 Min Area: 20
ADC Threshold: 1 Baseline: 0

***** Mode: Centroid positive ion

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

$RF = \frac{2.0ml}{.99l} = 2.02$

6/2/88 10:20:54
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec	
Centroid	2850	528.7	2137.5	24.7	101221.	36.	47.

TC=Target Compound
SC= Spike Compound

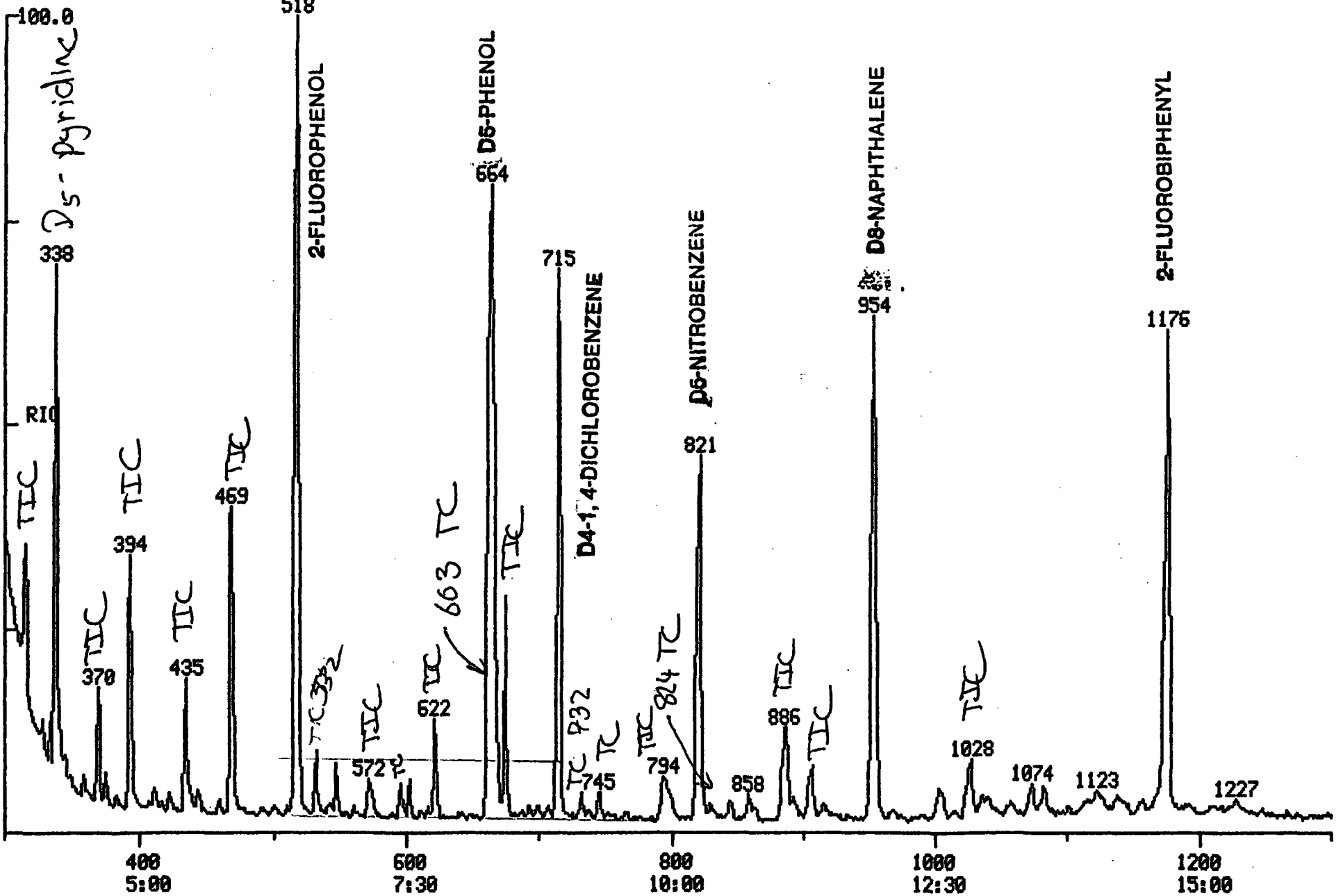
00763

RIC
06/02/88 9:43:00
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R977 #4
CALI: 060288CR #5

SCANS 300 TO 1300
OUT OF 300 TO 2850

T.I.C.-Tent. Ident. Compound



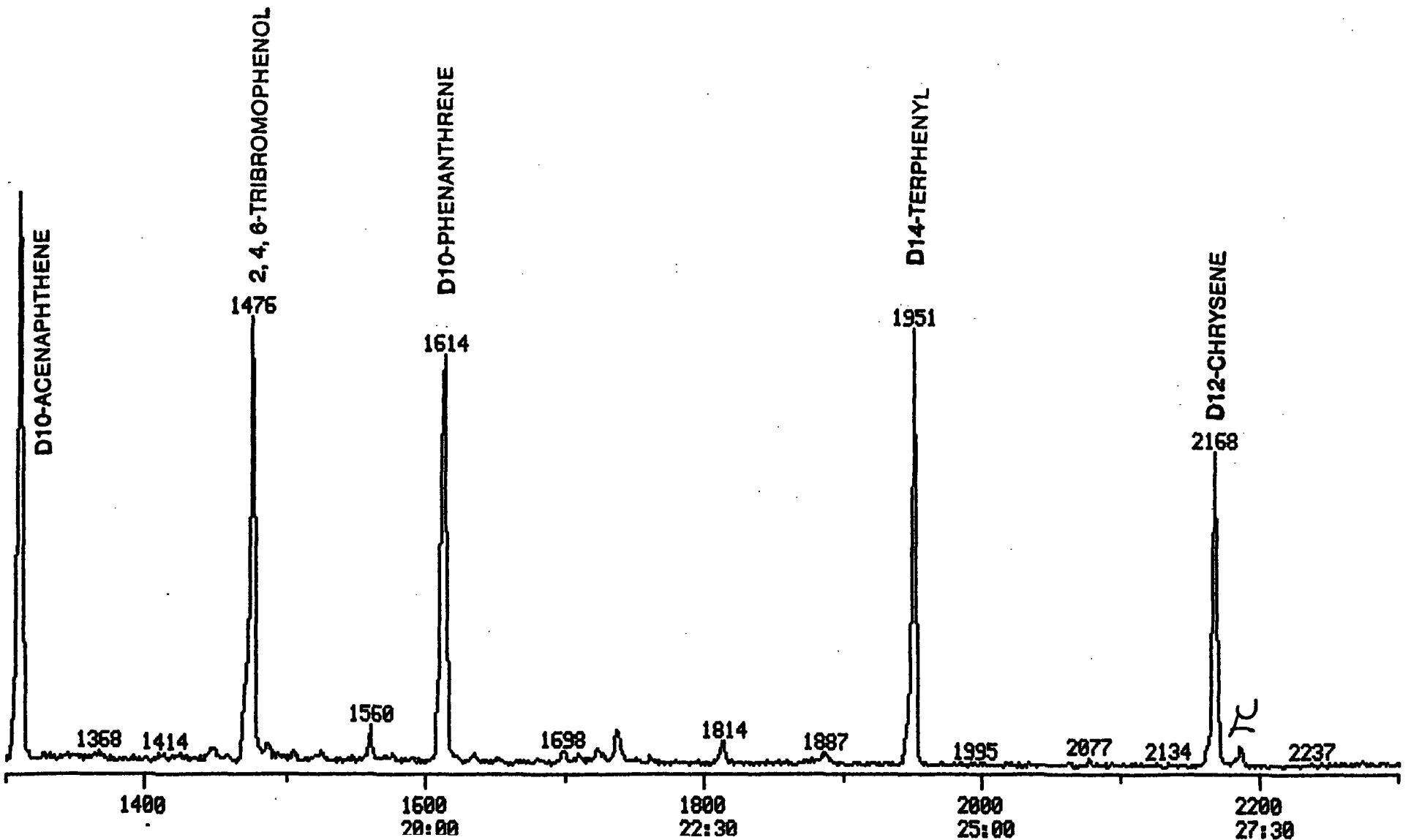
00764

RIC
06/02/88 9:43:00
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R977 #4 SCANS 1300 TO 2300
CALI: 060288CR #5 OUT OF 300 TO 2850

100.0

TC - target compond

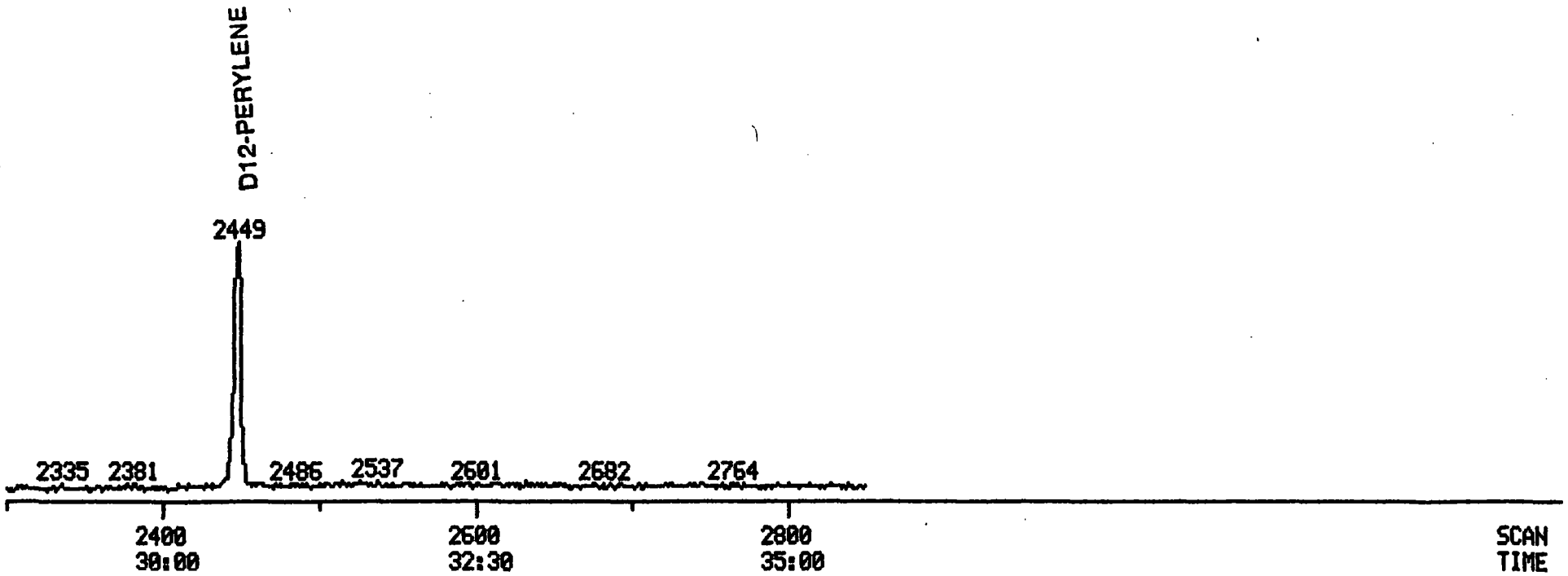


00765

RIC
06/02/88 9:43:00
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R977 #4 SCANS 2300 TO 2850
CALI: 060288CR #5 OUT OF 300 TO 2850

100.0 85248.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/02/88 17:32:06
DATA FILE: S59436R977
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00766
REPORT: IS01

< ---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	7	4	2	79	IS01/TC01
3	3	2	81	18	7	6	215	IS02/TC02
3	3	1	81	12	3	1	81	IS03/TC03
3	3	2	37	18	6	1	306	IS04/TC04
3	3	1	37	10	5	1	107	IS05/TC05
3	3	1	0	8	4	1	122	IS06/TC06
3	3	1	53	14	6	1	56	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

77 COMPOUNDS PROCESSED, 22 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT ><							------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-716	715	715	.	2	973	.	152	715	.	1
2	S1	2	-518	518	518	.	1	995	.	112	517	-1	1
3	S1	3	-666	665	664	-1	2	942	.	99	664	.	1
4	S1	105	-668	667	.	.	.	.	.	94	666	.	1
5	S1	110	-680	678	.	.	.	.	.	93	.	.	.
6	S1	115	-687	685	685	.	1	873	.	128	686	1	1
7	S1	125	-710	708	.	.	.	.	.	146	.	.	.
8	S2	1	-954	953	954	1	2	996	.	136	954	.	1
9	S3	1	-1312	1311	1311	.	1	992	.	164	1311	.	1
10	S1	130	-720	718	.	.	.	.	.	146	.	.	.
11	S1	145	-748	747	.	.	.	.	.	108	.	.	.
12	S1	150	-753	752	.	.	.	.	.	146	.	.	.
13	S1	160	-771	770	.	.	.	.	.	108	.	.	.
14	S1	165	-776	775	.	.	.	.	.	45	776	.	1
15	S1	185	-798	797	.	.	.	.	.	108	.	.	.
16	S1	190	-804	803	.	.	.	.	.	70	.	.	.
17	S1	200	-808	807	.	.	.	.	.	117	.	.	.
18	S2	2	-823	822	821	-1	2	999	.	82	821	.	1
19	S2	10	-827	826	824	-2	1	932	.	77	824	.	1
20	S2	20	-872	871	.	.	.	.	.	82	.	.	.
21	S2	25	-886	885	.	.	.	.	.	139	.	.	.
22	S2	30	-897	896	899	3	1	879	.	107	898	-1	1
23	S2	35	-917	916	.	.	.	.	.	93	915	.	1
24	S2	45	-926	925	922	-3	3	971	.	122	922	.	1
25	S2	40	-932	931	.	.	.	.	.	162	.	.	.
26	S2	55	-948	947	.	.	.	.	.	180	.	.	.
27	S2	60	-959	958	.	.	.	.	.	128	958	.	1
28	S2	80	-976	975	.	.	.	.	.	127	976	.	1
29	S2	95	-996	995	.	.	.	.	.	225	.	.	.
30	S2	130	-1074	1073	.	.	.	.	.	107	.	.	.
31	S2	145	-1097	1096	.	.	.	.	.	142	1096	.	1
32	S3	20	-1143	1142	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1160	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1614	1614	.	2	989	.	188	1614	.	1
35	S3	30	-1168	1168	.	.	.	.	.	196	1170	.	1
36	S3	3	-1177	1177	1176	-1	1	995	.	172	1176	.	1
37	S3	40	-1195	1195	.	.	.	.	.	162	1193	.	1
38	S3	45	-1225	1225	.	.	.	.	.	65	1223	.	1
39	S3	55	-1272	1272	.	.	.	.	.	163	.	.	.
40	S3	65	-1281	1281	.	.	.	.	.	152	1279	.	1
41	S3	70	-1285	1285	.	.	.	.	.	165	.	.	.
			- 11	1312	.	.	.	.	.	138	.	.	.

43	S3	80	-1320	1321	.	.	.	.	.	153	.	.	.
44	S3	85	-1331	1332	1331	-1	1	866	.	184	1331	.	1
45	S3	95	-1348	1349	1354	5	1	915	.	109	1353	-1	1
46	S3	90	-1352	1353	.	.	.	.	.	168	.	.	.
47	S3	105	-1363	1364	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1419	.	.	.	.	.	149	.	.	.
49	S3	135	-1423	1424	.	.	.	.	.	166	.	.	.
50	S3	140	-1425	1424	.	.	.	.	.	204	.	.	.
51	S3	150	-1438	1437	.	.	.	.	.	138	.	.	.
52	S4	10	-1447	1446	.	.	.	.	.	198	.	.	.
53	S4	15	-1452	1451	1449	-2	1	935	.	169	1449	.	1
54	S3	2	-1477	1476	1476	.	1	986	.	330	1476	.	1
55	S4	30	-1525	1523	.	.	.	.	.	248	.	.	.
56	S4	40	-1554	1552	.	.	.	.	.	284	.	.	.
57	S5	1	-2169	2168	2168	.	1	957	.	240	2168	.	1
58	S4	50	-1591	1590	.	.	.	.	.	266	1591	.	1
59	S4	65	-1621	1620	.	.	.	.	.	178	1619	.	1
60	S4	70	-1630	1629	.	.	.	.	.	178	1627	.	1
61	S4	85	-1753	1751	1750	-1	1	853	.	149	1751	1	1
62	S4	110	-1868	1866	.	.	.	.	.	202	1865	.	1
63	S6	1	-2449	2449	2449	.	1	987	.	264	2449	.	1
64	S5	15	-1914	1913	.	.	.	.	.	202	1912	.	1
65	S5	2	-1951	1950	1951	1	1	993	.	244	1951	.	1
66	S5	40	-2062	2061	.	.	.	.	.	149	2061	.	1
67	S5	55	-2165	2164	.	.	.	.	.	252	.	.	.
68	S5	50	-2166	2165	.	.	.	.	.	228	.	.	.
69	S5	60	-2176	2175	.	.	.	.	.	228	.	.	.
70	S5	65	-2187	2186	2186	.	1	992	.	149	2186	.	1
71	S6	10	-2310	2309	2309	.	1	890	.	149	2309	.	1
72	S6	15	-2380	2379	.	.	.	.	.	252	.	.	.
73	S6	25	-2386	2385	.	.	.	.	.	252	.	.	.
74	S6	35	-2440	2439	.	.	.	.	.	252	.	.	.
75	S6	55	-2686	2686	.	.	.	.	.	276	.	.	.
76	S6	60	-2689	2689	.	.	.	.	.	278	.	.	.
77	S6	65	-2753	2753	.	.	.	.	.	276	.	.	.

00767

Quantitation Report File: S59436R977

00768

Data: S59436R977.TI
06/02/88 9:43:00
Sample: 59436-10 BNA H20 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
1	CI30	1,4-DICHLOROBENZENE-D4	152IS1# 01	3855-82-1
2	CS50	2-FLUOROPHENOL	112SS1# 02	367-12-4
3	CS45	PHENOL-D5	99SS1# 03	4165-62-2
4	C315	PHENOL	94 S1#105CC	108-95-2
5	C325	BIS(2-CHLOROETHYL)ETHER	93 S1#110	111-44-4
6	C330	2-CHLOROPHENOL	128 S2#115	95-57-8
7	C335	1,3-DICHLOROBENZENE	146 S1#125	541-73-1
8	CI40	NAPHTHALENE-D8	136IS2# 01	1146-65-2
9	CI50	ACENAPHTHENE-D10	164IS3# 01	15067-26-2
10	C340	1,4-DICHLOROBENZENE	146 S1#130CC	106-46-7
11	C345	BENZYL ALCOHOL	108 S1#145	100-51-6
12	C350	1,2-DICHLOROBENZENE	146 S1#150	95-50-1
13	C355	2-METHYLPHENOL	108 S1#160	95-48-7
14	C360	BIS(2-CHLOROISOPROPYL)E	45 S1#165	108-60-1
15	C365	4-METHYLPHENOL	108 S1#185	106-44-5
16	C370	N-NITROSO-DI-N-PROPYLAM	70 S1#190SP	621-64-7
17	C375	HEXACHLOROETHANE	117 S1#200	67-72-1
18	CS20	NITROBENZENE-D5	82SS2# 02	4165-60-0
19	C410	NITROBENZENE	77 S2# 10	98-95-3
20	C415	ISOPHORONE	82 S2# 20	75-59-1
21	C420	2-NITROPHENOL	139 S2# 25CC	88-75-5
22	C425	2,4-DIMETHYLPHENOL	107 S2# 30	105-67-9
23	C435	BIS(2-CHLOROETHOXY)METH	93 S2# 35	111-91-1
24	C430	BENZOIC ACID	122 S2# 45	65-85-0
25	C440	2,4-DICHLOROPHENOL	162 S2# 40	120-83-2
26	C445	1,2,4-TRICHLOROBENZENE	180 S2# 55	120-82-1
27	C450	NAPHTHALENE	128 S2# 60	91-20-3
28	C455	4-CHLOROANALINE	127 S2# 80	106-47-8
29	C460	HEXACHLOROBUTADIENE	225 S2# 95CC	87-68-3
30	C465	4-CHLORO-3-METHYLPHENO	107 S2#130CC	59-50-7
31	C470	2-METHYLNAPHTHALENE	142 S2#145	91-57-6
32	C510	HEXACHLOROCYCLOPENTADI	237 S3# 20	77-47-4
33	C515	2,4,6-TRICHLOROPHENOL	196 S3# 25CC	88-06-2
34	CI60	PHENANTHRENE-D10	188IS4# 01	1517-22-2
35	C520	2,4,5-TRICHLOROPHENOL	196 S3# 30	95-95-4
36	CS25	2-FLUOROBIPHENYL	172SS3# 03	321-60-8
37	C525	2-CHLORONAPHTHALENE	162 S3# 40	91-58-7
38	C530	2-NITROANALINE	65 S3# 45	88-74-4
39	C535	DIMETHYLPHTHALATE	163 S3# 55	131-11-3
40	C540	ACENAPHTHYLENE	152 S3# 65	208-96-8
41	C543	2,6-DINITROTOLUENE	165 S3# 70	606-20-2
42	C545	3-NITROANILINE	138 S3# 75	99-09-2
43	C550	ACENAPHTHENE	153 S3# 80CC	83-32-9
44	C555	2,4-DINITROPHENOL	184 S3# 85SP	51-28-5
45	C560	4-NITROPHENOL	109 S3# 95SP	100-02-7
46	C565	DIBENZOFURAN	168 S3# 90	132-64-9
47	C570	2,4-DINITROTOLUENE	165 S3#105	121-14-2

No	Name			
48	C580 DIETHYLPHTHALATE	149	S3#130	84-66-2
49	C590 FLUORENE	166	S3#135	86-73-7
50	C585 4-CHLOROPHENYL-PHENYLE	204	S3#140	7005-72-3

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	715	8:56	1	1.000	A BB	25231.	40.000 UG/ML	6.08
2	112	517	6:28	1	0.723	A BB	83083.	89.780 UG/ML	13.64
3	99	664	8:18	1	0.929	A BB	115851.	90.137 UG/ML	13.69
4	94	666	8:19	1	0.931	A BV	361.	0.253 UG/ML	0.04
5	NOT FOUND								
6	128	686	8:34	1	0.959	A BB	153.	0.172 UG/ML	0.03
7	NOT FOUND								
8	136	954	11:55	8	1.000	A BB	95919.	40.000 UG/ML	6.08
9	164	1311	16:23	9	1.000	A BB	43819.	40.000 UG/ML	6.08
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	45	776	9:42	1	1.085	A BB	46.	0.028 UG/ML	0.00
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	82	821	10:16	8	0.861	A BV	46528.	43.279 UG/ML	6.57
19	77	824	10:18	8	0.864	A BB	328.	0.300 UG/ML	0.05
20	NOT FOUND								
21	NOT FOUND								
22	107	898	11:13	8	0.941	A BB	379.	0.483 UG/ML	0.07
23	93	915	11:26	8	0.959	A BB	49.	0.041 UG/ML	0.01
24	122	922	11:31	8	0.966	A VB	445.	1.069 UG/ML	0.16
25	NOT FOUND								
26	NOT FOUND								
27	128	958	11:58	8	1.004	A BB	118.	0.046 UG/ML	0.01
28	127	976	12:12	8	1.023	A BB	86.	0.081 UG/ML	0.01
29	NOT FOUND								
30	NOT FOUND								
31	142	1096	13:42	8	1.149	A BB	96.	0.063 UG/ML	0.01
32	NOT FOUND								
33	NOT FOUND								
34	188	1614	20:10	34	1.000	A BV	64196.	40.000 UG/ML	6.08
35	196	1170	14:37	9	0.892	A BB	78.	0.208 UG/ML	0.03
36	172	1176	14:42	9	0.897	A BB	66909.	43.227 UG/ML	6.57
37	162	1193	14:55	9	0.910	A BB	103.	0.072 UG/ML	0.01
38	65	1223	15:17	9	0.933	A VV	384.	0.680 UG/ML	0.10
39	NOT FOUND								
40	152	1279	15:59	9	0.976	A BB	81.	0.036 UG/ML	0.01
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	184	1331	16:38	9	1.015	A BB	58.	0.346 UG/ML	0.05
45	109	1353	16:55	9	1.032	A BV	160.	0.934 UG/ML	0.14
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:58	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:28	1.00	0.722	1.00	89.78	100.00	1.317	1.467	0.90
3	8:19	1.00	0.929	1.00	90.14	100.00	1.837	2.038	0.90
4	8:21	1.00	0.932	1.00	0.25	50.00	0.011	2.261	0.01
5	8:30		0.948						
6	8:35	1.00	0.958	1.00	0.17	50.00	0.005	1.410	0.00
7	8:52		0.990						
8	11:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	16:25	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	9:00		1.004						
11	9:21		1.043						
12	9:25		1.050						
13	9:38		1.075						
14	9:42	1.00	1.082	1.00	0.03	50.00	0.001	2.601	0.00
15	9:58		1.113						
16	10:03		1.121						
17	10:06		1.127						
18	10:17	1.00	0.862	1.00	43.28	50.00	0.388	0.448	0.87
19	10:20	1.00	0.866	1.00	0.30	50.00	0.003	0.455	0.01
20	10:54		0.913						
21	11:04		0.928						
22	11:13	1.00	0.939	1.00	0.48	50.00	0.003	0.327	0.01
23	11:28	1.00	0.960	1.00	0.04	50.00	0.000	0.497	0.00
24	11:34	1.00	0.970	1.00	1.07	50.00	0.004	0.174	0.02
25	11:39		0.976						
26	11:51		0.993						
27	11:59	1.00	1.004	1.00	0.05	50.00	0.001	1.075	0.00
28	12:12	1.00	1.022	1.00	0.08	50.00	0.001	0.441	0.00
29	12:27		1.043						
30	13:25		1.125						
31	13:43	1.00	1.149	1.00	0.06	50.00	0.001	0.640	0.00
32	14:17		0.871						
33	14:31		0.884						
34	20:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:36	1.00	0.890	1.00	0.21	50.00	0.001	0.342	0.00
36	14:43	1.00	0.896	1.00	43.23	50.00	1.222	1.413	0.86
37	14:56	1.00	0.910	1.00	0.07	50.00	0.002	1.304	0.00
38	15:19	1.00	0.933	1.00	0.68	50.00	0.007	0.515	0.01
39	15:54		0.969						
40	16:01	1.00	0.976	1.00	0.04	50.00	0.001	2.061	0.00
41	16:04		0.979						
42	16:23		0.998						
43	16:30		1.005						
44	16:38	1.00	1.014	1.00	0.35	50.00	0.001	0.153	0.01
45	16:51	1.00	1.027	1.01	0.93	50.00	0.003	0.156	0.02
46	16:54		1.030						
47	17:02		1.038						
48	17:43		1.080						
49	17:47		1.084						
50	17:49		1.085						

uantitation Report File: S59436R977

00771

Data: S59436R977.TI
06/02/88 9:43:00
Sample: 59436-10 BNA H2O 100%/2ML
onds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
51	C595	4-NITROANALINE	138 S3#150	100-01-6
52	C610	4,6-DINITRO-2-METHYLPH	198 S4# 10	534-52-1
53	C615	N-NITROSODIPHENYLAMINE	169 S4# 15CC	87-30-6
54	CS55	2,4,6-TRIBROMOPHENOL	330SS3# 02	118-79-6
55	C625	4-BROMOPHENYL-PHENYLET	248 S4# 30	101-55-3
56	C630	HEXACHLOROBENZENE	284 S4# 40	118-74-1
57	CI70	CHRYSENE-D12	240IS5# 01	1719-03-5
58	C635	PENTACHLOROPHENOL	266 S4# 50	87-86-5
59	C640	PHENANTHRENE	178 S4# 65	85-01-8
60	C645	ANTHRACENE	178 S4# 70	120-12-7
61	C650	DI-N-BUTYLPHTHALATE	149 S4# 85	84-74-2
62	C655	FLUORANTHENE	202 S4#110CC	206-44-0
63	CI75	PERYLENE-D12	164IS6# 01	1520-96-3
64	C715	PYRENE	202 S5# 15	129-00-0
65	CS30	TERPHENYL-D14	244SS5# 02	1718-51-0
66	C720	BUTYLBENZYLPHTHALATE	149 S5# 40	85-68-7
67	C725	3,3'-DICHLOROBENZIDINE	252 S5# 55	91-94-1
68	C730	BENZO(A)ANTHRACENE	228 S5# 50	56-55-3
69	C740	CHRYSENE	228 S5# 60	218-01-9
70	C745	BIS(2-ETHYLHEXYL)PHTHA	149 S5# 65	117-81-7
71	C760	DI-N-OCTYL PHTHALATE	149 S6# 10CC	117-84-0
72	C765	BENZO(B)FLUORANTHENE	252 S6# 15	205-99-2
73	C770	BENZO(K)FLUORANTHENE	252 S6# 25	207-08-9
74	C775	BENZO(A)PYRENE	252 S6# 35	50-32-8
75	C780	INDENO(1,2,3-CD)PYRENE	276 S6# 55	193-39-5
76	C785	DIBENZ(A,H)ANTHRACENE	278 S6# 60	53-70-3
77	C790	BENZO(G,H,I)PERYLENE	276 S6# 65	191-24-2

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	169	1449	18:07	34	0.898	A BB	964.	0.971 UG/ML	0.15
54	330	1476	18:27	9	1.126	A BB	15566.	94.015 UG/ML	14.28
55	NOT FOUND								
56	NOT FOUND								
57	240	2168	27:06	57	1.000	A BB	37608.	40.000 UG/ML	6.08
58	266	1591	19:53	34	0.986	A BB	151.	0.741 UG/ML	0.11
59	178	1619	20:14	34	1.003	A BB	124.	0.069 UG/ML	0.01
60	178	1627	20:20	34	1.008	A BB	141.	0.080 UG/ML	0.01
61	149	1751	21:53	34	1.085	A BB	820.	0.355 UG/ML	0.05
62	202	1865	23:19	34	1.156	A BB	102.	0.066 UG/ML	0.01
63	264	2449	30:37	63	1.000	A BV	29019.	40.000 UG/ML	6.08
64	202	1912	23:54	57	0.882	A BB	207.	0.148 UG/ML	0.02
65	244	1951	24:23	57	0.900	A BV	50260.	48.550 UG/ML	7.37
66	149	2061	25:46	57	0.951	A BB	157.	0.206 UG/ML	0.03

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	149	2186	27:19	57	1.008	A BB	1767.	1.649 UG/ML	0.25
71	149	2309	28:52	63	0.943	A BB	593.	0.339 UG/ML	0.05
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	17:58		1.095						
52	18:05		0.895						
53	18:09	1.00	0.899	1.00	0.97	50.00	0.012	0.618	0.02
54	18:28	1.00	1.125	1.00	94.02	100.00	0.142	0.151	0.94
55	19:04		0.944						
56	19:25		0.962						
57	27:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:53	1.00	0.985	1.00	0.74	50.00	0.002	0.127	0.01
59	20:16	1.00	1.003	1.00	0.07	50.00	0.002	1.125	0.00
60	20:22	1.00	1.009	1.00	0.08	50.00	0.002	1.105	0.00
61	21:55	1.00	1.085	1.00	0.35	50.00	0.010	1.440	0.01
62	23:21	1.00	1.156	1.00	0.07	50.00	0.001	0.958	0.00
63	30:37	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:55	1.00	0.882	1.00	0.15	50.00	0.004	1.489	0.00
65	24:23	1.00	0.899	1.00	48.55	50.00	1.069	1.101	0.97
66	25:46	1.00	0.950	1.00	0.21	50.00	0.003	0.811	0.00
67	27:04		0.998						
68	27:04		0.998						
69	27:12		1.003						
70	27:20	1.00	1.008	1.00	1.65	50.00	0.038	1.140	0.03
71	28:52	1.00	0.943	1.00	0.34	50.00	0.016	2.413	0.01
72	29:45		0.971						
73	29:49		0.974						
74	30:30		0.996						
75	33:34		1.096						
76	33:37		1.098						
77	34:25		1.124						

TCA FINISHED, 22 FOUND
FINISHED AT: 6/02/88 17:40:46

RMAL QUANTITATION SUMMARY FILE: S59436R977
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	715	1	25231.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	954	2	95919.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	43819.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1614	4	64196.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2168	5	37608.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2449	6	29019.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	821	2	46528.	0.388	43.279
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1176	3	66909.	1.222	43.227
9	S5# 2	CS30 TERPHENYL-D14	244	1951	5	50260.	1.069	48.550
10	S1# 3	CS45 PHENOL-D5	99	664	1	115851.	1.837	90.137
11	S1# 2	CS50 2-FLUOROPHENOL	112	517	1	83083.	1.317	89.780
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1476	3	15566.	0.142	94.015
13	S1#105	C315 PHENOL	94		1	NOT FOUND		
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND		
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND		
18	S1#145	C345 BENZYL ALCOHOL	108		1	NOT FOUND		
19	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND		
20	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND		
21	S1#165	C360 BIS(2-CHLOROISOPROP	45		1	NOT FOUND		
22	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND		
23	S1#190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND		
24	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND		
25	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND		
26	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND		
27	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND		
28	S2# 30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND		
29	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND		
30	S2# 40	C440 2,4-DICHLOROPHENOL	162		2	NOT FOUND		
31	S2# 45	C430 BENZOIC ACID	122	922	2	445.	0.004	~~1.069~~
32	S2# 55	C445 1,2,4-TRICHLOROBENZ	180		2	NOT FOUND		
33	S2# 60	C450 NAPHTHALENE	128		2	NOT FOUND		
34	S2# 80	C455 4-CHLOROANALINE	127		2	NOT FOUND		
35	S2# 95	C460 HEXACHLOROBUTADIENE	225		2	NOT FOUND		
36	S2#130	C465 4-CHLORO-3-METHYLPH	107		2	NOT FOUND		
37	S2#145	C470 2-METHYLNAPHTHALENE	142		2	NOT FOUND		
38	S3# 20	C510 HEXACHLOROCYCLOPENT	237		3	NOT FOUND		
39	S3# 25	C515 2,4,6-TRICHLOROPHEN	196		3	NOT FOUND		
40	S3# 30	C520 2,4,5-TRICHLOROPHEN	196		3	NOT FOUND		
41	S3# 40	C525 2-CHLORONAPHTHALENE	162		3	NOT FOUND		
42	S3# 45	C530 2-NITROANALINE	65		3	NOT FOUND		
43	S3# 55	C535 DIMETHYLPHTHALATE	163		3	NOT FOUND		
44	S3# 65	C540 ACENAPHTHYLENE	152		3	NOT FOUND		
45	S3# 70	C543 2,6-DINITROTOLUENE	165		3	NOT FOUND		
46	S3# 75	C545 3-NITROANILINE	138		3	NOT FOUND		
47	S3# 80	C550 ACENAPHTHENE	153		3	NOT FOUND		
48	S3# 85	C555 2,4-DINITROPHENOL	184		3	NOT FOUND		
49	S3# 90	C565 DIBENZOFURAN	168		3	NOT FOUND		
50	S3# 95	C560 4-NITROPHENOL	109		3	NOT FOUND		
					3	NOT FOUND		

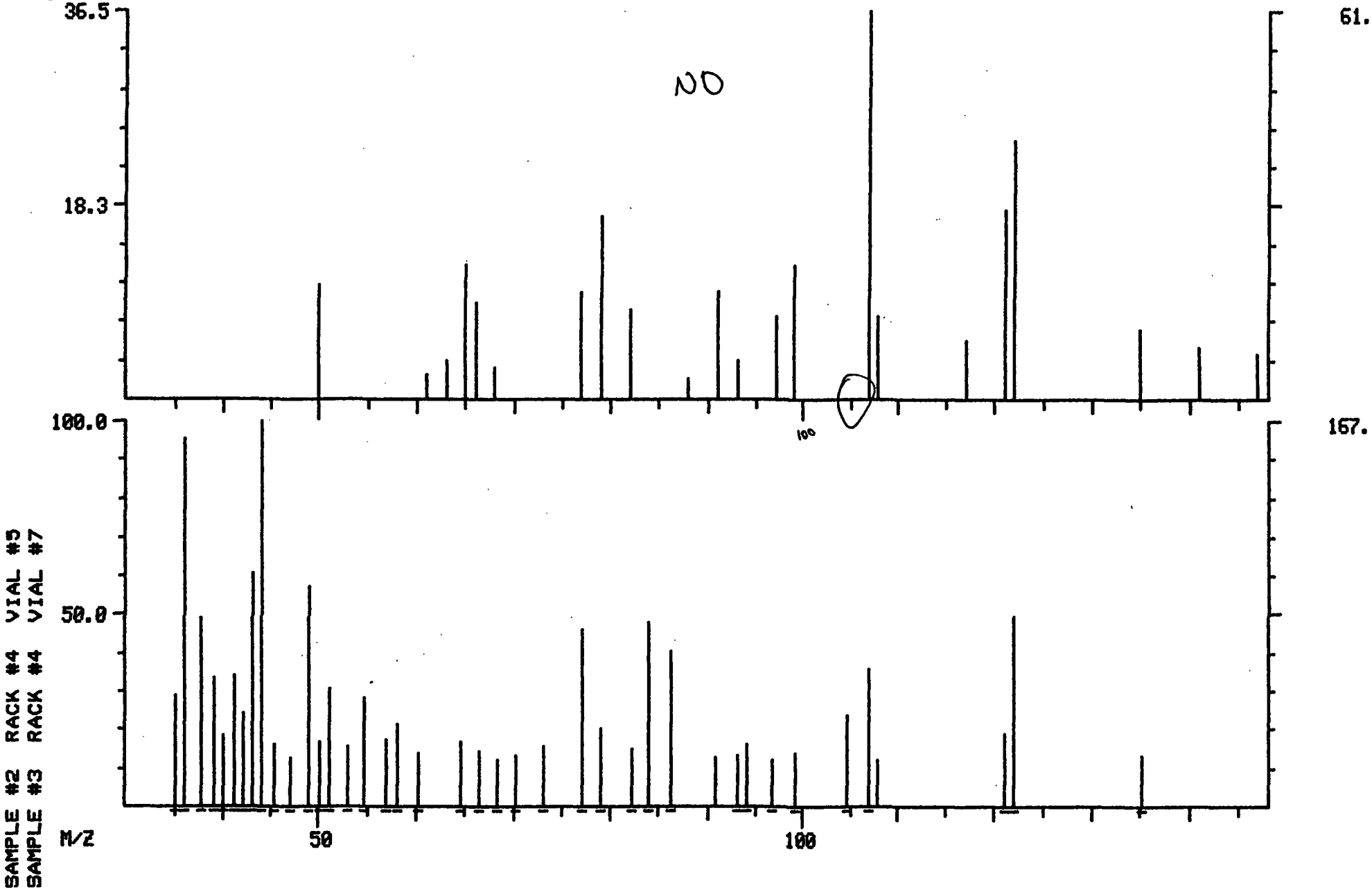
00774

52	S3#130	C580	DIETHYLPHTHALATE	149		3	NOT FOUND			
53	S3#135	C590	FLUORENE	166		3	NOT FOUND			
54	S3#140	C585	4-CHLOROPHENYL-PHEN	204		3	NOT FOUND			
55	S3#150	C595	4-NITROANALINE	138		3	NOT FOUND			
56	S4# 10	C610	4,6-DINITRO-2-METHY	198		4	NOT FOUND			
57	S4# 15	C615	N-NITROSODIPHENYLAM	169		4	NOT FOUND			
58	S4# 30	C625	4-BROMOPHENYL-PHENY	248		4	NOT FOUND			
59	S4# 40	C630	HEXACHLOROBENZENE	284		4	NOT FOUND			
60	S4# 50	C635	PENTACHLOROPHENOL	266		4	NOT FOUND			
61	S4# 65	C640	PHENANTHRENE	178		4	NOT FOUND			
62	S4# 70	C645	ANTHRACENE	178		4	NOT FOUND			
63	S4# 85	C650	DI-N-BUTYLPHTHALATE	149		4	NOT FOUND			
64	S4#110	C655	FLUORANTHENE	202		4	NOT FOUND			
65	S5# 15	C715	PYRENE	202		5	NOT FOUND			
66	S5# 40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND			
67	S5# 50	C730	BENZO(A)ANTHRACENE	228		5	NOT FOUND			
68	S5# 55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND			
69	S5# 60	C740	CHRYSENE	228		5	NOT FOUND			
70	S5# 65	C745	BIS(2-ETHYLHEXYL)PH	149	2186	5	1767.	0.038	1.649	✓
71	S6# 10	C760	DI-N-OCTYL PHTHALAT	149		6	NOT FOUND			
72	S6# 15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND			
73	S6# 25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND			
74	S6# 35	C775	BENZO(A)PYRENE	252		6	NOT FOUND			
75	S6# 55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND			
76	S6# 60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND			
77	S6# 65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND			

00775

DUAL MASS SPECTRUM
06/02/88 9:43:00 + 11:31
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 #922 BASE M/Z: 107/ 44
CALI: 060288CR #5 RIC: 368./ 1907.



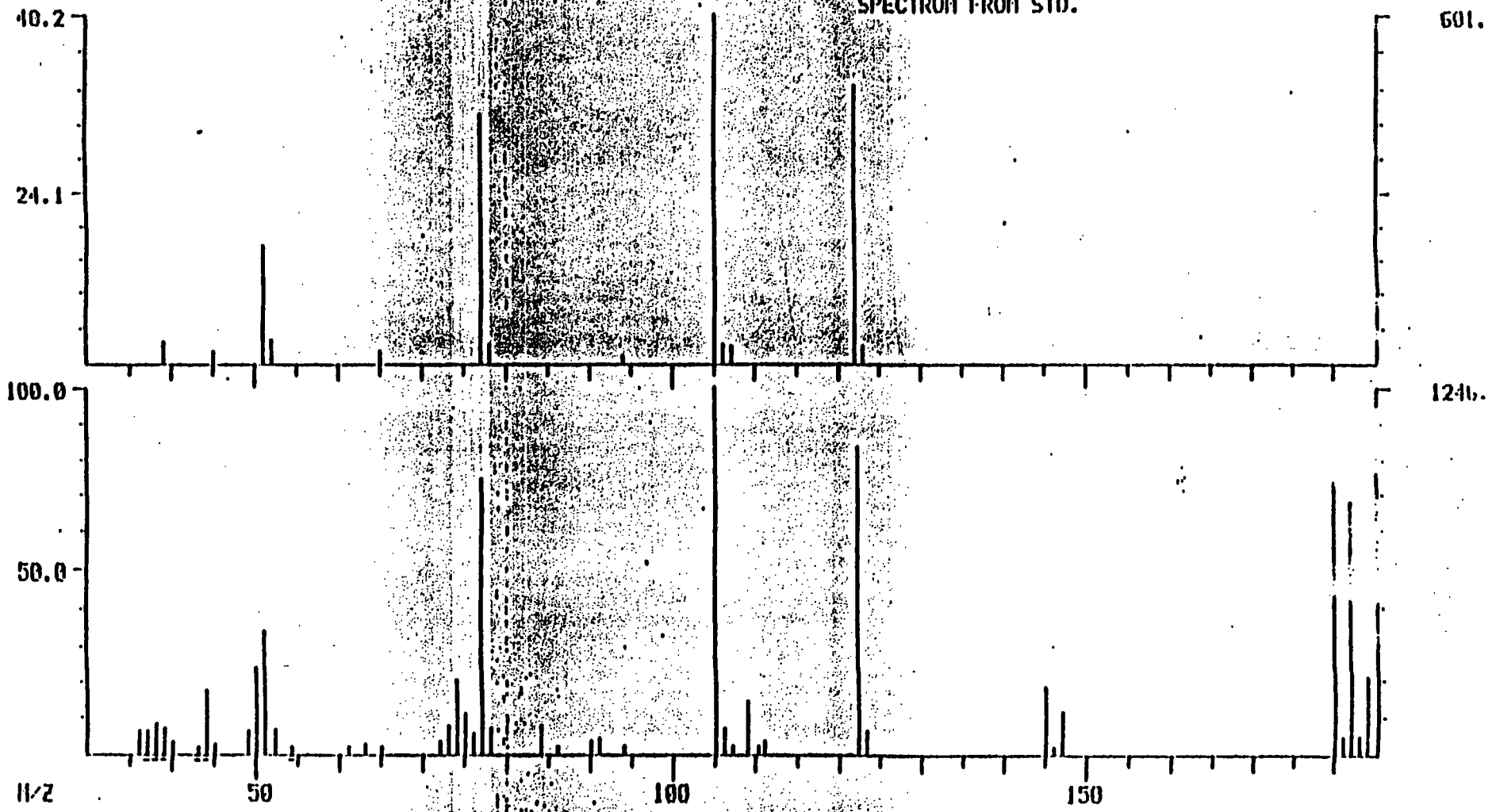
00776

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 11:19.
SAMPLE: 50PPM MSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2H 0T)

DATA: STDR010 #905
CALI: 103086C #5

BASE M/Z: 105/ 105
RIC: 1981./ 0735.

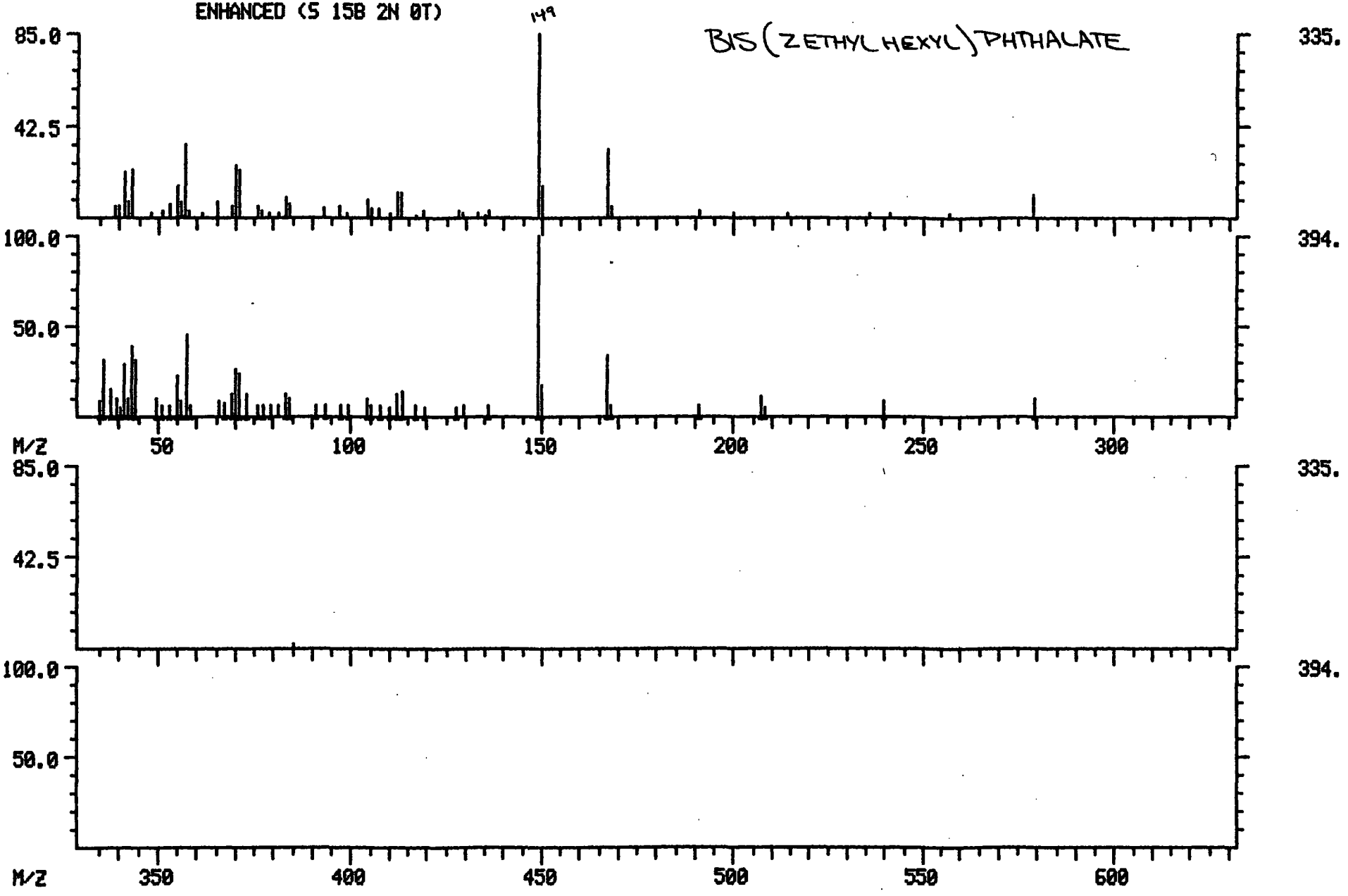
BENZOIC ACID
SPECTRUM FROM STD.



007777

DUAL MASS SPECTRUM
06/02/88 9:43:00 + 27:19
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: 5T
ENHANCED (5 15B 2N 0T)

DATA: 559436R977 #2186 BASE M/Z: 149/ 149
CALI: 060288CR #5 RIC: 1807./ 2887.

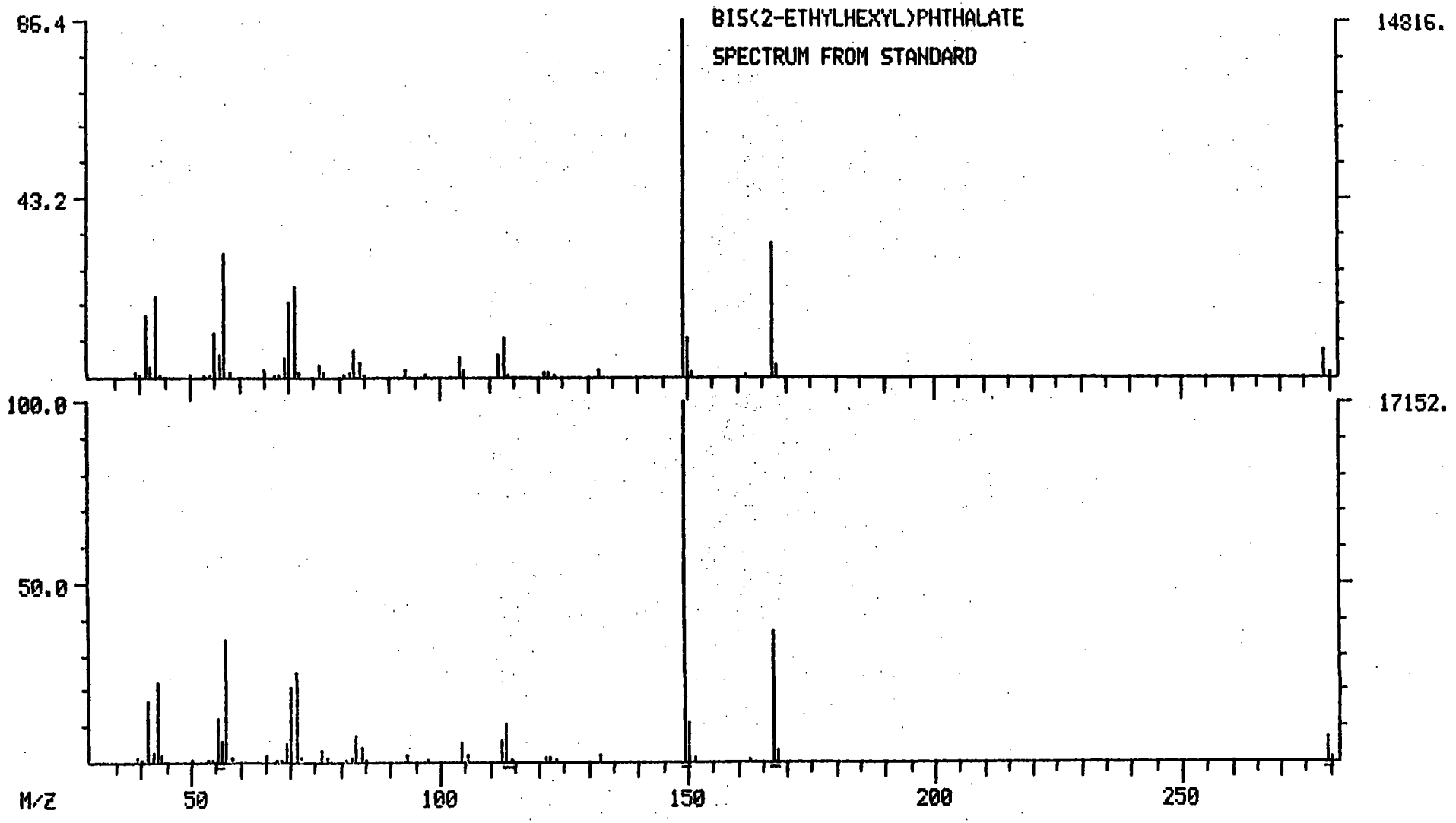


007778

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 30:27
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2N 0T)

DATA: STDR810 #2436
CALI: 103086C #5

BASE M/Z: 149/ 149
RIC: 55167./ 63807.



DATA REDUCED BY: AR DATE: 6-7-88 DATA FILE: S59436R977
DATA REVIEWED BY: ____ DATE: ____

00779

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-10 BNA H2O 100%/2ML RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MK

#	SCAN	G	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	316	B	2	11.	108-87-2	CYCLOHEXANE, METHYL-
2	370	B	2	6.0	108-88-3	BENZENE, METHYL- (VOA)
3	394	CB	1	15.	00-00-0	OXYGENATED HYDROCARBON
4	435	CB	1	10.	00-00-0	OXYGENATED HYDROCARBON
5	469	CB	1	22.	00-00-0	OXYGENATED HYDROCARBON
6	572	I	1	4.0	79-34-5	ETHANE, 1,1,2,2-TETRACHLORO- (VOA)
7	622	IB	1	7.0	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-
8	675	I	2	8.9	108-47-4	PYRIDINE, 2,4-DIMETHYL-
9	794	I	2	6.8	1824-81-3	2-PYRIDINAMINE, 6-METHYL-
10	886	C	1	9.0	00-00-0	AMINE
11	907	C	1	4.2	00-00-0	AMINE
12	1028	I	1	5.2	120-71-8	BENZENAMINE, 2-METHOXY-5-METHYL-

editing complete

DATA FILE: S59436R977

ENSECO TIC REPORT (PAGE 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	999	919	1	3:56	0.446	46287.	15087.	11.103	NB	1138.
2	995	944	1	4:37	0.522	25035.	11598.	6.005	NB	850.
3	927	821	1	4:55	0.556	64077.	26251.	15.370	BC	2.
4	919	714	1	5:26	0.613	41811.	13734.	10.029	BC	2.
5	846	759	1	5:51	0.660	91703.	31593.	21.996	BC	2.
6	908	845	1	7:08	0.804	16765.	3810.	4.022	NB	10636.
7	926	758	1	7:46	0.874	29111.	10271.	6.983	NB	6445.
8	992	896	1	8:26	0.949	37111.	21871.	8.902	NB	1746.
9	982	842	1	9:55	1.115	28373.	4182.	6.806	NB	1787.
10	777	595	2	11:04	0.933	49273.	9408.	8.993	BC	7.
11	859	643	2	11:20	0.955	22813.	5061.	4.164	BC	7.
12	910	749	2	12:50	1.082	28599.	5616.	5.220	NB	5324.

TIC SELECTION REPORT

DATA FILE: S59436R977

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 50 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 3 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
338	112919.	27.085
518	306663.	73.557
664	351267.	84.256
715	166761.	39.999
821	144411.	34.638
954	219160.	39.999
1176	203935.	37.221
1311	220163.	47.068
1614	187099.	39.999
1951	148089.	31.660
2168	121123.	48.395
2449	100111.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 13

INTERNAL STANDARD DATA IS LISTED BELOW. IS FOR WHICH RIC SIZE DIFFERS FROM THE ESTIMATED RIC SIZE BY MORE THAN 60 % ARE CONSIDERED TO HAVE INTERFERENCES, AND ARE NOT USED FOR QUANTITATION.

#	LIB	LIB#	RIC SIZE	ESTIMATED RIC SIZE	INTERFERENCE
1	S1	1	166761.	154330.	
2	S2	1	219160.	141274.	
3	S3	1	220163.	109824.	*
4	S4	1	187099.	123431.	
5	S5	1	121123.	72350.	*
6	S6	1	100111.	77694.	

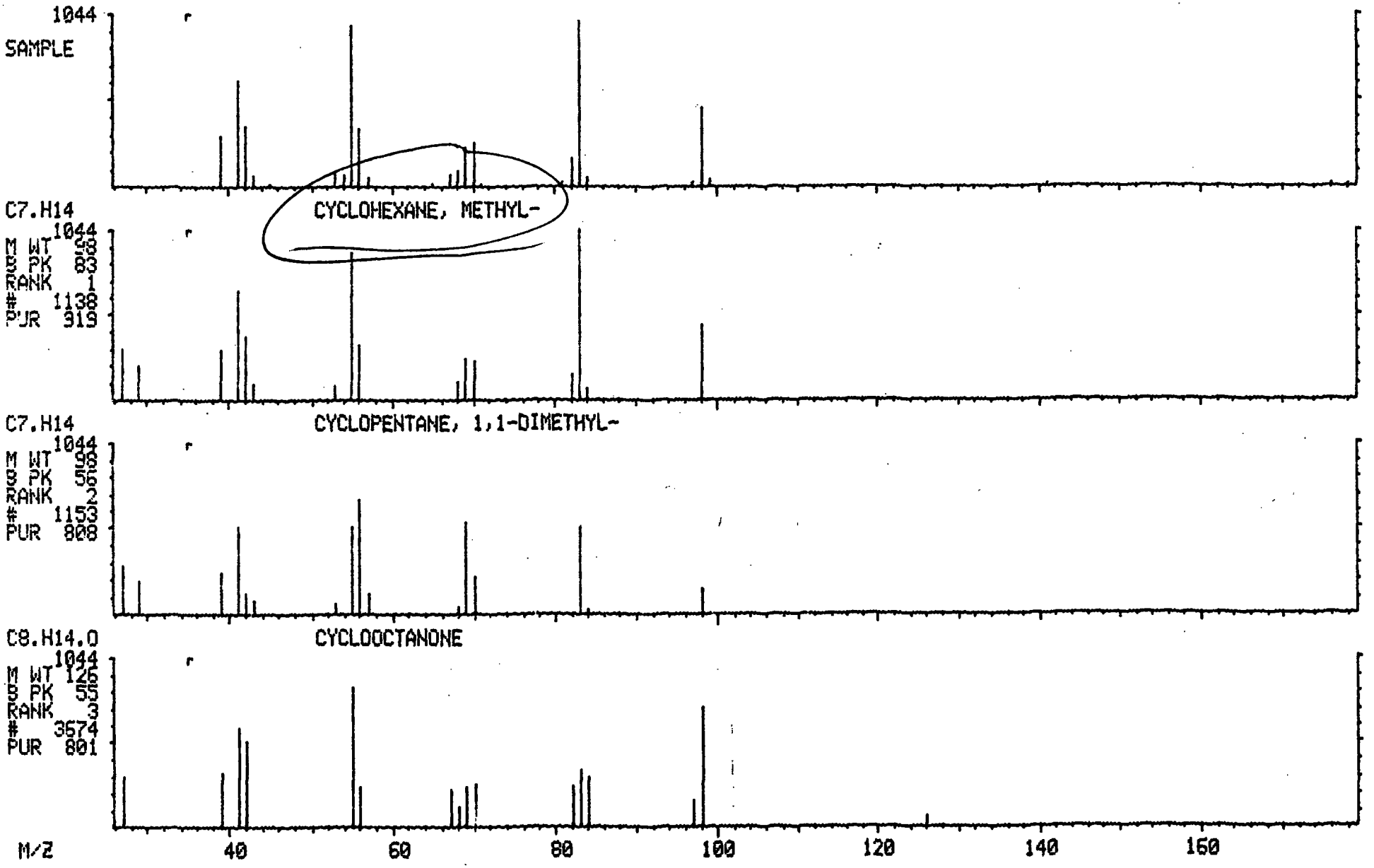
SIZE = AREA

00782

LIBRARY SEARCH
06/02/88 9:43:00 + 3:57
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 # 316
CALI: 060288CR # 5

BASE M/Z: 83
RIC: 12639.

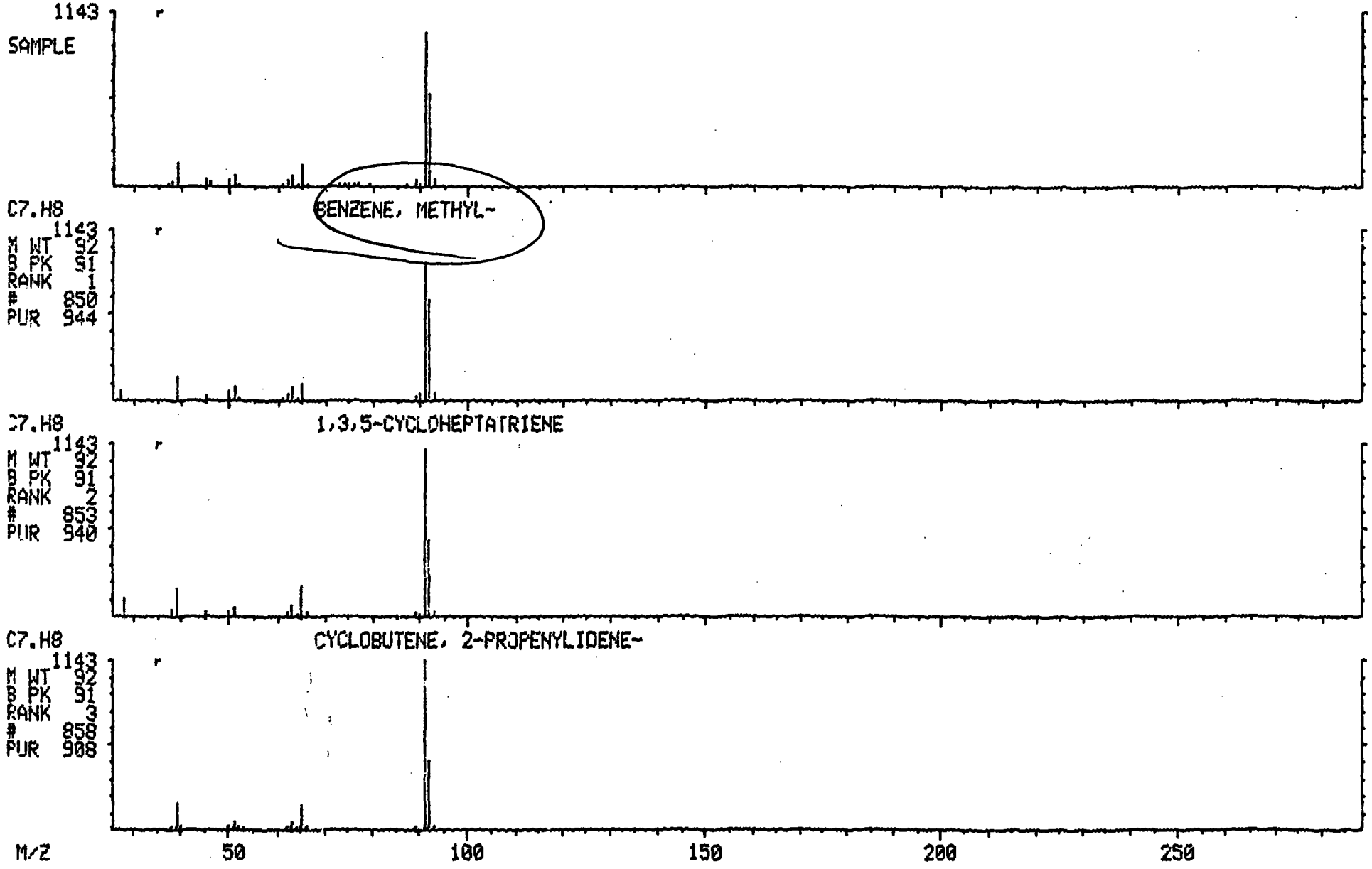


00783

LIBRARY SEARCH
06/02/88 9:43:00 + 4:37
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 # 370
CALI: 060288CR # 5

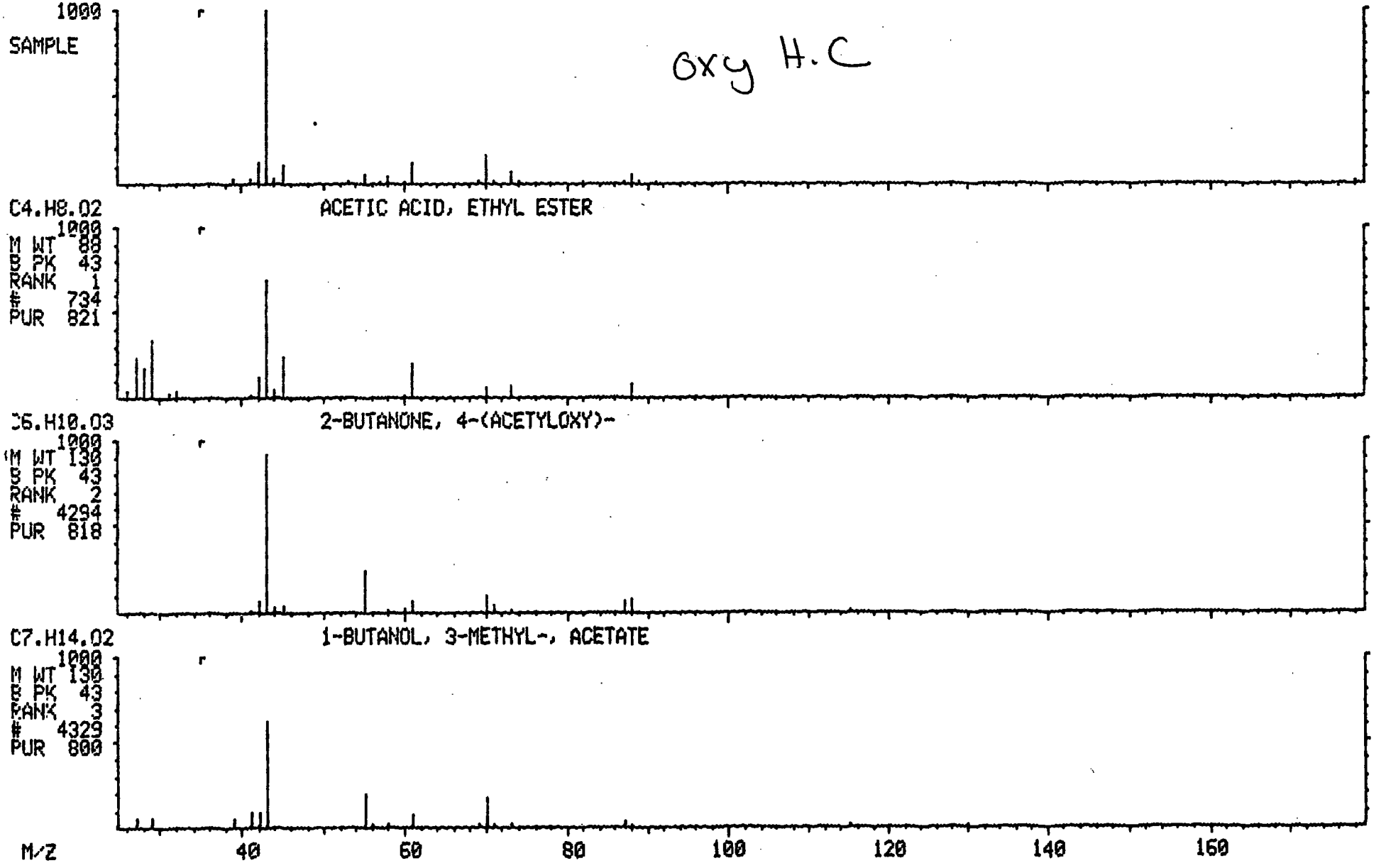
BASE M/Z: 91
RIC: 9327.



00784

LIBRARY SEARCH
06/02/88 9:43:00 + 4:55
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 # 394 BASE M/Z: 43
CALI: 060288CR # 5 RIC: 21407.

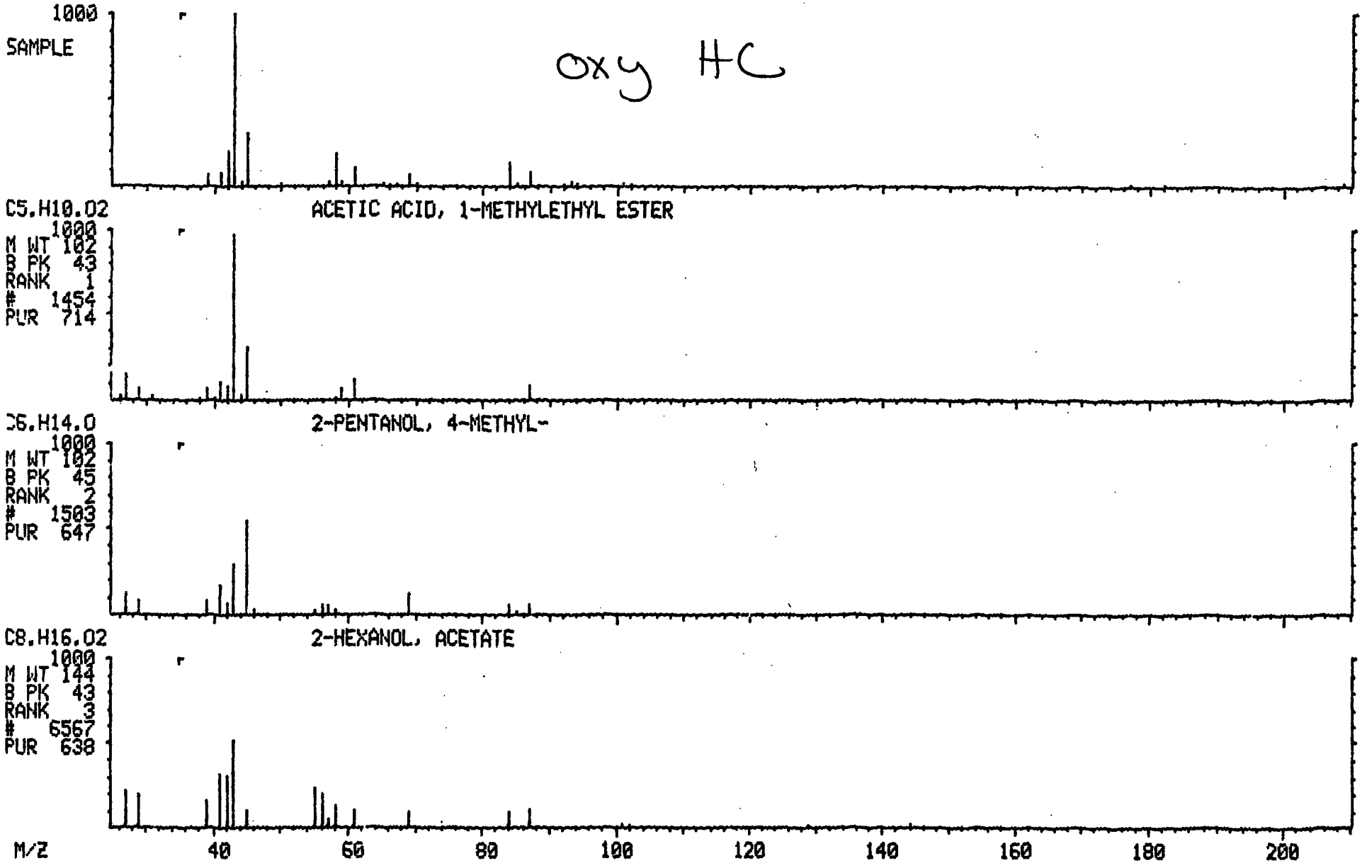


00785

LIBRARY SEARCH
06/02/88 9:43:00 + 5:26
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: 5T
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 # 435
CALI: 060288CR # 5

BASE M/Z: 43
RIC: 10927.

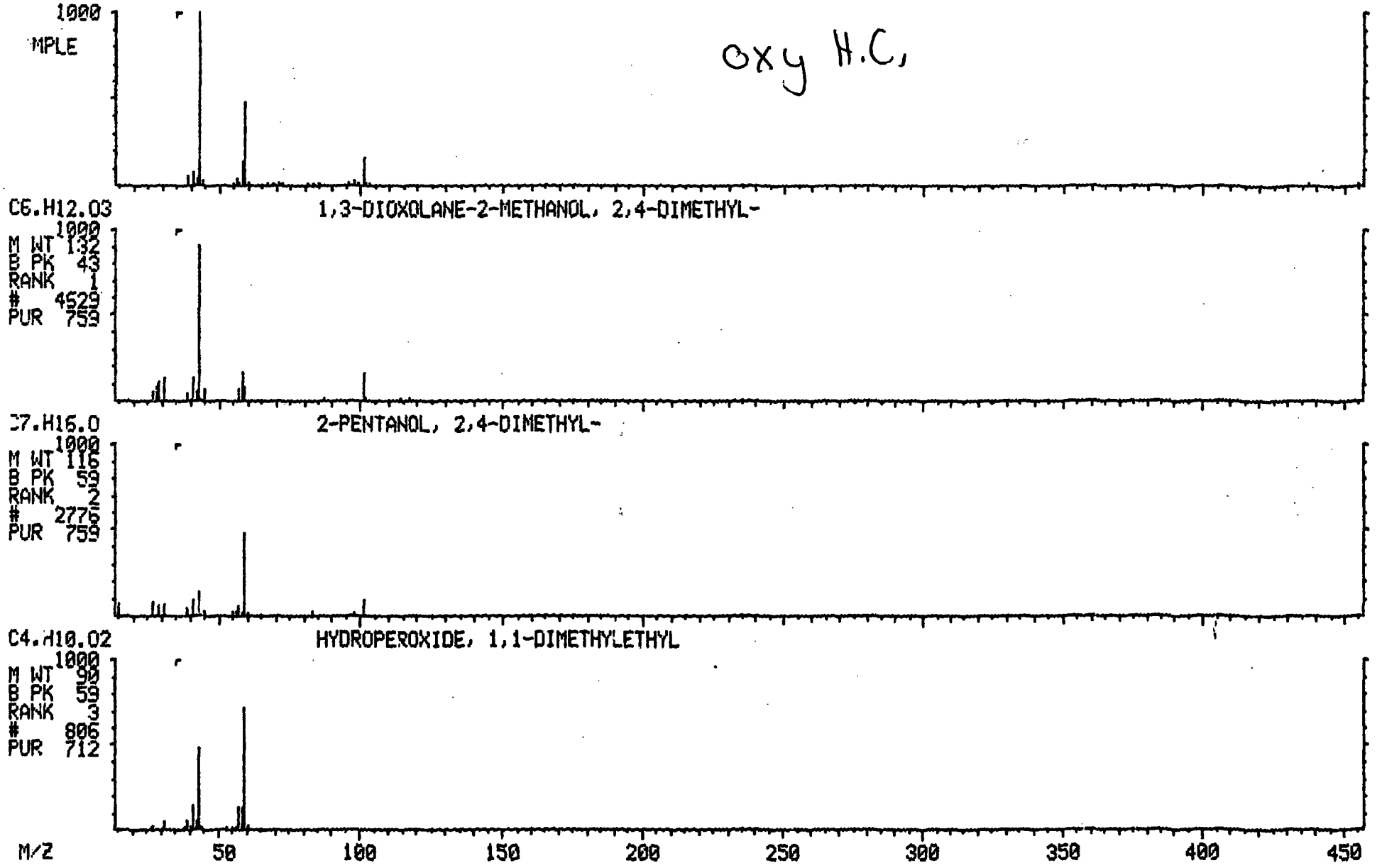


00786

LIBRARY SEARCH
06/02/88 9:43:00 + 5:52
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 # 469
CALI: 060288CR # 5

BASE M/Z: 43
RIC: 29119.

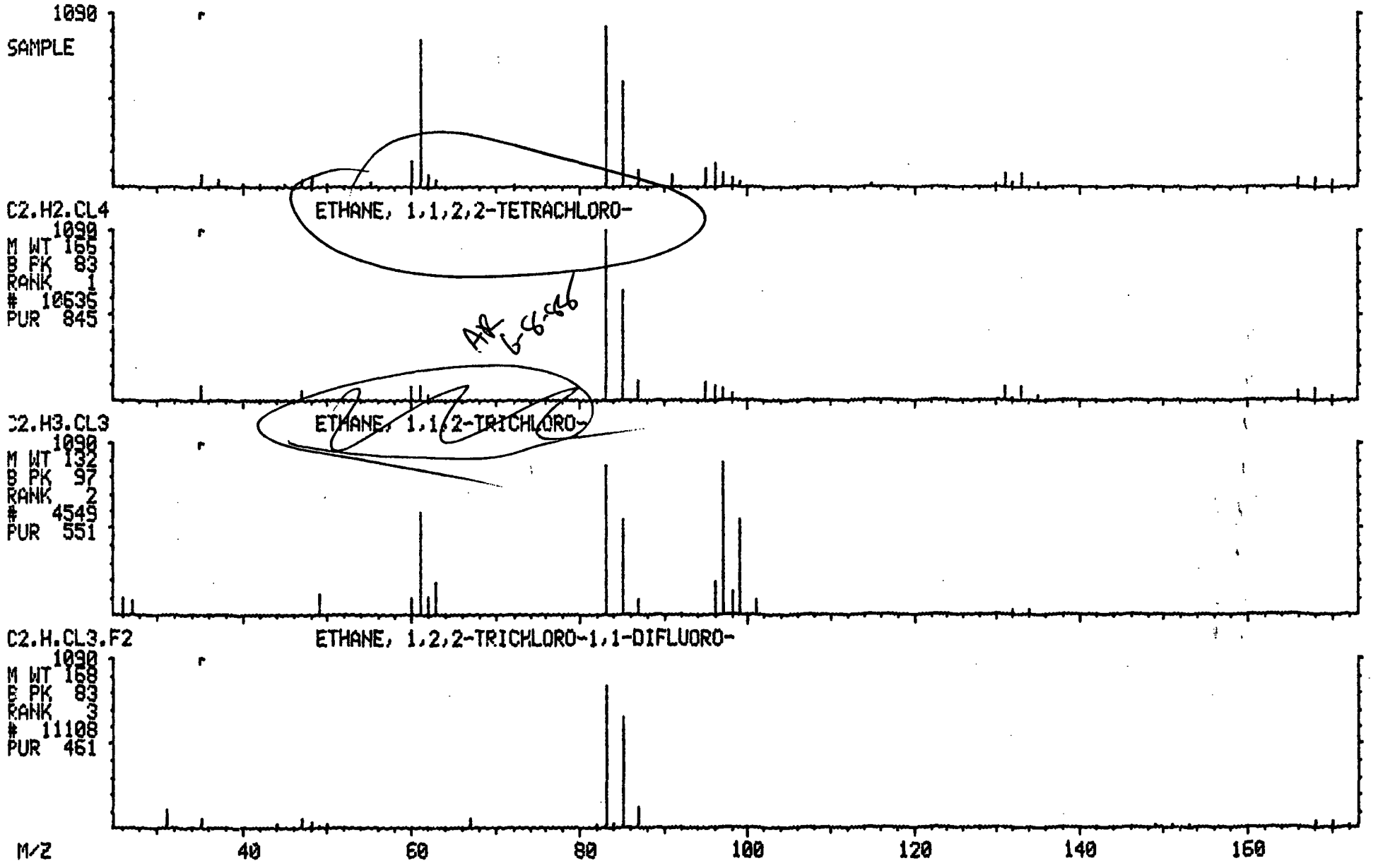


007787

LIBRARY SEARCH
06/02/88 9:43:00 + 7:09
SAMPLE: 59436-10 BNA H2O 100Z/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 # 572
CALI: 060288CR # 5

BASE M/Z: 83
RIC: 3923.

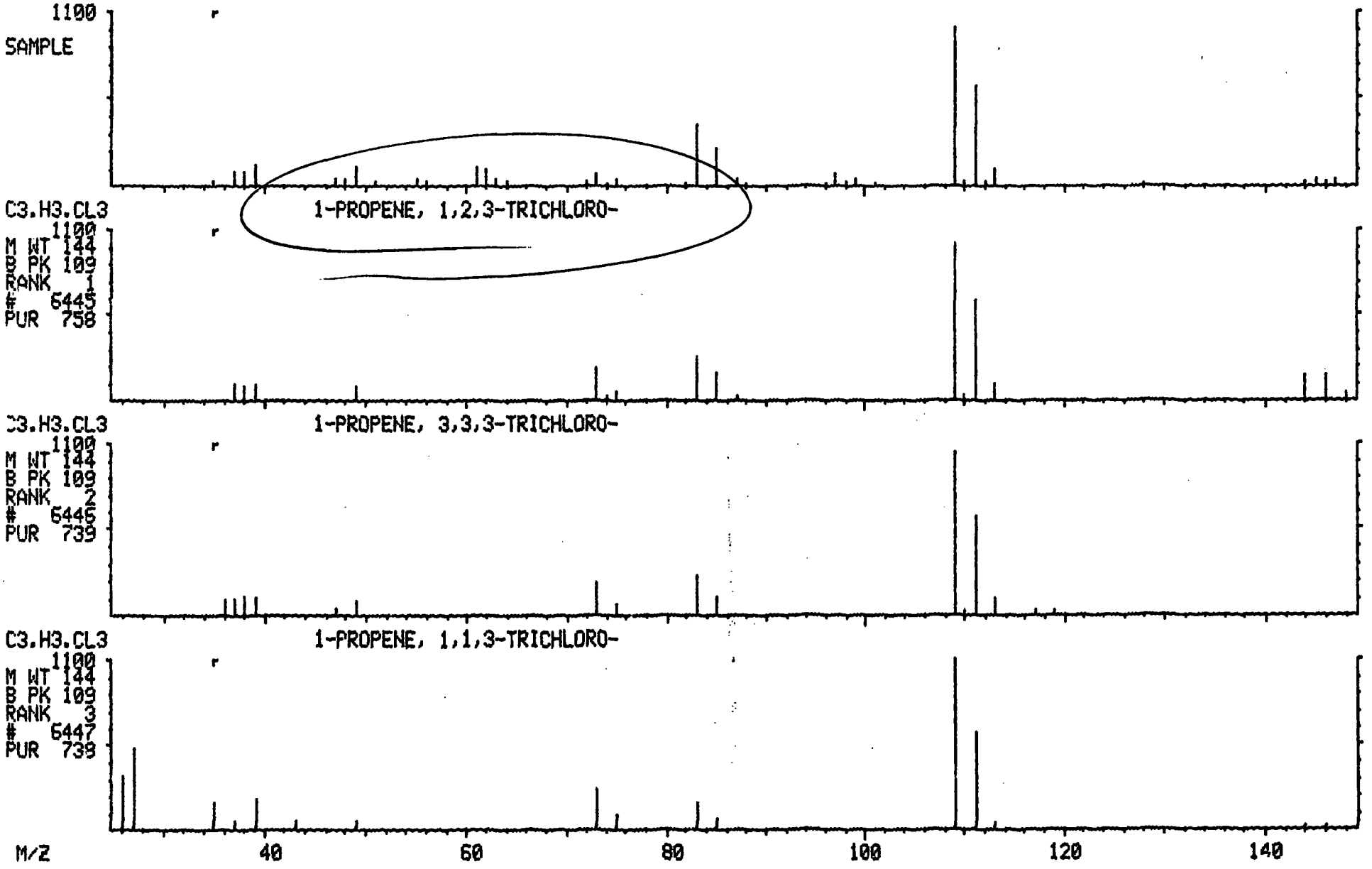


00788

LIBRARY SEARCH
06/02/88 9:43:00 + 7:46
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 # 622
CALI: 060288CR # 5

BASE M/Z: 109
RIC: 8879.

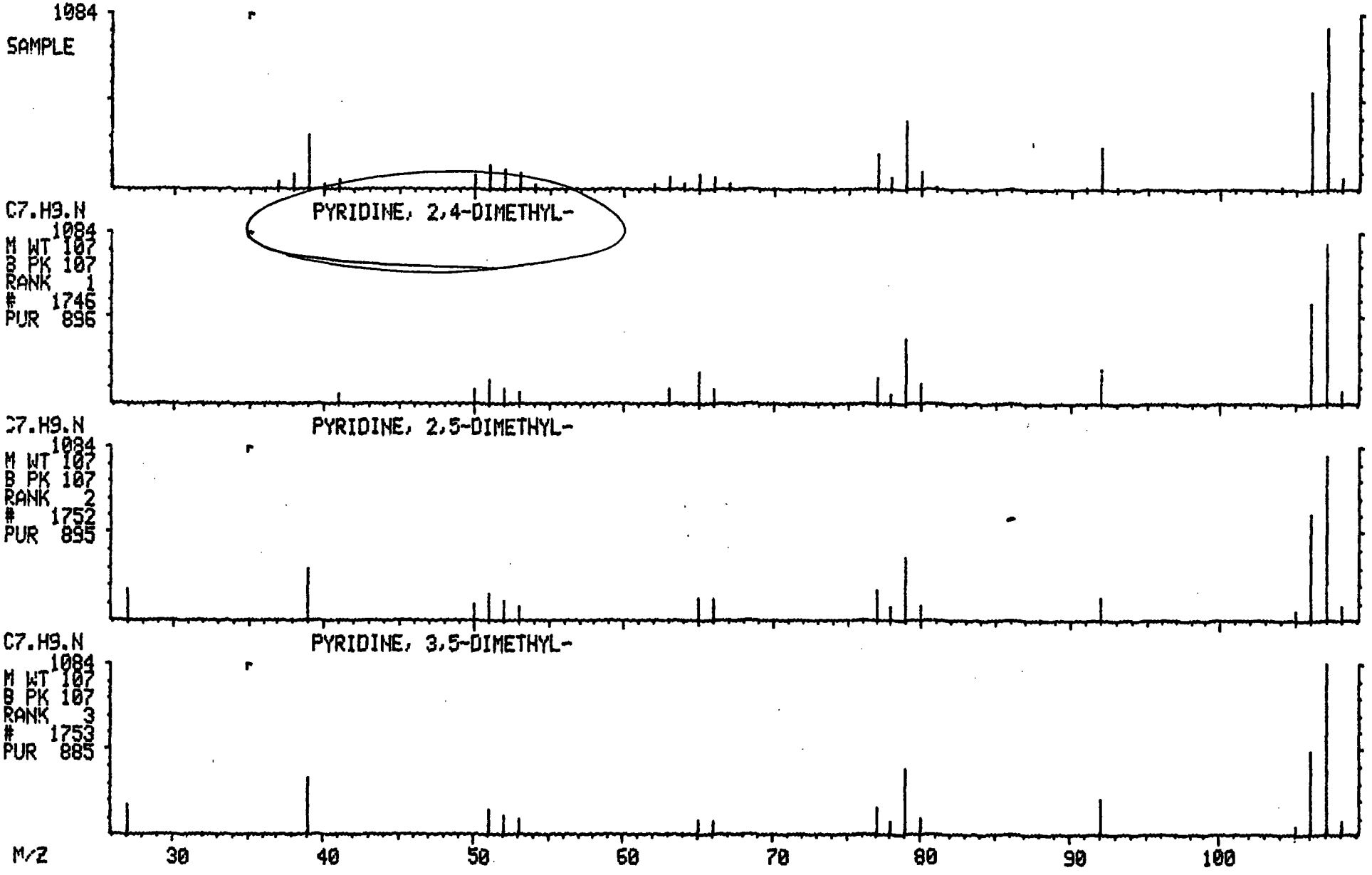


00789

LIBRARY SEARCH
06/02/88 9:43:00 + 8:26
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 # 675
CALI: 060288CR # 5

BASE M/Z: 107
RIC: 14687.

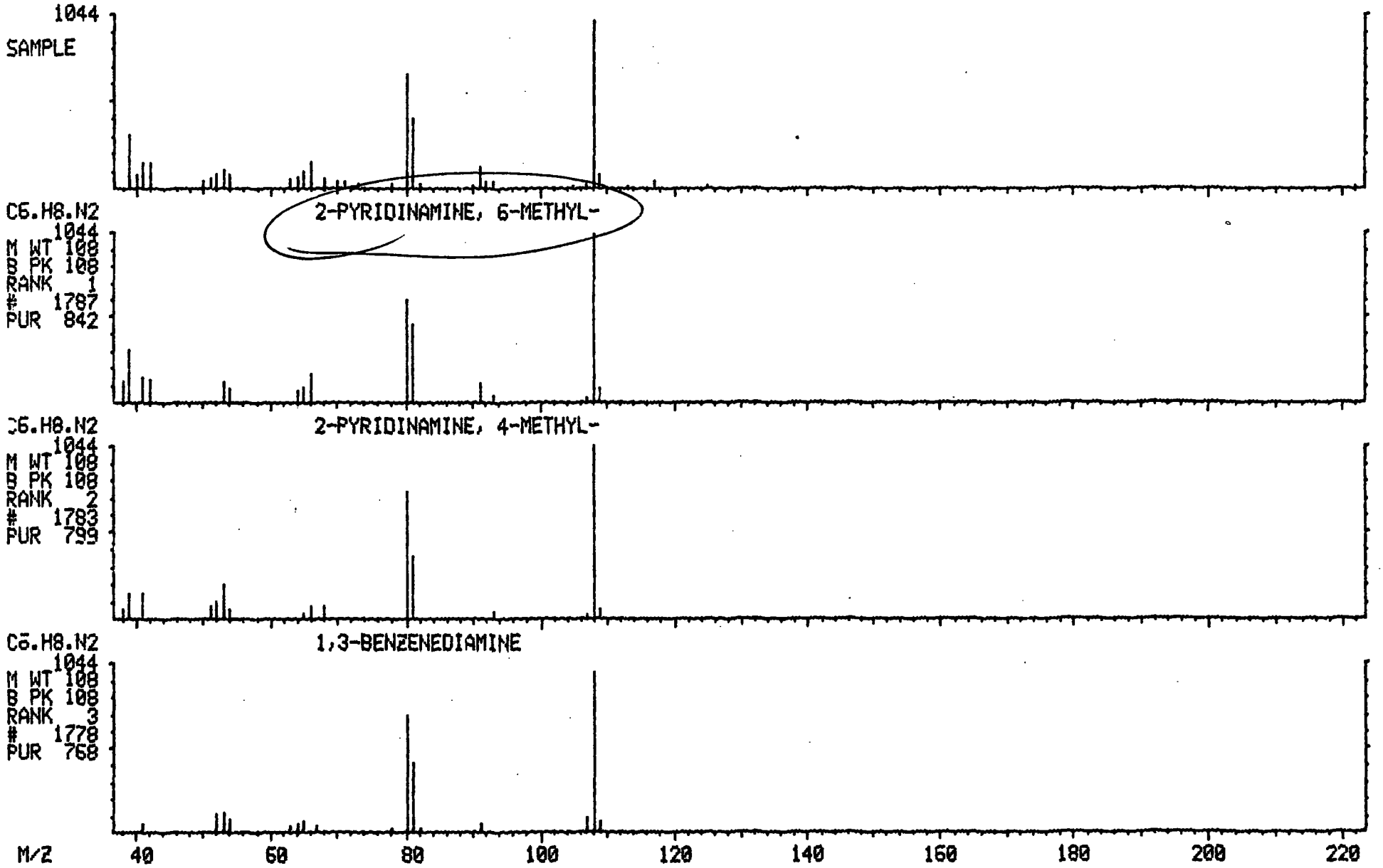


00790

LIBRARY SEARCH
06/02/88 9:43:00 + 9:55
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 # 794
CALI: 060288CR # 5

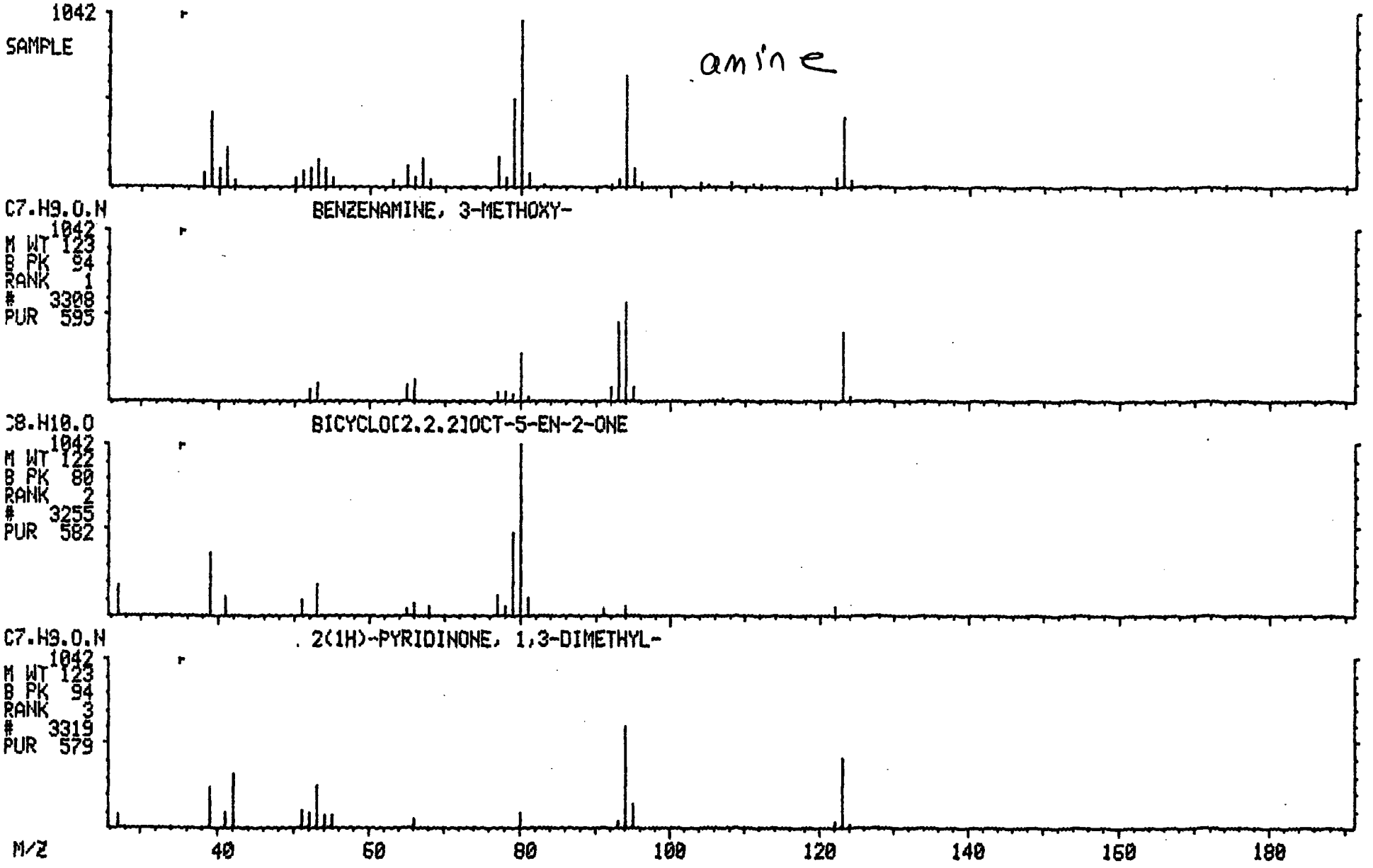
BASE M/Z: 108
RIC: 3535.



00791

LIBRARY SEARCH
06/02/88 9:43:00 + 11:04
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

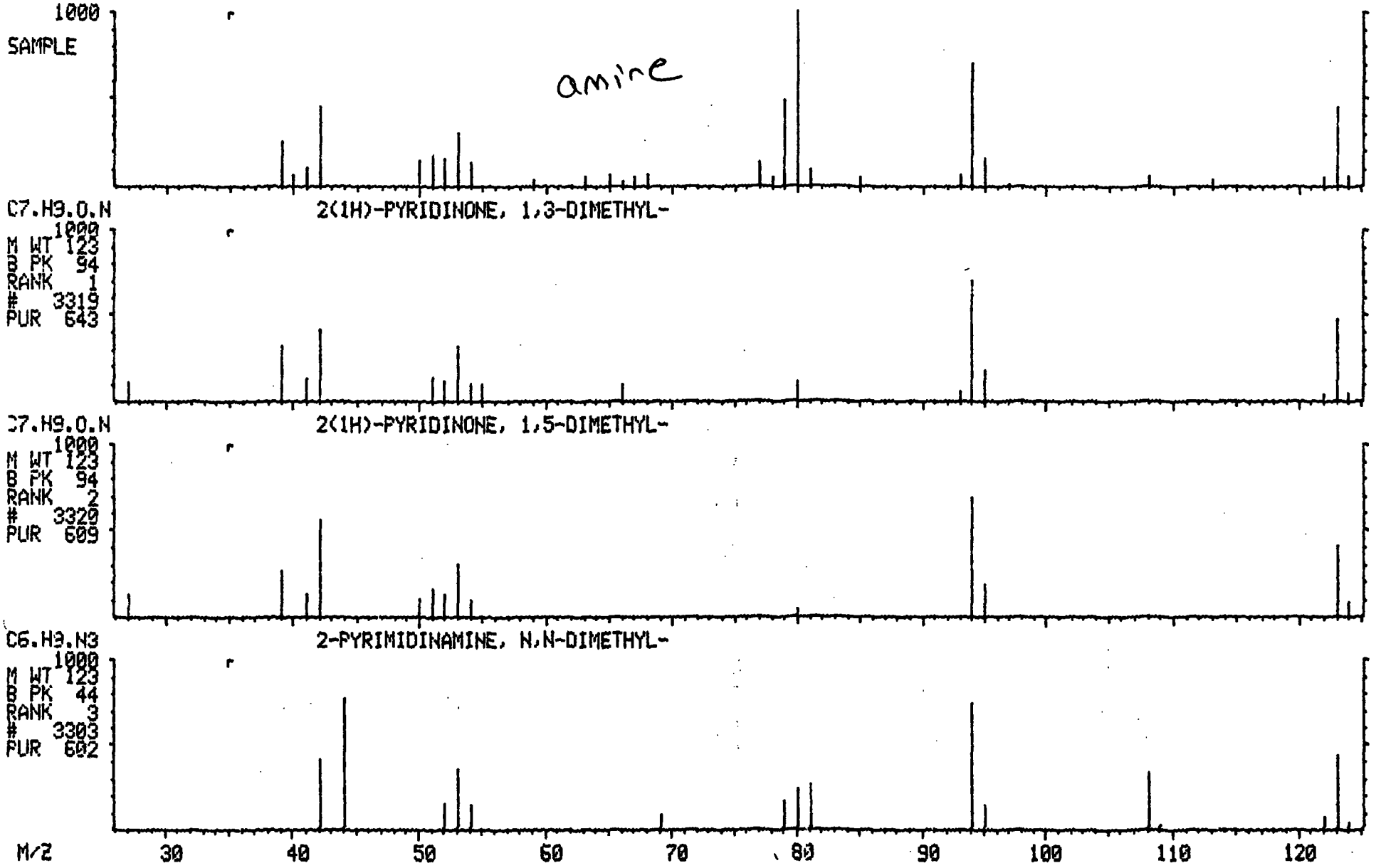
DATA: S59435R977 # 886 BASE M/Z: 80
CALI: 060288CR # 5 RIC: 9023.



00792

LIBRARY SEARCH
06/02/88 9:43:00 + 11:20
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 # 907 BASE M/Z: 80
CALI: 060288CR # 5 RIC: 4767.

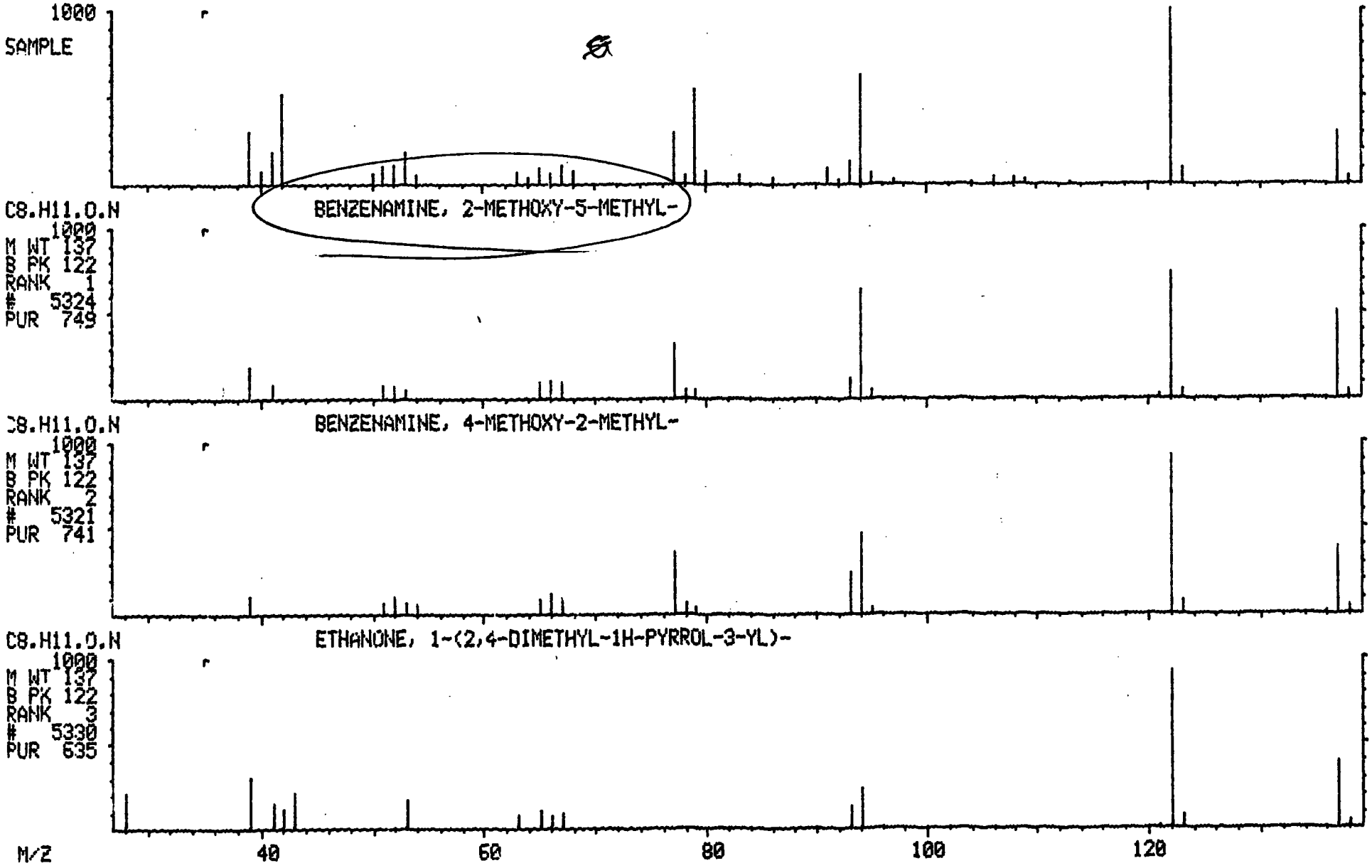


00793

LIBRARY SEARCH
06/02/88 9:43:00 + 12:51
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 #1028
CALI: 060288CR # 5

BASE M/Z: 122
RIC: 5287.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 18:11:43
DATA FILE: S59436R977
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

00794

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	13	11	4	210	IS01/TC01
3	3	2	0	14	8	1	170	IS02/TC02

26 COMPOUNDS PROCESSED, 18 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >		< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-714	715	715	.	2	973	.	152	715	.	1
2	S1	4	-332	338	338	.	1	989	.	84	338	.	1
3	S1	20	-334	340	.	.	.	.	.	79	342	.	1
4	S1	30	-429	435	435	.	2	878	.	93	435	.	1
5	S1	62	-494	499	.	.	.	.	.	93	.	.	.
6	S1	64	-525	530	531	1	1	938	.	107	531	.	1
7	S1	73	-556	561	560	-1	1	901	.	106	560	.	1
8	S1	83	-593	598	596	-2	1	989	.	107	596	.	1
9	S1	87	-613	618	617	-1	1	979	.	107	617	.	1
10	S1	88	-634	638	640	2	1	912	.	107	641	1	1
11	S1	89	-642	646	648	2	2	902	.	107	648	.	1
12	S1	92	-661	665	663	-2	1	985	.	107	663	.	1
13	S1	122	-699	703	707	4	1	950	.	107	707	.	1
14	S2	1	-953	954	954	.	2	996	.	136	954	.	1
15	S3	1	-1310	1311	1311	.	1	992	.	164	1311	.	1
16	S1	137	-730	731	732	1	1	981	.	106	732	.	1
17	S1	142	-743	744	745	1	1	956	.	106	745	.	1
18	S1	187	-797	798	.	.	.	.	.	108	.	.	.
19	S1	202	-821	822	824	2	1	955	.	106	824	.	1
20	S1	203	-826	827	824	-3	1	955	.	106	824	.	1
21	S1	204	-846	847	.	.	.	.	.	122	845	.	1
22	S2	27	-897	898	.	.	.	.	.	107	898	.	1
23	S2	37	-921	922	.	.	.	.	.	107	921	.	1
24	S2	47	-935	936	.	.	.	.	.	107	936	.	1
25	S2	57	-954	955	.	.	.	.	.	107	954	.	1
26	S2	150	-1117	1117	1116	-1	1	881	.	142	1117	1	1

Quantitation Report File: S59436R977

Data: S59436R977.TI
06/02/88 9:43:00
Sample: 59436-10 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name		
1	CI30 1,4-DICHLOROBENZENE-D4	152IS1# 01	3855-82-1
2	PYRIDINE-D5	84 S1# 04	
3	PYRIDINE	79 S1# 20	110-86-1
4	2-PICOLINE	93 S1# 30	109-06-8
5	3 & 4-PICOLINE	93 S1# 62	
6	2,6-LUTIDINE	107 S1# 64	
7	2-ETHYL PYRIDINE	106 S1# 73	
8	2,4 & 2,5-LUTIDINE	107 S1# 83	
9	2,3-LUTIDINE	107 S1# 87	
10	3-ETHYL PYRIDINE	107 S1# 88	
11	4-ETHYL PYRIDINE	107 S1# 89	
12	3,5-LUTIDINE	107 S1# 92	
13	3,4-LUTIDINE	107 S1#122	
14	CI40 NAPHTHALENE-D8	136IS2# 01	1146-65-2
15	CI50 ACENAPHTHENE-D10	164IS3# 01	15067-26-2
16	2-METHYL-5-ETHYL PYRIDINE	106 S1#137	
17	2-METHYL-3-ETHYL PYRIDINE	106 S1#142	
18	M AND P CRESOLS	108 S2#187	
19	3-ETHYL-4-METHYL PYRIDINE	106 S1#202	
20	3-ETHYL-5-METHYL PYRIDINE	106 S1#203	
21	2,6-DIMETHYL PHENOL	122 S1#204	
22	2,5-DIMETHYL PHENOL	107 S2# 27	
23	3,5-DIMETHYL PHENOL	107 S2# 37	
24	2,3-DIMETHYL PHENOL	107 S2# 47	
25	3,4-DIMETHYL PHENOL	107 S2# 57	
26	1-METHYLNAPHTHALENE	142 S2#150	90-12-0

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	715	8:56	1	1.000	A BB	25231.	40.000 UG/ML	22.16
2	84	338	4:13	1	0.473	A BB	42259.	34.684 UG/ML	19.21
3	79	342	4:16	1	0.478	A BB	347.	0.288 UG/ML	0.16
4	93	435	5:26	1	0.608	A BV	576.	0.485 UG/ML	0.27
5	NOT FOUND								
6	107	531	6:38	1	0.743	A BB	547.	0.432 UG/ML	0.24
7	106	560	7:00	1	0.783	A BB	284.	0.191 UG/ML	0.11
8	107	596	7:27	1	0.834	A BB	2652.	2.463 UG/ML	1.36
9	107	617	7:43	1	0.863	A BB	831.	0.718 UG/ML	0.40
10	107	641	8:01	1	0.897	A BV	399.	0.488 UG/ML	0.27
11	107	648	8:06	1	0.906	A VB	335.	0.369 UG/ML	0.20
12	107	663	8:17	1	0.927	A BV	9094.	9.088 UG/ML	5.03
13	107	707	8:50	1	0.989	A BB	907.	0.892 UG/ML	0.49
14	136	954	11:55	14	1.000	A BB	95919.	40.000 UG/ML	22.16
15	164	1311	16:23	15	1.000	A BB	43819.	40.000 UG/ML	22.16
16	106	732	9:09	1	1.024	A BB	1894.	1.391 UG/ML	0.77
17	106	745	9:19	1	1.042	A BB	1704.	1.754 UG/ML	0.97

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
18	NOT FOUND								
19	106	824	10:18	1	1.152	A BB	925.	4.020 UG/ML	2.23
20	106	824	10:18	1	1.152	A BB	925.	0.875 UG/ML	0.48
21	122	845	10:34	1	1.182	A BB	185.	0.239 UG/ML	0.13
22	107	898	11:13	14	0.941	A BB	379.	0.448 UG/ML	0.25
23	107	921	11:31	14	0.965	A BB	347.	0.403 UG/ML	0.22
24	107	936	11:42	14	0.981	A BB	304.	0.334 UG/ML	0.18
25	107	954	11:55	1	1.334	A BB	877.	0.770 UG/ML	0.43
26	142	1117	13:58	14	1.171	A BB	324.	0.193 UG/ML	0.11

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:09	1.02	0.464	1.02	34.68	50.00	1.340	1.932	0.69
3	4:10	1.02	0.467	1.02	0.29	50.00	0.011	1.908	0.01
4	5:22	1.01	0.600	1.01	0.48	50.00	0.018	1.883	0.01
5	6:10		0.691						
6	6:34	1.01	0.734	1.01	0.43	50.00	0.017	2.008	0.01
7	6:57	1.01	0.778	1.01	0.19	50.00	0.009	2.360	0.00
8	7:25	1.01	0.829	1.01	2.46	50.00	0.084	1.707	0.05
9	7:40	1.01	0.857	1.01	0.72	50.00	0.026	1.835	0.01
10	7:55	1.01	0.887	1.01	0.49	50.00	0.013	1.295	0.01
11	8:01	1.01	0.898	1.01	0.37	50.00	0.011	1.438	0.01
12	8:16	1.00	0.924	1.00	9.09	50.00	0.288	1.586	0.18
13	8:44	1.01	0.978	1.01	0.89	50.00	0.029	1.612	0.02
14	11:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	16:23	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	9:07	1.00	1.021	1.00	1.39	50.00	0.060	2.158	0.03
17	9:17	1.00	1.039	1.00	1.75	50.00	0.054	1.540	0.04
18	9:58		1.115						
19	10:16	1.00	1.148	1.00	4.02	50.00	0.029	0.365	0.08
20	10:19	1.00	1.155	1.00	0.87	50.00	0.029	1.676	0.02
21	10:34	1.00	1.183	1.00	0.24	50.00	0.006	1.226	0.00
22	11:13	1.00	0.940	1.00	0.45	50.00	0.003	0.353	0.01
23	11:31	1.00	0.965	1.00	0.40	50.00	0.003	0.359	0.01
24	11:41	1.00	0.980	1.00	0.33	50.00	0.003	0.380	0.01
25	11:55	1.00	1.334	1.00	0.77	50.00	0.028	1.806	0.02
26	13:58	1.00	1.171	1.00	0.19	50.00	0.003	0.699	0.00

TCA FINISHED, 18 FOUND
FINISHED AT: 6/03/88 18:14:35

00797

RF 2.02
SV 2.00

RMAL QUANTITATION SUMMARY FILE: S59436R977
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

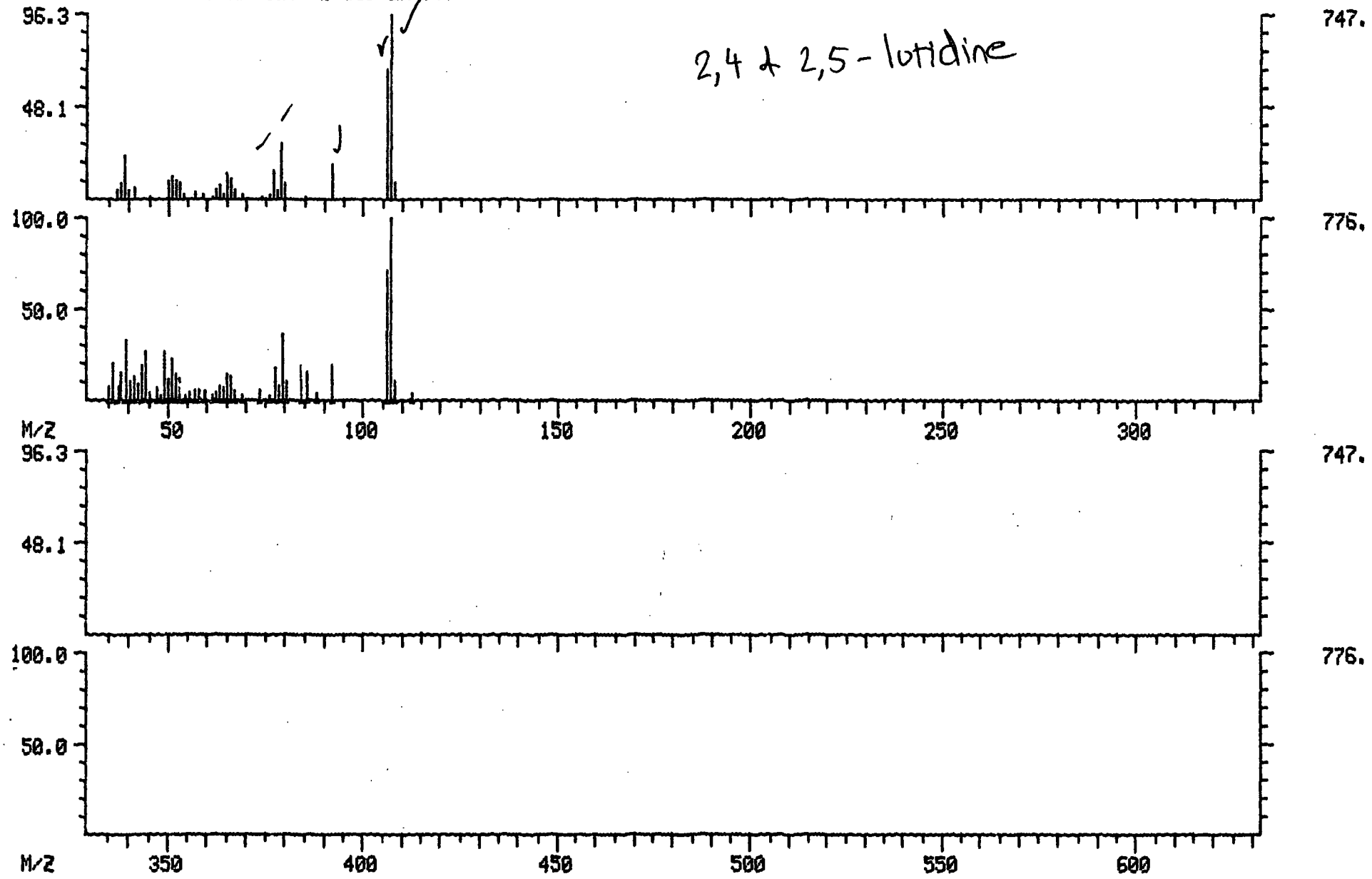
UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	715	1	25231.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	954	2	95919.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	43819.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	338	1	42259.	1.340	34.684
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93		1	NOT FOUND		
7	S1# 62	3 & 4-PICOLINE	93		1	NOT FOUND		
8	S1# 64	2,6-LUTIDINE	107		1	NOT FOUND		
9	S1# 73	2-ETHYL PYRIDINE	106		1	NOT FOUND		
10	S1# 83	2,4 & 2,5-LUTIDINE	107	596	1	2652.	0.084	~~2.463~~ OK AR 6.3.88
11	S1# 87	2,3-LUTIDINE	107		1	NOT FOUND		
12	S1# 88	3-ETHYL PYRIDINE	107		1	NOT FOUND		
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107	663	1	9094.	0.288	9.088 MD 6-9-88
15	S1#122	3,4-LUTIDINE	107		1	NOT FOUND		
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106	732	1	1894.	0.060	1.391
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106	745	1	1704.	0.054	1.754
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106	824	1	925.	0.029	4.020
20	S1#203	3-ETHYL-5-METHYL PYRIDIN	106		1	NOT FOUND		
21	S1#204	2,6-DIMETHYL PHENOL	122		1	NOT FOUND		
22	S2# 27	2,5-DIMETHYL PHENOL	107		2	NOT FOUND		
23	S2# 37	3,5-DIMETHYL PHENOL	107		2	NOT FOUND		
24	S2# 47	2,3-DIMETHYL PHENOL	107		2	NOT FOUND		
25	S2# 57	3,4-DIMETHYL PHENOL	107		1	NOT FOUND		
26	S2#150	1-METHYLNAPHTHALENE	142		2	NOT FOUND		

00798

DUAL MASS SPECTRUM
06/02/88 9:43:00 + 7:27
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 #596 BASE M/Z: 107/ 107
CALI: 060288CR #5 RIC: 3107./ 5079.



2,4 & 2,5-lutidine

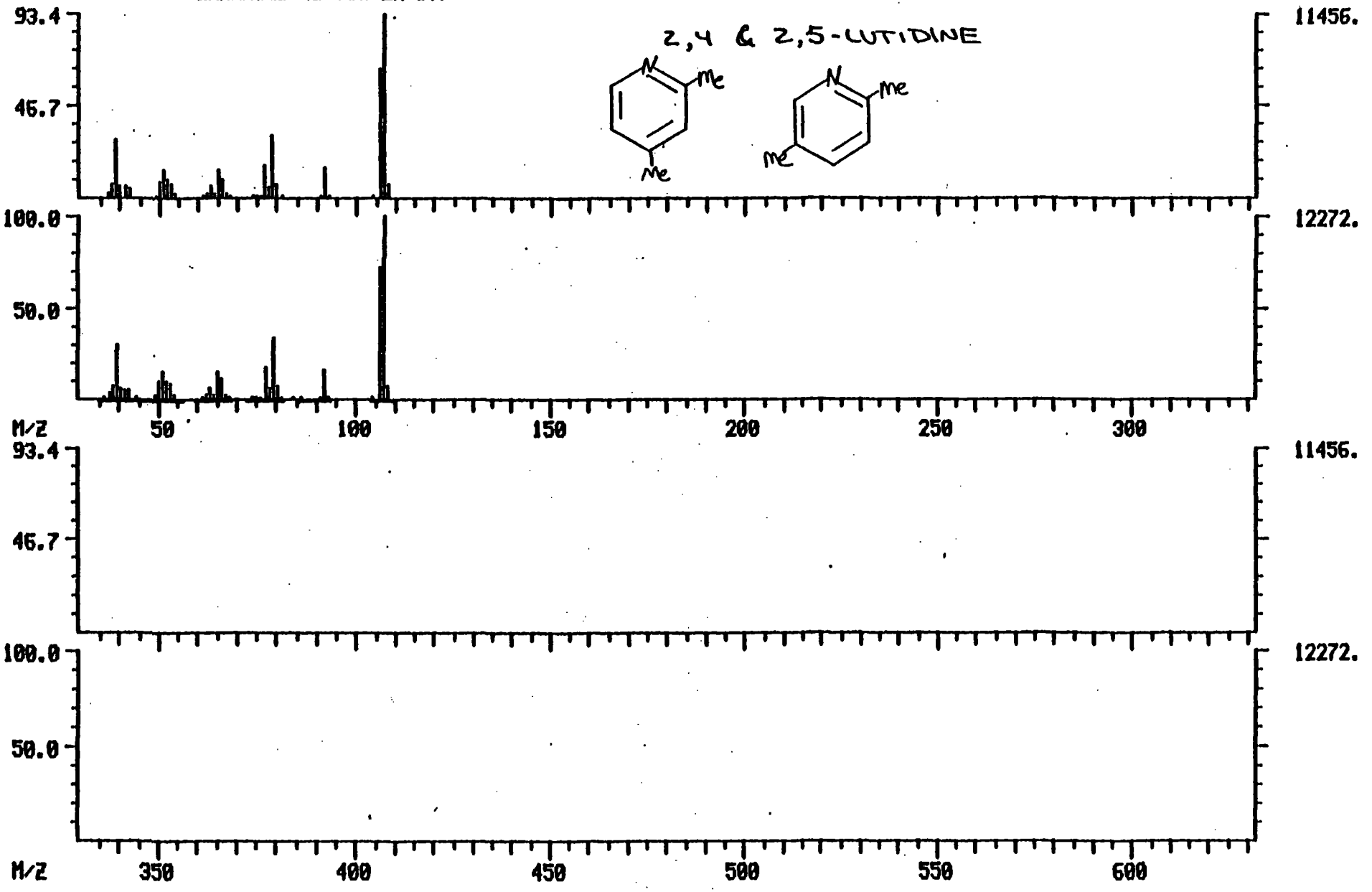
00799

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:25
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #593
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47359./ 52223.

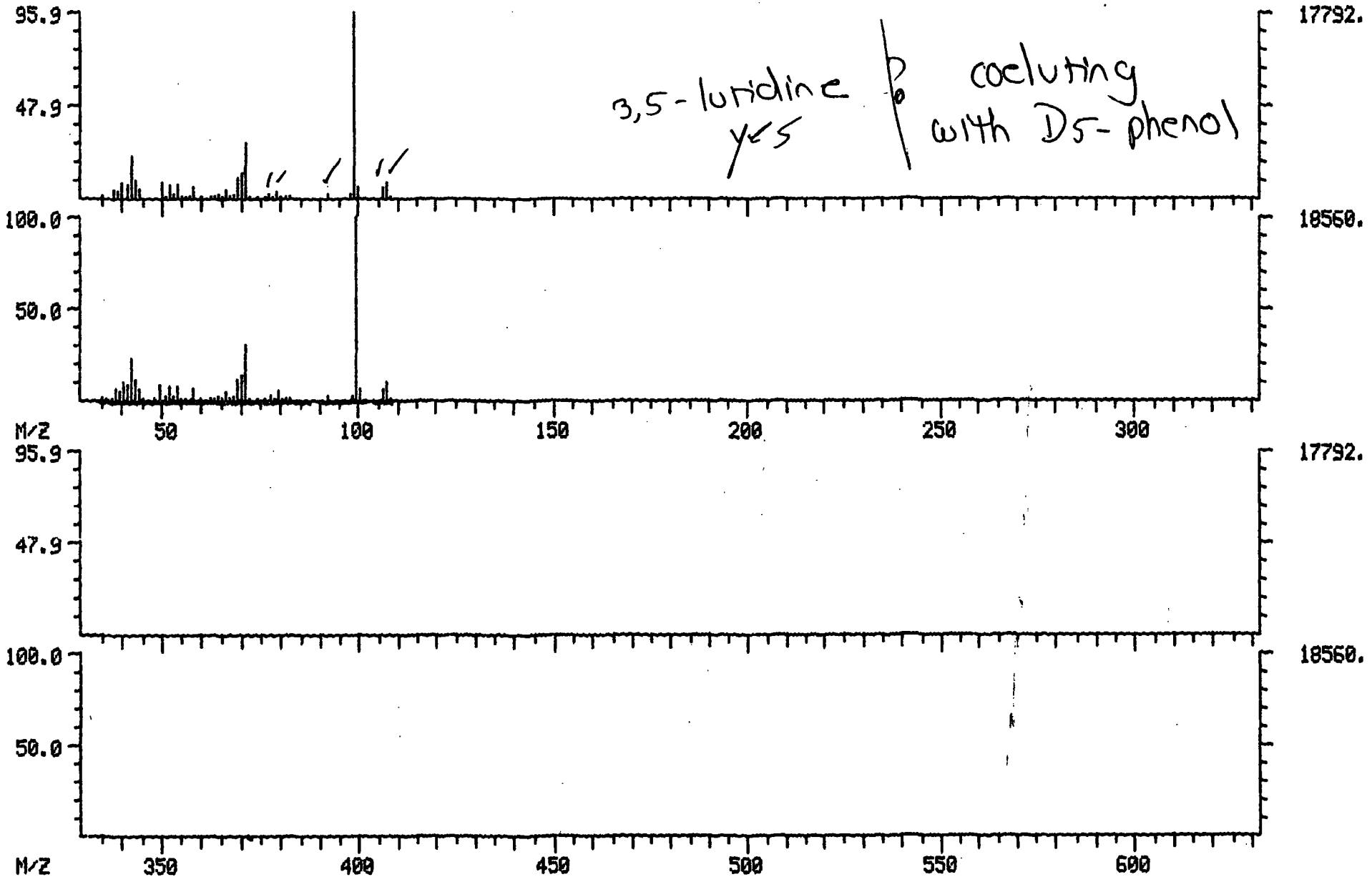
SPECTRUM FROM THE STANDARD



00800

DUAL MASS SPECTRUM
06/02/88 9:43:00 + 8:17
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 #663 BASE M/Z: 99/ 99
CALI: 060288CR #5 RIC: 57343./ 62079.



00801

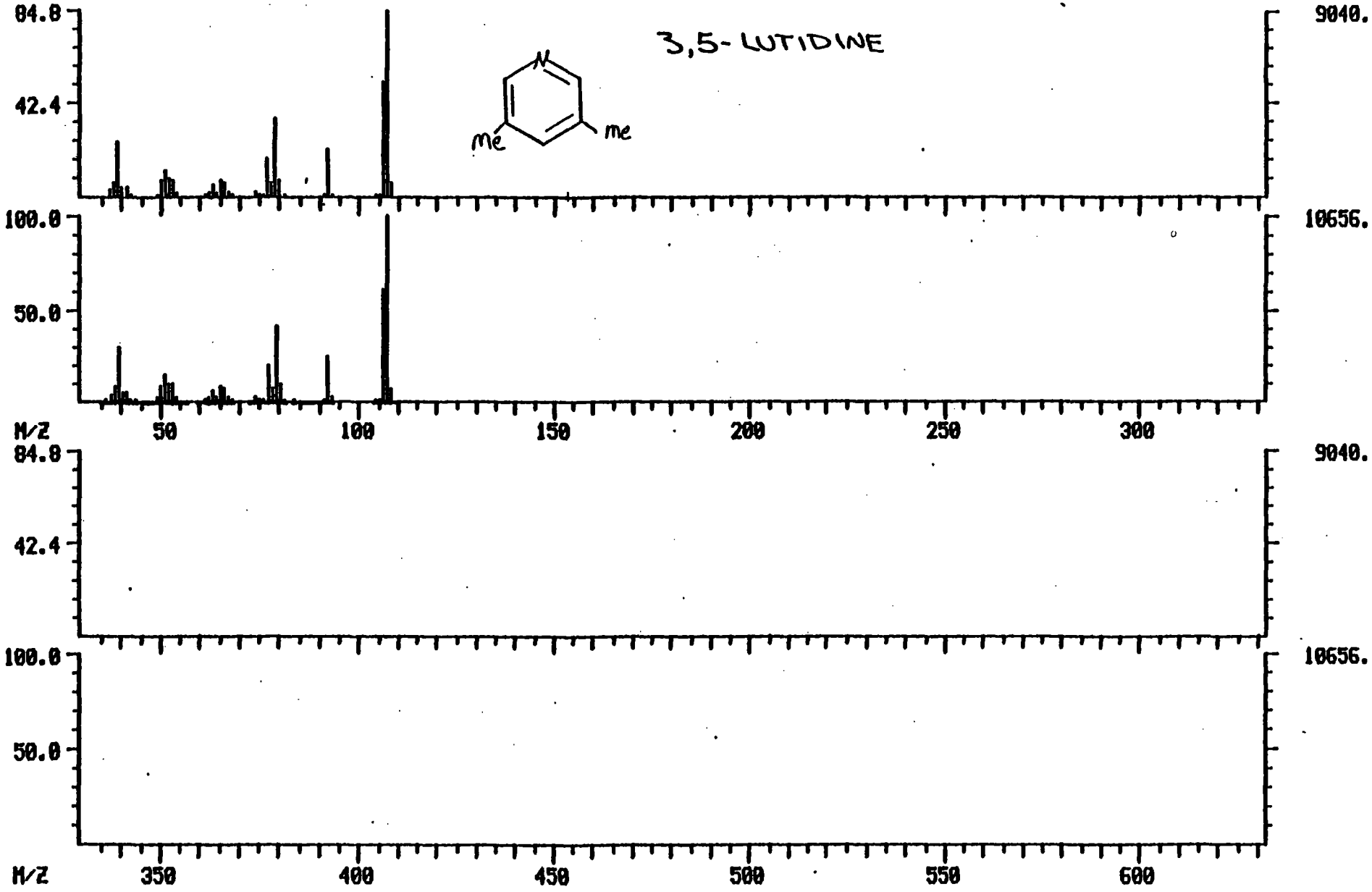
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:16
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #661
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 37567./ 45567.

SPECTRUM FROM THE STANDARD

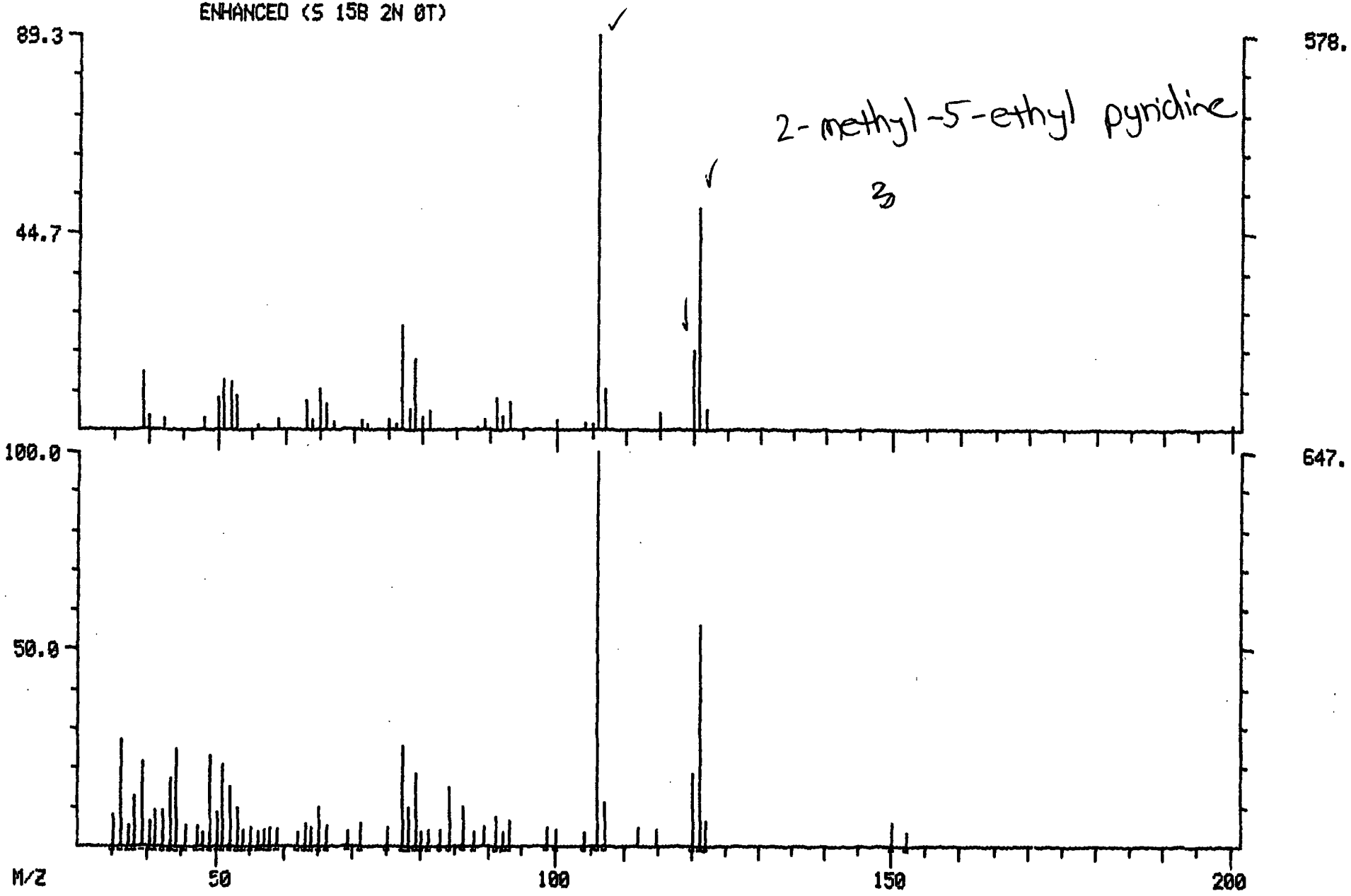
3,5-LUTIDINE



00802

DUAL MASS SPECTRUM
06/02/88 9:43:00 + 9:09
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 #732 BASE M/Z: 106/ 106
CALI: 060288CR #5 RIC: 2235./ 4151.



2-methyl-5-ethyl pyridine

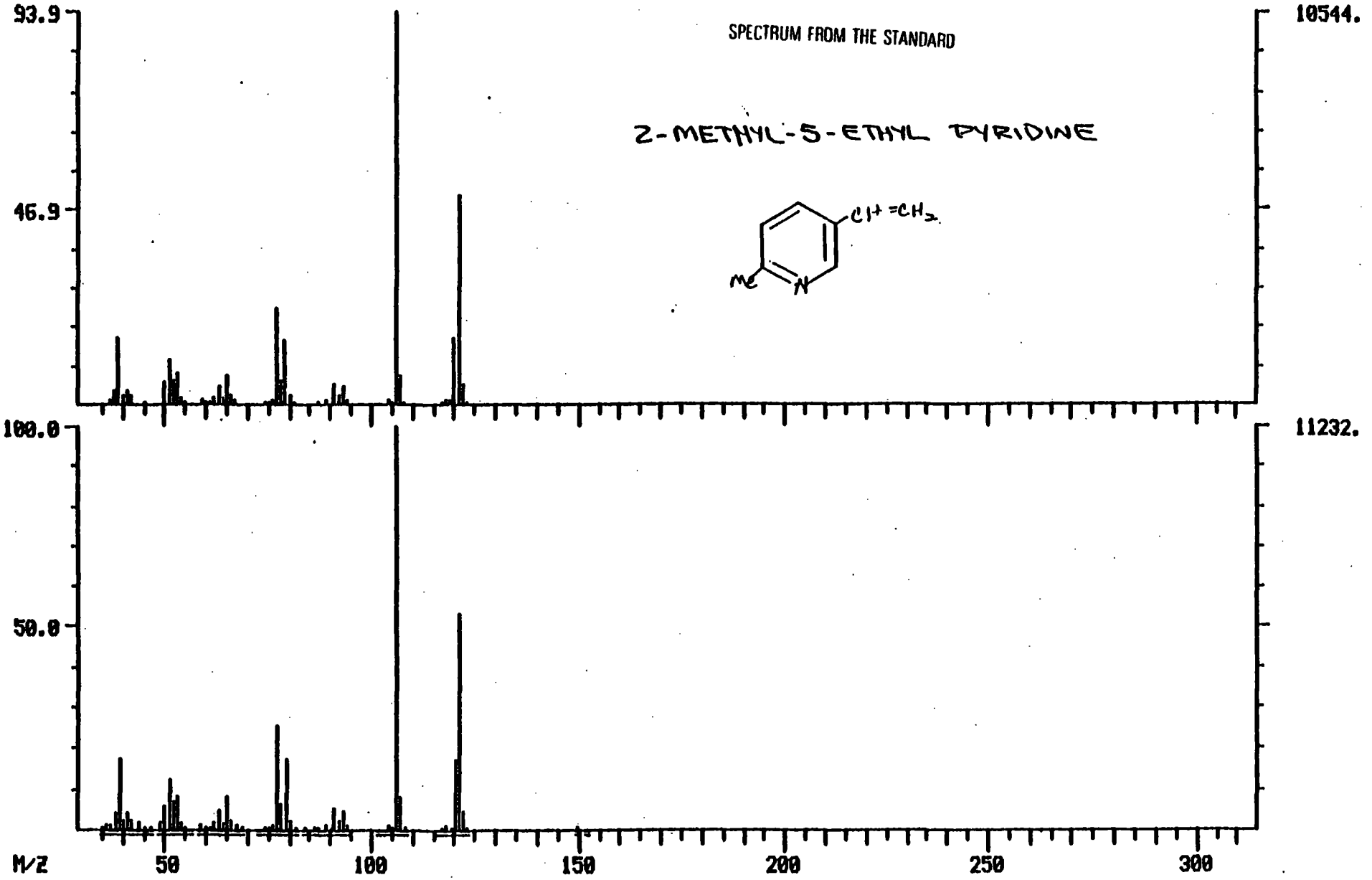
3

00803

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 9:07
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #730
CALI: 060288CR #5

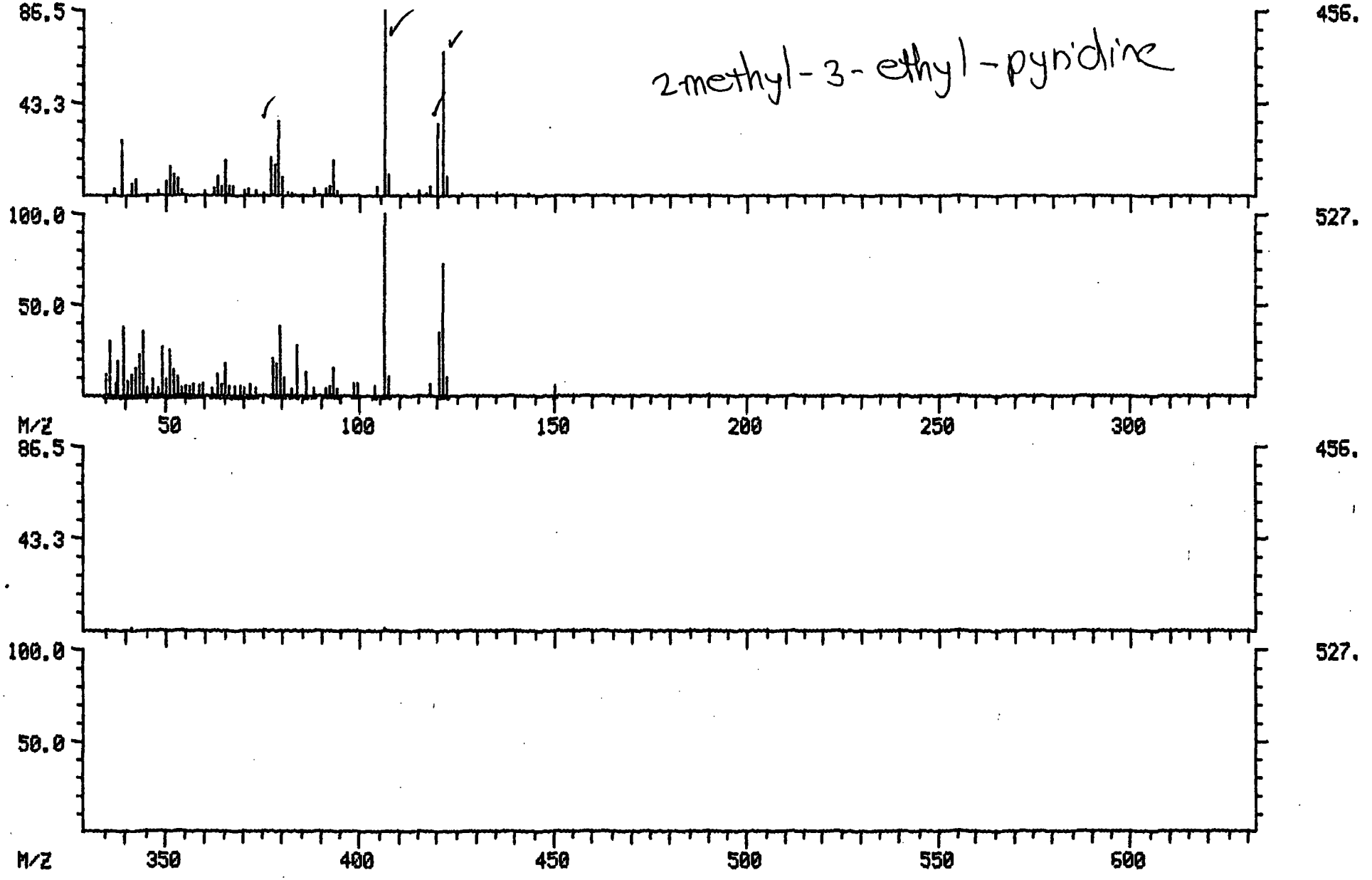
BASE M/Z: 106/ 106
RIC: 36671./ 40191.



00804

DUAL MASS SPECTRUM
06/02/88 9:43:00 + 9:19
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R977 #745 BASE M/Z: 106/ 106
CALI: 060288CR #5 RIC: 2483./ 4311.



00805

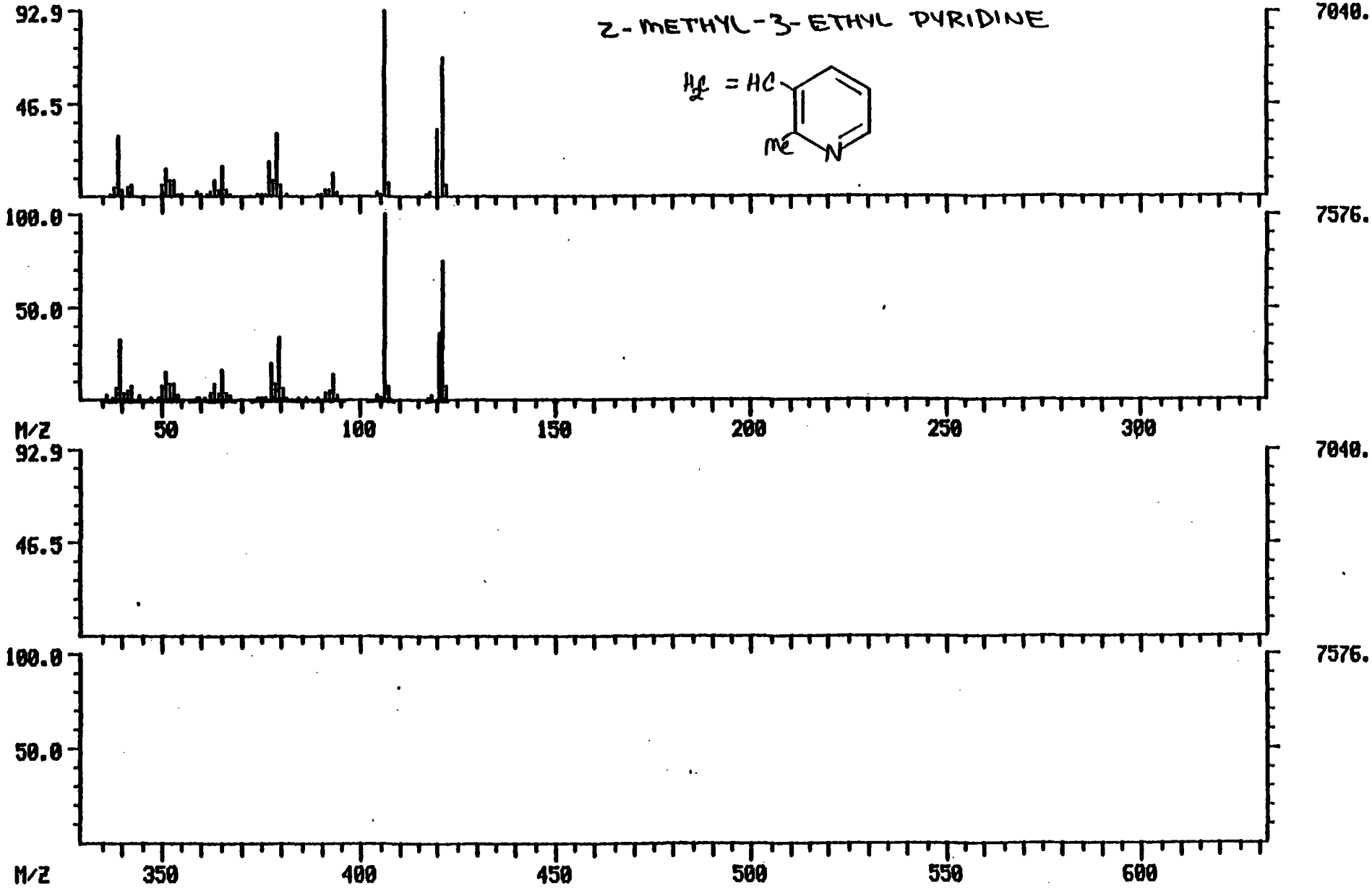
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 9:17
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #743
CALI: 060288CR #5

BASE M/Z: 106/ 106
RIC: 33215./ 37055.

SPECTRUM FROM THE STANDARD

2-METHYL-3-ETHYL PYRIDINE



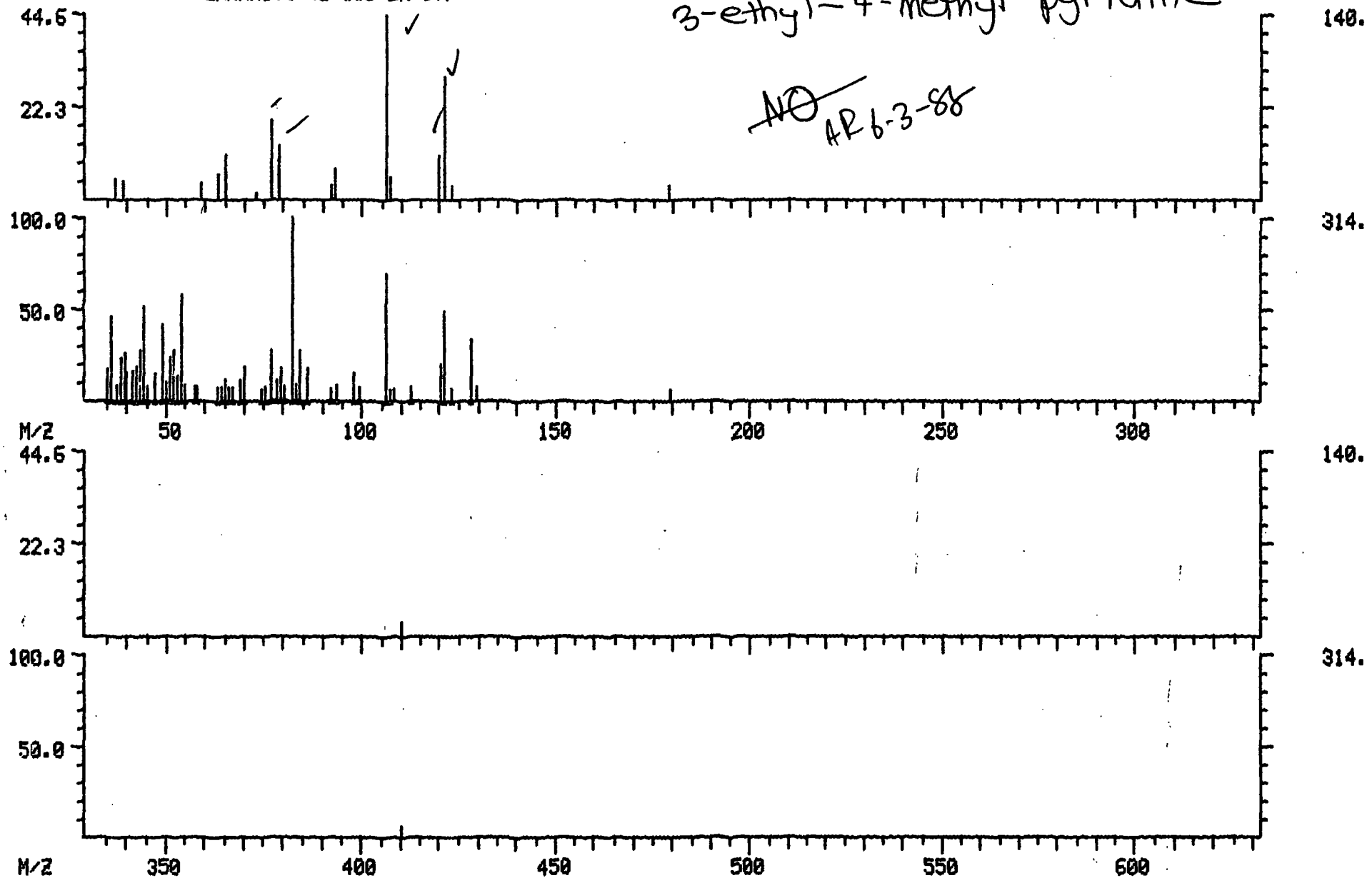
00806

DUAL MASS SPECTRUM
06/02/88 9:43:00 + 10:18
SAMPLE: 59436-10 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R977 #824 BASE M/Z: 106/ 82
CALI: 060288CR #5 RIC: 548./ 3255.

3-ethyl-4-methyl pyridine

~~NO~~ AR 6-3-88



00800

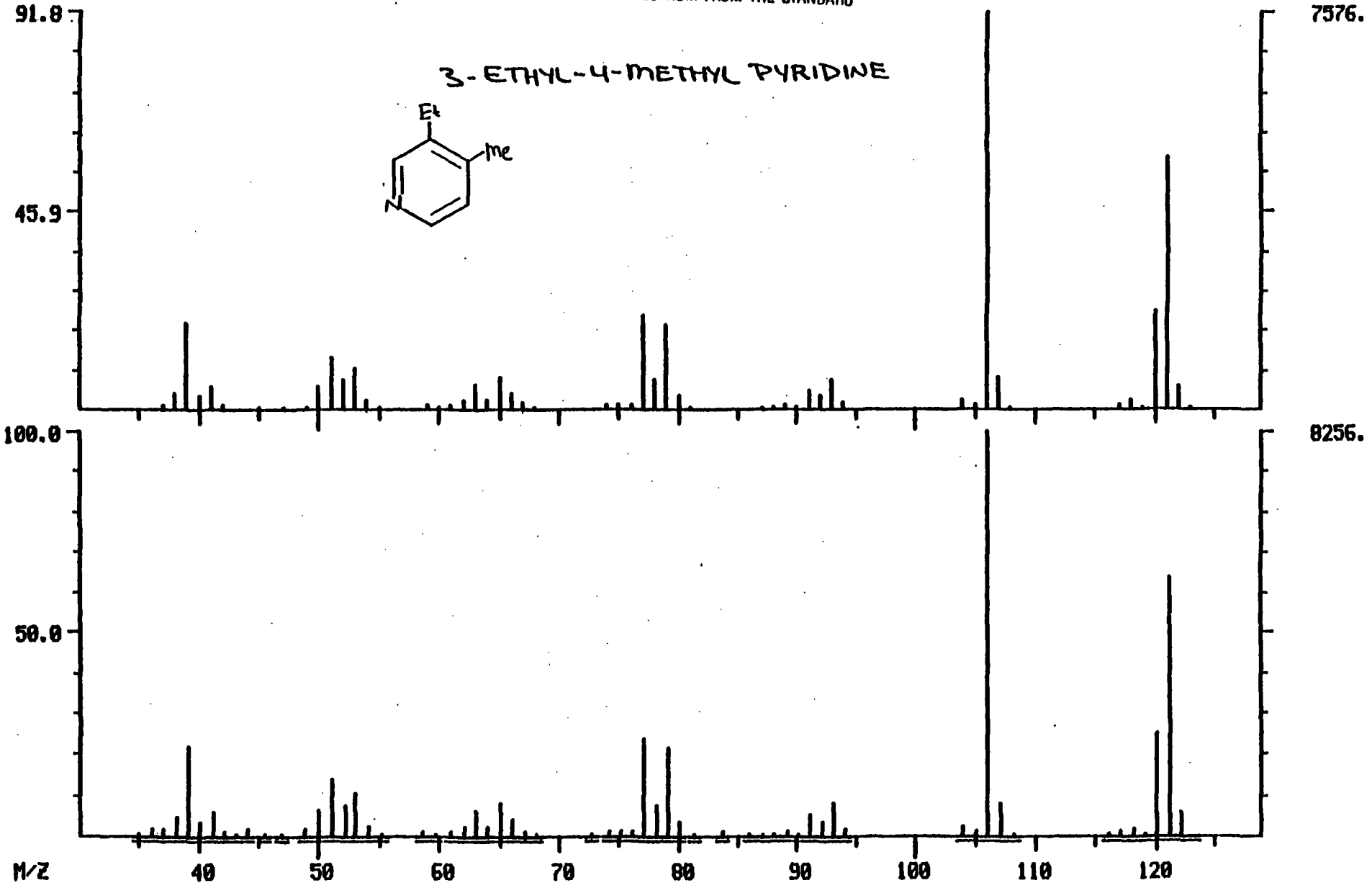
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 10:19
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #826
CALI: 060288CR #5

BASE M/Z: 106/ 106
RIC: 30111./ 33727.

SPECTRUM FROM THE STANDARD

3-ETHYL-4-METHYL PYRIDINE



RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: D:S59436X828. STARTED : 6/03/88 15:16:29

$RF = \frac{ng}{ml} \times \frac{0.5ml}{3.79L} = 0.132\ ng/L$

6/3/88 10:58:39 SCAN 1 OF 3900

00808

Acquisition started

Acquire Run 2: S59436X828 ACQUIRING
06/03/88 10:58:00 + 0:03 Free sectors: 21548 Scan: 7 of 3900
Sample: 59436-10 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc: PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc: PA GC elapsed time : 0: 3 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: P1 Mass intervals: 3
Scan time: 0.500 s Samp. int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	225.500	226.500	0.105	1	100	0	1	1	Pos
2	227.500	228.500	0.105	1	100	0	1	1	Pos
3	239.500	240.500	0.105	1	100	0	1	1	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

6/3/88 11:27:06 SCAN 3412 OF 3900

MID scan Desc: P2 Mass intervals: 3
Scan time: 0.500 s Samp. Int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

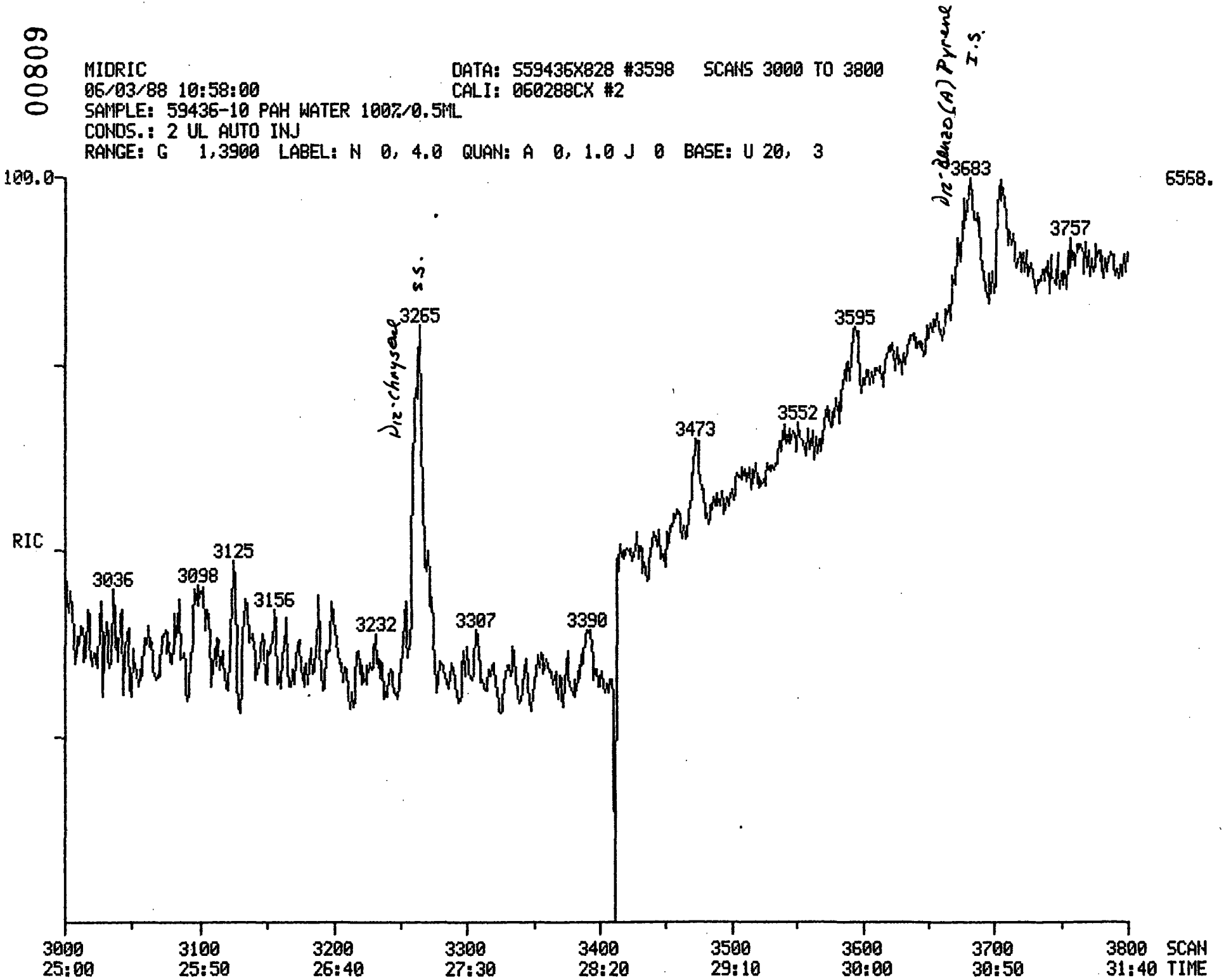
6/3/88 11:31:14
ACQUISITION COMPLETED
SCANS 1 TO 3411 Centroid
SCAN 3412 Suspended
SCANS 3413 TO 3900 Centroid

M e Scans Secs Out of % Peaks per scan per sec

00809

MIDRIC
06/03/88 10:58:00
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436X828 #3598 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X828

Data: S59436X828.TI
06/03/88 10:58:00
Sample: 59436-10 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE	250 PH# 10
11	BENZO(J)FLUORANTHENE	252 PH# 11
12	BENZO(J)FLUORANTHENE	252 PH# 11
13	BENZO(J)FLUORANTHENE	250 PH# 12
14	BENZO(A)PYRENE	252 PH# 13
15	BENZO(A)PYRENE	250 PH# 14

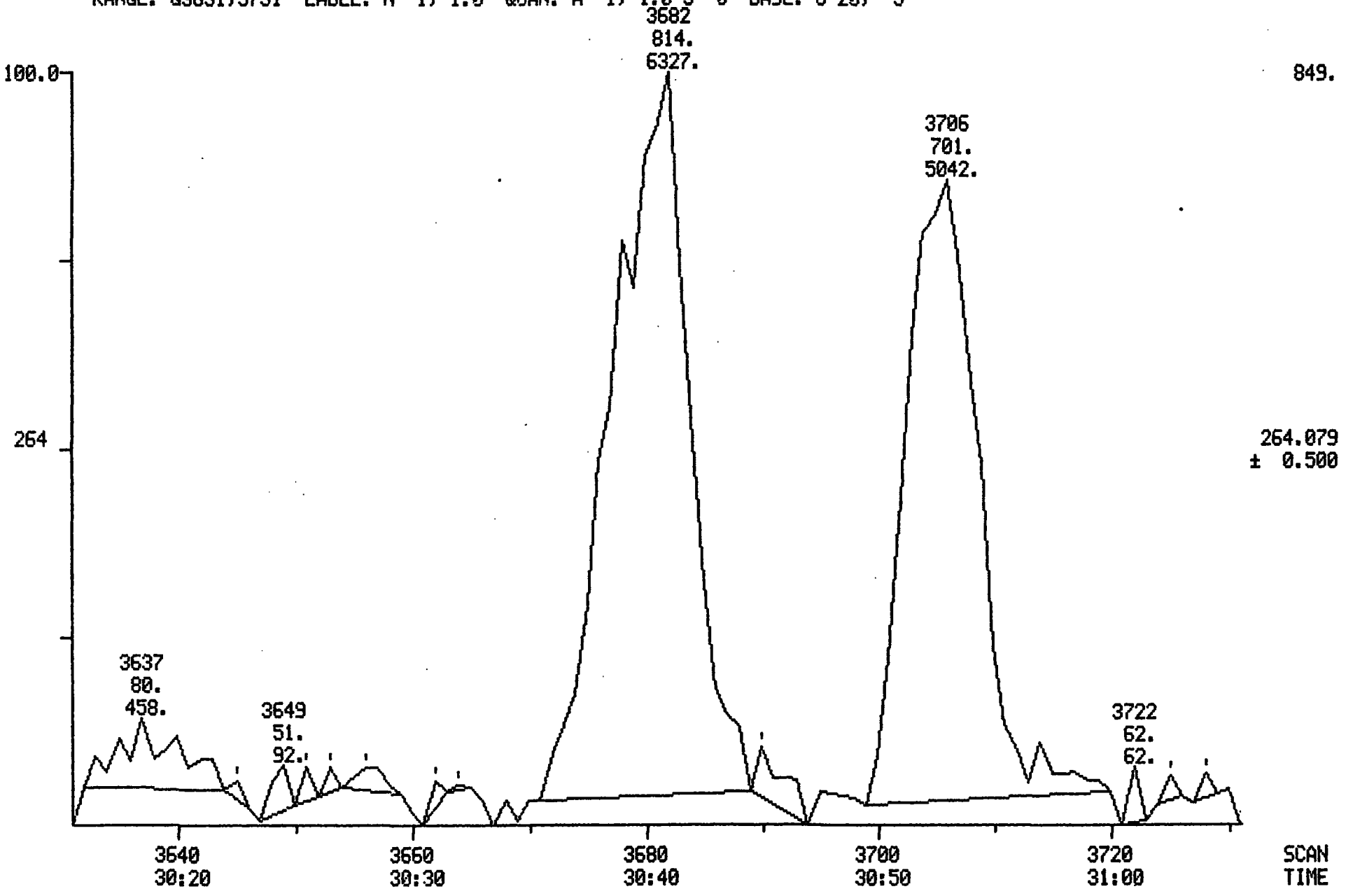
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3682	30:41	1	1.000	A BB	6327.	80.000	NG/ML	10.35
2	240	3265	27:12	1	0.887	A BV	16478.	158.949	NG/ML	20.56
3	228	3257	27:08	1	0.885	A BV	3539.	32.090	NG/ML	4.15
4	226	3261	27:10	1	0.886	A BV	1328.	54.446	NG/ML	7.04
5	228	3271	27:15	1	0.888	A VB	5239.	46.395	NG/ML	6.00
6	226	3268	27:14	1	0.888	A VB	2696.	92.122	NG/ML	11.92
7	252	3595	29:57	1	0.976	A BB	4962.	38.619	NG/ML	5.00
8	250	3594	29:57	1	0.976	A BB	1292.	53.263	NG/ML	6.89
9	252	3595	29:57	1	0.976	A BB	4962.	38.619	NG/ML	5.00
10	250	3594	29:57	1	0.976	A BB	1292.	65.031	NG/ML	8.41
11	252	3614	30:07	1	0.982	A BB	340.	2.874	NG/ML	0.37
12	252	3618	30:09	1	0.983	A BB	340.	2.874	NG/ML	0.37
13	250	3622	30:11	1	0.984	A BB	424.	16.221	NG/ML	2.10
14	252	3688	30:44	1	1.002	A VB	4133.	39.274	NG/ML	5.08
15	250	3683	30:41	1	1.000	A VV	1198.	52.342	NG/ML	6.77

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:40	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:10	1.00	0.886	1.00	158.95	80.00	2.604	1.311	1.99
3	27:07	1.00	0.884	1.00	32.09	80.00	0.559	1.395	0.40
4	27:07	1.00	0.884	1.00	54.45	80.00	0.210	0.308	0.68
5	27:12	1.00	0.887	1.00	46.39	80.00	0.828	1.428	0.58
6	27:12	1.00	0.887	1.00	92.12	80.00	0.426	0.370	1.15
7	29:55	1.00	0.976	1.00	38.62	80.00	0.784	1.625	0.48
8	29:56	1.00	0.976	1.00	53.26	80.00	0.204	0.307	0.67
9	29:57	1.00	0.977	1.00	38.62	80.00	0.784	1.625	0.48

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	29:58	1.00	0.977	1.00	65.03	80.00	0.204	0.251	0.81
11	29:41	1.01	0.982	1.00	2.87	80.00	0.054	1.496	0.04
12	29:41	1.02	0.982	1.00	2.87	80.00	0.054	1.496	0.04
13	29:41	1.02	0.982	1.00	16.22	80.00	0.067	0.330	0.20
14	30:43	1.00	1.002	1.00	39.27	80.00	0.653	1.331	0.49
15	30:43	1.00	1.002	1.00	52.34	80.00	0.189	0.289	0.65

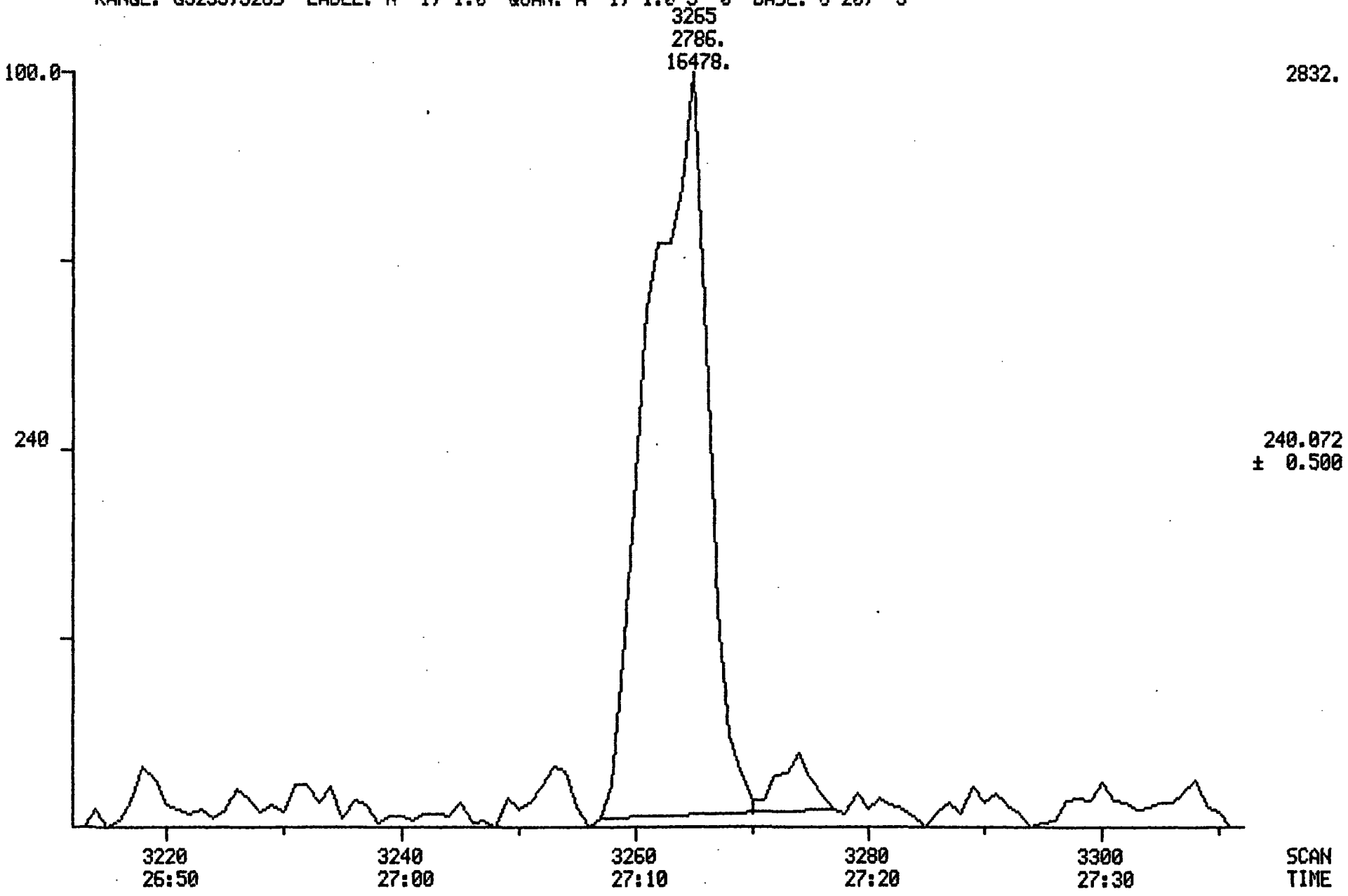
00812

MIDMASS CHROMATOGRAM DATA: S59436X828 #3681 SCANS 3631 TO 3731
06/03/88 10:58:00 CALI: 060288CX #2
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3631,3731 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



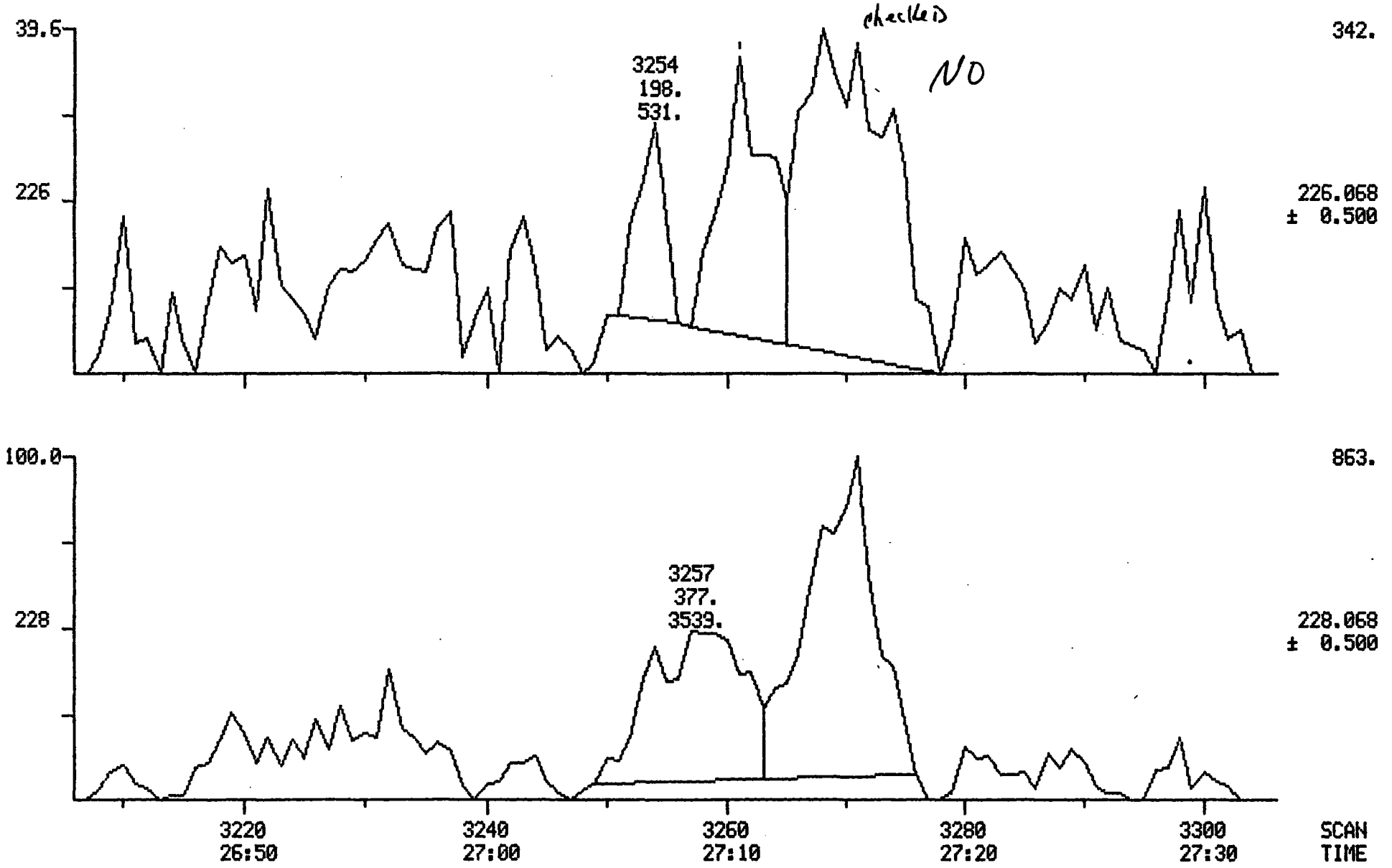
00813

MIDMASS CHROMATOGRAM DATA: S59436X828 #3262 SCANS 3212 TO 3312
06/03/88 10:58:00 CALI: 060288CX #2
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3255,3269 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



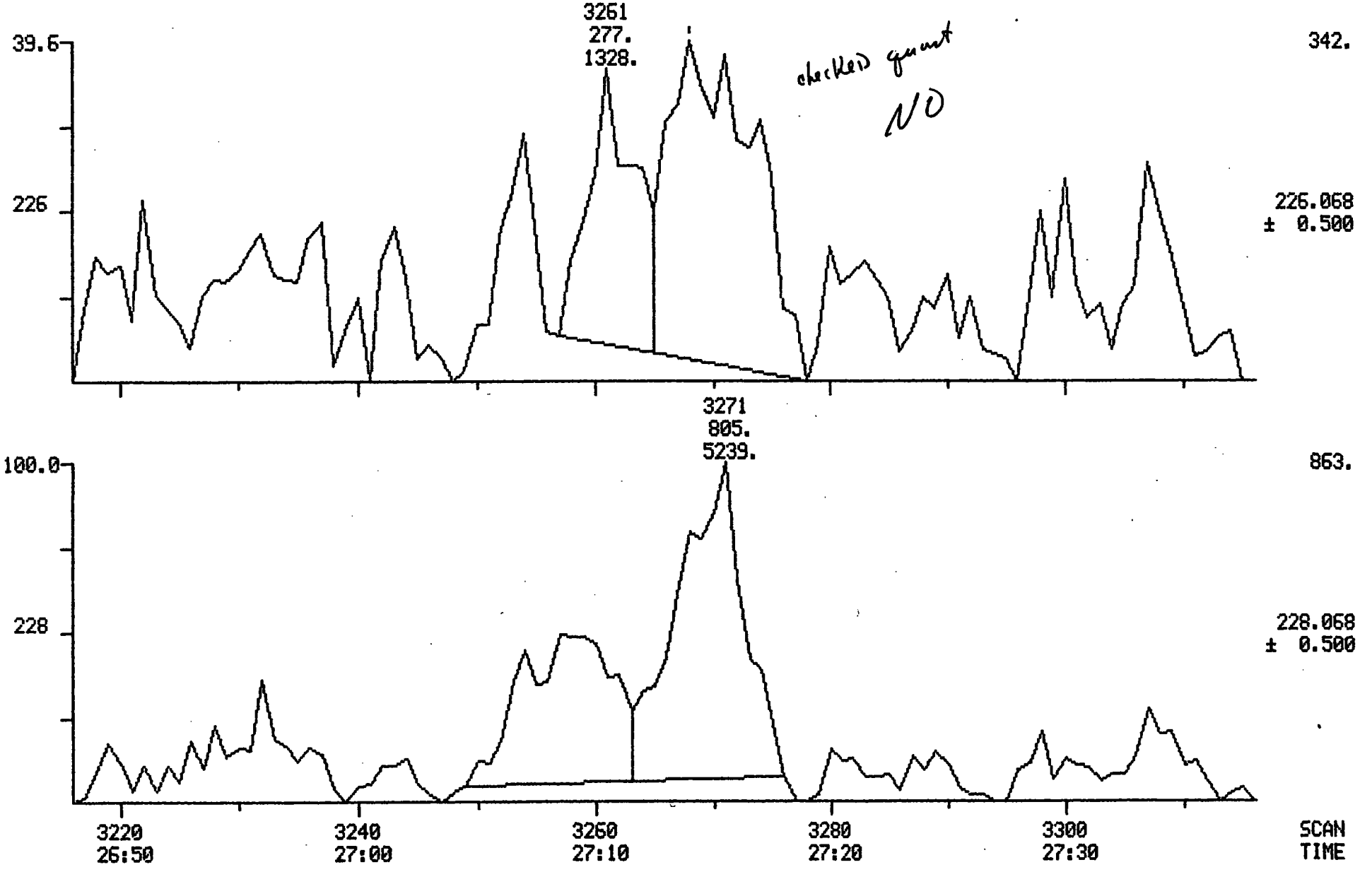
00814

MIDMASS CHROMATOGRAMS DATA: S59436X828 #3256 SCANS 3206 TO 3306
06/03/88 10:58:00 CALI: 060288CX #2
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3249,3263 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



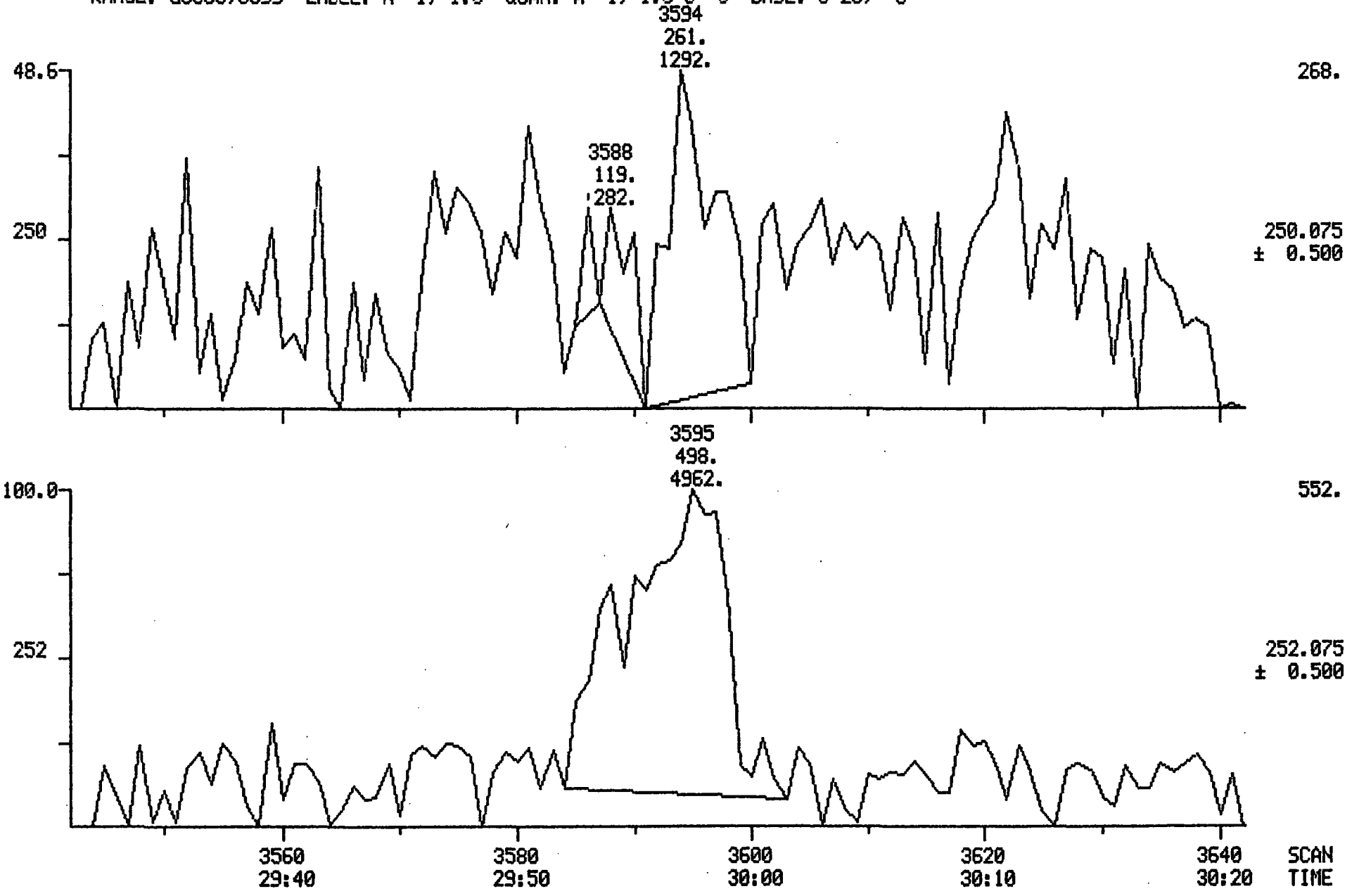
00815

MIDMASS CHROMATOGRAMS DATA: S59436X828 #3266 SCANS 3216 TO 3316
06/03/88 10:58:00 CALI: 060288CX #2
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3259,3273 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



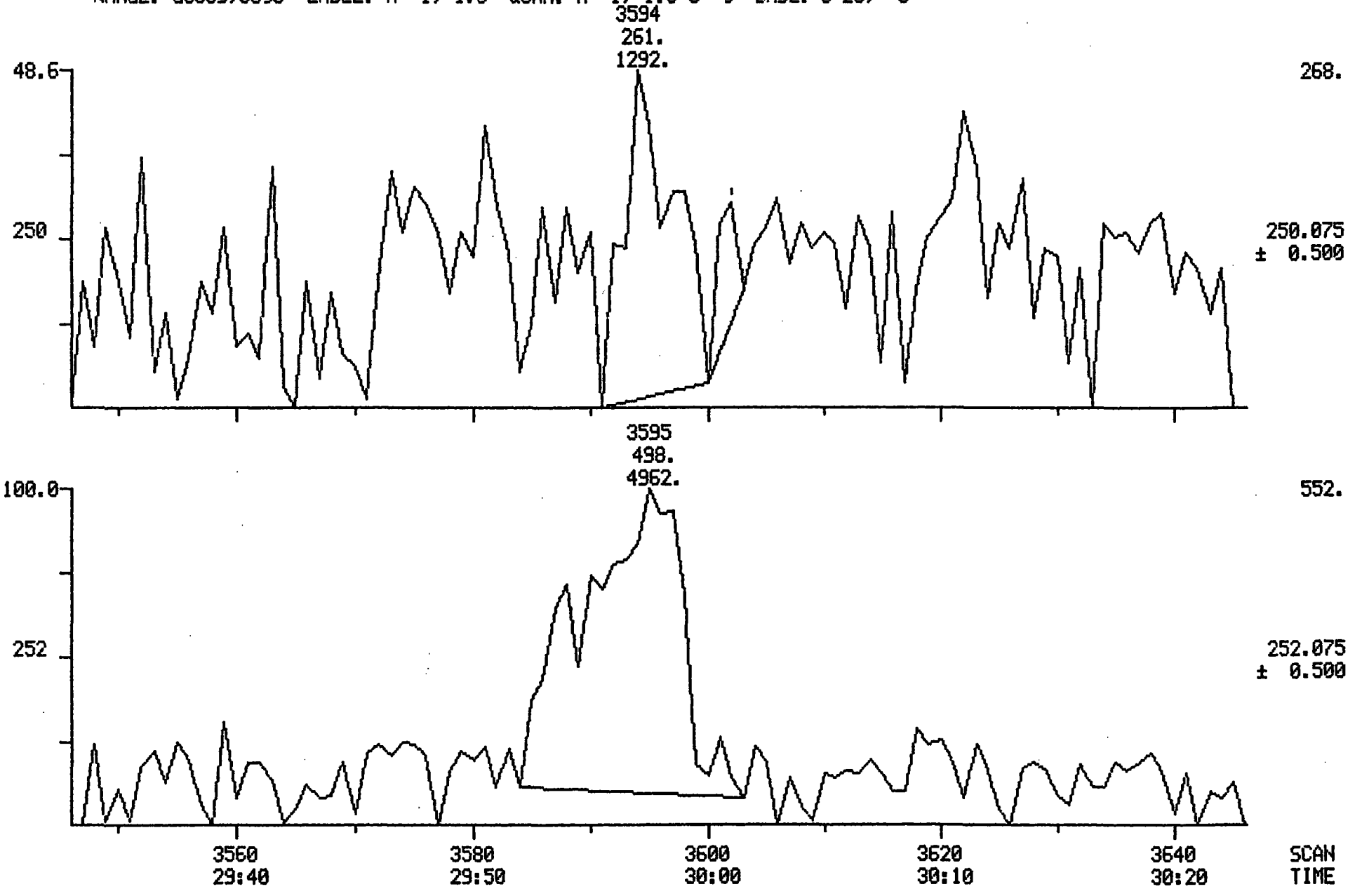
00816

MIDMASS CHROMATOGRAMS DATA: 559436X828 #3592 SCANS 3542 TO 3642
06/03/88 10:58:00 CALI: 060288CX #2
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3585,3599 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



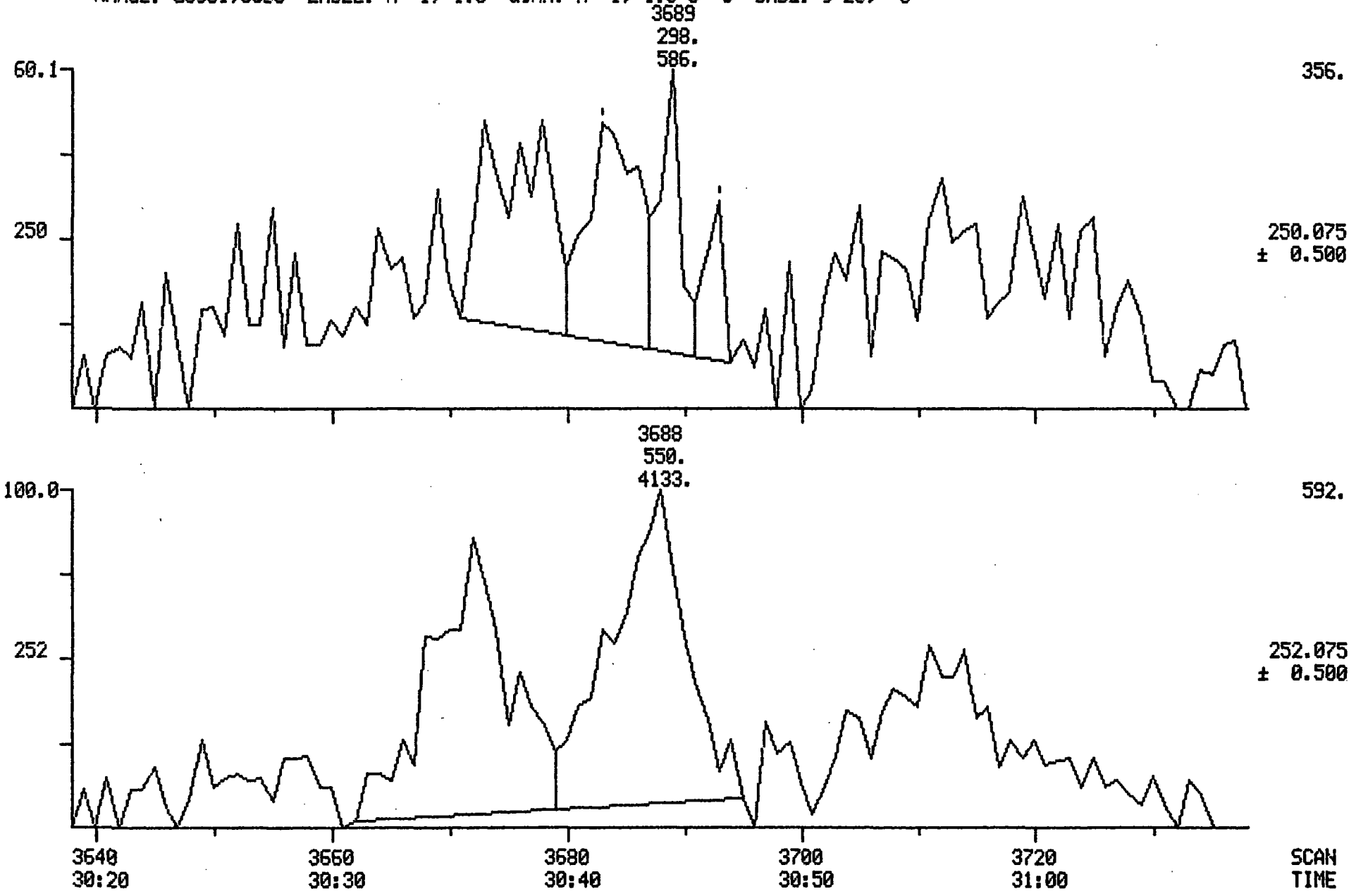
00817

MIDMASS CHROMATOGRAMS DATA: S59436X828 #3596 SCANS 3546 TO 3646
06/03/88 10:58:00 CALI: 060288CX #2
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3589,3603 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00818

MIDMASS CHROMATOGRAMS DATA: S59436X828 #3688 SCANS 3638 TO 3738
06/03/88 10:58:00 CALI: 060288CX #2
SAMPLE: 59436-10 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3681,3695 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X828

00819

Data: S59436X828.TI
06/03/88 10:58:00
Sample: 59436-10 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE	250 PH# 10
11	BENZO(J)FLUORANTHENE	252 PH# 11
12	BENZO(J)FLUORANTHENE	252 PH# 11
13	BENZO(J)FLUORANTHENE	250 PH# 12
14	BENZO(A)PYRENE	252 PH# 13
15	BENZO(A)PYRENE	250 PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3682	30:41	1	1.000	A BB	6327.	80.000	NG/ML	10.35
2	240	3265	27:12	1	0.887	A BV	16478.	158.949	NG/ML	20.56
3	228	3257	27:08	1	0.885	A BV	3539.	32.090	NG/ML	4.15
4	226	3261	27:10	1	0.886	A BV	1328.	54.446	NG/ML	7.04
5	228	3271	27:15	1	0.888	A VB	5239.	46.395	NG/ML	6.00
6	226	3268	27:14	1	0.888	A VB	2696.	92.122	NG/ML	11.92
7	252	3595	29:57	1	0.976	A BB	4962.	38.619	NG/ML	5.00
8	250	3594	29:57	1	0.976	A BB	1292.	53.263	NG/ML	6.89
9	252	3595	29:57	1	0.976	A BB	4962.	38.619	NG/ML	5.00
10	250	3594	29:57	1	0.976	A BB	1292.	65.031	NG/ML	8.41
11	252	3614	30:07	1	0.982	A BB	340.	2.874	NG/ML	0.37
12	252	3618	30:09	1	0.983	A BB	340.	2.874	NG/ML	0.37
13	250	3622	30:11	1	0.984	A BB	424.	16.221	NG/ML	2.10
14	252	3688	30:44	1	1.002	A VB	4133.	39.274	NG/ML	5.08
15	250	3683	30:41	1	1.000	A VV	1198.	52.342	NG/ML	6.77

RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: 2: S59436X867. STARTED : 6/07/88 3:12:20

00820

RF = ng/ml x 0.5ml / 3.79L = 0.132 ng/L
SJ = 1

6/6/88 16:32:52 SCAN 1 OF 3900
Acquisition started

Acquire Run 2: S59436X867 ACQUIRING
06/06/88 16:32:00 + 0:04 Free sectors: 11116 Scan: 8 of 3900
Sample: 59436-10 PAH/WATER 100%/0.5 ML RERUN
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc: PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc: PA GC elapsed time : 0: 3 min Int. oven : 300 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: P1 Mass intervals: 3
Scan time: 0.500 s Samp. int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	225.500	226.500	0.105	1	100	0	1	1	Pos
2	227.500	228.500	0.105	1	100	0	1	1	Pos
3	239.500	240.500	0.105	1	100	0	1	1	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

6/6/88 17:01:16 SCAN 3407 OF 3900

MID scan Desc: P2 Mass intervals: 3
Scan time: 0.500 s Samp. Int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

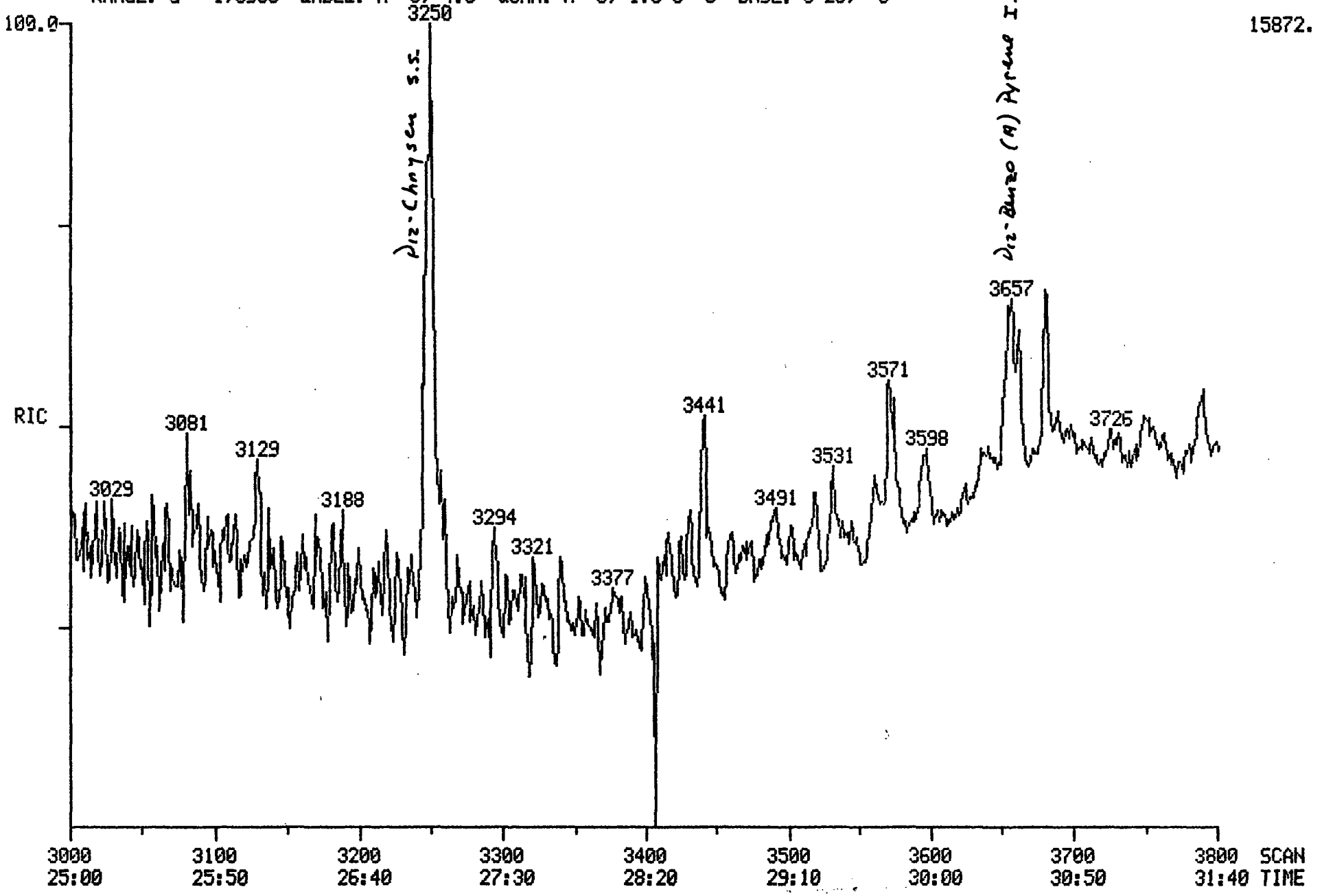
6/6/88 17:05:26
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00821

MIDRIC
06/06/88 16:32:00
SAMPLE: 59436-10 PAH/WATER 100Z/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436X867 #1 SCANS 3000 TO 3800
CALI: 060688CX #2



Quantitation Report File: S59436X867

00822

Data: S59436X867.TI
06/06/88 16:32:00
Sample: 59436-10 PAH/WATER 100%/0.5 ML RERUN
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE	250 PH# 10
11	BENZO(J)FLUORANTHENE	252 PH# 11
12	BENZO(J)FLUORANTHENE	250 PH# 12
13	BENZO(A)PYRENE	252 PH# 13
14	BENZO(A)PYRENE	250 PH# 14

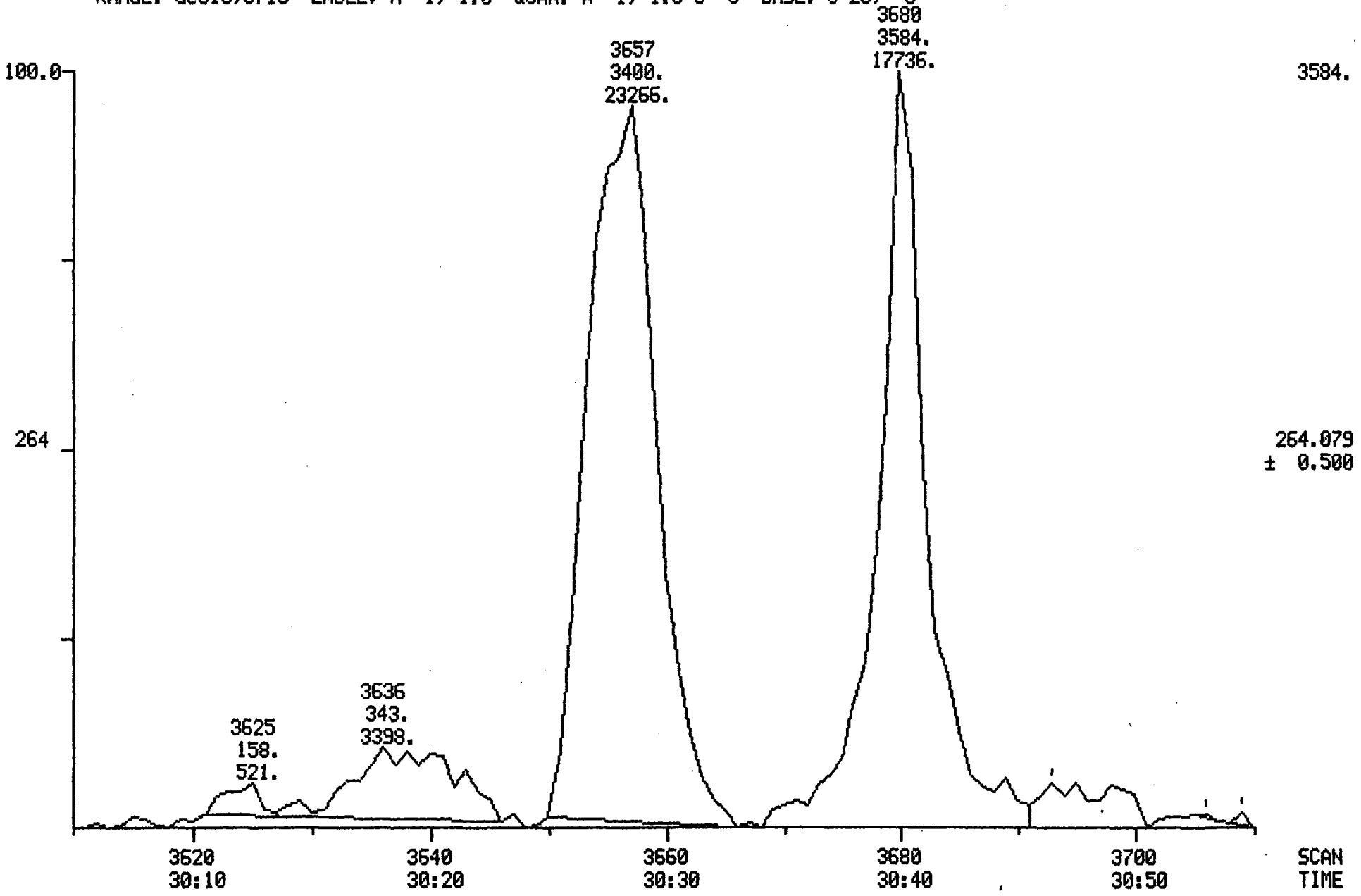
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3657	30:28	1	1.000	A BB	23266.	80.000	NG/ML	11.81
2	240	3250	27:05	1	0.889	A BV	57548.	120.800	NG/ML	17.84
3	228	3245	27:02	1	0.887	A VV	13456.	30.741	NG/ML	4.54
4	226	3247	27:03	1	0.888	A VV	8204.	80.190	NG/ML	11.84
5	228	3257	27:08	1	0.891	A VB	13887.	31.752	NG/ML	4.69
6	226	3247	27:03	1	0.888	A VV	8204.	66.740	NG/ML	9.85
7	252	3571	29:45	1	0.976	A VB	18227.	42.594	NG/ML	6.29
8	250	3572	29:46	1	0.977	A VB	4660.	40.024	NG/ML	5.91
9	252	3571	29:45	1	0.976	A VB	18227.	43.545	NG/ML	6.43
10	250	3572	29:46	1	0.977	A VB	4660.	42.759	NG/ML	6.31
11	252	3598	29:59	1	0.984	A BB	4368.	10.039	NG/ML	1.48
12	250	3598	29:59	1	0.984	A BB	3842.	39.971	NG/ML	5.90
13	252	3662	30:31	1	1.001	A BB	7500.	20.168	NG/ML	2.98
14	250	3662	30:31	1	1.001	A VB	2064.	27.985	NG/ML	4.13

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:30	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:05	1.00	0.888	1.00	120.80	80.00	2.473	1.638	1.51
3	27:02	1.00	0.887	1.00	30.74	80.00	0.578	1.505	0.38
4	27:02	1.00	0.887	1.00	80.19	80.00	0.353	0.352	1.00
5	27:08	1.00	0.890	1.00	31.75	80.00	0.597	1.504	0.40
6	27:08	1.00	0.890	1.00	66.74	80.00	0.353	0.423	0.83
7	29:45	1.00	0.976	1.00	42.59	80.00	0.783	1.471	0.53
8	29:46	1.00	0.976	1.00	40.02	80.00	0.200	0.400	0.50
9	29:50	1.00	0.978	1.00	43.54	80.00	0.783	1.439	0.54
10	29:50	1.00	0.978	1.00	42.76	80.00	0.200	0.375	0.53
11	29:41	1.01	0.982	1.00	10.04	80.00	0.188	1.496	0.13

	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	29:41	1.01	0.982	1.00	39.97	80.00	0.165	0.330	0.50
13	30:34	1.00	1.002	1.00	20.17	80.00	0.322	1.279	0.25
14	30:34	1.00	1.002	1.00	27.98	80.00	0.089	0.254	0.35

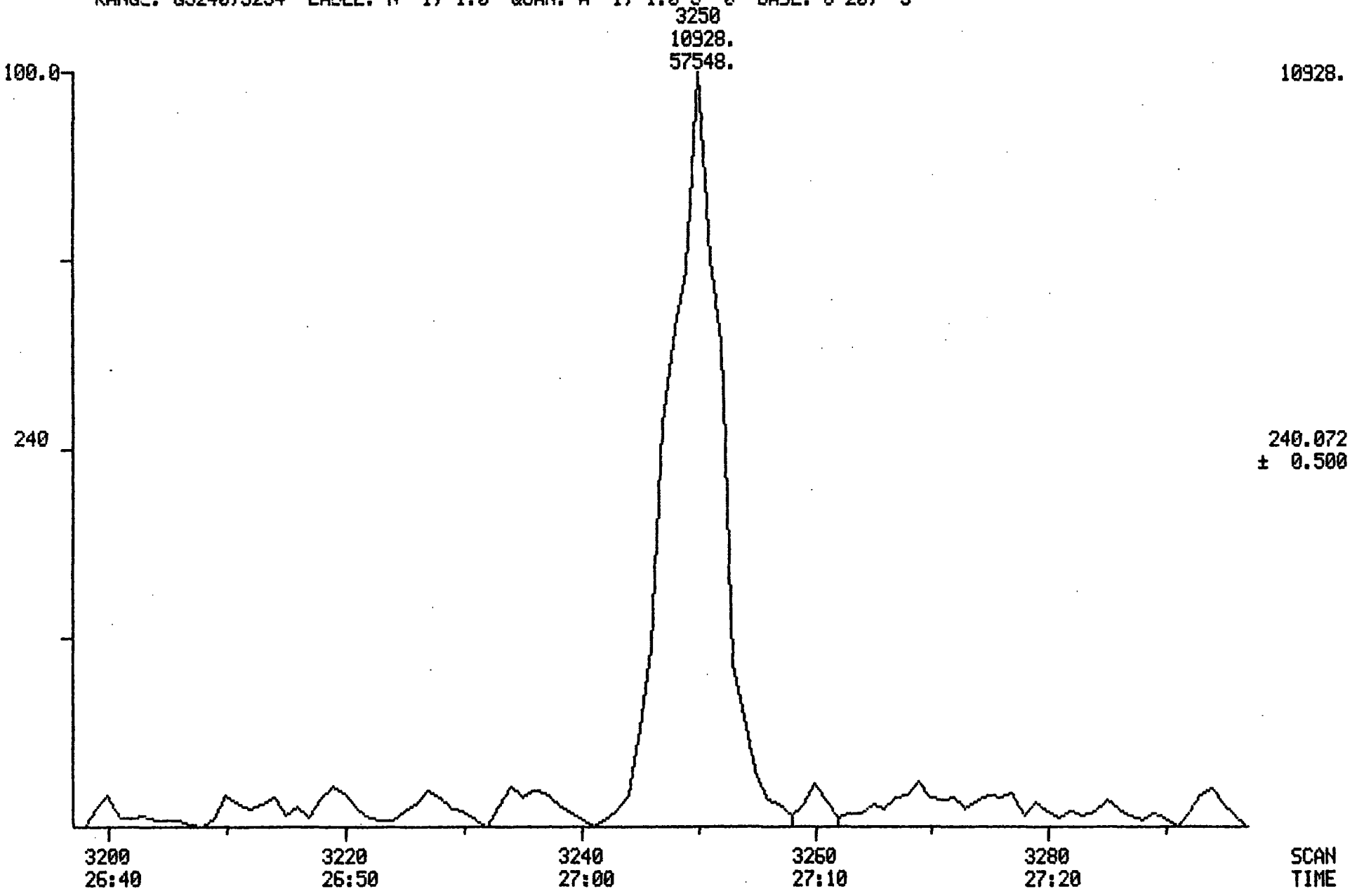
00824

MIDMASS CHROMATOGRAM DATA: S59436X867 #3660 SCANS 3610 TO 3710
06/06/88 16:32:00 CALI: 060688CX #2
SAMPLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3610,3710 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



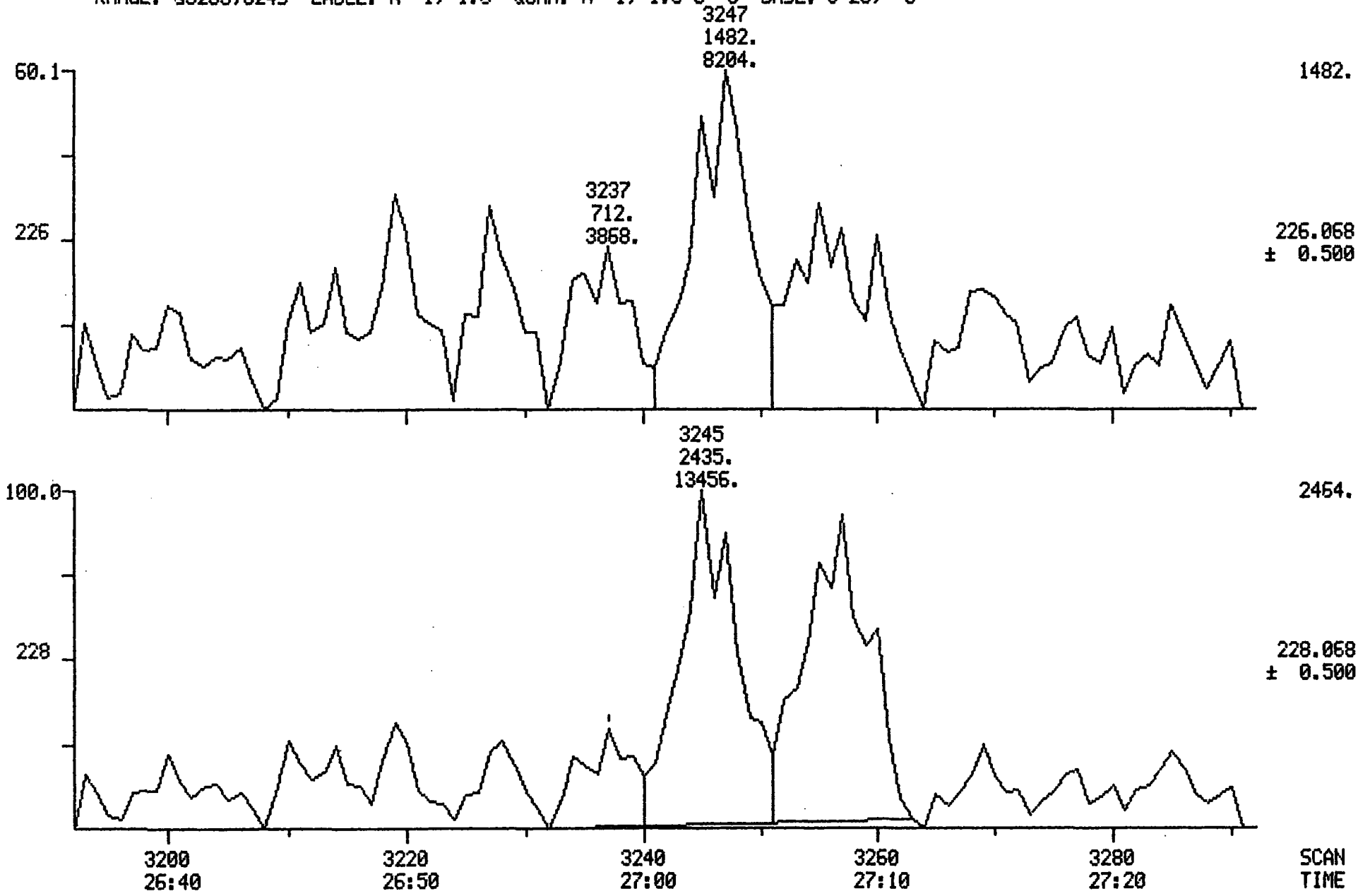
00825

MIDMASS CHROMATOGRAM DATA: S59436X867 #3247 SCANS 3197 TO 3297
06/06/88 16:32:00 CALI: 060688CX #2
SAMPLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3240,3254 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



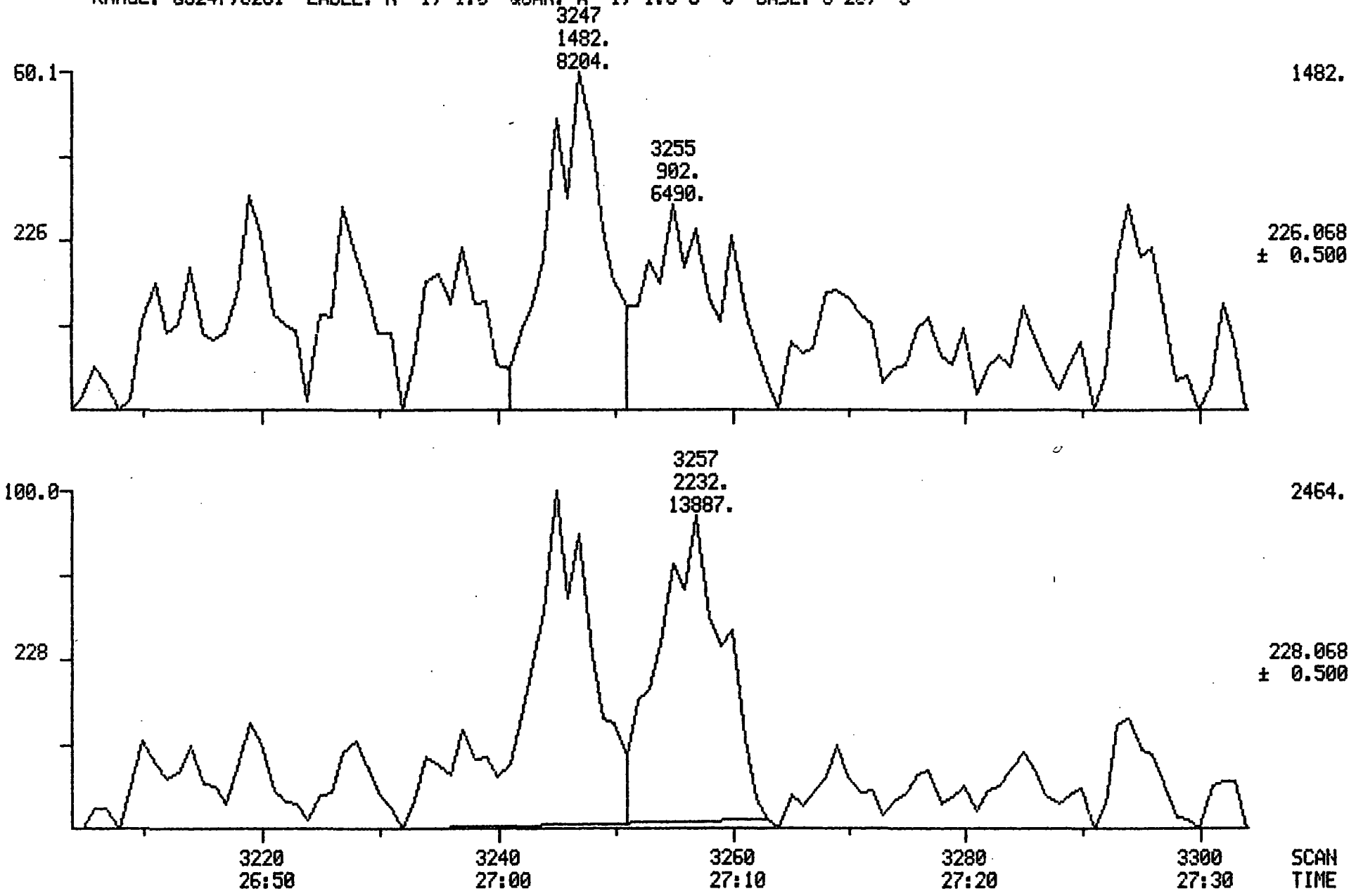
00826

MIDMASS CHROMATOGRAMS DATA: S59436X867 #3242 SCANS 3192 TO 3292
06/06/88 16:32:00 CALI: 060688CX #2
SAMPLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3235,3249 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



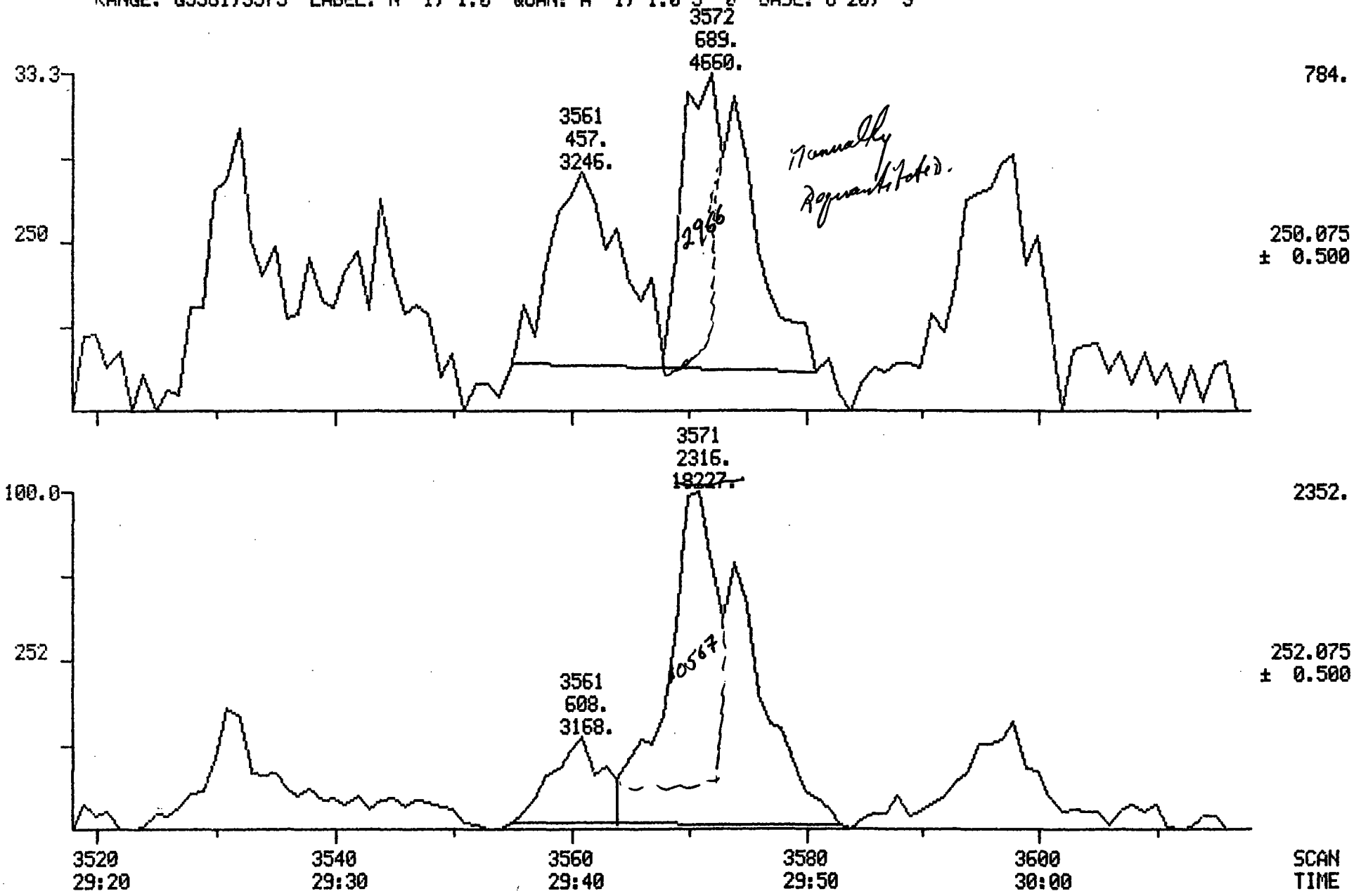
00827

MIDMASS CHROMATOGRAMS DATA: S59436X867 #3254 SCANS 3204 TO 3304
06/06/88 16:32:00 CALI: 060688CX #2
SAMPLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3247,3261 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



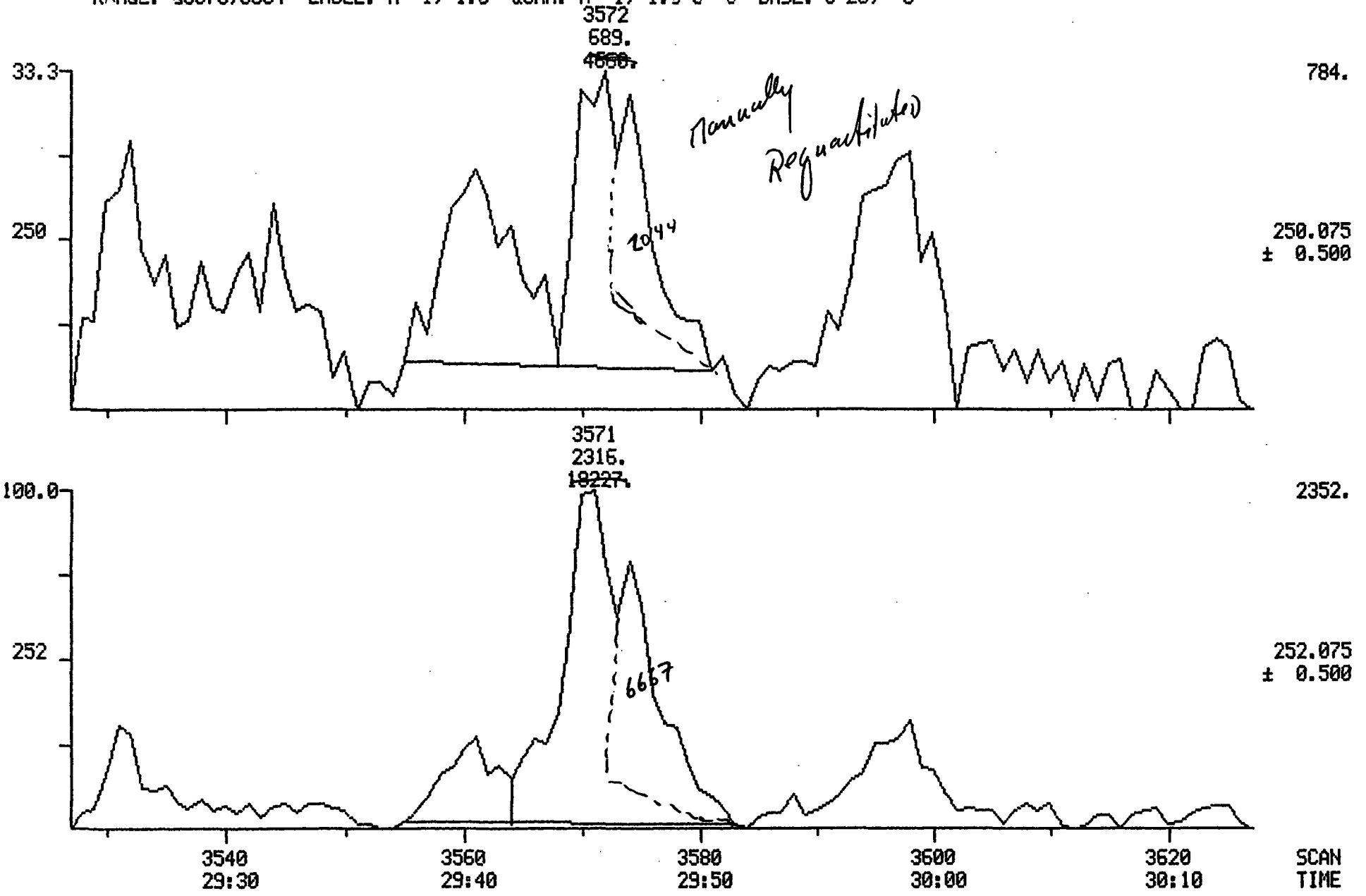
00828

MIDMASS CHROMATOGRAMS DATA: S59436X867 #3568 SCANS 3518 TO 3618
06/06/88 16:32:00 CALI: 060688CX #2
SAMPLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3561,3575 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



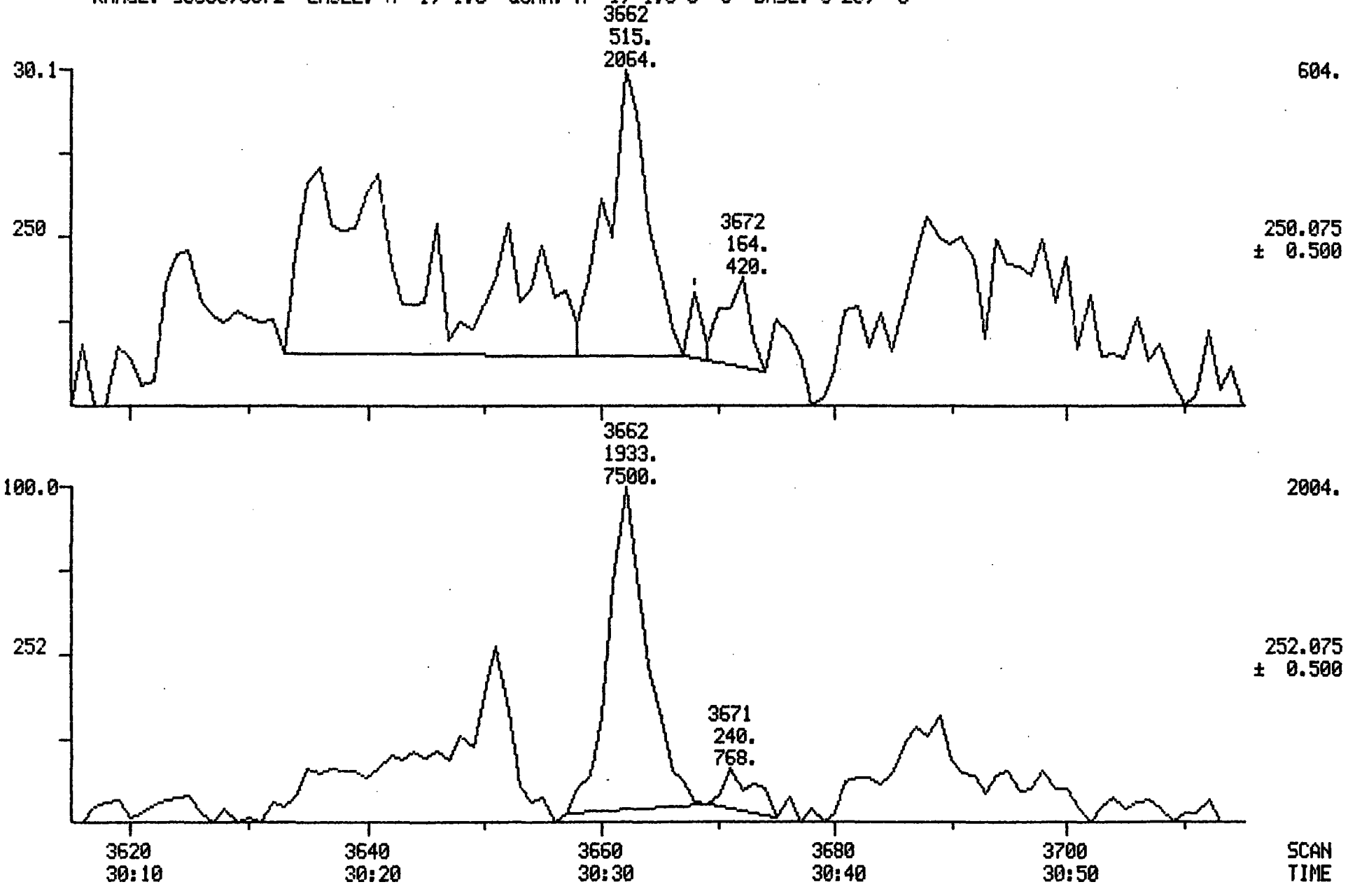
00829

MIDMASS CHROMATOGRAMS DATA: S59436X867 #3577 SCANS 3527 TO 3627
06/06/88 16:32:00 CALI: 060688CX #2
SAMPLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3570,3584 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00830

MIDMASS CHROMATOGRAMS DATA: S59436X867 #3665 SCANS 3615 TO 3715
06/06/88 16:32:00 CALI: 060688CX #2
SAMPLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3558,3672 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



ANTITATION REPORT FILE: S59436X867

00831

'A: S59436X867.TI
'06/88 16:32:00
'PLE: 59436-10 PAH/WATER 100%/0.5 ML RERUN
;MITTED BY: RMAL ANALYST: JGG/GW

)UNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
;P. FAC. FROM LIBRARY ENTRY

J	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	264	3657	30:28	1	1.000	A BB	23266.	80.000	NG/ML	13.49
2	240	3250	27:05	1	0.889	A BV	57548.	120.800	NG/ML	20.36
3	228	3245	27:02	1	0.887	A VV	13456.	30.741	NG/ML	5.18
4	226	3247	27:03	1	0.888	A VV	8204.	80.190	NG/ML	13.52
5	228	3257	27:08	1	0.891	A VB	13887.	31.752	NG/ML	5.35
6	226	3247	27:03	1	0.888	A VV	8204.	66.740	NG/ML	11.25
7	252	3571	29:45	1	0.976	M XX	10567.	24.695	NG/ML	4.16
8	250	3572	29:46	1	0.977	M XX	2966.	25.473	NG/ML	4.29
9	252	3574	29:47	1	0.977	M XX	6667.	15.928	NG/ML	2.68
10	250	3574	29:47	1	0.977	M XX	2044.	18.752	NG/ML	3.16
11	252	3598	29:59	1	0.984	A BB	4368.	10.039	NG/ML	1.69
12	250	3598	29:59	1	0.984	A BB	3842.	39.971	NG/ML	6.74
13	252	3662	30:31	1	1.001	A BB	7500.	20.168	NG/ML	3.40
14	250	3662	30:31	1	1.001	A VB	2064.	27.985	NG/ML	4.72

RMAL QUANTITATION SUMMARY FILE: S59436X867
RESULTS PRINTED ONLY FOR COMPONENTS GREATER THAN 1

00832

NO	NAME				SCAN	REF	RRT	RRF	AMOUNT	UNITS
1	D12-BENZO(A)PYRENE	264I	PH# 01	3657	1	1.000	1.000	80.000	NG/ML	
2	D12-CHRYSENE	240S	PH# 02	3250	1	0.889	2.473	120.800	NG/ML	
3	BENZO(A)ANTHRACENE	228	PH# 03	3245	1	0.887	0.578	30.741	NG/ML	
4	BENZO(A)ANTHRACENE	226	PH# 04	3247	1	0.888	0.353	80.190	NG/ML	
5	CHRYSENE	228	PH# 05	3257	1	0.891	0.597	31.752	NG/ML	
6	CHRYSENE	226	PH# 06	3247	1	0.888	0.353	66.740	NG/ML	
7	BENZO(B)FLUORANTHENE	252	PH# 07	3571	1	0.976	0.454	24.695	NG/ML	
8	BENZO(B)FLUORANTHENE	250	PH# 08	3572	1	0.977	0.127	25.473	NG/ML	
9	BENZO(K)FLUORANTHENE	252	PH# 09	3574	1	0.977	0.287	15.928	NG/ML	
10	BENZO(K)FLUORANTHENE	250	PH# 10	3574	1	0.977	0.088	18.752	NG/ML	
11	BENZO(J)FLUORANTHENE	252	PH# 11	3598	1	0.984	0.188	10.039	NG/ML	
12	BENZO(J)FLUORANTHENE	250	PH# 12	3598	1	0.984	0.165	39.971	NG/ML	
13	BENZO(A)PYRENE	252	PH# 13	3662	1	1.001	0.322	20.168	NG/ML	
14	BENZO(A)PYRENE	250	PH# 14	3662	1	1.001	0.089	27.985	NG/ML	

COLUMN 1: J:AB12427
COLUMN 2: J:8B12627

5-9436-LO
20%

UNITS ON AMOUNT: µg/m.

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
023	AROCLOR 1016(peak 1)	.0068	2.0	.0022	1.3	NA
026	AROCLOR 1221(peak 1)	.0046	2.0	.0013	2.6	NA
027	AROCLOR 1232(peak 1)	.0066	2.0	.0020	2.6	NA
029	AROCLOR 1242(peak 1)	.0062	2.0	.0023	2.6	NA
052	DIALLATE	.0000	1.0	.0000	4.2	.0000

00833

DBC

A) $\frac{24.0}{24.0}(100\%) = 100\%$

B) $\frac{20.5}{22.0}(100\%) = 93\%$

DBC Recovery = 93%
No HSL Pests/PCBs detected

NA - COLUMN AVERAGE IS NOT APPLICABLE BECAUSE THE %DIFFERENCE(AMOUNTS) > 10%

RESULT FILE: 3:AR1Ø27 59936-10 A8/Ø9/88 LIBRARY: LTE1Ø18

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
Ø18	p,p'-DDT	12.767	12.793	6	17347	.ØØ37	ug/ml
Ø22	TOXAPHENE (peak 3)	12.483	12.783	6	17347	.Ø59Ø	ug/ml
Ø23	AROCLOR 1Ø16(peak 1)	1.683	1.717	4	991	.ØØ68	ug/ml
Ø26	AROCLOR 1221(peak 1)	1.683	1.717	4	991	.ØØ46	ug/ml
Ø27	AROCLOR 1232(peak 1)	1.683	1.717	4	991	.ØØ66	ug/ml
Ø29	AROCLOR 1242(peak 1)	1.683	1.717	4	991	.ØØ62	ug/ml
Ø47	DBC (surrogate)	26.833	26.85Ø	7	81497	.Ø141	ug/ml
Ø52	DIALLATE	1.7ØØ	1.717	4	991	.ØØØØ	ug/ml

00834

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: J1681263.7 59936-10 08/09/88 LIBRARY [illegible]

00835

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC	1.383	1.400	7	1427	.0001	ug/ml
004	delta-BHC	2.450	2.467	10	2508	.0002	ug/ml
006	ALDRIN	2.717	2.663	11	1736	.0001	ug/ml
017	ENDOSULFAN SULFATE	16.550	16.200	14	71450	.0083	ug/ml
023	AROCLOR 1016(peak 1)	1.267	1.283	6	636	.0022	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.650	8	9183	.0157	ug/ml
026	AROCLOR 1221(peak 1)	1.250	1.283	6	636	.0013	ug/ml
027	AROCLOR 1232(peak 1)	1.250	1.283	6	636	.0020	ug/ml
029	AROCLOR 1242(peak 1)	1.250	1.283	6	636	.0023	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	8	9183	.0167	ug/ml
048	ENDRIN KETONE	22.267	22.233	15	152456	.0038	ug/ml
052	DIALLATE	1.230	1.283	6	636	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

AREA PERCENT REPORT

00836

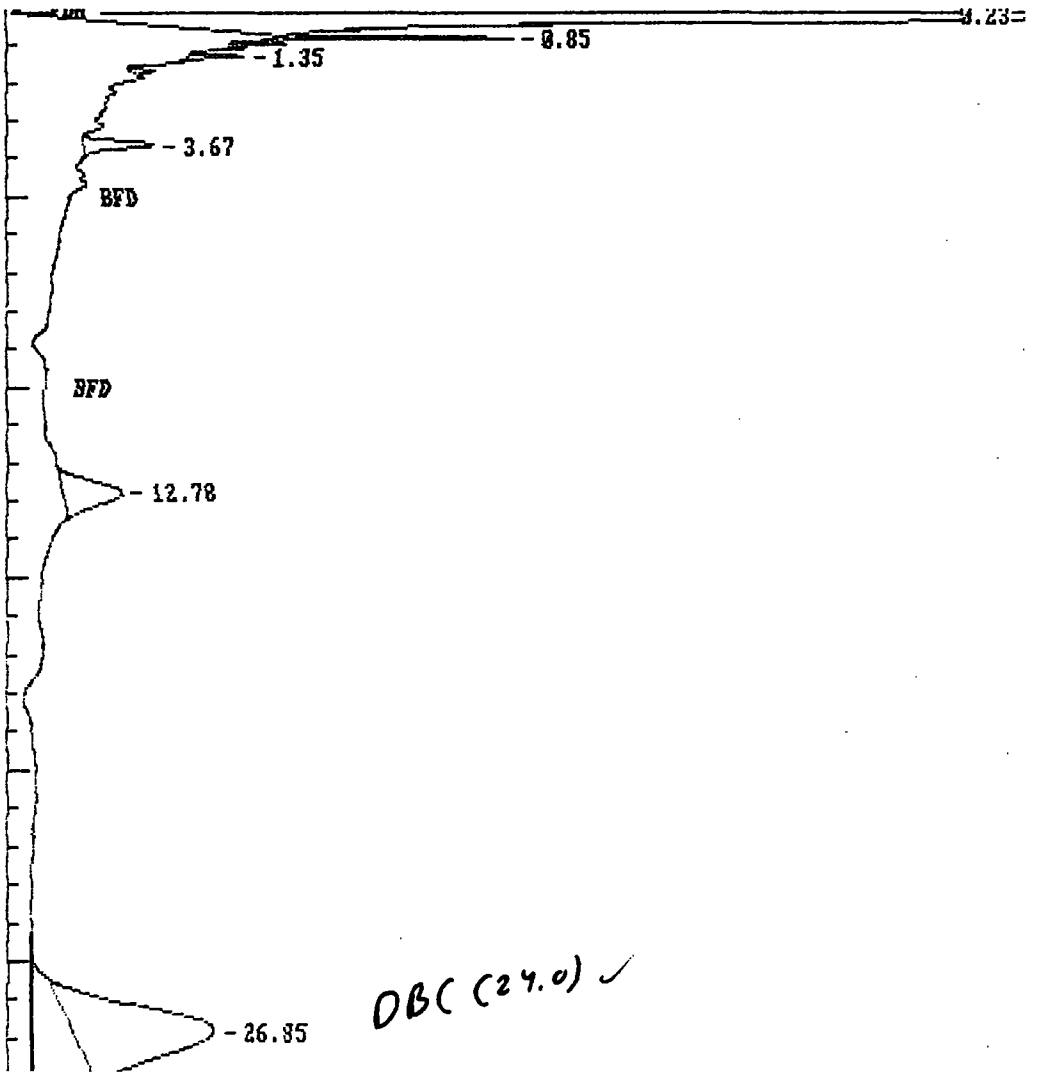
```
******************** 05-08-1988 11:52:36 Version 4.1 ********************
* Sample Name: 59436 10 20%                    Data File: J:AB12627      *
* Date: 05-07-1988 01:11:57 Method: M:ABPI                               *
* Interface: 10  Cycle#:  27   Operator SS  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HP 5890A              Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                     *
*            Detector 0: ECD                  Detector 1:               *
* Misc. Information: 4 UL INJECTION                    LPT1:          *  *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

SS
5/11/88

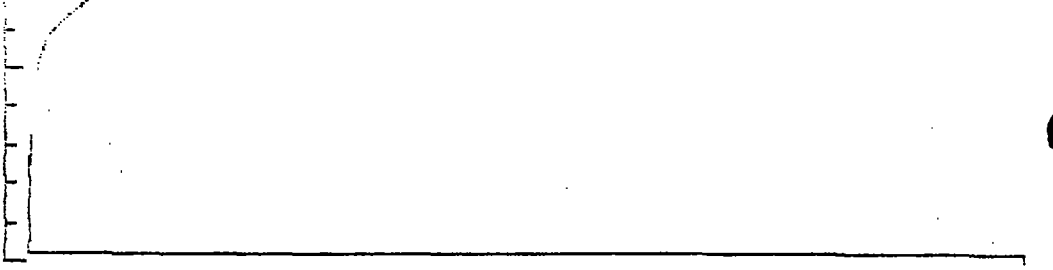
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	805630	87.4889	1	179291	100.000	4.5
2	0.85	7712	0.8375	1	1718	0.957	4.5
3	1.35	2177	0.2364	1	400	0.270	5.4
5	3.67	6475	0.7031	1	481	0.804	13.5
6	12.78	17347	1.8838	1	419	2.153	41.4
7	26.85	81497	8.8503	1	973	10.116	83.8

Total Area: 920837 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12627.PTS Printed on 05-08-1988 at 11:53:06
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



DBC (24.0) ✓



AREA PERCENT REPORT

00838

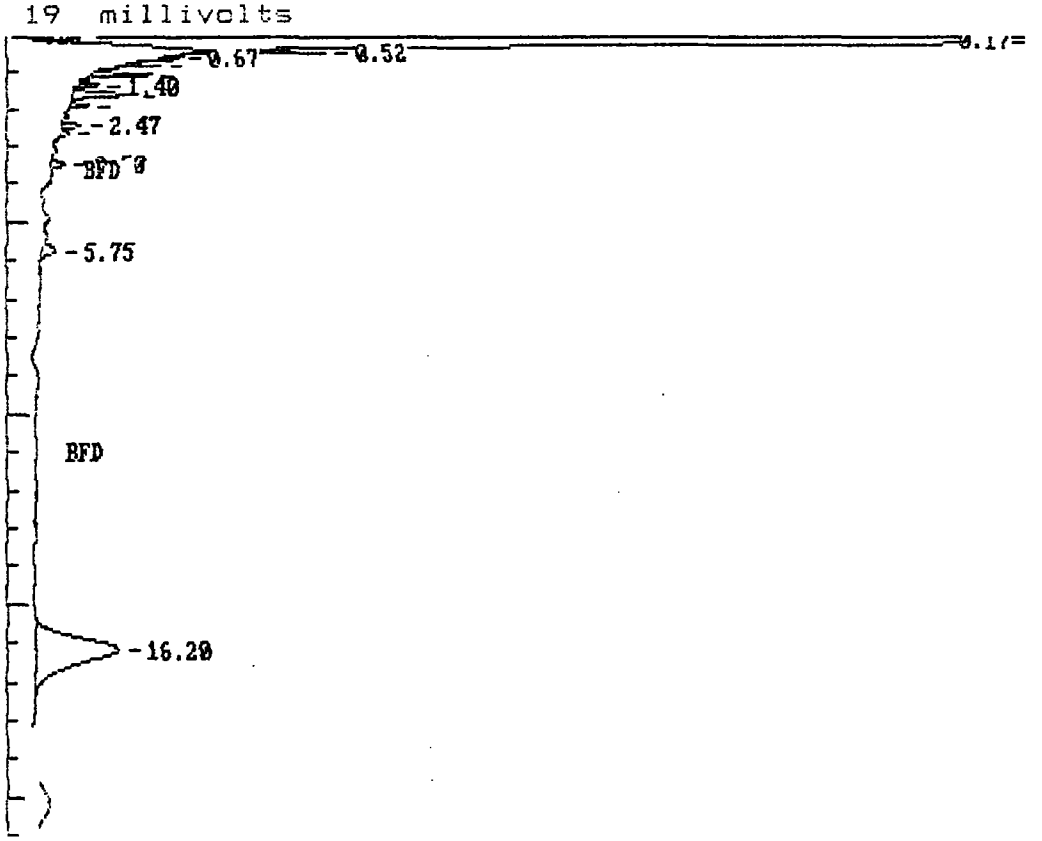
```
******************** 05-08-1988 12:26:33 Version 4.1 ********************
* Sample Name: 59436 10 20%                    Data File: J:BB12627      *
* Date: 05-07-1988 00:49:34 Method: M:BBPI                               *
* Interface: 12  Cycle#:  27   Operator SS  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEG ISOTHERMAL                                         *
*            Detector 0:                      Detector 1: ECD            *
* Misc. Information: 4 UL INJ                                            *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

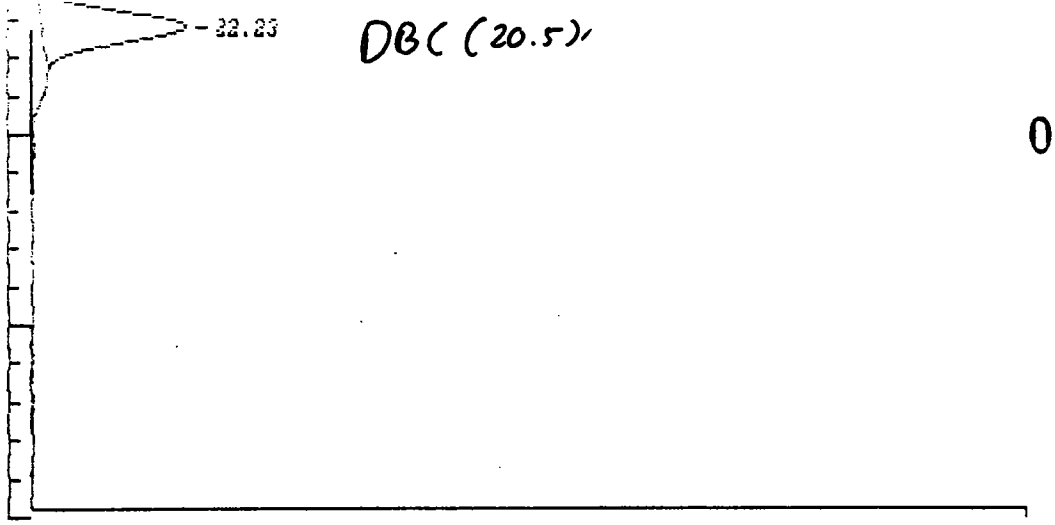
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1300133	83.0032	1	301059	100.000	4.3
2	0.52	6970	0.4449	1	2409	0.536	2.9
3	0.67	2610	0.1667	1	437	0.201	6.0
4	0.88	3407	0.2175	1	833	0.262	4.1
5	1.12	6503	0.4152	1	1207	0.500	5.4
7	1.40	1427	0.0911	1	410	0.110	3.5
8	1.65	9183	0.5863	1	1159	0.706	7.9
9	1.95	2059	0.1315	1	393	0.158	5.2
10	2.47	2508	0.1601	1	378	0.193	6.6
11	2.68	1736	0.1108	1	192	0.134	9.0
12	3.50	2180	0.1392	1	260	0.168	8.4
13	5.75	3743	0.2389	1	261	0.288	14.3
14	16.20	71450	4.5615	1	1567	5.496	45.6
15	22.23	152456	9.7331	1	2708	11.726	56.3

SS
5/11/88

Total Area: 1566364 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12627.PTS Printed on 05-08-1988 at 12:26:33
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts





DBC (20.5)

00839

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-11

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-11
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59436
Contract No. : N/A
Date Sample Rec: 04/20/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	04/28/88
Conc./Dilution Factor :	1.0
pH :	7.00
Percent Moisture :	100%
Percent Moisture (Decanted) :	N/A

CAS Number		Value	ug/L	CAS Number		Value	ug/L
74-83-3	Chloromethane		10 U	79-34-5	1,1,2,2-Tetrachloroethane		5 U
74-83-9	Bromomethane		10 U	78-87-5	1,2-Dichloropropane		5 U
75-01-4	VinylChloride		10 U	10061-02-6	Trans-1,3-Dichloropropene		5 U
75-00-3	Chloroethane		10 U	79-10-6	Trichloroethene		5 U
75-09-2	MethyleneChloride	1.7	J B	124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	6.2	J B	79-00-5	1,1,2-Trichloroethane		5 U
75-15-0	CarbonDisulfide		5 U	71-43-2	Benzene	9.5	
75-35-4	1,1-Dichloroethene		5 U	10061-01-5	cis-1,3-Dichloropropene		5 U
75-34-3	1,1-Dichloroethane		5 U	110-75-8	2-Chloroethylvinylether		10 U
156-60-5	Trans-1,2-Dichloroethene	13		75-25-2	Bromoform		5 U
67-66-3	Chloroform		5 U	591-78-6	2-Hexanone		10 U
107-06-2	1,2-Dichloroethane		5 U	108-10-1	4-Methyl-2-Pentanone		10 U
78-93-3	2-Butanone		10 U	127-18-4	Tetrachloroethene		5 U
71-55-6	1,1,1-Trichloroethane		5 U	108-88-3	Toluene		5 U
56-23-5	CarbonTetrachloride		5 U	108-90-7	Chlorobenzene		5 U
108-05-4	VinylAcetate		10 U	100-41-4	Ethylbenzene		5 U
75-27-4	Bromodichloromethane		5 U	100-42-5	Styrene		5 U
					Total Xylenes		5 U

U - compound was not detected
J - concentration detected is less than the required detection limit
B - compound was detected in the blank
sp - compound was a spike

10/85 Rev

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-11

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1.	Unknown	VOA	607	90 B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59436

Organics Analysis Data Sheet

Sample Number
59436-11

00842

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/23/88	Separatory Funnel Extraction	No
Date Analyzed	06/01/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.02		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L	CAS Number	Compound	Value	ug/L
108-95-2	Phenol		10 U				
111-44-4	bis(-2-Chloroethyl)Ether		10 U	83-32-9	Acenaphthene		10 U
95-57-8	2-Chlorophenol		10 U	51-28-5	2,4-Dinitrophenol		51 U
541-73-1	1,3-Dichlorobenzene		10 U	100-02-7	4-Nitrophenol	2.0	J
106-46-7	1,4-Dichlorobenzene		10 U	132-64-9	Dibenzofuran		10 U
100-51-6	Benzyl Alcohol		10 U	121-14-2	2,4-Dinitrotoluene		10 U
95-50-1	1,2-Dichlorobenzene		10 U	606-20-2	2,6-Dinitrotoluene		10 U
95-48-7	2-Methylphenol		10 U	84-66-2	Diethylphthalate		10 U
39638-32-9	bis(2-chloroisopropyl)Ether		10 U	7005-72-3	4-Chlorophenyl-phenylether		10 U
106-44-5	4-Methylphenol		10 U	86-73-7	Fluorene		10 U
621-64-7	N-Nitro-Di-n-Propylamine		10 U	100-01-6	4-Nitroaniline		51 U
67-72-1	Hexachloroethane		10 U	534-52-1	4,6-Dinitro-2-Methylphenol		51 U
98-95-3	Nitrobenzene		10 U	86-30-6	N-Nitrosidiphenylamine (1)		10 U
78-59-1	Isophorone		10 U	101-55-3	4-Bromophenyl-phenylether		10 U
88-75-5	2-Nitrophenol		10 U	118-74-1	Hexachlorobenzene		10 U
105-67-9	2,4-Dimethylphenol		10 U	87-86-5	Pentachlorophenol		51 U
65-85-0	Benzoic Acid		51 U	85-01-8	Phenanthrene		10 U
111-91-1	bis(2-Chloroethoxy) Methane		10 U	120-12-7	Anthracene		10 U
120-83-2	2,4-Dichlorophenol		10 U	84-74-2	Di-N-Butylphthalate		10 U
120-82-1	1,2,4-Trichlorobenzene		10 U	206-44-0	Fluoranthene		10 U
91-20-3	Naphthalene		10 U	129-00-0	Pyrene		10 U
106-47-8	4-Chloroaniline		10 U	85-68-7	Butylbenzylphthalate		10 U
87-68-3	Hexachlorobutadiene		10 U	91-94-1	3,3'-Dichlorobenzidine		20 U
59-50-7	4-Chloro-3-Methylphenol		10 U	56-55-3	Benzo(a)Anthracene		10 U
91-57-6	2-Methylnaphthalene		10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	7.6	J B
77-47-4	Hexachlorocyclopentadiene		10 U	218-01-9	Chrysene		10 U
88-06-2	2,4,6-Trichlorophenol		10 U	117-84-0	Di-n-Octylphthalate	29	B
95-95-4	2,4,5-Trichlorophenol		51 U	205-99-2	Benzo(b)Fluoranthene		10 U
91-58-7	2-Chloronaphthalene		10 U	207-08-9	Benzo(k)Fluoranthene		10 U
88-74-4	2-Nitroaniline		51 U	50-32-8	Benzo(a)Pyrene		10 U
131-11-4	Dimethyl Phthalate		10 U	193-39-5	Indeno(1,2,3-cd)Pyrene		10 U
208-96-8	Acenaphthylene		10 U	53-70-3	Dibenzo(a,h)Anthracene		10 U
99-09-2	3-Nitroaniline		51 U	191-24-2	Benzo(g,h,i)Perylene		10 U

(1)-Cannot be separated from diphenylamine.

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-11

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1. 108-87-2	Methyl Cyclohexane	BNA	315	10 B
2. 108-88-3	Methyl Benzene	BNA	369	5.9 B
3.	Oxygenated Hydrocarbon	BNA	393	8.9 B
4.	Oxygenated Hydrocarbon	BNA	435	5.3 B
5.	Oxygenated Hydrocarbon	BNA	469	18 B
6. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	623	11 B
7.	Phthalate	BNA	2137	7.1
8.	Phthalate	BNA	2182	14
9.	Phthalate	BNA	2260	8.6
10.	Phthalate	BNA	2267	5.9
11.	Unknown	BNA	2335	4.5
12.	Phthalate	BNA	2381	11
13.	Phthalate	BNA	2392	4.9
14.	Phthalate	BNA	2431	25
15.	Phthalate	BNA	2563	12
16.	Phthalate	BNA	2741	4.2
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-11
Date Analyzed: 06/01/88

Units: ug/L
Run Factor: 2.02

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	55.3	55	50-150

TARGET COMPOUNDS

Sampkle Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
	10 U	Pyridine	110-86-1
	10 U	2-Picoline	109-06-8
	10 U	3 & 4-Picoline	
	10 U	2,6-Lutidine	
	10 U	2-Ethyl Pyridine	
	10 U	2,4 & 2,5-Lutidine	
	10 U	2,3-Lutidine	
	10 U	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
	10 U	3,5-Lutidine	
	10 U	3,4-Lutidine	
	10 U	2-Methyl-5-Ethyl Pyridine	
	10 U	2-Methyl-3-Ethyl Pyridine	
	10 U	M and P Cresols	
	10 U	3-Ethyl-4-Methyl Pyridine	
	10 U	3-Ethyl-5-Methyl Pyridine	
	10 U	2,6-Dimethyl Phenol	
	10 U	2,5-Dimethyl Phenol	
	10 U	3,5-Dimethyl Phenol	
	10 U	2,3-Dimethyl Phenol	
	10 U	3,4-Dimethyl Phenol	
	10 U	1-Methylnaphthalene	90-12-0

FORM I

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-11
Date Analyzed: 06/03/88

Units: ug/L
Run Factor: 0.131

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	88.7	111	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
	10 U	Benzo(A)Anthracene
	10 U	Chrysene
	10 U	Benzo(B)Fluoranthene
	10 U	Benzo(K)Fluoranthene
	10 U	Benzo(A)Pyrene

FORM I

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59436

Sample Number: 59436-11

00846

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/23/88
Date Analyzed :05/07/88
Conc./Dil Factor : 50.5
Percent Moisture :

GPC Cleanup :No
Separatory Funnel Extract.:Yes
Cont. Liquid/Liquid Extr. :No
Sonication Extraction :No

CAS Number	Compound	Value	ug/ L
319-84-6	Alpha-BHC		0.05 U
319-85-7	Beta-BHC		0.05 U
319-86-8	Delta-BHC		0.05 U
58-89-9	Gamma-BHC(Lindane)		0.05 U
76-44-8	Heptachlor		0.05 U
309-00-2	Aldrin		0.05 U
1204-57-3	Heptachlor Epoxide		0.05 U
959-98-8	Endosulfan I		0.05 U
60-57-1	Dieldrin		0.10 U
72-55-9	4,4'-DDE		0.10 U
72-20-8	Endrin		0.10 U
33213-65-9	Endosulfan II		0.10 U
72-54-8	4,4'-DDD		0.10 U
1031-07-8	Endosulfan Sulfate		0.10 U
50-29-3	4,4'-DDT		0.10 U
72-43-5	Methoxychlor		0.51 U
53494-70-5	Endrin Ketone		0.10 U
57-74-9	Chlordane		0.51 U
8001-35-2	Toxaphene		1.00 U
12674-11-2	Aroclor-1016		0.51 U
11104-28-2	Aroclor-1221		0.51 U
11141-16-5	Aroclor-1232		0.51 U
53469-21-9	Aroclor-1242		0.51 U
12672-29-6	Aroclor-1248		0.51 U
11097-69-1	Aroclor-1254		1.00 U
11096-82-5	Arolcor-1260		1.00 U

Vi = Volume of extract injected (ul) Vi = 2ul/4ul
Vs = Volume of water extracted (ml) Vs = 990 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

4/28/88 16:44:07 SCAN 1 OF 730 00847
Acquisition started

Acquire
04/28/88 16:43:00 + 0:03
Sample: 59436-11 5ML/5ML VOA H20
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 3:S59436W900
Free sectors: 23956
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.025
Acct. No: 59436

*** GC descriptor: V3 ***

GC temperature: 63 DegC
Elapsed time : 0: 7 min

Injector: 50 DegC
Interface: 220 DegC

Seq. #	Temp (DegC)	Rate (C/min)	Time (minutes) period	total
1	60- 60	-	2.0	2.0
2	60-250	7.0	27.1	29.1
3	250-250	-	10.0	39.1
4	250-250	-	0.0	39.1

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

Scan time (s)
Up: 2.95 L*
Down: 0.00 L

Hold time (s)
Top: 0.00
Bottom: 0.05

Cent S/P: 10 Actual: 67
Frag S/P: 10 Actual: 10

Samp int (ms): 0.200
Samp int (ms): 1.400

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	812	u
Zero scale mass	1	u
Intensity/ion	2	
Peak width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(ms)	4	

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	126.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.88	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2106.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

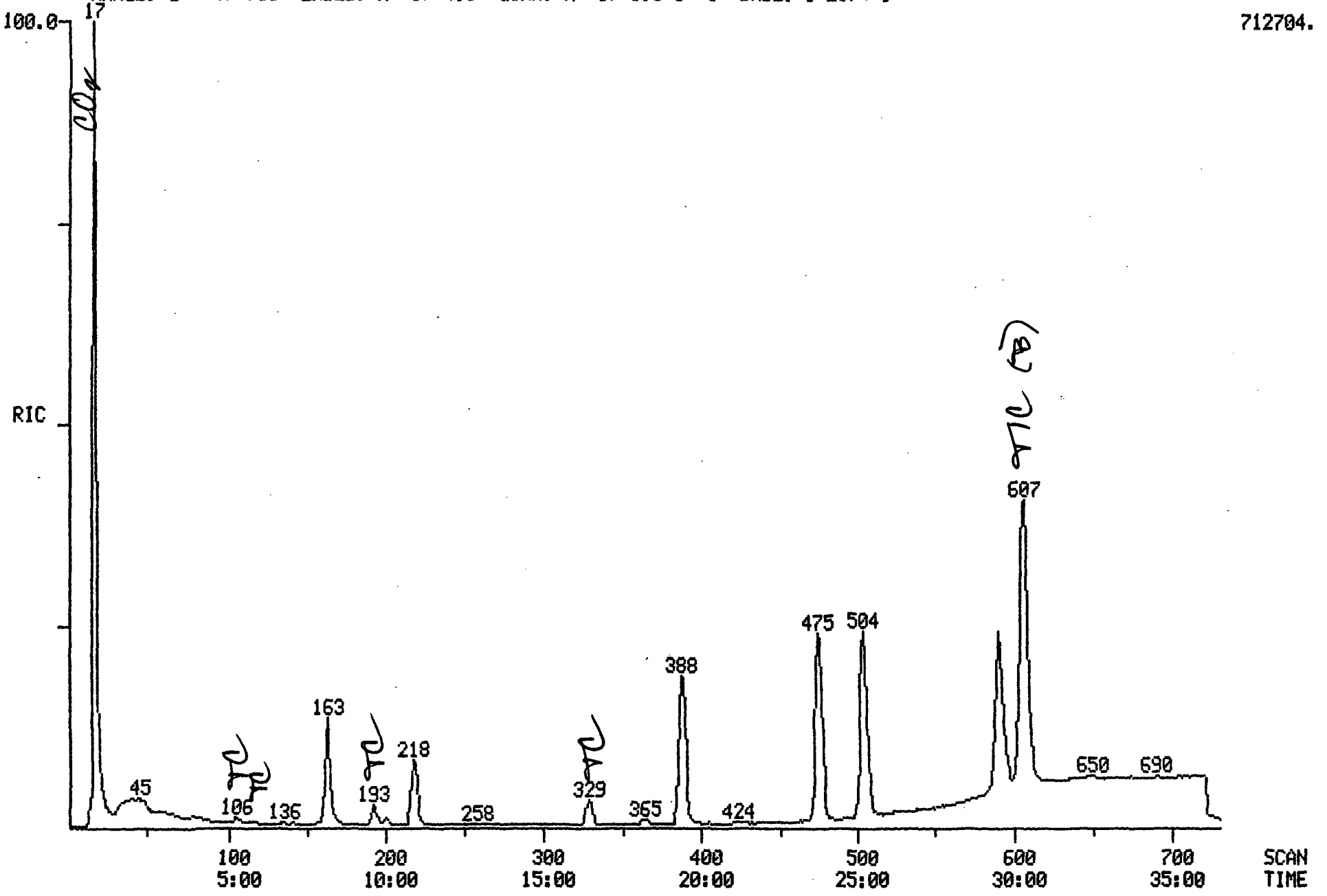
4/28/88 17:20:42
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	52.0	2190.0	2.4	20223.	28.	9.

00848

RIC
04/28/88 16:43:00
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436W900 #4 SCANS 1 TO 730
CALI: 042888CW #1



00849 ST

PROCEDURE: TCA DIAGNOSTIC REPORT 4/28/88 17:21:44
DATA FILE: S59436W900
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	5	9	ISO1/TCO1
3	3	2	53	18	8	6	55	ISO2/TCO2
3	3	1	53	12	6	8	84	ISO3/TCO3
1	1	1	0	7	2	1	0	ISO4/TCO4

41 COMPOUNDS PROCESSED, 15 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-163	163	163	.	1	955	.	128	163	.	1
2	V1	10	-32	29	.	.	.	.	.	50	.	.	.
3	V1	15	-48	46	.	.	.	.	.	94	.	.	.
4	V1	25	-60	58	58	.	1	998	.	62	58	.	1
5	V1	35	-74	72	.	.	.	.	.	64	.	.	.
6	V1	45	-107	106	106	.	1	986	.	84	106	.	1
7	V1	50	-116	115	115	.	5	1000	.	58	115	.	1
8	V1	65	-134	133	.	.	.	.	.	76	.	.	.
9	V1	80	-154	154	.	.	.	.	.	96	.	.	.
10	V2	1	-388	388	388	.	2	996	.	114	388	.	1
11	V3	1	-503	504	504	.	1	996	.	117	504	.	1
12	V1	90	-180	179	.	.	.	.	.	63	179	.	1
13	V1	95	-194	193	193	.	1	984	.	96	193	.	1
14	V1	100	-206	205	.	.	.	.	.	83	.	.	.
15	V1	2	-219	218	218	.	1	988	.	65	218	.	1
16	V2	10	-219	218	219	1	3	993	.	72	219	.	1
17	V1	110	-221	220	.	.	.	.	.	62	.	.	.
18	V2	15	-249	249	.	.	.	.	.	97	.	.	.
19	V2	20	-257	257	.	.	.	.	.	117	.	.	.
20	V2	25	-260	260	259	-1	2	964	.	43	.	.	.
21	V2	30	-268	268	.	.	.	.	.	83	.	.	.
22	V2	35	-299	299	.	.	.	.	.	63	.	.	.
23	V2	40	-304	304	.	.	.	.	.	75	.	.	.
24	V2	45	-317	317	.	.	.	.	.	130	.	.	.
25	V2	60	-329	329	329	.	1	989	.	78	329	.	1
26	V2	50	-331	331	.	.	.	.	.	129	.	.	.
27	V2	55	-333	333	.	.	.	.	.	97	.	.	.
28	V2	65	-334	334	.	.	.	.	.	75	.	.	.
29	V2	80	-393	393	.	.	.	.	.	173	.	.	.
30	V3	10	-405	405	405	.	2	924	.	58	.	.	.
31	V3	15	-441	441	440	-1	4	955	.	58	.	.	.
32	V3	25	-448	448	.	.	.	.	.	83	.	.	.
33	V3	20	-449	449	.	.	.	.	.	164	.	.	.
34	V3	2	-476	476	475	-1	1	991	.	98	475	.	1
35	V3	35	-480	480	.	.	.	.	.	92	480	.	1
36	V3	40	-507	508	.	.	.	.	.	112	.	.	.
37	V3	50	-549	549	.	.	.	.	.	106	.	.	.
38	V3	3	-591	590	590	.	1	990	.	95	591	1	1
39	V3	55	-611	610	.	.	.	.	.	104	611	.	1
40	V3	60	-615	613	.	.	.	.	.	106	.	.	.
41	V3	75	-628	626	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59436W900

ST ~~00019~~

00850

Data: S59436W900.TI
04/28/88 16:43:00
Sample: 59436-11 5ML/5ML VOA H2O
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.025
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	Name				
1	CI01	BROMOCHLOROMETHANE	128	IV1# 01	74-97-5
2	C010	CHLOROMETHANE	50	V1# 10SP	74-87-3
3	C015	BROMOMETHANE	94	V1# 15	74-83-9
4	C020	VINYL CHLORIDE	62	V1# 25	75-01-4
5	C025	CHLOROETHANE	64	V1# 35	75-00-3
6	C030	METHYLENE CHLORIDE	84	V1# 45	75-09-2
7	C035	ACETONE	58	V1# 50	67-64-1
8	C040	CARBON DISULFIDE	76	V1# 65	75-15-0
9	C045	1,1-DICHLOROETHENE	61	V1# 80	75-35-4
10	CI10	1,4-DIFLUOROBENZENE	114	IV2# 01	540-36-3
11	CI20	CHLOROBENZENE-D5	117	IV3# 01	3114-55-4
12	C050	1,1-DICHLOROETHANE	63	V1# 90	75-34-3
13		TRANS-1,2-DICHLOROETHENE	61	V1# 95	156-60-5
14	C060	CHLOROFORM	83	V1#100CC	67-66-3
15	CS15	1,2-DICHLOROETHANE-D4	65	SV1# 02	17060-07-0
16	C110	2-BUTANONE	72	V2# 10	78-93-3
17	C065	1,2-DICHLOROETHANE	62	V1#110	107-06-2
18	C115	1,1,1-TRICHLOROETHANE	97	V2# 15	71-55-6
19	C120	CARBONTETRACHLORIDE	117	V2# 20	56-23-5
20	C125	VINYL ACETATE	43	V2# 25	108-05-4
21	C130	BROMODICHLOROMETHANE	83	V2# 30	75-27-4
22	C140	1,2-DICHLOROPROPANE	63	V2# 35CC	78-87-5
23	C143	CIS-1,3-DICHLOROPROPENE	75	V2# 40	10061-01-5
24	C150	TRICHLOROETHENE	130	V2# 45	79-01-6
25	C165	BENZENE	78	V2# 60	71-43-2
26	C155	DIBROMOCHLOROMETHANE	129	V2# 50	124-48-1
27	C160	1,1,2-TRICHLOROETHANE	97	V2# 55	79-00-5
28	C172	TRANS-1,3-DICHLOROPROPE	75	V2# 65	10061-02-6
29	C180	BROMOFORM	173	V2# 80	75-25-2
30	C205	4-METHYL-2-PENTANONE	58	V3# 10	108-10-1
31	C210	2-HEXANONE	58	V3# 15	591-78-6
32	C225	1,1,2,2-TETRACHLOROETHA	83	V3# 25SP	79-34-5
33	C220	TETRACHLOROETHENE	164	V3# 20	127-18-4
34	CS05	TOLUENE-D8	98	SV3# 02	2037-26-5
35	C230	TOLUENE	92	V3# 35	108-88-3
36	C235	CHLOROBENZENE	112	V3# 40	108-90-7
37	C240	ETHYLBENZENE	106	V3# 50	100-41-4
38	CS10	BROMOFLUOROBENZENE	95	SV3# 03	460-00-4
39	C245	STYRENE	104	V3# 55	100-42-5
40		M-XYLENE	106	V3# 60	108-38-3
41		O+P XYLENES	106	V3# 75	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	163	8:09	1	1.000	A BB	39191.	50.000	UG/L	14.53
2	NOT FOUND									
3	NOT FOUND									
4	62	58	2:54	1	0.356	A BB	1442.	0.891	UG/L	0.26
5	NOT FOUND									
6	84	106	5:18	1	0.650	A BB	2792.	1.685	UG/L	0.49
7	58	115	5:45	1	0.706	A BV	806.	6.154	UG/L	1.79
8	NOT FOUND									
9	NOT FOUND									
10	114	388	19:24	10	1.000	A BB	245266.	50.000	UG/L	14.53
11	117	504	25:12	11	1.000	A BB	235421.	50.000	UG/L	14.53
12	63	179	8:57	1	1.098	A BB	203.	0.075	UG/L	0.02
13	96	193	9:39	1	1.184	A BB	15622.	13.402	UG/L	3.89
14	NOT FOUND									
15	65	218	10:54	1	1.337	A BB	76714.	49.463	UG/L	14.38
16	72	219	10:57	10	0.564	A BB	596.	3.843	UG/L	1.12
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	NOT FOUND									
25	78	329	16:27	10	0.848	A BB	44868.	9.514	UG/L	2.77
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	98	475	23:45	11	0.942	A BB	256936.	52.770	UG/L	15.34
35	92	480	24:00	11	0.952	A BB	522.	0.174	UG/L	0.05
36	NOT FOUND									
37	NOT FOUND									
38	95	591	29:33	11	1.173	A BB	154824.	56.118	UG/L	16.31
39	104	611	30:33	11	1.212	A BB	44.	0.013	UG/L	0.00
40	NOT FOUND									
41	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:12	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:36		0.195						
3	2:24		0.293						
4	3:00	0.97	0.366	0.97	0.89	50.00	0.037	2.065	0.02
5	3:42		0.451						
6	5:21	0.99	0.652	1.00	1.68	50.00	0.071	2.114	0.03
7	5:48	0.99	0.707	1.00	6.15	50.00	0.021	0.167	0.12
8	6:42		0.817						
9	7:42		0.939						
10	19:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	9:00	0.99	1.098	1.00	0.08	50.00	0.005	3.439	0.00
13	9:42	0.99	1.183	1.00	13.40	50.00	0.399	1.487	0.27

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	10:18		1.256						
15	10:57	1.00	1.335	1.00	49.46	50.00	1.957	1.979	0.99
16	10:57	1.00	0.563	1.00	3.84	50.00	0.002	0.032	0.08
17	11:03		1.348						
18	12:27		0.640						
19	12:51		0.661						
20	13:00		0.668						
21	13:24		0.689						
22	14:57		0.769						
23	15:12		0.781						
24	15:51		0.815						
25	16:27	1.00	0.846	1.00	9.51	50.00	0.183	0.961	0.19
26	16:33		0.851						
27	16:39		0.856						
28	16:42		0.859						
29	19:39		1.010						
30	20:15		0.804						
31	22:03		0.875						
32	22:24		0.889						
33	22:27		0.891						
34	23:48	1.00	0.944	1.00	52.77	50.00	1.091	1.034	1.06
35	24:00	1.00	0.952	1.00	0.17	50.00	0.002	0.636	0.00
36	25:21		1.006						
37	27:27		1.089						
38	29:33	1.00	1.173	1.00	56.12	50.00	0.658	0.586	1.12
39	30:33	1.00	1.212	1.00	0.01	50.00	0.000	0.703	0.00
40	30:45		1.220						
41	31:24		1.246						

TCA FINISHED, 15 FOUND
FINISHED AT: 4/28/88 17:25:48

00853

RMAL QUANTITATION SUMMARY FILE: S59436W900
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	39191.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	388	2	245266.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	235421.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	475	3	256936.	1.091	52.770
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	154824.	0.658	56.118
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	218	1	76714.	1.957	49.463
7	V1# 10	C010 CHLOROMETHANE	50		1	NOT FOUND		
8	V1# 15	C015 BROMOMETHANE	94		1	NOT FOUND		
9	V1# 25	C020 VINYL CHLORIDE	62		1	NOT FOUND		
10	V1# 35	C025 CHLOROETHANE	64		1	NOT FOUND		
11	V1# 45	C030 METHYLENE CHLORIDE	84	106	1	2792.	0.071	1.685 B
12	V1# 50	C035 ACETONE	58	115	1	806.	0.021	6.154 B
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96		1	NOT FOUND		
15	V1# 90	C050 1,1-DICHLOROETHANE	63		1	NOT FOUND		
16	V1# 95	TRANS-1,2-DICHLOROETHENE	96	193	1	15622.	0.399	13.402
17	V1#100	C060 CHLOROFORM	83		1	NOT FOUND		
18	V1#110	C065 1,2-DICHLOROETHANE	62		1	NOT FOUND		
19	V2# 10	C110 2-BUTANONE	72	219	2	596.	0.002	~~3.843~~
20	V2# 15	C115 1,1,1-TRICHLOROETHA	97		2	NOT FOUND		
21	V2# 20	C120 CARBONTETRACHLORIDE	117		2	NOT FOUND		
22	V2# 25	C125 VINYL ACETATE	43		2	NOT FOUND		
23	V2# 30	C130 BROMODICHLOROMETHAN	83		2	NOT FOUND		
24	V2# 35	C140 1,2-DICHLOROPROPANE	63		2	NOT FOUND		
25	V2# 40	C143 CIS-1,3-DICHLOROPRO	75		2	NOT FOUND		
26	V2# 45	C150 TRICHLOROETHENE	130		2	NOT FOUND		
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78	329	2	44868.	0.183	9.514
30	V2# 65	C172 TRANS-1,3-DICHLOROP	75		2	NOT FOUND		
31	V2# 80	C180 BROMOFORM	173		2	NOT FOUND		
32	V3# 10	C205 4-METHYL-2-PENTANON	58		3	NOT FOUND		
33	V3# 15	C210 2-HEXANONE	58		3	NOT FOUND		
34	V3# 20	C220 TETRACHLOROETHENE	164		3	NOT FOUND		
35	V3# 25	C225 1,1,2,2-TETRACHLORO	83		3	NOT FOUND		
36	V3# 35	C230 TOLUENE	92		3	NOT FOUND		
37	V3# 40	C235 CHLOROBENZENE	112		3	NOT FOUND		
38	V3# 50	C240 ETHYLBENZENE	106		3	NOT FOUND		
39	V3# 55	C245 STYRENE	104		3	NOT FOUND		
40	V3# 60	M-XYLENE	106		3	NOT FOUND		
41	V3# 75	O+P XYLENES	106		3	NOT FOUND		

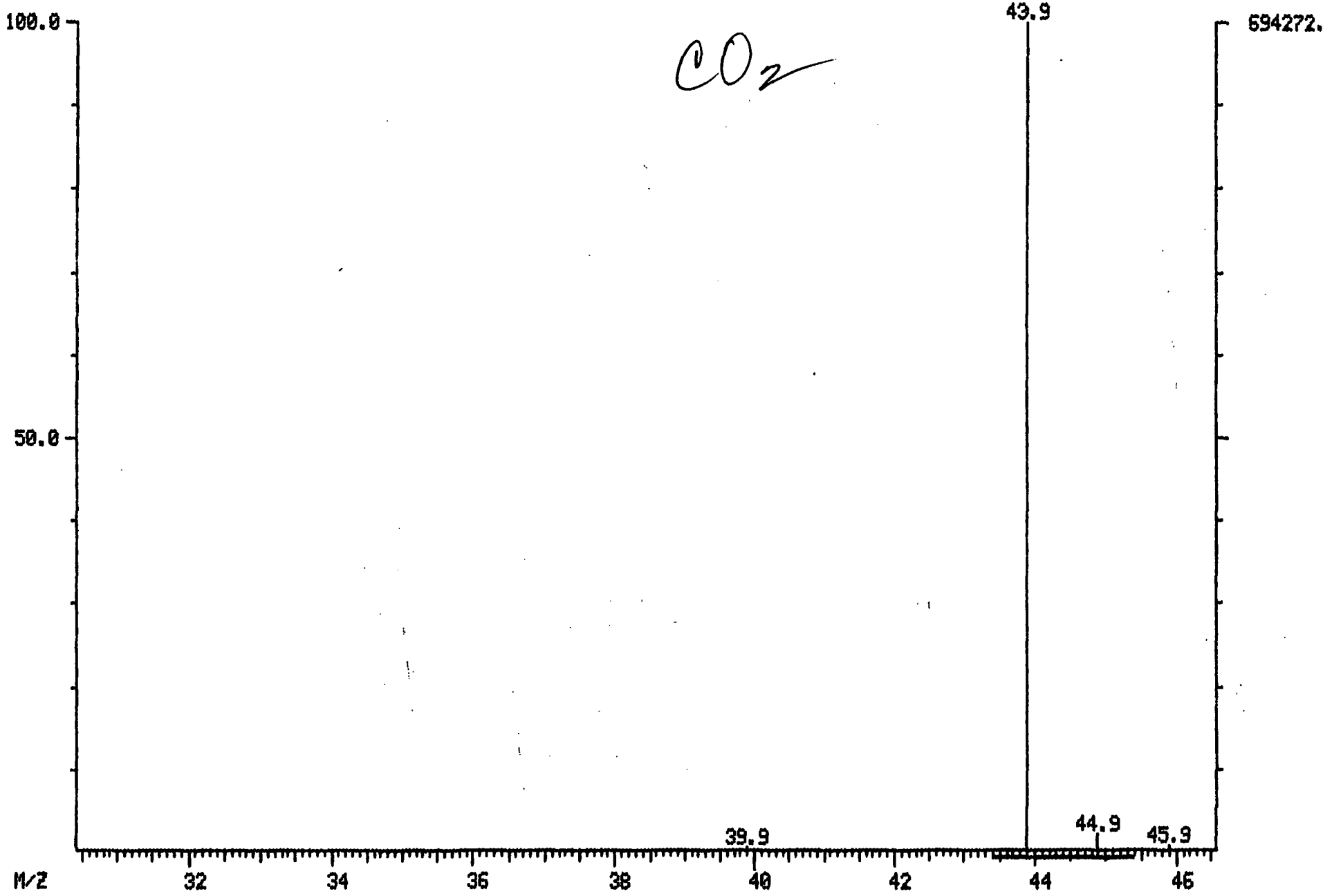
6.3.88

00854

MASS SPECTRUM
04/28/88 16:43:00 + 0:51
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
GC TEMP: 62 DEG. C

DATA: S59436W900 #17
CALI: 042888CW #1

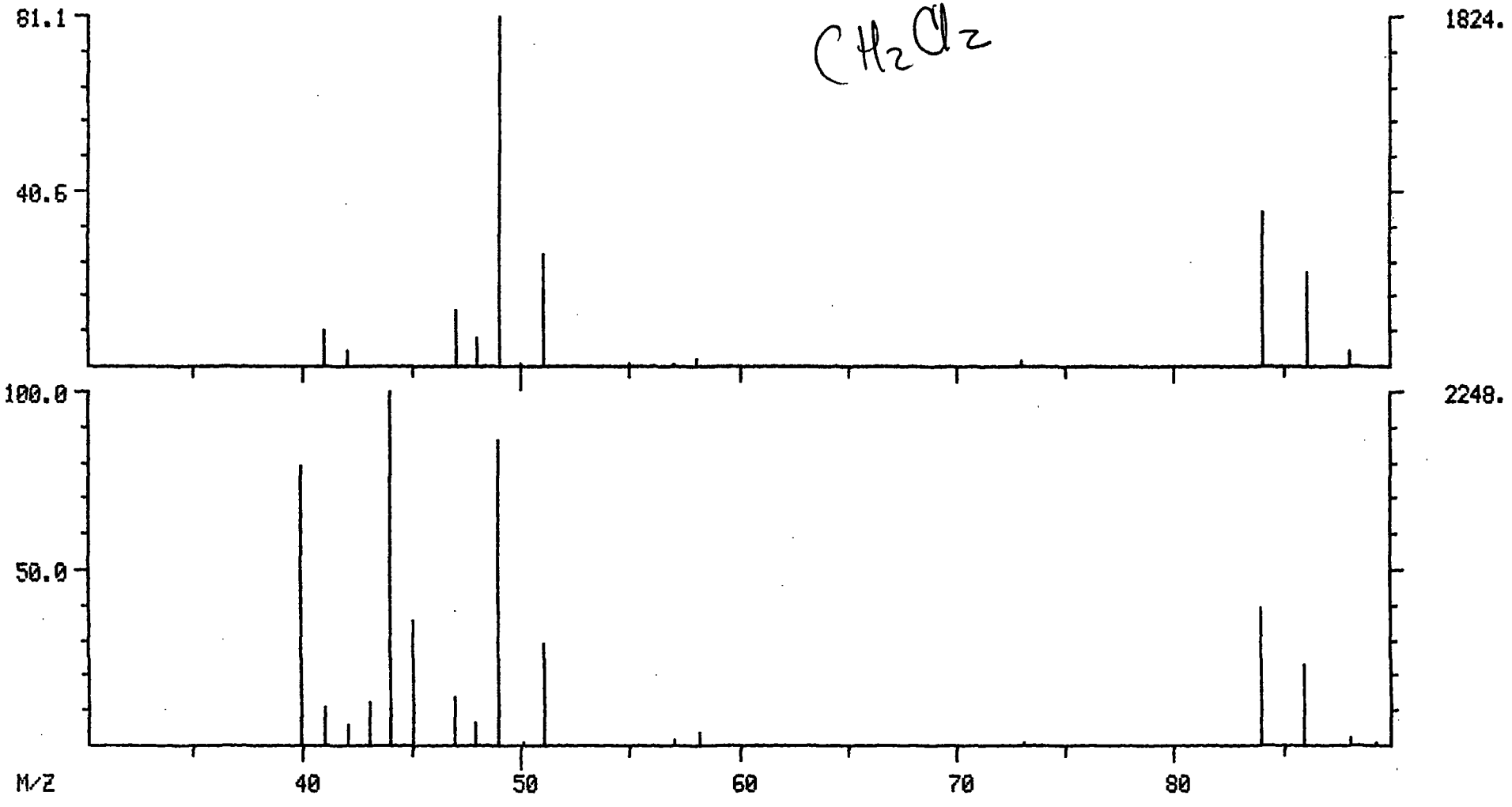
BASE M/Z: 44
RIC: 711680.



00855

DUAL MASS SPECTRUM
04/28/88 16:43:00 + 5:18
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
GC TEMP: 83 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559436W900 #106 BASE M/Z: 49/ 44
CALI: 042888CW #1 RIC: 4591./ 10159.



00856

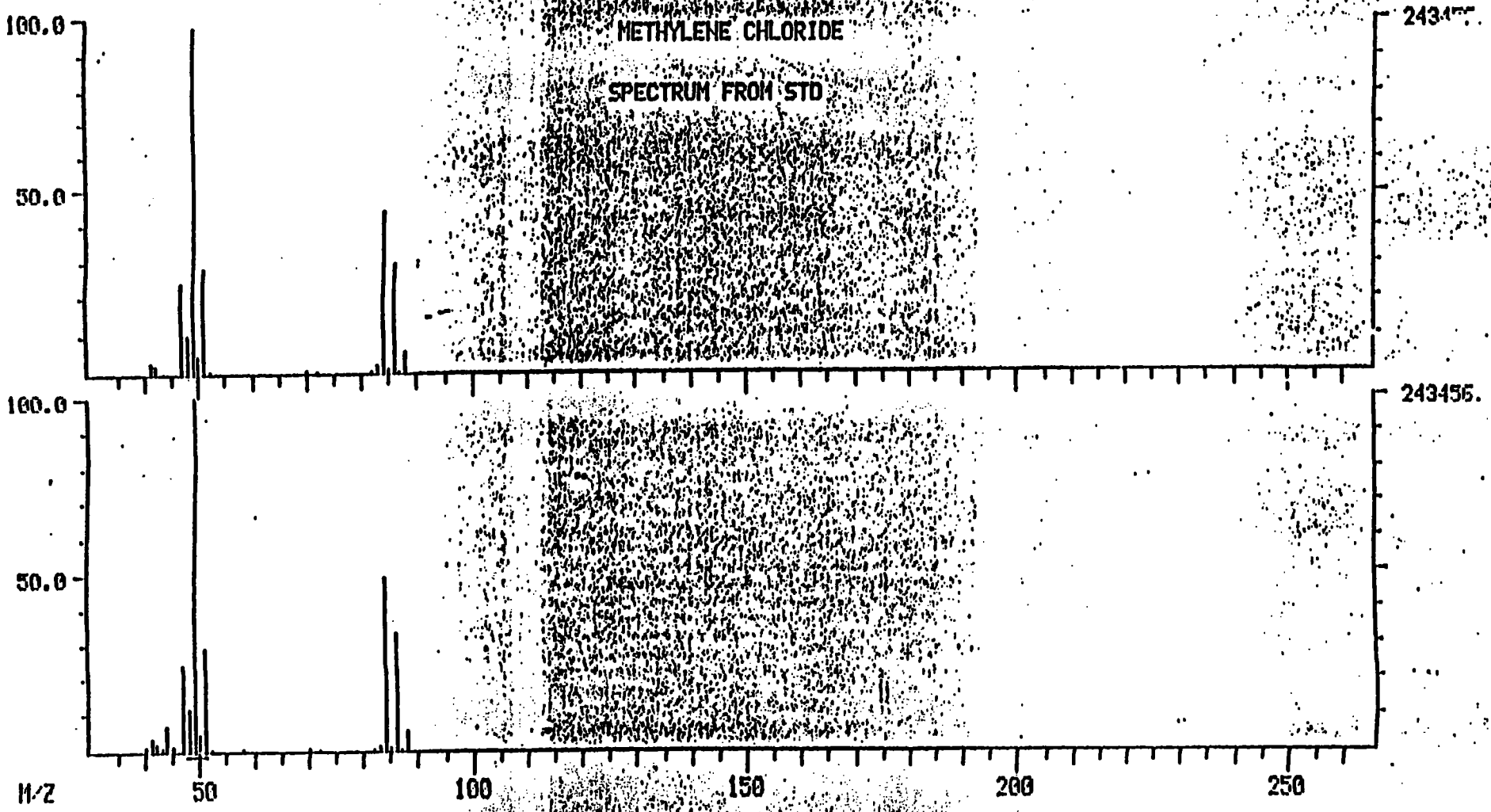
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

BASE M/Z: 49/ 49
RIC: 615423./ 678911.

METHYLENE CHLORIDE

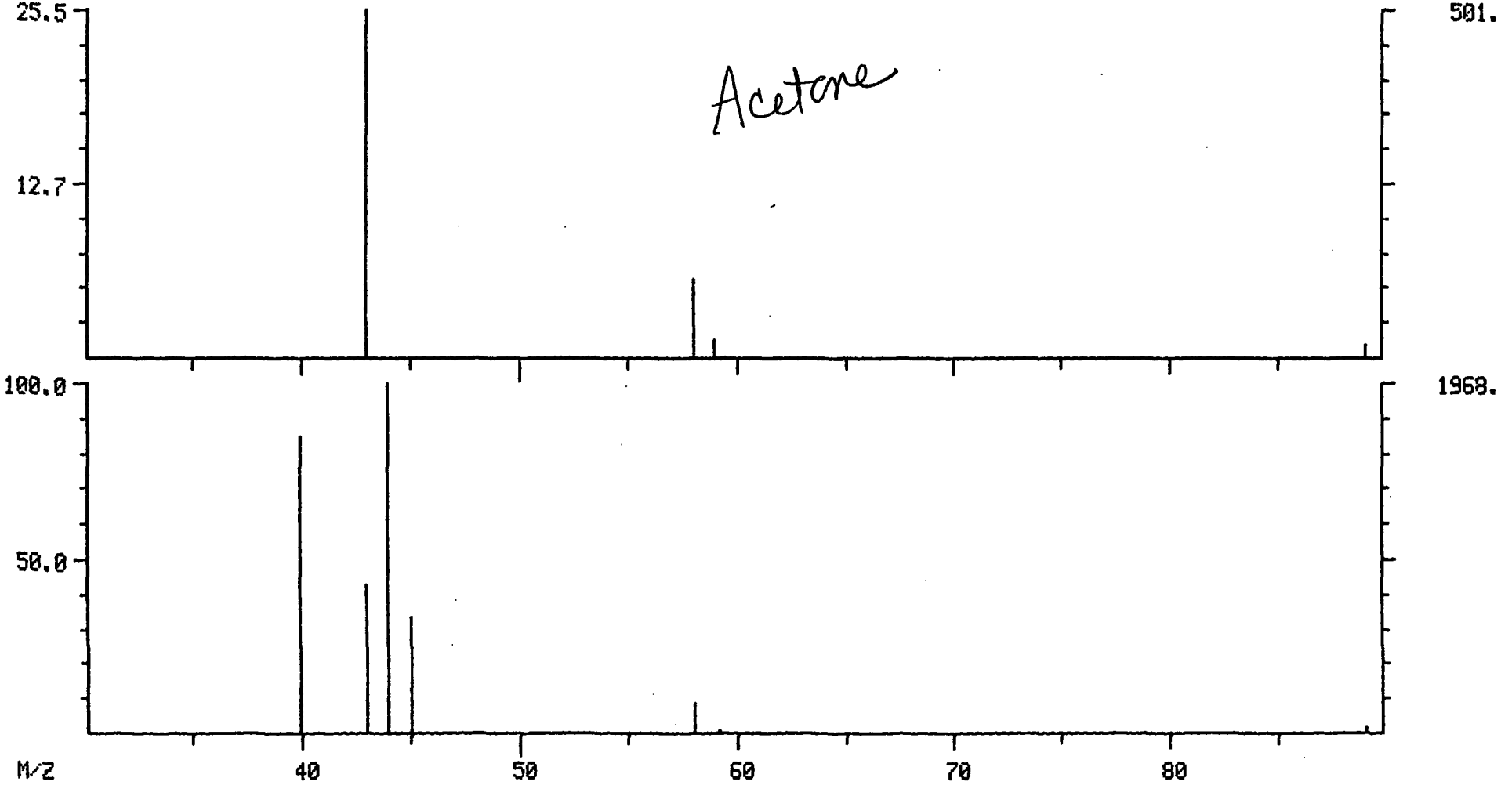
SPECTRUM FROM STD



00857

DUAL MASS SPECTRUM
04/28/88 16:43:00 + 5:45
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
GC TEMP: 86 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559436W900 #115 BASE M/Z: 43/ 44
CALI: 042888CW #1 RIC: 660./ 5375.

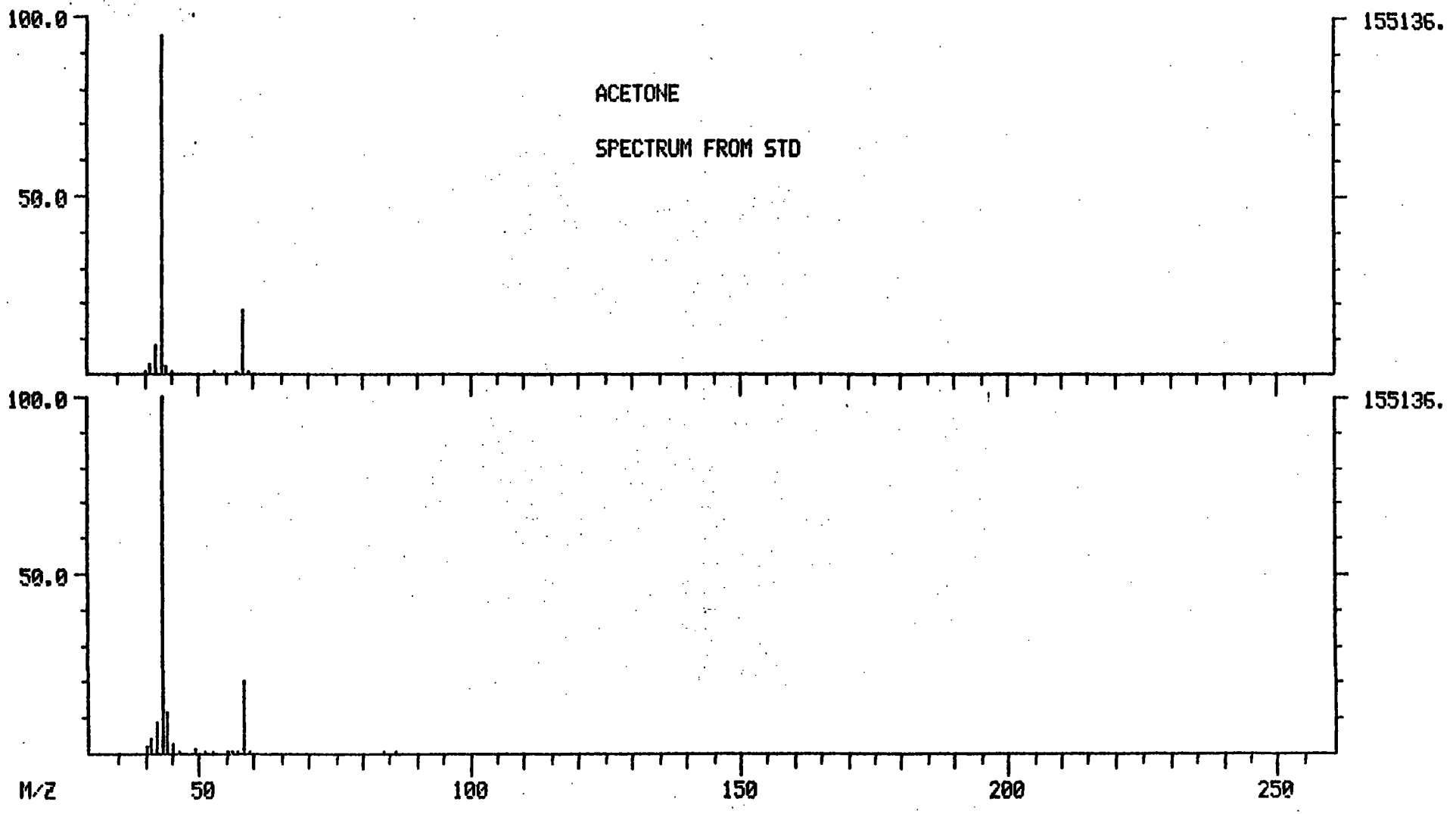


00858

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 7:37
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #150
CALI: STDJ198 #1

BASE M/Z: 43/ 43
RIC: 199935./ 247807.

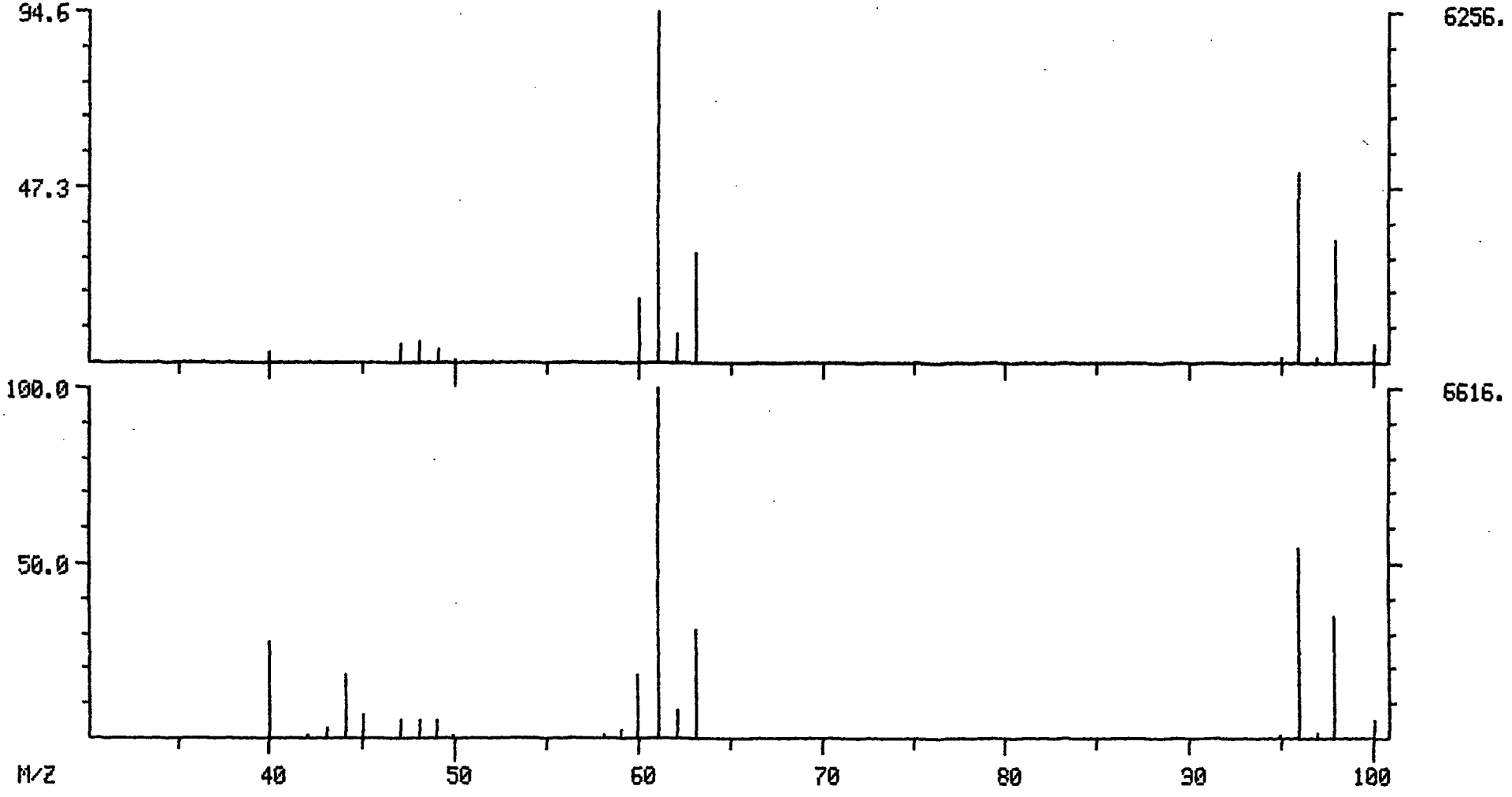


00859

DUAL MASS SPECTRUM
04/28/88 16:43:00 + 9:39
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
GC TEMP: 114 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W900 #193 BASE M/Z: 61/ 61
CALI: 042888CW #1 RIC: 17087./ 21663.

Trans-1,2-Dichloroethene

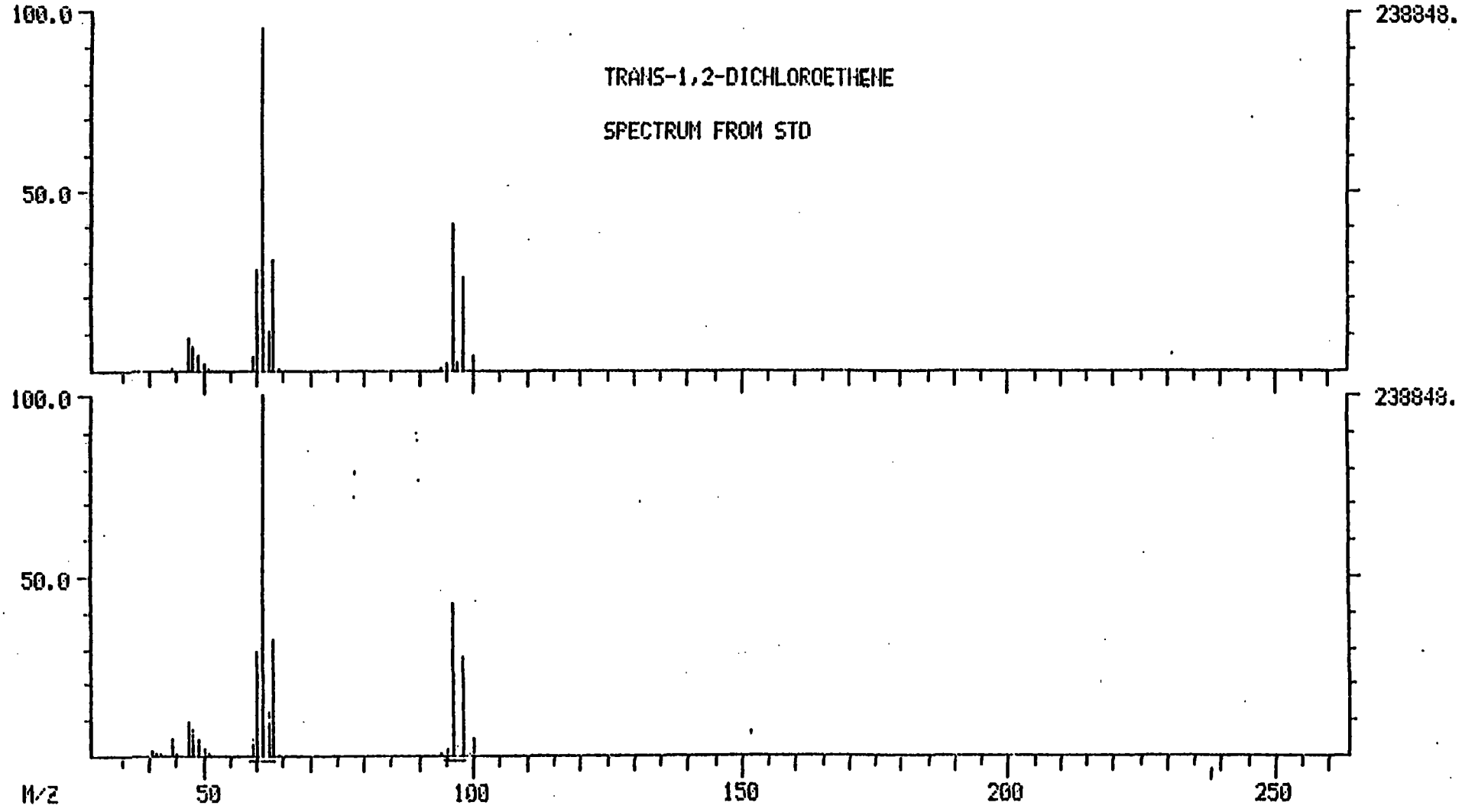


00860

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 11:57
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #235
CALI: STDJ198 #1

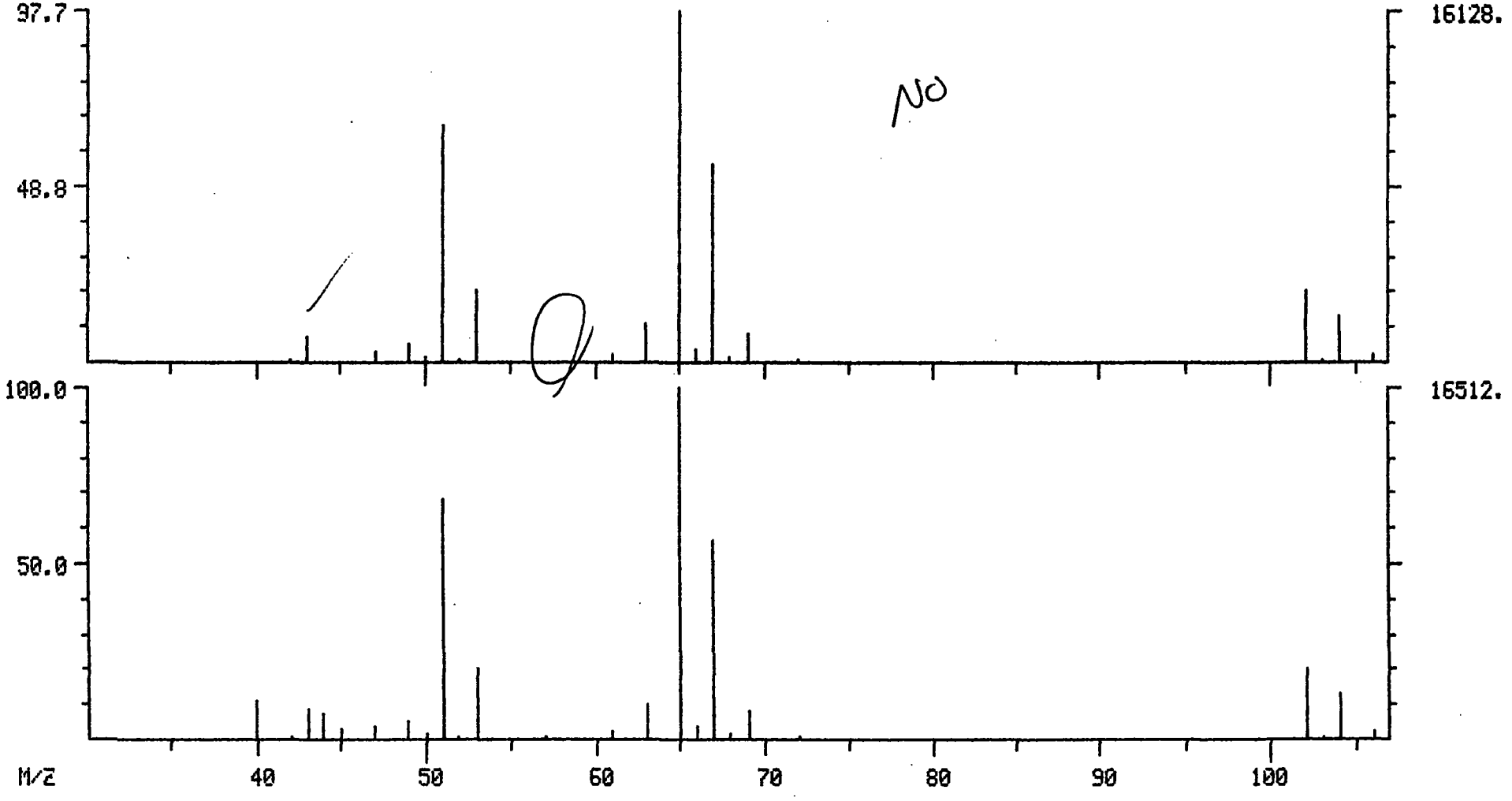
BASE M/Z: 61/ 61
RIC: 647167./ 705535.



00861

DUAL MASS SPECTRUM
04/28/88 16:43:00 + 10:57
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
GC TEMP: 123 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W900 #219 BASE M/Z: 65/ 65
CALI: 042888CW #1 RIC: 52735./ 57599.

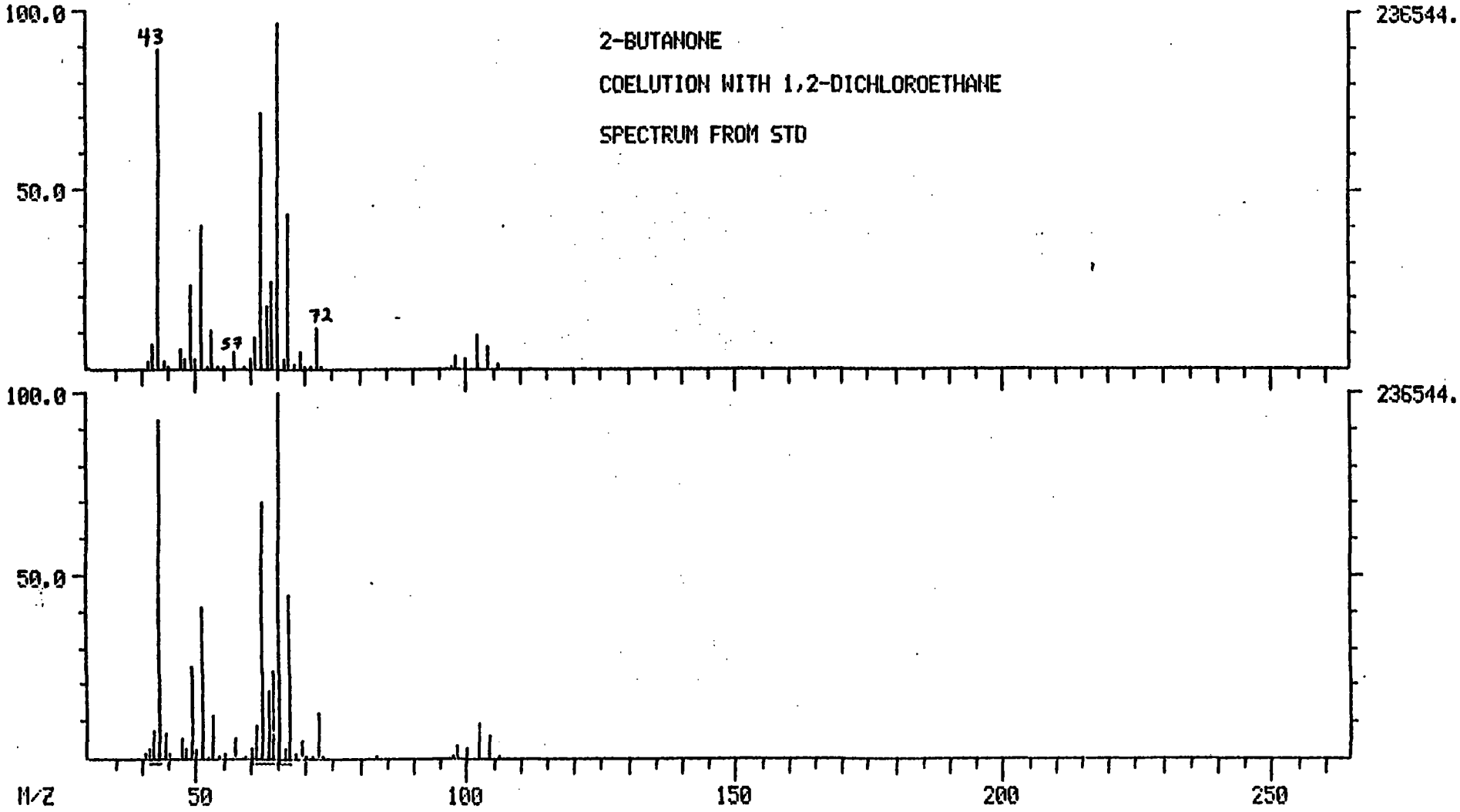


00862

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 13:13
SAMPLE: 50 PPB HSL STANDARD 9-23-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #260
CALI: STDJ198 #1

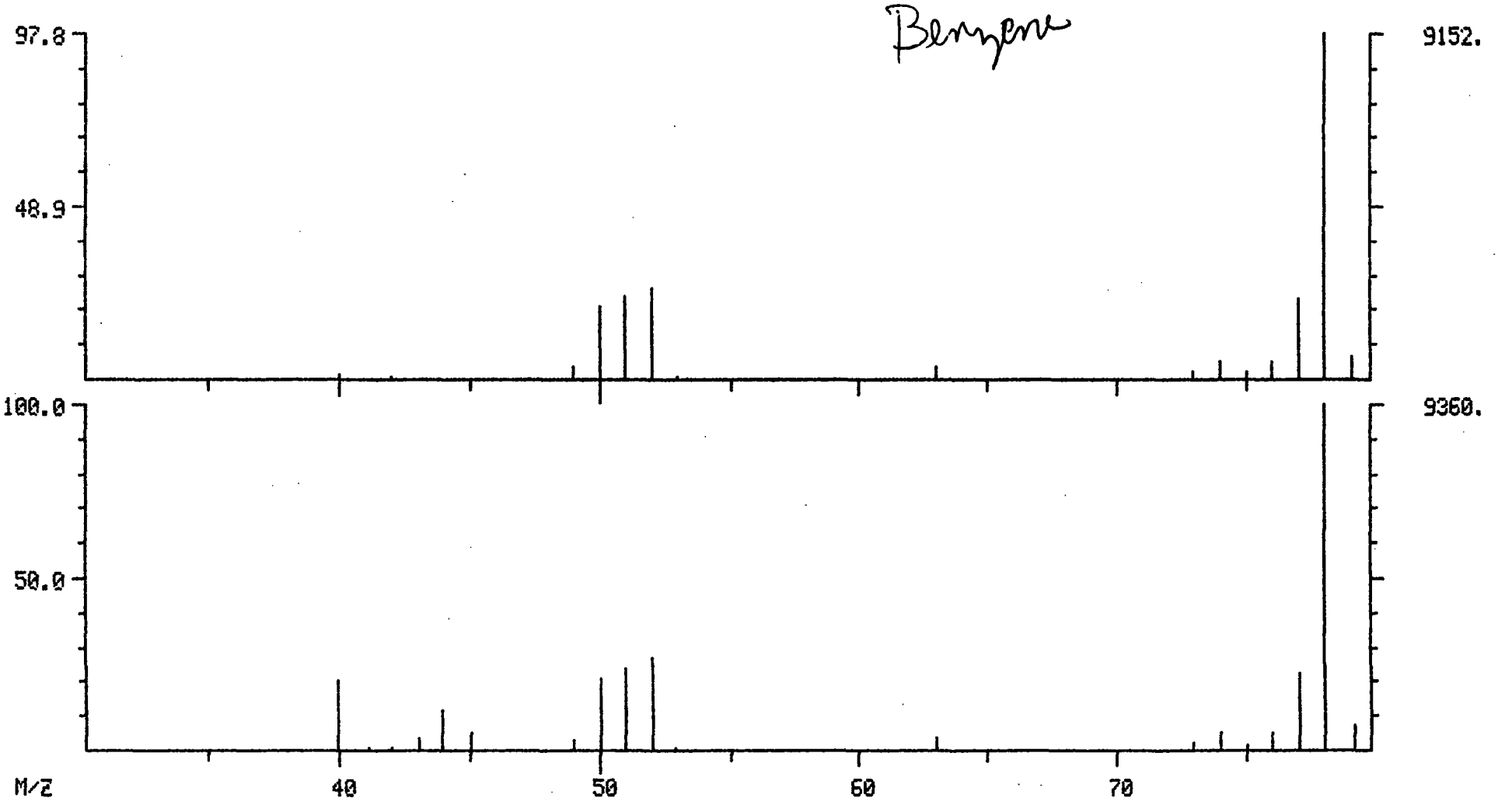
BASE M/Z: 65/ 55
RIC: 1191930./ 1241080.



00863

DUAL MASS SPECTRUM
04/28/88 16:43:00 + 16:27
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
GC TEMP: 161 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559436W900 #329 BASE M/Z: 78/ 78
CALI: 042888CW #1 RIC: 20639./ 24863.

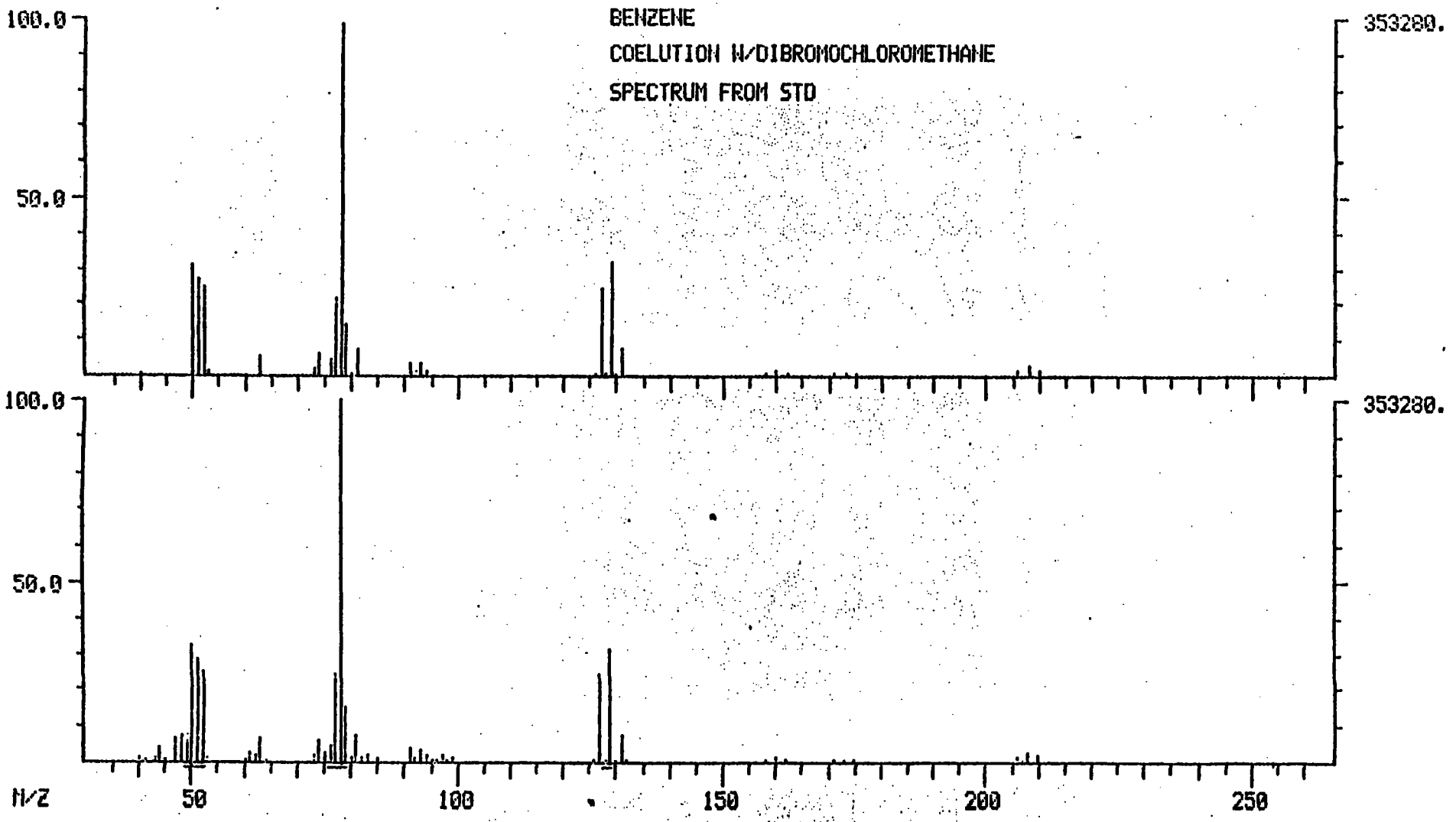


00864

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 18:21
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #361
CALI: STDJ198 #1

BASE M/Z: 78/ 78
RIC: 1177590./ 1380350.



Quantitation Report File: TEMP

Data: S59436W900.TI
04/28/88 16:43:00
Sample: 59436-11 5ML/5ML VOA H2O
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.025
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	CAS #	Name
1	0-00-0	UNKNOWN
2	0-00-0	UNKNOWN
3	0-00-0	UNKNOWN
4	23436-19-3	2-PROPANOL, 1-(2-METHYLPROPOXY)-

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	163	8:09	4	0.269	A BV	379616.	25.292	11.32
2	RIC	388	19:24	4	0.639	A BB	634368.	42.264	18.92
3	RIC	504	25:12	4	0.830	A BB	838360.	55.855	25.00
4	RIC	607	30:21	4	1.000	A VB	1500950.	~~100.000~~ B	44.76

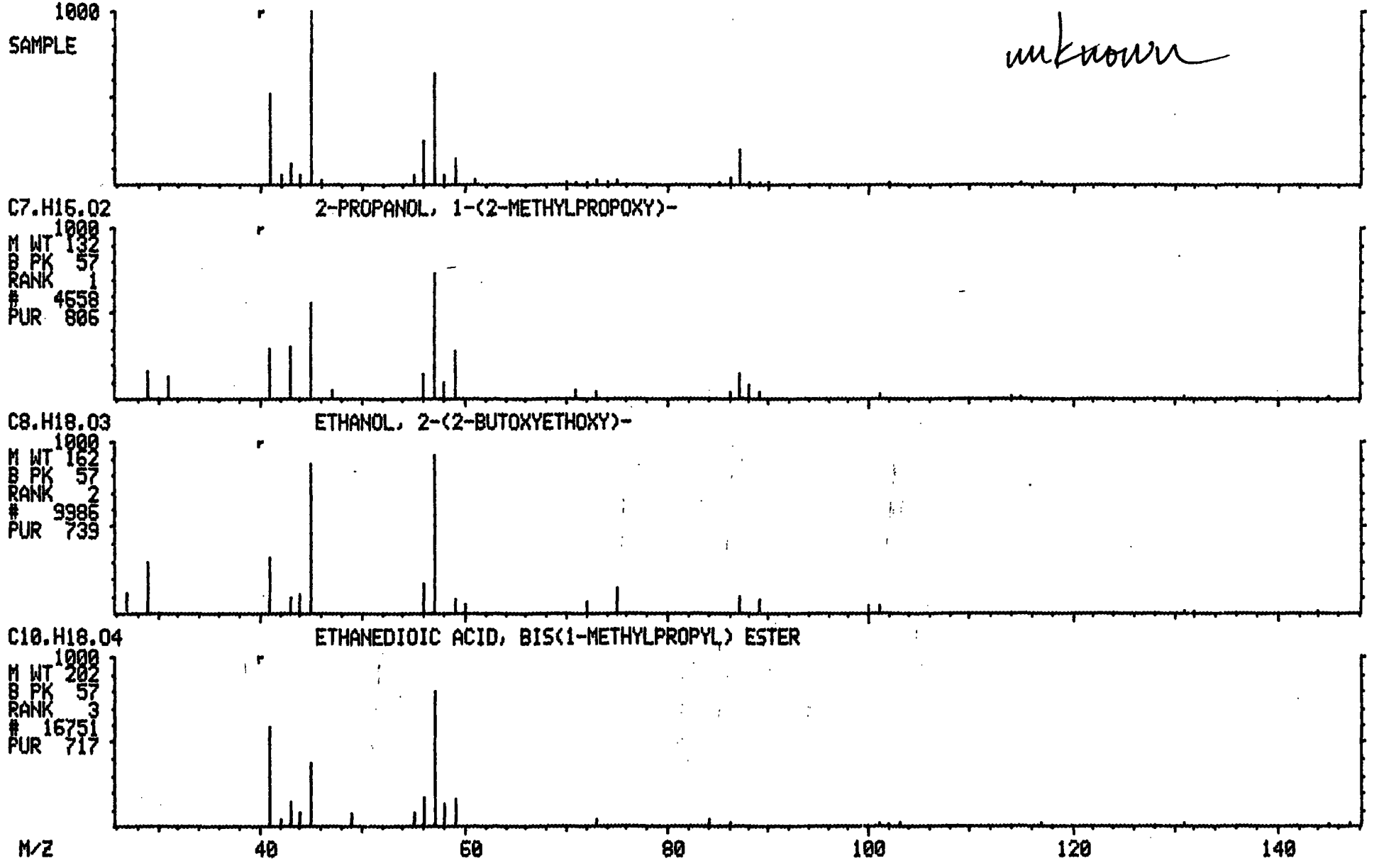
$\frac{1500950}{\text{A } \cancel{379616} \text{ 838360}} \times 50\text{ug/L} = \cancel{28}\ \text{B}$ 90

00866

LIBRARY SEARCH
04/28/88 16:43:00 + 30:21
SAMPLE: 59436-11 5ML/5ML VOA H2O
CONDS.: GC DESC V3
ENHANCED (S 15B 2N 0T)

DATA: S59436W900 # 607
CALI: 042888CW # 1

BASE M/Z: 45
RIC: 238335.



6/1/88 21:06:29 SCAN 1 OF 2850 00867
Acquisition started

Acquire Run 3:S59436R971 ACQUIRING
06/01/88 21:05:00 + 0:04 Free sectors: 9549 Scan: 5 of 2850
Sample: 59436-11 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc:ST Current GC oven tmp: 28 DegC Injector : 250 DegC
Current GC Desc:ST GC elapsed time : 0: 3 min Int. oven : 275 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********

Low mass: 35 Up: 0.70 L* Top: 0.00
High mass: 500 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 10 Samp Int (ms): 0.150 Peak Width: 1000.
Frag S/P: 10 Actual: 10 Samp Int (ms): 0.150 Inten/ion: 2

Min Peak Width: 3 Min Frag Width %: 80 Min Area: 20
ADC Threshold: 1 Baseline: 0

***** Mode: Centroid positive ion

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

$RF = \frac{2.0}{0.990} = 2.02$

$SV = 2.0$

6/1/88 21:42:10
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	511.5	2137.5	23.9	73119. 26.	34.

00868

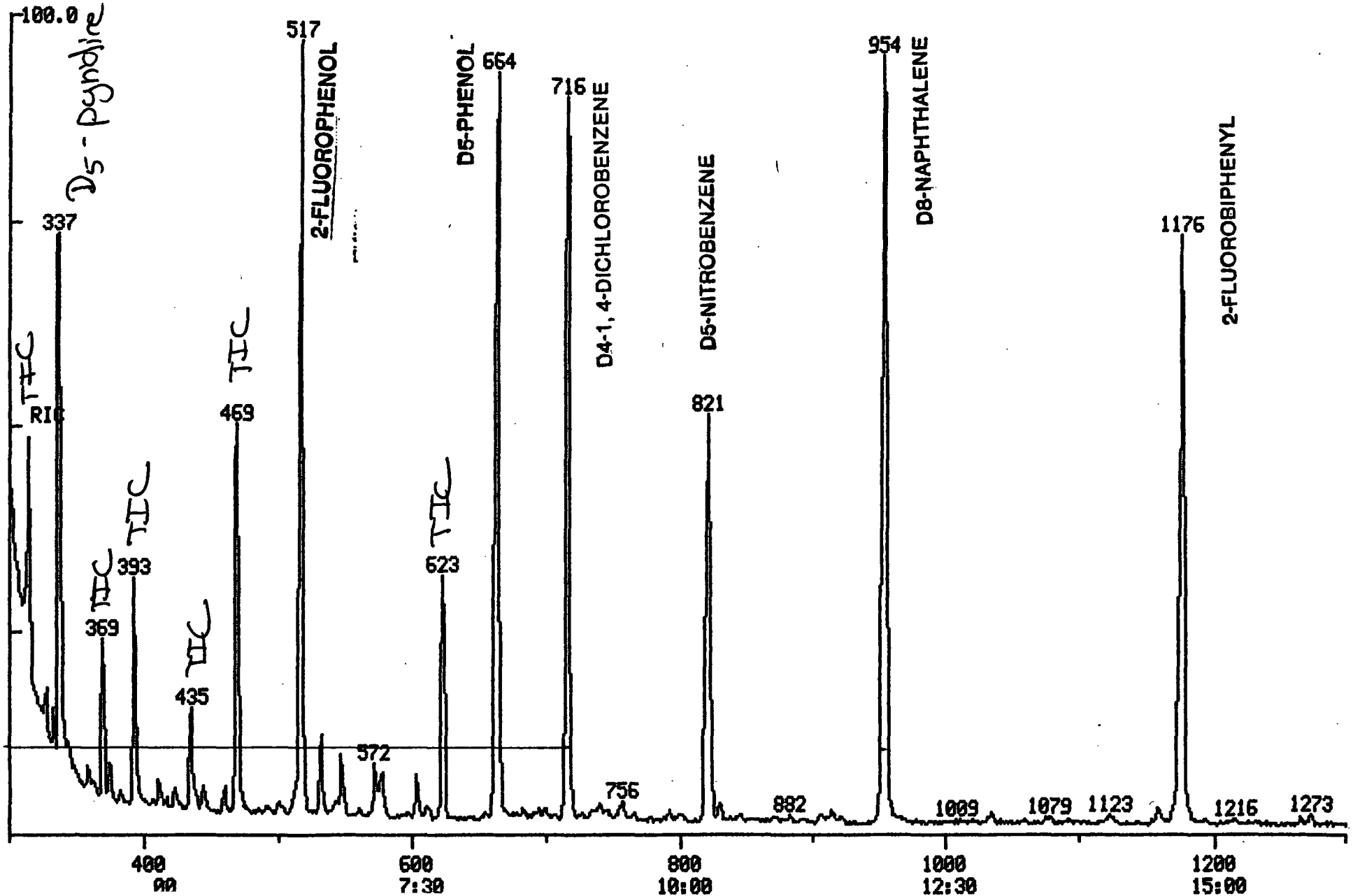
RIC
06/01/88 21:05:00
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R971 #4
CALI: 053188CR #4

SCANS 300 TO 1300
OUT OF 300 TO 2850

TC=Target Compound
SC=Spike Compound

T.I.C.-Tent. Ident. Compound



00869

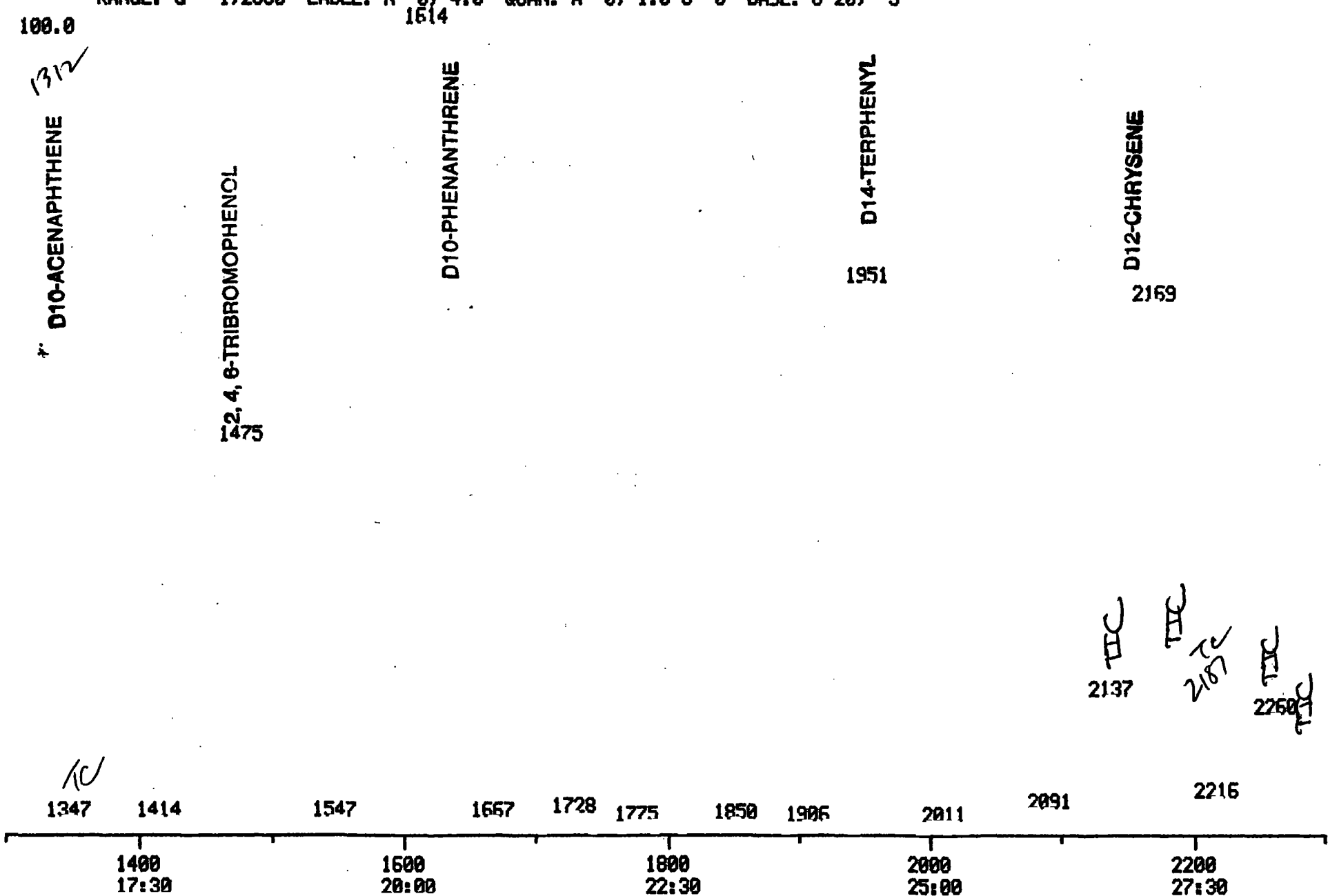
RIC
06/01/88 21:05:00
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R971 #4
CALI: 053188CR #4

SCANS 1300 TO 2300
OUT OF 300 TO 2850

TC=Target Compound
SC=Spike Compound

T.I.C.-Tent. Ident. Compound



00870

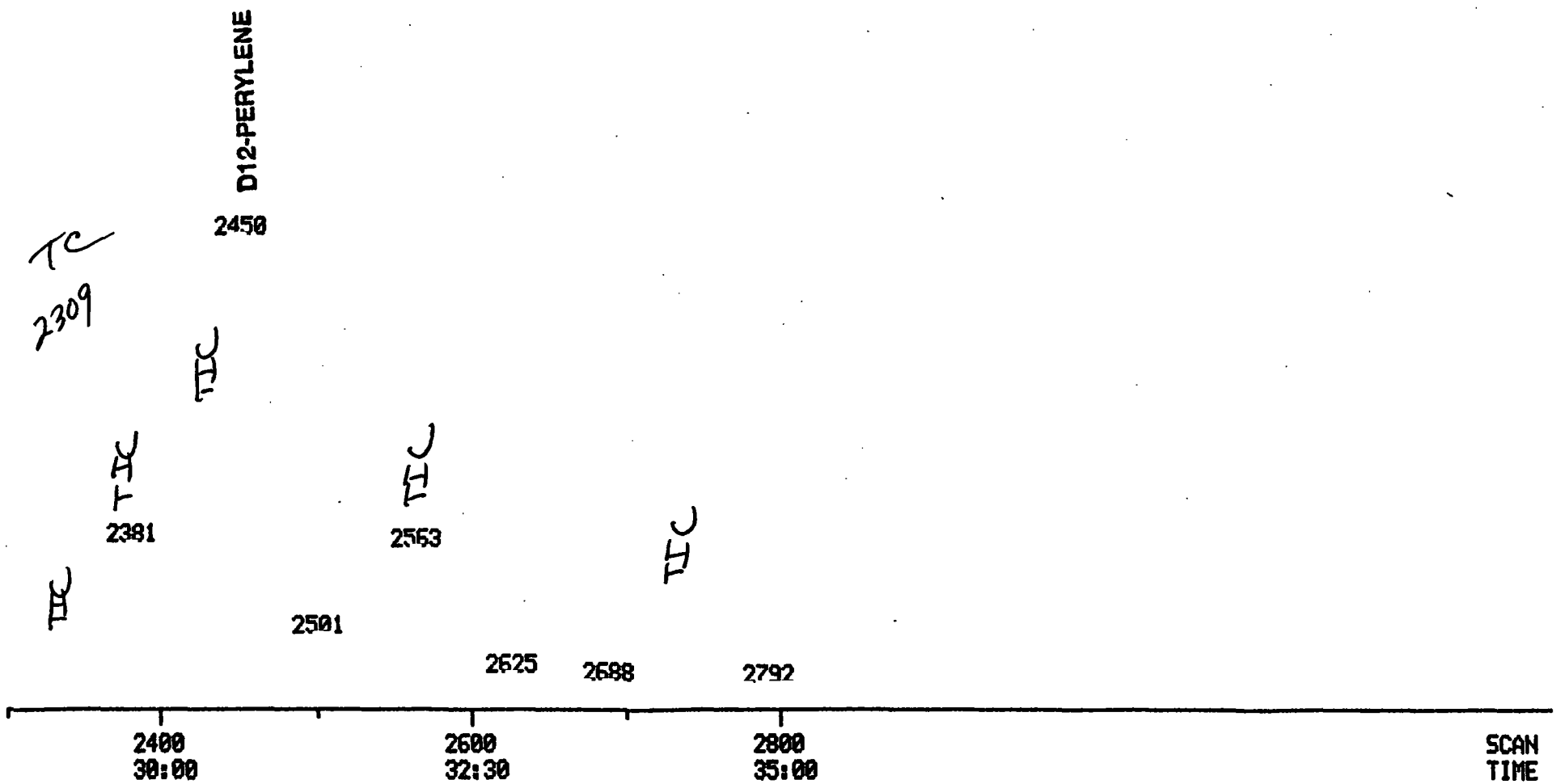
RIC
06/01/88 21:05:00
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R971 #4 SCANS 2300 TO 2850
CALI: 053188CR #4 OUT OF 300 TO 2850

100.0 63424.

T.I.C.-Tent. Ident. Compound

TC=Target Compound
SC=Spike Compound



ROCEDURE: TCA DIAGNOSTIC REPORT 6/02/88 0:30:03
ATA FILE: S59436R971
EFERENCE: 11TABLE
AME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	7	4	2	174	ISO1/TCO1
3	3	2	81	18	4	1	110	ISO2/TCO2
3	3	1	81	12	3	1	81	ISO3/TCO3
3	3	2	82	18	5	1	101	ISO4/TCO4
3	3	1	82	10	4	1	97	ISO5/TCO5
3	3	1	80	8	4	1	173	ISO6/TCO6
3	3	1	27	14	6	3	59	ISO7/TCO7
1	1	1	0	4	1	1	0	ISO8/TCO8

77 COMPOUNDS PROCESSED, 17 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >											
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-716	716	716	.	2	974	.	152	716	.	1
2	S1	2	-517	516	517	1	2	994	.	112	517	.	1
3	S1	3	-666	665	664	-1	1	939	.	99	664	.	1
4	S1	105	-668	667	665	-2	1	942	.	94	665	.	1
5	S1	110	-680	679	.	.	.	.	.	93	.	.	.
6	S1	115	-687	685	.	.	.	.	.	128	686	.	1
7	S1	125	-710	708	.	.	.	.	.	146	.	.	.
8	S2	1	-955	955	954	-1	2	997	.	136	954	.	1
9	S3	1	-1312	1312	1312	.	1	989	.	164	1312	.	1
10	S1	130	-720	719	.	.	.	.	.	146	.	.	.
11	S1	145	-748	747	.	.	.	.	.	108	.	.	.
12	S1	150	-753	752	.	.	.	.	.	146	.	.	.
13	S1	160	-771	770	.	.	.	.	.	108	.	.	.
14	S1	165	-776	775	.	.	.	.	.	45	.	.	.
15	S1	185	-798	797	.	.	.	.	.	108	796	.	1
16	S1	190	-804	803	.	.	.	.	.	70	.	.	.
17	S1	200	-808	807	.	.	.	.	.	117	.	.	.
18	S2	2	-823	822	821	-1	1	999	.	82	821	.	1
19	S2	10	-827	826	.	.	.	.	.	77	.	.	.
20	S2	20	-873	872	.	.	.	.	.	82	870	.	2
21	S2	25	-887	886	.	.	.	.	.	139	.	.	.
22	S2	30	-897	896	.	.	.	.	.	107	896	.	1
23	S2	35	-917	916	.	.	.	.	.	93	915	.	1
24	S2	45	-927	926	.	.	.	.	.	122	.	.	.
25	S2	40	-932	932	.	.	.	.	.	162	.	.	.
26	S2	55	-948	948	.	.	.	.	.	180	.	.	.
27	S2	60	-960	960	.	.	.	.	.	128	958	.	1
28	S2	80	-976	976	.	.	.	.	.	127	.	.	.
29	S2	95	-996	996	.	.	.	.	.	225	.	.	.
30	S2	130	-1074	1074	.	.	.	.	.	107	.	.	.
31	S2	145	-1097	1097	.	.	.	.	.	142	1097	.	1
32	S3	20	-1143	1143	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1161	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1614	1614	.	2	989	.	188	1614	.	1
35	S3	30	-1168	1168	.	.	.	.	.	196	.	.	.
36	S3	3	-1177	1177	1176	-1	1	996	.	172	1176	.	1
37	S3	40	-1195	1195	.	.	.	.	.	162	.	.	.
38	S3	45	-1225	1225	.	.	.	.	.	65	.	.	.
39	S3	55	-1272	1272	.	.	.	.	.	163	.	.	.
40	S3	65	-1281	1281	.	.	.	.	.	152	1279	.	1
41	S3	70	-1284	1284	.	.	.	.	.	165	1283	.	1
42	S3	75	-1311	1311	.	.	.	.	.	138	.	.	.

43	S3	80	-1320	1320	.	.	.	.	.	1 3	1319	.	1
44	S3	85	-1331	1331	.	.	.	.	.	184	.	.	.
45	S3	95	-1347	1347	1348	1	1	982	.	109	1348	.	1
46	S3	90	-1352	1352	.	.	.	.	.	168	1350	.	1
47	S3	105	-1364	1364	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1418	.	.	.	.	.	149	.	.	.
49	S3	135	-1423	1423	.	.	.	.	.	166	.	.	.
50	S3	140	-1425	1424	.	.	.	.	.	204	.	.	.
51	S3	150	-1439	1438	.	.	.	.	.	138	.	.	.
52	S4	10	-1447	1446	.	.	.	.	.	198	.	.	.
53	S4	15	-1453	1452	.	.	.	.	.	169	.	.	.
54	S3	2	-1477	1476	1475	-1	1	986	.	330	1475	.	1
55	S4	30	-1524	1523	.	.	.	.	.	248	.	.	.
56	S4	40	-1553	1552	.	.	.	.	.	284	.	.	.
57	S5	1	-2169	2169	2169	.	1	960	.	240	2168	-1	1
58	S4	50	-1591	1590	.	.	.	.	.	266	1588	.	1
59	S4	65	-1620	1619	.	.	.	.	.	178	1618	.	1
60	S4	70	-1630	1629	.	.	.	.	.	178	.	.	.
61	S4	85	-1754	1753	1751	-2	1	990	.	149	1751	.	1
62	S4	110	-1869	1868	.	.	.	.	.	202	1867	.	1
63	S6	1	-2450	2450	2450	.	1	994	.	264	2450	.	1
64	S5	15	-1915	1914	.	.	.	.	.	202	1913	.	1
65	S5	2	-1951	1950	1951	1	1	994	.	244	1951	.	1
66	S5	40	-2063	2062	.	.	.	.	.	149	2061	.	1
67	S5	55	-2166	2166	.	.	.	.	.	252	.	.	.
68	S5	50	-2166	2166	.	.	.	.	.	228	2167	.	1
69	S5	60	-2176	2176	.	.	.	.	.	228	.	.	.
70	S5	65	-2188	2188	2187	-1	1	995	.	149	2187	.	1
71	S6	10	-2310	2310	2309	-1	3	994	.	149	2309	.	1
72	S6	15	-2381	2381	.	.	.	.	.	252	2382	.	2
73	S6	25	-2387	2387	.	.	.	.	.	252	.	.	.
74	S6	35	-2440	2440	.	.	.	.	.	252	.	.	.
75	S6	55	-2687	2687	.	.	.	.	.	276	.	.	.
76	S6	60	-2690	2690	.	.	.	.	.	278	.	.	.
77	S6	65	-2755	2755	.	.	.	.	.	276	.	.	.

00872

uantitation Report File: S59436R971

00873

ata: S59436R971.TI
6/01/88 21:05:00
ample: 59436-11 BNA H2O 100%/2ML
onds.: ST
ormula: AUTO INJ Instrument: 4500 Weight: 0.000
ubmitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
1	CI30	1,4-DICHLOROBENZENE-D4	152IS1# 01	3855-82-1
2	CS50	2-FLUOROPHENOL	112SS1# 02	367-12-4
3	CS45	PHENOL-D5	99SS1# 03	4165-62-2
4	C315	PHENOL	94 S1#105CC	108-95-2
5	C325	BIS(2-CHLOROETHYL)ETHER	93 S1#110	111-44-4
6	C330	2-CHLOROPHENOL	128 S2#115	95-57-8
7	C335	1,3-DICHLOROBENZENE	146 S1#125	541-73-1
8	CI40	NAPHTHALENE-D8	136IS2# 01	1146-65-2
9	CI50	ACENAPHTHENE-D10	164IS3# 01	15067-26-2
10	C340	1,4-DICHLOROBENZENE	146 S1#130CC	106-46-7
11	C345	BENZYL ALCOHOL	108 S1#145	100-51-6
12	C350	1,2-DICHLOROBENZENE	146 S1#150	95-50-1
13	C355	2-METHYLPHENOL	108 S1#160	95-48-7
14	C360	BIS(2-CHLOROISOPROPYL)E	45 S1#165	108-60-1
15	C365	4-METHYLPHENOL	108 S1#185	106-44-5
16	C370	N-NITROSO-DI-N-PROPYLAM	70 S1#190SP	621-64-7
17	C375	HEXACHLOROETHANE	117 S1#200	67-72-1
18	CS20	NITROBENZENE-D5	82SS2# 02	4165-60-0
19	C410	NITROBENZENE	77 S2# 10	98-95-3
20	C415	ISOPHORONE	82 S2# 20	75-59-1
21	C420	2-NITROPHENOL	139 S2# 25CC	88-75-5
22	C425	2,4-DIMETHYLPHENOL	107 S2# 30	105-67-9
23	C435	BIS(2-CHLOROETHOXY)METH	93 S2# 35	111-91-1
24	C430	BENZOIC ACID	122 S2# 45	65-85-0
25	C440	2,4-DICHLOROPHENOL	162 S2# 40	120-83-2
26	C445	1,2,4-TRICHLOROBENZENE	180 S2# 55	120-82-1
27	C450	NAPHTHALENE	128 S2# 60	91-20-3
28	C455	4-CHLOROANALINE	127 S2# 80	106-47-8
29	C460	HEXACHLOROBUTADIENE	225 S2# 95CC	87-68-3
30	C465	4-CHLORO-3-METHYLPHENO	107 S2#130CC	59-50-7
31	C470	2-METHYLNAPHTHALENE	142 S2#145	91-57-6
32	C510	HEXACHLOROCYCLOPENTADI	237 S3# 20	77-47-4
33	C515	2,4,6-TRICHLOROPHENOL	196 S3# 25CC	88-06-2
34	CI60	PHENANTHRENE-D10	188IS4# 01	1517-22-2
35	C520	2,4,5-TRICHLOROPHENOL	196 S3# 30	95-95-4
36	CS25	2-FLUOROBIPHENYL	172SS3# 03	321-60-8
37	C525	2-CHLORONAPHTHALENE	162 S3# 40	91-58-7
38	C530	2-NITROANALINE	65 S3# 45	88-74-4
39	C535	DIMETHYLPHTHALATE	163 S3# 55	131-11-3
40	C540	ACENAPHTHYLENE	152 S3# 65	208-96-8
41	C543	2,6-DINITROTOLUENE	165 S3# 70	606-20-2
42	C545	3-NITROANILINE	138 S3# 75	99-09-2
43	C550	ACENAPHTHENE	153 S3# 80CC	83-32-9
44	C555	2,4-DINITROPHENOL	184 S3# 85SP	51-28-5
45	C560	4-NITROPHENOL	109 S3# 95SP	100-02-7
46	C565	DIBENZOFURAN	168 S3# 90	132-64-9
47	C570	2,4-DINITROTOLUENE	165 S3#105	121-14-2

No	Name			
48	C580 DIETHYLPHTHALATE	149	S3#130	84-66-2
49	C590 FLUORENE	166	S3#135	86-73-7
50	C585 4-CHLOROPHENYL-PHENYLE	204	S3#140	7005-72-3

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	716	8:57	1	1.000	A BB	26933.	40.000 UG/ML	7.47
2	112	517	6:28	1	0.722	A BV	41332.	43.141 UG/ML	8.05
3	99	664	8:18	1	0.927	A BB	63355.	46.442 UG/ML	8.67
4	94	665	8:19	1	0.929	A BB	3305.	2.170 UG/ML	0.41
5	NOT FOUND								
6	128	686	8:34	1	0.958	A BB	124.	0.131 UG/ML	0.02
7	NOT FOUND								
8	136	954	11:55	8	1.000	A BB	102832.	40.000 UG/ML	7.47
9	164	1312	16:24	9	1.000	A BB	46074.	40.000 UG/ML	7.47
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	108	796	9:57	1	1.112	A BB	150.	0.160 UG/ML	0.03
16	NOT FOUND								
17	NOT FOUND								
18	82	821	10:16	8	0.861	A BB	39434.	34.707 UG/ML	6.48
19	NOT FOUND								
20	82	870	10:52	8	0.912	A*VB	183.	0.085 UG/ML	0.02
21	NOT FOUND								
22	107	896	11:12	8	0.939	A BB	47.	0.056 UG/ML	0.01
23	93	915	11:26	8	0.959	A BB	45.	0.036 UG/ML	0.01
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	128	958	11:58	8	1.004	A BB	194.	0.071 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	142	1097	13:43	8	1.150	A BB	44.	0.027 UG/ML	0.01
32	NOT FOUND								
33	NOT FOUND								
34	188	1614	20:10	34	1.000	A BV	75179.	40.000 UG/ML	7.47
35	NOT FOUND								
36	172	1176	14:42	9	0.896	A BB	57496.	35.595 UG/ML	6.65
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	152	1279	15:59	9	0.975	A BB	53.	0.022 UG/ML	0.00
41	165	1283	16:02	9	0.978	A BB	47.	0.110 UG/ML	0.02
42	NOT FOUND								
43	153	1319	16:29	9	1.005	A BB	54.	0.038 UG/ML	0.01
44	NOT FOUND								
45	109	1348	16:51	9	1.027	A BB	208.	1.010 UG/ML	0.19
46	168	1350	16:52	9	1.029	A BB	127.	0.062 UG/ML	0.01
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:58	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:28	1.00	0.721	1.00	43.14	100.00	0.614	1.423	0.43
3	8:19	1.00	0.929	1.00	46.44	100.00	0.941	2.026	0.46
4	8:21	1.00	0.932	1.00	2.17	50.00	0.098	2.262	0.04
5	8:30		0.948						
6	8:35	1.00	0.958	1.00	0.13	50.00	0.004	1.407	0.00
7	8:52		0.990						
8	11:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	16:25	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	9:00		1.004						
11	9:21		1.043						
12	9:25		1.050						
13	9:38		1.075						
14	9:42		1.082						
15	9:58	1.00	1.113	1.00	0.16	50.00	0.004	1.389	0.00
16	10:03		1.121						
17	10:06		1.127						
18	10:17	1.00	0.861	1.00	34.71	50.00	0.307	0.442	0.69
19	10:20		0.865						
20	10:55	1.00	0.913	1.00	0.08	50.00	0.001	0.838	0.00
21	11:05		0.928						
22	11:13	1.00	0.938	1.00	0.06	50.00	0.000	0.326	0.00
23	11:28	1.00	0.959	1.00	0.04	50.00	0.000	0.489	0.00
24	11:35		0.970						
25	11:39		0.975						
26	11:51		0.992						
27	12:00	1.00	1.004	1.00	0.07	50.00	0.002	1.060	0.00
28	12:12		1.021						
29	12:27		1.042						
30	13:25		1.123						
31	13:43	1.00	1.147	1.00	0.03	50.00	0.000	0.634	0.00
32	14:17		0.871						
33	14:31		0.884						
34	20:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:36		0.890						
36	14:43	1.00	0.896	1.00	35.59	50.00	0.998	1.402	0.71
37	14:56		0.910						
38	15:19		0.933						
39	15:54		0.969						
40	16:01	1.00	0.976	1.00	0.02	50.00	0.001	2.069	0.00
41	16:03	1.00	0.978	1.00	0.11	50.00	0.001	0.371	0.00
42	16:23		0.998						
43	16:30	1.00	1.005	1.00	0.04	50.00	0.001	1.221	0.00
44	16:38		1.014						
45	16:50	1.00	1.026	1.00	1.01	50.00	0.004	0.179	0.02
46	16:54	1.00	1.030	1.00	0.06	50.00	0.002	1.786	0.00
47	17:03		1.039						
48	17:43		1.080						
49	17:47		1.084						
50	17:49		1.085						

Quantitation Report File: S59436R971

Data: S59436R971.TI
06/01/88 21:05:00
Sample: 59436-11 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name				
51	C595	4-NITROANALINE	138	S3#150	100-01-6
52	C610	4,6-DINITRO-2-METHYLPH	198	S4# 10	534-52-1
53	C615	N-NITROSODIPHENYLAMINE	169	S4# 15CC	87-30-6
54	CS55	2,4,6-TRIBROMOPHENOL	330	SS3# 02	118-79-6
55	C625	4-BROMOPHENYL-PHENYLET	248	S4# 30	101-55-3
56	C630	HEXACHLOROBENZENE	284	S4# 40	118-74-1
57	CI70	CHRYSENE-D12	240	IS5# 01	1719-03-5
58	C635	PENTACHLOROPHENOL	266	S4# 50	87-86-5
59	C640	PHENANTHRENE	178	S4# 65	85-01-8
60	C645	ANTHRACENE	178	S4# 70	120-12-7
61	C650	DI-N-BUTYLPHTHALATE	149	S4# 85	84-74-2
62	C655	FLUORANTHENE	202	S4#110CC	206-44-0
63	CI75	PERYLENE-D12	164	IS6# 01	1520-96-3
64	C715	PYRENE	202	S5# 15	129-00-0
65	CS30	TERPHENYL-D14	244	SS5# 02	1718-51-0
66	C720	BUTYLBENZYLPHTHALATE	149	S5# 40	85-68-7
67	C725	3,3'-DICHLOROBENZIDINE	252	S5# 55	91-94-1
68	C730	BENZO(A)ANTHRACENE	228	S5# 50	56-55-3
69	C740	CHRYSENE	228	S5# 60	218-01-9
70	C745	BIS(2-ETHYLHEXYL)PHTHA	149	S5# 65	117-81-7
71	C760	DI-N-OCTYL PHTHALATE	149	S6# 10CC	117-84-0
72	C765	BENZO(B)FLUORANTHENE	252	S6# 15	205-99-2
73	C770	BENZO(K)FLUORANTHENE	252	S6# 25	207-08-9
74	C775	BENZO(A)PYRENE	252	S6# 35	50-32-8
75	C780	INDENO(1,2,3-CD)PYRENE	276	S6# 55	193-39-5
76	C785	DIBENZ(A,H)ANTHRACENE	278	S6# 60	53-70-3
77	C790	BENZO(G,H,I)PERYLENE	276	S6# 65	191-24-2

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	330	1475	18:26	9	1.124	A BB	12607.	68.918 UG/ML	12.87
55	NOT FOUND								
56	NOT FOUND								
57	240	2168	27:06	57	1.000	A BB	49822.	40.000 UG/ML	7.47
58	266	1588	19:51	34	0.984	A BB	121.	0.444 UG/ML	0.08
59	178	1618	20:13	34	1.002	A BB	102.	0.048 UG/ML	0.01
60	NOT FOUND								
61	149	1751	21:53	34	1.085	A BB	1032.	0.368 UG/ML	0.07
62	202	1867	23:20	34	1.157	A BB	75.	0.038 UG/ML	0.01
63	264	2450	30:37	63	1.000	A BB	38568.	40.000 UG/ML	7.47
64	202	1913	23:55	57	0.882	A BB	113.	0.064 UG/ML	0.01
65	244	1951	24:23	57	0.900	A BB	58024.	43.453 UG/ML	8.11
66	149	2061	25:46	57	0.951	A BB	343.	0.337 UG/ML	0.06

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	228	2167	27:05	57	1.000	A BV	244.	0.158 UG/ML	0.03
69	NOT FOUND								
70	149	2187	27:20	57	1.009	A VB	5277.	3.754 UG/ML	0.70
71	149	2309	28:52	63	0.942	A BV	34205.	14.137 UG/ML	2.64
72	252	2382	29:46	63	0.972	A*BB	154.	0.116 UG/ML	0.02
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	17:59		1.096						
52	18:05		0.895						
53	18:10		0.899						
54	18:28	1.00	1.125	1.00	68.92	100.00	0.109	0.159	0.69
55	19:03		0.943						
56	19:25		0.961						
57	27:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:53	1.00	0.985	1.00	0.44	50.00	0.001	0.145	0.01
59	20:15	1.00	1.002	1.00	0.05	50.00	0.001	1.136	0.00
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	0.37	50.00	0.011	1.492	0.01
62	23:22	1.00	1.157	1.00	0.04	50.00	0.001	1.057	0.00
63	30:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:56	1.00	0.882	1.00	0.06	50.00	0.002	1.422	0.00
65	24:23	1.00	0.899	1.00	43.45	50.00	0.932	1.072	0.87
66	25:47	1.00	0.951	1.00	0.34	50.00	0.006	0.818	0.01
67	27:04		0.998						
68	27:04	1.00	0.998	1.00	0.16	50.00	0.004	1.237	0.00
69	27:12		1.003						
70	27:21	1.00	1.008	1.00	3.75	50.00	0.085	1.129	0.08
71	28:52	1.00	0.942	1.00	14.14	50.00	0.709	2.509	0.28
72	29:46	1.00	0.971	1.00	0.12	50.00	0.003	1.378	0.00
73	29:50		0.974						
74	30:30		0.996						
75	33:35		1.096						
76	33:37		1.098						
77	34:26		1.124						

TCA FINISHED, 17 FOUND
#8
FINISHED AT: 6/02/88 0:37:56

RMAL QUANTITATION SUMMARY FILE: S59436R971
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	716	1	26933.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	954	2	102832.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1312	3	46074.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1614	4	75179.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2168	5	49822.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2450	6	38568.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	821	2	39434.	0.307	34.707
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1176	3	57496.	0.998	35.595
9	S5# 2	CS30 TERPHENYL-D14	244	1951	5	58024.	0.932	43.453
10	S1# 3	CS45 PHENOL-D5	99	664	1	63355.	0.941	46.442
11	S1# 2	CS50 2-FLUOROPHENOL	112	517	1	41332.	0.614	43.142
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1475	3	12607.	0.109	68.918
13	S1#105	C315 PHENOL	94	665	1	3305.	~~0.098~~	~~2.170~~
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND		
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND		
18	S1#145	C345 BENZYL ALCOHOL	108		1	NOT FOUND		
19	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND		
20	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND		
21	S1#165	C360 BIS(2-CHLOROISOPROP	45		1	NOT FOUND		
22	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND		
23	S1#190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND		
24	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND		
25	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND		
26	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND		
27	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND		
28	S2# 30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND		
29	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND		
30	S2# 40	C440 2,4-DICHLOROPHENOL	162		2	NOT FOUND		
31	S2# 45	C430 BENZOIC ACID	122		2	NOT FOUND		
32	S2# 55	C445 1,2,4-TRICHLOROBENZ	180		2	NOT FOUND		
33	S2# 60	C450 NAPHTHALENE	128		2	NOT FOUND		
34	S2# 80	C455 4-CHLOROANALINE	127		2	NOT FOUND		
35	S2# 95	C460 HEXACHLOROBUTADIENE	225		2	NOT FOUND		
36	S2#130	C465 4-CHLORO-3-METHYLPH	107		2	NOT FOUND		
37	S2#145	C470 2-METHYLNAPHTHALENE	142		2	NOT FOUND		
38	S3# 20	C510 HEXACHLOROCYCLOPENT	237		3	NOT FOUND		
39	S3# 25	C515 2,4,6-TRICHLOROPHEN	196		3	NOT FOUND		
40	S3# 30	C520 2,4,5-TRICHLOROPHEN	196		3	NOT FOUND		
41	S3# 40	C525 2-CHLORONAPHTHALENE	162		3	NOT FOUND		
42	S3# 45	C530 2-NITROANALINE	65		3	NOT FOUND		
43	S3# 55	C535 DIMETHYLPHTHALATE	163		3	NOT FOUND		
44	S3# 65	C540 ACENAPHTHYLENE	152		3	NOT FOUND		
45	S3# 70	C543 2,6-DINITROTOLUENE	165		3	NOT FOUND		
46	S3# 75	C545 3-NITROANILINE	138		3	NOT FOUND		
47	S3# 80	C550 ACENAPHTHENE	153		3	NOT FOUND		
48	S3# 85	C555 2,4-DINITROPHENOL	184		3	NOT FOUND		
49	S3# 90	C565 DIBENZOFURAN	168		3	NOT FOUND		
		- DPHENOL	109	1348	3	208.	0.004	1.010

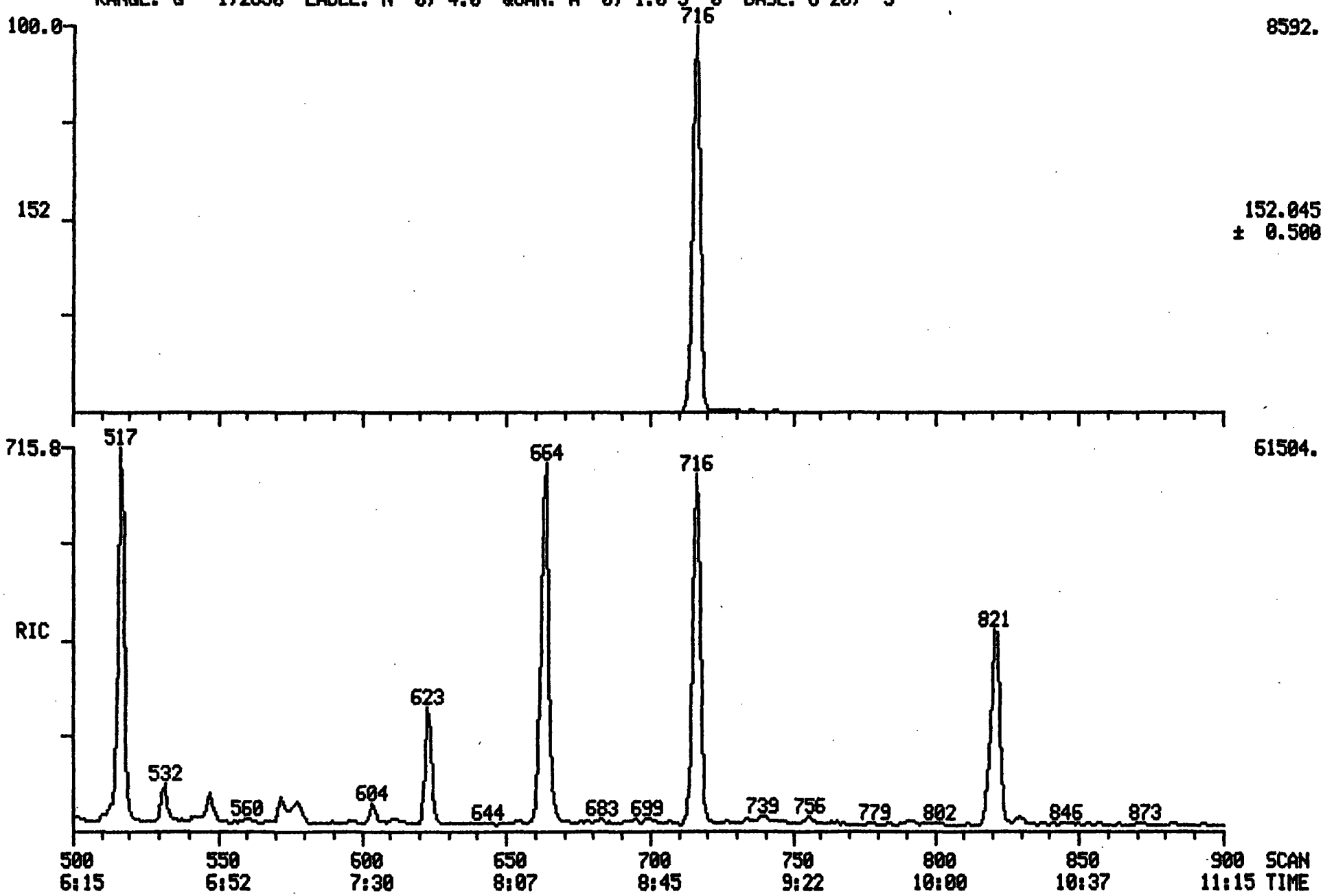
00879

51	S3#105	C570	2,4-DINITROTOLUENE	165		3	NOT FOUND			
52	S3#130	C580	DIETHYLPHTHALATE	149		3	NOT FOUND			
53	S3#135	C590	FLUORENE	166		3	NOT FOUND			
54	S3#140	C585	4-CHLOROPHENYL-PHEN	204		3	NOT FOUND			
55	S3#150	C595	4-NITROANALINE	138		3	NOT FOUND			
56	S4# 10	C610	4,6-DINITRO-2-METHY	198		4	NOT FOUND			
57	S4# 15	C615	N-NITROSODIPHENYLAM	169		4	NOT FOUND			
58	S4# 30	C625	4-BROMOPHENYL-PHENY	248		4	NOT FOUND			
59	S4# 40	C630	HEXACHLOROBENZENE	284		4	NOT FOUND			
60	S4# 50	C635	PENTACHLOROPHENOL	266		4	NOT FOUND			
61	S4# 65	C640	PHENANTHRENE	178		4	NOT FOUND			
62	S4# 70	C645	ANTHRACENE	178		4	NOT FOUND			
63	S4# 85	C650	DI-N-BUTYLPHTHALATE	149		4	NOT FOUND			
64	S4#110	C655	FLUORANTHENE	202		4	NOT FOUND			
65	S5# 15	C715	PYRENE	202		5	NOT FOUND			
66	S5# 40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND			
67	S5# 50	C730	BENZO(A)ANTHRACENE	228		5	NOT FOUND			
68	S5# 55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND			
69	S5# 60	C740	CHRYSENE	228		5	NOT FOUND			
70	S5# 65	C745	BIS(2-ETHYLHEXYL)PH	149	2187	5	5277.	0.085	3.754	
71	S6# 10	C760	DI-N-OCTYL PHTHALAT	149	2309	6	34205.	0.709	14.137	
72	S6# 15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND			
73	S6# 25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND			
74	S6# 35	C775	BENZO(A)PYRENE	252		6	NOT FOUND			
75	S6# 55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND			
76	S6# 60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND			
77	S6# 65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND			

00800

RIC+MASS CHROMATOGRAM
06/01/88 21:05:00
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

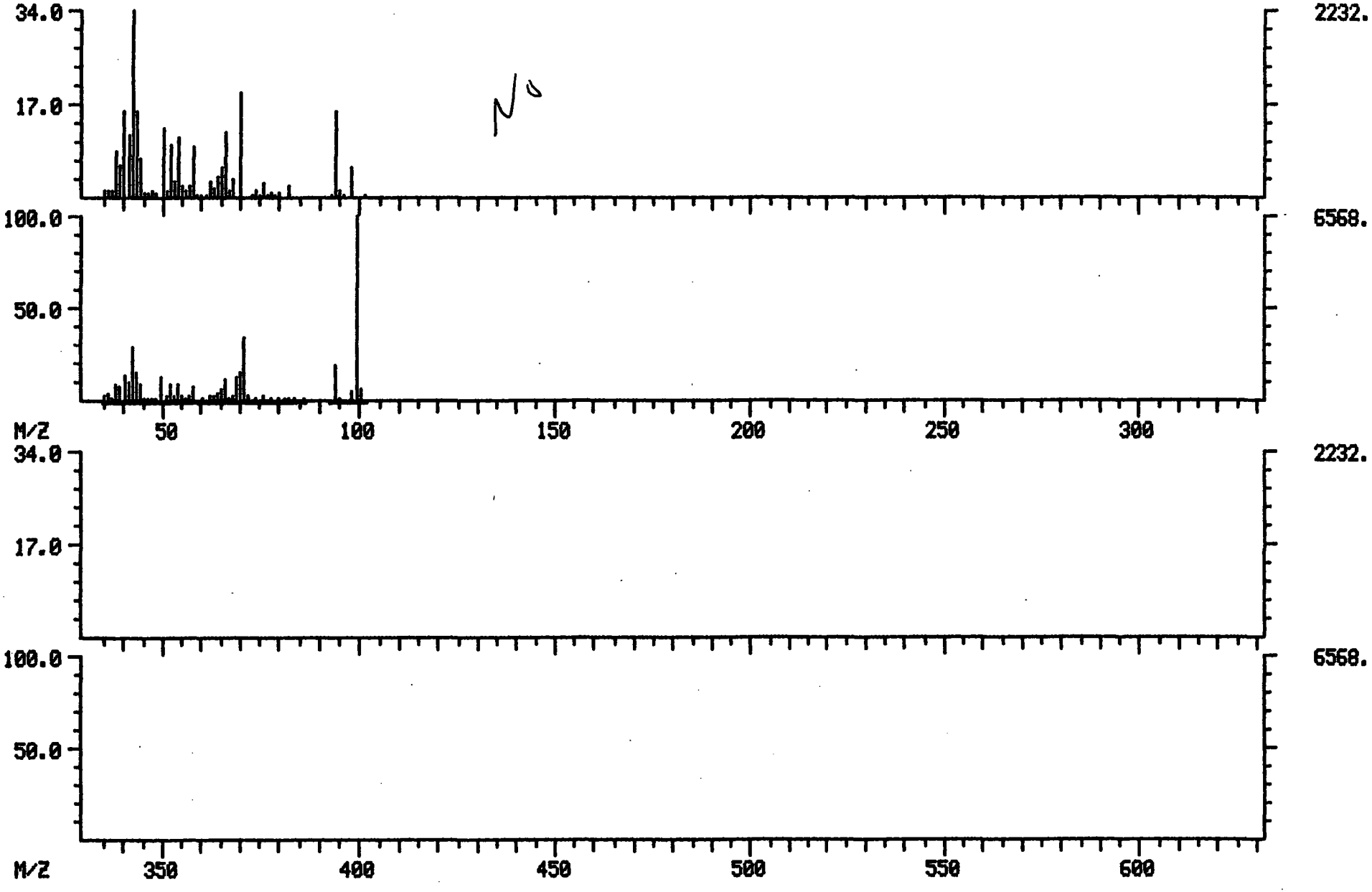
DATA: 559436R971 #1 SCANS 500 TO 900
CALI: 053188CR #4



00881

DUAL MASS SPECTRUM
06/01/88 21:05:00 + 8:19
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 #665 BASE M/Z: 42/ 99
CALI: 053188CR #4 RIC: 15983./ 25727.

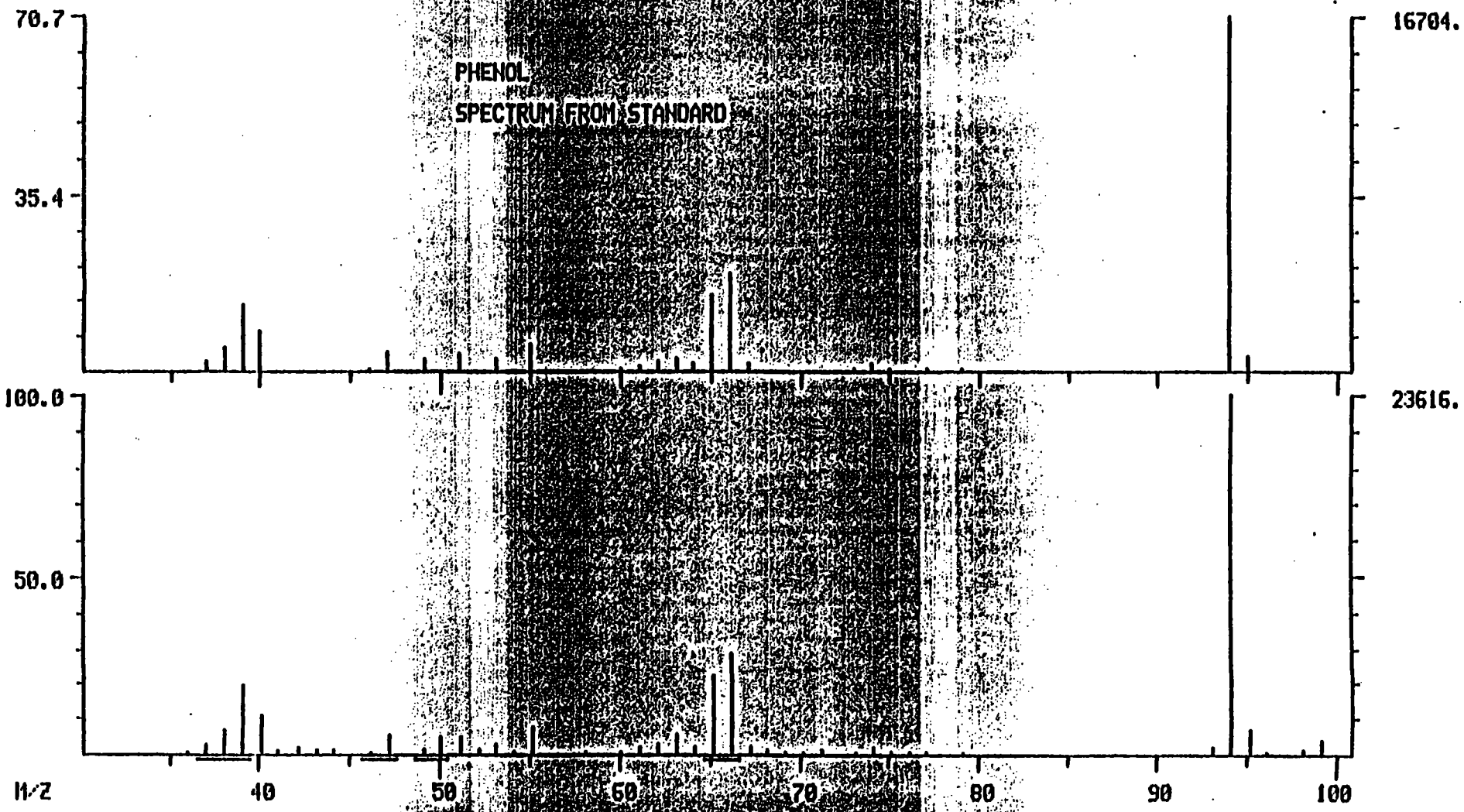


00882

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 7:27
SAMPLE: 50PPM HSL STD
COMDS.: DESC ST
ENHANCED (S 15B 2H 0T)

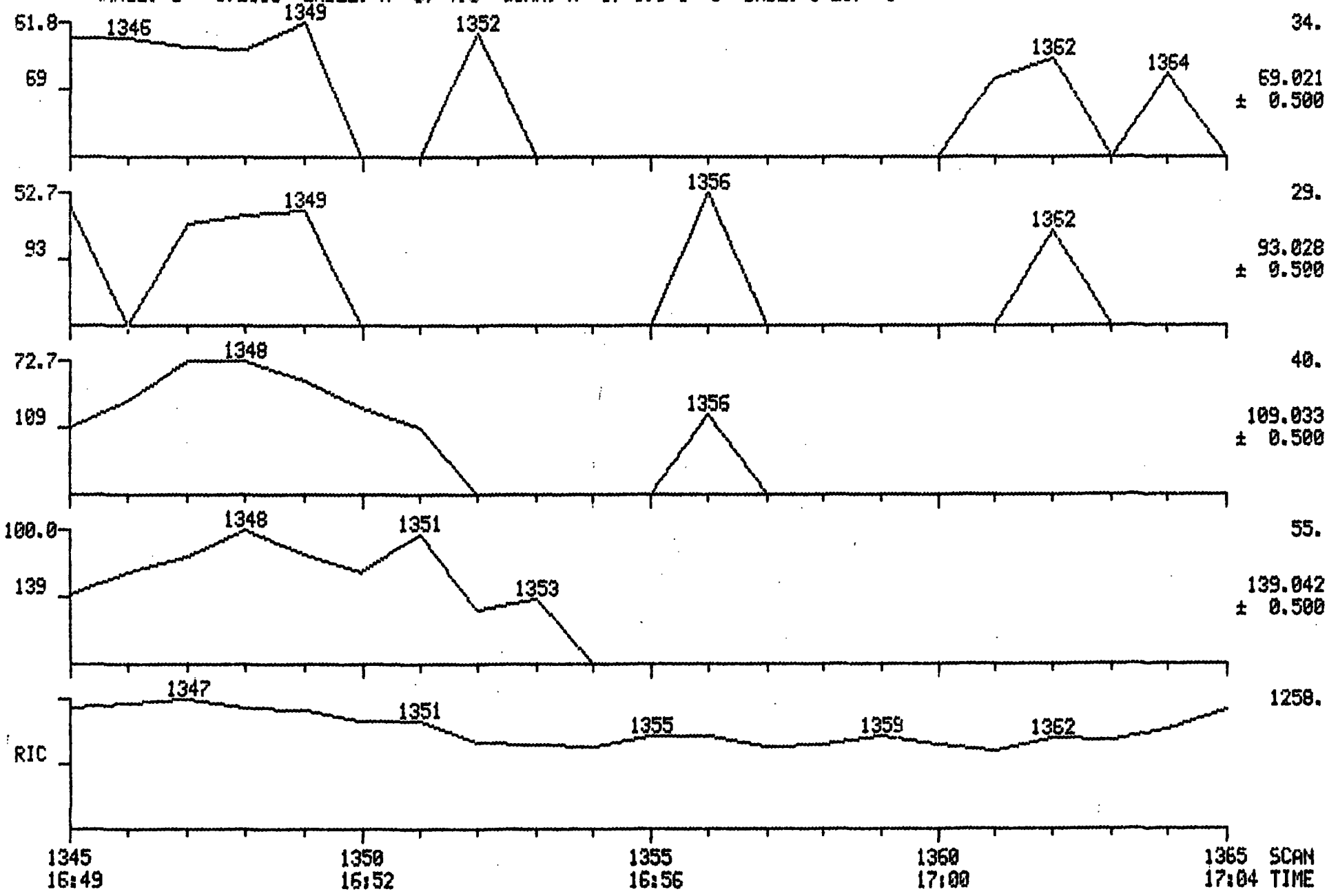
DATA: STDR810 #596
CALI: 103086C #5

BASE M/Z: 94/ 94
RIC: 39359./ 63039.



00883

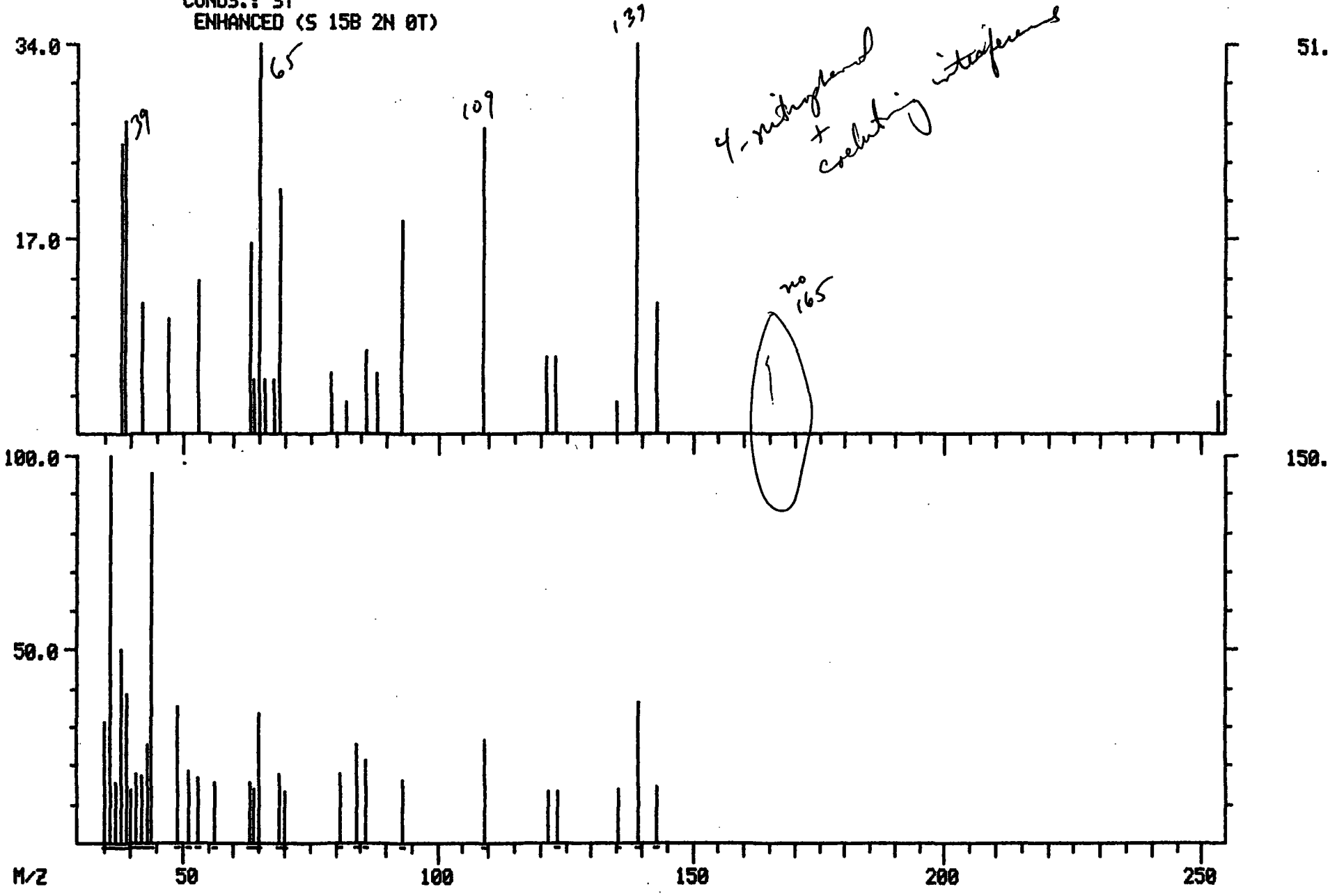
RIC+MASS CHROMATOGRAMS DATA: S59436R971 #1 SCANS 1345 TO 1365
06/01/88 21:05:00 CALI: 053188CR #4
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



00884

DUAL MASS SPECTRUM
06/01/88 21:05:00 + 16:51
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 #1348 BASE M/Z: 139/ 36
CALI: 053188CR #4 RIC: 454./ 1179.



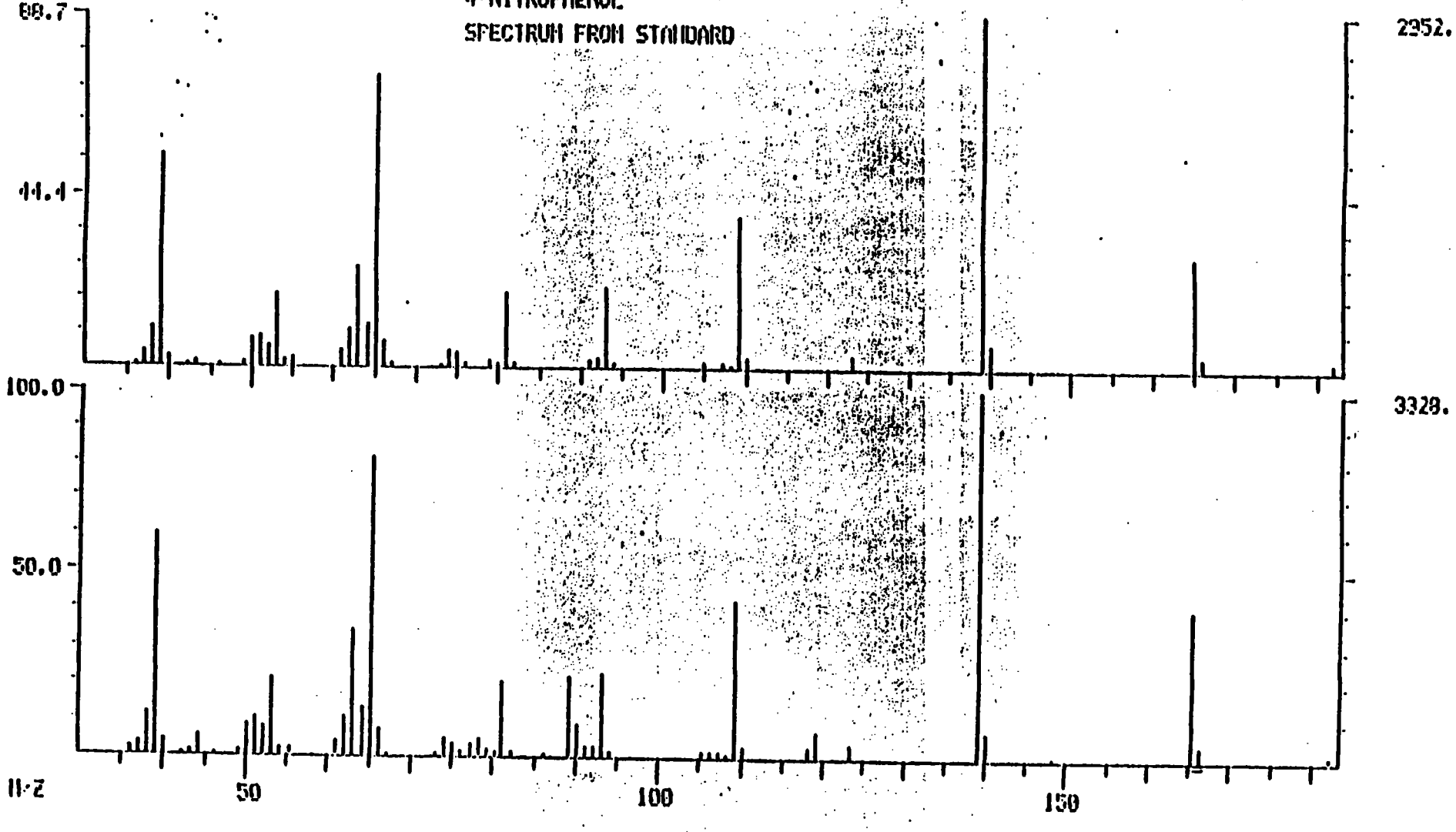
00885

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 17:34
SAMPLE: 50PPM MSL STD
COMDS.: DESC ST
ENHANCED (S 150 2H 0T)

DATA: STDR810 M1406
CALI: 103086C M5

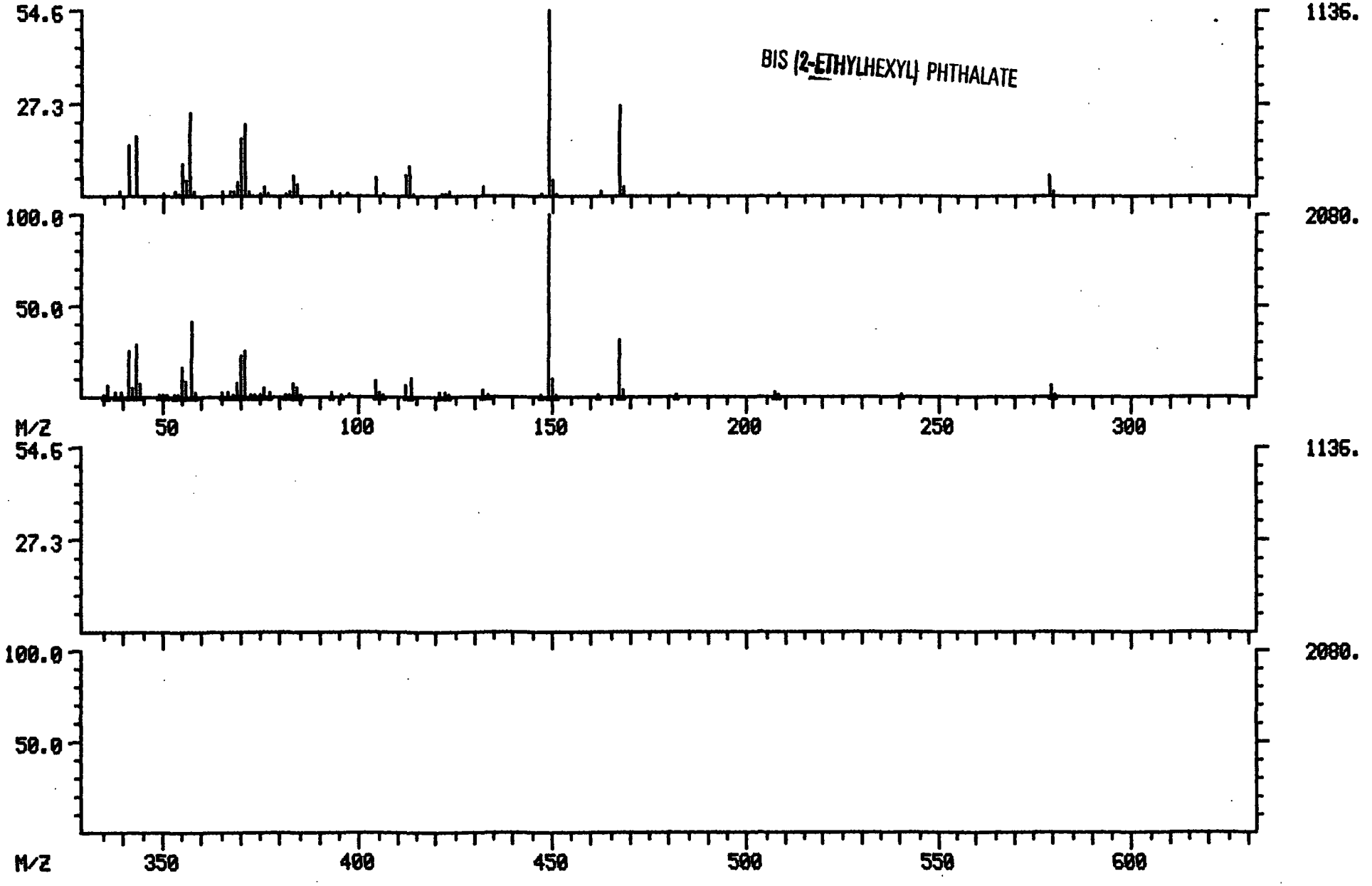
BASE M/Z: 139/ 139
RIC: 16079./ 20511.

4-NITROPHENOL
SPECTRUM FROM STANDARD



DUAL MASS SPECTRUM
06/01/88 21:05:00 + 27:20
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 #2187 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 5711./ 9391.

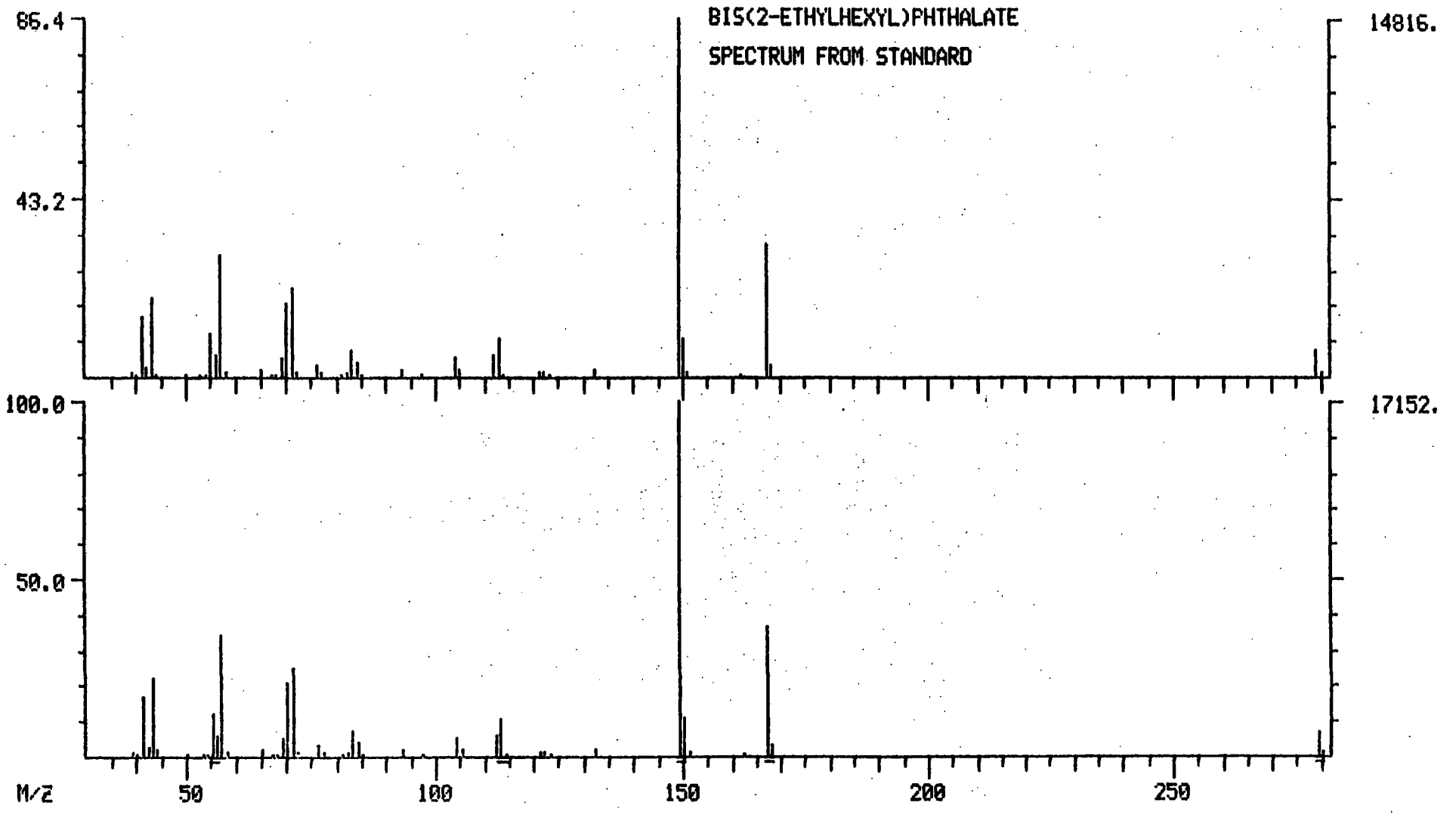


00887

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 30:27
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2N 0T)

DATA: STDR810 #2436
CALI: 103086C #5

BASE M/Z: 149/ 149
RIC: 55167./ 63807.

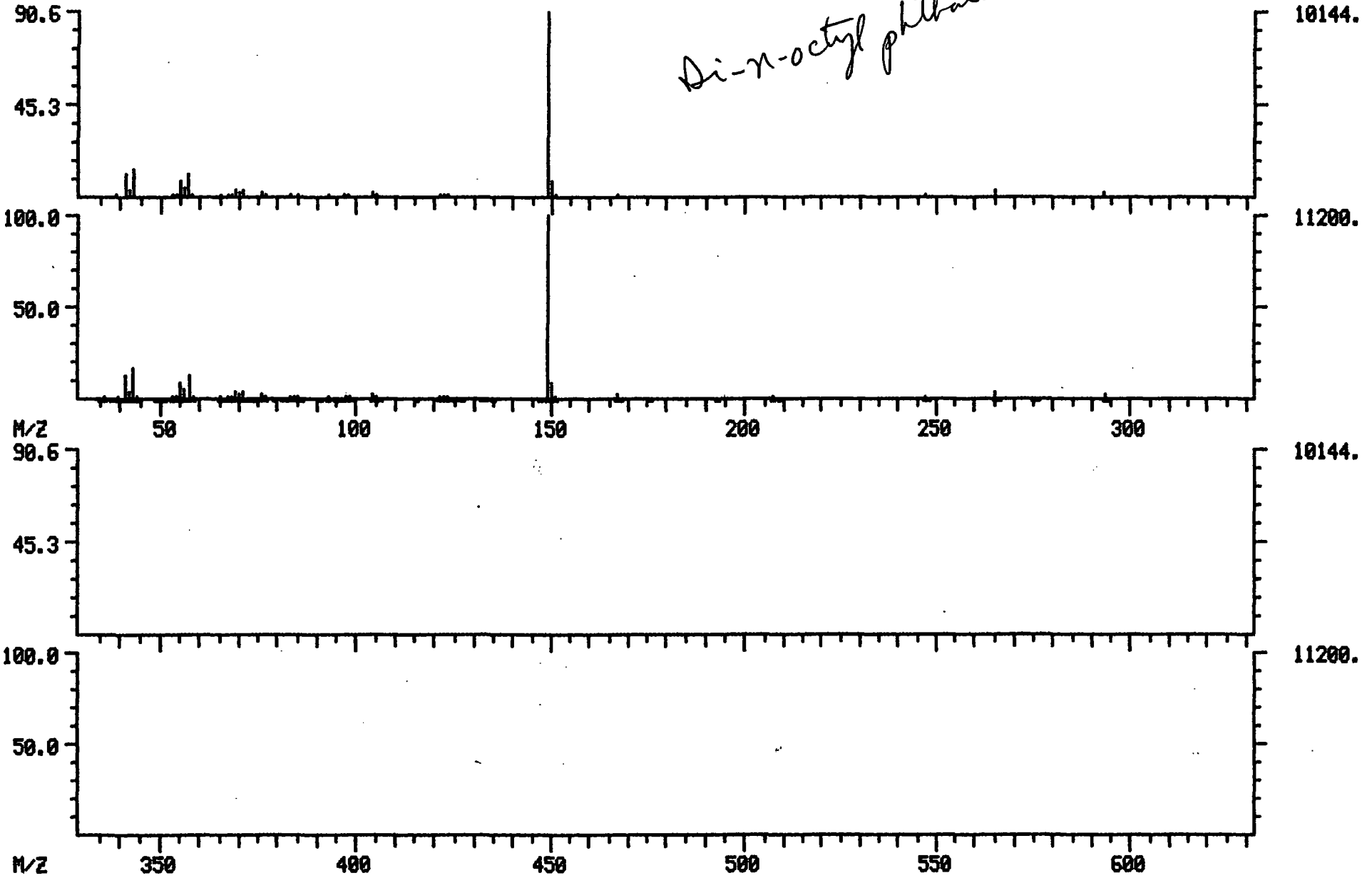


00888

DUAL MASS SPECTRUM
06/01/88 21:05:00 + 28:52
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 #2309 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 22463./ 25343.

Di-n-octyl phthalate

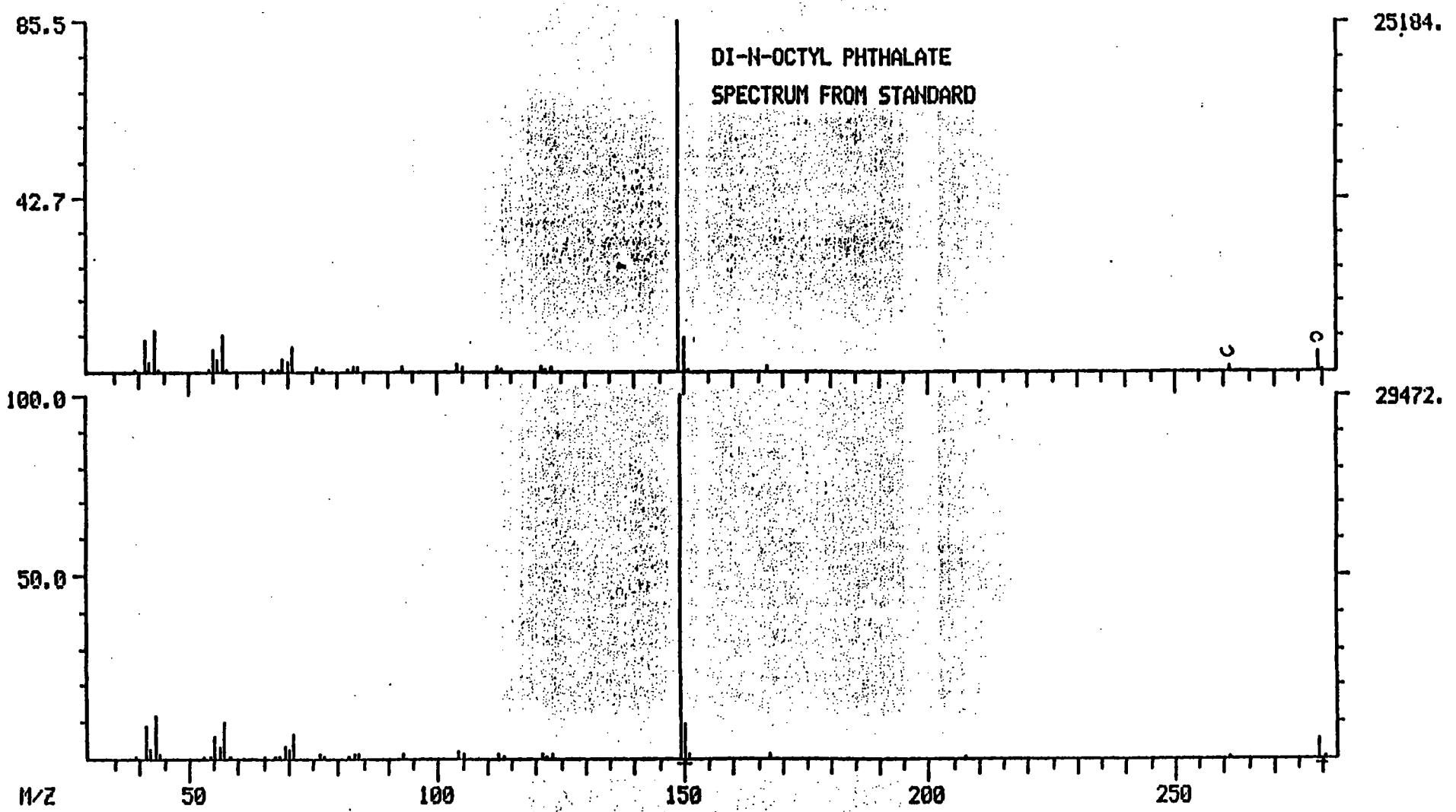


00889

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 32:18
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2N 0T)

DATA: STDR810 #2584
CALI: 103086C #5

BASE M/Z: 149/ 149
RIC: 50111./ 58623.



DATA REDUCED BY: AR DATE: 6-7-86 DATA FILE: S59436R971
DATA REVIEWED BY: ____ DATE: ____

00890

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-11 BNA H2O 100%/2ML RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MK

#	SCAN	G	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	315	B	2	10.	108-87-2	CYCLOHEXANE, METHYL-
2	369	B	2	5.9	108-88-3	BENZENE, METHYL- (VOA)
3	393	CB	1	8.9	00-00-0	OXYGENATED HYDROCARBON
4	435	CB	1	5.3	00-00-0	OXYGENATED HYDROCARBON
5	469	CB	1	18.	00-00-0	OXYGENATED HYDROCARBON
6	623	IB	1	11.	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-
7	2137	C	2	7.1	00-00-0	PHTHALATE
8	2182	C	2	14.	00-00-0	PHTHALATE
9	2260	C	2	8.6	00-00-0	PHTHALATE
10	2267	C	2	5.9	00-00-0	PHTHALATE
11	2335	~~C~~ VT	1	4.5	00-00-0	UNKNOWN
12	2381	C	2	11.	00-00-0	PHTHALATE
13	2392	C	2	4.9	00-00-0	PHTHALATE
14	2431	C	2	25.	00-00-0	PHTHALATE
15	2563	C	2	12.	00-00-0	PHTHALATE
16	2741	C	2	4.2	00-00-0	PHTHALATE

edit completed

DATA FILE: S59436R971

ENSECO TIC REPORT (PAGE 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	998	905	1	3:56	0.444	44607.	17151.	10.146	NB	1138.
2	994	943	1	4:36	0.520	25917.	12106.	5.895	NB	850.
3	938	818	1	4:54	0.553	39299.	17373.	8.938	BC	2.
4	765	724	1	5:26	0.612	23424.	7776.	5.328	BC	2.
5	812	778	1	5:51	0.660	81034.	29663.	18.430	BC	2.
6	941	770	1	7:47	0.875	48879.	18806.	11.117	NB	6445.
7	970	896	6	26:42	0.877	24953.	9960.	7.099	BC	8.
8	994	933	6	27:16	0.895	49049.	12639.	13.954	BC	8.
9	971	838	6	28:14	0.927	30337.	8370.	8.630	BC	8.
10	960	776	6	28:20	0.930	20826.	7342.	5.925	BC	8.
11	589	314	6	29:11	0.958	15729.	2025.	4.475	UK	1.
12	946	784	6	29:45	0.976	39583.	9638.	11.261	BC	8.
13	956	769	6	29:53	0.981	17372.	4475.	4.942	BC	8.
14	991	875	6	30:23	0.997	86681.	18623.	24.659	BC	8.
15	914	786	6	32:02	1.051	40743.	9104.	11.591	BC	8.
16	854	628	6	34:15	1.123	14733.	2371.	4.192	BC	8.

TIC SELECTION REPORT

DATA FILE: S59436R971

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 50 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 3 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
337	114935.	26.140
517	160300.	36.458
664	184378.	41.934
716	175872.	39.999
821	116032.	26.390
954	227887.	39.999
1176	175505.	30.805
1312	231179.	42.947
1614	215313.	39.999
1951	173973.	32.320
2169	158065.	44.966
2187	19915.	5.665
2309	80843.	22.998
2450	140607.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 17

INTERNAL STANDARD DATA IS LISTED BELOW. IS FOR WHICH RIC SIZE DIFFERS FROM THE ESTIMATED RIC SIZE BY MORE THAN 60 % ARE CONSIDERED TO HAVE INTERFERENCES, AND ARE NOT USED FOR QUANTITATION.

#	LIB	LIB#	RIC SIZE	ESTIMATED RIC SIZE	INTERFERENCE
1	S1	1	175872	164738.	
2	S2	1	227887	151456.	
3	S3	1	231179	115475.	*
4	S4	1	215313	144548.	
5	S5	1	158065	95849.	*
6	S6	1	140607	103261.	

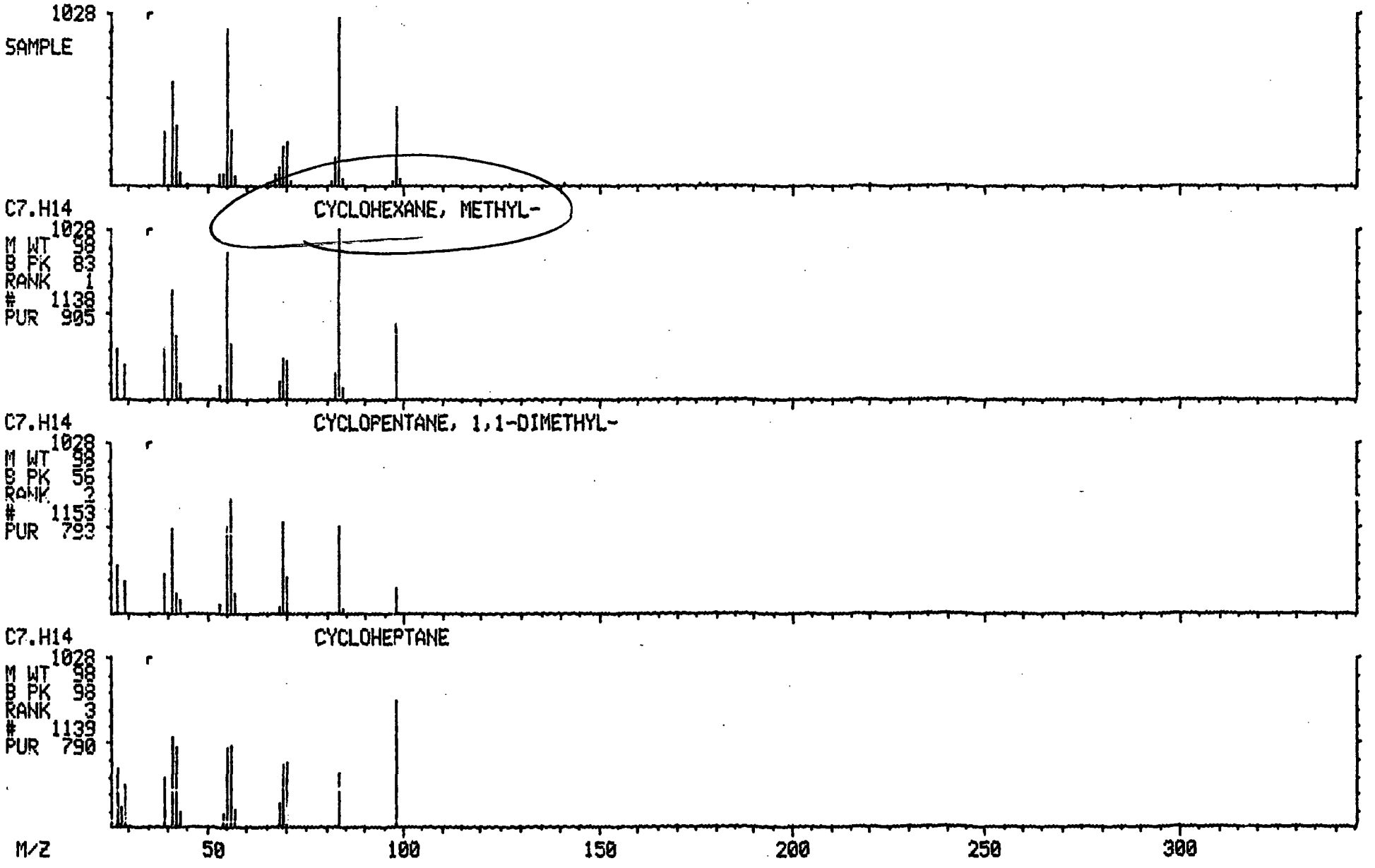
SIZE = AREA

00893

LIBRARY SEARCH
05/01/88 21:05:00 + 3:56
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 # 315
CALI: 053188CR # 4

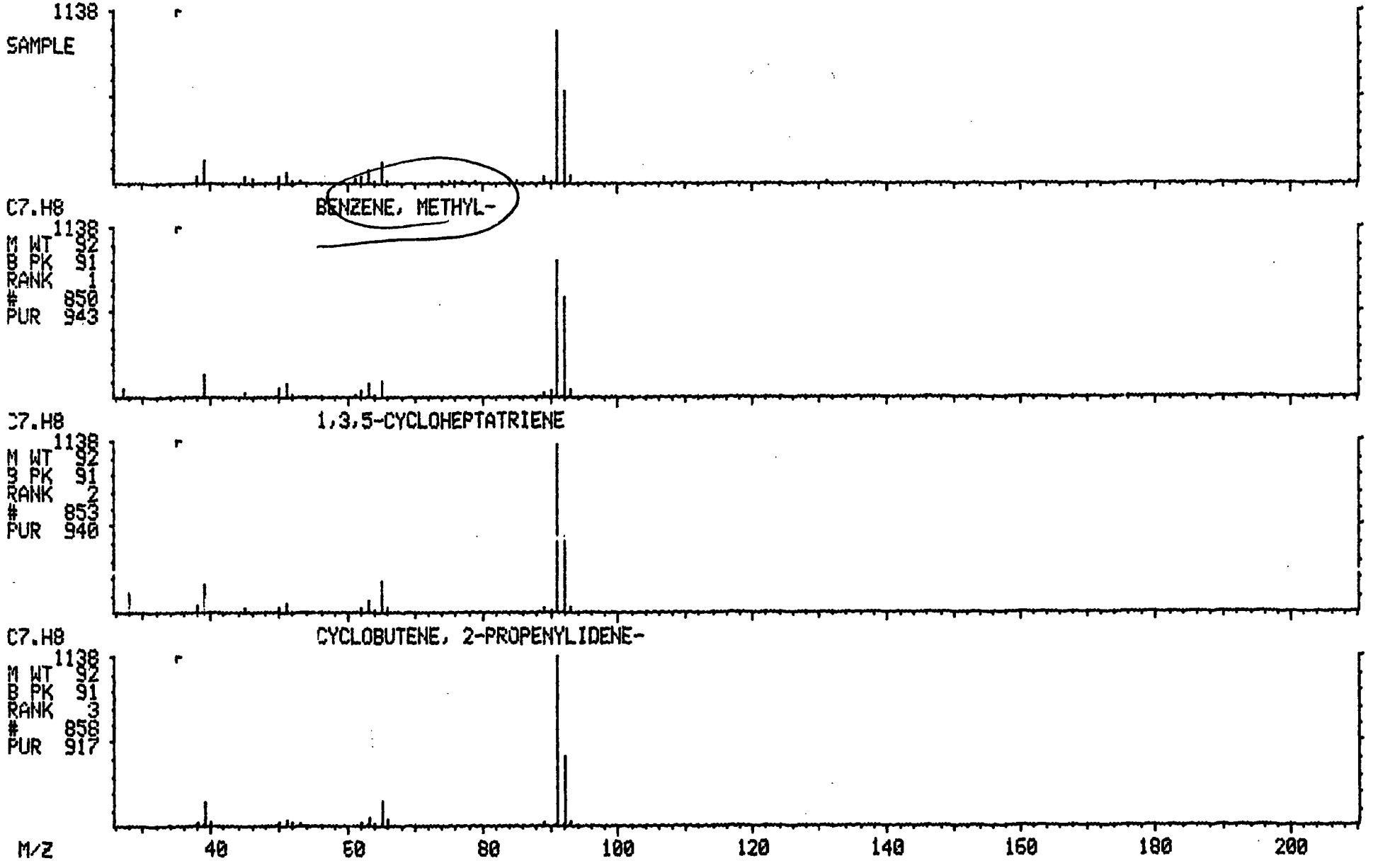
BASE M/Z: 83
RIC: 12847.



00894

LIBRARY SEARCH
06/01/88 21:05:00 + 4:37
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 # 369 BASE M/Z: 91
CALI: 053188CR # 4 RIC: 9535.

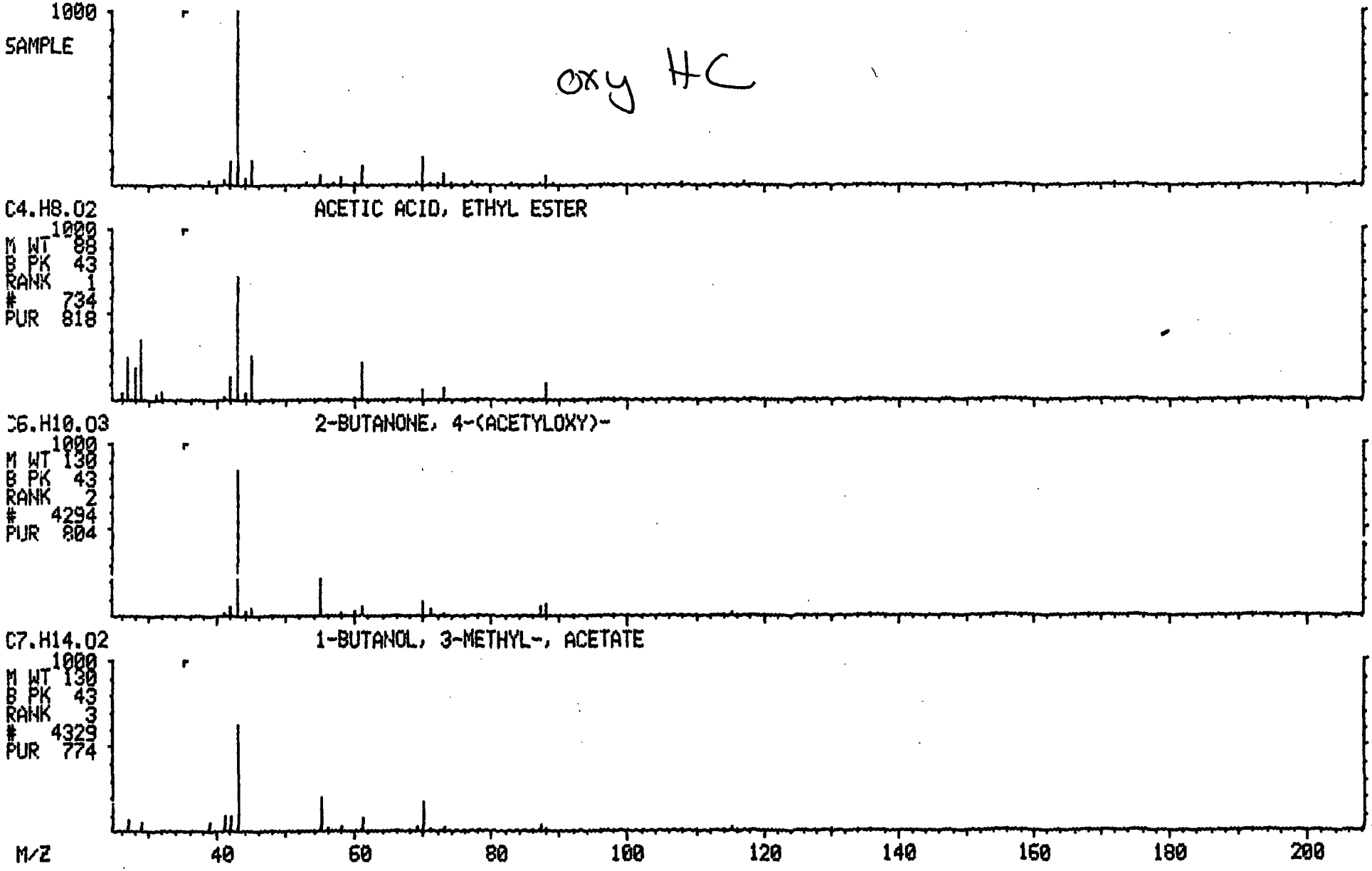


00895

LIBRARY SEARCH
05/01/88 21:05:00 + 4:55
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 # 393
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 13743.

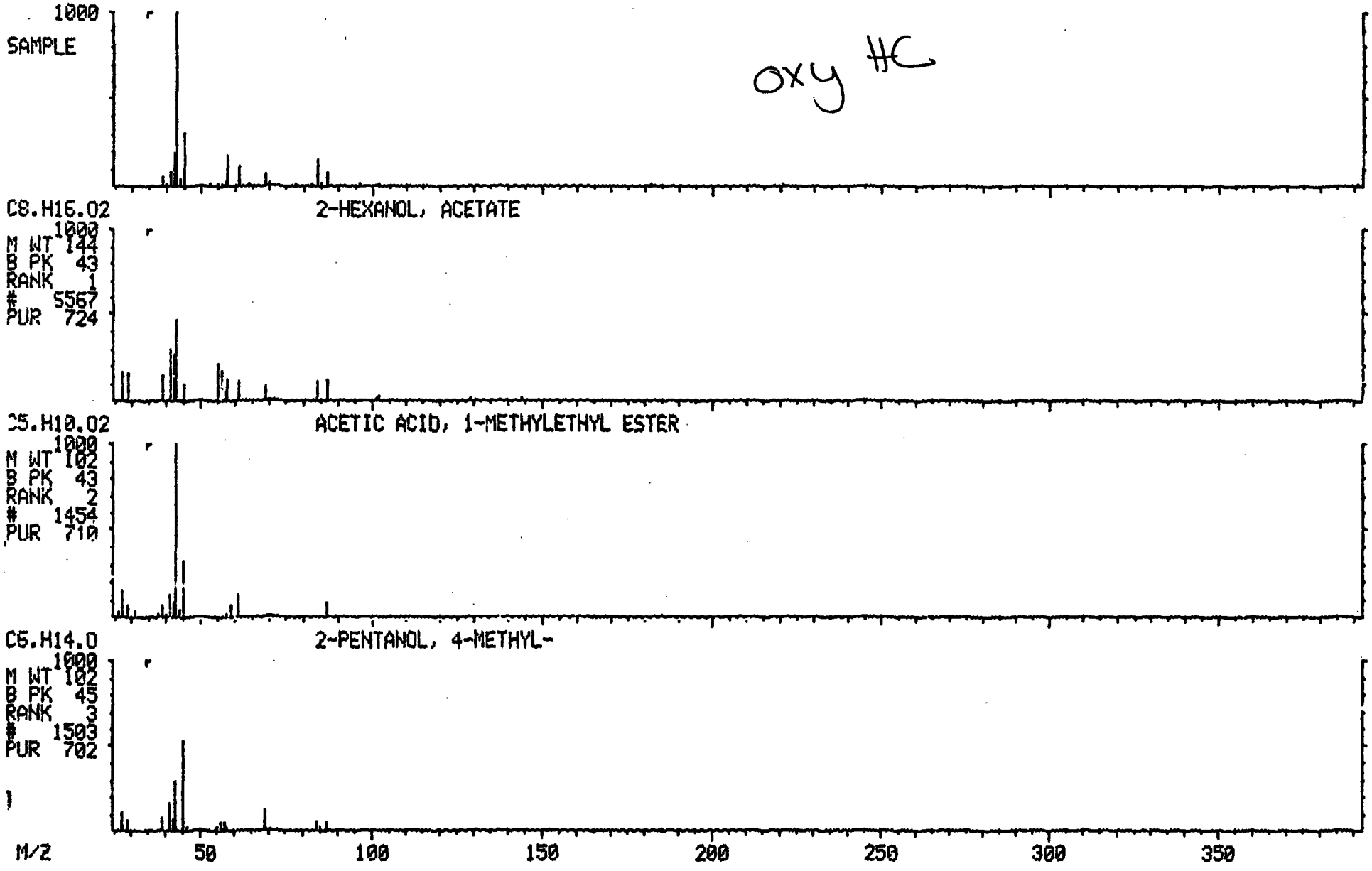


00896

LIBRARY SEARCH
06/01/88 21:05:00 + 5:26
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 # 435
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 7111.

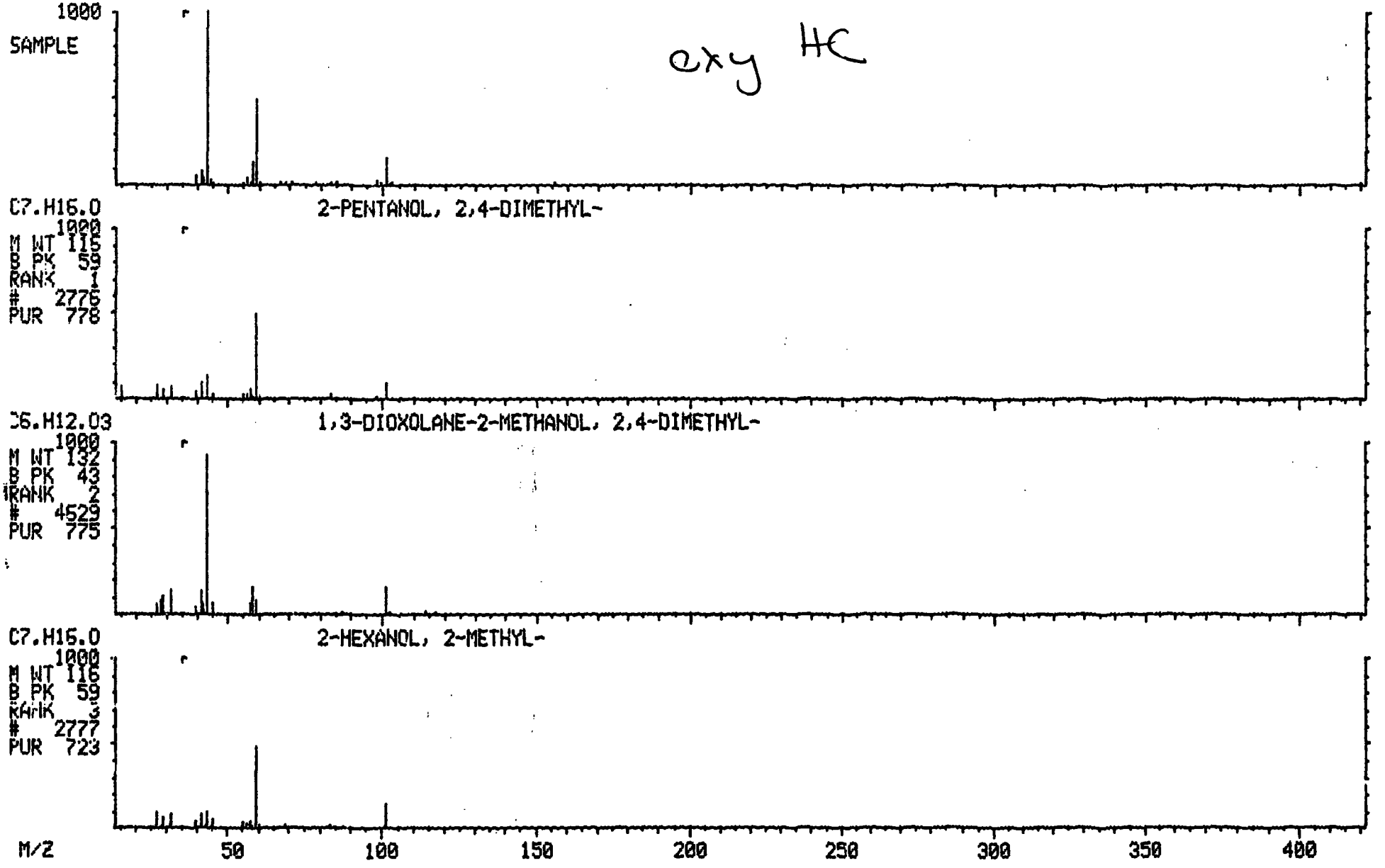


00897

LIBRARY SEARCH
06/01/88 21:05:00 + 5:52
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 # 469
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 26783.

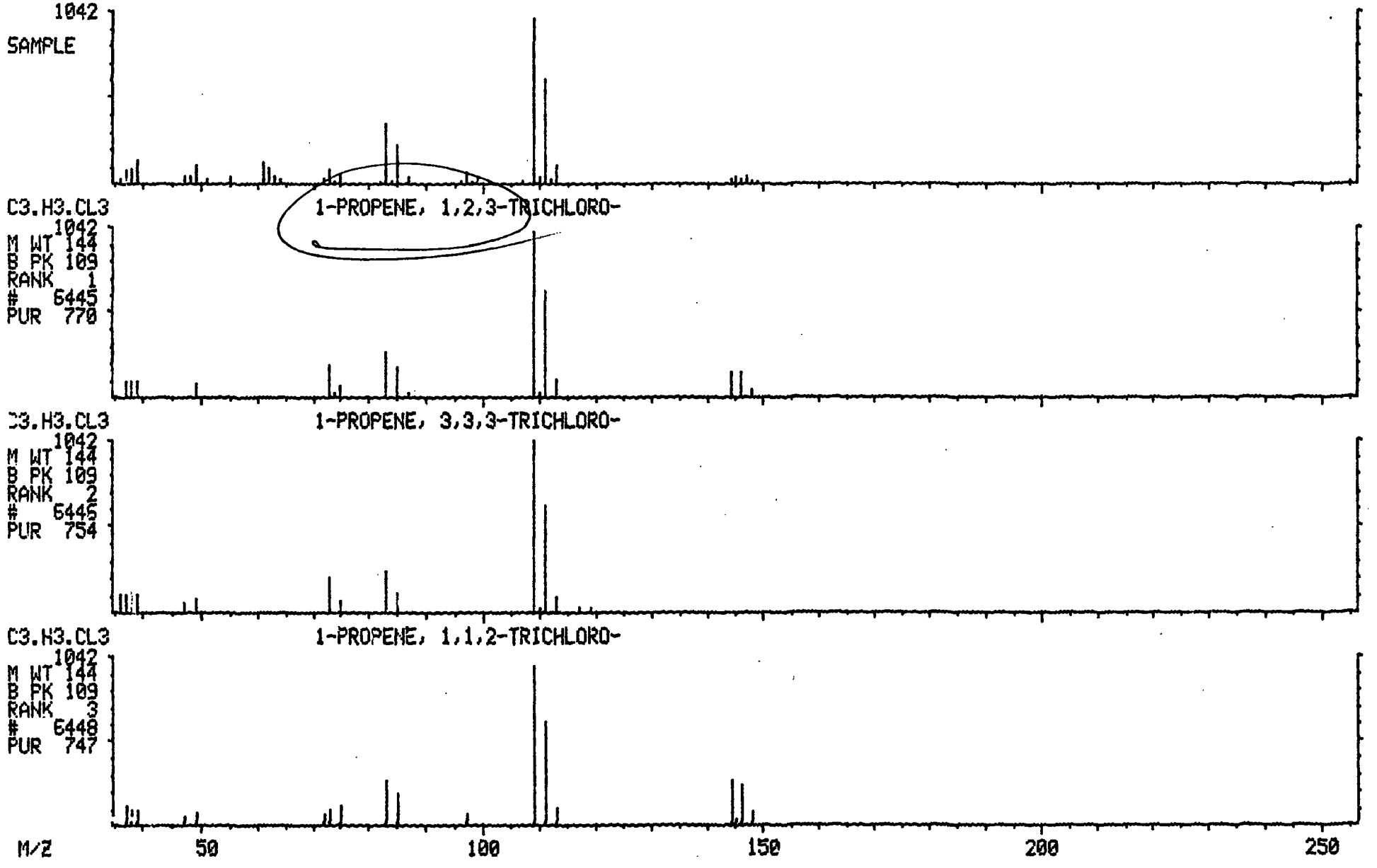


00898

LIBRARY SEARCH
06/01/88 21:05:00 + 7:47
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 # 623
CALI: 053188CR # 4

BASE M/Z: 109
RIC: 16175.

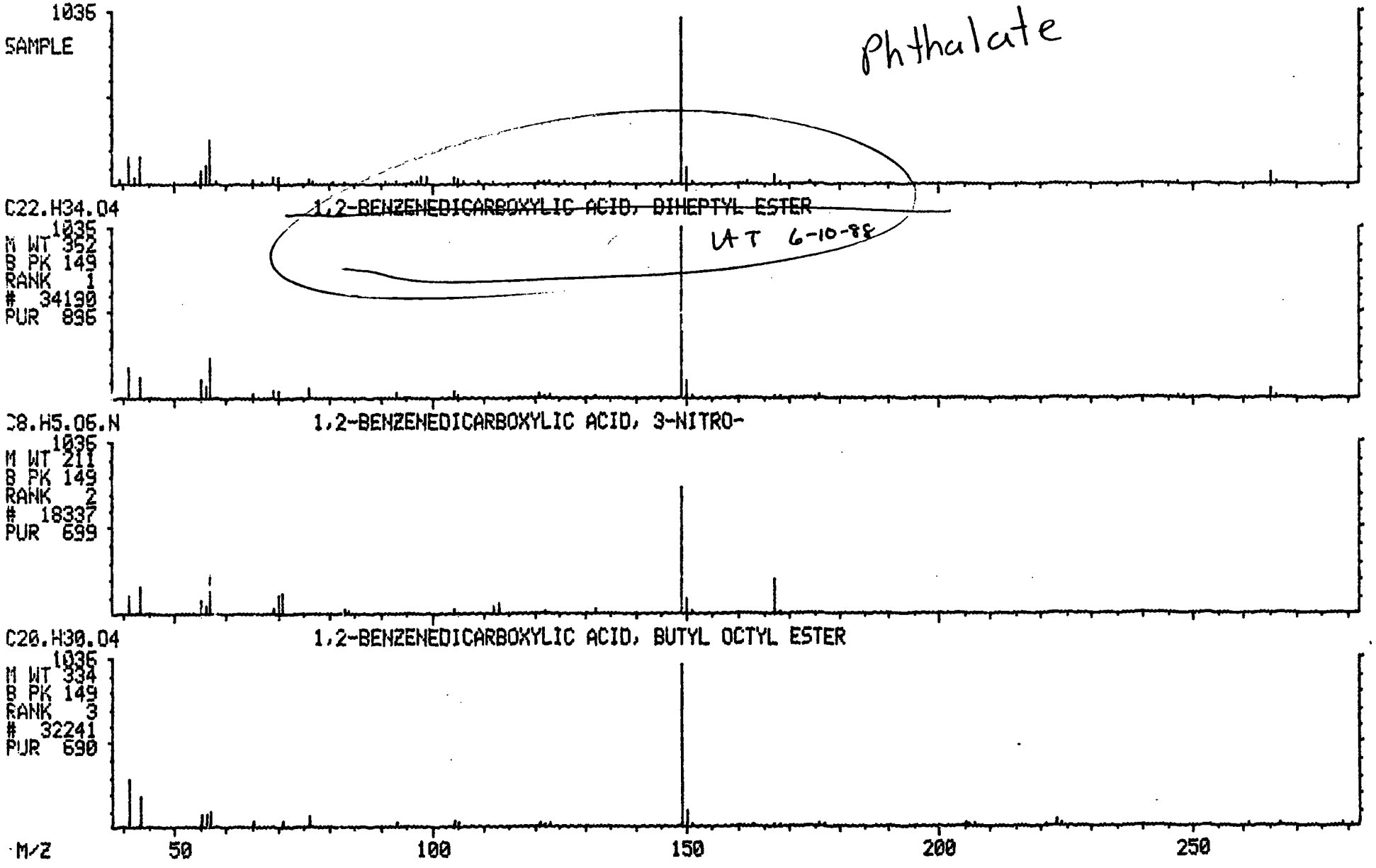


00899

LIBRARY SEARCH
06/01/88 21:05:00 + 26:43
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 #2137
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 8431.

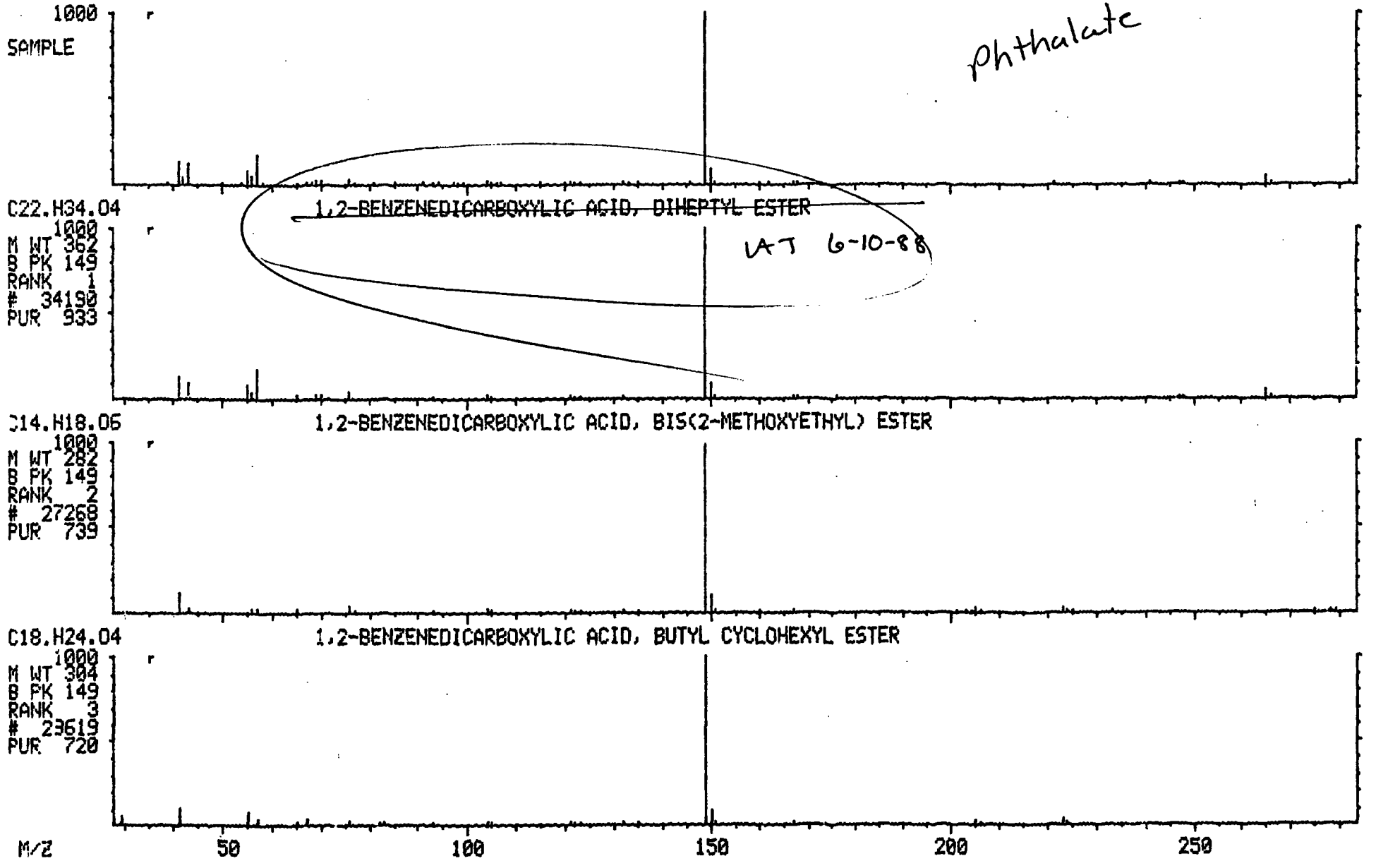


00600

LIBRARY SEARCH
06/01/88 21:05:00 + 27:16
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 #2182
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 11359.

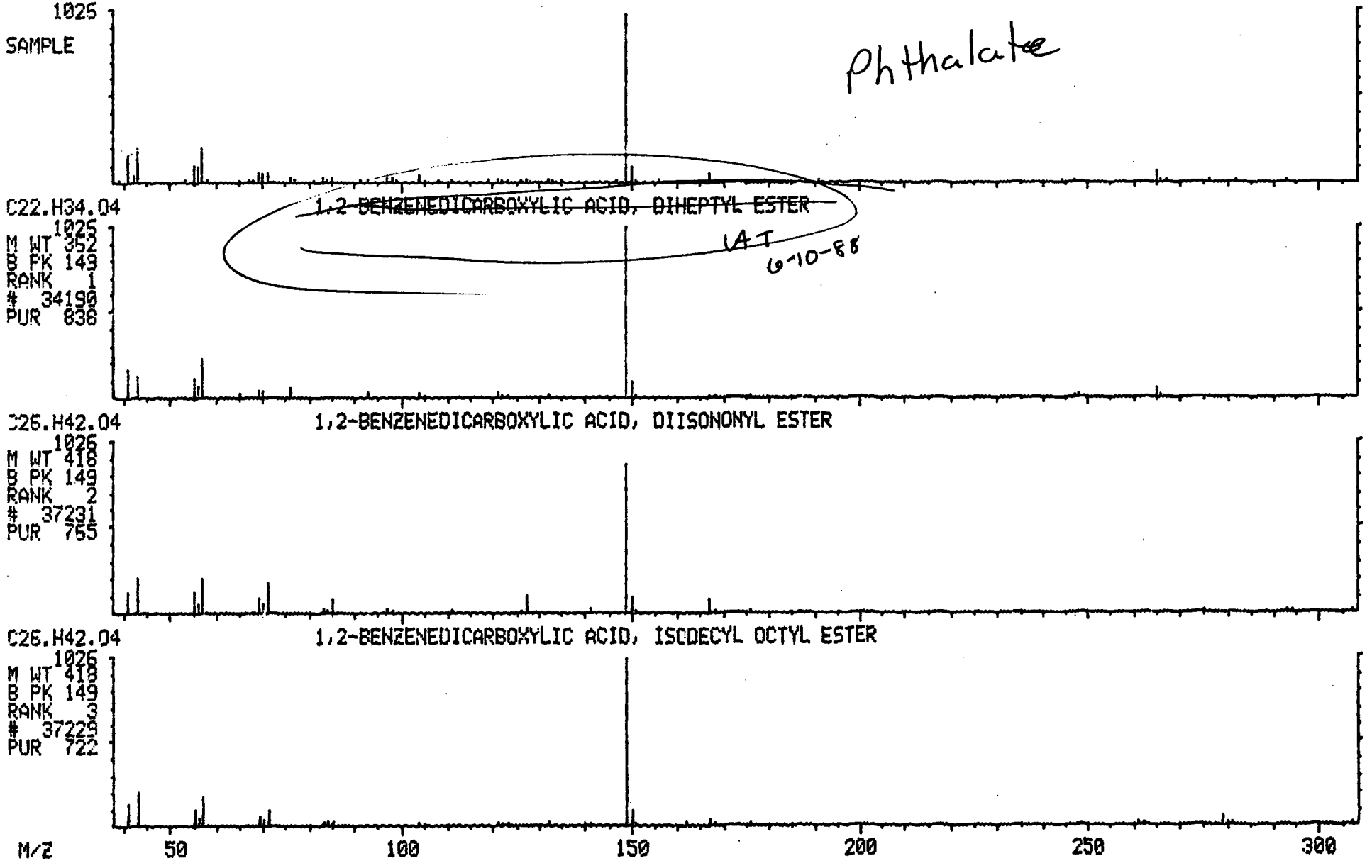


00901

LIBRARY SEARCH
06/01/88 21:05:00 + 28:15
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 #2260
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 7607.

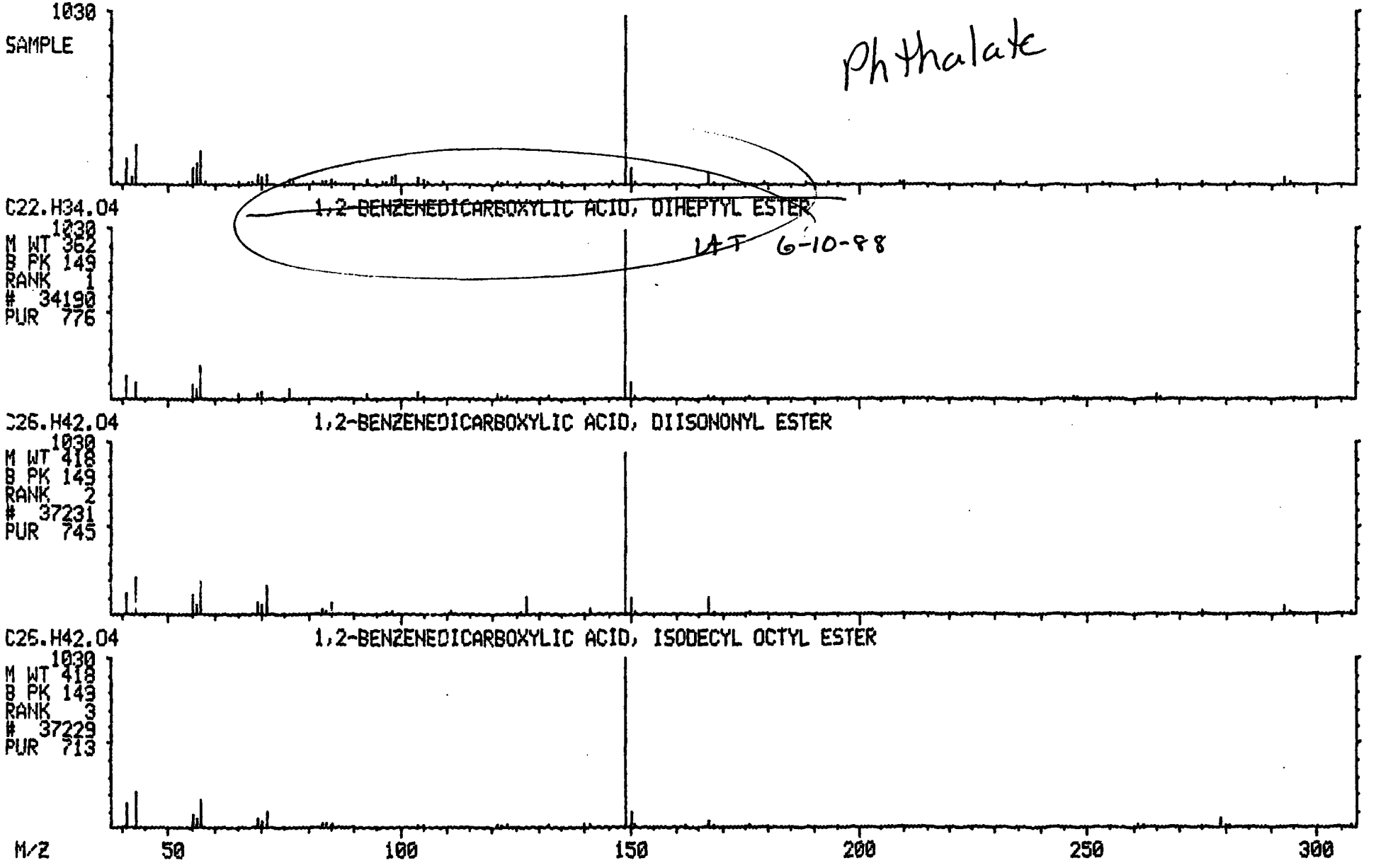


00902

LIBRARY SEARCH
06/01/88 21:05:00 + 28:20
SAMPLE: 59436-11 BNA H20 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 #2267
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 6383.

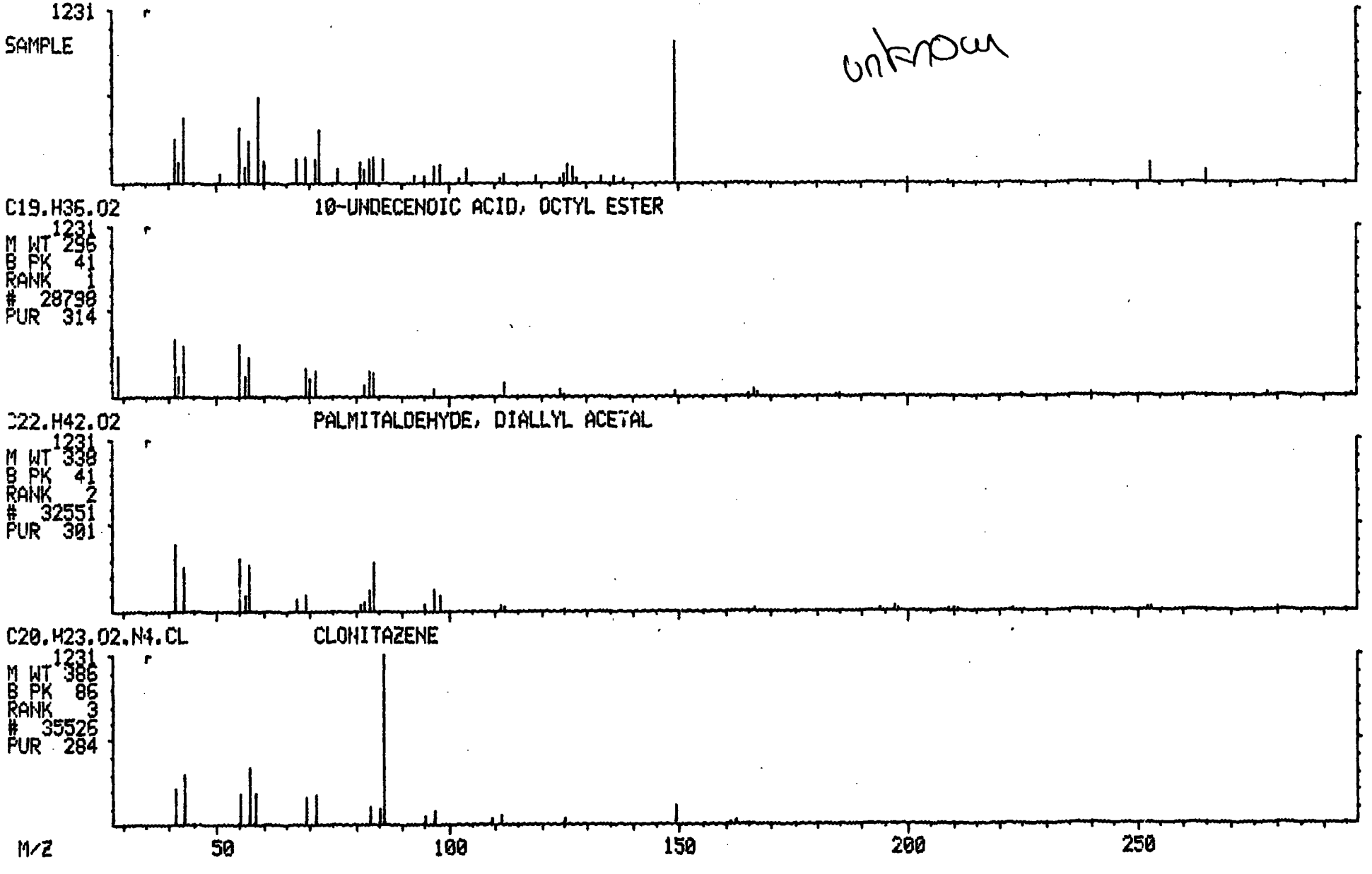


00903

LIBRARY SEARCH
06/01/88 21:05:00 + 29:11
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 #2335
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 1433.

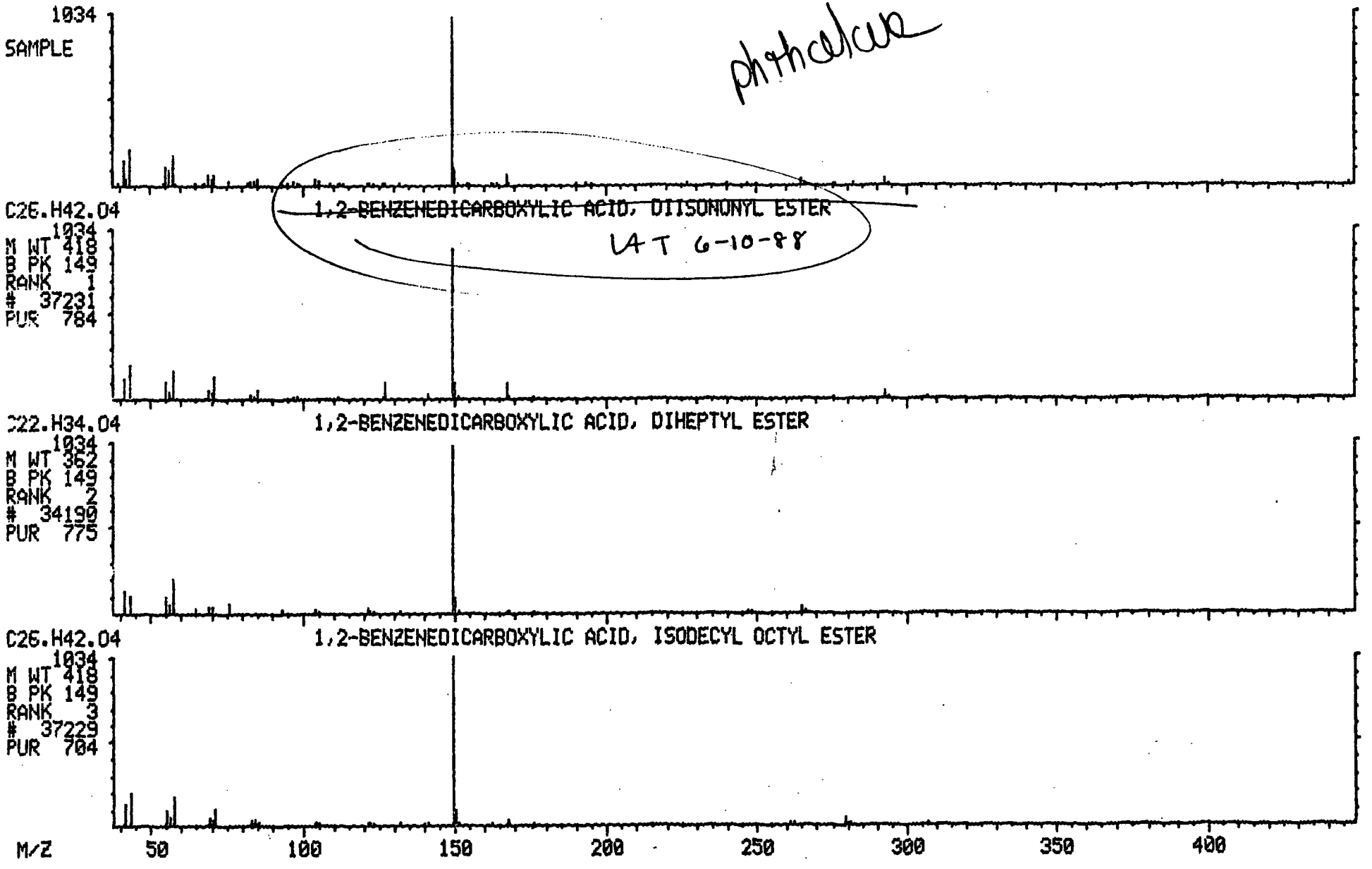


00904

LIBRARY SEARCH
06/01/88 21:05:00 + 29:46
SAMPLE: 59436-11 BNA H20 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 #2381
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 9183.

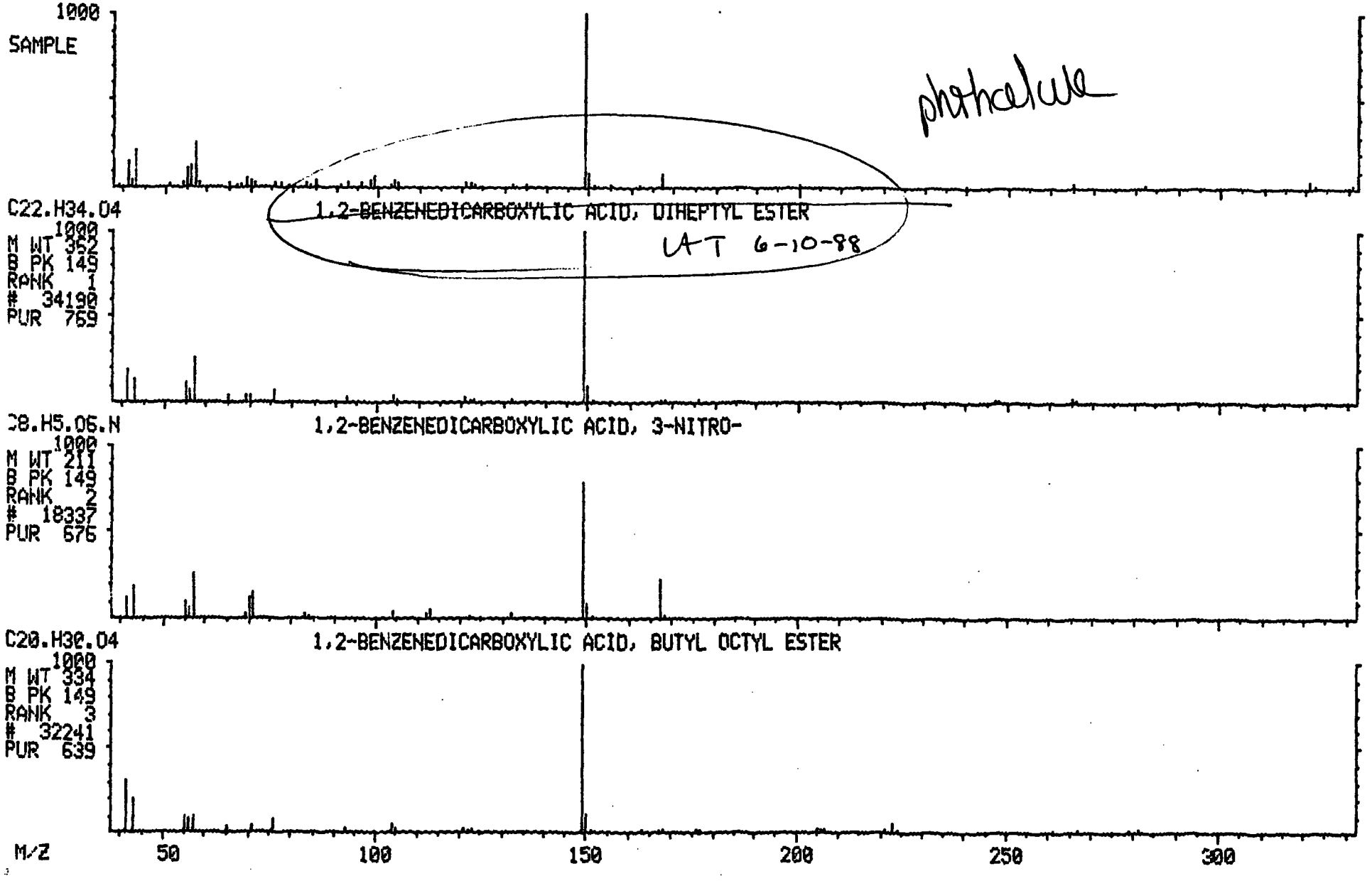


00905

LIBRARY SEARCH
06/01/88 21:05:00 + 29:54
SAMPLE: 59436-11 BNA H20 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R971 #2392
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 4059.



00906

LIBRARY SEARCH
06/01/88 21:05:00 + 30:23
SAMPLE: 59436-11 BNA H2O 100Z/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 #2431
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 17151.

1014
SAMPLE

phthalate

C22.H34.04 1,2-BENZENEDICARBOXYLIC ACID, DIHEPTYL ESTER

LAT 6-10-88

1014
M WT 362
B PK 149
RANK 1
34190
PUR 875

C26.H42.04 1,2-BENZENEDICARBOXYLIC ACID, ISODECYL OCTYL ESTER

1014
M WT 418
B PK 149
RANK 2
37229
PUR 743

C20.H30.04 1,2-BENZENEDICARBOXYLIC ACID, BUTYL OCTYL ESTER

1014
M WT 334
B PK 149
RANK 3
32241
PUR 708

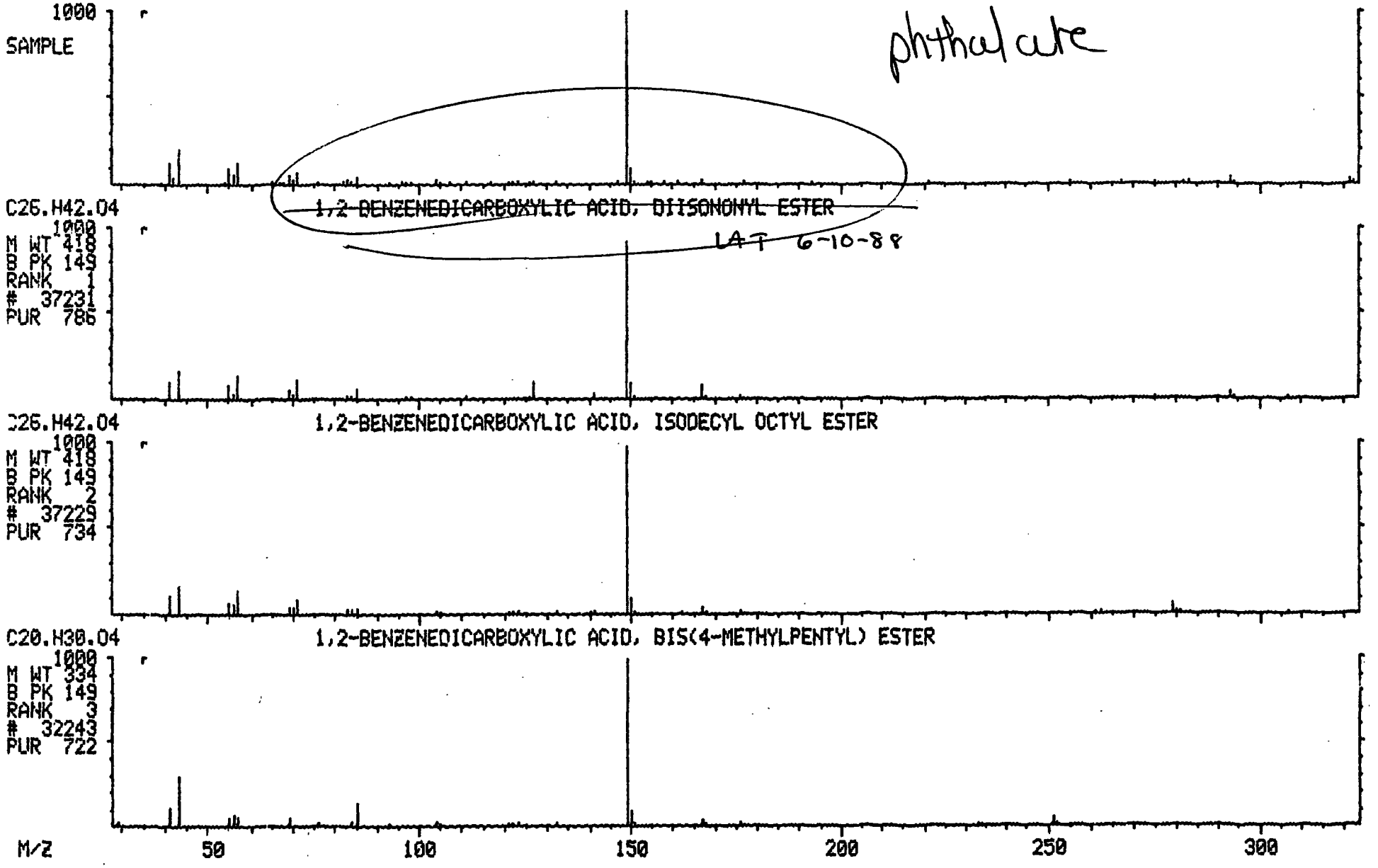
M/Z 50 100 150 200 250 300

00907

LIBRARY SEARCH
06/01/88 21:05:00 + 32:02
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: 559436R971 #2563
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 8623.

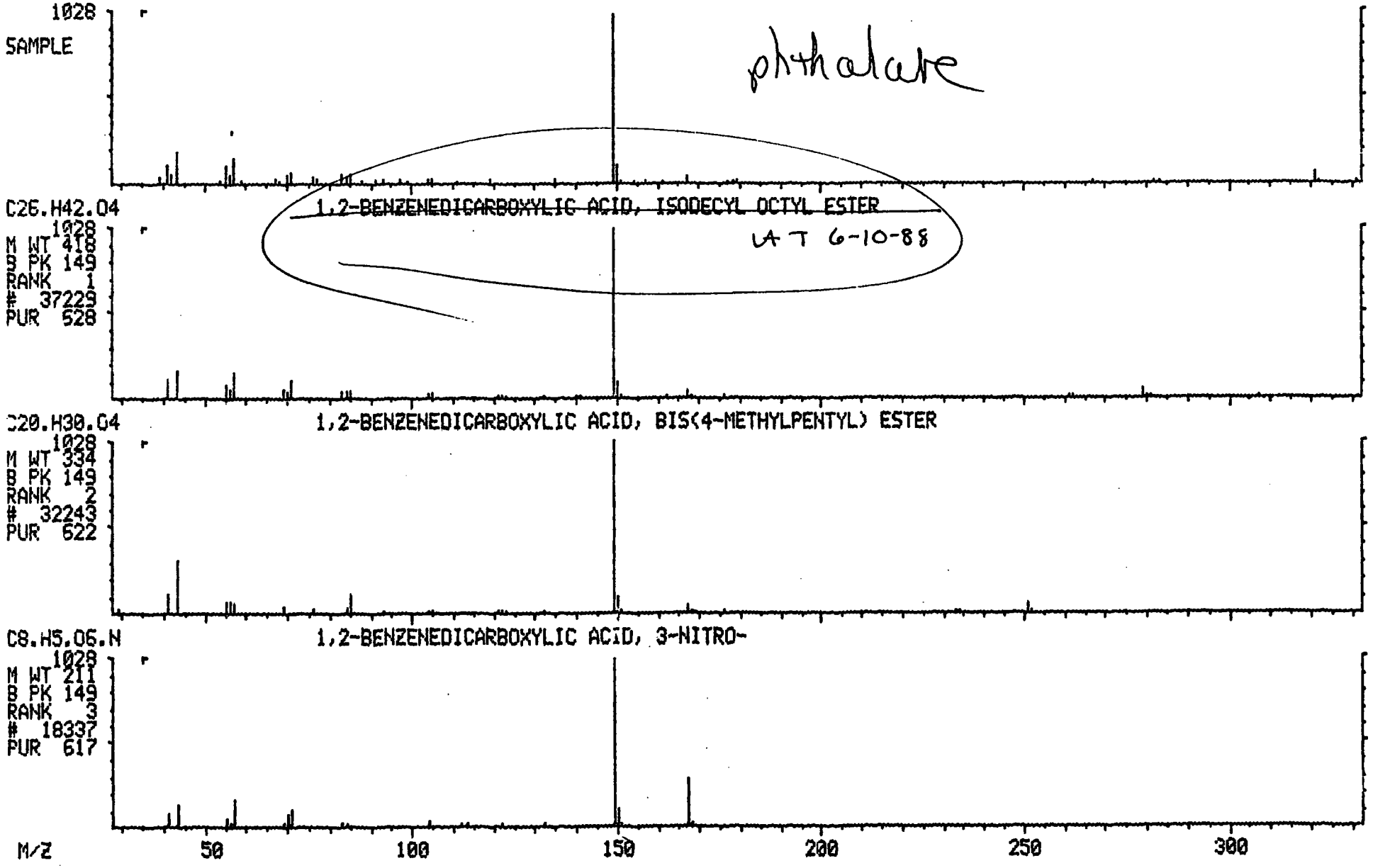


00908

LIBRARY SEARCH
06/01/88 21:05:00 + 34:16
SAMPLE: 59436-11 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R971 #2741
CALI: 053188CR # 4

BASE M/Z: 149
RIC: 2327.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 17:54:10
DATA FILE: S59436R971
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

< ---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	13	2	1	0	IS01/TC01
3	3	2	81	14	3	1	81	IS02/TC02

26 COMPOUNDS PROCESSED, 4 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT >< ------ CHRO ------- >										
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-715	716	716	.	2	974	.	152	716	.	1
2	S1	4	-335	336	336	.	1	986	.	84	336	.	1
3	S1	20	-337	338	.	.	.	.	.	79	.	.	.
4	S1	30	-431	432	.	.	.	.	.	93	.	.	.
5	S1	62	-496	497	.	.	.	.	.	93	.	.	.
6	S1	64	-526	527	.	.	.	.	.	107	.	.	.
7	S1	73	-558	559	.	.	.	.	.	106	.	.	.
8	S1	83	-594	595	.	.	.	.	.	107	.	.	.
9	S1	87	-615	616	.	.	.	.	.	107	.	.	.
10	S1	88	-635	636	.	.	.	.	.	107	.	.	.
11	S1	89	-643	644	.	.	.	.	.	107	.	.	.
12	S1	92	-663	664	.	.	.	.	.	107	.	.	.
13	S1	122	-700	701	.	.	.	.	.	107	.	.	.
14	S2	1	-954	955	954	-1	2	997	.	136	954	.	1
15	S3	1	-1311	1312	1312	.	1	989	.	164	1312	.	1
16	S1	137	-731	732	.	.	.	.	.	106	.	.	.
17	S1	142	-745	746	.	.	.	.	.	106	.	.	.
18	S1	187	-799	800	.	.	.	.	.	108	.	.	.
19	S1	202	-822	823	.	.	.	.	.	106	.	.	.
20	S1	203	-827	828	.	.	.	.	.	106	.	.	.
21	S1	204	-847	848	.	.	.	.	.	122	.	.	.
22	S2	27	-898	899	.	.	.	.	.	107	.	.	.
23	S2	37	-922	923	.	.	.	.	.	107	.	.	.
24	S2	47	-937	938	.	.	.	.	.	107	.	.	.
25	S2	57	-955	956	.	.	.	.	.	107	955	.	1
26	S2	150	-1118	1119	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59436R971

Data: S59436R971.TI
06/01/88 21:05:00
Sample: 59436-11 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name		
1	CI30 1,4-DICHLOROBENZENE-D4	152IS1# 01	3855-82-1
2	PYRIDINE-D5	84 S1# 04	
3	PYRIDINE	79 S1# 20	110-86-1
4	2-PICOLINE	93 S1# 30	109-06-8
5	3 & 4-PICOLINE	93 S1# 62	
6	2,6-LUTIDINE	107 S1# 64	
7	2-ETHYL PYRIDINE	106 S1# 73	
8	2,4 & 2,5-LUTIDINE	107 S1# 83	
9	2,3-LUTIDINE	107 S1# 87	
10	3-ETHYL PYRIDINE	107 S1# 88	
11	4-ETHYL PYRIDINE	107 S1# 89	
12	3,5-LUTIDINE	107 S1# 92	
13	3,4-LUTIDINE	107 S1#122	
14	CI40 NAPHTHALENE-D8	136IS2# 01	1146-65-2
15	CI50 ACENAPHTHENE-D10	164IS3# 01	15067-26-2
16	2-METHYL-5-ETHYL PYRIDINE	106 S1#137	
17	2-METHYL-3-ETHYL PYRIDINE	106 S1#142	
18	M AND P CRESOLS	108 S2#187	
19	3-ETHYL-4-METHYL PYRIDINE	106 S1#202	
20	3-ETHYL-5-METHYL PYRIDINE	106 S1#203	
21	2,6-DIMETHYL PHENOL	122 S1#204	
22	2,5-DIMETHYL PHENOL	107 S2# 27	
23	3,5-DIMETHYL PHENOL	107 S2# 37	
24	2,3-DIMETHYL PHENOL	107 S2# 47	
25	3,4-DIMETHYL PHENOL	107 S2# 57	
26	1-METHYLNAPHTHALENE	142 S2#150	90-12-0

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	716	8:57	1	1.000	A BB	26933.	40.000 UG/ML	27.01
2	84	336	4:12	1	0.469	A BB	41586.	27.650 UG/ML	18.67
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	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	136	954	11:55	14	1.000	A BB	102832.	40.000 UG/ML	27.01
15	164	1312	16:24	15	1.000	A BB	46074.	40.000 UG/ML	27.01
16	NOT FOUND								
17	NOT FOUND								

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	107	955	11:56	1	1.334	A BB	556.	0.444 UG/ML	0.30
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:11	1.00	0.468	1.00	27.65	50.00	1.235	2.234	0.55
3	4:13		0.471						
4	5:23		0.602						
5	6:12		0.693						
6	6:34		0.735						
7	6:58		0.779						
8	7:25		0.830						
9	7:41		0.859						
10	7:56		0.887						
11	8:02		0.898						
12	8:17		0.926						
13	8:45		0.978						
14	11:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	16:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	9:08		1.021						
17	9:19		1.041						
18	9:59		1.116						
19	10:16		1.148						
20	10:20		1.155						
21	10:35		1.183						
22	11:13		0.940						
23	11:31		0.965						
24	11:43		0.981						
25	11:56	1.00	1.334	1.00	0.44	50.00	0.017	1.861	0.01
26	13:58		1.171						

TCA FINISHED, 4 FOUND
FINISHED AT: 6/03/88 17:57:02

RF 2.02 00912
SV 2.00

RMAL QUANTITATION SUMMARY FILE: S59436R971
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	716	1	26933.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	954	2	102832.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1312	3	46074.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	336	1	41586.	1.235	27.650
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93		1	NOT FOUND		
7	S1# 62	3 & 4-PICOLINE	93		1	NOT FOUND		
8	S1# 64	2,6-LUTIDINE	107		1	NOT FOUND		
9	S1# 73	2-ETHYL PYRIDINE	106		1	NOT FOUND		
10	S1# 83	2,4 & 2,5-LUTIDINE	107		1	NOT FOUND		
11	S1# 87	2,3-LUTIDINE	107		1	NOT FOUND		
12	S1# 88	3-ETHYL PYRIDINE	107		1	NOT FOUND		
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107		1	NOT FOUND		
15	S1#122	3,4-LUTIDINE	107		1	NOT FOUND		
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106		1	NOT FOUND		
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106		1	NOT FOUND		
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106		1	NOT FOUND		
20	S1#203	3-ETHYL-5-METHYL PYRIDIN	106		1	NOT FOUND		
21	S1#204	2,6-DIMETHYL PHENOL	122		1	NOT FOUND		
22	S2# 27	2,5-DIMETHYL PHENOL	107		2	NOT FOUND		
23	S2# 37	3,5-DIMETHYL PHENOL	107		2	NOT FOUND		
24	S2# 47	2,3-DIMETHYL PHENOL	107		2	NOT FOUND		
25	S2# 57	3,4-DIMETHYL PHENOL	107		1	NOT FOUND		
26	S2#150	1-METHYLNAPHTHALENE	142		2	NOT FOUND		

RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: D:S59436X829. STARTED : 6/03/88 15:22:01

00913

6/3/88 11:49:59 SCAN 1 OF 3900 $RF = \frac{ng}{mL} \times \frac{0.5 mL}{3.82 L} = 0.131 \, ng/L$
Acquisition started

Acquire Run 2:S59436X829 ACQUIRING
06/03/88 11:49:00 + 0:07 Free sectors: 21278 Scan: 15 of 3900
Sample: 59436-11 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc:PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc:PA GC elapsed time : 0:11 min Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: P1 Mass intervals: 3
Scan time: 0.500 s Samp. int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	225.500	226.500	0.105	1	100	0	1	1	Pos
2	227.500	228.500	0.105	1	100	0	1	1	Pos
3	239.500	240.500	0.105	1	100	0	1	1	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

6/3/88 12:18:26 SCAN 3413 OF 3900

MID scan Desc: P2 Mass intervals: 3
Scan time: 0.500 s Samp. Int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

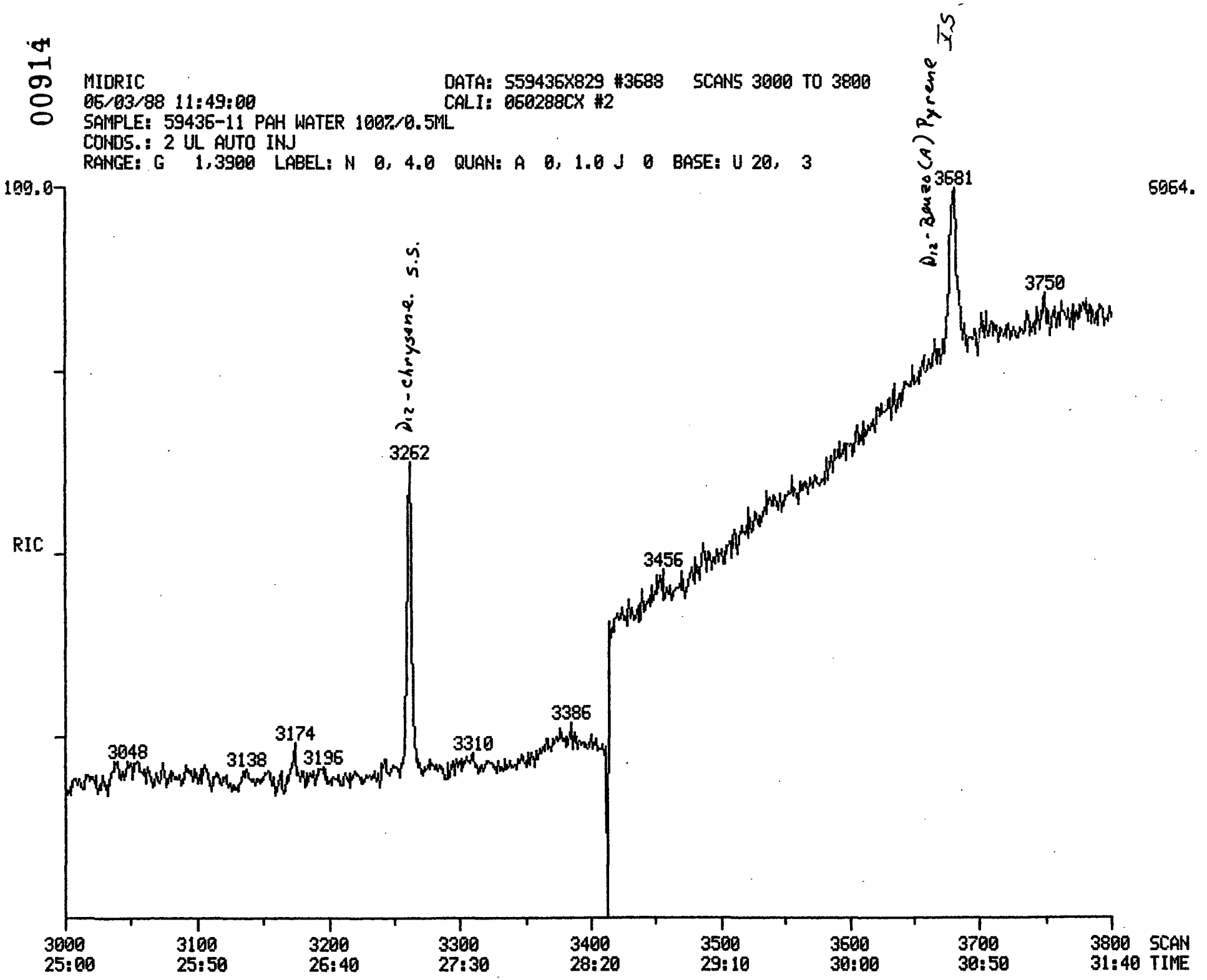
6/3/88 12:22:34
ACQUISITION COMPLETED
SCANS 1 TO 3412 Centroid
SCAN 3413 Suspended
SCANS 3414 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00914

MIDRIC
06/03/88 11:49:00
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436X829 #3688 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X829

Data: S59436X829.TI
06/03/88 11:49:00
Sample: 59436-11 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(K)FLUORANTHENE	252 PH# 09
11	BENZO(K)FLUORANTHENE	250 PH# 10
12	BENZO(K)FLUORANTHENE	250 PH# 10
13	BENZO(J)FLUORANTHENE	252 PH# 11
14	BENZO(J)FLUORANTHENE	250 PH# 12
15	BENZO(A)PYRENE	252 PH# 13
16	BENZO(A)PYRENE	250 PH# 14

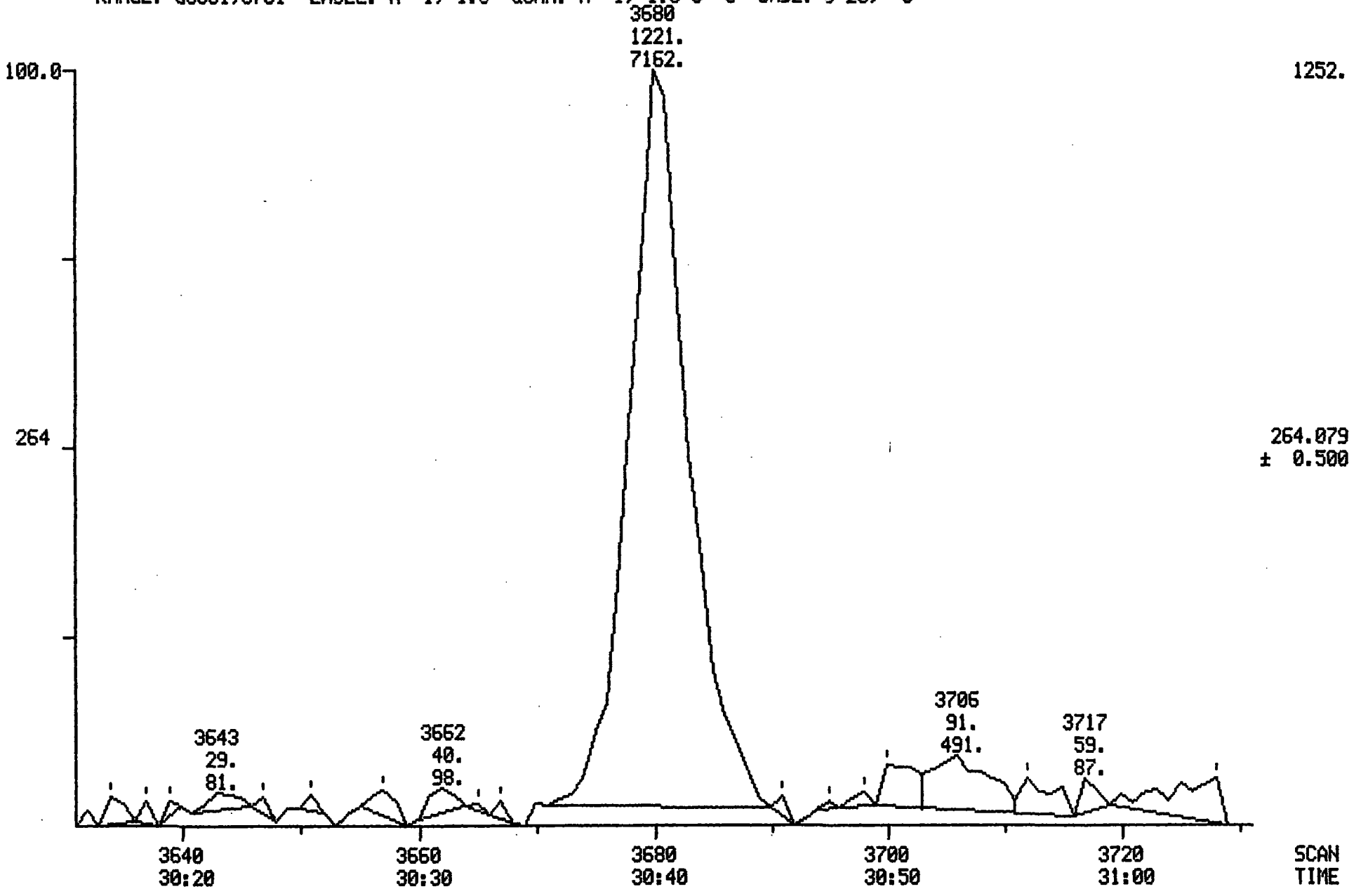
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3680	30:40	1	1.000	A BB	7162.	80.000	NG/ML	26.32
2	240	3262	27:11	1	0.886	A BB	10410.	88.707	NG/ML	29.18
3	228	3256	27:08	1	0.885	A BB	228.	1.822	NG/ML	0.60
4	226	3253	27:06	1	0.884	A BB	121.	4.384	NG/ML	1.44
5	228	3269	27:14	1	0.888	A VB	378.	2.954	NG/ML	0.97
6	226	3263	27:11	1	0.887	A BB	108.	3.260	NG/ML	1.07
7	252	3585	29:52	1	0.974	A BB	130.	0.894	NG/ML	0.29
8	250	3592	29:56	1	0.976	A BV	393.	14.331	NG/ML	4.71
9	250	3596	29:58	1	0.977	A VB	375.	13.675	NG/ML	4.50
10	252	3599	29:59	1	0.978	A BB	458.	3.149	NG/ML	1.04
11	250	3592	29:56	1	0.976	A BV	393.	17.497	NG/ML	5.76
12	250	3596	29:58	1	0.977	A VB	375.	16.697	NG/ML	5.49
13	252	3619	30:09	1	0.983	A BV	1016.	7.583	NG/ML	2.49
14	250	3622	30:11	1	0.984	A BV	368.	12.437	NG/ML	4.09
15	252	3689	30:44	1	1.002	A BB	183.	1.536	NG/ML	0.51
16	250	3679	30:39	1	1.000	A BV	908.	35.049	NG/ML	11.53

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:40	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:10	1.00	0.886	1.00	88.71	80.00	1.454	1.311	1.11
3	27:07	1.00	0.884	1.00	1.82	80.00	0.032	1.395	0.02
4	27:07	1.00	0.884	1.00	4.38	80.00	0.017	0.308	0.05
5	27:12	1.00	0.887	1.00	2.95	80.00	0.053	1.428	0.04
6	27:12	1.00	0.887	1.00	3.26	80.00	0.015	0.370	0.04
7	29:55	1.00	0.976	1.00	0.89	80.00	0.018	1.625	0.01

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	29:56	1.00	0.976	1.00	14.33	80.00	0.055	0.307	0.18
9	29:56	1.00	0.976	1.00	13.68	80.00	0.052	0.307	0.17
10	29:57	1.00	0.977	1.00	3.15	80.00	0.064	1.625	0.04
11	29:58	1.00	0.977	1.00	17.50	80.00	0.055	0.251	0.22
12	29:58	1.00	0.977	1.00	16.70	80.00	0.052	0.251	0.21
13	29:41	1.02	0.982	1.00	7.58	80.00	0.142	1.496	0.09
14	29:41	1.02	0.982	1.00	12.44	80.00	0.051	0.330	0.16
15	30:43	1.00	1.002	1.00	1.54	80.00	0.026	1.331	0.02
16	30:43	1.00	1.002	1.00	35.05	80.00	0.127	0.289	0.44

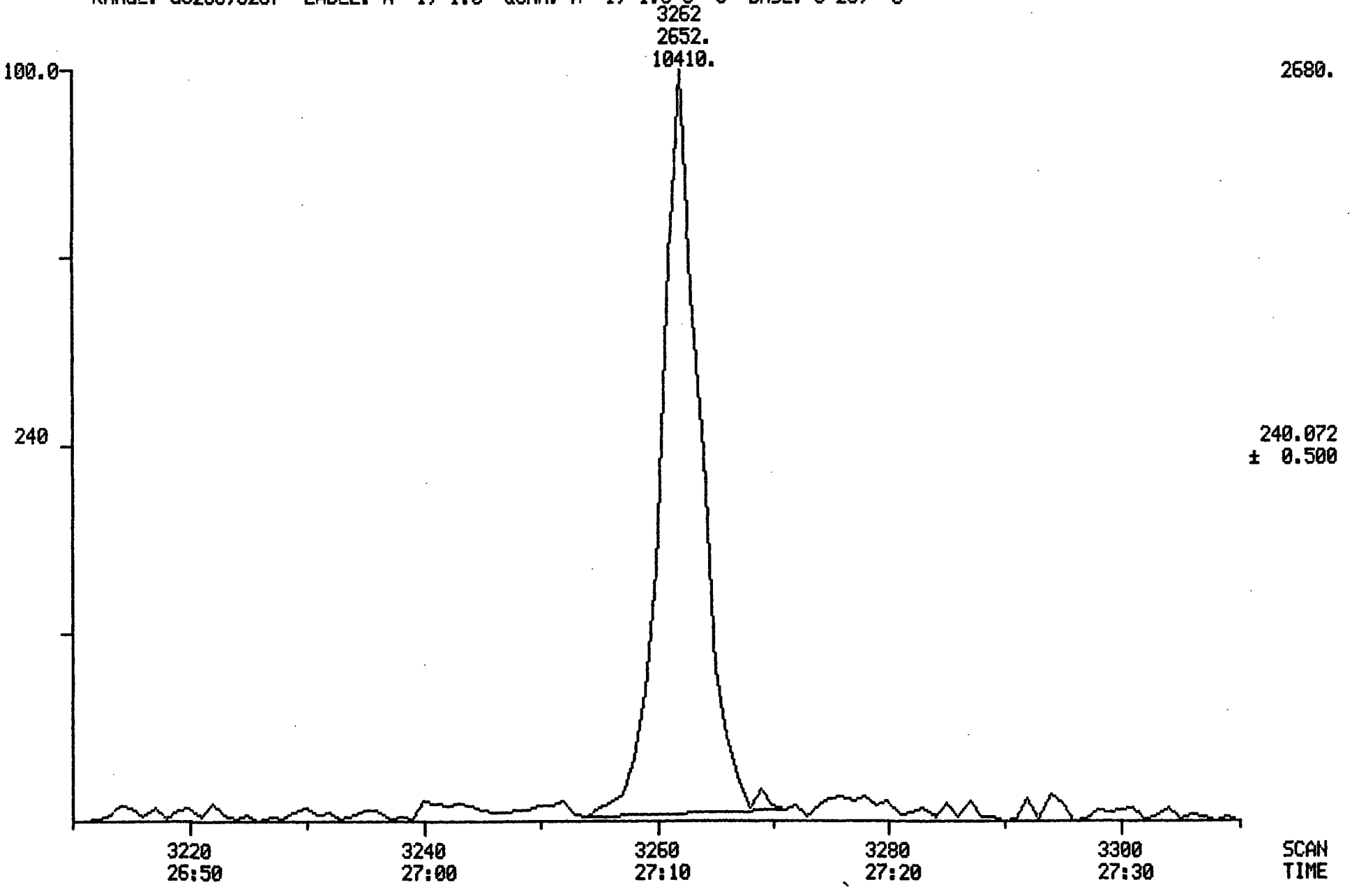
00916

MIDMASS CHROMATOGRAM DATA: S59436X829 #3681 SCANS 3631 TO 3731
06/03/88 11:49:00 CALI: 060288CX #2
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3631,3731 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



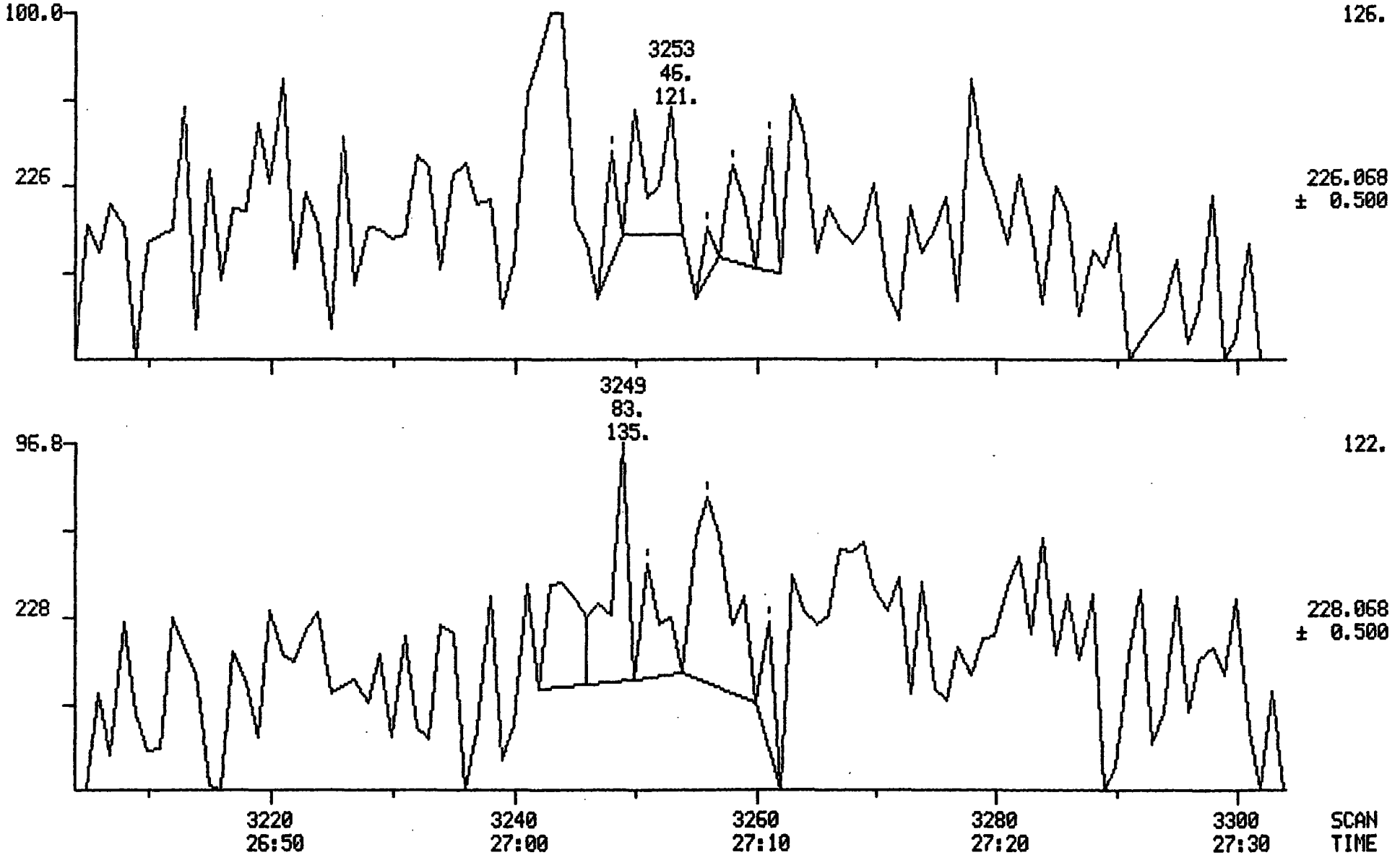
00918

MIDMASS CHROMATOGRAM DATA: S59436X829 #3260 SCANS 3210 TO 3310
06/03/88 11:49:00 CALI: 060288CX #2
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3253,3267 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



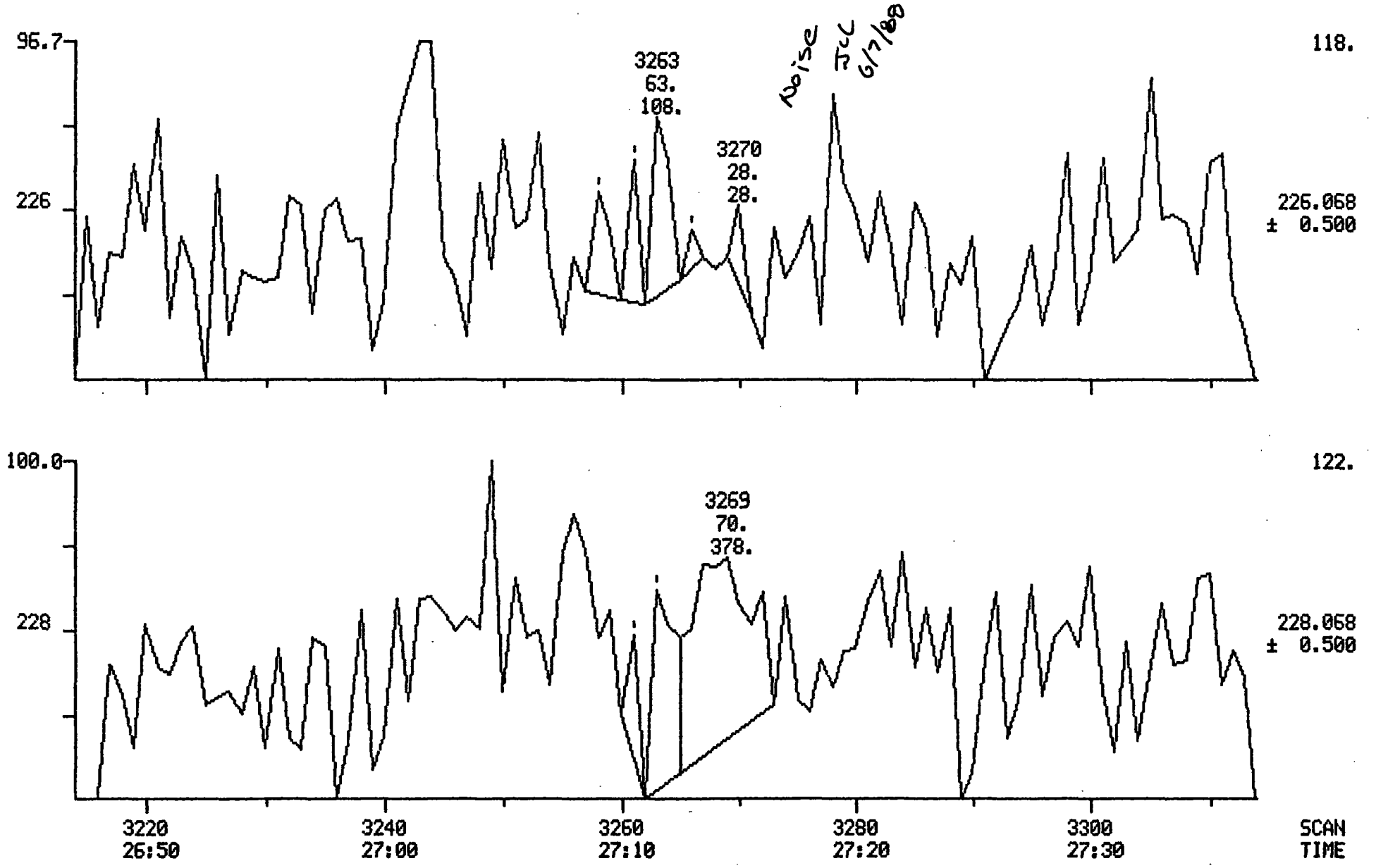
00919

MIDMASS CHROMATOGRAMS DATA: S59436X829 #3254 SCANS 3204 TO 3304
06/03/88 11:49:00 CALI: 060288CX #2
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3247,3261 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



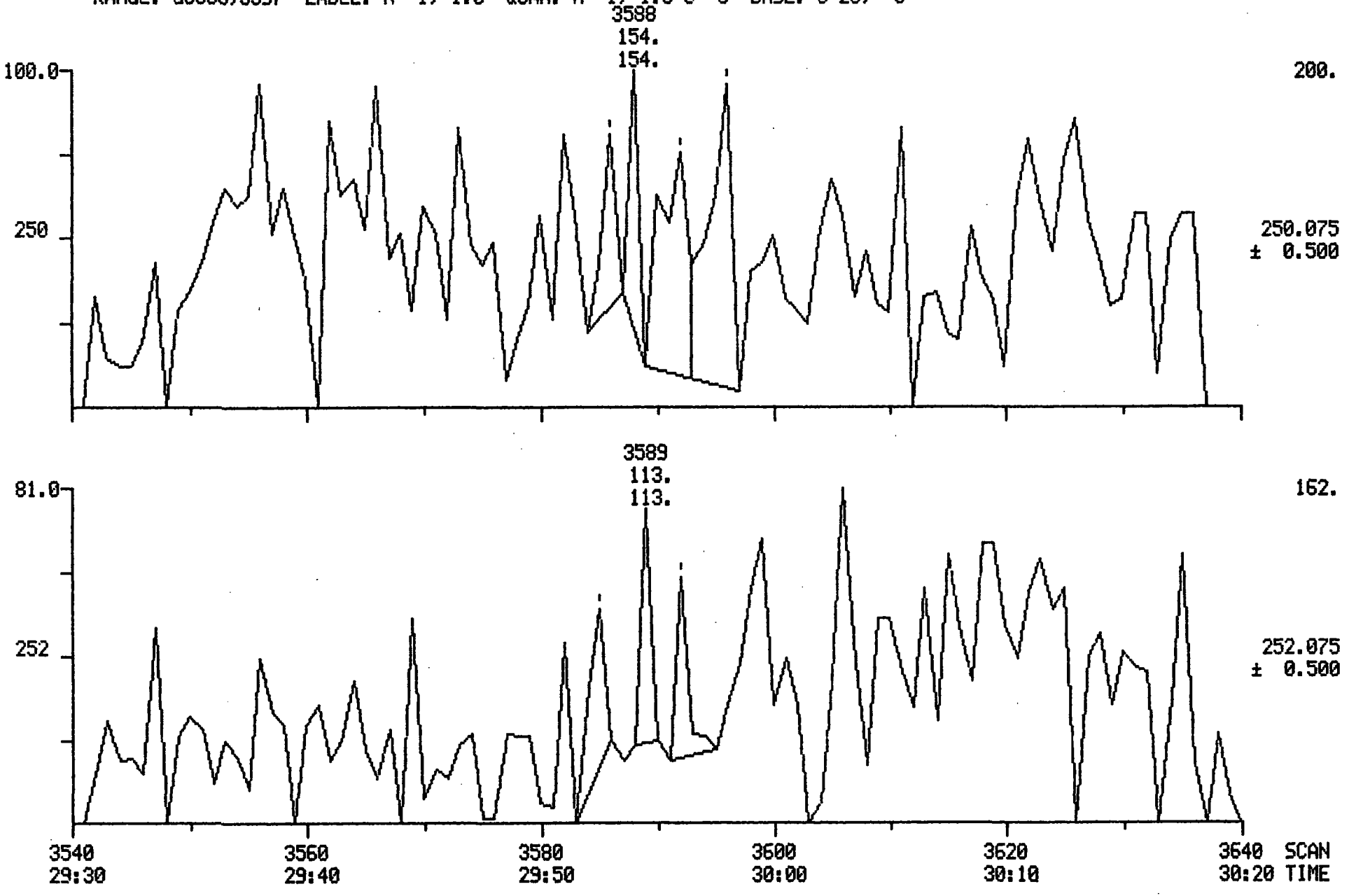
00920

MIDMASS CHROMATOGRAMS DATA: S59436X829 #3264 SCANS 3214 TO 3314
06/03/88 11:49:00 CALI: 060288CX #2
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3257,3271 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



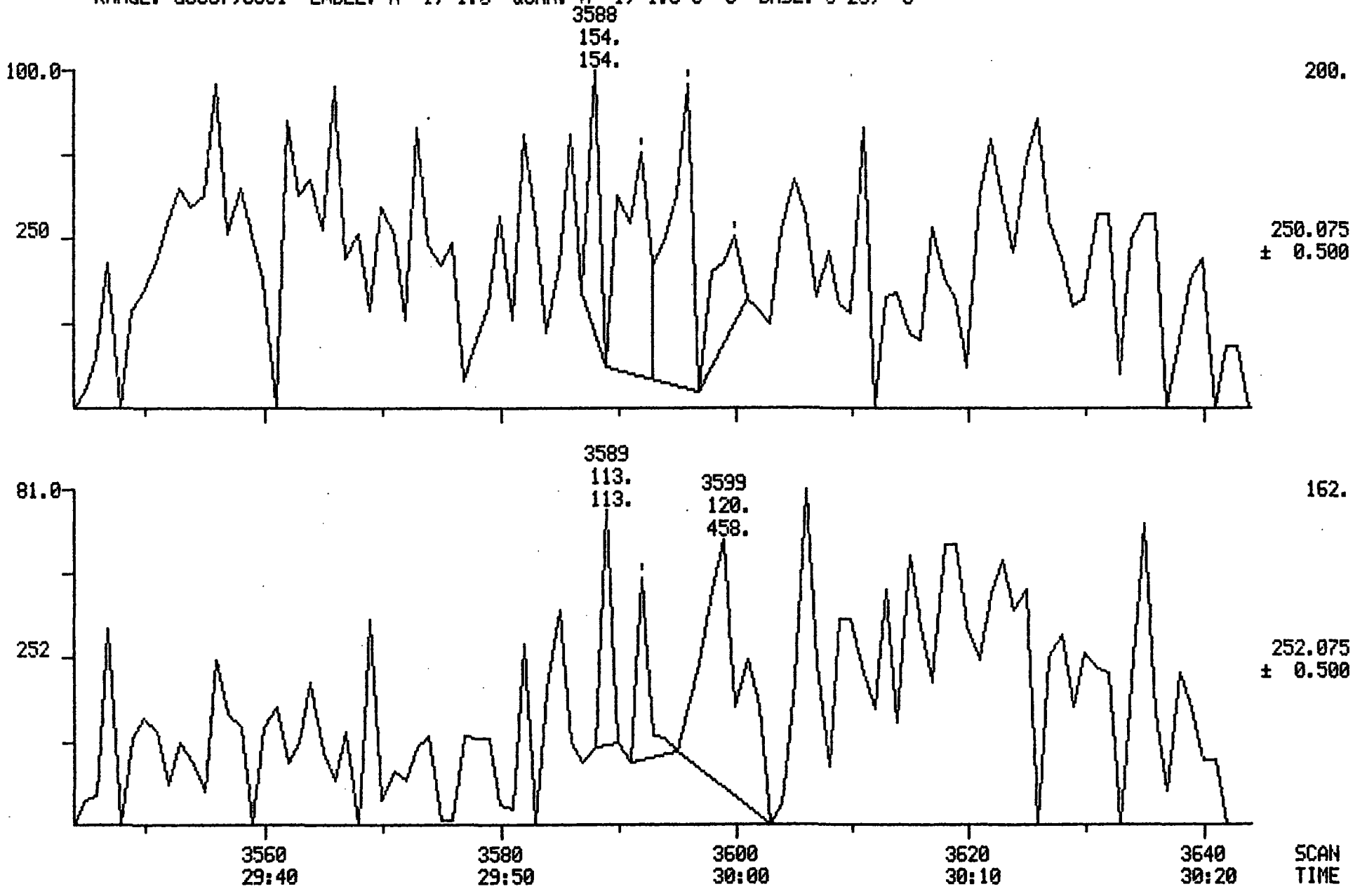
00921

MIDMASS CHROMATOGRAMS DATA: S59436X829 #3590 SCANS 3540 TO 3640
06/03/88 11:49:00 CALI: 060288CX #2
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3583,3597 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



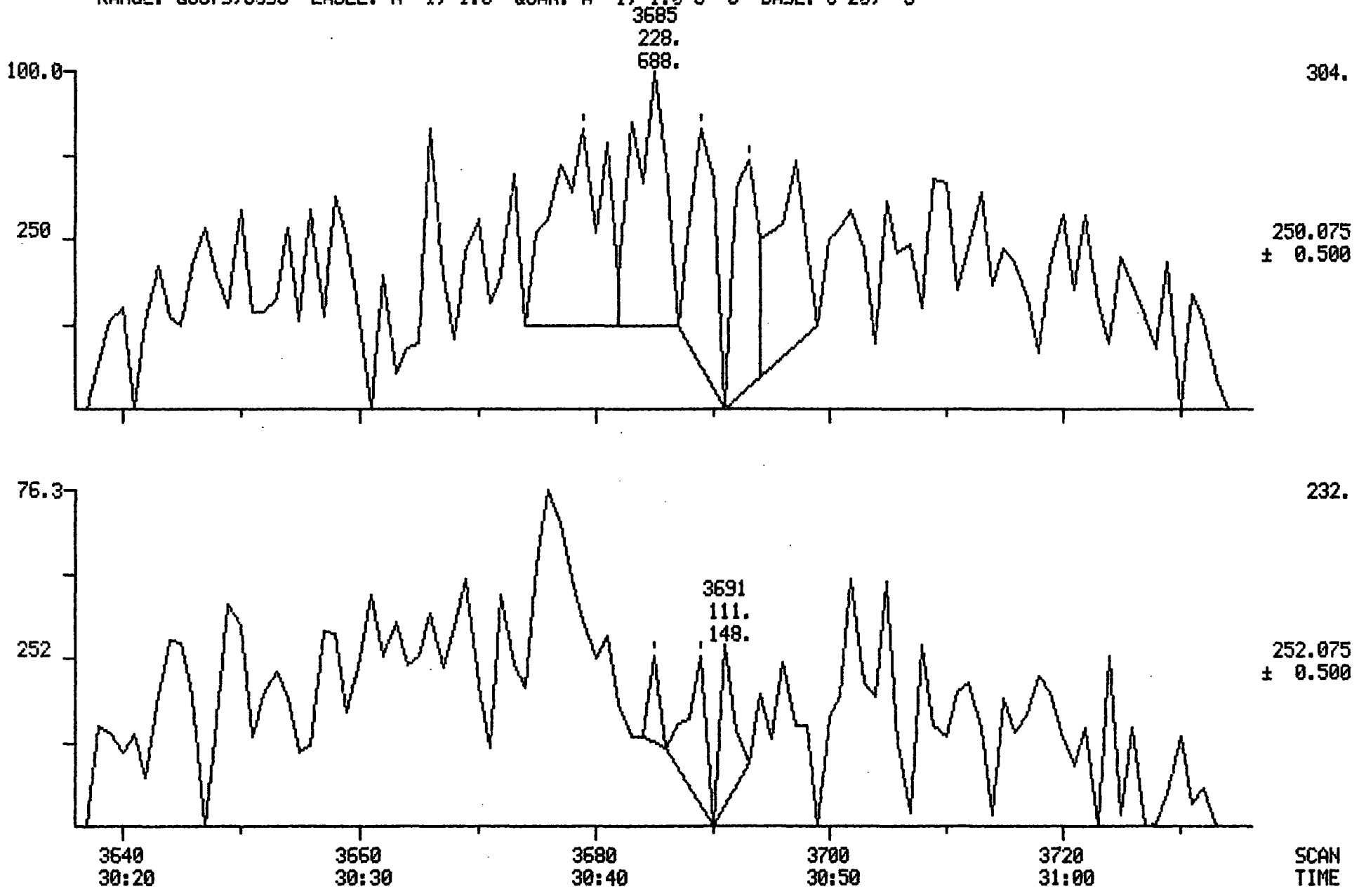
00922

MIDMASS CHROMATOGRAMS DATA: S59436X829 #3594 SCANS 3544 TO 3644
06/03/88 11:49:00 CALI: 060288CX #2
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3587,3601 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00923

MIDMASS CHROMATOGRAMS DATA: 559436X829 #3686 SCANS 3636 TO 3736
06/03/88 11:49:00 CALI: 060288CX #2
SAMPLE: 59436-11 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3679,3693 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X829

00924

Data: S59436X829.TI
06/03/88 11:49:00
Sample: 59436-11 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name		
1	D12-BENZO(A)PYRENE	264I	PH# 01
2	D12-CHRYSENE	240S	PH# 02
3	BENZO(A)ANTHRACENE	228	PH# 03
4	BENZO(A)ANTHRACENE	226	PH# 04
5	CHRYSENE	228	PH# 05
6	CHRYSENE	226	PH# 06
7	BENZO(B)FLUORANTHENE	250	PH# 08
8	BENZO(B)FLUORANTHENE	250	PH# 08
9	BENZO(K)FLUORANTHENE	252	PH# 09
10	BENZO(K)FLUORANTHENE	250	PH# 10
11	BENZO(K)FLUORANTHENE	250	PH# 10
12	BENZO(J)FLUORANTHENE	252	PH# 11
13	BENZO(J)FLUORANTHENE	250	PH# 12
14	BENZO(A)PYRENE	252	PH# 13
15	BENZO(A)PYRENE	250	PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3680	30:40	1	1.000	A BB	7162.	80.000	NG/ML	26.40
2	240	3262	27:11	1	0.886	A BB	10410.	88.707	NG/ML	29.27
3	228	3256	27:08	1	0.885	A BB	228.	1.822	NG/ML	0.60
4	226	3253	27:06	1	0.884	A BB	121.	4.384	NG/ML	1.45
5	228	3269	27:14	1	0.888	A VB	378.	2.954	NG/ML	0.97
6	226	3263	27:11	1	0.887	A BB	108.	3.260	NG/ML	1.08
7	250	3592	29:56	1	0.976	A BV	393.	14.331	NG/ML	4.73
8	250	3596	29:58	1	0.977	A VB	375.	13.675	NG/ML	4.51
9	252	3599	29:59	1	0.978	A BB	458.	3.149	NG/ML	1.04
10	250	3592	29:56	1	0.976	A BV	393.	17.497	NG/ML	5.77
11	250	3596	29:58	1	0.977	A VB	375.	16.697	NG/ML	5.51
12	252	3619	30:09	1	0.983	A BV	1016.	7.583	NG/ML	2.50
13	250	3622	30:11	1	0.984	A BV	368.	12.437	NG/ML	4.10
14	252	3689	30:44	1	1.002	A BB	183.	1.536	NG/ML	0.51
15	250	3679	30:39	1	1.000	A BV	908.	35.049	NG/ML	11.56

COLUMN 1: J:A81Z626 59436-11 05/29/98
COLUMN 2: J:BB1Z628 20% UNITS ON AMOUNT: ug/ml

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE

00925

DBC

A) $\frac{26.0}{24.0}(100\%) = 108\%$

B) $\frac{23.0}{22.0}(100\%) = 105\%$

DBC Recovery = 105%
No HSL ~~Recovs~~ Pesticide/PCBs detected

NA - COLUMN AVERAGE IS NOT APPLICABLE BECAUSE THE %DIFFERENCE(AMOUNTS) > 10%

RESULT FILE: J:A612625 59936-11 05/09/89 LIBRARY LIBV1013

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
018	p,p'-DDT	12.767	12.817	6	19410	.0041	ug/ml
022	TOXAPHENE (peak 3)	12.483	12.817	6	19410	.0660	ug/ml
043	AROCLOR 1260(peak 4)	13.183	12.817	6	19410	.0435	ug/ml
047	DBC (surrogate)	26.833	26.850	7	93152	.0161	ug/ml

00926

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: J1081.D28 59436-11 05/09/88 LIBRARY: LABHLY8

00927

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC	1.383	1.400	7	678	.0000	ug/ml
002	LINDANE	1.800	1.900	9	697	.0001	ug/ml
004	delta-BHC	2.450	2.467	10	3834	.0003	ug/ml
017	ENDOSULFAN SULFATE	16.550	16.183	15	64719	.0076	ug/ml
023	AROCLOR 1016(peak 1)	1.267	1.283	6	754	.0026	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.650	8	6768	.0116	ug/ml
026	AROCLOR 1221(peak 1)	1.250	1.283	6	754	.0015	ug/ml
027	AROCLOR 1232(peak 1)	1.250	1.283	6	754	.0024	ug/ml
029	AROCLOR 1242(peak 1)	1.250	1.283	6	754	.0027	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	8	6768	.0123	ug/ml
035	AROCLOR 1254(peak 1)	5.017	4.933	13	1935	.0019	ug/ml
048	ENDRIN KETONE	22.267	22.217	16	172741	.0043	ug/ml
052	DIALLATE	1.230	1.283	6	754	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

AREA PERCENT REPORT

00928

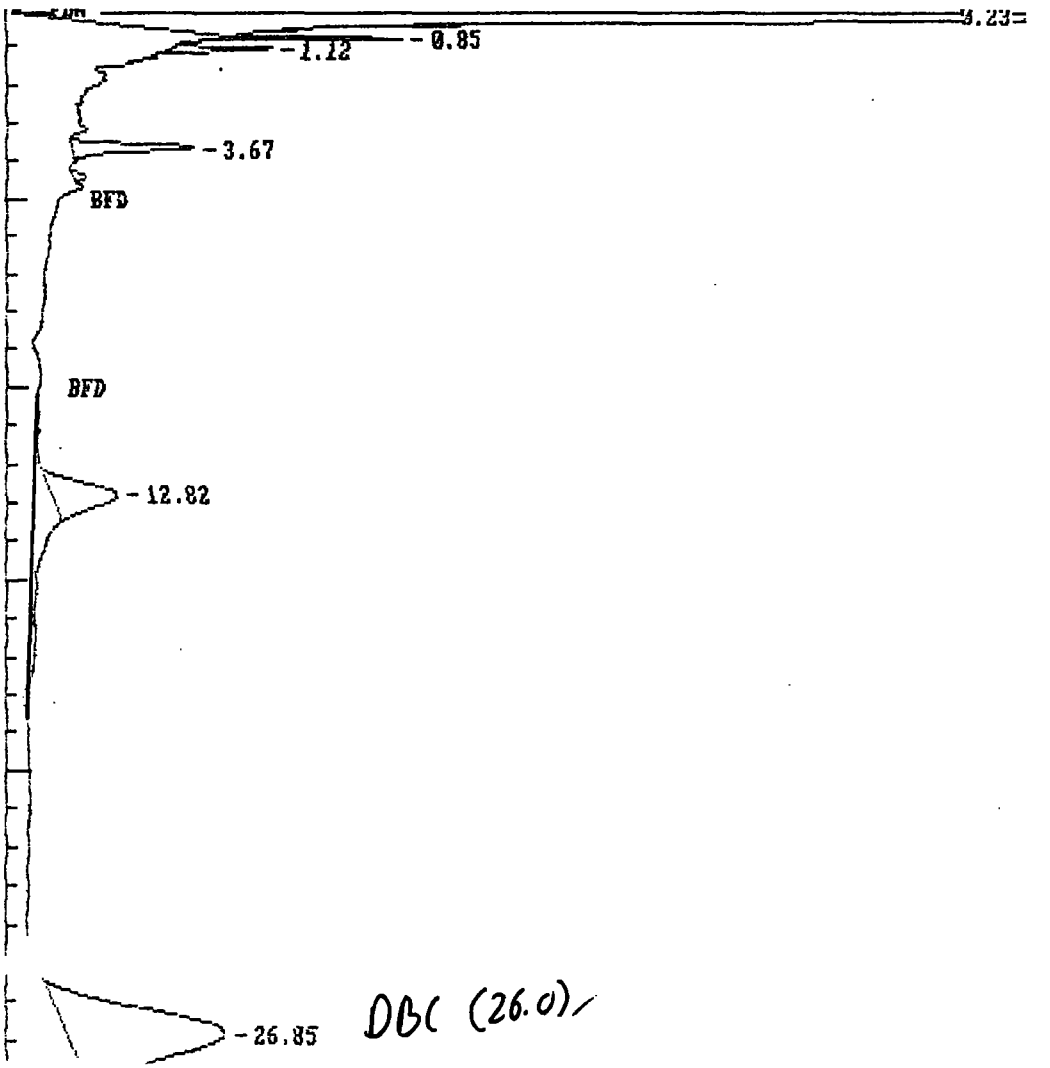
```
******************** 05-08-1988 11:53:48 Version 4.1 ********************
* Sample Name: 59436 11 20%                    Data File: J:AB12628      *
* Date: 05-07-1988 01:50:17 Method: M:ABPI                               *
* Interface: 10  Cycle#:  28   Operator SS  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                     *
*            Detector 0: ECD                  Detector 1:               *
* Misc. Information: 4 UL INJECTION                    LPT1:        *   *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

SS
5/11/88

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	730250	84.5452	1	163699	100.000	4.5
2	0.85	4484	0.5191	1	1270	0.614	3.5
3	1.12	4930	0.5708	1	709	0.675	7.0
4	3.67	11514	1.3330	1	848	1.577	13.6
6	12.82	19410	2.2471	1	457	2.658	42.5
7	26.85	93152	10.7847	1	1095	12.756	85.1

Total Area: 863739 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12628.PTS Printed on 05-08-1988 at 11:54:13
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



DBC (26.0)

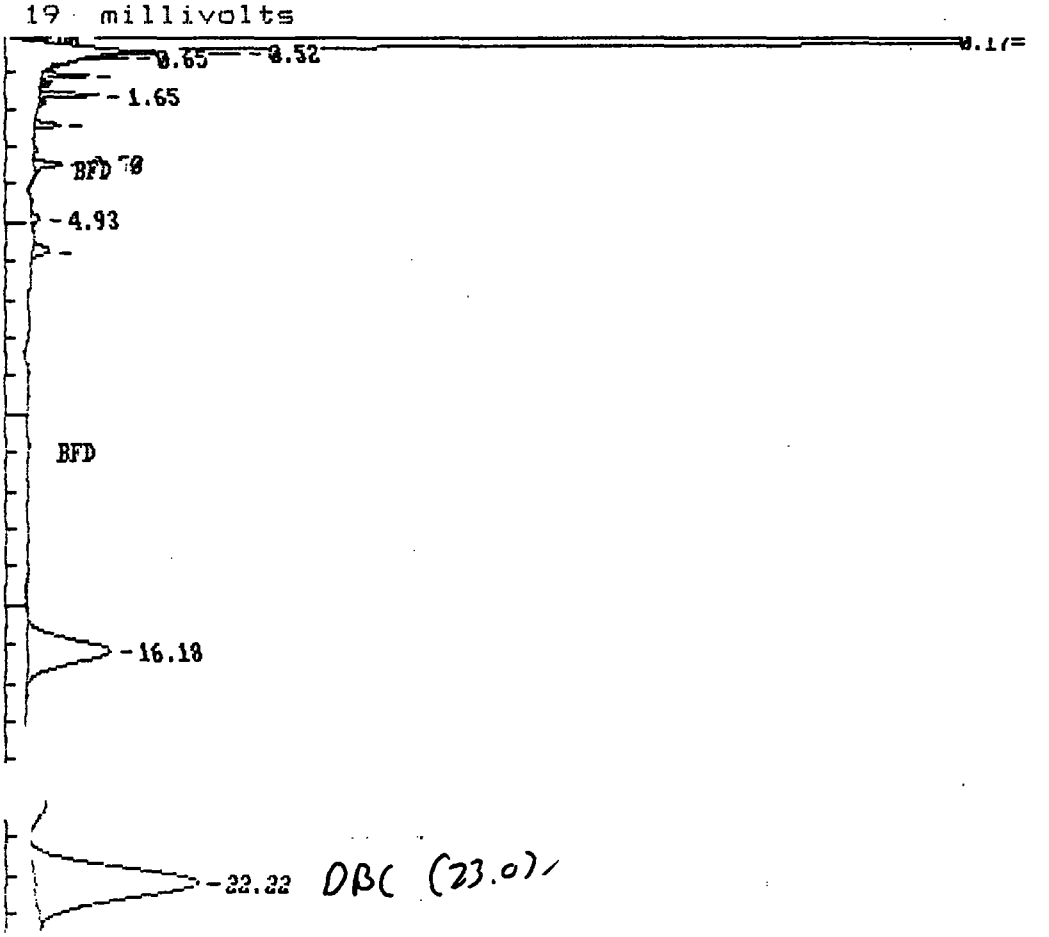
```
******************** 05-08-1988 12:27:16 Version 4.1 ********************
* Sample Name: 59436 11 20%                          Data File: J:BB12628     *
* Date: 05-07-1988 01:26:54 Method: M:BBPI                                    *
* Interface: 12  Cycle#:  28   Operator SS  Channel#: 0    Vial#: N.A.       *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100               *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                   *
* Conditions: 190 DEG ISOTHERMAL                                             *
*            Detector 0:                          Detector 1: ECD            *
* Misc. Information: 4 UL INJ                                                *
*****************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1151518	80.8024	1	275211	100.000	4.2
2	0.52	6125	0.4298	1	2318	0.532	2.6
3	0.65	2864	0.2010	1	826	0.249	3.5
5	1.12	4711	0.3305	1	894	0.409	5.3
8	1.65	6768	0.4749	1	1105	0.588	6.1
10	2.47	3834	0.2690	1	485	0.333	7.9
12	3.50	5032	0.3531	1	529	0.437	9.5
13	4.93	1935	0.1358	1	162	0.168	12.0
14	5.75	4858	0.3409	1	338	0.422	14.4
15	16.18	64719	4.5413	1	1550	5.620	41.8
16	22.22	172741	12.1213	1	3042	15.001	56.8

SS
5/11/88

Total Area: 1425103 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12628.PTS Printed on 05-08-1988 at 12:27:41
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



DBC (23.0)

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-12

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-12
Sample Matrix : Water
Data Released Authorized By : JOL

Case Number : N/A
Q.C. Report No: 59436
Contract No. : N/A
Date Sample Rec: 04/20/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	04/29/88
Conc./Dilution Factor :	1.0
pH :	7.00
Percent Moisture :	100%
Percent Moisture (Decanted) :	N/A

CAS Number		Value	ug/L	CAS Number		Value	ug/L
74-83-3	Chloromethane		10 U	79-34-5	1,1,2,2-Tetrachloroethane		5 U
74-83-9	Bromomethane		10 U	78-87-5	1,2-Dichloropropane		5 U
75-01-4	VinylChloride		10 U	10061-02-6	Trans-1,3-Dichloropropene		5 U
75-00-3	Chloroethane		10 U	79-10-6	Trichloroethene		5 U
75-09-2	MethyleneChloride		5 U	124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	6.2	J B	79-00-5	1,1,2-Trichloroethane		5 U
75-15-0	CarbonDisulfide		5 U	71-43-2	Benzene		5 U
75-35-4	1,1-Dichloroethene		5 U	10061-01-5	cis-1,3-Dichloropropene		5 U
75-34-3	1,1-Dichloroethane		5 U	110-75-8	2-Chloroethylvinylether		10 U
156-60-5	Trans-1,2-Dichloroethene		5 U	75-25-2	Bromoform		5 U
67-66-3	Chloroform		5 U	591-78-6	2-Hexanone		10 U
107-06-2	1,2-Dichloroethane		5 U	108-10-1	4-Methyl-2-Pentanone		10 U
78-93-3	2-Butanone		10 U	127-18-4	Tetrachloroethene		5 U
71-55-6	1,1,1-Trichloroethane		5 U	108-88-3	Toluene		5 U
56-23-5	CarbonTetrachloride		5 U	108-90-7	Chlorobenzene		5 U
108-05-4	VinylAcetate		10 U	100-41-4	Ethylbenzene		5 U
75-27-4	Bromodichloromethane		5 U	100-42-5	Styrene		5 U
					Total Xylenes		5 U

U - compound was not detected
J - concentration detected is less than the required detection limit
B - compound was detected in the blank
sp - compound was a spike

10/85 Rev

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-12

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1.	Unknown	VOA	39	24 B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59436

Organics Analysis Data Sheet

Page 2

Sample Number
59436-12

00934

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/23/88	Separatory Funnel Extraction	No
Date Analyzed	06/01/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.00		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L	CAS Number	Compound	Value	ug/L
108-95-2	Phenol		10 U				
111-44-4	bis(-2-Chloroethyl)Ether		10 U	83-32-9	Acenaphthene		10 U
95-57-8	2-Chlorophenol		10 U	51-28-5	2,4-Dinitrophenol		50 U
541-73-1	1,3-Dichlorobenzene		10 U	100-02-7	4-Nitrophenol		50 U
106-46-7	1,4-Dichlorobenzene		10 U	132-64-9	Dibenzofuran		10 U
100-51-6	Benzyl Alcohol		10 U	121-14-2	2,4-Dinitrotoluene		10 U
95-50-1	1,2-Dichlorobenzene		10 U	606-20-2	2,6-Dinitrotoluene		10 U
95-48-7	2-Methylphenol		10 U	84-66-2	Diethylphthalate		10 U
39638-32-9	bis(2-chloroisopropyl)Ether		10 U	7005-72-3	4-Chlorophenyl-phenylether		10 U
106-44-5	4-Methylphenol		10 U	86-73-7	Fluorene		10 U
621-64-7	N-Nitro-Di-n-Propylamine		10 U	100-01-6	4-Nitroaniline		50 U
67-72-1	Hexachloroethane		10 U	534-52-1	4,6-Dinitro-2-Methylphenol		50 U
98-95-3	Nitrobenzene		10 U	86-30-6	N-Nitrosidiphenylamine (1)		10 U
78-59-1	Isophorone		10 U	101-55-3	4-Bromophenyl-phenylether		10 U
88-75-5	2-Nitrophenol		10 U	118-74-1	Hexachlorobenzene		10 U
105-67-9	2,4-Dimethylphenol		10 U	87-86-5	Pentachlorophenol		50 U
65-85-0	Benzoic Acid		50 U	85-01-8	Phenanthrene		10 U
111-91-1	bis(2-Chloroethoxy) Methane		10 U	120-12-7	Anthracene		10 U
120-83-2	2,4-Dichlorophenol		10 U	84-74-2	Di-N-Butylphthalate		10 U
120-82-1	1,2,4-Trichlorobenzene		10 U	206-44-0	Fluoranthene		10 U
91-20-3	Naphthalene		10 U	129-00-0	Pyrene		10 U
106-47-8	4-Chloroaniline		10 U	85-68-7	Butylbenzylphthalate		10 U
87-68-3	Hexachlorobutadiene		10 U	91-94-1	3,3'-Dichlorobenzidine		20 U
59-50-7	4-Chloro-3-Methylphenol		10 U	56-55-3	Benzo(a)Anthracene		10 U
91-57-6	2-Methylnaphthalene		10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	12	B
77-47-4	Hexachlorocyclopentadiene		10 U	218-01-9	Chrysene		10 U
88-06-2	2,4,6-Trichlorophenol		10 U	117-84-0	Di-n-Octylphthalate		10 U
95-95-4	2,4,5-Trichlorophenol		50 U	205-99-2	Benzo(b)Fluoranthene		10 U
91-58-7	2-Chloronaphthalene		10 U	207-08-9	Benzo(k)Fluoranthene		10 U
88-74-4	2-Nitroaniline		50 U	50-32-8	Benzo(a)Pyrene		10 U
131-11-4	Dimethyl Phthalate		10 U	193-39-5	Indeno(1,2,3-cd)Pyrene		10 U
208-96-8	Acenaphthylene		10 U	53-70-3	Dibenzo(a,h)Anthracene		10 U
99-09-2	3-Nitroaniline		50 U	191-24-2	Benzo(g,h,i)Perylene		10 U

(1)-Cannot be separated from diphenylamine.

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-12

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1. 108-87-2	Methyl Cyclohexane	BNA	314	9.9 B
2. 108-88-3	Methyl Benzene	BNA	368	5.2 B
3.	Oxygenated Hydrocarbon	BNA	392	9.1 B
4.	Oxygenated Hydrocarbon	BNA	434	6.9 B
5.	Oxygenated Hydrocarbon	BNA	468	18 B
6. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	623	7.2 B
7. 78-40-0	Triethyl Ester Phosphoric Acid	BNA	864	7.4
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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29.				
30.				

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-12
Date Analyzed: 06/01/88

Units: ug/L
Run Factor: 2.00

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	52.6	53	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
	10 U	Pyridine	110-86-1
	10 U	2-Picoline	109-06-8
	10 U	3 & 4-Picoline	
	10 U	2,6-Lutidine	
	10 U	2-Ethyl Pyridine	
	10 U	2,4 & 2,5-Lutidine	
	10 U	2,3-Lutidine	
	10 U	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
	10 U	3,5-Lutidine	
	10 U	3,4-Lutidine	
	10 U	2-Methyl-5-Ethyl Pyridine	
	10 U	2-Methyl-3-Ethyl Pyridine	
	10 U	M and P Cresols	
	10 U	3-Ethyl-4-Methyl Pyridine	
	10 U	3-Ethyl-5-Methyl Pyridine	
	10 U	2,6-Dimethyl Phenol	
	10 U	2,5-Dimethyl Phenol	
	10 U	3,5-Dimethyl Phenol	
	10 U	2,3-Dimethyl Phenol	
	10 U	3,4-Dimethyl Phenol	
	10 U	1-Methylnaphthalene	90-12-0

FORM I

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-12
Date Analyzed: 06/03/88

Units: ug/L
Run Factor: 0.130

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	83.4	104	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
	10 U	Benzo(A)Anthracene
5.2	J	Chrysene
	10 U	Benzo(B)Fluoranthene
	10 U	Benzo(K)Fluoranthene
	10 U	Benzo(A)Pyrene

FORM I

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59436

Sample Number:
59436-12

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/23/88
Date Analyzed :05/07/88
Conc./Dil Factor : 50.5
Percent Moisture :

GPC Cleanup :No
Separatory Funnel Extract.:Yes
Cont. Liquid/Liquid Extr. :No
Sonication Extraction :No

CAS Number	Compound	Value	ug/ L
319-84-6	Alpha-BHC		0.05 U
319-85-7	Beta-BHC		0.05 U
319-86-8	Delta-BHC		0.05 U
58-89-9	Gamma-BHC(Lindane)		0.05 U
76-44-8	Heptachlor		0.05 U
309-00-2	Aldrin		0.05 U
1204-57-3	Heptachlor Epoxide		0.05 U
959-98-8	Endosulfan I		0.05 U
60-57-1	Dieldrin		0.10 U
72-55-9	4,4'-DDE		0.10 U
72-20-8	Endrin		0.10 U
33213-65-9	Endosulfan II		0.10 U
72-54-8	4,4'-DDD		0.10 U
1031-07-8	Endosulfan Sulfate		0.10 U
50-29-3	4,4'-DDT		0.10 U
72-43-5	Methoxychlor		0.51 U
53494-70-5	Endrin Ketone		0.10 U
57-74-9	Chlordane		0.51 U
8001-35-2	Toxaphene		1.00 U
12674-11-2	Aroclor-1016		0.51 U
11104-28-2	Aroclor-1221		0.51 U
11141-16-5	Aroclor-1232		0.51 U
53469-21-9	Aroclor-1242		0.51 U
12672-29-6	Aroclor-1248		0.51 U
11097-69-1	Aroclor-1254		1.00 U
11096-82-5	Arolcor-1260		1.00 U

Vi = Volume of extract injected (ul) Vi = 2ul/4ul
Vs = Volume of water extracted (ml) Vs = 990 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

4/29/88 18:49:33 SCAN 1 OF 730
Acquisition started

00939 OP

Acquire
04/29/88 18:49:00 + 0:03
Sample: 59436-12 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 3:S59436W925
Free sectors: 18862
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.026
Acct. No: 59436

*** GC descriptor: V3 ***

GC temperature: 60 DegC
Elapsed time : 0: 3 min

Injector: 50 DegC
Interface: 220 DegC

Seq. #	Temp (DegC)	Rate (C/min)	Time (minutes) period	Time (minutes) total
1	60- 60	-	2.0	2.0
2	60-250	7.0	27.1	29.1
3	250-250	-	10.0	39.1
4	250-250	-	0.0	39.1

Valve times (minutes)	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

Scan time (s)
Up: 2.95 L*
Down: 0.00 L

Hold time (s)
Top: 0.00
Bottom: 0.05

Cent S/P: 10 Actual: 67
Frag S/P: 10 Actual: 10

Samp int (ms): 0.200
Samp int (ms): 1.400

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	812	u
Zero scale mass	1	u
Intensity/ion	2	
Peak width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(ms)	4	

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	126.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.88	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2106.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

4/29/88 19:26:07
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	45.3	2190.0	2.1	18612.	25.	8.

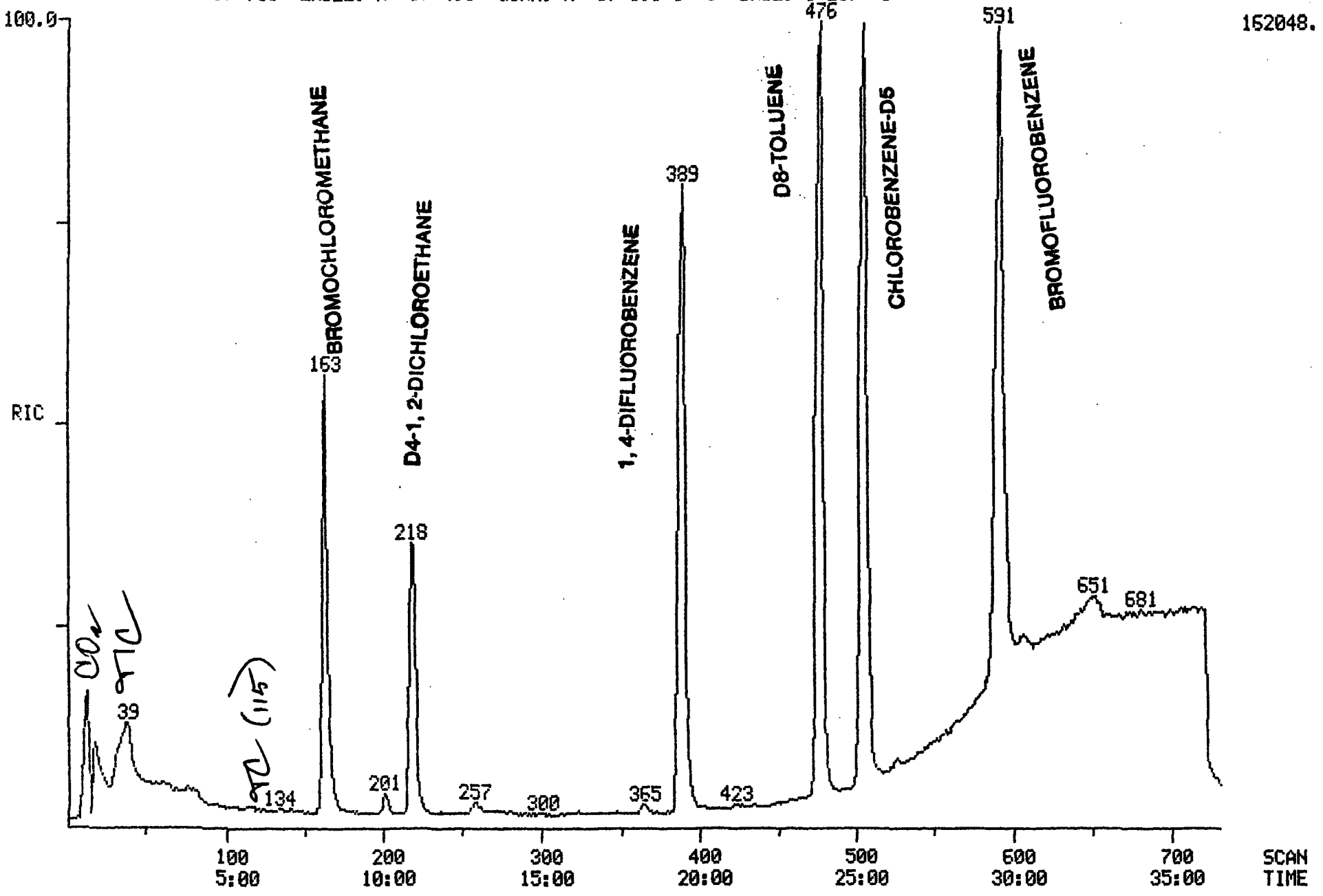
00940

RIC
04/29/88 18:49:00
SAMPLE: 59436-12 VOA H2O 100%/5ML
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436W925 #4 SCANS 1 TO 730
CALI: 042988CW #3

TIC = Tentatively Identified Compound

TC = Target Compound
SC = Spike Compound



PROCEDURE: TCA DIAGNOSTIC REPORT 4/30/88 1:47:00
DATA FILE: S59436W925
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00941
REPORT: ISO1

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	2	5	116	ISO1/TCO1
3	3	1	27	18	6	8	154	ISO2/TCO2
3	3	1	27	12	6	6	176	ISO3/TCO3
1	1	1	0	7	2	1	0	ISO4/TCO4

41 COMPOUNDS PROCESSED, 11 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-161	163	163	.	1	959	.	128	163	.	1
2	V1	10	-28	28	.	.	.	.	.	50	.	.	.
3	V1	15	-44	44	.	.	.	.	.	94	.	.	.
4	V1	25	-56	56	.	.	.	.	.	62	.	.	.
5	V1	35	-70	71	.	.	.	.	.	64	.	.	.
6	V1	45	-105	106	.	.	.	.	.	84	106	.	1
7	V1	50	-114	115	114	-1	5	1000	.	58	115	1	1
8	V1	65	-132	133	.	.	.	.	.	76	.	.	.
9	V1	80	-153	154	.	.	.	.	.	96	.	.	.
10	V2	1	-388	389	389	.	1	997	.	114	389	.	1
11	V3	1	-503	504	504	.	1	997	.	117	504	.	1
12	V1	90	-179	179	.	.	.	.	.	63	.	.	.
13	V1	95	-193	193	.	.	.	.	.	96	.	.	.
14	V1	100	-204	204	.	.	.	.	.	83	.	.	.
15	V1	2	-218	218	218	.	1	992	.	65	219	1	1
16	V2	10	-218	218	219	1	4	976	.	72	220	1	1
17	V1	110	-220	220	.	.	.	.	.	62	.	.	.
18	V2	15	-248	248	.	.	.	.	.	97	.	.	.
19	V2	20	-256	256	.	.	.	.	.	117	.	.	.
20	V2	25	-259	259	257	-2	2	957	.	43	.	.	.
21	V2	30	-267	267	.	.	.	.	.	83	.	.	.
22	V2	35	-298	299	.	.	.	.	.	63	.	.	.
23	V2	40	-304	305	.	.	.	.	.	75	.	.	.
24	V2	45	-316	317	.	.	.	.	.	130	.	.	.
25	V2	60	-329	330	.	.	.	.	.	78	.	.	.
26	V2	50	-330	331	.	.	.	.	.	129	.	.	.
27	V2	65	-333	334	.	.	.	.	.	75	.	.	.
28	V2	55	-333	334	.	.	.	.	.	97	.	.	.
29	V2	80	-393	394	.	.	.	.	.	173	.	.	.
30	V3	10	-404	405	407	2	3	922	.	58	.	.	.
31	V3	15	-441	442	439	-3	2	969	.	58	.	.	.
32	V3	25	-447	448	.	.	.	.	.	83	.	.	.
33	V3	20	-448	449	.	.	.	.	.	164	.	.	.
34	V3	2	-475	476	476	.	1	990	.	98	476	.	1
35	V3	35	-480	481	.	.	.	.	.	92	.	.	.
36	V3	40	-506	507	.	.	.	.	.	112	.	.	.
37	V3	50	-549	549	.	.	.	.	.	106	.	.	.
38	V3	3	-591	591	591	.	1	991	.	95	591	.	1
39	V3	55	-611	611	.	.	.	.	.	104	.	.	.
40	V3	60	-615	615	.	.	.	.	.	106	.	.	.
41	V3	75	-628	628	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59436W925

00942

Data: S59436W925.TI
04/29/88 18:49:00
Sample: 59436-12 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.026
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	Name				
1	CI01 BROMOCHLOROMETHANE	128	IV1#	01	74-97-5
2	CO10 CHLOROMETHANE	50	V1#	10SP	74-87-3
3	CO15 BROMOMETHANE	94	V1#	15	74-83-9
4	CO20 VINYL CHLORIDE	62	V1#	25	75-01-4
5	CO25 CHLOROETHANE	64	V1#	35	75-00-3
6	CO30 METHYLENE CHLORIDE	84	V1#	45	75-09-2
7	CO35 ACETONE	58	V1#	50	67-64-1
8	CO40 CARBON DISULFIDE	76	V1#	65	75-15-0
9	CO45 1,1-DICHLOROETHENE	61	V1#	80	75-35-4
10	CI10 1,4-DIFLUOROBENZENE	114	IV2#	01	540-36-3
11	CI20 CHLOROBENZENE-D5	117	IV3#	01	3114-55-4
12	CO50 1,1-DICHLOROETHANE	63	V1#	90	75-34-3
13	TRANS-1,2-DICHLOROETHENE	61	V1#	95	156-60-5
14	CO60 CHLOROFORM	83	V1#	100CC	67-66-3
15	CS15 1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
16	C110 2-BUTANONE	72	V2#	10	78-93-3
17	CO65 1,2-DICHLOROETHANE	62	V1#	110	107-06-2
18	C115 1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
19	C120 CARBONTETRACHLORIDE	117	V2#	20	56-23-5
20	C125 VINYL ACETATE	43	V2#	25	108-05-4
21	C130 BROMODICHLOROMETHANE	83	V2#	30	75-27-4
22	C140 1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
23	C143 CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
24	C150 TRICHLOROETHENE	130	V2#	45	79-01-6
25	C165 BENZENE	78	V2#	60	71-43-2
26	C155 DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
27	C172 TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
28	C160 1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
29	C180 BROMOFORM	173	V2#	80	75-25-2
30	C205 4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
31	C210 2-HEXANONE	58	V3#	15	591-78-6
32	C225 1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5
33	C220 TETRACHLOROETHENE	164	V3#	20	127-18-4
34	CS05 TOLUENE-D8	98	SV3#	02	2037-26-5
35	C230 TOLUENE	92	V3#	35	108-88-3
36	C235 CHLOROBENZENE	112	V3#	40	108-90-7
37	C240 ETHYLBENZENE	106	V3#	50	100-41-4
38	CS10 BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
39	C245 STYRENE	104	V3#	55	100-42-5
40	M-XYLENE	106	V3#	60	108-38-3
41	O+P XYLENES	106	V3#	75	

00943

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	163	8:09	1	1.000	A BB	39522.	50.000 UG/L	16.56
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	106	5:18	1	0.650	A BB	228.	0.134 UG/L	0.04
7	58	115	5:45	1	0.706	A VB	843.	6.164 UG/L	2.04
8	NOT FOUND								
9	NOT FOUND								
10	114	389	19:27	10	1.000	A BB	236061.	50.000 UG/L	16.56
11	117	504	25:12	11	1.000	A BB	224480.	50.000 UG/L	16.56
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	219	10:57	1	1.344	A BB	74597.	44.087 UG/L	14.60
16	72	220	11:00	10	0.566	A BB	118.	0.732 UG/L	0.24
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
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	98	476	23:48	11	0.944	A BB	243237.	50.331 UG/L	16.66
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	95	591	29:33	11	1.173	A BB	139565.	50.590 UG/L	16.75
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:06	1.01	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:24		0.173						
3	2:12		0.272						
4	2:48		0.346						
5	3:30		0.432						
6	5:15	1.01	0.648	1.00	0.13	50.00	0.006	2.149	0.00
7	5:42	1.01	0.704	1.00	6.16	50.00	0.021	0.173	0.12
8	6:36		0.815						
9	7:39		0.944						
10	19:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	8:57		1.105						
13	9:39		1.191						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	10:12		1.259						
15	10:54	1.00	1.346	1.00	44.09	50.00	1.887	2.141	0.88
16	10:54	1.01	0.560	1.01	0.73	50.00	0.000	0.034	0.01
17	11:00		1.358						
18	12:24		0.638						
19	12:48		0.658						
20	12:57		0.666						
21	13:21		0.686						
22	14:54		0.766						
23	15:12		0.781						
24	15:48		0.812						
25	16:27		0.846						
26	16:30		0.848						
27	16:39		0.856						
28	16:39		0.856						
29	19:39		1.010						
30	20:12		0.802						
31	22:03		0.875						
32	22:21		0.887						
33	22:24		0.889						
34	23:45	1.00	0.942	1.00	50.33	50.00	1.084	1.076	1.01
35	24:00		0.952						
36	25:18		1.004						
37	27:27		1.089						
38	29:33	1.00	1.173	1.00	50.59	50.00	0.622	0.614	1.01
39	30:33		1.212						
40	30:45		1.220						
41	31:24		1.246						

TCA FINISHED, 11 FOUND
FINISHED AT: 4/30/88 1:51:02

00945

RMAL QUANTITATION SUMMARY FILE: S59436W925
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	39522.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	236061.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	224480.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	476	3	243237.	1.084	50.331
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	139565.	0.622	50.590
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	219	1	74597.	1.887	44.087
7	V1# 10	C010 CHLOROMETHANE	50		1	NOT FOUND		
8	V1# 15	C015 BROMOMETHANE	94		1	NOT FOUND		
9	V1# 25	C020 VINYL CHLORIDE	62		1	NOT FOUND		
10	V1# 35	C025 CHLOROETHANE	64		1	NOT FOUND		
11	V1# 45	C030 METHYLENE CHLORIDE	84		1	NOT FOUND		
12	V1# 50	C035 ACETONE	58	115	1	843.	0.021	6.164 B
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96		1	NOT FOUND		
15	V1# 90	C050 1,1-DICHLOROETHANE	63		1	NOT FOUND		
16	V1# 95	TRANS-1,2-DICHLOROETHENE	96		1	NOT FOUND		
17	V1#100	C060 CHLOROFORM	83		1	NOT FOUND		
18	V1#110	C065 1,2-DICHLOROETHANE	62		1	NOT FOUND		
19	V2# 10	C110 2-BUTANONE	72		2	NOT FOUND		
20	V2# 15	C115 1,1,1-TRICHLOROETHA	97		2	NOT FOUND		
21	V2# 20	C120 CARBONTETRACHLORIDE	117		2	NOT FOUND		
22	V2# 25	C125 VINYL ACETATE	43		2	NOT FOUND		
23	V2# 30	C130 BROMODICHLOROMETHAN	83		2	NOT FOUND		
24	V2# 35	C140 1,2-DICHLOROPROPANE	63		2	NOT FOUND		
25	V2# 40	C143 CIS-1,3-DICHLOROPRO	75		2	NOT FOUND		
26	V2# 45	C150 TRICHLOROETHENE	130		2	NOT FOUND		
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78		2	NOT FOUND		
30	V2# 65	C172 TRANS-1,3-DICHLOROP	75		2	NOT FOUND		
31	V2# 80	C180 BROMOFORM	173		2	NOT FOUND		
32	V3# 10	C205 4-METHYL-2-PENTANON	58		3	NOT FOUND		
33	V3# 15	C210 2-HEXANONE	58		3	NOT FOUND		
34	V3# 20	C220 TETRACHLOROETHENE	164		3	NOT FOUND		
35	V3# 25	C225 1,1,2,2-TETRACHLORO	83		3	NOT FOUND		
36	V3# 35	C230 TOLUENE	92		3	NOT FOUND		
37	V3# 40	C235 CHLOROBENZENE	112		3	NOT FOUND		
38	V3# 50	C240 ETHYLBENZENE	106		3	NOT FOUND		
39	V3# 55	C245 STYRENE	104		3	NOT FOUND		
40	V3# 60	M-XYLENE	106		3	NOT FOUND		
41	V3# 75	O+P XYLENES	106		3	NOT FOUND		

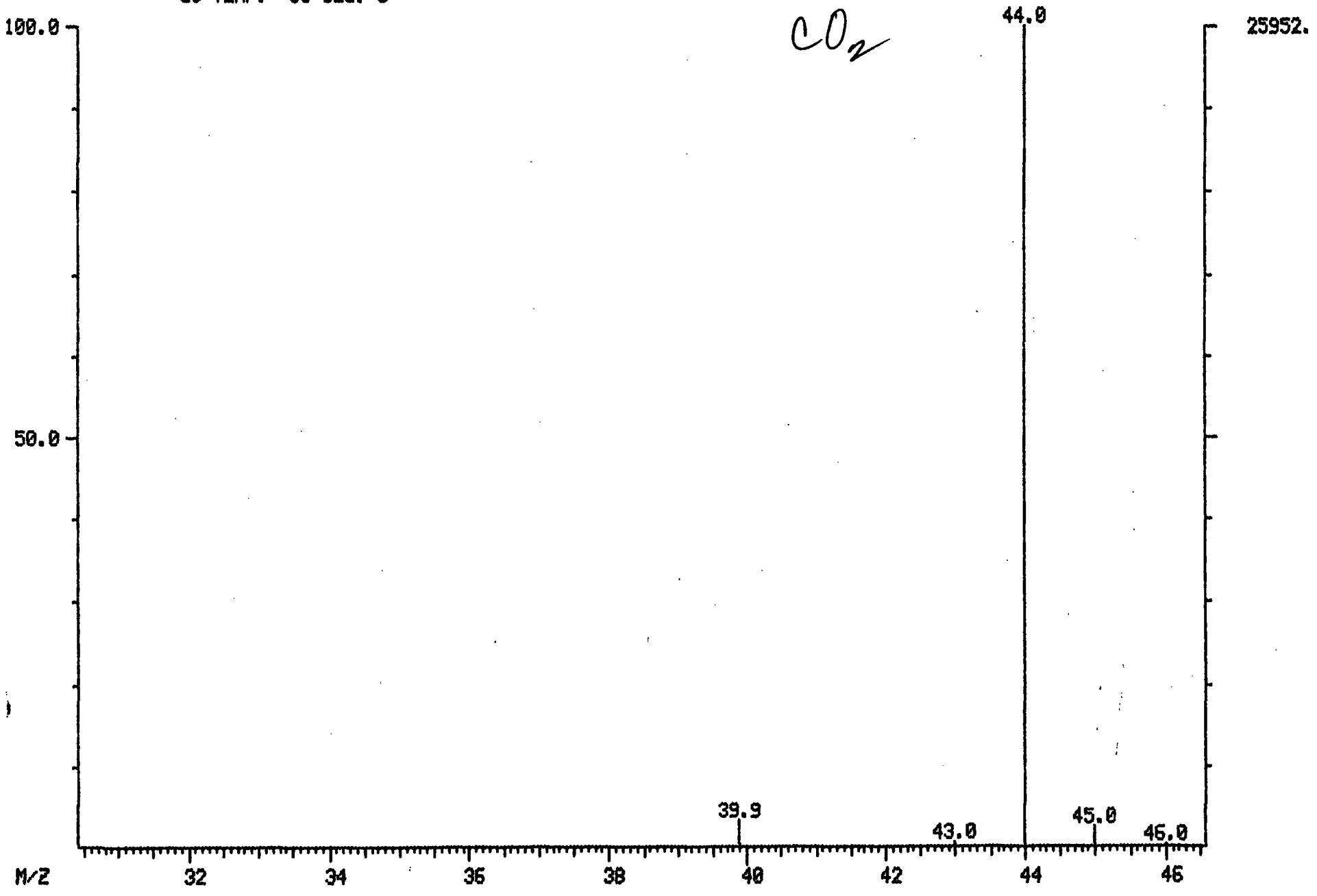
ul 6-2-88

00946

MASS SPECTRUM
04/29/88 18:49:00 + 0:39
SAMPLE: 59436-12 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 60 DEG. C

DATA: S59436W925 #13
CALI: 042988CW #3

BASE M/Z: 44
RIC: 27680.

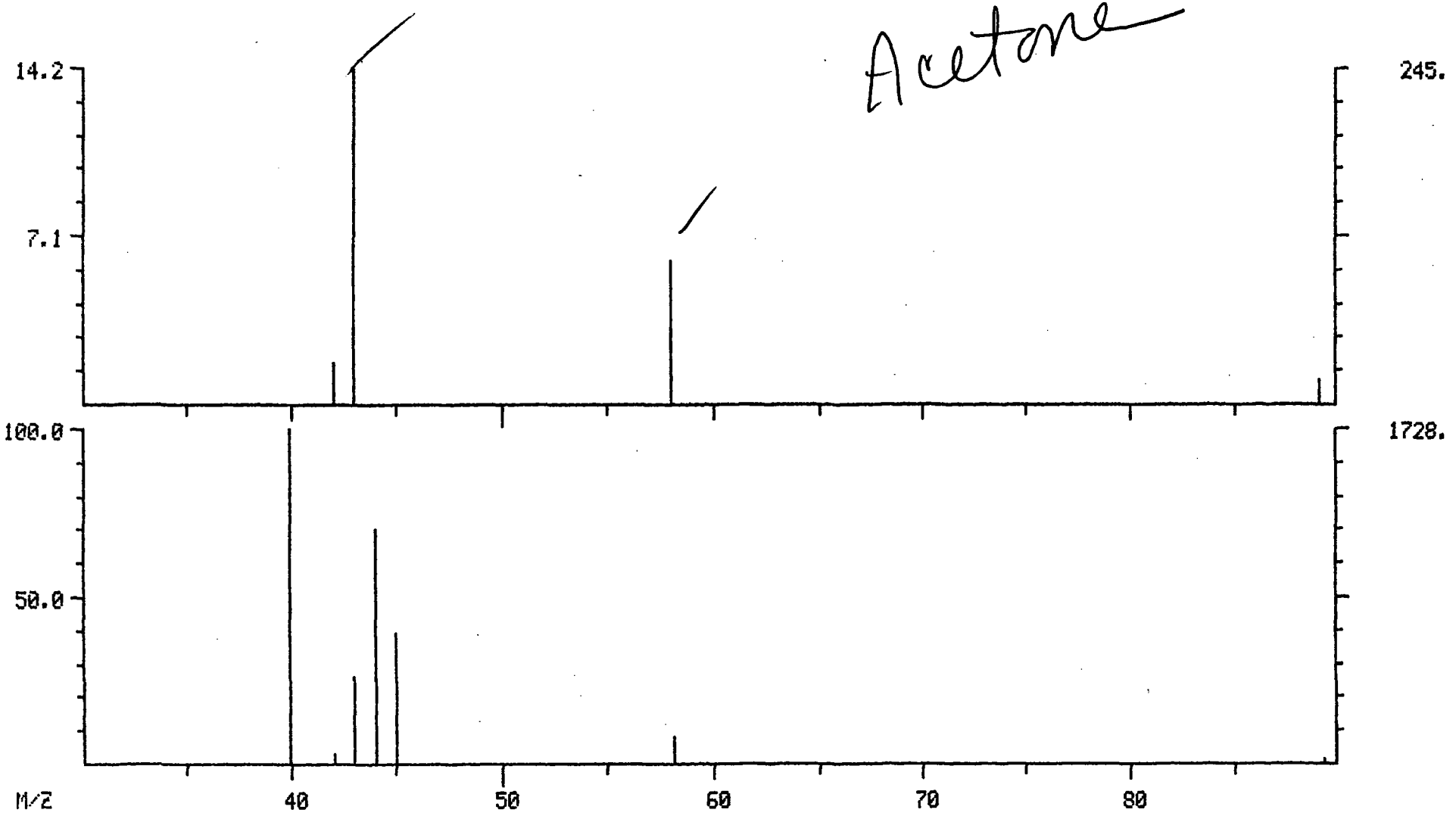


00947

DUAL MASS SPECTRUM
04/29/88 18:49:00 + 5:45
SAMPLE: 59436-12 VOA H2O 100Z/5ML
CONDS.: GC DESC V3
GC TEMP: 86 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W925 #115 BASE M/Z: 43/ 40
CALI: 042988CW #3 RIC: 396./ 4295.

Acetone

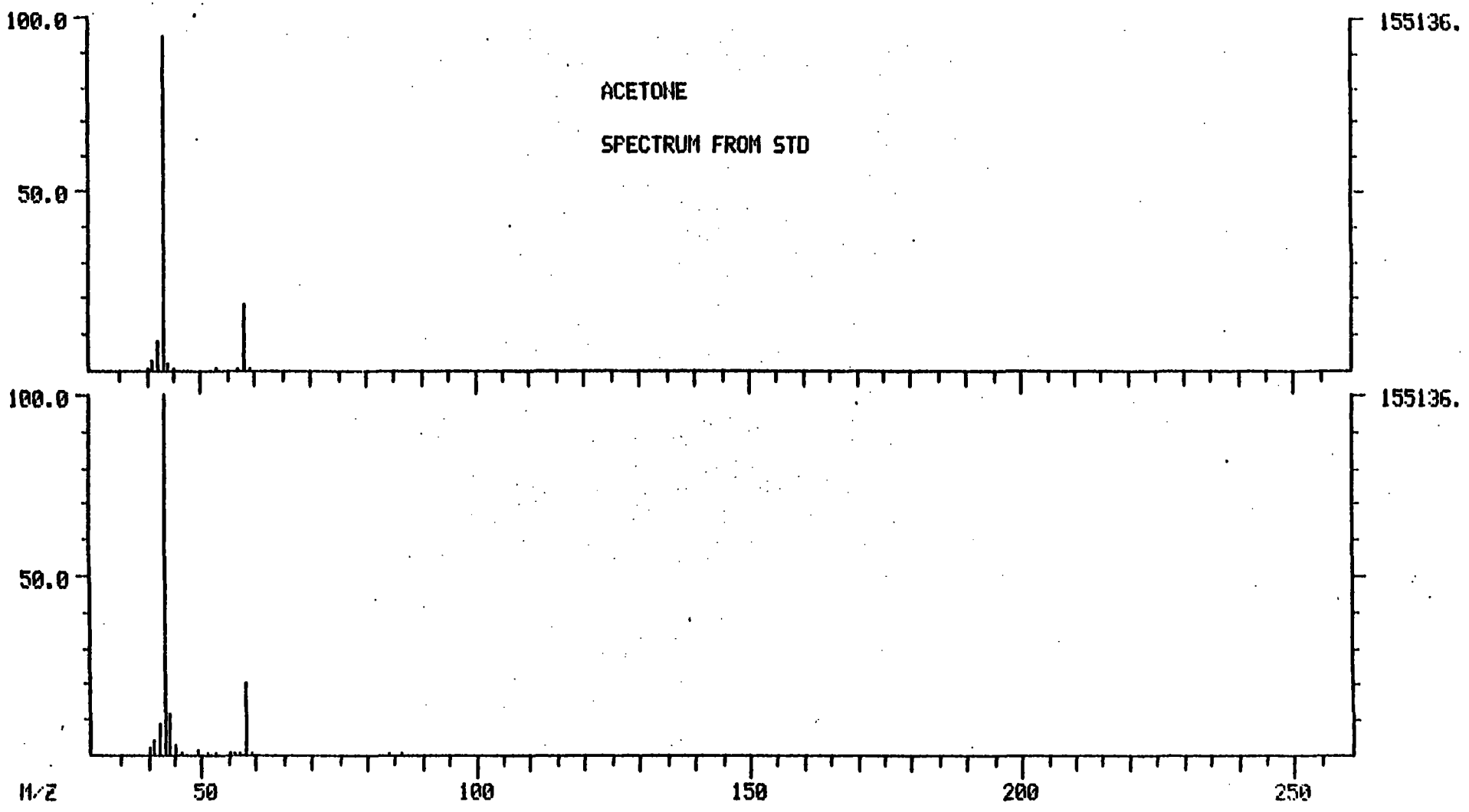


00948

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 7:37
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #150
CALI: STDJ198 #1

BASE M/Z: 43/ 43
RIC: 199935./ 247807.



Quantitation Report File: TEMP

TW59436C.MS

00949

Data: S59436W925.TI
04/29/88 18:49:00
Sample: 59436-12 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.026
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	CAS #	Name
1	0-00-0	UNKNOWN
2	0-00-0	UNKNOWN
3	0-00-0	UNKNOWN
4	28871-61-6	SILANE, (FLUOROMETHYL)TRIMETHYL-

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	163	8:09	3	0.323	A BB	369455.	48.710	19.52
2	RIC	389	19:27	3	0.772	A BB	590392.	77.839	31.19
3	RIC	504	25:12	3	1.000	A BB	758480.	100.000	40.07
4	RIC	39	1:57	3	0.077	A VB	174680.	23.030 ✓B	9.23

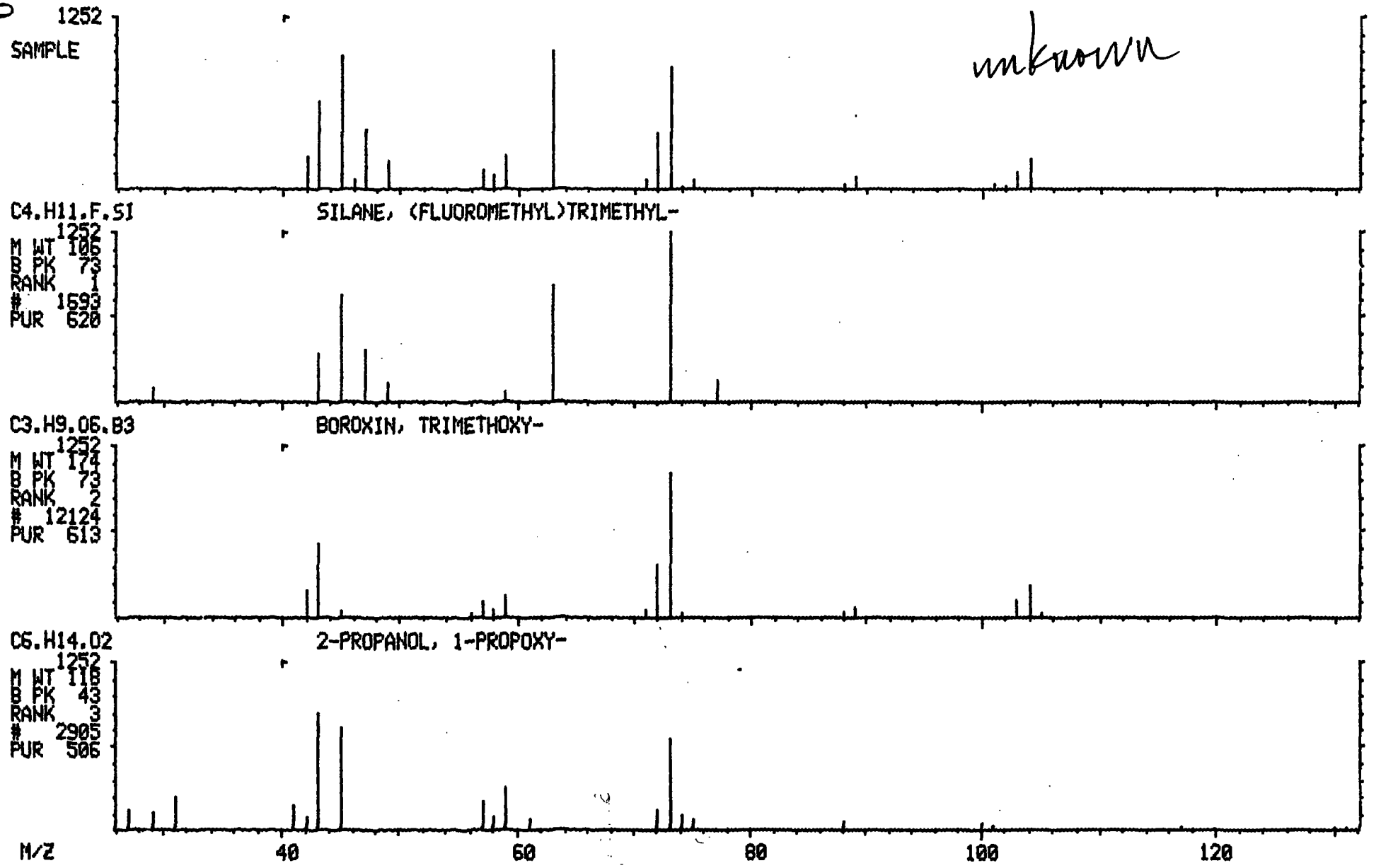
$\frac{174680}{369455} \times 50 = 24$ ug/L B

00950

LIBRARY SEARCH
04/29/88 18:49:00 + 1:57
SAMPLE: 59435-12 VOA H2O 100%/5ML
CONDS.: GC DESC V3
ENHANCED (S 15B 2N 0T)

DATA: 559436W925 # 39
CALI: 042988CW # 3

BASE M/Z: 63
RIC: 8039.



6/1/88 21:53:21 SCAN 1 OF 2850 00951

Acquisition started

Acquire Run 3:S59436R972 ACQUIRING
06/01/88 21:52:00 + 0:04 Free sectors: 8879 Scan: 5 of 2850
Sample: 59436-12 BNA H20 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No: 59436

********** GC PARAMETERS **********

Loaded GC Desc:ST Current GC oven tmp: 29 DegC Injector : 250 DegC
Current GC Desc:ST GC elapsed time : 0: 3 min Int. oven : 275 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********

Low mass: 35 Up: 0.70 L* Top: 0.00
High mass: 500 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 10 Samp Int (ms): 0.150 Peak Width: 1000.
Frag S/P: 10 Actual: 10 Samp Int (ms): 0.150 Inten/ion: 2

Min Peak Width: 3 Min Frag Width %: 80 Min Area: 20
ADC Threshold: 1 Baseline: 0

***** Mode: Centroid positive ion

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

$RF = \frac{2.0}{1.0L} = 2.0$

$SV = 2.0$

6/1/88 22:29:02
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	518.8	2137.5	24.3	129974.	46.	61.

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	107	954	11:55	1	1.332	A BB	462.	0.437 UG/ML	0.31
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:11	1.00	0.468	1.00	21.17	50.00	0.946	2.234	0.42
3	4:13		0.471						
4	5:23		0.602						
5	6:12		0.693						
6	6:34		0.735						
7	6:58		0.779						
8	7:25		0.830						
9	7:41		0.859						
10	7:56		0.887						
11	8:02		0.898						
12	8:17		0.926						
13	8:45		0.978						
14	11:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	16:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	9:08		1.021						
17	9:19		1.041						
18	9:59		1.116						
19	10:16		1.148						
20	10:20		1.155						
21	10:35		1.183						
22	11:13		0.940						
23	11:31		0.965						
24	11:43		0.981						
25	11:56	1.00	1.334	1.00	0.44	50.00	0.016	1.861	0.01
26	13:58		1.171						

00401

RF 2.00
SV 2.00

TCA FINISHED, 4 FOUND
FINISHED AT: 6/03/88 17:36:58

RMAL QUANTITATION SUMMARY FILE: S59436R965
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	716	1	22740.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	954	2	87104.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	40703.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	336	1	26888.	0.946	21.173
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93		1	NOT FOUND		
7	S1# 62	3 & 4-PICOLINE	93		1	NOT FOUND		
8	S1# 64	2,6-LUTIDINE	107		1	NOT FOUND		
9	S1# 73	2-ETHYL PYRIDINE	106		1	NOT FOUND		
10	S1# 83	2,4 & 2,5-LUTIDINE	107		1	NOT FOUND		
11	S1# 87	2,3-LUTIDINE	107		1	NOT FOUND		
12	S1# 88	3-ETHYL PYRIDINE	107		1	NOT FOUND		
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107		1	NOT FOUND		
15	S1#122	3,4-LUTIDINE	107		1	NOT FOUND		
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106		1	NOT FOUND		
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106		1	NOT FOUND		
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106		1	NOT FOUND		
20	S1#203	3-ETHYL-5-METHYL PYRIDIN	106		1	NOT FOUND		
21	S1#204	2,6-DIMETHYL PHENOL	122		1	NOT FOUND		
22	S2# 27	2,5-DIMETHYL PHENOL	107		2	NOT FOUND		
23	S2# 37	3,5-DIMETHYL PHENOL	107		2	NOT FOUND		
24	S2# 47	2,3-DIMETHYL PHENOL	107		2	NOT FOUND		
25	S2# 57	3,4-DIMETHYL PHENOL	107		1	NOT FOUND		
26	S2#150	1-METHYLNAPHTHALENE	142		2	NOT FOUND		

RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: D:S59436X822. STARTED : 6/03/88 11:46:13

6/2/88 21:49:58 SCAN 1 OF 3900 $RF = \frac{ng}{ml} \times \frac{0.5ml}{3.825L} = 0.131\ ng/L$

Acquisition started

Acquire Run 2:S59436X822 ACQUIRING
06/02/88 21:49:00 + 0:03 Free sectors: 23155 Scan: 7 of 3900
Sample: 59436-05 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc:PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc:PA GC elapsed time : 0: 3 min Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: P1 Mass intervals: 3
Scan time: 0.500 s Samp. int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	225.500	226.500	0.105	1	100	0	1	1	Pos
2	227.500	228.500	0.105	1	100	0	1	1	Pos
3	239.500	240.500	0.105	1	100	0	1	1	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

6/2/88 22:18:23 SCAN 3407 OF 3900

MID scan Desc: P2 Mass intervals: 3
Scan time: 0.500 s Samp. Int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

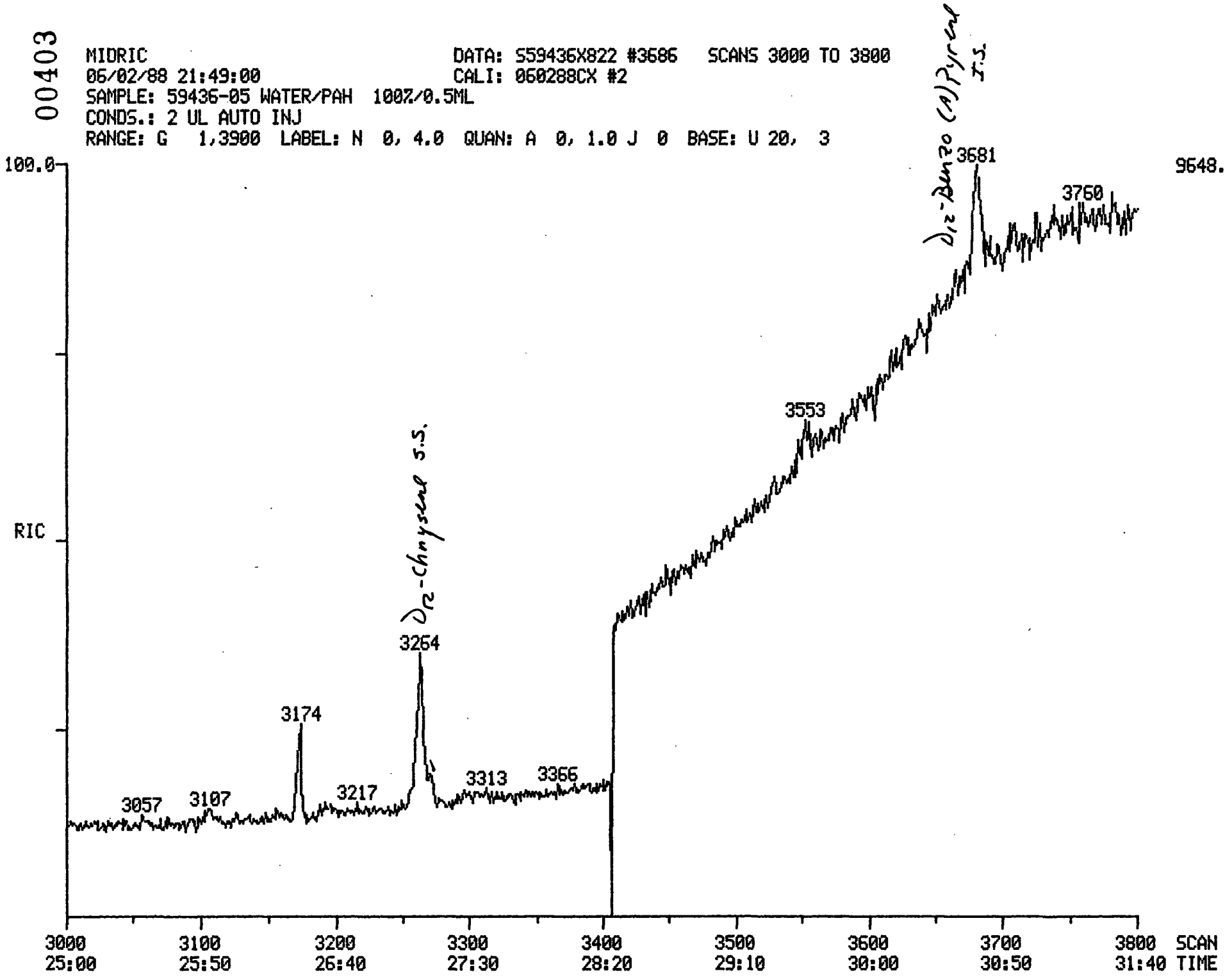
6/2/88 22:22:33
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00403

MIDRIC
06/02/88 21:49:00
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436X822 #3686 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X822

Data: S59436X822.TI
06/02/88 21:49:00
Sample: 59436-05 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

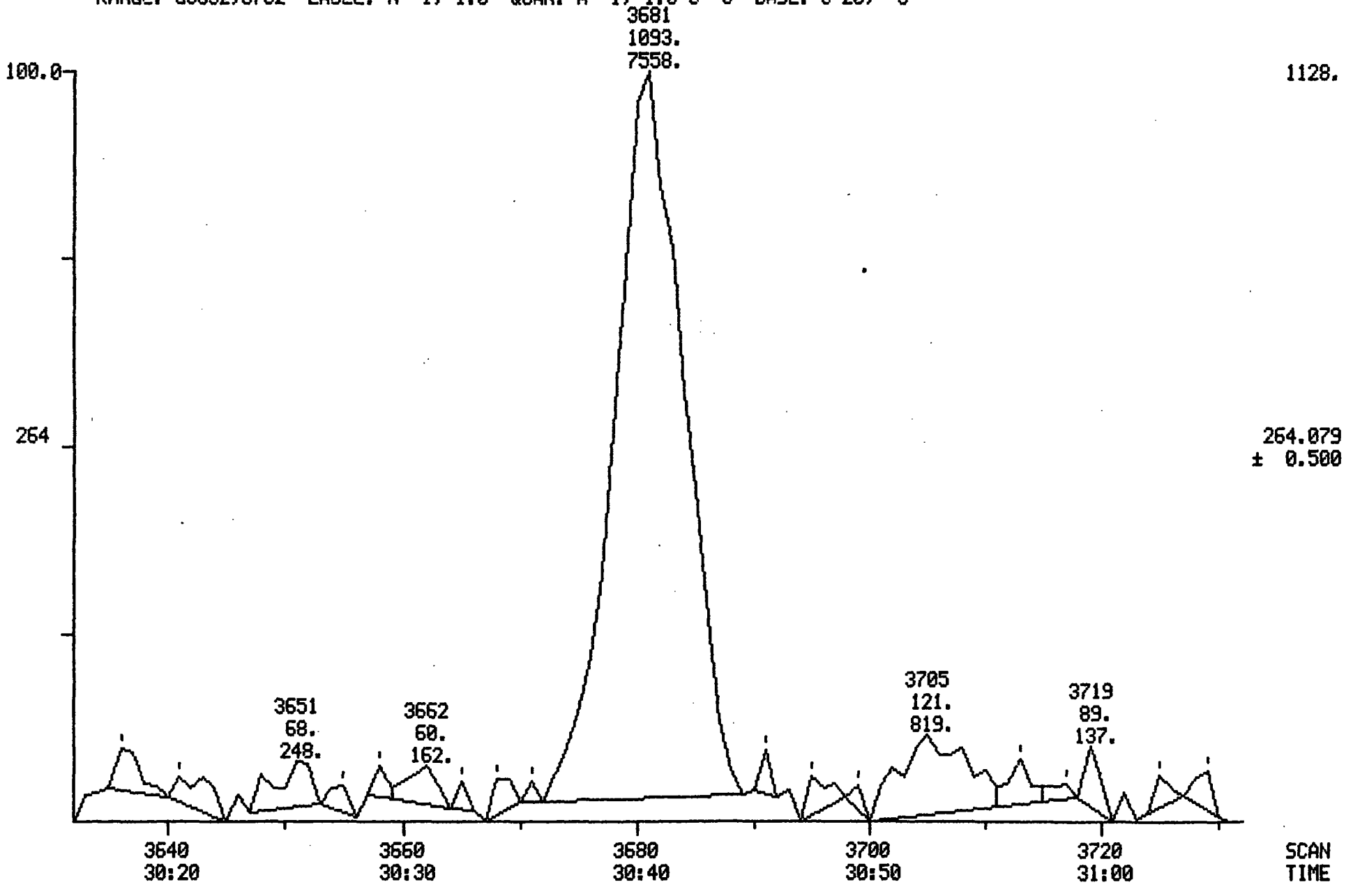
No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE	250 PH# 10
11	BENZO(J)FLUORANTHENE	252 PH# 11
12	BENZO(J)FLUORANTHENE	250 PH# 12
13	BENZO(A)PYRENE	252 PH# 13
14	BENZO(A)PYRENE	250 PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3681	30:40	1	1.000	A BB	7558.60%	80.000	NG/ML	26.93
2	240	3264	27:12	1	0.887	A BV	10804.	74.523	NG/ML	25.09
3	228	3257	27:08	1	0.885	A VB	1149.	7.511	NG/ML	2.53
4	226	3258	27:09	1	0.885	A BB	393.	11.117	NG/ML	3.74
5	228	3271	27:15	1	0.889	A BB	1600.	9.987	NG/ML	3.36
6	226	3273	27:16	1	0.889	A VB	470.	11.150	NG/ML	3.75
7	252	3589	29:54	1	0.975	A BB	672.	4.235	NG/ML	1.43
8	250	3595	29:57	1	0.977	A BB	304.	7.943	NG/ML	2.67
9	252	3594	29:57	1	0.976	A BV	586.	3.692	NG/ML	1.24
10	250	3603	30:01	1	0.979	A BB	384.	10.033	NG/ML	3.38
11	252	3609	30:04	1	0.980	A BB	540.	3.821	NG/ML	1.29
12	250	3618	30:09	1	0.983	A BB	1252.	40.097	NG/ML	13.50
13	252	3681	30:40	1	1.000	A BV	2122.	16.159	NG/ML	5.44
14	250	3688	30:44	1	1.002	A BB	752.	16.776	NG/ML	5.65

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:41	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:11	1.00	0.886	1.00	74.52	80.00	1.429	1.535	0.93
3	27:08	1.00	0.885	1.00	7.51	80.00	0.152	1.619	0.09
4	27:08	1.00	0.885	1.00	11.12	80.00	0.052	0.375	0.14
5	27:15	1.00	0.888	1.00	9.99	80.00	0.212	1.696	0.12
6	27:15	1.00	0.888	1.00	11.15	80.00	0.062	0.446	0.14
7	29:56	1.00	0.976	1.00	4.23	80.00	0.089	1.680	0.05
8	29:56	1.00	0.976	1.00	7.94	80.00	0.040	0.405	0.10
9	29:59	1.00	0.977	1.00	3.69	80.00	0.078	1.680	0.05
10	29:59	1.00	0.977	1.00	10.03	80.00	0.051	0.405	0.13
11	29:41	1.01	0.982	1.00	3.82	80.00	0.071	1.496	0.05

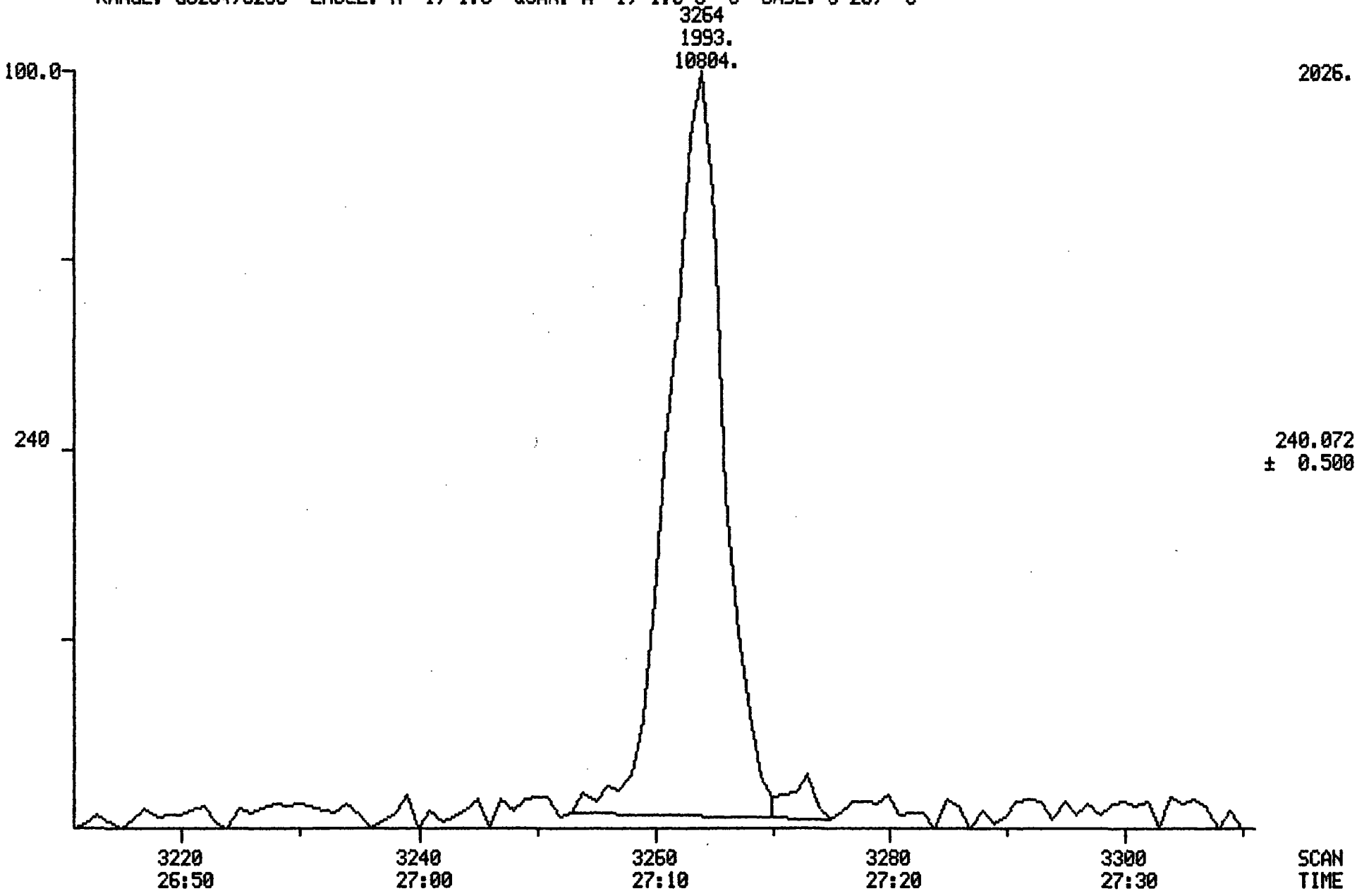
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
12	29:41	1.02	0.982	1.00	40.10	80.00	0.166	0.330	0.50
13	30:44	1.00	1.002	1.00	16.16	80.00	0.281	1.390	0.20
14	30:44	1.00	1.002	1.00	16.78	80.00	0.099	0.474	0.21

MIDMASS CHROMATOGRAM DATA: S59436X822 #3682 SCANS 3632 TO 3732
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3632,3732 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



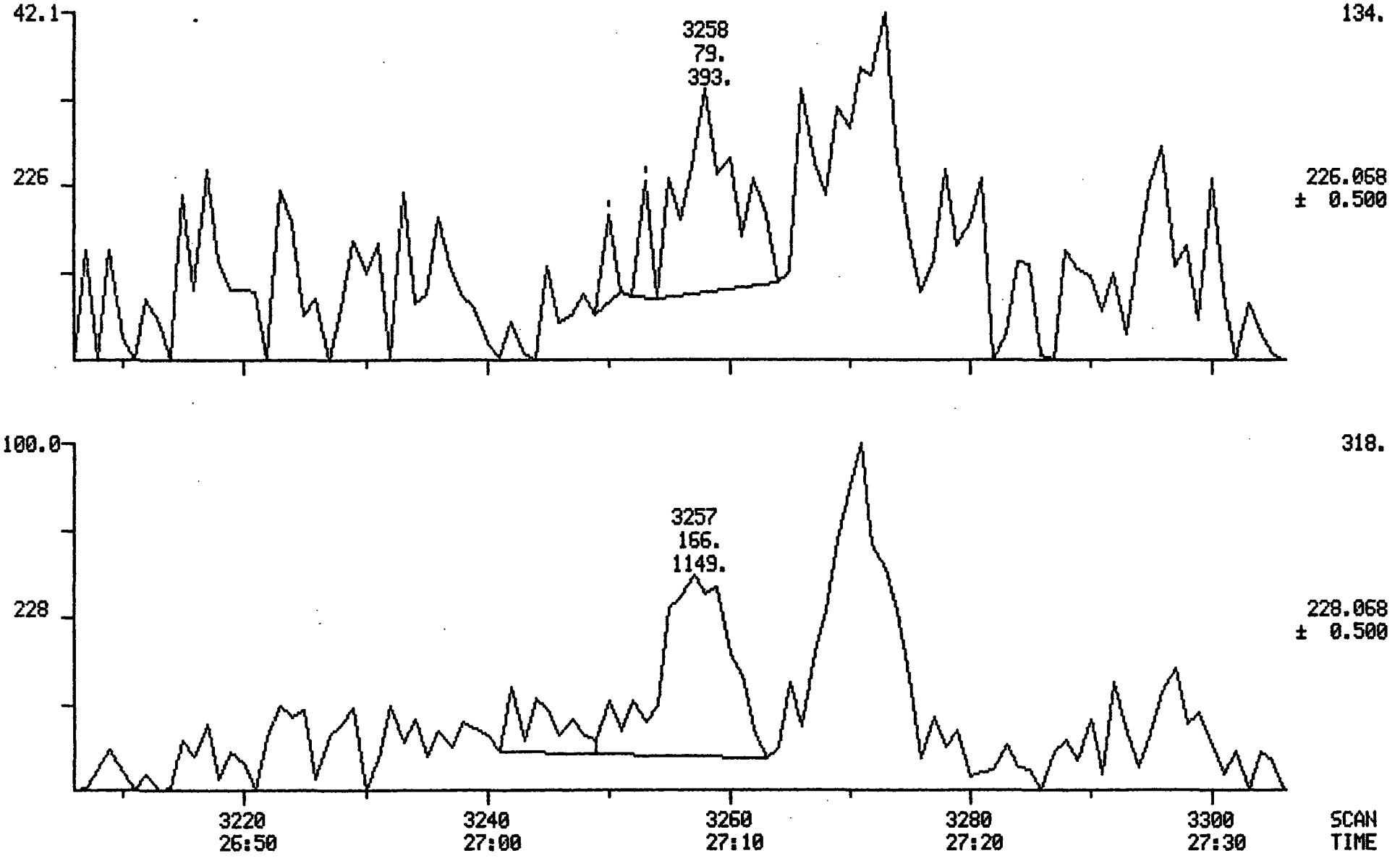
004007

MIDMASS CHROMATOGRAM DATA: S59436X822 #3261 SCANS 3211 TO 3311
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3254,3268 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



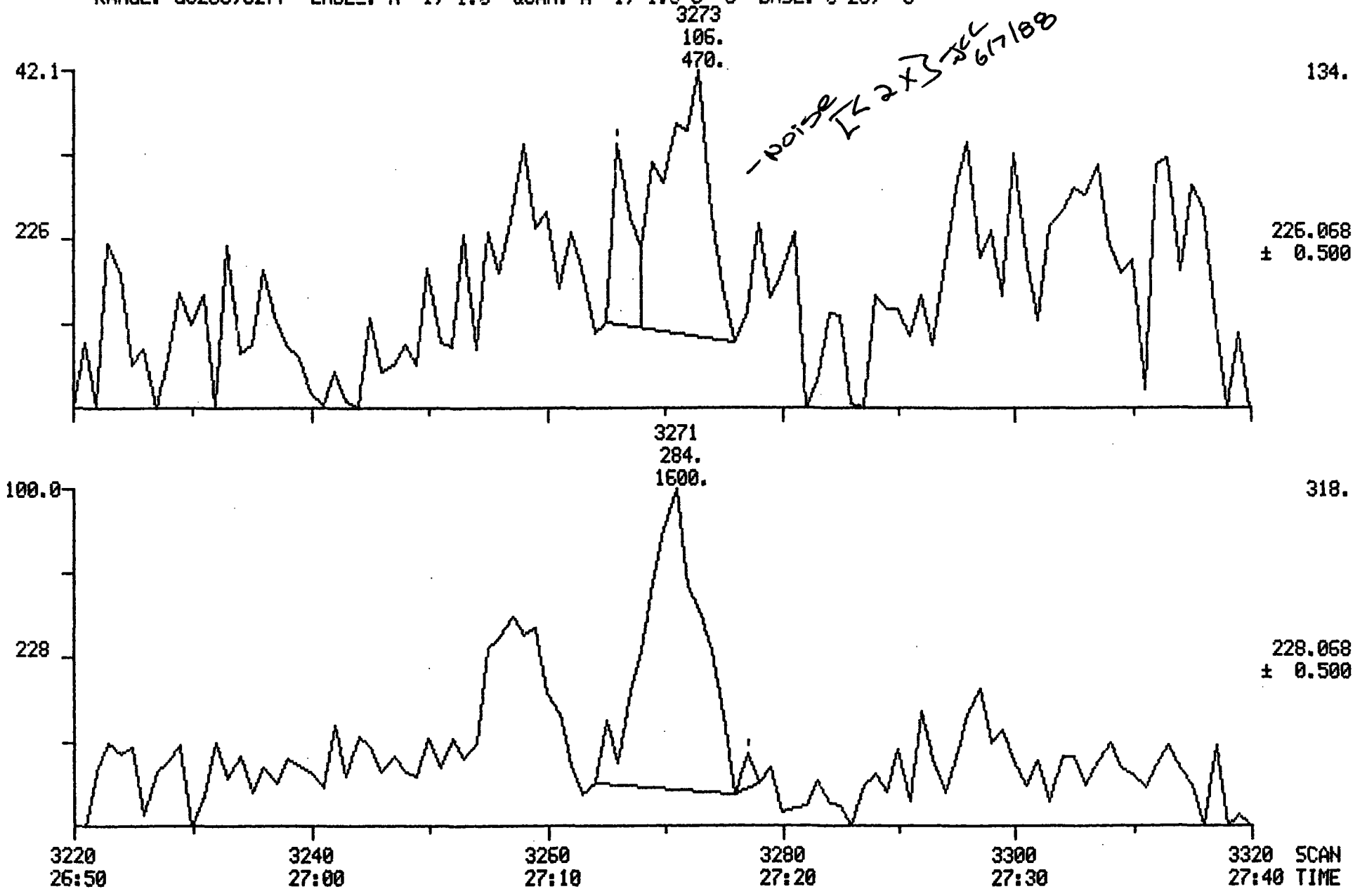
00408

MIDMASS CHROMATOGRAMS DATA: S59436X822 #3256 SCANS 3206 TO 3306
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3249,3263 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



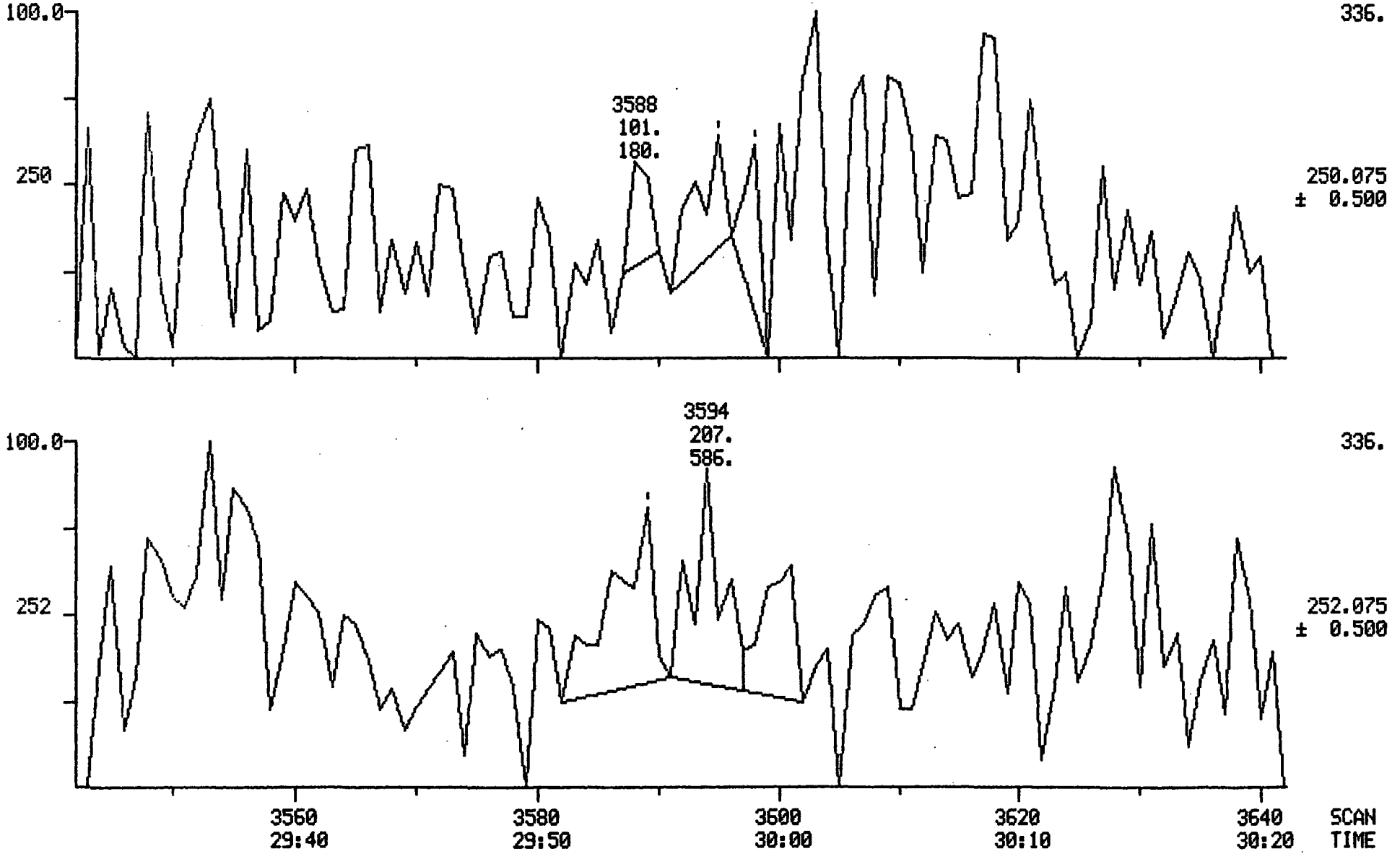
00409

MIDMASS CHROMATOGRAMS DATA: S59436X822 #3270 SCANS 3220 TO 3320
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3263,3277 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



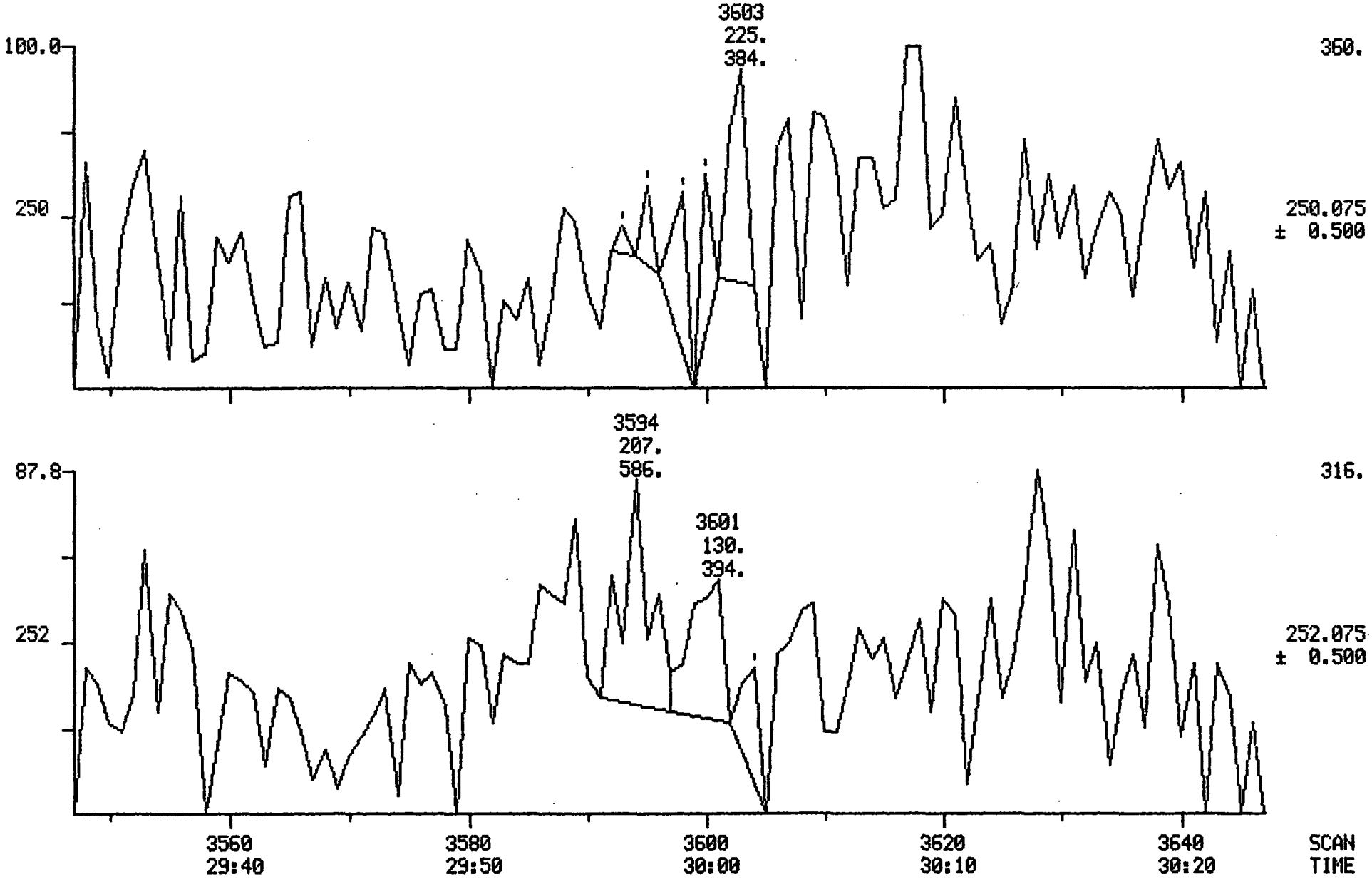
00410

MIDMASS CHROMATOGRAMS DATA: 559436X822 #3592 SCANS 3542 TO 3642
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3585,3599 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



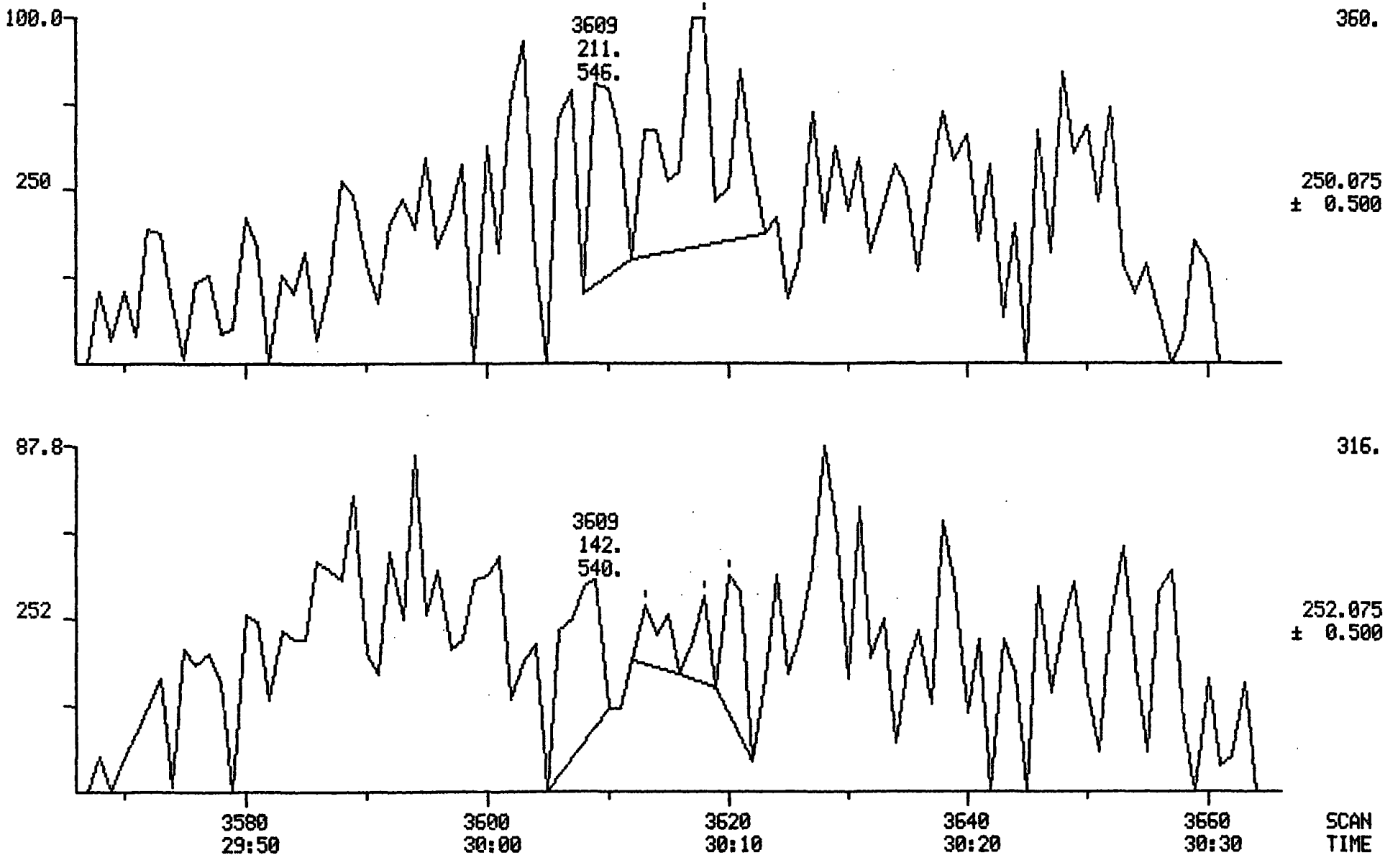
00411

MIDMASS CHROMATOGRAMS DATA: S59436X822 #3597 SCANS 3547 TO 3647
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3590,3604 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



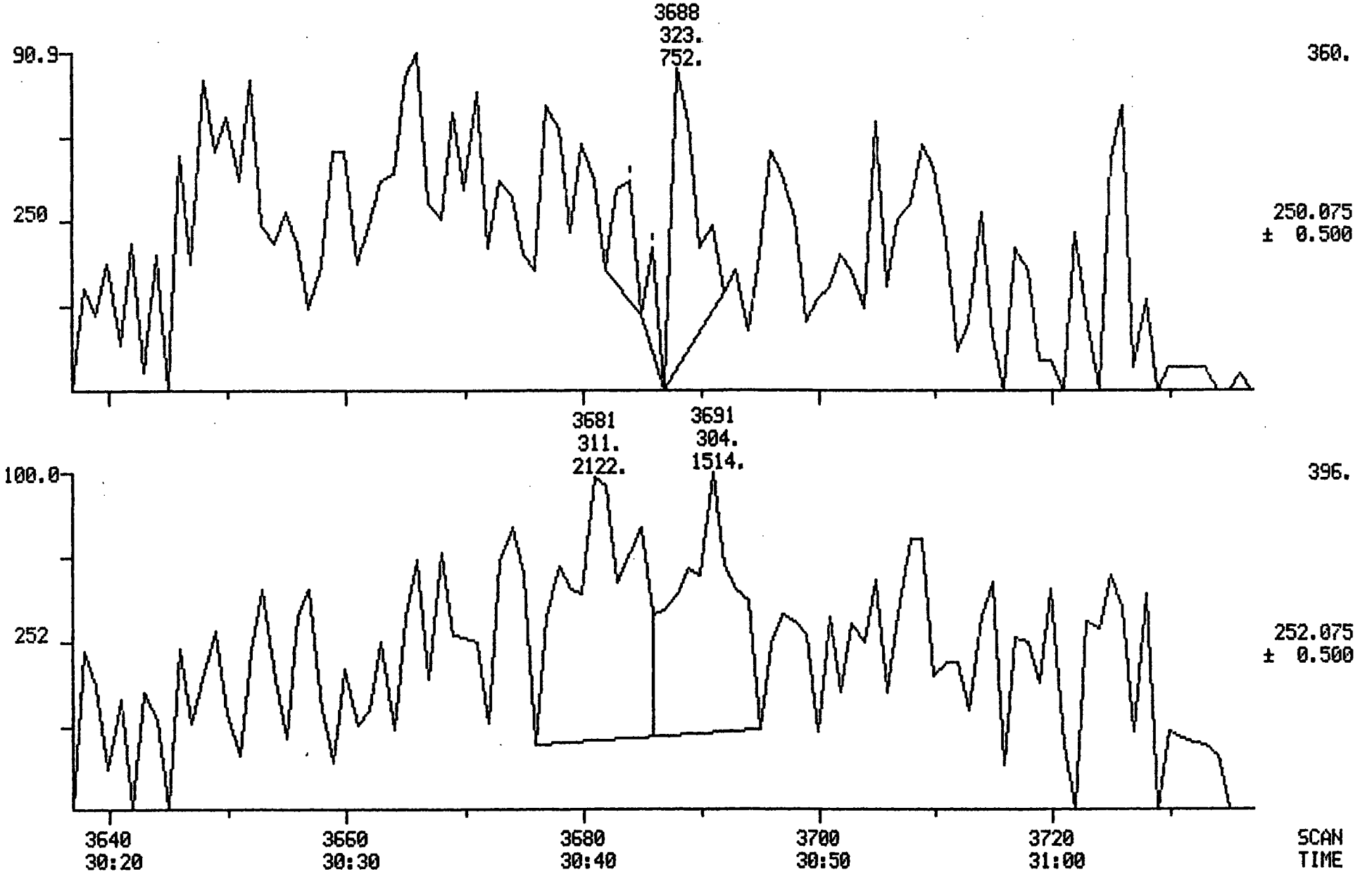
00412

MIDMASS CHROMATOGRAMS DATA: S59436X822 #3616 SCANS 3566 TO 3666
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3609,3623 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00413

MIDMASS CHROMATOGRAMS DATA: S59436X822 #3687 SCANS 3637 TO 3737
06/02/88 21:49:00 CALI: 060288CX #2
SAMPLE: 59436-05 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3680,3694 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X822

Data: S59436X822.TI
06/02/88 21:49:00
Sample: 59436-05 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name		
1	D12-BENZO(A)PYRENE	264	IPH# 01
2	D12-CHRYSENE	240	SPH# 02
3	BENZO(A)ANTHRACENE	228	PH# 03
4	BENZO(A)ANTHRACENE	226	PH# 04
5	CHRYSENE	228	PH# 05
6	CHRYSENE	226	PH# 06
7	BENZO(B)FLUORANTHENE	252	PH# 07
8	BENZO(B)FLUORANTHENE	250	PH# 08
9	BENZO(K)FLUORANTHENE	252	PH# 09
10	BENZO(K)FLUORANTHENE	250	PH# 10
11	BENZO(J)FLUORANTHENE	252	PH# 11
12	BENZO(J)FLUORANTHENE	250	PH# 12
13	BENZO(A)PYRENE	252	PH# 13
14	BENZO(A)PYRENE	250	PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3681	30:40	1	1.000	A BB	7558.	80.000	NG/ML	26.93
2	240	3264	27:12	1	0.887	A BV	10804.	74.523	NG/ML	25.09
3	228	3257	27:08	1	0.885	A VB	1149.	7.511	NG/ML	2.53
4	226	3258	27:09	1	0.885	A BB	393.	11.117	NG/ML	3.74
5	228	3271	27:15	1	0.889	A BB	1600.	9.987	NG/ML	3.36
6	226	3273	27:16	1	0.889	A VB	470.	11.150	NG/ML	3.75
7	252	3589	29:54	1	0.975	A BB	672.	4.235	NG/ML	1.43
8	250	3595	29:57	1	0.977	A BB	304.	7.943	NG/ML	2.67
9	252	3594	29:57	1	0.976	A BV	586.	3.692	NG/ML	1.24
10	250	3603	30:01	1	0.979	A BB	384.	10.033	NG/ML	3.38
11	252	3609	30:04	1	0.980	A BB	540.	3.821	NG/ML	1.29
12	250	3618	30:09	1	0.983	A BB	1252.	40.097	NG/ML	13.50
13	252	3681	30:40	1	1.000	A BV	2122.	16.159	NG/ML	5.44
14	250	3688	30:44	1	1.002	A BB	752.	16.776	NG/ML	5.65

COLUMN 1: J:A81162Ø
COLUMN 2: J:BB12620

59436-05
20%

UNITS ON AMOUNT: ug/ml

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	%DIFF RT	COLUMN 2 AMOUNT	%DIFF RT	COLUMN AVERAGE

00415

DBC

A) $\frac{24.0}{24.0}$ (100%) = 100%

B) $\frac{21.0}{22.0}$ (100%) = 95%

DBC Recovery = 95%
No HSL Pesto/PCBs detected

NA - COLUMN AVERAGE IS NOT APPLICABLE BECAUSE THE %DIFFERENCE(AMOUNTS) > 10%

RESULT FILE: J:AB12620 59436-05 05/09/88 LIBRARY: LIB0100

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
047	DBC (surrogate)	26.833	26.867	6	86572	.0150	ug/ml

00416

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: J:8812620 59436-05 05/09/88 LIBRARY: L:8811X0

00417

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
002	LINDANE	1.800	1.900	7	941	.0001	ug/ml
004	delta-BHC	2.450	2.467	8	4072	.0004	ug/ml
023	AROCLOR 1016(peak 1)	1.267	1.283	5	570	.0020	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.650	6	6711	.0115	ug/ml
026	AROCLOR 1221(peak 1)	1.250	1.283	5	570	.0011	ug/ml
027	AROCLOR 1232(peak 1)	1.250	1.283	5	570	.0018	ug/ml
029	AROCLOR 1242(peak 1)	1.250	1.283	5	570	.0020	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	6	6711	.0122	ug/ml
048	ENDRIN KETONE	22.267	22.267	10	164938	.0041	ug/ml
052	DIALLATE	1.230	1.283	5	570	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

00418

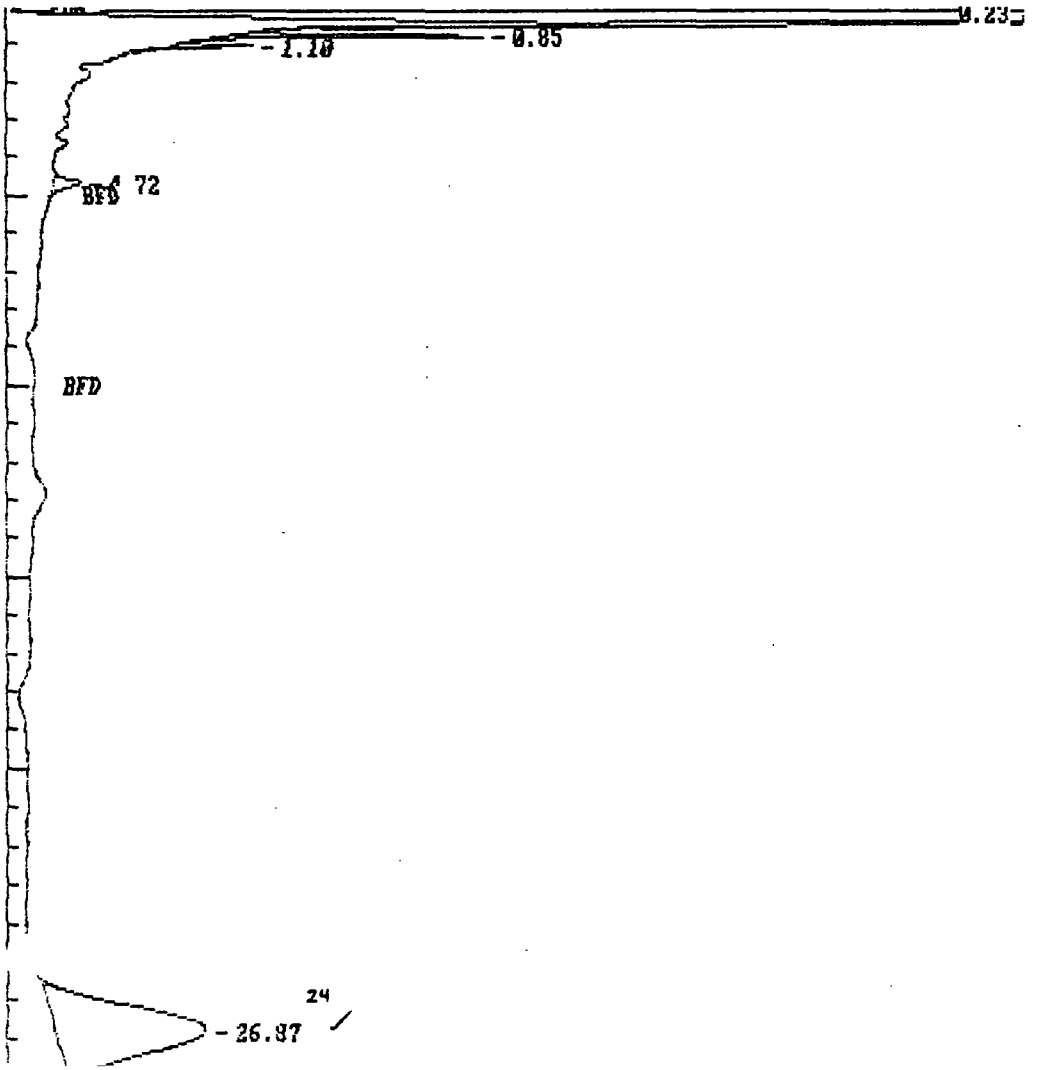
```
******************** 05-08-1988 11:44:41 Version 4.1 ********************
* Sample Name: 59436 05 20%                          Data File: J:AB12620
* Date: 05-06-1988 20:44:18 Method: M:ABPI                                *
* Interface: 10  Cycle#:  20   Operator SS  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS  *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                     *
*            Detector 0: ECD                  Detector 1:                *
* Misc. Information: 4 UL INJECTION                      LPT1:        *  *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

SS
5/11/88

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	648803	83.0607	1	124415	100.000	5.2
2	0.53	32035	4.1012	1	11728	4.938	2.7
3	0.85	8184	1.0477	1	1779	1.261	4.6
4	1.10	2735	0.3501	1	605	0.422	4.5
5	4.72	2791	0.3572	1	188	0.430	14.8
6	26.87	86572	11.0831	1	1036	13.343	83.6

Total Area: 781120 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12620.PTS Printed on 05-08-1988 at 11:45:04
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



AREA PERCENT REPORT

00420

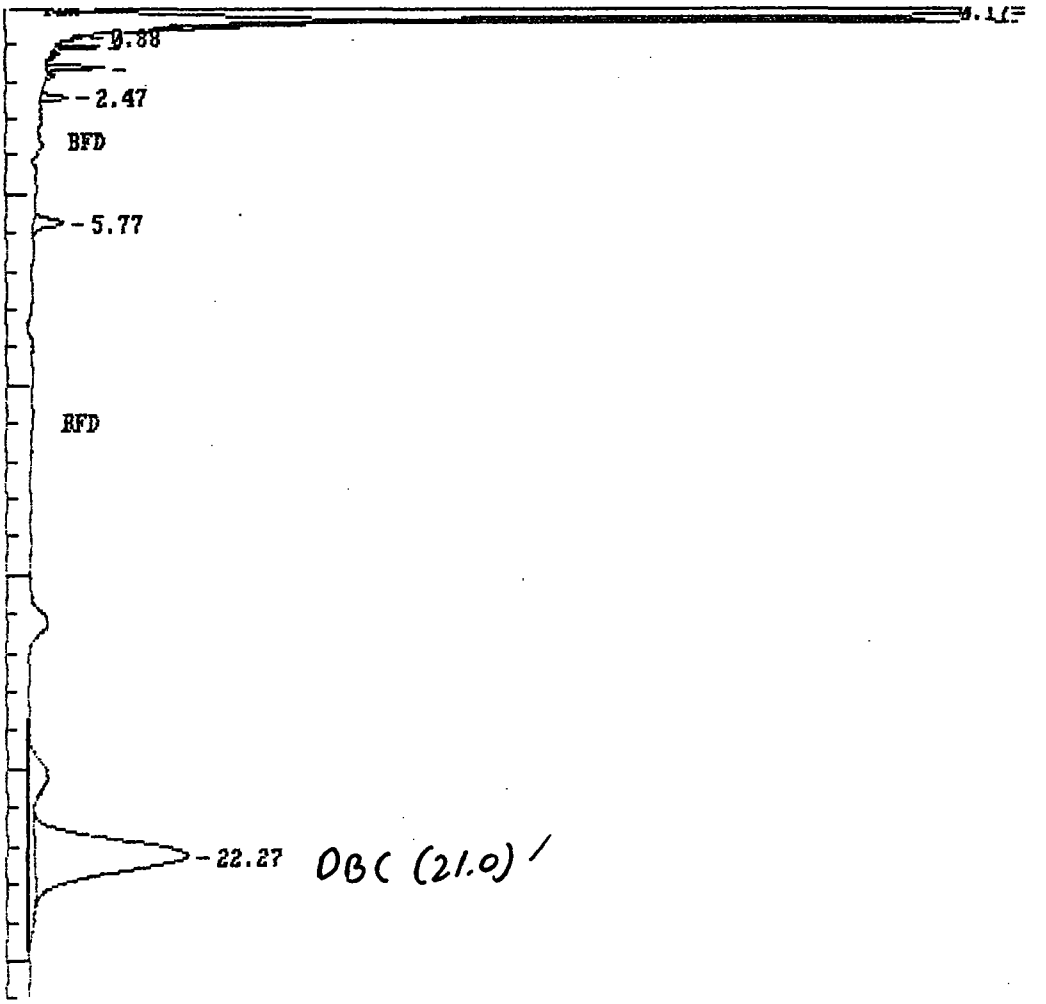
```
******************** 05-08-1988 12:18:15 Version 4.1 ********************
* Sample Name: 59436 05 20%                    Data File: J:BB12620      *
* Date: 05-06-1988 20:25:59 Method: M:BBPI                               *
* Interface: 12  Cycle#:  20   Operator SS  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEG ISOTHERMAL                                         *
*            Detector 0:                        Detector 1: ECD          *
* Misc. Information: 4 UL INJ                                            *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	972767	81.8285	1	206050	100.000	4.7
2	0.43	26844	2.2581	1	13097	2.760	2.0
3	0.88	1340	0.1127	1	231	0.138	5.8
4	1.12	3664	0.3082	1	837	0.377	4.4
6	1.65	6711	0.5645	1	1094	0.690	6.1
8	2.47	4072	0.3425	1	509	0.419	8.0
9	5.77	8452	0.7110	1	549	0.869	15.4
10	22.27	164938	13.8745	1	2861	16.956	57.7

SS 5/11/88

Total Area: 1188787 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12620.PTS Printed on 05-08-1988 at 12:18:39
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



DBC (21.0)

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-06

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-06
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59436
Contract No. : N/A
Date Sample Rec: 04/20/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	04/28/88
Conc./Dilution Factor :	1.0
pH :	7.00
Percent Moisture :	100%
Percent Moisture (Decanted) :	N/A

CAS Number		Value	ug/L	CAS Number		Value	ug/L
74-83-3	Chloromethane		10 U	79-34-5	1,1,2,2-Tetrachloroethane		5 U
74-83-9	Bromomethane		10 U	78-87-5	1,2-Dichloropropane		5 U
75-01-4	VinylChloride	8.5	J	10061-02-6	Trans-1,3-Dichloropropene		5 U
75-00-3	Chloroethane		10 U	79-10-6	Trichloroethene		5 U
75-09-2	MethyleneChloride		5 U	124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	4.1	J B	79-00-5	1,1,2-Trichloroethane		5 U
75-15-0	CarbonDisulfide		5 U	71-43-2	Benzene		5 U
75-35-4	1,1-Dichloroethene		5 U	10061-01-5	cis-1,3-Dichloropropene		5 U
75-34-3	1,1-Dichloroethane		5 U	110-75-8	2-Chloroethylvinylether		10 U
156-60-5	Trans-1,2-Dichloroethene		5 U	75-25-2	Bromoform		5 U
67-66-3	Chloroform		5 U	591-78-6	2-Hexanone		10 U
107-06-2	1,2-Dichloroethane		5 U	108-10-1	4-Methyl-2-Pentanone		10 U
78-93-3	2-Butanone		10 U	127-18-4	Tetrachloroethene		5 U
71-55-6	1,1,1-Trichloroethane		5 U	108-88-3	Toluene		5 U
56-23-5	CarbonTetrachloride		5 U	108-90-7	Chlorobenzene		5 U
108-05-4	VinylAcetate		10 U	100-41-4	Ethylbenzene		5 U
75-27-4	Bromodichloromethane		5 U	100-42-5	Styrene		5 U
					Total Xylenes		5 U

U - compound was not detected
J - concentration detected is less than the required detection limit
B - compound was detected in the blank
sp - compound was a spike

10/85 Rev

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-06

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1.	Unknown	VOA	38	13 B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59436

Organics Analysis Data Sheet

Page 2

Sample Number
59436-06

00424

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/23/88	Separatory Funnel Extraction	No
Date Analyzed	06/01/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.03		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L	CAS Number	Compound	Value	ug/L
108-95-2	Phenol		10 U				
111-44-4	bis(-2-Chloroethyl)Ether		10 U	83-32-9	Acenaphthene		10 U
95-57-8	2-Chlorophenol		10 U	51-28-5	2,4-Dinitrophenol		51 U
541-73-1	1,3-Dichlorobenzene		10 U	100-02-7	4-Nitrophenol		51 U
106-46-7	1,4-Dichlorobenzene		10 U	132-64-9	Dibenzofuran		10 U
100-51-6	Benzyl Alcohol		10 U	121-14-2	2,4-Dinitrotoluene		10 U
95-50-1	1,2-Dichlorobenzene		10 U	606-20-2	2,6-Dinitrotoluene		10 U
95-48-7	2-Methylphenol		10 U	84-66-2	Diethylphthalate		10 U
39638-32-9	bis(2-chloroisopropyl)Ether		10 U	7005-72-3	4-Chlorophenyl-phenylether		10 U
106-44-5	4-Methylphenol		10 U	86-73-7	Fluorene		10 U
621-64-7	N-Nitro-Di-n-Propylamine		10 U	100-01-6	4-Nitroaniline		51 U
67-72-1	Hexachloroethane		10 U	534-52-1	4,6-Dinitro-2-Methylphenol		51 U
98-95-3	Nitrobenzene		10 U	86-30-6	N-Nitrosidiphenylamine (1)		10 U
78-59-1	Isophorone		10 U	101-55-3	4-Bromophenyl-phenylether		10 U
88-75-5	2-Nitrophenol		10 U	118-74-1	Hexachlorobenzene		10 U
105-67-9	2,4-Dimethylphenol		10 U	87-86-5	Pentachlorophenol		51 U
65-85-0	Benzoic Acid		51 U	85-01-8	Phenanthrene		10 U
111-91-1	bis(2-Chloroethoxy) Methane		10 U	120-12-7	Anthracene		10 U
120-83-2	2,4-Dichlorophenol		10 U	84-74-2	Di-N-Butylphthalate		10 U
120-82-1	1,2,4-Trichlorobenzene		10 U	206-44-0	Fluoranthene		10 U
91-20-3	Naphthalene		10 U	129-00-0	Pyrene		10 U
106-47-8	4-Chloroaniline		10 U	85-68-7	Butylbenzylphthalate		10 U
87-68-3	Hexachlorobutadiene		10 U	91-94-1	3,3'-Dichlorobenzidine		20 U
59-50-7	4-Chloro-3-Methylphenol		10 U	56-55-3	Benzo(a)Anthracene		10 U
91-57-6	2-Methylnaphthalene		10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	7.2	J B
77-47-4	Hexachlorocyclopentadiene		10 U	218-01-9	Chrysene		10 U
88-06-2	2,4,6-Trichlorophenol		10 U	117-84-0	Di-n-Octylphthalate	4.6	J B
95-95-4	2,4,5-Trichlorophenol		51 U	205-99-2	Benzo(b)Fluoranthene		10 U
91-58-7	2-Chloronaphthalene		10 U	207-08-9	Benzo(k)Fluoranthene		10 U
88-74-4	2-Nitroaniline		51 U	50-32-8	Benzo(a)Pyrene		10 U
131-11-4	Dimethyl Phthalate		10 U	193-39-5	Indeno(1,2,3-cd)Pyrene		10 U
208-96-8	Acenaphthylene		10 U	53-70-3	Dibenzo(a,h)Anthracene		10 U
99-09-2	3-Nitroaniline		51 U	191-24-2	Benzo(g,h,i)Perylene		10 U

(1)-Cannot be separated from diphenylamine.

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-06

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1. 108-87-2	Methyl Cyclohexane	BNA	316	11 B
2. 108-88-3	Methyl Benzene	BNA	370	6.0 B
3.	Oxygenated Hydrocarbon	BNA	394	12 B
4.	Oxygenated Hydrocarbon	BNA	436	7.8 B
5.	Oxygenated Hydrocarbon	BNA	470	17 B
6. 79-34-5	1,1,2,2-Tetrachloroethane	BNA	573	4.2
7. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	624	8.8 B
8. 4337-65-9	Mono(2-Ethylhexyl)Ester	BNA	2079	5.1
9.	Hexanedioic Acid			
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-06
Date Analyzed: 06/01/88

Units: ug/L
Run Factor: 2.03

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	39.3	39	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
	10 U	Pyridine	110-86-1
	10 U	2-Picoline	109-06-8
	10 U	3 & 4-Picoline	
	10 U	2,6-Lutidine	
	10 U	2-Ethyl Pyridine	
	10 U	2,4 & 2,5-Lutidine	
	10 U	2,3-Lutidine	
	10 U	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
	10 U	3,5-Lutidine	
	10 U	3,4-Lutidine	
	10 U	2-Methyl-5-Ethyl Pyridine	
	10 U	2-Methyl-3-Ethyl Pyridine	
	10 U	M and P Cresols	
	10 U	3-Ethyl-4-Methyl Pyridine	
	10 U	3-Ethyl-5-Methyl Pyridine	
	10 U	2,6-Dimethyl Phenol	
	10 U	2,5-Dimethyl Phenol	
	10 U	3,5-Dimethyl Phenol	
	10 U	2,3-Dimethyl Phenol	
	10 U	3,4-Dimethyl Phenol	
	10 U	1-Methylnaphthalene	90-12-0

FORM I

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-06
Date Analyzed: 06/02/88

Units: ug/L
Run Factor: 0.133

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	74.7	93	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
	10 U	Benzo(A)Anthracene
	10 U	Chrysene
	10 U	Benzo(B)Fluoranthen
	10 U	Benzo(K)Fluoranthene
	10 U	Benzo(A)Pyrene

FORM I

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59436

Sample Number:
59436-06

ORGANICS ANALYSIS DATA SHEET
(Page 3)

00428

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/23/88
Date Analyzed :05/06/88
Conc./Dil Factor : 50.5
Percent Moisture :

GPC Cleanup :No
Separatory Funnel Extract.:Yes
Cont. Liquid/Liquid Extr. :No
Sonication Extraction :No

CAS Number	Compound	Value	ug/ L
319-84-6	Alpha-BHC		0.05 U
319-85-7	Beta-BHC		0.05 U
319-86-8	Delta-BHC		0.05 U
58-89-9	Gamma-BHC(Lindane)		0.05 U
76-44-8	Heptachlor		0.05 U
309-00-2	Aldrin		0.05 U
1204-57-3	Heptachlor Epoxide		0.05 U
959-98-8	Endosulfan I		0.05 U
60-57-1	Dieldrin		0.10 U
72-55-9	4,4'-DDE		0.10 U
72-20-8	Endrin		0.10 U
33213-65-9	Endosulfan II		0.10 U
72-54-8	4,4'-DDD		0.10 U
1031-07-8	Endosulfan Sulfate		0.10 U
50-29-3	4,4'-DDT		0.10 U
72-43-5	Methoxychlor		0.51 U
53494-70-5	Endrin Ketone		0.10 U
57-74-9	Chlordane		0.51 U
8001-35-2	Toxaphene		1.00 U
12674-11-2	Aroclor-1016		0.51 U
11104-28-2	Aroclor-1221		0.51 U
11141-16-5	Aroclor-1232		0.51 U
53469-21-9	Aroclor-1242		0.51 U
12672-29-6	Aroclor-1248		0.51 U
11097-69-1	Aroclor-1254		1.00 U
11096-82-5	Arolcor-1260		1.00 U

Vi = Volume of extract injected (ul) Vi = 2ul/4ul
Vs = Volume of water extracted (ml) Vs = 990 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

00429 OK

4/28/88 21:35:49 SCAN 1 OF 730
Acquisition started

Acquire
04/28/88 21:35:00 + 0:03
Sample: 59436-06 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 3:S59436W906
Free sectors: 22806
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.025
Acct. No: 59436

*** GC descriptor: V3 ***

GC temperature: 60 DegC
Elapsed time : 0: 7 min

Injector: 50 DegC
Interface: 220 DegC

Seq. #	Temp (DegC)	Rate (C/min)	Time (minutes) period	total
1	60- 60	-	2.0	2.0
2	60-250	7.0	27.1	29.1
3	250-250	-	10.0	39.1
4	250-250	-	0.0	39.1

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

Scan time (s)
Up: 2.95 L*
Down: 0.00 L

Hold time (s)
Top: 0.00
Bottom: 0.05

Cent S/P: 10 Actual: 67
Frag S/P: 10 Actual: 10

Samp int (ms): 0.200
Samp int (ms): 1.400

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	812	u
Zero scale mass	1	u
Intensity/ion	2	
Peak width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(ms)	4	

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	126.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.88	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2106.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

4/28/88 22:12:22
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	51.0	2190.0	2.3	20196.	28.	9.

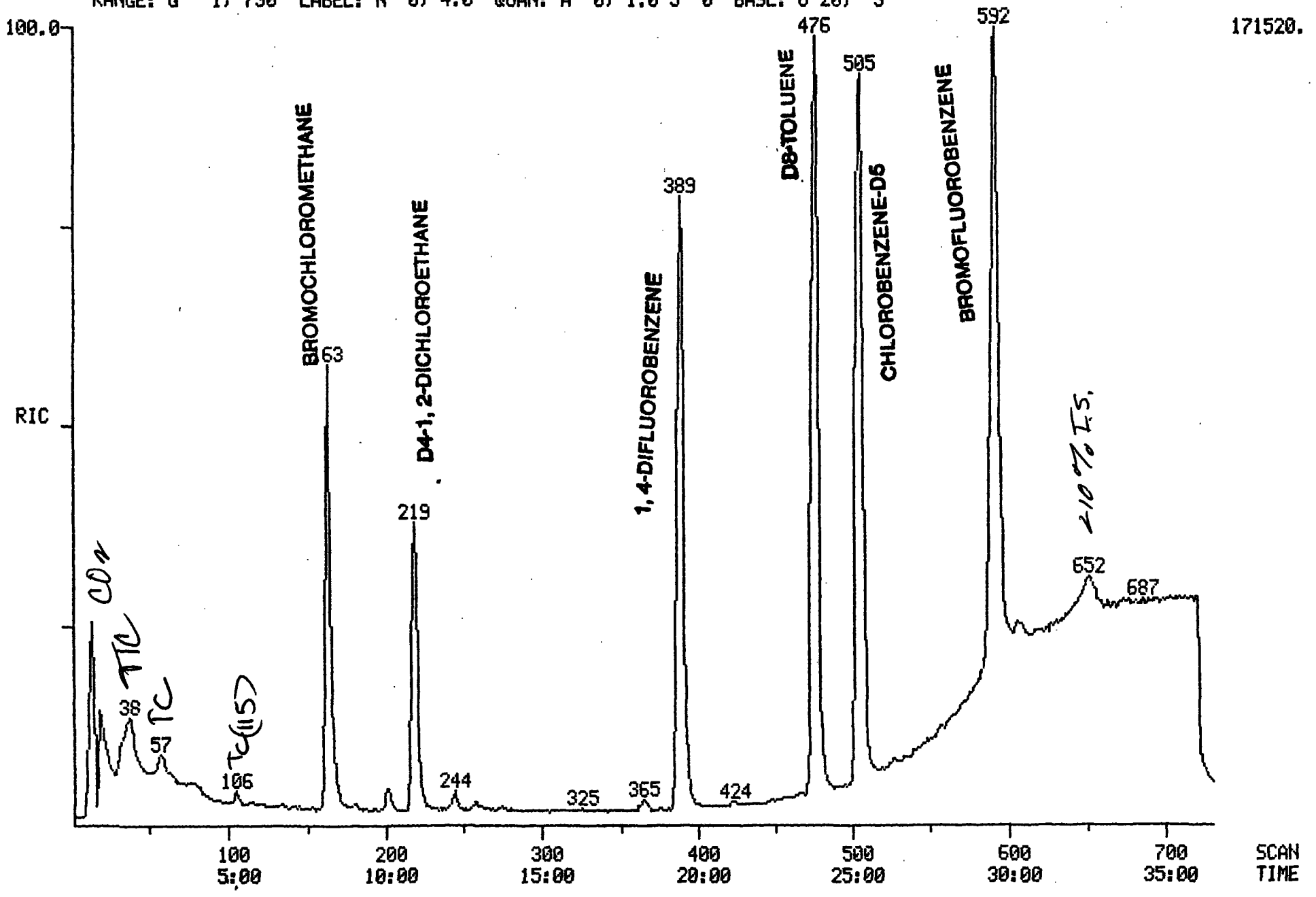
00430

RIC
04/28/88 21:35:00
SAMPLE: 59436-06 VOA H2O 100%/5ML
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436W906 #4 SCANS 1 TO 730
CALI: 042888CW #1

TIC=Tentatively Identified Compound

TC=Target Compound
SC=Spike Compound



PROCEDURE: TCA DIAGNOSTIC REPORT 4/29/88 4:32:20
DATA FILE: S59436W906
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00431

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	7	69	ISO1/TCO1
3	3	1	26	18	6	8	76	ISO2/TCO2
3	3	1	26	12	6	6	102	ISO3/TCO3
1	1	1	0	7	2	1	0	ISO4/TCO4

41 COMPOUNDS PROCESSED, 13 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-163	163	163	.	1	962	.	128	163	.	1
2	V1	10	-33	30	.	.	.	.	.	50	.	.	.
3	V1	15	-48	46	.	.	.	.	.	94	.	.	.
4	V1	25	-59	57	57	.	1	993	.	62	57	.	1
5	V1	35	-73	71	.	.	.	.	.	64	.	.	.
6	V1	45	-107	106	106	.	1	970	.	84	105	-1	1
7	V1	50	-116	115	114	-1	7	1000	.	58	115	1	1
8	V1	65	-133	132	.	.	.	.	.	76	.	.	.
9	V1	80	-154	154	.	.	.	.	.	96	.	.	.
10	V2	1	-388	389	389	.	1	996	.	114	389	.	1
11	V3	1	-503	505	505	.	1	995	.	117	504	-1	1
12	V1	90	-180	180	.	.	.	.	.	63	.	.	.
13	V1	95	-194	194	.	.	.	.	.	96	194	.	1
14	V1	100	-206	206	.	.	.	.	.	83	.	.	.
15	V1	2	-219	219	219	.	1	988	.	65	219	.	1
16	V2	10	-219	219	219	.	4	967	.	72	220	1	1
17	V1	110	-221	221	.	.	.	.	.	62	.	.	.
18	V2	15	-249	250	.	.	.	.	.	97	.	.	.
19	V2	20	-258	259	.	.	.	.	.	117	.	.	.
20	V2	25	-260	261	262	1	2	967	.	43	.	.	.
21	V2	30	-268	269	.	.	.	.	.	83	.	.	.
22	V2	35	-299	300	.	.	.	.	.	63	.	.	.
23	V2	40	-305	306	.	.	.	.	.	75	.	.	.
24	V2	45	-317	318	.	.	.	.	.	130	.	.	.
25	V2	60	-330	331	.	.	.	.	.	78	.	.	.
26	V2	50	-331	332	.	.	.	.	.	129	.	.	.
27	V2	65	-334	335	.	.	.	.	.	75	.	.	.
28	V2	55	-334	335	.	.	.	.	.	97	.	.	.
29	V2	80	-394	395	.	.	.	.	.	173	.	.	.
30	V3	10	-405	406	407	1	2	916	.	58	.	.	.
31	V3	15	-442	443	442	-1	3	949	.	58	.	.	.
32	V3	25	-448	449	.	.	.	.	.	83	.	.	.
33	V3	20	-449	450	.	.	.	.	.	164	.	.	.
34	V3	2	-476	477	476	-1	1	990	.	98	476	.	1
35	V3	35	-480	481	.	.	.	.	.	92	479	.	1
36	V3	40	-507	509	.	.	.	.	.	112	.	.	.
37	V3	50	-550	551	.	.	.	.	.	106	.	.	.
38	V3	3	-591	591	591	.	1	990	.	95	591	.	1
39	V3	55	-612	612	.	.	.	.	.	104	.	.	.
40	V3	60	-616	615	.	.	.	.	.	106	.	.	.
41	V3	75	-629	628	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59436W906

Data: S59436W906.TI
04/28/88 21:35:00
Sample: 59436-06 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.025
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	Name				
1	CI01	BROMOCHLOROMETHANE	128	IV1# 01	74-97-5
2	CO10	CHLOROMETHANE	50	V1# 10SP	74-87-3
3	CO15	BROMOMETHANE	94	V1# 15	74-83-9
4	CO20	VINYL CHLORIDE	62	V1# 25	75-01-4
5	CO25	CHLOROETHANE	64	V1# 35	75-00-3
6	CO30	METHYLENE CHLORIDE	84	V1# 45	75-09-2
7	CO35	ACETONE	58	V1# 50	67-64-1
8	CO40	CARBON DISULFIDE	76	V1# 65	75-15-0
9	CO45	1,1-DICHLOROETHENE	61	V1# 80	75-35-4
10	CI10	1,4-DIFLUOROBENZENE	114	IV2# 01	540-36-3
11	CI20	CHLOROBENZENE-D5	117	IV3# 01	3114-55-4
12	CO50	1,1-DICHLOROETHANE	63	V1# 90	75-34-3
13	TRANS-1,2-DICHLOROETHENE		61	V1# 95	156-60-5
14	CO60	CHLOROFORM	83	V1#100CC	67-66-3
15	CS15	1,2-DICHLOROETHANE-D4	65	SV1# 02	17060-07-0
16	C110	2-BUTANONE	72	V2# 10	78-93-3
17	CO65	1,2-DICHLOROETHANE	62	V1#110	107-06-2
18	C115	1,1,1-TRICHLOROETHANE	97	V2# 15	71-55-6
19	C120	CARBONTETRACHLORIDE	117	V2# 20	56-23-5
20	C125	VINYL ACETATE	43	V2# 25	108-05-4
21	C130	BROMODICHLOROMETHANE	83	V2# 30	75-27-4
22	C140	1,2-DICHLOROPROPANE	63	V2# 35CC	78-87-5
23	C143	CIS-1,3-DICHLOROPROPENE	75	V2# 40	10061-01-5
24	C150	TRICHLOROETHENE	130	V2# 45	79-01-6
25	C165	BENZENE	78	V2# 60	71-43-2
26	C155	DIBROMOCHLOROMETHANE	129	V2# 50	124-48-1
27	C172	TRANS-1,3-DICHLOROPROPE	75	V2# 65	10061-02-6
28	C160	1,1,2-TRICHLOROETHANE	97	V2# 55	79-00-5
29	C180	BROMOFORM	173	V2# 80	75-25-2
30	C205	4-METHYL-2-PENTANONE	58	V3# 10	108-10-1
31	C210	2-HEXANONE	58	V3# 15	591-78-6
32	C225	1,1,2,2-TETRACHLOROETHA	83	V3# 25SP	79-34-5
33	C220	TETRACHLOROETHENE	164	V3# 20	127-18-4
34	CS05	TOLUENE-D8	98	SV3# 02	2037-26-5
35	C230	TOLUENE	92	V3# 35	108-88-3
36	C235	CHLOROBENZENE	112	V3# 40	108-90-7
37	C240	ETHYLBENZENE	106	V3# 50	100-41-4
38	CS10	BROMOFLUOROBENZENE	95	SV3# 03	460-00-4
39	C245	STYRENE	104	V3# 55	100-42-5
40	M-XYLENE		106	V3# 60	108-38-3
41	O+P XYLENES		106	V3# 75	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	163	8:09	1	1.000	A BB	42216.	50.000	UG/L	15.71
2	NOT	FOUND								
3	NOT	FOUND								
4	62	57	2:51	1	0.350	A BB	15353.	8.457	UG/L	2.66
5	NOT	FOUND								
6	84	105	5:15	1	0.644	A BB	1425.	0.744	UG/L	0.23
7	58	115	5:45	1	0.706	A VB	616.	4.108	UG/L	1.29
8	NOT	FOUND								
9	NOT	FOUND								
10	114	389	19:27	10	1.000	A BB	238804.	50.000	UG/L	15.71
11	117	504	25:12	11	1.000	A BB	222532.	50.000	UG/L	15.71
12	NOT	FOUND								
13	96	194	9:42	1	1.190	A BB	100.	0.076	UG/L	0.02
14	NOT	FOUND								
15	65	219	10:57	1	1.344	A BB	80822.	46.976	UG/L	14.76
16	72	220	11:00	10	0.566	A BB	168.	0.964	UG/L	0.30
17	NOT	FOUND								
18	NOT	FOUND								
19	NOT	FOUND								
20	NOT	FOUND								
21	NOT	FOUND								
22	NOT	FOUND								
23	NOT	FOUND								
24	NOT	FOUND								
25	NOT	FOUND								
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	98	476	23:48	11	0.944	A BB	249692.	52.116	UG/L	16.38
35	92	479	23:57	11	0.950	A BB	228.	0.074	UG/L	0.02
36	NOT	FOUND								
37	NOT	FOUND								
38	95	591	29:33	11	1.173	A BB	150470.	54.759	UG/L	17.21
39	NOT	FOUND								
40	NOT	FOUND								
41	NOT	FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:12	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:39		0.201						
3	2:24		0.293						
4	2:57	0.97	0.360	0.97	8.46	50.00	0.364	2.150	0.17
5	3:39		0.445						
6	5:21	0.98	0.652	0.99	0.74	50.00	0.034	2.269	0.01
7	5:48	0.99	0.707	1.00	4.11	50.00	0.015	0.178	0.08
8	6:39		0.811						
9	7:42		0.939						
10	19:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	9:00		1.098						
13	9:42	1.00	1.183	1.01	0.08	50.00	0.002	1.563	0.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	10:18		1.256						
15	10:57	1.00	1.335	1.01	46.98	50.00	1.914	2.038	0.94
16	10:57	1.00	0.563	1.00	0.96	50.00	0.001	0.036	0.02
17	11:03		1.348						
18	12:27		0.640						
19	12:54		0.663						
20	13:00		0.668						
21	13:24		0.689						
22	14:57		0.769						
23	15:15		0.784						
24	15:51		0.815						
25	16:30		0.848						
26	16:33		0.851						
27	16:42		0.859						
28	16:42		0.859						
29	19:42		1.013						
30	20:15		0.804						
31	22:06		0.877						
32	22:24		0.889						
33	22:27		0.891						
34	23:48	1.00	0.944	1.00	52.12	50.00	1.122	1.076	1.04
35	24:00	1.00	0.952	1.00	0.07	50.00	0.001	0.694	0.00
36	25:21		1.006						
37	27:30		1.091						
38	29:33	1.00	1.173	1.00	54.76	50.00	0.676	0.617	1.10
39	30:36		1.214						
40	30:48		1.222						
41	31:27		1.248						

TCA FINISHED, 13 FOUND
FINISHED AT: 4/29/88 4:36:21

RMAL QUANTITATION SUMMARY FILE: S59436W906
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	42216.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	238804.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	222532.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	476	3	249692.	1.122	52.116
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	150470.	0.676	54.759
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	219	1	80822.	1.914	46.976
7	V1# 10	C010 CHLOROMETHANE	50		1	NOT FOUND		
8	V1# 15	C015 BROMOMETHANE	94		1	NOT FOUND		
9	V1# 25	C020 VINYL CHLORIDE	62	57	1	15353.	0.364	8.457
10	V1# 35	C025 CHLOROETHANE	64		1	NOT FOUND		
11	V1# 45	C030 METHYLENE CHLORIDE	84		1	NOT FOUND		
12	V1# 50	C035 ACETONE	58	115	1	616.	0.015	4.108 B
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96		1	NOT FOUND		
15	V1# 90	C050 1,1-DICHLOROETHANE	63		1	NOT FOUND		
16	V1# 95	TRANS-1,2-DICHLOROETHENE	96		1	NOT FOUND		
17	V1#100	C060 CHLOROFORM	83		1	NOT FOUND		
18	V1#110	C065 1,2-DICHLOROETHANE	62		1	NOT FOUND		
19	V2# 10	C110 2-BUTANONE	72		2	NOT FOUND		
20	V2# 15	C115 1,1,1-TRICHLOROETHA	97		2	NOT FOUND		
21	V2# 20	C120 CARBONTETRACHLORIDE	117		2	NOT FOUND		
22	V2# 25	C125 VINYL ACETATE	43		2	NOT FOUND		
23	V2# 30	C130 BROMODICHLOROMETHAN	83		2	NOT FOUND		
24	V2# 35	C140 1,2-DICHLOROPROPANE	63		2	NOT FOUND		
25	V2# 40	C143 CIS-1,3-DICHLOROPRO	75		2	NOT FOUND		
26	V2# 45	C150 TRICHLOROETHENE	130		2	NOT FOUND		
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78		2	NOT FOUND		
30	V2# 65	C172 TRANS-1,3-DICHLOROP	75		2	NOT FOUND		
31	V2# 80	C180 BROMOFORM	173		2	NOT FOUND		
32	V3# 10	C205 4-METHYL-2-PENTANON	58		3	NOT FOUND		
33	V3# 15	C210 2-HEXANONE	58		3	NOT FOUND		
34	V3# 20	C220 TETRACHLOROETHENE	164		3	NOT FOUND		
35	V3# 25	C225 1,1,2,2-TETRACHLORO	83		3	NOT FOUND		
36	V3# 35	C230 TOLUENE	92		3	NOT FOUND		
37	V3# 40	C235 CHLOROBENZENE	112		3	NOT FOUND		
38	V3# 50	C240 ETHYLBENZENE	106		3	NOT FOUND		
39	V3# 55	C245 STYRENE	104		3	NOT FOUND		
40	V3# 60	M-XYLENE	106		3	NOT FOUND		
41	V3# 75	O+P XYLENES	106		3	NOT FOUND		

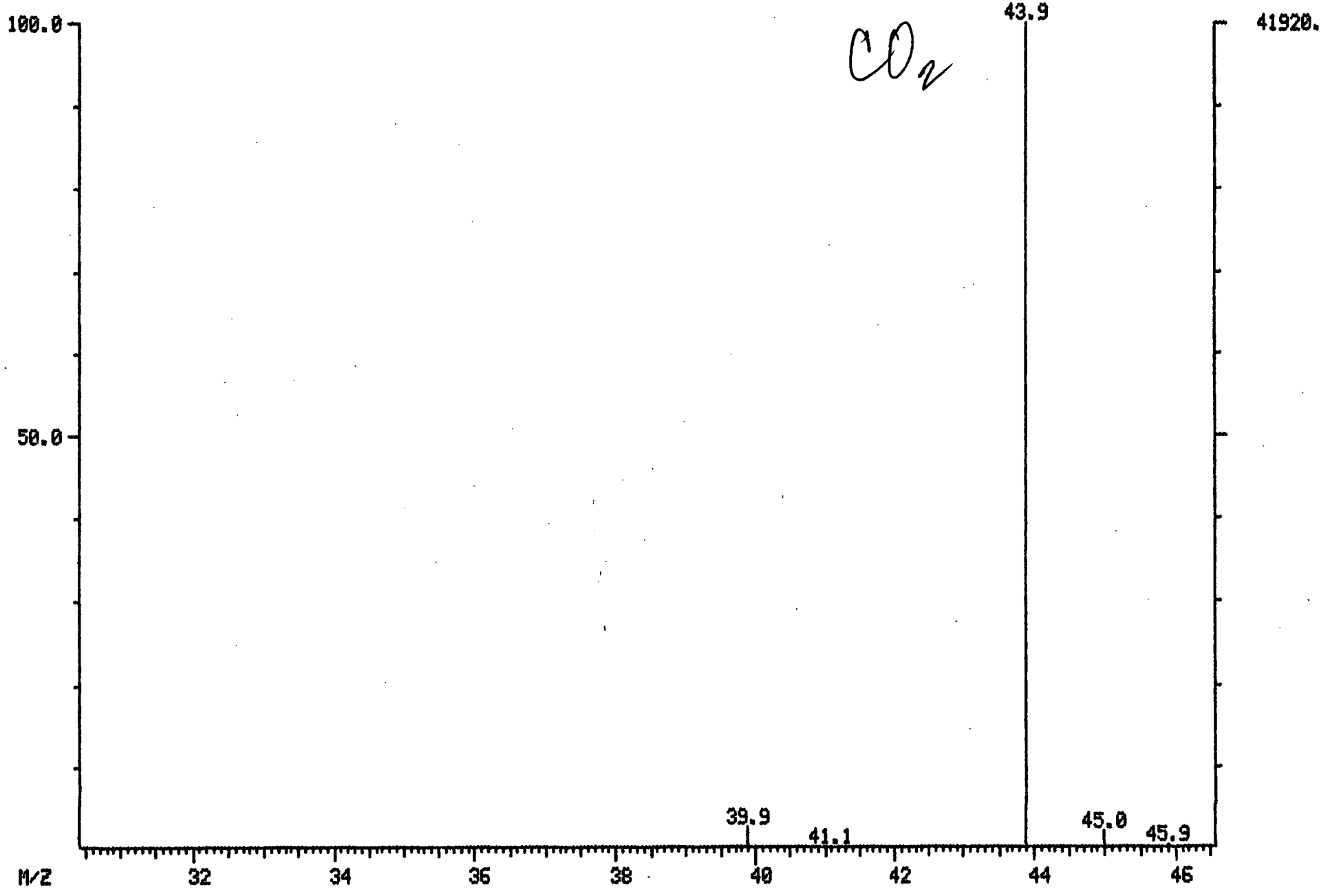
6.7.88

00436

MASS SPECTRUM
04/28/88 21:35:00 + 0:39
SAMPLE: 59436-06 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 60 DEG. C

DATA: S59436W906 #13
CALI: 042888CW #1

BASE M/Z: 44
RIC: 43840.

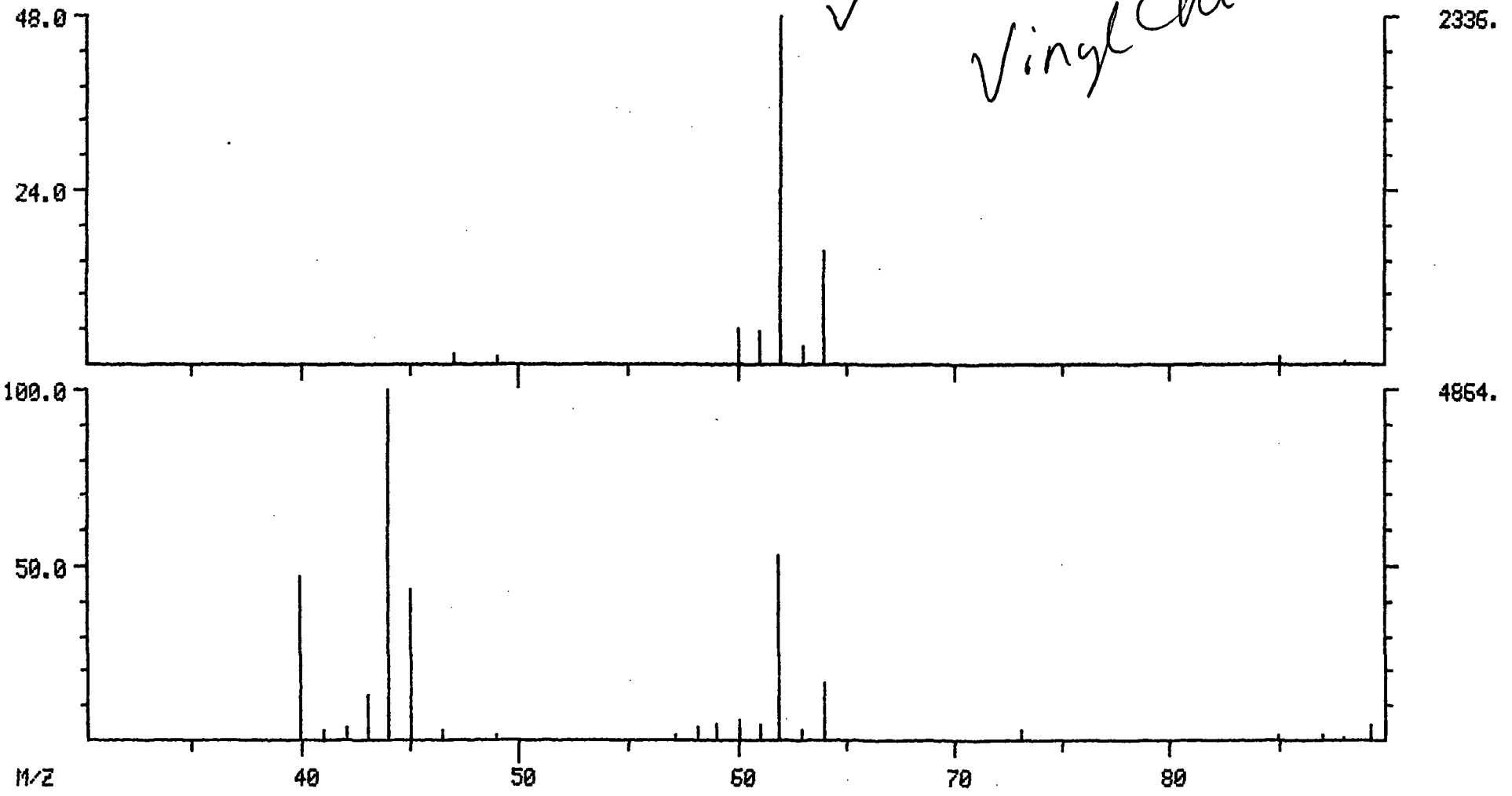


00437

DUAL MASS SPECTRUM
04/28/88 21:35:00 + 2:51
SAMPLE: 59436-06 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 66 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W906 #57 BASE M/Z: 62/ 44
CALI: 042888CW #1 RIC: 3851./ 15439.

Vinyl Chloride

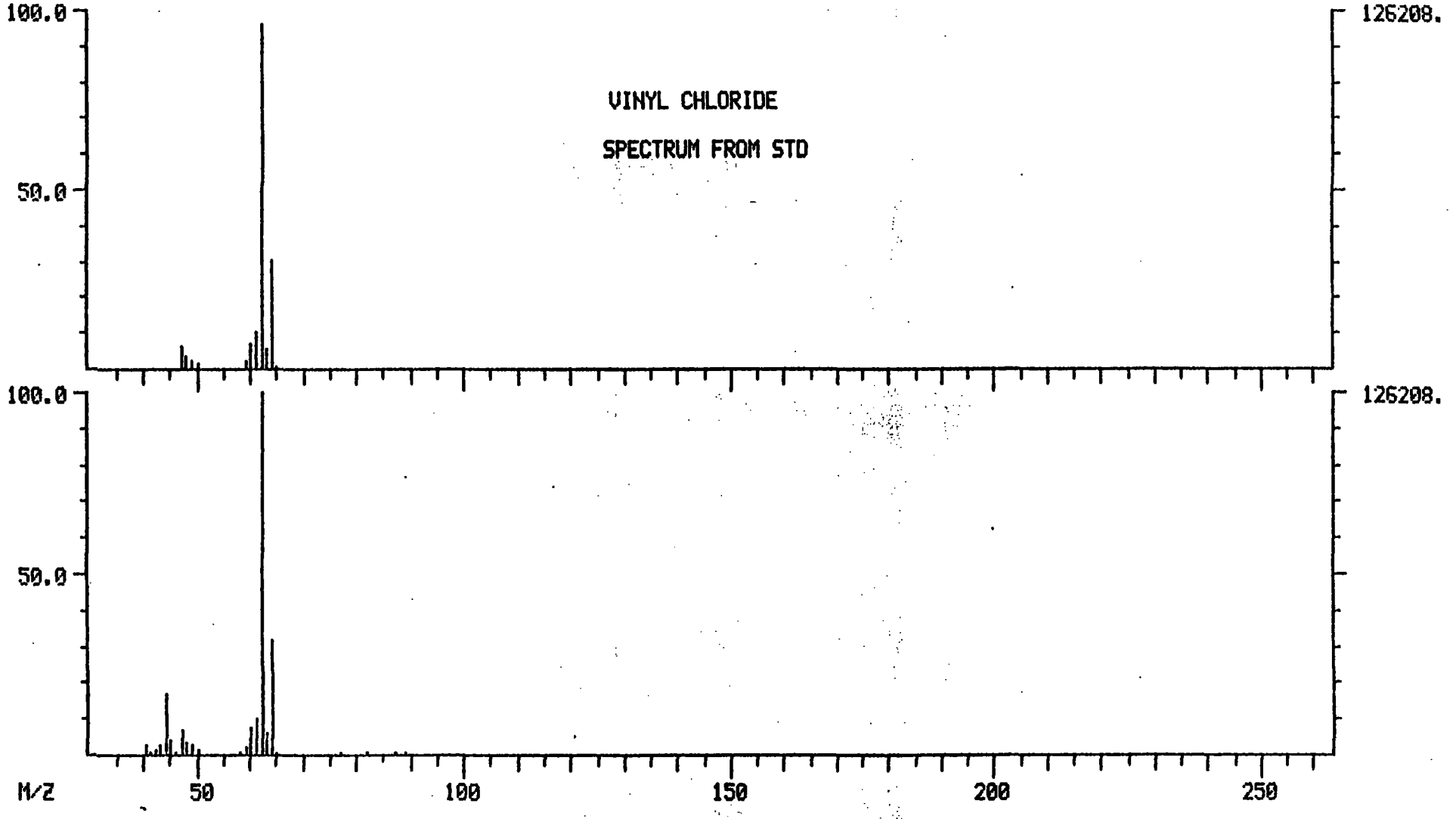


00438

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 3:37
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #71
CALI: STDJ198 #1

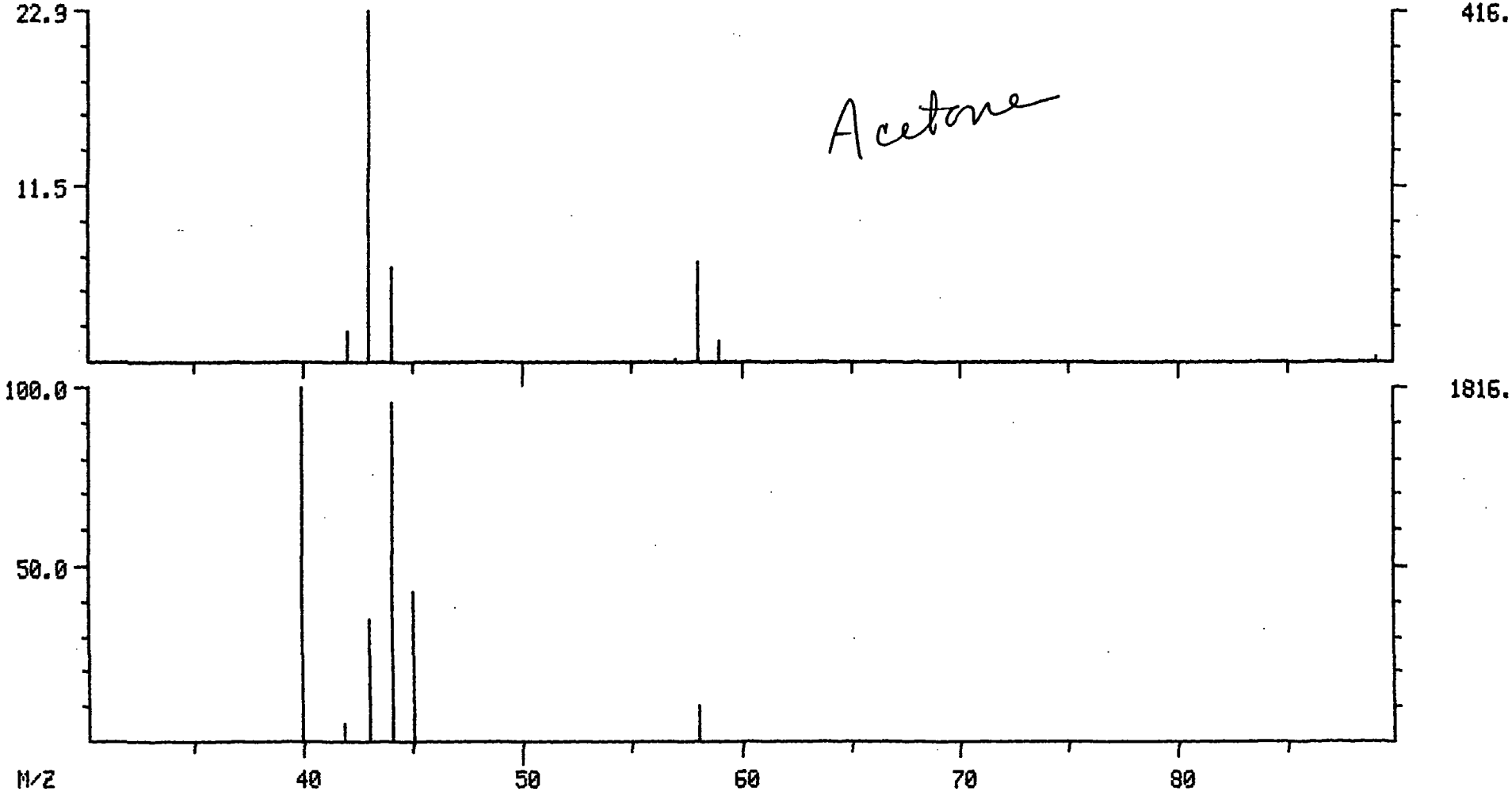
BASE M/Z: 62/ 62
RIC: 209151./ 263167.



00439

DUAL MASS SPECTRUM
04/28/88 21:35:00 + 5:45
SAMPLE: 59436-06 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 86 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W906 #115 BASE M/Z: 43/ 40
CALI: 042888CW #1 RIC: 712./ 5247.

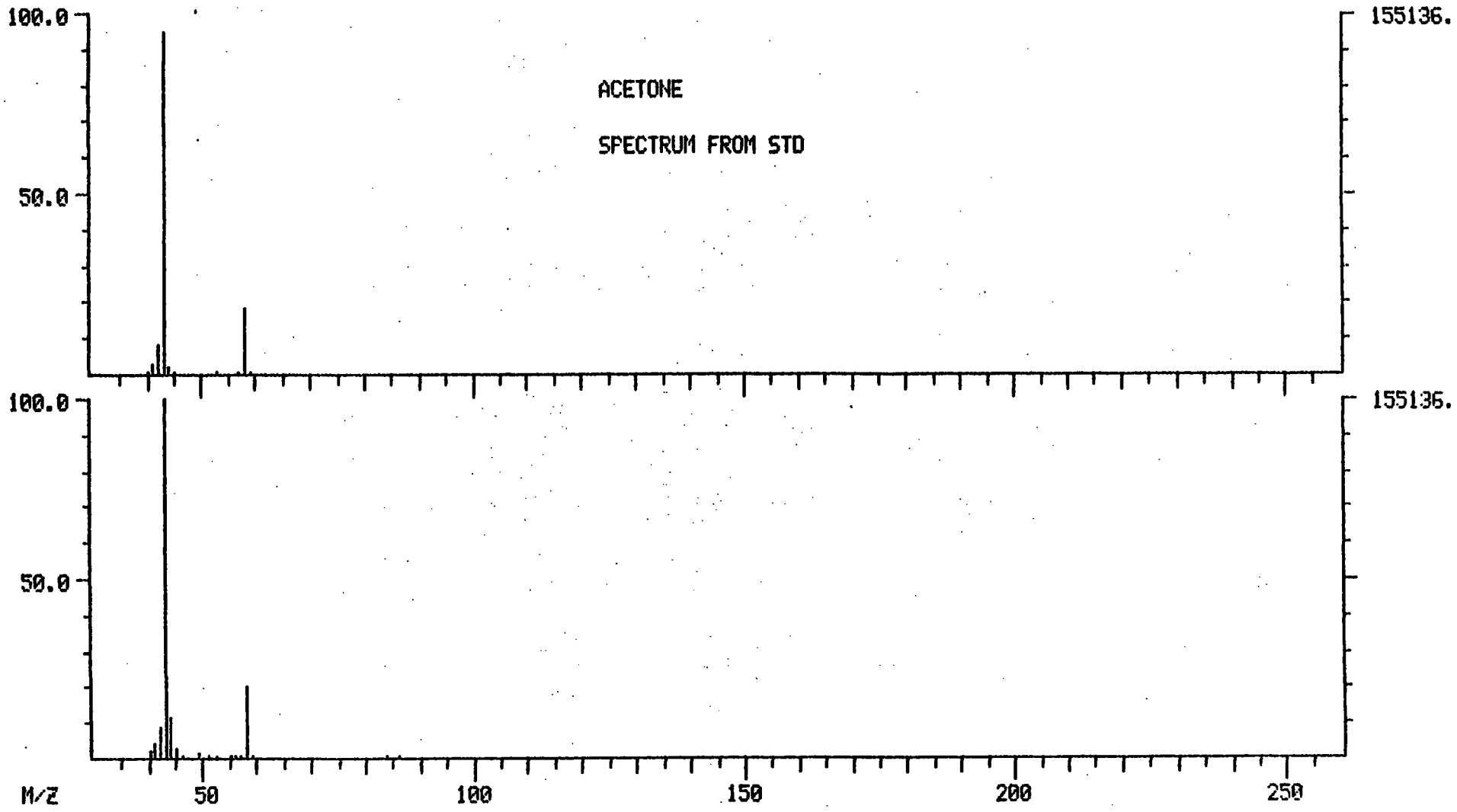


00440

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 7:37
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #150
CALI: STDJ198 #1

BASE M/Z: 43/ 43
RIC: 199935./ 247807.



Quantitation Report File: TEMP

Data: S59436W906.TI
04/28/88 21:35:00
Sample: 59436-06 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.025
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	CAS #	Name
1	0-00-0	UNKNOWN
2	0-00-0	UNKNOWN
3	102-24-9	BOROXIN, TRIMETHOXY-

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	389	19:27	2	0.770	A BB	611019.	~~78.481~~	39.52
2	RIC	505	25:15	2	1.000	A BB	778560.	~~100.000~~	50.35
3	RIC	37	1:51	2	0.073	A VB	156642.	~~20.120~~ ✓ B	10.13

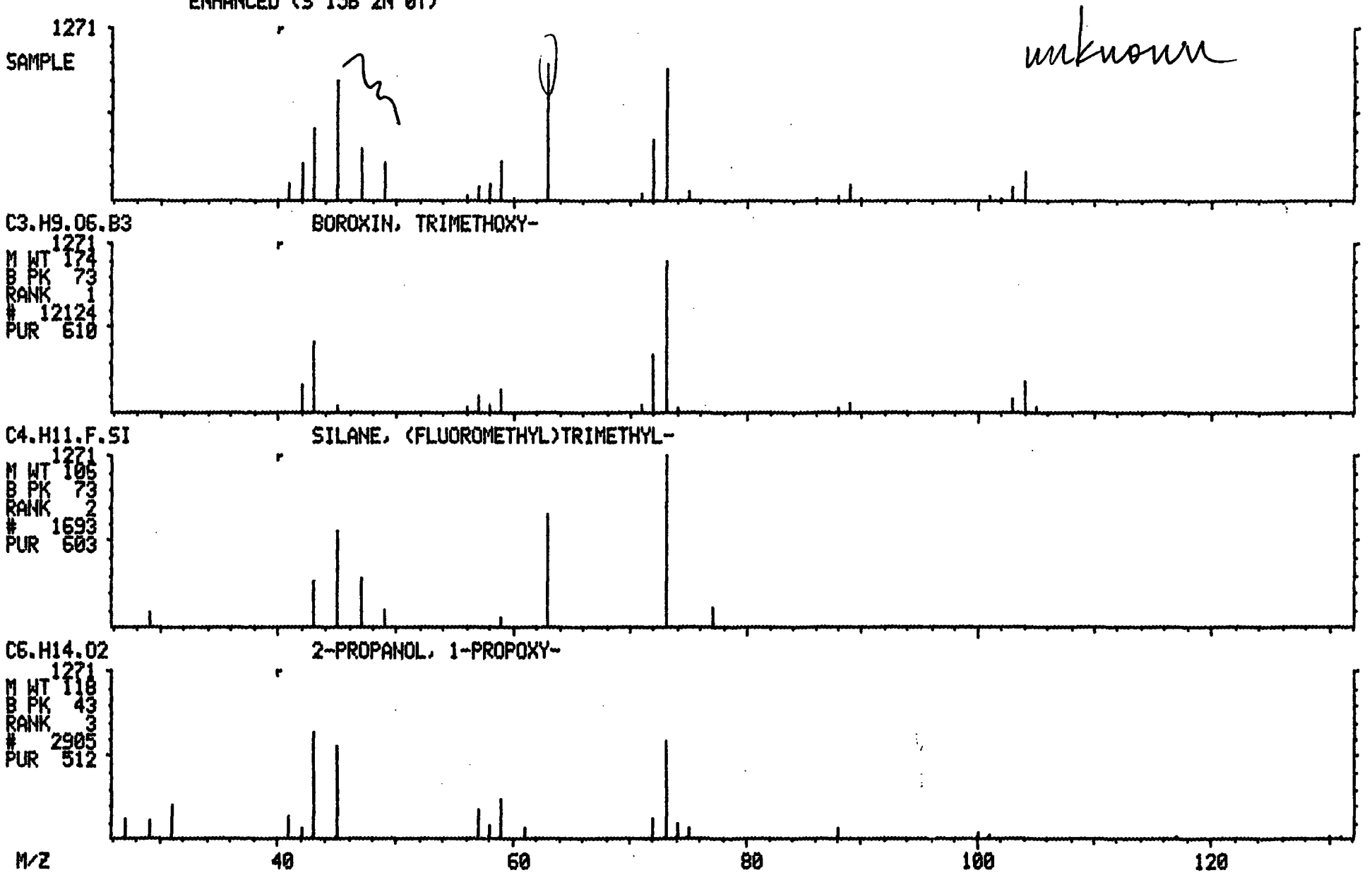
$$\left(\frac{156642}{\cancel{389}\ 611019}\right)(50\,\mu g/L) = 13\,\mu g/L \quad B$$

00442

LIBRARY SEARCH
04/28/88 21:35:00 + 1:54
SAMPLE: 59436-06 VOA H2O 100%/5ML
CONDS.: GC DESC V3
ENHANCED (S 15B 2N 0T)

DATA: 559436W906 # 38
CALI: 042888CW # 1

BASE M/Z: 63
RIC: 8831.



6/1/88 17:09:23 SCAN 1 OF 2850 00443
Acquisition started

Acquire Run 3:S59436R966 ACQUIRING
06/01/88 17:08:00 + 0:04 Free sectors: 13119 Scan: 5 of 2850
Sample: 59436-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No: 59436

********** GC PARAMETERS **********

Loaded GC Desc:ST Current GC oven tmp: 28 DegC Injector : 250 DegC
Current GC Desc:ST GC elapsed time : 0: 7 min Int.oven : 275 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********

Low mass: 35 Up: 0.70 L* Top: 0.00
High mass: 500 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 10 Samp Int (ms): 0.150 Peak Width: 1000.
Frag S/P: 10 Actual: 10 Samp Int (ms): 0.150 Inten/ion: 2

Min Peak Width: 3 Min Frag Width %: 80 Min Area: 20
ADC Threshold: 1 Baseline: 0

***** Mode: Centroid positive ion

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

$RF = \frac{2.0}{0.985} = 2.03$

$SV = 2.0$

6/1/88 17:45:03
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	475.7	2137.5	22.3	56548. 20.	26.

00444

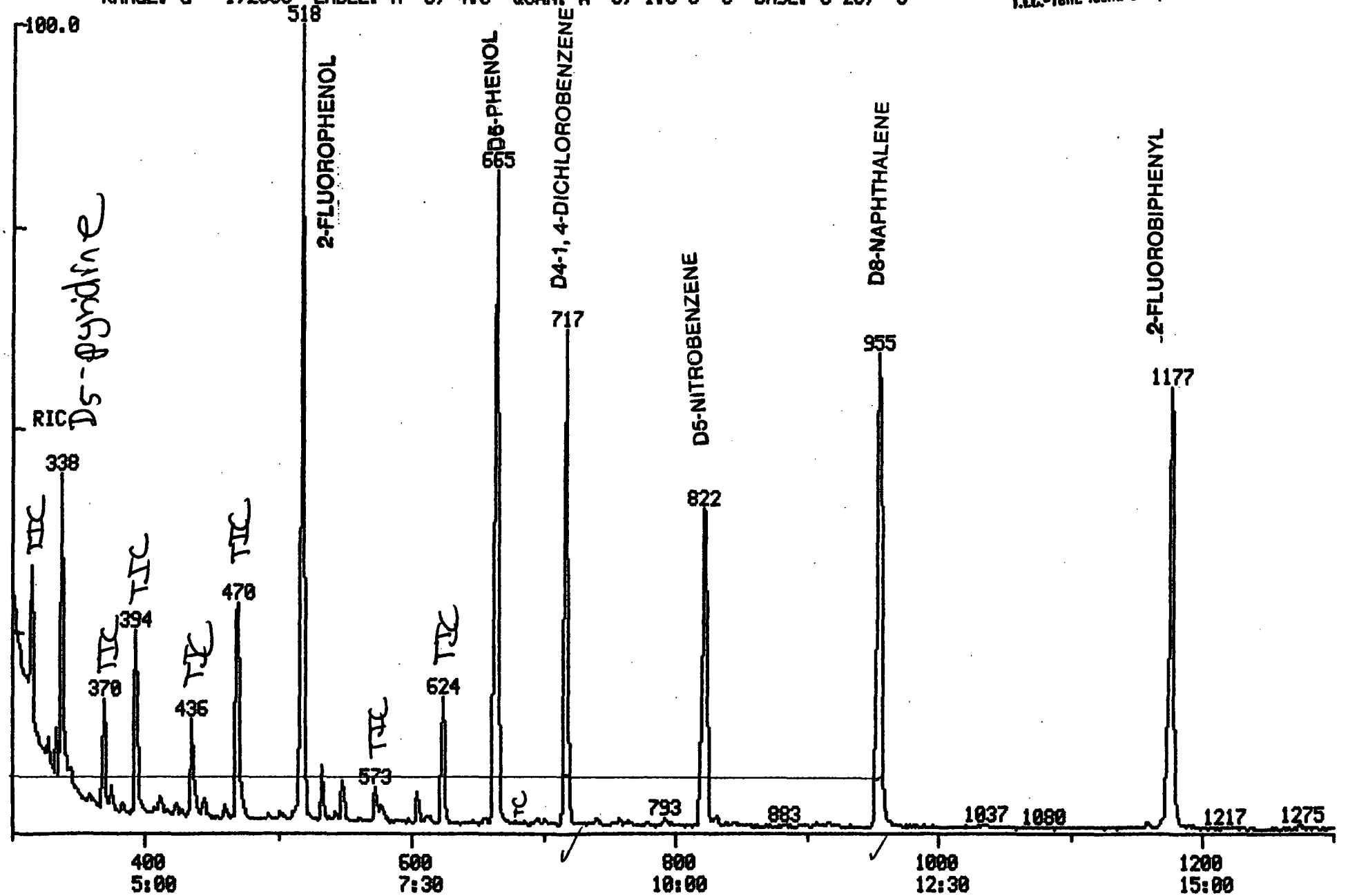
RIC
06/01/88 17:08:00
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R966 #4
CALI: 053188CR #4

SCANS 300 TO 1300
OUT OF 300 TO 2850

TC=Target Compound
SC=Spike Compound

T.I.C.-Tent. Ident. Compound



00445

RIC
06/01/88 17:08:00
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R966 #4 SCANS 1300 TO 2300
CALI: 053188CR #4 OUT OF 300 TO 2850

100.0

T.I.C.-Tent. Ident. Compound

TC=Target Compound
SC= Spike Compound

1313 D10-ACENAPHTHENE

2,4,6-TRIBROMOPHENOL 1477

D10-PHENANTHRENE 1615

1952 D14-TERPHENYL

D12-CHRYSENE 2170

TIC 2079

TC 2188

1348 1417 1525 1573 1671 1752 1824 1875 1999 18

1400 17:30 1600 20:00 1800 22:30 2000 25:00 2200 27:30

00446

RIC
06/01/88 17:08:00
SAMPLE: 59436-06 BNA H2O 100Z/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R966 #4 SCANS 2300 TO 2850
CALI: 053188CR #4 OUT OF 300 TO 2850

100.0 87808.

T.I.C.-Tent. Ident. Compound

TC=Target Compound
SC=Spike Compound

D12-PERYLENE

2451

TC 2310

2 7 2715 2793

2400 2600 2800 SCAN
30:00 32:30 35:00 TIME

AMPLE #1 RACK #2 VIAL #10 00447

PROCEDURE: TCA DIAGNOSTIC REPORT 6/01/88 23:40:14

DATA FILE: S59436R966

REFERENCE: 11TABLE

NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

REPORT: IS01

< ---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	7	3	2	157	IS01/TC01
3	3	1	81	18	4	1	110	IS02/TC02
3	3	1	81	12	3	1	81	IS03/TC03
3	3	2	82	18	4	1	61	IS04/TC04
3	3	1	82	10	4	1	61	IS05/TC05
3	3	1	81	8	4	1	173	IS06/TC06
3	3	1	27	14	6	2	59	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

77 COMPOUNDS PROCESSED, 15 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT ><							------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-716	717	717	.	2	973	.	152	717	.	1
2	S1	2	-517	518	518	.	2	995	.	112	518	.	1
3	S1	3	-666	666	665	-1	1	940	.	99	664	-1	1
4	S1	105	-668	668	.	.	.	.	.	94	666	.	1
5	S1	110	-680	680	.	.	.	.	.	93	.	.	.
6	S1	115	-687	687	.	.	.	.	.	128	687	.	1
7	S1	125	-710	710	.	.	.	.	.	146	.	.	.
8	S2	1	-955	956	955	-1	1	996	.	136	955	.	1
9	S3	1	-1312	1313	1313	.	1	993	.	164	1313	.	1
10	S1	130	-720	720	.	.	.	.	.	146	.	.	.
11	S1	145	-748	748	.	.	.	.	.	108	.	.	.
12	S1	150	-753	753	.	.	.	.	.	146	.	.	.
13	S1	160	-771	771	.	.	.	.	.	108	.	.	.
14	S1	165	-776	776	.	.	.	.	.	45	.	.	.
15	S1	185	-798	798	.	.	.	.	.	108	798	.	1
16	S1	190	-804	804	.	.	.	.	.	70	.	.	.
17	S1	200	-808	808	.	.	.	.	.	117	.	.	.
18	S2	2	-823	823	822	-1	1	999	.	82	822	.	1
19	S2	10	-827	827	.	.	.	.	.	77	.	.	.
20	S2	20	-873	873	.	.	.	.	.	82	.	.	.
21	S2	25	-887	887	.	.	.	.	.	139	.	.	.
22	S2	30	-897	897	.	.	.	.	.	107	.	.	.
23	S2	35	-917	917	.	.	.	.	.	93	.	.	.
24	S2	45	-927	927	.	.	.	.	.	122	.	.	.
25	S2	40	-932	933	.	.	.	.	.	162	.	.	.
26	S2	55	-948	949	.	.	.	.	.	180	.	.	.
27	S2	60	-960	961	.	.	.	.	.	128	959	.	1
28	S2	80	-976	977	.	.	.	.	.	127	.	.	.
29	S2	95	-996	997	.	.	.	.	.	225	.	.	.
30	S2	130	-1074	1075	.	.	.	.	.	107	1075	.	1
31	S2	145	-1097	1098	.	.	.	.	.	142	.	.	.
32	S3	20	-1143	1144	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1162	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1615	1615	.	2	989	.	188	1615	.	1
35	S3	30	-1168	1168	.	.	.	.	.	196	.	.	.
36	S3	3	-1177	1177	1177	.	1	997	.	172	1177	.	1
37	S3	40	-1195	1195	.	.	.	.	.	162	.	.	.
38	S3	45	-1225	1225	.	.	.	.	.	65	1223	.	1
39	S3	55	-1272	1272	.	.	.	.	.	163	.	.	.
40	S3	65	-1281	1281	.	.	.	.	.	152	1281	.	1
41	S3	70	-1284	1284	.	.	.	.	.	165	.	.	.

42	S3	75	-1311	1311	.	.	.	.	.	138	.	.	.
43	S3	80	-1320	1320	.	.	.	.	.	153	1319	.	1
44	S3	85	-1331	1331	.	.	.	.	.	184	.	.	.
45	S3	95	-1347	1347	.	.	.	.	.	109	.	.	.
46	S3	90	-1352	1352	.	.	.	.	.	168	1351	.	1
47	S3	105	-1364	1364	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1418	.	.	.	.	.	149	1416	.	1
49	S3	135	-1423	1423	.	.	.	.	.	166	1421	.	1
50	S3	140	-1425	1425	.	.	.	.	.	204	.	.	.
51	S3	150	-1439	1439	.	.	.	.	.	138	.	.	.
52	S4	10	-1447	1447	.	.	.	.	.	198	.	.	.
53	S4	15	-1453	1453	.	.	.	.	.	169	1451	.	1
54	S3	2	-1477	1477	1477	.	1	978	.	330	1476	-1	1
55	S4	30	-1524	1524	.	.	.	.	.	248	.	.	.
56	S4	40	-1553	1553	.	.	.	.	.	284	.	.	.
57	S5	1	-2169	2170	2170	.	1	959	.	240	2170	.	1
58	S4	50	-1591	1591	.	.	.	.	.	266	.	.	.
59	S4	65	-1620	1620	.	.	.	.	.	178	.	.	.
60	S4	70	-1630	1630	.	.	.	.	.	178	.	.	.
61	S4	85	-1754	1754	1752	-2	1	905	.	149	1752	.	1
62	S4	110	-1869	1869	.	.	.	.	.	202	1867	.	1
63	S6	1	-2450	2451	2451	.	1	989	.	264	2451	.	1
64	S5	15	-1915	1915	.	.	.	.	.	202	1914	.	1
65	S5	2	-1951	1951	1952	1	1	995	.	244	1952	.	1
66	S5	40	-2063	2063	.	.	.	.	.	149	2062	.	1
67	S5	55	-2166	2167	.	.	.	.	.	252	.	.	.
68	S5	50	-2166	2167	.	.	.	.	.	228	2169	.	2
69	S5	60	-2176	2177	.	.	.	.	.	228	.	.	.
70	S5	65	-2188	2189	2188	-1	2	993	.	149	2188	.	1
71	S6	10	-2310	2311	2310	-1	1	992	.	149	2310	.	1
72	S6	15	-2381	2382	.	.	.	.	.	252	.	.	.
73	S6	25	-2387	2388	.	.	.	.	.	252	.	.	.
74	S6	35	-2440	2441	.	.	.	.	.	252	.	.	.
75	S6	55	-2687	2688	.	.	.	.	.	276	.	.	.
76	S6	60	-2690	2691	.	.	.	.	.	278	.	.	.
77	S6	65	-2755	2756	.	.	.	.	.	276	.	.	.

Quantitation Report File: S59436R966

Data: S59436R966.TI
06/01/88 17:08:00
Sample: 59436-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
1	CI30	1,4-DICHLOROBENZENE-D4	152IS1# 01	3855-82-1
2	CS50	2-FLUOROPHENOL	112SS1# 02	367-12-4
3	CS45	PHENOL-D5	99SS1# 03	4165-62-2
4	C315	PHENOL	94 S1#105CC	108-95-2
5	C325	BIS(2-CHLOROETHYL)ETHER	93 S1#110	111-44-4
6	C330	2-CHLOROPHENOL	128 S2#115	95-57-8
7	C335	1,3-DICHLOROBENZENE	146 S1#125	541-73-1
8	CI40	NAPHTHALENE-D8	136IS2# 01	1146-65-2
9	CI50	ACENAPHTHENE-D10	164IS3# 01	15067-26-2
10	C340	1,4-DICHLOROBENZENE	146 S1#130CC	106-46-7
11	C345	BENZYL ALCOHOL	108 S1#145	100-51-6
12	C350	1,2-DICHLOROBENZENE	146 S1#150	95-50-1
13	C355	2-METHYLPHENOL	108 S1#160	95-48-7
14	C360	BIS(2-CHLOROISOPROPYL)E	45 S1#165	108-60-1
15	C365	4-METHYLPHENOL	108 S1#185	106-44-5
16	C370	N-NITROSO-DI-N-PROPYLAM	70 S1#190SP	621-64-7
17	C375	HEXACHLOROETHANE	117 S1#200	67-72-1
18	CS20	NITROBENZENE-D5	82SS2# 02	4165-60-0
19	C410	NITROBENZENE	77 S2# 10	98-95-3
20	C415	ISOPHORONE	82 S2# 20	75-59-1
21	C420	2-NITROPHENOL	139 S2# 25CC	88-75-5
22	C425	2,4-DIMETHYLPHENOL	107 S2# 30	105-67-9
23	C435	BIS(2-CHLOROETHOXY)METH	93 S2# 35	111-91-1
24	C430	BENZOIC ACID	122 S2# 45	65-85-0
25	C440	2,4-DICHLOROPHENOL	162 S2# 40	120-83-2
26	C445	1,2,4-TRICHLOROBENZENE	180 S2# 55	120-82-1
27	C450	NAPHTHALENE	128 S2# 60	91-20-3
28	C455	4-CHLOROANALINE	127 S2# 80	106-47-8
29	C460	HEXACHLOROBUTADIENE	225 S2# 95CC	87-68-3
30	C465	4-CHLORO-3-METHYLPHENO	107 S2#130CC	59-50-7
31	C470	2-METHYLNAPHTHALENE	142 S2#145	91-57-6
32	C510	HEXACHLOROCYCLOPENTADI	237 S3# 20	77-47-4
33	C515	2,4,6-TRICHLOROPHENOL	196 S3# 25CC	88-06-2
34	CI60	PHENANTHRENE-D10	188IS4# 01	1517-22-2
35	C520	2,4,5-TRICHLOROPHENOL	196 S3# 30	95-95-4
36	CS25	2-FLUOROBIPHENYL	172SS3# 03	321-60-8
37	C525	2-CHLORONAPHTHALENE	162 S3# 40	91-58-7
38	C530	2-NITROANALINE	65 S3# 45	88-74-4
39	C535	DIMETHYLPHTHALATE	163 S3# 55	131-11-3
40	C540	ACENAPHTHYLENE	152 S3# 65	208-96-8
41	C543	2,6-DINITROTOLUENE	165 S3# 70	606-20-2
42	C545	3-NITROANILINE	138 S3# 75	99-09-2
43	C550	ACENAPHTHENE	153 S3# 80CC	83-32-9
44	C555	2,4-DINITROPHENOL	184 S3# 85SP	51-28-5
45	C560	4-NITROPHENOL	109 S3# 95SP	100-02-7
46	C565	DIBENZOFURAN	168 S3# 90	132-64-9
47	C570	2,4-DINITROTOLUENE	165 S3#105	121-14-2

No	Name			
48	C580 DIETHYLPHTHALATE	149	S3#130	84-66-2
49	C590 FLUORENE	166	S3#135	86-73-7
50	C585 4-CHLOROPHENYL-PHENYLE	204	S3#140	7005-72-3

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	717	8:58	1	1.000	A BB	24533.	40.000 UG/ML	6.82
2	112	518	6:28	1	0.722	A BB	55853.	64.001 UG/ML	10.91
3	99	664	8:18	1	0.926	A BB	83485.	67.185 UG/ML	11.45
4	94	666	8:19	1	0.929	A BB	318.	0.229 UG/ML	0.04
5	NOT FOUND								
6	128	687	8:35	1	0.958	A BB	103.	0.119 UG/ML	0.02
7	NOT FOUND								
8	136	955	11:56	8	1.000	A BB	93660.	40.000 UG/ML	6.82
9	164	1313	16:25	9	1.000	A BV	43106.	40.000 UG/ML	6.82
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	108	798	9:58	1	1.113	A BB	42.	0.049 UG/ML	0.01
16	NOT FOUND								
17	NOT FOUND								
18	82	822	10:16	8	0.861	A BB	44967.	43.453 UG/ML	7.41
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	128	959	11:59	8	1.004	A BB	102.	0.041 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	107	1075	13:26	8	1.126	A BB	54.	0.075 UG/ML	0.01
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	188	1615	20:11	34	1.000	A BV	67681.	40.000 UG/ML	6.82
35	NOT FOUND								
36	172	1177	14:43	9	0.896	A BB	61178.	40.482 UG/ML	6.90
37	NOT FOUND								
38	65	1223	15:17	9	0.931	A BB	41.	0.068 UG/ML	0.01
39	NOT FOUND								
40	152	1281	16:01	9	0.976	A BB	46.	0.021 UG/ML	0.00
41	NOT FOUND								
42	NOT FOUND								
43	153	1319	16:29	9	1.005	A BB	45.	0.034 UG/ML	0.01
44	NOT FOUND								
45	NOT FOUND								
46	168	1351	16:53	9	1.029	A BB	67.	0.035 UG/ML	0.01
47	NOT FOUND								
48	149	1416	17:42	9	1.078	A BB	106.	0.068 UG/ML	0.01
49	166	1421	17:46	9	1.082	A BB	47.	0.030 UG/ML	0.01
50	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:58	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:28	1.00	0.721	1.00	64.00	100.00	0.911	1.423	0.64
3	8:19	1.00	0.929	1.00	67.19	100.00	1.361	2.026	0.67
4	8:21	1.00	0.932	1.00	0.23	50.00	0.010	2.262	0.00
5	8:30		0.948						
6	8:35	1.00	0.958	1.00	0.12	50.00	0.003	1.407	0.00
7	8:52		0.990						
8	11:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	16:25	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	9:00		1.004						
11	9:21		1.043						
12	9:25		1.050						
13	9:38		1.075						
14	9:42		1.082						
15	9:58	1.00	1.113	1.00	0.05	50.00	0.001	1.389	0.00
16	10:03		1.121						
17	10:06		1.127						
18	10:17	1.00	0.861	1.00	43.45	50.00	0.384	0.442	0.87
19	10:20		0.865						
20	10:55		0.913						
21	11:05		0.928						
22	11:13		0.938						
23	11:28		0.959						
24	11:35		0.970						
25	11:39		0.975						
26	11:51		0.992						
27	12:00	1.00	1.004	1.00	0.04	50.00	0.001	1.060	0.00
28	12:12		1.021						
29	12:27		1.042						
30	13:25	1.00	1.123	1.00	0.07	50.00	0.000	0.309	0.00
31	13:43		1.147						
32	14:17		0.871						
33	14:31		0.884						
34	20:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:36		0.890						
36	14:43	1.00	0.896	1.00	40.48	50.00	1.135	1.402	0.81
37	14:56		0.910						
38	15:19	1.00	0.933	1.00	0.07	50.00	0.001	0.556	0.00
39	15:54		0.969						
40	16:01	1.00	0.976	1.00	0.02	50.00	0.001	2.069	0.00
41	16:03		0.978						
42	16:23		0.998						
43	16:30	1.00	1.005	1.00	0.03	50.00	0.001	1.221	0.00
44	16:38		1.014						
45	16:50		1.026						
46	16:54	1.00	1.030	1.00	0.03	50.00	0.001	1.786	0.00
47	17:03		1.039						
48	17:43	1.00	1.080	1.00	0.07	50.00	0.002	1.452	0.00
49	17:47	1.00	1.084	1.00	0.03	50.00	0.001	1.438	0.00
50	17:49		1.085						

Quantitation Report File: S59436R966

Data: S59436R966.TI
06/01/88 17:08:00
Sample: 59436-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
51	C595	4-NITROANALINE	138 S3#150	100-01-6
52	C610	4,6-DINITRO-2-METHYLPH	198 S4# 10	534-52-1
53	C615	N-NITROSODIPHENYLAMINE	169 S4# 15CC	87-30-6
54	CS55	2,4,6-TRIBROMOPHENOL	330SS3# 02	118-79-6
55	C625	4-BROMOPHENYL-PHENYLET	248 S4# 30	101-55-3
56	C630	HEXACHLOROBENZENE	284 S4# 40	118-74-1
57	CI70	CHRYSENE-D12	240IS5# 01	1719-03-5
58	C635	PENTACHLOROPHENOL	266 S4# 50	87-86-5
59	C640	PHENANTHRENE	178 S4# 65	85-01-8
60	C645	ANTHRACENE	178 S4# 70	120-12-7
61	C650	DI-N-BUTYLPHTHALATE	149 S4# 85	84-74-2
62	C655	FLUORANTHENE	202 S4#110CC	206-44-0
63	CI75	PERYLENE-D12	164IS6# 01	1520-96-3
64	C715	PYRENE	202 S5# 15	129-00-0
65	CS30	TERPHENYL-D14	244SS5# 02	1718-51-0
66	C720	BUTYLBENZYLPHTHALATE	149 S5# 40	85-68-7
67	C725	3,3'-DICHLOROBENZIDINE	252 S5# 55	91-94-1
68	C730	BENZO(A)ANTHRACENE	228 S5# 50	56-55-3
69	C740	CHRYSENE	228 S5# 60	218-01-9
70	C745	BIS(2-ETHYLHEXYL)PHTHA	149 S5# 65	117-81-7
71	C760	DI-N-OCTYL PHTHALATE	149 S6# 10CC	117-84-0
72	C765	BENZO(B)FLUORANTHENE	252 S6# 15	205-99-2
73	C770	BENZO(K)FLUORANTHENE	252 S6# 25	207-08-9
74	C775	BENZO(A)PYRENE	252 S6# 35	50-32-8
75	C780	INDENO(1,2,3-CD)PYRENE	276 S6# 55	193-39-5
76	C785	DIBENZ(A,H)ANTHRACENE	278 S6# 60	53-70-3
77	C790	BENZO(G,H,I)PERYLENE	276 S6# 65	191-24-2

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	169	1451	18:08	34	0.898	A BB	424.	0.414 UG/ML	0.07
54	330	1476	18:27	9	1.124	A BB	12932.	75.562 UG/ML	12.88
55	NOT FOUND								
56	NOT FOUND								
57	240	2170	27:07	57	1.000	A BB	43679.	40.000 UG/ML	6.82
58	NOT FOUND								
59	NOT FOUND								
60	NOT FOUND								
61	149	1752	21:54	34	1.085	A BB	1519.	0.602 UG/ML	0.10
62	202	1867	23:20	34	1.156	A BB	50.	0.028 UG/ML	0.00
63	264	2451	30:38	63	1.000	A BB	33737.	40.000 UG/ML	6.82
64	202	1914	23:55	57	0.882	A BB	124.	0.080 UG/ML	0.01
65	244	1952	24:24	57	0.900	A BB	56298.	48.091 UG/ML	8.20
66	149	2062	25:46	57	0.950	A BB	153.	0.171 UG/ML	0.03

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	228	2169	27:07	57	1.000	A#BV	215.	0.159 UG/ML	0.03
69	NOT FOUND								
70	149	2188	27:21	57	1.008	A VB	4373.	3.548 UG/ML	0.60
71	149	2310	28:52	63	0.942	A BB	4818.	2.276 UG/ML	0.39
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	17:59		1.096						
52	18:05		0.895						
53	18:10	1.00	0.899	1.00	0.41	50.00	0.005	0.605	0.01
54	18:28	1.00	1.125	1.00	75.56	100.00	0.120	0.159	0.76
55	19:03		0.943						
56	19:25		0.961						
57	27:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:53		0.985						
59	20:15		1.002						
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	0.60	50.00	0.018	1.492	0.01
62	23:22	1.00	1.157	1.00	0.03	50.00	0.001	1.057	0.00
63	30:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:56	1.00	0.882	1.00	0.08	50.00	0.002	1.422	0.00
65	24:23	1.00	0.899	1.00	48.09	50.00	1.031	1.072	0.96
66	25:47	1.00	0.951	1.00	0.17	50.00	0.003	0.818	0.00
67	27:04		0.998						
68	27:04	1.00	0.998	1.00	0.16	50.00	0.004	1.237	0.00
69	27:12		1.003						
70	27:21	1.00	1.008	1.00	3.55	50.00	0.080	1.129	0.07
71	28:52	1.00	0.942	1.00	2.28	50.00	0.114	2.509	0.05
72	29:46		0.971						
73	29:50		0.974						
74	30:30		0.996						
75	33:35		1.096						
76	33:37		1.098						
77	34:26		1.124						

TCA FINISHED, 15 FOUND
FINISHED AT: 6/01/88 23:47:51

RMAL QUANTITATION SUMMARY FILE: S59436R966
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/ML

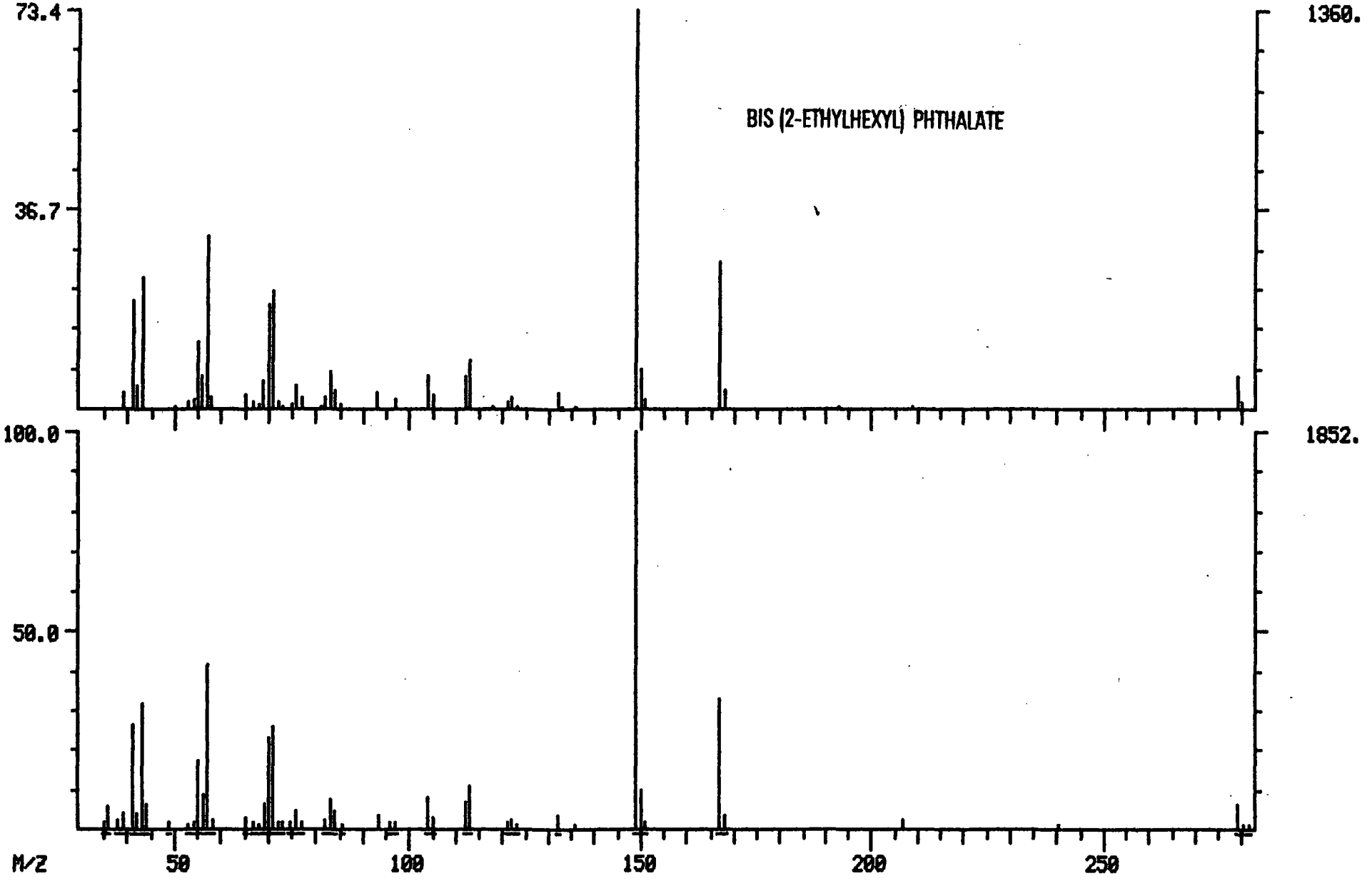
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	717	1	24533.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	955	2	93660.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1313	3	43106.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1615	4	67681.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2170	5	43679.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2451	6	33737.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	822	2	44967.	0.384	43.453
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1177	3	61178.	1.135	40.482
9	S5# 2	CS30 TERPHENYL-D14	244	1952	5	56298.	1.031	48.091
10	S1# 3	CS45 PHENOL-D5	99	664	1	83485.	1.361	67.185
11	S1# 2	CS50 2-FLUOROPHENOL	112	518	1	55853.	0.911	64.001
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1476	3	12932.	0.120	75.562
13	S1#105	C315 PHENOL	94		1	NOT FOUND		
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND		
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND		
18	S1#145	C345 BENZYL ALCOHOL	108		1	NOT FOUND		
19	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND		
20	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND		
21	S1#165	C360 BIS(2-CHLOROISOPROP	45		1	NOT FOUND		
22	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND		
23	S1#190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND		
24	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND		
25	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND		
26	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND		
27	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND		
28	S2# 30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND		
29	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND		
30	S2# 40	C440 2,4-DICHLOROPHENOL	162		2	NOT FOUND		
31	S2# 45	C430 BENZOIC ACID	122		2	NOT FOUND		
32	S2# 55	C445 1,2,4-TRICHLOROBENZ	180		2	NOT FOUND		
33	S2# 60	C450 NAPHTHALENE	128		2	NOT FOUND		
34	S2# 80	C455 4-CHLOROANALINE	127		2	NOT FOUND		
35	S2# 95	C460 HEXACHLOROBUTADIENE	225		2	NOT FOUND		
36	S2#130	C465 4-CHLORO-3-METHYLPH	107		2	NOT FOUND		
37	S2#145	C470 2-METHYLNAPHTHALENE	142		2	NOT FOUND		
38	S3# 20	C510 HEXACHLOROCYCLOPENT	237		3	NOT FOUND		
39	S3# 25	C515 2,4,6-TRICHLOROPHEN	196		3	NOT FOUND		
40	S3# 30	C520 2,4,5-TRICHLOROPHEN	196		3	NOT FOUND		
41	S3# 40	C525 2-CHLORONAPHTHALENE	162		3	NOT FOUND		
42	S3# 45	C530 2-NITROANALINE	65		3	NOT FOUND		
43	S3# 55	C535 DIMETHYLPHTHALATE	163		3	NOT FOUND		
44	S3# 65	C540 ACENAPHTHYLENE	152		3	NOT FOUND		
45	S3# 70	C543 2,6-DINITROTOLUENE	165		3	NOT FOUND		
46	S3# 75	C545 3-NITROANILINE	138		3	NOT FOUND		
47	S3# 80	C550 ACENAPHTHENE	153		3	NOT FOUND		
48	S3# 85	C555 2,4-DINITROPHENOL	184		3	NOT FOUND		
49	S3# 90	C565 DIBENZOFURAN	168		3	NOT FOUND		
50	S3# 95	C560 4-NITROPHENOL	109		3	NOT FOUND		
51	S3#105	C570 2,4-DINITROTOLUENE	165		3	NOT FOUND		

52	S3#130	C580	DIETHYLPHTHALATE	149		3	NOT FOUND			
53	S3#135	C590	FLUORENE	166		3	NOT FOUND			
54	S3#140	C585	4-CHLOROPHENYL-PHEN	204		3	NOT FOUND			
55	S3#150	C595	4-NITROANALINE	138		3	NOT FOUND			
56	S4# 10	C610	4,6-DINITRO-2-METHY	198		4	NOT FOUND			
57	S4# 15	C615	N-NITROSODIPHENYLAM	169		4	NOT FOUND			
58	S4# 30	C625	4-BROMOPHENYL-PHENY	248		4	NOT FOUND			
59	S4# 40	C630	HEXACHLOROBENZENE	284		4	NOT FOUND			
60	S4# 50	C635	PENTACHLOROPHENOL	266		4	NOT FOUND			
61	S4# 65	C640	PHENANTHRENE	178		4	NOT FOUND			
62	S4# 70	C645	ANTHRACENE	178		4	NOT FOUND			
63	S4# 85	C650	DI-N-BUTYLPHTHALATE	149		4	NOT FOUND			
64	S4#110	C655	FLUORANTHENE	202		4	NOT FOUND			
65	S5# 15	C715	PYRENE	202		5	NOT FOUND			
66	S5# 40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND			
67	S5# 50	C730	BENZO(A)ANTHRACENE	228		5	NOT FOUND			
68	S5# 55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND			
69	S5# 60	C740	CHRYSENE	228		5	NOT FOUND			
70	S5# 65	C745	BIS(2-ETHYLHEXYL)PH	149	2188	5	4373.	0.080	3.548	
71	S6# 10	C760	DI-N-OCTYL PHTHALAT	149	2310	6	4818.	0.114	2.276	
72	S6# 15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND			
73	S6# 25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND			
74	S6# 35	C775	BENZO(A)PYRENE	252		6	NOT FOUND			
75	S6# 55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND			
76	S6# 60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND			
77	S6# 65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND			

00456

DUAL MASS SPECTRUM
06/01/88 17:08:00 + 27:21
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R966 #2188 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 6271./ 8415.

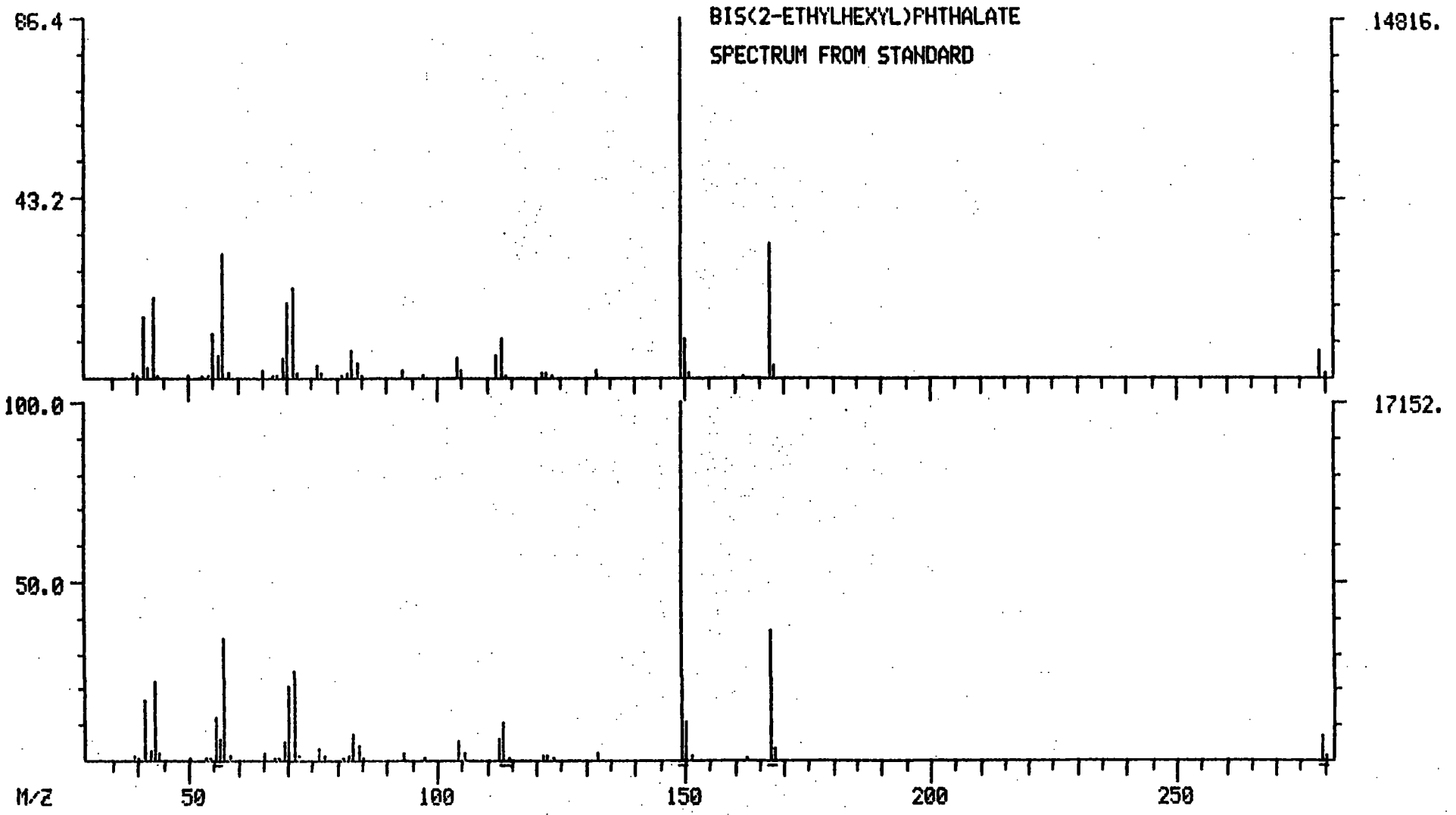


00457

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 30:27
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2N 0T)

DATA: STDR810 #2436
CALI: 103086C #5

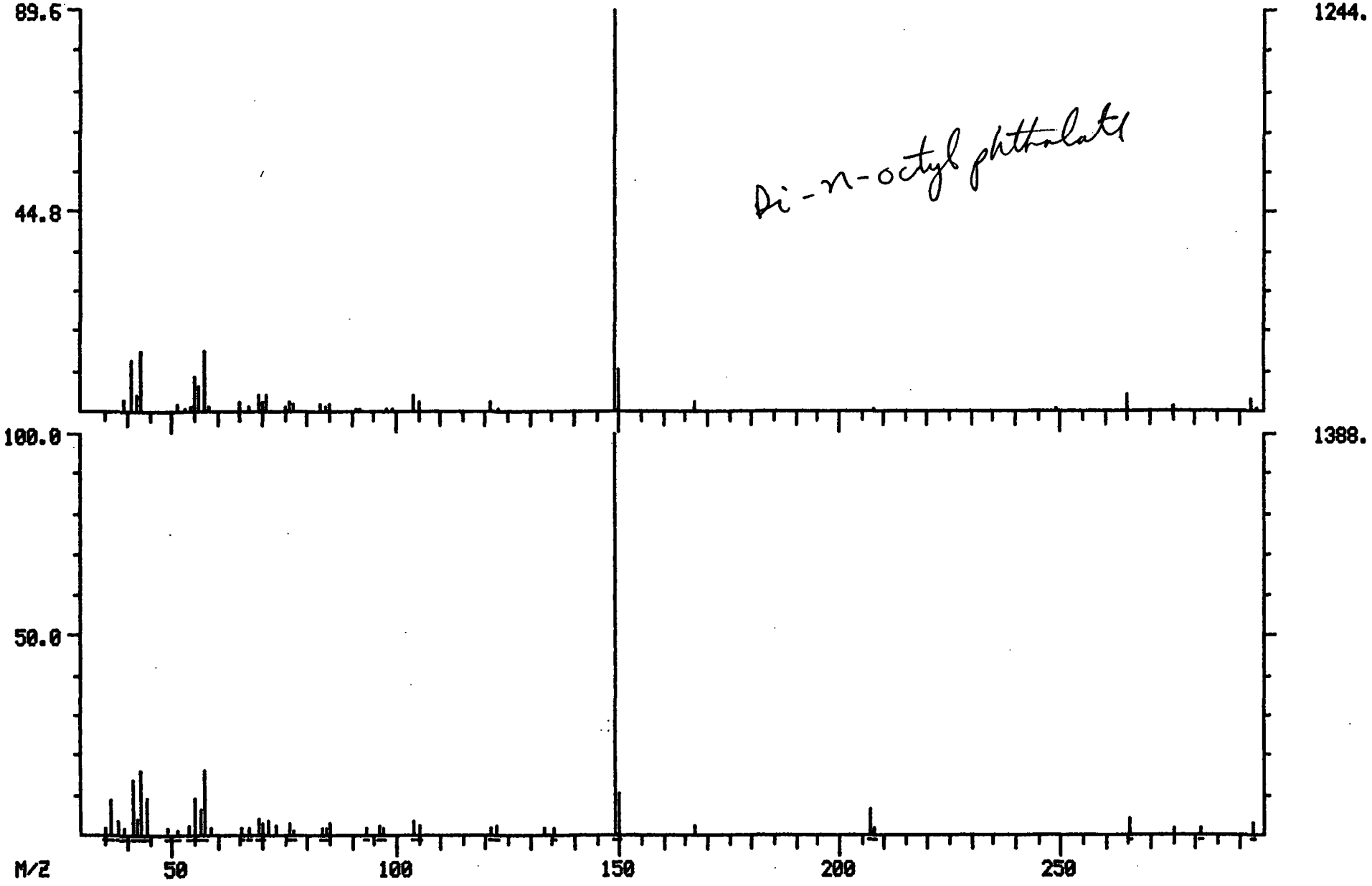
BASE M/Z: 149/ 149
RIC: 55167./ 63807.



0458

DUAL MASS SPECTRUM
06/01/88 17:08:00 + 28:52
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R966 #2310 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 2835./ 3839.



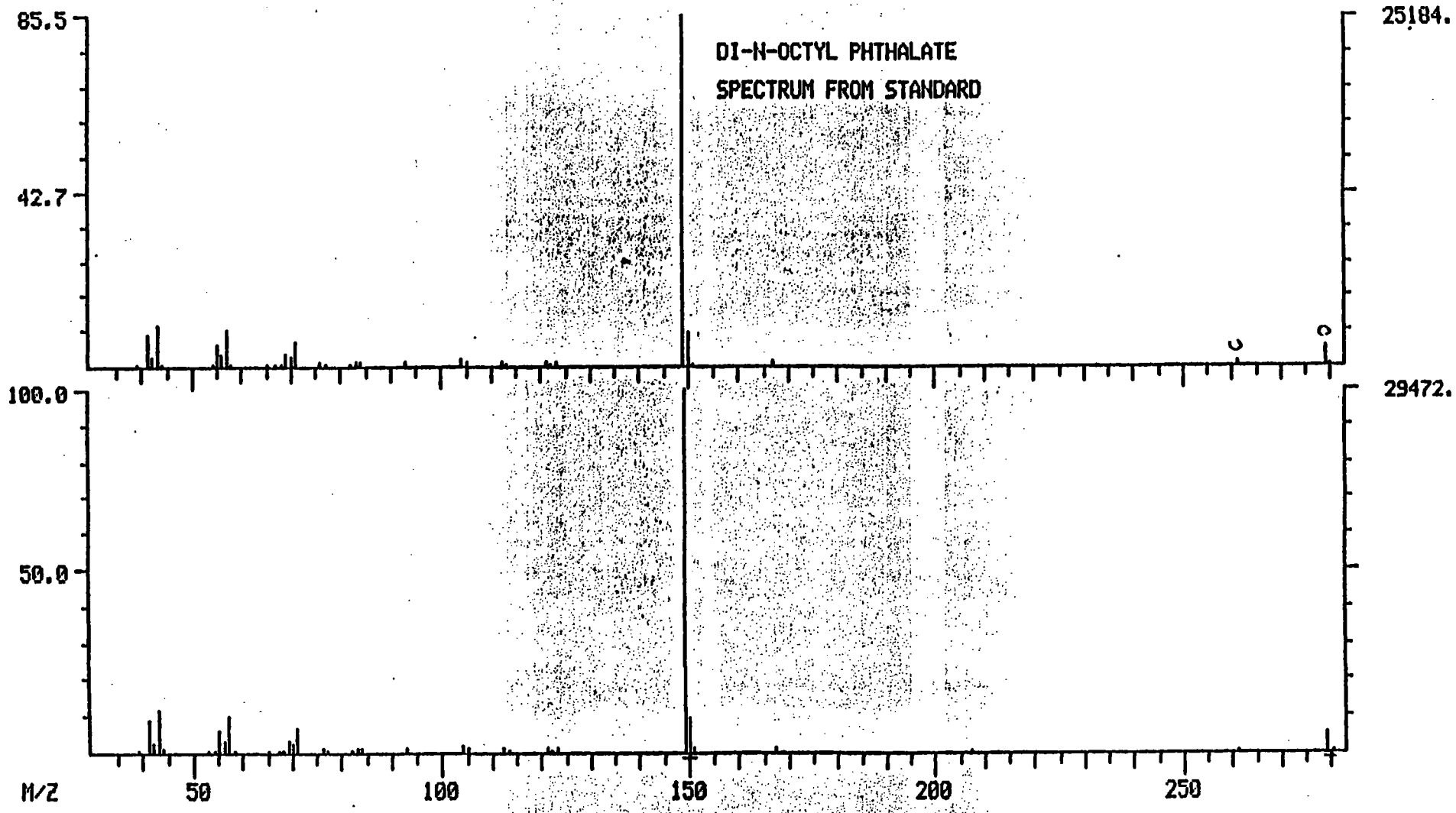
Di-n-octyl phthalate

00459

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 32:18
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2N 0T)

DATA: STDR810 #2584
CALI: 103086C #5

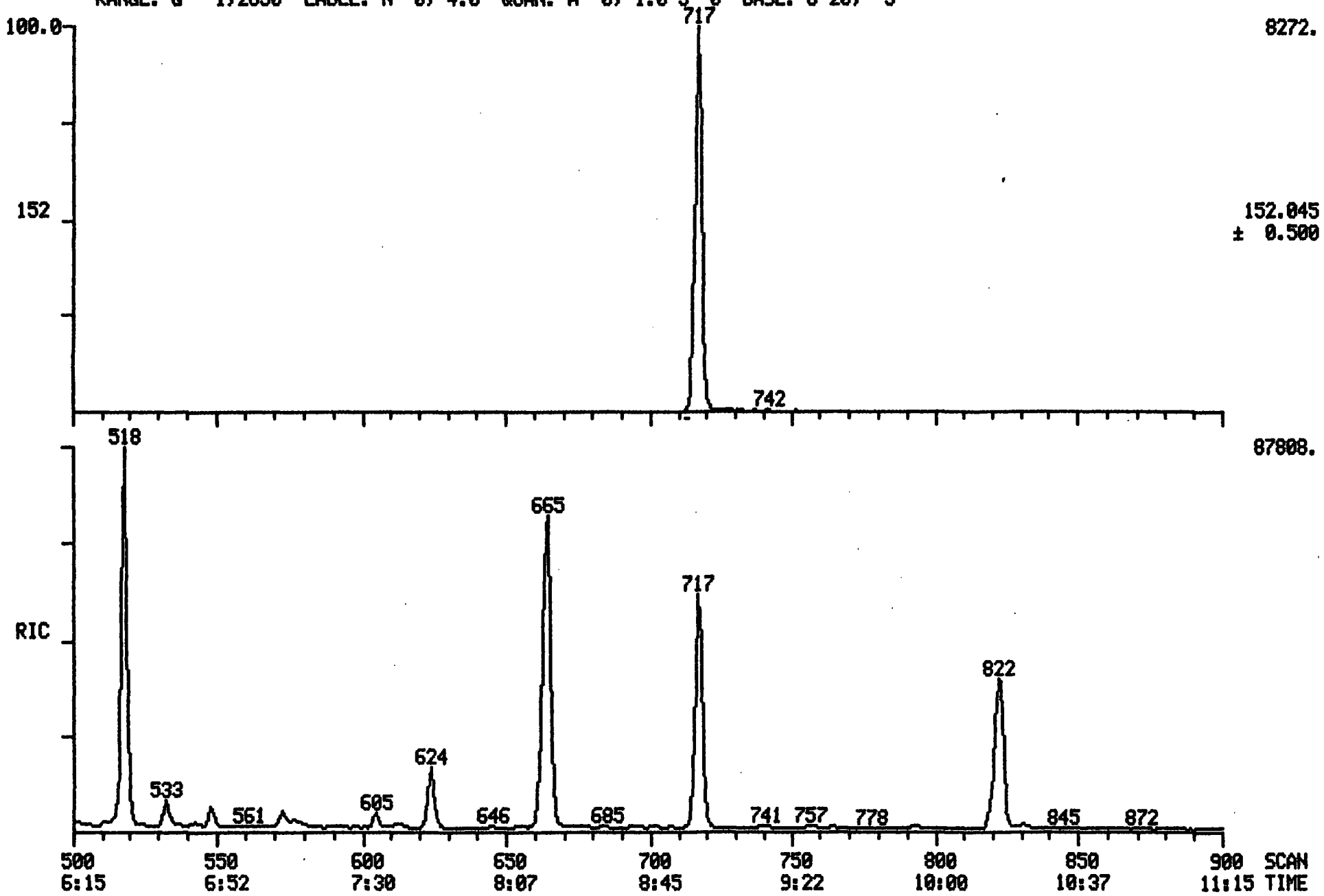
BASE M/Z: 149/ 149
RIC: 50111./ 58623.



00460

RIC+MASS CHROMATOGRAM
06/01/88 17:08:00
SAMPLE: 59436-06 BNA H2O 100Z/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R966 #1 SCANS 500 TO 900
CALI: 053188CR #4



DATA REDUCED BY: AR DATE: 6-7-88 DATA FILE: S59436R966
DATA REVIEWED BY: ____ DATE: ____

00461

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-06 BNA H2O 100%/2ML RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MK

#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	316	B	2	11.	108-87-2	CYCLOHEXANE, METHYL-
2	370	B	2	6.0	108-88-3	BENZENE, METHYL- (VOA TIC)
3	394	CB	1	12.	00-00-0	OXYGENATED HYDROCARBON
4	436	CB	1	7.8	00-00-0	OXYGENATED HYDROCARBON
5	470	CB	1	17.	00-00-0	OXYGENATED HYDROCARBON
6	573	I	2	4.2	79-34-5	ETHANE, 1,1,2,2-TETRACHLORO- (VOA TIC)
7	624	IB	2	8.8	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-
8	2079	I	2	5.1	4337-65-9	HEXANEDIOIC ACID, MONO(2-ETHYLHEXY

edit complete

DATA FILE: S59436R966

ENSECO TIC REPORT (PAGE 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	981	886	1	3:56	0.445	42991.	16255.	10.640	NB	1138.
2	992	955	1	4:37	0.521	24417.	11766.	6.043	NB	850.
3	856	823	1	4:55	0.554	49767.	19860.	12.317	BC	2.
4	771	734	1	5:26	0.613	31636.	10618.	7.830	BC	2.
5	813	779	1	5:52	0.660	69885.	23153.	17.297	BC	2.
6	974	902	1	7:09	0.804	16801.	3567.	4.158	NB	10636.
7	0	760	1	7:47	0.875	35637.	13716.	8.820	NB	6445.
8	968	833	6	25:59	0.853	15321.	5265.	5.075	NB	24638.

TIC SELECTION REPORT

DATA FILE: S59436R966

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 50 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 3 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
338	69727.	17.257
518	210675.	52.141
665	233655.	57.829
717	161617.	39.999
822	133896.	33.139
955	207639.	39.999
1177	187913.	36.199
1313	217468.	44.144
1615	197052.	39.999
1952	168313.	34.166
2170	138068.	45.729
2188	19375.	6.417
2451	120769.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 9

INTERNAL STANDARD DATA IS LISTED BELOW. IS FOR WHICH RIC SIZE DIFFERS FROM THE ESTIMATED RIC SIZE BY MORE THAN 60 % ARE CONSIDERED TO HAVE INTERFERENCES, AND ARE NOT USED FOR QUANTITATION.

#	LIB	LIB#	RIC SIZE	ESTIMATED RIC SIZE	INTERFERENCE
1	S1	1	161617.	150058.	
2	S2	1	207639.	137946.	
3	S3	1	217468.	108036.	*
4	S4	1	197052.	130132.	
5	S5	1	138068.	84030.	*
6	S6	1	120769.	90326.	

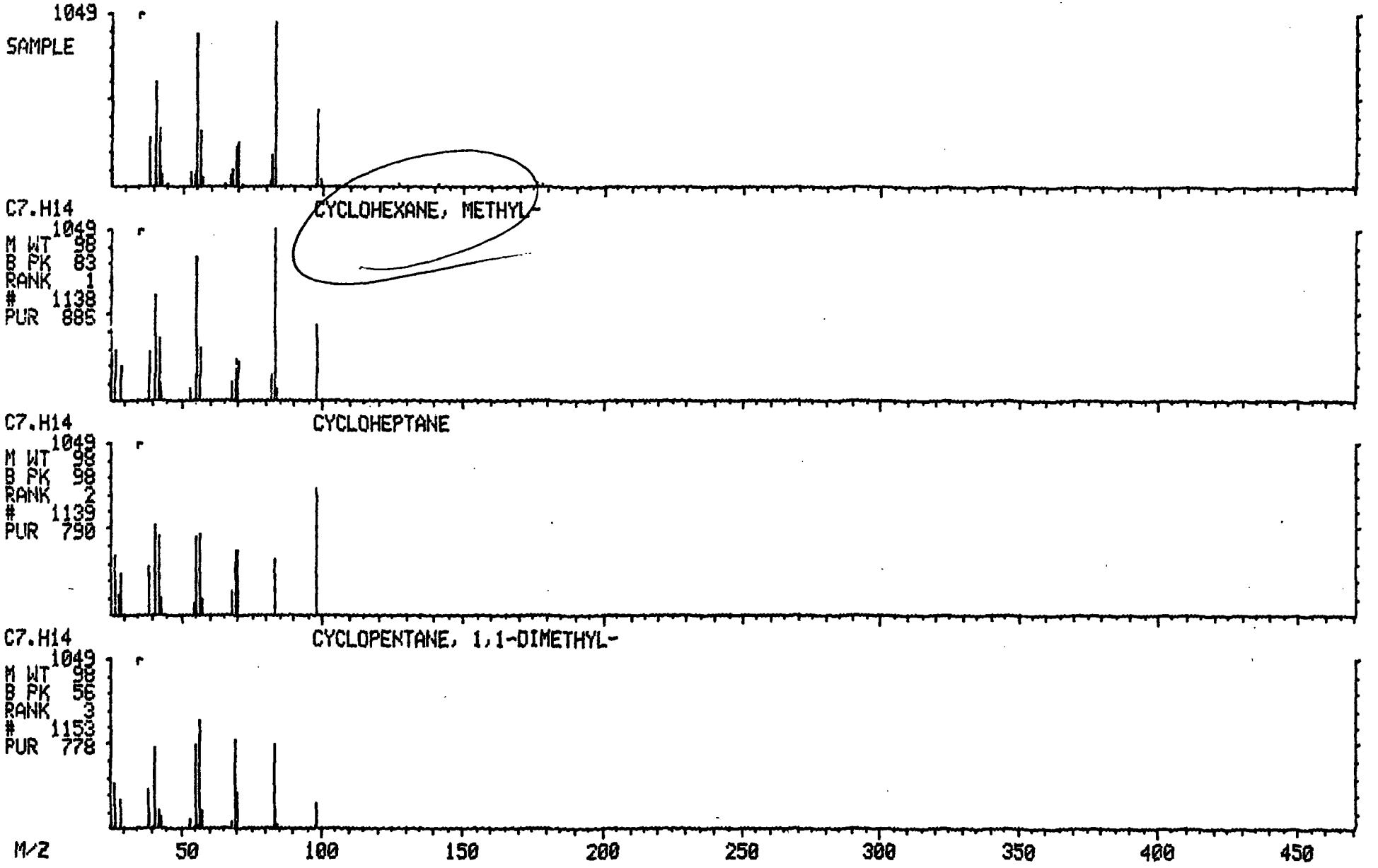
SIZE = AREA

00464

LIBRARY SEARCH
06/01/88 17:08:00 + 3:57
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R366 # 316
CALI: 053188CR # 4

BASE M/Z: 83
RIC: 12015.

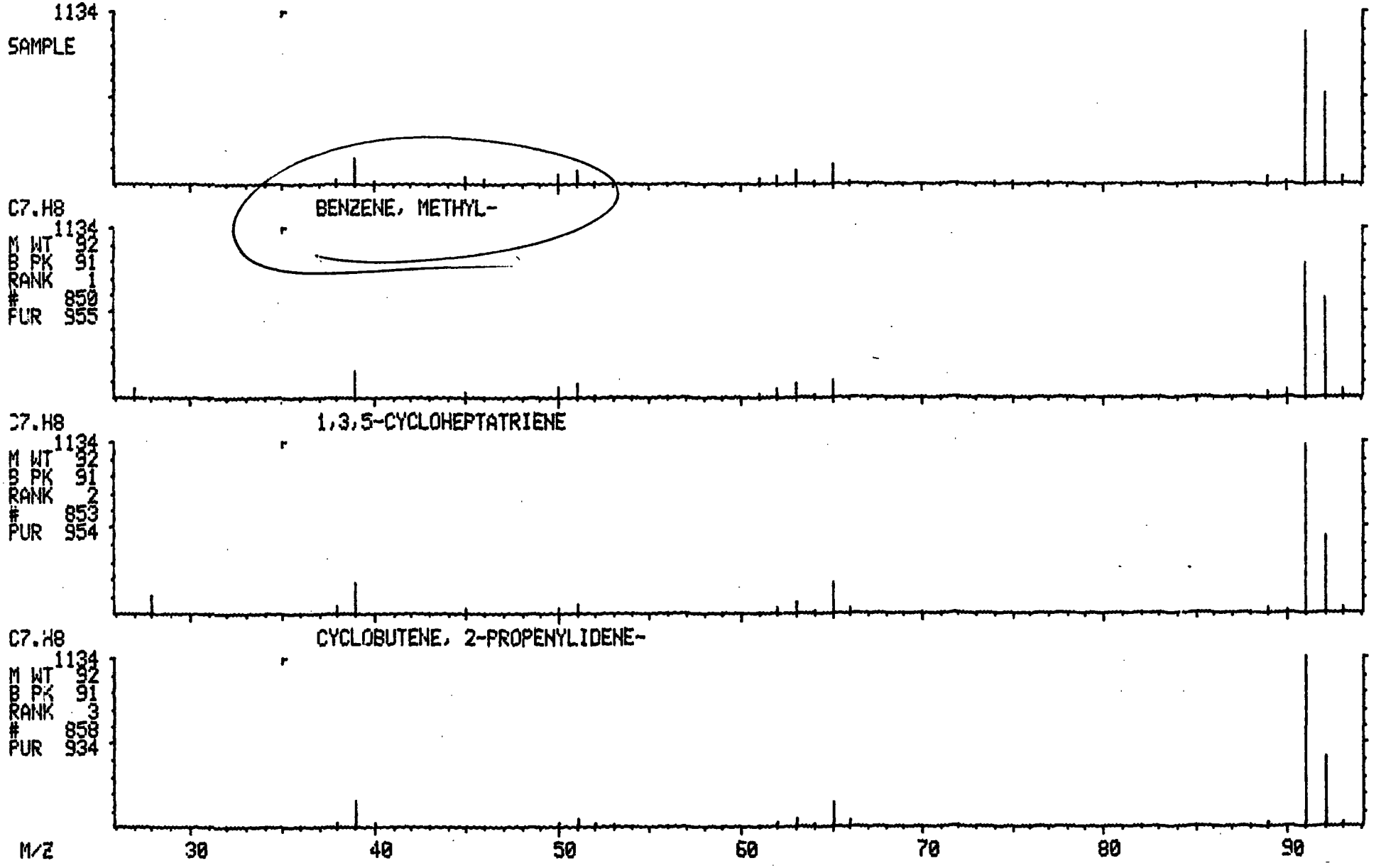


00465

LIBRARY SEARCH
06/01/88 17:08:00 + 4:37
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R966 # 370
CALI: 053188CR # 4

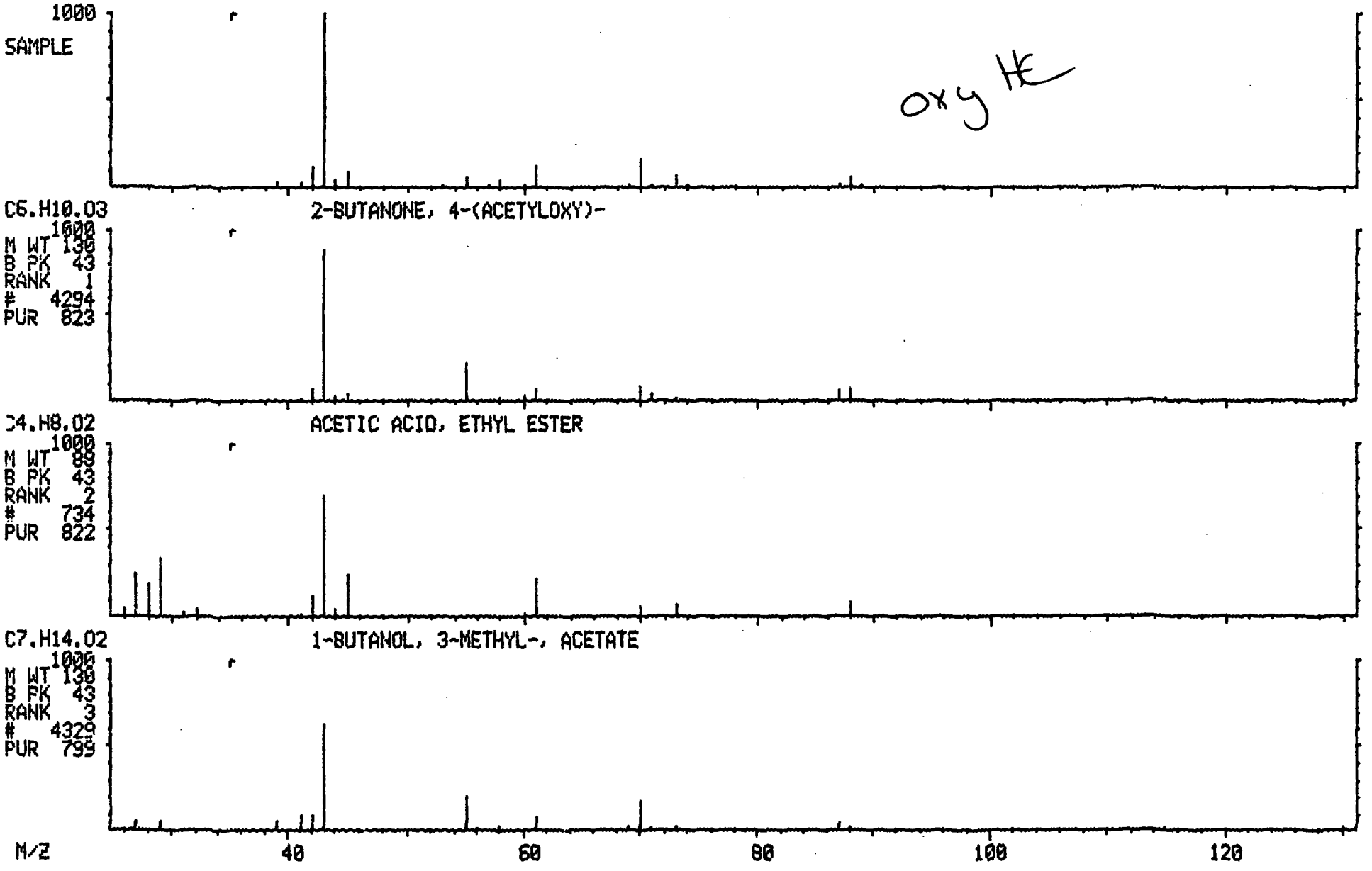
BASE M/Z: 91
RIC: 8927.



LIBRARY SEARCH
06/01/88 17:08:00 + 4:55
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R966 # 394
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 16383.

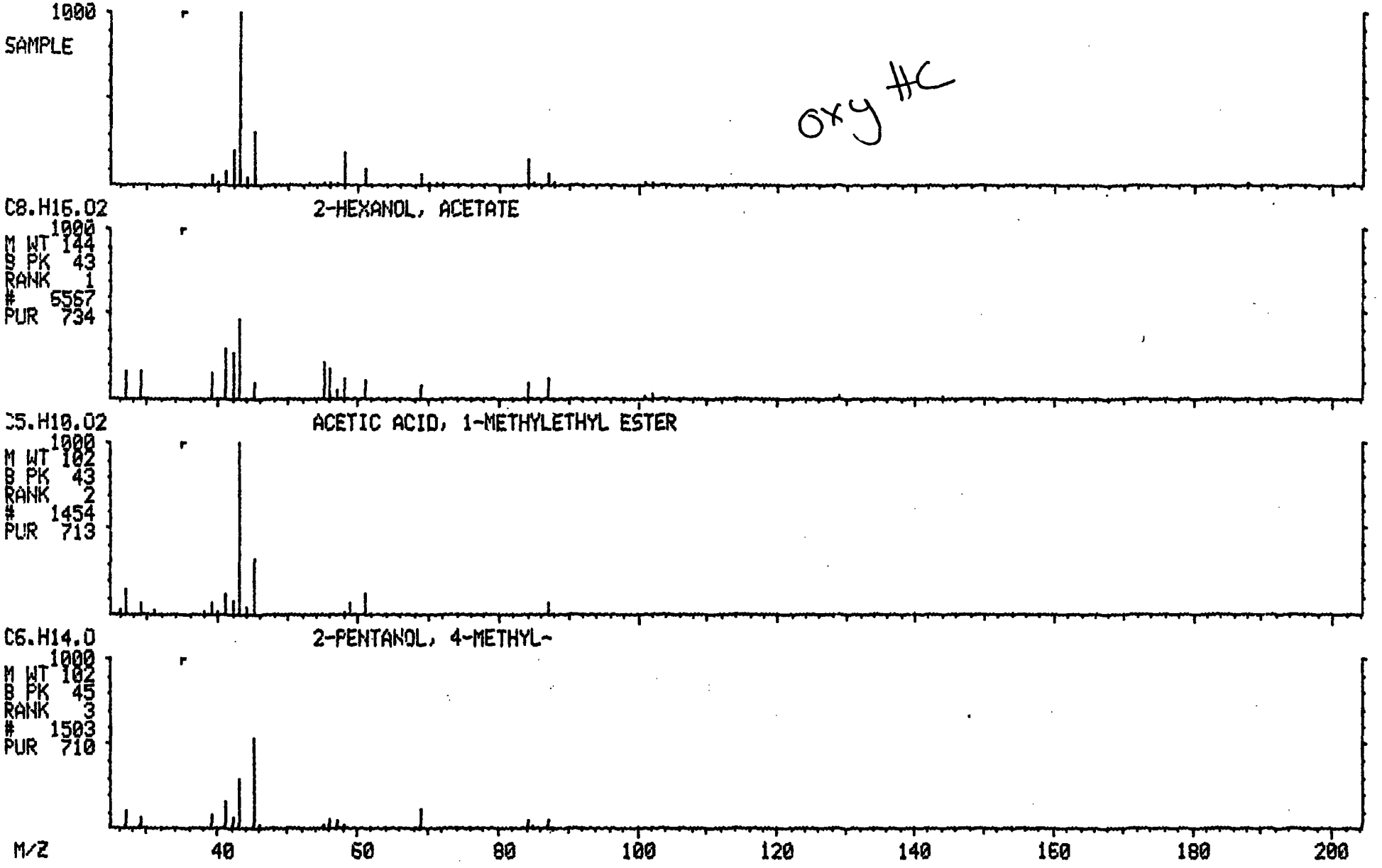


004467

LIBRARY SEARCH
06/01/88 17:08:00 + 5:27
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R966 # 436
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 9519.

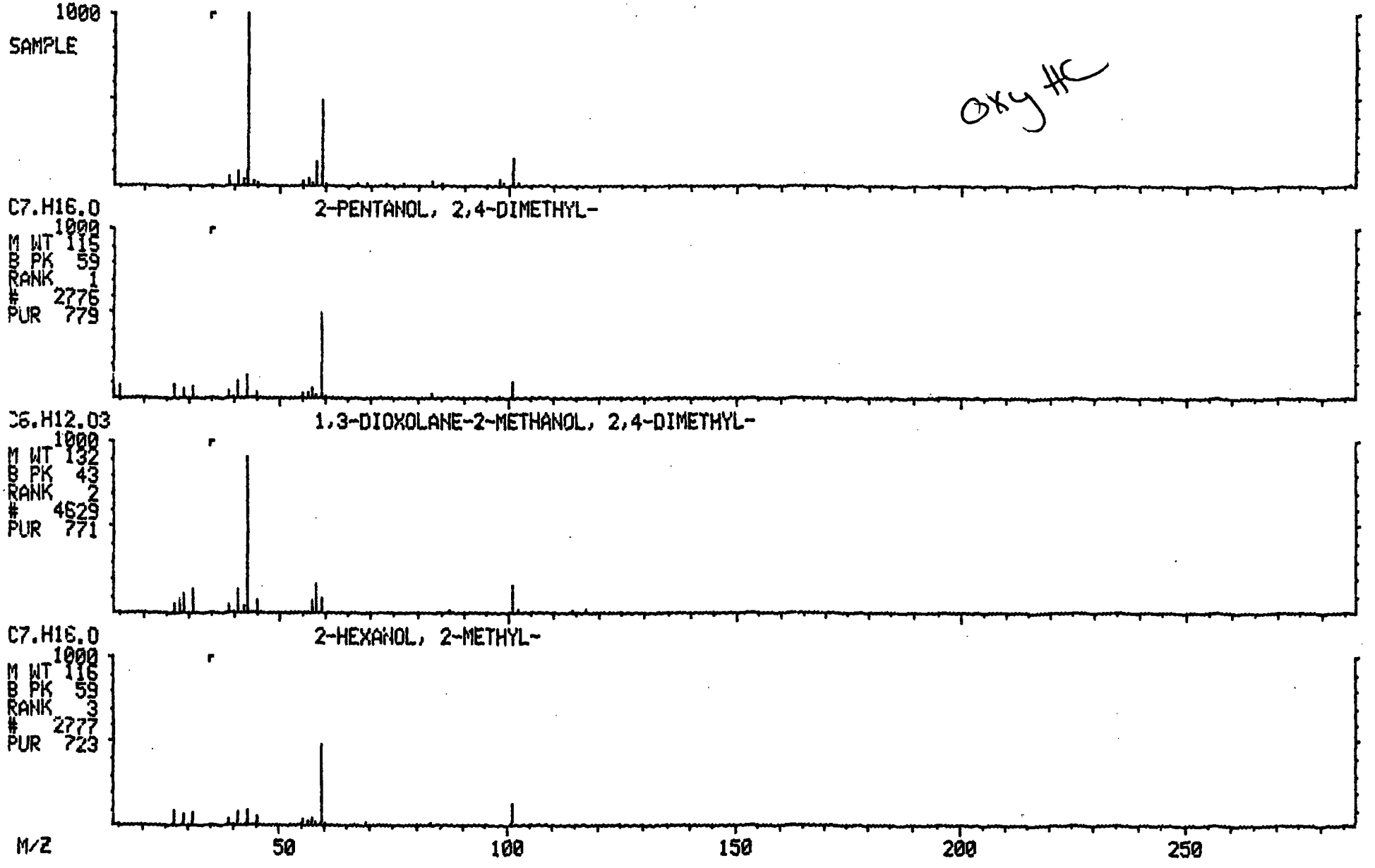


00468

LIBRARY SEARCH
06/01/88 17:08:00 + 5:52
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R966 # 470
CALI: 053188CR # 4

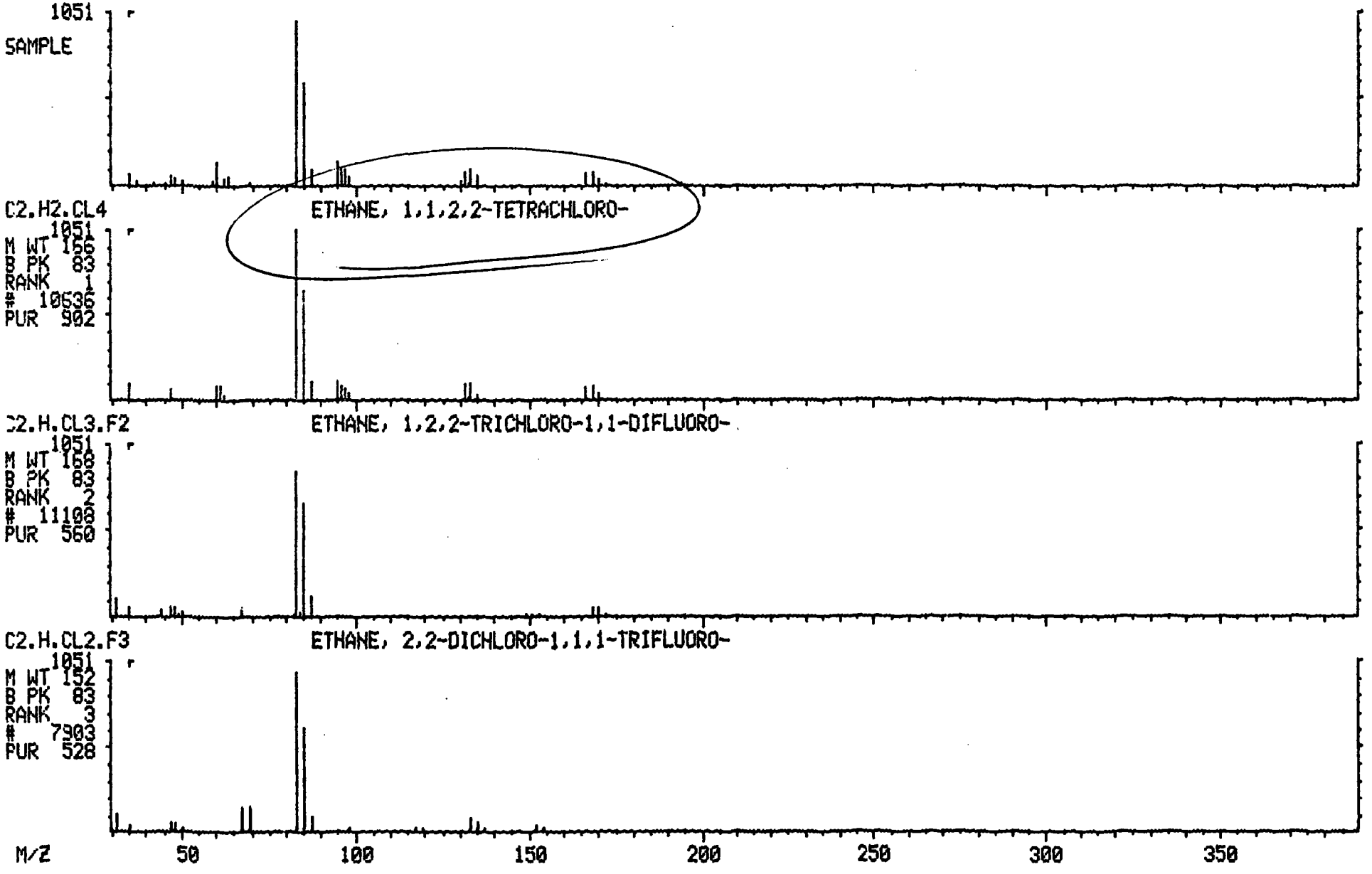
BASE M/Z: 43
RIC: 21567.



00469

LIBRARY SEARCH
06/01/88 17:08:00 + 7:10
SAMPLE: 59436-06 BNA H2O 100Z/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

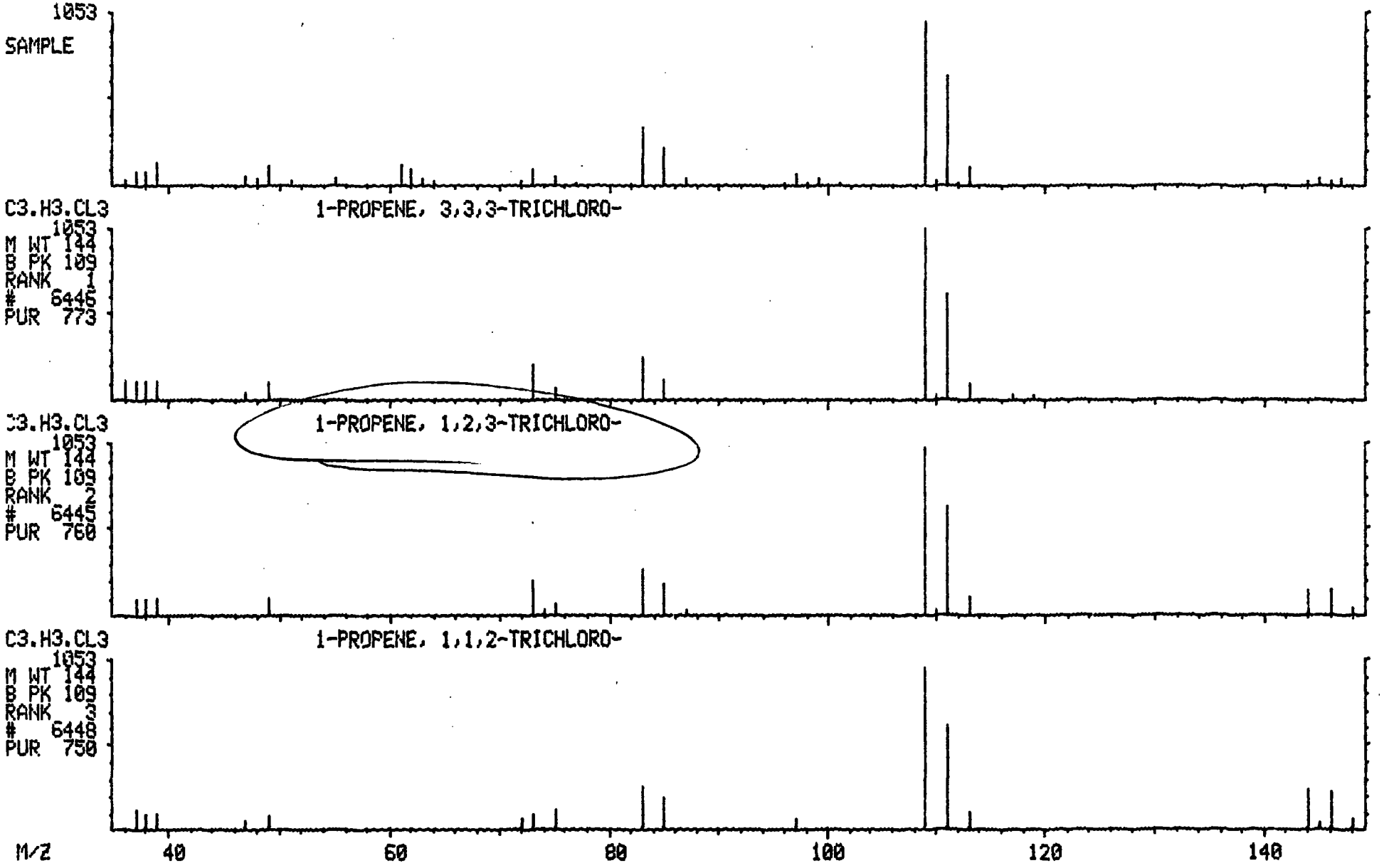
DATA: S59436R965 # 573 BASE M/Z: 83
CALI: 053188CR # 4 RIC: 3053.



000470

LIBRARY SEARCH
06/01/88 17:08:00 + 7:48
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R966 # 624 BASE M/Z: 109
CALI: 053188CR # 4 RIC: 11695.

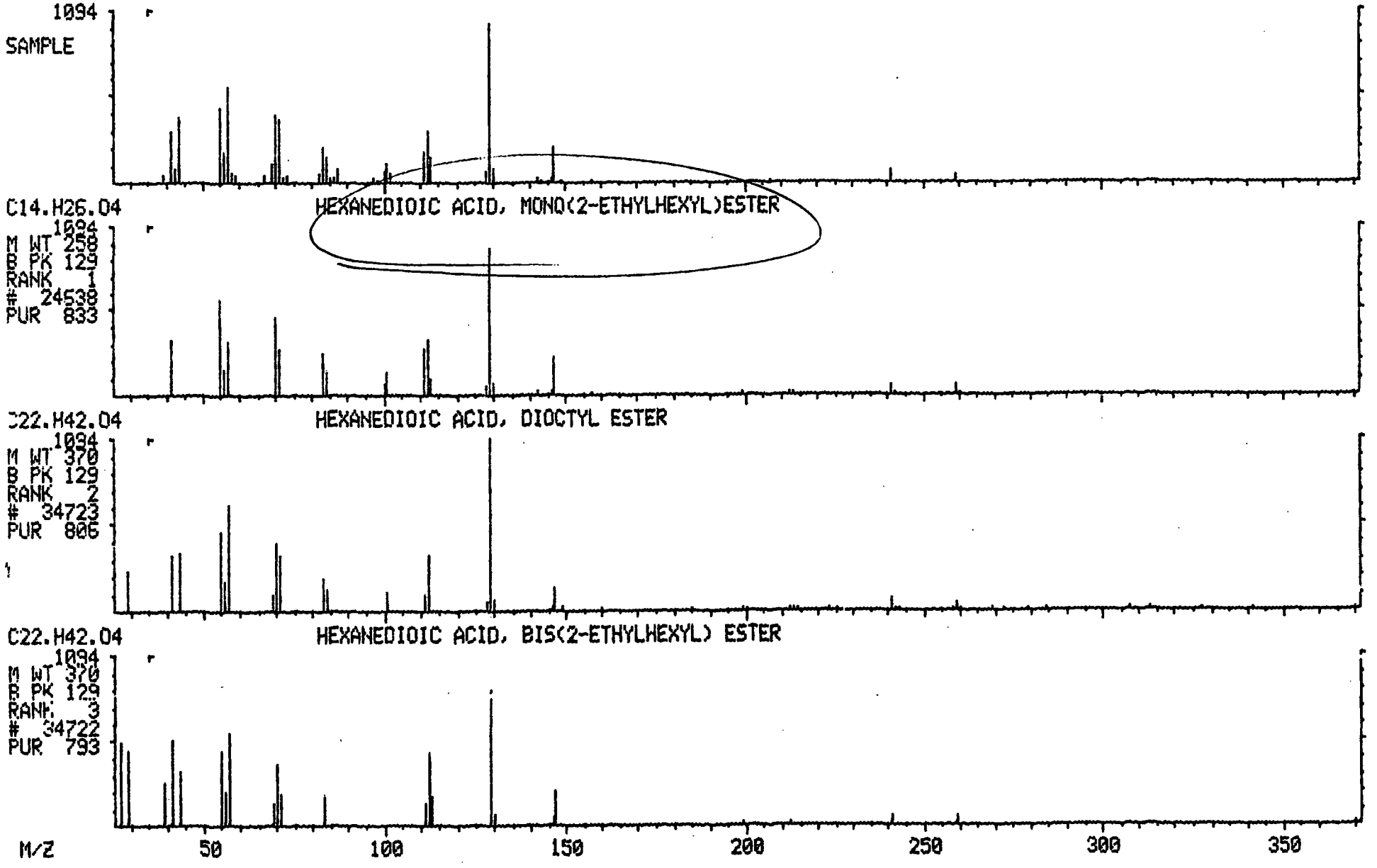


004471

LIBRARY SEARCH
06/01/88 17:08:00 + 25:59
SAMPLE: 59436-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R966 #2079
CALI: 053188CR # 4

BASE M/Z: 129
RIC: 4799.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 17:37:51
DATA FILE: S59436R966
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00472
REPORT: IS01

< ---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	13	2	1	0	IS01/TC01
3	3	1	81	14	3	1	81	IS02/TC02

26 COMPOUNDS PROCESSED, 4 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT ><							------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-715	717	717	.	2	973	.	152	717	.	1
2	S1	4	-335	338	338	.	1	989	.	84	338	.	1
3	S1	20	-337	340	.	.	.	.	.	79	.	.	.
4	S1	30	-431	434	.	.	.	.	.	93	.	.	.
5	S1	62	-496	499	.	.	.	.	.	93	.	.	.
6	S1	64	-526	528	.	.	.	.	.	107	.	.	.
7	S1	73	-558	560	.	.	.	.	.	106	.	.	.
8	S1	83	-594	596	.	.	.	.	.	107	.	.	.
9	S1	87	-615	617	.	.	.	.	.	107	.	.	.
10	S1	88	-635	637	.	.	.	.	.	107	.	.	.
11	S1	89	-643	645	.	.	.	.	.	107	.	.	.
12	S1	92	-663	665	.	.	.	.	.	107	.	.	.
13	S1	122	-700	702	.	.	.	.	.	107	.	.	.
14	S2	1	-954	956	955	-1	1	996	.	136	955	.	1
15	S3	1	-1311	1313	1313	.	1	993	.	164	1313	.	1
16	S1	137	-731	733	.	.	.	.	.	106	.	.	.
17	S1	142	-745	747	.	.	.	.	.	106	.	.	.
18	S1	187	-799	801	.	.	.	.	.	108	.	.	.
19	S1	202	-822	824	.	.	.	.	.	106	.	.	.
20	S1	203	-827	829	.	.	.	.	.	106	.	.	.
21	S1	204	-847	849	.	.	.	.	.	122	.	.	.
22	S2	27	-898	900	.	.	.	.	.	107	.	.	.
23	S2	37	-922	924	.	.	.	.	.	107	.	.	.
24	S2	47	-937	939	.	.	.	.	.	107	.	.	.
25	S2	57	-955	957	.	.	.	.	.	107	956	.	1
26	S2	150	-1118	1120	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59436R966

Data: S59436R966.TI
06/01/88 17:08:00
Sample: 59436-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
1	CI30 1,4-DICHLOROBENZENE-D4	152	IS1# 01	3855-82-1
2	PYRIDINE-D5	84	S1# 04	
3	PYRIDINE	79	S1# 20	110-86-1
4	2-PICOLINE	93	S1# 30	109-06-8
5	3 & 4-PICOLINE	93	S1# 62	
6	2,6-LUTIDINE	107	S1# 64	
7	2-ETHYL PYRIDINE	106	S1# 73	
8	2,4 & 2,5-LUTIDINE	107	S1# 83	
9	2,3-LUTIDINE	107	S1# 87	
10	3-ETHYL PYRIDINE	107	S1# 88	
11	4-ETHYL PYRIDINE	107	S1# 89	
12	3,5-LUTIDINE	107	S1# 92	
13	3,4-LUTIDINE	107	S1#122	
14	CI40 NAPHTHALENE-D8	136	IS2# 01	1146-65-2
15	CI50 ACENAPHTHENE-D10	164	IS3# 01	15067-26-2
16	2-METHYL-5-ETHYL PYRIDINE	106	S1#137	
17	2-METHYL-3-ETHYL PYRIDINE	106	S1#142	
18	M AND P CRESOLS	108	S2#187	
19	3-ETHYL-4-METHYL PYRIDINE	106	S1#202	
20	3-ETHYL-5-METHYL PYRIDINE	106	S1#203	
21	2,6-DIMETHYL PHENOL	122	S1#204	
22	2,5-DIMETHYL PHENOL	107	S2# 27	
23	3,5-DIMETHYL PHENOL	107	S2# 37	
24	2,3-DIMETHYL PHENOL	107	S2# 47	
25	3,4-DIMETHYL PHENOL	107	S2# 57	
26	1-METHYLNAPHTHALENE	142	S2#150	90-12-0

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	717	8:58	1	1.000	A BB	24533.	40.000 UG/ML	28.56
2	84	338	4:13	1	0.471	A BB	26926.	19.654 UG/ML	14.03
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	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	136	955	11:56	14	1.000	A BB	93660.	40.000 UG/ML	28.56
15	164	1313	16:25	15	1.000	A BV	43106.	40.000 UG/ML	28.56
16	NOT FOUND								
17	NOT FOUND								

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	107	956	11:57	1	1.333	A BB	506.	0.443 UG/ML	0.32
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:11	1.01	0.468	1.01	19.65	50.00	0.878	2.234	0.39
3	4:13		0.471						
4	5:23		0.602						
5	6:12		0.693						
6	6:34		0.735						
7	6:58		0.779						
8	7:25		0.830						
9	7:41		0.859						
10	7:56		0.887						
11	8:02		0.898						
12	8:17		0.926						
13	8:45		0.978						
14	11:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	16:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	9:08		1.021						
17	9:19		1.041						
18	9:59		1.116						
19	10:16		1.148						
20	10:20		1.155						
21	10:35		1.183						
22	11:13		0.940						
23	11:31		0.965						
24	11:43		0.981						
25	11:56	1.00	1.334	1.00	0.44	50.00	0.017	1.861	0.01
26	13:58		1.171						

TCA FINISHED, 4 FOUND
FINISHED AT: 6/03/88 17:40:35

RF 2.Ø3
SU 2.ØØ

RMAL QUANTITATION SUMMARY FILE: S59436R966
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

00475

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	717	1	24533.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	955	2	93660.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1313	3	43106.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	338	1	26926.	0.878	19.654
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93		1	NOT FOUND		
7	S1# 62	3 & 4-PICOLINE	93		1	NOT FOUND		
8	S1# 64	2,6-LUTIDINE	107		1	NOT FOUND		
9	S1# 73	2-ETHYL PYRIDINE	106		1	NOT FOUND		
10	S1# 83	2,4 & 2,5-LUTIDINE	107		1	NOT FOUND		
11	S1# 87	2,3-LUTIDINE	107		1	NOT FOUND		
12	S1# 88	3-ETHYL PYRIDINE	107		1	NOT FOUND		
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107		1	NOT FOUND		
15	S1#122	3,4-LUTIDINE	107		1	NOT FOUND		
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106		1	NOT FOUND		
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106		1	NOT FOUND		
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106		1	NOT FOUND		
20	S1#203	3-ETHYL-5-METHYL PYRIDIN	106		1	NOT FOUND		
21	S1#204	2,6-DIMETHYL PHENOL	122		1	NOT FOUND		
22	S2# 27	2,5-DIMETHYL PHENOL	107		2	NOT FOUND		
23	S2# 37	3,5-DIMETHYL PHENOL	107		2	NOT FOUND		
24	S2# 47	2,3-DIMETHYL PHENOL	107		2	NOT FOUND		
25	S2# 57	3,4-DIMETHYL PHENOL	107		1	NOT FOUND		
26	S2#150	1-METHYLNAPHTHALENE	142		2	NOT FOUND		

RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: D: S59436X823. STARTED : 6/03/88 11:53:43

00476

6/2/88 22:39:47 SCAN 1 OF 3900 $RF = \frac{ng}{ml} \times \frac{0.5ml}{3.75L} = 0.133 \frac{ng}{L}$

Acquisition started

Acquire Run 2: S59436X823 ACQUIRING
06/02/88 22:39:00 + 0:03 Free sectors: 22887 Scan: 7 of 3900
Sample: 59436-06 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc: PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc: PA GC elapsed time : 0: 3 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: P1 Mass intervals: 3
Scan time: 0.500 s Samp. int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	225.500	226.500	0.105	1	100	0	1	1	Pos
2	227.500	228.500	0.105	1	100	0	1	1	Pos
3	239.500	240.500	0.105	1	100	0	1	1	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

6/2/88 23:08:12 SCAN 3407 OF 3900

MID scan Desc: P2 Mass intervals: 3
Scan time: 0.500 s Samp. Int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

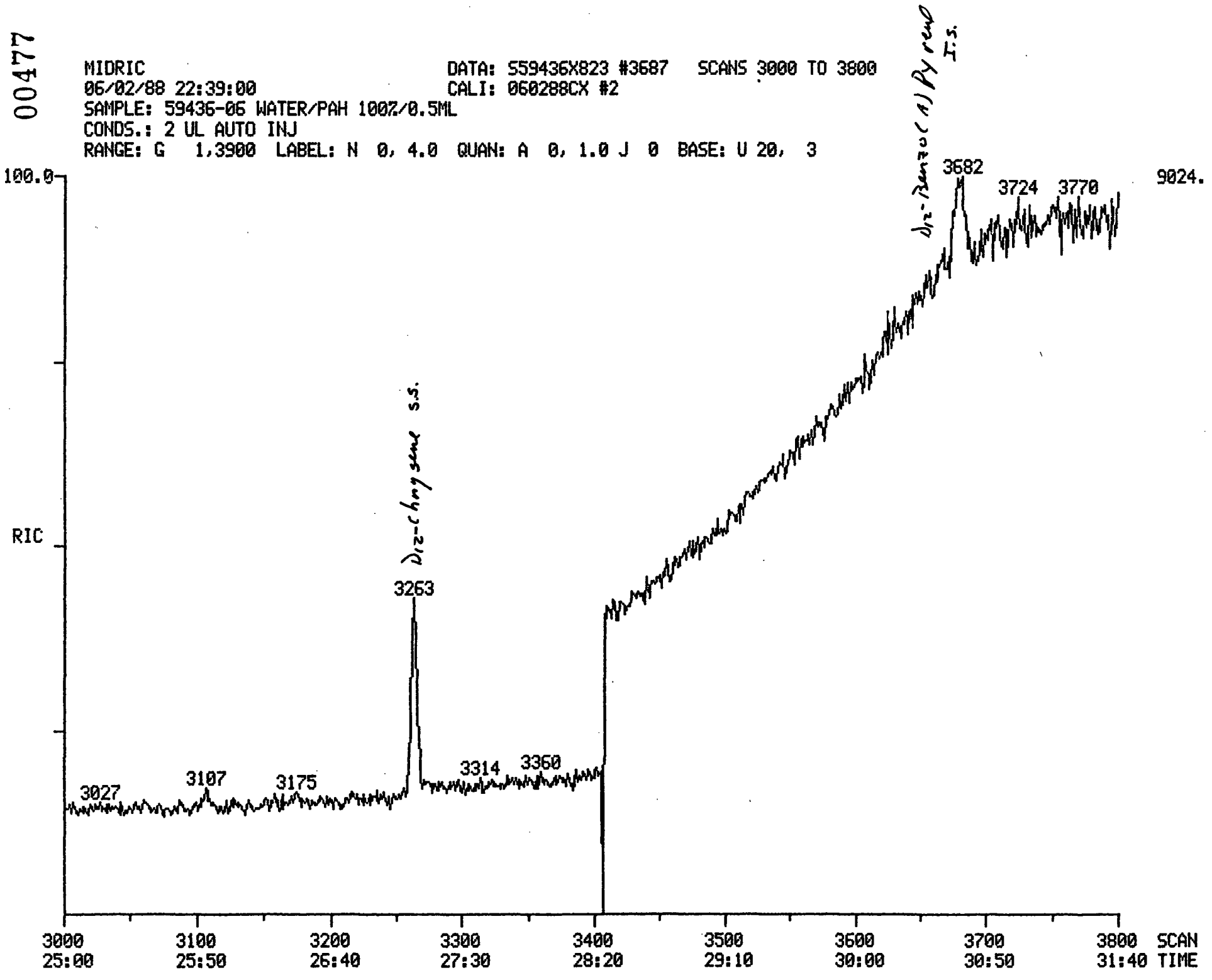
6/2/88 23:12:22
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00477

MIDRIC
06/02/88 22:39:00
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436X823 #3687 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X823

00478

Data: S59436X823.TI
06/02/88 22:39:00
Sample: 59436-06 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	228 PH# 03
5	BENZO(A)ANTHRACENE	226 PH# 04
6	CHRYSENE	228 PH# 05
7	CHRYSENE	226 PH# 06
8	BENZO(B)FLUORANTHENE	252 PH# 07
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(K)FLUORANTHENE	252 PH# 09
11	BENZO(K)FLUORANTHENE	250 PH# 10
12	BENZO(J)FLUORANTHENE	252 PH# 11
13	BENZO(J)FLUORANTHENE	250 PH# 12
14	BENZO(J)FLUORANTHENE	250 PH# 12
15	BENZO(A)PYRENE	252 PH# 13
16	BENZO(A)PYRENE	250 PH# 14

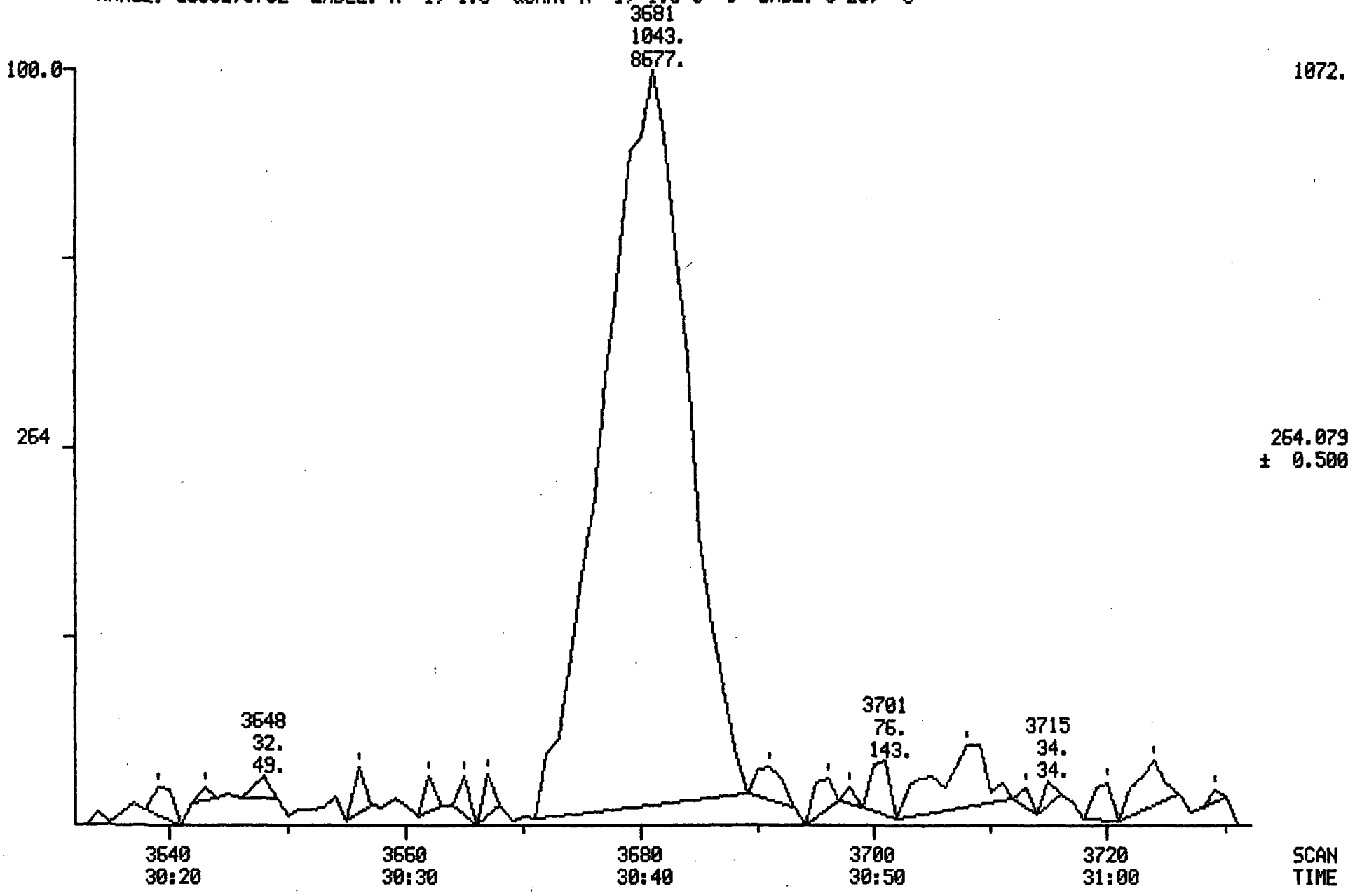
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3681	30:40	1	1.000	A BB	8677. 69%	80.000	NG/ML	40.32
2	240	3263	27:11	1	0.886	A BB	12433.	74.698	NG/ML	37.65
3	228	3252	27:06	1	0.883	A BB	75.	0.427	NG/ML	0.22
4	228	3255	27:07	1	0.884	A BB	82.	0.467	NG/ML	0.24
5	226	3263	27:11	1	0.886	A BB	62.	1.526	NG/ML	0.77
6	228	3273	27:16	1	0.889	A BV	364.	1.977	NG/ML	1.00
7	226	3274	27:17	1	0.889	A BB	116.	2.409	NG/ML	1.21
8	252	3598	29:59	1	0.977	A BV	725.	3.981	NG/ML	2.01
9	250	3595	29:57	1	0.977	A BB	202.	4.597	NG/ML	2.32
10	252	3598	29:59	1	0.977	A BV	725.	3.981	NG/ML	2.01
11	250	3595	29:57	1	0.977	A BB	202.	4.597	NG/ML	2.32
12	252	3614	30:07	1	0.982	A BV	988.	6.089	NG/ML	3.07
13	250	3614	30:07	1	0.982	A BB	152.	4.240	NG/ML	2.14
14	250	3616	30:08	1	0.982	A BB	162.	4.519	NG/ML	2.28
15	252	3691	30:45	1	1.003	A BB	304.	2.016	NG/ML	1.02
16	250	3685	30:42	1	1.001	A BB	148.	2.876	NG/ML	1.45

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:41	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:11	1.00	0.886	1.00	74.70	80.00	1.433	1.535	0.93
3	27:08	1.00	0.885	1.00	0.43	80.00	0.009	1.619	0.01
4	27:08	1.00	0.885	1.00	0.47	80.00	0.009	1.619	0.01
5	27:08	1.00	0.885	1.00	1.53	80.00	0.007	0.375	0.02
6	27:15	1.00	0.888	1.00	1.98	80.00	0.042	1.696	0.02
7	27:15	1.00	0.888	1.00	2.41	80.00	0.013	0.446	0.03

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	29:56	1.00	0.976	1.00	3.98	80.00	0.084	1.680	0.05
9	29:56	1.00	0.976	1.00	4.60	80.00	0.023	0.405	0.06
10	29:59	1.00	0.977	1.00	3.98	80.00	0.084	1.680	0.05
11	29:59	1.00	0.977	1.00	4.60	80.00	0.023	0.405	0.06
12	29:41	1.01	0.982	1.00	6.09	80.00	0.114	1.496	0.08
13	29:41	1.01	0.982	1.00	4.24	80.00	0.018	0.330	0.05
14	29:41	1.02	0.982	1.00	4.52	80.00	0.019	0.330	0.06
15	30:44	1.00	1.002	1.00	2.02	80.00	0.035	1.390	0.03
16	30:44	1.00	1.002	1.00	2.88	80.00	0.017	0.474	0.04

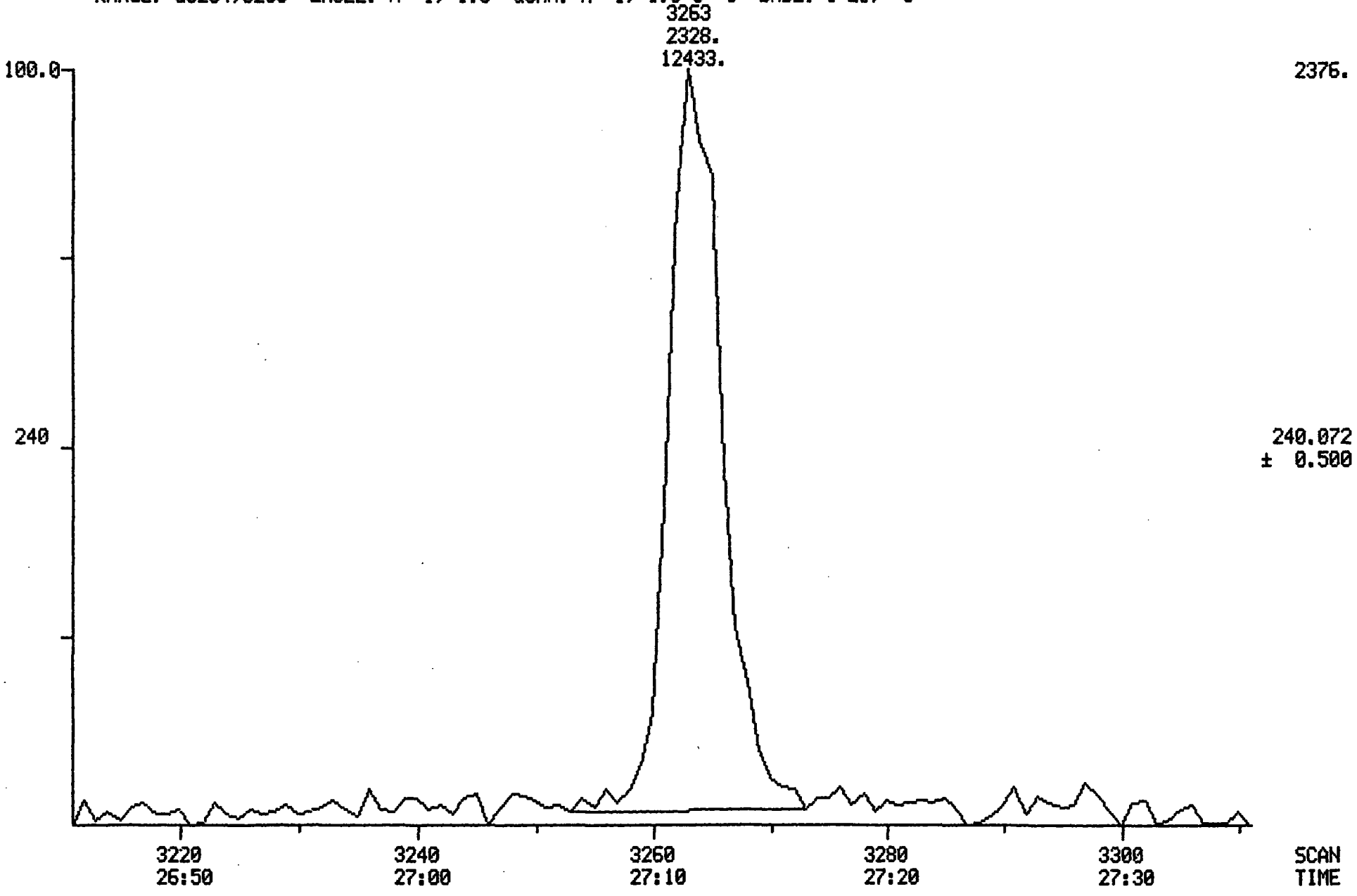
00480

MIDMASS CHROMATOGRAM DATA: S59436X823 #3682 SCANS 3632 TO 3732
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3632,3732 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



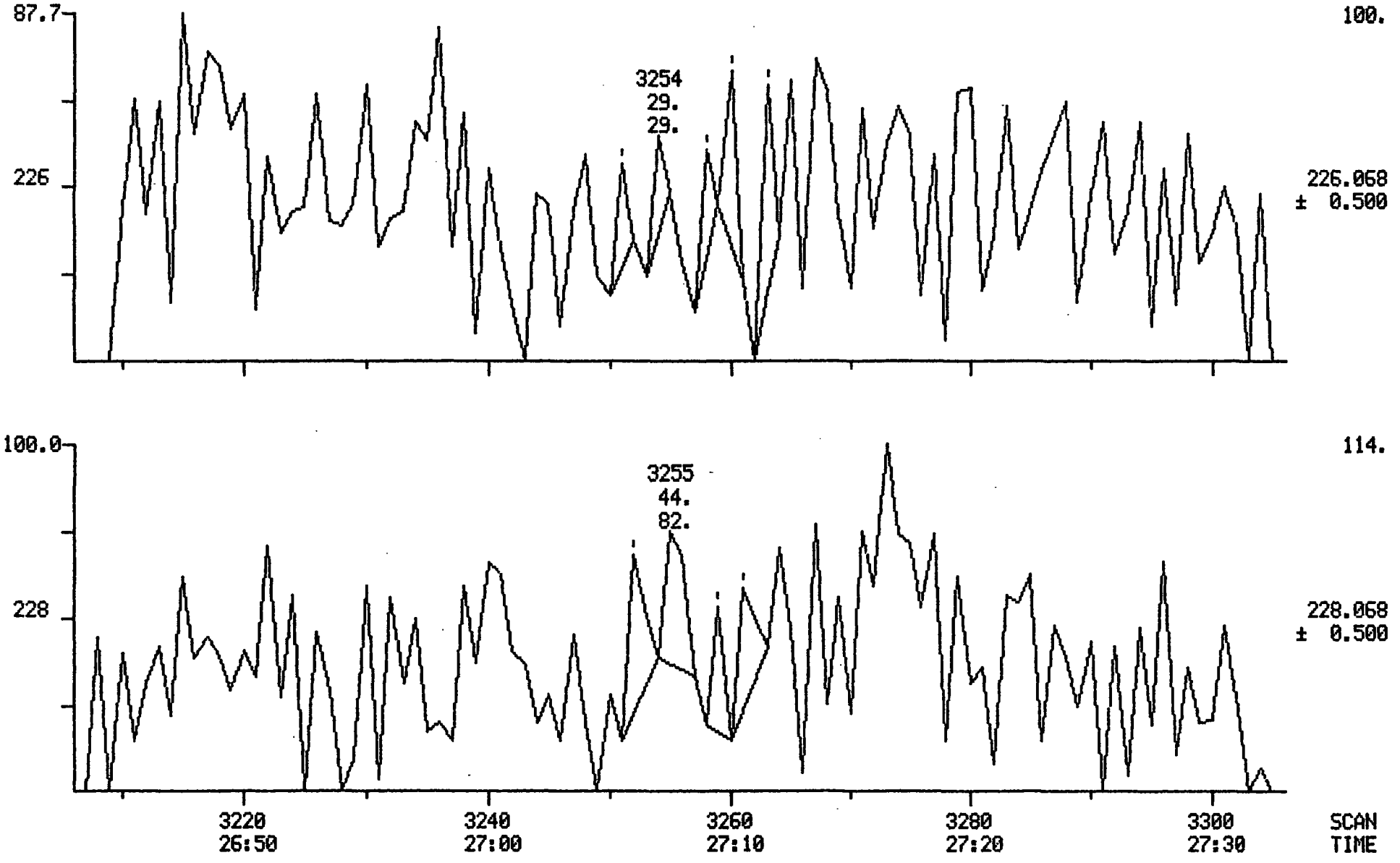
00481

MIDMASS CHROMATOGRAM DATA: S59436X823 #3261 SCANS 3211 TO 3311
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3254,3268 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



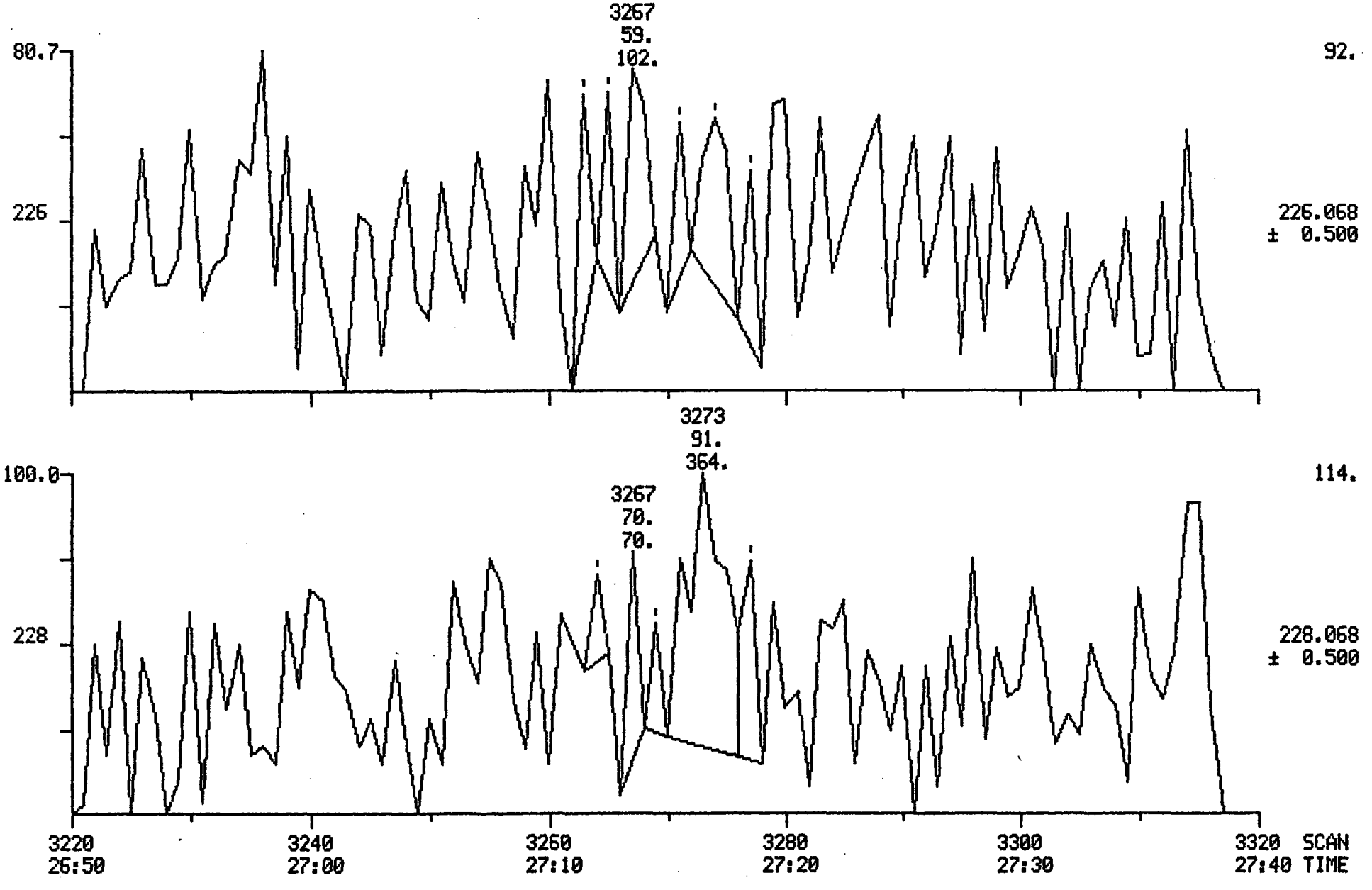
00482

MIDMASS CHROMATOGRAMS DATA: S59436X823 #3256 SCANS 3206 TO 3306
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3249,3253 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



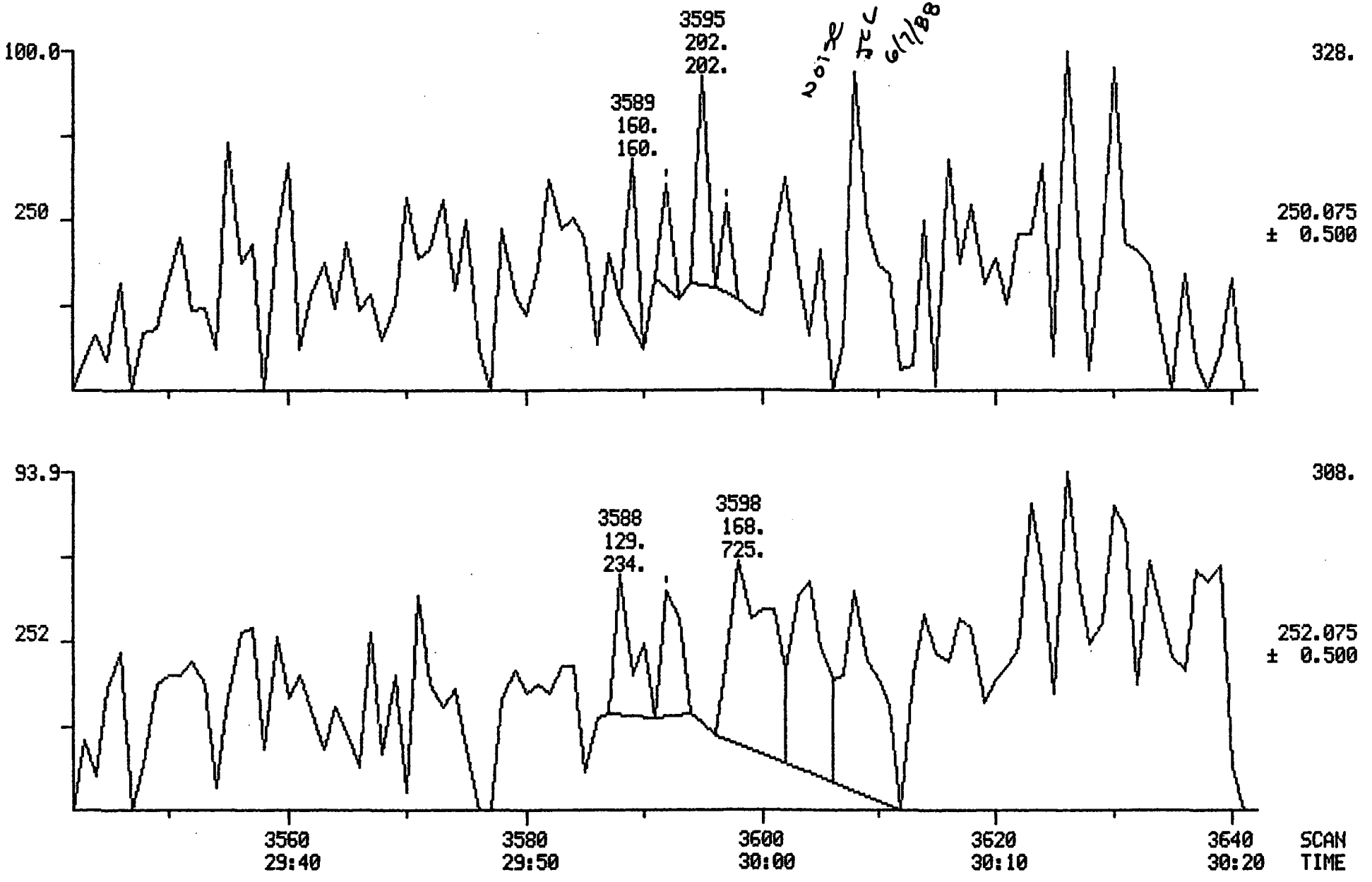
00483

MIDMASS CHROMATOGRAMS DATA: S59436X823 #3270 SCANS 3220 TO 3320
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3263,3277 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



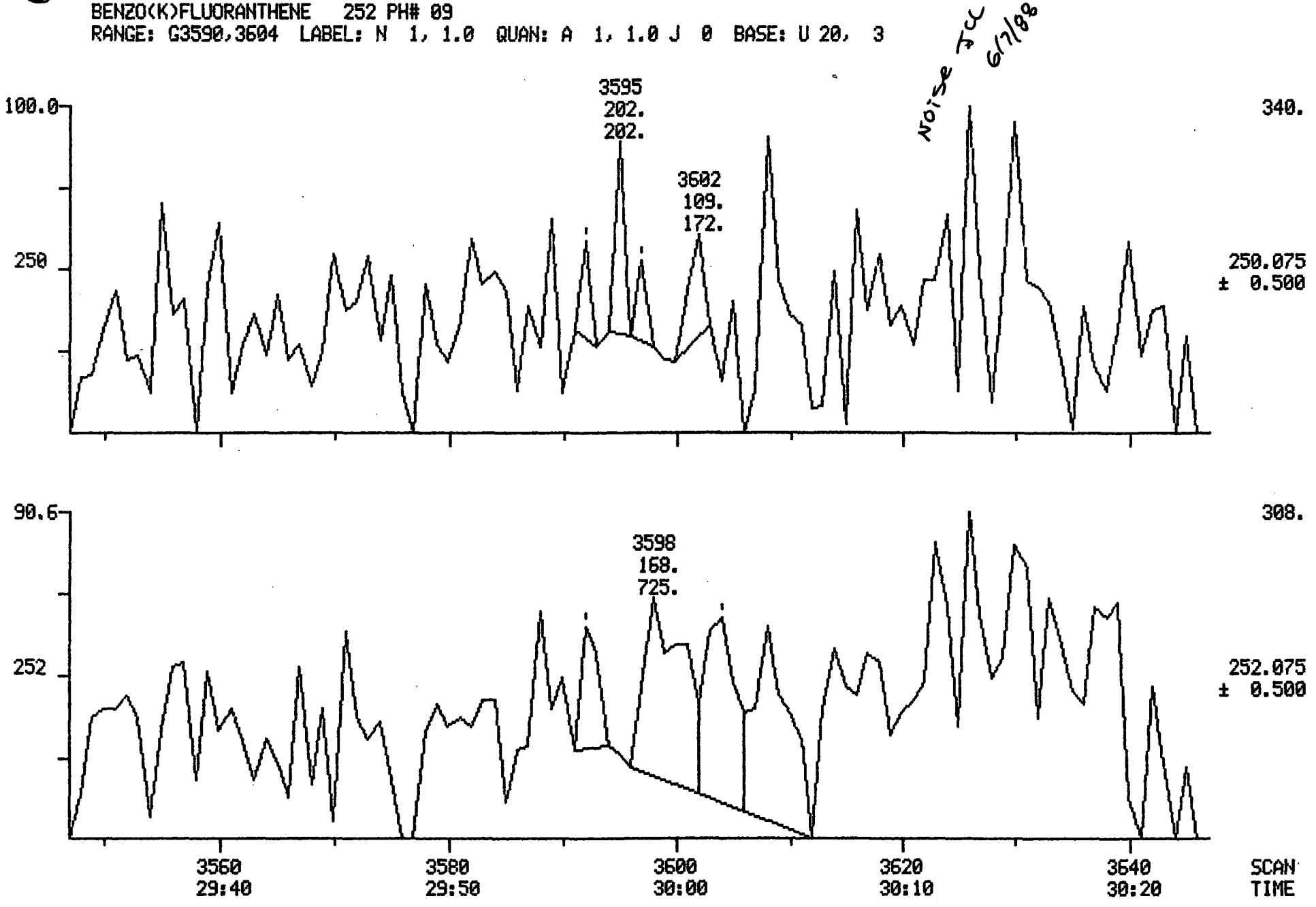
00484

MIDMASS CHROMATOGRAMS DATA: S59436X823 #3592 SCANS 3542 TO 3642
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3585,3599 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3

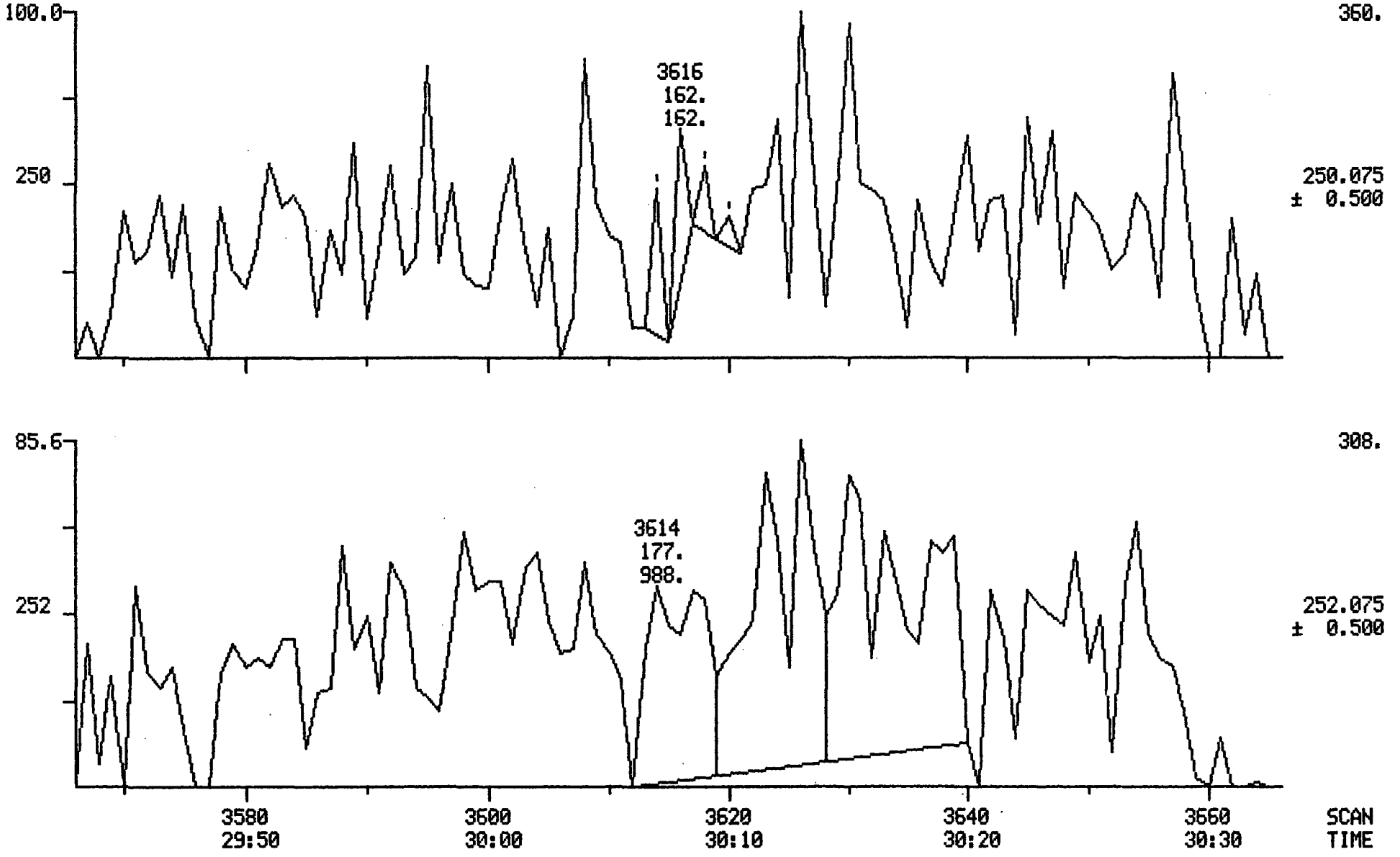


00485

MIDMASS CHROMATOGRAMS DATA: S59436X823 #3597 SCANS 3547 TO 3647
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3590,3604 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3

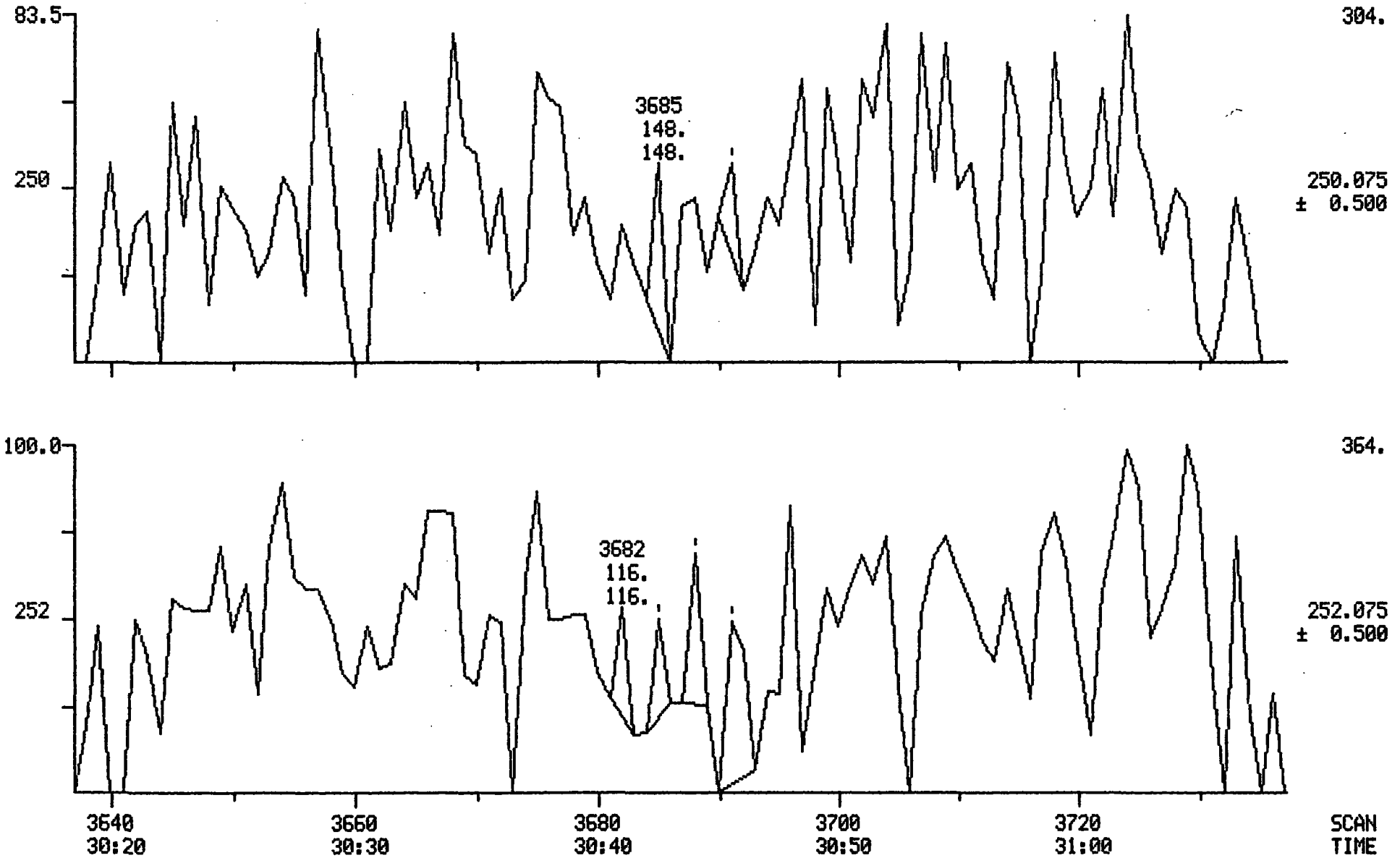


MIDMASS CHROMATOGRAMS DATA: S59436X823 #3616 SCANS 3566 TO 3666
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3609,3623 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00487

MIDMASS CHROMATOGRAMS DATA: 559436X823 #3687 SCANS 3637 TO 3737
06/02/88 22:39:00 CALI: 060288CX #2
SAMPLE: 59436-06 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3680,3694 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X823

Data: S59436X823.TI
06/02/88 22:39:00
Sample: 59436-06 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	226 PH# 04
4	CHRYSENE	228 PH# 05
5	CHRYSENE	226 PH# 06
6	BENZO(B)FLUORANTHENE	252 PH# 07
7	BENZO(B)FLUORANTHENE	250 PH# 08
8	BENZO(K)FLUORANTHENE	252 PH# 09
9	BENZO(K)FLUORANTHENE	250 PH# 10
10	BENZO(J)FLUORANTHENE	252 PH# 11
11	BENZO(J)FLUORANTHENE	250 PH# 12
12	BENZO(J)FLUORANTHENE	250 PH# 12
13	BENZO(A)PYRENE	252 PH# 13
14	BENZO(A)PYRENE	250 PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3681	30:40	1	1.000	A BB	8677.	80.000	NG/ML	40.51
2	240	3263	27:11	1	0.886	A BB	12433.	74.698	NG/ML	37.82
3	226	3263	27:11	1	0.886	A BB	62.	1.526	NG/ML	0.77
4	228	3273	27:16	1	0.889	A BV	364.	1.977	NG/ML	1.00
5	226	3274	27:17	1	0.889	A BB	116.	2.409	NG/ML	1.22
6	252	3598	29:59	1	0.977	A BV	725.	3.981	NG/ML	2.02
7	250	3595	29:57	1	0.977	A BB	202.	4.597	NG/ML	2.33
8	252	3598	29:59	1	0.977	A BV	725.	3.981	NG/ML	2.02
9	250	3595	29:57	1	0.977	A BB	202.	4.597	NG/ML	2.33
10	252	3614	30:07	1	0.982	A BV	988.	6.089	NG/ML	3.08
11	250	3614	30:07	1	0.982	A BB	152.	4.240	NG/ML	2.15
12	250	3616	30:08	1	0.982	A BB	162.	4.519	NG/ML	2.29
13	252	3691	30:45	1	1.003	A BB	304.	2.016	NG/ML	1.02
14	250	3685	30:42	1	1.001	A BB	148.	2.876	NG/ML	1.46

COLUMN 1: J:A3150.01
COLUMN 2: J:B3150.01

59436-06
20%

UNITS ON AMOUNT: ug/ml

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE

00489

DBC

A) $\frac{25.0}{24.0}$ (100%) = 104%

B) $\frac{22.5}{22.0}$ (100%) = 102%

DBC Recovery = 102%
No HSL Pests/PCBs detected

NA - COLUMN AVERAGE IS NOT APPLICABLE BECAUSE THE %DIFFERENCE(AMOUNTS) > 10%

RESULT FILE: [illegible] 59436-06 [illegible] [illegible]

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
047	DBC (surrogate)	26.833	26.833	6	93366	.0161	ug/ml

00490

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: [illegible] 59436-06 [illegible]

00491

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC	1.383	1.400	6	705	.0000	ug/ml
004	delta-BHC	2.450	2.467	9	3857	.0003	ug/ml
010	ENDOSULFAN-A	5.400	5.400	11	1383	.0001	ug/ml
017	ENDOSULFAN SULFATE	16.550	16.200	12	14250	.0017	ug/ml
023	AROCLOR 1016(peak 1)	1.267	1.283	5	359	.0012	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.650	7	7693	.0132	ug/ml
026	AROCLOR 1221(peak 1)	1.250	1.283	5	359	.0007	ug/ml
027	AROCLOR 1232(peak 1)	1.250	1.283	5	359	.0011	ug/ml
029	AROCLOR 1242(peak 1)	1.250	1.283	5	359	.0013	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	7	7693	.0140	ug/ml
035	AROCLOR 1254(peak 1)	5.017	4.933	10	5201	.0050	ug/ml
048	ENDRIN KETONE	22.267	22.267	13	175718	.0043	ug/ml
052	DIALLATE	1.230	1.283	5	359	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

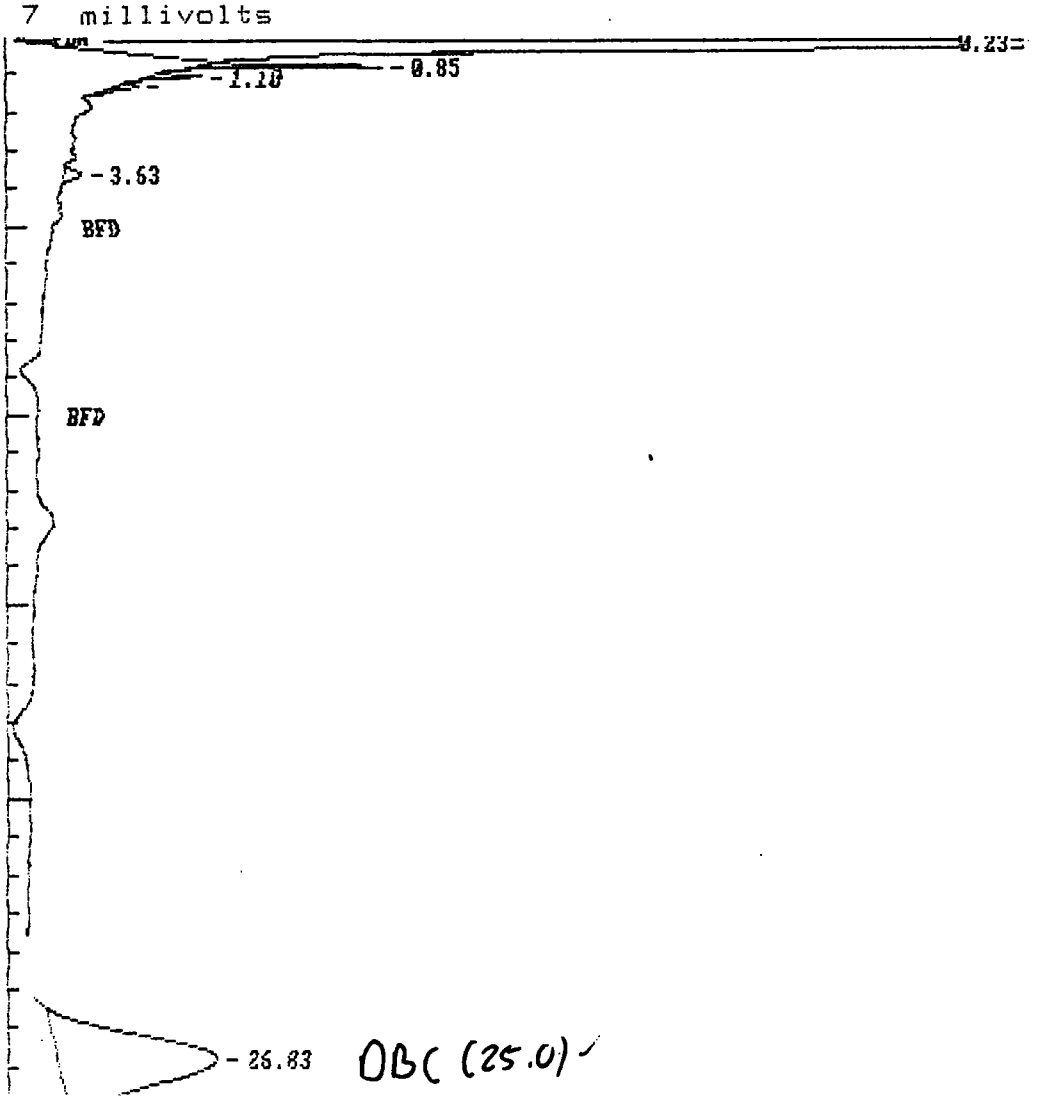
```
******************** 05-30-1988 11:45:46 Version 4.1 ********************
* Sample Name: 59436 06 20%                    Data File: J:AB12621      *
* Date: 05-06-1988 21:22:14 Method: M:ABPI                               *
* Interface: 10  Cycle#:  21   Operator SS  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HP 5890A              Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                     *
*            Detector 0: ECD                  Detector 1:               *
* Misc. Information: 4 UL INJECTION                     LPT1:        *  *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	912572	89.6942	1	216477	100.000	4.2
2	0.85	5654	0.5557	1	1301	0.620	4.3
3	1.10	2089	0.2053	1	368	0.229	5.7
4	1.37	2109	0.2073	1	182	0.231	11.6
5	3.63	1637	0.1608	1	119	0.179	13.8
6	26.83	93366	9.1767	1	1102	10.231	84.7

SS
5/11/88

Total Area: 1017426 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12621.PTS Printed on 05-08-1988 at 11:46:10
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



OBC (25.0)

AREA PERCENT REPORT

00494

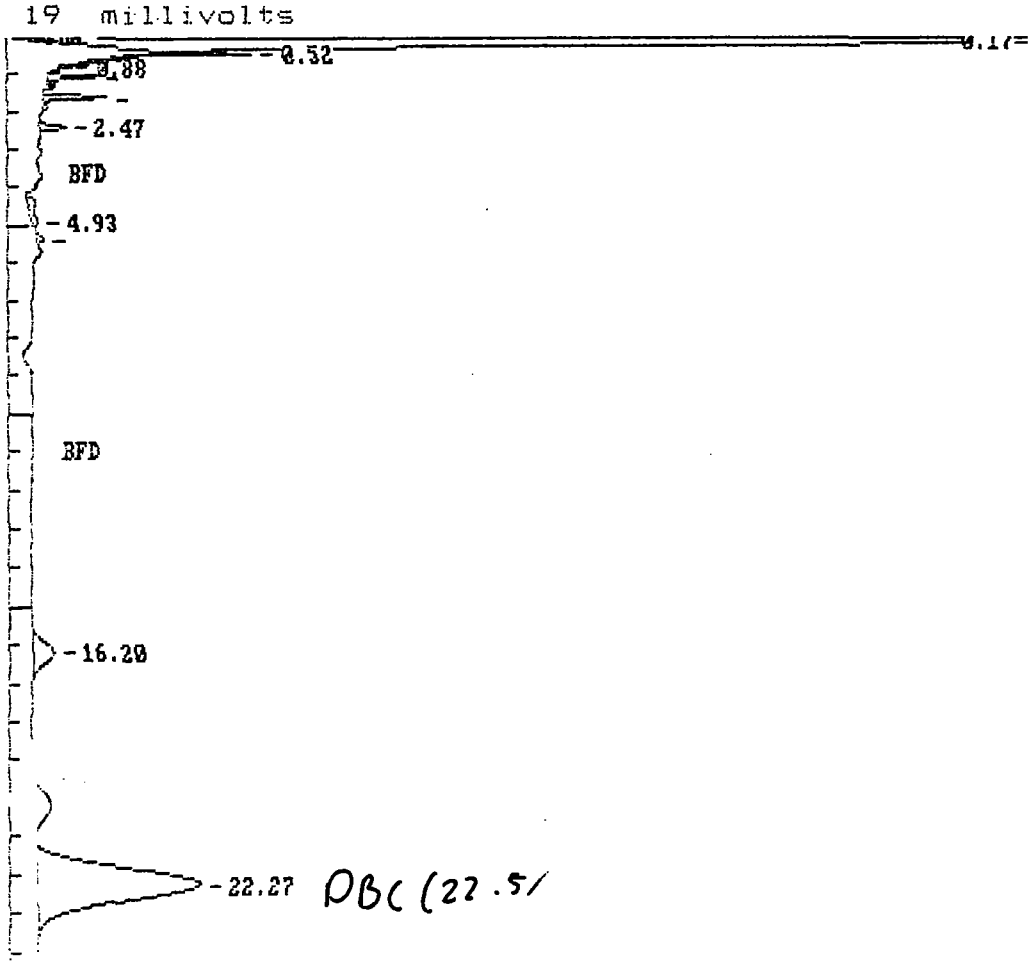
```
******************** 05-08-1988 12:19:23 Version 4.1 ********************
* Sample Name: 59436 06 20%                          Data File: J:BB12621      *
* Date: 05-06-1988 21:03:28 Method: M:BBPI                                     *
* Interface: 12  Cycle#:  21   Operator SS  Channel#: 0    Vial#: N.A.         *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100                 *
*******************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GLASS    *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                  *
* Conditions: 190 DEG ISOTHERMAL                                              *
*             Detector 0:                          Detector 1: ECD            *
* Misc. Information: 4 UL INJ                                                 *
*******************************************************************************
Starting Delay:    0.00                          Run Time:    35.00
```

SS 5/11/88

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1474977	87.0340	1	364616	100.000	4.0
2	0.52	5409	0.3192	1	1967	0.367	2.7
3	0.88	1043	0.0615	1	197	0.071	5.3
4	1.12	5185	0.3060	1	929	0.352	5.6
7	1.65	7693	0.4539	1	1195	0.522	6.4
9	2.47	3857	0.2276	1	486	0.261	7.9
10	4.93	5201	0.3069	1	108	0.353	48.3
11	5.40	1383	0.0816	1	126	0.094	11.0
12	16.20	14250	0.8408	1	376	0.966	37.9
13	22.27	175718	10.3686	1	3041	11.913	57.8

Total Area: 1694715 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12621.PTS Printed on 05-08-1988 at 12:19:47
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



ORGANICS ANALYSIS DATA SHEET
(Page 1)

00496

Sample Number : 59436-07

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-07
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59436
Contract No. : N/A
Date Sample Rec: 04/20/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	04/29/88
Conc./Dilution Factor :	1.0
pH :	7.00
Percent Moisture :	100%
Percent Moisture (Decanted) :	N/A

CAS Number		Value	ug/L	CAS Number		Value	ug/L
74-83-3	Chloromethane		10 U	79-34-5	1,1,2,2-Tetrachloroethane		5 U
74-83-9	Bromomethane		10 U	78-87-5	1,2-Dichloropropane		5 U
75-01-4	VinylChloride		10 U	10061-02-6	Trans-1,3-Dichloropropene		5 U
75-00-3	Chloroethane		10 U	79-10-6	Trichloroethene		5 U
75-09-2	MethyleneChloride	2.5	J B	124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	16	B	79-00-5	1,1,2-Trichloroethane		5 U
75-15-0	CarbonDisulfide		5 U	71-43-2	Benzene		5 U
75-35-4	1,1-Dichloroethene		5 U	10061-01-5	cis-1,3-Dichloropropene		5 U
75-34-3	1,1-Dichloroethane		5 U	110-75-8	2-Chloroethylvinylether		10 U
156-60-5	Trans-1,2-Dichloroethene		5 U	75-25-2	Bromoform		5 U
67-66-3	Chloroform		5 U	591-78-6	2-Hexanone		10 U
107-06-2	1,2-Dichloroethane		5 U	108-10-1	4-Methyl-2-Pentanone		10 U
78-93-3	2-Butanone		10 U	127-18-4	Tetrachloroethene	2.0	J
71-55-6	1,1,1-Trichloroethane	1.1	J	108-88-3	Toluene		5 U
56-23-5	CarbonTetrachloride		5 U	108-90-7	Chlorobenzene		5 U
108-05-4	VinylAcetate		10 U	100-41-4	Ethylbenzene		5 U
75-27-4	Bromodichloromethane		5 U	100-42-5	Styrene		5 U
					Total Xylenes		5 U

U - compound was not detected
J - concentration detected is less than the required detection limit
B - compound was detected in the blank
sp - compound was a spike

10/85 Rev

Form I

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-07

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1.	Unknown	VOA	37	21 B
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
15.				
16.				
17.				
18.				
19.				
20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59436

Organics Analysis Data Sheet

Sample Number
59436-07

00498

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/23/88	Separatory Funnel Extraction	No
Date Analyzed	06/01/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.02		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L	CAS Number	Compound	Value	ug/L
108-95-2	Phenol		10 U				
111-44-4	bis(-2-Chloroethyl)Ether		10 U	83-32-9	Acenaphthene		10 U
95-57-8	2-Chlorophenol		10 U	51-28-5	2,4-Dinitrophenol		51 U
541-73-1	1,3-Dichlorobenzene		10 U	100-02-7	4-Nitrophenol		51 U
106-46-7	1,4-Dichlorobenzene		10 U	132-64-9	Dibenzofuran		10 U
100-51-6	Benzyl Alcohol		10 U	121-14-2	2,4-Dinitrotoluene		10 U
95-50-1	1,2-Dichlorobenzene		10 U	606-20-2	2,6-Dinitrotoluene		10 U
95-48-7	2-Methylphenol		10 U	84-66-2	Diethylphthalate		10 U
39638-32-9	bis(2-chloroisopropyl)Ether		10 U	7005-72-3	4-Chlorophenyl-phenylether		10 U
106-44-5	4-Methylphenol		10 U	86-73-7	Fluorene		10 U
621-64-7	N-Nitro-Di-n-Propylamine		10 U	100-01-6	4-Nitroaniline		51 U
67-72-1	Hexachloroethane		10 U	534-52-1	4,6-Dinitro-2-Methylphenol		51 U
98-95-3	Nitrobenzene		10 U	86-30-6	N-Nitrosidiphenylamine (1)		10 U
78-59-1	Isophorone		10 U	101-55-3	4-Bromophenyl-phenylether		10 U
88-75-5	2-Nitrophenol		10 U	118-74-1	Hexachlorobenzene		10 U
105-67-9	2,4-Dimethylphenol		10 U	87-86-5	Pentachlorophenol		51 U
65-85-0	Benzoic Acid		51 U	85-01-8	Phenanthrene		10 U
111-91-1	bis(2-Chloroethoxy) Methane		10 U	120-12-7	Anthracene		10 U
120-83-2	2,4-Dichlorophenol		10 U	84-74-2	Di-N-Butylphthalate		10 U
120-82-1	1,2,4-Trichlorobenzene		10 U	206-44-0	Fluoranthene		10 U
91-20-3	Naphthalene		10 U	129-00-0	Pyrene		10 U
106-47-8	4-Chloroaniline		10 U	85-68-7	Butylbenzylphthalate		10 U
87-68-3	Hexachlorobutadiene		10 U	91-94-1	3,3'-Dichlorobenzidine		20 U
59-50-7	4-Chloro-3-Methylphenol		10 U	56-55-3	Benzo(a)Anthracene		10 U
91-57-6	2-Methylnaphthalene		10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	9.0	J B
77-47-4	Hexachlorocyclopentadiene		10 U	218-01-9	Chrysene		10 U
88-06-2	2,4,6-Trichlorophenol		10 U	117-84-0	Di-n-Octylphthalate	2.4	J B
95-95-4	2,4,5-Trichlorophenol		51 U	205-99-2	Benzo(b)Fluoranthene		10 U
91-58-7	2-Chloronaphthalene		10 U	207-08-9	Benzo(k)Fluoranthene		10 U
88-74-4	2-Nitroaniline		51 U	50-32-8	Benzo(a)Pyrene		10 U
131-11-4	Dimethyl Phthalate		10 U	193-39-5	Indeno(1,2,3-cd)Pyrene		10 U
208-96-8	Acenaphthylene		10 U	53-70-3	Dibenzo(a,h)Anthracene		10 U
99-09-2	3-Nitroaniline		51 U	191-24-2	Benzo(g,h,i)Perylene		10 U

(1)-Cannot be separated from diphenylamine.

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-07

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1. 108-87-2	Methyl Cyclohexane	BNA	314	9.1 B
2. 108-88-3	Methyl Benzene	BNA	369	7.6 B
3.	Oxygenated Hydrocarbon	BNA	393	12 B
4.	Oxygenated Hydrocarbon	BNA	435	6.9 B
5.	Oxygenated Hydrocarbon	BNA	469	20 B
6. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	624	8.6 B
7. 20324-32-7	1-(2-Methoxy-1-Methylethoxy)-	BNA	696	5.2
8.	2-Propanol			
9. 2091-29-4	9-Hexadeceneoic Acid	BNA	1724	4.9
10.				
11.				
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ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-07
Date Analyzed: 06/01/88

Units: ug/L
Run Factor: 2.02

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	50.1	50	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
	10 U	Pyridine	110-86-1
	10 U	2-Picoline	109-06-8
	10 U	3 & 4-Picoline	
	10 U	2,6-Lutidine	
	10 U	2-Ethyl Pyridine	
	10 U	2,4 & 2,5-Lutidine	
	10 U	2,3-Lutidine	
	10 U	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
2.8	J	3,5-Lutidine	
	10 U	3,4-Lutidine	
	10 U	2-Methyl-5-Ethyl Pyridine	
	10 U	2-Methyl-3-Ethyl Pyridine	
	10 U	M and P Cresols	
	10 U	3-Ethyl-4-Methyl Pyridine	
	10 U	3-Ethyl-5-Methyl Pyridine	
	10 U	2,6-Dimethyl Phenol	
	10 U	2,5-Dimethyl Phenol	
	10 U	3,5-Dimethyl Phenol	
	10 U	2,3-Dimethyl Phenol	
	10 U	3,4-Dimethyl Phenol	
	10 U	1-Methylnaphthalene	90-12-0

J = Value below detection limit.

FORM I

ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-07
Date Analyzed: 06/02/88

Units: ug/L
Run Factor: 0.132

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	68.5	86	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
	10 U	Benzo(A)Anthracene
4.8	J	Chrysene
	10 U	Benzo(B)Fluoranthene
	10 U	Benzo(K)Fluoranthene
	10 U	Benzo(A)Pyrene

FORM I

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59436

Sample Number:
59436-07

00502

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/23/88
Date Analyzed :05/06/88
Conc./Dil Factor : 50.5
Percent Moisture :

GPC Cleanup :No
Separatory Funnel Extract.:Yes
Cont. Liquid/Liquid Extr. :No
Sonication Extraction :No

CAS Number	Compound	Value	ug/ L
319-84-6	Alpha-BHC		0.05 U
319-85-7	Beta-BHC		0.05 U
319-86-8	Delta-BHC		0.05 U
58-89-9	Gamma-BHC(Lindane)		0.05 U
76-44-8	Heptachlor		0.05 U
309-00-2	Aldrin		0.05 U
1204-57-3	Heptachlor Epoxide		0.05 U
959-98-8	Endosulfan I		0.05 U
60-57-1	Dieldrin		0.10 U
72-55-9	4,4'-DDE		0.10 U
72-20-8	Endrin		0.10 U
33213-65-9	Endosulfan II		0.10 U
72-54-8	4,4'-DDD		0.10 U
1031-07-8	Endosulfan Sulfate		0.10 U
50-29-3	4,4'-DDT		0.10 U
72-43-5	Methoxychlor		0.51 U
53494-70-5	Endrin Ketone		0.10 U
57-74-9	Chlordane		0.51 U
8001-35-2	Toxaphene		1.00 U
12674-11-2	Aroclor-1016		0.51 U
11104-28-2	Aroclor-1221		0.51 U
11141-16-5	Aroclor-1232		0.51 U
53469-21-9	Aroclor-1242		0.51 U
12672-29-6	Aroclor-1248		0.51 U
11097-69-1	Aroclor-1254		1.00 U
11096-82-5	Arolcor-1260		1.00 U

Vi = Volume of extract injected (ul) Vi = 2ul/4ul
Vs = Volume of water extracted (ml) Vs = 990 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

4/29/88 17:04:16 SCAN 1 OF 730 00503

OK

Acquisition started

Acquire
04/29/88 17:03:00 + 0:03
Sample: 59436-07 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 3: S59436W923
Free sectors: 19219
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.026
Acct. No: 59436

*** GC descriptor: V3 ***

GC temperature: 60 DegC
Elapsed time : 0: 7 min

Injector: 50 DegC
Interface: 220 DegC

Seq. #	Temp (DegC)	Rate (C/min)	Time (minutes) period	total
1	60- 60	-	2.0	2.0
2	60-250	7.0	27.1	29.1
3	250-250	-	10.0	39.1
4	250-250	-	0.0	39.1

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

Scan time (s)
Up: 2.95 L*
Down: 0.00 L

Hold time (s)
Top: 0.00
Bottom: 0.05

Cent S/P: 10 Actual: 67
Frag S/P: 10 Actual: 10

Samp int (ms): 0.200
Samp int (ms): 1.400

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	812	u
Zero scale mass	1	u
Intensity/ion	2	
Peak width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(ms)	4	

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	126.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.88	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2106.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

4/29/88 17:40:50
Acquisition completed
Scans 1 to 730 centroid

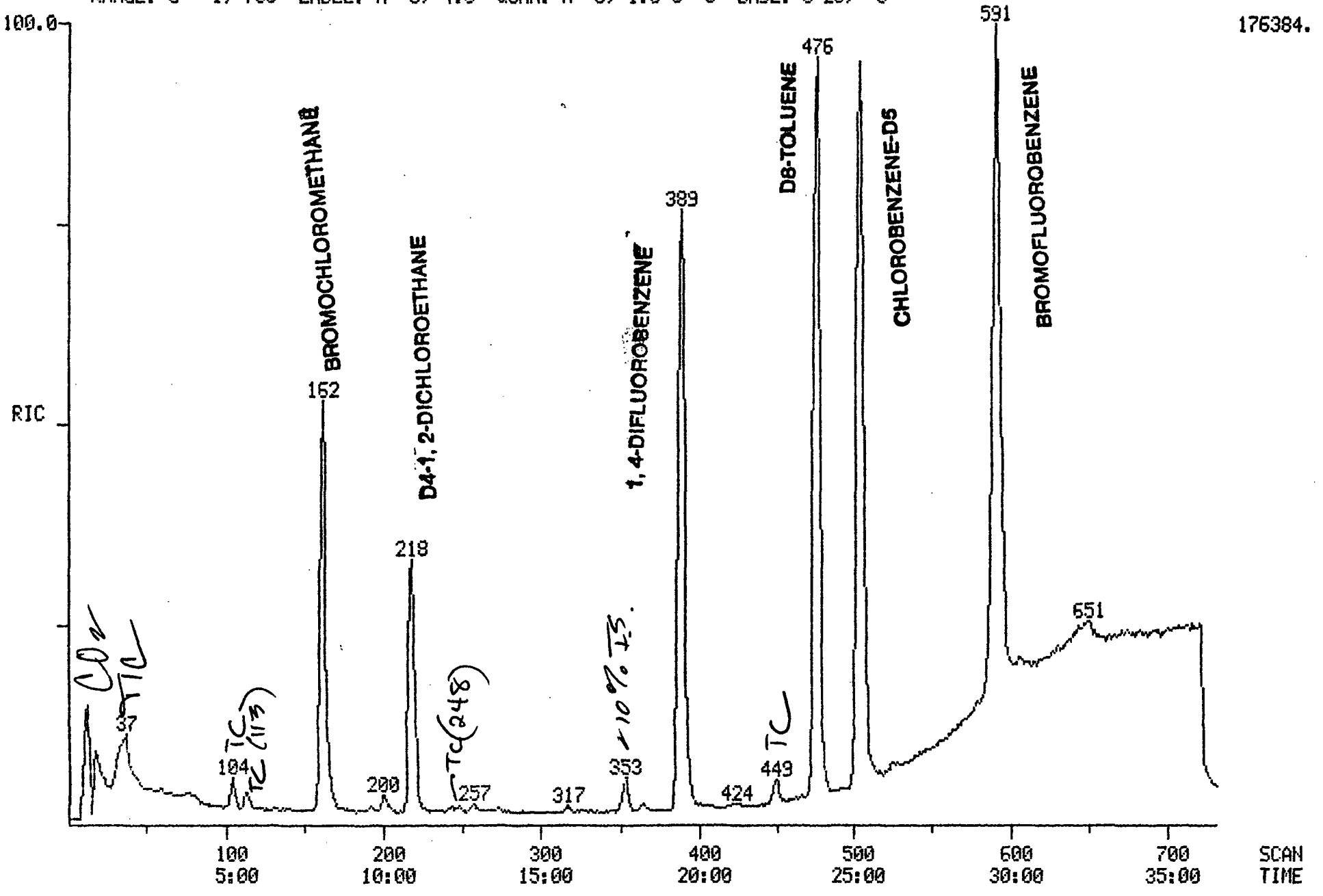
Mode	Scans	Secs	out of	%	Peaks per scan per second		
Centroid	730	45.9	2190.0	2.1	18390.	25.	8.

00504

RIC
04/29/88 17:03:00
SAMPLE: 59436-07 VOA H2O 100%/5ML
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436W923 #4 SCANS 1 TO 730
CALI: 042988CW #3

TIC = Tentatively Identified Compound
TC = Target Compound
SC = Spike Compound



PROCEDURE: TCA DIAGNOSTIC REPORT 4/30/88 1:33:52
DATA FILE: S59436W923
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00505
REPORT: IS01

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	3	6	24	IS01/TC01
3	3	2	0	18	9	8	98	IS02/TC02
3	3	1	0	12	7	9	159	IS03/TC03
1	1	1	0	7	2	1	0	IS04/TC04

41 COMPOUNDS PROCESSED, 16 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-161	162	162	.	1	960	.	128	162	.	1
2	V1	10	-28	24	.	.	.	.	.	50	.	.	.
3	V1	15	-44	41	.	.	.	.	.	94	.	.	.
4	V1	25	-56	53	.	.	.	.	.	62	.	.	.
5	V1	35	-70	68	.	.	.	.	.	64	.	.	.
6	V1	45	-105	104	104	.	1	985	.	84	104	.	1
7	V1	50	-114	113	113	.	6	1000	.	58	113	.	1
8	V1	65	-132	132	.	.	.	.	.	76	131	.	1
9	V1	80	-153	154	.	.	.	.	.	96	.	.	.
10	V2	1	-388	389	389	.	1	997	.	114	389	.	1
11	V3	1	-503	504	504	.	2	998	.	117	504	.	1
12	V1	90	-179	179	.	.	.	.	.	63	178	.	1
13	V1	95	-193	193	192	-1	1	928	.	96	193	1	1
14	V1	100	-204	204	204	.	1	984	.	83	204	.	1
15	V1	2	-218	218	218	.	1	987	.	65	218	.	1
16	V2	10	-218	218	218	.	4	975	.	72	218	.	1
17	V1	110	-220	220	.	.	.	.	.	62	.	.	.
18	V2	15	-248	248	248	.	1	917	.	97	248	.	1
19	V2	20	-256	256	.	.	.	.	.	117	.	.	.
20	V2	25	-259	259	257	-2	2	969	.	43	.	.	.
21	V2	30	-267	267	.	.	.	.	.	83	268	.	1
22	V2	35	-298	298	.	.	.	.	.	63	.	.	.
23	V2	40	-304	304	.	.	.	.	.	75	.	.	.
24	V2	45	-316	316	.	.	.	.	.	130	317	.	1
25	V2	60	-329	329	.	.	.	.	.	78	.	.	.
26	V2	50	-330	330	.	.	.	.	.	129	.	.	.
27	V2	65	-333	334	.	.	.	.	.	75	.	.	.
28	V2	55	-333	334	.	.	.	.	.	97	.	.	.
29	V2	80	-393	394	.	.	.	.	.	173	.	.	.
30	V3	10	-404	405	407	2	3	920	.	58	.	.	.
31	V3	15	-441	442	439	-3	3	950	.	58	.	.	.
32	V3	25	-447	448	.	.	.	.	.	83	.	.	.
33	V3	20	-448	449	449	.	1	994	.	164	448	-1	1
34	V3	2	-475	476	476	.	1	993	.	98	476	.	1
35	V3	35	-480	481	.	.	.	.	.	92	.	.	.
36	V3	40	-506	507	.	.	.	.	.	112	.	.	.
37	V3	50	-549	549	.	.	.	.	.	106	.	.	.
38	V3	3	-591	591	591	.	1	989	.	95	591	.	1
39	V3	55	-611	611	.	.	.	.	.	104	.	.	.
40	V3	60	-615	615	.	.	.	.	.	106	.	.	.
41	V3	75	-628	628	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59436W923

00506

Data: S59436W923.TI
04/29/88 17:03:00
Sample: 59436-07 VOA H2O 100%/5ML
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight: 0.026
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	Name					
1	CI01	BROMOCHLOROMETHANE	128	IV1#	01	74-97-5
2	C010	CHLOROMETHANE	50	V1#	10SP	74-87-3
3	C015	BROMOMETHANE	94	V1#	15	74-83-9
4	C020	VINYL CHLORIDE	62	V1#	25	75-01-4
5	C025	CHLOROETHANE	64	V1#	35	75-00-3
6	C030	METHYLENE CHLORIDE	84	V1#	45	75-09-2
7	C035	ACETONE	58	V1#	50	67-64-1
8	C040	CARBON DISULFIDE	76	V1#	65	75-15-0
9	C045	1,1-DICHLOROETHENE	61	V1#	80	75-35-4
10	CI10	1,4-DIFLUOROBENZENE	114	IV2#	01	540-36-3
11	CI20	CHLOROBENZENE-D5	117	IV3#	01	3114-55-4
12	C050	1,1-DICHLOROETHANE	63	V1#	90	75-34-3
13	TRANS-1,2-DICHLOROETHENE		61	V1#	95	156-60-5
14	C060	CHLOROFORM	83	V1#	100CC	67-66-3
15	CS15	1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
16	C110	2-BUTANONE	72	V2#	10	78-93-3
17	C065	1,2-DICHLOROETHANE	62	V1#	110	107-06-2
18	C115	1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
19	C120	CARBONTETRACHLORIDE	117	V2#	20	56-23-5
20	C125	VINYL ACETATE	43	V2#	25	108-05-4
21	C130	BROMODICHLOROMETHANE	83	V2#	30	75-27-4
22	C140	1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
23	C143	CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
24	C150	TRICHLOROETHENE	130	V2#	45	79-01-6
25	C165	BENZENE	78	V2#	60	71-43-2
26	C155	DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
27	C172	TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
28	C160	1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
29	C180	BROMOFORM	173	V2#	80	75-25-2
30	C205	4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
31	C210	2-HEXANONE	58	V3#	15	591-78-6
32	C225	1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5
33	C220	TETRACHLOROETHENE	164	V3#	20	127-18-4
34	CS05	TOLUENE-D8	98	SV3#	02	2037-26-5
35	C230	TOLUENE	92	V3#	35	108-88-3
36	C235	CHLOROBENZENE	112	V3#	40	108-90-7
37	C240	ETHYLBENZENE	106	V3#	50	100-41-4
38	CS10	BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
39	C245	STYRENE	104	V3#	55	100-42-5
40	M-XYLENE		106	V3#	60	108-38-3
41	O+P XYLENES		106	V3#	75	

00507

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	162	8:06	1	1.000	A BB	40633.	50.000 UG/L	15.70
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	104	5:12	1	0.642	A BB	4335.	2.482 UG/L	0.78
7	58	113	5:39	1	0.698	A BB	2308.	16.416 UG/L	5.16
8	76	131	6:33	1	0.809	A BB	99.	0.029 UG/L	0.01
9	NOT FOUND								
10	114	389	19:27	10	1.000	A BB	246574.	50.000 UG/L	15.70
11	117	504	25:12	11	1.000	A BB	232866.	50.000 UG/L	15.70
12	63	178	8:54	1	1.099	A BB	261.	0.087 UG/L	0.03
13	96	193	9:39	1	1.191	A BB	1192.	0.928 UG/L	0.29
14	83	204	10:12	1	1.259	A BB	1313.	0.527 UG/L	0.17
15	65	218	10:54	1	1.346	A BB	74166.	42.634 UG/L	13.39
16	72	218	10:54	10	0.560	A BB	71.	0.422 UG/L	0.13
17	NOT FOUND								
18	97	248	12:24	10	0.638	A BB	1788.	1.050 UG/L	0.33
19	NOT FOUND								
20	NOT FOUND								
21	83	268	13:24	10	0.689	A BB	51.	0.021 UG/L	0.01
22	NOT FOUND								
23	NOT FOUND								
24	130	317	15:51	10	0.815	A BB	1177.	0.753 UG/L	0.24
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	164	448	22:24	11	0.889	A BB	3355.	1.987 UG/L	0.62
34	98	476	23:48	11	0.944	A BB	256005.	51.065 UG/L	16.04
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	95	591	29:33	11	1.173	A BB	143058.	49.988 UG/L	15.70
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:06	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:24		0.173						
3	2:12		0.272						
4	2:48		0.346						
5	3:30		0.432						
6	5:15	0.99	0.648	0.99	2.48	50.00	0.107	2.149	0.05
7	5:42	0.99	0.704	0.99	16.42	50.00	0.057	0.173	0.33
8	6:36	0.99	0.815	0.99	0.03	50.00	0.002	4.155	0.00
9	7:39		0.944						
10	19:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	8:57	0.99	1.105	0.99	0.09	50.00	0.006	3.697	0.00
13	9:39	1.00	1.191	1.00	0.93	50.00	0.029	1.581	0.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
14	10:12	1.00	1.259	1.00	0.53	50.00	0.032	3.063	0.01
15	10:54	1.00	1.346	1.00	42.63	50.00	1.825	2.141	0.85
16	10:54	1.00	0.560	1.00	0.42	50.00	0.000	0.034	0.01
17	11:00		1.358						
18	12:24	1.00	0.638	1.00	1.05	50.00	0.007	0.345	0.02
19	12:48		0.658						
20	12:57		0.666						
21	13:21	1.00	0.686	1.00	0.02	50.00	0.000	0.482	0.00
22	14:54		0.766						
23	15:12		0.781						
24	15:48	1.00	0.812	1.00	0.75	50.00	0.005	0.317	0.02
25	16:27		0.846						
26	16:30		0.848						
27	16:39		0.856						
28	16:39		0.856						
29	19:39		1.010						
30	20:12		0.802						
31	22:03		0.875						
32	22:21		0.887						
33	22:24	1.00	0.889	1.00	1.99	50.00	0.014	0.362	0.04
34	23:45	1.00	0.942	1.00	51.07	50.00	1.099	1.076	1.02
35	24:00		0.952						
36	25:18		1.004						
37	27:27		1.089						
38	29:33	1.00	1.173	1.00	49.99	50.00	0.614	0.614	1.00
39	30:33		1.212						
40	30:45		1.220						
41	31:24		1.246						

TCA FINISHED, 16 FOUND
FINISHED AT: 4/30/88 1:40:10

RMAL QUANTITATION SUMMARY FILE: S59436W923
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

00509

UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	162	1	40633.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	246574.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	232866.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	476	3	256005.	1.099	51.065
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	143058.	0.614	49.988
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	218	1	74166.	1.825	42.634
7	V1# 10	C010 CHLOROMETHANE	50		1	NOT FOUND		
8	V1# 15	C015 BROMOMETHANE	94		1	NOT FOUND		
9	V1# 25	C020 VINYL CHLORIDE	62		1	NOT FOUND		
10	V1# 35	C025 CHLOROETHANE	64		1	NOT FOUND		
11	V1# 45	C030 METHYLENE CHLORIDE	84	104	1	4335.	0.107	2.482
12	V1# 50	C035 ACETONE	58	113	1	2308.	0.057	16.416
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96		1	NOT FOUND		
15	V1# 90	C050 1,1-DICHLOROETHANE	63		1	NOT FOUND		
16	V1# 95	TRANS-1,2-DICHLOROETHENE	96		1	NOT FOUND		
17	V1#100	C060 CHLOROFORM	83		1	NOT FOUND		
18	V1#110	C065 1,2-DICHLOROETHANE	62		1	NOT FOUND		
19	V2# 10	C110 2-BUTANONE	72		2	NOT FOUND		
20	V2# 15	C115 1,1,1-TRICHLOROETHA	97	248	2	1788.	0.007	1.050
21	V2# 20	C120 CARBONTETRACHLORIDE	117		2	NOT FOUND		
22	V2# 25	C125 VINYL ACETATE	43		2	NOT FOUND		
23	V2# 30	C130 BROMODICHLOROMETHAN	83		2	NOT FOUND		
24	V2# 35	C140 1,2-DICHLOROPROPANE	63		2	NOT FOUND		
25	V2# 40	C143 CIS-1,3-DICHLOROPRO	75		2	NOT FOUND		
26	V2# 45	C150 TRICHLOROETHENE	130		2	NOT FOUND		
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78		2	NOT FOUND		
30	V2# 65	C172 TRANS-1,3-DICHLOROP	75		2	NOT FOUND		
31	V2# 80	C180 BROMOFORM	173		2	NOT FOUND		
32	V3# 10	C205 4-METHYL-2-PENTANON	58		3	NOT FOUND		
33	V3# 15	C210 2-HEXANONE	58		3	NOT FOUND		
34	V3# 20	C220 TETRACHLOROETHENE	164	448	3	3355.	0.014	1.987
35	V3# 25	C225 1,1,2,2-TETRACHLORO	83		3	NOT FOUND		
36	V3# 35	C230 TOLUENE	92		3	NOT FOUND		
37	V3# 40	C235 CHLOROBENZENE	112		3	NOT FOUND		
38	V3# 50	C240 ETHYLBENZENE	106		3	NOT FOUND		
39	V3# 55	C245 STYRENE	104		3	NOT FOUND		
40	V3# 60	M-XYLENE	106		3	NOT FOUND		
41	V3# 75	O+P XYLENES	106		3	NOT FOUND		

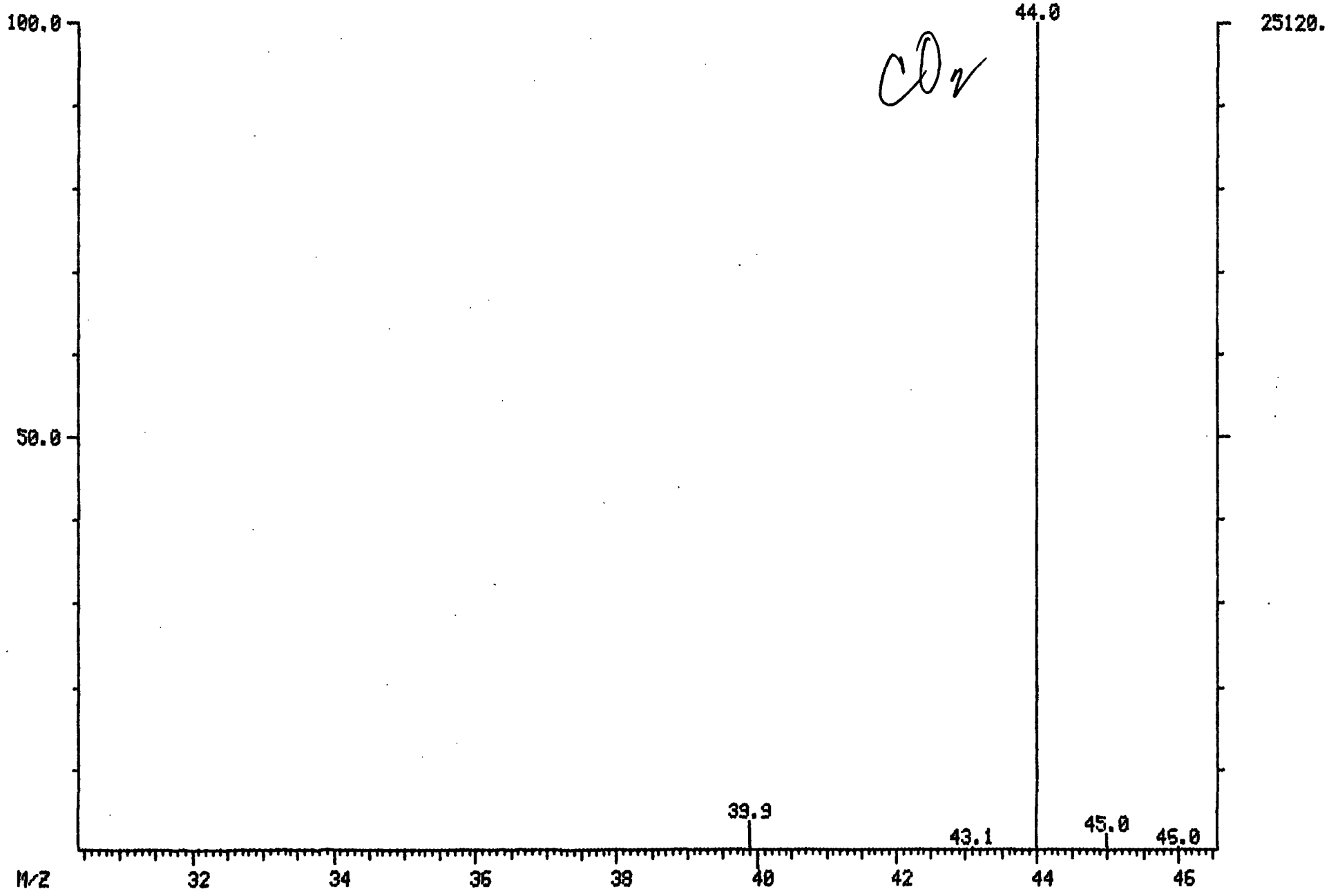
V.3.88

00510

MASS SPECTRUM
04/29/88 17:03:00 + 0:39
SAMPLE: 59436-07 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 60 DEG. C

DATA: S59436W923 #13
CALI: 042988CW #3

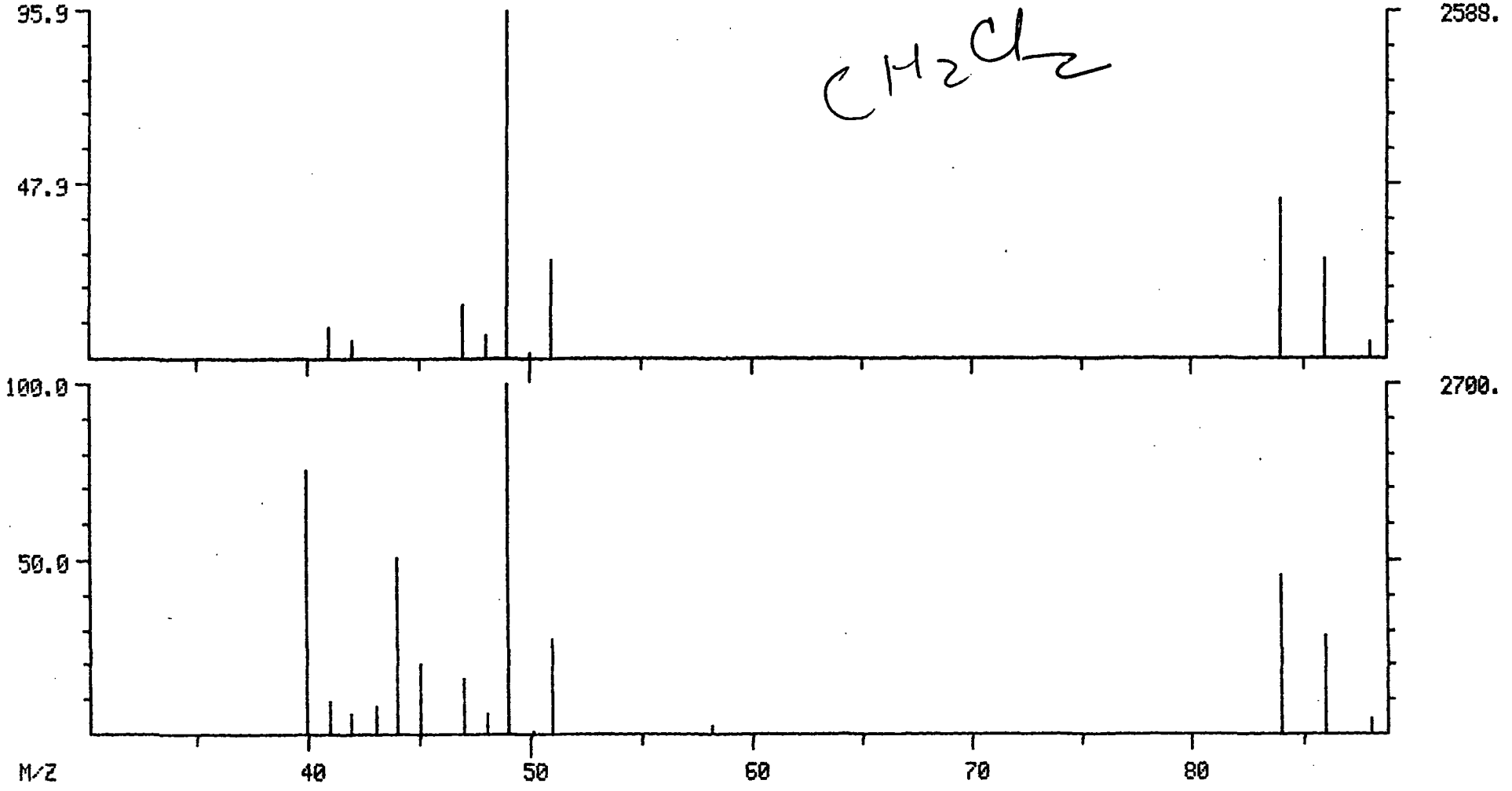
BASE M/Z: 44
RIC: 26624.



00511

DUAL MASS SPECTRUM
04/29/88 17:03:00 + 5:12
SAMPLE: 59436-07 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 82 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W923 #104 BASE M/Z: 49/ 49
CALI: 042988CW #3 RIC: 6295./ 10799.



00512

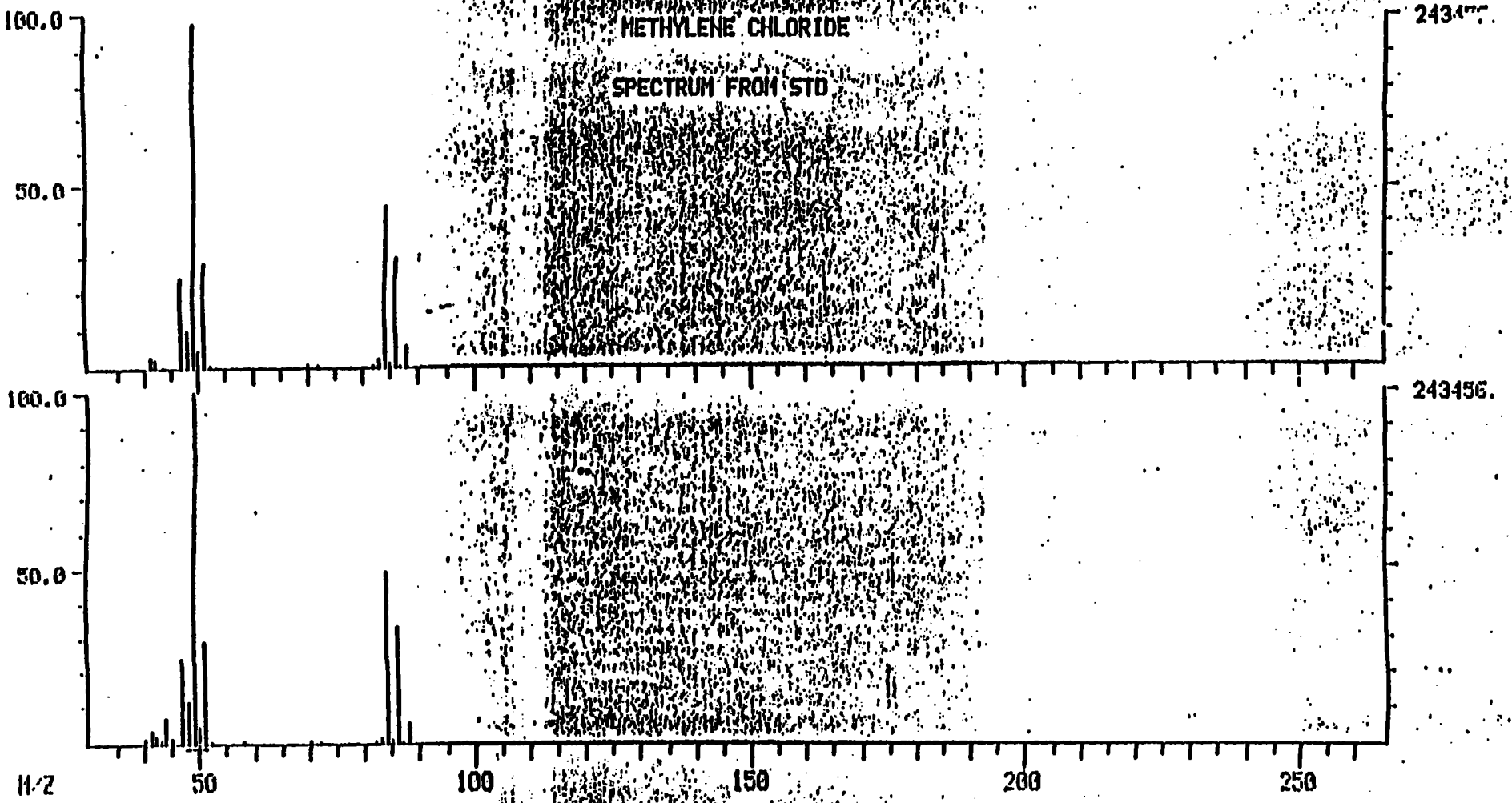
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100Z/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

BASE M/Z: 49/ 49
RIC: 615423./ 678911.

METHYLENE CHLORIDE

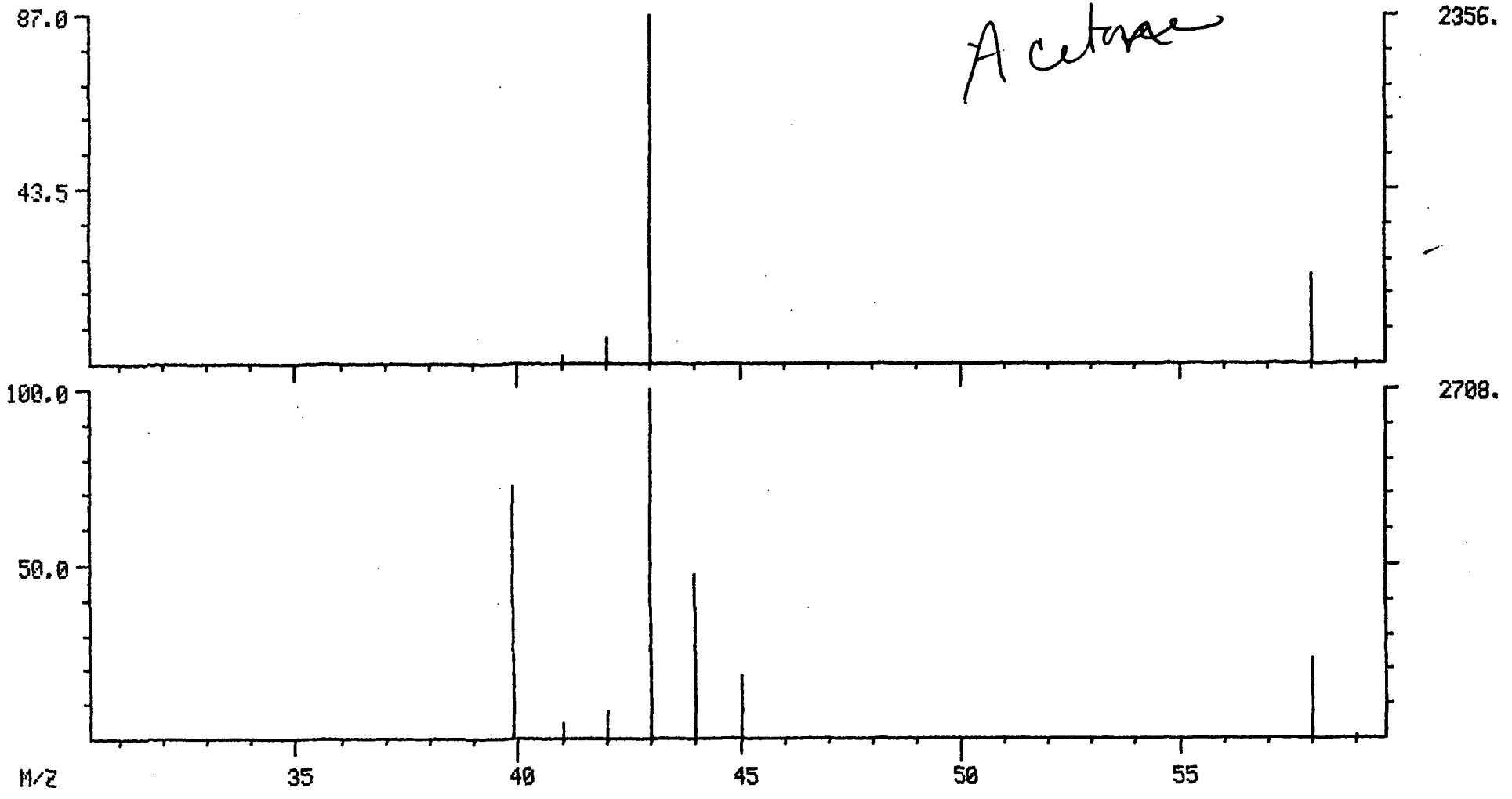
SPECTRUM FROM STD



00513

DUAL MASS SPECTRUM
04/29/88 17:03:00 + 5:39
SAMPLE: 59436-07 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 86 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559436W923 #113 BASE M/Z: 43/ 43
CALI: 042988CW #3 RIC: 3203./ 7415.

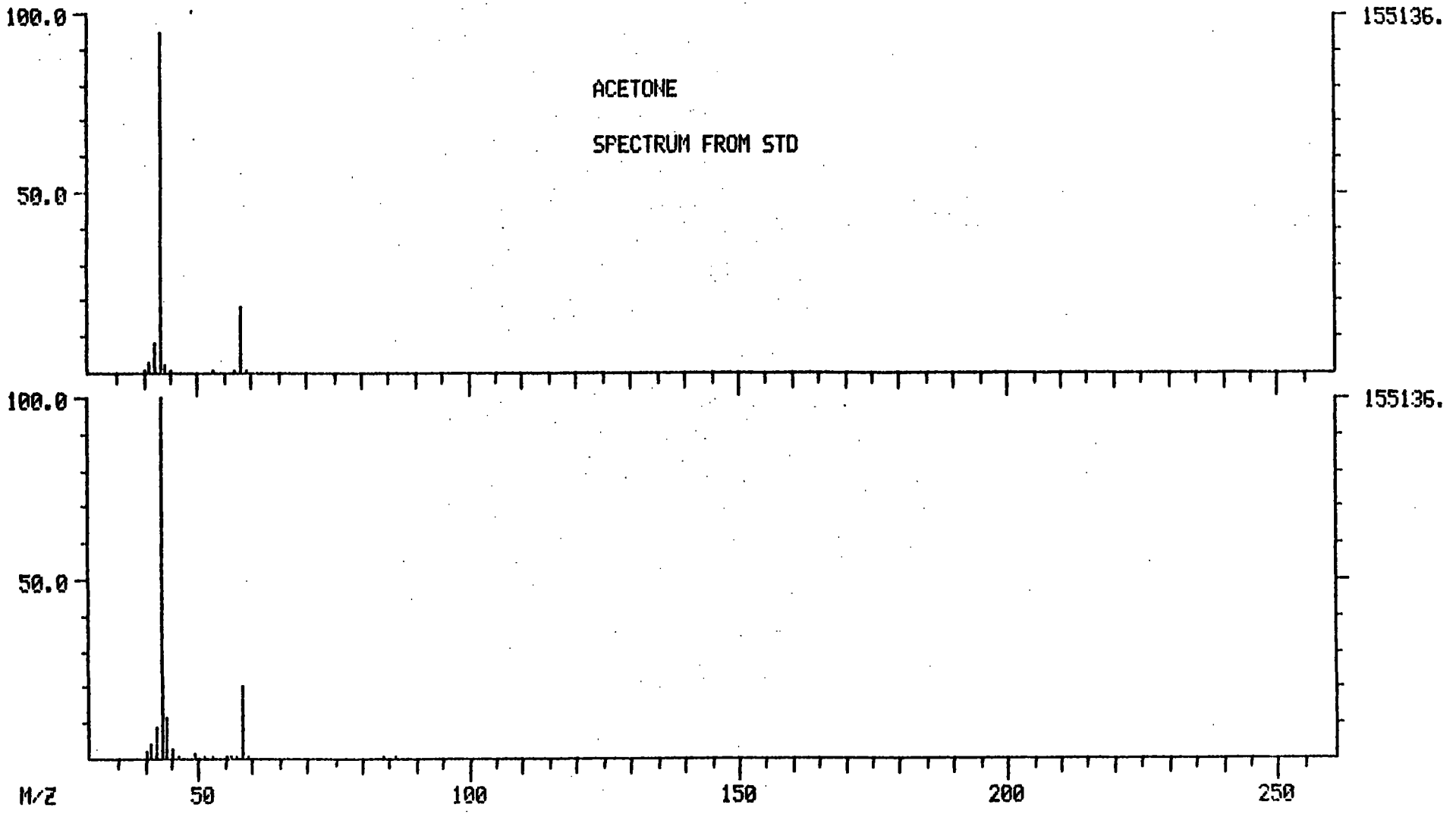


00514

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 7:37
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #150
CALI: STDJ198 #1

BASE M/Z: 43/ 43
RIC: 199935./ 247807.

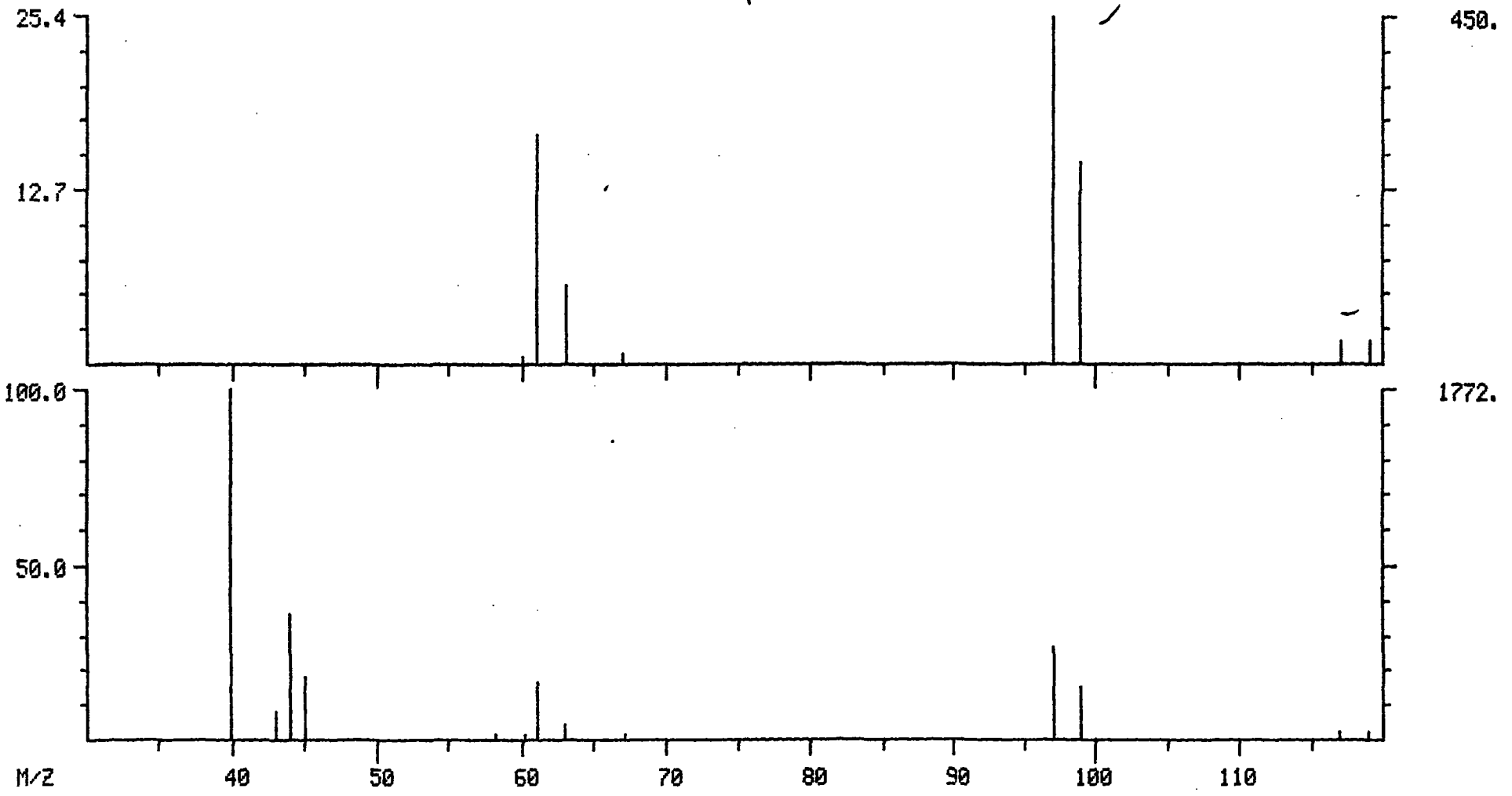


00515

DUAL MASS SPECTRUM
04/29/88 17:03:00 + 12:24
SAMPLE: 59436-07 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 133 DEG. C.
ENHANCED (S 15B 2N 0T)

DATA: S59436W923 #248 BASE M/Z: 97/ 40
CALI: 042988CW #3 RIC: 1191./ 4143.

1,1,1-Trichloroethane

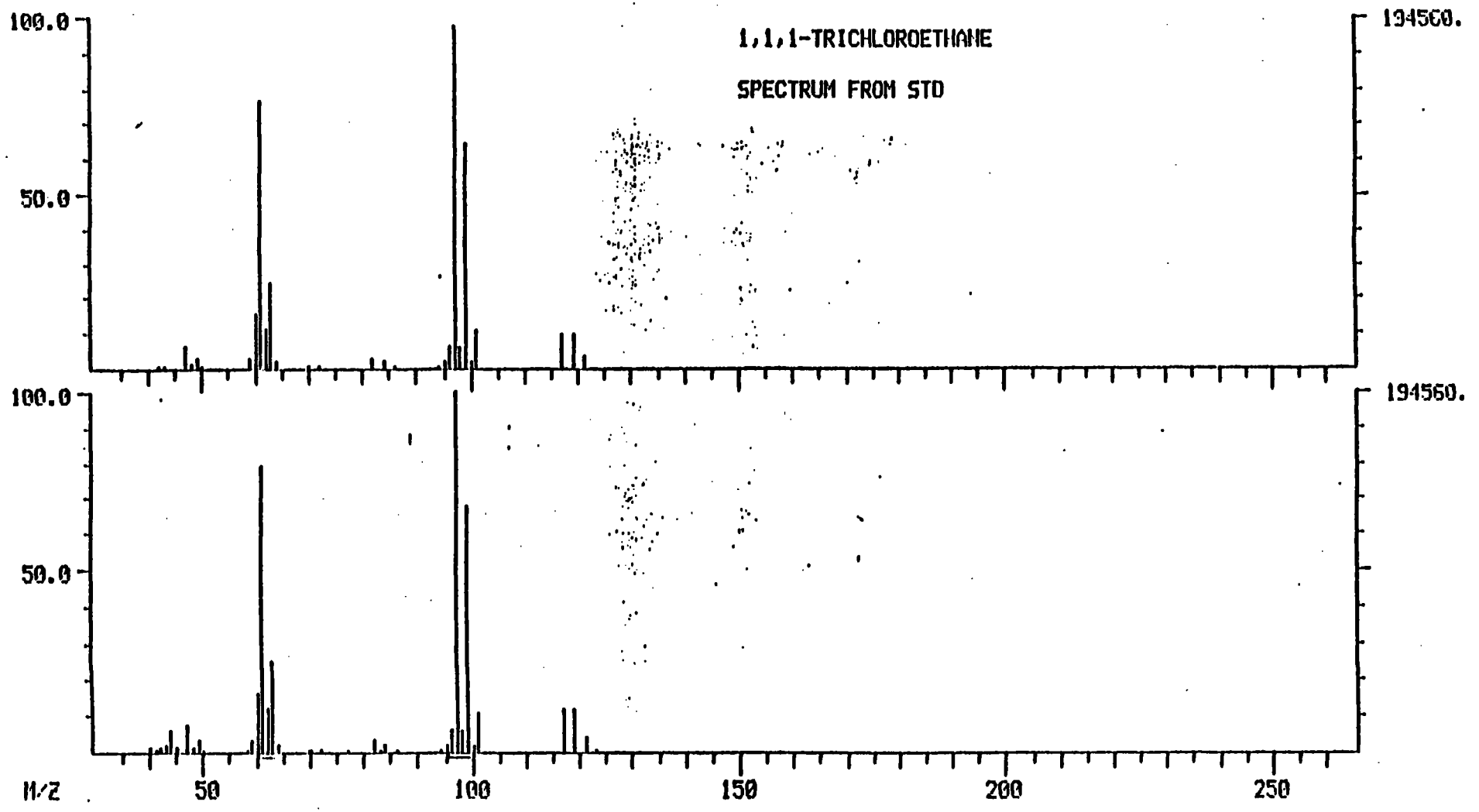


00516

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 14:38
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #288
CALI: STDJ198 #1

BASE M/Z: 97/ 97
RIC: 705535./ 774143.

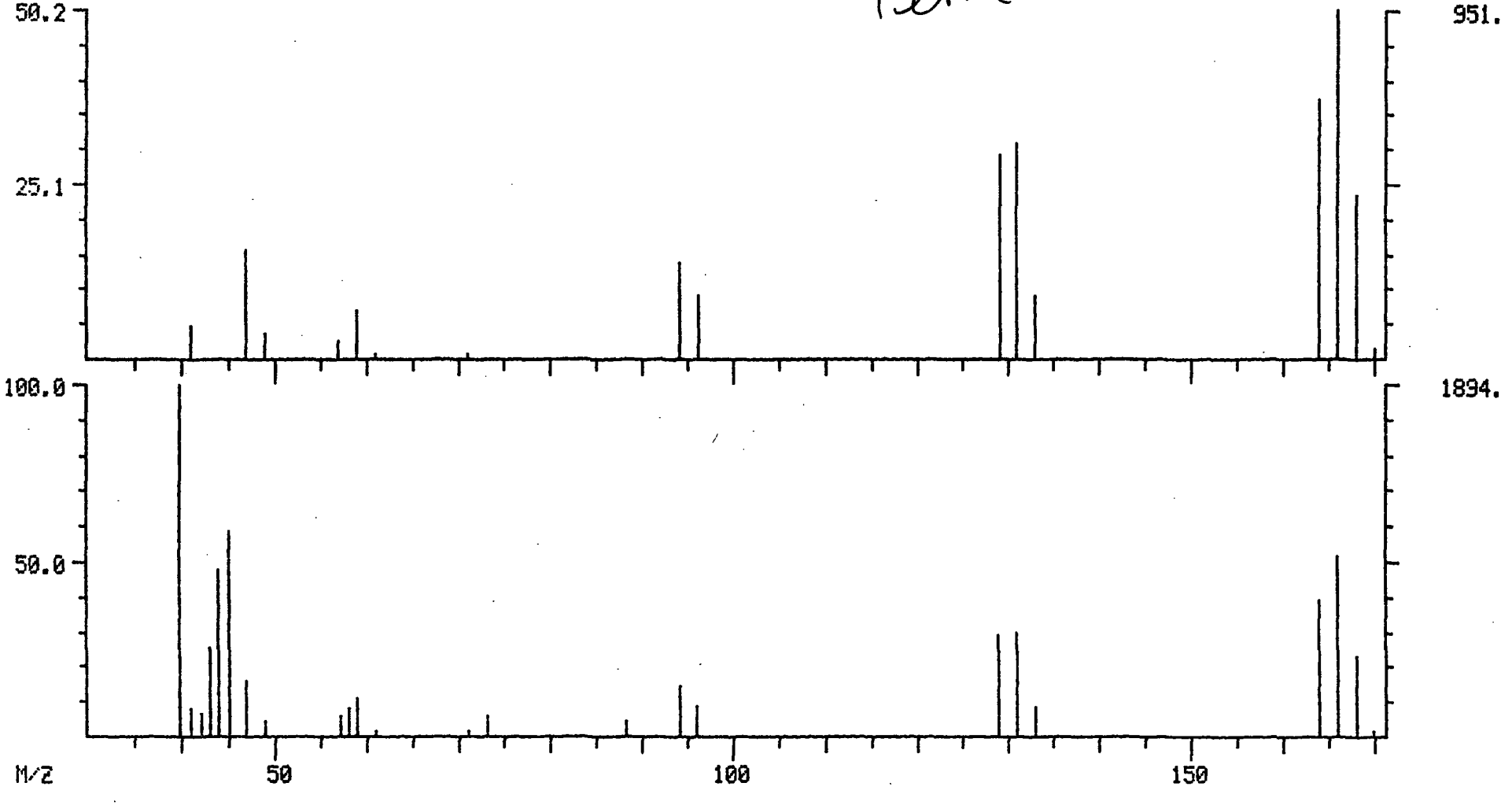


005517

DUAL MASS SPECTRUM
04/29/88 17:03:00 + 22:24
SAMPLE: 59436-07 VOA H2O 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 203 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436W923 #448 BASE M/Z: 166/ 40
CALI: 042988CW #3 RIC: 4543./ 9663.

Tetrachloroethene



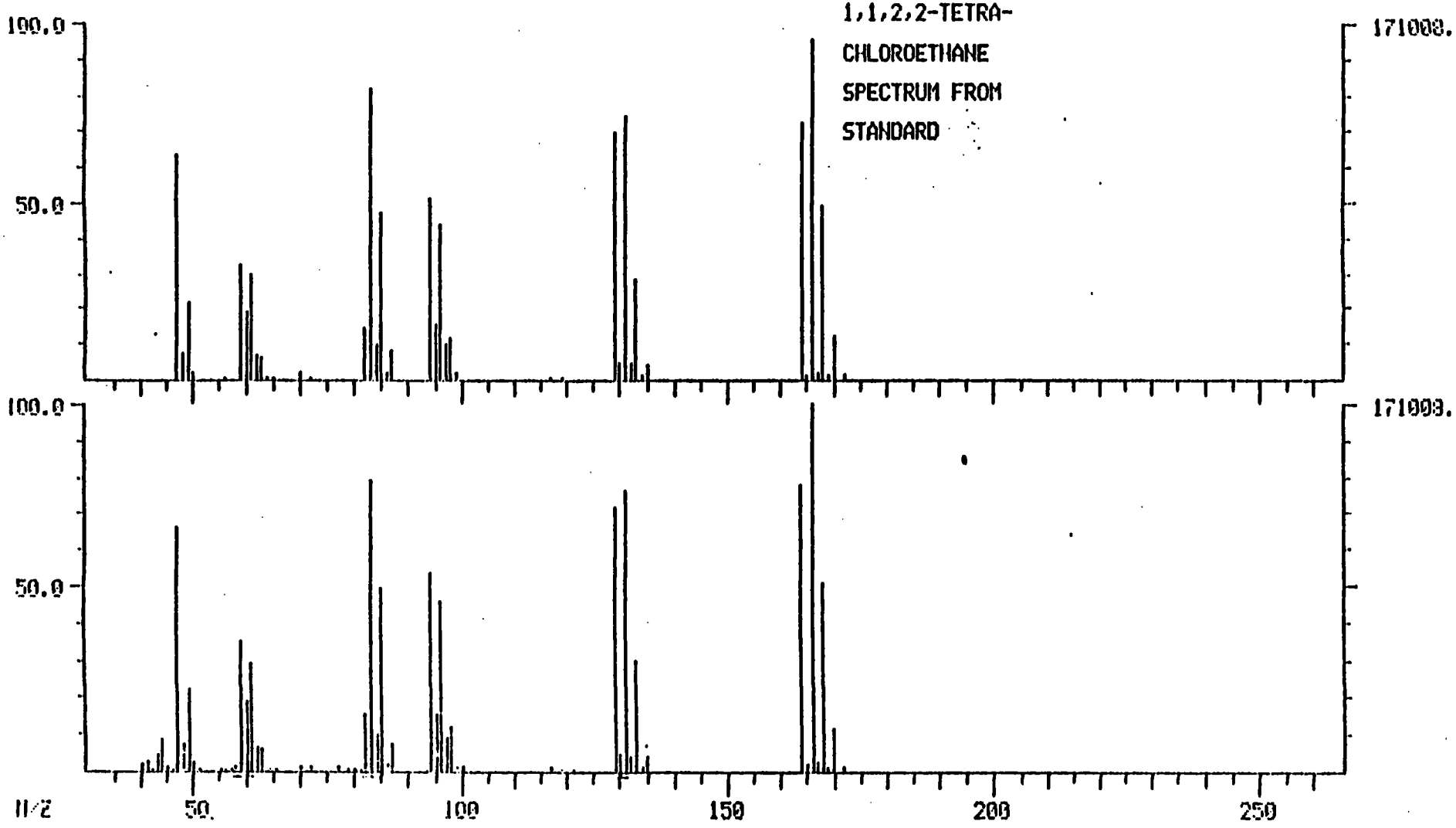
00518

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 23:41
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2H 0T)

DATA: STDJ198 #466
CALI: STDJ198 #1

BASE M/Z: 166/ 166
RIC: 1566710./ 1669110.

TETRACHLOROETHENE
COELUTION WITH
1,1,2,2-TETRA-
CHLOROETHANE
SPECTRUM FROM
STANDARD



Quantitation Report File: TEMP

00519

Data: S59436W923.TI
04/29/88 17:03:00
Sample: 59436-07 VOA H2O 100%/5ML
Conds.: QC DESC V3
Formula: Instrument: 5100 Weight: 0.026
Submitted by: RMAL Analyst: DC Acct. No.: 59436

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

No	CAS #	Name
1	0-00-0	UNKNOWN
2	0-00-0	UNKNOWN
3	0-00-0	UNKNOWN
4	28871-61-6	SILANE, (FLUOROMETHYL)TRIMETHYL-

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	162	8:06	3	0.321	A BB	373636.	46.238	19.13
2	RIC	389	19:27	3	0.772	A BV	613492.	75.920	31.42
3	RIC	504	25:12	3	1.000	A BB	808076.	100.000	41.38
4	RIC	37	1:51	3	0.073	A VB	157578.	~~19.500~~ B	8.07

$\frac{157578}{373636} \times 50 ug/l = 21 ug/l$ B

00520

LIBRARY SEARCH
04/29/88 17:03:00 + 1:51
SAMPLE: 59436-07 VOA H2O 100%/5ML
CONDS.: GC DESC V3
ENHANCED (S 15B 2N 0T)

DATA: S59436W923 # 37
CALI: 042988CW # 3

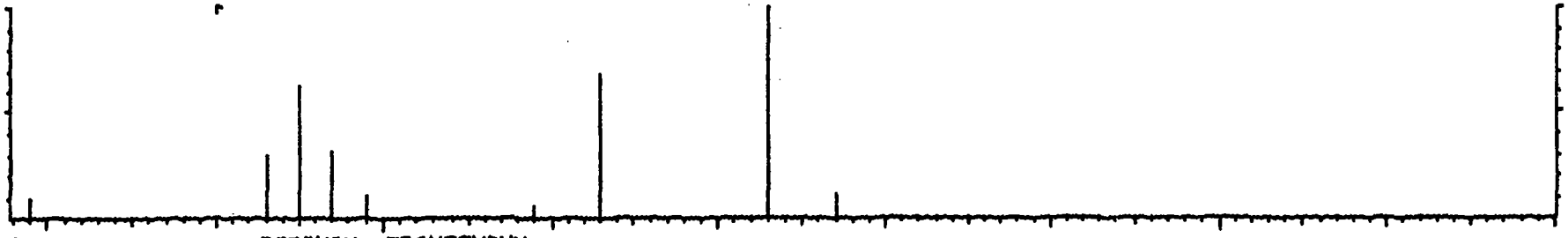
BASE M/Z: 63
RIC: 7903.

1149
SAMPLE

unknown

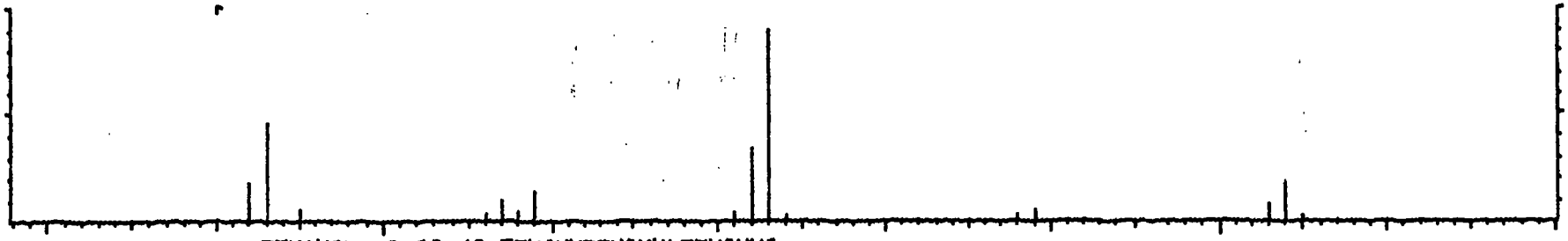
C4.H11.F.SI SILANE, (FLUOROMETHYL)TRIMETHYL-

1149
M WT 106
B PK 73
RANK 1
1693
PUR 609



C3.H9.O6.B3 BOROXIN, TRIMETHOXY-

1149
M WT 174
B PK 73
RANK 2
12124
PUR 578



C8.H18.O4 ETHANOL, 2-[2-(2-ETHOXYETHOXY)ETHOXY]-

1149
M WT 178
B PK 45
RANK 3
12863
PUR 494

M/Z 30 40 50 60 70 80 90 100 110 12

6/1/88 17:56:24 SCAN 1 OF 2850 00521
Acquisition started

Acquire Run 3:S59436R967 ACQUIRING
06/01/88 17:55:00 + 0:04 Free sectors: 12579 Scan: 5 of 2850
Sample: 59436-07 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc:ST Current GC oven tmp: 30 DegC Injector : 250 DegC
Current GC Desc:ST GC elapsed time : 0: 3 min Int. oven : 275 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********

Low mass: 35 Up: 0.70 L* Top: 0.00
High mass: 500 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 10 Samp Int (ms): 0.150 Peak Width: 1000.
Frag S/P: 10 Actual: 10 Samp Int (ms): 0.150 Inten/ion: 2

Min Peak Width: 3 Min Frag Width %: 80 Min Area: 20
ADC Threshold: 1 Baseline: 0

***** Mode: Centroid positive ion

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

$RF = \frac{2.0}{0.990} = 2.02$

$SV = 2.0$

6/1/88 18:32:04
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	507.6	2137.5	23.7	67199. 24.	31.

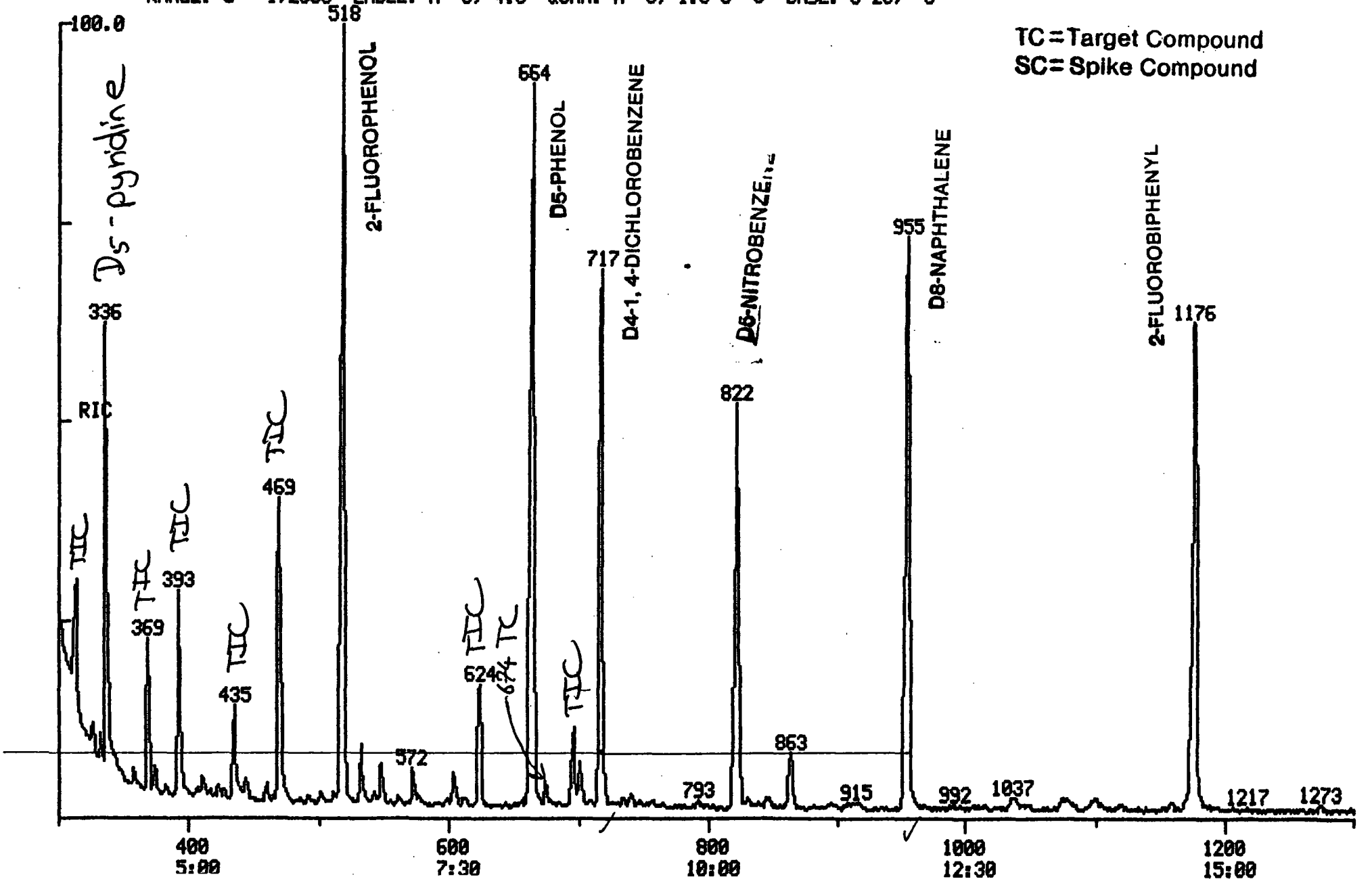
00522

RIC
06/01/88 17:55:00
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R967 #4
CALI: 053188CR #4

SCANS 300 TO 1300
OUT OF 300 TO 2850

T.I.C.-Tent. Ident. Compound



00523

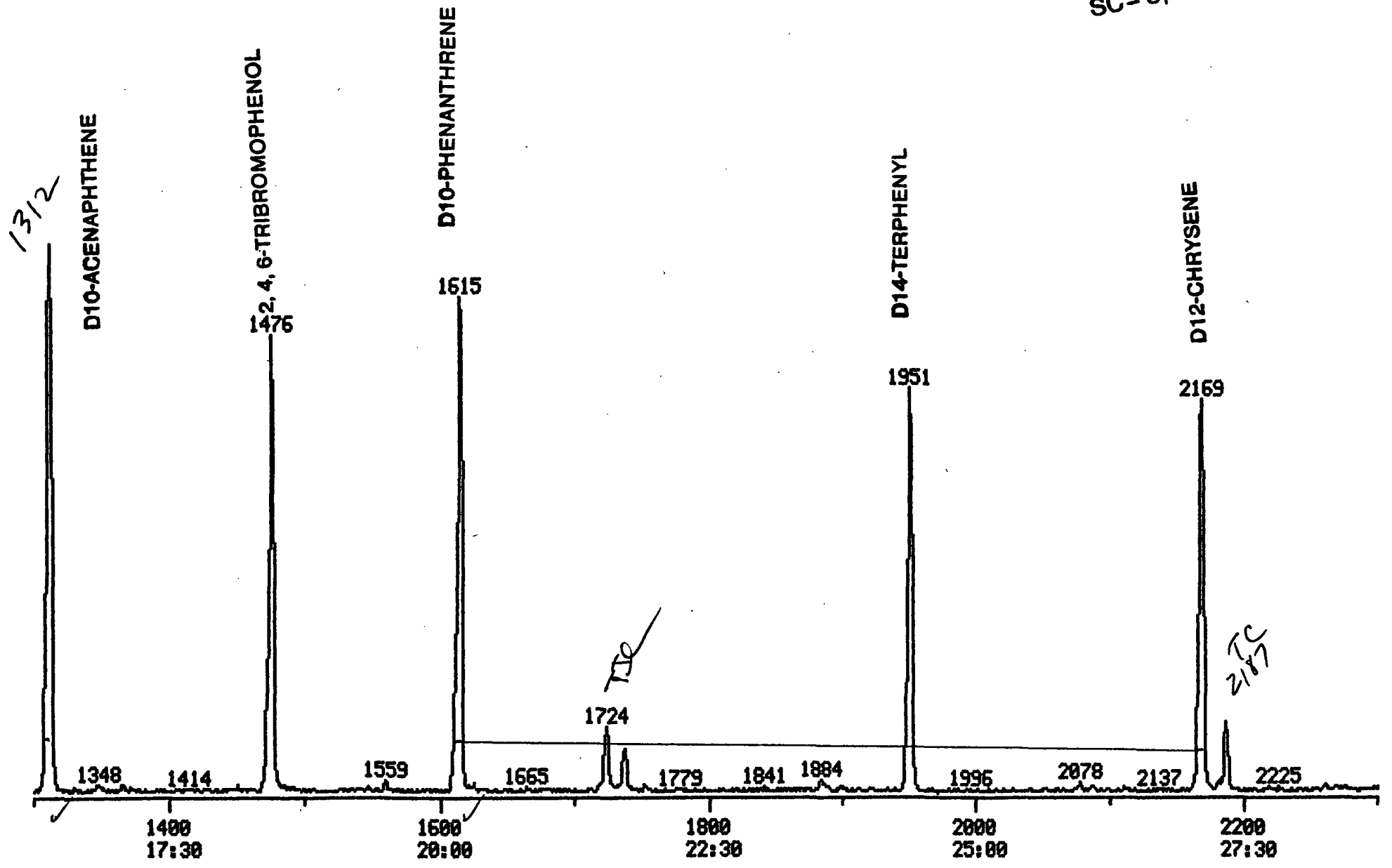
RIC
06/01/88 17:55:00
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R967 #4
CALI: 053188CR #4

SCANS 1300 TO 2300
OUT OF 300 TO 2850

T.I.C.-Tent. Ident. Compound

TC=Target Compound
SC= Spike Compound



00524

RIC
06/01/88 17:55:00
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

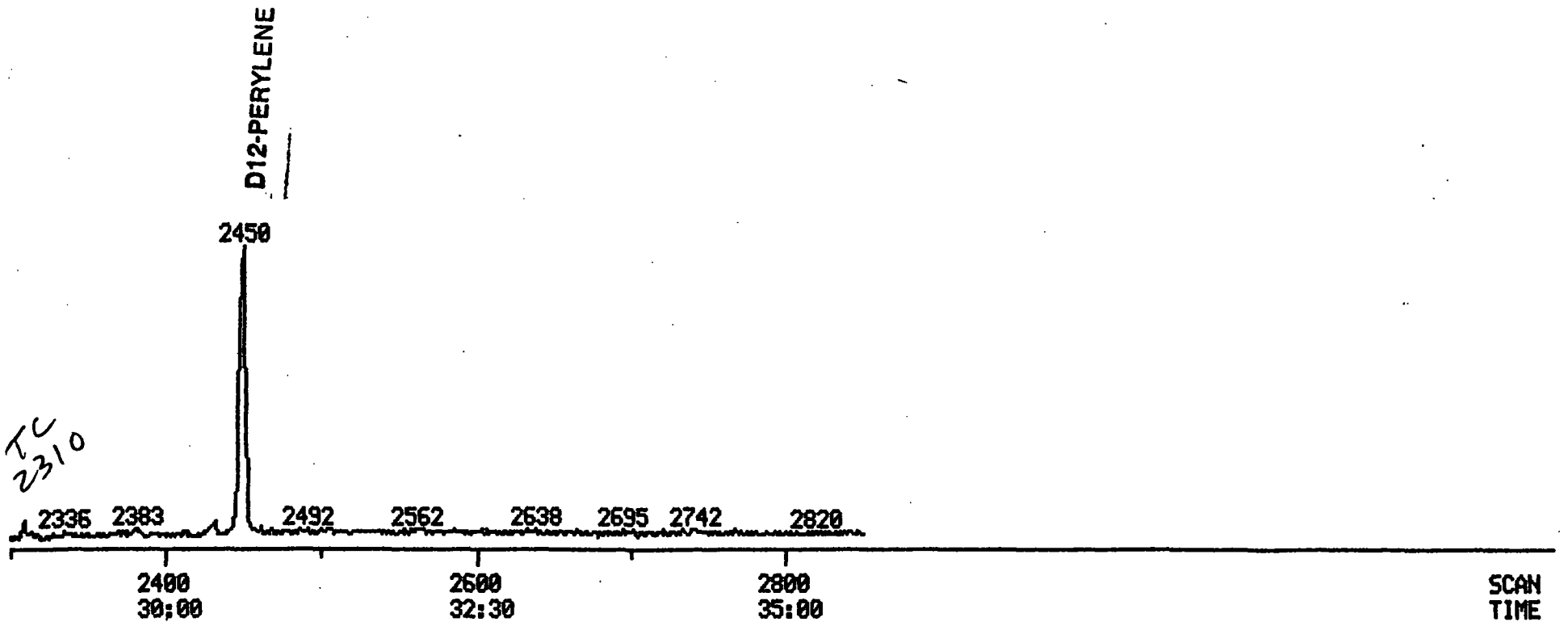
DATA: S59436R967 #4 SCANS 2300 TO 2850
CALI: 053188CR #4 OUT OF 300 TO 2850

TC = Target Compound
SC = Spike Compound

T.I.C.-Tent. Ident. Compound

100.0

74880.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/01/88 23:50:01
DATA FILE: S59436R967
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00525
REPORT: IS01

< ---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	7	4	1	195	IS01/TC01
3	3	1	49	18	4	1	99	IS02/TC02
3	3	1	49	12	3	1	49	IS03/TC03
3	3	2	0	18	5	1	50	IS04/TC04
3	3	1	0	10	4	1	58	IS05/TC05
3	3	1	0	8	3	1	0	IS06/TC06
3	3	1	0	14	6	2	45	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

77 COMPOUNDS PROCESSED, 16 FOUND

< COMPOUND ><			---------- SEARCH ---------- >< SAT ><							------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-716	717	717	.	1	979	.	152	717	.	1
2	S1	2	-517	517	518	1	1	994	.	112	518	.	1
3	S1	3	-666	665	664	-1	1	934	.	99	664	.	1
4	S1	105	-668	667	.	.	.	.	.	94	666	.	1
5	S1	110	-680	679	.	.	.	.	.	93	.	.	.
6	S1	115	-687	686	685	-1	1	867	.	128	685	.	1
7	S1	125	-710	709	.	.	.	.	.	146	.	.	.
8	S2	1	-955	955	955	.	1	1000	.	136	955	.	1
9	S3	1	-1312	1312	1312	.	1	992	.	164	1312	.	1
10	S1	130	-720	720	.	.	.	.	.	146	720	.	1
11	S1	145	-748	748	.	.	.	.	.	108	.	.	.
12	S1	150	-753	753	.	.	.	.	.	146	.	.	.
13	S1	160	-771	771	.	.	.	.	.	108	.	.	.
14	S1	165	-776	776	.	.	.	.	.	45	.	.	.
15	S1	185	-798	798	.	.	.	.	.	108	797	.	1
16	S1	190	-804	804	.	.	.	.	.	70	.	.	.
17	S1	200	-808	808	.	.	.	.	.	117	.	.	.
18	S2	2	-823	823	822	-1	1	994	.	82	822	.	1
19	S2	10	-827	827	.	.	.	.	.	77	.	.	.
20	S2	20	-873	873	.	.	.	.	.	82	.	.	.
21	S2	25	-887	887	.	.	.	.	.	139	.	.	.
22	S2	30	-897	897	.	.	.	.	.	107	899	.	1
23	S2	35	-917	917	.	.	.	.	.	93	.	.	.
24	S2	45	-927	927	.	.	.	.	.	122	.	.	.
25	S2	40	-932	932	.	.	.	.	.	162	.	.	.
26	S2	55	-948	948	.	.	.	.	.	180	.	.	.
27	S2	60	-960	960	.	.	.	.	.	128	958	.	1
28	S2	80	-976	976	.	.	.	.	.	127	.	.	.
29	S2	95	-996	996	.	.	.	.	.	225	.	.	.
30	S2	130	-1074	1074	.	.	.	.	.	107	1074	.	1
31	S2	145	-1097	1097	.	.	.	.	.	142	.	.	.
32	S3	20	-1143	1143	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1161	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1615	1615	.	2	995	.	188	1615	.	1
35	S3	30	-1168	1168	.	.	.	.	.	196	.	.	.
36	S3	3	-1177	1177	1176	-1	1	996	.	172	1176	.	1
37	S3	40	-1195	1195	.	.	.	.	.	162	1193	.	1
38	S3	45	-1225	1225	.	.	.	.	.	65	1224	.	1
39	S3	55	-1272	1272	.	.	.	.	.	163	.	.	.
40	S3	65	-1281	1281	.	.	.	.	.	152	1279	.	1
41	S3	70	-1284	1284	.	.	.	.	.	165	.	.	.
			-							138			

43	S3	80	-1320	1320	.	.	.	.	.	153	.	.	.
44	S3	85	-1331	1331	.	.	.	.	.	184	.	.	.
45	S3	95	-1347	1347	1347	.	1	943	.	109	1349	2	1
46	S3	90	-1352	1352	.	.	.	.	.	168	1351	.	1
47	S3	105	-1364	1364	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1418	.	.	.	.	.	149	.	.	.
49	S3	135	-1423	1423	.	.	.	.	.	166	.	.	.
50	S3	140	-1425	1425	.	.	.	.	.	204	.	.	.
51	S3	150	-1439	1439	.	.	.	.	.	138	.	.	.
52	S4	10	-1447	1447	.	.	.	.	.	198	.	.	.
53	S4	15	-1453	1453	.	.	.	.	.	169	.	.	.
54	S3	2	-1477	1477	1476	-1	1	986	.	330	1476	.	1
55	S4	30	-1524	1524	.	.	.	.	.	248	.	.	.
56	S4	40	-1553	1553	.	.	.	.	.	284	.	.	.
57	S5	1	-2169	2169	2169	.	1	953	.	240	2169	.	1
58	S4	50	-1591	1591	.	.	.	.	.	266	.	.	.
59	S4	65	-1620	1620	.	.	.	.	.	178	1619	.	1
60	S4	70	-1630	1630	.	.	.	.	.	178	.	.	.
61	S4	85	-1754	1754	.	.	.	.	.	149	1753	.	1
62	S4	110	-1869	1869	.	.	.	.	.	202	1868	.	1
63	S6	1	-2450	2450	2450	.	1	994	.	264	2450	.	1
64	S5	15	-1915	1915	.	.	.	.	.	202	1913	.	1
65	S5	2	-1951	1951	1951	.	1	995	.	244	1951	.	1
66	S5	40	-2063	2063	.	.	.	.	.	149	2062	.	1
67	S5	55	-2166	2166	.	.	.	.	.	252	.	.	.
68	S5	50	-2166	2166	.	.	.	.	.	228	2168	.	1
69	S5	60	-2176	2176	.	.	.	.	.	228	.	.	.
70	S5	65	-2188	2188	2187	-1	2	992	.	149	2187	.	1
71	S6	10	-2310	2310	2310	.	1	990	.	149	2310	.	1
72	S6	15	-2381	2381	.	.	.	.	.	252	2380	.	1
73	S6	25	-2387	2387	.	.	.	.	.	252	.	.	.
74	S6	35	-2440	2440	.	.	.	.	.	252	.	.	.
75	S6	55	-2687	2687	.	.	.	.	.	276	.	.	.
76	S6	60	-2690	2690	.	.	.	.	.	278	.	.	.
77	S6	65	-2755	2755	.	.	.	.	.	276	.	.	.

Quantitation Report File: S59436R967

00527

Data: S59436R967.TI
06/01/88 17:55:00
Sample: 59436-07 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
1	CI30	1,4-DICHLOROBENZENE-D4	152IS1# 01	3855-82-1
2	CS50	2-FLUOROPHENOL	112SS1# 02	367-12-4
3	CS45	PHENOL-D5	99SS1# 03	4165-62-2
4	C315	PHENOL	94 S1#105CC	108-95-2
5	C325	BIS(2-CHLOROETHYL)ETHER	93 S1#110	111-44-4
6	C330	2-CHLOROPHENOL	128 S2#115	95-57-8
7	C335	1,3-DICHLOROBENZENE	146 S1#125	541-73-1
8	CI40	NAPHTHALENE-D8	136IS2# 01	1146-65-2
9	CI50	ACENAPHTHENE-D10	164IS3# 01	15067-26-2
10	C340	1,4-DICHLOROBENZENE	146 S1#130CC	106-46-7
11	C345	BENZYL ALCOHOL	108 S1#145	100-51-6
12	C350	1,2-DICHLOROBENZENE	146 S1#150	95-50-1
13	C355	2-METHYLPHENOL	108 S1#160	95-48-7
14	C360	BIS(2-CHLOROISOPROPYL)E	45 S1#165	108-60-1
15	C365	4-METHYLPHENOL	108 S1#185	106-44-5
16	C370	N-NITROSO-DI-N-PROPYLAM	70 S1#190SP	621-64-7
17	C375	HEXACHLOROETHANE	117 S1#200	67-72-1
18	CS20	NITROBENZENE-D5	82SS2# 02	4165-60-0
19	C410	NITROBENZENE	77 S2# 10	98-95-3
20	C415	ISOPHORONE	82 S2# 20	75-59-1
21	C420	2-NITROPHENOL	139 S2# 25CC	88-75-5
22	C425	2,4-DIMETHYLPHENOL	107 S2# 30	105-67-9
23	C435	BIS(2-CHLOROETHOXY)METH	93 S2# 35	111-91-1
24	C430	BENZOIC ACID	122 S2# 45	65-85-0
25	C440	2,4-DICHLOROPHENOL	162 S2# 40	120-83-2
26	C445	1,2,4-TRICHLOROBENZENE	180 S2# 55	120-82-1
27	C450	NAPHTHALENE	128 S2# 60	91-20-3
28	C455	4-CHLOROANALINE	127 S2# 80	106-47-8
29	C460	HEXACHLOROBUTADIENE	225 S2# 95CC	87-68-3
30	C465	4-CHLORO-3-METHYLPHENO	107 S2#130CC	59-50-7
31	C470	2-METHYLNAPHTHALENE	142 S2#145	91-57-6
32	C510	HEXACHLOROCYCLOPENTADI	237 S3# 20	77-47-4
33	C515	2,4,6-TRICHLOROPHENOL	196 S3# 25CC	88-06-2
34	CI60	PHENANTHRENE-D10	188IS4# 01	1517-22-2
35	C520	2,4,5-TRICHLOROPHENOL	196 S3# 30	95-95-4
36	CS25	2-FLUOROBIPHENYL	172SS3# 03	321-60-8
37	C525	2-CHLORONAPHTHALENE	162 S3# 40	91-58-7
38	C530	2-NITROANALINE	65 S3# 45	88-74-4
39	C535	DIMETHYLPHTHALATE	163 S3# 55	131-11-3
40	C540	ACENAPHTHYLENE	152 S3# 65	208-96-8
41	C543	2,6-DINITROTOLUENE	165 S3# 70	606-20-2
42	C545	3-NITROANILINE	138 S3# 75	99-09-2
43	C550	ACENAPHTHENE	153 S3# 80CC	83-32-9
44	C555	2,4-DINITROPHENOL	184 S3# 85SP	51-28-5
45	C560	4-NITROPHENOL	109 S3# 95SP	100-02-7
46	C565	DIBENZOFURAN	168 S3# 90	132-64-9
47	C570	2,4-DINITROTOLUENE	165 S3#105	121-14-2

No	Name				
48	C580 DIETHYLPHTHALATE	149	S3#130	84-66-2	
49	C590 FLUORENE	166	S3#135	86-73-7	
50	C585 4-CHLOROPHENYL-PHENYLE	204	S3#140	7005-72-3	

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	717	8:58	1	1.000	A BV	21830.	40.000	UG/ML	6.53
2	112	518	6:28	1	0.722	A BB	58021.	74.719	UG/ML	12.19
3	99	664	8:18	1	0.926	A BB	84427.	76.355	UG/ML	12.46
4	94	666	8:19	1	0.929	A BB	278.	0.225	UG/ML	0.04
5	NOT FOUND									
6	128	685	8:34	1	0.955	A BB	123.	0.160	UG/ML	0.03
7	NOT FOUND									
8	136	955	11:56	8	1.000	A BB	83921.	40.000	UG/ML	6.53
9	164	1312	16:24	9	1.000	A BB	38573.	40.000	UG/ML	6.53
10	146	720	9:00	1	1.004	A BB	50.	0.059	UG/ML	0.01
11	NOT FOUND									
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	108	797	9:58	1	1.112	A BB	198.	0.261	UG/ML	0.04
16	NOT FOUND									
17	NOT FOUND									
18	82	822	10:16	8	0.861	A BB	39982.	43.118	UG/ML	7.04
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									
22	107	899	11:14	8	0.941	A BB	52.	0.076	UG/ML	0.01
23	NOT FOUND									
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	128	958	11:58	8	1.003	A BB	95.	0.043	UG/ML	0.01
28	NOT FOUND									
29	NOT FOUND									
30	107	1074	13:25	8	1.125	A BB	137.	0.211	UG/ML	0.03
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	188	1615	20:11	34	1.000	A BV	61154.	40.000	UG/ML	6.53
35	NOT FOUND									
36	172	1176	14:42	9	0.896	A BB	57767.	42.717	UG/ML	6.97
37	162	1193	14:55	9	0.909	A BB	79.	0.063	UG/ML	0.01
38	65	1224	15:18	9	0.933	A BB	41.	0.077	UG/ML	0.01
39	NOT FOUND									
40	152	1279	15:59	9	0.975	A BB	69.	0.035	UG/ML	0.01
41	NOT FOUND									
42	NOT FOUND									
43	NOT FOUND									
44	NOT FOUND									
45	109	1349	16:52	9	1.028	A BB	139.	0.806	UG/ML	0.13
46	168	1351	16:53	9	1.030	A BB	72.	0.042	UG/ML	0.01
47	NOT FOUND									
48	NOT FOUND									
49	NOT FOUND									
50	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:58	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:28	1.00	0.721	1.00	74.72	100.00	1.063	1.423	0.75
3	8:19	1.00	0.929	1.00	76.36	100.00	1.547	2.026	0.76
4	8:21	1.00	0.932	1.00	0.23	50.00	0.010	2.262	0.00
5	8:30		0.948						
6	8:35	1.00	0.958	1.00	0.16	50.00	0.005	1.407	0.00
7	8:52		0.990						
8	11:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	16:25	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	9:00	1.00	1.004	1.00	0.06	50.00	0.002	1.564	0.00
11	9:21		1.043						
12	9:25		1.050						
13	9:38		1.075						
14	9:42		1.082						
15	9:58	1.00	1.113	1.00	0.26	50.00	0.007	1.389	0.01
16	10:03		1.121						
17	10:06		1.127						
18	10:17	1.00	0.861	1.00	43.12	50.00	0.381	0.442	0.86
19	10:20		0.865						
20	10:55		0.913						
21	11:05		0.928						
22	11:13	1.00	0.938	1.00	0.08	50.00	0.000	0.326	0.00
23	11:28		0.959						
24	11:35		0.970						
25	11:39		0.975						
26	11:51		0.992						
27	12:00	1.00	1.004	1.00	0.04	50.00	0.001	1.060	0.00
28	12:12		1.021						
29	12:27		1.042						
30	13:25	1.00	1.123	1.00	0.21	50.00	0.001	0.309	0.00
31	13:43		1.147						
32	14:17		0.871						
33	14:31		0.884						
34	20:12	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:36		0.890						
36	14:43	1.00	0.896	1.00	42.72	50.00	1.198	1.402	0.85
37	14:56	1.00	0.910	1.00	0.06	50.00	0.002	1.291	0.00
38	15:19	1.00	0.933	1.00	0.08	50.00	0.001	0.556	0.00
39	15:54		0.969						
40	16:01	1.00	0.976	1.00	0.03	50.00	0.001	2.069	0.00
41	16:03		0.978						
42	16:23		0.998						
43	16:30		1.005						
44	16:38		1.014						
45	16:50	1.00	1.026	1.00	0.81	50.00	0.003	0.179	0.02
46	16:54	1.00	1.030	1.00	0.04	50.00	0.001	1.786	0.00
47	17:03		1.039						
48	17:43		1.080						
49	17:47		1.084						
50	17:49		1.085						

Quantitation Report File: S59436R967

Data: S59436R967.TI
06/01/88 17:55:00
Sample: 59436-07 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
51	C595 4-NITROANALINE	138 S3#150		100-01-6
52	C610 4,6-DINITRO-2-METHYLPH	198 S4# 10		534-52-1
53	C615 N-NITROSODIPHENYLAMINE	169 S4# 15CC		87-30-6
54	CS55 2,4,6-TRIBROMOPHENOL	330SS3# 02		118-79-6
55	C625 4-BROMOPHENYL-PHENYLET	248 S4# 30		101-55-3
56	C630 HEXACHLOROBENZENE	284 S4# 40		118-74-1
57	CI70 CHRYSENE-D12	240IS5# 01		1719-03-5
58	C635 PENTACHLOROPHENOL	266 S4# 50		87-86-5
59	C640 PHENANTHRENE	178 S4# 65		85-01-8
60	C645 ANTHRACENE	178 S4# 70		120-12-7
61	C650 DI-N-BUTYLPHTHALATE	149 S4# 85		84-74-2
62	C655 FLUORANTHENE	202 S4#110CC		206-44-0
63	CI75 PERYLENE-D12	164IS6# 01		1520-96-3
64	C715 PYRENE	202 S5# 15		129-00-0
65	CS30 TERPHENYL-D14	244SS5# 02		1718-51-0
66	C720 BUTYLBENZYLPHTHALATE	149 S5# 40		85-68-7
67	C725 3,3'-DICHLOROBENZIDINE	252 S5# 55		91-94-1
68	C730 BENZO(A)ANTHRACENE	228 S5# 50		56-55-3
69	C740 CHRYSENE	228 S5# 60		218-01-9
70	C745 BIS(2-ETHYLHEXYL)PHTHA	149 S5# 65		117-81-7
71	C760 DI-N-OCTYL PHTHALATE	149 S6# 10CC		117-84-0
72	C765 BENZO(B)FLUORANTHENE	252 S6# 15		205-99-2
73	C770 BENZO(K)FLUORANTHENE	252 S6# 25		207-08-9
74	C775 BENZO(A)PYRENE	252 S6# 35		50-32-8
75	C780 INDENO(1,2,3-CD)PYRENE	276 S6# 55		193-39-5
76	C785 DIBENZ(A,H)ANTHRACENE	278 S6# 60		53-70-3
77	C790 BENZO(G,H,I)PERYLENE	276 S6# 65		191-24-2

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
51	NOT FOUND								
52	NOT FOUND								
53	NOT FOUND								
54	330	1476	18:27	9	1.125	A BB	13458.	87.876 UG/ML	14.34
55	NOT FOUND								
56	NOT FOUND								
57	240	2169	27:07	57	1.000	A BB	43479.	40.000 UG/ML	6.53
58	NOT FOUND								
59	178	1619	20:14	34	1.002	A BB	72.	0.041 UG/ML	0.01
60	NOT FOUND								
61	149	1753	21:55	34	1.085	A BB	689.	0.302 UG/ML	0.05
62	202	1868	23:21	34	1.157	A BB	46.	0.028 UG/ML	0.00
63	264	2450	30:37	63	1.000	A BV	29847.	40.000 UG/ML	6.53
64	202	1913	23:55	57	0.882	A BB	90.	0.058 UG/ML	0.01
65	244	1951	24:23	57	0.899	A BV	45871.	39.364 UG/ML	6.42
66	149	2062	25:46	57	0.951	A BB	207.	0.233 UG/ML	0.04

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	228	2168	27:06	57	1.000	A BB	249.	0.185 UG/ML	0.03
69	NOT FOUND								
70	149	2187	27:20	57	1.008	A BB	5809.	4.735 UG/ML	0.77
71	149	2310	28:52	63	0.943	A VV	1880.	1.004 UG/ML	0.16
72	252	2380	29:45	63	0.971	A BB	44.	0.043 UG/ML	0.01
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	17:59		1.096						
52	18:05		0.895						
53	18:10		0.899						
54	18:28	1.00	1.125	1.00	87.88	100.00	0.140	0.159	0.88
55	19:03		0.943						
56	19:25		0.961						
57	27:07	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:53		0.985						
59	20:15	1.00	1.002	1.00	0.04	50.00	0.001	1.136	0.00
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	0.30	50.00	0.009	1.492	0.01
62	23:22	1.00	1.157	1.00	0.03	50.00	0.001	1.057	0.00
63	30:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:56	1.00	0.882	1.00	0.06	50.00	0.002	1.422	0.00
65	24:23	1.00	0.899	1.00	39.36	50.00	0.844	1.072	0.79
66	25:47	1.00	0.951	1.00	0.23	50.00	0.004	0.818	0.00
67	27:04		0.998						
68	27:04	1.00	0.998	1.00	0.19	50.00	0.005	1.237	0.00
69	27:12		1.003						
70	27:21	1.00	1.008	1.00	4.74	50.00	0.107	1.129	0.09
71	28:52	1.00	0.942	1.00	1.00	50.00	0.050	2.509	0.02
72	29:46	1.00	0.971	1.00	0.04	50.00	0.001	1.378	0.00
73	29:50		0.974						
74	30:30		0.996						
75	33:35		1.096						
76	33:37		1.098						
77	34:26		1.124						

TCA FINISHED, 16 FOUND
FINISHED AT: 6/01/88 23:57:49

RMAL QUANTITATION SUMMARY FILE: S59436R967
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1 CI30	1,4-DICHLOROBENZENE	152	717	1	21830.	1.000	40.000
2	S2# 1 CI40	NAPHTHALENE-D8	136	955	2	83921.	1.000	40.000
3	S3# 1 CI50	ACENAPHTHENE-D10	164	1312	3	38573.	1.000	40.000
4	S4# 1 CI60	PHENANTHRENE-D10	188	1615	4	61154.	1.000	40.000
5	S5# 1 CI70	CHRYSENE-D12	240	2169	5	43479.	1.000	40.000
6	S6# 1 CI75	PERYLENE-D12	264	2450	6	29847.	1.000	40.000
7	S2# 2 CS20	NITROBENZENE-D5	82	822	2	39982.	0.381	43.119
8	S3# 3 CS25	2-FLUOROBIPHENYL	172	1176	3	57767.	1.198	42.717
9	S5# 2 CS30	TERPHENYL-D14	244	1951	5	45871.	0.844	39.364
10	S1# 3 CS45	PHENOL-D5	99	664	1	84427.	1.547	76.355
11	S1# 2 CS50	2-FLUOROPHENOL	112	518	1	58021.	1.063	74.719
12	S3# 2 CS55	2,4,6-TRIBROMOPHENO	330	1476	3	13458.	0.140	87.876
13	S1#105 C315	PHENOL	94		1	NOT FOUND		
14	S1#110 C325	BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115 C330	2-CHLOROPHENOL	128		1	NOT FOUND		
16	S1#125 C335	1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130 C340	1,4-DICHLOROBENZENE	146		1	NOT FOUND		
18	S1#145 C345	BENZYL ALCOHOL	108		1	NOT FOUND		
19	S1#150 C350	1,2-DICHLOROBENZENE	146		1	NOT FOUND		
20	S1#160 C355	2-METHYLPHENOL	108		1	NOT FOUND		
21	S1#165 C360	BIS(2-CHLOROISOPROP	45		1	NOT FOUND		
22	S1#185 C365	4-METHYLPHENOL	108		1	NOT FOUND		
23	S1#190 C370	N-NITROSO-DI-N-PROP	70		1	NOT FOUND		
24	S1#200 C375	HEXACHLOROETHANE	117		1	NOT FOUND		
25	S2# 10 C410	NITROBENZENE	77		2	NOT FOUND		
26	S2# 20 C415	ISOPHORONE	82		2	NOT FOUND		
27	S2# 25 C420	2-NITROPHENOL	139		2	NOT FOUND		
28	S2# 30 C425	2,4-DIMETHYLPHENOL	107		2	NOT FOUND		
29	S2# 35 C435	BIS(2-CHLOROETHOXY)	93		2	NOT FOUND		
30	S2# 40 C440	2,4-DICHLOROPHENOL	162		2	NOT FOUND		
31	S2# 45 C430	BENZOIC ACID	122		2	NOT FOUND		
32	S2# 55 C445	1,2,4-TRICHLOROBENZ	180		2	NOT FOUND		
33	S2# 60 C450	NAPHTHALENE	128		2	NOT FOUND		
34	S2# 80 C455	4-CHLOROANALINE	127		2	NOT FOUND		
35	S2# 95 C460	HEXACHLOROBUTADIENE	225		2	NOT FOUND		
36	S2#130 C465	4-CHLORO-3-METHYLPH	107		2	NOT FOUND		
37	S2#145 C470	2-METHYLNAPHTHALENE	142		2	NOT FOUND		
38	S3# 20 C510	HEXACHLOROCYCLOPENT	237		3	NOT FOUND		
39	S3# 25 C515	2,4,6-TRICHLOROPHEN	196		3	NOT FOUND		
40	S3# 30 C520	2,4,5-TRICHLOROPHEN	196		3	NOT FOUND		
41	S3# 40 C525	2-CHLORONAPHTHALENE	162		3	NOT FOUND		
42	S3# 45 C530	2-NITROANALINE	65		3	NOT FOUND		
43	S3# 55 C535	DIMETHYLPHTHALATE	163		3	NOT FOUND		
44	S3# 65 C540	ACENAPHTHYLENE	152		3	NOT FOUND		
45	S3# 70 C543	2,6-DINITROTOLUENE	165		3	NOT FOUND		
46	S3# 75 C545	3-NITROANILINE	138		3	NOT FOUND		
47	S3# 80 C550	ACENAPHTHENE	153		3	NOT FOUND		
48	S3# 85 C555	2,4-DINITROPHENOL	184		3	NOT FOUND		
49	S3# 90 C565	DIBENZOFURAN	168		3	NOT FOUND		
50	S3# 95 C560	4-NITROPHENOL	109		3	NOT FOUND		

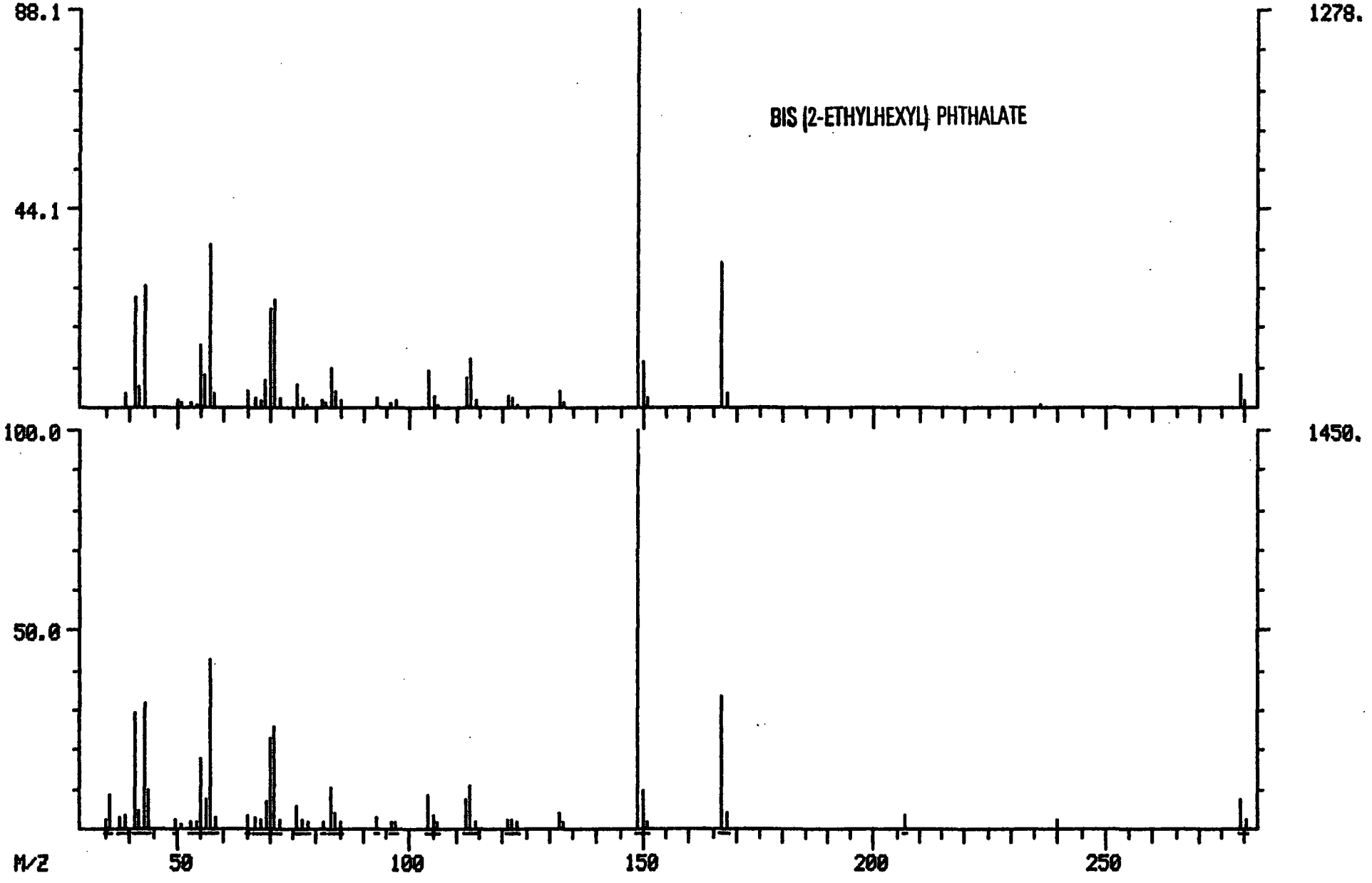
00533

52	S3#130	C580	DIETHYLPHTHALATE	149		3	NOT FOUND			
53	S3#135	C590	FLUORENE	166		3	NOT FOUND			
54	S3#140	C585	4-CHLOROPHENYL-PHEN	204		3	NOT FOUND			
55	S3#150	C595	4-NITROANALINE	138		3	NOT FOUND			
56	S4# 10	C610	4,6-DINITRO-2-METHY	198		4	NOT FOUND			
57	S4# 15	C615	N-NITROSODIPHENYLAM	169		4	NOT FOUND			
58	S4# 30	C625	4-BROMOPHENYL-PHENY	248		4	NOT FOUND			
59	S4# 40	C630	HEXACHLOROBENZENE	284		4	NOT FOUND			
60	S4# 50	C635	PENTACHLOROPHENOL	266		4	NOT FOUND			
61	S4# 65	C640	PHENANTHRENE	178		4	NOT FOUND			
62	S4# 70	C645	ANTHRACENE	178		4	NOT FOUND			
63	S4# 85	C650	DI-N-BUTYLPHTHALATE	149		4	NOT FOUND			
64	S4#110	C655	FLUORANTHENE	202		4	NOT FOUND			
65	S5# 15	C715	PYRENE	202		5	NOT FOUND			
66	S5# 40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND			
67	S5# 50	C730	BENZO(A)ANTHRACENE	228		5	NOT FOUND			
68	S5# 55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND			
69	S5# 60	C740	CHRYSENE	228		5	NOT FOUND			
70	S5# 65	C745	BIS(2-ETHYLHEXYL)PH	149	2187	5	5809.	0.107	4.735	
71	S6# 10	C760	DI-N-OCTYL PHTHALAT	149	2310	6	1880.	0.050	1.004	
72	S6# 15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND			
73	S6# 25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND			
74	S6# 35	C775	BENZO(A)PYRENE	252		6	NOT FOUND			
75	S6# 55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND			
76	S6# 60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND			
77	S6# 65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND			

00534

DUAL MASS SPECTRUM
06/01/88 17:55:00 + 27:20
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R967 #2187 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 5783./ 6975.

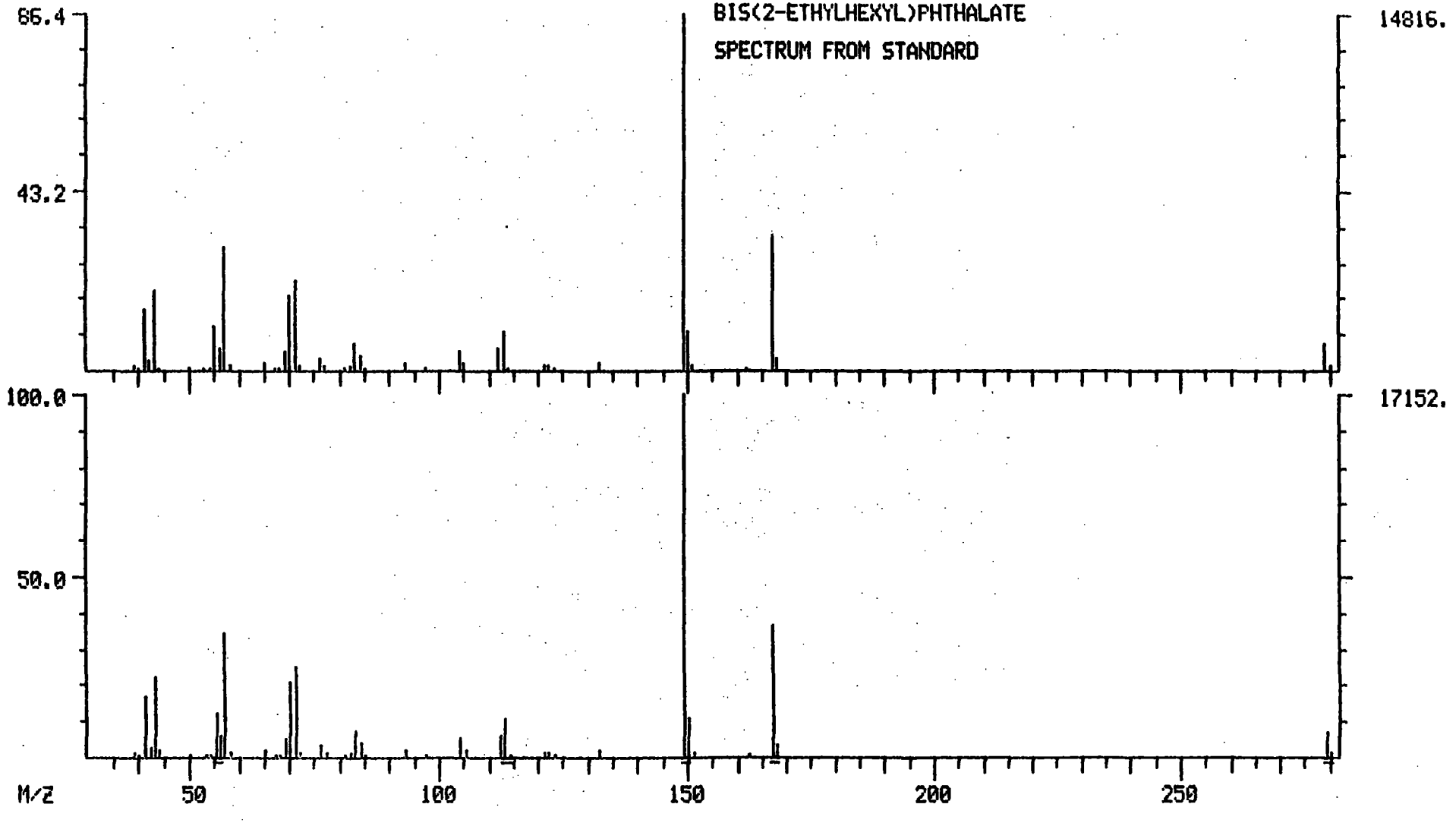


00535

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 30:27
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2N 0T)

DATA: STDR810 #2436
CALI: 103086C #5

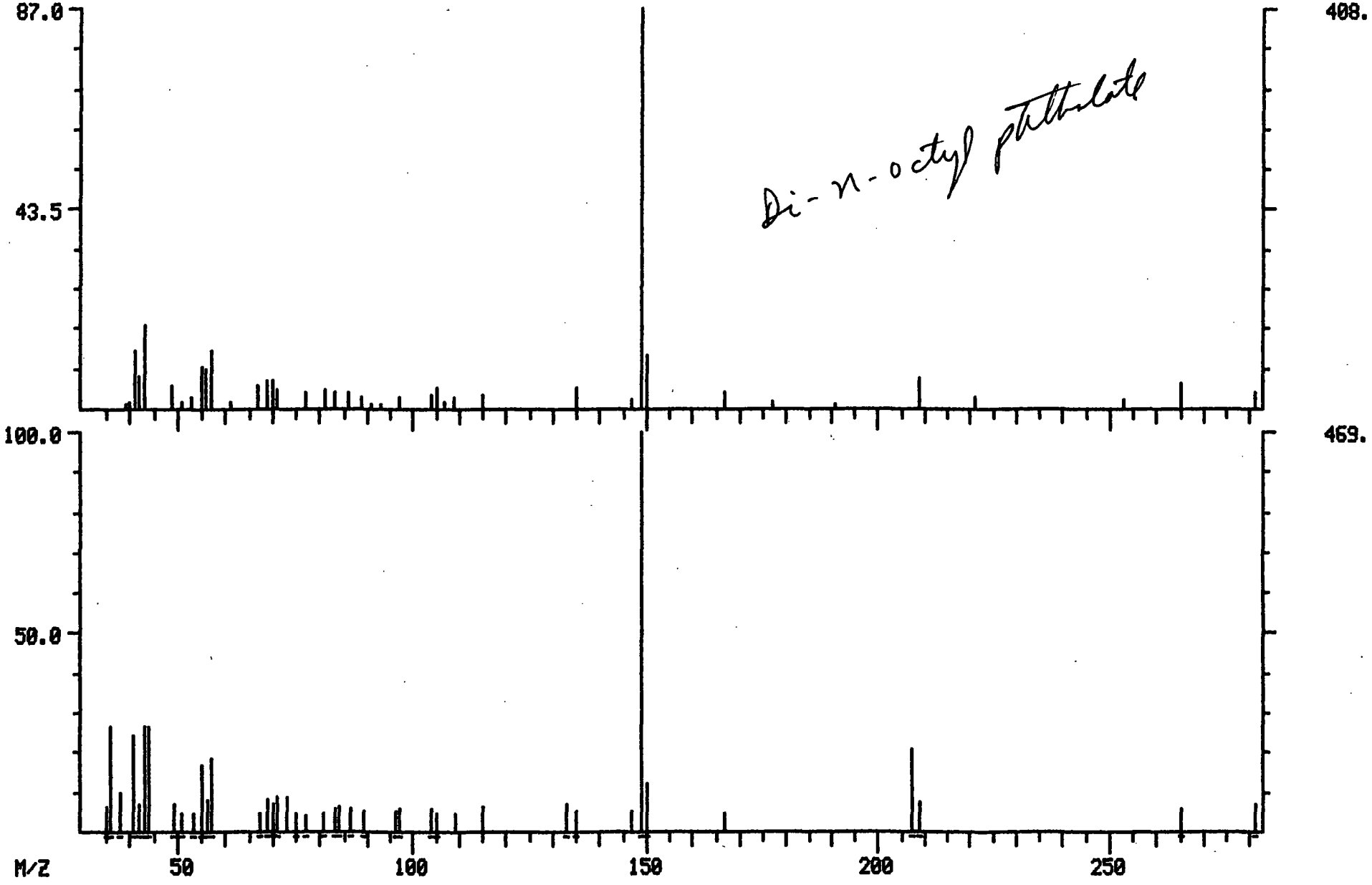
BASE M/Z: 149/ 149
RIC: 55167./ 63807.



00536

DUAL MASS SPECTRUM
06/01/88 17:55:00 + 28:52
SAMPLE: 59436-07 BNA H2O 100Z/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R967 #2310 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 1269./ 2207.



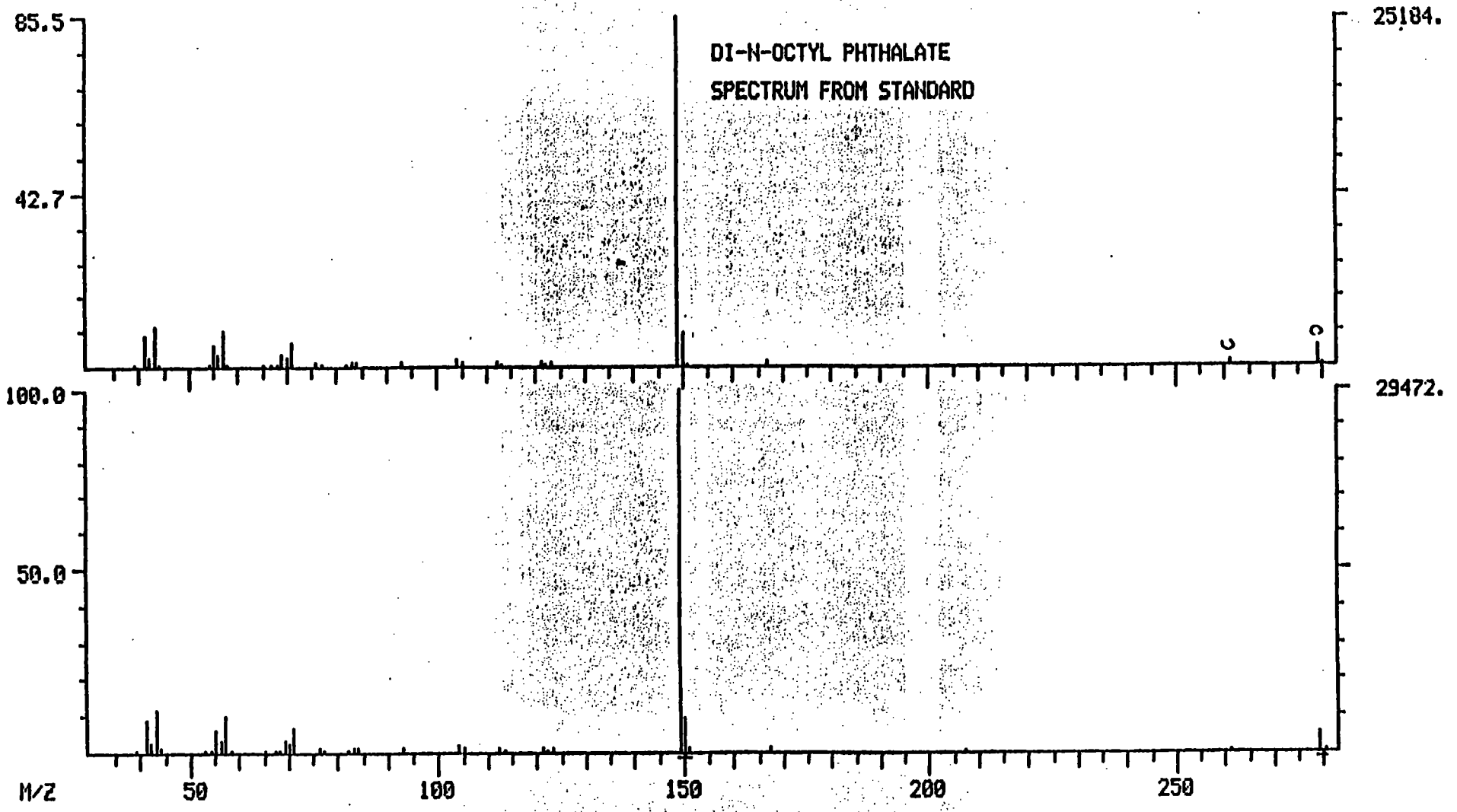
Di-n-octyl phthalate

00537

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 32:18
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (S 15B 2N 0T)

DATA: STDR810 #2584
CALI: 103086C #5

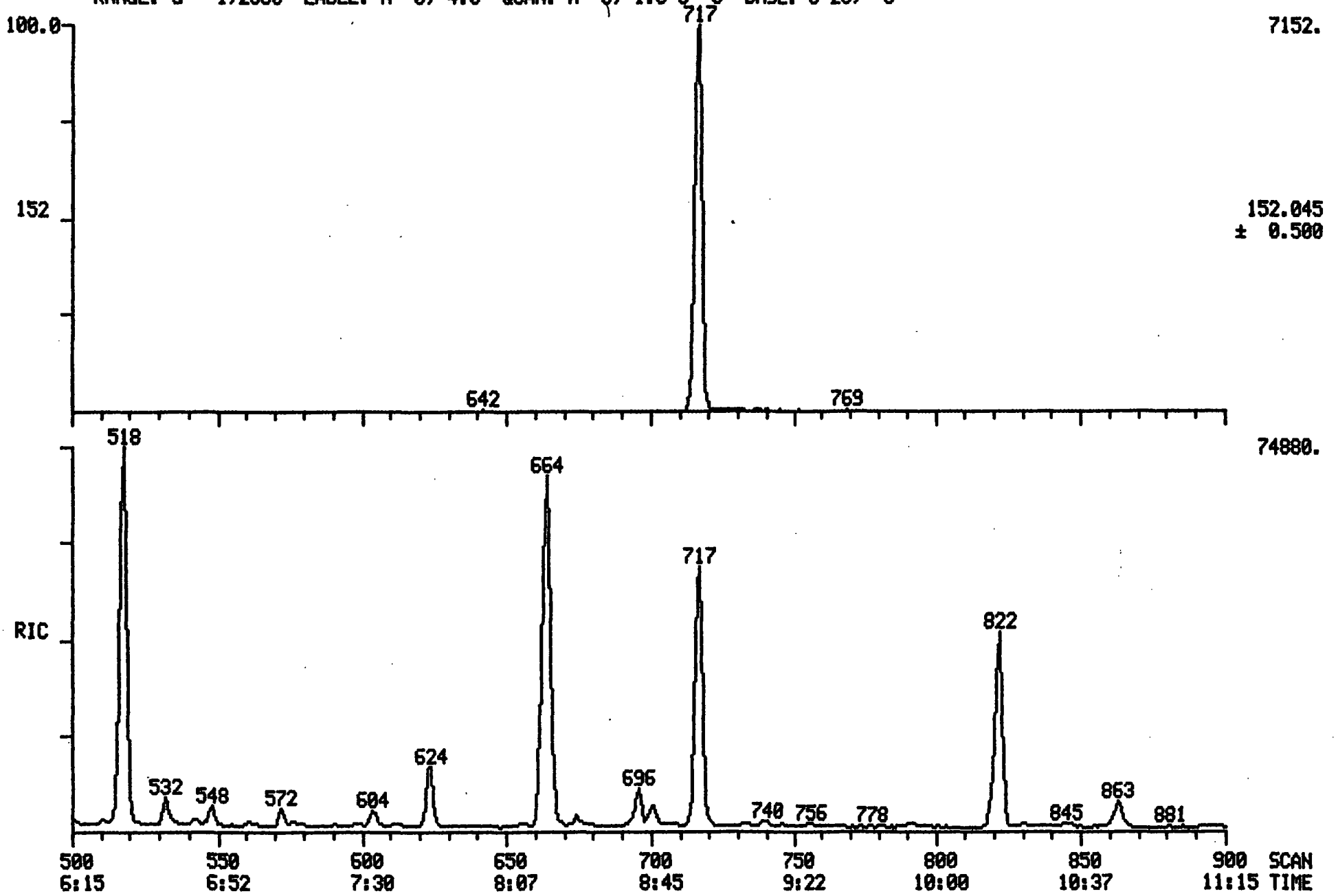
BASE M/Z: 149/ 149
RIC: 50111./ 58623.



00538

RIC+MASS CHROMATOGRAM
06/01/88 17:55:00
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R967 #1 SCANS 500 TO 900
CALI: 053188CR #4



DATA REDUCED BY: AR DATE: 6-7-88 DATA FILE: S59436R967
DATA REVIEWED BY: ____ DATE: ____

00539

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-07 BNA H2O 100%/2ML RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MK

#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	314	B	2	9.1	108-87-2	CYCLOHEXANE, METHYL-
2	369	B	2	7.6	108-88-3	BENZENE, METHYL- (VOA TIC)
3	393	CB	1	12.	00-00-0	OXYGENATED HYDROCARBON
4	435	CB	1	6.9	00-00-0	OXYGENATED HYDROCARBON
5	469	CB	1	20.	00-00-0	OXYGENATED HYDROCARBON
6	624	IB	2	8.6	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-
7	696	I	2	5.2	20324-32-7	2-PROPANOL, 1-(2-METHOXY-1-METHYLE
8	1724	I	1	4.9	2091-29-4	9-HEXADECENOIC ACID

editing completed

DATA FILE: S59436R967

ENSECO TIC REPORT (PAGE 2)

CONCENTRATION = AREA(TIC)*CONC(IS)/AREA(IS)

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	982	882	1	3:55	0.442	35087.	12031.	9.111	NB	1138.
2	994	942	1	4:36	0.519	29298.	14480.	7.608	NB	850.
3	851	805	1	4:54	0.553	44765.	19305.	11.624	BC	2.
4	928	749	1	5:26	0.611	26421.	8912.	6.860	BC	2.
5	802	766	1	5:51	0.659	75220.	28499.	19.531	BC	2.
6	941	758	1	7:47	0.875	33042.	11590.	8.580	NB	6445.
7	0	904	1	8:41	0.975	20173.	7296.	5.238	NB	7259.
8	945	644	4	21:32	1.072	22247.	5791.	4.932	NB	24165.

TIC SELECTION REPORT

DATA FILE: S59436R967

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 50 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 3 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
336	88719.	23.036
518	222001.	57.643
664	237417.	61.645
717	154052.	39.999
822	120979.	31.412
955	186956.	39.999
1176	176717.	37.809
1312	194590.	43.136
1615	180440.	39.999
1951	137550.	30.492
2169	141435.	53.975
2187	22133.	8.446
2450	104813.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 9

INTERNAL STANDARD DATA IS LISTED BELOW. IS FOR WHICH RIC SIZE DIFFERS FROM THE ESTIMATED RIC SIZE BY MORE THAN 60 % ARE CONSIDERED TO HAVE INTERFERENCES, AND ARE NOT USED FOR QUANTITATION.

#	LIB	LIB#	RIC SIZE	ESTIMATED RIC SIZE	INTERFERENCE
1	S1	1	154052.	133525.	
2	S2	1	186956.	123602.	
3	S3	1	194590.	96675.	*
4	S4	1	180440.	117582.	
5	S5	1	141435.	83645.	*
6	S6	1	104813.	79911.	

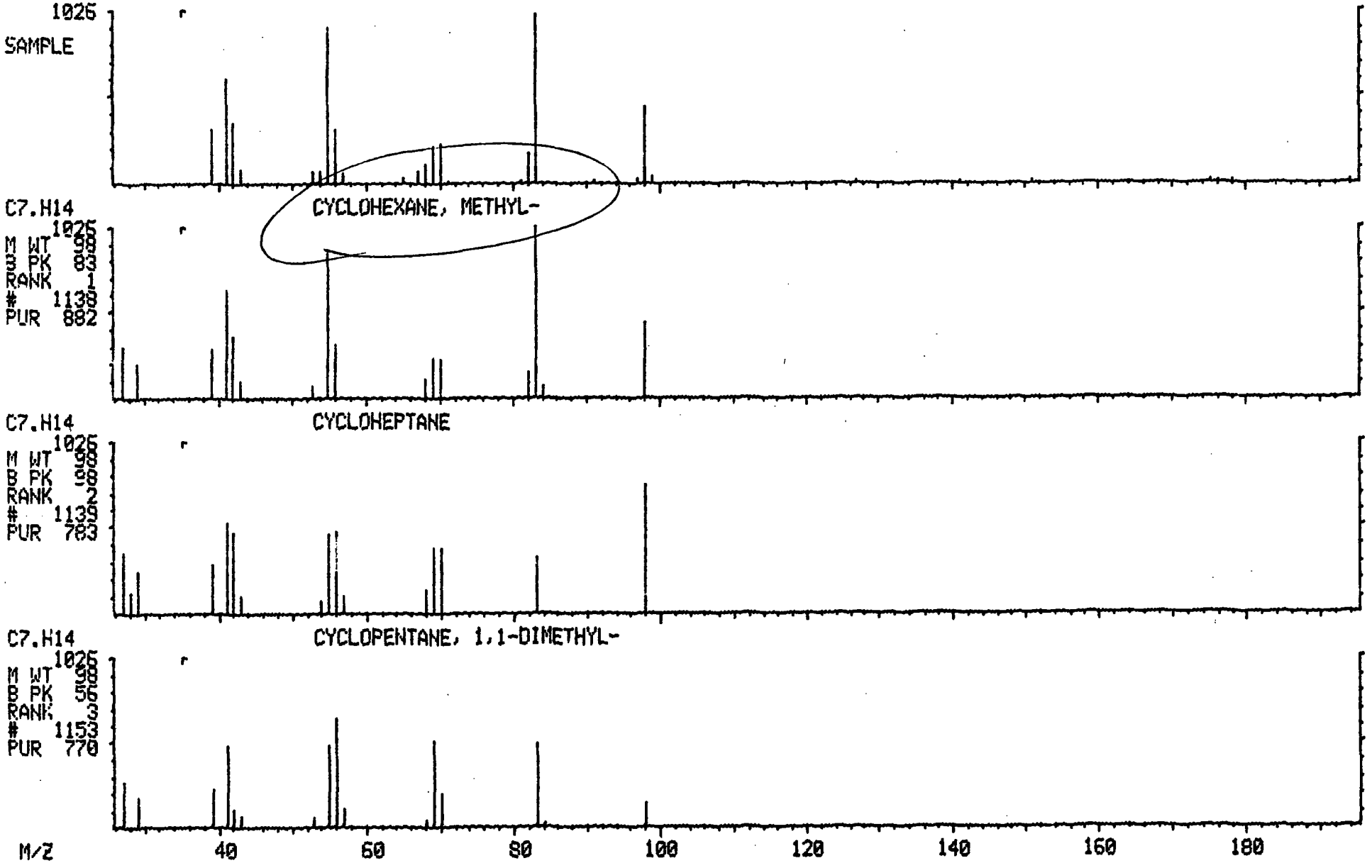
SIZE = AREA

00542

LIBRARY SEARCH
05/01/88 17:55:00 + 3:55
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R967 # 314
CALI: 053188CR # 4

BASE M/Z: 83
RIC: 9487.

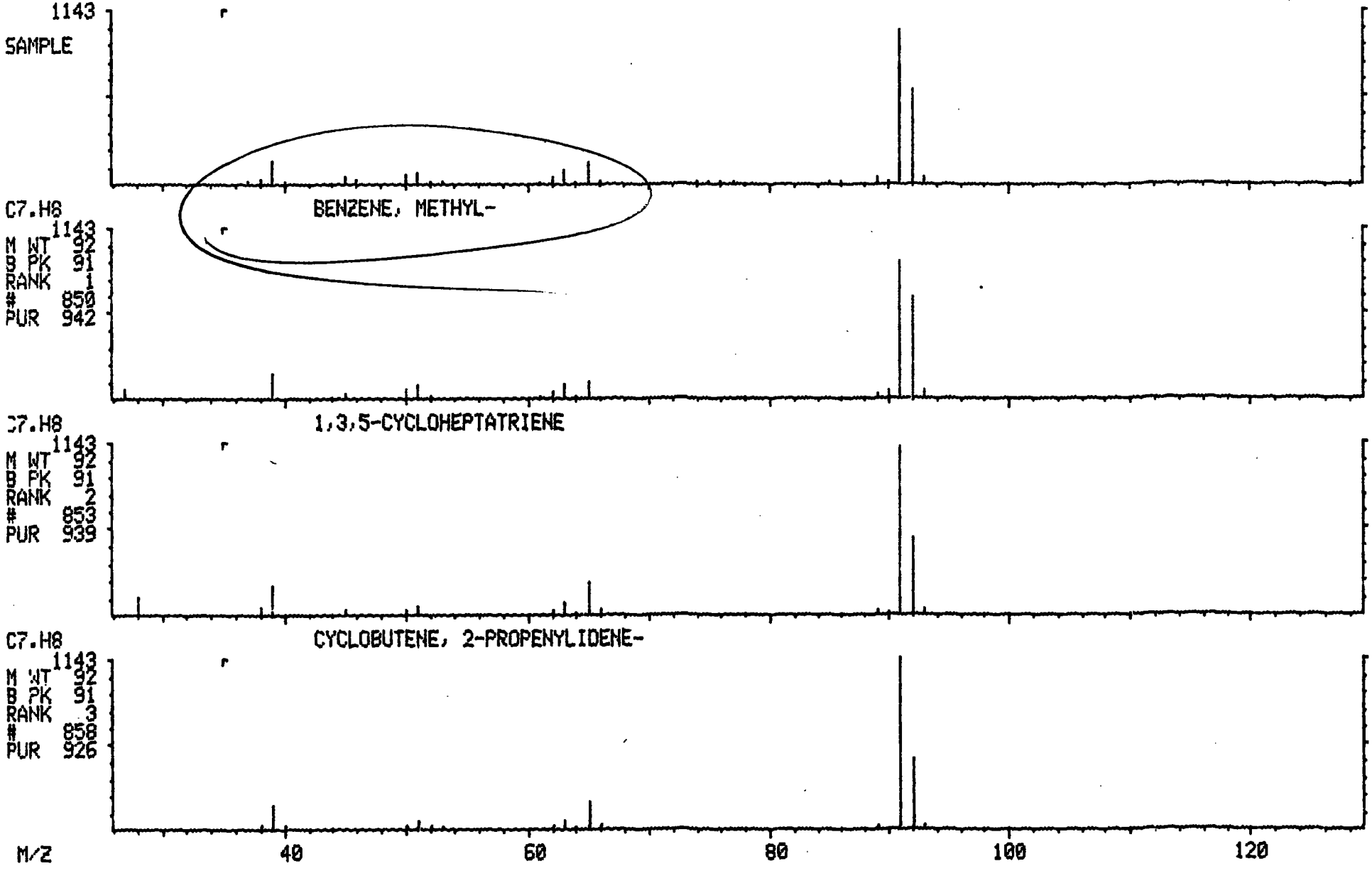


00543

LIBRARY SEARCH
06/01/88 17:55:00 + 4:37
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R967 # 369
CALI: 053188CR # 4

BASE M/Z: 91
RIC: 11119.



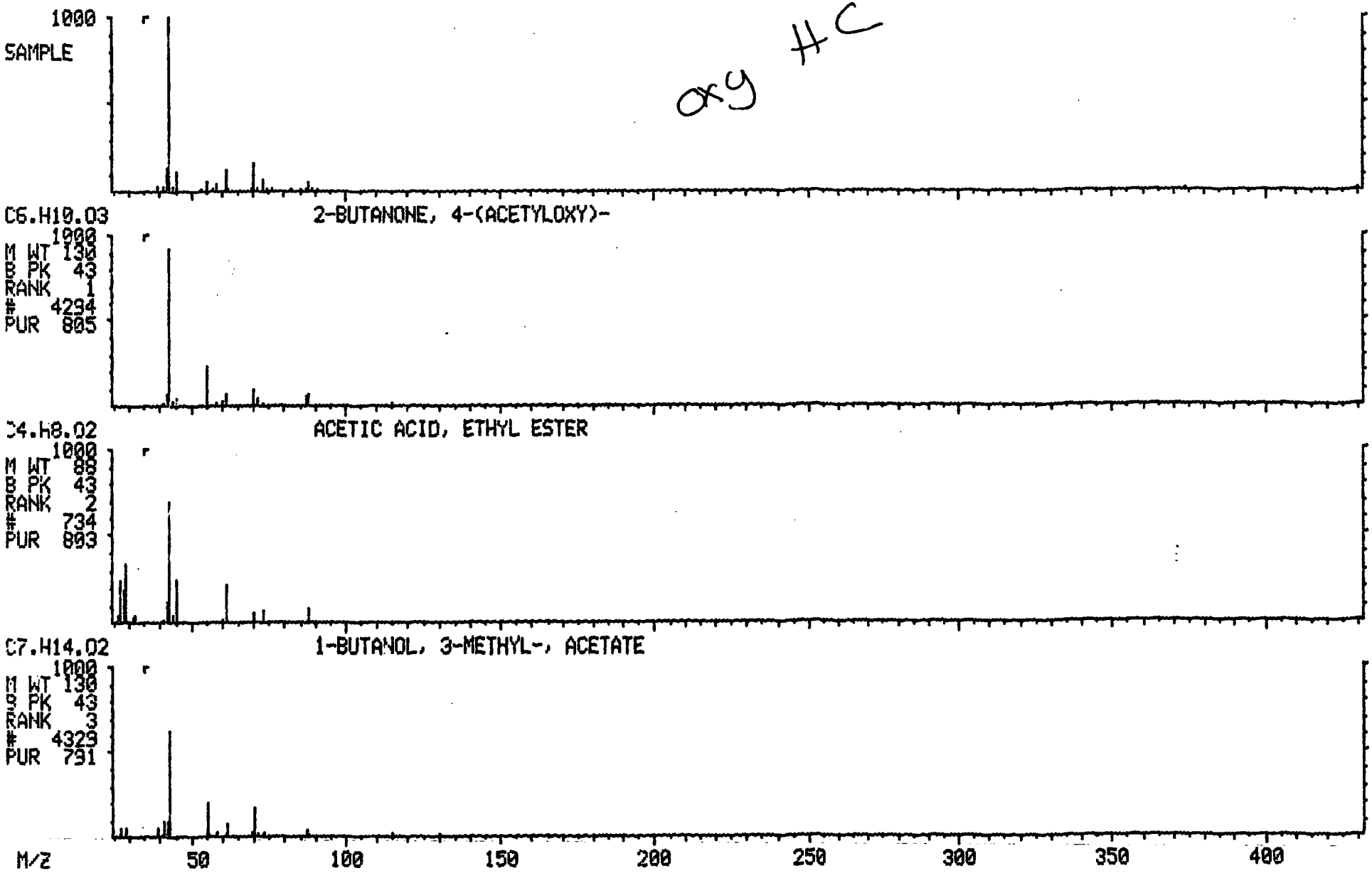
00544

LIBRARY SEARCH
06/01/88 17:55:00 + 4:55
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R967 # 393
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 15455.

oxy #C



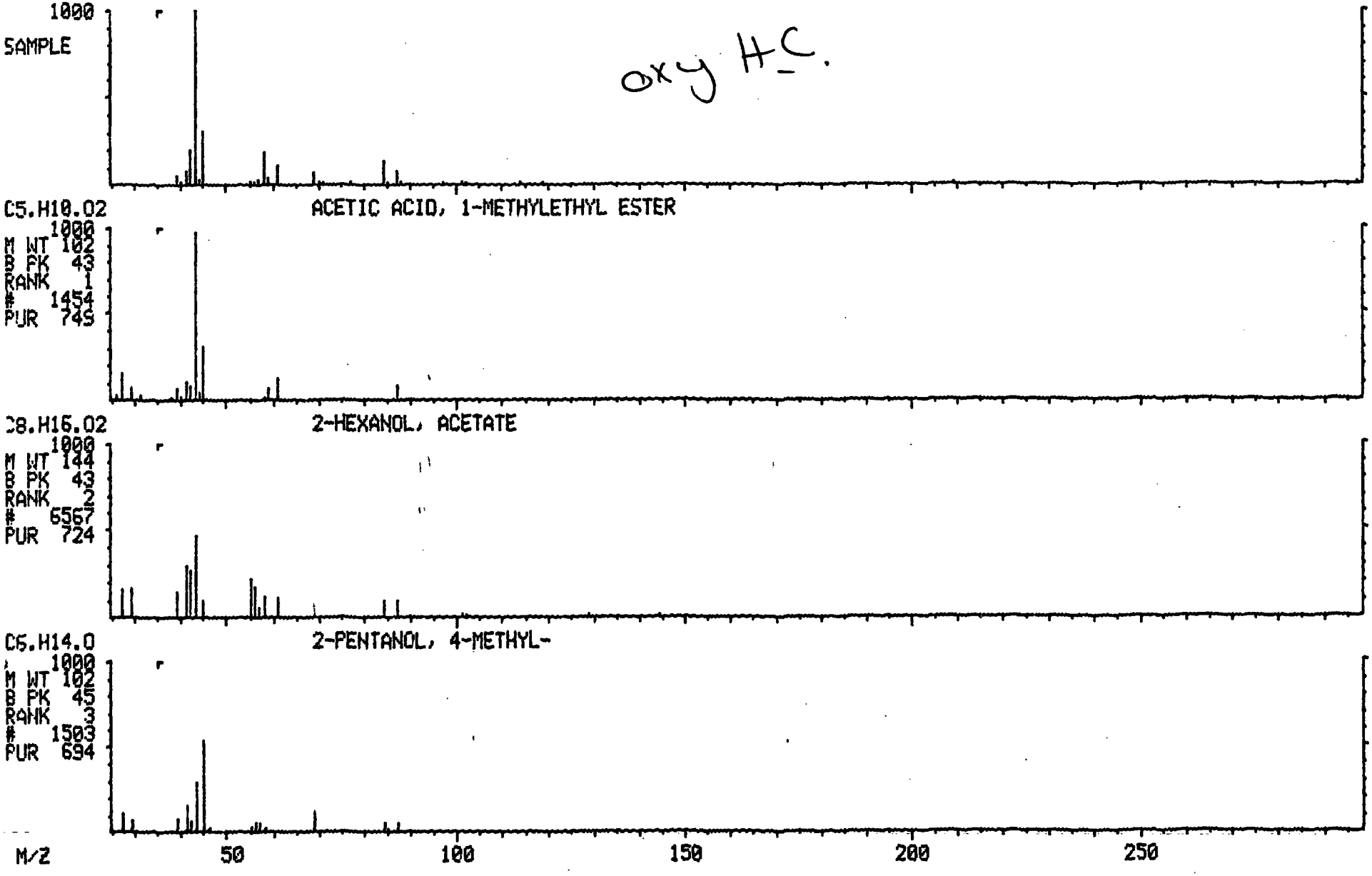
00545

LIBRARY SEARCH
06/01/88 17:55:00 + 5:26
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R367 # 435
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 7495.

oxy HC.

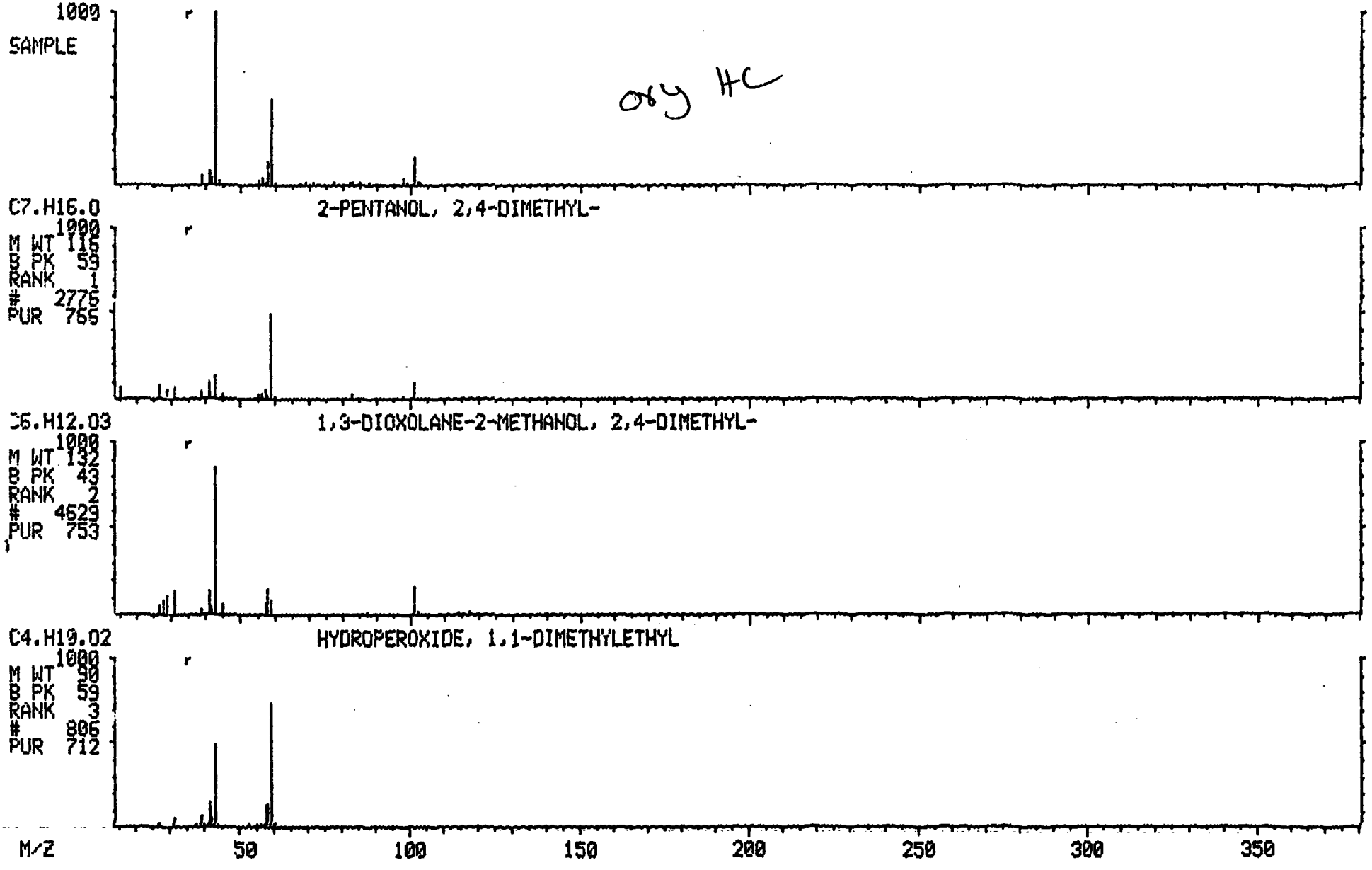


00546

LIBRARY SEARCH
06/01/88 17:55:00 + 5:52
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R967 # 469
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 24415.

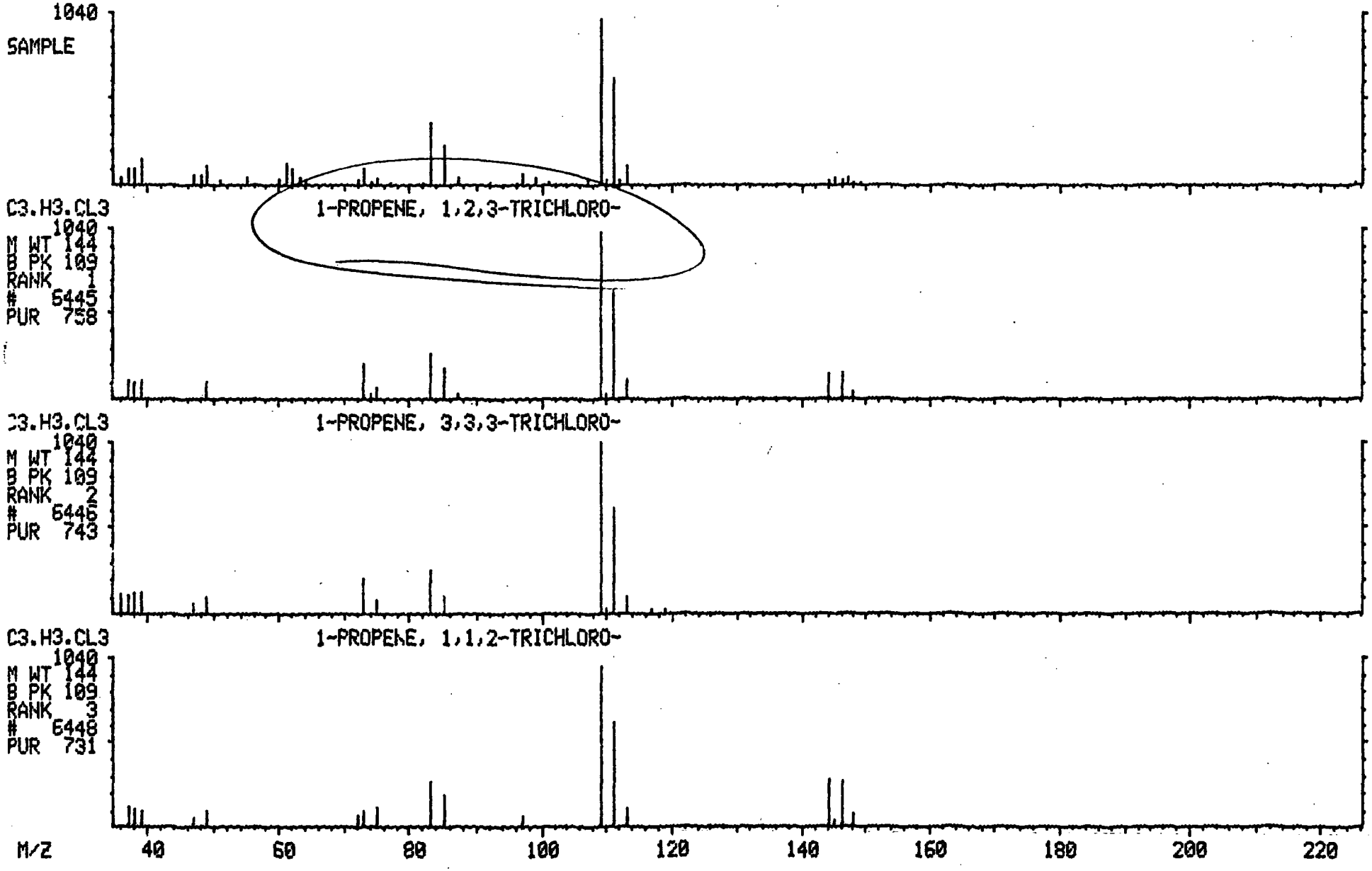


005547

LIBRARY SEARCH
06/01/88 17:55:00 + 7:48
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R967 # 624
CALI: 053188CR # 4

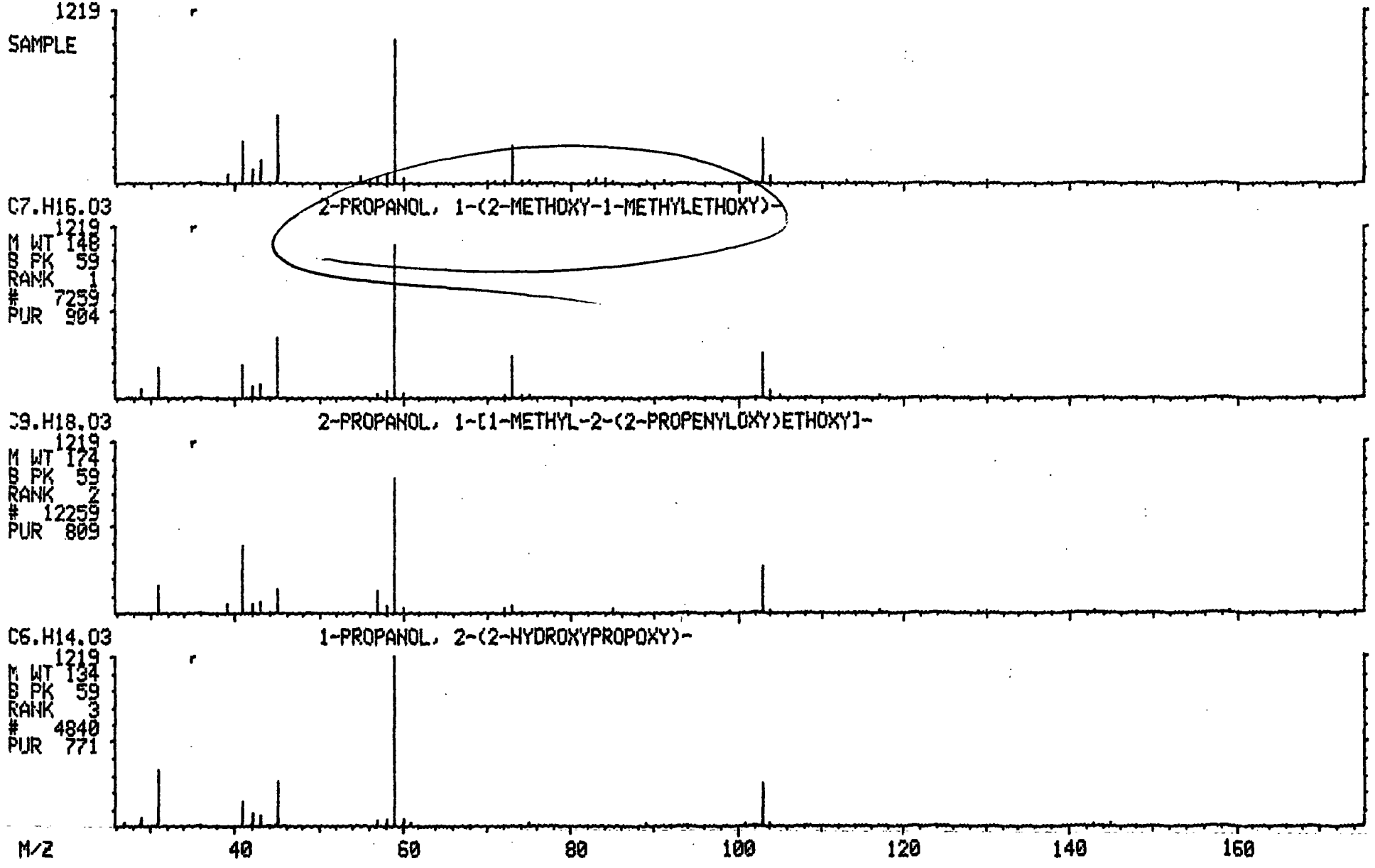
BASE M/Z: 109
RIC: 10335.



00548

LIBRARY SEARCH
06/01/88 17:55:00 + 8:42
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R967 # 696 BASE M/Z: 59
CALI: 053188CR # 4 RIC: 6079.

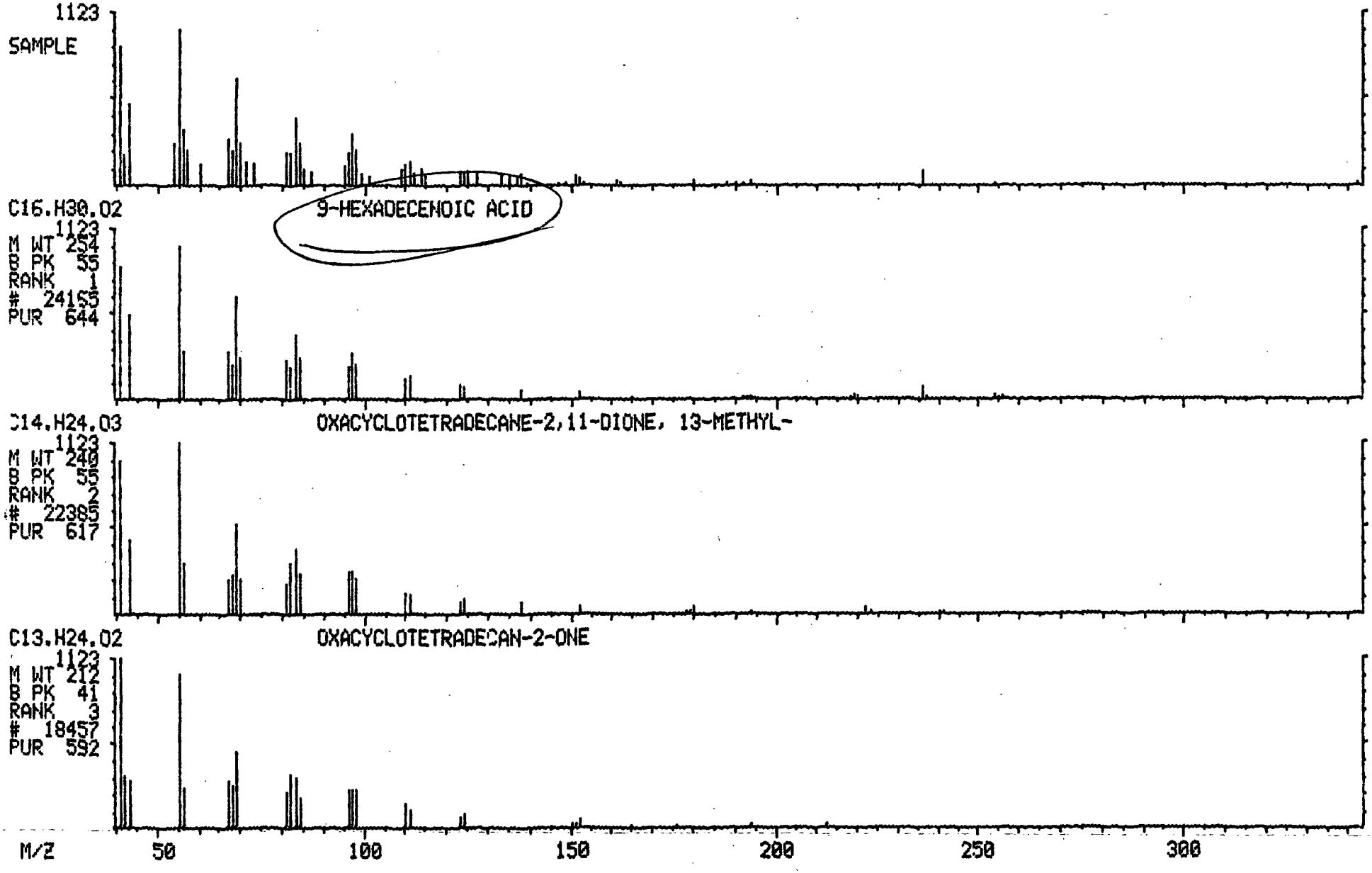


00549

LIBRARY SEARCH
06/01/88 17:55:00 + 21:33
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R967 #1724
CALI: 053188CR # 4

BASE M/Z: 55
RIC: 4719.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 17:41:28
DATA FILE: S59436R967
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00550
REPORT: IS01

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	7	2	418	IS01/TC01
3	3	1	49	14	4	1	37	IS02/TC02

26 COMPOUNDS PROCESSED, 10 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >		< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-715	717	717	.	1	979	.	152	717	.	1
2	S1	4	-335	339	336	-3	1	991	.	84	336	.	1
3	S1	20	-337	341	.	.	.	.	.	79	.	.	.
4	S1	30	-431	436	441	5	1	920	.	93	440	-1	1
5	S1	62	-496	501	.	.	.	.	.	93	.	.	.
6	S1	64	-526	531	531	.	1	949	.	107	531	.	1
7	S1	73	-558	563	561	-2	1	896	.	106	561	.	1
8	S1	83	-594	599	599	.	2	951	.	107	599	.	1
9	S1	87	-615	621	.	.	.	.	.	107	.	.	.
10	S1	88	-635	641	.	.	.	.	.	107	.	.	.
11	S1	89	-643	649	.	.	.	.	.	107	650	.	1
12	S1	92	-663	669	674	5	1	993	.	107	674	.	1
13	S1	122	-700	706	.	.	.	.	.	107	.	.	.
14	S2	1	-954	955	955	.	1	1000	.	136	955	.	1
15	S3	1	-1311	1312	1312	.	1	992	.	164	1312	.	1
16	S1	137	-731	733	733	.	1	877	.	106	733	.	1
17	S1	142	-745	747	.	.	.	.	.	106	746	.	1
18	S1	187	-799	801	.	.	.	.	.	108	.	.	.
19	S1	202	-822	824	.	.	.	.	.	106	.	.	.
20	S1	203	-827	829	.	.	.	.	.	106	.	.	.
21	S1	204	-847	849	.	.	.	.	.	122	.	.	.
22	S2	27	-898	900	.	.	.	.	.	107	899	.	1
23	S2	37	-922	924	.	.	.	.	.	107	.	.	.
24	S2	47	-937	938	.	.	.	.	.	107	.	.	.
25	S2	57	-955	956	.	.	.	.	.	107	955	.	1
26	S2	150	-1118	1119	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59436R967

00551

Data: S59436R967.TI
06/01/88 17:55:00
Sample: 59436-07 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59436

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

No	Name			
1	CI30 1,4-DICHLOROBENZENE-D4	152	IS1# 01	3855-82-1
2	PYRIDINE-D5	84	S1# 04	
3	PYRIDINE	79	S1# 20	110-86-1
4	2-PICOLINE	93	S1# 30	109-06-8
5	3 & 4-PICOLINE	93	S1# 62	
6	2,6-LUTIDINE	107	S1# 64	
7	2-ETHYL PYRIDINE	106	S1# 73	
8	2,4 & 2,5-LUTIDINE	107	S1# 83	
9	2,3-LUTIDINE	107	S1# 87	
10	3-ETHYL PYRIDINE	107	S1# 88	
11	4-ETHYL PYRIDINE	107	S1# 89	
12	3,5-LUTIDINE	107	S1# 92	
13	3,4-LUTIDINE	107	S1#122	
14	CI40 NAPHTHALENE-D8	136	IS2# 01	1146-65-2
15	CI50 ACENAPHTHENE-D10	164	IS3# 01	15067-26-2
16	2-METHYL-5-ETHYL PYRIDINE	106	S1#137	
17	2-METHYL-3-ETHYL PYRIDINE	106	S1#142	
18	M AND P CRESOLS	108	S2#187	
19	3-ETHYL-4-METHYL PYRIDINE	106	S1#202	
20	3-ETHYL-5-METHYL PYRIDINE	106	S1#203	
21	2,6-DIMETHYL PHENOL	122	S1#204	
22	2,5-DIMETHYL PHENOL	107	S2# 27	
23	3,5-DIMETHYL PHENOL	107	S2# 37	
24	2,3-DIMETHYL PHENOL	107	S2# 47	
25	3,4-DIMETHYL PHENOL	107	S2# 57	
26	1-METHYLNAPHTHALENE	142	S2#150	90-12-0

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	717	8:58	1	1.000	A BV	21830.	40.000 UG/ML	26.76
2	84	336	4:12	1	0.469	A BB	30560.	25.068 UG/ML	16.77
3	NOT FOUND								
4	93	440	5:30	1	0.614	A BB	938.	0.891 UG/ML	0.60
5	NOT FOUND								
6	107	531	6:38	1	0.741	A BB	339.	0.304 UG/ML	0.20
7	106	561	7:01	1	0.782	A BB	313.	0.239 UG/ML	0.16
8	107	599	7:29	1	0.835	A BV	325.	0.353 UG/ML	0.24
9	NOT FOUND								
10	NOT FOUND								
11	107	650	8:07	1	0.907	A BB	174.	0.221 UG/ML	0.15
12	107	674	8:25	1	0.940	A BB	1224.	1.401 UG/ML	0.94
13	NOT FOUND								
14	136	955	11:56	14	1.000	A BB	83921.	40.000 UG/ML	26.76
15	164	1312	16:24	15	1.000	A BB	38573.	40.000 UG/ML	26.76
16	106	733	9:10	1	1.022	A BB	279.	0.236 UG/ML	0.16
17	106	746	9:19	1	1.040	A BB	219.	0.265 UG/ML	0.18

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	107	899	11:14	14	0.941	A BB	52.	0.070 UG/ML	0.05
23	NOT FOUND								
24	NOT FOUND								
25	107	955	11:56	1	1.332	A BB	431.	0.424 UG/ML	0.28
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	4:11	1.00	0.468	1.00	25.07	50.00	1.120	2.234	0.50
3	4:13		0.471						
4	5:23	1.02	0.602	1.02	0.89	50.00	0.034	1.929	0.02
5	6:12		0.693						
6	6:34	1.01	0.735	1.01	0.30	50.00	0.012	2.046	0.01
7	6:58	1.01	0.779	1.00	0.24	50.00	0.011	2.397	0.00
8	7:25	1.01	0.830	1.01	0.35	50.00	0.012	1.688	0.01
9	7:41		0.859						
10	7:56		0.887						
11	8:02	1.01	0.898	1.01	0.22	50.00	0.006	1.445	0.00
12	8:17	1.02	0.926	1.02	1.40	50.00	0.045	1.600	0.03
13	8:45		0.978						
14	11:56	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	16:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	9:08	1.00	1.021	1.00	0.24	50.00	0.010	2.162	0.00
17	9:19	1.00	1.041	1.00	0.27	50.00	0.008	1.512	0.01
18	9:59		1.116						
19	10:16		1.148						
20	10:20		1.155						
21	10:35		1.183						
22	11:13	1.00	0.940	1.00	0.07	50.00	0.000	0.355	0.00
23	11:31		0.965						
24	11:43		0.981						
25	11:56	1.00	1.334	1.00	0.42	50.00	0.016	1.861	0.01
26	13:58		1.171						

TCA FINISHED, 10 FOUND
FINISHED AT: 6/03/88 17:44:15

RF 2.Ø2 00553
SV 2.ØØ

RMAL QUANTITATION SUMMARY FILE: S59436R967
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

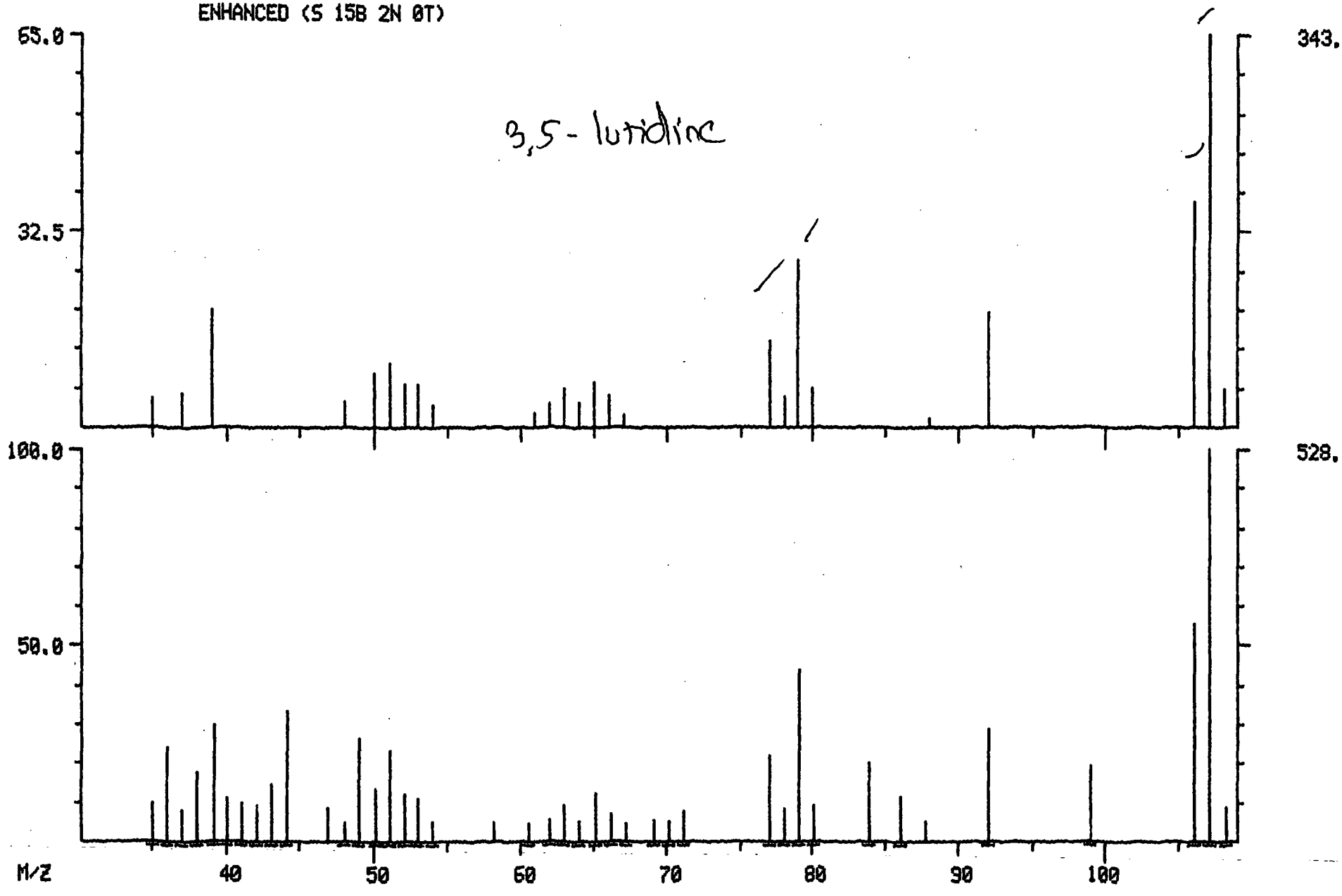
UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	717	1	21830.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	955	2	83921.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1312	3	38573.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	336	1	30560.	1.120	25.068
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93		1	NOT FOUND		
7	S1# 62	3 & 4-PICOLINE	93		1	NOT FOUND		
8	S1# 64	2,6-LUTIDINE	107		1	NOT FOUND		
9	S1# 73	2-ETHYL PYRIDINE	106		1	NOT FOUND		
10	S1# 83	2,4 & 2,5-LUTIDINE	107		1	NOT FOUND		
11	S1# 87	2,3-LUTIDINE	107		1	NOT FOUND		
12	S1# 88	3-ETHYL PYRIDINE	107		1	NOT FOUND		
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107	674	1	1224.	0.045 ✓	1.401
15	S1#122	3,4-LUTIDINE	107		1	NOT FOUND		
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106		1	NOT FOUND		
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106		1	NOT FOUND		
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106		1	NOT FOUND		
20	S1#203	3-ETHYL-5-METHYL PYRIDIN	106		1	NOT FOUND		
21	S1#204	2,6-DIMETHYL PHENOL	122		1	NOT FOUND		
22	S2# 27	2,5-DIMETHYL PHENOL	107		2	NOT FOUND		
23	S2# 37	3,5-DIMETHYL PHENOL	107		2	NOT FOUND		
24	S2# 47	2,3-DIMETHYL PHENOL	107		2	NOT FOUND		
25	S2# 57	3,4-DIMETHYL PHENOL	107		1	NOT FOUND		
26	S2#150	1-METHYLNAPHTHALENE	142		2	NOT FOUND		

00554

DUAL MASS SPECTRUM
06/01/88 17:55:00 + 8:25
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: S59436R967 #674 BASE M/Z: 107/ 107
CALI: 053188CR #4 RIC: 1509./ 3579.



00555

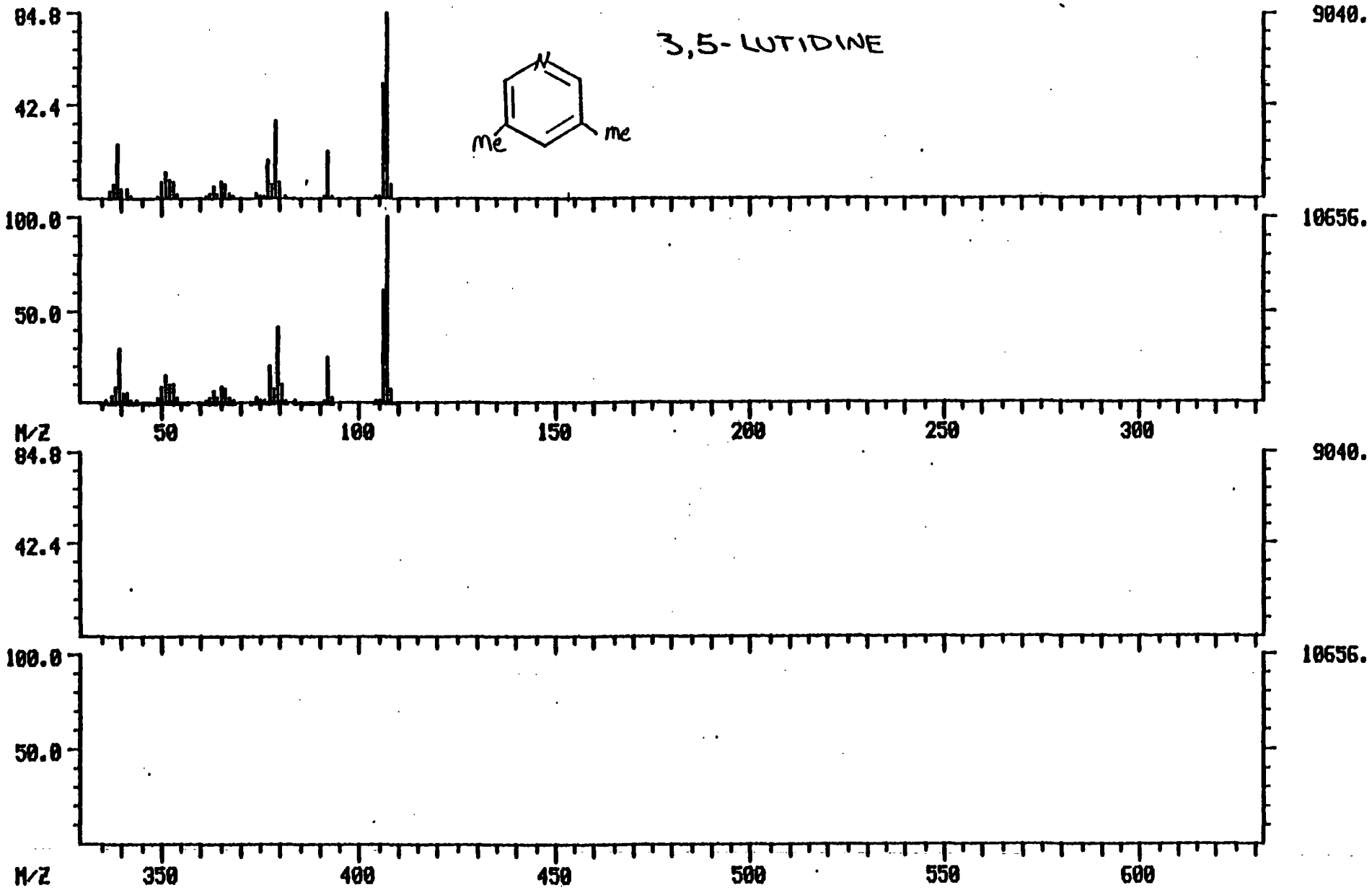
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:16
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: 5T
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #661
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 37567./ 45567.

SPECTRUM FROM THE STANDARD

3,5-LUTIDINE



RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: D:S59436X824. STARTED : 6/03/88 12:00:58

00556

6/2/88 23:29:30 SCAN 1 OF 3900 $RF = \frac{ng}{ml} \times \frac{0.5ml}{3.8L} = 0.132\ ng/L$
Acquisition started

Acquire Run 2: S59436X824 ACQUIRING
06/02/88 23:29:00 + 0:03 Free sectors: 22619 Scan: 7 of 3900
Sample: 59436-07 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc: PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc: PA GC elapsed time : 0: 3 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 30	-	1.0	1.0	Sweep/Split	0.5	0.0
2	30 - 325	10.0	29.5	30.5	Divert	45.5	0.0
3	325 - 325	-	15.0	45.5			
4	325 - 325	-	0.0	45.5			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: P1 Mass intervals: 3
Scan time: 0.500 s Samp. int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	225.500	226.500	0.105	1	100	0	1	1	Pos
2	227.500	228.500	0.105	1	100	0	1	1	Pos
3	239.500	240.500	0.105	1	100	0	1	1	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

6/2/88 23:57:55 SCAN 3407 OF 3900

MID scan Desc: P2 Mass intervals: 3
Scan time: 0.500 s Samp. Int.: 0.200 ms Master rate: 1024

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

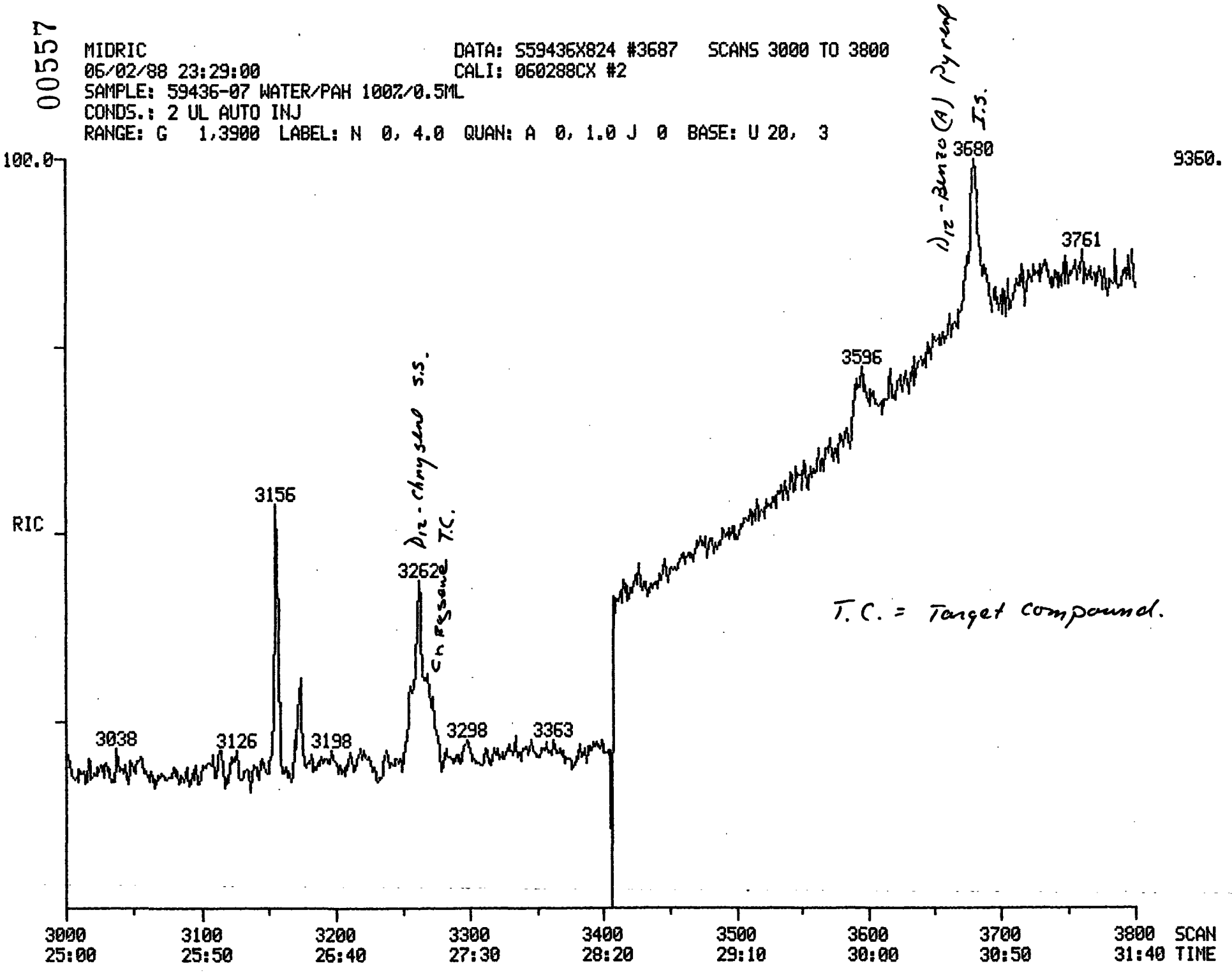
6/3/88 0:02:04
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode Scans Secs Out of % Peaks per scan per sec

00557

MIDRIC
06/02/88 23:29:00
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436X824 #3687 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X824

00558

Data: S59436X824.TI
06/02/88 23:29:00
Sample: 59436-07 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(B)FLUORANTHENE	250 PH# 08
11	BENZO(K)FLUORANTHENE	252 PH# 09
12	BENZO(K)FLUORANTHENE	250 PH# 10
13	BENZO(J)FLUORANTHENE	252 PH# 11
14	BENZO(J)FLUORANTHENE	250 PH# 12
15	BENZO(A)PYRENE	252 PH# 13
16	BENZO(A)PYRENE	250 PH# 14

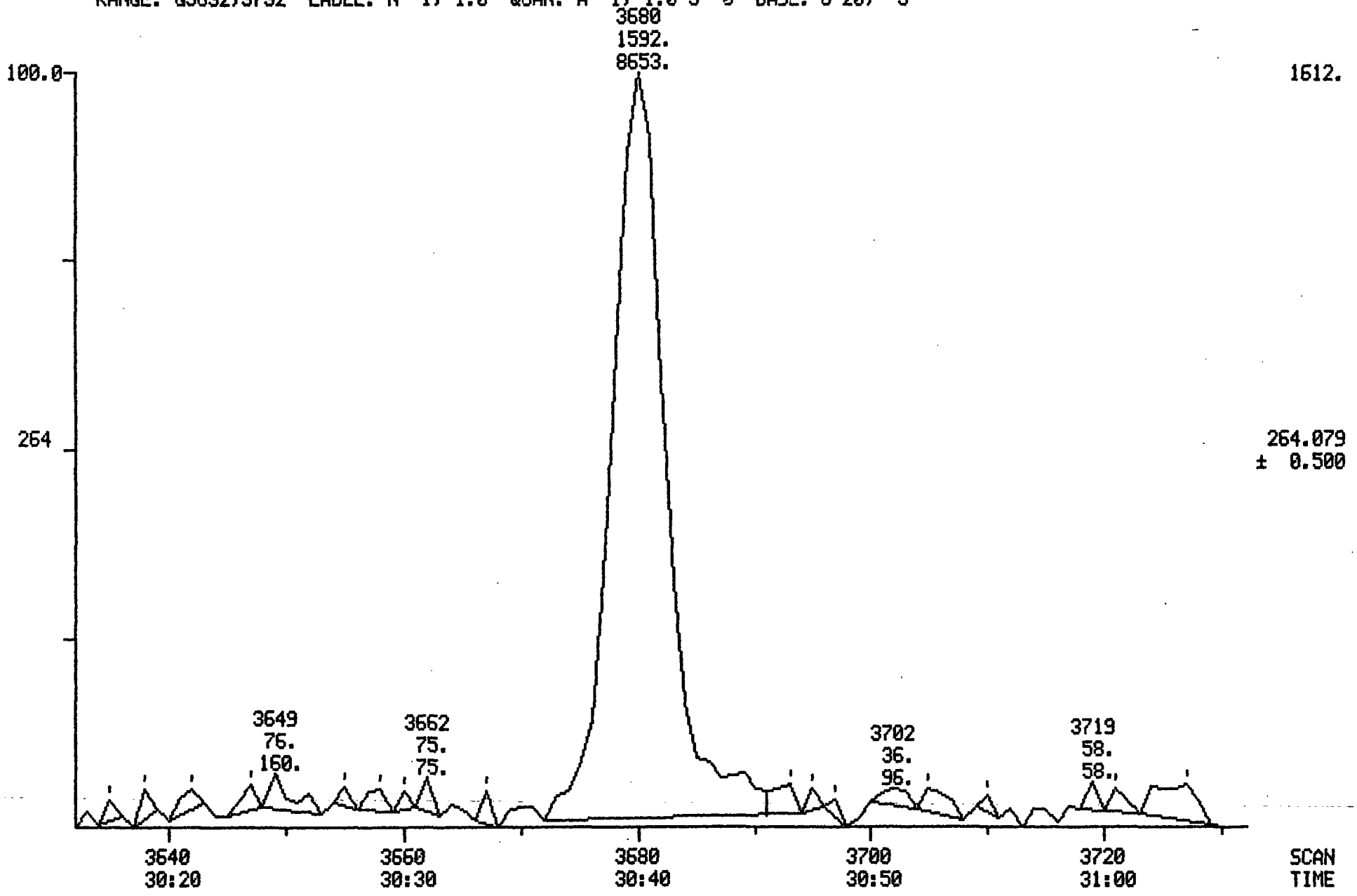
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3680	30:40	1	1.000	A BV	8653.69%	80.000	NG/ML	19.25
2	240	3262	27:11	1	0.886	A VB	11371.	68.505	NG/ML	16.48
3	228	3256	27:08	1	0.885	A BV	4318.	24.655	NG/ML	5.93
4	226	3257	27:08	1	0.885	A BV	1772.	43.726	NG/ML	10.52
5	228	3268	27:14	1	0.888	A VB	6601.	35.991	NG/ML	8.66
6	226	3268	27:14	1	0.888	A VV	1724.	35.752	NG/ML	8.60
7	252	3596	29:58	1	0.977	A VB	3469.	19.096	NG/ML	4.59
8	250	3583	29:51	1	0.974	A BB	286.	6.527	NG/ML	1.57
9	250	3590	29:55	1	0.976	A BB	266.	6.070	NG/ML	1.46
10	250	3596	29:58	1	0.977	A VB	265.	6.038	NG/ML	1.45
11	252	3596	29:58	1	0.977	A VB	3469.	19.096	NG/ML	4.59
12	250	3596	29:58	1	0.977	A VB	265.	6.038	NG/ML	1.45
13	252	3618	30:09	1	0.983	A BB	172.	1.063	NG/ML	0.26
14	250	3618	30:09	1	0.983	A BB	320.	8.952	NG/ML	2.15
15	252	3684	30:42	1	1.001	A VB	3159.	21.010	NG/ML	5.06
16	250	3684	30:42	1	1.001	A VV	1698.	33.083	NG/ML	7.96

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:41	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:11	1.00	0.886	1.00	68.51	80.00	1.314	1.535	0.86
3	27:08	1.00	0.885	1.00	24.66	80.00	0.499	1.619	0.31
4	27:08	1.00	0.885	1.00	43.73	80.00	0.205	0.375	0.55
5	27:15	1.00	0.888	1.00	35.99	80.00	0.763	1.696	0.45
6	27:15	1.00	0.888	1.00	35.75	80.00	0.199	0.446	0.45
7	29:56	1.00	0.976	1.00	19.10	80.00	0.401	1.680	0.24

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	29:56	1.00	0.976	1.00	6.53	80.00	0.033	0.405	0.08
9	29:56	1.00	0.976	1.00	6.07	80.00	0.031	0.405	0.08
10	29:56	1.00	0.976	1.00	6.04	80.00	0.031	0.405	0.08
11	29:59	1.00	0.977	1.00	19.10	80.00	0.401	1.680	0.24
12	29:59	1.00	0.977	1.00	6.04	80.00	0.031	0.405	0.08
13	29:41	1.02	0.982	1.00	1.06	80.00	0.020	1.496	0.01
14	29:41	1.02	0.982	1.00	8.95	80.00	0.037	0.330	0.11
15	30:44	1.00	1.002	1.00	21.01	80.00	0.365	1.390	0.26
16	30:44	1.00	1.002	1.00	33.08	80.00	0.196	0.474	0.41

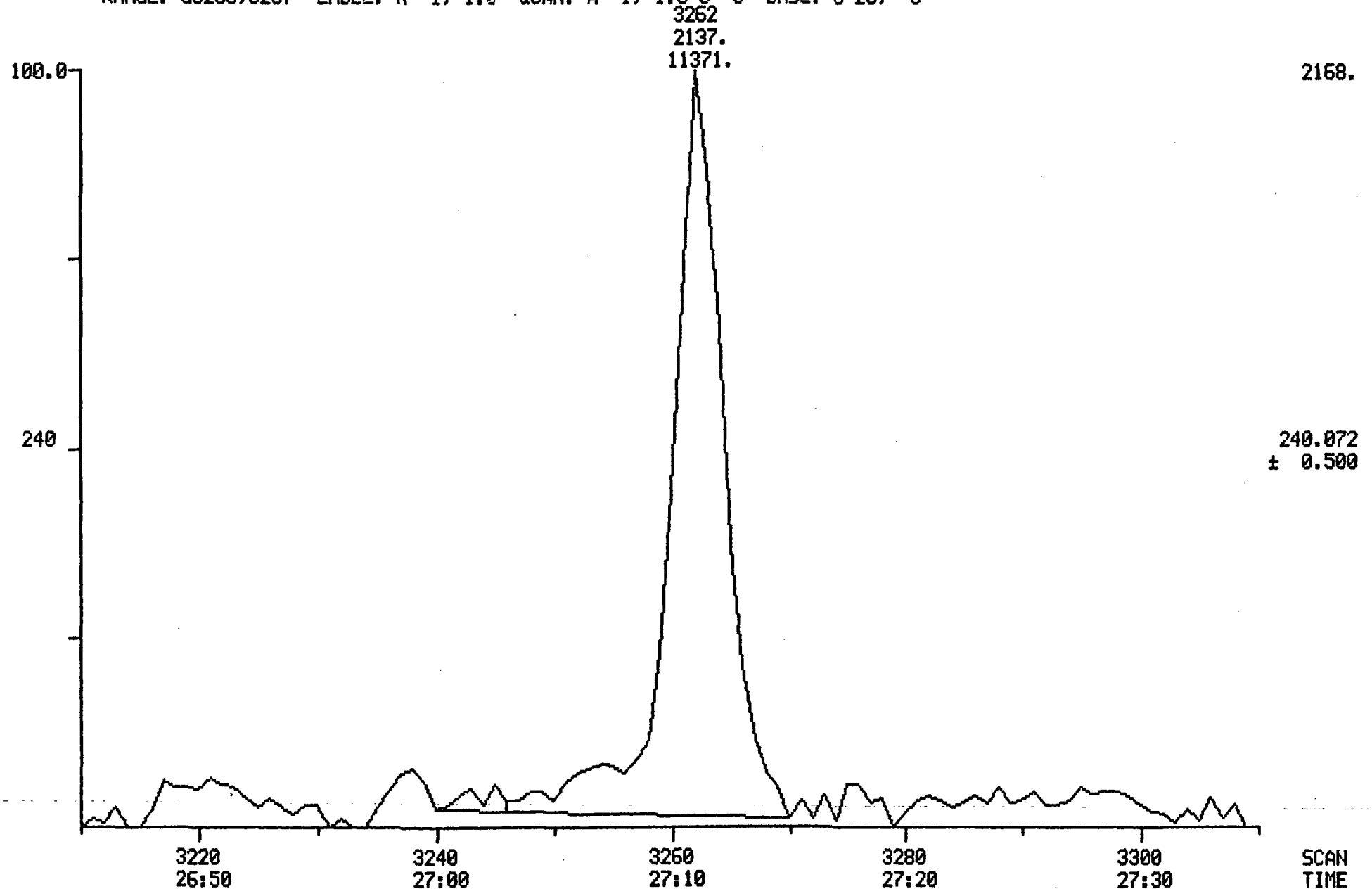
0056U

MIDMASS CHROMATOGRAM DATA: S59436X824 #3682 SCANS 3632 TO 3732
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3632,3732 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



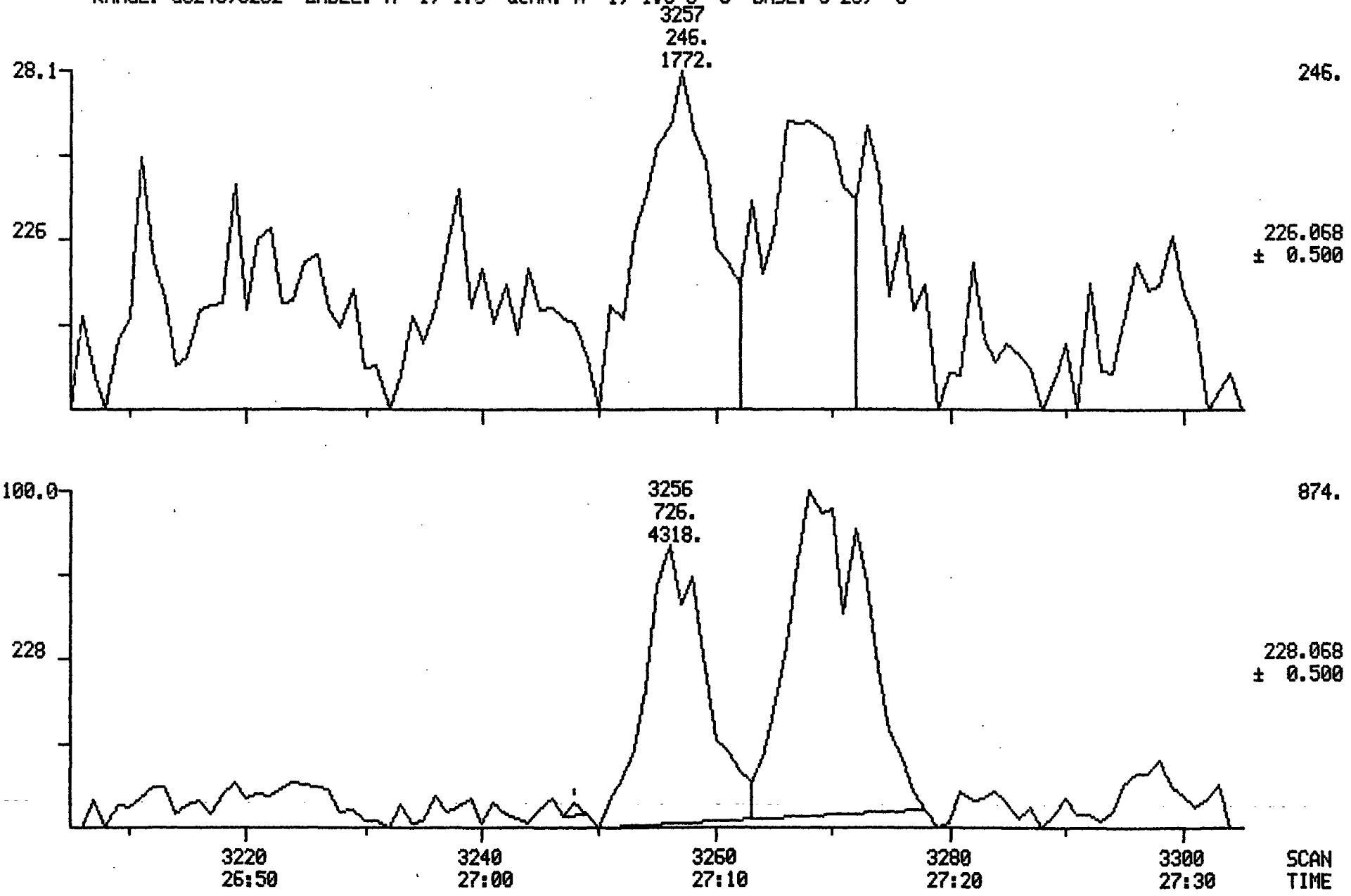
00561

MIDMASS CHROMATOGRAM DATA: 559436X824 #3260 SCANS 3210 TO 3310
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3253,3267 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



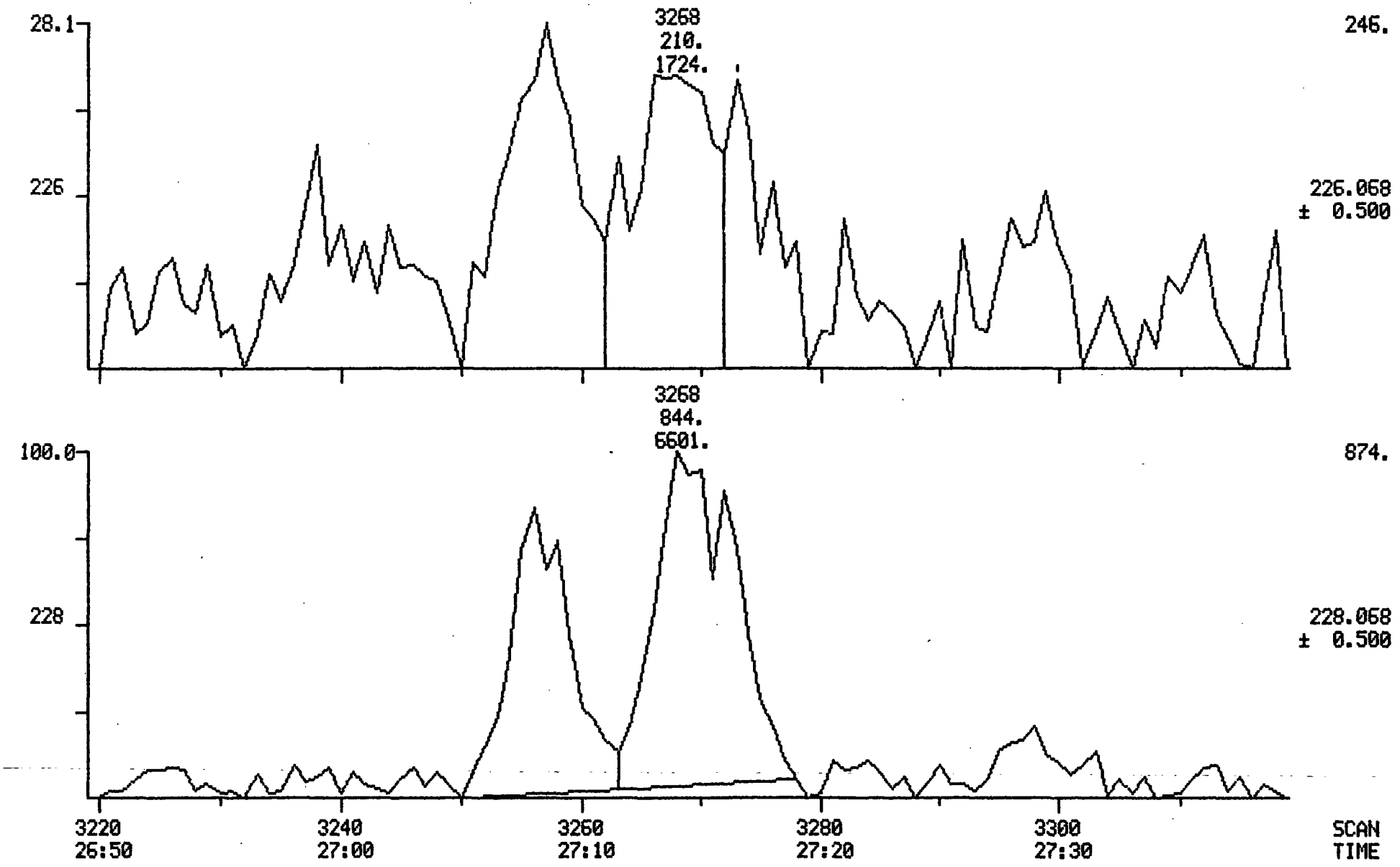
00562

MIDMASS CHROMATOGRAMS DATA: S59436X824 #3255 SCANS 3205 TO 3305
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3248,3262 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



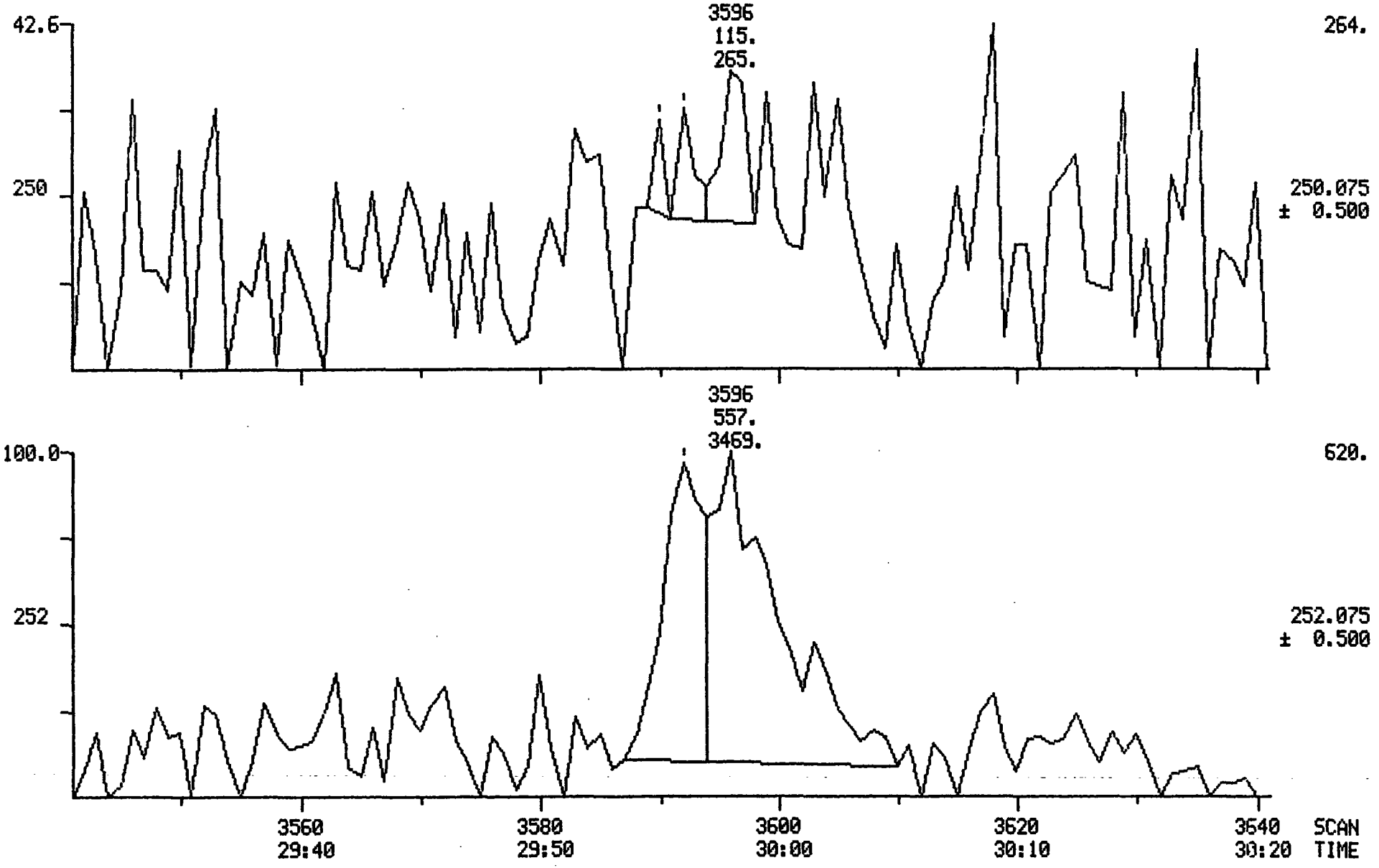
00563

MIDMASS CHROMATOGRAMS DATA: 559436X824 #3269 SCANS 3219 TO 3319
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3262,3276 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



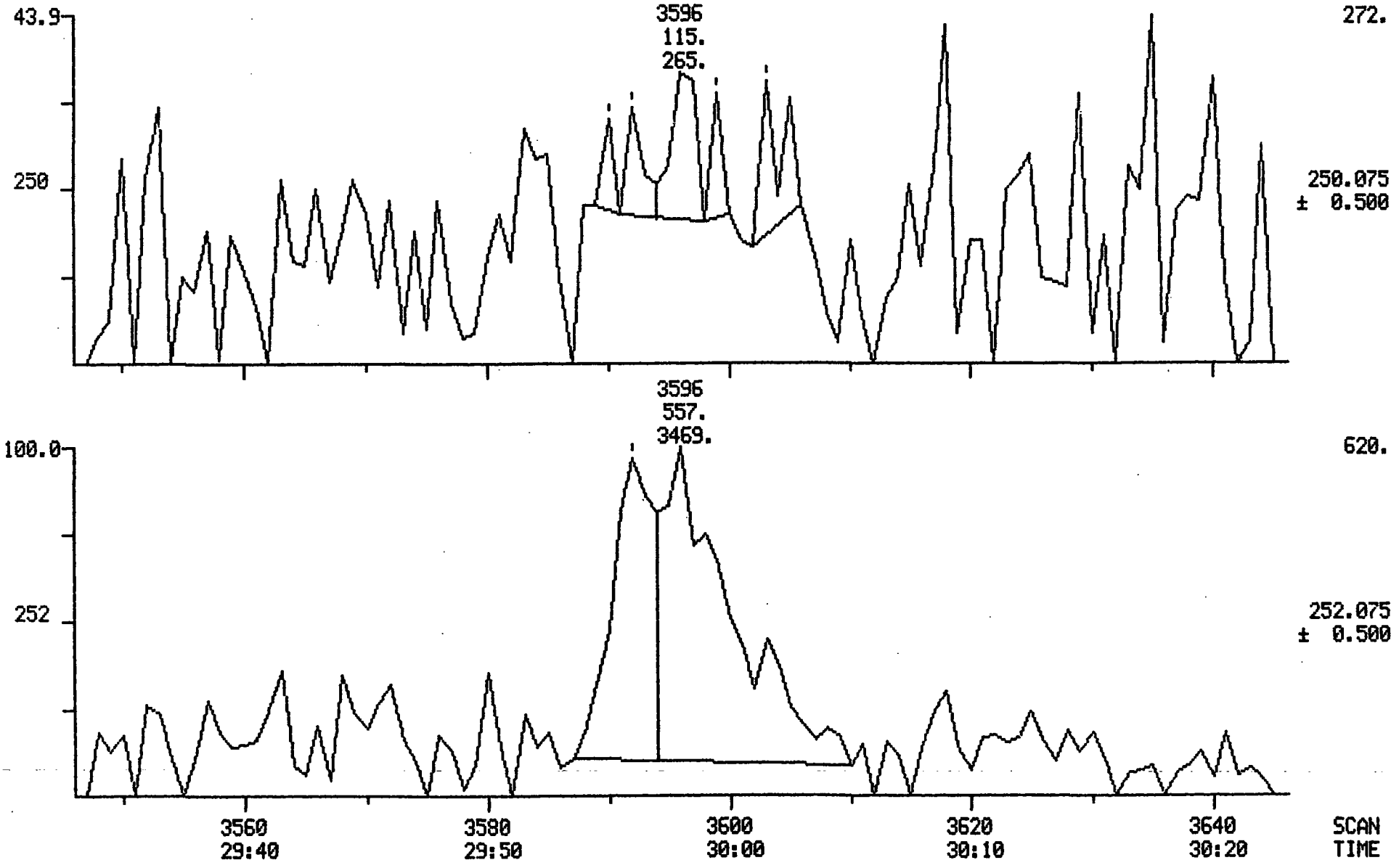
00564

MIDMASS CHROMATOGRAMS DATA: S59436X824 #3591 SCANS 3541 TO 3641
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3584,3598 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



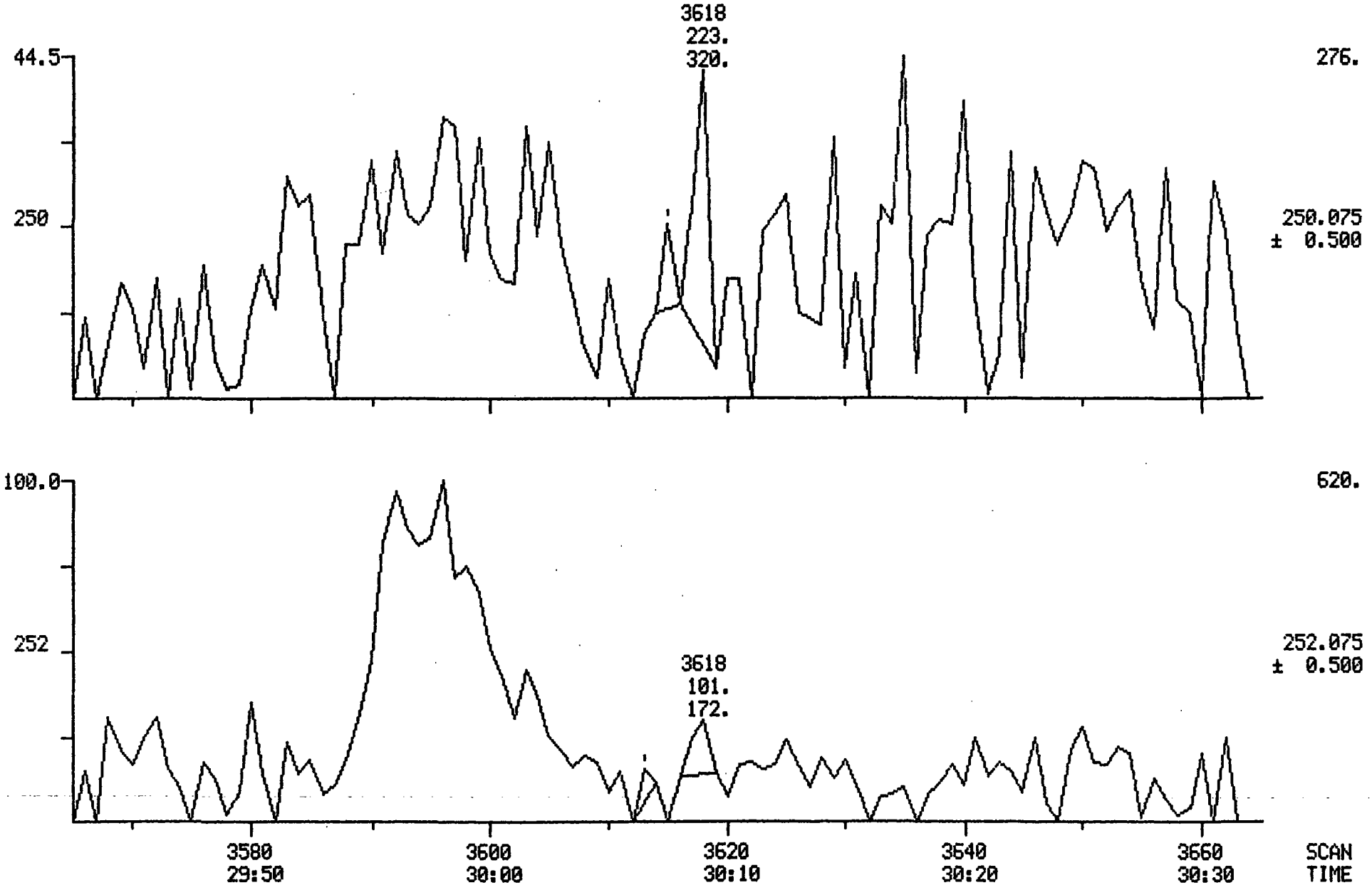
00565

MIDMASS CHROMATOGRAMS DATA: S59436X824 #3596 SCANS 3546 TO 3646
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3589,3603 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



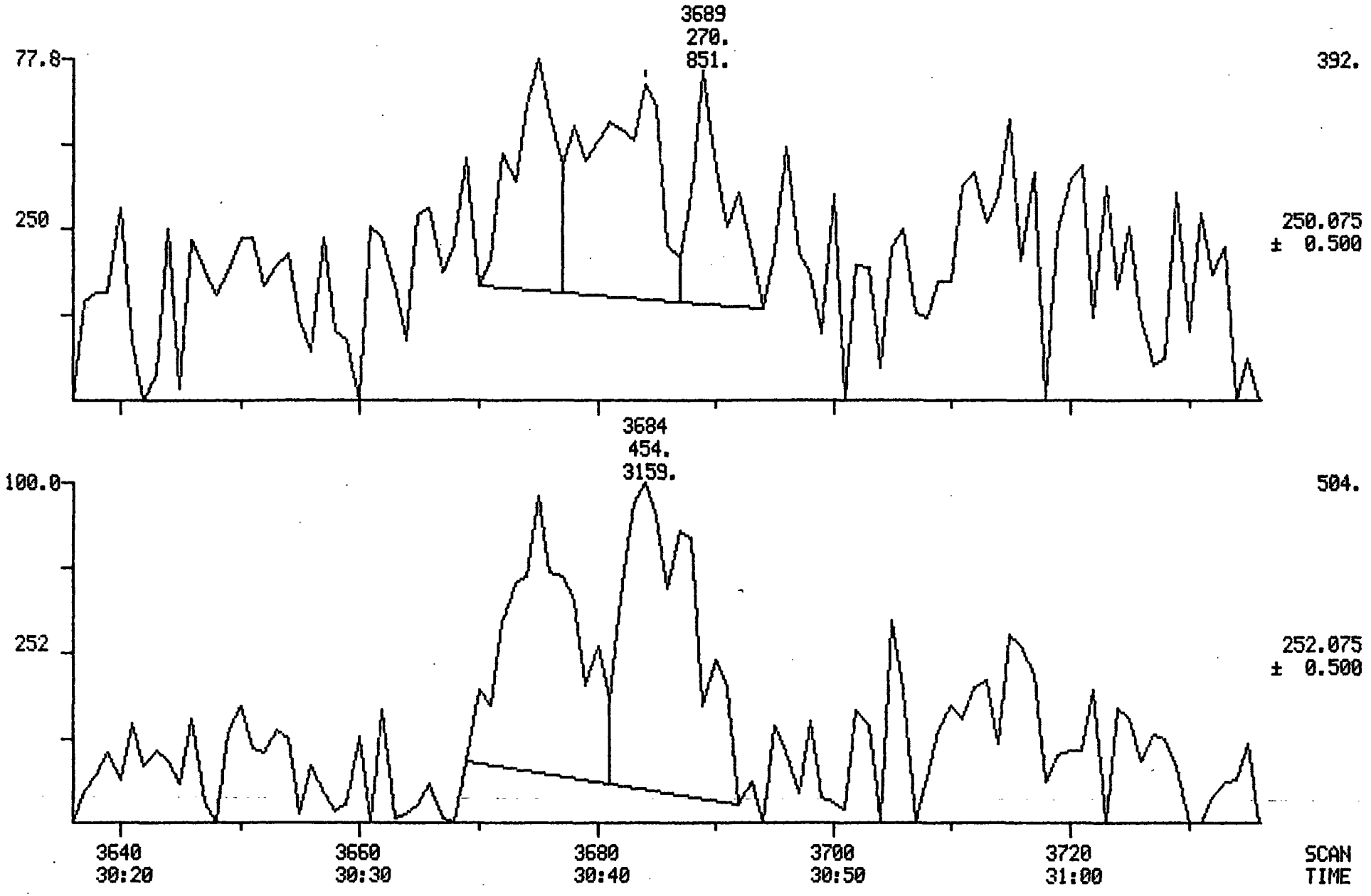
00566

MIDMASS CHROMATOGRAMS DATA: 559436X824 #3615 SCANS 3565 TO 3665
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3608,3622 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00567

MIDMASS CHROMATOGRAMS DATA: S59436X824 #3686 SCANS 3636 TO 3736
06/02/88 23:29:00 CALI: 060288CX #2
SAMPLE: 59436-07 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3679,3693 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X824

Data: S59436X824.TI
06/02/88 23:29:00
Sample: 59436-07 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

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

No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(B)FLUORANTHENE	250 PH# 08
11	BENZO(K)FLUORANTHENE	252 PH# 09
12	BENZO(K)FLUORANTHENE	250 PH# 10
13	BENZO(J)FLUORANTHENE	252 PH# 11
14	BENZO(J)FLUORANTHENE	250 PH# 12
15	BENZO(A)PYRENE	252 PH# 13
16	BENZO(A)PYRENE	250 PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3680	30:40	1	1.000	A BV	8653.	80.000	NG/ML	19.25
2	240	3262	27:11	1	0.886	A VB	11371.	68.505	NG/ML	16.48
3	228	3256	27:08	1	0.885	A BV	4318.	24.655	NG/ML	5.93
4	226	3257	27:08	1	0.885	A BV	1772.	43.726	NG/ML	10.52
5	228	3268	27:14	1	0.888	A VB	6601.	35.991	NG/ML	8.66
6	226	3268	27:14	1	0.888	A VV	1724.	35.752	NG/ML	8.60
7	252	3596	29:58	1	0.977	A VB	3469.	19.096	NG/ML	4.59
8	250	3583	29:51	1	0.974	A BB	286.	6.527	NG/ML	1.57
9	250	3590	29:55	1	0.976	A BB	266.	6.070	NG/ML	1.46
10	250	3596	29:58	1	0.977	A VB	265.	6.038	NG/ML	1.45
11	252	3596	29:58	1	0.977	A VB	3469.	19.096	NG/ML	4.59
12	250	3596	29:58	1	0.977	A VB	265.	6.038	NG/ML	1.45
13	252	3618	30:09	1	0.983	A BB	172.	1.063	NG/ML	0.26
14	250	3618	30:09	1	0.983	A BB	320.	8.952	NG/ML	2.15
15	252	3684	30:42	1	1.001	A VB	3159.	21.010	NG/ML	5.06
16	250	3684	30:42	1	1.001	A VV	1698.	33.083	NG/ML	7.96

COLUMN 1: [illegible]AB12622
COLUMN 2: J18B12622

59436-07
20%

UNITS ON AMOUNT: ug/ml

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE

00569

DBC

A) $\frac{23.5}{24.0}(100\%) = 98\%$

B) $\frac{21.0}{22.0}(100\%) = 95\%$

β-BHC

A) $\frac{5.0}{76.0}(0.0075\ ug/ml)\left(\frac{10.0\ ml}{0.99\ l}\right)\left(\frac{100\%}{20\%}\right) = 0.0249\ ug/l$ ∴ BDL ND(0.05 ug/l)

DBC Recovery = 95%
NO HSL Pests/PCBs detected

NA - COLUMN AVERAGE IS NOT APPLICABLE BECAUSE THE %DIFFERENCE(AMOUNTS) > 10%

RESULT FILE: J48I2622 59936-07 05/09/89 LIBRARY: [illegible]

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
003	beta-BHC	1.800	1.817	6	2163	.0012	ug/ml
018	p,p'-DDT	12.767	12.800	10	22947	.0049	ug/ml
022	TOXAPHENE (peak 3)	12.483	12.800	10	22947	.0780	ug/ml
047	DBC (surrogate)	26.833	26.833	11	78794	.0136	ug/ml

00570

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: J:8812622 59936-07 05/09/88 LIBRARY: LIBMIXB

00571

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC	1.383	1.383	3	1807	.0001	ug/ml
004	delta-BHC	2.450	2.467	5	4291	.0004	ug/ml
006	ALDRIN	2.717	2.683	6	773	.0001	ug/ml
017	ENDOSULFAN SULFATE	16.550	16.200	11	73690	.0086	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.650	4	8897	.0152	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	4	8897	.0161	ug/ml
035	AROCLOR 1254(peak 1)	5.017	4.900	9	2667	.0026	ug/ml
048	ENDRIN KETONE	22.267	22.250	12	157484	.0039	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

AREA PERCENT REPORT

00572

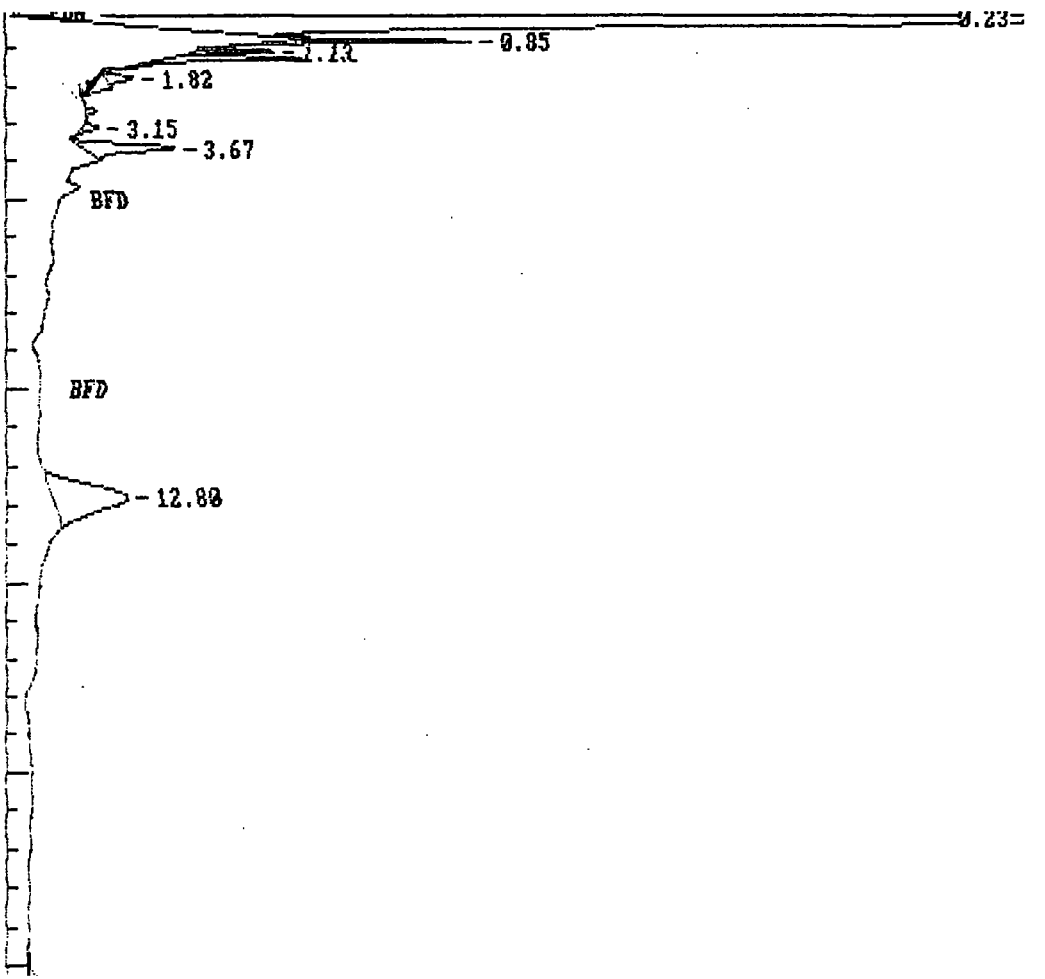
```
******************** 05-08-1988 11:46:53 Version 4.1 ********************
* Sample Name: 59436 07 20%                    Data File: J:AB12622      *
* Date: 05-06-1988 22:00:04 Method: M:ABPI                               *
* Interface: 10  Cycle#:  22   Operator SS  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                     *
*          Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                    LPT1:        *    *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

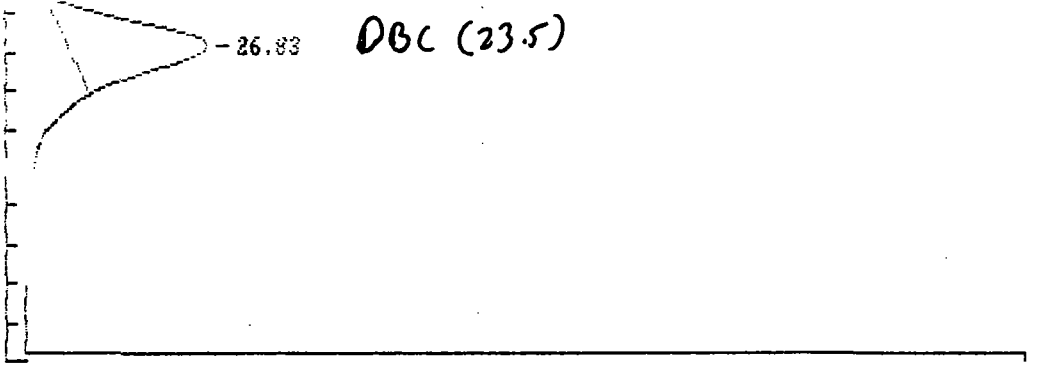
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	835994	86.3224	1	162004	100.000	5.2
3	0.85	6260	0.6464	1	1370	0.749	4.6
4	1.13	3095	0.3196	1	564	0.370	5.5
5	1.32	9424	0.9731	1	1185	1.127	8.0
6	1.82 - p.o.μc	2163	0.2233	1	191	0.259	11.3
8	3.15	1314	0.1357	1	119	0.157	11.0
9	3.67	8465	0.8741	1	632	1.013	13.4
10	12.80	22947	2.3694	1	521	2.745	44.1
11	26.83	78794	8.1360	1	961	9.425	82.0

SS 5/6/88

Total Area: 968456 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12622.PTS Printed on 05-08-1988 at 11:47:17
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





DBC (23.5)

00573

AREA PERCENT REPORT

```
******************** 05-08-1988 12:20:29 Version 4.1 ********************
* Sample Name: 59436 07 20%                    Data File: J:BB12622      *
* Date: 05-06-1988 21:40:46 Method: M:BBPI                               *
* Interface: 12  Cycle#:  22   Operator SS  Channel#: 0    Vial#: N.A.   *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100           *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEG ISOTHERMAL                                         *
*            Detector 0:                      Detector 1: ECD            *
* Misc. Information: 4 UL INJ                                            *
*************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

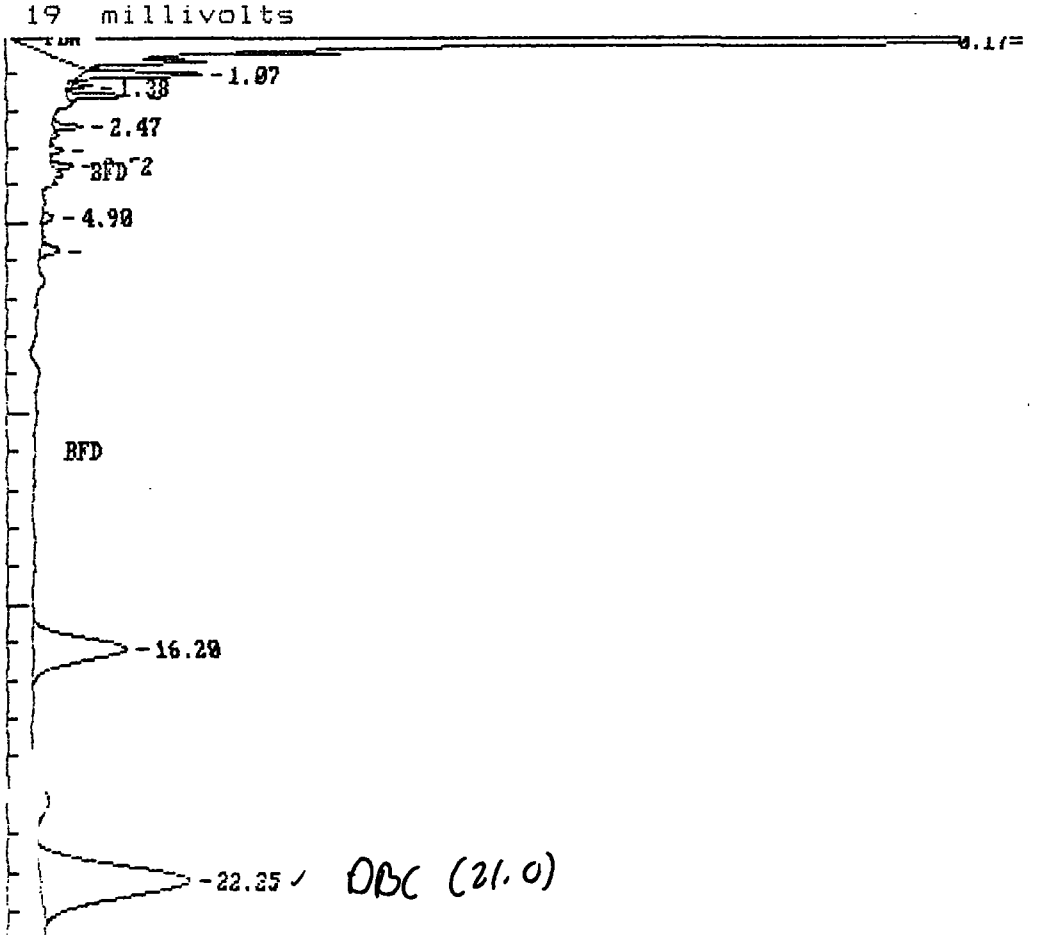
00574

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1391326	83.2585	1	293744	100.000	4.7
2	1.07	20557	1.2301	1	2272	1.477	9.0
3	1.38	1807	0.1081	1	418	0.130	4.3
4	1.65	8897	0.5324	1	1367	0.639	6.5
5	2.47	4291	0.2568	1	549	0.308	7.8
7	3.08	1841	0.1102	1	215	0.132	8.6
8	3.52	3021	0.1808	1	367	0.217	8.2
9	4.90	2667	0.1596	1	217	0.192	12.3
10	5.75	5512	0.3298	1	358	0.396	15.4
11	16.20	73690	4.4097	1	1746	5.296	42.2
12	22.25	157484	9.4240	1	2776	11.319	56.7

SS 5/11/88

Total Area: 1671091 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12622.PTS Printed on 05-08-1988 at 12:20:54
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



DBC (21.0)

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-08

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-08
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59436
Contract No. : N/A
Date Sample Rec: 04/20/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	04/29/88
Conc./Dilution Factor :	1.0
pH :	7.00
Percent Moisture :	100%
Percent Moisture (Decanted) :	N/A

CAS Number		Value	ug/L	CAS Number		Value	ug/L
74-83-3	Chloromethane		10 U	79-34-5	1,1,2,2-Tetrachloroethane		5 U
74-83-9	Bromomethane		10 U	78-87-5	1,2-Dichloropropane		5 U
75-01-4	VinylChloride		10 U	10061-02-6	Trans-1,3-Dichloropropene		5 U
75-00-3	Chloroethane		10 U	79-10-6	Trichloroethene		5 U
75-09-2	MethyleneChloride	2.6	J B	124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	4.9	J B	79-00-5	1,1,2-Trichloroethane		5 U
75-15-0	CarbonDisulfide		5 U	71-43-2	Benzene		5 U
75-35-4	1,1-Dichloroethene		5 U	10061-01-5	cis-1,3-Dichloropropene		5 U
75-34-3	1,1-Dichloroethane		5 U	110-75-8	2-Chloroethylvinylether		10 U
156-60-5	Trans-1,2-Dichloroethene	1.1	J	75-25-2	Bromoform		5 U
67-66-3	Chloroform		5 U	591-78-6	2-Hexanone		10 U
107-06-2	1,2-Dichloroethane		5 U	108-10-1	4-Methyl-2-Pentanone		10 U
78-93-3	2-Butanone		10 U	127-18-4	Tetrachloroethene	2.2	J
71-55-6	1,1,1-Trichloroethane		5 U	108-88-3	Toluene		5 U
56-23-5	CarbonTetrachloride		5 U	108-90-7	Chlorobenzene		5 U
108-05-4	VinylAcetate		10 U	100-41-4	Ethylbenzene		5 U
75-27-4	Bromodichloromethane		5 U	100-42-5	Styrene		5 U
					Total Xylenes		5 U

U - compound was not detected
J - concentration detected is less than the required detection limit
B - compound was detected in the blank
sp - compound was a spike

10/85 Rev

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-08

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1.	No Volatiles Detected	VOA		
2.				
3.				
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30.				

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59436

Organics Analysis Data Sheet

Page 2

Sample Number
59436-08

00578

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/23/88	Separatory Funnel Extraction	No
Date Analyzed	06/01/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.04		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L	CAS Number	Compound	Value	ug/L
108-95-2	Phenol		10 U				
111-44-4	bis(-2-Chloroethyl)Ether		10 U	83-32-9	Acenaphthene		10 U
95-57-8	2-Chlorophenol		10 U	51-28-5	2,4-Dinitrophenol		51 U
541-73-1	1,3-Dichlorobenzene		10 U	100-02-7	4-Nitrophenol		51 U
106-46-7	1,4-Dichlorobenzene		10 U	132-64-9	Dibenzofuran		10 U
100-51-6	Benzyl Alcohol		10 U	121-14-2	2,4-Dinitrotoluene		10 U
95-50-1	1,2-Dichlorobenzene		10 U	606-20-2	2,6-Dinitrotoluene		10 U
95-48-7	2-Methylphenol		10 U	84-66-2	Diethylphthalate		10 U
39638-32-9	bis(2-chloroisopropyl)Ether		10 U	7005-72-3	4-Chlorophenyl-phenylether		10 U
106-44-5	4-Methylphenol		10 U	86-73-7	Fluorene		10 U
621-64-7	N-Nitro-Di-n-Propylamine		10 U	100-01-6	4-Nitroaniline		51 U
67-72-1	Hexachloroethane		10 U	534-52-1	4,6-Dinitro-2-Methylphenol		51 U
98-95-3	Nitrobenzene		10 U	86-30-6	N-Nitrosidiphenylamine (1)		10 U
78-59-1	Isophorone		10 U	101-55-3	4-Bromophenyl-phenylether		10 U
88-75-5	2-Nitrophenol		10 U	118-74-1	Hexachlorobenzene		10 U
105-67-9	2,4-Dimethylphenol		10 U	87-86-5	Pentachlorophenol		51 U
65-85-0	Benzoic Acid		51 U	85-01-8	Phenanthrene		10 U
111-91-1	bis(2-Chloroethoxy) Methane		10 U	120-12-7	Anthracene		10 U
120-83-2	2,4-Dichlorophenol		10 U	84-74-2	Di-N-Butylphthalate		10 U
120-82-1	1,2,4-Trichlorobenzene		10 U	206-44-0	Fluoranthene		10 U
91-20-3	Naphthalene		10 U	129-00-0	Pyrene		10 U
106-47-8	4-Chloroaniline		10 U	85-68-7	Butylbenzylphthalate		10 U
87-68-3	Hexachlorobutadiene		10 U	91-94-1	3,3'-Dichlorobenzidine		20 U
59-50-7	4-Chloro-3-Methylphenol		10 U	56-55-3	Benzo(a)Anthracene		10 U
91-57-6	2-Methylnaphthalene		10 U	117-81-7	bis(2-Ethylhexyl)Phthalate	9.6	J B
77-47-4	Hexachlorocyclopentadiene		10 U	218-01-9	Chrysene		10 U
88-06-2	2,4,6-Trichlorophenol		10 U	117-84-0	Di-n-Octylphthalate	2.0	J B
95-95-4	2,4,5-Trichlorophenol		51 U	205-99-2	Benzo(b)Fluoranthene		10 U
91-58-7	2-Chloronaphthalene		10 U	207-08-9	Benzo(k)Fluoranthene		10 U
88-74-4	2-Nitroaniline		51 U	50-32-8	Benzo(a)Pyrene		10 U
131-11-4	Dimethyl Phthalate		10 U	193-39-5	Indeno(1,2,3-cd)Pyrene		10 U
208-96-8	Acenaphthylene		10 U	53-70-3	Dibenzo(a,h)Anthracene		10 U
99-09-2	3-Nitroaniline		51 U	191-24-2	Benzo(g,h,i)Perylene		10 U

(1)-Cannot be separated from diphenylamine.

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59436

Sample Number
59436-08

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1. 108-87-2	Methyl Cyclohexane	BNA	314	11 B
2. 108-88-3	Methyl Benzene	BNA	369	7.2 B
3.	Oxygenated Hydrocarbon	BNA	393	14 B
4.	Oxygenated Hydrocarbon	BNA	434	7.5 B
5.	Oxygenated Hydrocarbon	BNA	468	20 B
6. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	623	12 B
7. 20324-32-7	1-(2-Methoxy-1-Methylethoxy)-	BNA	695	4.2
8.	2-Propanol			
9. 2091-29-4	9-Hexadeceneoic Acid	BNA	1723	4.0
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