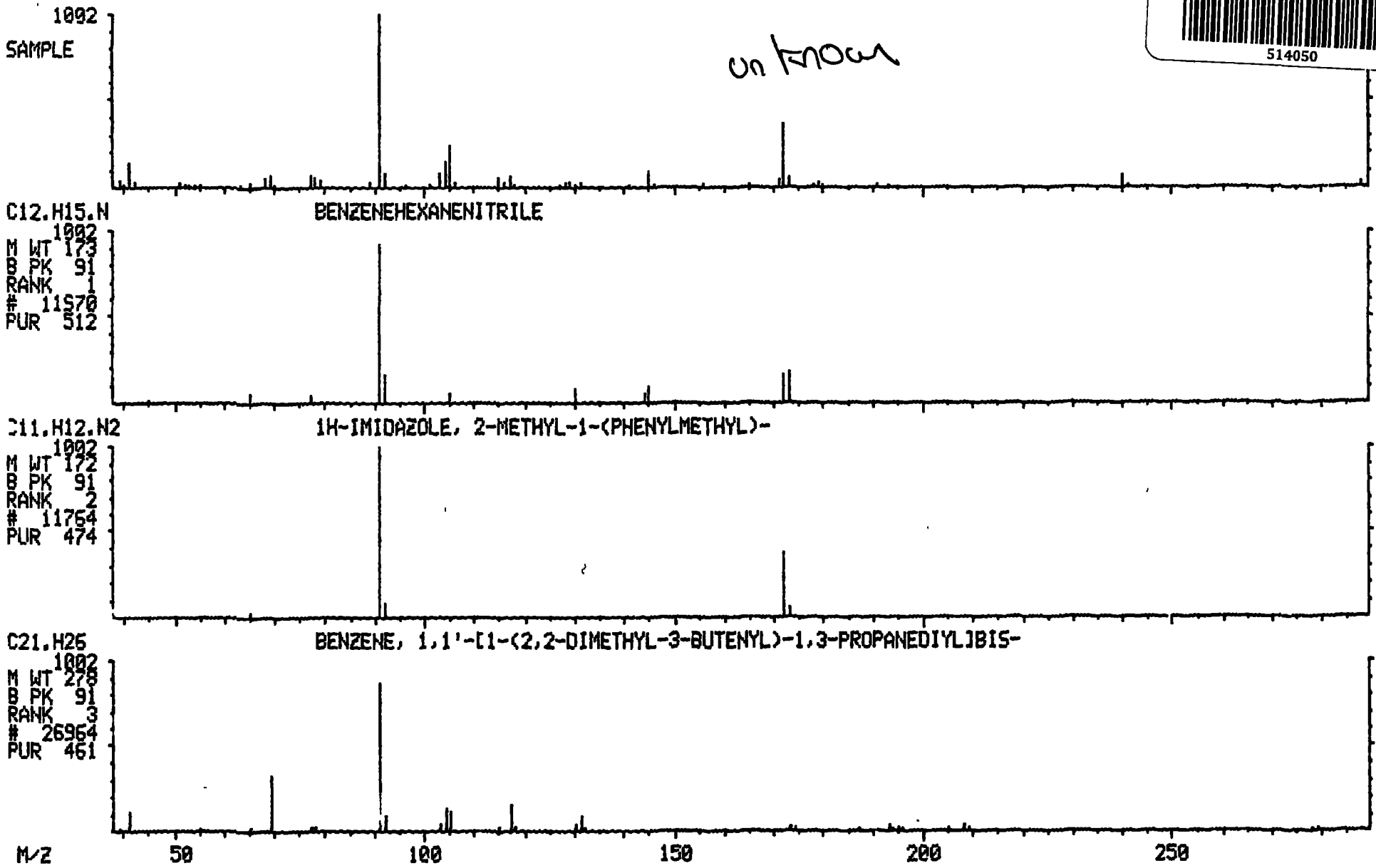
00134

LIBRARY SEARCH
06/02/88 21:33:00 + 26:16
SAMPLE: 59436-02 REPREP BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R995 #2101
CALI: 060288CR # 5

BASE M/Z: 91
RIC: 5159.

US EPA RECORDS CENTER REGION 5
514050



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 18:54:41
DATA FILE: S59436R995
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

00135

< ---- STANDARDS ----- ><				--- PLUS UNKNOWNS --- ><				- LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	3	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	714	714	.	3	978	.	152	714	.	1
2	S1	4	-338	339	339	.	1	967	.	84	339	.	1
3	S1	20	-340	341	.	.	.	.	.	79	.	.	.
4	S1	30	-432	433	.	.	.	.	.	93	.	.	.
5	S1	62	-496	496	.	.	.	.	.	93	.	.	.
6	S1	64	-527	527	.	.	.	.	.	107	.	.	.
7	S1	73	-558	558	.	.	.	.	.	106	.	.	.
8	S1	83	-594	594	.	.	.	.	.	107	.	.	.
9	S1	87	-614	614	.	.	.	.	.	107	.	.	.
10	S1	88	-635	634	.	.	.	.	.	107	.	.	.
11	S1	89	-643	642	.	.	.	.	.	107	.	.	.
12	S1	92	-663	662	.	.	.	.	.	107	.	.	.
13	S1	122	-700	699	.	.	.	.	.	107	.	.	.
14	S2	1	-954	953	952	-1	2	993	.	136	952	.	1
15	S3	1	-1310	1309	1309	.	1	992	.	164	1309	.	1
16	S1	137	-730	729	.	.	.	.	.	106	.	.	.
17	S1	142	-745	744	.	.	.	.	.	106	.	.	.
18	S1	187	-799	798	.	.	.	.	.	108	.	.	.
19	S1	202	-821	820	.	.	.	.	.	106	.	.	.
20	S1	203	-827	826	.	.	.	.	.	106	.	.	.
21	S1	204	-847	846	.	.	.	.	.	122	.	.	.
22	S2	27	-898	897	.	.	.	.	.	107	.	.	.
23	S2	37	-922	921	.	.	.	.	.	107	.	.	.
24	S2	47	-936	935	.	.	.	.	.	107	.	.	.
25	S2	57	-955	954	.	.	.	.	.	107	952	.	1
26	S2	150	-1118	1117	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59436R995

00136

Data: S59436R995.TI
06/02/88 21:33:00
Sample: 59436-02 REPREP BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: DC Acct. No.:

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	714	8:55	1	1.000	A BV	25680.	40.000 UG/ML	26.51
2	84	339	4:14	1	0.475	A BB	34418.	30.417 UG/ML	20.16
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	952	11:54	14	1.000	A BB	94592.	40.000 UG/ML	26.51
15	164	1309	16:22	15	1.000	A BB	43603.	40.000 UG/ML	26.51
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	952	11:54	1	1.333	A BB	548.	0.503 UG/ML	0.33
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	4:13	1.00	0.472	1.01	30.42	50.00	1.072	1.763	0.61
3	4:15		0.475						
4	5:24		0.603						
5	6:12		0.693						
6	6:35		0.736						
7	6:58		0.779						
8	7:25		0.830						
9	7:40		0.858						
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	16:23	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	9:07		1.020						
17	9:19		1.041						
18	9:59		1.116						
19	10:16		1.147						
20	10:20		1.155						
21	10:35		1.183						
22	11:13		0.940						
23	11:31		0.965						
24	11:42		0.980						
25	11:56	1.00	1.334	1.00	0.50	50.00	0.017	1.696	0.01
26	13:58		1.171						

RF 2.06
SV 2.00

TCA FINISHED, 4 FOUND
FINISHED AT: 6/03/88 18:57:23

RMAL QUANTITATION SUMMARY FILE: S59436R995
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	714	1	25680.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	952	2	94592.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1309	3	43603.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	339	1	34418.	1.072	30.417
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:S59436X819. STARTED : 6/03/88 11:25:48

RF 00139

$\frac{ng}{ml} \times \frac{0.5ml}{3.83L} = 0.130\ ng/L$

6/2/88 19:20:30 SCAN 1 OF 3900
Acquisition started

Acquire Run 2:S59436X819 ACQUIRING
06/02/88 19:20:00 + 0:03 Free sectors: 23959 Scan: 7 of 3900
Sample: 59436-02 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 19:48:55 SCAN 3407 OF 3900

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

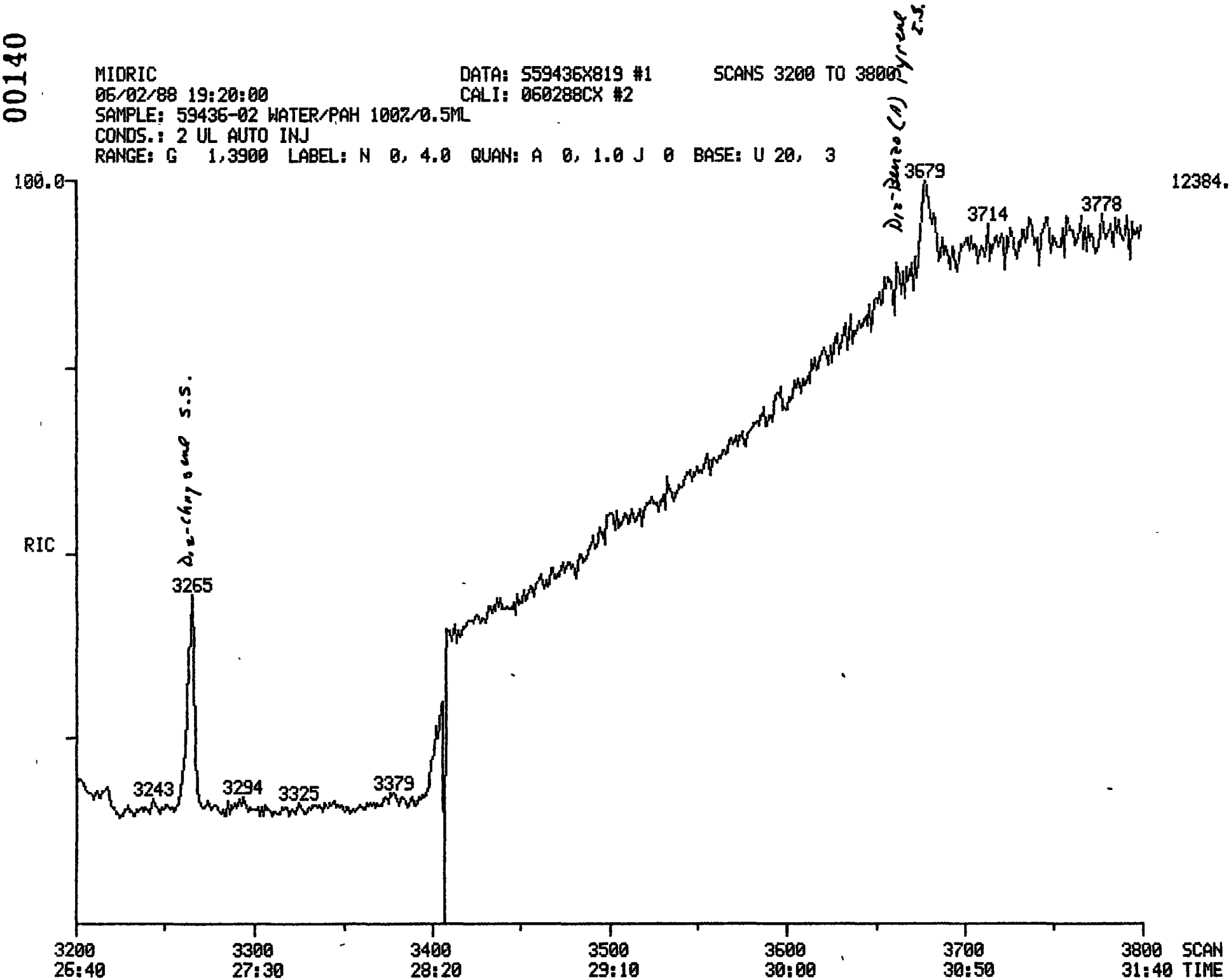
Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	249.575	250.575	0.105	1	100	0	1	1	Pos
2	251.575	252.575	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

6/2/88 19:53:04
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

00140

MIDRIC DATA: 559436X819 #1 SCANS 3200 TO 3800
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 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



Quantitation Report File: S59436X819

Data: S59436X819.TI
06/02/88 19:20:00
Sample: 59436-02 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	252 PH# 07
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(K)FLUORANTHENE	252 PH# 09
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

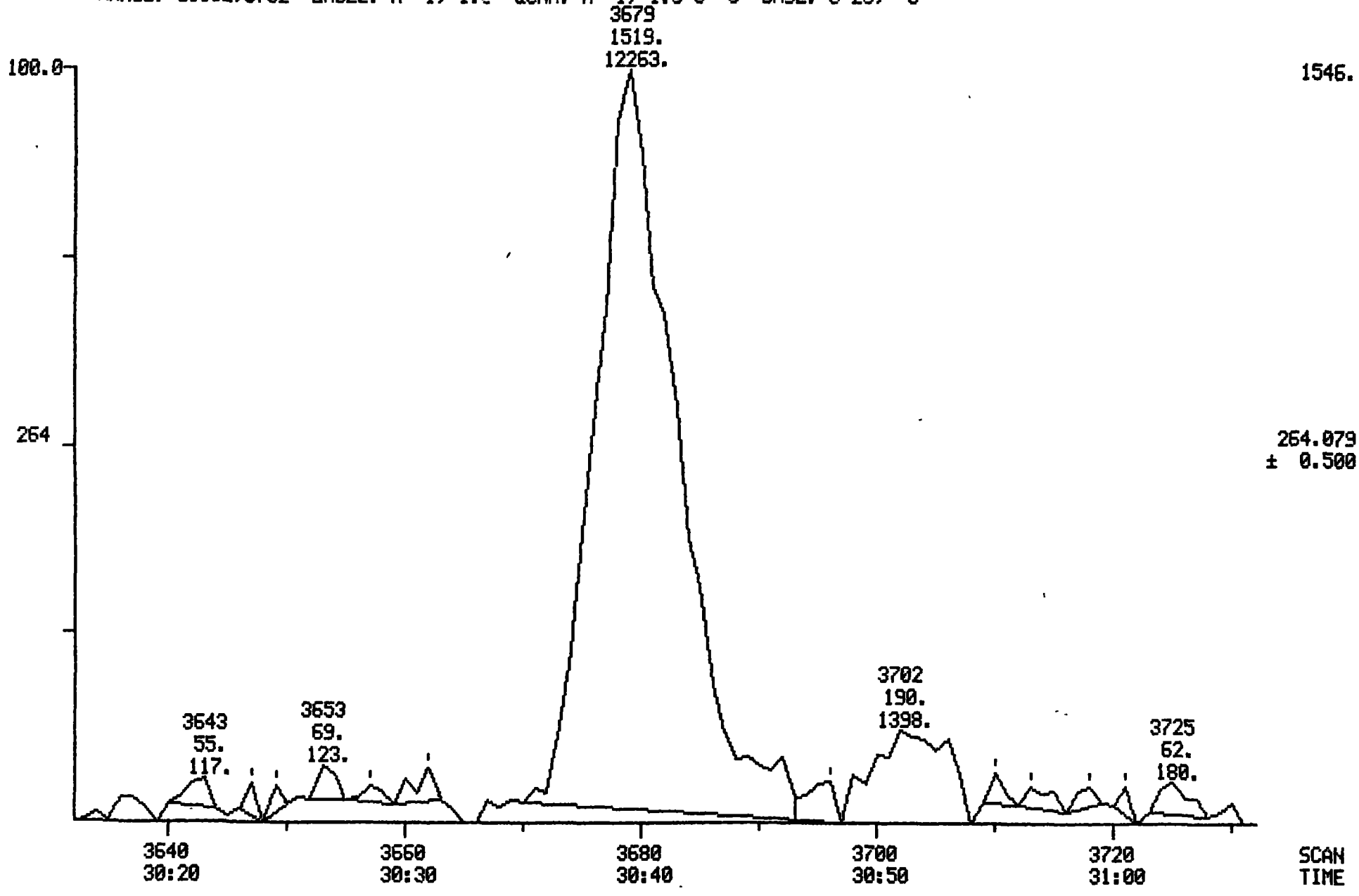
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3679	30:39	1	1.000	A BV	12263.	80.000	NG/ML	35.27
2	240	3265	27:12	1	0.887	A BB	16328.	69.414	NG/ML	30.61
3	228	3254	27:07	1	0.884	A BB	816.	3.287	NG/ML	1.45
4	226	3249	27:04	1	0.883	A VB	438.	7.620	NG/ML	3.36
5	228	3273	27:16	1	0.890	A BB	448.	1.723	NG/ML	0.76
6	226	3265	27:12	1	0.887	A VB	698.	10.220	NG/ML	4.51
7	252	3588	29:54	1	0.975	A BB	604.	2.346	NG/ML	1.03
8	252	3595	29:57	1	0.977	A BB	600.	2.330	NG/ML	1.03
9	250	3596	29:58	1	0.977	A BB	816.	13.140	NG/ML	5.79
10	252	3588	29:54	1	0.975	A BB	604.	2.346	NG/ML	1.03
11	252	3595	29:57	1	0.977	A BB	600.	2.330	NG/ML	1.03
12	250	3596	29:58	1	0.977	A BB	816.	13.140	NG/ML	5.79
13	252	3620	30:10	1	0.984	A BB	292.	1.273	NG/ML	0.56
14	250	3621	30:10	1	0.984	A BB	292.	5.764	NG/ML	2.54
15	252	3688	30:44	1	1.002	A BB	1040.	4.881	NG/ML	2.15
16	250	3684	30:42	1	1.001	A BB	508.	6.985	NG/ML	3.08

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	69.41	80.00	1.331	1.535	0.87
3	27:08	1.00	0.885	1.00	3.29	80.00	0.067	1.619	0.04
4	27:08	1.00	0.885	1.00	7.62	80.00	0.036	0.375	0.10
5	27:15	1.00	0.888	1.00	1.72	80.00	0.037	1.696	0.02
6	27:15	1.00	0.888	1.00	10.22	80.00	0.057	0.446	0.13
7	29:56	1.00	0.976	1.00	2.35	80.00	0.049	1.680	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	2.33	80.00	0.049	1.680	0.03
9	29:56	1.00	0.976	1.00	13.14	80.00	0.067	0.405	0.16
10	29:59	1.00	0.977	1.00	2.35	80.00	0.049	1.680	0.03
11	29:59	1.00	0.977	1.00	2.33	80.00	0.049	1.680	0.03
12	29:59	1.00	0.977	1.00	13.14	80.00	0.067	0.405	0.16
13	29:41	1.02	0.982	1.00	1.27	80.00	0.024	1.496	0.02
14	29:41	1.02	0.982	1.00	5.76	80.00	0.024	0.330	0.07
15	30:44	1.00	1.002	1.00	4.88	80.00	0.085	1.390	0.06
16	30:44	1.00	1.002	1.00	6.98	80.00	0.041	0.474	0.09

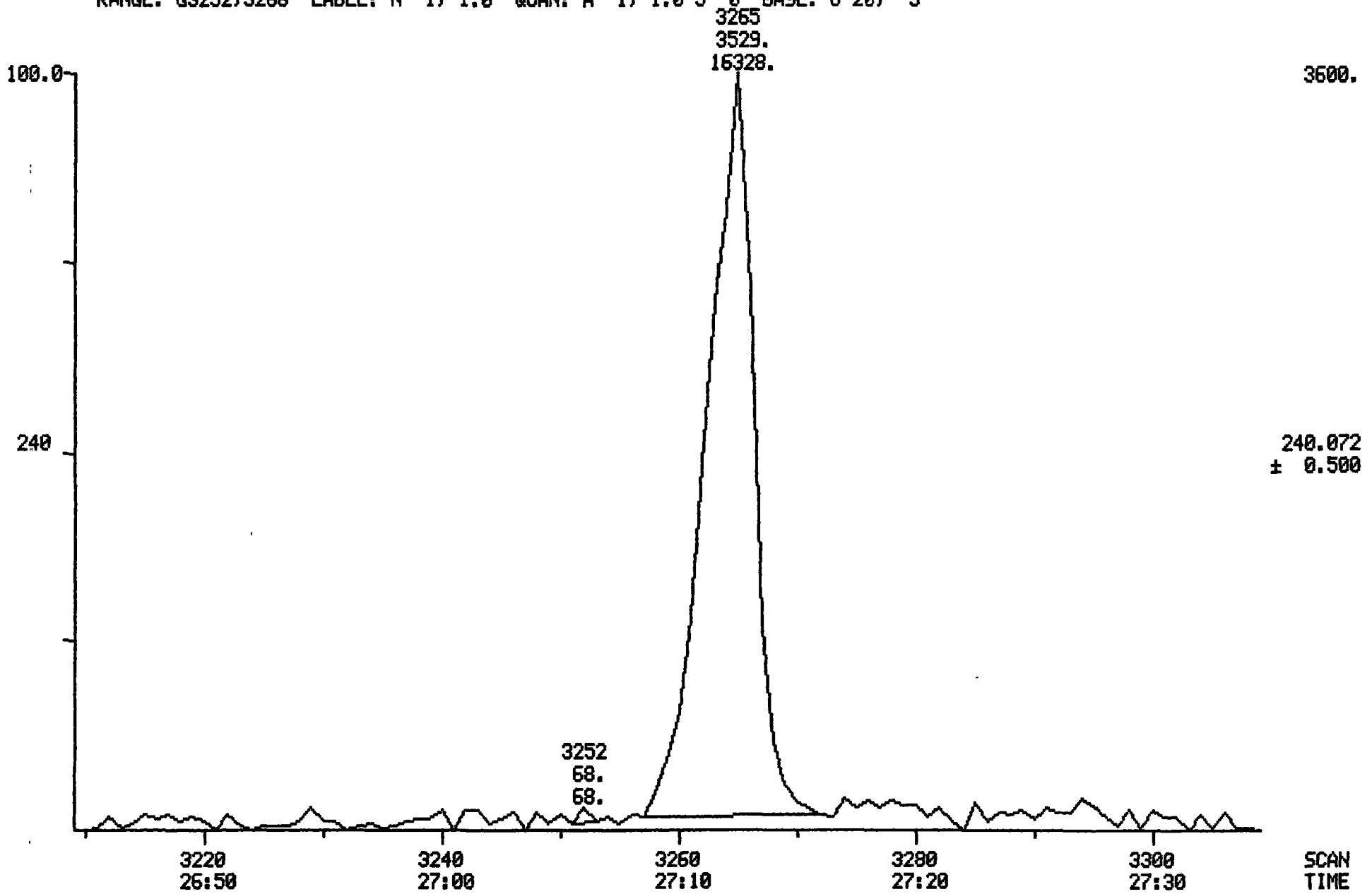
00143

MIDMASS CHROMATOGRAM DATA: S59436X819 #3682 SCANS 3632 TO 3732
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 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



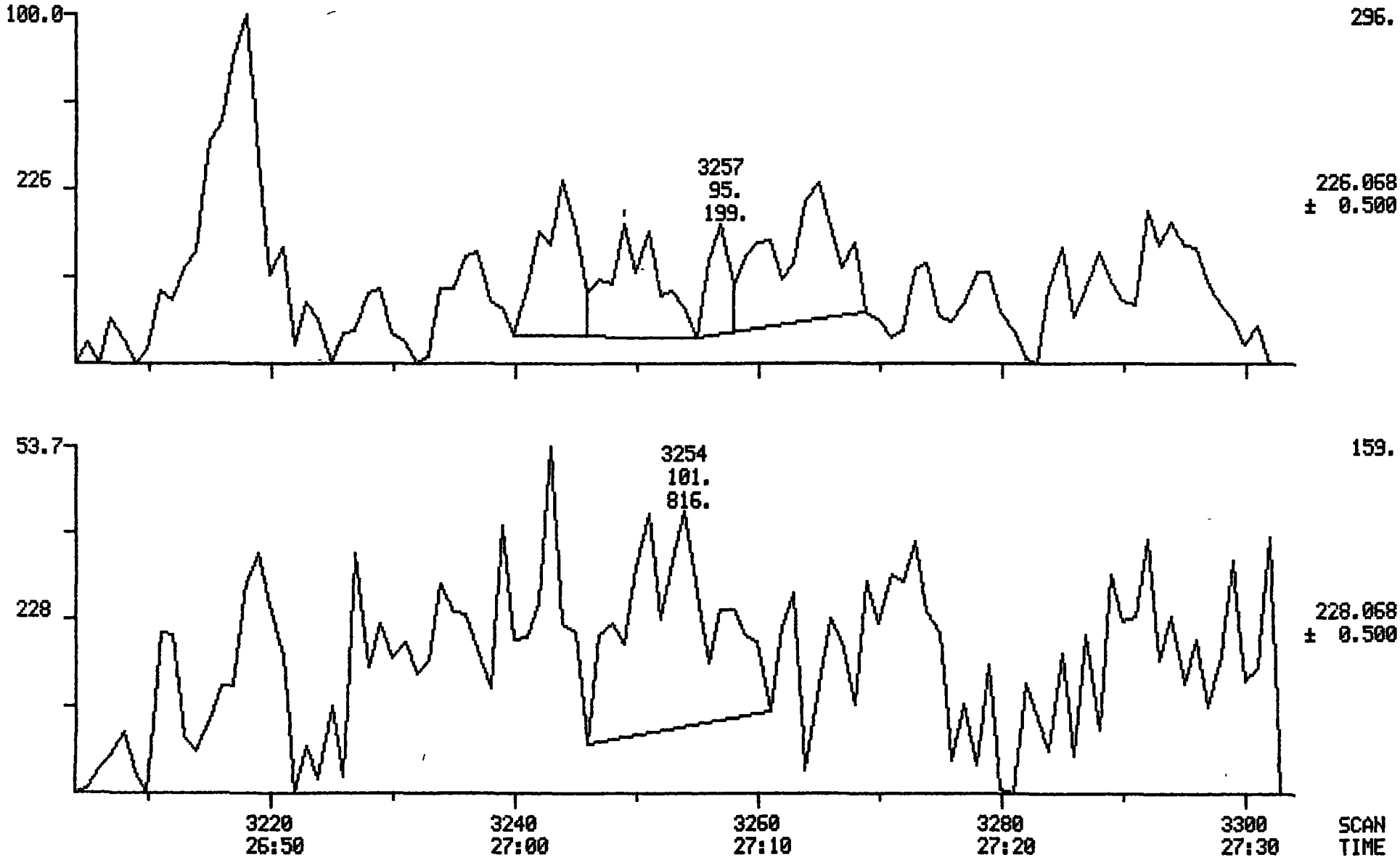
00144

MIDMASS CHROMATOGRAM DATA: S59436X819 #3259 SCANS 3209 TO 3309
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 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



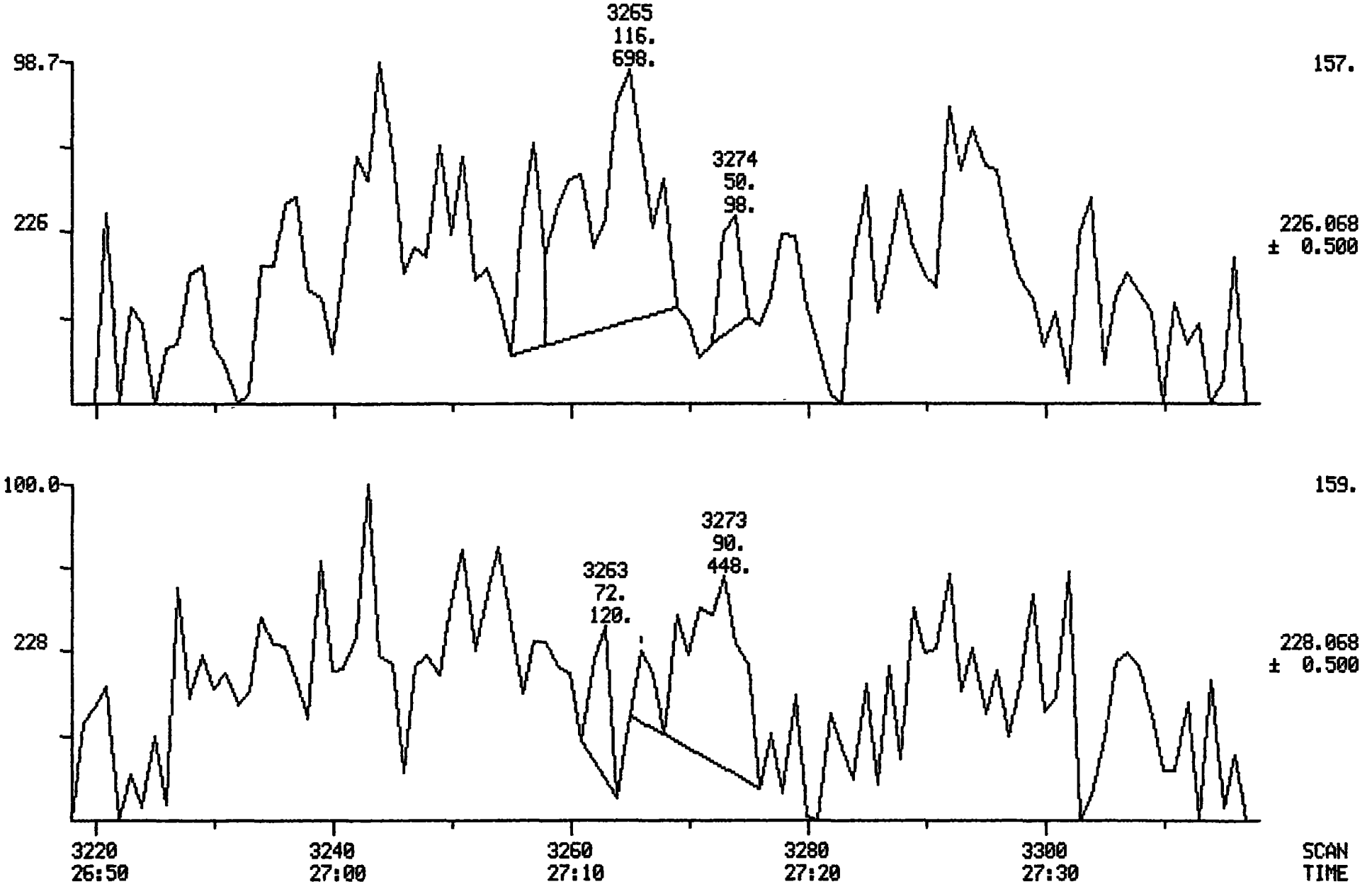
00145

MIDMASS CHROMATOGRAMS DATA: S59436X819 #3254 SCANS 3204 TO 3304
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 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



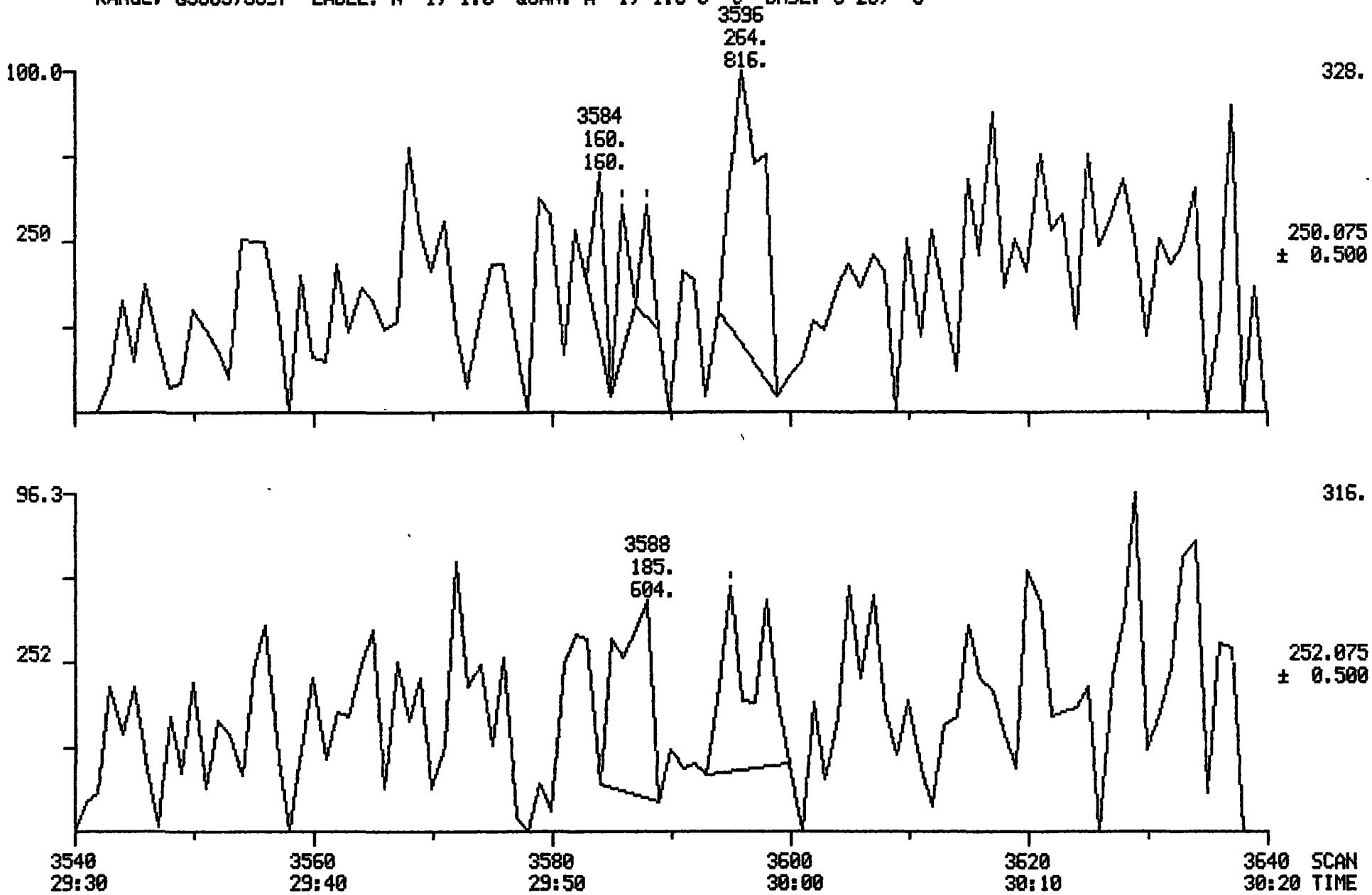
00146

MIDMASS CHROMATOGRAMS DATA: S59436X819 #3268 SCANS 3218 TO 3318
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 WATER/PAH 100Z/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



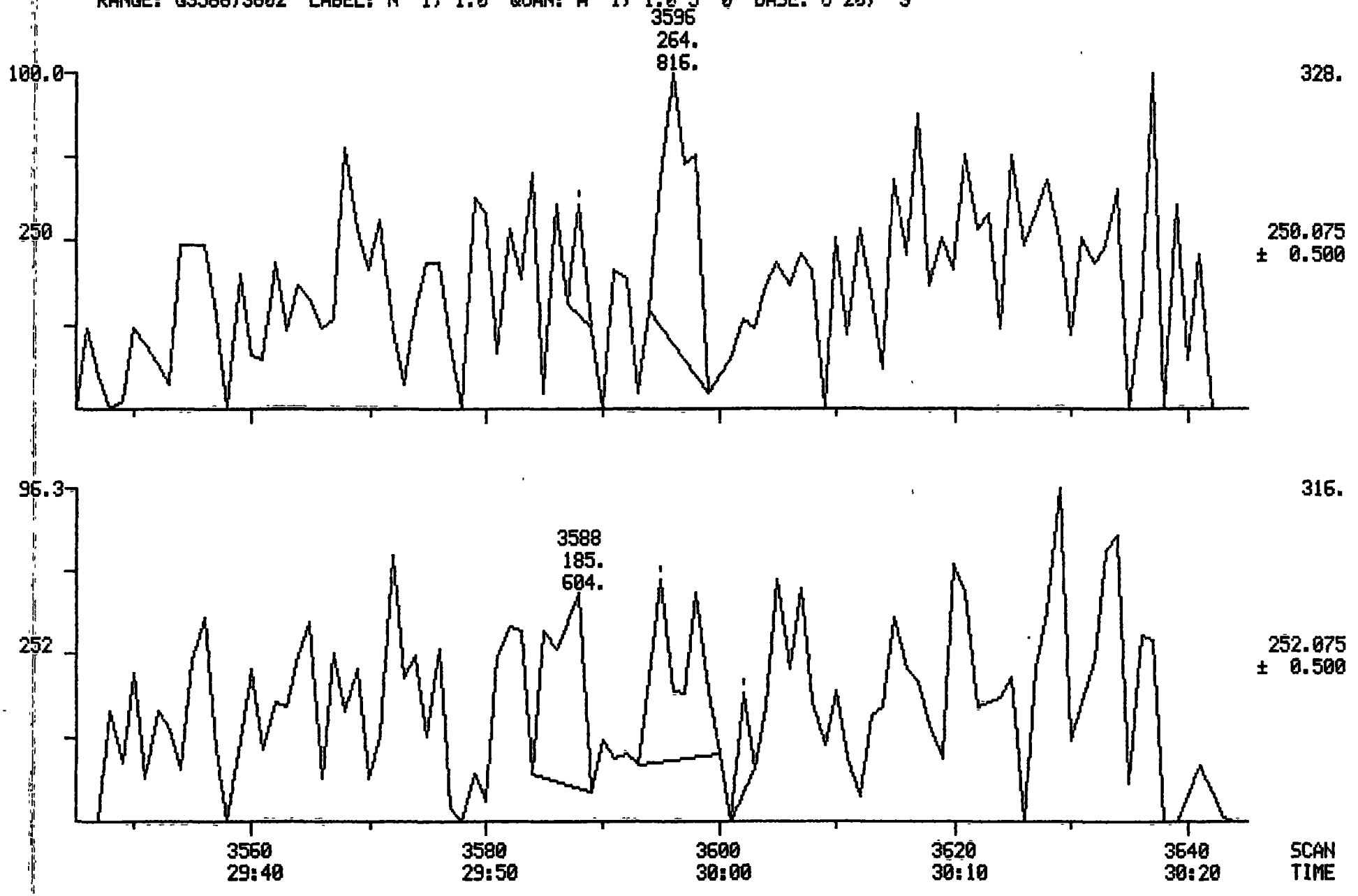
00147

MIDMASS CHROMATOGRAMS DATA: S59436X819 #3590 SCANS 3540 TO 3640
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 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



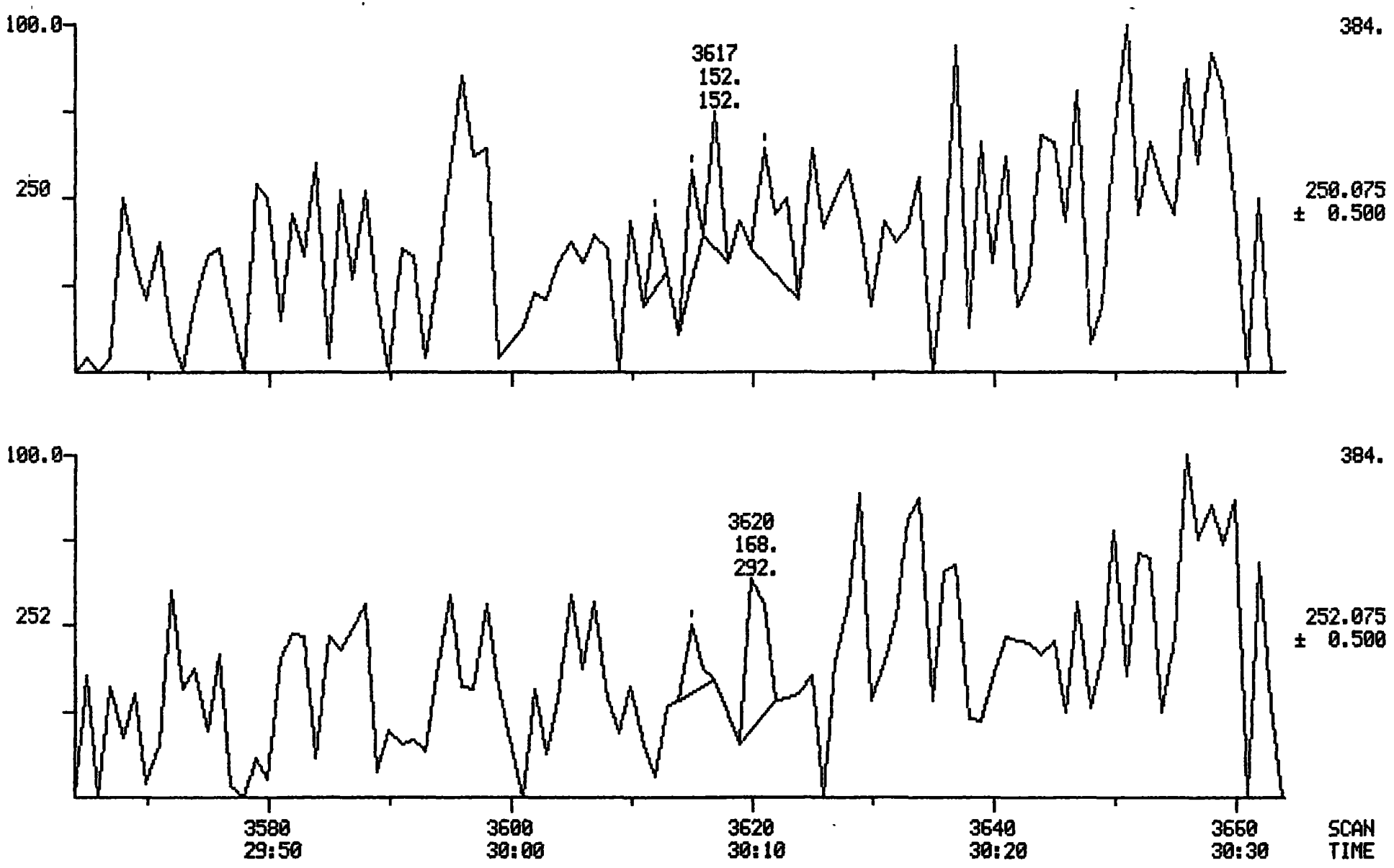
00148

MIDMASS CHROMATOGRAMS DATA: S59436X819 #3595 SCANS 3545 TO 3645
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 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



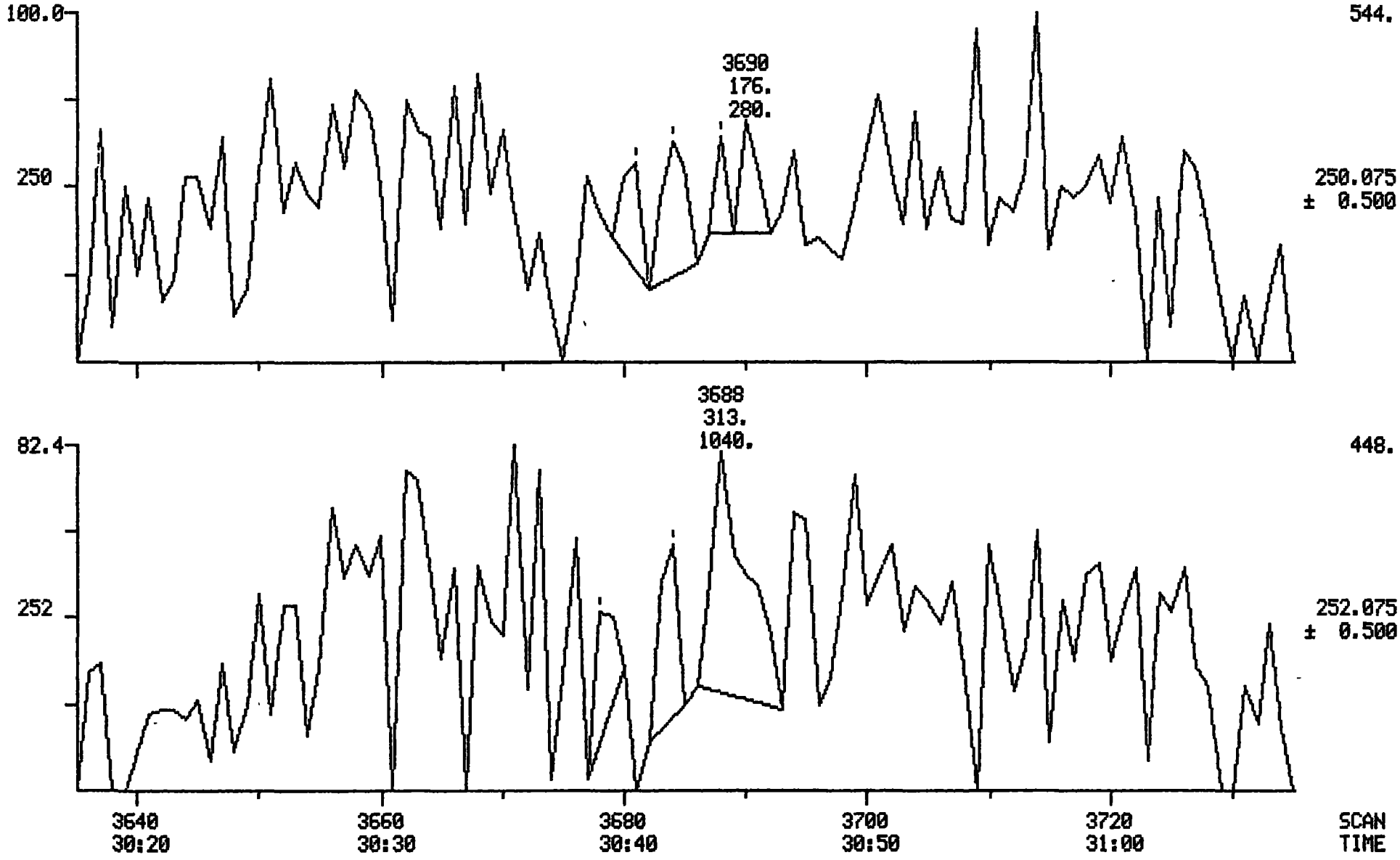
00149

MIDMASS CHROMATOGRAMS DATA: S59436X819 #3614 SCANS 3564 TO 3664
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3607,3621 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00150

MIDMASS CHROMATOGRAMS DATA: S59436X819 #3685 SCANS 3635 TO 3735
06/02/88 19:20:00 CALI: 060288CX #2
SAMPLE: 59436-02 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: S59436X819

Data: S59436X819.TI
06/02/88 19:20:00
Sample: 59436-02 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	252 PH# 07
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(K)FLUORANTHENE	252 PH# 09
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	3679	30:39	1	1.000	A BV	12263.	80.000	NG/ML	35.27
2	240	3265	27:12	1	0.887	A BB	16328.	69.414	NG/ML	30.61
3	228	3254	27:07	1	0.884	A BB	816.	3.287	NG/ML	1.45
4	226	3249	27:04	1	0.883	A VB	438.	7.620	NG/ML	3.36
5	228	3273	27:16	1	0.890	A BB	448.	1.723	NG/ML	0.76
6	226	3265	27:12	1	0.887	A VB	698.	10.220	NG/ML	4.51
7	252	3588	29:54	1	0.975	A BB	604.	2.346	NG/ML	1.03
8	252	3595	29:57	1	0.977	A BB	600.	2.330	NG/ML	1.03
9	250	3596	29:58	1	0.977	A BB	816.	13.140	NG/ML	5.79
10	252	3588	29:54	1	0.975	A BB	604.	2.346	NG/ML	1.03
11	252	3595	29:57	1	0.977	A BB	600.	2.330	NG/ML	1.03
12	250	3596	29:58	1	0.977	A BB	816.	13.140	NG/ML	5.79
13	252	3620	30:10	1	0.984	A BB	292.	1.273	NG/ML	0.56
14	250	3621	30:10	1	0.984	A BB	292.	5.764	NG/ML	2.54
15	252	3688	30:44	1	1.002	A BB	1040.	4.881	NG/ML	2.15
16	250	3684	30:42	1	1.001	A BB	508.	6.985	NG/ML	3.08

59436-02
20%

00152

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	%DIFF RT	COLUMN 2 AMOUNT	%DIFF RT	COLUMN AVERAGE
004	delta-BHC	.0006	1.6	.0002	.7	NA
047	DBC (surrogate)	.0153	.1	.0316	.3	NA
052	DIALLATE	.0000	2.9	.0000	4.2	.0000

DBC

A) $\frac{25.5}{24.0}(100\%) = 106\%$

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

Δ·BHC

A) $\frac{2.0}{80.5}(0.0075\,ug/ml) = 0.000186\,ug/ml \rightarrow 0.000186\,ug/ml\left(\frac{10.0\,ml}{0.99\,l}\right)\left(\frac{100\%}{20\%}\right) = 0.0094\,ug/l$

B) $\frac{2.5}{100.0}(0.0075\,ug/ml) = 0.000188\,ug/ml$

∴ B.D.L. (ND = 0.05 ug/l)

DBC Recovery = 100%
No HSL Pests/PCBs detected

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

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
002	LINDANE	1.967	2.017	5	2266	.0003	ug/ml
003	beta-BHC	1.800	1.750	5	2303	.0012	ug/ml
004	delta-BHC	2.050	2.017	6	2266	.0006	ug/ml
018	p,p'-DDT	12.767	12.800	10	30296	.0045	ug/ml
022	TOXAPHENE (peak 3)	12.483	12.800	10	30296	.1030	ug/ml
047	DBC (surrogate)	26.833	26.850	11	88330	.0153	ug/ml
052	DIALLATE	1.700	1.750	5	2303	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

59936-02 C0154

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
004	delta-BHC	2.450	2.467	8	2442	.0012	ug/ml
017	ENDOSULFAN SULFATE	16.550	16.233	14	55034	.0065	ug/ml
023	AROCLOR 1016(peak 1)	1.267	1.287	5	2087	.0071	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.650	6	6668	.0114	ug/ml
026	AROCLOR 1221(peak 1)	1.250	1.287	5	2087	.0042	ug/ml
027	AROCLOR 1232(peak 1)	1.250	1.283	5	2087	.0066	ug/ml
029	AROCLOR 1242(peak 1)	1.250	1.287	5	2087	.0074	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	6	6668	.0121	ug/ml
034	AROCLOR 1248(peak 3)	4.333	4.383	11	3601	.0044	ug/ml
047	DBC (surrogate)	22.383	22.317	15	172669	.0716	ug/ml
048	ENDRIN KETONE	22.267	22.317	15	172669	.0043	ug/ml
052	DIALLATE	1.230	1.283	5	2087	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

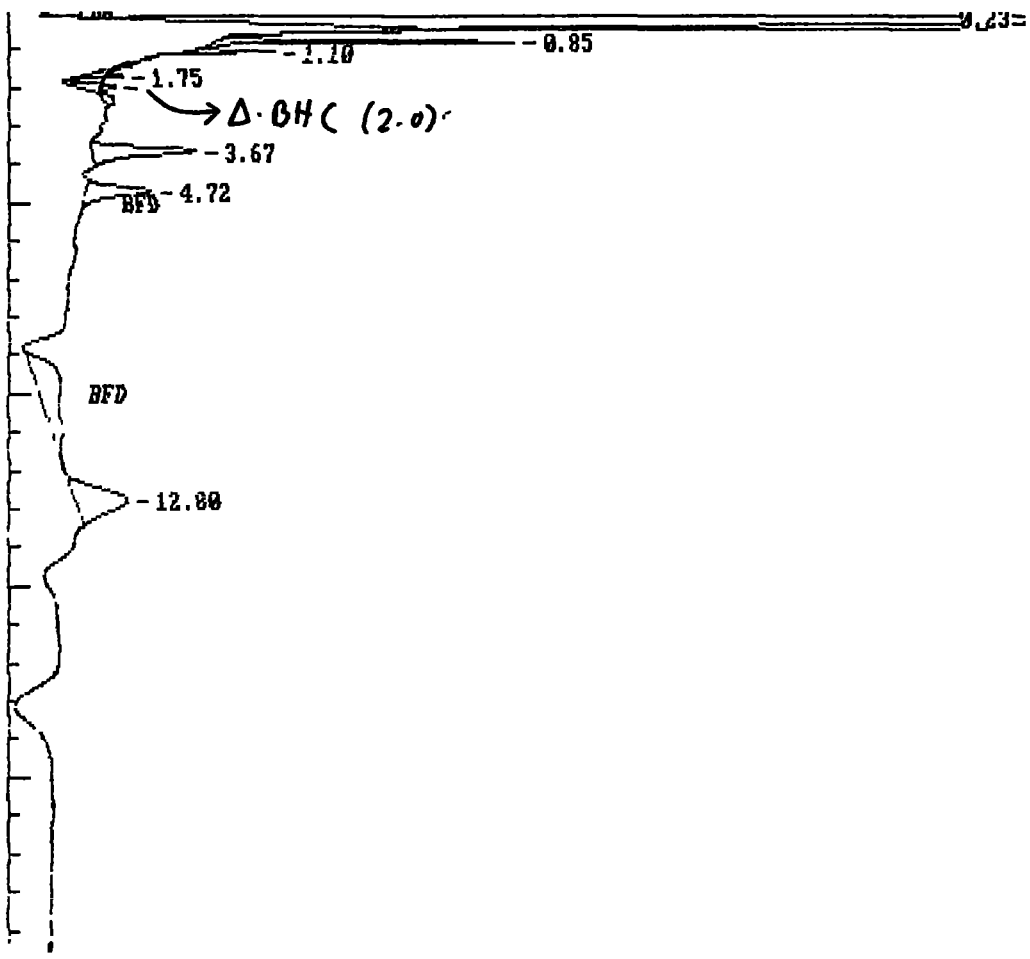
```
*****************************************************************************
* Sample Name: 59436 #2 2%                          Data File: J:AB12615
* Date: 05-08-1988 17:32:31  Method: M:4PPT                                 *
* Interface: 10  Cycle#:  15   Operator 85  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GL-25  *
*              Solvent Description: 1.5% SP2250/1.95% SP1401                *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*              Detector 0: ECD                  Detector 1:                 *
* Misc. Information: 4 UL INJECTION                          LPT1:          *
*****************************************************************************
Starting Delay:    0.00                          Run Time:    35.00
```

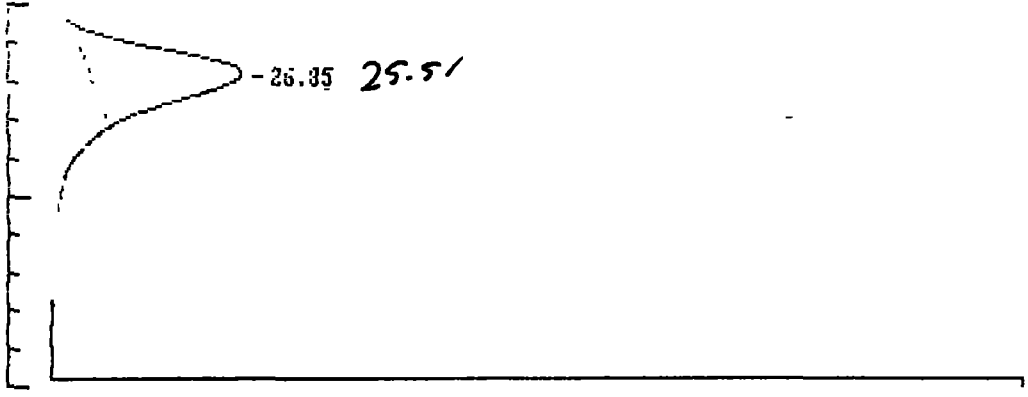
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	567728	77.5327	1	127130	100.000	4.5
2	0.53	10106	1.3801	1	3972	1.780	2.5
3	0.85	9733	1.3292	1	2106	1.714	4.6
4	1.10	2794	0.3816	1	661	0.492	4.2
5	1.75	2303	0.3145	1	311	0.406	7.4
6	2.02	2266	0.3095	1	228	0.399	9.9
8	3.67	10815	1.4770	1	716	1.905	15.1
9	4.72	7873	1.0752	1	454	1.387	17.3
10	12.80	30296	4.1374	1	357	5.336	84.9
11	26.85	88330	12.0629	1	1057	15.558	83.6

SS
5/11/88

Total Area: 732243 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12615.PTS Printed on 05-08-1988 at 12:12:22
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




-26.35
25.51

05-06-1988 12:12:12 Version 4.1

* Sample Name: 5943e 02 20% Data File: J:BB12615
* Date: 05-06-1988 17:17:56 Method: M:P3PJ
* Interface: 12 Cycle#: 15 Operator 33 Channel#: 0 Vial#: N.A.
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100

* Instrument Type: HP 5880A Column Type: oFT 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

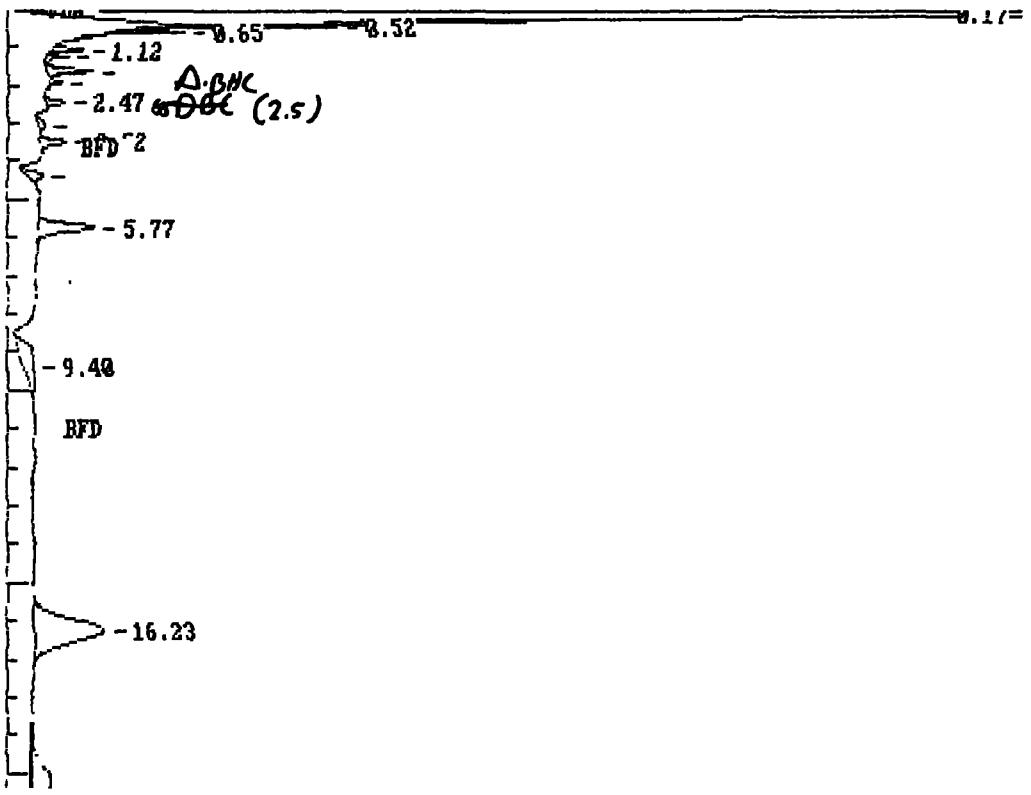
65

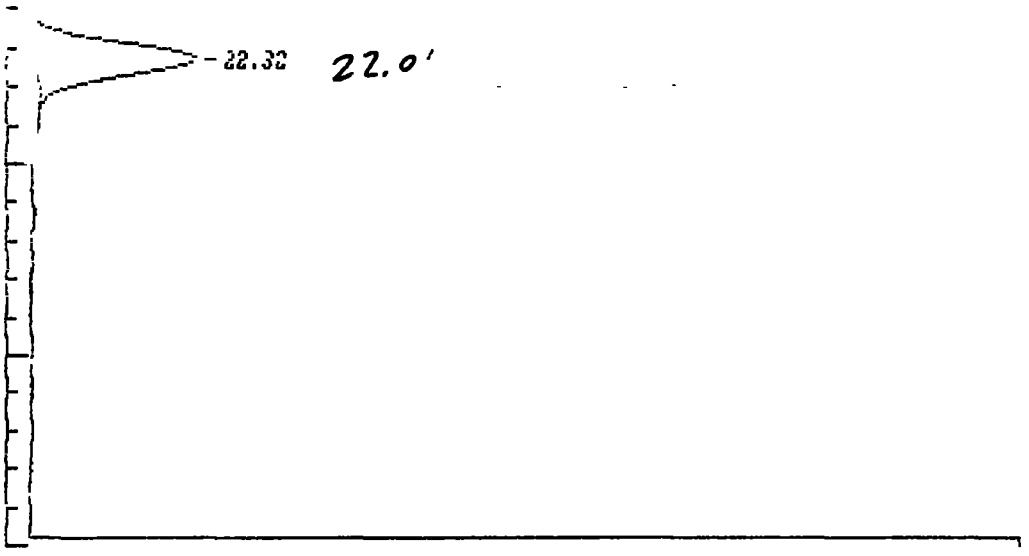
5/11/88

Pk No.	Ret Time	Peak Area	Area %	E L	Peak Ht.	Normalized %	Area/ Height
1	0.17	929471	75.7740	1	209090	100.000	4.4
2	0.52	8774	0.7153	1	3446	0.944	2.5
3	0.65	3461	0.2822	1	1331	0.372	2.6
4	1.12	3246	0.2646	1	617	0.349	5.3
5	1.28	2087	0.1701	1	419	0.224	5.0
6	1.65	6668	0.5436	1	876	0.717	7.6
7	1.95	1300	0.1059	1	241	0.140	5.4
8	2.47	2442	0.1991	1	342	0.263	7.1
9	3.08	1369	0.1116	1	100	0.147	13.7
10	3.52	4591	0.3742	1	482	0.494	9.5
11	4.38	3601	0.2936	1	298	0.387	12.1
12	5.77	16396	1.3367	1	1060	1.764	15.5
13	9.40	14530	1.1846	1	201	1.563	72.4
14	16.23	56034	4.5681	1	1309	6.029	42.8
15	22.32	172669	14.0766	1	2990	18.577	57.7

Total Area: 1226637 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12615.PTS Printed on 05-06-1988 at 12:12:49
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts




22.32
22.0'

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-03

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-03
Sample Matrix : Water
Data Released Authorized By : JCC

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 :	04/27/88
Conc./Dilution Factor :	2.0
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		20 U	79-34-5	1,1,2,2-Tetrachloroethane		10 U
74-83-9	Bromomethane		20 U	78-87-5	1,2-Dichloropropane		10 U
75-01-4	VinylChloride		20 U	10061-02-6	Trans-1,3-Dichloropropene		10 U
75-00-3	Chloroethane		20 U	79-10-6	Trichloroethene		10 U
75-09-2	MethyleneChloride	7.5	J B	124-48-1	Dibromochloromethane		10 U
67-64-1	Acetone		20 U	79-00-5	1,1,2-Trichloroethane		10 U
75-15-0	CarbonDisulfide		10 U	71-43-2	Benzene	390	
75-35-4	1,1-Dichloroethene		10 U	10061-01-5	cis-1,3-Dichloropropene		10 U
75-34-3	1,1-Dichloroethane		10 U	110-75-8	2-Chloroethylvinylether		20 U
156-60-5	Trans-1,2-Dichloroethene		10 U	75-25-2	Bromoform		10 U
67-66-3	Chloroform		10 U	591-78-6	2-Hexanone		20 U
107-06-2	1,2-Dichloroethane		10 U	108-10-1	4-Methyl-2-Pentanone		20 U
78-93-3	2-Butanone		20 U	127-18-4	Tetrachloroethene		10 U
71-55-6	1,1,1-Trichloroethane		10 U	108-88-3	Toluene		10 U
56-23-5	CarbonTetrachloride		10 U	108-90-7	Chlorobenzene		10 U
108-05-4	VinylAcetate		20 U	100-41-4	Ethylbenzene		10 U
75-27-4	Bromodichloromethane		10 U	100-42-5	Styrene		10 U
					Total Xylenes		10 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
59436-03

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
59436-03

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/25/88	Separatory Funnel Extraction	Yes
Date Analyzed	06/03/88	Continuous Liquid-Liquid Extraction	No
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		10 U
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
59436-03

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	312	8.1 B
2. 108-88-3	Methyl Benzene	BNA	367	5.7 B
3.	Oxygenated Hydrocarbon	BNA	468	13 B
4. 1824-81-3	6-Methyl-2-Pyridinamine	BNA	793	11
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
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20.				
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22.				
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24.				
25.				
26.				
27.				
28.				
29.				
30.				

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

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

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	37.7	38	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
	10 U	Pyridine	110-86-1
16.0		2-Picoline	109-06-8
48.0		3 & 4-Picoline	
9.5	J	2,6-Lutidine	
4.2	J	2-Ethyl Pyridine	
40.0		2,4 & 2,5-Lutidine	
16.0		2,3-Lutidine	
15.0		3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
44.0		3,5-Lutidine	
	10 U	3,4-Lutidine	
7.4	J	2-Methyl-5-Ethyl Pyridine	
3.1	J	2-Methyl-3-Ethyl Pyridine	
	10 U	M and P Cresols	
4.3	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: 59436-03
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	64.7	81	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: 59436-03

CC165

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

4/27/88 21:04:10 SCAN 1 OF 1650
Acquisition started

00166

Acquire
04/27/88 21:04:00 + 0:04
Sample: 59436-03 2.5ML/5ML
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Run 0:S59436Z821
Free sectors: 6514
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 4 of 1650
Weight: 0.000
Acct. No:

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

Loaded GC Desc:CV Current GC oven tmp: -10 DegC Injector : 150 DegC
Current GC Desc:CV GC elapsed time : 0: 3 min Int.oven : 150 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	-10 - -10	-	1.0	1.0	Sweep/Split	32.7	0.0
2	-10 - 100	6.0	18.3	19.3	Divert	32.7	0.0
3	100 - 170	8.3	8.4	27.7			
4	170 - 170	-	5.0	32.7			

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

Low mass: 35 Up: 0.95 L* Top: 0.00
High mass: 300 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 18 Samp Int (ms): 0.200 Peak Width: 1000.
Frag S/P: 10 Actual: 9 Samp Int (ms): 0.400 Inten/ion: 2

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

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

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	

4/27/88 21:31:43
ACQUISITION COMPLETED
SCANS 1 TO 1650 Centroid

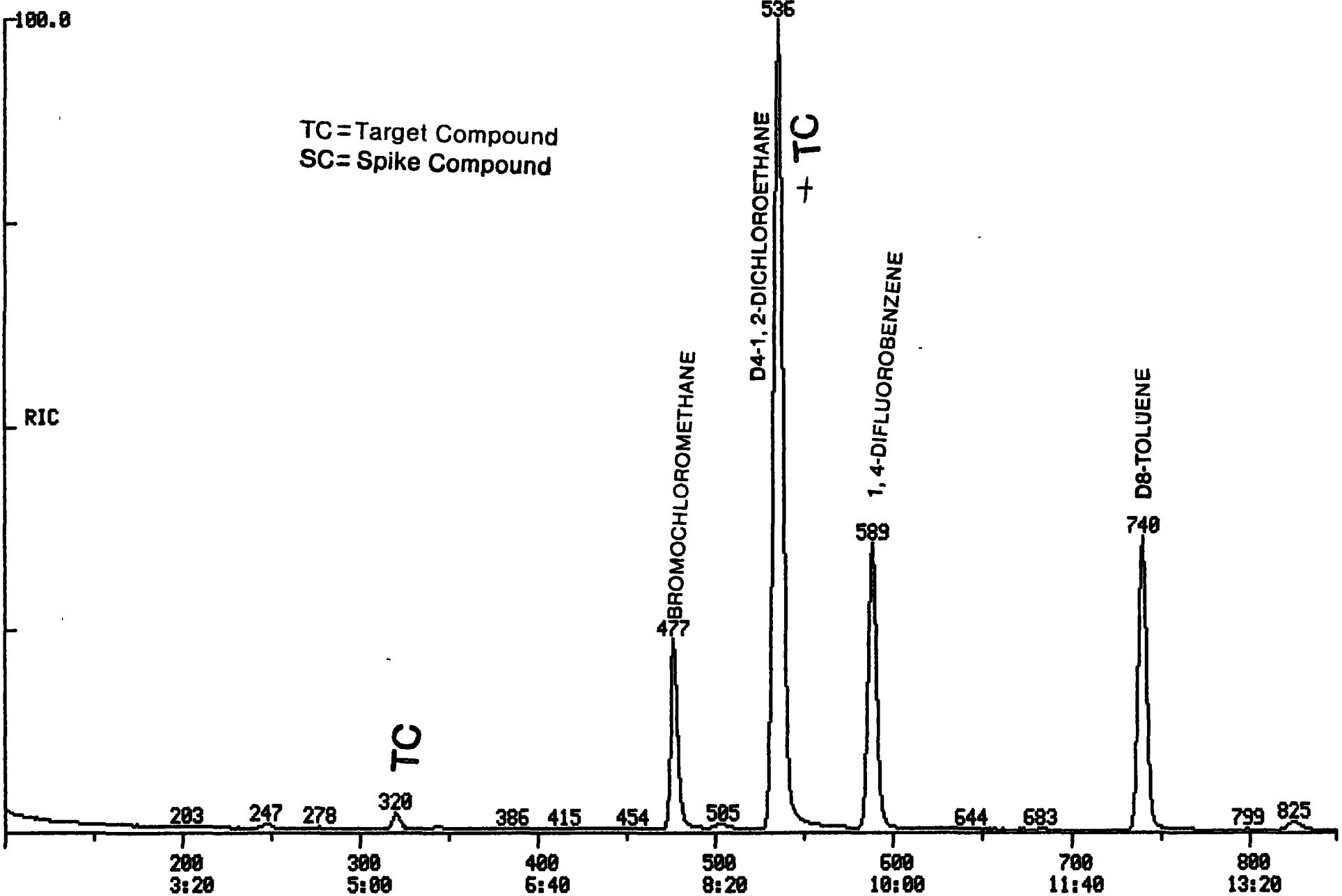
Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	1650	38.2	1650.0	2.3	26373. 16.	16.

00167

RIC
04/27/88 21:04:00
SAMPLE: 59436-03 2.5ML/5ML
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

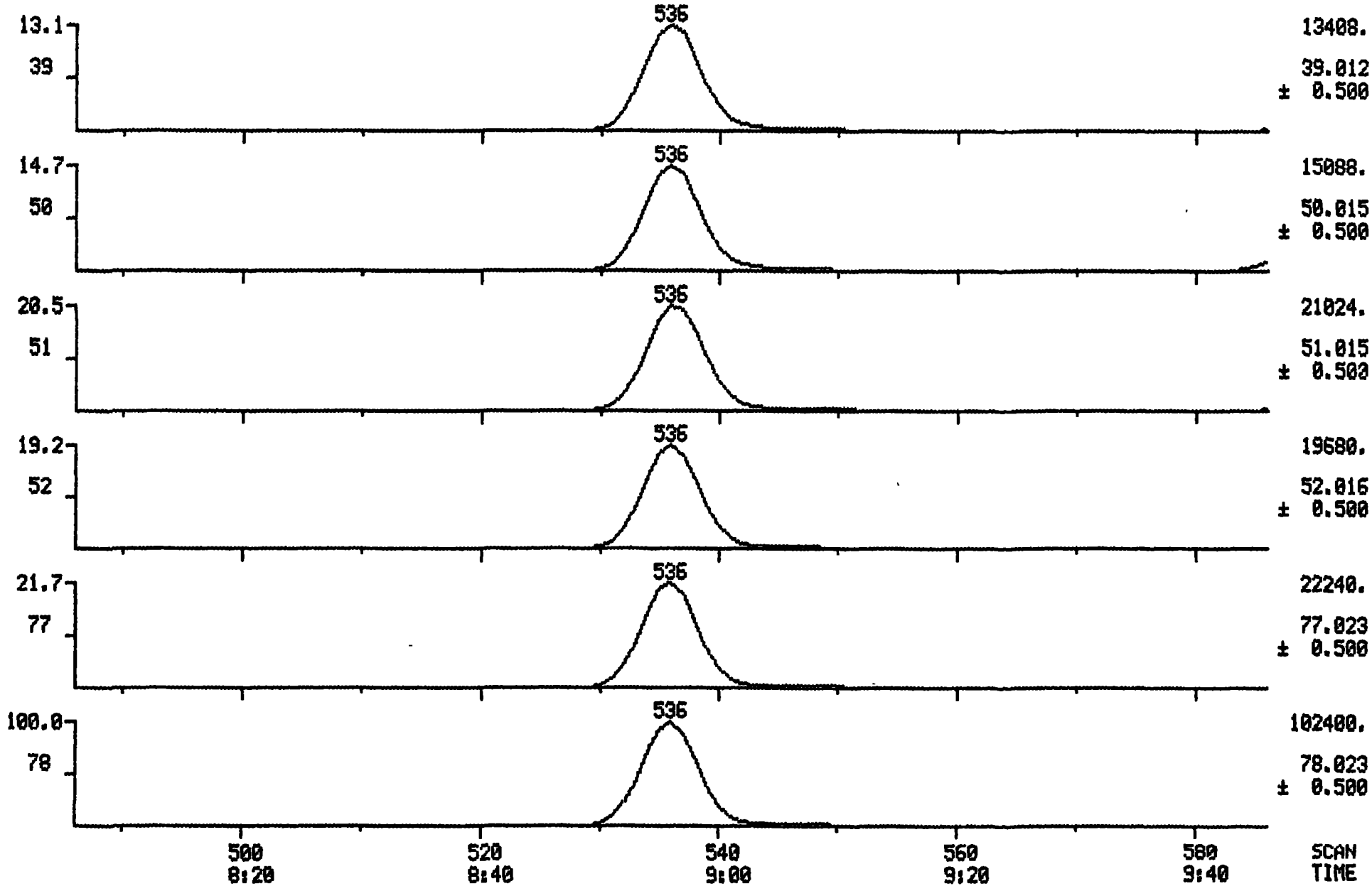
DATA: 559436Z821 #4
CALI: 042788CZ #5

SCANS 100 TO 850
OUT OF 100 TO 1500



00168

MASS CHROMATOGRAMS DATA: 5594362821 #536 SCANS 486 TO 586
04/27/88 21:04:00 CALI: 042788C2 #5
SAMPLE: 59436-03 2.5ML/5ML
CONDS.: GC DESC CV
C165 BENZENE 78 V2# 60 71-43-2
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

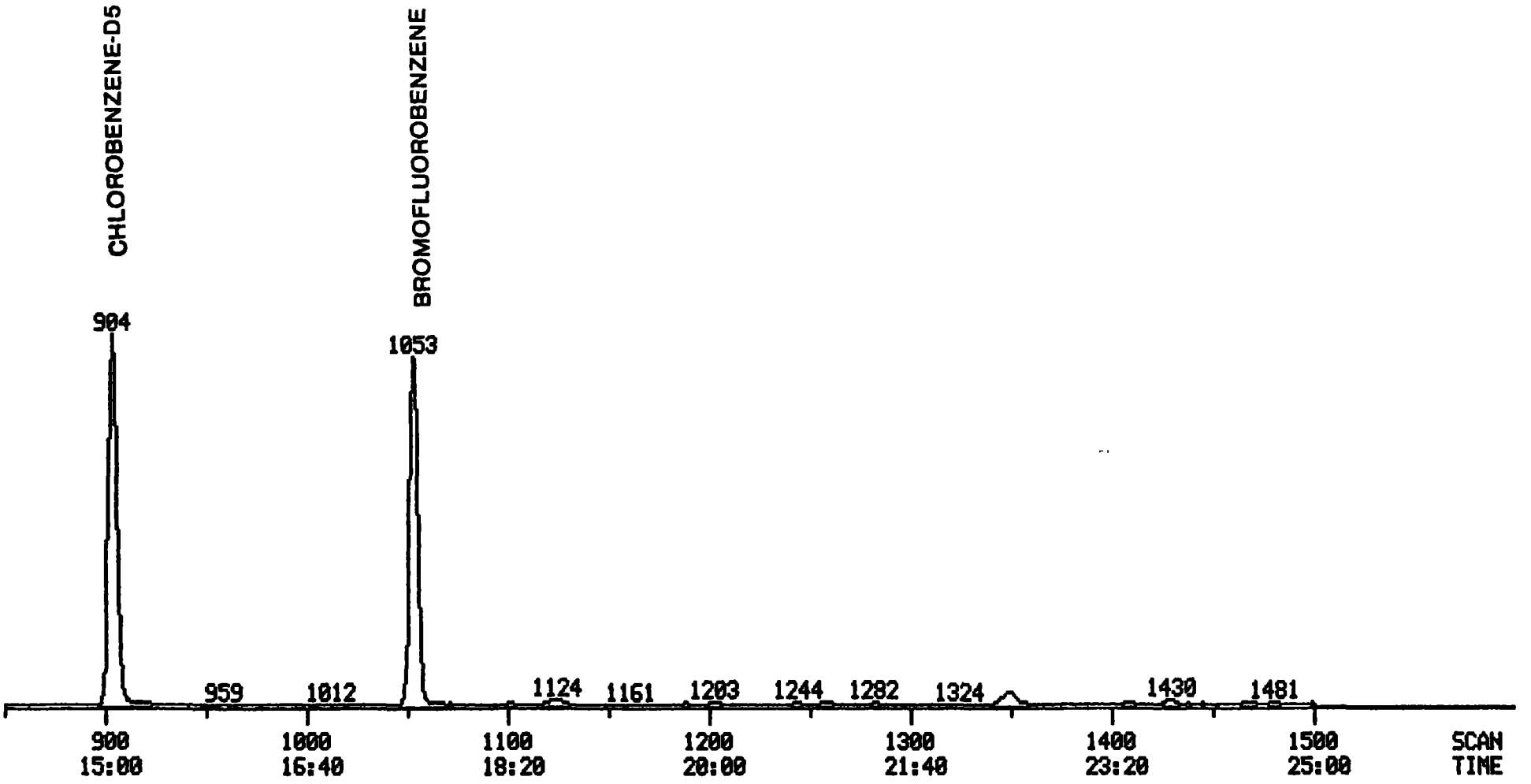


RIC
04/27/88 21:04:00
SAMPLE: 59436-03 2.5ML/5ML
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436Z821 #4 SCANS 850 TO 1500
CALI: 042788CZ #5 OUT OF 100 TO 1500

100.0 245248.

TC = Target Compound
SC = Spike Compound



PROCEDURE: TCA DIAGNOSTIC REPORT 5/02/88 16:29:10
DATA FILE: S59436Z821
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00170

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	13	4	1	57	ISO1/TCO1
3	3	2	0	18	5	1	63	ISO2/TCO2
3	3	1	0	6	3	1	0	ISO3/TCO3
1	1	1	0	9	2	1	0	ISO4/TCO4

41 COMPOUNDS PROCESSED, 9 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-476	477	477	.	2	991	.	128	477	.	1
2	V1	10	-107	102	.	.	.	.	.	50	.	.	.
3	V1	25	-122	118	.	.	.	.	.	62	.	.	.
4	V1	15	-156	152	.	.	.	.	.	94	.	.	.
5	V1	35	-170	166	.	.	.	.	.	64	.	.	.
6	V1	80	-257	255	.	.	.	.	.	96	.	.	.
7	V1	65	-265	263	.	.	.	.	.	76	.	.	.
8	V1	50	-282	280	280	.	1	979	.	58	.	.	.
9	V1	45	-321	320	320	.	1	977	.	84	320	.	1
10	V1	95	-346	345	.	.	.	.	.	96	.	.	.
11	V1	90	-392	392	.	.	.	.	.	63	392	.	1
12	V2	25	-412	412	413	1	1	856	.	43	414	1	1
13	V2	10	-467	468	.	.	.	.	.	72	.	.	.
14	V2	1	-588	589	589	.	2	998	.	114	589	.	1
15	V3	1	-903	904	904	.	1	997	.	117	904	.	1
16	V1	100	-494	495	.	.	.	.	.	83	.	.	.
17	V2	15	-498	499	.	.	.	.	.	97	.	.	.
18	V2	20	-513	514	.	.	.	.	.	117	.	.	.
19	V2	60	-536	537	536	-1	1	991	.	78	536	.	1
20	V1	2	-537	538	.	.	.	.	.	65	537	.	1
21	V1	110	-545	546	.	.	.	.	.	62	.	.	.
22	V2	45	-608	609	.	.	.	.	.	130	.	.	.
23	V2	35	-631	632	.	.	.	.	.	63	.	.	.
24	V2	30	-669	670	.	.	.	.	.	83	.	.	.
25	V2	40	-717	718	.	.	.	.	.	75	.	.	.
26	V3	2	-740	741	740	-1	1	974	.	98	740	.	1
27	V3	10	-742	743	.	.	.	.	.	58	.	.	.
28	V3	35	-747	748	.	.	.	.	.	92	747	.	1
29	V2	65	-785	786	.	.	.	.	.	75	.	.	.
30	V2	55	-803	804	.	.	.	.	.	97	.	.	.
31	V3	20	-805	806	.	.	.	.	.	164	.	.	.
32	V3	15	-839	840	.	.	.	.	.	58	.	.	.
33	V2	50	-843	844	.	.	.	.	.	129	.	.	.
34	V3	40	-908	909	.	.	.	.	.	112	.	.	.
35	V3	50	-926	927	.	.	.	.	.	106	.	.	.
36	V3	75	-941	942	.	.	.	.	.	106	.	.	.
37	V3	60	-988	988	.	.	.	.	.	106	.	.	.
38	V3	55	-992	992	.	.	.	.	.	104	.	.	.
39	V2	80	-1010	1010	.	.	.	.	.	173	.	.	.
40	V3	3	-1053	1053	1053	.	1	975	.	95	1054	1	1
41	V3	25	-1087	1087	.	.	.	.	.	83	1085	.	2

Quantitation Report File: S59436Z821

Data: S59436Z821.TI
04/27/88 21:04:00
Sample: 59436-03 2.5ML/5ML
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Instrument: 4500
Analyst: CR

Weight: 0.000
Acct. No.:

00171

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	C020	VINYL CHLORIDE	62	V1#	25	75-01-4
4	C015	BROMOMETHANE	94	V1#	15	74-83-9
5	C025	CHLOROETHANE	64	V1#	35	75-00-3
6	C045	1,1-DICHLOROETHENE	61	V1#	80	75-35-4
7	C040	CARBON DISULFIDE	76	V1#	65	75-15-0
8	C035	ACETONE	58	V1#	50	67-64-1
9	C030	METHYLENE CHLORIDE	84	V1#	45	75-09-2
10	TRANS-1,2-DICHLOROETHENE		61	V1#	95	156-60-5
11	C050	1,1-DICHLOROETHANE	63	V1#	90	75-34-3
12	C125	VINYL ACETATE	43	V2#	25	108-05-4
13	C110	2-BUTANONE	72	V2#	10	78-93-3
14	CI10	1,4-DIFLUOROBENZENE	114	IV2#	01	540-36-3
15	CI20	CHLOROBENZENE-D5	117	IV3#	01	3114-55-4
16	C060	CHLOROFORM	83	V1#	100CC	67-66-3
17	C115	1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
18	C120	CARBONTETRACHLORIDE	117	V2#	20	56-23-5
19	C165	BENZENE	78	V2#	60	71-43-2
20	CS15	1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
21	C065	1,2-DICHLOROETHANE	62	V1#	110	107-06-2
22	C150	TRICHLOROETHENE	130	V2#	45	79-01-6
23	C140	1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
24	C130	BROMODICHLOROMETHANE	83	V2#	30	75-27-4
25	C143	CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
26	CS05	TOLUENE-D8	98	SV3#	02	2037-26-5
27	C205	4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
28	C230	TOLUENE	92	V3#	35	108-88-3
29	C172	TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
30	C160	1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
31	C220	TETRACHLOROETHENE	164	V3#	20	127-18-4
32	C210	2-HEXANONE	58	V3#	15	591-78-6
33	C155	DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
34	C235	CHLOROBENZENE	112	V3#	40	108-90-7
35	C240	ETHYLBENZENE	106	V3#	50	100-41-4
36	M+P XYLENES		106	V3#	75	
37	O-XYLENE		106	V3#	60	
38	C245	STYRENE	104	V3#	55	100-42-5
39	C180	BROMOFORM	173	V2#	80	75-25-2
40	CS10	BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
41	C225	1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	477	7:57	1	1.000	A BB	39078.	50.000 UG/L	10.07
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	320	5:20	1	0.671	A BB	5213.	3.767 UG/L	0.76
10	NOT FOUND								
11	63	392	6:32	1	0.822	A BB	86.	0.044 UG/L	0.01
12	43	414	6:54	14	0.703	A BB	96.	0.056 UG/L	0.01
13	NOT FOUND								
14	114	589	9:49	14	1.000	A BB	198975.	50.000 UG/L	10.07
15	117	904	15:04	15	1.000	A BB	166459.	50.000 UG/L	10.07
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	78	536	8:56	14	0.910	A BB	582339.	196.636 UG/L	39.62
20	65	537	8:57	1	1.126	A BB	35641.	45.788 UG/L	9.23
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	98	740	12:20	15	0.819	A BB	170108.	50.260 UG/L	10.13
27	NOT FOUND								
28	92	747	12:27	15	0.826	A BB	205.	0.104 UG/L	0.02
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	95	1054	17:34	15	1.166	A BB	110651.	49.517 UG/L	9.98
41	83	1085	18:05	15	1.200	A*VV	294.	0.172 UG/L	0.03

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	7:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:47		0.224						
3	2:02		0.256						
4	2:36		0.327						
5	2:50		0.356						
6	4:17		0.539						
7	4:25		0.556						
8	4:42		0.591						
9	5:21	1.00	0.673	1.00	3.77	50.00	0.133	1.771	0.08
10	5:46		0.725						
11	6:32	1.00	0.822	1.00	0.04	50.00	0.002	2.479	0.00
12	6:52	1.00	0.699	1.00	0.06	50.00	0.000	0.434	0.00
13	7:47		0.793						

00173

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	9:49	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
15	15:04	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	8:14		1.036						
17	8:18		0.846						
18	8:33		0.871						
19	8:56	1.00	0.910	1.00	196.64	50.00	2.927	0.744	3.93
20	8:57	1.00	1.126	1.00	45.79	50.00	0.912	0.996	0.92
21	9:05		1.143						
22	10:08		1.032						
23	10:31		1.071						
24	11:09		1.136						
25	11:57		1.217						
26	12:20	1.00	0.819	1.00	50.26	50.00	1.022	1.017	1.01
27	12:22		0.821						
28	12:27	1.00	0.826	1.00	0.10	50.00	0.001	0.591	0.00
29	13:05		1.333						
30	13:23		1.363						
31	13:25		0.890						
32	13:59		0.928						
33	14:03		1.431						
34	15:08		1.004						
35	15:26		1.024						
36	15:41		1.041						
37	16:28		1.093						
38	16:32		1.097						
39	16:50		1.715						
40	17:33	1.00	1.165	1.00	49.52	50.00	0.665	0.671	0.99
41	18:07	1.00	1.202	1.00	0.17	50.00	0.002	0.513	0.00

TCA FINISHED, 9 FOUND
FINISHED AT: 5/02/88 16:33:31

00174

RMAL QUANTITATION SUMMARY FILE: S59436Z821
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

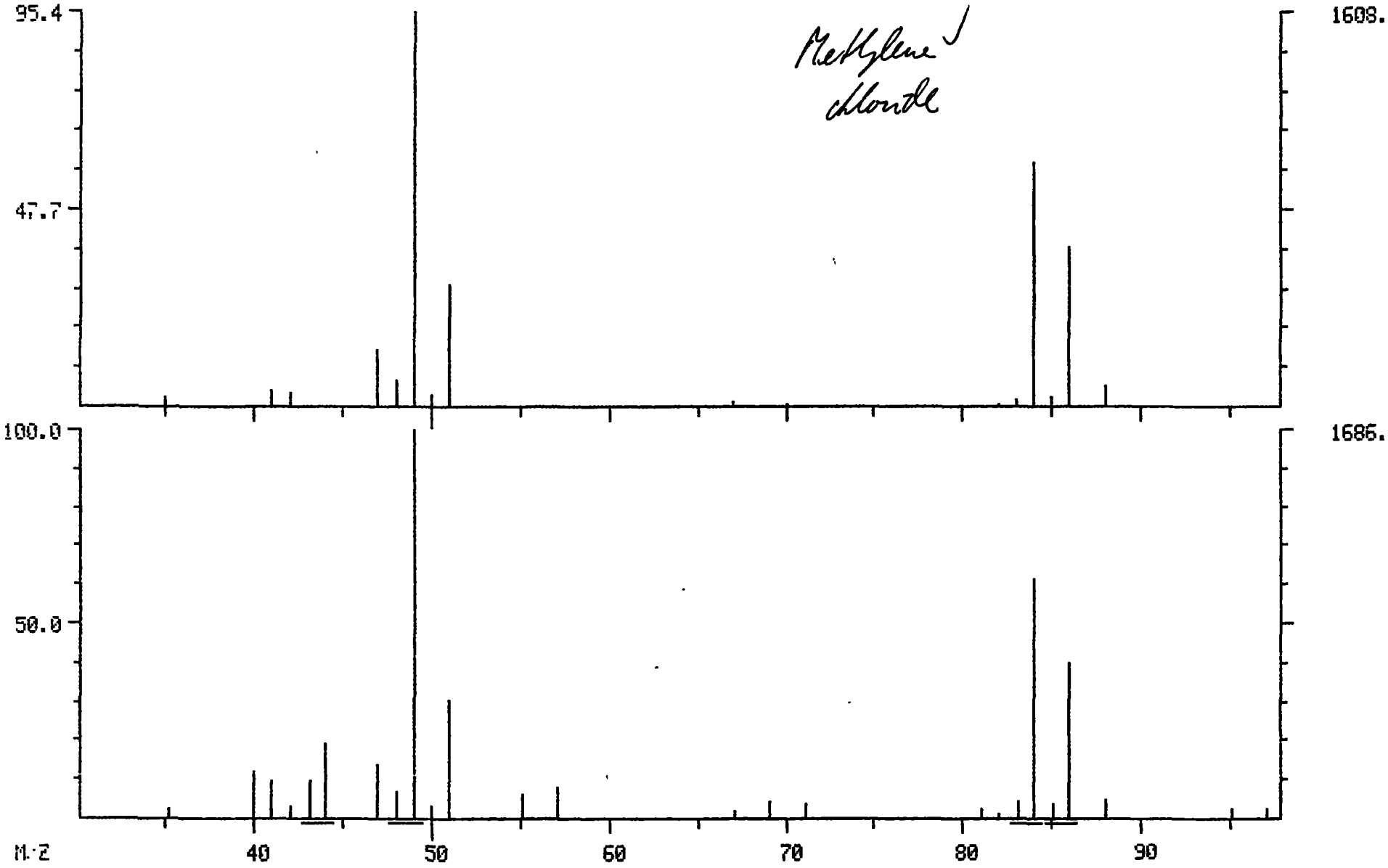
UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	477	1	39078.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	589	2	198973.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	904	3	166459.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	740	3	170108.	1.022	50.260
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	1054	3	110651.	0.665	49.517
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	537	1	35641.	0.912	45.788
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	320	1	5213.	0.133	3.767
12	V1# 50	C035 ACETONE	58		1	NOT FOUND		
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	536	2	582339.	2.927	196.636
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	O-XYLENE	106		3	NOT FOUND		
41	V3# 75	M+P XYLENES	106		3	NOT FOUND		

00175

DUAL MASS SPECTRUM
04/27/88 21:04:00 + 5:20
SAMPLE: 59436-03 2.5ML/5ML
CONDS.: GC DESC CV
GC TEMP: 17 DEG. C
ENHANCED (5 15B 2N 0T)

DATA: S59436Z821 #320 BASE M/Z: 49/ 49
CALI: 042788CZ #5 RIC: 4487./ 5983.



00176

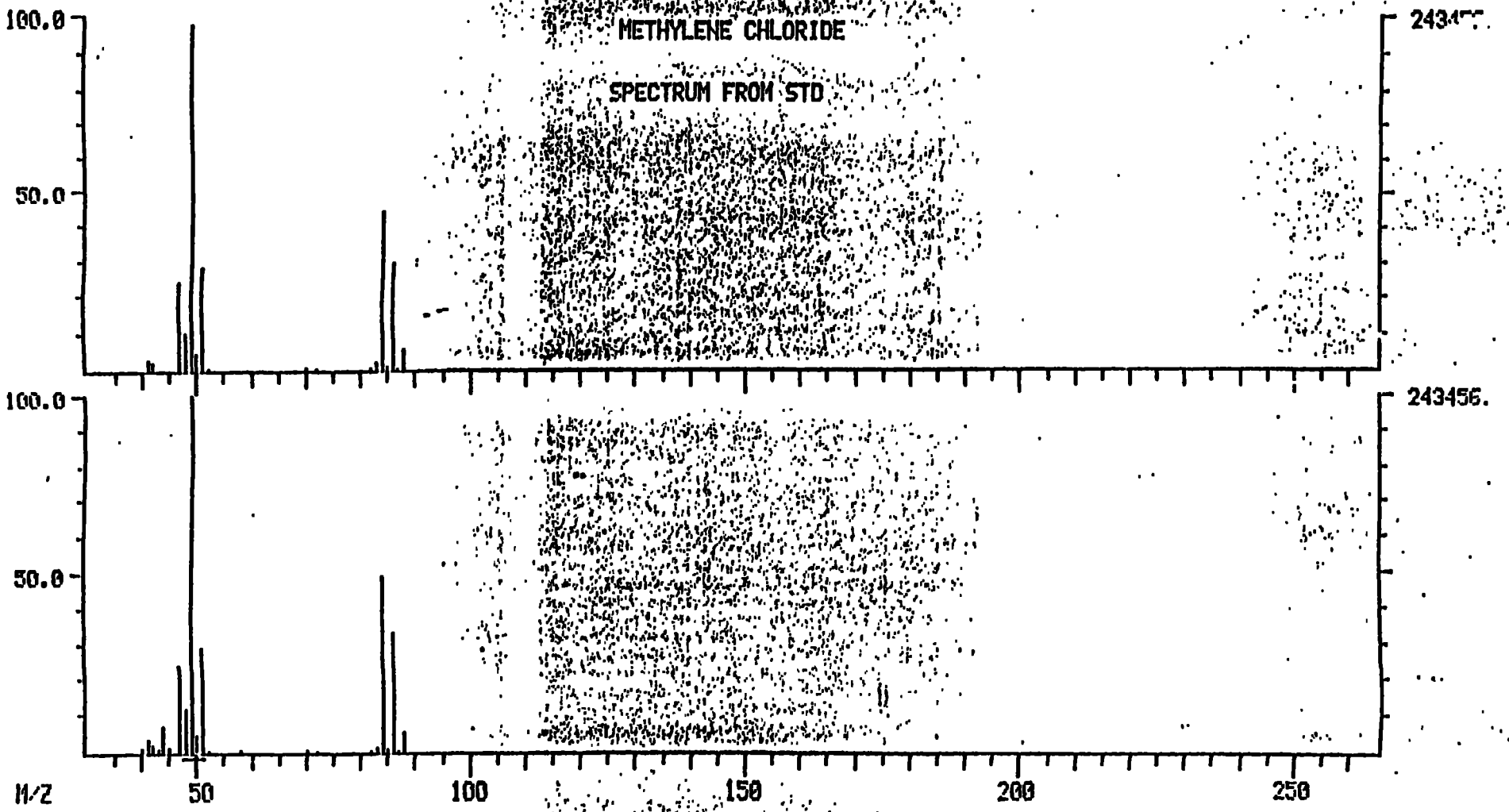
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100Z/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

SPECTRUM FROM STD

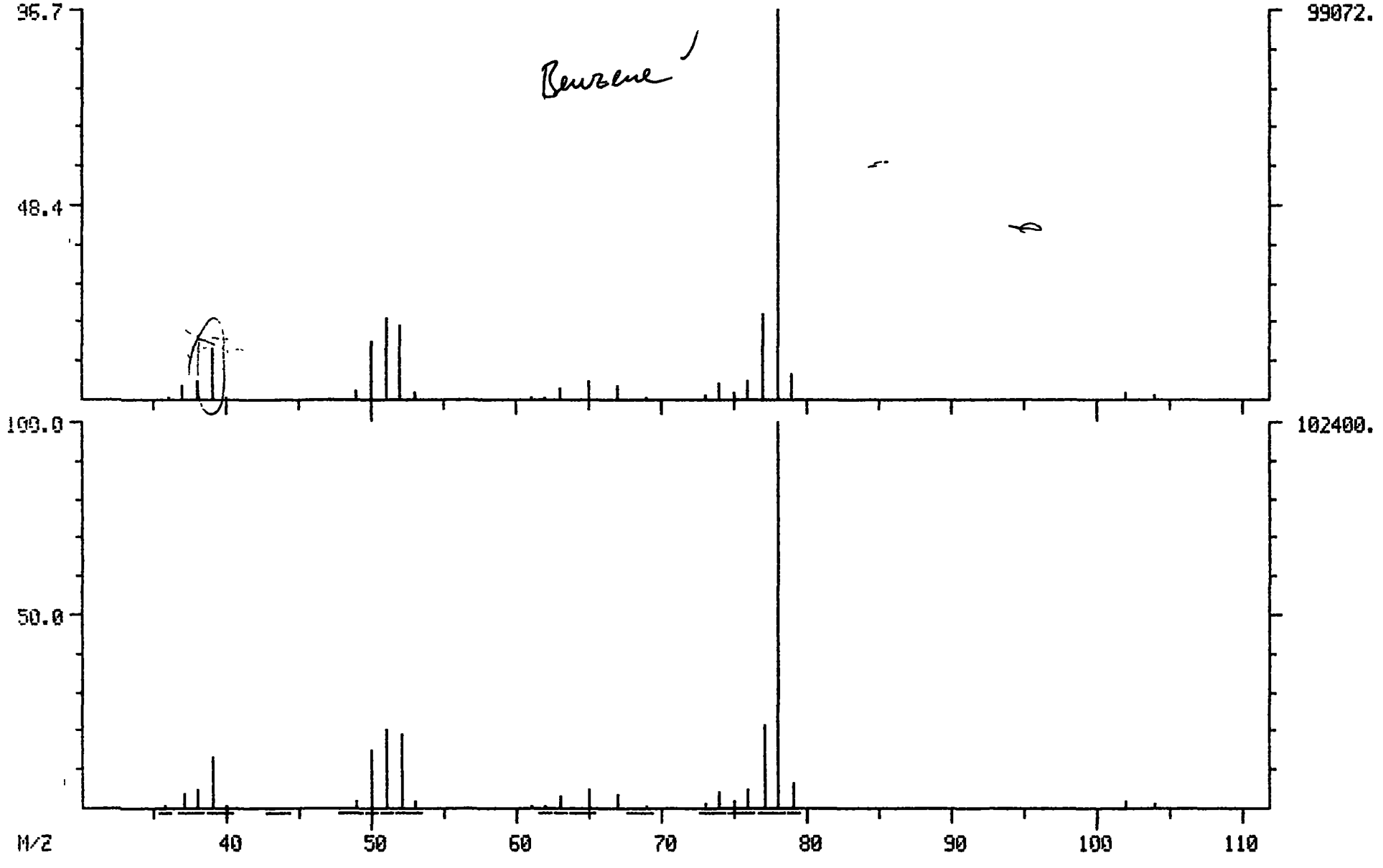


00177

DUAL MASS SPECTRUM
04/27/88 21:04:00 + 8:56
SAMPLE: 59436-03 2.5ML/5ML
CONDS.: GC DESC CV
GC TEMP: 38 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 5594362821 #536
CALI: 042788CZ #5

BASE M/Z: 78/ 78
RIC: 236799./ 245247.

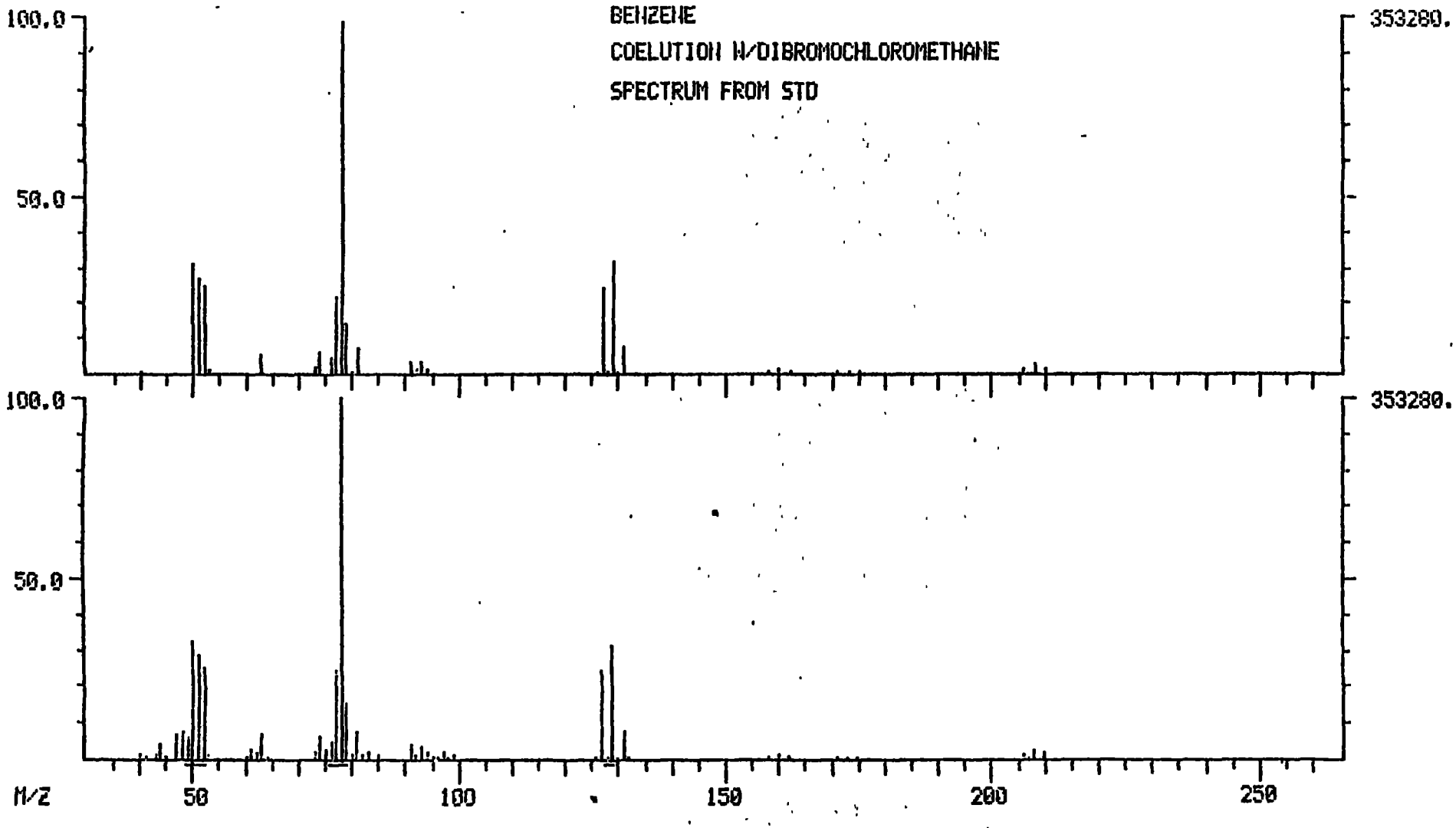


00178

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 2H 0T)

DATA: STDJ198 #361
CALI: STDJ198 #1

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



6/3/88 13:12:41 SCAN 1 OF 2850
Acquisition started

00179

Acquire Run 0:S59436R009 ACQUIRING
06/03/88 13:11:00 + 0:04 Free sectors: 13234 Scan: 5 of 2850
Sample: 59436-02 BNA H20 100%/2ML
Conds.: ST -03 MD 6-4-88
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No:

********** 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	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	

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

6/3/88 13:48:21
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec	
Centroid	2850	441.6	2137.5	20.7	71085.	25.	33.

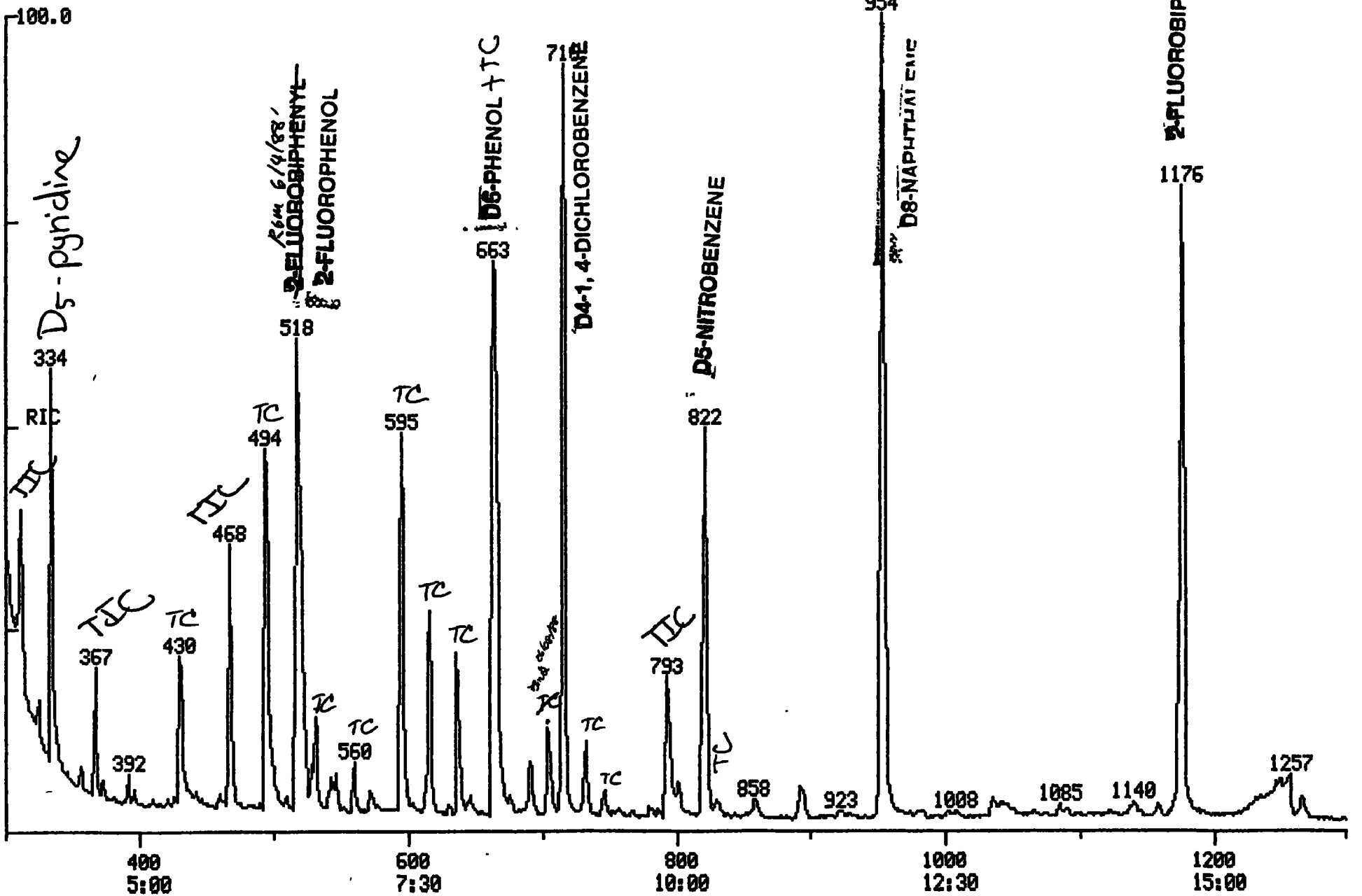
TC = Target Compound
SC = Spike Compound

C0180

I.C.-Tent. Ident. Compound

RIC
06/03/88 13:11:00
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 03 MD 6-7-88
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R009 #4 SCANS 300 TO 1300
CALI: 060388CR #6 OUT OF 300 TO 2850

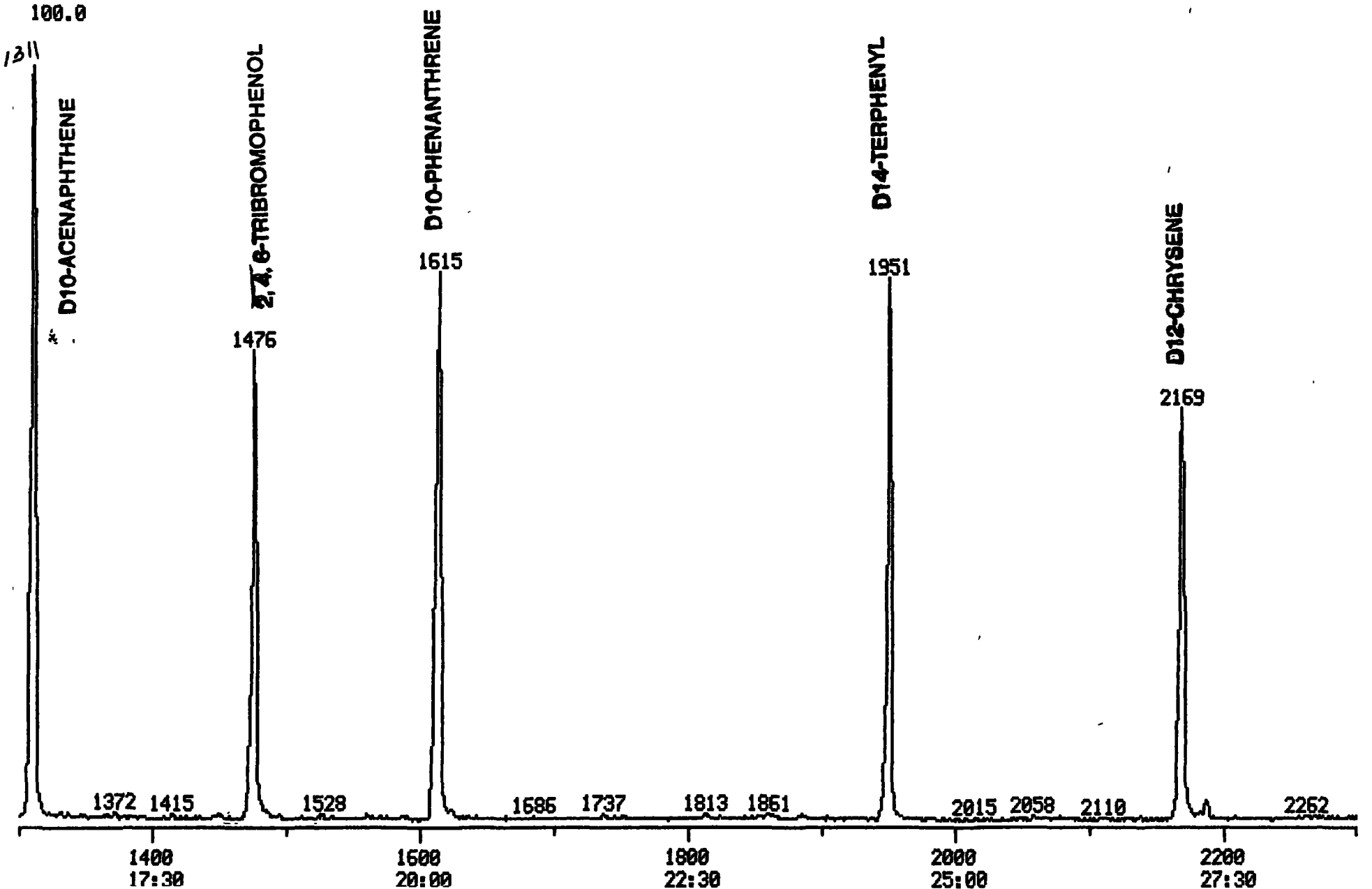


00181

RIC
06/03/88 13:11:00
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST -03 MD 6-7-88
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R009 #4
CALI: 060388CR #6

SCANS 1300 TO 2300
OUT OF 300 TO 2850

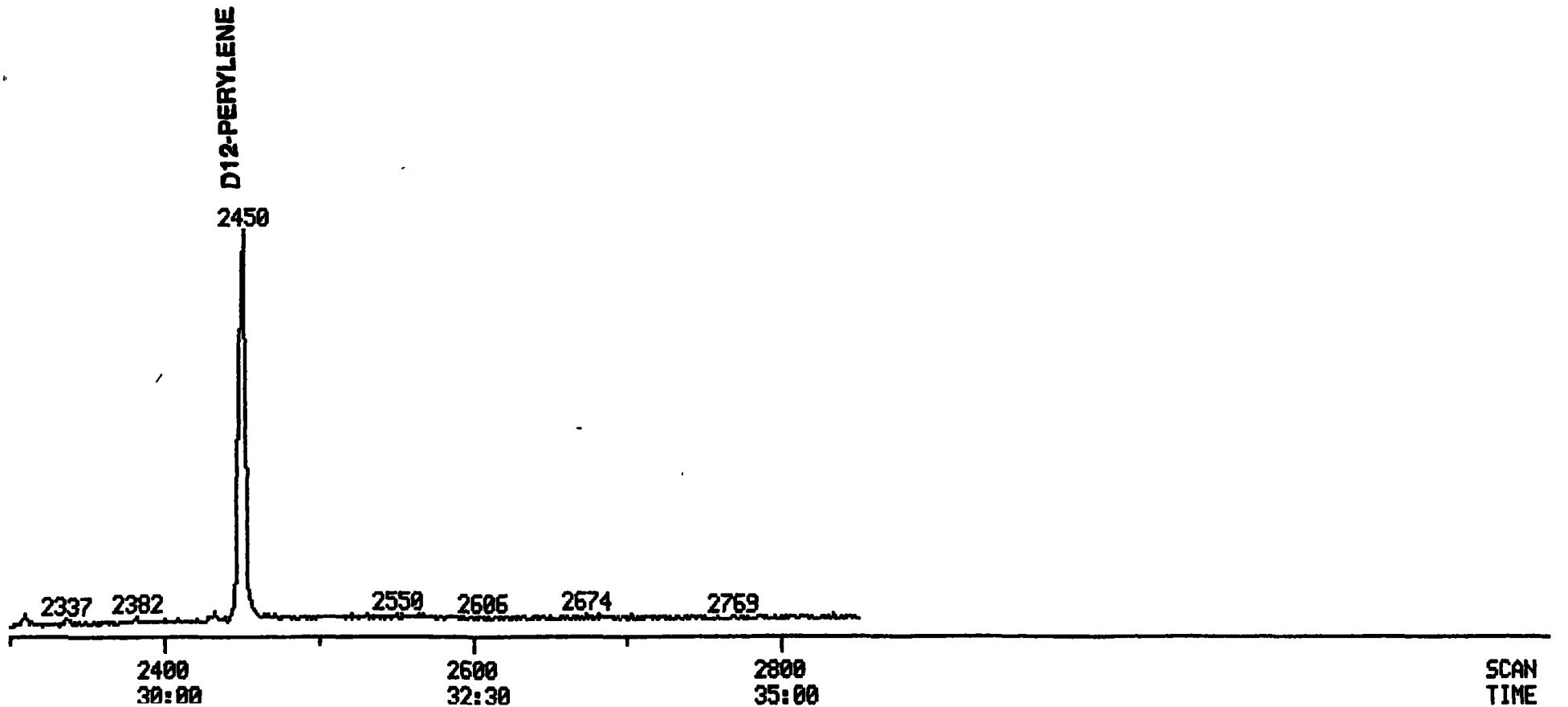


00182

RIC
06/03/88 13:11:00
SAMPLE: 59436-~~02~~ BNA H2O 100%/2ML
CONDS.: ST -03 MD 6-7-88
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R009 #4 SCANS 2300 TO 2850
CALI: 060388CR #6 OUT OF 300 TO 2850

100.0 80512.



ROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 22:28:35
ATA FILE: S59436R009
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	1	0	7	4	1	73	ISO1/TC01
3	3	2	16	18	6	3	158	ISO2/TC02
3	3	1	16	12	3	1	16	ISO3/TC03
3	3	2	126	18	4	1	102	ISO4/TC04
3	3	1	126	10	4	1	115	ISO5/TC05
3	3	1	133	8	3	1	133	ISO6/TC06
3	3	1	26	14	6	1	102	ISO7/TC07
1	1	1	0	4	1	1	0	ISO8/TC08

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	.	1	950	.	152	716	.	1
2	S1	2	-517	518	518	.	1	991	.	112	518	.	1
3	S1	3	-666	666	665	-1	1	931	.	99	665	.	1
4	S1	105	-668	668	.	.	.	.	.	94	667	.	1
5	S1	110	-681	681	.	.	.	.	.	93	.	.	.
6	S1	115	-687	687	687	.	1	864	.	128	686	-1	1
7	S1	125	-711	711	.	.	.	.	.	146	.	.	.
8	S2	1	-955	954	954	.	2	994	.	136	954	.	1
9	S3	1	-1313	1311	1311	.	1	993	.	164	1311	.	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	-799	799	801	2	1	876	.	108	.	.	.
16	S1	190	-804	804	.	.	.	.	.	70	.	.	.
17	S1	200	-808	808	.	.	.	.	.	117	.	.	.
18	S2	2	-824	824	822	-2	1	997	.	82	822	.	1
19	S2	10	-827	827	.	.	.	.	.	77	825	.	1
20	S2	20	-872	872	.	.	.	.	.	82	872	.	1
21	S2	25	-887	887	.	.	.	.	.	139	.	.	.
22	S2	30	-898	898	.	.	.	.	.	107	897	.	1
23	S2	35	-917	917	.	.	.	.	.	93	.	.	.
24	S2	45	-928	928	929	1	3	986	.	122	931	2	1
25	S2	40	-932	931	.	.	.	.	.	162	.	.	.
26	S2	55	-948	947	.	.	.	.	.	180	.	.	.
27	S2	60	-960	959	.	.	.	.	.	128	959	.	1
28	S2	80	-976	975	.	.	.	.	.	127	.	.	.
29	S2	95	-997	996	.	.	.	.	.	225	.	.	.
30	S2	130	-1075	1074	.	.	.	.	.	107	.	.	.
31	S2	145	-1097	1096	.	.	.	.	.	142	.	.	.
32	S3	20	-1144	1143	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1159	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1614	1615	1	2	989	.	188	1614	-1	1
35	S3	30	-1169	1168	.	.	.	.	.	196	.	.	.
36	S3	3	-1178	1177	1176	-1	1	994	.	172	1176	.	1
37	S3	40	-1196	1195	.	.	.	.	.	162	.	.	.
38	S3	45	-1226	1225	.	.	.	.	.	65	1225	.	1
39	S3	55	-1272	1271	.	.	.	.	.	163	1269	.	1
40	S3	65	-1281	1280	.	.	.	.	.	152	1279	.	1
41	S3	70	-1285	1284	.	.	.	.	.	165	.	.	.
42	S3	75	-1311	1310	.	.	.	.	.	138	.	.	.

43	S3	80	-1320	1319	.	.	.	.	.	153	.	.	.
44	S3	85	-1332	1331	.	.	.	.	.	184	.	.	.
45	S3	95	-1350	1349	.	.	.	.	.	109	.	.	.
46	S3	90	-1353	1352	.	.	.	.	.	168	1350	.	1
47	S3	105	-1364	1363	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1417	.	.	.	.	.	149	.	.	.
49	S3	135	-1423	1422	.	.	.	.	.	166	1421	.	1
50	S3	140	-1426	1425	.	.	.	.	.	204	.	.	.
51	S3	150	-1439	1438	.	.	.	.	.	138	.	.	.
52	S4	10	-1448	1447	.	.	.	.	.	198	.	.	.
53	S4	15	-1453	1452	.	.	.	.	.	169	.	.	.
54	S3	2	-1478	1477	1476	-1	1	993	.	330	1476	.	1
55	S4	30	-1526	1525	.	.	.	.	.	248	.	.	.
56	S4	40	-1553	1552	.	.	.	.	.	284	.	.	.
57	S5	1	-2170	2169	2169	.	1	942	.	240	2169	.	1
58	S4	50	-1592	1591	.	.	.	.	.	266	1591	.	1
59	S4	65	-1621	1620	.	.	.	.	.	178	1619	.	1
60	S4	70	-1630	1629	.	.	.	.	.	178	.	.	.
61	S4	85	-1753	1752	.	.	.	.	.	149	1751	.	1
62	S4	110	-1869	1868	.	.	.	.	.	202	1867	.	1
63	S6	1	-2452	2450	2450	.	1	985	.	264	2450	.	1
64	S5	15	-1915	1914	.	.	.	.	.	202	1912	.	1
65	S5	2	-1953	1952	1951	-1	1	988	.	244	1951	.	1
66	S5	40	-2064	2063	.	.	.	.	.	149	2061	.	1
67	S5	55	-2167	2166	.	.	.	.	.	252	.	.	.
68	S5	50	-2167	2166	.	.	.	.	.	228	.	.	.
69	S5	60	-2176	2175	.	.	.	.	.	228	2173	.	1
70	S5	65	-2189	2188	2187	-1	1	996	.	149	2187	.	1
71	S6	10	-2310	2309	2310	1	1	998	.	149	2310	.	1
72	S6	15	-2382	2380	.	.	.	.	.	252	.	.	.
73	S6	25	-2387	2385	.	.	.	.	.	252	.	.	.
74	S6	35	-2442	2440	.	.	.	.	.	252	2439	.	1
75	S6	55	-2688	2686	.	.	.	.	.	276	.	.	.
76	S6	60	-2692	2690	.	.	.	.	.	278	.	.	.
77	S6	65	-2755	2753	.	.	.	.	.	276	.	.	.

Quantitation Report File: S59436R009

00185

Data: S59436R009.TI
06/03/88 13:11:00
Sample: 59436-02 BNA H2O 100%/2ML
Conds.: ST -03 MDG-7-88
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.:

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	35495.	40.000 UG/ML	7.30
2	112	518	6:28	1	0.723	A BB	69712.	57.827 UG/ML	10.56
3	99	665	8:19	1	0.929	A BB	65989.	38.712 UG/ML	7.07
4	94	667	8:20	1	0.932	A BB	881.	0.471 UG/ML	0.09
5	NOT FOUND								
6	128	686	8:34	1	0.958	A BB	213.	0.166 UG/ML	0.03
7	NOT FOUND								
8	136	954	11:55	8	1.000	A BB	143562.	40.000 UG/ML	7.30
9	164	1311	16:23	9	1.000	A BB	65584.	40.000 UG/ML	7.30
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	82	822	10:16	8	0.862	A BB	46096.	34.399 UG/ML	6.28
19	77	825	10:19	8	0.865	A BB	132.	0.100 UG/ML	0.02
20	82	872	10:54	8	0.914	A BB	236.	0.089 UG/ML	0.02
21	NOT FOUND								
22	107	897	11:13	8	0.940	A BB	71.	0.065 UG/ML	0.01
23	NOT FOUND								
24	122	931	11:38	8	0.976	A VB	572.	1.002 UG/ML	0.18
25	NOT FOUND								
26	NOT FOUND								
27	128	959	11:59	8	1.005	A BB	120.	0.032 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	188	1614	20:10	34	1.000	A BV	90041.	40.000 UG/ML	7.30
35	NOT FOUND								
36	172	1176	14:42	9	0.897	A BB	82068.	37.470 UG/ML	6.84
37	NOT FOUND								
38	65	1225	15:19	9	0.934	A BV	193.	0.293 UG/ML	0.05
39	163	1269	15:52	9	0.968	A BB	53.	0.024 UG/ML	0.00
40	152	1279	15:59	9	0.976	A BB	63.	0.019 UG/ML	0.00
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	168	1350	16:52	9	1.030	A BB	95.	0.033 UG/ML	0.01
47	NOT FOUND								
48	NOT FOUND								
49	166	1421	17:46	9	1.084	A BB	53.	0.025 UG/ML	0.00
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	57.83	100.00	0.786	1.359	0.58
3	8:19	1.00	0.929	1.00	38.71	100.00	0.744	1.921	0.39
4	8:21	1.00	0.932	1.00	0.47	50.00	0.020	2.109	0.01
5	8:31		0.950						
6	8:35	1.00	0.958	1.00	0.17	50.00	0.005	1.443	0.00
7	8:53		0.992						
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	9:59		1.114						
16	10:03		1.121						
17	10:06		1.127						
18	10:18	1.00	0.862	1.00	34.40	50.00	0.257	0.373	0.69
19	10:20	1.00	0.865	1.00	0.10	50.00	0.001	0.366	0.00
20	10:54	1.00	0.912	1.00	0.09	50.00	0.001	0.742	0.00
21	11:05		0.928						
22	11:13	1.00	0.939	1.00	0.06	50.00	0.000	0.305	0.00
23	11:28		0.959						
24	11:36	1.00	0.971	1.01	1.00	50.00	0.003	0.159	0.02
25	11:39		0.975						
26	11:51		0.992						
27	12:00	1.00	1.004	1.00	0.03	50.00	0.001	1.054	0.00
28	12:12		1.021						
29	12:28		1.043						
30	13:26		1.124						
31	13:43		1.147						
32	14:18		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	14:37		0.890						
36	14:43	1.00	0.896	1.00	37.47	50.00	1.001	1.336	0.75
37	14:57		0.910						
38	15:19	1.00	0.933	1.00	0.29	50.00	0.002	0.403	0.01
39	15:54	1.00	0.968	1.00	0.02	50.00	0.001	1.354	0.00
40	16:01	1.00	0.975	1.00	0.02	50.00	0.001	2.038	0.00
41	16:04		0.978						
42	16:23		0.998						
43	16:30		1.005						
44	16:39		1.014						
45	16:52		1.027						
46	16:55	1.00	1.030	1.00	0.03	50.00	0.001	1.735	0.00
47	17:03		1.038						
48	17:43		1.079						
49	17:47	1.00	1.083	1.00	0.02	50.00	0.001	1.316	0.00
50	17:49		1.085						

Quantitation Report File: S59436R009

00188

Data: S59436R009.TI
06/03/88 13:11:00
Sample: 59436-~~02~~ -03 BNA H2O 100%/2ML
Conds.: ST MD 6-7-88
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.:

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	330S3# 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	244S5# 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	1.126	A BB	16985.	89.060 UG/ML	16.26
55	NOT FOUND								
56	NOT FOUND								
57	240	2169	27:07	57	1.000	A BB	53434.	40.000 UG/ML	7.30
58	266	1591	19:53	34	0.986	A BB	87.	0.333 UG/ML	0.06
59	178	1619	20:14	34	1.003	A BB	123.	0.047 UG/ML	0.01
60	NOT FOUND								
61	149	1751	21:53	34	1.085	A BB	541.	0.160 UG/ML	0.03
62	202	1867	23:20	34	1.157	A BB	101.	0.045 UG/ML	0.01
63	264	2450	30:37	63	1.000	A BB	43025.	40.000 UG/ML	7.30
64	202	1912	23:54	57	0.882	A BB	179.	0.086 UG/ML	0.02
65	244	1951	24:23	57	0.899	A BB	65980.	45.618 UG/ML	8.33
66	149	2061	25:46	57	0.950	A BB	131.	0.113 UG/ML	0.02

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	228	2173	27:10	57	1.002	A VB	119.	0.088 UG/ML	0.02
70	149	2187	27:20	57	1.008	A VB	1407.	0.818 UG/ML	0.15
71	149	2310	28:52	63	0.943	A BB	1817.	0.692 UG/ML	0.13
72	NOT FOUND								
73	NOT FOUND								
74	252	2439	30:29	63	0.996	A BB	50.	0.041 UG/ML	0.01
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		1.095						
52	18:06		0.896						
53	18:10		0.899						
54	18:28	1.00	1.125	1.00	89.06	100.00	0.104	0.116	0.89
55	19:04		0.944						
56	19:25		0.961						
57	27:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:54	1.00	0.985	1.00	0.33	50.00	0.001	0.116	0.01
59	20:16	1.00	1.003	1.00	0.05	50.00	0.001	1.160	0.00
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	0.16	50.00	0.005	1.504	0.00
62	23:22	1.00	1.157	1.00	0.04	50.00	0.001	1.001	0.00
63	30:40	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	0.09	50.00	0.003	1.550	0.00
65	24:25	1.00	0.900	1.00	45.62	50.00	0.988	1.083	0.91
66	25:48	1.00	0.951	1.00	0.11	50.00	0.002	0.865	0.00
67	27:05		0.998						
68	27:05		0.998						
69	27:12	1.00	1.002	1.00	0.09	50.00	0.002	1.010	0.00
70	27:22	1.00	1.008	1.00	0.82	50.00	0.021	1.288	0.02
71	28:52	1.00	0.942	1.00	0.69	50.00	0.034	2.442	0.01
72	29:46		0.971						
73	29:50		0.973						
74	30:31	1.00	0.996	1.00	0.04	50.00	0.001	1.137	0.00
75	33:36		1.096						
76	33:39		1.097						
77	34:26		1.123						

TCA FINISHED, 17 FOUND
FINISHED AT: 6/03/88 22:36:37

00190

MAL QUANTITATION SUMMARY FILE: S59436R009
OMPOUNDS 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	35495.	1.000	40.000
2	S2# 1 CI40	NAPHTHALENE-D8	136	954	2	143562.	1.000	40.000
3	S3# 1 CI50	ACENAPHTHENE-D10	164	1311	3	65584.	1.000	40.000
4	S4# 1 CI60	PHENANTHRENE-D10	188	1614	4	90041.	1.000	40.000
5	S5# 1 CI70	CHRYSENE-D12	240	2169	5	53434.	1.000	40.000
6	S6# 1 CI75	PERYLENE-D12	264	2450	6	43025.	1.000	40.000
7	S2# 2 CS20	NITROBENZENE-D5	82	822	2	46096.	0.257	34.399
8	S3# 3 CS25	2-FLUOROBIPHENYL	172	1176	3	82068.	1.001	37.470
9	S5# 2 CS30	TERPHENYL-D14	244	1951	5	65980.	0.988	45.618
10	S1# 3 CS45	PHENOL-D5	99	665	1	65989.	0.744	38.712
11	S1# 2 CS50	2-FLUOROPHENOL	112	518	1	69712.	0.786	57.827
12	S3# 2 CS55	2,4,6-TRIBROMOPHENO	330	1476	3	16985.	0.104	89.060
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	931	2	572.	0.003	~~1.002~~
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		
	# 05 C570	2,4-DINITROTOLUENE	165		3	NOT FOUND		

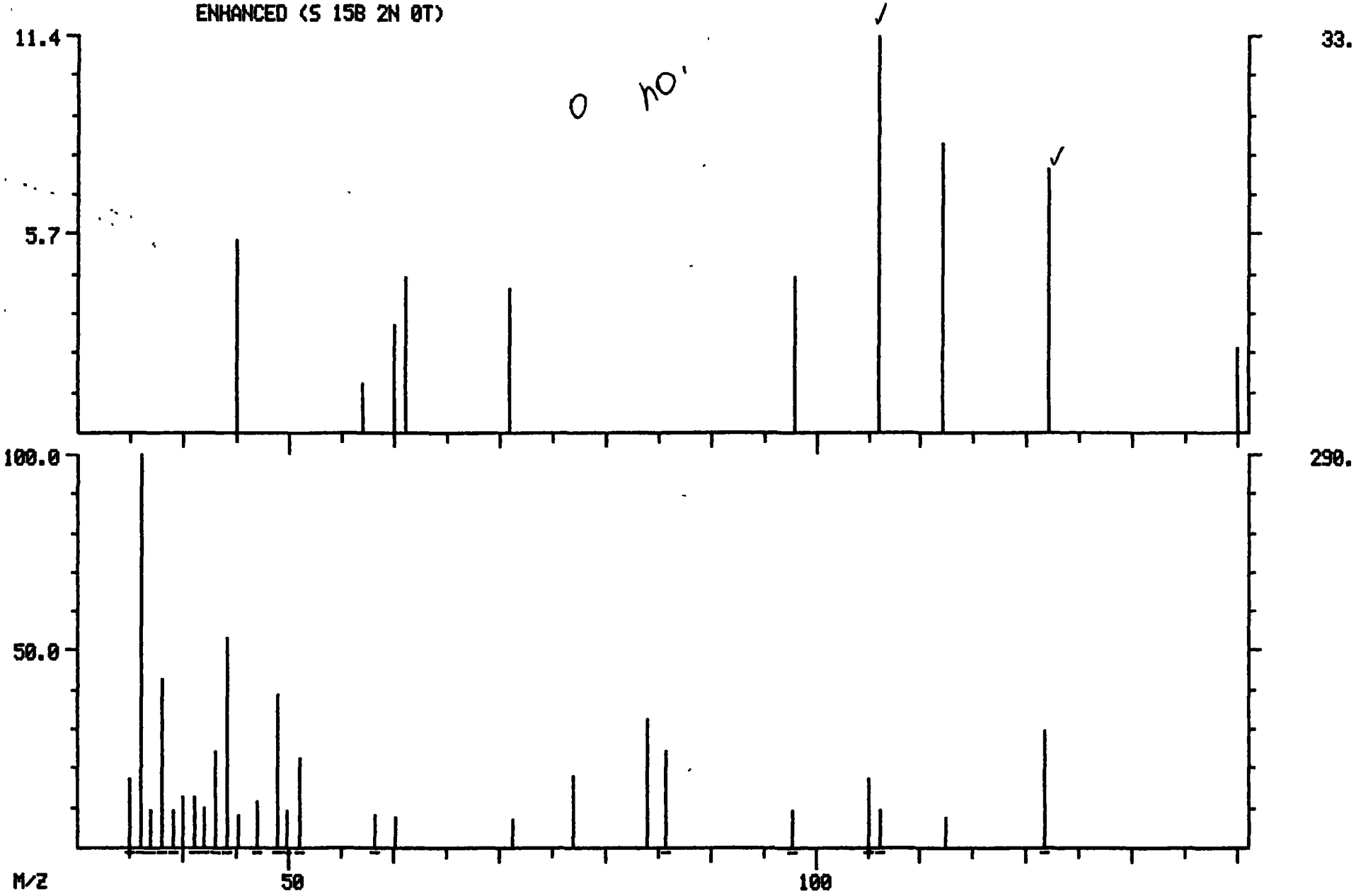
52	S3#130	C580	DIETHYLPHTHALATE	149	3	NOT FOUND
53	S3#135	C590	FLUORENE	166	3	NOT FOUND
54	S3#140	C585	4-CHLOROPHENYL-PHEN	204	3	NOT FOUND
55	S3#150	C595	4-NITROANALINE	138	3	NOT FOUND
56	S4# 10	C610	4,6-DINITRO-2-METHY	198	4	NOT FOUND
57	S4# 15	C615	N-NITROSODIPHENYLAM	169	4	NOT FOUND
58	S4# 30	C625	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	5	NOT FOUND
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

00192

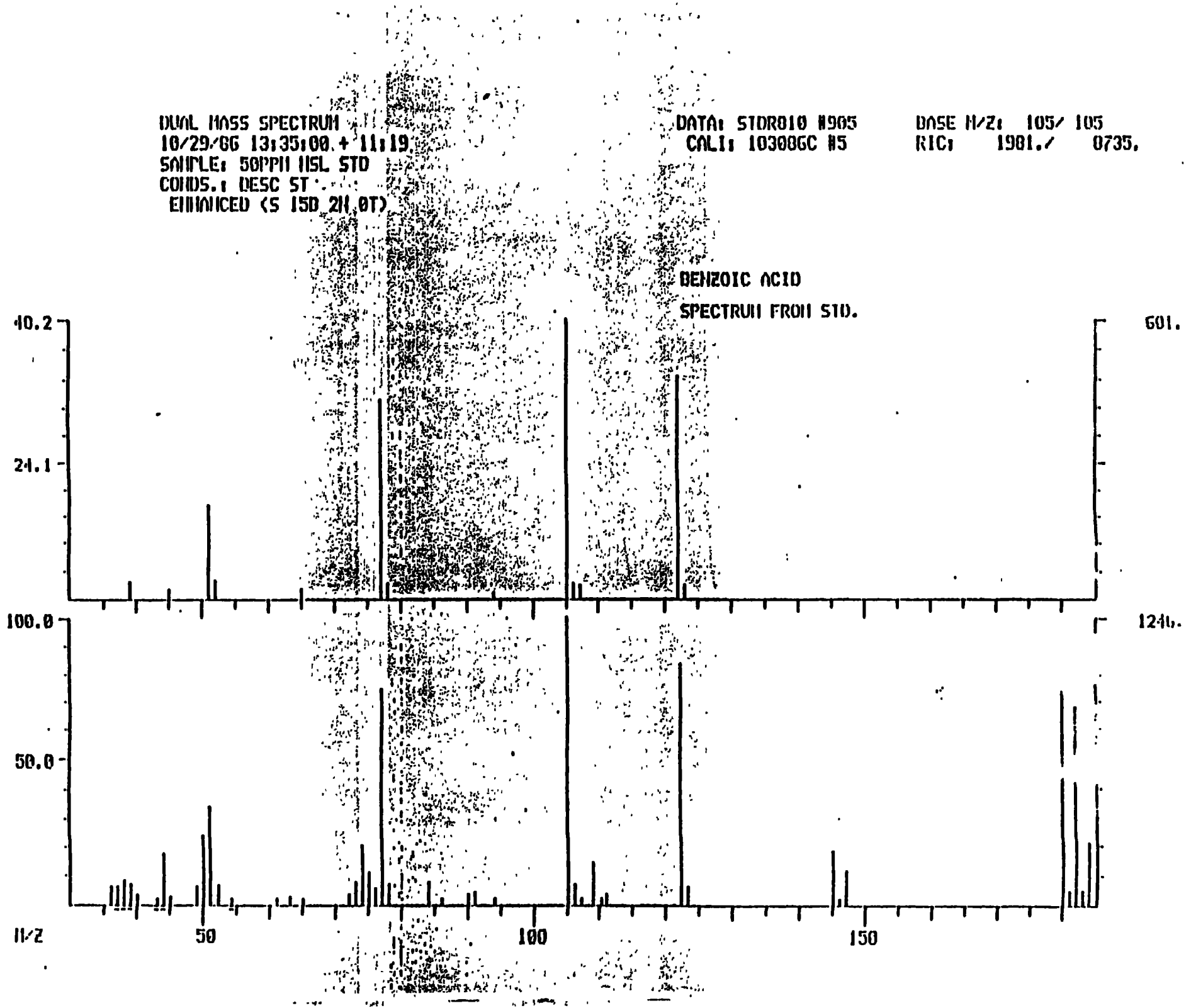
DUAL MASS SPECTRUM
06/03/88 13:11:00 + 11:38
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST -03 MD6-7-88
ENHANCED (S 15B 2N 0T)

DATA: 559436R009 #931
CALI: 060388CR #6

BASE M/Z: 106/ 36
RIC: 152./ 1601.



00193


DUAL MASS SPECTRUM
10/29/86 13:35:00.+ 11:19.
SAMPLE: 50PPM MSL STD
COND5.: DESC ST
ENHANCED (S 15D 2H.0T)
DATA: STDR010 #905
CALI: 10308GC #5
BASE M/Z: 105/ 105
RIC: 1981./ 0735.
BENZOIC ACID
SPECTRUM FROM STD.
40.2
24.1
601.
100.0
50.0
1240.
M/Z
50
100
150

DATA REDUCED BY: AR DATE: 6-8-86 DATA FILE: S59436R009
DATA REVIEWED BY: ____ DATE: ____

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-~~02~~ 03 BNA H20 100%/2ML RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MK

6-8-86 AR

#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	312	B	2	8.1	108-87-2	CYCLOHEXANE, METHYL-
2	367	B	2	5.7	108-88-3	BENZENE, METHYL- VOA
3	468	CB	1	13.	00-00-0	OXYGENATED HYDROCARBON
4	793	I	2	11.	1824-81-3	2-PYRIDINAMINE, 6-METHYL-

editing complete

DATA FILE: S59436R009

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	877	1	3:53	0.440	43295.	16383.	8.137	NB	1138.
2	993	964	1	4:35	0.517	30407.	13414.	5.715	NB	850.
3	842	766	1	5:50	0.658	71429.	25865.	13.424	BC	2.
4	998	915	1	9:54	1.112	56871.	13567.	10.688	NB	1787.

TIC SELECTION REPORT

DATA FILE: S59436R009

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 35 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 3 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
384	81643.	19.087
430	46779.	7.509
494	115671.	18.568
518	210575.	33.802
531	26655.	4.278
595	102283.	16.419
616	56670.	9.097
636	39251.	6.300
663	268643.	43.124
704	27171.	4.361
716	211021.	33.874
822	139529.	22.398
954	289137.	46.413
1176	230203.	36.953
1312	311631.	50.024
1476	167005.	26.808
1615	249181.	39.999
1951	186195.	43.318
2169	171931.	39.999
2450	153071.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 3

INTERNAL STANDARD DATA IS LISTED BELOW. IS FOR WHICH RIC SIZE DIFFERS FROM THE ESTIMATED RIC SIZE BY MORE THAN 70 % ARE CONSIDERED TO HAVE INTERFERENCES, AND ARE NOT USED FOR QUANTITATION.

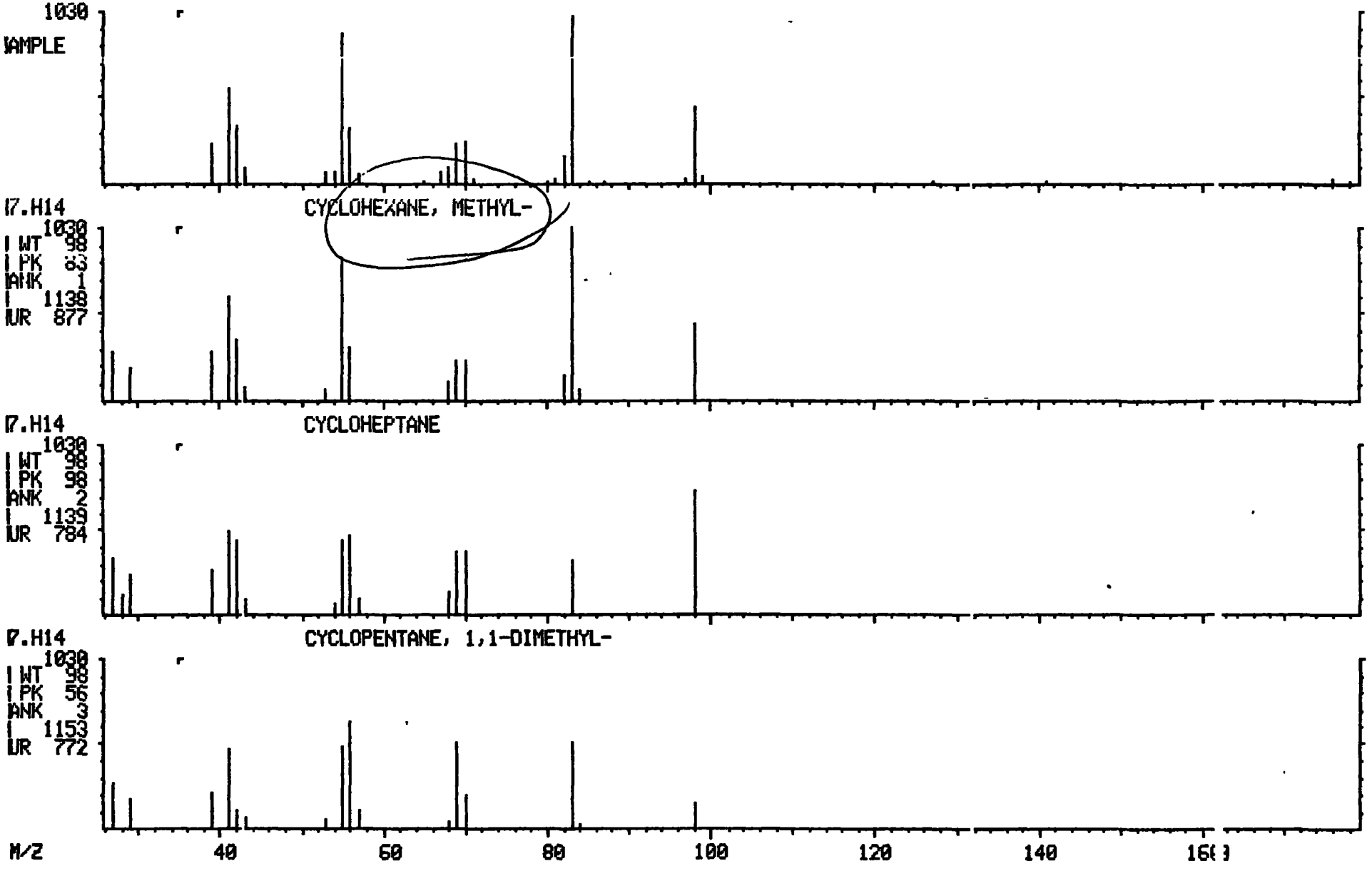
#	LIB	LIB#	RIC SIZE	ESTIMATED RIC SIZE	INTERFERENCE
1	S1	1	311632 0.	~~15897.~~	~~*~~
2	S2	1	249182 0.	~~211445.~~	~~*~~
3	S3	1	1311631.	164372.	*
4	S4	1	249181.	173124.	
5	S5	1	171931.	102797.	
6	S6	1	153071.	115193.	

SIZE = AREA

LIBRARY SEARCH
06/03/88 13:11:00 + 3:54
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 # 312
CALI: 060388CR # 6

BASE M/Z: 83
RIC: 12351.

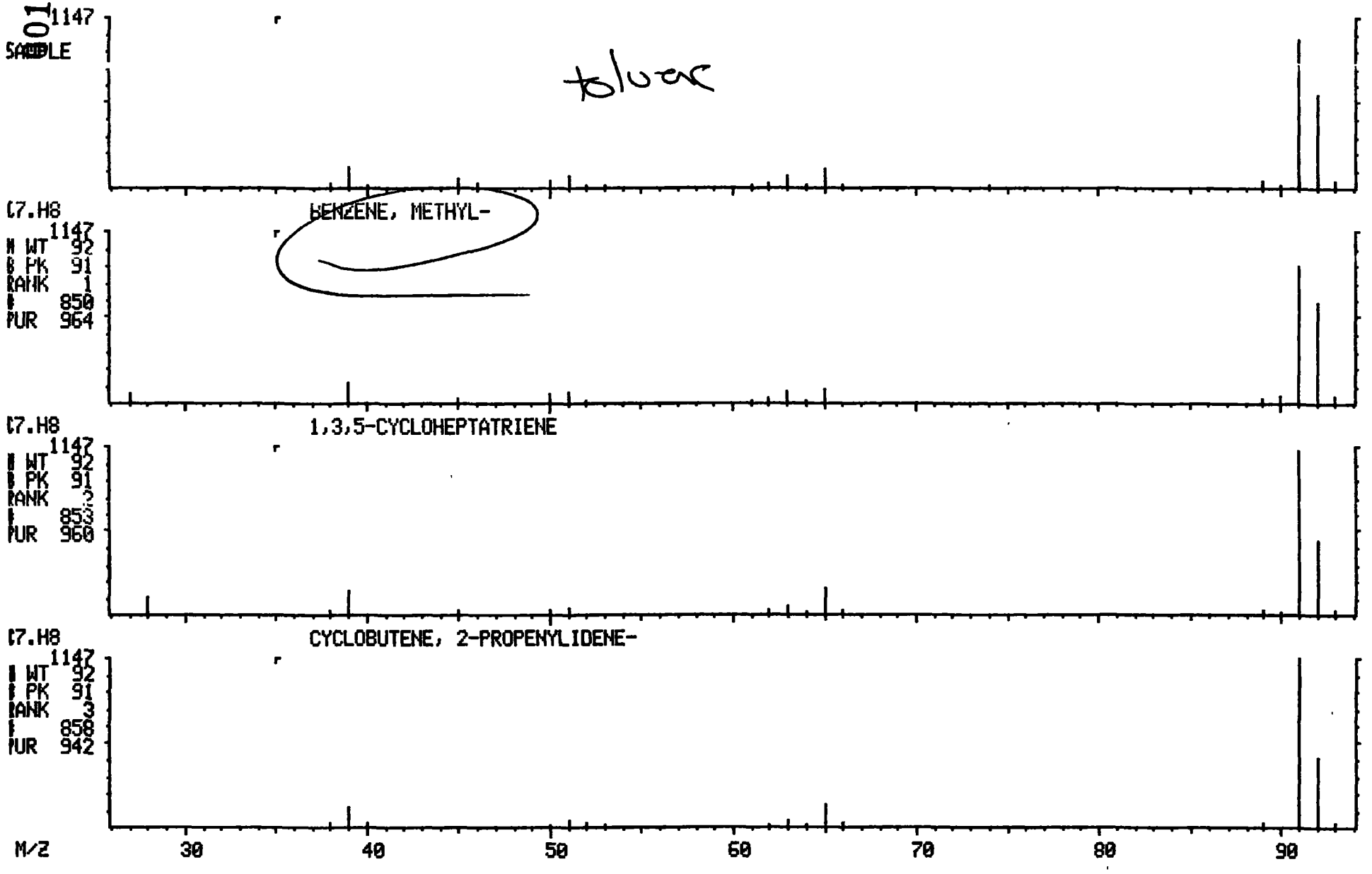


LIBRARY SEARCH
06/03/88 13:11:00 + 4:35
SAMPLE: 59436-07 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 # 367
CALI: 060388CR # 6

BASE M/Z: 91
RIC: 9503.

0198

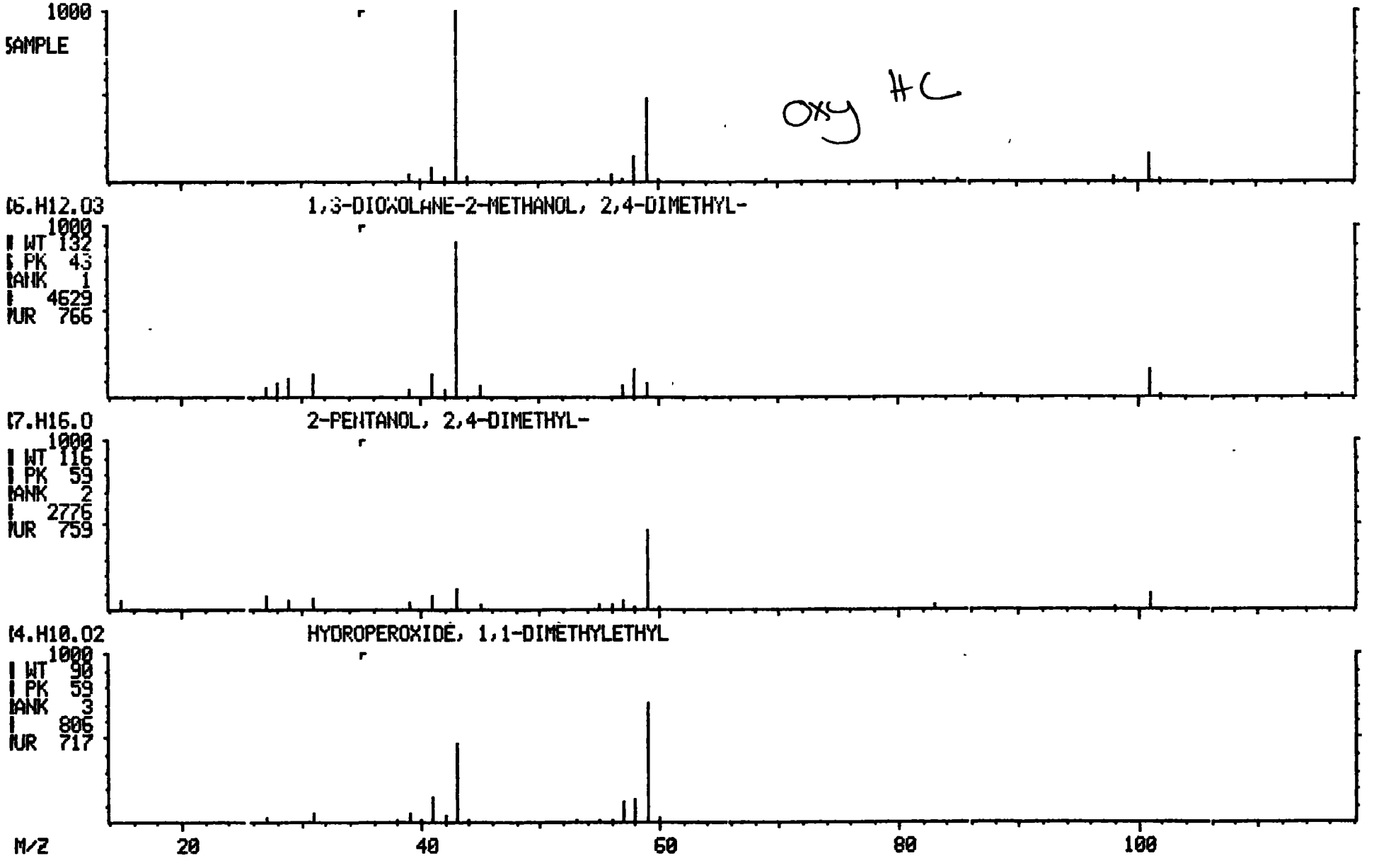


00199

LIBRARY SEARCH
06/03/88 13:11:00 + 5:51
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 03 [illegible]
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 # 468
CALI: 060388CR # 6

BASE M/Z: 43
RIC: 22975.

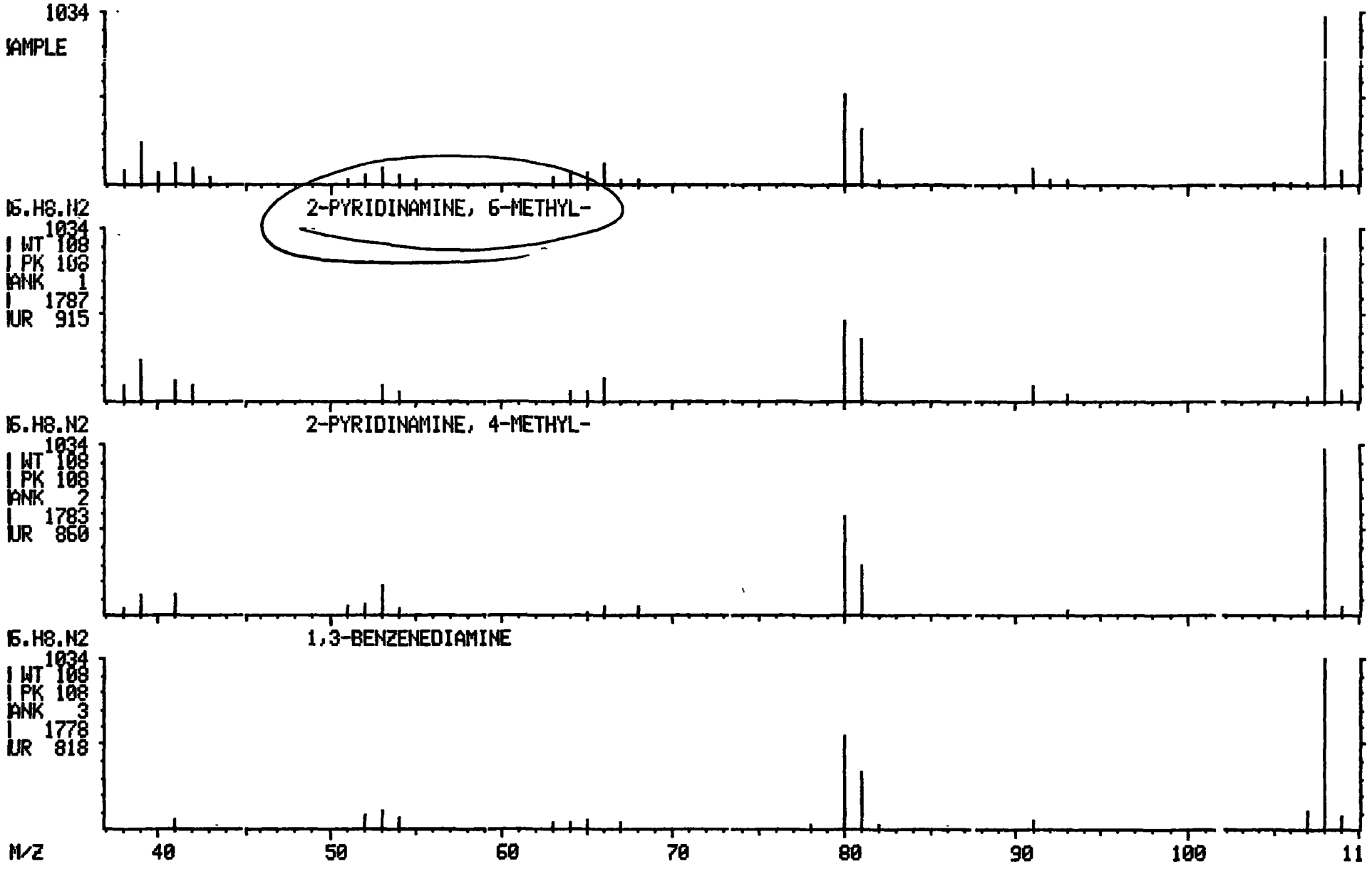


00200

LIBRARY SEARCH
06/03/88 13:11:00 + 9:55
SAMPLE: 59436-~~02~~ 03 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 # 793
CALI: 060388CR # 6

BASE M/Z: 108
RIC: 11919.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/88 4:05:02
DATA FILE: S59436R009
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00201
REPORT: IS01

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	12	8	172	IS01/TC01
3	3	2	49	14	8	1	157	IS02/TC02

26 COMPOUNDS PROCESSED, 19 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	950	.	152	716	.	1
2	S1	4	-332	334	334	.	1	986	.	84	334	.	1
3	S1	20	-334	336	.	.	.	.	.	79	.	.	.
4	S1	30	-429	431	430	-1	1	997	.	93	430	.	1
5	S1	62	-494	496	494	-2	1	996	.	93	494	.	1
6	S1	64	-525	527	531	4	1	999	.	107	531	.	1
7	S1	73	-557	559	560	1	1	991	.	106	560	.	1
8	S1	83	-593	595	595	.	1	995	.	107	595	.	1
9	S1	87	-614	616	616	.	1	997	.	107	616	.	1
10	S1	88	-635	637	636	-1	2	998	.	107	636	.	1
11	S1	89	-643	645	646	1	2	964	.	107	646	.	1
12	S1	92	-662	664	663	-1	2	999	.	107	663	.	1
13	S1	122	-700	702	704	2	1	991	.	107	705	1	1
14	S2	1	-954	954	954	.	2	994	.	136	954	.	1
15	S3	1	-1311	1311	1311	.	1	993	.	164	1311	.	1
16	S1	137	-730	731	732	1	1	994	.	106	732	.	1
17	S1	142	-744	745	746	1	1	966	.	106	746	.	1
18	S1	187	-799	800	800	.	1	838	.	108	.	.	.
19	S1	202	-822	823	825	2	1	934	.	106	826	1	1
20	S1	203	-827	828	825	-3	1	934	.	106	826	1	1
21	S1	204	-847	848	.	.	.	.	.	122	.	.	.
22	S2	27	-898	899	.	.	.	.	.	107	897	.	1
23	S2	37	-922	923	.	.	.	.	.	107	924	.	1
24	S2	47	-937	938	.	.	.	.	.	107	936	.	1
25	S2	57	-955	956	.	.	.	.	.	107	955	.	1
26	S2	150	-1118	1118	.	.	.	.	.	142	1117	.	1

Quantitation Report File: S59436R009

Data: S59436R009.TI
06/03/88 13:11:00
Sample: 59436-D2 BNA H2O 100%/2ML
Conds.: ST -03 MD 6-7-88
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.:

00202

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	716	8:57	1	1.000	A BB	35495.	40.000	UG/ML	16.16
2	84	334	4:10	1	0.466	A BB	30159.	18.834	UG/ML	7.61
3	NOT FOUND									
4	93	430	5:22	1	0.601	A BB	12099.	7.704	UG/ML	3.11
5	93	494	6:10	1	0.690	A BB	36432.	23.591	UG/ML	9.53
6	107	531	6:38	1	0.742	A BB	8051.	4.696	UG/ML	1.90
7	106	560	7:00	1	0.782	A BB	4119.	2.073	UG/ML	0.84
8	107	595	7:26	1	0.831	A BB	29163.	19.711	UG/ML	7.96
9	107	616	7:42	1	0.860	A BV	12749.	8.137	UG/ML	3.29
10	107	636	7:57	1	0.888	A BV	8041.	7.475	UG/ML	3.02
11	107	646	8:04	1	0.902	A VB	761.	0.602	UG/ML	0.24
12	107	663	8:17	1	0.926	A BV	29622.	21.650	UG/ML	8.75
13	107	705	8:49	1	0.985	A BB	5826.	4.226	UG/ML	1.71
14	136	954	11:55	14	1.000	A BB	143562.	40.000	UG/ML	16.16
15	164	1311	16:23	15	1.000	A BB	65584.	40.000	UG/ML	16.16
16	106	732	9:09	1	1.022	A BV	6518.	3.668	UG/ML	1.48
17	106	746	9:19	1	1.042	A VB	1911.	1.512	UG/ML	0.61

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
18	NOT FOUND									
19	106	826	10:19	1	1.154	A BB	696.	2.141	UG/ML	0.86
20	106	826	10:19	1	1.154	A BB	696.	0.652	UG/ML	0.26
21	NOT FOUND									
22	107	897	11:13	14	0.940	A BB	71.	0.062	UG/ML	0.02
23	107	924	11:33	14	0.969	A BB	124.	0.108	UG/ML	0.04
24	107	936	11:42	14	0.981	A BB	77.	0.063	UG/ML	0.03
25	107	955	11:56	1	1.334	A BB	819.	0.575	UG/ML	0.23
26	142	1117	13:58	14	1.171	A BB	79.	0.031	UG/ML	0.01

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	4:09	1.01	0.464	1.01	18.83	50.00	0.680	1.805	0.38
3	4:10		0.466						
4	5:22	1.00	0.599	1.00	7.70	50.00	0.273	1.770	0.15
5	6:10	1.00	0.690	1.00	23.59	50.00	0.821	1.740	0.47
6	6:34	1.01	0.733	1.01	4.70	50.00	0.181	1.932	0.09
7	6:58	1.01	0.778	1.01	2.07	50.00	0.093	2.239	0.04
8	7:25	1.00	0.828	1.00	19.71	50.00	0.657	1.667	0.39
9	7:40	1.00	0.858	1.00	8.14	50.00	0.287	1.766	0.16
10	7:56	1.00	0.887	1.00	7.47	50.00	0.181	1.212	0.15
11	8:02	1.00	0.898	1.00	0.60	50.00	0.017	1.424	0.01
12	8:16	1.00	0.925	1.00	21.65	50.00	0.668	1.542	0.43
13	8:45	1.01	0.978	1.01	4.23	50.00	0.131	1.554	0.08
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	9:07	1.00	1.020	1.00	3.67	50.00	0.147	2.003 ✓	0.07
17	9:18	1.00	1.039	1.00	1.51	50.00	0.043	1.424 ✓	0.03
18	9:59		1.116						
19	10:16	1.00	1.148	1.00	2.14	50.00	0.016	0.366	0.04
20	10:20	1.00	1.155	1.00	0.65	50.00	0.016	1.204	0.01
21	10:35		1.183						
22	11:13	1.00	0.940	1.00	0.06	50.00	0.000	0.320	0.00
23	11:31	1.00	0.965	1.00	0.11	50.00	0.001	0.321	0.00
24	11:43	1.00	0.981	1.00	0.06	50.00	0.000	0.341	0.00
25	11:56	1.00	1.334	1.00	0.57	50.00	0.018	1.606	0.01
26	13:58	1.00	1.171	1.00	0.03	50.00	0.000	0.713	0.00

TCA FINISHED, 19 FOUND
FINISHED AT: 6/04/88 4:07:55

RMAL QUANTITATION SUMMARY FILE: S59436R009
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

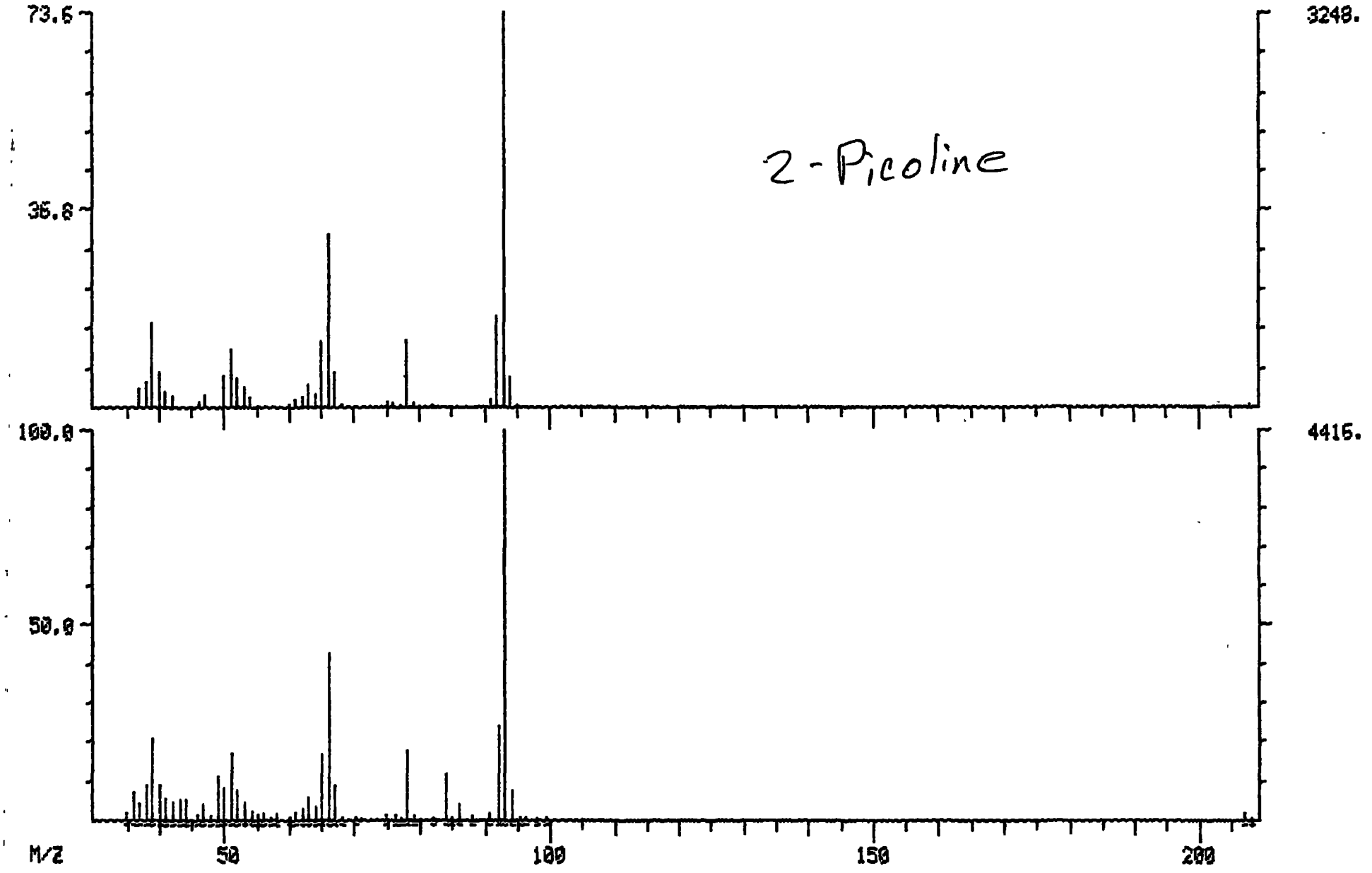
UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	716	1	35495.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	954	2	143562.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	65584.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	334	1	30159.	0.680	18.834
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93	430	1	12099.	0.273	7.704
7	S1# 62	3 & 4-PICOLINE	93	494	1	36432.	0.821	23.591
8	S1# 64	2,6-LUTIDINE	107	531	1	8051.	0.181	4.696
9	S1# 73	2-ETHYL PYRIDINE	106	560	1	4119.	0.093	2.073
10	S1# 83	2,4 & 2,5-LUTIDINE	107	595	1	29163.	0.657	19.711
11	S1# 87	2,3-LUTIDINE	107	616	1	12749.	0.287	8.137
12	S1# 88	3-ETHYL PYRIDINE	107	636	1	8041.	0.181	7.475
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107	663	1	29622.	0.668	21.650
15	S1#122	3,4-LUTIDINE	107	705	1	5826.	0.131	~~4.228~~
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106	732	1	6518.	0.147	3.668
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106	746	1	1911.	0.043	1.512
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106	826	1	696.	0.016	2.141
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		

00205

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 5:22
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 03-BNA 06/08/88
ENHANCED (S 15B 2N 0T)

DATA: 559436R009 #430 BASE M/Z: 93/ 93
CALI: 060388CR #6 RIC: 10671./ 17503.

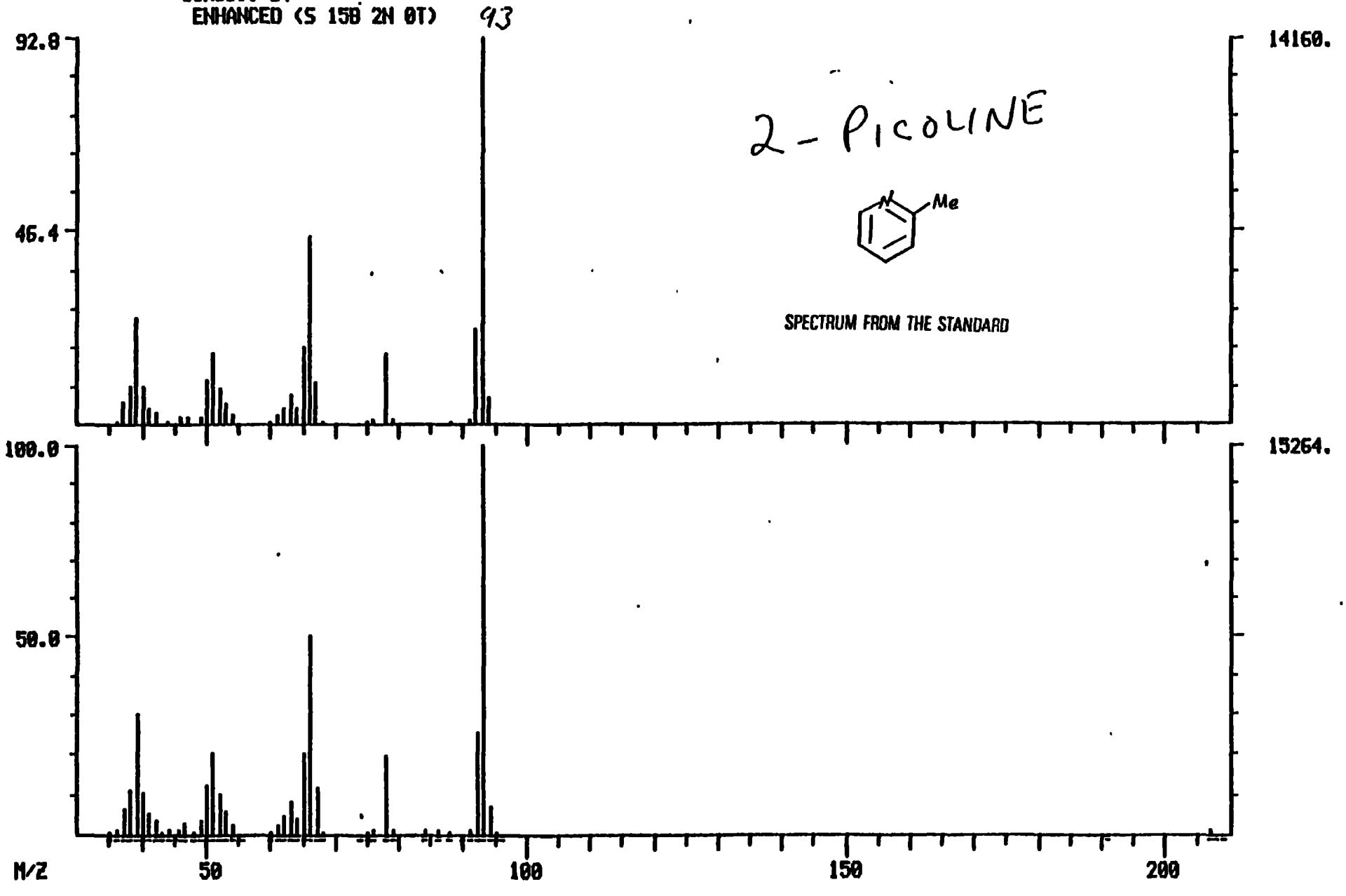


00206

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 5:22
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #429
CALI: 060288CR #5

BASE M/Z: 93/ 93
RIC: 52351./ 60095.



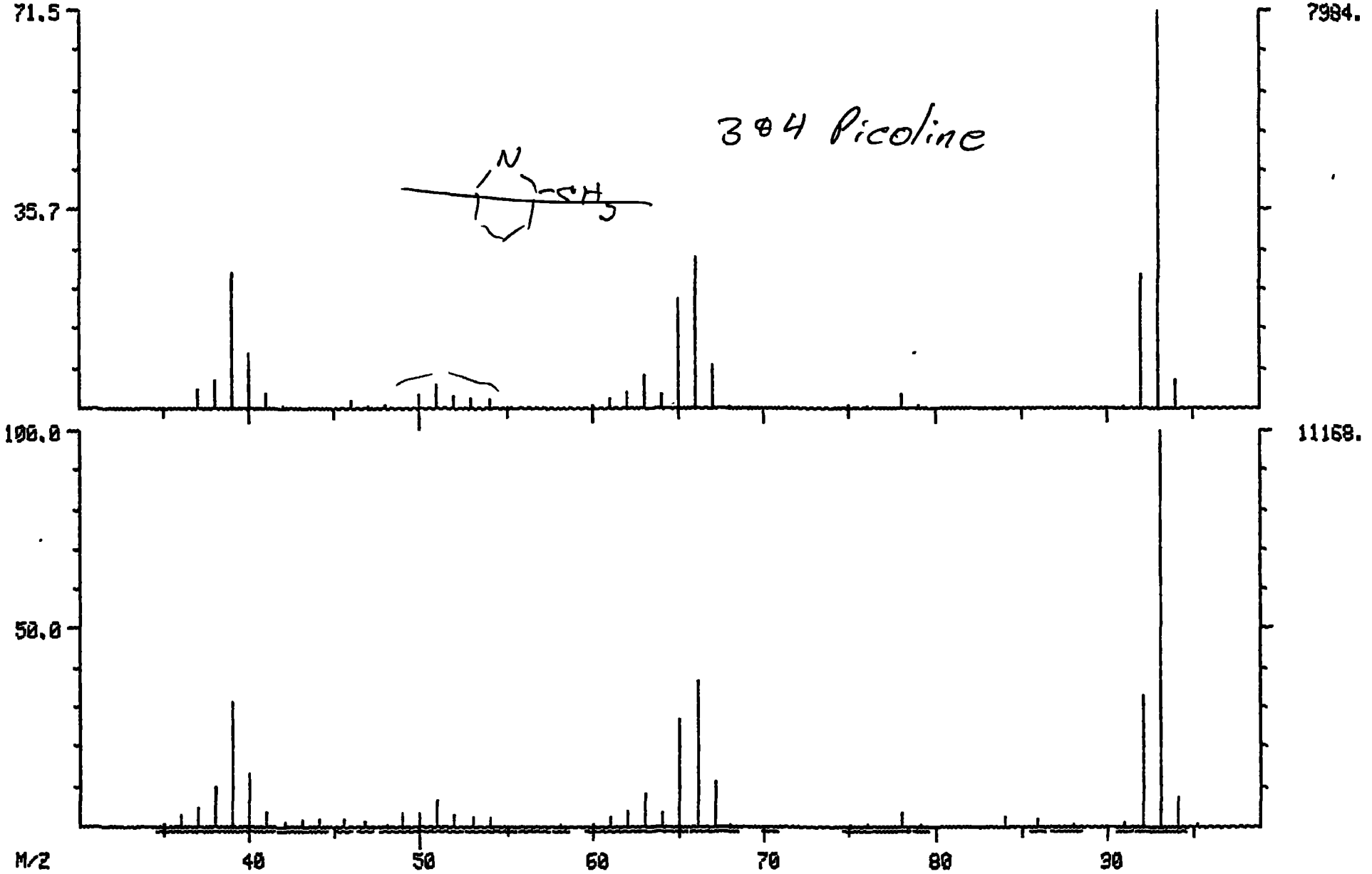
2-PICOLINE

SPECTRUM FROM THE STANDARD

00207

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 6:10
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 63 BNA 06/08/88
ENHANCED (S 15B 2N 0T)

DATA: 559436R009 #494 BASE M/Z: 93/ 93
CALI: 060388CR #6 RIC: 26015./ 38143.

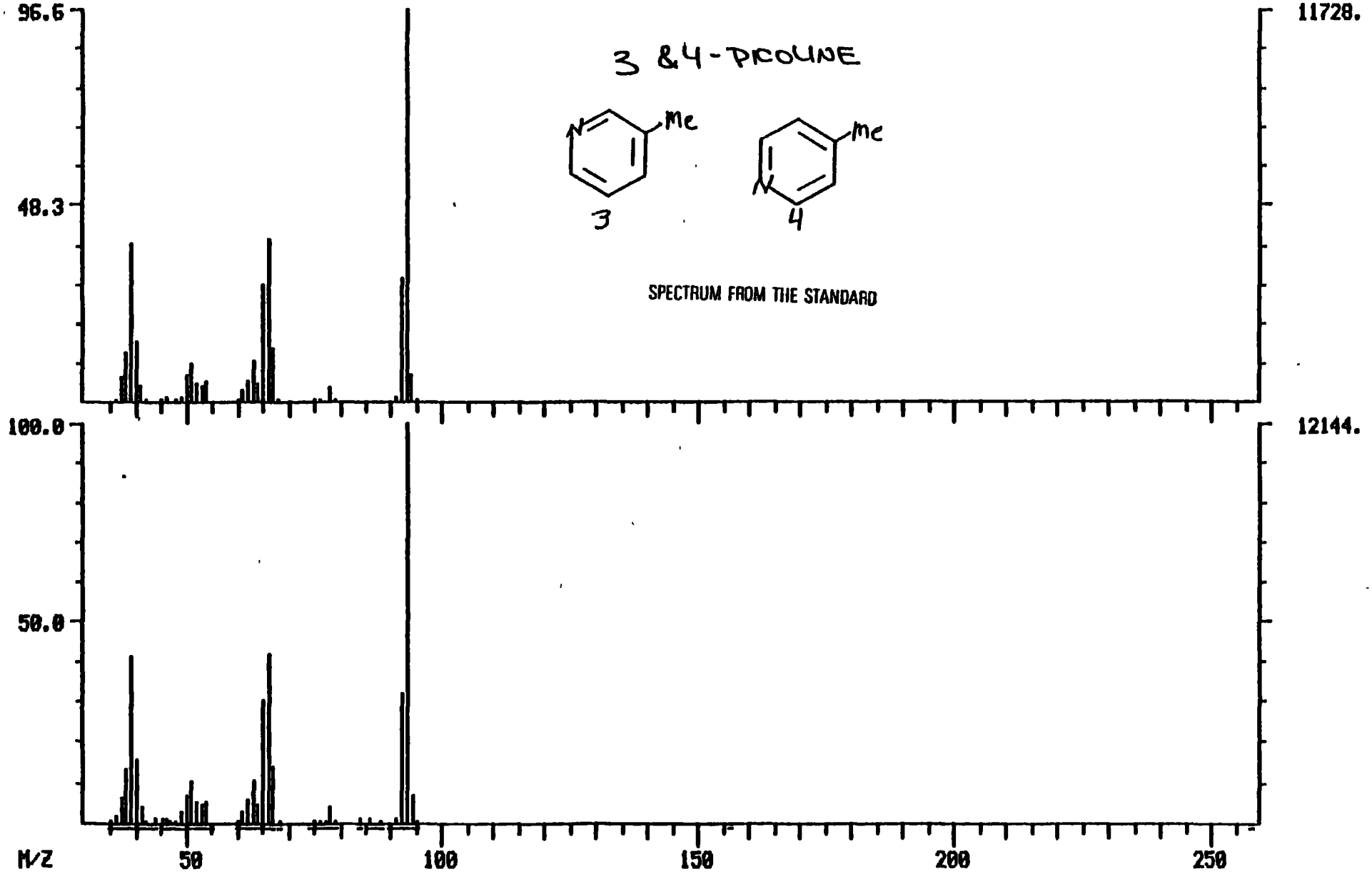


C0208

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 6:10
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #494
CALI: 060288CR #5

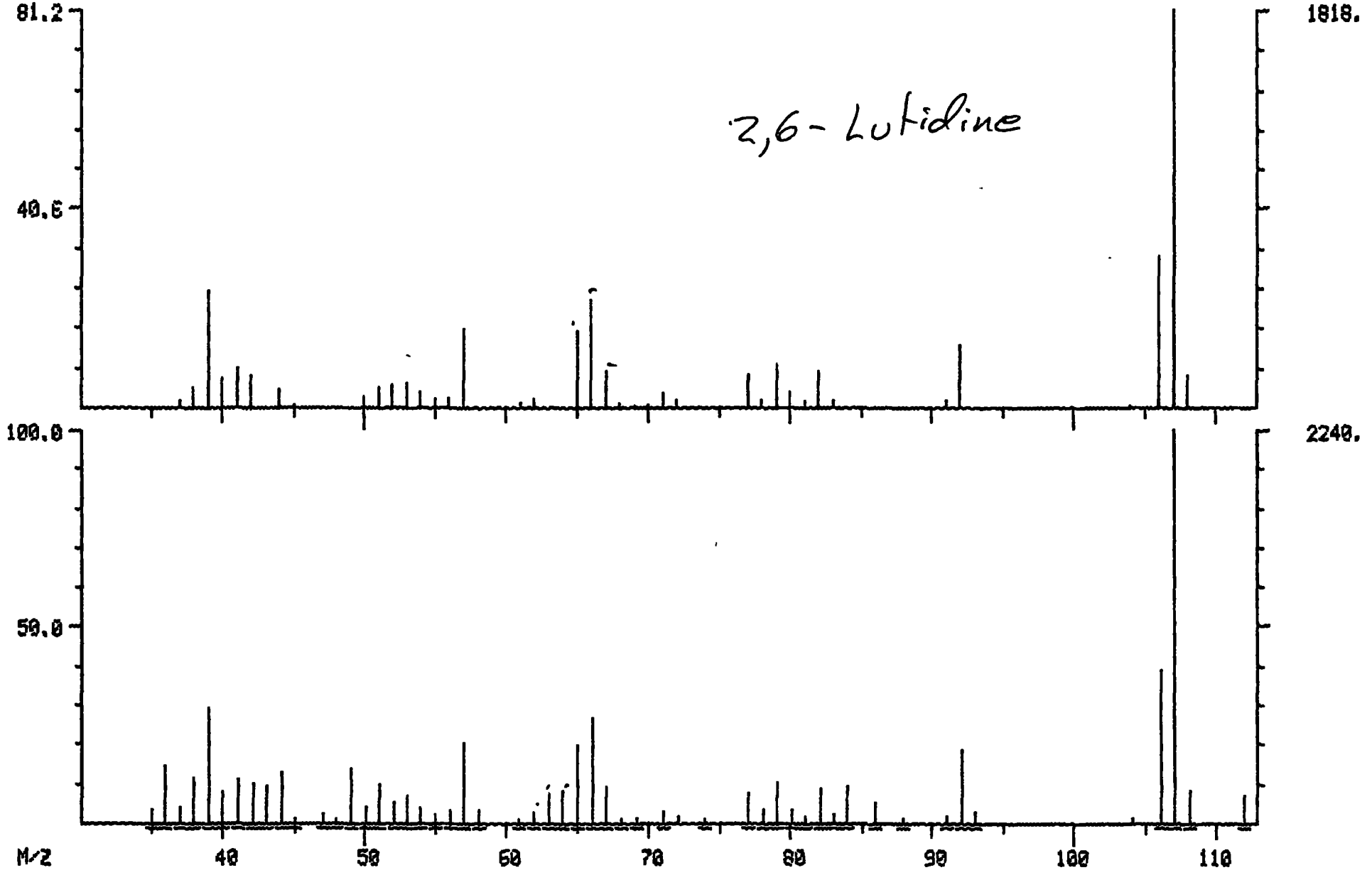
BASE M/Z: 93/ 93
RIC: 43583./ 46591.



C0209

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 6:38
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 03-BNA 06/08/88
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 #531 BASE M/Z: 107/ 107
CALI: 060388CR #6 RIC: 6991./ 11375.



00210

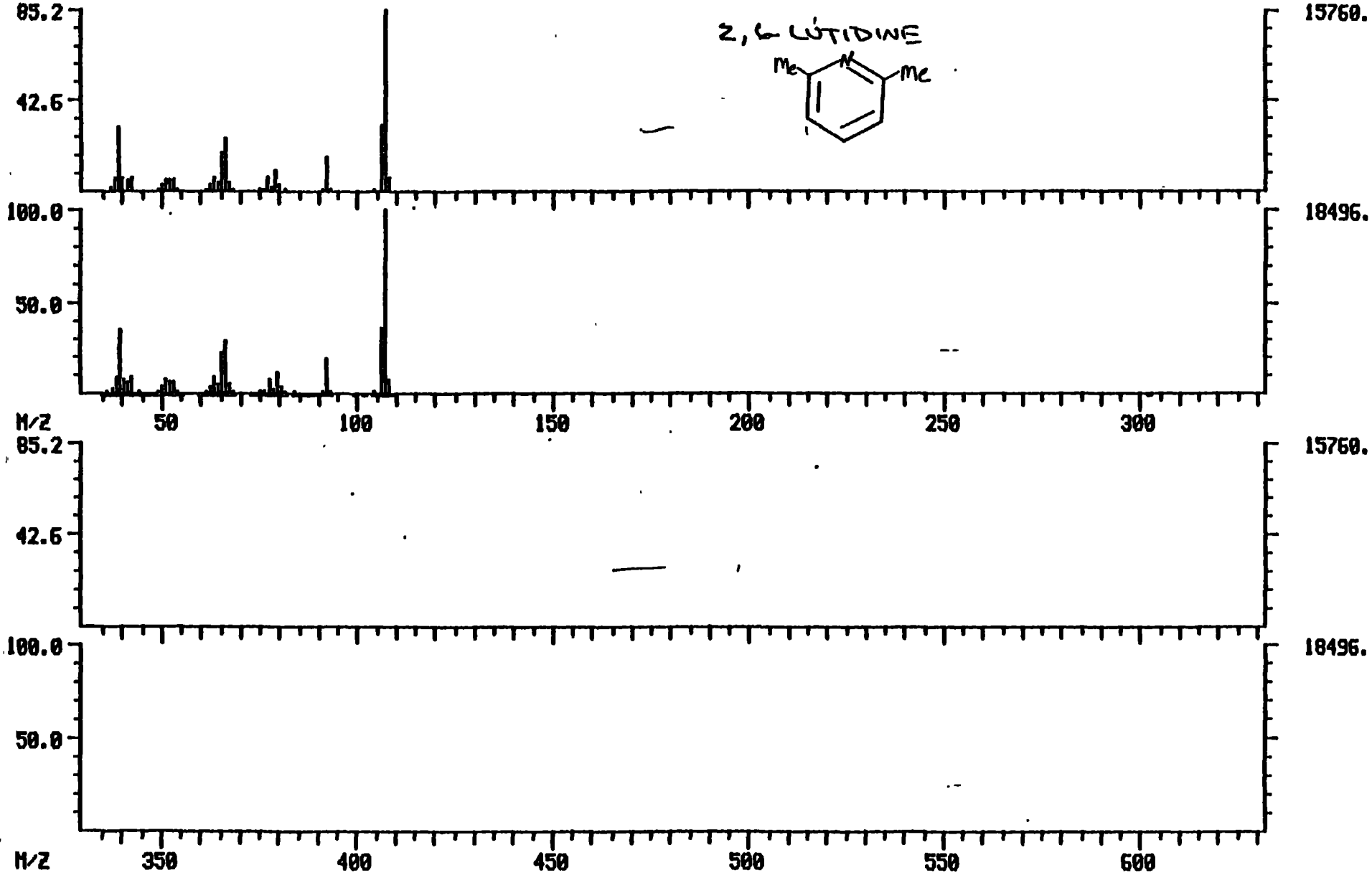
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 6:34
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #525
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 57279./ 69119.

SPECTRUM FROM THE STANDARD

2,6 LUTIDINE

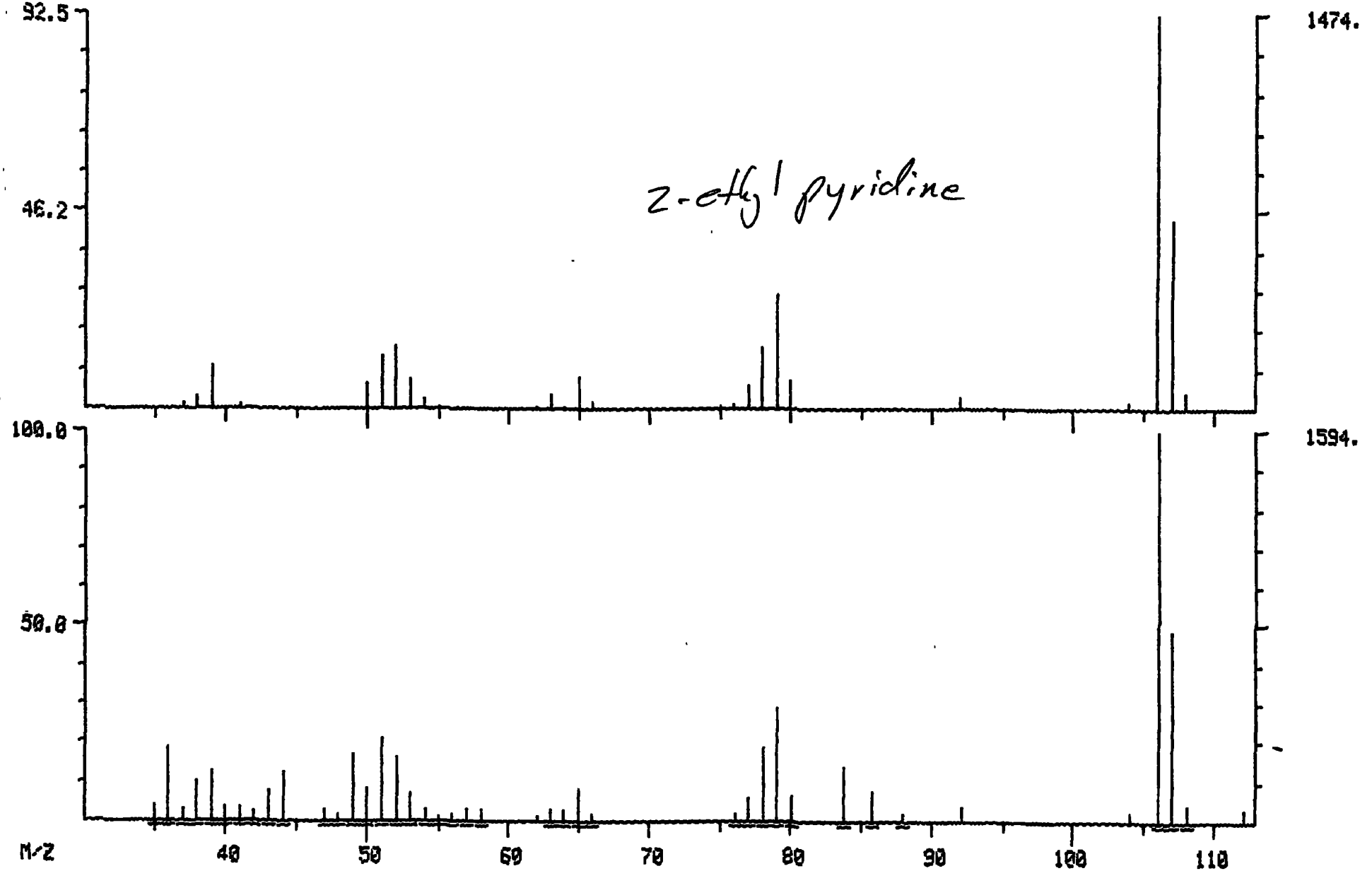


C0211

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 7:00
SAMPLE: 59436-~~02~~ 03 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 #560
CALI: 060388CR #6

BASE M/Z: 106/ 106
RIC: 4319./ 6815.



C0212

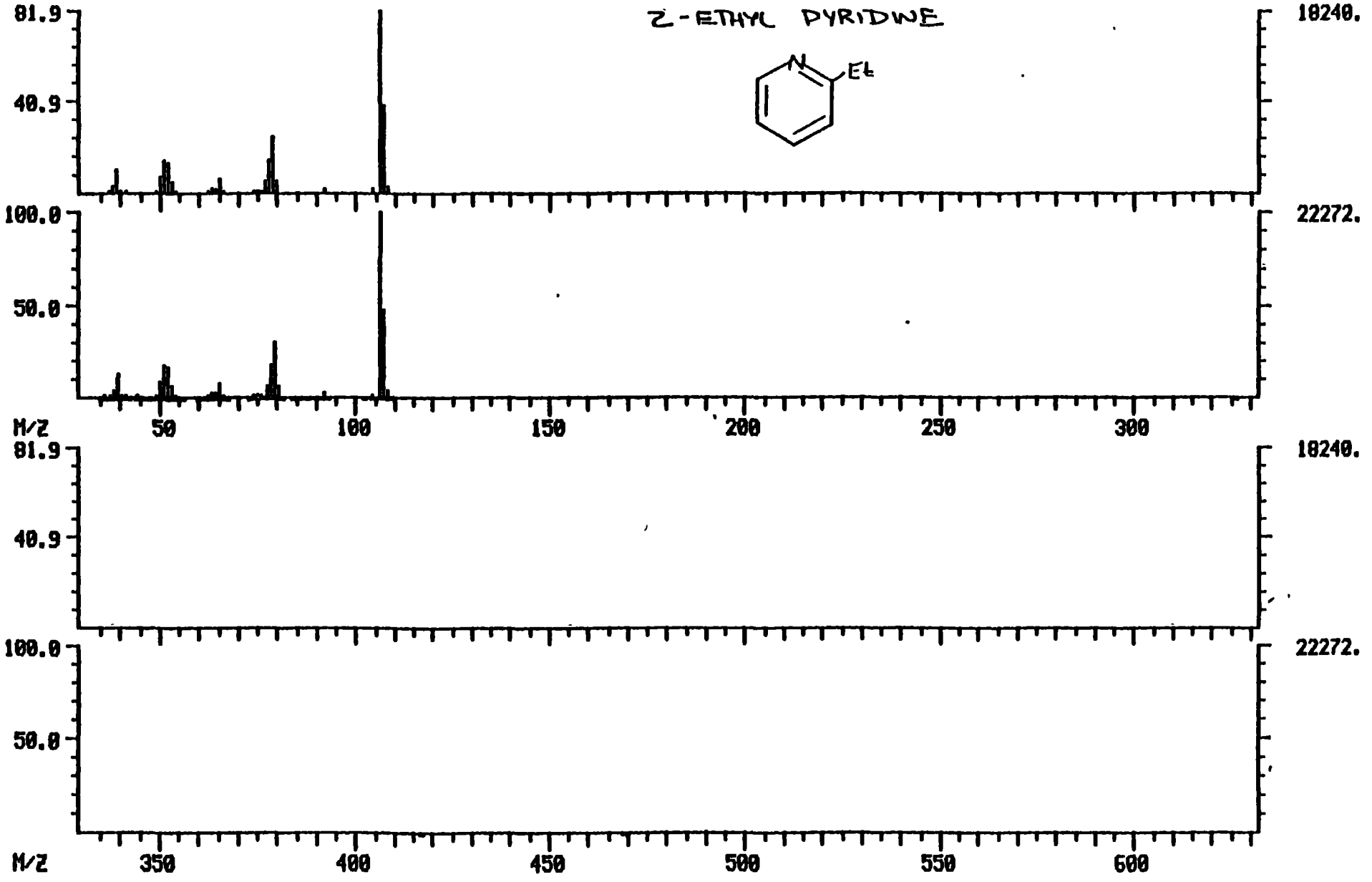
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 6:57
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #556
CALI: 060288CR #5

BASE M/Z: 106/ 106
RIC: 57215./ 70143.

SPECTRUM FROM THE STANDARD

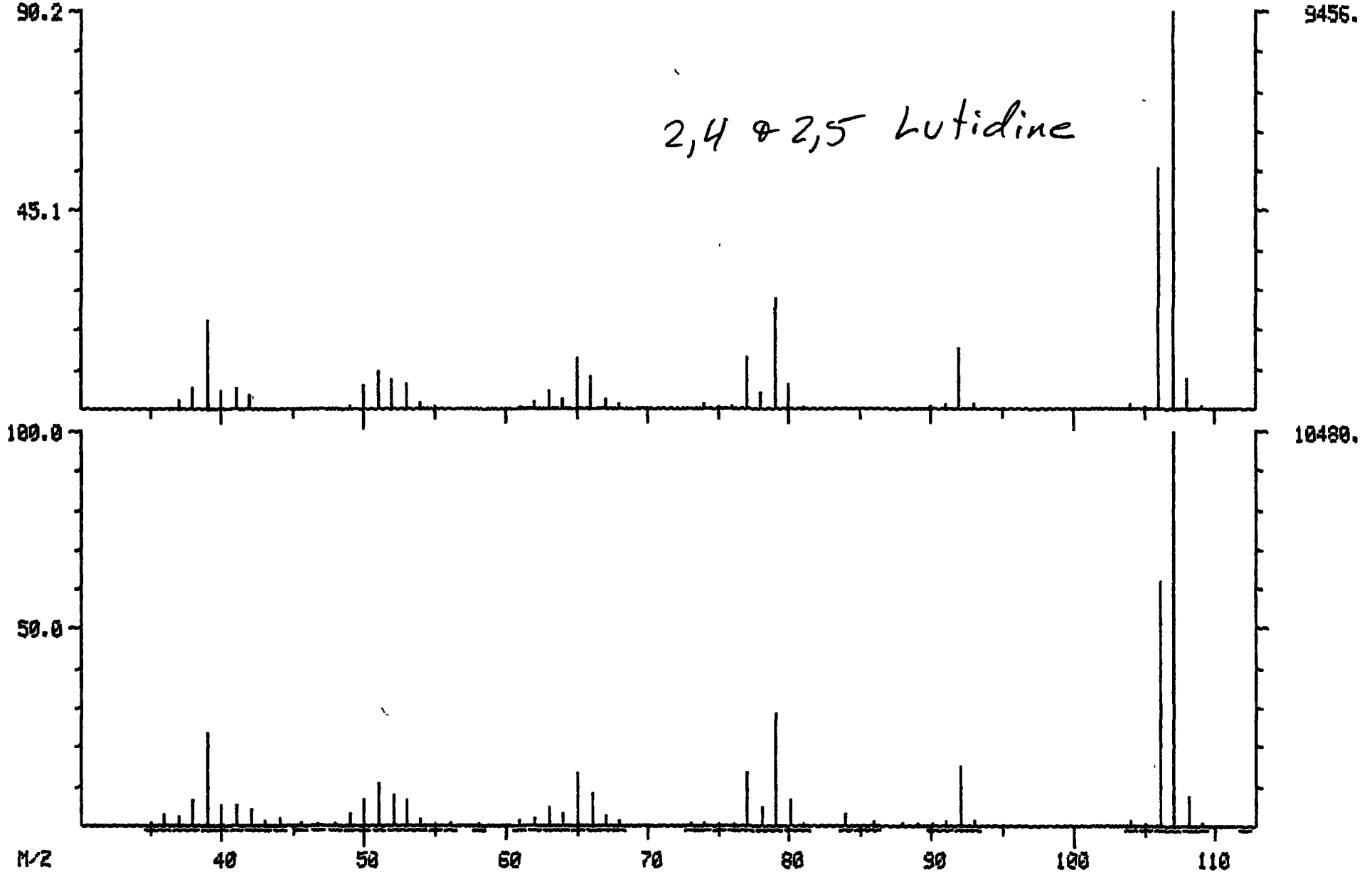
2-ETHYL PYRIDINE



00213

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 7:26
SAMPLE: 59436-~~02~~ 03 BNA H2O 100?/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S5943ER009 #595 BASE M/Z: 107/ 107
CALI: 060388CR #6 RIC: 33407./ 39615.



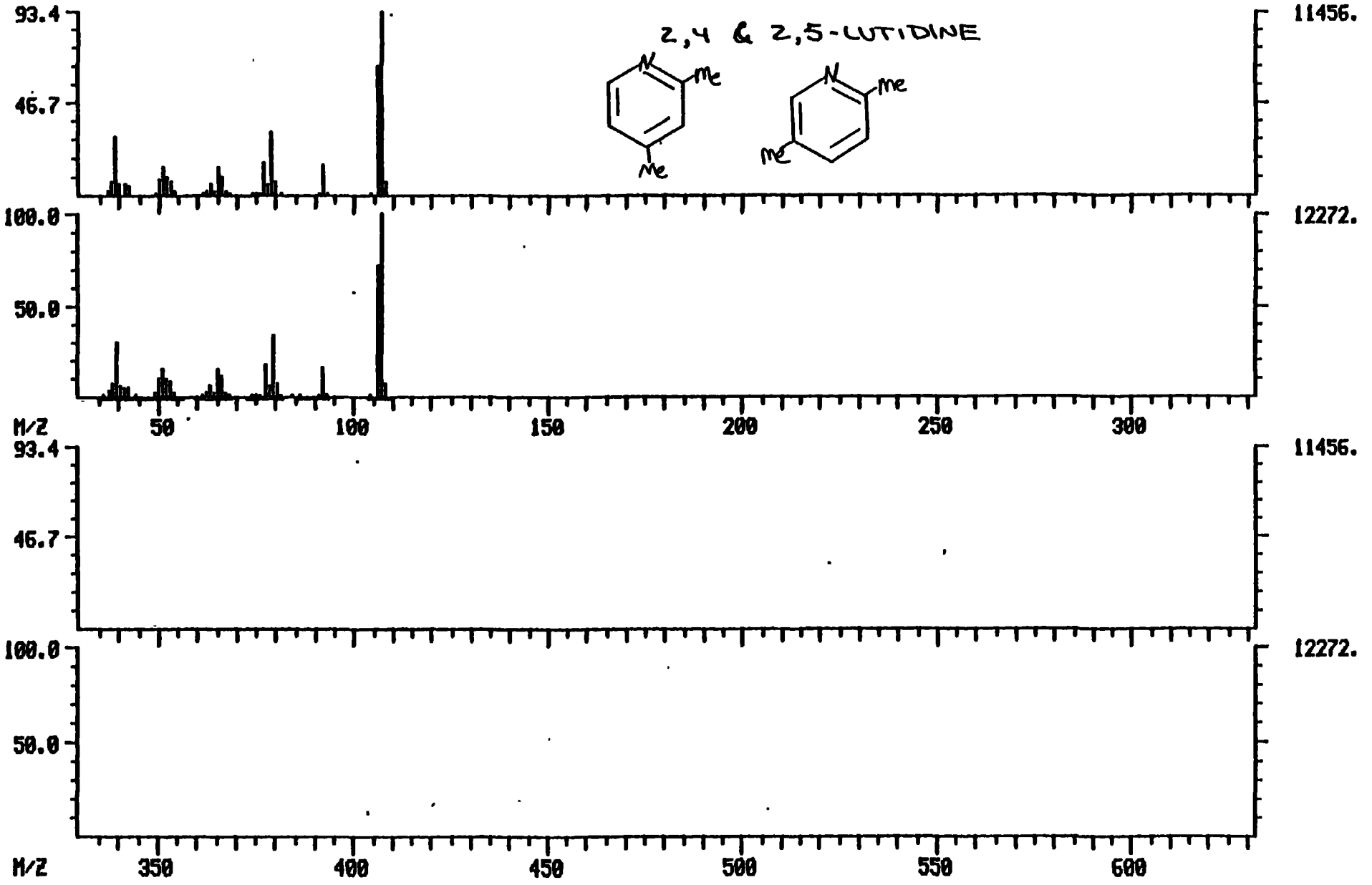
00214

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

DATA: STDR976 #593
CALI: 060288CR #5

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

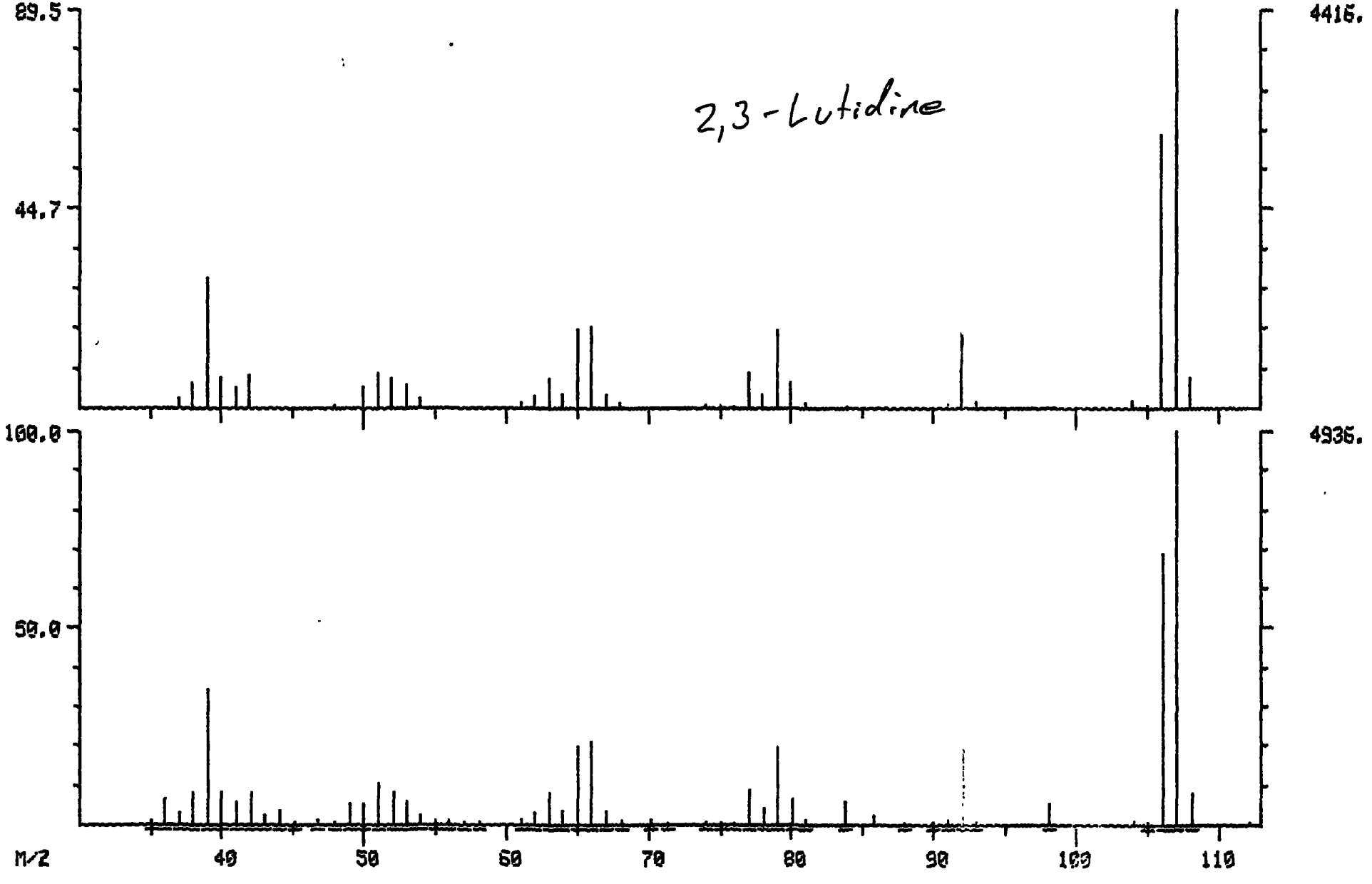
SPECTRUM FROM THE STANDARD



00215

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 7:42
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 03 -8mb 06/08/88
ENHANCED (S 15B 2N 0T)

DATA: S59436R003 #616 BASE M/Z: 107/ 107
CALI: 060388CR #6 RIC: 17471./ 21855.



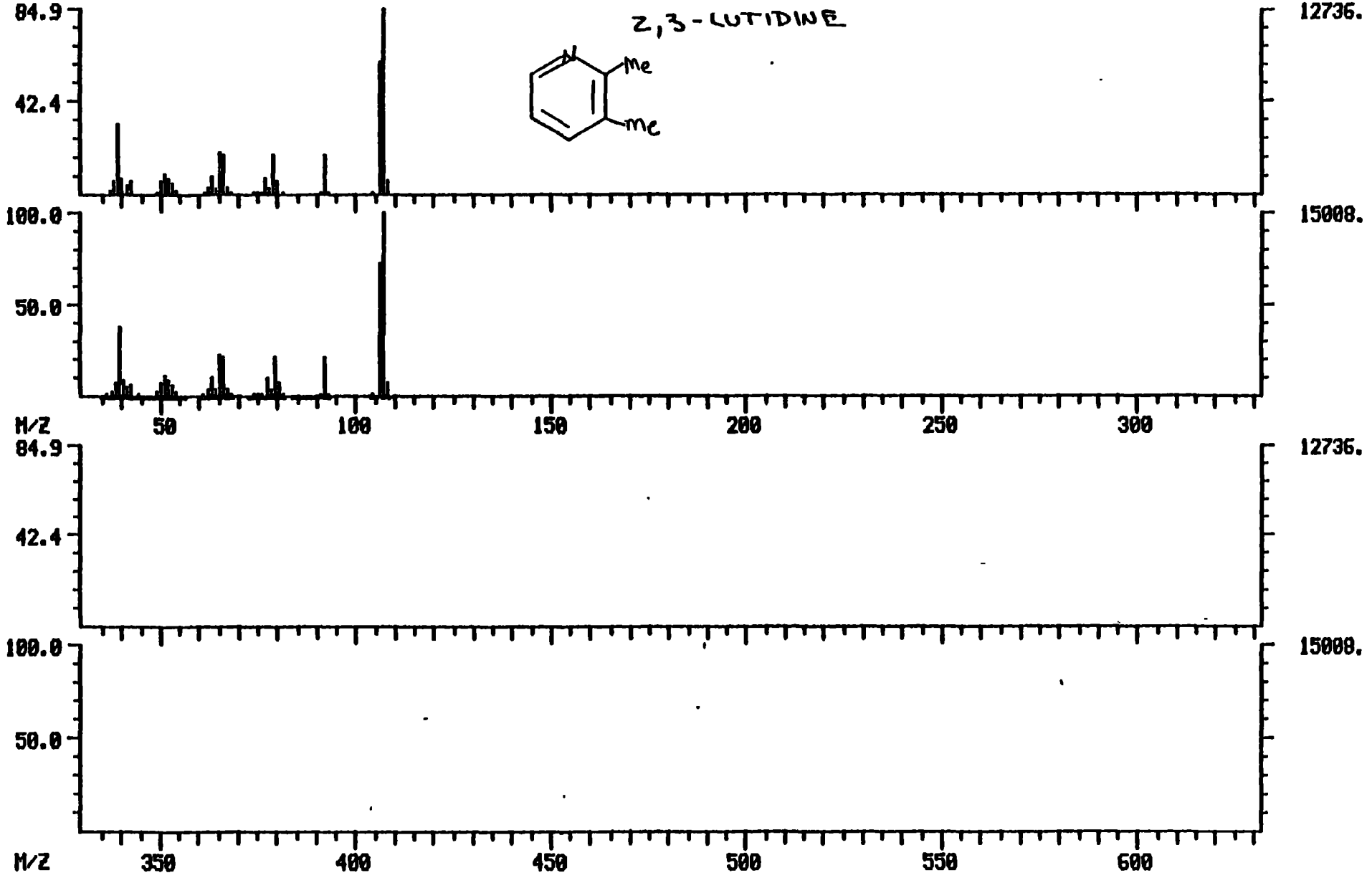
00216

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:40
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #613
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 54335./ 64575.

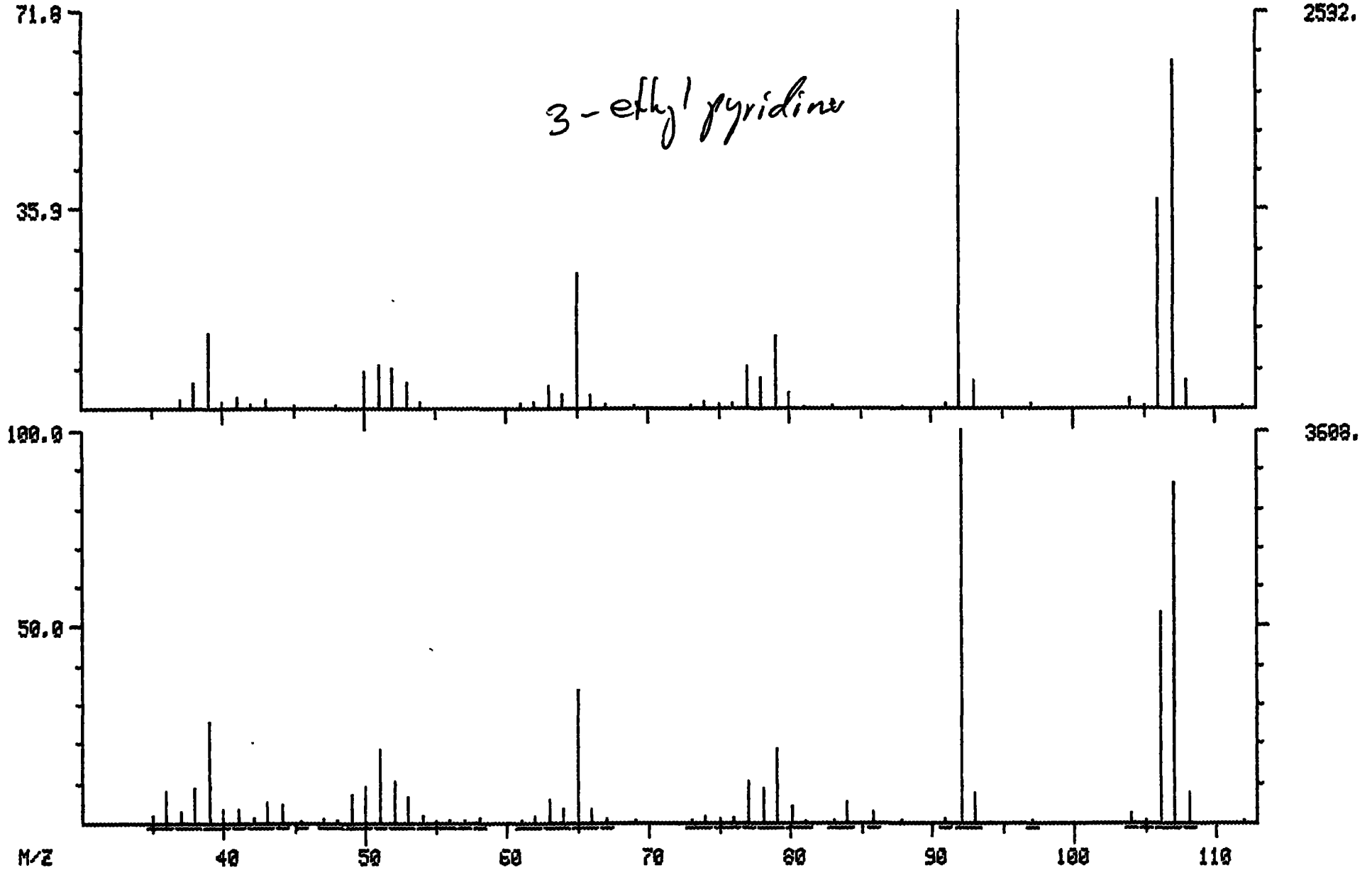
SPECTRUM FROM THE STANDARD



00217

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 7:57
SAMPLE: 59436-02 BNA H2O 100Z/2ML
CONDS.: ST 03 tmb 06/08/88
ENHANCED (S 15B 2N 0T)

DATA: S59436R003 #636 BASE M/Z: 92/ 92
CALI: 060388CR #6 RIC: 11231./ 17791.



00218

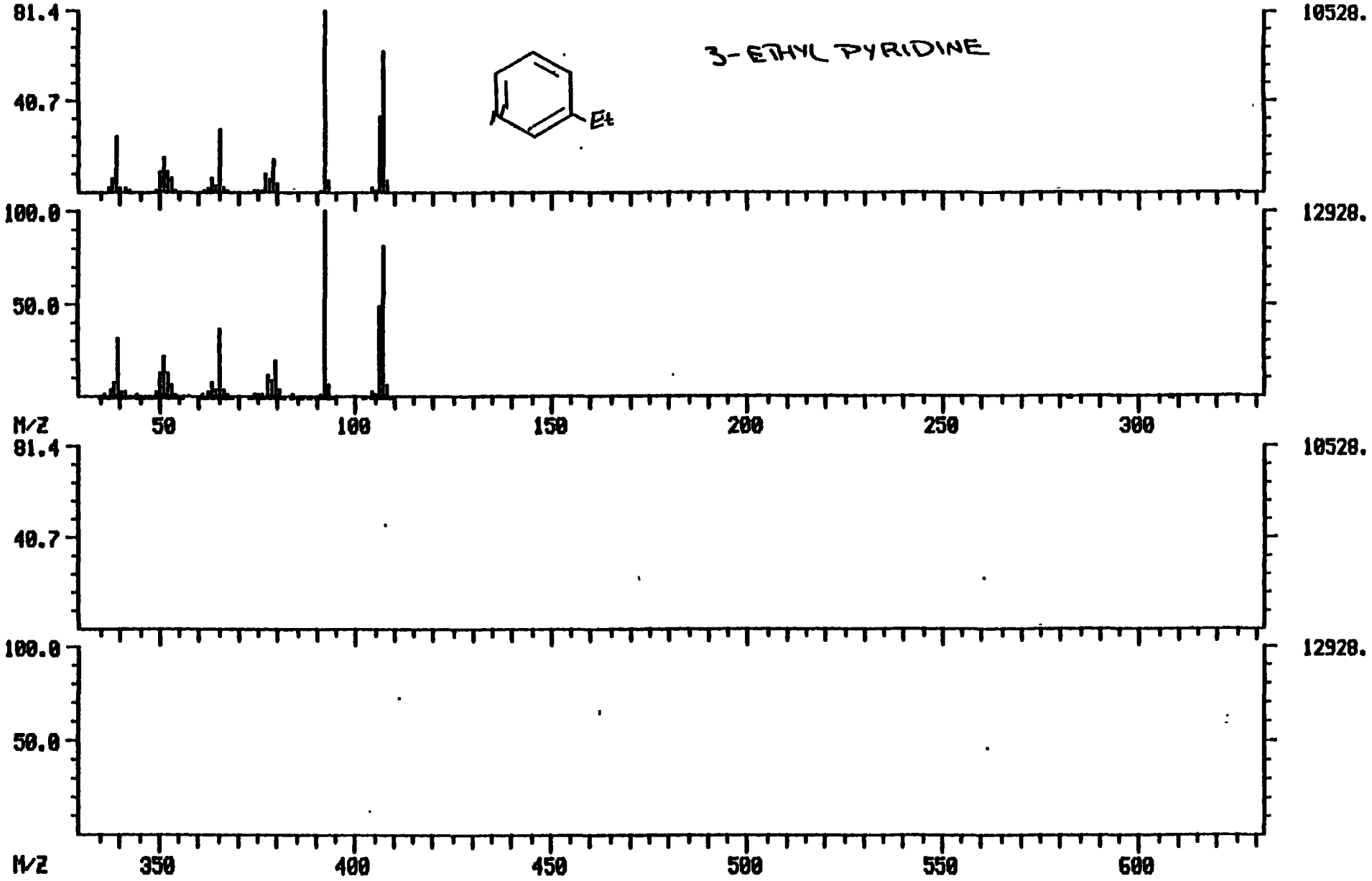
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:55
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #634
CALI: 060288CR #5

BASE M/Z: 92/ 92
RIC: 45375./ 60159.

SPECTRUM FROM THE STANDARD

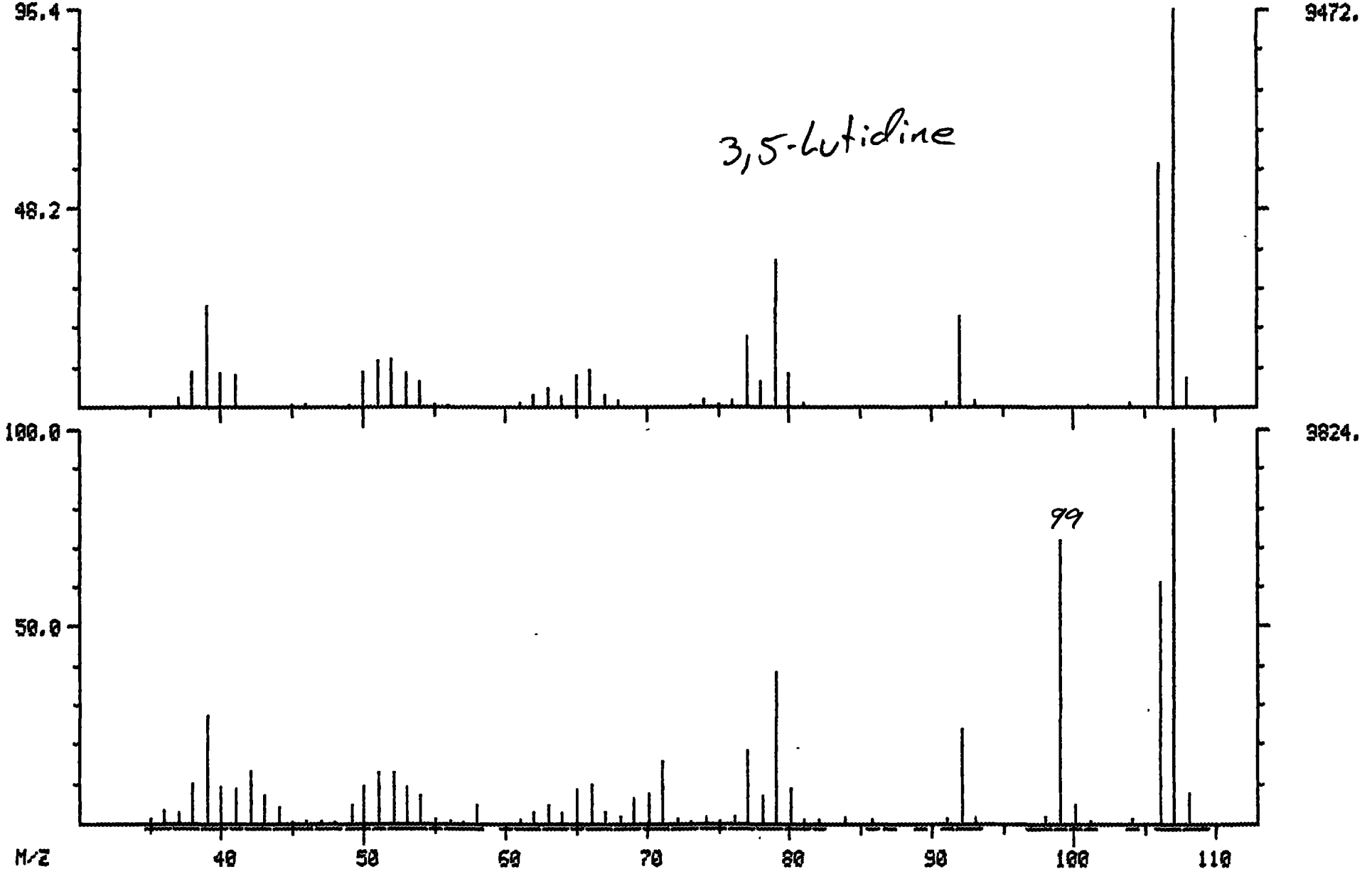
3-ETHYL PYRIDINE



00219

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 8:17
SAMPLE: 59436-~~02~~ 03-Bmb 06/03/88 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 #663 BASE M/Z: 107/ 107
CALI: 060388CR #6 RIC: 38975./ 56511.



00220

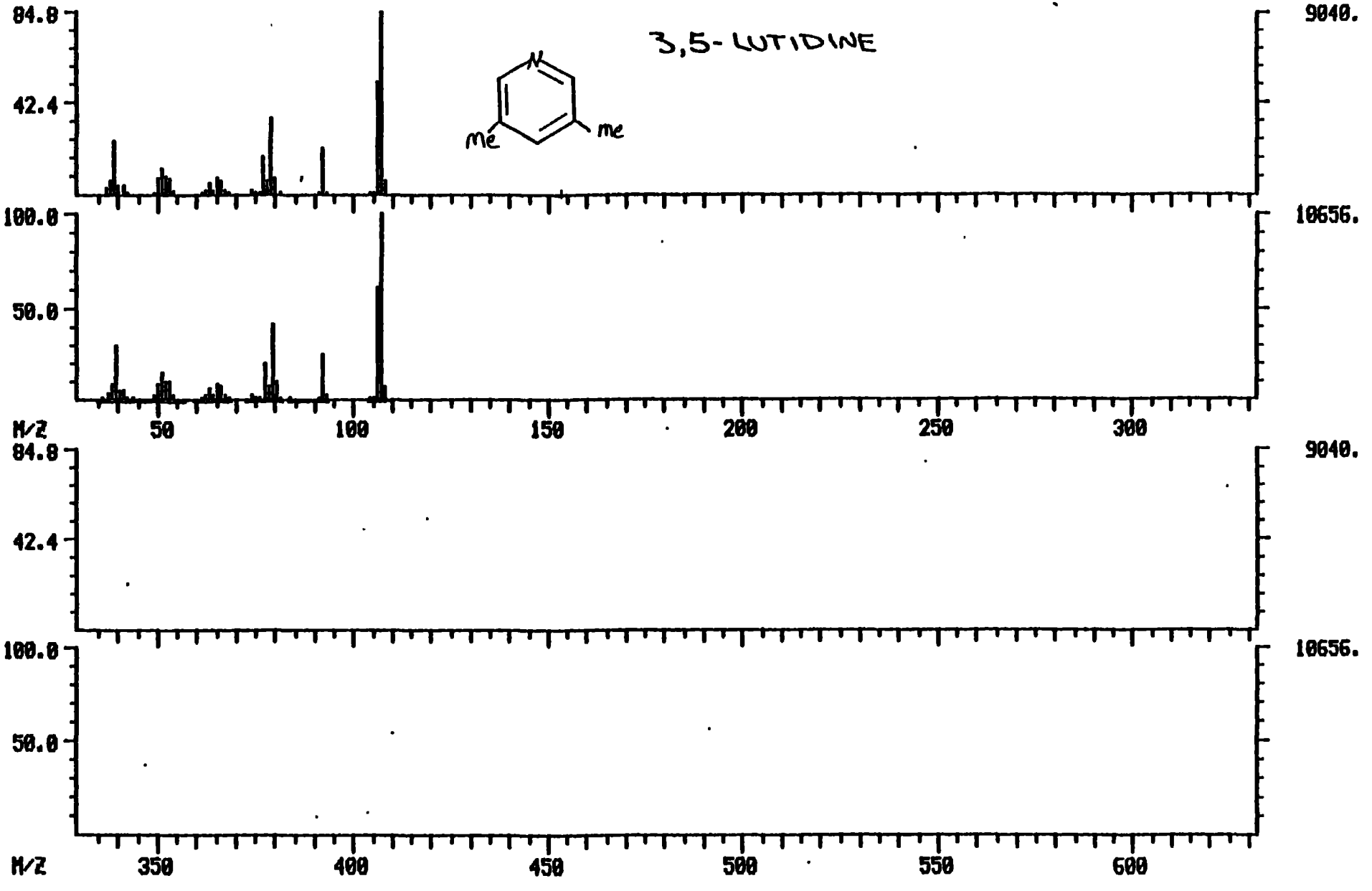
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:16
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #661
CALI: 060288CR #5

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

SPECTRUM FROM THE STANDARD

3,5-LUTIDINE

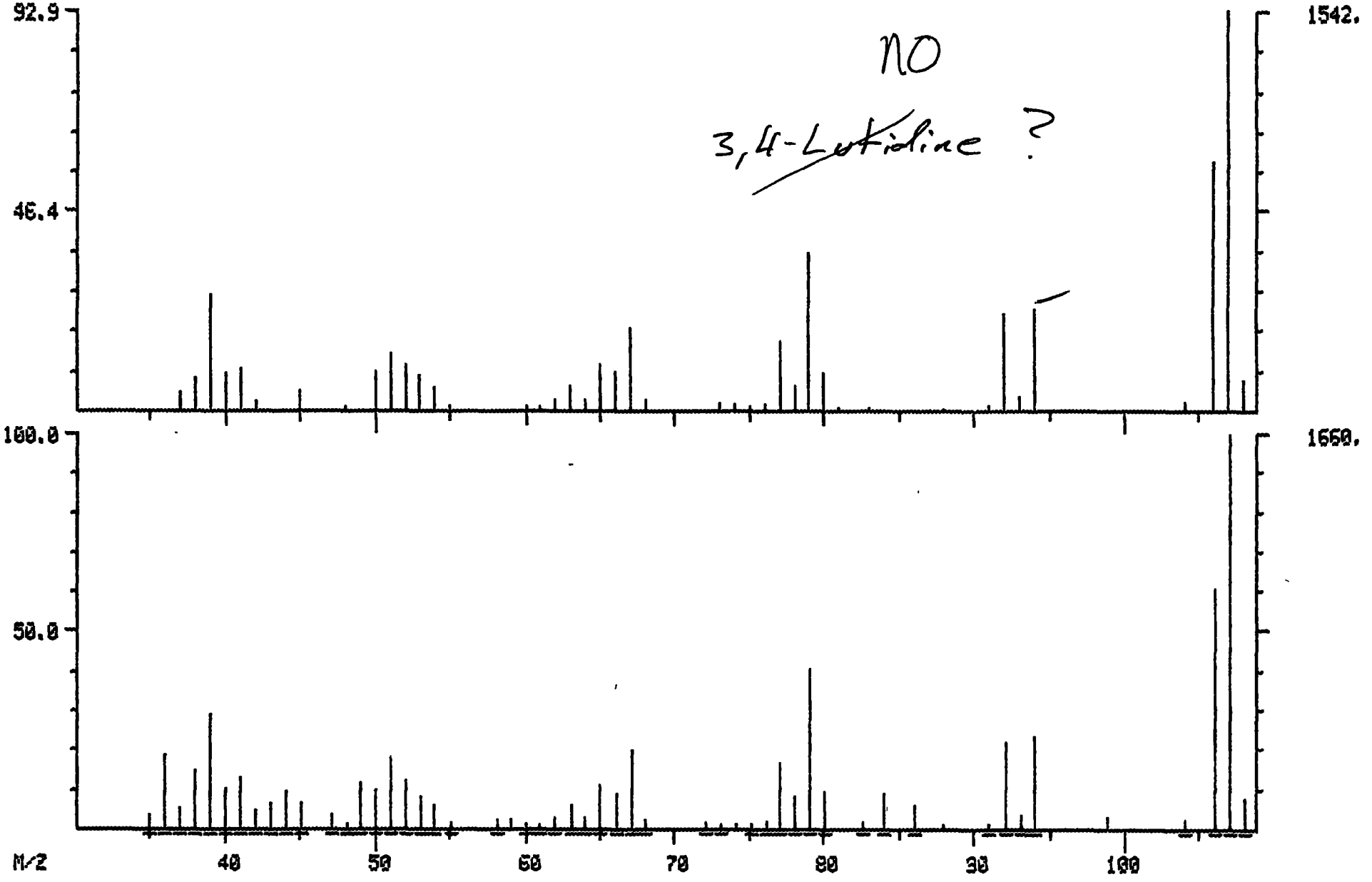


~~0022~~ 1

ST 00221

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 8:49
SAMPLE: 59436-~~02~~ 03 BNA H2O 100%/2ML
CONDS.: ST 06/08/88
ENHANCED (S 15B 2N 0T)

DATA: S59436R003 #705 BASE M/Z: 107/ 107
CALI: 060388CR #6 RIC: 7559./ 9551.



NO

3,4-Lutidine ?

00222

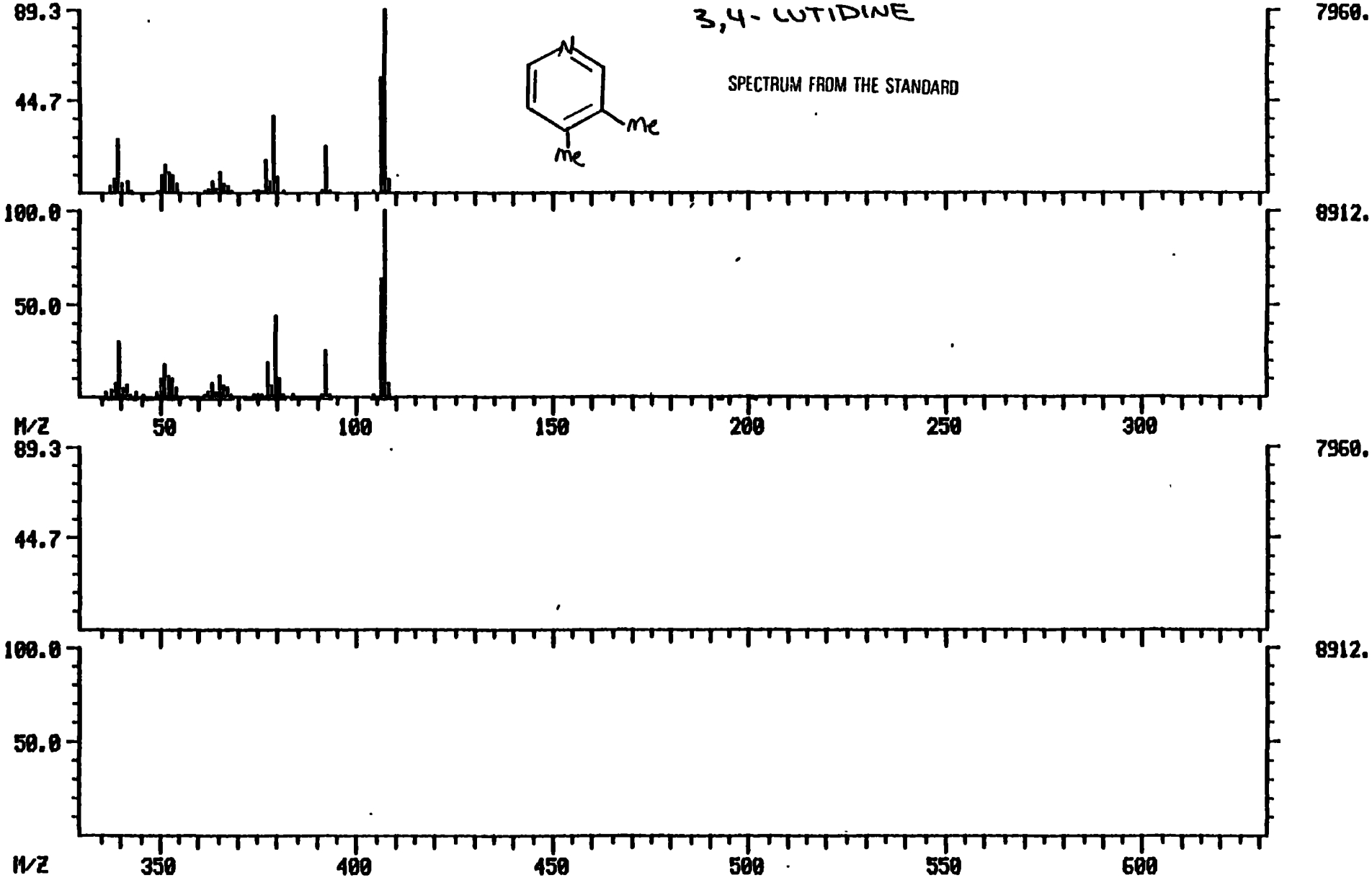
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:44
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #699
CALI: 060208CR #5

BASE M/Z: 107/ 107
RIC: 33407./ 39487.

3,4-LUTIDINE

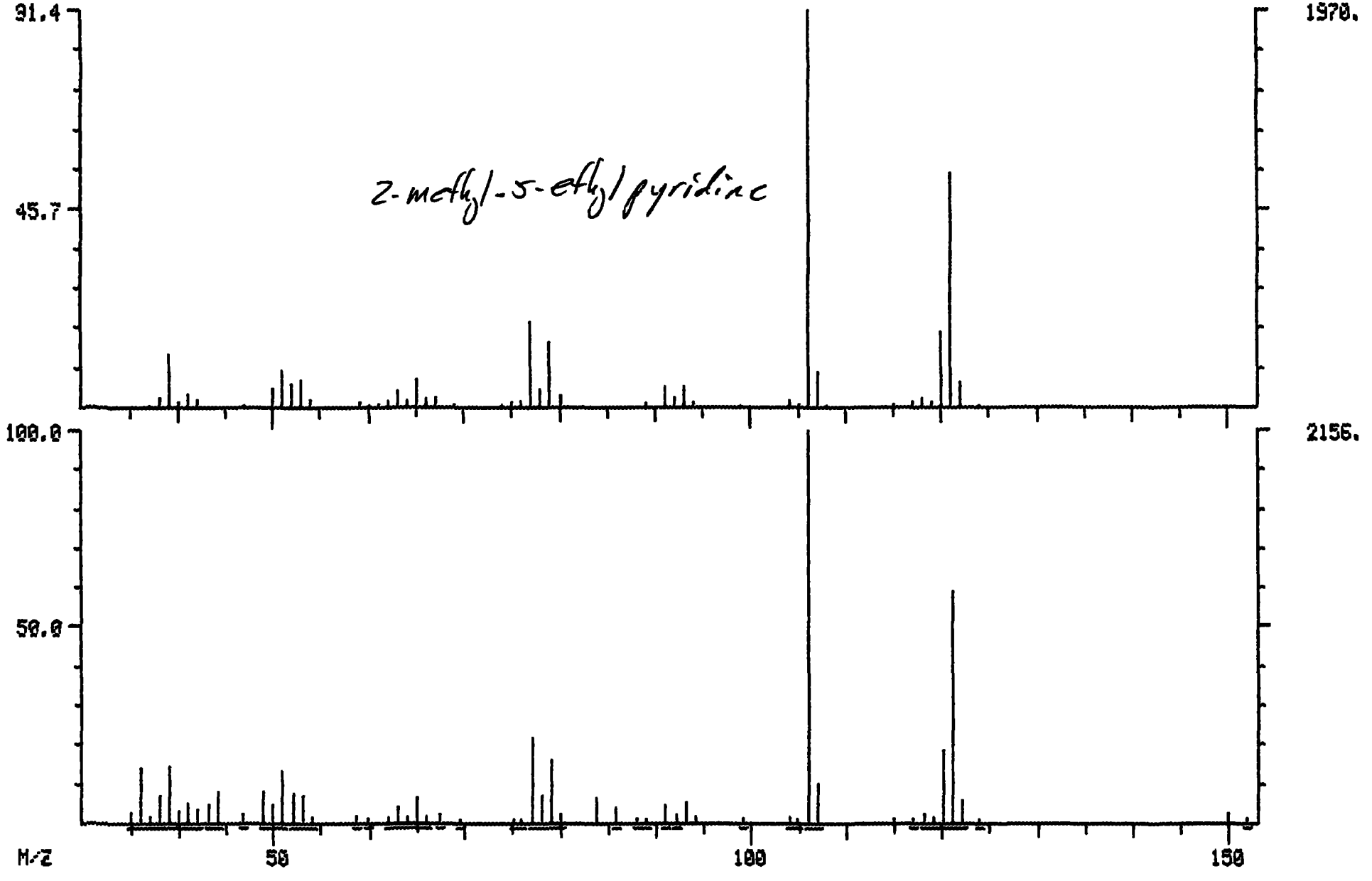
SPECTRUM FROM THE STANDARD



00223

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 9:09
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 03 [illegible]
ENHANCED (S 15B 2N 0T)

DATA: 559436R003 #732 BASE M/Z: 106/ 106
CALI: 060388CR #6 RIC: 6703./ 8959.

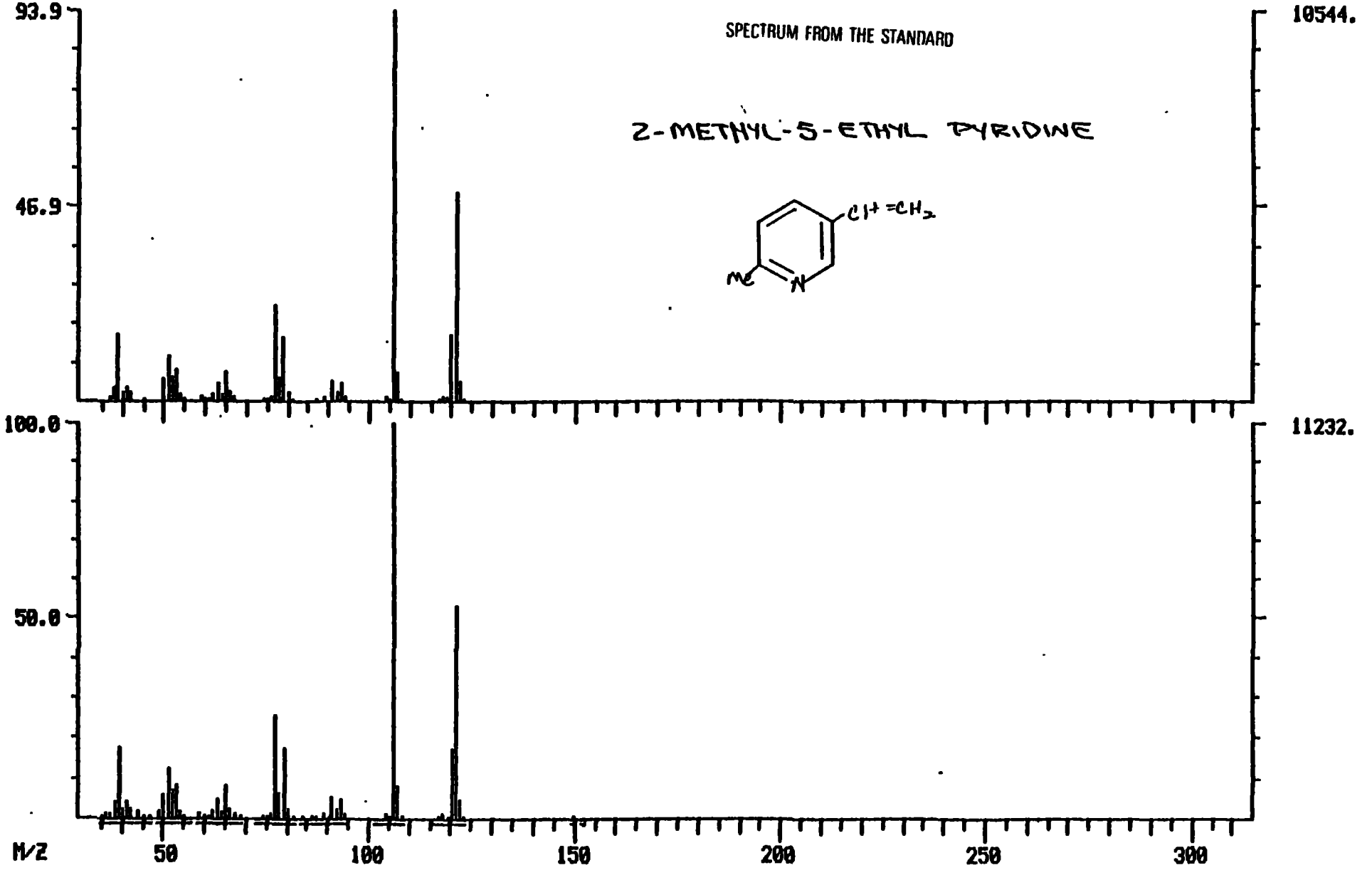


C0224

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

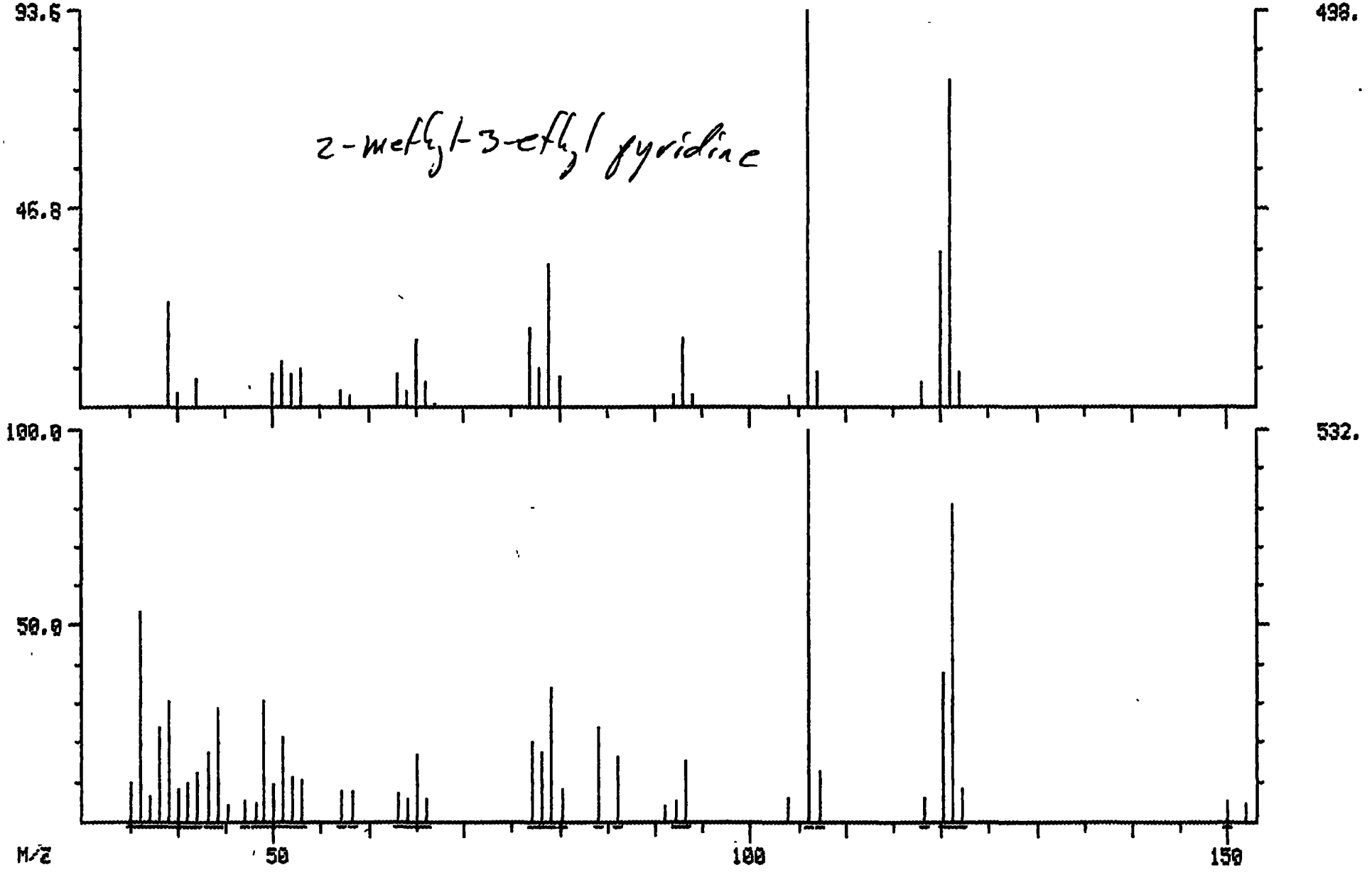
BASE M/Z: 106/ 106
RIC: 36671./ 40191.



00225

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 9:19
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R003 #746 BASE M/Z: 106/ 106
CALI: 060388CR #6 RIC: 2303./ 4015.



2-methyl-3-ethyl pyridine

C0226

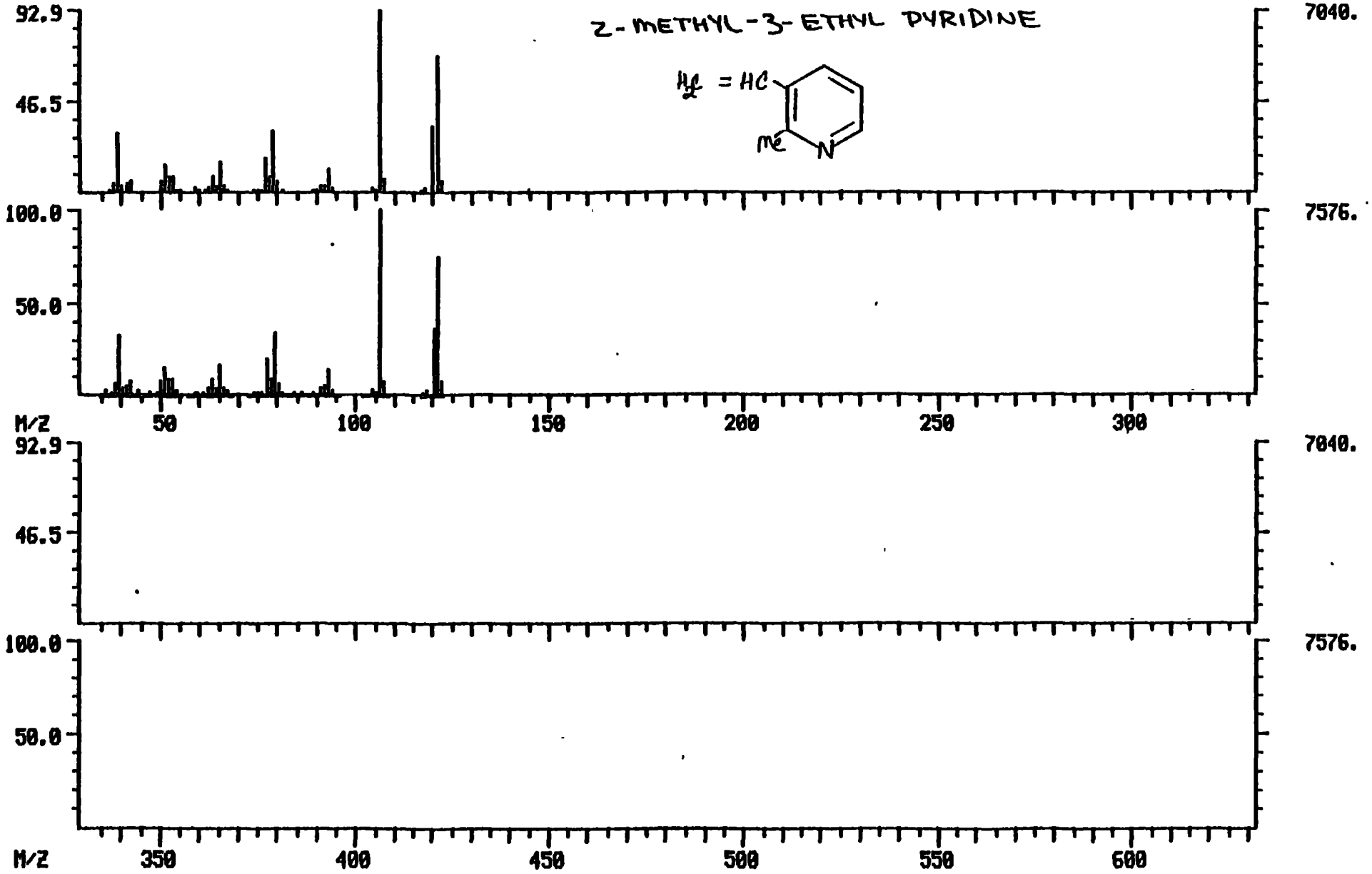
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 9:17
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #743
CALI: 060288CR #5

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

SPECTRUM FROM THE STANDARD

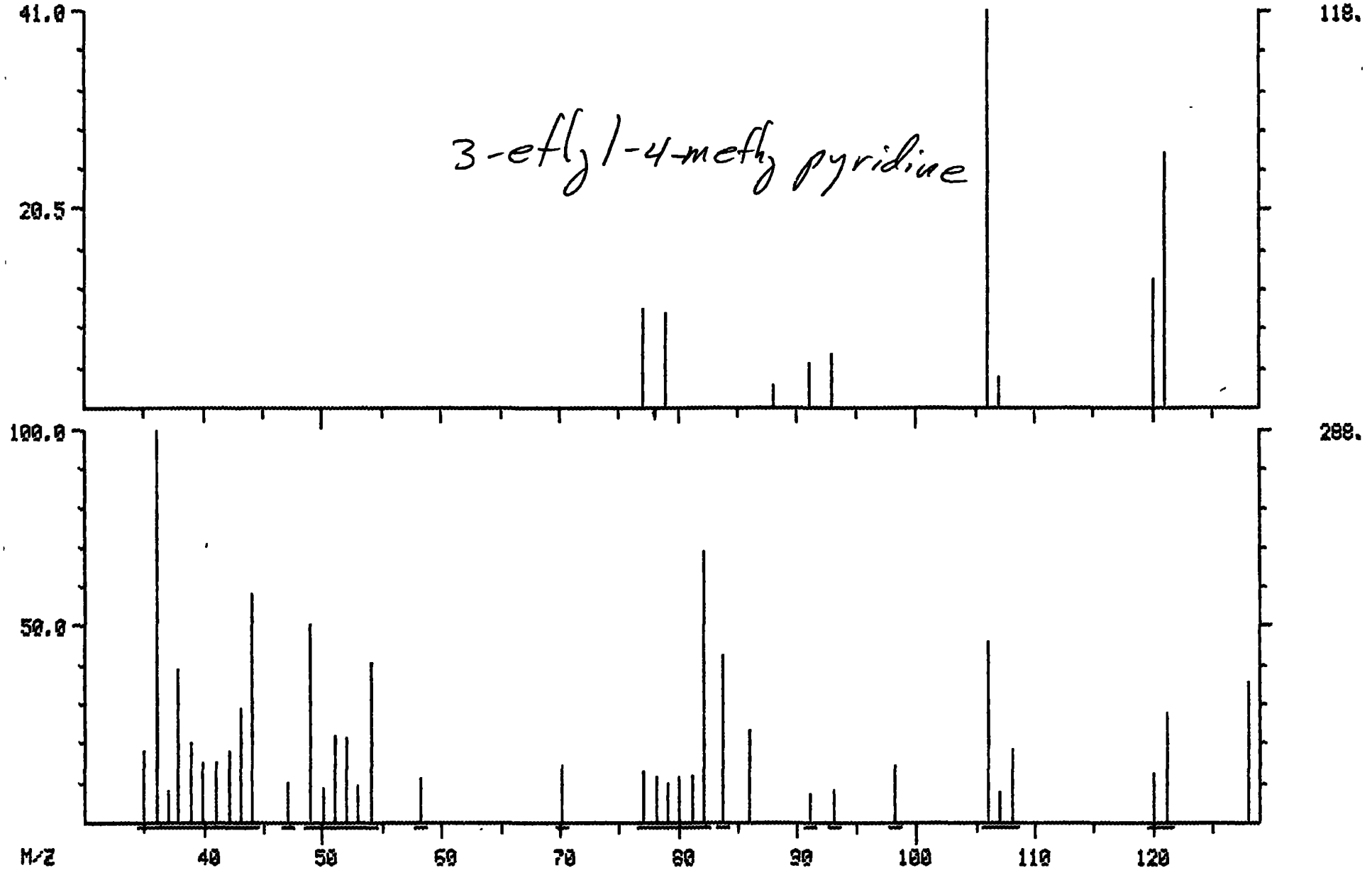
2-METHYL-3-ETHYL PYRIDINE



00227

DUAL MASS SPECTRUM
06/03/88 13:11:00 + 10:19
SAMPLE: 59436-02 BNA H2O 100%/2ML
CONDS.: ST 03-BNA 06/08/88
ENHANCED (S 15B 2N 0T)

DATA: S59436R009 #826 BASE M/Z: 106/ 36
CALI: 060388CR #6 RIC: 333./ 2535.



C0228

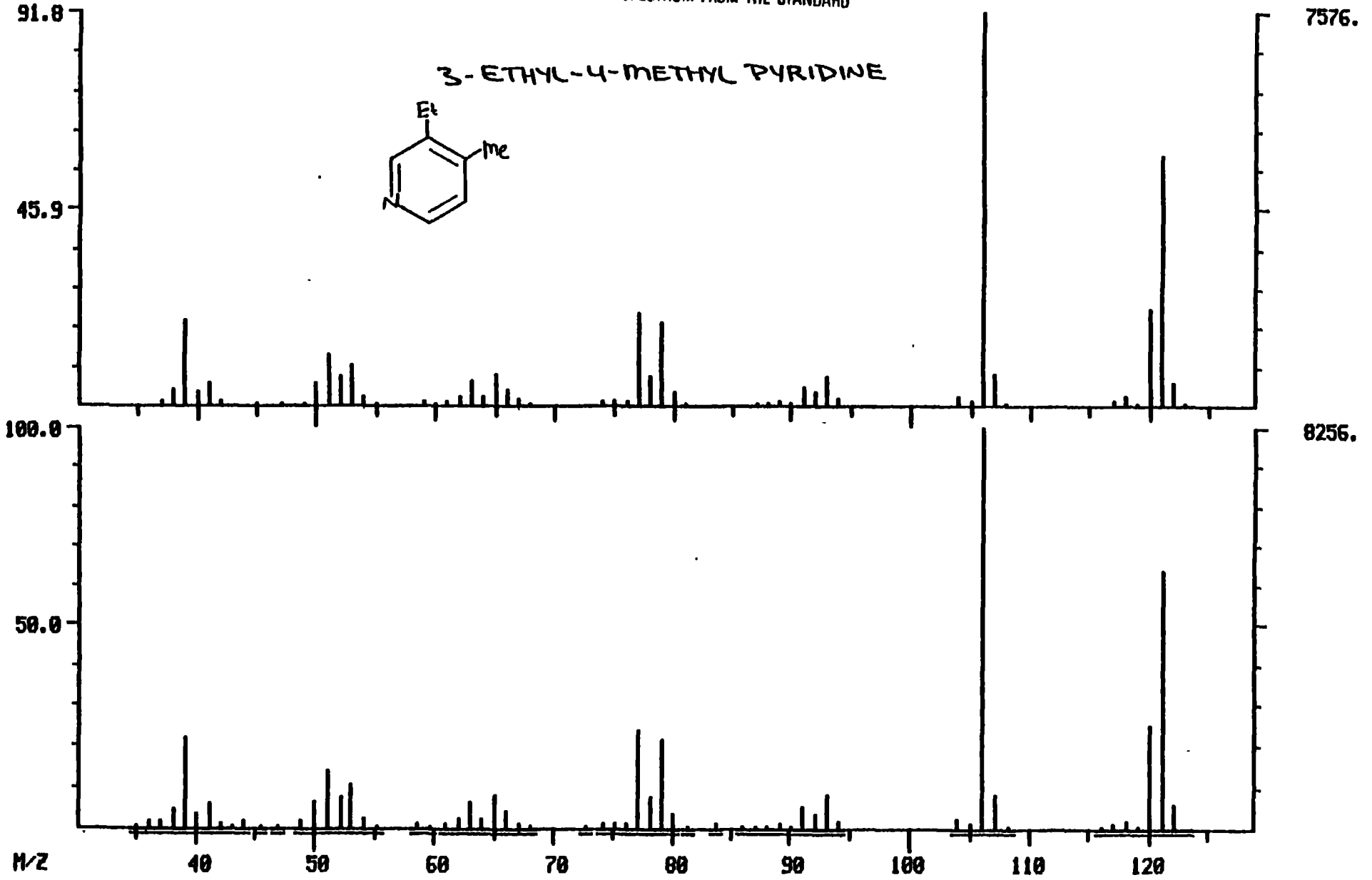
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 10:19
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

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: S59436X820. STARTED : 6/03/88 11:32:49

$RF = \frac{ng}{mL} \times \frac{0.5ml}{3.8L} = 0.132 \frac{ng}{L}$

00229

6/2/88 20:10:09 SCAN 1 OF 3900
Acquisition started

Acquire Run 2: S59436X820 ACQUIRING
06/02/88 20:10:00 + 0:03 Free sectors: 23691 Scan: 7 of 3900
Sample: 59436-03 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 20:38:34 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

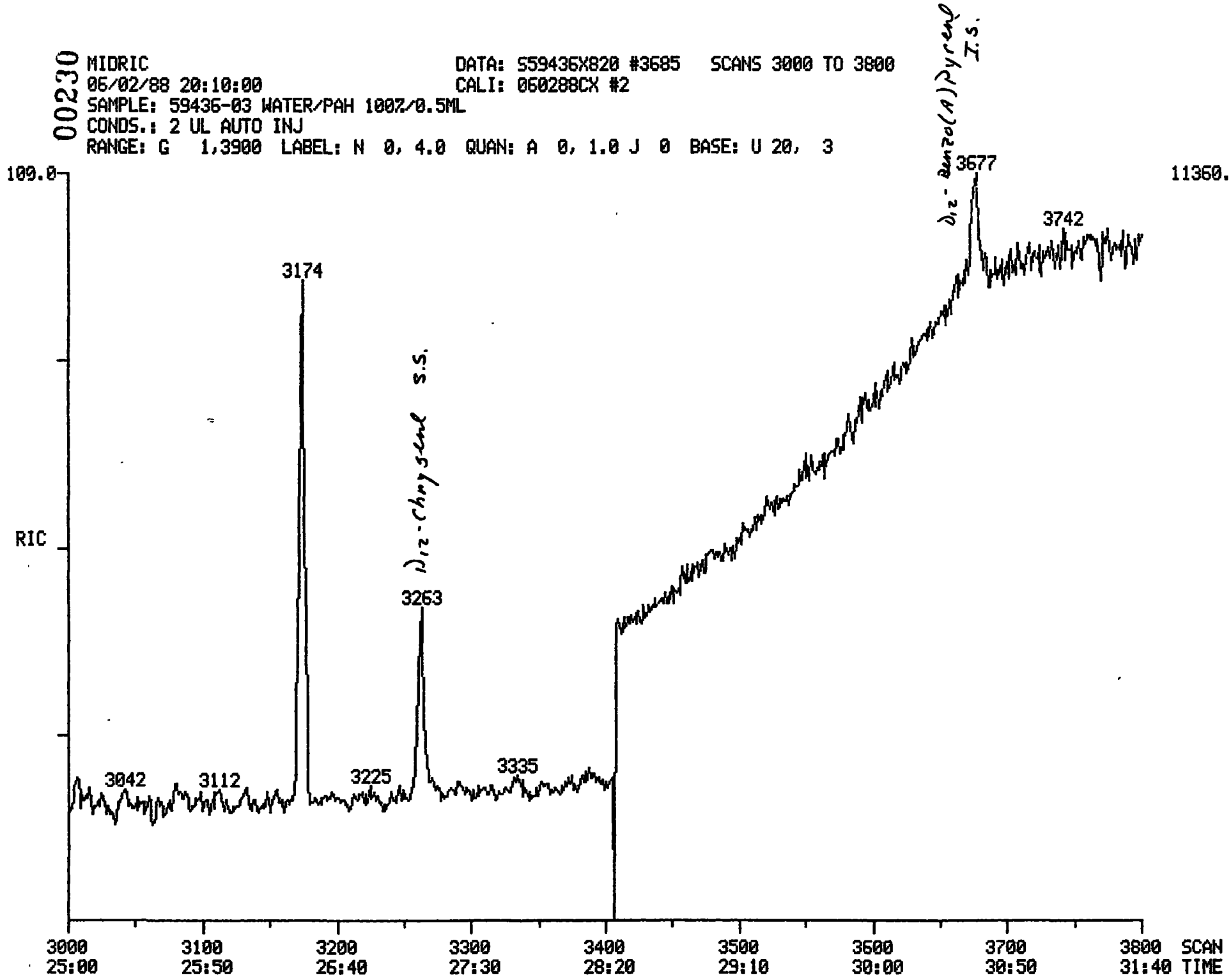
6/2/88 20:42:44
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00230

MIDRIC
06/02/88 20:10:00
SAMPLE: 59436-03 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: S59436X820 #3685 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X820

00231

Data: S59436X820.TI
06/02/88 20:10:00
Sample: 59436-03 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	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(A)PYRENE	252 PH# 13
15	BENZO(A)PYRENE	250 PH# 14

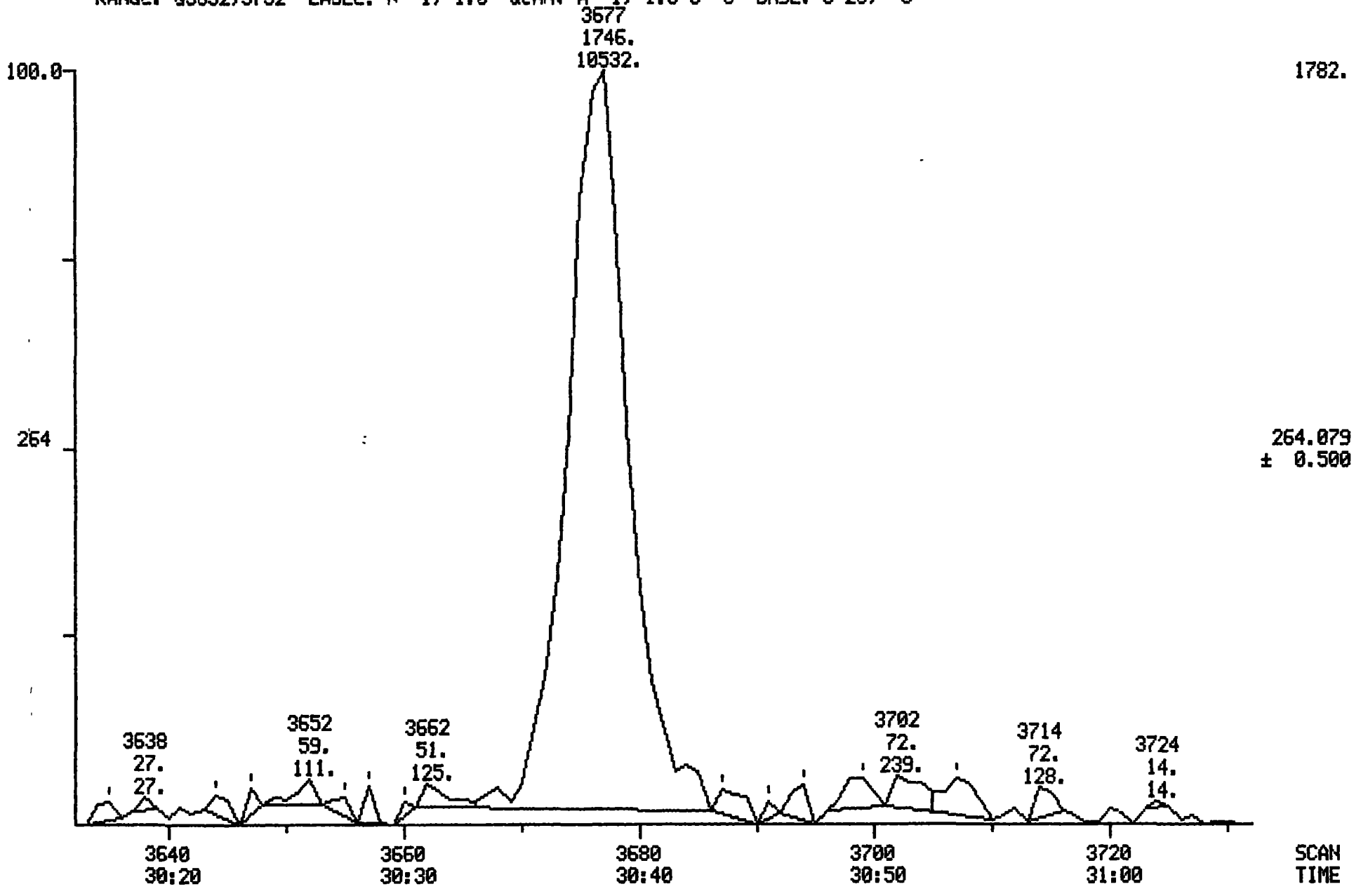
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3677	30:38	1	1.000	A VB	10532.	80.000	NG/ML	34.52
2	240	3263	27:11	1	0.887	A BB	13076.	64.726	NG/ML	27.93
3	228	3258	27:09	1	0.886	A BB	1142.	5.357	NG/ML	2.31
4	226	3247	27:03	1	0.883	A BB	132.	2.676	NG/ML	1.15
5	228	3271	27:15	1	0.890	A BB	785.	3.519	NG/ML	1.52
6	226	3264	27:12	1	0.888	A BB	887.	15.122	NG/ML	6.52
7	252	3582	29:51	1	0.974	A BB	372.	1.682	NG/ML	0.73
8	250	3582	29:51	1	0.974	A BB	1204.	22.575	NG/ML	9.74
9	252	3588	29:54	1	0.976	A BB	268.	1.212	NG/ML	0.52
10	252	3595	29:57	1	0.978	A BB	246.	1.112	NG/ML	0.48
11	250	3593	29:56	1	0.977	A BB	546.	10.238	NG/ML	4.42
12	252	3616	30:08	1	0.983	A BB	438.	2.224	NG/ML	0.96
13	250	3611	30:05	1	0.982	A BB	420.	9.653	NG/ML	4.16
14	252	3684	30:42	1	1.002	A VB	918.	5.018	NG/ML	2.17
15	250	3684	30:42	1	1.002	A BB	416.	6.660	NG/ML	2.87

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	64.73	80.00	1.242	1.535	0.81
3	27:08	1.00	0.885	1.00	5.36	80.00	0.108	1.619	0.07
4	27:08	1.00	0.885	1.00	2.68	80.00	0.013	0.375	0.03
5	27:15	1.00	0.888	1.00	3.52	80.00	0.075	1.696	0.04
6	27:15	1.00	0.888	1.00	15.12	80.00	0.084	0.446	0.19
7	29:56	1.00	0.976	1.00	1.68	80.00	0.035	1.680	0.02
8	29:56	1.00	0.976	1.00	22.58	80.00	0.114	0.405	0.28
9	29:59	1.00	0.977	1.00	1.21	80.00	0.025	1.680	0.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	29:59	1.00	0.977	1.00	1.11	80.00	0.023	1.680	0.01
11	29:59	1.00	0.977	1.00	10.24	80.00	0.052	0.405	0.13
12	29:41	1.02	0.982	1.00	2.22	80.00	0.042	1.496	0.03
13	29:41	1.01	0.982	1.00	9.65	80.00	0.040	0.330	0.12
14	30:44	1.00	1.002	1.00	5.02	80.00	0.087	1.390	0.06
15	30:44	1.00	1.002	1.00	6.66	80.00	0.039	0.474	0.08

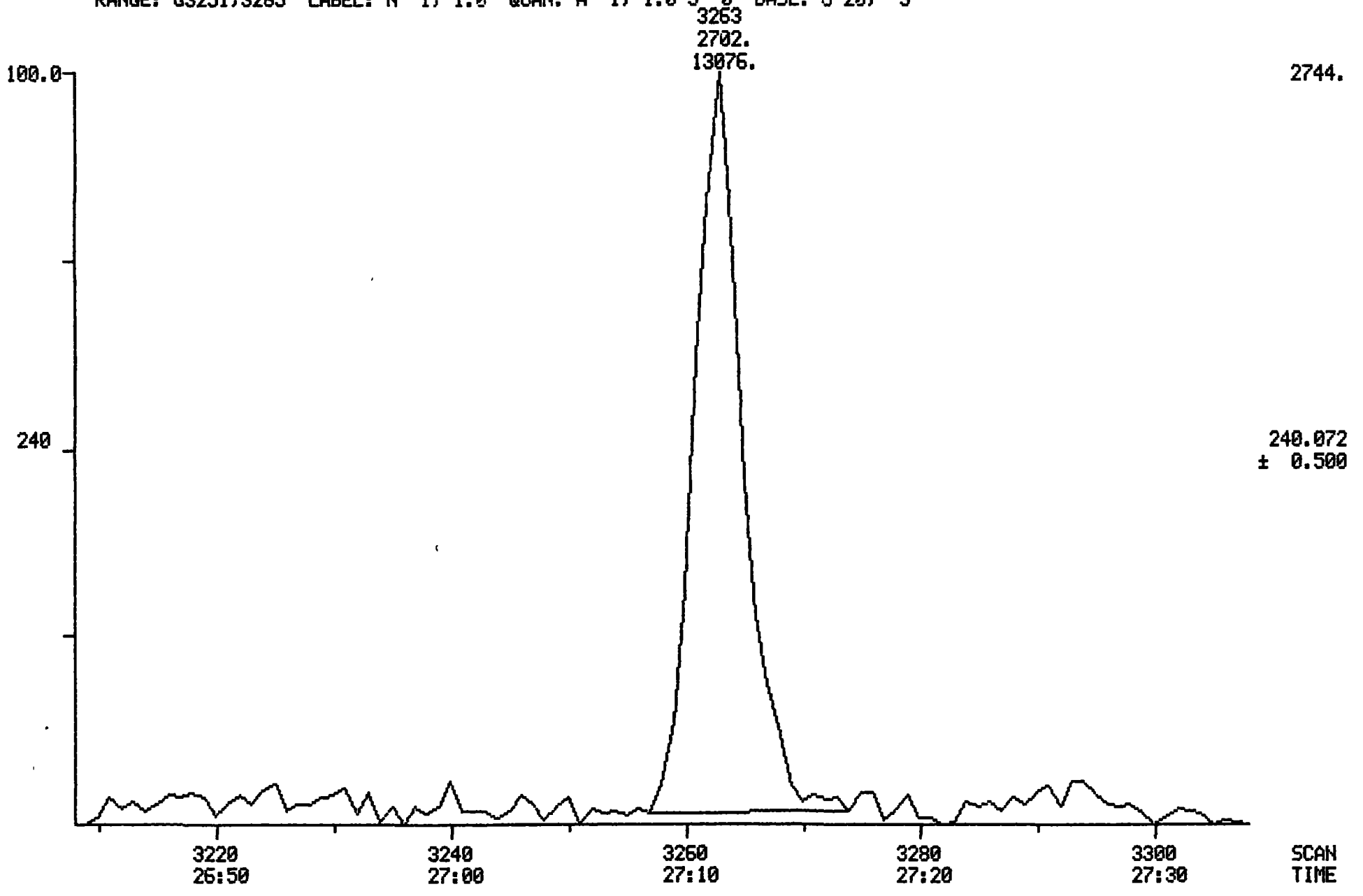
00233

MIDMASS CHROMATOGRAM DATA: S59436X820 #3682 SCANS 3632 TO 3732
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 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



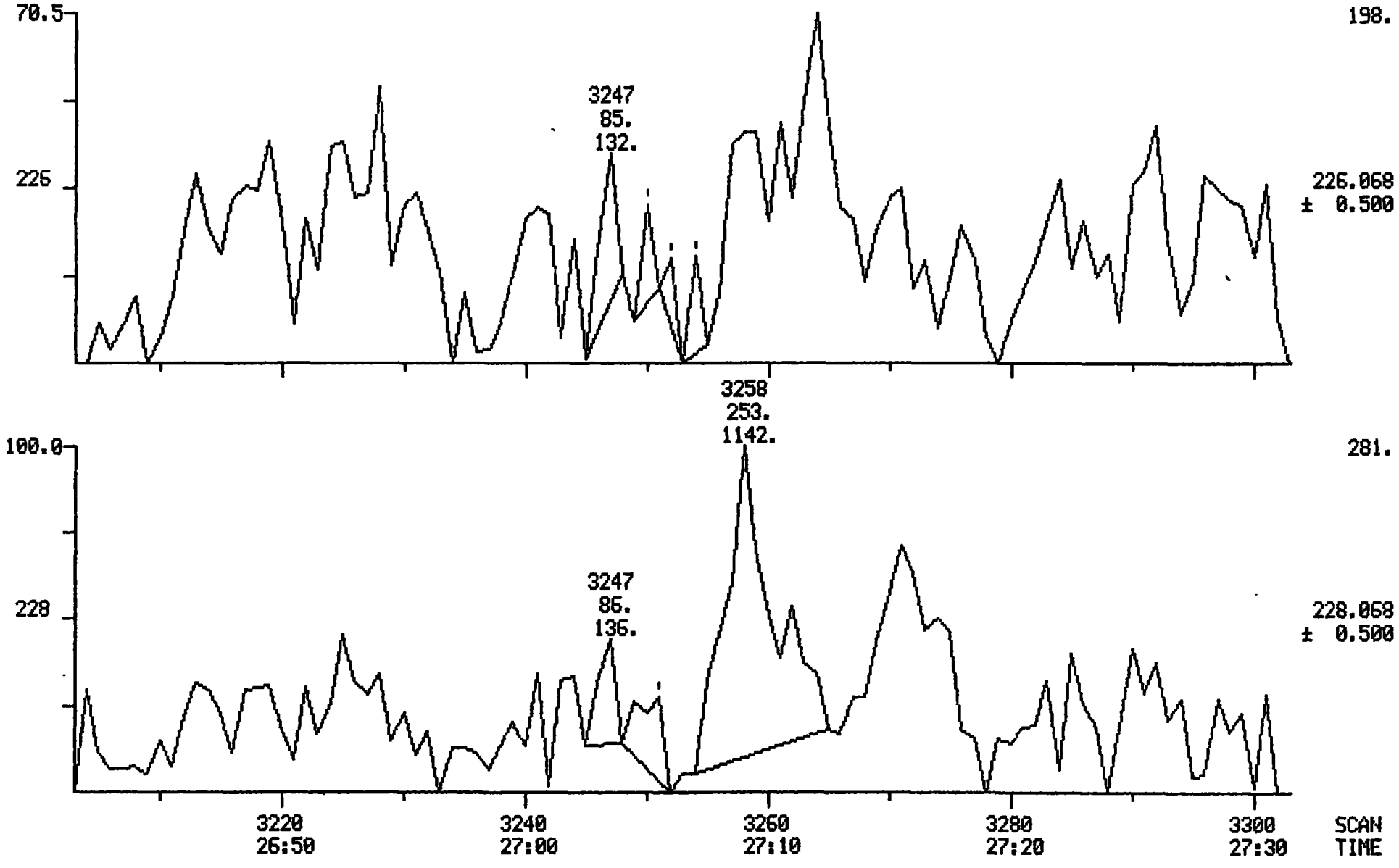
00234

MIDMASS CHROMATOGRAM DATA: S59436X820 #3258 SCANS 3208 TO 3308
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3251,3265 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



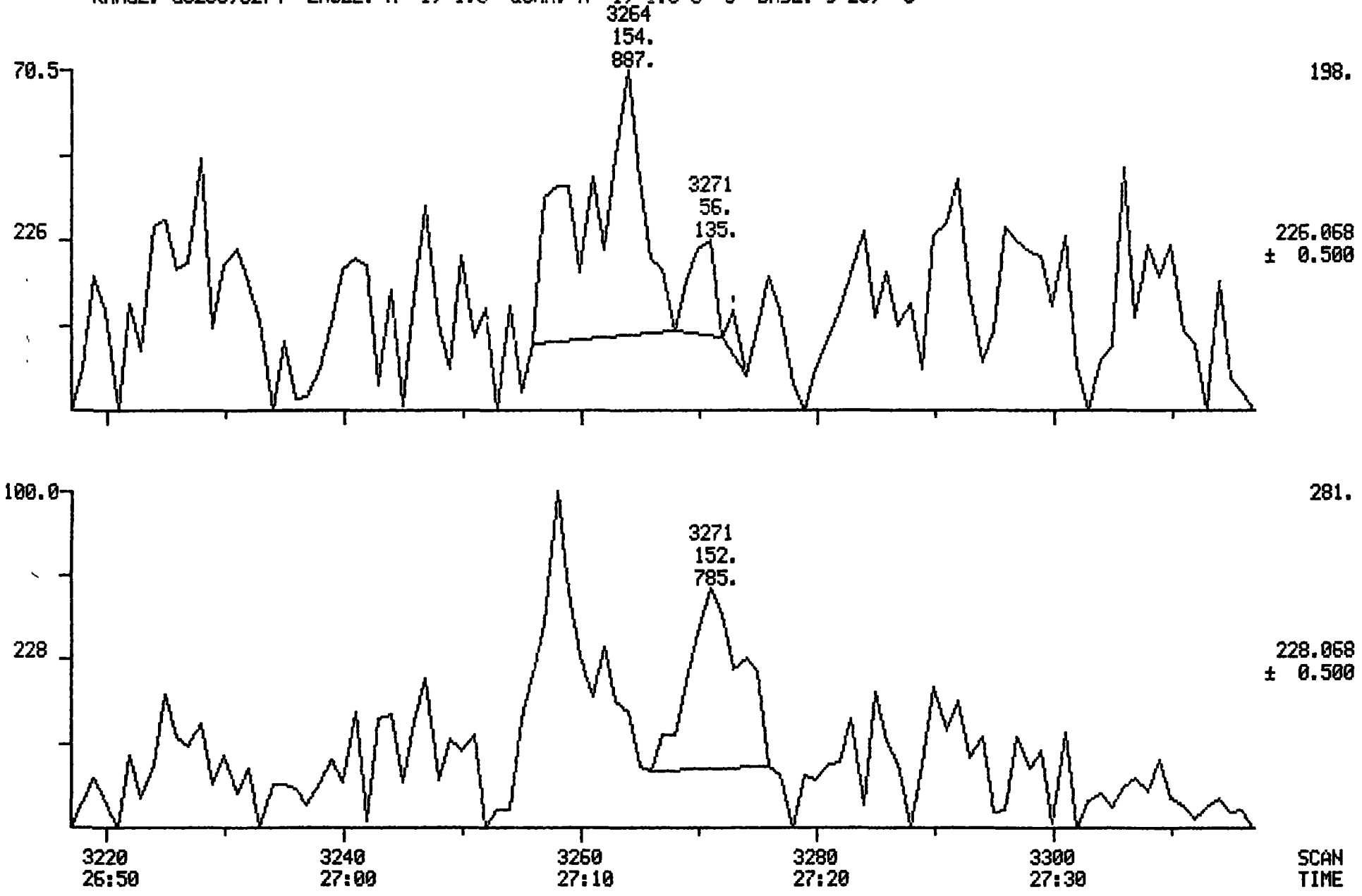
00235

MIDMASS CHROMATOGRAMS DATA: 559436X820 #3253 SCANS 3203 TO 3303
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3246,3260 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



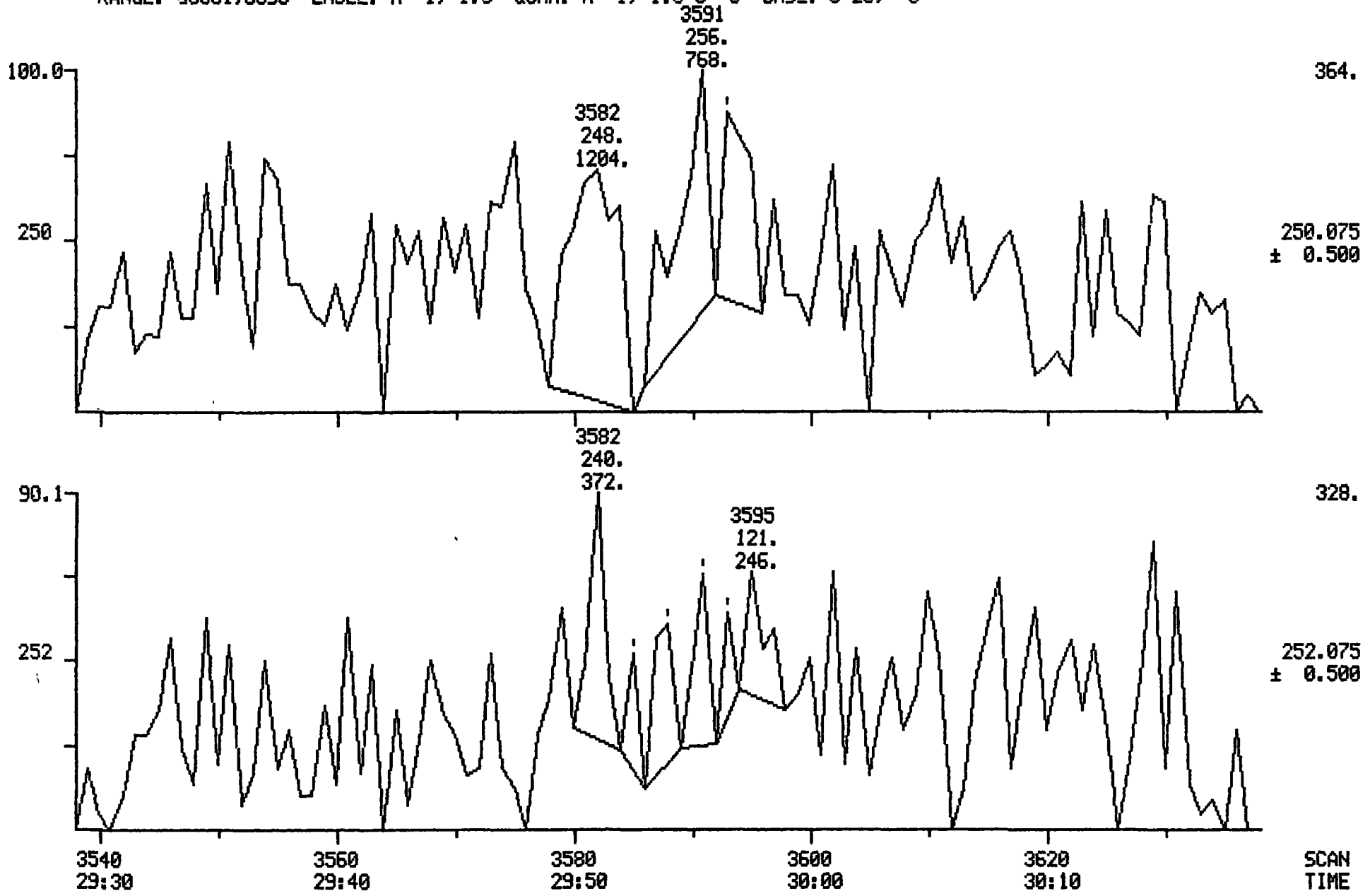
00236

MIDMASS CHROMATOGRAMS DATA: S59436X820 #3267 SCANS 3217 TO 3317
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3260,3274 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



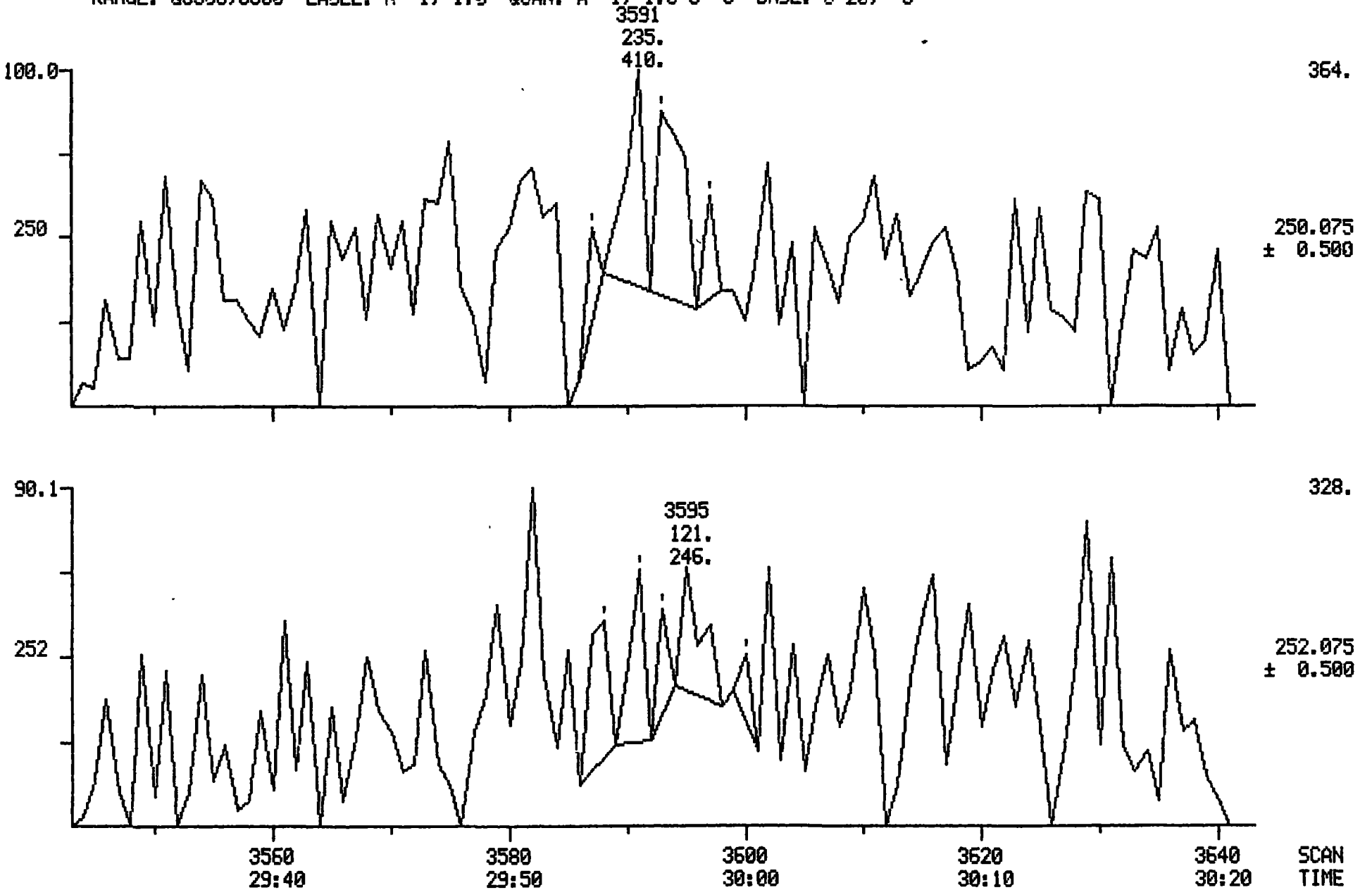
00237

MIDMASS CHROMATOGRAMS DATA: S59436X820 #3588 SCANS 3538 TO 3638
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3581,3595 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



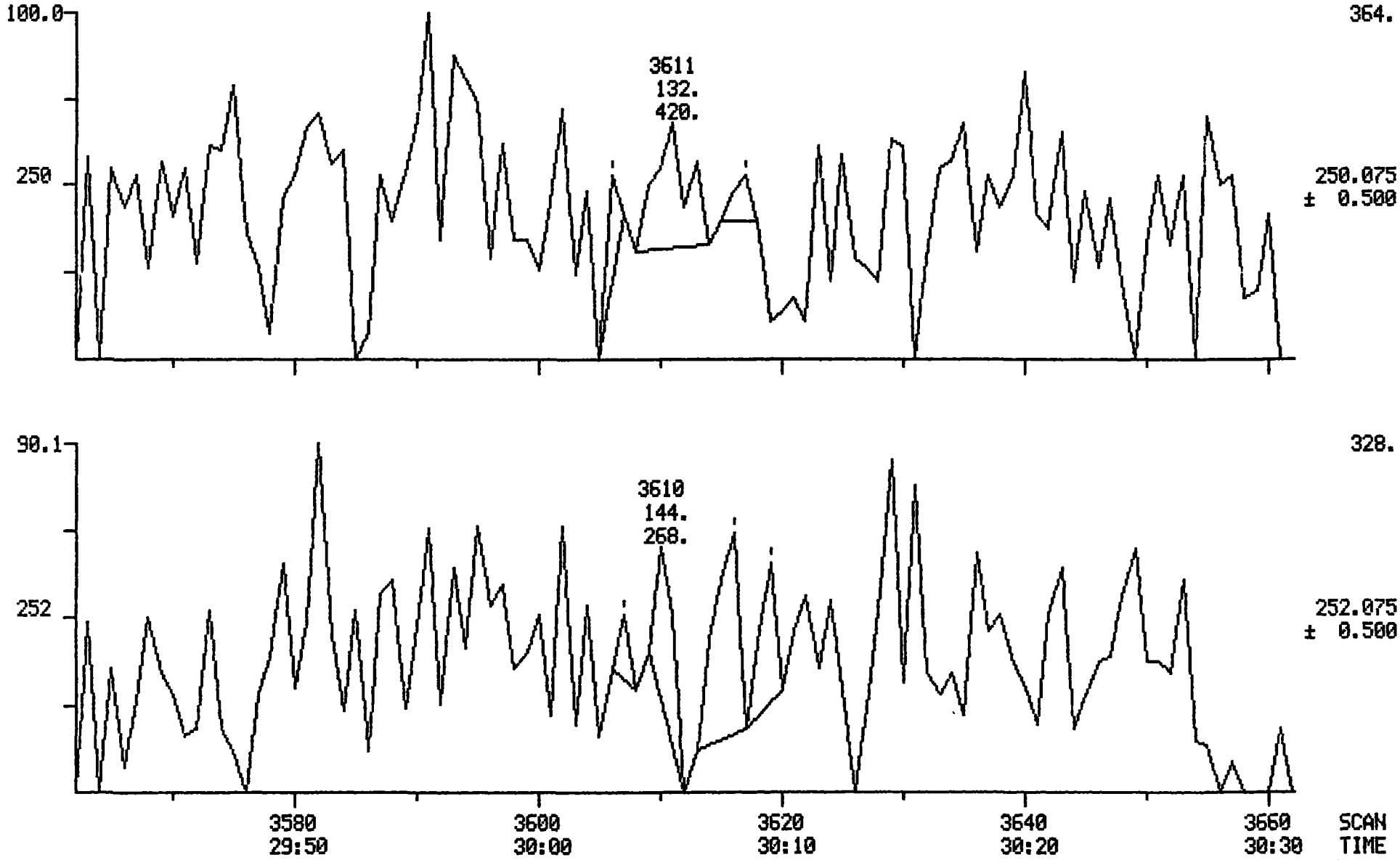
00238

MIDMASS CHROMATOGRAMS DATA: S59436X820 #3593 SCANS 3543 TO 3643
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3586,3600 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



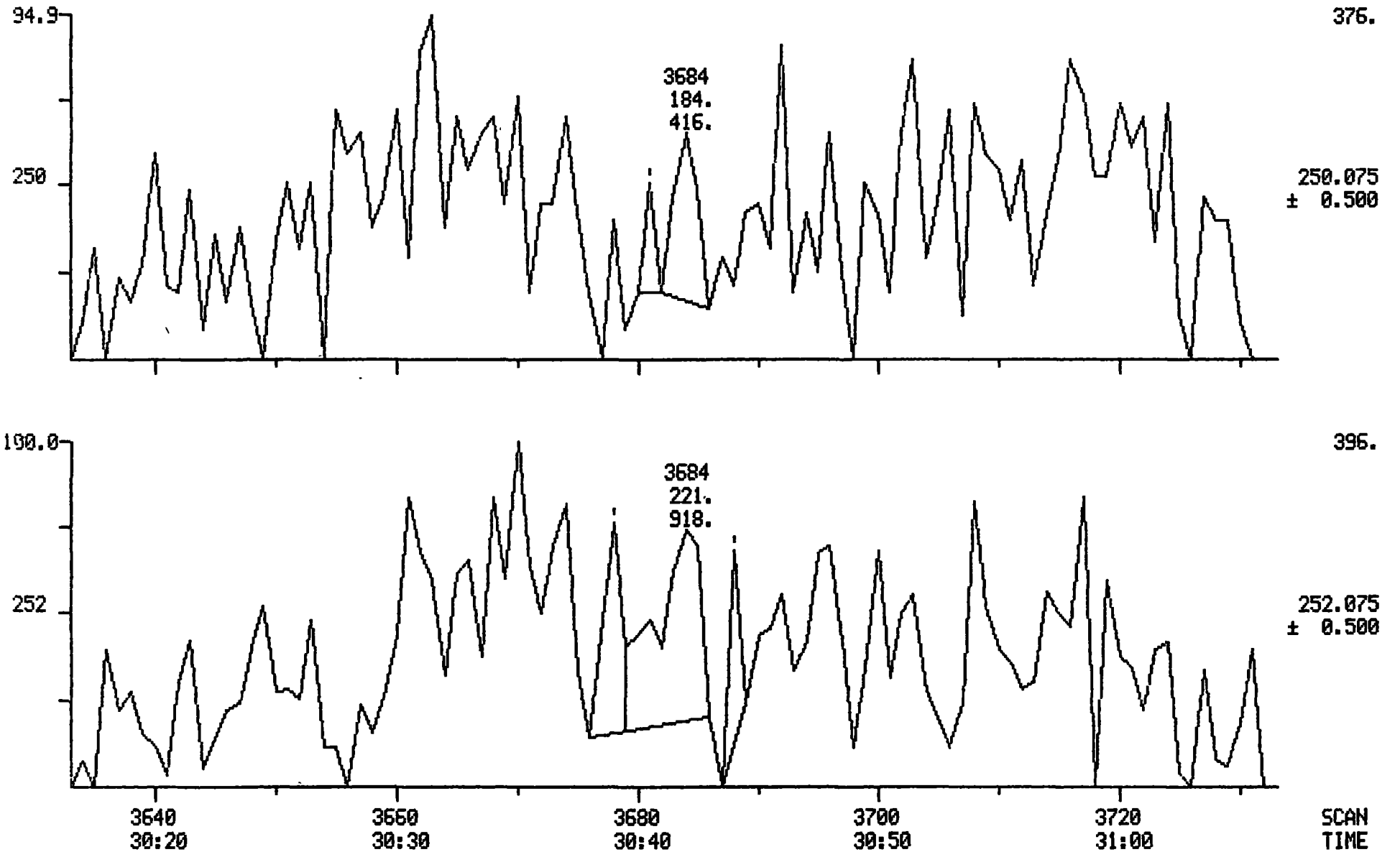
00239

MIDMASS CHROMATOGRAMS DATA: S59436X820 #3612 SCANS 3562 TO 3662
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3605,3619 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



C0240

MIDMASS CHROMATOGRAMS DATA: S59436X820 #3683 SCANS 3633 TO 3733
06/02/88 20:10:00 CALI: 060288CX #2
SAMPLE: 59436-03 WATER/PAH 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3676,3690 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X820

Data: S59436X820.TI
06/02/88 20:10:00
Sample: 59436-03 WATER/PAH 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

00241

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	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(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	3677	30:38	1	1.000	A VB	10532.	80.000	NG/ML	34.52
2	240	3263	27:11	1	0.887	A BB	13076.	64.726	NG/ML	27.93
3	228	3258	27:09	1	0.886	A BB	1142.	5.357	NG/ML	2.31
4	226	3247	27:03	1	0.883	A BB	132.	2.676	NG/ML	1.15
5	228	3271	27:15	1	0.890	A BB	785.	3.519	NG/ML	1.52
6	226	3264	27:12	1	0.888	A BB	887.	15.122	NG/ML	6.52
7	252	3582	29:51	1	0.974	A BB	372.	1.682	NG/ML	0.73
8	250	3582	29:51	1	0.974	A BB	1204.	22.575	NG/ML	9.74
9	252	3588	29:54	1	0.976	A BB	268.	1.212	NG/ML	0.52
10	252	3595	29:57	1	0.978	A BB	246.	1.112	NG/ML	0.48
11	250	3593	29:56	1	0.977	A BB	546.	10.238	NG/ML	4.42
12	252	3616	30:08	1	0.983	A BB	438.	2.224	NG/ML	0.96
13	250	3611	30:05	1	0.982	A BB	420.	9.653	NG/ML	4.16
14	252	3684	30:42	1	1.002	A VB	918.	5.018	NG/ML	2.17
15	250	3684	30:42	1	1.002	A BB	416.	6.660	NG/ML	2.87

COLUMN 1: [illegible]
COLUMN 2: [illegible]

59436-03
20%

[illegible] AMOUNT [illegible]

00242

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
047	DBC (surrogate)	.0150	.1	.0311	.3	NA

DBC

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

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) [illegible]%

59936-03

00243

LIB E T	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
012	p,p'-DDT	12.767	12.917	6	[illegible]	[illegible]	[illegible] ml
022	TOXAPHENE (peak 3)	12.483	12.617	6	[illegible]	[illegible]	[illegible] ml
043	AROCLOR 1260 (peak 4)	13.183	13.317	6	[illegible]	[illegible]	[illegible] ml
047	DBC (surrogate)	26.833	26.050	7	[illegible]	[illegible]	[illegible] ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

59436-03

00244

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
004	delta-BHC	2.450	2.467	9	4110	.0004	ug/ml
017	ENDOSULFAN SULFATE	16.550	16.537	14	52312	.0059	ug/ml
023	AROCLOR 1016(peak 1)	1.267	1.293	6	391	.0013	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.653	~	5630	.0096	ug/ml
026	AROCLOR 1221(peak 1)	1.250	1.287	6	391	.0008	ug/ml
027	AROCLOR 1232(peak 1)	1.250	1.283	6	391	.0012	ug/ml
029	AROCLOR 1242(peak 1)	1.250	1.287	6	391	.0014	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	7	5630	.0102	ug/ml
035	AROCLOR 1254(peak 1)	5.017	4.950	11	22462	.0218	ug/ml
047	DBC (surrogate)	22.383	22.317	15	169848	.0311	ug/ml
048	ENDRIN KETONE	22.267	22.317	15	169848	.0042	ug/ml
052	DIALLATE	1.230	1.287	6	391	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

* Sample Name: 5943c 03 [illegible] Data File: [illegible]
* Date: 05-06-1988 19:11:21 Method: M:ADPI
* Interface: 10 Cycle#: 16 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: 4

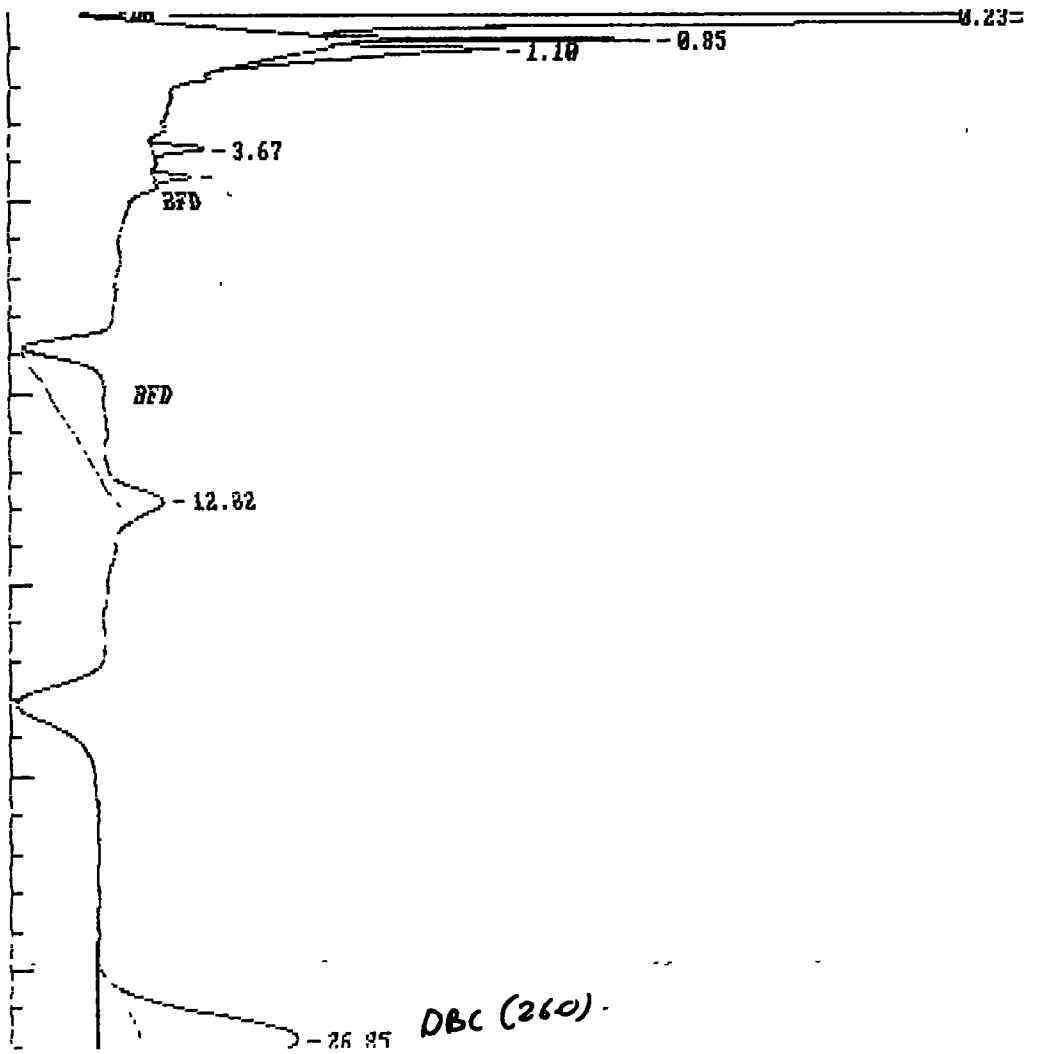
Starting Delay: 0.00 Run Time: 35.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	640193	76.5606	1	133029	100.000	4.8
2	0.85	10116	1.2098	1	2213	1.580	4.6
3	1.10	22746	2.7202	1	1297	3.553	17.5
4	3.67	4442	0.5312	1	354	0.694	12.5
5	4.42	2590	0.3097	1	244	0.404	10.6
6	12.82	63697	7.6175	1	322	9.950	197.9
7	26.85	92408	11.0510	1	1081	14.434	85.4

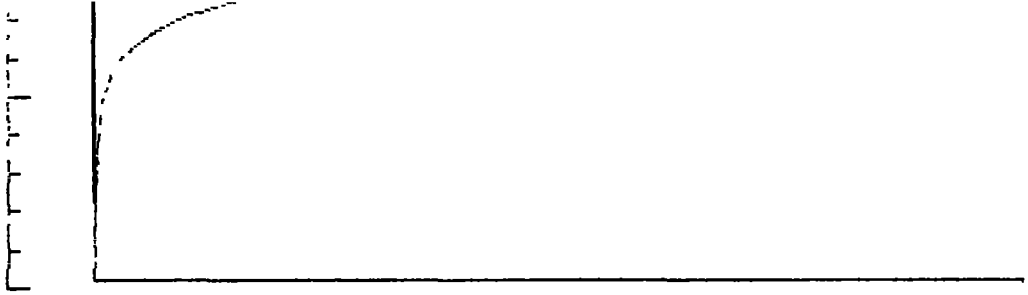
SS 5/11/88

Total Area: 836191 Area Reject: 1000 One sample per 1.000 sec

Data File = J:AB12616.PTS Printed on 05-08-1988 at 12:13:33
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



DBC (260)



[illegible]

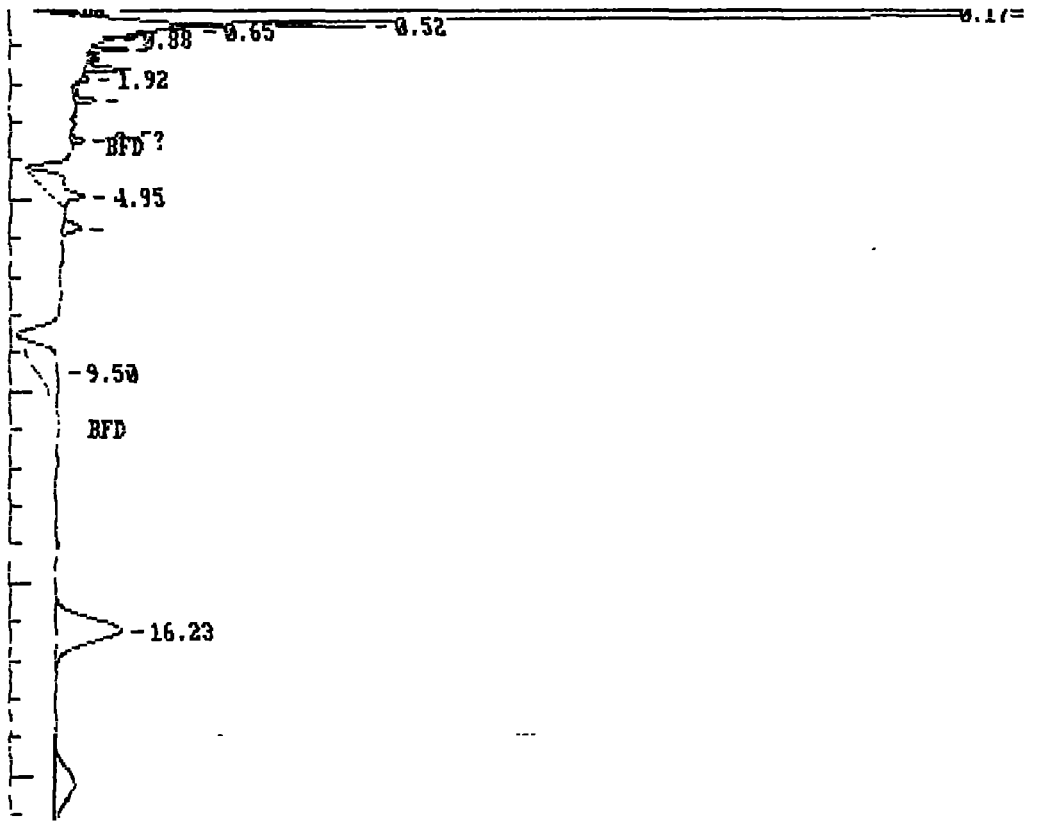
```
******************************* 05-08-1988 12:17:25 Version 2.1 ******************************
* Sample Name: 59136 #3 20%                                  Data File: J:5B12616                *
* Date: 05-06-1988 17:55:14 Method: M:SSSI                                                       *
* Interface: 12  Cycle#:  14   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
```

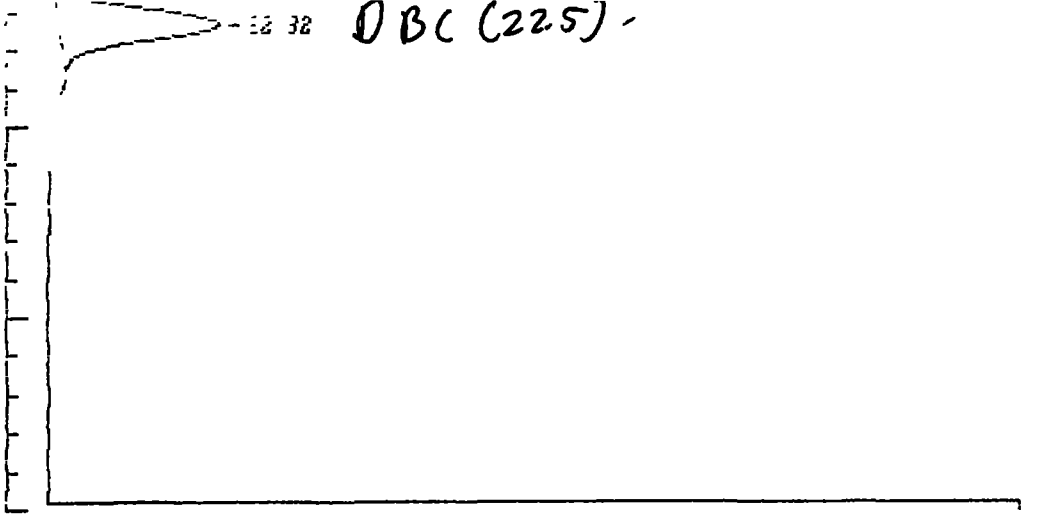
Pk No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1026700	76.7462	1	219104	100.000	4.7
2	0.52	9569	0.7153	1	3547	0.932	2.7
3	0.65	3224	0.2410	1	823	0.314	4.0
4	0.88	1193	0.0892	1	248	0.116	1.8
5	1.13	3637	0.2719	1	686	0.354	5.3
7	1.65	5630	0.4209	1	845	0.548	6.7
8	1.92	1686	0.1410	1	183	0.184	10.3
9	2.47	4110	0.3072	1	417	0.400	9.9
10	3.52	2026	0.1514	1	240	0.197	8.5
11	4.95	22462	1.6790	1	592	2.188	37.9
12	5.77	5237	0.3915	1	360	0.510	14.5
13	9.50	31753	2.3735	1	378	3.093	83.9
14	16.23	50512	3.7758	1	1200	4.920	42.1
15	22.32	169848	12.6962	1	3002	16.543	56.6

SS
5/11/88

Total Area: 1337786 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:5B12616.PTS Printed on 05-08-1988 at 12:14:01
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts




12 32
DBC (225)

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-04

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-04
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 :	04/27/88
Conc./Dilution Factor :	2.0
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		20 U	79-34-5	1,1,2,2-Tetrachloroethane		10 U
74-83-9	Bromomethane		20 U	78-87-5	1,2-Dichloropropane		10 U
75-01-4	VinylChloride		20 U	10061-02-6	Trans-1,3-Dichloropropene		10 U
75-00-3	Chloroethane		20 U	79-10-6	Trichloroethene		10 U
75-09-2	MethyleneChloride	7.5	J B	124-48-1	Dibromochloromethane		10 U
67-64-1	Acetone		20 U	79-00-5	1,1,2-Trichloroethane		10 U
75-15-0	CarbonDisulfide		10 U	71-43-2	Benzene	400	
75-35-4	1,1-Dichloroethene		10 U	10061-01-5	cis-1,3-Dichloropropene		10 U
75-34-3	1,1-Dichloroethane		10 U	110-75-8	2-Chloroethylvinylether		20 U
156-60-5	Trans-1,2-Dichloroethene		10 U	75-25-2	Bromoform		10 U
67-66-3	Chloroform		10 U	591-78-6	2-Hexanone		20 U
107-06-2	1,2-Dichloroethane		10 U	108-10-1	4-Methyl-2-Pentanone		20 U
78-93-3	2-Butanone		20 U	127-18-4	Tetrachloroethene		10 U
71-55-6	1,1,1-Trichloroethane		10 U	108-88-3	Toluene		10 U
56-23-5	CarbonTetrachloride		10 U	108-90-7	Chlorobenzene		10 U
108-05-4	VinylAcetate		20 U	100-41-4	Ethylbenzene		10 U
75-27-4	Bromodichloromethane		10 U	100-42-5	Styrene		10 U
					Total Xylenes		10 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
59436-04

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.				
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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
59436-04

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	3.8	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
59436-04

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	9.5 B
2. 108-88-3	Methyl Benzene	BNA	369	6.0 B
3.	Oxygenated Hydrocarbon	BNA	393	19 B
4. 109-05-7	2-Methyl Piperidine	BNA	412	4.9
5.	Oxygenated Hydrocarbon	BNA	469	21 B
6. 24070-77-7	2-Methyl Cyclopentanol	BNA	531	11
7. 622-39-9	2-Propylpyridinamine	BNA	691	4.5
8. 1824-81-3	6-Methyl-2-Pyridinamine	BNA	794	29
9.	Unknown	BNA	896	18
10. 2591-86-8	1-Piperidinecarboxaldehyde	BNA	1038	12
11. 766-52-9	1-Ethyl-2-Methyl Piperidine	BNA	1083	18
12. 1003-68-5	5-Methyl-2(1H)-Pyridinone	BNA	1095	25
13.	Amine	BNA	1122	6.8
14. 5022-29-7	N-Ethyl-1H-Isoindole-1,3(2H)-	BNA	1267	4.8
15.	Dione			
16.	Unknown	BNA	1284	14
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

00253

Sample: 59436-04
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	46.7	47	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
	10 U	Pyridine	110-86-1
16.0		2-Picoline	109-06-8
56.0		3 & 4-Picoline	
11.0		2,6-Lutidine	
4.6	J	2-Ethyl Pyridine	
42.0		2,4 & 2,5-Lutidine	
18.0		2,3-Lutidine	
15.0		3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
47.0		3,5-Lutidine	
7.9	J	3,4-Lutidine	
7.9	J	2-Methyl-5-Ethyl Pyridine	
3.3	J	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: 59436-04
Date Analyzed: 06/02/88

Units: ug/L
Run Factor: 0.131

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	67.8	85	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:
59436-04

00255

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

4/27/88 21:40:13 SCAN 1 OF 1650 00256
Acquisition started

Acquire
04/27/88 21:40:00 + 0:04
Sample: 59436-04 2.5ML/5ML
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Run 0:S59436Z822
Free sectors: 6243
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 4 of 1650
Weight: 0.000
Acct. No:

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

Loaded GC Desc:CV Current GC oven tmp: -9 DegC Injector : 150 DegC
Current GC Desc:CV GC elapsed time : 0: 3 min Int.oven : 150 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	-10 - -10	-	1.0	1.0	Sweep/Split	32.7	0.0
2	-10 - 100	6.0	18.3	19.3	Divert	32.7	0.0
3	100 - 170	8.3	8.4	27.7			
4	170 - 170	-	5.0	32.7			

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

Low mass: 35 Up: 0.95 L* Top: 0.00
High mass: 300 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 18 Samp Int (ms): 0.200 Peak Width: 1000.
Frag S/P: 10 Actual: 9 Samp Int (ms): 0.400 Inten/ion: 2

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

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

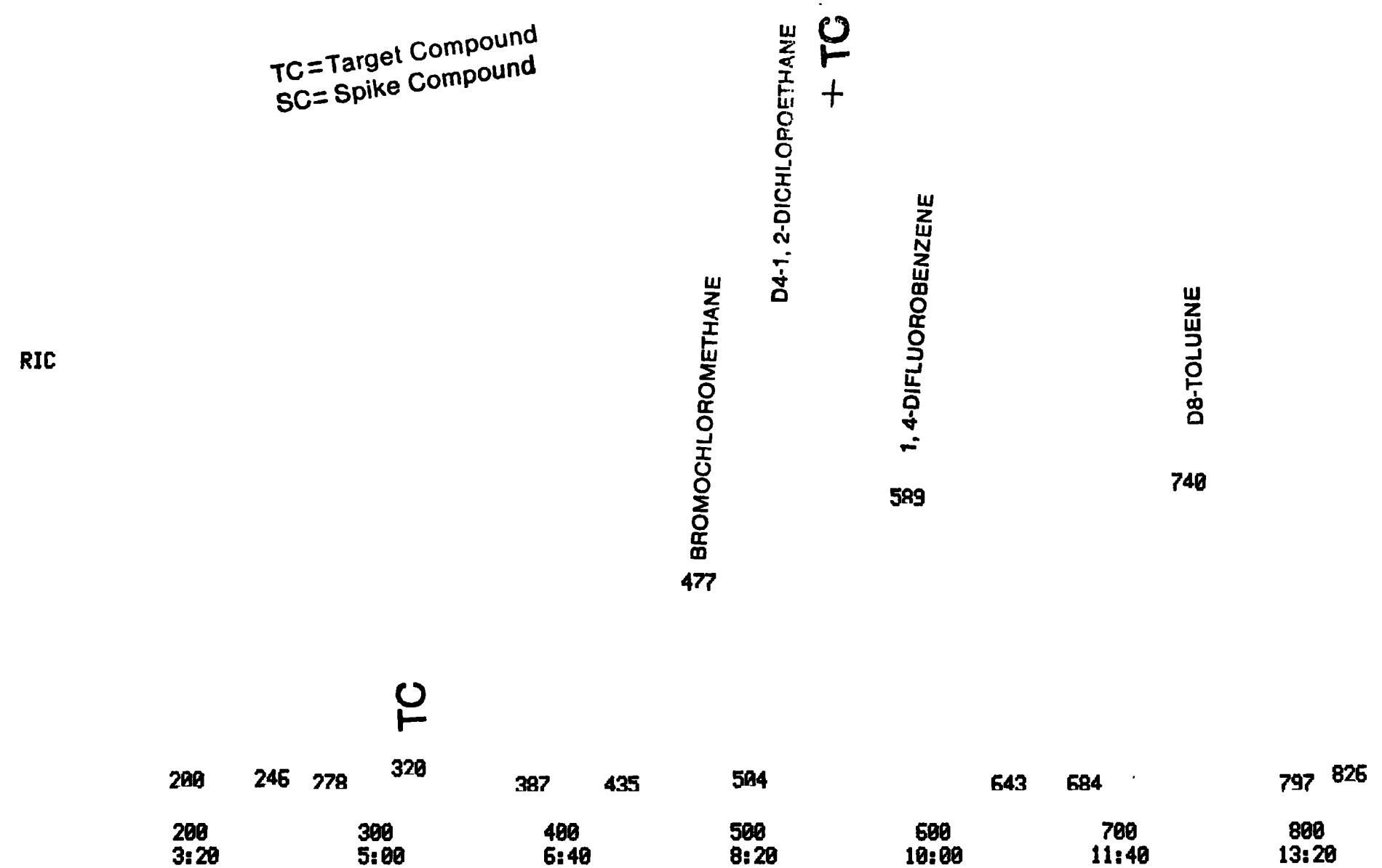
Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/27/88 22:07:46
ACQUISITION COMPLETED
SCANS 1 TO 1650 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	1650	38.4	1650.0	2.3	25529. 15.	15.

RIC
04/27/88 21:40:00
SAMPLE: 59436-04 2.5ML/5ML
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436Z822 #4 SCANS 100 TO 850
CALI: 042788CZ #5 OUT OF 100 TO 1500



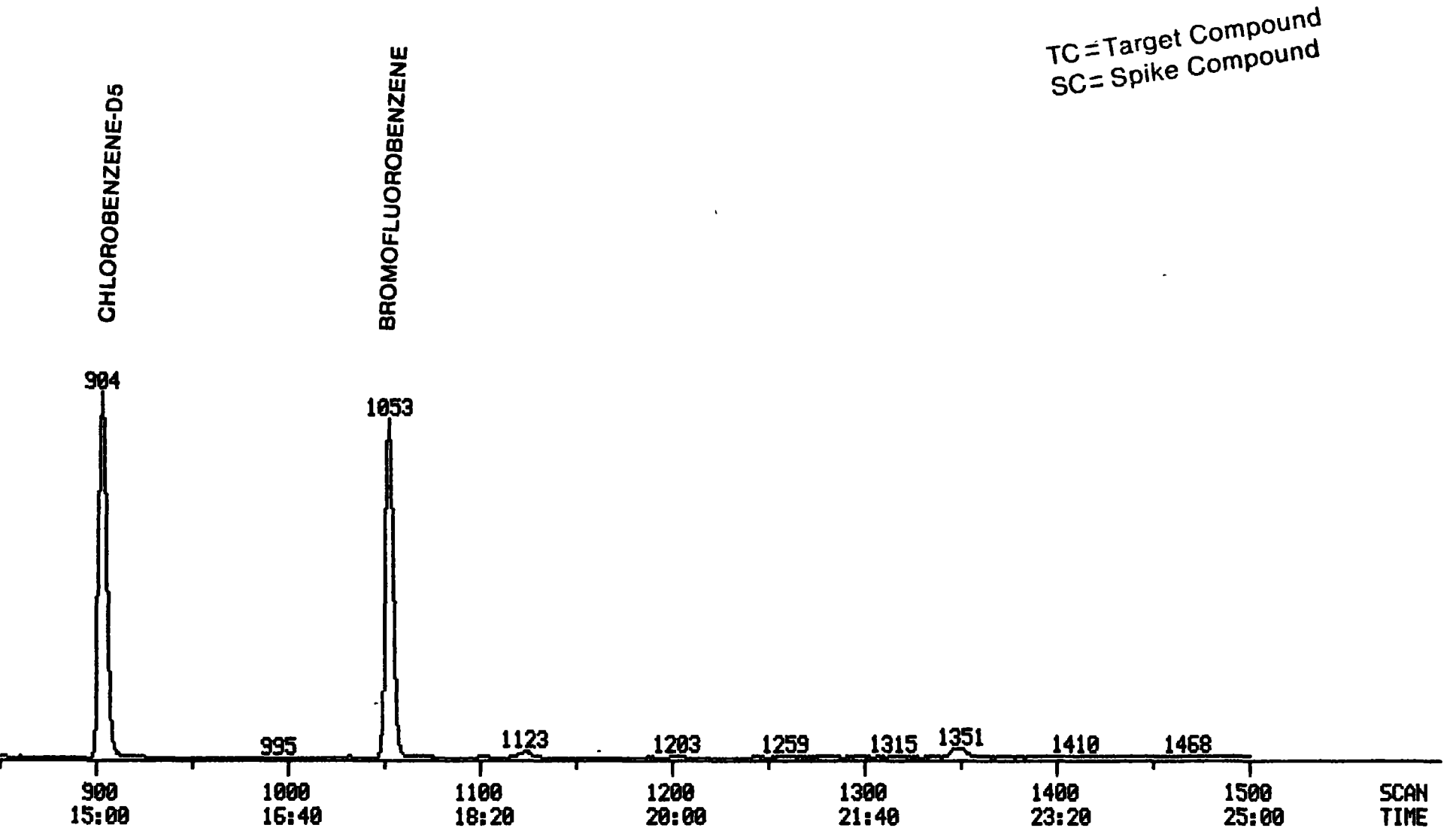
RIC
04/27/88 21:40:00
SAMPLE: 59436-04 2.5ML/5ML
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 5594362822 #4 SCANS 850 TO 1500
CALI: 042788CZ #5 OUT OF 100 TO 1500

00258

100.0

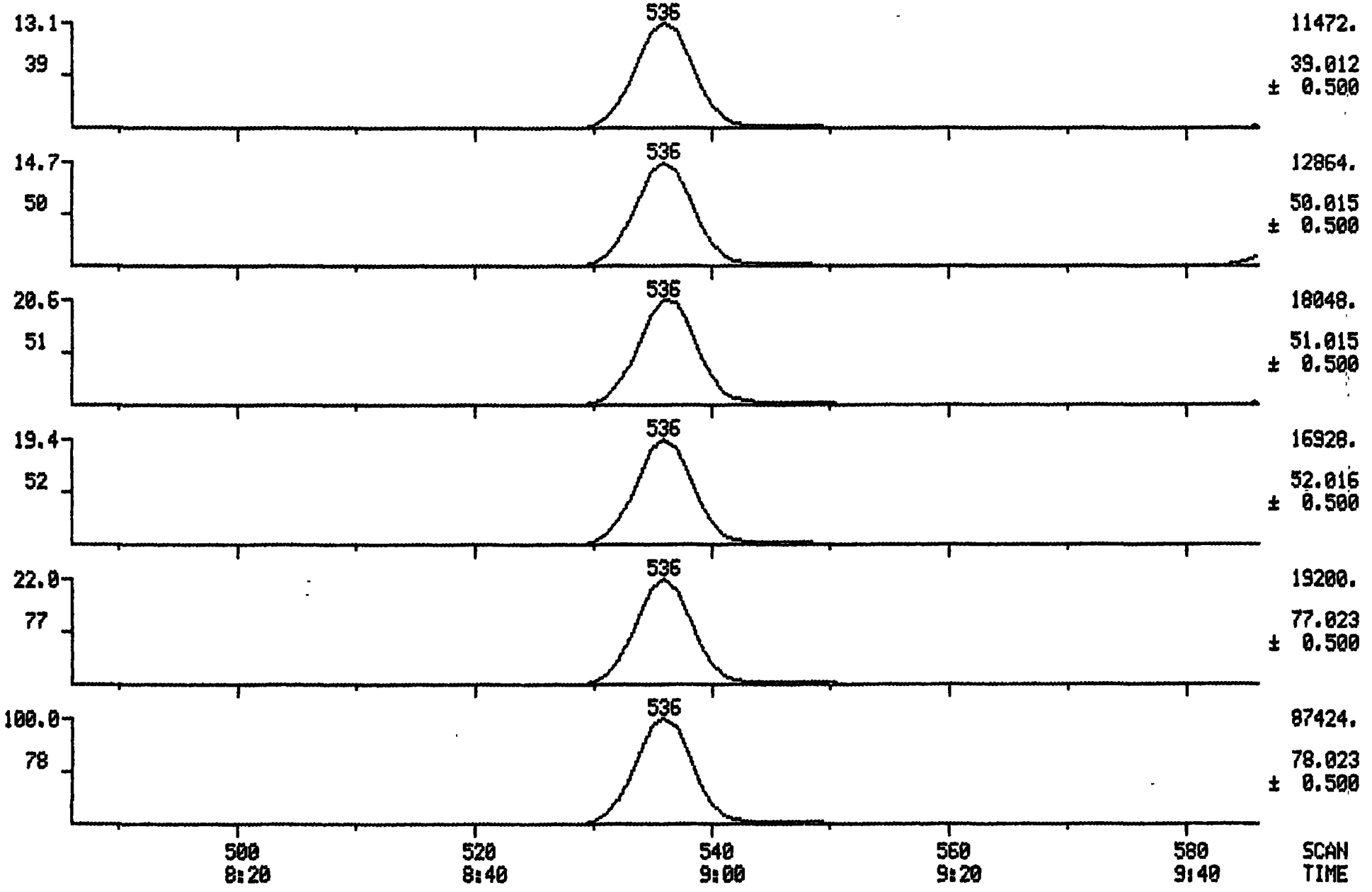
210432.



00259

MASS CHROMATOGRAMS
04/27/88 21:40:00
SAMPLE: 59436-04 2.5ML/5ML
CONDS.: GC DESC CV
C165 BENZENE 78 V2# 60 71-43-2
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S594362822 #536 SCANS 486 TO 586
CALI: 042788CZ #5



PROCEDURE: TCA DIAGNOSTIC REPORT : : 5
DATA FILE: S59436Z822
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00260
REPORT: ISO1

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	5	1	73	ISO1/TC01
3	3	1	0	18	5	1	63	ISO2/TC02
3	3	1	0	6	3	1	0	ISO3/TC03
1	1	1	0	9	2	1	0	ISO4/TC04

41 COMPOUNDS PROCESSED, 10 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-476	477	477	.	1	990	.	128	477	.	1
2	V1	10	-107	105	.	.	.	.	.	50	.	.	.
3	V1	25	-122	120	.	.	.	.	.	62	.	.	.
4	V1	15	-156	154	.	.	.	.	.	94	.	.	.
5	V1	35	-170	168	.	.	.	.	.	64	.	.	.
6	V1	80	-257	256	257	1	1	865	.	96	257	.	1
7	V1	65	-265	264	.	.	.	.	.	76	.	.	.
8	V1	50	-282	281	281	.	1	986	.	58	.	.	.
9	V1	45	-321	321	320	-1	1	978	.	84	320	.	1
10	V1	95	-346	346	.	.	.	.	.	96	.	.	.
11	V1	90	-392	392	.	.	.	.	.	63	391	.	1
12	V2	25	-412	413	413	.	1	859	.	43	414	1	1
13	V2	10	-467	468	.	.	.	.	.	72	.	.	.
14	V2	1	-588	589	589	.	1	999	.	114	589	.	1
15	V3	1	-903	904	904	.	1	996	.	117	904	.	1
16	V1	100	-494	495	.	.	.	.	.	83	.	.	.
17	V2	15	-498	499	.	.	.	.	.	97	.	.	.
18	V2	20	-513	514	.	.	.	.	.	117	.	.	.
19	V2	60	-536	537	536	-1	1	990	.	78	536	.	1
20	V1	2	-537	538	.	.	.	.	.	65	537	.	1
21	V1	110	-545	546	.	.	.	.	.	62	.	.	.
22	V2	45	-608	609	.	.	.	.	.	130	607	.	1
23	V2	35	-631	632	.	.	.	.	.	63	.	.	.
24	V2	30	-669	670	.	.	.	.	.	83	.	.	.
25	V2	40	-717	718	.	.	.	.	.	75	.	.	.
26	V3	2	-740	741	740	-1	1	974	.	98	740	.	1
27	V3	10	-742	743	.	.	.	.	.	58	.	.	.
28	V3	35	-747	748	.	.	.	.	.	92	747	.	1
29	V2	65	-785	786	.	.	.	.	.	75	.	.	.
30	V2	55	-803	804	.	.	.	.	.	97	.	.	.
31	V3	20	-805	806	.	.	.	.	.	164	.	.	.
32	V3	15	-839	840	.	.	.	.	.	58	.	.	.
33	V2	50	-843	844	.	.	.	.	.	129	.	.	.
34	V3	40	-908	909	.	.	.	.	.	112	907	.	1
35	V3	50	-926	927	.	.	.	.	.	106	.	.	.
36	V3	75	-941	942	.	.	.	.	.	106	.	.	.
37	V3	60	-988	988	.	.	.	.	.	106	.	.	.
38	V3	55	-992	992	.	.	.	.	.	104	.	.	.
39	V2	80	-1010	1010	.	.	.	.	.	173	.	.	.
40	V3	3	-1053	1053	1053	.	1	975	.	95	1053	.	1
41	V3	25	-1087	1087	.	.	.	.	.	83	1085	.	1

Quantitation Report File: S59436Z822

Data: S59436Z822.TI
04/27/88 21:40:00
Sample: 59436-04 2.5ML/5ML
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Instrument: 4500
Analyst: CR

Weight: 0.000
Acct. No.:

C0261

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	C020	VINYL CHLORIDE	62	V1#	25	75-01-4
4	C015	BROMOMETHANE	94	V1#	15	74-83-9
5	C025	CHLOROETHANE	64	V1#	35	75-00-3
6	C045	1,1-DICHLOROETHENE	61	V1#	80	75-35-4
7	C040	CARBON DISULFIDE	76	V1#	65	75-15-0
8	C035	ACETONE	58	V1#	50	67-64-1
9	C030	METHYLENE CHLORIDE	84	V1#	45	75-09-2
10	TRANS-1,2-DICHLOROETHENE		61	V1#	95	156-60-5
11	C050	1,1-DICHLOROETHANE	63	V1#	90	75-34-3
12	C125	VINYL ACETATE	43	V2#	25	108-05-4
13	C110	2-BUTANONE	72	V2#	10	78-93-3
14	CI10	1,4-DIFLUOROBENZENE	114	IV2#	01	540-36-3
15	CI20	CHLOROBENZENE-D5	117	IV3#	01	3114-55-4
16	C060	CHLOROFORM	83	V1#	100CC	67-66-3
17	C115	1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
18	C120	CARBONTETRACHLORIDE	117	V2#	20	56-23-5
19	C165	BENZENE	78	V2#	60	71-43-2
20	CS15	1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
21	C065	1,2-DICHLOROETHANE	62	V1#	110	107-06-2
22	C150	TRICHLOROETHENE	130	V2#	45	79-01-6
23	C140	1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
24	C130	BROMODICHLOROMETHANE	83	V2#	30	75-27-4
25	C143	CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
26	CS05	TOLUENE-D8	98	SV3#	02	2037-26-5
27	C205	4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
28	C230	TOLUENE	92	V3#	35	108-88-3
29	C172	TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
30	C160	1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
31	C220	TETRACHLOROETHENE	164	V3#	20	127-18-4
32	C210	2-HEXANONE	58	V3#	15	591-78-6
33	C155	DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
34	C235	CHLOROBENZENE	112	V3#	40	108-90-7
35	C240	ETHYLBENZENE	106	V3#	50	100-41-4
36	M+P XYLENES		106	V3#	75	
37	O-XYLENE		106	V3#	60	
38	C245	STYRENE	104	V3#	55	100-42-5
39	C180	BROMOFORM	173	V2#	80	75-25-2
40	CS10	BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
41	C225	1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	477	7:57	1	1.000	A BB	34210.	50.000 UG/L	9.97
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	96	257	4:17	1	0.539	A BB	295.	0.345 UG/L	0.07
7	NOT FOUND								
8	NOT FOUND								
9	84	320	5:20	1	0.671	A BB	4540.	3.748 UG/L	0.75
10	NOT FOUND								
11	63	391	6:31	1	0.820	A BB	49.	0.029 UG/L	0.01
12	43	414	6:54	14	0.703	A BB	136.	0.094 UG/L	0.02
13	NOT FOUND								
14	114	589	9:49	14	1.000	A BB	167165.	50.000 UG/L	9.97
15	117	904	15:04	15	1.000	A BB	142041.	50.000 UG/L	9.97
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	78	536	8:56	14	0.910	A BB	502243.	201.862 UG/L	40.26
20	65	537	8:57	1	1.126	A BB	30856.	45.282 UG/L	9.03
21	NOT FOUND								
22	130	607	10:07	14	1.031	A BB	515.	0.453 UG/L	0.09
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	98	740	12:20	15	0.819	A BB	144296.	49.963 UG/L	9.97
27	NOT FOUND								
28	92	747	12:27	15	0.826	A BB	778.	0.463 UG/L	0.09
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	112	907	15:07	15	1.003	A BB	721.	0.337 UG/L	0.07
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	95	1053	17:33	15	1.165	A BB	92924.	48.733 UG/L	9.72
41	83	1085	18:05	15	1.200	A VV	177.	0.121 UG/L	0.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	7:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:47		0.224						
3	2:02		0.256						
4	2:36		0.327						
5	2:50		0.356						
6	4:17	1.00	0.539	1.00	0.35	50.00	0.009	1.249	0.01
7	4:25		0.556						
8	4:42		0.591						
9	5:21	1.00	0.673	1.00	3.75	50.00	0.133	1.771	0.07
10	5:46		0.725						
11	6:32	1.00	0.822	1.00	0.03	50.00	0.001	2.479	0.00
12	6:52	1.00	0.699	1.00	0.09	50.00	0.001	0.434	0.00
13	7:47		0.793						

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No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	9:49	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
15	15:04	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	8:14		1.036						
17	8:18		0.846						
18	8:33		0.871						
19	8:56	1.00	0.910	1.00	201.86	50.00	3.004	0.744	4.04
20	8:57	1.00	1.126	1.00	45.28	50.00	0.902	0.996	0.91
21	9:05		1.143						
22	10:08	1.00	1.032	1.00	0.45	50.00	0.003	0.340	0.01
23	10:31		1.071						
24	11:09		1.136						
25	11:57		1.217						
26	12:20	1.00	0.819	1.00	49.96	50.00	1.016	1.017	1.00
27	12:22		0.821						
28	12:27	1.00	0.826	1.00	0.46	50.00	0.005	0.591	0.01
29	13:05		1.333						
30	13:23		1.363						
31	13:25		0.890						
32	13:59		0.928						
33	14:03		1.431						
34	15:08	1.00	1.004	1.00	0.34	50.00	0.005	0.754	0.01
35	15:26		1.024						
36	15:41		1.041						
37	16:28		1.093						
38	16:32		1.097						
39	16:50		1.715						
40	17:33	1.00	1.165	1.00	48.73	50.00	0.654	0.671	0.97
41	18:07	1.00	1.202	1.00	0.12	50.00	0.001	0.513	0.00

TCA FINISHED, 10 FOUND
FINISHED AT: 5/02/88 16:41:29

RMAL QUANTITATION SUMMARY FILE: S594362822
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

00264

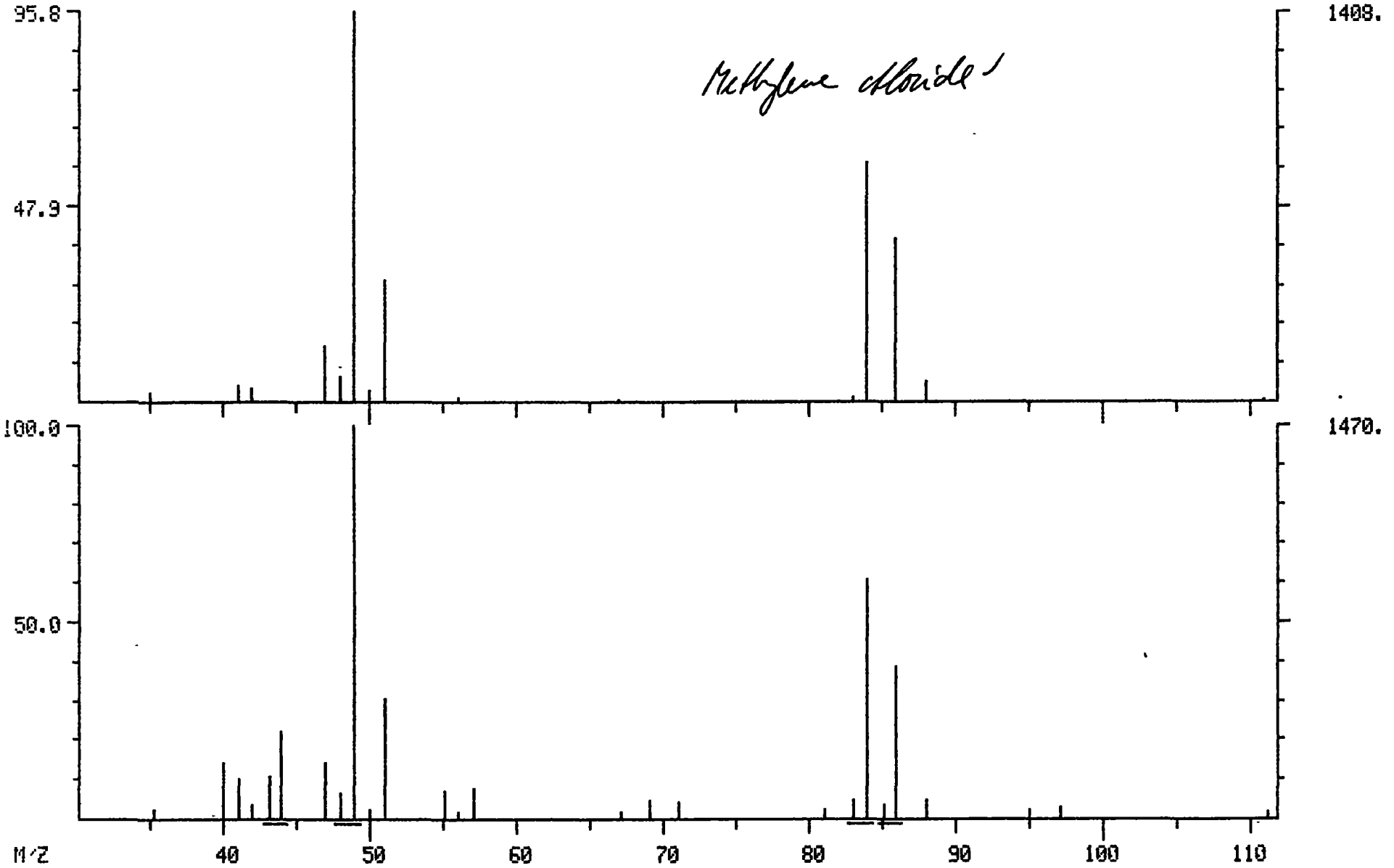
UNITS: UG/L

NO	LIBRARY ENTRY		NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1#	1	CI01 BROMOCHLOROMETHANE	128	477	1	34210.	1.000	50.000
2	V2#	1	CI10 1,4-DIFLUOROBENZENE	114	589	2	167165.	1.000	50.000
3	V3#	1	CI20 CHLOROBENZENE-D5	117	904	3	142041.	1.000	50.000
4	V3#	2	CS05 TOLUENE-D8	98	740	3	144296.	1.016	49.963
5	V3#	3	CS10 BROMOFLUOROBENZENE	95	1053	3	92924.	0.654	48.733
6	V1#	2	CS15 1,2-DICHLOROETHANE-	65	537	1	30856.	0.902	45.282
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	320	1	4540.	0.133	3.748
12	V1#	50	C035 ACETONE	58		1	NOT FOUND		
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	536	2	502243.	3.004	201.862
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	O-XYLENE	106		3	NOT FOUND		
41	V3#	75	M+P XYLENES	106		3	NOT FOUND		

00265

DUAL MASS SPECTRUM
04/27/88 21:40:00 + 5:20
SAMPLE: 59436-04 2.5ML/5ML
CONDS.: GC DESC CV
GC TEMP: 17 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436Z822 #320 BASE M/Z: 49/ 49
CALI: 042788CZ #5 RIC: 3903./ 5407.



C0266

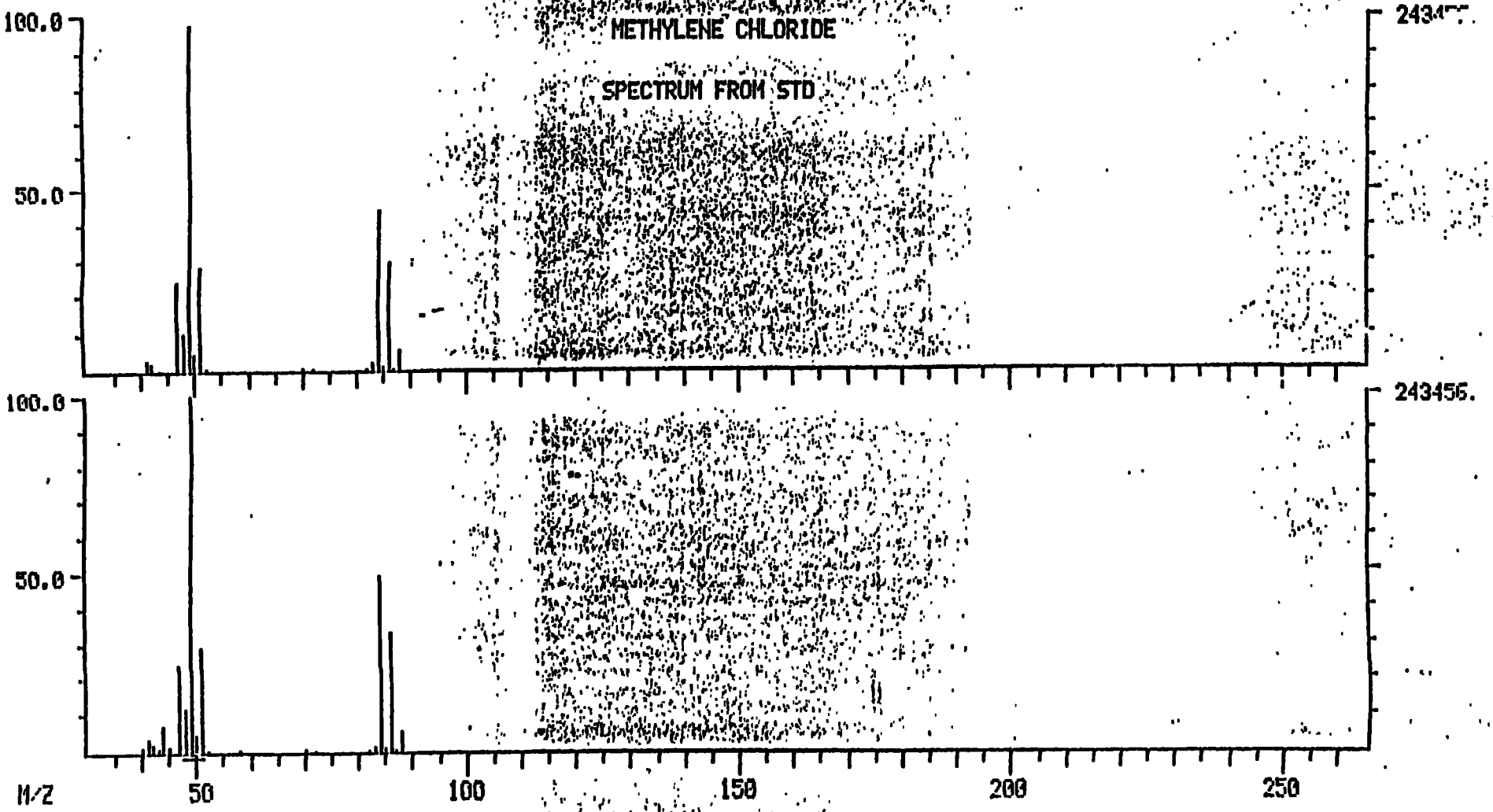
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
COMDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

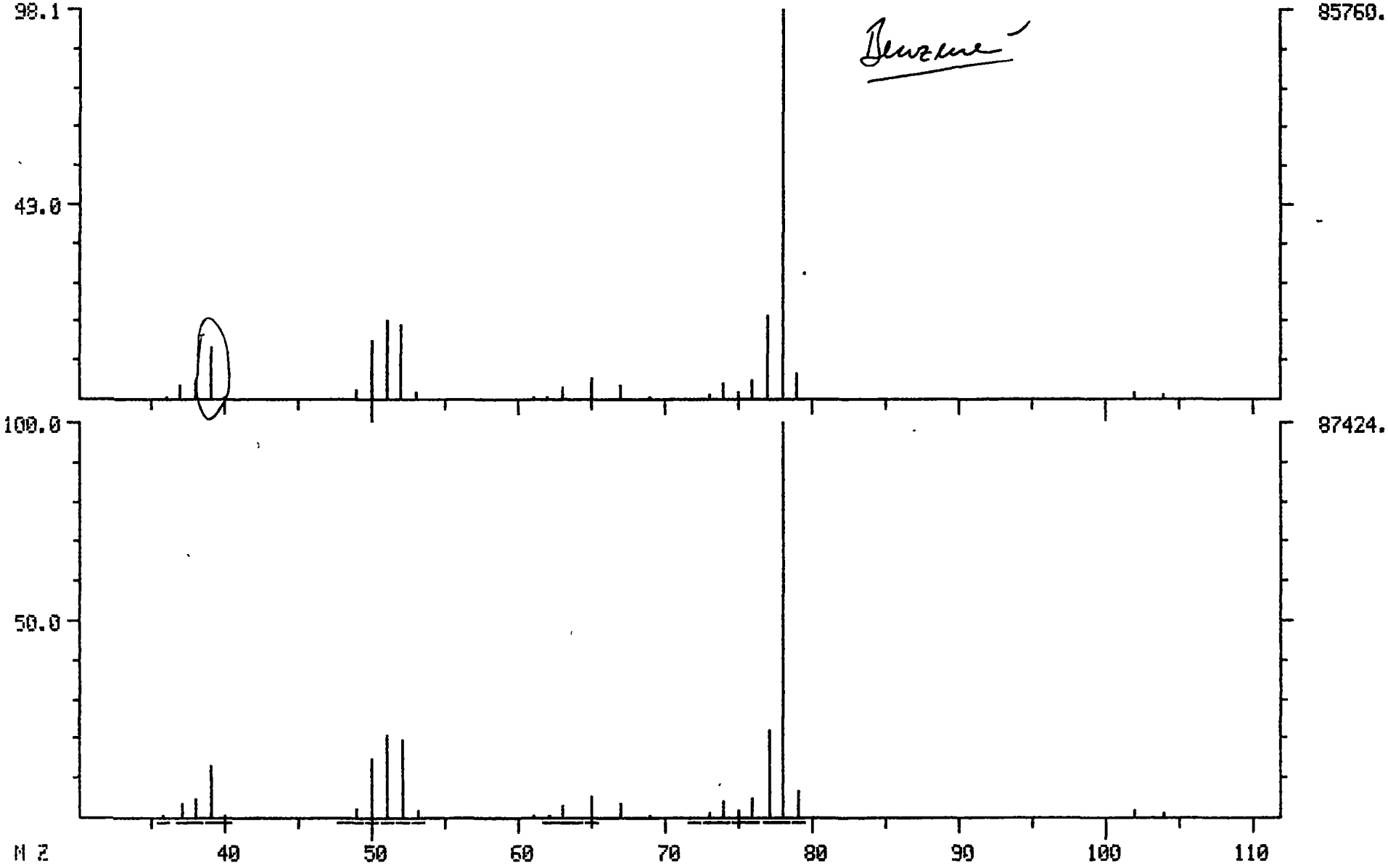
SPECTRUM FROM STD



00267

DUAL MASS SPECTRUM
04/27/88 21:40:00 + 8:56
SAMPLE: 59436-04 2.5ML/5ML
CONDS.: GC DESC CV
GC TEMP: 38 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559436Z822 #536 BASE M/Z: 78/ 78
CALI: 042788CZ #5 RIC: 205311./ 210943.

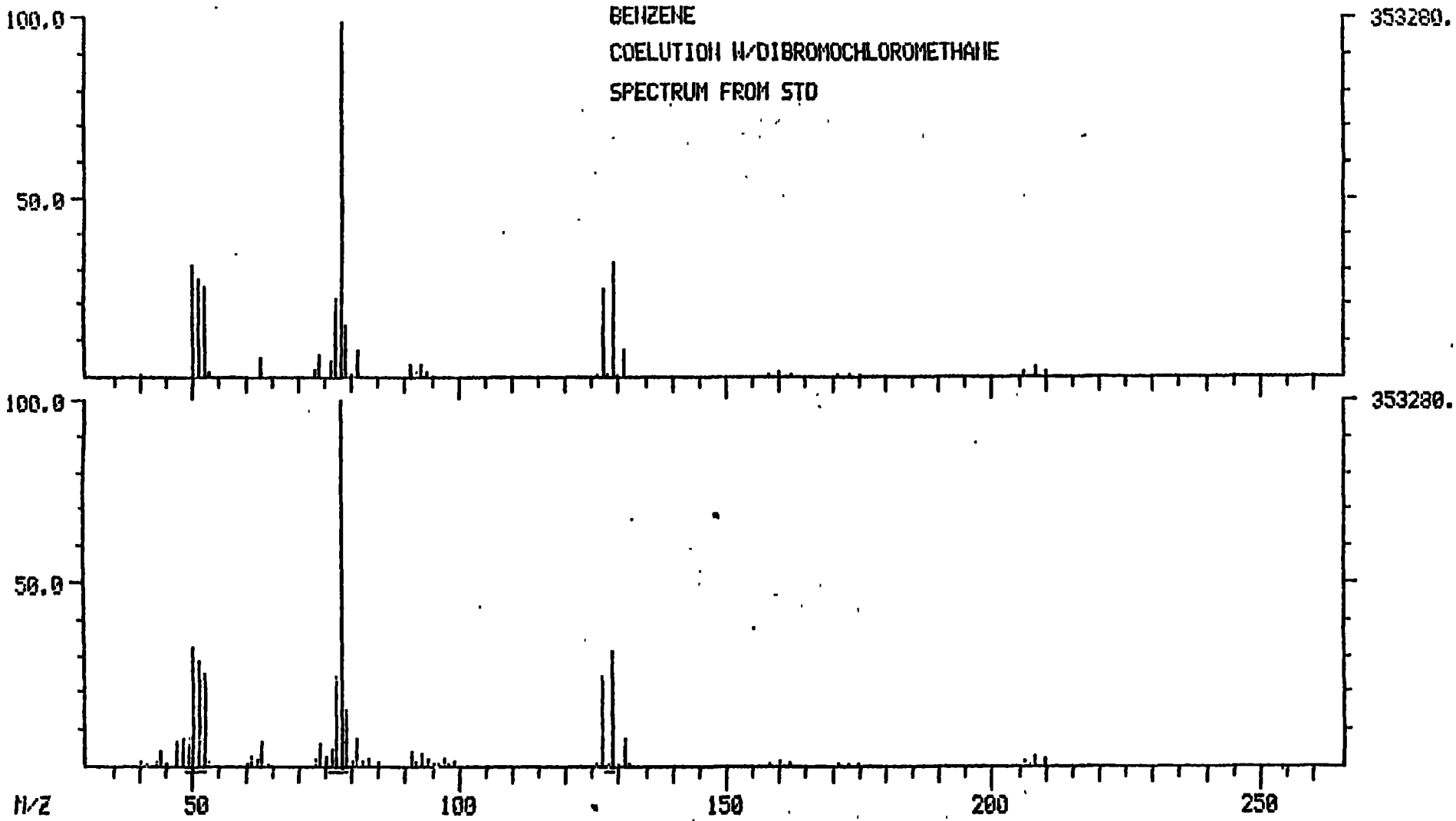


C0208

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

DATA: STDJ198 #361
CALI: STDJ198 #1

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



6/1/88 15:33:54 SCAN 1 OF 2850

Acquisition started

00269

6/2/88

Acquire Run 3:S59436R964 ACQUIRING
06/01/88 15:32:00 + 0:04 Free sectors: 14813 Scan: 5 of 2850
Sample: 59436-04 100%/1ML BNA
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MD Acct. No:

2nd

********** 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

$RF = \left(\frac{2.0\,ml}{0.990\,L}\right) = 2.02\ ml/L$

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	

SV = 2

/BE

6/1/88 16:09:35
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	539.6	2137.5	25.2	114469. 40.	54.

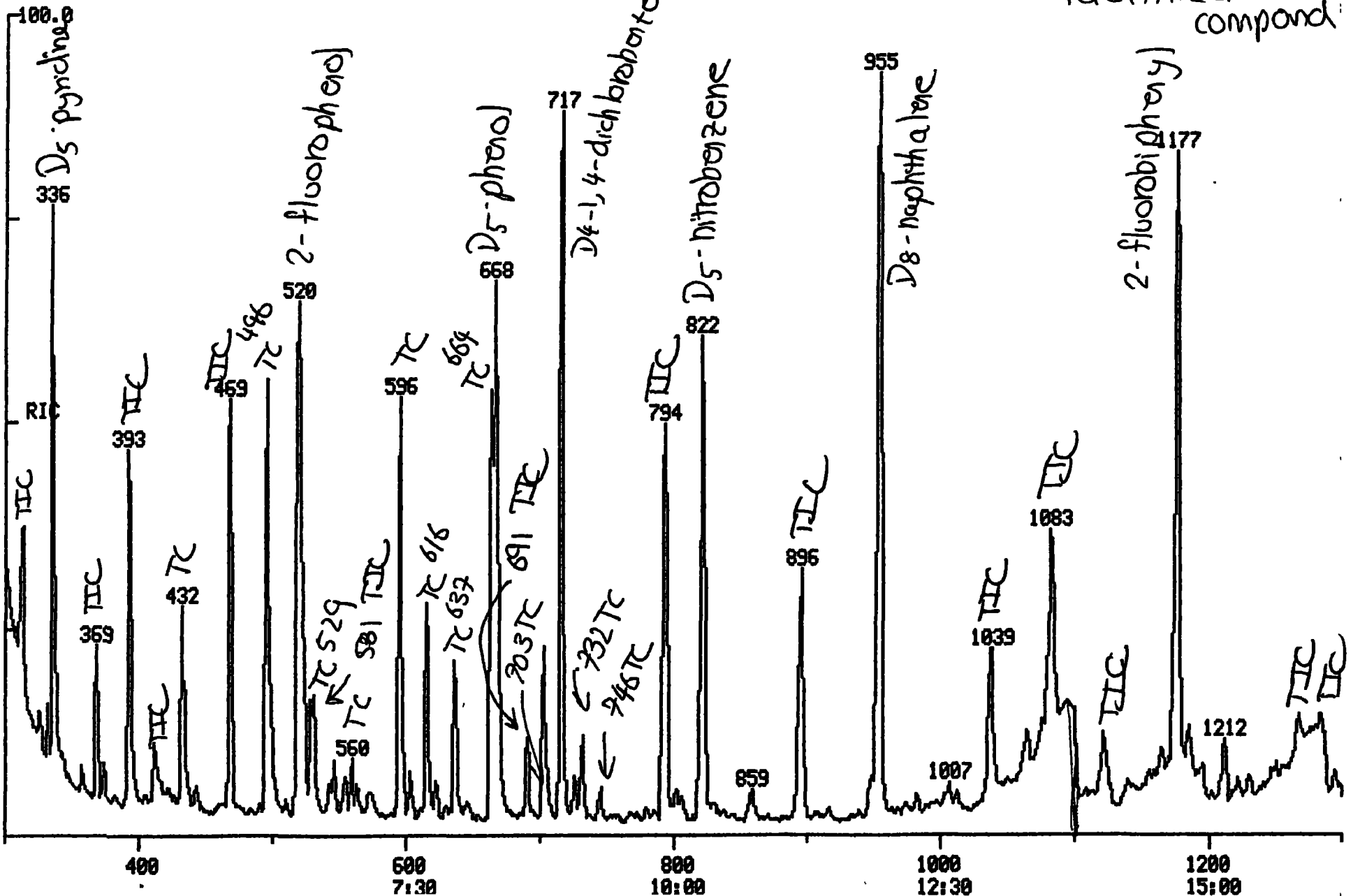
C0270

RIC
06/01/88 15:32:00
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R964 #4
CALI: 053188CR #4

SCANS 300 TO 1300
OUT OF 300 TO 2850

TC- target compond
TIC- tentatively identified compond

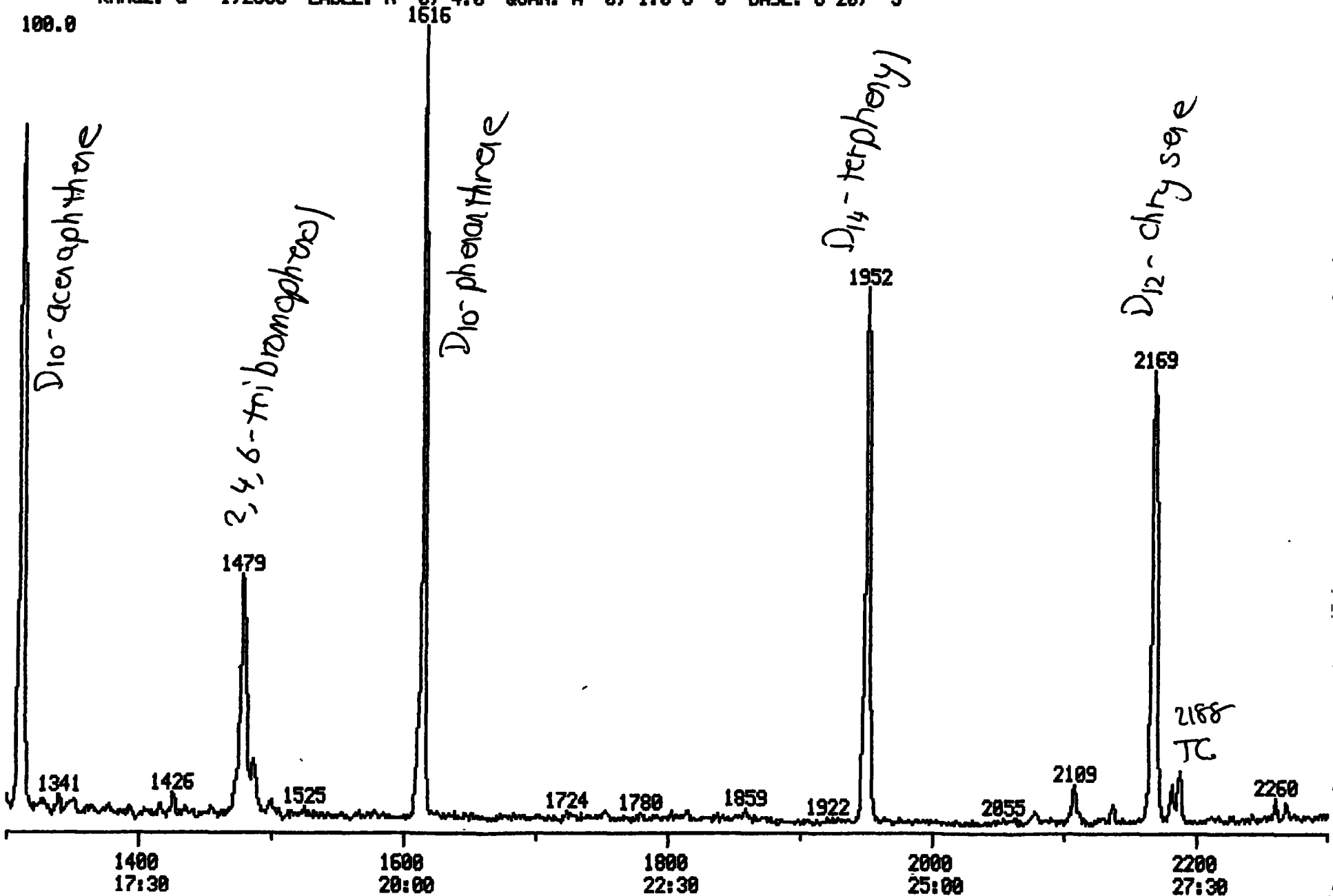


TC = Target Compound

00271

RIC
06/01/88 15:32:00
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R964 #4 SCANS 1300 TO 2300
CALI: 053188CR #4 OUT OF 300 TO 2850



00272

TC = Target Compound

RIC
06/01/88 15:32:00
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436R964 #4
CALI: 053188CR #4

SCANS 2300 TO 2850
OUT OF 300 TO 2850

100.0

59072.

ROCEDURE: TCA DIAGNOSTIC REPORT 6/01/88 16:20:50
ATA FILE: S59436R964
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

00273

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	7	3	2	39	IS01/TC01
3	3	1	81	18	5	1	215	IS02/TC02
3	3	1	81	12	3	1	81	IS03/TC03
3	3	2	37	18	6	2	295	IS04/TC04
3	3	1	37	10	4	1	66	IS05/TC05
3	3	1	28	8	4	1	100	IS06/TC06
3	3	1	27	14	6	2	29	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

77 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	-716	717	717	.	1	980	.	152	717	.	1
2	S1	2	-517	520	520	.	2	998	.	112	520	.	1
3	S1	3	-666	668	668	.	1	948	.	99	668	.	1
4	S1	105	-668	670	.	.	.	.	.	94	670	.	1
5	S1	110	-680	682	.	.	.	.	.	93	.	.	.
6	S1	115	-687	688	.	.	.	.	.	128	687	.	1
7	S1	125	-710	711	.	.	.	.	.	146	.	.	.
8	S2	1	-955	956	955	-1	1	998	.	136	955	.	1
9	S3	1	-1312	1313	1313	.	1	989	.	164	1313	.	1
10	S1	130	-720	721	.	.	.	.	.	146	.	.	.
11	S1	145	-748	749	.	.	.	.	.	108	.	.	.
12	S1	150	-753	754	.	.	.	.	.	146	.	.	.
13	S1	160	-771	772	.	.	.	.	.	108	.	.	.
14	S1	165	-776	777	.	.	.	.	.	45	.	.	.
15	S1	185	-798	799	802	3	1	896	.	108	.	.	.
16	S1	190	-804	805	.	.	.	.	.	70	.	.	.
17	S1	200	-808	809	.	.	.	.	.	117	.	.	.
18	S2	2	-823	824	822	-2	1	997	.	82	822	.	1
19	S2	10	-827	828	.	.	.	.	.	77	826	.	1
20	S2	20	-873	874	.	.	.	.	.	82	872	.	2
21	S2	25	-887	888	.	.	.	.	.	139	.	.	.
22	S2	30	-897	898	.	.	.	.	.	107	.	.	.
23	S2	35	-917	918	.	.	.	.	.	93	.	.	.
24	S2	45	-927	928	.	.	.	.	.	122	.	.	.
25	S2	40	-932	933	.	.	.	.	.	162	.	.	.
26	S2	55	-948	949	.	.	.	.	.	180	.	.	.
27	S2	60	-960	961	.	.	.	.	.	128	.	.	.
28	S2	80	-976	977	.	.	.	.	.	127	976	.	1
29	S2	95	-996	997	.	.	.	.	.	225	.	.	.
30	S2	130	-1074	1075	.	.	.	.	.	107	.	.	.
31	S2	145	-1097	1098	.	.	.	.	.	142	1096	.	1
32	S3	20	-1143	1144	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1162	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1616	1616	.	2	987	.	188	1616	.	1
35	S3	30	-1168	1167	.	.	.	.	.	196	.	.	.
36	S3	3	-1177	1176	1177	1	1	994	.	172	1177	.	1
37	S3	40	-1195	1194	.	.	.	.	.	162	1194	.	1
38	S3	45	-1225	1224	.	.	.	.	.	65	1222	.	1
39	S3	55	-1272	1271	.	.	.	.	.	163	1269	.	1
40	S3	65	-1281	1280	.	.	.	.	.	152	1280	.	1
41	S3	70	-1284	1283	.	.	.	.	.	165	.	.	.
42	S3	75	-1311	1310	1305	-5	1	889	.	138	1304	-1	1

					.	.	.	.	.	1	.	.	.
44	S3	85	-1331	1330	.	.	.	.	.	184	.		
45	S3	95	-1347	1346	1346	.	2	921	.	109	.	.	.
46	S3	90	-1352	1351	.	.	.	.	.	168	1349	.	1
47	S3	105	-1364	1363	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1417	.	.	.	.	.	149	1415	.	2
49	S3	135	-1423	1422	.	.	.	.	.	166	1422	.	1
50	S3	140	-1425	1426	.	.	.	.	.	204	.	.	.
51	S3	150	-1439	1440	.	.	.	.	.	138	.	.	.
52	S4	10	-1447	1448	.	.	.	.	.	198	.	.	.
53	S4	15	-1453	1454	.	.	.	.	.	169	.	.	.
54	S3	2	-1477	1478	1479	1	1	986	.	330	1479	.	1
55	S4	30	-1524	1525	.	.	.	.	.	248	.	.	.
56	S4	40	-1553	1554	.	.	.	.	.	284	.	.	.
57	S5	1	-2169	2169	2169	.	1	962	.	240	2169	.	1
58	S4	50	-1591	1591	.	.	.	.	.	266	.	.	.
59	S4	65	-1620	1620	.	.	.	.	.	178	1620	.	1
60	S4	70	-1630	1630	.	.	.	.	.	178	.	.	.
61	S4	85	-1754	1754	1753	-1	1	923	.	149	1753	.	1
62	S4	110	-1869	1869	.	.	.	.	.	202	.	.	.
63	S6	1	-2450	2450	2450	.	1	995	.	264	2450	.	1
64	S5	15	-1915	1916	.	.	.	.	.	202	1914	.	1
65	S5	2	-1951	1952	1952	.	1	994	.	244	1952	.	1
66	S5	40	-2063	2063	.	.	.	.	.	149	2062	.	1
67	S5	55	-2166	2166	.	.	.	.	.	252	.	.	.
68	S5	50	-2166	2166	.	.	.	.	.	228	.	.	.
69	S5	60	-2176	2176	.	.	.	.	.	228	2174	.	1
70	S5	65	-2188	2188	2188	.	2	991	.	149	2188	.	1
71	S6	10	-2310	2310	2310	.	1	995	.	149	2309	-1	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: S59436R964

Data: S59436R964.TI
06/01/88 15:32:00
Sample: 59436-04 100%/1ML BNA
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MD Acct. No.:

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	21655.	40.000 UG/ML	7.93
2	112	520	6:30	1	0.725	A BB	44877.	58.258 UG/ML	11.56
3	99	668	8:21	1	0.932	A BB	27948.	25.480 UG/ML	5.05
4	94	670	8:22	1	0.934	A BB	767.	0.626 UG/ML	0.12
5	NOT FOUND								
6	128	687	8:35	1	0.958	A BB	177.	0.232 UG/ML	0.05
7	NOT FOUND								
8	136	955	11:56	8	1.000	A BB	84588.	40.000 UG/ML	7.93
9	164	1313	16:25	9	1.000	A BB	38821.	40.000 UG/ML	7.93
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	82	822	10:16	8	0.861	A BV	39224.	41.967 UG/ML	8.33
19	77	826	10:19	8	0.865	A VB	170.	0.181 UG/ML	0.04
20	82	872	10:54	8	0.913	A*VB	220.	0.124 UG/ML	0.02
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	127	976	12:12	8	1.022	A BB	123.	0.132 UG/ML	0.03
29	NOT FOUND								
30	NOT FOUND								
31	142	1096	13:42	8	1.148	A BB	104.	0.078 UG/ML	0.02
32	NOT FOUND								
33	NOT FOUND								
34	188	1616	20:12	34	1.000	A BV	63883.	40.000 UG/ML	7.93
35	NOT FOUND								
36	172	1177	14:43	9	0.896	A BB	55512.	40.787 UG/ML	8.09
37	162	1194	14:55	9	0.909	A BB	78.	0.062 UG/ML	0.01
38	65	1222	15:16	9	0.931	A VB	173.	0.320 UG/ML	0.06
39	163	1269	15:52	9	0.966	A BB	94.	0.066 UG/ML	0.01
40	152	1280	16:00	9	0.975	A BB	175.	0.087 UG/ML	0.02
41	NOT FOUND								
42	138	1304	16:18	9	0.993	A BB	42.	0.102 UG/ML	0.02
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	168	1349	16:52	9	1.027	A BB	127.	0.073 UG/ML	0.01
47	NOT FOUND								
48	149	1415	17:41	9	1.078	A*BB	180.	0.128 UG/ML	0.03
49	166	1422	17:46	9	1.083	A BB	78.	0.056 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	1.01	0.721	1.01	58.26	100.00	0.829	1.423	0.58
3	8:19	1.00	0.929	1.00	25.48	100.00	0.516	2.026	0.25
4	8:21	1.00	0.932	1.00	0.63	50.00	0.028	2.262	0.01
5	8:30		0.948						
6	8:35	1.00	0.958	1.00	0.23	50.00	0.007	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		1.113						
16	10:03		1.121						
17	10:06		1.127						
18	10:17	1.00	0.861	1.00	41.97	50.00	0.371	0.442	0.84
19	10:20	1.00	0.865	1.00	0.18	50.00	0.002	0.444	0.00
20	10:55	1.00	0.913	1.00	0.12	50.00	0.002	0.838	0.00
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		1.004						
28	12:12	1.00	1.021	1.00	0.13	50.00	0.001	0.439	0.00
29	12:27		1.042						
30	13:25		1.123						
31	13:43	1.00	1.147	1.00	0.08	50.00	0.001	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	40.79	50.00	1.144	1.402	0.82
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	0.32	50.00	0.004	0.556	0.01
39	15:54	1.00	0.969	1.00	0.07	50.00	0.002	1.463	0.00
40	16:01	1.00	0.976	1.00	0.09	50.00	0.004	2.069	0.00
41	16:03		0.978						
42	16:23	0.99	0.998	0.99	0.10	50.00	0.001	0.424	0.00
43	16:30		1.005						
44	16:38		1.014						
45	16:50		1.026						
46	16:54	1.00	1.030	1.00	0.07	50.00	0.003	1.786	0.00
47	17:03		1.039						
48	17:43	1.00	1.080	1.00	0.13	50.00	0.004	1.452	0.00
49	17:47	1.00	1.084	1.00	0.06	50.00	0.002	1.438	0.00
50	17:49		1.085						

Quantitation Report File: S59436R964

Data: S59436R964.TI
06/01/88 15:32:00
Sample: 59436-04 100%/1ML BNA
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MD Acct. No.:

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	1479	18:29	9	1.126	A BB	7058.	45.795 UG/ML	9.08
55	NOT FOUND								
56	NOT FOUND								
57	240	2169	27:07	57	1.000	A BB	44342.	40.000 UG/ML	7.93
58	NOT FOUND								
59	178	1620	20:15	34	1.002	A BB	52.	0.029 UG/ML	0.01
60	NOT FOUND								
61	149	1753	21:55	34	1.085	A BB	973.	0.408 UG/ML	0.08
62	NOT FOUND								
63	264	2450	30:37	63	1.000	A BB	33881.	40.000 UG/ML	7.93
64	202	1914	23:55	57	0.882	A BB	116.	0.074 UG/ML	0.01
65	244	1952	24:24	57	0.900	A BB	53057.	44.645 UG/ML	8.86
66	149	2062	25:46	57	0.951	A BB	191.	0.211 UG/ML	0.04

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	228	2174	27:10	57	1.002	A VB	82.	0.078 UG/ML	0.02
70	149	2188	27:21	57	1.009	A VB	2348.	1.877 UG/ML	0.37
71	149	2309	28:52	63	0.942	A BB	4842.	2.278 UG/ML	0.45
72	252	2380	29:45	63	0.971	A BB	45.	0.039 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	45.80	100.00	0.073	0.159	0.46
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	0.03	50.00	0.001	1.136	0.00
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	0.41	50.00	0.012	1.492	0.01
62	23:22		1.157						
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	0.07	50.00	0.002	1.422	0.00
65	24:23	1.00	0.899	1.00	44.64	50.00	0.957	1.072	0.89
66	25:47	1.00	0.951	1.00	0.21	50.00	0.003	0.818	0.00
67	27:04		0.998						
68	27:04		0.998						
69	27:12	1.00	1.003	1.00	0.08	50.00	0.001	0.948	0.00
70	27:21	1.00	1.008	1.00	1.88	50.00	0.042	1.129	0.04
71	28:52	1.00	0.942	1.00	2.28	50.00	0.114	2.509	0.05
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, 18 FOUND
FINISHED AT: 6/01/88 16:31:22

··C0280

RMAL QUANTITATION SUMMARY FILE: S59436R964 3:HS59436R964.QL
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	21655.	1.000	40.000
2	S2# 1 CI40	NAPHTHALENE-D8	136	955	2	84588.	1.000	40.000
3	S3# 1 CI50	ACENAPHTHENE-D10	164	1313	3	38821.	1.000	40.000
4	S4# 1 CI60	PHENANTHRENE-D10	188	1616	4	63883.	1.000	40.000
5	S5# 1 CI70	CHRYSENE-D12	240	2169	5	44342.	1.000	40.000
6	S6# 1 CI75	PERYLENE-D12	264	2450	6	33881.	1.000	40.000
7	S2# 2 CS20	NITROBENZENE-D5	82	822	2	39224.	0.371	41.967
8	S3# 3 CS25	2-FLUOROBIPHENYL	172	1177	3	55512.	1.144	40.787
9	S5# 2 CS30	TERPHENYL-D14	244	1952	5	53057.	0.957	44.645
10	S1# 3 CS45	PHENOL-D5	99	668	1	27948.	0.516	25.480
11	S1# 2 CS50	2-FLUOROPHENOL	112	520	1	44877.	0.829	58.258
12	S3# 2 CS55	2,4,6-TRIBROMOPHENO	330	1479	3	7058.	0.073	45.795
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		

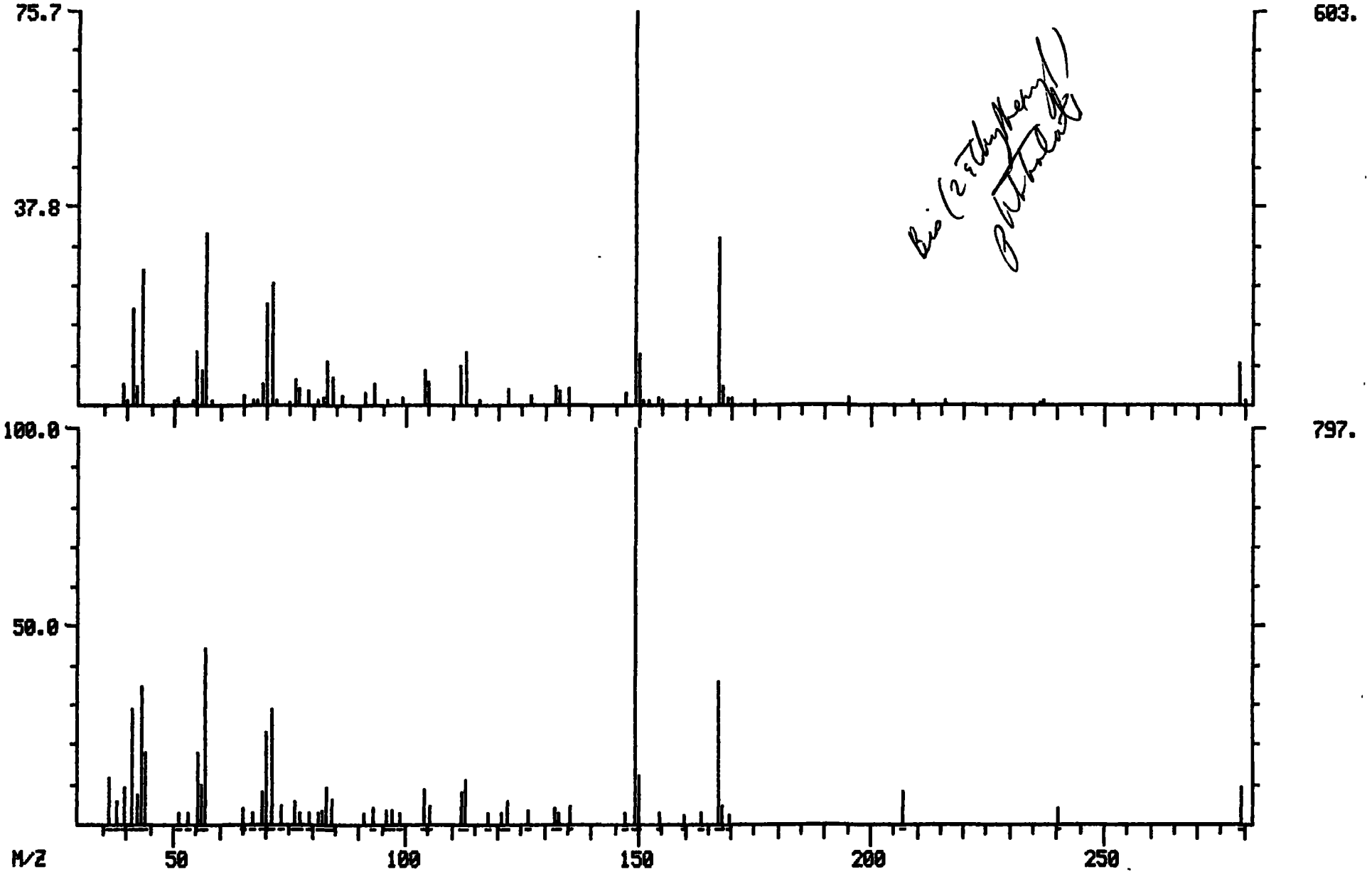
53	S3#135	C590	FLUORENE	166		3	NOT FOUND			
54	S3#140	C585	4-CHLOROPHENYL-PHEN	204		3	NOT FOUND			
55	S3#150	C595	4-NITROANALINE	138		3	NOT FOUND			
56	S4# 10	C610	4,6-DINITRO-2-METHY	198		4	NOT FOUND			
57	S4# 15	C615	N-NITROSODIPHENYLAM	169		4	NOT FOUND			
58	S4# 30	C625	4-BROMOPHENYL-PHENY	248		4	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	2348.	0.042	1.877	
71	S6# 10	C760	DI-N-OCTYL PHTHALAT	149	2309	6	4842.	0.114	2.278	
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			

00281

002S2

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 27:21
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #2188 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 3071./ 4495.



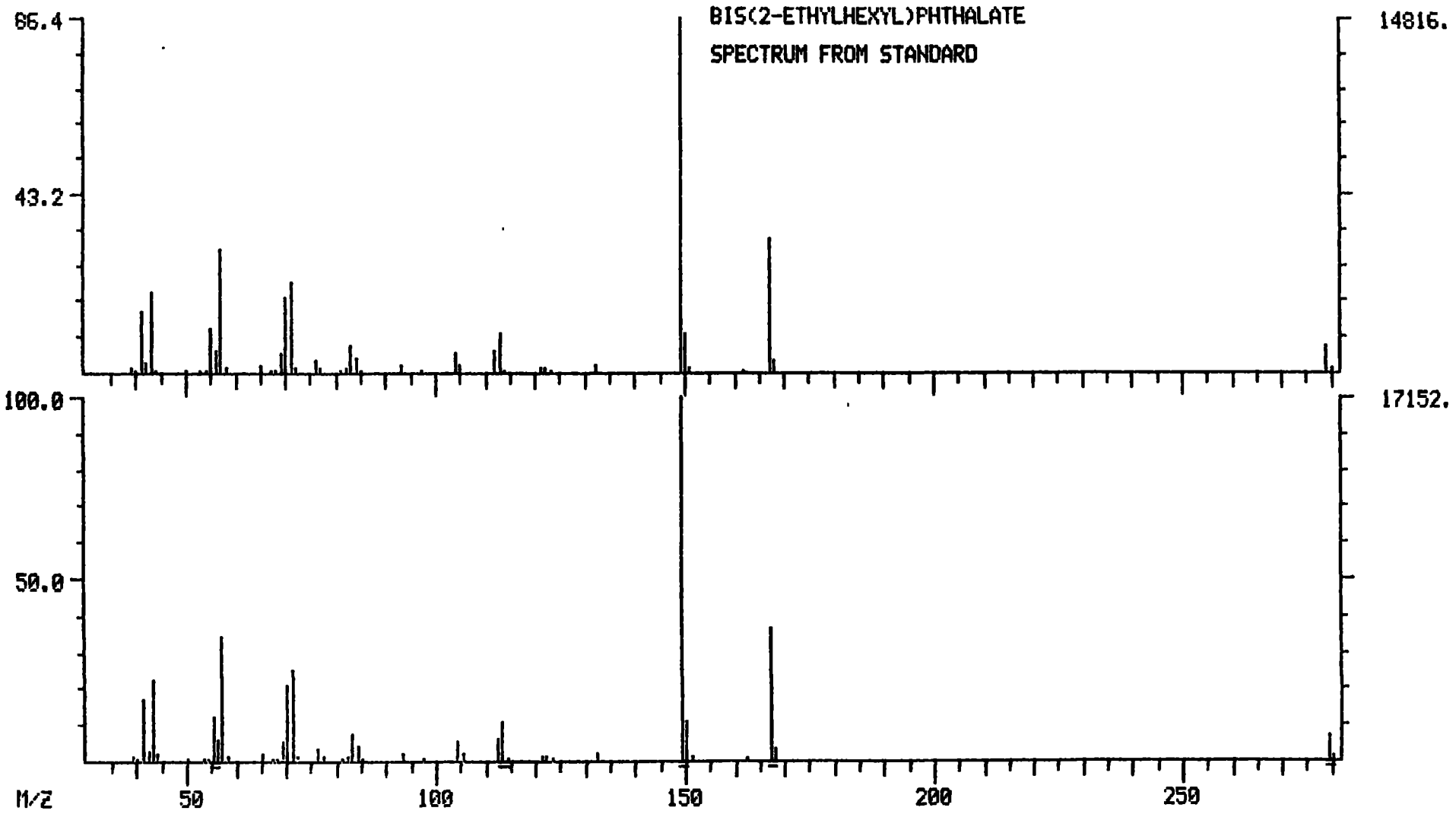
Bis (2-Ethylhexyl) phthalate

00283

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.

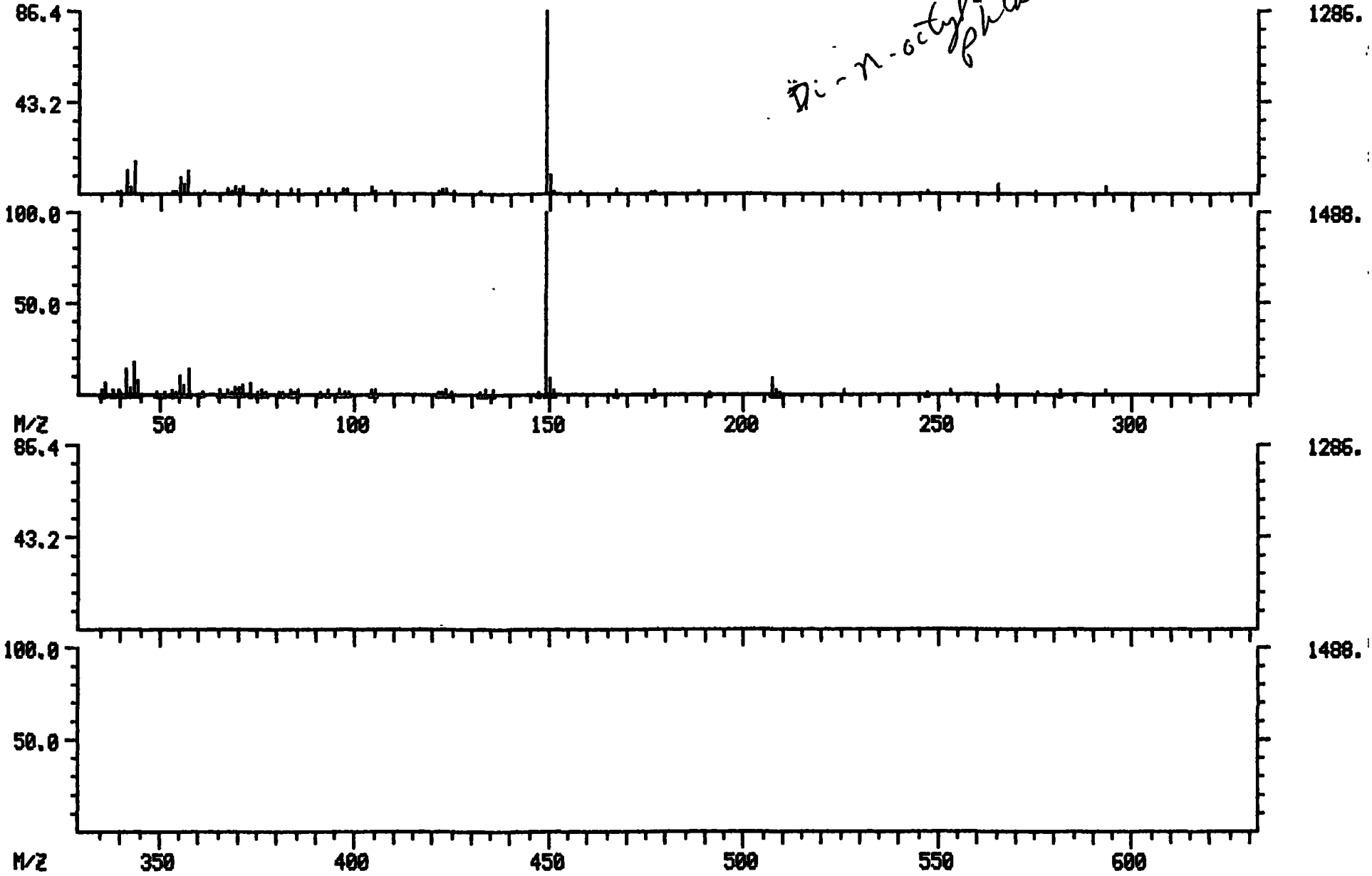


00284

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 28:52
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #2309 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 3239./ 4639.

Di-n-octyl phthalate

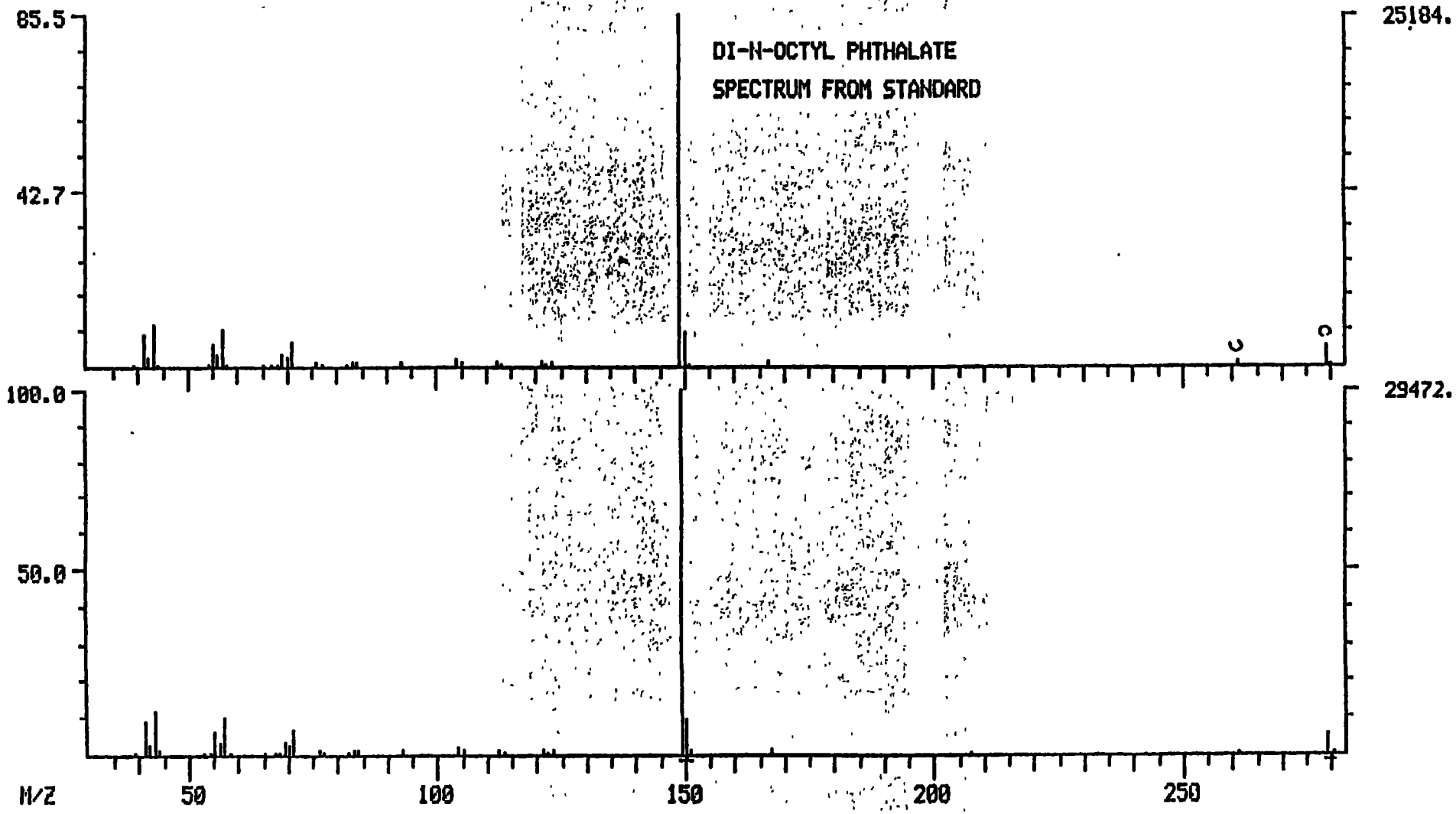


00285 to

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 FILE: S59436R964

ENSECO TIC REPORT (PAGE 2)

~~00285~~ 16

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

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	982	905	1	3:55	0.442	34239.	11402.	9.481	NB	1138.
2	994	932	1	4:36	0.519	21707.	10943.	6.011	NB	850.
3	946	819	1	4:54	0.553	68711.	25169.	19.027	BC	2.
4	980	852	1	5:08	0.579	17859.	3972.	4.946	NB	1216.
5	803	767	1	5:51	0.659	75649.	29237.	20.948	BC	2.
6	964	850	1	6:38	0.745	37997.	8208.	10.522	NB	1351.
7	998	887	1	8:38	0.968	16215.	5592.	4.490	NB	3159.
8	998	897	1	9:55	1.112	105588.	28233.	29.238	NB	1787.
9	913	666	1	11:11	1.254	66542.	17531.	18.426	UK	1.
10	872	702	1	12:58	1.452	42803.	10271.	11.853	NB	2315.
11	902	695	1	13:32	1.515	65431.	13754.	18.118	NB	3863.
12	986	847	1	13:41	1.532	90954.	7211.	25.186	NB	1880.
13	895	585	1	14:01	1.569	24439.	4712.	6.768	BC	7.
14	0	563	4	15:50	0.789	22511.	3815.	4.773	NB	12285.
15	876	247	4	16:02	0.799	63911.	5264.	13.549	UK	1.

TIC SELECTION REPORT

DATA FILE: S59436R964

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	78927.	21.855
496	96111	26.613
520	166455.	46.092
596	79361.	21.975
616	43595.	12.071
637	36349.	10.065
717	144453.	39.999
732	15753.	4.362
822	119651.	33.132
955	199507.	55.244
1177	178239.	37.787
1313	196947.	41.753
1616	188677.	39.999
1952	162395.	34.428
2169	142573.	45.929
2450	124167.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 19

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	144453.	132454.	
2	S2	1	199507.	124585.	*
3	S3	1	196947.	97297.	*
4	S4	1	188677.	122829.	
5	S5	1	142573.	85305.	*
6	S6	1	124167.	90711.	

SIZE = AREA

DATA REDUCED BY: AR DATE: 6-7-88 DATA FILE: S59436R964
DATA REVIEWED BY: ____ DATE: ____

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-04 100%/1ML BNA RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MD

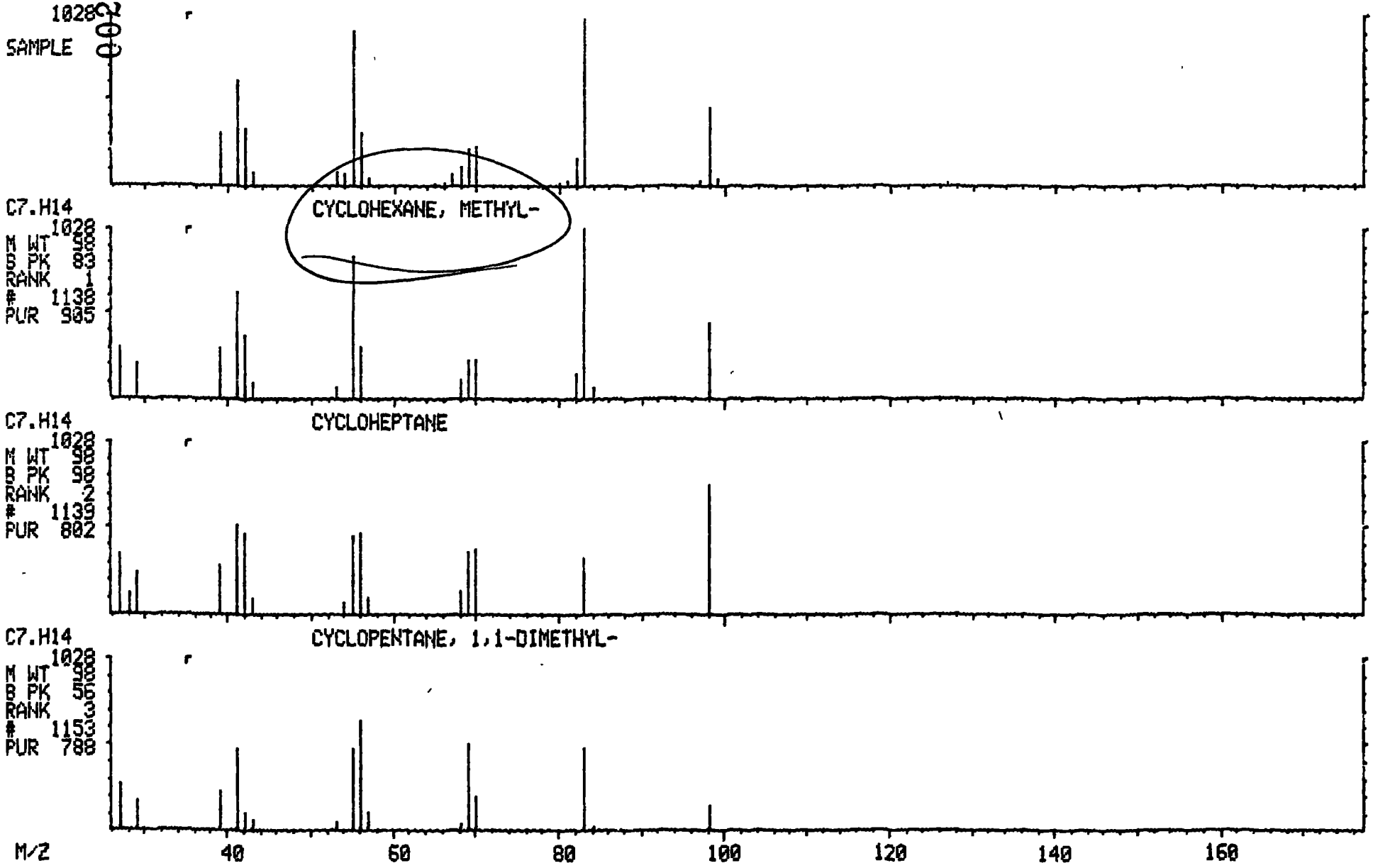
#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	314	B	2	9.5	108-87-2	CYCLOHEXANE, METHYL-
2	369	B	2	6.0	108-88-3	BENZENE, METHYL- (VOA)
3	393	CB	1	19.	00-00-0	OXYGENATED HYDROCARBON
4	412	I	2	4.9	109-05-7	PIPERIDINE, 2-METHYL-
5	469	CB	1	21.	00-00-0	OXYGENATED HYDROCARBON
6	531	I	1	11.	24070-77-7	CYCLOPENTANOL, 2-METHYL-
7	691	I	2	4.5	622-39-9	PYRIDINE, 2-PROPYL-
8	794	I	2 6-10-88	29.	1824-81-3	2-PYRIDINAMINE, 6-METHYL-
9	896		~~0~~ 1	18.	00-00-0	UNKNOWN
10	1038	I	1	12.	2591-86-8	1-PIPERIDINECARBOXALDEHYDE
11	1083	I	1	18.	766-52-9	PIPERIDINE, 1-ETHYL-2-METHYL-
12	1095	I	2	25.	1003-68-5	2(1H)-PYRIDINONE, 5-METHYL-
13	1122	C	1	6.8	00-00-0	AMINE
14	1267	I	1	4.8	5022-29-7	1H-ISOINDOLE-1,3(2H)-DIONE, N-ETHY
15	1284	VT	~~0~~ 1 6-10-88	14.	00-00-0	UNKNOWN

edit complete

LIBRARY SEARCH
06/01/88 15:32:00 + 3:55
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 # 314
CALI: 053188CR # 4

BASE M/Z: 83
RIC: 9375.



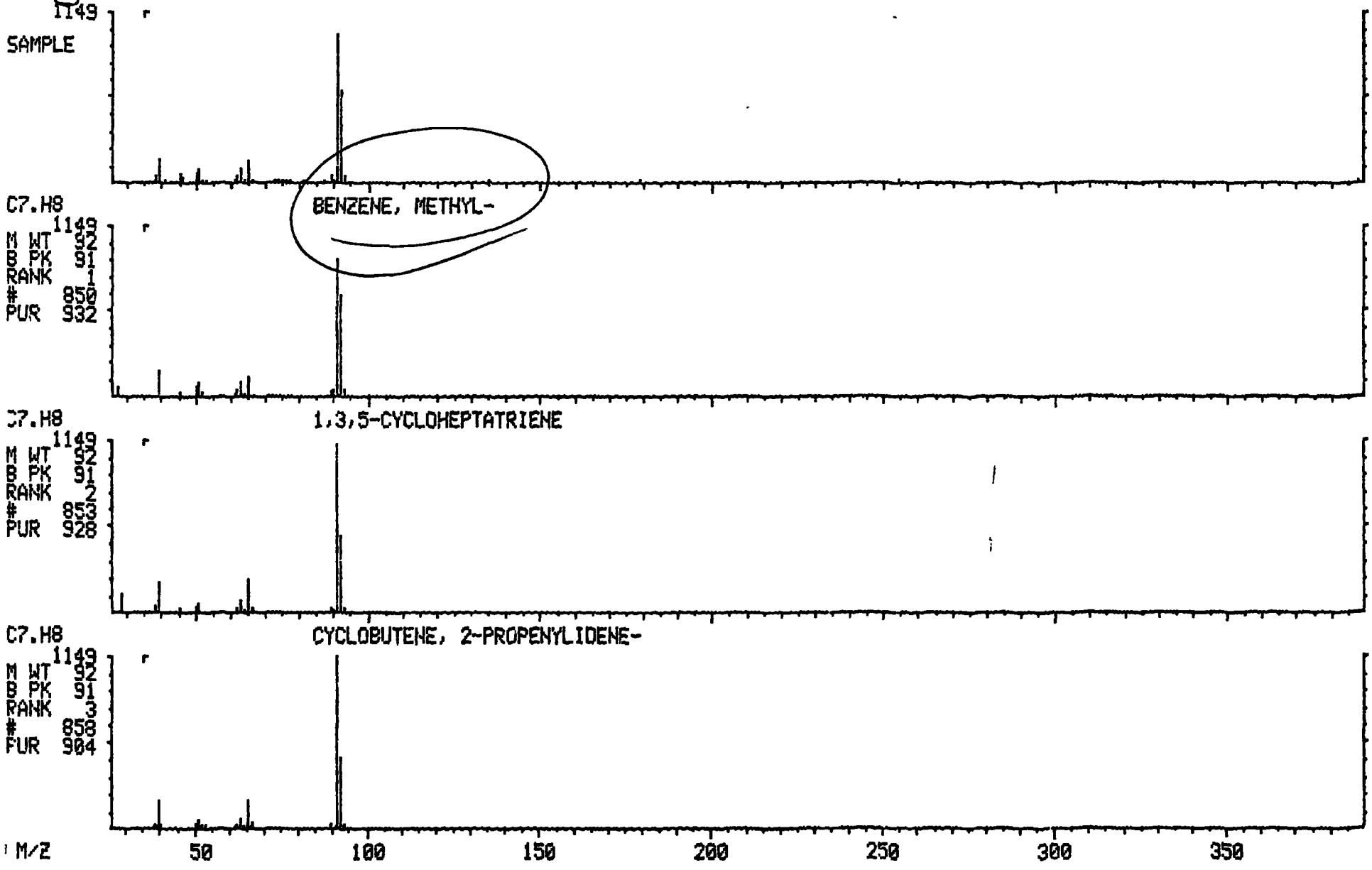
00289

00290

LIBRARY SEARCH
06/01/88 15:32:00 + 4:37
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 # 363
CALI: 053188CR # 4

BASE M/Z: 91
RIC: 8447.

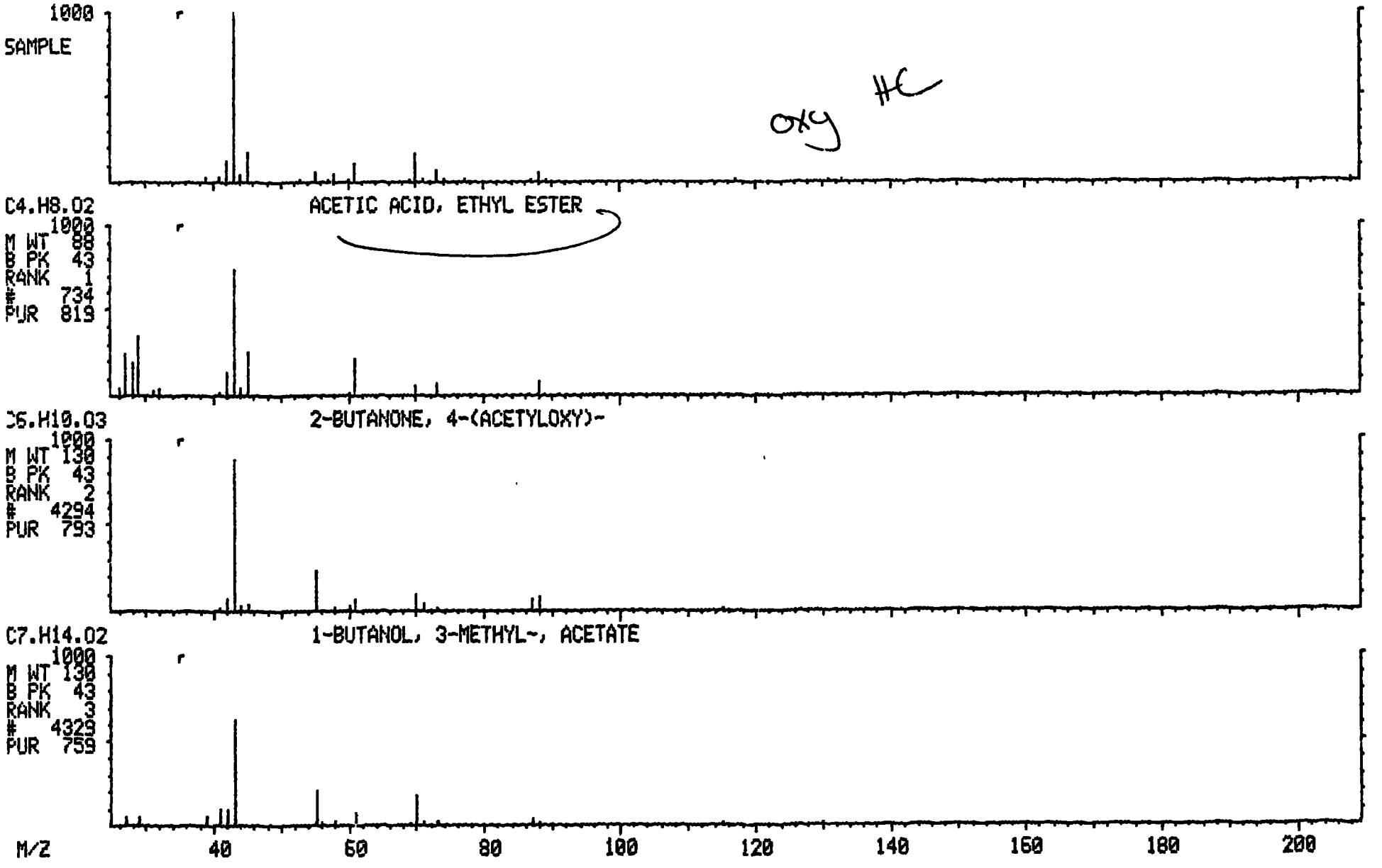


00291

LIBRARY SEARCH
06/01/88 15:32:00 + 4:55
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 # 393
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 22079.

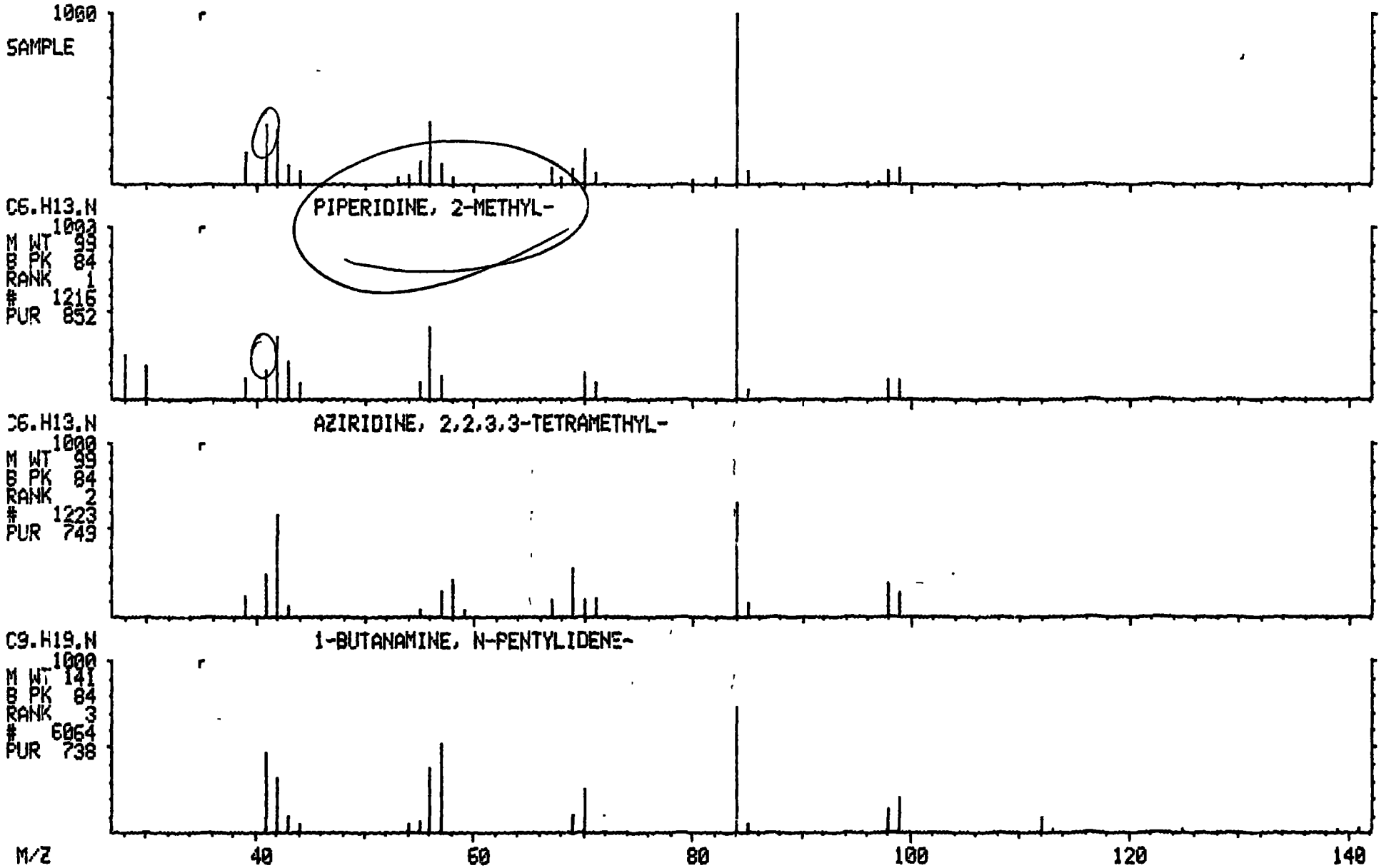


C0293

LIBRARY SEARCH
06/01/88 15:32:00 + 5:09
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 # 412
CALI: 053188CR # 4

BASE M/Z: 84
RIC: 2919.

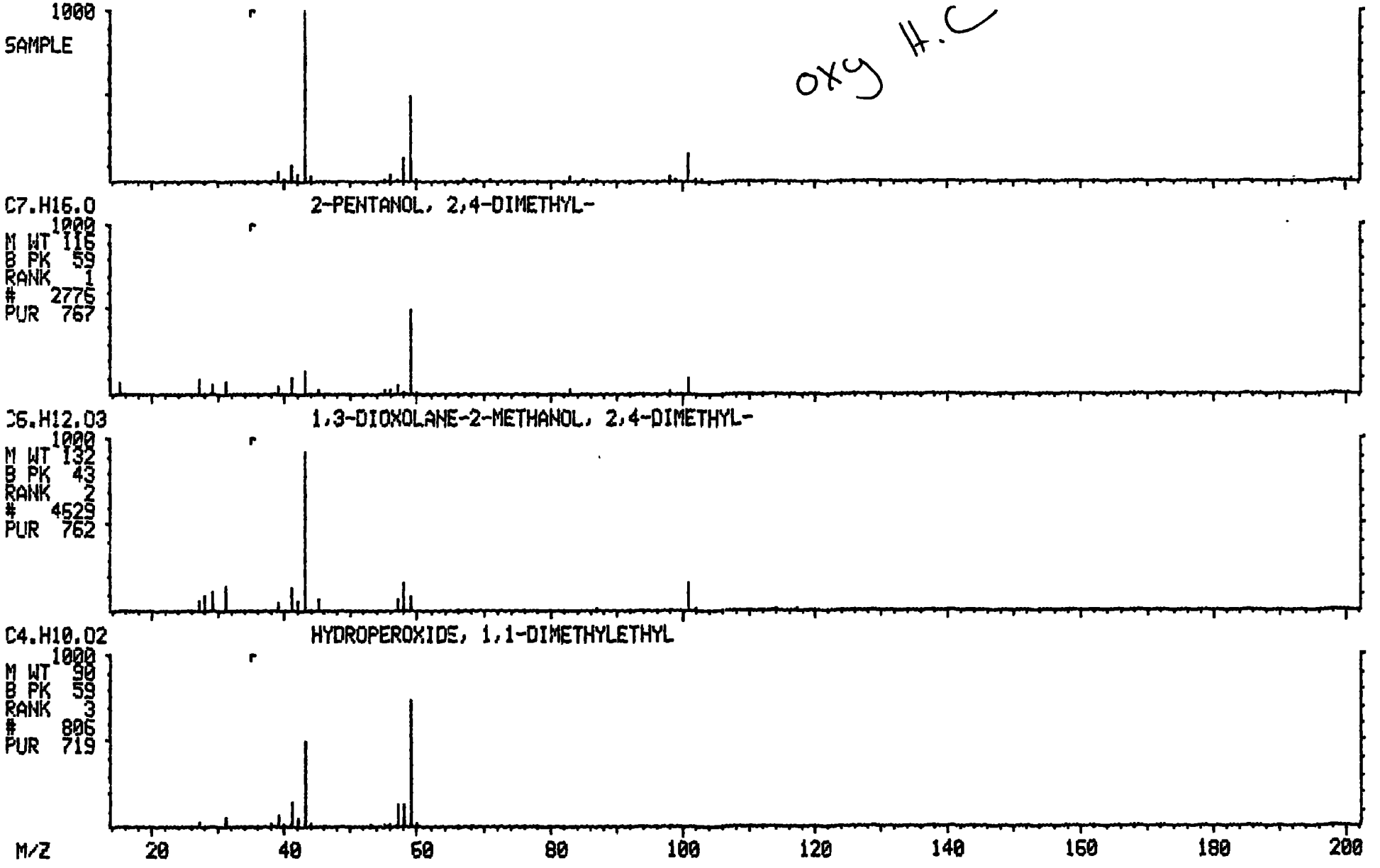


00293 Ab

LIBRARY SEARCH
06/01/88 15:32:00 + 5:52
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 # 469
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 25503.

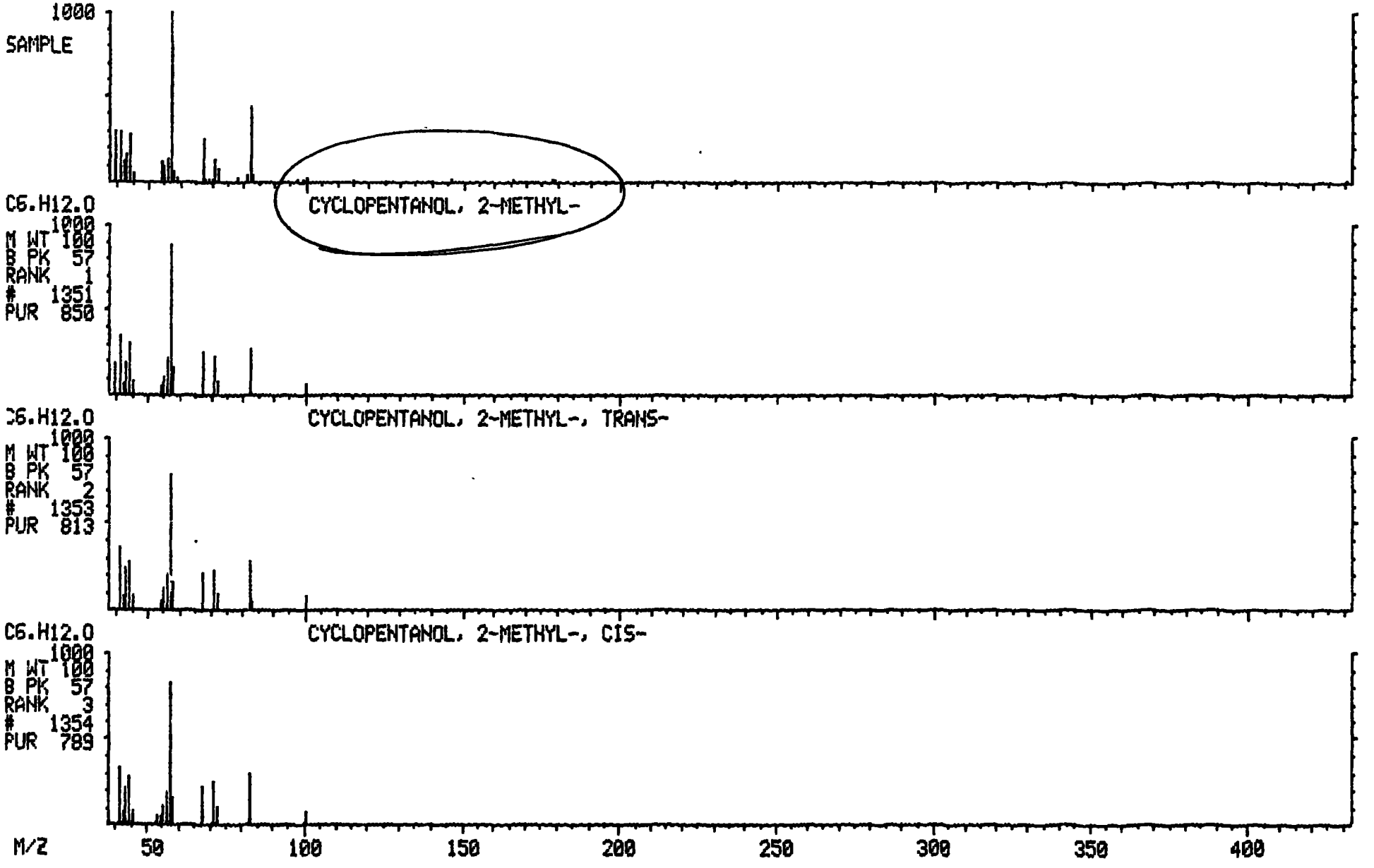


00294

LIBRARY SEARCH
06/01/88 15:32:00 + 6:38
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 # 531
CALI: 053188CR # 4

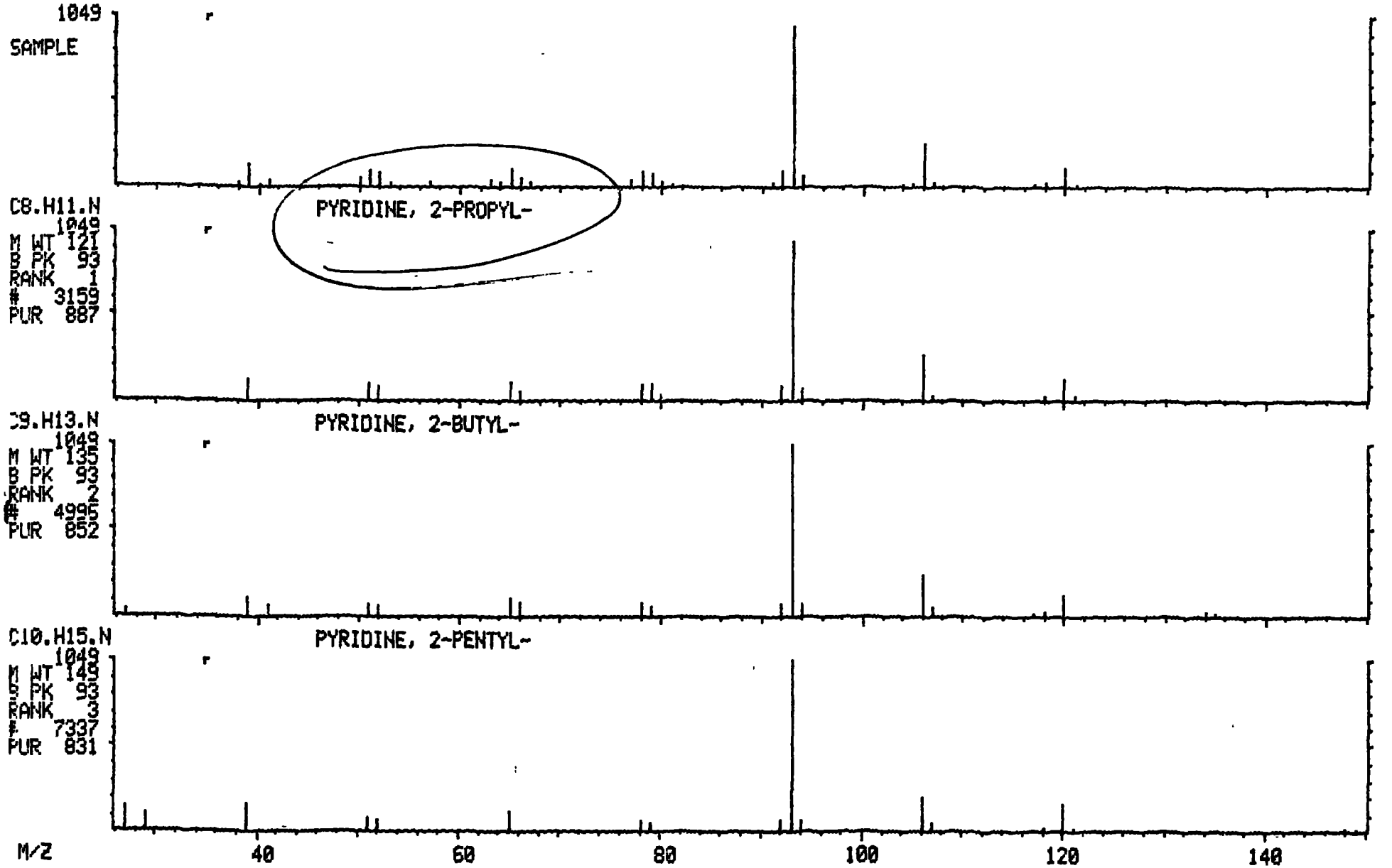
BASE M/Z: 57
RIC: 5079.



00295

LIBRARY SEARCH
06/01/88 15:32:00 + 8:38
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 # 691 BASE M/Z: 93
CALI: 053188CR # 4 RIC: 5127.

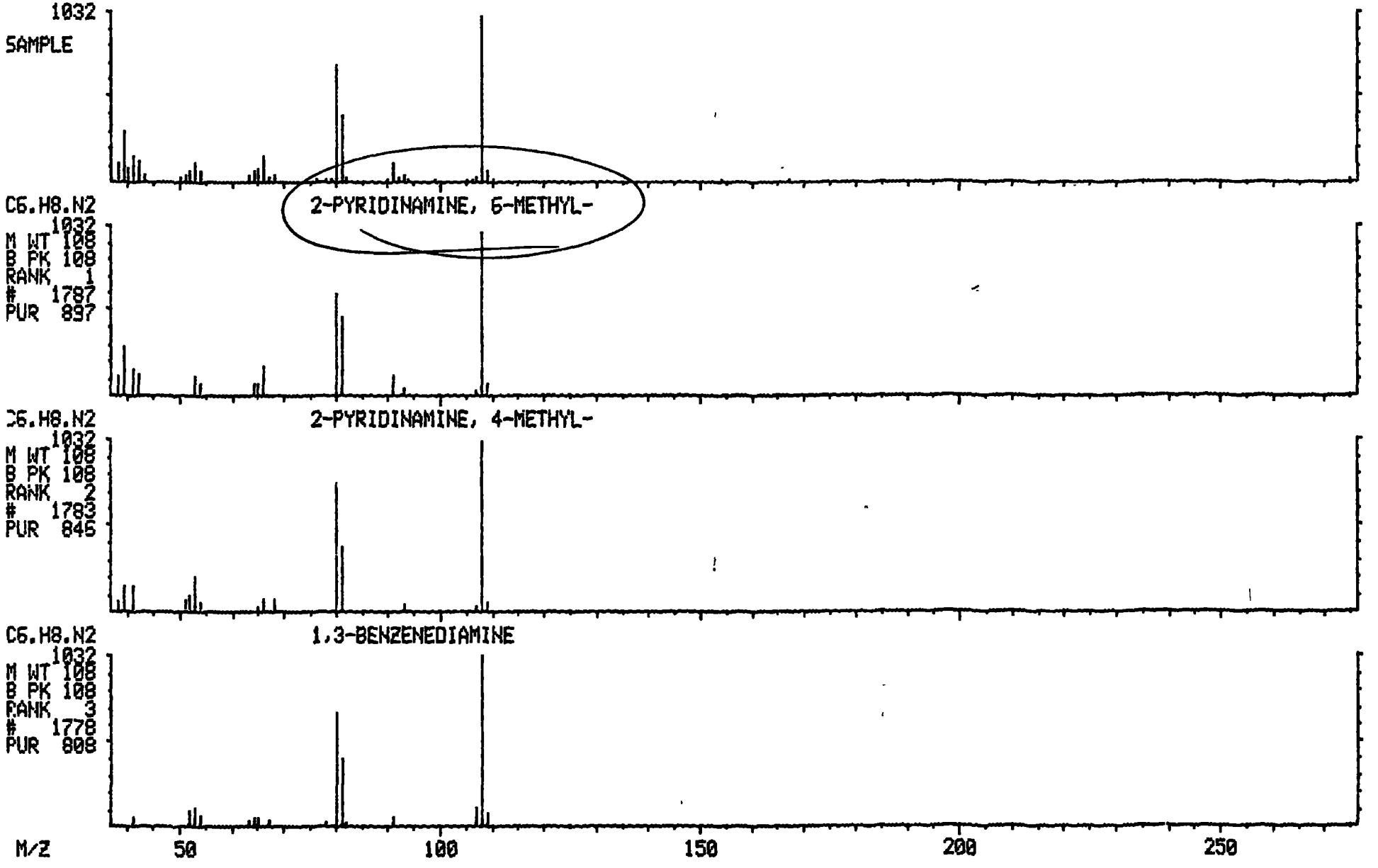


00296

LIBRARY SEARCH
06/01/88 15:32:00 + 9:55
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 # 794
CALI: 053188CR # 4

BASE M/Z: 108
RIC: 25311.

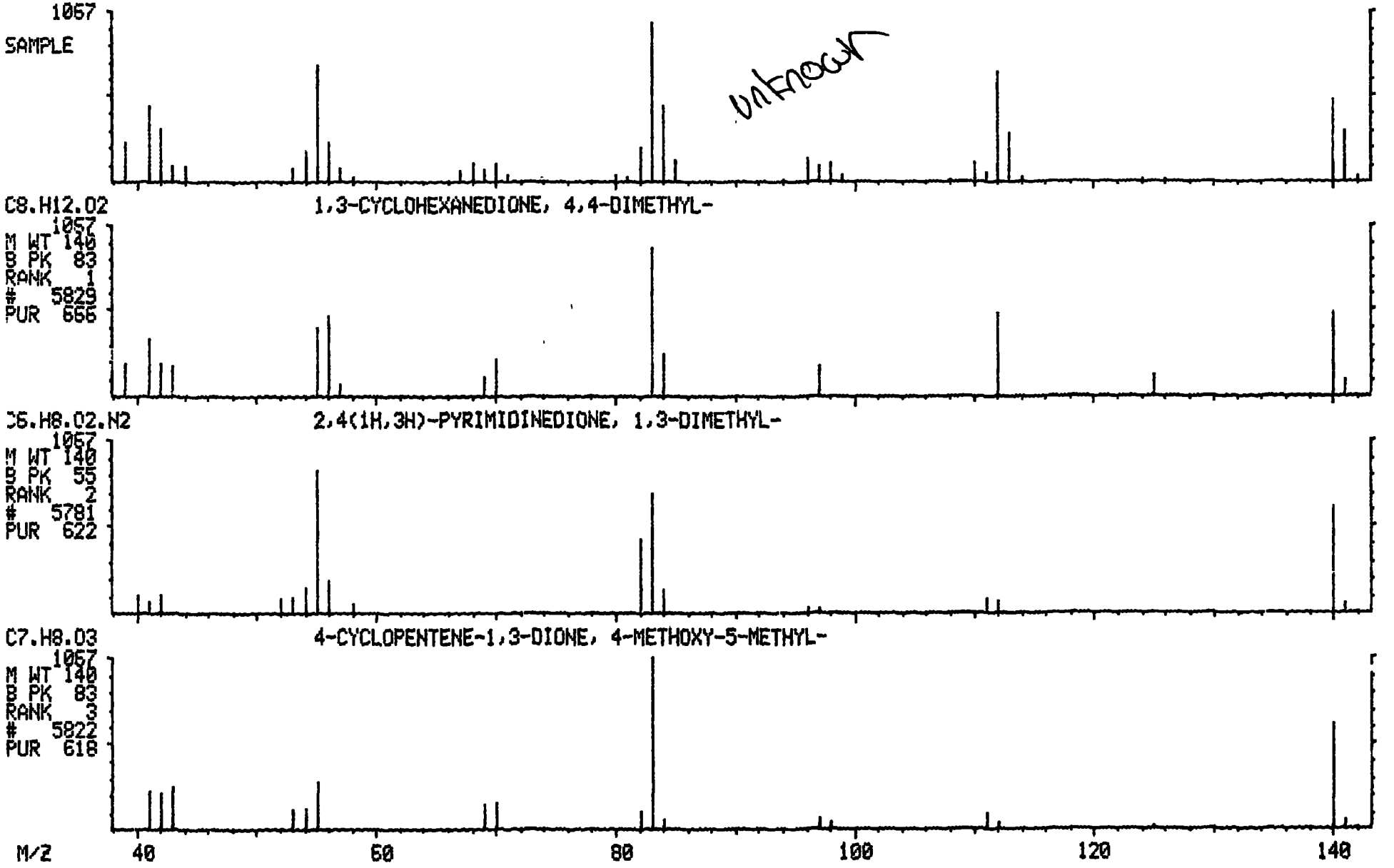


00297

LIBRARY SEARCH
05/01/88 15:32:00 + 11:12
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 # 895
CALI: 053188CR # 4

BASE M/Z: 83
RIC: 16351.

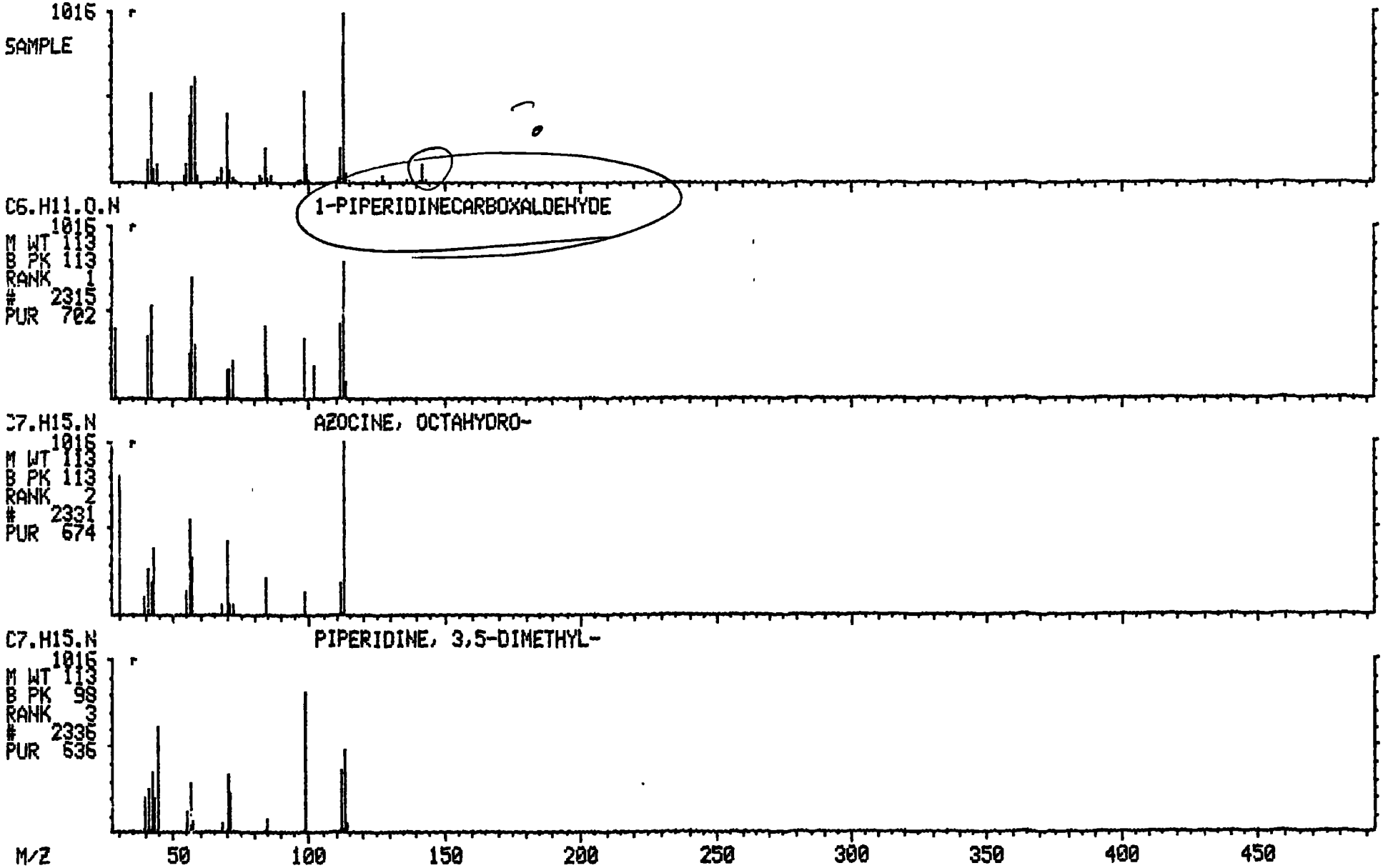


00298

LIBRARY SEARCH
06/01/88 15:32:00 + 12:58
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 #1038
CALI: 053188CR # 4

BASE M/Z: 113
RIC: 9391.

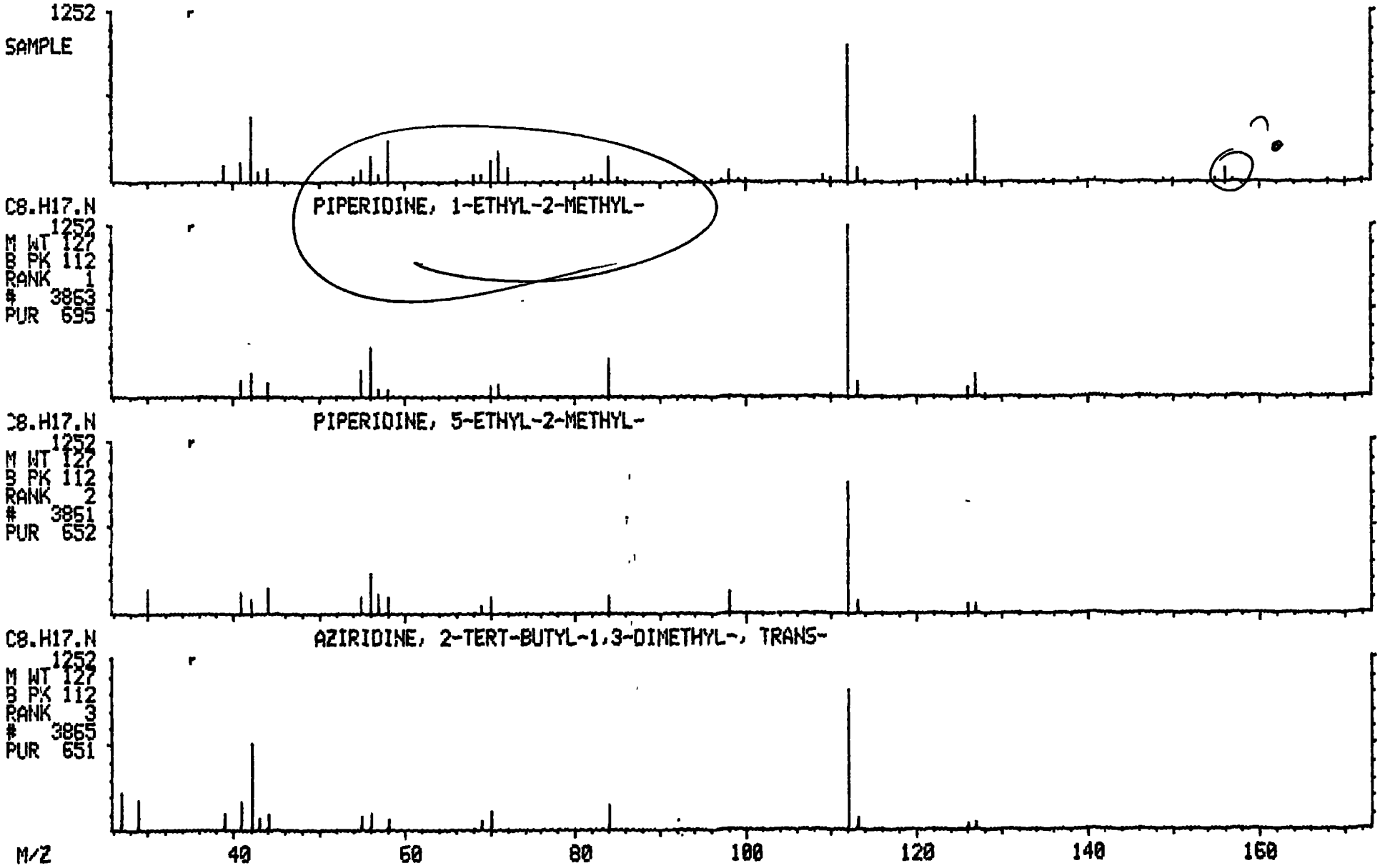


00299

LIBRARY SEARCH
06/01/88 15:32:00 + 13:32
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R954 #1083
CALI: 053188CR # 4

BASE M/Z: 112
RIC: 12111.



LIBRARY SEARCH
06/01/88 15:32:00 + 13:41
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST

DATA: S59436R964 #1095
CALI: 053188CR # 4

BASE M/Z: 80
RIC: 8239.

SAMPLE

C6.H7.O.N 2(1H)-PYRIDINONE, 5-METHYL-
M WT 109
B PK 80
RANK 1
1880
PUR 847

C6.H7.O.N 2(1H)-PYRIDINONE, 3-METHYL-
M WT 109
B PK 80
RANK 2
1878
PUR 814

C6.H7.O.N PHENOL, 2-AMINO-
M WT 109
B PK 80
RANK 3
1868
PUR 800

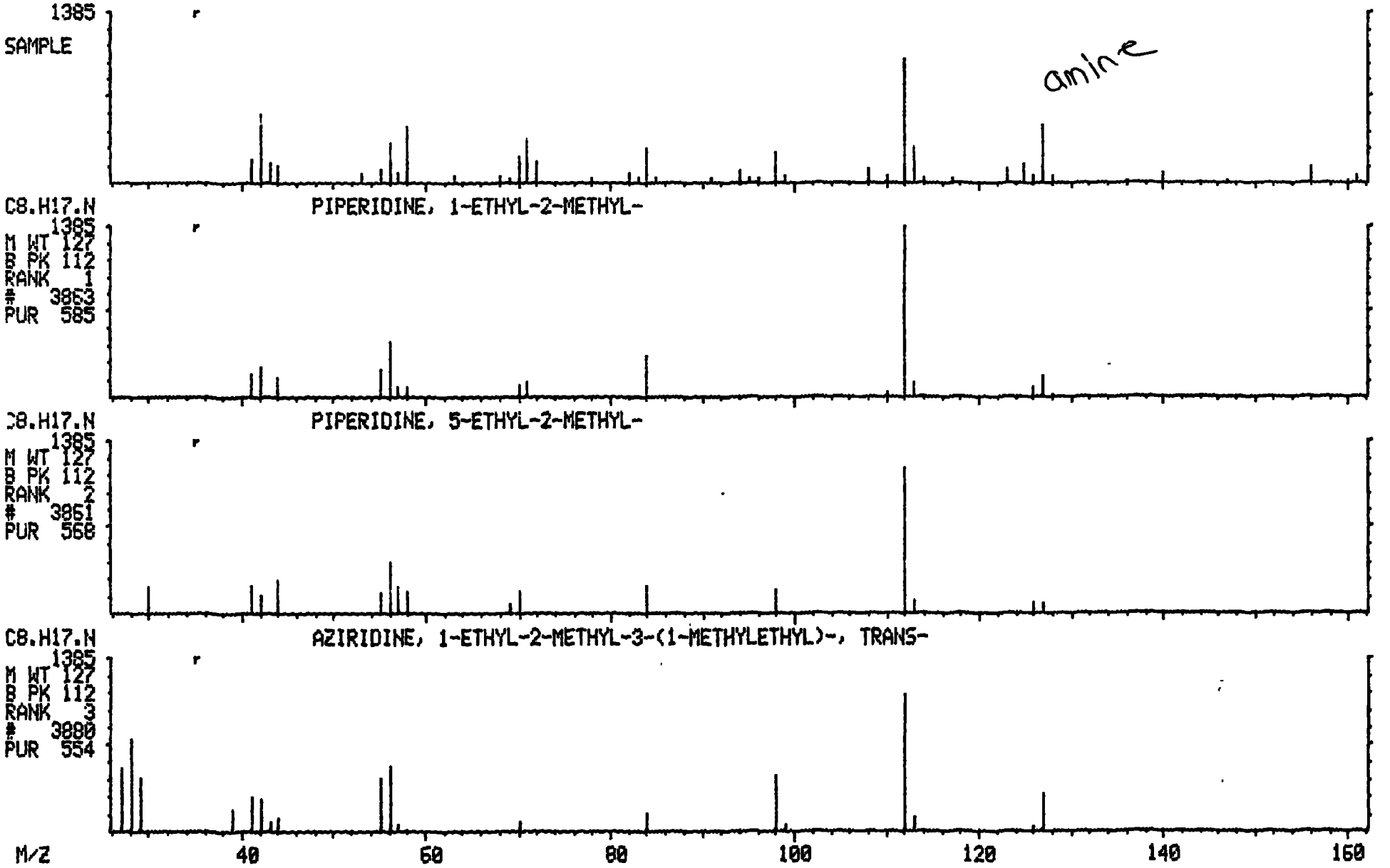
M/Z 50 100 150 200 250 300 350 400 450

C0301

LIBRARY SEARCH
06/01/88 15:32:00 + 14:01
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R954 #1122
CALI: 053188CR # 4

BASE M/Z: 112
RIC: 4127.

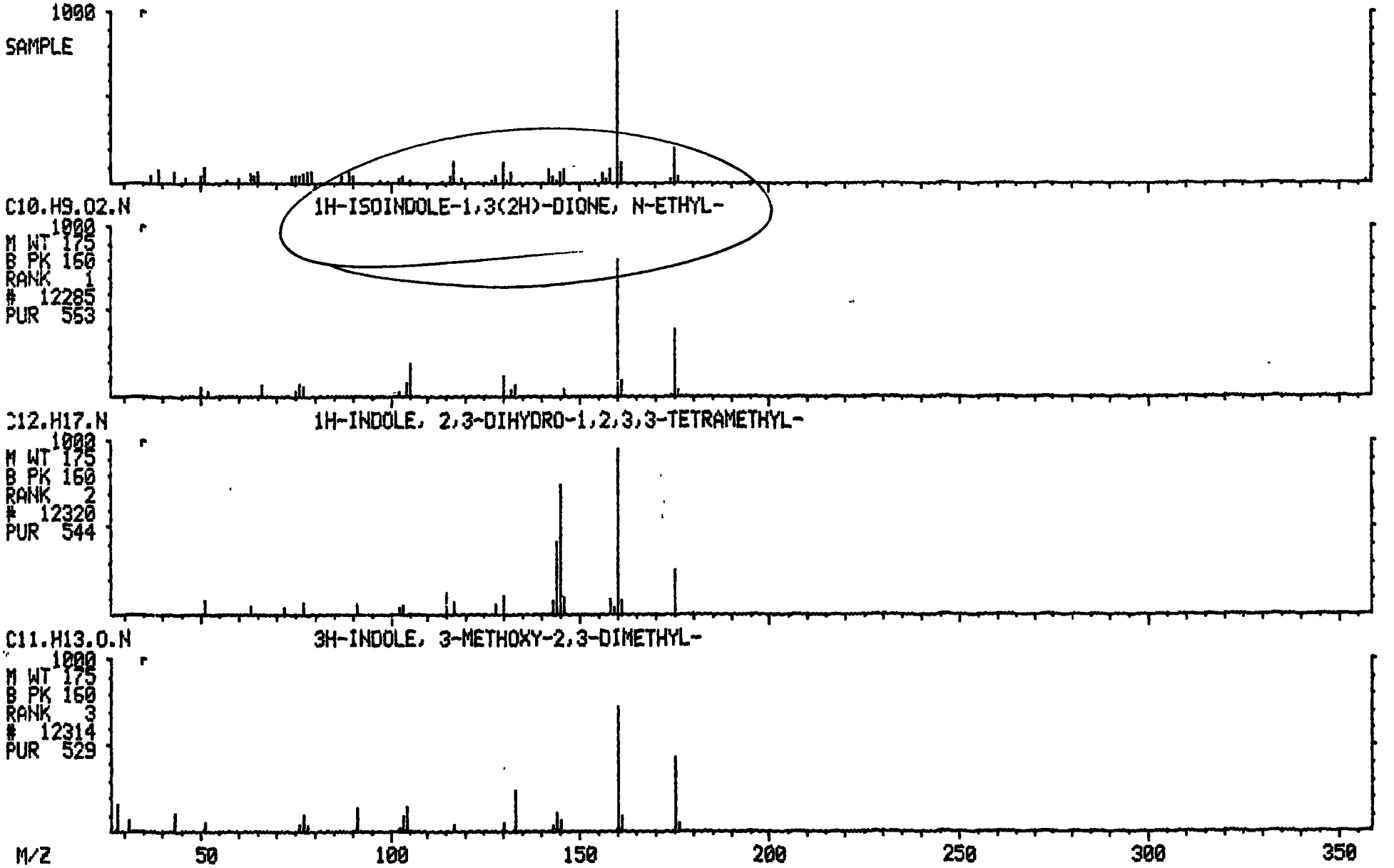


00302

LIBRARY SEARCH
06/01/88 15:32:00 + 15:50
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #1257
CALI: 053188CR # 4

BASE M/Z: 160
RIC: 2263.

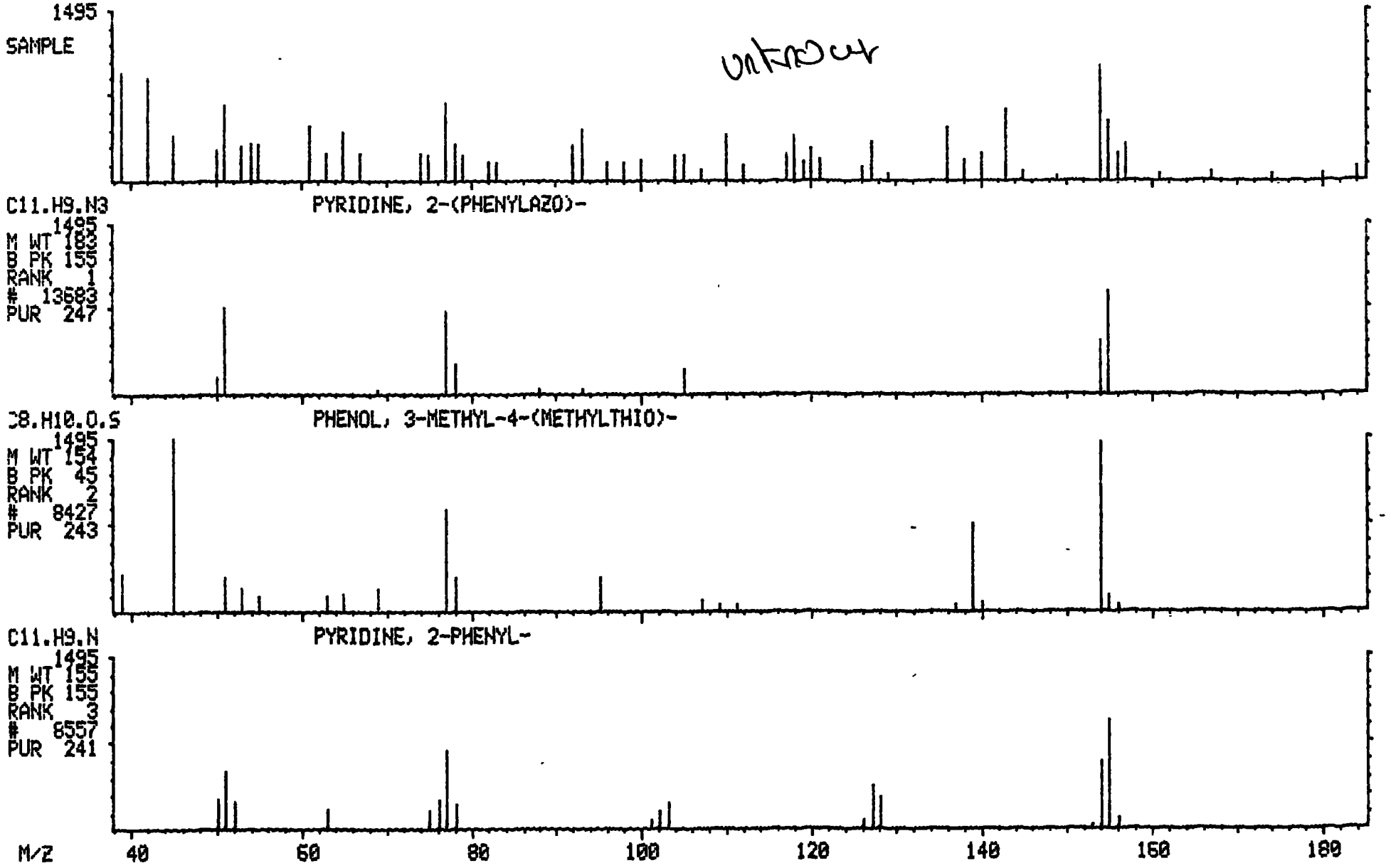


00303

LIBRARY SEARCH
06/01/88 15:32:00 + 16:03
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #1284
CALI: 053188CR # 4

BASE M/Z: 154
RIC: 1997.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 17:25:25
DATA FILE: S59436R964
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

00304

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	12	4	104	IS01/TC01
3	3	1	81	14	8	1	162	IS02/TC02

26 COMPOUNDS PROCESSED, 19 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	980	.	152	717	.	1
2	S1	4	-335	336	336	.	1	990	.	84	336	.	1
3	S1	20	-337	338	.	.	.	.	.	79	.	.	.
4	S1	30	-431	432	432	.	1	997	.	93	432	.	1
5	S1	62	-496	497	496	-1	1	993	.	93	496	.	1
6	S1	64	-526	528	529	1	1	993	.	107	529	.	1
7	S1	73	-558	560	560	.	1	985	.	106	560	.	1
8	S1	83	-594	596	596	.	1	994	.	107	596	.	1
9	S1	87	-615	617	616	-1	1	992	.	107	616	.	1
10	S1	88	-635	637	637	.	2	993	.	107	637	.	1
11	S1	89	-643	645	647	2	2	951	.	107	647	.	1
12	S1	92	-663	665	664	-1	1	993	.	107	664	.	1
13	S1	122	-700	702	703	1	1	971	.	107	703	.	1
14	S2	1	-954	956	955	-1	1	998	.	136	955	.	1
15	S3	1	-1311	1313	1313	.	1	989	.	164	1313	.	1
16	S1	137	-731	733	732	-1	1	989	.	106	732	.	1
17	S1	142	-745	747	746	-1	1	952	.	106	746	.	1
18	S1	187	-799	801	802	1	1	902	.	108	.	.	.
19	S1	202	-822	824	826	2	1	904	.	106	826	.	1
20	S1	203	-827	829	826	-3	1	904	.	106	826	.	1
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	955	.	1
26	S2	150	-1118	1120	.	.	.	.	.	142	1118	.	1

Quantitation Report File: S59436R964

Data: S59436R964.TI
06/01/88 15:32:00
Sample: 59436-04 100%/1ML BNA
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MD Acct. No.:

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	21655.	40.000 UG/ML	15.32
2	84	336	4:12	1	0.469	A BB	28254.	23.364 UG/ML	8.95
3	NOT FOUND								
4	93	432	5:24	1	0.603	A BB	8441.	8.083 UG/ML	3.10
5	93	496	6:12	1	0.692	A BB	26682.	27.778 UG/ML	10.64
6	107	529	6:37	1	0.738	A BB	5968.	5.389 UG/ML	2.06
7	106	560	7:00	1	0.781	A BB	2970.	2.289 UG/ML	0.88
8	107	596	7:27	1	0.831	A BV	19167.	20.979 UG/ML	8.04
9	107	616	7:42	1	0.859	A BB	8761.	8.977 UG/ML	3.44
10	107	637	7:58	1	0.888	A BB	5167.	7.445 UG/ML	2.85
11	107	647	8:05	1	0.902	A BB	408.	0.522 UG/ML	0.20
12	107	664	8:18	1	0.926	A BB	20344.	23.482 UG/ML	8.99
13	107	703	8:47	1	0.980	A BB	3397.	3.909 UG/ML	1.50
14	136	955	11:56	14	1.000	A BB	84588.	40.000 UG/ML	15.32
15	164	1313	16:25	15	1.000	A BB	38821.	40.000 UG/ML	15.32
16	106	732	9:09	1	1.021	A VB	4571	3.905 UG/ML	1.50
17	106	746	9:19	1	1.040	A BB	1355.	1.656 UG/ML	0.63

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
18	NOT FOUND								
19	106	826	10:19	1	1.152	A BB	467.	2.064 UG/ML	0.79
20	106	826	10:19	1	1.152	A BB	467.	0.644 UG/ML	0.25
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	107	955	11:56	1	1.332	A BB	459.	0.456 UG/ML	0.17
26	142	1118	13:58	14	1.171	A BB	186.	0.126 UG/ML	0.05

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	23.36	50.00	1.044	2.234	0.47
3	4:13		0.471						
4	5:23	1.00	0.602	1.00	8.08	50.00	0.312	1.929	0.16
5	6:12	1.00	0.693	1.00	27.78	50.00	0.986	1.774	0.56
6	6:34	1.01	0.735	1.00	5.39	50.00	0.220	2.046	0.11
7	6:58	1.00	0.779	1.00	2.29	50.00	0.110	2.397	0.05
8	7:25	1.00	0.830	1.00	20.98	50.00	0.708	1.688	0.42
9	7:41	1.00	0.859	1.00	8.98	50.00	0.324	1.803	0.18
10	7:56	1.00	0.887	1.00	7.45	50.00	0.191	1.282	0.15
11	8:02	1.01	0.898	1.00	0.52	50.00	0.015	1.445	0.01
12	8:17	1.00	0.926	1.00	23.48	50.00	0.752	1.600	0.47
13	8:45	1.00	0.978	1.00	3.91	50.00	0.125	1.605	0.08
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	3.91	50.00	0.169	2.162	0.08
17	9:19	1.00	1.041	1.00	1.66	50.00	0.050	1.512	0.03
18	9:59		1.116						
19	10:16	1.00	1.148	1.00	2.06	50.00	0.017	0.418	0.04
20	10:20	1.00	1.155	1.00	0.64	50.00	0.017	1.339	0.01
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	0.46	50.00	0.017	1.861	0.01
26	13:58	1.00	1.171	1.00	0.13	50.00	0.002	0.698	0.00

TCA FINISHED, 19 FOUND
FINISHED AT: 6/03/88 17:28:23

RF 2.02
SV 2.04

RMAL QUANTITATION SUMMARY FILE: S59436R964
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

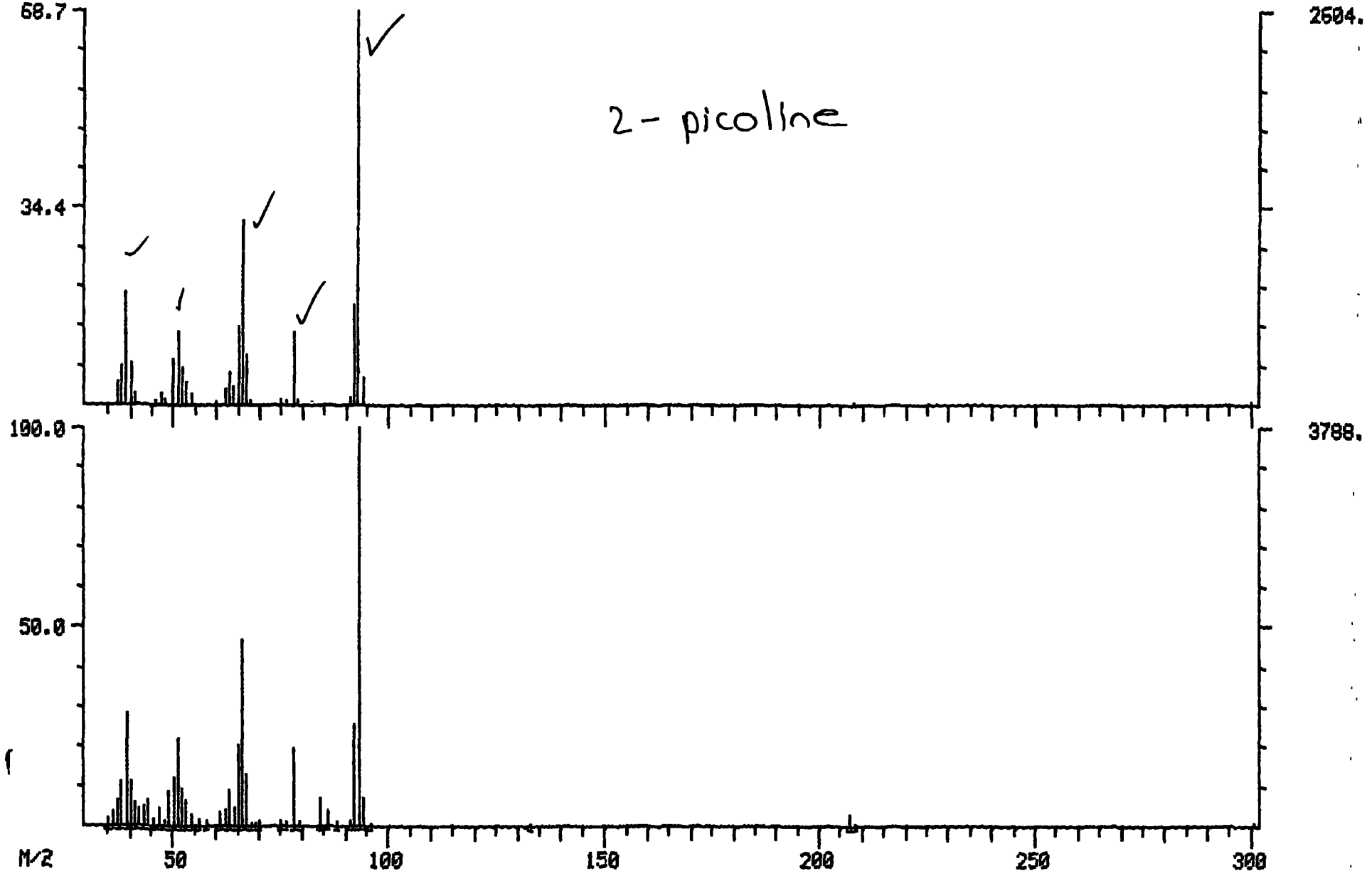
UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	717	1	21655.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	955	2	84588.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1313	3	38821.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	336	1	28254.	1.044	23.364
5	S1# 20	PYRIDINE	79		1	NOT FOUND		
6	S1# 30	2-PICOLINE	93	432	1	8441.	0.312	8.083
7	S1# 62	3 & 4-PICOLINE	93	496	1	26682.	0.986	27.778
8	S1# 64	2,6-LUTIDINE	107	529	1	5968.	0.220	5.389
9	S1# 73	2-ETHYL PYRIDINE	106	560	1	2970.	0.110	2.289
10	S1# 83	2,4 & 2,5-LUTIDINE	107	596	1	19167.	0.708	20.979
11	S1# 87	2,3-LUTIDINE	107	616	1	8761.	0.324	8.977
12	S1# 88	3-ETHYL PYRIDINE	107	637	1	5167.	0.191	7.445
13	S1# 89	4-ETHYL PYRIDINE	107		1	NOT FOUND		
14	S1# 92	3,5-LUTIDINE	107	664	1	20344.	0.752	23.482
15	S1#122	3,4-LUTIDINE	107	703	1	3397.	0.125	3.909
16	S1#137	2-METHYL-5-ETHYL PYRIDIN	106	732	1	4571.	0.169	3.905
17	S1#142	2-METHYL-3-ETHYL PYRIDIN	106	746	1	1355.	0.050	1.656
18	S1#187	M AND P CRESOLS	108		1	NOT FOUND		
19	S1#202	3-ETHYL-4-METHYL PYRIDIN	106	826	1	467.	0.017	~~2.064~~
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		

C0306

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 5:24
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 #432 BASE M/Z: 93/ 93
CALI: 053188CR #4 RIC: 9503./ 16303.

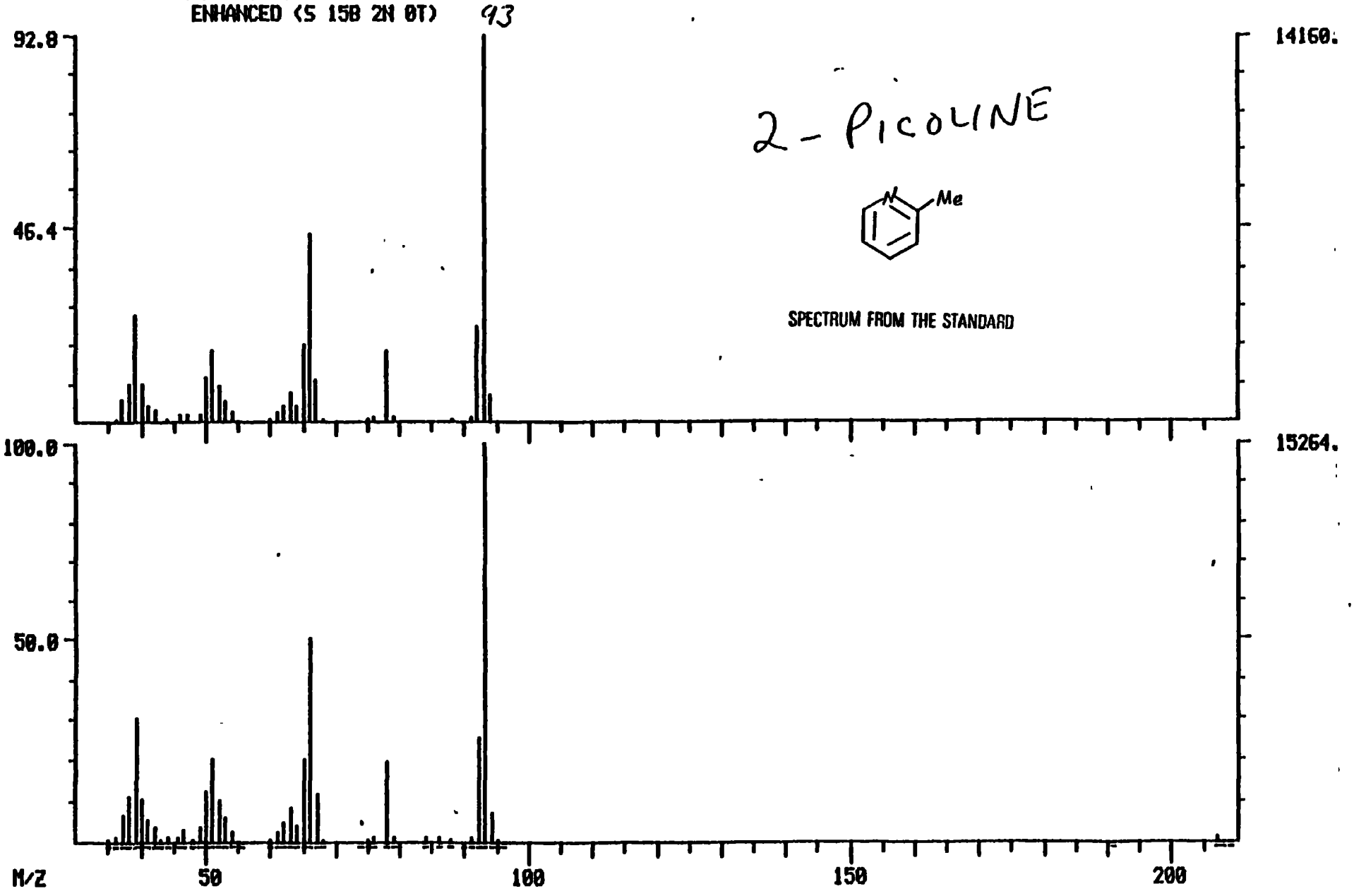


00309

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 5:22
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STOR976 #429
CALI: 060288CR #5

BASE M/Z: 93/ 93
RIC: 52351./ 60095.



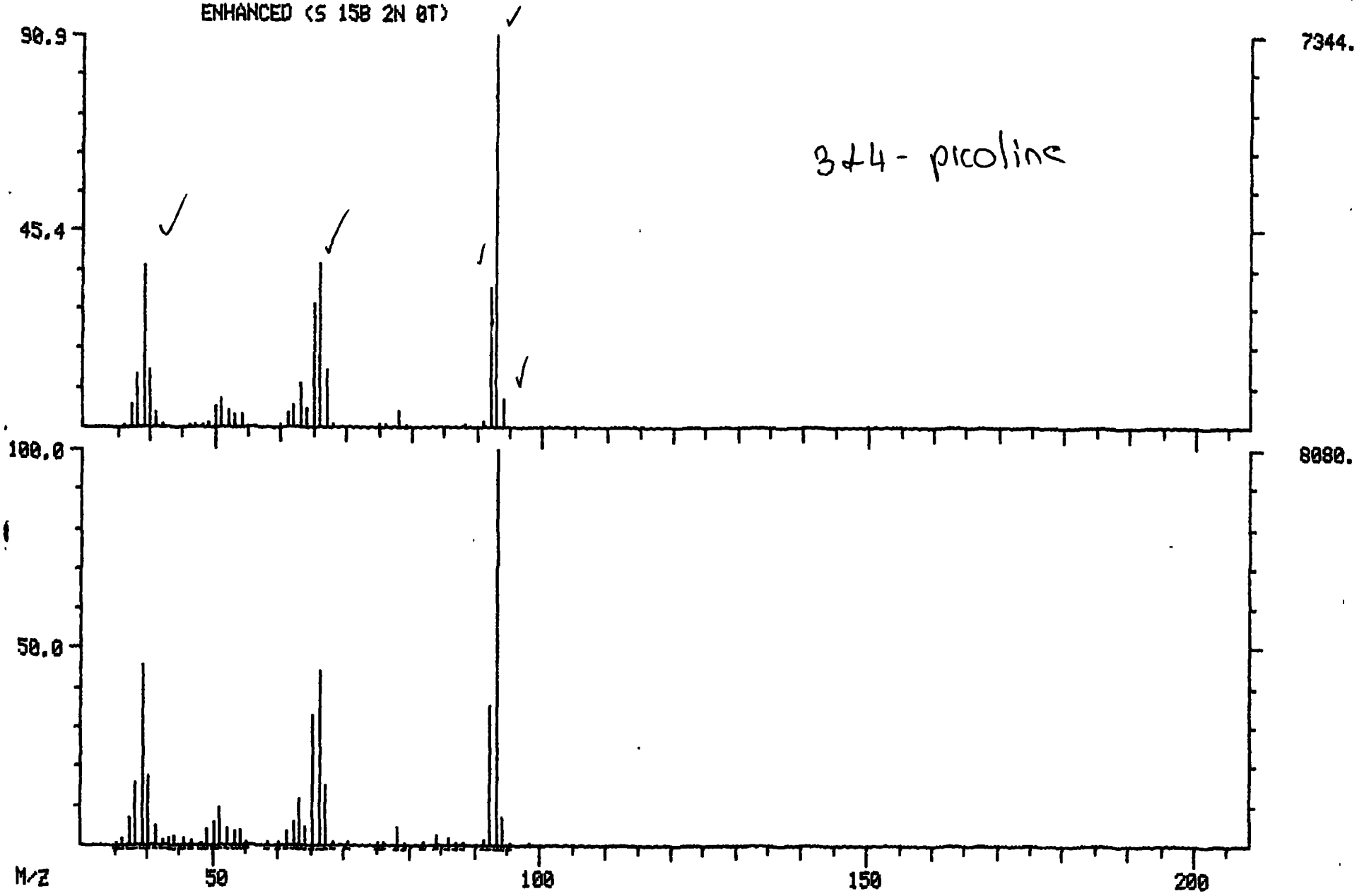
2-PICOLINE

SPECTRUM FROM THE STANDARD

C0310

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 6:12
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #496 BASE M/Z: 93/ 93
CALI: 053188CR #4 RIC: 27039./ 32831.

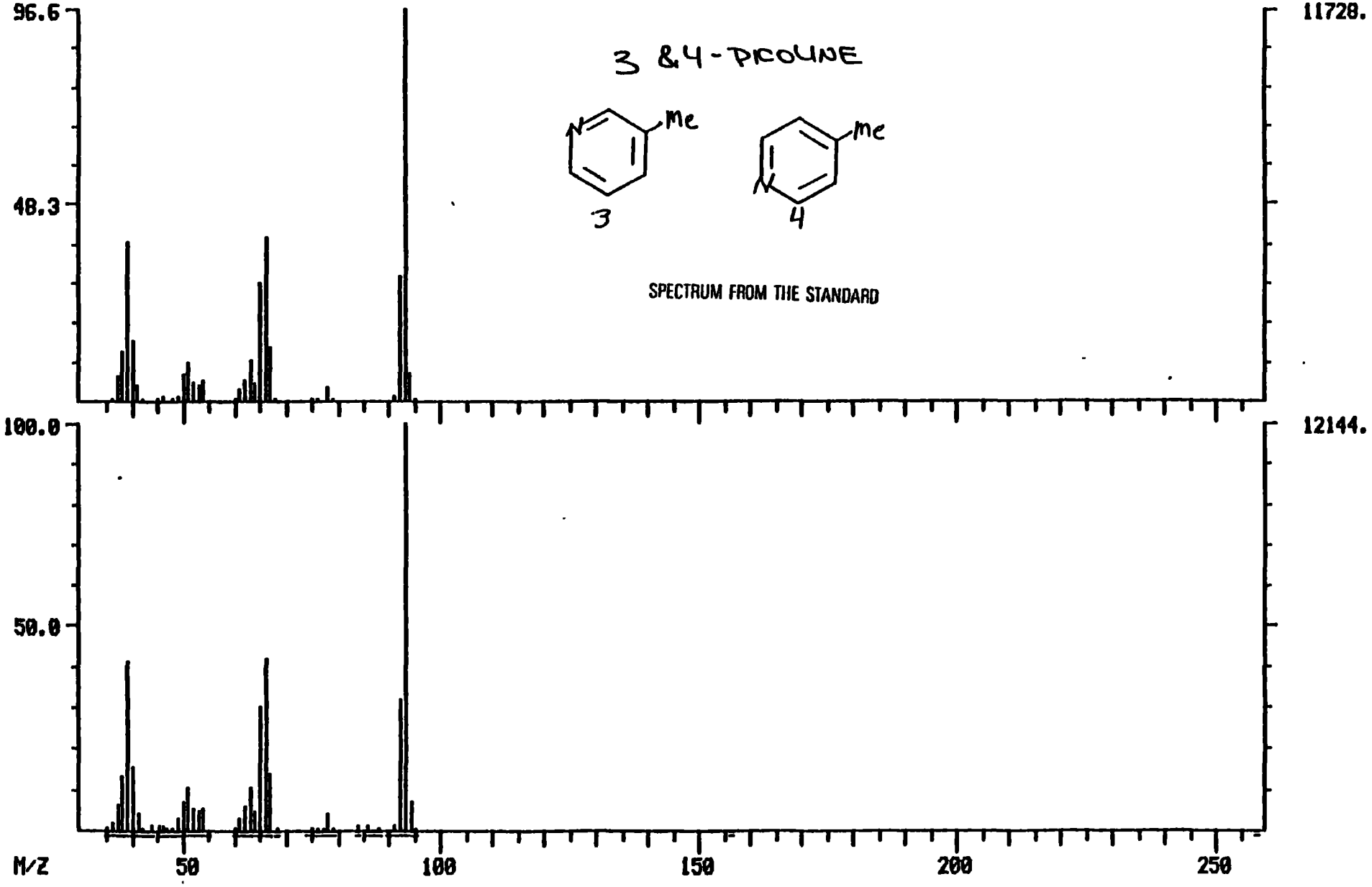


C0311

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 6:10
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #494
CALI: 060288CR #5

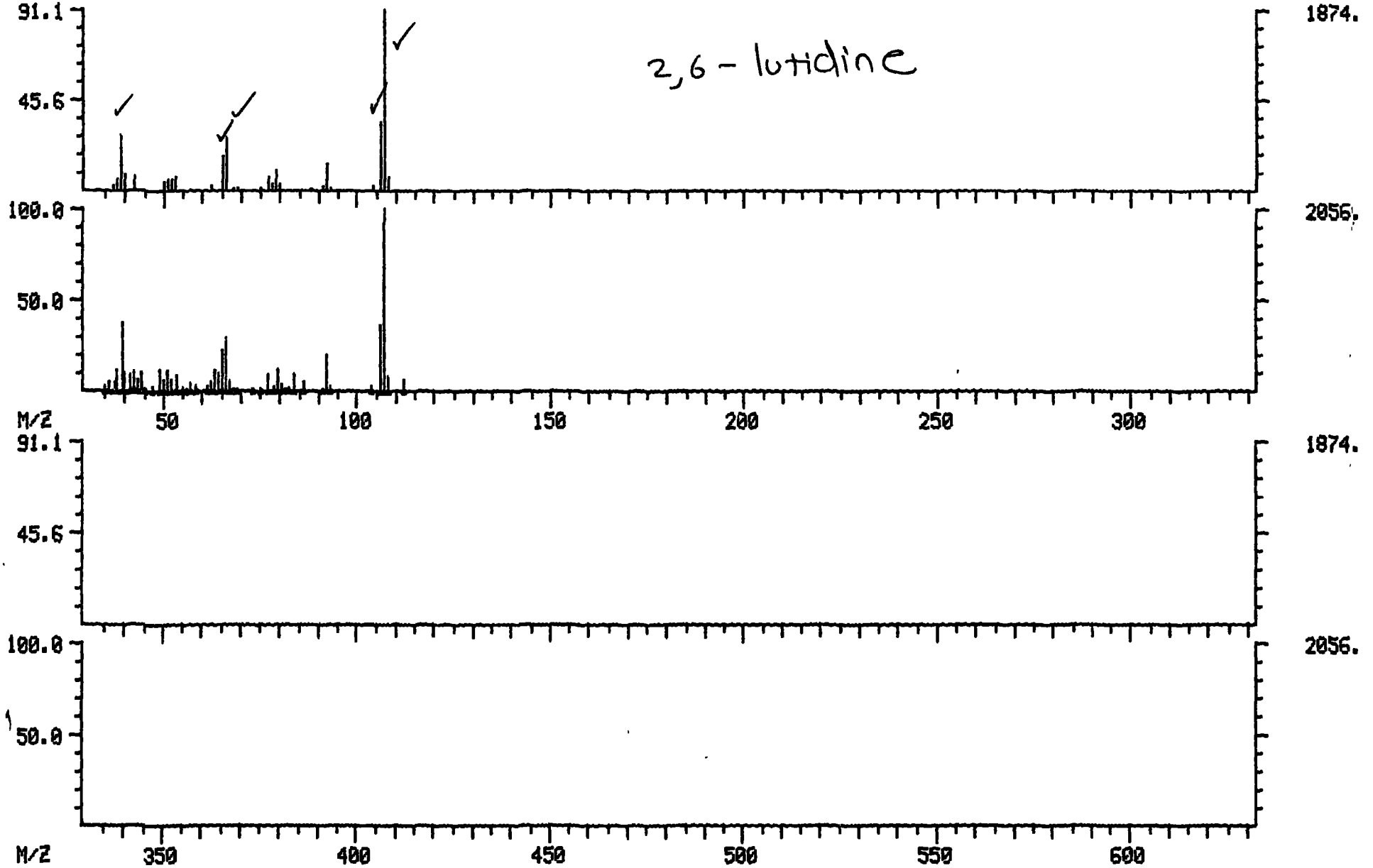
BASE M/Z: 93/ 93
RIC: 43583./ 46591.



00312

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 6:37
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #529 BASE M/Z: 107/ 107
CALI: 053188CR #4 RIC: 6071./ 9743.



CC313

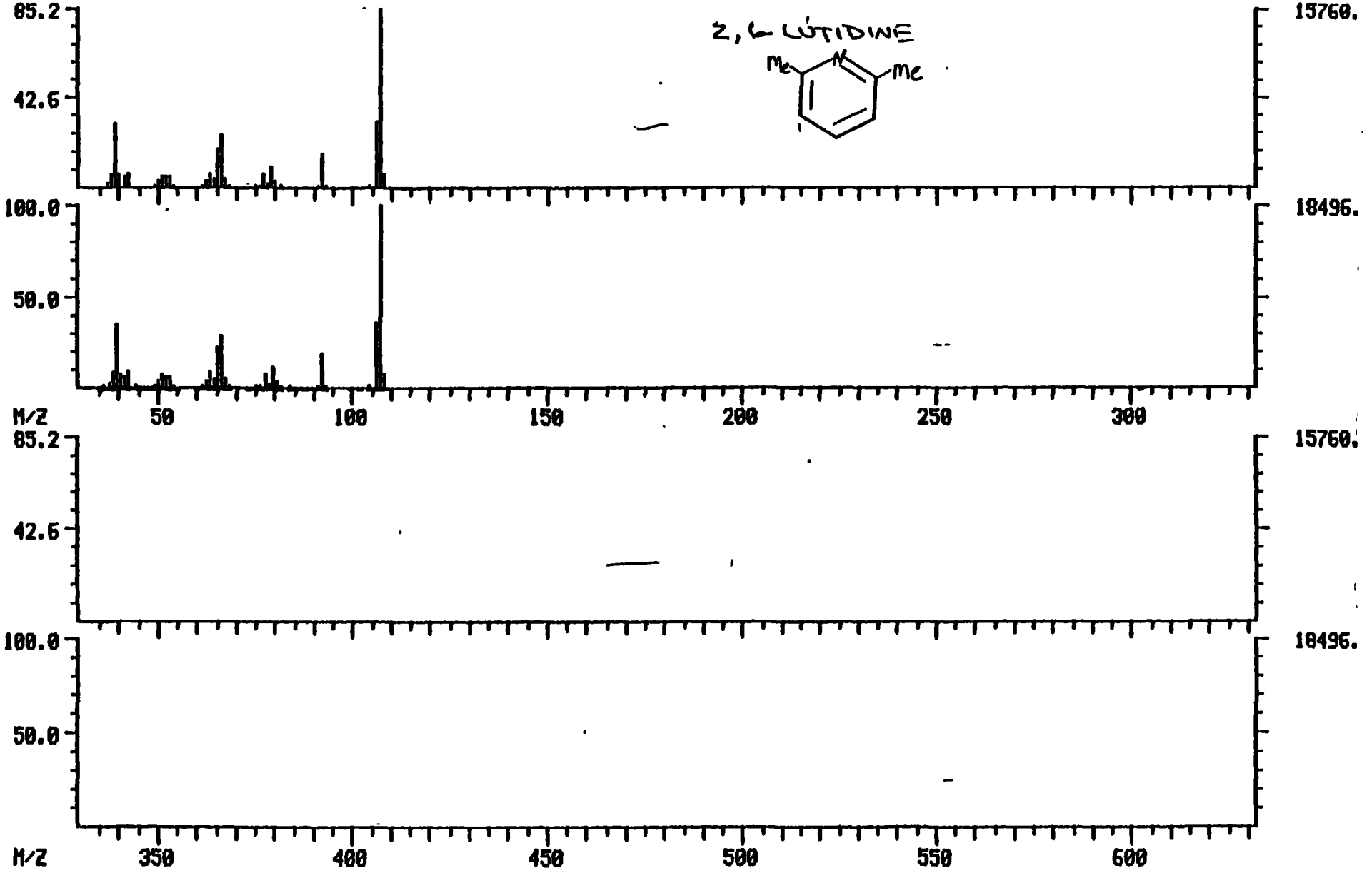
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 6:34
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #525
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 57279./ 69119.

SPECTRUM FROM THE STANDARD

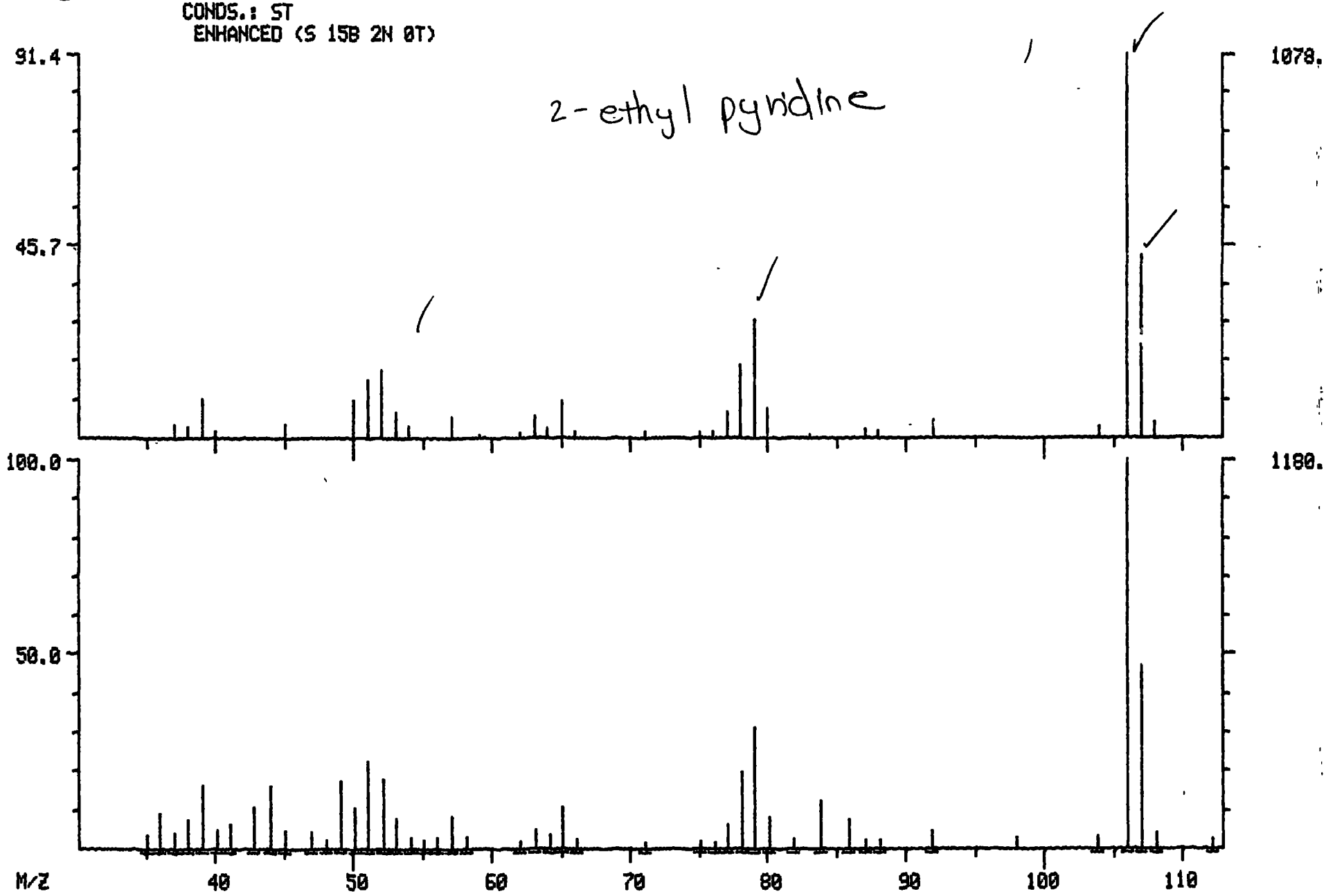
2,6 LUTIDINE



CC314

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 7:00
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 #560 BASE M/Z: 106/ 106
CALI: 053188CR #4 RIC: 3555./ 5519.



00315

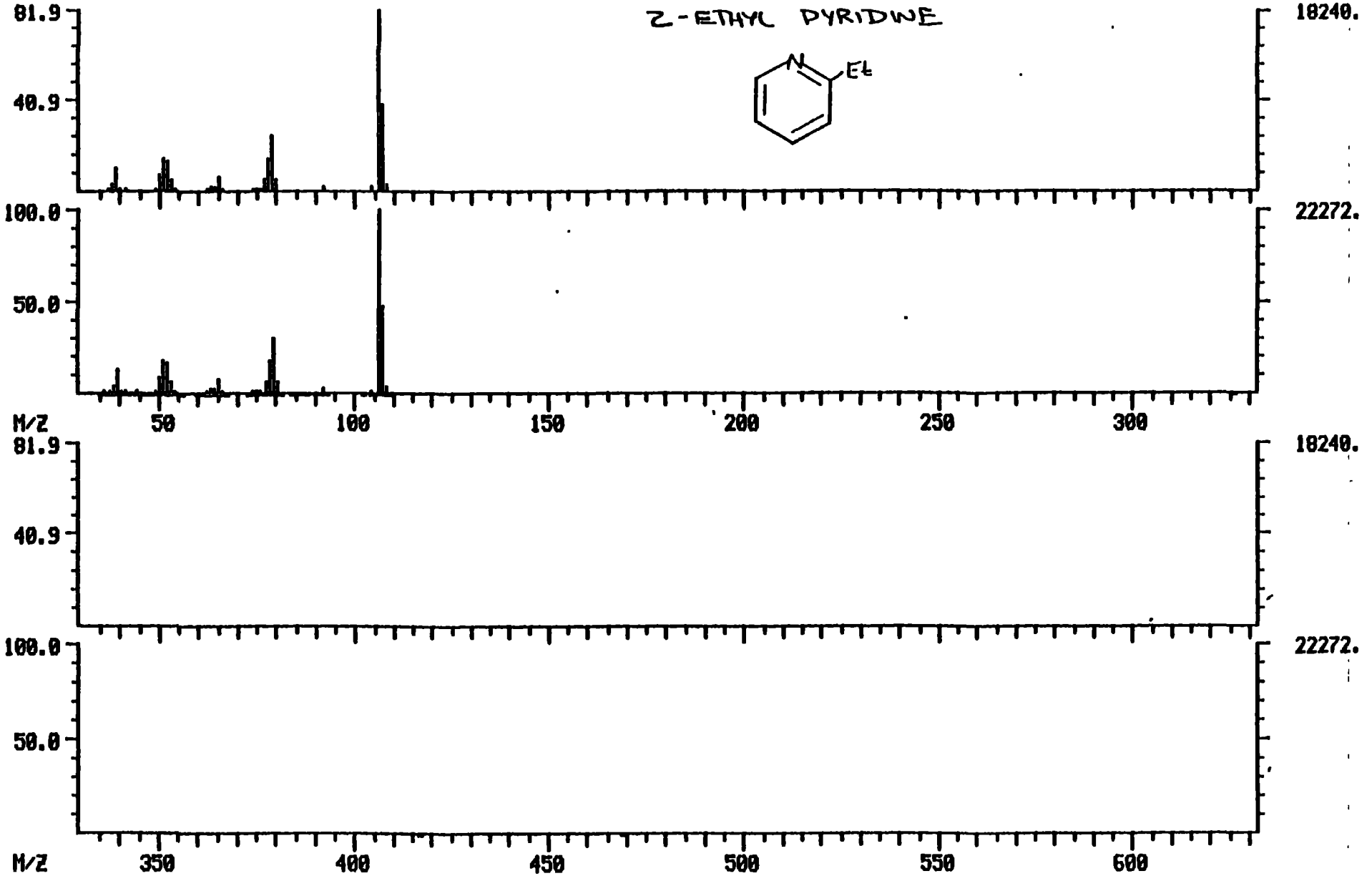
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 6:57
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #556
CALI: 060288CR #5

BASE M/Z: 106/ 106
RIC: 57215./ 70143.

SPECTRUM FROM THE STANDARD

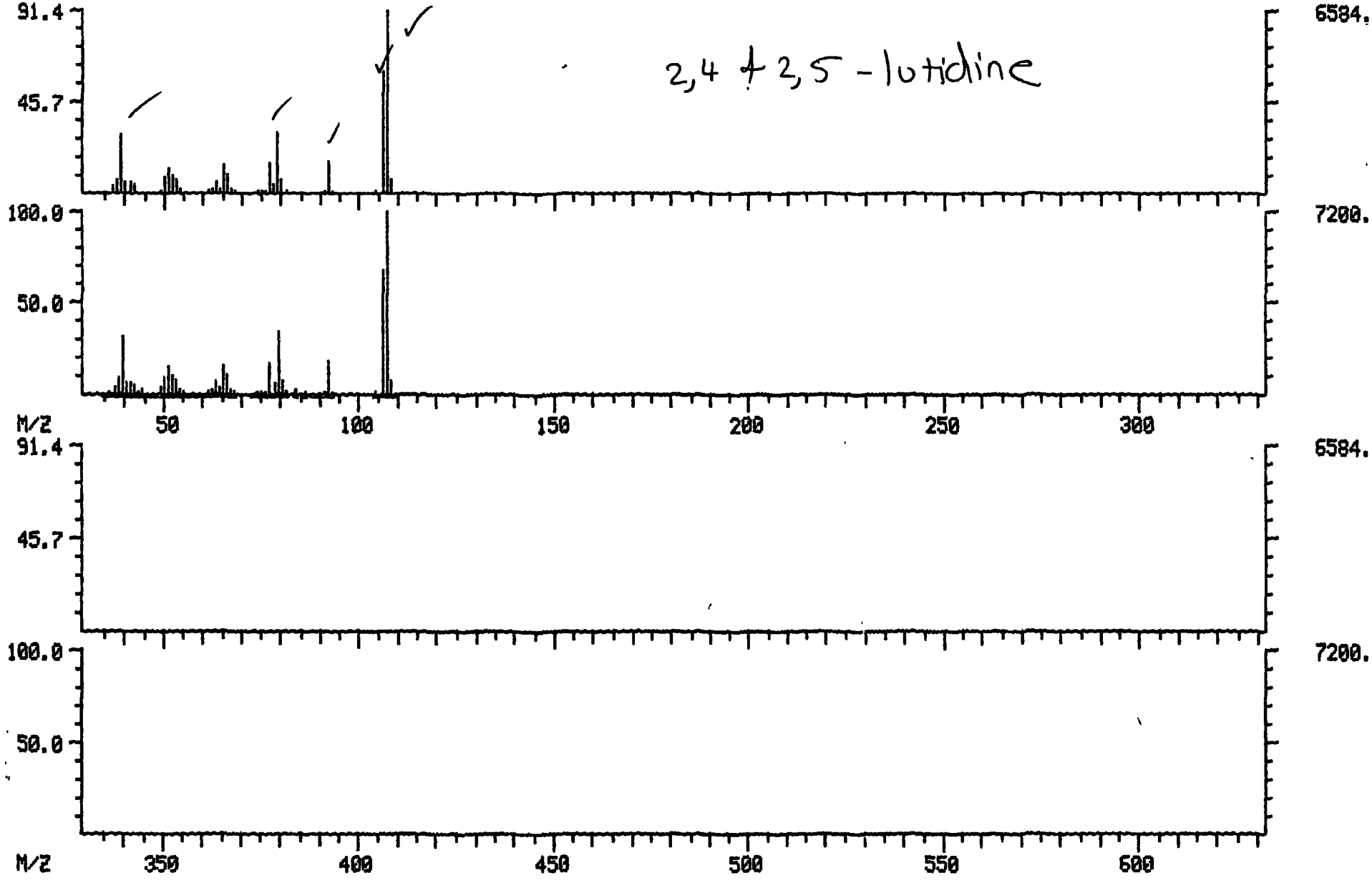
2-ETHYL PYRIDINE



00316

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 7:27
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #596 BASE M/Z: 107/ 107
CALI: 053188CR #4 RIC: 27071./ 31423.



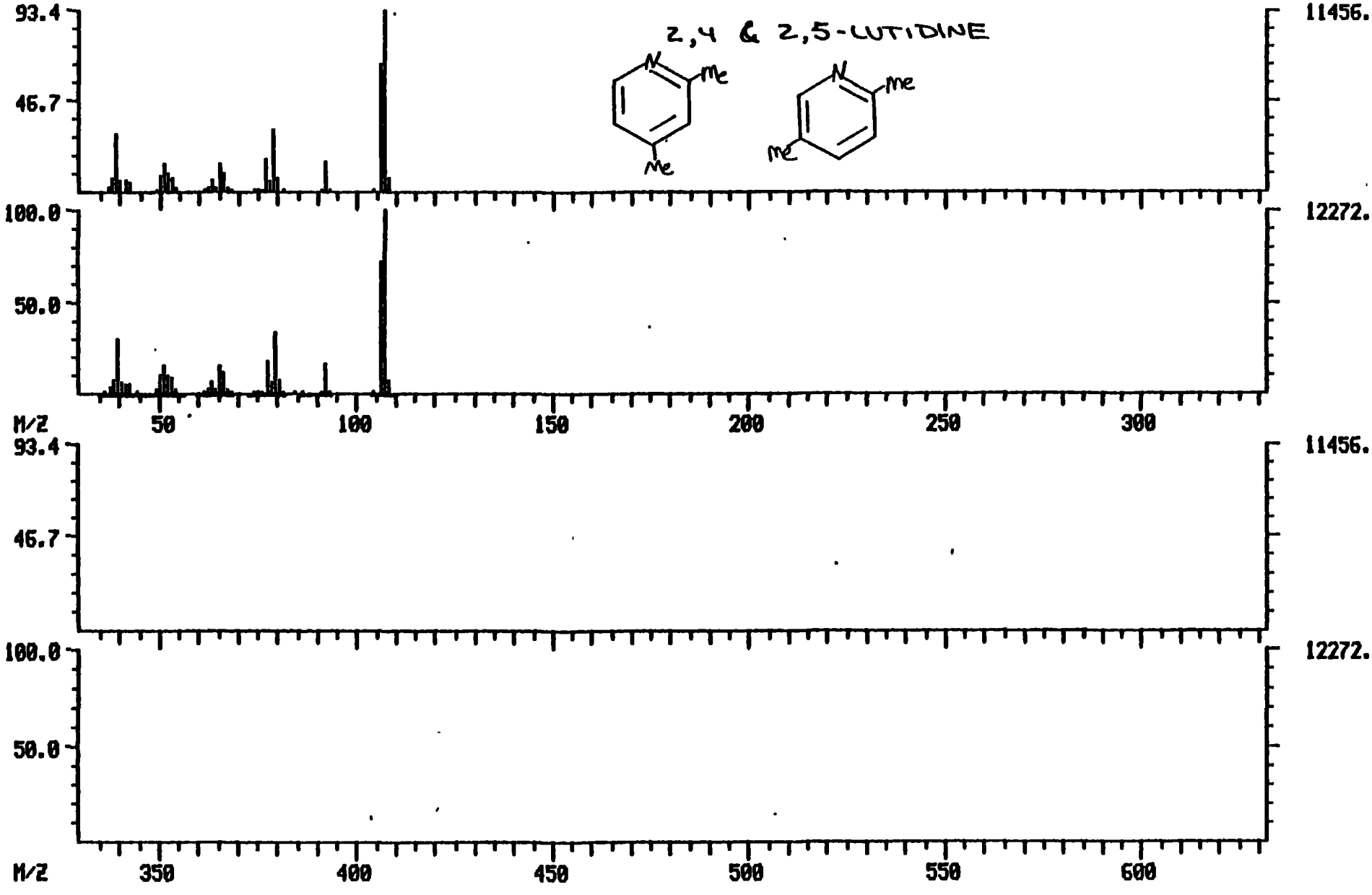
C0317

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

DATA: STDR976 #593
CALI: 060288CR #5

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

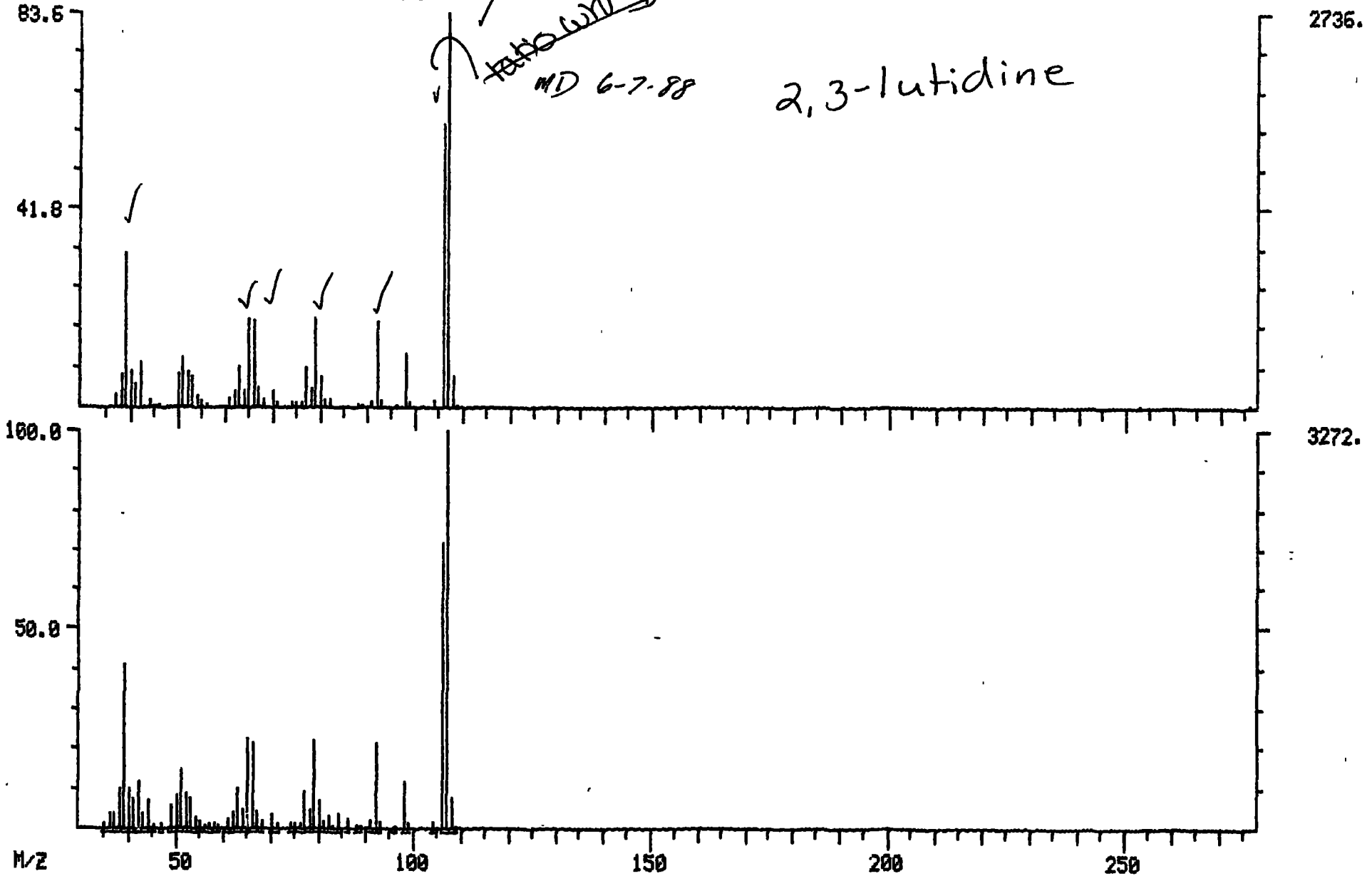
SPECTRUM FROM THE STANDARD



00318

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 7:42
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #616 BASE M/Z: 107/ 107
CALI: 053188CR #4 RIC: 12847./ 16543.



following
MD 6-7-88

2,3-lutidine

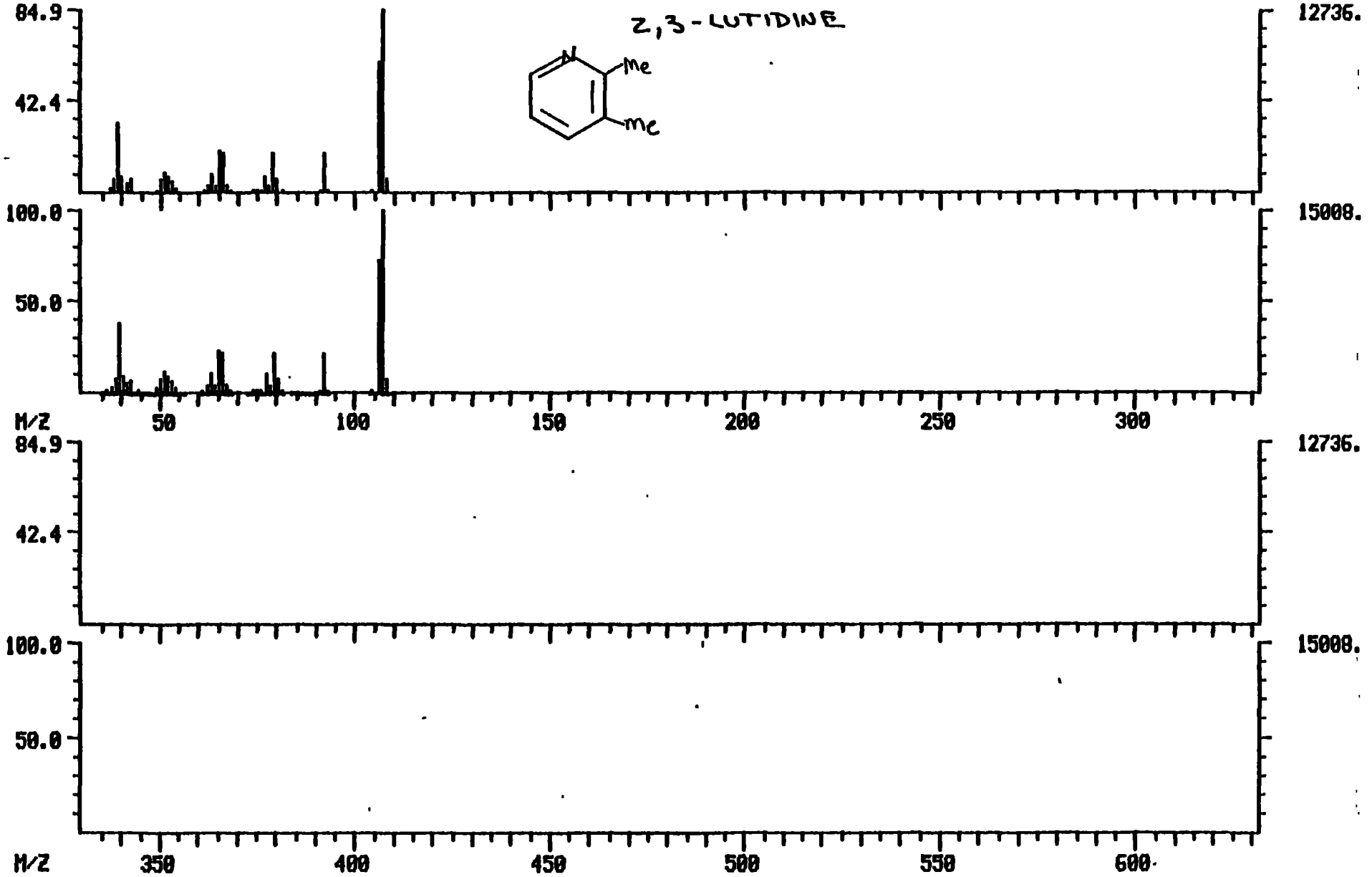
C0319

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:40
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #613
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 54335./ 64575.

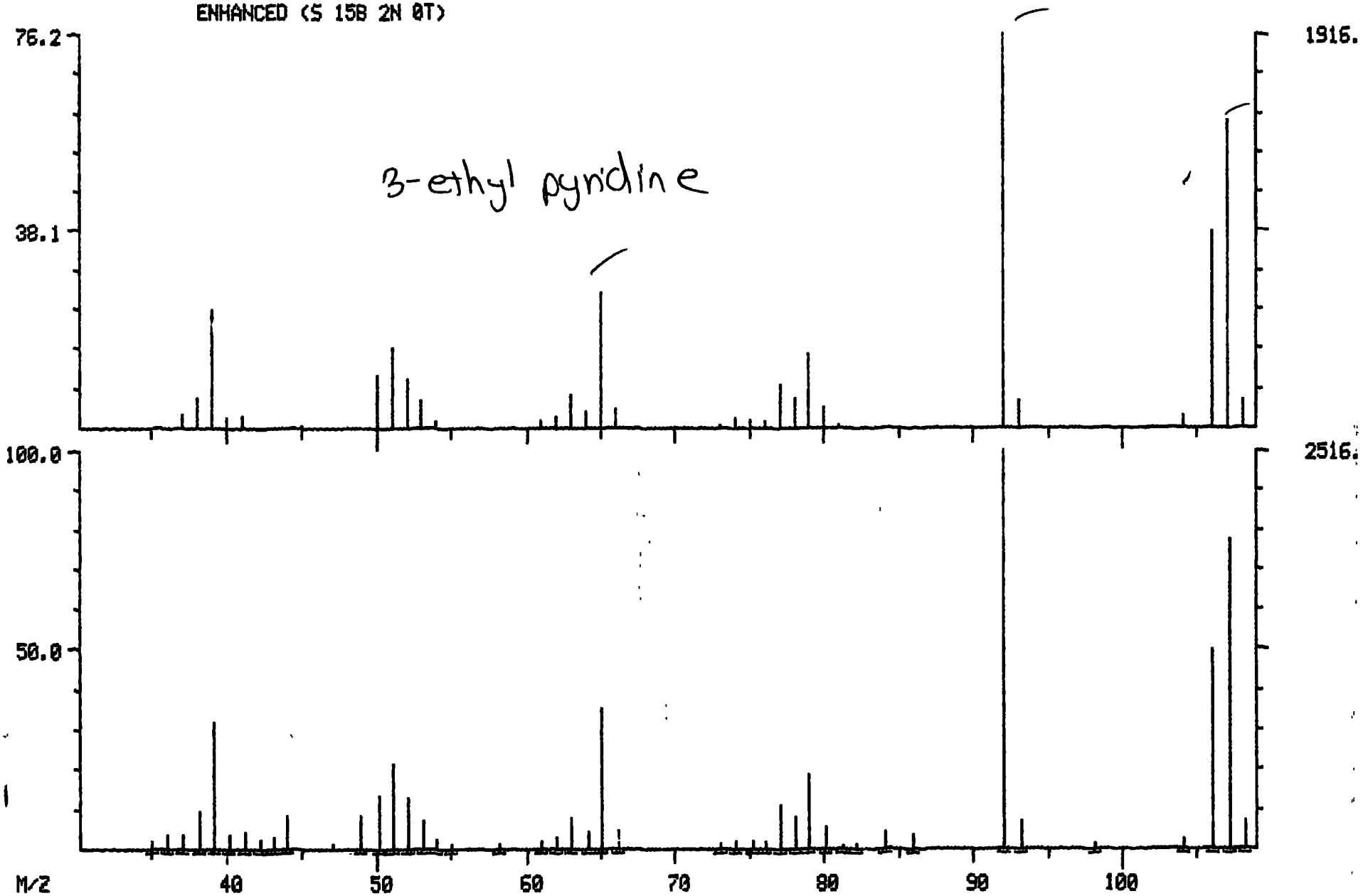
SPECTRUM FROM THE STANDARD



C0320

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 7:58
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #637 BASE M/Z: 92/ 92
CALI: 053188CR #4 RIC: 8607./ 12527.



00321

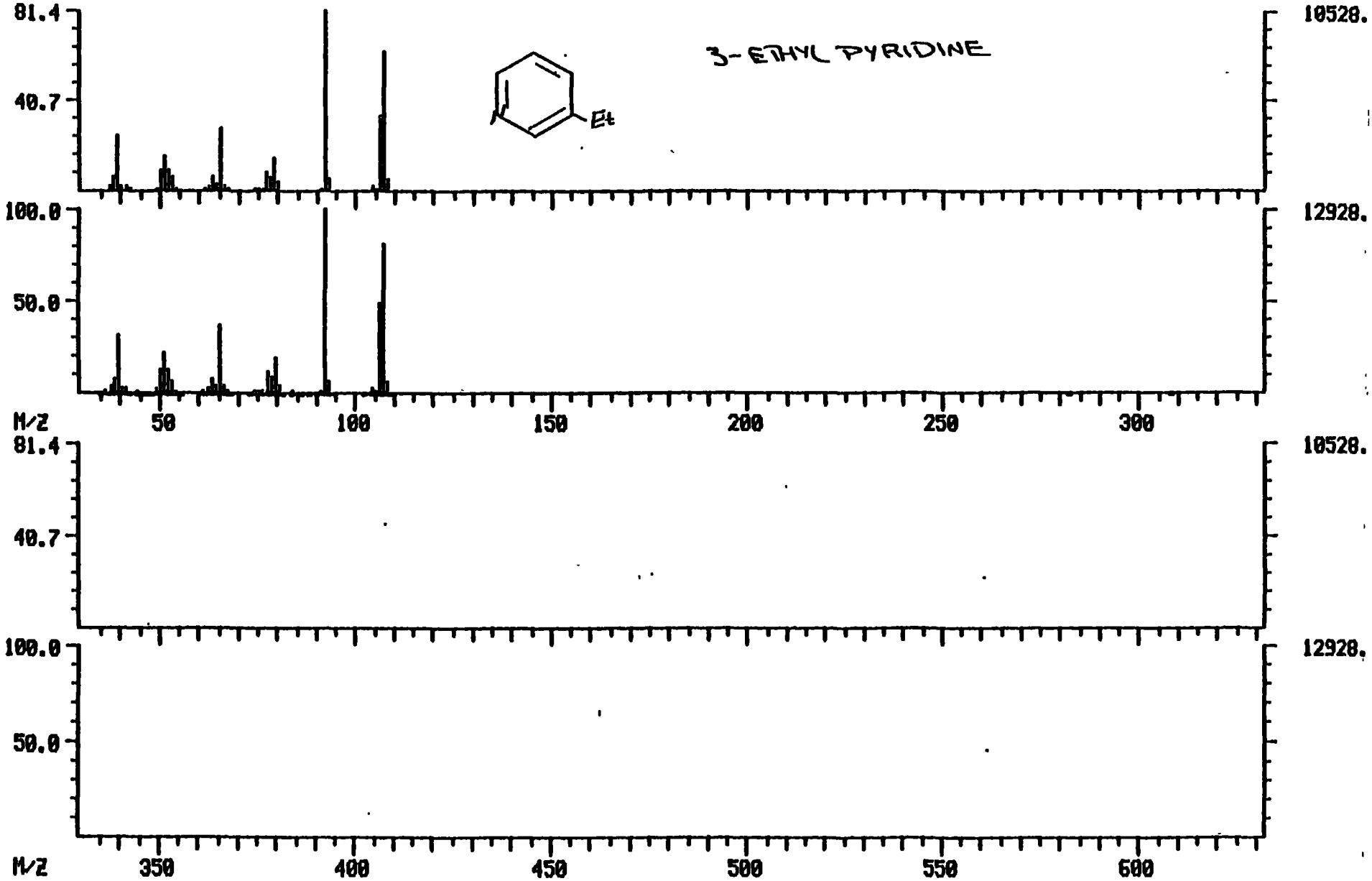
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:55
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: 5T
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #634
CALI: 060288CR #5

BASE M/Z: 92/ 92
RIC: 45375./ 60159.

SPECTRUM FROM THE STANDARD

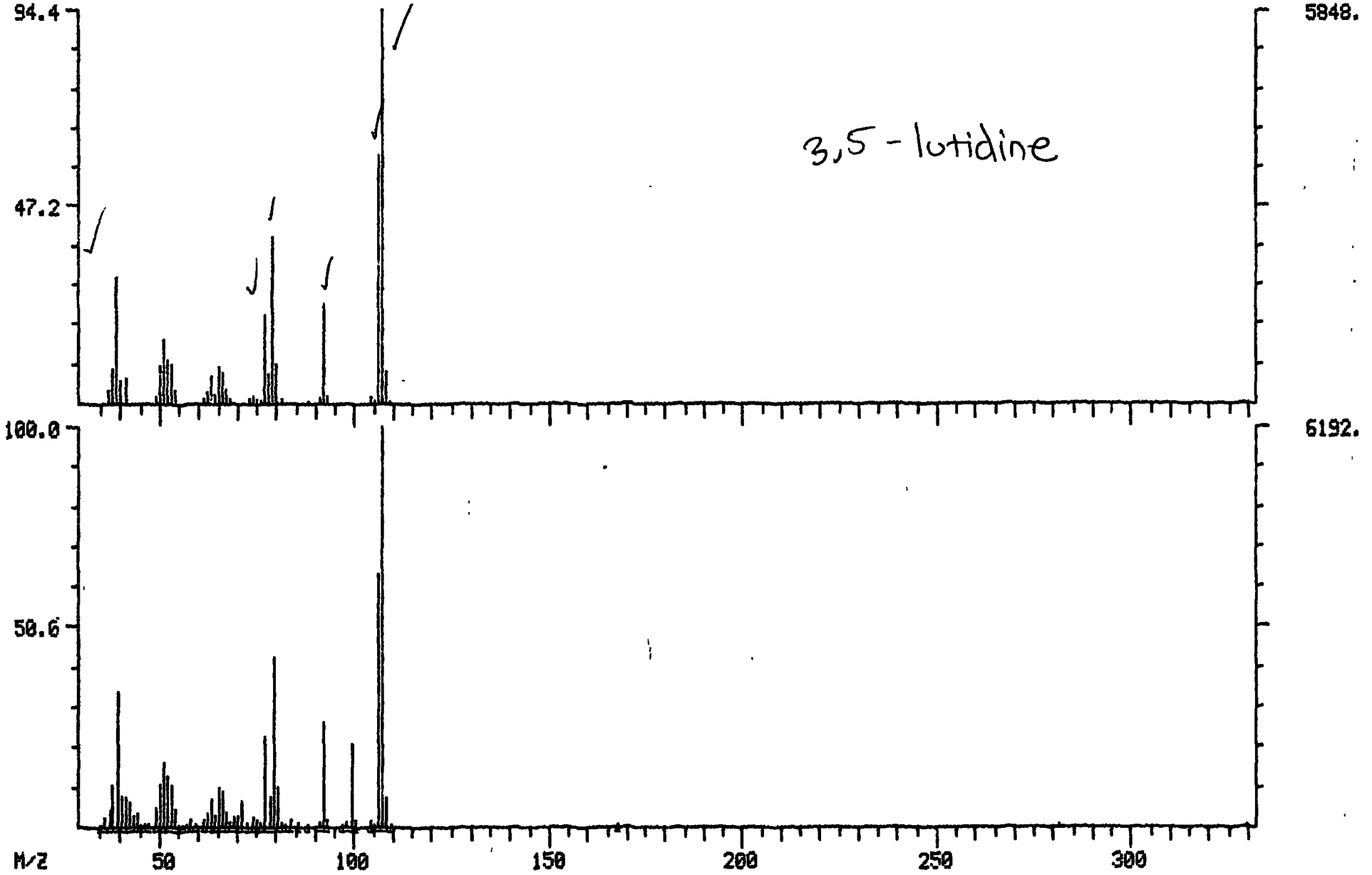
3-ETHYL PYRIDINE



00322

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 8:18
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #664 BASE M/Z: 107/ 107
CALI: 053188CR #4 RIC: 25343./ 31935.



00323

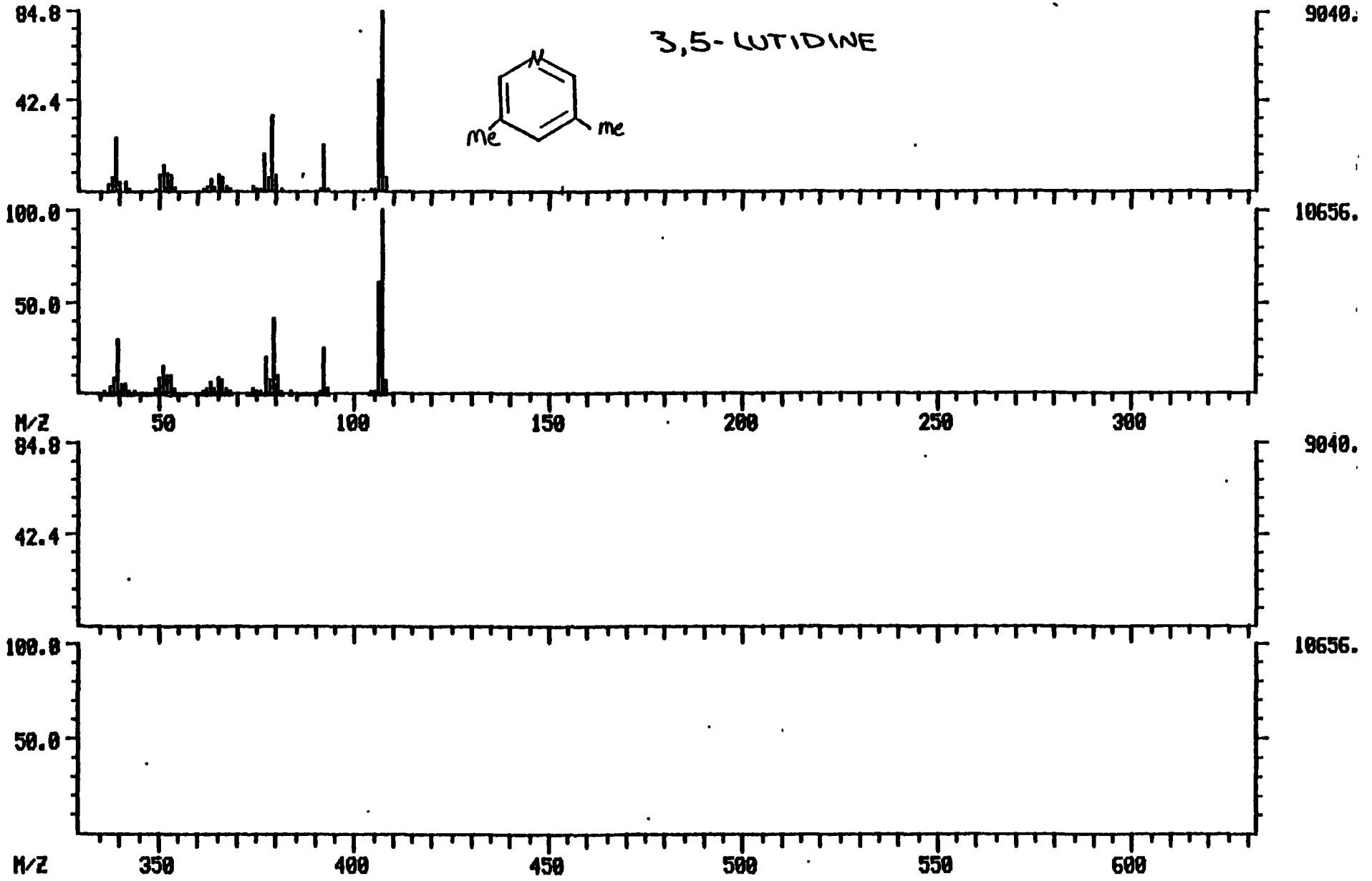
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:16
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #661
CALI: 060288CR #5

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

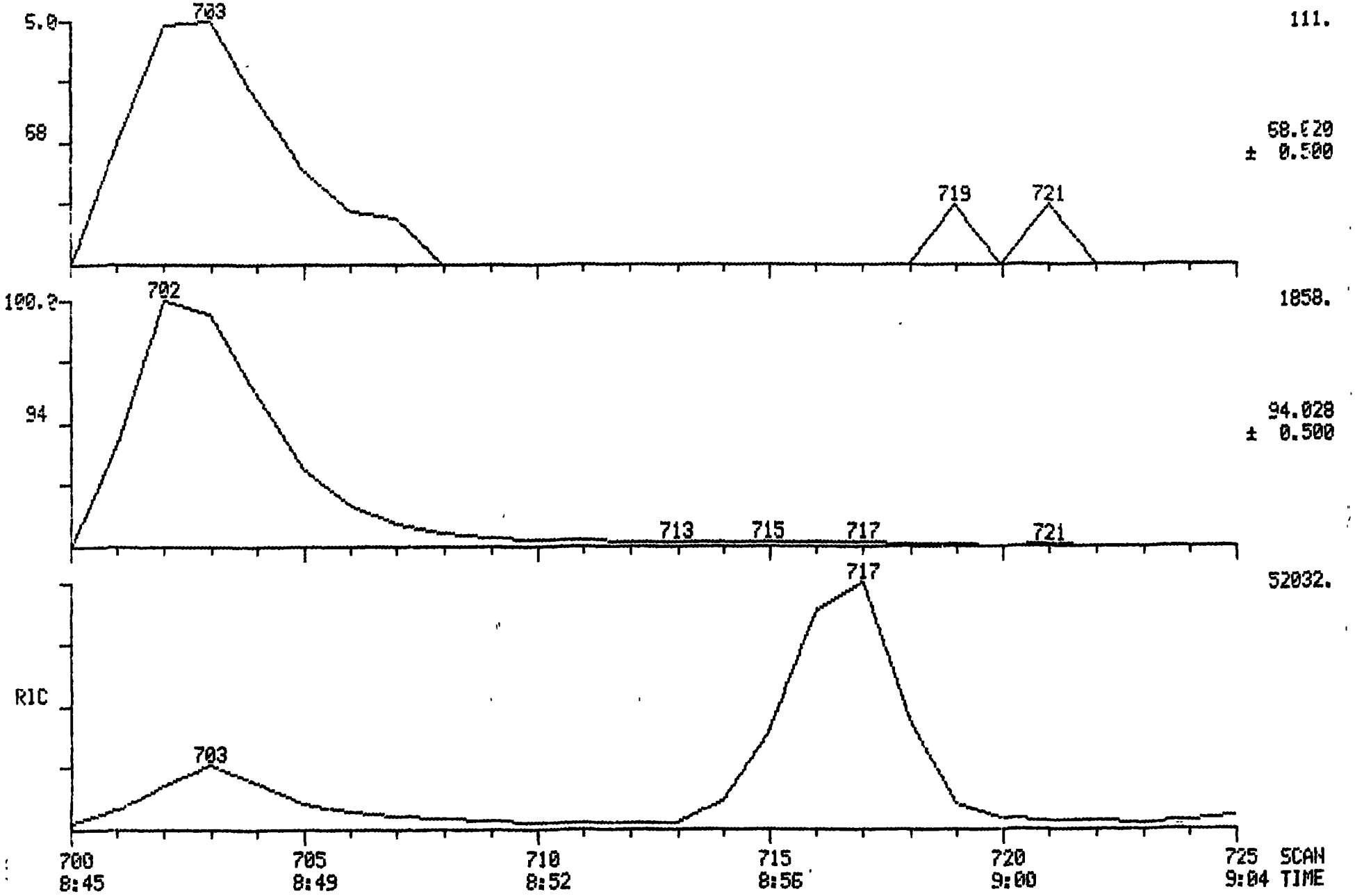
SPECTRUM FROM THE STANDARD

3,5-LUTIDINE



00324

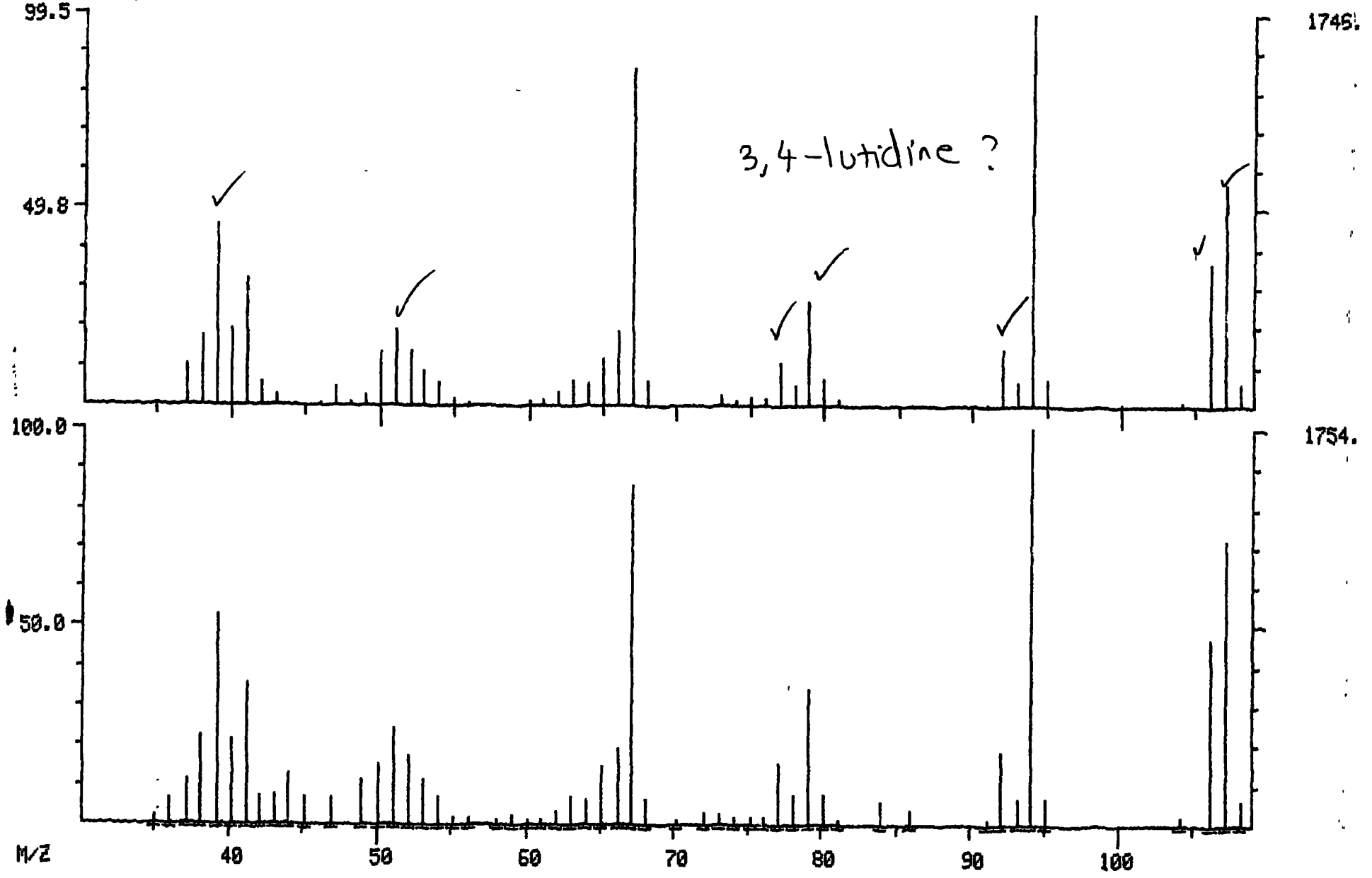
RIC+MASS CHROMATOGRAMS DATA: 559436R964 #1 SCANS 700 TO 725
06/01/88 15:32:00 CALI: 053188CR #4
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



C0325

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 8:47
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #703 BASE M/Z: 94/ 94
CALI: 053188CR #4 RIC: 10927./ 13551.



C0326

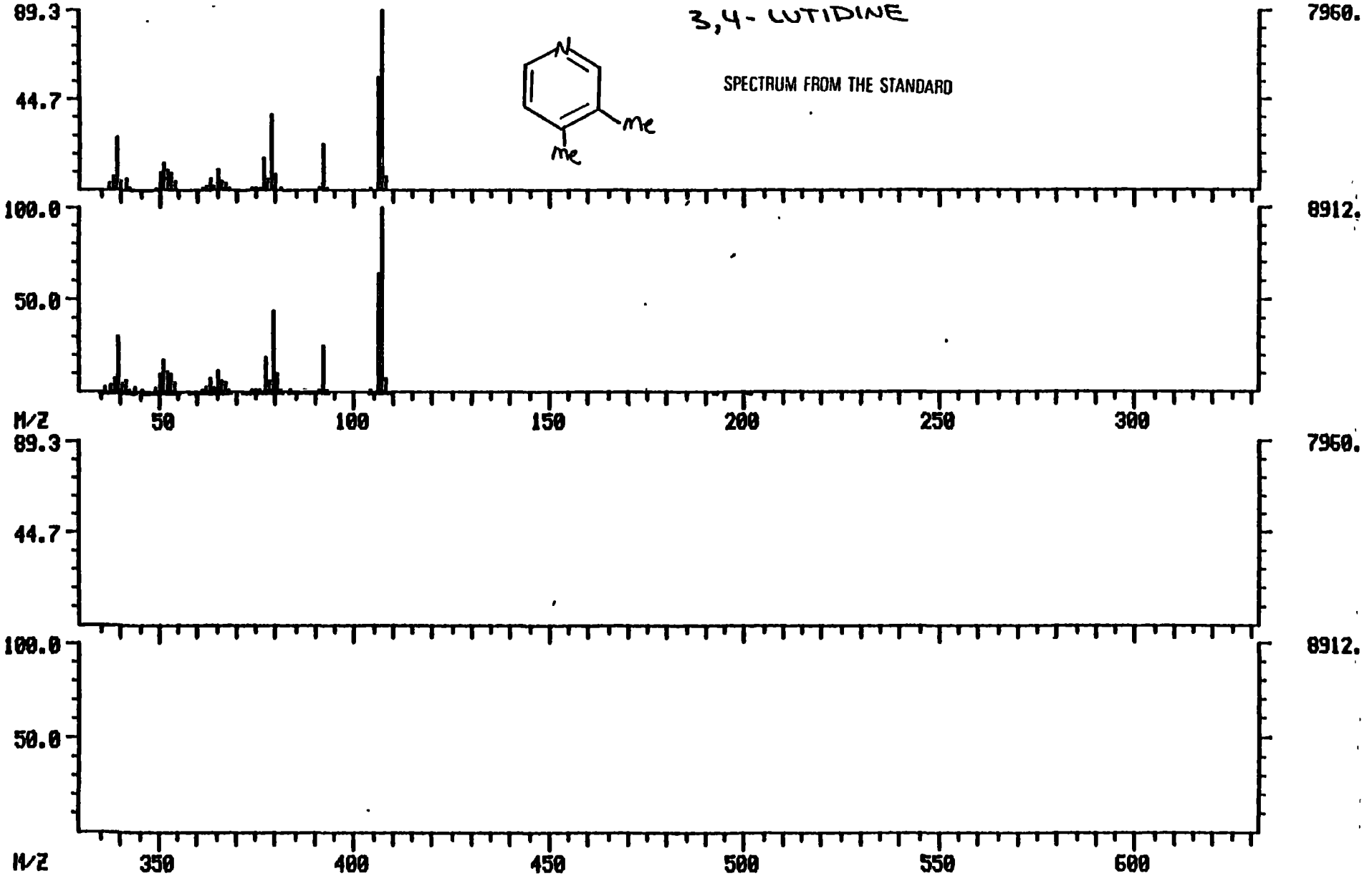
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:44
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #699
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 33407./ 39487.

3,4-LUTIDINE

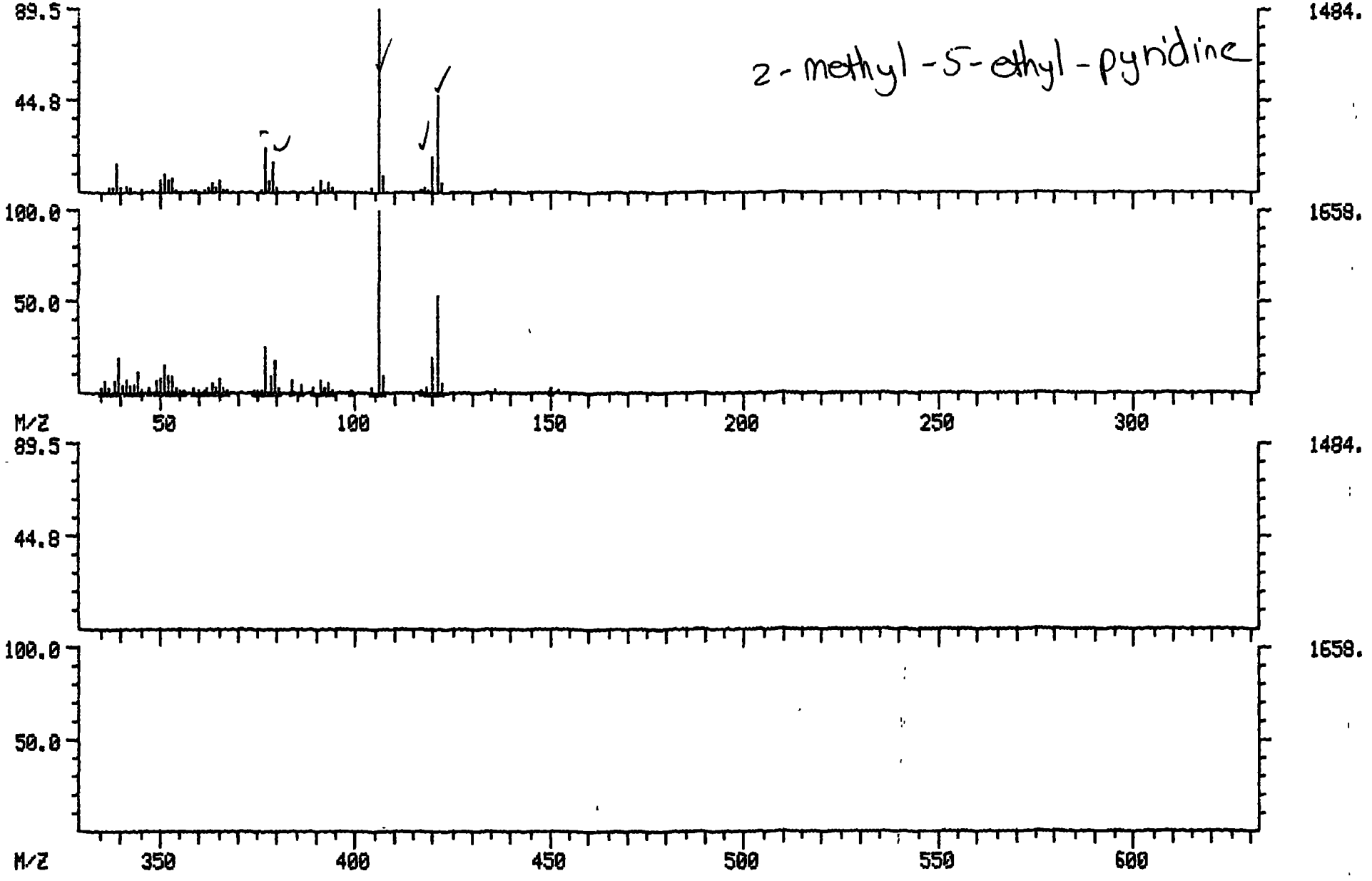
SPECTRUM FROM THE STANDARD



00327

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 9:09
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R964 #732 BASE M/Z: 106/ 106
CALI: 053188CR #4 RIC: 5143./ 7159.

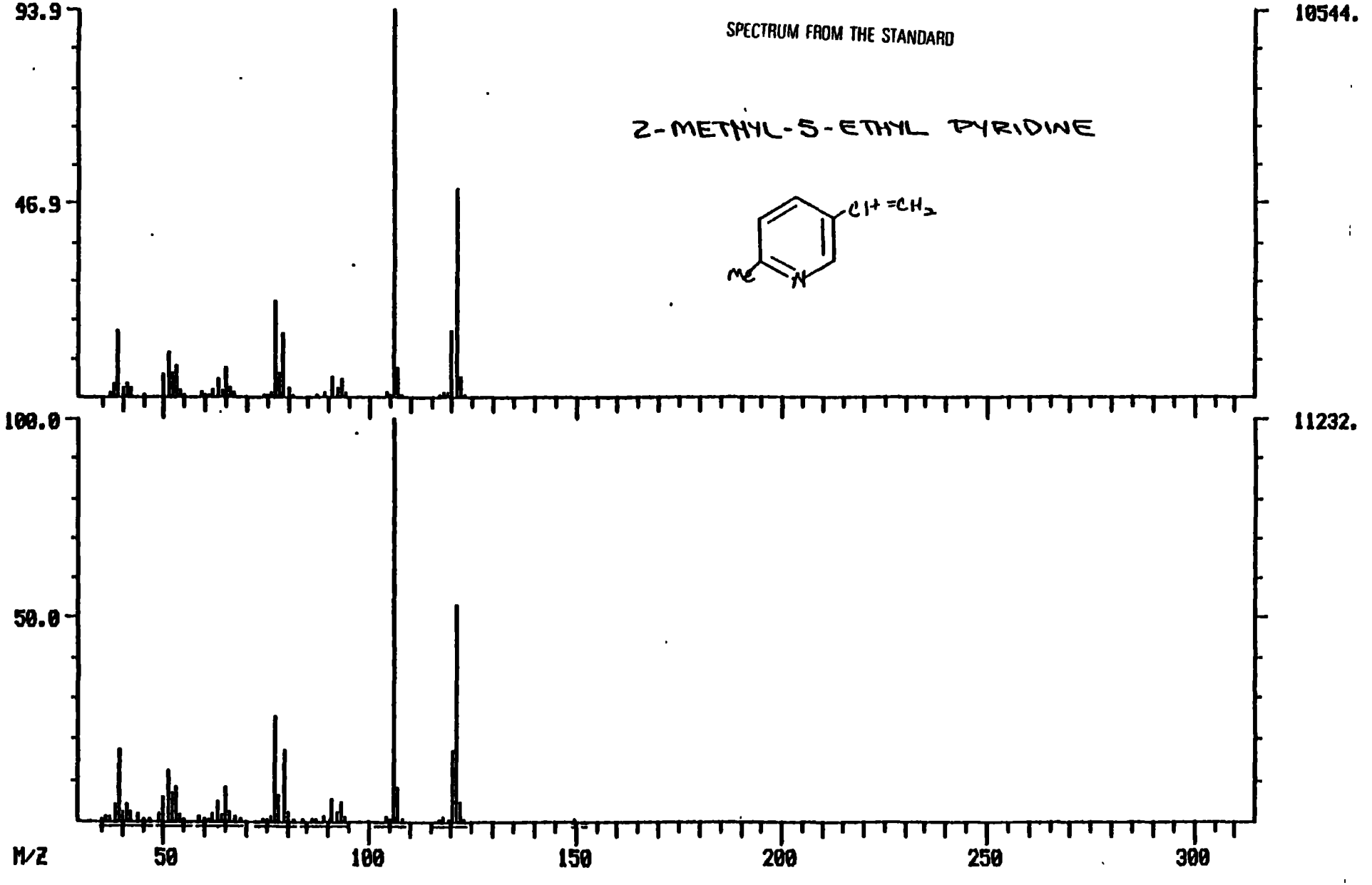


00328

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

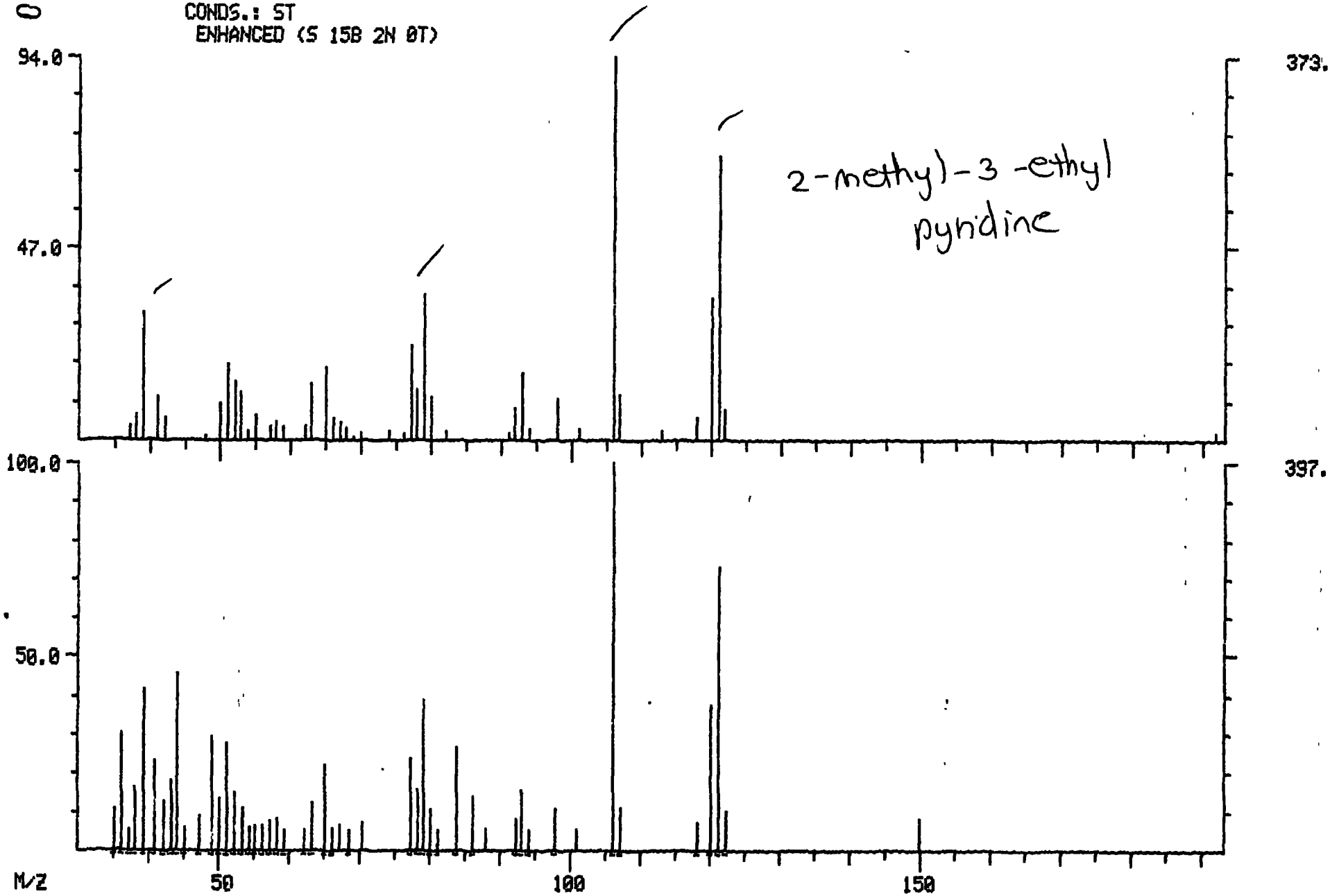
BASE M/Z: 106/ 106
RIC: 36671./ 40191.



00329

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 9:19
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #746 BASE M/Z: 106/ 106
CALI: 053188CR #4 RIC: 2111./ 3379.



00330

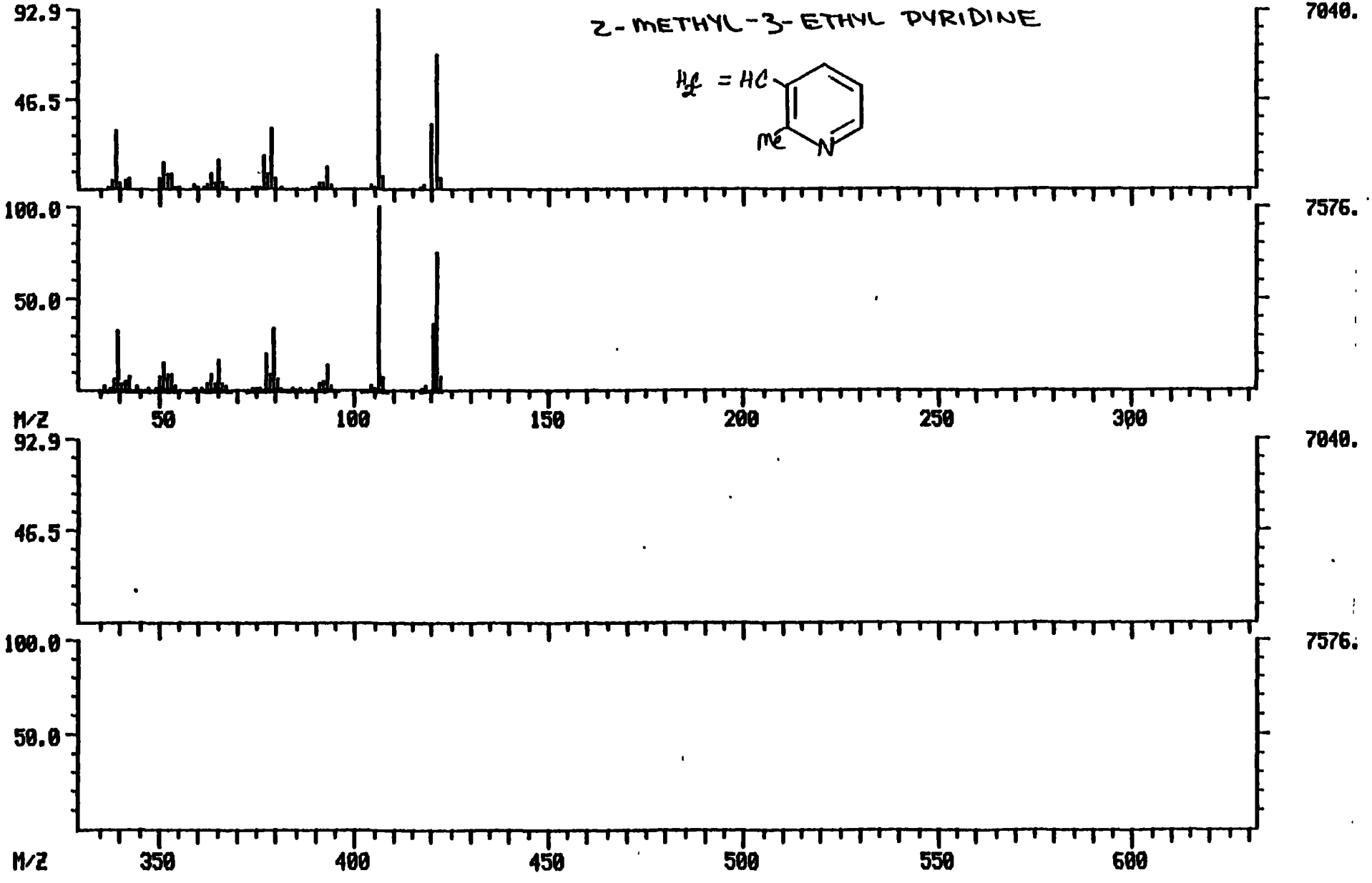
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 9:17
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #743
CALI: 060288CR #5

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

SPECTRUM FROM THE STANDARD

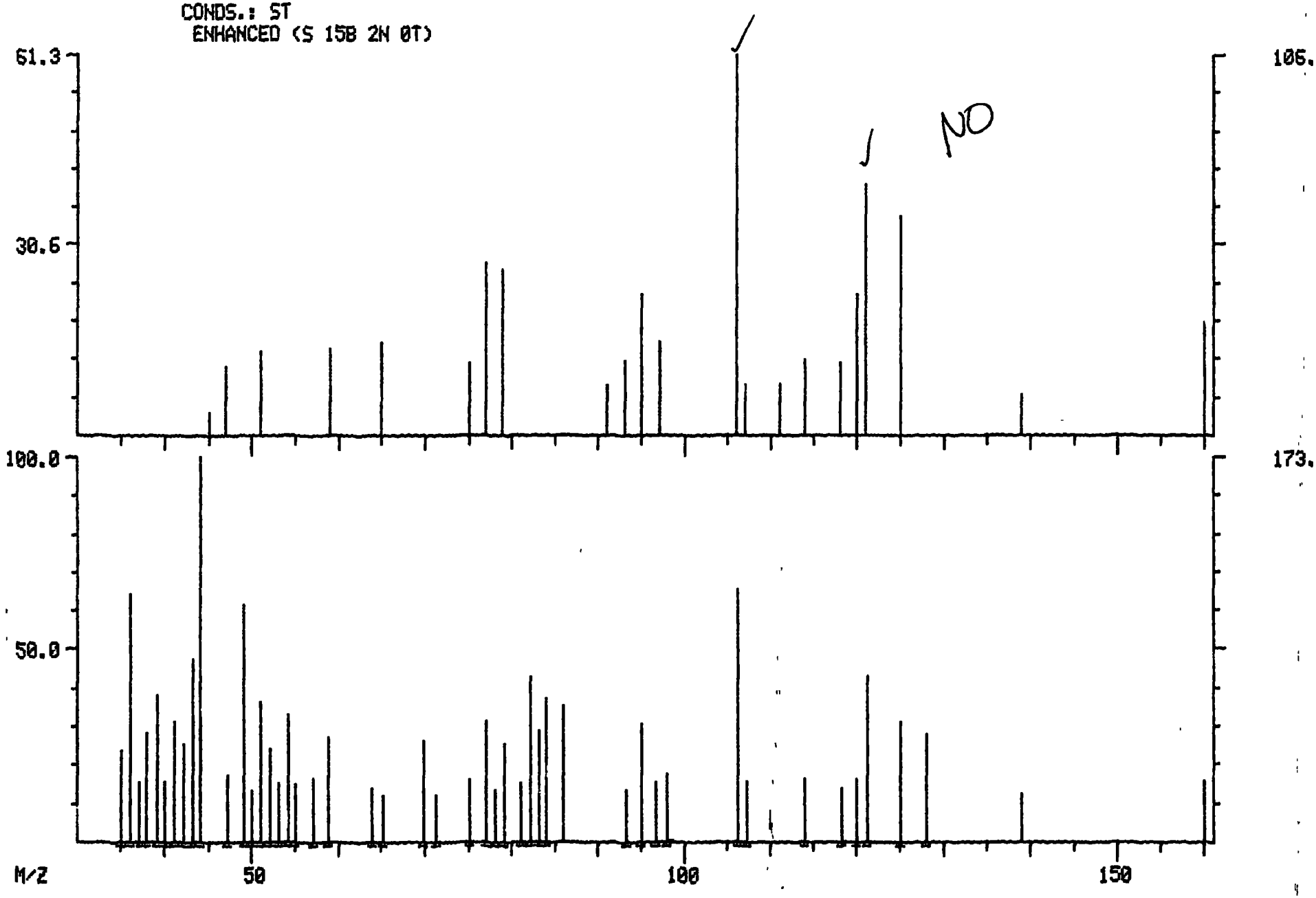
2-METHYL-3-ETHYL PYRIDINE



00331

DUAL MASS SPECTRUM
06/01/88 15:32:00 + 10:19
SAMPLE: 59436-04 100%/1ML BNA
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R964 #826 BASE M/Z: 106/ 44
CALI: 053188CR #4 RIC: 698./ 2247.



C0332

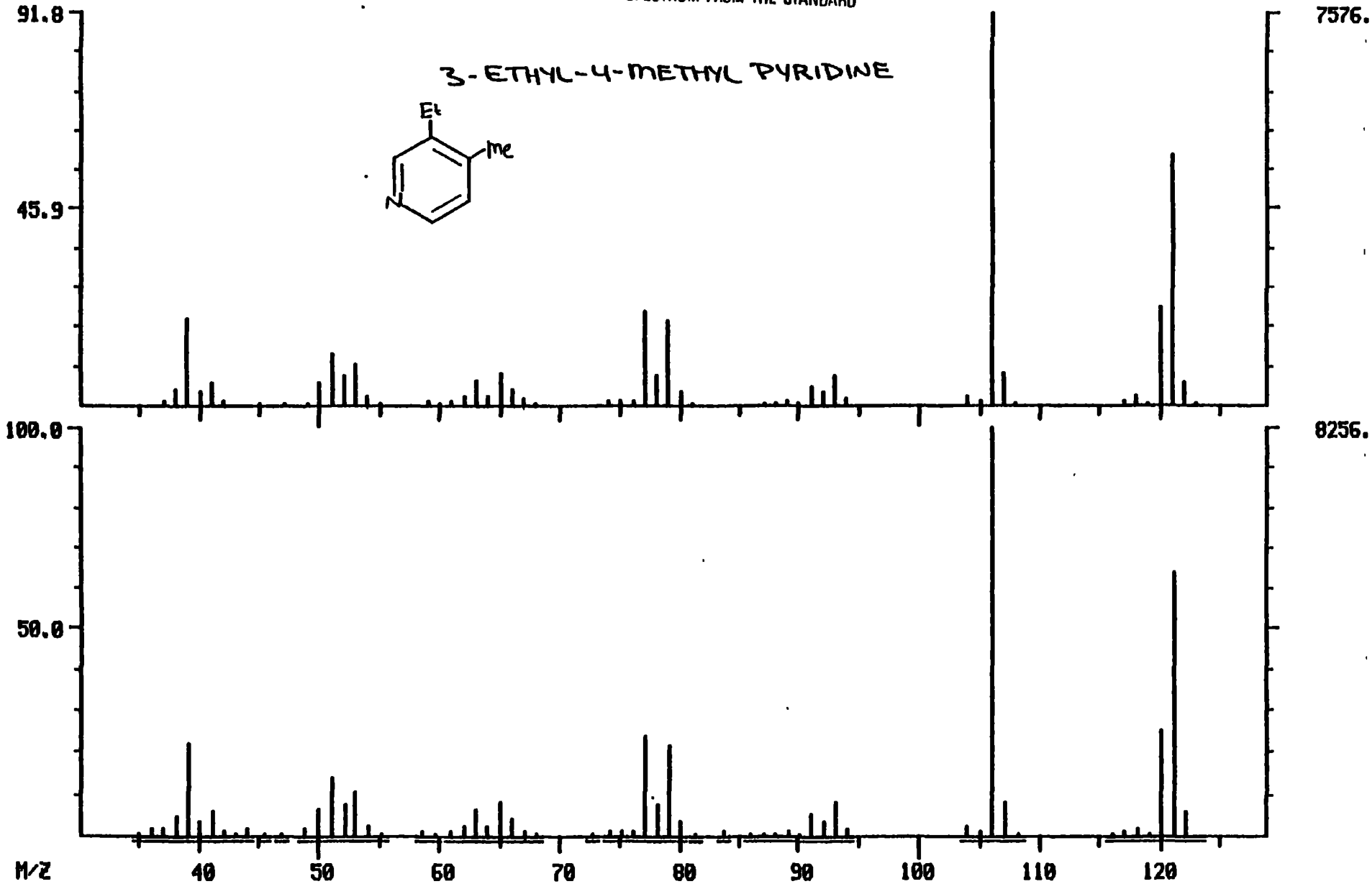
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 10:19
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

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: S59436X821. STARTED : 6/03/88 11:38:59

6/2/88 21:00:18 SCAN 1 OF 3900 $RF = \frac{mg}{ml} \times \frac{0.5ml}{3.82L} = 0.0133 \frac{mg}{L}$
Acquisition started

Acquire Run 2: S59436X821 ACQUIRING
06/02/88 21:00:00 + 0:03 Free sectors: 23423 Scan: 7 of 3900
Sample: 59436-04 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 21:28:42 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

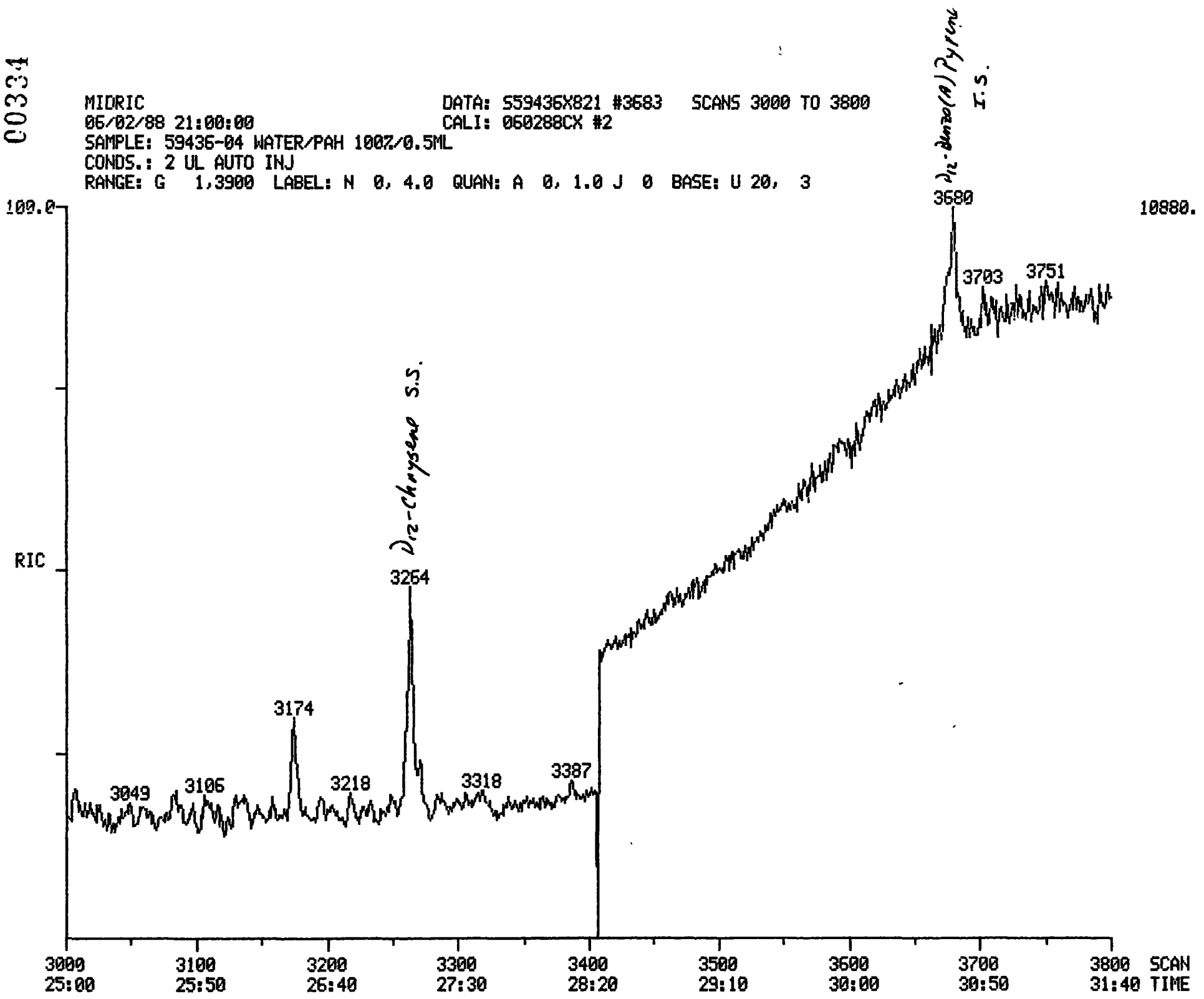
6/2/88 21:32:52
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00334

MIDRIC
06/02/88 21:00:00
SAMPLE: 59436-04 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: S59436X821 #3683 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X821

00335

Data: S59436X821.TI
06/02/88 21:00:00
Sample: 59436-04 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	252 PH# 07
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(K)FLUORANTHENE	252 PH# 09
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

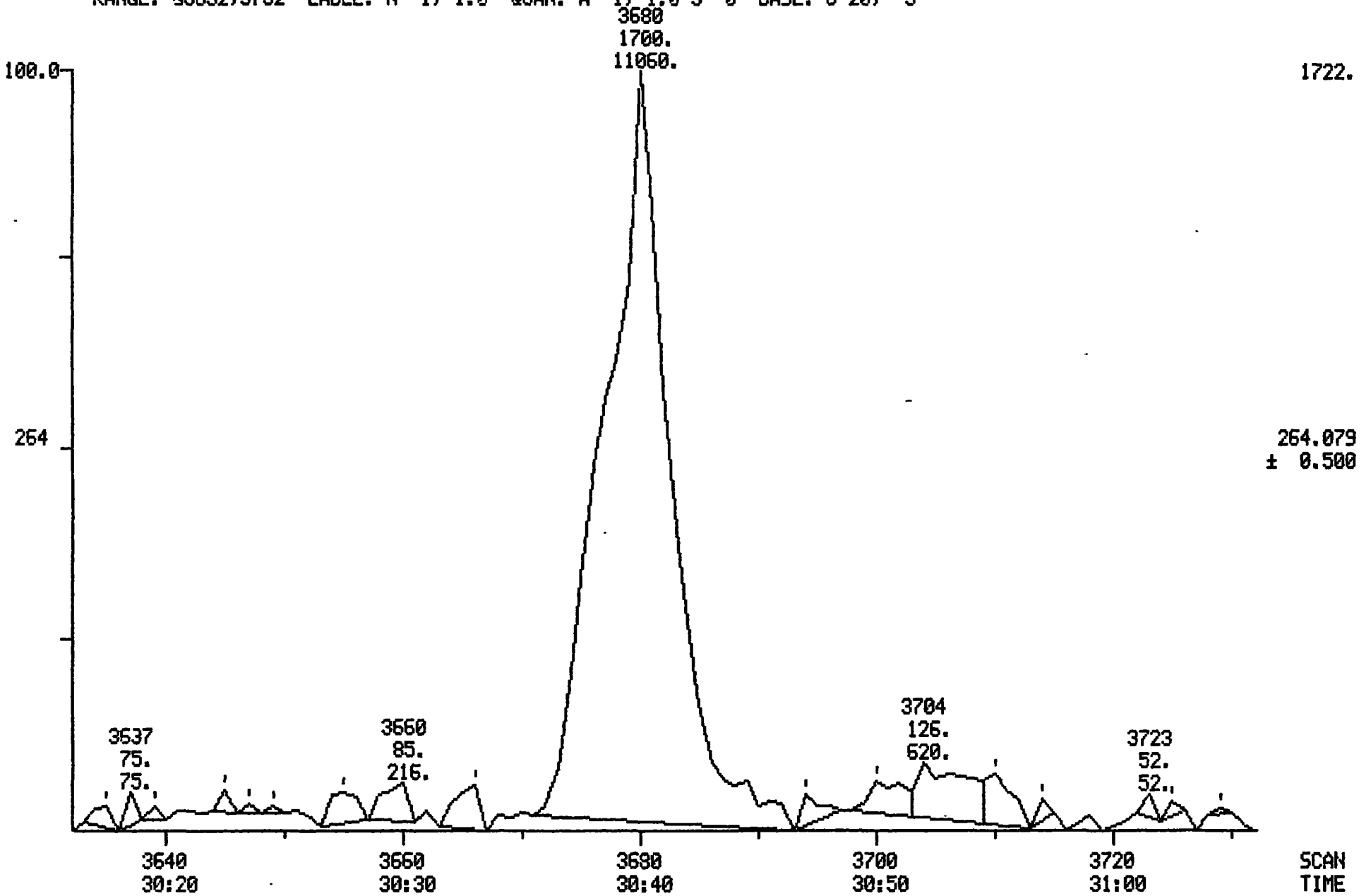
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3680	30:40	1	1.000	A BB	11060.	80.000	NG/ML	27.88
2	240	3264	27:12	1	0.887	A BV	14384.	67.798	NG/ML	23.63
3	228	3259	27:09	1	0.886	A VV	1773.	7.918	NG/ML	2.76
4	226	3260	27:10	1	0.886	A VV	631.	12.183	NG/ML	4.25
5	228	3271	27:15	1	0.889	A VB	2526.	10.773	NG/ML	3.75
6	226	3271	27:15	1	0.889	A VB	1068.	17.334	NG/ML	6.04
7	252	3589	29:54	1	0.975	A BV	855.	3.682	NG/ML	1.28
8	252	3594	29:57	1	0.977	A VB	887.	3.819	NG/ML	1.33
9	250	3597	29:58	1	0.977	A VB	1230.	21.953	NG/ML	7.65
10	252	3589	29:54	1	0.975	A BV	855.	3.682	NG/ML	1.28
11	252	3594	29:57	1	0.977	A VB	887.	3.819	NG/ML	1.33
12	250	3597	29:58	1	0.977	A VB	1230.	21.953	NG/ML	7.65
13	252	3614	30:07	1	0.982	A BV	1941.	9.387	NG/ML	3.27
14	250	3614	30:07	1	0.982	A VB	549.	12.022	NG/ML	4.19
15	252	3687	30:43	1	1.002	A BB	912.	4.745	NG/ML	1.65
16	250	3691	30:45	1	1.003	A BB	384.	5.854	NG/ML	2.04

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	67.80	80.00	1.300	1.535	0.85
3	27:08	1.00	0.885	1.00	7.92	80.00	0.160	1.619	0.10
4	27:08	1.00	0.885	1.00	12.18	80.00	0.057	0.375	0.15
5	27:15	1.00	0.888	1.00	10.77	80.00	0.228	1.696	0.13
6	27:15	1.00	0.888	1.00	17.33	80.00	0.097	0.446	0.22
7	29:56	1.00	0.976	1.00	3.68	80.00	0.077	1.680	0.05

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	3.82	80.00	0.080	1.680	0.05
9	29:56	1.00	0.976	1.00	21.95	80.00	0.111	0.405	0.27
10	29:59	1.00	0.977	1.00	3.68	80.00	0.077	1.680	0.05
11	29:59	1.00	0.977	1.00	3.82	80.00	0.080	1.680	0.05
12	29:59	1.00	0.977	1.00	21.95	80.00	0.111	0.405	0.27
13	29:41	1.01	0.982	1.00	9.39	80.00	0.176	1.496	0.12
14	29:41	1.01	0.982	1.00	12.02	80.00	0.050	0.330	0.15
15	30:44	1.00	1.002	1.00	4.75	80.00	0.082	1.390	0.06
16	30:44	1.00	1.002	1.00	5.85	80.00	0.035	0.474	0.07

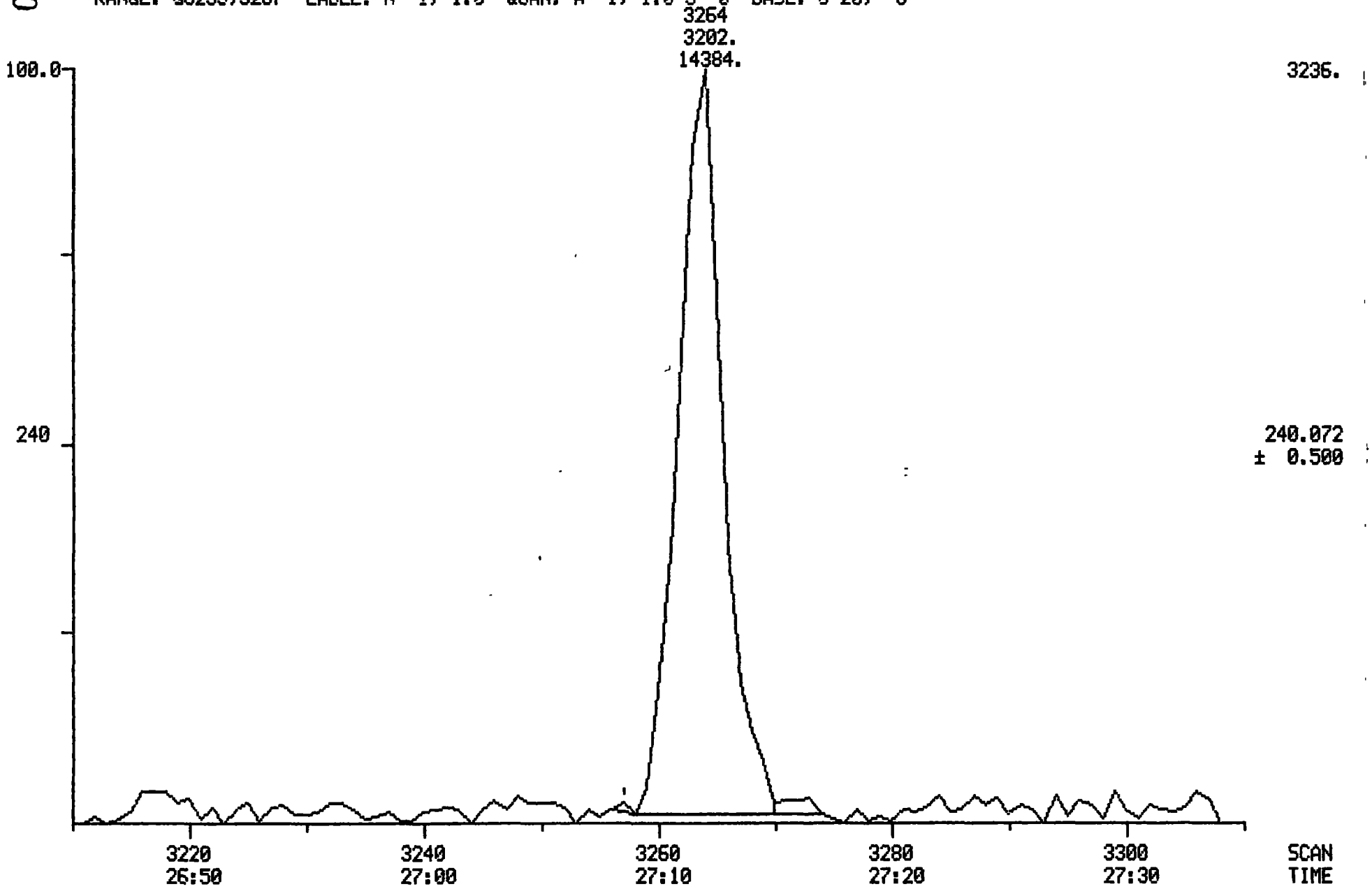
D0337 +

MIDMASS CHROMATOGRAM DATA: S59436X821 #3682 SCANS 3632 TO 3732
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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



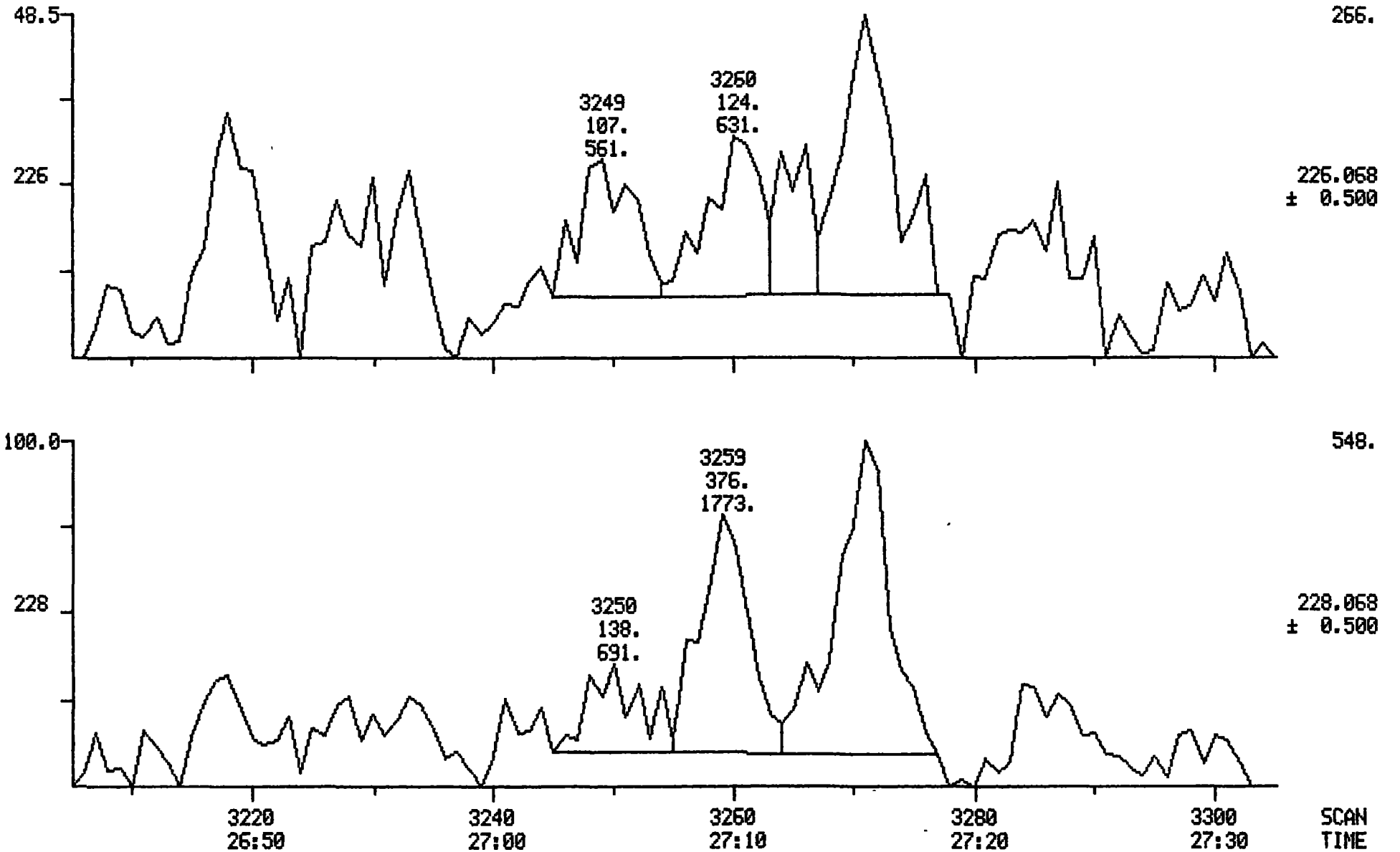
00338

MIDMASS CHROMATOGRAM DATA: 559436X821 #3260 SCANS 3210 TO 3310
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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



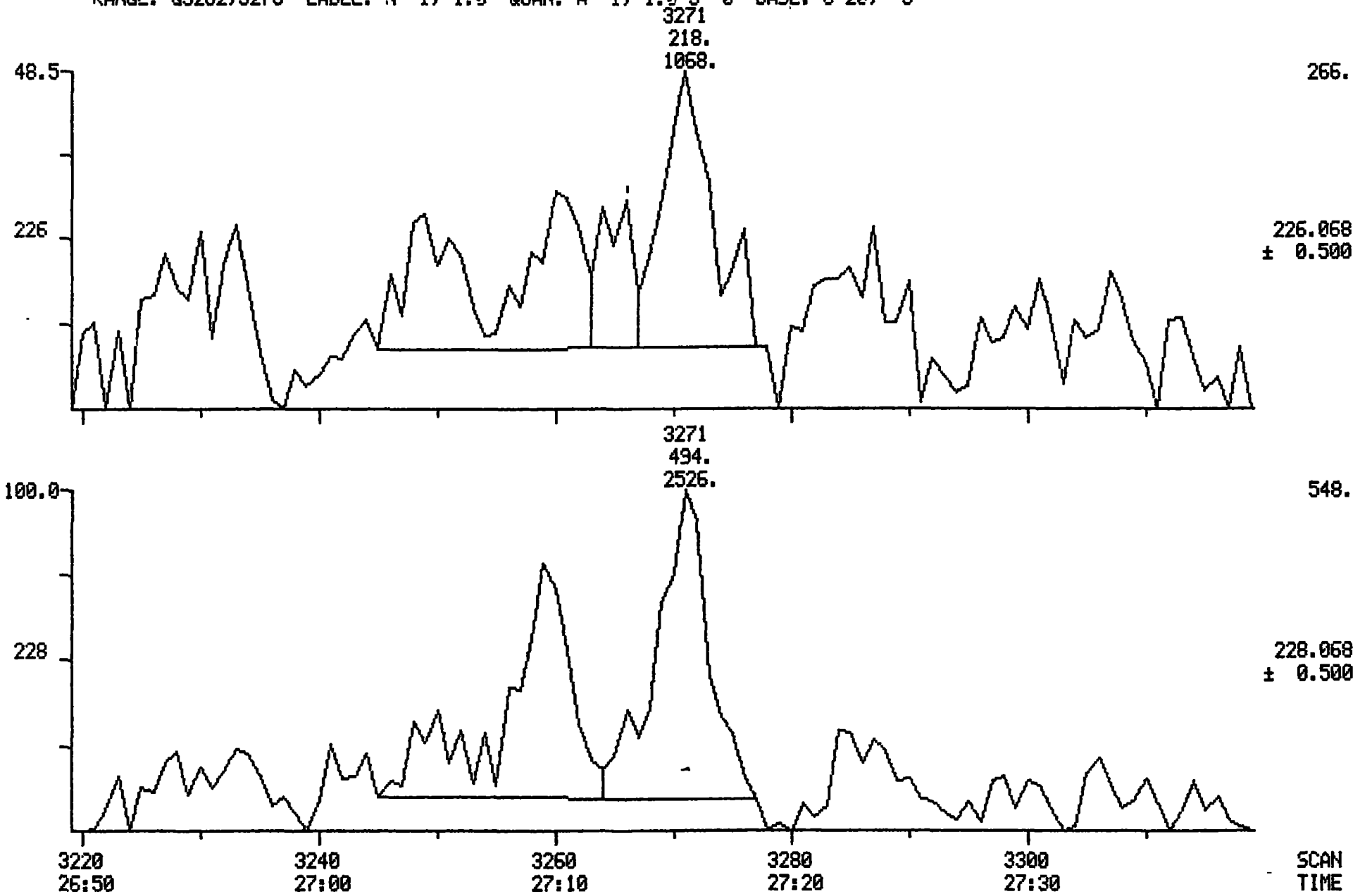
00339

MIDMASS CHROMATOGRAMS DATA: S59436X821 #3255 SCANS 3205 TO 3305
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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



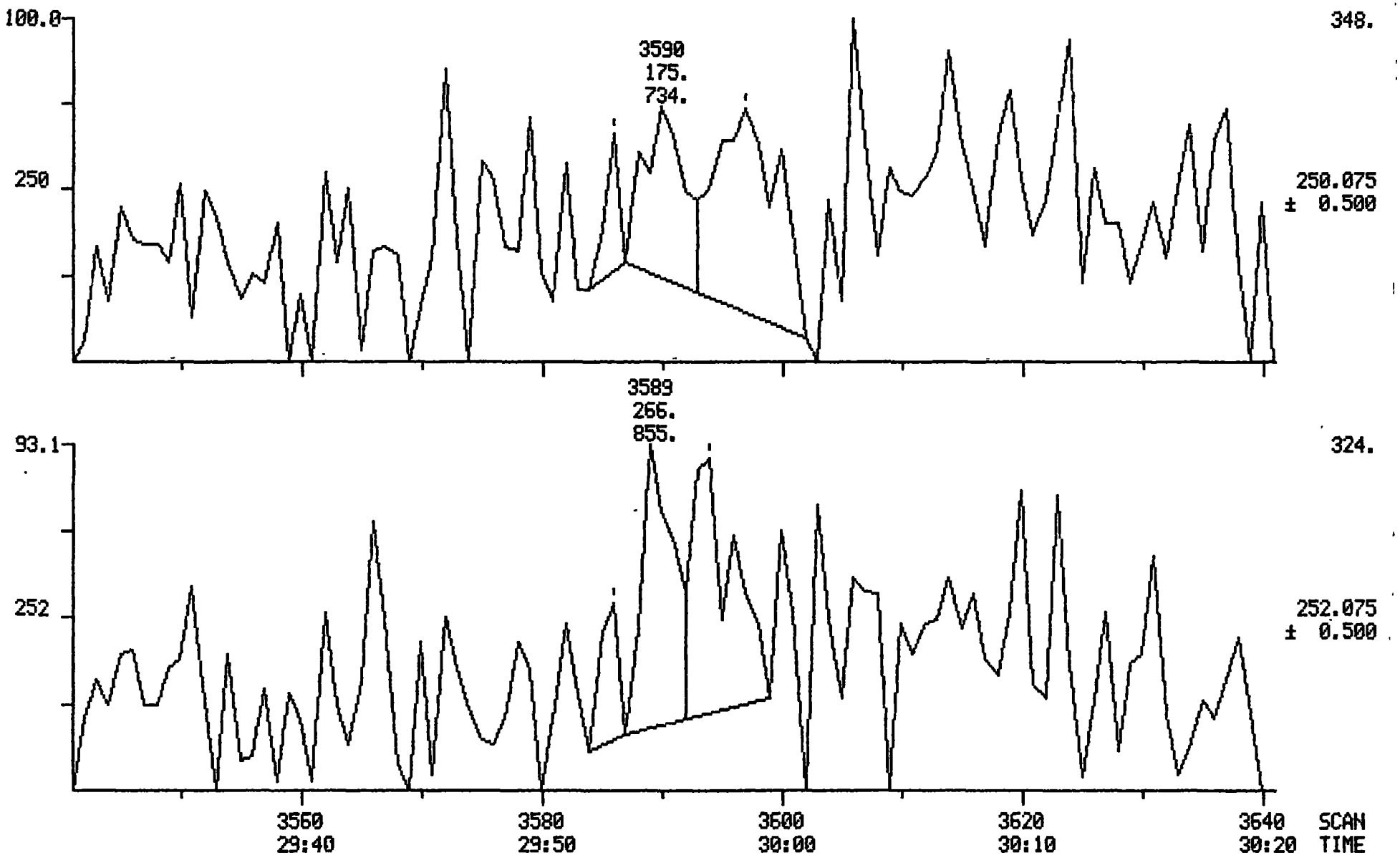
00340

MIDMASS CHROMATOGRAMS DATA: S59436X821 #3269 SCANS 3219 TO 3319
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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



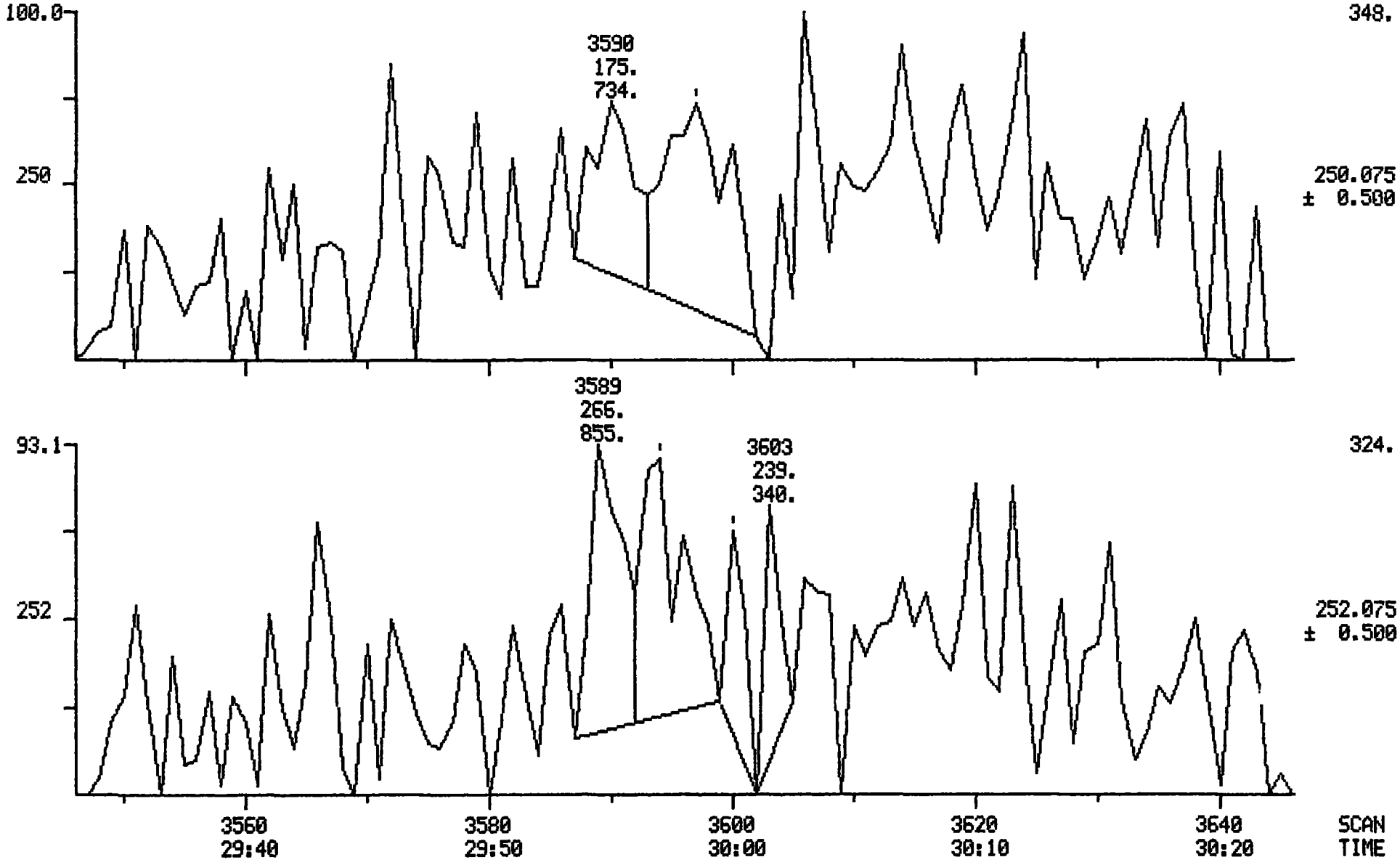
00341

MIDMASS CHROMATOGRAMS DATA: S59436X821 #3591 SCANS 3541 TO 3641
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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



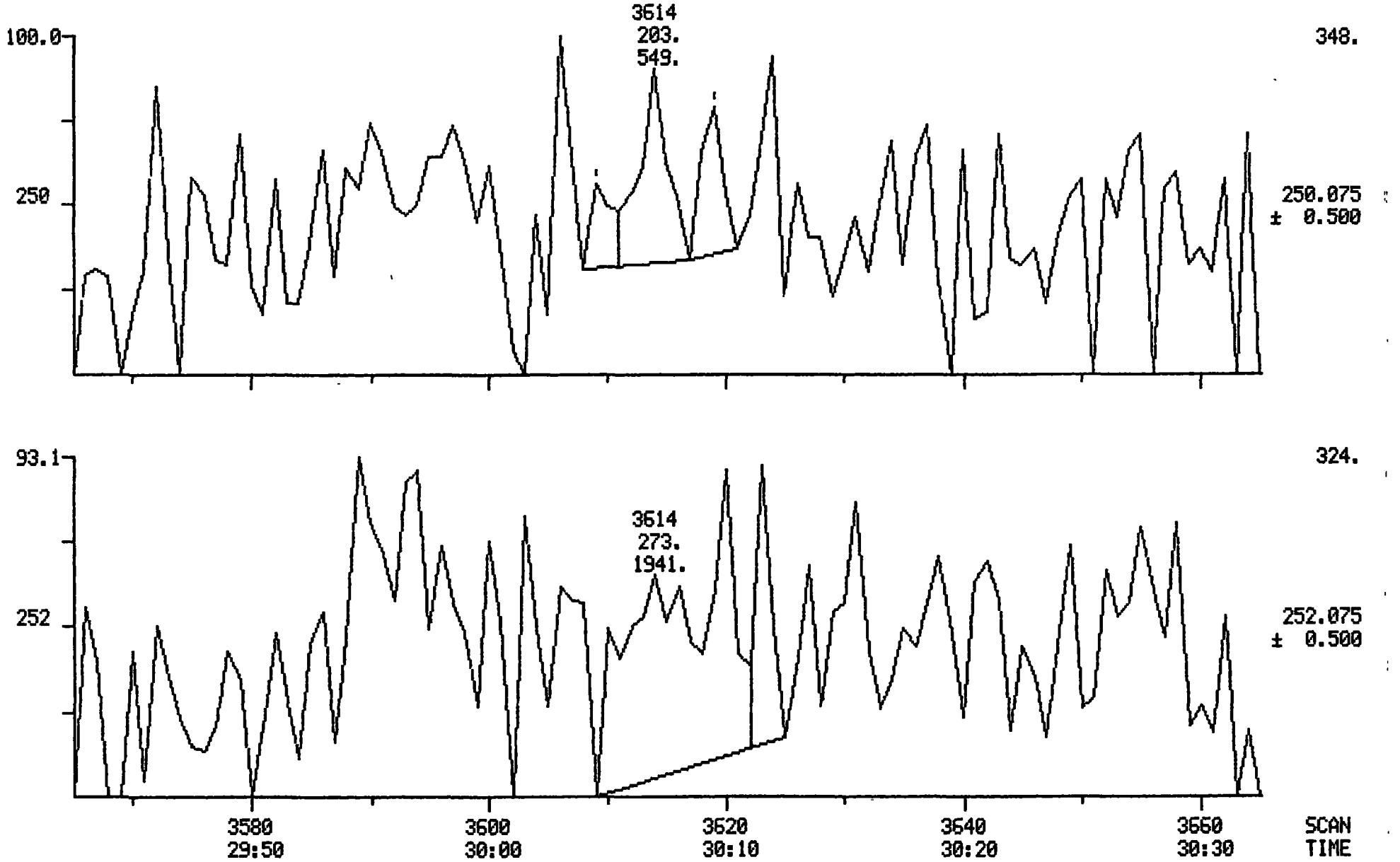
00342

MIDMASS CHROMATOGRAMS DATA: S59436X821 #3596 SCANS 3546 TO 3646
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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



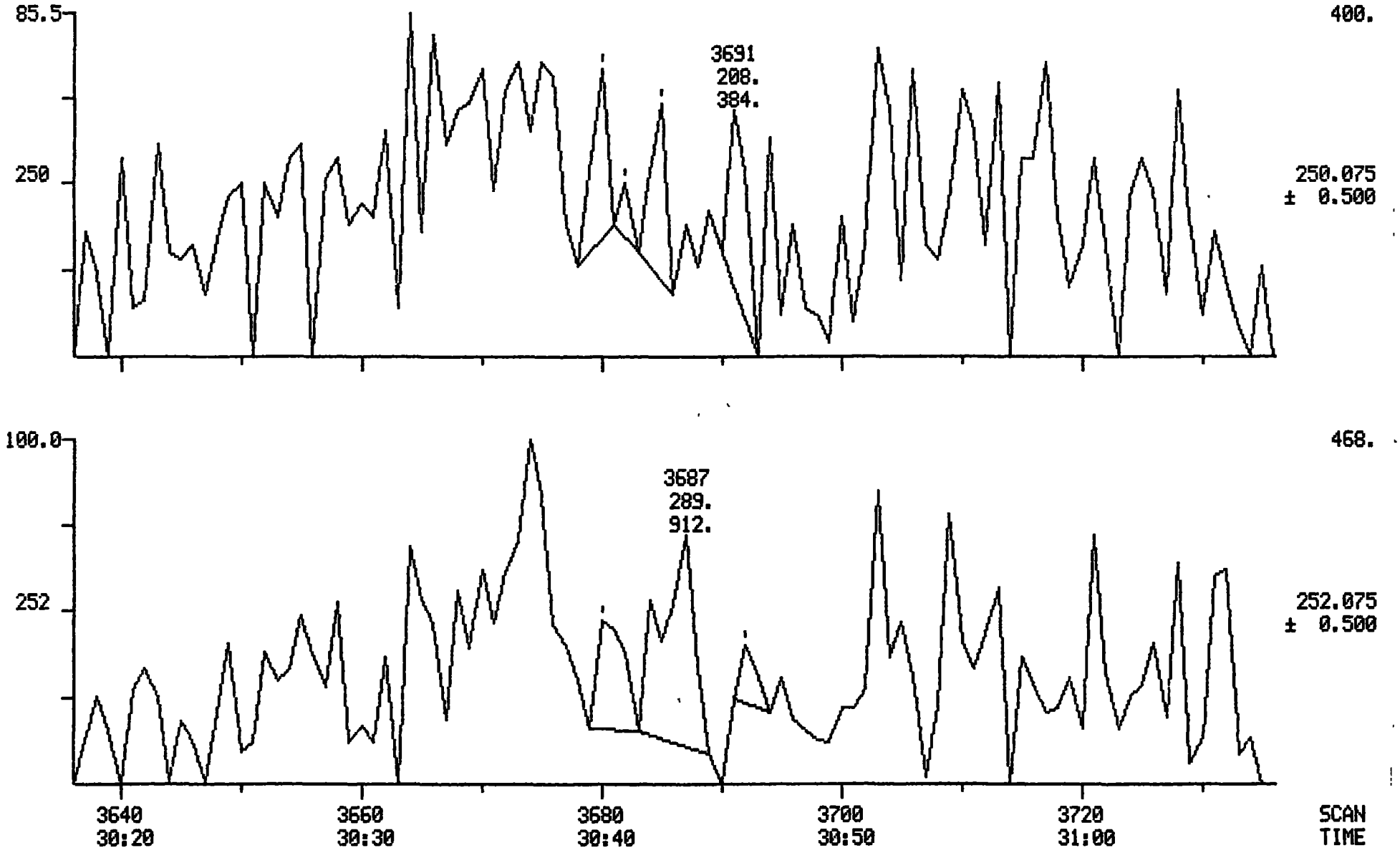
00343

MIDMASS CHROMATOGRAMS DATA: S59436X821 #3615 SCANS 3565 TO 3665
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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



00344

MIDMASS CHROMATOGRAMS DATA: S59436X821 #3686 SCANS 3636 TO 3736
06/02/88 21:00:00 CALI: 060288CX #2
SAMPLE: 59436-04 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: S59436X821

Data: S59436X821.TI
06/02/88 21:00:00
Sample: 59436-04 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	252 PH# 07
9	BENZO(B)FLUORANTHENE	250 PH# 08
10	BENZO(K)FLUORANTHENE	252 PH# 09
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 BB	11060.	80.000	NG/ML	27.88
2	240	3264	27:12	1	0.887	A BV	14384.	67.798	NG/ML	23.63
3	228	3259	27:09	1	0.886	A VV	1773.	7.918	NG/ML	2.76
4	226	3260	27:10	1	0.886	A VV	631.	12.183	NG/ML	4.25
5	228	3271	27:15	1	0.889	A VB	2526.	10.773	NG/ML	3.75
6	226	3271	27:15	1	0.889	A VB	1068.	17.334	NG/ML	6.04
7	252	3589	29:54	1	0.975	A BV	855.	3.682	NG/ML	1.28
8	252	3594	29:57	1	0.977	A VB	887.	3.819	NG/ML	1.33
9	250	3597	29:58	1	0.977	A VB	1230.	21.953	NG/ML	7.65
10	252	3589	29:54	1	0.975	A BV	855.	3.682	NG/ML	1.28
11	252	3594	29:57	1	0.977	A VB	887.	3.819	NG/ML	1.33
12	250	3597	29:58	1	0.977	A VB	1230.	21.953	NG/ML	7.65
13	252	3614	30:07	1	0.982	A BV	1941.	9.387	NG/ML	3.27
14	250	3614	30:07	1	0.982	A VB	549.	12.022	NG/ML	4.19
15	252	3687	30:43	1	1.002	A BB	912.	4.745	NG/ML	1.65
16	250	3691	30:45	1	1.003	A BB	384.	5.854	NG/ML	2.04

59436-04
20%

00346

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	%DIFF RT	COLUMN 2 AMOUNT	%DIFF RT	COLUMN AVERAGE
047	DBC (surrogate)	.0166	.0	.0323	.0	NA

DBC

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

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

DBC Recovery = 100%'
No HSL Pests/PCBs detected

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

[illegible] 59436-04 [illegible]

C0347

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
006	ALDRIN	4.100	4.017	4	44251	.0[illegible]	ug/ml
010	p,p'-DDT	12.767	12.800	5	67169	.0144	ug/ml
022	TOXAPHENE (peak 3)	12.483	12.800	5	67169	.2284	ug/ml
033	AROCLOR 1248 peak 2)	4.067	4.017	4	44251	.4630	ug/ml
047	DBC (surrogate)	26.833	26.833	6	95954	.0166	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

59436-04

00348

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	SCAN NUMBER	PEAK AREA	AMOUNT	UNIT
004	gamma-BHC - BDL	2.450	2.457	7	3879	.0007	[illegible]
017	ENDOSULFAN SULFATE	16.550	16.233	14	13747	.0014	[illegible]
024	AROCLOR 1016(peak 2)	1.650	1.677	6	2562	.0044	[illegible]
034	AROCLOR 1242(peak 2)	1.650	1.673	6	2562	.0016	[illegible]
035	AROCLOR 1254(peak 1)	5.017	4.950	8	101227	.0982	[illegible]
042	AROCLOR 1260(peak 3)	9.067	9.300	9	17197	.0169	ug/ml
047	DEC (surrogate)	22.383	22.300	11	176498	.0225	ug/ml
018	ENDRIN KETONE	22.267	22.300	11	176493	.0044	ug/ml

^ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

00349

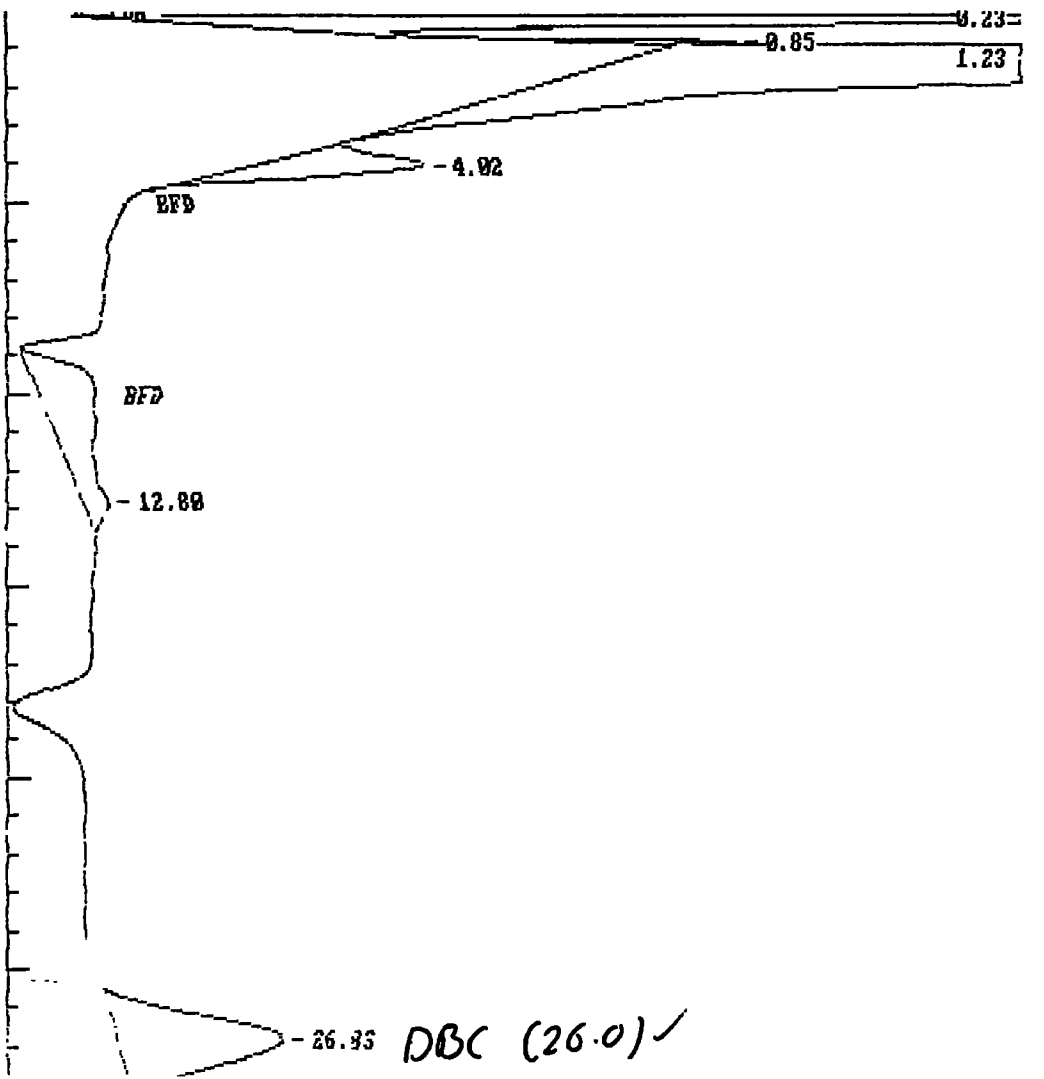
```
******************* 05-08-1988 12:14:19 Version 4.1 ***************
* Sample Name: 5947c 20 20%                          Data File: J:AB12617
* Date: 05-08-1988 18:19:22 Method: M:AGPI
* Interface: 10  Cycle#:  17   Operator SS  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 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	677305	44.9959	1	140064	100.000	4.8
2	0.85	2980	0.1980	1	986	0.440	3.0
3	1.23	617601	41.0295	1	13006	91.185	47.5
4	4.02	44251	2.9398	1	1139	6.533	38.8
5	12.80	67169	4.4623	1	180	9.917	373.7
6	26.83	95954	6.3745	1	1134	14.167	84.6

SS 5/11/88

Total Area: 1505260 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12617.PTS Printed on 05-08-1988 at 12:14:44
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



DBC (26.0)

00351

* Sample Name: 59435 04 20% Data File: J:BB12617
* Date: 05-06-1988 15:32:53 Method: M:BBPI
* Interface: 12 Cycle#: 17 Operator SS Channel#: 0 Vial#: N...
* 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 (N)

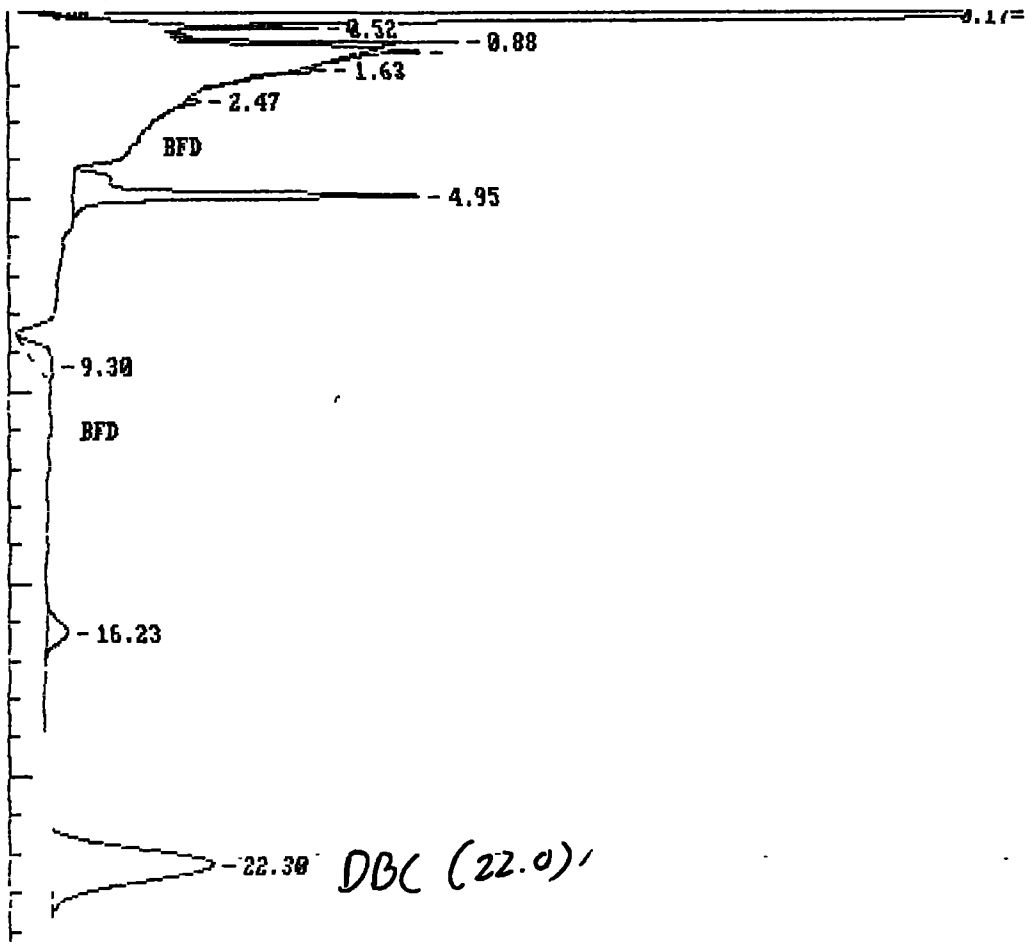
Starting Delay: 0.00 Run Time: 35.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1086767	75.5924	1	232173	100.000	4.7
2	0.52	6629	0.4611	1	2393	0.610	2.8
4	0.88	19740	1.3731	1	3974	1.815	5.0
5	1.13	9463	0.6582	1	1035	0.871	9.1
6	1.63	2562	0.1782	1	583	0.236	4.4
7	2.47	3878	0.2697	1	329	0.357	11.8
8	4.95	101227	7.0411	1	6484	9.315	15.6
9	9.30	17197	1.1961	1	291	1.582	59.2
10	16.23	13707	0.9534	1	362	1.261	37.9
11	22.30	176498	12.2767	1	3057	16.241	57.7

SS 5/11/88

Total Area: 1437668 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12617.PTS Printed on 05-06-1988 at 12:15:12
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



DBC (22.0)

C0353

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59436-05

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-05
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 :	04/27/88
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	7.3	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	1.9	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		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

Form I

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

Sample Number
59436-05

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.				
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Form 1, Part B

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	3.2	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		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
59436-05

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	9.5 B
2. 108-88-3	Methyl Benzene	BNA	369	5.9 B
3.	Oxygenated Hydrocarbon	BNA	392	12 B
4.	Oxygenated Hydrocarbon	BNA	434	6.3 B
5.	Oxygenated Hydrocarbon	BNA	468	16 B
6. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	622	9.0 B
7. 10544-50-0	Molecular Sulfur	BNA	1803	970
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ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59436-05
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	42.3	42	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: 59436-05
Date Analyzed: 06/02/88

Units: ug/L
Run Factor: 0.131

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	74.5	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)Fluoranthene
	10 U	Benzo(K)Fluoranthene
	10 U	Benzo(A)Pyrene

FORM I

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59436

Sample Number:
59436-05

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

4/27/88 22:16:19 SCAN 1 OF 1650
Acquisition started

00360

Acquire
04/27/88 22:16:00 + 0:04
Sample: 59436-05 5ML 100%
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Run 0:S59436Z823
Free sectors: 5979
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 4 of 1650
Weight: 0.000
Acct. No:

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

Loaded GC Desc:CV Current GC oven tmp: -10 DegC Injector : 150 DegC
Current GC Desc:CV GC elapsed time : 0: 3 min Int.oven : 150 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	-10 - -10	-	1.0	1.0	Sweep/Split	32.7	0.0
2	-10 - 100	6.0	18.3	19.3	Divert	32.7	0.0
3	100 - 170	8.3	8.4	27.7			
4	170 - 170	-	5.0	32.7			

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

Low mass: 35 Up: 0.95 L* Top: 0.00
High mass: 300 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 18 Samp Int (ms): 0.200 Peak Width: 1000.
Frag S/P: 10 Actual: 9 Samp Int (ms): 0.400 Inten/ion: 2

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

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

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	

4/27/88 22:43:52
ACQUISITION COMPLETED
SCANS 1 TO 1650 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	1650	35.0	1650.0	2.1	24315. 15.	15.

00361

RIC
04/27/88 22:16:00
SAMPLE: 59436-05 5ML 100%
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 5594362823 #4 SCANS 100 TO 850
CALI: 042788CZ #5 OUT OF 100 TO 1500

100.0

TC=Target Compound
SC= Spike Compound

BROMOCHLOROMETHANE 477

D4-1, 2-DICHLOROETHANE 537

1, 4-DIFLUOROBENZENE 589

D8-TOLUENE 740

RIC

TC

TC

200 246 280 319 352 392 431 504 644 670 785 825

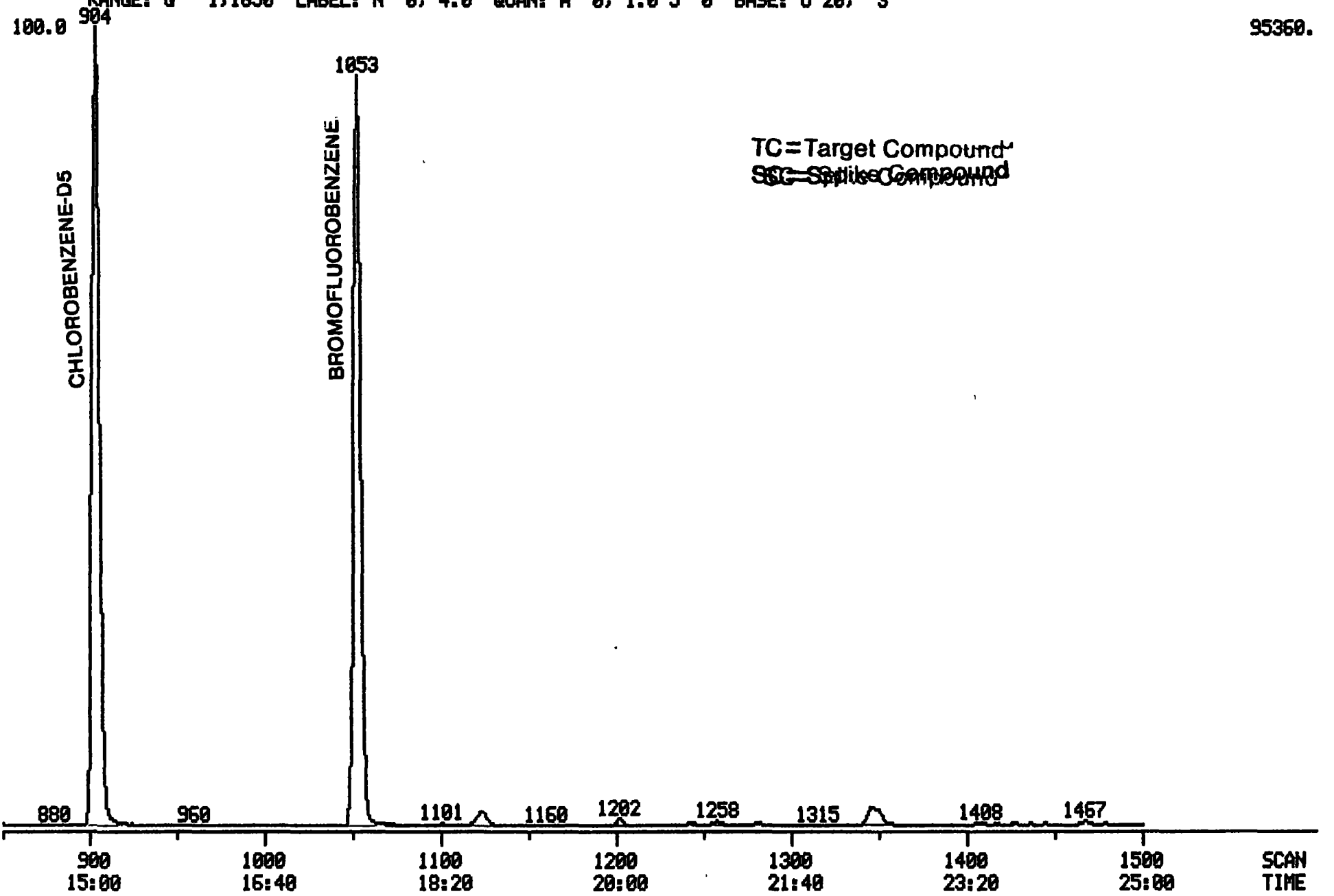
200 300 400 500 600 700 800
3:20 5:00 6:40 8:20 10:00 11:40 13:20

C0362

RIC
04/27/88 22:16:00
SAMPLE: 59436-05 5ML 100%
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559436Z823 #4
CALI: 042788CZ #5

SCANS 850 TO 1500
OUT OF 100 TO 1500



PROCEDURE: TCA DIA N STIC
DATA FILE: S59436Z823
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00363

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	5	4	112	ISO1/TCO1
3	3	1	0	18	5	1	63	ISO2/TCO2
3	3	1	0	6	3	1	0	ISO3/TCO3
1	1	1	0	9	2	1	0	ISO4/TCO4

41 COMPOUNDS PROCESSED, 10 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-476	477	477	.	1	991	.	128	477	.	1
2	V1	10	-107	104	.	.	.	.	.	50	.	.	.
3	V1	25	-122	119	120	1	1	989	.	62	120	.	1
4	V1	15	-156	153	.	.	.	.	.	94	.	.	.
5	V1	35	-170	168	.	.	.	.	.	64	.	.	.
6	V1	80	-257	255	.	.	.	.	.	96	.	.	.
7	V1	65	-265	263	.	.	.	.	.	76	.	.	.
8	V1	50	-282	281	279	-2	1	983	.	58	281	2	1
9	V1	45	-321	320	320	.	1	923	.	84	319	-1	1
10	V1	95	-346	345	.	.	.	.	.	96	.	.	.
11	V1	90	-392	392	.	.	.	.	.	63	392	.	1
12	V2	25	-412	412	412	.	4	862	.	43	.	.	.
13	V2	10	-467	467	.	.	.	.	.	72	.	.	.
14	V2	1	-588	589	589	.	1	999	.	114	589	.	1
15	V3	1	-903	904	904	.	1	1000	.	117	904	.	1
16	V1	100	-494	495	.	.	.	.	.	83	493	.	1
17	V2	15	-498	499	.	.	.	.	.	97	.	.	.
18	V2	20	-513	514	.	.	.	.	.	117	.	.	.
19	V2	60	-536	537	.	.	.	.	.	78	536	.	1
20	V1	2	-537	538	537	-1	1	991	.	65	537	.	1
21	V1	110	-545	546	.	.	.	.	.	62	.	.	.
22	V2	45	-608	609	.	.	.	.	.	130	608	.	1
23	V2	35	-631	632	.	.	.	.	.	63	.	.	.
24	V2	30	-669	670	.	.	.	.	.	83	668	.	1
25	V2	40	-717	718	.	.	.	.	.	75	.	.	.
26	V3	2	-740	741	740	-1	1	974	.	98	740	.	1
27	V3	10	-742	743	.	.	.	.	.	58	.	.	.
28	V3	35	-747	748	.	.	.	.	.	92	747	.	1
29	V2	65	-785	786	.	.	.	.	.	75	.	.	.
30	V2	55	-803	804	.	.	.	.	.	97	.	.	.
31	V3	20	-805	806	.	.	.	.	.	164	.	.	.
32	V3	15	-839	840	.	.	.	.	.	58	.	.	.
33	V2	50	-843	844	.	.	.	.	.	129	.	.	.
34	V3	40	-908	909	.	.	.	.	.	112	907	.	1
35	V3	50	-926	927	.	.	.	.	.	106	.	.	.
36	V3	75	-941	942	.	.	.	.	.	106	.	.	.
37	V3	60	-988	988	.	.	.	.	.	106	.	.	.
38	V3	55	-992	992	.	.	.	.	.	104	.	.	.
39	V2	80	-1010	1010	.	.	.	.	.	173	.	.	.
40	V3	3	-1053	1053	1053	.	1	975	.	95	1053	.	1
41	V3	25	-1087	1087	.	.	.	.	.	83	.	.	.

Quantitation Report File: S59436Z823

Data: S59436Z823.TI
04/27/88 22:16:00
Sample: 59436-05 5ML 100%
Conds.: QC DESC CV
Formula: ---
Submitted by: RMAL

Instrument: 4500
Analyst: CR

Weight: 0.000
Acct. No.:

00364

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	C020	VINYL CHLORIDE	62	V1# 25	75-01-4
4	C015	BROMOMETHANE	94	V1# 15	74-83-9
5	C025	CHLOROETHANE	64	V1# 35	75-00-3
6	C045	1,1-DICHLOROETHENE	61	V1# 80	75-35-4
7	C040	CARBON DISULFIDE	76	V1# 65	75-15-0
8	C035	ACETONE	58	V1# 50	67-64-1
9	C030	METHYLENE CHLORIDE	84	V1# 45	75-09-2
10	TRANS-1,2-DICHLOROETHENE		61	V1# 95	156-60-5
11	C050	1,1-DICHLOROETHANE	63	V1# 90	75-34-3
12	C125	VINYL ACETATE	43	V2# 25	108-05-4
13	C110	2-BUTANONE	72	V2# 10	78-93-3
14	CI10	1,4-DIFLUOROBENZENE	114	IV2# 01	540-36-3
15	CI20	CHLOROBENZENE-D5	117	IV3# 01	3114-55-4
16	C060	CHLOROFORM	83	V1#100CC	67-66-3
17	C115	1,1,1-TRICHLOROETHANE	97	V2# 15	71-55-6
18	C120	CARBONTETRACHLORIDE	117	V2# 20	56-23-5
19	C165	BENZENE	78	V2# 60	71-43-2
20	CS15	1,2-DICHLOROETHANE-D4	65	SV1# 02	17060-07-0
21	C065	1,2-DICHLOROETHANE	62	V1#110	107-06-2
22	C150	TRICHLOROETHENE	130	V2# 45	79-01-6
23	C140	1,2-DICHLOROPROPANE	63	V2# 35CC	78-87-5
24	C130	BROMODICHLOROMETHANE	83	V2# 30	75-27-4
25	C143	CIS-1,3-DICHLOROPROPENE	75	V2# 40	10061-01-5
26	CS05	TOLUENE-D8	98	SV3# 02	2037-26-5
27	C205	4-METHYL-2-PENTANONE	58	V3# 10	108-10-1
28	C230	TOLUENE	92	V3# 35	108-88-3
29	C172	TRANS-1,3-DICHLOROPROPE	75	V2# 65	10061-02-6
30	C160	1,1,2-TRICHLOROETHANE	97	V2# 55	79-00-5
31	C220	TETRACHLOROETHENE	164	V3# 20	127-18-4
32	C210	2-HEXANONE	58	V3# 15	591-78-6
33	C155	DIBROMOCHLOROMETHANE	129	V2# 50	124-48-1
34	C235	CHLOROBENZENE	112	V3# 40	108-90-7
35	C240	ETHYLBENZENE	106	V3# 50	100-41-4
36	M+P XYLENES		106	V3# 75	
37	O-XYLENE		106	V3# 60	
38	C245	STYRENE	104	V3# 55	100-42-5
39	C180	BROMOFORM	173	V2# 80	75-25-2
40	CS10	BROMOFLUOROBENZENE	95	SV3# 03	460-00-4
41	C225	1,1,2,2-TETRACHLOROETHA	83	V3# 25SP	79-34-5

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	477	7:57	1	1.000	A BB	38322.	50.000 UG/L	16.23
2	NOT FOUND								
3	62	120	2:00	1	0.252	A BB	4653.	7.303 UG/L	2.37
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	58	281	4:41	1	0.589	A BB	95.	1.880 UG/L	0.61
9	84	319	5:19	1	0.669	A BB	623.	0.459 UG/L	0.15
10	NOT FOUND								
11	63	392	6:32	1	0.822	A BB	409.	0.215 UG/L	0.07
12	NOT FOUND								
13	NOT FOUND								
14	114	589	9:49	14	1.000	A BB	189304.	50.000 UG/L	16.23
15	117	904	15:04	15	1.000	A BB	158474.	50.000 UG/L	16.23
16	83	493	8:13	1	1.034	A BB	426.	0.248 UG/L	0.08
17	NOT FOUND								
18	NOT FOUND								
19	78	536	8:56	14	0.910	A BB	1348.	0.478 UG/L	0.16
20	65	537	8:57	1	1.126	A BB	36610.	47.962 UG/L	15.57
21	NOT FOUND								
22	130	608	10:08	14	1.032	A BB	526.	0.409 UG/L	0.13
23	NOT FOUND								
24	83	668	11:08	14	1.134	A BB	229.	0.119 UG/L	0.04
25	NOT FOUND								
26	98	740	12:20	15	0.819	A BB	161184.	50.023 UG/L	16.23
27	NOT FOUND								
28	92	747	12:27	15	0.826	A BB	308.	0.164 UG/L	0.05
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	112	907	15:07	15	1.003	A BB	331.	0.139 UG/L	0.04
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	95	1053	17:33	15	1.165	A BB	103763.	48.774 UG/L	15.83
41	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	7:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:47		0.224						
3	2:02	0.98	0.256	0.98	7.30	50.00	0.121	0.831	0.15
4	2:36		0.327						
5	2:50		0.356						
6	4:17		0.539						
7	4:25		0.556						
8	4:42	1.00	0.591	1.00	1.88	50.00	0.002	0.066	0.04
9	5:21	0.99	0.673	0.99	0.46	50.00	0.016	1.771	0.01
10	5:46		0.725						
11	6:32	1.00	0.822	1.00	0.22	50.00	0.011	2.479	0.00
12	6:52		0.699						
13	7:47		0.793						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	9:49	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
15	15:04	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	8:14	1.00	1.036	1.00	0.25	50.00	0.011	2.239	0.00
17	8:18		0.846						
18	8:33		0.871						
19	8:56	1.00	0.910	1.00	0.48	50.00	0.007	0.744	0.01
20	8:57	1.00	1.126	1.00	47.96	50.00	0.955	0.996	0.96
21	9:05		1.143						
22	10:08	1.00	1.032	1.00	0.41	50.00	0.003	0.340	0.01
23	10:31		1.071						
24	11:09	1.00	1.136	1.00	0.12	50.00	0.001	0.509	0.00
25	11:57		1.217						
26	12:20	1.00	0.819	1.00	50.02	50.00	1.017	1.017	1.00
27	12:22		0.821						
28	12:27	1.00	0.826	1.00	0.16	50.00	0.002	0.591	0.00
29	13:05		1.333						
30	13:23		1.363						
31	13:25		0.890						
32	13:59		0.928						
33	14:03		1.431						
34	15:08	1.00	1.004	1.00	0.14	50.00	0.002	0.754	0.00
35	15:26		1.024						
36	15:41		1.041						
37	16:28		1.093						
38	16:32		1.097						
39	16:50		1.715						
40	17:33	1.00	1.165	1.00	48.77	50.00	0.655	0.671	0.98
41	18:07		1.202						

~~00361~~

00366

ST

TCA FINISHED, 10 FOUND
FINISHED AT: 5/02/88 16.47:45

RMAL QUANTITATION SUMMARY FILE: S59436Z823
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

00367

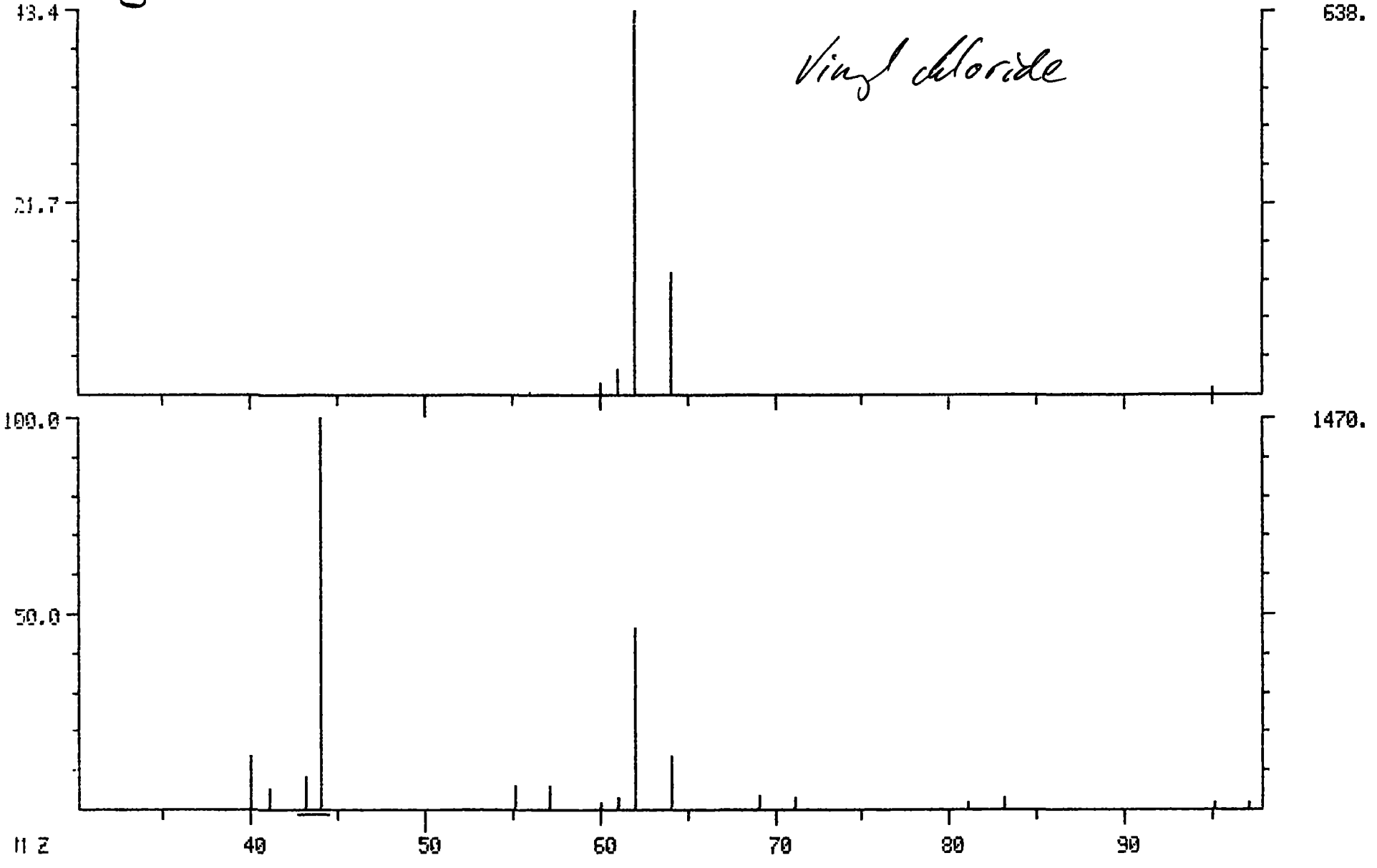
UNITS: UG/L

NO	LIBRARY ENTRY		NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1#	1	CI01 BROMOCHLOROMETHANE	128	477	1	38322.	1.000	50.000
2	V2#	1	CI10 1,4-DIFLUOROBENZENE	114	589	2	189304.	1.000	50.000
3	V3#	1	CI20 CHLOROBENZENE-D5	117	904	3	158474.	1.000	50.000
4	V3#	2	CS05 TOLUENE-D8	98	740	3	161184.	1.017	50.023
5	V3#	3	CS10 BROMOFLUOROBENZENE	95	1053	3	103763.	0.655	48.774
6	V1#	2	CS15 1,2-DICHLOROETHANE-	65	537	1	36610.	0.955	47.962
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	120	1	4653.	0.121	7.303
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	281	1	95.	0.002	1.880
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	O-XYLENE	106		3	NOT FOUND		
41	V3#	75	M+P XYLENES	106		3	NOT FOUND		

C0368

DUAL MASS SPECTRUM
04/27/88 22:16:00 + 2:00
SAMPLE: 59436-05 5ML 100%
CONDS.: GC DESC CV
GC TEMP: -3 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436Z823 #120 BASE M/Z: 62/ 44
CALI: 042788CZ #5 RIC: 913./ 3239.

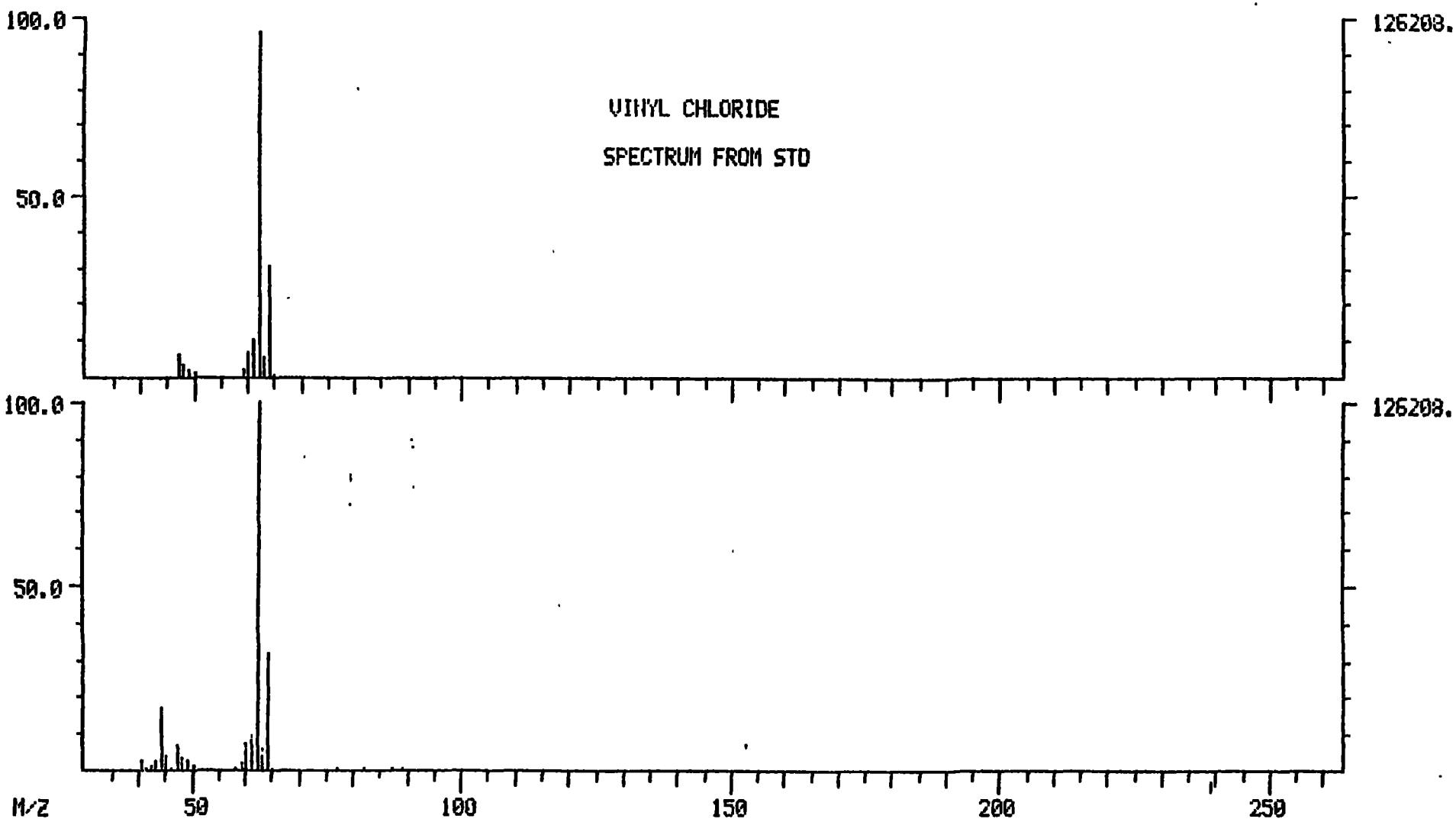


00369

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

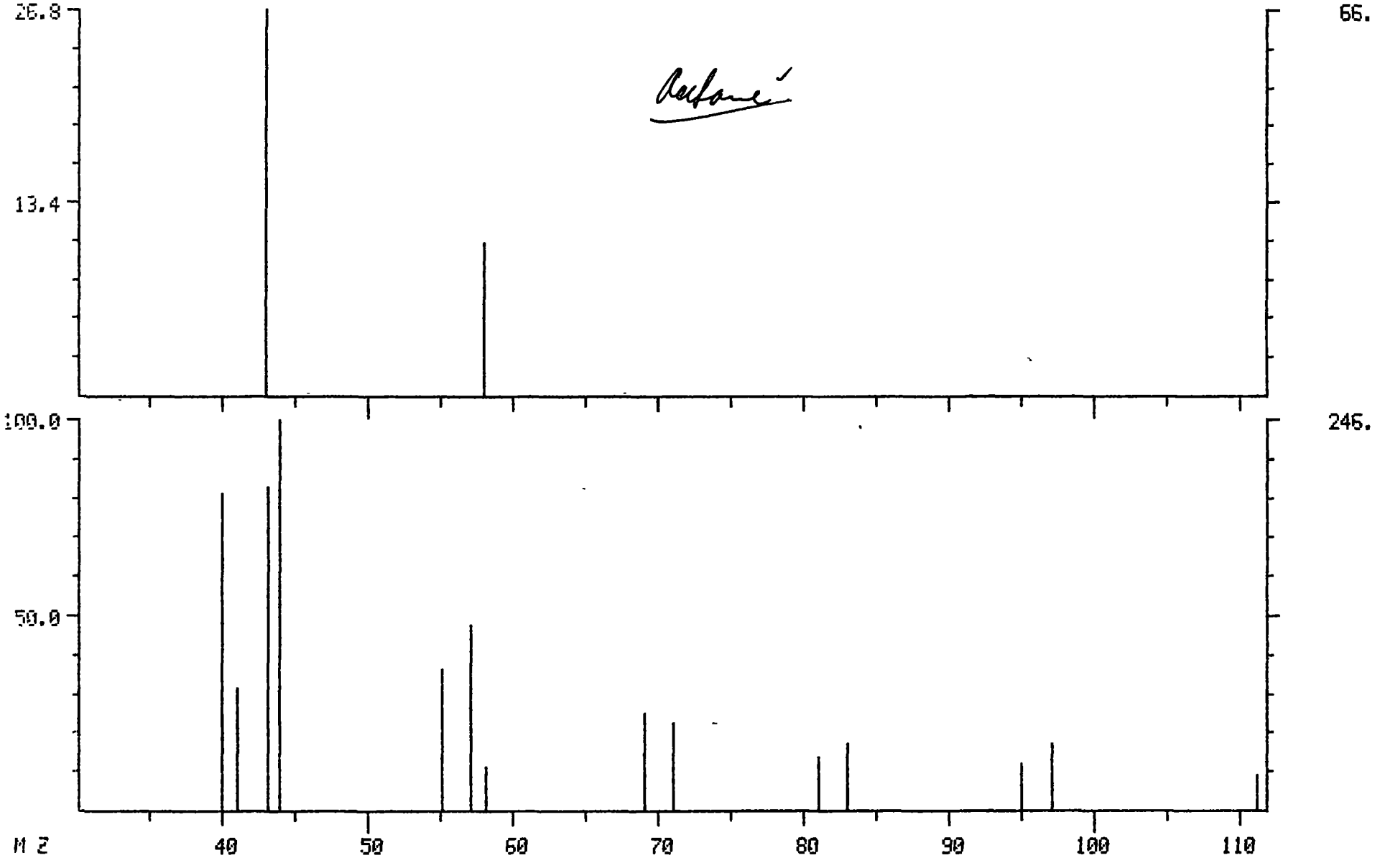
BASE M/Z: 62/ 62
RIC: 209151./ 263167.



00370

DUAL MASS SPECTRUM
04/27/88 22:16:00 + 4:41
SAMPLE: 59436-05 5ML 100%
CONDS.: GC DESC CV
GC TEMP: 13 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436Z823 #281 BASE M/Z: 43/ 44
CALI: 042788CZ #5 RIC: 91./ 1250.



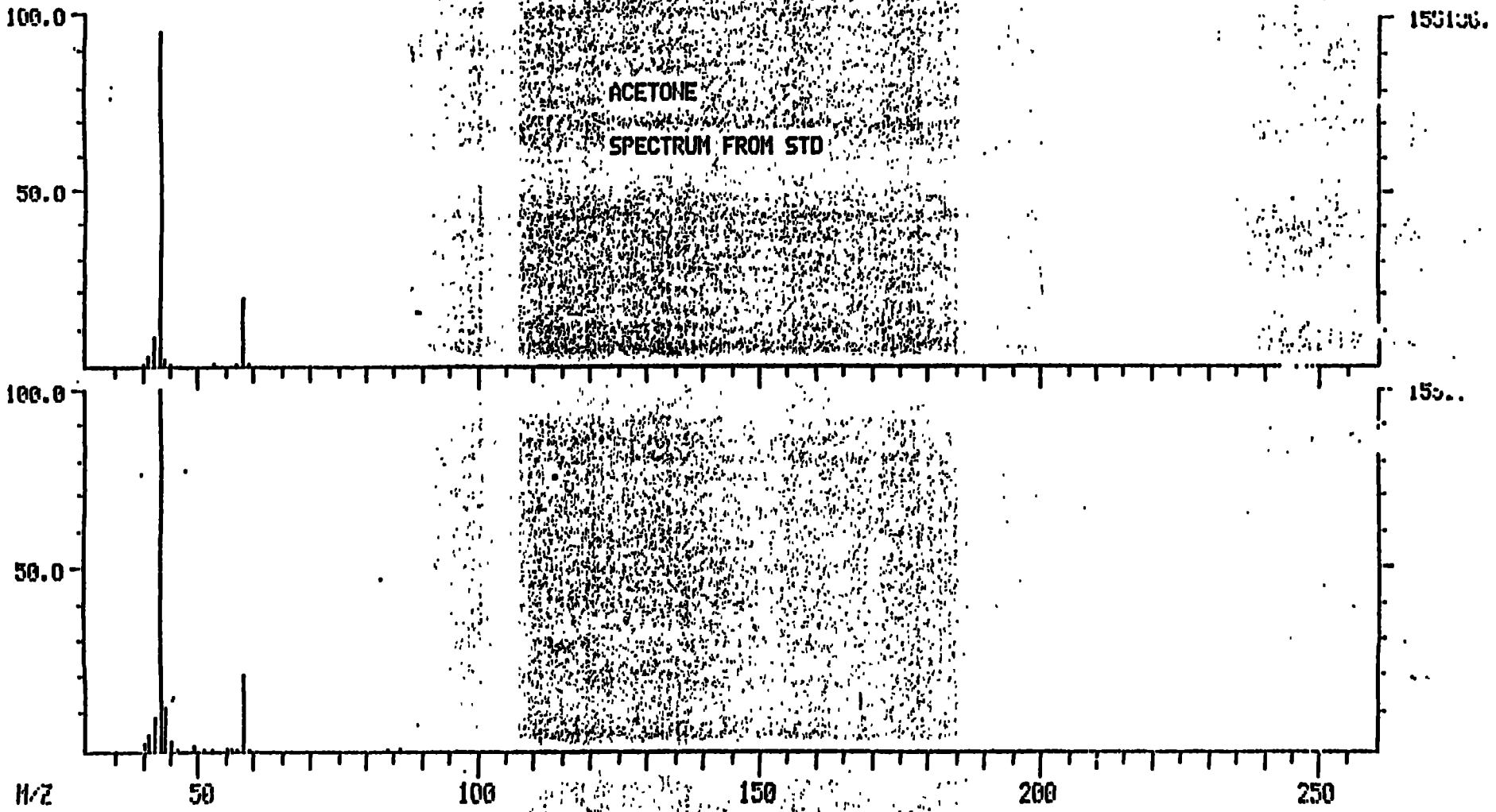
Acetone

00371

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 2H 0T)

DATA: STDJ198 0150
CALI: STDJ198 01

BASE M/Z: 43/ 43
RIC: 199835./ 247007.



6/1/88 16:22:30 SCAN 1 OF 2850
Acquisition started

Acquire Run 3:S59436R965 ACQUIRING
06/01/88 16:21:00 + 0:09 Free sectors: 13815 Scan: 12 of 2850
Sample: 59436-05 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: 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	

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

SV = 2

6/1/88 16:58:11
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

/BE

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	495.4	2137.5	23.2	74532. 26.	35.

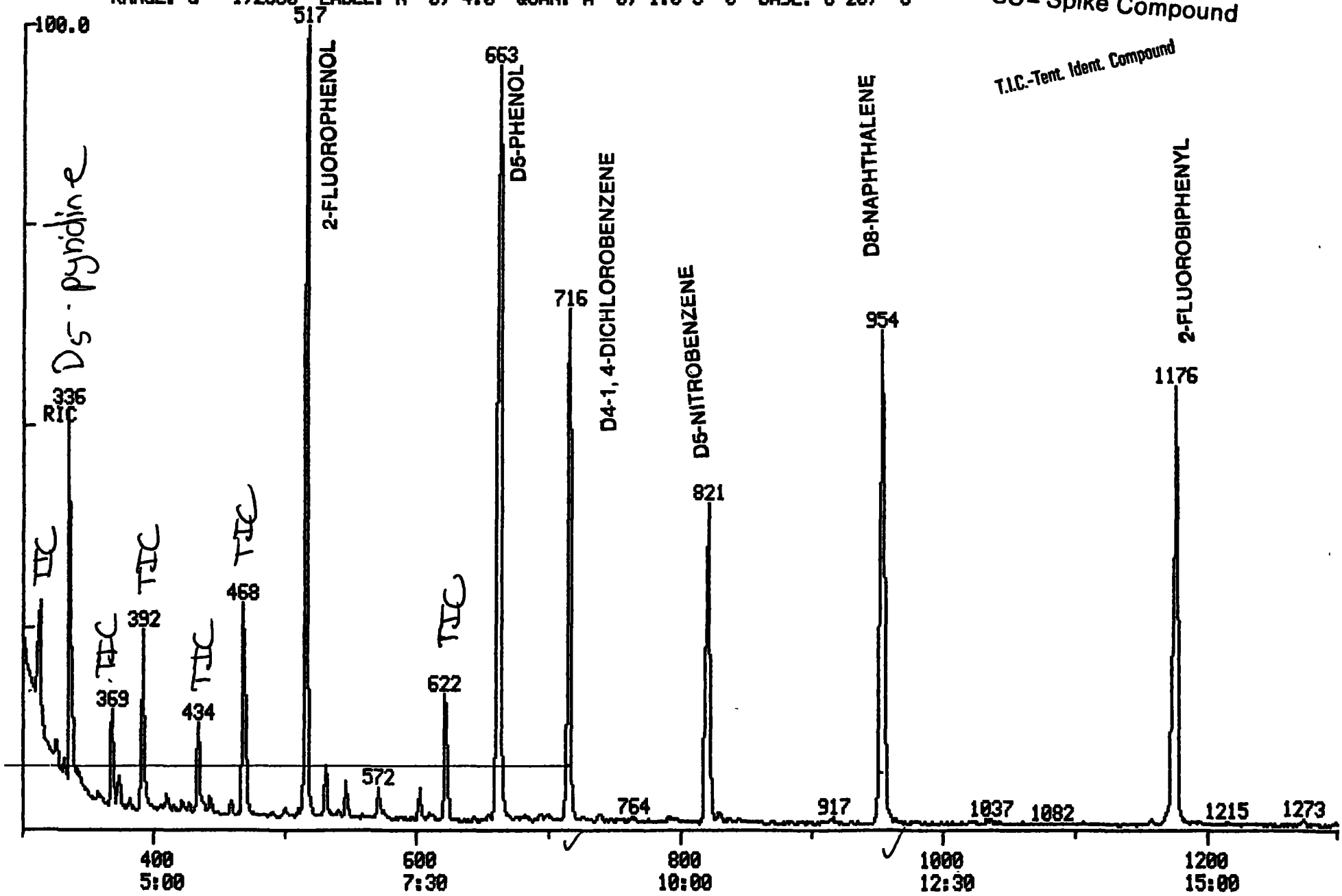
00373

RIC
06/01/88 16:21:00
SAMPLE: 59436-05 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: 559436R965 #4
CALI: 053188CR #4

SCANS 300 TO 1300
OUT OF 300 TO 2850

TC = Target Compound
SC = Spike Compound



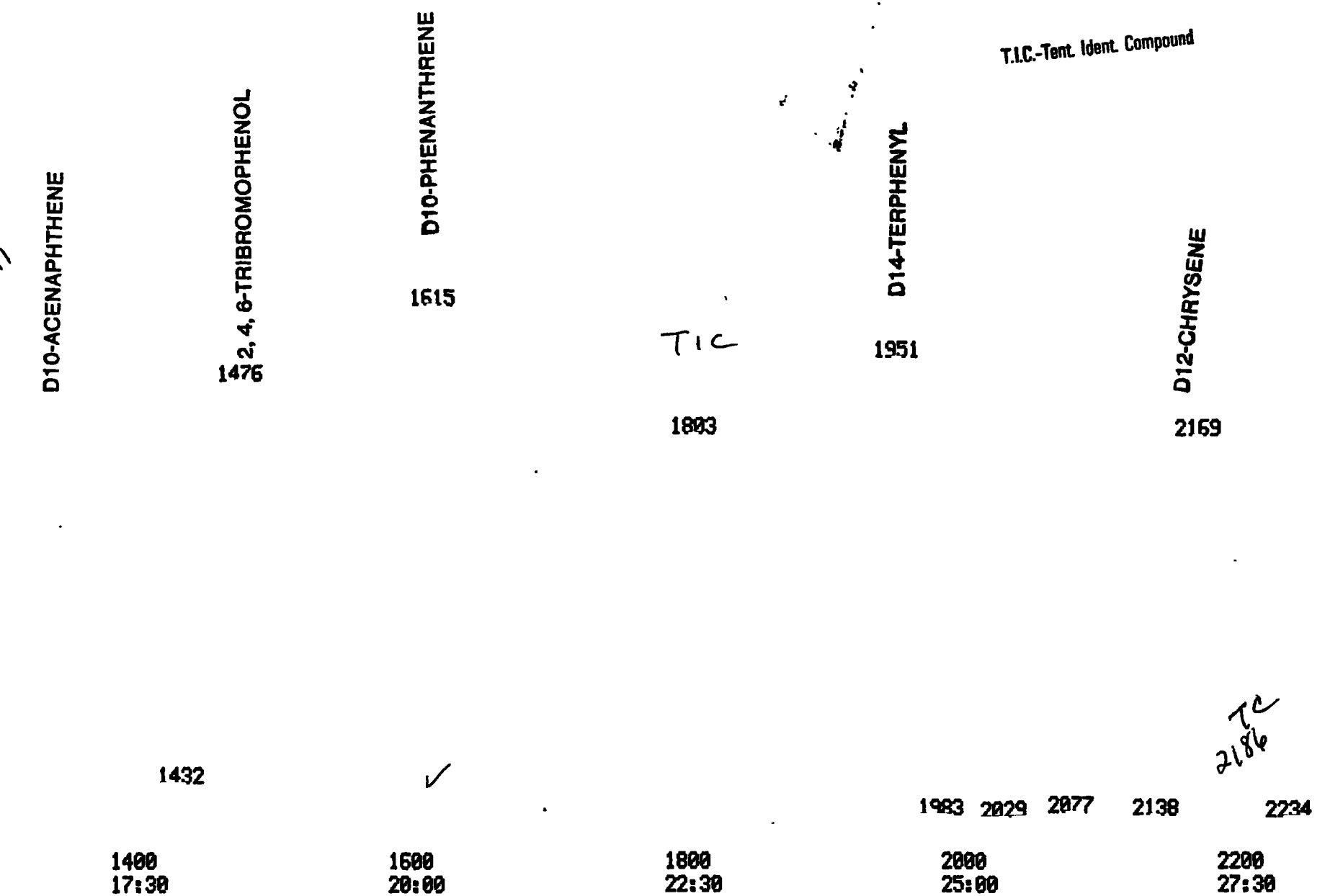
00374

RIC
06/01/88 16:21:00
SAMPLE: 59436-05 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: S59436R965 #4 SCANS 1300 TO 2300
CALI: 053188CR #4 OUT OF 300 TO 2850

TC = Target Compound
CC = Spike Compound

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



00375

RIC
06/01/88 16:21:00
SAMPLE: 59436-05 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: 559436R965 #4 SCANS 2300 TO 2850
CALI: 053188CR #4 OUT OF 300 TO 2850

100.0 84480.

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

TC = Target Compound
SC = Spike Compound

D12-PERYLENE

2450

2337 2380 2503 2567 2643 2725 2804

2400 30:00 2600 32:30 2800 35:00 SCAN TIME

PROCEDURE: TCA DIAGNOSTIC REPORT 6/01/88 23:28:38
DATA FILE: S59436R965
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	1	0	7	4	1	172	IS01/TC01
3	3	1	81	18	4	1	110	IS02/TC02
3	3	1	81	12	3	1	81	IS03/TC03
3	3	1	37	18	4	1	39	IS04/TC04
3	3	1	37	10	4	1	61	IS05/TC05
3	3	1	0	8	3	1	0	IS06/TC06
3	3	1	0	14	6	1	90	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	716	716	.	1	976	.	152	716	.	1
2	S1	2	-517	517	517	.	1	994	.	112	516	-1	1
3	S1	3	-666	665	663	-2	1	932	.	99	663	.	1
4	S1	105	-668	667	.	.	.	.	.	94	665	.	1
5	S1	110	-680	679	.	.	.	.	.	93	.	.	.
6	S1	115	-687	686	685	-1	1	876	.	128	685	.	1
7	S1	125	-710	708	.	.	.	.	.	146	.	.	.
8	S2	1	-955	955	954	-1	1	997	.	136	954	.	1
9	S3	1	-1312	1312	1312	.	1	989	.	164	1311	-1	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	797	.	1
16	S1	190	-804	803	.	.	.	.	.	70	.	.	.
17	S1	200	-808	807	.	.	.	.	.	117	.	.	.
18	S2	2	-823	822	821	-1	1	997	.	82	821	.	1
19	S2	10	-827	826	.	.	.	.	.	77	.	.	.
20	S2	20	-873	872	.	.	.	.	.	82	.	.	.
21	S2	25	-887	886	.	.	.	.	.	139	.	.	.
22	S2	30	-897	896	.	.	.	.	.	107	.	.	.
23	S2	35	-917	916	.	.	.	.	.	93	.	.	.
24	S2	45	-927	926	.	.	.	.	.	122	.	.	.
25	S2	40	-932	932	.	.	.	.	.	162	931	.	1
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	.	1	993	.	188	1615	.	1
35	S3	30	-1168	1167	.	.	.	.	.	196	.	.	.
36	S3	3	-1177	1176	1176	.	1	996	.	172	1176	.	1
37	S3	40	-1195	1194	.	.	.	.	.	162	.	.	.
38	S3	45	-1225	1224	.	.	.	.	.	65	.	.	.
39	S3	55	-1272	1272	.	.	.	.	.	163	.	.	.
40	S3	65	-1281	1281	.	.	.	.	.	152	1280	.	1
41	S3	70	-1284	1284	.	.	.	.	.	165	.	.	.
			-										

43	S3	80	-1320	1320	.	.	.	.	.	153	.	.	.
44	S3	85	-1331	1331	.	.	.	.	.	184	.	.	.
45	S3	95	-1347	1347	.	.	.	.	.	109	1349	.	1
46	S3	90	-1352	1352	.	.	.	.	.	168	.	.	.
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	974	.	330	1475	-1	1
55	S4	30	-1524	1524	.	.	.	.	.	248	.	.	.
56	S4	40	-1553	1553	.	.	.	.	.	284	.	.	.
57	S5	1	-2169	2169	2169	.	1	955	.	240	2168	-1	1
58	S4	50	-1591	1591	.	.	.	.	.	266	.	.	.
59	S4	65	-1620	1620	.	.	.	.	.	178	1619	.	1
60	S4	70	-1630	1630	.	.	.	.	.	178	1628	.	1
61	S4	85	-1754	1754	.	.	.	.	.	149	1753	.	1
62	S4	110	-1869	1869	.	.	.	.	.	202	1869	.	1
63	S6	1	-2450	2450	2450	.	1	991	.	264	2450	.	1
64	S5	15	-1915	1915	.	.	.	.	.	202	1915	.	1
65	S5	2	-1951	1951	1951	.	1	992	.	244	1951	.	1
66	S5	40	-2063	2063	.	.	.	.	.	149	2062	.	1
67	S5	55	-2166	2165	.	.	.	.	.	252	.	.	.
68	S5	50	-2166	2165	.	.	.	.	.	228	2164	.	1
69	S5	60	-2176	2175	.	.	.	.	.	228	.	.	.
70	S5	65	-2188	2187	2186	-1	1	995	.	149	2186	.	1
71	S6	10	-2310	2309	2309	.	1	985	.	149	2309	.	1
72	S6	15	-2381	2380	.	.	.	.	.	252	.	.	.
73	S6	25	-2387	2386	.	.	.	.	.	252	.	.	.
74	S6	35	-2440	2439	.	.	.	.	.	252	.	.	.
75	S6	55	-2687	2687	.	.	.	.	.	276	.	.	.
76	S6	60	-2690	2690	.	.	.	.	.	278	.	.	.
77	S6	65	-2755	2755	.	.	.	.	.	276	.	.	.

Quantitation Report File: S59436R965

Data: S59436R965.TI
06/01/88 16:21:00
Sample: 59436-05 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	716	8:57	1	1.000	A BV	22740.	40.000 UG/ML	6.65
2	112	516	6:27	1	0.721	A BV	61769.	76.361 UG/ML	12.69
3	99	663	8:17	1	0.926	A BB	89199.	77.443 UG/ML	12.87
4	94	665	8:19	1	0.929	A BB	338.	0.263 UG/ML	0.04
5	NOT FOUND								
6	128	685	8:34	1	0.957	A BB	151.	0.189 UG/ML	0.03
7	NOT FOUND								
8	136	954	11:55	8	1.000	A BB	87104.	40.000 UG/ML	6.65
9	164	1311	16:23	9	1.000	A BB	40703.	40.000 UG/ML	6.65
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	108	797	9:58	1	1.113	A BB	269.	0.341 UG/ML	0.06
16	NOT FOUND								
17	NOT FOUND								
18	82	821	10:16	8	0.861	A BV	37725.	39.198 UG/ML	6.51
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	162	931	11:38	8	0.976	A BB	100.	0.163 UG/ML	0.03
26	NOT FOUND								
27	128	958	11:58	8	1.004	A BB	85.	0.037 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	107	1074	13:25	8	1.126	A BB	48.	0.071 UG/ML	0.01
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	188	1615	20:11	34	1.000	A BV	67772.	40.000 UG/ML	6.65
35	NOT FOUND								
36	172	1176	14:42	9	0.897	A BB	52993.	37.136 UG/ML	6.17
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	152	1280	16:00	9	0.976	A BB	44.	0.021 UG/ML	0.00
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	109	1349	16:52	9	1.029	A BB	126.	0.693 UG/ML	0.12
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

C0380

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	76.36	100.00	1.087	1.423	0.76
3	8:19	1.00	0.929	1.00	77.44	100.00	1.569	2.026	0.77
4	8:21	1.00	0.932	1.00	0.26	50.00	0.012	2.262	0.01
5	8:30		0.948						
6	8:35	1.00	0.958	1.00	0.19	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		1.004						
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	0.34	50.00	0.009	1.389	0.01
16	10:03		1.121						
17	10:06		1.127						
18	10:17	1.00	0.861	1.00	39.20	50.00	0.346	0.442	0.78
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	1.00	0.975	1.00	0.16	50.00	0.001	0.281	0.00
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	37.14	50.00	1.042	1.402	0.74
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		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	0.69	50.00	0.002	0.179	0.01
46	16:54		1.030						
47	17:03		1.039						
48	17:43		1.080						
49	17:47		1.084						
50	17:49		1.085						

Quantitation Report File: S59436R965

Data: S59436R965.TI
06/01/88 16:21:00
Sample: 59436-05 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	1.125	A BB	12539.	77.591 UG/ML	12.89
55	NOT FOUND								
56	NOT FOUND								
57	240	2168	27:06	57	1.000	A BB	46378.	40.000 UG/ML	6.65
58	NOT FOUND								
59	178	1619	20:14	34	1.002	A BB	72.	0.037 UG/ML	0.01
60	178	1628	20:21	34	1.008	A BB	51.	0.026 UG/ML	0.00
61	149	1753	21:55	34	1.085	A BB	844.	0.334 UG/ML	0.06
62	202	1869	23:22	34	1.157	A BB	52.	0.029 UG/ML	0.00
63	264	2450	30:37	63	1.000	A BB	35686.	40.000 UG/ML	6.65
64	202	1915	23:56	57	0.883	A BB	83.	0.050 UG/ML	0.01
65	244	1951	24:23	57	0.900	A BV	61597.	49.555 UG/ML	8.23
66	149	2062	25:46	57	0.951	A BB	67.	0.071 UG/ML	0.01

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	228	2164	27:03	57	0.998	A BV	71.	0.050 UG/ML	0.01
69	NOT FOUND								
70	149	2186	27:19	57	1.008	A VB	2080.	1.589 UG/ML	0.26
71	149	2309	28:52	63	0.942	A BB	1540.	0.688 UG/ML	0.11
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		0.899						
54	18:28	1.00	1.125	1.00	77.59	100.00	0.123	0.159	0.78
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	1.00	1.009	1.00	0.03	50.00	0.001	1.143	0.00
61	21:55	1.00	1.085	1.00	0.33	50.00	0.010	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	0.05	50.00	0.001	1.422	0.00
65	24:23	1.00	0.899	1.00	49.55	50.00	1.063	1.072	0.99
66	25:47	1.00	0.951	1.00	0.07	50.00	0.001	0.818	0.00
67	27:04		0.998						
68	27:04	1.00	0.998	1.00	0.05	50.00	0.001	1.237	0.00
69	27:12		1.003						
70	27:21	1.00	1.008	1.00	1.59	50.00	0.036	1.129	0.03
71	28:52	1.00	0.942	1.00	0.69	50.00	0.035	2.509	0.01
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 23:38:04

00383

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

UNITS: UG/ML

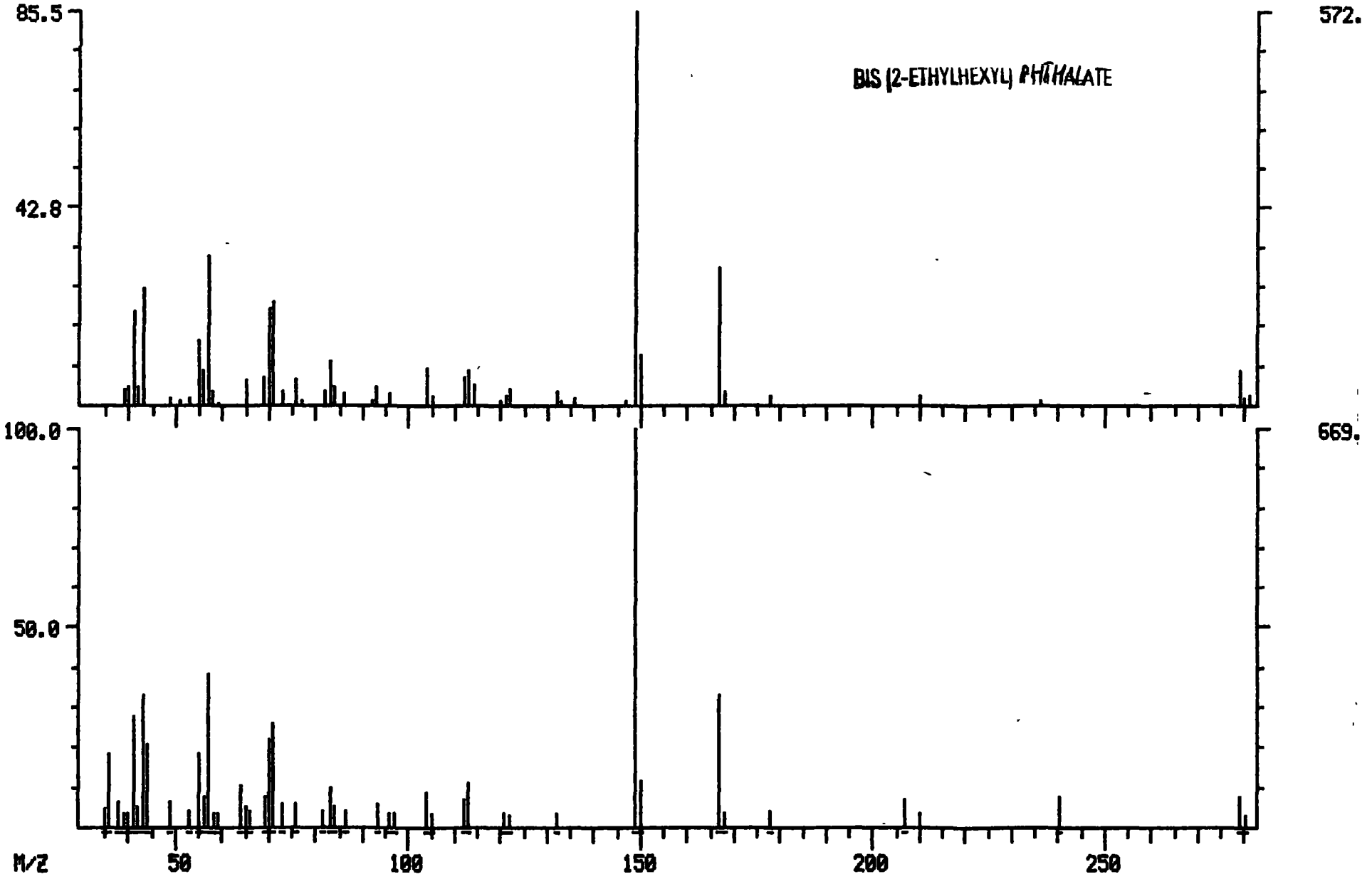
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1 CI30	1,4-DICHLOROBENZENE	152	716	1	22740.	1.000	40.000
2	S2# 1 CI40	NAPHTHALENE-D8	136	954	2	87104.	1.000	40.000
3	S3# 1 CI50	ACENAPHTHENE-D10	164	1311	3	40703.	1.000	40.000
4	S4# 1 CI60	PHENANTHRENE-D10	188	1615	4	67772.	1.000	40.000
5	S5# 1 CI70	CHRYSENE-D12	240	2168	5	46378.	1.000	40.000
6	S6# 1 CI75	PERYLENE-D12	264	2450	6	35686.	1.000	40.000
7	S2# 2 CS20	NITROBENZENE-D5	82	821	2	37725.	0.346	39.198
8	S3# 3 CS25	2-FLUOROBIPHENYL	172	1176	3	52993.	1.042	37.136
9	S5# 2 CS30	TERPHENYL-D14	244	1951	5	61597.	1.063	49.555
10	S1# 3 CS45	PHENOL-D5	99	663	1	89199.	1.569	77.443
11	S1# 2 CS50	2-FLUOROPHENOL	112	516	1	61769.	1.087	76.361
12	S3# 2 CS55	2,4,6-TRIBROMOPHENO	330	1475	3	12539.	0.123	77.591
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		

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	2080.	0.036	1.589	
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			

C0385

DUAL MASS SPECTRUM
06/01/88 16:21:00 + 27:19
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R965 #2186 BASE M/Z: 149/ 149
CALI: 053188CR #4 RIC: 2667./ 3683.

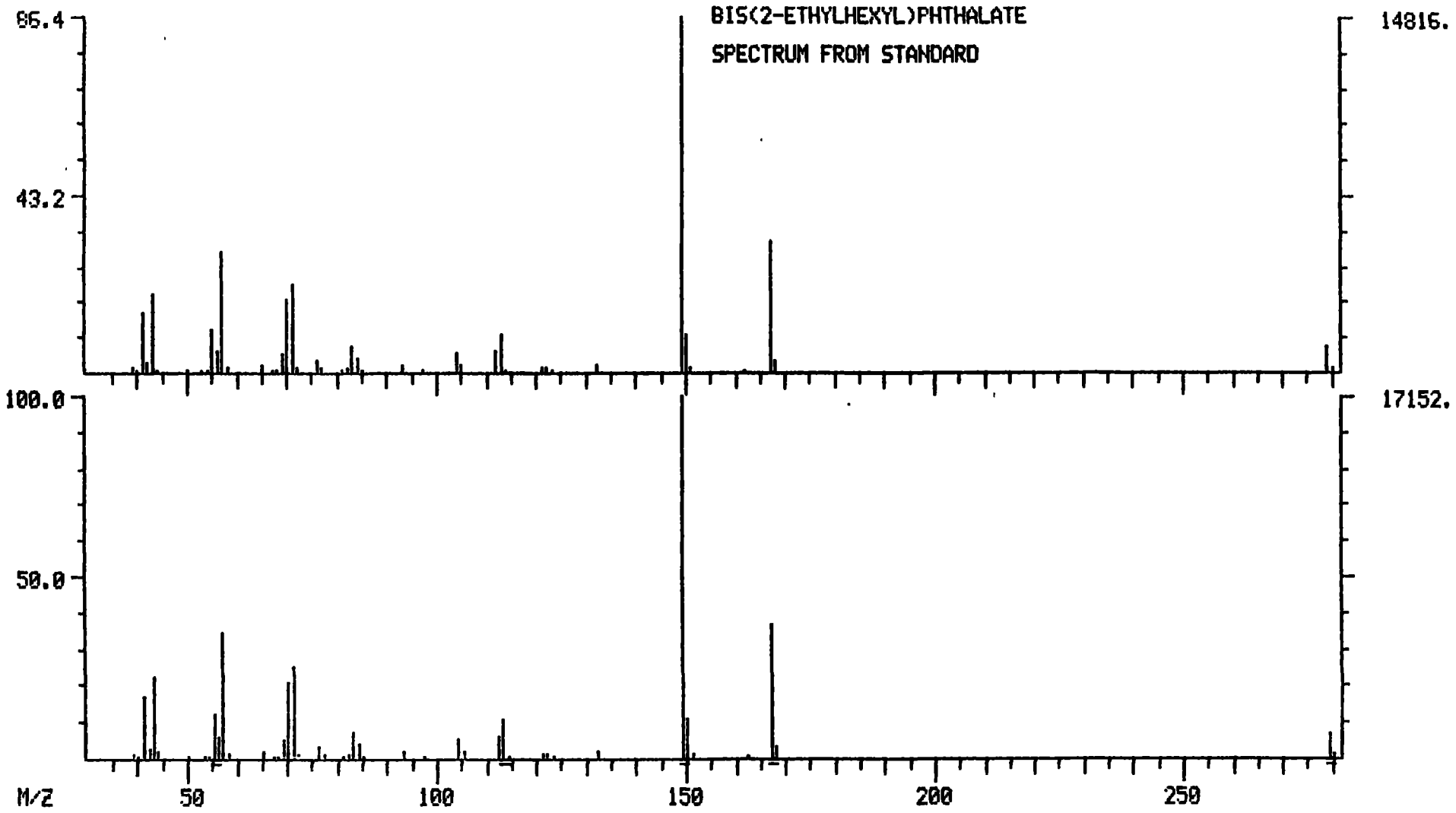


00386

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

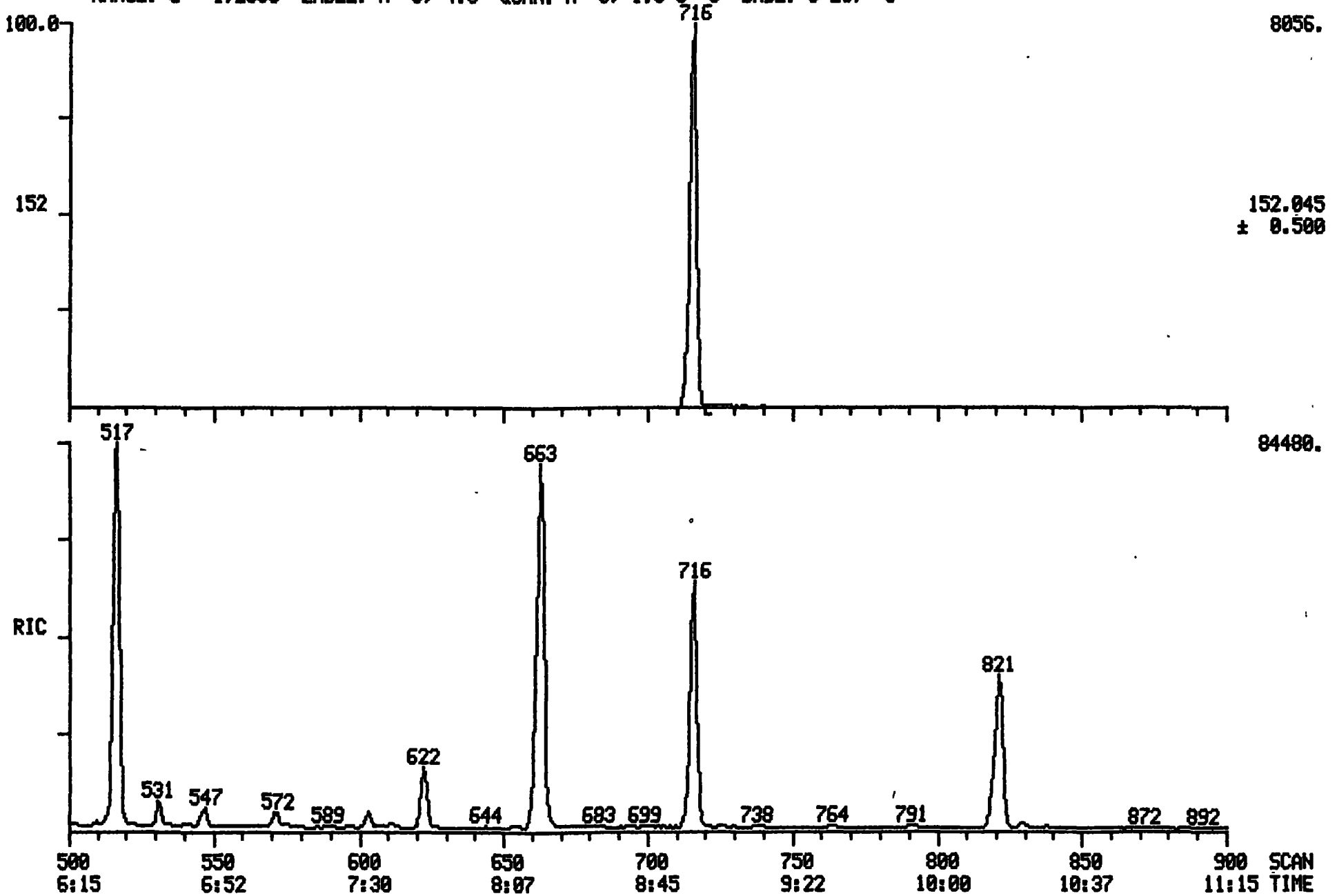
BASE M/Z: 149/ 143
RIC: 55167./ 63807.



00387

RIC+MASS CHROMATOGRAM
06/01/88 16:21:00
SAMPLE: 59436-05 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: S59436R965 #1 SCANS 500 TO 900
CALI: 053188CR #4



DATA REDUCED BY: AR DATE: 6-7-88 DATA FILE: S59436R965
DATA REVIEWED BY: ____ DATE: ____

ENSECO TIC REPORT (PAGE 1)

00388

SAMPLE: 59436-05 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	9.5	108-87-2	CYCLOHEXANE, METHYL-
2	369	B	2	5.9	108-88-3	BENZENE, METHYL- (VOA)
3	392	CB	1	12.	00-00-0	OXYGENATED HYDROCARBON
4	434	CB	1	6.3	00-00-0	OXYGENATED HYDROCARBON
5	468	CB	1	16.	00-00-0	OXYGENATED HYDROCARBON
6	622	IB	2	9.0	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-
7	1803		2	970.	10544-50-0	SULFUR, MOL. (S8)

edit complete

DATA FILE: S59436R965

ENSECO TIC REPORT (PAGE 2)

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

00389

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	981	890	1	3:55	0.443	35711.	12623.	9.479	NB	1138.
2	0	0	1	4:36	0.520	22099.	10019.	5.866	NB	850.
3	920	817	1	4:53	0.552	44817.	18483.	11.895	BC	2.
4	774	735	1	5:25	0.611	23839.	9260.	6.328	BC	2.
5	817	779	1	5:50	0.658	62039.	22000.	16.466	BC	2.
6	0	756	1	7:46	0.873	34014.	12984.	9.028	NB	6445.
7	992	959	4	22:32	1.121	4663640.	36789.	967.321	NB	24507.

TIC SELECTION REPORT

DATA FILE: S59436R965

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	79263.	21.037
517	230115.	61.076
663	255251.	67.747
716	150706.	39.999
821	113457.	30.113
954	193792.	39.999
1176	163325.	33.711
1312	204111.	42.336
1615	192847.	39.999
1951	181853.	37.719
2169	149153.	47.011
2450	126907.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 12

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	150706.	139091.	
2	S2	1	193792.	128290.	
3	S3	1	204111.	102014.	*
4	S4	1	192847.	130306.	
5	S5	1	149153.	89223.	*
6	S6	1	126907.	95544.	

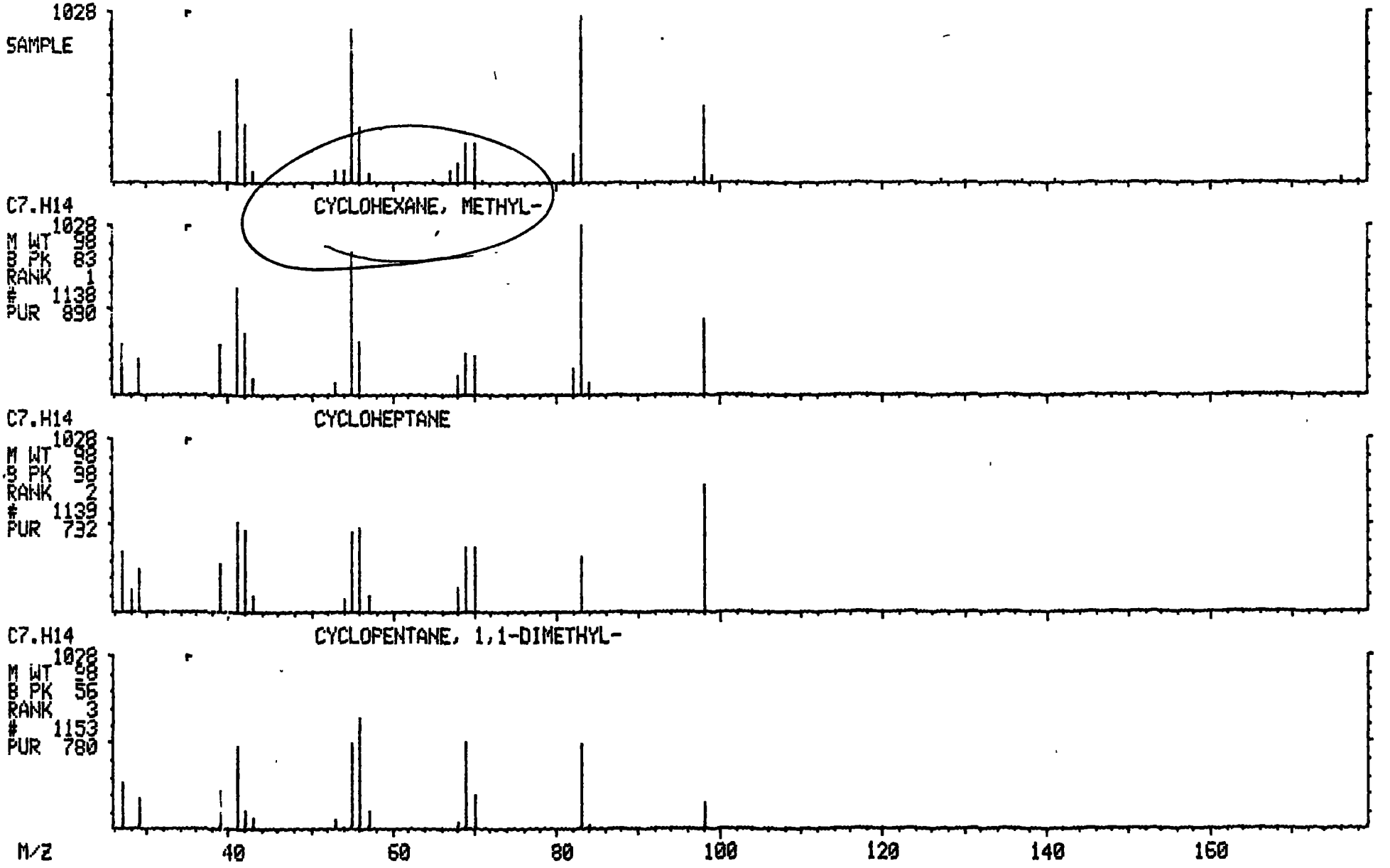
SIZE = AREA

00391

LIBRARY SEARCH
06/01/88 16:21:00 + 3:55
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R965 # 314
CALI: 053188CR # 4

BASE M/Z: 83
RIC: 9887.

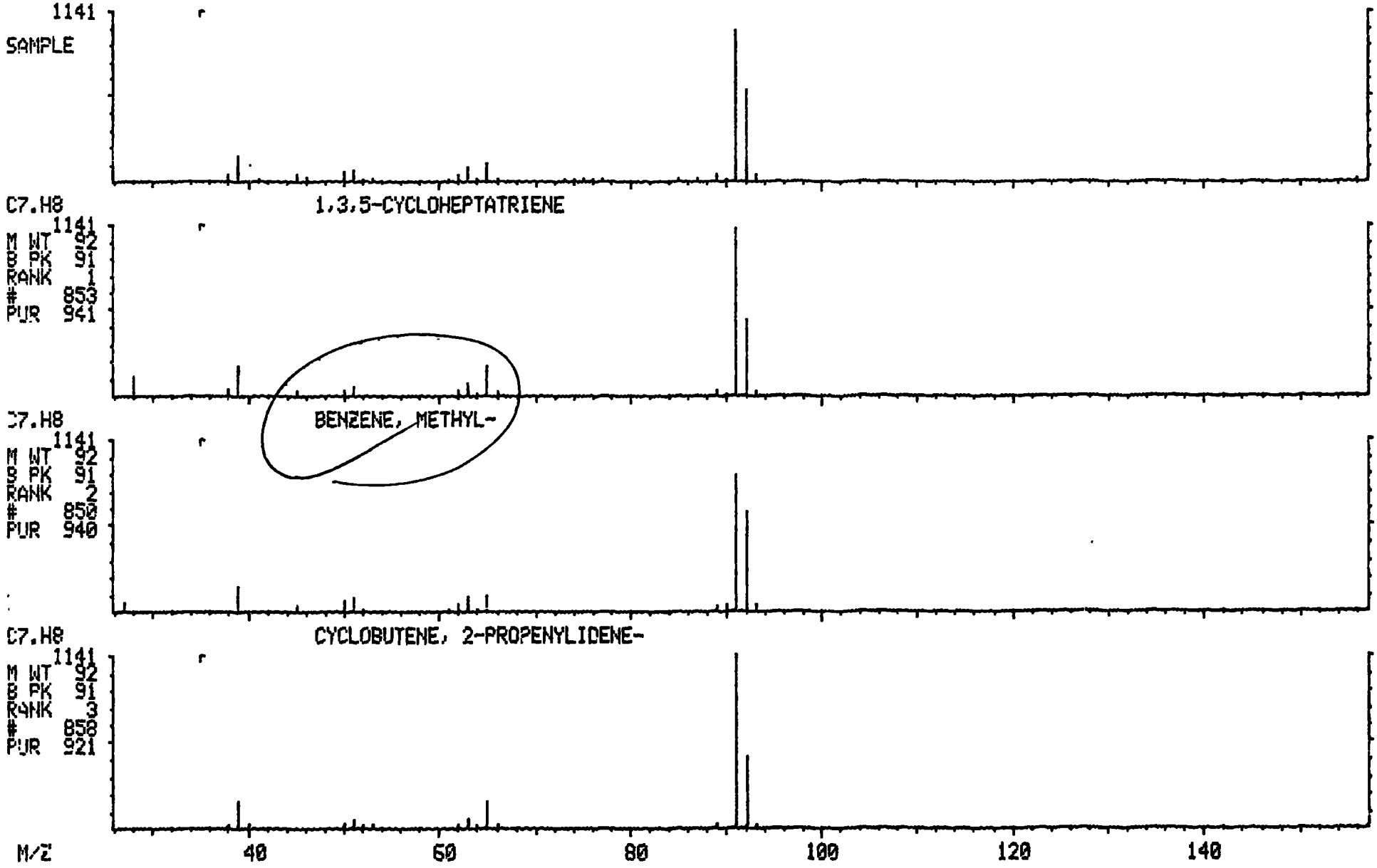


00392

LIBRARY SEARCH
06/01/88 16:21:00 + 4:37
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R365 # 369
CALI: 053188CR # 4

BASE M/Z: 91
RIC: 8063.

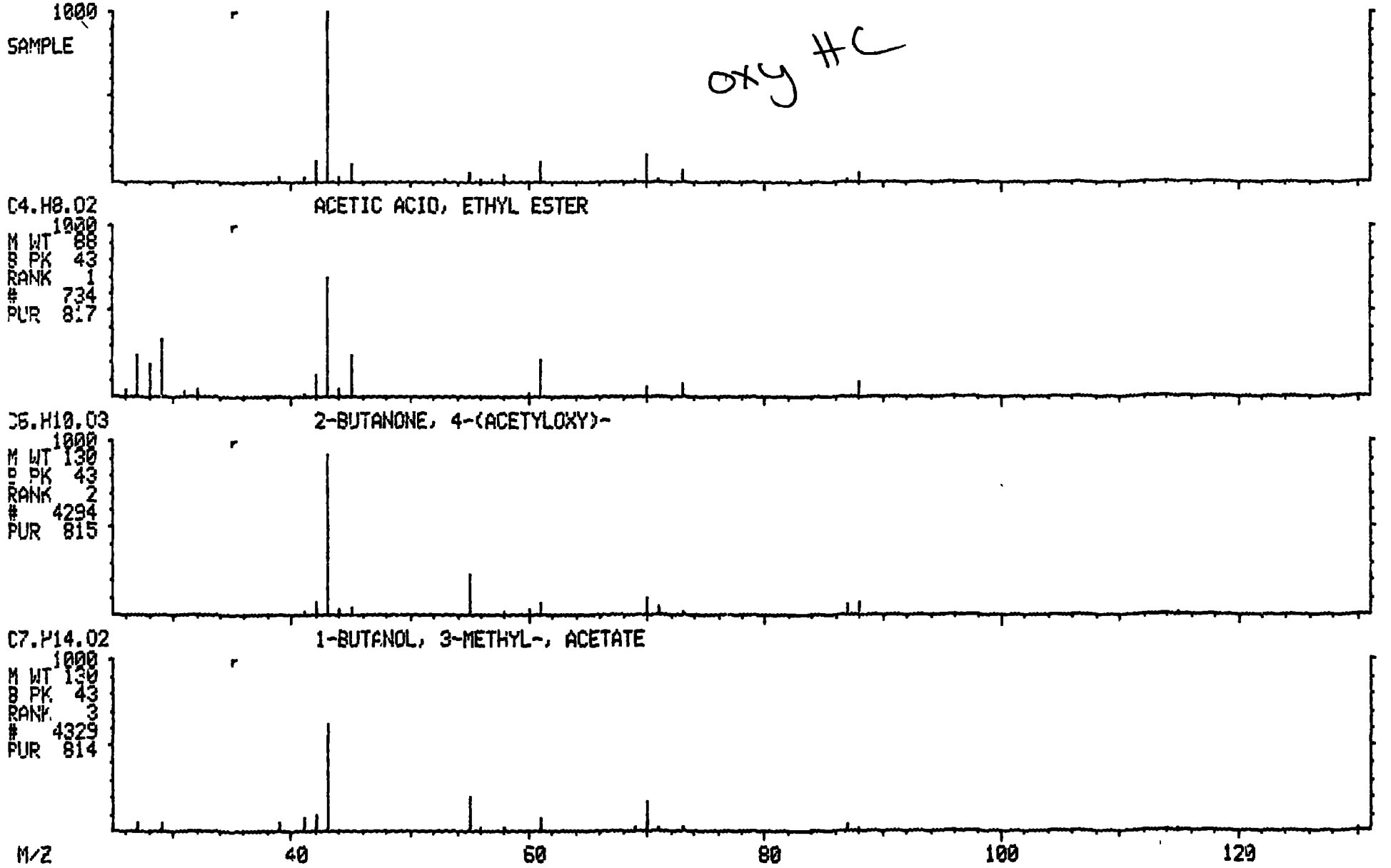


00393

LIBRARY SEARCH
06/01/88 16:21:00 + 4:54
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R965 # 392
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 15007.



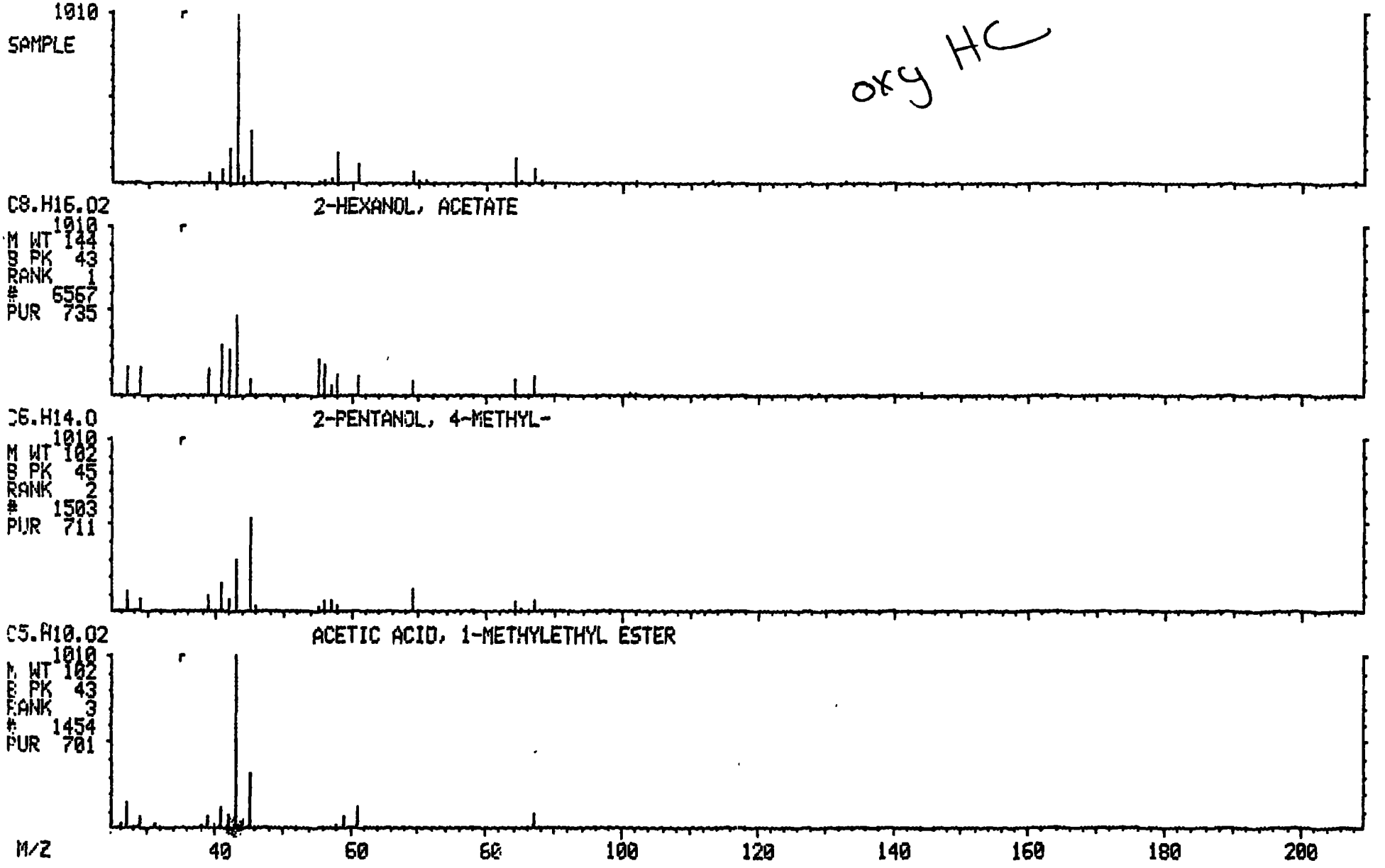
00394

LIBRARY SEARCH
06/01/88 16:21:00 + 5:25
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R965 # 434
CALI: 053188CR # 4

BASE M/Z: 43
RIC: 7119.

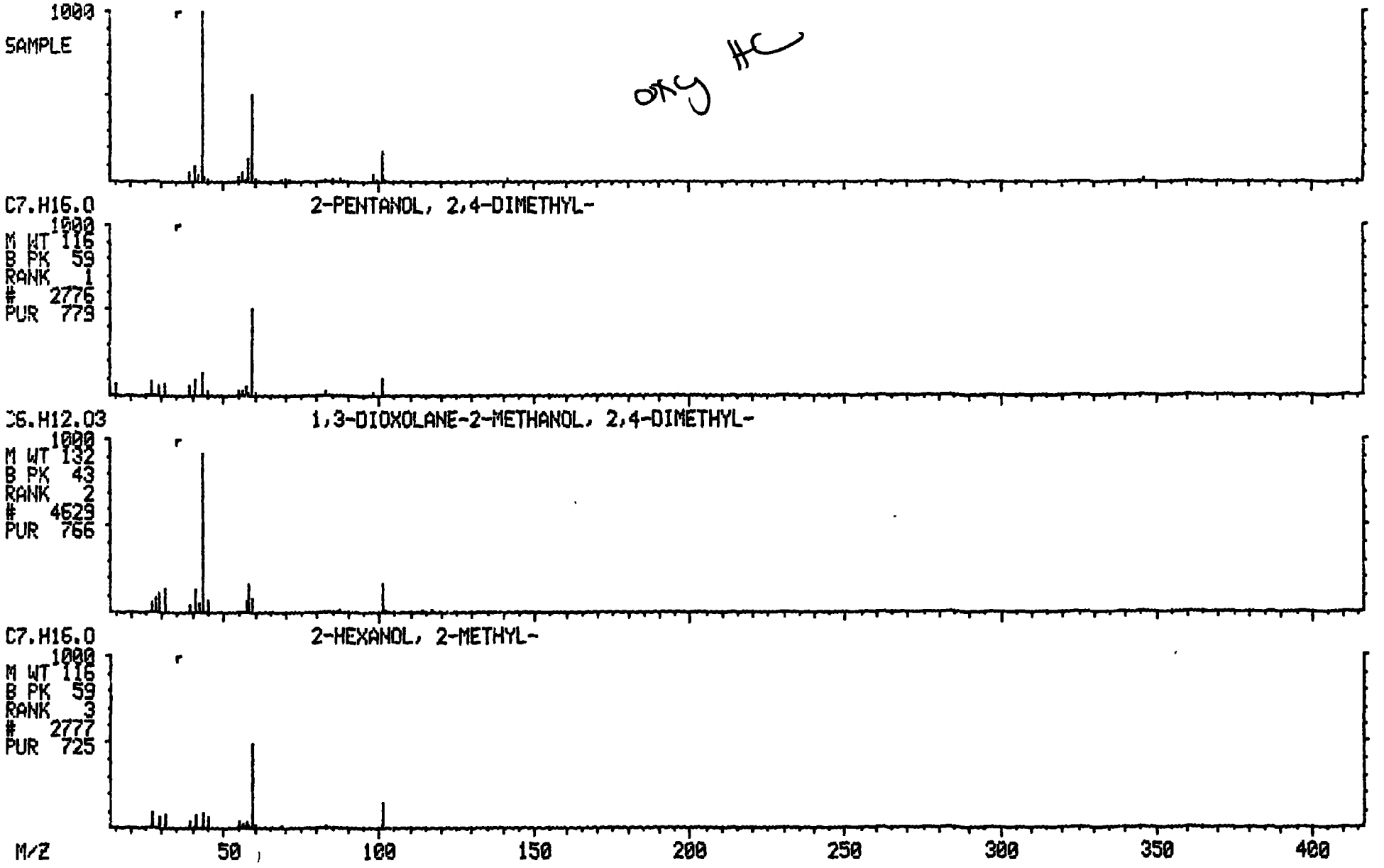
oxy HC



00395

LIBRARY SEARCH
06/01/88 16:21:00 + 5:51
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R965 # 468 BASE M/Z: 43
CALI: 053188CR # 4 RIC: 18879.

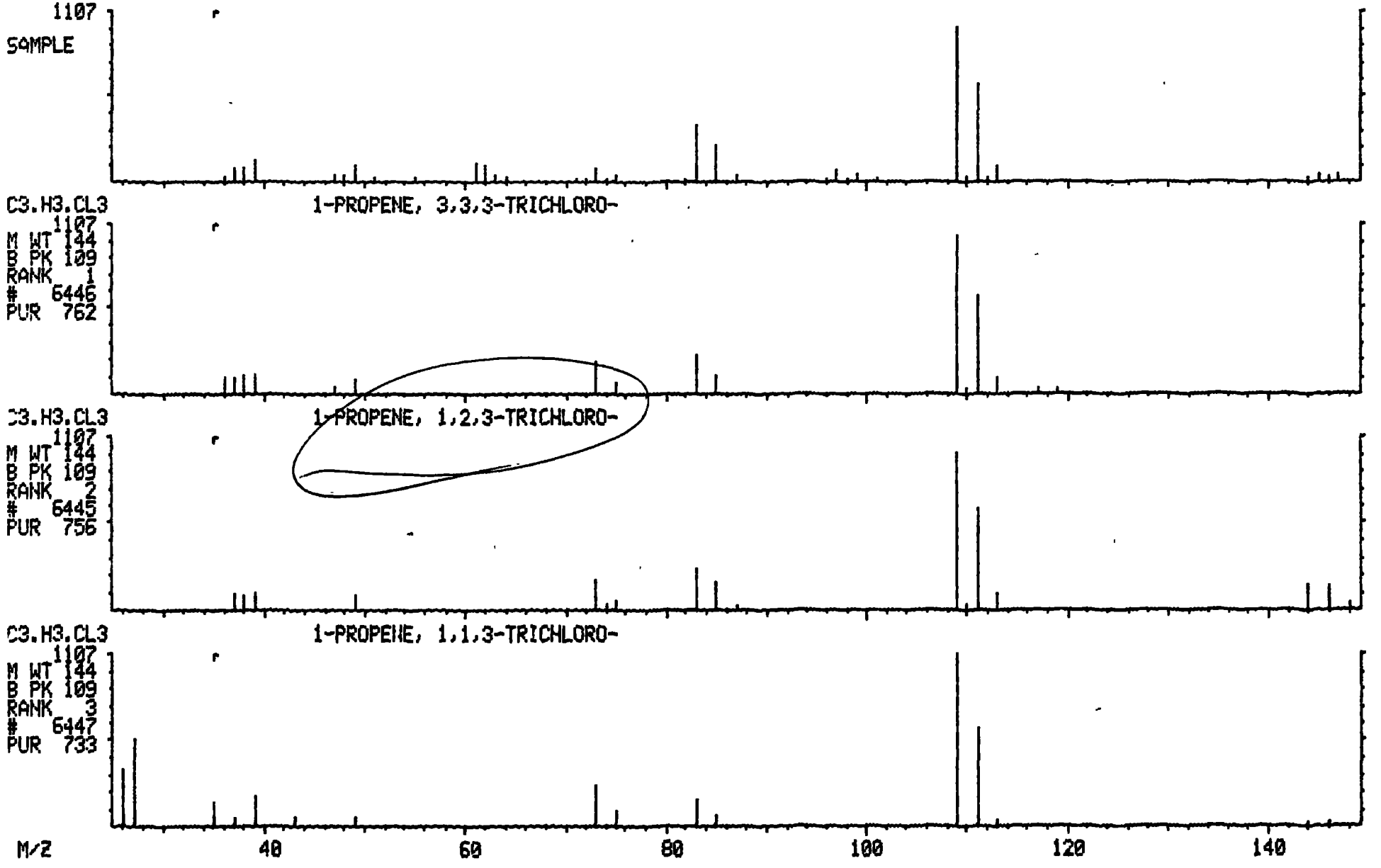


00396

LIBRARY SEARCH
06/01/88 16:21:00 + 7:46
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: 5T
ENHANCED (5 15B 2N 0T)

DATA: 559436R965 # 622
CALI: 053188CR # 4

BASE M/Z: 109
RIC: 10975.

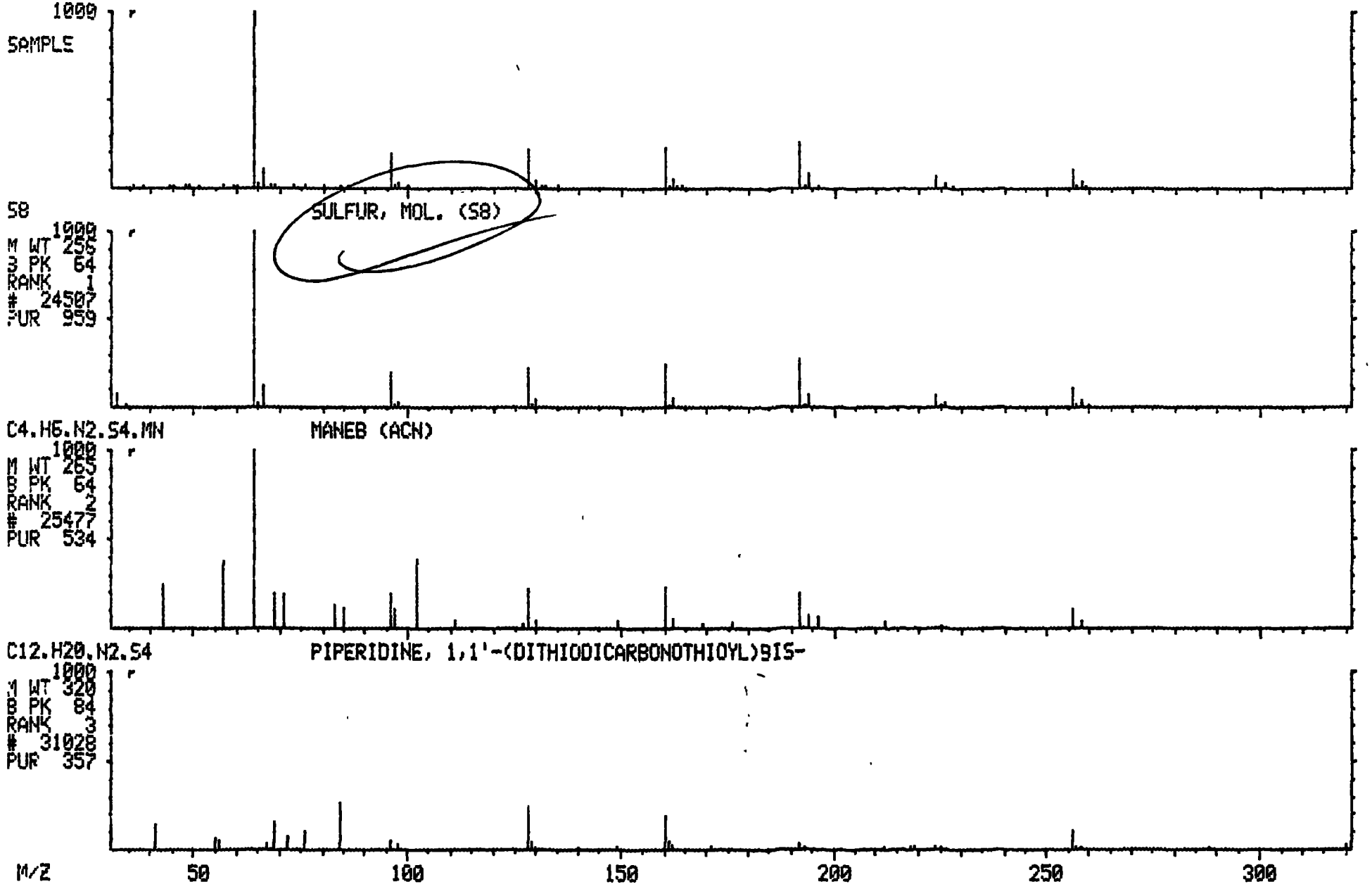


00397

LIBRARY SEARCH
05/01/88 16:21:00 + 22:32
SAMPLE: 59436-05 BNA H2O 100%/2ML
CONDS.: ST

DATA: S59436R965 #1803
CALI: 053188CR # 4

BASE M/Z: 64
RIC: 38975.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 17:33:29
DATA FILE: S59436R965
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00398
REPORT: ISO1

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	2	1	0	ISO1/TC01
3	3	1	81	14	3	1	81	ISO2/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	.	1	976	.	152	716	.	1
2	S1	4	-335	336	336	.	1	990	.	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	1	997	.	136	954	.	1
15	S3	1	-1311	1312	1312	.	1	989	.	164	1311	-1	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	954	.	1
26	S2	150	-1118	1119	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59436R965

Data: S59436R965.TI
06/01/88 16:21:00
Sample: 59436-05 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 BV	22740.	40.000 UG/ML	28.25
2	84	336	4:12	1	0.469	A BB	26888.	21.173 UG/ML	14.95
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	87104.	40.000 UG/ML	28.25
15	164	1311	16:23	15	1.000	A BB	40703.	40.000 UG/ML	28.25
16	NOT FOUND								
17	NOT FOUND								

01717

INITIAL CALIBRATION RAW DATA

RMAL-GC/MS/DS-AUTOPROCESSING
DATAFILE : D: STDW441SM. STARTED : 3/30/88 15:00:28

01718

3/28/88 16:28:20 SCAN 1 OF 730
Acquisition started

Acquire
03/28/88 16:27:00 + 0:06
Sample: 50PPB HSL STD CS1 3/17, CS2 3/18, API 3/15, IS/SS 3/21
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 2: STDW441SM
Free sectors: 4504
Instrument: 5100
Analyst: JN

Acquiring
Scan: 2 of 730
Weight: 0.002
Acct. No:

*** 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)	125.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.80	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

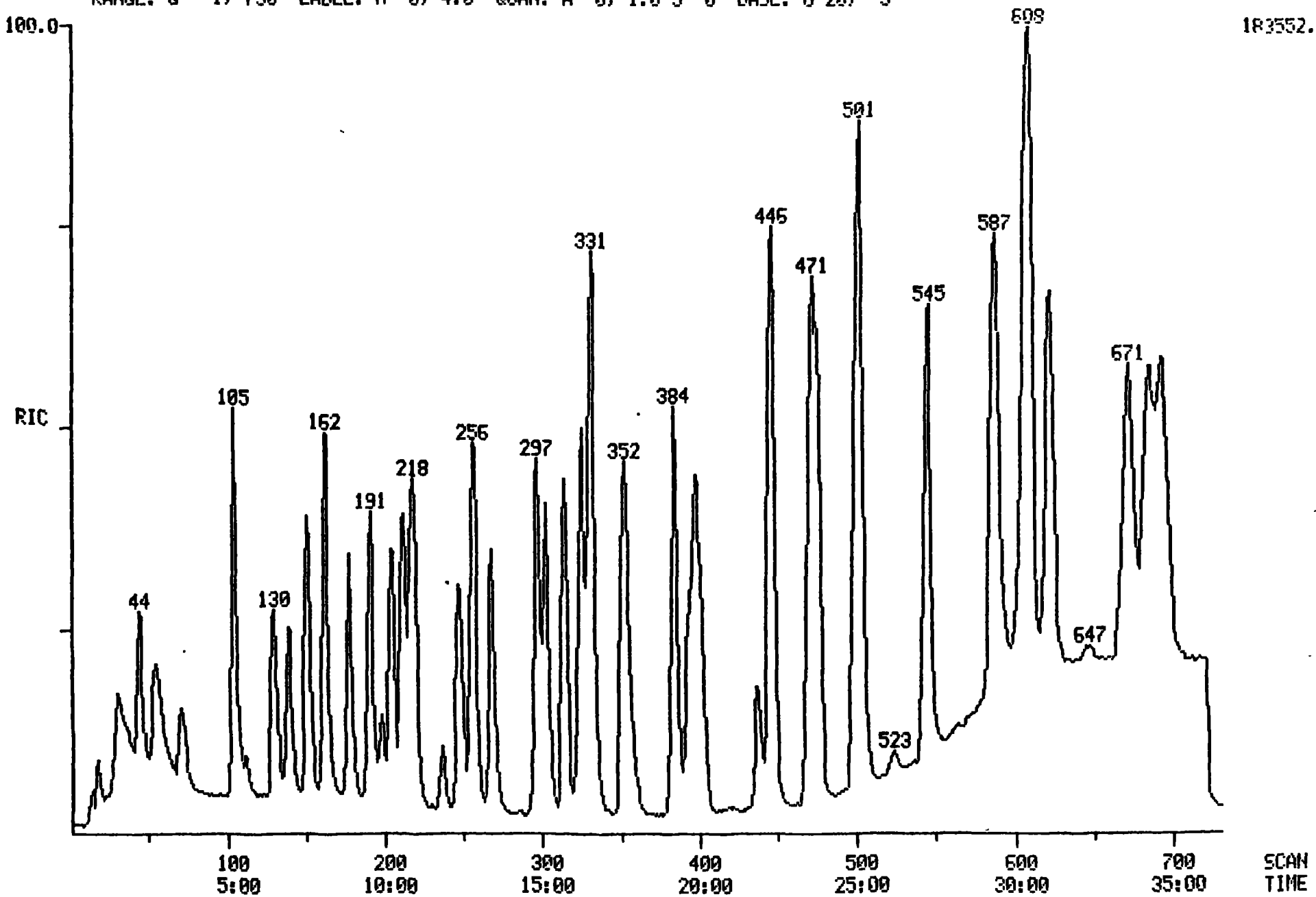
Electron multiplier voltage: -2047.
Electrometer Range: 10 ^-7
Electrometer zero: -4.0

3/28/88 17:04:53
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	102.6	2190.0	4.7	43792.	60.	20.

RIC
03/28/88 16:27:00
SAMPLE: 50PPB HSL STD CS1 3/17, CS2 3/18, API 3/15, IS/SS 3/21
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: STDW4415M #1 SCANS 1 TO 730
CALI: 032888CW #2



01710

SYSTEM, SCIENCE + SOFTWARE DIAGNOSTICS

01720

STDW441SM
032888CW
03/28/88
50PPB HSL STD CS1 3/17, CS2 3/18, API 3/15, IS/SS 3/21

NO	LIB	ID	M/E	SCAN	PRED	DELTA	FIT	PUR	MATCH	AREA
1	E4	BROM	128	162	162	0	958	735	92.	34437.
2	E4	CHLO	50	30	30	0	988	596	87.	82601.
3	E4	BROM	94	44	44	0	931	580	83.	52775.
4	E4	VINY	62	56	56	0	994	380	76.	76718.
5	E4	CHLO	64	71	71	0	987	526	83.	42781.
6	E4	METH	84	104	104	0	989	713	93.	62384.
7	E4	ACET	58	112	112	0	985	380	76.	5941.
				-107		5	981	23	58.	
8	E4	CARB	76	130	130	0	999	852	100.	144054.
9	E4	1,1-	96	151	151	0	989	742	94.	45860.
10	E4	1,1-	63	178	178	0	988	689	91.	115414.
11	E4	TRAN	96	191	191	0	992	777	96.	48468.
12	E4	CHLO	83	204	204	0	1000	795	97.	85060.
13	E4	1,2-	62	219	219	0	967	621	87.	64049.
14	E4	D4-1	65	217	217	0	987	508	82.	59122.
15	E4	1,4-	114	384	384	0	996	659	90.	159608.
16	E4	2-BU	72	216	216	0	992	216	68.	6135.
17	E4	1,1,	97	247	247	0	934	651	87.	54545.
18	E4	CARB	117	256	256	0	995	559	85.	54419.
19	E4	VINY	43	257	257	0	991	507	82.	174677.
20	E4	BROM	83	268	268	0	977	792	96.	82641.
21	E4	1,2-	63	297	297	0	972	603	86.	81929.
22	E4	TRAN	75	331	331	0	945	161	63.	44768.
				-325		6	484	58	35.	
23	E4	TRIC	130	314	314	0	992	839	99.	56411.
24	E4	DIBR	129	330	330	0	964	399	76.	63169.
25	E4	1,1,	97	332	332	0	982	405	77.	47293.
26	E4	BENZ	78	325	325	0	911	725	89.	165562.
27	E4	CIS-	75	302	302	0	992	712	93.	129002.
28	E4	2-CH	63	355	355	0	975	558	84.	29820.
29	E4	BROM	173	393	393	0	993	656	90.	49638.
30	E4	CHLO	117	500	500	0	996	571	86.	146174.
31	E4	2-HE	58	437	437	0	997	738	94.	25032.
32	E4	4-ME	58	401	401	0	997	633	89.	25593.
33	E4	TETR	164	445	445	0	991	343	84.	55608.
34	E4	1,1,	83	446	446	0	881	483	76.	83225.
35	E4	TOLU	92	475	475	0	990	648	89.	101759.
36	E4	CHLO	112	502	502	0	989	460	80.	126361.
37	E4	ETHY	106	544	544	0	997	619	88.	64196.
38	E4	STYR	104	606	606	0	990	510	82.	139886.
39	E4	O-XY	106	622	622	0	997	482	81.	79983.
40	E4	BROM	95	587	587	0	991	542	84.	103245.
41	E4	DB-T	98	471	471	0	992	712	93.	165191.
42	E4	M-XY	106	609	609	0	978	431	78.	83210.

Quantitation Report File: STDW441SM

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

01721

No	Name			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	CHLOROMETHANE	50	E2#	02SP
3	BROMOMETHANE	94	E2#	03
4	VINYL CHLORIDE	62	E2#	04CC
5	CHLORETHANE	64	E2#	05
6	METHYLENE CHLORIDE	84	E2#	06
7	ACETONE	58	E2#	07
8	CARBON DISULFIDE	76	E2#	08
9	1,1-DICHLOROETHENE	61	E2#	09
10	1,1-DICHLOROETHANE	63	E2#	10SP
11	TRANS-1,2-DICHLOROETHENE	61	E2#	11
12	CHLOROFORM	83	E2#	12CC
13	1,2-DICHLOROETHANE	62	E2#	13
14	D4-1,2-DICHLOROETHANE	65	SE2#	14
15	1,4-DIFLUOROBENZENE	114	SE2#	15
16	2-BUTANONE	72	E2#	16
17	1,1,1-TRICHLOROETHANE	97	E2#	17
18	CARBONTETRACHLORIDE	117	E2#	18
19	VINYL ACETATE	43	E2#	19
20	BROMODICHLOROMETHANE	83	E2#	20
21	1,2-DICHLOROPROPANE	63	E2#	21CC
22	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
23	TRICHLORETHENE	130	E2#	23
24	DIBROMOCHLOROMETHANE	129	E2#	24
25	1,1,2-TRICHLOROETHANE	97	E2#	25
26	BENZENE	78	E2#	26
27	CIS-1,3-DICHLOROPROPENE	75	E2#	27
28	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
29	BROMOFORM	173	E2#	29SP
30	CHLOROBENZENE-D5	117	E2#	30
31	2-HEXANONE	58	E2#	31
32	4-METHYL-2-PENTANONE	58	E2#	32
33	TETRACHLOROETHENE	164	E2#	33
34	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
35	TOLUENE	92	E2#	35
36	CHLOROBENZENE	112	E2#	36SP
37	ETHYLBENZENE	106	E2#	37
38	STYRENE	104	E2#	38
39	O-XYLENE	106	E2#	39
40	BROMOFLUOROBENZENE	95	SE2#	40
41	D8-TOLUENE	98	SE2#	41
42	M-XYLENE	106	E2#	42

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	162	8:06	1	1.000	A BB	34438.	50.000	UG/L	2.36
2	50	30	1:30	1	0.185	# BV	82601.	50.000	UG/L	2.36
3	94	44	2:12	1	0.272	# BV	52776.	50.000	UG/L	2.36
4	62	56	2:48	1	0.346	A BB	76718.	50.375	UG/L	2.38
5	64	71	3:33	1	0.438	# VV	42782.	50.000	UG/L	2.36
6	84	104	5:12	1	0.642	# BV	62384.	50.000	UG/L	2.36
7	58	112	5:36	1	0.691	# VV	5942.	65.696	UG/L	3.11
8	76	130	6:30	1	0.802	# BV	144055.	50.000	UG/L	2.36

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
9	96	151	7:33	1	0.932	# BV	45861.	50.000	UG/L	2.36
10	63	178	8:54	1	1.099	# BV	115414.	50.000	UG/L	2.36
11	96	191	9:33	1	1.179	# BV	48468.	50.000	UG/L	2.36
12	83	204	10:12	1	1.259	# BV	85060.	50.000	UG/L	2.36
13	62	219	10:57	1	1.352	# VV	64050.	50.000	UG/L	2.36
14	65	217	10:51	1	1.340	A BB	59122.	50.000	UG/L	2.36
15	114	384	19:12	15	1.000	# BV	159609.	50.000	UG/L	2.36
16	72	216	10:48	15	0.562	A BB	6136.	50.000	UG/L	2.36
17	97	247	12:21	15	0.643	# BV	54546.	50.000	UG/L	2.36
18	117	256	12:48	15	0.667	# VB	54420.	50.000	UG/L	2.36
19	43	257	12:51	15	0.669	# VV	174678.	50.000	UG/L	2.36
20	83	268	13:24	15	0.698	# BV	82641.	50.000	UG/L	2.36
21	63	297	14:51	15	0.773	# BV	81929.	50.000	UG/L	2.36
22	75	331	16:33	15	0.862	# VV	44769.	29.000	UG/L	1.37
23	130	314	15:42	15	0.818	# BV	56412.	50.000	UG/L	2.36
24	129	330	16:30	15	0.859	A BB	63170.	50.000	UG/L	2.36
25	97	332	16:36	15	0.865	# VB	47293.	50.000	UG/L	2.36
26	78	325	16:15	15	0.846	# BV	165562.	50.000	UG/L	2.36
27	75	302	15:06	15	0.786	# BV	129003.	70.000	UG/L	3.31
28	63	355	17:45	15	0.924	# BV	29820.	50.000	UG/L	2.36
29	173	393	19:39	15	1.023	A BB	49639.	50.000	UG/L	2.36
30	117	500	25:00	30	1.000	# BV	146174.	50.000	UG/L	2.36
31	58	437	21:51	30	0.874	# VV	25033.	50.000	UG/L	2.36
32	58	401	20:03	30	0.802	# VV	25593.	50.000	UG/L	2.36
33	164	445	22:15	30	0.890	# BV	56609.	50.000	UG/L	2.36
34	83	446	22:18	30	0.892	# BV	83225.	49.488	UG/L	2.34
35	92	475	23:45	30	0.950	A BB	101760.	50.000	UG/L	2.36
36	112	502	25:06	30	1.004	# BV	126362.	50.000	UG/L	2.36
37	106	544	27:12	30	1.088	# BV	64196.	50.000	UG/L	2.36
38	104	606	30:18	30	1.212	# VV	139887.	50.000	UG/L	2.36
39	106	622	31:06	30	1.244	# VV	79984.	50.000	UG/L	2.36
40	95	587	29:21	30	1.174	# VV	103246.	50.000	UG/L	2.36
41	98	471	23:33	30	0.942	# BV	165191.	50.000	UG/L	2.36
42	106	609	30:27	30	1.218	# BV	83211.	50.000	UG/L	2.36

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	1:30	1.00	0.185	1.00	50.00	50.00	2.399	2.399	1.00
3	2:12	1.00	0.272	1.00	50.00	50.00	1.532	1.532	1.00
4	2:48	1.00	0.346	1.00	50.37	50.00	2.228	2.211	1.01
5	3:33	1.00	0.438	1.00	50.00	50.00	1.242	1.242	1.00
6	5:12	1.00	0.642	1.00	50.00	50.00	1.812	1.812	1.00
7	5:36	1.00	0.691	1.00	65.70	50.00	0.173	0.131	1.31
8	6:30	1.00	0.802	1.00	50.00	50.00	4.183	4.183	1.00
9	7:33	1.00	0.932	1.00	50.00	50.00	1.332	1.332	1.00
10	8:54	1.00	1.099	1.00	50.00	50.00	3.351	3.351	1.00
11	9:33	1.00	1.179	1.00	50.00	50.00	1.407	1.407	1.00
12	10:12	1.00	1.259	1.00	50.00	50.00	2.470	2.470	1.00
13	10:57	1.00	1.352	1.00	50.00	50.00	1.860	1.860	1.00
14	10:51	1.00	1.340	1.00	50.00	50.00	1.717	1.717	1.00
15	19:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	10:48	1.00	0.562	1.00	50.00	50.00	0.038	0.038	1.00
17	12:21	1.00	0.643	1.00	50.00	50.00	0.342	0.342	1.00
18	12:48	1.00	0.667	1.00	50.00	50.00	0.341	0.341	1.00
19	12:51	1.00	0.669	1.00	50.00	50.00	1.094	1.094	1.00
20	13:24	1.00	0.698	1.00	50.00	50.00	0.518	0.518	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
21	14:51	1.00	0.773	1.00	50.00	50.00	0.513	0.513	1.00
22	16:33	1.00	0.862	1.00	29.00	29.00	0.484	0.484	1.00
23	15:42	1.00	0.818	1.00	50.00	50.00	0.353	0.353	1.00
24	16:30	1.00	0.859	1.00	50.00	50.00	0.396	0.396	1.00
25	16:36	1.00	0.865	1.00	50.00	50.00	0.296	0.296	1.00
26	16:15	1.00	0.846	1.00	50.00	50.00	1.037	1.037	1.00
27	15:06	1.00	0.786	1.00	70.00	70.00	0.577	0.577	1.00
28	17:45	1.00	0.924	1.00	50.00	50.00	0.187	0.187	1.00
29	19:39	1.00	1.023	1.00	50.00	50.00	0.311	0.311	1.00
30	25:00	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
31	21:51	1.00	0.874	1.00	50.00	50.00	0.171	0.171	1.00
32	20:03	1.00	0.802	1.00	50.00	50.00	0.175	0.175	1.00
33	22:15	1.00	0.890	1.00	50.00	50.00	0.387	0.387	1.00
34	22:18	1.00	0.892	1.00	49.49	50.00	0.569	0.575	0.99
35	23:45	1.00	0.950	1.00	50.00	50.00	0.696	0.696	1.00
36	25:06	1.00	1.004	1.00	50.00	50.00	0.864	0.864	1.00
37	27:12	1.00	1.088	1.00	50.00	50.00	0.439	0.439	1.00
38	30:18	1.00	1.212	1.00	50.00	50.00	0.957	0.957	1.00
39	31:06	1.00	1.244	1.00	50.00	50.00	0.547	0.547	1.00
40	29:21	1.00	1.174	1.00	50.00	50.00	0.706	0.706	1.00
41	23:33	1.00	0.942	1.00	50.00	50.00	1.130	1.130	1.00
42	30:27	1.00	1.218	1.00	50.00	50.00	0.569	0.569	1.00

QUANTITATION REPORT FILE: STDW441SM

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

01724

NO	NAME			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	1,4-DIFLUOROBENZENE	114	SE2#	15
3	CHLOROBENZENE-D5	117	E2#	30
4	D8-TOLUENE	98	SE2#	41
5	BROMOFLUOROBENZENE	95	SE2#	40
6	D4-1,2-DICHLOROETHANE	65	SE2#	14
7	CHLOROMETHANE	50	E2#	02SP
8	BROMOMETHANE	94	E2#	03
9	VINYL CHLORIDE	62	E2#	04CC
10	CHLORETHANE	64	E2#	05
11	METHYLENE CHLORIDE	84	E2#	06
12	ACETONE	58	E2#	07
13	CARBON DISULFIDE	76	E2#	08
14	1,1-DICHLOROETHENE	61	E2#	09
15	1,1-DICHLOROETHANE	63	E2#	10SP
16	TRANS-1,2-DICHLOROETHENE	61	E2#	11
17	CHLOROFORM	83	E2#	12CC
18	1,2-DICHLOROETHANE	62	E2#	13
19	2-BUTANONE	72	E2#	16
20	1,1,1-TRICHLOROETHANE	97	E2#	17
21	CARBONTETRACHLORIDE	117	E2#	18
22	VINYL ACETATE	43	E2#	19
23	BROMODICHLOROMETHANE	83	E2#	20
24	1,2-DICHLOROPROPANE	63	E2#	21CC
25	TRICHLORETHENE	130	E2#	23
26	DIBROMOCHLOROMETHANE	129	E2#	24
27	1,1,2-TRICHLOROETHANE	97	E2#	25
28	BENZENE	78	E2#	26
29	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
30	CIS-1,3-DICHLOROPROPENE	75	E2#	27
31	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
32	BROMOFORM	173	E2#	29SP
33	2-HEXANONE	58	E2#	31
34	4-METHYL-2-PENTANONE	58	E2#	32
35	TETRACHLOROETHENE	164	E2#	33
36	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
37	TOLUENE	92	E2#	35
38	CHLOROBENZENE	112	E2#	36SP
39	ETHYLBENZENE	106	E2#	37
40	STYRENE	104	E2#	38
41	O-XYLENE	106	E2#	39
42	M-XYLENE	106	E2#	42

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	162	8:06	1	1.000	A BB	34438.	50.000	UG/L	2.36
2	114	384	19:12	2	1.000	# BV	159609.	50.000	UG/L	2.36
3	117	500	25:00	3	1.000	# BV	146174.	50.000	UG/L	2.36
4	98	471	23:33	3	0.942	# BV	165191.	50.000	UG/L	2.36
5	95	587	29:21	3	1.174	# VV	103246.	50.000	UG/L	2.36
6	65	217	10:51	1	1.340	A BB	59122.	50.000	UG/L	2.36
7	50	30	1:30	1	0.185	# BV	82601.	50.000	UG/L	2.36
8	94	44	2:12	1	0.272	# BV	52776.	50.000	UG/L	2.36
9	62	56	2:48	1	0.346	A BB	76718.	50.375	UG/L	2.38

01725

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
10	64	71	3:33	1	0.438	# VV	42782.	50.000	UG/L	2.36
11	84	104	5:12	1	0.642	# BV	62384.	50.000	UG/L	2.36
12	58	112	5:36	1	0.691	# VV	5942.	65.696	UG/L	3.11
13	76	130	6:30	1	0.802	# BV	144055.	50.000	UG/L	2.36
14	96	151	7:33	1	0.932	# BV	45861.	50.000	UG/L	2.36
15	63	178	8:54	1	1.099	# BV	115414.	50.000	UG/L	2.36
16	96	191	9:33	1	1.179	# BV	48468.	50.000	UG/L	2.36
17	83	204	10:12	1	1.259	# BV	85060.	50.000	UG/L	2.36
18	62	219	10:57	1	1.352	# VV	64050.	50.000	UG/L	2.36
19	72	216	10:48	2	0.562	A BB	6136.	50.000	UG/L	2.36
20	97	247	12:21	2	0.643	# BV	54546.	50.000	UG/L	2.36
21	117	256	12:48	2	0.667	# VB	54420.	50.000	UG/L	2.36
22	43	257	12:51	2	0.669	# VV	174678.	50.000	UG/L	2.36
23	83	268	13:24	2	0.698	# BV	82641.	50.000	UG/L	2.36
24	63	297	14:51	2	0.773	# BV	81929.	50.000	UG/L	2.36
25	130	314	15:42	2	0.818	# BV	56412.	50.000	UG/L	2.36
26	129	330	16:30	2	0.859	A BB	63170.	50.000	UG/L	2.36
27	97	332	16:36	2	0.865	# VB	47293.	50.000	UG/L	2.36
28	78	325	16:15	2	0.846	# BV	165562.	50.000	UG/L	2.36
29	75	331	16:33	2	0.862	# VV	44769.	29.000	UG/L	1.37
30	75	302	15:06	2	0.786	# BV	129003.	70.000	UG/L	3.31
31	63	355	17:45	2	0.924	# BV	29820.	50.000	UG/L	2.36
32	173	393	19:39	2	1.023	A BB	49639.	50.000	UG/L	2.36
33	58	437	21:51	3	0.874	# VV	25033.	50.000	UG/L	2.36
34	58	401	20:03	3	0.802	# VV	25593.	50.000	UG/L	2.36
35	164	445	22:15	3	0.890	# BV	56609.	50.000	UG/L	2.36
36	83	446	22:18	3	0.892	# BV	83225.	49.488	UG/L	2.34
37	92	475	23:45	3	0.950	A BB	101760.	50.000	UG/L	2.36
38	112	502	25:06	3	1.004	# BV	126362.	50.000	UG/L	2.36
39	106	544	27:12	3	1.088	# BV	64196.	50.000	UG/L	2.36
40	104	606	30:18	3	1.212	# VV	139887.	50.000	UG/L	2.36
41	106	622	31:06	3	1.244	# VV	79984.	50.000	UG/L	2.36
42	106	609	30:27	3	1.218	# BV	83211.	50.000	UG/L	2.36

RMAL QUANTITATION SUMMARY FILE: STDW441SM 01726
RESULTS PRINTED ONLY FOR COMPONENTS GREATER THAN 1

NO	NAME		SCAN	REF	RRT	RRF	AMOUNT	UNITS
1	BROMOCHLOROMETHANE	128IE2# 01	162	1	1.000	1.000	50.000	UG/L
2	1,4-DIFLUOROBENZENE	114SE2# 15	384	2	1.000	1.000	50.000	UG/L
3	CHLOROBENZENE-D5	117 E2# 30	500	3	1.000	1.000	50.000	UG/L
4	D8-TOLUENE	98SE2# 41	471	3	0.942	1.130	50.000	UG/L
5	BROMOFLUOROBENZENE	95SE2# 40	587	3	1.174	0.706	50.000	UG/L
6	D4-1,2-DICHLOROETHANE	65SE2# 14	217	1	1.340	1.717	50.000	UG/L
7	CHLOROMETHANE	50 E2# 02SP	30	1	0.185	2.399	50.000	UG/L
8	BROMOMETHANE	94 E2# 03	44	1	0.272	1.533	50.000	UG/L
9	VINYL CHLORIDE	62 E2# 04CC	56	1	0.346	2.228	50.375	UG/L
10	CHLORETHANE	64 E2# 05	71	1	0.438	1.242	50.000	UG/L
11	METHYLENE CHLORIDE	84 E2# 06	104	1	0.642	1.812	50.000	UG/L
12	ACETONE	58 E2# 07	112	1	0.691	0.173	65.696	UG/L
13	CARBON DISULFIDE	76 E2# 08	130	1	0.802	4.183	50.000	UG/L
14	1,1-DICHLOROETHENE	61 E2# 09	151	1	0.932	1.332	50.000	UG/L
15	1,1-DICHLOROETHANE	63 E2# 10SP	178	1	1.099	3.351	50.000	UG/L
16	TRANS-1,2-DICHLOROETHENE	61 E2# 11	191	1	1.179	1.407	50.000	UG/L
17	CHLOROFORM	83 E2# 12CC	204	1	1.259	2.470	50.000	UG/L
18	1,2-DICHLOROETHANE	62 E2# 13	219	1	1.352	1.860	50.000	UG/L
19	2-BUTANONE	72 E2# 16	216	2	0.562	0.038	50.000	UG/L
20	1,1,1-TRICHLOROETHANE	97 E2# 17	247	2	0.643	0.342	50.000	UG/L
21	CARBONTETRACHLORIDE	117 E2# 18	256	2	0.667	0.341	50.000	UG/L
22	VINYL ACETATE	43 E2# 19	257	2	0.669	1.094	50.000	UG/L
23	BROMODICHLOROMETHANE	83 E2# 20	268	2	0.698	0.518	50.000	UG/L
24	1,2-DICHLOROPROPANE	63 E2# 21CC	297	2	0.773	0.513	50.000	UG/L
25	TRICHLORETHENE	130 E2# 23	314	2	0.818	0.353	50.000	UG/L
26	DIBROMOCHLOROMETHANE	129 E2# 24	330	2	0.859	0.396	50.000	UG/L
27	1,1,2-TRICHLOROETHANE	97 E2# 25	332	2	0.865	0.296	50.000	UG/L
28	BENZENE	78 E2# 26	325	2	0.846	1.037	50.000	UG/L
29	TRANS-1,3-DICHLOROPROPENE	75 E2# 22	331	2	0.862	0.484	29.000	UG/L
30	CIS-1,3-DICHLOROPROPENE	75 E2# 27	302	2	0.786	0.577	70.000	UG/L
31	2-CHLOROETHYL VINYL ETHER	63 E2# 28SP	355	2	0.924	0.187	50.000	UG/L
32	BROMOFORM	173 E2# 29SP	393	2	1.023	0.311	50.000	UG/L
33	2-HEXANONE	58 E2# 31	437	3	0.874	0.171	50.000	UG/L
34	4-METHYL-2-PENTANONE	58 E2# 32	401	3	0.802	0.175	50.000	UG/L
35	TETRACHLOROETHENE	164 E2# 33	445	3	0.890	0.387	50.000	UG/L
36	1,1,2,2-TETRACHLOROETHANE	83 E2# 34SP	446	3	0.892	0.569	49.488	UG/L
37	TOLUENE	92 E2# 35	475	3	0.950	0.696	50.000	UG/L
38	CHLOROBENZENE	112 E2# 36SP	502	3	1.004	0.864	50.000	UG/L
39	ETHYLBENZENE	106 E2# 37	544	3	1.088	0.439	50.000	UG/L
40	STYRENE	104 E2# 38	606	3	1.212	0.957	50.000	UG/L
41	O-XYLENE	106 E2# 39	622	3	1.244	0.547	50.000	UG/L
42	M-XYLENE	106 E2# 42	609	3	1.218	0.569	50.000	UG/L

QUANTITATION REPORT FILE: STDW441SM

01727

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

NO	NAME			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	1,4-DIFLUOROBENZENE	114	SE2#	15
3	CHLOROBENZENE-D5	117	E2#	30
4	D8-TOLUENE	98	SE2#	41
5	BROMOFLUOROBENZENE	95	SE2#	40
6	D4-1,2-DICHLOROETHANE	65	SE2#	14
7	CHLOROMETHANE	50	E2#	02SP
8	BROMOMETHANE	94	E2#	03
9	VINYL CHLORIDE	62	E2#	04CC
10	CHLORETHANE	64	E2#	05
11	METHYLENE CHLORIDE	84	E2#	06
12	ACETONE	58	E2#	07
13	CARBON DISULFIDE	76	E2#	08
14	1,1-DICHLOROETHENE	61	E2#	09
15	1,1-DICHLOROETHANE	63	E2#	10SP
16	TRANS-1,2-DICHLOROETHENE	61	E2#	11
17	CHLOROFORM	83	E2#	12CC
18	1,2-DICHLOROETHANE	62	E2#	13
19	2-BUTANONE	72	E2#	16
20	1,1,1-TRICHLOROETHANE	97	E2#	17
21	CARBONTETRACHLORIDE	117	E2#	18
22	VINYL ACETATE	43	E2#	19
23	BROMODICHLOROMETHANE	83	E2#	20
24	1,2-DICHLOROPROPANE	63	E2#	21CC
25	TRICHLORETHENE	130	E2#	23
26	DIBROMOCHLOROMETHANE	129	E2#	24
27	1,1,2-TRICHLOROETHANE	97	E2#	25
28	BENZENE	78	E2#	26
29	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
30	CIS-1,3-DICHLOROPROPENE	75	E2#	27
31	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
32	BROMOFORM	173	E2#	29SP
33	2-HEXANONE	58	E2#	31
34	4-METHYL-2-PENTANONE	58	E2#	32
35	TETRACHLOROETHENE	164	E2#	33
36	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
37	TOLUENE	92	E2#	35
38	CHLOROBENZENE	112	E2#	36SP
39	ETHYLBENZENE	106	E2#	37
40	STYRENE	104	E2#	38
41	O-XYLENE	106	E2#	39
42	M-XYLENE	106	E2#	42

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	162	8:06	1	1.000	A BB	34438.	50.000	UG/L	2.38
2	114	384	19:12	2	1.000	# BV	159609.	50.000	UG/L	2.38
3	117	500	25:00	3	1.000	# BV	146174.	50.000	UG/L	2.38
4	98	471	23:33	3	0.942	# BV	165191.	50.000	UG/L	2.38
5	95	587	29:21	3	1.174	# VV	103246.	50.000	UG/L	2.38
6	65	217	10:51	1	1.340	A BB	59122.	50.000	UG/L	2.38
7	50	30	1:30	1	0.185	# BV	82601.	50.000	UG/L	2.38
8	94	44	2:12	1	0.272	# BV	52776.	50.000	UG/L	2.38
9	62	56	2:48	1	0.346	A BB	76718.	50.000	UG/L	2.38

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
10	64	71	3:33	1	0.438	# VV	42782.	50.000	UG/L	2.38
11	84	104	5:12	1	0.642	# BV	62384.	50.000	UG/L	2.38
12	58	112	5:36	1	0.691	# VV	5942.	50.000	UG/L	2.38
13	76	130	6:30	1	0.802	# BV	144055.	50.000	UG/L	2.38
14	96	151	7:33	1	0.932	# BV	45861.	50.000	UG/L	2.38
15	63	178	8:54	1	1.099	# BV	115414.	50.000	UG/L	2.38
16	96	191	9:33	1	1.179	# BV	48468.	50.000	UG/L	2.38
17	83	204	10:12	1	1.259	# BV	85060.	50.000	UG/L	2.38
18	62	219	10:57	1	1.352	# VV	64050.	50.000	UG/L	2.38
19	72	216	10:48	2	0.562	A BB	6136.	50.000	UG/L	2.38
20	97	247	12:21	2	0.643	# BV	54546.	50.000	UG/L	2.38
21	117	256	12:48	2	0.667	# VB	54420.	50.000	UG/L	2.38
22	43	257	12:51	2	0.669	# VV	174678.	50.000	UG/L	2.38
23	83	268	13:24	2	0.698	# BV	82641.	50.000	UG/L	2.38
24	63	297	14:51	2	0.773	# BV	81929.	50.000	UG/L	2.38
25	130	314	15:42	2	0.818	# BV	56412.	50.000	UG/L	2.38
26	129	330	16:30	2	0.859	A BB	63170.	50.000	UG/L	2.38
27	97	332	16:36	2	0.865	# VB	47293.	50.000	UG/L	2.38
28	78	325	16:15	2	0.846	# BV	165562.	50.000	UG/L	2.38
29	75	331	16:33	2	0.862	# VV	44769.	29.000	UG/L	1.38
30	75	302	15:06	2	0.786	# BV	129003.	70.000	UG/L	3.33
31	63	355	17:45	2	0.924	# BV	29820.	50.000	UG/L	2.38
32	173	393	19:39	2	1.023	A BB	49639.	50.000	UG/L	2.38
33	58	437	21:51	3	0.874	# VV	25033.	50.000	UG/L	2.38
34	58	401	20:03	3	0.802	# VV	25593.	50.000	UG/L	2.38
35	164	445	22:15	3	0.890	# BV	56609.	50.000	UG/L	2.38
36	83	446	22:18	3	0.892	# BV	83225.	50.000	UG/L	2.38
37	92	475	23:45	3	0.950	A BB	101760.	50.000	UG/L	2.38
38	112	502	25:06	3	1.004	# BV	126362.	50.000	UG/L	2.38
39	106	544	27:12	3	1.088	# BV	64196.	50.000	UG/L	2.38
40	104	606	30:18	3	1.212	# VV	139887.	50.000	UG/L	2.38
41	106	622	31:06	3	1.244	# VV	79984.	50.000	UG/L	2.38
42	106	609	30:27	3	1.218	# BV	83211.	50.000	UG/L	2.38

RMAL QUANTITATION SUMMARY FILE: STDW441SM
RESULTS PRINTED ONLY FOR COMPONENTS GREATER THAN 1

NO	NAME		SCAN	REF	RRT	RRF	AMOUNT	UNITS
1	BROMOCHLOROMETHANE	128IE2# 01	162	1	1.000	1.000	50.000	UG/L
2	1,4-DIFLUOROBENZENE	114SE2# 15	384	2	1.000	1.000	50.000	UG/L
3	CHLOROBENZENE-D5	117 E2# 30	500	3	1.000	1.000	50.000	UG/L
4	D8-TOLUENE	98SE2# 41	471	3	0.942	1.130	50.000	UG/L
5	BROMOFLUOROBENZENE	95SE2# 40	587	3	1.174	0.706	50.000	UG/L
6	D4-1,2-DICHLOROETHANE	65SE2# 14	217	1	1.340	1.717	50.000	UG/L
7	CHLOROMETHANE	50 E2# 02SP	30	1	0.185	2.399	50.000	UG/L
8	BROMOMETHANE	94 E2# 03	44	1	0.272	1.533	50.000	UG/L
9	VINYL CHLORIDE	62 E2# 04CC	56	1	0.346	2.228	50.000	UG/L
10	CHLORETHANE	64 E2# 05	71	1	0.438	1.242	50.000	UG/L
11	METHYLENE CHLORIDE	84 E2# 06	104	1	0.642	1.812	50.000	UG/L
12	ACETONE	58 E2# 07	112	1	0.691	0.173	50.000	UG/L
13	CARBON DISULFIDE	76 E2# 08	130	1	0.802	4.183	50.000	UG/L
14	1,1-DICHLOROETHENE	61 E2# 09	151	1	0.932	1.332	50.000	UG/L
15	1,1-DICHLOROETHANE	63 E2# 10SP	178	1	1.099	3.351	50.000	UG/L
16	TRANS-1,2-DICHLOROETHENE	61 E2# 11	191	1	1.179	1.407	50.000	UG/L
17	CHLOROFORM	83 E2# 12CC	204	1	1.259	2.470	50.000	UG/L
18	1,2-DICHLOROETHANE	62 E2# 13	219	1	1.352	1.860	50.000	UG/L
19	2-BUTANONE	72 E2# 16	216	2	0.562	0.038	50.000	UG/L
20	1,1,1-TRICHLOROETHANE	97 E2# 17	247	2	0.643	0.342	50.000	UG/L
21	CARBONTETRACHLORIDE	117 E2# 18	256	2	0.667	0.341	50.000	UG/L
22	VINYL ACETATE	43 E2# 19	257	2	0.669	1.094	50.000	UG/L
23	BROMODICHLOROMETHANE	83 E2# 20	268	2	0.698	0.518	50.000	UG/L
24	1,2-DICHLOROPROPANE	63 E2# 21CC	297	2	0.773	0.513	50.000	UG/L
25	TRICHLORETHENE	130 E2# 23	314	2	0.818	0.353	50.000	UG/L
26	DIBROMOCHLOROMETHANE	129 E2# 24	330	2	0.859	0.396	50.000	UG/L
27	1,1,2-TRICHLOROETHANE	97 E2# 25	332	2	0.865	0.296	50.000	UG/L
28	BENZENE	78 E2# 26	325	2	0.846	1.037	50.000	UG/L
29	TRANS-1,3-DICHLOROPROPENE	75 E2# 22	331	2	0.862	0.484	29.000	UG/L
30	CIS-1,3-DICHLOROPROPENE	75 E2# 27	302	2	0.786	0.577	70.000	UG/L
31	2-CHLOROETHYL VINYL ETHER	63 E2# 28SP	355	2	0.924	0.187	50.000	UG/L
32	BROMOFORM	173 E2# 29SP	393	2	1.023	0.311	50.000	UG/L
33	2-HEXANONE	58 E2# 31	437	3	0.874	0.171	50.000	UG/L
34	4-METHYL-2-PENTANONE	58 E2# 32	401	3	0.802	0.175	50.000	UG/L
35	TETRACHLOROETHENE	164 E2# 33	445	3	0.890	0.387	50.000	UG/L
36	1,1,2,2-TETRACHLOROETHANE	83 E2# 34SP	446	3	0.892	0.569	50.000	UG/L
37	TOLUENE	92 E2# 35	475	3	0.950	0.696	50.000	UG/L
38	CHLOROBENZENE	112 E2# 36SP	502	3	1.004	0.864	50.000	UG/L
39	ETHYLBENZENE	106 E2# 37	544	3	1.088	0.439	50.000	UG/L
40	STYRENE	104 E2# 38	606	3	1.212	0.957	50.000	UG/L
41	O-XYLENE	106 E2# 39	622	3	1.244	0.547	50.000	UG/L
42	M-XYLENE	106 E2# 42	609	3	1.218	0.569	50.000	UG/L

RMAL-GC/MS/DS-AUTOPROCESSING
DATAFILE :2:STDW443SM. STARTED : 3/30/88 15:19:18

01730

3/28/88 18:07:23 SCAN 1 OF 730
Acquisition started

Acquire
03/28/88 18:06:00 + 0:03
Sample: 20PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 2:STDW443SM
Free sectors: 3769
Instrument: 5100
Analyst: JN

Acquiring
Scan: 1 of 730
Weight: 0.002
Acct. No:

*** GC descriptor: V3 ***

GC temperature: 65 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)	125.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.80	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2047.
Electrometer Range: 10 ^-7
Electrometer zero: -4.0

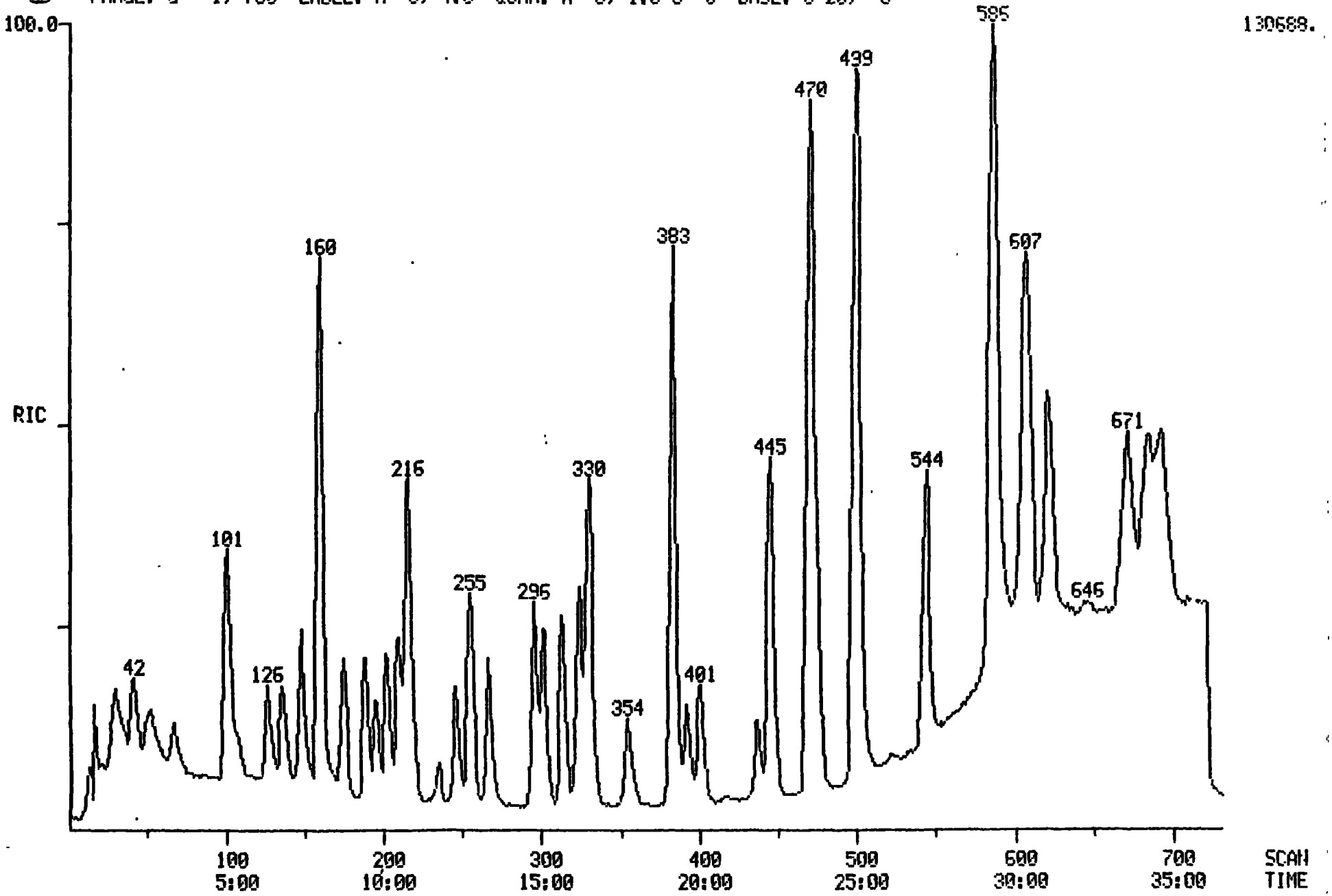
3/28/88 18:43:58
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	92.2	2190.0	4.2	38200.	52.	17

01731

RIC
03/28/88 18:06:00
SAMPLE: 20PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: H 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: STDW4435M #1 SCANS 1 TO 730
CALI: 032888CW #2



SYSTEM, SCIENCE + SOFTWARE DIAGNOSTICS

01732

STDW443SM
032888CW
03/28/88
20PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21

NO	LIB	ID	M/E	SCAN	PRED	DELTA	FIT	PUR	MATCH	AREA
1	E4	BROM	128	160	162	2	950	736	92.	34622.
2	E4	CHLO	50	29	30	1	992	378	76.	35984.
3	E4	BROM	94	42	43	1	942	432	76.	19563.
4	E4	VINY	62	52	55	3	995	268	71.	29744.
5	E4	CHLO	64	67	70	3	988	343	74.	18418.
6	E4	METH	84	101	103	2	989	632	89.	33229.
7	E4	ACET	58	108	111	3	983	239	69.	3477.
				-116		-5	993	83	61.	
				-103		8	984	27	44.	
8	E4	CARB	76	126	128	2	998	750	95.	58796.
9	E4	1,1-	96	148	149	1	991	635	89.	19402.
10	E4	1,1-	63	175	176	1	991	618	88.	45165.
11	E4	TRAN	96	188	189	1	992	715	93.	18655.
12	E4	CHLO	83	202	201	-1	998	747	95.	34766.
13	E4	1,2-	62	217	216	-1	928	522	80.	26728.
14	E4	D4-1	65	215	214	-1	987	619	88.	54644.
15	E4	1,4-	114	383	384	1	995	664	90.	159963.
16	E4	2-BU	72	214	215	1	990	121	63.	2439.
17	E4	1,1,	97	246	246	0	936	666	88.	22655.
18	E4	CARB	117	254	255	1	994	488	82.	21906.
19	E4	VINY	43	256	256	0	993	520	83.	73945.
20	E4	BROM	83	267	267	0	975	716	92.	33585.
21	E4	1,2-	63	296	296	0	967	565	84.	33330.
22	E4	TRAN	75	330	330	0	943	154	62.	18272.
				-324		6	501	58	35.	
23	E4	TRIC	130	313	313	0	986	784	96.	23176.
24	E4	DIBR	129	329	329	0	967	386	75.	25874.
25	E4	1,1,	97	331	331	0	979	383	76.	19757.
26	E4	BENZ	78	324	324	0	911	694	88.	67351.
27	E4	CIS-	75	301	301	0	993	670	91.	52798.
28	E4	2-CH	63	354	354	0	965	727	92.	12872.
29	E4	BROM	173	392	392	0	988	644	89.	20667.
30	E4	CHLO	117	499	500	1	998	606	88.	139427.
31	E4	2-HE	58	436	436	0	999	644	90.	12716.
32	E4	4-ME	58	400	400	0	995	708	93.	12233.
33	E4	TETR	164	444	444	0	988	508	82.	22761.
34	E4	1,1,	83	446	445	-1	924	486	78.	36512.
35	E4	TOLU	92	474	474	0	991	507	82.	41110.
36	E4	CHLO	112	502	501	-1	996	372	76.	49603.
37	E4	ETHY	106	544	543	-1	996	547	85.	26349.
38	E4	STYR	104	605	605	0	989	415	78.	57658.
39	E4	O-XY	106	621	621	0	994	351	75.	33806.
40	E4	BROM	95	586	586	0	995	537	84.	101148.
41	E4	D8-T	98	470	470	0	992	710	93.	160517.
42	E4	M-XY	106	608	608	0	971	335	73.	34302.

Quantitation Report File: STDW443SM

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

No	Name			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	CHLOROMETHANE	50	E2#	02SP
3	BROMOMETHANE	94	E2#	03
4	VINYL CHLORIDE	62	E2#	04CC
5	CHLORETHANE	64	E2#	05
6	METHYLENE CHLORIDE	84	E2#	06
7	ACETONE	58	E2#	07
8	CARBON DISULFIDE	76	E2#	08
9	1,1-DICHLOROETHENE	61	E2#	09
10	1,1-DICHLOROETHANE	63	E2#	10SP
11	TRANS-1,2-DICHLOROETHENE	61	E2#	11
12	CHLOROFORM	83	E2#	12CC
13	1,2-DICHLOROETHANE	62	E2#	13
14	D4-1,2-DICHLOROETHANE	65	SE2#	14
15	1,4-DIFLUOROBENZENE	114	SE2#	15
16	2-BUTANONE	72	E2#	16
17	1,1,1-TRICHLOROETHANE	97	E2#	17
18	CARBONTETRACHLORIDE	117	E2#	18
19	VINYL ACETATE	43	E2#	19
20	BROMODICHLOROMETHANE	83	E2#	20
21	1,2-DICHLOROPROPANE	63	E2#	21CC
22	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
23	TRICHLORETHENE	130	E2#	23
24	DIBROMOCHLOROMETHANE	129	E2#	24
25	1,1,2-TRICHLOROETHANE	97	E2#	25
26	BENZENE	78	E2#	26
27	CIS-1,3-DICHLOROPROPENE	75	E2#	27
28	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
29	BROMOFORM	173	E2#	29SP
30	CHLOROBENZENE-D5	117	E2#	30
31	2-HEXANONE	58	E2#	31
32	4-METHYL-2-PENTANONE	58	E2#	32
33	TETRACHLOROETHENE	164	E2#	33
34	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
35	TOLUENE	92	E2#	35
36	CHLOROBENZENE	112	E2#	36SP
37	ETHYLBENZENE	106	E2#	37
38	STYRENE	104	E2#	38
39	O-XYLENE	106	E2#	39
40	BROMOFLUOROBENZENE	95	SE2#	40
41	D8-TOLUENE	98	SE2#	41
42	M-XYLENE	106	E2#	42

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	160	8:00	1	1.000	# BV	34623.	50.000	UG/L	4.68
2	50	29	1:27	1	0.181	# BV	35984.	21.666	UG/L	2.03
3	94	42	2:06	1	0.263	A BB	19564.	18.436	UG/L	1.73
4	62	52	2:36	1	0.325	# BV	29744.	19.282	UG/L	1.81
5	64	67	3:21	1	0.419	# VB	18418.	21.411	UG/L	2.01
6	84	101	5:03	1	0.631	# BV	33230.	26.491	UG/L	2.48
7	58	108	5:24	1	0.675	# VV	3477.	29.106	UG/L	2.73
8	76	126	6:18	1	0.788	# BV	58797.	20.299	UG/L	1.90

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No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
9	96	148	7:24	1	0.925	# BV	19403.	21.041	UG/L	1.97
10	63	175	8:45	1	1.094	# BV	45165.	19.462	UG/L	1.82
11	96	188	9:24	1	1.175	# BV	18656.	19.143	UG/L	1.79
12	83	202	10:06	1	1.262	# BV	34766.	20.327	UG/L	1.90
13	62	217	10:51	1	1.356	# BV	26728.	20.754	UG/L	1.94
14	65	215	10:45	1	1.344	# BV	54645.	45.966	UG/L	4.31
15	114	383	19:09	15	1.000	# BV	159964.	50.000	UG/L	4.68
16	72	214	10:42	15	0.559	A BB	2440.	19.839	UG/L	1.86
17	97	246	12:18	15	0.642	# BV	22655.	20.721	UG/L	1.94
18	117	254	12:42	15	0.663	# VB	21907.	20.083	UG/L	1.88
19	43	256	12:48	15	0.668	# VV	73946.	21.119	UG/L	1.98
20	83	267	13:21	15	0.697	# BB	33586.	20.275	UG/L	1.90
21	63	296	14:48	15	0.773	A BB	33331.	20.296	UG/L	1.90
22	75	330	16:30	15	0.862	# VB	18272.	11.810	UG/L	1.11
23	130	313	15:39	15	0.817	A BB	23177.	20.497	UG/L	1.92
24	129	329	16:27	15	0.859	A BB	25874.	20.435	UG/L	1.91
25	97	331	16:33	15	0.864	A BB	19757.	20.842	UG/L	1.95
26	78	324	16:12	15	0.846	# BV	67352.	20.295	UG/L	1.90
27	75	301	15:03	15	0.786	# BV	52798.	28.586	UG/L	2.68
28	63	354	17:42	15	0.924	# BV	12872.	21.535	UG/L	2.02
29	173	392	19:36	15	1.023	A BB	20668.	20.772	UG/L	1.95
30	117	499	24:57	30	1.000	# BV	139427.	50.000	UG/L	4.68
31	58	436	21:48	30	0.874	# VV	12717.	26.630	UG/L	2.49
32	58	400	20:00	30	0.802	# VV	12233.	25.056	UG/L	2.35
33	164	444	22:12	30	0.890	A BB	22761.	21.077	UG/L	1.97
34	83	446	22:18	30	0.894	# BV	36512.	22.997	UG/L	2.15
35	92	474	23:42	30	0.950	# BB	41110.	21.177	UG/L	1.98
36	112	502	25:06	30	1.006	A BB	49603.	20.577	UG/L	1.93
37	106	544	27:12	30	1.090	# BV	26550.	21.679	UG/L	2.03
38	104	605	30:15	30	1.212	# BV	57659.	21.606	UG/L	2.02
39	106	621	31:03	30	1.244	# VV	33806.	22.156	UG/L	2.08
40	95	586	29:18	30	1.174	# VV	101148.	51.355	UG/L	4.81
41	98	470	23:30	30	0.942	# BV	160517.	50.936	UG/L	4.77
42	106	608	30:24	30	1.218	# BV	34302.	21.609	UG/L	2.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:06	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:30	0.97	0.185	0.98	21.67	50.00	1.039	2.399	0.43
3	2:12	0.95	0.272	0.97	18.44	50.00	0.565	1.532	0.37
4	2:48	0.93	0.346	0.94	19.28	50.00	0.859	2.228	0.39
5	3:33	0.94	0.438	0.96	21.41	50.00	0.532	1.242	0.43
6	5:12	0.97	0.642	0.98	26.49	50.00	0.960	1.812	0.53
7	5:36	0.96	0.691	0.98	29.11	50.00	0.100	0.173	0.58
8	6:30	0.97	0.802	0.98	20.30	50.00	1.698	4.183	0.41
9	7:33	0.98	0.932	0.99	21.04	50.00	0.560	1.332	0.42
10	8:54	0.98	1.099	1.00	19.46	50.00	1.304	3.351	0.39
11	9:33	0.98	1.179	1.00	19.14	50.00	0.539	1.407	0.38
12	10:12	0.99	1.259	1.00	20.33	50.00	1.004	2.470	0.41
13	10:57	0.99	1.352	1.00	20.75	50.00	0.772	1.860	0.42
14	10:51	0.99	1.340	1.00	45.97	50.00	1.578	1.717	0.92
15	19:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	10:48	0.99	0.562	0.99	19.84	50.00	0.015	0.038	0.40
17	12:21	1.00	0.643	1.00	20.72	50.00	0.142	0.342	0.41
18	12:48	0.99	0.667	0.99	20.08	50.00	0.137	0.341	0.40
19	12:51	1.00	0.669	1.00	21.12	50.00	0.462	1.094	0.42
20	13:24	1.00	0.698	1.00	20.28	50.00	0.210	0.518	0.41

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
21	14:51	1.00	0.773	1.00	20.30	50.00	0.208	0.513	0.41
22	16:33	1.00	0.862	1.00	11.81	29.00	0.197	0.484	0.41
23	15:42	1.00	0.818	1.00	20.50	50.00	0.145	0.353	0.41
24	16:30	1.00	0.859	1.00	20.43	50.00	0.162	0.396	0.41
25	16:36	1.00	0.865	1.00	20.84	50.00	0.124	0.296	0.42
26	16:15	1.00	0.846	1.00	20.30	50.00	0.421	1.037	0.41
27	15:06	1.00	0.786	1.00	28.59	70.00	0.236	0.577	0.41
28	17:45	1.00	0.924	1.00	21.54	50.00	0.080	0.187	0.43
29	19:39	1.00	1.023	1.00	20.77	50.00	0.129	0.311	0.42
30	25:00	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
31	21:51	1.00	0.874	1.00	26.63	50.00	0.091	0.171	0.53
32	20:03	1.00	0.802	1.00	25.06	50.00	0.088	0.175	0.50
33	22:15	1.00	0.890	1.00	21.08	50.00	0.163	0.387	0.42
34	22:18	1.00	0.892	1.00	23.00	50.00	0.262	0.569	0.46
35	23:45	1.00	0.950	1.00	21.18	50.00	0.295	0.696	0.42
36	25:06	1.00	1.004	1.00	20.58	50.00	0.356	0.864	0.41
37	27:12	1.00	1.088	1.00	21.68	50.00	0.190	0.439	0.43
38	30:18	1.00	1.212	1.00	21.61	50.00	0.414	0.957	0.43
39	31:06	1.00	1.244	1.00	22.16	50.00	0.242	0.547	0.44
40	29:21	1.00	1.174	1.00	51.35	50.00	0.725	0.706	1.03
41	23:33	1.00	0.942	1.00	50.94	50.00	1.151	1.130	1.02
42	30:27	1.00	1.218	1.00	21.61	50.00	0.246	0.569	0.43

QUANTITATION REPORT FILE: STDW443SM

01736

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

NO	NAME			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	1,4-DIFLUOROBENZENE	114	SE2#	15
3	CHLOROBENZENE-D5	117	E2#	30
4	D8-TOLUENE	98	SE2#	41
5	BROMOFLUOROBENZENE	95	SE2#	40
6	D4-1,2-DICHLOROETHANE	65	SE2#	14
7	CHLOROMETHANE	50	E2#	02SP
8	BROMOMETHANE	94	E2#	03
9	VINYL CHLORIDE	62	E2#	04CC
10	CHLORETHANE	64	E2#	05
11	METHYLENE CHLORIDE	84	E2#	06
12	ACETONE	58	E2#	07
13	CARBON DISULFIDE	76	E2#	08
14	1,1-DICHLOROETHENE	61	E2#	09
15	1,1-DICHLOROETHANE	63	E2#	10SP
16	TRANS-1,2-DICHLOROETHENE	61	E2#	11
17	CHLOROFORM	83	E2#	12CC
18	1,2-DICHLOROETHANE	62	E2#	13
19	2-BUTANONE	72	E2#	16
20	1,1,1-TRICHLOROETHANE	97	E2#	17
21	CARBONTETRACHLORIDE	117	E2#	18
22	VINYL ACETATE	43	E2#	19
23	BROMODICHLOROMETHANE	83	E2#	20
24	1,2-DICHLOROPROPANE	63	E2#	21CC
25	TRICHLORETHENE	130	E2#	23
26	DIBROMOCHLOROMETHANE	129	E2#	24
27	1,1,2-TRICHLOROETHANE	97	E2#	25
28	BENZENE	78	E2#	26
29	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
30	CIS-1,3-DICHLOROPROPENE	75	E2#	27
31	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
32	BROMOFORM	173	E2#	29SP
33	2-HEXANONE	58	E2#	31
34	4-METHYL-2-PENTANONE	58	E2#	32
35	TETRACHLOROETHENE	164	E2#	33
36	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
37	TOLUENE	92	E2#	35
38	CHLOROBENZENE	112	E2#	36SP
39	ETHYLBENZENE	106	E2#	37
40	STYRENE	104	E2#	38
41	O-XYLENE	106	E2#	39
42	M-XYLENE	106	E2#	42

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	160	8:00	1	1.000	# BV	34623.	50.000	UG/L	4.68
2	114	383	19:09	2	1.000	# BV	159964.	50.000	UG/L	4.68
3	117	499	24:57	3	1.000	# BV	139427.	50.000	UG/L	4.68
4	98	470	23:30	3	0.942	# BV	160517.	50.936	UG/L	4.77
5	95	586	29:18	3	1.174	# VV	101148.	51.355	UG/L	4.81
6	65	215	10:45	1	1.344	# BV	54645.	45.966	UG/L	4.31
7	50	29	1:27	1	0.181	# BV	35984.	21.666	UG/L	2.03
8	94	42	2:06	1	0.263	A BB	19564.	18.436	UG/L	1.73
9	62	52	2:36	1	0.325	# BV	29744.	19.282	UG/L	1.81

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
10	64	67	3:21	1	0.419	# VB	18418.	21.411	UG/L	2.01
11	84	101	5:03	1	0.631	# BV	33230.	26.491	UG/L	2.48
12	58	108	5:24	1	0.675	# VV	3477.	29.106	UG/L	2.73
13	76	126	6:18	1	0.788	# BV	58797.	20.299	UG/L	1.90
14	96	148	7:24	1	0.925	# BV	19403.	21.041	UG/L	1.97
15	63	175	8:45	1	1.094	# BV	45165.	19.462	UG/L	1.82
16	96	188	9:24	1	1.175	# BV	18656.	19.143	UG/L	1.79
17	83	202	10:06	1	1.262	# BV	34766.	20.327	UG/L	1.90
18	62	217	10:51	1	1.356	# BV	26728.	20.754	UG/L	1.94
19	72	214	10:42	2	0.559	A BB	2440.	19.839	UG/L	1.86
20	97	246	12:18	2	0.642	# BV	22655.	20.721	UG/L	1.94
21	117	254	12:42	2	0.663	# VB	21907.	20.083	UG/L	1.88
22	43	256	12:48	2	0.668	# VV	73946.	21.119	UG/L	1.98
23	83	267	13:21	2	0.697	# BB	33586.	20.275	UG/L	1.90
24	63	296	14:48	2	0.773	A BB	33331.	20.296	UG/L	1.90
25	130	313	15:39	2	0.817	A BB	23177.	20.497	UG/L	1.92
26	129	329	16:27	2	0.859	A BB	25874.	20.435	UG/L	1.91
27	97	331	16:33	2	0.864	A BB	19757.	20.842	UG/L	1.95
28	78	324	16:12	2	0.846	# BV	67352.	20.295	UG/L	1.90
29	75	330	16:30	2	0.862	# VB	18272.	11.810	UG/L	1.11
30	75	301	15:03	2	0.786	# BV	52798.	28.586	UG/L	2.68
31	63	354	17:42	2	0.924	# BV	12872.	21.535	UG/L	2.02
32	173	392	19:36	2	1.023	A BB	20668.	20.772	UG/L	1.95
33	58	436	21:48	3	0.874	# VV	12717.	26.630	UG/L	2.49
34	58	400	20:00	3	0.802	# VV	12233.	25.056	UG/L	2.35
35	164	444	22:12	3	0.890	A BB	22761.	21.077	UG/L	1.97
36	83	446	22:18	3	0.894	# BV	36512.	22.997	UG/L	2.15
37	92	474	23:42	3	0.950	# BB	41110.	21.177	UG/L	1.98
38	112	502	25:06	3	1.006	A BB	49603.	20.577	UG/L	1.93
39	106	544	27:12	3	1.090	# BV	26550.	21.679	UG/L	2.03
40	104	605	30:15	3	1.212	# BV	57659.	21.606	UG/L	2.02
41	106	621	31:03	3	1.244	# VV	33806.	22.156	UG/L	2.08
42	106	608	30:24	3	1.218	# BV	34302.	21.609	UG/L	2.02

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RMAL QUANTITATION SUMMARY FILE: STDW443SM 01738
RESULTS PRINTED ONLY FOR COMPONENTS GREATER THAN 1

NO	NAME		SCAN	REF	RRT	RRF	AMOUNT	UNITS
1	BROMOCHLOROMETHANE	128IE2# 01	160	1	1.000	1.000	50.000	UG/L
2	1,4-DIFLUOROBENZENE	114SE2# 15	383	2	1.000	1.000	50.000	UG/L
3	CHLOROBENZENE-D5	117 E2# 30	499	3	1.000	1.000	50.000	UG/L
4	D8-TOLUENE	98SE2# 41	470	3	0.942	1.151	50.936	UG/L
5	BROMOFLUOROBENZENE	95SE2# 40	586	3	1.174	0.725	51.355	UG/L
6	D4-1,2-DICHLOROETHANE	65SE2# 14	215	1	1.344	1.578	45.966	UG/L
7	CHLOROMETHANE	50 E2# 02SP	29	1	0.181	1.039	21.666	UG/L
8	BROMOMETHANE	94 E2# 03	42	1	0.263	0.565	18.436	UG/L
9	VINYL CHLORIDE	62 E2# 04CC	52	1	0.325	0.859	19.282	UG/L
10	CHLORETHANE	64 E2# 05	67	1	0.419	0.532	21.411	UG/L
11	METHYLENE CHLORIDE	84 E2# 06	101	1	0.631	0.960	26.491	UG/L
12	ACETONE	58 E2# 07	108	1	0.675	0.100	29.106	UG/L
13	CARBON DISULFIDE	76 E2# 08	126	1	0.788	1.698	20.299	UG/L
14	1,1-DICHLOROETHENE	61 E2# 09	148	1	0.925	0.560	21.041	UG/L
15	1,1-DICHLOROETHANE	63 E2# 10SP	175	1	1.094	1.305	19.462	UG/L
16	TRANS-1,2-DICHLOROETHENE	61 E2# 11	188	1	1.175	0.539	19.143	UG/L
17	CHLOROFORM	83 E2# 12CC	202	1	1.262	1.004	20.327	UG/L
18	1,2-DICHLOROETHANE	62 E2# 13	217	1	1.356	0.772	20.754	UG/L
19	2-BUTANONE	72 E2# 16	214	2	0.559	0.015	19.839	UG/L
20	1,1,1-TRICHLOROETHANE	97 E2# 17	246	2	0.642	0.142	20.721	UG/L
21	CARBONTETRACHLORIDE	117 E2# 18	254	2	0.663	0.137	20.083	UG/L
22	VINYL ACETATE	43 E2# 19	256	2	0.668	0.462	21.119	UG/L
23	BROMODICHLOROMETHANE	83 E2# 20	267	2	0.697	0.210	20.275	UG/L
24	1,2-DICHLOROPROPANE	63 E2# 21CC	296	2	0.773	0.208	20.296	UG/L
25	TRICHLORETHENE	130 E2# 23	313	2	0.817	0.145	20.497	UG/L
26	DIBROMOCHLOROMETHANE	129 E2# 24	329	2	0.859	0.162	20.435	UG/L
27	1,1,2-TRICHLOROETHANE	97 E2# 25	331	2	0.864	0.124	20.842	UG/L
28	BENZENE	78 E2# 26	324	2	0.846	0.421	20.295	UG/L
29	TRANS-1,3-DICHLOROPROPENE	75 E2# 22	330	2	0.862	0.197	11.810	UG/L
30	CIS-1,3-DICHLOROPROPENE	75 E2# 27	301	2	0.786	0.236	28.586	UG/L
31	2-CHLOROETHYL VINYL ETHER	63 E2# 28SP	354	2	0.924	0.080	21.535	UG/L
32	BROMOFORM	173 E2# 29SP	392	2	1.023	0.129	20.772	UG/L
33	2-HEXANONE	58 E2# 31	436	3	0.874	0.091	26.630	UG/L
34	4-METHYL-2-PENTANONE	58 E2# 32	400	3	0.802	0.088	25.056	UG/L
35	TETRACHLOROETHENE	164 E2# 33	444	3	0.890	0.163	21.077	UG/L
36	1,1,2,2-TETRACHLOROETHANE	83 E2# 34SP	446	3	0.894	0.262	22.997	UG/L
37	TOLUENE	92 E2# 35	474	3	0.950	0.295	21.177	UG/L
38	CHLOROBENZENE	112 E2# 36SP	502	3	1.006	0.356	20.577	UG/L
39	ETHYLBENZENE	106 E2# 37	544	3	1.090	0.190	21.679	UG/L
40	STYRENE	104 E2# 38	605	3	1.212	0.414	21.606	UG/L
41	O-XYLENE	106 E2# 39	621	3	1.244	0.242	22.156	UG/L
42	M-XYLENE	106 E2# 42	608	3	1.218	0.246	21.609	UG/L

RMAL-GC/MS/DS-AUTOPROCESSING
DATAFILE : 2:STDW446SM. STARTED : 3/30/88 15:22:49

01739

3/28/88 20:31:50 SCAN 1 OF 730
Acquisition started

Acquire
03/28/88 20:31:00 + 0:03
Sample: 100PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 2:STDW446SM
Free sectors: 2721
Instrument: 5100
Analyst: JN

Acquiring
Scan: 1 of 730
Weight: 0.002
Acct. No:

*** 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	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)	125.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.80	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

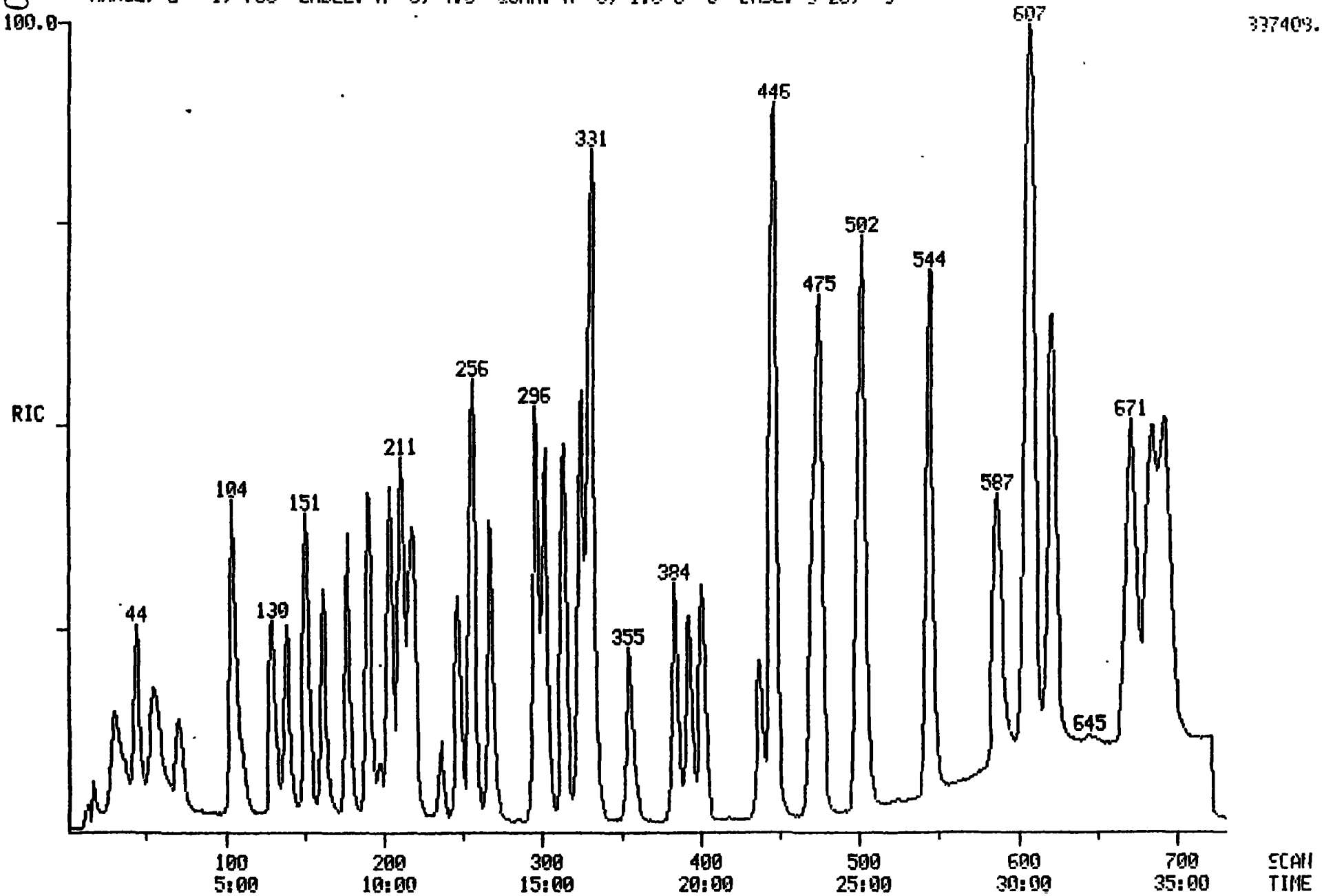
Electron multiplier voltage: -2047.
Electrometer Range: 10 ^-7
Electrometer zero: -4.0

3/28/88 21:08:24
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	102.6	2190.0	4.7	44676.	61.	20.

RIC
03/28/88 20:31:00
SAMPLE: 100PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21
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: STDW446SM #1 SCANS 1 TO 730
CALI: 032888CW #2



SYSTEM, SCIENCE + SOFTWARE DIAGNOSTICS

STDW446SM
032888CW
03/28/88
100PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21

01741

NO	LIB	ID	M/E	SCAN	PRED	DELTA	FIT	PUR	MATCH	AREA
1	E4	BROM	128	162	162	0	953	738	92.	36515.
2	E4	CHLO	50	30	30	0	988	732	93.	178103.
3	E4	BROM	94	44	44	0	928	684	88.	111310.
4	E4	VINY	62	56	56	0	994	476	81.	161227.
5	E4	CHLO	64	71	71	0	984	644	89.	91299.
6	E4	METH	84	104	104	0	989	727	93.	119974.
7	E4	ACET	58	112	112	0	984	438	79.	9941.
8	E4	CARB	76	130	130	0	994	901	100.	296242.
9	E4	1,1-	96	151	151	0	990	792	97.	95841.
10	E4	1,1-	63	177	178	1	988	754	95.	247556.
11	E4	TRAN	96	190	191	1	990	834	99.	101905.
12	E4	CHLO	83	204	204	0	1000	843	100.	191664.
13	E4	1,2-	62	219	219	0	970	656	89.	136501.
14	E4	D4-1	65	217	217	0	979	354	74.	64797.
15	E4	1,4-	114	384	384	0	998	662	90.	171983.
16	E4	2-BU	72	216	216	0	993	264	70.	12060.
				-209		7	967	9	48.	
17	E4	1,1,	97	247	247	0	937	790	94.	114830.
18	E4	CARB	117	255	256	1	997	516	83.	114483.
19	E4	VINY	43	256	257	1	991	564	85.	374073.
20	E4	BROM	83	267	268	1	979	813	97.	173062.
21	E4	1,2-	63	296	297	1	970	625	87.	175919.
22	E4	TRAN	75	331	331	0	944	162	63.	94945.
23	E4	TRIC	130	314	314	0	991	857	100.	117742.
24	E4	DIBR	129	330	330	0	956	394	75.	139814.
25	E4	1,1,	97	332	332	0	984	426	78.	103727.
26	E4	BENZ	78	325	325	0	913	747	90.	351603.
27	E4	CIS-	75	302	302	0	994	752	95.	275822.
28	E4	2-CH	63	355	355	0	979	811	97.	65145
29	E4	BROM	173	393	393	0	988	793	97	114614.
30	E4	CHLO	117	499	500	1	997	507	83.	157095.
31	E4	2-HE	58	437	436	-1	996	794	97.	58632
32	E4	4-ME	58	401	400	-1	992	814	98.	56895.
33	E4	TETR	164	445	444	-1	989	544	84.	124707
34	E4	1,1,	83	446	445	-1	894	513	78.	199202.
35	E4	TOLU	92	475	474	-1	990	699	92.	217720.
36	E4	CHLO	112	502	501	-1	990	591	87.	264873.
37	E4	ETHY	106	544	543	-1	994	677	91.	138601.
38	E4	STYR	104	606	605	-1	991	631	89.	292655.
39	E4	O-XY	106	622	621	-1	996	576	86.	169453.
40	E4	BROM	95	586	586	0	991	541	84.	107170.
41	E4	D8-T	98	471	470	-1	993	697	92.	173548.
42	E4	M-XY	106	609	608	-1	980	501	82.	174843.

Quantitation Report File: STDW446SM

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

01742

No	Name			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	CHLOROMETHANE	50	E2#	02SP
3	BROMOMETHANE	94	E2#	03
4	VINYL CHLORIDE	62	E2#	04CC
5	CHLORETHANE	64	E2#	05
6	METHYLENE CHLORIDE	84	E2#	06
7	ACETONE	58	E2#	07
8	CARBON DISULFIDE	76	E2#	08
9	1,1-DICHLOROETHENE	61	E2#	09
10	1,1-DICHLOROETHANE	63	E2#	10SP
11	TRANS-1,2-DICHLOROETHENE	61	E2#	11
12	CHLOROFORM	83	E2#	12CC
13	1,2-DICHLOROETHANE	62	E2#	13
14	D4-1,2-DICHLOROETHANE	65	SE2#	14
15	1,4-DIFLUOROBENZENE	114	SE2#	15
16	2-BUTANONE	72	E2#	16
17	1,1,1-TRICHLOROETHANE	97	E2#	17
18	CARBONTETRACHLORIDE	117	E2#	18
19	VINYL ACETATE	43	E2#	19
20	BROMODICHLOROMETHANE	83	E2#	20
21	1,2-DICHLOROPROPANE	63	E2#	21CC
22	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
23	TRICHLORETHENE	130	E2#	23
24	DIBROMOCHLOROMETHANE	129	E2#	24
25	1,1,2-TRICHLOROETHANE	97	E2#	25
26	BENZENE	78	E2#	26
27	CIS-1,3-DICHLOROPROPENE	75	E2#	27
28	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
29	BROMOFORM	173	E2#	29SP
30	CHLOROBENZENE-D5	117	E2#	30
31	2-HEXANONE	58	E2#	31
32	4-METHYL-2-PENTANONE	58	E2#	32
33	TETRACHLOROETHENE	164	E2#	33
34	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
35	TOLUENE	92	E2#	35
36	CHLOROBENZENE	112	E2#	36SP
37	ETHYLBENZENE	106	E2#	37
38	STYRENE	104	E2#	38
39	O-XYLENE	106	E2#	39
40	BROMOFLUOROBENZENE	95	SE2#	40
41	D8-TOLUENE	98	SE2#	41
42	M-XYLENE	106	E2#	42

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	162	8:06	1	1.000	# BV	36516.	50.000	UG/L	1.29
2	50	30	1:30	1	0.185	# BV	178103.	101.674	UG/L	2.62
3	94	44	2:12	1	0.272	# BV	111310.	99.455	UG/L	2.56
4	62	56	2:48	1	0.346	A BB	161227.	99.098	UG/L	2.56
5	64	71	3:33	1	0.438	# VV	91299.	100.631	UG/L	2.60
6	84	104	5:12	1	0.642	# BV	119974.	90.685	UG/L	2.34
7	58	112	5:36	1	0.691	# VV	9941.	78.894	UG/L	2.03
8	76	130	6:30	1	0.802	A BB	296242.	96.971	UG/L	2.50

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
9	96	151	7:33	1	0.932	# BV	95841.	98.545	UG/L	2.54
10	63	177	8:51	1	1.093	# BV	247556.	101.144	UG/L	2.61
11	96	190	9:30	1	1.173	# VV	101905.	99.143	UG/L	2.56
12	83	204	10:12	1	1.259	# BV	191664.	106.252	UG/L	2.74
13	62	219	10:57	1	1.352	# VV	136502.	100.495	UG/L	2.59
14	65	217	10:51	1	1.340	# BV	64797.	51.681	UG/L	1.33
15	114	384	19:12	15	1.000	# BV	171984.	50.000	UG/L	1.29
16	72	216	10:48	15	0.562	# VB	12061.	91.209	UG/L	2.35
17	97	247	12:21	15	0.643	# BV	114830.	97.686	UG/L	2.52
18	117	255	12:45	15	0.664	# VV	114483.	97.617	UG/L	2.52
19	43	256	12:48	15	0.667	# VV	374074.	99.371	UG/L	2.56
20	83	267	13:21	15	0.695	# VV	173063.	97.173	UG/L	2.51
21	63	296	14:48	15	0.771	# BV	175920.	99.635	UG/L	2.57
22	75	331	16:33	15	0.862	# VV	94945.	57.077	UG/L	1.47
23	130	314	15:42	15	0.818	# BV	117742.	96.850	UG/L	2.50
24	129	330	16:30	15	0.859	# BV	139815.	102.703	UG/L	2.65
25	97	332	16:36	15	0.865	# VV	103727.	101.773	UG/L	2.62
26	78	325	16:15	15	0.846	# VV	351604.	98.544	UG/L	2.54
27	75	302	15:06	15	0.786	# VV	275822.	138.898	UG/L	3.58
28	63	355	17:45	15	0.924	# VV	65145.	101.370	UG/L	2.61
29	173	393	19:39	15	1.023	A BB	114614.	107.141	UG/L	2.76
30	117	499	24:57	30	1.000	# BV	157096.	50.000	UG/L	1.29
31	58	437	21:51	30	0.876	# VV	58638.	108.980	UG/L	2.81
32	58	401	20:03	30	0.804	# VV	56895.	103.425	UG/L	2.67
33	164	445	22:15	30	0.892	# BV	124707.	102.491	UG/L	2.64
34	83	446	22:18	30	0.894	# BV	199202.	111.356	UG/L	2.87
35	92	475	23:45	30	0.952	# BV	217721.	99.540	UG/L	2.57
36	112	502	25:06	30	1.006	# BV	264873.	97.521	UG/L	2.51
37	106	544	27:12	30	1.090	# BV	138601.	100.446	UG/L	2.59
38	104	606	30:18	30	1.214	# VV	292656.	97.332	UG/L	2.51
39	106	622	31:06	30	1.246	# VV	169454.	98.566	UG/L	2.54
40	95	586	29:18	30	1.174	# VV	107170.	48.292	UG/L	1.25
41	98	471	23:33	30	0.944	# BV	178548.	50.286	UG/L	1.30
42	106	609	30:27	30	1.220	# BV	174843.	97.756	UG/L	2.52

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	1:30	1.00	0.185	1.00	101.67	50.00	4.877	2.399	2.03
3	2:12	1.00	0.272	1.00	99.45	50.00	3.048	1.532	1.99
4	2:48	1.00	0.346	1.00	99.10	50.00	4.415	2.228	1.98
5	3:33	1.00	0.438	1.00	100.63	50.00	2.500	1.242	2.01
6	5:12	1.00	0.642	1.00	90.69	50.00	3.286	1.812	1.81
7	5:36	1.00	0.691	1.00	78.89	50.00	0.272	0.173	1.58
8	6:30	1.00	0.802	1.00	96.97	50.00	8.113	4.183	1.94
9	7:33	1.00	0.932	1.00	98.55	50.00	2.625	1.332	1.97
10	8:54	0.99	1.099	0.99	101.14	50.00	6.779	3.351	2.02
11	9:33	0.99	1.179	0.99	99.14	50.00	2.791	1.407	1.98
12	10:12	1.00	1.259	1.00	106.25	50.00	5.249	2.470	2.13
13	10:57	1.00	1.352	1.00	100.50	50.00	3.738	1.860	2.01
14	10:51	1.00	1.340	1.00	51.68	50.00	1.774	1.717	1.03
15	19:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	10:48	1.00	0.562	1.00	91.21	50.00	0.070	0.038	1.82
17	12:21	1.00	0.643	1.00	97.69	50.00	0.668	0.342	1.95
18	12:48	1.00	0.667	1.00	97.62	50.00	0.666	0.341	1.95
19	12:51	1.00	0.669	1.00	99.37	50.00	2.175	1.094	1.99
20	13:24	1.00	0.698	1.00	97.17	50.00	1.006	0.518	1.94

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
21	14:51	1.00	0.773	1.00	99.64	50.00	1.023	0.513	1.99
22	16:33	1.00	0.862	1.00	57.08	29.00	0.952	0.484	1.97
23	15:42	1.00	0.818	1.00	96.85	50.00	0.685	0.353	1.94
24	16:30	1.00	0.859	1.00	102.70	50.00	0.813	0.396	2.05
25	16:36	1.00	0.865	1.00	101.77	50.00	0.603	0.296	2.04
26	16:15	1.00	0.846	1.00	98.54	50.00	2.044	1.037	1.97
27	15:06	1.00	0.786	1.00	138.90	70.00	1.146	0.577	1.98
28	17:45	1.00	0.924	1.00	101.37	50.00	0.379	0.187	2.03
29	19:39	1.00	1.023	1.00	107.14	50.00	0.666	0.311	2.14
30	25:00	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
31	21:51	1.00	0.874	1.00	108.98	50.00	0.373	0.171	2.18
32	20:03	1.00	0.802	1.00	103.42	50.00	0.362	0.175	2.07
33	22:15	1.00	0.890	1.00	102.49	50.00	0.794	0.387	2.05
34	22:18	1.00	0.892	1.00	111.36	50.00	1.268	0.569	2.23
35	23:45	1.00	0.950	1.00	99.54	50.00	1.386	0.696	1.99
36	25:06	1.00	1.004	1.00	97.52	50.00	1.686	0.864	1.95
37	27:12	1.00	1.088	1.00	100.45	50.00	0.882	0.439	2.01
38	30:18	1.00	1.212	1.00	97.33	50.00	1.863	0.957	1.95
39	31:06	1.00	1.244	1.00	98.57	50.00	1.079	0.547	1.97
40	29:21	1.00	1.174	1.00	48.29	50.00	0.682	0.706	0.97
41	23:33	1.00	0.942	1.00	50.29	50.00	1.137	1.130	1.01
42	30:27	1.00	1.218	1.00	97.76	50.00	1.113	0.569	1.96

QUANTITATION REPORT FILE: STDW446SM

01745

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

NO	NAME			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	1,4-DIFLUOROBENZENE	114	SE2#	15
3	CHLOROBENZENE-D5	117	E2#	30
4	D8-TOLUENE	98	SE2#	41
5	BROMOFLUOROBENZENE	95	SE2#	40
6	D4-1,2-DICHLOROETHANE	65	SE2#	14
7	CHLOROMETHANE	50	E2#	02SP
8	BROMOMETHANE	94	E2#	03
9	VINYL CHLORIDE	62	E2#	04CC
10	CHLORETHANE	64	E2#	05
11	METHYLENE CHLORIDE	84	E2#	06
12	ACETONE	58	E2#	07
13	CARBON DISULFIDE	76	E2#	08
14	1,1-DICHLOROETHENE	61	E2#	09
15	1,1-DICHLOROETHANE	63	E2#	10SP
16	TRANS-1,2-DICHLOROETHENE	61	E2#	11
17	CHLOROFORM	83	E2#	12CC
18	1,2-DICHLOROETHANE	62	E2#	13
19	2-BUTANONE	72	E2#	16
20	1,1,1-TRICHLOROETHANE	97	E2#	17
21	CARBONTETRACHLORIDE	117	E2#	18
22	VINYL ACETATE	43	E2#	19
23	BROMODICHLOROMETHANE	83	E2#	20
24	1,2-DICHLOROPROPANE	63	E2#	21CC
25	TRICHLORETHENE	130	E2#	23
26	DIBROMOCHLOROMETHANE	129	E2#	24
27	1,1,2-TRICHLOROETHANE	97	E2#	25
28	BENZENE	78	E2#	26
29	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
30	CIS-1,3-DICHLOROPROPENE	75	E2#	27
31	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
32	BROMOFORM	173	E2#	29SP
33	2-HEXANONE	58	E2#	31
34	4-METHYL-2-PENTANONE	58	E2#	32
35	TETRACHLOROETHENE	164	E2#	33
36	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
37	TOLUENE	92	E2#	35
38	CHLOROBENZENE	112	E2#	36SP
39	ETHYLBENZENE	106	E2#	37
40	STYRENE	104	E2#	38
41	O-XYLENE	106	E2#	39
42	M-XYLENE	106	E2#	42

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	162	8:06	1	1.000	# BV	36516.	50.000	UG/L	1.29
2	114	384	19:12	2	1.000	# BV	171984.	50.000	UG/L	1.29
3	117	499	24:57	3	1.000	# BV	157096.	50.000	UG/L	1.29
4	98	471	23:33	3	0.944	# BV	178548.	50.286	UG/L	1.30
5	95	586	29:18	3	1.174	# VV	107170.	48.292	UG/L	1.25
6	65	217	10:51	1	1.340	# BV	64797.	51.681	UG/L	1.33
7	50	30	1:30	1	0.185	# BV	178103.	101.674	UG/L	2.62
8	94	44	2:12	1	0.272	# BV	111310.	99.455	UG/L	2.56
9	62	56	2:48	1	0.346	A BB	161227.	99.098	UG/L	2.56

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
10	64	71	3:33	1	0.438	# VV	91299.	100.631	UG/L	2.60
11	84	104	5:12	1	0.642	# BV	119974.	90.685	UG/L	2.34
12	58	112	5:36	1	0.691	# VV	9941.	78.894	UG/L	2.03
13	76	130	6:30	1	0.802	A BB	296242.	96.971	UG/L	2.50
14	96	151	7:33	1	0.932	# BV	95841.	98.545	UG/L	2.54
15	63	177	8:51	1	1.093	# BV	247556.	101.144	UG/L	2.61
16	96	190	9:30	1	1.173	# VV	101905.	99.143	UG/L	2.56
17	83	204	10:12	1	1.259	# BV	191664.	106.252	UG/L	2.74
18	62	219	10:57	1	1.352	# VV	136502.	100.495	UG/L	2.59
19	72	216	10:48	2	0.562	# VB	12061.	91.209	UG/L	2.35
20	97	247	12:21	2	0.643	# BV	114830.	97.686	UG/L	2.52
21	117	255	12:45	2	0.664	# VV	114483.	97.617	UG/L	2.52
22	43	256	12:48	2	0.667	# VV	374074.	99.371	UG/L	2.56
23	83	267	13:21	2	0.695	# VV	173063.	97.173	UG/L	2.51
24	63	296	14:48	2	0.771	# BV	175920.	99.635	UG/L	2.57
25	130	314	15:42	2	0.818	# BV	117742.	96.850	UG/L	2.50
26	129	330	16:30	2	0.859	# BV	139815.	102.703	UG/L	2.65
27	97	332	16:36	2	0.865	# VV	103727.	101.773	UG/L	2.62
28	78	325	16:15	2	0.846	# VV	351604.	98.544	UG/L	2.54
29	75	331	16:33	2	0.862	# VV	94945.	57.077	UG/L	1.47
30	75	302	15:06	2	0.786	# VV	275822.	138.898	UG/L	3.58
31	63	355	17:45	2	0.924	# VV	65145.	101.370	UG/L	2.61
32	173	393	19:39	2	1.023	A BB	114614.	107.141	UG/L	2.76
33	58	437	21:51	3	0.876	# VV	58638.	108.980	UG/L	2.81
34	58	401	20:03	3	0.804	# VV	56895.	103.425	UG/L	2.67
35	164	445	22:15	3	0.892	# BV	124707.	102.491	UG/L	2.64
36	83	446	22:18	3	0.894	# BV	199202.	111.356	UG/L	2.87
37	92	475	23:45	3	0.952	# BV	217721.	99.540	UG/L	2.57
38	112	502	25:06	3	1.006	# BV	264873.	97.521	UG/L	2.51
39	106	544	27:12	3	1.090	# BV	138601.	100.446	UG/L	2.59
40	104	606	30:18	3	1.214	# VV	292656.	97.332	UG/L	2.51
41	106	622	31:06	3	1.246	# VV	169454.	98.566	UG/L	2.54
42	106	609	30:27	3	1.220	# BV	174843.	97.756	UG/L	2.52

RMAL QUANTITATION SUMMARY FILE: STDW446SM
RESULTS PRINTED ONLY FOR COMPONENTS GREATER THAN 1

01747

NO	NAME		SCAN	REF	RRT	RRF	AMOUNT	UNITS
1	BROMOCHLOROMETHANE	128IE2# 01	162	1	1.000	1.000	50.000	UG/L
2	1,4-DIFLUOROBENZENE	114SE2# 15	384	2	1.000	1.000	50.000	UG/L
3	CHLOROBENZENE-D5	117 E2# 30	499	3	1.000	1.000	50.000	UG/L
4	D8-TOLUENE	98SE2# 41	471	3	0.944	1.137	50.286	UG/L
5	BROMOFLUOROBENZENE	95SE2# 40	586	3	1.174	0.682	48.292	UG/L
6	D4-1,2-DICHLOROETHANE	65SE2# 14	217	1	1.340	1.775	51.681	UG/L
7	CHLOROMETHANE	50 E2# 02SP	30	1	0.185	4.877	101.674	UG/L
8	BROMOMETHANE	94 E2# 03	44	1	0.272	3.048	99.455	UG/L
9	VINYL CHLORIDE	62 E2# 04CC	56	1	0.346	4.415	99.098	UG/L
10	CHLORETHANE	64 E2# 05	71	1	0.438	2.500	100.631	UG/L
11	METHYLENE CHLORIDE	84 E2# 06	104	1	0.642	3.286	90.685	UG/L
12	ACETONE	58 E2# 07	112	1	0.691	0.272	78.894	UG/L
13	CARBON DISULFIDE	76 E2# 08	130	1	0.802	8.113	96.971	UG/L
14	1,1-DICHLOROETHENE	61 E2# 09	151	1	0.932	2.625	98.545	UG/L
15	1,1-DICHLOROETHANE	63 E2# 10SP	177	1	1.093	6.779	101.144	UG/L
16	TRANS-1,2-DICHLOROETHENE	61 E2# 11	190	1	1.173	2.791	99.143	UG/L
17	CHLOROFORM	83 E2# 12CC	204	1	1.259	5.249	106.252	UG/L
18	1,2-DICHLOROETHANE	62 E2# 13	219	1	1.352	3.738	100.495	UG/L
19	2-BUTANONE	72 E2# 16	216	2	0.562	0.070	91.209	UG/L
20	1,1,1-TRICHLOROETHANE	97 E2# 17	247	2	0.643	0.668	97.686	UG/L
21	CARBONTETRACHLORIDE	117 E2# 18	255	2	0.664	0.666	97.617	UG/L
22	VINYL ACETATE	43 E2# 19	256	2	0.667	2.175	99.371	UG/L
23	BROMODICHLOROMETHANE	83 E2# 20	267	2	0.695	1.006	97.173	UG/L
24	1,2-DICHLOROPROPANE	63 E2# 21CC	296	2	0.771	1.023	99.635	UG/L
25	TRICHLORETHENE	130 E2# 23	314	2	0.818	0.685	96.850	UG/L
26	DIBROMOCHLOROMETHANE	129 E2# 24	330	2	0.859	0.813	102.703	UG/L
27	1,1,2-TRICHLOROETHANE	97 E2# 25	332	2	0.865	0.603	101.773	UG/L
28	BENZENE	78 E2# 26	325	2	0.846	2.044	98.544	UG/L
29	TRANS-1,3-DICHLOROPROPENE	75 E2# 22	331	2	0.862	0.952	57.077	UG/L
30	CIS-1,3-DICHLOROPROPENE	75 E2# 27	302	2	0.786	1.146	138.898	UG/L
31	2-CHLOROETHYL VINYL ETHER	63 E2# 28SP	355	2	0.924	0.379	101.370	UG/L
32	BROMOFORM	173 E2# 29SP	393	2	1.023	0.666	107.141	UG/L
33	2-HEXANONE	58 E2# 31	437	3	0.876	0.373	108.980	UG/L
34	4-METHYL-2-PENTANONE	58 E2# 32	401	3	0.804	0.362	103.425	UG/L
35	TETRACHLOROETHENE	164 E2# 33	445	3	0.892	0.794	102.491	UG/L
36	1,1,2,2-TETRACHLOROETHANE	83 E2# 34SP	446	3	0.894	1.268	111.356	UG/L
37	TOLUENE	92 E2# 35	475	3	0.952	1.386	99.540	UG/L
38	CHLOROBENZENE	112 E2# 36SP	502	3	1.006	1.686	97.521	UG/L
39	ETHYLBENZENE	106 E2# 37	544	3	1.090	0.882	100.446	UG/L
40	STYRENE	104 E2# 38	606	3	1.214	1.863	97.332	UG/L
41	O-XYLENE	106 E2# 39	622	3	1.246	1.079	98.566	UG/L
42	M-XYLENE	106 E2# 42	609	3	1.220	1.113	97.756	UG/L

RMAL-GC/MS/DS-AUTOPROCESSING
DATAFILE : 2: STDW447SM. STARTED : 3/30/88 15: 54: 41

01748

3/28/88 21: 17: 01 SCAN 1 OF 730
Acquisition started

Acquire
03/28/88 21: 16: 00 + 0: 03
Sample: 150PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 2: STDW447SM
Free sectors: 2337
Instrument: 5100
Analyst: JN

Acquiring
Scan: 1 of 730
Weight: 0.002
Acct. No:

*** GC descriptor: V3 ***

GC temperature: 65 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.

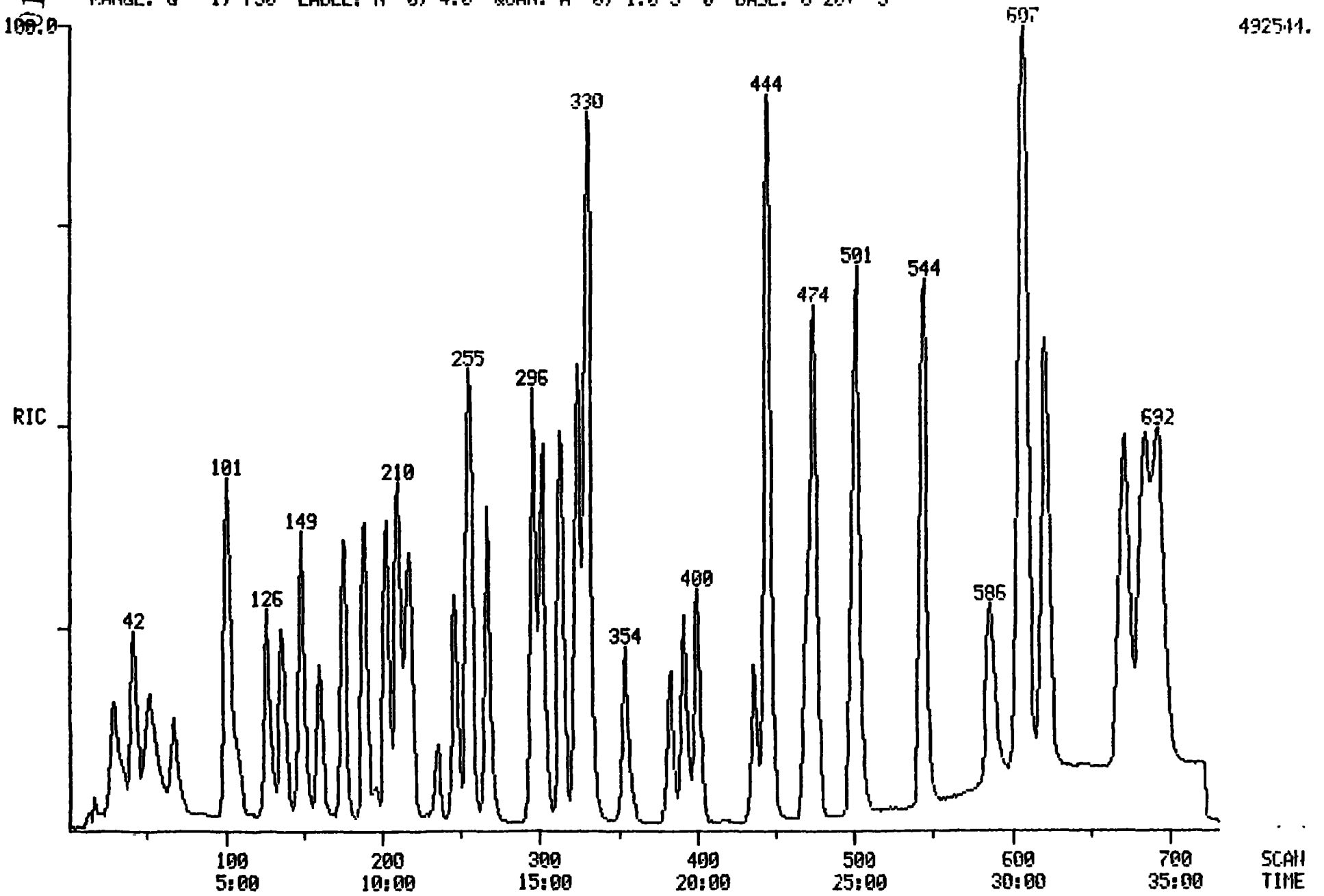
	Positive ion mode	Negative ion mode
Resolution (high)	125.00	128.00
Resolution (low)	125.00	128.00
Ion energy	1.80	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2047.
Electrometer Range: 10 ^-7
Electrometer zero: -4.0

3/28/88 21: 53: 35
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	109.5	2190.0	5.0	48408.	66.	22.

RIC DATA: STDW447SM #1 SCANS 1 TO 730
03/28/88 21:16:00 CALI: 032888CW #2
SAMPLE: 150PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20. 3



SYSTEM, SCIENCE + SOFTWARE DIAGNOSTICS

STDW447SM
032888CW
03/28/88
150PPB HSL STD CS1 3/17, CS2 3/18, IS/SS 3/21

01750

NO	LIB	ID	M/E	SCAN	PRED	DELTA	FIT	PUR	MATCH	AREA
1	E4	BROM	128	160	162	2	950	720	91.	36153.
2	E4	CHLO	50	29	30	1	986	759	95.	263489.
3	E4	BROM	94	42	43	1	926	712	89.	163940.
4	E4	VINY	62	53	55	2	992	508	82.	240703.
5	E4	CHLO	64	67	70	3	983	657	89.	142524.
6	E4	METH	84	101	103	2	989	745	94.	188187.
7	E4	ACET	58	108	111	3	983	368	75.	14975.
				-119		-8	981	93	46.	
8	E4	CARB	76	126	128	2	991	903	100.	475664.
9	E4	1,1-	96	148	149	1	995	815	98.	145883.
10	E4	1,1-	63	175	176	1	989	771	95.	365385.
11	E4	TRAN	96	188	189	1	992	844	99.	142823.
12	E4	CHLO	83	203	201	-2	997	865	100.	270258
13	E4	1,2-	62	218	216	-2	966	688	90.	203570.
14	E4	D4-1	65	216	214	-2	972	279	70.	69049.
15	E4	1,4-	114	382	384	2	996	657	90.	165779
16	E4	2-BU	72	214	215	1	996	328	74.	16625.
				-221		-6	996	30	59.	
17	E4	1,1,	97	246	246	0	937	812	95.	174958.
18	E4	CARB	117	254	255	1	996	551	85.	175295.
19	E4	VINY	43	256	256	0	993	549	85.	375701.
20	E4	BROM	83	267	267	0	977	810	97.	265745.
21	E4	1,2-	63	296	295	-1	969	628	87.	268202.
22	E4	TRAN	75	331	329	-2	944	166	63.	147736.
				-324		5	496	59	35.	
23	E4	TRIC	130	313	312	-1	986	862	100.	181544.
24	E4	DIBR	129	329	328	-1	963	431	77.	217246.
25	E4	1,1,	97	331	330	-1	980	398	76.	159475.
26	E4	BENZ	78	324	323	-1	915	754	91.	533014.
27	E4	CIS-	75	302	300	-2	993	752	95.	420591.
28	E4	2-CH	63	354	353	-1	979	814	97.	94630
29	E4	BROM	173	391	391	0	988	791	96.	170151.
30	E4	CHLO	117	499	500	1	997	458	80.	156624.
31	E4	2-HE	58	436	436	0	998	812	98.	79871.
32	E4	4-ME	58	400	400	0	995	828	99.	82010.
33	E4	TETR	164	444	444	0	989	535	84.	185225.
34	E4	1,1,	83	445	445	0	902	524	79.	299644.
35	E4	TOLU	92	474	474	0	990	718	93.	321269.
36	E4	CHLO	112	501	501	0	991	633	89.	396724.
37	E4	ETHY	106	544	543	-1	996	693	92.	199556.
38	E4	STYR	104	605	605	0	991	634	89.	441826.
39	E4	O-XY	106	621	621	0	997	608	88.	247639.
40	E4	BROM	95	586	586	0	993	531	84.	107544.
41	E4	D8-T	98	469	470	1	993	673	91.	174315.
42	E4	M-XY	106	608	608	0	977	503	81.	261774

Quantitation Report File: STDW447SM

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

01751

No	Name			
1	BROMOCHLOROMETHANE	128	IE2#	01
2	CHLOROMETHANE	50	E2#	02SP
3	BROMOMETHANE	94	E2#	03
4	VINYL CHLORIDE	62	E2#	04CC
5	CHLORETHANE	64	E2#	05
6	METHYLENE CHLORIDE	84	E2#	06
7	ACETONE	58	E2#	07
8	CARBON DISULFIDE	76	E2#	08
9	1,1-DICHLOROETHENE	61	E2#	09
10	1,1-DICHLOROETHANE	63	E2#	10SP
11	TRANS-1,2-DICHLOROETHENE	61	E2#	11
12	CHLOROFORM	83	E2#	12CC
13	1,2-DICHLOROETHANE	62	E2#	13
14	D4-1,2-DICHLOROETHANE	65	SE2#	14
15	1,4-DIFLUOROBENZENE	114	SE2#	15
16	2-BUTANONE	72	E2#	16
17	1,1,1-TRICHLOROETHANE	97	E2#	17
18	CARBONTETRACHLORIDE	117	E2#	18
19	VINYL ACETATE	43	E2#	19
20	BROMODICHLOROMETHANE	83	E2#	20
21	1,2-DICHLOROPROPANE	63	E2#	21CC
22	TRANS-1,3-DICHLOROPROPENE	75	E2#	22
23	TRICHLORETHENE	130	E2#	23
24	DIBROMOCHLOROMETHANE	129	E2#	24
25	1,1,2-TRICHLOROETHANE	97	E2#	25
26	BENZENE	78	E2#	26
27	CIS-1,3-DICHLOROPROPENE	75	E2#	27
28	2-CHLOROETHYL VINYL ETHER	63	E2#	28SP
29	BROMOFORM	173	E2#	29SP
30	CHLOROBENZENE-D5	117	E2#	30
31	2-HEXANONE	58	E2#	31
32	4-METHYL-2-PENTANONE	58	E2#	32
33	TETRACHLOROETHENE	164	E2#	33
34	1,1,2,2-TETRACHLOROETHANE	83	E2#	34SP
35	TOLUENE	92	E2#	35
36	CHLOROBENZENE	112	E2#	36SP
37	ETHYLBENZENE	106	E2#	37
38	STYRENE	104	E2#	38
39	O-XYLENE	106	E2#	39
40	BROMOFLUOROBENZENE	95	SE2#	40
41	D8-TOLUENE	98	SE2#	41
42	M-XYLENE	106	E2#	42

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	160	8:00	1	1.000	# BV	36154.	50.000	UG/L	0.87
2	50	29	1:27	1	0.181	# BV	263490.	151.924	UG/L	2.64
3	94	42	2:06	1	0.263	# BV	163941.	147.946	UG/L	2.57
4	62	53	2:39	1	0.331	A BB	240703.	149.429	UG/L	2.60
5	64	67	3:21	1	0.419	# VV	142524.	158.665	UG/L	2.76
6	84	101	5:03	1	0.631	# BV	188188.	143.670	UG/L	2.50
7	58	108	5:24	1	0.675	# VV	14975.	120.033	UG/L	2.09
8	76	126	6:18	1	0.788	A BB	475665.	157.262	UG/L	2.73

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
9	96	148	7:24	1	0.925	# VV	145884.	151.501	UG/L	2.63
10	63	175	8:45	1	1.094	# VV	365386.	150.780	UG/L	2.62
11	96	188	9:24	1	1.175	# VV	142823.	140.343	UG/L	2.44
12	83	203	10:09	1	1.269	A BB	270258.	151.322	UG/L	2.63
13	62	218	10:54	1	1.362	# VV	203571.	151.373	UG/L	2.63
14	65	216	10:48	1	1.350	# VV	69050.	55.624	UG/L	0.97
15	114	382	19:06	15	1.000	# BV	165779.	50.000	UG/L	0.87
16	72	214	10:42	15	0.560	# BV	16625.	130.433	UG/L	2.27
17	97	246	12:18	15	0.644	# BV	174959.	154.408	UG/L	2.68
18	117	254	12:42	15	0.665	# VV	175295.	155.063	UG/L	2.70
19	43	256	12:48	15	0.670	# VV	575701.	158.656	UG/L	2.76
20	83	267	13:21	15	0.699	# VV	265746.	154.798	UG/L	2.69
21	63	296	14:48	15	0.775	# VV	268202.	157.587	UG/L	2.74
22	75	331	16:33	15	0.866	# VV	147737.	92.138	UG/L	1.60
23	130	313	15:39	15	0.819	# BV	181545.	154.921	UG/L	2.69
24	129	329	16:27	15	0.861	# BV	217246.	165.554	UG/L	2.88
25	97	331	16:33	15	0.866	# VV	159475.	162.326	UG/L	2.82
26	78	324	16:12	15	0.848	# BV	533014.	154.980	UG/L	2.69
27	75	302	15:06	15	0.791	# BV	420592.	219.728	UG/L	3.82
28	63	354	17:42	15	0.927	# VV	94630.	152.761	UG/L	2.66
29	173	391	19:33	15	1.024	# BV	170152.	165.010	UG/L	2.87
30	117	499	24:57	30	1.000	# BV	156624.	50.000	UG/L	0.87
31	58	436	21:48	30	0.874	# VB	79871.	148.888	UG/L	2.59
32	58	400	20:00	30	0.802	# VV	82010.	149.528	UG/L	2.60
33	164	444	22:12	30	0.890	# BV	185226.	152.686	UG/L	2.65
34	83	445	22:15	30	0.892	# VV	299645.	168.009	UG/L	2.92
35	92	474	23:42	30	0.950	# BV	321270.	147.325	UG/L	2.56
36	112	501	25:03	30	1.004	# BV	396725.	146.506	UG/L	2.55
37	106	544	27:12	30	1.090	# BV	199556.	145.056	UG/L	2.52
38	104	605	30:15	30	1.212	# VV	441826.	147.386	UG/L	2.56
39	106	621	31:03	30	1.244	# VV	247639.	144.477	UG/L	2.51
40	95	586	29:18	30	1.174	# VV	107544.	48.607	UG/L	0.84
41	98	469	23:27	30	0.940	# BV	174315.	49.241	UG/L	0.86
42	106	608	30:24	30	1.218	# VV	261775.	146.801	UG/L	2.55

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:06	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:30	0.97	0.185	0.98	151.92	50.00	7.288	2.399	3.04
3	2:12	0.95	0.272	0.97	147.95	50.00	4.535	1.532	2.96
4	2:48	0.95	0.346	0.96	149.43	50.00	6.658	2.228	2.99
5	3:33	0.94	0.438	0.96	158.66	50.00	3.942	1.242	3.17
6	5:12	0.97	0.642	0.98	143.67	50.00	5.205	1.812	2.87
7	5:36	0.96	0.691	0.98	120.03	50.00	0.414	0.173	2.40
8	6:30	0.97	0.802	0.98	157.26	50.00	13.157	4.183	3.15
9	7:33	0.98	0.932	0.99	151.50	50.00	4.035	1.332	3.03
10	8:54	0.98	1.099	1.00	150.78	50.00	10.106	3.351	3.02
11	9:33	0.98	1.179	1.00	140.34	50.00	3.950	1.407	2.81
12	10:12	1.00	1.259	1.01	151.32	50.00	7.475	2.470	3.03
13	10:57	1.00	1.352	1.01	151.37	50.00	5.631	1.860	3.03
14	10:51	1.00	1.340	1.01	55.62	50.00	1.910	1.717	1.11
15	19:12	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	10:48	0.99	0.562	1.00	130.43	50.00	0.100	0.038	2.61
17	12:21	1.00	0.643	1.00	154.41	50.00	1.055	0.342	3.09
18	12:48	0.99	0.667	1.00	155.06	50.00	1.057	0.341	3.10
19	12:51	1.00	0.669	1.00	158.66	50.00	3.473	1.094	3.17
20	13:24	1.00	0.698	1.00	154.80	50.00	1.603	0.518	3.10

QC SUMMARY PACKAGE

CASE: N/A

RMA QC# 59436

Reilly Tar

WASTE SURROGATE PERCENT RECOVERY SUMMARY

00002

Case No.:N/A Contract Lab : RMAL Contract No. :N/A

QC Report No.: 59436

Level :Low

SMO Traffic No.	Toluene-D8 (88-110)	BFB (86-115)	1,2 Dichloro-Ethane-D4 (76-114)	Nitro-Benzene-D5 (35-114)	2-Fluoro-Biphenyl (43-116)	Terphenyl-D14 (33-141)	Phenol-D5 (10-94)	2-Fluoro-Phenol (21-100)	2,4,6 Tribromo-Phenol (10-123)	Dibutyl-Chlorendate ** (24-154)
	(Volatile)			(Semi-Volatile)						(Pesticide)
MB-1	99	100	96	74	70	88	91	87	86	89
MB-2	106	111	94	68	66	102	92	84	108	
MB-3	103	106	98	63	57	90	38	57	84	
MB-4	103	108	92							
59436-01	100	98	96	85	82	98	29	42	75	95
59436-02	100	97	102	86	84	93	37	54	60	100
59436-03	100	99	92	69	75	91	39	58	89	102
59436-04	100	98	90	84	82	89	26	58	46	100
59436-05	100	98	96	78	74	99	78	76	78	95
59436-06	104	110	94	87	81	96	67	64	76	102
59436-07	102	100	85	86	85	79	76	74	88	95
59436-08	104	105	88	92	87	81	86	86	96	95
59436-09	106	115	101	83	82	69	80	83	90	85
59436-10	103	105	94	87	86	97	90	90	94	93
59436-11	106	112	99	69	71	87	46	43	69	105
59436-12	101	101	88	70	73	84	76	74	101	98
59436-13	103	104	96	100	92	92	70	70	85	107
59436-14	103	108	92	102	103	107	70	64	94	84
59436-15	105	109	96							
59436-16	105	102	92	94	90	96	29	24	46	100
59436-17	102	97	88	60	60	57	70	68	63	73
59436-18	103	104	94							
59436-19	105	107	88	84	102	96	68	68	60	77
59436-20	103	106	93	85	82	68	67	64	86	95
59436-21	101	104	90							

* Values are outside Q.C. Limits.
** Advisory Limits Only.

Volatiles : 0 out of 75 ; Outside of Q.C. Limits
Semi-Volatiles : 0 out of 126 ; Outside of Q.C. Limits
Pesticides : 0 out of 19 ; Outside of Q.C. Limits

COMMENTS :

FORM II 10/85 Rev

WASTE SURROGATE PERCENT RECOVERY SUMMARY

Case No.:N/A Contract Lab : RMAL Contract No. :N/A

QC Report No.: 59436

Level :Low

SMO Traffic No.	Toluene-D8 (88-110)	BFB (86-115)	1,2 Dichloro-Ethane-D4 (76-114)	Nitro-Benzene-D5 (35-114)	2-Fluoro-Biphenyl (43-116)	Terphenyl-D14 (33-141)	Phenol-D5 (10-94)	2-Fluoro-Phenol (21-100)	2,4,6 Tribromo-Phenol (10-123)	Dibutyl-Chlorendate ** (24-154)
	(Volatile)			(Semi-Volatile)						(Pesticide)
59436-22	102	109	97	75	74	80	73	74	72	98
59436-23	102	106	92	79	76	74	68	67	81	105

* Values are outside Q.C. Limits.
** Advisory Limits Only.

Volatiles : 0 out of 6 ; Outside of Q.C. Limits
Semi-Volatiles : 0 out of 12 ; Outside of Q.C. Limits
Pesticides : 0 out of 2 ; Outside of Q.C. Limits

COMMENTS :

00003A

WASTE SURROGATE PERCENT RECOVERY SUMMARY

Case No.: N/A Contract Lab : RMAL Contract No. :N/A
QC Report No.: 59436

Level : Low

SMO Traffic No.	Toluene-D8 (88-110)	BFB (86-115)	1,2 Dichloro-Ethane-D4 (76-114)	D-12 Chrysene (10-118)	D-5 Pyridine	Terphenyl-D14 (33-141)	Phenol-D5 (10-94)	2-Fluoro-Phenol (21-100)	2,4,6 Tribromo-Phenol (10-123)	Dibutyl-Chlorendate ** (24-154)
	(Volatile)			(Semi-Volatile)						(Pesticide)
MB-1				114	50					
MB-2					34					
MB-3					39					
59436-01				98	54					
59436-02				87	61					
59436-03				81	38					
59436-04				85	47					
59436-05				93	42					
59436-06				93	39					
59436-07				86	50					
59436-08				93	60					
59436-09				74	43					
59436-10				199 *	69					
59436-10RR				151 *						
59436-11				111	55					
59436-12				104	53					
59436-13				78	76					
59436-14				82	74					
59436-16				82	74					
59436-17				106	55					
59436-19				74	42					
59436-20				72	47					
59436-22				112	56					
59436-23				118	66					

* Values are outside Q.C. Limits.
** Advisory Limits Only.

Volatiles :	0 out of 0	; Outside of Q.C. Limits
Semi-Volatiles :	2 out of 45	; Outside of Q.C. Limits
Pesticides :	0 out of 0	; Outside of Q.C. Limits

COMMENTS :

FORM II 10/85 Rev

C0004

METHOD BLANK SUMMARY

Case No. 59436 Naylon Contractor RMAL Contract No. N/A

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND NAME, FIG OR UNKNOWN	CONC.	UNITS	CRQL
MB-1 BLZ808	4/27/88	VOA	Waste	L	Z	75-09-2	Methylene Chloride	8.1	ug/l	5
						67-64-1	Acetone	6.7		10
						591-78-6	2-Hexanone	3.9		10
MB-2 SCSW895A	4/28/88	VOA	Waste	L	W	75-09-2	Methylene Chloride	7.6		5
						67-64-1	Acetone	6.2		10
							Unknown	21		
							Unknown	16		
MB-3 BLW904	4/28/88	VOA	Waste	L	W	75-09-2	Methylene Chloride	7.2		5
						67-64-1	Acetone	7.2		10
							Unknown	52		
							Unknown	12		
MB-4 BLW917	4/29/88	VOA	Waste	L	W	75-09-2	Methylene Chloride	7.1		5
						67-64-1	Acetone	3.7		10
							Unknown	9.7		
MB-1 S59436R963	6/1/88	BNA	Waste	L	R	117-81-7	Bis(2-Ethylhexyl)Phthalate	3.6		10
						117-84-0	Di-N-Octylphthalate	2.3		10
						108-87-2	Methyl Cyclohexane	10		
						108-88-3	Methyl Benzene	6.7		
							Oxygenated Hydrocarbon	12		
							Oxygenated Hydrocarbon	7.4		

Comments:

FORM IV

7/89

00005

METHOD BLANK SUMMARY

Case No. 59436 Region _____ Contractor RMAL - Contract No. N/A

FILE ID	DATE OF ANALYSIS	FRACTION	MATRIX	CONC. LEVEL	INST. ID	CAS NUMBER	COMPOUND NAME, ID OR UNKNOWN	CONC.	UNITS	CRQL
							Oxygenated Hydrocarbon	17	ug/l	
						96-19-5	1,2,3-Trochloro-1-Propene	11		
MB-2 S59436U566	6/3/88	BNA	Waste	L	U	117-81-7	Bis(2-Ethylhexyl)Phthalate	4.0		10
						117-84-0	Di-N-Octylphthalate	2.8		10
						108-88-3	Methyl Benzene	5.5		
							Oxygenated Hydrocarbon	14		
							Oxygenated Hydrocarbon	9.9		
							Oxygenated Hydrocarbon	19		
						96-19-5	1,2,3-Trichloro-1-Propene	9.5		
MB-3 S59436R982	6/2/88	BNA	Waste	L	R	108-87-2	Methyl Cyclohexane	7.7		
						108-88-3	Methyl Benzene	4.9		
							Oxygenated Hydrocarbon	11		
MB-1 S59436R963	6/1/88	PYR	Waste	L	R		3,4-Lutidine	2.4		10 ppb
MB-2 S59436U566	6/3/88	PYR	Waste	L	U		No Pyridines Detected			
MB-3 S59436R982	6/2/88	PYR	Waste	L	R		No Pyridines Detected			
MB-1 S59436X881	6/7/88	PAH	Waste	L	X		No PAH's Detected			
MB-1 AB/BB12618	5/6/88	Pest	Waste	L	B		No Pests/PCB's Detected			

Comments:

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No. 59436 Contractor: RMAL Contract No. N/A

Instrument ID: R Date: 4-16-87 Time: 8:06

Lab ID: DFR094 Data Release Authorized by: CB/AU

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	48.48
68	less than 2.0% of mass 69	0.88 (1.70)1
69	mass 69 relative abundance	53.69
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	45.33
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.76
275	10.0 - 30.0% of mass 198	20.06
365	greater than 1.00% of mass 198	1.57
441	present, but less than mass 443	6.71
442	greater than 40.0% of mass 198	50.54
443	17.0 - 23.0% of mass 442	9.76 (19.3)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

1=Value in () is % mass 69
2=Value in () is % mass 442

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppb HSL Std	STDR095	4-16-87	8:34:00
20 ppb HSL Std	STDR096	"	9:26:00
80 ppb HSL Std	STDR097	"	10:14:00
120 ppb HSL Std	STDR098	"	11:03:00
160 ppb HSL Std	STDR099	"	11:51:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

00007

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: R Date: 10-26-87 Time: 12:51:00

Lab ID: DFR102 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	40.76	
68	less than 2.0% of mass 69	0.00	(0.00)1
69	mass 69 relative abundance	51.13	
70	less than 2.0% of mass 69	0.00	(0.00)1
127	40.0 - 60.0% of mass 198	44.78	
197	less than 1.0% of mass 198	0.00	
198	base peak, 100% relative abundance	100.00	
199	5.0 - 9.0% of mass 198	6.84	
275	10.0 - 30.0% of mass 198	17.77	
365	greater than 1.00% of mass 198	2.12	
441	present, but less than mass 443	6.77	
442	greater than 40.0% of mass 198	53.60	
443	17.0 - 23.0% of mass 442	11.28	(21.05)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
20 ppm PYR STD	STDR103	10-26-87	13:10:00
50 ppm PYR STD	STDR104	10-26-87	13:56:00
80 ppm PYR STD	STDR105	10-26-87	14:37:00
120 ppm PYR STD	STDR106	10-26-87	15:26:00
160 ppm PYR STD	STDR107	10-26-87	17:00:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: R Date: 06/01/88 Time: 11:26:00

Lab ID: DFR960 Data Release Authorized by: CBLAV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.18
68	less than 2.0% of mass 69	0.00 (0.00)1
69	mass 69 relative abundance	65.18
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	55.28
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.81
275	10.0 - 30.0% of mass 198	21.95
365	greater than 1.00% of mass 198	3.87
441	present, but less than mass 443	7.66
442	greater than 40.0% of mass 198	58.04
443	17.0 - 23.0% of mass 442	10.57 (18.21)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppm HSL STD	STDR961	06/01/88	11:47:00
50 ppm PYR STD	STDR962	06/01/88	13:37:00
Method Blank	S59436R963	06/01/88	14:37:00
59436-04	S59436R964	06/01/88	15:32:00
59436-05	S59436R965	06/01/88	16:21:00
59436-06	S59436R966	06/01/88	17:08:00
59436-07	S59436R967	06/01/88	17:55:00
59436-08	S59436R968	06/01/88	18:41:00
59436-09	S59436R969	06/01/88	19:30:00
59436-11	S59436R971	06/01/88	21:05:00
59436-12	S59436R972	06/01/88	21:52:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: R Date: 06/02/88 Time: 07:00:00

Lab ID: DFR974 Data Release Authorized by: JCL/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	58.63
68	less than 2.0% of mass 69	0.00 (0.00)1
69	mass 69 relative abundance	63.58
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	54.16
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	5.97
275	10.0 - 30.0% of mass 198	20.72
365	greater than 1.00% of mass 198	3.77
441	present, but less than mass 443	8.01
442	greater than 40.0% of mass 198	54.16
443	17.0 - 23.0% of mass 442	11.62 (21.45)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppm HSL STD	STDR975	06/02/88	07:16:00
50 ppm PYR STD	STDR976	06/02/88	08:33:00
59436-10	S59436R977	06/02/88	09:43:00
59436-19	S59436R978	06/02/88	10:30:00
59436-20	S59436R979	06/02/88	11:17:00
59436-22	S59436R980	06/02/88	12:57:00
59436-23	S59436R981	06/02/88	13:44:00
Method Blank	S59436R982	06/02/88	14:31:00
59436-01	S59436R983	06/02/88	15:19:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: R Date: 06/02/88 Time: 17:25:00

Lab ID: DFR990 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	54.56
68	less than 2.0% of mass 69	0.00 (0.00)1
69	mass 69 relative abundance	61.43
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	51.52
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.61
275	10.0 - 30.0% of mass 198	21.40
365	greater than 1.00% of mass 198	3.96
441	present, but less than mass 443	9.71
442	greater than 40.0% of mass 198	63.80
443	17.0 - 23.0% of mass 442	11.03 (17.29)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppm HSL STD	STDR991	06/02/88	17:53:00
50 ppm PYR STD	STDR992	06/02/88	18:58:00
59436-17	S59436R993	06/02/88	19:47:00
59436-02	S59436R995	06/02/88	21:33:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

00011

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: R Date: 06/03/88 Time: 09:46:00

Lab ID: DFR006 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	53.95
68	less than 2.0% of mass 69	0.00 (0.00)1
69	mass 69 relative abundance	51.36
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	51.36
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.93
275	10.0 - 30.0% of mass 198	21.83
365	greater than 1.00% of mass 198	2.27
441	present, but less than mass 443	6.67
442	greater than 40.0% of mass 198	57.06
443	17.0 - 23.0% of mass 442	9.97 (17.47)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppm HSL STD	STDR007	06/03/88	10:41:00
50 ppm PYR STD	STDR008	06/03/88	12:22:00
59436-03	S59436R009	06/03/88	13:11:00

C0012

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: U Date: 03-15-88 Time: 11:49:00

Lab ID: DFU926 Data Release Authorized by: CBlAV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0 - 60.0% of mass 198	48.49	
68	less than 2.0% of mass 69	0.00	(0.00)1
69	mass 69 relative abundance	52.69	
70	less than 2.0% of mass 69	0.00	(0.00)1
127	40.0 - 60.0% of mass 198	45.61	
197	less than 1.0% of mass 198	0.00	
198	base peak, 100% relative abundance	100.00	
199	5.0 - 9.0% of mass 198	6.29	
275	10.0 - 30.0% of mass 198	21.23	
365	greater than 1.00% of mass 198	2.56	
441	present, but less than mass 443	7.80	
442	greater than 40.0% of mass 198	61.27	
443	17.0 - 23.0% of mass 442	12.12	(19.79)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
20 ppm HSL STD	STDUU927	03-15-88	12:11:00
50 ppm HSL STD	STDUU928	03-15-88	13:02:00
80 ppm HSL STD	STDUU929	03-15-88	13:50:00
120 ppm HSL STD	STDUU930	03-15-88	14:38:00
160 ppm HSL STD	STDUU931	03-15-88	15:26:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

00013

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: U Date: 06/01/88 Time: 12:31:00

Lab ID: DFU532 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.91
68	less than 2.0% of mass 69	0.00 (0.00)1
69	mass 69 relative abundance	49.87
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	45.44
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.58
275	10.0 - 30.0% of mass 198	16.71
365	greater than 1.00% of mass 198	2.35
441	present, but less than mass 443	6.85
442	greater than 40.0% of mass 198	56.64
443	17.0 - 23.0% of mass 442	10.13 (17.89)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppm HSL STD	STDU534	06/01/88	15:47:00
59436-13	S59436U540	06/01/88	22:18:00
59436-14	S59436U541	06/01/88	23:04:00
59436-16	S59436U542	06/01/88	23:51:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

00014

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: U Date: 06/01/88 Time: 12:31:00

Lab ID: DFU532 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	56.91
68	less than 2.0% of mass 69	0.00 (0.00)1
69	mass 69 relative abundance	49.87
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	45.44
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	7.58
275	10.0 - 30.0% of mass 198	16.71
365	greater than 1.00% of mass 198	2.35
441	present, but less than mass 443	6.85
442	greater than 40.0% of mass 198	56.64
443	17.0 - 23.0% of mass 442	10.13 (17.89)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppm PYR STD	STDU535	06/01/88	17:52:00
20 ppm PYR STD	STDU536	06/01/88	19:15:00
80 ppm PYR STD	STDU537	06/01/88	20:01:00
120 ppm PYR STD	STDU538	06/01/88	20:47:00
160 ppm PYR STD	STDU539	06/01/88	21:33:00

GC/MS TUNING AND MASS CALIBRATION
Decafluorotriphenylphosphine (DFTPP)

00015

Case No: 59436 Contractor: RMAL Contract No: N/A

Instrument ID: U Date: 06/03/88 Time: 14:14:00

Lab ID: DFU556 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	52.58
68	less than 2.0% of mass 69	0.00 (0.00)1
69	mass 69 relative abundance	52.41
70	less than 2.0% of mass 69	0.00 (0.00)1
127	40.0 - 60.0% of mass 198	41.43
197	less than 1.0% of mass 198	0.00
198	base peak, 100% relative abundance	100.00
199	5.0 - 9.0% of mass 198	6.32
275	10.0 - 30.0% of mass 198	18.22
365	greater than 1.00% of mass 198	2.25
441	present, but less than mass 443	5.07
442	greater than 40.0% of mass 198	43.59
443	17.0 - 23.0% of mass 442	8.07 (18.51)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS.

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppm HSL STD	STDU557	06/03/88	15:32:00
50 ppm PYR STD	STDU558	06/03/88	16:45:00
Method Blank	S59436U566	06/03/88	22:58:00

GC/MS TUNING AND MASS CALIBRATION
Bromofluorobenzene (BFB)

00016

Case No. 59436 Contractor: RMAL Contract No. N/A

Instrument ID: Z Date: 04-13-88 Time: 22:29:00

Lab ID: BFZ533 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 of the base peak	15.12
75	30.0 - 60.0% of the base peak	35.33
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	5.91
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	82.49
175	5.0 - 9.0% of mass 174	5.13(6.22)1
176	Greater than 95.0%, but less than 101.0% of mass 174	80.39(97.45)1
177	5.0 - 9.0% of mass 176	4.49(5.59)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

1-VALUE IN () IS % MASS 174
2-VALUE IN () IS % MASS 176

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppb HSL STD	STDZ534	04-13-88	22:58:00
20 ppb HSL STD	STDZ536	04-14-88	00:21:00
100 ppb HSL STD	STDZ537	04-14-88	01:03:00
150 ppb HSL STD	STDZ538	04-14-88	01:44:00
200 ppb HSL STD	STDZ539	04-14-88	02:26:00

GC/MS TUNING AND MASS CALIBRATION
Bromofluorobenzene (BFB)

00017

Case No. 59436 Contractor: RMAL Contract No. N/A

Instrument ID: Z Date: 04/27/88 Time: 10:43:00

Lab ID: BFZ806 Data Release Authorized by: CBAV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 of the base peak	17.38
75	30.0 - 60.0% of the base peak	36.40
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	6.94
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	84.20
175	5.0 - 9.0% of mass 174	5.43(6.44)1
176	Greater than 95.0%, but less than 101.0% of mass 174	82.42(97.87)1
177	5.0 - 9.0% of mass 176	5.05(6.13)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

1-VALUE IN () IS % MASS 174
2-VALUE IN () IS % MASS 176

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppb HSL STD	AQSTDZ807	04/27/88	11:38:00
Method Blank	BLZ808	04/27/88	12:43:00
59436-01	S59436Z819	04/27/88	19:51:00
59436-02	S59436Z820	04/27/88	20:27:00
59436-03	S59436Z821	04/27/88	21:04:00
59436-04	S59436Z822	04/27/88	21:40:00
59436-05	S59436Z823	04/27/88	22:16:00

C0018 AO

GC/MS TUNING AND MASS CALIBRATION
Bromofluorobenzene (BFB)

Case No. 59436 Contractor: RMAL Contract No. N/A

Instrument ID: W Date: 03/28/88 Time: 15:22:00

Lab ID: BFW440 Data Release Authorized by: CB/AV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 of the base peak	32.30
75	30.0 - 60.0% of the base peak	47.24
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	6.35
173	Less than 1.0% of the base peak	0.52
174	Greater than 50.0% of the base peak	78.99
175	5.0 - 9.0% of mass 174	6.69(8.47)1
176	Greater than 95.0%, but less than 101.0% of mass 174	77.50(98.11)1
177	5.0 - 9.0% of mass 176	6.56(8.46)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

1-VALUE IN () IS % MASS 174
2-VALUE IN () IS % MASS 176

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppb HSL STD	STDW441SM	03-28-88	16:27:00
20 ppb HSL STD	STDW443SM	03-28-88	18:06:00
100 ppb HSL STD	STDW446SM	03-28-88	20:31:00
150 ppb HSL STD	STDW447SM	03-28-88	21:16:00
200 ppb HSL STD	STDW449SM	03-28-88	22:55:00

GC/MS TUNING AND MASS CALIBRATION
Bromofluorobenzene (BFB)

00019

Case No. 59436 Contractor: RMAL Contract No. N/A

Instrument ID: W Date: 04/28/88 Time: 09:45:00

Lab ID: BFW892 Data Release Authorized by: cdav

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 of the base peak	28.47
75	30.0 - 60.0% of the base peak	45.77
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	6.90
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	79.51
175	5.0 - 9.0% of mass 174	5.69(7.16)1
176	Greater than 95.0%, but less than 101.0% of mass 174	76.07(95.68)1
177	5.0 - 9.0% of mass 176	5.41(7.12)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

1-VALUE IN () IS % MASS 174
2-VALUE IN () IS % MASS 176

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppb HSL STD	STDW893A	04/28/88	10:14:00
Method Blank	SCSW895A	04/28/88	12:05:00
59436-09	S59436W898	04/28/88	15:03:00
59436-11	S59436W900	04/28/88	16:43:00

GC/MS TUNING AND MASS CALIBRATION
Bromofluorobenzene (BFB)

Case No. 59436 Contractor: RMAL Contract No. N/A

Instrument ID: W Date: 04/28/88 Time: 17:46:00

Lab ID: BFW901 Data Release Authorized by: CBlAV

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 of the base peak	27.22
75	30.0 - 60.0% of the base peak	43.83
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	7.26
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	77.92
175	5.0 - 9.0% of mass 174	5.88(7.55)1
176	Greater than 95.0%, but less than 101.0% of mass 174	74.13(95.14)1
177	5.0 - 9.0% of mass 176	5.09(6.86)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

1-VALUE IN () IS % MASS 174
2-VALUE IN () IS % MASS 176

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppb HSL STD	STDW902	04/28/88	18:08:00
Method Blank	BLW904	04/28/88	19:49:00
59436-06	S59436W906	04/28/88	21:35:00
59436-10	S59436W907	04/28/88	22:27:00
59436-13	S59436W908	04/28/88	23:20:00
59436-14	S59436W909	04/29/88	00:12:00
59436-15	S59436W910	04/29/88	01:05:00
59436-16	S59436W911	04/29/88	01:57:00
59436-17	S59436W912	04/29/88	02:50:00
59436-18	S59436W913	04/29/88	03:42:00

GC/MS TUNING AND MASS CALIBRATION
Bromofluorobenzene (BFB)

Case No. 59436 Contractor: RMAL Contract No. N/A

Instrument ID: W Date: 04/29/88 Time: 09:16:00

Lab ID: BFW914 Data Release Authorized by: CBlav

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0 of the base peak	28.22
75	30.0 - 60.0% of the base peak	45.68
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of the base peak	7.48
173	Less than 1.0% of the base peak	0.00
174	Greater than 50.0% of the base peak	80.27
175	5.0 - 9.0% of mass 174	5.96(7.42)1
176	Greater than 95.0%, but less than 101.0% of mass 174	78.77(98.12)1
177	5.0 - 9.0% of mass 176	4.98(6.33)2

THIS PERFORMANCE TUNE APPLIES TO THE FOLLOWING SAMPLES, BLANKS AND STANDARDS

1-VALUE IN () IS % MASS 174
2-VALUE IN () IS % MASS 176

SAMPLE ID	LAB ID	DATE OF ANALYSIS	TIME OF ANALYSIS
50 ppb HSL STD	STDW915	04/29/88	09:48:00
Method Blank	BLW917	04/29/88	11:40:00
59436-19	S59436W918	04/29/88	12:32:00
59436-20	S59436W919	04/29/88	13:24:00
59436-21	S59436W920	04/29/88	14:11:00
59436-22	S59436W921	04/29/88	14:56:00
59436-23	S59436W922	04/29/88	15:47:00
59436-07	S59436W923	04/29/88	17:03:00
59436-08	S59436W924	04/29/88	17:56:00
59436-12	S59436W925	04/29/88	18:49:00

5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

00022

Lab Name: RMAL Contract: N/A

Instrument ID: X Case No: 59436 Date: 10/20/87

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE OF ANALYSIS	TIME ANALYZED
1	80 ppb PAH STD	STDX742	10/20/88	09:18:00
2	40 ppb PAH STD	STDX743	10/20/87	10:38:00
3	800 ppb PAH STD	STDX744	10/20/87	11:41:00
4	400 ppb PAH STD	STDX745	10/20/87	13:06:00
5	200 ppb PAH STD	STDX746	10/20/87	13:53:00

5B

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

00023

Lab Name: RMAL Contract: N/A

Instrument ID: X Case No: 59436 Date: 06/02/88

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE OF ANALYSIS	TIME ANALYZED
1	PAH STD	STDX816	06/02/88	16:23:00
2	59436-01	S59436X818	06/02/88	18:30:00
3	59436-02	S59436X819	06/02/88	19:20:00
4	59436-03	S59436X820	06/02/88	20:10:00
5	59436-04	S59436X821	06/02/88	21:00:00
6	59436-05	S59436X822	06/02/88	21:49:00
7	59436-06	S59436X823	06/02/88	22:39:00
8	59436-07	S59436X824	06/02/88	23:29:00
9	59436-08	S59436X825	06/03/88	00:19:00
10	59436-09	S59436X826	06/03/88	01:09:00

5B

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

Lab Name: RMAL Contract: N/A

Instrument ID: X Case No: 59436 Date: 06/03/88

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE OF ANALYSIS	TIME ANALYZED
1	PAH STD	STDX827	06/03/88	09:22:00
2	59436-10	S59436X828	06/03/88	10:58:00
3	59436-11	S59436X829	06/03/88	11:49:00
4	59436-12	S59436X830	06/03/88	12:40:00
5	59436-13	S59436X831	06/03/88	13:29:00
6	59436-14	S59436X832	06/03/88	14:19:00

5B

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

00025

Lab Name: RMAL Contract: N/A

Instrument ID: X Case No: 59436 Date: 06/03/88

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE OF ANALYSIS	TIME ANALYZED
1	PAH STD	STDX833	06/03/88	15:31:00
2	59436-16	S59436X834	06/03/88	16:59:00
3	59436-22	S59436X838	06/03/88	20:20:00
4	59436-23	S59436X839	06/03/88	21:09:00

5B
SEMIVOLATILE ORGANIC GC/MS TUNING AND MASS
CALIBRATION - DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: RMAL Contract:N/A

Lab Code: RMAL Case No.: 59436 Date: 06/06/88

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE OF ANALYSIS	TIME ANALYZED
1	PAH STD	STDX866	06/06/88	15:30:00
2	59435-10RR	S59436X867	06/06/88	16:32:00
3	59436-19	S59436X868	06/06/88	17:23:00
4	59436-20	S59436X869	06/06/88	18:13:00
5	59436-17	S59436X870	06/06/88	19:04:00

FORM V SV 1/87 Rev.

5B

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

Lab Name: RMAL Contract: N/A

00027

Instrument ID: X Case No: 59436 Date: 06/07/88

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE OF ANALYSIS	TIME ANALYZED
1	PAH STD	STDX880	06/07/88	09:51:00
2	Method Blank	S59436X881	06/07/88	11:18:00

SAMPLE DATA PACKAGE

ORGANICS ANALYSIS DATA SHEET
(Page 1)

00029

Sample Number : 59436-01

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-01
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 :	04/27/88
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	1.9	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	2.5	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

Form I

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

Sample Number
59436-01

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

Page 2

Sample Number
59436-01

00031

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/25/88	Separatory Funnel Extraction	Yes
Date Analyzed	06/02/88	Continuous Liquid-Liquid Extraction	No
Conc/Dil Factor	2.06		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L
108-95-2	Phenol		10 U
111-44-4	bis(-2-Chloroethyl)Ether		10 U
95-57-8	2-Chlorophenol		10 U
541-73-1	1,3-Dichlorobenzene		10 U
106-46-7	1,4-Dichlorobenzene		10 U
100-51-6	Benzyl Alcohol		10 U
95-50-1	1,2-Dichlorobenzene		10 U
95-48-7	2-Methylphenol		10 U
39638-32-9	bis(2-chloroisopropyl)Ether		10 U
106-44-5	4-Methylphenol		10 U
621-64-7	N-Nitro-Di-n-Propylamine		10 U
67-72-1	Hexachloroethane		10 U
98-95-3	Nitrobenzene		10 U
78-59-1	Isophorone		10 U
88-75-5	2-Nitrophenol		10 U
105-67-9	2,4-Dimethylphenol		10 U
65-85-0	Benzoic Acid		52 U
111-91-1	bis(2-Chloroethoxy) Methane		10 U
120-83-2	2,4-Dichlorophenol		10 U
120-82-1	1,2,4-Trichlorobenzene		10 U
91-20-3	Naphthalene		10 U
106-47-8	4-Chloroaniline		10 U
87-68-3	Hexachlorobutadiene		10 U
59-50-7	4-Chloro-3-Methylphenol		10 U
91-57-6	2-Methylnaphthalene		10 U
77-47-4	Hexachlorocyclopentadiene		10 U
88-06-2	2,4,6-Trichlorophenol		10 U
95-95-4	2,4,5-Trichlorophenol		52 U
91-58-7	2-Chloronaphthalene		10 U
88-74-4	2-Nitroaniline		52 U
131-11-4	Dimethyl Phthalate		10 U
208-96-8	Acenaphthylene		10 U
99-09-2	3-Nitroaniline		52 U

CAS Number	Compound	Value	ug/L
83-32-9	Acenaphthene		10 U
51-28-5	2,4-Dinitrophenol		52 U
100-02-7	4-Nitrophenol		52 U
132-64-9	Dibenzofuran		10 U
121-14-2	2,4-Dinitrotoluene		10 U
606-20-2	2,6-Dinitrotoluene		10 U
84-66-2	Diethylphthalate		10 U
7005-72-3	4-Chlorophenyl-phenylether		10 U
86-73-7	Fluorene		10 U
100-01-6	4-Nitroaniline		52 U
534-52-1	4,6-Dinitro-2-Methylphenol		52 U
86-30-6	N-Nitrosidiphenylamine (1)		10 U
101-55-3	4-Bromophenyl-phenylether		10 U
118-74-1	Hexachlorobenzene		10 U
87-86-5	Pentachlorophenol		52 U
85-01-8	Phenanthrene		10 U
120-12-7	Anthracene		10 U
84-74-2	Di-N-Butylphthalate		10 U
206-44-0	Fluoranthene		10 U
129-00-0	Pyrene		10 U
85-68-7	Butylbenzylphthalate		10 U
91-94-1	3,3'-Dichlorobenzidine		21 U
56-55-3	Benzo(a)Anthracene		10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	2.1	J
218-01-9	Chrysene		10 U
117-84-0	Di-n-Octylphthalate		10 U
205-99-2	Benzo(b)Fluoranthene		10 U
207-08-9	Benzo(k)Fluoranthene		10 U
50-32-8	Benzo(a)Pyrene		10 U
193-39-5	Indeno(1,2,3-cd)Pyrene		10 U
53-70-3	Dibenzo(a,h)Anthracene		10 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
59436-01

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	8.6 B
2. 108-88-3	Methyl Benzene	BNA	370	5.0 B
3.	Oxygenated Hydrocarbon	BNA	469	14 B
4.				
5.				
6.				
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30.				

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

00033

Sample: 59436-01
Date Analyzed: 06/02/88

Units: ug/L
Run Factor: 2.06

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	53.5	54	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: 59436-01
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	78.3	98	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: 59436-01

00035

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

4/27/88 19:51:37 SCAN 1 OF 1650
Acquisition started

00036

Acquire
04/27/88 19:51:00 + 0:04
Sample: 59436-01 5ML 100%
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Run 0:S59436Z819
Free sectors: 7067
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 4 of 1650
Weight: 0.000
Acct. No:

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

Loaded GC Desc:CV Current GC oven tmp: -9 DegC Injector : 150 DegC
Current GC Desc:CV GC elapsed time : 0: 3 min Int. oven : 150 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	-10 - -10	-	1.0	1.0	Sweep/Split	32.7	0.0
2	-10 - 100	6.0	18.3	19.3	Divert	32.7	0.0
3	100 - 170	8.3	8.4	27.7			
4	170 - 170	-	5.0	32.7			

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

Low mass: 35 Up: 0.95 L* Top: 0.00
High mass: 300 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 18 Samp Int (ms): 0.200 Peak Width: 1000.
Frag S/P: 10 Actual: 9 Samp Int (ms): 0.400 Inten/ion: 2

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

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

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	

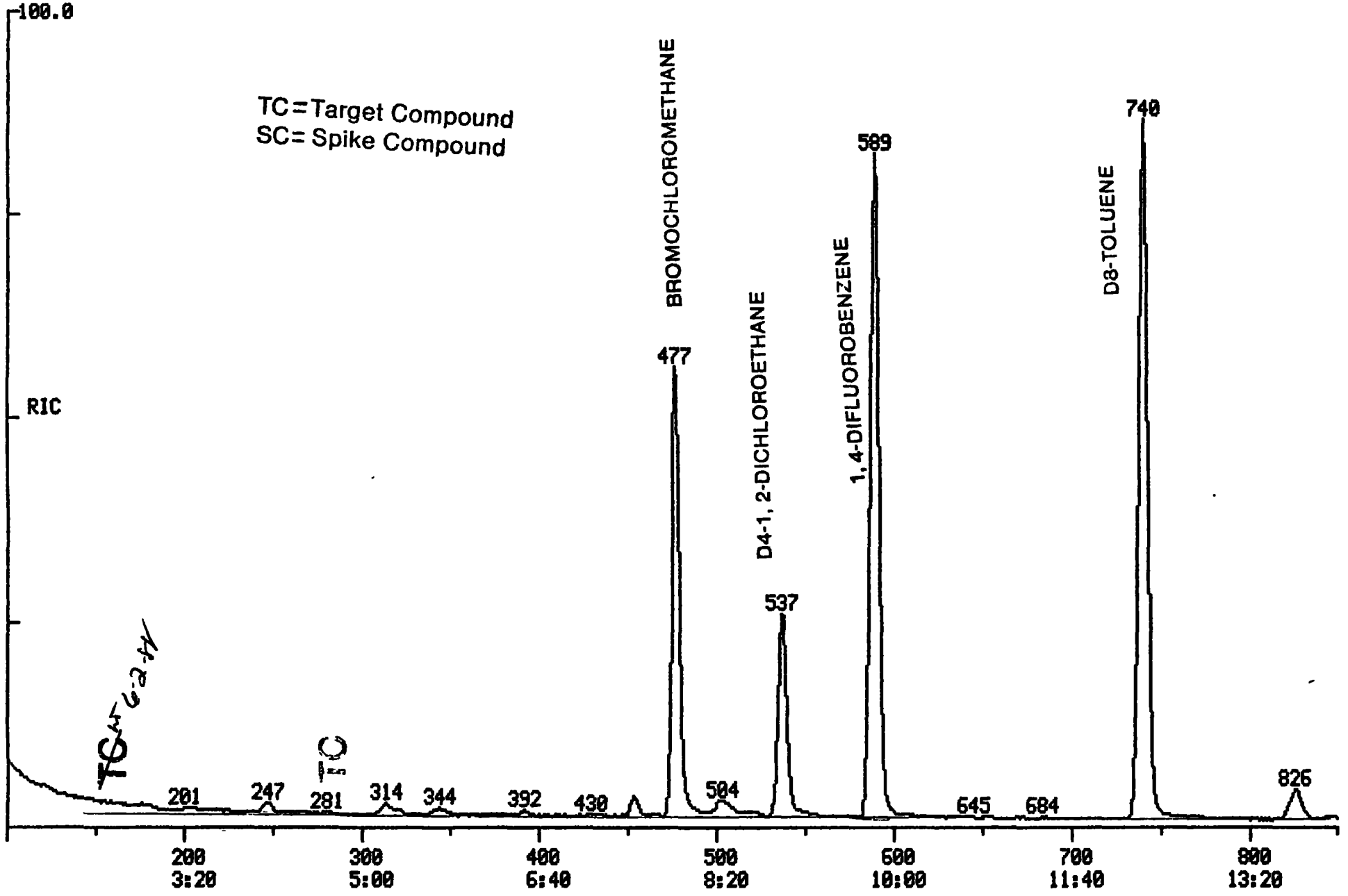
4/27/88 20:19:10
ACQUISITION COMPLETED
SCANS 1 TO 1650 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	1650	40.7	1650.0	2.5	27507. 17.	17.

00037

RIC
04/27/88 19:51:00
SAMPLE: 59436-01 5ML 100%
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

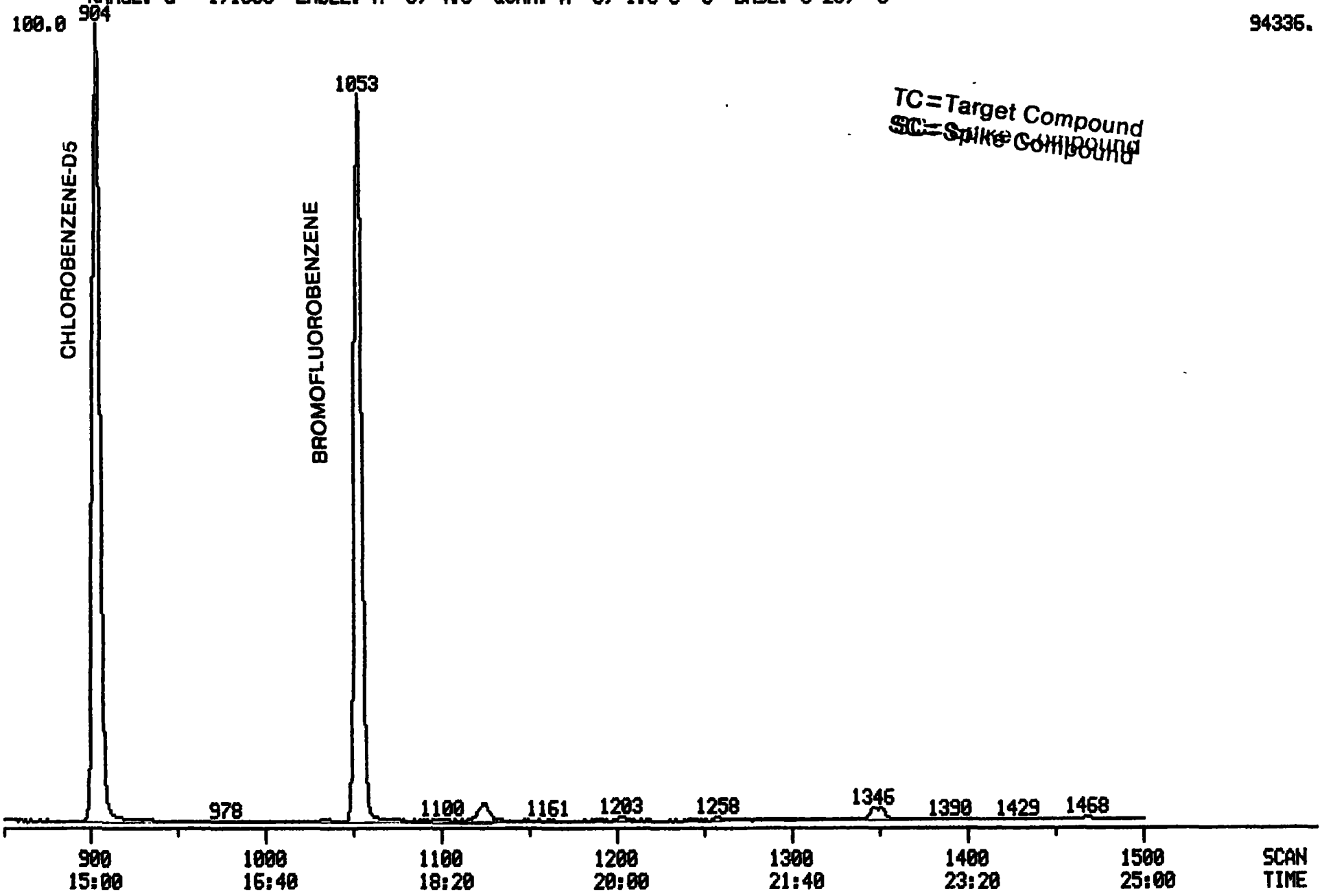
DATA: 5594362819 #4 SCANS 100 TO 850
CALI: 042788CZ #5 OUT OF 100 TO 1500



00038

RIC
04/27/88 19:51:00
SAMPLE: 59436-01 5ML 100%
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436Z819 #4 SCANS 850 TO 1500
CALI: 042788CZ #5 OUT OF 100 TO 1500



TC=Target Compound
SC=Spike Compound

PROCEDURE. TCA DIAGNOSTIC REPORT 5/02/88 16:10:42
DATA FILE: S59436Z819
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00039

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	5	3	152	ISO1/TCO1
3	3	1	0	18	5	1	63	ISO2/TCO2
3	3	1	0	6	3	1	0	ISO3/TCO3
1	1	1	0	9	2	1	0	ISO4/TCO4

41 COMPOUNDS PROCESSED, 10 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-476	477	477	.	1	990	.	128	477	.	1
2	V1	10	-107	106	.	.	.	.	.	50	.	.	.
3	V1	25	-122	121	122	1	1	909	.	62	123	1	1
4	V1	15	-156	156	.	.	.	.	.	94	.	.	.
5	V1	35	-170	170	.	.	.	.	.	64	.	.	.
6	V1	80	-257	257	.	.	.	.	.	96	.	.	.
7	V1	65	-265	265	.	.	.	.	.	76	.	.	.
8	V1	50	-282	282	281	-1	1	989	.	58	281	.	1
9	V1	45	-321	322	.	.	.	.	.	84	320	.	1
10	V1	95	-346	347	.	.	.	.	.	96	.	.	.
11	V1	90	-392	393	392	-1	1	856	.	63	392	.	1
12	V2	25	-412	413	415	2	3	859	.	43	.	.	.
13	V2	10	-467	468	.	.	.	.	.	72	.	.	.
14	V2	1	-588	589	589	.	1	995	.	114	589	.	1
15	V3	1	-903	904	904	.	1	996	.	117	904	.	1
16	V1	100	-494	495	.	.	.	.	.	83	.	.	.
17	V2	15	-498	499	.	.	.	.	.	97	.	.	.
18	V2	20	-513	514	.	.	.	.	.	117	.	.	.
19	V2	60	-536	537	.	.	.	.	.	78	536	.	1
20	V1	2	-537	538	537	-1	1	991	.	65	537	.	1
21	V1	110	-545	546	.	.	.	.	.	62	.	.	.
22	V2	45	-608	609	.	.	.	.	.	130	.	.	.
23	V2	35	-631	632	.	.	.	.	.	63	.	.	.
24	V2	30	-669	670	.	.	.	.	.	83	.	.	.
25	V2	40	-717	718	.	.	.	.	.	75	.	.	.
26	V3	2	-740	741	740	-1	1	972	.	98	740	.	1
27	V3	10	-742	743	.	.	.	.	.	58	.	.	.
28	V3	35	-747	748	.	.	.	.	.	92	747	.	1
29	V2	65	-785	786	.	.	.	.	.	75	.	.	.
30	V2	55	-803	804	.	.	.	.	.	97	.	.	.
31	V3	20	-805	806	.	.	.	.	.	164	.	.	.
32	V3	15	-839	840	.	.	.	.	.	58	.	.	.
33	V2	50	-843	844	.	.	.	.	.	129	.	.	.
34	V3	40	-908	909	.	.	.	.	.	112	.	.	.
35	V3	50	-926	927	.	.	.	.	.	106	.	.	.
36	V3	75	-941	942	.	.	.	.	.	106	.	.	.
37	V3	60	-988	988	.	.	.	.	.	106	.	.	.
38	V3	55	-992	992	.	.	.	.	.	104	.	.	.
39	V2	80	-1010	1010	.	.	.	.	.	173	.	.	.
40	V3	3	-1053	1053	1053	.	1	974	.	95	1053	.	1
41	V3	25	-1087	1087	.	.	.	.	.	83	.	.	.

Quantitation Report File: S59436Z819

C0040

Data: S59436Z819.TI
04/27/88 19:51:00
Sample: 59436-01 5ML 100%
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Instrument: 4500
Analyst: CR

Weight: 0.000
Acct. No.:

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	CO20	VINYL CHLORIDE	62	V1#	25	75-01-4
4	CO15	BROMOMETHANE	94	V1#	15	74-83-9
5	CO25	CHLOROETHANE	64	V1#	35	75-00-3
6	CO45	1,1-DICHLOROETHENE	61	V1#	80	75-35-4
7	CO40	CARBON DISULFIDE	76	V1#	65	75-15-0
8	CO35	ACETONE	58	V1#	50	67-64-1
9	CO30	METHYLENE CHLORIDE	84	V1#	45	75-09-2
10	TRANS-1,2-DICHLOROETHENE		61	V1#	95	156-60-5
11	CO50	1,1-DICHLOROETHANE	63	V1#	90	75-34-3
12	C125	VINYL ACETATE	43	V2#	25	108-05-4
13	C110	2-BUTANONE	72	V2#	10	78-93-3
14	CI10	1,4-DIFLUOROBENZENE	114	IV2#	01	540-36-3
15	CI20	CHLOROBENZENE-D5	117	IV3#	01	3114-55-4
16	CO60	CHLOROFORM	83	V1#	100CC	67-66-3
17	C115	1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
18	C120	CARBONTETRACHLORIDE	117	V2#	20	56-23-5
19	C165	BENZENE	78	V2#	60	71-43-2
20	CS15	1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
21	CO65	1,2-DICHLOROETHANE	62	V1#	110	107-06-2
22	C150	TRICHLOROETHENE	130	V2#	45	79-01-6
23	C140	1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
24	C130	BROMODICHLOROMETHANE	83	V2#	30	75-27-4
25	C143	CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
26	CS05	TOLUENE-D8	98	SV3#	02	2037-26-5
27	C205	4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
28	C230	TOLUENE	92	V3#	35	108-88-3
29	C172	TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
30	C160	1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
31	C220	TETRACHLOROETHENE	164	V3#	20	127-18-4
32	C210	2-HEXANONE	58	V3#	15	591-78-6
33	C155	DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
34	C235	CHLOROBENZENE	112	V3#	40	108-90-7
35	C240	ETHYLBENZENE	106	V3#	50	100-41-4
36	M+P XYLENES		106	V3#	75	
37	O-XYLENE		106	V3#	60	
38	C245	STYRENE	104	V3#	55	100-42-5
39	C180	BROMOFORM	173	V2#	80	75-25-2
40	CS10	BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
41	C225	1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5

C0041

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	477	7:57	1	1.000	A BB	36884.	50.000	UG/L	16.49
2	NOT	FOUND								
3	62	123	2:03	1	0.258	A BB	1188.	1.937	UG/L	0.64
4	NOT	FOUND								
5	NOT	FOUND								
6	NOT	FOUND								
7	NOT	FOUND								
8	58	281	4:41	1	0.589	A BB	121.	2.488	UG/L	0.82
9	84	320	5:20	1	0.671	A BB	650.	0.498	UG/L	0.16
10	NOT	FOUND								
11	63	392	6:32	1	0.822	A BB	1947.	1.065	UG/L	0.35
12	NOT	FOUND								
13	NOT	FOUND								
14	114	589	9:49	14	1.000	A BB	181405.	50.000	UG/L	16.49
15	117	904	15:04	15	1.000	A BB	155580.	50.000	UG/L	16.49
16	NOT	FOUND								
17	NOT	FOUND								
18	NOT	FOUND								
19	78	536	8:56	14	0.910	A BB	301.	0.111	UG/L	0.04
20	65	537	8:57	1	1.126	A BB	35235.	47.959	UG/L	15.82
21	NOT	FOUND								
22	NOT	FOUND								
23	NOT	FOUND								
24	NOT	FOUND								
25	NOT	FOUND								
26	98	740	12:20	15	0.819	A BB	158722.	50.175	UG/L	16.55
27	NOT	FOUND								
28	92	747	12:27	15	0.826	A BB	225.	0.122	UG/L	0.04
29	NOT	FOUND								
30	NOT	FOUND								
31	NOT	FOUND								
32	NOT	FOUND								
33	NOT	FOUND								
34	NOT	FOUND								
35	NOT	FOUND								
36	NOT	FOUND								
37	NOT	FOUND								
38	NOT	FOUND								
39	NOT	FOUND								
40	95	1053	17:33	15	1.165	A BB	102037.	48.856	UG/L	16.12
41	NOT	FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	7:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:47		0.224						
3	2:02	1.01	0.256	1.01	1.94	50.00	0.032	0.831	0.04
4	2:36		0.327						
5	2:50		0.356						
6	4:17		0.539						
7	4:25		0.556						
8	4:42	1.00	0.591	1.00	2.49	50.00	0.003	0.066	0.05
9	5:21	1.00	0.673	1.00	0.50	50.00	0.018	1.771	0.01
10	5:46		0.725						
11	6:32	1.00	0.822	1.00	1.06	50.00	0.053	2.479	0.02
12	6:52		0.699						
13	7:47		0.793						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	9:49	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
15	15:04	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	8:14		1.036						
17	8:18		0.846						
18	8:33		0.871						
19	8:56	1.00	0.910	1.00	0.11	50.00	0.002	0.744	0.00
20	8:57	1.00	1.126	1.00	47.96	50.00	0.955	0.996	0.96
21	9:05		1.143						
22	10:08		1.032						
23	10:31		1.071						
24	11:09		1.136						
25	11:57		1.217						
26	12:20	1.00	0.819	1.00	50.18	50.00	1.020	1.017	1.00
27	12:22		0.821						
28	12:27	1.00	0.826	1.00	0.12	50.00	0.001	0.591	0.00
29	13:05		1.333						
30	13:23		1.363						
31	13:25		0.890						
32	13:59		0.928						
33	14:03		1.431						
34	15:08		1.004						
35	15:26		1.024						
36	15:41		1.041						
37	16:28		1.093						
38	16:32		1.097						
39	16:50		1.715						
40	17:33	1.00	1.165	1.00	48.86	50.00	0.656	0.671	0.98
41	18:07		1.202						

TCA FINISHED, 10 FOUND
FINISHED AT: 5/02/88 16:15:57

RMAL QUANTITATION SUMMARY FILE: S594362819
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

00043

UNITS: UG/L

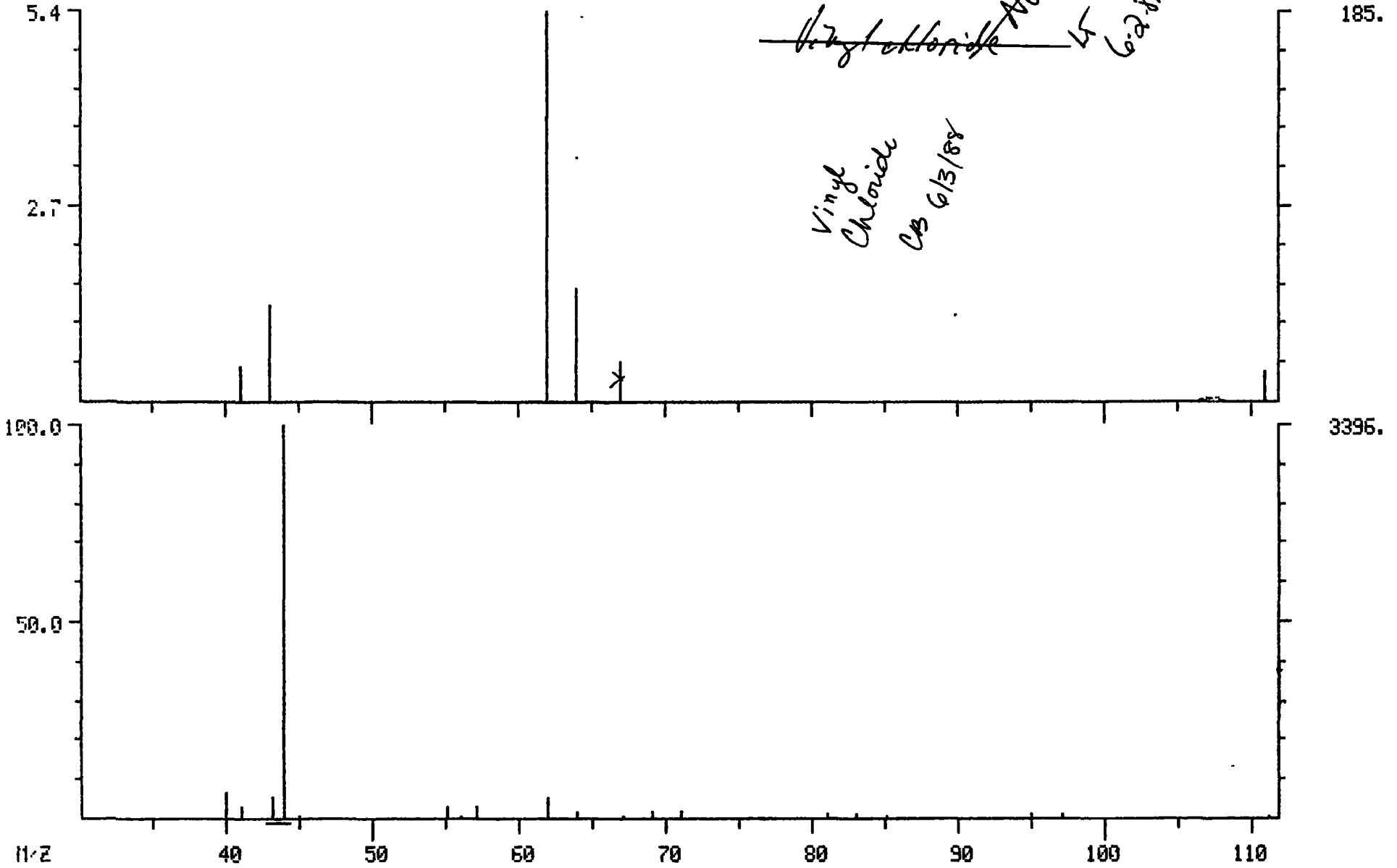
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	477	1	36884.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	589	2	181405.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	904	3	155580.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	740	3	158722.	1.020	50.175
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	1053	3	102037.	0.656	48.856
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	537	1	35235.	0.955	47.959
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	~~123~~	~~1~~	~~1188.~~	~~0.032~~	~~1.937~~
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	281	1	121.	0.003	2.488
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~~	~~392~~	~~1~~	~~1947.~~	~~0.053~~	~~1.065~~
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	O-XYLENE	106		3	NOT FOUND		
41	V3# 75	M+P XYLENES	106		3	NOT FOUND		

yes CB 6/3/88
LS 6-2-88
LS 6-2-88 NO

00044

DUAL MASS SPECTRUM
04/27/88 19:51:00 + 2:02
SAMPLE: 59436-01 5ML 100%
CONDS.: GC DESC CV
GC TEMP: -3 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436Z819 #122 BASE M/Z: 62/ 44
CALI: 042788CZ #5 RIC: 331./ 4743.



~~Vinyl chloride~~ NO 6-2-88

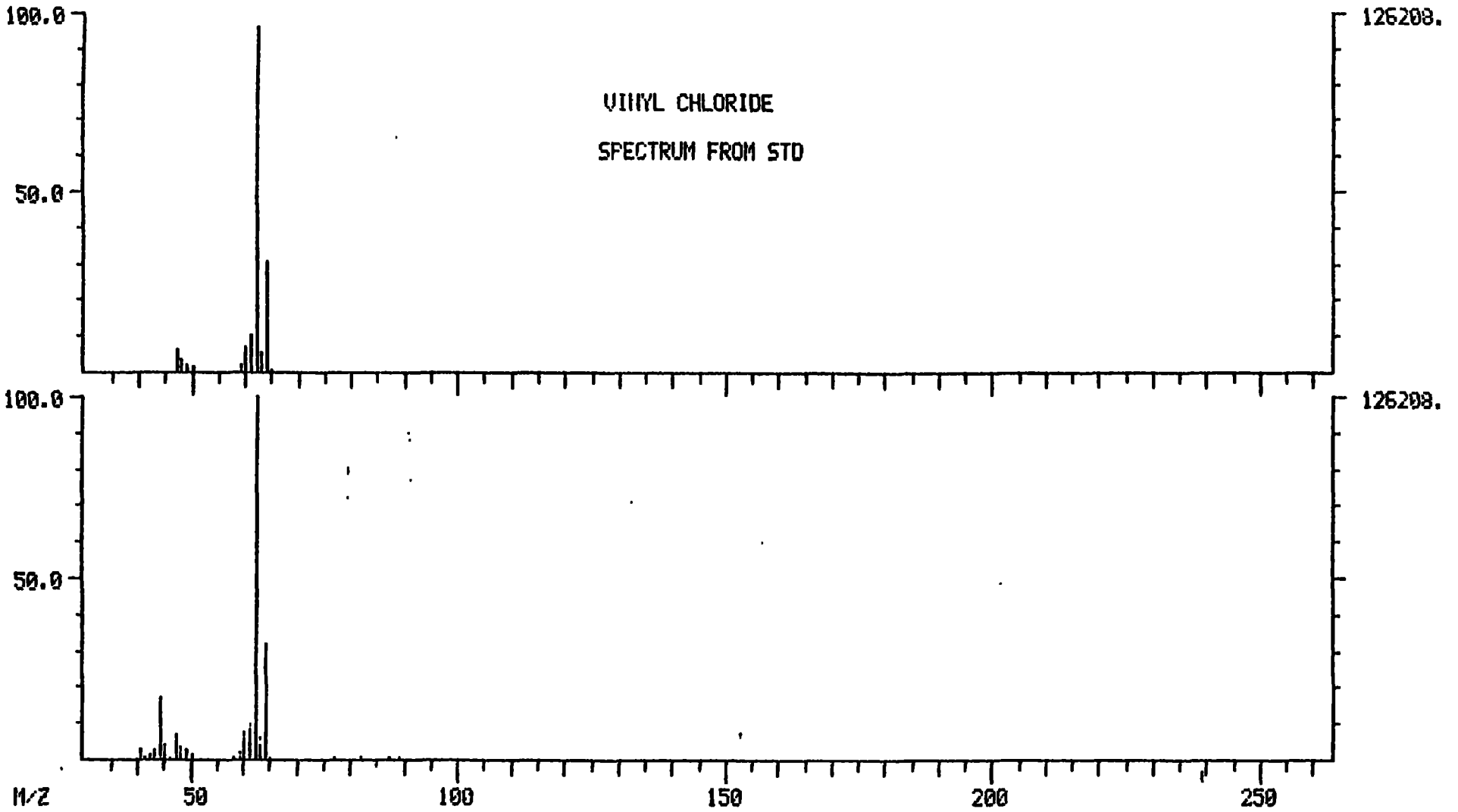
Vinyl Chloride CB 6/3/88

00045

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

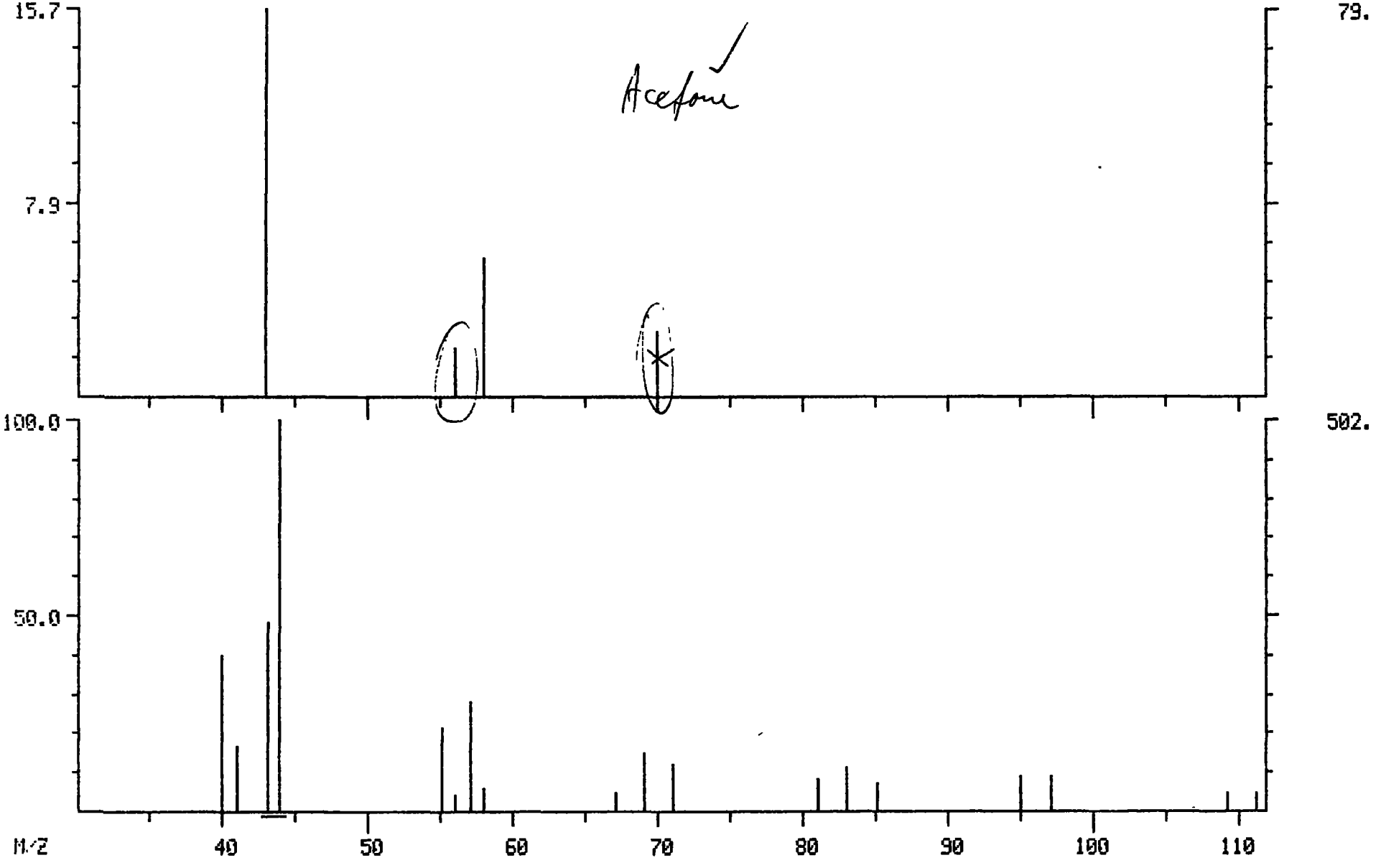
BASE M/Z: 62/ 62
RIC: 209151./ 263167.



00046

DUAL MASS SPECTRUM
04/27/88 19:51:00 + 4:41
SAMPLE: 59436-01 5ML 100%
CONDS.: GC DESC CV
GC TEMP: 13 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59436Z819 #281 BASE M/Z: 43/ 44
CALI: 042788CZ #5 RIC: 129./ 1777.

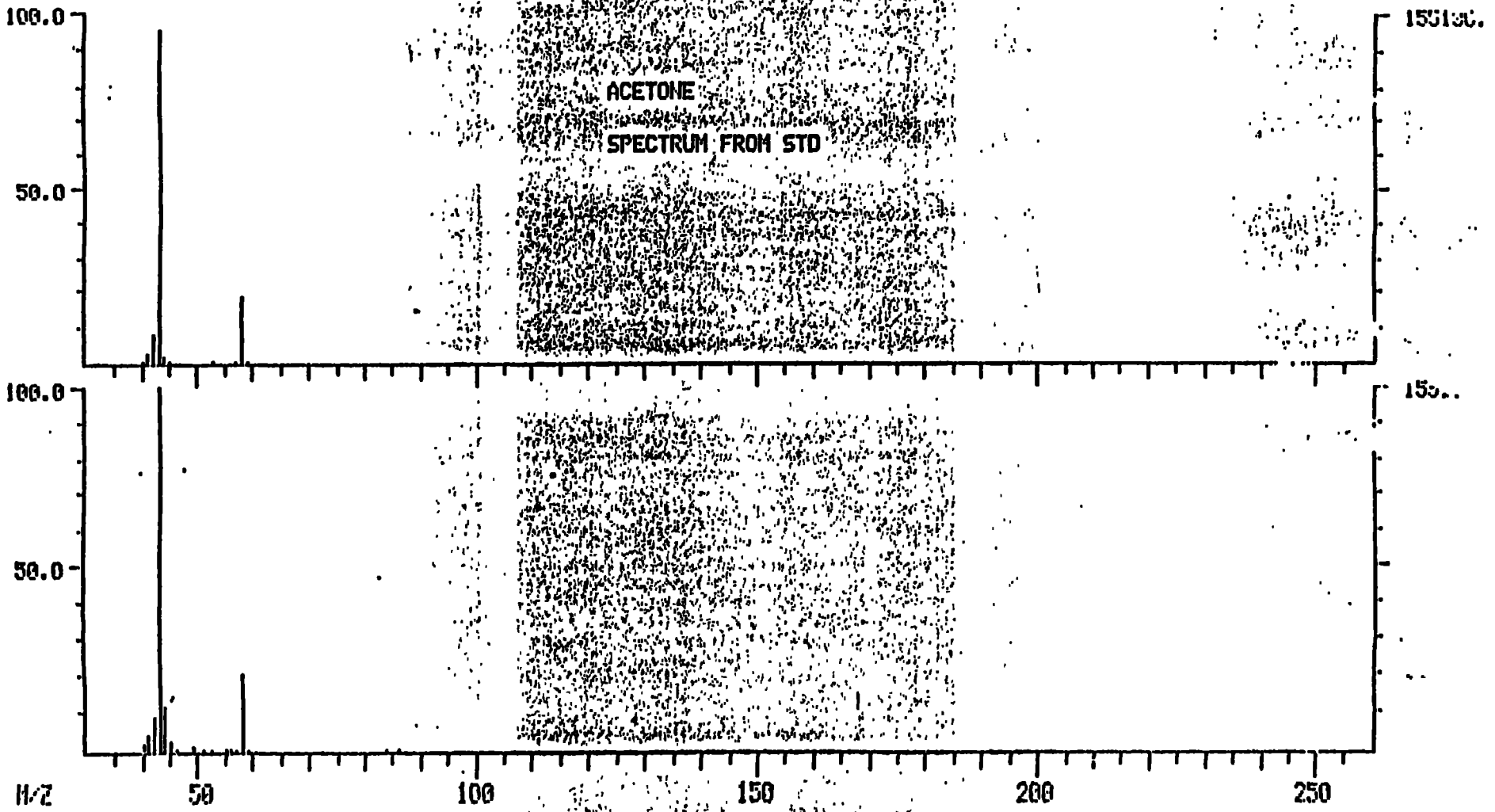


00047

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 2H 0T)

DATA: STDJ198 #150
CALI: STDJ198 #1

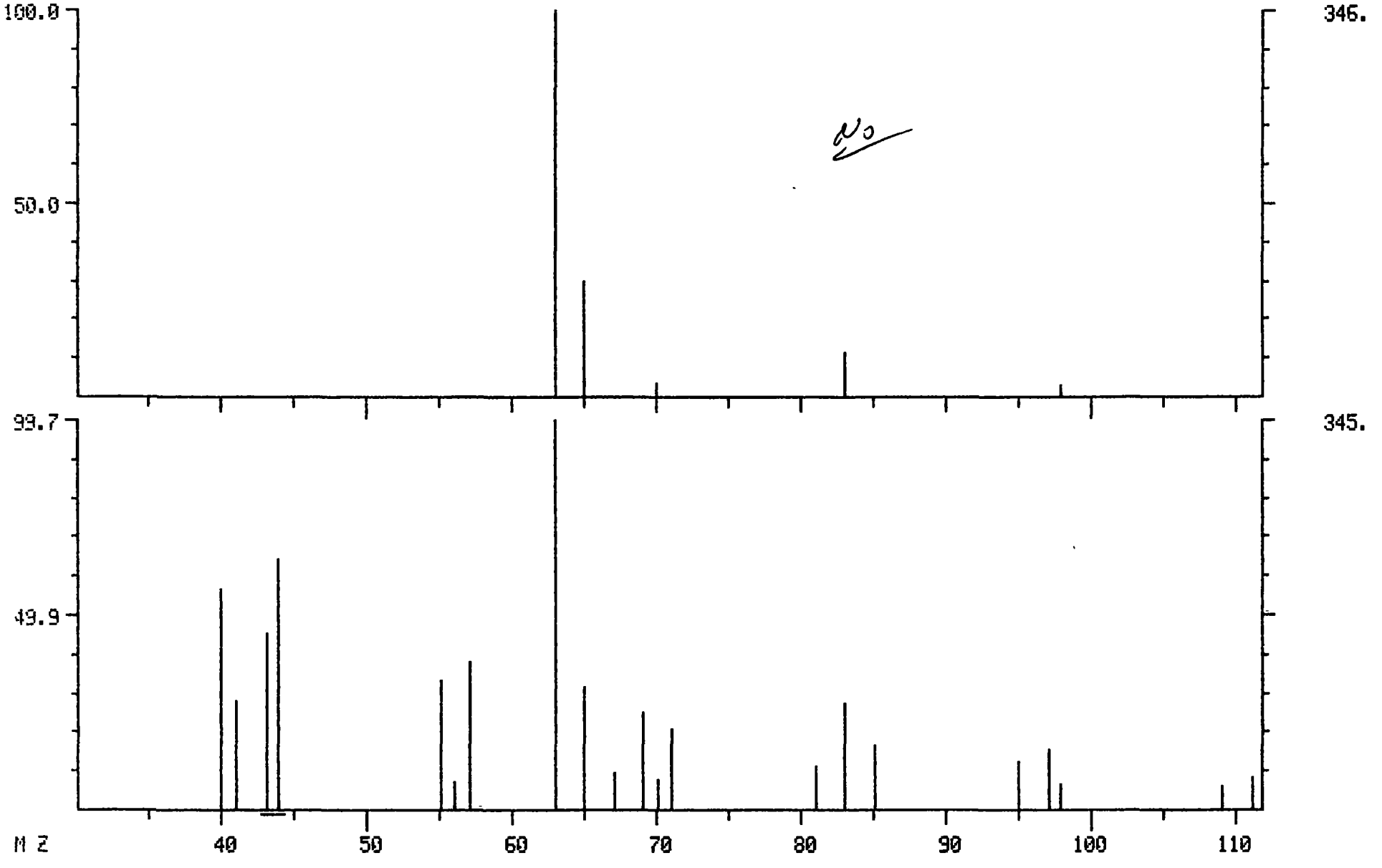
BASE M/Z: 43/ 43
RIC: 199835./ 247807.



00048

DUAL MASS SPECTRUM
04/27/88 19:51:00 + 6:32
SAMPLE: 59436-01 5ML 100%
CONDS.: GC DESC CV
GC TEMP: 24 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S594362819 #392 BASE M/Z: 63/ 63
CALI: 042788CZ #5 RIC: 511./ 1973.



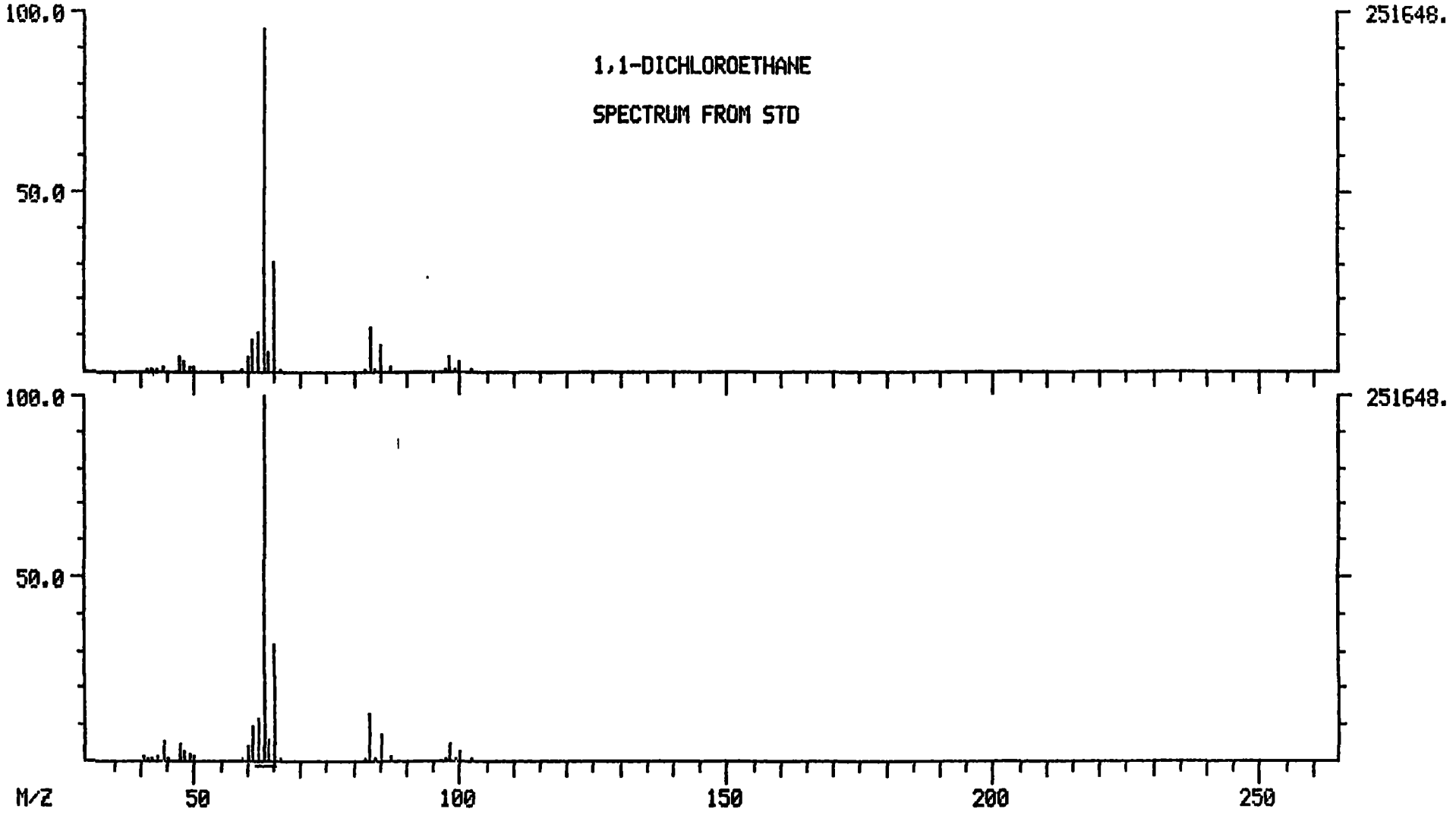
No

00049

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

DATA: STDJ198 #220
CALI: STDJ198 #1

BASE M/Z: 63/ 63
RIC: 506367./ 552953.



6/2/88 15:20:18 SCAN 1 OF 2850 00050
Acquisition started

Acquire Run 0:S59436R983 ACQUIRING
06/02/88 15:19:00 + 0:10 Free sectors: 23145 Scan: 13 of 2850
Sample: 59436-01 REPREP 100%/2ML BNA H2O
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: 31 DegC Injector : 250 DegC
Current GC Desc:ST GC elapsed time : 0:11 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	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	

$RF = \frac{2.0 ml}{.97} = 2.06$

6/2/88 15:55:58
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	499.0	2137.5	23.3	57238. 20.	27.

TC=Target Compound
SC=Spike Compound

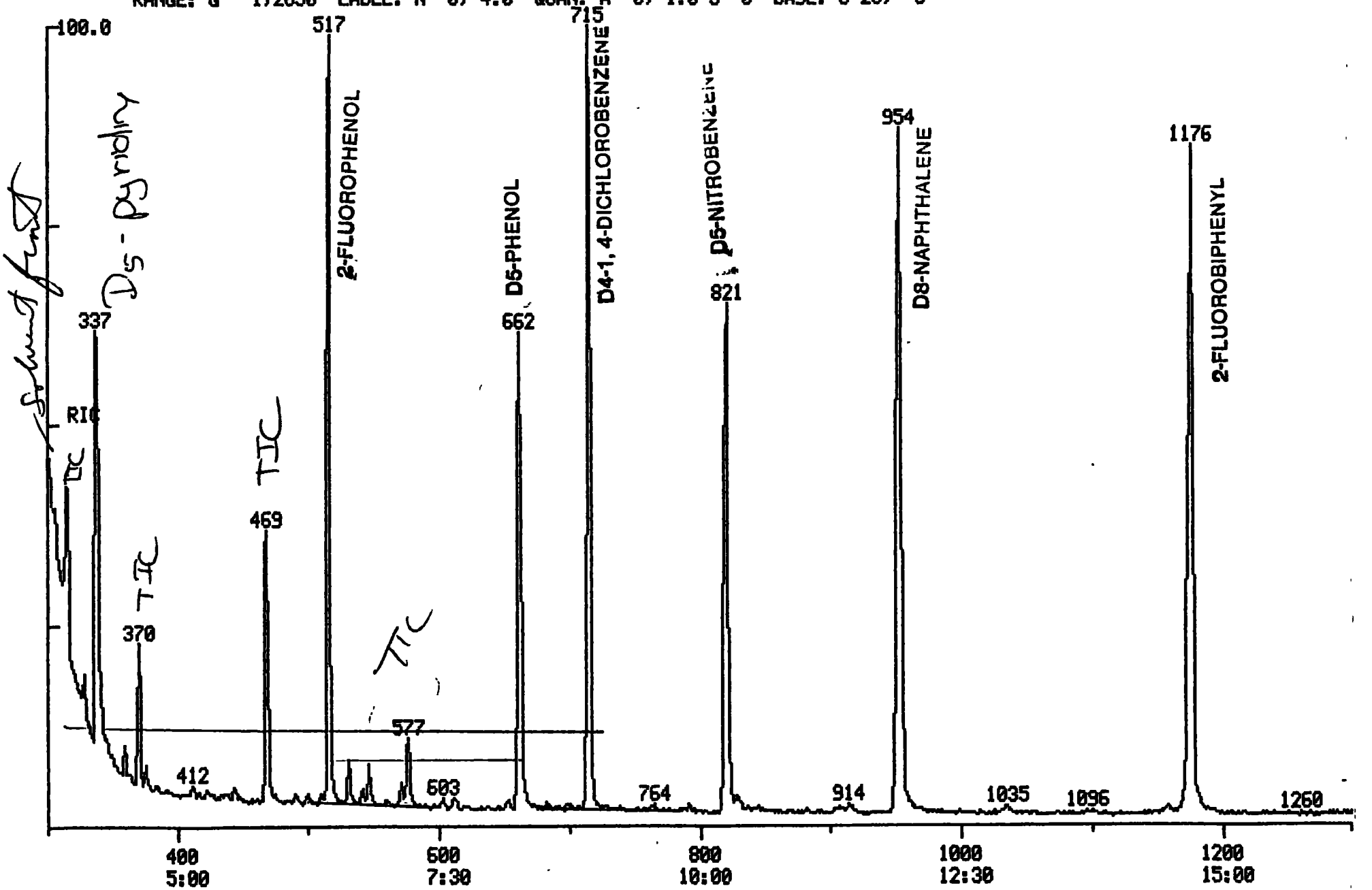
00051

RIC
06/02/88 15:19:00
SAMPLE: 59436-01 REPREP 100%/2ML BNA H2O
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436R983 #4
CALI: 060288CR #5

SCANS 300 TO 1300
OUT OF 300 TO 2850

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

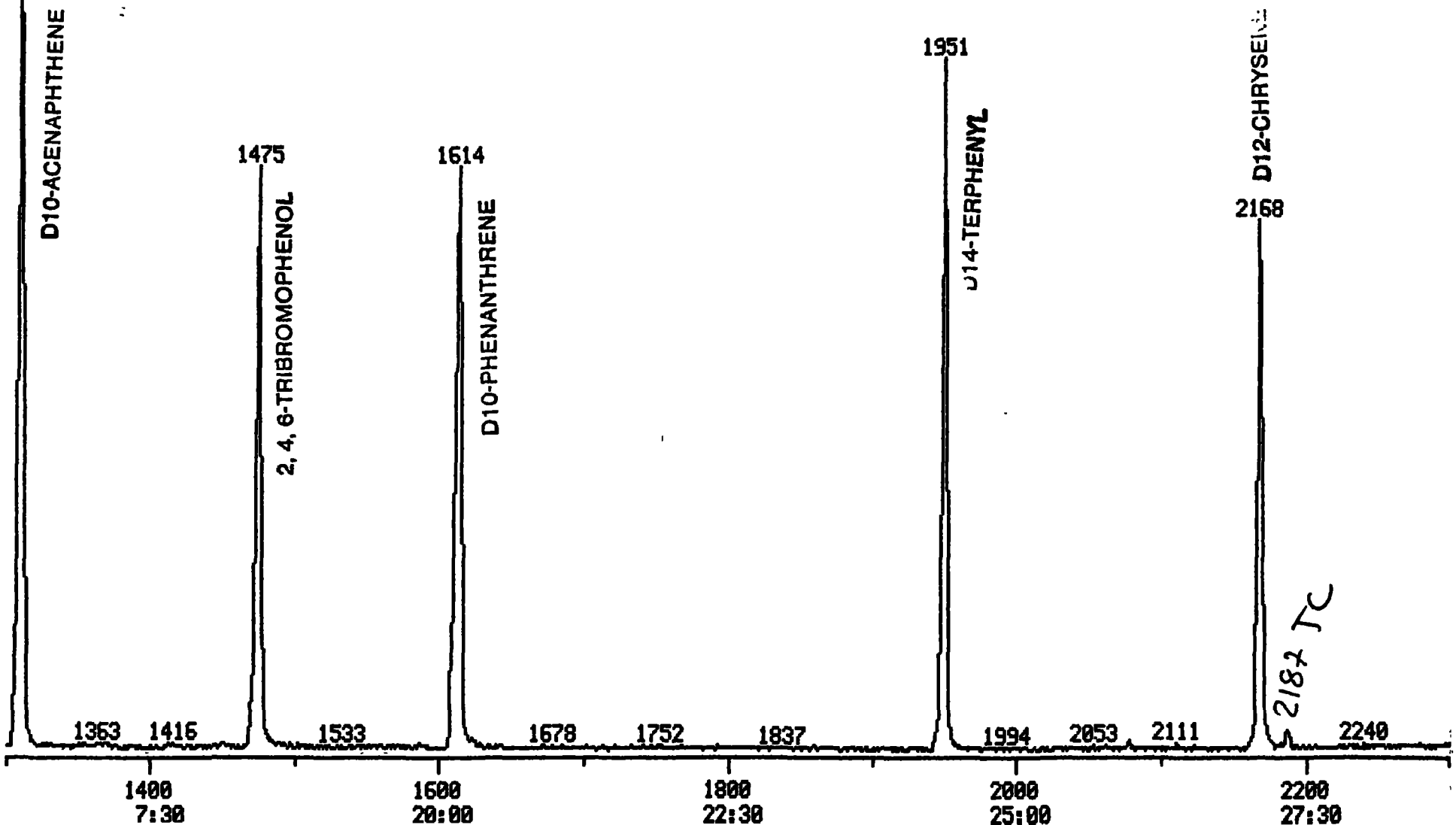


00052

RIC DATA: S59436R983 #4 SCANS 1300 TO 2300
06/02/88 15:19:00 CALI: 060288CR #5 OUT OF 300 TO 2850
SAMPLE: 59436-01 REPREP 100%/2ML BNA H2O
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0

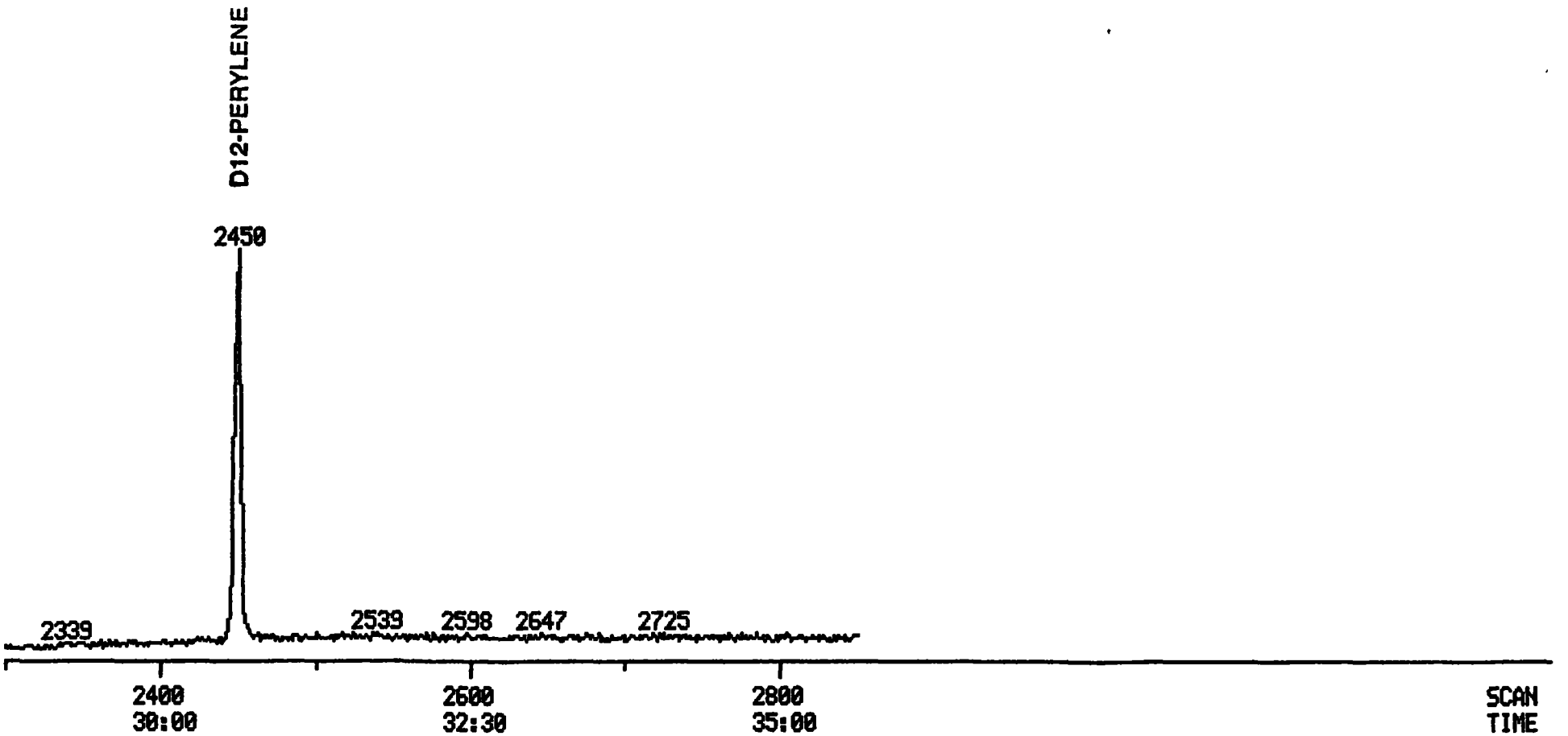
TC- target compound
TIC- tentatively identified compound



00053

RIC DATA: S59436R983 #4 SCANS 2300 TO 2850
06/02/88 15:19:00 CALI: 060288CR #5 OUT OF 300 TO 2850
SAMPLE: 59436-01 REPREP 100%/2ML BNA H2O
CONDS.: ST
RANGE: G 1,2850 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 58368.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/02/88 20:07:43
DATA FILE: S59436R983
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	3	0	7	3	1	236	ISO1/TCO1
3	3	1	0	18	5	1	402	ISO2/TCO2
3	3	1	0	12	3	1	0	ISO3/TCO3
3	3	2	0	18	4	1	0	ISO4/TCO4
3	3	1	0	10	4	1	58	ISO5/TCO5
3	3	1	0	8	3	1	0	ISO6/TCO6
3	3	2	107	14	5	1	68	ISO7/TCO7
1	1	1	0	4	1	1	0	ISO8/TCO8

77 COMPOUNDS PROCESSED, 14 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	.	3	973	.	152	715	.	1
2	S1	2	-518	517	517	.	1	997	.	112	517	.	1
3	S1	3	-666	664	662	-2	1	935	.	99	662	.	1
4	S1	105	-668	666	.	.	.	.	.	94	.	.	.
5	S1	110	-680	678	.	.	.	.	.	93	.	.	.
6	S1	115	-687	685	.	.	.	.	.	128	684	.	1
7	S1	125	-710	708	.	.	.	.	.	146	.	.	.
8	S2	1	-954	953	953	.	1	996	.	136	953	.	1
9	S3	1	-1312	1311	1311	.	1	990	.	164	1311	.	1
10	S1	130	-720	717	.	.	.	.	.	146	.	.	.
11	S1	145	-748	745	.	.	.	.	.	108	.	.	.
12	S1	150	-753	750	.	.	.	.	.	146	.	.	.
13	S1	160	-771	768	.	.	.	.	.	108	.	.	.
14	S1	165	-776	773	.	.	.	.	.	45	.	.	.
15	S1	185	-798	795	.	.	.	.	.	108	.	.	.
16	S1	190	-804	801	.	.	.	.	.	70	.	.	.
17	S1	200	-808	805	.	.	.	.	.	117	.	.	.
18	S2	2	-823	820	821	1	1	997	.	82	821	.	1
19	S2	10	-827	824	.	.	.	.	.	77	.	.	.
20	S2	20	-872	869	.	.	.	.	.	82	870	.	1
21	S2	25	-886	883	.	.	.	.	.	139	.	.	.
22	S2	30	-897	894	.	.	.	.	.	107	.	.	.
23	S2	35	-917	914	.	.	.	.	.	93	.	.	.
24	S2	45	-926	923	917	-6	1	872	.	122	917	.	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	.	.	.
29	S2	95	-996	995	.	.	.	.	.	225	.	.	.
30	S2	130	-1074	1073	.	.	.	.	.	107	.	.	.
31	S2	145	-1097	1096	.	.	.	.	.	142	.	.	.
32	S3	20	-1143	1142	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1160	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1614	1614	.	2	991	.	188	1614	.	1
35	S3	30	-1168	1167	.	.	.	.	.	196	.	.	.
36	S3	3	-1177	1176	1176	.	1	996	.	172	1176	.	1
37	S3	40	-1195	1194	.	.	.	.	.	162	.	.	.
38	S3	45	-1225	1224	.	.	.	.	.	65	.	.	.
39	S3	55	-1272	1271	.	.	.	.	.	163	.	.	.
40	S3	65	-1281	1280	.	.	.	.	.	152	1279	.	1
41	S3	70	-1285	1284	.	.	.	.	.	165	1283	.	1
42	S3	75	-1311	1310	.	.	.	.	.	138	.	.	.

43	S3	80	-1320	1319	.	.	.	.	.		.	.	.
44	S3	85	-1331	1330	.	.	.	.	.	184	.	.	.
45	S3	95	-1348	1347	.	.	.	.	.	109	.	.	.
46	S3	90	-1352	1351	.	.	.	.	.	168	1350	.	1
47	S3	105	-1363	1362	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1417	.	.	.	.	.	149	1415	.	1
49	S3	135	-1423	1422	.	.	.	.	.	166	.	.	.
50	S3	140	-1425	1424	.	.	.	.	.	204	.	.	.
51	S3	150	-1438	1437	.	.	.	.	.	138	.	.	.
52	S4	10	-1447	1446	.	.	.	.	.	198	.	.	.
53	S4	15	-1452	1451	.	.	.	.	.	169	1450	.	1
54	S3	2	-1477	1476	1475	-1	1	912	.	330	1475	.	1
55	S4	30	-1525	1524	.	.	.	.	.	248	.	.	.
56	S4	40	-1554	1553	.	.	.	.	.	284	.	.	.
57	S5	1	-2169	2168	2168	.	1	960	.	240	2168	.	1
58	S4	50	-1591	1590	.	.	.	.	.	266	.	.	.
59	S4	65	-1621	1620	.	.	.	.	.	178	1618	.	1
60	S4	70	-1630	1629	.	.	.	.	.	178	.	.	.
61	S4	85	-1753	1752	.	.	.	.	.	149	1751	.	1
62	S4	110	-1868	1867	.	.	.	.	.	202	1868	.	1
63	S6	1	-2449	2449	2450	1	2	993	.	264	2450	.	1
64	S5	15	-1914	1913	.	.	.	.	.	202	1914	.	1
65	S5	2	-1951	1951	1951	.	1	992	.	244	1951	.	1
66	S5	40	-2062	2062	.	.	.	.	.	149	2062	.	1
67	S5	55	-2165	2165	.	.	.	.	.	252	.	.	.
68	S5	50	-2166	2166	.	.	.	.	.	228	2168	.	1
69	S5	60	-2176	2176	.	.	.	.	.	228	.	.	.
70	S5	65	-2187	2187	2187	.	1	989	.	149	2187	.	1
71	S6	10	-2310	2310	.	.	.	.	.	149	2309	.	1
72	S6	15	-2380	2380	.	.	.	.	.	252	.	.	.
73	S6	25	-2386	2386	.	.	.	.	.	252	.	.	.
74	S6	35	-2440	2440	.	.	.	.	.	252	.	.	.
75	S6	55	-2686	2687	.	.	.	.	.	276	.	.	.
76	S6	60	-2689	2690	.	.	.	.	.	278	.	.	.
77	S6	65	-2753	2754	.	.	.	.	.	276	.	.	.

55000

Quantitation Report File: S59436R983

Data: S59436R983.TI
06/02/88 15:19:00
Sample: 59436-01 REPREP 100%/2ML BNA H2O
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	25325.	40.000 UG/ML	7.67
2	112	517	6:28	1	0.723	A BB	39310.	42.322 UG/ML	8.12
3	99	662	8:16	1	0.926	A BB	37143.	28.792 UG/ML	5.52
4	NOT FOUND								
5	NOT FOUND								
6	128	684	8:33	1	0.957	A BB	113.	0.127 UG/ML	0.02
7	NOT FOUND								
8	136	953	11:55	8	1.000	A BB	95681.	40.000 UG/ML	7.67
9	164	1311	16:23	9	1.000	A BV	44785.	40.000 UG/ML	7.67
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	82	821	10:16	8	0.861	A BB	45761.	42.672 UG/ML	8.18
19	NOT FOUND								
20	82	870	10:52	8	0.913	A VB	180.	0.090 UG/ML	0.02
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	122	917	11:28	8	0.962	A BB	83.	0.200 UG/ML	0.04
25	NOT FOUND								
26	NOT FOUND								
27	128	958	11:58	8	1.005	A BB	130.	0.051 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	188	1614	20:10	34	1.000	A BB	63839.	40.000 UG/ML	7.67
35	NOT FOUND								
36	172	1176	14:42	9	0.897	A BB	64562.	40.812 UG/ML	7.83
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	152	1279	15:59	9	0.976	A BB	80.	0.035 UG/ML	0.01
41	165	1283	16:02	9	0.979	A BB	47.	0.120 UG/ML	0.02
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	168	1350	16:52	9	1.030	A BB	108.	0.054 UG/ML	0.01
47	NOT FOUND								
48	149	1415	17:41	9	1.079	A BB	126.	0.078 UG/ML	0.01
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	42.32	100.00	0.621	1.467	0.42
3	8:19	0.99	0.929	1.00	28.79	100.00	0.587	2.038	0.29
4	8:21		0.932						
5	8:30		0.948						
6	8:35	1.00	0.958	1.00	0.13	50.00	0.004	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		1.082						
15	9:58		1.113						
16	10:03		1.121						
17	10:06		1.127						
18	10:17	1.00	0.862	1.00	42.67	50.00	0.383	0.448	0.85
19	10:20		0.866						
20	10:54	1.00	0.913	1.00	0.09	50.00	0.002	0.840	0.00
21	11:04		0.928						
22	11:13		0.939						
23	11:28		0.960						
24	11:34	0.99	0.970	0.99	0.20	50.00	0.001	0.174	0.00
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		1.022						
29	12:27		1.043						
30	13:25		1.125						
31	13:43		1.149						
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	40.81	50.00	1.153	1.413	0.82
37	14:56		0.910						
38	15:19		0.933						
39	15:54		0.969						
40	16:01	1.00	0.976	1.00	0.03	50.00	0.001	2.061	0.00
41	16:04	1.00	0.979	1.00	0.12	50.00	0.001	0.349	0.00
42	16:23		0.998						
43	16:30		1.005						
44	16:38		1.014						
45	16:51		1.027						
46	16:54	1.00	1.030	1.00	0.05	50.00	0.002	1.779	0.00
47	17:02		1.038						
48	17:43	1.00	1.080	1.00	0.08	50.00	0.002	1.439	0.00
49	17:47		1.084						
50	17:49		1.085						

Quantitation Report File: S59436R983

00059

Data: S59436R983.TI
06/02/88 15:19:00
Sample: 59436-01 REPREP 100%/2ML BNA H2O
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	1450	18:07	34	0.898	A BB	482.	0.488 UG/ML	0.09
54	330	1475	18:26	9	1.125	A BB	12655.	74.786 UG/ML	14.34
55	NOT FOUND								
56	NOT FOUND								
57	240	2168	27:06	57	1.000	A BB	40116.	40.000 UG/ML	7.67
58	NOT FOUND								
59	178	1618	20:13	34	1.002	A BB	108.	0.060 UG/ML	0.01
60	NOT FOUND								
61	149	1751	21:53	34	1.085	A BB	412.	0.179 UG/ML	0.03
62	202	1868	23:21	34	1.157	A BB	42.	0.027 UG/ML	0.01
63	264	2450	30:37	63	1.000	A BB	32632.	40.000 UG/ML	7.67
64	202	1914	23:55	57	0.883	A BB	88.	0.059 UG/ML	0.01
65	244	1951	24:23	57	0.900	A BB	54384.	49.249 UG/ML	9.44
66	149	2062	25:46	57	0.951	A BB	75.	0.092 UG/ML	0.02

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	141.	0.111 UG/ML	0.02
69	NOT FOUND								
70	149	2187	27:20	57	1.009	A BB	1170.	1.024 UG/ML	0.20
71	149	2309	28:52	63	0.942	A BB	230.	0.117 UG/ML	0.02
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	0.49	50.00	0.006	0.618	0.01
54	18:28	1.00	1.125	1.00	74.79	100.00	0.113	0.151	0.75
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		0.985						
59	20:16	1.00	1.003	1.00	0.06	50.00	0.001	1.125	0.00
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	0.18	50.00	0.005	1.440	0.00
62	23:21	1.00	1.156	1.00	0.03	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	0.06	50.00	0.002	1.489	0.00
65	24:23	1.00	0.899	1.00	49.25	50.00	1.085	1.101	0.98
66	25:46	1.00	0.950	1.00	0.09	50.00	0.001	0.811	0.00
67	27:04		0.998						
68	27:04	1.00	0.998	1.00	0.11	50.00	0.003	1.271	0.00
69	27:12		1.003						
70	27:20	1.00	1.008	1.00	1.02	50.00	0.023	1.140	0.02
71	28:52	1.00	0.943	1.00	0.12	50.00	0.006	2.413	0.00
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, 14 FOUND
FINISHED AT: 6/02/88 20:17:46

RMAL QUANTITATION SUMMARY FILE: S59436R983
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	25325.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	953	2	95681.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	44785.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1614	4	63839.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2168	5	40116.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2450	6	32632.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	821	2	45761.	0.383	42.672
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1176	3	64562.	1.153	40.812
9	S5# 2	CS30 TERPHENYL-D14	244	1951	5	54384.	1.085	49.249
10	S1# 3	CS45 PHENOL-D5	99	662	1	37143.	0.587	28.792
11	S1# 2	CS50 2-FLUOROPHENOL	112	517	1	39310.	0.621	42.322
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1475	3	12655.	0.113	74.786
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		

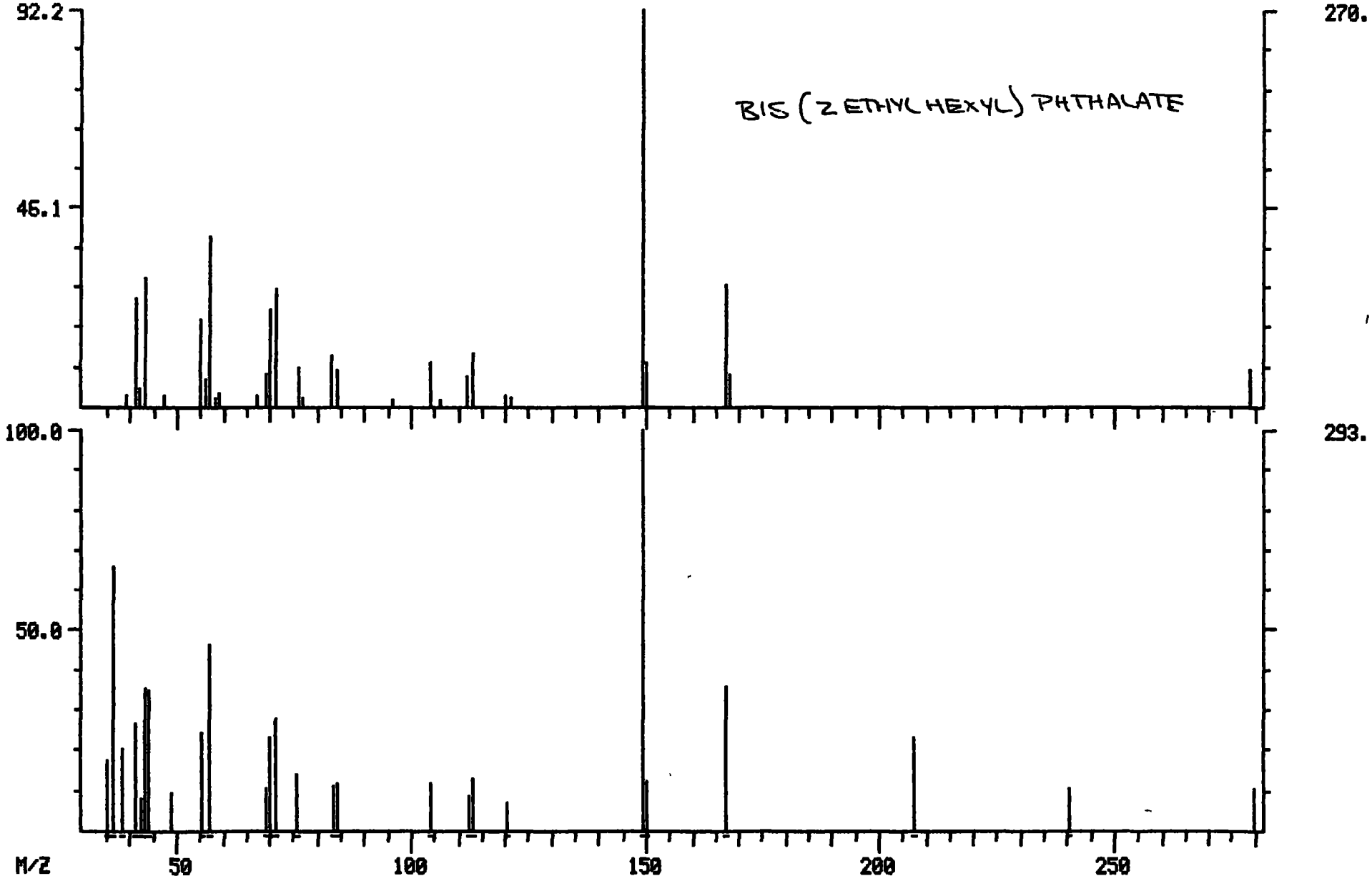
00062

52	S3#130	C580	DIETHYLPHTHALATE	149		3	NOT F O U D				
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	1170.	0.023	1.024		
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				

00063

DUAL MASS SPECTRUM
06/02/88 15:19:00 + 27:20
SAMPLE: 59436-01 REPREP 100%/2ML BNA H2O
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R983 #2187 BASE M/Z: 149/ 149
CALI: 060288CR #5 RIC: 1209./ 1813.

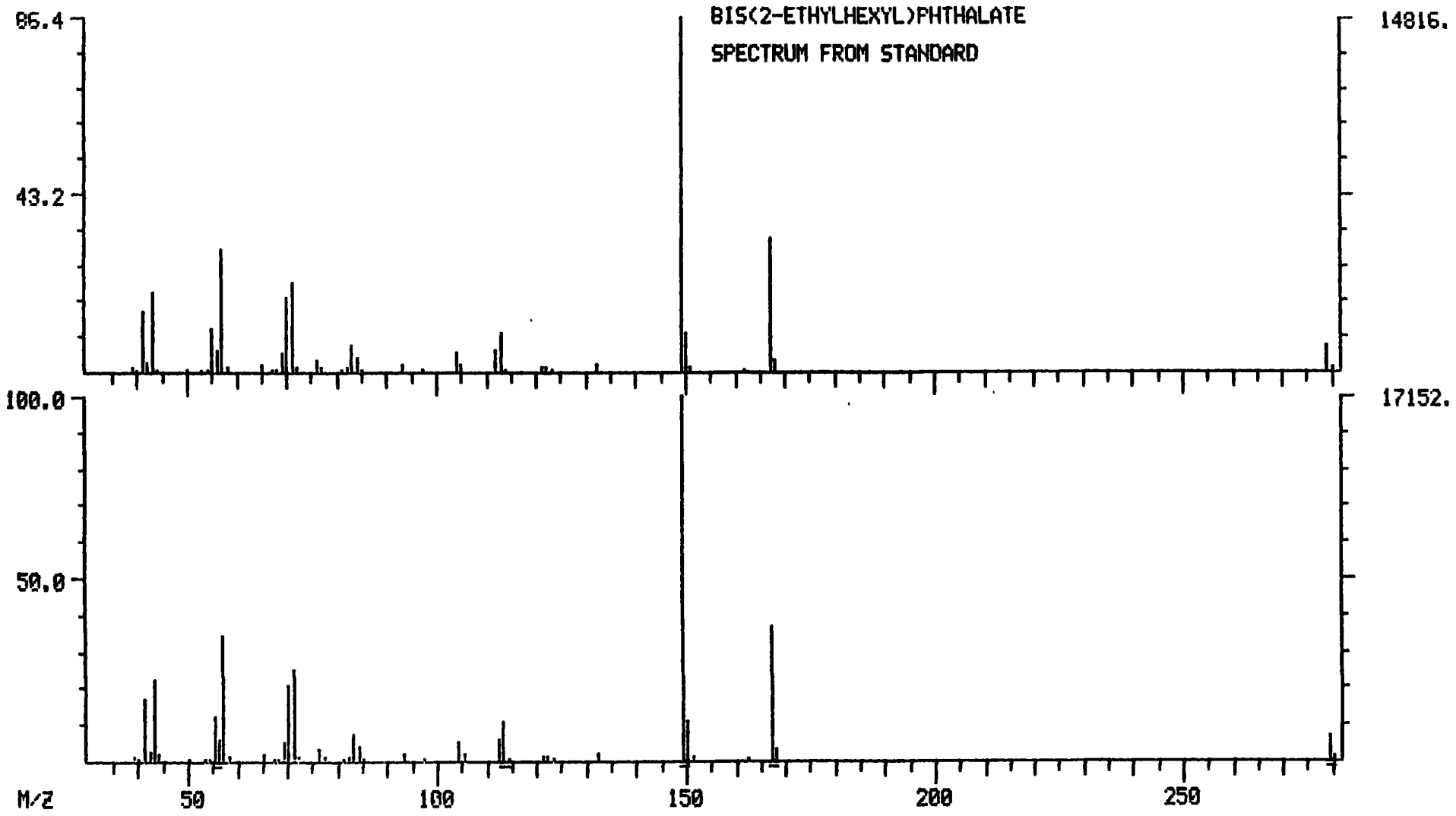


00064

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/ 143
RIC: 55167./ 63807.



DATA REDUCED BY: AR DATE: 6-7-88 DATA FILE: S59436R983
DATA REVIEWED BY: ____ DATE: ____

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-01 REPREP 100%/2ML BNA H RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: MK

#	SCAN	G	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	316	B	2	8.6 ✓	108-87-2	CYCLOHEXANE, METHYL-
2	370	B	2	5.0	108-88-3	BENZENE, METHYL-(VOA)
3	469	CB	1	14.	00-00-0	OXYGENATED HYDROCARBON

editing complete

DATA FILE: S59436R983

ENSECO TIC REPORT (PAGE 2) 00066

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

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	982	868	1	3:56	0.446	35791.	11135.	8.561	NB	1138.
2	994	930	1	4:37	0.522	21037.	10161.	5.032	NB	850.
3	812	777	1	5:51	0.660	56697.	19610.	13.561	BC	2.

TIC SELECTION REPORT

DATA FILE: S59436R983

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	89455.	21.395
517	147059.	35.172
662	103715.	24.806
715	167241.	39.999
821	138987.	33.242
954	213375.	39.999
1176	195525.	36.653
1311	221819.	48.830
1614	181706.	39.999
1951	158083.	34.799
2168	125792.	45.924
2450	109563.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 4

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	167241.	154902.	
2	S2	1	213375.	140923.	
3	S3	1	221819.	112244.	*
4	S4	1	181706.	122744.	
5	S5	1	125792.	77175.	*
6	S6	1	109563.	87368.	

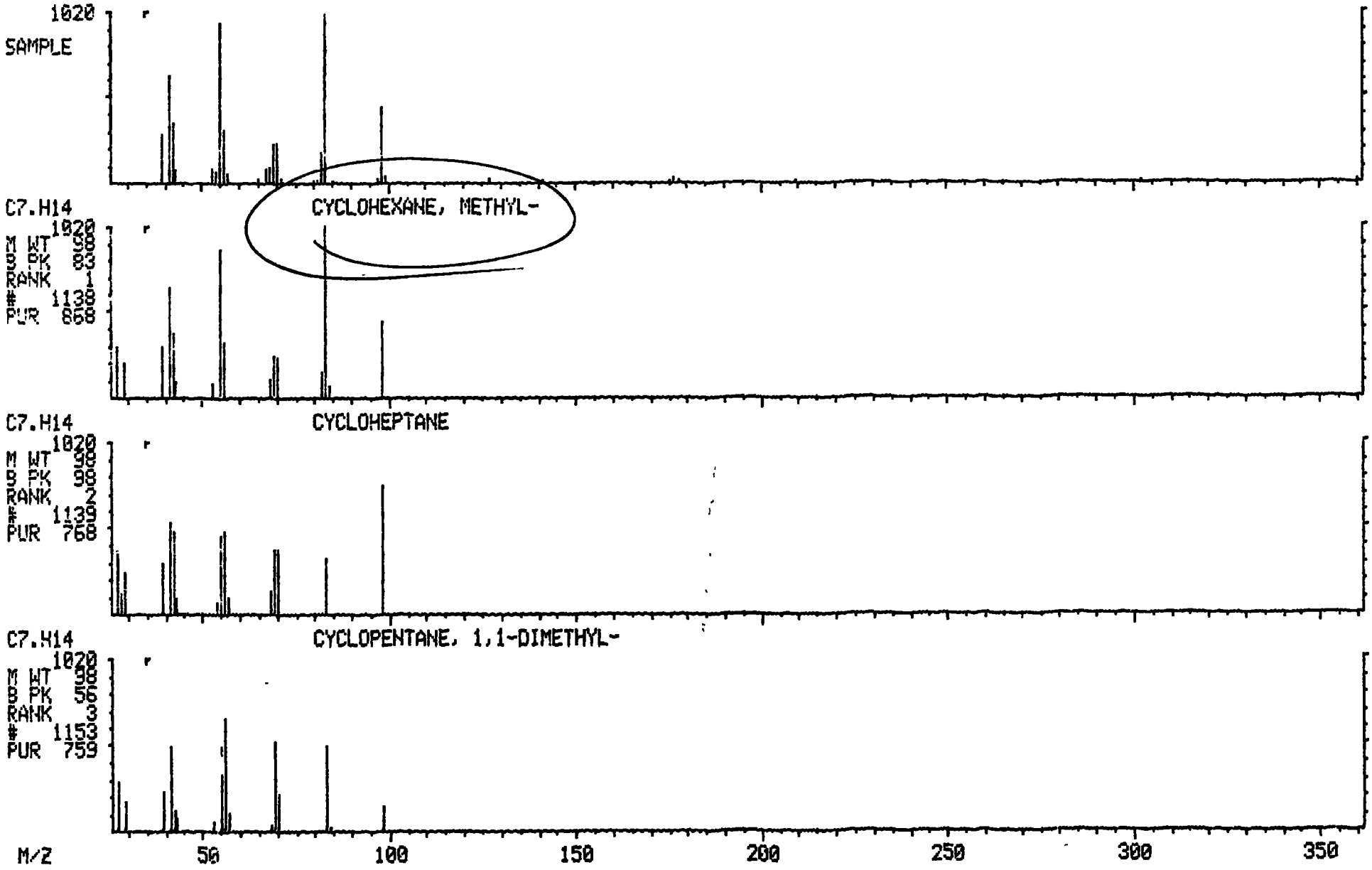
SIZE = AREA

00068

LIBRARY SEARCH
06/02/88 15:19:00 + 3:57
SAMPLE: 59436-01 REPREP 100%/2ML BNA H2O
CONDS.: ST
ENHANCED (S 158 2N 0T)

DATA: 559436R983 # 316
CALI: 050288CR # 5

BASE M/Z: 83
RIC: 8687.

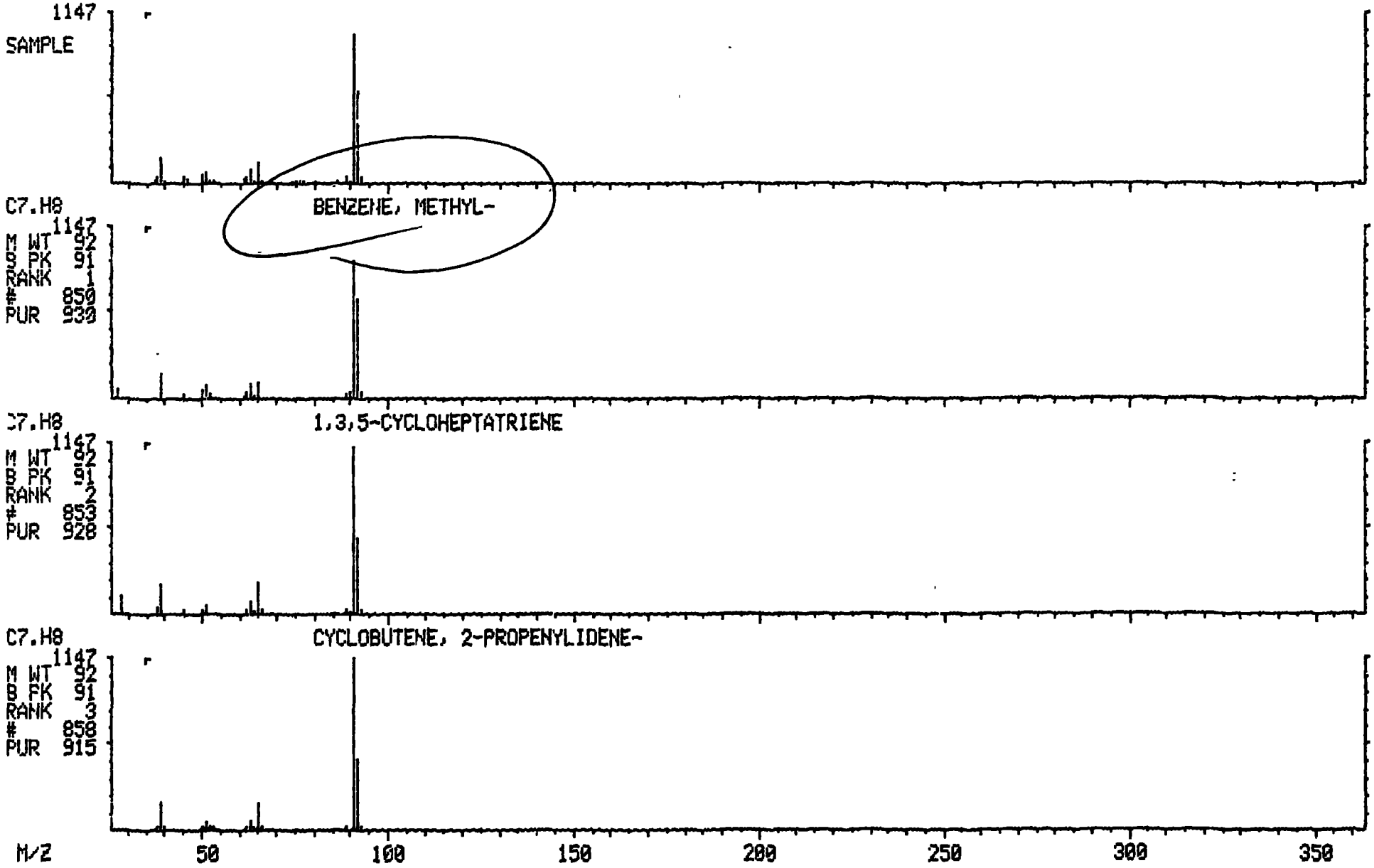


00063

LIBRARY SEARCH
06/02/88 15:19:00 + 4:37
SAMPLE: 59436-01 REPREP 100%/2ML BNA H2O
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R983 # 370
CALI: 060288CR # 5

BASE M/Z: 91
RIC: 7935.

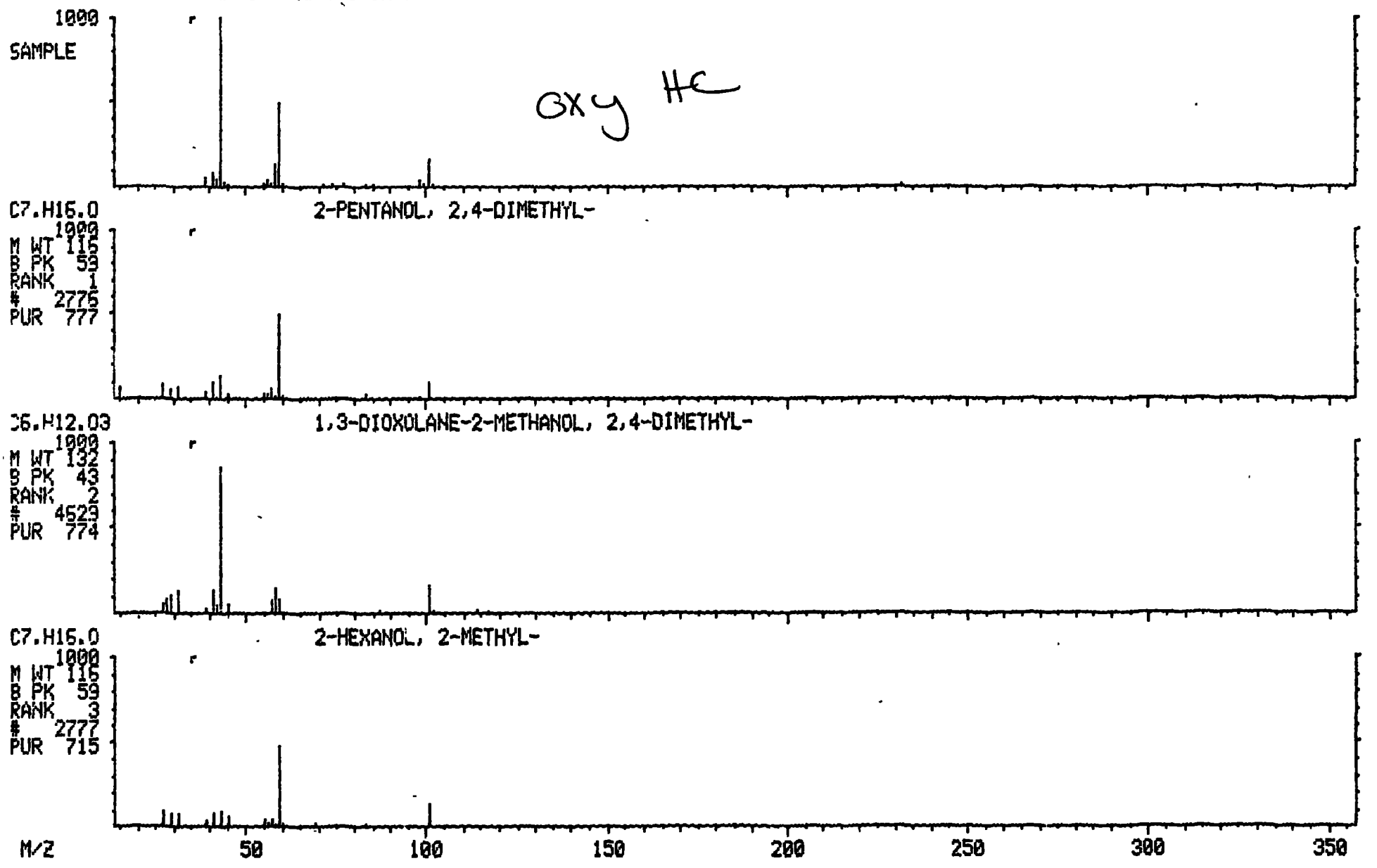


00070

LIBRARY SEARCH
06/02/88 15:19:00 + 5:52
SAMPLE: 59436-01 REPREP 100%/2ML BNA H2O
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R983 # 469
CALI: 060288CR # 5

BASE M/Z: 43
RIC: 18175.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 18:35:27
DATA FILE: S59436R983
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	3	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	-714	715	715	.	3	973	.	152	715	.	1
2	S1	4	-332	337	337	.	1	979	.	84	337	.	1
3	S1	20	-334	339	.	.	.	.	.	79	.	.	.
4	S1	30	-429	433	.	.	.	.	.	93	.	.	.
5	S1	62	-494	497	.	.	.	.	.	93	.	.	.
6	S1	64	-525	528	.	.	.	.	.	107	.	.	.
7	S1	73	-556	559	.	.	.	.	.	106	.	.	.
8	S1	83	-593	595	.	.	.	.	.	107	.	.	.
9	S1	87	-613	615	.	.	.	.	.	107	.	.	.
10	S1	88	-634	636	.	.	.	.	.	107	.	.	.
11	S1	89	-642	644	.	.	.	.	.	107	.	.	.
12	S1	92	-661	663	.	.	.	.	.	107	.	.	.
13	S1	122	-699	700	.	.	.	.	.	107	.	.	.
14	S2	1	-953	954	953	-1	1	996	.	136	953	.	1
15	S3	1	-1310	1311	1311	.	1	990	.	164	1311	.	1
16	S1	137	-730	731	.	.	.	.	.	106	.	.	.
17	S1	142	-743	744	.	.	.	.	.	106	.	.	.
18	S1	187	-797	798	.	.	.	.	.	108	.	.	.
19	S1	202	-821	822	.	.	.	.	.	106	.	.	.
20	S1	203	-826	827	.	.	.	.	.	106	.	.	.
21	S1	204	-846	847	.	.	.	.	.	122	.	.	.
22	S2	27	-897	898	.	.	.	.	.	107	.	.	.
23	S2	37	-921	922	.	.	.	.	.	107	.	.	.
24	S2	47	-935	936	.	.	.	.	.	107	.	.	.
25	S2	57	-954	955	.	.	.	.	.	107	954	.	1
26	S2	150	-1117	1118	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59436R983

00072

Data: S59436R983.TI
06/02/88 15:19.00
Sample: 59436-01 REPREP 100%/2ML BNA H20
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 BB	25325.	40.000 UG/ML	27.18
2	84	337	4:13	1	0.471	A BB	32739.	26.771 UG/ML	18.19
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	953	11:55	14	1.000	A BB	95681.	40.000 UG/ML	27.18
15	164	1311	16:23	15	1.000	A BV	44785.	40.000 UG/ML	27.18
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	954	11:55	1	1.334	A BB	483.	0.422 UG/ML	0.29
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:56	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	26.77	50.00	1.034	1.932	0.54
3	4:10		0.467						
4	5:22		0.600						
5	6:10		0.691						
6	6:34		0.734						
7	6:57		0.778						
8	7:25		0.829						
9	7:40		0.857						
10	7:55		0.887						
11	8:01		0.898						
12	8:16		0.924						
13	8:44		0.978						
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		1.021						
17	9:17		1.039						
18	9:58		1.115						
19	10:16		1.148						
20	10:19		1.155						
21	10:34		1.183						
22	11:13		0.940						
23	11:31		0.965						
24	11:41		0.980						
25	11:55	1.00	1.334	1.00	0.42	50.00	0.015	1.806	0.01
26	13:58		1.171						

00074 RF 2.06
SV 2.00

TCA FINISHED, 4 FOUND
FINISHED AT: 6/03/88 18:38:09

RMAL QUANTITATION SUMMARY FILE: S59436R983
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	25325.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	953	2	95681.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	44785.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	337	1	32739.	1.034	26.771
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: S59436X818. STARTED : 6/03/88 11:19:10 QF 00075

$\frac{ng}{ml} \times \frac{0.5 mL}{3.8 L} = 0.132 \, ng/L$

6/2/88 18:30:42 SCAN 1 OF 3900
Acquisition started

Acquire Run 2: S59436X818 ACQUIRING
06/02/88 18:30:00 + 0:03 Free sectors: 24227 Scan: 7 of 3900
Sample: 59436-01 WATER/PAH 100%/0.5 ML
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: 7 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	

6/2/88 18:59:07 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

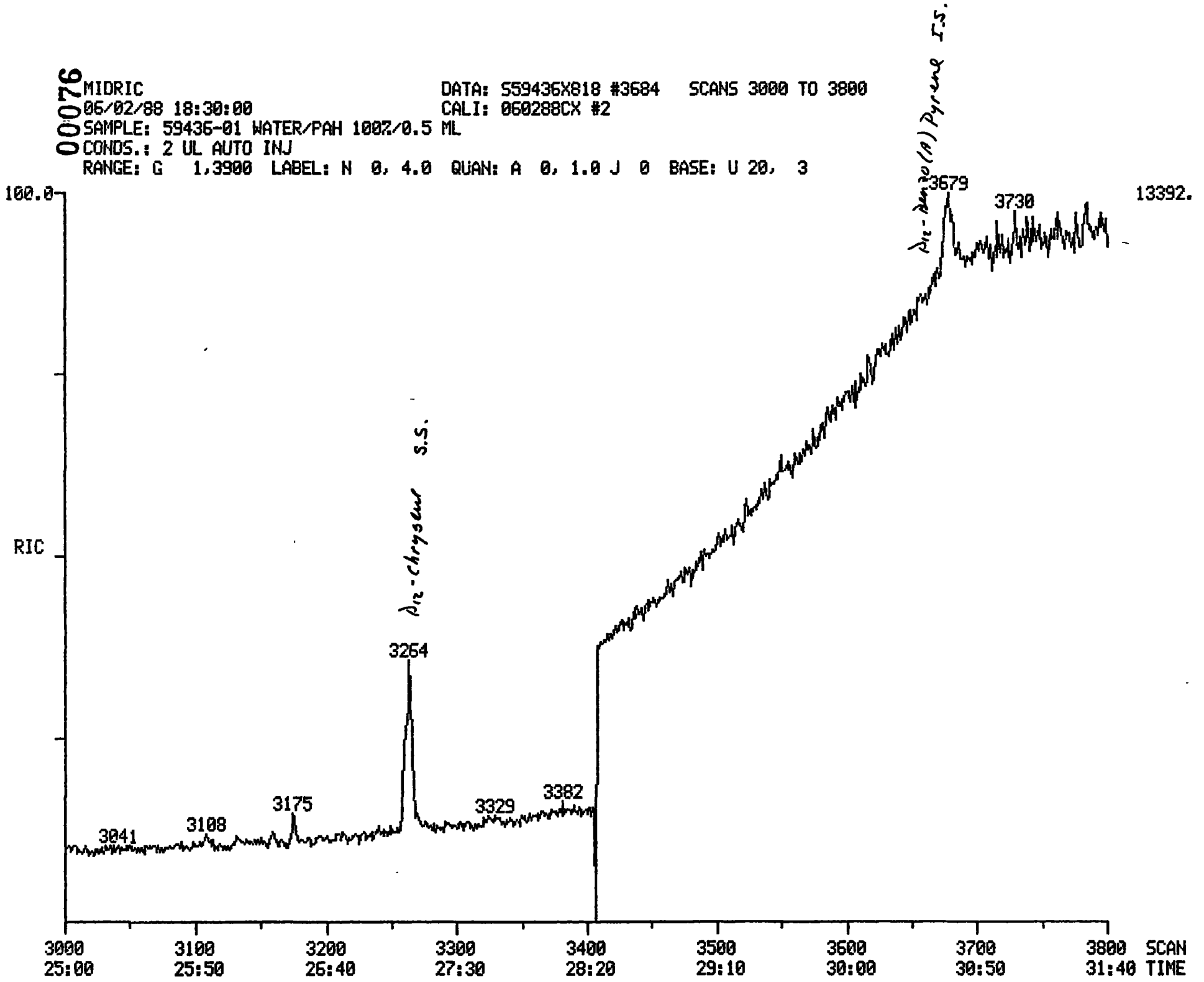
6/2/88 19:03:16
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00076

MIDRIC
06/02/88 18:30:00
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
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: S59436X818 #3684 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59436X818

Data: S59436X818.TI
06/02/88 18:30:00
Sample: 59436-01 WATER/PAH 100%/0.5 ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59436

00077

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	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

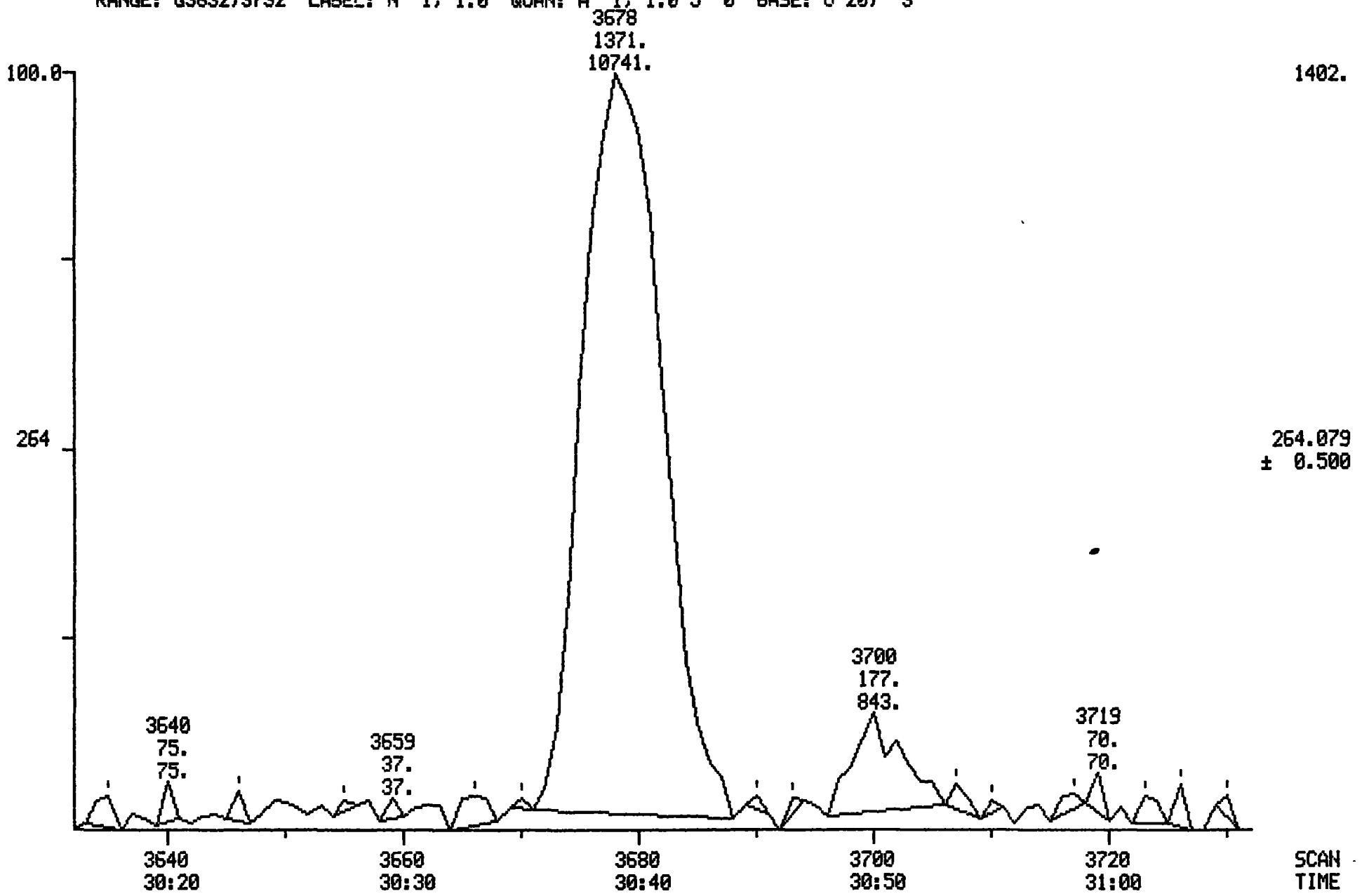
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3678	30:39	1	1.000	A BB	10741.	80.000	NG/ML	27.73
2	240	3264	27:12	1	0.887	A BB	16132.	78.298	NG/ML	27.14
3	228	3259	27:09	1	0.886	A BB	469.	2.157	NG/ML	0.75
4	226	3258	27:09	1	0.886	A VB	874.	17.372	NG/ML	6.02
5	228	3270	27:15	1	0.889	A BB	824.	3.619	NG/ML	1.25
6	226	3270	27:15	1	0.889	A BV	291.	4.865	NG/ML	1.69
7	252	3594	29:57	1	0.977	A BB	440.	1.951	NG/ML	0.68
8	250	3586	29:53	1	0.975	A BV	665.	12.226	NG/ML	4.24
9	252	3594	29:57	1	0.977	A BB	440.	1.951	NG/ML	0.68
10	252	3600	30:00	1	0.979	A BB	448.	1.986	NG/ML	0.69
11	250	3590	29:55	1	0.976	A VB	459.	8.439	NG/ML	2.92
12	250	3594	29:57	1	0.977	A BB	492.	9.045	NG/ML	3.14
13	252	3617	30:08	1	0.983	A BB	200.	0.996	NG/ML	0.35
14	250	3617	30:08	1	0.983	A BB	728.	16.406	NG/ML	5.69
15	252	3687	30:43	1	1.002	A VB	1544.	8.273	NG/ML	2.87
16	250	3686	30:43	1	1.002	A VV	2608.	40.935	NG/ML	14.19

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	78.30	80.00	1.502	1.535	0.98
3	27:08	1.00	0.885	1.00	2.16	80.00	0.044	1.619	0.03
4	27:08	1.00	0.885	1.00	17.37	80.00	0.081	0.375	0.22
5	27:15	1.00	0.888	1.00	3.62	80.00	0.077	1.696	0.05
6	27:15	1.00	0.888	1.00	4.87	80.00	0.027	0.446	0.06
7	29:56	1.00	0.976	1.00	1.95	80.00	0.041	1.680	0.02

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	12.23	80.00	0.062	0.405	0.15
9	29:59	1.00	0.977	1.00	1.95	80.00	0.041	1.680	0.02
10	29:59	1.00	0.977	1.00	1.99	80.00	0.042	1.680	0.02
11	29:59	1.00	0.977	1.00	8.44	80.00	0.043	0.405	0.11
12	29:59	1.00	0.977	1.00	9.05	80.00	0.046	0.405	0.11
13	29:41	1.02	0.982	1.00	1.00	80.00	0.019	1.496	0.01
14	29:41	1.02	0.982	1.00	16.41	80.00	0.068	0.330	0.21
15	30:44	1.00	1.002	1.00	8.27	80.00	0.144	1.390	0.10
16	30:44	1.00	1.002	1.00	40.93	80.00	0.243	0.474	0.51

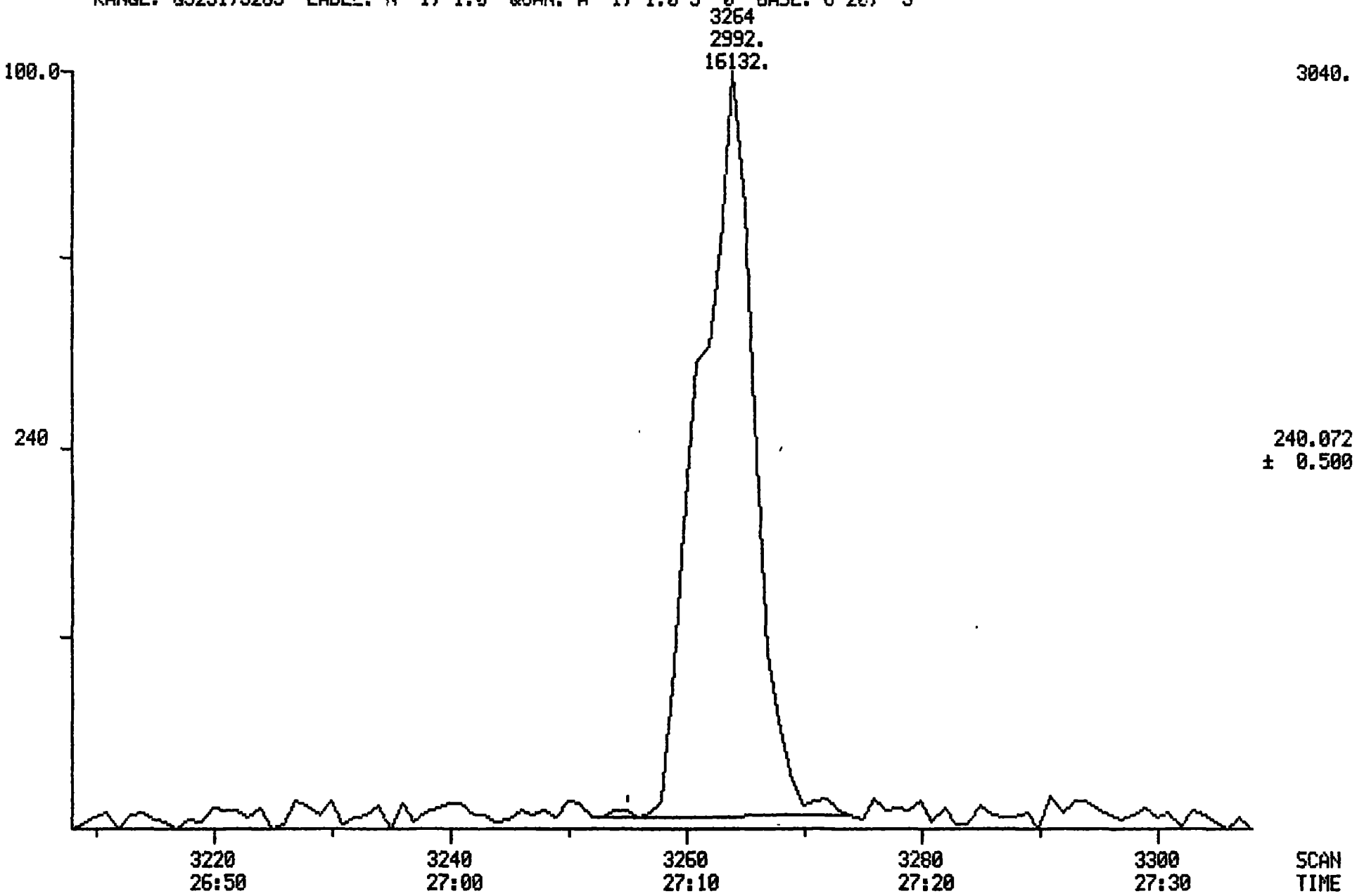
00079

MIDMASS CHROMATOGRAM DATA: 559436X818 #3682 SCANS 3632 TO 3732
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
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



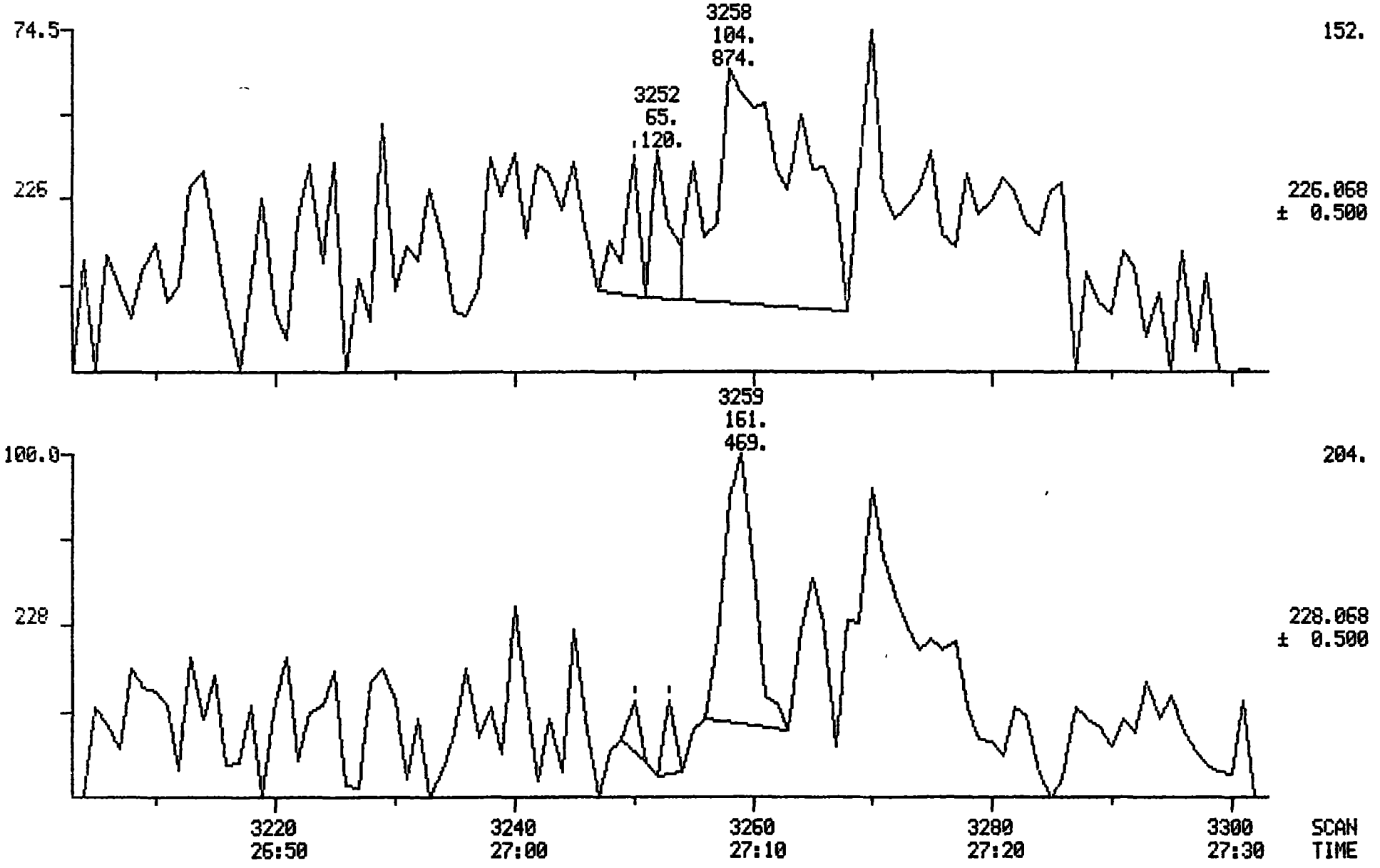
00080

MIDMASS CHROMATOGRAM DATA: S59436X818 #3258 SCANS 3208 TO 3308
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3251,3265 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



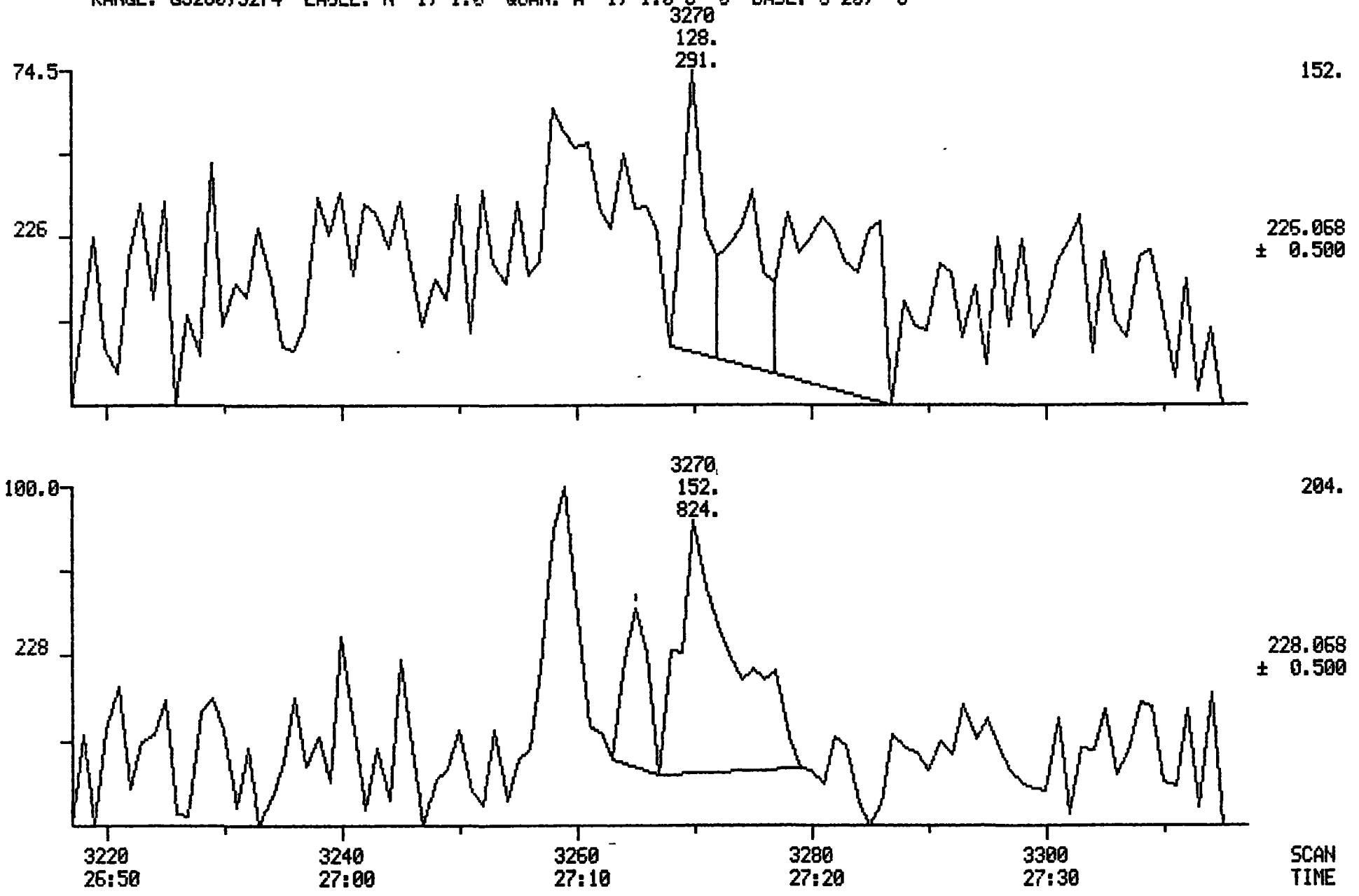
00081

MIDMASS CHROMATOGRAMS DATA: S59436X818 #3253 SCANS 3203 TO 3303
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3246,3260 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



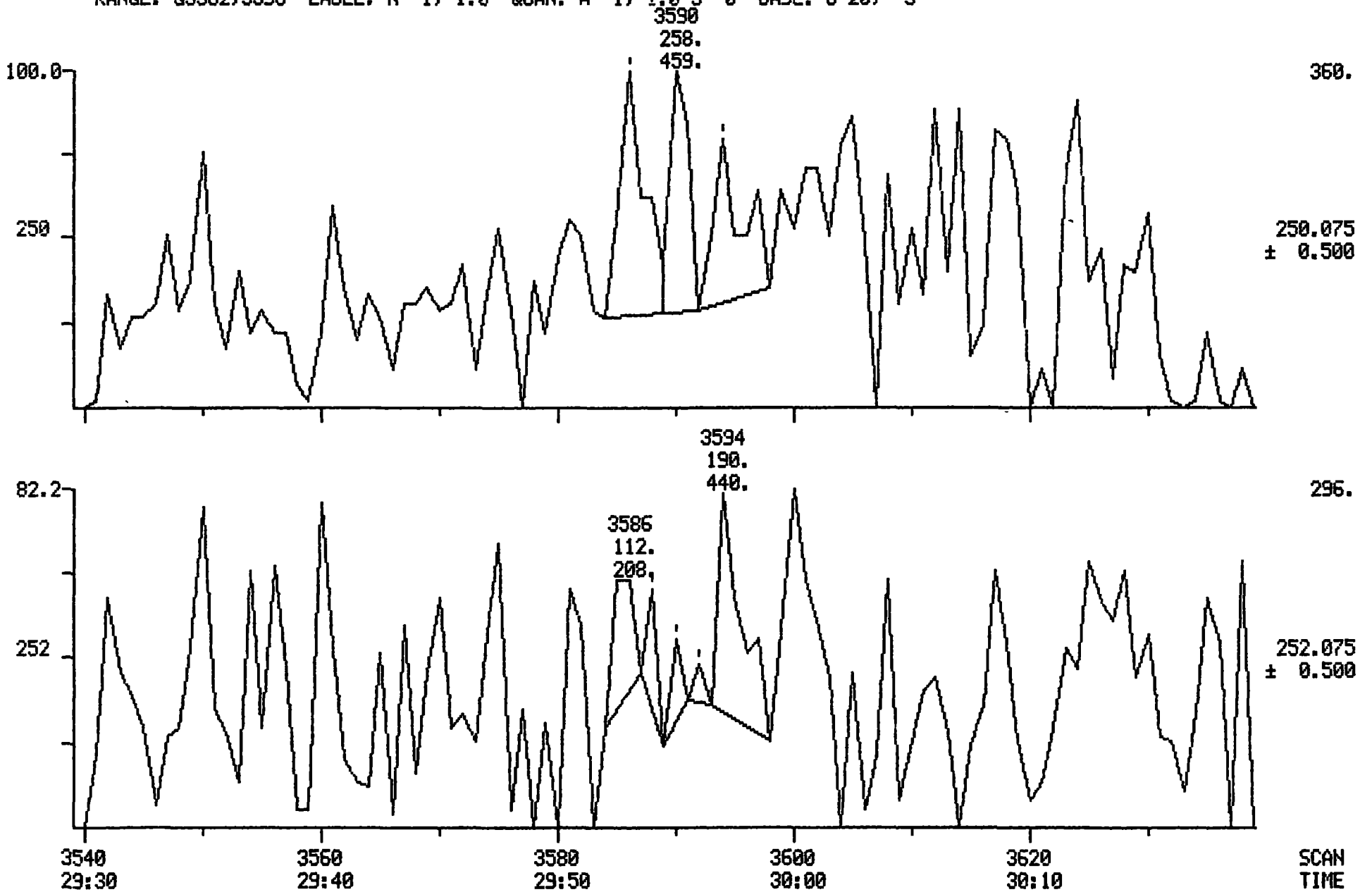
00082

MIDMASS CHROMATOGRAMS DATA: S59436X818 #3267 SCANS 3217 TO 3317
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3260,3274 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3

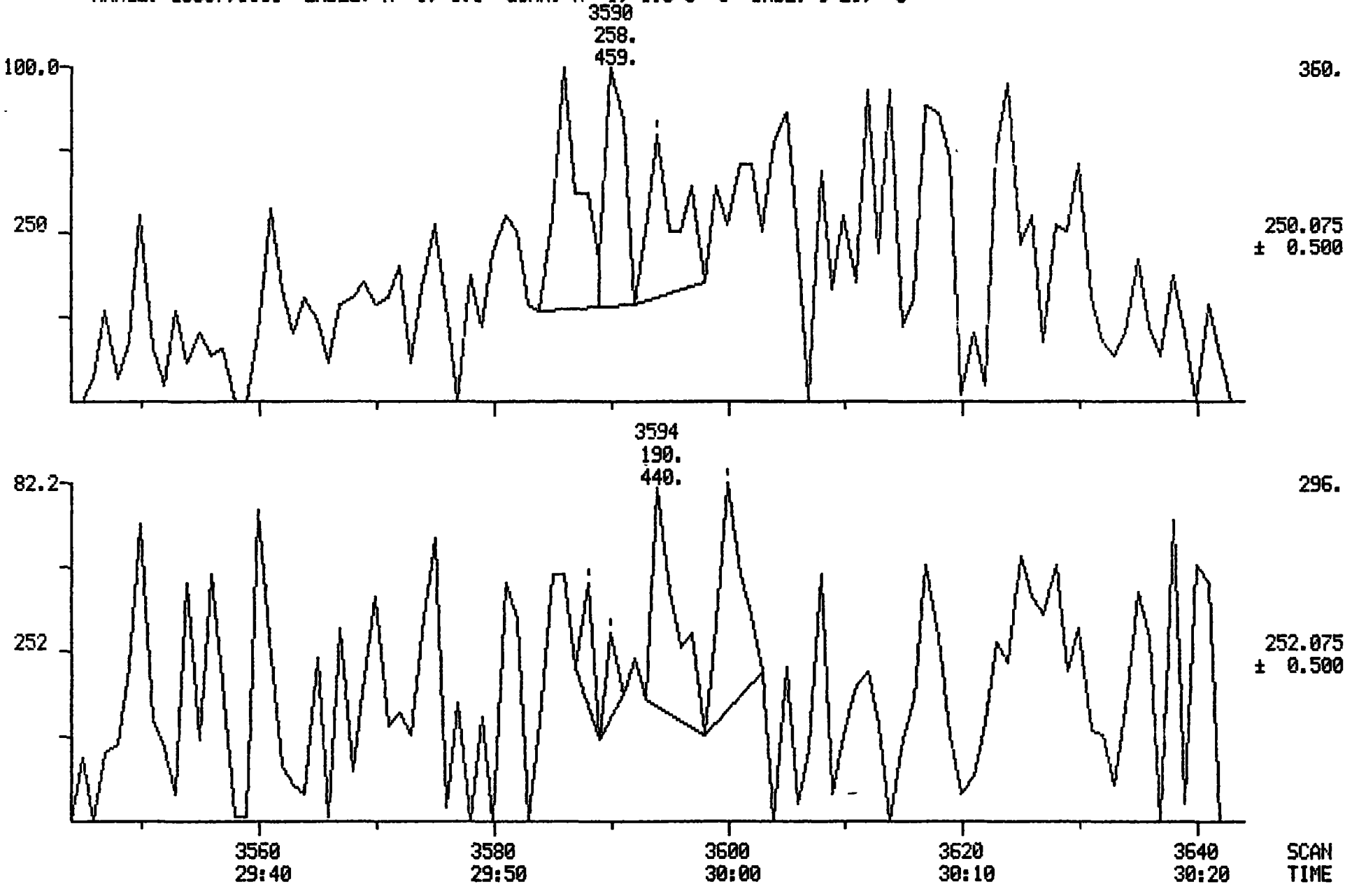


00083

MIDMASS CHROMATOGRAMS DATA: S59436X818 #3589 SCANS 3539 TO 3639
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3582,3596 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3

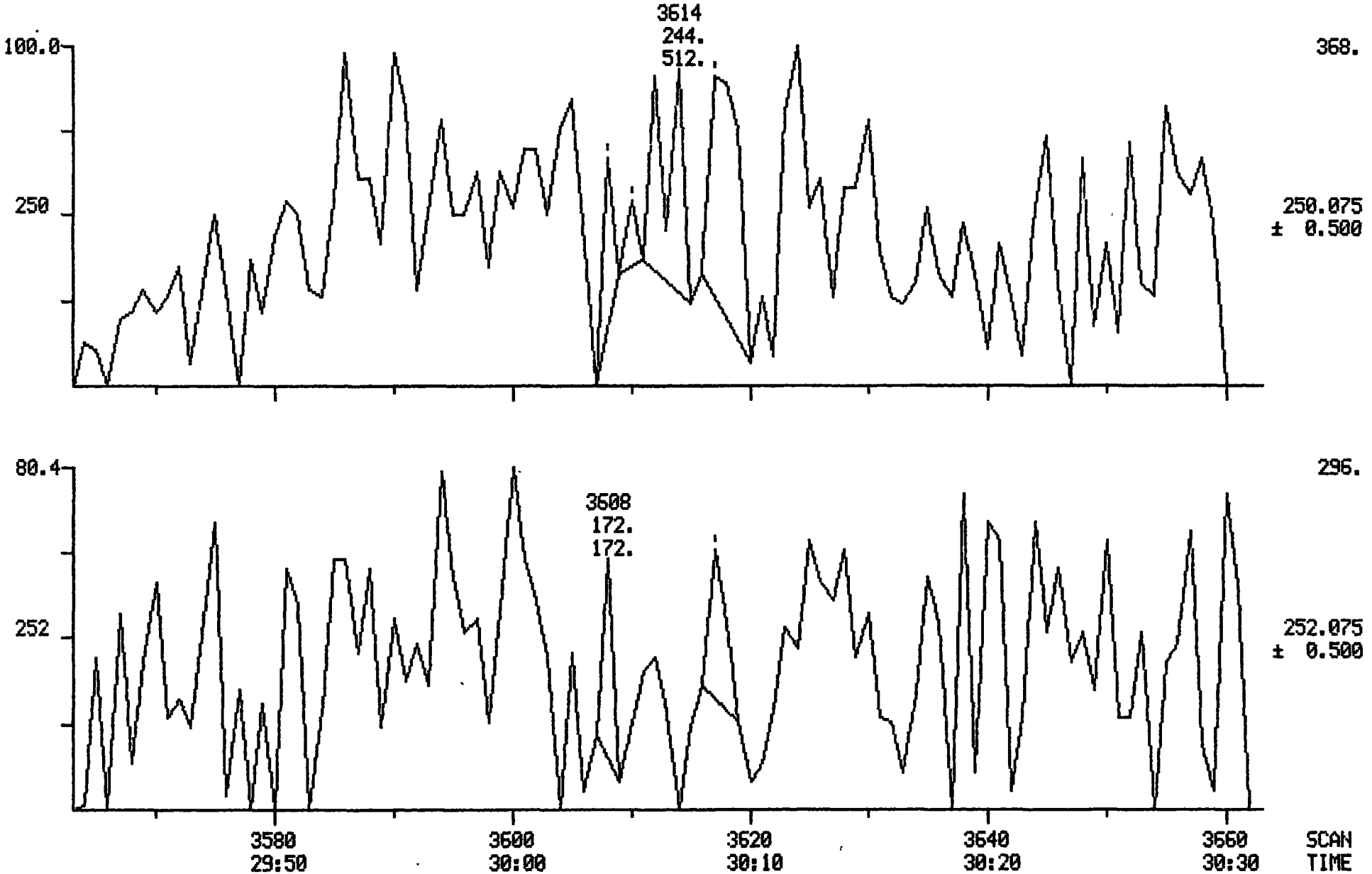


MIDMASS CHROMATOGRAMS DATA: S59436X818 #3594 SCANS 3544 TO 3644
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3587,3601 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



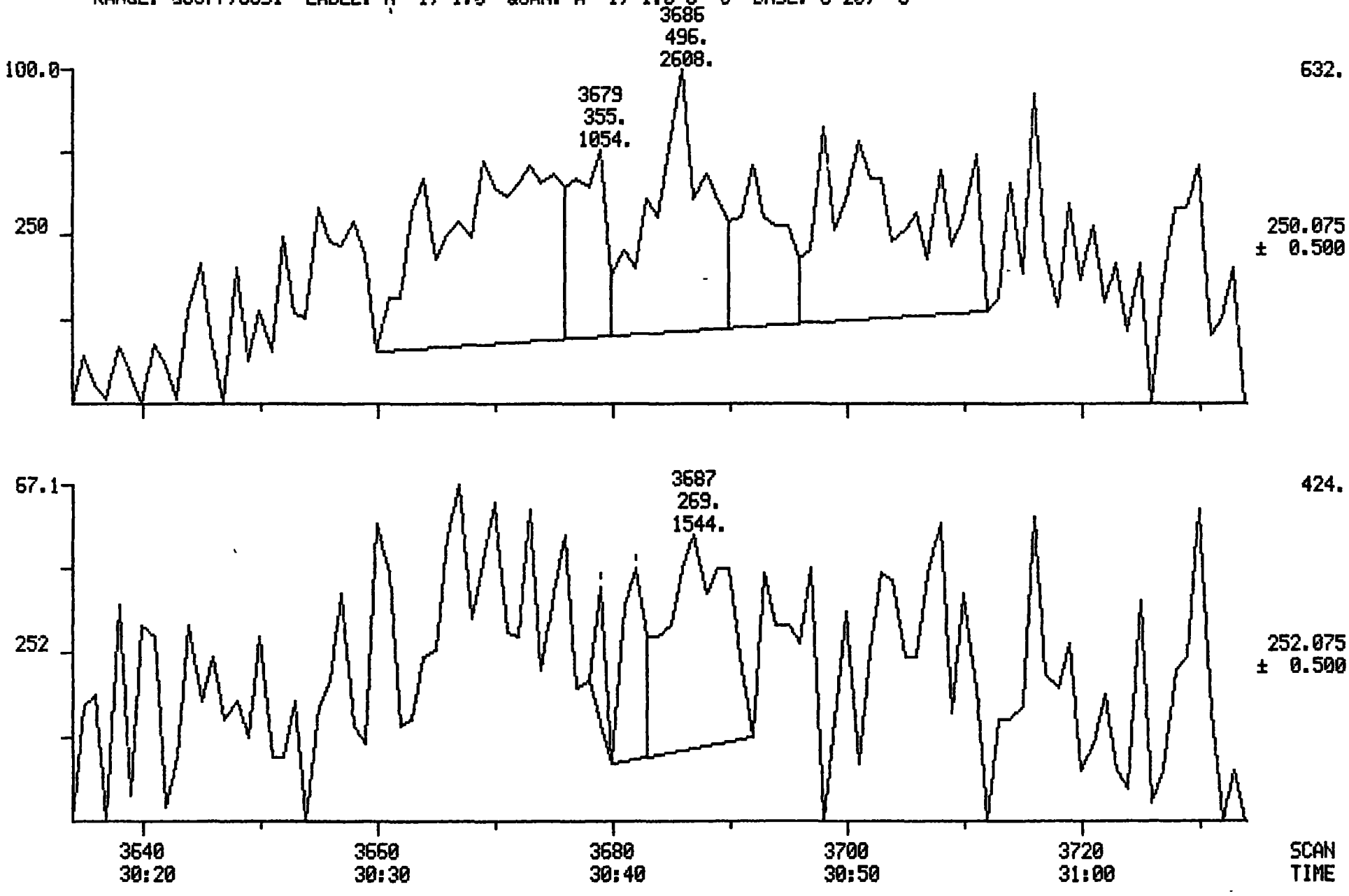
00085

MIDMASS CHROMATOGRAMS DATA: 559436X818 #3613 SCANS 3563 TO 3663
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3606,3620 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



00086

MIDMASS CHROMATOGRAMS DATA: S59436X818 #3684 SCANS 3634 TO 3734
06/02/88 18:30:00 CALI: 060288CX #2
SAMPLE: 59436-01 WATER/PAH 100%/0.5 ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3677,3691 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59436X818

Data: S59436X818.TI
06/02/88 18:30:00
Sample: 59436-01 WATER/PAH 100%/0.5 ML
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	252	PH# 09
11	BENZO(K)FLUORANTHENE	250	PH# 10
12	BENZO(K)FLUORANTHENE	250	PH# 10
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	3678	30:39	1	1.000	A BB	10741.	80.000	NG/ML	27.82
2	240	3264	27:12	1	0.887	A BB	16132.	78.298	NG/ML	27.23
3	228	3259	27:09	1	0.886	A BB	469.	2.157	NG/ML	0.75
4	226	3258	27:09	1	0.886	A VB	874.	17.372	NG/ML	6.04
5	228	3270	27:15	1	0.889	A BB	824.	3.619	NG/ML	1.26
6	226	3270	27:15	1	0.889	A BV	291.	4.865	NG/ML	1.69
7	252	3594	29:57	1	0.977	A BB	440.	1.951	NG/ML	0.68
8	250	3586	29:53	1	0.975	A BV	665.	12.226	NG/ML	4.25
9	252	3594	29:57	1	0.977	A BB	440.	1.951	NG/ML	0.68
10	252	3600	30:00	1	0.979	A BB	448.	1.986	NG/ML	0.69
11	250	3590	29:55	1	0.976	A VB	459.	8.439	NG/ML	2.93
12	250	3594	29:57	1	0.977	A BB	492.	9.045	NG/ML	3.15
13	250	3617	30:08	1	0.983	A BB	728.	16.406	NG/ML	5.71
14	252	3687	30:43	1	1.002	A VB	1544.	8.273	NG/ML	2.88
15	250	3686	30:43	1	1.002	A VV	2608.	40.935	NG/ML	14.24

59436-01
120%

00088

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 RT	COLUMN 2 AMOUNT	COLUMN 2 RT	COLUMN AVERAGE
447	DBC (surrogate)	.0149	.0	.0142	.3	NA

DBC

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

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

DBC Recovery = 95%
NO HSL Pests/PCBs detected.

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

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	TEST AREA	AMOUNT	UNITS
014	p,p'-DDD	9.667	9.833	5	27572	.0073	ug/ml
016	ENDRIN ALDEHYDE	9.550	9.833	5	27577	.0057	ug/ml
047	DBC (surrogate)	26.833	26.833	6	26754	.0149	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

LIB ENT	COMPONENT NAME	ORIENTATION TIME EXPECTED	ORIENTATION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
004	delta-BHC	2.430	2.467	[illegible]	4072	.0044	ug/ml
017	ENDOSULFAN SULFATE	16.550	16.250	11	30920	.0036	ug/ml
023	AROCLOR 1016(peak 1	1.267	1.283	3	659	.0023	ug/ml
024	AROCLOR 1016(peak 2)	1.650	1.650	4	5488	.0094	ug/ml
026	AROCLOR 1221(peak 1)	1.250	1.283	3	659	.0013	ug/ml
027	AROCLOR 1232(peak 1)	1.250	1.283	3	659	.0021	ug/ml
029	AROCLOR 1242(peak 1)	1.250	1.283	3	659	.0023	ug/ml
030	AROCLOR 1242(peak 2)	1.650	1.650	4	5488	.0100	ug/ml
035	AROCLOR 1254(peak 1)	5.017	4.900	8	12335	.0120	ug/ml
047	DBC (surrogate)	22.383	22.317	11	165812	.0304	ug/ml
048	ENDRIN KETONE	22.267	22.317	11	165812	.0041	ug/ml
052	DIALLATE	1.230	1.283	3	659	.0000	ug/ml

^ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

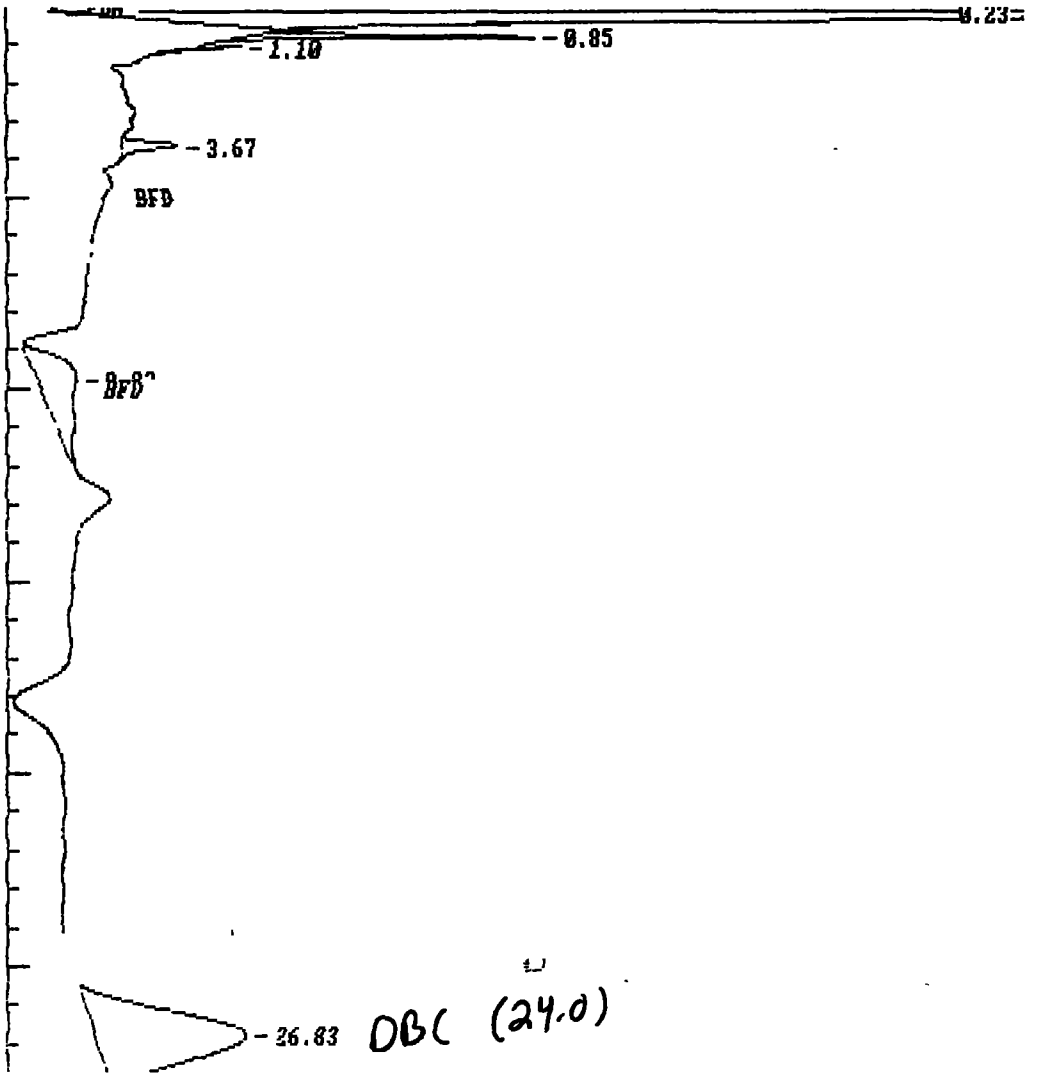
```
******************* 05-05-1988 12:11:48 Version 4.1 ******************
* Sample Name: 59475 01 2.5                    Data File: J:AB12614      *
* Date: 05-06-1988 16:54:18 Method: M:ABPI                               *
* Interface: 10  Cycle#:  14   Operator SS  Channel#: 0    Vial#: N.A.   *
* 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	679488	83.7575	1	147108	100.000	4.6
2	0.85	11395	1.4046	1	2011	1.677	5.7
3	1.10	1621	0.1998	1	346	0.239	4.7
4	3.67	4927	0.6073	1	378	0.725	13.0
5	9.83	27573	3.3987	1	250	4.058	110.2
6	26.83	86254	10.6321	1	1035	12.694	83.3

SS
5/11/88

Total Area: 811256 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB12614.PTS Printed on 05-08-1988 at 12:11:12
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



DBC (24.0)

26000

05-08-1988 12:11:17 Version 1.1

* Sample Name: 59436 01 20% Data File: J:BB12614
* Date: 05-06-1988 16:40:40 Method: M:BBPI
* Interface: 12 Cycle#: 14 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

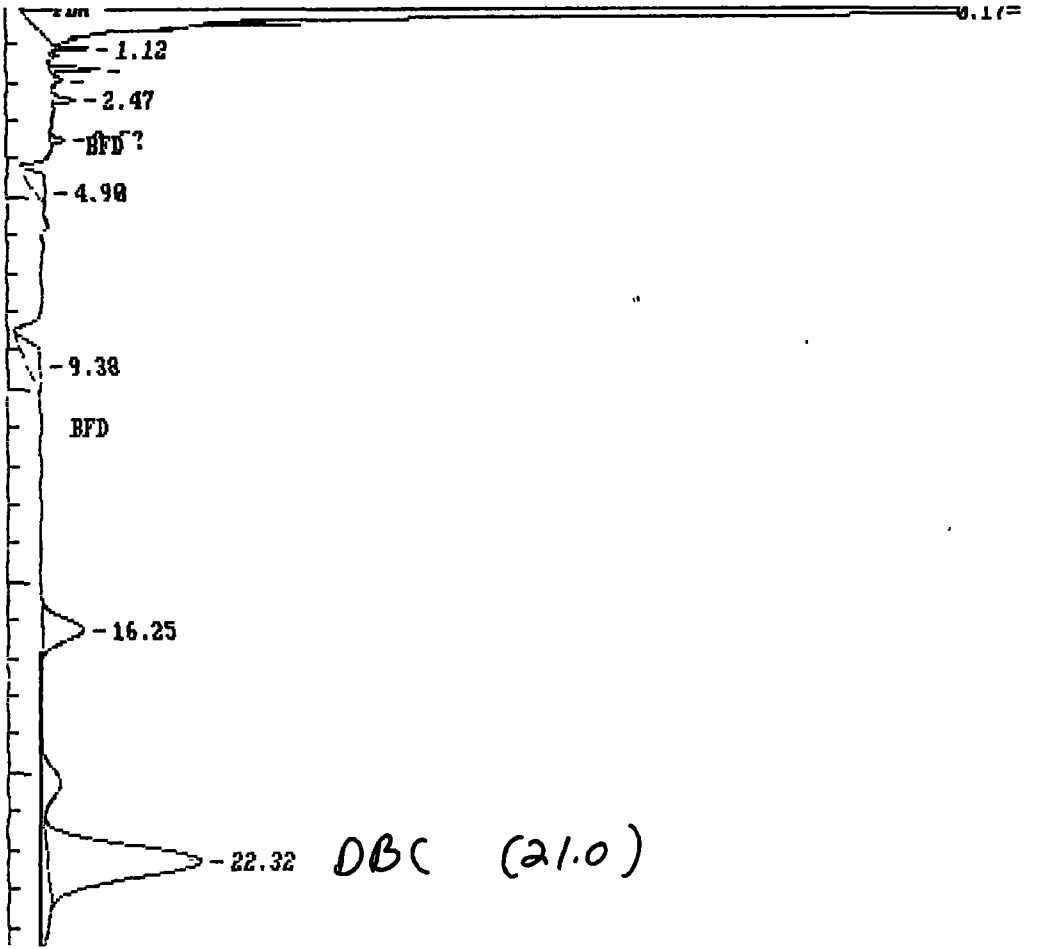
Starting Delay: 0.00 Run Time: 35.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1132992	82.3969	1	241669	100.000	4.7
2	1.12	2789	0.2028	1	639	0.246	4.4
4	1.65	5488	0.3991	1	899	0.484	6.1
5	1.93	1258	0.0915	1	162	0.111	7.8
6	2.47	4092	0.2976	1	431	0.361	9.5
7	3.52	2101	0.1528	1	249	0.185	8.4
8	4.90	12335	0.8970	1	193	1.089	63.8
9	9.38	17256	1.2549	1	246	1.523	70.3
10	16.25	30920	2.2487	1	762	2.729	40.6
11	22.32	165812	12.0587	1	2877	14.635	57.6

SS 5/11/88

Total Area: 1375042 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB12614.PTS Printed on 05-08-1988 at 12:11:38
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)

C0095

Sample Number : 59436-02

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59436-02
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 :	04/27/88
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	5.2	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

Form I

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

Sample Number
59436-02

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.				
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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
59436-02

00097

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/25/88	Separatory Funnel Extraction	Yes
Date Analyzed	06/02/88	Continuous Liquid-Liquid Extraction	No
Conc/Dil Factor	2.06		
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		52 U
541-73-1	1,3-Dichlorobenzene		10 U	100-02-7	4-Nitrophenol		52 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		52 U
67-72-1	Hexachloroethane		10 U	534-52-1	4,6-Dinitro-2-Methylphenol		52 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		52 U
65-85-0	Benzoic Acid		52 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		21 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		10 U
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		52 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		52 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		52 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
59436-02

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	368	5.4 B
3.	Oxygenated Hydrocarbon	BNA	467	24 B
4. 24070-77-7	2-Methyl-Cyclopentanol	BNA	530	4.3
5. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	621	12
6.	Unknown	BNA	1578	4.3
7.	Unknown	BNA	2101	6.7
8.				
9.				
10.				
11.				
12.				
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14.				
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16.				
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23.				
24.				
25.				
26.				
27.				
28.				
29.				
30.				

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

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

Units: ug/L
Run Factor: 2.06

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	60.8	61	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: 59436-02
Date Analyzed: 06/02/88

Units: ug/L
Run Factor: 0.130

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	69.4	87	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: 59436-02

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

4/27/88 20:27:57 SCAN 1 OF 1650
Acquisition started

Acquire
04/27/88 20:27:00 + 0:04
Sample: 59436-02 5ML 100%
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Run 0:S594362820
Free sectors: 6787
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 4 of 1650
Weight: 0.000
Acct. No:

00102

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

Loaded GC Desc:CV Current GC oven tmp: -9 DegC Injector : 150 DegC
Current GC Desc:CV GC elapsed time : 0: 3 min Int.oven : 150 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	-10 - -10	-	1.0	1.0	Sweep/Split	32.7	0.0
2	-10 - 100	6.0	18.3	19.3	Divert	32.7	0.0
3	100 - 170	8.3	8.4	27.7			
4	170 - 170	-	5.0	32.7			

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

Low mass: 35 Up: 0.95 L* Top: 0.00
High mass: 300 Down: 0.00 L Bottom: 0.05

Cent S/P: 10 Actual: 18 Samp Int (ms): 0.200 Peak Width: 1000.
Frag S/P: 10 Actual: 9 Samp Int (ms): 0.400 Inten/ion: 2

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

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

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	

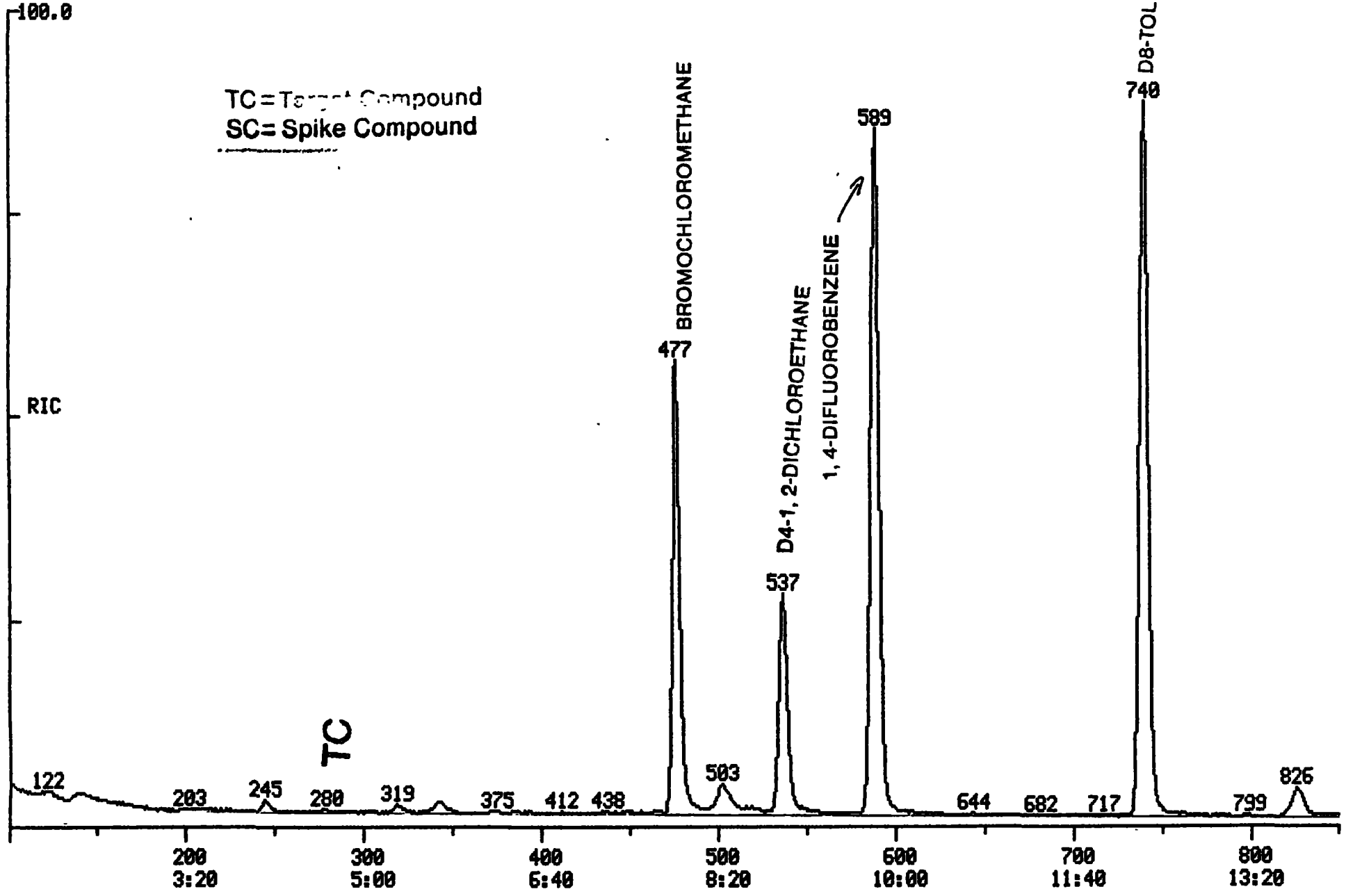
4/27/88 20:55:30
ACQUISITION COMPLETED
SCANS 1 TO 1650 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	1650	39.5	1650.0	2.4	26517. 16.	16.

C01C3

RIC
04/27/88 20:27:00
SAMPLE: 59436-02 5ML 100%
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

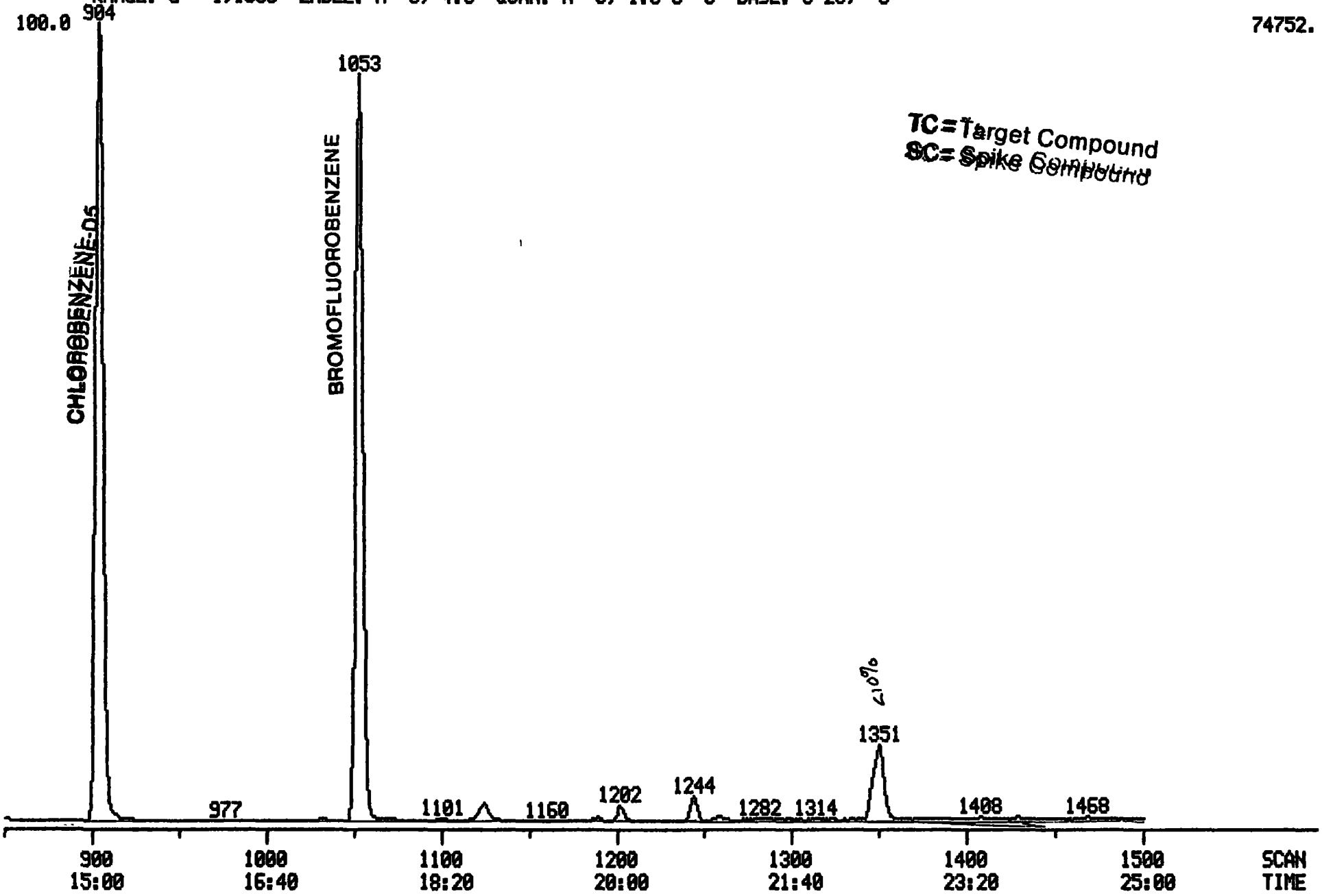
DATA:\S59436Z820 #4 SCANS 100 TO 850
CALI: 042788CZ #5 OUT OF 100 TO 1500



00104

RIC
04/27/88 20:27:00
SAMPLE: 59436-02 5ML 100%
CONDS.: GC DESC CV
RANGE: G 1,1650 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59436Z820 #4 SCANS 850 TO 1500
CALI: 042788CZ #5 OUT OF 100 TO 1500



PROCEDURE: TCA DIAGNOSTIC REPORT 5/02/88 16:22:56
DATA FILE: S59436Z820
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

00105

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	4	4	19	IS01/TC01
3	3	1	0	18	5	1	63	IS02/TC02
3	3	1	0	6	3	1	0	IS03/TC03
1	1	1	0	9	2	1	0	IS04/TC04

41 COMPOUNDS PROCESSED, 9 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >		< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-476	477	477	.	1	987	.	128	476	-1	1
2	V1	10	-107	100	.	.	.	.	.	50	.	.	.
3	V1	25	-122	116	.	.	.	.	.	62	.	.	.
4	V1	15	-156	151	.	.	.	.	.	94	.	.	.
5	V1	35	-170	165	.	.	.	.	.	64	.	.	.
6	V1	80	-257	254	.	.	.	.	.	96	.	.	.
7	V1	65	-265	262	.	.	.	.	.	76	.	.	.
8	V1	50	-282	279	279	.	1	994	.	58	279	.	1
9	V1	45	-321	319	319	.	1	913	.	84	319	.	1
10	V1	95	-346	344	.	.	.	.	.	96	.	.	.
11	V1	90	-392	391	.	.	.	.	.	63	.	.	.
12	V2	25	-412	412	412	.	4	859	.	43	.	.	.
13	V2	10	-467	468	.	.	.	.	.	72	.	.	.
14	V2	1	-588	589	589	.	1	997	.	114	589	.	1
15	V3	1	-903	904	904	.	1	998	.	117	904	.	1
16	V1	100	-494	495	.	.	.	.	.	83	493	.	1
17	V2	15	-498	499	.	.	.	.	.	97	.	.	.
18	V2	20	-513	514	.	.	.	.	.	117	.	.	.
19	V2	60	-536	537	.	.	.	.	.	78	.	.	.
20	V1	2	-537	538	537	-1	1	991	.	65	537	.	1
21	V1	110	-545	546	.	.	.	.	.	62	.	.	.
22	V2	45	-608	609	.	.	.	.	.	130	.	.	.
23	V2	35	-631	632	.	.	.	.	.	63	.	.	.
24	V2	30	-669	670	.	.	.	.	.	83	669	.	1
25	V2	40	-717	718	.	.	.	.	.	75	.	.	.
26	V3	2	-740	741	740	-1	1	976	.	98	740	.	1
27	V3	10	-742	743	.	.	.	.	.	58	.	.	.
28	V3	35	-747	748	.	.	.	.	.	92	746	.	1
29	V2	65	-785	786	.	.	.	.	.	75	.	.	.
30	V2	55	-803	804	.	.	.	.	.	97	.	.	.
31	V3	20	-805	806	.	.	.	.	.	164	.	.	.
32	V3	15	-839	840	.	.	.	.	.	58	.	.	.
33	V2	50	-843	844	.	.	.	.	.	129	.	.	.
34	V3	40	-908	909	.	.	.	.	.	112	.	.	.
35	V3	50	-926	927	.	.	.	.	.	106	.	.	.
36	V3	75	-941	942	.	.	.	.	.	106	.	.	.
37	V3	60	-988	988	.	.	.	.	.	106	.	.	.
38	V3	55	-992	992	.	.	.	.	.	104	.	.	.
39	V2	80	-1010	1010	.	.	.	.	.	173	.	.	.
40	V3	3	-1053	1053	1053	.	1	975	.	95	1053	.	1
41	V3	25	-1087	1087	.	.	.	.	.	83	1089	.	1

Quantitation Report File: S59436Z820

00106

Data: S59436Z820.TI
04/27/88 20:27:00
Sample: 59436-02 5ML 100%
Conds.: GC DESC CV
Formula: ---
Submitted by: RMAL

Instrument: 4500
Analyst: CR

Weight: 0.000
Acct. No.:

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	CO20 VINYL CHLORIDE	62	V1#	25	75-01-4
4	CO15 BROMOMETHANE	94	V1#	15	74-83-9
5	CO25 CHLOROETHANE	64	V1#	35	75-00-3
6	CO45 1,1-DICHLOROETHENE	61	V1#	80	75-35-4
7	CO40 CARBON DISULFIDE	76	V1#	65	75-15-0
8	CO35 ACETONE	58	V1#	50	67-64-1
9	CO30 METHYLENE CHLORIDE	84	V1#	45	75-09-2
10	TRANS-1,2-DICHLOROETHENE	61	V1#	95	156-60-5
11	CO50 1,1-DICHLOROETHANE	63	V1#	90	75-34-3
12	C125 VINYL ACETATE	43	V2#	25	108-05-4
13	C110 2-BUTANONE	72	V2#	10	78-93-3
14	CI10 1,4-DIFLUOROBENZENE	114	IV2#	01	540-36-3
15	CI20 CHLOROBENZENE-D5	117	IV3#	01	3114-55-4
16	CO60 CHLOROFORM	83	V1#	100CC	67-66-3
17	C115 1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
18	C120 CARBONTETRACHLORIDE	117	V2#	20	56-23-5
19	C165 BENZENE	78	V2#	60	71-43-2
20	CS15 1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
21	CO65 1,2-DICHLOROETHANE	62	V1#	110	107-06-2
22	C150 TRICHLOROETHENE	130	V2#	45	79-01-6
23	C140 1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
24	C130 BROMODICHLOROMETHANE	83	V2#	30	75-27-4
25	C143 CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
26	CS05 TOLUENE-D8	98	SV3#	02	2037-26-5
27	C205 4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
28	C230 TOLUENE	92	V3#	35	108-88-3
29	C172 TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
30	C160 1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
31	C220 TETRACHLOROETHENE	164	V3#	20	127-18-4
32	C210 2-HEXANONE	58	V3#	15	591-78-6
33	C155 DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
34	C235 CHLOROBENZENE	112	V3#	40	108-90-7
35	C240 ETHYLBENZENE	106	V3#	50	100-41-4
36	M+P XYLENES	106	V3#	75	
37	O-XYLENE	106	V3#	60	
38	C245 STYRENE	104	V3#	55	100-42-5
39	C180 BROMOFORM	173	V2#	80	75-25-2
40	CS10 BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
41	C225 1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	476	7:56	1	1.000	A BB	29884.	50.000 UG/L	16.35
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	58	279	4:39	1	0.586	A BB	205.	5.203 UG/L	1.70
9	84	319	5:19	1	0.670	A BB	743.	0.702 UG/L	0.23
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	114	589	9:49	14	1.000	A BB	147239.	50.000 UG/L	16.35
15	117	904	15:04	15	1.000	A BB	125883.	50.000 UG/L	16.35
16	83	493	8:13	1	1.036	A BB	181.	0.135 UG/L	0.04
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	65	537	8:57	1	1.128	A BB	30465.	51.180 UG/L	16.74
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	83	669	11:09	14	1.136	A BB	80.	0.053 UG/L	0.02
25	NOT FOUND								
26	98	740	12:20	15	0.819	A BB	127726.	49.903 UG/L	16.32
27	NOT FOUND								
28	92	746	12:26	15	0.825	A BB	94.	0.063 UG/L	0.02
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	95	1053	17:33	15	1.165	A BB	82000.	48.524 UG/L	15.87
41	83	1089	18:09	15	1.205	A VB	62.	0.048 UG/L	0.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	7:57	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:47		0.224						
3	2:02		0.256						
4	2:36		0.327						
5	2:50		0.356						
6	4:17		0.539						
7	4:25		0.556						
8	4:42	0.99	0.591	0.99	5.20	50.00	0.007	0.066	0.10
9	5:21	0.99	0.673	1.00	0.70	50.00	0.025	1.771	0.01
10	5:46		0.725						
11	6:32		0.822						
12	6:52		0.699						
13	7:47		0.793						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	9:49	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
15	15:04	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
16	8:14	1.00	1.036	1.00	0.14	50.00	0.006	2.239	0.00
17	8:18		0.846						
18	8:33		0.871						
19	8:56		0.910						
20	8:57	1.00	1.126	1.00	51.18	50.00	1.019	0.996	1.02
21	9:05		1.143						
22	10:08		1.032						
23	10:31		1.071						
24	11:09	1.00	1.136	1.00	0.05	50.00	0.001	0.509	0.00
25	11:57		1.217						
26	12:20	1.00	0.819	1.00	49.90	50.00	1.015	1.017	1.00
27	12:22		0.821						
28	12:27	1.00	0.826	1.00	0.06	50.00	0.001	0.591	0.00
29	13:05		1.333						
30	13:23		1.363						
31	13:25		0.890						
32	13:59		0.928						
33	14:03		1.431						
34	15:08		1.004						
35	15:26		1.024						
36	15:41		1.041						
37	16:28		1.093						
38	16:32		1.097						
39	16:50		1.715						
40	17:33	1.00	1.165	1.00	48.52	50.00	0.651	0.671	0.97
41	18:07	1.00	1.202	1.00	0.05	50.00	0.000	0.513	0.00

TCA FINISHED, 9 FOUND
FINISHED AT: 5/02/88 16:27:16

00109

RMAL QUANTITATION SUMMARY FILE: S59436Z820
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

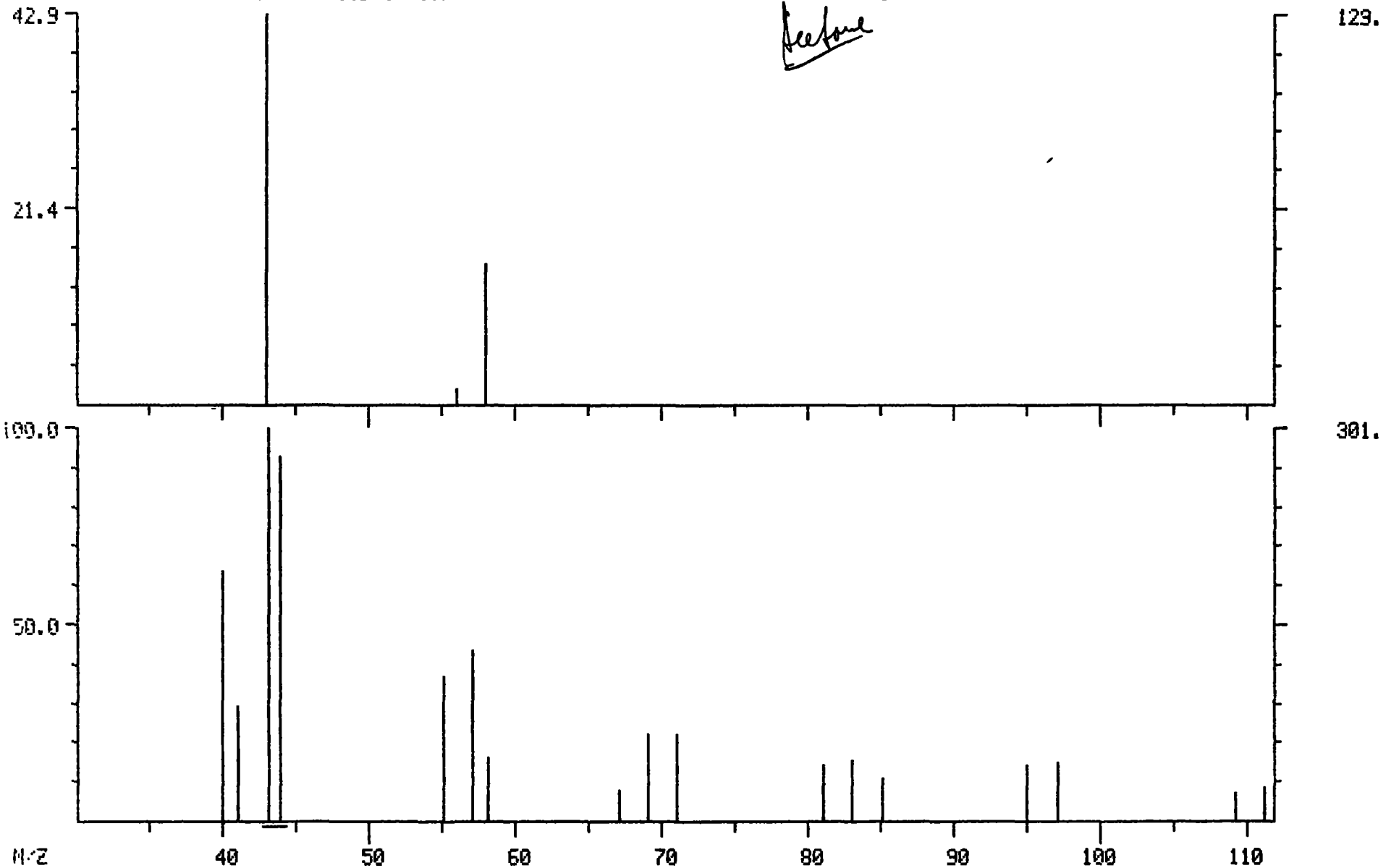
NO	LIBRARY ENTRY		NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1#	1	CI01 BROMOCHLOROMETHANE	128	476	1	29884.	1.000	50.000
2	V2#	1	CI10 1,4-DIFLUOROBENZENE	114	589	2	147239.	1.000	50.000
3	V3#	1	CI20 CHLOROBENZENE-D5	117	904	3	125883.	1.000	50.000
4	V3#	2	CS05 TOLUENE-D8	98	740	3	127726.	1.015	49.903
5	V3#	3	CS10 BROMOFLUOROBENZENE	95	1053	3	82000.	0.651	48.524
6	V1#	2	CS15 1,2-DICHLOROETHANE-	65	537	1	30465.	1.019	51.180
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	279	1	205.	0.007	5.203
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	O-XYLENE	106		3	NOT FOUND		
41	V3#	75	M+P XYLENES	106		3	NOT FOUND		

00110

DUAL MASS SPECTRUM
04/27/88 20:27:00 + 4:39
SAMPLE: 59436-02 5ML 100%
CONDS.: GC DESC CV
GC TEMP: 13 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S594362820 #279 BASE M/Z: 43/ 43
CALI: 042788CZ #5 RIC: 179./ 1571.

Acetone

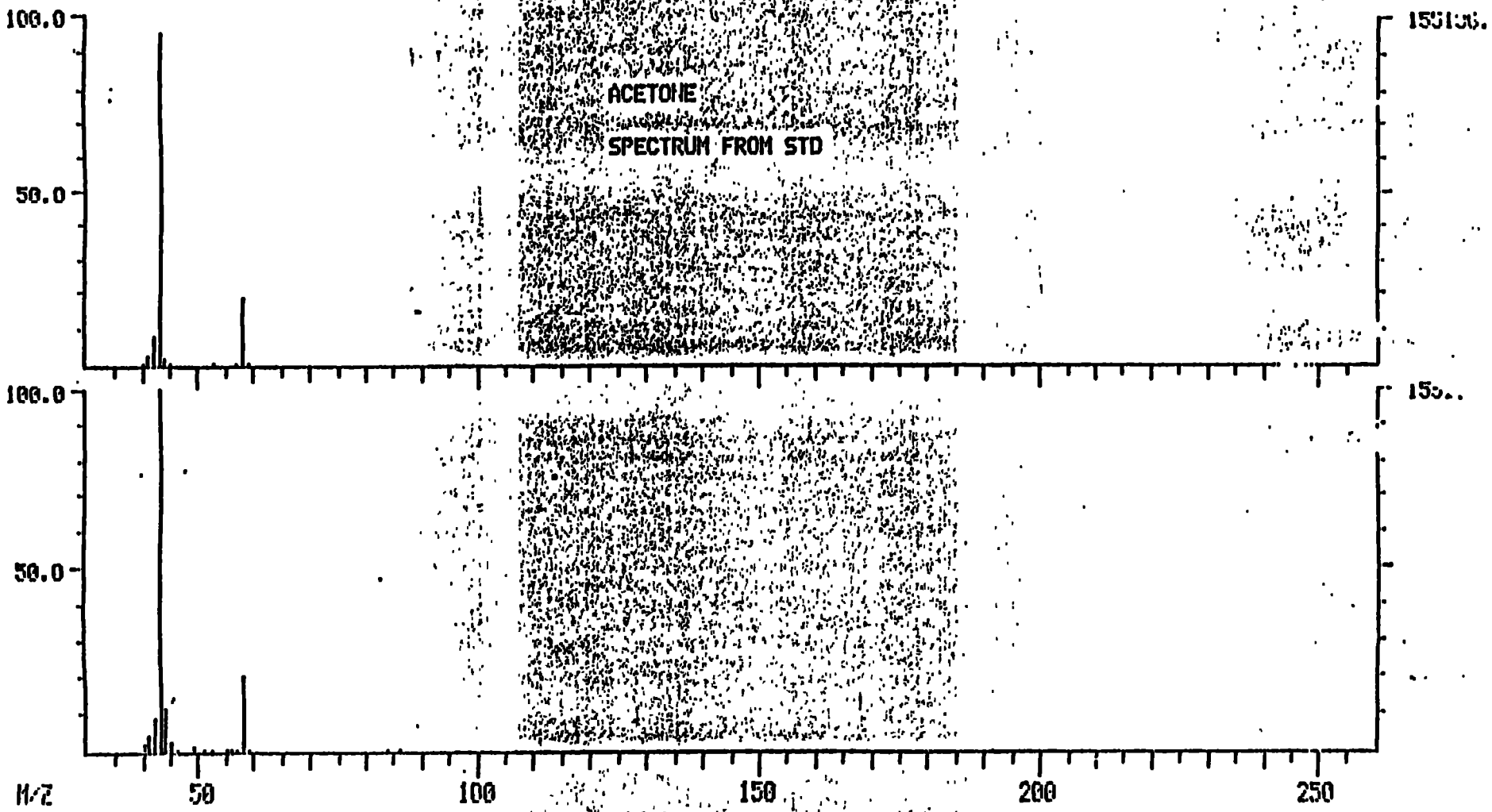


00111

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

DATA: STDJ198 #150
CALI: STDJ198 #1

BASE M/Z: 43/ 43
RIC: 199835./ 247007.



6/2/88 21:35:16 SCAN 1 OF 2850

Acquisition started

~~RF = 2.00~~

00112

Acquire Run 0:S59436R995 ACQUIRING
06/02/88 21:33:00 + 0:07 Free sectors: 19159 Scan: 9 of 2850
Sample: 59436-02 REPREP BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: DC Acct. No:

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

Loaded GC Desc:ST Current GC oven tmp: 32 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	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	

$RF = \frac{2.0 \text{ ml}}{.97} = 2.06$

6/2/88 22:10:56
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

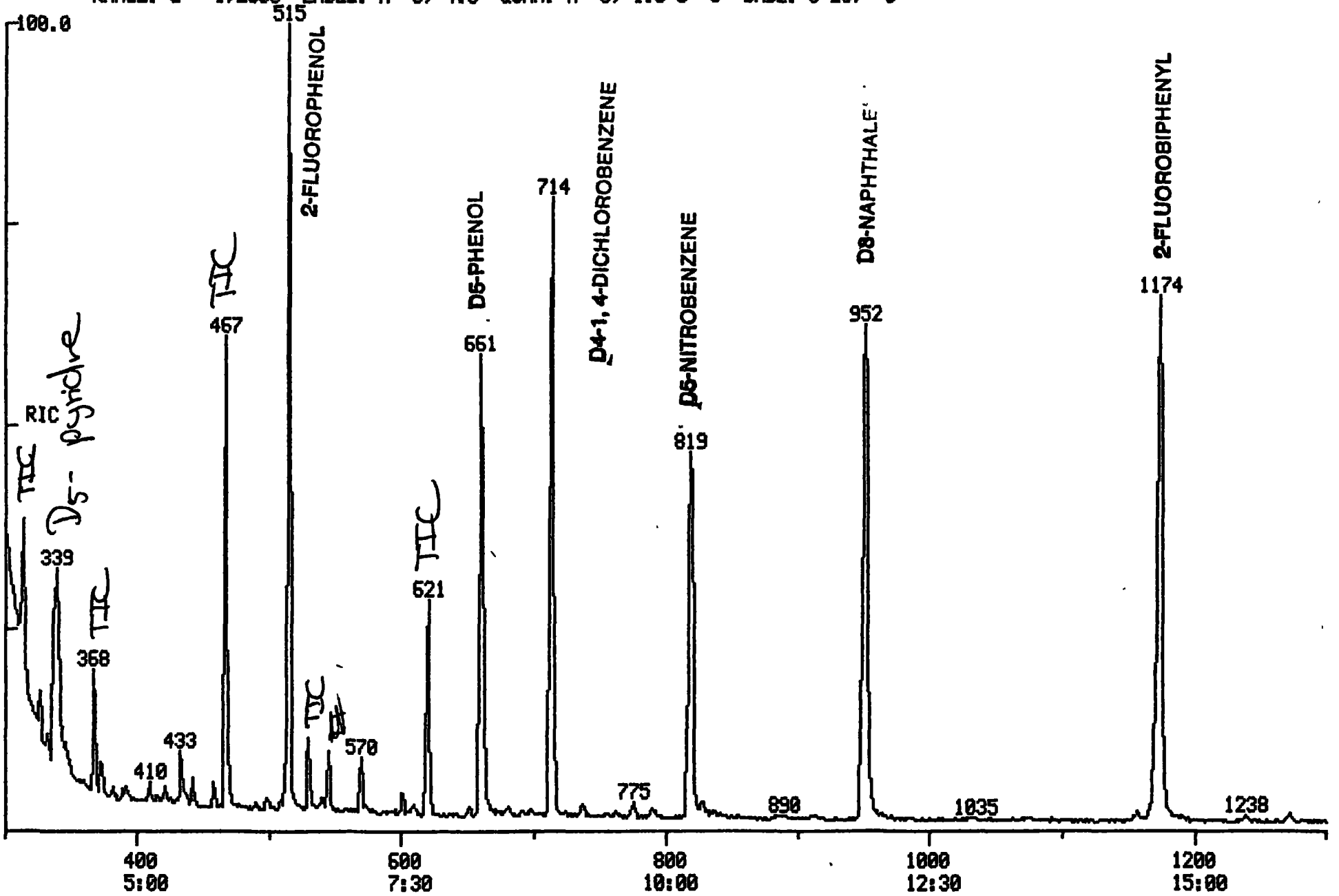
Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	512.1	2137.5	24.0	65001. 23.	30.

CC113

RIC
06/02/88 21:33:00
SAMPLE: 59436-02 REPREP 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: S59436R995 #4
CALI: 060288CR #5

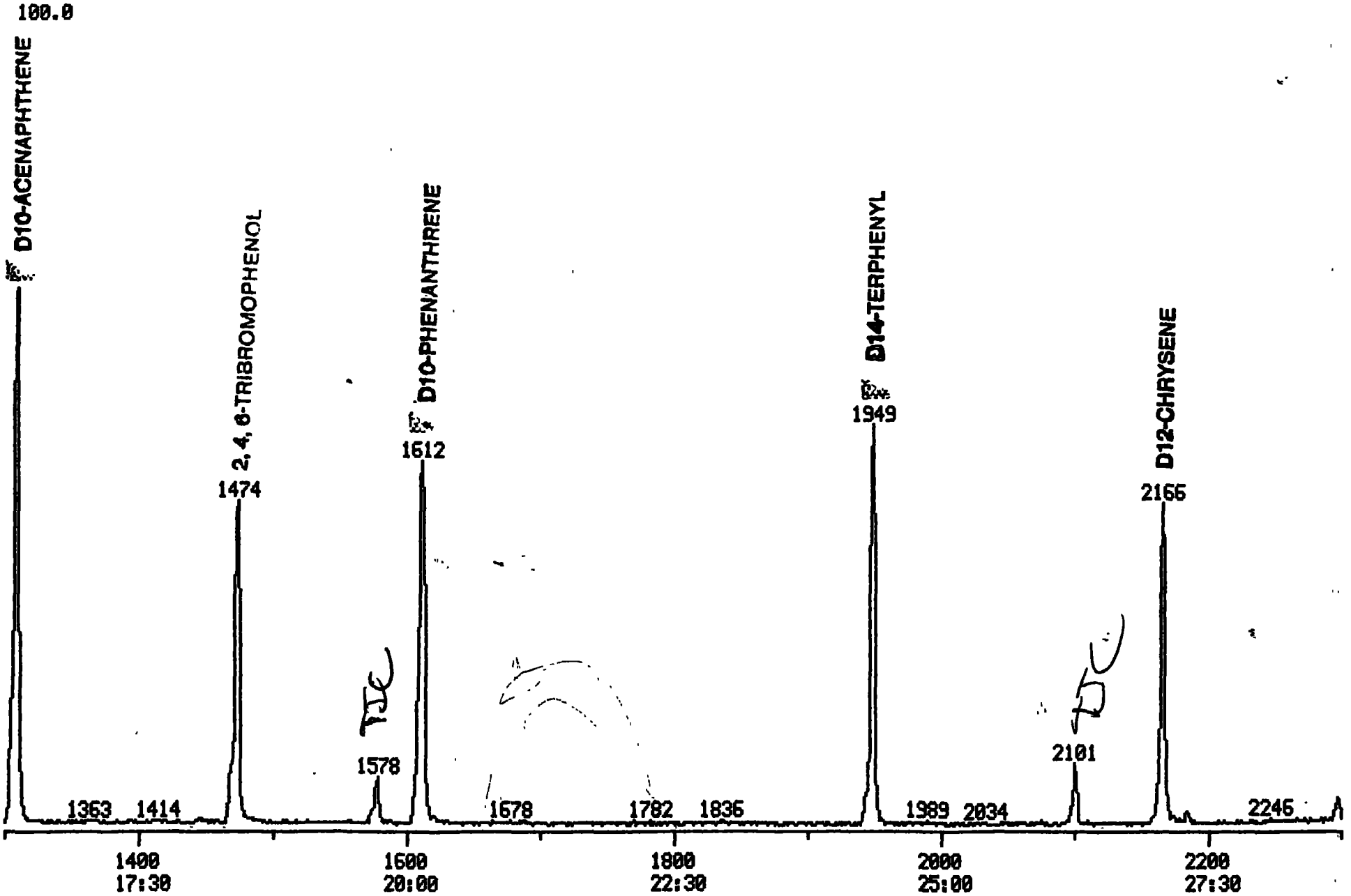
SCANS 300 TO 1300
OUT OF 300 TO 2850



00114

RIC
06/02/88 21:33:00
SAMPLE: 59436-02 REPREP 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

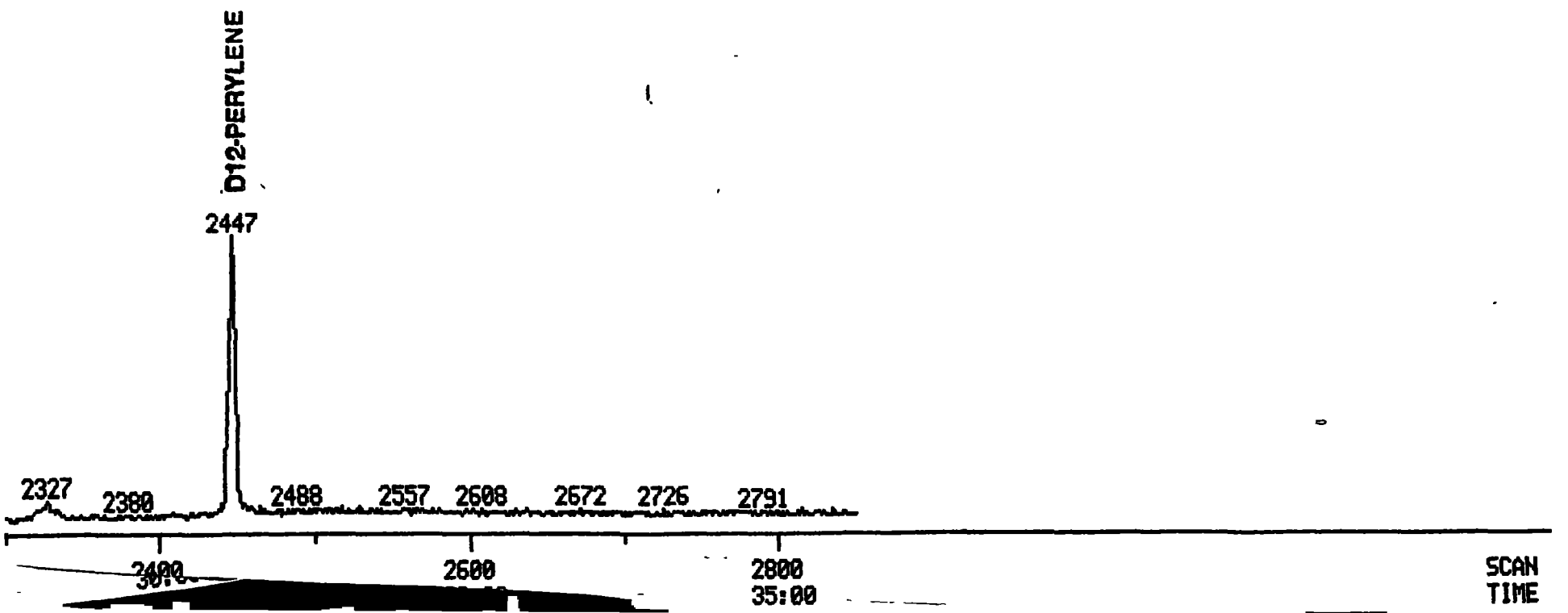
DATA: 559436R995 #4 SCANS 1300 TO 2300
CALI: 060288CR #5 OUT OF 300 TO 2850



00115

RIC DATA: S59436R995 #4 SCANS 2300 TO 2850
06/02/88 21:33:00 CALI: 060288CR #5 OUT OF 300 TO 2850
SAMPLE: 59436-02 REPREP 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

100.0 77440.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 7:37:54
DATA FILE: S59436R995
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	3	0	7	3	1	216	IS01/TC01
3	3	2	16	18	4	1	149	IS02/TC02
3	3	1	16	12	3	1	16	IS03/TC03
3	3	2	37	18	4	1	41	IS04/TC04
3	3	1	37	10	4	1	66	IS05/TC05
3	3	2	28	8	3	1	28	IS06/TC06
3	3	1	27	14	5	1	72	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

77 COMPOUNDS PROCESSED, 13 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-714	714	714	.	3	978	.	152	714	.	1
2	S1	2	-516	515	515	.	1	995	.	112	515	.	1
3	S1	3	-664	663	661	-2	1	936	.	99	661	.	1
4	S1	105	-666	665	.	.	.	.	.	94	663	.	1
5	S1	110	-679	678	.	.	.	.	.	93	.	.	.
6	S1	115	-685	684	.	.	.	.	.	128	683	.	1
7	S1	125	-709	708	.	.	.	.	.	146	.	.	.
8	S2	1	-953	952	952	.	2	993	.	136	952	.	1
9	S3	1	-1311	1309	1309	.	1	992	.	164	1309	.	1
10	S1	130	-718	717	.	.	.	.	.	146	.	.	.
11	S1	145	-746	745	.	.	.	.	.	108	.	.	.
12	S1	150	-751	750	.	.	.	.	.	146	.	.	.
13	S1	160	-769	768	.	.	.	.	.	108	.	.	.
14	S1	165	-774	773	.	.	.	.	.	45	.	.	.
15	S1	185	-797	796	.	.	.	.	.	108	.	.	.
16	S1	190	-802	801	.	.	.	.	.	70	.	.	.
17	S1	200	-807	806	.	.	.	.	.	117	.	.	.
18	S2	2	-822	821	819	-2	1	1000	.	82	819	.	1
19	S2	10	-825	824	.	.	.	.	.	77	.	.	.
20	S2	20	-871	870	.	.	.	.	.	82	.	.	.
21	S2	25	-885	884	.	.	.	.	.	139	.	.	.
22	S2	30	-896	895	.	.	.	.	.	107	.	.	.
23	S2	35	-915	914	.	.	.	.	.	93	.	.	.
24	S2	45	-926	925	.	.	.	.	.	122	.	.	.
25	S2	40	-931	930	.	.	.	.	.	162	.	.	.
26	S2	55	-947	946	.	.	.	.	.	180	.	.	.
27	S2	60	-958	957	.	.	.	.	.	128	957	.	1
28	S2	80	-975	974	.	.	.	.	.	127	.	.	.
29	S2	95	-995	994	.	.	.	.	.	225	.	.	.
30	S2	130	-1073	1072	.	.	.	.	.	107	1073	.	1
31	S2	145	-1096	1095	.	.	.	.	.	142	.	.	.
32	S3	20	-1142	1141	.	.	.	.	.	237	.	.	.
33	S3	25	-1160	1158	.	.	.	.	.	196	.	.	.
34	S4	1	-1614	1612	1612	.	2	989	.	188	1612	.	1
35	S3	30	-1167	1165	.	.	.	.	.	196	.	.	.
36	S3	3	-1176	1174	1174	.	1	998	.	172	1174	.	1
37	S3	40	-1194	1192	.	.	.	.	.	162	.	.	.
38	S3	45	-1224	1222	.	.	.	.	.	65	.	.	.
39	S3	55	-1271	1269	.	.	.	.	.	163	.	.	.
40	S3	65	-1280	1278	.	.	.	.	.	152	1277	.	1
41	S3	70	-1284	1282	.	.	.	.	.	165	.	.	.

43	S3	80	-1319	1317	.	.	.	.	.	153	.	.	.	
44	S3	85	-1330	1328	.	.	.	.	.	184	.	.	.	
45	S3	95	-1347	1345	.	.	.	.	.	109	.	.	.	
46	S3	90	-1351	1349	.	.	.	.	.	168	.	.	.	
47	S3	105	-1363	1361	.	.	.	.	.	165	.	.	.	
48	S3	130	-1417	1415	.	.	.	.	.	149	.	.	.	
49	S3	135	-1423	1421	.	.	.	.	.	166	.	.	.	
50	S3	140	-1425	1423	.	.	.	.	.	204	.	.	.	
51	S3	150	-1438	1436	.	.	.	.	.	138	.	.	.	
52	S4	10	-1446	1444	.	.	.	.	.	198	.	.	.	
53	S4	15	-1452	1450	.	.	.	.	.	169	.	.	.	
54	S3	2	-1476	1474	1473	-1	1	982	.	330	1473	.	1	
55	S4	30	-1524	1522	.	.	.	.	.	248	.	.	.	
56	S4	40	-1553	1551	.	.	.	.	.	284	.	.	.	
57	S5	1	-2169	2166	2166	.	2	960	.	240	2166	.	1	
58	S4	50	-1590	1588	.	.	.	.	.	266	.	.	.	
59	S4	65	-1620	1618	.	.	.	.	.	178	1617	.	1	
60	S4	70	-1629	1627	.	.	.	.	.	178	.	.	.	
61	S4	85	-1753	1751	.	.	.	.	.	149	1749	.	1	
62	S4	110	-1868	1865	.	.	.	.	.	202	1866	.	1	
63	S6	1	-2450	2447	2447	.	1	992	.	264	2447	.	1	
64	S5	15	-1915	1912	.	.	.	.	.	202	1911	.	1	
65	S5	2	-1951	1948	1949	1	1	992	.	244	1949	.	1	
66	S5	40	-2062	2059	.	.	.	.	.	149	2059	.	1	
67	S5	55	-2166	2163	.	.	.	.	.	252	.	.	.	
68	S5	50	-2166	2163	.	.	.	.	.	228	2165	.	1	
69	S5	60	-2176	2173	.	.	.	.	.	228	2171	.	1	
70	S5	65	-2188	2185	2184	-1	1	977	.	149	2184	.	1	
71	S6	10	-2310	2307	.	.	.	.	.	149	2307	.	1	
72	S6	15	-2381	2378	.	.	.	.	.	252	.	.	.	
73	S6	25	-2386	2383	.	.	.	.	.	252	.	.	.	
74	S6	35	-2441	2438	.	.	.	.	.	252	.	.	.	
75	S6	55	-2688	2685	.	.	.	.	.	276	.	.	.	
76	S6	60	-2692	2689	.	.	.	.	.	278	.	.	.	
77	S6	65	-2756	2753	.	.	.	.	.	276	.	.	.	

00117

Quantitation Report File: S59436R995

00118

Data: S59436R995.TI
06/02/88 21:33:00
Sample: 59436-02 REPREP BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: DC Acct. No.:

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	714	8:55	1	1.000	A BV	25680.	40.000 UG/ML	7.63
2	112	515	6:26	1	0.721	A BB	47439.	54.081 UG/ML	10.32
3	99	661	8:16	1	0.926	A BB	46228.	36.762 UG/ML	7.01
4	94	663	8:17	1	0.929	A BB	123.	0.090 UG/ML	0.02
5	NOT FOUND								
6	128	683	8:32	1	0.957	A BB	134.	0.154 UG/ML	0.03
7	NOT FOUND								
8	136	952	11:54	8	1.000	A BB	94592.	40.000 UG/ML	7.63
9	164	1309	16:22	9	1.000	A BB	43603.	40.000 UG/ML	7.63
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	82	819	10:14	8	0.860	A BB	43915.	42.843 UG/ML	8.17
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	957	11:58	8	1.005	A BB	74.	0.030 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	107	1073	13:25	8	1.127	A BB	71.	0.102 UG/ML	0.02
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	188	1612	20:09	34	1.000	A BB	59182.	40.000 UG/ML	7.63
35	NOT FOUND								
36	172	1174	14:40	9	0.897	A BB	63180.	41.789 UG/ML	7.97
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	152	1277	15:58	9	0.976	A BB	50.	0.022 UG/ML	0.00
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								
49	NOT FOUND								
50	NOT FOUND								

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	6:27	1.00	0.722	1.00	54.08	100.00	0.739	1.366	0.54
3	8:18	1.00	0.929	1.00	36.76	100.00	0.720	1.959	0.37
4	8:19	1.00	0.931	1.00	0.09	50.00	0.004	2.138	0.00
5	8:29		0.950						
6	8:34	1.00	0.958	1.00	0.15	50.00	0.004	1.357	0.00
7	8:52		0.992						
8	11:55	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	16:24	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	8:58		1.004						
11	9:19		1.043						
12	9:23		1.050						
13	9:37		1.076						
14	9:40		1.083						
15	9:58		1.115						
16	10:01		1.122						
17	10:05		1.129						
18	10:16	1.00	0.862	1.00	42.84	50.00	0.371	0.433	0.86
19	10:19		0.865						
20	10:53		0.913						
21	11:04		0.928						
22	11:12		0.939						
23	11:26		0.959						
24	11:34		0.971						
25	11:38		0.976						
26	11:50		0.993						
27	11:58	1.00	1.004	1.00	0.03	50.00	0.001	1.051	0.00
28	12:11		1.022						
29	12:26		1.043						
30	13:25	1.00	1.125	1.00	0.10	50.00	0.001	0.295	0.00
31	13:42		1.149						
32	14:16		0.870						
33	14:30		0.884						
34	20:11	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:35		0.889						
36	14:42	1.00	0.896	1.00	41.79	50.00	1.159	1.387	0.84
37	14:55		0.910						
38	15:18		0.933						
39	15:53		0.969						
40	16:00	1.00	0.976	1.00	0.02	50.00	0.001	2.074	0.00
41	16:03		0.979						
42	16:22		0.998						
43	16:29		1.005						
44	16:37		1.014						
45	16:50		1.027						
46	16:53		1.030						
47	17:02		1.039						
48	17:43		1.080						
49	17:47		1.085						
50	17:49		1.086						

Quantitation Report File: S59436R995

Data: S59436R995.TI
06/02/88 21:33:00
Sample: 59436-02 REPREP BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: DC Acct. No.:

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	1473	18:25	9	1.125	A BB	10172.	60.330 UG/ML	11.51
55	NOT FOUND								
56	NOT FOUND								
57	240	2166	27:04	57	1.000	A BB	36413.	40.000 UG/ML	7.63
58	NOT FOUND								
59	178	1617	20:13	34	1.003	A BB	135.	0.080 UG/ML	0.02
60	NOT FOUND								
61	149	1749	21:52	34	1.085	A BB	473.	0.221 UG/ML	0.04
62	202	1866	23:19	34	1.158	A BB	88.	0.062 UG/ML	0.01
63	264	2447	30:35	63	1.000	A BB	28204.	40.000 UG/ML	7.63
64	202	1911	23:53	57	0.882	A BB	108.	0.080 UG/ML	0.02
65	244	1949	24:22	57	0.900	A BB	45066.	46.385 UG/ML	8.85
66	149	2059	25:44	57	0.951	A BB	110.	0.149 UG/ML	0.03

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	228	2165	27:04	57	1.000	A BB	152.	0.131 UG/ML	0.03
69	228	2171	27:08	57	1.002	A BB	46.	0.055 UG/ML	0.01
70	149	2184	27:18	57	1.008	A BB	925.	0.887 UG/ML	0.17
71	149	2307	28:50	63	0.943	A BB	225.	0.127 UG/ML	0.02
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		1.096						
52	18:04		0.895						
53	18:09		0.899						
54	18:27	1.00	1.125	1.00	60.33	100.00	0.093	0.155	0.60
55	19:03		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	19:52		0.985						
59	20:15	1.00	1.003	1.00	0.08	50.00	0.002	1.135	0.00
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	0.22	50.00	0.006	1.448	0.00
62	23:21	1.00	1.157	1.00	0.06	50.00	0.001	0.956	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	1.483	0.00
65	24:23	1.00	0.899	1.00	46.38	50.00	0.990	1.067	0.93
66	25:46	1.00	0.950	1.00	0.15	50.00	0.002	0.812	0.00
67	27:04		0.998						
68	27:04	1.00	0.998	1.00	0.13	50.00	0.003	1.272	0.00
69	27:12	1.00	1.003	1.00	0.06	50.00	0.001	0.912	0.00
70	27:21	1.00	1.008	1.00	0.89	50.00	0.020	1.145	0.02
71	28:52	1.00	0.942	1.00	0.13	50.00	0.006	2.514	0.00
72	29:46		0.971						
73	29:49		0.973						
74	30:31		0.996						
75	33:36		1.097						
76	33:39		1.098						
77	34:27		1.124						

TCA FINISHED, 13 FOUND
FINISHED AT: 6/03/88 7:45:25

RMAL QUANTITATION SUMMARY FILE: S59436R995
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	714	1	25680.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	952	2	94592.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1309	3	43603.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1612	4	59182.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2166	5	36413.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2447	6	28204.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	819	2	43915.	0.371	42.843
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1174	3	63180.	1.159	41.789
9	S5# 2	CS30 TERPHENYL-D14	244	1949	5	45066.	0.990	46.385
10	S1# 3	CS45 PHENOL-D5	99	661	1	46228.	0.720	36.762
11	S1# 2	CS50 2-FLUOROPHENOL	112	515	1	47439.	0.739	54.081
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1473	3	10172.	0.093	60.330
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		

C0124

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	5	NOT FOUND
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

DATA REDUCED BY: AR DATE: 6-7-88 DATA FILE: S59436R995 00125
DATA REVIEWED BY: ____ DATE: ____

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59436-02 REPREP BNA H2O 100%/2 RUN FACTOR: 1.00
CONDITIONS: ST ANALYST: DC

#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	315	B	2	10.	108-87-2	CYCLOHEXANE, METHYL-
2	368	B	2	5.4	108-88-3	BENZENE, METHYL- VOA
3	467	CB	1	24.	00-00-0	OXYGENATED HYDROCARBON
4	530	I	1	4.3	24070-77-7	CYCLOPENTANOL, 2-METHYL-
5	621	IB	1	12.	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-
6	1578		0	4.3	00-00-0	UNKNOWN
7	2101		0	6.7	00-00-0	UNKNOWN

editing complete

DATA FILE: S59436R995

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	893	1	3:56	0.446	43839.	14751.	10.301	NB	1138.
2	0	935	1	4:35	0.520	22959.	11576.	5.395	NB	850.
3	862	776	1	5:50	0.659	101803.	44714.	23.922	BC	2.
4	968	859	1	6:37	0.747	18187.	6616.	4.274	NB	1351.
5	941	764	1	7:45	0.874	51799.	20417.	12.172	NB	6445.
6	950	566	4	19:43	0.983	18268.	4203.	4.300	UK	1.
7	855	512	5	26:15	0.974	18558.	5376.	6.662	UK	1.

TIC SELECTION REPORT

DATA FILE: S59436R995

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
339	104367.	24.524
515	183795.	43.188
661	135449.	31.827
714	170227.	39.999
819	130872.	30.752
952	209751.	39.999
1174	196295.	37.433
1310	214043.	50.381
1612	169937.	39.999
1949	131057.	47.043
2166	111435.	39.999
2447	96267.	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	170227.	157074.	
2	S2	1	209751.	139320.	
3	S3	1	214043.	109282.	*
4	S4	1	169937.	113790.	
5	S5	1	111435.	70051.	
6	S6	1	96267.	75512.	

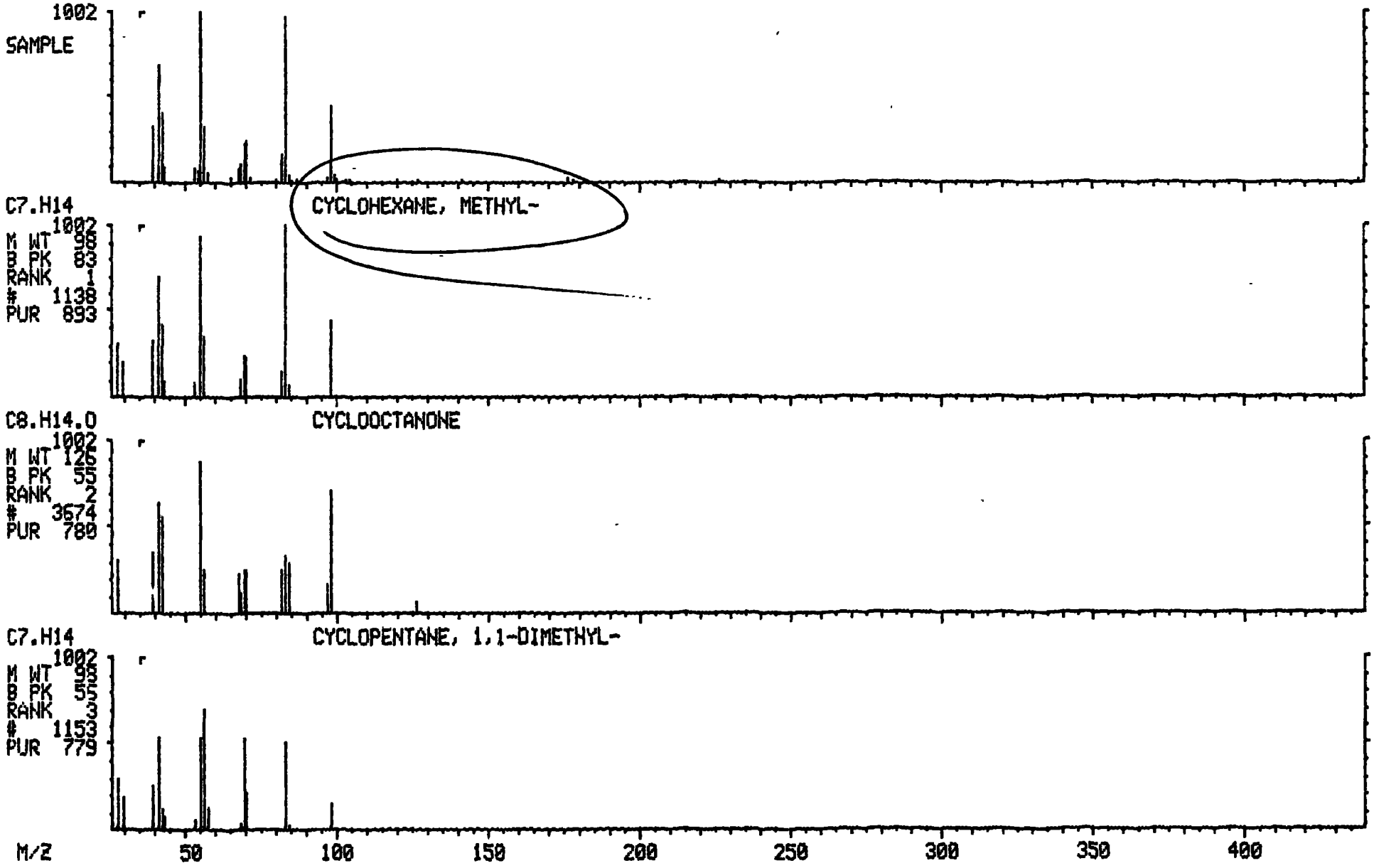
SIZE = AREA

00128

LIBRARY SEARCH
06/02/88 21:33:00 + 3:56
SAMPLE: 59436-02 REPREP BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R995 # 315
CALI: 050288CR # 5

BASE M/Z: 55
RIC: 11391.

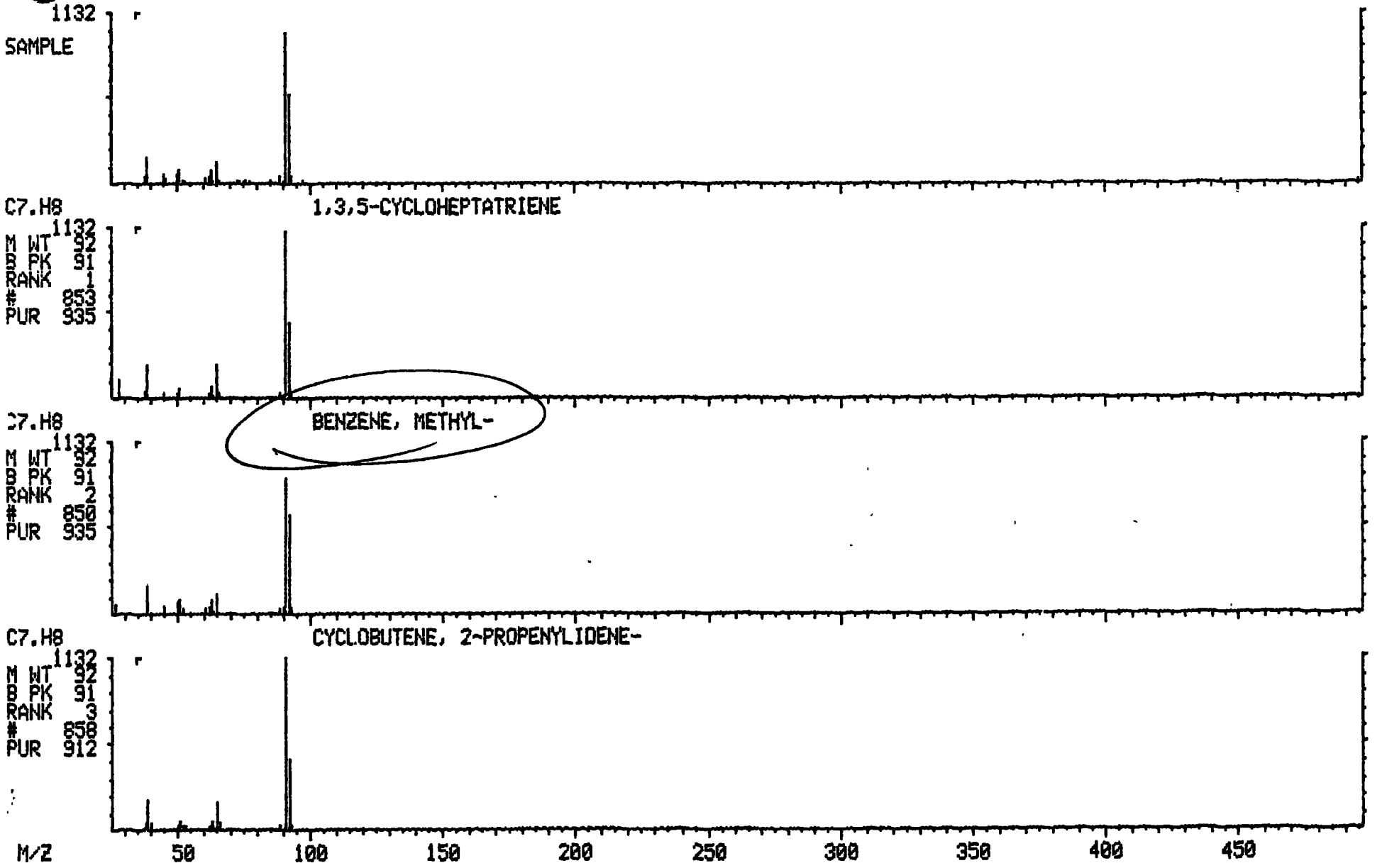


00129

LIBRARY SEARCH
06/02/88 21:33:00 + 4:36
SAMPLE: 59436-02 REPREP BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R995 # 368
CALI: 060288CR # 5

BASE M/Z: 91
RIC: 8895.



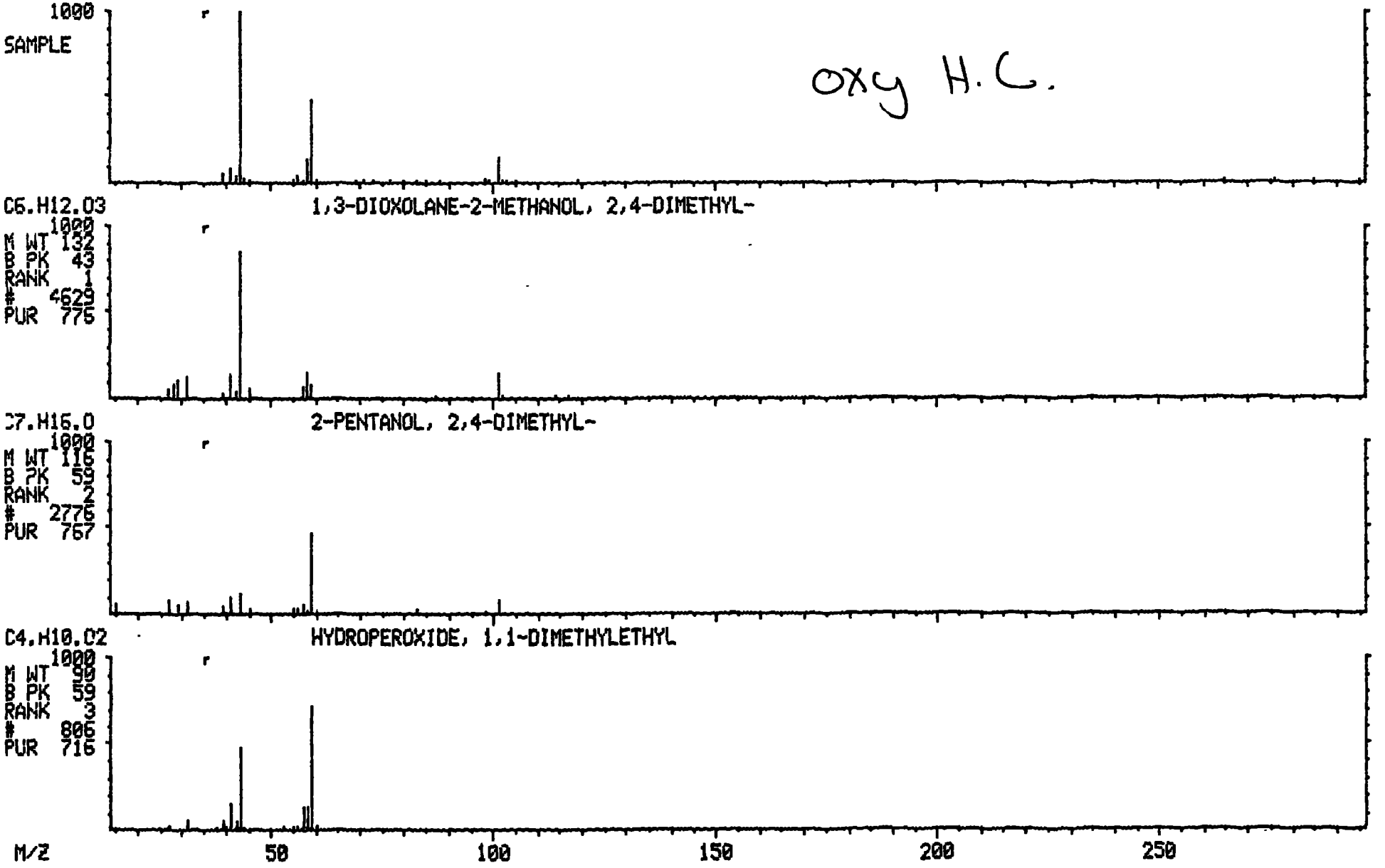
00130

LIBRARY SEARCH
05/02/88 21:33:00 + 5:50
SAMPLE: 59436-02 REPREP BNA H2O 100Z/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R995 # 467
CALI: 060288CR # 5

BASE M/Z: 43
RIC: 36671.

oxy H.C.

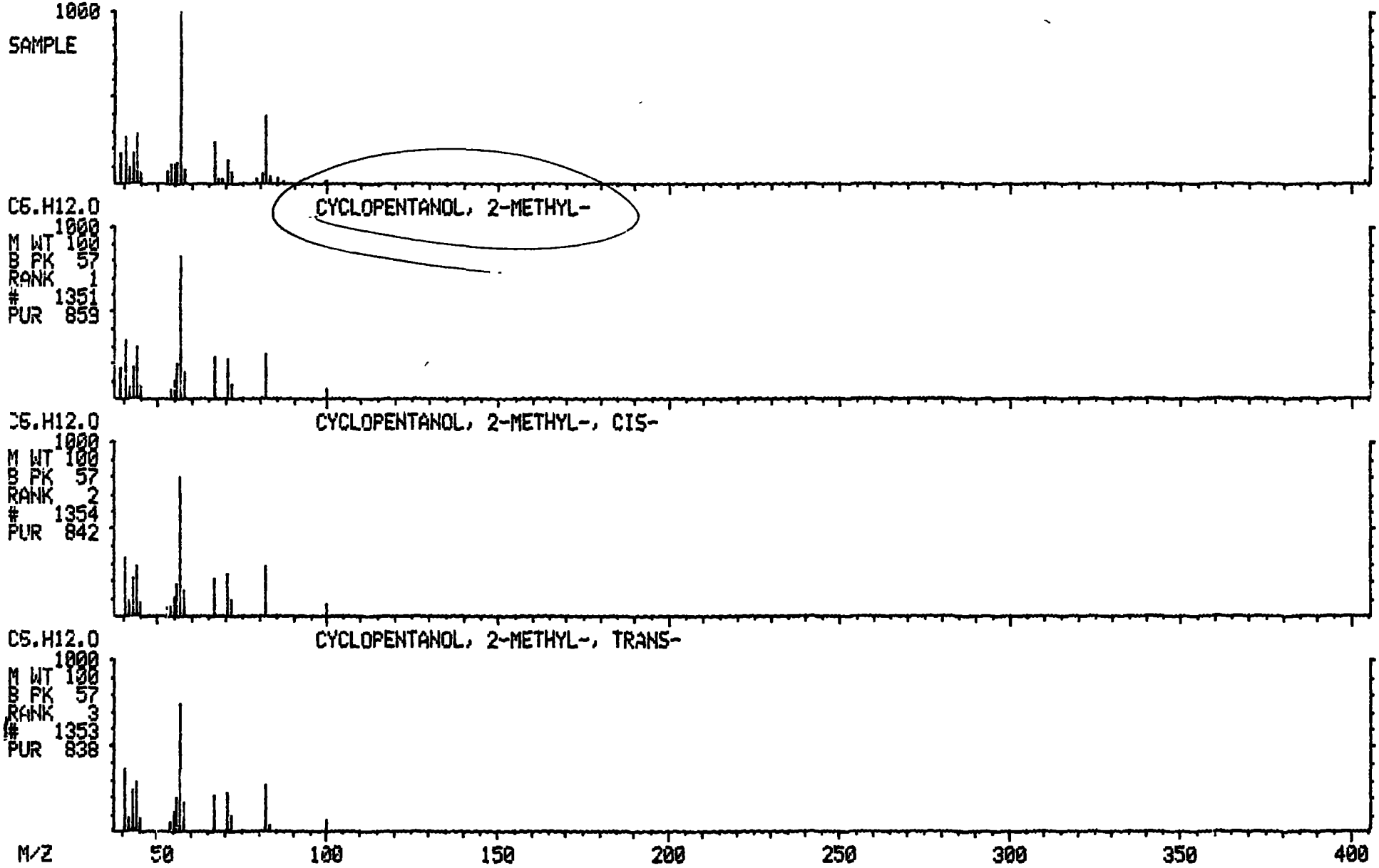


00131

LIBRARY SEARCH
06/02/88 21:33:00 + 6:37
SAMPLE: 59436-02 REPREP BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: 559436R995 # 530
CALI: 060288CR # 5

BASE M/Z: 57
RIC: 5279.

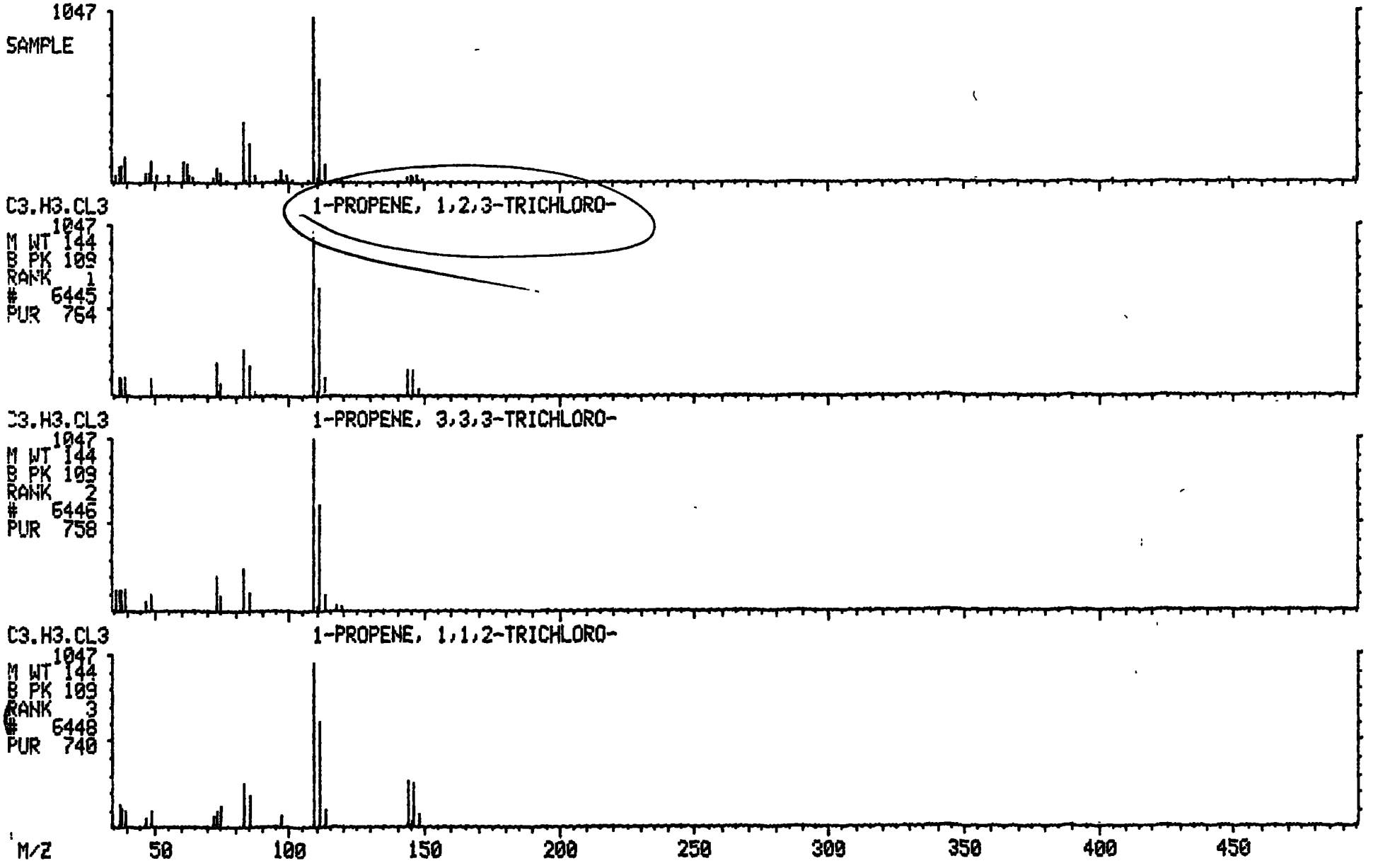


00132

LIBRARY SEARCH
06/02/88 21:33:00 + 7:46
SAMPLE: 59436-02 REPREP BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R995 # 621
CALI: 060288CR # 5

BASE M/Z: 109
RIC: 17695.

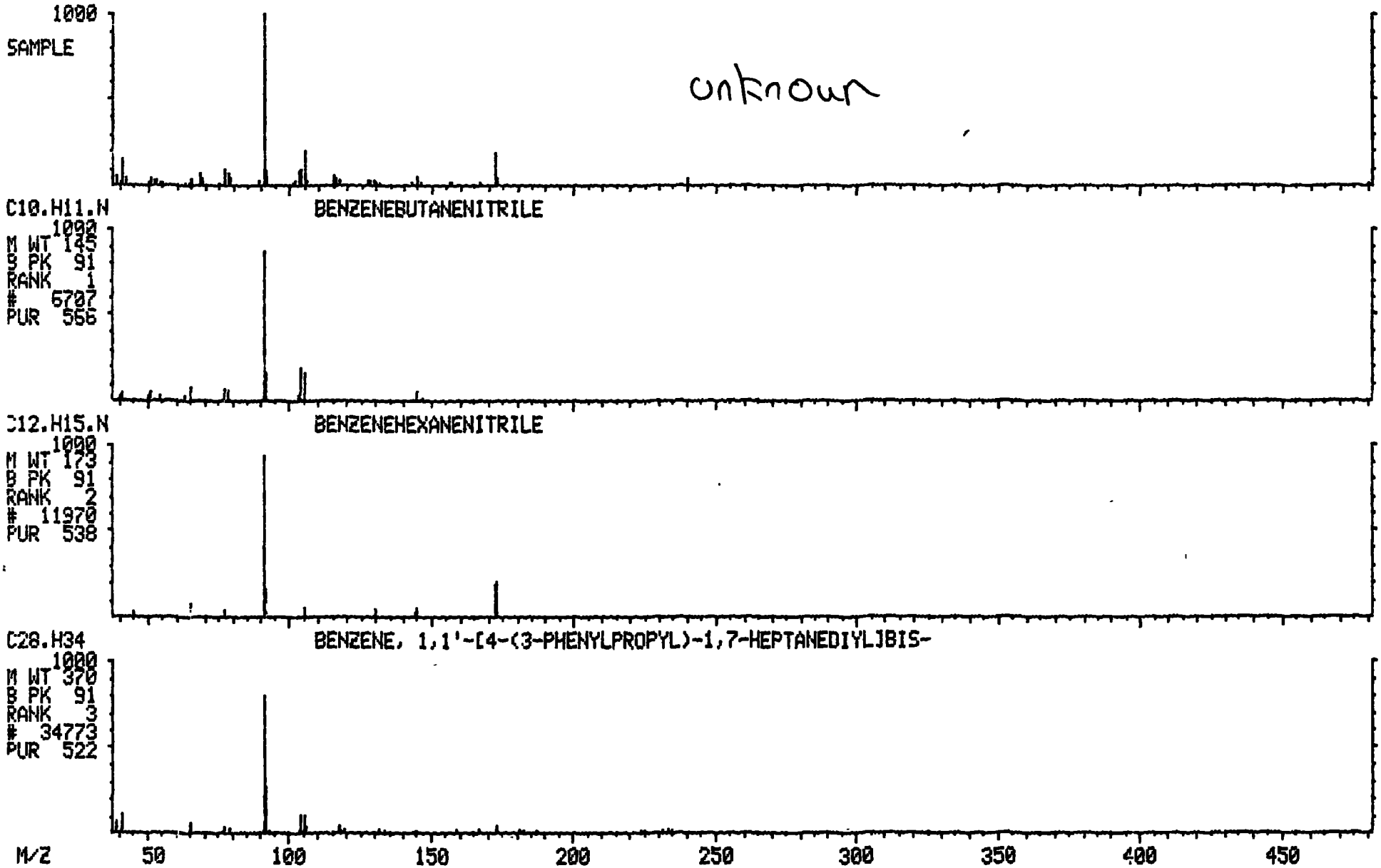


00133

LIBRARY SEARCH
06/02/88 21:33:00 + 19:43
SAMPLE: 59436-02 REPREP BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59436R995 #1578
CALI: 060288CR # 5

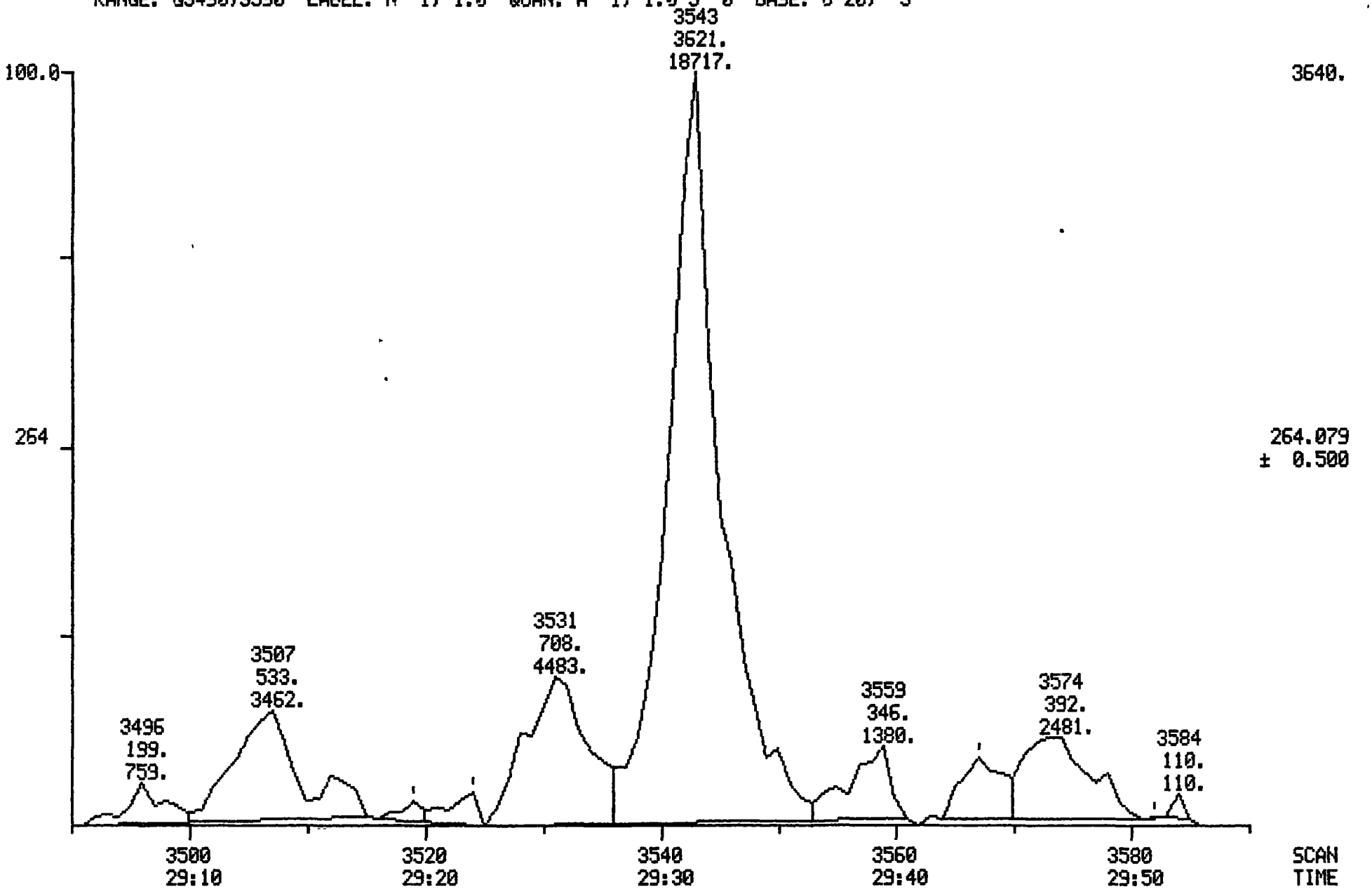
BASE M/Z: 91
RIC: 3995.



No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
8	28:48	1.00	0.977	1.00	81.89	80.00	0.304	0.297	1.02
9	28:48	1.00	0.977	1.00	79.94	80.00	0.297	0.297	1.00
10	28:51	1.00	0.978	1.00	185.27	80.00	3.295	1.423	2.32
11	28:51	1.00	0.978	1.00	78.51	80.00	0.304	0.310	0.98
12	28:51	1.00	0.978	1.00	76.64	80.00	0.297	0.310	0.96
13	29:41	0.98	0.982	1.00	6.94	80.00	0.130	1.496	0.09
14	29:41	0.98	0.982	1.00	37.76	80.00	0.156	0.330	0.47
15	29:32	1.00	1.001	1.00	69.54	80.00	1.171	1.347	0.87
16	29:33	1.00	1.002	1.00	55.33	80.00	0.228	0.330	0.69

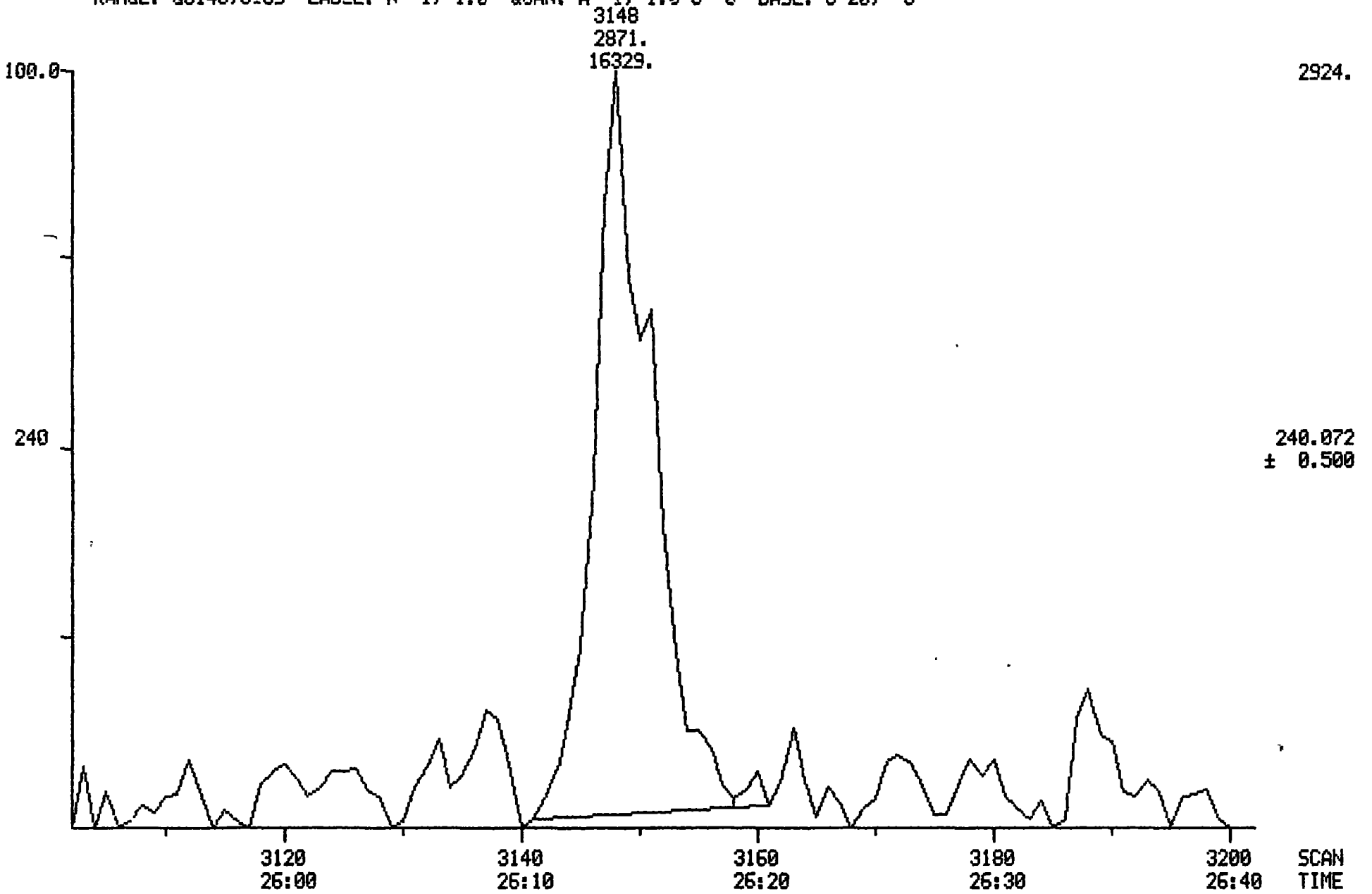
00401

MIDMASS CHROMATOGRAM DATA: 559444X849 #3540 SCANS 3490 TO 3590
06/04/88 14:36:00 CALI: 060488CX #2
SAMPLE: 59444-05 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3490,3590 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



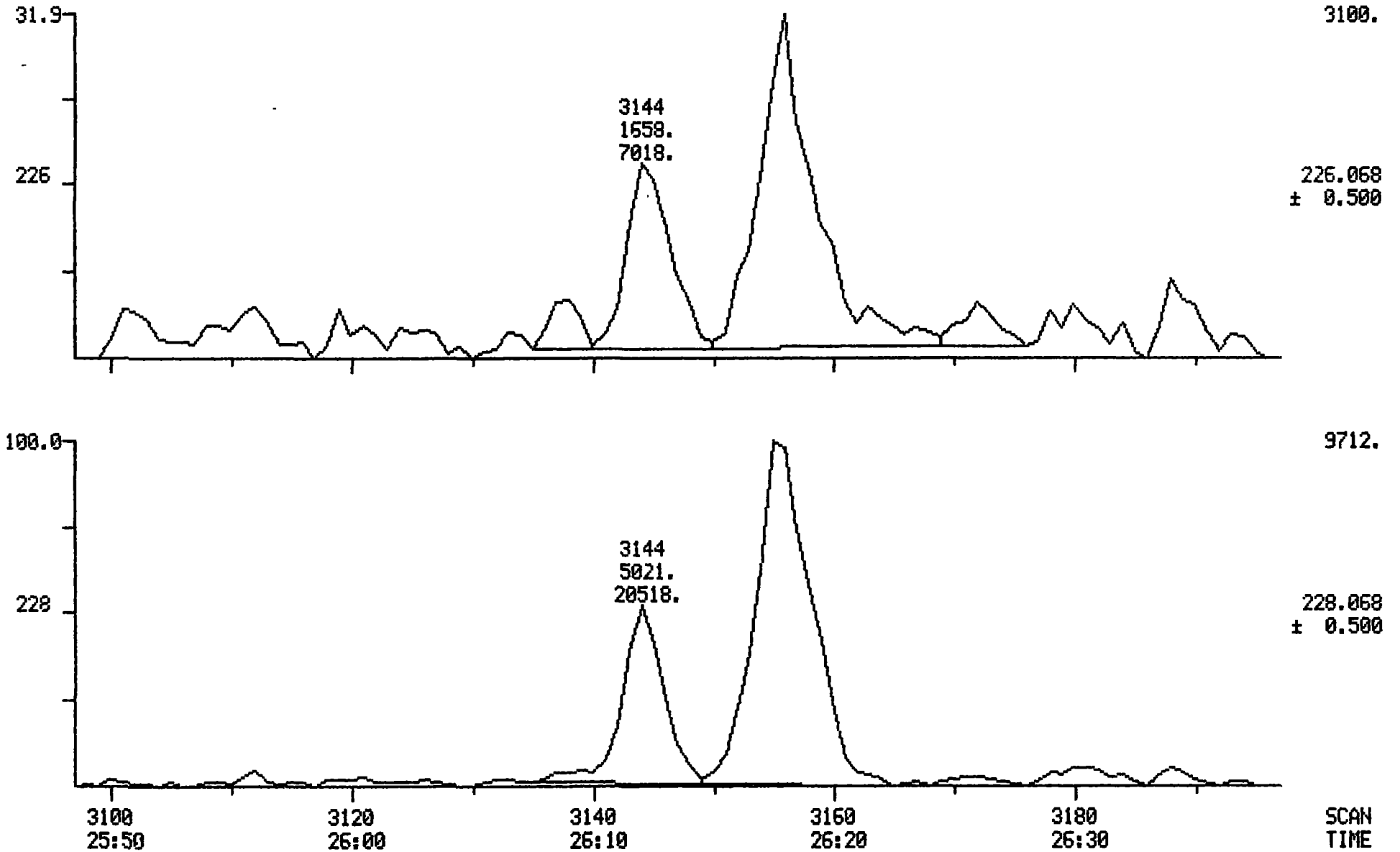
00402

MIDMASS CHROMATOGRAM DATA: S59444X849 #3152 SCANS 3102 TO 3202
06/04/88 14:36:00 CALI: 060488CX #2
SAMPLE: 59444-05 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3145,3159 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



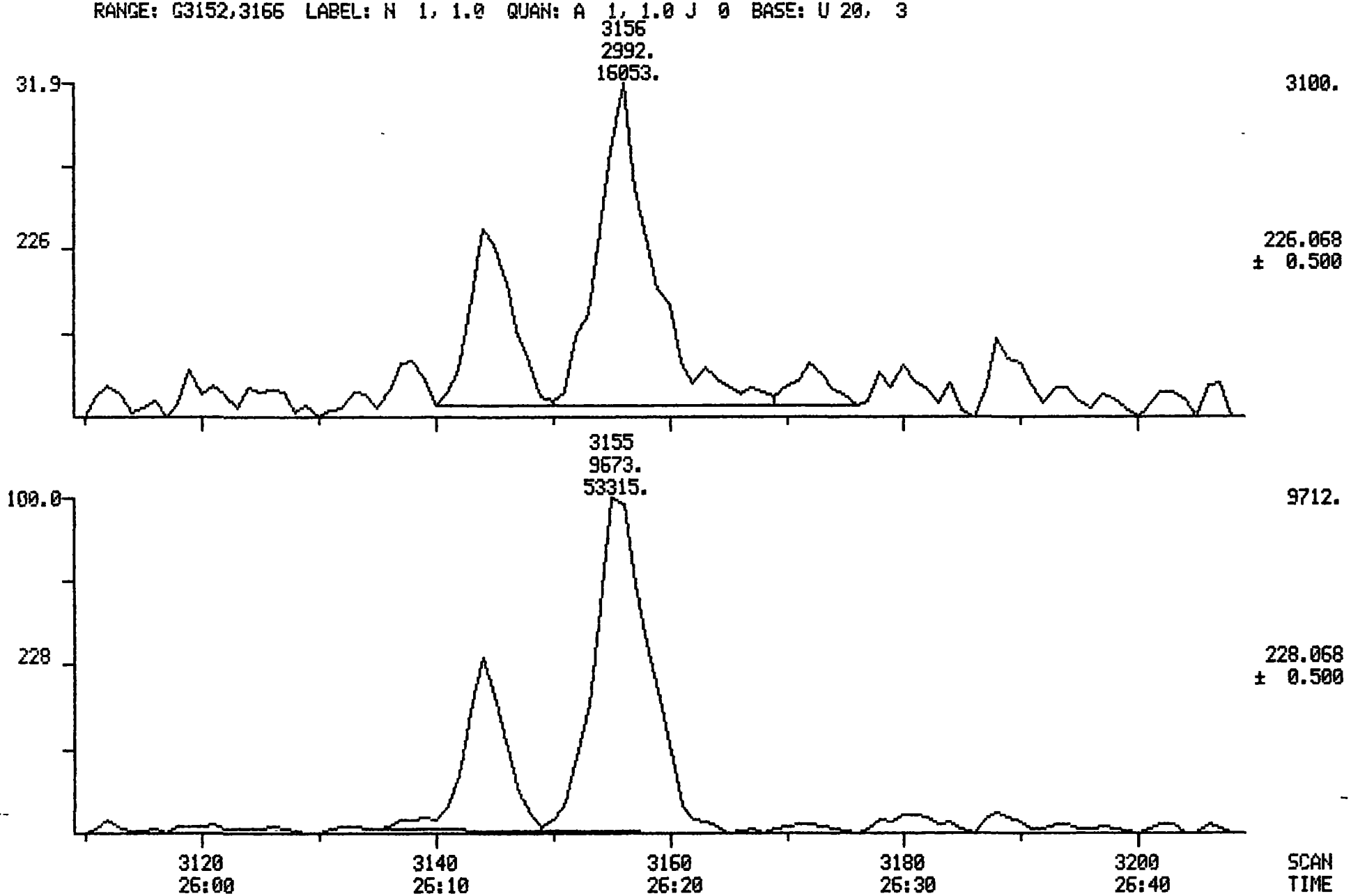
00403

MIDMASS CHROMATOGRAMS DATA: S59444X849 #3147 SCANS 3097 TO 3197
06/04/88 14:36:00 CALI: 060488CX #2
SAMPLE: 59444-05 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3140,3154 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3

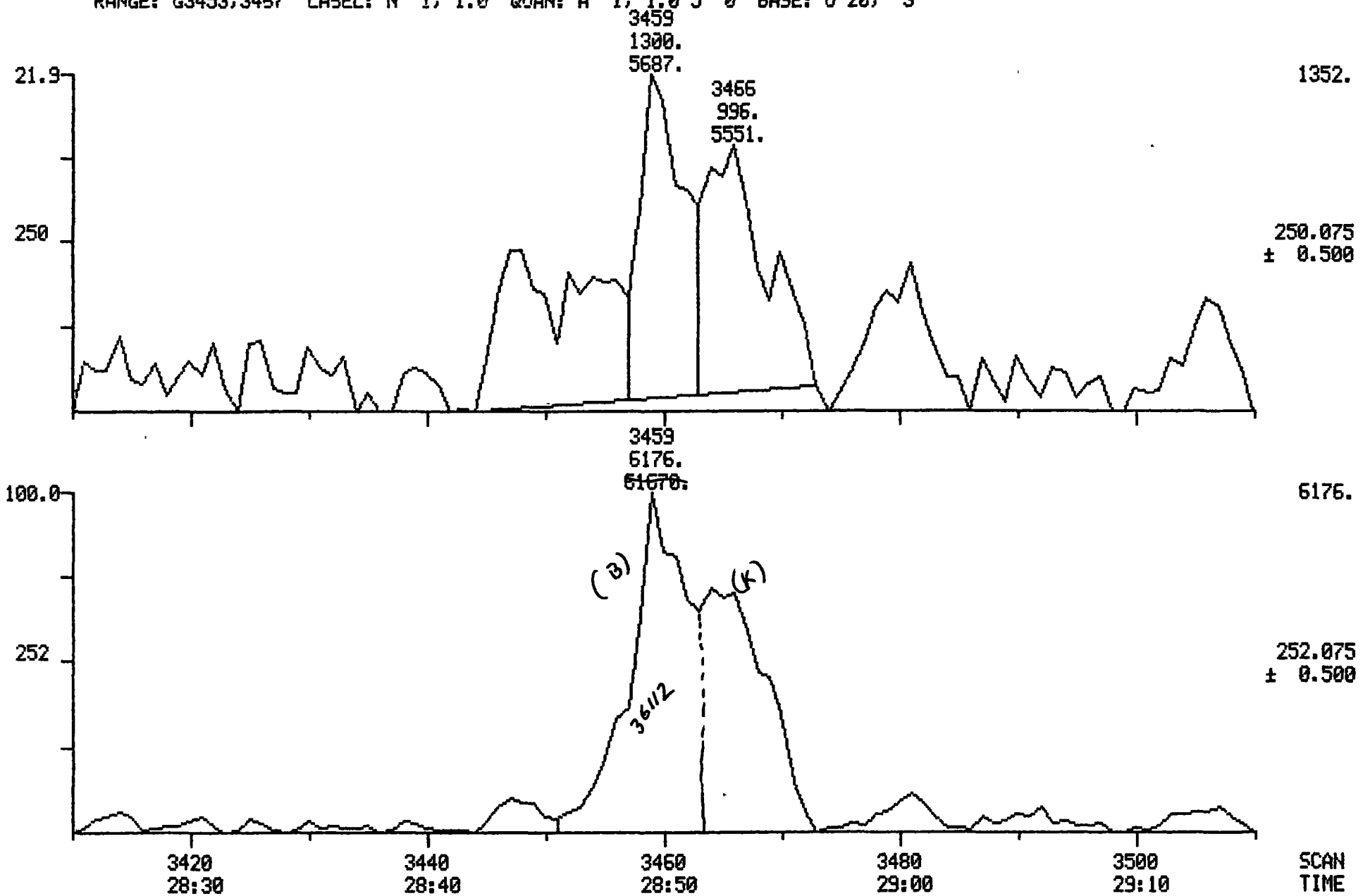


00404

MIDMASS CHROMATOGRAMS DATA: S59444X849 #3159 SCANS 3109 TO 3209
06/04/88 14:36:00 CALI: 060488CX #2
SAMPLE: 59444-05 PAH WATER 100Z/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3152,3166 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3

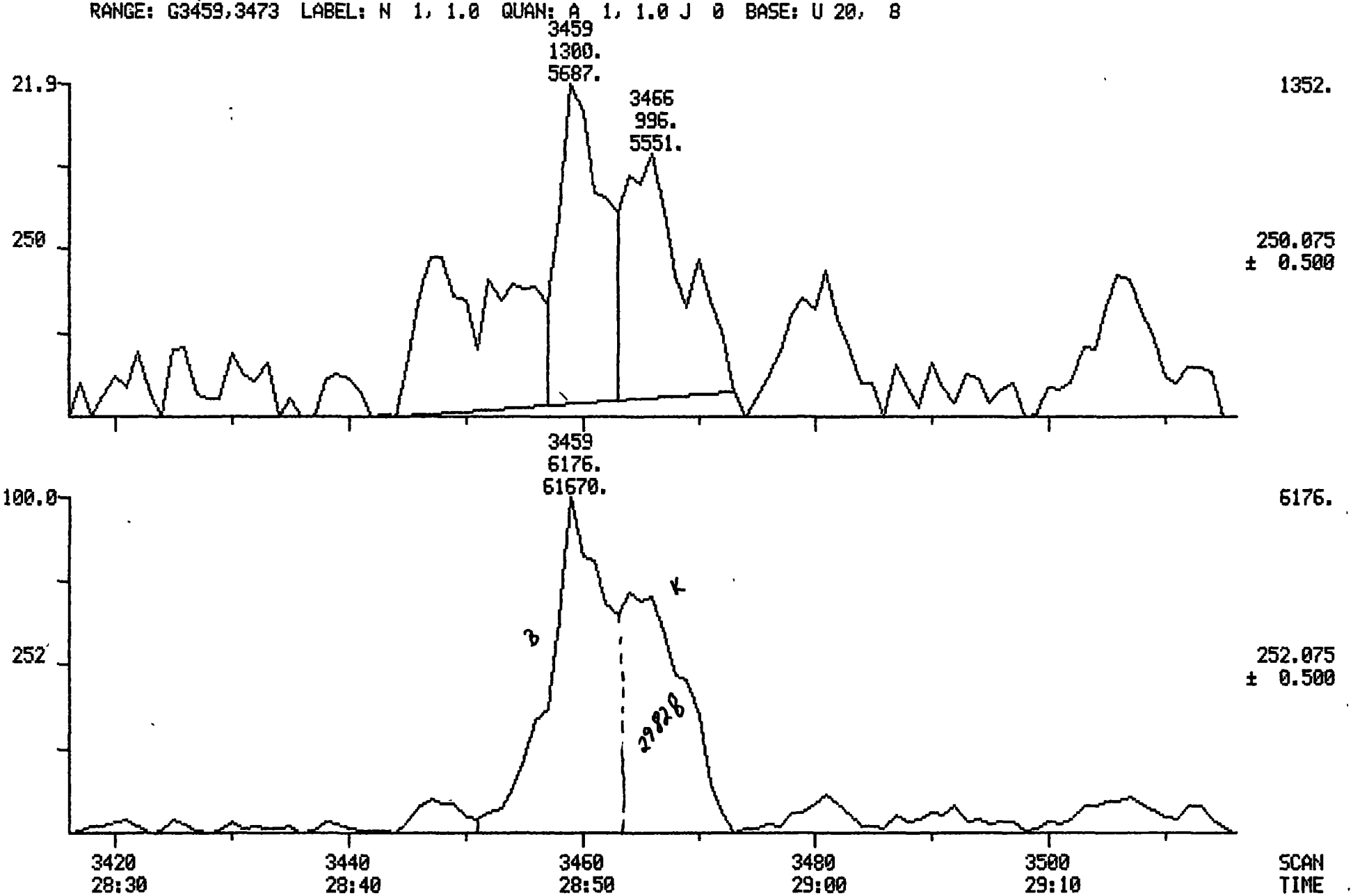


MIDMASS CHROMATOGRAMS DATA: 559444X849 #3460 SCANS 3410 TO 3510
06/04/88 14:36:00 CALI: 060488CX #2
SAMPLE: 59444-05 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3453,3457 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



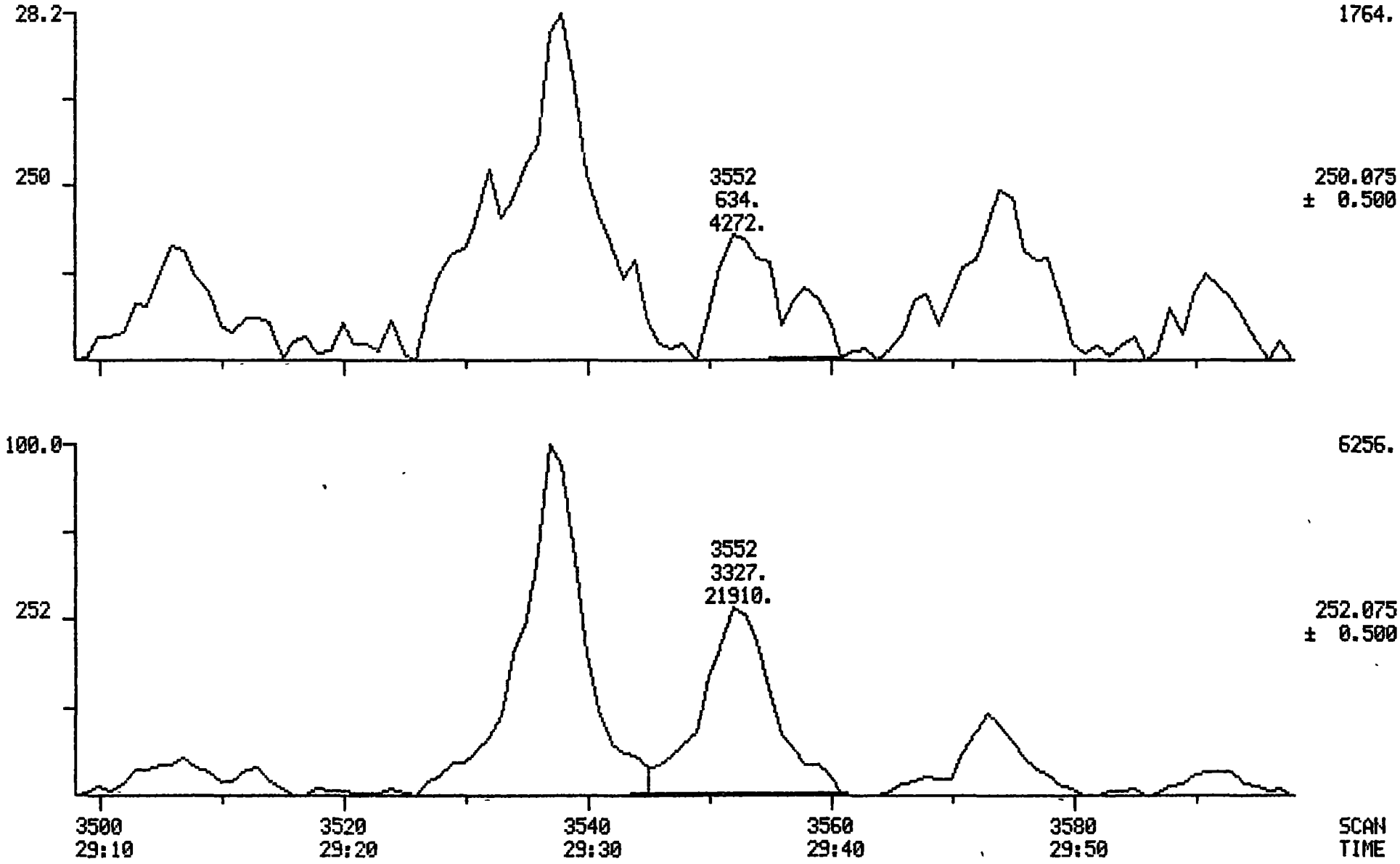
004406

MIDMASS CHROMATOGRAMS DATA: 559444X849 #3466 SCANS 3416 TO 3516
06/04/88 14:36:00 CALI: 060488CX #2
SAMPLE: 59444-05 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3459,3473 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 8



004407

MIDMASS CHROMATOGRAMS DATA: S59444X849 #3548 SCANS 3498 TO 3598
06/04/88 14:36:00 CALI: 060488CX #2
SAMPLE: 59444-05 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3541,3555 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59444X849

00408

Data: S59444X849.TI
06/04/88 14:36:00
Sample: 59444-05 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(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	3543	29:31	1	1.000	A VV	18717.	80.000	NG/ML	7.19
2	240	3148	26:14	1	0.889	A BV	16329.	42.836	NG/ML	3.85
3	228	3144	26:12	1	0.887	A BV	20518.	48.310	NG/ML	4.34
4	226	3144	26:12	1	0.887	A VV	7018.	69.958	NG/ML	6.29
5	228	3155	26:17	1	0.890	A VB	53315.	128.174	NG/ML	11.52
6	226	3156	26:18	1	0.891	A VV	16053.	152.572	NG/ML	13.71
7	252	3459	28:49	1	0.976	M XX	36112.	94.426	NG/ML	8.49
8	250	3459	28:49	1	0.976	A VV	5687.	81.888	NG/ML	7.36
9	252	3464	28:52	1	0.978	M XX	29828.	89.608	NG/ML	8.05
10	250	3466	28:53	1	0.978	A VB	5551.	76.641	NG/ML	6.89
11	250	3459	28:49	1	0.976	A VV	5687.	78.511	NG/ML	7.06
12	252	3481	29:00	1	0.983	A BB	2428.	6.937	NG/ML	0.62
13	250	3481	29:00	1	0.983	A BB	2920.	37.763	NG/ML	3.39
14	252	3552	29:36	1	1.003	A VB	21910.	69.543	NG/ML	6.25
15	250	3552	29:36	1	1.003	A BB	4272.	55.333	NG/ML	4.97

59444-05 20%

DC 05/19/86

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

00409

Maximum DBC surrogate recovery $= \frac{1.0\,ug}{ml} \times \frac{1.0\,ml}{10.0\,ml} \times \frac{20\%}{100\%} = \frac{.02\,ug}{ml}$

DAY 127

DBC Col. A: $\frac{27.0\,mm}{27.5\,mm} \times \frac{.02\,ug/ml}{.02\,ug/ml} \times 100\% = 98\%$

Col B - Not Use - R.T shift

DAY 134

For DDT only - ND

DBC surrogate recovery = 98%

No other CLP compounds found

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

[illegible]

DLC 05/19/[illegible]

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME REQUIRED	[illegible] NONE	[illegible] ARRAY	AMOUNT	[illegible]
016	[illegible]-DDT no col. conf.	12.[illegible]67	12.800	[illegible]	[illegible]	[illegible]	[illegible]
022	TOXAPHENE (peak [illegible]) no pattern	12.450	12.800	7	[illegible]	[illegible]	[illegible]
043	AROCLOR 1260 (peak [illegible]) + no pat	13.167	12.800	[illegible]	[illegible]	[illegible]	[illegible]
047	DDC (surrogate)	25.800	25.800	8	[illegible]	[illegible]	[illegible]

00410

^ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

00411

[illegible] CNT	[illegible] NAME	[illegible]	[illegible] MEASURED	[illegible]	[illegible]	[illegible]	[illegible]
001	alpha BHC	1.470	1.470	5	4623	.0003	[illegible]
002	LINDANE	1.580	1.900	[illegible]	1546	[illegible]	[illegible]
003	beta-BHC	2.150	2.150	8	7581	.0005	[illegible]
007	HEPTACHLOR EPOXIDE	4.380	4.400	11	8027	.0008	[illegible]
023	AROCLOR 1016(peak 1)	1.367	1.472	5	4623	.0115	[illegible]
024	AROCLOR 1016(peak 2)	1.800	1.687	6	3130	.0047	ug/ml
024	AROCLOR 1016(peak 2)	1.800	1.900	7	1546	.0019	ug/ml
025	AROCLOR 1016(peak 3)	2.400	2.450	9	1479	.0011	ug/ml
028	AROCLOR 1232(peak 2)	2.417	2.450	9	1479	.0023	ug/ml
030	AROCLOR 1242(peak 2)	1.817	1.900	7	1546	.0020	ug/ml
031	AROCLOR 1242(peak 3)	2.400	2.450	9	1479	.0011	ug/ml
032	AROCLOR 1248(peak 1)	2.433	2.450	9	1479	.0016	ug/ml
033	AROCLOR 1248(peak 2)	3.133	3.133	10	5259	.0057	ug/ml
037	AROCLOR 1254(peak 3)	7.200	7.183	12	4658	.0046	ug/ml
046	AROCLOR 1260(peak 7)	20.083	20.067	13	94668	.0557	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

00412

DLC 05/09/88

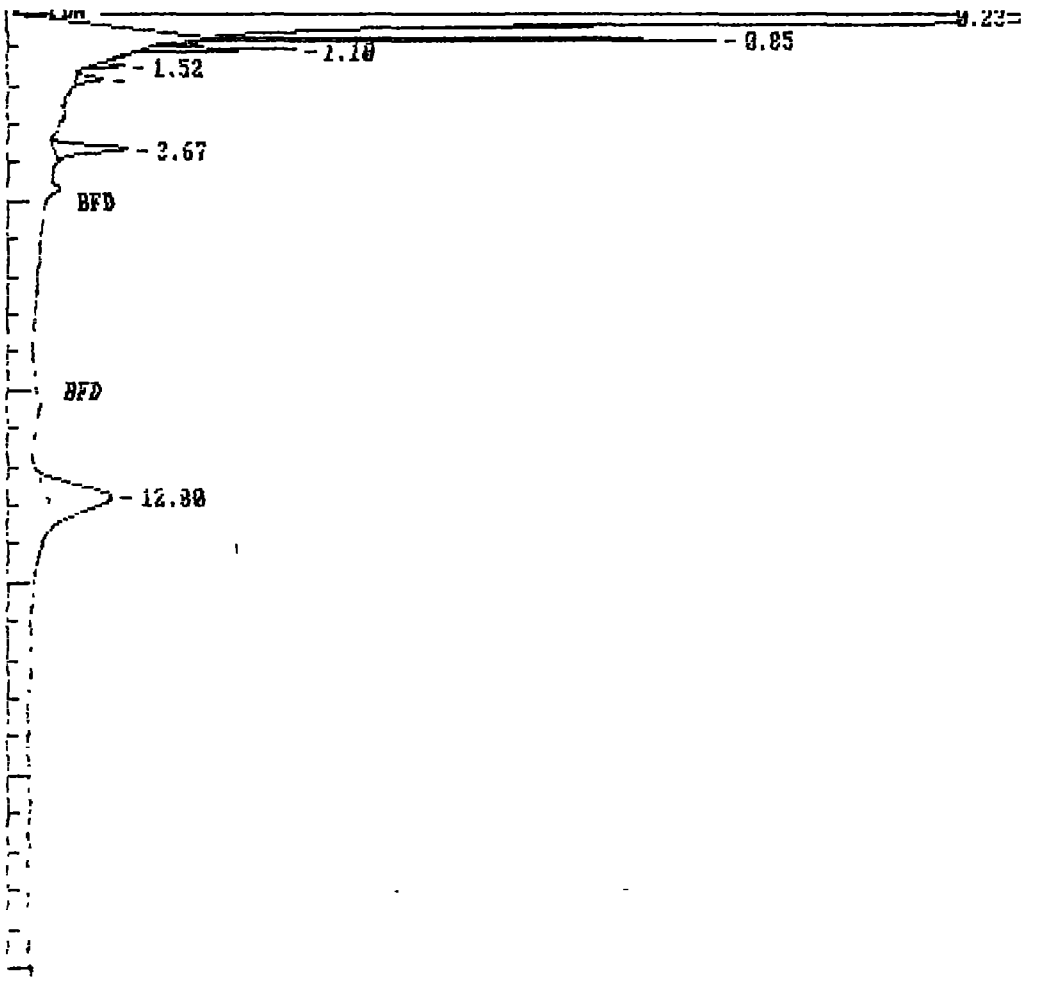
- Sample Name: [illegible]
  Date: [illegible] Method: [illegible]
* Interface: 10 Cycle#: 20 Operator: [illegible] Channel#: 0 [illegible]
* Starting Peak: 4 [illegible] Threshold: 1 Area Threshold: [illegible]
* Instrument Type: [illegible] Column Type: [illegible]
* Solvent Description: [illegible]
* Conditions: 190 DEGREES ISOTHERMAL
* Detector 0: ECD Detector 1:
* Misc. Information: 4 UL INJECTION LPT1: *

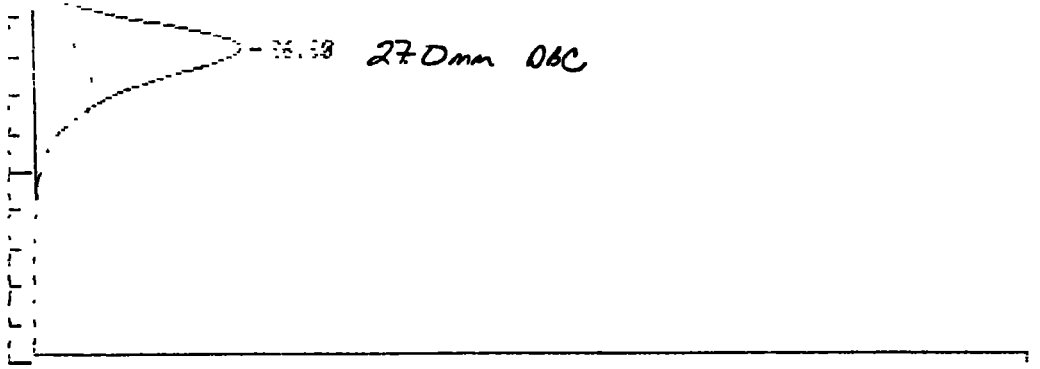
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	L	Peak Ht.	Normalized %	Area Height
1	0.23	[illegible]	[illegible]	1	[illegible]	100.000	[illegible]
2	0.85	13027	1.1575	1	3633	1.326	3.6
3	1.10	4565	0.4056	1	1062	0.465	4.3
4	1.52	1235	0.1097	1	225	0.126	5.5
5	1.87	1639	0.1456	1	188	0.167	[illegible]
6	3.67	6924	0.6152	1	507	0.705	13.7
7	12.80	19310	1.7157	1	449	1.966	43.0
8	26.80	96616	8.5845	1	1138	9.837	84.9

Total Area: 1125459 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB12720.ATB
Data File = J:AB12720.PTB Printed on 05-09-1988 at 01:03:08
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





00413

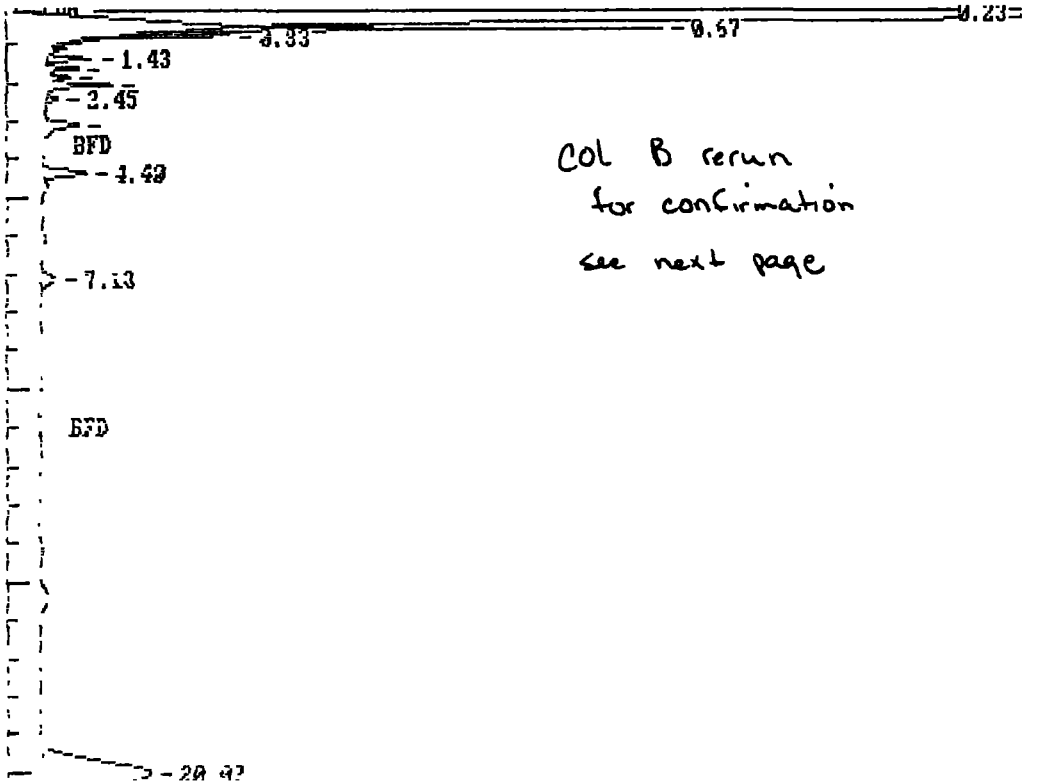
00414

```
*****************************************************************************
* Sample Name: 594-4 .5 ZOL                                  Date File: 1287220
* Date: 25-09-1988 06:45:43 Method: M:8681
* Interface: 12  Cycle#:  30   Operator 55  Channel#: 6    Vial#: N.A.
* Starting Peak Width:  10   Threshold: 1   Area Threshold: 100
*****************************************************************************
* Instrument Type: HP 5880A                  Column Type: cFT X DMM 15 GLASS
*              Solvent Description: 1.5% SP2250/1.95% SP2401
* Conditions: 190 DEG ISOTHERMAL
*             Detector 0:                          Detector 1: ECD
* Misc. Information: 4 UL INJ
*****************************************************************************
Starting Date :    0.00                                Run Time:     0.00
```

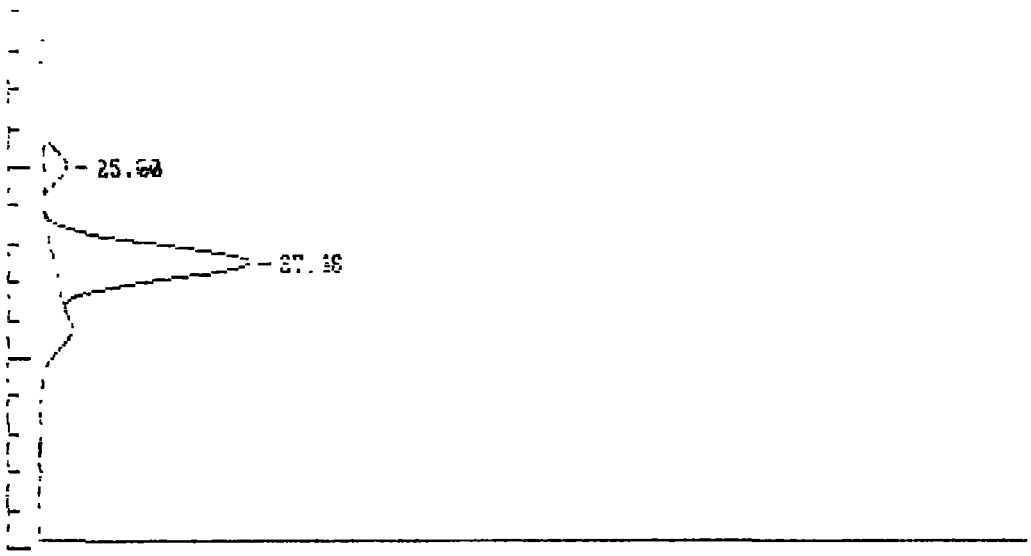
Pk No.	Ret Time	Peak Area	Area %	D L	Peak Ht.	Normalized %	Area/ Height
1	0.23	2502664	85.9127	1	425920	100.000	5.9
2	0.67	28690	0.9851	1	8277	1.145	3.7
3	0.83	5654	0.1941	1	2129	0.224	2.7
5	1.42	4423	0.1527	1	842	0.105	5.5
6	1.68	3430	0.1178	1	569	0.177	6.0
7	1.90	1546	0.0531	1	339	0.080	4.6
8	2.10	7851	0.2706	1	1139	0.215	6.9
9	2.45	1479	0.0508	1	203	0.050	7.3
10	3.13	5259	0.1806	1	364	0.210	9.3
11	4.40	8087	0.2775	1	764	0.327	10.6
12	7.18	4658	0.1599	1	271	0.186	17.2
13	20.07	94608	3.2565	1	2030	3.783	46.6
14	25.00	20379	0.6997	1	409	0.814	49.8
15	27.48	223344	7.6688	1	3608	8.924	61.9

Total Area: 2912355 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB12720.ATB
Data File = J:BB12720.FTS Printed on 05-09-1988 at 00:46:29
Start time: 0.00 min. Stop time: 35.00 min Offset: 0 mv.
Full Range: 10 millivolts



Col B rerun
for confirmation
see next page



00415

DLE 05/19/88

00416

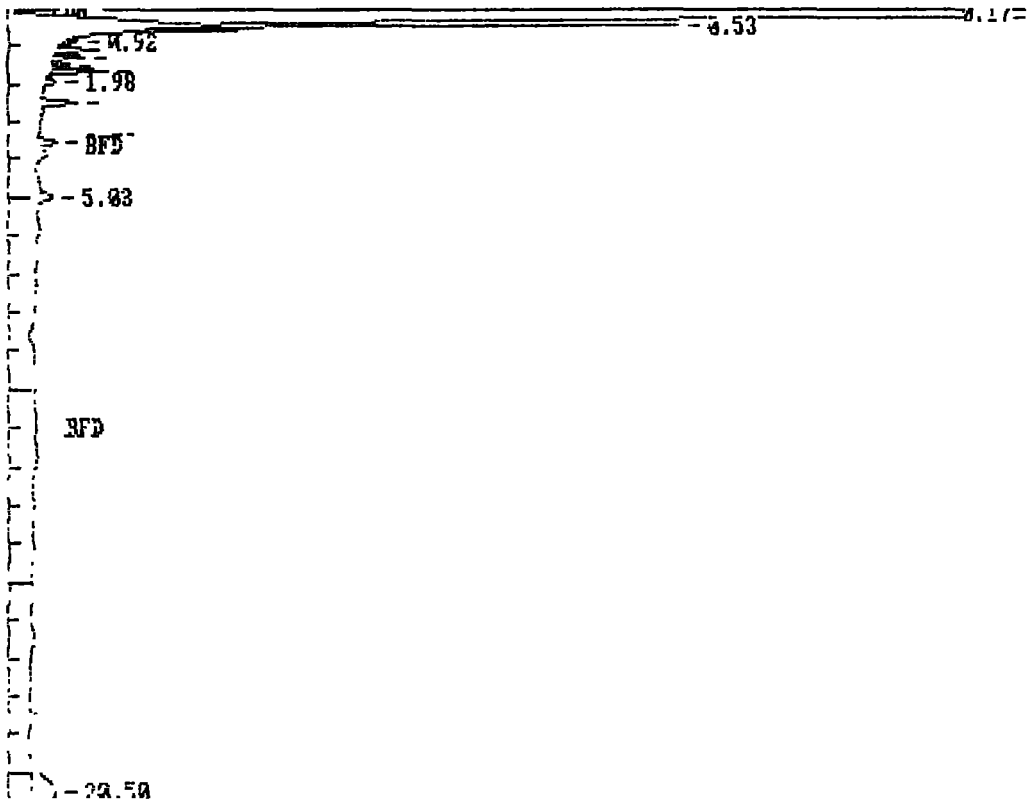
* Sample Name [illegible] 25 ZD% rerun Data File: [illegible]
* Date [illegible] 22 49:32 [illegible] M:5091
* Injection [illegible] Cycle: [illegible] 17 Operator: [illegible] Channel: 1 [illegible]
* Starting Peak [illegible] Tangent: 1 Area Threshold: 1.
* Instrument Type: HP 5890A Detector Type: FFT - DIM ID [illegible]
* Solvent Description: 1.5% [illegible], 1.95% [illegible]
* Conditions: 190 CCB ISOTHERMAL
* Detector 0: Detector 1: ECD
* Misc. Information: 4 UL INJ

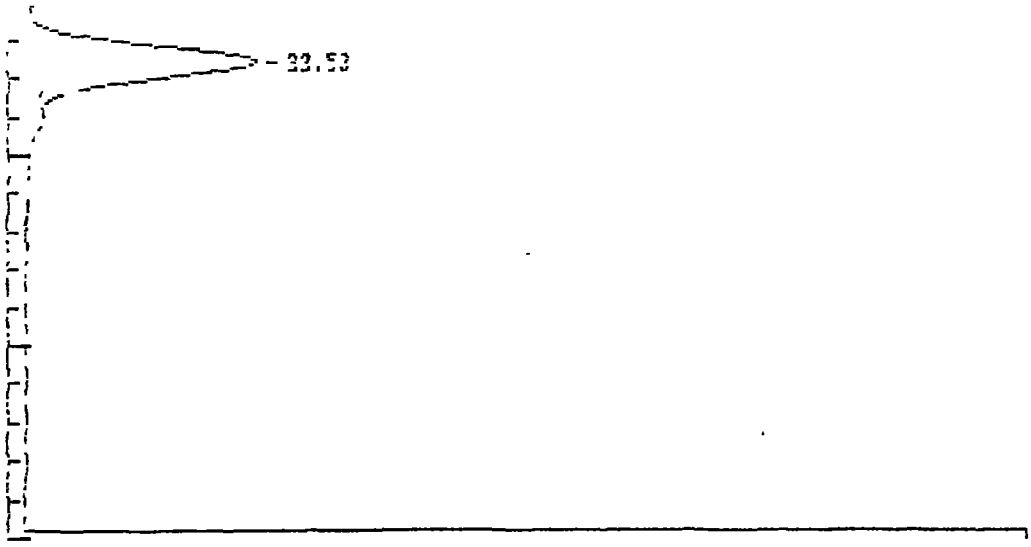
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area Height
1	0.17	1533724	95.3036	1	705670	100.000	4.6
2	0.53	29434	1.3697	1	9033	1.605	3.7
3	0.92	1566	0.0729	1	265	0.035	5.9
4	1.15	3295	0.1214	1	754	0.217	4.9
5	1.35	3011	0.1401	1	592	0.164	5.1
6	1.55	1175	0.0547	1	717	0.064	3.7
7	1.70	6557	0.3051	1	1051	0.350	6.1
8	1.98	1381	0.0596	1	230	0.070	6.4
9	2.55	5306	0.2767	1	681	0.277	7.5
10	3.58	2640	0.1229	1	308	0.144	8.6
11	5.03	3320	0.1548	1	274	0.181	12.1
12	20.50	21074	0.9807	1	447	1.149	47.1
13	22.58	236115	10.9878	1	4085	12.876	57.8

Total Area: 2148888 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13419.ATB
Data File = J:BB13419.PTS Printed on 05-13-1988 at 22:30:30
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts




33.53

ORGANICS ANALYSIS DATA SHEET
(Page 1)

00418

Sample Number : 59444-06

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59444-06
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59444
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration : Low
Date Extracted/Prepared : N/A
Date Analyzed : 05/02/88
Conc./Dilution Factor : 1.0
pH : 7.0
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	6.6	B	124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone		10 U	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

Form I

Laboratory Name: Rocky Mountain Analytical
Case Number: N/A
Q.C. Number: 59444

Sample Number
59444-06

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: 59444

Organics Analysis Data Sheet

Sample Number
59444-06

00420

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/27/88	Separatory Funnel Extraction	No
Date Analyzed	06/03/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.01		
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	2.2	J
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		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: 59444

Sample Number
59444-06

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	311	9.1 B
2. 108-88-3	Methyl Benzene	BNA	367	6.4 B
3.	Oxygenated Hydrocarbon	BNA	467	15 B
4. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	622	11 B
5.				
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ROCKY MOUNTAIN ANALYTICAL LABORATORY 00422
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59444-06
Date Analyzed: 06/03/88

Units: ug/L
Run Factor: 2.01

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	68.7	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	
	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: 59444-06
Date Analyzed: 06/04/88

Units: ng/L
Run Factor: 0.125

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	33.3	42	10-118

Target Compounds

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

J= Value is below detection limit (10ppt)

FORM I

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59444

Sample Number: 59444-06

00424

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/26/88
Date Analyzed :05/09/88
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	Aroicor-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

5/2/88 18:33 54 SCAN 1 OF 730
Acquisition started

00425

Acquire
05/02/88 18:33:00 + 0:03
Sample: 59444-06 100%/5ML
Conds.: GC DESC V3
Formula:
Submitted by: RMAL

Run 3:S59444W959
Free sectors: 12525
Instrument: 5100
Analyst: MD/GW

Acquiring
Scan: 1 of 730
Weight: 0.029
Acct. No:

*** 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	1.96	-4.00
Ion programming	5.41	-4.00
Lens voltage	-80.00	50.20
Extractor voltage	0.94	not used

Electron multiplier voltage: -2247.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/2/88 19:10:29
Acquisition completed
Scans: 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan per second		
Centroid	730	28.5	2190.0	1.3	11630.	16.	5.

00426

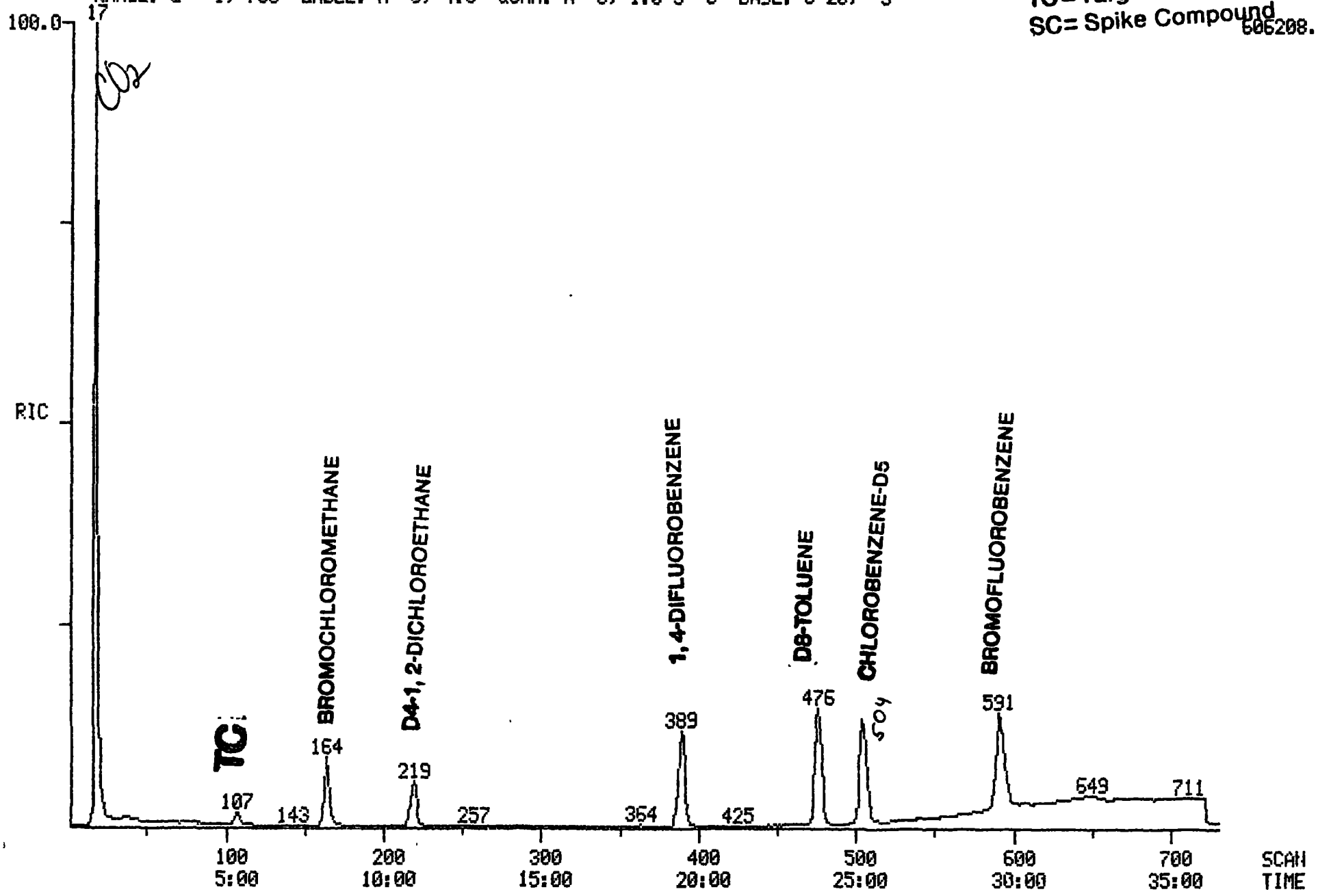
RIC
05/02/88 18:33:00
SAMPLE: 59444-06 100%/5ML
CONDS.: GC DESC V3
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559444W959 #4 SCANS 1 TO 730
CALI: 050288CW #3

TIC=Tentatively Identified Compound

TC=Target Compound
SC= Spike Compound

606208.



PROCEDURE: TCA DIAGNOSTIC REPORT 5/02/88 19.53:30
DATA FILE: S59444W959
REFERENCE. 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION. 2 PROCESSING OPTION. 3
REPORT: ISO1

00427

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	3	1	88	ISO1/TCO1
3	3	1	0	18	6	6	98	ISO2/TCO2
3	3	1	0	12	6	2	134	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	-162	164	164	.	1	958	.	128	163	-1	1
2	V1	10	-33	32	.	.	.	.	.	50	.	.	.
3	V1	15	-49	48	.	.	.	.	.	94	.	.	.
4	V1	25	-60	59	.	.	.	.	.	62	.	.	.
5	V1	35	-74	74	.	.	.	.	.	64	.	.	.
6	V1	45	-106	106	107	1	1	987	.	84	107	.	1
7	V1	50	-115	116	115	-1	1	970	.	58	114	-1	1
8	V1	65	-133	134	.	.	.	.	.	76	.	.	.
9	V1	80	-154	156	.	.	.	.	.	96	.	.	.
10	V2	1	-387	389	389	.	1	997	.	114	389	.	1
11	V3	1	-502	504	504	.	1	997	.	117	504	.	1
12	V1	90	-179	180	.	.	.	.	.	63	.	.	.
13	V1	95	-193	194	.	.	.	.	.	96	.	.	.
14	V1	100	-205	206	.	.	.	.	.	83	.	.	.
15	V1	2	-218	219	219	.	1	989	.	65	219	.	1
16	V2	10	-218	219	218	-1	3	806	.	72	.	.	.
17	V1	110	-220	221	.	.	.	.	.	62	.	.	.
18	V2	15	-248	249	.	.	.	.	.	97	.	.	.
19	V2	20	-256	257	.	.	.	.	.	117	.	.	.
20	V2	25	-259	260	259	-1	2	854	.	43	259	.	1
21	V2	30	-267	268	.	.	.	.	.	83	.	.	.
22	V2	35	-297	298	.	.	.	.	.	63	.	.	.
23	V2	40	-303	304	.	.	.	.	.	75	.	.	.
24	V2	45	-316	317	.	.	.	.	.	130	.	.	.
25	V2	60	-328	329	.	.	.	.	.	78	.	.	.
26	V2	50	-330	331	.	.	.	.	.	129	.	.	.
27	V2	55	-332	333	.	.	.	.	.	97	.	.	.
28	V2	65	-333	334	.	.	.	.	.	75	.	.	.
29	V2	80	-392	393	.	.	.	.	.	173	.	.	.
30	V3	10	-404	405	403	-2	1	921	.	58	.	.	.
31	V3	15	-440	441	442	1	2	955	.	58	440	-2	1
32	V3	25	-446	447	.	.	.	.	.	83	.	.	.
33	V3	20	-448	449	.	.	.	.	.	164	.	.	.
34	V3	2	-475	476	476	.	1	991	.	98	476	.	1
35	V3	35	-479	480	.	.	.	.	.	92	.	.	.
36	V3	40	-506	508	.	.	.	.	.	112	.	.	.
37	V3	50	-548	549	.	.	.	.	.	106	.	.	.
38	V3	3	-590	591	591	.	1	993	.	95	591	.	1
39	V3	55	-611	612	.	.	.	.	.	104	.	.	.
40	V3	60	-614	615	.	.	.	.	.	106	.	.	.
41	V3	75	-627	628	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59444W959

Data: S59444W959 TI
05/02/88 18:33:00
Sample: 59444-06 100%/5ML
Conds.: GC DESC V3
Formula: Instrument: 5100 Weight. 0.029
Submitted by: RMAL Analyst: MD/GW Acct. No.:

00428

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	23972.	50.000 UG/L	16.15
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	107	5:21	1	0.656	A BB	6364.	6.611 UG/L	2.13
7	58	114	5:42	1	0.699	A BB	49.	0.622 UG/L	0.20
8	NOT FOUND								
9	NOT FOUND								
10	114	389	19:27	10	1.000	A BB	133619.	50.000 UG/L	16.15
11	117	504	25:12	11	1.000	A BB	114398.	50.000 UG/L	16.15
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	219	10:57	1	1.344	A BB	44337.	48.085 UG/L	15.53
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	43	259	12:57	10	0.666	A VB	234.	0.081 UG/L	0.03
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	58	440	22:00	11	0.873	A BB	351.	0.884 UG/L	0.29
32	NOT FOUND								
33	NOT FOUND								
34	98	476	23:48	11	0.944	A BB	135022.	50.202 UG/L	16.21
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	95	591	29:33	11	1.173	A BB	79517.	53.249 UG/L	17.19
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	8:09	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:39		0.202						
3	2:27		0.301						
4	3:00		0.368						
5	3:42		0.454						
6	5:18	1.01	0.650	1.01	6.61	50.00	0.265	2.008	0.13
7	5:45	0.99	0.706	0.99	0.62	50.00	0.002	0.164	0.01
8	6:39		0.816						
9	7:42		0.945						
10	19:24	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:09	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	8:57		1.098						
13	9:39		1.184						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	10:15		1.258						
15	10:54	1.00	1.337	1.00	48.09	50.00	1.850	1.923	0.96
16	10:54		0.562						
17	11:00		1.350						
18	12:24		0.639						
19	12:48		0.660						
20	12:57	1.00	0.668	1.00	0.08	50.00	0.002	1.086	0.00
21	13:21		0.688						
22	14:51		0.765						
23	15:09		0.781						
24	15:48		0.814						
25	16:24		0.845						
26	16:30		0.851						
27	16:36		0.856						
28	16:39		0.858						
29	19:36		1.010						
30	20:12		0.803						
31	22:00	1.00	0.875	1.00	0.88	50.00	0.003	0.174	0.02
32	22:18		0.887						
33	22:24		0.891						
34	23:45	1.00	0.944	1.00	50.20	50.00	1.180	1.176	1.00
35	23:57		0.952						
36	25:18		1.006						
37	27:24		1.089						
38	29:30	1.00	1.173	1.00	53.25	50.00	0.695	0.653	1.06
39	30:33		1.215						
40	30:42		1.221						
41	31:21		1.247						

TCA FINISHED, 12 FOUND
FINISHED AT: 5/02/88 19:57.36

RMAL QUANTITATION SUMMARY FILE: S59444W959
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

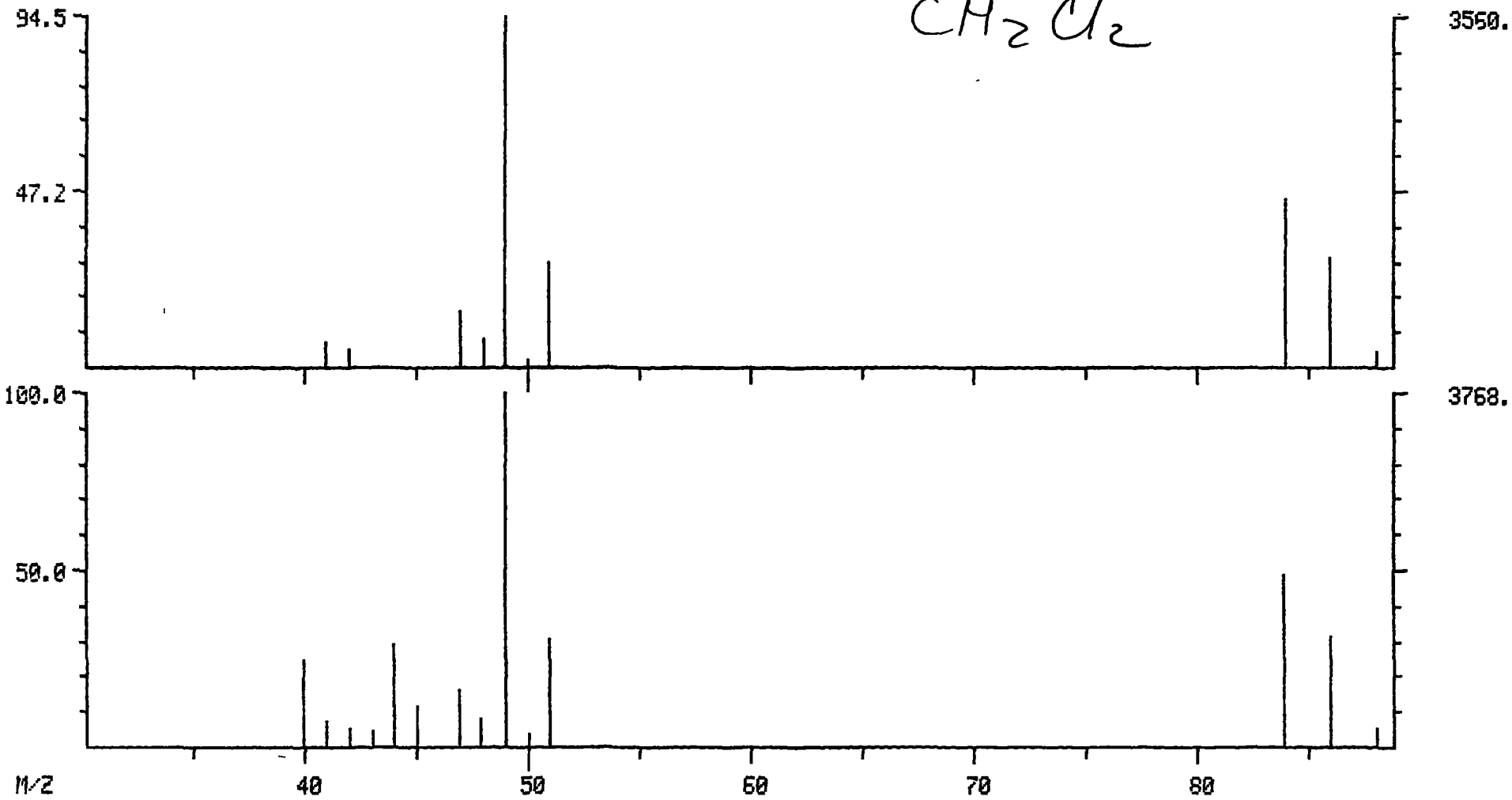
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	23972.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	133619.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	114398.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	476	3	135022.	1.180	50.202
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	79517.	0.695	53.249
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	219	1	44337.	1.850	48.085
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	107	1	6364.	0.265	6.611
12	V1# 50	C035 ACETONE	58		1	NOT FOUND		
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		

00432

DUAL MASS SPECTRUM
05/02/88 18:33:00 + 5:21
SAMPLE: 59444-06 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 84 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59444W959 #107 BASE M/Z: 49/ 49
CALI: 050288CW #3 RIC: 8991./ 12207.

CH_2Cl_2



00433

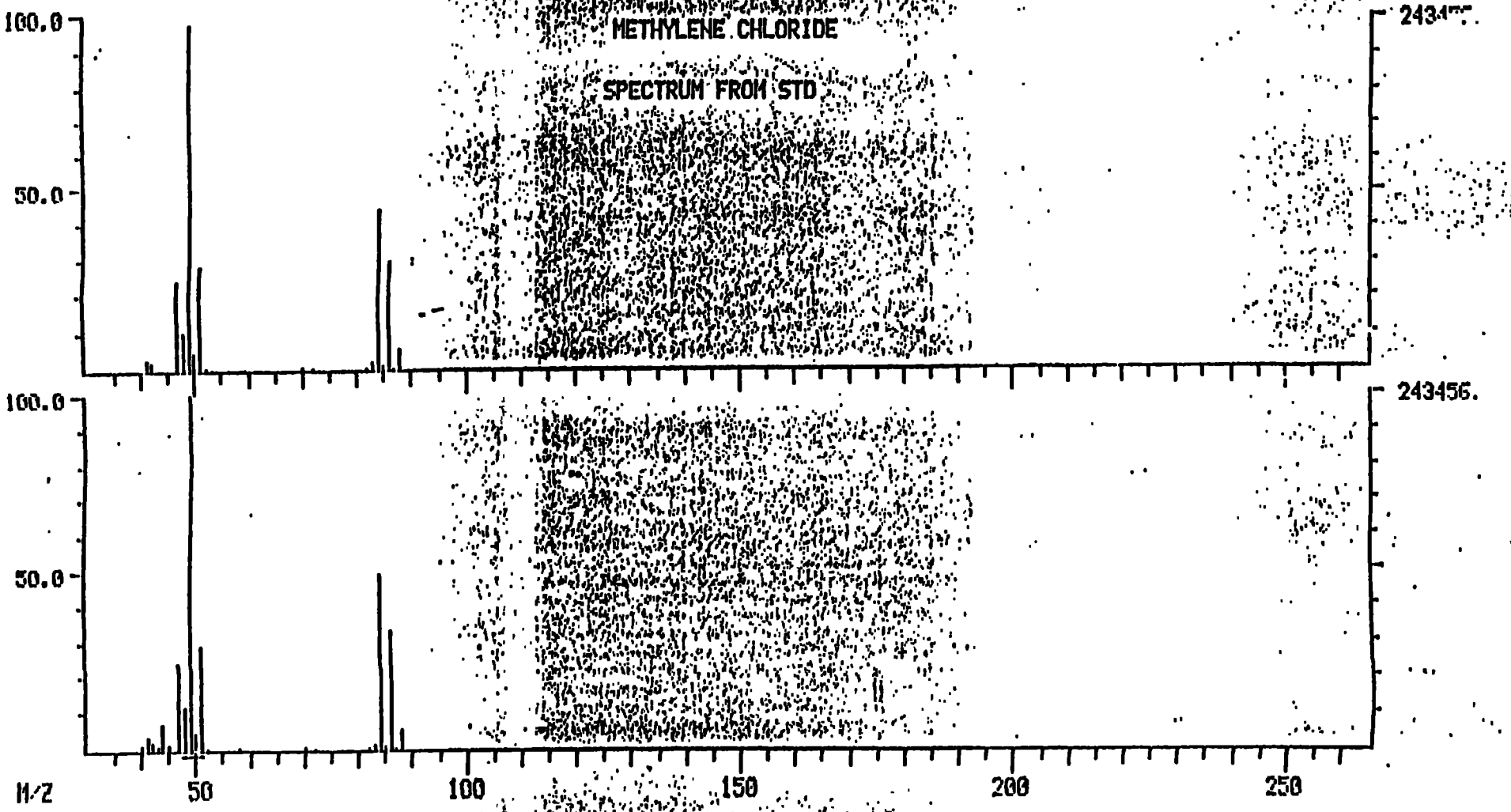
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
COMDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

SPECTRUM FROM STD

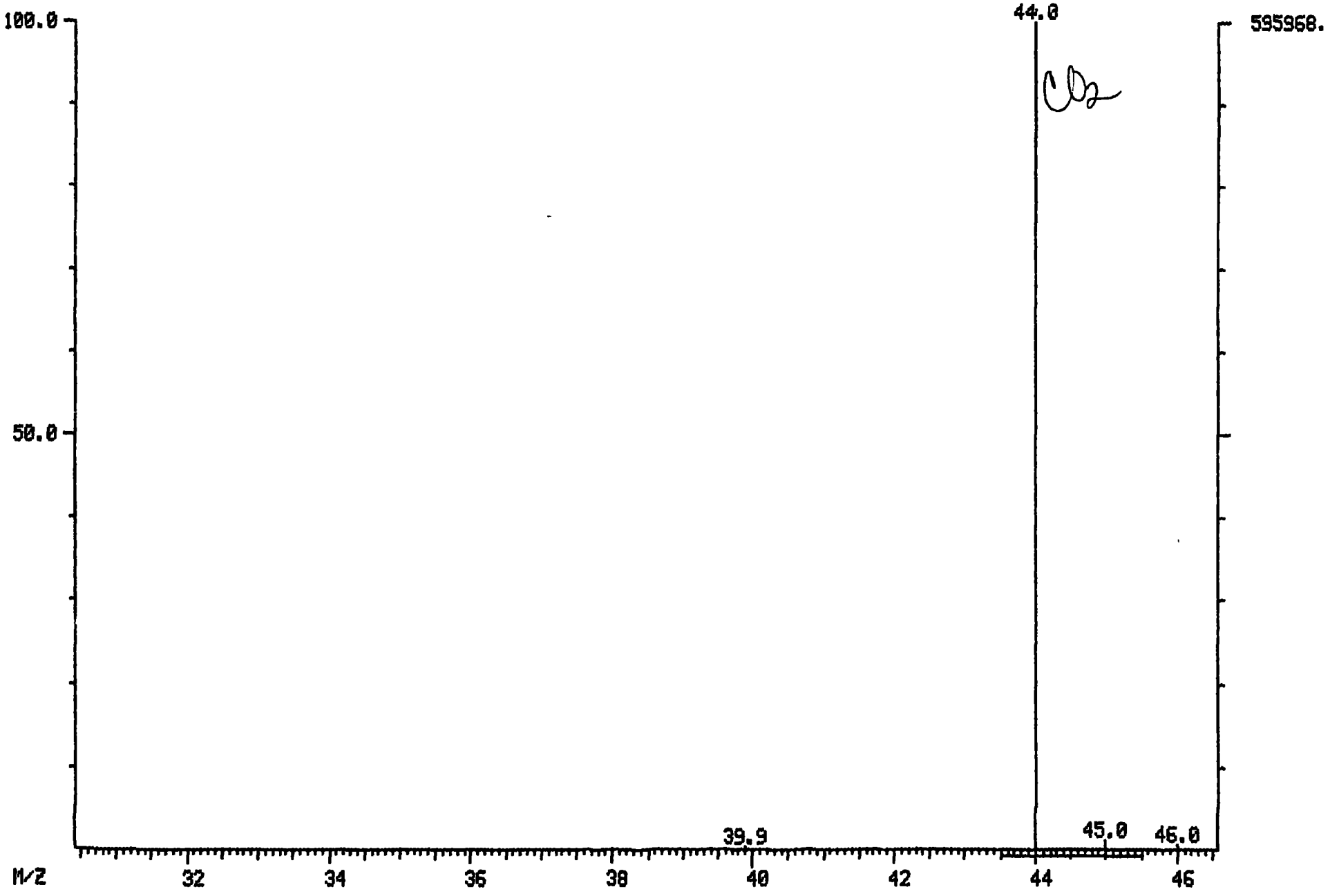


00434

MASS SPECTRUM
05/02/88 18:33:00 + 0:51
SAMPLE: 59444-06 100%/5ML
CONDS.: GC DESC V3
GC TEMP: 60 DEG. C

DATA: S59444W959 #17
CALI: 050288CW #3

BASE M/Z: 44
RIC: 607232.



$RF = \frac{ug}{ml} \times \frac{2.0ml}{0.995} = 2.01$

6/3/88 15:39:50 SCAN 1 OF 2850
Acquisition started

00435

Acquire Run 0:S59444R012 ACQUIRING
06/03/88 15:38:00 + 0:03 Free sectors: 11409 Scan: 4 of 2850
Sample: 59444-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No: 59444

********** 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	

6/3/88 16:15:31
ACQUISITION COMPLETED
SCANS 1 TO 2850 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2850	432.9	2137.5	20.3	55499. 19.	26.

TC=Target Compound
SC= Spike Compound

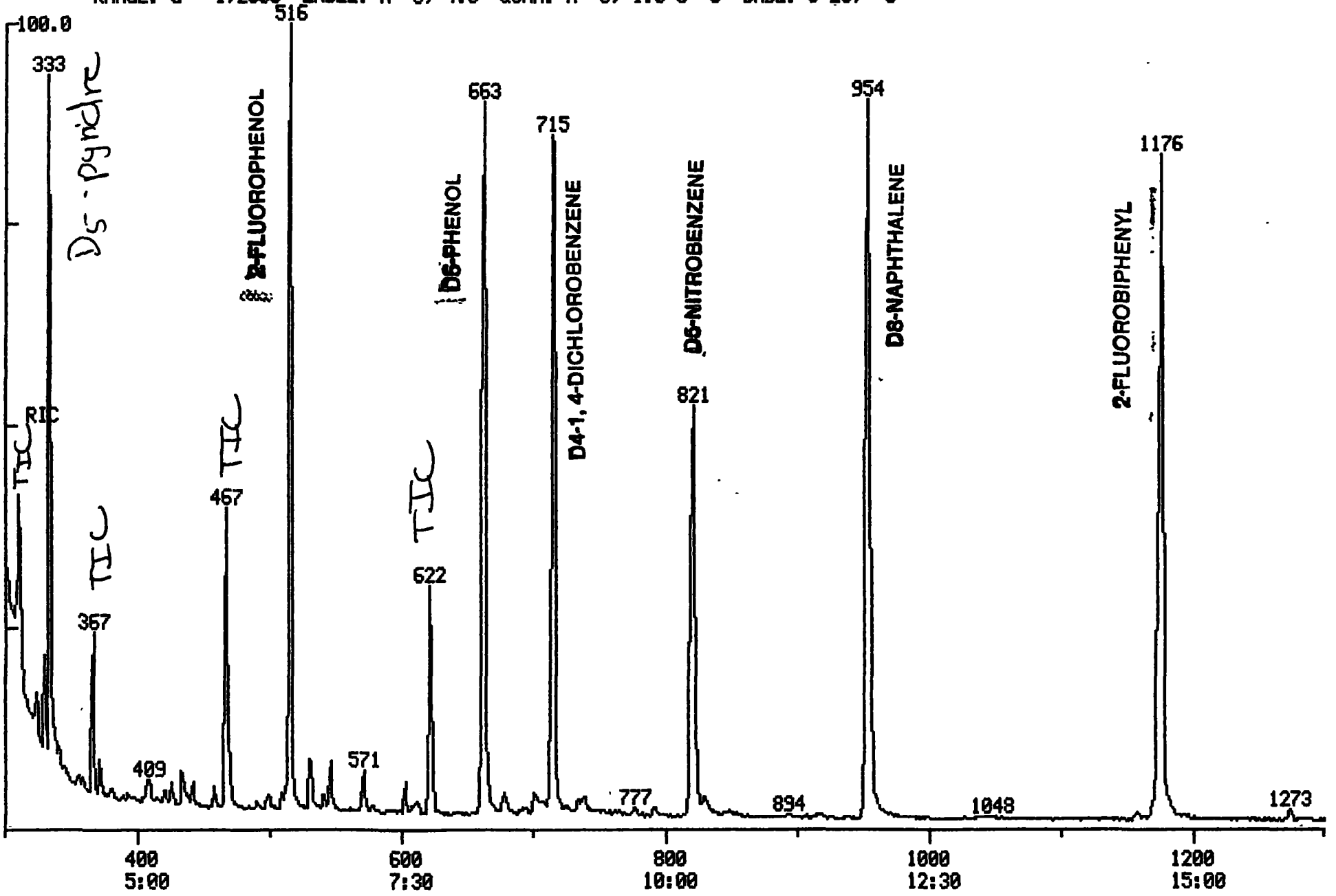
T.I.C.-Tent. Ident. Compound

00436

RIC
06/03/88 15:38:00
SAMPLE: 59444-06 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: 559444R012 #4
CALI: 060388CR #6

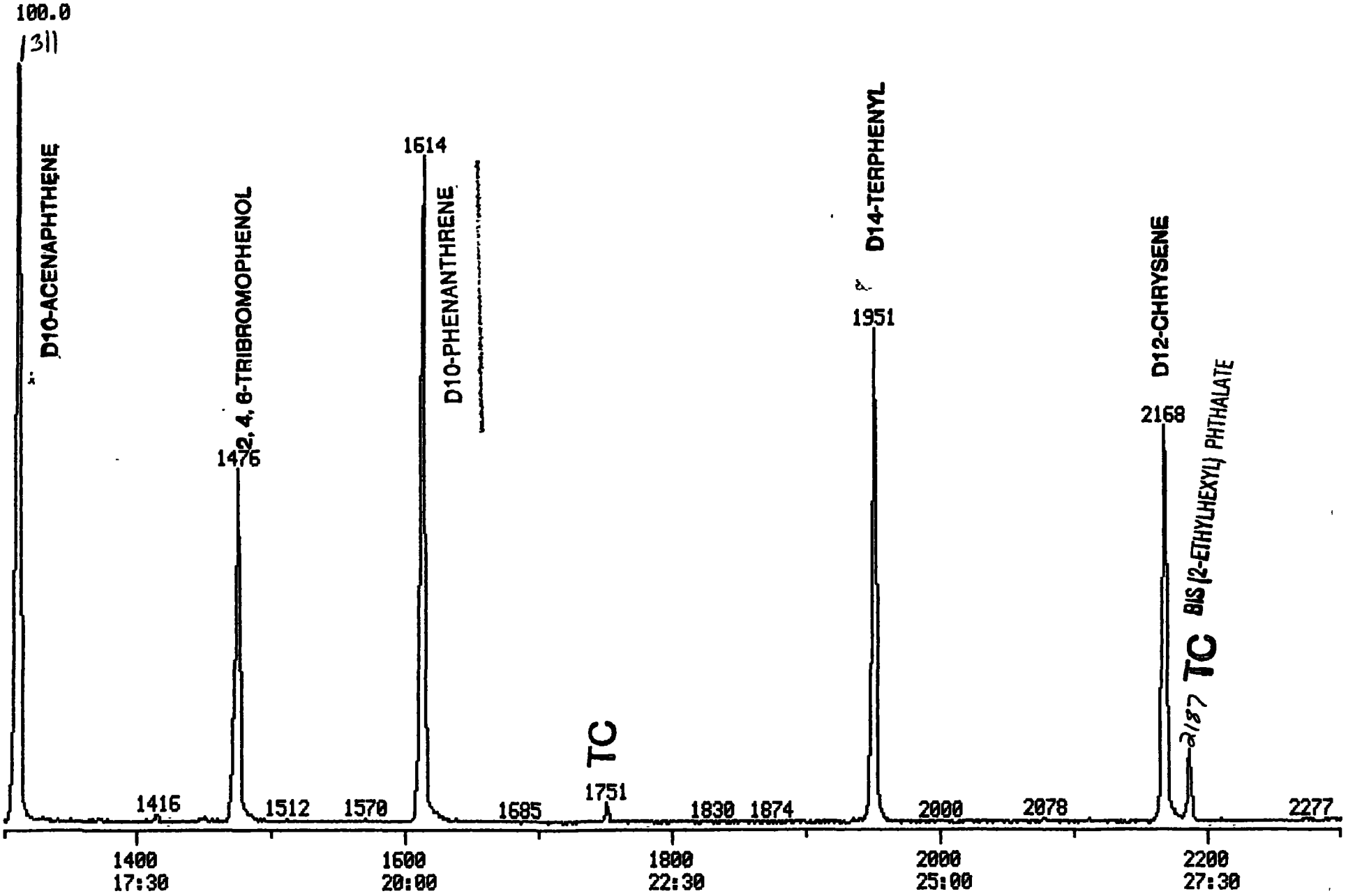
SCANS 300 TO 1300
OUT OF 300 TO 2850



00437

RIC
06/03/88 15:38:00
SAMPLE: 59444-06 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

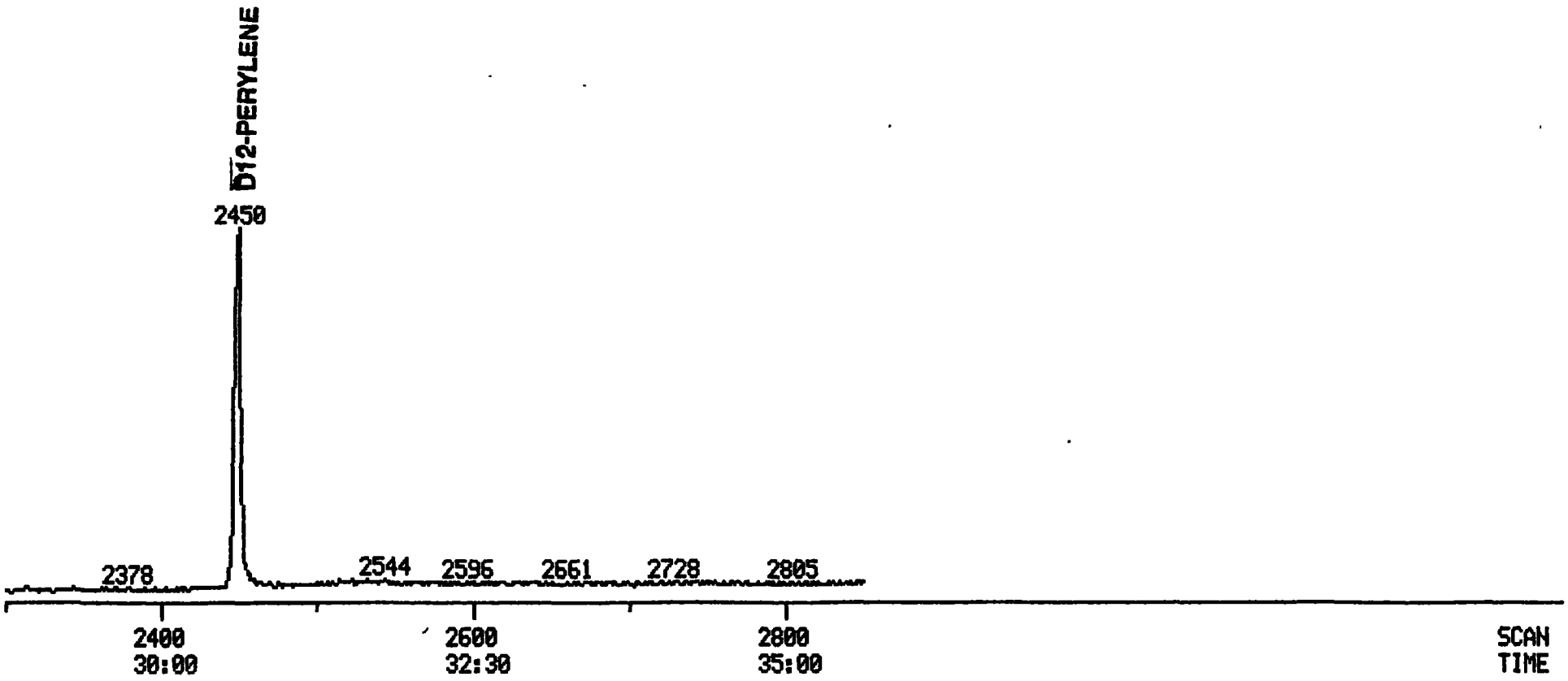
DATA: 559444R012 #4 SCANS 1300 TO 2300
CALI: 060388CR #6 OUT OF 300 TO 2850



RIC
06/03/88 15:38:00
SAMPLE: 59444-06 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: 559444R012 #4 SCANS 2300 TO 2850
CALI: 060388CR #6 OUT OF 300 TO 2850

100.0 80640.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/03/88 22:59:33
DATA FILE: S59444R012
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 00439
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	49	18	5	1	421	IS02/TC02
3	3	1	49	12	3	1	49	IS03/TC03
3	3	1	44	18	4	1	33	IS04/TC04
3	3	1	44	10	4	1	47	IS05/TC05
3	3	1	80	8	4	1	60	IS06/TC06
3	3	1	27	14	6	1	53	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	715	715	.	2	947	.	152	715	.	1
2	S1	2	-517	516	516	.	1	989	.	112	516	.	1
3	S1	3	-666	664	663	-1	2	941	.	99	663	.	1
4	S1	105	-668	666	.	.	.	.	.	94	664	.	1
5	S1	110	-681	679	.	.	.	.	.	93	.	.	.
6	S1	115	-687	685	.	.	.	.	.	128	684	.	1
7	S1	125	-711	709	.	.	.	.	.	146	.	.	.
8	S2	1	-955	953	953	.	1	995	.	136	953	.	1
9	S3	1	-1313	1311	1311	.	1	996	.	164	1311	.	1
10	S1	130	-720	716	.	.	.	.	.	146	.	.	.
11	S1	145	-748	744	.	.	.	.	.	108	.	.	.
12	S1	150	-753	749	.	.	.	.	.	146	.	.	.
13	S1	160	-771	767	.	.	.	.	.	108	.	.	.
14	S1	165	-776	772	.	.	.	.	.	45	.	.	.
15	S1	185	-799	795	.	.	.	.	.	108	.	.	.
16	S1	190	-804	800	.	.	.	.	.	70	.	.	.
17	S1	200	-808	804	.	.	.	.	.	117	.	.	.
18	S2	2	-824	820	821	1	1	996	.	82	821	.	1
19	S2	10	-827	823	.	.	.	.	.	77	.	.	.
20	S2	20	-872	868	.	.	.	.	.	82	.	.	.
21	S2	25	-887	883	.	.	.	.	.	139	.	.	.
22	S2	30	-898	894	.	.	.	.	.	107	.	.	.
23	S2	35	-917	913	.	.	.	.	.	93	.	.	.
24	S2	45	-928	924	918	-6	1	859	.	122	917	-1	1
25	S2	40	-932	930	.	.	.	.	.	162	.	.	.
26	S2	55	-948	946	.	.	.	.	.	180	.	.	.
27	S2	60	-960	958	.	.	.	.	.	128	958	.	1
28	S2	80	-976	974	.	.	.	.	.	127	.	.	.
29	S2	95	-997	995	.	.	.	.	.	225	.	.	.
30	S2	130	-1075	1073	.	.	.	.	.	107	.	.	.
31	S2	145	-1097	1095	.	.	.	.	.	142	.	.	.
32	S3	20	-1144	1142	.	.	.	.	.	237	.	.	.
33	S3	25	-1161	1159	.	.	.	.	.	196	.	.	.
34	S4	1	-1615	1614	1614	.	1	986	.	188	1614	.	1
35	S3	30	-1169	1167	.	.	.	.	.	196	.	.	.
36	S3	3	-1178	1176	1176	.	1	998	.	172	1176	.	1
37	S3	40	-1196	1194	.	.	.	.	.	162	.	.	.
38	S3	45	-1226	1224	.	.	.	.	.	65	.	.	.
39	S3	55	-1272	1270	.	.	.	.	.	163	.	.	.
40	S3	65	-1281	1279	.	.	.	.	.	152	1279	.	1
41	S3	70	-1285	1283	.	.	.	.	.	165	1284	.	1
4			- 1	1309					.	138	.	.	.

43	S3	80	-1320	1318	.	.	.	.	.	153	.	.	.
44	S3	85	-1332	1330	.	.	.	.	.	184	.	.	.
45	S3	95	-1350	1348	.	.	.	.	.	109	.	.	.
46	S3	90	-1353	1351	.	.	.	.	.	168	1350	.	1
47	S3	105	-1364	1362	.	.	.	.	.	165	.	.	.
48	S3	130	-1418	1416	.	.	.	.	.	149	1415	.	1
49	S3	135	-1423	1421	.	.	.	.	.	166	.	.	.
50	S3	140	-1426	1424	.	.	.	.	.	204	.	.	.
51	S3	150	-1439	1437	.	.	.	.	.	138	.	.	.
52	S4	10	-1448	1446	.	.	.	.	.	198	.	.	.
53	S4	15	-1453	1451	.	.	.	.	.	169	1450	.	1
54	S3	2	-1478	1476	1476	.	1	987	.	330	1475	-1	1
55	S4	30	-1526	1524	.	.	.	.	.	248	.	.	.
56	S4	40	-1553	1551	.	.	.	.	.	284	.	.	.
57	S5	1	-2170	2168	2168	.	1	948	.	240	2168	.	1
58	S4	50	-1592	1590	.	.	.	.	.	266	.	.	.
59	S4	65	-1621	1619	.	.	.	.	.	178	1618	.	1
60	S4	70	-1630	1628	.	.	.	.	.	178	.	.	.
61	S4	85	-1753	1751	1751	.	1	951	.	149	1751	.	1
62	S4	110	-1869	1867	.	.	.	.	.	202	.	.	.
63	S6	1	-2452	2450	2450	.	1	980	.	264	2449	-1	1
64	S5	15	-1915	1913	.	.	.	.	.	202	1914	.	1
65	S5	2	-1953	1951	1951	.	1	988	.	244	1951	.	1
66	S5	40	-2064	2062	.	.	.	.	.	149	2060	.	1
67	S5	55	-2167	2165	.	.	.	.	.	252	.	.	.
68	S5	50	-2167	2165	.	.	.	.	.	228	.	.	.
69	S5	60	-2176	2174	.	.	.	.	.	228	.	.	.
70	S5	65	-2189	2187	2187	.	1	992	.	149	2187	.	1
71	S6	10	-2310	2308	2309	1	1	850	.	149	2310	1	1
72	S6	15	-2382	2380	.	.	.	.	.	252	.	.	.
73	S6	25	-2387	2385	.	.	.	.	.	252	.	.	.
74	S6	35	-2442	2440	.	.	.	.	.	252	.	.	.
75	S6	55	-2688	2686	.	.	.	.	.	276	.	.	.
76	S6	60	-2692	2690	.	.	.	.	.	278	.	.	.
77	S6	65	-2755	2753	.	.	.	.	.	276	.	.	.

00440

Quantitation Report File: S59444R012

00441

Data: S59444R012.TI
06/03/88 15:38:00
Sample: 59444-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59444

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 BV	36527.	40.000 UG/ML	7.27
2	112	516	6:27	1	0.722	A BB	59473.	47.940 UG/ML	8.71
3	99	663	8:17	1	0.927	A BB	86044.	49.051 UG/ML	8.91
4	94	664	8:18	1	0.929	A BB	225.	0.117 UG/ML	0.02
5	NOT FOUND								
6	128	684	8:33	1	0.957	A BB	98.	0.074 UG/ML	0.01
7	NOT FOUND								
8	136	953	11:55	8	1.000	A BB	143238.	40.000 UG/ML	7.27
9	164	1311	16:23	9	1.000	A BB	64901.	40.000 UG/ML	7.27
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	82	821	10:16	8	0.861	A BB	54797.	40.984 UG/ML	7.44
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	122	917	11:28	8	0.962	A BB	109.	0.191 UG/ML	0.03
25	NOT FOUND								
26	NOT FOUND								
27	128	958	11:58	8	1.005	A BB	136.	0.036 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	188	1614	20:10	34	1.000	A BB	88349.	40.000 UG/ML	7.27
35	NOT FOUND								
36	172	1176	14:42	9	0.897	A BB	91781.	42.345 UG/ML	7.69
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	152	1279	15:59	9	0.976	A BB	48.	0.015 UG/ML	0.00
41	165	1284	16:03	9	0.979	A BB	134.	0.256 UG/ML	0.05
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	168	1350	16:52	9	1.030	A BB	63.	0.022 UG/ML	0.00
47	NOT FOUND								
48	149	1415	17:41	9	1.079	A BB	184.	0.088 UG/ML	0.02
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	47.94	100.00	0.651	1.359	0.48
3	8:19	1.00	0.929	1.00	49.05	100.00	0.942	1.921	0.49
4	8:21	0.99	0.932	1.00	0.12	50.00	0.005	2.109	0.00
5	8:31		0.950						
6	8:35	1.00	0.958	1.00	0.07	50.00	0.002	1.443	0.00
7	8:53		0.992						
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	9:59		1.114						
16	10:03		1.121						
17	10:06		1.127						
18	10:18	1.00	0.862	1.00	40.98	50.00	0.306	0.373	0.82
19	10:20		0.865						
20	10:54		0.912						
21	11:05		0.928						
22	11:13		0.939						
23	11:28		0.959						
24	11:36	0.99	0.971	0.99	0.19	50.00	0.001	0.159	0.00
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	1.054	0.00
28	12:12		1.021						
29	12:28		1.043						
30	13:26		1.124						
31	13:43		1.147						
32	14:18		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	14:37		0.890						
36	14:43	1.00	0.896	1.00	42.35	50.00	1.131	1.336	0.85
37	14:57		0.910						
38	15:19		0.933						
39	15:54		0.968						
40	16:01	1.00	0.975	1.00	0.01	50.00	0.001	2.038	0.00
41	16:04	1.00	0.978	1.00	0.26	50.00	0.002	0.323	0.01
42	16:23		0.998						
43	16:30		1.005						
44	16:39		1.014						
45	16:52		1.027						
46	16:55	1.00	1.030	1.00	0.02	50.00	0.001	1.735	0.00
47	17:03		1.038						
48	17:43	1.00	1.079	1.00	0.09	50.00	0.002	1.287	0.00
49	17:47		1.083						
50	17:49		1.085						

Quantitation Report File: S59444R012

00444

Data: S59444R012.TI
06/03/88 15:38:00
Sample: 59444-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59444

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	1450	18:07	34	0.898	A BB	605.	0.423 UG/ML	0.08
54	330	1475	18:26	9	1.125	A BB	14670.	77.731 UG/ML	14.12
55	NOT FOUND								
56	NOT FOUND								
57	240	2168	27:06	57	1.000	A BB	49333.	40.000 UG/ML	7.27
58	NOT FOUND								
59	178	1618	20:13	34	1.002	A BB	84.	0.033 UG/ML	0.01
60	NOT FOUND								
61	149	1751	21:53	34	1.085	A BB	3661.	1.102 UG/ML	0.20
62	NOT FOUND								
63	264	2449	30:37	63	1.000	A BB	37398.	40.000 UG/ML	7.27
64	202	1914	23:55	57	0.883	A BB	81.	0.042 UG/ML	0.01
65	244	1951	24:23	57	0.900	A BB	61949.	46.391 UG/ML	8.43
66	149	2060	25:45	57	0.950	A BB	76.	0.071 UG/ML	0.01

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	149	2187	27:20	57	1.009	A BB	5684.	3.577 UG/ML	0.65
71	149	2310	28:52	63	0.943	A BV	288.	0.126 UG/ML	0.02
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		1.095						
52	18:06		0.896						
53	18:10	1.00	0.899	1.00	0.42	50.00	0.005	0.648	0.01
54	18:28	1.00	1.125	1.00	77.73	100.00	0.090	0.116	0.78
55	19:04		0.944						
56	19:25		0.961						
57	27:08	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:54		0.985						
59	20:16	1.00	1.003	1.00	0.03	50.00	0.001	1.160	0.00
60	20:22		1.009						
61	21:55	1.00	1.085	1.00	1.10	50.00	0.033	1.504	0.02
62	23:22		1.157						
63	30:40	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	0.04	50.00	0.001	1.550	0.00
65	24:25	1.00	0.900	1.00	46.39	50.00	1.005	1.083	0.93
66	25:48	1.00	0.951	1.00	0.07	50.00	0.001	0.865	0.00
67	27:05		0.998						
68	27:05		0.998						
69	27:12		1.002						
70	27:22	1.00	1.008	1.00	3.58	50.00	0.092	1.288	0.07
71	28:52	1.00	0.942	1.00	0.13	50.00	0.006	2.442	0.00
72	29:46		0.971						
73	29:50		0.973						
74	30:31		0.996						
75	33:36		1.096						
76	33:39		1.097						
77	34:26		1.123						

TCA FINISHED, 16 FOUND
FINISHED AT: 6/03/88 23:07:16

RMAL QUANTITATION SUMMARY FILE: S59444R012
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	36527.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	953	2	143238.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	64901.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1614	4	88349.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2168	5	49333.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2449	6	37398.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	821	2	54797.	0.306	40.984
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1176	3	91781.	1.131	42.345
9	S5# 2	CS30 TERPHENYL-D14	244	1951	5	61949.	1.005	46.391
10	S1# 3	CS45 PHENOL-D5	99	663	1	86044.	0.942	49.051
11	S1# 2	CS50 2-FLUOROPHENOL	112	516	1	59473.	0.651	47.940
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1475	3	14670.	0.090	77.731
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		

00447

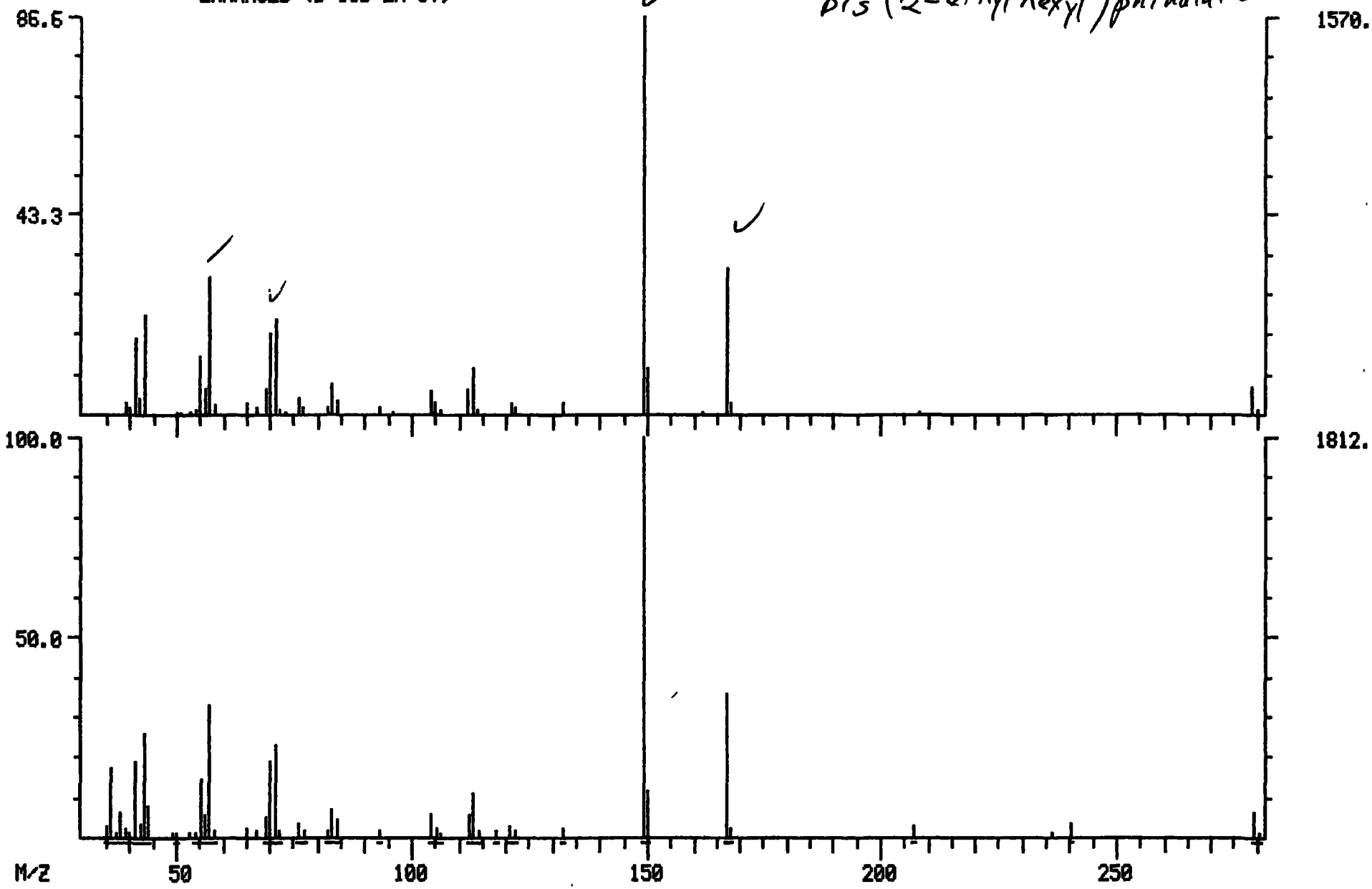
52	S3#130	C580	DIETHYLPHTHALATE	149		3	NOT FOUND			
53	S3#135	C590	FLUORENE	166		3	NOT FOUND			
54	S3#140	C585	4-CHLOROPHENYL-PHEN	204		3	NOT FOUND			
55	S3#150	C595	4-NITROANALINE	138		3	NOT FOUND			
56	S4# 10	C610	4,6-DINITRO-2-METHY	198		4	NOT FOUND			
57	S4# 15	C615	N-NITROSODIPHENYLAM	169		4	NOT 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	1751	4	3661.	0.033	1.102	✓
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	5684.	0.092	3.577	✓
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			

00448

DUAL MASS SPECTRUM
06/03/88 15:38:00 + 27:20
SAMPLE: 59444-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59444R012 #2187 BASE M/Z: 149/ 149
CALI: 060388CR #6 RIC: 6087./ 7735.

bis (2-ethylhexyl) phthalate

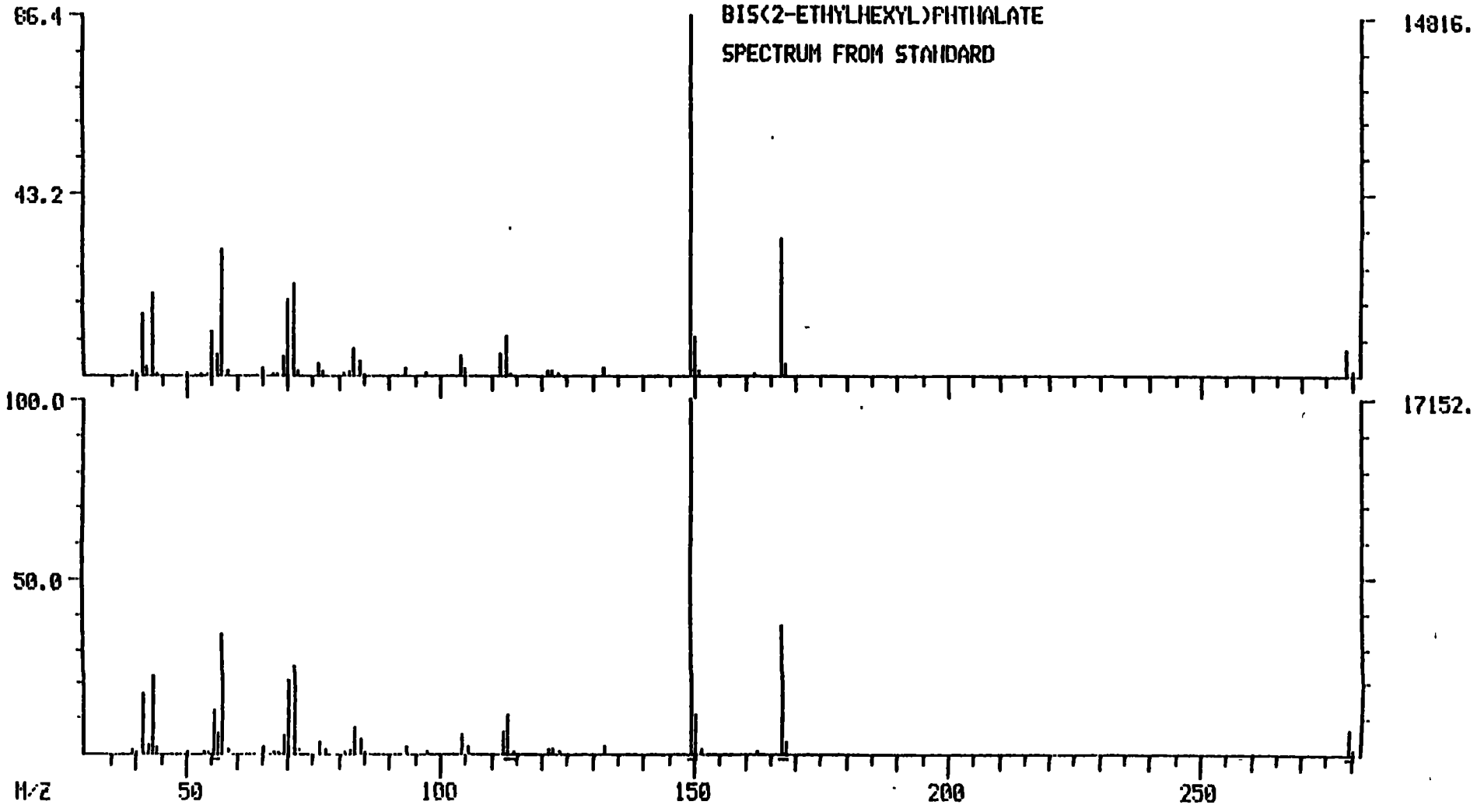


00449

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

DATA: STDR810 #2436
CALI: 103086C #5

BASE M/Z: 149/ 143
RIC: 55167./ 63807.

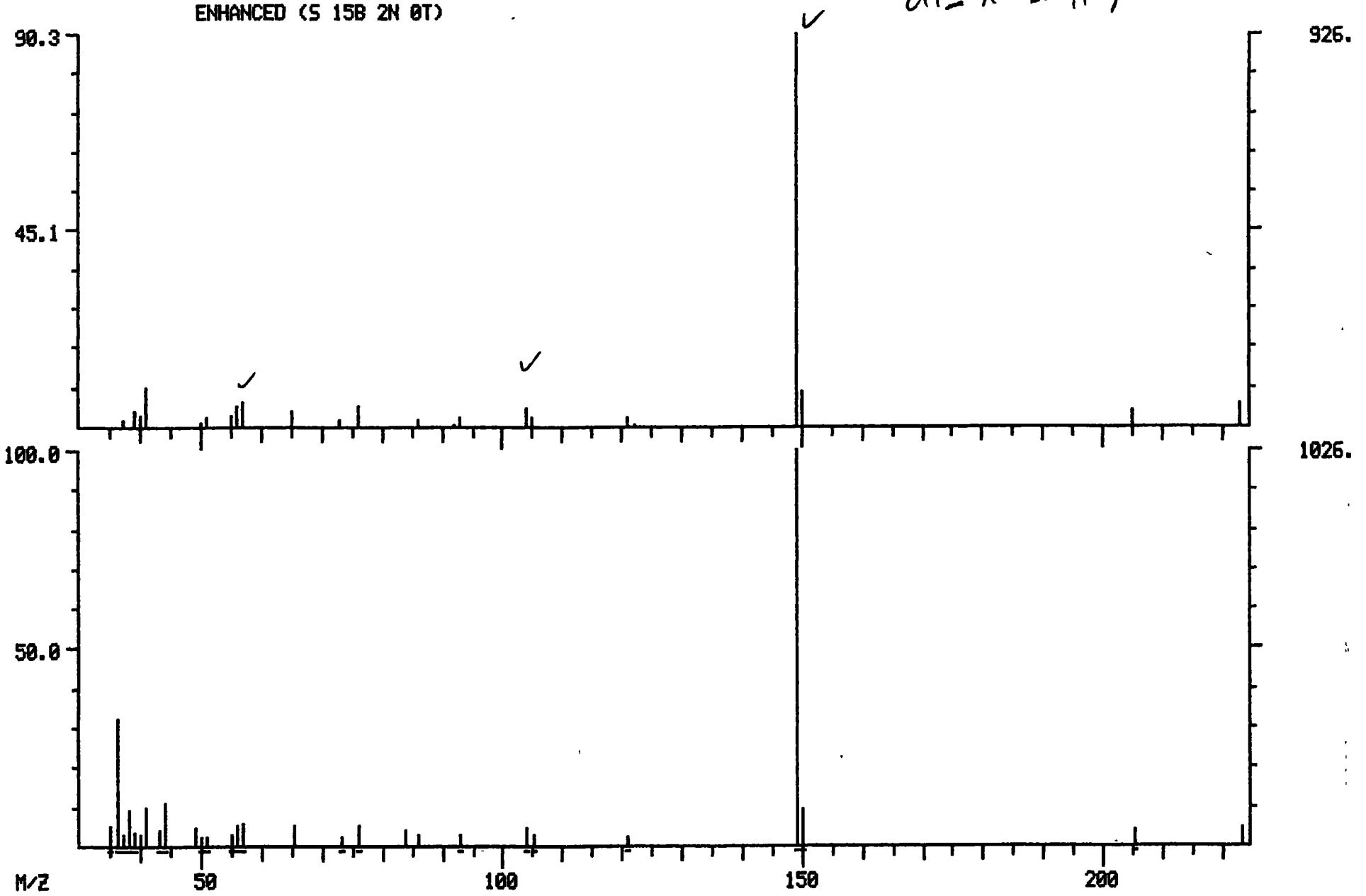


00450

DUAL MASS SPECTRUM
06/03/88 15:38:00 + 21:53
SAMPLE: 59444-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59444R012 #1751 BASE M/Z: 149/ 149
CALI: 060388CR #6 RIC: 1677./ 2611.

di-n-butyl phthalate

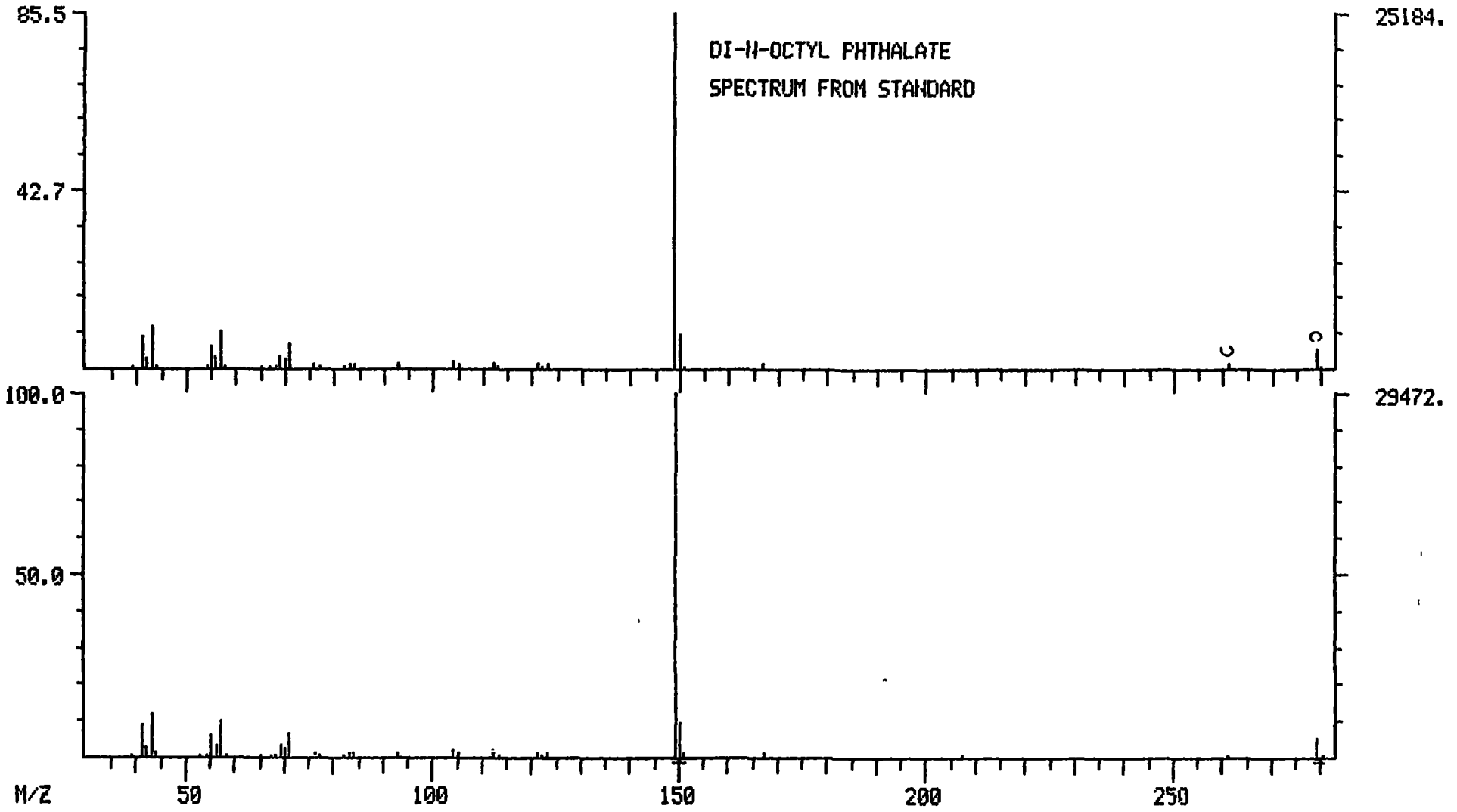


00451

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: 6-9-88
DATA REVIEWED BY: ____ DATE: ____

DATA FILE: 59444R01Z

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 59444-06 BNA H2O 100%/2ML
CONDITIONS: ST

RUN FACTOR: 1.00
ANALYST: MK

#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/ML)	CAS #	COMPOUND
1	311	B	2	9.1	108-87-2	CYCLOHEXANE, METHYL-
2	367	B	2	6.4	108-88-3	BENZENE, METHYL- ✓ok
3	467	CB	1	15.	00-00-0	OXYGENATED HYDROCARBON
4	622	IB	1	11.	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-

DATA FILE: S59444R012

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	895	1	3:53	0.439	48319.	16575.	9.122	NB	1138.
2	994	955	1	4:35	0.518	33847.	15899.	6.390	NB	850.
3	807	779	1	5:50	0.658	79455.	29622.	15.000	BC	2.
4	922	766	1	7:46	0.874	57717.	22577.	10.896	NB	6445.

TIC SELECTION REPORT

DATA FILE: S59444R012

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 35 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 3 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
388	148171.	27.497
516	191063.	36.069
663	210361.	39.712
715	211885.	39.999
821	158625.	29.945
954	281063.	39.999
1176	252507.	35.936
1311	300719.	49.879
1476	141127.	23.408
1614	241157.	39.999
1951	173105.	45.406
2168	152495.	39.999
2187	21096.	5.533
2450	132751.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 10 % OF THE CLOSEST INTERNAL STANDARD (WITHOUT INTERFERENCES) = 4

INTERNAL STANDARD DATA IS LISTED BELOW. IS FOR WHICH RIC SIZE DIFFERS FROM THE ESTIMATED RIC SIZE BY MORE THAN 70 % ARE CONSIDERED TO HAVE INTERFERENCES, AND ARE NOT USED FOR QUANTITATION.

#	LIB	LIB#	RIC SIZE	ESTIMATED RIC SIZE	INTERFERENCE
1	S1	1	211885.	223421.	
2	S2	1	281063.	210968.	
3	S3	1	300719.	162661.	*
4	S4	1	241157.	169870.	
5	S5	1	152495.	94908.	
6	S6	1	132751.	100129.	

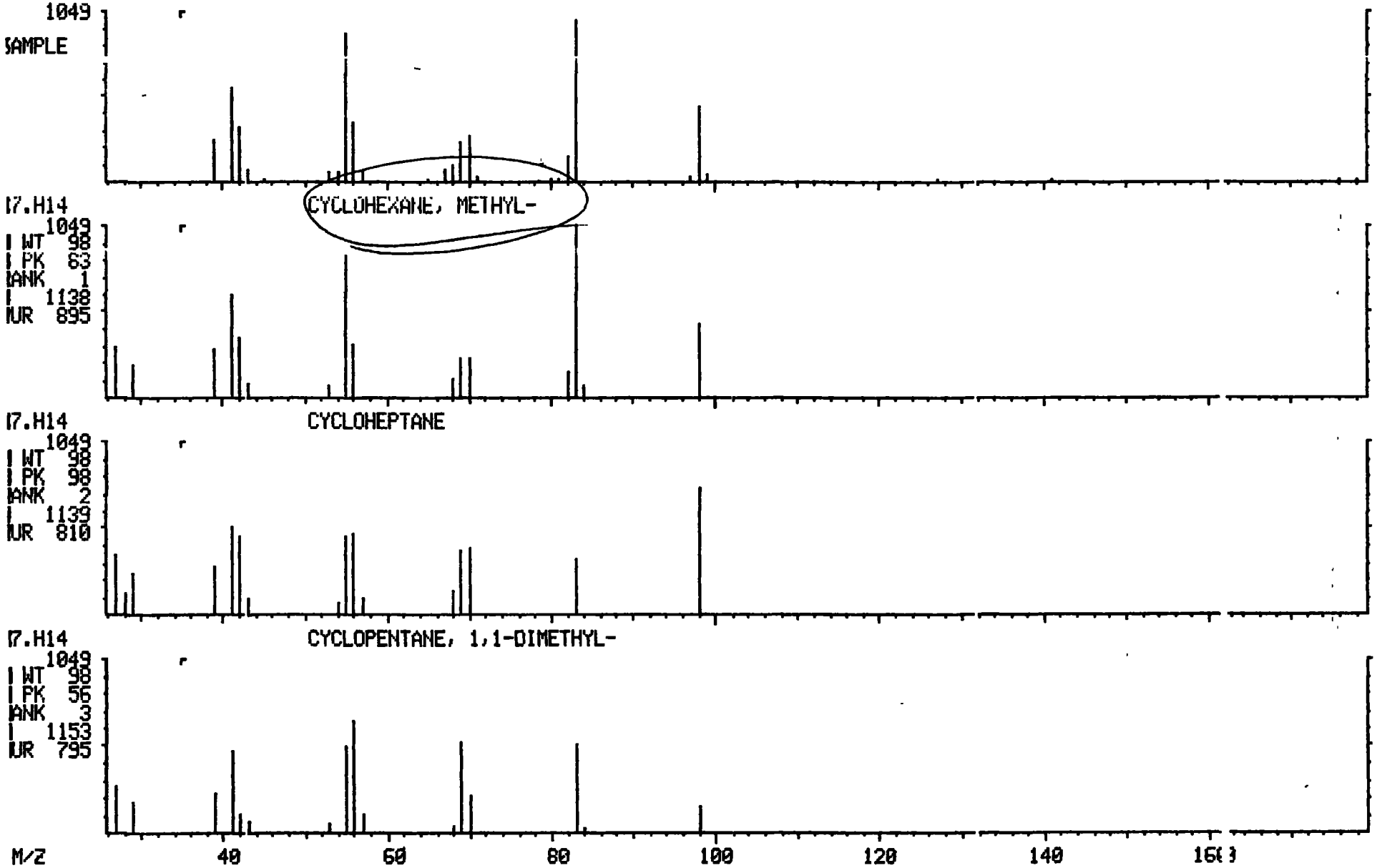
SIZE = AREA

LIBRARY SEARCH
06/03/88 15:38:00 + 3:53
SAMPLE: 59444-06 BNA H2O 100%/2ML
CONDS..: ST
ENHANCED (S 15B 2N 0T)

DATA: S59444R012 # 311
CALI: 060388CR # 6

BASE M/Z: 83
RIC: 14015.

00455

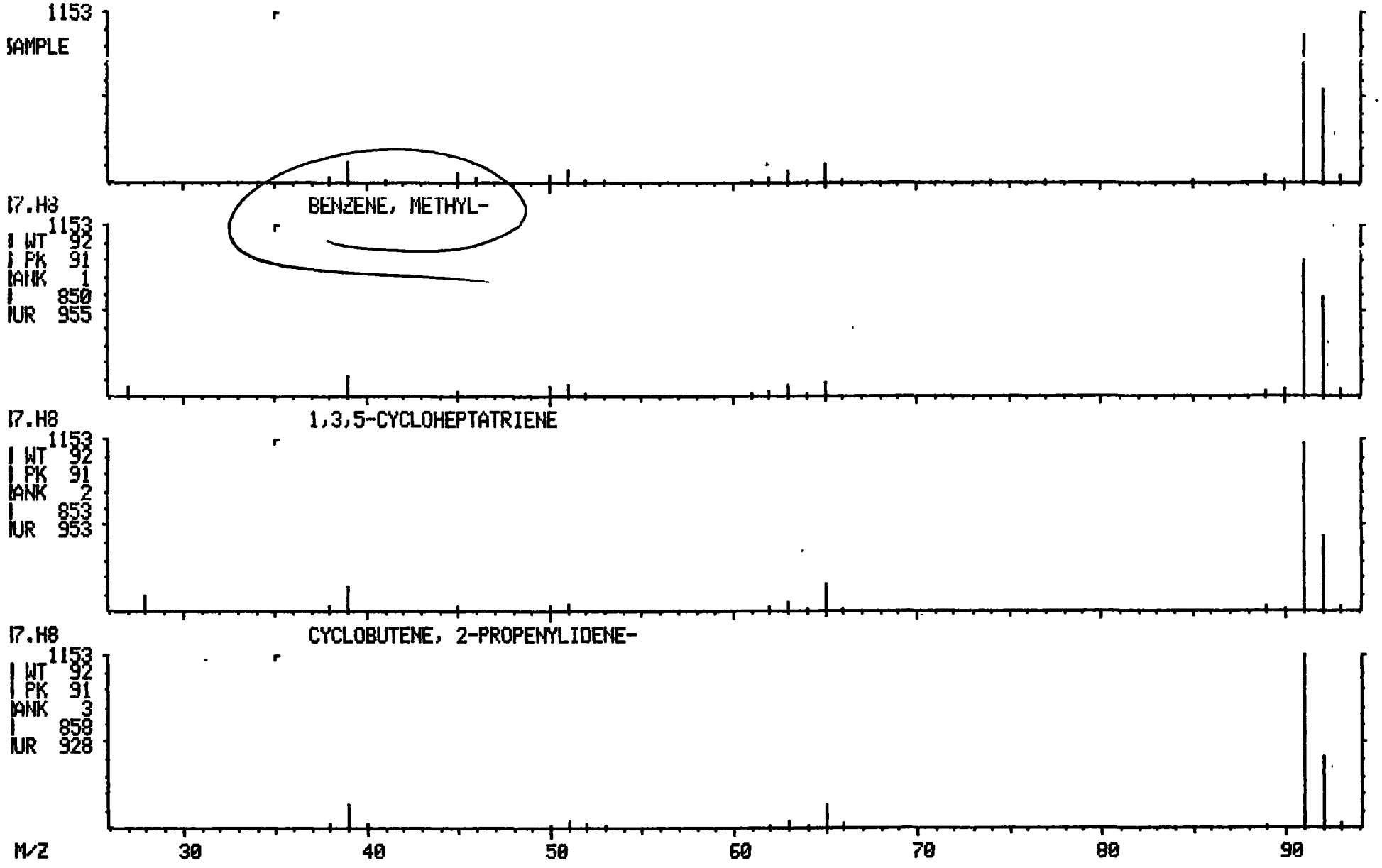


LIBRARY SEARCH
06/03/88 15:38:00 + 4:35
SAMPLE: 59444-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59444R012 # 367
CALI: 050388CR # 6

BASE M/Z: 91
RIC: 12847.

00456

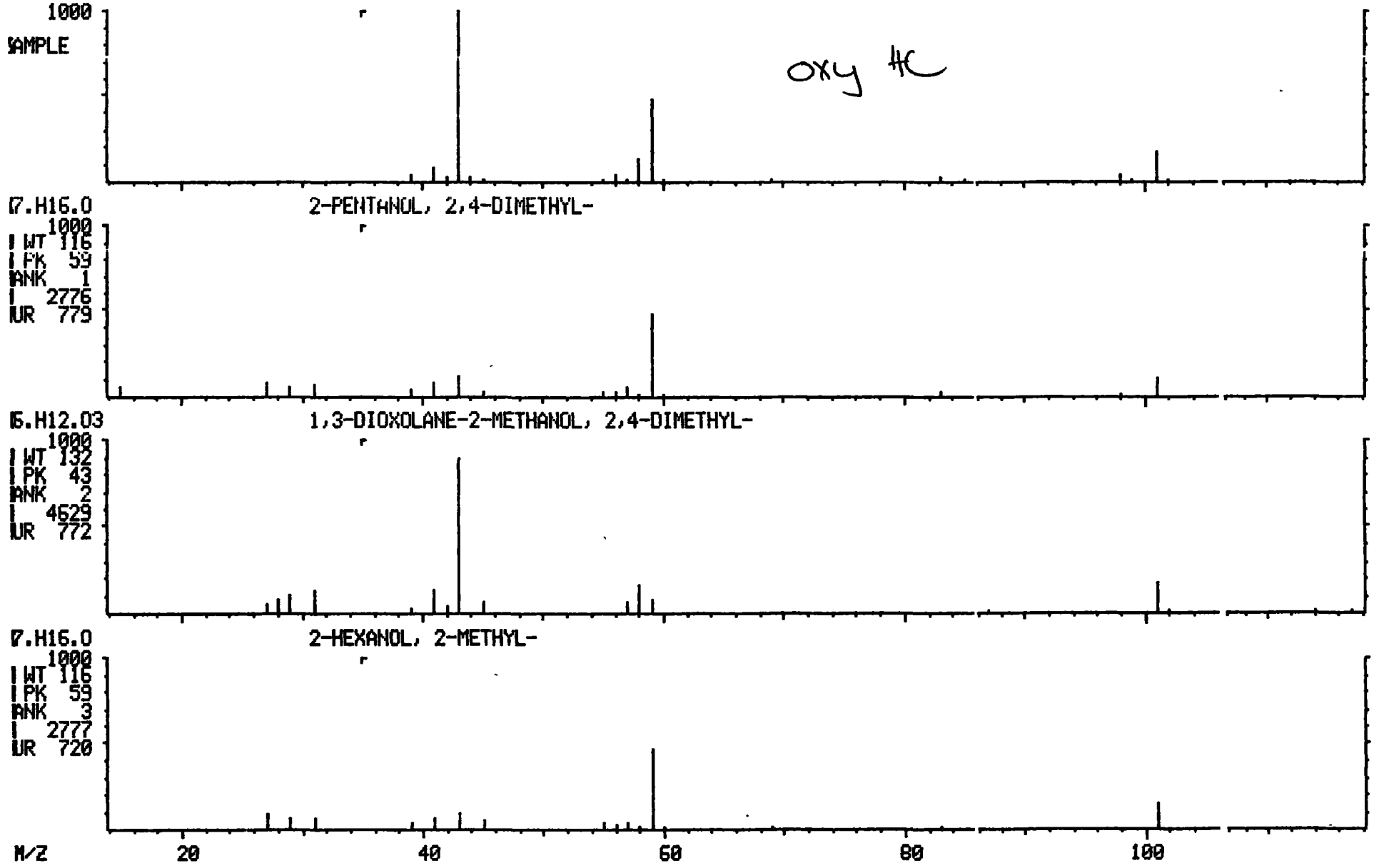


LIBRARY SEARCH
06/03/88 15:38:00 + 5:50
SAMPLE: 59444-06 BNA H2O 100%/2ML
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: S59444R012 # 467
CALI: 060388CR # 6

BASE M/Z: 43
RIC: 25887.

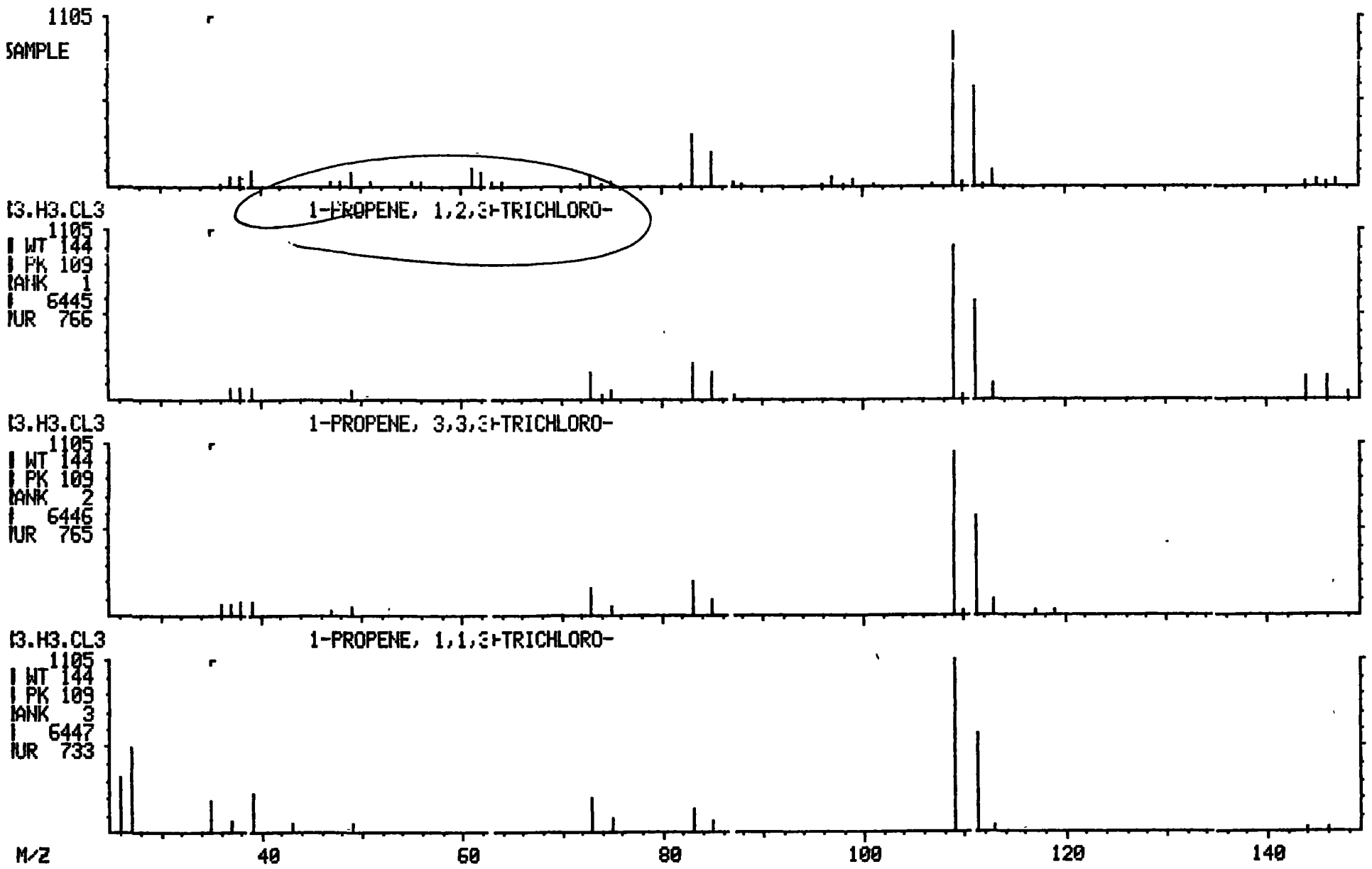
00457



LIBRARY SEARCH
06/03/88 15:38:00 + 7:46
SAMPLE: 59444-06 BNA H2O 100%/2ML
CONDS..: ST
ENHANCED (S 15B 2N 0T)

DATA: S59444R012 # 622 BASE M/Z: 108
CALI: 060388CR # 6 PTC: 19487.

00458



PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/88 4:22:55
DATA FILE: S59444R012
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00459

< ---- STANDARDS ------ >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	2	0	13	2	1	0	ISO1/TCO1
3	3	1	81	14	3	1	81	ISO2/TCO2

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	715	715	.	2	947	.	152	715	.	1
2	S1	4	-332	333	333	.	1	994	.	84	333	.	1
3	S1	20	-334	335	.	.	.	.	.	79	.	.	.
4	S1	30	-429	430	.	.	.	.	.	93	.	.	.
5	S1	62	-494	495	.	.	.	.	.	93	.	.	.
6	S1	64	-525	525	.	.	.	.	.	107	.	.	.
7	S1	73	-557	557	.	.	.	.	.	106	.	.	.
8	S1	83	-593	593	.	.	.	.	.	107	.	.	.
9	S1	87	-614	614	.	.	.	.	.	107	.	.	.
10	S1	88	-635	635	.	.	.	.	.	107	.	.	.
11	S1	89	-643	643	.	.	.	.	.	107	.	.	.
12	S1	92	-662	662	.	.	.	.	.	107	.	.	.
13	S1	122	-700	700	.	.	.	.	.	107	.	.	.
14	S2	1	-954	954	953	-1	1	995	.	136	953	.	1
15	S3	1	-1311	1311	1311	.	1	996	.	164	1311	.	1
16	S1	137	-730	730	.	.	.	.	.	106	.	.	.
17	S1	142	-744	744	.	.	.	.	.	106	.	.	.
18	S1	187	-799	799	.	.	.	.	.	108	.	.	.
19	S1	202	-822	822	.	.	.	.	.	106	.	.	.
20	S1	203	-827	827	.	.	.	.	.	106	.	.	.
21	S1	204	-847	847	.	.	.	.	.	122	.	.	.
22	S2	27	-898	898	.	.	.	.	.	107	.	.	.
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: S59444R012

00460

Data: S59444R012.TI
06/03/88 15:38:00
Sample: 59444-06 BNA H2O 100%/2ML
Conds.: ST
Formula: AUTO INJ Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: MK Acct. No.: 59444

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	36527.	40.000 UG/ML	25.85
2	84	333	4:10	1	0.466	A BB	56623.	34.361 UG/ML	22.21
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	953	11:55	14	1.000	A BB	143238.	40.000 UG/ML	25.85
15	164	1311	16:23	15	1.000	A BB	64901.	40.000 UG/ML	25.85
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	954	11:55	1	1.334	A BB	576.	0.393 UG/ML	0.25
26	NOT FOUND								

00461

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	4:09	1.00	0.464	1.00	34.36	50.00	1.240	1.805	0.69
3	4:10		0.466						
4	5:22		0.599						
5	6:10		0.690						
6	6:34		0.733						
7	6:58		0.778						
8	7:25		0.828						
9	7:40		0.858						
10	7:56		0.887						
11	8:02		0.898						
12	8:16		0.925						
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	9:07		1.020						
17	9:18		1.039						
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	0.39	50.00	0.013	1.606	0.01
26	13:58		1.171						

TCA FINISHED, 4 FOUND
FINISHED AT: 6/04/88 4:25:38

RMAL QUANTITATION SUMMARY FILE: S59444R012
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

00462

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	715	1	36527.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	953	2	143238.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1311	3	64901.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	333	1	56623.	1.240	34.361
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: 2: S59444X850. STARTED : 6/04/88 23:12:31

00463

6/4/88 15:27:30 SCAN 1 OF 3900

$RF = \frac{ng}{ml} \times \frac{0.5\,ml}{4.0\,L} = 0.125\ \frac{ng}{ml}$

Acquisition started

Acquire Run 2: S59444X850 ACQUIRING
06/04/88 15:27:00 + 0:03 Free sectors: 15668 Scan: 7 of 3900
Sample: 59444-06 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 : 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	0.106	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	

6/4/88 15:56:51 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	0.106	1	100	0	1	1	Pos
3	263.579	264.579	0.106	1	100	0	1	1	Pos

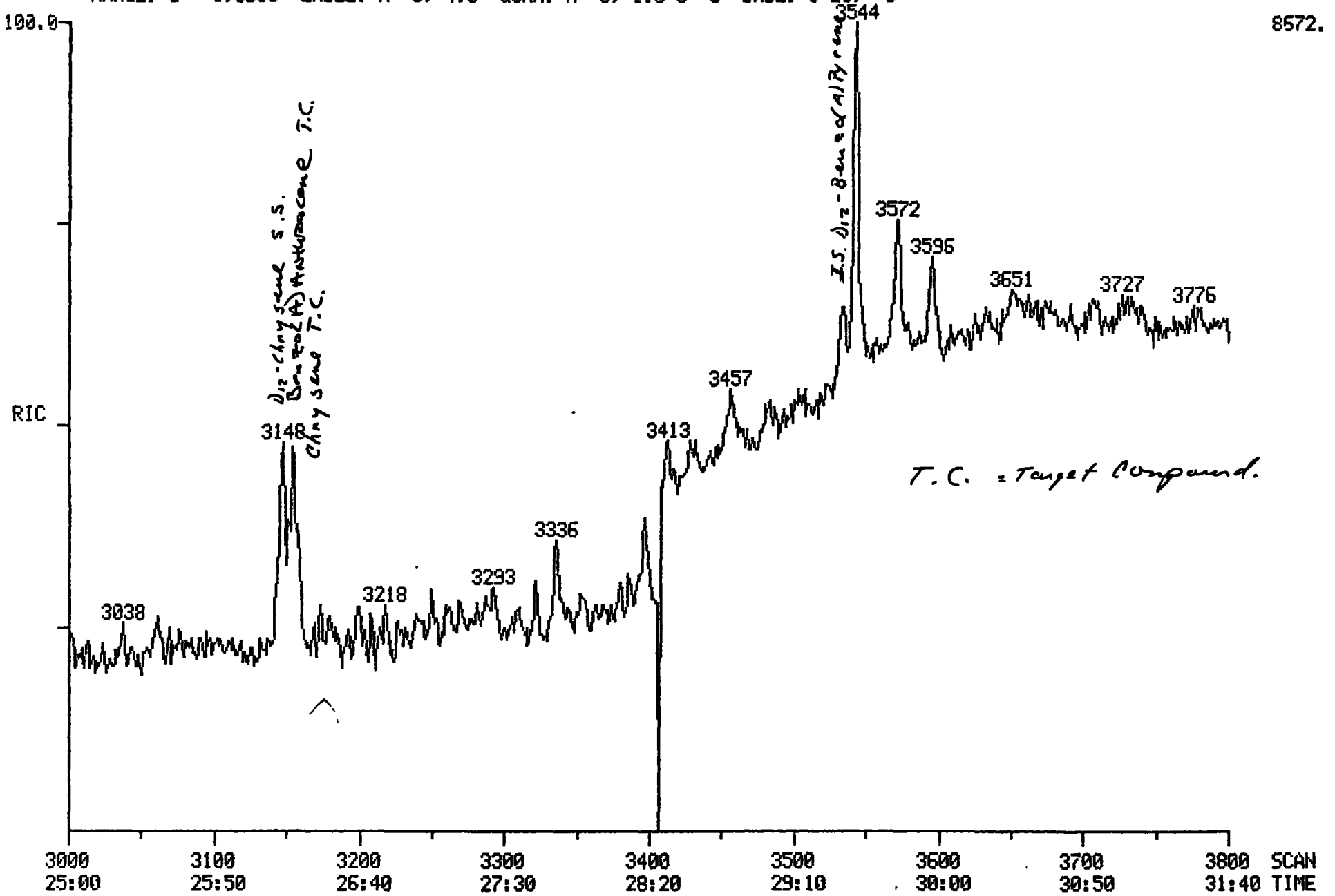
6/4/88 16:01:08
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

00464

MIDRIC
06/04/88 15:27:00
SAMPLE: 59444-06 PAH WATER 100Z/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: S59444X850 #1 SCANS 3000 TO 3800
CALI: 060488CX #2



Quantitation Report File: S59444X850

Data: S59444X850.TI
06/04/88 15:27:00
Sample: 59444-06 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

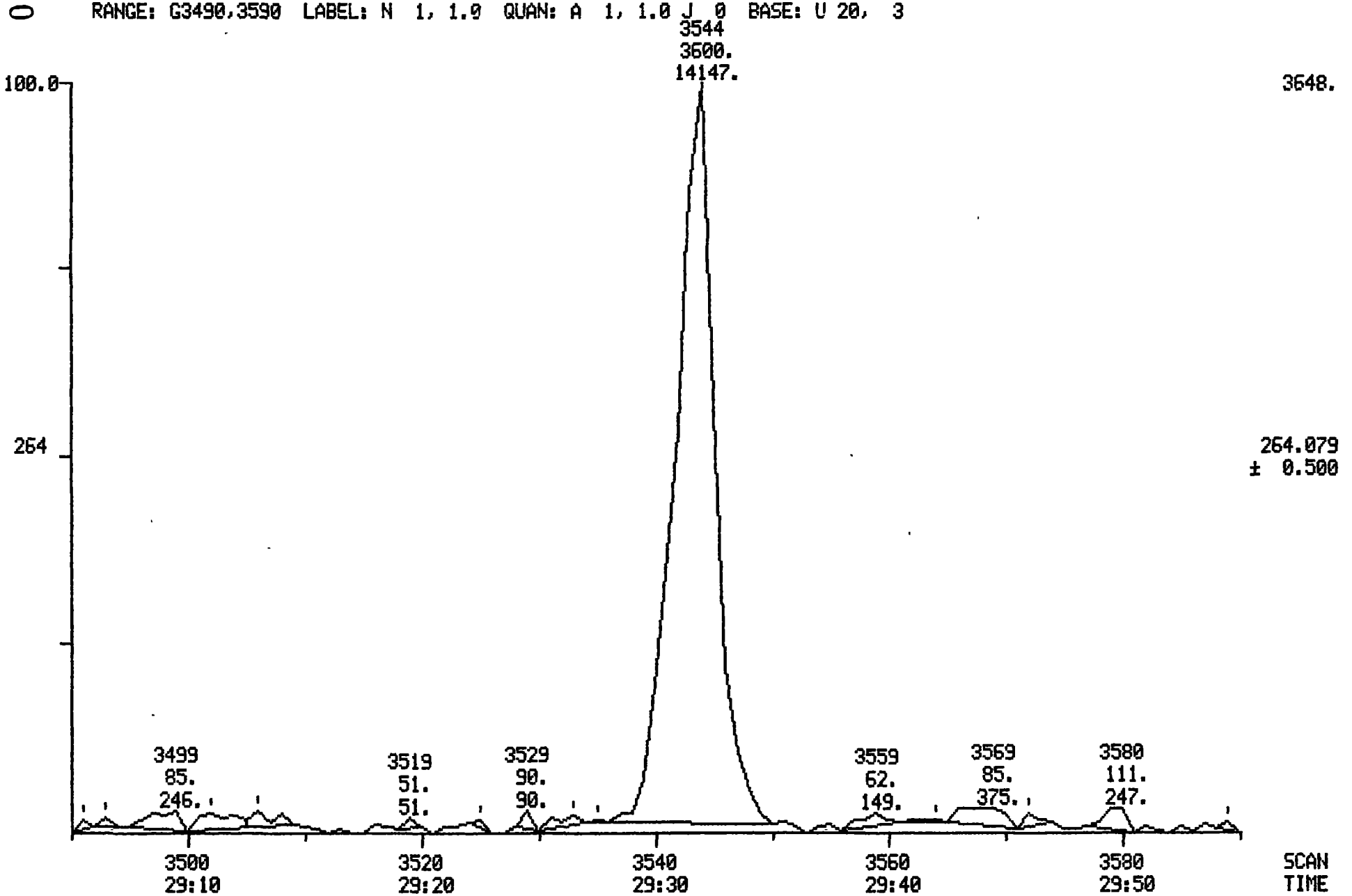
No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE	250 PH# 10
11	BENZO(J)FLUORANTHENE	252 PH# 11
12	BENZO(J)FLUORANTHENE	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	3544	29:32	1	1.000	A BB	14147.	80.000	NG/ML	24.20
2	240	3148	26:14	1	0.888	A BB	9597.	33.308	NG/ML	10.08
3	228	3154	26:17	1	0.890	A VB	9646.	30.049	NG/ML	9.09
4	226	3155	26:17	1	0.890	A BB	2566.	33.843	NG/ML	10.24
5	228	3154	26:17	1	0.890	A VB	9646.	30.682	NG/ML	9.28
6	226	3155	26:17	1	0.890	A BB	2566.	32.266	NG/ML	9.76
7	252	3457	28:48	1	0.975	A VB	5468.	18.917	NG/ML	5.72
8	250	3457	28:48	1	0.975	A BB	1651.	31.455	NG/ML	9.51
9	252	3472	28:56	1	0.980	A BB	100.	0.397	NG/ML	0.12
10	250	3473	28:56	1	0.980	A BB	434.	7.928	NG/ML	2.40
11	252	3482	29:01	1	0.983	A BB	1512.	5.715	NG/ML	1.73
12	250	3483	29:01	1	0.983	A BV	686.	11.731	NG/ML	3.55
13	252	3547	29:33	1	1.001	A VB	1936.	8.130	NG/ML	2.46
14	250	3548	29:34	1	1.001	A VB	360.	6.162	NG/ML	1.86

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	29:30	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	26:14	1.00	0.890	1.00	33.31	80.00	0.678	1.629	0.42
3	26:12	1.00	0.888	1.00	30.05	80.00	0.682	1.815	0.38
4	26:12	1.00	0.888	1.00	33.84	80.00	0.181	0.429	0.42
5	26:18	1.00	0.892	1.00	30.68	80.00	0.682	1.778	0.38
6	26:18	1.00	0.892	1.00	32.27	80.00	0.181	0.450	0.40
7	28:48	1.00	0.977	1.00	18.92	80.00	0.387	1.635	0.24
8	28:48	1.00	0.977	1.00	31.45	80.00	0.117	0.297	0.39
9	28:51	1.00	0.978	1.00	0.40	80.00	0.007	1.423	0.00
10	28:51	1.00	0.978	1.00	7.93	80.00	0.031	0.310	0.10
11	29:41	0.98	0.982	1.00	5.72	80.00	0.107	1.496	0.07

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
12	29:41	0.98	0.982	1.00	11.73	80.00	0.048	0.330	0.15
13	29:32	1.00	1.001	1.00	8.13	80.00	0.137	1.347	0.10
14	29:33	1.00	1.002	1.00	6.16	80.00	0.025	0.330	0.08

MIDMASS CHROMATOGRAM DATA: S59444X850 #3540 SCANS 3490 TO 3590
06/04/88 15:27:00 CALI: 060488CX #2
SAMPLE: 59444-06 PAH WATER 100Z/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3490,3590 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



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CASE NARRATIVE

for

REILLY TAR AND CHEMICAL CORPORATION

RMAL Project 59436

June 17, 1988

Introduction

Twenty-three water samples were received at Rocky Mountain Analytical Laboratory on April 20, 1988. These samples were assigned two separate project numbers, 59435 for inorganic analysis and 59436 for organic analysis. A cross reference associating the RMAL project number to the actual field sample number is included. Only the organic package is attached since the inorganic package was complete and sent to you on June 10, 1988. These samples were analyzed for volatile and semivolatile hazardous substance list (HSL) compounds, pesticides and PCBs, pyridines and part per trillion (ppt) polynuclear aromatic hydrocarbons (PNAs).

Analytical Results

The waters were screened, found to be and analyzed as low level samples. Samples 59436-15, -18, and -21 were trip blanks and only analyzed for HSL volatiles. All other samples were analyzed for all parameters. Sample 59436-17 due to the presence of non-target compounds had to be diluted prior to analysis. This sample was analyzed at 50%/0.5 ml. As suggested in the November 13, 1987 letter to Dr. Paul Rivers, the nominal reportable detection limits of 10 ppt for all PNA compounds and 10 ppb for all pyridine compounds were applied. This reportable detection limit corresponds to the EPA/CLP terminology for their forms as the contract required detection limit (CRDL).

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SAMPLE CROSS REFERENCE

RMAL Sample ID Number	Client ID
59436-01	ICW-7
59436-02	ICW-7A
59436-03	ICW-11
59436-04	ICW-11A
59436-05	TWS-2
59436-06	ICW-9
59436-07	SW-3
59436-08	SW-2
59436-09	SW-5
59436-10	SW-5A
59436-11	ICW-10
59436-12	SW-6
59436-13	TWS-1
59436-14	MW-1
59436-15	SB-2
59436-16	ICW-8
59436-17	MW-5
59436-18	SB-3
59436-19	SW-7A
59436-20	SW-7
59436-21	SB-1
59436-22	SW-4
59436-23	SW-1

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RMAL # 59436

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   d) Pesticide Individual Standards.....2605
   e) Pesticide Quantitation Standards.....2667
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