01054

US EPA RECORDS CENTER REGION 5
513843

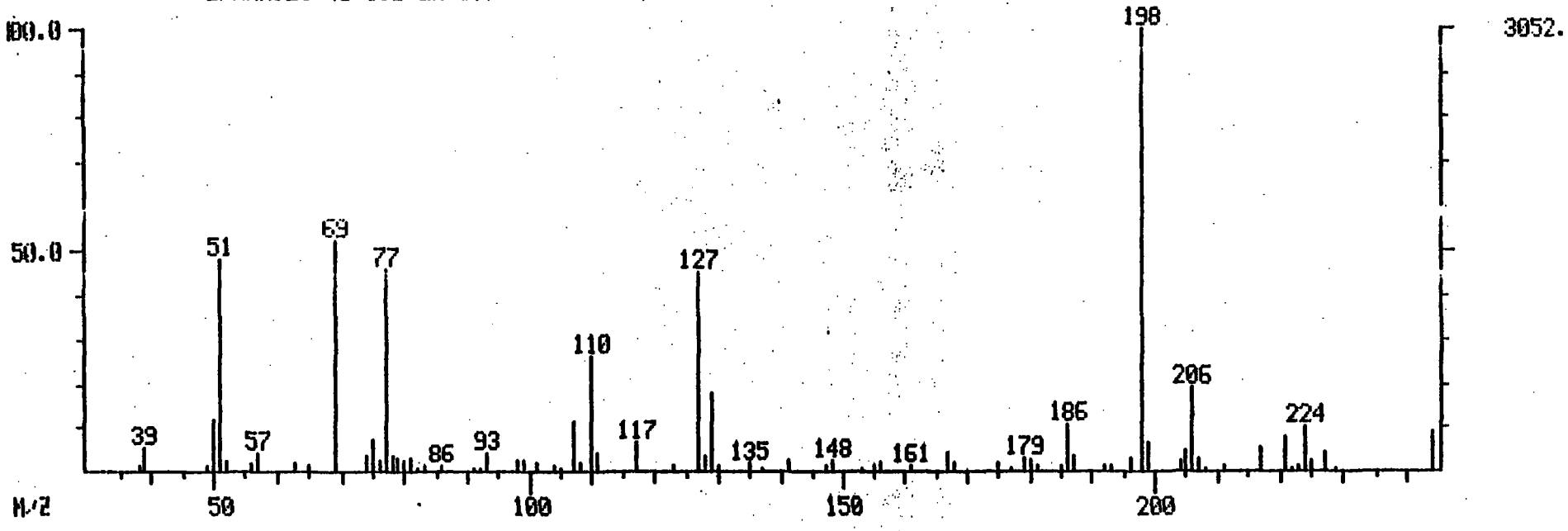
RAW QC DATA PACKAGE

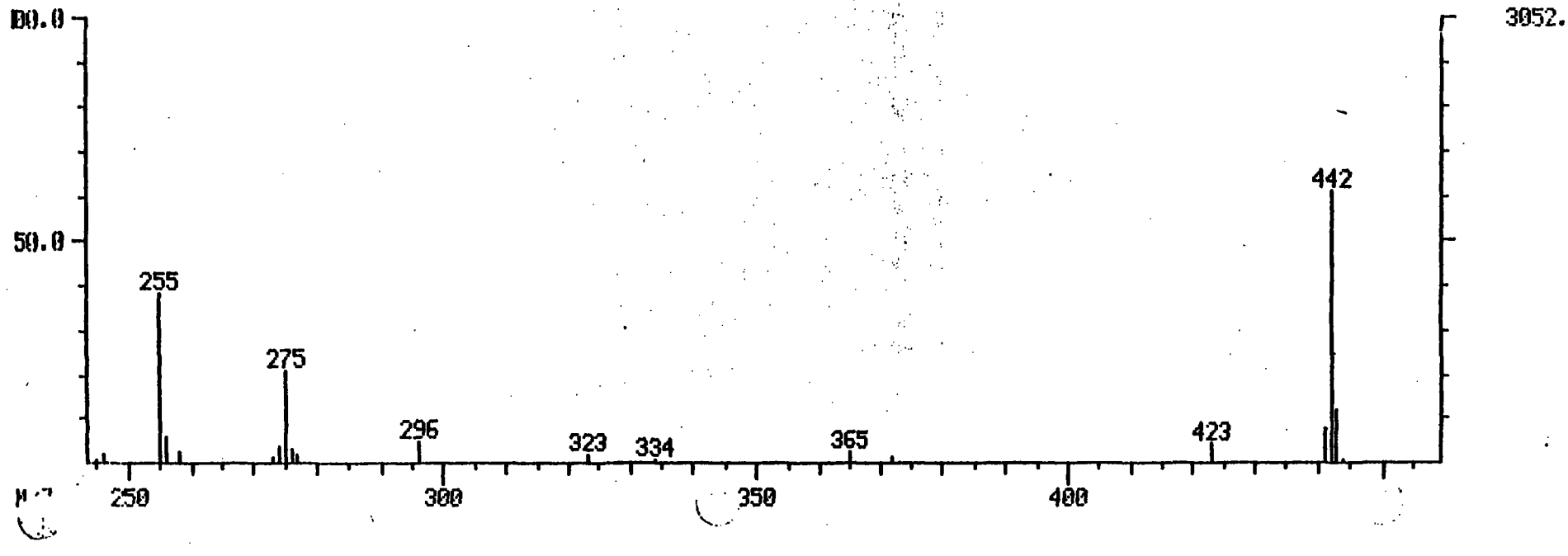
01055

MASS SPECTRUM
03/15/88 11:49:00 + 4:55
SAMPLE: DFTPP
CONDS.: GC DESC QD
GC TEMP: 251 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: DFU926 #399
CALI: 031588CU #5

BASE M/Z: 198
RIC: 22624.





Mass List
3/15/88 11:49:00 + 4:55
Sample: DFTPP
Conds.: GC DESC QD
Enhanced (S 15B 2N OT)

Data: DFU726 # 373
Cali: 031588CU # 5

Base m/z: 198
RIC: 22624.

38 0.00 0.00 0. Minima Min Inten: 0.
444 # 0 Maxima

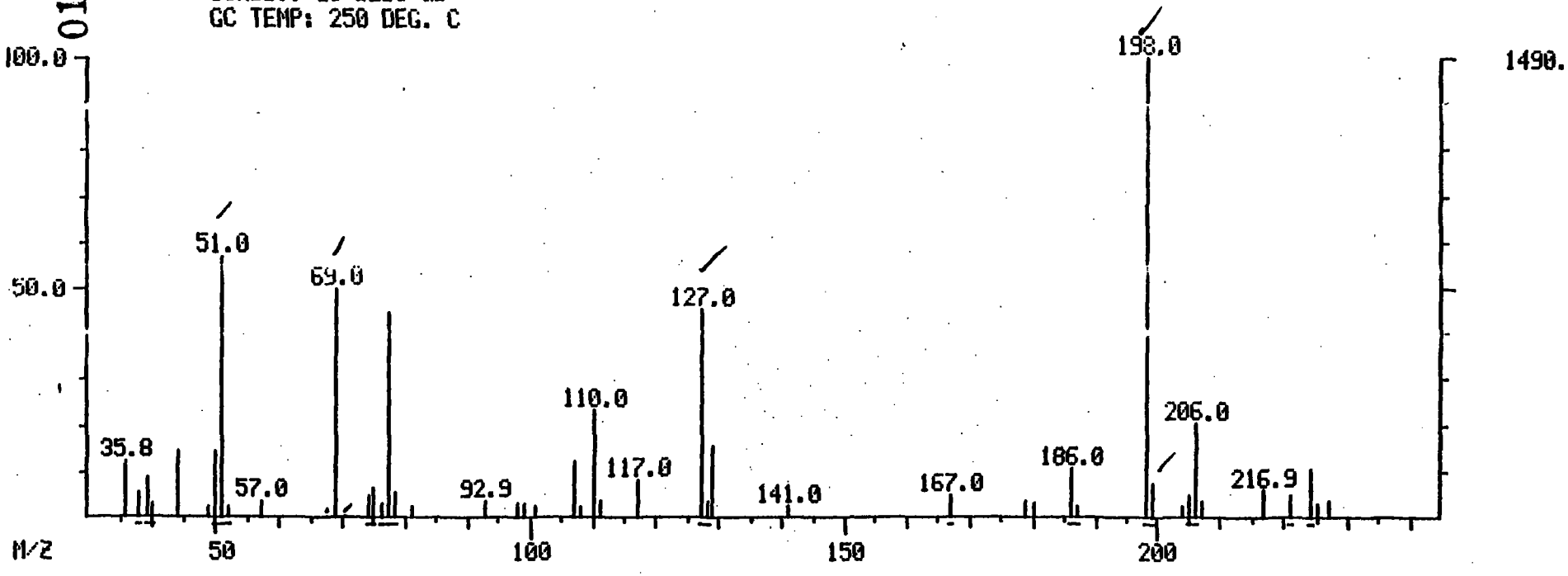
Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
38.00?	1.15	0.15	35.	168.00	1.80	0.24	55.
39.00?	5.28	0.71	161.	175.00	1.87	0.25	57.
49.00	0.92	0.12	28.	177.00	0.59	0.08	18.
50.00	11.96	1.61	365.	179.00	3.18	0.43	97.
51.00	48.49	6.54	1480.	180.00	2.23	0.30	68.
52.00	2.59	0.35	79.	181.00	1.08	0.15	33.
56.00	1.51	0.20	46.	185.00	1.15	0.15	35.
57.00	4.03	0.54	123.	186.00	10.48	1.41	320.
63.00	1.87	0.25	57.	187.00	3.31	0.45	101.
65.00	1.08	0.15	33.	192.00	0.98	0.13	30.
69.00	52.69	7.11	1608.	193.00	0.92	0.12	28.
74.00	3.80	0.51	116.	196.00	3.15	0.42	96.
75.00	7.08	0.95	216.	198.00	100.00	13.49	3052.
76.00	2.46	0.33	75.	199.00	6.29	0.85	192.
77.00	46.20	6.23	1410.	204.00	2.62	0.35	80.
78.00	3.34	0.45	102.	205.00	4.55	0.61	139.
79.00	2.79	0.38	85.	206.00	19.04	2.57	581.
80.00	2.29	0.31	70.	207.00	2.98	0.40	91.
81.00	3.11	0.42	95.	208.00	0.56	0.08	17.
82.00	0.36	0.05	11.	211.00	1.47	0.20	45.
83.00	0.95	0.13	29.	217.00	5.57	0.75	170.
86.00	0.98	0.13	30.	221.00	7.77	1.05	237.
91.00	0.33	0.04	10.	222.00	0.43	0.06	13.
92.00	0.49	0.07	15.	223.00	0.98	0.13	30.
93.00	4.26	0.57	130.	224.00	10.09	1.36	308.
98.00	2.52	0.34	77.	225.00	2.69	0.36	82.
99.00	2.62	0.35	80.	227.00	4.06	0.55	124.
101.00	1.57	0.21	48.	229.00	0.33	0.04	10.
104.00	0.95	0.13	29.	244.00	8.85	1.19	270.
105.00	0.85	0.11	26.	245.00	0.62	0.08	19.
107.00	11.66	1.57	356.	246.00	1.67	0.23	51.
108.00	1.93	0.26	59.	255.00	38.60	5.21	1178.
110.00	26.18	3.53	799.	256.00	6.00	0.81	183.
111.00	4.00	0.54	122.	258.00	2.26	0.30	69.
117.00	6.55	0.88	200.	273.00	1.47	0.20	45.
123.00	1.11	0.15	34.	274.00	3.77	0.51	115.
127.00	45.61	6.15	1392.	275.00	21.23	2.86	648.
128.00	3.87	0.52	118.	276.00	3.01	0.41	92.
129.00	17.76	2.40	542.	277.00	1.87	0.25	57.
130.00	1.41	0.19	43.	296.00	4.59	0.62	140.
135.00	1.57	0.21	48.	323.00	1.93	0.26	59.
137.00	0.59	0.08	18.	334.00	0.85	0.11	26.
141.00	2.16	0.29	66.	365.00	2.56	0.34	78.
147.00	0.95	0.13	29.	372.00	1.21	0.16	37.
148.00	2.13	0.29	65.	423.00	3.93	0.53	120.
153.00	0.36	0.05	11.	441.00	7.80	1.05	238.
155.00	1.15	0.15	35.	442.00	61.27	8.27	1870.
156.00	1.87	0.25	57.	443.00	12.12	1.64	370.
161.00	0.95	0.13	29.	444.00	0.43	0.06	13.
167.00	3.93	0.53	120.				

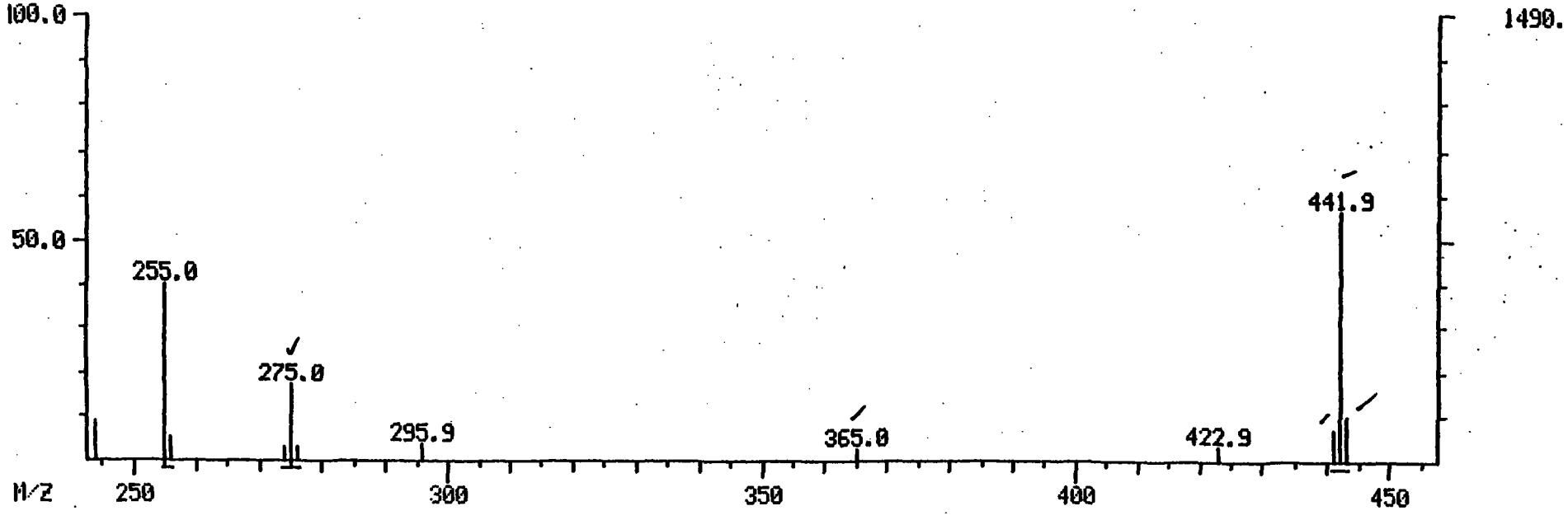
010057

MASS SPECTRUM
06/01/88 12:31:00 ↑: 4:37
SAMPLE: DFTPP
CONDS.: GC DESC QD
GC TEMP: 250 DEG. C

DATA: DFU532 #369
CALI: 053188CU #5

BASE M/Z: 198
RIC: 10656.





06/01/88 12:31:00 + 4:37 Cali: 053188CU # 5 RIC: 10656.
Sample: DFTPP
Conds.: GC DESC QD

01058

36 0.00 0.00 0. Minima Min Inten: 0.
443 # 0 Maxima

Mass		% RA	% RIC	Inten.
35.78?		11.95	1.67	178.
37.95?F		5.30	0.74	79.
39.05?F		8.52	1.19	127.
39.96	F	3.15	0.44	47.
44.03		14.63	2.05	218.
48.98		2.42	0.34	36.
50.00	F	14.30	2.00	213.
51.02	F	56.91	7.96	848.
52.07	F	2.48	0.35	37.
56.98		3.36	0.47	50.
68.95		49.87	6.97	743.
74.03	F	4.83	0.68	72.
74.99	F	6.51	0.91	97.
76.05	F	2.68	0.38	40.
77.05	F	44.70	6.25	666.
78.43	F	5.23	0.73	78.
81.02		2.42	0.34	36.
92.95		3.76	0.53	56.
97.94		2.82	0.39	42.
98.98		3.15	0.44	47.
100.92		2.15	0.30	32.
106.98		12.08	1.69	180.
107.98		2.15	0.30	32.
109.99		23.36	3.27	348.
111.12		3.22	0.45	48.
116.98		8.12	1.14	121.
126.98	F	45.44	6.35	677.
128.02	F	3.69	0.52	55.
128.97		15.64	2.19	233.
141.03		2.35	0.33	35.
167.05	F	4.50	0.63	67.
178.89		3.42	0.48	51.
180.14		2.68	0.38	40.
186.02	F	10.47	1.46	156.
187.03	F	2.15	0.30	32.
197.97	F	100.00	13.98	1490.
198.98	F	7.58	1.06	113.
203.97		2.21	0.31	33.
205.03	F	4.43	0.62	66.
206.00	F	20.40	2.85	304.
207.03		3.29	0.46	49.
216.92		5.97	0.84	89.
221.00	F	4.36	0.61	65.
224.03	F	10.74	1.50	160.
225.00		3.09	0.43	46.
226.98		3.62	0.51	54.
243.98		8.93	1.25	133.
254.97	F	40.34	5.64	601.
255.98	F	5.30	0.74	79.
273.87	F	2.89	0.40	43.
274.97	F	16.71	2.34	249.

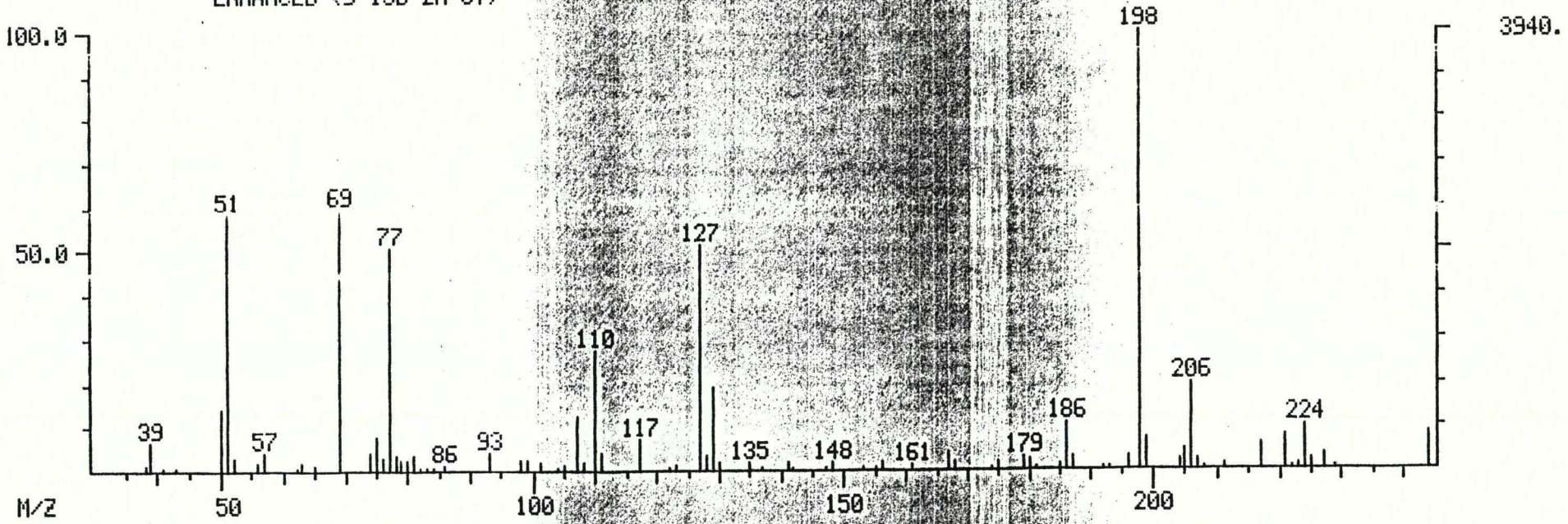
Mass		% RA	% RIC	Inten.
275.91	F	3.15	0.44	47.
295.94		3.56	0.50	53.
364.97		2.35	0.33	35.
422.91		2.82	0.39	42.
440.87	F	6.85	0.96	102.
441.94	F	56.64	7.92	844.
442.94	F	10.13	1.42	151.

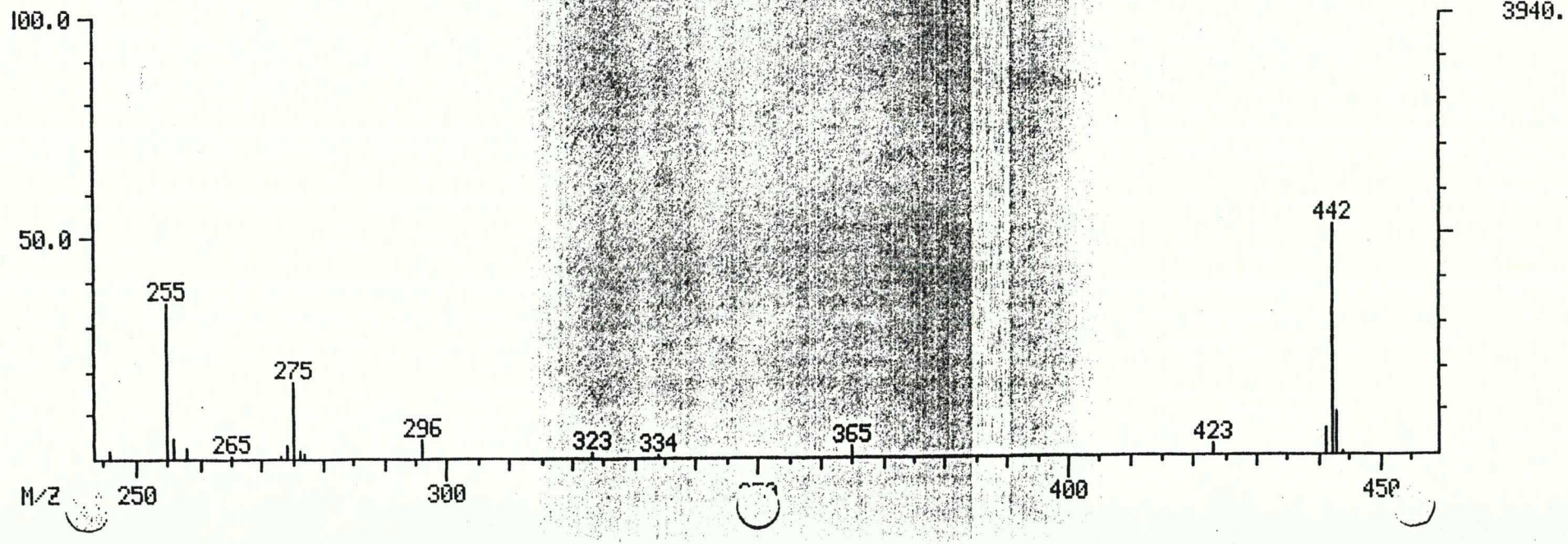
01059

MASS SPECTRUM
06/02/88 14:18:00 + 4:39
SAMPLE: DFTPP
CONDS.: GC DESC QD
GC TEMP: 250 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: DFU546 #372
CALI: 060288CU #5

BASE M/Z: 198
RIC: 29888.





06/02/88 14:18:00 + 4:39 Cali: 060288CU # 5 RIC: 29888.
Sample: DFTPP
Conds.: GC DESC QD
Enhanced (S 15B 2N OT)

38 0.00 0.00 0. Minima Min Inten: 15.
444 # 0 Maxima

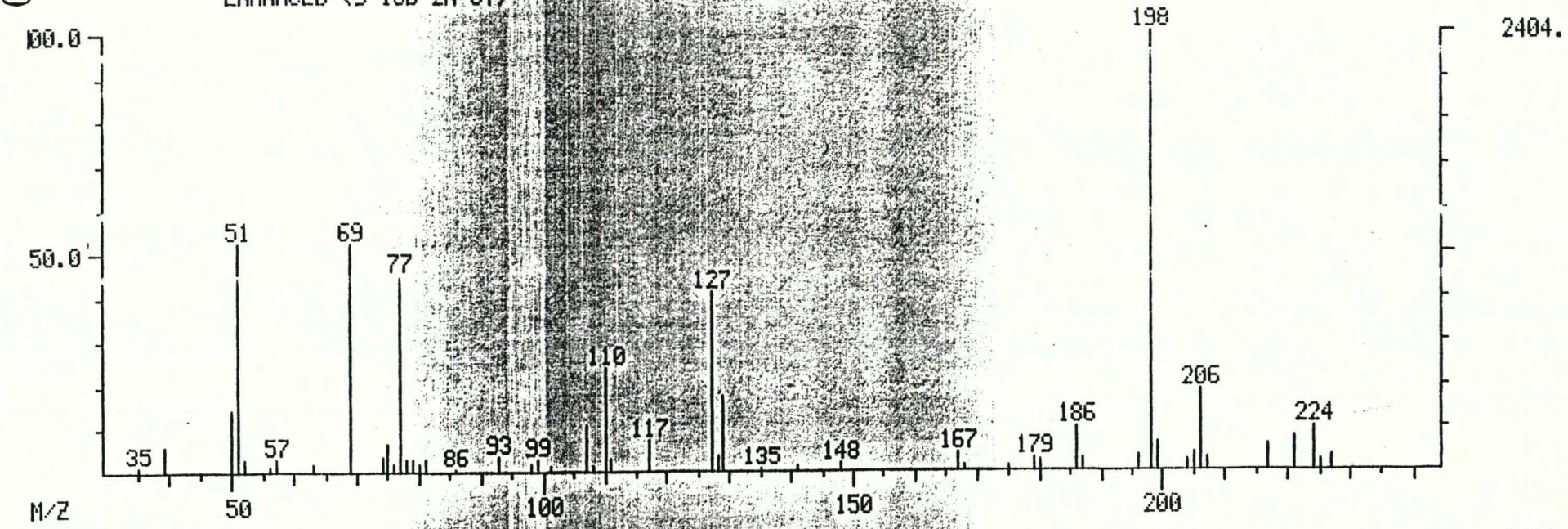
Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
38.00?	1.04	0.14	41.	156.00	1.52	0.20	60.
39.00?	6.83	0.90	269.	161.00	1.32	0.17	52.
41.00	0.76	0.10	30.	167.00	3.98	0.53	157.
43.00	0.76	0.10	30.	168.00	1.57	0.21	62.
50.00	14.59	1.92	575.	174.00	0.46	0.06	18.
51.00	58.88	7.76	2320.	175.00	1.60	0.21	63.
52.00	3.10	0.41	122.	179.00	3.20	0.42	126.
56.00	1.80	0.24	71.	180.00	2.11	0.28	83.
57.00	4.42	0.58	174.	181.00	0.81	0.11	32.
62.00	0.43	0.06	17.	185.00	1.35	0.18	53.
63.00	2.01	0.26	79.	186.00	10.91	1.44	430.
65.00	1.07	0.14	42.	187.00	2.89	0.38	114.
69.00	60.10	7.92	2368.	192.00	0.74	0.10	29.
74.00	4.14	0.55	163.	193.00	0.84	0.11	33.
75.00	7.54	0.99	297.	196.00	3.05	0.40	120.
76.00	2.97	0.39	117.	198.00	100.00	13.18	3940.
77.00	50.61	6.67	1994.	199.00	6.93	0.91	273.
78.00	3.71	0.49	146.	204.00	2.61	0.34	103.
79.00	2.41	0.32	95.	205.00	4.52	0.60	178.
80.00	2.11	0.28	83.	206.00	19.59	2.58	772.
81.00	3.43	0.45	135.	207.00	2.66	0.35	105.
82.00	0.74	0.10	29.	208.00	0.69	0.09	27.
83.00	0.81	0.11	32.	211.00	1.45	0.19	57.
84.00	0.71	0.09	28.	217.00	5.79	0.76	228.
86.00	1.12	0.15	44.	221.00	7.82	1.03	308.
93.00	4.34	0.57	171.	223.00	1.19	0.16	47.
98.00	2.64	0.35	104.	224.00	10.18	1.34	401.
99.00	2.69	0.35	106.	225.00	2.59	0.34	102.
101.00	2.01	0.26	79.	227.00	3.83	0.51	151.
104.00	0.69	0.09	27.	229.00	0.48	0.06	19.
105.00	1.22	0.16	48.	244.00	8.35	1.10	329.
107.00	12.41	1.64	489.	246.00	1.90	0.25	75.
108.00	2.03	0.27	80.	255.00	35.53	4.68	1400.
110.00	27.41	3.61	1080.	256.00	4.85	0.64	191.
111.00	3.93	0.52	155.	258.00	2.21	0.29	87.
117.00	6.95	0.92	274.	265.00	0.43	0.06	17.
122.00	0.41	0.05	16.	273.00	0.84	0.11	33.
123.00	1.35	0.18	53.	274.00	3.05	0.40	120.
127.00	51.78	6.83	2040.	275.00	17.26	2.28	680.
128.00	3.58	0.47	141.	276.00	2.08	0.27	82.
129.00	19.29	2.54	760.	277.00	1.35	0.18	53.
130.00	1.83	0.24	72.	296.00	3.91	0.52	154.
135.00	1.78	0.23	70.	323.00	1.35	0.18	53.
137.00	0.48	0.06	19.	334.00	0.43	0.06	17.
141.00	2.01	0.26	79.	365.00	2.11	0.28	83.
142.00	0.53	0.07	21.	423.00	2.64	0.35	104.
147.00	0.56	0.07	22.	441.00	6.19	0.82	244.
148.00	2.03	0.27	80.	442.00	52.18	6.88	2056.
153.00	0.43	0.06	17.	443.00	9.67	1.27	381.
155.00	0.86	0.11	34.	444.00	0.43	0.06	17.

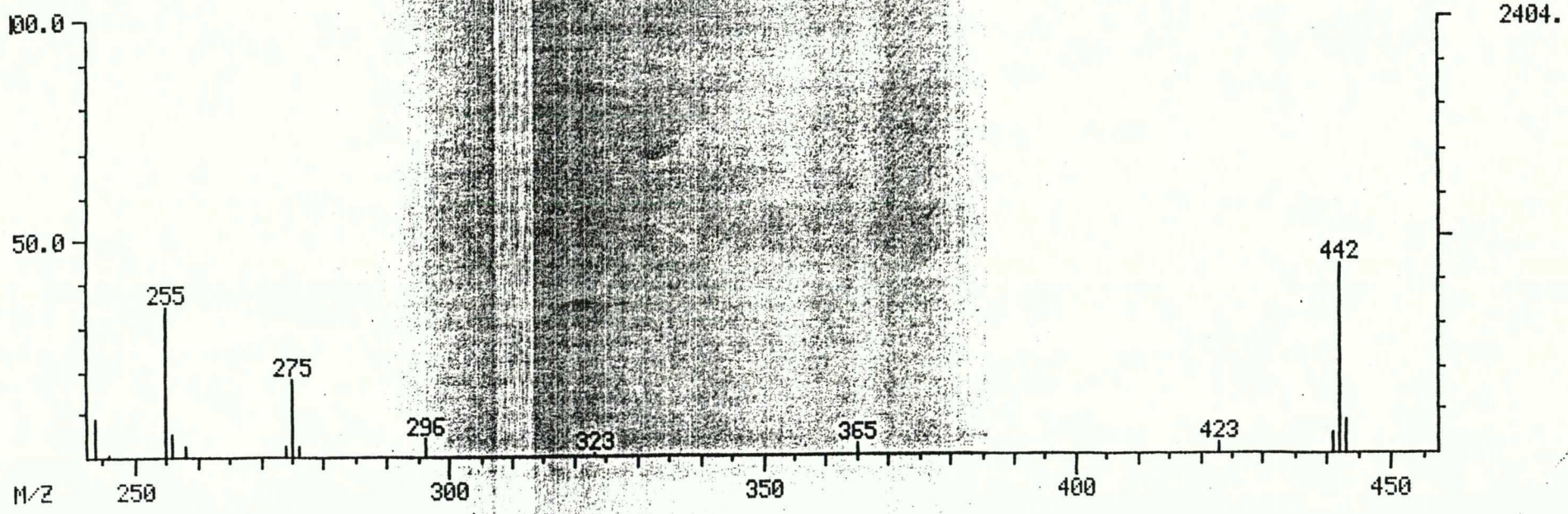
01061

MASS SPECTRUM
06/03/88 14:14:00 + 4:36
SAMPLE: DFTPP
CONDS.: GC DESC QD
GC TEMP: 250 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: DFU556 #368
CALI: 060388CU #5

BASE M/Z: 198
RIC: 15840.





Mass List
06/03/88 14:14:00 + 4:36
Sample: DFTPP
Conds.: GC DESC QD
Enhanced (S 15B 2N OT)

Data: DFU556 # 368
Cali: 060388CU # 5

Base m/z: 198
RIC: 15840.

01062

35 0.00 0.00 0. Minima Min Inten: 0.
443 # 0 Maxima

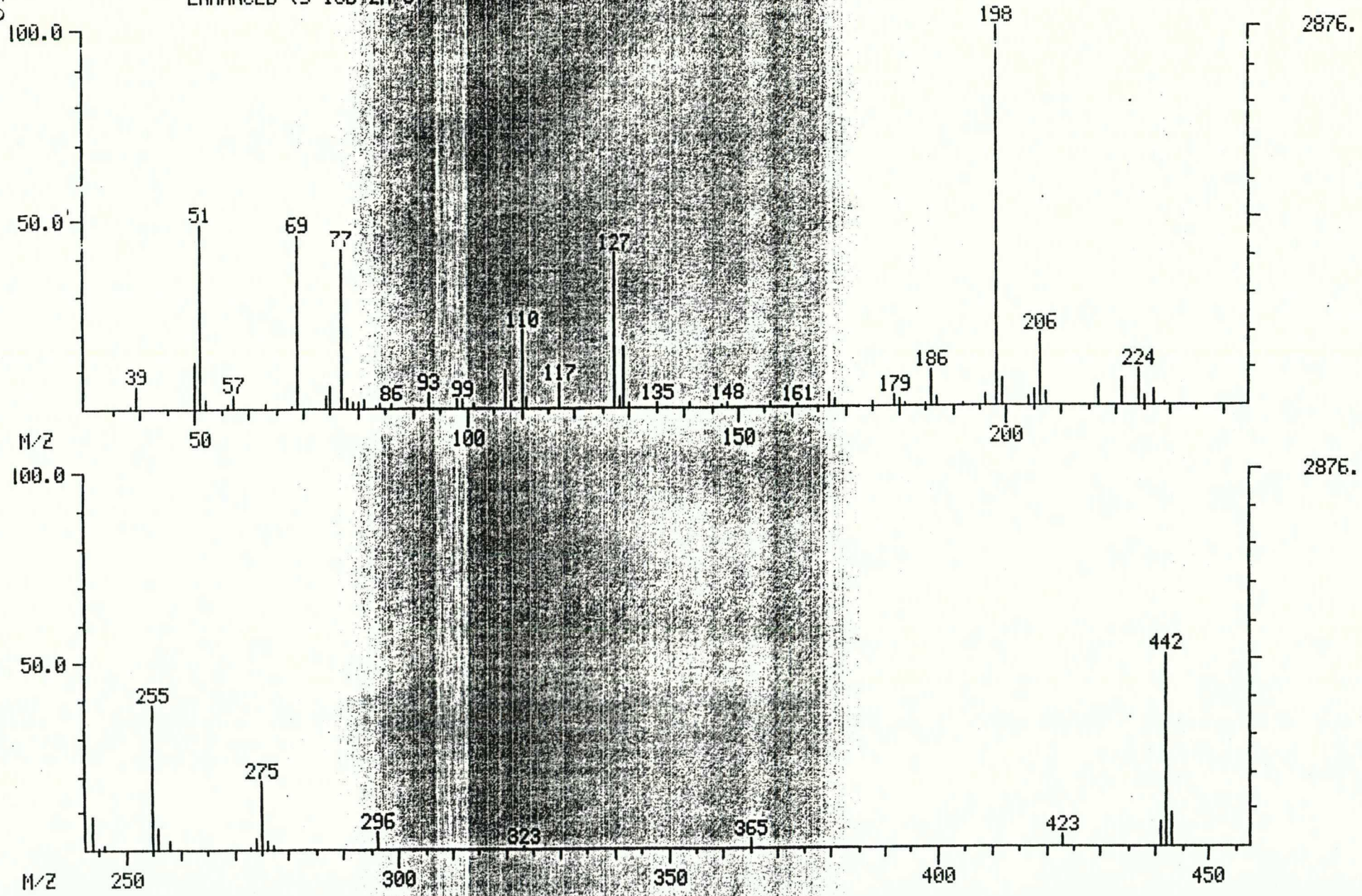
Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
35.00?	1.00	0.15	24.	225.00	2.41	0.37	58.
39.00?	6.20	0.94	149.	227.00	3.70	0.56	89.
50.00	14.60	2.22	351.	244.00	8.74	1.33	210.
51.00	52.58	7.98	1264.	246.00	0.79	0.12	19.
52.00	2.70	0.41	65.	255.00	34.78	5.28	836.
56.00	1.16	0.18	28.	256.00	5.28	0.80	127.
57.00	3.16	0.48	76.	258.00	2.16	0.33	52.
63.00	1.58	0.24	38.	274.00	2.50	0.38	60.
69.00	52.41	7.95	1260.	275.00	18.22	2.77	438.
74.00	3.49	0.53	84.	276.00	2.16	0.33	52.
75.00	6.49	0.98	156.	296.00	4.28	0.65	103.
76.00	1.62	0.25	39.	323.00	0.46	0.07	11.
77.00	45.51	6.91	1094.	365.00	2.25	0.34	54.
78.00	3.04	0.46	73.	423.00	2.29	0.35	55.
79.00	2.75	0.42	66.	441.00	5.07	0.77	122.
80.00	1.66	0.25	40.	442.00	43.59	6.62	1048.
81.00	2.91	0.44	70.	443.00	8.07	1.22	194.
86.00	0.42	0.06	10.				
93.00	3.87	0.59	93.				
98.00	1.66	0.25	40.				
99.00	2.87	0.44	69.				
101.00	1.12	0.17	27.				
107.00	10.65	1.62	256.				
108.00	1.46	0.22	35.				
110.00	23.67	3.59	569.				
111.00	3.00	0.45	72.				
117.00	7.11	1.08	171.				
127.00	41.43	6.29	996.				
128.00	3.41	0.52	82.				
129.00	17.30	2.63	416.				
135.00	0.62	0.09	15.				
141.00	1.33	0.20	32.				
148.00	1.66	0.25	40.				
167.00	4.12	0.62	99.				
168.00	1.46	0.22	35.				
175.00	1.16	0.18	28.				
179.00	2.91	0.44	70.				
180.00	2.20	0.33	53.				
186.00	10.07	1.53	242.				
187.00	2.75	0.42	66.				
196.00	3.66	0.56	88.				
198.00	100.00	15.18	2404.				
199.00	6.32	0.96	152.				
204.00	2.54	0.39	61.				
205.00	4.45	0.68	107.				
206.00	18.76	2.85	451.				
207.00	2.83	0.43	68.				
217.00	5.91	0.90	142.				
221.00	7.49	1.14	180.				
224.00	10.44	1.58	251.				

01063

MASS SPECTRUM
06/06/88 8:23:00 + 4:26
SAMPLE: DFTPP
CONDS.: GC DESC QD
GC TEMP: 250 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: DFU567 #355
CALI: 060688CU #5

BASE M/Z: 198
RIC: 19168.



Mass List
06/06/88 8:23:00 + 4:26
Sample: DFTPP
Conds.: GC DESC QD
Enhanced (S 15B 2N OT)

Data: [illegible]
Cali: 060688CU # 5

Base m/z: 170
RIC: 19168.

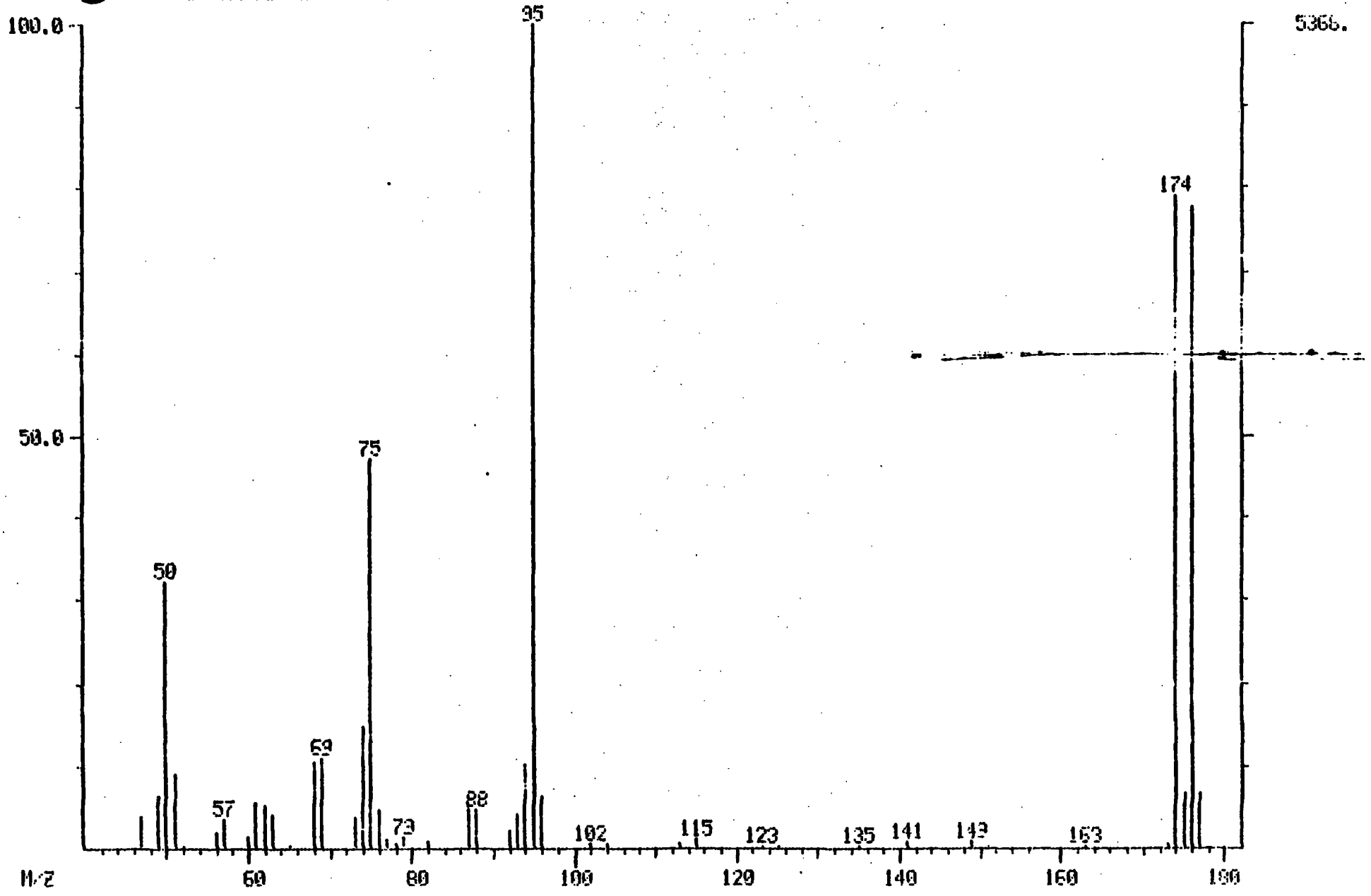
38	0.00	0.00	0. Minima	Min Inten:	0.		
443			# 0 Maxima				
Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
38.00?	0.83	0.13	24.	198.00	100.00	15.00	2876.
39.00?	5.95	0.89	171.	199.00	6.99	1.05	201.
50.00	12.73	1.91	366.	204.00	2.40	0.36	69.
51.00	48.96	7.35	1408.	205.00	4.07	0.61	117.
52.00	2.40	0.36	69.	206.00	19.30	2.90	555.
56.00	1.50	0.22	43.	207.00	3.41	0.51	98.
57.00	3.76	0.56	108.	217.00	5.15	0.77	148.
63.00	1.32	0.20	38.	221.00	7.27	1.09	209.
68.00	0.80	0.12	23.	224.00	9.84	1.48	283.
69.00	46.31	6.95	1332.	225.00	2.36	0.35	68.
74.00	3.58	0.54	103.	227.00	4.00	0.60	115.
75.00	5.88	0.88	169.	229.00	0.52	0.08	15.
77.00	42.63	6.40	1226.	244.00	8.73	1.31	251.
78.00	3.06	0.46	88.	245.00	0.63	0.09	18.
79.00	1.81	0.27	52.	246.00	1.11	0.17	32.
80.00	1.77	0.27	51.	255.00	38.80	5.82	1116.
81.00	2.64	0.40	76.	256.00	5.77	0.87	166.
83.00	0.59	0.09	17.	258.00	2.12	0.32	61.
84.00	0.90	0.14	26.	273.00	0.63	0.09	18.
86.00	1.01	0.15	29.	274.00	3.16	0.47	91.
93.00	4.17	0.63	120.	275.00	18.64	2.80	536.
98.00	2.43	0.37	70.	276.00	2.36	0.35	68.
99.00	2.57	0.39	74.	277.00	1.01	0.15	29.
101.00	1.43	0.21	41.	296.00	4.69	0.70	135.
107.00	10.08	1.51	290.	323.00	0.59	0.09	17.
108.00	1.60	0.24	46.	365.00	2.19	0.33	63.
110.00	20.83	3.12	599.	423.00	2.78	0.42	80.
111.00	3.09	0.46	89.	441.00	6.40	0.96	184.
117.00	6.33	0.95	182.	442.00	51.46	7.72	1480.
127.00	41.52	6.23	1194.	443.00	8.97	1.35	258.
128.00	3.09	0.46	89.				
129.00	16.38	2.46	471.				
130.00	0.97	0.15	28.				
135.00	1.43	0.21	41.				
141.00	1.39	0.21	40.				
147.00	0.35	0.05	10.				
148.00	1.50	0.22	43.				
156.00	1.01	0.15	29.				
161.00	0.52	0.08	15.				
167.00	3.72	0.56	107.				
168.00	1.56	0.23	45.				
175.00	1.43	0.21	41.				
179.00	3.13	0.47	90.				
180.00	1.88	0.28	54.				
181.00	0.63	0.09	18.				
185.00	0.70	0.10	20.				
186.00	9.53	1.43	274.				
187.00	2.61	0.39	75.				
192.00	0.56	0.08	16.				
196.00	3.16	0.47	91.				

01065

MASS SPECTRUM
03/28/88 15:22:00 + 7:30
SAMPLE: 50 NG BFB
CONDS.: GC DESC V3
GC TEMP: 250 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BFW440 #150
CALI: 032888CW #2

BASE M/Z: 95
RIC: 25728.



Mass List
03/28/88 15:22:00 + 7:30
Sample: 50 NG BFB
Conds.: GC DESC V3
Enhanced (G 15B 2N OT)

Data: BFW440 # 150
Cali: 032888CW # 2

Base m/z: 95
RIC: 25728.

01066

47	0.00	0.00	0.	Minima	Min inten:	0.
177			# 0	Maxima		

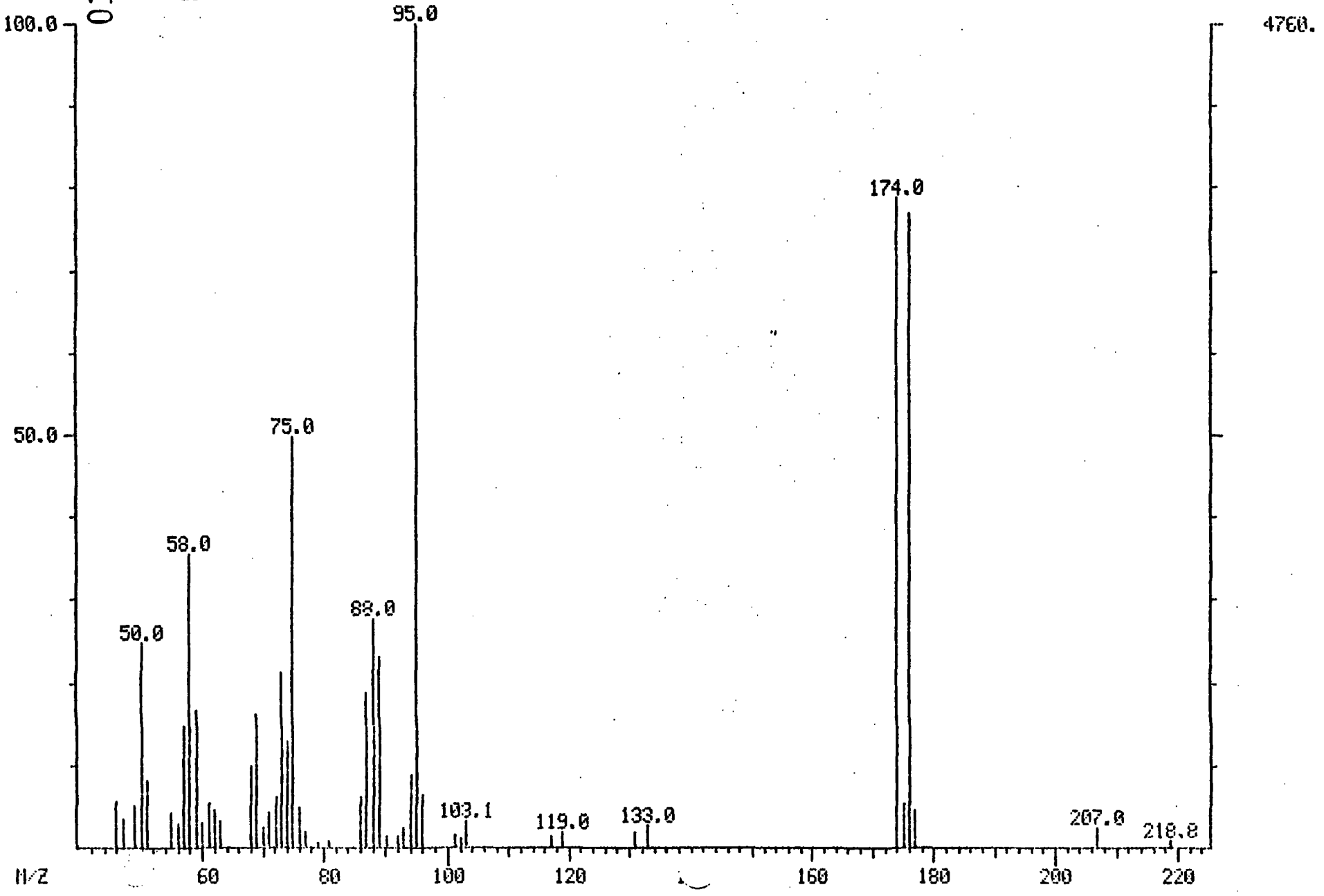
Mass	% RA	% RIC	Inten.
47.00?	3.87	0.81	208.
49.00?	6.28	1.31	337.
50.00?	32.30	6.74	1734.
51.00?	9.24	1.93	496.
52.00?	0.15	0.03	8.
56.00?	2.05	0.43	110.
57.00?	3.46	0.72	186.
60.00?	1.45	0.30	78.
61.00?	5.42	1.13	291.
62.00?	5.35	1.12	287.
63.00?	4.06	0.85	218.
65.00?	0.20	0.04	11.
68.00?	10.43	2.18	560.
69.00	10.92	2.28	586.
73.00	3.86	0.80	207.
74.00	14.88	3.11	799.
75.00	47.24	9.86	2536.
76.00	4.77	1.00	256.
77.00	1.15	0.24	62.
78.00	0.63	0.13	34.
79.00	1.27	0.26	68.
82.00	0.95	0.20	51.
87.00	4.69	0.98	252
88.00	4.81	1.00	258.
92.00	2.18	0.45	117.
93.00	4.06	0.85	218.
94.00	10.26	2.14	551.
95.00	100.00	20.86	5368.
96.00	6.35	1.33	341.
102.00	0.50	0.10	27.
104.00	0.47	0.10	25.
113.00	0.52	0.11	28.
114.00	0.11	0.02	6.
115.00	1.01	0.21	54.
123.00	0.20	0.04	11.
125.00	0.20	0.04	11.
135.00	0.37	0.08	20.
137.00	0.13	0.03	7.
139.00	0.13	0.03	7.
141.00	0.89	0.19	48.
149.00	0.93	0.19	50.
151.00	0.28	0.06	15.
163.00	0.32	0.07	17.
173.00	0.52	0.11	28
174.00	78.99	16.48	4240.
175.00	6.57	1.40	359.
176.00	77.30	16.17	4160.
177.00	6.56	1.37	352.

MASS SPECTRUM
05/02/88 21:37:00 + 7:48
SAMPLE: 50 NG BFB
CONDS.: 2.0ML/5ML
GC TEMP: 250 DEG. C

DATA: BFW963 #156
CALI: 050288CW2 #3

BASE M/Z: 95
RIC: 30848.

01067



Mass List
05/02/88 21:37:00 + 7:48
Sample: 50 NG BFB
Conds.: 2.0ML/5ML

Data: BFW963 # 156
Cali: 050288CW2 # 3

Base m/z: 95
RIC: 30848.

01068

46 0.00 0.00 0. Minima Min inten: 0.
219 # 0 Maxima

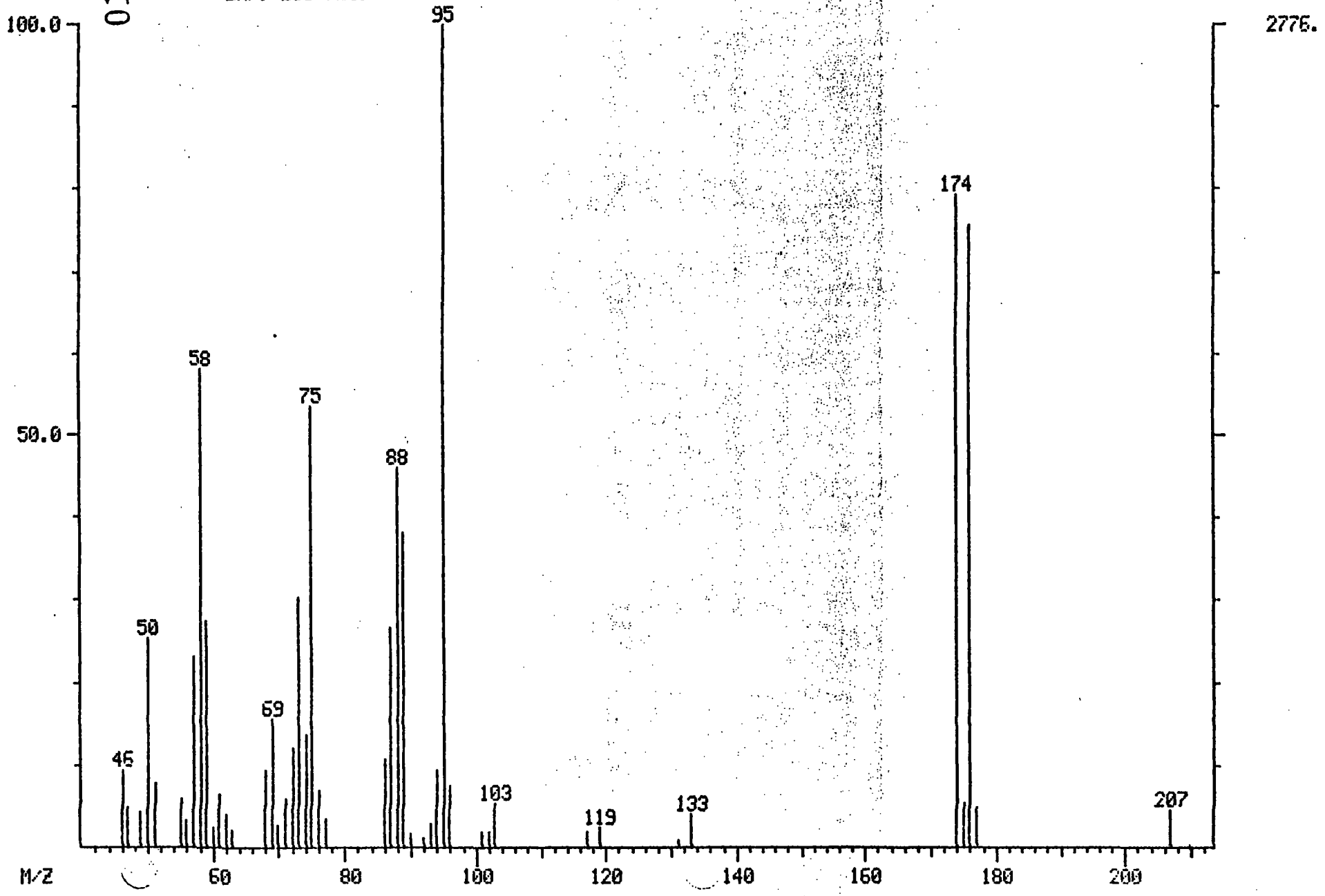
Mass		% RA	% RIC	Inten.
46.03?		5.69	0.88	271.
47.05?	M	3.42	0.53	163.
49.02?		4.98	0.77	237.
50.00?		24.62	3.80	1172.
51.03?		8.32	1.28	396.
55.03?		4.37	0.67	208.
56.07?		3.05	0.47	145.
57.03?		14.87	2.30	708.
58.03?		35.42	5.47	1686.
59.05?		16.79	2.59	799.
60.04?		2.84	0.44	135.
61.02?		5.27	0.81	251.
62.01?		4.47	0.69	213.
63.04?		3.28	0.51	156.
68.01?		9.98	1.54	475.
69.02		16.20	2.50	771.
70.04		2.31	0.36	110.
71.05		4.39	0.68	209.
72.05		6.11	0.94	291.
73.04		21.20	3.27	1009.
74.03		13.00	2.01	619.
75.02		49.75	7.68	2368.
76.05		4.94	0.76	235.
77.08	M	2.02	0.31	96.
79.04		0.44	0.07	21.
80.86		0.69	0.11	33.
86.05		6.05	0.93	288.
87.04		18.95	2.92	902.
88.04		27.56	4.25	1312.
89.05		23.24	3.59	1106.
90.05		1.34	0.21	64.
92.01	M	1.22	0.19	58.
92.99		2.48	0.38	118.
94.04		8.74	1.35	416.
95.03		100.00	15.43	4760.
96.04		6.55	1.01	312.
101.09		1.66	0.26	79.
102.04	M	1.11	0.17	53.
103.08		3.24	0.50	154.
116.98		1.28	0.20	61.
119.02	M	1.85	0.29	88.
130.98	M	1.83	0.28	87.
133.05		2.71	0.42	129.
173.95		78.74	12.15	3748.
174.98		5.42	0.84	258.
175.95		76.81	11.85	3656.
176.97		4.62	0.71	220.
207.03		2.46	0.38	117.
218.83		0.71	0.11	34.

01069

MASS SPECTRUM
05/03/88 10:38:00 + 8:18
SAMPLE: 50 NG BFB
CONDS.: 10%/0.5ML
GC TEMP: 250 DEG. C

DATA: BFW977 #168
CALI: 050388CW #2

BASE M/Z: 95
RIC: 21408.



Mass List
05/03/88 10:38:00 + 8:18
Sample: 50 NG BFB
Conds.: 10%/0.5ML

Data: BFW977 # 166
Cali: 050388CW # 2

Base m/z: 95
RIC: 21408.

01070

46		0.00	0.00	0.	Minima	Min inten: 0.
207				# 0	Maxima	
Mass		% RA	% RIC	Inten.		
46.00?		9.40	1.22	261.		
47.00?	M	4.86	0.63	135.		
49.00?		4.39	0.57	122.		
50.00?		25.22	3.27	700.		
51.00?		7.71	1.00	214.		
55.00?		5.94	0.77	165.		
56.00?		3.21	0.42	89.		
57.00?		23.05	2.99	640.		
58.00?		58.07	7.53	1612.		
59.00?		27.41	3.55	761.		
60.00?		2.41	0.31	67.		
61.00?	M	6.41	0.83	178.		
62.00?	M	4.11	0.53	114.		
63.00?	M	2.16	0.28	60.		
68.00?		9.37	1.21	260.		
69.00		15.67	2.03	435.		
70.00		2.59	0.34	72.		
71.00		5.94	0.77	165.		
72.00		12.00	1.56	333.		
73.00		30.37	3.94	843.		
74.00		13.83	1.79	384.		
75.00		53.46	6.93	1484.		
76.00		6.99	0.91	194.		
77.00		3.46	0.45	96.		
86.00		10.77	1.40	299.		
87.00		26.55	3.44	737.		
88.00		45.97	5.96	1276.		
89.00		38.04	4.93	1056.		
90.00		1.73	0.22	48.		
92.00		1.01	0.13	28.		
93.00	M	2.99	0.39	83.		
94.00		9.44	1.22	262.		
95.00		100.00	12.97	2776.		
96.00		7.42	0.96	206.		
101.00		1.80	0.23	50.		
102.00	M	1.87	0.24	52.		
103.00		5.37	0.70	149.		
117.00		1.95	0.25	54.		
119.00	M	2.49	0.32	69.		
131.00		0.83	0.11	23.		
133.00		3.93	0.51	109.		
174.00		79.39	10.30	2204.		
175.00		5.40	0.70	150.		
176.00		75.65	9.81	2100.		
177.00	M	4.76	0.62	132.		
207.00	M	4.57	0.59	127.		

01071

PESTICIDE EVALUATION STANDARDS

EVALUATION MIXES

Evaluation Mix A	Concentration ug/ml	Nanograms Col. A - 2 ul	Injected Col. B - 4 ul
Aldrin	0.003	0.006	0.012
Endrin	0.006	0.012	0.024
pp'-DDT	0.010	0.020	0.040
DBC	0.020	0.040	0.08

Evaluation Mix B			
Aldrin	0.0075	0.015	0.030
Endrin	0.015	0.030	0.060
pp'-DDT	0.025	0.050	0.10
DBC	0.050	0.10	0.20

Evaluation Mix C			
Aldrin	0.015	0.030	0.060
Endrin	0.030	0.060	0.12
pp'-DDT	0.050	0.10	0.20
DBC	0.10	0.20	0.40

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

01073

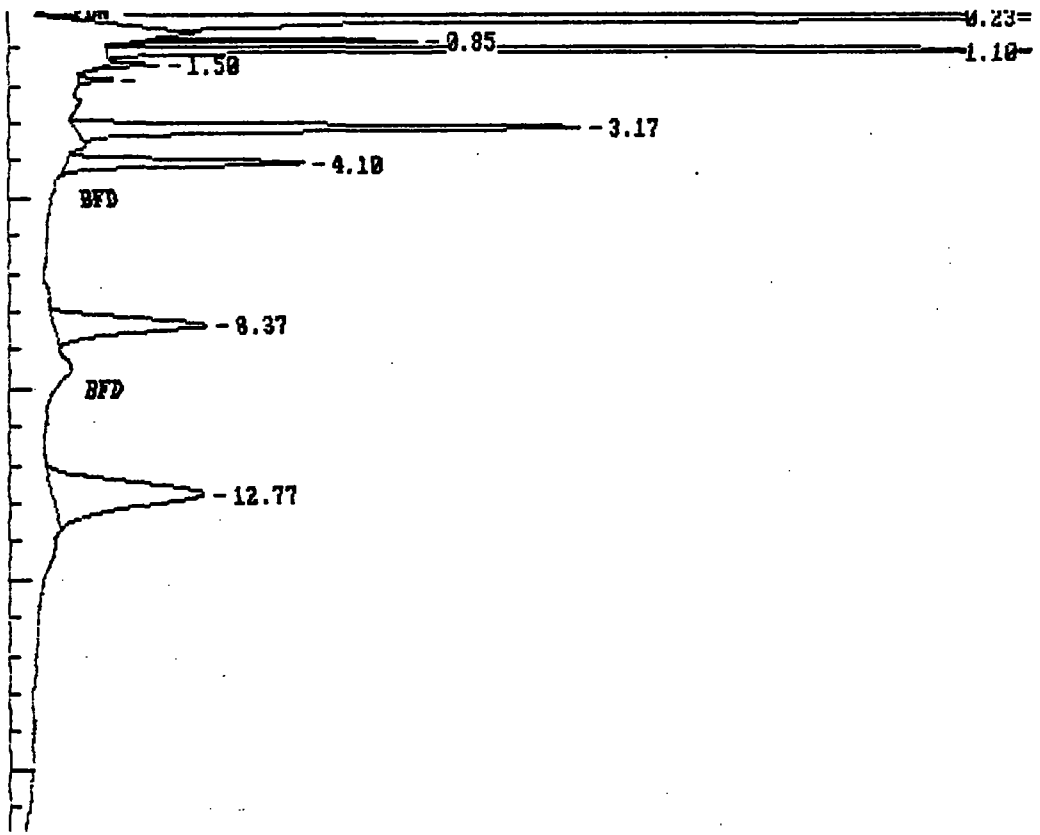
```
******************** 05-12-1988 08:30:05 Version 4.1 ********************
* Sample Name: EVALUATION MIX A                    Data File: J:AB1331      *
* Date: 05-12-1988 08:29:50 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  1    Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                  *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*            Detector 0: ECD                    Detector 1:                 *
* Misc. Information: 4 UL INJECTION                        LPT1:        *   *
*****************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

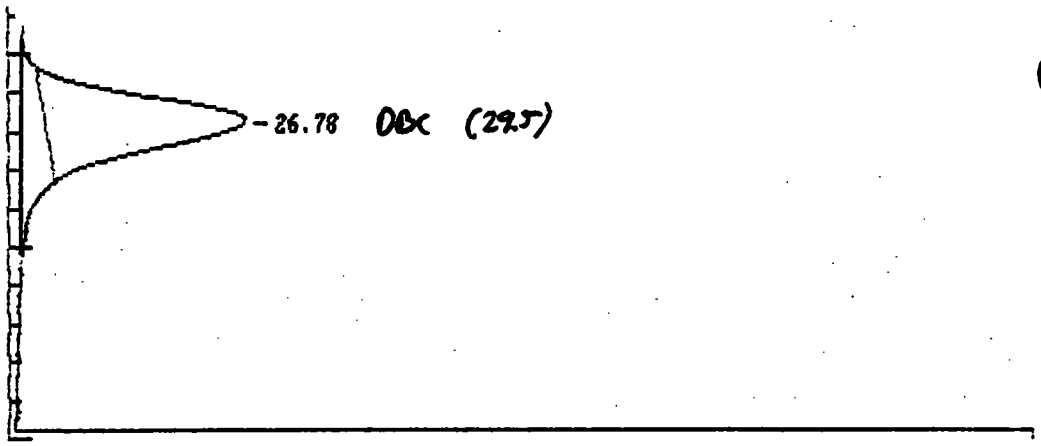
Pk No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	0.23	436028	55.1638	1	104567	100.000	4.2
2	0.85	7232	0.9149	1	1916	1.658	3.8
3	1.10	85902	10.8678	1	18551	19.701	4.6
4	1.50	2375	0.3005	1	396	0.545	6.0
5	1.88	1552	0.1964	1	239	0.356	6.5
6	3.17	43185	5.4635	1	3469	9.904	12.4
7	4.10	21563	2.7280	1	1623	4.945	13.3
8	8.37	28100	3.5551	1	1053	6.445	26.7
9	12.77	45867	5.8028	1	1042	10.519	44.0
10	26.78	118622	15.0073	1	1373	27.205	86.4

SS 5/19/86

Total Area: 790424 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1331.ATB
Data File = J:AB1331.PTS Printed on 05-12-1988 at 08:30:34
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




-26.78 DBC (29.5)

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

01075

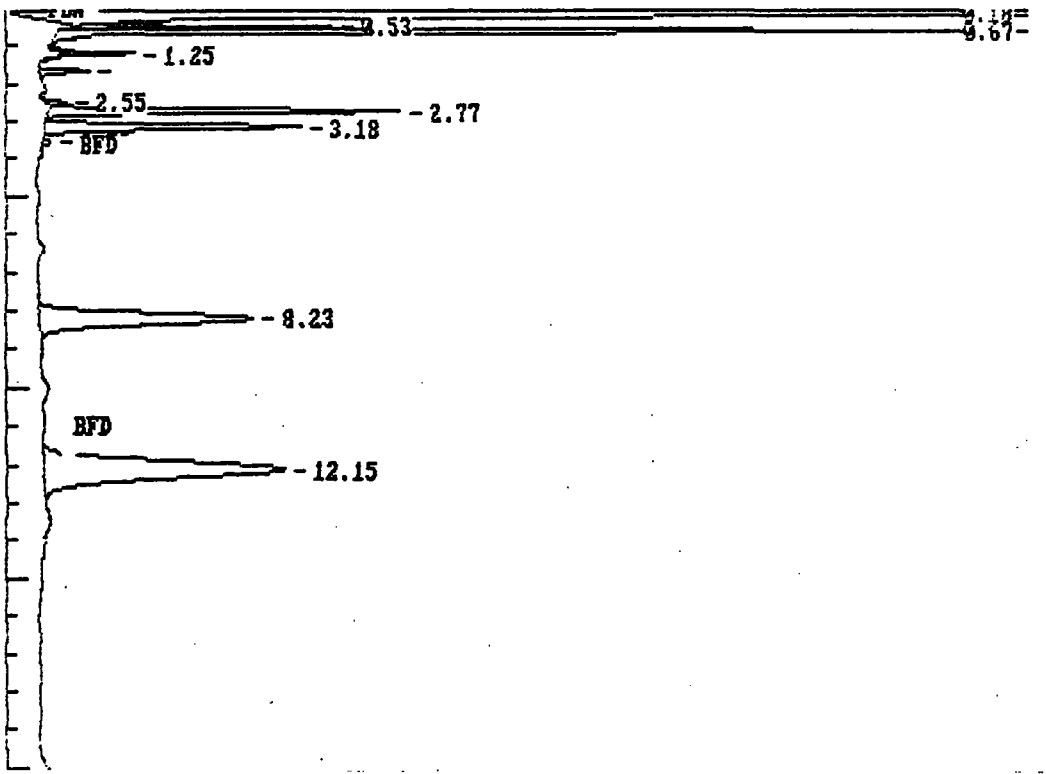
```
******************** 05-12-1988 08:27:11 Version 4.1 ********************
* Sample Name: EVALUATION MIX A                    Data File: J:BB1331      *
* Date: 05-12-1988 08:26:56 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  1    Operator SS  Channel#: 0    Vial#: N.A.      *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	829446	51.8368	1	189588	100.000	4.4
2	0.53	13343	0.8339	1	4853	1.609	2.7
3	0.67	157707	9.8560	1	52028	19.014	3.0
5	1.25	6405	0.4003	1	1362	0.772	4.7
6	1.70	6227	0.3892	1	930	0.751	6.7
7	2.55	2254	0.1408	1	342	0.272	6.6
8	2.77	48509	3.0316	1	6544	5.848	7.4
9	3.18	43799	2.7372	1	4772	5.280	9.2
10	3.58	1219	0.0762	1	154	0.147	7.9
11	8.23	82702	5.1685	1	4003	9.971	20.7
12	12.15	136768	8.5474	1	4453	16.489	30.7
13	22.62	271731	16.9820	1	4617	32.760	58.9

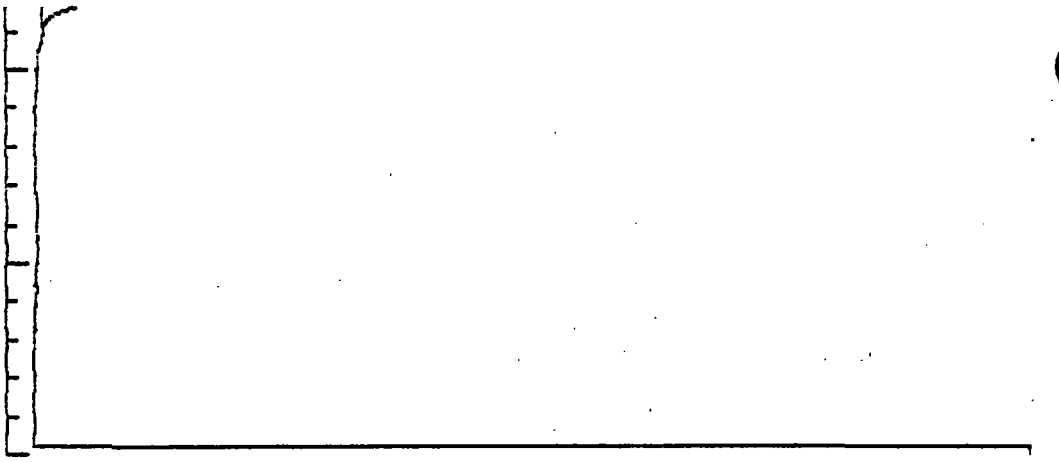
SS
5/19/88

Total Area: 1600109 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1331.ATB
Data File = J:BB1331.PTS Printed on 05-12-1988 at 08:27:37
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



-22.62 DBC (32.5)



01076

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

01077

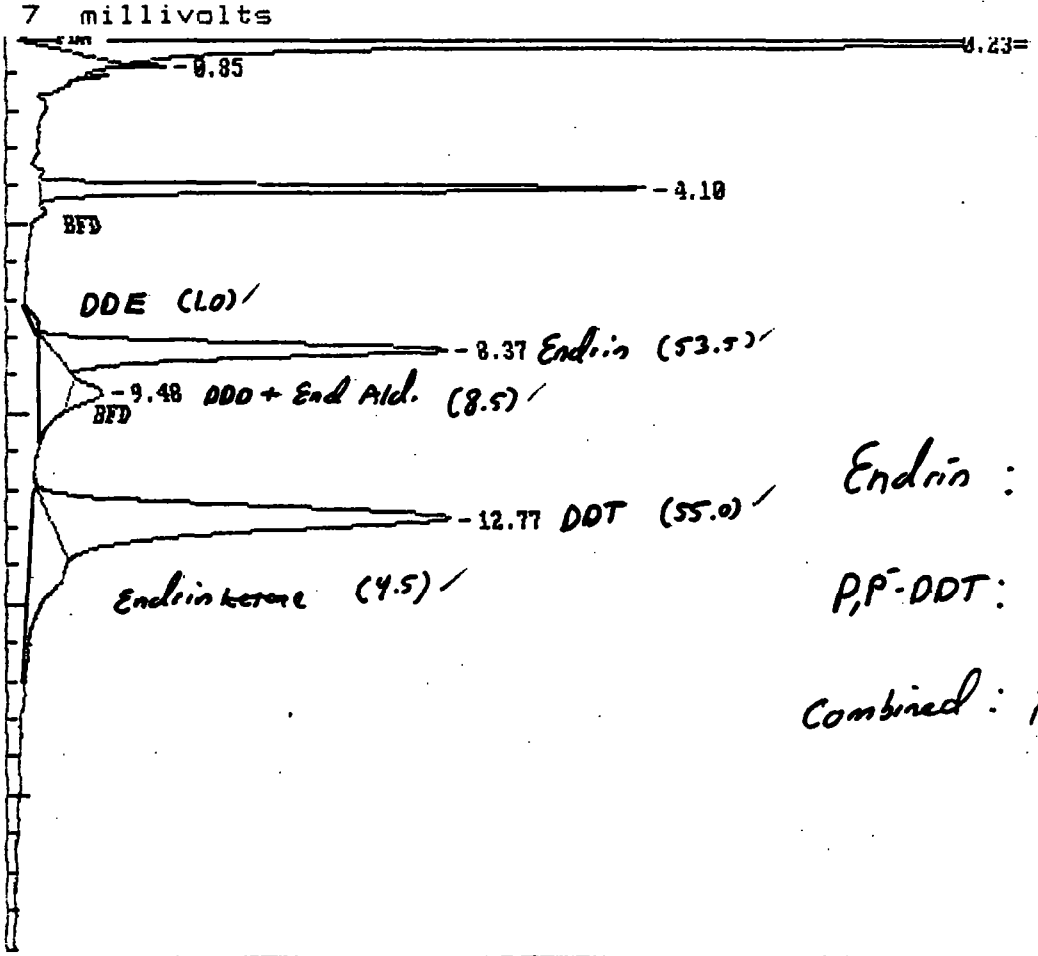
```
******************** 05-12-1988 09:09:08 Version 4.1 ********************
* Sample Name: EVALUATION MIX B                    Data File: J:AB1332      *
* Date: 05-12-1988 09:08:53 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  2    Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*             Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                        LPT1:        *   *
*****************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	464550	43.6218	1	104728	100.000	4.4
2	0.85	1158	0.1087	1	330	0.249	3.5
4	4.10	55703	5.2306	1	4166	11.991	13.4
5	8.37	72720	6.8285	1	2710	15.654	26.8
6	9.48	7447	0.6993	1	239	1.603	31.2
7	12.77	125176	11.7542	1	2761	26.946	45.3
8	26.78	338194	31.7569	1	3648	72.800	92.7

SS
5/19/88

Total Area: 1064948 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1332.ATB
Data File = J:AB1332.PTS Printed on 05-12-1988 at 09:09:33
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



Endrin : $\frac{13.0}{66.5}(100) = 20\%$

P,P'-DDT : $\frac{9.5}{64.5}(100) = 15\%$

Combined : $\frac{14.0}{122.5}(100) = 11\%$

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

01079

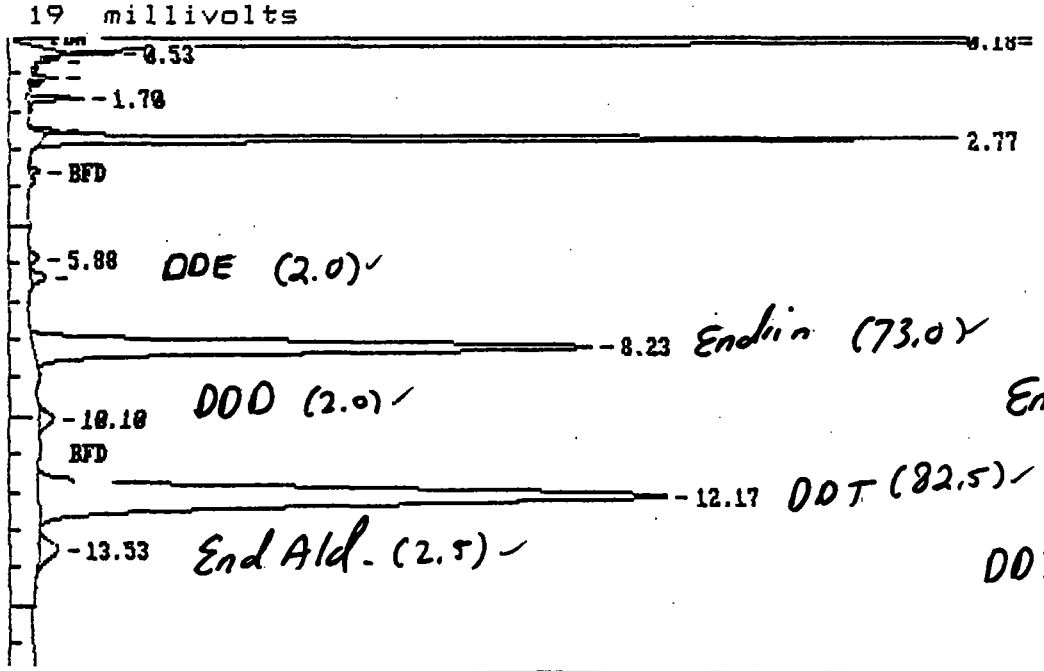
```
******************** 05-12-1988 09:05:42 Version 4.1 ********************
* Sample Name: EVALUATION MIX B                    Data File: J:BB1332     *
* Date: 05-12-1988 09:05:27 Method: M:SBPI                                 *
* Interface: 12  Cycle#:  2    Operator SS  Channel#: 0    Vial#: N.A.     *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	874085	37.2174	1	202088	100.000	4.3
2	0.53	3178	0.1353	1	1022	0.364	3.1
3	0.68	1325	0.0564	1	350	0.152	3.8
5	1.15	2349	0.1000	1	519	0.269	4.5
7	1.70	6929	0.2950	1	1067	0.793	6.5
9	2.55	1920	0.0818	1	325	0.220	5.9
10	2.77	127409	5.4249	1	17092	14.576	7.5
11	3.60	1606	0.0684	1	190	0.184	8.5
12	5.88	2479	0.1056	1	175	0.284	14.2
13	6.42	4252	0.1810	1	272	0.486	15.6
14	8.23	213821	9.1042	1	10444	24.462	20.5
15	10.10	6103	0.2599	1	265	0.698	23.0
16	12.17	358881	15.2807	1	11745	41.058	30.6
17	13.53	10886	0.4635	1	337	1.245	32.3
18	20.53	39641	1.6879	1	825	4.535	48.1
19	22.62	693730	29.5381	1	11750	79.366	59.0

SS
5/19/88

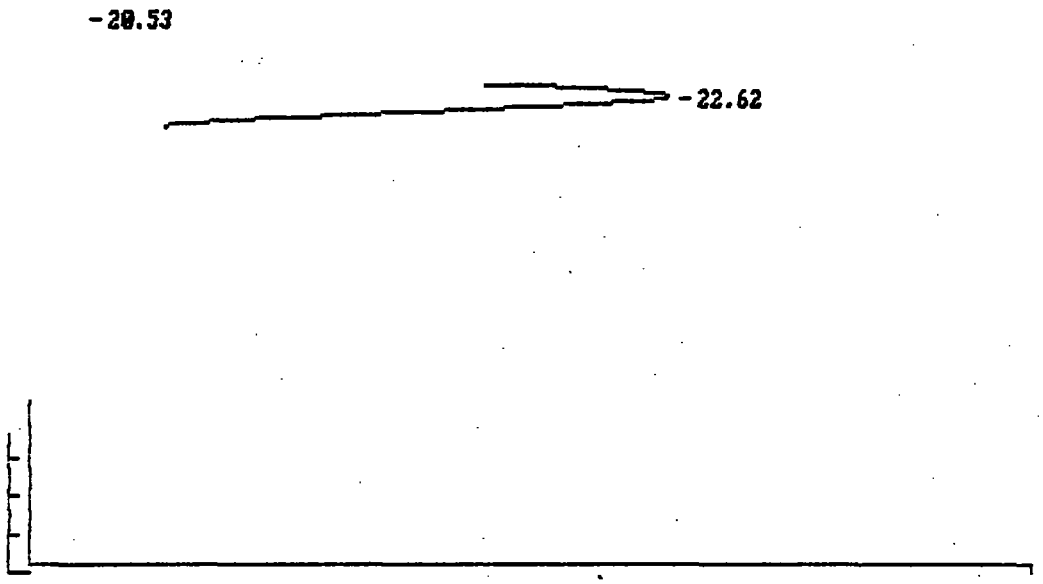
Total Area: 2348592 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1332.ATB
Data File = J:BB1332.PTS Printed on 05-12-1988 at 09:06:10
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



Endrin: $\frac{2.5}{75.5}(100) = 3.3$

DDT: $\frac{4.0}{86.5}(100) = 4.6$


-20.53
-22.62

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

01081

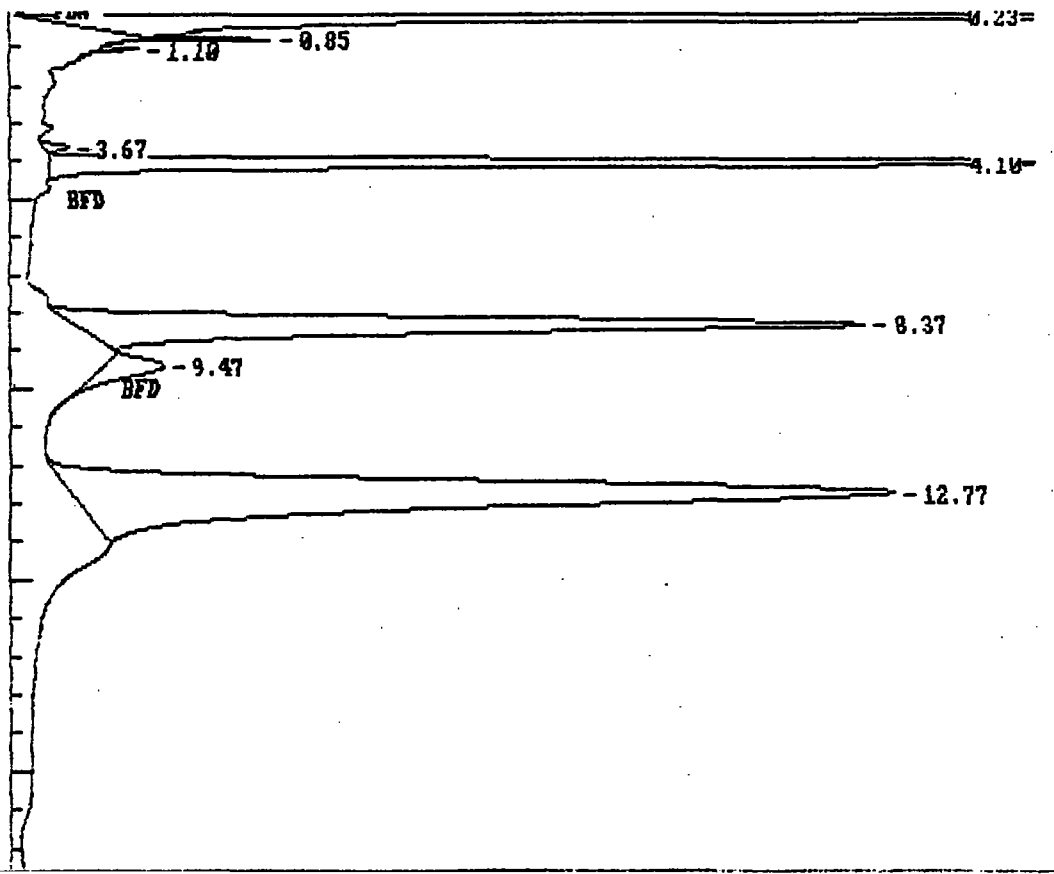
```
******************** 05-12-1988 09:47:49 Version 4.1 ********************
* Sample Name: EVALUATION MIX C                    Data File: J:AB1333      *
* Date: 05-12-1988 09:47:27 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  3    Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*             Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                        LPT1:        *   *
*****************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

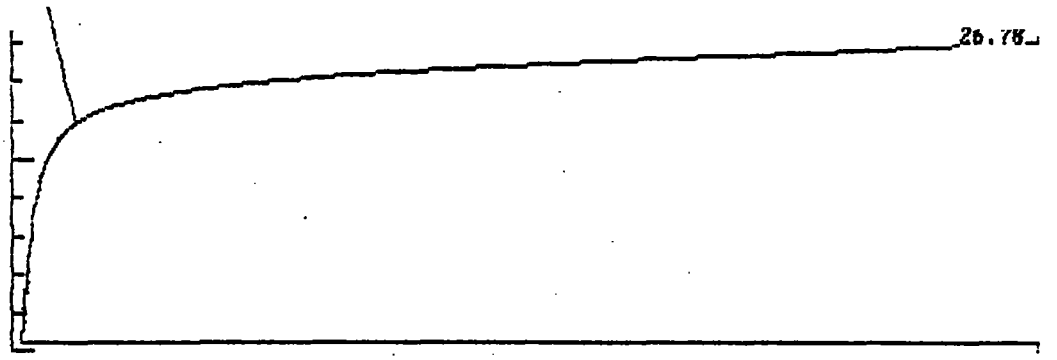
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	499861	28.7753	1	118976	71.465	4.2
2	0.85	3080	0.1773	1	910	0.440	3.4
3	1.10	1282	0.0738	1	294	0.183	4.4
4	3.67	1678	0.0966	1	161	0.240	10.4
5	4.10	114208	6.5746	1	8594	16.328	13.3
6	8.37	144728	8.3315	1	5400	20.692	26.8
7	9.47	14939	0.8600	1	429	2.136	34.8
8	12.77	257893	14.8460	1	5643	36.871	45.7
9	26.78	699448	40.2649	1	7306	100.000	95.7

SS
5/19/88

Total Area: 1737118 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1333.ATB
Data File = J:AB1333.PTS Printed on 05-12-1988 at 09:48:32
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




26.78

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

01083

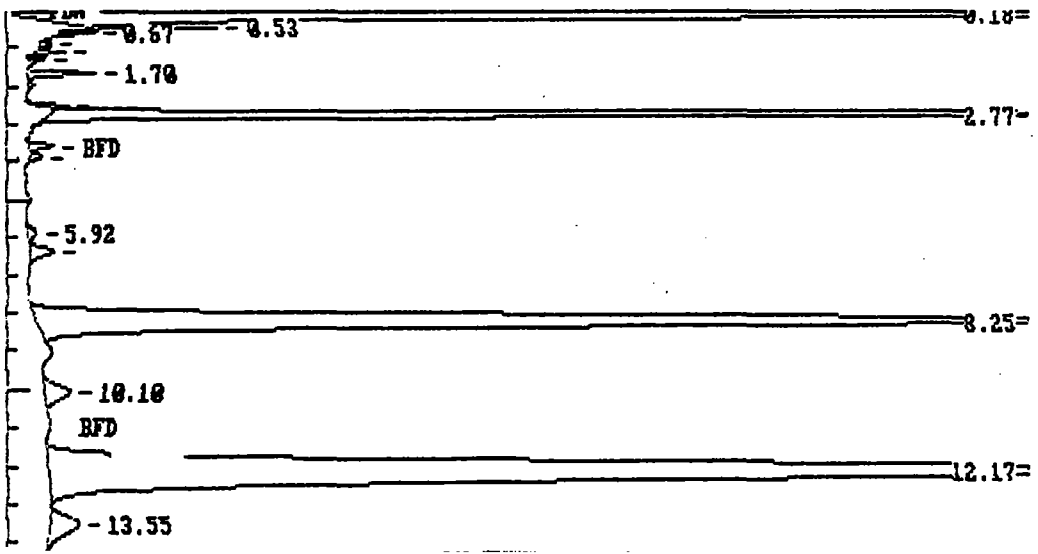
```
******************** 05-12-1988 09:43:54 Version 4.1 ********************
* Sample Name: EVALUATION MIX C                    Data File: J:BB1333      *
* Date: 05-12-1988 09:43:38 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  3    Operator SS  Channel#: 0    Vial#: N.A.      *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	981020	25.1617	1	228158	71.442	4.3
2	0.53	7566	0.1940	1	2569	0.551	2.9
3	0.67	3411	0.0875	1	723	0.248	4.7
4	0.92	1587	0.0407	1	213	0.116	7.4
5	1.15	2489	0.0638	1	584	0.181	4.3
6	1.33	1079	0.0277	1	263	0.079	4.1
7	1.70	8339	0.2139	1	1283	0.607	6.5
9	2.55	1831	0.0470	1	352	0.133	5.2
10	2.77	258858	6.6393	1	34772	18.851	7.4
11	3.60	3739	0.0959	1	445	0.272	8.4
12	3.88	2336	0.0599	1	223	0.170	10.5
13	5.92	2431	0.0623	1	153	0.177	15.9
14	6.42	6696	0.1717	1	437	0.488	15.3
15	8.25	420511	10.7855	1	20812	30.624	20.2
16	10.10	11499	0.2949	1	473	0.837	24.3
17	12.17	715718	18.3571	1	23533	52.122	30.4
18	13.55	17737	0.4549	1	526	1.292	33.7
19	20.55	78848	2.0223	1	1618	5.742	48.7
20	22.63	1373164	35.2197	1	23282	100.000	59.0

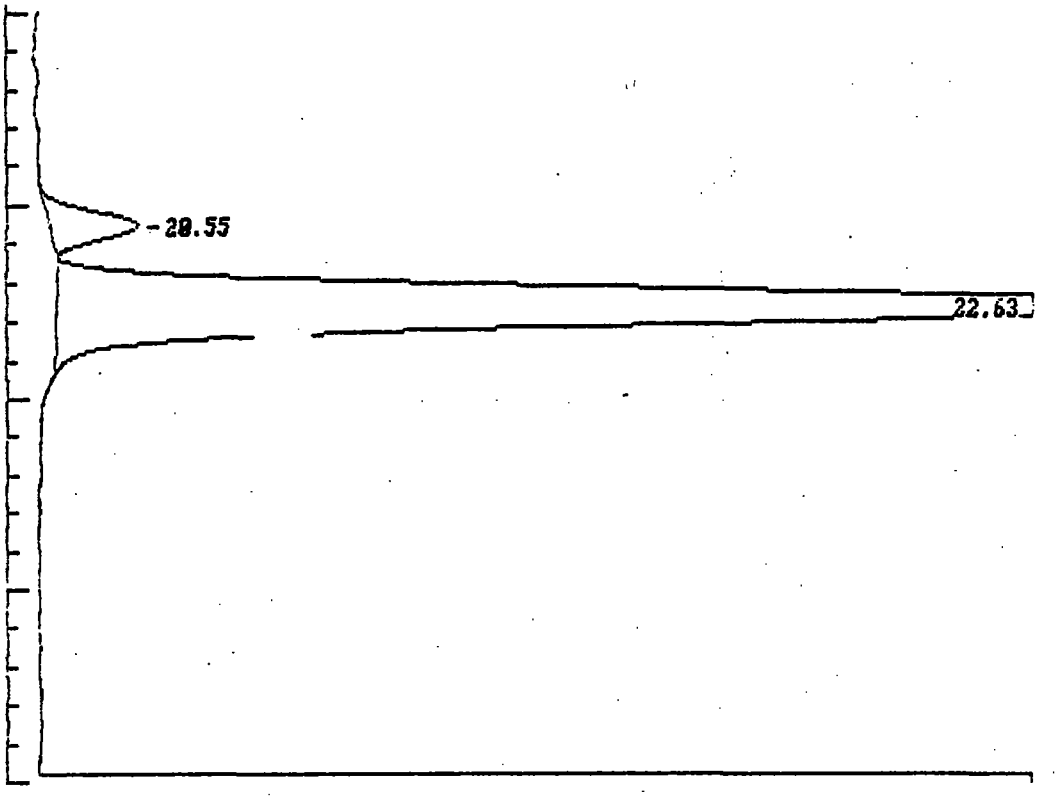
SS
5/19/88

Total Area: 3898856 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1333.ATB
Data File = J:BB1333.PTS Printed on 05-12-1988 at 09:44:25
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



01084



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

01085

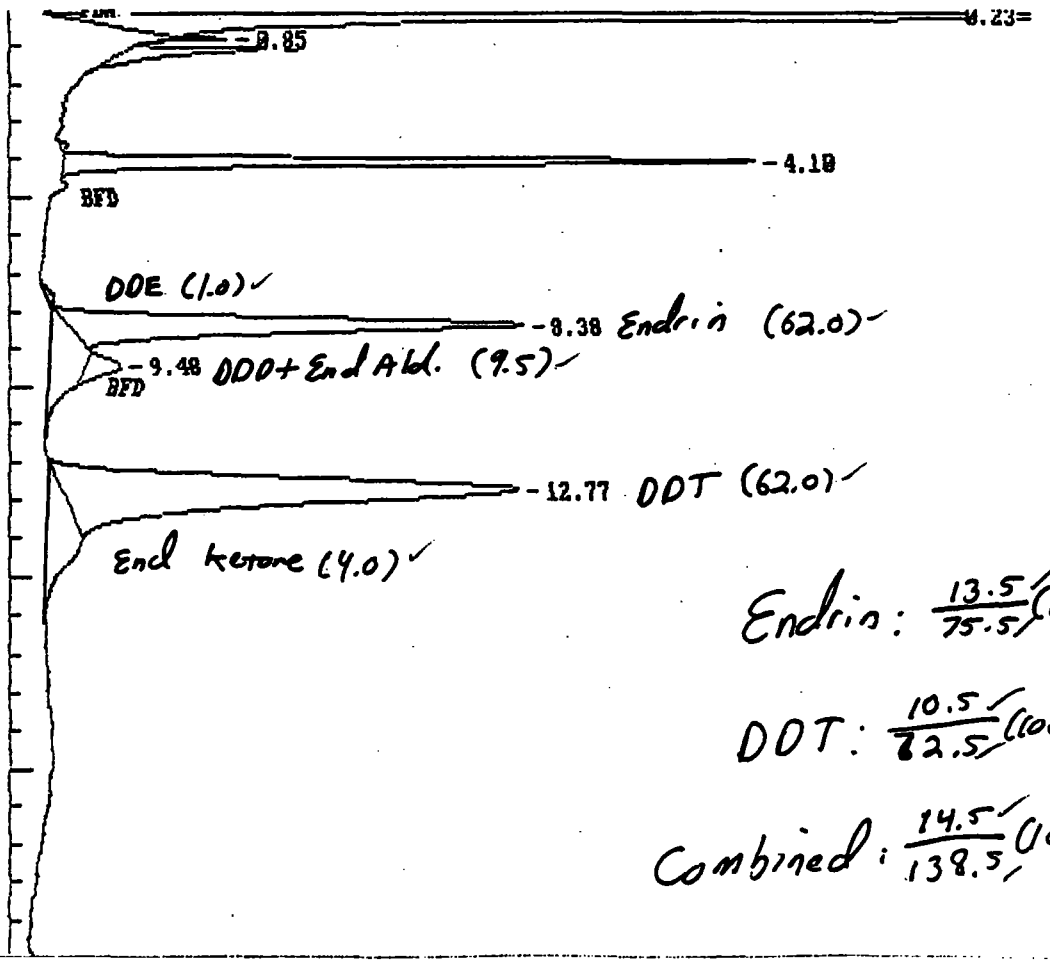
********** 05-13-1988 08:16:44 Version 4.1 **********
* Sample Name: EVALUATION MIX B Data File: J:AB13319 *
* Date: 05-13-1988 08:16:22 Method: M:ABPI *
* Interface: 10 Cycle#: 19 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	459134	39.2934	1	100708	100.000	4.6
2	0.85	1850	0.1583	1	414	0.403	4.5
3	1.13	13345	1.1421	1	1013	2.907	13.2
5	4.10	63730	5.4541	1	4772	13.880	13.4
6	8.38	84287	7.2134	1	3125	18.358	27.0
7	9.48	7980	0.6830	1	256	1.738	31.2
8	12.77	144109	12.3331	1	3146	31.387	45.8
9	26.82	394042	33.7227	1	4195	85.823	93.9

SS
5/14/88

Total Area: 1168478 Area Reject: 1000 One sample per 1.000 sec.

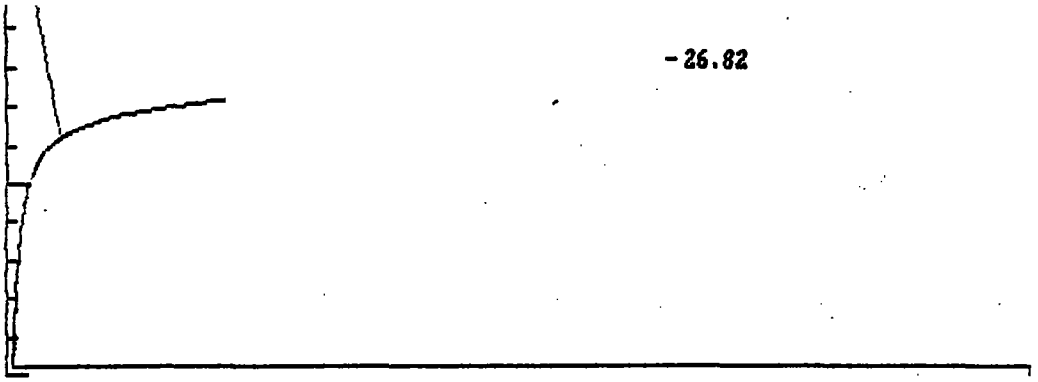
Areas, times, and heights stored in: J:AB13319.ATB
Data File = J:AB13319.PTS Printed on 05-13-1988 at 08:17:12
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



Endrin: $\frac{13.5}{75.5}(100) = 18\%$

DDT: $\frac{10.5}{62.5}(100) = 14\%$

Combined: $\frac{14.5}{138.5}(100) = 10\%$



01086

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

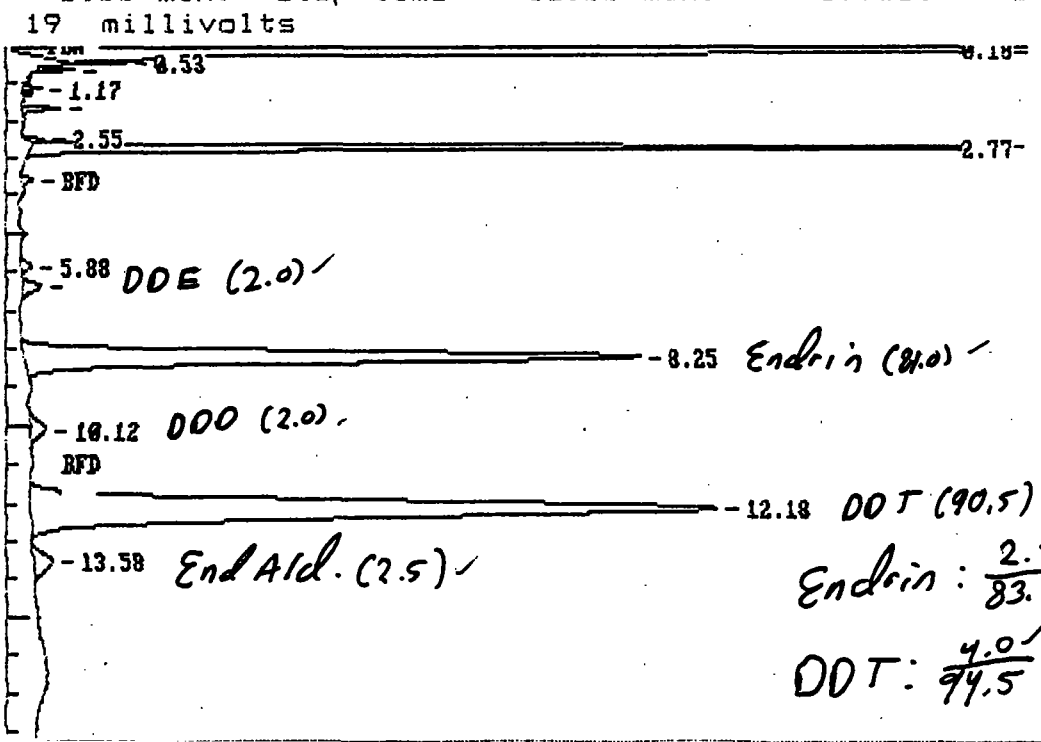
********** 05-13-1988 07:17:16 Version 4.1 **********
* Sample Name: EVALUATION MIX B Data File: J:BB13319 *
* Date: 05-13-1988 07:17:00 Method: M:BBPI 01087
* Interface: 12 Cycle#: 19 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument 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: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	847609	34.4889	1	191757	100.000	4.4
2	0.53	3624	0.1475	1	1181	0.428	3.1
3	0.68	2759	0.1123	1	727	0.326	3.8
4	1.17	1543	0.0628	1	345	0.182	4.5
6	1.70	4872	0.1982	1	728	0.575	6.7
7	2.55	1512	0.0615	1	267	0.178	5.7
8	2.77	140900	5.7332	1	18562	16.623	7.6
9	3.62	1817	0.0739	1	210	0.214	8.7
10	5.88	2771	0.1128	1	197	0.327	14.1
11	6.42	5381	0.2190	1	343	0.635	15.7
12	8.25	235658	9.5889	1	11529	27.803	20.4
13	10.12	7278	0.2961	1	299	0.859	24.4
14	12.18	393674	16.0185	1	12877	46.445	30.6
15	13.58	9655	0.3929	1	315	1.139	30.7
16	20.57	43408	1.7663	1	906	5.121	47.9
17	22.65	755166	30.7275	1	12770	89.094	59.1

SS 5/19/88

Total Area: 2457625 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13319.ATB
Data File = J:BB13319.PTS Printed on 05-13-1988 at 07:17:46
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



Endrin: $\frac{2.5}{83.5}(100) = 3.0\%$

DDT: $\frac{4.0}{94.5}(100) = 4.2\%$

-20.57

-22.65

01088

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

01089

********** 05-13-1988 08:40:16 Version 4.1 **********

* Sample Name: EVALUATION MIX B Data File: J:AB13331 *
* Date: 05-13-1988 08:40:01 Method: M:ABPI *
* Interface: 10 Cycle#: 31 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *

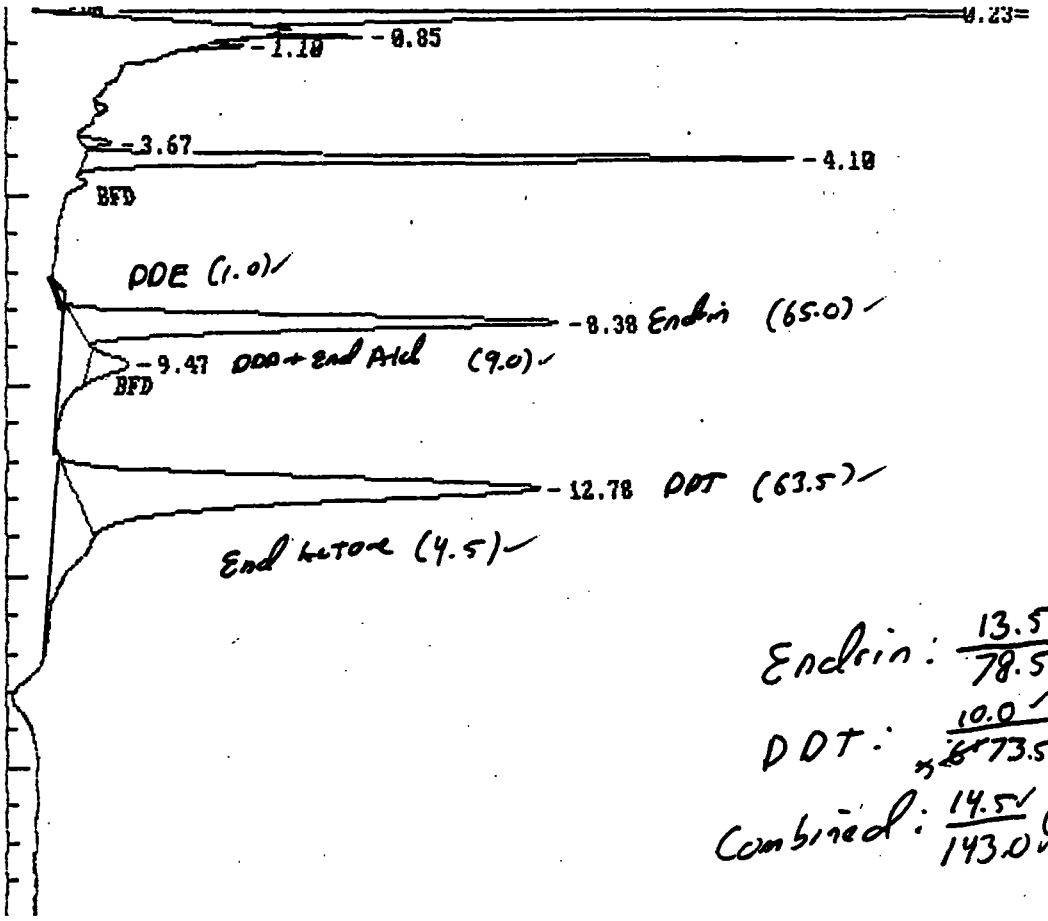
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	464472	35.7946	1	101355	89.790	4.6
2	0.85	2519	0.1941	1	710	0.487	3.5
3	1.10	1942	0.1497	1	291	0.375	6.7
5	3.67	2139	0.1648	1	199	0.413	10.7
6	4.10	64983	5.0079	1	4890	12.562	13.3
7	8.38	88387	6.8116	1	3318	17.087	26.6
8	9.47	9089	0.7004	1	280	1.757	32.4
9	12.78	146787	11.3122	1	3212	28.376	45.7
10	26.85	517287	39.8648	1	4464	100.000	115.9

SJ 5/19/88

Total Area: 1297604 Area Reject: 1000 One sample per 1.000 sec.

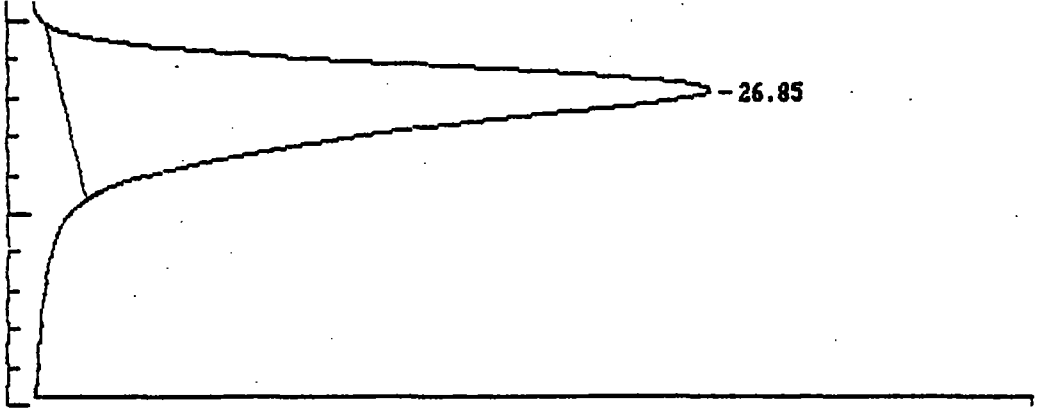
Areas, times, and heights stored in: J:AB13331.ATB
Data File = J:AB13331.PTS Printed on 05-13-1988 at 08:40:42
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



Endrin: $\frac{13.5}{78.5}(100) = 17\%$

DDT: $\frac{10.0}{73.5}(100) = 14\%$

Combined: $\frac{14.5}{143.0}(100) = 10\%$



01090

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

********** 05-13-1988 07:52:06 Version 4.1 **********
* Sample Name: EVALUATION MIX B Data File: J:BB13331 *
* Date: 05-13-1988 07:51:50 Method: M:BBPI 01091
* Interface: 12 Cycle#: 31 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 *
****

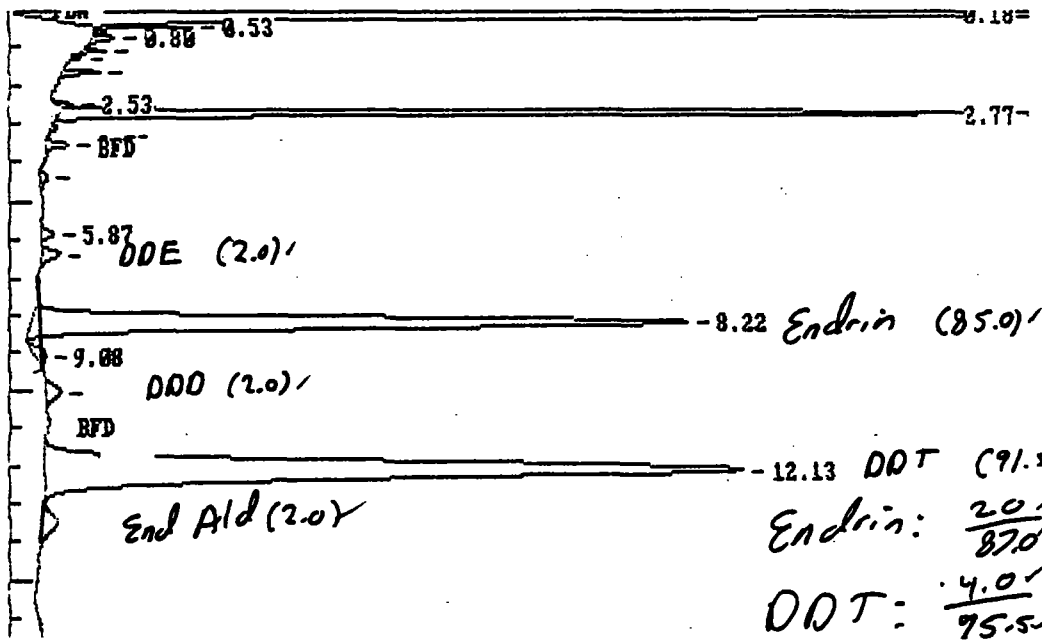
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	840566	35.0853	1	182778	100.000	4.6
2	0.53	5181	0.2163	1	1741	0.616	3.0
3	0.80	3940	0.1645	1	431	0.469	9.1
4	1.15	2316	0.0966	1	519	0.275	4.5
5	1.33	1294	0.0540	1	231	0.154	5.6
6	1.70	4948	0.2065	1	738	0.589	6.7
7	2.53	1381	0.0576	1	257	0.164	5.4
8	2.77	143594	5.9936	1	19178	17.083	7.5
10	3.58	3757	0.1568	1	419	0.447	9.0
11	4.42	1853	0.0773	1	117	0.220	15.8
12	5.87	3635	0.1517	1	258	0.432	14.1
13	6.40	5281	0.2204	1	336	0.628	15.7
14	8.22	249971	10.4338	1	12313	29.738	20.3
15	9.08	4701	0.1962	1	199	0.559	23.7
16	10.08	6896	0.2878	1	288	0.820	23.9
17	12.13	399978	16.6951	1	13089	47.584	30.6
18	20.50	45396	1.8948	1	933	5.401	48.7
19	22.57	671093	28.0115	1	12138	79.838	55.3

SS
5/19/88

Total Area: 2395778 Area Reject: 1000 One sample per 1.000 sec.

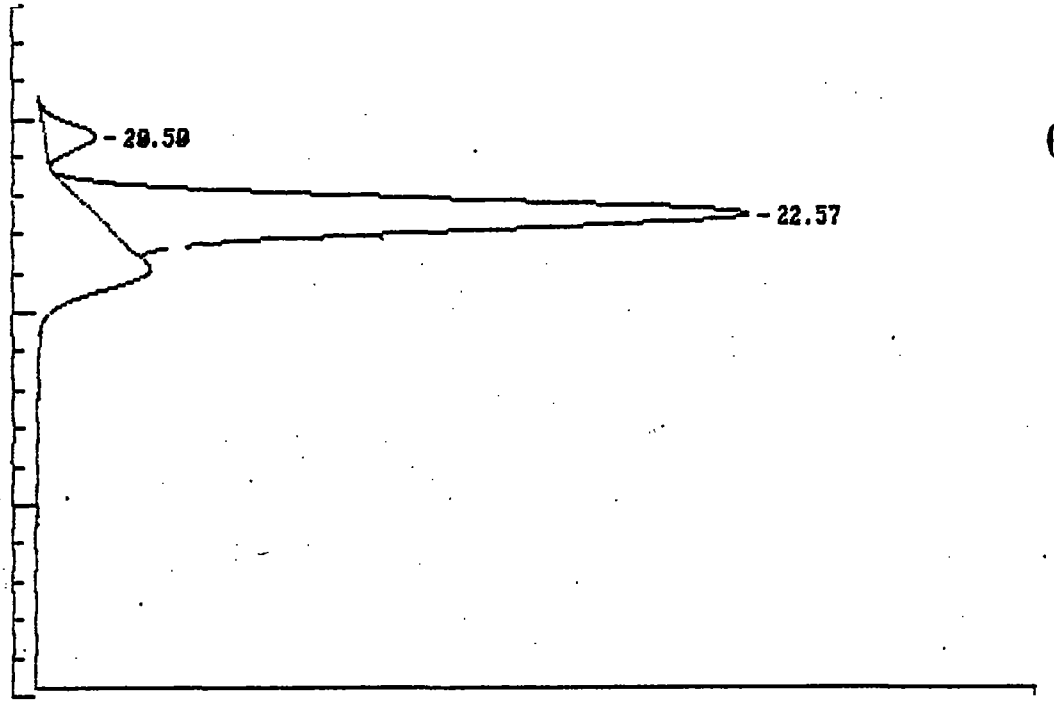
Areas, times, and heights stored in: J:BB13331.ATB
Data File = J:BB13331.PTS Printed on 05-13-1988 at 07:52:35
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



Endrin: $\frac{20}{87.0}(100) = 2.3\%$

DDT: $\frac{4.0}{95.5}(100) = 4.2\%$

C1092



EPA

01093

EVALUATION MIXES

Evaluation Mix A	Concentration ug/ml	Nanograms Col. A - 2 ul	Injected Col. B - 4 ul
Aldrin	0.003	0.006	0.012
Endrin	0.006	0.012	0.024
pp'-DDT	0.010	0.020	0.040
DBC	0.020	0.040	0.08

Evaluation Mix B			
Aldrin	0.0075	0.015	0.030
Endrin	0.015	0.030	0.060
pp'-DDT	0.025	0.050	0.10
DBC	0.050	0.10	0.20

Evaluation Mix C			
Aldrin	0.015	0.030	0.060
Endrin	0.030	0.060	0.12
pp'-DDT	0.050	0.10	0.20
DBC	0.10	0.20	0.40

DLC 05/25/88

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

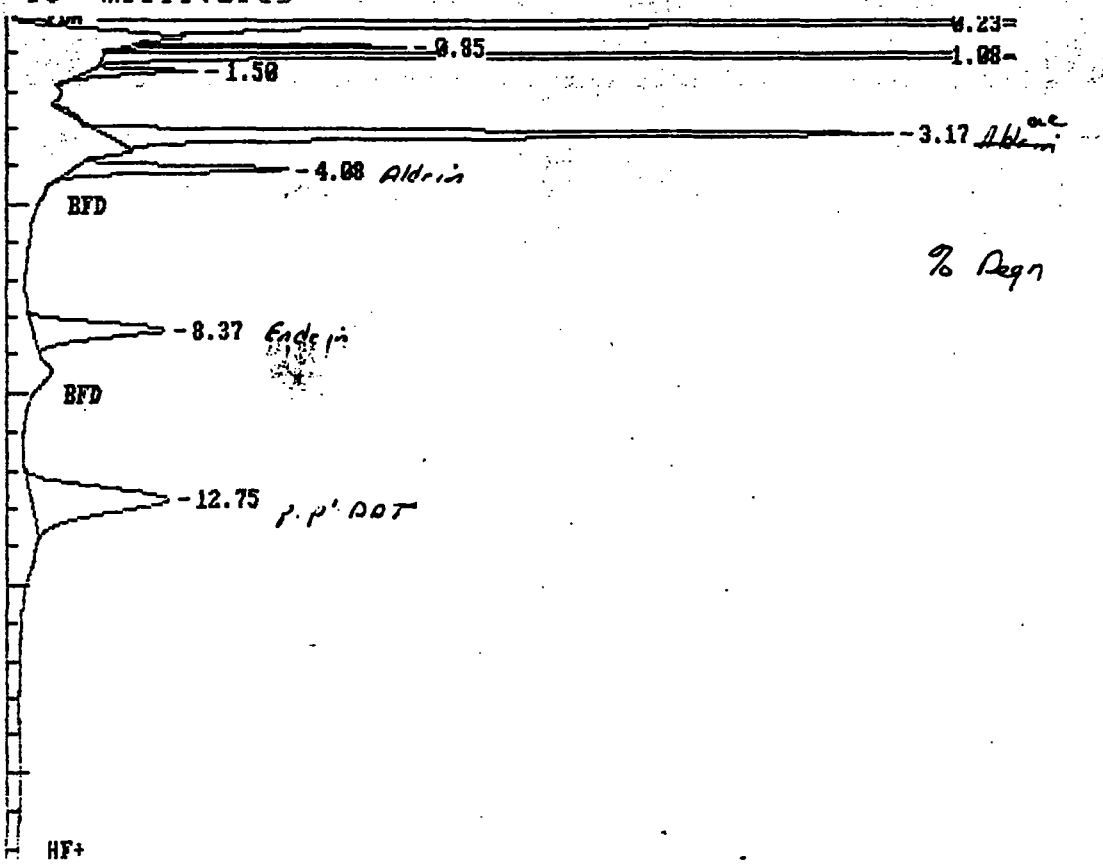
01094

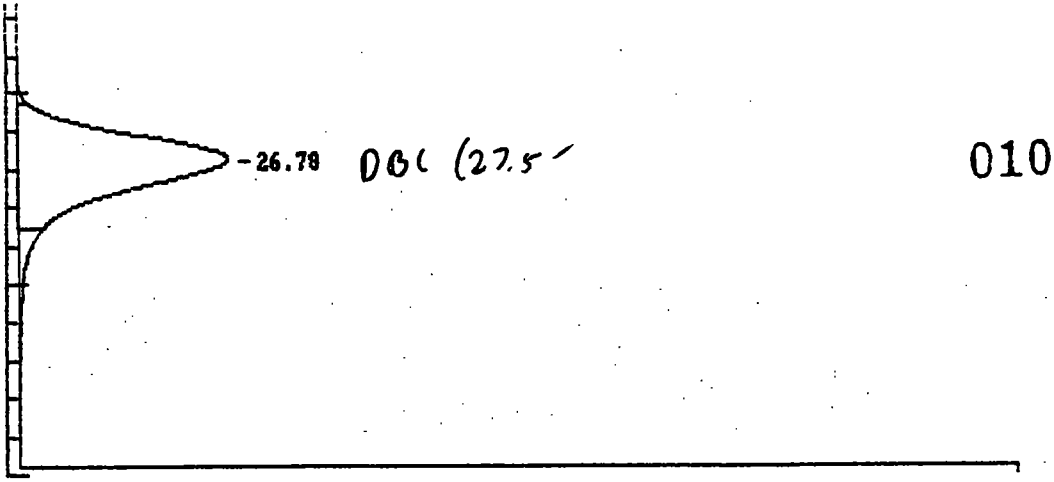
```
******************** 05-19-1988 11:52:11 Version 4.1 ********************
* Sample Name: EVALUATION MIX A                    Data File: J:AB1401      *
* Date: 05-19-1988 10:21:24 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  1    Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*             Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                          LPT1:      *   *
*****************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	571071	49.0880	1	139414	100.000	4.1
2	0.85	10425	0.8961	1	2783	1.825	3.7
3	1.08	134504	11.5617	1	28062	23.553	4.8
4	1.50	8806	0.7569	1	1090	1.542	8.1
5	3.17	105224	9.0448	1	7849	18.426	13.4
6	4.08	27958	2.4032	1	2121	4.896	13.2
7	8.37	35243	3.0294	1	1305	6.171	27.0
8	12.75	61322	5.2711	1	1364	10.738	45.0
9	26.78	208810	17.9488	1	2090	36.565	99.9

Total Area: 1163361 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1401.ATB
Data File = J:AB1401.PTS Printed on 05-19-1988 at 11:52:39
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





DBC (27.5

01095

DCR
05/23/88

DJL 05/23/89

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

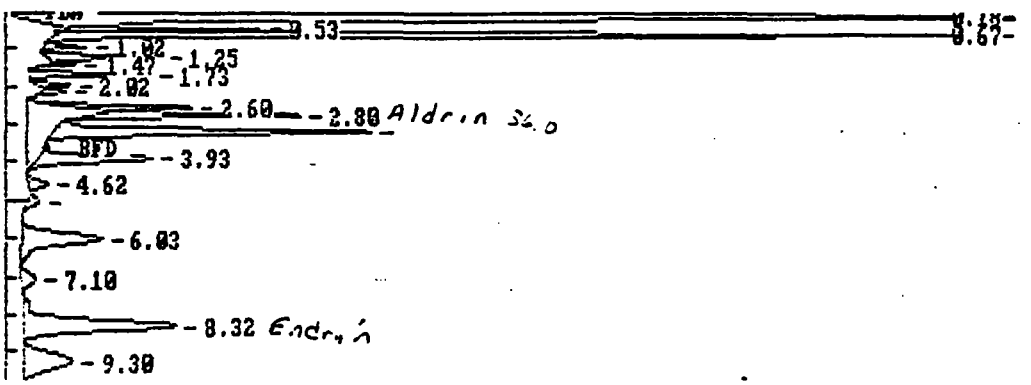
01096

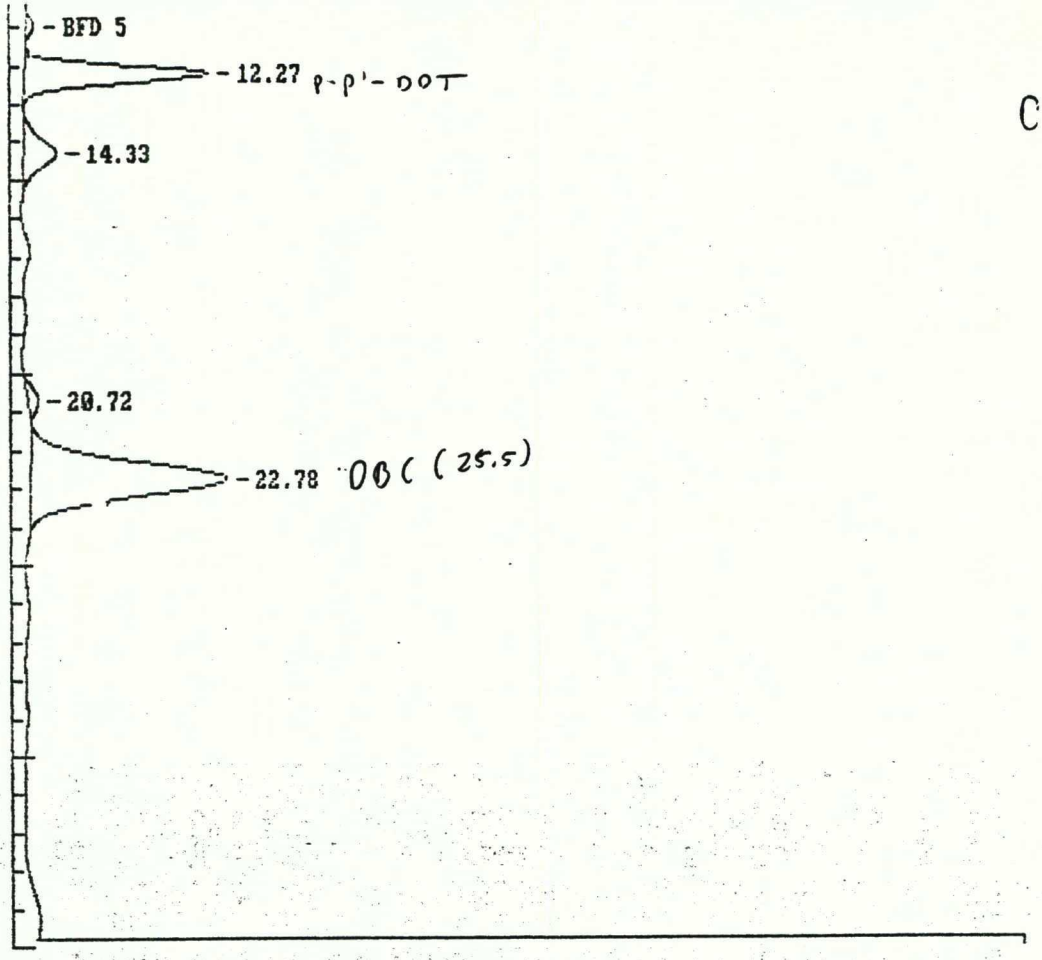
```
******************** 05-19-1988 11:55:45 Version 4.1 ********************
* Sample Name: EVALUATION MIX A                    Data File: J:BB1401      *
* Date: 05-19-1988 10:18:15 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  1    Operator SS  Channel#: 0    Vial#: N.A.      *
* 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	0.18	1138041	44.4256	1	265267	100.000	4.3
2	0.53	19236	0.7509	1	6202	1.690	3.1
3	0.67	249362	9.7343	1	74595	21.912	3.3
4	1.02	6864	0.2679	1	1381	0.603	5.0
5	1.25	25021	0.9767	1	3590	2.199	7.0
6	1.47	4080	0.1593	1	917	0.359	4.4
7	1.73	23869	0.9318	1	3797	2.097	6.3
8	2.02	5672	0.2214	1	997	0.498	5.7
9	2.20	6054	0.2363	1	867	0.532	7.0
10	2.60	23240	0.9072	1	3304	2.042	7.0
11	2.80	43143	1.6842	1	6646	3.791	6.5
12	3.22	103822	4.0529	1	10087	9.123	10.3
14	3.93	48102	1.8778	1	3589	4.227	13.4
15	4.62	8093	0.3159	1	599	0.711	13.5
16	5.07	5610	0.2190	1	374	0.493	15.0
17	6.03	55712	2.1748	1	2492	4.895	22.4
18	7.10	8359	0.3263	1	409	0.735	20.4
19	8.32	100463	3.9218	1	4789	8.828	21.0
20	9.30	46026	1.7967	1	1519	4.044	30.3
21	10.95	7026	0.2743	1	244	0.617	28.8
22	12.27	180634	7.0514	1	5779	15.872	31.3
23	14.33	55474	2.1655	1	1032	4.874	53.7
24	20.72	13151	0.5134	1	321	1.156	40.9
25	22.78	384629	15.0147	1	6161	33.797	62.4

Total Area: 2561679 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1401.ATB
Data File = J:BB1401.PTS Printed on 05-19-1988 at 11:56:14
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts





C1097

DCL 05/23/88

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

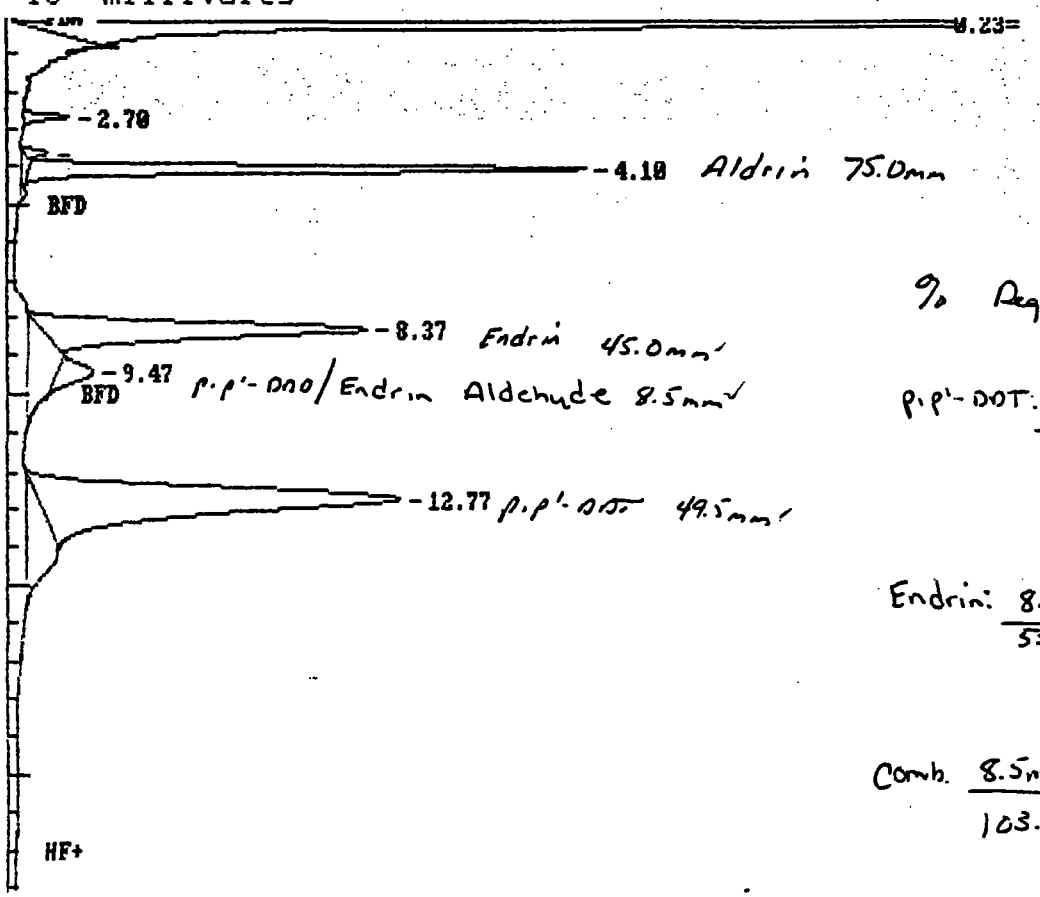
01098

```
******************* 05-19-1988 11:53:23 Version 4.1 *********************
* Sample Name: EVALUATION MIX B                    Data File: J:AB1402      *
* Date: 05-19-1988 11:00:36 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  2    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	561224	39.2892	1	128411	100.000	4.4
3	2.70	4425	0.3098	1	441	0.788	10.0
4	3.67	2340	0.1638	1	217	0.417	10.8
5	4.10	74669	5.2273	1	5556	13.305	13.4
6	8.37	86470	6.0534	1	3208	15.407	27.0
7	9.47	11823	0.8276	1	356	2.107	33.2
8	12.77	167061	11.6953	1	3584	29.767	46.6
9	26.80	520433	36.4336	1	5075	92.732	102.5

Total Area: 1428444 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1402.ATB
Data File = J:AB1402.PTS Printed on 05-19-1988 at 11:53:48
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts

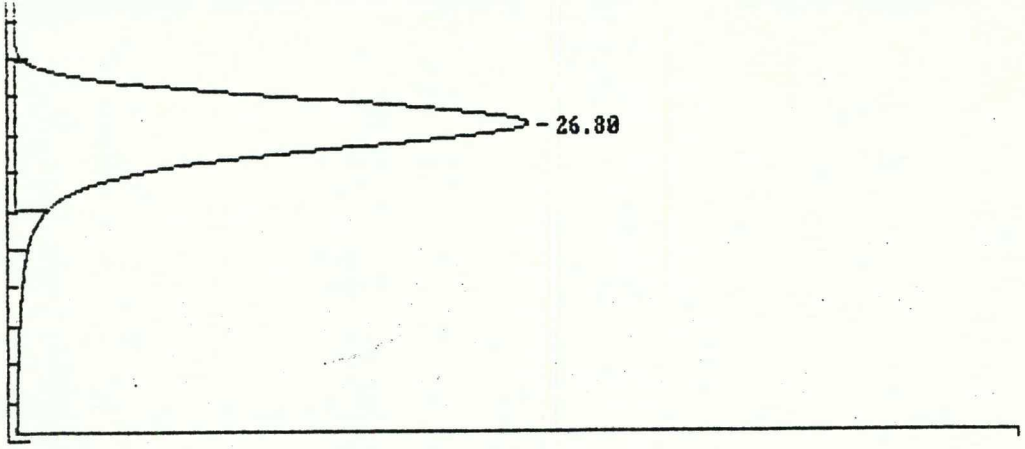


% Recov

p.p'-DDT: $\frac{8.5mm}{54.0mm} \times 100 = 15\%$

Endrin: $\frac{8.5mm}{53.5mm} \times 100\% = 16\%$

Comb. $\frac{8.5mm}{103.0mm} \times 100\% = 8.3\%$



01099

DLL 05/23/88

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

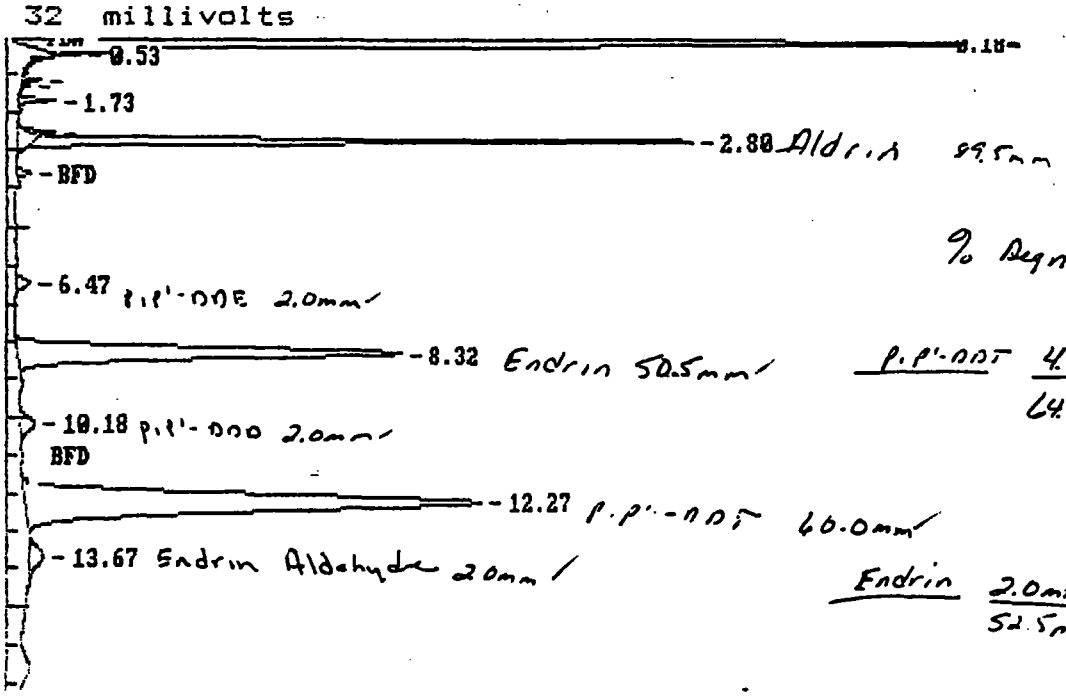
01100

```
******************** 05-19-1988 11:57:03 Version 4.1 ********************
* Sample Name: EVALUATION MIX B                    Data File: J:BB1402      *
* Date: 05-19-1988 10:57:19 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  2   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	0.18	1111595	37.6801	1	255354	100.000	4.4
2	0.53	3084	0.1045	1	910	0.277	3.4
5	1.17	2718	0.0921	1	603	0.245	4.5
6	1.35	1678	0.0569	1	266	0.151	6.3
7	1.73	7564	0.2564	1	1132	0.680	6.7
8	2.58	3799	0.1288	1	644	0.342	5.9
9	2.80	156975	5.3210	1	20994	14.122	7.5
10	3.63	3771	0.1278	1	423	0.339	8.9
11	6.47	7010	0.2376	1	430	0.631	16.3
12	8.32	249263	8.4493	1	12127	22.424	20.6
13	10.18	10075	0.3415	1	404	0.906	25.0
14	12.27	442331	14.9938	1	14443	39.792	30.6
15	13.67	15687	0.5317	1	450	1.411	34.8
16	20.73	54705	1.8543	1	1112	4.921	49.2
17	22.80	879835	29.8240	1	14757	79.151	59.6

Total Area: 2950087 Area Reject: 1000 One sample per 1.000 sec.

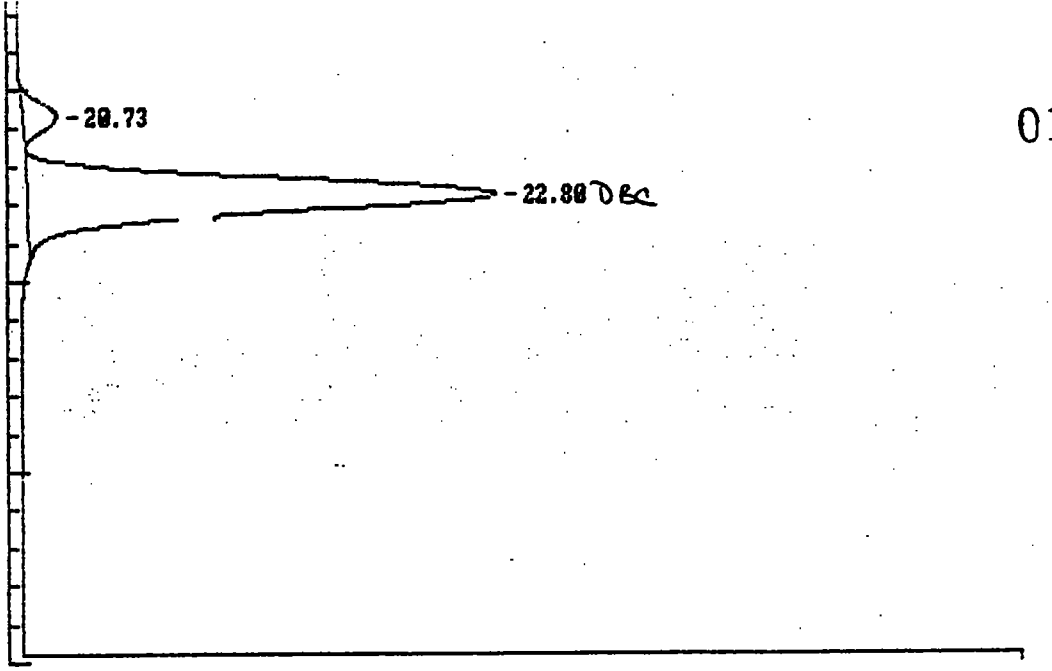
Areas, times, and heights stored in: J:BB1402.ATB
Data File = J:BB1402.PTS Printed on 05-19-1988 at 11:57:29
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts



% Recovery

p,p'-DDT $\frac{4.0mm}{64.0mm} \times 100 = 6.2\%$

Endrin $\frac{2.0mm}{52.5mm} \times 100 = 3.8\%$



01101

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

01102

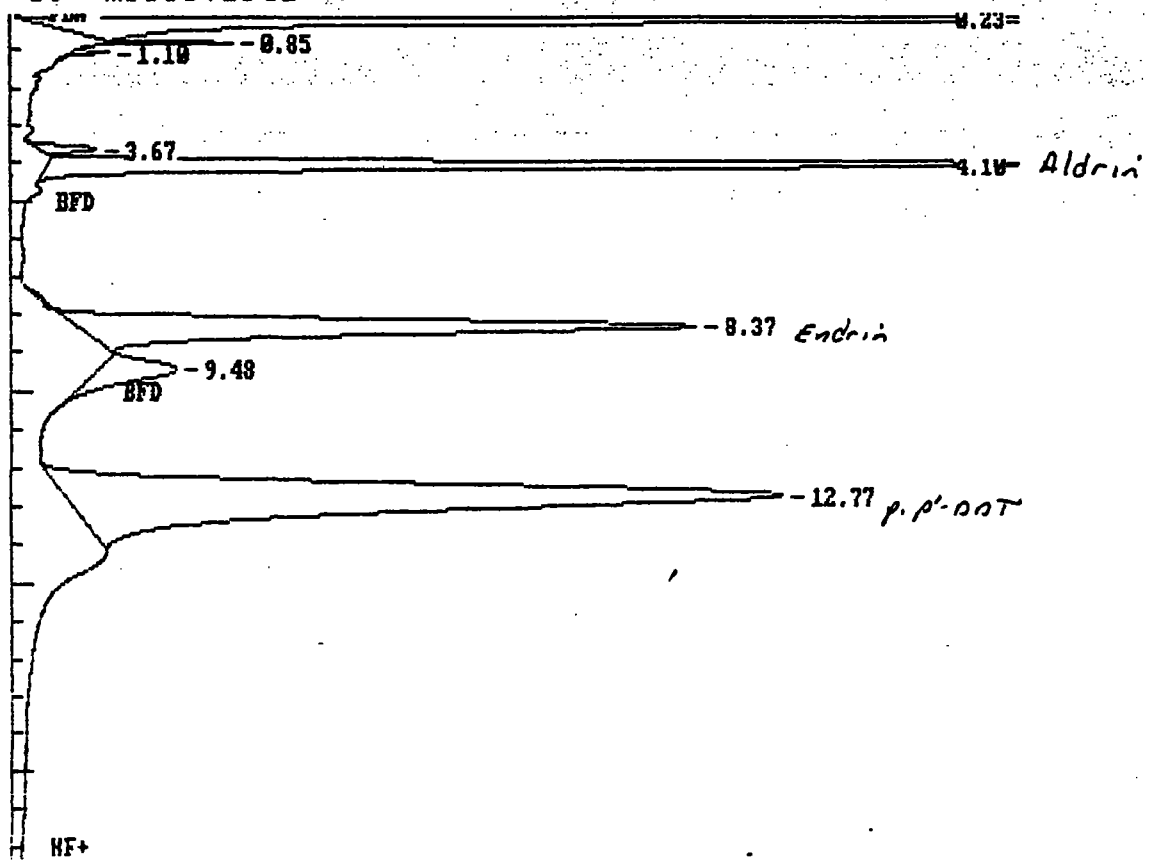
05/23/88 DLL

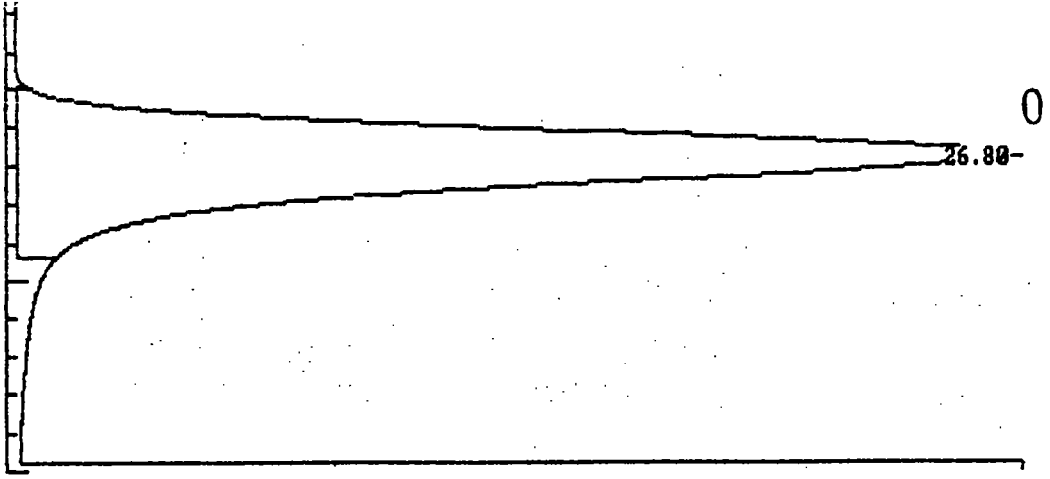
```
******************** 05-19-1988 11:54:32 Version 4.1 ********************
* Sample Name: EVALUATION MIX C                    Data File: J:AB1403      *
* Date: 05-19-1988 11:40:49 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  3    Operator SS  Channel#: 0    Vial#: N.A.      *
* 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	612494	26.6189	1	148655	60.897	4.1
2	0.85	4626	0.2010	1	1305	0.460	3.5
3	1.10	1774	0.0771	1	384	0.176	4.6
4	3.67	5961	0.2591	1	545	0.593	10.9
5	4.10	147761	6.4217	1	11167	14.691	13.2
6	8.37	162869	7.0783	1	6143	16.193	26.5
7	9.48	29582	1.2856	1	792	2.941	37.4
8	12.77	330118	14.3469	1	7123	32.822	46.3
9	26.80	1005789	43.7115	1	9741	100.000	103.3

Total Area: 2300974 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1403.ATB
Data File = J:AB1403.PTS Printed on 05-19-1988 at 11:54:56
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01103

DLL 05/23/88

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

01104

********** 05-19-1988 11:58:15 Version 4.1 **********

* Sample Name: EVALUATION MIX C Data File: J:BB1403 *
* Date: 05-19-1988 11:35:28 Method: M:BBPI *
* Interface: 12 Cycle#: 3 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

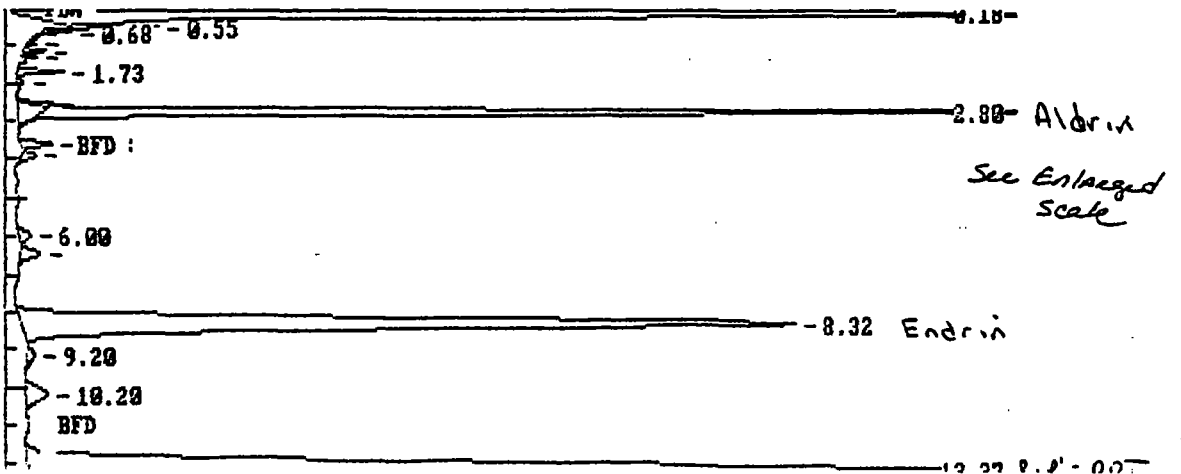
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEG ISOTHERMAL *
* Detector 0: Detector 1: ECD *
* Misc. Information: 4 UL INJ *

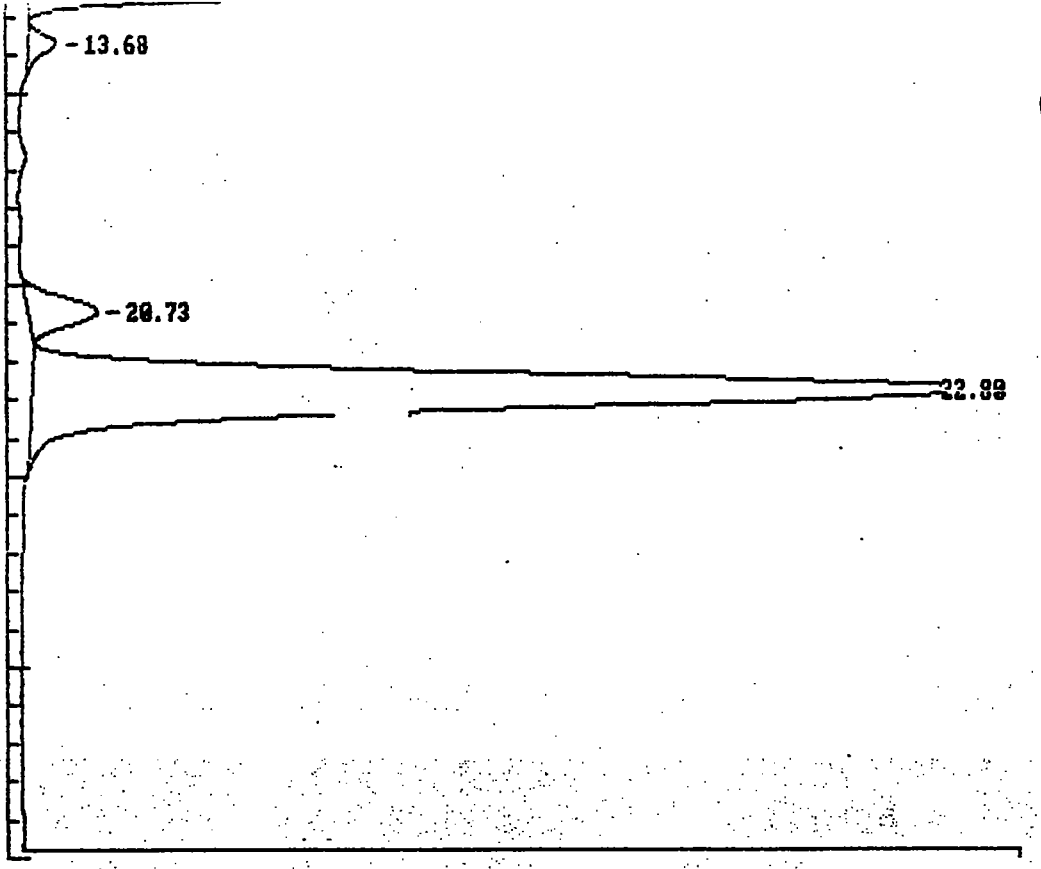
Starting Delay: 0.00 Run Time: 35.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1273219	25.3909	1	298427	71.440	4.3
2	0.55	9581	0.1911	1	3076	0.538	3.1
3	0.68	3965	0.0791	1	944	0.222	4.2
4	1.00	1676	0.0334	1	303	0.094	5.5
5	1.17	3222	0.0643	1	700	0.181	4.6
6	1.35	1881	0.0375	1	445	0.106	4.2
7	1.73	9315	0.1858	1	1442	0.523	6.5
8	2.02	1163	0.0232	1	201	0.065	5.8
10	2.60	1997	0.0398	1	304	0.112	6.6
11	2.80	326629	6.5137	1	43396	18.327	7.5
12	3.63	8497	0.1694	1	972	0.477	8.7
13	3.93	5018	0.1001	1	448	0.282	11.2
14	6.00	5647	0.1126	1	341	0.317	16.6
15	6.48	9246	0.1844	1	620	0.519	14.9
16	8.32	497614	9.9236	1	24545	27.921	20.3
17	9.20	5340	0.1065	1	241	0.300	22.2
18	10.20	16849	0.3360	1	681	0.945	24.8
19	12.27	912968	18.2067	1	29842	51.226	30.6
20	13.68	31774	0.6336	1	885	1.783	35.9
21	20.73	106643	2.1267	1	2165	5.984	49.3
22	22.80	1782219	35.5416	1	29861	100.000	59.7

Total Area: 5014461 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1403.ATB
Data File = J:BB1403.PTS Printed on 05-19-1988 at 11:58:42
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts




13.68
20.73
22.88

01106

DLL 05/23/88

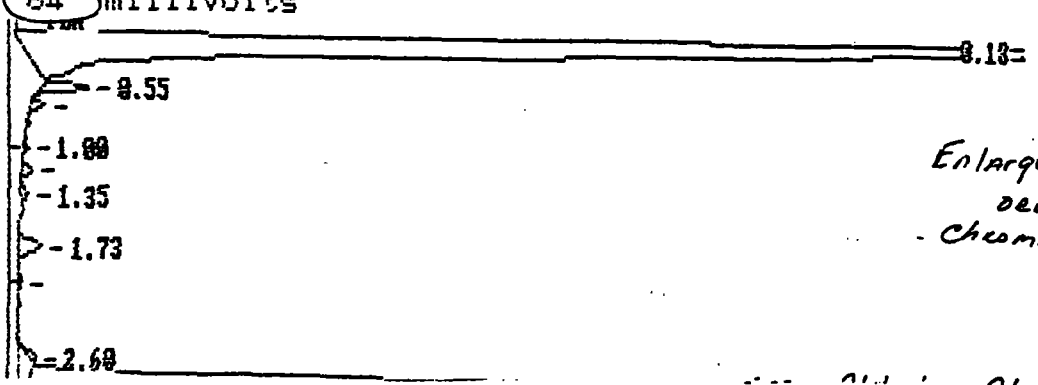
******** AREA PERCENT REPORT ********

```
******************** 05-20-1988 10:31:25 Version 4.1 ********************
* Sample Name: EVALUATION MIX C                    Data File: J:BB1403      *
* Date: 05-19-1988 11:35:28 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  3    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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1273219	25.3909	1	298427	71.440	4.3
2	0.55	9581	0.1911	1	3076	0.538	3.1
3	0.68	3965	0.0791	1	944	0.222	4.2
4	1.00	1676	0.0334	1	303	0.094	5.5
5	1.17	3222	0.0643	1	700	0.181	4.6
6	1.35	1881	0.0375	1	445	0.106	4.2
7	1.73	9315	0.1858	1	1442	0.523	6.5
8	2.02	1163	0.0232	1	201	0.065	5.8
10	2.60	1997	0.0398	1	304	0.112	6.6
11	2.80	326629	6.5137	1	43396	18.327	7.5
12	3.63	8497	0.1694	1	972	0.477	8.7
13	3.93	5018	0.1001	1	448	0.282	11.2
14	6.00	5647	0.1126	1	341	0.317	16.6
15	6.48	9246	0.1844	1	620	0.519	14.9
16	8.32	497614	9.9236	1	24545	27.921	20.3
17	9.20	5340	0.1065	1	241	0.300	22.2
18	10.20	16849	0.3360	1	681	0.945	24.8
19	12.27	912968	18.2067	1	29842	51.226	30.6
20	13.68	31774	0.6336	1	885	1.783	35.9
21	20.73	106643	2.1267	1	2165	5.984	49.3
22	22.80	1782219	35.5416	1	29861	100.000	59.7

Total Area: 5014461 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB1403.PTS Printed on 05-20-1988 at 10:33:00
Start time: 0.00 min. Stop time: 4.02 min. Offset: 0 mv.
Full Range: 64 millivolts



Enlarged Peak
Original
Chromatogram 32 mV

01107 DLK 05/23/88

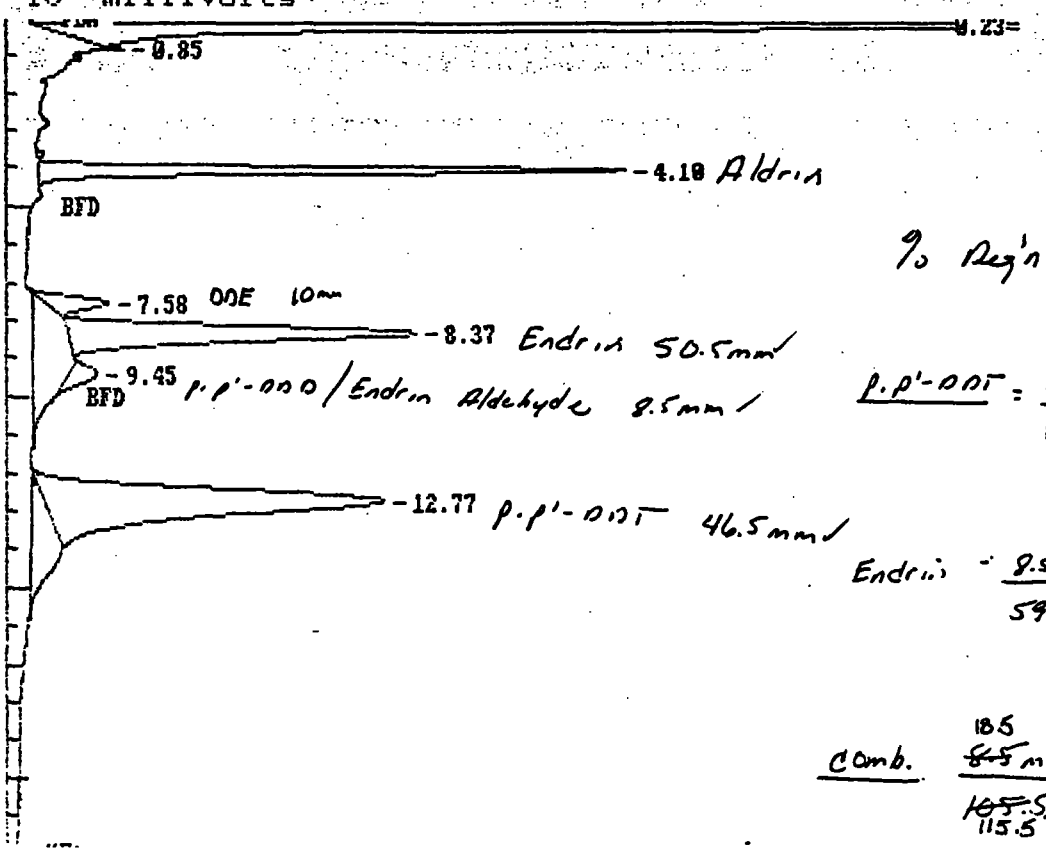
********** AREA PERCENT REPORT **********

```
******************** 05-19-1988 23:33:26 Version 4.1 ********************
* Sample Name: EVALUATION MIX B                    Data File: J:AB14019     *
* Date: 05-19-1988 23:33:11 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  19   Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*             Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                        LPT1:        *   *
*****************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	587697	40.2873	1	133360	100.000	4.4
2	0.85	1033	0.0708	1	251	0.176	4.1
5	4.10	78328	5.3694	1	5818	13.328	13.5
6	7.58	12495	0.8565	1	589	2.126	21.2
7	8.37	90586	6.2098	1	3436	15.414	26.4
8	9.45	9458	0.6483	1	294	1.609	32.2
9	12.77	155596	10.6663	1	3351	26.476	46.4
10	26.77	523572	35.8915	1	5072	89.089	103.2

Total Area: 1458764 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14019.ATB
Data File = J:AB14019.PTS Printed on 05-19-1988 at 23:33:50
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts

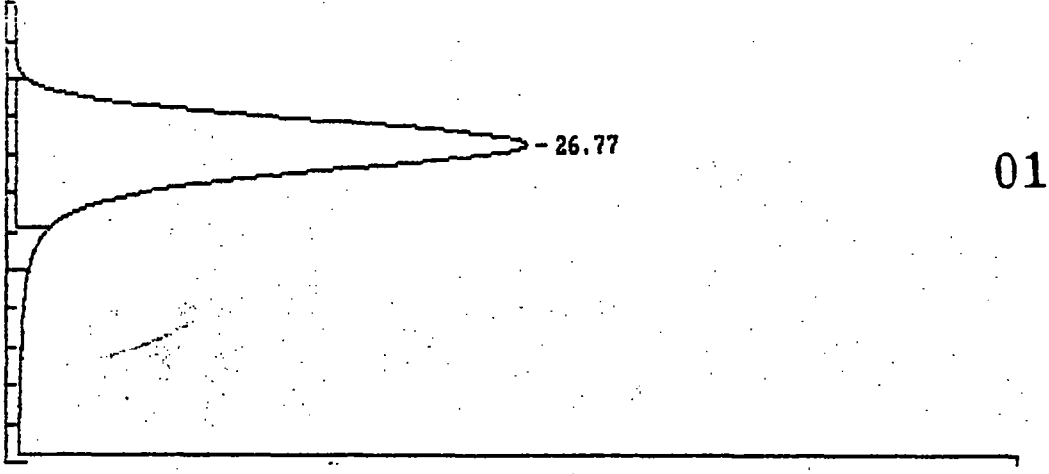


% Rec'n

p.p'-DDT = 18.5mm AB / 65.0mm 65 mm AB × 100 = 28% ~~15%~~

Endrin = 8.5mm / 59.0mm × 100 = 14%

Comb. 18.5 ~~8.5~~ mm / 115.5 ~~105.5~~ mm × 100% = 16% ~~8.1%~~



01108

01109

DLE 8/13/88

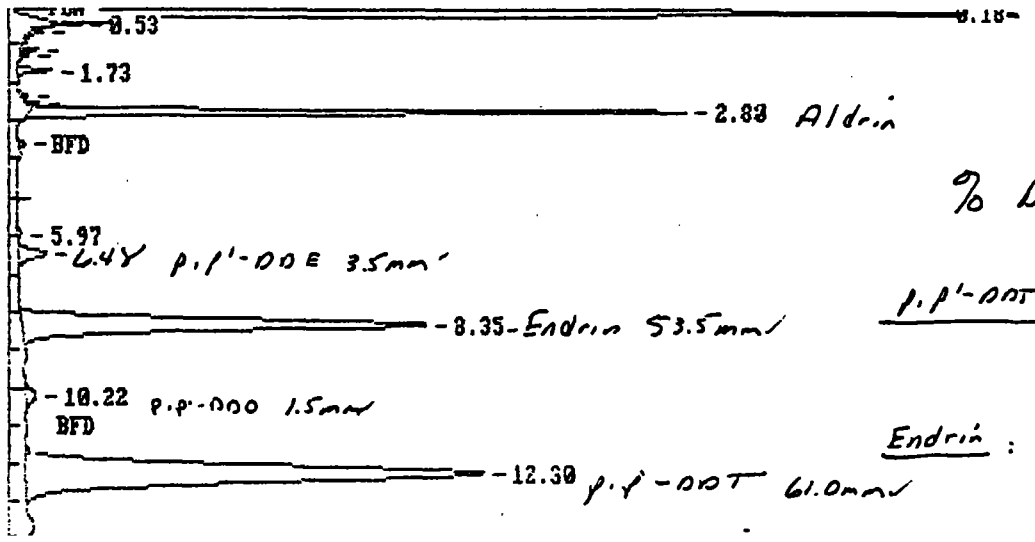
********* AREA PERCENT REPORT *********

```
******************** 05-19-1988 23:22:50 Version 4.1 ********************
* Sample Name: EVALUATION MIX B                    Data File: J:BB14019    *
* Date: 05-19-1988 23:22:33 Method: M:BBPI                                 *
* Interface: 12  Cycle#:  19   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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1147801	38.3579	1	260167	100.000	4.4
2	0.53	3003	0.1004	1	913	0.262	3.3
3	0.73	3074	0.1027	1	466	0.268	6.6
4	1.18	2457	0.0821	1	551	0.214	4.5
5	1.35	1688	0.0564	1	286	0.147	5.9
6	1.73	7099	0.2372	1	1086	0.618	6.5
7	2.38	1406	0.0470	1	218	0.122	6.5
8	2.58	1517	0.0507	1	296	0.132	5.1
9	2.80	158947	5.3118	1	20985	13.848	7.6
10	3.65	1858	0.0621	1	220	0.162	8.4
11	5.97	1545	0.0516	1	113	0.135	13.7
12	6.48	14183	0.4740	1	865	1.236	16.4
13	8.35	265754	8.8811	1	12864	23.153	20.7
14	10.22	7595	0.2538	1	310	0.662	24.5
15	12.30	449635	15.0262	1	14597	39.174	30.8
16	16.72	10934	0.3654	1	300	0.953	36.4
17	20.77	60910	2.0355	1	1237	5.307	49.2
18	22.87	852943	28.5042	1	14340	74.311	59.5

Total Area: 2992346 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14019.ATB
Data File = J:BB14019.PTS Printed on 05-19-1988 at 23:23:17
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts

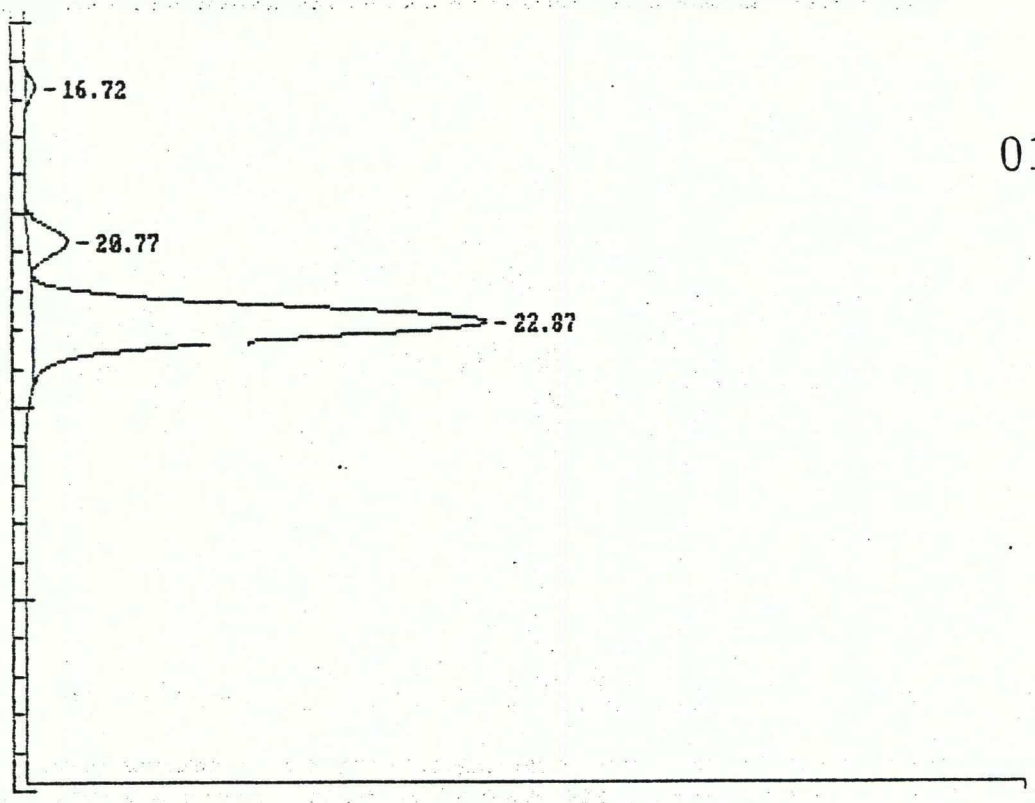


% Deg'n

p,p'-DDT : 5.0mm / 66.0mm x 100 = 7.6

Endrin : Ø

01110



PESTICIDE INDIVIDUAL STANDARDS

INDIVIDUAL MIX A

Component	Concentration ug/ml	Nanograms Col. A - 2 ul	Injected Col. B - 4 ul
Lindane (gamma-BHC)	0.0035	0.0070	0.014
Heptachlor	0.0075	0.015	0.030
Aldrin	0.0075	0.015	0.030
Heptachlor Epoxide	0.010	0.020	0.040
Endosulfan A	0.015	0.030	0.060
Dieldrin	0.0075	0.015	0.030
pp'-DDT	0.025	0.050	0.10
Endrin Aldehyde	0.030	0.060	0.12
Endosulfan B	0.025	0.050	0.10
Methoxychlor	0.050	0.10	0.20
Dibutylchlorendate	0.050	0.10	0.20

INDIVIDUAL MIX B

Component	Concentration ug/ml	Nanograms Col. A - 2 ul	Injected Col. B - 4 ul
alpha-BHC	0.0035	0.0070	0.014
beta-BHC	0.0075	0.015	0.030
delta-BHC	0.0075	0.015	0.030
Aldrin	0.0075	0.015	0.030
pp'-DDE	0.0075	0.015	0.030
Endrin	0.015	0.030	0.060
pp'-DDD	0.025	0.050	0.10
Endosulfan Sulfate	0.038	0.076	0.15
Endrin Ketone	0.020	0.040	0.080
Dibutylchlorendate	0.050	0.10	0.20

STANDARD: INDIVIDUAL MIX A 05/13/89 LIBRARY: L:SS1013

01113

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
002	LINDANE	1.967	1.967	4	32152	.0035	ug/ml
005	HEPTACHLOR	3.267	3.267	6	86895	.0075	ug/ml
006	ALDRIN	4.100	4.100	7	67221	.0075	ug/ml
007	HEPTACHLOR EPOXIDE	5.067	5.067	8	104156	.0100	ug/ml
010	ENDOSULFAN-A	6.350	6.350	9	117852	.0150	ug/ml
012	DIELDRIN	7.483	7.483	10	62459	.0075	ug/ml
015	ENDOSULFAN-B	8.567	8.567	11	142782	.0250	ug/ml
016	ENDRIN ALDEHYDE	9.550	9.550	12	179819	.0300	ug/ml
018	p,p'-DDT	12.750	12.750	13	152057	.0250	ug/ml
019	METHOXYCHLOR	19.483	19.483	14	196942	.0500	ug/ml
047	DBC (surrogate)	26.800	26.800	15	396265	.0500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: INDIVIDUAL MIX A 05/13/88 LIBRARY: L:SSMIXB

01114

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
002	LINDANE	1.833	1.833	6	87872	.0035	ug/ml
005	HEPTACHLOR	2.267	2.267	7	247572	.0075	ug/ml
006	ALDRIN	2.767	2.767	9	152555	.0075	ug/ml
007	HEPTACHLOR EPOXIDE	4.317	4.317	12	218953	.0100	ug/ml
010	ENDOSULFAN-A	5.500	5.500	13	250803	.0150	ug/ml
012	DIELDRIN	6.767	6.767	14	161907	.0075	ug/ml
015	ENDOSULFAN-B	10.117	10.117	15	424534	.0250	ug/ml
016	ENDRIN ALDEHYDE	13.533	13.533	17	508360	.0300	ug/ml
018	p,p'-DDT	12.167	12.167	16	411807	.0250	ug/ml
019	METHOXYCHLOR	23.933	23.933	20	249774	.0500	ug/ml
047	DBC (surrogate)	22.650	22.650	19	455737	.0500	ug/ml

^ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

01115

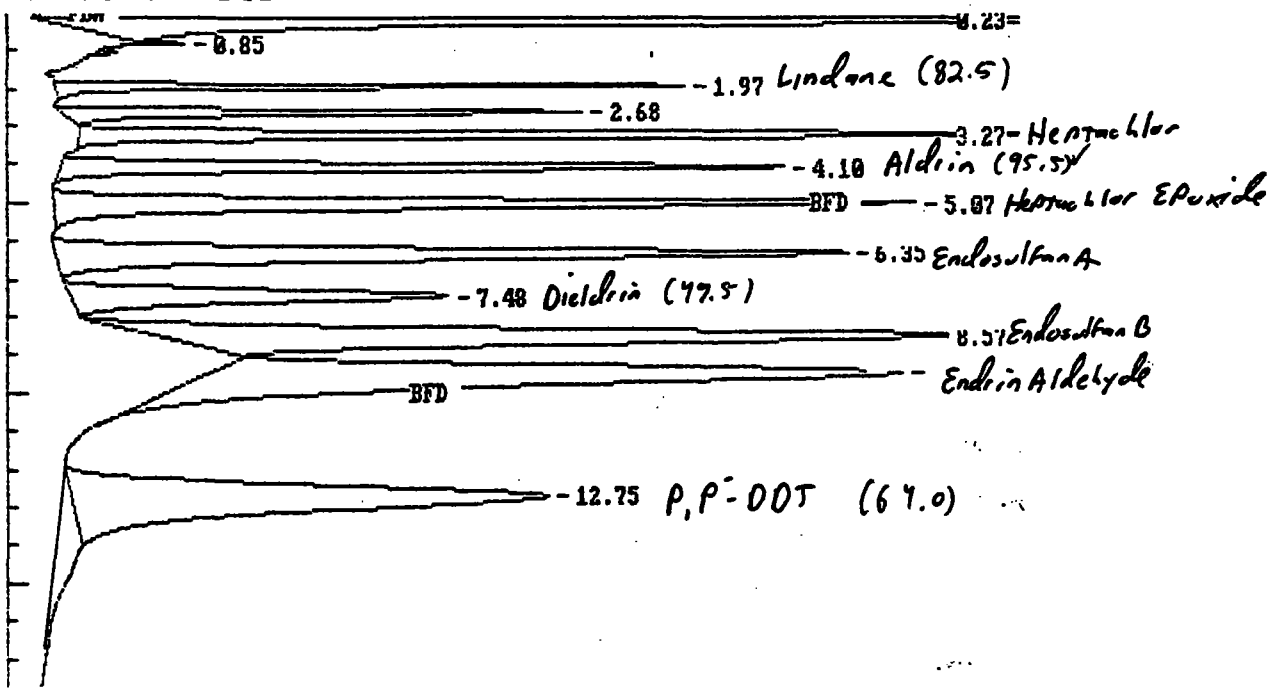
```
******************** 05-19-1988 10:11:22 Version 4.1 ********************
* Sample Name: INDIVIDUAL MIX A                    Data File: J:AB1334      *
* Date: 05-12-1988 10:30:26 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  4    Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*             Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                        LPT1:        *   *
*****************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

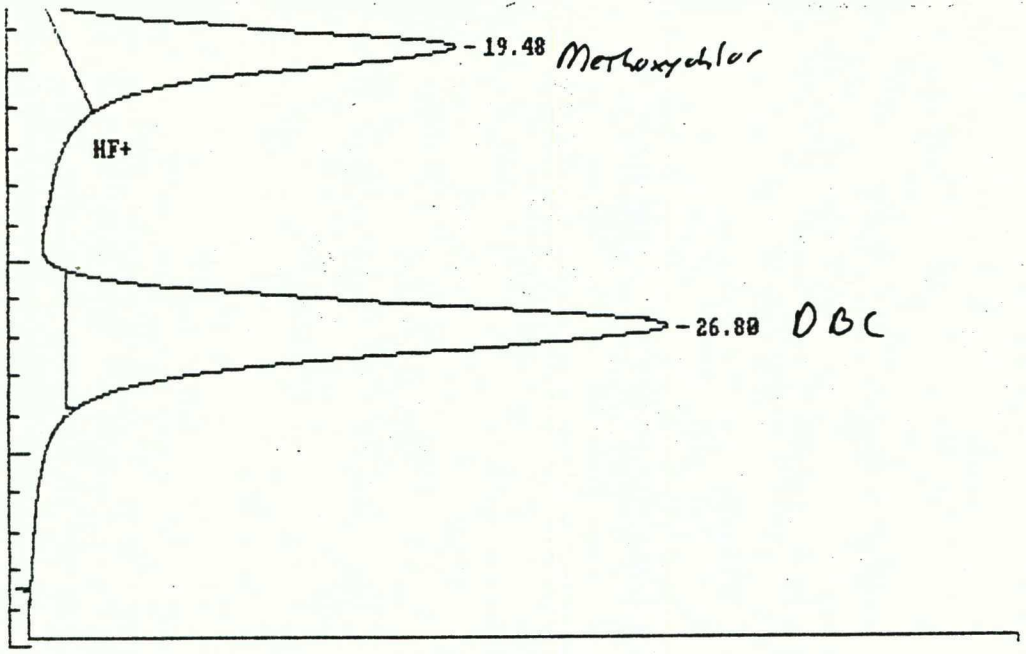
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	487476	23.6412	1	113725	100.000	4.3
2	0.85	1389	0.0674	1	388	0.285	3.6
4	1.97	32152	1.5593	1	4367	6.596	7.4
5	2.68	35512	1.7222	1	3588	7.285	9.9
6	3.27	86895	4.2141	1	7970	17.825	10.9
7	4.10	67221	3.2600	1	5030	13.790	13.4
8	5.07	104156	5.0513	1	5975	21.366	17.4
9	6.35	117852	5.7155	1	5492	24.176	21.5
10	7.48	62459	3.0291	1	2613	12.813	23.9
11	8.57	142782	6.9245	1	5420	29.290	26.3
12	9.55	179819	8.7207	1	4846	36.888	37.1
13	12.75	152057	7.3743	1	3300	31.193	46.1
14	19.48	196942	9.5511	1	2711	40.400	72.6
15	26.80	395270	19.1694	1	4202	81.085	94.1

SS
5/19/88

Total Area: 2061981 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1334.ATB
Data File = J:AB1334.PTS Printed on 05-19-1988 at 10:11:50
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





01116

01117

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

```
******************** 05-26-1988 07:11:04 Version 4.1 ********************
* Sample Name: INDIVIDUAL MIX A                    Data File: J:AB1334      *
* Date: 05-12-1988 10:30:26 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  4    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:          *    *
*****************************************************************************
```

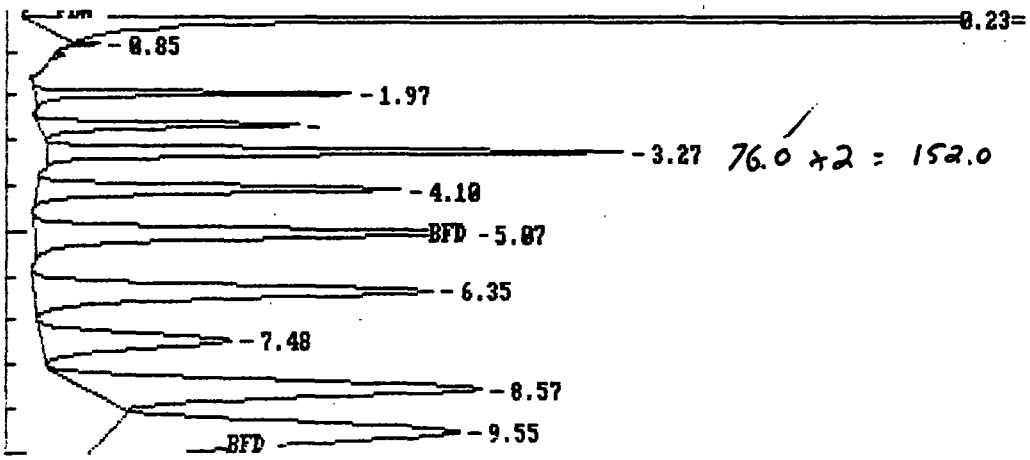
SS 5/26/88

Starting Delay: 0.00 Run Time: 35.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.233	487476	23.6412	1	113725	100.000	4.3
2	0.850	1389	0.0674	1	388	0.285	3.6
4	1.967	32152	1.5593	1	4367	6.596	7.4
5	2.683	35512	1.7222	1	3588	7.285	9.9
6	3.267	86895	4.2141	1	7970	17.825	10.9
7	4.100	67221	3.2600	1	5030	13.790	13.4
8	5.067	104156	5.0513	1	5975	21.366	17.4
9	6.350	117852	5.7155	1	5492	24.176	21.5
10	7.483	62459	3.0291	1	2613	12.813	23.9
11	8.567	142782	6.9245	1	5420	29.290	26.3
12	9.550	179819	8.7207	1	4846	36.888	37.1
13	12.750	152057	7.3743	1	3300	31.193	46.1
14	19.483	196942	9.5511	1	2711	40.400	72.6
15	26.800	395270	19.1694	1	4202	81.085	94.1

Total Area: 2061981 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:AB1334.PTS Printed on 05-26-1988 at 07:11:51
Start time: 0.00 min. Stop time: 10.00 min. Offset: 0 mv.
Full Range: 14 millivolts



76.0 x 2 = 152.0

********** AREA PERCENT REPORT ********** 01118

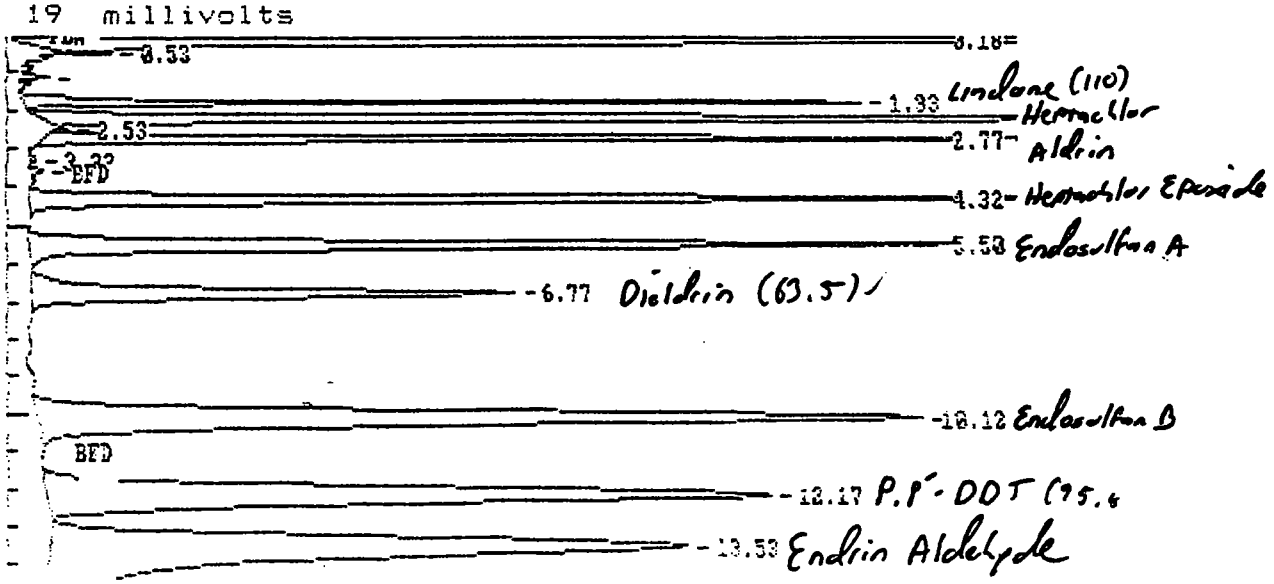
```
******************** 05-12-1988 10:23:10 Version 4.1 ********************
* Sample Name: INDIVIDUAL MIX A                    Data File: J:BB1334      *
* Date: 05-12-1988 10:22:52 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  4    Operator SS  Channel#: 0    Vial#: N.A.      *
* 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:    0.00
```

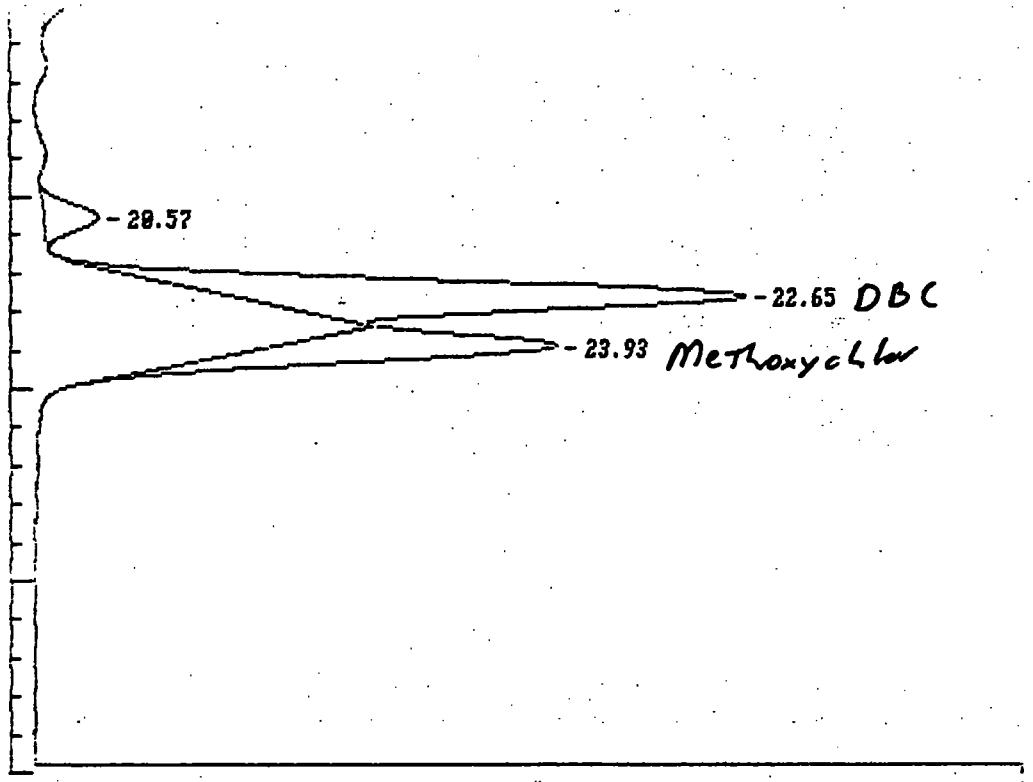
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	933697	22.4320	1	219603	100.000	4.3
2	0.53	3141	0.0755	1	1049	0.336	3.0
4	1.17	2437	0.0585	1	544	0.261	4.5
6	1.83	87872	2.1111	1	15837	9.411	5.5
7	2.27	247572	5.9479	1	28324	26.515	8.7
8	2.53	1193	0.0287	1	237	0.128	5.0
9	2.77	152555	3.6651	1	20461	16.339	7.5
10	3.32	1125	0.0270	1	114	0.120	9.9
11	3.62	1893	0.0455	1	221	0.203	8.6
12	4.32	218953	5.2603	1	19165	23.450	11.4
13	5.50	250803	6.0255	1	17464	26.861	14.4
14	6.77	161907	3.8898	1	9120	17.340	17.8
15	10.12	424534	10.1994	1	16726	45.468	25.4
16	12.17	411807	9.8936	1	13716	44.105	30.0
17	13.53	508360	12.2133	1	12070	54.446	42.1
18	20.57	48978	1.1767	1	1014	5.246	48.3
19	22.65	455737	10.9491	1	9543	48.810	47.8
20	23.93	249774	6.0008	1	5473	26.751	45.6

SS
5/19/89

Total Area: 4162336 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1334.ATB
Data File = J:BB1334.PTS Printed on 05-12-1988 at 10:23:39
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts




20.57
22.65 DBC
23.93 Methoxychlor

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

01120

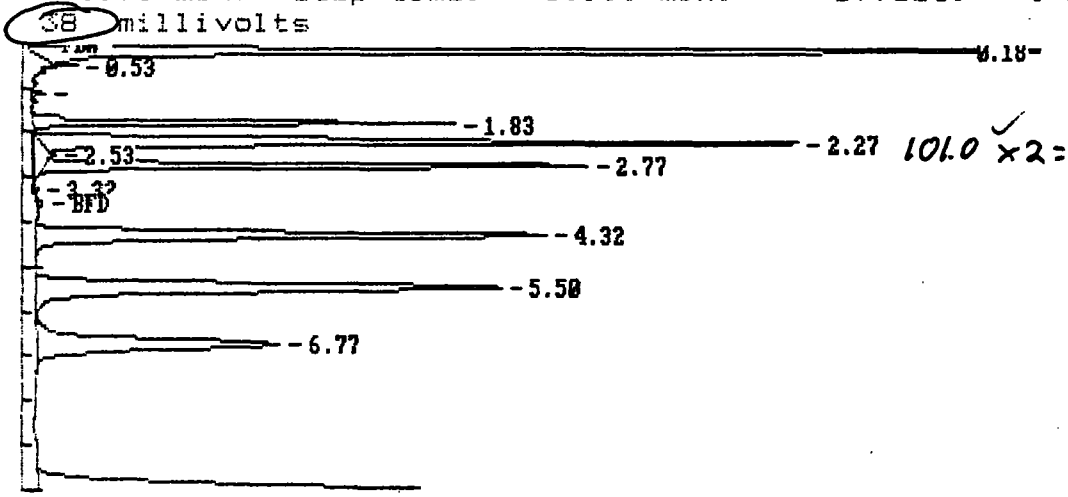
```
******************** 05-26-1988 07:12:47 Version 4.1 *********************
* Sample Name: INDIVIDUAL MIX A                    Data File: J:BB1334      *
* Date: 05-12-1988 10:22:52 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  4    Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                  *
* Conditions: 190 DEG ISOTHERMAL                                            *
*            Detector 0:                          Detector 1: ECD           *
* Misc. Information: 4 UL INJ                                               *
*****************************************************************************
Starting Delay:   0.00                          Run Time:   35.00
```

SS 5/26/88

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.183	933697	22.4320	1	219603	100.000	4.3
2	0.533	3141	0.0755	1	1049	0.336	3.0
4	1.167	2437	0.0585	1	544	0.261	4.5
6	1.833	87872	2.1111	1	15837	9.411	5.5
7	2.267	247572	5.9479	1	28324	26.515	8.7
8	2.533	1193	0.0287	1	237	0.128	5.0
9	2.767	152555	3.6651	1	20461	16.339	7.5
10	3.317	1125	0.0270	1	114	0.120	9.9
11	3.617	1893	0.0455	1	221	0.203	8.6
12	4.317	218953	5.2603	1	19165	23.450	11.4
13	5.500	250803	6.0255	1	17464	26.861	14.4
14	6.767	161907	3.8898	1	9120	17.340	17.8
15	10.117	424534	10.1994	1	16726	45.468	25.4
16	12.167	411807	9.8936	1	13716	44.105	30.0
17	13.533	508360	12.2133	1	12070	54.446	42.1
18	20.567	48978	1.1767	1	1014	5.246	48.3
19	22.650	455737	10.9491	1	9543	48.810	47.8
20	23.933	249774	6.0008	1	5473	26.751	45.6

Total Area: 4162336 Area Reject: 1000 One sample per 1.000 sec.

Data File = J:BB1334.PTS Printed on 05-26-1988 at 07:13:35
Start time: 0.00 min. Stop time: 10.00 min. Offset: 0 mv.
Full Range: 38 millivolts



101.0 ✓ x2 = 202.0

STANDARD: INDIVIDUAL MIX B 05/13/88 LIBRARY: L:SS1013

01121

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha-BHC	1.650	1.650	4	12083	.0035	ug/ml
003	beta-BHC	1.783	1.783	5	14773	.0075	ug/ml
004	delta-BHC	2.050	2.050	6	28323	.0075	ug/ml
006	ALDRIN	4.100	4.100	8	55987	.0075	ug/ml
011	p,p'-DDE	7.583	7.583	10	31974	.0075	ug/ml
013	ENDRIN	8.400	8.400	11	72344	.0150	ug/ml
014	p,p'-DDD	9.650	9.650	12	103218	.0250	ug/ml
017	ENDOSULFAN SULFATE	11.183	11.183	13	144304	.0380	ug/ml
048	ENDRIN KETONE	14.450	14.450	14	146230	.0200	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: INDIVIDUAL MIX B 05/13/88 LIBRARY: L:SSMIXB

01122

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC	1.417	1.417	6	66126	.0035	ug/ml
003	beta-BHC	2.133	2.133	8	82931	.0075	ug/ml
004	delta-BHC	2.500	2.500	9	120175	.0075	ug/ml
006	ALDRIN	2.767	2.767	10	125813	.0075	ug/ml
011	p,p'-DDE	6.417	6.417	13	121159	.0075	ug/ml
013	ENDRIN	8.250	8.250	14	194612	.0150	ug/ml
014	p,p'-DDD	10.083	10.083	15	386239	.0250	ug/ml
017	ENDOSULFAN SULFATE	16.850	16.850	17	456321	.0380	ug/ml
048	ENDRIN KETONE	22.600	22.600	19	1102734	.0200	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

01123

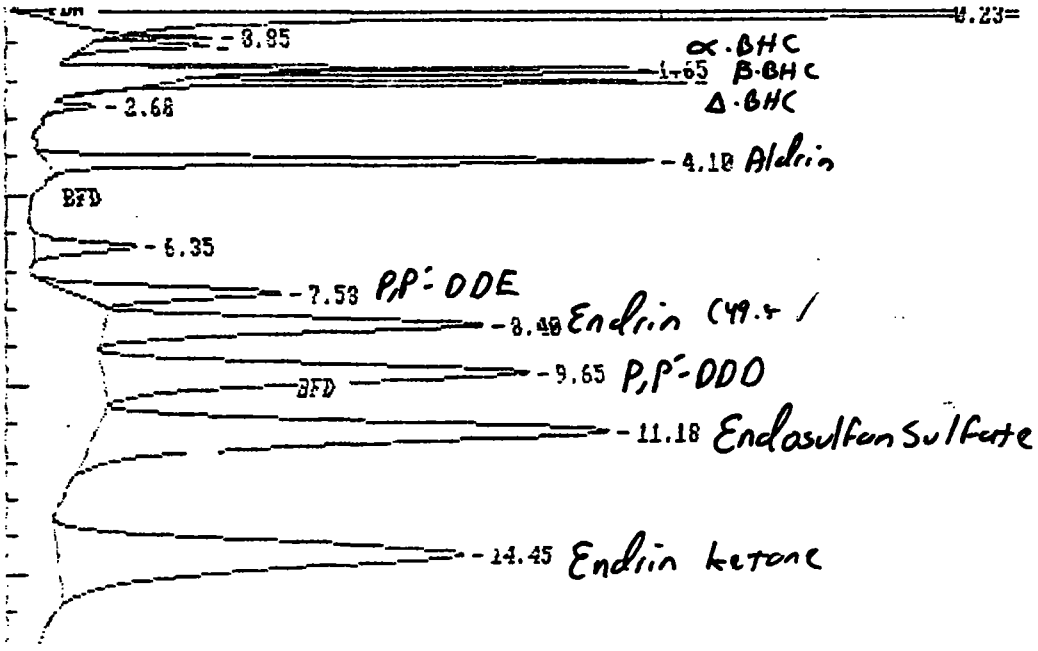
```
******************** 05-12-1988 11:10:36 Version 4.1 ********************
* Sample Name: INDIVIDUAL MIX B                    Data File: J:AB1335      *
* Date: 05-12-1988 11:10:20 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  5    Operator SS  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS   *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                 *
* Conditions: 190 DEGREES ISOTHERMAL                                       *
*            Detector 0: ECD                    Detector 1:               *
* Misc. Information: 4 UL INJECTION                        LPT1:        *  *
*****************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	464609	32.1010	1	108727	100.000	4.3
2	0.85	2385	0.1648	1	685	0.513	3.5
3	1.10	9839	0.6798	1	851	2.118	11.6
4	1.65	12083	0.8348	1	2798	2.601	4.3
5	1.78	14778	1.0210	1	2570	3.181	5.7
6	2.05	28323	1.9569	1	3706	6.096	7.6
7	2.68	2923	0.2020	1	309	0.629	9.5
8	4.10	55987	3.8683	1	4247	12.050	13.2
9	6.35	14453	0.9986	1	698	3.111	20.7
10	7.58	31974	2.2092	1	1422	6.882	22.5
11	8.40	72344	4.9984	1	2631	15.571	27.5
12	9.65	103218	7.1316	1	2968	22.216	34.8
13	11.18	144303	9.9703	1	3583	31.059	40.3
14	14.45	146230	10.1034	1	2808	31.474	52.1
15	26.78	343888	23.7600	1	3710	74.017	92.7

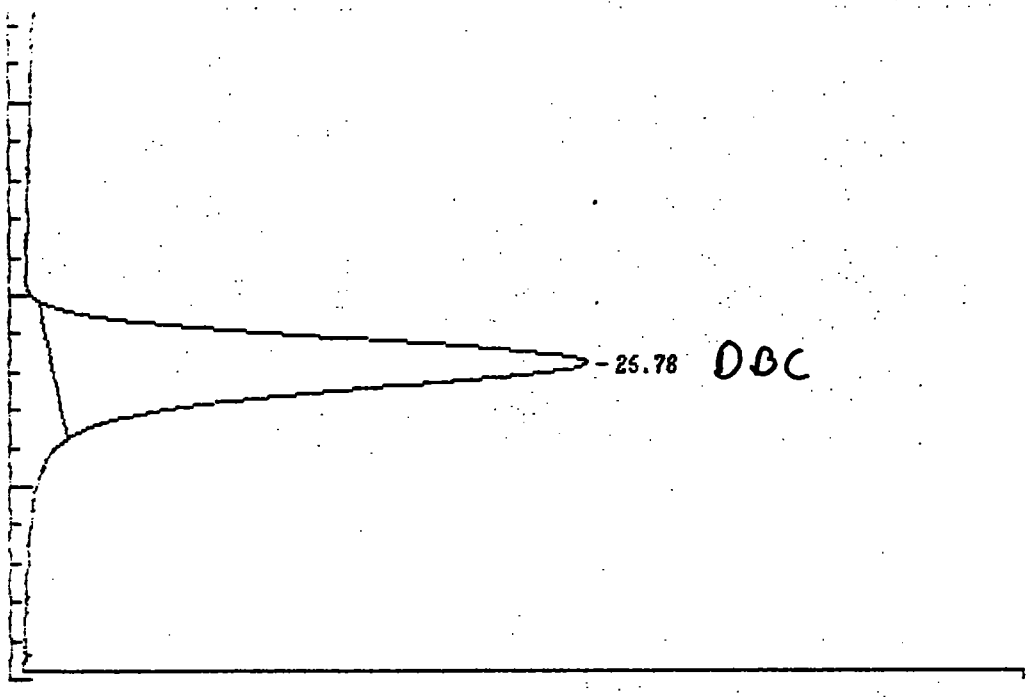
SS 5/19/88

Total Area: 1447337 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1335.ATB
Data File = J:AB1335.PTS Printed on 05-12-1988 at 11:11:06
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



01124



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

01125

********** 05-12-1988 11:04:32 Version 4.1 **********

* Sample Name: INDIVIDUAL MIX B Data File: J:BB1335 *
* Date: 05-12-1988 11:04:16 Method: M:BBPI *
* Interface: 12 Cycle#: 5 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 *

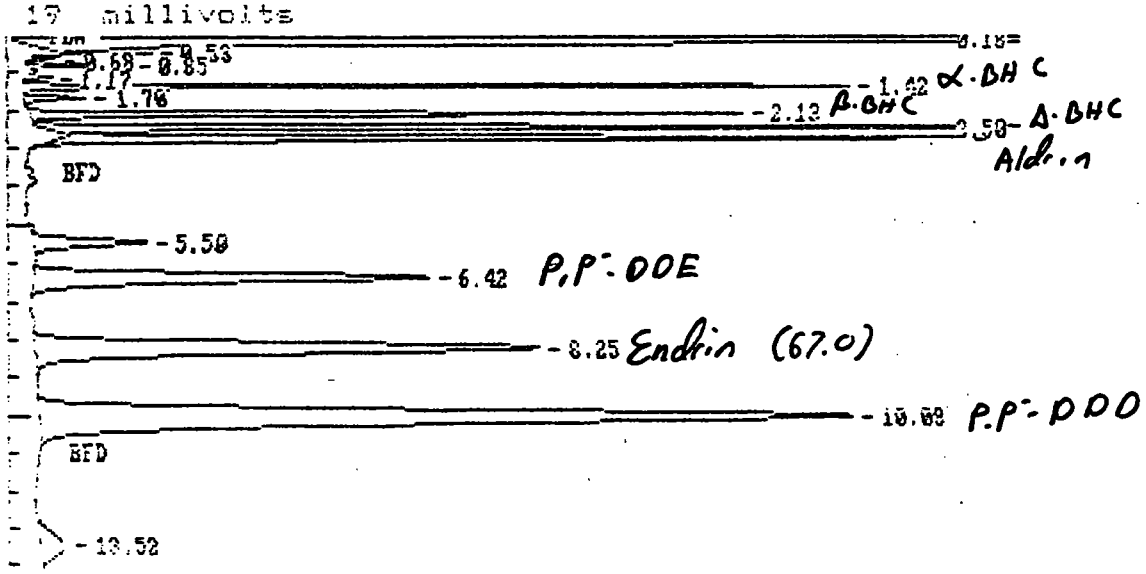
Starting Delay: 0.00 Run Time: 0.00

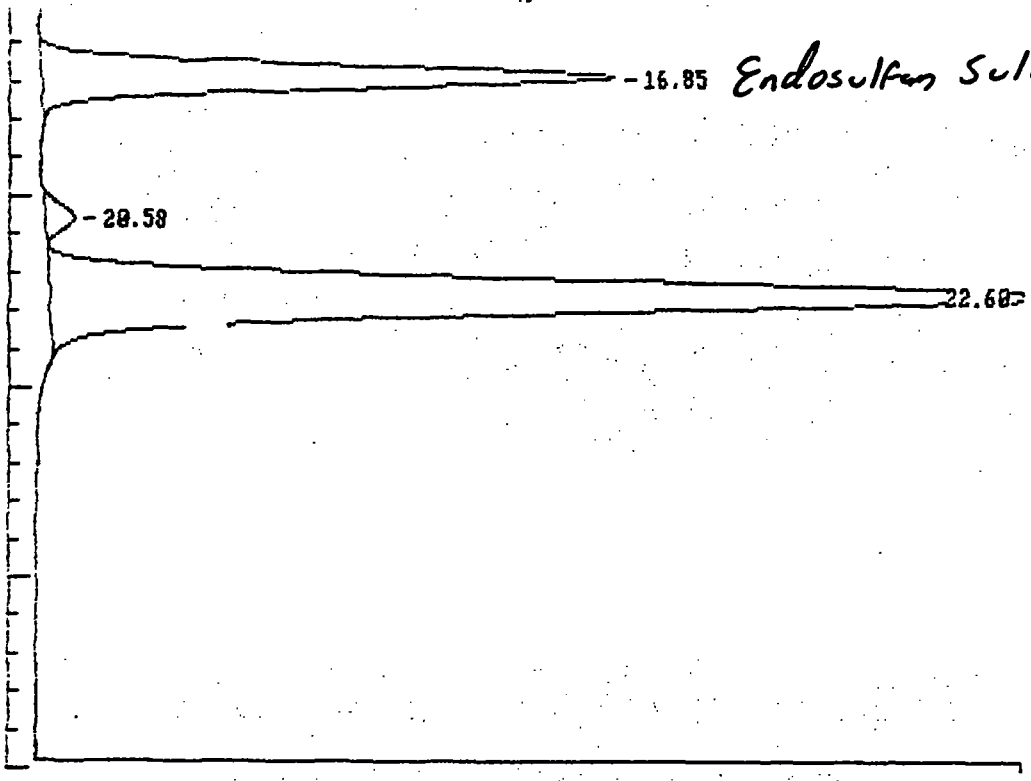
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	884768	24.3210	1	204641	80.234	4.3
2	0.53	5545	0.1524	1	1865	0.503	3.0
3	0.68	1620	0.0445	1	439	0.147	3.7
4	0.85	6416	0.1764	1	1897	0.582	3.4
5	1.17	2142	0.0589	1	505	0.194	4.2
6	1.42	66126	1.8177	1	15580	5.997	4.2
7	1.70	7899	0.2171	1	1167	0.716	6.8
8	2.13	82931	2.2797	1	13439	7.520	6.2
9	2.50	120175	3.3034	1	18766	10.898	6.4
10	2.77	125813	3.4584	1	17123	11.409	7.3
12	5.50	29895	0.8218	1	2129	2.711	14.0
13	6.42	121159	3.3305	1	7409	10.987	16.4
14	8.25	194612	5.3496	1	9494	17.648	20.5
15	10.08	386239	10.6172	1	15313	35.026	25.2
16	13.52	18994	0.5221	1	463	1.722	41.0
17	16.85	456521	12.5491	1	10838	41.399	42.1
18	20.58	24283	0.6675	1	540	2.202	45.0
19	22.60	1102734	30.3126	1	18981	100.000	58.1

Total Area: 3637870 Area Reject: 1000 One sample per 1.000 sec.

SS
5/19/88

Areas, times, and heights stored in: J:BB1335.ATB
Data File = J:BB1335.PTS Printed on 05-12-1988 at 11:05:00
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts




16.85
Endosulfan Sulfate
01126
20.58
22.60
DBC/Endrin Ketone

COLUMN 1: J:AB13325
COLUMN 2: J:BB13325

05/13/88
UNITS ON AMOUNT: µg/ml

01127

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
002	LINDANE	.0038	.0	.0036	.0	.0037
005	HEPTACHLOR	.0082	.0	.0070	.0	NA
006	ALDRIN	.0099	.0	.0096	.0	.0098
007	HEPTACHLOR EPOXIDE	.0111	.0	.0105	.0	.0108
010	ENDOSULFAN-A	.0169	.3	.0161	.3	.0165
012	DIELDRIN	.0083	.0	.0079	.2	.0081
014	p,p'-DDD	.0480	1.0	.0297	.0	NA
015	ENDOSULFAN-B	.0282	.0	.0270	.3	.0276
016	ENDRIN ALDEHYDE	.0331	.0	.0313	.2	.0322
018	p,p'-DDT	.0267	.1	.0257	.1	.0262
019	METHOXYCHLOR	.0548	.1	.0509	.3	.0528
033	AROCLOR 1248(peak 2)	.6300	1.2	.1548	4.1	NA
038	AROCLOR 1254(peak 4)	.2776	1.6	.3644	2.8	NA
047	DBC (surrogate)	.0555	.0	.0530	.2	.0543
051	HEPTACHLOR IN TC	.1865	.5	.2544	.7	NA

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

RESULT FILE: J:AB13325 05/13/88 LIBRARY: L:SS101B

01128

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
002	LINDANE	1.967	1.967	3	35091	.0038	ug/ml
005	HEPTACHLOR	3.267	3.267	5	94483	.0082	ug/ml
006	ALDRIN	4.100	4.100	6	73771	.0099	ug/ml
007	HEPTACHLOR EPOXIDE	5.067	5.067	7	115434	.0111	ug/ml
009	alpha-CHLORDANE	6.517	6.367	8	132408	.4216	ug/ml
010	ENDOSULFAN-A	6.350	6.367	8	132408	.0169	ug/ml
011	p,p'-DDE	7.583	7.483	9	68806	.0161	ug/ml
012	DIELDRIN	7.483	7.483	9	68806	.0083	ug/ml
013	ENDRIN	8.400	8.567	10	160991	.0334	ug/ml
014	p,p'-DDD	9.650	9.550	11	198105	.0480	ug/ml
015	ENDOSULFAN-B	8.567	8.567	10	160991	.0282	ug/ml
016	ENDRIN ALDEHYDE	9.550	9.550	11	198105	.0331	ug/ml
018	p,p'-DDT	12.750	12.767	12	162347	.0267	ug/ml
019	METHOXYCHLOR	19.483	19.500	13	215803	.0548	ug/ml
022	TOXAPHENE (peak 3)	12.433	12.767	12	162347	.4771	ug/ml
033	AROCLOR 1248(peak 2)	4.050	4.100	6	73771	.6300	ug/ml
036	AROCLOR 1254(peak 2)	6.300	6.367	8	132408	.2019	ug/ml
038	AROCLOR 1254(peak 4)	9.400	9.550	11	198105	.2776	ug/ml
040	AROCLOR 1260(peak 1)	9.350	9.550	11	198105	.7352	ug/ml
047	DBC (surrogate)	26.800	26.800	14	439893	.0555	ug/ml
051	HEPTACHLOR IN TC	3.283	3.267	5	94483	.1865	ug/ml
053	CHLOROBENZILATE	9.580	9.550	11	198105	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: J:BB13325 05/13/88 LIBRARY: L:SSMIXB

01129

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
002	LINDANE	1.833	1.833	5	90404	.0036	ug/ml
005	HEPTACHLOR	2.267	2.267	6	230762	.0070	ug/ml
006	ALDRIN	2.767	2.767	7	161650	.0096	ug/ml
007	HEPTACHLOR EPOXIDE	4.317	4.317	10	229565	.0105	ug/ml
010	ENDOSULFAN-A	5.500	5.483	11	268960	.0161	ug/ml
012	DIELDRIN	6.767	6.750	12	171304	.0079	ug/ml
014	p,p'-DDD	10.083	10.083	13	458660	.0297	ug/ml
015	ENDOSULFAN-B	10.117	10.083	13	458660	.0270	ug/ml
016	ENDRIN ALDEHYDE	13.533	13.500	15	531137	.0313	ug/ml
018	p,p'-DDT	12.167	12.150	14	422594	.0257	ug/ml
019	METHOXYCHLOR	23.933	23.867	18	254310	.0509	ug/ml
020	TOXAPHENE (peak 1)	6.783	6.750	12	171304	.5724	ug/ml
021	TOXAPHENE (peak 2)	10.350	10.083	13	458660	1.0095	ug/ml
025	AROCLOR 1016(peak 3)	2.250	2.267	6	230762	.1629	ug/ml
028	AROCLOR 1232(peak 2)	2.250	2.267	6	230762	.3637	ug/ml
031	AROCLOR 1242(peak 3)	2.250	2.267	6	230762	.1979	ug/ml
032	AROCLOR 1248(peak 1)	2.250	2.267	6	230762	.2246	ug/ml
033	AROCLOR 1248(peak 2)	2.883	2.767	7	161650	.1548	ug/ml
034	AROCLOR 1248(peak 3)	4.417	4.317	10	229565	.1855	ug/ml
038	AROCLOR 1254(peak 4)	10.367	10.083	13	458660	.3644	ug/ml
039	AROCLOR 1254(peak 5)	11.867	12.150	14	422594	.2940	ug/ml
043	AROCLOR 1260(peak 4)	10.367	10.083	13	458660	.4438	ug/ml
044	AROCLOR 1260(peak 5)	11.833	12.150	14	422594	.3095	ug/ml
046	AROCLOR 1260(peak 7)	24.017	23.867	18	254310	.1022	ug/ml
047	DBC (surrogate)	22.650	22.600	17	483331	.0530	ug/ml
048	ENDRIN KETONE	22.600	22.600	17	483331	.0088	ug/ml
051	HEPTACHLOR IN TC	2.283	2.267	6	230762	.2544	ug/ml

^ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

01130

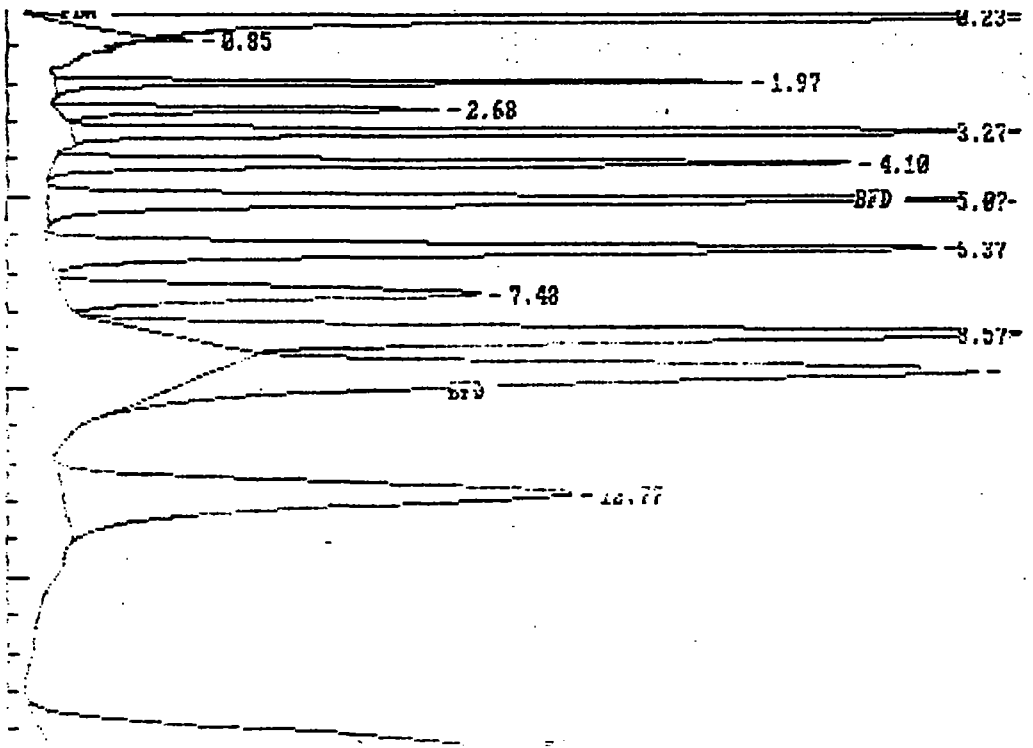
```
******************** 05-13-1988 08:28:23 Version 4.1 ***********************
* Sample Name: 59434 INDIVIDUAL MIX A              Data File: J:AB13325      *
* Date: 05-13-1988 08:28:08 Method: M:ABPI                                   *
* Interface: 10  Cycle#:  25   Operator SS  Channel#: 0    Vial#: N.A.       *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100               *
*****************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GLASS   *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                 *
* Conditions: 190 DEGREES ISOTHERMAL                                         *
*             Detector 0: ECD                    Detector 1:                 *
* Misc. Information: 4 UL INJECTION                        LPT1:          *  *
*****************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

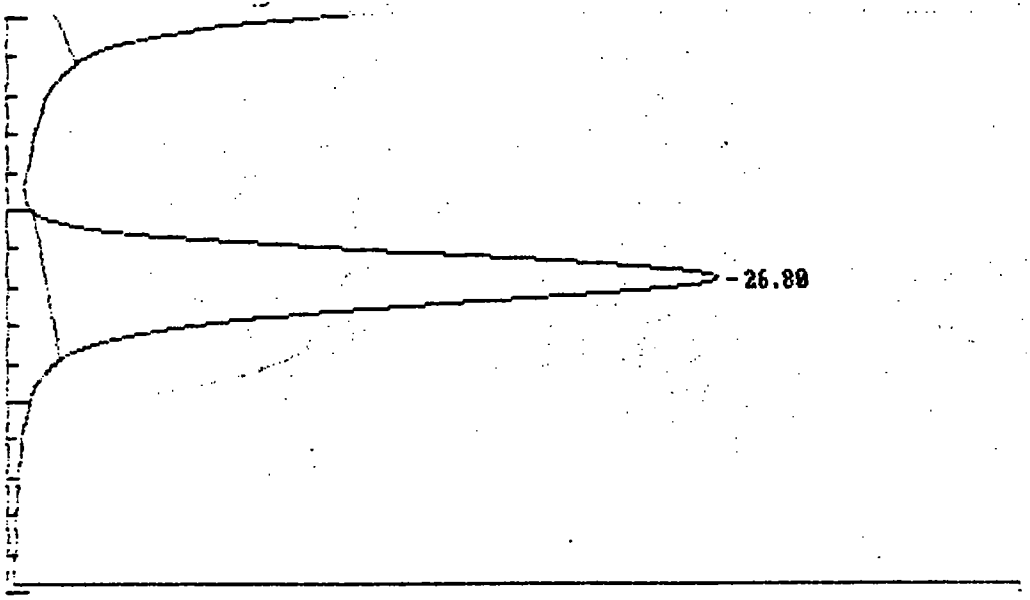
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	513232	22.9338	1	118554	100.000	4.3
2	0.85	1325	0.0592	1	357	0.258	3.7
3	1.97	35091	1.5680	1	4758	6.837	7.4
4	2.68	26200	1.1707	1	2616	5.105	10.0
5	3.27	94483	4.2220	1	8605	18.409	11.0
6	4.10	73771	3.2965	1	5521	14.374	13.4
7	5.07	115434	5.1582	1	6575	22.492	17.6
8	6.37	132408	5.9167	1	6154	25.799	21.5
9	7.48	68806	3.0746	1	2877	13.406	23.9
10	8.57	160991	7.1939	1	6125	31.368	26.3
11	9.55	198105	8.8523	1	5312	38.599	37.3
12	12.77	162347	7.2545	1	3518	31.632	46.1
13	19.50	215803	9.6432	1	2934	42.048	73.5
14	26.80	439893	19.6566	1	4651	85.710	94.6

SS
5/19/88

Total Area: 2237887 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13325.ATB
Data File = J:AB13325.PTS Printed on 05-13-1988 at 08:28:52
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





01131

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

01132

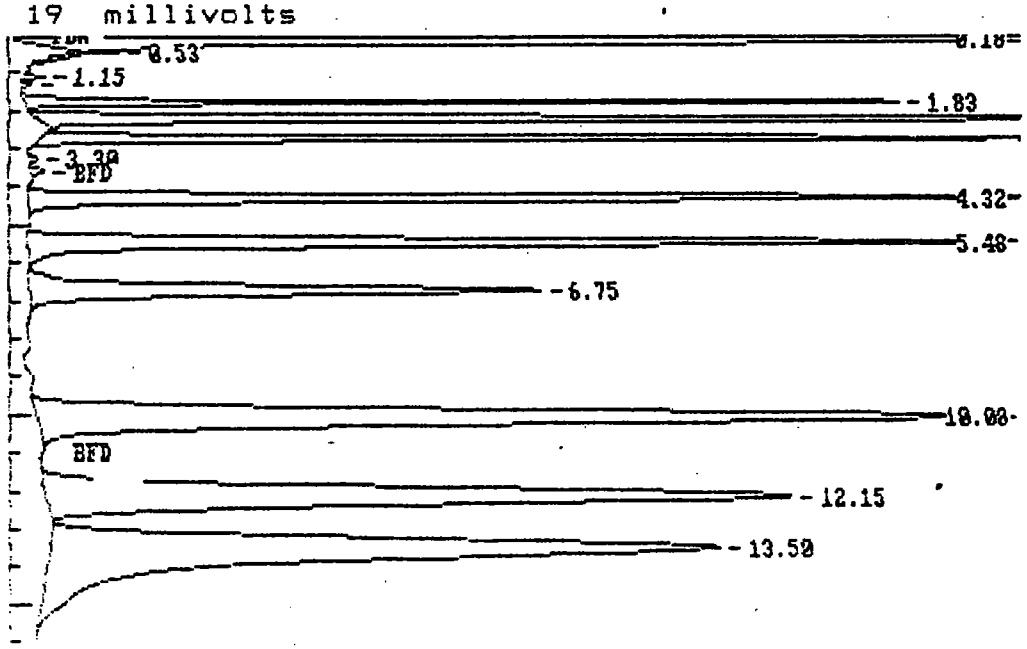
```
******************** 05-13-1988 07:29:39 Version 4.1 ********************
* Sample Name: 59434 INDIVIDUAL MIX A            Data File: J:BB13325     *
* Date: 05-13-1988 07:29:20 Method: M:BBPI                                *
* Interface: 12  Cycle#:  25   Operator SS  Channel#: 0    Vial#: N.A.    *
* 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:     0.00
```

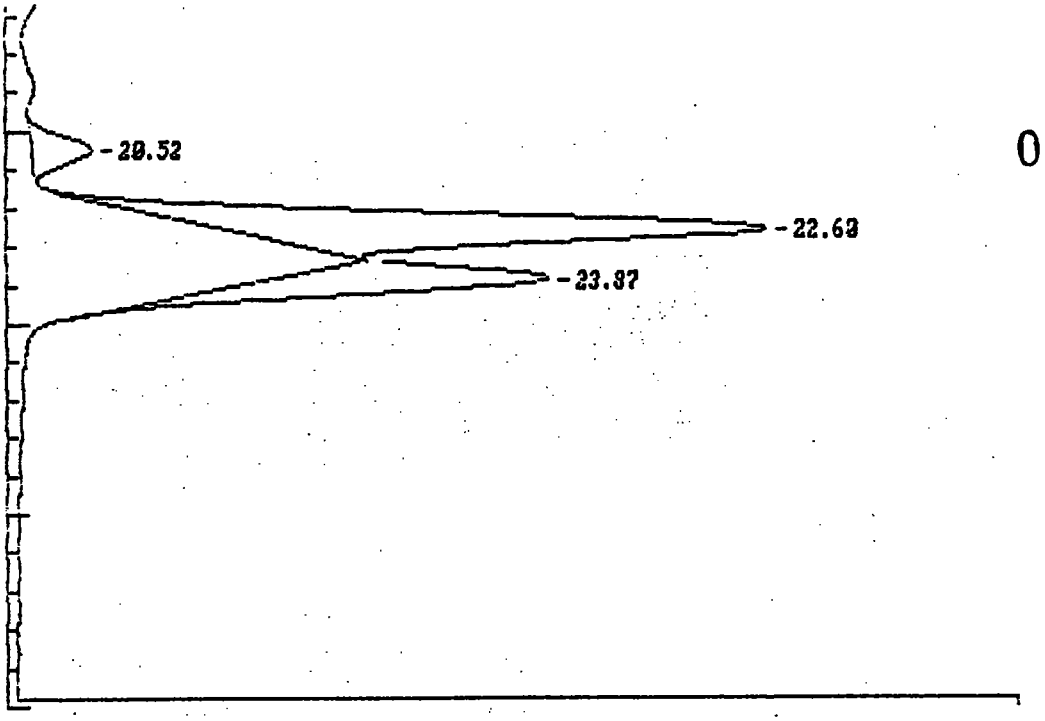
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	979178	22.5441	1	227042	100.000	4.3
2	0.53	1151	0.0265	1	734	0.118	1.6
3	1.15	1804	0.0415	1	402	0.184	4.5
4	1.33	1417	0.0326	1	205	0.145	6.9
5	1.83	90404	2.0814	1	16484	9.233	5.5
6	2.27	230762	5.3129	1	29014	23.567	8.0
7	2.77	161650	3.7217	1	21693	16.509	7.5
8	3.30	1532	0.0353	1	160	0.156	9.6
9	3.60	2260	0.0520	1	254	0.231	8.9
10	4.32	229565	5.2854	1	20214	23.445	11.4
11	5.48	268960	6.1924	1	18684	27.468	14.4
12	6.75	171304	3.9440	1	9642	17.495	17.8
13	10.08	458660	10.5599	1	18063	46.841	25.4
14	12.15	422594	9.7296	1	14070	43.158	30.0
15	13.50	531137	12.2286	1	12657	54.243	42.0
16	20.52	53374	1.2289	1	1105	5.451	48.3
17	22.60	483331	11.1280	1	10080	49.361	48.0
18	23.87	254310	5.8551	1	5512	25.972	46.1

Total Area: 4343393 Area Reject: 1000 One sample per 1.000 sec.

55
5/19/88

Areas, times, and heights stored in: J:BB13325.ATB
Data File = J:BB13325.PTS Printed on 05-13-1988 at 07:30:09
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts





01133

COLUMN 1: J:AB13337
COLUMN 2: J:BB13337

05/13/88
UNITS ON AMOUNT: ug/ml

01134

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	%DIFF RT	COLUMN 2 AMOUNT	%DIFF RT	COLUMN AVERAGE
001	alpha-BHC	.0040	.0	.0037	.0	.0039
003	beta-BHC	.0086	.0	.0076	.8	NA
004	delta-BHC	.0087	.0	.0080	.7	.0084
006	ALDRIN	.0086	.0	.0082	.0	.0084
010	ENDOSULFAN-A	.0023	.3	.0020	.6	NA
011	p,p'-DDE	.0084	.0	.0081	.5	.0082
013	ENDRIN	.0179	.0	.0170	.4	.0174
014	p,p'-DDD	.0279	.0	.0270	.5	.0275
015	ENDOSULFAN-B	.0151	2.0	.0246	.8	NA
016	ENDRIN ALDEHYDE	.0192	1.0	.0009	.9	NA
017	ENDOSULFAN SULFATE	.0426	.0	.0414	.4	.0420
033	AROCLOR 1248(peak 2)	.5475	1.2	.1320	4.1	NA
047	DBC (surrogate)	.0501	.1	.1288	.7	NA
048	ENDRIN KETONE	.0226	.1	.0213	.4	.0220

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

RESULT FILE: J:AB13337 05/13/88 LIBRARY: L:SS101B

01135

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha-BHC	1.650	1.650	5	13896	.0040	ug/ml
003	beta-BHC	1.783	1.783	6	16984	.0096	ug/ml
004	delta-BHC	2.050	2.050	7	32983	.0087	ug/ml
006	ALDRIN	4.100	4.100	9	64113	.0086	ug/ml
009	alpha-CHLORDANE	6.517	6.367	10	18380	.0585	ug/ml
010	ENDOSULFAN-A	6.350	6.367	10	18380	.0023	ug/ml
011	p,p'-DDE	7.583	7.583	11	35787	.0084	ug/ml
012	DIELDRIN	7.483	7.583	11	35787	.0043	ug/ml
013	ENDRIN	8.400	8.400	12	86451	.0179	ug/ml
014	p,p'-DDD	9.650	9.650	13	115195	.0279	ug/ml
015	ENDOSULFAN-B	8.567	8.400	12	86451	.0151	ug/ml
016	ENDRIN ALDEHYDE	9.550	9.650	13	115195	.0192	ug/ml
017	ENDOSULFAN SULFATE	11.183	11.183	14	161680	.0426	ug/ml
023	AROCLOR 1016(peak 1)	1.683	1.650	5	13896	.0877	ug/ml
026	AROCLOR 1221(peak 1)	1.683	1.650	5	13896	.0699	ug/ml
027	AROCLOR 1232(peak 1)	1.683	1.650	5	13896	.0825	ug/ml
029	AROCLOR 1242(peak 1)	1.683	1.650	5	13896	.1104	ug/ml
033	AROCLOR 1248(peak 2)	4.050	4.100	9	64113	.5475	ug/ml
036	AROCLOR 1254(peak 2)	6.300	6.367	10	18380	.0280	ug/ml
038	AROCLOR 1254(peak 4)	9.400	9.650	13	115195	.1614	ug/ml
039	AROCLOR 1254(peak 5)	11.050	11.183	14	161680	.2752	ug/ml
041	AROCLOR 1260(peak 2)	11.150	11.183	14	161680	.3393	ug/ml
047	DBC (surrogate)	26.800	26.817	16	396664	.0501	ug/ml
048	ENDRIN KETONE	14.450	14.467	15	165406	.0226	ug/ml
052	DIALLATE	1.700	1.650	5	13896	.0000	ug/ml
053	CHLOROBENZILATE	9.580	9.650	13	115195	.0000	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: J:BB13337 05/13/88 LIBRARY: L:SSMIXB

01136

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC	1.417	1.417	6	70687	.0037	ug/ml
003	beta-BHC	2.133	2.117	8	83520	.0076	ug/ml
004	delta-BHC	2.500	2.483	9	128686	.0080	ug/ml
006	ALDRIN	2.767	2.767	10	137872	.0082	ug/ml
010	ENDOSULFAN-A	5.500	5.467	12	32833	.0020	ug/ml
011	p,p'-DDE	6.417	6.383	13	130875	.0081	ug/ml
013	ENDRIN	8.250	8.217	14	220229	.0170	ug/ml
014	p,p'-DDD	10.083	10.033	15	417820	.0270	ug/ml
015	ENDOSULFAN-B	10.117	10.033	15	417820	.0246	ug/ml
016	ENDRIN ALDEHYDE	13.533	13.417	16	15821	.0009	ug/ml
017	ENDOSULFAN SULFATE	16.850	16.783	17	497018	.0414	ug/ml
021	TOXAPHENE (peak 2)	10.350	10.033	15	417820	.9196	ug/ml
024	AROCLOR 1016(peak 2)	1.683	1.700	7	4547	.0058	ug/ml
030	AROCLOR 1242(peak 2)	1.683	1.700	7	4547	.0068	ug/ml
033	AROCLOR 1248(peak 2)	2.883	2.767	10	137872	.1320	ug/ml
037	AROCLOR 1254(peak 3)	8.100	8.217	14	220229	.1463	ug/ml
043	AROCLOR 1260(peak 4)	10.367	10.033	15	417820	.4043	ug/ml
047	DBC (surrogate)	22.650	22.500	19	1173890	.1288	ug/ml
048	ENDRIN KETONE	22.600	22.500	19	1173890	.0213	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

01137

```
******************** 05-13-1988 08:52:00 Version 4.1 ********************
* Sample Name: 59434 INDIVIDUAL MIX B              Data File: J:AB13337     *
* Date: 05-13-1988 08:51:43 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  37   Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GLASS  *
*              Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*             Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                      LPT1:          *   *
*****************************************************************************
```

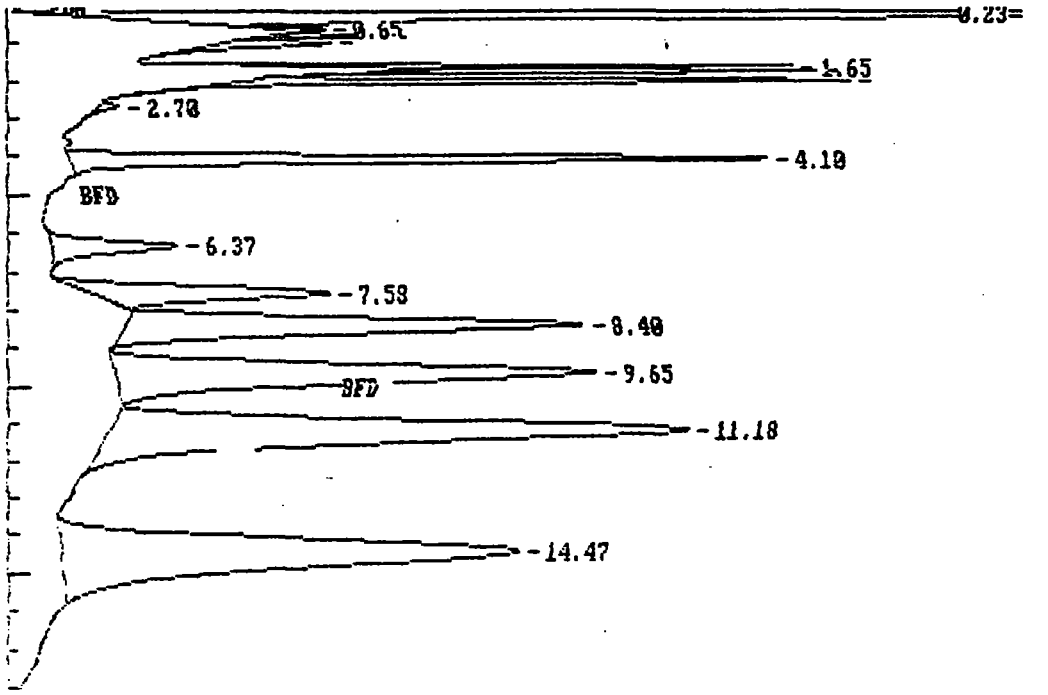
Starting Delay: 0.00 Run Time: 0.00

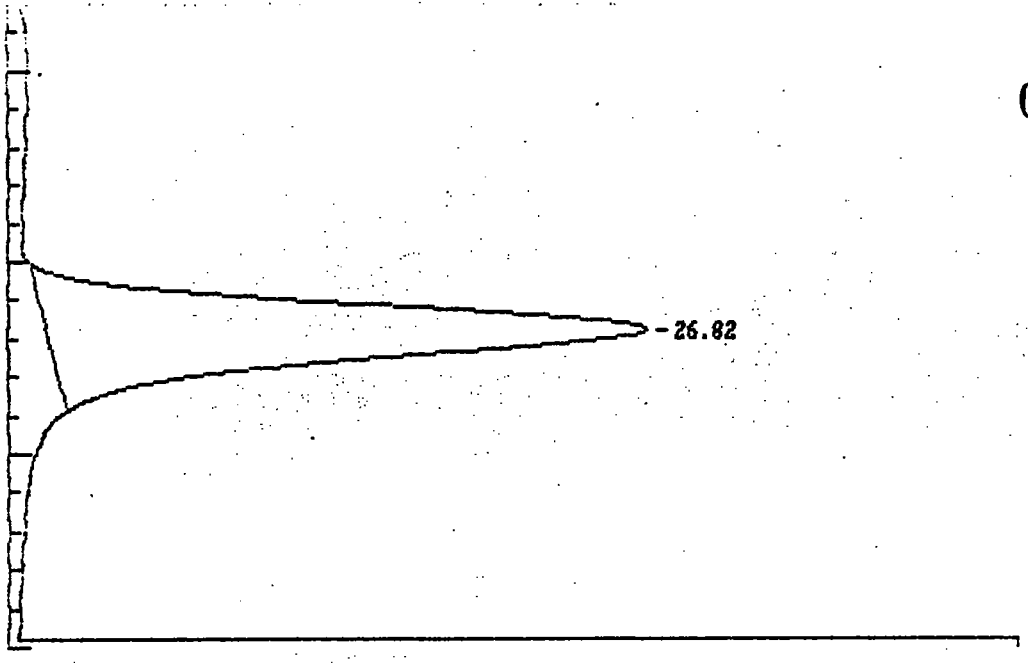
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	488601	30.3146	1	115400	100.000	4.2
2	0.65	1555	0.0965	1	348	0.318	4.5
3	0.85	4307	0.2672	1	842	0.891	5.1
4	1.02	8137	0.5048	1	728	1.665	11.2
5	1.65	13896	0.8622	1	3224	2.844	4.3
6	1.78	16984	1.0537	1	2932	3.476	5.8
7	2.05	32983	2.0464	1	4318	6.751	7.6
8	2.70	1629	0.1011	1	141	0.333	11.6
9	4.10	64113	3.9778	1	4839	13.122	13.2
10	6.37	18380	1.1404	1	851	3.762	21.6
11	7.58	35787	2.2203	1	1593	7.324	22.5
12	8.40	86451	5.3637	1	3180	17.694	27.2
13	9.65	115195	7.1471	1	3324	23.577	34.7
14	11.18	161680	10.0312	1	4015	33.090	40.3
15	14.47	165406	10.2624	1	3159	33.853	52.4
16	26.82	396664	24.6105	1	4184	81.184	94.8

SS
5/19/88

Total Area: 1611766 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13337.ATB
Data File = J:AB13337.PTS Printed on 05-13-1988 at 08:52:26
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




-26.82

AREA PERCENT REPORT

01139

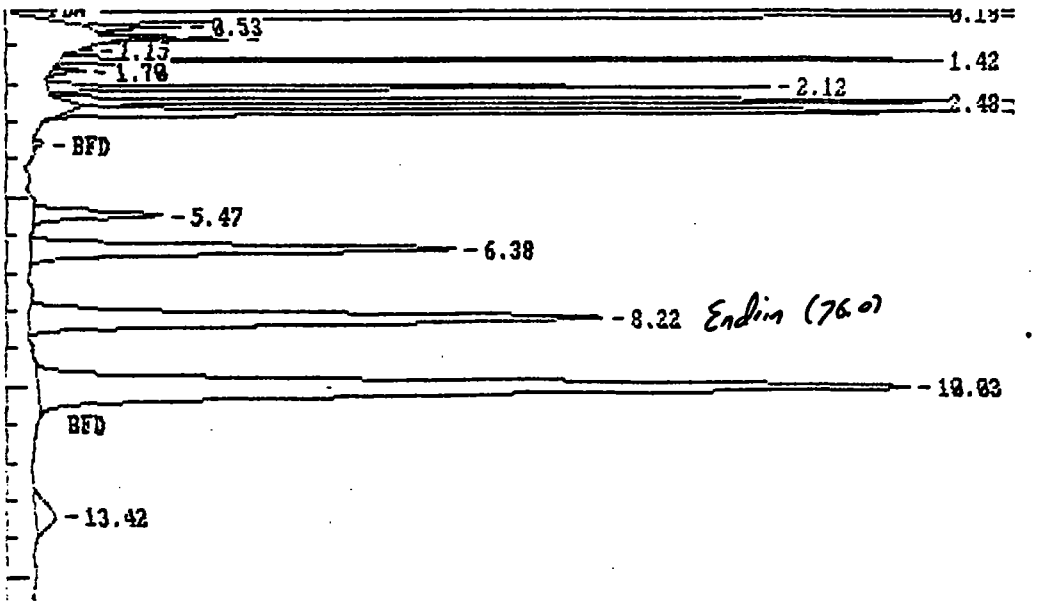
```
******************** 05-13-1988 08:08:23 Version 4.1 ********************
* Sample Name: 59434 INDIVIDUAL MIX B            Data File: J:BB13337     *
* Date: 05-13-1988 08:08:04 Method: M:BBPI                                *
* Interface: 12  Cycle#:  37   Operator SS  Channel#: 0    Vial#: N.A.    *
* 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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	965381	24.5602	1	220819	82.238	4.4
2	0.53	7837	0.1994	1	1688	0.668	4.6
3	0.75	1468	0.0373	1	585	0.125	2.5
4	0.83	5240	0.1333	1	1788	0.446	2.9
5	1.15	1053	0.0268	1	276	0.090	3.8
6	1.42	70687	1.7983	1	16754	6.022	4.2
7	1.70	4547	0.1157	1	658	0.387	6.9
8	2.12	83520	2.1248	1	13670	7.115	6.1
9	2.48	128686	3.2739	1	20690	10.962	6.2
10	2.77	137872	3.5076	1	18718	11.745	7.4
11	3.60	1607	0.0409	1	190	0.137	8.4
12	5.47	32833	0.8353	1	2395	2.797	13.7
13	6.38	130875	3.3296	1	7981	11.149	16.4
14	8.22	220229	5.6028	1	10852	18.761	20.3
15	10.03	417820	10.6297	1	16517	35.593	25.3
16	13.42	15821	0.4025	1	371	1.348	42.6
17	16.78	497018	12.6446	1	11799	42.339	42.1
18	20.47	34291	0.8724	1	733	2.921	46.8
19	22.50	1173890	29.8649	1	20262	100.000	57.9

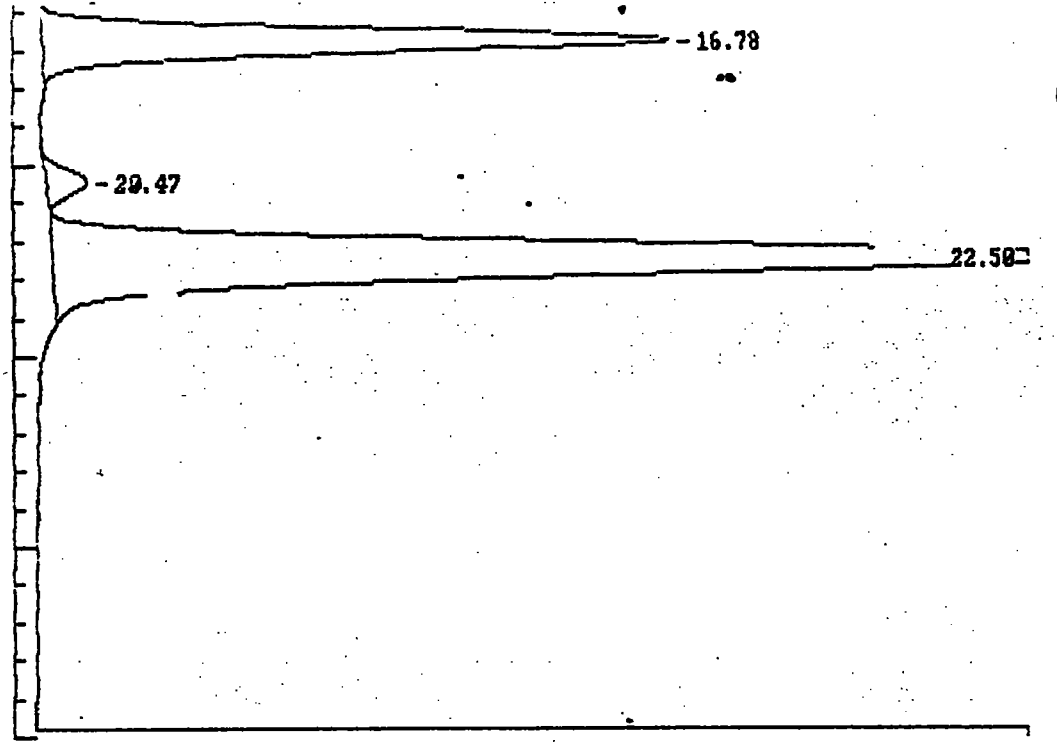
SS 5/19/88

Total Area: 3930672 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13337.ATB
Data File = J:BB13337.PTS Printed on 05-13-1988 at 08:08:57
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



01140



INDIVIDUAL MIX A

Component	Concentration ug/ml	Nanograms Col. A - 2 ul	Injected Col. B - 4 ul
Lindane (gamma-BHC)	0.0035	0.0070	0.014
Heptachlor	0.0075	0.015	0.030
Aldrin	0.0075	0.015	0.030
Heptachlor Epoxide	0.010	0.020	0.040
Endosulfan A	0.015	0.030	0.060
Dieldrin	0.0075	0.015	0.030
pp'-DDT	0.025	0.050	0.10
Endrin Aldehyde	0.030	0.060	0.12
Endosulfan B	0.025	0.050	0.10
Methoxychlor	0.050	0.10	0.20
DIbutylchlorendate	0.050	0.10	0.20

INDIVIDUAL MIX B

Component	Concentration ug/ml	Nanograms Col. A - 2 ul	Injected Col. B - 4 ul
alpha-BHC	0.0035	0.0070	0.014
beta-BHC	0.0075	0.015	0.030
delta-BHC	0.0075	0.015	0.030
Aldrin	0.0075	0.015	0.030
pp'-DDE	0.0075	0.015	0.030
Endrin	0.015	0.030	0.060
pp'-DDD	0.025	0.050	0.10
Endosulfan Sulfate	0.038	0.076	0.15
Endrin Ketone	0.020	0.040	0.080
DIbutylchlorendate	0.050	0.10	0.20

STANDARD: INDIVIDUAL MIX A 05/23/88 LIBRARY: L:DR101B

01142

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
002	LINDANE	1.967	1.967	4	43894	.0035	ug/
005	HEPTACHLOR	3.267	3.267	6	118356	.0075	ug/
006	ALDRIN	4.100	4.100	7	91456	.0075	ug/
007	HEPTACHLOR EPOXIDE	5.067	5.067	8	147174	.0100	ug/
010	ENDOSULFAN-A	6.367	6.367	9	165696	.0150	ug/
012	DIELDRIN	7.483	7.483	10	88264	.0075	ug/
015	ENDOSULFAN-B	8.567	8.567	11	197396	.0250	ug/
016	ENDRIN ALDEHYDE	9.550	9.550	12	237593	.0300	ug/
018	p,p'-DDT	12.767	12.767	13	212779	.0250	ug/
019	METHOXYCHLOR	19.500	19.500	14	274498	.0500	ug/
047	DBC (surrogate)	26.800	26.800	15	557151	.0500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: INDIVIDUAL MIX A 05/23/88 LIBRARY: L:DRMIXB

01143

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
002	LINDANE	~1.850	~1.850	6	~114235	.0035	ug/
005	HEPTACHLOR	~2.300	~2.300	7	~320468	.0075	ug/
006	ALDRIN	~2.800	~2.800	9	~196668	.0075	ug/
007	HEPTACHLOR EPOXIDE	~4.367	~4.367	13	~291276	.0100	ug/
010	ENDOSULFAN-A	~5.550	~5.550	14	~339057	.0150	ug/
012	DIELDRIN	~6.833	~6.833	15	~217012	.0075	ug/
015	ENDOSULFAN-B	~10.200	~10.200	17	~569662	.0250	ug/
016	ENDRIN ALDEHYDE	~13.650	~13.650	19	~679220	.0300	ug/
018	p,p'-DDT	~12.267	~12.267	18	~564678	.0250	ug/
019	METHOXYCHLOR	~24.117	~24.117	22	~366740	.0500	ug/
047	DBC (surrogate)	~22.817	~22.817	21	~617001	.0500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

DLC 05/23/88

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

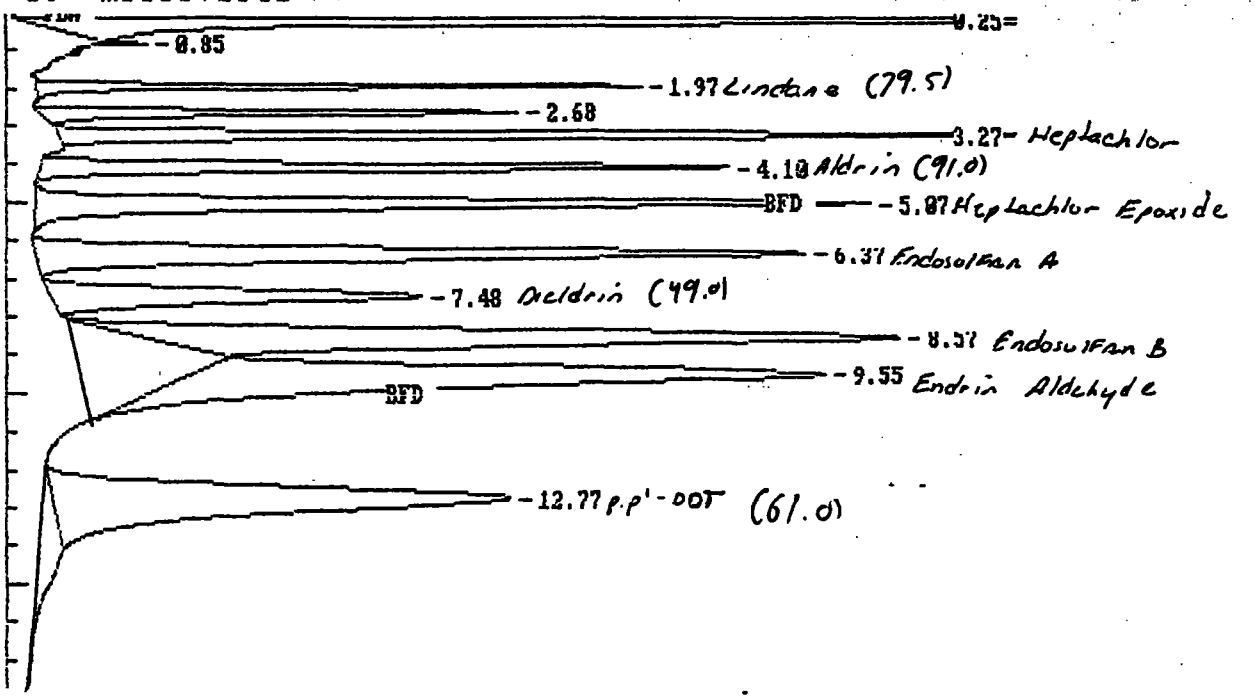
01144

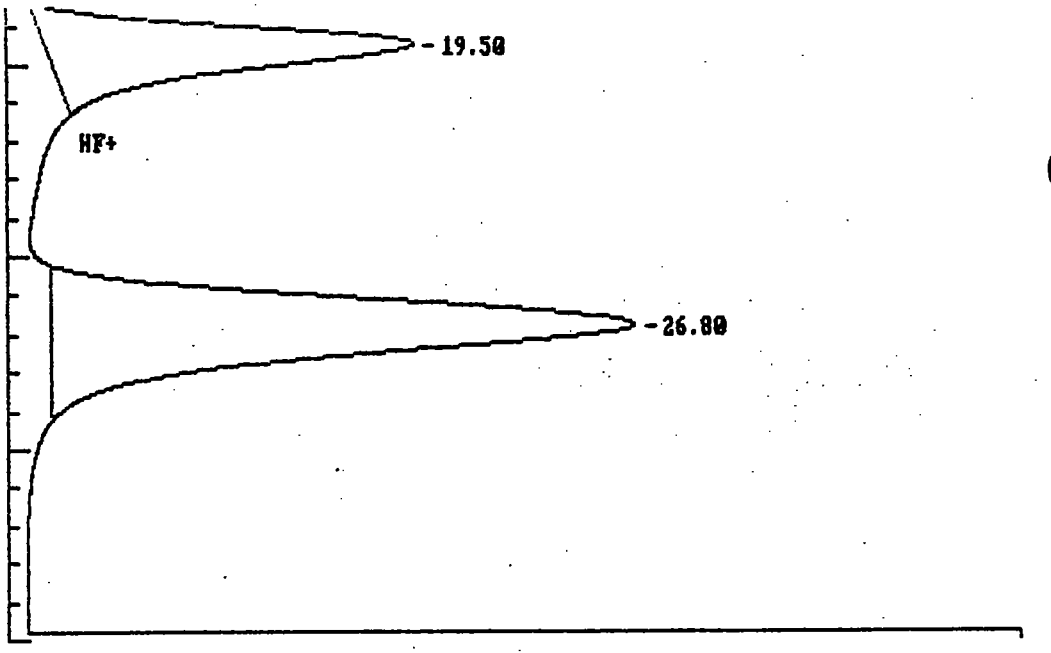
```
******************** 05-19-1988 12:32:35 Version 4.1 ********************
* Sample Name: INDIVIDUAL MIX A                    Data File: J:AB1404      *
* Date: 05-19-1988 12:32:19 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  4    Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                  *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*           Detector 0: ECD                  Detector 1:                    *
* Misc. Information: 4 UL INJECTION                    LPT1:          *    *
*****************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.25	888871	28.9363	1	198693	100.000	4.5
2	0.85	1899	0.0618	1	506	0.214	3.7
4	1.97	43894	1.4289	1	5997	4.938	7.3
5	2.68	46793	1.5233	1	4712	5.264	9.9
6	3.27	118356	3.8530	1	10836	13.315	10.9
7	4.10	91456	2.9773	1	6849	10.289	13.4
8	5.07	147174	4.7911	1	8288	16.557	17.8
9	6.37	165696	5.3941	1	7638	18.641	21.7
10	7.48	88264	2.8733	1	3669	9.930	24.1
11	8.57	197396	6.4260	1	7439	22.207	26.5
12	9.55	237593	7.7346	1	6323	26.730	37.6
13	12.77	212779	6.9268	1	4515	23.938	47.1
14	19.50	274498	8.9360	1	3614	30.882	76.0
15	26.80	557151	18.1375	1	5782	62.681	96.4

Total Area: 3071820 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1404.ATB
Data File = J:AB1404.PTS Printed on 05-19-1988 at 12:33:02
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01145

DLC 05/23/88

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

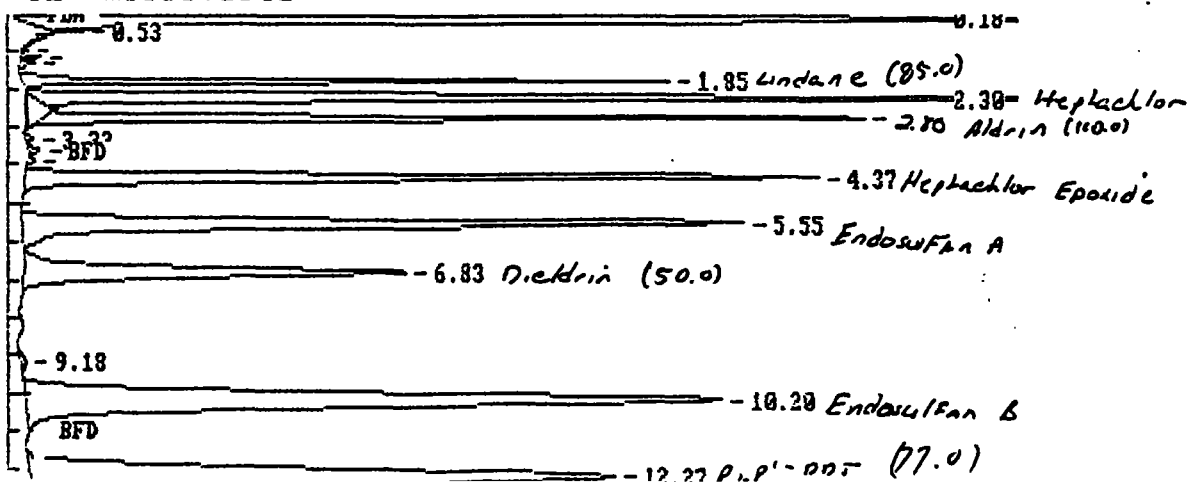
01146

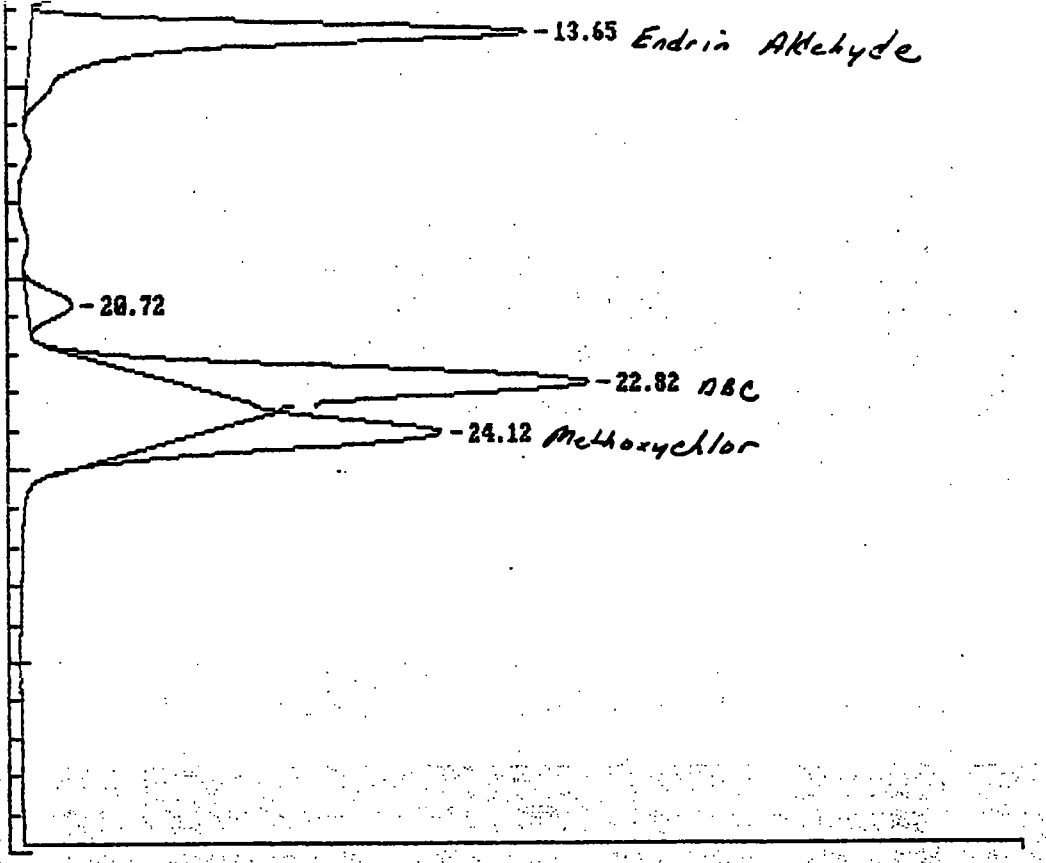
```
******************* 05-19-1988 12:26:39 Version 4.1 *********************
* Sample Name: INDIVIDUAL MIX A                    Data File: J:BB1404      *
* Date: 05-19-1988 12:26:23 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  4    Operator SS  Channel#: 0    Vial#: N.A.      *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1671862	27.6953	1	382716	100.000	4.4
2	0.53	2270	0.0376	1	1010	0.136	2.2
3	1.00	1130	0.0187	1	197	0.068	5.7
4	1.18	2902	0.0481	1	633	0.174	4.6
5	1.35	3180	0.0527	1	457	0.190	7.0
6	1.85	114235	1.8924	1	20620	6.833	5.5
7	2.30	320468	5.3087	1	37147	19.168	8.6
9	2.80	196668	3.2579	1	26215	11.763	7.5
10	3.33	2322	0.0385	1	241	0.139	9.7
11	3.63	2980	0.0494	1	357	0.178	8.4
12	3.93	2219	0.0368	1	229	0.133	9.7
13	4.37	291276	4.8251	1	25296	17.422	11.5
14	5.55	339057	5.6167	1	22989	20.280	14.7
15	6.83	217012	3.5949	1	12101	12.980	17.9
16	9.18	3598	0.0596	1	158	0.215	22.8
17	10.20	569662	9.4367	1	22199	34.073	25.7
18	12.27	564678	9.3542	1	18652	33.775	30.3
19	13.65	679220	11.2516	1	15605	40.627	43.5
20	20.72	68161	1.1291	1	1404	4.077	48.6
21	22.82	617001	10.2209	1	12846	36.905	48.0
22	24.12	366740	6.0752	1	7735	21.936	47.4

Total Area: 6036638 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1404.ATB
Data File = J:BB1404.PTS Printed on 05-19-1988 at 12:27:07
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts




13.65 Endrin Aldehyde
20.72
22.82 DBC
24.12 Methoxychlor

STANDARD: INDIVIDUAL MIX B 05/23/88 LIBRARY: L:DR101B

01148

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
001	alpha-BHC	1.650	1.650	4	16405	.0035	ug/
003	beta-BHC	1.783	1.783	5	19775	.0075	ug/
004	delta-BHC	2.050	2.050	6	36186	.0075	ug/
006	ALDRIN	4.100	4.100	9	77316	.0075	ug/
011	p,p'-DDE	7.583	7.583	11	40948	.0075	ug/
013	ENDRIN	8.400	8.400	12	91319	.0150	ug/
014	p,p'-DDD	9.650	9.650	13	133023	.0250	ug/
017	ENDOSULFAN SULFATE	11.183	11.183	14	179759	.0380	ug/
048	ENDRIN KETONE	14.450	14.450	15	195445	.0200	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: INDIVIDUAL MIX B 05/23/88 LIBRARY: L:DRMIXB

01149

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
001	alpha BHC	1.433	1.433	6	83413	.0035	ug/
003	beta-BHC	2.150	2.150	8	102690	.0075	ug/
004	delta-BHC	2.517	2.517	9	148393	.0075	ug/
006	ALDRIN	2.800	2.800	10	155982	.0075	ug/
011	p,p'-DDE	6.483	6.483	14	151774	.0075	ug/
013	ENDRIN	8.350	8.350	15	238867	.0150	ug/
014	p,p'-DDD	10.183	10.183	16	478884	.0250	ug/
017	ENDOSULFAN SULFATE	17.033	17.033	18	571490	.0380	ug/
048	ENDRIN KETONE	22.833	22.833	20	1380743	.0200	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

DLR 05/23/88

01150

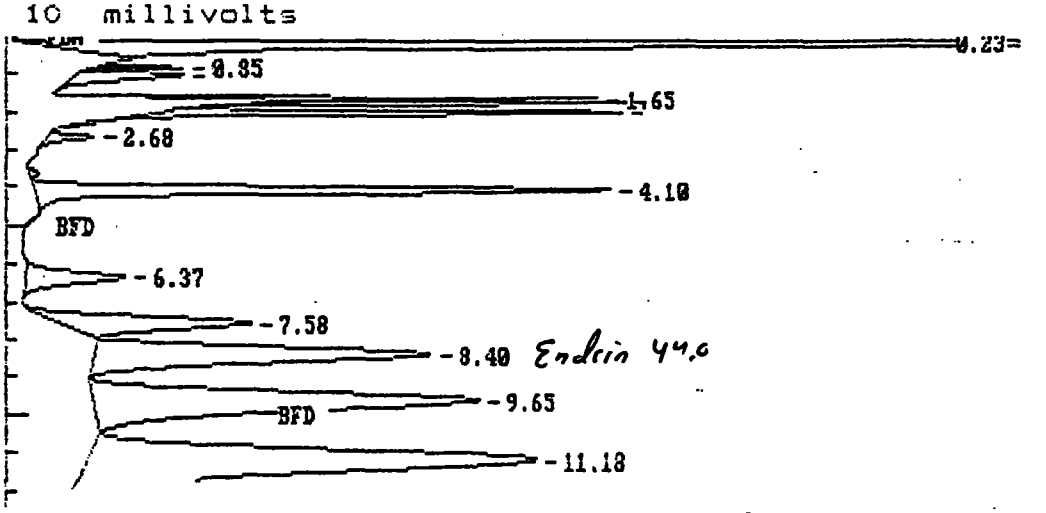
******** AREA PERCENT REPORT ********

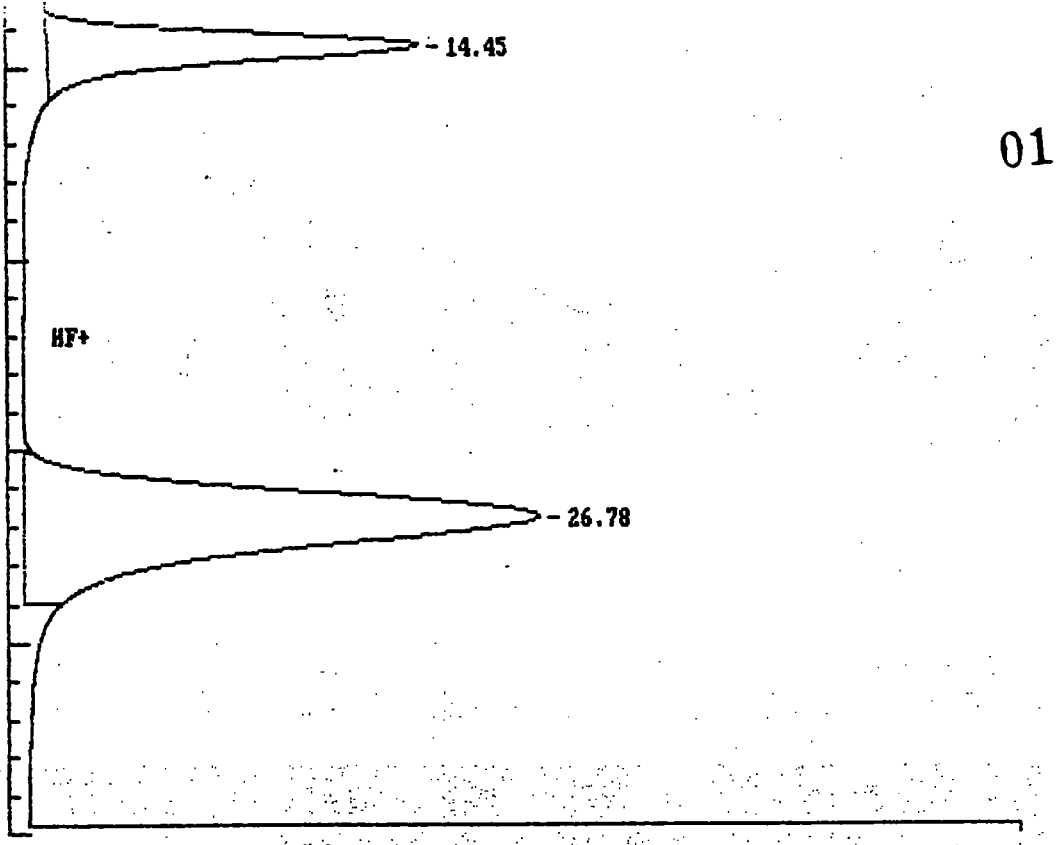
```
******************* 05-19-1988 14:22:51 Version 4.1 *********************
* Sample Name: INDIVIDUAL MIX B                    Data File: J:AB1405      *
* Date: 05-19-1988 14:22:36 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  5    Operator SS  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*****************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GLASS  *
*              Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                       *
*             Detector 0: ECD                  Detector 1:                 *
* Misc. Information: 4 UL INJECTION                        LPT1:        *  *
*****************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	633901	31.8434	1	146350	100.000	4.3
2	0.85	3079	0.1547	1	875	0.486	3.5
3	1.03	12914	0.6487	1	1043	2.037	12.4
4	1.65	16405	0.8241	1	3774	2.588	4.3
5	1.78	19775	0.9934	1	3496	3.120	5.7
6	2.05	36186	1.8178	1	4732	5.708	7.6
7	2.68	4666	0.2344	1	461	0.736	10.1
9	4.10	77316	3.8839	1	5698	12.197	13.6
10	6.37	20452	1.0274	1	960	3.226	21.3
11	7.58	40948	2.0570	1	1810	6.460	22.6
12	8.40	91319	4.5873	1	3306	14.406	27.6
13	9.65	133023	6.6823	1	3789	20.985	35.1
14	11.18	179759	9.0300	1	4428	28.358	40.6
15	14.45	195445	9.8180	1	3665	30.832	53.3
16	26.78	525494	26.3977	1	5118	82.898	102.7

Total Area: 1990681 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1405.ATB
Data File = J:AB1405.PTS Printed on 05-19-1988 at 14:23:17
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01151

DLR 05/23/89

01152

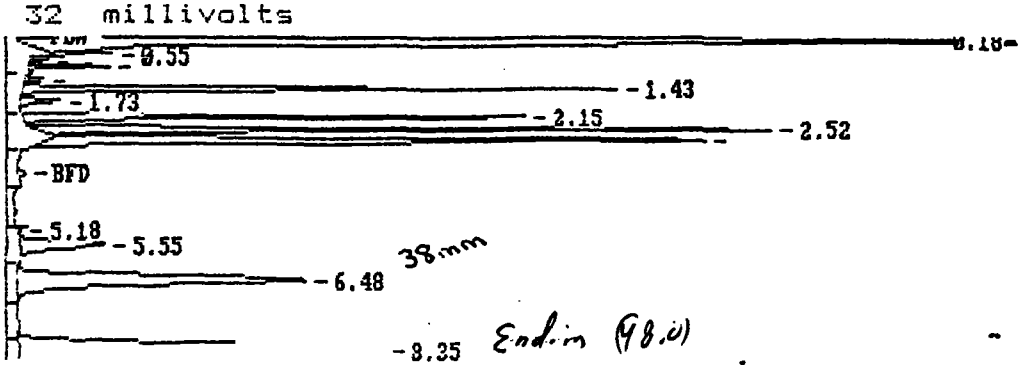
******** AREA PERCENT REPORT ********

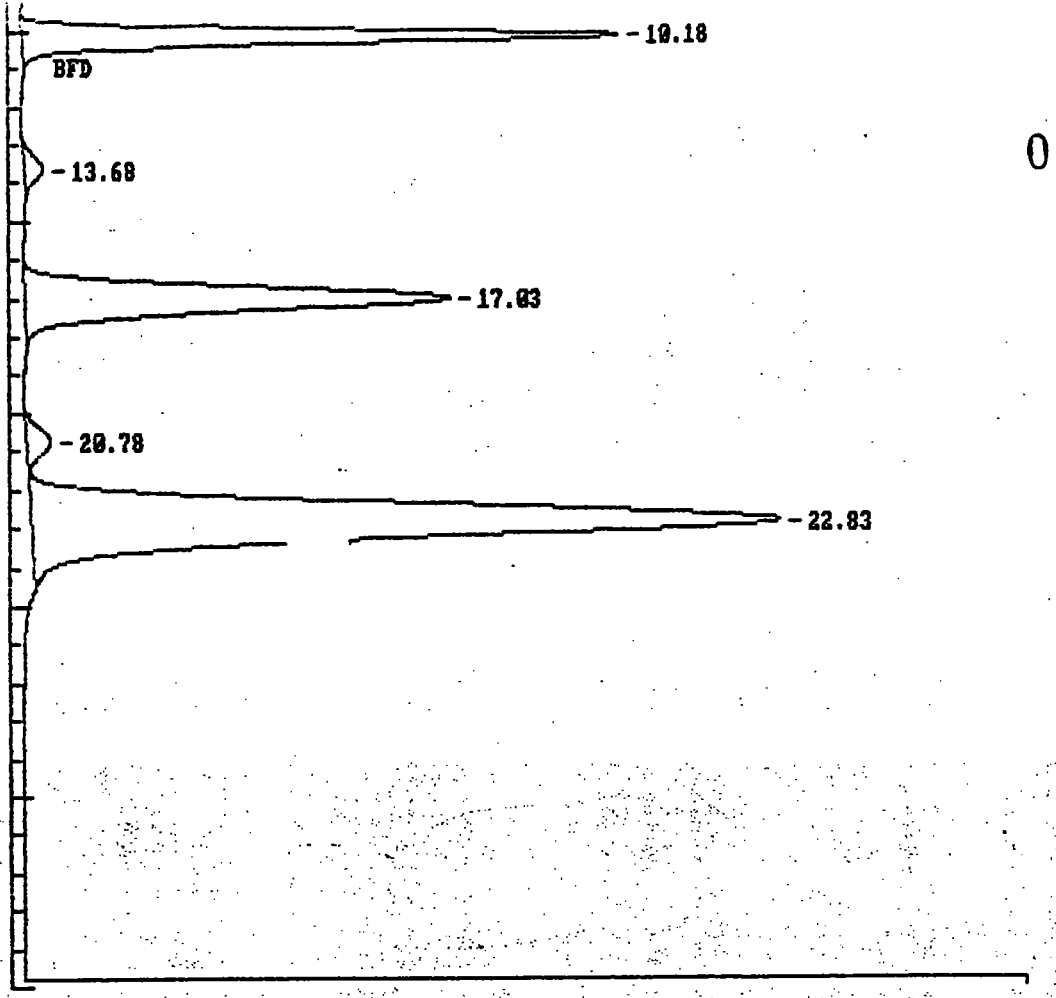
```
******************** 05-19-1988 14:20:25 Version 4.1 ********************
* Sample Name: INDIVIDUAL MIX B                    Data File: J:BB1405      *
* Date: 05-19-1988 14:20:09 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  5    Operator SS  Channel#: 0    Vial#: N.A.      *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1230070	26.3401	1	282840	89.088	4.3
2	0.55	6750	0.1445	1	2140	0.489	3.2
3	0.68	2307	0.0494	1	546	0.167	4.2
4	0.85	8417	0.1802	1	2529	0.610	3.3
5	1.18	2635	0.0564	1	607	0.191	4.3
6	1.43	83413	1.7862	1	18993	6.041	4.4
7	1.73	8703	0.1864	1	1266	0.630	6.9
8	2.15	102690	2.1990	1	15991	7.437	6.4
9	2.52	148393	3.1776	1	23267	10.747	6.4
10	2.80	155981	3.3401	1	21085	11.297	7.4
11	3.65	2055	0.0440	1	237	0.149	8.7
12	5.18	1052	0.0225	1	105	0.076	10.0
13	5.55	35679	0.7640	1	2628	2.584	13.6
14	6.48	151774	3.2500	1	9159	10.992	16.6
15	8.35	238867	5.1150	1	11591	17.300	20.6
16	10.18	478884	10.2546	1	18804	34.683	25.5
17	13.68	25532	0.5467	1	579	1.849	44.1
18	17.03	571490	12.2376	1	13396	41.390	42.7
19	20.78	34520	0.7392	1	732	2.500	47.2
20	22.83	1380743	29.5665	1	23710	100.000	58.2

Total Area: 4669954 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1405.ATB
Data File = J:BB1405.PTS Printed on 05-19-1988 at 14:20:52
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts





01153

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

01154

59444 Individual mix A

RESULT FILE: J:AB14025 05/23/88 LIBRARY: L:DR101

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
002	LINDANE	1.967	1.967	5	50776	.0040	ug/
005	HEPTACHLOR	3.267	3.267	7	129501	.0082	ug/
006	ALDRIN	4.100	4.100	8	99280	.0096	ug/
007	HEPTACHLOR EPOXIDE	5.067	5.067	9	156210	.0106	ug/
009	alpha-CHLORDANE	6.517	6.367	10	178584	.4268	ug/
010	ENDOSULFAN-A	6.367	6.367	10	178584	.0162	ug/
011	p,p'-DDE	7.583	7.483	11	95338	.0175	ug/
012	DIELDRIN	7.483	7.483	11	95338	.0081	ug/
013	ENDRIN	8.400	8.567	12	211256	.0347	ug/
014	p,p'-DDD	9.650	9.550	13	256676	.0482	ug/
015	ENDOSULFAN-B	8.567	8.567	12	211256	.0268	ug/
016	ENDRIN ALDEHYDE	9.550	9.550	13	256676	.0324	ug/
018	p,p'-DDT	12.767	12.767	14	233304	.0274	ug/
019	METHOXYCHLOR	19.500	19.517	15	309506	.0564	ug/
022	TOXAPHENE (peak 3)	12.467	12.767	14	233304	.5004	ug/m
033	AROCLOR 1248(peak 2)	4.050	4.100	8	99280	.6945	ug/
036	AROCLOR 1254(peak 2)	6.317	6.367	10	178584	.2314	ug/
038	AROCLOR 1254(peak 4)	9.400	9.550	13	256676	.3096	ug/
040	AROCLOR 1260(peak 1)	9.333	9.550	13	256676	.7578	ug/
047	DBC (surrogate)	26.800	26.800	16	602673	.0541	ug/
051	HEPTACHLOR IN TC	3.267	3.267	7	129501	.1943	ug/
053	CHLOROBENZILATE	9.580	9.550	13	256676	.0000	ug/

01155

59444 Individual Mix A

RESULT FILE: J:BB14025 05/23/88 LIBRARY: L:DRMIX

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
002	LINDANE	1.850	1.850	7	115137	.0035	ug/
004	delta-BHC	2.517	2.567	9	656	.0000	ug/
005	HEPTACHLOR	2.300	2.300	8	322344	.0075	ug/
006	ALDRIN	2.800	2.800	10	202976	.0098	ug/
007	HEPTACHLOR EPOXIDE	4.367	4.383	13	289091	.0099	ug/
010	ENDOSULFAN-A	5.550	5.567	14	344747	.0153	ug/
012	DIELDRIN	6.833	6.850	15	221796	.0077	ug/
014	p,p'-DDD	10.183	10.217	17	581437	.0304	ug/
015	ENDOSULFAN-B	10.200	10.217	17	581437	.0255	ug/
016	ENDRIN ALDEHYDE	13.650	13.683	19	682172	.0301	ug/
018	p,p'-DDT	12.267	12.300	18	586578	.0260	ug/
019	METHOXYCHLOR	24.117	24.183	22	391331	.0534	ug/
020	TOXAPHENE (peak 1)	6.850	6.850	15	221796	.5974	ug/
021	TOXAPHENE (peak 2)	10.450	10.217	17	581437	1.0182	ug/m
023	AROCLOR 1016(peak 1)	1.300	1.350	6	2712	.0051	ug/m
025	AROCLOR 1016(peak 3)	2.267	2.300	8	322344	.1802	ug/
028	AROCLOR 1232(peak 2)	2.267	2.300	8	322344	.4118	ug/
031	AROCLOR 1242(peak 3)	2.267	2.300	8	322344	.2296	ug/
032	AROCLOR 1248(peak 1)	2.267	2.300	8	322344	.2571	ug/
034	AROCLOR 1248(peak 3)	4.450	4.383	13	289091	.1861	ug/
037	AROCLOR 1254(peak 3)	7.067	6.850	15	221796	.1840	ug/
039	AROCLOR 1254(peak 5)	10.450	10.217	17	581437	.4080	ug/
042	AROCLOR 1260(peak 3)	9.300	9.217	16	4554	.0027	ug/
043	AROCLOR 1260(peak 4)	10.467	10.217	17	581437	.4327	ug/
044	AROCLOR 1260(peak 5)	11.950	12.300	18	586578	.3494	ug/
047	DBC (surrogate)	22.817	22.867	21	624470	.0506	ug/
048	ENDRIN KETONE	22.833	22.867	21	624470	.0090	ug/
049	ISODRIN	3.683	3.650	12	3747	.0002	ug/
051	HEPTACHLOR IN TC	2.300	2.300	8	322344	.2835	ug/
052	DIALLATE	1.230	1.183	5	2093	.0000	ug/

594KU Individual mx A

01156

COLUMN 1: J:AB14025
COLUMN 2: J:BB14025

05/23/8
UNITS ON AMOUNT: ug/m

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUM AVERAG
002	LINDANE	.0040	.0	.0035	.0	N
005	HEPTACHLOR	.0082	.0	.0075	.0	.007
006	ALDRIN	.0096	.0	.0098	.0	.009
007	HEPTACHLOR EPOXIDE	.0106	.0	.0099	.4	.010
010	ENDOSULFAN-A	.0162	.0	.0153	.3	.015
012	DIELDRIN	.0081	.0	.0077	.2	.007
014	p,p'-DDD	.0482	1.0	.0304	.3	N
015	ENDOSULFAN-B	.0268	.0	.0255	.2	.026
016	ENDRIN ALDEHYDE	.0324	.0	.0301	.2	.031
018	p,p'-DDT	.0274	.0	.0260	.3	.026
019	METHOXYCHLOR	.0564	.1	.0534	.3	.054
047	DBC (surrogate)	.0541	.0	.0506	.2	.052
051	HEPTACHLOR IN-TC	.1943	.0	.2835	.0	N

Del 05/23/88

01157

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

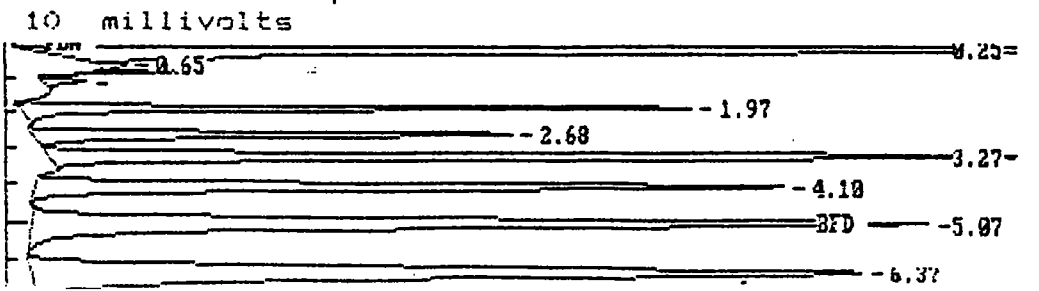
********** 05-20-1988 03:26:07 Version 4.1 **********
* Sample Name: 59444 INDIVIDUAL MIX A Data File: J:AB14025 *
* Date: 05-20-1988 03:25:51 Method: M:ABPI *
* Interface: 10 Cycle#: 25 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****

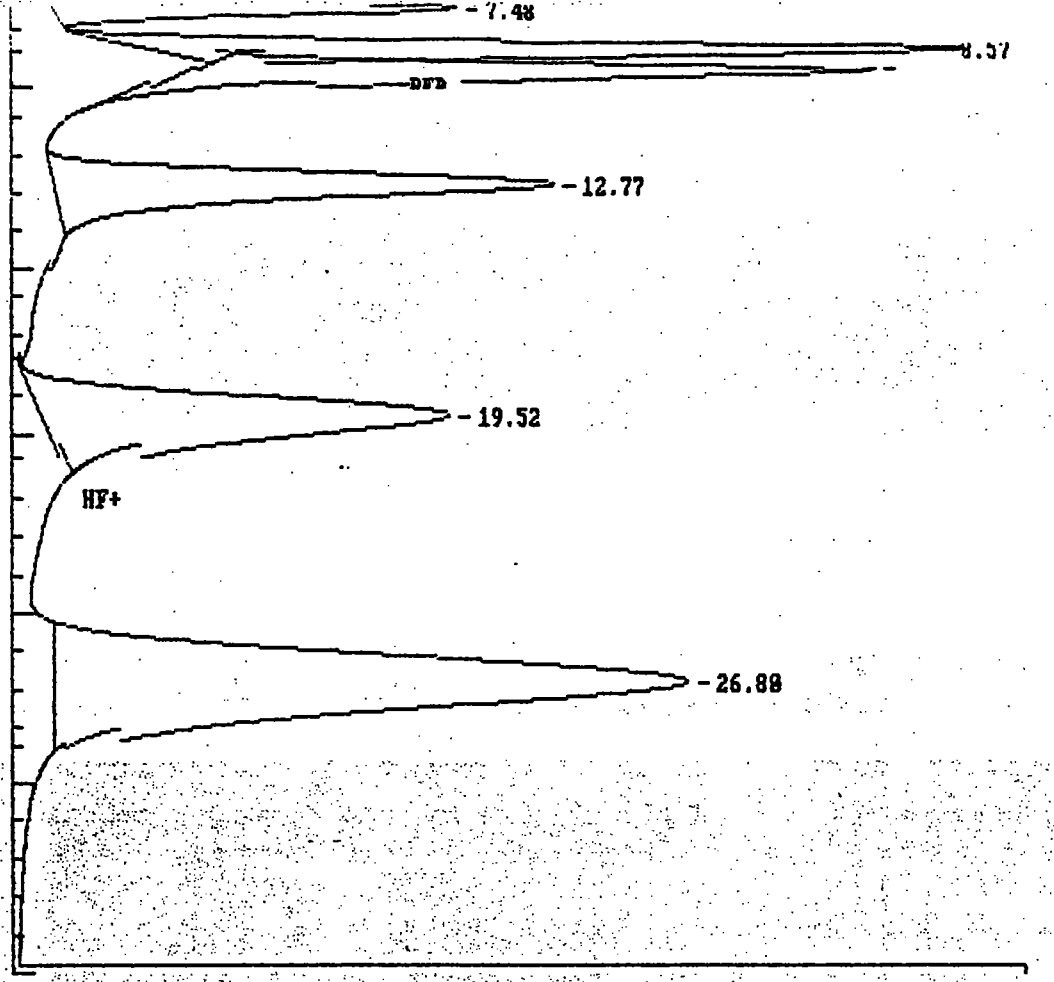
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.25	913640	27.7505	1	204165	100.000	4.5
2	0.65	1615	0.0490	1	267	0.177	6.1
3	0.85	3213	0.0976	1	712	0.352	4.5
4	1.10	3198	0.0971	1	423	0.350	7.6
5	1.97	50776	1.5422	1	6674	5.558	7.6
6	2.68	47569	1.4448	1	4754	5.206	10.0
7	3.27	129501	3.9334	1	11813	14.174	11.0
8	4.10	99280	3.0155	1	7451	10.866	13.3
9	5.07	156210	4.7447	1	8921	17.098	17.5
10	6.37	178584	5.4242	1	8252	19.546	21.6
11	7.48	95338	2.8958	1	3973	10.435	24.0
12	8.57	211256	6.4166	1	8013	23.122	26.4
13	9.55	256676	7.7962	1	6786	28.094	37.8
14	12.77	233304	7.0863	1	4949	25.536	47.1
15	19.52	309506	9.4008	1	4014	33.876	77.1
16	26.80	602673	18.3053	1	6280	65.964	96.0

Total Area: 3292337 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14025.ATB
Data File = J:AB14025.PTS Printed on 05-20-1988 at 03:26:33
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01158

LE 05/23/88

01159

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

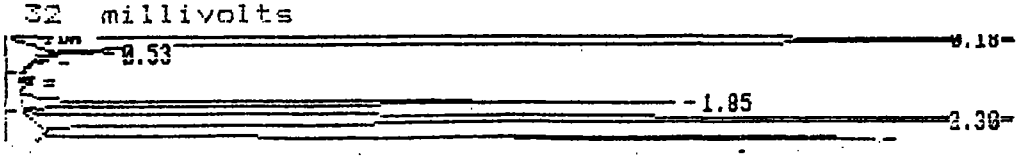
********** 05-20-1988 03:11:41 Version 4.1 **********
* Sample Name: 59444 INDIVIDUAL MIX A Data File: J:BB14025 *
* Date: 05-20-1988 03:11:25 Method: M:BBPI *
* Interface: 12 Cycle#: 25 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument 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 *
****

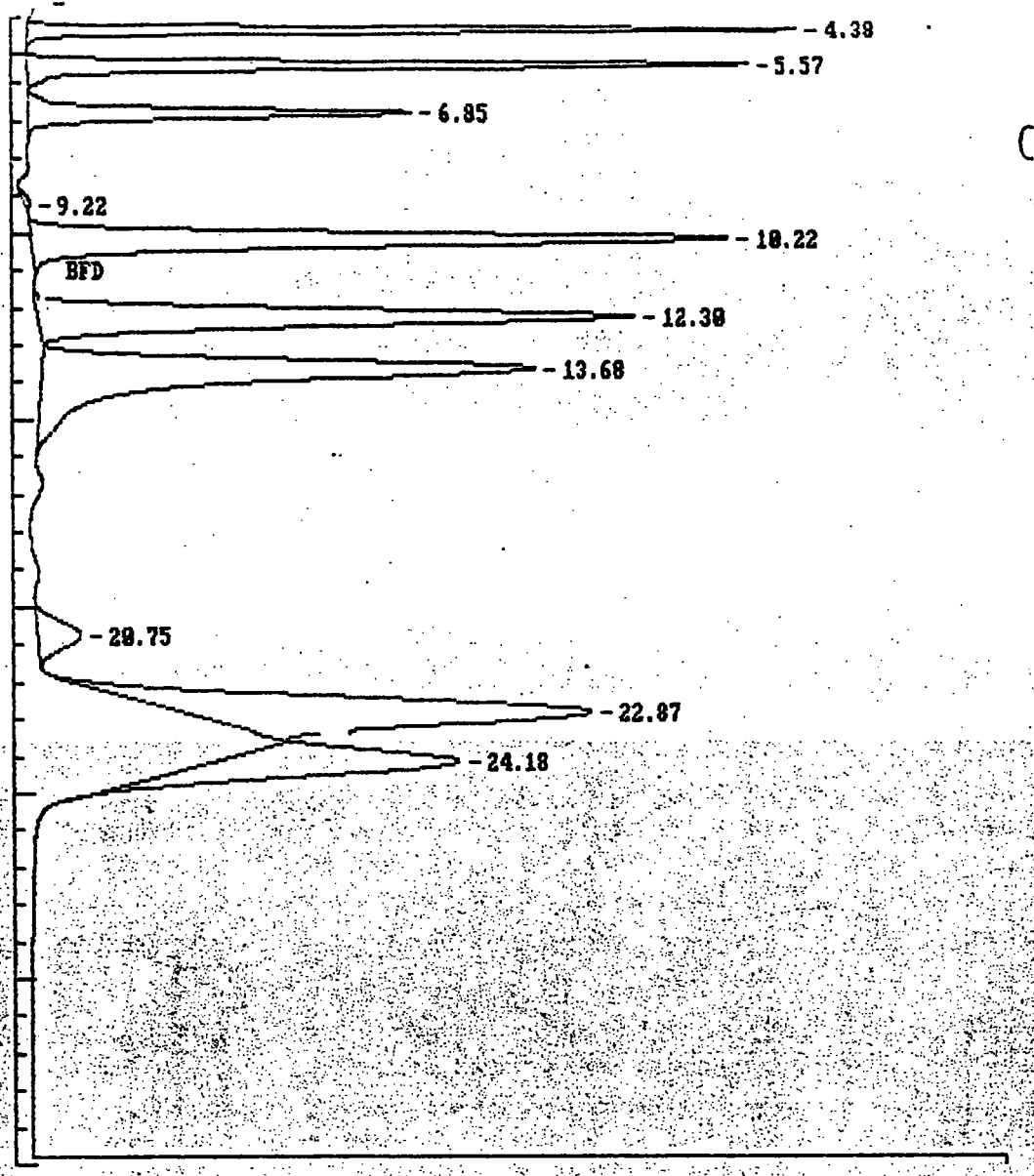
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1679674	27.4020	1	382330	100.000	4.4
2	0.53	4556	0.0743	1	1377	0.271	3.3
3	0.68	2349	0.0383	1	479	0.140	4.9
5	1.18	2093	0.0341	1	470	0.125	4.5
6	1.35	2712	0.0442	1	444	0.161	6.1
7	1.85	115137	1.8783	1	20864	6.855	5.5
8	2.30	322344	5.2587	1	38107	19.191	8.5
10	2.80	202976	3.3113	1	26775	12.084	7.6
11	3.35	1528	0.0249	1	161	0.091	9.5
12	3.65	3747	0.0611	1	415	0.223	9.0
13	4.38	289091	4.7162	1	24988	17.211	11.6
14	5.57	344747	5.6242	1	23396	20.525	14.7
15	6.85	221796	3.6183	1	12365	13.205	17.9
16	9.22	4554	0.0743	1	173	0.271	26.3
17	10.22	581437	9.4855	1	22637	34.616	25.7
18	12.30	586578	9.5693	1	19348	34.922	30.3
19	13.68	682172	11.1289	1	15987	40.613	42.7
20	20.75	66468	1.0843	1	1364	3.957	48.7
21	22.87	624470	10.1875	1	13051	37.178	47.8
22	24.18	391331	6.3841	1	8244	23.298	47.5

Total Area: 6129760 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14025.ATB
Data File = J:BB14025.PTS Printed on 05-20-1988 at 03:12:08
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts





C1160

01161

PESTICIDE QUANTITATION STANDARDS

STANDARD: TOXAPHENE 05/13/90 LIBRARY: [illegible]

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
020	TOXAPHENE (peak 1)	7.193	7.193	7	15966	.2500	ug/ml
021	TOXAPHENE (peak 2)	9.250	9.250	9	69315	.2500	ug/ml
022	TOXAPHENE (peak 3)	12.433	12.433	11	85075	.2500	ug/ml

01162

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: TOXAPHENE 05/12/89 LIBRARY: LICOMIXB

01163

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
020	TOXAPHENE (peak 1)	6.783	6.783	17	74817	.2500	ug/ml
021	TOXAPHENE (peak 2)	10.350	10.350	22	113589	.2500	ug/ml
022	TOXAPHENE (peak 3)	12.650	12.650	24	184761	.2500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

********** 05-12-1988 11:46:53 Version 4.1 **********

* Sample Name: TOXAPHENE 2.25 UG/ML Data File: J:AB1336 *
* Date: 05-12-1988 11:46:37 Method: M:ABPI *
* Interface: 10 Cycle#: 6 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *

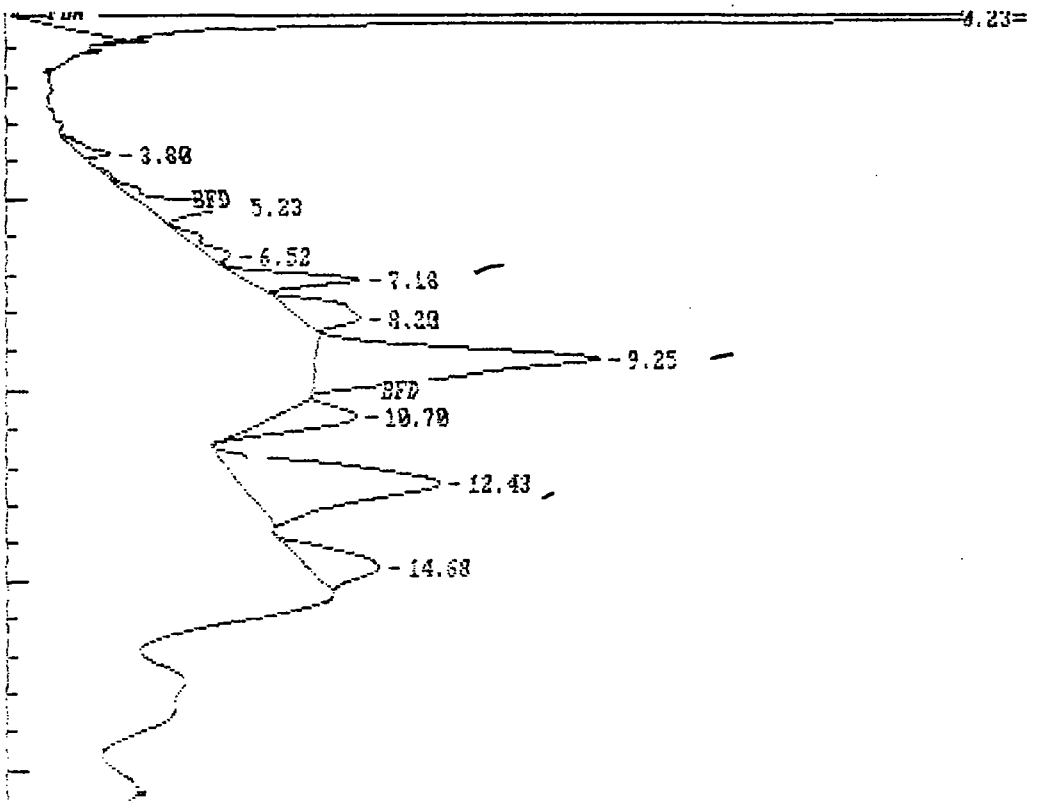
Starting Delay: 0.00 Run Time: 0.00

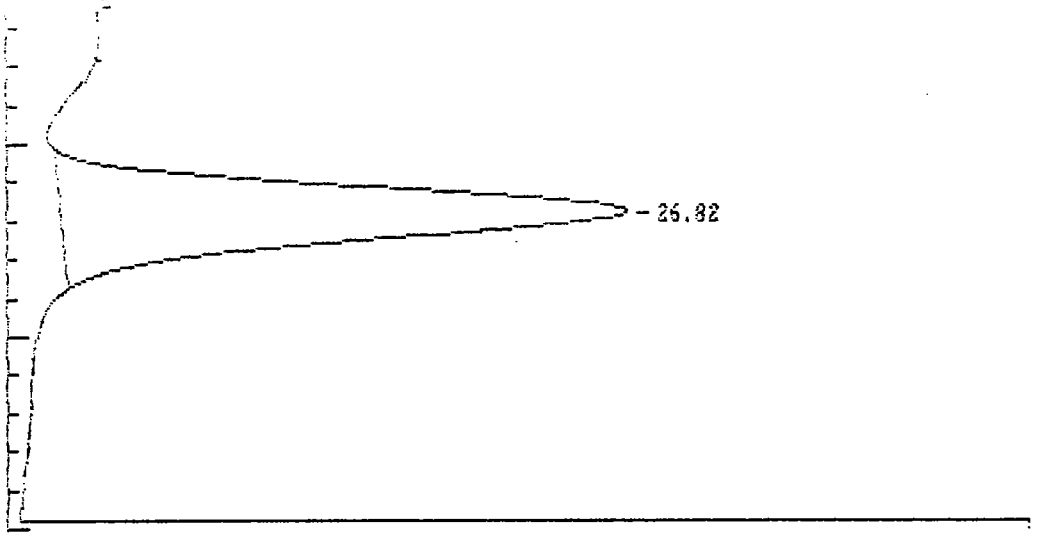
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	464863	42.1475	1	107956	100.000	4.3
4	3.90	3828	0.3471	1	213	0.823	18.0
5	5.23	15410	1.3972	1	508	3.315	30.3
6	6.52	4386	0.3977	1	137	0.944	32.0
7	7.18	15966	1.4475	1	766	3.434	20.8
8	8.20	16799	1.5231	1	401	3.614	41.9
9	9.25	89315	8.0979	1	1973	19.213	45.3
10	10.70	23508	2.1314	1	569	5.057	41.3
11	12.43	85075	7.7134	1	1372	18.301	62.0
12	14.68	25031	2.2694	1	487	5.384	51.3
13	26.82	358765	32.5279	1	3906	77.176	91.8

SS
5/10/88

Total Area: 1102944 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1336.ATB
Data File = J:AB1336.FTS Printed on 05-12-1988 at 11:47:19
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





01165

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

01166

********** 05-12-1988 11:40:49 Version 3.1 **********

* Sample Name: TOXAPHENE 0.25 UG/ML Data File: J:BB1336 *
* Date: 05-12-1988 11:40:31 Method: M:88P1 *
* Interface: 12 Cycle#: 4 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 *

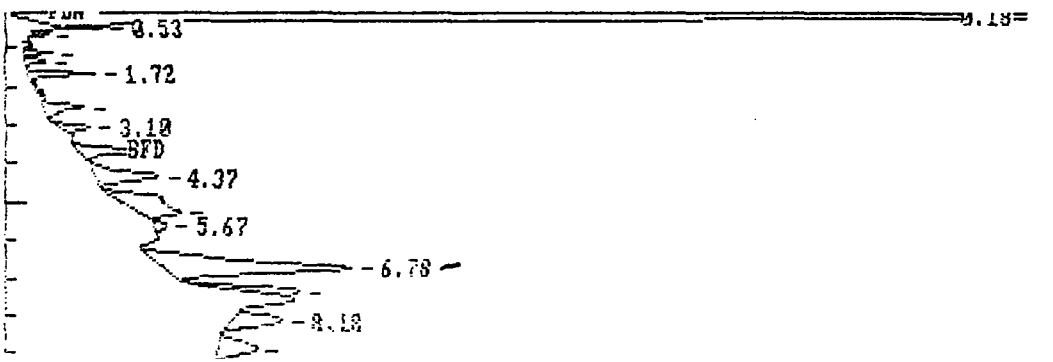
Starting Delay: 0.00 Run Time: 0.00

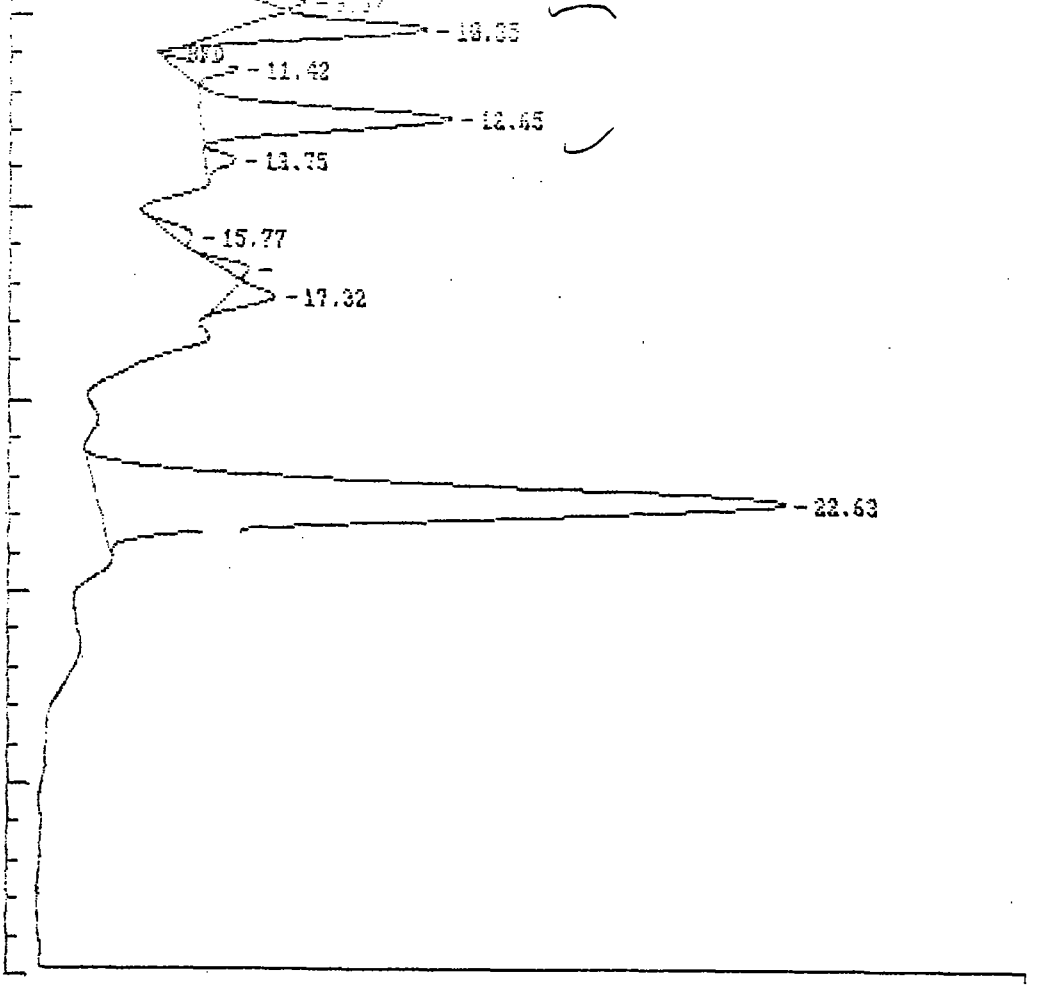
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	912733	39.3337	1	212961	100.000	4.3
2	0.53	2946	0.1270	1	918	0.323	3.2
3	0.68	1189	0.0512	1	326	0.130	3.6
5	1.17	2368	0.1020	1	549	0.259	4.3
6	1.40	3061	0.1319	1	397	0.335	7.7
7	1.72	8640	0.3723	1	1285	0.947	6.7
11	2.57	8628	0.3718	1	761	0.945	11.3
12	3.10	4233	0.1824	1	513	0.464	8.3
13	3.70	14039	0.6050	1	1303	1.538	10.8
14	4.37	18977	0.8178	1	1147	2.079	16.5
15	5.30	26499	1.1420	1	741	2.903	35.7
16	5.67	2745	0.1183	1	238	0.301	11.6
17	6.78	74817	3.2242	1	3451	8.197	21.7
18	7.42	11352	0.4892	1	741	1.244	15.3
19	8.18	19441	0.8378	1	970	2.130	20.0
20	8.95	16448	0.7088	1	729	1.802	22.6
21	9.67	16064	0.6922	1	777	1.760	20.7
22	10.35	113589	4.8950	1	3641	12.445	31.2
23	11.42	25404	1.0947	1	1096	2.783	23.2
24	12.65	184761	7.9621	1	4664	20.243	39.6
25	13.75	14636	0.6308	1	575	1.604	25.5
26	15.77	12599	0.5429	1	372	1.380	33.9
27	16.62	12426	0.5355	1	460	1.361	27.0
28	17.32	28081	1.2102	1	897	3.077	31.3
29	22.63	784813	33.8210	1	12872	85.995	61.0

Total Area: 2320488 Area Reject: 1000 One sample per 1.000 sec.

SS 5/18/88

Areas, times, and heights stored in: J:BB1336.AT3
Data File = J:BB1336.PTS Printed on 05-12-1988 at 11:41:22
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts





01167

STANDARD: TECHNICAL CHLORDANE [illegible]

01168

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
008	gamma-CHLORDANE	5.833	5.833	12	82114	.0750	ug/ml
009	alpha-CHLORDANE	6.517	6.517	13	23556	.0750	ug/ml
051	HEPTACHLOR IN TC	3.283	3.283	9	37980	.0750	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

ANDARD: TECHNICAL CHLORDANE 05/13/88

01169

IB NT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
008	gamma-CHLORDANE	4.817	4.817	15	130450	.0750	ug/ml
009	alpha-CHLORDANE	5.283	5.283	16	112978	.0750	ug/ml
051	HEPTACHLOR IN TC	2.283	2.283	9	68043	.0750	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

********** AREA PERCENT REPORT ********** 01170

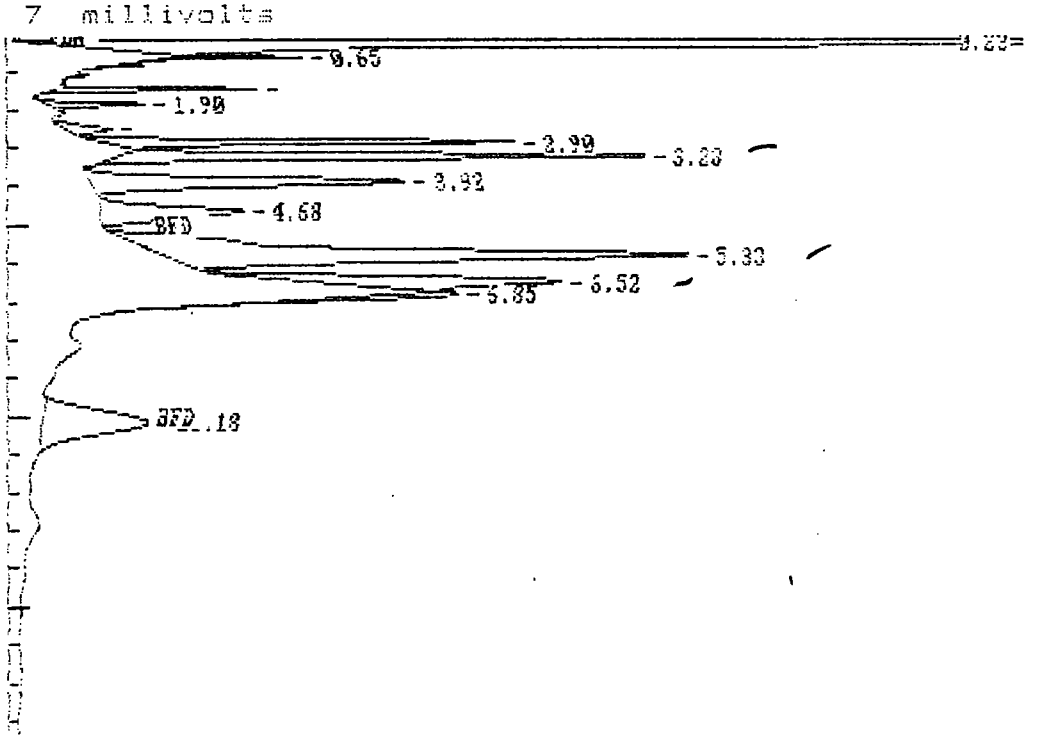
********** 05-12-1988 12:26:44 Version 4.1 **********
* Sample Name: TECHNICAL CHLORDANE 0.075 UG/ML Data File: J:AB1337 *
* Date: 05-12-1988 12:26:28 Method: M:ABPI *
* Interface: 10 Cycle#: 7 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: *
****
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	488634	42.5571	1	117226	100.000	4.2
2	0.65	2926	0.2548	1	986	0.599	3.3
5	1.50	7615	0.6632	1	1441	1.558	5.3
6	1.90	4143	0.3608	1	670	0.848	6.2
7	2.55	3681	0.3206	1	312	0.753	11.8
8	2.90	25610	2.2305	1	2819	5.241	9.1
9	3.28	37988	3.3085	1	3665	7.774	10.4
10	3.92	35714	3.1104	1	2166	7.309	16.5
11	4.68	21116	1.8391	1	990	4.321	21.3
12	5.83	82114	7.1516	1	3606	16.805	22.8
13	6.52	23556	2.0516	1	1538	4.821	15.3
14	6.85	10295	0.8966	1	626	2.107	16.5
15	10.18	30680	2.6720	1	742	6.279	41.4
16	26.80	374116	32.5832	1	4001	76.564	93.5

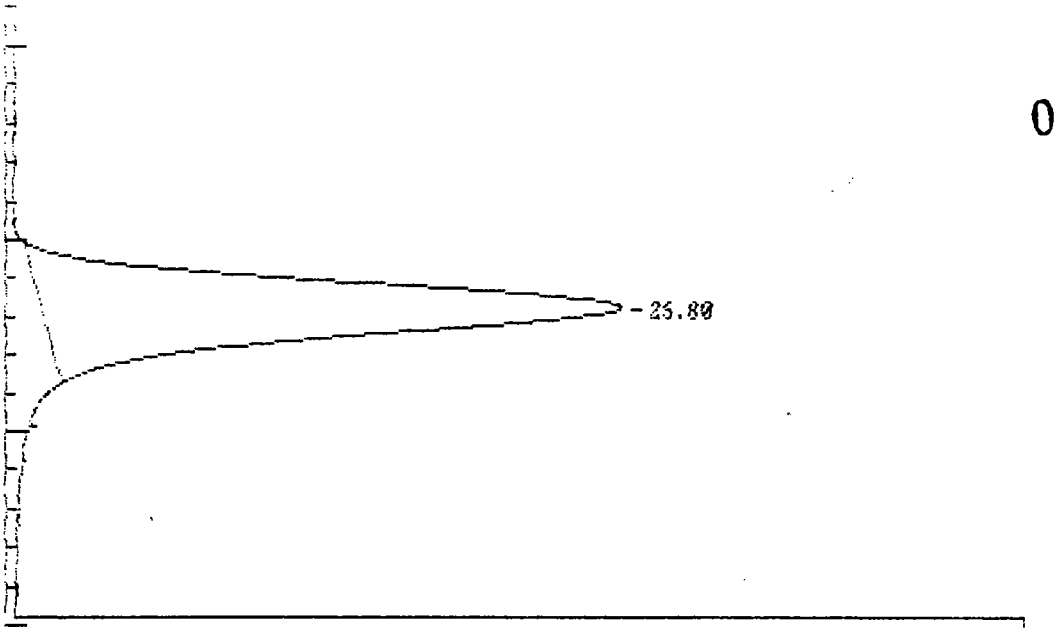
SS 5/19/88

Total Area: 1148186 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1337.ATB
Data File = J:AB1337.PTG Printed on 05-12-1988 at 12:27:13
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



01171



01172

[illegible]
* [illegible]
* Date: [illegible]
* Interface: 12 [illegible]
* Starting Peak Width: [illegible]
****
* Instrument Type: HP 5880A Column Type: [illegible]
* Solvent Description: 1.5% SP2250/1.95% [illegible]
* Conditions: 190 DEG ISOTHERMAL
* Detector 0: Detector 1: ECD
* Misc. Information: 4 UL INJ
****

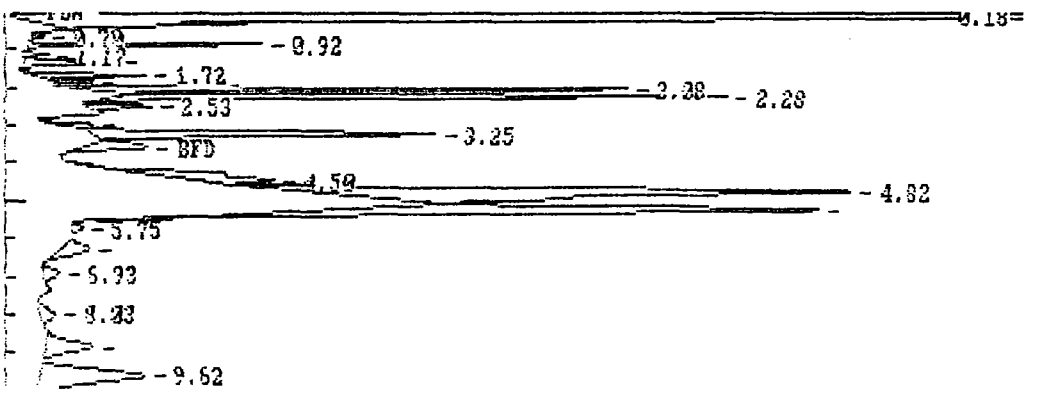
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	993087	41.4751	1	230222	100.000	4.3
2	0.79	1055	[illegible]	1	252	0.106	4.2
3	0.92	15931	0.6653	1	4406	1.604	3.6
4	1.17	1908	0.0797	1	466	0.192	4.1
5	1.32	12216	0.5102	1	1733	[illegible]	7.0
6	1.72	12624	0.5272	1	2041	[illegible]	[illegible]
7	1.88	3046	0.1272	1	765	[illegible]	[illegible]
8	2.08	54395	2.2719	1	10000	5.471	5.4
9	2.28	68043	2.8417	1	11596	6.852	5.9
10	2.53	7530	0.3145	1	1182	0.758	6.4
11	3.03	2801	0.1170	1	413	0.282	6.8
12	3.25	50784	2.1209	1	6391	5.114	7.9
13	3.60	15346	0.6409	1	1242	1.545	12.4
14	4.50	21841	0.9122	1	1360	2.199	16.1
15	4.82	130458	5.4484	1	9983	13.137	13.1
16	5.28	112978	4.7184	1	9502	11.376	11.9
17	5.75	1824	0.0762	1	191	0.181	[illegible]
18	6.30	11341	0.4736	1	558	1.142	20.3
19	6.93	4339	0.1812	1	289	0.437	15.0
20	8.03	5166	0.2157	1	274	0.520	18.8
21	8.87	17774	0.7423	1	896	1.790	19.8
22	9.62	47684	1.9915	1	1986	4.802	24.0
23	20.60	46661	1.9487	1	954	4.699	48.9
24	22.67	755581	31.5561	1	12804	76.084	59.0

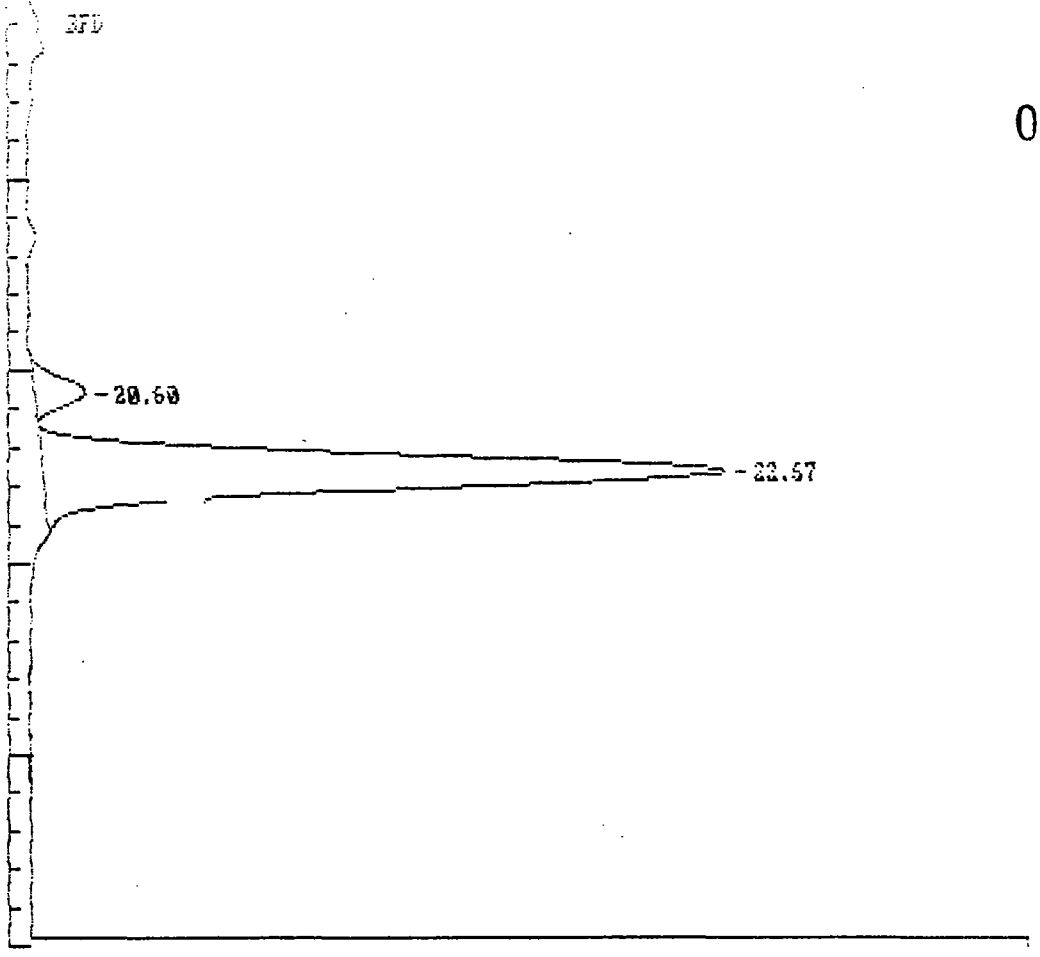
SS
5/19/88

Total Area: 2394407 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1337.ATB
Data File = J:BB1337.PTS Printed on 05-12-1988 at 12:19:31
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



01173



STANDARD: AROCLOR 1016/1260 05/13/92 LIBRARY: [illegible]

01174

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
023	AROCLOR 1016(peak 1)	1.683	1.683	6	11089	.0750	ug/ml
024	AROCLOR 1016(peak 2)	2.183	2.183	7	18929	.0750	ug/ml
025	AROCLOR 1016(peak 3)	2.867	2.867	9	30839	.0750	ug/ml
040	AROCLOR 1260(peak 1)	9.350	9.350	17	67366	.2500	ug/ml
041	AROCLOR 1260(peak 2)	11.150	11.150	18	119119	.2500	ug/ml
042	AROCLOR 1260(peak 3)	12.067	12.067	19	18593	.2500	ug/ml
043	AROCLOR 1260(peak 4)	13.150	13.150	20	120206	.2500	ug/ml
044	AROCLOR 1260(peak 5)	15.267	15.267	21	110545	.2500	ug/ml
045	AROCLOR 1260(peak 6)	17.633	17.633	22	138730	.2500	ug/ml
046	AROCLOR 1260(peak 7)	21.467	21.467	23	231492	.2500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1016/1260 [illegible] [illegible]

01175

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
023	AROCLOR 1016(peak 1)	1.283	1.283	6	29998	.0750	ug/ml
024	AROCLOR 1016(peak 2)	1.683	1.683	8	58675	.0750	ug/ml
025	AROCLOR 1016(peak 3)	2.250	2.250	10	106246	.0750	ug/ml
040	AROCLOR 1260(peak 1)	7.183	7.183	20	203833	.2500	ug/ml
041	AROCLOR 1260(peak 2)	8.017	8.017	21	219191	.2500	ug/ml
042	AROCLOR 1260(peak 3)	9.217	9.217	22	341715	.2500	ug/ml
043	AROCLOR 1260(peak 4)	10.367	10.367	23	258351	.2500	ug/ml
044	AROCLOR 1260(peak 5)	11.833	11.833	24	341300	.2500	ug/ml
045	AROCLOR 1260(peak 6)	18.967	18.967	29	436253	.2500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

01176

AREA PERCENT REPORT

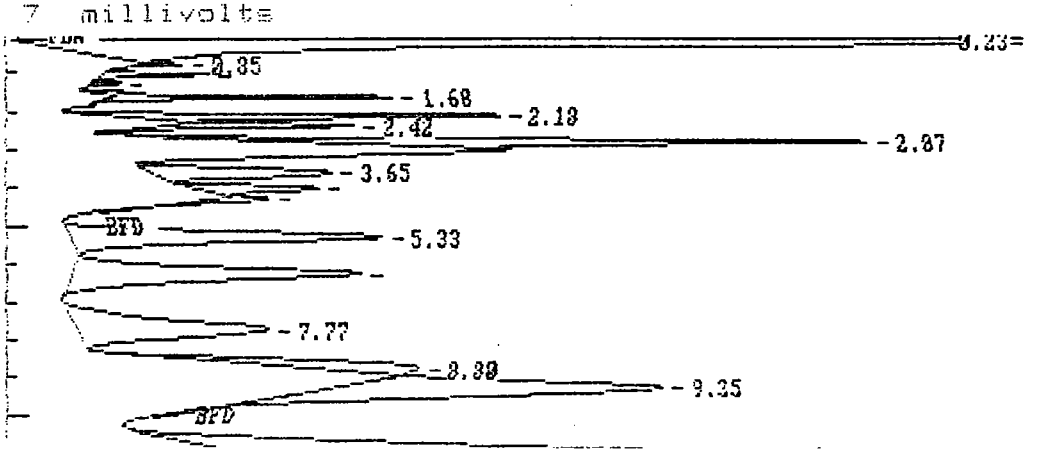
```
******************** 05-12-1988 13:09:46 Version 4.1 ********************
* Sample Name: AROCLOR 1016/1260 0.075/0.25 UG/ML Data File: J:AB1338      *
* Date: 05-12-1988 13:09:29 Method: M:ABPI                                 *
* Interface: 10  Cycle#: 8   Operator SS  Channel#: 0   Vial#: N.A.        *
* Starting Peak Width: 10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GLASS  *
*          Solvent Description: 1.5% SP2250/1.95% SP2401                   *
* Conditions: 190 DEGREES ISOTHERMAL                                       *
*          Detector 0: ECD                  Detector 1:                     *
* Misc. Information: 4 UL INJECTION                  LPT1:          *      *
*****************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

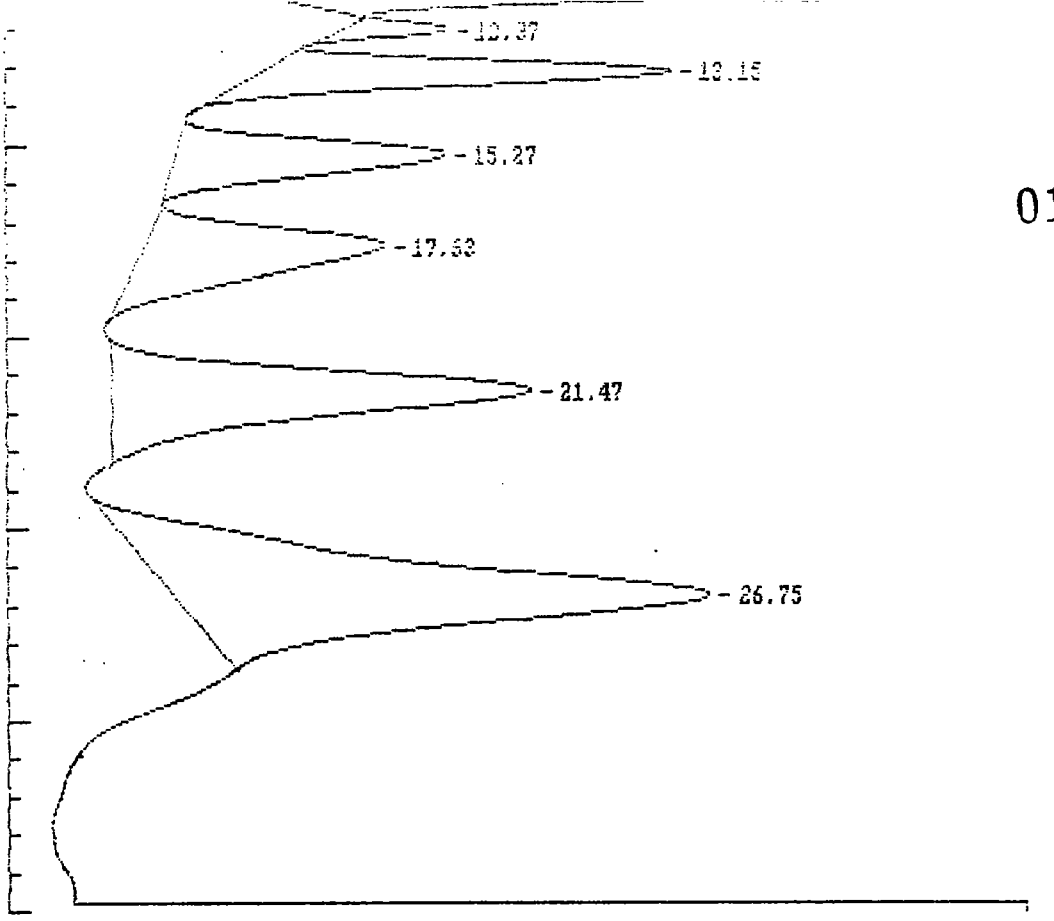
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	476567	24.5239	1	109636	100.000	4.3
2	0.85	1146	0.0590	1	324	0.240	3.5
3	1.10	4072	0.2095	1	743	0.854	5.5
4	1.33	1154	0.0594	1	233	0.242	4.9
6	1.68	11888	0.6118	1	1974	2.495	6.0
7	2.18	18929	0.9741	1	2547	3.972	7.4
8	2.42	9700	0.4991	1	1355	2.035	7.2
9	2.87	30839	1.5870	1	3531	6.471	8.7
10	3.65	18411	0.9474	1	1206	3.863	15.3
11	4.07	7793	0.4010	1	761	1.635	10.2
12	4.33	6150	0.3165	1	498	1.290	12.4
13	5.33	41492	2.1352	1	2129	8.706	19.5
14	6.30	48097	2.4750	1	1984	10.092	24.2
15	7.77	41335	2.1271	1	1294	8.673	31.9
16	8.80	15287	0.7867	1	619	3.208	24.7
17	9.35	67366	3.4666	1	2443	14.136	27.6
18	11.15	119119	6.1298	1	3246	24.995	36.7
19	12.07	18593	0.9568	1	753	3.901	24.7
20	13.15	120206	6.1857	1	2840	25.223	42.3
21	15.27	110545	5.6886	1	1852	23.196	59.7
22	17.63	138730	7.1389	1	1659	29.110	83.6
23	21.47	231492	11.9124	1	2894	48.575	80.0
24	26.75	404369	20.8086	1	3705	84.850	109.1

55
5/19/90

Total Area: 1943278 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1338.AT8
Data File = J:AB1338.PTS Printed on 05-12-1988 at 13:10:15
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





01177

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

01178

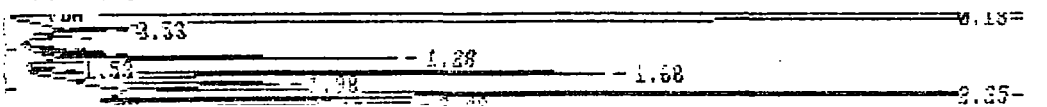
```
******************** 05-12-1988 13:07:32 Version 4.1 ************************
* Sample Name: AROCLOR 1016/1260 0.075/0.25 UO/MLData File: J:BB1338        *
* Date: 05-12-1988 13:07:14 Method: M:BBP1                                  *
* Interface: 12  Cycle#:  0    Operator SS  Channel#: 0    Vial#: 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:     0.00
```

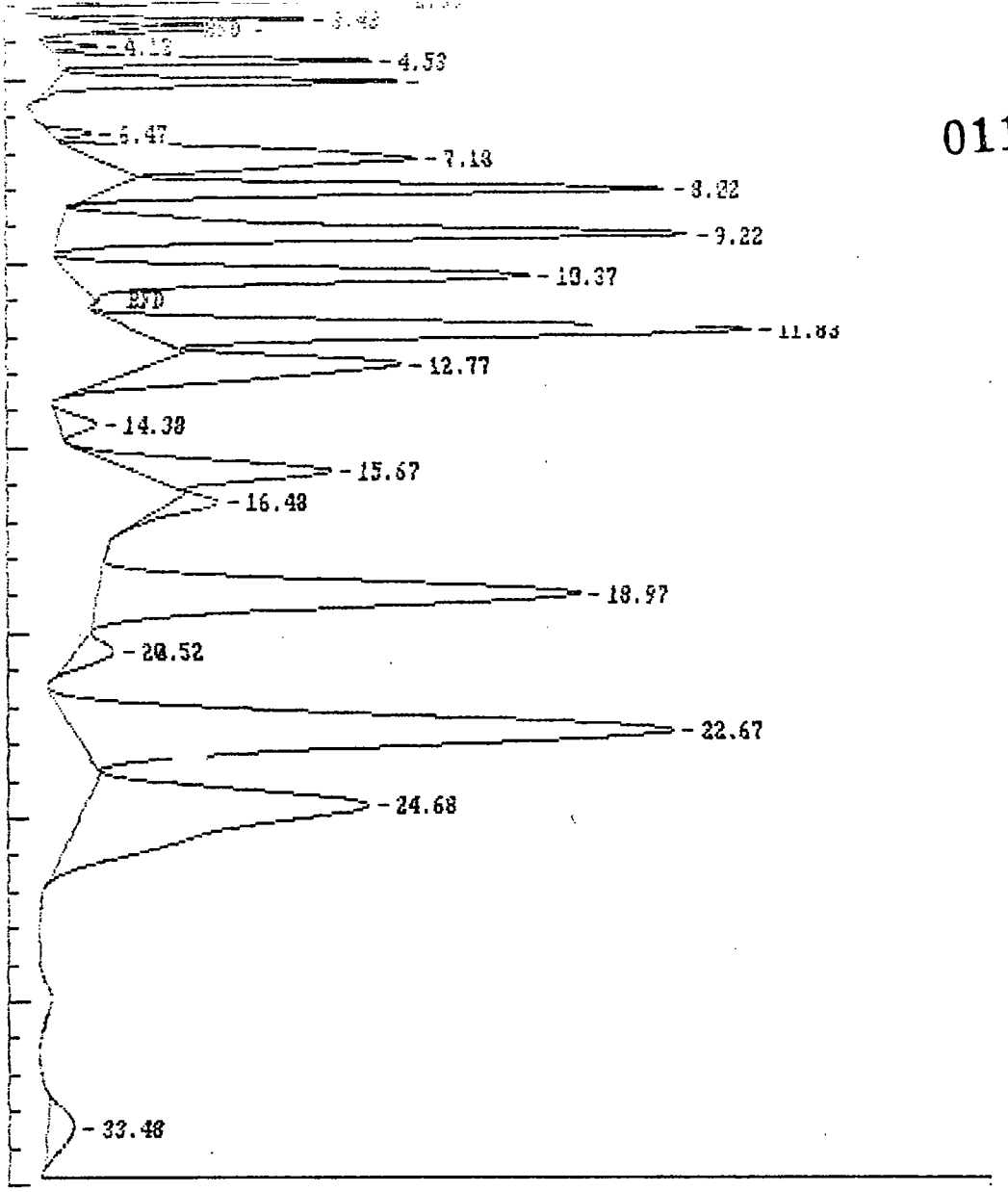
Pk No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	Normalized %	Area/ Height
1	0.19	914772	18.9731	1	213487	100.000	4.3
2	0.53	3064	0.0635	1	947	0.335	3.2
3	0.68	3221	0.0668	1	760	0.352	4.2
4	1.02	2633	0.0546	1	647	0.286	4.1
5	1.13	4239	0.0879	1	1113	0.463	3.8
6	1.28	29998	0.6222	1	6529	3.279	4.6
7	1.53	1975	0.0410	1	511	0.216	3.9
8	1.68	58675	1.2170	1	10486	6.414	5.6
9	1.98	21426	0.4444	1	3228	2.342	6.6
10	2.25	106246	2.2036	1	16706	11.614	6.4
11	2.48	30306	0.6286	1	4985	3.313	6.1
12	2.65	10132	0.2101	1	2045	1.108	5.0
13	2.88	52666	1.0923	1	5252	5.757	10.0
14	3.43	33653	0.6980	1	3921	3.679	8.6
15	3.68	20622	0.4277	1	2505	2.254	8.2
16	4.12	8182	0.1697	1	938	0.894	8.7
17	4.53	76789	1.5927	1	6060	8.394	12.7
18	5.08	99245	2.0584	1	6688	10.849	14.8
19	6.47	9106	0.1889	1	753	0.995	12.1
20	7.18	203833	4.2276	1	6166	22.282	33.1
21	8.02	219191	4.5462	1	10851	23.961	20.2
22	9.22	341715	7.0874	1	12251	37.355	27.9
23	10.37	258351	5.3584	1	8863	28.242	29.2
24	11.83	341300	7.0788	1	11893	37.310	28.7
25	12.77	198894	4.1252	1	4874	21.742	40.8
26	14.38	20862	0.4327	1	704	2.281	29.6
27	15.67	129011	2.6758	1	3738	14.103	34.5
28	16.48	31813	0.6598	1	936	3.478	34.0
29	18.97	436252	9.0482	1	9370	47.690	46.6
30	20.52	32039	0.6645	1	765	3.502	41.9
31	22.67	654010	13.5647	1	11654	71.494	56.1
32	24.68	433069	8.9822	1	5519	47.342	78.5
33	33.48	34130	0.7079	1	512	3.731	66.7

SS 5/19/88

Total Area: 4821417 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1338.AT8
Data File = J:BB1338.PT8 Printed on 05-12-1988 at 13:08:03
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts




4.53
6.47
7.18
8.22
9.22
10.37
EPD
11.83
12.77
14.38
15.67
16.48
18.97
20.52
22.67
24.68
33.48

01179

STANDARD: AROCLOR 1221 05/13/88 LIBRARY: [illegible]

01180

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
026	AROCLOR 1221(peak 1)	1.683	1.683	7	29800	.1500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1221 05/17/88 LIBRARY: [illegible]

01181

LID ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
026	AROCLOR 1221(peak 1)	1.283	1.283	7	85905	1500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

01182

********** 05-12-1988 13:47:11 Version 4.1 **********

* Sample Name: AROCLOR 1221 0.150 UG/ML Data File: J:AB1339 *
* Date: 05-12-1988 13:46:57 Method: M:ABPI *
* Interface: 10 Cycle#: 9 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *

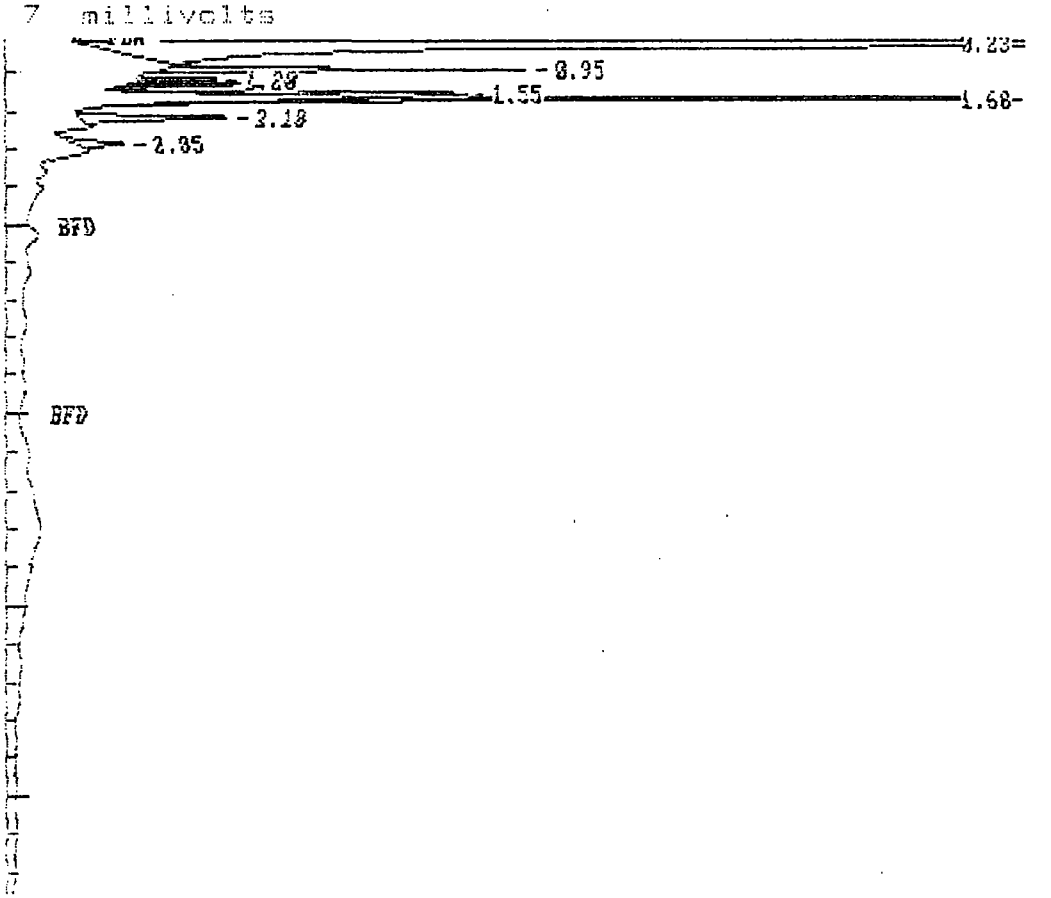
Starting Delay: 0.00 Run Time: 0.00

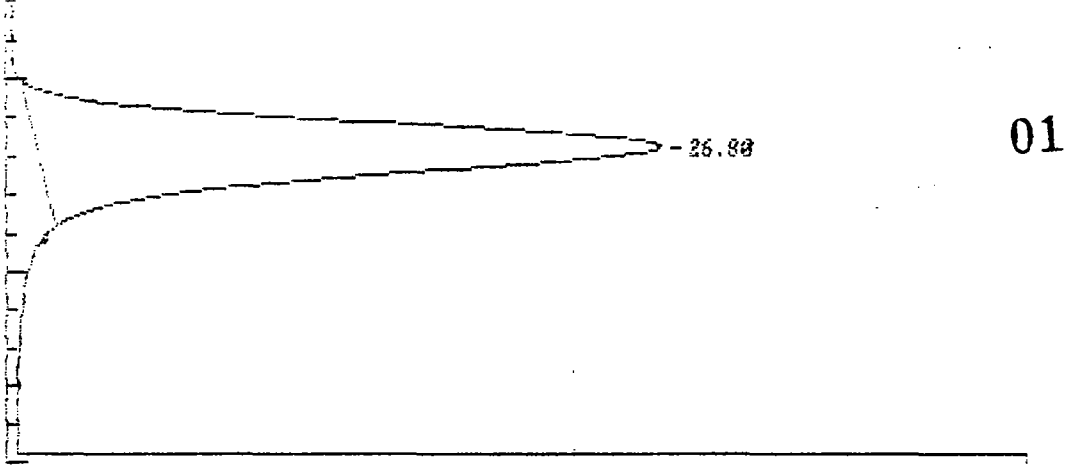
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	485256	51.4072	1	114670	100.000	4.2
3	0.95	9833	1.0417	1	2518	2.026	3.9
4	1.20	2320	0.2458	1	558	0.478	4.2
5	1.33	3714	0.3935	1	815	0.765	4.6
6	1.55	3748	0.3971	1	915	0.772	4.1
7	1.68	29800	3.1570	1	4956	6.141	6.0
8	2.18	8115	0.8597	1	988	1.672	8.2
9	2.85	2872	0.3043	1	323	0.592	8.9
10	26.80	398288	42.1939	1	4292	82.078	92.8

SS
5/19/88

Total Area: 943946 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1339.ATB
Data File = J:AB1339.PTS Printed on 05-12-1988 at 13:47:39
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





01183

********** AREA PERCENT REPORT ********** 01184

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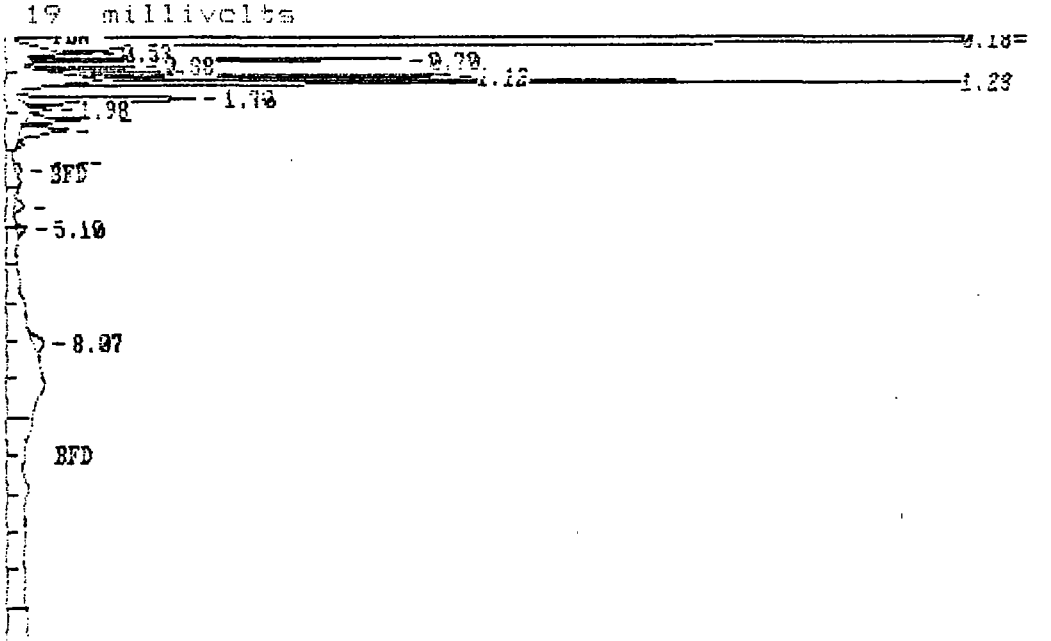
******************* 05-12-1988 13:39:20 Version 4.1 ********************
* Sample Name: AROCLOR 1221 0.150 UG/ML          Data File: J:BB1339      *
* Date: 05-12-1988 13:39:07 Method: M:32PI                                *
* Interface: 12  Cycle#:  9    Operator SS  Channel#: 0    Vial#: N.A.    *
* 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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	934150	47.5612	1	217040	100.000	4.3
2	0.53	2596	0.1321	1	796	0.278	3.3
3	0.70	23044	1.1733	1	6963	2.467	3.3
4	0.88	6221	0.3167	1	1953	0.666	3.2
5	1.02	6348	0.3232	1	1924	0.680	3.3
6	1.12	23188	1.1806	1	6815	2.482	3.4
7	1.28	85905	4.3738	1	17121	9.196	5.0
8	1.70	28317	1.4417	1	3247	3.031	8.7
9	1.98	2360	0.1202	1	418	0.253	5.6
10	2.25	10424	0.5307	1	1602	1.116	6.5
11	2.50	10191	0.5188	1	873	1.091	11.7
13	3.57	1619	0.0824	1	97	0.173	16.7
14	4.50	2933	0.1493	1	194	0.314	15.1
15	5.10	2385	0.1214	1	157	0.255	15.2
16	8.07	3809	0.1939	1	196	0.408	19.5
17	20.60	17464	0.8892	1	395	1.870	44.3
18	22.68	803149	40.8914	1	13498	85.976	59.5

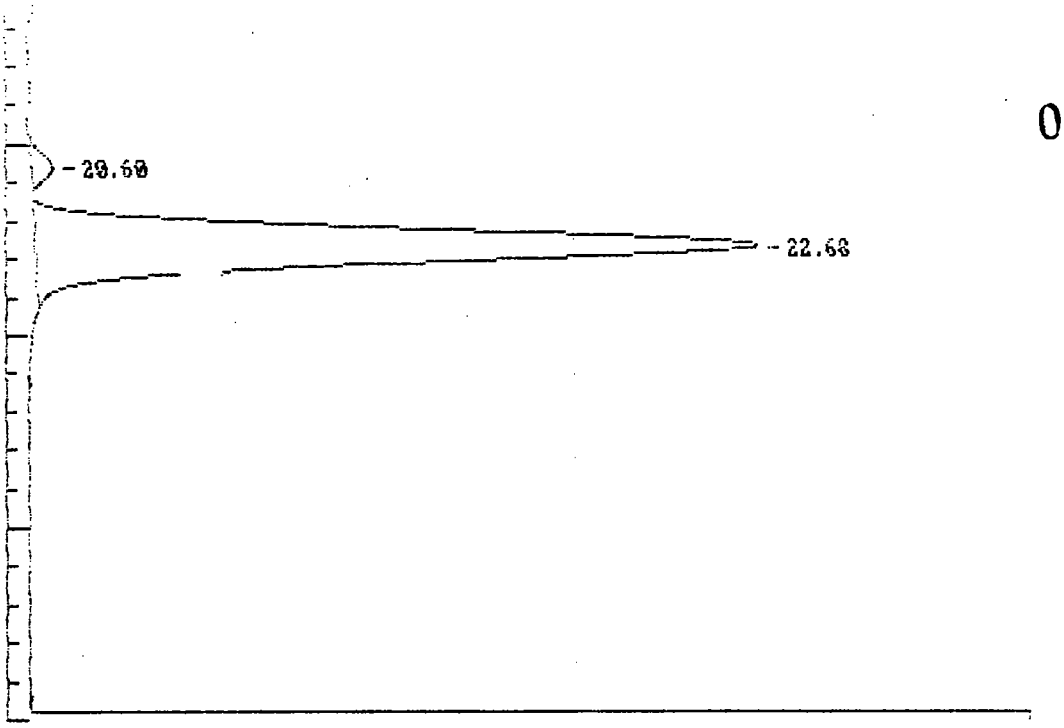
Total Area: 1964100 Area Reject: 1000 One sample per 1.000 sec.

SS 5/19/88

Areas, times, and heights stored in: J:BB1339.ATB
Data File = J:BB1339.PTS Printed on 05-12-1988 at 13:39:51
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



01185



STANDARD: AROCLOR 1232 05/[illegible] LIBRARY: [illegible]

01186

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
027	AROCLOR 1232(peak 1)	1.683	1.683	7	25266	.1500	ug/ml
028	AROCLOR 1232(peak 2)	2.867	2.867	10	28242	.1500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1232 [illegible] LIBRARY: [illegible]

01187

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
Ø27	AROCLOR 1232(peak 1)	1.283	1.283	7	64845	.1500	ug/ml
Ø28	AROCLOR 1232(peak 2)	2.250	2.250	11	95191	.1500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

********** AREA PERCENT REPORT ********** 01188

********** 05-12-1988 14:25:42 Version 4.1 **********

* Sample Name: AROCLOR 1232 0.150 UG/ML Data File: J:AB13310 *
* Date: 05-12-1988 14:25:23 Method: M:ASPI *
* Interface: 10 Cycle#: 10 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: *

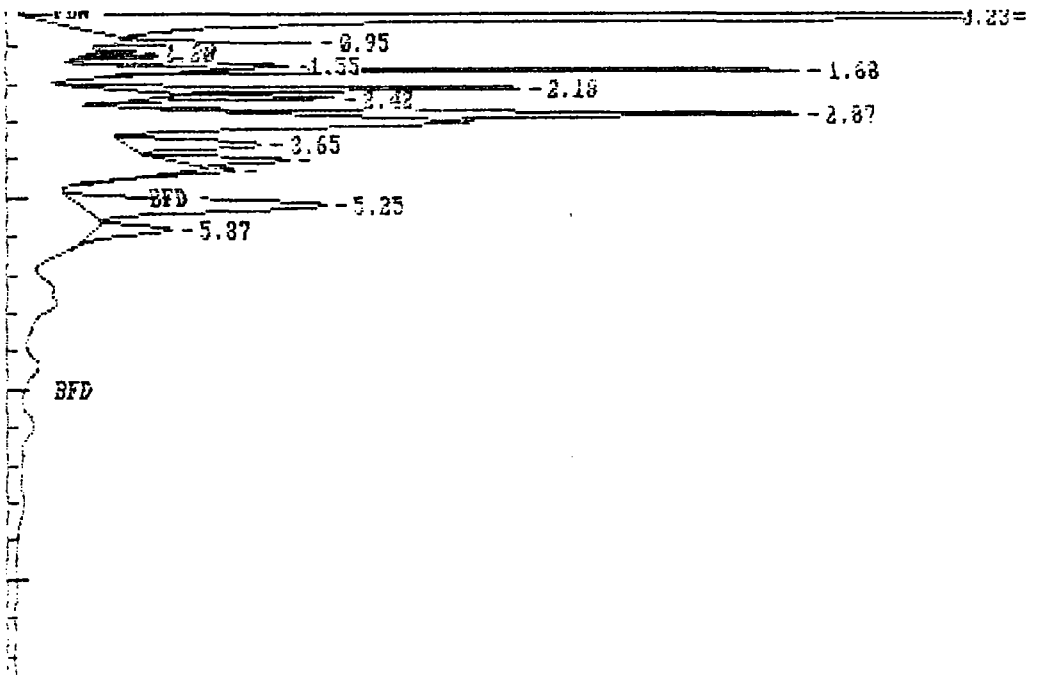
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	464309	46.0354	1	107063	100.000	4.3
3	0.95	5268	0.5223	1	1377	1.135	3.8
4	1.20	1171	0.1161	1	312	0.252	3.8
5	1.33	2623	0.2600	1	570	0.565	4.6
6	1.55	2131	0.2113	1	534	0.459	4.0
7	1.68	25266	2.5051	1	4173	5.442	6.1
8	2.18	20517	2.0342	1	2719	4.419	7.5
9	2.42	9170	0.9092	1	1284	1.975	7.1
10	2.87	28242	2.8001	1	3254	6.082	8.7
11	3.65	13508	1.3392	1	909	2.909	14.9
12	4.07	7939	0.7871	1	757	1.710	10.5
13	4.33	4795	0.4754	1	385	1.033	12.5
14	5.25	34506	3.4212	1	1657	7.432	20.8
15	5.87	9756	0.9673	1	552	2.101	17.7
16	26.80	379392	37.6161	1	4067	81.711	93.3

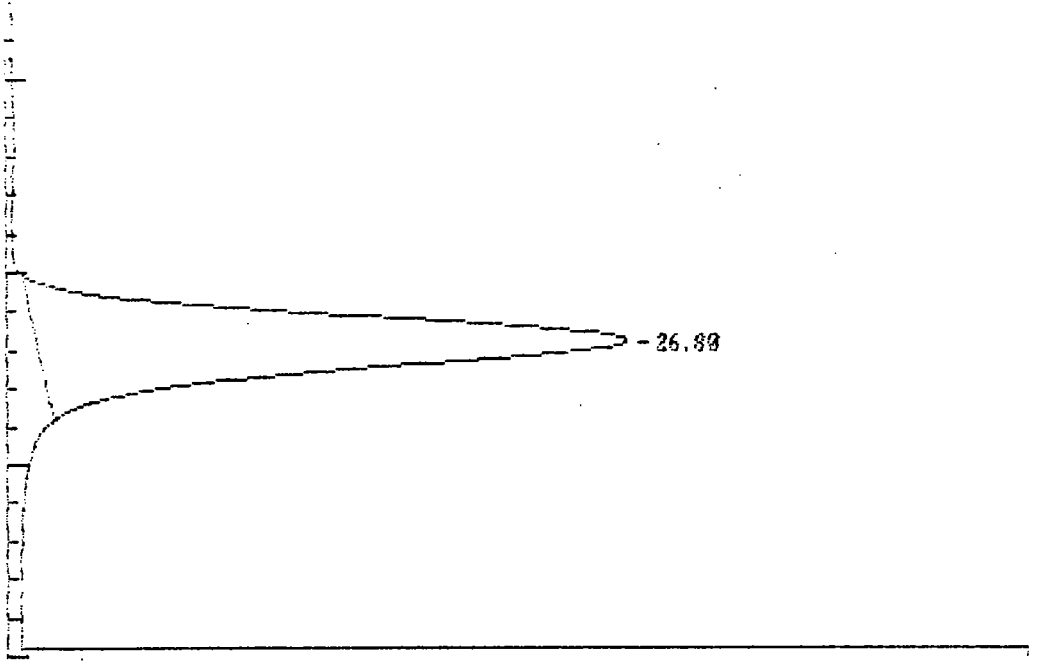
SS
5/19/88

Total Area: 1008591 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13310.ATB
Data File = J:AB13310.PTS Printed on 05-12-1988 at 14:26:11
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



01189



AREA PERCENT REPORT

01190

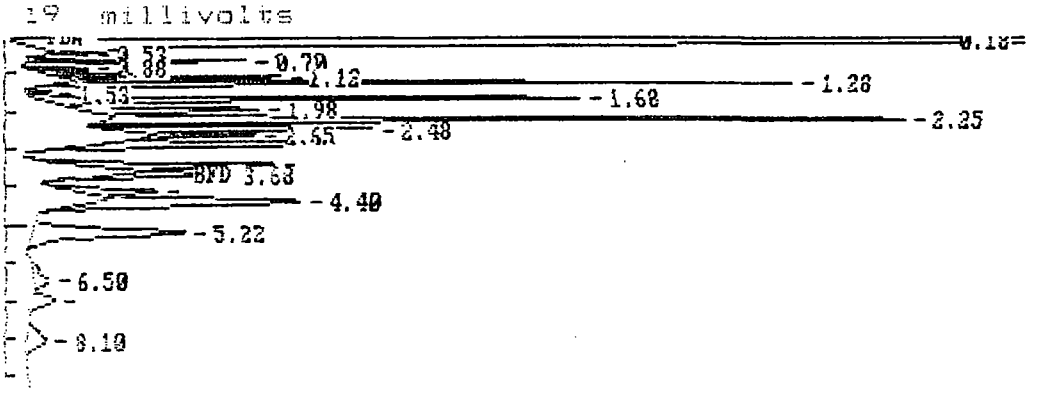
```
******************** 05-12-1988 14:16:31 Version 4.1 ********************
* Sample Name: AROCLOR 1232 0.150 UG/ML          Data File: J:BB13310      *
* Date: 05-12-1988 14:16:14 Method: M:BBPI                                 *
* Interface: 12  Cycle#:  10   Operator 88  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 10?             *
****************************************************************************
* Instrument Type: HP 5890A              Column Type: 6FT X 2MM ID GLASS   *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                 *
* Conditions: 190 DEG ISOTHERMAL                                           *
*            Detector 0:                        Detector 1: ECD            *
* Misc. Information: 4 UL INJ                                              *
****************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	886829	40.6151	1	208244	100.000	4.3
2	0.53	2462	0.1128	1	758	0.278	3.2
3	0.70	13614	0.6235	1	4140	1.535	3.3
4	0.88	3774	0.1728	1	1171	0.426	3.2
5	1.02	4572	0.2094	1	1394	0.516	3.3
6	1.12	14028	0.6425	1	4094	1.582	3.4
7	1.28	66845	3.0613	1	13798	7.537	4.9
8	1.53	1601	0.0733	1	437	0.181	3.7
9	1.68	60696	2.7798	1	10061	6.844	6.0
10	1.98	19977	0.9149	1	3033	2.253	6.6
11	2.25	95181	4.3591	1	15078	10.733	6.3
12	2.48	27848	1.2754	1	4619	3.140	6.0
13	2.65	10300	0.4717	1	1990	1.161	5.2
14	2.88	40222	1.8421	1	4040	4.535	10.0
15	3.43	28203	1.2916	1	3313	3.180	8.5
16	3.68	15857	0.7262	1	1961	1.788	8.1
17	4.13	11360	0.5203	1	1346	1.281	8.4
18	4.40	48604	2.2259	1	3939	5.481	12.3
19	5.22	45595	2.0882	1	2841	5.141	16.0
20	6.50	6344	0.2905	1	278	0.715	22.8
21	7.03	7803	0.3574	1	437	0.880	17.8
22	8.10	10302	0.4718	1	376	1.162	27.4
23	10.38	5007	0.2293	1	221	0.565	22.7
24	20.62	33204	1.5207	1	696	3.744	47.7
25	22.68	723273	33.1245	1	12207	81.557	59.2

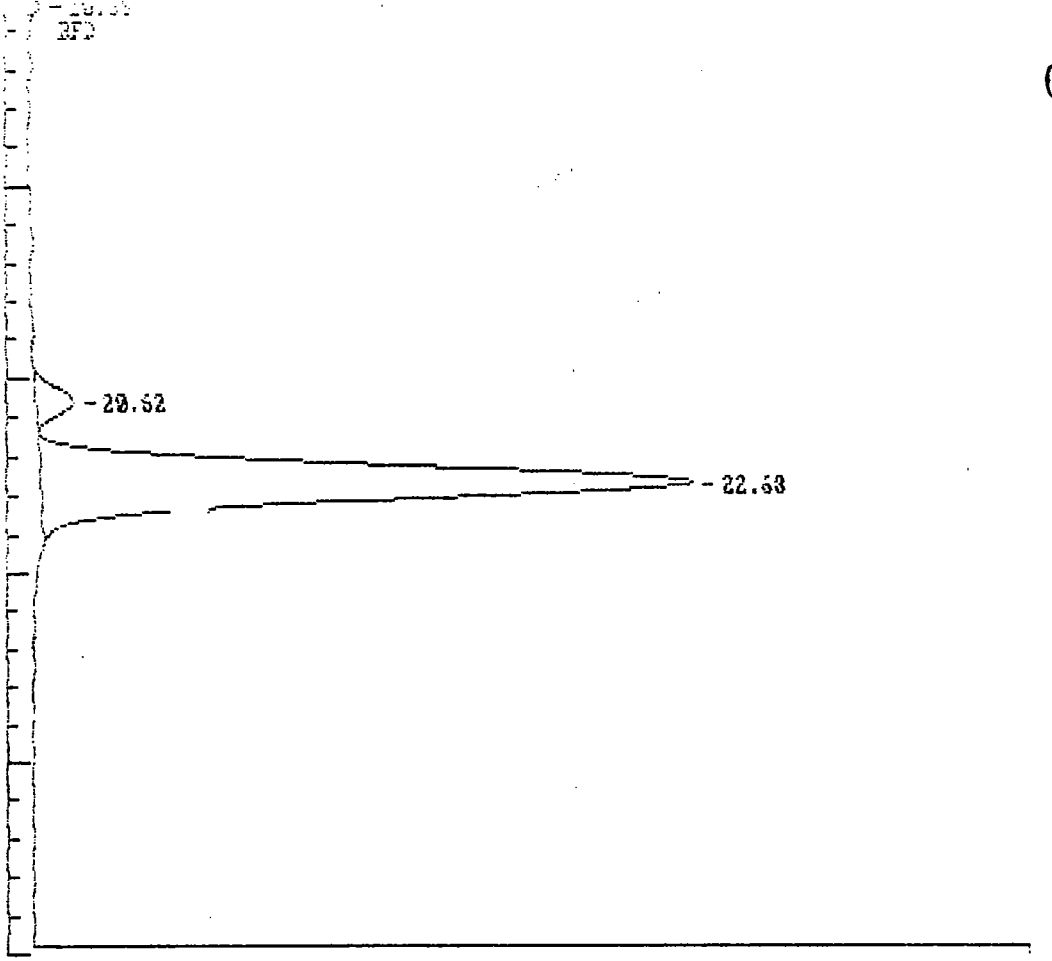
SS 5/19/88

Total Area: 2183498 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13310.ATB
Data File = J:BB13310.PTS Printed on 05-12-1988 at 14:17:03
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



01191



STANDARD: AROCLOR 1242 05/13/89 LIBRARY [illegible]

01192

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
029	AROCLOR 1242(peak 1)	1.683	1.683	6	9440	.0750	ug/ml
030	AROCLOR 1242(peak 2)	2.183	2.183	7	15860	.0750	ug/ml
031	AROCLOR 1242(peak 3)	2.867	2.867	9	25762	.0750	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1242 05/17/88 LIBRARY: LSOMTXB

01193

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
029	AROCLOR 1242(peak 1)	1.283	1.283	6	25134	.0750	ug/ml
030	AROCLOR 1242(peak 2)	1.683	1.683	8	50457	.0750	ug/ml
031	AROCLOR 1242(peak 3)	2.250	2.250	10	87434	.0750	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

AREA PERCENT REPORT

*** 05-12-1988 15:05:19 Version 4.

Sample: [illegible] 1242 0.075 UG/ML Data File: J:AB13311

Method: [illegible] Method: MIABPI

[illegible] 88 Channel#: 0 Vial#: N.A.

Starting [illegible] Threshold: 100

Instrument Type: HP 5890A Col. or Type: [illegible] DBM ID GLASS

Conditions: 170 DEGREES ISOTHERMAL

Detector: FID Injection:

Misc. Information: 4 UL INJECTION [illegible]

Starting Delay: 0.00 Run Time: [illegible]

Pk No.	Ret Time	Peak Area	Area %	S L	Peak Ht.	[illegible] %	Area Height
1	0.23	454532	47.2809	1	105384	100.000	4.3
2	0.85	1553	0.1615	1	325	0.747	4.8
3	1.10	2274	0.2365	1	410	0.560	5.5
6	1.68	9440	0.9820	1	1584	2.077	6.0
7	2.18	15860	1.6498	1	2144	3.489	7.4
8	2.42	8332	0.8667	1	1163	1.833	7.2
9	2.87	25762	2.6799	1	2945	5.668	8.7
10	3.67	12619	1.3117	1	843	2.774	15.0
11	4.67	7125	0.7412	1	680	1.568	10.5
12	4.33	4451	0.4630	1	362	0.979	12.3
13	5.25	31826	3.3105	1	1523	7.002	20.9
14	5.87	9182	0.9551	1	510	2.020	17.9
15	26.80	378598	39.3614	1	4016	83.250	94.2

Total Area: 961242 Area Reject: 1000 One sample per 1.000 sec.

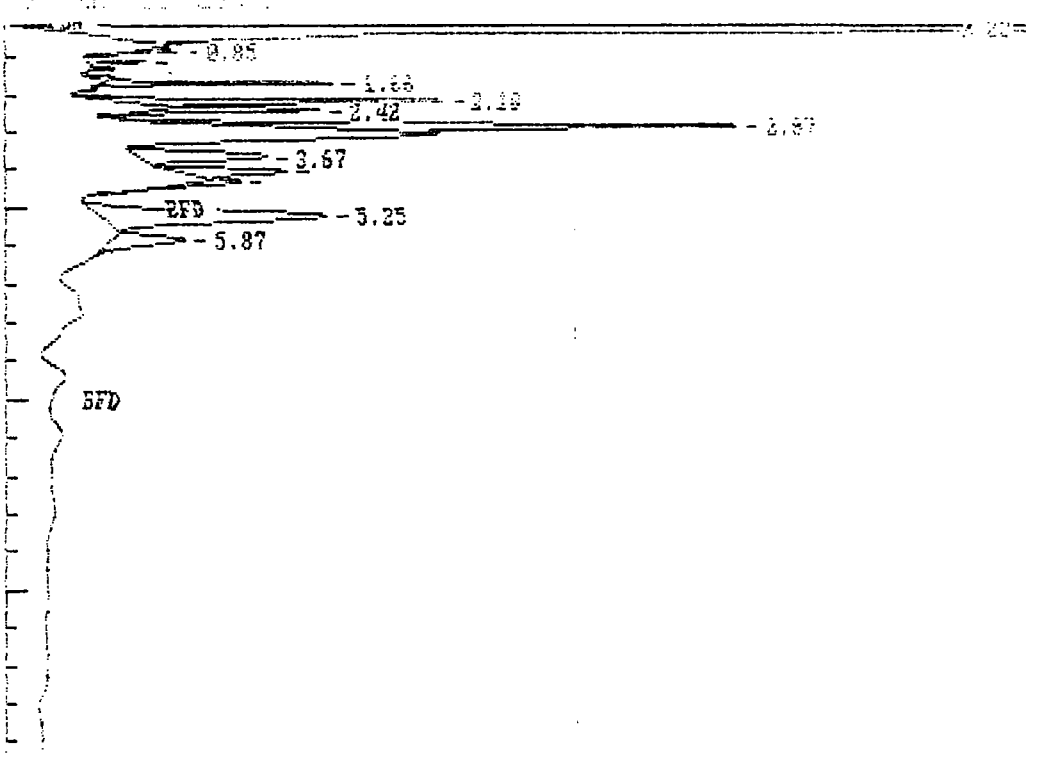
SS 5/19/88

Areas, times, and heights stored in: J:AB[illegible].ARS

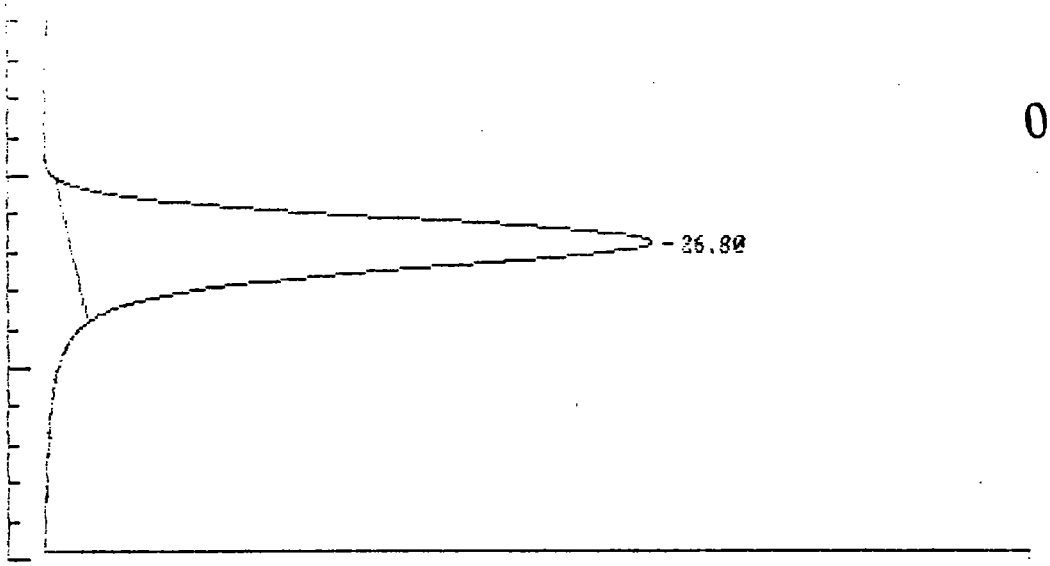
Data File = J:AB13311 [illegible] Printed on 05-12-1988 at 15:08:44

Start time: 0.00 min. Stop time: 35.00 min. Length: [illegible] min.

Full Range: [illegible] millivolts



01195



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

01196

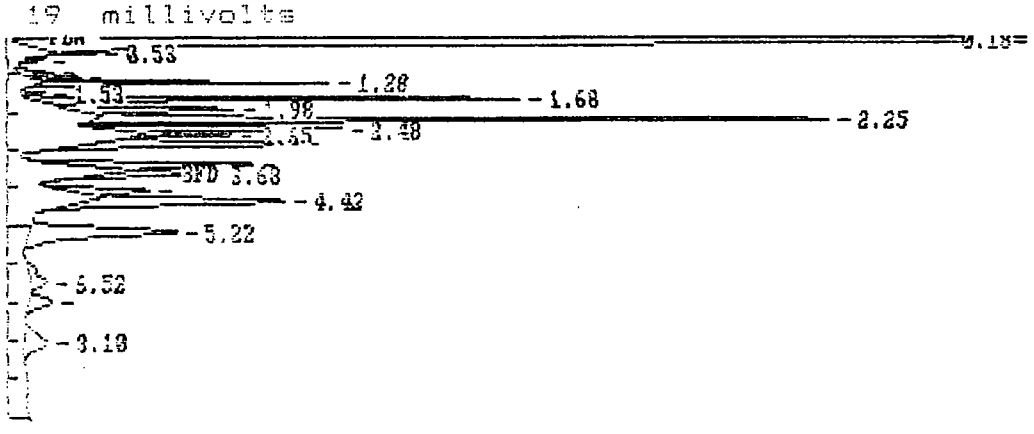
```
******************** 05-12-1988 14:55:38 Version 4.1 ********************
* Sample Name: AROCLOR 1242 0.075 UG/ML          Data File: J:BB13311      *
* Date: 05-12-1988 14:55:21 Method: M:BBPI                                 *
* Interface: 12  Cycle#:  11   Operator SS  Channel#: 0    Vial#: N.A.     *
* 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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	850999	41.3952	1	196404	100.000	4.3
2	0.53	2870	0.1396	1	900	0.337	3.2
3	0.68	1380	0.0671	1	375	0.162	3.7
4	1.02	2894	0.1408	1	615	0.340	4.7
5	1.13	3224	0.1568	1	856	0.379	3.8
6	1.28	25134	1.2226	1	5451	2.953	4.6
7	1.53	1579	0.0768	1	419	0.185	3.8
8	1.68	50457	2.4544	1	9034	5.929	5.6
9	1.98	18562	0.9029	1	2802	2.181	6.6
10	2.25	87434	4.2530	1	13879	10.274	6.3
11	2.48	25586	1.2446	1	4239	3.007	6.0
12	2.65	8960	0.4358	1	1749	1.053	5.1
13	2.88	38540	1.8747	1	3864	4.529	10.0
14	3.43	26383	1.2833	1	3112	3.100	8.5
15	3.68	15307	0.7446	1	1888	1.799	8.1
16	4.12	10936	0.5319	1	1367	1.285	8.0
17	4.42	46242	2.2493	1	3801	5.434	12.2
18	5.22	44199	2.1495	1	2747	5.193	16.1
19	6.52	7415	0.3607	1	299	0.871	24.8
20	7.02	8072	0.3926	1	449	0.949	18.0
21	8.10	11653	0.5668	1	434	1.369	26.8
22	10.37	5722	0.2783	1	245	0.672	23.3
23	20.62	46135	2.2441	1	949	5.421	48.6
24	22.68	716127	34.8346	1	12165	84.151	58.9

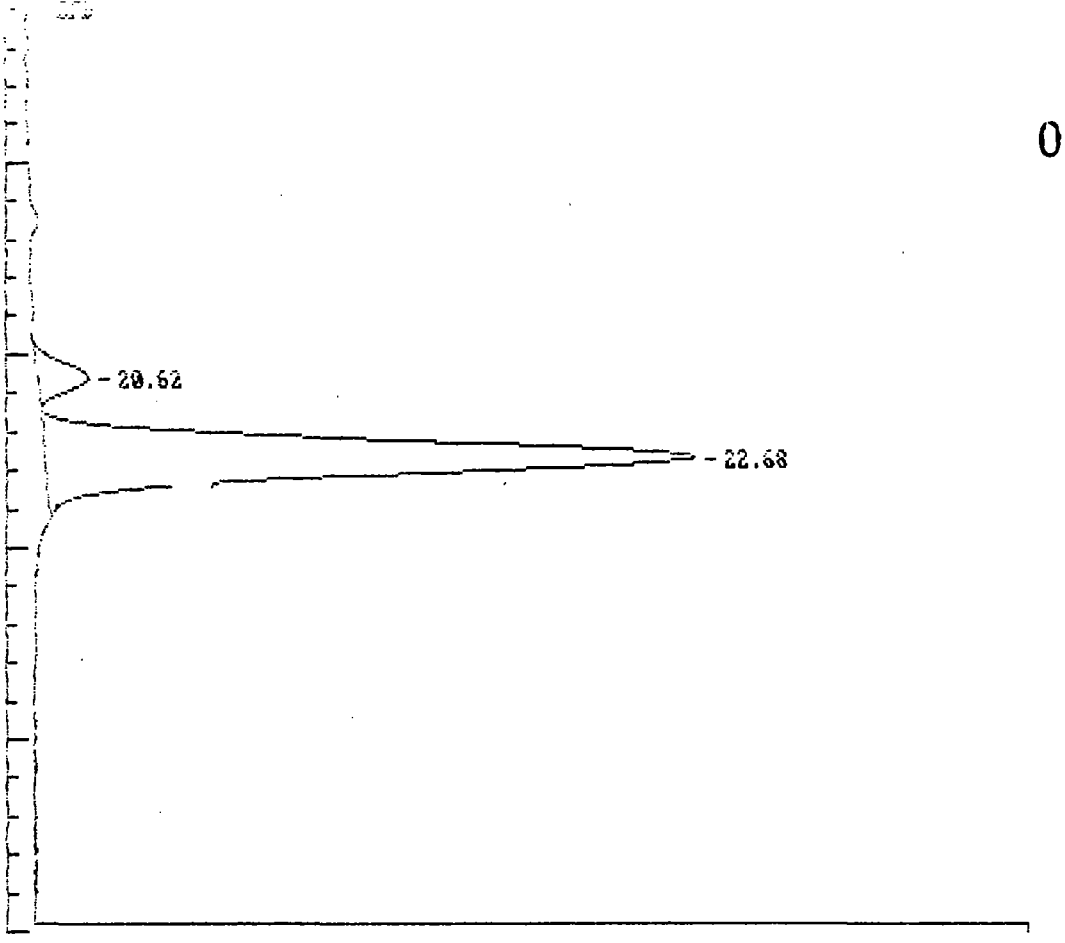
SS
5/19/88

Total Area: 2055794 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13311.AT2
Data File = J:BB13311.PTS Printed on 05-12-1988 at 14:56:08
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



01197



STANDARD: AROCLOR 1248 05/13/91

01198

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
Ø32	AROCLOR 1248(peak 1)	2.867	2.867	7	122268	.1500	ug/ml
Ø33	AROCLOR 1248(peak 2)	4.Ø5Ø	4.Ø5Ø	9	17565	.1500	ug/ml
Ø34	AROCLOR 1248(peak 3)	5.25Ø	5.25Ø	11	138962	.1500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1248 05/13/88 LIBRARY: [illegible]

01199

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
Ø32	AROCLOR 1248(peak 1)	2.25Ø	2.25Ø	1Ø	154Ø9Ø	.15ØØ	ug/ml
Ø33	AROCLOR 1248(peak 2)	2.883	2.883	13	156647	.15ØØ	ug/ml
Ø34	AROCLOR 1248(peak 3)	4.417	4.417	17	185596	.15ØØ	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

AREA PERCENT REPORT

01200

********** 05-12-1988 15:45:01 Version 4.1 **********
* Sample Name: AROCLOR 1248 0.150 UG/ML Data File: J:AB13312 *
* Date: 05-12-1988 15:44:44 Method: M:ASPI *
* Interface: 10 Cycle#: 12 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****

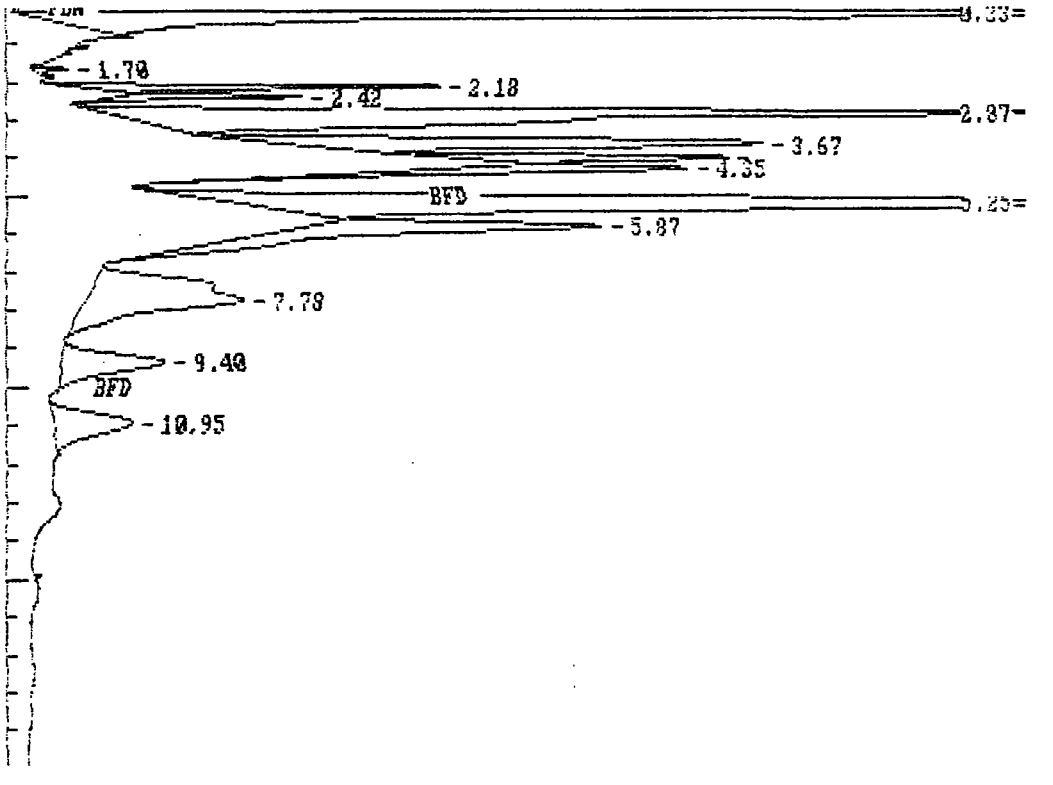
Starting Delay: 0.00 Run Time: 0.00

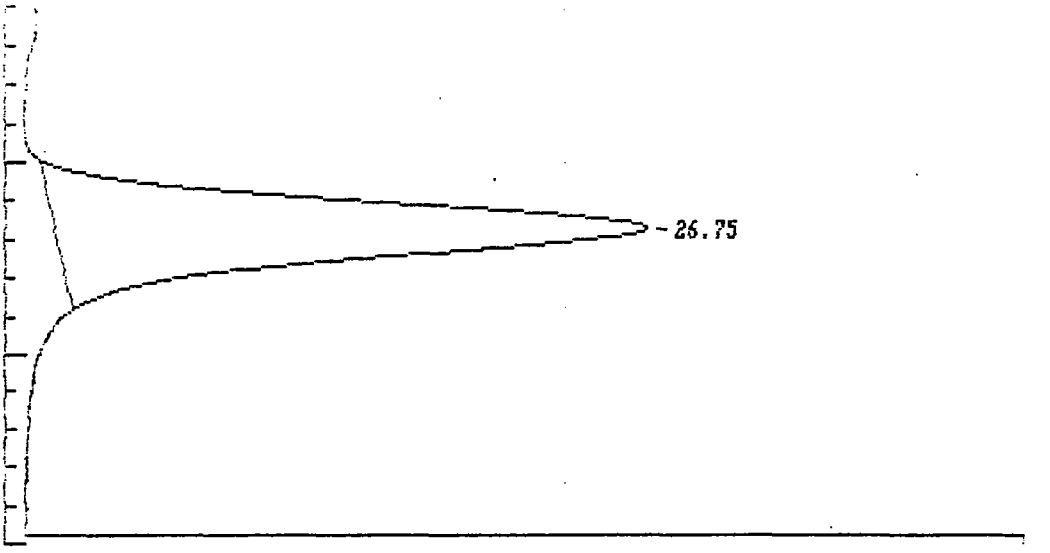
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	645597	40.9298	1	141375	100.000	4.6
3	1.70	1297	0.0822	1	235	0.201	5.5
5	2.18	17838	1.1309	1	2379	2.763	7.5
6	2.42	9478	0.6009	1	1288	1.468	7.4
7	2.87	122268	7.7516	1	7594	18.939	16.1
8	3.67	49757	3.1545	1	3161	7.707	15.7
9	4.05	17565	1.1136	1	1800	2.721	9.8
10	4.35	23320	1.4785	1	1803	3.612	12.9
11	5.25	138962	8.8099	1	6404	21.524	21.7
12	5.87	50882	3.2258	1	2100	7.881	24.2
13	7.78	57332	3.6347	1	1099	8.880	52.2
14	9.40	23238	1.4733	1	719	3.599	32.3
15	10.95	20075	1.2727	1	542	3.110	37.0
16	26.75	399720	25.3416	1	4088	61.915	97.8

SS
5/19/88

Total Area: 1577328 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13312.ATB
Data File = J:AB13312.PTS Printed on 05-12-1988 at 15:45:30
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




26.75

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

01202

********** 05-12-1988 15:34:27 Version 4.1 **********

* Sample Name: AROCLOR 1248 0.150 UG/ML Data File: J:BB13312 *
* Date: 05-12-1988 15:34:11 Method: M:BBPI *
* Interface: 12 Cycle#: 12 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 *

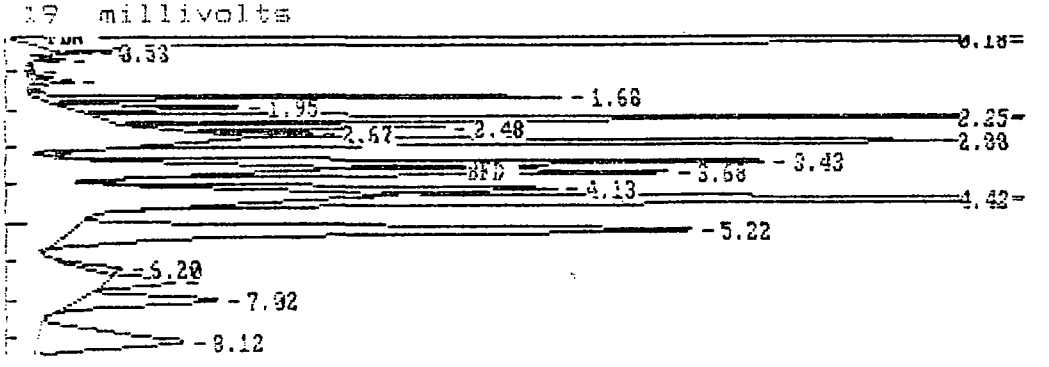
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1227026	37.8566	1	293835	100.000	4.2
2	0.53	2362	0.0729	1	709	0.192	3.3
3	0.70	3106	0.0958	1	666	0.253	4.7
4	1.00	1397	0.0431	1	209	0.114	6.7
5	1.17	1572	0.0485	1	398	0.128	3.9
6	1.30	3628	0.1119	1	782	0.296	4.6
8	1.68	52712	1.6263	1	9858	4.296	5.3
9	1.95	23073	0.7119	1	3213	1.880	7.2
10	2.25	154090	4.7540	1	24970	12.558	6.2
11	2.48	31720	0.9786	1	5352	2.585	5.9
12	2.67	6331	0.1953	1	1443	0.516	4.4
13	2.88	156647	4.8329	1	14742	12.766	10.6
14	3.43	83918	2.5891	1	10091	6.839	8.3
15	3.68	69101	2.1319	1	8013	5.632	8.6
16	4.13	44520	1.3735	1	5277	3.628	8.4
17	4.42	185596	5.7261	1	14919	15.126	12.4
18	5.22	200894	6.1981	1	11719	16.372	17.1
19	6.20	5774	0.1781	1	505	0.471	11.4
20	6.53	19943	0.6153	1	1352	1.625	14.7
21	7.02	45237	1.3957	1	2680	3.687	16.9
22	8.12	76592	2.3630	1	2779	6.242	27.6
23	9.22	9679	0.2986	1	346	0.789	28.0
24	10.38	47724	1.4724	1	1925	3.889	24.8
25	11.87	12769	0.3939	1	472	1.041	27.1
26	20.62	125628	3.8759	1	2500	10.238	50.3
27	22.70	650209	20.0605	1	11184	52.991	58.1

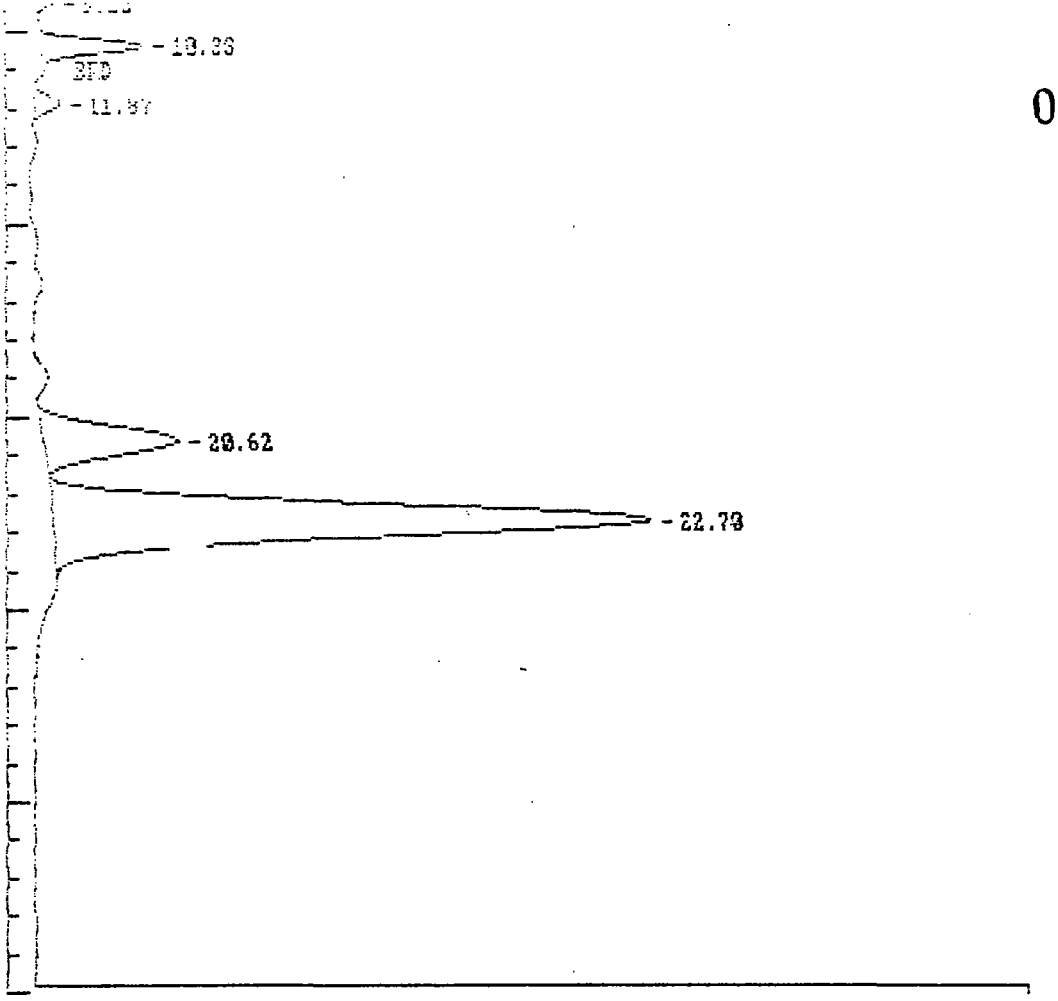
SS 5/19/88

Total Area: 3241244 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13312.ATB
Data File = J:BB13312.PTS Printed on 05-12-1988 at 15:34:57
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



01203



STANDARD: AROCLOR 125A 05/13/88 LIBRARY: [illegible]

01204

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
035	AROCLOR 1254(peak 1)	5.317	5.317	5	85860	.1500	ug/ml
036	AROCLOR 1254(peak 2)	6.300	6.300	6	98392	.1500	ug/ml
037	AROCLOR 1254(peak 3)	7.817	7.817	8	42796	.1500	ug/ml
038	AROCLOR 1254(peak 4)	9.400	9.400	9	107046	.1500	ug/ml
039	AROCLOR 1254(peak 5)	11.050	11.050	10	88124	.1500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1254 [illegible] LIB [illegible]

01205

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
035	AROCLOR 1254(peak 1)	5.100	5.100	16	217277	.1500	ug/ml
036	AROCLOR 1254(peak 2)	7.017	7.017	18	161682	.1500	ug/ml
037	AROCLOR 1254(peak 3)	8.100	8.100	19	225743	.1500	ug/ml
038	AROCLOR 1254(peak 4)	10.367	10.367	21	188806	.1500	ug/ml
039	AROCLOR 1254(peak 5)	11.867	11.867	22	215607	.1500	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

********** 05-12-1988 16:24:50 Version 4.1 **********
* Sample Name: AROCLOR 1254 0.150 UG/ML Data File: J:AB13313 01206
* Date: 05-12-1988 16:24:35 Method: M:A8PI
* Interface: 10 Cycle#: 13 Operator SS Channel#: 0 Vial#: N.A.
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS
* Solvent Description: 1.5% SP2250/1.95% SP2401
* Conditions: 190 DEGREES ISOTHERMAL
* Detector 0: ECD Detector 1:
* Misc. Information: 4 UL INJECTION LPT1:

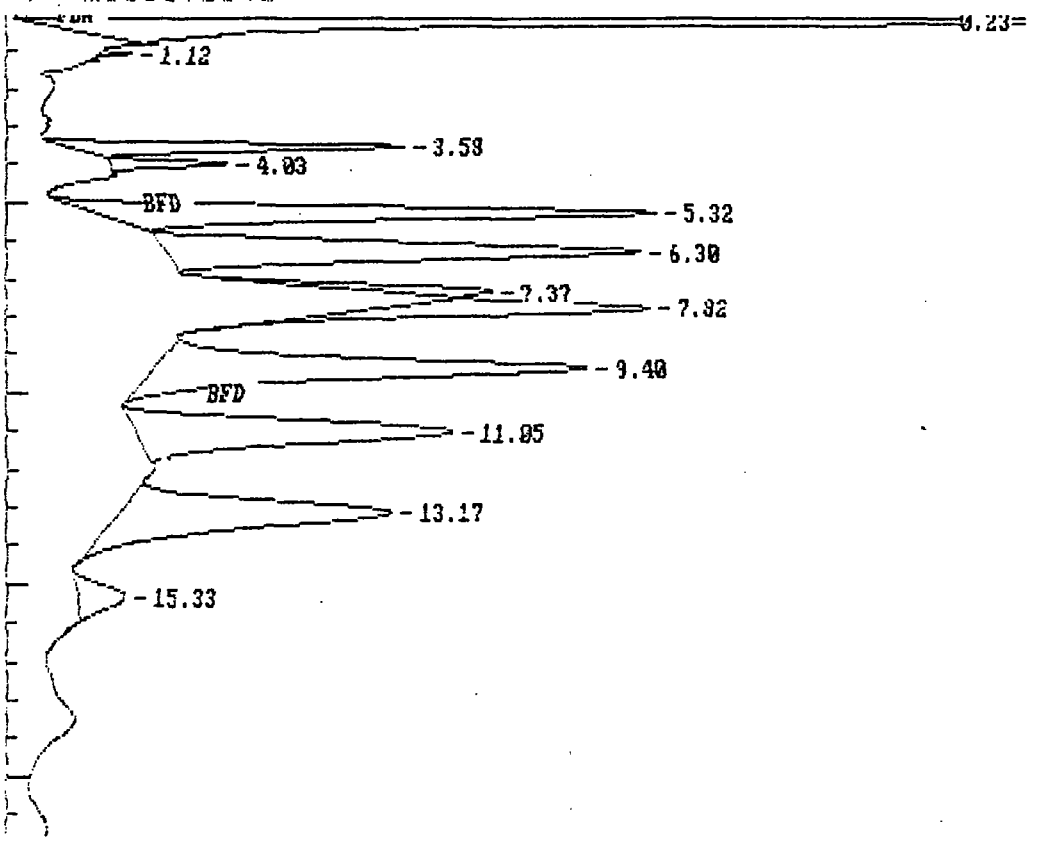
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	593606	50.3992	1	138700	100.000	4.3
2	1.12	1074	0.0912	1	225	0.181	4.8
3	3.58	30485	2.5883	1	2277	5.136	13.4
4	4.03	8800	0.7471	1	797	1.482	11.0
5	5.32	85860	7.2898	1	3820	14.464	22.5
6	6.30	98392	8.3538	1	3264	16.575	30.1
7	7.37	14359	1.2191	1	680	2.419	21.1
8	7.82	42796	3.6335	1	1912	7.210	22.4
9	9.40	107046	9.0886	1	2986	18.033	35.8
10	11.05	88124	7.4820	1	2172	14.846	40.6
11	13.17	93855	7.9686	1	1869	15.811	50.2
12	15.33	13411	1.1386	1	321	2.259	41.8

SS
5/19/88

Total Area: 1177807 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13313.ATB
Data File = J:AB13313.PTS Printed on 05-12-1988 at 16:25:20
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts



C1207

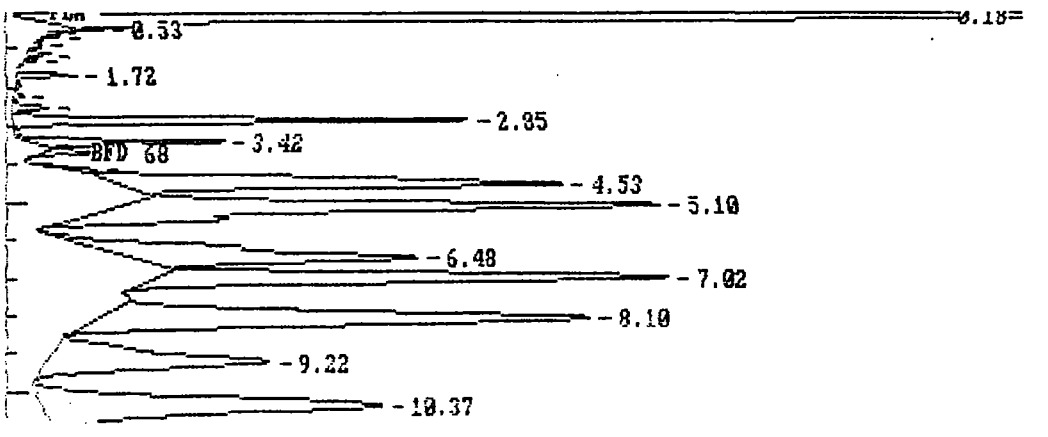
```
******************** 05-12-1988 16:13:46 Version 4.1 ********************
* Sample Name: AROCLOR 1254 0.150 UG/ML.          Data File: J:BB13313      *
* Date: 05-12-1988 16:13:28 Method: M:BBP[                                  *
* Interface: 12  Cycle#:  13   Operator SS  Channel#: 0    Vial#: N.A.      *
* 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:     0.00
```

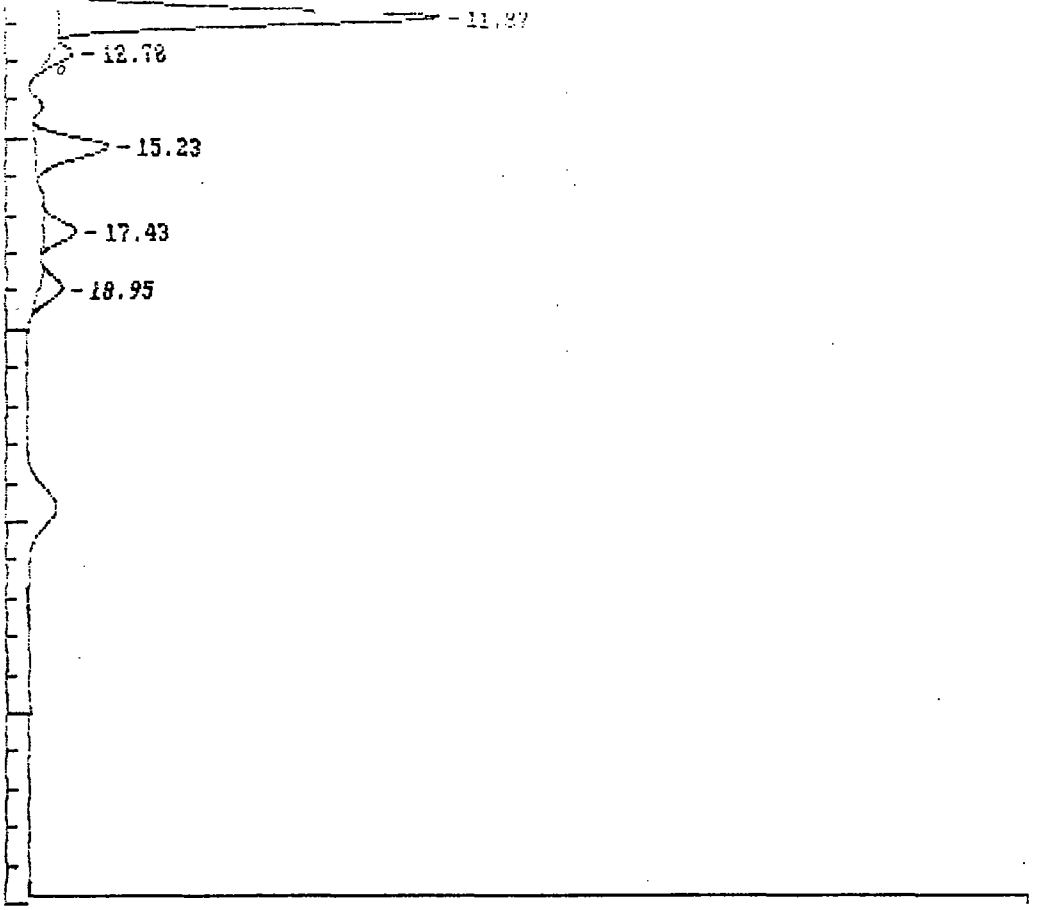
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1177784	41.6648	1	284976	100.000	4.1
2	0.53	2128	0.0756	1	609	0.181	3.5
3	0.70	1548	0.0550	1	282	0.131	5.5
4	0.92	1434	0.0510	1	180	0.122	8.0
5	1.17	2305	0.0619	1	454	0.196	5.1
6	1.33	1456	0.0517	1	265	0.124	5.5
7	1.72	7517	0.2672	1	1165	0.638	6.5
9	2.25	1144	0.0407	1	177	0.097	6.5
10	2.55	5675	0.2017	1	697	0.482	8.1
11	2.85	76984	2.7364	1	8561	6.536	9.0
12	3.42	29572	1.0511	1	3548	2.511	8.3
13	3.68	7049	0.2506	1	910	0.598	7.7
14	4.13	3191	0.1134	1	481	0.271	6.6
15	4.53	133603	4.7490	1	8161	11.344	16.4
16	5.10	217277	7.7232	1	10203	18.448	21.3
17	6.48	123301	4.3828	1	5229	10.469	23.6
18	7.02	161682	5.7470	1	9678	13.728	16.7
19	8.10	225743	8.0241	1	9361	19.167	24.1
20	9.22	121474	4.3178	1	4225	10.314	28.7
21	10.37	188806	6.7112	1	6386	16.031	29.6
22	11.87	215607	7.6638	1	7046	18.306	30.6
23	12.78	12145	0.4317	1	410	1.031	29.6
24	15.23	54274	1.9292	1	1362	4.608	39.9
25	17.43	22949	0.8157	1	608	1.948	37.8
26	18.95	18659	0.6632	1	446	1.584	41.9

SS
5/19/88

Total Area: 2813303 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13313.AT8
Data File = J:BB13313.PTS Printed on 05-12-1988 at 16:14:16
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts





01209

STANDARD: TOXAPHENE 05/23/88 LIBRARY: L:DR101B

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
020	TOXAPHENE (peak 1)	~7.167	~7.167	8	~21117	.2500	ug/
021	TOXAPHENE (peak 2)	~9.250	~9.250	10	~116110	.2500	ug/m
022	TOXAPHENE (peak 3)	~12.467	~12.467	12	~116564	.2500	ug/m

01210

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

01211

STANDARD: TOXAPHENE 05/23/88 LIBRARY: L:DRMIXB

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
020	TOXAPHENE (peak 1)	6.850	6.850	17	92811	.2500	ug/
021	TOXAPHENE (peak 2)	10.450	10.450	22	142761	.2500	ug/m
022	TOXAPHENE (peak 3)	12.783	12.783	24	233684	.2500	ug/m

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

DLC 05/23/88

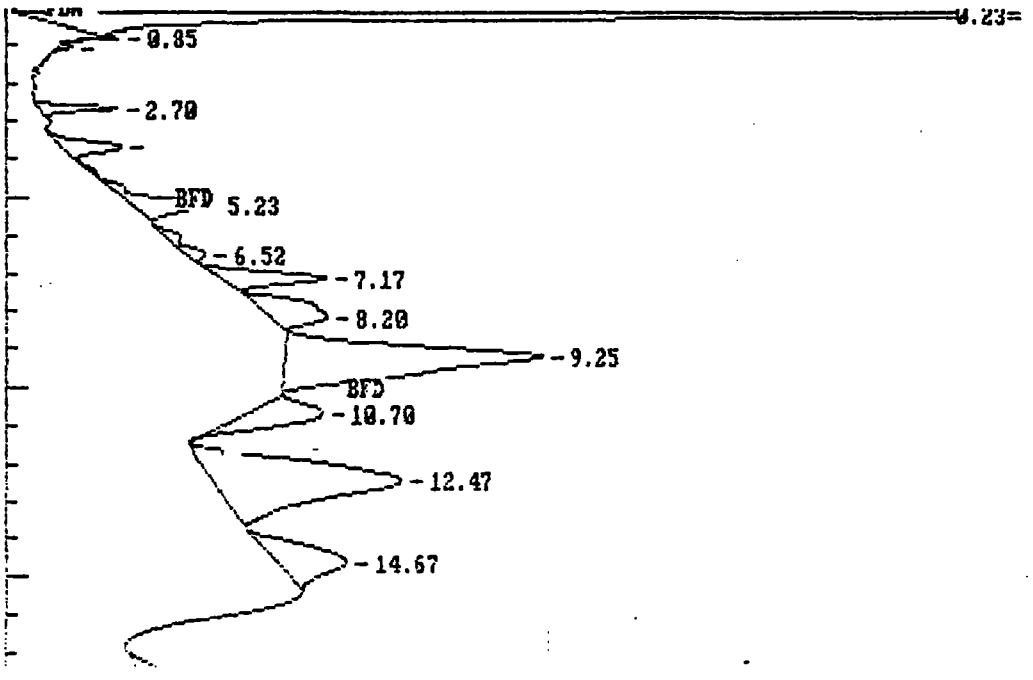
********* AREA PERCENT REPORT *********

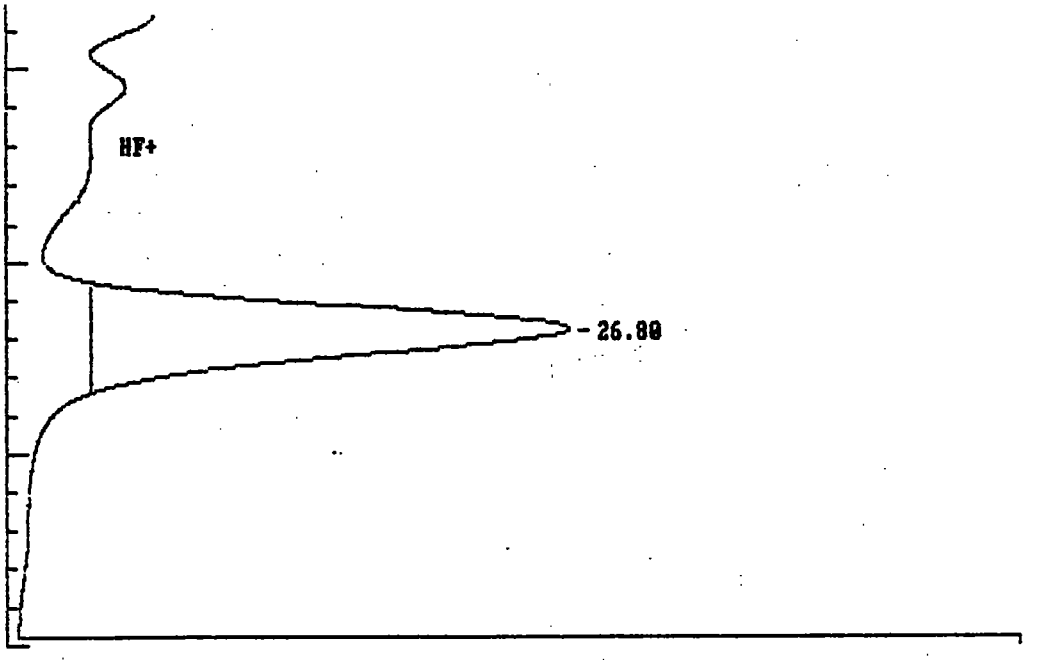
********** 05-19-1988 15:02:55 Version 4.1 **********
* Sample Name: TOXAPHENE 0.25 UG/ML Data File: J:AB1406 *
* Date: 05-19-1988 15:02:38 Method: M:ABPI *
* Interface: 10 Cycle#: 6 Operator SS Channel#: 0 Vial#: N.A. 01212 *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	600001	42.6381	1	139695	100.000	4.3
2	0.85	1003	0.0712	1	266	0.167	3.8
3	1.10	1132	0.0804	1	154	0.189	7.3
4	2.70	7265	0.5163	1	747	1.211	9.7
5	3.70	10645	0.7565	1	552	1.774	19.3
6	5.23	19422	1.3802	1	657	3.237	29.5
7	6.52	6091	0.4328	1	182	1.015	33.5
8	7.17	21117	1.5006	1	1019	3.519	20.7
9	8.20	22296	1.5844	1	536	3.716	41.6
10	9.25	116110	8.2512	1	2565	19.352	45.3
11	10.70	31234	2.2196	1	760	5.206	41.1
12	12.47	116564	8.2834	1	1831	19.427	63.6
13	14.67	34654	2.4626	1	667	5.776	51.9
14	17.73	10513	0.7471	1	233	1.752	45.0
15	26.80	409149	29.0755	1	4757	68.191	86.0

Total Area: 1407195 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1406.ATB
Data File = J:AB1406.PTS Printed on 05-19-1988 at 15:03:24
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01213

DLG 05/23/88

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

01214

********** 05-19-1988 14:58:49 Version 4.1 **********

* Sample Name: TOXAPHENE 0.25 UG/ML Data File: J:BB1406 *
* Date: 05-19-1988 14:58:32 Method: M:BBPI *
* Interface: 12 Cycle#: 6 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

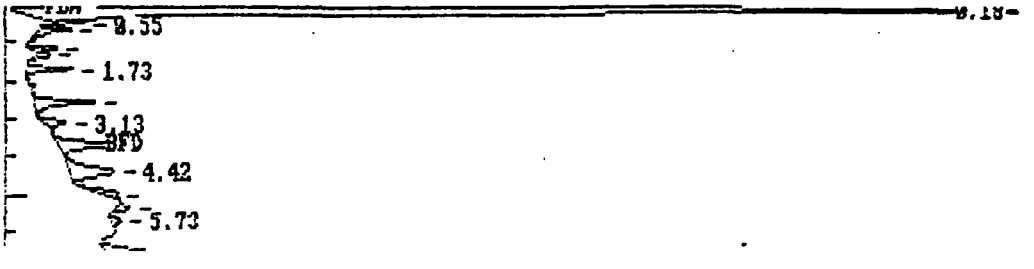
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEG ISOTHERMAL *
* Detector 0: Detector 1: ECD *
* Misc. Information: 4 UL INJ *

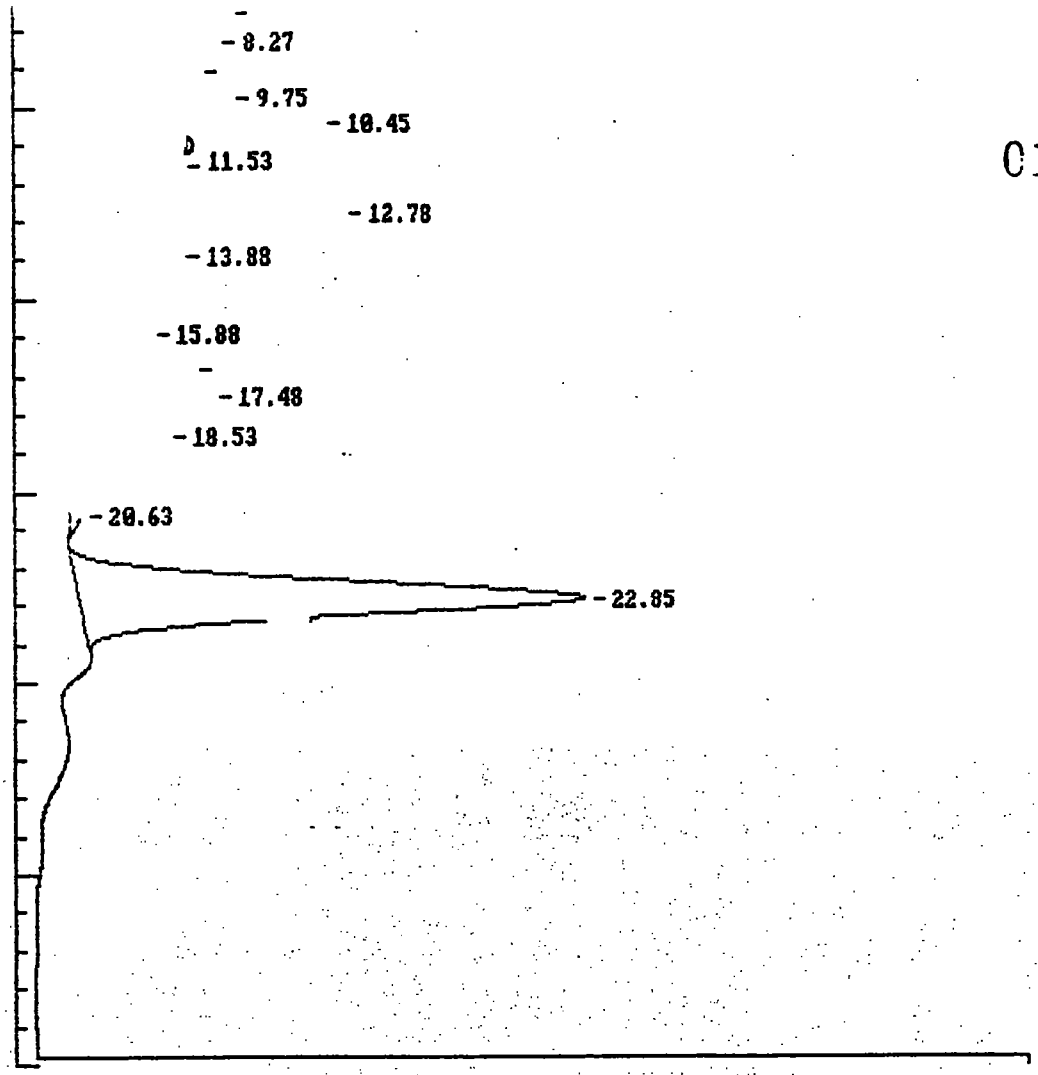
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1156802	38.9138	1	265637	100.000	4.4
2	0.55	4256	0.1432	1	1085	0.368	3.9
3	0.72	8848	0.2976	1	1041	0.765	8.5
4	1.18	3702	0.1245	1	801	0.320	4.6
5	1.35	4181	0.1406	1	429	0.361	9.7
6	1.73	9754	0.3281	1	1451	0.843	6.7
10	2.58	18355	0.6174	1	1897	1.587	9.7
11	3.13	5223	0.1757	1	621	0.451	8.4
12	3.73	21849	0.7350	1	1754	1.889	12.5
13	4.42	22236	0.7480	1	1371	1.922	16.2
14	4.98	5132	0.1726	1	433	0.444	11.9
15	5.37	4735	0.1593	1	493	0.409	9.6
16	5.73	3484	0.1172	1	296	0.301	11.8
17	6.85	92811	3.1221	1	4254	8.023	21.8
18	7.48	14836	0.4991	1	1013	1.282	14.6
19	8.27	24803	0.8343	1	1211	2.144	20.5
20	9.05	20877	0.7023	1	934	1.805	22.3
21	9.75	20530	0.6906	1	1013	1.775	20.3
22	10.45	142761	4.8024	1	4519	12.341	31.6
23	11.53	32747	1.1016	1	1396	2.831	23.5
24	12.78	233684	7.8609	1	5881	20.201	39.7
25	13.88	17656	0.5939	1	695	1.526	25.4
26	15.88	15466	0.5203	1	502	1.337	30.8
27	16.80	16104	0.5417	1	573	1.392	28.1
28	17.48	37168	1.2503	1	1148	3.213	32.4
29	18.53	39710	1.3358	1	851	3.433	46.6
30	20.63	14215	0.4782	1	341	1.229	41.7
31	22.85	980811	32.9936	1	16027	84.786	61.2

Total Area: 2972730 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1406.ATB
Data File = J:BB1406.PTS Printed on 05-19-1988 at 14:59:17
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts





01215

STANDARD: TECHNICAL CHLORDANE 05/23/88 LIBRARY: L:DR101B

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
008	gamma-CHLORDANE	~5.833	~5.833	11	~109174	.0750	ug/
009	alpha-CHLORDANE	~6.517	~6.517	12	~31386	.0750	ug/
051	HEPTACHLOR IN TC	~3.267	~3.267	8	~49981	.0750	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

01217

STANDARD: TECHNICAL CHLORDANE 05/23/88 LIBRARY: L:DRMIXB

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
008	gamma-CHLORDANE	~4.867	4.867	16	~163101	.0750	ug/
009	alpha-CHLORDANE	~5.333	5.333	17	~136052	.0750	ug/
051	HEPTACHLOR IN TC	~2.300	2.300	10	~85267	.0750	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

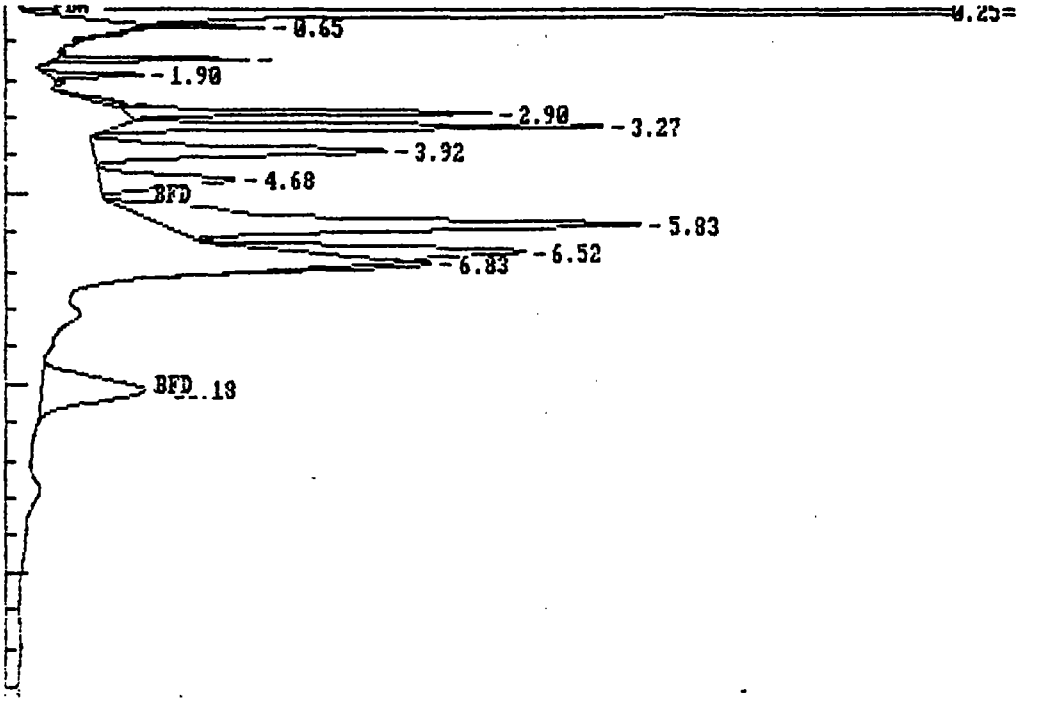
01218

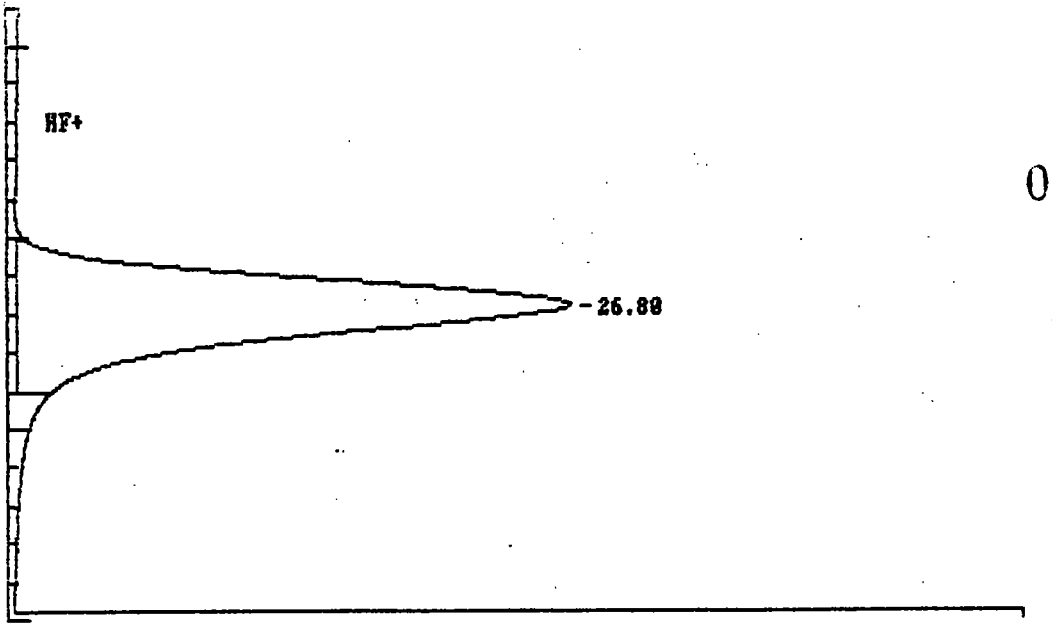
********** 05-19-1988 15:57:45 Version 4.1 **********
* Sample Name: TECHNICAL CHLORDANE 0.075 UG/ML Data File: J:AB1407 *
* Date: 05-19-1988 15:57:29 Method: M:ABPI *
* Interface: 10 Cycle#: 7 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.25	726856	43.4425	1	162839	100.000	4.5
2	0.65	5305	0.3170	1	1240	0.730	4.3
3	1.50	10427	0.6232	1	1944	1.435	5.4
4	1.90	5750	0.3437	1	919	0.791	6.3
6	2.68	2861	0.1710	1	155	0.394	18.4
7	2.90	32253	1.9277	1	3622	4.437	8.9
8	3.27	49981	2.9873	1	4832	6.876	10.3
9	3.92	50023	2.9898	1	2882	6.882	17.4
10	4.68	28736	1.7175	1	1339	3.953	21.5
11	5.83	109174	6.5251	1	4761	15.020	22.9
12	6.52	31386	1.8758	1	2028	4.318	15.5
13	6.83	13383	0.7999	1	722	1.841	18.5
14	10.18	42598	2.5460	1	1014	5.861	42.0
15	26.80	564412	33.7336	1	5485	77.651	102.9

Total Area: 1673143 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1407.ATB
Data File = J:AB1407.PTS Printed on 05-19-1988 at 15:58:13
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01219

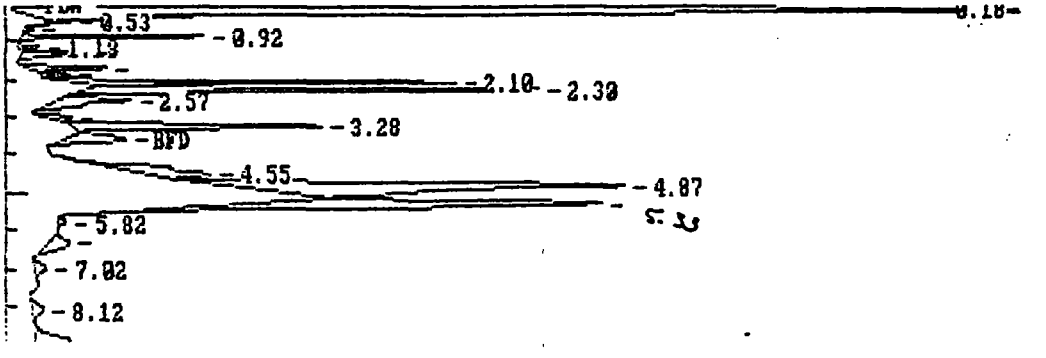
********** AREA PERCENT REPORT ********** 01220

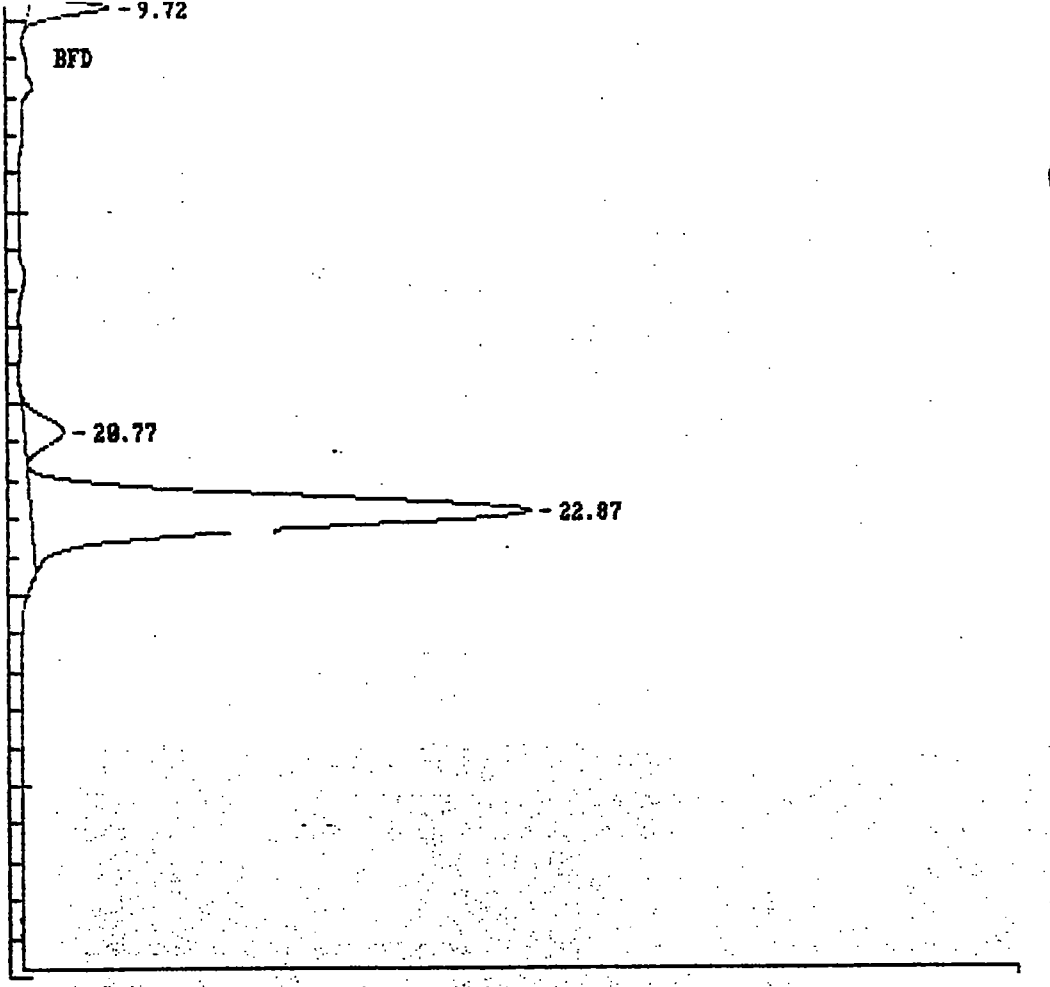
```
******************** 05-19-1988 15:55:42 Version 4.1 ********************
* Sample Name: TECHNICAL CHLORDANE 0.075 UG/ML   Data File: J:BB1407      *
* Date: 05-19-1988 15:55:23 Method: M:BBPI                                *
* Interface: 12  Cycle#:  7    Operator SS  Channel#: 0    Vial#: N.A.    *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1449048	44.9441	1	333426	100.000	4.3
2	0.53	2245	0.0696	1	731	0.155	3.1
3	0.73	1366	0.0424	1	287	0.094	4.8
4	0.92	21649	0.6715	1	5759	1.494	3.8
5	1.18	2382	0.0739	1	574	0.164	4.1
6	1.33	15551	0.4823	1	2169	1.073	7.2
7	1.75	14083	0.4368	1	2286	0.972	6.2
8	1.90	3831	0.1188	1	927	0.264	4.1
9	2.10	67004	2.0782	1	12104	4.624	5.5
10	2.30	85267	2.6447	1	14358	5.884	5.9
11	2.57	27977	0.8677	1	2334	1.931	12.0
12	3.07	3608	0.1119	1	517	0.249	7.0
13	3.28	63041	1.9553	1	7848	4.351	8.0
14	3.63	23147	0.7179	1	1932	1.597	12.0
15	4.55	26707	0.8284	1	1743	1.843	15.3
16	4.87	163101	5.0588	1	12282	11.256	13.3
17	5.33	136052	4.2198	1	11438	9.389	11.9
18	5.82	2482	0.0770	1	245	0.171	10.1
19	6.37	14886	0.4617	1	708	1.027	21.0
20	7.02	5498	0.1705	1	360	0.379	15.3
21	8.12	6650	0.2062	1	344	0.459	19.3
22	8.95	22951	0.7119	1	1134	1.584	20.2
23	9.72	62011	1.9234	1	2541	4.279	24.4
24	20.77	61447	1.9059	1	1241	4.241	49.5
25	22.87	942131	29.2214	1	15878	65.017	59.3

Total Area: 3224114 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1407.ATB
Data File = J:BB1407.PTS Printed on 05-19-1988 at 15:56:14
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts





01221

STANDARD: AROCLOR 1016/1260 05/23/88 LIBRARY: L:DR101B

01222

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
023	AROCLOR 1016(peak 1)	1.683	1.683	4	21334	.0750	ug/m
024	AROCLOR 1016(peak 2)	2.183	2.183	5	25364	.0750	ug/m
025	AROCLOR 1016(peak 3)	2.867	2.867	7	40109	.0750	ug/
040	AROCLOR 1260(peak 1)	9.333	9.333	15	84678	.2500	ug/
041	AROCLOR 1260(peak 2)	11.150	11.150	16	146817	.2500	ug/
042	AROCLOR 1260(peak 3)	12.050	12.050	17	23232	.2500	ug/
043	AROCLOR 1260(peak 4)	13.150	13.150	18	148677	.2500	ug/
044	AROCLOR 1260(peak 5)	15.283	15.283	19	137859	.2500	ug/
045	AROCLOR 1260(peak 6)	17.617	17.617	20	178569	.2500	ug/
046	AROCLOR 1260(peak 7)	21.467	21.467	21	49629	.2500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

01223

STANDARD: AROCLOR 1016/1260 05/23/88 LIBRARY: L:DRMIXB

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
023	AROCLOR 1016(peak 1)	~1.300	~1.300	6	~39596	.0750	ug/m
024	AROCLOR 1016(peak 2)	~1.700	~1.700	8	~74131	.0750	ug/m
025	AROCLOR 1016(peak 3)	~2.267	~2.267	10	~134150	.0750	ug/
040	AROCLOR 1260 (PEAK 1	~7.250	~7.250	20	~256171	.2500	ug/
041	AROCLOR 1260(peak 2)	~8.083	~8.083	21	~273101	.2500	ug/
042	AROCLOR 1260(peak 3)	~9.300	~9.300	22	~426034	.2500	ug/
043	AROCLOR 1260(peak 4)	~10.467	~10.467	23	~335956	.2500	ug/
044	AROCLOR 1260(peak 5)	~11.950	~11.950	24	~419683	.2500	ug/
045	AROCLOR 1260(peak 6)	~12.883	~12.883	25	~256389	.2500	ug/
046	AROCLOR 1260(peak 7)	~19.133	~19.133	29	~531782	.2500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

DLC 05/23/88

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

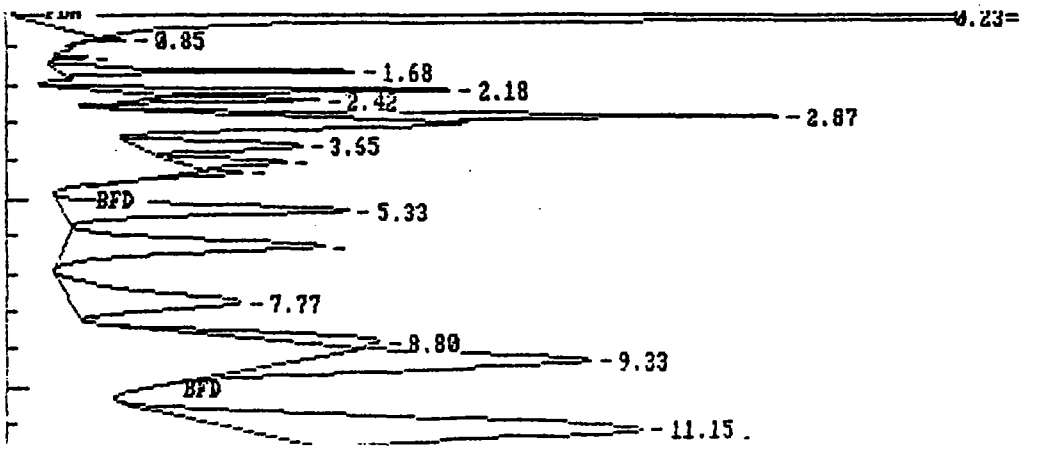
01224

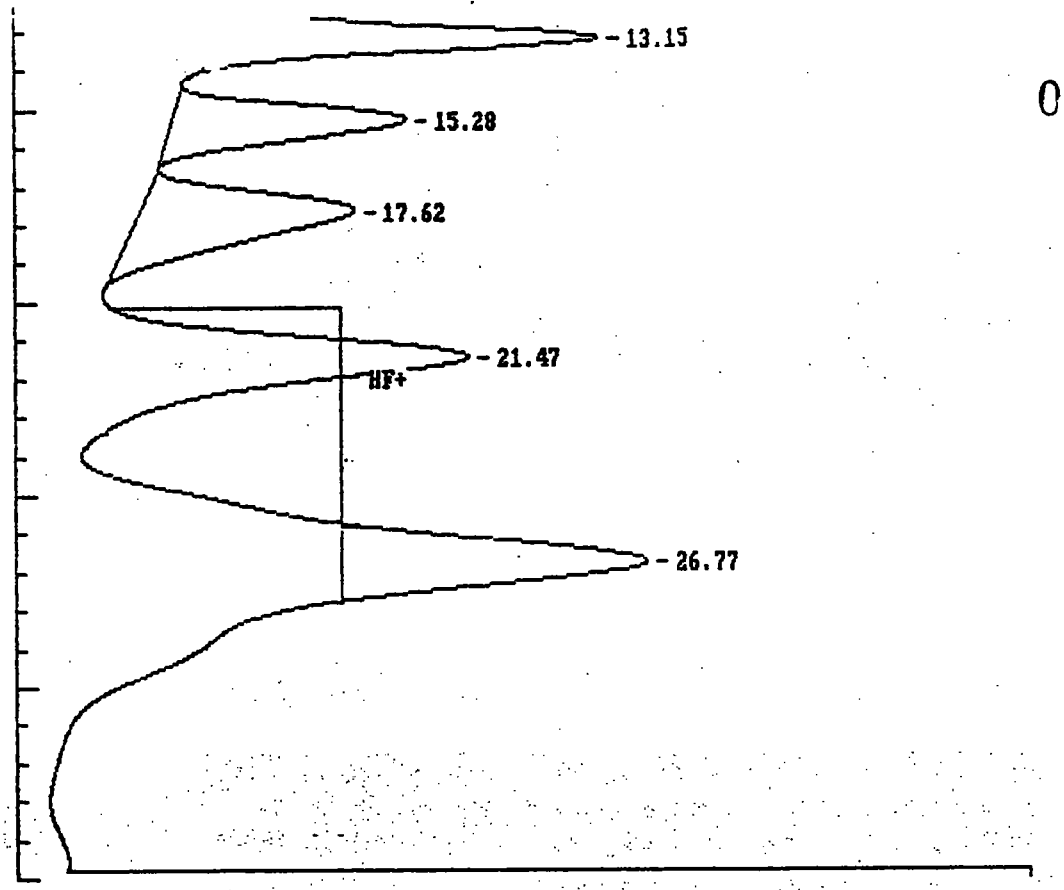
```
******************** 05-19-1988 16:22:28 Version 4.1 ********************
* Sample Name: AROCLOR 1016/1260 0.075/0.25 UG/MLData File: J:AB1408      *
* Date: 05-19-1988 16:22:10 Method: M:ABPI                                *
* Interface: 10  Cycle#:  8    Operator SS  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS  *
*            Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                     *
*           Detector 0: ECD                  Detector 1:                  *
* Misc. Information: 4 UL INJECTION                    LPT1:          *  *
*************************************************************************
Starting Delay:    0.00                        Run Time:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	568826	30.4430	1	128260	100.000	4.4
2	0.85	1176	0.0629	1	341	0.207	3.4
3	1.33	1699	0.0909	1	341	0.299	5.0
4	1.68	21334	1.1418	1	2903	3.751	7.4
5	2.18	25364	1.3575	1	3356	4.459	7.6
6	2.42	12788	0.6844	1	1796	2.248	7.1
7	2.87	40109	2.1466	1	4508	7.051	8.9
8	3.65	24251	1.2979	1	1582	4.263	15.3
9	4.07	10160	0.5438	1	979	1.786	10.4
10	4.33	8154	0.4364	1	658	1.433	12.4
11	5.33	55457	2.9680	1	2818	9.749	19.7
12	6.30	62922	3.3675	1	2568	11.062	24.5
13	7.77	54228	2.9022	1	1677	9.533	32.3
14	8.80	20032	1.0721	1	797	3.522	25.1
15	9.33	84678	4.5319	1	3011	14.886	28.1
16	11.15	146817	7.8575	1	3968	25.811	37.0
17	12.05	23232	1.2433	1	929	4.084	25.0
18	13.15	148677	7.9571	1	3478	26.138	42.7
19	15.28	137859	7.3781	1	2307	24.236	59.8
20	17.62	178568	9.5568	1	2109	31.392	84.7
21	21.47	49629	2.6561	2	1138	8.725	43.6
22	26.77	192536	10.3043	2	2924	33.848	65.9

Total Area: 1868495 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1408.ATB
Data File = J:AB1408.PTS Printed on 05-19-1988 at 16:22:57
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01225

01226 DLC 05/23/88

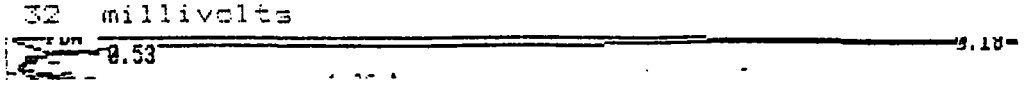
********** AREA PERCENT REPORT **********

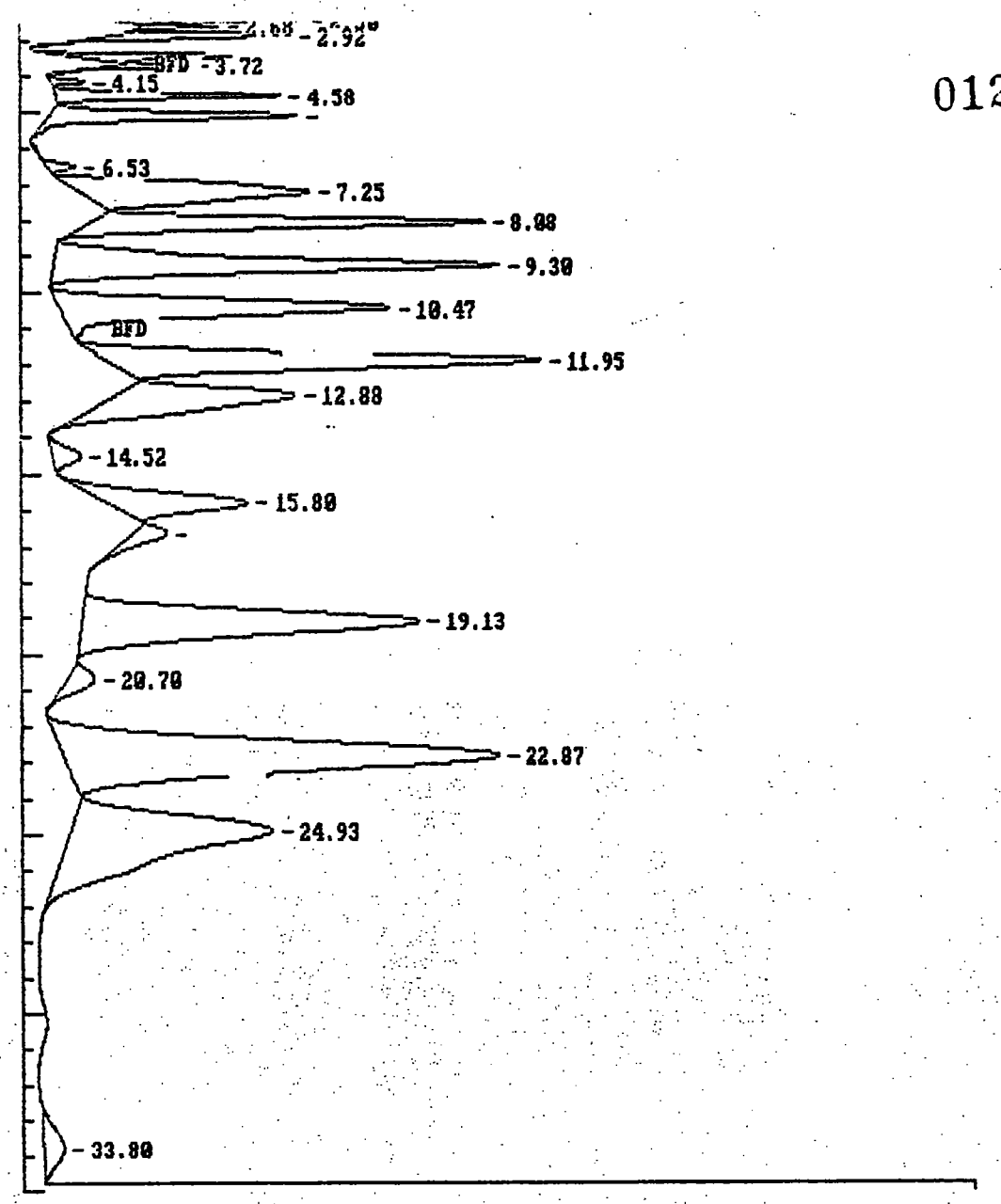
```
******************** 05-19-1988 16:16:08 Version 4.1 ********************
* Sample Name: AROCLOR 1016/1260 0.075/0.25 UG/MLData File: J:BB1408      *
* Date: 05-19-1988 16:15:47 Method: M:BBPI                                *
* Interface: 12  Cycle#:  8    Operator SS  Channel#: 0    Vial#: N.A.    *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1097992	18.2884	1	250296	100.000	4.4
2	0.53	3630	0.0605	1	1090	0.331	3.3
3	0.70	2213	0.0369	1	447	0.202	5.0
4	1.02	3387	0.0564	1	873	0.308	3.9
5	1.13	4763	0.0793	1	1322	0.434	3.6
6	1.30	39596	0.6595	1	8341	3.606	4.7
7	1.55	2568	0.0428	1	643	0.234	4.0
8	1.70	74131	1.2347	1	12750	6.752	5.8
9	2.00	26965	0.4491	1	4059	2.456	6.6
10	2.27	134150	2.2344	1	20850	12.218	6.4
11	2.50	37251	0.6205	1	6283	3.393	5.9
12	2.68	13399	0.2232	1	2689	1.220	5.0
13	2.92	67666	1.1271	1	6588	6.163	10.3
14	3.47	42612	0.7097	1	4914	3.881	8.7
15	3.72	25510	0.4249	1	3075	2.323	8.3
16	4.15	10134	0.1688	1	1183	0.923	8.6
17	4.58	98503	1.6407	1	7557	8.971	13.0
18	5.13	127652	2.1262	1	8383	11.626	15.2
19	6.53	11177	0.1862	1	921	1.018	12.1
20	7.25	256171	4.2668	1	7658	23.331	33.4
21	8.08	273101	4.5488	1	13310	24.873	20.5
22	9.30	426034	7.0961	1	15013	38.801	28.4
23	10.47	335956	5.5958	1	11077	30.597	30.3
24	11.95	419683	6.9903	1	14462	38.223	29.0
25	12.88	256389	4.2705	1	6109	23.351	42.0
26	14.52	27834	0.4636	1	922	2.533	30.2
27	15.80	160249	2.6691	1	4646	14.595	34.5
28	16.65	41753	0.6954	1	1209	3.803	34.5
29	19.13	531782	8.8575	1	11327	48.432	46.9
30	20.70	41632	0.6934	1	994	3.792	41.9
31	22.87	825518	13.7500	1	14598	75.184	56.6
32	24.93	537825	8.9581	1	6784	48.983	79.3
33	33.80	46548	0.7753	1	672	4.239	69.3

Total Area: 6003769 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1408.ATB
Data File = J:BB1408.PTS Printed on 05-19-1988 at 16:16:40
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts

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BFD 3.72
4.15
4.58
6.53
7.25
8.08
9.30
10.47
BFD
11.95
12.88
14.52
15.80
19.13
20.70
22.87
24.93
33.80

STANDARD: AROCLOR 1221 05/23/88 LIBRARY: L:DR101

01228

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UN
026	AROCLOR 1221(peak 1)	\1.683	\1.683	7	\37636	.1500	ug

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1221 05/23/88 LIBRARY: L:DRMIXF

01229

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UN
026	AROCLOR 1221(peak 1)	\1.300	\1.300	7	\03989	.1500	ug

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

DCE 03/23/08

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

01230

********** 05-19-1988 17:03:25 Version 4.1 **********

* Sample Name: AROCLOR 1221 0.15 UG/ML Data File: J:AB1409 *
* Date: 05-19-1988 17:03:09 Method: M:ABPI *
* Interface: 10 Cycle#: 9 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

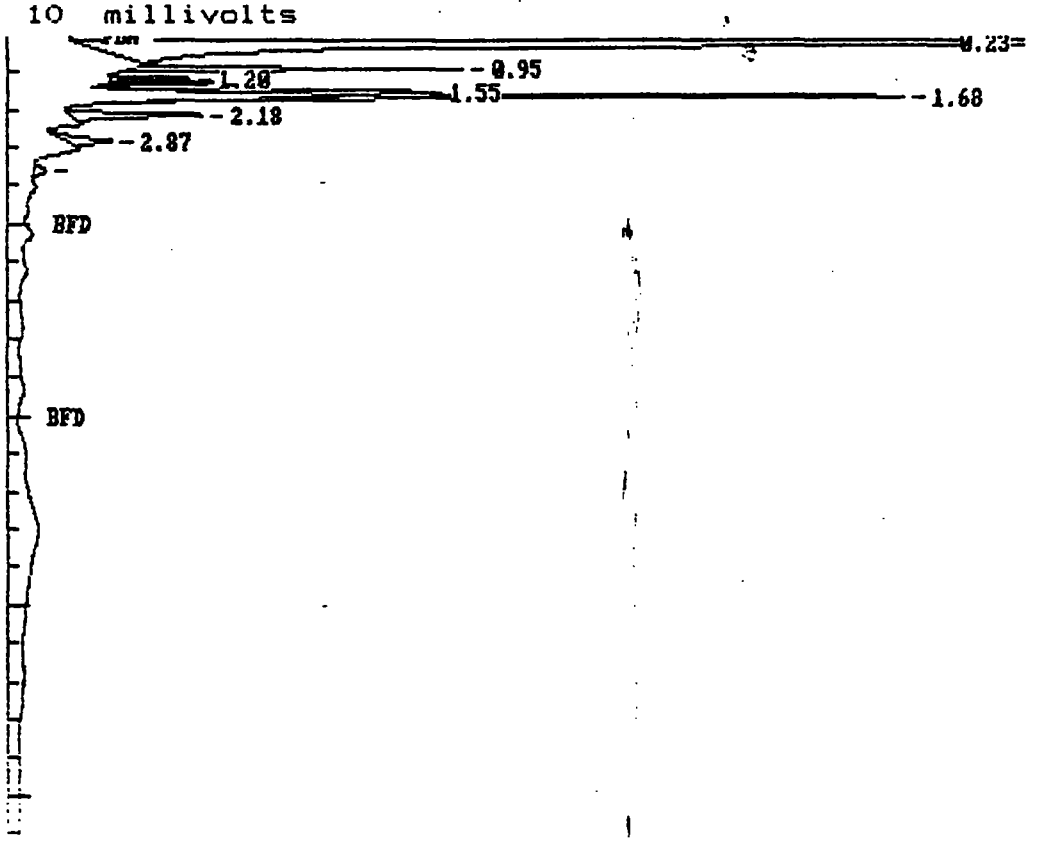
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *

Starting Delay: 0.00 Run Time: 0.00

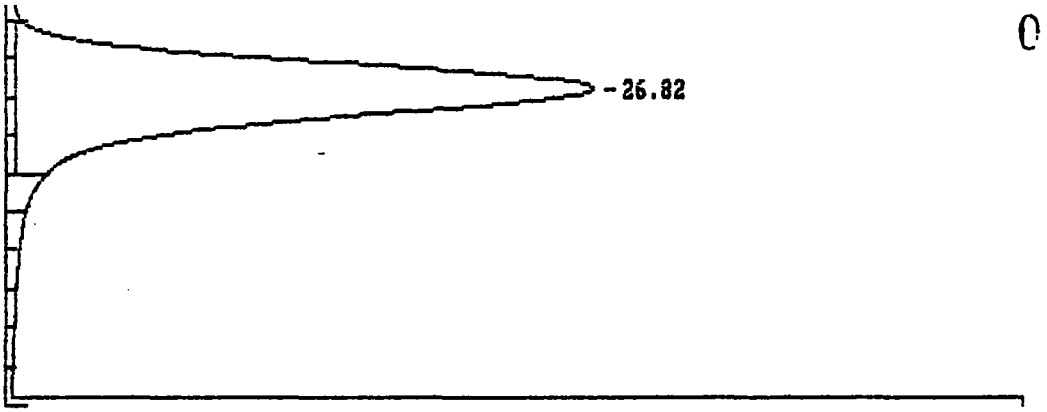
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	565536	46.4664	1	130184	98.865	4.3
3	0.95	13155	1.0808	1	3267	2.300	4.0
4	1.20	3149	0.2587	1	767	0.550	4.1
5	1.33	4882	0.4011	1	1077	0.853	4.5
6	1.55	4699	0.3861	1	1170	0.821	4.0
7	1.68	37636	3.0923	1	6160	6.579	6.1
8	2.18	10508	0.8633	1	1270	1.837	8.3
9	2.87	3974	0.3265	1	408	0.695	9.7
10	3.65	1519	0.1248	1	122	0.266	12.4
11	26.82	572029	46.9999	1	5712	100.000	100.1

Total Area: 1217086 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB1409.ATB
Data File = J:AB1409.PTS Printed on 05-19-1988 at 17:03:50
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts



HF+



01231

DCC 05/25/88

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

01232

********** 05-19-1988 16:56:45 Version 4.1 **********

* Sample Name: AROCLOR 1221 0.15 UG/ML Data File: J:BB1409 *
* Date: 05-19-1988 16:56:28 Method: M:BBPI *
* Interface: 12 Cycle#: 9 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

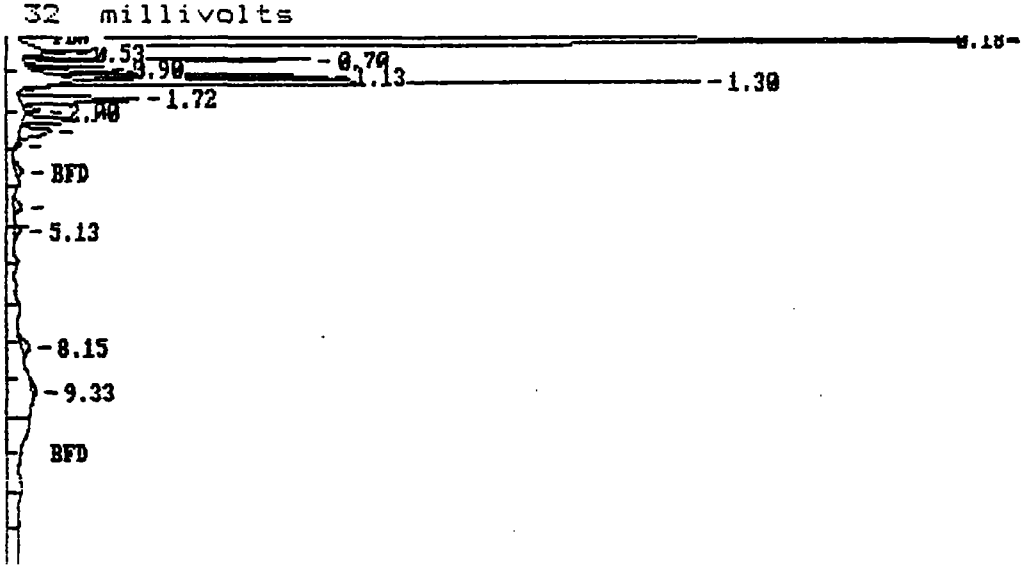
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEG ISOTHERMAL *
* Detector 0: Detector 1: ECD *
* Misc. Information: 4 UL INJ *

Starting Delay: 0.00 Run Time: 0.00

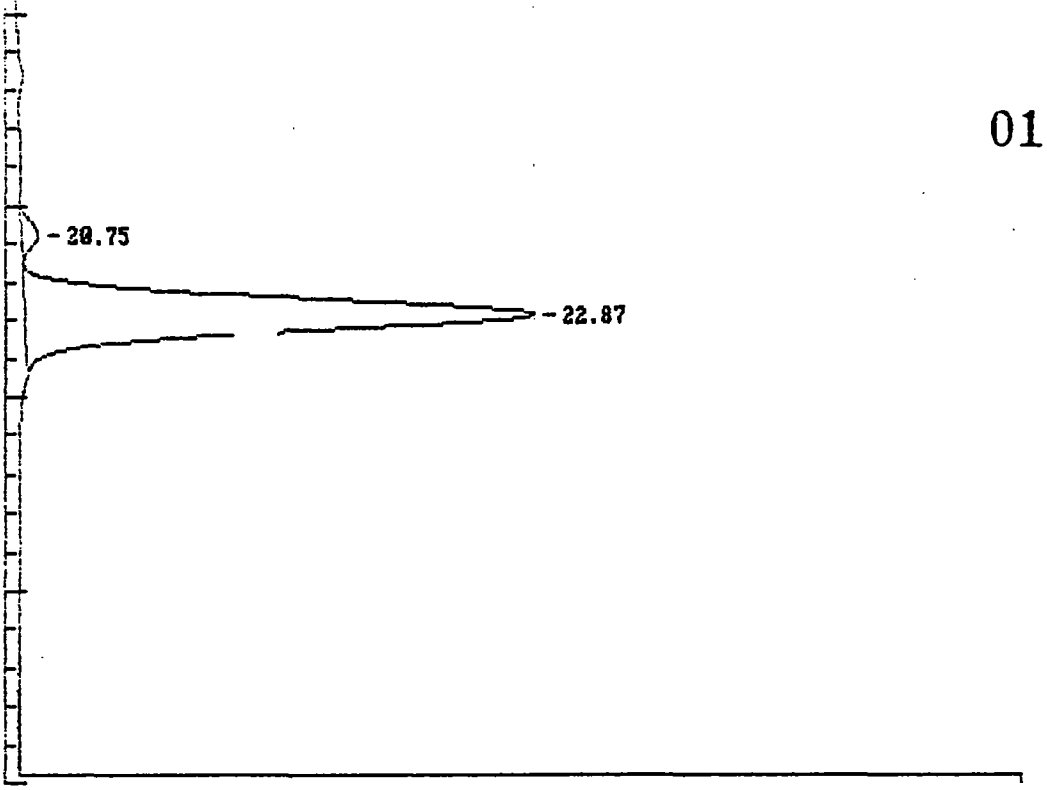
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1067741	46.0971	1	243721	100.000	4.4
2	0.53	2725	0.1176	1	829	0.255	3.3
3	0.70	28514	1.2310	1	8980	2.670	3.2
4	0.90	7473	0.3226	1	2366	0.700	3.2
5	1.02	7476	0.3227	1	2353	0.700	3.2
6	1.13	27786	1.1996	1	8174	2.602	3.4
7	1.30	103989	4.4895	1	20415	9.739	5.1
8	1.72	33784	1.4585	1	3742	3.164	9.0
9	2.00	2805	0.1211	1	494	0.263	5.7
10	2.27	12661	0.5466	1	1932	1.186	6.6
11	2.53	13235	0.5714	1	995	1.239	13.3
12	2.90	1147	0.0495	1	130	0.107	8.8
13	3.62	2918	0.1260	1	201	0.273	14.5
14	4.55	3733	0.1612	1	247	0.350	15.1
15	5.13	3041	0.1313	1	195	0.285	15.6
16	8.15	4952	0.2138	1	245	0.464	20.2
17	9.33	2951	0.1274	1	144	0.276	20.6
18	20.75	24835	1.0722	1	534	2.326	46.5
19	22.87	964526	41.6410	1	16110	90.333	59.9

Total Area: 2316288 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB1409.ATB
Data File = J:BB1409.PTS Printed on 05-19-1988 at 16:57:14
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts



01233



STANDARD: AROCLOR 1232 05/23/88 LIBRARY: L:DR101B

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
027	AROCLOR 1232(peak 1)	~1.683	~1.683	7	~31934	.1500	ug/
028	AROCLOR 1232(peak 2)	~2.867	~2.867	10	~35233	.1500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1232 05/23/88 LIBRARY: L:DRMIXB

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
027	AROCLOR 1232(peak 1)	\1.300	\1.300	7	\84243	.1500	ug/
028	AROCLOR 1232(peak 2)	\2.267	\2.267	11	\117426	.1500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

DLC 05/25/88

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

01236

********** 05-19-1988 17:41:53 Version 4.1 **********

* Sample Name: AROCLOR 1232 0.15 UG/ML Data File: J:AB14010 *
* Date: 05-19-1988 17:41:38 Method: M:ABPI *
* Interface: 10 Cycle#: 10 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

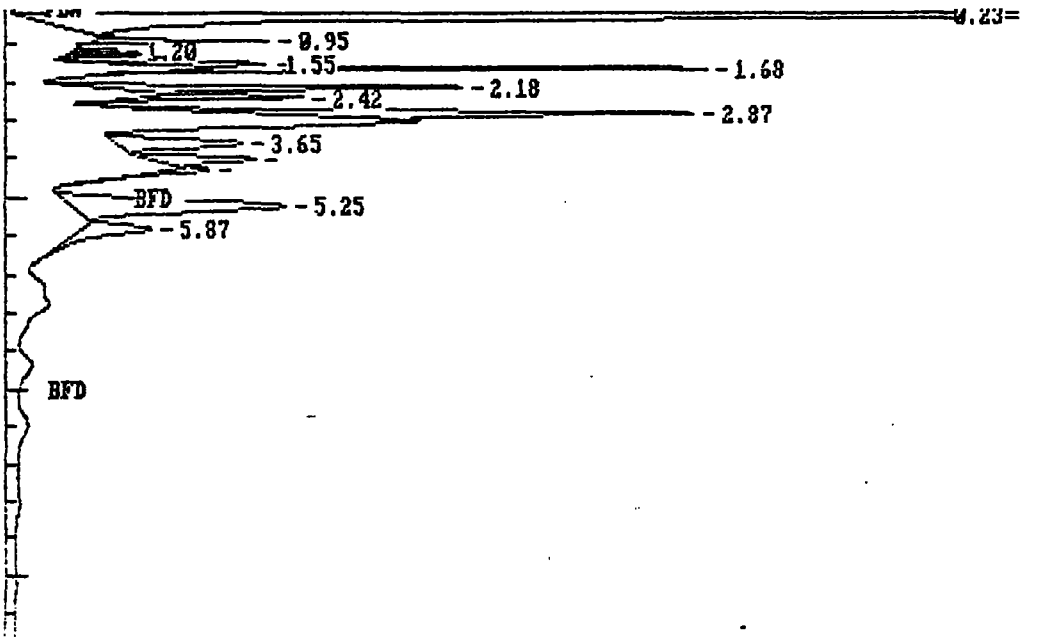
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *

Starting Delay: 0.00 Run Time: 0.00

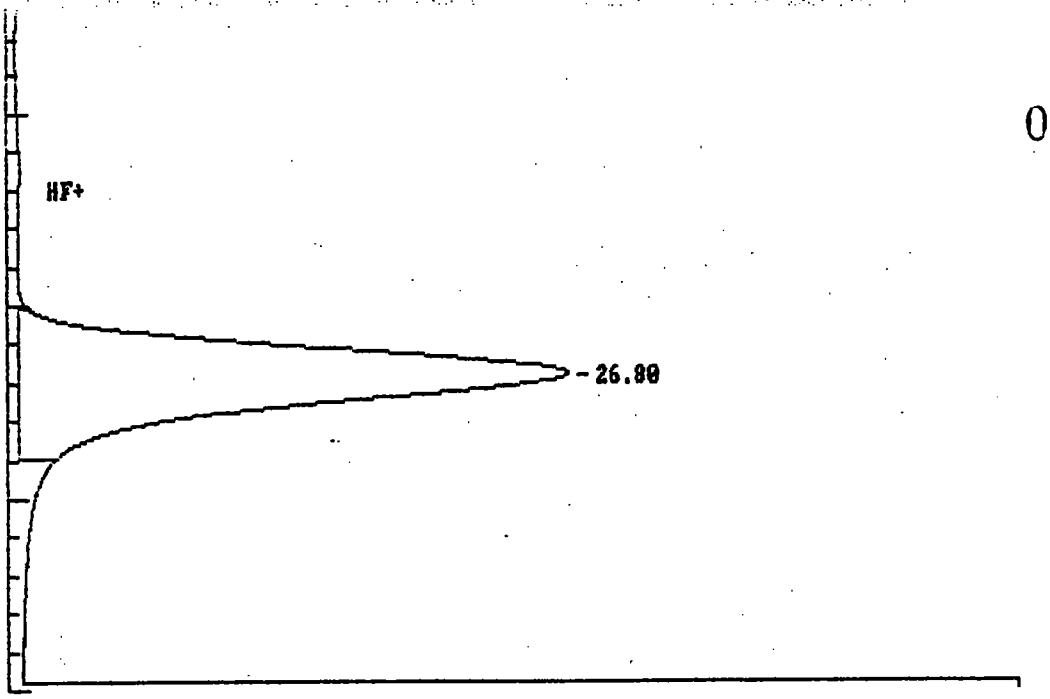
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	588413	43.3198	1	134533	100.000	4.4
3	0.95	6700	0.4933	1	1778	1.139	3.8
4	1.20	1718	0.1265	1	446	0.292	3.9
5	1.33	3472	0.2557	1	763	0.590	4.5
6	1.55	2700	0.1988	1	674	0.459	4.0
7	1.68	31934	2.3510	1	5221	5.427	6.1
8	2.18	26410	1.9443	1	3471	4.488	7.6
9	2.42	11911	0.8769	1	1664	2.024	7.2
10	2.87	35233	2.5939	1	4010	5.988	8.8
11	3.65	18259	1.3442	1	1235	3.103	14.8
12	4.07	9964	0.7336	1	947	1.693	10.5
13	4.33	6144	0.4523	1	494	1.044	12.4
14	5.25	44003	3.2396	1	2098	7.478	21.0
15	5.87	15440	1.1367	1	723	2.624	21.3
16	26.80	556000	40.9335	1	5454	94.491	101.9

Total Area: 1358301 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14010.ATB
Data File = J:AB14010.PTS Printed on 05-19-1988 at 17:42:19
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts



01237



01238

05/23/88

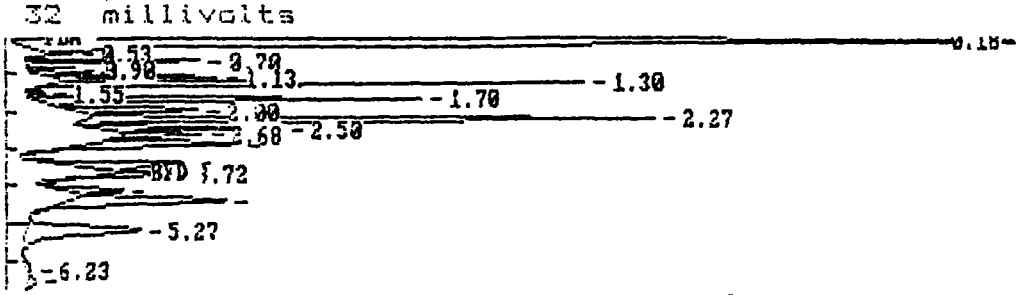
********** AREA PERCENT REPORT **********

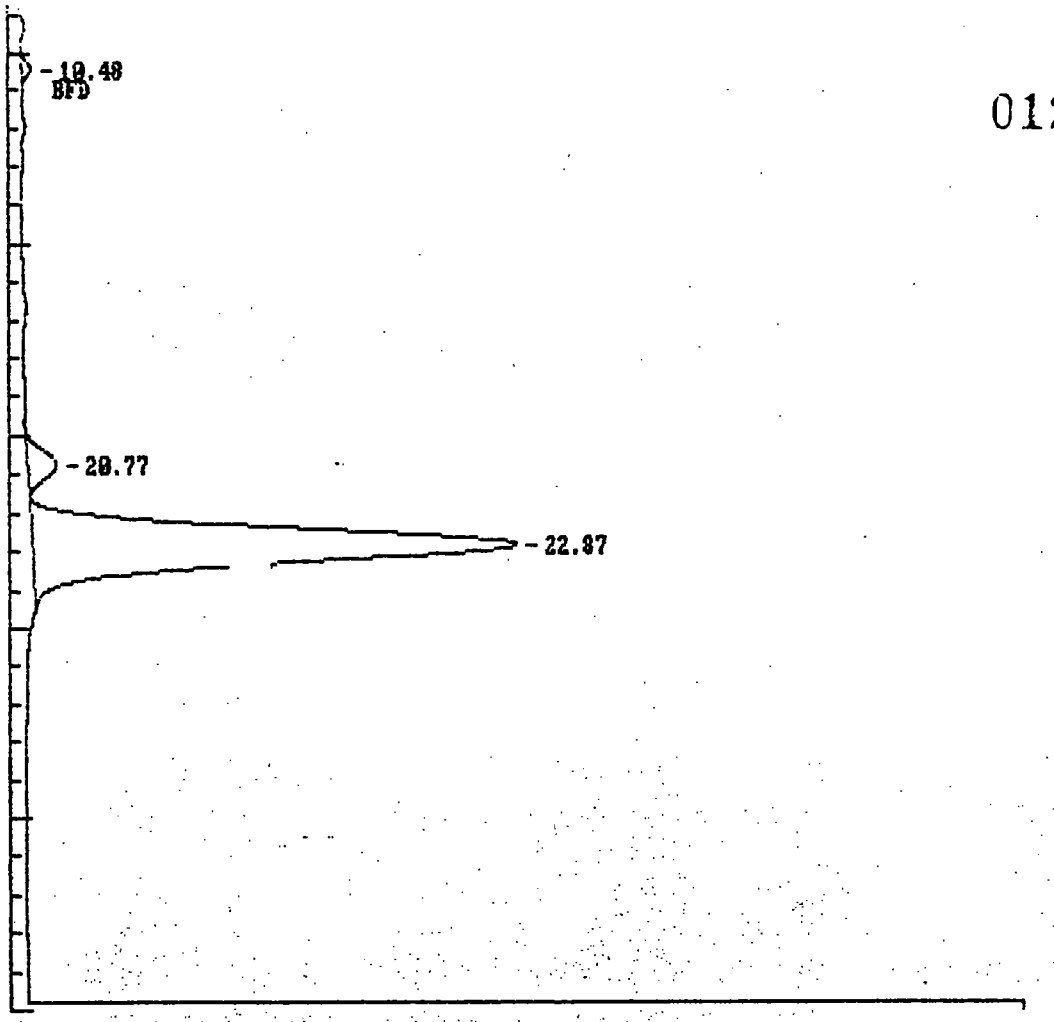
```
******************** 05-19-1988 17:34:46 Version 4.1 *********************
* Sample Name: AROCLOR 1232 0.15 UG/ML          Data File: J:BB14010      *
* Date: 05-19-1988 17:34:29 Method: M:BBPI                                *
* Interface: 12  Cycle#:  10   Operator SS  Channel#: 0    Vial#: N.A.    *
* 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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1130804	40.8314	1	259228	100.000	4.4
2	0.53	3287	0.1187	1	974	0.291	3.4
3	0.70	17427	0.6292	1	5492	1.541	3.2
4	0.90	4581	0.1654	1	1467	0.405	3.1
5	1.02	5371	0.1939	1	1678	0.475	3.2
6	1.13	17179	0.6203	1	5077	1.519	3.4
7	1.30	84243	3.0419	1	17077	7.450	4.9
8	1.55	2142	0.0773	1	568	0.189	3.8
9	1.70	75359	2.7211	1	12117	6.664	6.2
10	2.00	24663	0.8905	1	3740	2.181	6.6
11	2.27	117426	4.2401	1	18271	10.384	6.4
12	2.50	33670	1.2157	1	5690	2.977	5.9
13	2.68	13261	0.4788	1	2590	1.173	5.1
14	2.92	50464	1.8222	1	5029	4.463	10.0
15	3.47	35920	1.2970	1	4135	3.177	8.7
16	3.72	18118	0.6542	1	2298	1.602	7.9
17	4.17	14567	0.5260	1	1749	1.288	8.3
18	4.45	63056	2.2768	1	5026	5.576	12.5
19	5.27	58552	2.1142	1	3578	5.178	16.4
20	6.23	2269	0.0819	1	122	0.201	18.5
21	6.57	3990	0.1441	1	276	0.353	14.5
22	7.08	10503	0.3792	1	572	0.929	18.4
23	8.18	15322	0.5533	1	536	1.355	28.6
24	10.48	6838	0.2469	1	287	0.605	23.9
25	20.77	43283	1.5629	1	898	3.828	48.2
26	22.87	917156	33.1169	1	15360	81.107	59.7

Total Area: 2769447 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14010.ATB
Data File = J:BB14010.PTS Printed on 05-19-1988 at 17:35:16
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts




-10.48
BFD
-20.77
-22.87

STANDARD: AROCLOR 1242 05/23/88 LIBRARY: L:DR101B

01240

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
029	AROCLOR 1242(peak 1)	1.683	1.683	5	16349	.0750	ug/
030	AROCLOR 1242(peak 2)	2.183	2.183	6	20407	.0750	ug/
031	AROCLOR 1242(peak 3)	2.867	2.867	8	31262	.0750	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1242 05/23/88 LIBRARY: L:DRMIXB

01241

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
029	AROCLOR 1242(peak 1)	~1.300	~1.300	6	~32667	.0750	ug/
030	AROCLOR 1242(peak 2)	~1.700	~1.700	8	~60832	.0750	ug/
031	AROCLOR 1242(peak 3)	~2.267	~2.267	10	~105295	.0750	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

DLB 05/23/88

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

01242

********** 05-19-1988 18:21:32 Version 4.1 **********

* Sample Name: AROCLOR 1242 0.0750 UG/ML Data File: J:AB14011 *
* Date: 05-19-1988 18:21:18 Method: M:ABPI *
* Interface: 10 Cycle#: 11 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *

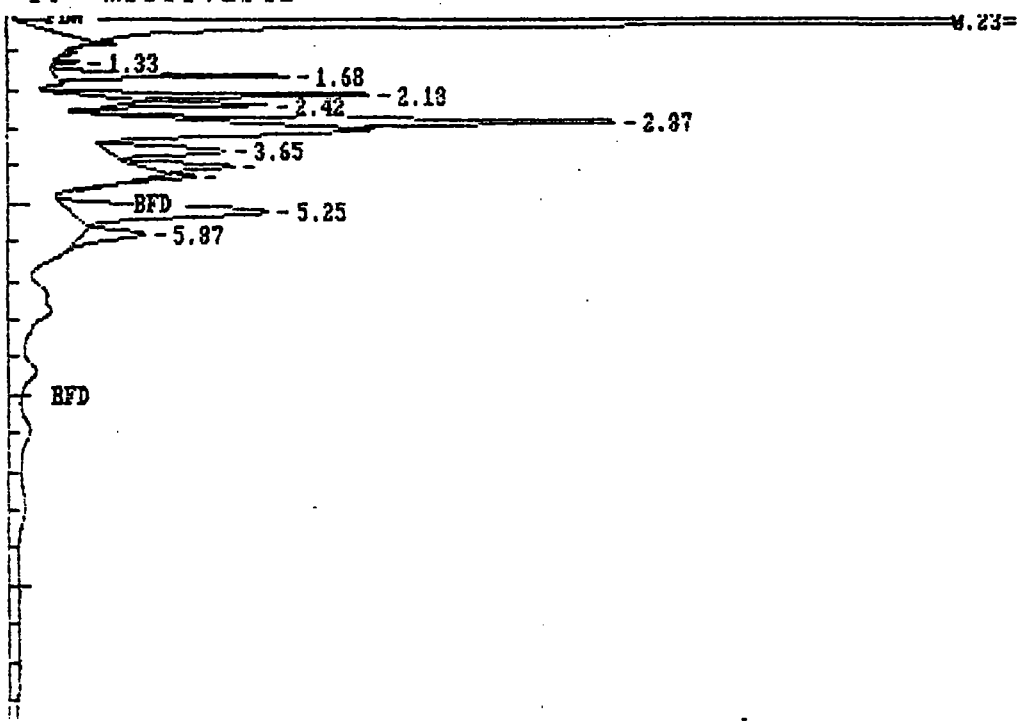
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *

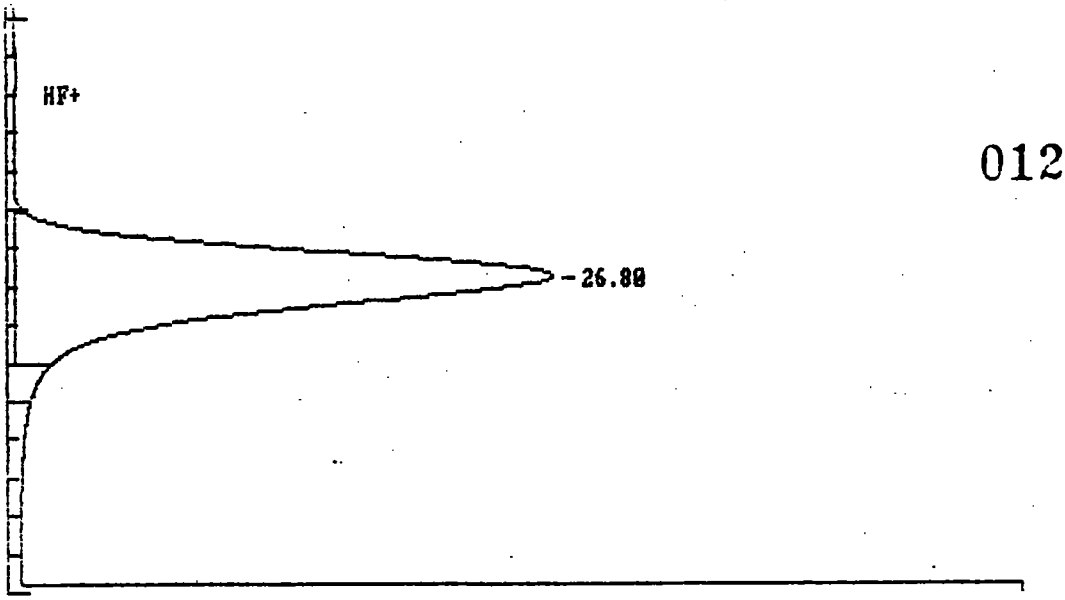
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	540269	43.1777	1	122667	98.517	4.4
4	1.33	1205	0.0963	1	257	0.220	4.7
5	1.68	16349	1.3066	1	2273	2.981	7.2
6	2.18	20407	1.6309	1	2720	3.721	7.5
7	2.42	10648	0.8510	1	1489	1.942	7.2
8	2.87	31262	2.4984	1	3543	5.701	8.8
9	3.65	16783	1.3412	1	1134	3.060	14.8
10	4.07	8601	0.6873	1	830	1.568	10.4
11	4.33	5902	0.4717	1	482	1.076	12.2
12	5.25	40319	3.2222	1	1919	7.352	21.0
13	5.87	11122	0.8889	1	626	2.028	17.8
14	26.80	548403	43.8277	1	5297	100.000	103.5

Total Area: 1251269 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14011.ATB
Data File = J:AB14011.PTS Printed on 05-19-1988 at 18:21:58
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01243

DLC 05/25/88

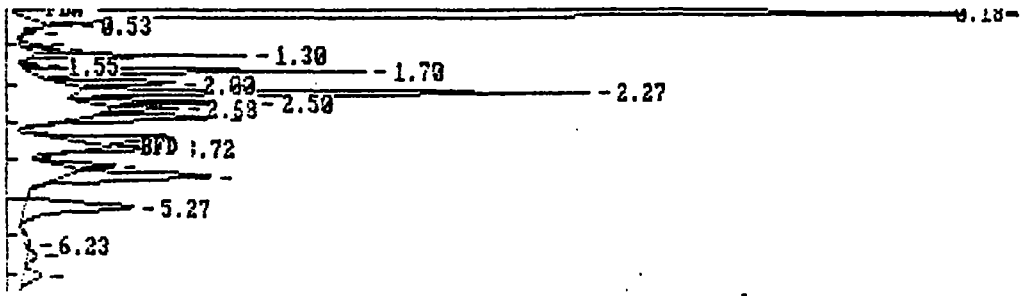
********** AREA PERCENT REPORT ********** 01244

********** 05-19-1988 18:14:19 Version 4.1 **********
* Sample Name: AROCLOR 1242 0.0750 UG/ML Data File: J:BB14011 *
* Date: 05-19-1988 18:14:04 Method: M:BBPI *
* Interface: 12 Cycle#: 11 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: 0.00

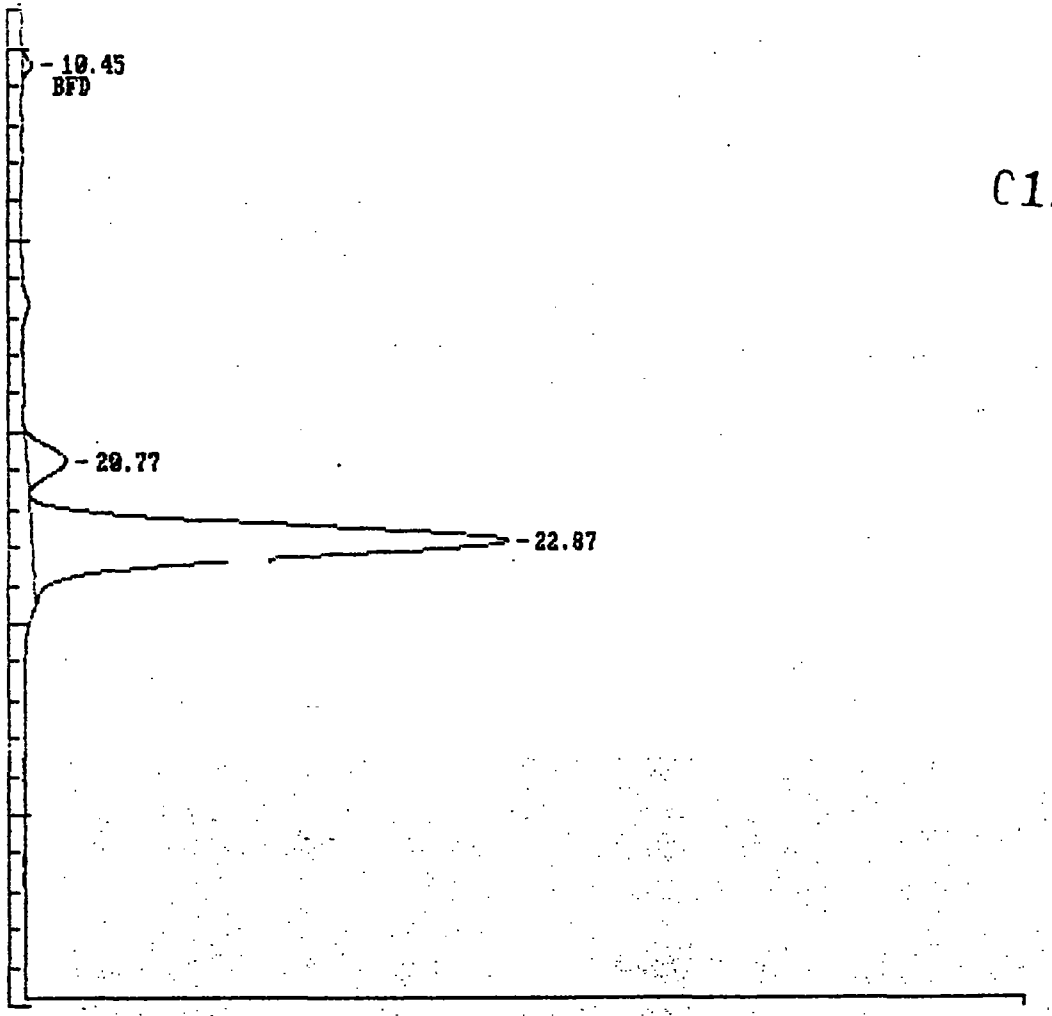
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1077431	41.9747	1	247217	100.000	4.4
2	0.53	3243	0.1263	1	976	0.301	3.3
3	0.68	2335	0.0910	1	416	0.217	5.6
4	1.02	2312	0.0901	1	660	0.215	3.5
5	1.13	3595	0.1401	1	987	0.334	3.6
6	1.30	32667	1.2726	1	6791	3.032	4.8
7	1.55	2065	0.0804	1	538	0.192	3.8
8	1.70	60832	2.3699	1	10510	5.646	5.8
9	2.00	22303	0.8689	1	3355	2.070	6.6
10	2.27	105295	4.1021	1	16397	9.773	6.4
11	2.50	30032	1.1700	1	5088	2.787	5.9
12	2.68	11361	0.4426	1	2239	1.054	5.1
13	2.92	47406	1.8468	1	4716	4.400	10.1
14	3.47	32288	1.2579	1	3770	2.997	8.6
15	3.72	19181	0.7473	1	2315	1.780	8.3
16	4.17	13823	0.5385	1	1663	1.283	8.3
17	4.45	58682	2.2861	1	4675	5.446	12.6
18	5.27	55513	2.1627	1	3382	5.152	16.4
19	6.23	2077	0.0809	1	110	0.193	19.0
20	6.57	3543	0.1380	1	254	0.329	13.9
21	7.08	10178	0.3965	1	560	0.945	18.2
22	8.17	15588	0.6073	1	575	1.447	27.1
23	10.45	7365	0.2869	1	303	0.684	24.3
24	20.77	61030	2.3776	1	1240	5.664	49.2
25	22.87	886716	34.5448	1	14913	82.299	59.5

Total Area: 2566859 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14011.ATB
Data File = J:BB14011.PTS Printed on 05-19-1988 at 18:14:50
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts



C1245



C1246

STANDARD: AROCLOR 1248 05/23/88 LIBRARY: L:DR101B

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
032	AROCLOR 1248(peak 1)	~2.867	~2.867	7	~152450	.1500	ug/
033	AROCLOR 1248(peak 2)	~4.050	~4.050	9	~21443	.1500	ug/
034	AROCLOR 1248(peak 3)	~5.250	~5.250	11	~169242	.1500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

STANDARD: AROCLOR 1248 05/23/88 LIBRARY: L:DRMIXB

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
032	AROCLOR 1248(peak 1)	2.267	2.267	10	188093	.1500	ug/
033	AROCLOR 1248(peak 2)	3.467	3.467	14	106269	.1500	ug/
034	AROCLOR 1248(peak 3)	4.450	4.450	17	233024	.1500	ug/

C1247

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

C1248

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

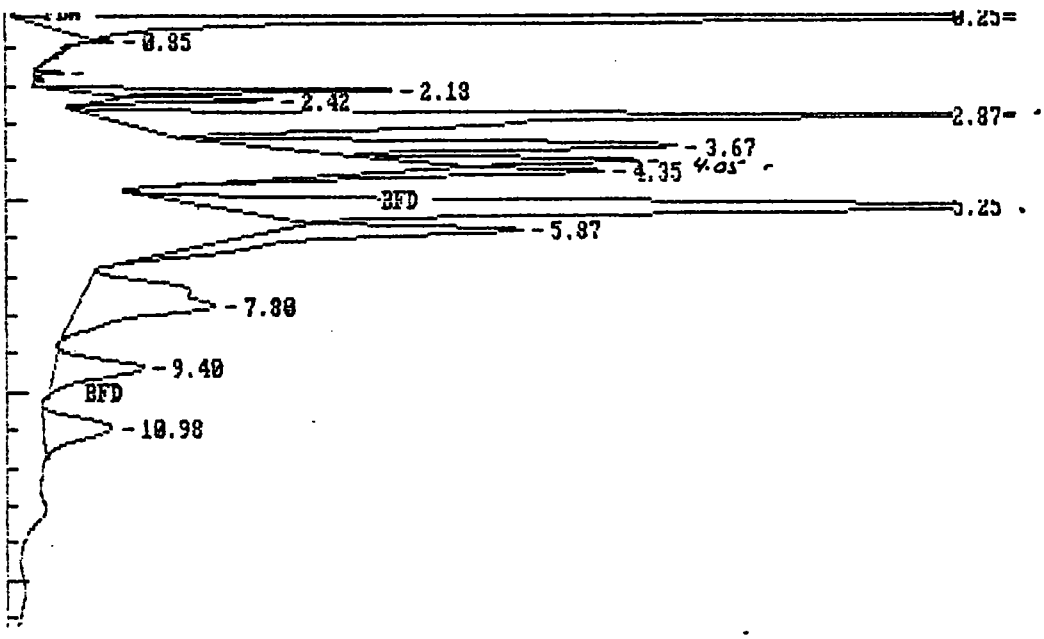
********** 05-19-1988 19:00:57 Version 4.1 **********
* Sample Name: AROCLOR 1248 0.150 UG/ML Data File: J:AB14012 *
* Date: 05-19-1988 19:00:41 Method: M:ABPI *
* Interface: 10 Cycle#: 12 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****

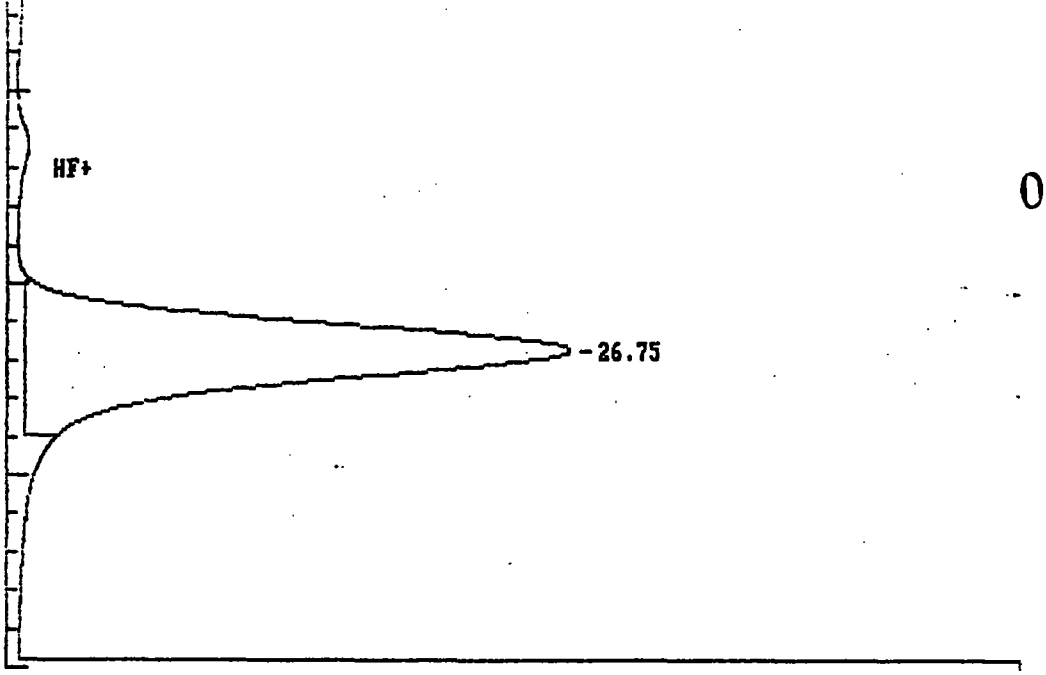
Starting Delay: 0.00 Run Time: 0.00

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.25	734920	37.3910	1	160517	100.000	4.6
2	0.85	1042	0.0530	1	280	0.142	3.7
3	1.68	1508	0.0767	1	281	0.205	5.4
5	2.18	23211	1.1809	1	3064	3.158	7.6
6	2.42	12222	0.6218	1	1663	1.663	7.4
7	2.87	152450	7.7563	1	9271	20.744	16.4
8	3.67	62635	3.1867	1	3964	8.523	15.8
9	4.05	21443	1.0910	1	2191	2.918	9.8
10	4.35	29025	1.4767	1	2224	3.949	13.1
11	5.25	169242	8.6106	1	7724	23.029	21.9
12	5.87	62824	3.1963	1	2521	8.548	24.9
13	7.80	71999	3.6631	1	1381	9.797	52.1
14	9.40	29024	1.4766	1	890	3.949	32.6
15	10.98	25859	1.3156	1	679	3.519	38.1
16	26.75	568097	28.9035	1	5391	77.301	105.4

Total Area: 1965498 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14012.ATB
Data File = J:AB14012.PTS Printed on 05-19-1988 at 19:01:25
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01249

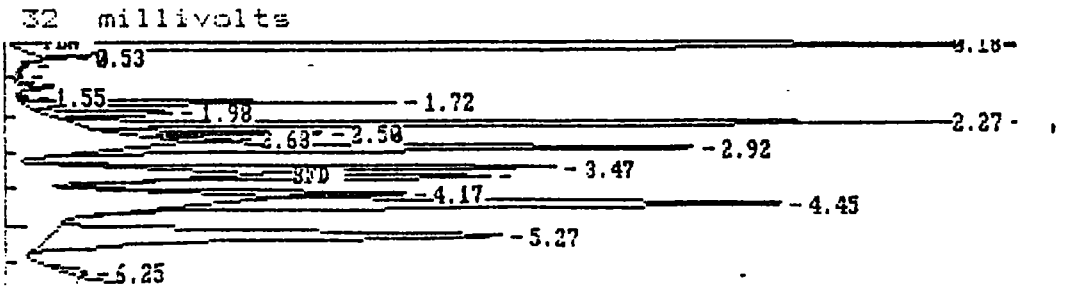
********** AREA PERCENT REPORT ********** 01250

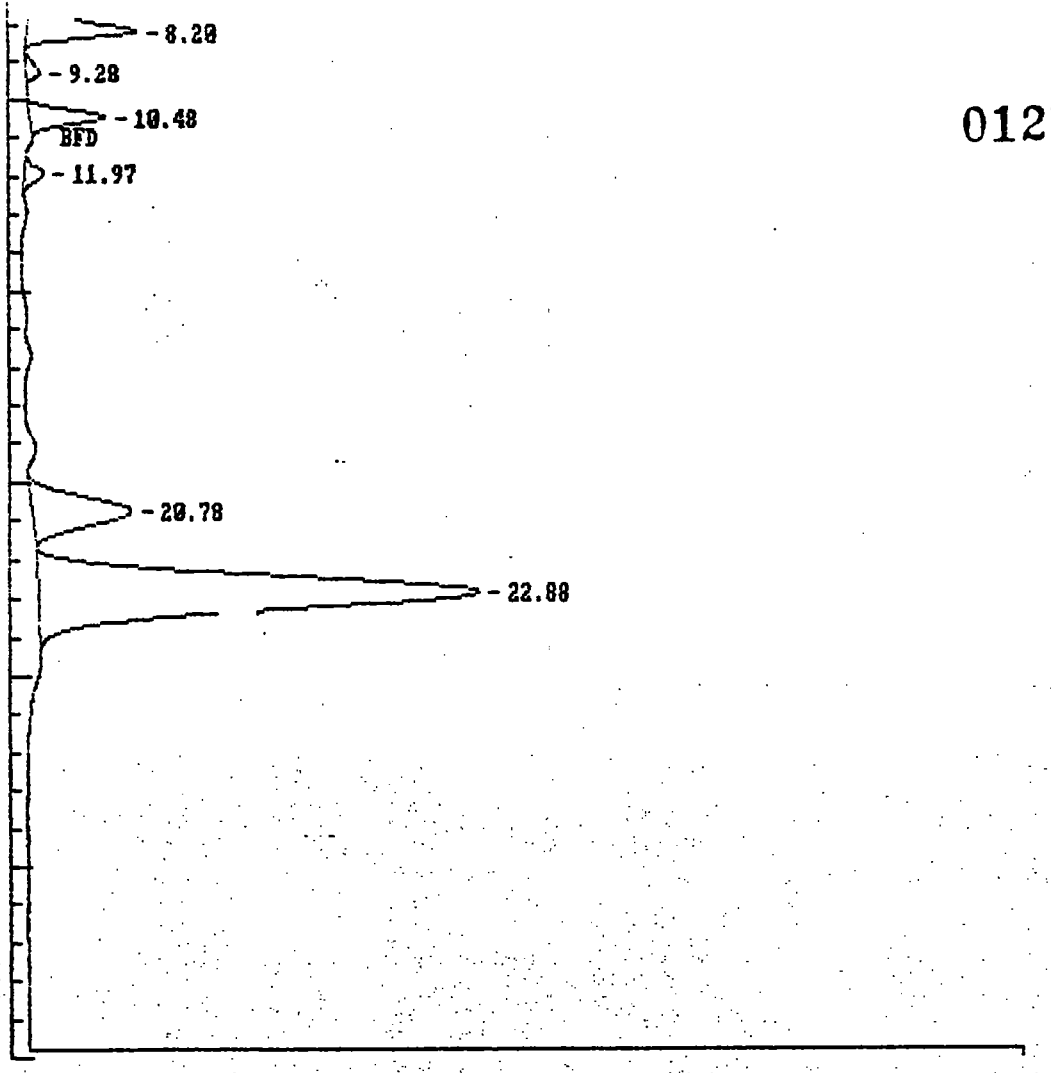
```
******************** 05-19-1988 18:53:38 Version 4.1 **********************
* Sample Name: AROCLOR 1248 0.150  UG/ML          Data File: J:BB14012      *
* Date: 05-19-1988 18:53:20 Method: M:BBPI                                  *
* Interface: 12  Cycle#:  12   Operator SS  Channel#: 0    Vial#: 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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1429142	36.2396	1	329204	100.000	4.3
2	0.53	3170	0.0804	1	927	0.222	3.4
3	0.70	1884	0.0478	1	240	0.132	7.8
4	1.02	1303	0.0330	1	213	0.091	6.1
5	1.18	1541	0.0391	1	397	0.108	3.9
6	1.32	4616	0.1171	1	966	0.323	4.8
7	1.55	1255	0.0318	1	338	0.088	3.7
8	1.72	64879	1.6452	1	11702	4.540	5.5
9	1.98	28991	0.7351	1	3916	2.029	7.4
10	2.27	188093	4.7696	1	29861	13.161	6.3
11	2.50	36774	0.9325	1	6378	2.573	5.8
12	2.68	8274	0.2098	1	1930	0.579	4.3
13	2.92	194066	4.9210	1	18004	13.579	10.8
14	3.47	106269	2.6947	1	12504	7.436	8.5
15	3.72	82747	2.0982	1	9550	5.790	8.7
16	4.17	55725	1.4131	1	6669	3.899	8.4
17	4.45	233024	5.9089	1	18054	16.305	12.9
18	5.27	251479	6.3769	1	14359	17.597	17.5
19	6.25	7320	0.1856	1	672	0.512	10.9
20	6.58	25484	0.6462	1	1687	1.783	15.1
21	7.08	57531	1.4588	1	3344	4.026	17.2
22	8.20	97166	2.4639	1	3496	6.799	27.8
23	9.28	12011	0.3046	1	433	0.840	27.7
24	10.48	61042	1.5479	1	2421	4.271	25.2
25	11.97	16383	0.4154	1	599	1.146	27.3
26	20.78	157980	4.0060	1	3121	11.054	50.6
27	22.88	815451	20.6778	1	13911	57.059	58.6

Total Area: 3943597 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14012.AT8
Data File = J:BB14012.PT8 Printed on 05-19-1988 at 18:54:12
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts





01251

STANDARD: AROCLOR 1254 05/23/88 LIBRARY: L:DR101B

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
035	AROCLOR 1254(peak 1)	5.317	5.317	4	101413	.1500	ug/
036	AROCLOR 1254(peak 2)	6.317	6.317	5	115747	.1500	ug/
037	AROCLOR 1254(peak 3)	7.833	7.833	7	49314	.1500	ug/
038	AROCLOR 1254(peak 4)	9.400	9.400	8	124376	.1500	ug/
039	AROCLOR 1254(peak 5)	11.050	11.050	9	101629	.1500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

01253

STANDARD: AROCLOR 1254 05/23/88 LIBRARY: L:DRMIXB

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
035	AROCLOR 1254(peak 1)	4.567	4.567	13	151382	.1500	ug/
036	AROCLOR 1254(peak 2)	5.150	5.150	14	247073	.1500	ug/
037	AROCLOR 1254(peak 3)	7.067	7.067	17	180826	.1500	ug/
038	AROCLOR 1254(peak 4)	8.167	8.167	18	254643	.1500	ug/
039	AROCLOR 1254(peak 5)	10.450	10.450	20	213769	.1500	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

01254

DLL 05/25/88

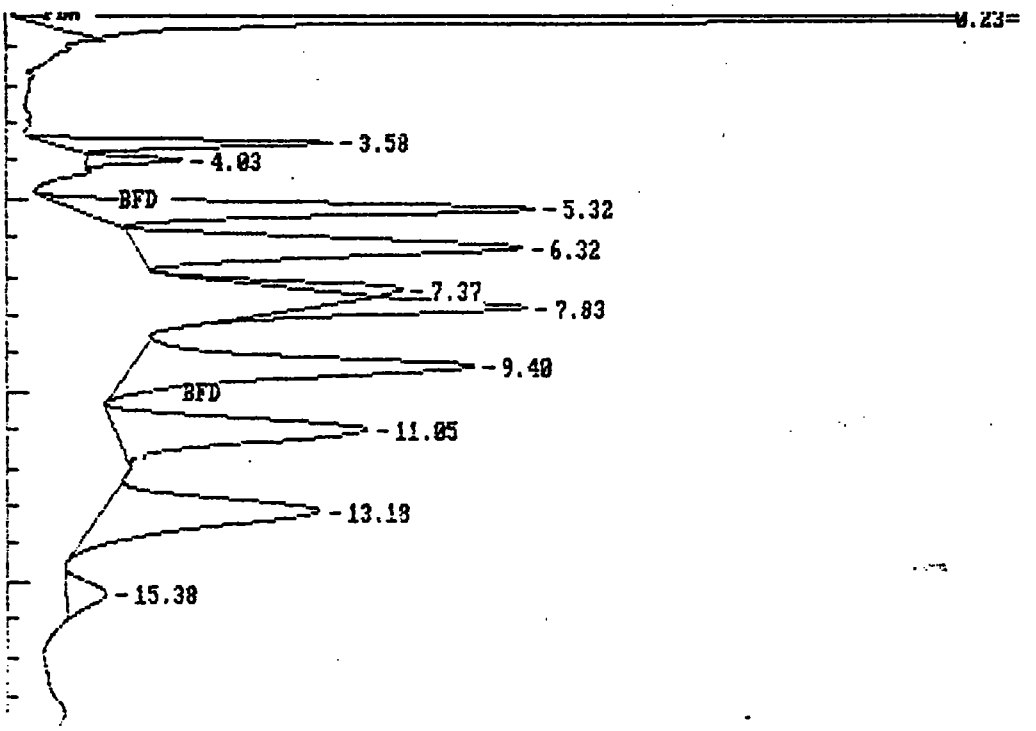
********* AREA PERCENT REPORT *********

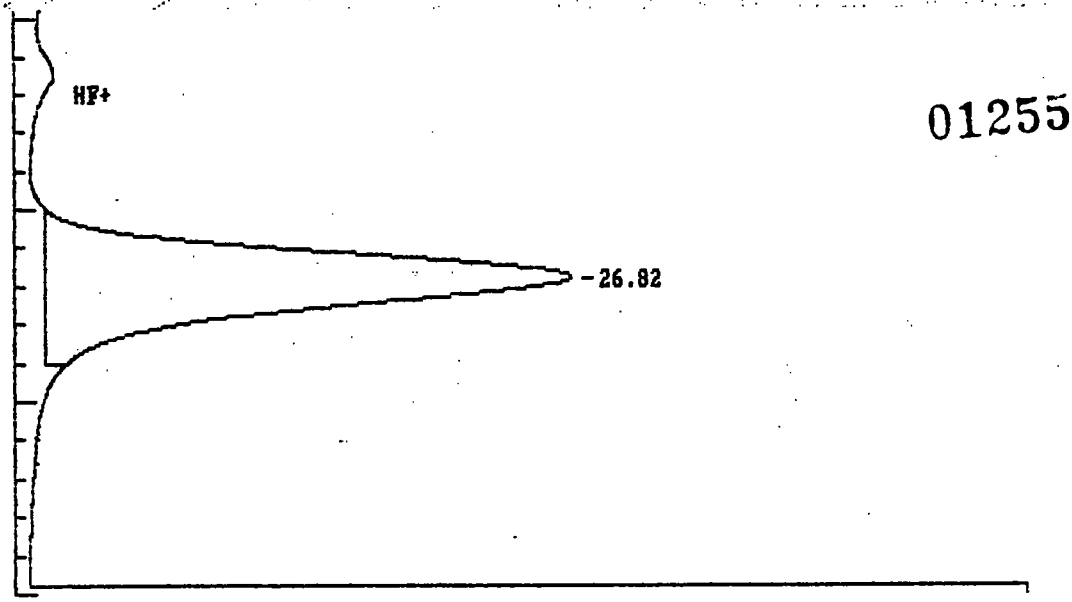
```
******************** 05-19-1988 19:40:49 Version 4.1 **********************
* Sample Name: AROCLOR 1254 0.150  UG/ML          Data File: J:AB14013      *
* Date: 05-19-1988 19:40:34 Method: M:ABPI                                  *
* Interface: 10  Cycle#:  13   Operator SS  Channel#: 0    Vial#: N.A.      *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100              *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS    *
*             Solvent Description: 1.5% SP2250/1.95% SP2401                 *
* Conditions: 190 DEGREES ISOTHERMAL                                        *
*            Detector 0: ECD                  Detector 1:                    *
* Misc. Information: 4 UL INJECTION                    LPT1:          *    *
*****************************************************************************
Starting Delay:    0.00                          Run Time:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	552722	31.5253	1	125522	100.000	4.4
2	3.58	36886	2.1038	1	2725	6.674	13.5
3	4.03	10370	0.5915	1	936	1.876	11.1
4	5.32	101413	5.7842	1	4494	18.348	22.6
5	6.32	115747	6.6018	1	3806	20.941	30.4
6	7.37	16387	0.9347	1	775	2.965	21.2
7	7.83	49314	2.8127	1	2214	8.922	22.3
8	9.40	124376	7.0940	1	3398	22.502	36.6
9	11.05	101629	5.7966	1	2469	18.387	41.2
10	13.18	108646	6.1968	1	2136	19.657	50.9
11	15.38	16395	0.9351	1	381	2.966	43.0
12	26.82	519383	29.6237	1	5218	93.968	99.5

Total Area: 1753267 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14013.ATB
Data File = J:AB14013.PTS Printed on 05-19-1988 at 19:41:14
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01255

Due 05/23/88

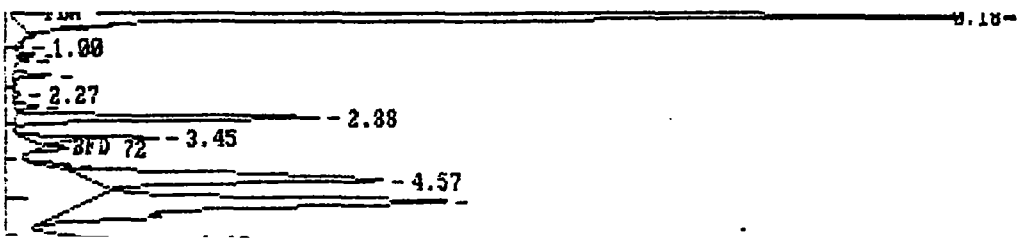
********** AREA PERCENT REPORT ********** 01256

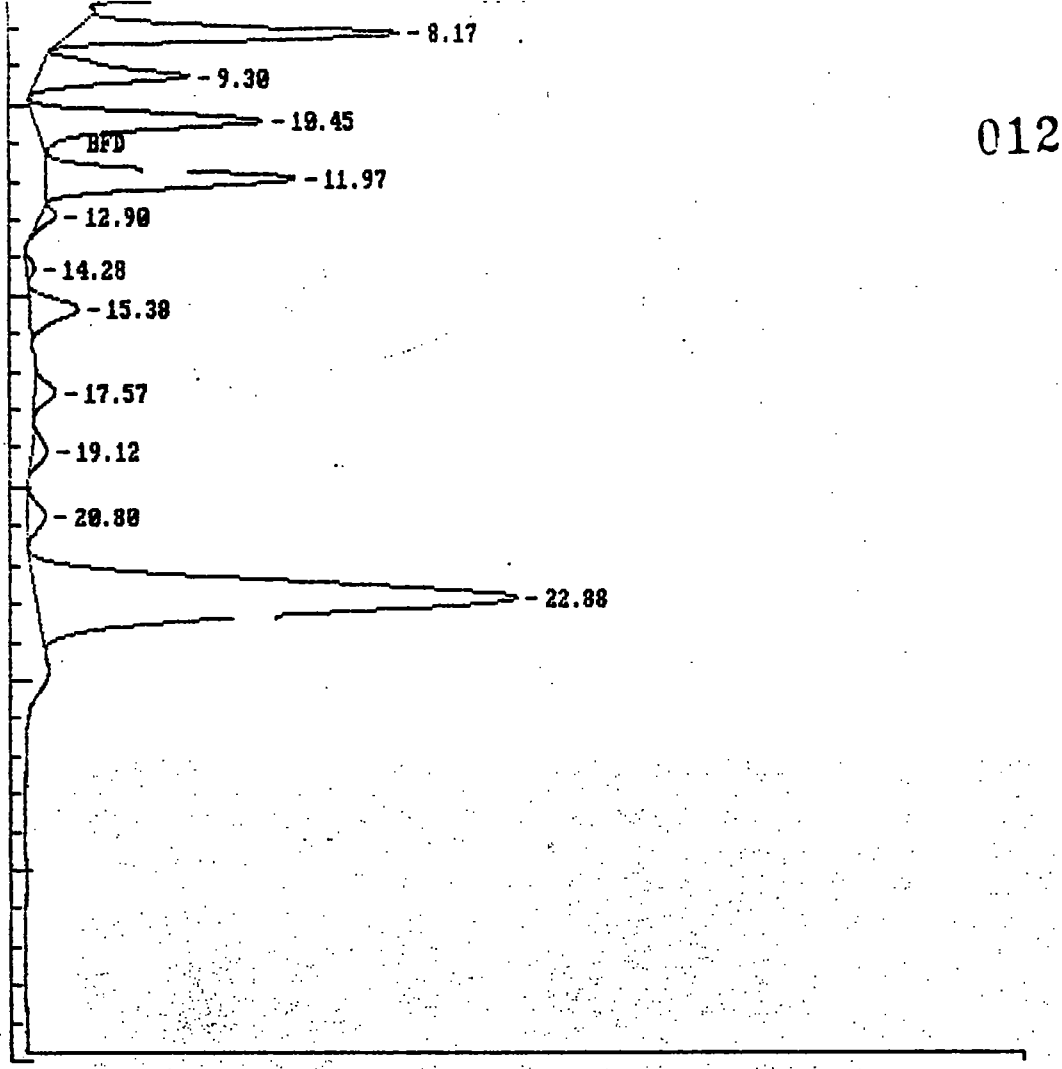
```
******************** 05-19-1988 19:33:16 Version 4.1 ********************
* Sample Name: AROCLOR 1254 0.150  UG/ML          Data File: J:BB14013     *
* Date: 05-19-1988 19:32:58 Method: M:BBPI                                 *
* Interface: 12  Cycle#:  13   Operator SS  Channel#: 0    Vial#: N.A.     *
* 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:     0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1104778	29.0550	1	245135	100.000	4.5
2	1.00	1280	0.0337	1	198	0.116	6.5
3	1.18	2597	0.0683	1	578	0.235	4.5
4	1.35	2197	0.0578	1	380	0.199	5.8
5	1.73	7585	0.1995	1	1178	0.687	6.4
7	2.27	1249	0.0328	1	203	0.113	6.2
8	2.58	5918	0.1556	1	692	0.536	8.5
9	2.88	86891	2.2852	1	9552	7.865	9.1
10	3.45	33798	0.8889	1	4008	3.059	8.4
11	3.72	7413	0.1950	1	984	0.671	7.5
12	4.18	3897	0.1025	1	503	0.353	7.7
13	4.57	151382	3.9812	1	9178	13.702	16.5
14	5.15	247073	6.4979	1	11458	22.364	21.6
15	6.27	11012	0.2896	1	909	0.997	12.1
16	6.55	57771	1.5193	1	4266	5.229	13.5
17	7.07	180826	4.7556	1	10719	16.368	16.9
18	8.17	254643	6.6970	1	10424	23.049	24.4
19	9.30	138816	3.6508	1	4785	12.565	29.0
20	10.45	213769	5.6220	1	7158	19.349	29.9
21	11.97	243477	6.4033	1	7876	22.039	30.9
22	12.90	14564	0.3830	1	486	1.318	30.0
23	14.28	6160	0.1620	1	233	0.558	26.4
24	15.38	60963	1.6033	1	1531	5.518	39.8
25	17.37	23682	0.6228	1	642	2.144	36.9
26	19.12	20273	0.5332	1	492	1.835	41.2
27	20.80	24975	0.6568	1	547	2.261	45.7
28	22.88	895378	23.5479	1	15253	81.046	58.7

Total Area: 3802365 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14013.ATB
Data File = J:BB14013.PTS Printed on 05-19-1988 at 19:33:44
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts





01257

01258

BLANK RAW DATA

ORGANICS ANALYSIS DATA SHEET
(Page 1)

01259

Sample Number : MB-1

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : MB-1
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59450
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 : 6.0
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	8.2		124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	3.6	J	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: 59450

Sample Number
MB-1

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.				
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28.				
29.				
30.				

ORGANICS ANALYSIS DATA SHEET
(Page 1)

01261

Sample Number : MB-2

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : MB-2
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59450
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration : Low
Date Extracted/Prepared : N/A
Date Analyzed : 05/03/88
Conc./Dilution Factor : 1.0
pH : 6.0
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	9.4		124-48-1	Dibromochloromethane		5 U
67-64-1	Acetone	7.8	J	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: 59450

Sample Number
MB-2

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.				
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28.				
29.				
30.				

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59450

Organics Analysis Data Sheet

Sample Number
MB-1

01263

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/27/88	Separatory Funnel Extraction	No
Date Analyzed	06/06/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	2.00		
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		50 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		50 U
91-58-7	2-Chloronaphthalene		10 U
88-74-4	2-Nitroaniline		50 U
131-11-4	Dimethyl Phthalate		10 U
208-96-8	Acenaphthylene		10 U
99-09-2	3-Nitroaniline		50 U

CAS Number	Compound	Value	ug/L
83-32-9	Acenaphthene		10 U
51-28-5	2,4-Dinitrophenol		50 U
100-02-7	4-Nitrophenol		50 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		50 U
534-52-1	4,6-Dinitro-2-Methylphenol		50 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		50 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		20 U
56-55-3	Benzo(a)Anthracene		10 U
117-81-7	bis(2-Ethylhexyl)Phthalate	4.9	J
218-01-9	Chrysene		10 U
117-84-0	Di-n-Octylphthalate	18	
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: 59450

Sample Number
MB-1

ORGANIC ANALYSIS DATA SHEET
(Page 4)

Tentatively Identified Compounds

CAS Number	Compound Name	Fraction	RT or Scan Number	Estimated Conc. ug/l
1. 1640-89-7	Ethyl Cyclopentane	BNA	294	1.8
2.	Oxygenated Hydrocarbon	BNA	302	3.8
3. 108-88-3	Methyl Benzene	BNA	336	13
4.	Oxygenated Hydrocarbon	BNA	363	27
5.	Oxygenated Hydrocarbon	BNA	405	35
6.	Oxygenated Hydrocarbon	BNA	440	54
7. 96-19-5	1,2,3-Trichloro-1-Propene	BNA	591	14
8.	Unknown Phthalate	BNA	2135	9.8
9.	Unknown Phthalate	BNA	2331	8.4
10.	Unknown Phthalate	BNA	2379	20
11.	Unknown Phthalate	BNA	2494	8.3
12.				
13.				
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ROCKY MOUNTAIN ANALYTICAL LABORATORY
ORGANIC MASS SPECTROMETRY DIVISION
TARGET COMPOUND DATA SUMMARY SHEET

Sample: 59450-Method Blank-1
Date Analyzed: 06/06/88

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	65.9	66	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: 59450-Method Blank 1
Date Analyzed: 06/06/88

Units: ng/L
Run Factor: 0.125

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	72.3	90	10-118

Target Compounds

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

FORM I

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

Sample: 59450-Method Blank 2
Date Analyzed: 06/06/88

Units: ng/L
Run Factor: 0.125

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	59.7	75	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: 59450

Sample Number:
MB-1

01268

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/28/88
Date Analyzed :05/13/88
Conc./Dil Factor : 50.0
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		0.50 U
53494-70-5	Endrin Ketone		0.10 U
57-74-9	Chlordane		0.50 U
8001-35-2	Toxaphene		1.00 U
12674-11-2	Aroclor-1016		0.50 U
11104-28-2	Aroclor-1221		0.50 U
11141-16-5	Aroclor-1232		0.50 U
53469-21-9	Aroclor-1242		0.50 U
12672-29-6	Aroclor-1248		0.50 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 = 1000 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

MB-1

5/2/88 23:07:14 SCAN 1 OF 730
Acquisition started

01269

Acquire
05/02/88 23:06:00 + 0:03
Sample: CLP,59450,,VBLK,LOW,WATER,BL050288,VOA,EPA
Conds.: 5ML H20
Formula:
Submitted by: RMAL

Run 3:BLW965
Free sectors: 11694
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.029
Acct. No: 59450

*** GC descriptor: V3 ***

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

Injector: 50 DegC
Interface: 220 DegC

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

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

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

Hold time (s)
Top: 0.00
Bottom: 0.05

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

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

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

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

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	127.00	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: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/2/88 23:43:48
Acquisition completed
Scans 1 to 730 centroid

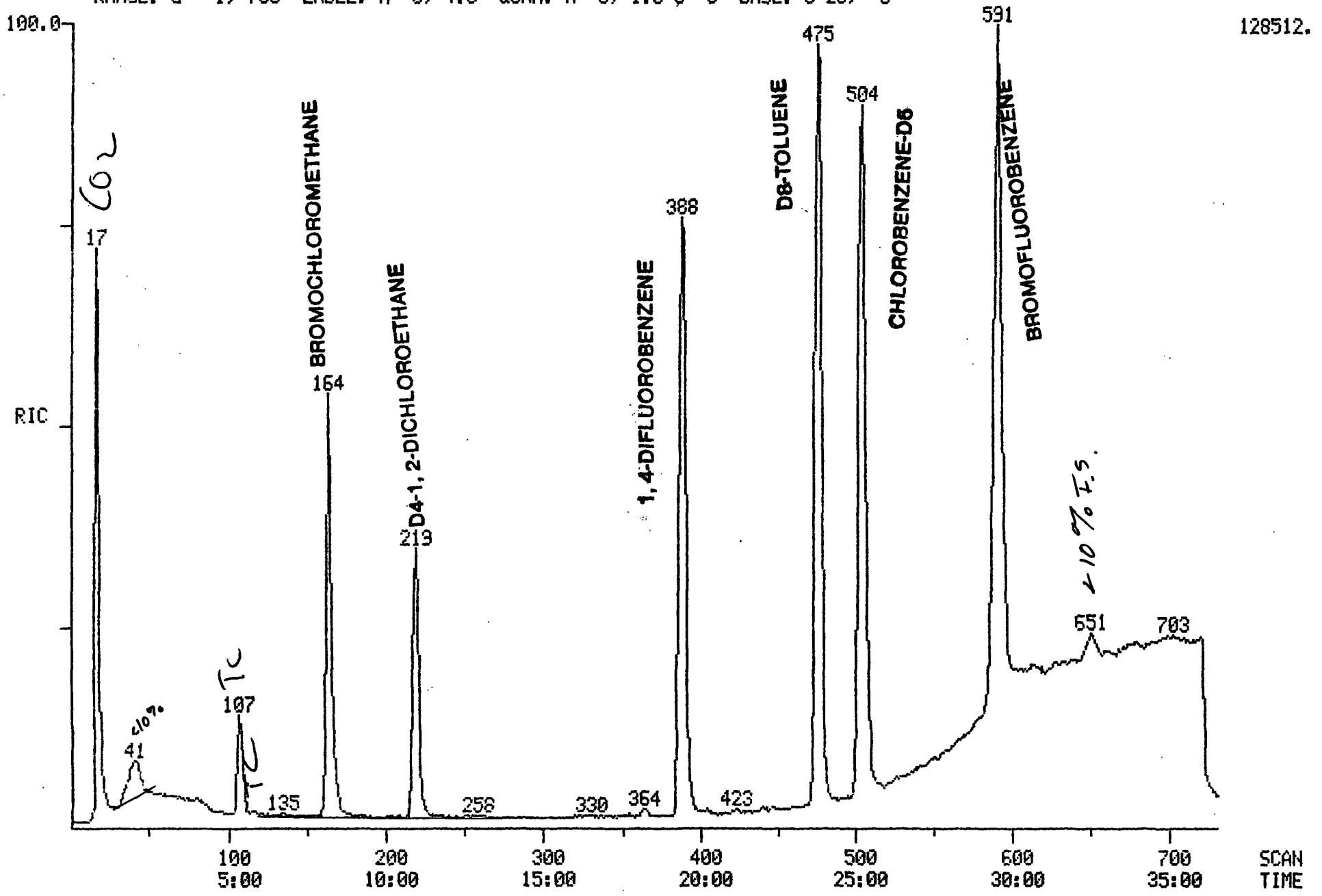
Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	35.1	2190.0	1.6	13995.	19.	6.

01270

TC = Target Compound
SC = Spike Compound

TIC = Tentatively Identified Compound

RIC DATA: BLW965 #4 SCANS 1 TO 730
05/02/88 23:06:00 CALI: 050288CW2 #3
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050288,VOA,EPA
CONDS.: 5ML H2O
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



PROCEDURE: TCA DIAGNOSTIC REPORT 5/02/88 23:45:01
DATA FILE: BLW965
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 **01271**
REPORT: IS01

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	3	2	25	IS01/TC01
3	3	1	160	18	6	8	100	IS02/TC02
3	3	1	160	12	6	3	128	IS03/TC03
1	1	1	0	7	5	2	116	IS04/TC04

41 COMPOUNDS PROCESSED, 15 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-162	164	164	.	1	966	.	128	163	-1	1
2	V1	10	-32	29	.	.	.	.	.	50	.	.	.
3	V1	15	-48	46	.	.	.	.	.	94	.	.	.
4	V1	25	-60	58	.	.	.	.	.	62	.	.	.
5	V1	35	-74	73	.	.	.	.	.	64	.	.	.
6	V1	45	-107	107	107	.	1	989	.	84	107	.	1
7	V1	50	-116	116	116	.	2	1000	.	58	117	1	1
8	V1	65	-133	134	.	.	.	.	.	76	.	.	.
9	V1	80	-154	156	.	.	.	.	.	96	.	.	.
10	V2	1	-388	389	388	-1	1	998	.	114	388	.	1
11	V3	1	-502	503	504	1	1	997	.	117	504	.	1
12	V1	90	-180	181	.	.	.	.	.	63	.	.	.
13	V1	95	-194	195	.	.	.	.	.	96	.	.	.
14	V1	100	-205	206	.	.	.	.	.	83	.	.	.
15	V1	2	-218	219	219	.	1	988	.	65	219	.	1
16	V2	10	-218	219	219	.	4	807	.	72	.	.	.
17	V1	110	-221	222	.	.	.	.	.	62	.	.	.
18	V2	15	-248	249	.	.	.	.	.	97	.	.	.
19	V2	20	-257	258	.	.	.	.	.	117	.	.	.
20	V2	25	-260	261	260	-1	2	858	.	43	260	.	1
21	V2	30	-267	268	.	.	.	.	.	83	.	.	.
22	V2	35	-298	299	.	.	.	.	.	63	.	.	.
23	V2	40	-304	305	.	.	.	.	.	75	.	.	.
24	V2	45	-317	318	.	.	.	.	.	130	.	.	.
25	V2	60	-329	330	.	.	.	.	.	78	.	.	.
26	V2	50	-330	331	.	.	.	.	.	129	.	.	.
27	V2	65	-333	334	.	.	.	.	.	75	.	.	.
28	V2	55	-333	334	.	.	.	.	.	97	.	.	.
29	V2	80	-393	394	.	.	.	.	.	173	.	.	.
30	V3	10	-405	405	404	-1	3	922	.	58	405	1	1
31	V3	15	-441	441	441	.	1	947	.	58	441	.	1
32	V3	25	-447	447	.	.	.	.	.	83	447	.	1
33	V3	20	-448	448	.	.	.	.	.	164	.	.	.
34	V3	2	-475	475	475	.	1	987	.	98	475	.	1
35	V3	35	-480	480	.	.	.	.	.	92	479	.	1
36	V3	40	-506	508	.	.	.	.	.	112	506	.	1
37	V3	50	-549	550	.	.	.	.	.	106	549	.	1
38	V3	3	-590	591	591	.	1	987	.	95	591	.	1
39	V3	55	-611	611	613	2	1	856	.	104	611	-2	1
40	V3	60	-615	615	615	.	2	890	.	106	615	.	1
41	V3	75	-628	628	627	-1	1	889	.	106	629	2	1

Quantitation Report File: BLW965

01272

Data: BLW965.TI
05/02/88 23:06:00
Sample: CLP,59450,,VBLK,LOW,WATER,BL050288,VOA,EPA
Conds.: 5ML H20
Formula:
Submitted by: RMAL

Instrument: 5100
Analyst: DC

Weight: 0.029
Acct. No.: 59450

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

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

01273

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	163	8:09	1	1.000	A BB	33071.	50.000 UG/L	16.18
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	107	5:21	1	0.656	A BB	10546.	8.239 UG/L	2.67
7	58	117	5:51	1	0.718	A BB	353.	3.612 UG/L	1.17
8	NOT FOUND								
9	NOT FOUND								
10	114	388	19:24	10	1.000	A BB	188601.	50.000 UG/L	16.18
11	117	504	25:12	11	1.000	A BB	167860.	50.000 UG/L	16.18
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	219	10:57	1	1.344	A BB	55636.	44.528 UG/L	14.41
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	43	260	13:00	10	0.670	A BB	108.	0.045 UG/L	0.01
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	58	405	20:15	11	0.804	A BB	391.	0.754 UG/L	0.24
31	58	441	22:03	11	0.875	A BB	651.	1.300 UG/L	0.42
32	83	447	22:21	11	0.887	A BB	608.	0.306 UG/L	0.10
33	NOT FOUND								
34	98	475	23:45	11	0.942	A BB	196588.	48.698 UG/L	15.76
35	92	479	23:57	11	0.950	A BB	166.	0.073 UG/L	0.02
36	112	506	25:18	11	1.004	A BB	460.	0.170 UG/L	0.06
37	106	549	27:27	11	1.089	A BB	68.	0.047 UG/L	0.02
38	95	591	29:33	11	1.173	A BB	118000.	50.644 UG/L	16.38
39	104	611	30:33	11	1.212	A BB	964.	0.323 UG/L	0.10
40	106	615	30:45	11	1.220	A BB	425.	0.239 UG/L	0.08
41	106	629	31:27	11	1.248	A BB	241.	0.140 UG/L	0.05

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	1:36		0.196						
3	2:24		0.294						
4	3:00		0.368						
5	3:42		0.454						
6	5:21	1.00	0.656	1.00	8.24	50.00	0.319	1.935	0.16
7	5:48	1.01	0.712	1.01	3.61	50.00	0.011	0.148	0.07
8	6:39		0.816						
9	7:42		0.945						
10	19:27	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	9:00		1.104						
13	9:42		1.190						

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	44.53	50.00	1.682	1.889	0.89
16	10:54		0.560						
17	11:03		1.356						
18	12:24		0.638						
19	12:51		0.661						
20	13:00	1.00	0.668	1.00	0.04	50.00	0.001	0.643	0.00
21	13:21		0.686						
22	14:54		0.766						
23	15:12		0.781						
24	15:51		0.815						
25	16:27		0.846						
26	16:30		0.848						
27	16:39		0.856						
28	16:39		0.856						
29	19:39		1.010						
30	20:15	1.00	0.805	1.00	0.75	50.00	0.002	0.154	0.02
31	22:03	1.00	0.877	1.00	1.30	50.00	0.004	0.149	0.03
32	22:21	1.00	0.889	1.00	0.31	50.00	0.004	0.592	0.01
33	22:24		0.891						
34	23:45	1.00	0.944	1.00	48.70	50.00	1.171	1.202	0.97
35	24:00	1.00	0.954	1.00	0.07	50.00	0.001	0.682	0.00
36	25:18	1.00	1.006	1.00	0.17	50.00	0.003	0.806	0.00
37	27:27	1.00	1.091	1.00	0.05	50.00	0.000	0.433	0.00
38	29:30	1.00	1.173	1.00	50.64	50.00	0.703	0.694	1.01
39	30:33	1.00	1.215	1.00	0.32	50.00	0.006	0.889	0.01
40	30:45	1.00	1.223	1.00	0.24	50.00	0.003	0.530	0.00
41	31:24	1.00	1.249	1.00	0.14	50.00	0.001	0.514	0.00

01274

TCA FINISHED, 15 FOUND
FINISHED AT: 5/02/88 23:48:59

RMAL QUANTITATION SUMMARY FILE: BLW965
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

01275

UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	33071.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	388	2	188601.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	167860.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	475	3	196588.	1.171	48.698
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	118000.	0.703	50.644
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	219	1	55636.	1.682	44.528
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	10546.	0.319	8.239
12	V1# 50	C035 ACETONE	58	117	1	353.	0.011	3.612
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	441	3	651.	0.004	~~1.300~~ ND
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		

N 6.7.88

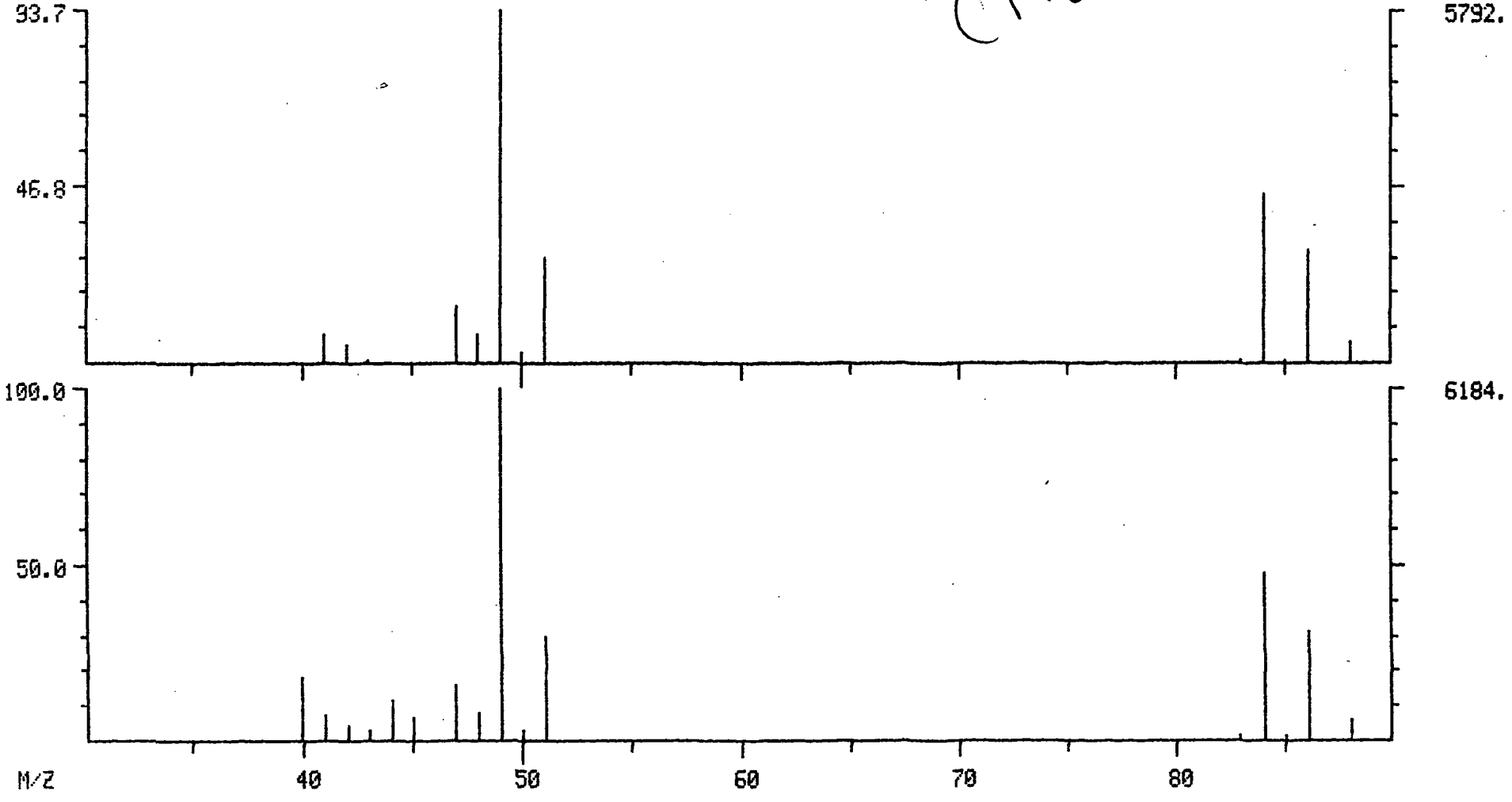
01276

DUAL MASS SPECTRUM
05/02/88 23:06:00 + 5:21
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050288,VOA,EPA
CONDS.: 5ML H2O
GC TEMP: 83 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLW965 #107
CALI: 050288CW2 #3

BASE M/Z: 49/ 49
RIC: 14879./ 18239.

CH_2Cl_2



01277

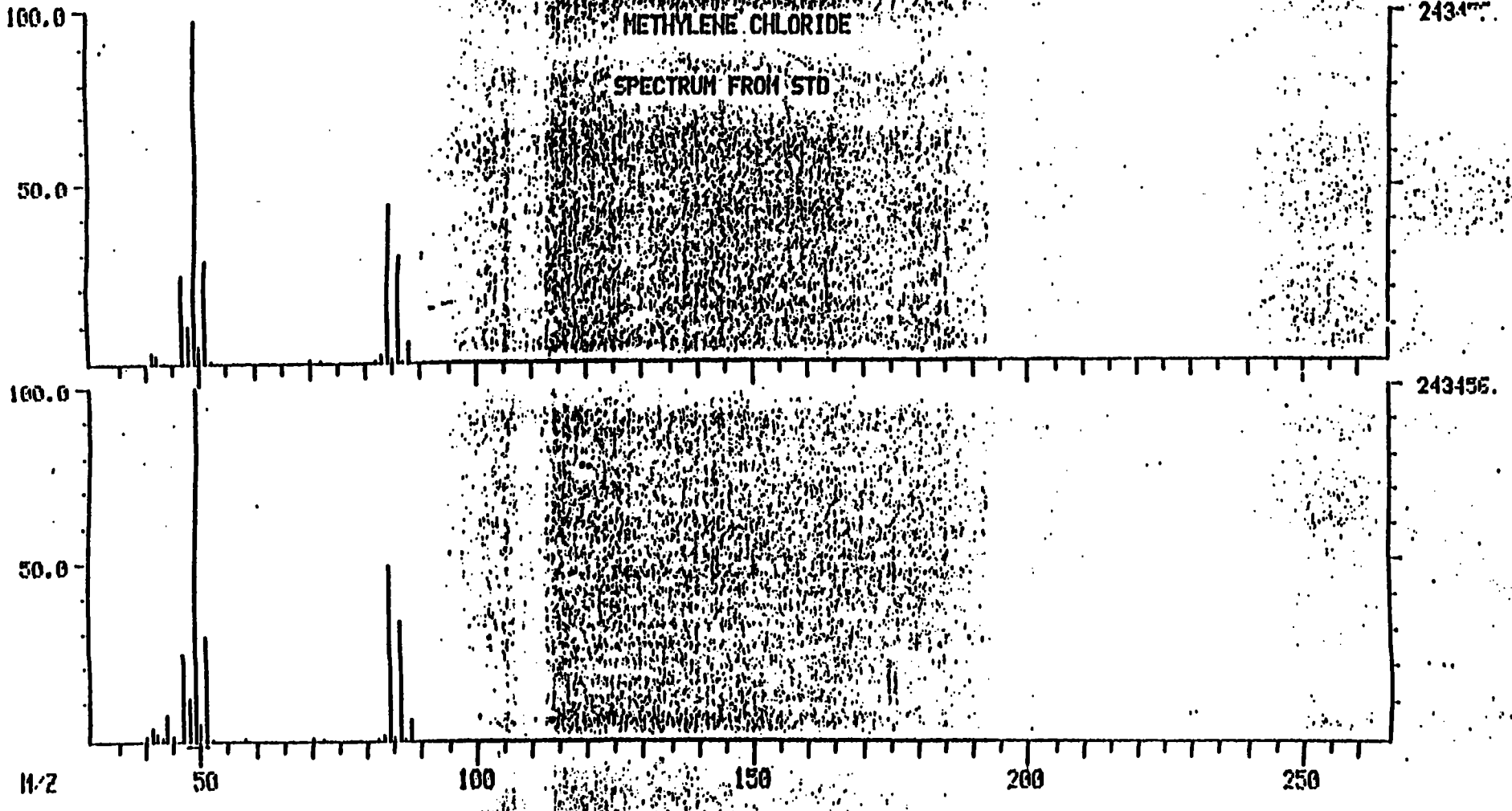
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

SPECTRUM FROM STD

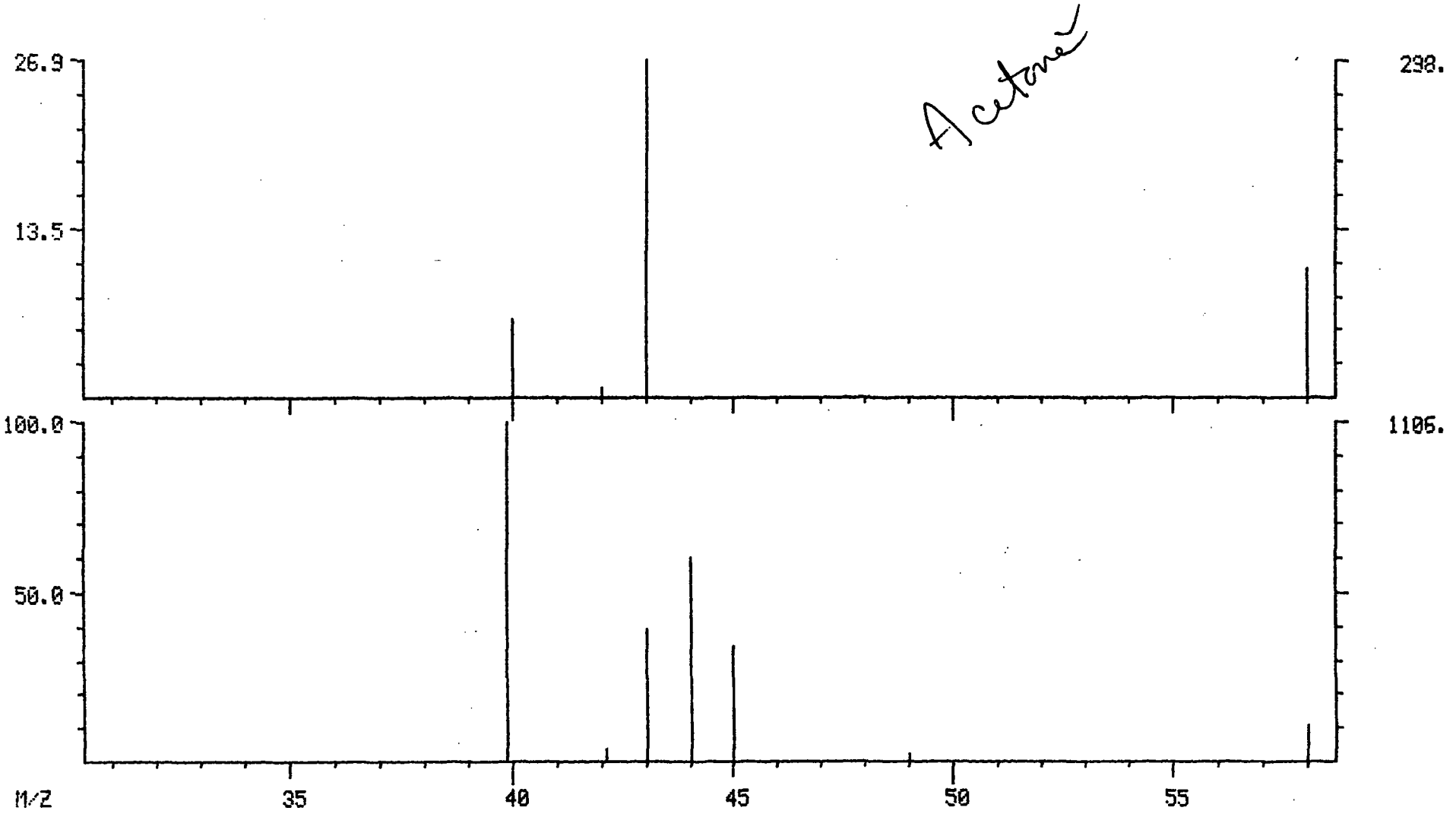


01278

DUAL MASS SPECTRUM
05/02/88 23:06:00 + 5:51
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050288,VOA,EPA
CONDS.: 5ML H2O
GC TEMP: 87 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLW965 #117
CALI: 050288CW2 #3

BASE M/Z: 43/ 40
RIC: 490./ 2759.

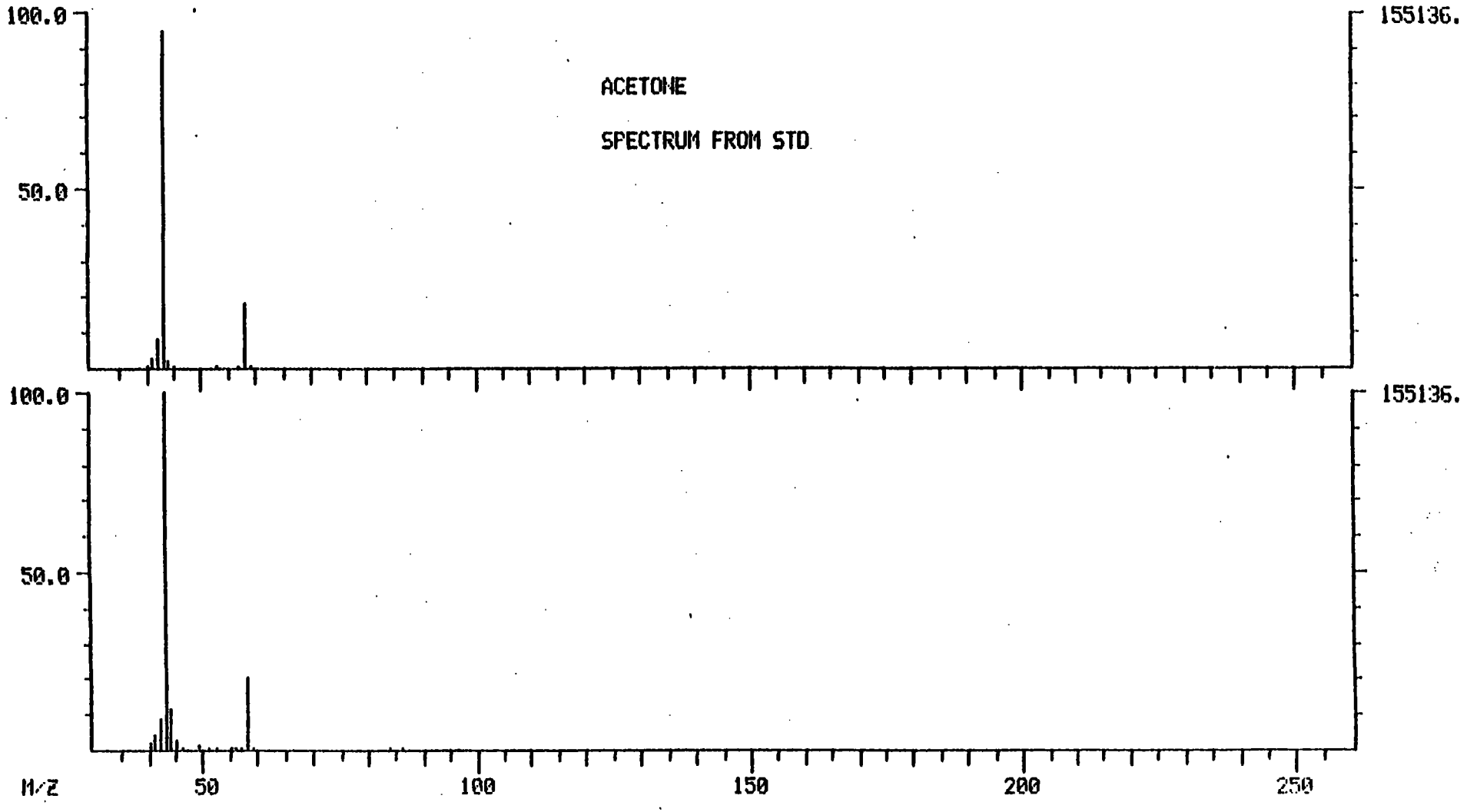


01279

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

DATA: STDJ198 #150
CALI: STDJ198 #1

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

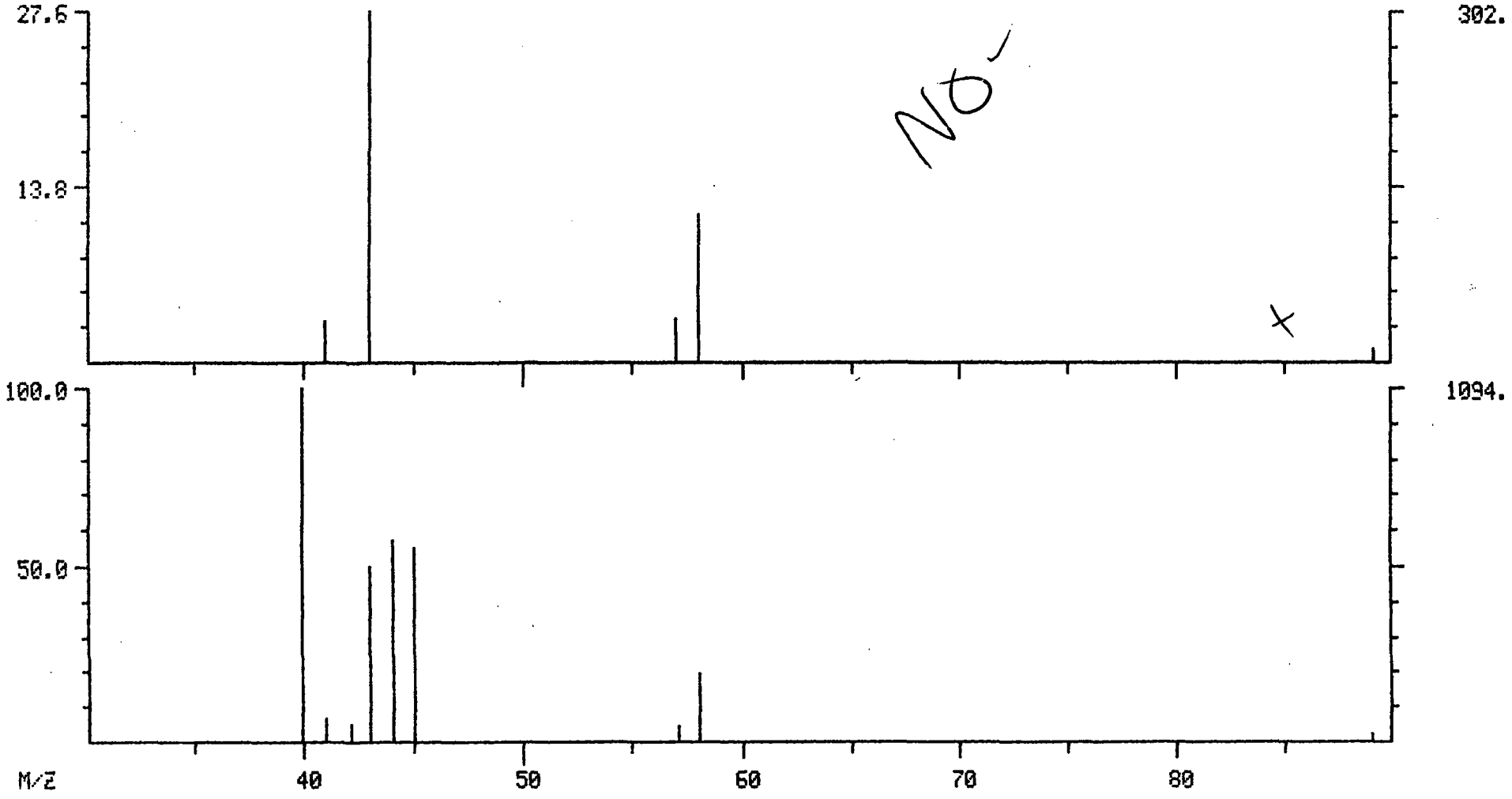


01280

DUAL MASS SPECTRUM
05/02/88 23:06:00 + 22:03
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050288,VOA,EPA
CONDS.: 5ML H2O
GC TEMP: 201 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLW965 #441
CALI: 050288CW2 #3

BASE M/Z: 43/ 40
RIC: 510./ 3283.

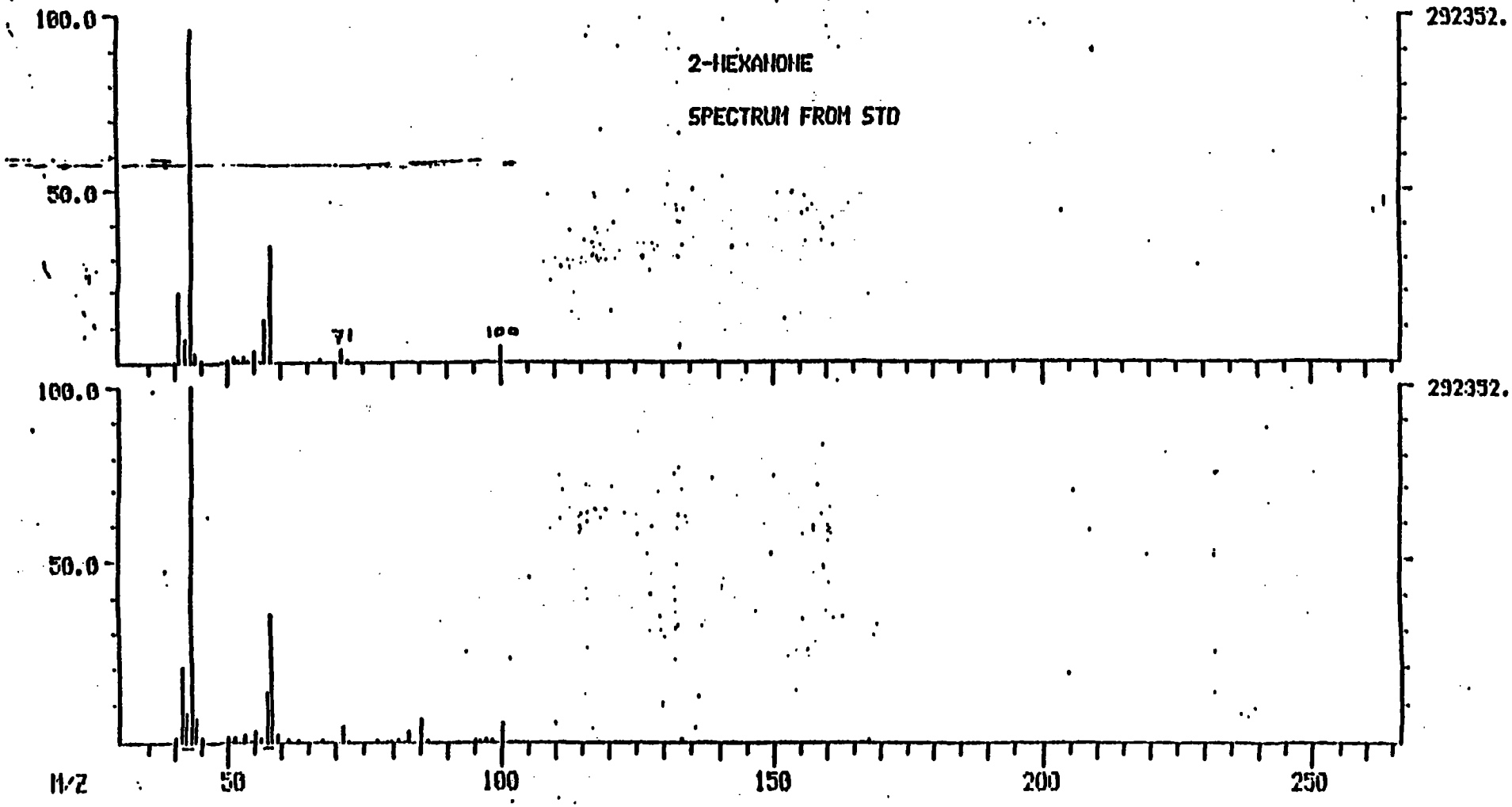


01281

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 23:23
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
COMDS.:
ENHANCED (5 150 2H 0T)

DATA: STDJ198 #460
CALI: STDJ198 #1

BASE M/Z: 43/ 43
RIC: 549607./ 659455.

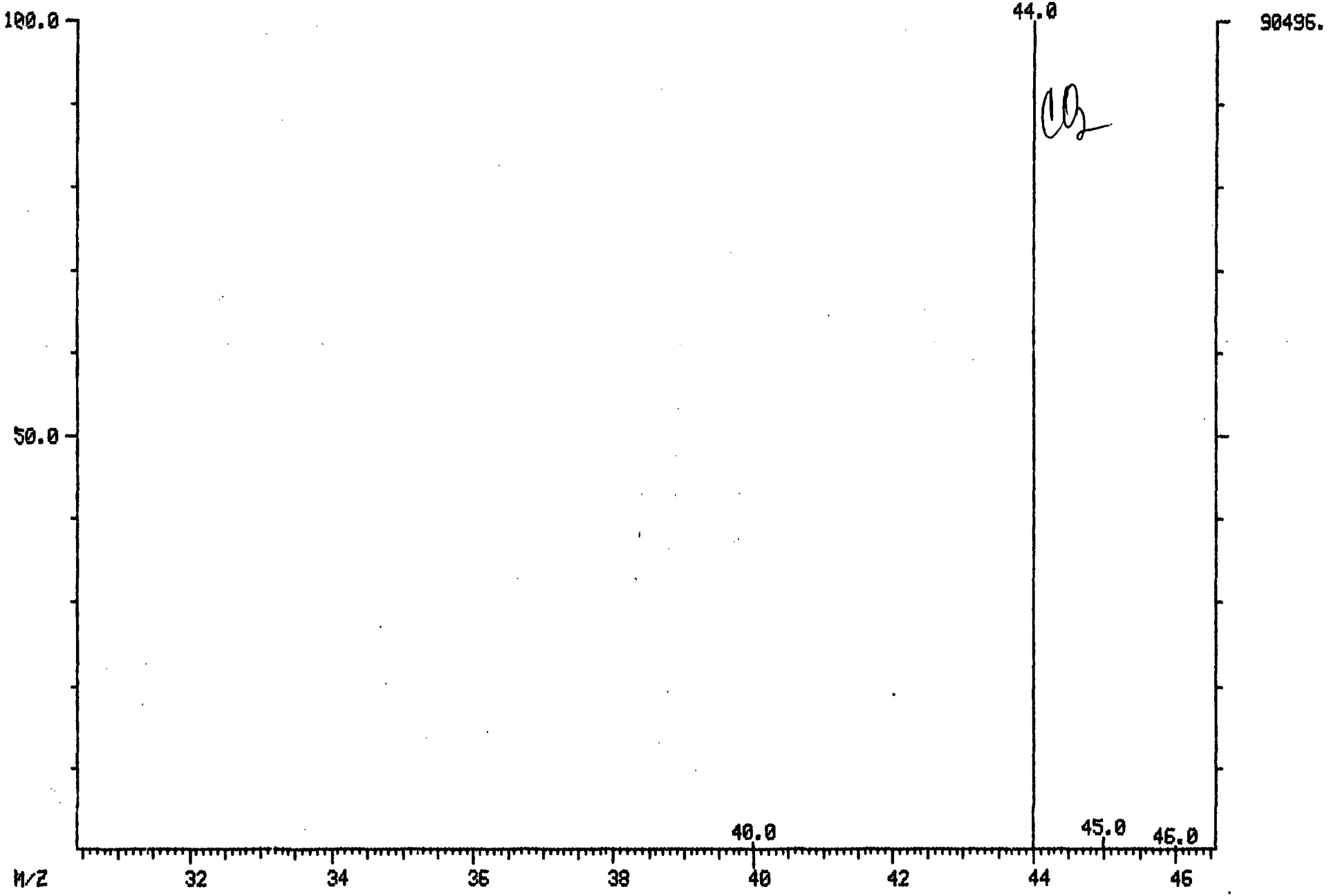


01282

MASS SPECTRUM
05/02/88 23:06:00 + 0:51
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050288,VOA,EPA
CONDS.: 5ML H2O
GC TEMP: 60 DEG. C

DATA: BLW965 #17
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 93056.



MB-2

5/3/88 13:30:23 SCAN 1 OF 730
Acquisition started

Acquire
05/03/88 13:30:00 + 0:03
Sample: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
Conds.: 100%/3ML
Formula:
Submitted by: RMAL

Run 3:BLW980
Free sectors: 9357
Instrument: 5100
Analyst: GW

Acquiring
Scan: 1 of 730

01283

Weight: 0.031
Acct. No: 59450

*** GC descriptor: V3 ***

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

Injector: 50 DegC
Interface: 220 DegC

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

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

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

Hold time (s)
Top: 0.00
Bottom: 0.05

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

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

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

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

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	127.00	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: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/3/88 14:06:56
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	33.4	2190.0	1.5	13686.	19.	6.

01284

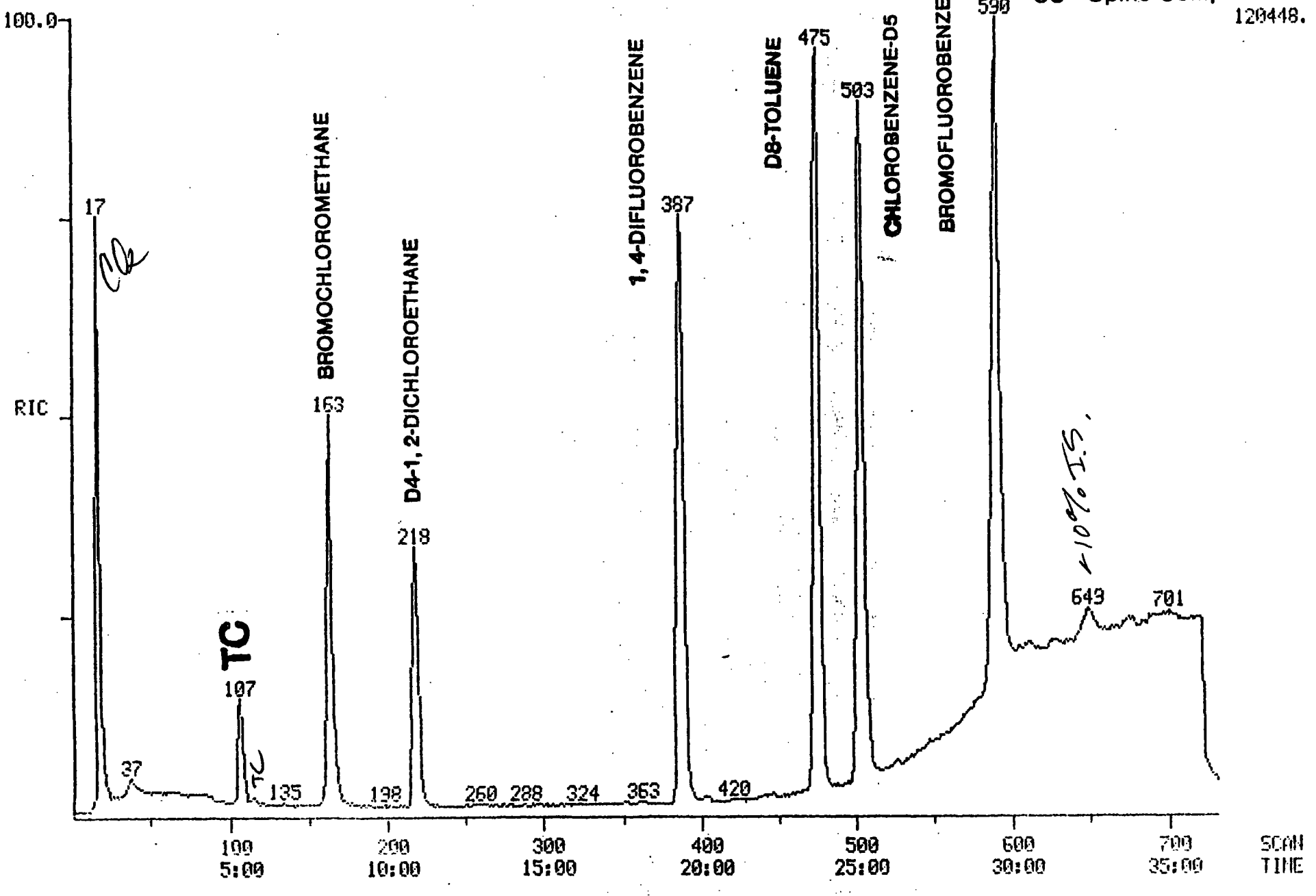
RIC
05/03/88 13:30:00
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
CONDS.: 100Z/5ML
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: BLW980 #4
CALI: 050388CW #2

SCANS 1 TO 730

TIC = Tentatively Identified Compound

TC = Target Compound
SC = Spike Compound



PROCEDURE: TCA DIAGNOSTIC REPORT 5/03/88 14:08:29
DATA FILE: BLW980
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

01285

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	3	3	12	ISO1/TCO1
3	3	1	107	18	6	6	80	ISO2/TCO2
3	3	1	107	12	6	2	94	ISO3/TCO3
1	1	1	0	7	5	2	88	ISO4/TCO4

41 COMPOUNDS PROCESSED, 15 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-162	163	163	.	1	967	.	128	163	.	1
2	V1	10	-32	30	.	.	.	.	.	50	.	.	.
3	V1	15	-48	47	.	.	.	.	.	94	.	.	.
4	V1	25	-59	58	.	.	.	.	.	62	.	.	.
5	V1	35	-74	73	.	.	.	.	.	64	.	.	.
6	V1	45	-107	107	107	.	1	986	.	84	107	.	1
7	V1	50	-116	116	116	.	3	1000	.	58	115	-1	1
8	V1	65	-133	133	.	.	.	.	.	76	.	.	.
9	V1	80	-154	155	.	.	.	.	.	96	.	.	.
10	V2	1	-388	388	387	-1	1	996	.	114	387	.	1
11	V3	1	-503	502	503	1	1	998	.	117	503	.	1
12	V1	90	-179	179	.	.	.	.	.	63	.	.	.
13	V1	95	-194	194	.	.	.	.	.	96	.	.	.
14	V1	100	-205	205	.	.	.	.	.	83	.	.	.
15	V2	10	-218	218	218	.	3	805	.	72	.	.	.
16	V1	2	-219	219	218	-1	1	990	.	65	218	.	1
17	V1	110	-221	221	.	.	.	.	.	62	.	.	.
18	V2	15	-248	248	.	.	.	.	.	97	.	.	.
19	V2	20	-257	257	.	.	.	.	.	117	.	.	.
20	V2	25	-260	260	260	.	2	860	.	43	260	.	1
21	V2	30	-268	268	.	.	.	.	.	83	.	.	.
22	V2	35	-299	299	.	.	.	.	.	63	.	.	.
23	V2	40	-304	304	.	.	.	.	.	75	.	.	.
24	V2	45	-317	317	.	.	.	.	.	130	.	.	.
25	V2	60	-330	330	.	.	.	.	.	78	.	.	.
26	V2	50	-331	331	.	.	.	.	.	129	.	.	.
27	V2	65	-334	334	.	.	.	.	.	75	.	.	.
28	V2	55	-334	334	.	.	.	.	.	97	.	.	.
29	V2	80	-393	392	.	.	.	.	.	173	.	.	.
30	V3	10	-405	404	403	-1	1	919	.	58	403	.	1
31	V3	15	-441	440	440	.	2	949	.	58	439	-1	1
32	V3	25	-447	446	.	.	.	.	.	83	446	.	1
33	V3	20	-449	448	.	.	.	.	.	164	.	.	.
34	V3	2	-476	475	475	.	1	990	.	98	474	-1	1
35	V3	35	-480	479	.	.	.	.	.	92	478	.	1
36	V3	40	-507	507	.	.	.	.	.	112	505	.	1
37	V3	50	-549	548	.	.	.	.	.	106	548	.	1
38	V3	3	-591	590	590	.	1	989	.	95	590	.	1
39	V3	55	-612	611	610	-1	1	948	.	104	611	1	1
40	V3	60	-615	614	614	.	1	904	.	106	614	.	1
41	V3	75	-628	627	628	1	2	967	.	106	628	.	1

Quantitation Report File: BLW980

01286

Data: BLW980.TI
05/02/88 13:30:00
Sample: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
Conds.: 100%/5ML
Formula: Instrument: 5100 Weight: 0.031
Submitted by: RMAL Analyst: GW Acct. No.: 59450

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	C110 2-BUTANONE	72	V2#	10	78-93-3
16	CS15 1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
17	C065 1,2-DICHLOROETHANE	62	V1#	110	107-06-2
18	C115 1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
19	C120 CARBONTETRACHLORIDE	117	V2#	20	56-23-5
20	C125 VINYL ACETATE	43	V2#	25	108-05-4
21	C130 BROMODICHLOROMETHANE	83	V2#	30	75-27-4
22	C140 1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
23	C143 CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
24	C150 TRICHLOROETHENE	130	V2#	45	79-01-6
25	C165 BENZENE	78	V2#	60	71-43-2
26	C155 DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
27	C172 TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
28	C160 1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
29	C180 BROMOFORM	173	V2#	80	75-25-2
30	C205 4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
31	C210 2-HEXANONE	58	V3#	15	591-78-6
32	C225 1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5
33	C220 TETRACHLOROETHENE	164	V3#	20	127-18-4
34	CS05 TOLUENE-D8	98	SV3#	02	2037-26-5
35	C230 TOLUENE	92	V3#	35	108-88-3
36	C235 CHLOROBENZENE	112	V3#	40	108-90-7
37	C240 ETHYLBENZENE	106	V3#	50	100-41-4
38	CS10 BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
39	C245 STYRENE	104	V3#	55	100-42-5
40	M-XYLENE	106	V3#	60	108-38-3
41	O+P XYLENES	106	V3#	75	

01287

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	163	8:09	1	1.000	A BB	27863.	50.000 UG/L	15.60
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	107	5:21	1	0.656	A BB	10558.	9.352 UG/L	2.92
7	58	115	5:45	1	0.706	A BB	650.	7.754 UG/L	2.42
8	NOT FOUND								
9	NOT FOUND								
10	114	387	19:21	10	1.000	A BB	172779.	50.000 UG/L	15.60
11	117	503	25:09	11	1.000	A BB	153676.	50.000 UG/L	15.60
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	65	218	10:54	1	1.337	A BB	50845.	46.849 UG/L	14.61
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	43	260	13:00	10	0.672	A BB	840.	0.224 UG/L	0.07
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	58	403	20:09	11	0.801	A BB	541.	1.092 UG/L	0.34
31	58	439	21:57	11	0.873	A BB	651.	1.255 UG/L	0.39
32	83	446	22:18	11	0.887	A BB	909.	0.467 UG/L	0.15
33	NOT FOUND								
34	98	474	23:42	11	0.942	A BB	184538.	50.140 UG/L	15.64
35	92	478	23:54	11	0.950	A BB	405.	0.181 UG/L	0.06
36	112	505	25:15	11	1.004	A BB	855.	0.323 UG/L	0.10
37	106	548	27:24	11	1.089	A BB	281.	0.200 UG/L	0.06
38	95	590	29:30	11	1.173	A BB	107410.	51.416 UG/L	16.04
39	104	611	30:33	11	1.215	A BB	1623.	0.578 UG/L	0.18
40	106	614	30:42	11	1.221	A BB	623.	0.376 UG/L	0.12
41	106	628	31:24	11	1.249	A BB	665.	0.421 UG/L	0.13

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	1:36		0.196						
3	2:24		0.294						
4	2:57		0.362						
5	3:42		0.454						
6	5:21	1.00	0.656	1.00	9.35	50.00	0.379	2.026	0.19
7	5:48	0.99	0.712	0.99	7.75	50.00	0.023	0.150	0.16
8	6:39		0.816						
9	7:42		0.945						
10	19:27	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	8:57		1.098						
13	9:42		1.190						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	10:15		1.258						
15	10:54		0.560						
16	10:57	1.00	1.344	1.00	46.85	50.00	1.825	1.948	0.94
17	11:03		1.356						
18	12:24		0.638						
19	12:51		0.661						
20	13:00	1.00	0.668	1.01	0.22	50.00	0.005	1.086	0.00
21	13:24		0.689						
22	14:57		0.769						
23	15:12		0.781						
24	15:51		0.815						
25	16:30		0.848						
26	16:33		0.851						
27	16:42		0.859						
28	16:42		0.859						
29	19:39		1.010						
30	20:15	1.00	0.804	1.00	1.09	50.00	0.004	0.161	0.02
31	22:03	1.00	0.875	1.00	1.26	50.00	0.004	0.169	0.03
32	22:21	1.00	0.887	1.00	0.47	50.00	0.006	0.634	0.01
33	22:27		0.891						
34	23:48	1.00	0.944	1.00	50.14	50.00	1.201	1.197	1.00
35	24:00	1.00	0.952	1.00	0.18	50.00	0.003	0.728	0.00
36	25:21	1.00	1.006	1.00	0.32	50.00	0.006	0.861	0.01
37	27:27	1.00	1.089	1.00	0.20	50.00	0.002	0.458	0.00
38	29:33	1.00	1.173	1.00	51.42	50.00	0.699	0.680	1.03
39	30:36	1.00	1.214	1.00	0.58	50.00	0.011	0.913	0.01
40	30:45	1.00	1.220	1.00	0.38	50.00	0.004	0.539	0.01
41	31:24	1.00	1.246	1.00	0.42	50.00	0.004	0.514	0.01

01288

TCA FINISHED, 15 FOUND
FINISHED AT: 5/03/88 14:12:26

01289

RMAL QUANTITATION SUMMARY FILE: BLW980
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

% Rec

UNITS: UG/L

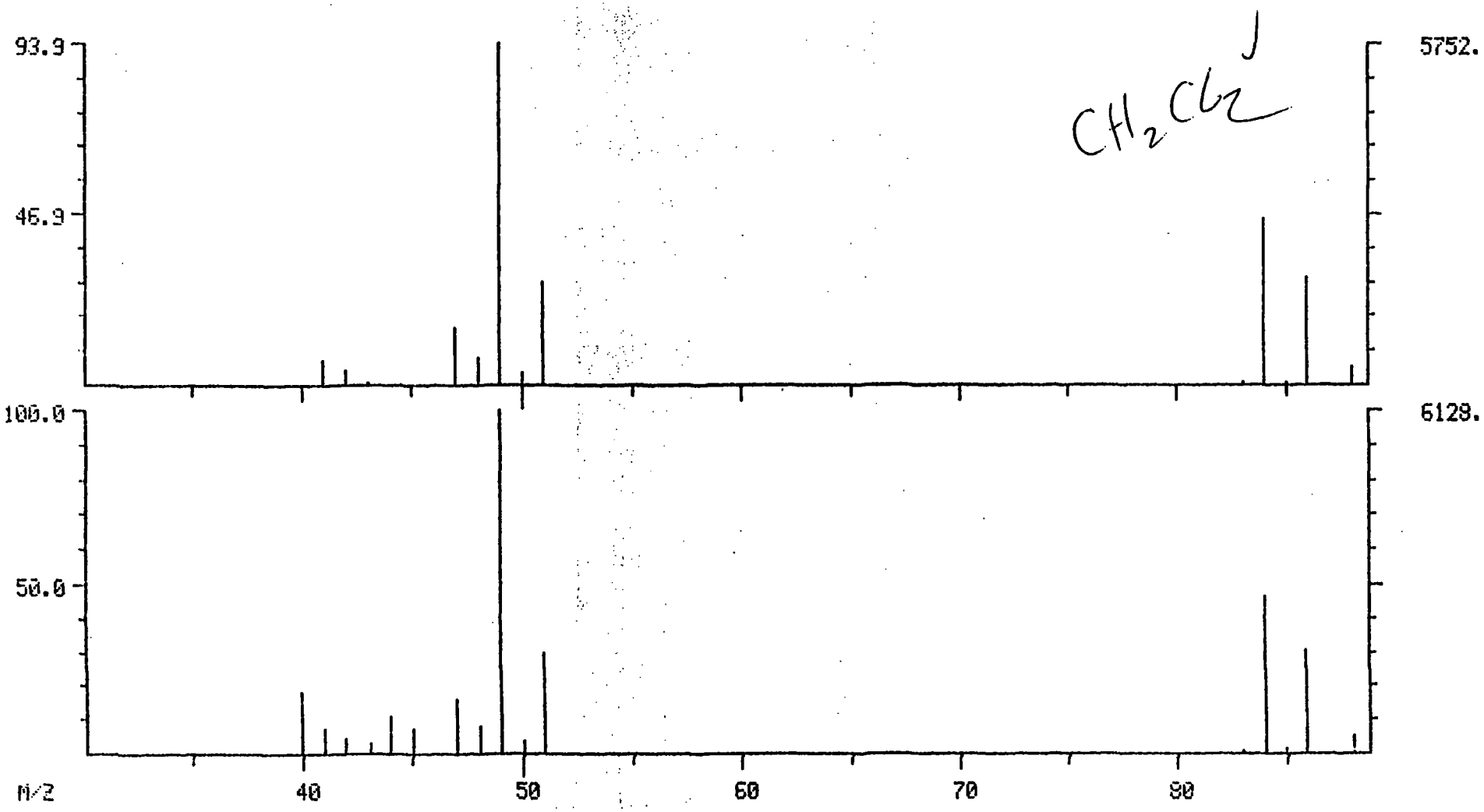
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT	
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	27863.	1.000	50.000	
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	387	2	172779.	1.000	50.000	
3	V3# 1	CI20 CHLOROBENZENE-D5	117	503	3	153676.	1.000	50.000	
4	V3# 2	CS05 TOLUENE-D8	98	474	3	184538.	1.201	50.140	100
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	590	3	107410.	0.699	51.416	103
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	218	1	50845.	1.825	46.849	94
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	10558.	0.379	9.352	
12	V1# 50	C035 ACETONE	58	115	1	650.	0.023	7.754	
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	403	3	541.	0.004	~~1.092~~	
33	V3# 15	C210 2-HEXANONE	58	439	3	651.	0.004	~~1.255~~	
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			

01290

DUAL MASS SPECTRUM
05/03/88 13:30:00 + 5:21
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 84 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLW980 #107
CALI: 050388CW #2

BASE M/Z: 49/ 49
RIC: 14735./ 17823.



01291

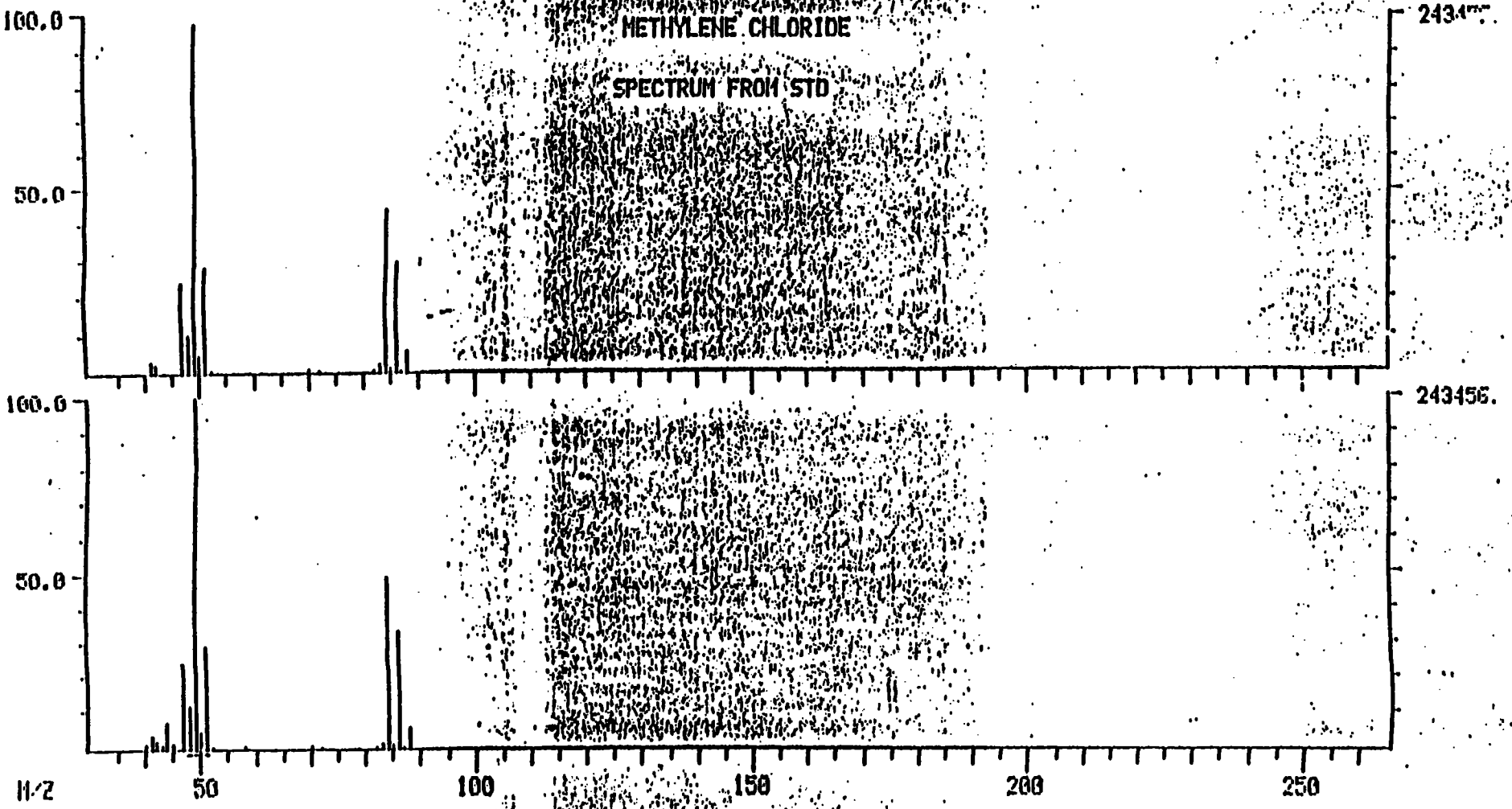
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100Z/5ML
COMDS.:
ENHANCED (S 15B 2H 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

SPECTRUM FROM STD

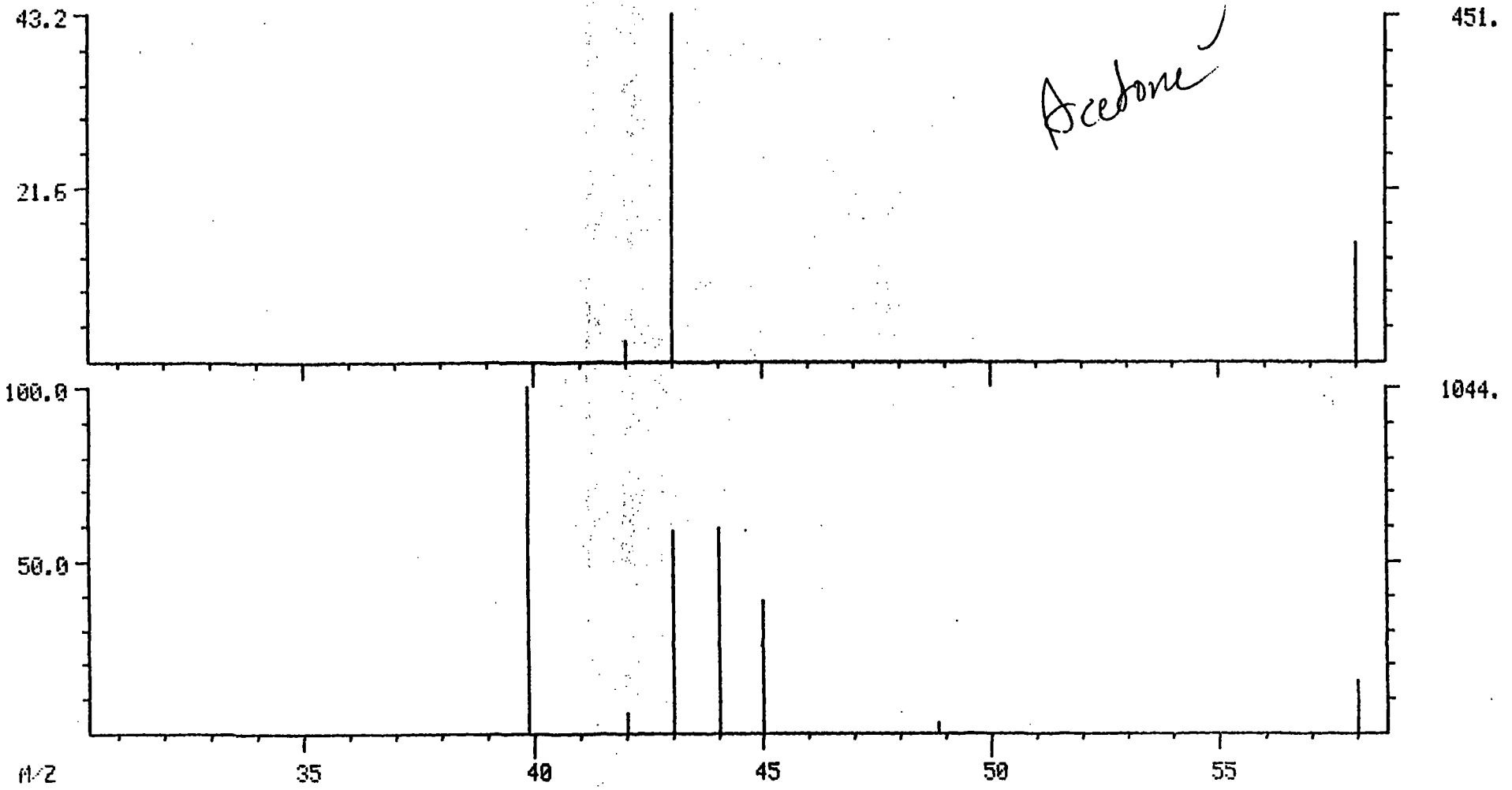


01292

DUAL MASS SPECTRUM
05/03/88 13:30:00 + 5:45
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 86 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLW380 #115
CALI: 050388CW #2

BASE M/Z: 43/ 40
RIC: 631./ 2931.



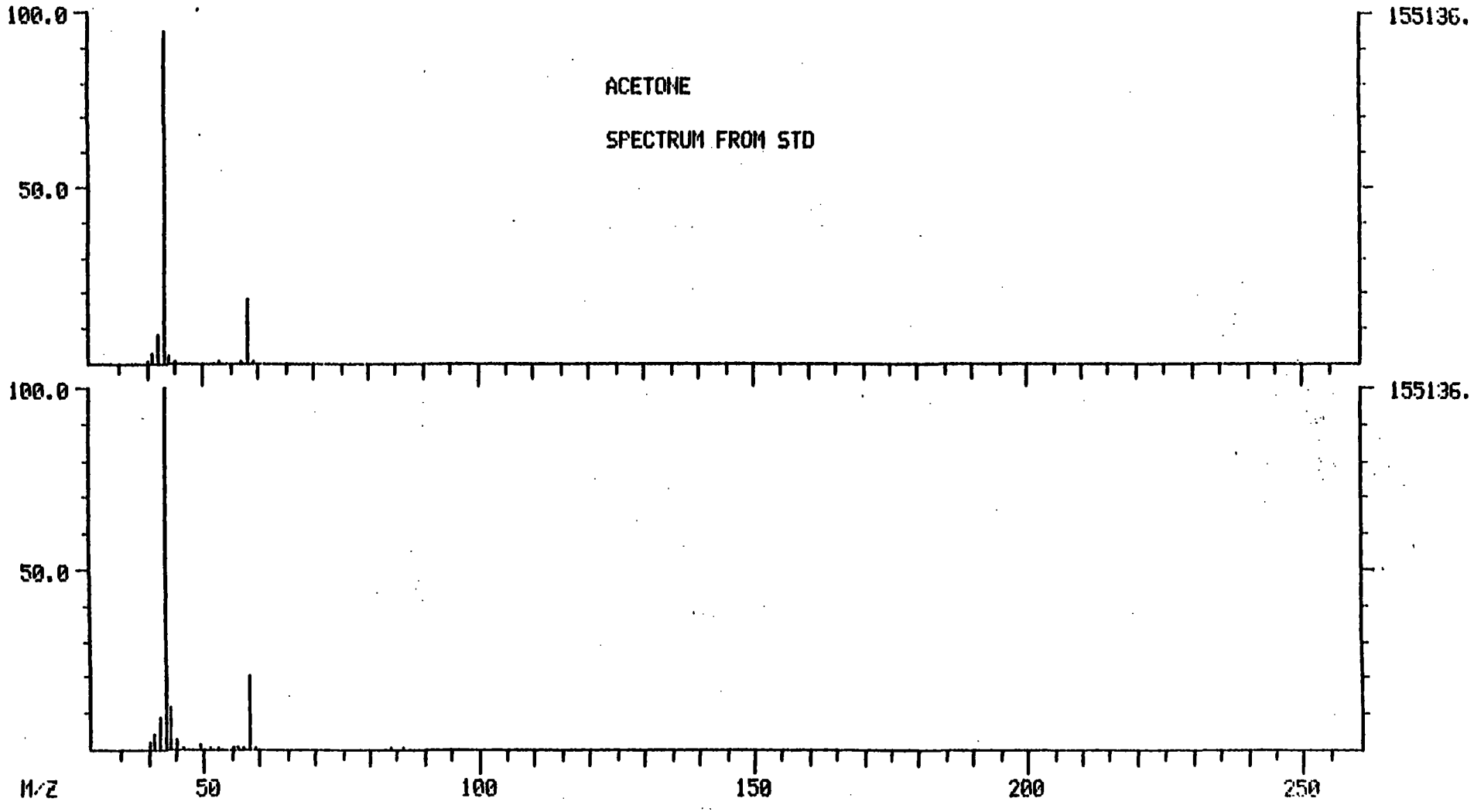
Acetone

01293

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

DATA: STDJ198 #150
CALI: STDJ198 #1

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



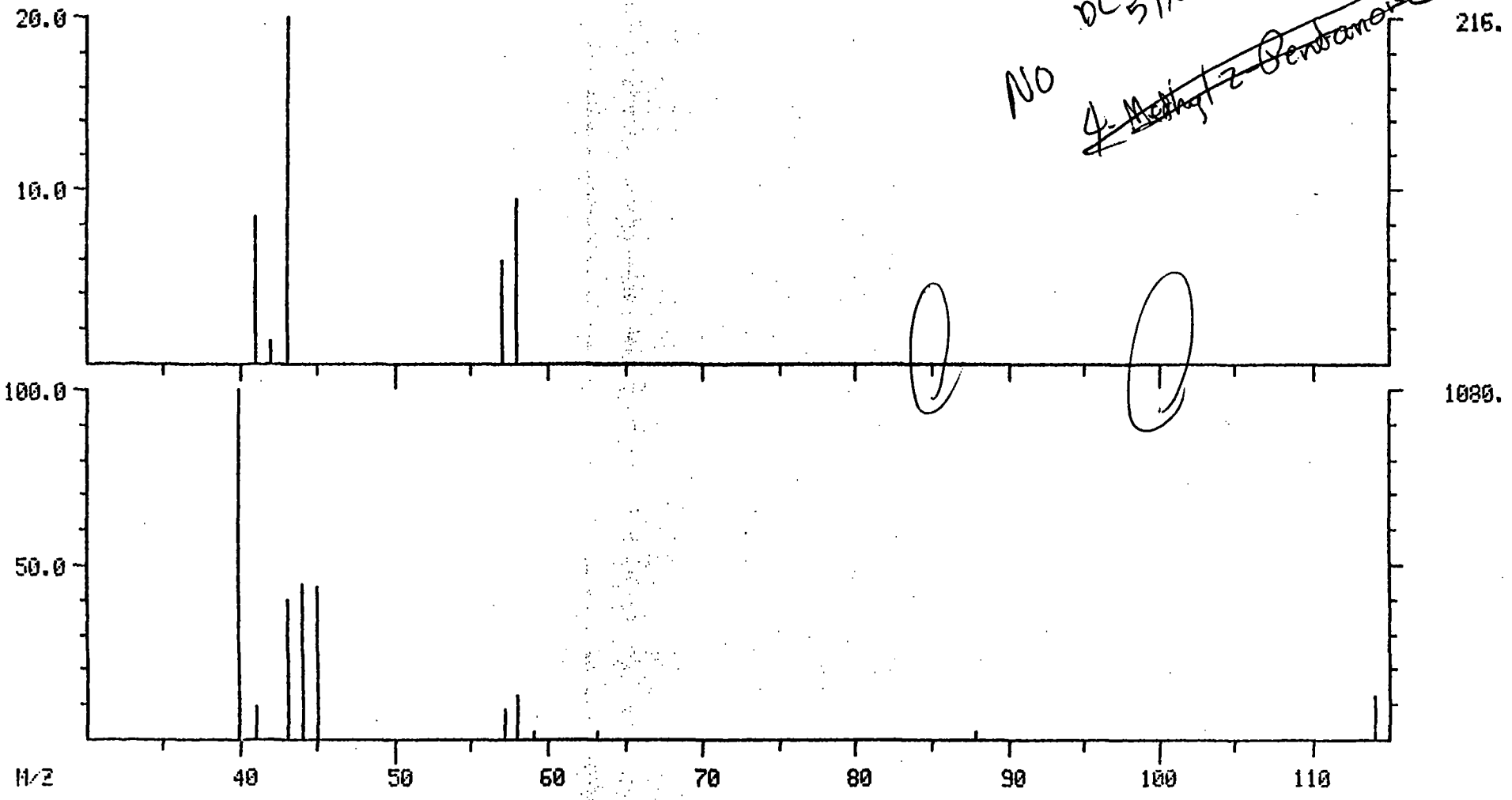
01294

DUAL MASS SPECTRUM
05/03/88 13:30:00 + 20:09
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 187 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLW980 #403
CALI: 050388CW #2

BASE M/Z: 43/ 40
RIC: 484./ 2983.

NO DC 5/16/88
~~4-Methyl-2-Pentanone~~

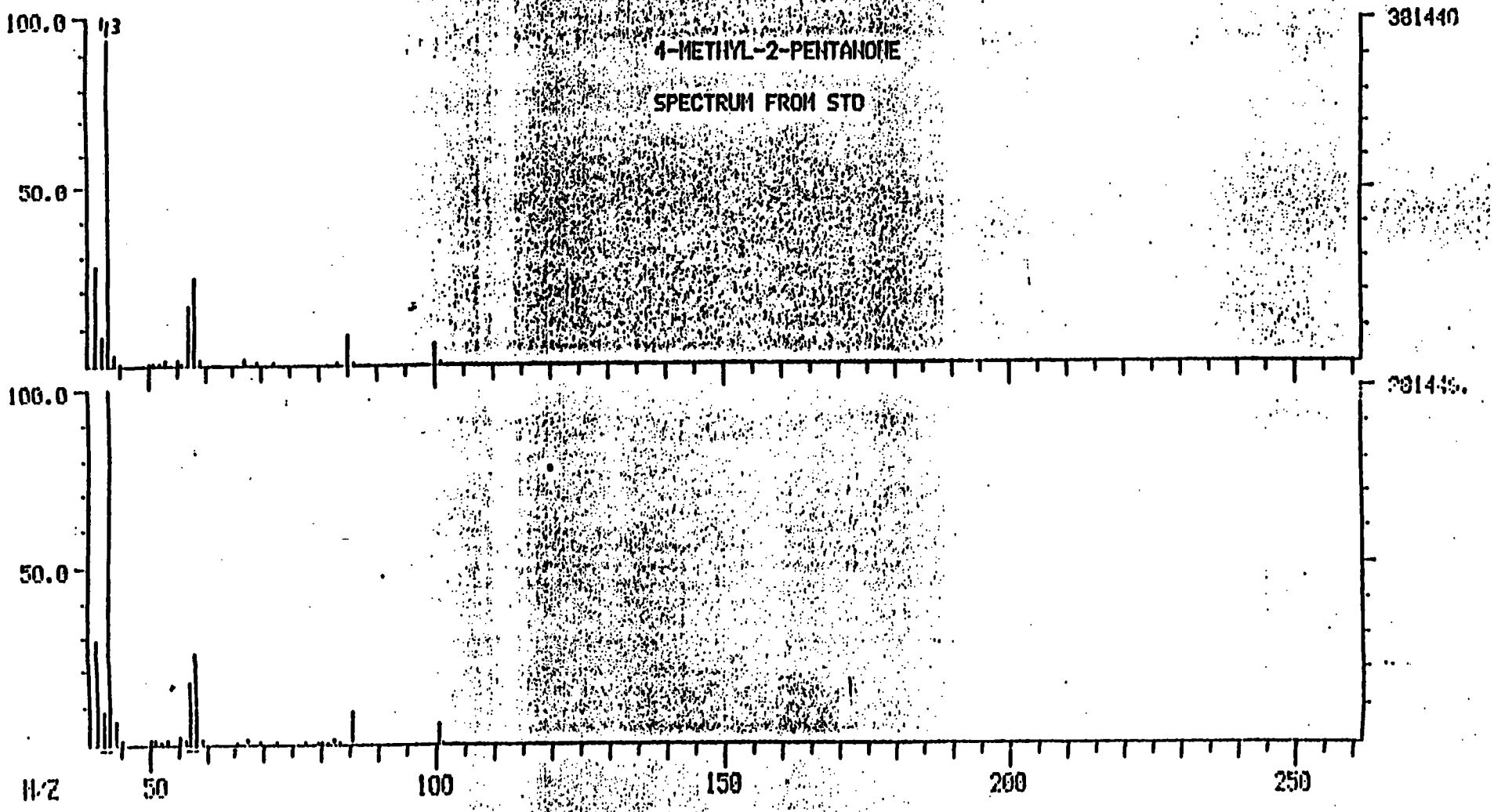


01295

DUAL MASS SPECTRUM
10/13/86 10:38:00 + 21:45
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (5 150 2H 0T)

DATA: STDJ198 #428
CALI: STDJ198 #1

BASE M/Z: 43/ 43
RIC: 759807./ 835583.

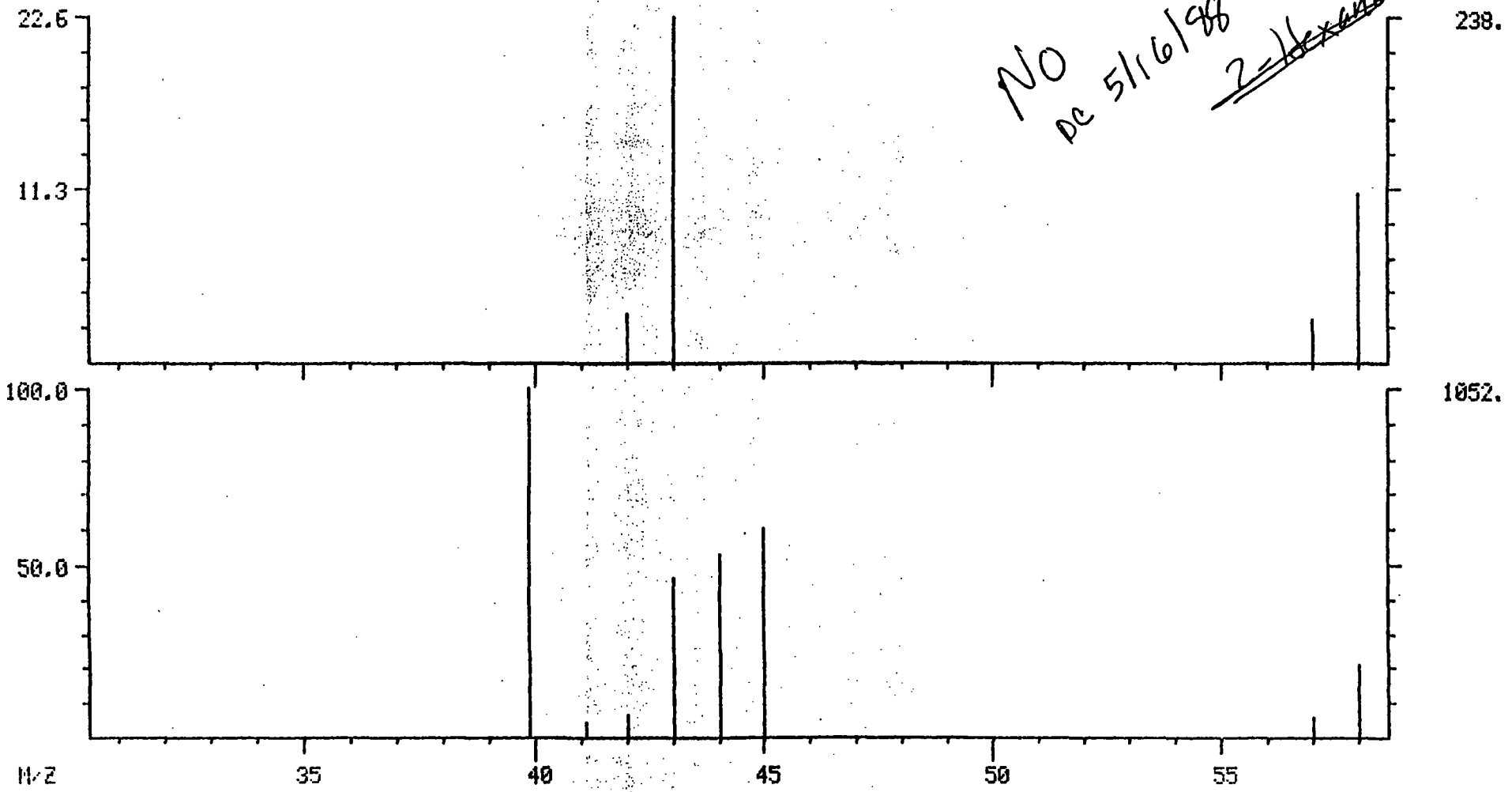


01296

DUAL MASS SPECTRUM
05/03/88 13:30:00 + 21:57
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 200 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: BLW980 #439
CALI: 050388CW #2

BASE M/Z: 43/ 40
RIC: 415./ 3127.



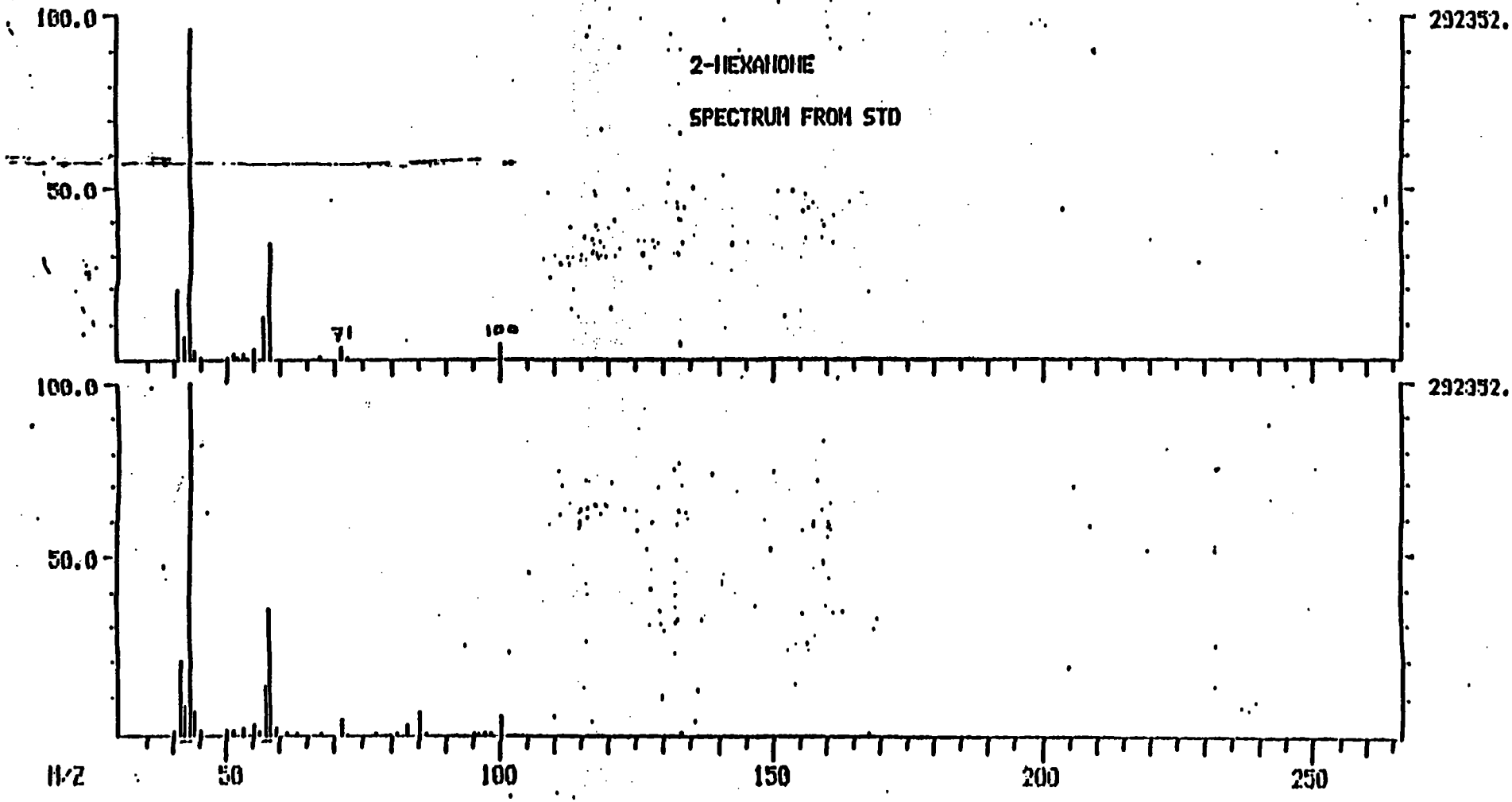
NO
DC 5/16/88
~~2-Hexanone~~

01297

DUAL MASS SPECTRUM
10/13/86 10:30:00 + 23:23
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
COMDS.:
ENHANCED (5 150 211 0T)

DATA: STDJ190 H460
CALI: STDJ190 H1

BASE M/Z: 43/ 43
RIC: 549007./ 659455.

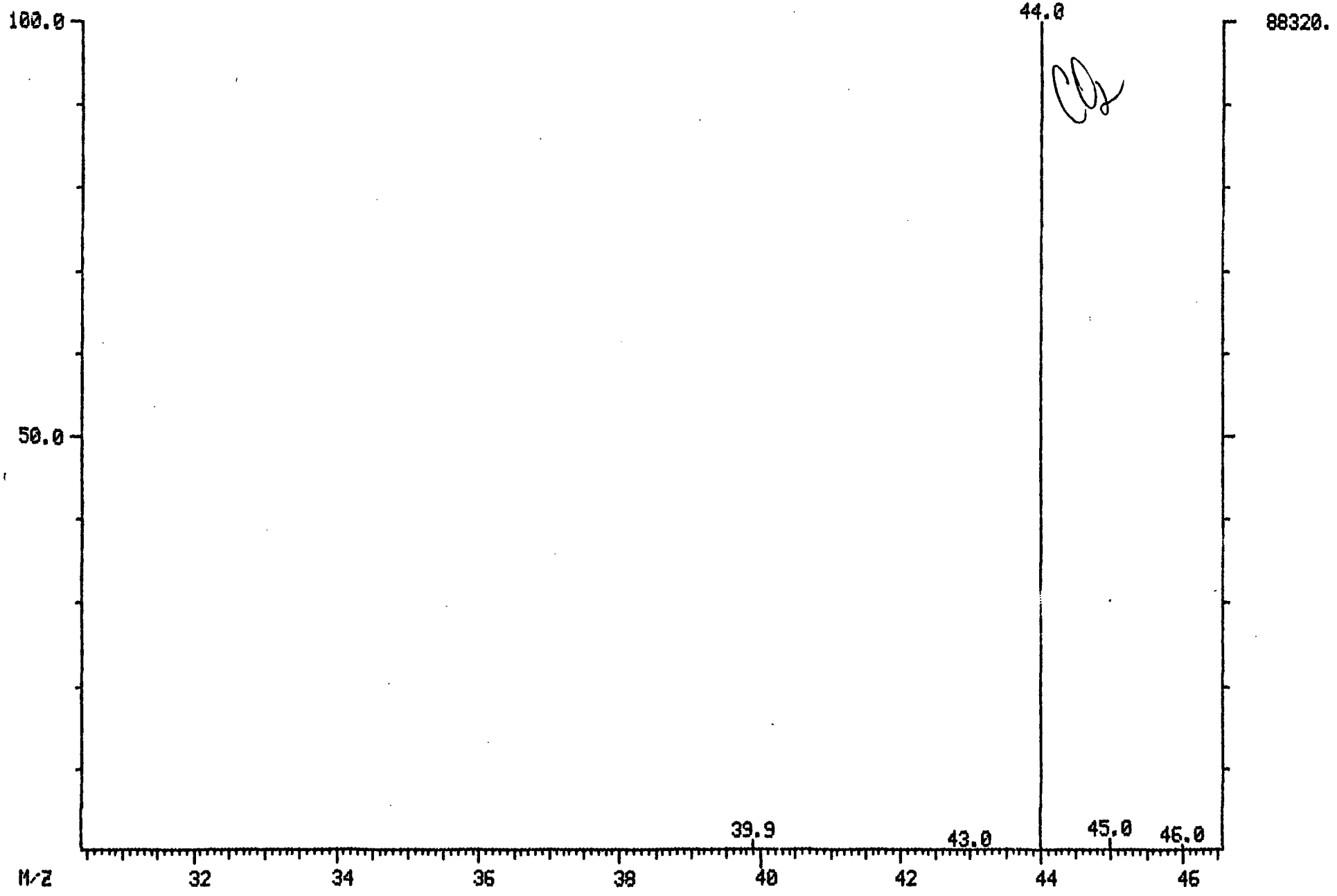


01298

MASS SPECTRUM
05/03/88 13:30:00 + 0:51
SAMPLE: CLP,59450,,VBLK,LOW,WATER,BL050388,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 60 DEG. C

DATA: BLW980 #17
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 90752.



$\frac{ug}{mL} \times \frac{2.0\,mL}{1.0\,L} = 2.0\,\frac{ug}{L}$ MB-1

01299

6/6/88 10:45:03 SCAN 1 OF 2800
Acquisition started

Acquire Run 0:S59450U570 ACQUIRING
06/06/88 10:44:00 + 0:04 Free sectors: 2041a Scan: 5 of 2800
Sample: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No:

********** 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 : 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	40.5	0.0
3	325 - 325	-	10.0	40.5			
4	325 - 325	-	0.0	40.5			

********** 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: 30
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	

6/6/88 11:20:05
ACQUISITION COMPLETED
SCANS 1 TO 2800 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2800	169.1	2100.0	8.1	27446. 10.	13.

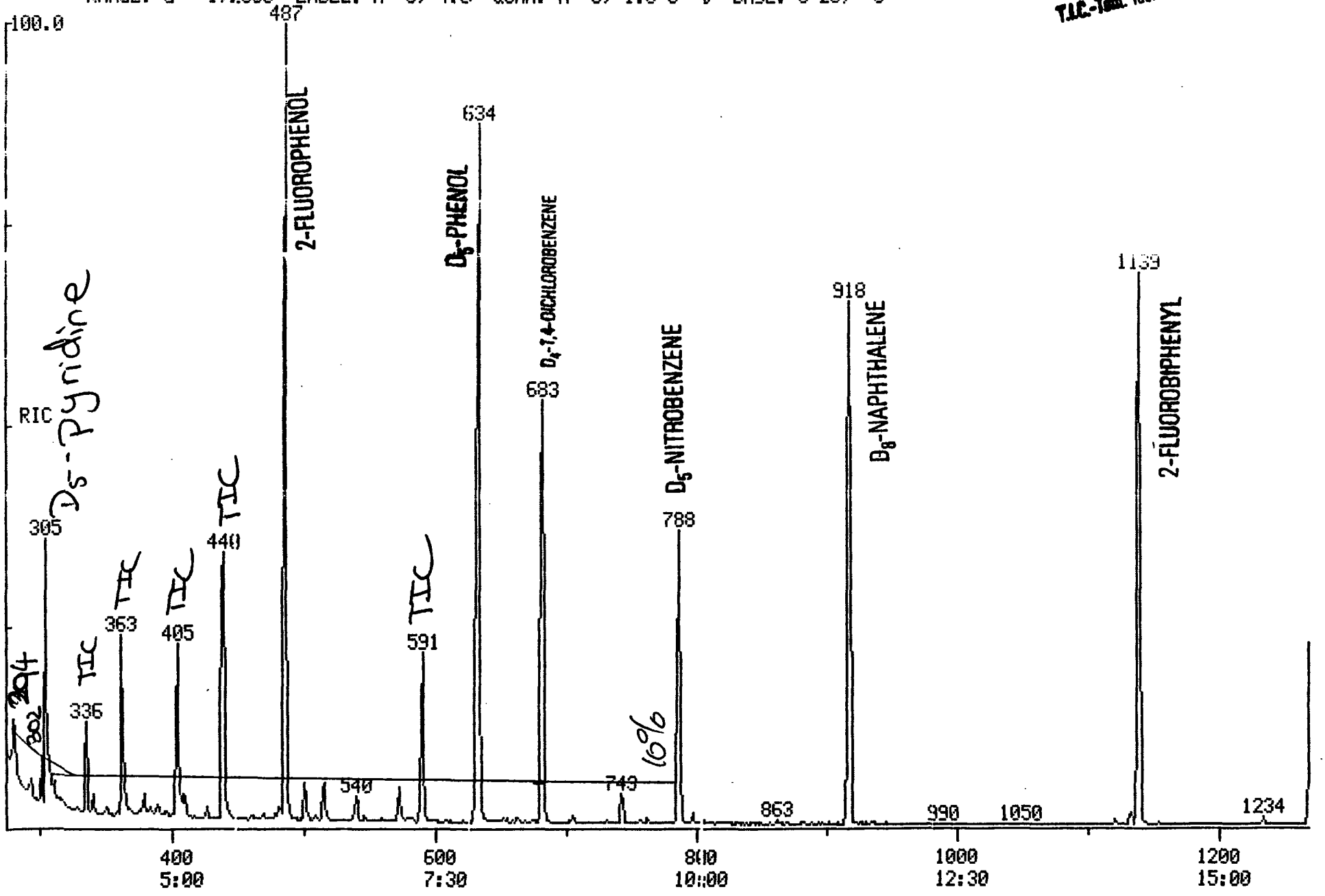
01300

RIC
06/06/88 10:44:00
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59450U570 #4 SCANS 270 TO 1270
CALI: 060688CU #5 OUT OF 270 TO 2800

TC = Target Compound
SC = Spike Compound

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



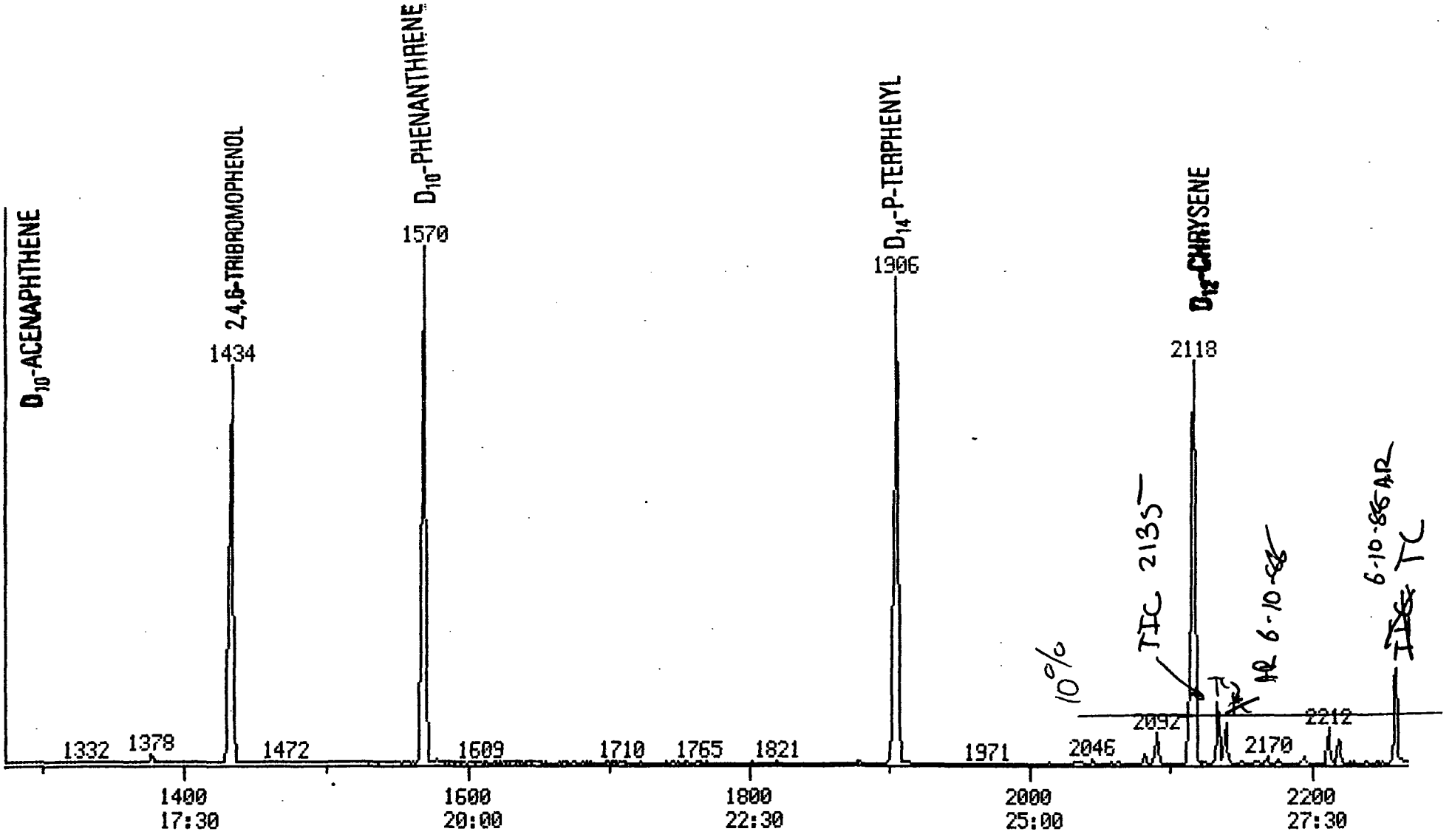
01301

RIC DATA: S59450U570 #4 SCANS 1270 TO 2270
06/06/88 10:44:00 CALI: 060688CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

TC = Target Compound
SC = Spike Compound

100.0

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



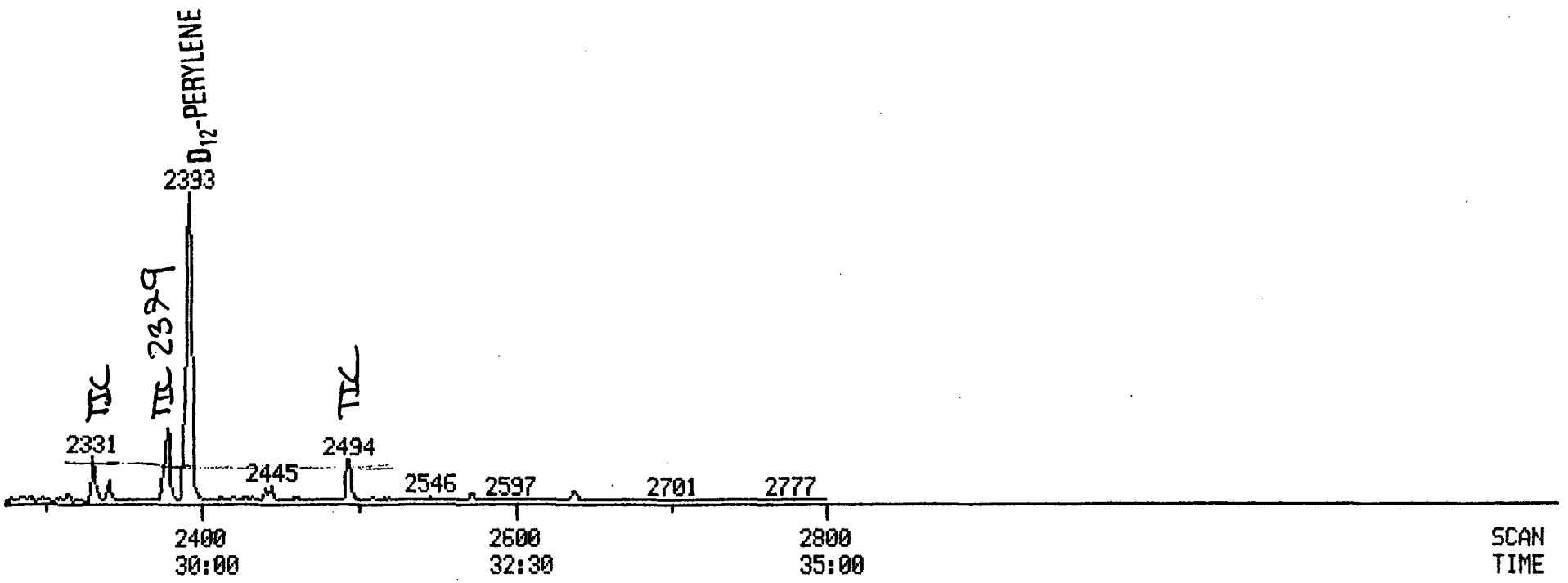
01302

RIC DATA: S59450U570 #4 SCANS 2270 TO 2800
06/06/88 10:44:00 CALI: 060688CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100Z/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

TC = Target Compound
SC = Spike Compound

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

100.0 165376.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/06/88 12:07:41
DATA FILE: S59450U570
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

01303

---- STANDARDS -----				--- PLUS UNKNOWNS ---				- LIST NAMES -
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	7	3	1	138	IS01/TC01
3	3	1	32	18	4	1	64	IS02/TC02
3	3	1	32	12	3	1	32	IS03/TC03
3	3	1	170	18	4	1	134	IS04/TC04
3	3	1	170	10	4	1	120	IS05/TC05
3	3	1	156	8	3	1	154	IS06/TC06
3	3	1	107	14	6	1	57	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

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	-681	683	683	.	1	971	.	152	683	.	1
2	S1	2	-486	487	487	.	1	994	.	112	487	.	1
3	S1	3	-634	635	634	-1	1	945	.	99	634	.	1
4	S1	105	-636	637	.	.	.	.	.	94	635	.	1
5	S1	110	-648	649	.	.	.	.	.	93	.	.	.
6	S1	115	-652	653	.	.	.	.	.	128	652	.	1
7	S1	125	-675	676	.	.	.	.	.	146	.	.	.
8	S2	1	-916	918	918	.	1	995	.	136	918	.	1
9	S3	1	-1269	1272	1272	.	1	993	.	164	1272	.	1
10	S1	130	-685	686	.	.	.	.	.	146	.	.	.
11	S1	145	-713	715	.	.	.	.	.	108	.	.	.
12	S1	150	-717	719	.	.	.	.	.	146	.	.	.
13	S1	160	-737	739	.	.	.	.	.	108	.	.	.
14	S1	165	-742	744	.	.	.	.	.	45	.	.	.
15	S1	185	-765	767	.	.	.	.	.	108	.	.	.
16	S1	190	-769	771	.	.	.	.	.	70	.	.	.
17	S1	200	-771	773	.	.	.	.	.	117	.	.	.
18	S2	2	-787	789	788	-1	1	998	.	82	788	.	1
19	S2	10	-791	793	.	.	.	.	.	77	.	.	.
20	S2	20	-836	838	.	.	.	.	.	82	.	.	.
21	S2	25	-850	852	.	.	.	.	.	139	.	.	.
22	S2	30	-862	864	.	.	.	.	.	107	.	.	.
23	S2	35	-882	884	.	.	.	.	.	93	.	.	.
24	S2	40	-895	897	.	.	.	.	.	162	.	.	.
25	S2	45	-895	897	.	.	.	.	.	122	.	.	.
26	S2	55	-910	912	.	.	.	.	.	180	.	.	.
27	S2	60	-921	923	.	.	.	.	.	128	.	.	.
28	S2	80	-939	941	.	.	.	.	.	127	.	.	.
29	S2	95	-959	961	.	.	.	.	.	225	.	.	.
30	S2	130	-1037	1039	.	.	.	.	.	107	.	.	.
31	S2	145	-1057	1060	.	.	.	.	.	142	.	.	.
32	S3	20	-1103	1106	.	.	.	.	.	237	.	.	.
33	S3	25	-1120	1123	.	.	.	.	.	196	.	.	.
34	S4	1	-1570	1571	1570	-1	1	992	.	188	1570	.	1
35	S3	30	-1127	1129	.	.	.	.	.	196	.	.	.
36	S3	3	-1138	1140	1139	-1	1	995	.	172	1139	.	1
37	S3	40	-1154	1156	.	.	.	.	.	162	.	.	.
38	S3	45	-1185	1187	.	.	.	.	.	65	.	.	.
39	S3	55	-1232	1233	.	.	.	.	.	163	.	.	.
40	S3	65	-1238	1239	.	.	.	.	.	152	.	.	.
41	S3	70	-1244	1245	.	.	.	.	.	165	.	.	.
42	S3	75	-1270	1271	.	.	.	.	.	138	.	.	.
43	S3	80	-1277	1278	.	.	.	.	.	153	.	.	.
44	S3	85	-1289	1290	.	.	.	.	.	184	.	.	.
45	S3	95	-1307	1308	.	.	.	.	.	109	.	.	.
46	S3	90	-1309	1310	.	.	.	.	.	168	.	.	.
47	S3	105	-1322	1323	.	.	.	.	.	165	.	.	.
48	S3	130	-1378	1379	.	.	.	.	.	149	.	.	.
49	S3	135	-1380	1381	.	.	.	.	.	166	.	.	.
50	S3	140	-1383	1384	.	.	.	.	.	204	.	.	.
51	S3	150	-1397	1398	.	.	.	.	.	138	.	.	.
52	S4	10	-1407	1408	.	.	.	.	.	198	.	.	.
53	S4	15	-1412	1413	.	.	.	.	.	169	.	.	.
54	S3	2	-1433	1434	1434	.	1	969	.	330	1434	.	1
55	S4	30	-1483	1484	.	.	.	.	.	248	.	.	.
56	S4	40	-1510	1511	.	.	.	.	.	284	.	.	.
57	S5	1	-2118	2118	2118	.	1	965	.	240	2118	.	1
58	S4	50	-1548	1549	.	.	.	.	.	266	.	.	.
59	S4	65	-1576	1577	.	.	.	.	.	178	.	.	.
60	S4	70	-1585	1586	.	.	.	.	.	178	.	.	.
61	S4	85	-1712	1713	.	.	.	.	.	149	.	.	.
62	S4	110	-1820	1820	.	.	.	.	.	202	.	.	.
63	S6	1	-2395	2394	2393	-1	1	991	.	264	2393	.	1
64	S5	15	-1867	1867	.	.	.	.	.	202	.	.	.
		2	-18[illegible]	1906	1906		1	990	.	244	1906	.	1

66	S5	40	-2017	2016	.	.	.	.	.	149	2015	.	.	1
67	S5	50	-2114	2113	.	.	.	.	.	228	.	.	.	.
68	S5	55	-2118	2117	.	.	.	.	.	252	.	.	.	.
69	S5	60	-2125	2124	.	.	.	.	.	228	.	.	.	.
70	S5	65	-2142	2141	2141	.	1	995	.	149	2141	.	.	1
71	S6	10	-2262	2261	2261	.	1	997	.	149	2261	.	.	1
72	S6	15	-2327	2326	.	.	.	.	.	252	.	.	.	.
73	S6	25	-2332	2331	.	.	.	.	.	252	.	.	.	.
74	S6	35	-2386	2385	.	.	.	.	.	252	.	.	.	.
75	S6	55	-2599	2597	.	.	.	.	.	276	.	.	.	.
76	S6	60	-2601	2599	.	.	.	.	.	278	.	.	.	.
77	S6	65	-2656	2654	.	.	.	.	.	276	.	.	.	.

01305

Data: S59450U570.TI
06/06/88 10:44:00
Sample: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	C440	2,4-DICHLOROPHENOL	162 S2# 40	120-83-2
25	C430	BENZOIC ACID	122 S2# 45	65-85-0
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

01306

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	152	683	8:32	1	1.000	A BB	31513.	40.000	UG/ML	5.98
2	112	487	6:05	1	0.713	A BV	89340.	84.423	UG/ML	12.61
3	99	634	7:55	1	0.928	A BB	119123.	88.741	UG/ML	13.26
4	94	635	7:56	1	0.930	A BB	158.	0.104	UG/ML	0.02
5	NOT FOUND									
6	128	652	8:09	1	0.955	A BB	92.	0.081	UG/ML	0.01
7	NOT FOUND									
8	136	918	11:28	8	1.000	A BB	119438.	40.000	UG/ML	5.98
9	164	1272	15:54	9	1.000	A BB	59549.	40.000	UG/ML	5.98
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	788	9:51	8	0.858	A BB	49992.	43.713	UG/ML	6.53
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	NOT FOUND									
28	NOT FOUND									
29	NOT FOUND									
30	NOT FOUND									
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	188	1570	19:37	34	1.000	A BV	106582.	40.000	UG/ML	5.98
35	NOT FOUND									
36	172	1139	14:14	9	0.895	A BV	90013.	41.049	UG/ML	6.13
37	NOT FOUND									
38	NOT FOUND									
39	NOT FOUND									
40	NOT FOUND									
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	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:05	1.00	0.712	1.00	84.42	100.00	1.134	1.343	0.84
3	7:57	1.00	0.930	1.00	88.74	100.00	1.512	1.704	0.89
4	7:58	1.00	0.933	1.00	0.10	50.00	0.004	1.920	0.00
5	8:07		0.950						
6	8:10	1.00	0.956	1.00	0.08	50.00	0.002	1.441	0.00
7	8:28		0.990						
8	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	8:35		1.004						
11	8:56		1.045						
12	8:59		1.051						
13	9:14		1.080						
14	9:18		1.088						
15	9:35		1.121						
16	9:38		1.127						
17	9:40		1.130						
18	9:52	1.00	0.859	1.00	43.71	50.00	0.335	0.383	0.87
19	9:55		0.863						
20	10:28		0.912						
21	10:39		0.927						
22	10:48		0.940						
23	11:03		0.962						
24	11:13		0.976						
25	11:13		0.976						
26	11:24		0.992						
27	11:32		1.004						
28	11:46		1.024						
29	12:01		1.046						
30	12:59		1.131						
31	13:14		1.152						
32	13:49		0.869						
33	14:01		0.882						
34	19:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:07		0.888						
36	14:15	1.00	0.896	1.00	41.05	50.00	1.209	1.473	0.82
37	14:27		0.909						
38	14:50		0.933						
39	15:25		0.970						
40	15:30		0.975						
41	15:34		0.980						
42	15:54		1.000						
43	15:59		1.006						
44	16:08		1.015						
45	16:22		1.029						
46	16:23		1.031						
47	16:33		1.041						
48	17:15		1.085						
49	17:16		1.086						
50	17:19		1.089						

01307

Quantitation Report File: S59450U570

01308

Data: S59450U570.TI
06/06/88 10:44:00
Sample: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	C730 BENZO(A)ANTHRACENE	228 S5# 50	56-55-3
68	C725 3,3'-DICHLOROBENZIDINE	252 S5# 55	91-94-1
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	1434	17:55	9	1.127	A BB	18365.	98.144 UG/ML	14.66
55	NOT FOUND								
56	NOT FOUND								
57	240	2118	26:28	57	1.000	A BV	80847.	40.000 UG/ML	5.98
58	NOT FOUND								
59	NOT FOUND								
60	NOT FOUND								
61	NOT FOUND								
62	NOT FOUND								
63	264	2393	29:55	63	1.000	A BB	56738.	40.000 UG/ML	5.98
64	NOT FOUND								
65	244	1906	23:49	57	0.900	A BB	102783.	61.944 UG/ML	9.25
66	149	2015	25:11	57	0.951	A BB	128.	0.094 UG/ML	0.01

01309

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	149	2141	26:46	57	1.011	A VB	5155.	2.445 UG/ML	0.37
71	149	2261	28:16	63	0.945	A BB	23860.	8.776 UG/ML	1.31
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	17:29		1.100						
52	17:35		0.896						
53	17:39		0.899						
54	17:56	1.00	1.128	1.00	98.14	100.00	0.123	0.126	0.98
55	18:32		0.944						
56	18:52		0.961						
57	26:29	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:21		0.985						
59	19:42		1.003						
60	19:49		1.009						
61	21:24		1.090						
62	22:45		1.158						
63	29:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:20		0.881						
65	23:49	1.00	0.899	1.00	61.94	50.00	1.017	0.821	1.24
66	25:13	1.00	0.952	1.00	0.09	50.00	0.001	0.676	0.00
67	26:25		0.998						
68	26:28		1.000						
69	26:34		1.003						
70	26:46	1.00	1.011	1.00	2.45	50.00	0.051	1.043	0.05
71	28:16	1.00	0.944	1.00	8.78	50.00	0.336	1.917	0.18
72	29:05		0.971						
73	29:09		0.973						
74	29:49		0.996						
75	32:29		1.085						
76	32:31		1.086						
77	33:12		1.109						

TCA FINISHED, 14 FOUND
FINISHED AT: 6/06/88 12:15:39

01310

RMAL QUANTITATION SUMMARY FILE: 5574500579
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	PRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	683	1	31513.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	119438.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1272	3	59549.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1570	4	106582.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2118	5	80847.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2393	6	56738.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	788	2	49992.	0.535	43.713
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1139	3	90013.	1.209	41.049
9	S5# 2	CS30 TERPHENYL-D14	244	1906	5	102783.	1.017	61.944
10	S1# 3	CS45 PHENOL-D5	99	634	1	119123.	1.512	88.741
11	S1# 2	CS50 2-FLUOROPHENOL	112	487	1	89340.	1.134	84.423
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1434	3	18385.	0.123	98.144
13	S1#105	C315 PHENOL	94		1	NOT FOUND		
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128		1	NOT FOUND		
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND		
18	S1#145	C345 BENZYL ALCOHOL	108		1	NOT FOUND		
19	S1#150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND		
20	S1#160	C355 2-METHYLPHENOL	108		1	NOT FOUND		
21	S1#165	C360 BIS(2-CHLOROISOPROP	45		1	NOT FOUND		
22	S1#185	C365 4-METHYLPHENOL	108		1	NOT FOUND		
23	S1#190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND		
24	S1#200	C375 HEXACHLOROETHANE	117		1	NOT FOUND		
25	S2# 10	C410 NITROBENZENE	77		2	NOT FOUND		
26	S2# 20	C415 ISOPHORONE	82		2	NOT FOUND		
27	S2# 25	C420 2-NITROPHENOL	139		2	NOT FOUND		
28	S2# 30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND		
29	S2# 35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND		
30	S2# 40	C440 2,4-DICHLOROPHENOL	162		2	NOT FOUND		
31	S2# 45	C430 BENZOIC ACID	122		2	NOT FOUND		
32	S2# 55	C445 1,2,4-TRICHLOROBENZ	180		2	NOT FOUND		
33	S2# 60	C450 NAPHTHALENE	128		2	NOT FOUND		
34	S2# 80	C455 4-CHLOROANALINE	127		2	NOT FOUND		
35	S2# 95	C460 HEXACHLOROBUTADIENE	225		2	NOT FOUND		
36	S2#130	C465 4-CHLORO-3-METHYLPH	107		2	NOT FOUND		
37	S2#145	C470 2-METHYLNAPHTHALENE	142		2	NOT FOUND		
38	S3# 20	C510 HEXACHLOROCYCLOPENT	237		3	NOT FOUND		
39	S3# 25	C515 2,4,6-TRICHLOROPHEN	196		3	NOT FOUND		
40	S3# 30	C520 2,4,5-TRICHLOROPHEN	196		3	NOT FOUND		
41	S3# 40	C525 2-CHLORONAPHTHALENE	162		3	NOT FOUND		
42	S3# 45	C530 2-NITROANALINE	65		3	NOT FOUND		
43	S3# 55	C535 DIMETHYLPHTHALATE	163		3	NOT FOUND		
44	S3# 65	C540 ACENAPHTHYLENE	152		3	NOT FOUND		
45	S3# 70	C543 2,6-DINITROTOLUENE	165		3	NOT FOUND		
46	S3# 75	C545 3-NITROANILINE	138		3	NOT FOUND		
47	S3# 80	C550 ACENAPHTHENE	153		3	NOT FOUND		
48	S3# 85	C555 2,4-DINITROPHENOL	184		3	NOT FOUND		
49	S3# 90	C565 DIBENZOFURAN	168		3	NOT FOUND		
50	S3# 95	C560 4-NITROPHENOL	109		3	NOT FOUND		
51	S3#105	C570 2,4-DINITROTOLUENE	165		3	NOT FOUND		
52	S3#130	C580 DIETHYLPHTHALATE	149		3	NOT FOUND		
53	S3#135	C590 FLUORENE	166		3	NOT FOUND		
54	S3#140	C585 4-CHLOROPHENYL-PHEN	204		3	NOT FOUND		
55	S3#150	C595 4-NITROANALINE	138		3	NOT FOUND		
56	S4# 10	C610 4,6-DINITRO-2-METHY	198		4	NOT FOUND		
57	S4# 15	C615 N-NITROSODIPHENYLAM	169		4	NOT FOUND		
58	S4# 30	C625 4-BROMOPHENYL-PHENY	248		4	NOT FOUND		
59	S4# 40	C630 HEXACHLOROBENZENE	284		4	NOT FOUND		
60	S4# 50	C635 PENTACHLOROPHENOL	266		4	NOT FOUND		
61	S4# 65	C640 PHENANTHRENE	178		4	NOT FOUND		
62	S4# 70	C645 ANTHRACENE	178		4	NOT FOUND		
63	S4# 85	C650 DI-N-BUTYLPHTHALATE	149		4	NOT FOUND		
64	S4#110	C655 FLUORANTHENE	202		4	NOT FOUND		
65	S5# 15	C715 PYRENE	202		5	NOT FOUND		
66	S5# 40	C720 BUTYLBENZYLPHTHALAT	149		5	NOT FOUND		
67	S5# 50	C730 BENZO(A)ANTHRACENE	228		5	NOT FOUND		
68	S5# 55	C725 3,3'-DICHLOROBENZID	252		5	NOT FOUND		
69	S5# 60	C740 CHRYSENE	228		5	NOT FOUND		
70	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	2141	5	5155.	0.051	2.445
71	S6# 10	C760 DI-N-OCTYL PHTHALAT	149	2261	6	23860.	0.336	8.776
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		

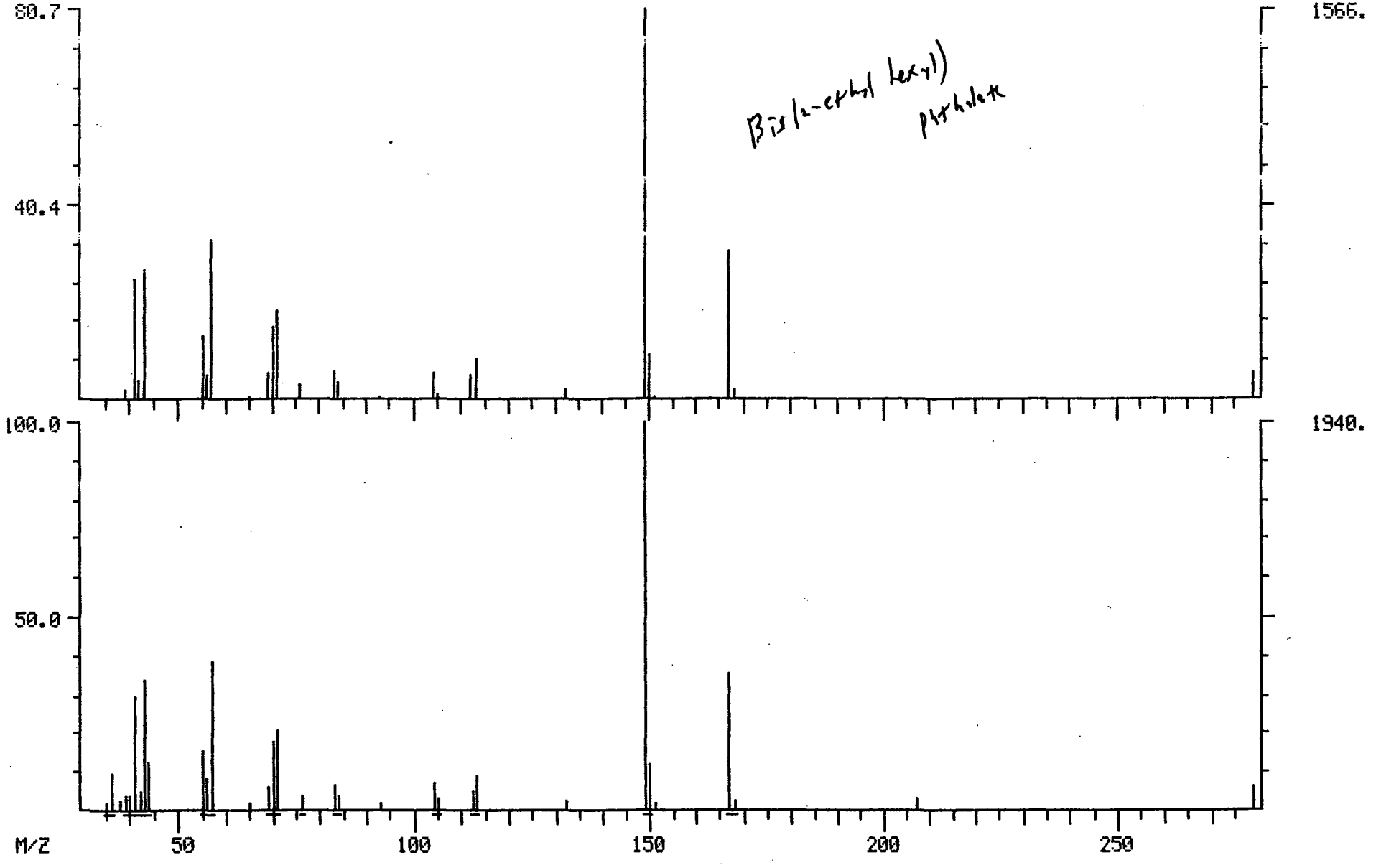
76	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	6	NOT FOUND
77	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	6	NOT FOUND

01311

01312

DUAL MASS SPECTRUM
06/06/88 10:44:00 + 26:46
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 289 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U570 #2141 BASE M/Z: 149/ 149
CALI: 060688CU #5 RIC: 6015./ 8023.

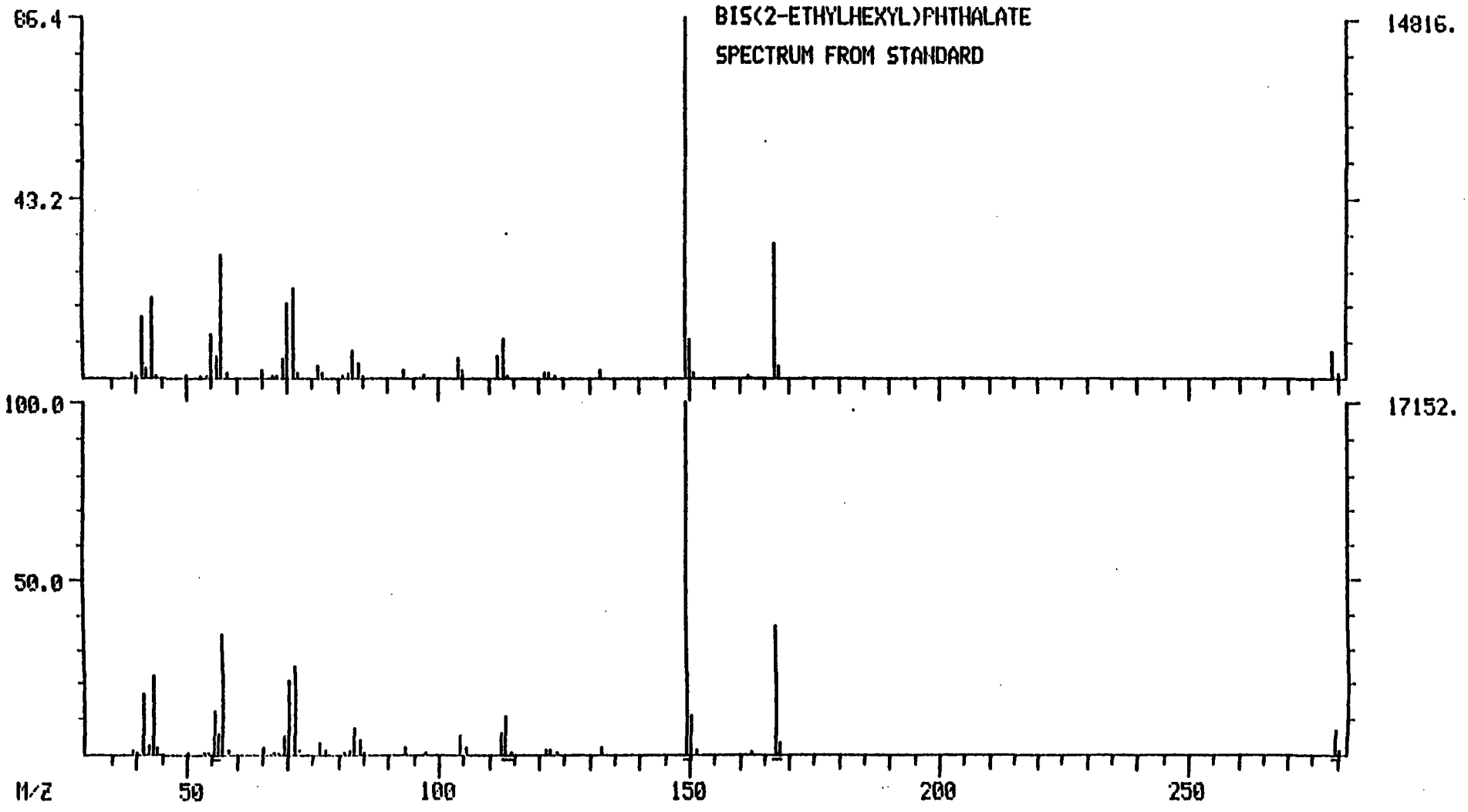


01313

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

DATA: STDR810 #2436
CALI: 103086C #5

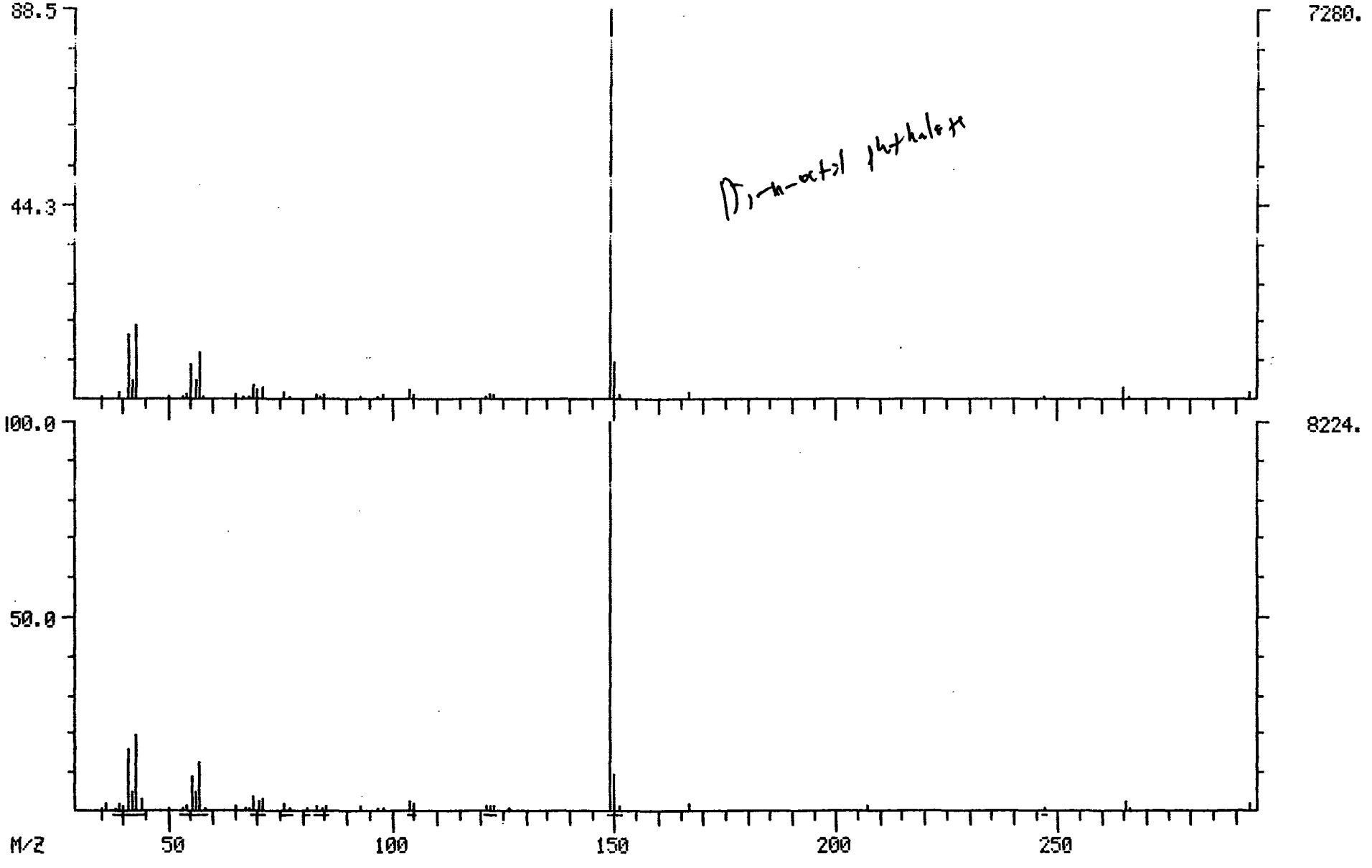
BASE M/Z: 149/ 149
RIC: 55167./ 63807.



01314

DUAL MASS SPECTRUM
06/06/88 10:44:00 + 28:16
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 304 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450U570 #2261 BASE M/Z: 149/ 149
CALI: 060688CU #5 RIC: 15647./ 18495.

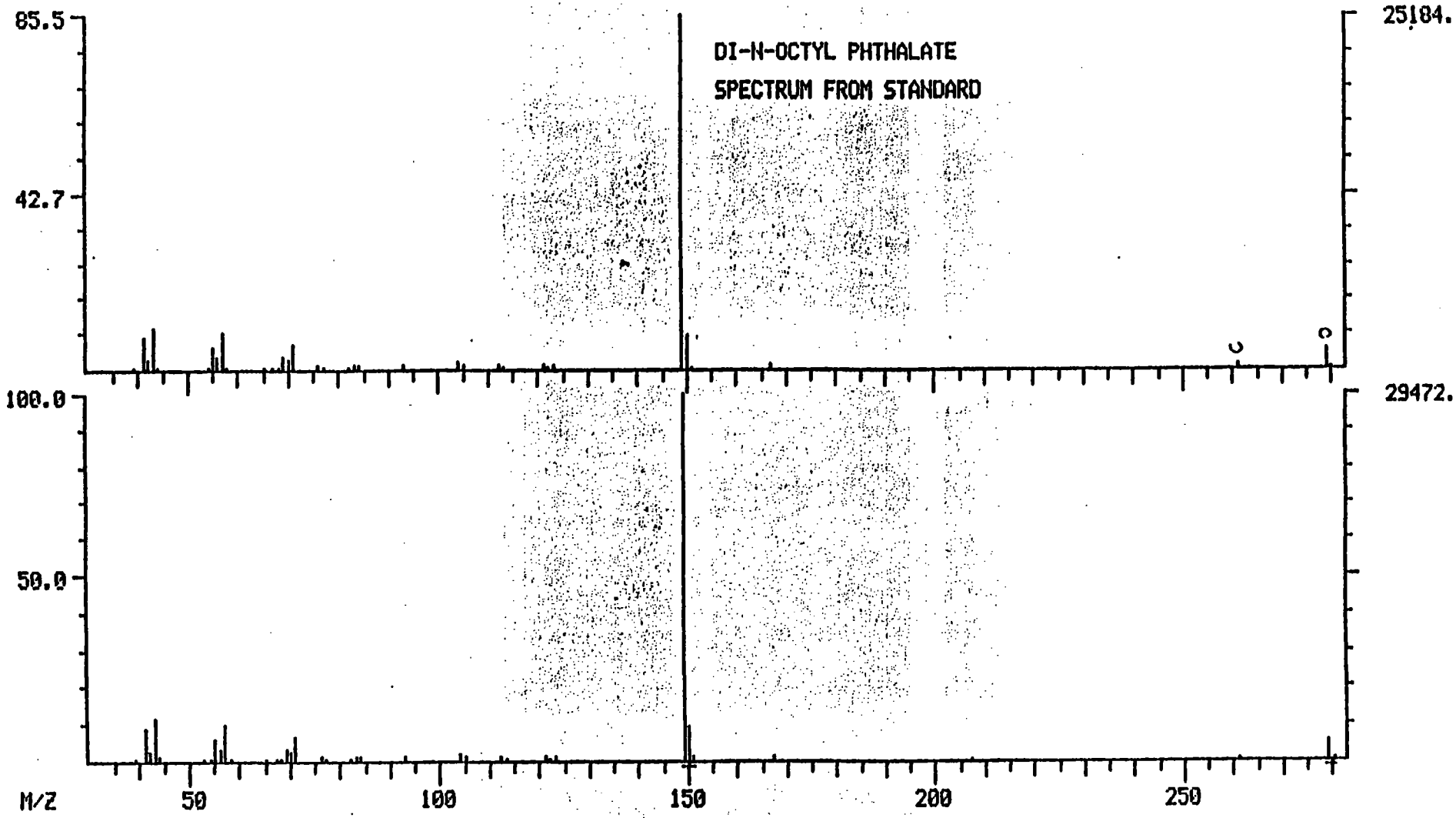


01315

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.



uantitation Report File: S59450U5701

Not Captured

Data: S59450U570.TI
06/06/88 10:44:00
Sample: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No.:

01316

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

No	CAS #	Name
1	0-00-0	UNKNOWN
2	0-00-0	UNKNOWN
3	0-00-0	UNKNOWN
4	0-00-0	UNKNOWN
5	0-00-0	UNKNOWN
6	0-00-0	UNKNOWN
7	1640-89-7	CYCLOPENTANE, ETHYL-
8	~~39300-45-3~~	~~DINOCAP~~ oxy Hydrocarbon
9	108-88-3	BENZENE, METHYL- vol
10	~~10150-87-5~~	~~2-BUTANONE, 4-(ACETYLOXY)-~~ oxy hydrocarbon
11	~~108-21-4~~	~~ACETIC ACID, 1-METHYLETHYL ESTER~~ "
12	~~625-06-9~~	~~2-PENTANOL, 2,4-DIMETHYL-~~ "
13	~~3648-21-3~~	~~1,2-BENZENEDICARBOXYLIC ACID,~~ DIHEPTYL ESTER Phthalate
14	~~28553-12-0~~	~~1,2-BENZENEDICARBOXYLIC ACID,~~ DIISONONYL ESTER "
15	~~3648-21-3~~	~~1,2-BENZENEDICARBOXYLIC~~ ACID, DIHEPTYL ESTER "
16	~~28553-12-0~~	~~1,2-BENZENEDICARBOXYLIC ACID,~~ DIISONONYL ESTER "

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	ng/l	%Tot
1	RIC	683	8:32	4	0.435	A BB	209102.	72.297		10.67
2	RIC	918	11:28	4	0.585	A BB	257208.	88.929		13.12
3	RIC	1272	15:54	4	0.810	A BB	278897.	96.428		14.23
4	RIC	1570	19:37	4	1.000	A BV	289227.	100.000		14.75
5	RIC	2118	26:28	4	1.349	A BB	242662.	83.900		12.38
6	RIC	2393	29:55	4	1.524	A BB	205430.	71.027		10.48
7	RIC	294	3:40	4	0.187	A BB	4886.	1.689	.935	0.25
8	RIC	302	3:46	4	0.192	A BB	9804.	3.390	1.875	0.50
9	RIC IS	336	4:12	4	0.214	A BV	34642.	11.978	6.627	1.77
10	RIC #1	363	4:32	4	0.231	A BB	71140.	24.597	13.61	3.63
11	RIC	405	5:04	4	0.258	A BB	91725.	31.714	17.55	4.68
12	RIC IS	440	5:30	4	0.280	A BB	142007.	49.099	27.17	7.24
13	RIC #5	2135	26:41	4	1.360	A VV	29605.	10.236	4.86	1.51
14	RIC	2331	29:08	4	1.485	A BB	21660.	7.489	4.22	1.10
15	RIC	2379	29:44	4	1.515	A BB	51297.	17.736	9.99	2.62
16	RIC	2494	31:10	4	1.589	A BB	21204.	7.331	4.13	1.08

IS #6

not multiplied by dil factor

96-19-5 1-Propene, 1,2,3-trichloro-

scan # 591 RT 7:23 Area 75766 amount = 14.49

Quantitation Report File: TEMP

Data: S59450U570.TI
06/06/88 10:44:00
Sample: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA 01317
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No.:

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

No	CAS #	Name
1	96-19-5	1-PROPENE, 1,2,3-TRICHLORO-

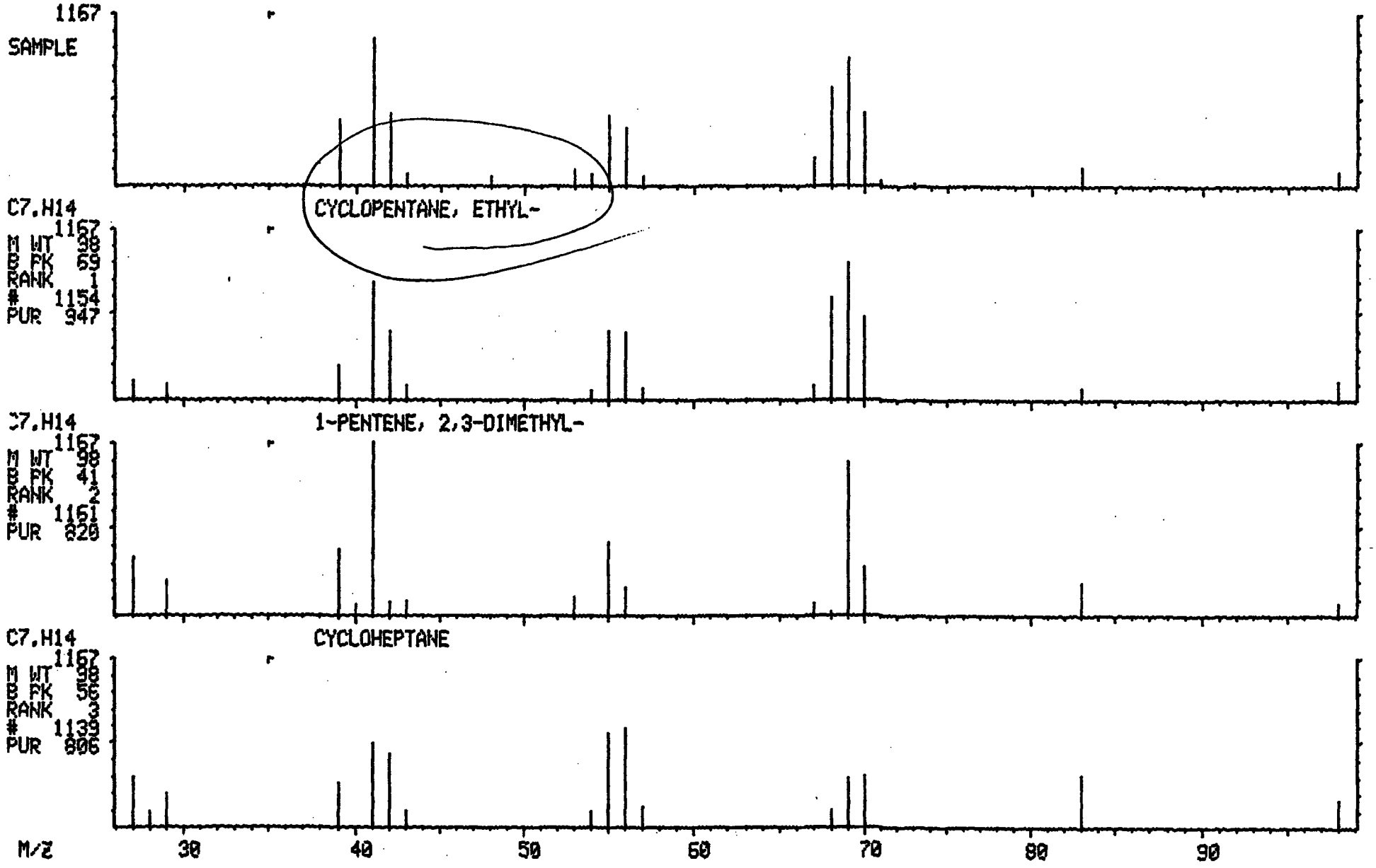
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	591	7:23	1	1.000	A BV	75766.	~~100.000~~	*100.

01318

LIBRARY SEARCH
06/06/88 10:44:00 + 3:40
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: S59450U570 # 294
CALI: 060688CU # 5

BASE M/Z: 41
RIC: 2387.

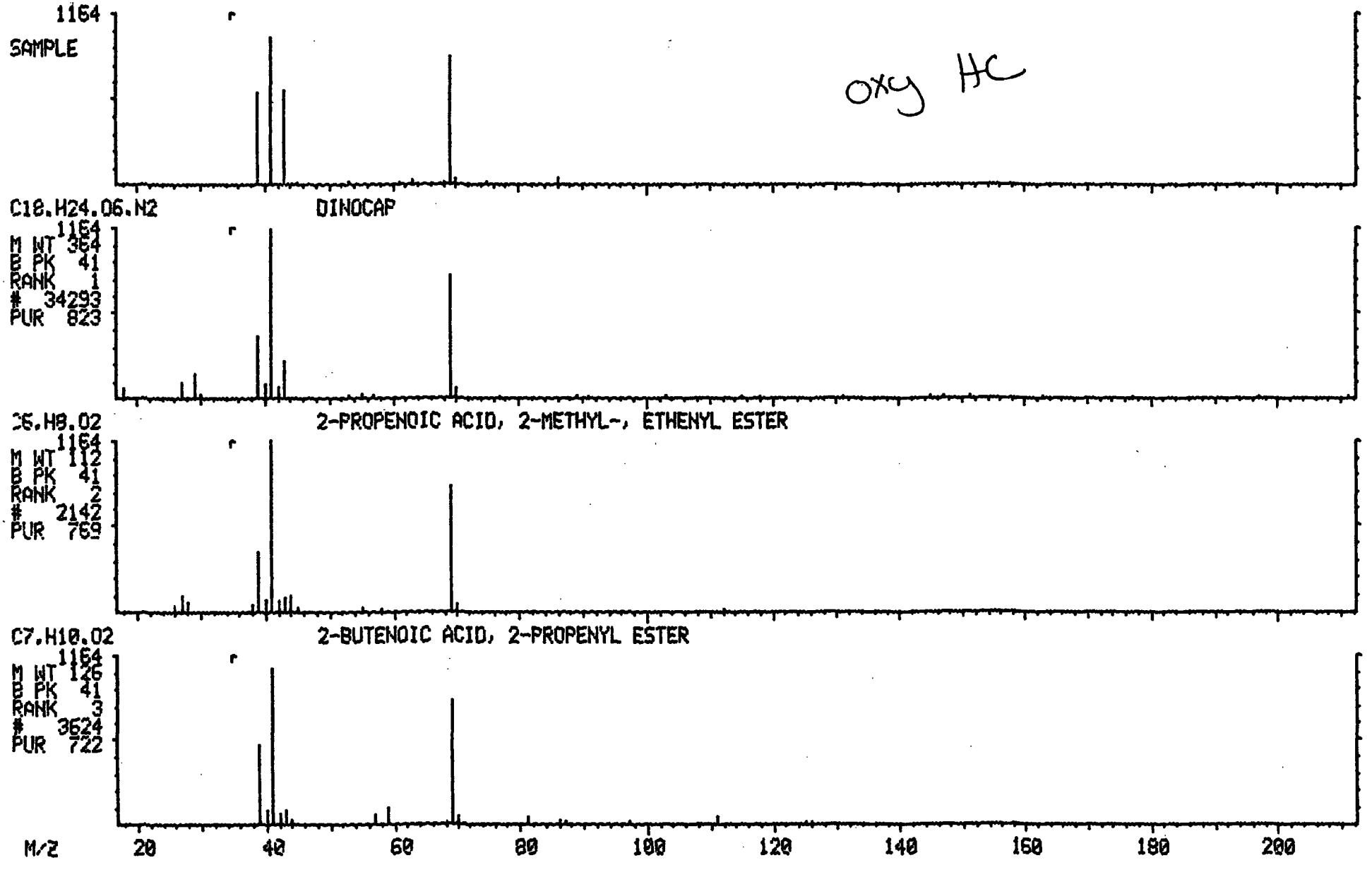


01319

LIBRARY SEARCH
06/06/88 10:44:00 + 3:46
SAMPLE: CLP,59450.,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: 559450U570 # 302
CALI: 060688CU # 5

BASE M/Z: 41
RIC: 4231.

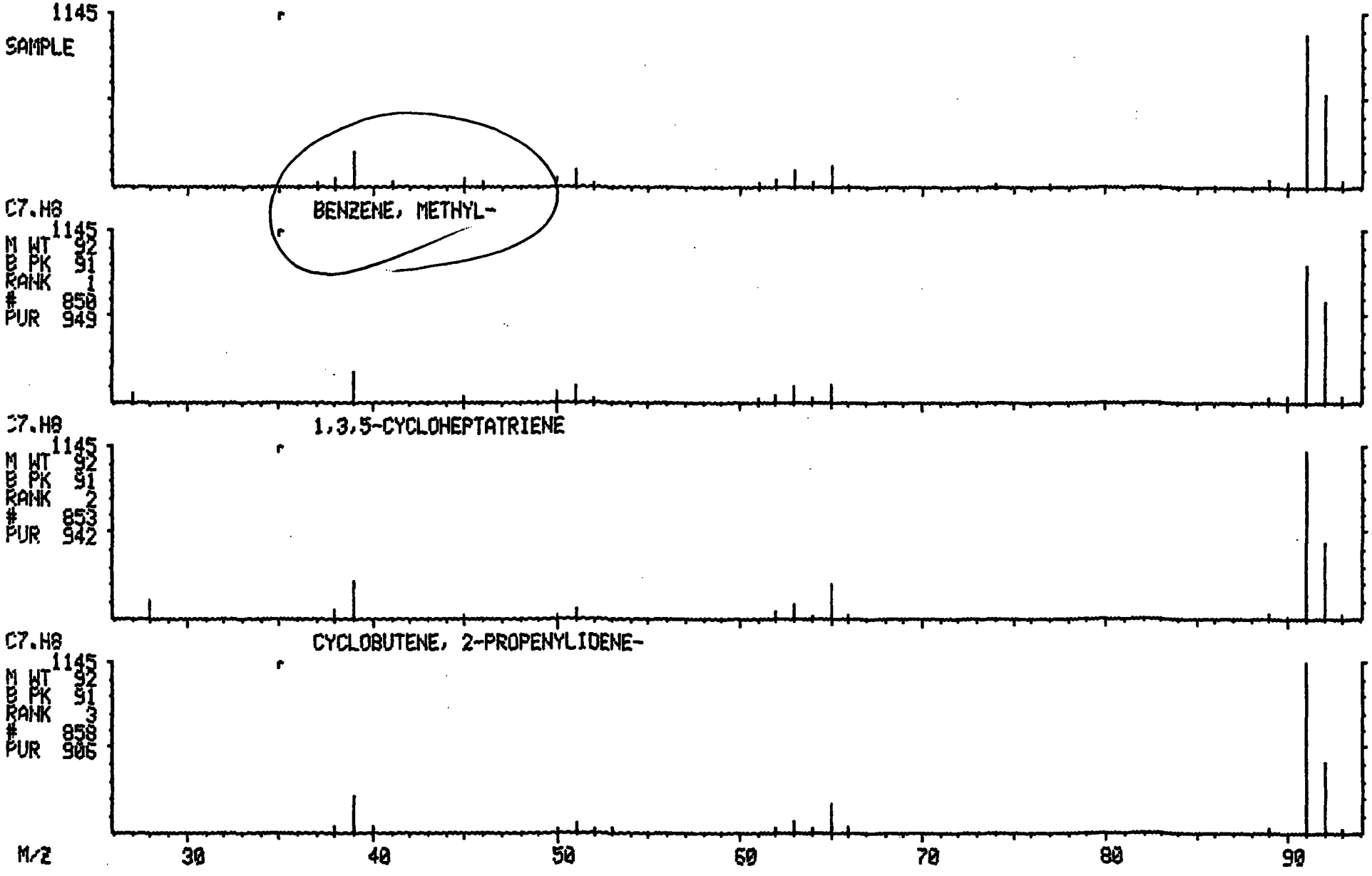


01320

LIBRARY SEARCH
06/06/88 10:44:00 + 4:12
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: 559450U570 # 336
CALI: 060688CU # 5

BASE M/Z: 91
RIC: 13583.

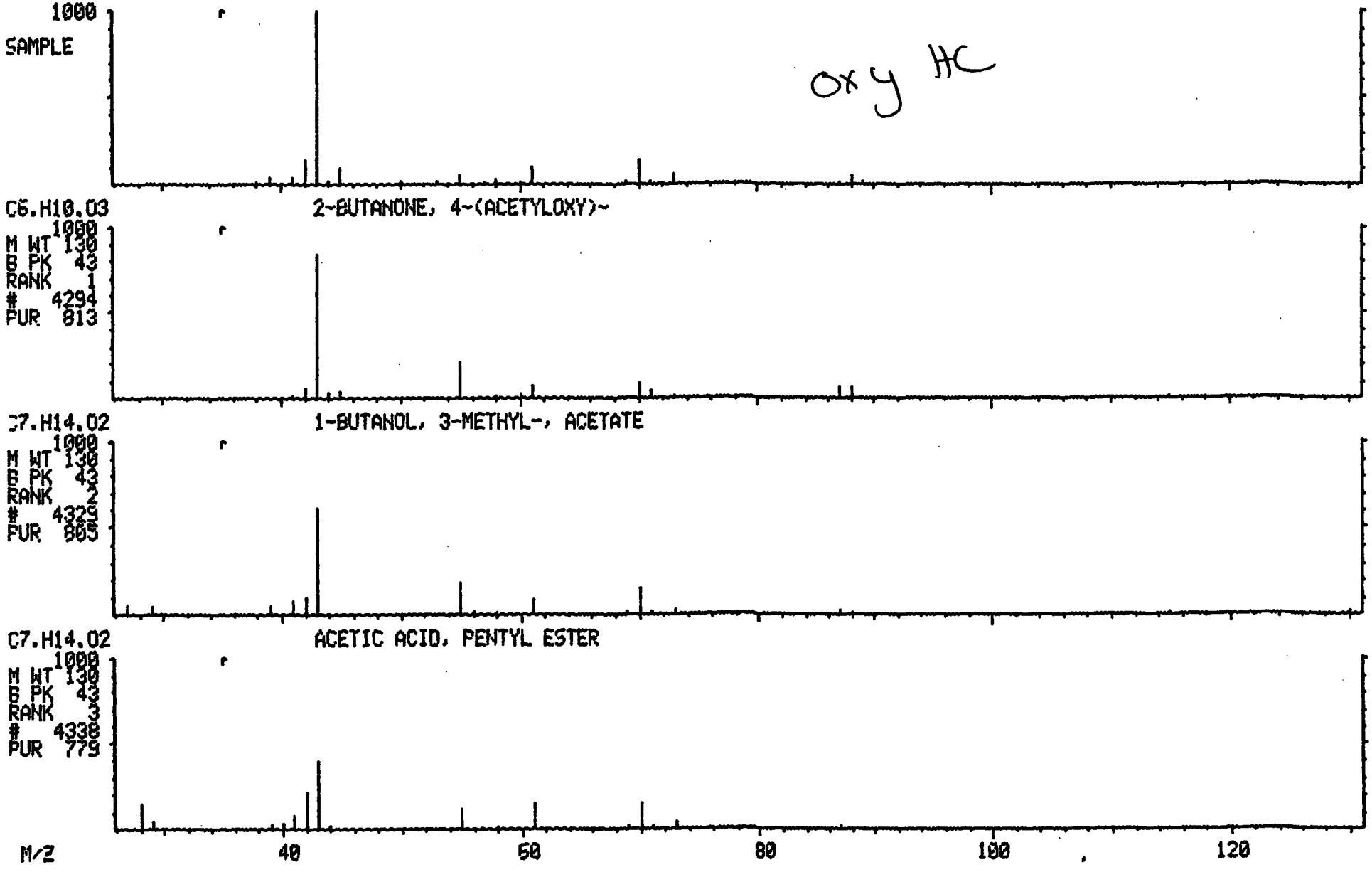


01321

LIBRARY SEARCH
06/06/88 10:44:00 + 4:32
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: 559450U570 # 363
CALI: 060688CU # 5

BASE M/Z: 43
RIC: 24095.

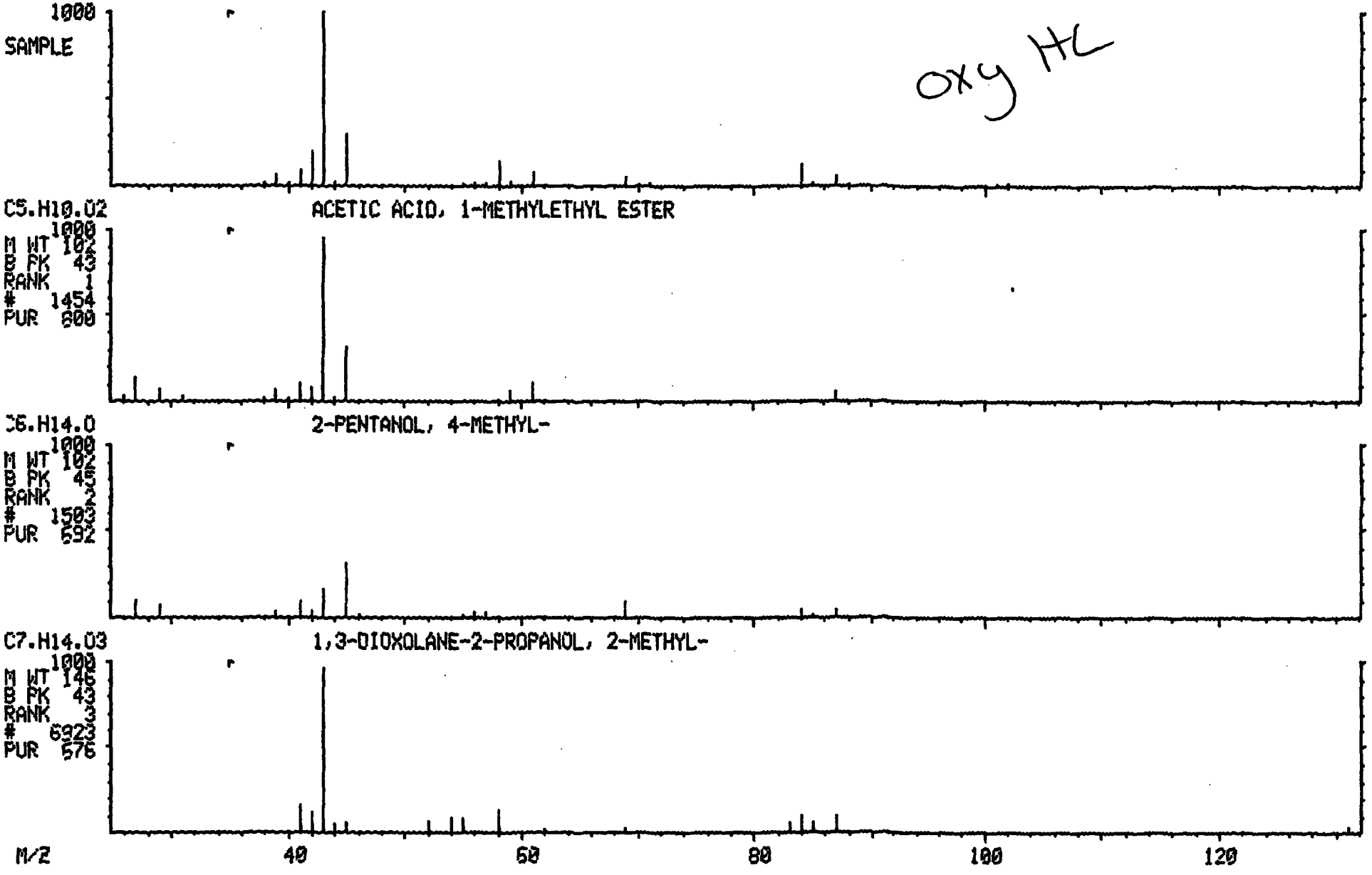


01322

LIBRARY SEARCH
06/06/88 10:44:00 + 5:04
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: 59345QU570 # 405
CALI: 060688CU # 5

BASE M/Z: 43
RIC: 27455.

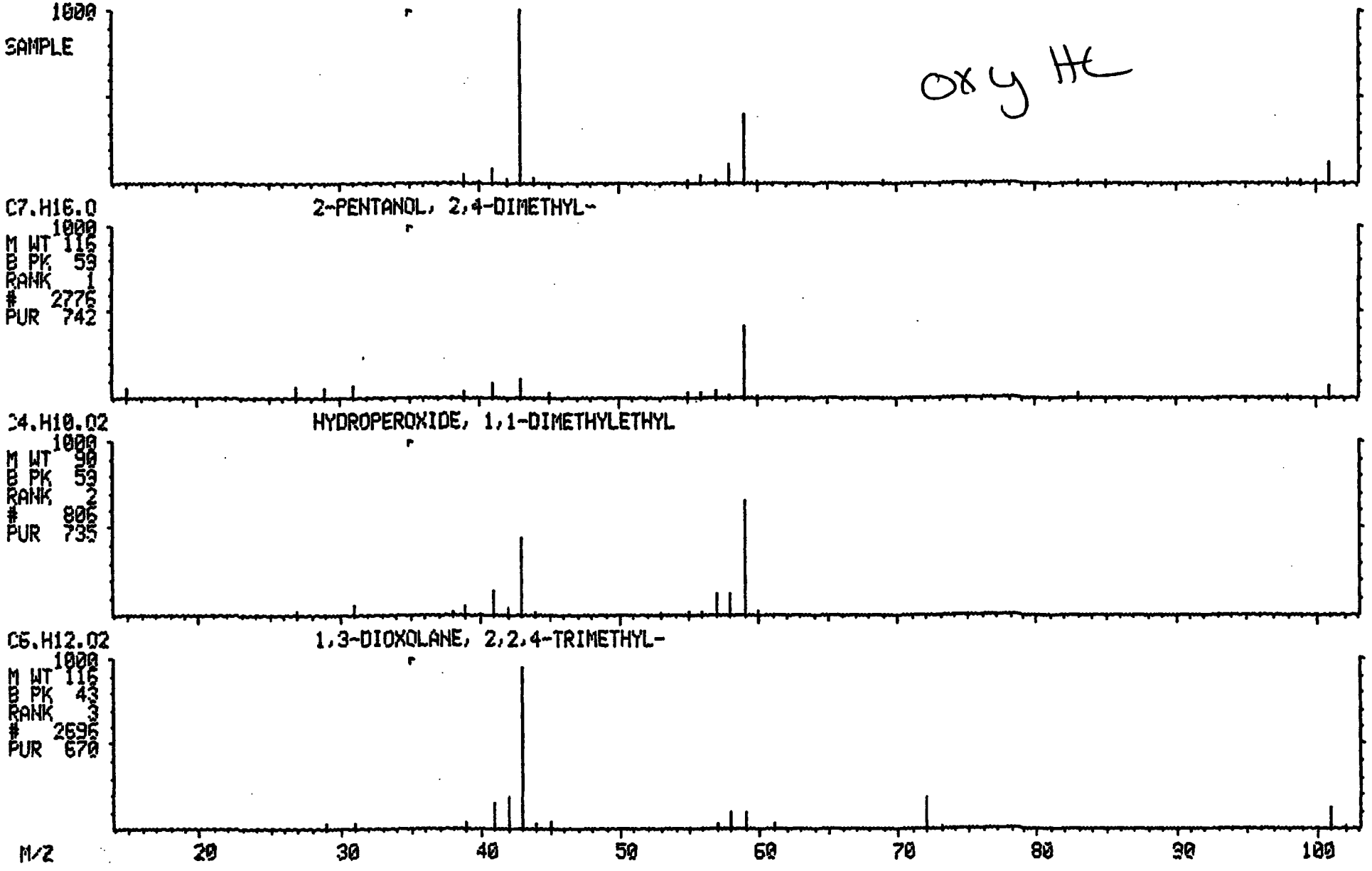


01323

LIBRARY SEARCH
06/06/88 10:44:00 + 5:30
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: S59450U570 # 440
CALI: 060688CU # 5

BASE M/Z: 43
RIC: 46847.

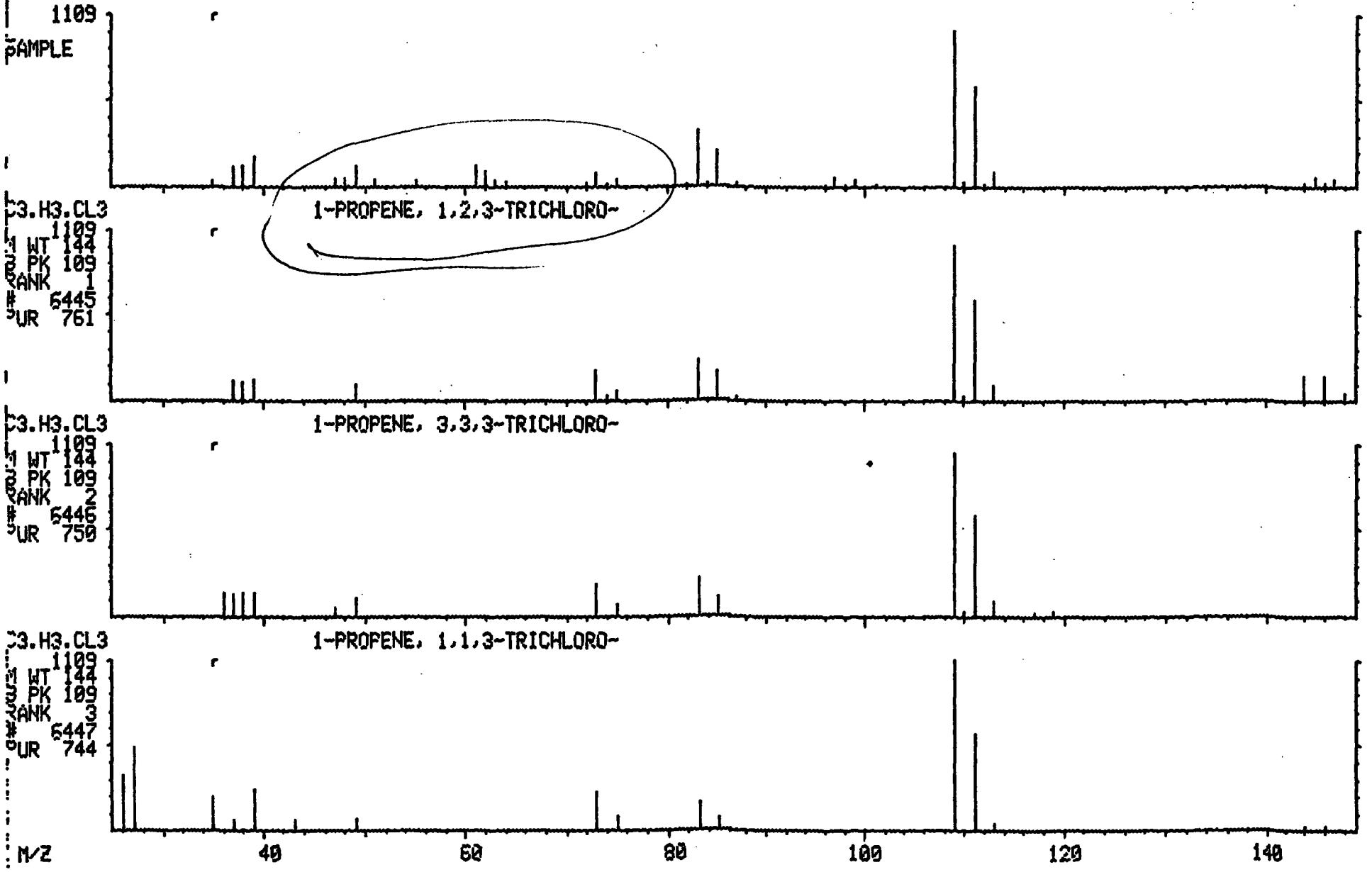


01324

LIBRARY SEARCH
06/06/88 10:44:00 + 7:23
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: 559450U570 # 591
CALI: 060688CU # 5

BASE M/Z: 109
RIC: 27455.



RACK NO. 0 VIAL NO. 1

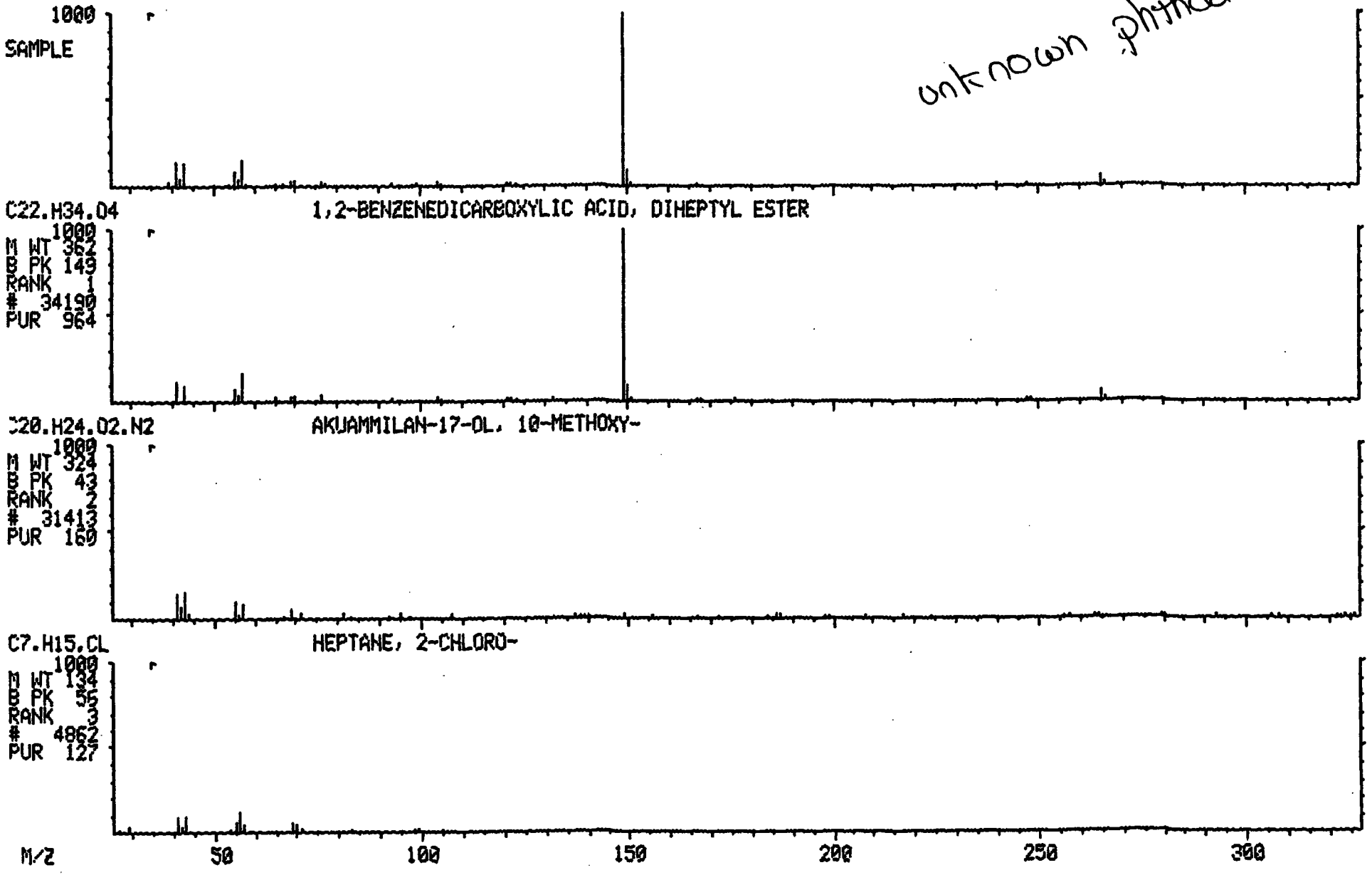
01325

LIBRARY SEARCH
06/06/88 10:44:00 + 26:41
SAMPLE: CLP,59450.,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: S59450U570 #2135
CALI: 060688CU # 5

BASE M/Z: 149
RIC: 9743.

unknown phthalate

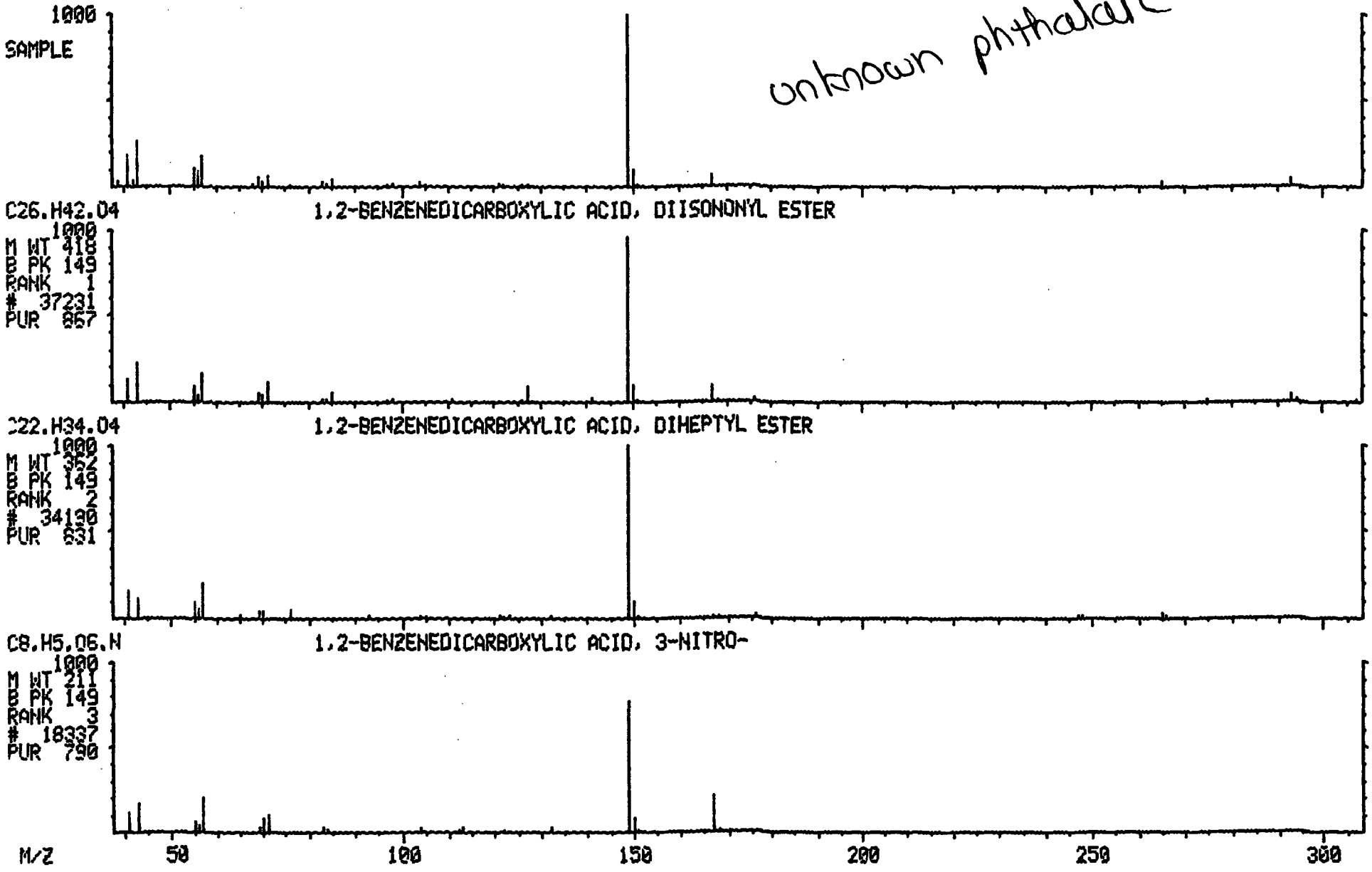


01326

LIBRARY SEARCH
06/06/88 10:44:00 + 29:08
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: S59450U570 #2331
CALI: 060688CU # 5

BASE M/Z: 149
RIC: 6383.

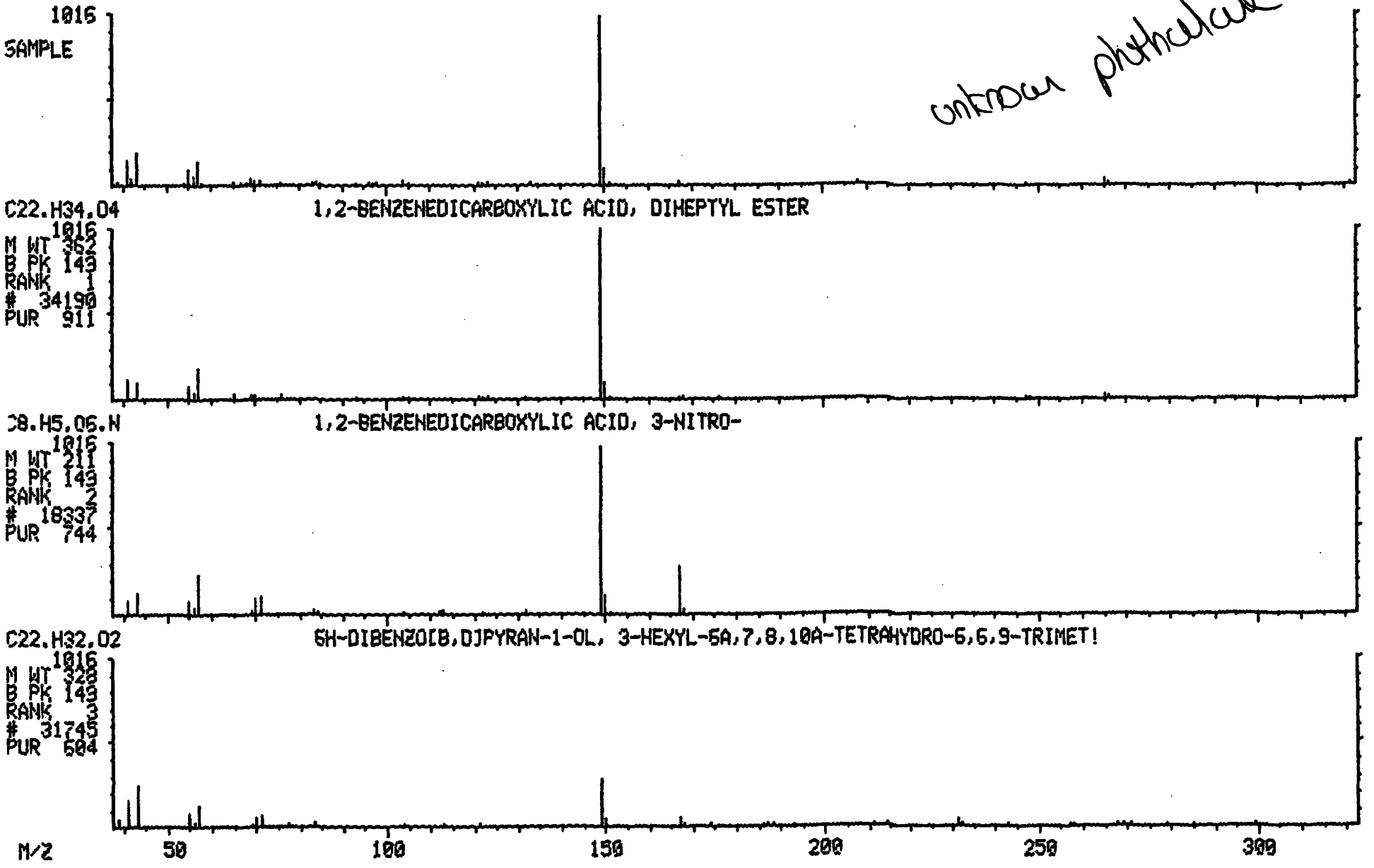


01327

LIBRARY SEARCH
06/06/88 10:44:00 + 29:44
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: S59450U570 #2379
CALI: 060688CU # 5

BASE M/Z: 149
RIC: 11487.

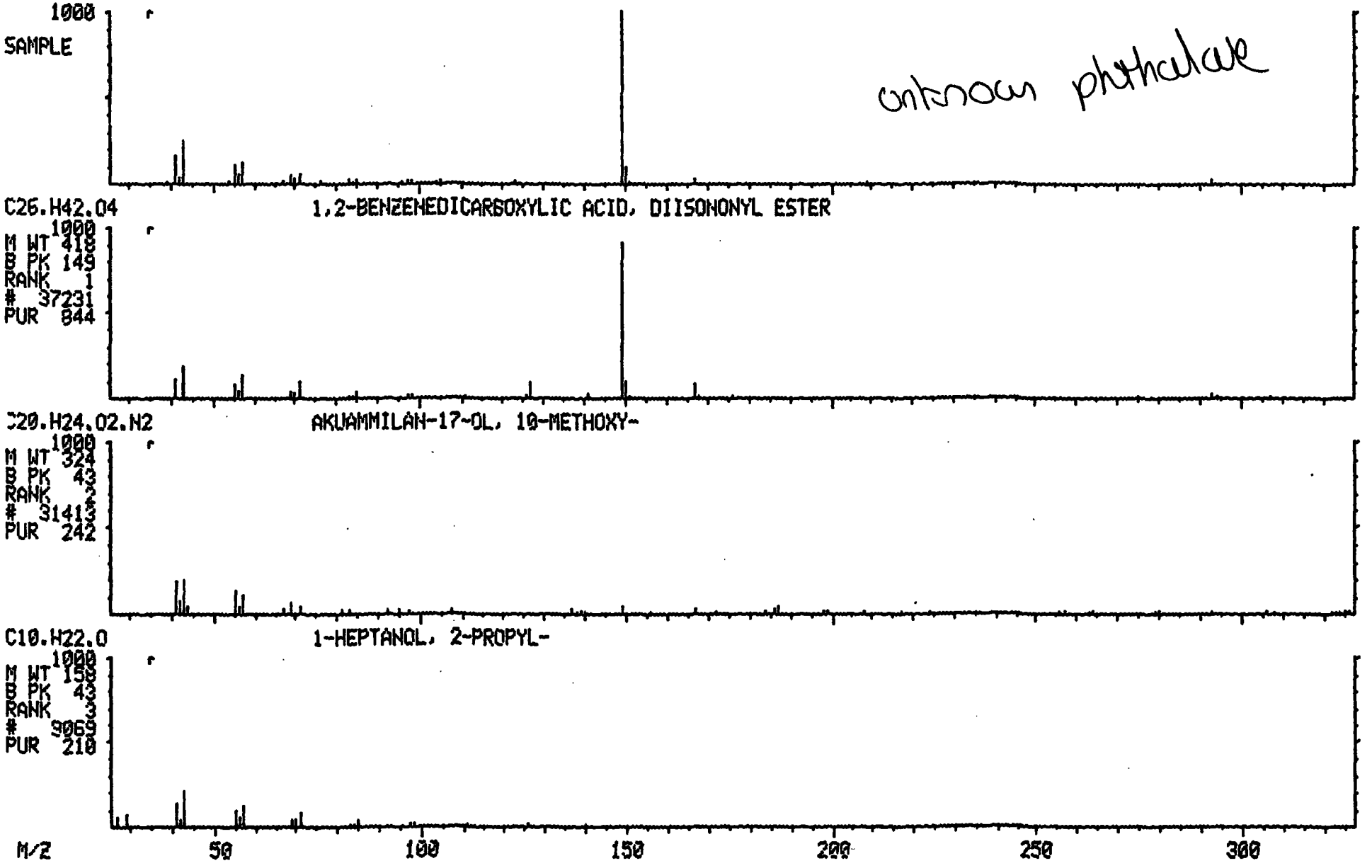


01328

LIBRARY SEARCH
06/06/88 10:44:00 + 31:10
SAMPLE: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: 559450U570 #2494
CALI: 060688CU # 5

BASE M/Z: 149
RIC: 6327.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/08/88 16:42:47
DATA FILE: S59450U570
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

01329

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	2	2	101	ISO1/TCO1
3	3	1	32	14	3	1	32	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	-681	683	683	.	1	971	.	152	683	.	1
2	S1	4	-303	304	305	1	2	987	.	84	305	.	1
3	S1	20	-304	305	.	.	.	.	.	79	.	.	.
4	S1	30	-399	400	.	.	.	.	.	93	.	.	.
5	S1	62	-464	466	.	.	.	.	.	93	.	.	.
6	S1	64	-495	497	.	.	.	.	.	107	.	.	.
7	S1	73	-526	528	.	.	.	.	.	106	.	.	.
8	S1	83	-562	564	.	.	.	.	.	107	.	.	.
9	S1	87	-583	585	.	.	.	.	.	107	.	.	.
10	S1	88	-603	605	.	.	.	.	.	107	.	.	.
11	S1	89	-611	613	.	.	.	.	.	107	.	.	.
12	S1	92	-630	632	.	.	.	.	.	107	.	.	.
13	S1	122	-667	669	.	.	.	.	.	107	.	.	.
14	S2	1	-916	918	918	.	1	995	.	136	918	.	1
15	S3	1	-1269	1272	1272	.	1	993	.	164	1272	.	1
16	S1	137	-697	699	.	.	.	.	.	106	.	.	.
17	S1	142	-711	713	.	.	.	.	.	106	.	.	.
18	S1	187	-765	767	.	.	.	.	.	108	.	.	.
19	S1	202	-791	793	.	.	.	.	.	106	.	.	.
20	S1	203	-792	794	.	.	.	.	.	106	.	.	.
21	S1	204	-812	814	.	.	.	.	.	122	.	.	.
22	S2	27	-864	866	.	.	.	.	.	107	.	.	.
23	S2	37	-888	890	.	.	.	.	.	107	.	.	.
24	S2	47	-901	903	.	.	.	.	.	107	.	.	.
25	S2	57	-920	922	.	.	.	.	.	107	.	.	.
26	S2	150	-1079	1082	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59450U570

Data: S59450U570.TI
06/06/88 10:44:00
Sample: CLP,59450,,SBLK,LOW,WATER,59450-BL 4/27 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000 01330
Submitted by: RMAL Analyst: KS 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	683	8:32	1	1.000	A BB	31513.	40.000 UG/ML	25.05
2	84	305	3:49	1	0.447	A BB	37303.	39.703 UG/ML	24.86
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	918	11:28	14	1.000	A BB	119438.	40.000 UG/ML	25.05
15	164	1272	15:54	15	1.000	A BB	59549.	40.000 UG/ML	25.05
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	NOT FOUND								
26	NOT FOUND								

01331

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:47	1.01	0.444	1.01	39.70	50.00	0.947	1.193	0.79
3	3:48		0.446						
4	4:39		0.585						
5	5:48		0.680						
6	6:11		0.726						
7	6:34		0.771						
8	7:01		0.824						
9	7:17		0.855						
10	7:32		0.884						
11	7:38		0.896						
12	7:52		0.924						
13	8:20		0.978						
14	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	8:43		1.022						
17	8:53		1.043						
18	9:34		1.122						
19	9:53		1.160						
20	9:54		1.161						
21	10:09		1.191						
22	10:48		0.942						
23	11:06		0.968						
24	11:16		0.983						
25	11:30		1.349						
26	13:29		1.177						

TCA FINISHED, 4 FOUND
FINISHED AT: 6/08/88 16:46:04

RMAL QUANTITATION SUMMARY FILE: S59450U570 01332
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	683	1	31513.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	119438.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1272	3	59549.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	305	1	37303.	0.947	39.703
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 PAH MB1
DATAFILE: D:S59450X862. STARTED : 6/06/88 15:25:49 4.0L

6/6/88 12:06:52 SCAN 1 OF 3900
Acquisition started

01333

Acquire Run 2:S59450X862 ACQUIRING
06/06/88 12:06:00 + 0:03 Free sectors: 12440 Scan: 7 of 3900
Sample: 59450-BL 4/27 PAH/WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No: 59436

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

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

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

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

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

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

6/6/88 12:35:17 SCAN 3407 OF 3900

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

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

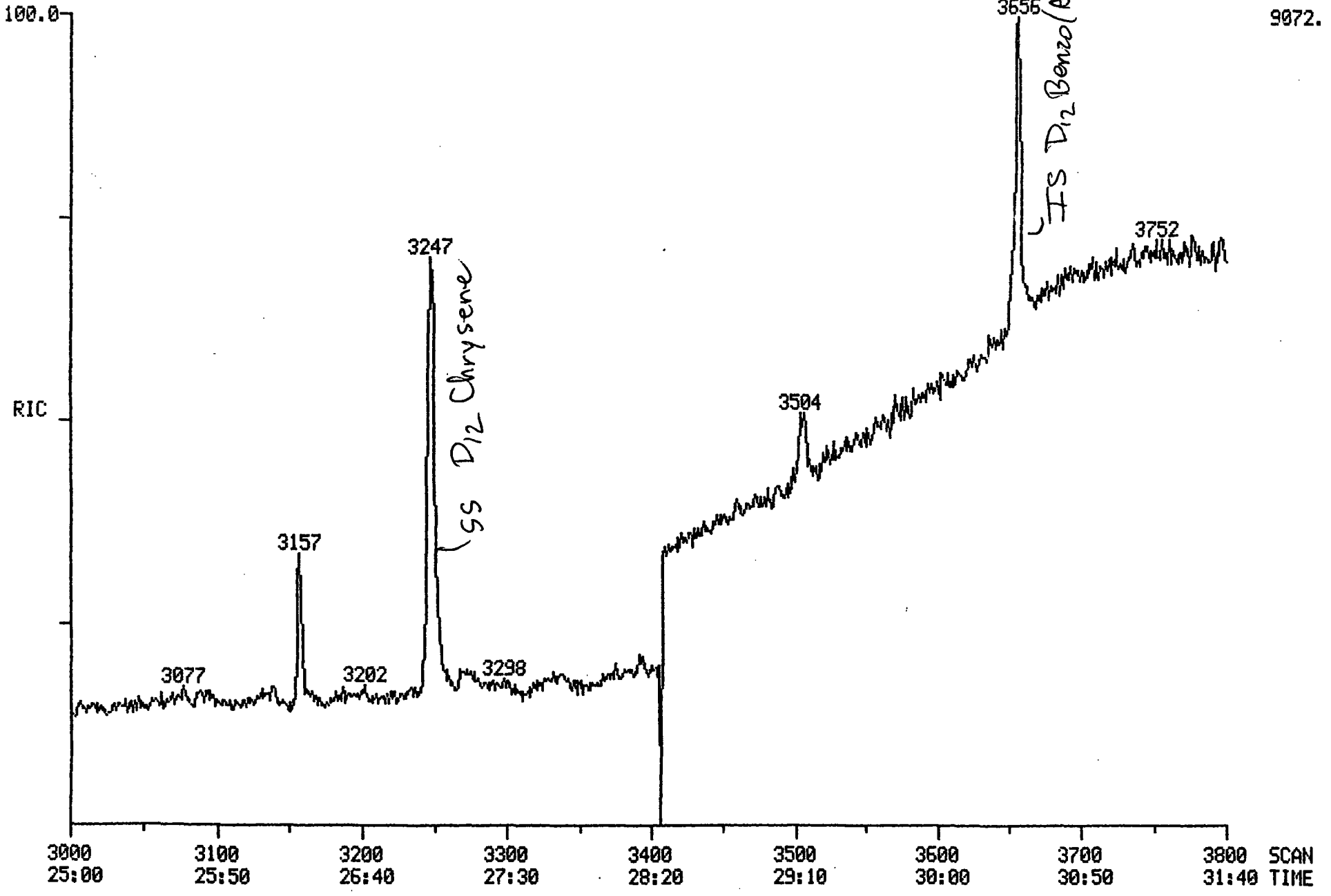
6/6/88 12:39:26
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode Scans Secs Out of % Peaks per scan per sec

01334

MIDRIC
06/06/88 12:06:00
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59450X862 #3661 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59450X862

01335

Data: S59450X862.TI
06/06/88 12:06:00
Sample: 59450-BL 4/27 PAH/WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No.: 59436

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

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

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3656	30:28	1	1.000	A BB	17936.	80.000	NG/ML	44.54
2	240	3247	27:03	1	0.888	A BB	25693.	72.320	NG/ML	40.26
3	228	3243	27:01	1	0.887	A BV	989.	2.733	NG/ML	1.52
4	226	3244	27:02	1	0.887	A VB	584.	5.929	NG/ML	3.30
5	228	3256	27:08	1	0.891	A VB	1110.	3.220	NG/ML	1.79
6	226	3255	27:07	1	0.890	A BB	160.	1.587	NG/ML	0.88
7	226	3261	27:10	1	0.892	A BB	147.	1.458	NG/ML	0.81
8	252	3575	29:47	1	0.978	A BB	132.	0.379	NG/ML	0.21
9	250	3576	29:48	1	0.978	A BB	212.	3.151	NG/ML	1.75
10	252	3578	29:49	1	0.979	A BB	282.	0.841	NG/ML	0.47
11	250	3576	29:48	1	0.978	A BB	212.	2.938	NG/ML	1.64
12	252	3586	29:53	1	0.981	A BB	176.	0.525	NG/ML	0.29
13	250	3594	29:57	1	0.983	A BB	72.	0.972	NG/ML	0.54
14	250	3596	29:58	1	0.984	A BB	76.	1.026	NG/ML	0.57
15	252	3668	30:34	1	1.003	A BB	232.	0.837	NG/ML	0.47
16	250	3667	30:33	1	1.003	A BB	136.	1.715	NG/ML	0.95

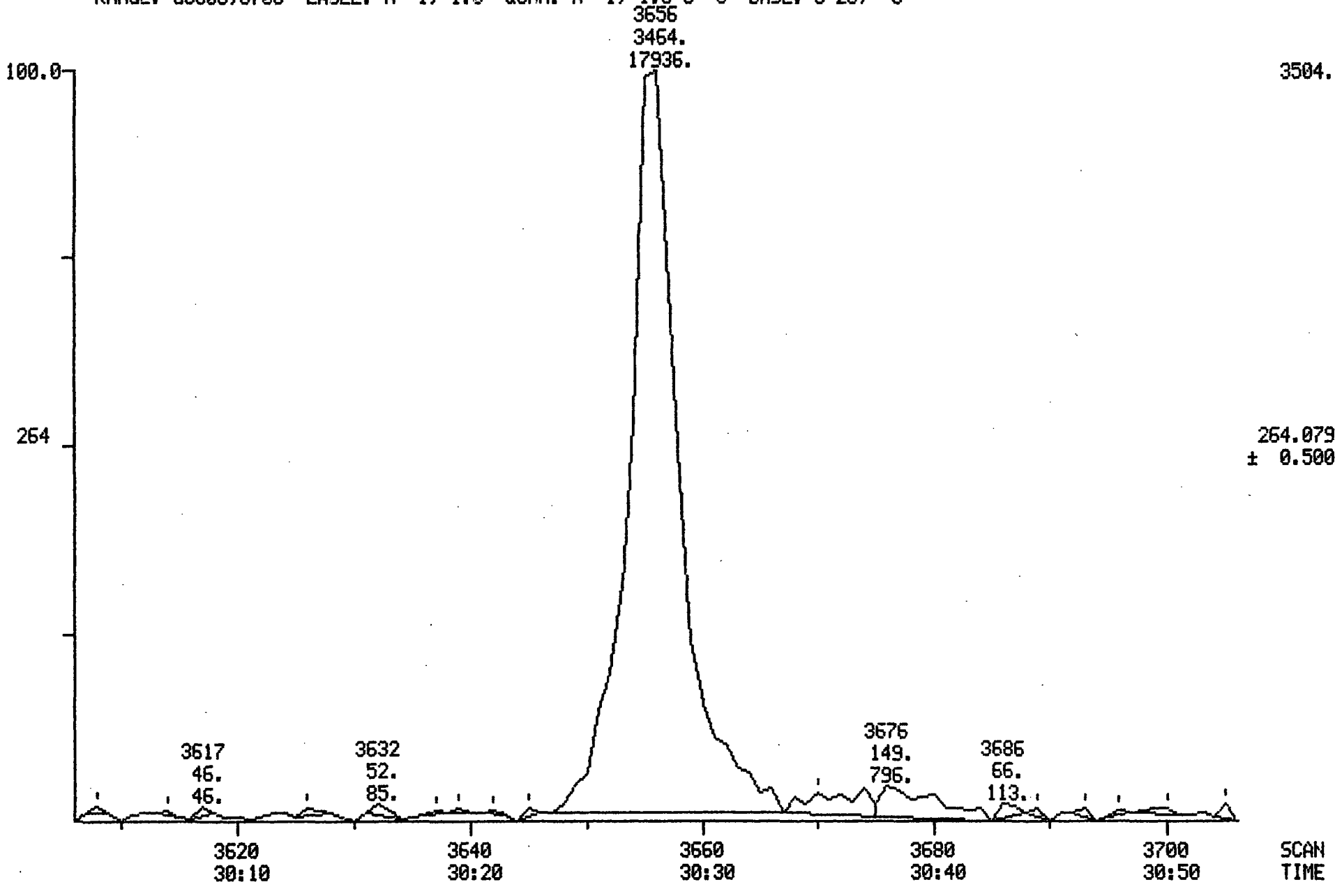
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:05	1.00	0.889	1.00	72.32	80.00	1.432	1.585	0.90
3	27:02	1.00	0.887	1.00	2.73	80.00	0.055	1.614	0.03
4	27:02	1.00	0.887	1.00	5.93	80.00	0.033	0.439	0.07
5	27:08	1.00	0.891	1.00	3.22	80.00	0.062	1.537	0.04
6	27:09	1.00	0.891	1.00	1.59	80.00	0.009	0.451	0.02
7	27:09	1.00	0.891	1.00	1.46	80.00	0.008	0.451	0.02

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
8	29:44	1.00	0.976	1.00	0.38	80.00	0.007	1.555	0.00
9	29:44	1.00	0.976	1.00	3.15	80.00	0.012	0.300	0.04
10	29:47	1.00	0.978	1.00	0.84	80.00	0.016	1.496	0.01
11	29:47	1.00	0.978	1.00	2.94	80.00	0.012	0.322	0.04
12	29:41	1.01	0.982	1.00	0.52	80.00	0.010	1.496	0.01
13	29:41	1.01	0.982	1.00	0.97	80.00	0.004	0.330	0.01
14	29:41	1.01	0.982	1.00	1.03	80.00	0.004	0.330	0.01
15	30:31	1.00	1.002	1.00	0.84	80.00	0.013	1.236	0.01
16	30:31	1.00	1.002	1.00	1.72	80.00	0.008	0.354	0.02

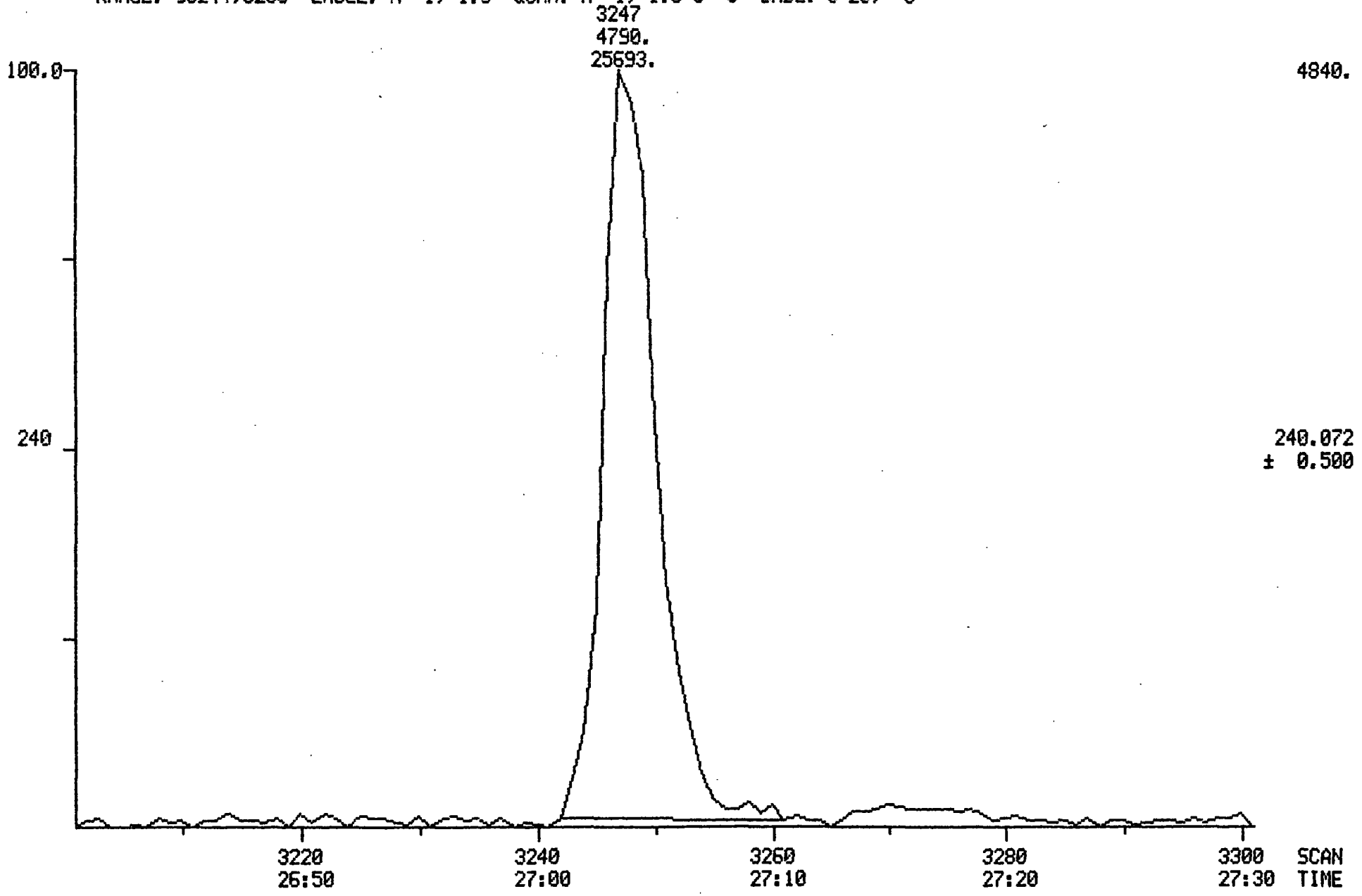
01336

01337

MIDMASS CHROMATOGRAM DATA: S59450X862 #3656 SCANS 3606 TO 3706
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3606,3706 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3

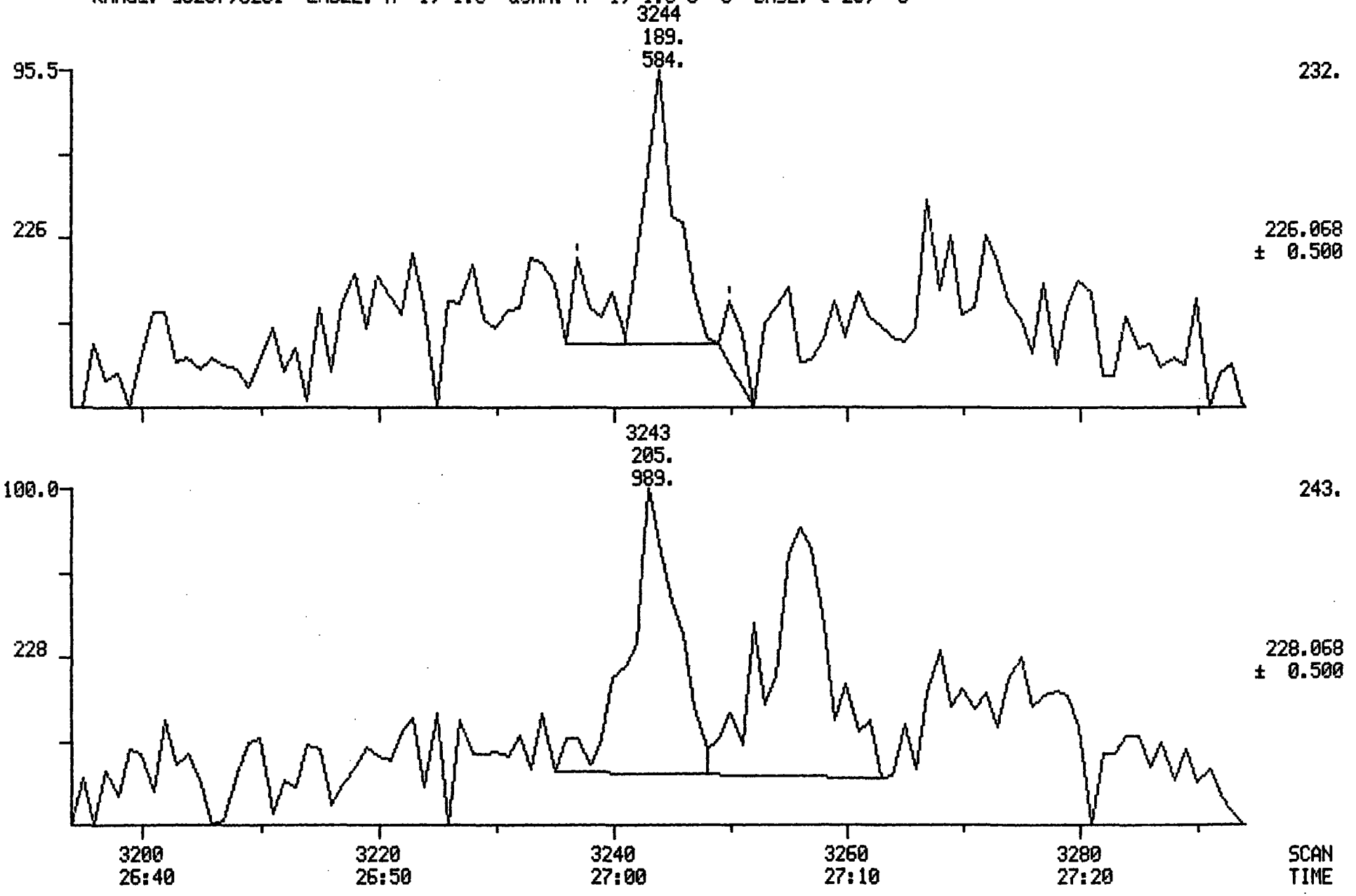


MIDMASS CHROMATOGRAM DATA: S59450X862 #3251 SCANS 3201 TO 3301
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3244,3258 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



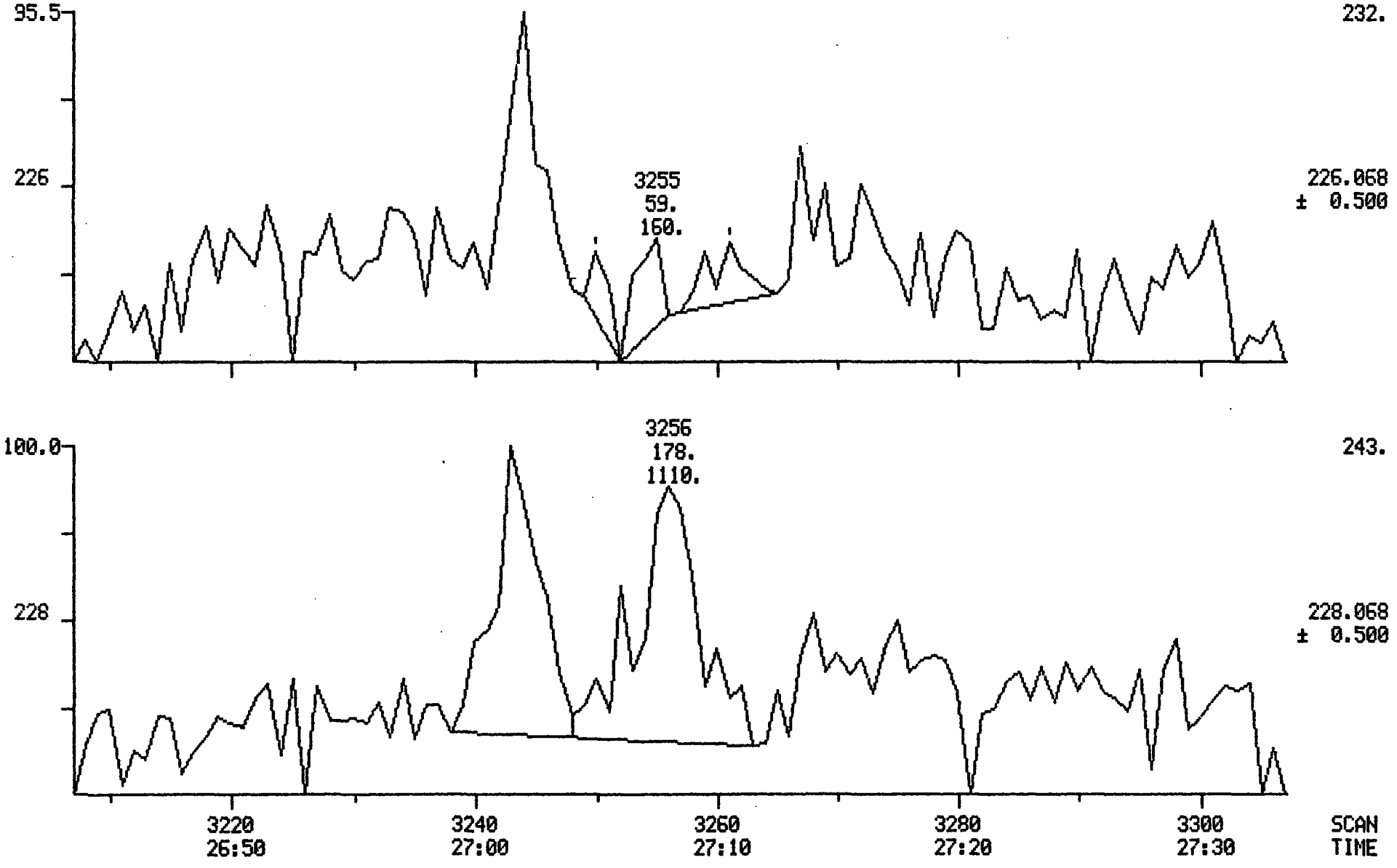
01339

MIDMASS CHROMATOGRAMS DATA: S59450X862 #3244 SCANS 3194 TO 3294
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3237,3251 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



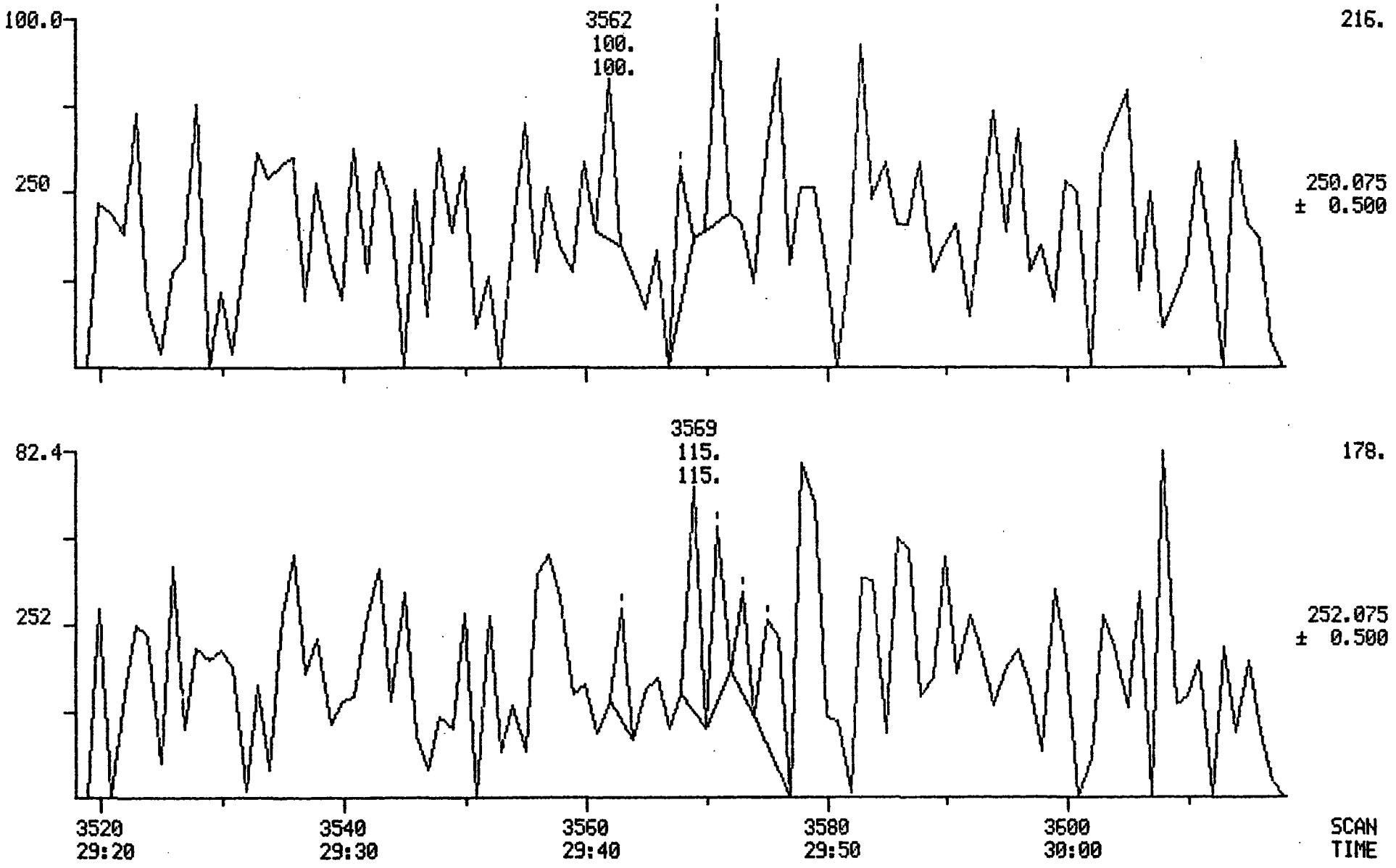
01340

MIDMASS CHROMATOGRAMS DATA: S59450X862 #3257 SCANS 3207 TO 3307
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3250,3264 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



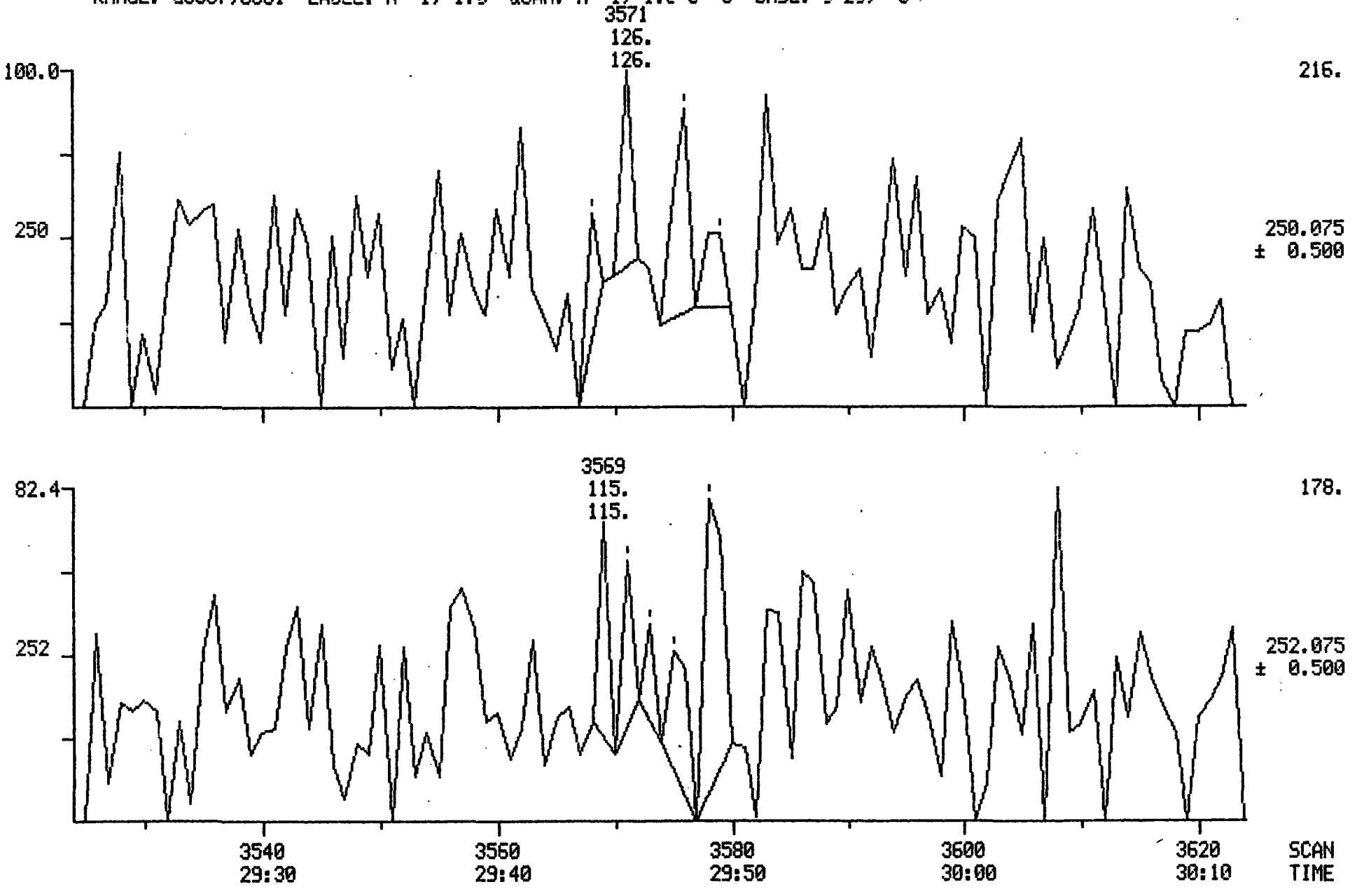
01341

MIDMASS CHROMATOGRAMS DATA: S59450X862 #3568 SCANS 3518 TO 3618
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3561,3575 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



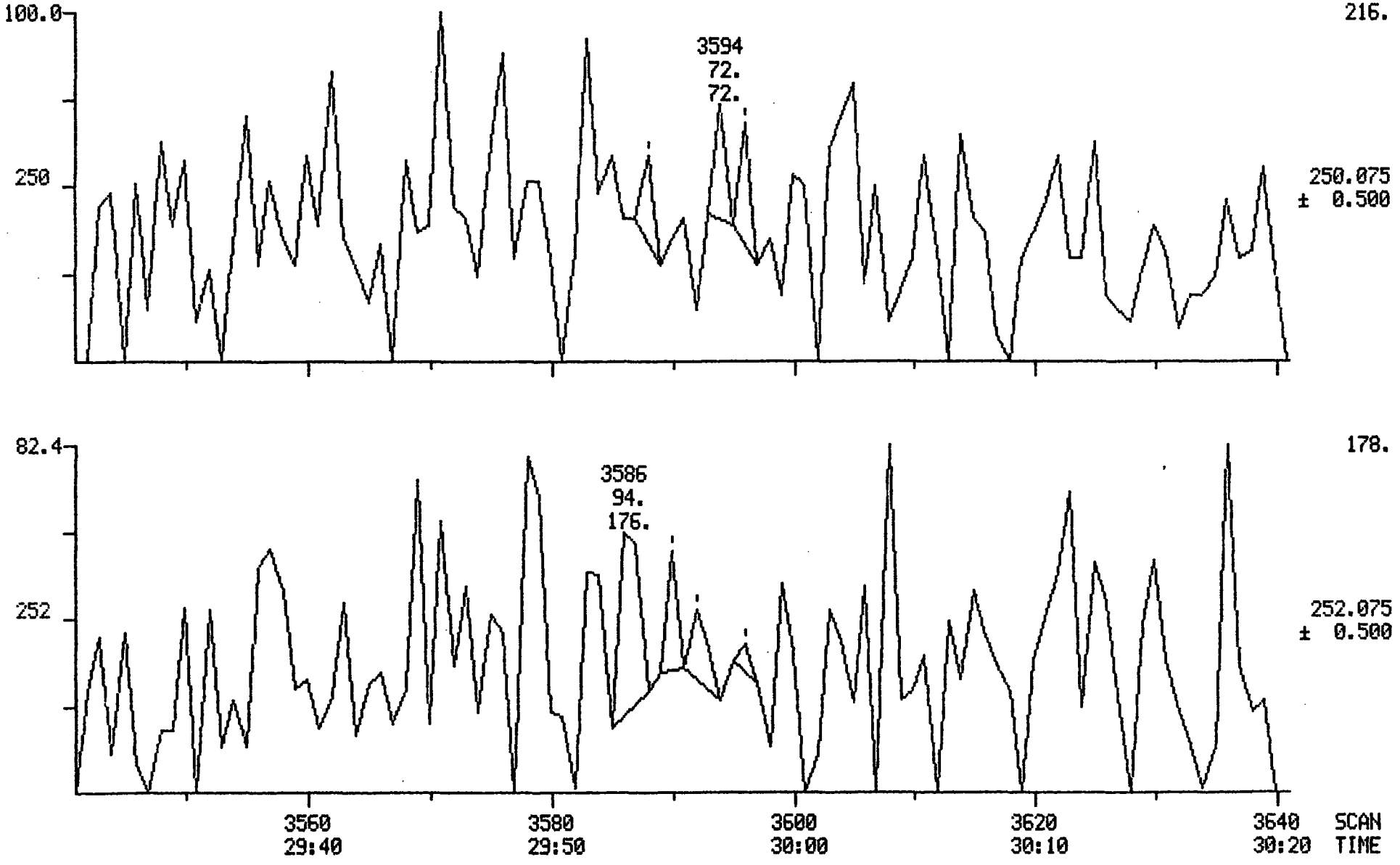
01342

MIDMASS CHROMATOGRAMS DATA: S59450X862 #3574 SCANS 3524 TO 3624
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3567,3581 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



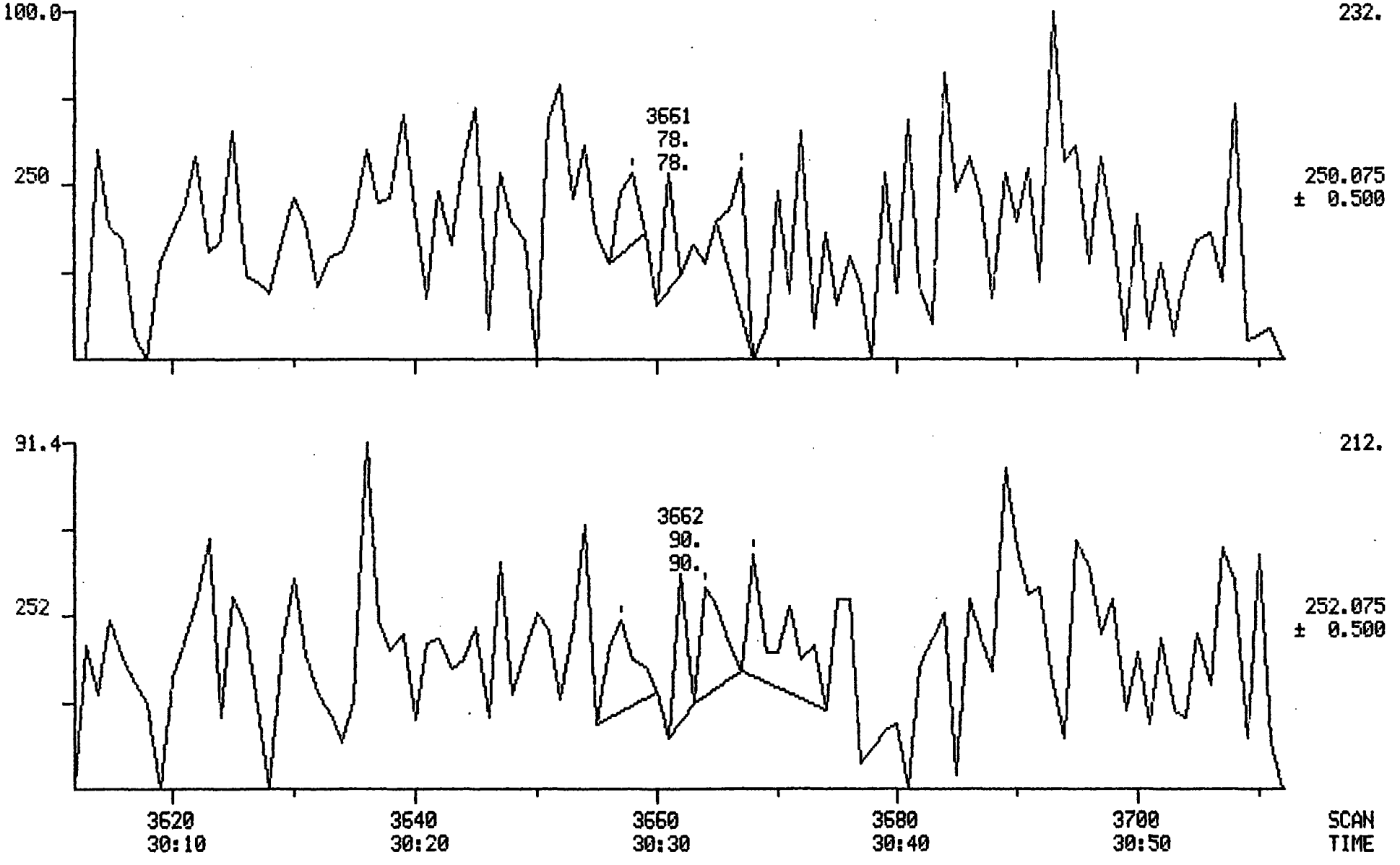
01343

MIDMASS CHROMATOGRAMS DATA: S59450X862 #3591 SCANS 3541 TO 3641
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3584,3598 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



01344

MIDMASS CHROMATOGRAMS DATA: S59450X862 #3662 SCANS 3612 TO 3712
06/06/88 12:06:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/27 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3655,3669 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59450X862

Data: S59450X862.TI
06/06/88 12:06:00

01345

Sample: 59450-BL 4/27 PAH/WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No.: 59436

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

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

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3656	30:28	1	1.000	A BB	17936.	80.000	NG/ML	45.43
2	240	3247	27:03	1	0.888	A BB	25693.	72.320	NG/ML	41.07
3	228	3243	27:01	1	0.887	A BV	989.	2.733	NG/ML	1.55
4	226	3244	27:02	1	0.887	A VB	584.	5.929	NG/ML	3.37
5	228	3256	27:08	1	0.891	A VB	1110.	3.220	NG/ML	1.83
6	226	3255	27:07	1	0.890	A BB	160.	1.587	NG/ML	0.90
7	226	3261	27:10	1	0.892	A BB	147.	1.458	NG/ML	0.83
8	250	3576	29:48	1	0.978	A BB	212.	3.151	NG/ML	1.79
9	250	3576	29:48	1	0.978	A BB	212.	2.938	NG/ML	1.67
10	250	3596	29:58	1	0.984	A BB	76.	1.026	NG/ML	0.58
11	250	3667	30:33	1	1.003	A BB	136.	1.715	NG/ML	0.97

RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM PAH 08-2
DATAFILE: D:S59450X863. STARTED : 6/06/88 15:32:44
4.0L

01346

6/6/88 12:56:49 SCAN 1 OF 3900
Acquisition started

Acquire Run 2:S59450X863 ACQUIRING
06/06/88 12:56:00 + 0:03 Free sectors: 12172 Scan: 7 of 3900
Sample: 59450-BL 4/28 PAH/WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No: 59436

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

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

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

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

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

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

6/6/88 13:25:14 SCAN 3407 OF 3900

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

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

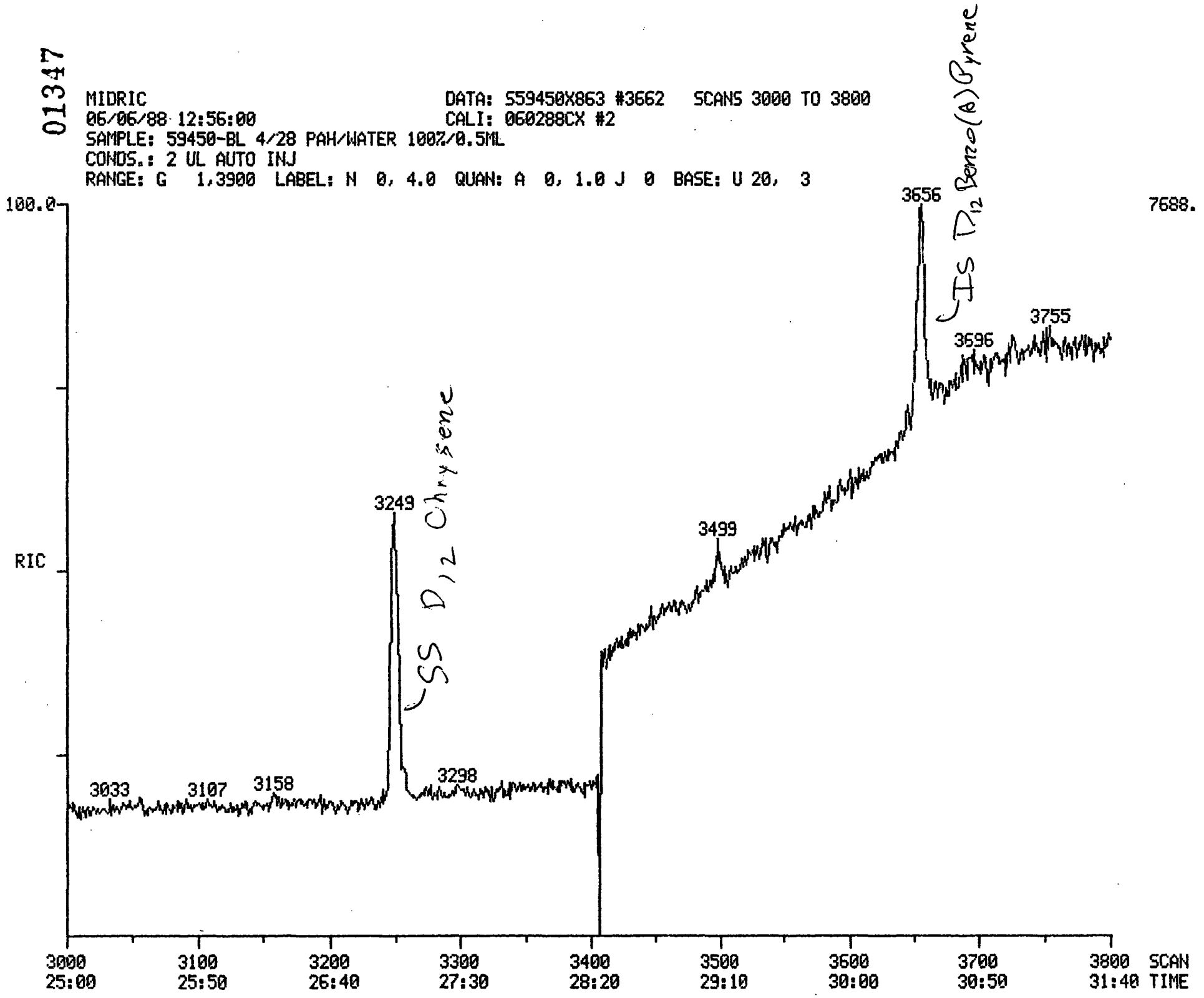
6/6/88 13:29:24
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

01347

MIDRIC
06/06/88 12:56:00
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559450X863 #3662 SCANS 3000 TO 3800
CALI: 060288CX #2



Quantitation Report File: S59450X863

01348

Data: S59450X863.TI
06/06/88 12:56:00
Sample: 59450-BL 4/28 PAH/WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No.: 59436

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

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

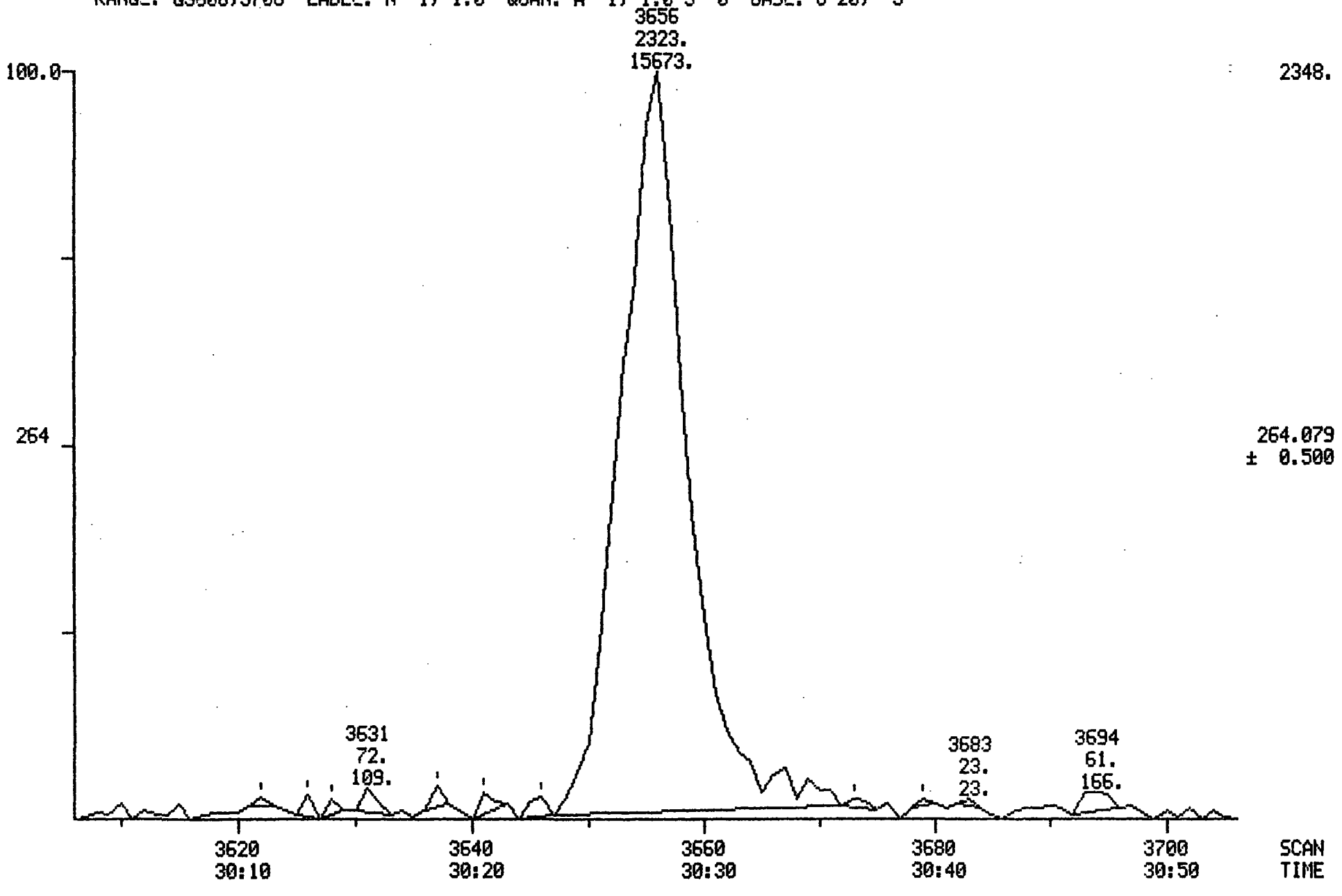
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3656	30:28	1	1.000	A BB	15673.	80.000	NG/ML	47.08
2	240	3249	27:04	1	0.889	A BB	18518.	59.654	NG/ML	35.11
3	228	3247	27:03	1	0.888	A BV	374.	1.184	NG/ML	0.70
4	226	3245	27:02	1	0.888	A BB	201.	2.335	NG/ML	1.37
5	228	3258	27:09	1	0.891	A VB	790.	2.623	NG/ML	1.54
6	226	3257	27:08	1	0.891	A BB	488.	5.522	NG/ML	3.25
7	252	3563	29:41	1	0.975	A BB	62.	0.203	NG/ML	0.12
8	252	3565	29:42	1	0.975	A BB	58.	0.190	NG/ML	0.11
9	252	3567	29:43	1	0.976	A BB	57.	0.187	NG/ML	0.11
10	250	3569	29:44	1	0.976	A BB	86.	1.463	NG/ML	0.86
11	250	3571	29:45	1	0.977	A BB	80.	1.361	NG/ML	0.80
12	252	3567	29:43	1	0.976	A BB	57.	0.194	NG/ML	0.11
13	252	3573	29:46	1	0.977	A BB	54.	0.184	NG/ML	0.11
14	250	3582	29:51	1	0.980	A BB	110.	1.745	NG/ML	1.03
15	252	3594	29:57	1	0.983	A BV	217.	0.742	NG/ML	0.44
16	250	3585	29:52	1	0.981	A BB	264.	4.077	NG/ML	2.40
17	250	3594	29:57	1	0.983	A BB	264.	4.077	NG/ML	2.40
18	252	3660	30:30	1	1.001	A BB	478.	1.974	NG/ML	1.16
19	250	3666	30:33	1	1.003	A BB	152.	2.194	NG/ML	1.29

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:05	1.00	0.889	1.00	59.65	80.00	1.182	1.585	0.75
3	27:02	1.00	0.887	1.00	1.18	80.00	0.024	1.614	0.01
4	27:02	1.00	0.887	1.00	2.34	80.00	0.013	0.439	0.03
5	27:08	1.00	0.891	1.00	2.62	80.00	0.050	1.537	0.03
6	27:09	1.00	0.891	1.00	5.52	80.00	0.031	0.451	0.07
7	29:44	1.00	0.976	1.00	0.20	80.00	0.004	1.555	0.00
8	29:44	1.00	0.976	1.00	0.19	80.00	0.004	1.555	0.00
9	29:44	1.00	0.976	1.00	0.19	80.00	0.004	1.555	0.00
10	29:44	1.00	0.976	1.00	1.46	80.00	0.005	0.300	0.02
11	29:44	1.00	0.976	1.00	1.36	80.00	0.005	0.300	0.02
12	29:47	1.00	0.978	1.00	0.19	80.00	0.004	1.496	0.00
13	29:47	1.00	0.978	1.00	0.18	80.00	0.003	1.496	0.00
14	29:47	1.00	0.978	1.00	1.74	80.00	0.007	0.322	0.02
15	29:41	1.01	0.982	1.00	0.74	80.00	0.014	1.496	0.01
16	29:41	1.01	0.982	1.00	4.08	80.00	0.017	0.330	0.05
17	29:41	1.01	0.982	1.00	4.08	80.00	0.017	0.330	0.05
18	30:31	1.00	1.002	1.00	1.97	80.00	0.030	1.236	0.02
19	30:31	1.00	1.002	1.00	2.19	80.00	0.010	0.354	0.03

01349

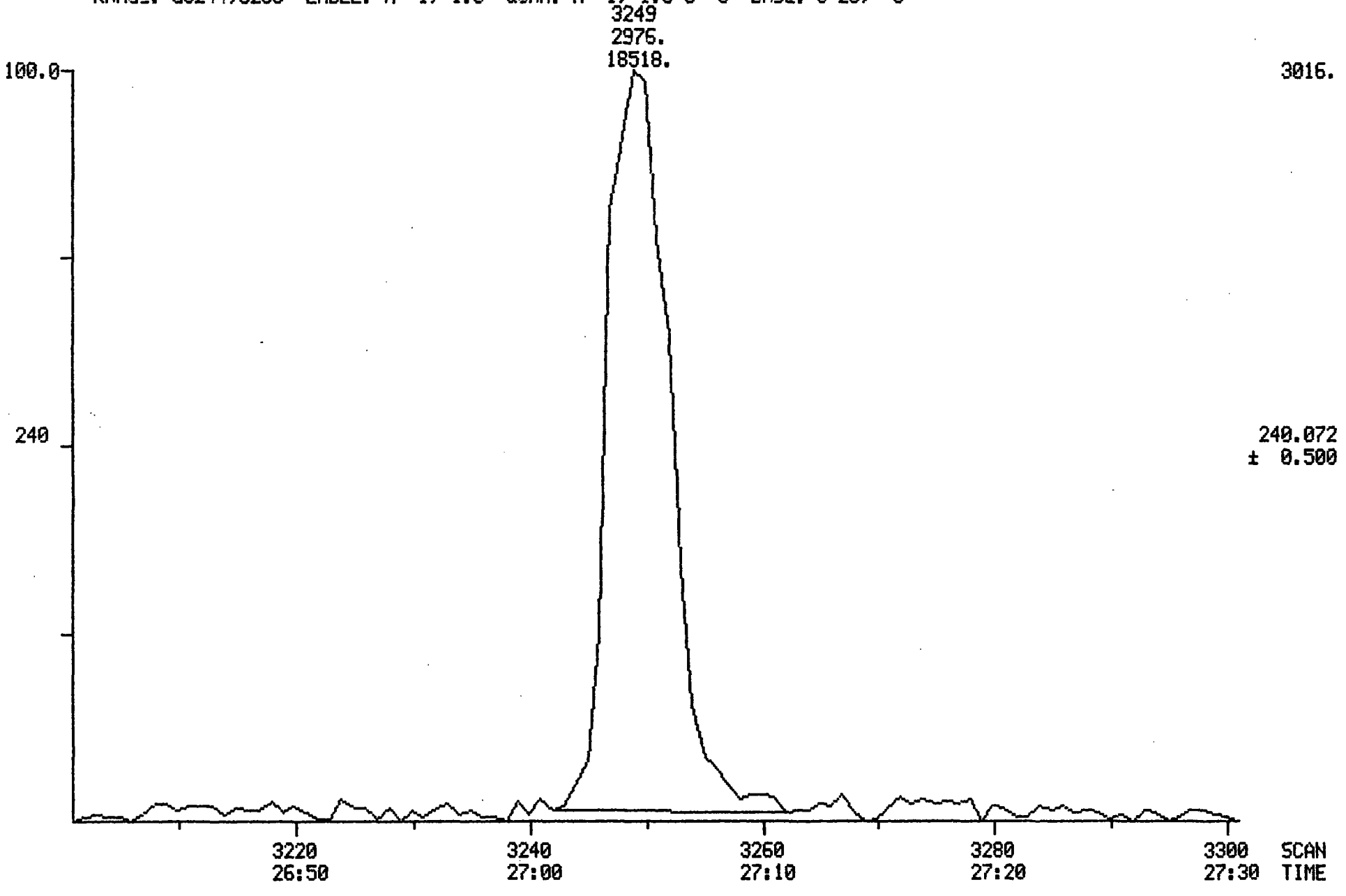
01350

MIDMASS CHROMATOGRAM DATA: S59450X863 #3656 SCANS 3606 TO 3706
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3606,3706 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



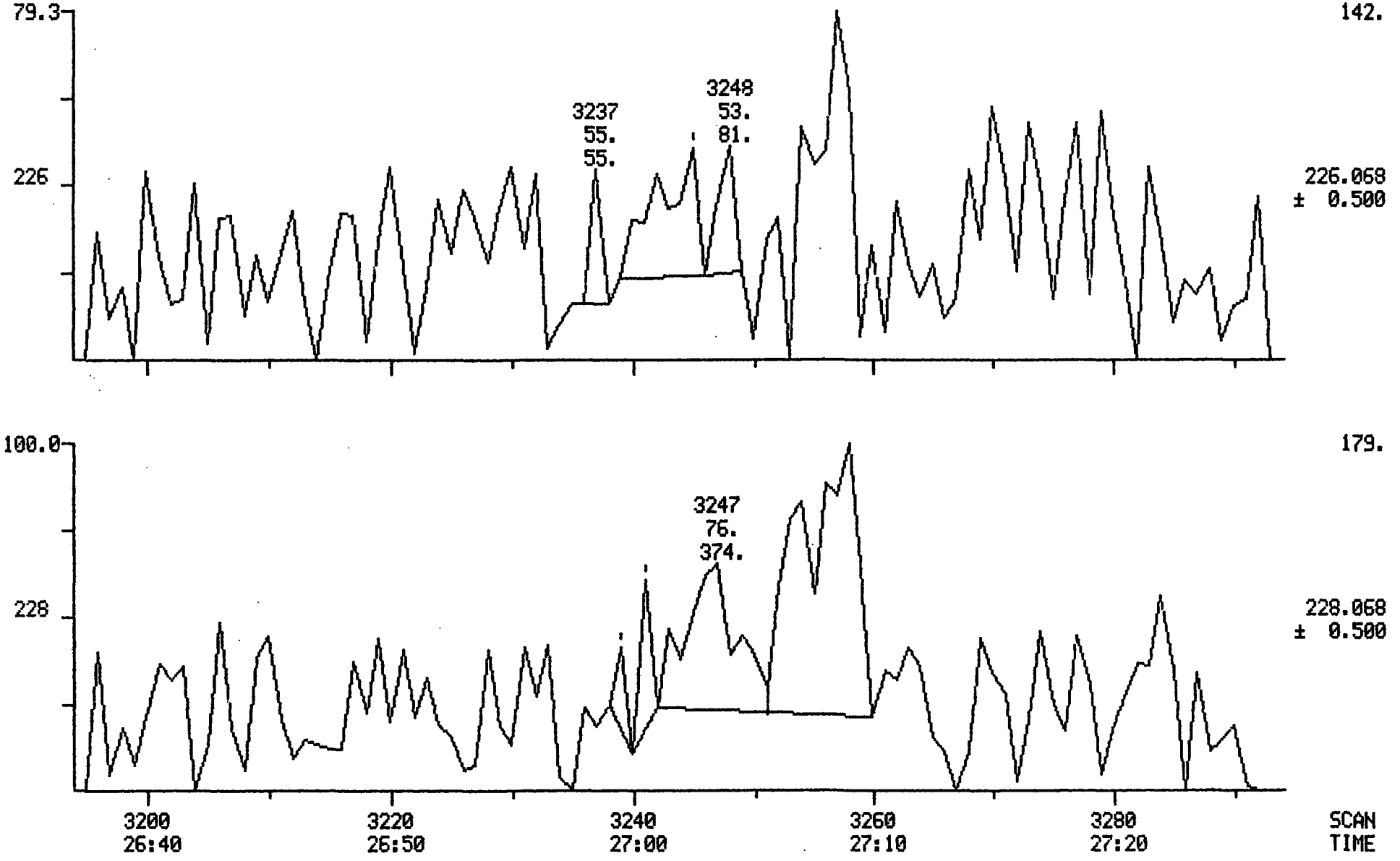
01351

MIDMASS CHROMATOGRAM DATA: S59450X863 #3251 SCANS 3201 TO 3301
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3244,3258 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



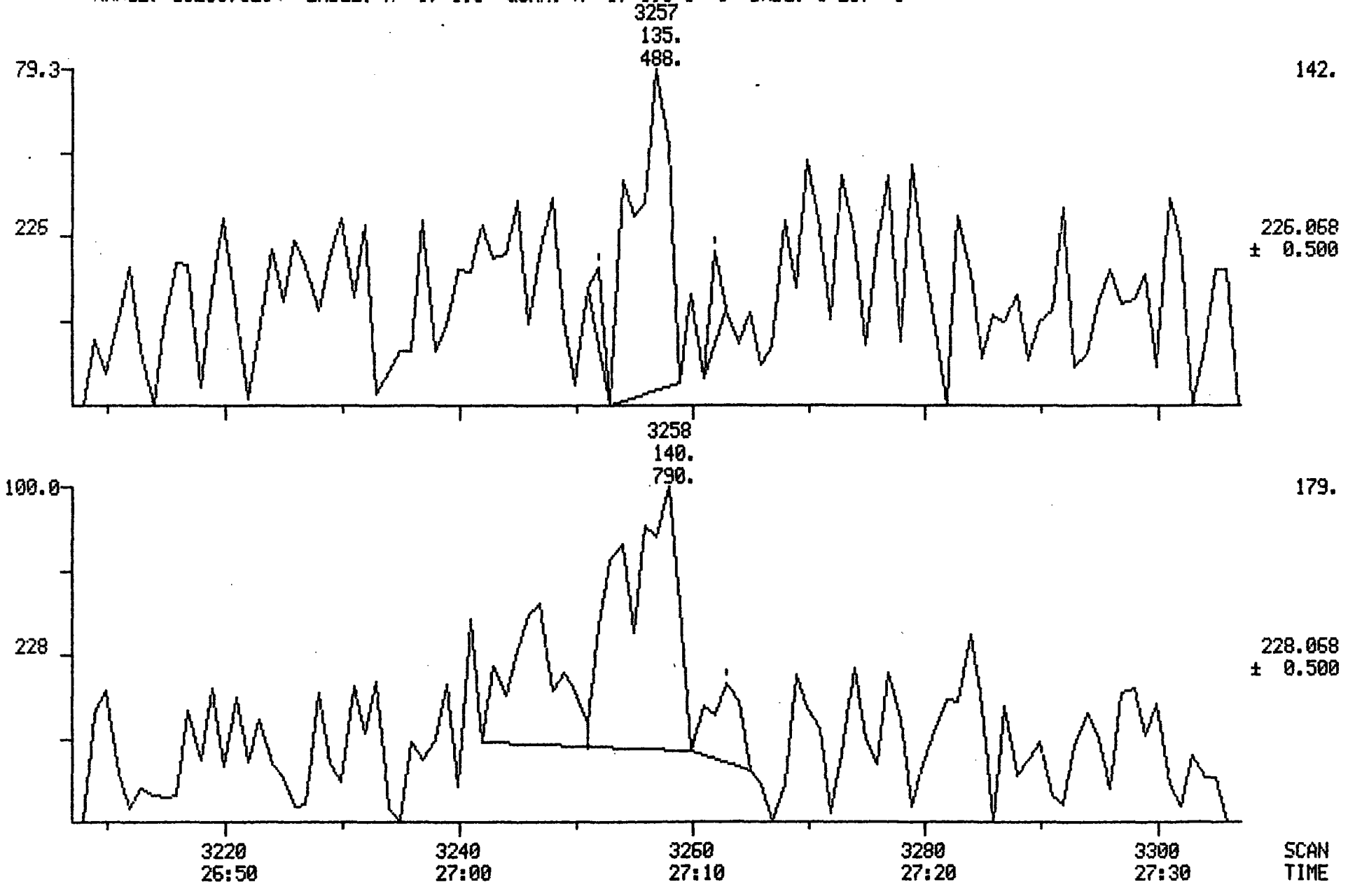
01352

MIDMASS CHROMATOGRAMS DATA: S59450X863 #3244 SCANS 3194 TO 3294
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3237,3251 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



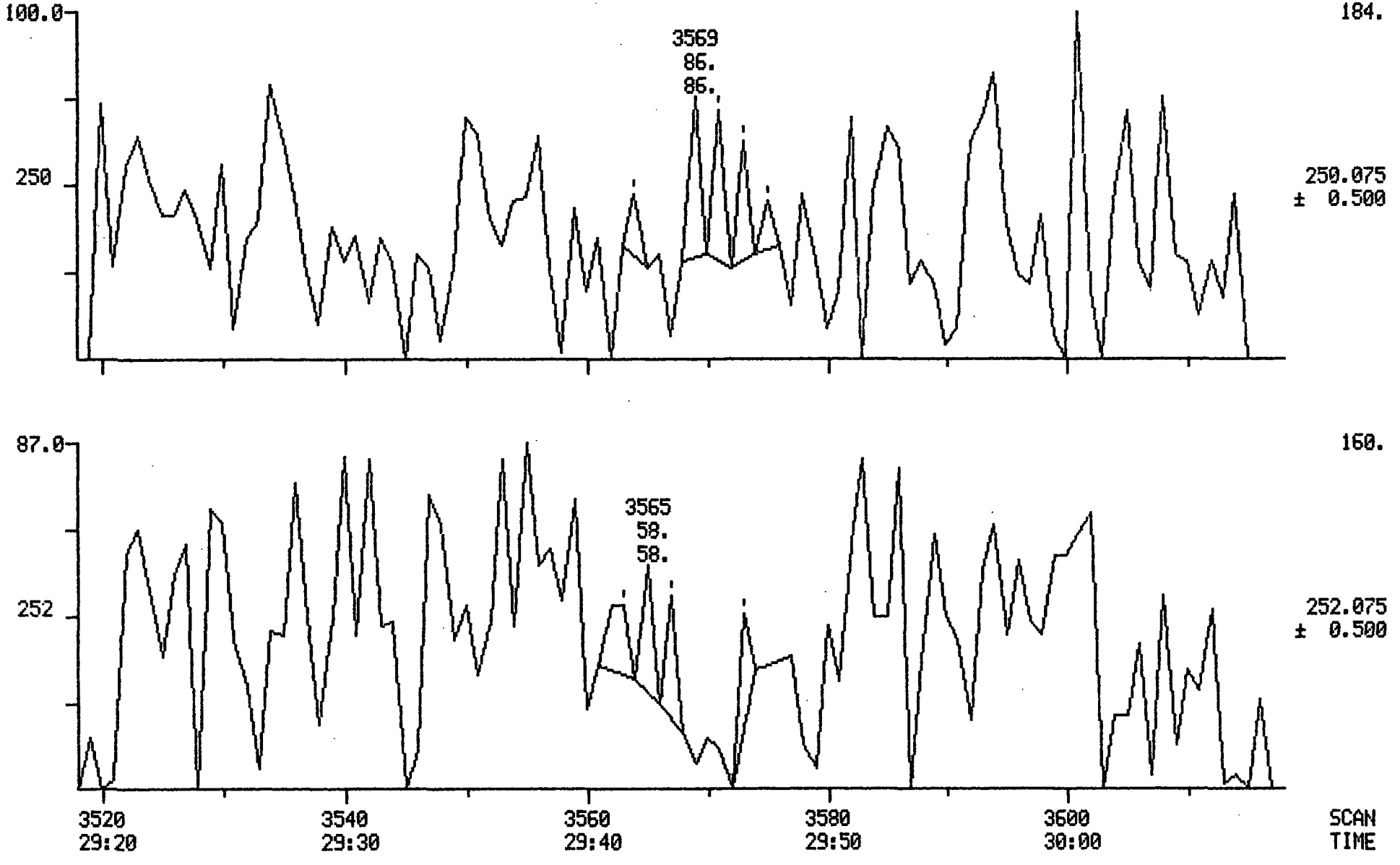
01353

MIDMASS CHROMATOGRAMS DATA: S59450X863 #3257 SCANS 3207 TO 3307
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3250,3264 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



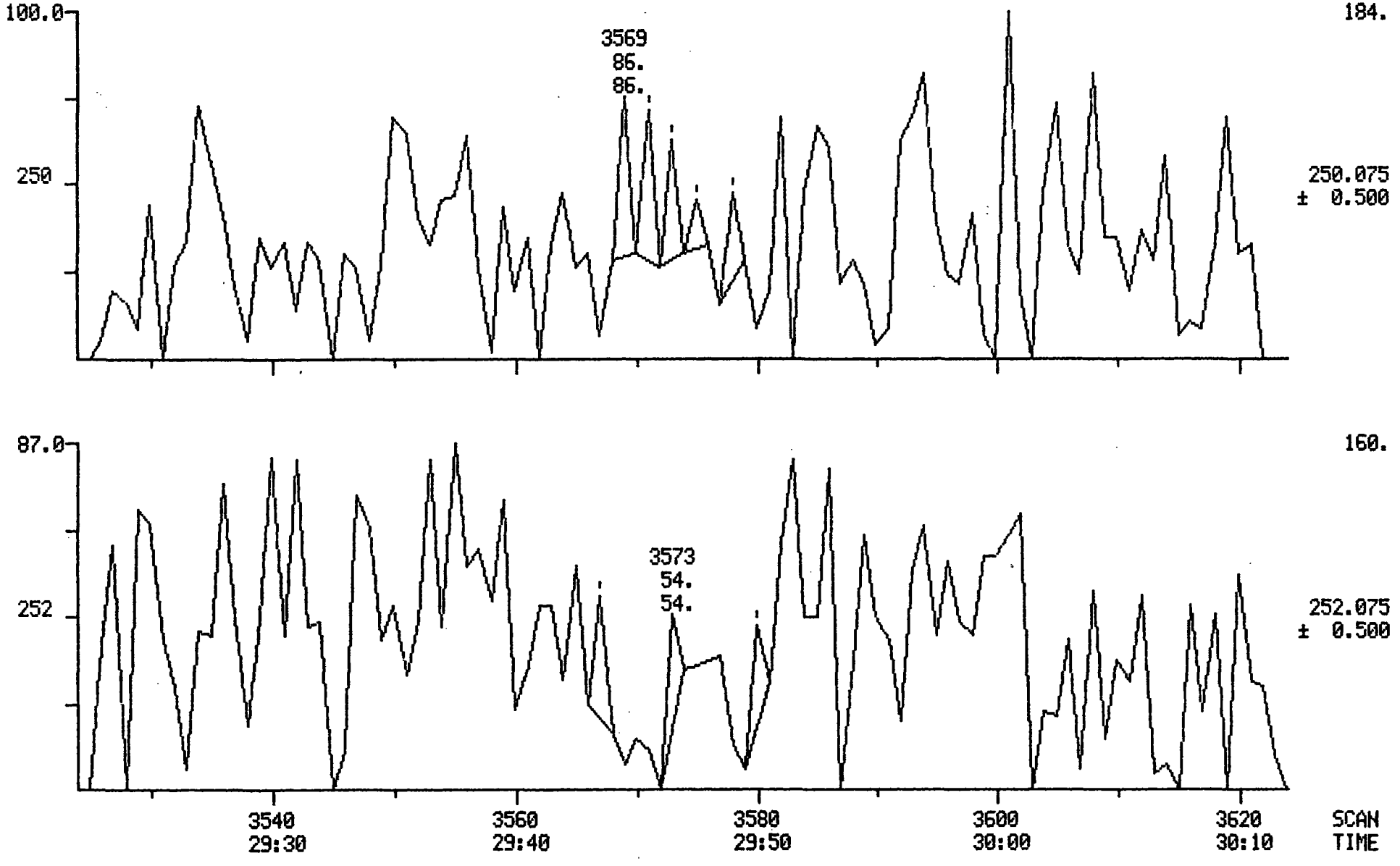
01354

MIDMASS CHROMATOGRAMS DATA: S59450X863 #3568 SCANS 3518 TO 3618
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3561,3575 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



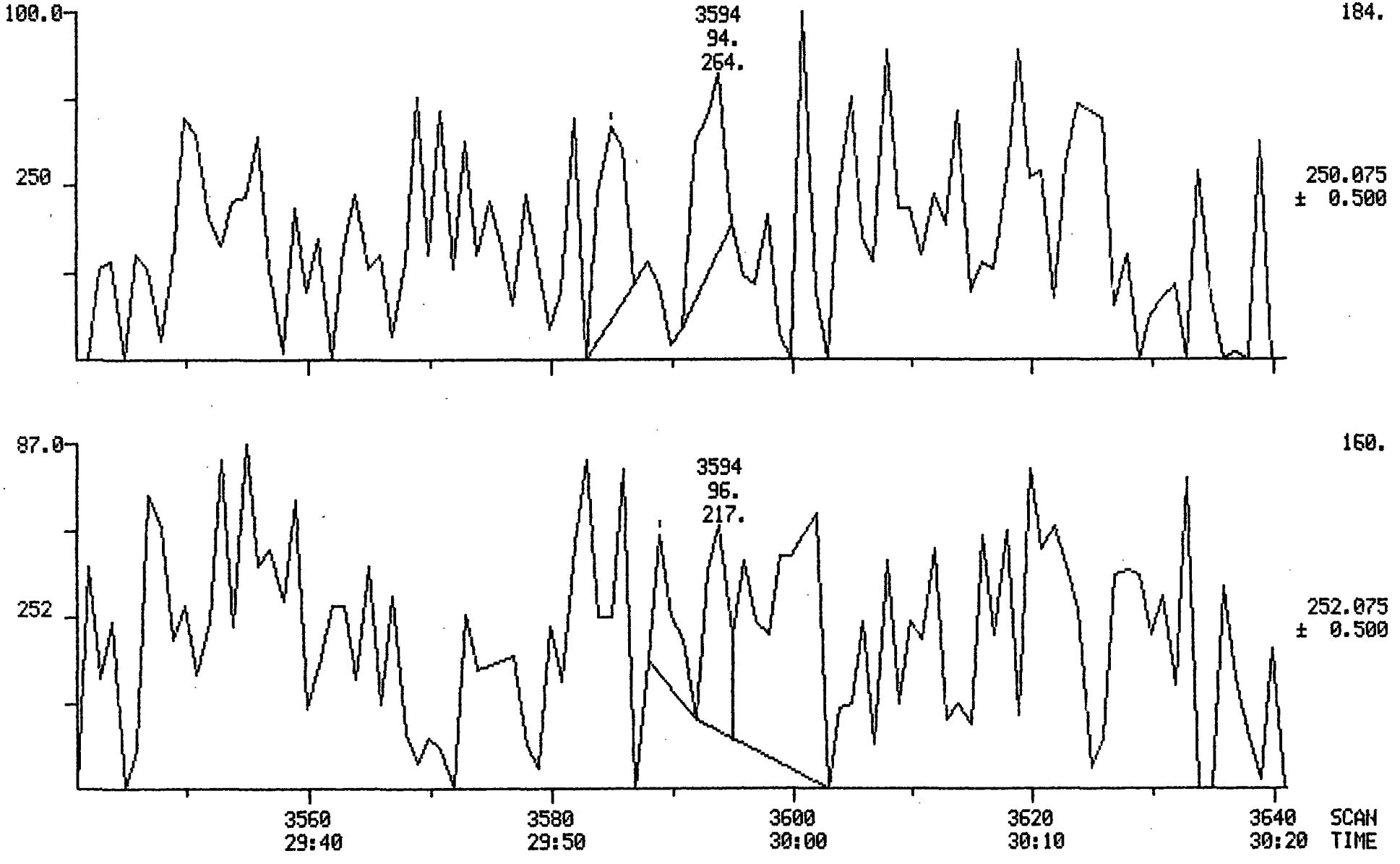
01355

MIDMASS CHROMATOGRAMS DATA: S59450X863 #3574 SCANS 3524 TO 3624
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3567,3581 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



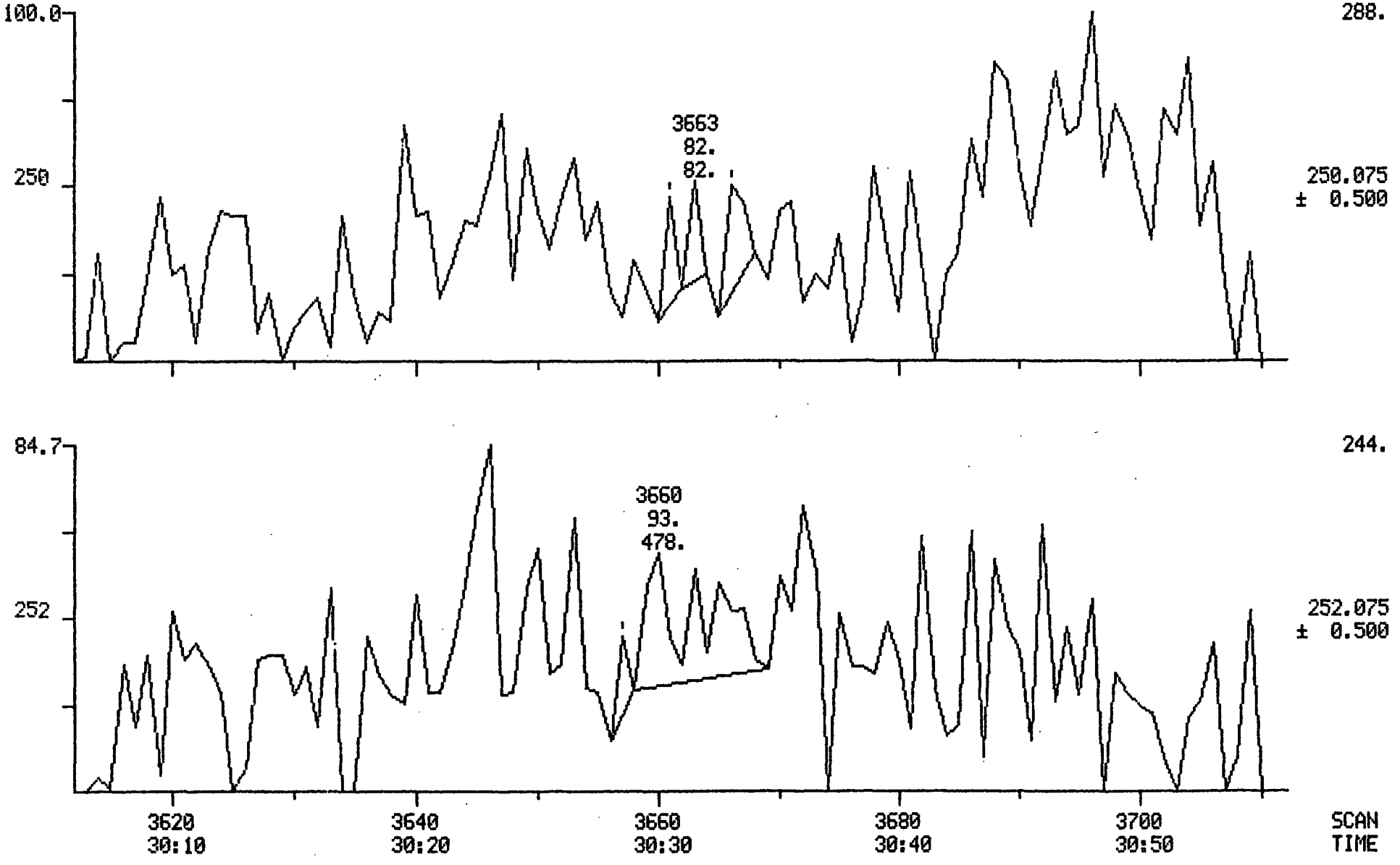
01356

MIDMASS CHROMATOGRAMS DATA: S59450X863 #3591 SCANS 3541 TO 3641
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3584,3598 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



01357

MIDMASS CHROMATOGRAMS DATA: S59450X863 #3662 SCANS 3612 TO 3712
06/06/88 12:56:00 CALI: 060288CX #2
SAMPLE: 59450-BL 4/28 PAH/WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3655,3669 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



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

5945 0 - Blank 4/28/88
20%

UNITS ON AMOUNT: [illegible]

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
047	DBC (surrogate)	.0148	.1	.0279	.1	NA

OCPSCS: $1.0\,\mu g/ml \left(\frac{1.0\,ml}{10.0\,ml}\right) = 0.1\,\mu g/ml$ @20% = 0.02 µg/ml = EMA

DBC

01358

A) $\frac{30.0}{29.5}$ (100%) = 102%

B) $\frac{30.0}{32.5}$ (100%) = 92%

DBC Recovery = 92%
NO HSL Pests/PCBs detected

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

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
047	DBC (surrogate)	26.800	26.533	7	117083	.0148	ug/ml

01359

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: [illegible] [illegible] [illegible]

01360

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
004	delta-BHC	2.500	2.550	9	4175	.0003	ug/ml
024	AROCLOR 1016(peak 2)	1.683	1.717	7	5854	.0075	ug/ml
030	AROCLOR 1242(peak 2)	1.683	1.717	7	5854	.0057	ug/ml
035	AROCLOR 1254(peak 1)	5.100	5.050	11	9219	.0064	ug/ml
047	DBC (surrogate)	22.650	22.667	12	254566	.0279	ug/ml
048	ENDRIN KETONE	22.600	22.667	12	254566	.0046	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

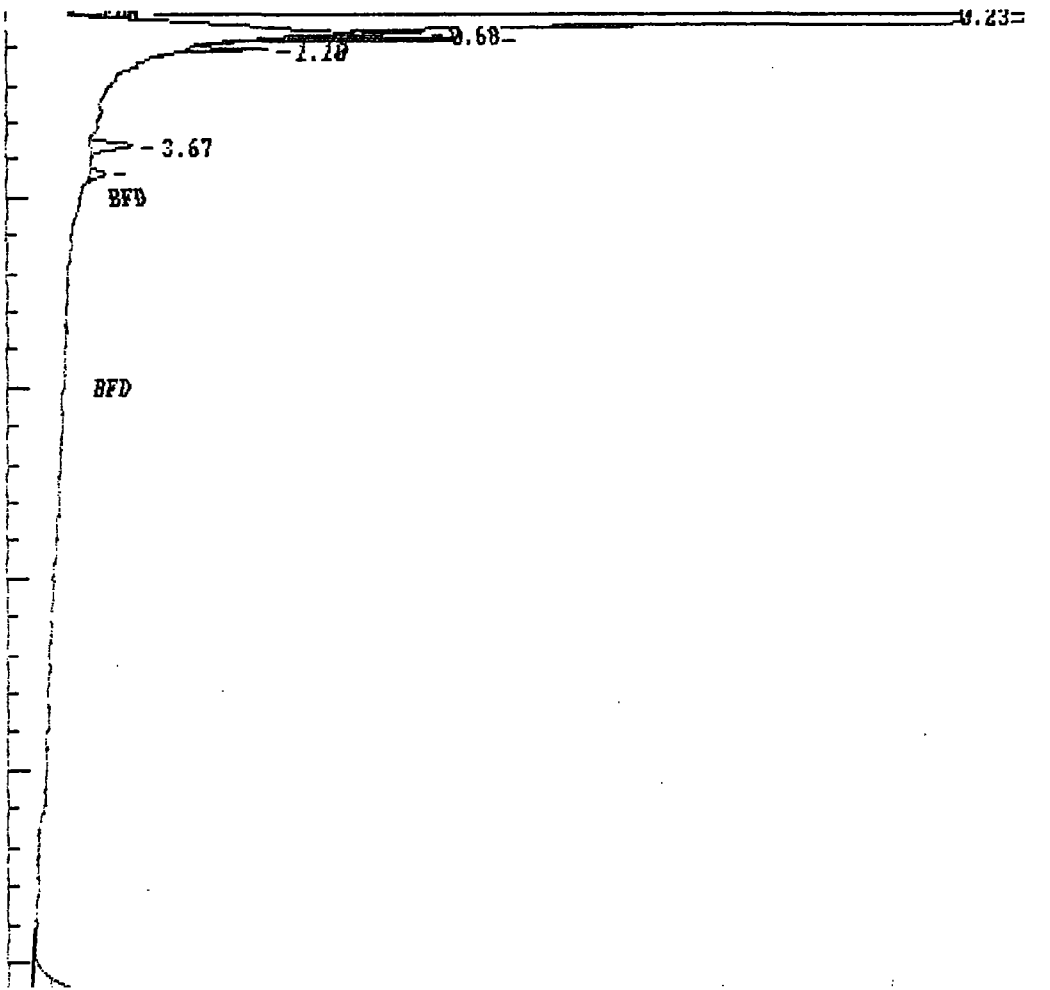
********** 05-13-1988 08:14:40 Version 4.1 **********
* Sample Name: 59450 BLANK 4/28/88 20% Data File: J:AB13318 01361
* Date: 05-13-1988 08:14:23 Method: M:ASPI *
* Interface: 10 Cycle#: 18 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****
Starting Delay: 0.00 Run Time: 0.00

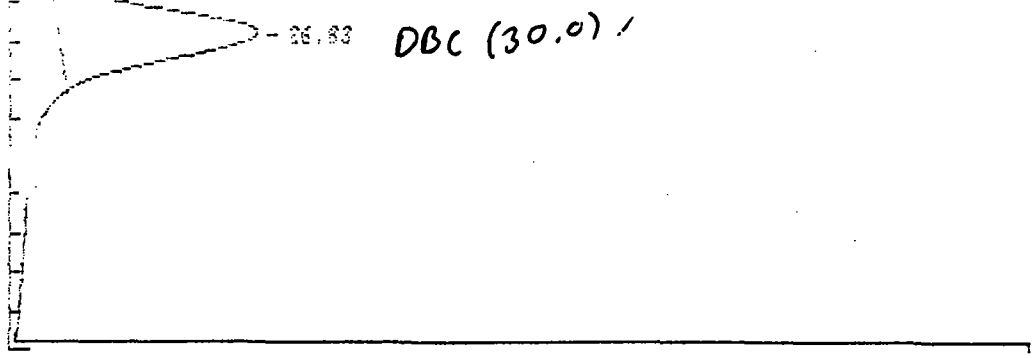
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	589660	81.5705	1	113392	100.000	5.2
2	0.68	2579	0.3568	1	687	0.437	3.8
3	0.85	5812	0.8039	1	1701	0.986	3.4
4	1.10	2750	0.3804	1	600	0.466	4.6
5	3.67	3818	0.5282	1	293	0.647	13.1
6	4.42	1183	0.1636	1	99	0.201	12.0
7	26.83	117083	16.1966	1	1374	19.856	85.2

SS
5/25/88

Total Area: 722883 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13318.ATB
Data File = J:AB13318.PTS Printed on 05-13-1988 at 08:15:09
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts





DBC (30.0)

01362

AREA PERCENT REPORT

01363

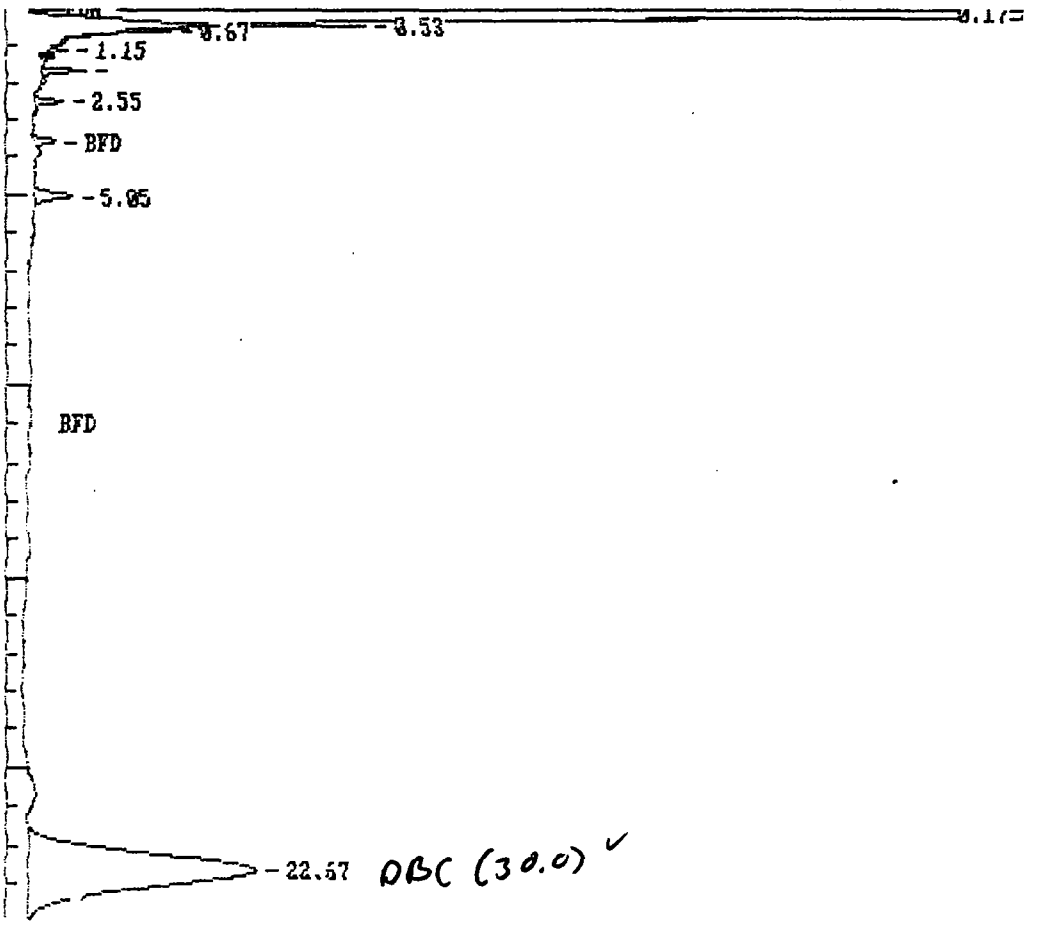
```
******************* 05-13-1988 07:15:20 Version 4.1 ********************
* Sample Name: 59450 BLANK 4/29/88 20%          Data File: J:BB13318     *
* Date: 05-13-1988 07:15:03 Method: M:BBPI                               *
* Interface: 12  Cycle#:  19   Operator SS  Channel#: 0    Vial#: N.A.   *
* 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:    0.00
```

SS 5/25/88

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1035615	78.0013	1	186804	100.000	5.5
2	0.53	9276	0.6987	1	3367	0.896	2.8
3	0.67	3577	0.2694	1	1087	0.345	3.3
5	1.15	1884	0.1419	1	429	0.182	4.4
7	1.72	5854	0.4409	1	857	0.565	6.8
9	2.55	4175	0.3144	1	539	0.403	7.7
10	3.60	3525	0.2655	1	398	0.340	8.9
11	5.05	9219	0.6944	1	721	0.890	12.8
12	22.67	254566	19.1736	1	4300	24.581	59.2

Total Area: 1327690 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13318.ATB
Data File = J:BB13318.PTS Printed on 05-13-1988 at 07:15:48
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts



DBC (30.0) ✓

01364

01365

MATRIX SPIKE DATA

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59450-01MS

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59450-01MS
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59450
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	05/03/88
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	49		SP
75-09-2	MethyleneChloride	1.5	J	B	124-48-1	Dibromochloromethane		5	U
67-64-1	Acetone	1.7	J	B	79-00-5	1,1,2-Trichloroethane		5	U
75-15-0	CarbonDisulfide		5	U	71-43-2	Benzene	47		SP
75-35-4	1,1-Dichloroethene	58		SP	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	46		SP
56-23-5	CarbonTetrachloride		5	U	108-90-7	Chlorobenzene	50		SP
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 Lab
Case No: N/A
Q.C.Report No: 59450

Organics Analysis Data Sheet

Sample Number
59450-01MS

01367

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	1.89		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L		CAS Number	Compound	Value	ug/L	
108-95-2	Phenol	71		SP					
111-44-4	bis(-2-Chloroethyl)Ether		9 U		83-32-9	Acenaphthene	46		SP
95-57-8	2-Chlorophenol	84		SP	51-28-5	2,4-Dinitrophenol		47 U	
541-73-1	1,3-Dichlorobenzene		9 U		100-02-7	4-Nitrophenol	110		SP
106-46-7	1,4-Dichlorobenzene	28		SP	132-64-9	Dibenzofuran		9 U	
100-51-6	Benzyl Alcohol		9 U		121-14-2	2,4-Dinitrotoluene	53		SP
95-50-1	1,2-Dichlorobenzene		9 U		606-20-2	2,6-Dinitrotoluene		9 U	
95-48-7	2-Methylphenol		9 U		84-66-2	Diethylphthalate		9 U	
39638-32-9	bis(2-chloroisopropyl)Ether		9 U		7005-72-3	4-Chlorophenyl-phenylether		9 U	
106-44-5	4-Methylphenol		9 U		86-73-7	Fluorene		9 U	
621-64-7	N-Nitro-Di-n-Propylamine	40		SP	100-01-6	4-Nitroaniline		47 U	
67-72-1	Hexachloroethane		9 U		534-52-1	4,6-Dinitro-2-Methylphenol		47 U	
98-95-3	Nitrobenzene		9 U		86-30-6	N-Nitrosidiphenylamine (1)		9 U	
78-59-1	Isophorone		9 U		101-55-3	4-Bromophenyl-phenylether		9 U	
88-75-5	2-Nitrophenol		9 U		118-74-1	Hexachlorobenzene		9 U	
105-67-9	2,4-Dimethylphenol		9 U		87-86-5	Pentachlorophenol	93		SP
65-85-0	Benzoic Acid		47 U		85-01-8	Phenanthrene		9 U	
111-91-1	bis(2-Chloroethoxy) Methane		9 U		120-12-7	Anthracene		9 U	
120-83-2	2,4-Dichlorophenol		9 U		84-74-2	Di-N-Butylphthalate		9 U	
120-82-1	1,2,4-Trichlorobenzene	30		SP	206-44-0	Fluoranthene		9 U	
91-20-3	Naphthalene		9 U		129-00-0	Pyrene	48		SP
106-47-8	4-Chloroaniline		9 U		85-68-7	Butylbenzylphthalate		9 U	
87-68-3	Hexachlorobutadiene		9 U		91-94-1	3,3'-Dichlorobenzidine		19 U	
59-50-7	4-Chloro-3-Methylphenol	93		SP	56-55-3	Benzo(a)Anthracene		9 U	
91-57-6	2-Methylnaphthalene		9 U		117-81-7	bis(2-Ethylhexyl)Phthalate	25		B
77-47-4	Hexachlorocyclopentadiene		9 U		218-01-9	Chrysene		9 U	
88-06-2	2,4,6-Trichlorophenol		9 U		117-84-0	Di-n-Octylphthalate		9 U	
95-95-4	2,4,5-Trichlorophenol		47 U		205-99-2	Benzo(b)Fluoranthene		9 U	
91-58-7	2-Chloronaphthalene		9 U		207-08-9	Benzo(k)Fluoranthene		9 U	
88-74-4	2-Nitroaniline		47 U		50-32-8	Benzo(a)Pyrene		9 U	
131-11-4	Dimethyl Phthalate		9 U		193-39-5	Indeno(1,2,3-cd)Pyrene		9 U	
208-96-8	Acenaphthylene		9 U		53-70-3	Dibenzo(a,h)Anthracene		9 U	
99-09-2	3-Nitroaniline		47 U		191-24-2	Benzo(g,h,i)Perylene		9 U	

(1)-Cannot be separated from diphenylamine.

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

Sample: 59450-01MS
Date Analyzed: 06/03/88

Units: ug/L
Run Factor: 1.89

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	49.4	49	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
55.0	SP	Pyridine	110-86-1
64.0	SP	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	
65.0	SP	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
	10 U	3,5-Lutidine	
	10 U	3,4-Lutidine	
75.0	SP	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

SP = Spike Compound

FORM I

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

Sample: 59450-01MS
Date Analyzed: 06/06/88

Units: ng/L
Run Factor: 0.125

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	47.1	59	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
18	SP	Benzo(A)Anthracene
18	SP	Chrysene
12	SP	Benzo(B)Fluoranthene
8.9	J SP	Benzo(K)Fluoranthene
6.8	J SP	Benzo(A)Pyrene

J = Value below detection limit (10 ppt).

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59450

Sample Number: 59450-01MS

01370

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/28/88
Date Analyzed :05/13/88
Conc./Dil Factor : 50.0
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)	0.15		SP
76-44-8	Heptachlor	0.13		SP
309-00-2	Aldrin	0.14		SP
1204-57-3	Heptachlor Epoxide		0.05 U	
959-98-8	Endosulfan I		0.05 U	
60-57-1	Dieldrin	0.37		SP
72-55-9	4,4'-DDE		0.10 U	
72-20-8	Endrin	0.51		SP
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	0.36		SP
72-43-5	Methoxychlor		0.50 U	
53494-70-5	Endrin Ketone		0.10 U	
57-74-9	Chlordane		0.50 U	
8001-35-2	Toxaphene		1.00 U	
12674-11-2	Aroclor-1016		0.50 U	
11104-28-2	Aroclor-1221		0.50 U	
11141-16-5	Aroclor-1232		0.50 U	
53469-21-9	Aroclor-1242		0.50 U	
12672-29-6	Aroclor-1248		0.50 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 = 1000 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

ORGANICS ANALYSIS DATA SHEET
(Page 1)

01371

Sample Number : 59450-02MS

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59450-02MS
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59450
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	05/03/88
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	51		SP
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	52		SP
75-35-4	1,1-Dichloroethene	61		SP	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	48		SP
56-23-5	CarbonTetrachloride		5	U	108-90-7	Chlorobenzene	51		SP
108-05-4	VinylAcetate		10	U	100-41-4	Ethylbenzene		5	U
75-27-4	Bromodichloromethane		5	U	100-42-5	Styrene		5	U
						Total Xylenes		5	U

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

10/85 Rev

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59450

Organics Analysis Data Sheet

Sample Number
59450-02MS

01372

Semivolatile Compounds

Conc.:	Low	GPC Cleanup	No
Date Extracted/Prepared:	04/27/88	Separatory Funnel Extraction	No
Date Analyzed	06/06/88	Continuous Liquid-Liquid Extraction	Yes
Conc/Dil Factor	1.89		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L		CAS Number	Compound	Value	ug/L	
108-95-2	Phenol	23		SP					
111-44-4	bis(-2-Chloroethyl)Ether		9 U		83-32-9	Acenaphthene	46		SP
95-57-8	2-Chlorophenol	82		SP	51-28-5	2,4-Dinitrophenol		47 U	
541-73-1	1,3-Dichlorobenzene		9 U		100-02-7	4-Nitrophenol	93		SP
106-46-7	1,4-Dichlorobenzene	26		SP	132-64-9	Dibenzofuran		9 U	
100-51-6	Benzyl Alcohol		9 U		121-14-2	2,4-Dinitrotoluene	53		SP
95-50-1	1,2-Dichlorobenzene		9 U		606-20-2	2,6-Dinitrotoluene		9 U	
95-48-7	2-Methylphenol		9 U		84-66-2	Diethylphthalate		9 U	
39638-32-9	bis(2-chloroisopropyl)Ether		9 U		7005-72-3	4-Chlorophenyl-phenylether		9 U	
106-44-5	4-Methylphenol		9 U		86-73-7	Fluorene		9 U	
621-64-7	N-Nitro-Di-n-Propylamine	33		SP	100-01-6	4-Nitroaniline		47 U	
67-72-1	Hexachloroethane		9 U		534-52-1	4,6-Dinitro-2-Methylphenol		47 U	
98-95-3	Nitrobenzene		9 U		86-30-6	N-Nitrosidiphenylamine (1)		9 U	
78-59-1	Isophorone		9 U		101-55-3	4-Bromophenyl-phenylether		9 U	
88-75-5	2-Nitrophenol		9 U		118-74-1	Hexachlorobenzene		9 U	
105-67-9	2,4-Dimethylphenol		9 U		87-86-5	Pentachlorophenol	98		SP
65-85-0	Benzoic Acid		47 U		85-01-8	Phenanthrene		9 U	
111-91-1	bis(2-Chloroethoxy) Methane		9 U		120-12-7	Anthracene		9 U	
120-83-2	2,4-Dichlorophenol		9 U		84-74-2	Di-N-Butylphthalate		9 U	
120-82-1	1,2,4-Trichlorobenzene	29		SP	206-44-0	Fluoranthene		9 U	
91-20-3	Naphthalene		9 U		129-00-0	Pyrene	65		SP
106-47-8	4-Chloroaniline		9 U		85-68-7	Butylbenzylphthalate		9 U	
87-68-3	Hexachlorobutadiene		9 U		91-94-1	3,3'-Dichlorobenzidine		19 U	
59-50-7	4-Chloro-3-Methylphenol	88		SP	56-55-3	Benzo(a)Anthracene		9 U	
91-57-6	2-Methylnaphthalene		9 U		117-81-7	bis(2-Ethylhexyl)Phthalate	5.9		J B
77-47-4	Hexachlorocyclopentadiene		9 U		218-01-9	Chrysene		9 U	
88-06-2	2,4,6-Trichlorophenol		9 U		117-84-0	Di-n-Octylphthalate		9 U	
95-95-4	2,4,5-Trichlorophenol		47 U		205-99-2	Benzo(b)Fluoranthene		9 U	
91-58-7	2-Chloronaphthalene		9 U		207-08-9	Benzo(k)Fluoranthene		9 U	
88-74-4	2-Nitroaniline		47 U		50-32-8	Benzo(a)Pyrene		9 U	
131-11-4	Dimethyl Phthalate		9 U		193-39-5	Indeno(1,2,3-cd)Pyrene		9 U	
208-96-8	Acenaphthylene		9 U		53-70-3	Dibenzo(a,h)Anthracene		9 U	
99-09-2	3-Nitroaniline		47 U		191-24-2	Benzo(g,h,i)Perylene		9 U	

(1)-Cannot be separated from diphenylamine.

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

Sample: 59450-02MS
Date Analyzed: 06/06/88

Units: ug/L
Run Factor: 1.89

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	56.0	56	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
48.0	SP	Pyridine	110-86-1
42.0	SP	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	
60.0	SP	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
	10 U	3,5-Lutidine	
	10 U	3,4-Lutidine	
4.0		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

SP = Spike Compound

FORM I

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

Sample: 59450-02MS
Date Analyzed: 06/08/88

Units: ng/L
Run Factor: 0.125

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	53.0	66	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
18	SP	Benzo(A)Anthracene
17	SP	Chrysene
12	SP	Benzo(B)Fluoranthene
6.1	J SP	Benzo(K)Fluoranthene
7.5	J SP	Benzo(A)Pyrene

J = Value below detection limit (10 ppt).

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59450

Sample Number:
59450-02MS

01375

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/28/88
Date Analyzed :05/19/88
Conc./Dil Factor : 47.6
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	0.31		SP
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		0.48 U	
53494-70-5	Endrin Ketone		0.10 U	
57-74-9	Chlordane		0.48 U	
8001-35-2	Toxaphene		0.95 U	
12674-11-2	Aroclor-1016		0.48 U	
11104-28-2	Aroclor-1221		0.48 U	
11141-16-5	Aroclor-1232		0.48 U	
53469-21-9	Aroclor-1242		0.48 U	
12672-29-6	Aroclor-1248		0.48 U	
11097-69-1	Aroclor-1254		0.95 U	
11096-82-5	Arolcor-1260		0.95 U	

Vi = Volume of extract injected (ul) Vi = 2ul/4ul
Vs = Volume of water extracted (ml) Vs = 1050 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59450-05MS

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59450-05MS
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59450
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	05/03/88
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	52		SP
75-09-2	MethyleneChloride	2.2		J B	124-48-1	Dibromochloromethane		5	U
67-64-1	Acetone	3.9		J B	79-00-5	1,1,2-Trichloroethane		5	U
75-15-0	CarbonDisulfide		5	U	71-43-2	Benzene	50		SP
75-35-4	1,1-Dichloroethene	59		SP	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	49		SP
56-23-5	CarbonTetrachloride		5	U	108-90-7	Chlorobenzene	51		SP
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

5/3/88 1:34:42 SCAN 1 OF 730
Acquisition started

Acquire
05/03/88 1:34:00 + 0:03
Sample: CLP,59450,,59450-01MS,LOW,WATER,59450-01MS,VOA,EPA
Conds.: 100%/5ML
Formula:
Submitted by: RMAL

Run 3:S59450W967
Free sectors: 11412
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.030
Acct. No: 59450

01377

*** GC descriptor: V3 ***

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

Injector: 50 DegC
Interface: 220 DegC

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

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

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

Hold time (s)
Top: 0.00
Bottom: 0.05

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

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

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

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

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	127.00	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: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/3/88 2:11:17
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	35.6	2190.0	1.6	14457.	20.	7.

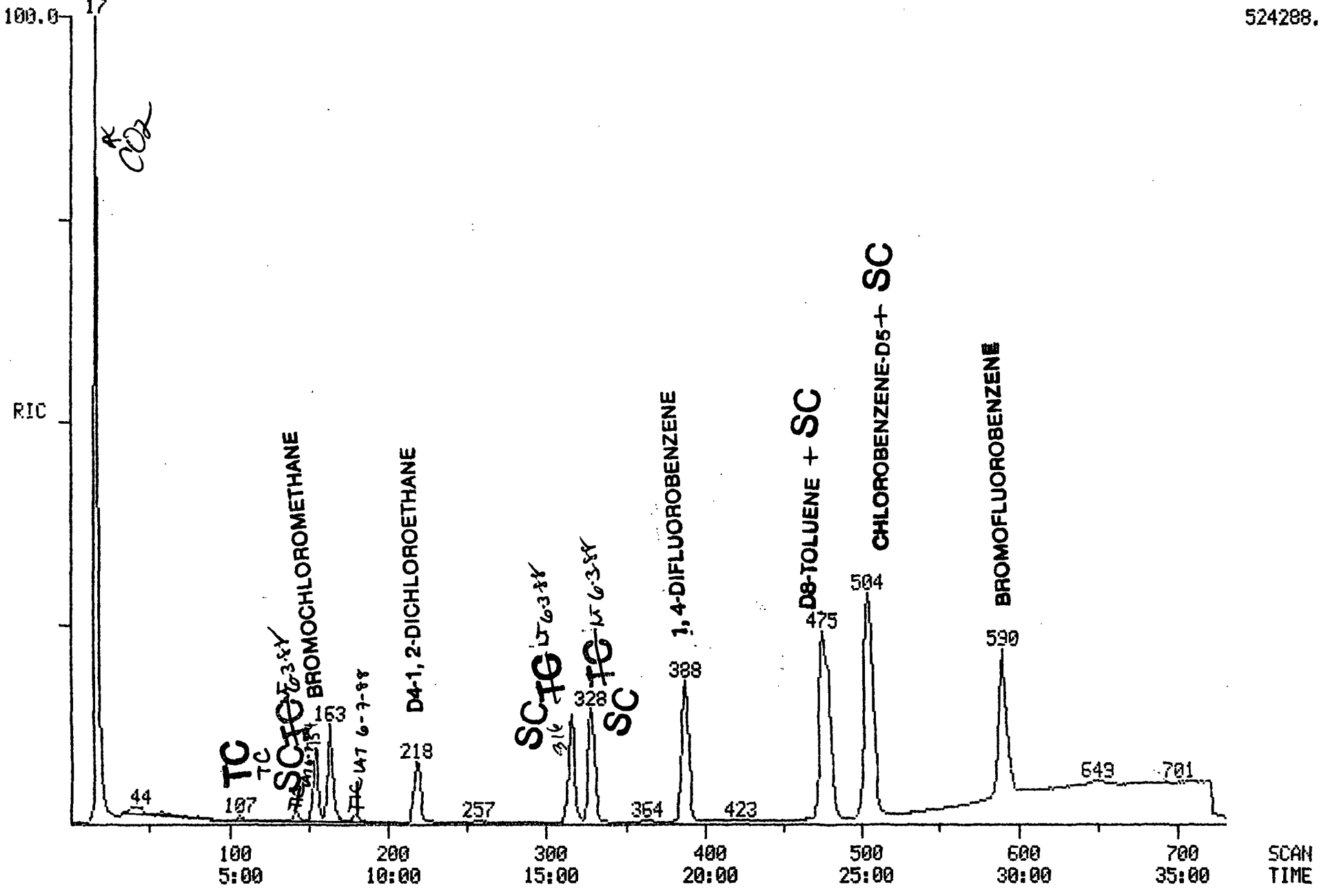
01378

TIC = Tentatively Identified Compound

TC = Target Compound
SC = Spike Compound

RIC DATA: S59450W967 #4 SCANS 1 TO 730
05/03/88 1:34:00 CALI: 050288CW2 #3
SAMPLE: CLP,59450,,59450-01MS,LOW,WATER,59450-01MS,VOA,EPA
CONDS.: 100%/5ML
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

524288.



PROCEDURE: TCA DIAGNOSTIC REPORT 5/03/88 8:48:00
DATA FILE: S59450W967
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

01379

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	2	46	IS01/TC01
3	3	1	80	18	8	3	90	IS02/TC02
3	3	1	80	12	7	4	214	IS03/TC03
1	1	1	0	7	3	1	69	IS04/TC04

41 COMPOUNDS PROCESSED, 17 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >		< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-162	163	163	.	1	973	.	128	163	.	1
2	V1	10	-32	31	.	.	.	.	.	50	.	.	.
3	V1	15	-48	47	.	.	.	.	.	94	.	.	.
4	V1	25	-60	59	.	.	.	.	.	62	.	.	.
5	V1	35	-74	74	.	.	.	.	.	64	.	.	.
6	V1	45	-107	107	107	.	1	989	.	84	107	.	1
7	V1	50	-116	116	116	.	2	991	.	58	117	1	1
8	V1	65	-133	133	.	.	.	.	.	76	.	.	.
9	V1	80	-154	154	154	.	1	985	.	96	154	.	1
10	V2	1	-388	389	388	-1	1	994	.	114	388	.	1
11	V3	1	-502	503	503	.	1	998	.	117	503	.	1
12	V1	90	-180	180	.	.	.	.	.	63	.	.	.
13	V1	95	-194	194	.	.	.	.	.	96	.	.	.
14	V1	100	-205	205	.	.	.	.	.	83	.	.	.
15	V1	2	-218	218	218	.	1	989	.	65	218	.	1
16	V2	10	-218	218	218	.	1	945	.	72	.	.	.
17	V1	110	-221	221	.	.	.	.	.	62	.	.	.
18	V2	15	-248	248	.	.	.	.	.	97	.	.	.
19	V2	20	-257	257	.	.	.	.	.	117	.	.	.
20	V2	25	-260	260	261	1	3	860	.	43	.	.	.
21	V2	30	-267	267	.	.	.	.	.	83	.	.	.
22	V2	35	-298	298	.	.	.	.	.	63	.	.	.
23	V2	40	-304	304	.	.	.	.	.	75	.	.	.
24	V2	45	-317	317	316	-1	1	981	.	130	316	.	1
25	V2	60	-329	329	328	-1	1	988	.	78	328	.	1
26	V2	50	-330	330	.	.	.	.	.	129	.	.	.
27	V2	65	-333	334	.	.	.	.	.	75	.	.	.
28	V2	55	-333	334	.	.	.	.	.	97	.	.	.
29	V2	80	-393	394	.	.	.	.	.	173	.	.	.
30	V3	10	-405	406	405	-1	1	915	.	58	403	-2	1
31	V3	15	-441	442	446	4	4	945	.	58	.	.	.
32	V3	25	-447	448	.	.	.	.	.	83	.	.	.
33	V3	20	-448	449	.	.	.	.	.	164	.	.	.
34	V3	2	-475	476	475	-1	1	993	.	98	475	.	1
35	V3	35	-480	481	479	-2	1	987	.	92	479	.	1
36	V3	40	-506	506	506	.	1	986	.	112	506	.	1
37	V3	50	-549	549	.	.	.	.	.	106	.	.	.
38	V3	3	-590	590	590	.	1	986	.	95	590	.	1
39	V3	55	-611	611	.	.	.	.	.	104	.	.	.
40	V3	60	-615	615	.	.	.	.	.	106	.	.	.
41	V3	75	-628	628	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59450W967

01380

Data: S59450W967.TI
05/03/88 1:34:00
Sample: CLP,59450,,59450-01MS,LOW,WATER,59450-01MS,VOA,EPA
Conds.: 100%/5ML
Formula: Instrument: 5100 Weight: 0.030
Submitted by: RMAL Analyst: DC Acct. No.: 59450

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

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

01381

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	163	8:09	1	1.000	A BB	31612.	50.000 UG/L	9.13
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	107	5:21	1	0.656	A BB	1877.	1.534 UG/L	0.28
7	58	117	5:51	1	0.718	A BB	162.	1.734 UG/L	0.32
8	NOT FOUND								
9	96	154	7:42	1	0.945	A BB	38683.	58.044 UG/L	10.60
10	114	388	19:24	10	1.000	A BB	181578.	50.000 UG/L	9.13
11	117	503	25:09	11	1.000	A BB	153741.	50.000 UG/L	9.13
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	218	10:54	1	1.337	A BB	52952.	44.336 UG/L	8.09
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	130	316	15:48	10	0.814	A BB	60318.	49.093 UG/L	8.96
25	78	328	16:24	10	0.845	A BB	159485.	47.338 UG/L	8.64
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	58	403	20:09	11	0.801	A BB	50.	0.105 UG/L	0.02
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	98	475	23:45	11	0.944	A BB	185314.	50.121 UG/L	9.15
35	92	479	23:57	11	0.952	A BB	97416.	46.484 UG/L	8.49
36	112	506	25:18	11	1.006	A BB	123073.	49.684 UG/L	9.07
37	NOT FOUND								
38	95	590	29:30	11	1.173	A BB	105202.	49.298 UG/L	9.00
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	1:36		0.196						
3	2:24		0.294						
4	3:00		0.368						
5	3:42		0.454						
6	5:21	1.00	0.656	1.00	1.53	50.00	0.059	1.935	0.03
7	5:48	1.01	0.712	1.01	1.73	50.00	0.005	0.148	0.03
8	6:39		0.816						
9	7:42	1.00	0.945	1.00	58.04	50.00	1.224	1.054	1.16
10	19:27	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	9:00		1.104						
13	9:42		1.190						

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	44.34	50.00	1.675	1.889	0.89
16	10:54		0.560						
17	11:03		1.356						
18	12:24		0.638						
19	12:51		0.661						
20	13:00		0.668						
21	13:21		0.686						
22	14:54		0.766						
23	15:12		0.781						
24	15:51	1.00	0.815	1.00	49.09	50.00	0.332	0.338	0.98
25	16:27	1.00	0.846	1.00	47.34	50.00	0.878	0.928	0.95
26	16:30		0.848						
27	16:39		0.856						
28	16:39		0.856						
29	19:39		1.010						
30	20:15	1.00	0.805	1.00	0.11	50.00	0.000	0.154	0.00
31	22:03		0.877						
32	22:21		0.889						
33	22:24		0.891						
34	23:45	1.00	0.944	1.00	50.12	50.00	1.205	1.202	1.00
35	24:00	1.00	0.954	1.00	46.48	50.00	0.634	0.682	0.93
36	25:18	1.00	1.006	1.00	49.68	50.00	0.801	0.806	0.99
37	27:27		1.091						
38	29:30	1.00	1.173	1.00	49.30	50.00	0.684	0.694	0.99
39	30:33		1.215						
40	30:45		1.223						
41	31:24		1.249						

01382

TCA FINISHED, 17 FOUND
FINISHED AT: 5/03/88 8:52:08

RMAL QUANTITATION SUMMARY FILE: S59450W967
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

01383

UNITS: UG/L

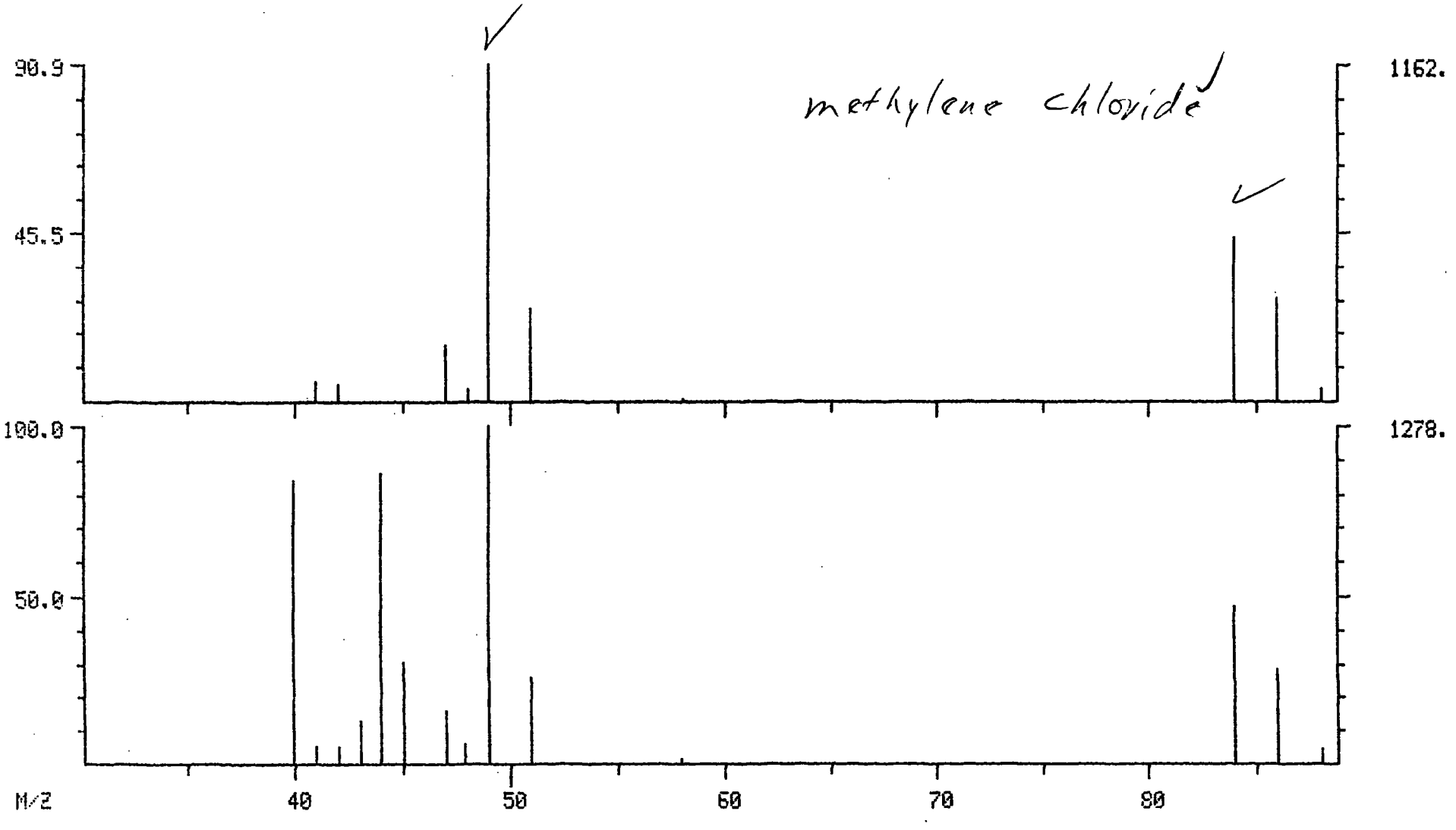
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	31612.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	388	2	181578.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	503	3	153741.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	475	3	185314.	1.205	50.121
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	590	3	105202.	0.684	49.298
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	218	1	52952.	1.675	44.336
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	1877.	0.059	1.534
12	V1# 50	C035 ACETONE	58	117	1	162.	0.005	~~1.734~~
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96	154	1	38683.	1.224	58.044
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	316	2	60318.	0.332	49.093
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	328	2	159485.	0.878	47.338
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	479	3	97416.	0.634	46.484
37	V3# 40	C235 CHLOROBENZENE	112	506	3	123073.	0.801	49.684
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		

01384

DUAL MASS SPECTRUM
05/03/88 1:34:00 + 5:21
SAMPLE: CLP,59450.,59450-01MS,LOW,WATER,59450-01MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 83 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W967 #107
CALI: 050288CW2 #3

BASE M/Z: 49/ 49
RIC: 2807./ 5791.



01385

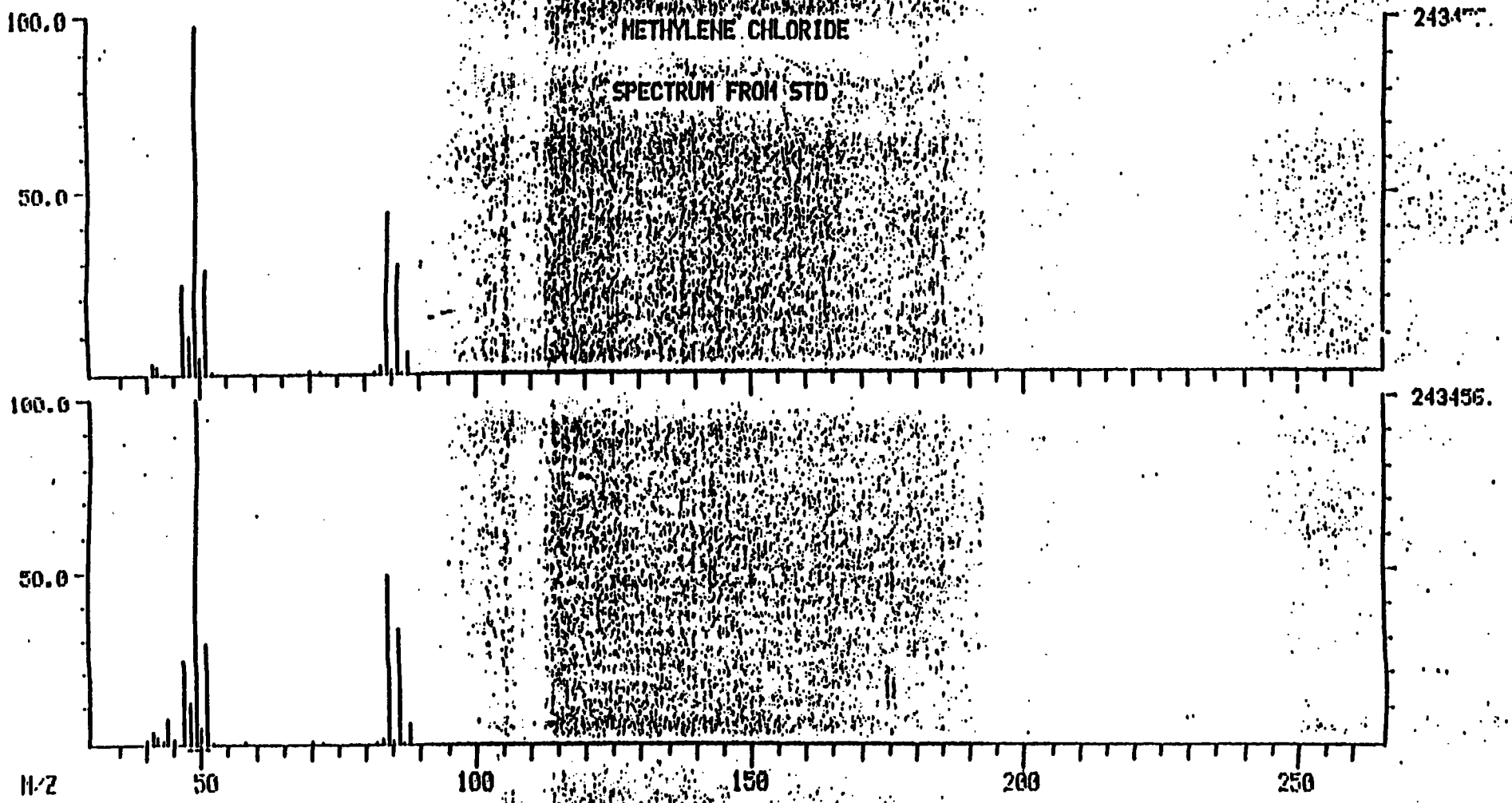
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100Z/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

SPECTRUM FROM STD

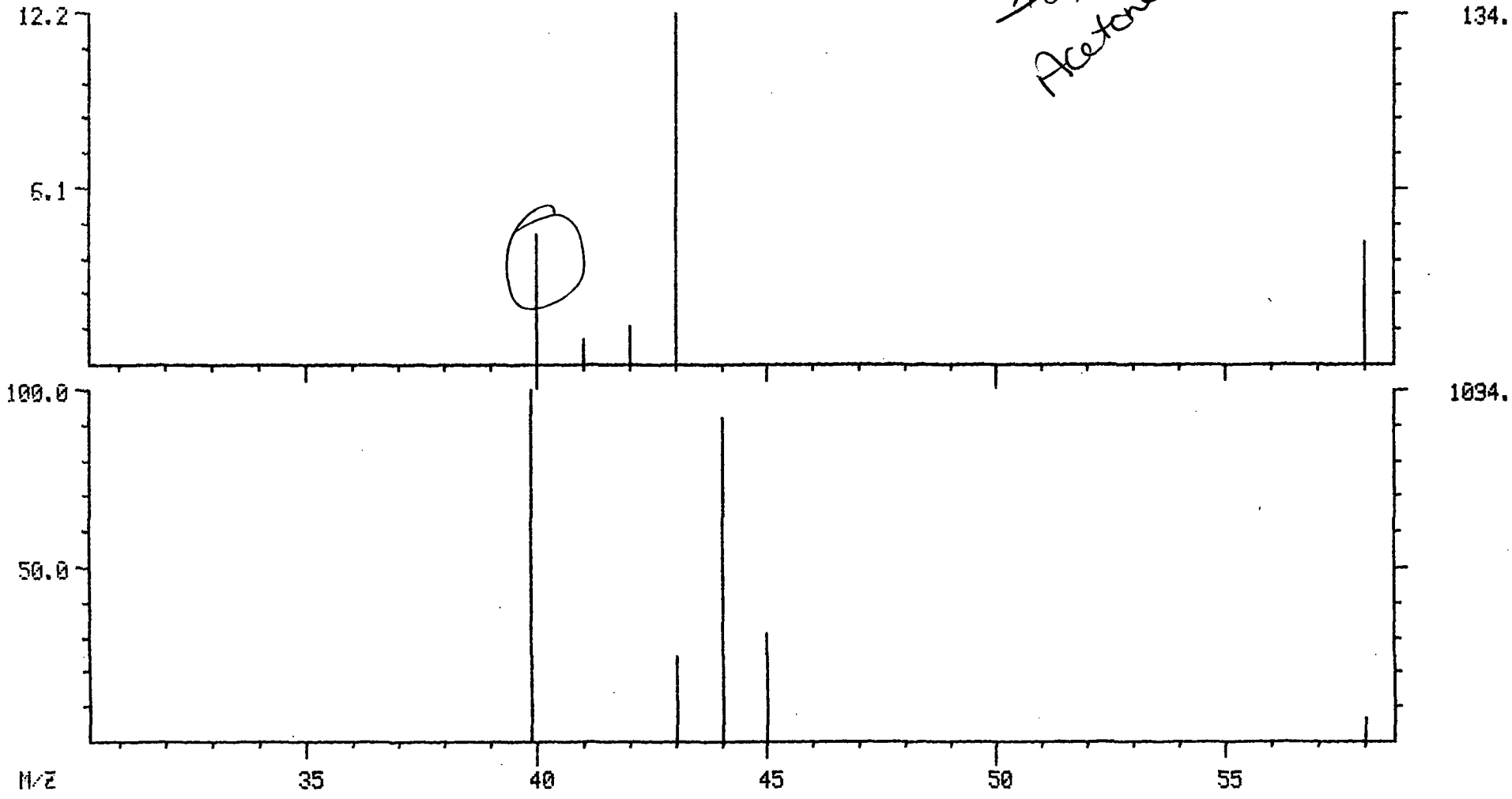


01386

DUAL MASS SPECTRUM
05/03/88 1:34:00 + 5:51
SAMPLE: CLP,59450,,59450-01MS,LOW,WATER,59450-01MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 87 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W367 #117 BASE M/Z: 43/ 40
CALI: 050288CW2 #3 RIC: 255./ 2779.

~~Sol~~ 6.3.88
Acetone

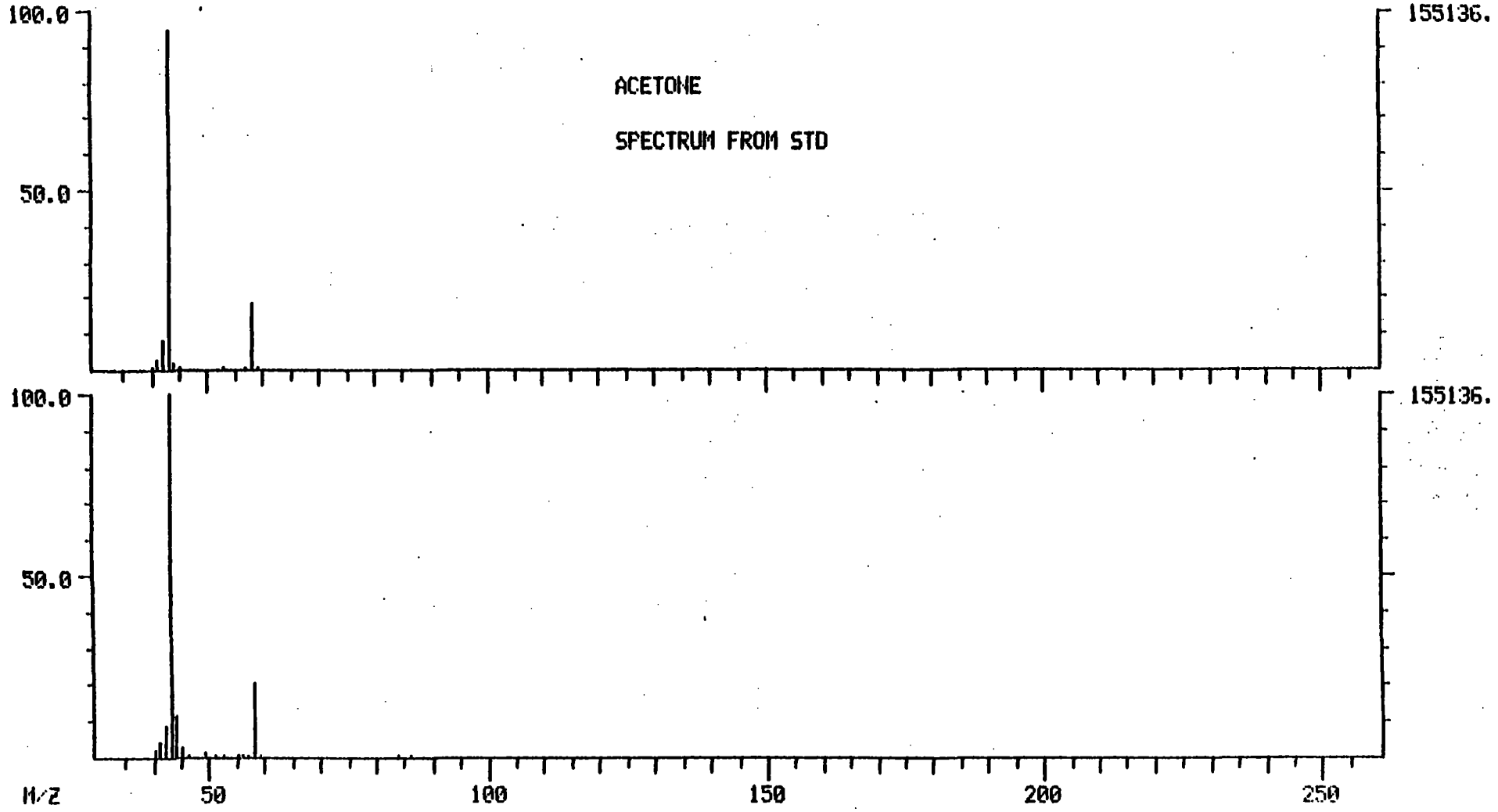


01387

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

DATA: STDJ198 #150
CALI: STDJ198 #1

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

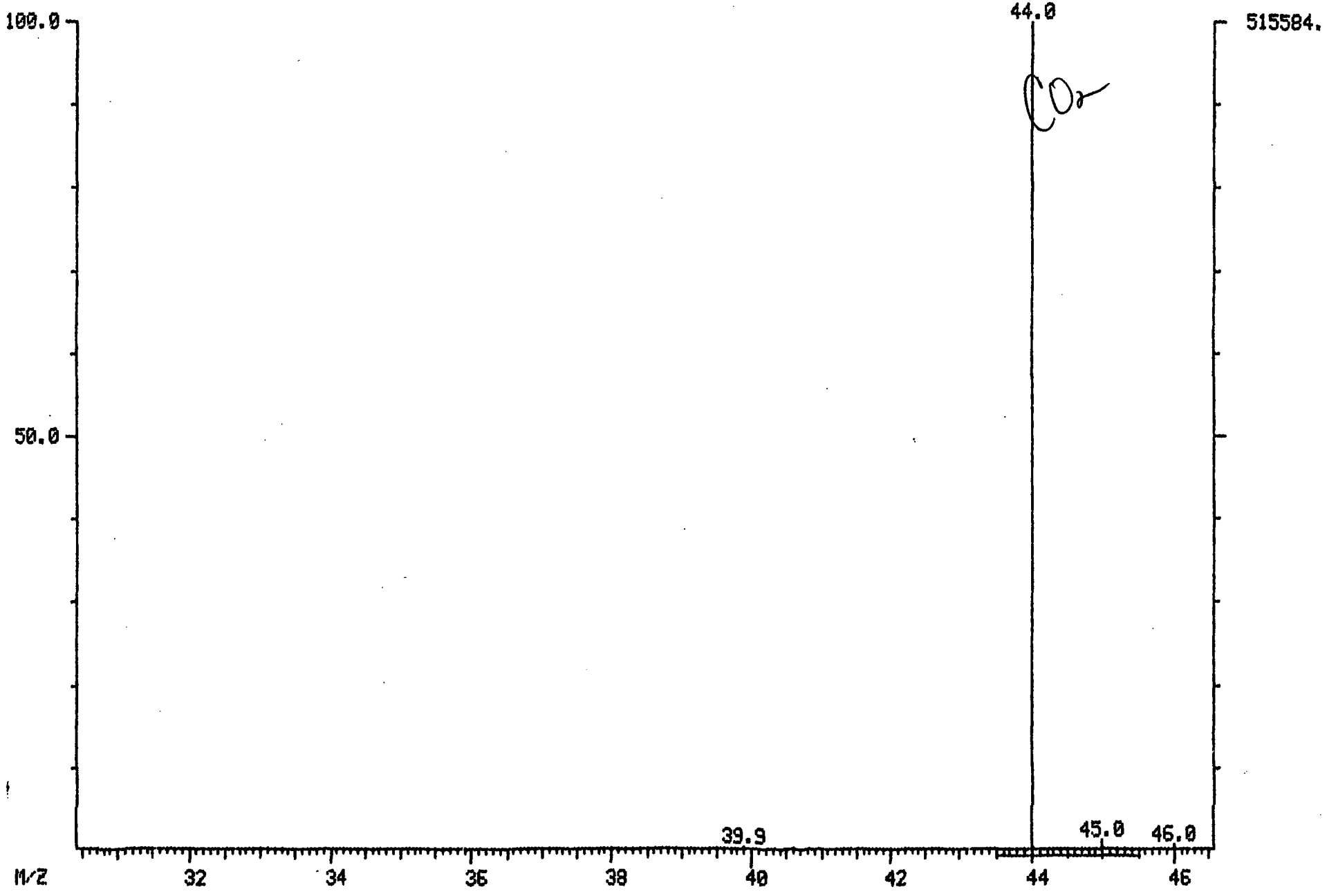


01388

MASS SPECTRUM
05/03/88 1:34:00 + 0:51
SAMPLE: CLP,59450,,59450-01MS,LOW,WATER,59450-01MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 60 DEG. C

DATA: 559450W967 #17
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 525312.



$RF = \frac{2\,ml}{1.06\,\ell} \times \frac{4g}{ml} = 1.89$

6/3/88 20:42:45 SCAN 1 OF 2800
Acquisition started

01389

Acquire MS Run 0:S59450U563 ACQUIRING
06/03/88 20:42:00 + 0:04 Free sectors: 22790 Scan: 5 of 2800
Sample: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2mL,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No:

********** 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 : 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	40.5	0.0
3	325 - 325	-	10.0	40.5			
4	325 - 325	-	0.0	40.5			

********** 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: 30
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	

6/3/88 21:17:48
ACQUISITION COMPLETED
SCANS 1 TO 2800 Centroid

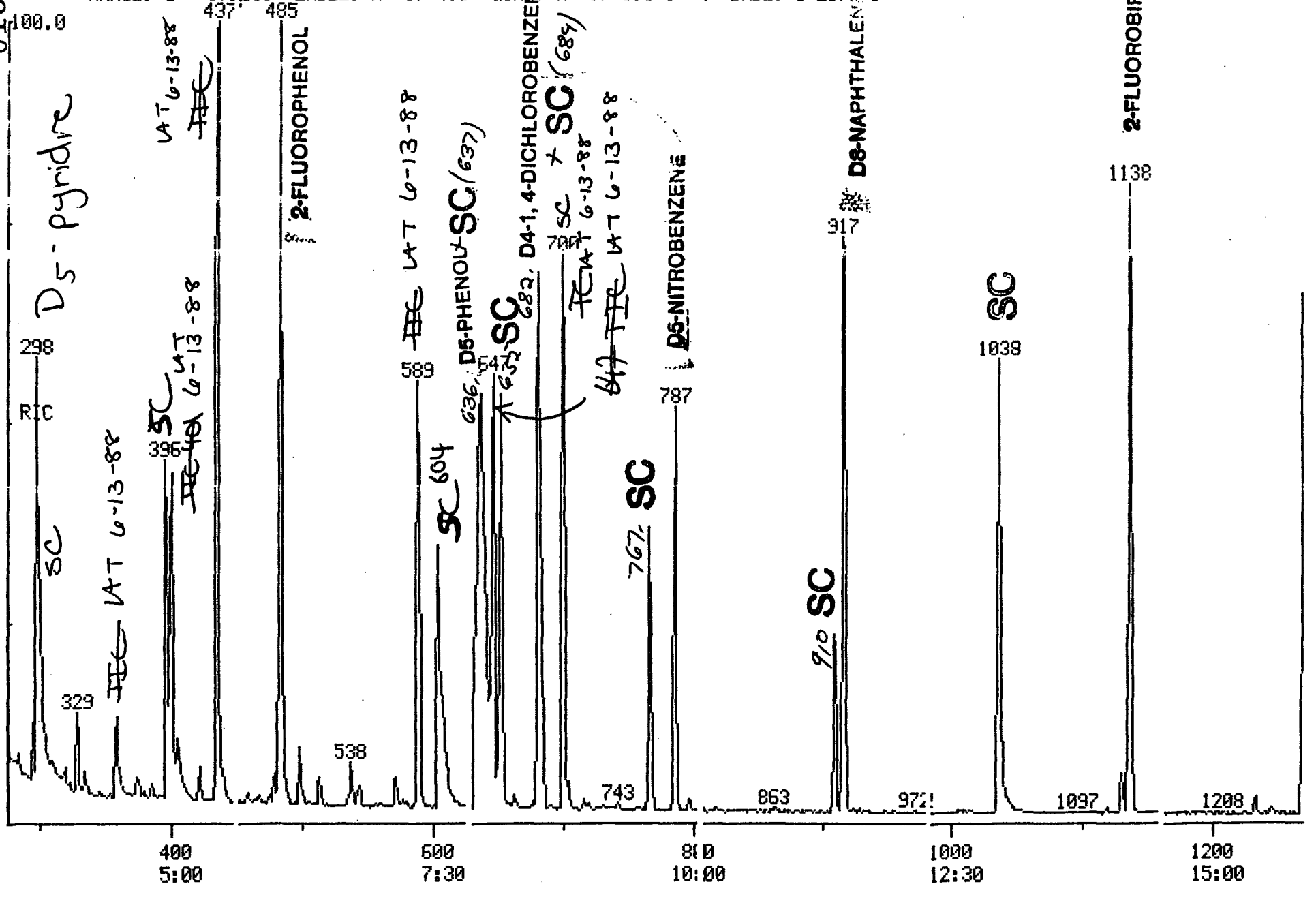
Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2800	192.4	2100.0	9.2	32448. 12.	15.

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

TC=Target Compound
SC=Spike Compound

RIC
06/03/88 20:43:00
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BN1,EPA
CONDS.:
RANGE: G 1,1800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 1 BASE: U 20, 3

DATA: S59450U563 #4 SCANS 270 TO 1270
CALI: 060388CU #5 OUT OF 270 TO 2800



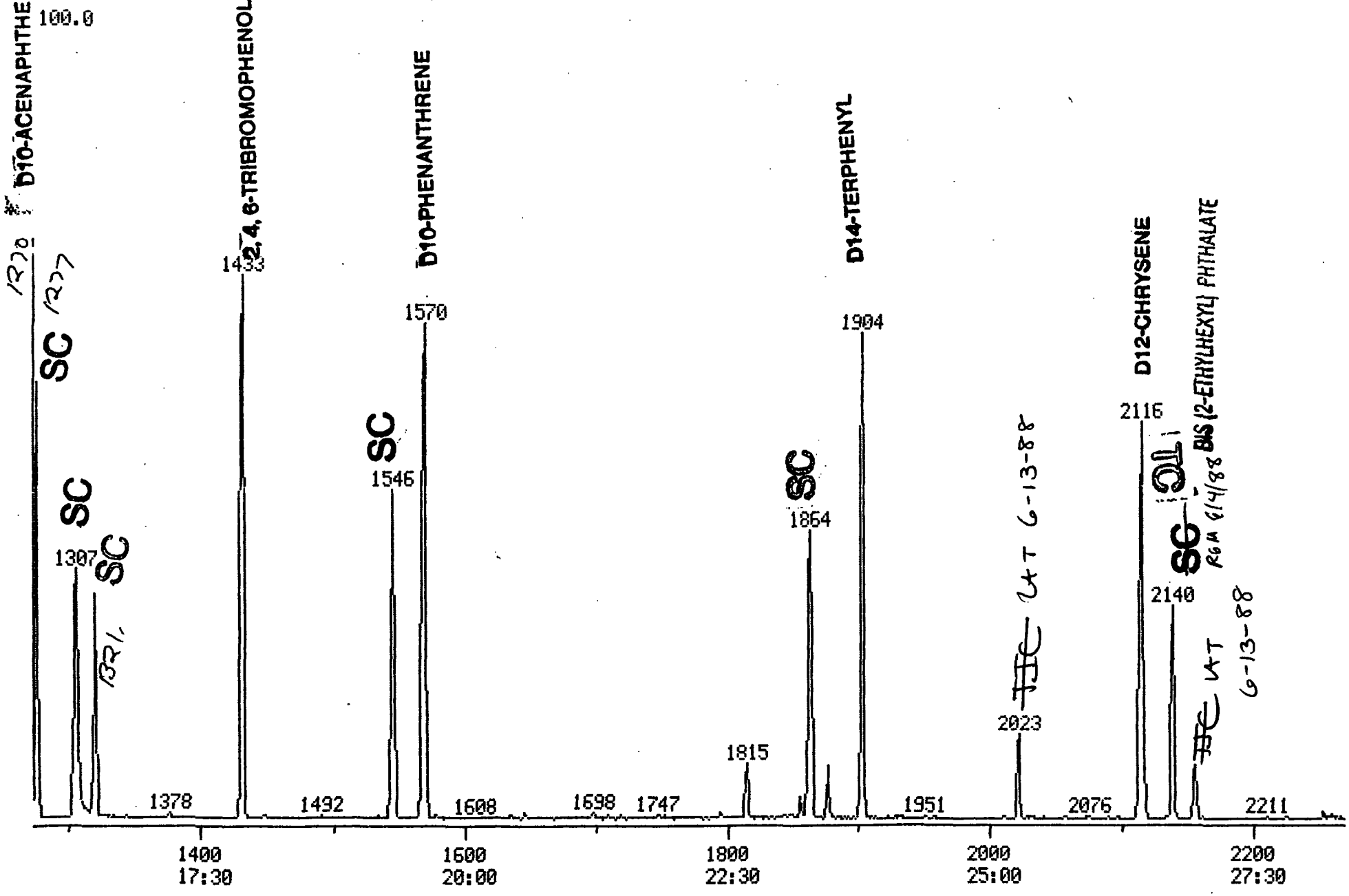
01391

RIC
06/03/88 20:42:00 MS
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559450U563 #4 SCANS 1270 TO 2270
CALI: 060388CU #5 OUT OF 270 TO 2800

TC = Target Compound
SC = Spike Compound

T.I.C.-Tent. Idem. Compound



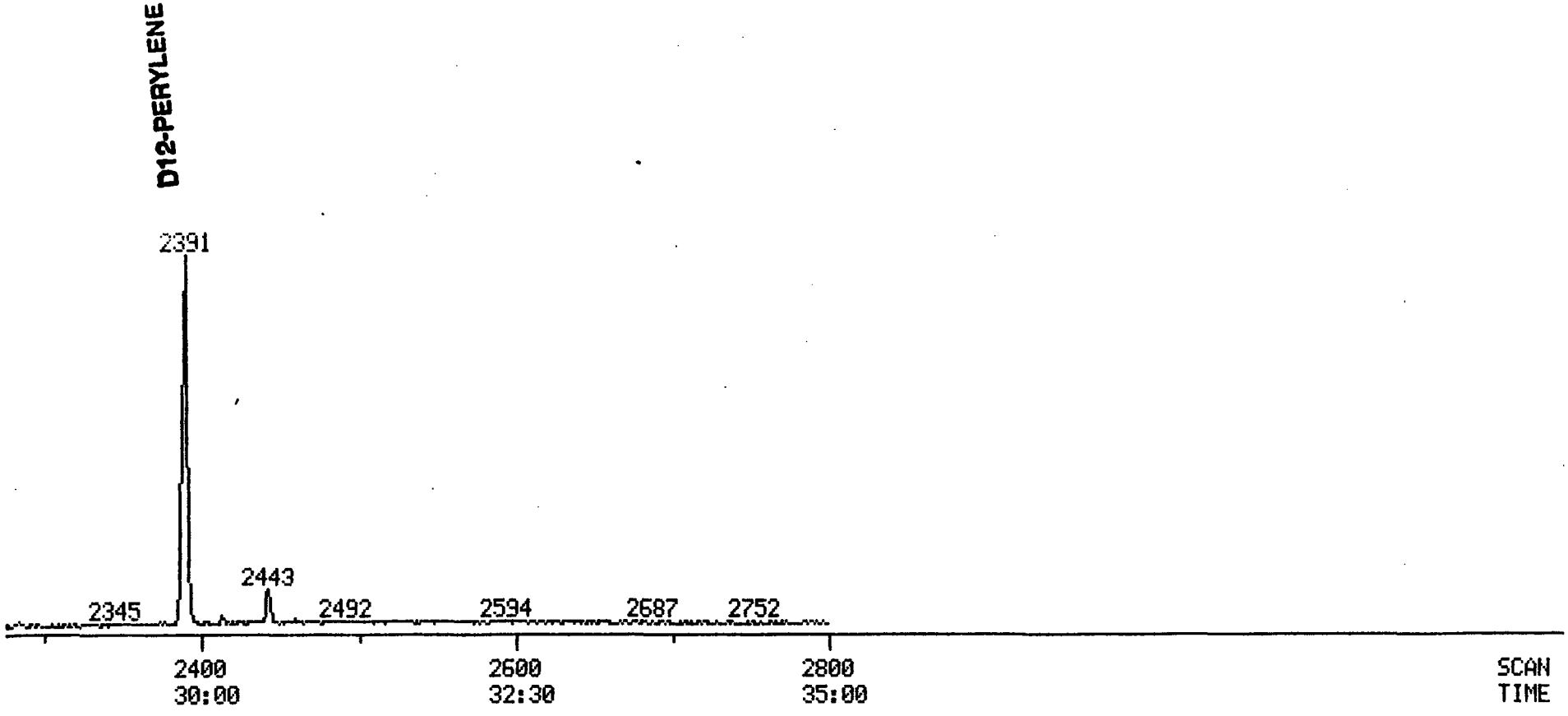
01392

RIC DATA: S59450U563 #4 SCANS 2270 TO 2800
06/03/88 20:42:00 m5 CALI: 060388CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

TC=Target Compound
SC=Spike Compound

TIC-Tent. Ident. Compound

100.0 100608.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/88 9:16:33
DATA FILE: S59450U563
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

(---- STANDARDS -----)				(--- PLUS UNKNOWNS ---)				(- LIST NAMES -)
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	7	5	1	59	ISO1/TCO1
3	3	1	81	18	6	1	119	ISO2/TCO2
3	3	1	81	12	5	1	96	ISO3/TCO3
3	3	1	82	18	7	1	83	ISO4/TCO4
3	3	1	82	10	4	1	97	ISO5/TCO5
3	3	1	23	8	4	1	137	ISO6/TCO6
3	3	1	27	14	7	1	80	ISO7/TCO7
1	1	1	0	4	1	1	0	ISO8/TCO8

77 COMPOUNDS PROCESSED, 25 FOUND

(COMPOUND)			(---------- SEARCH ----------)						(SAT)	(------ CHRO ------)			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-680	682	682	.	1	974	.	152	682	.	1
2	S1	2	-484	485	485	.	1	994	.	112	485	.	1
3	S1	3	-633	635	636	1	1	944	.	99	636	.	1
4	S1	105	-635	637	637	.	1	972	.	94	637	.	1
5	S1	110	-647	649	.	.	.	.	.	93	647	.	1
6	S1	115	-651	653	653	.	1	988	.	128	652	-1	1
7	S1	125	-675	677	.	.	.	.	.	146	.	.	.
8	S2	1	-916	918	917	-1	1	995	.	136	917	.	1
9	S3	1	-1269	1271	1271	.	1	992	.	164	1270	-1	1
10	S1	130	-684	684	684	.	1	975	.	146	684	.	1
11	S1	145	-713	713	.	.	.	.	.	108	.	.	.
12	S1	150	-717	717	.	.	.	.	.	146	.	.	.
13	S1	160	-736	736	.	.	.	.	.	108	.	.	.
14	S1	165	-742	742	.	.	.	.	.	45	.	.	.
15	S1	185	-763	763	.	.	.	.	.	108	.	.	.
16	S1	190	-768	768	767	-1	1	997	.	70	767	.	1
17	S1	200	-771	771	.	.	.	.	.	117	.	.	.
18	S2	2	-787	788	787	-1	1	994	.	82	787	.	1
19	S2	10	-790	791	.	.	.	.	.	77	.	.	.
20	S2	20	-835	836	.	.	.	.	.	82	.	.	.
21	S2	25	-849	850	.	.	.	.	.	139	.	.	.
22	S2	30	-862	863	.	.	.	.	.	107	.	.	.
23	S2	35	-881	882	.	.	.	.	.	93	.	.	.
24	S2	45	-892	893	.	.	.	.	.	122	.	.	.
25	S2	40	-894	895	.	.	.	.	.	162	.	.	.
26	S2	55	-910	911	910	-1	1	987	.	180	910	.	1
27	S2	60	-921	922	.	.	.	.	.	128	921	.	1
28	S2	80	-938	939	.	.	.	.	.	127	.	.	.
29	S2	95	-959	960	.	.	.	.	.	225	.	.	.
30	S2	130	-1037	1038	1038	.	1	993	.	107	1038	.	1
31	S2	145	-1057	1058	.	.	.	.	.	142	1057	.	1
32	S3	20	-1104	1105	.	.	.	.	.	237	.	.	.
33	S3	25	-1121	1122	.	.	.	.	.	196	.	.	.
34	S4	1	-1569	1570	1570	.	1	987	.	188	1570	.	1
35	S3	30	-1127	1128	.	.	.	.	.	196	.	.	.
36	S3	3	-1138	1139	1138	-1	1	994	.	172	1138	.	1
37	S3	40	-1154	1155	.	.	.	.	.	162	.	.	.
38	S3	45	-1184	1185	.	.	.	.	.	65	.	.	.
39	S3	55	-1232	1233	.	.	.	.	.	163	.	.	.
40	S3	65	-1238	1239	.	.	.	.	.	152	.	.	.
41	S3	70	-1244	1245	.	.	.	.	.	165	1246	.	1
42	S3	75	-1269	1270	.	.	.	.	.	138	.	.	.
43	S3	80	-1277	1278	1277	-1	1	993	.	153	1277	.	1
44	S3	85	-1289	1290	.	.	.	.	.	184	.	.	.
45	S3	95	-1306	1307	1307	.	1	996	.	109	1307	.	1
46	S3	90	-1309	1310	.	.	.	.	.	168	.	.	.
47	S3	105	-1321	1322	1321	-1	1	993	.	165	1321	.	1
48	S3	130	-1377	1378	.	.	.	.	.	149	1376	.	1
49	S3	135	-1379	1380	.	.	.	.	.	166	.	.	.
50	S3	140	-1383	1384	.	.	.	.	.	204	.	.	.
51	S3	150	-1395	1396	.	.	.	.	.	138	.	.	.
52	S4	10	-1404	1405	.	.	.	.	.	198	.	.	.
53	S4	15	-1411	1412	.	.	.	.	.	169	.	.	.
54	S3	2	-1433	1434	1433	-1	1	920	.	330	1432	-1	1
55	S4	30	-1482	1483	.	.	.	.	.	248	.	.	.
56	S4	40	-1509	1510	.	.	.	.	.	284	.	.	.
57	S5	1	-2116	2116	2116	.	1	957	.	240	2116	.	1
58	S4	50	-1546	1547	1545	-2	1	991	.	266	1545	.	1
59	S4	65	-1575	1576	.	.	.	.	.	178	1574	.	1
60	S4	70	-1583	1584	.	.	.	.	.	178	.	.	.
61	S4	85	-1711	1711	.	.	.	.	.	149	1709	.	1

63	S6	1	-2391	2391	2391	.	1	987	.	264	2391	.	1
64	S5	15	-1865	1865	1864	-1	1	998	.	202	1864	.	1
65	S5	2	-1905	1905	1904	-1	1	992	.	244	1904	.	1
66	S5	40	-2016	2016	.	.	.	.	.	149	.	.	.
67	S5	50	-2113	2112	.	.	.	.	.	228	.	.	.
68	S5	55	-2115	2114	.	.	.	.	.	252	.	.	.
69	S5	60	-2123	2122	.	.	.	.	.	228	.	.	.
70	S5	65	-2141	2140	2140	.	1	995	.	149	2140	.	1
71	S6	10	-2260	2259	2259	.	1	887	.	149	2259	.	1
72	S6	15	-2324	2323	.	.	.	.	.	252	.	.	.
73	S6	25	-2329	2328	.	.	.	.	.	252	.	.	.
74	S6	35	-2382	2381	.	.	.	.	.	252	.	.	.
75	S6	55	-2595	2595	.	.	.	.	.	276	.	.	.
76	S6	60	-2597	2597	.	.	.	.	.	278	.	.	.
77	S6	65	-2652	2652	.	.	.	.	.	276	.	.	.

Data: S59450U563.TI
06/03/88 20:42:00 MS
Sample: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	682	8:31	1	1.000	A BB	24449.	40.000 UG/ML	3.96
2	112	485	6:04	1	0.711	A BB	63016.	75.576 UG/ML	7.48
3	99	636	7:57	1	0.933	A BB	80001.	77.059 UG/ML	7.62
4	94	637	7:58	1	0.934	A BB	43764.	37.485 UG/ML	3.71
5	93	647	8:05	1	0.949	A VB	521.	0.557 UG/ML	0.06
6	128	652	8:09	1	0.956	A BB	37612.	44.287 UG/ML	4.38
7	NOT FOUND								
8	136	917	11:28	8	1.000	A BB	88558.	40.000 UG/ML	3.96
9	164	1270	15:52	9	1.000	A BB	43322.	40.000 UG/ML	3.96
10	146	684	8:33	1	1.003	A BB	14898.	15.003 UG/ML	1.48
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	70	767	9:35	1	1.125	A BB	13421.	21.278 UG/ML	2.11
17	NOT FOUND								
18	82	787	9:50	8	0.858	A BB	35579.	38.878 UG/ML	3.85
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	180	910	11:22	8	0.992	A BB	12058.	16.111 UG/ML	1.59
27	128	921	11:31	8	1.004	A BB	74.	0.030 UG/ML	0.00
28	NOT FOUND								
29	NOT FOUND								
30	107	1038	12:58	8	1.132	A BB	29001.	49.352 UG/ML	4.88
31	142	1057	13:13	8	1.153	A BB	117.	0.082 UG/ML	0.01
32	NOT FOUND								
33	NOT FOUND								
34	188	1570	19:37	34	1.000	A BV	73015.	40.000 UG/ML	3.96
35	NOT FOUND								
36	172	1138	14:13	9	0.896	A BV	68222.	42.235 UG/ML	4.18
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	165	1246	15:34	9	0.981	A BB	81.	0.219 UG/ML	0.02
42	NOT FOUND								
43	153	1277	15:58	9	1.006	A BB	32267.	24.546 UG/ML	2.43
44	NOT FOUND								
45	109	1307	16:20	9	1.029	A BV	8697.	57.310 UG/ML	5.67
46	NOT FOUND								
47	165	1321	16:31	9	1.040	A BB	12698.	28.177 UG/ML	2.79
48	149	1376	17:12	9	1.083	A BB	89.	0.058 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	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:04	1.00	0.711	1.00	75.58	100.00	1.031	1.364	0.76
3	7:55	1.00	0.930	1.00	77.06	100.00	1.309	1.699	0.77
4	7:57	1.00	0.933	1.00	37.49	50.00	1.432	1.910	0.75
5	8:06	1.00	0.950	1.00	0.56	50.00	0.017	1.530	0.01
6	8:09	1.00	0.956	1.00	44.29	50.00	1.231	1.389	0.89
7	8:27		0.991						
8	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	8:34	1.00	1.004	1.00	15.00	50.00	0.487	1.625	0.30
11	8:55		1.047						
12	8:58		1.053						
13	9:13		1.081						
14	9:17		1.089						
15	9:33		1.120						
16	9:37	1.00	1.128	1.00	21.28	50.00	0.439	1.032	0.43
17	9:39		1.132						
18	9:51	1.00	0.858	1.00	38.88	50.00	0.321	0.413	0.78
19	9:53		0.862						
20	10:27		0.911						
21	10:37		0.926						
22	10:47		0.940						
23	11:01		0.961						
24	11:10		0.973						
25	11:11		0.975						
26	11:23	1.00	0.992	1.00	16.11	50.00	0.109	0.338	0.32
27	11:31	1.00	1.004	1.00	0.03	50.00	0.001	1.107	0.00
28	11:44		1.023						
29	12:00		1.046						
30	12:58	1.00	1.131	1.00	49.35	50.00	0.262	0.265	0.99
31	13:13	1.00	1.153	1.00	0.08	50.00	0.001	0.649	0.00
32	13:49		0.869						
33	14:01		0.883						
34	19:37	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:06		0.887						
36	14:14	1.00	0.896	1.00	42.23	50.00	1.260	1.491	0.84
37	14:26		0.909						
38	14:49		0.932						
39	15:25		0.970						
40	15:29		0.975						
41	15:34	1.00	0.980	1.00	0.22	50.00	0.001	0.342	0.00
42	15:52		0.999						
43	15:58	1.00	1.006	1.00	24.55	50.00	0.596	1.214	0.49
44	16:07		1.015						
45	16:20	1.00	1.028	1.00	57.31	50.00	0.161	0.140	1.15
46	16:22		1.031						
47	16:31	1.00	1.040	1.00	28.18	50.00	0.234	0.416	0.56
48	17:13	1.00	1.084	1.00	0.06	50.00	0.002	1.416	0.00
49	17:15		1.086						
50	17:18		1.089						

Quantitation Report File: S59450U563

01398

Data: S59450U563.TI
06/03/88 20:42:00
Sample: CLP,59450,,0190,LOW,WATER,59450-0190 MS 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	C730 BENZO(A)ANTHRACENE	228 S5# 50		56-55-3
68	C725 3,3'-DICHLOROBENZIDINE	252 S5# 55		91-94-1
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	1432	17:54	9	1.128	A BB	12148.	105.808 UG/ML	10.47
55	NOT FOUND								
56	NOT FOUND								
57	240	2116	26:27	57	1.000	A BV	50710.	40.000 UG/ML	3.96
58	266	1545	19:19	34	0.984	A BB	12208.	48.960 UG/ML	4.84
59	178	1574	19:40	34	1.003	A BB	192.	0.096 UG/ML	0.01
60	NOT FOUND								
61	149	1709	21:22	34	1.089	A BB	559.	0.224 UG/ML	0.02
62	NOT FOUND								
63	264	2391	29:53	63	1.000	A BB	37007.	40.000 UG/ML	3.96
64	202	1864	23:18	57	0.881	A BB	43828.	25.401 UG/ML	2.51
65	244	1904	23:48	57	0.900	A BB	52874.	48.639 UG/ML	4.81
66	NOT FOUND								

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	149	2140	26:45	57	1.011	A BB	17298.	13.108 UG/ML	1.30
71	149	2259	28:14	63	0.945	A BB	501.	0.306 UG/ML	0.03
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	17:27		1.098						
52	17:33		0.894						
53	17:38		0.899						
54	17:55	1.00	1.128	1.00	105.81	100.00	0.112	0.106	1.06
55	18:31		0.944						
56	18:52		0.961						
57	26:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:19	1.00	0.985	1.00	48.96	50.00	0.134	0.137	0.98
59	19:41	1.00	1.003	1.00	0.10	50.00	0.002	1.096	0.00
60	19:47		1.008						
61	21:23	1.00	1.090	1.00	0.22	50.00	0.006	1.364	0.00
62	22:44		1.159						
63	29:54	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:19	1.00	0.881	1.00	25.40	50.00	0.691	1.361	0.51
65	23:49	1.00	0.900	1.00	48.64	50.00	0.834	0.857	0.97
66	25:12		0.952						
67	26:25		0.998						
68	26:26		0.999						
69	26:32		1.003						
70	26:46	1.00	1.011	1.00	13.11	50.00	0.273	1.041	0.26
71	28:15	1.00	0.945	1.00	0.31	50.00	0.011	1.772	0.01
72	29:03		0.972						
73	29:07		0.974						
74	29:46		0.996						
75	32:26		1.085						
76	32:28		1.086						
77	33:09		1.109						

TGA FINISHED, 23 FOUND
FINISHED AT: 6/04/88 9:24:42

RMAL QUANTITATION SUMMARY FILE: S39430U363
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	682	1	24449.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	917	2	88558.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1270	3	43322.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1570	4	73015.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2116	5	50710.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2391	6	37007.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	787	2	35579.	0.921	38.878
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1138	3	68222.	1.260	42.235
9	S5# 2	CS30 TERPHENYL-D14	244	1904	5	52874.	0.834	48.639
10	S1# 3	CS45 PHENOL-D5	99	636	1	80001.	1.309	77.059
11	S1# 2	CS50 2-FLUOROPHENOL	112	485	1	63016.	1.031	75.576
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1432	3	12148.	0.112	105.808
13	S1#105	C315 PHENOL	94	637	1	43764.	1.432	37.485
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128	652	1	37612.	1.231	44.287
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146	684	1	14898.	0.487	15.003
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	767	1	13421.	0.439	21.278
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	910	2	12058.	0.109	16.111
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	1038	2	29001.	0.262	49.352
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	1277	3	32267.	0.596	24.546
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	1307	3	8697.	0.161	57.310
51	S3#105	C570 2,4-DINITROTOLUENE	165	1321	3	12698.	0.234	28.177
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	1545	4	12208.	0.134	48.960
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	1864	5	43825.	0.691	25.401
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	2140	5	17298.	0.273	13.106

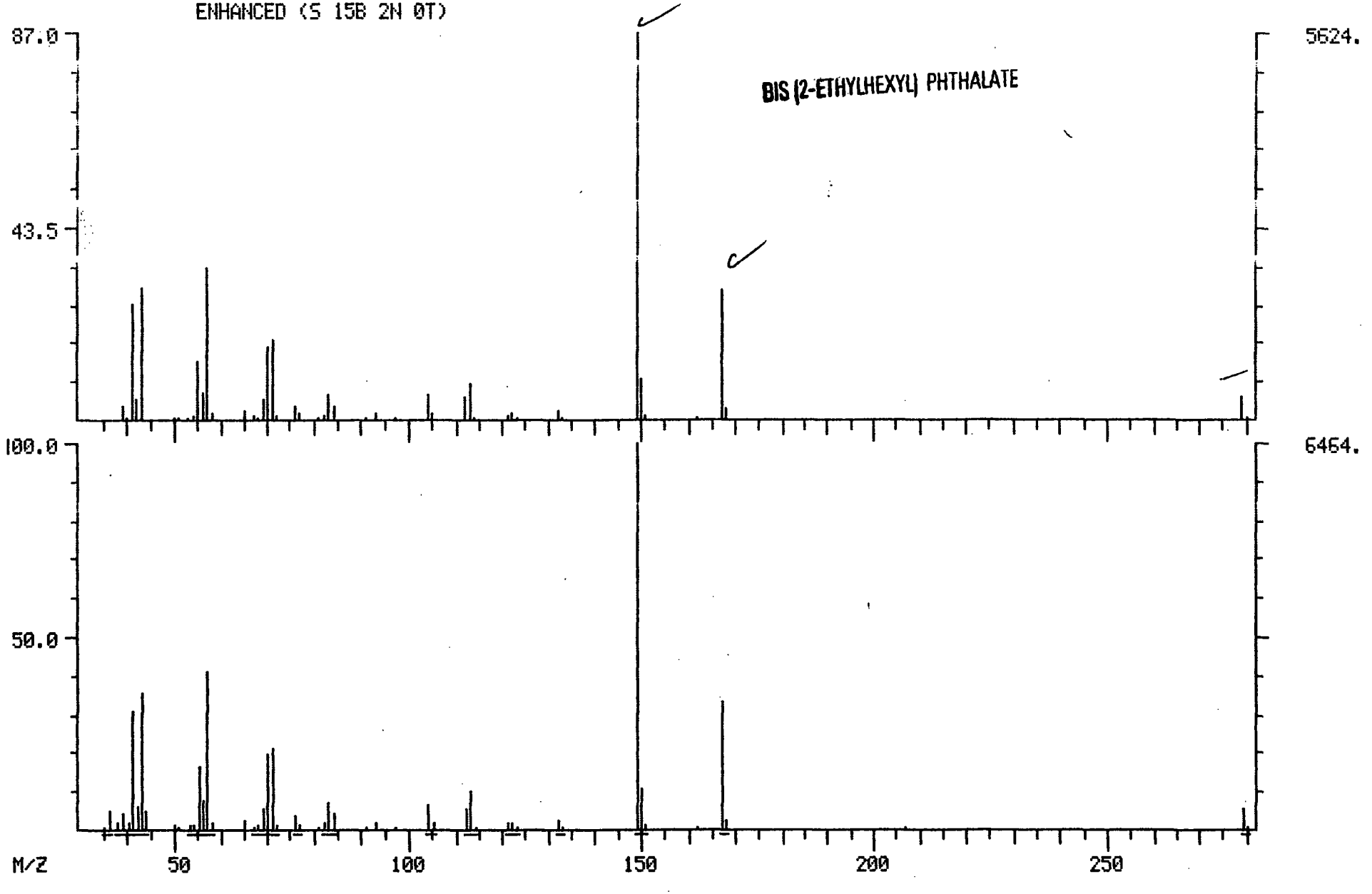
72	S6#	15	C765	BENZO(B)FLUORANTHEN	252	6	NOT FOUND
73	S6#	25	C770	BENZO(K)FLUORANTHEN	252	6	NOT FOUND
74	S6#	35	C775	BENZO(A)PYRENE	252	6	NOT FOUND
75	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	6	NOT FOUND
76	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	6	NOT FOUND
77	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	6	NOT FOUND

DUAL MASS SPECTRUM
06/03/88 20:42:00 + 26:45
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100Z/2ML,BNA,EPA
CONDS.:
GC TEMP: 288 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U563 #2140 BASE M/Z: 149/ 149
CALI: 060388CU #5 RIC: 22559./ 27231.

MS

01402

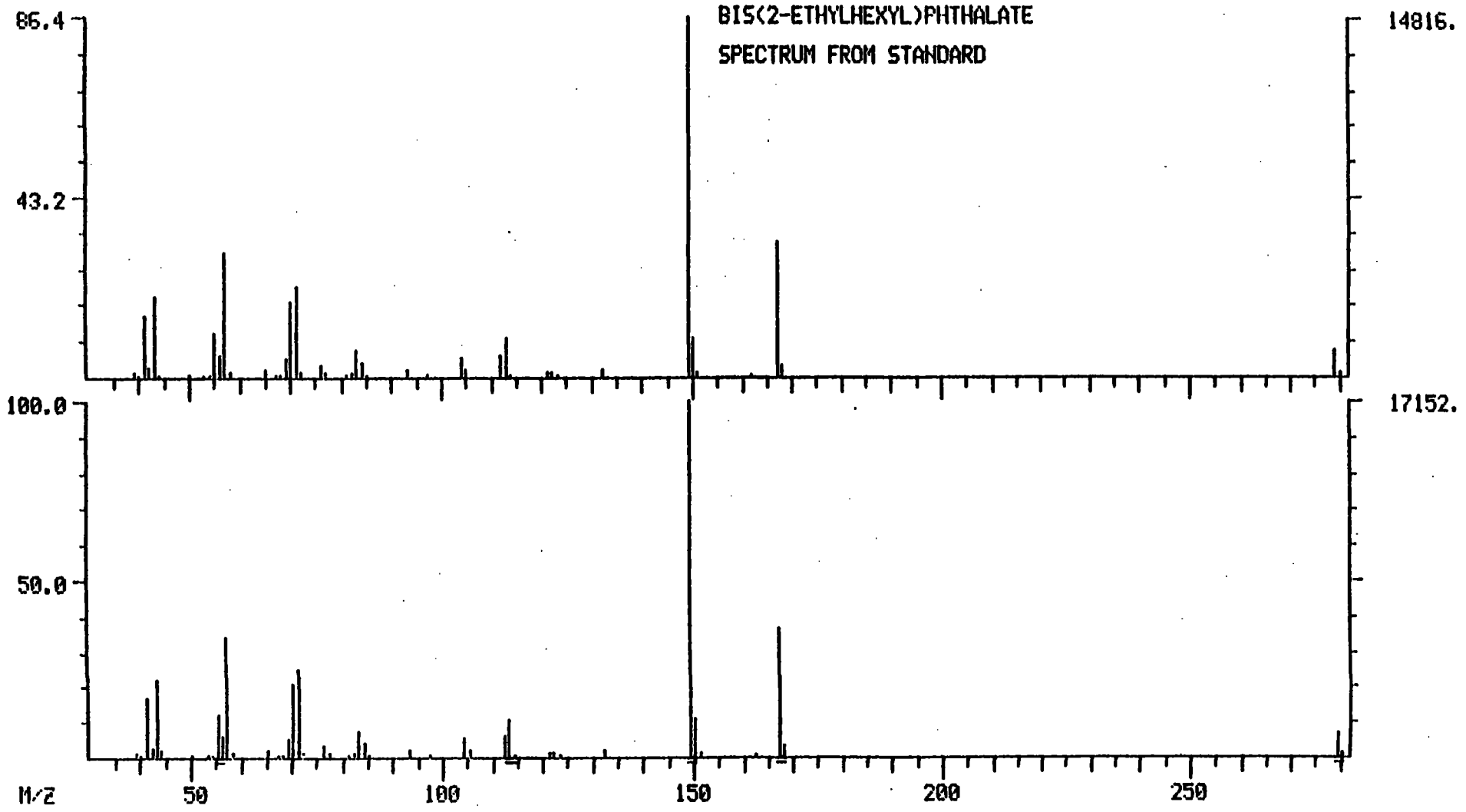


01403

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.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/88 16:23:31
DATA FILE: S59450U563
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

01404

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	6	2	325	ISO1/TCO1
3	3	1	81	14	4	1	141	ISO2/TCO2

26 COMPOUNDS PROCESSED, 9 FOUND

COMPOUND			SEARCH						SAT	CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-680	682	682	.	1	974	.	152	682	.	1
2	S1	4	-299	298	298	.	1	982	.	84	298	.	1
3	S1	20	-301	300	300	.	1	988	.	79	300	.	1
4	S1	30	-397	396	396	.	2	989	.	93	396	.	1
5	S1	62	-462	461	.	.	.	.	.	93	.	.	.
6	S1	64	-494	493	.	.	.	.	.	107	.	.	.
7	S1	73	-525	524	.	.	.	.	.	106	.	.	.
8	S1	83	-561	560	.	.	.	.	.	107	.	.	.
9	S1	87	-582	581	.	.	.	.	.	107	.	.	.
10	S1	88	-602	601	604	3	1	985	.	107	604	.	1
11	S1	89	-610	609	604	-5	1	930	.	107	604	.	1
12	S1	92	-629	628	.	.	.	.	.	107	.	.	.
13	S1	122	-666	666	.	.	.	.	.	107	.	.	.
14	S2	1	-916	918	917	-1	1	995	.	136	917	.	1
15	S3	1	-1269	1271	1271	.	1	992	.	164	1270	-1	1
16	S1	137	-696	699	700	1	1	990	.	106	700	.	1
17	S1	142	-710	713	.	.	.	.	.	106	.	.	.
18	S1	187	-766	768	.	.	.	.	.	108	.	.	.
19	S1	203	-793	795	.	.	.	.	.	106	.	.	.
20	S1	202	-793	795	.	.	.	.	.	106	.	.	.
21	S1	204	-812	814	.	.	.	.	.	122	.	.	.
22	S2	27	-864	866	.	.	.	.	.	107	.	.	.
23	S2	37	-889	891	.	.	.	.	.	107	.	.	.
24	S2	47	-902	904	.	.	.	.	.	107	.	.	.
25	S2	57	-921	923	.	.	.	.	.	107	.	.	.
26	S2	150	-1079	1081	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59450U563

01405

Data: S59450U563.TI
06/03/88 20:42:00 MS
Sample: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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-5-METHYL PYRIDINE	106 S1#203	
20	3-ETHYL-4-METHYL PYRIDINE	106 S1#202	
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	682	8:31	1	1.000	A BB	24449.	40.000 UG/ML	12.66
2	84	298	3:43	1	0.437	A BB	26942.	24.724 UG/ML	7.83
3	79	300	3:45	1	0.440	A BB	27484.	29.298 UG/ML	9.27
4	93	396	4:57	1	0.581	A BV	30015.	34.094 UG/ML	10.79
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	107	604	7:33	1	0.886	A BB	25012.	34.395 UG/ML	10.89
11	107	604	7:33	1	0.886	A BB	25012.	33.448 UG/ML	10.59
12	NOT FOUND								
13	NOT FOUND								
14	136	917	11:28	14	1.000	A BB	88558.	40.000 UG/ML	12.66
15	164	1270	15:52	15	1.000	A BB	43322.	40.000 UG/ML	12.66
16	106	700	8:45	1	1.026	A BB	46216.	39.946 UG/ML	12.65
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	NOT FOUND								
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:44	1.00	0.439	1.00	24.72	50.00	0.882	1.783	0.49
3	3:46	1.00	0.442	1.00	29.30	50.00	0.899	1.535	0.59
4	4:58	1.00	0.583	1.00	34.09	50.00	0.982	1.440	0.68
5	5:46		0.678						
6	6:10		0.725						
7	6:34		0.771						
8	7:01		0.824						
9	7:16		0.855						
10	7:31	1.00	0.884	1.00	34.40	50.00	0.818	1.190	0.69
11	7:37	0.99	0.896	0.99	33.45	50.00	0.818	1.223	0.67
12	7:52		0.924						
13	8:19		0.978						
14	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	8:42	1.01	1.022	1.00	39.95	50.00	1.512	1.893	0.80
17	8:52		1.043						
18	9:34		1.125						
19	9:55		1.164						
20	9:55		1.164						
21	10:09		1.192						
22	10:48		0.942						
23	11:07		0.969						
24	11:16		0.984						
25	11:31		1.352						
26	13:29		1.177						

TGA FINISHED, 7 FOUND
FINISHED AT: 6/04/88 16:26:28

01407

RMAL QUANTITATION SUMMARY FILE: 5574300563
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

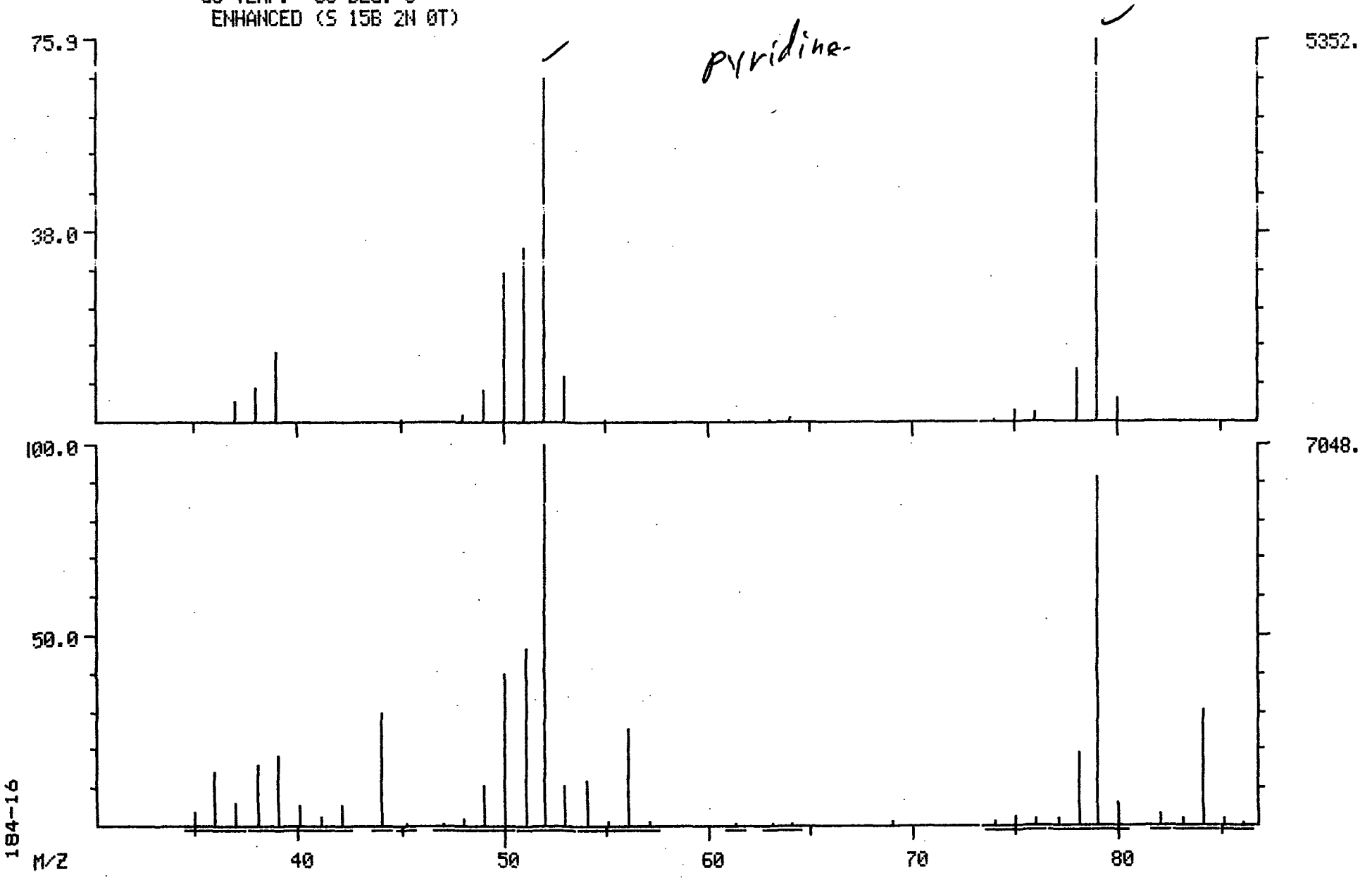
UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	682	1	24449.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	917	2	88558.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1270	3	43322.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	298	1	26942.	0.882	24.724 x2÷100 = 49%
5	S1# 20	PYRIDINE	79	300	1	27484.	0.899	29.298 ✓
6	S1# 30	2-PICOLINE	93	396	1	30015.	0.982	34.094 ✓
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	604	1	25012.	0.818	34.395 ✓
13	S1# 89	4-ETHYL PYRIDINE	107	604	1	25012.	0.818	33.449 ✓
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	700	1	46216.	1.512	39.946 ✓
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		

01408

DUAL MASS SPECTRUM
06/03/88 20:42:00 + 3:45
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 58 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450U563 #300 BASE M/Z: 79/ 52
CALI: 060388CU #5 RIC: 19231./ 36479.



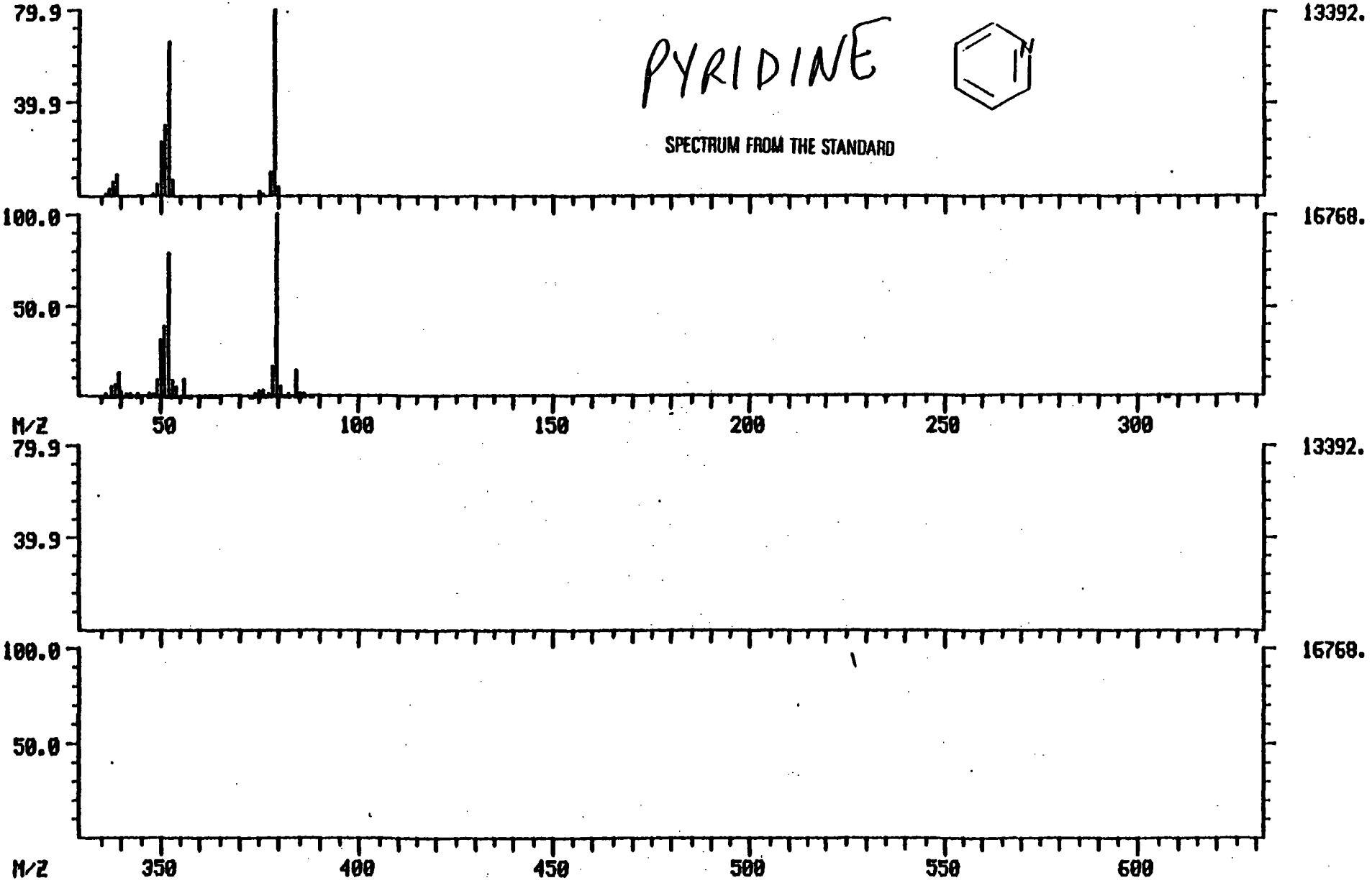
184-16

01409

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 4:10
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #334
CALI: 060288CR #5

BASE M/Z: 79/ 79
RIC: 41855./ 60863.



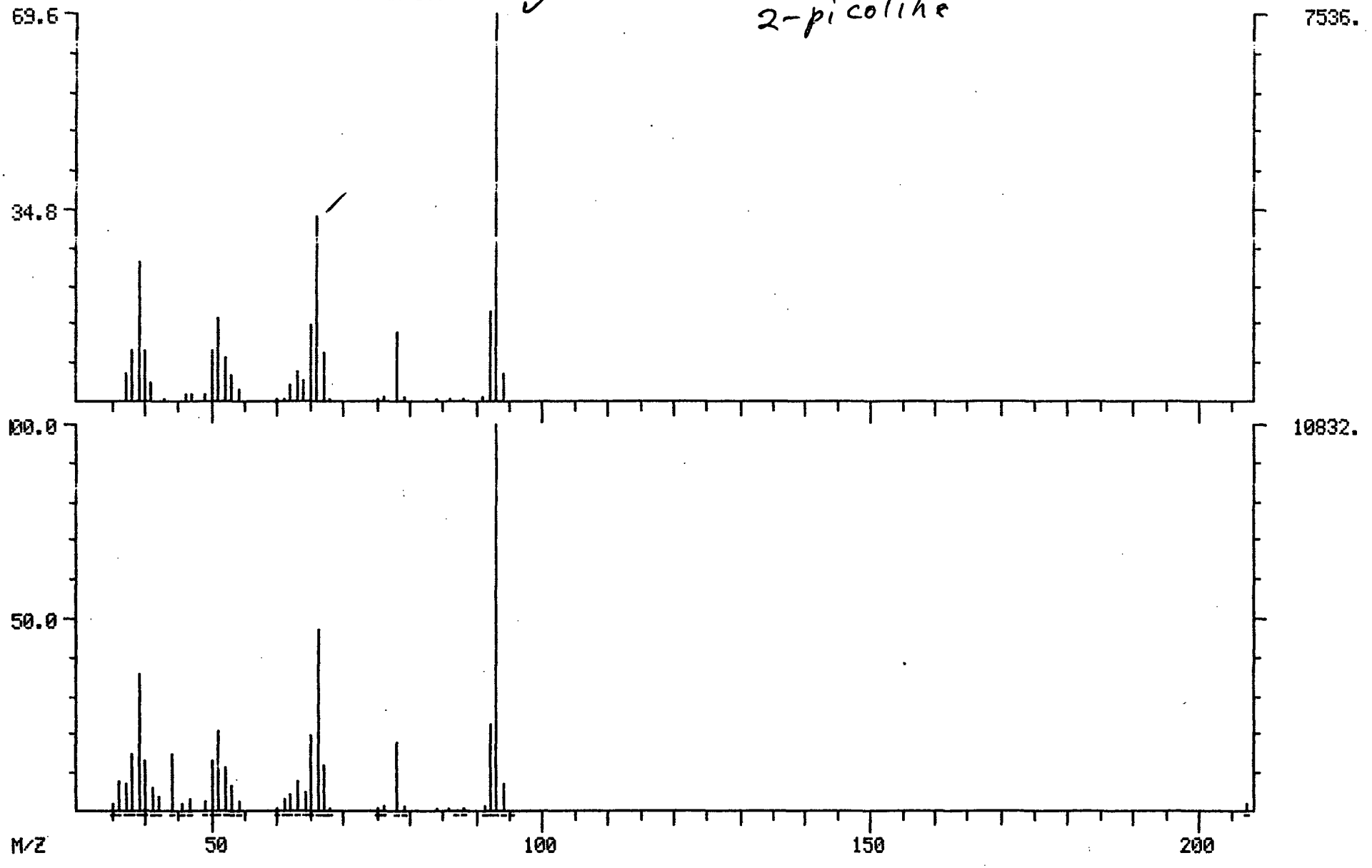
01410

DUAL MASS SPECTRUM
06/03/88 20:42:00 + 4:57
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 70 DEG. C
ENHANCED (S 15B 2N 0T)

MS

DATA: S59450U5E0 #396 BASE M/Z: 93/ 93
CALI: 060388CU #5 RIC: 29279./ 45567.

2-picoline

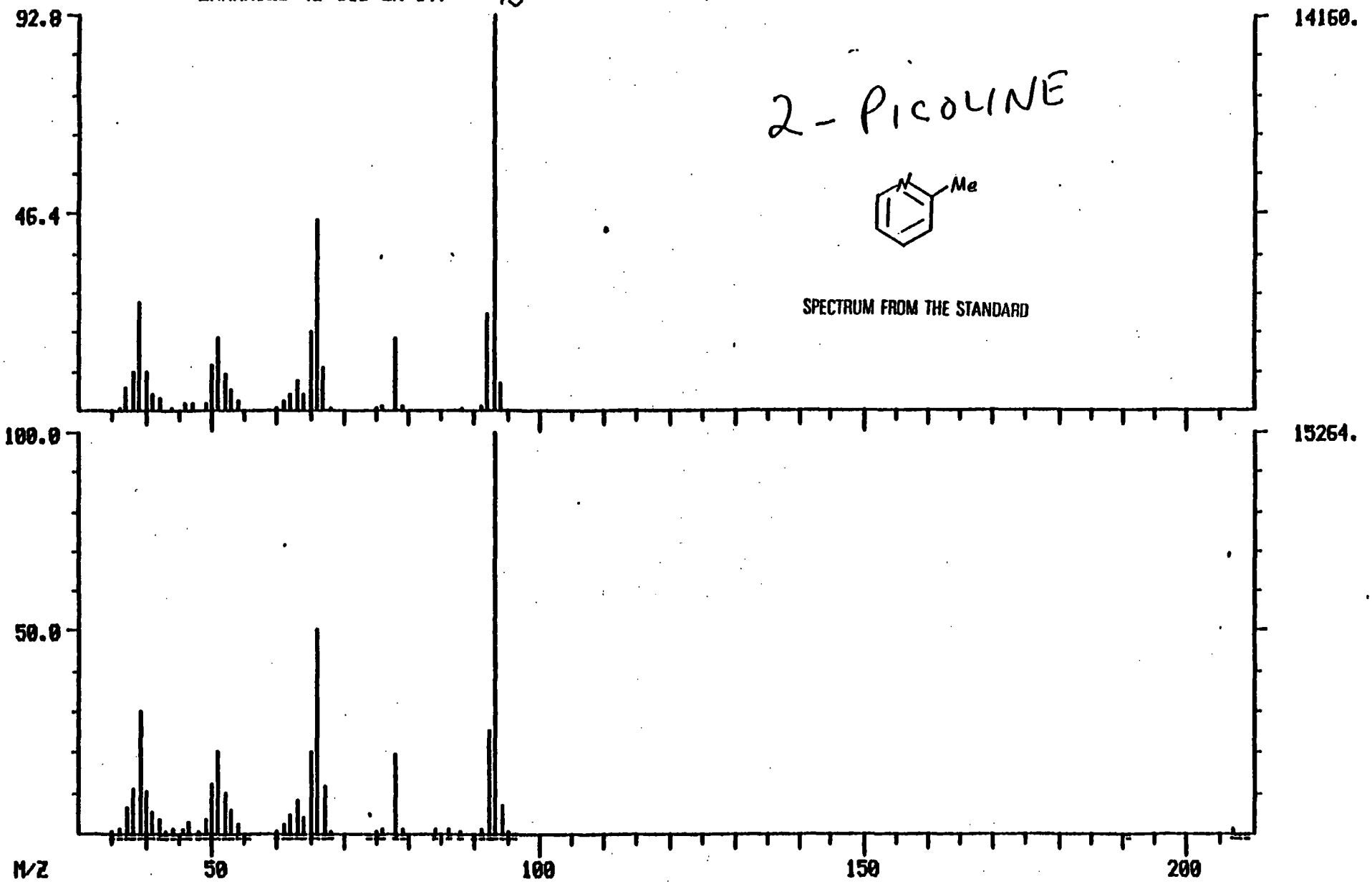


014111

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: STDR976 #429
CALI: 060288CR #5

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



2-PICOLINE

SPECTRUM FROM THE STANDARD

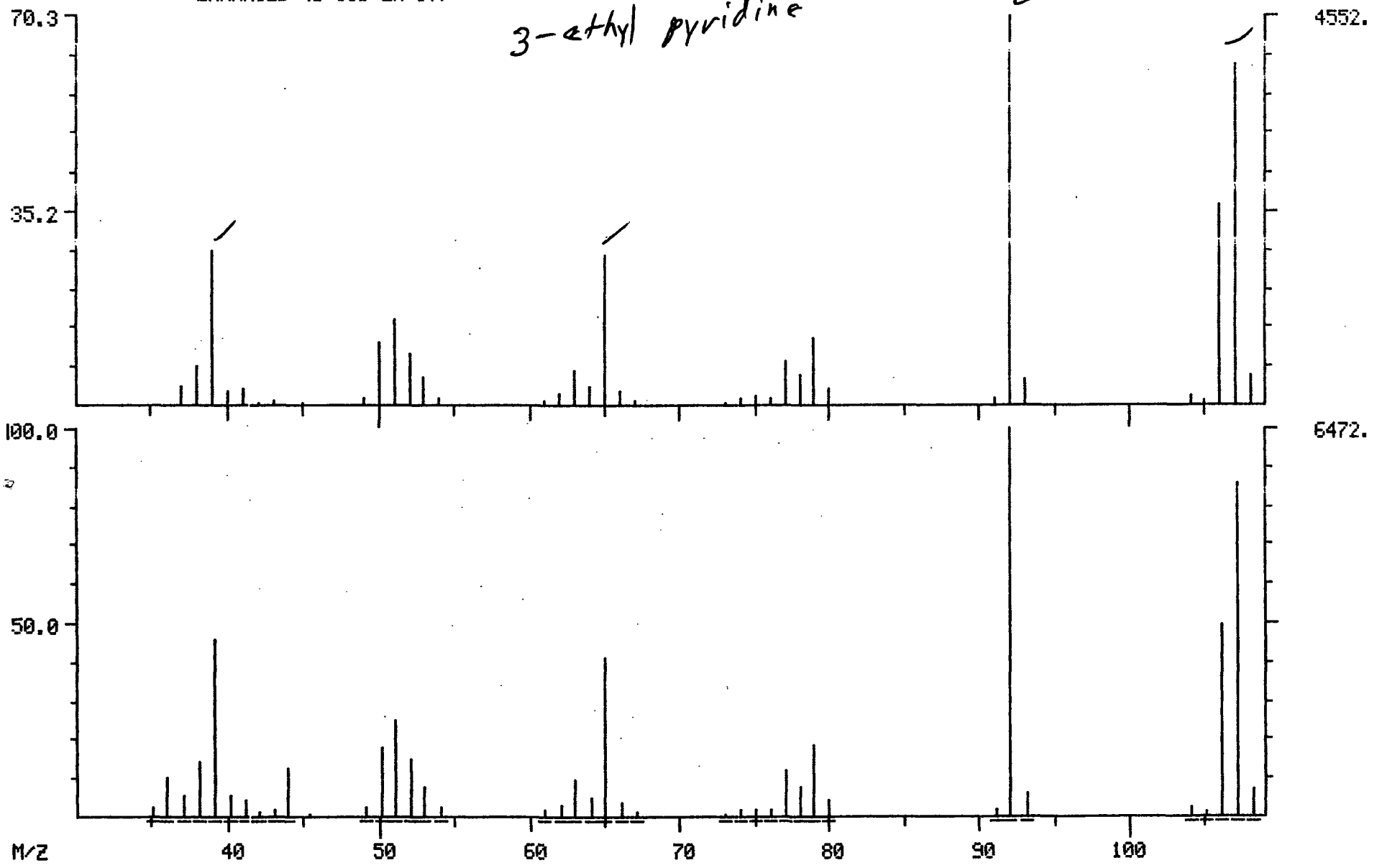
01412

DUAL MASS SPECTRUM
06/03/88 20:42:00 + 7:33
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
CONDS..:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U563 #604
CALI: 060388CU #5

BASE M/Z: 92/ 92
RIC: 22527./ 35007.

3-ethyl pyridine



01413

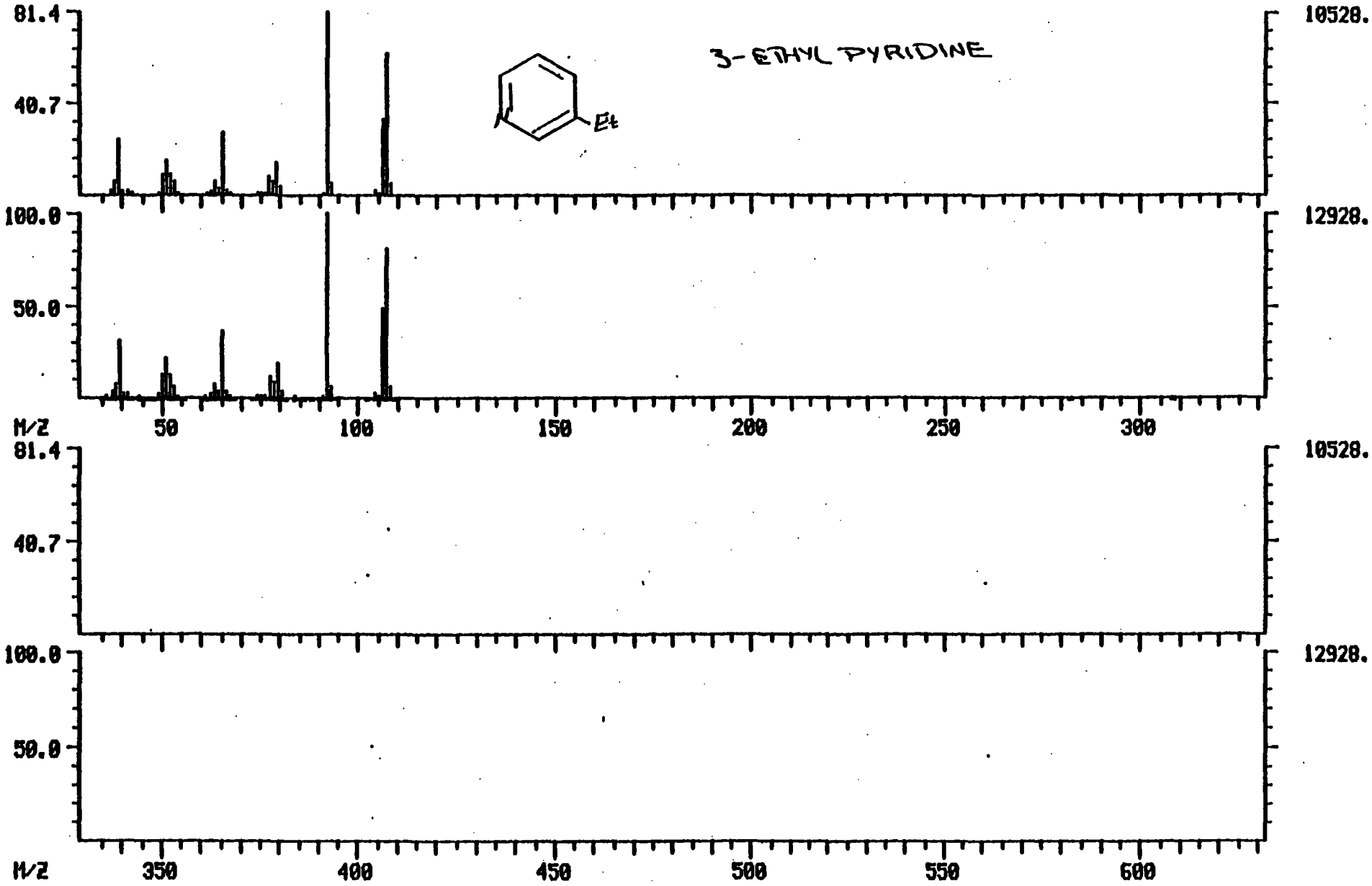
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:55
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #634
CALI: 060288CR #5

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

SPECTRUM FROM THE STANDARD

3-ETHYL PYRIDINE



01414

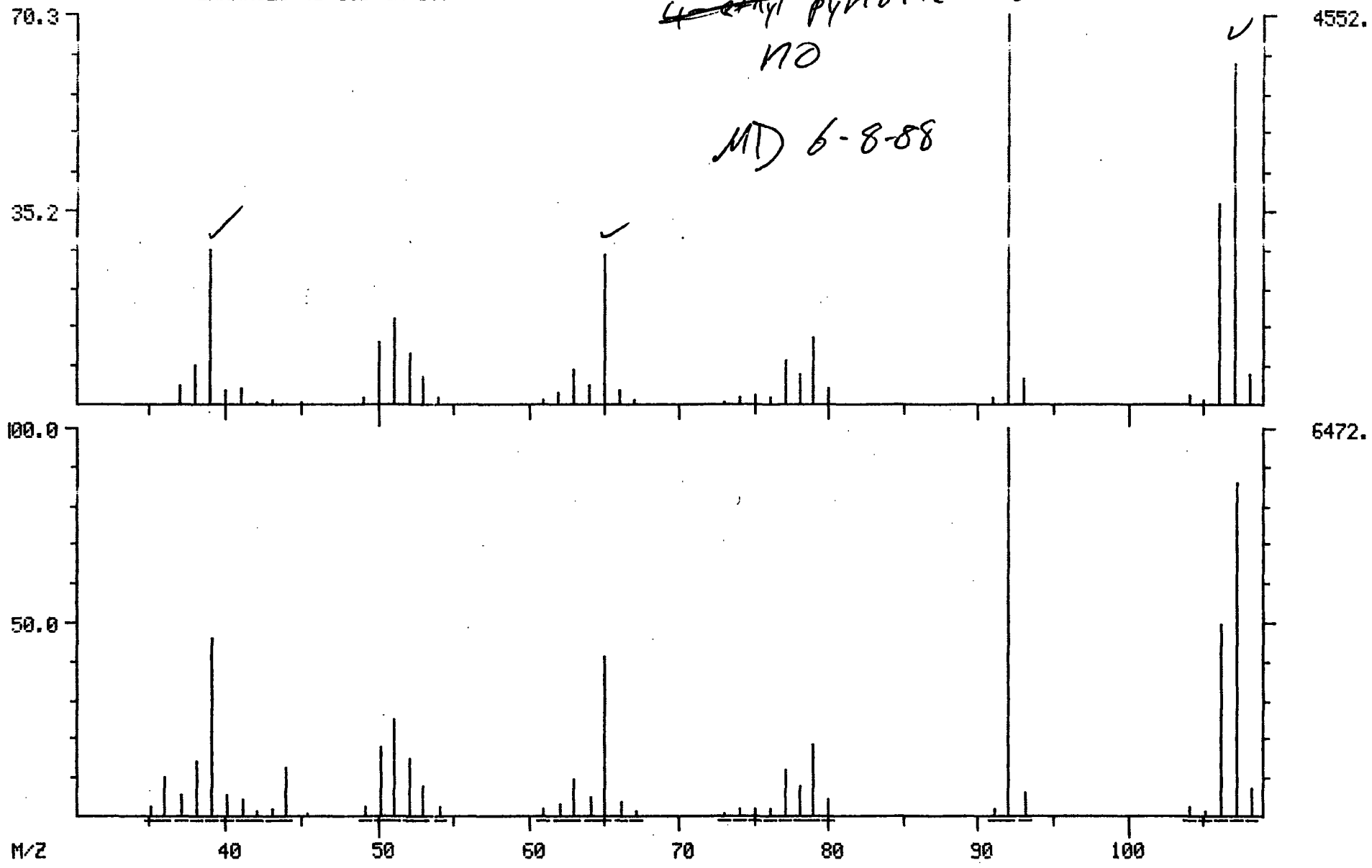
DUAL MASS SPECTRUM
06/03/88 20:42:00 + 7:33
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U563 #604 BASE M/Z: 92/ 92
CALI: 060388CU #5 RIC: 22527./ 35007.

MS

~~4-ethyl pyridine~~
NO

MD 6-8-88



01415

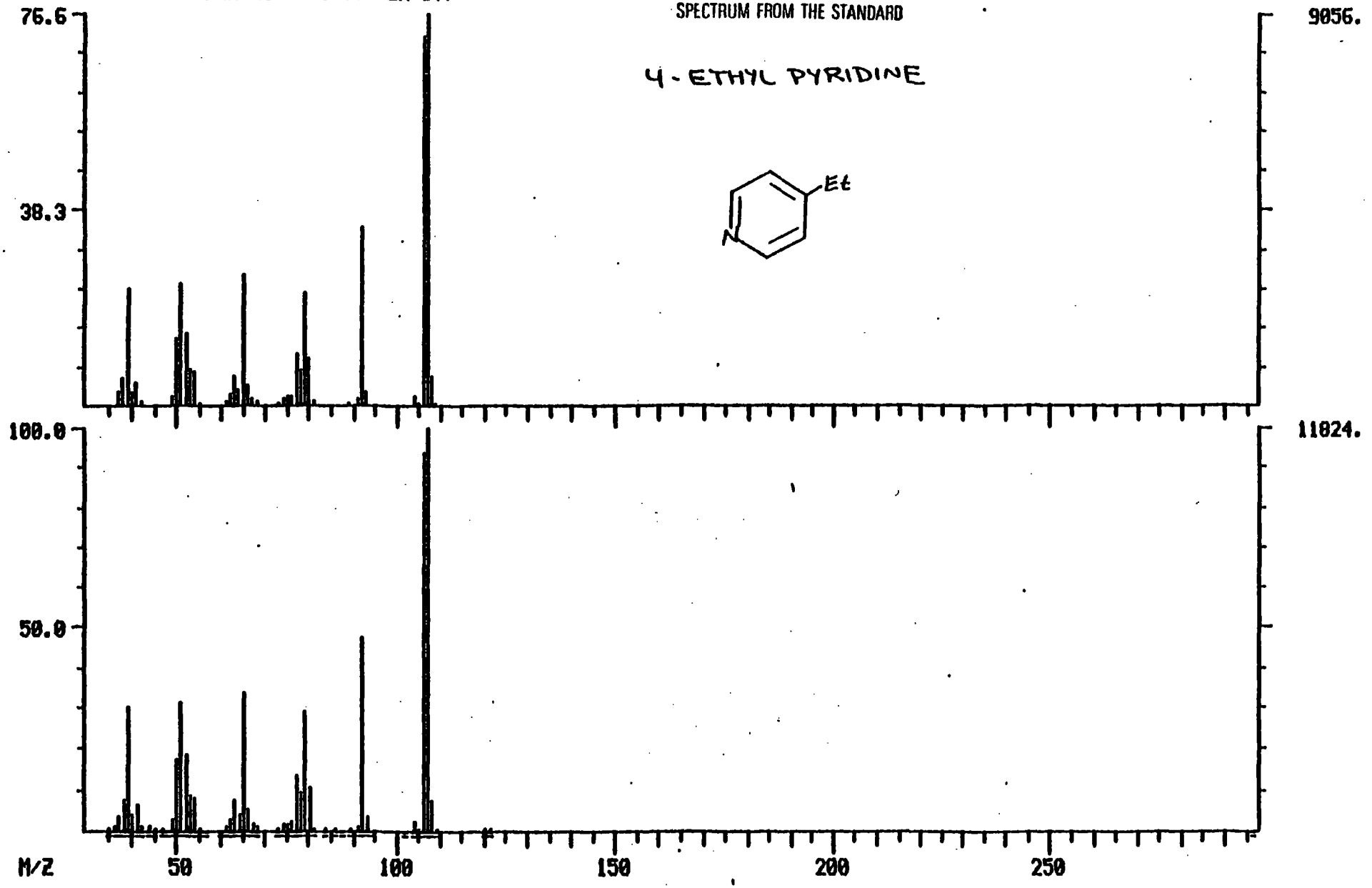
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:01
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #642
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47679./ 62655.

SPECTRUM FROM THE STANDARD

4-ETHYL PYRIDINE



01416

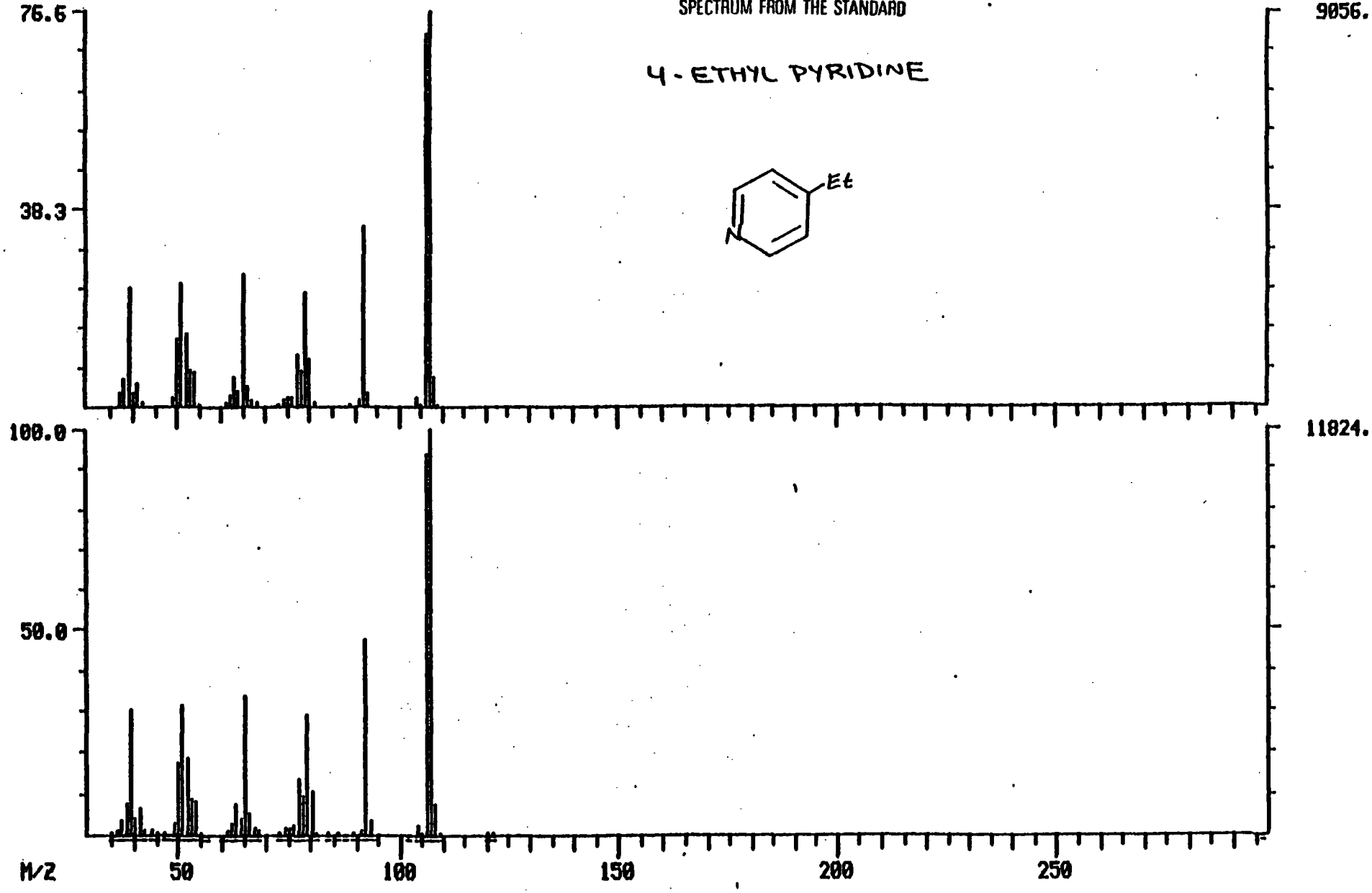
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:01
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STOR976 #642
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47679./ 62655.

SPECTRUM FROM THE STANDARD

4-ETHYL PYRIDINE



01417

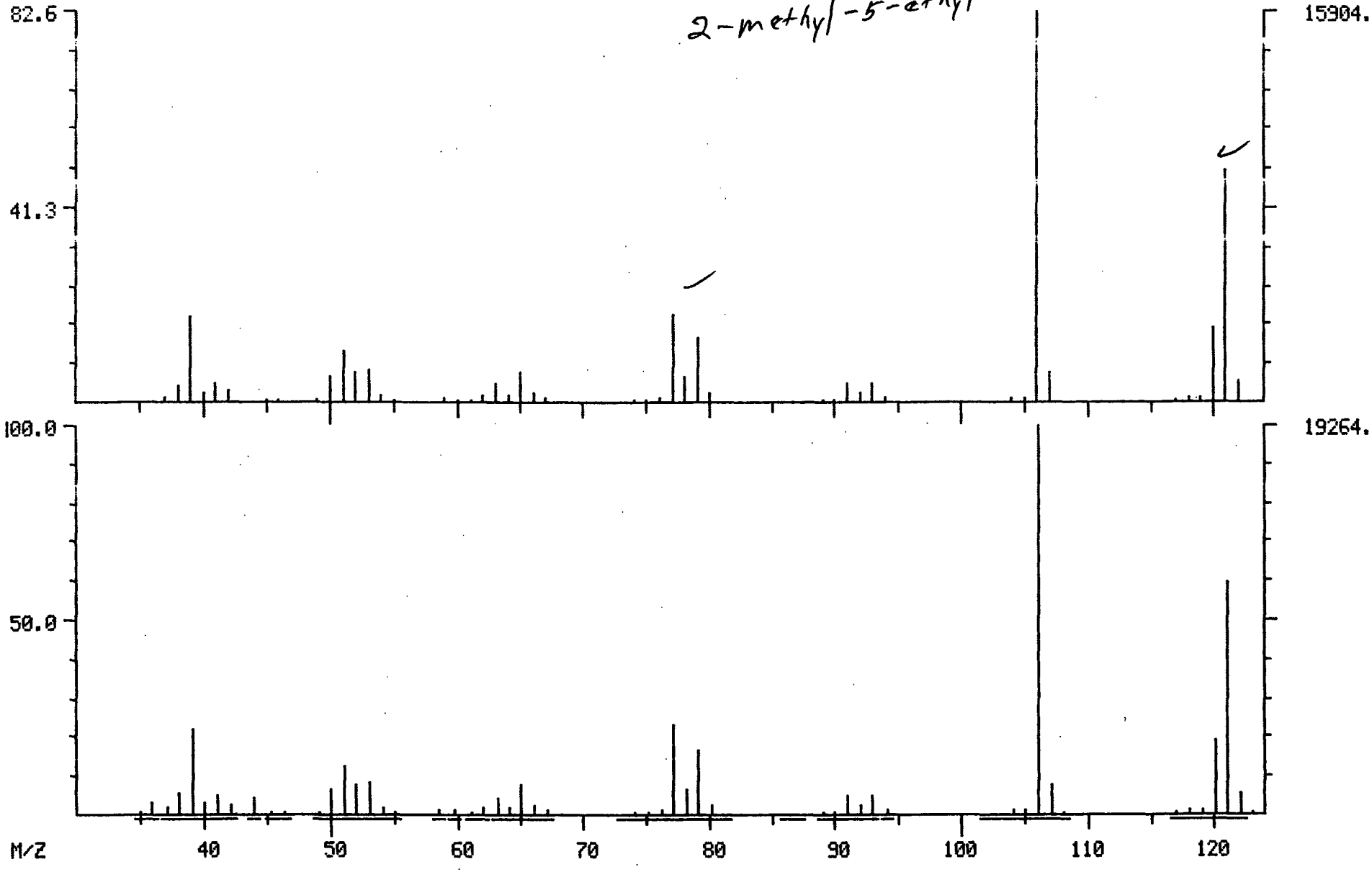
DUAL MASS SPECTRUM
06/03/88 20:42:00 + 8:45
SAMPLE: CLP,59450,,0190,LOW,WATER,59450-0190 100Z/2ML,BNA,EPA
CONDS.:
GC TEMP: 108 DEG. C
ENHANCED (S 15B 2N 0T)

MS

DATA: S59450U5S3 #700
CALI: 060388CU #5

BASE M/Z: 106/ 106
RIC: 57791./ 71679.

2-methyl-5-ethyl pyridine

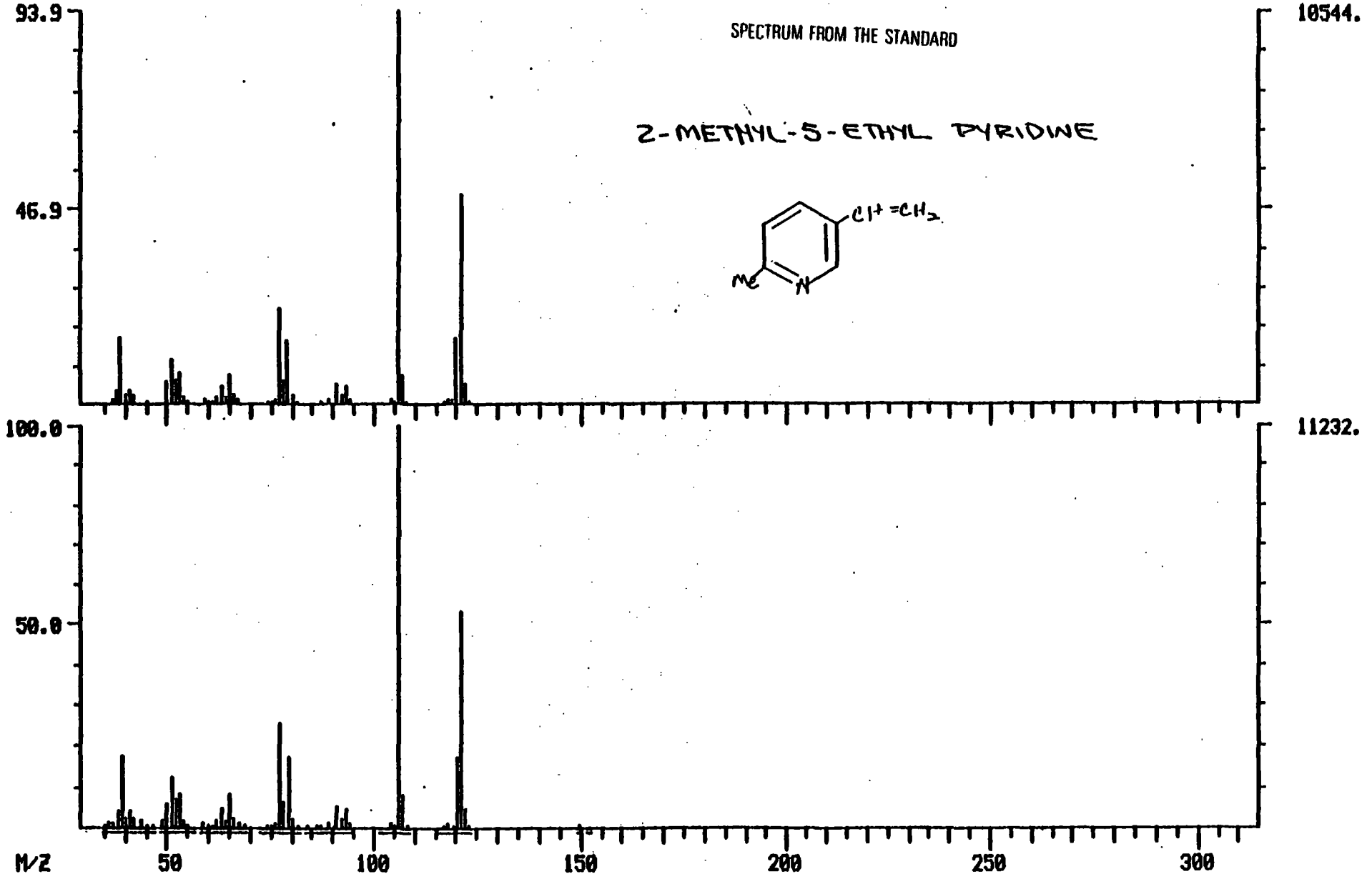


014418

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.



RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: 2: S59450X873. STARTED : 6/07/88 3:47:38 4.0L

01419

6/6/88 21:36:26 SCAN 1 OF 3900 $RF = \frac{ng}{ml} \times \frac{0.5ml}{4.0L} = 0.125 \frac{ng}{L}$

Acquisition started

SV = 1

Acquire Run 2: S59450X873 ACQUIRING
06/06/88 21:36:00 + 0:03 Free sectors: 9508 Scan: 7 of 3900
Sample: 59450-~~170~~ MS PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No: 59436

********** GC PARAMETERS **********
Loaded GC Desc: PA Current GC oven tmp: 29 DegC Injector : 265 DegC
Current GC Desc: PA GC elapsed time : 0: 7 min Int. oven : 300 DegC

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

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

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

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

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

6/6/88 22:04:51 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	0.105	1	100	0	1	1	Pos
3	263.579	264.579	0.105	1	100	0	1	1	Pos

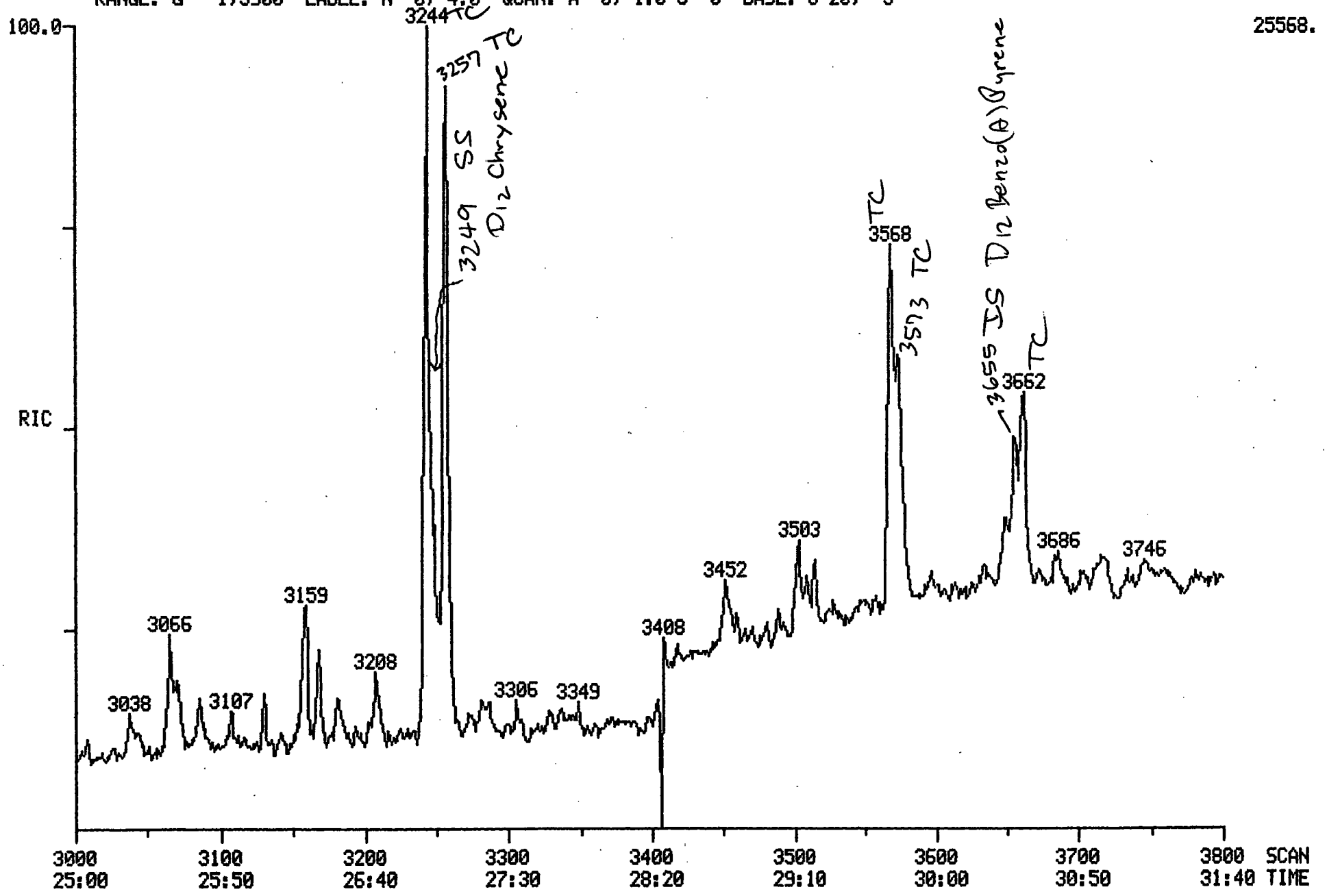
6/6/88 22:09:01
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode Scans Secs Out of % Peaks per scan per sec

01420

TC = Target Compound

MIDRIC DATA: S59450X873 #1 SCANS 3000 TO 3800
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
RANGE: G 1,3900 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59450X873

01421

Data: S59450X873.TI
06/06/88 21:36:00
Sample: 59450-170 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No.: 59436

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

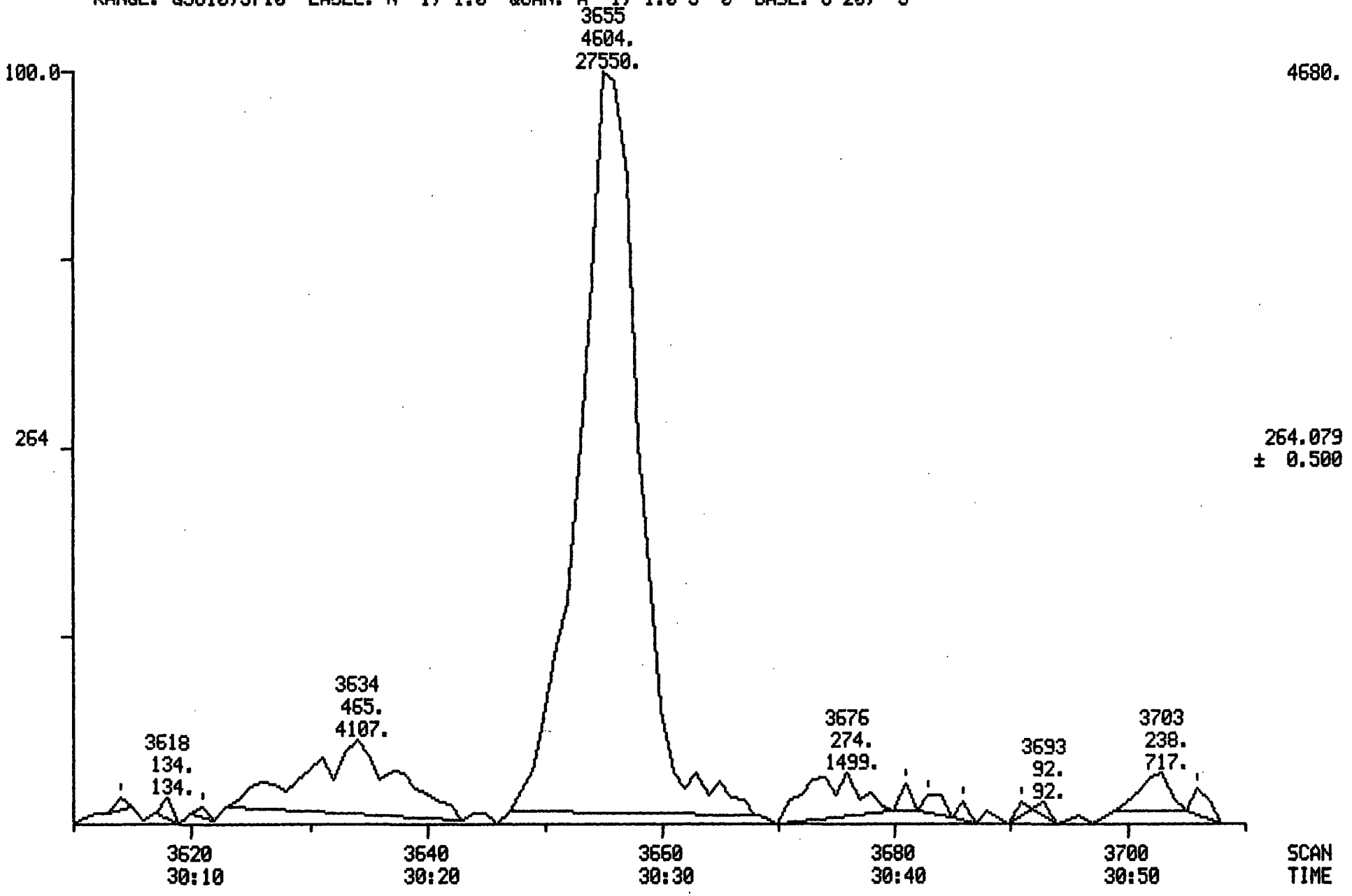
No	Name	
1	D12-BENZO(A)PYRENE	264IPH# 01
2	D12-CHRYSENE	240SPH# 02
3	BENZO(A)ANTHRACENE	228 PH# 03
4	BENZO(A)ANTHRACENE	226 PH# 04
5	CHRYSENE	228 PH# 05
6	CHRYSENE	226 PH# 06
7	BENZO(B)FLUORANTHENE	252 PH# 07
8	BENZO(B)FLUORANTHENE	250 PH# 08
9	BENZO(K)FLUORANTHENE	252 PH# 09
10	BENZO(K)FLUORANTHENE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

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3655	30:27	1	1.000	A BB	27550.	80.000	NG/ML	6.27
2	240	3249	27:04	1	0.889	A BB	26590.	47.137	NG/ML	3.70
3	228	3244	27:02	1	0.888	A BV	72702.	140.264	NG/ML	11.00
4	226	3244	27:02	1	0.888	A BV	18268.	150.796	NG/ML	11.83
5	228	3257	27:08	1	0.891	A VB	74986.	144.796	NG/ML	11.36
6	226	3257	27:08	1	0.891	A VB	20020.	137.543	NG/ML	10.79
7	252	3568	29:44	1	0.976	A BB	80260.	158.396	NG/ML	12.42
8	250	3568	29:44	1	0.976	A BV	9277.	67.288	NG/ML	5.28
9	252	3568	29:44	1	0.976	A BB	80260.	161.931	NG/ML	12.70
10	250	3568	29:44	1	0.976	A BV	9277.	71.887	NG/ML	5.64
11	252	3597	29:58	1	0.984	A BB	580.	1.126	NG/ML	0.09
12	252	3661	30:30	1	1.002	A VV	23905.	54.286	NG/ML	4.26
13	250	3662	30:31	1	1.002	A BB	5192.	59.457	NG/ML	4.66

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:30	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:05	1.00	0.888	1.00	47.14	80.00	0.965	1.638	0.59
3	27:02	1.00	0.887	1.00	140.26	80.00	2.639	1.505	1.75
4	27:02	1.00	0.887	1.00	150.80	80.00	0.663	0.352	1.88
5	27:08	1.00	0.890	1.00	144.80	80.00	2.722	1.504	1.81
6	27:08	1.00	0.890	1.00	137.54	80.00	0.727	0.423	1.72
7	29:45	1.00	0.976	1.00	158.40	80.00	2.913	1.471	1.98
8	29:46	1.00	0.976	1.00	67.29	80.00	0.337	0.400	0.84
9	29:50	1.00	0.978	1.00	161.93	80.00	2.913	1.439	2.02
10	29:50	1.00	0.978	1.00	71.89	80.00	0.337	0.375	0.90
11	29:41	1.01	0.982	1.00	1.13	80.00	0.021	1.496	0.01
12	30:34	1.00	1.002	1.00	54.29	80.00	0.868	1.279	0.68
13	30:34	1.00	1.002	1.00	59.46	80.00	0.188	0.254	0.74

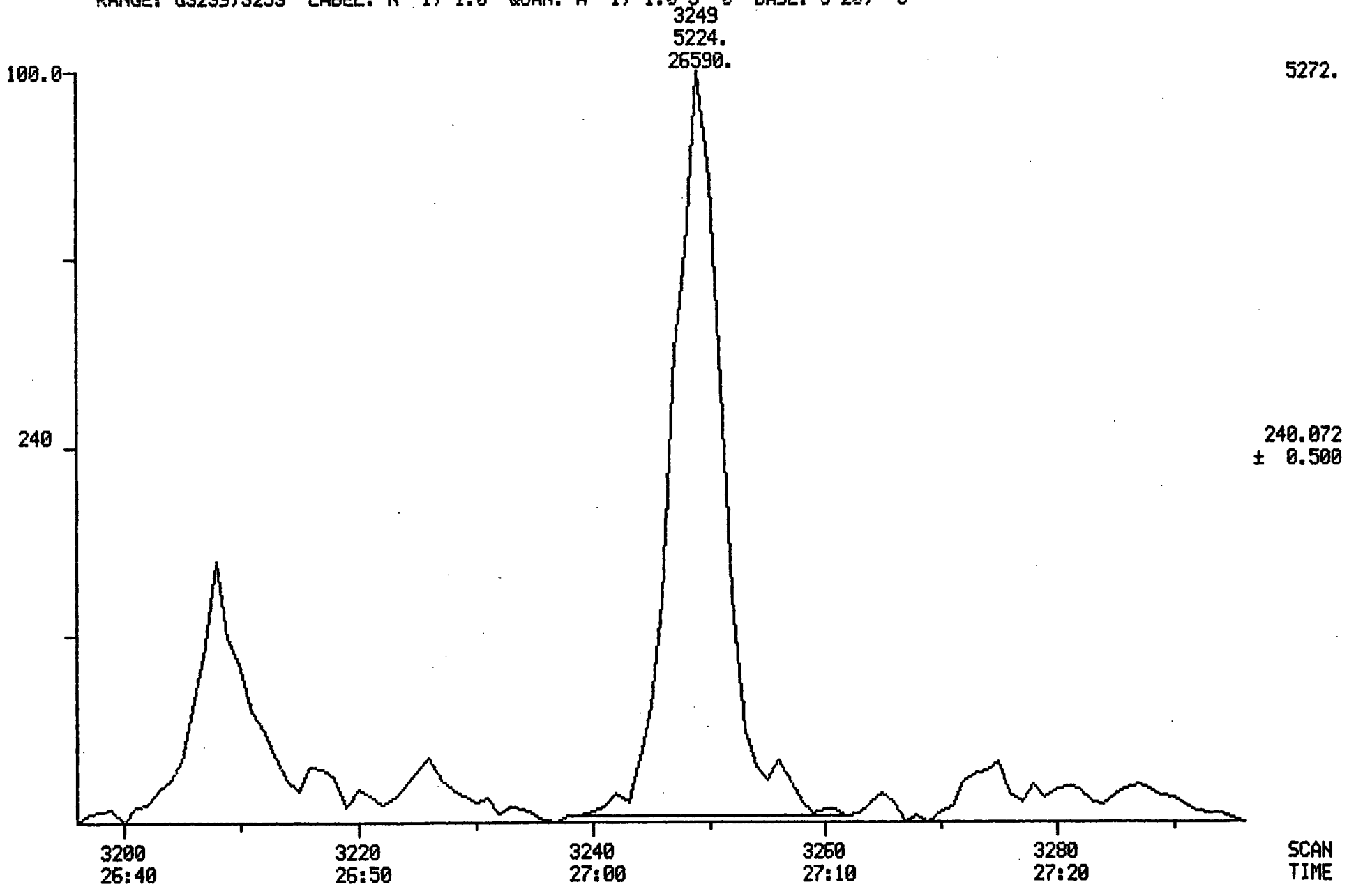
01422

MIDMASS CHROMATOGRAM DATA: S59450X873 #3660 SCANS 3610 TO 3710
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3610,3710 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



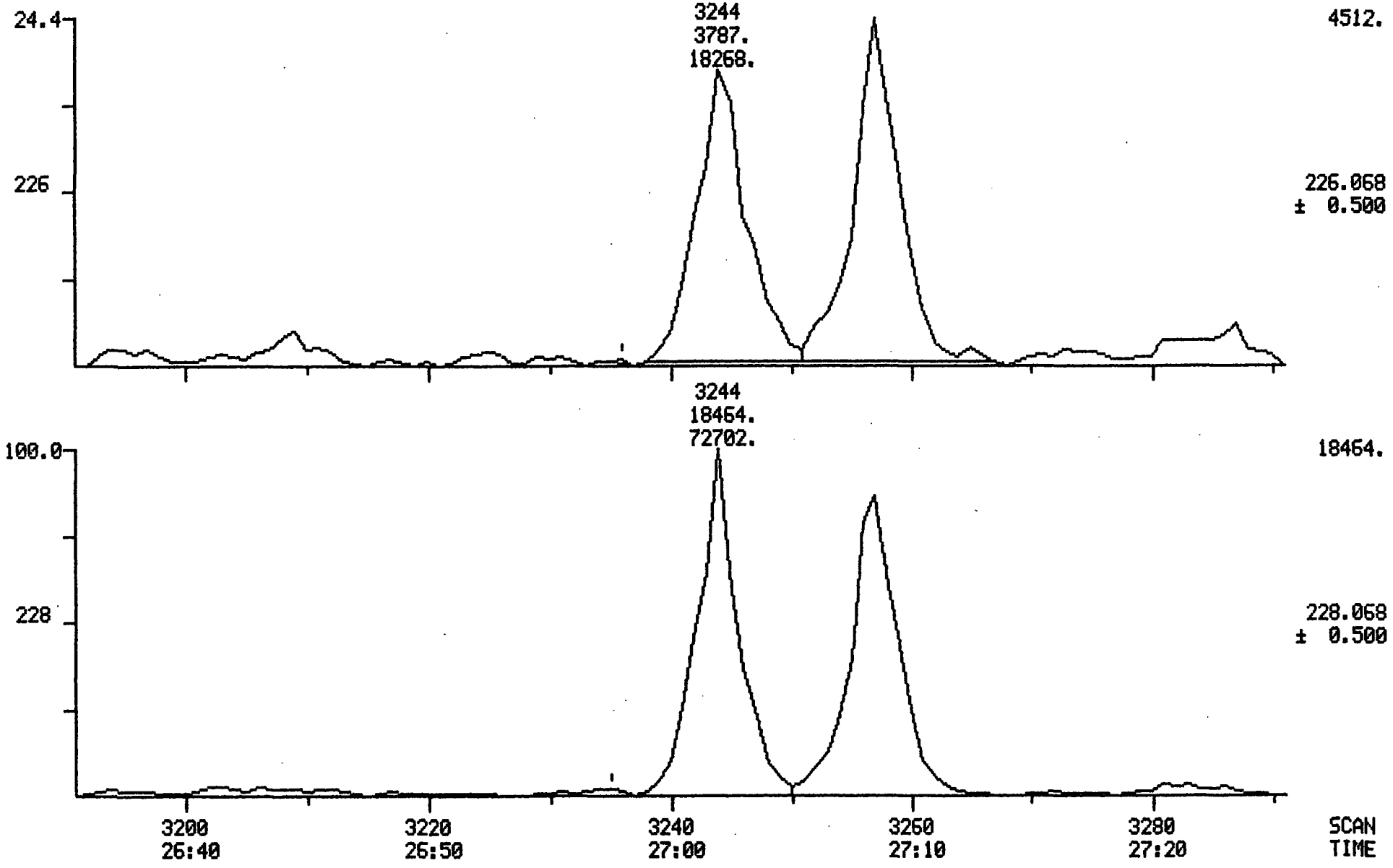
01423

MIDMASS CHROMATOGRAM DATA: S59450X873 #3246 SCANS 3196 TO 3296
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3239,3253 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



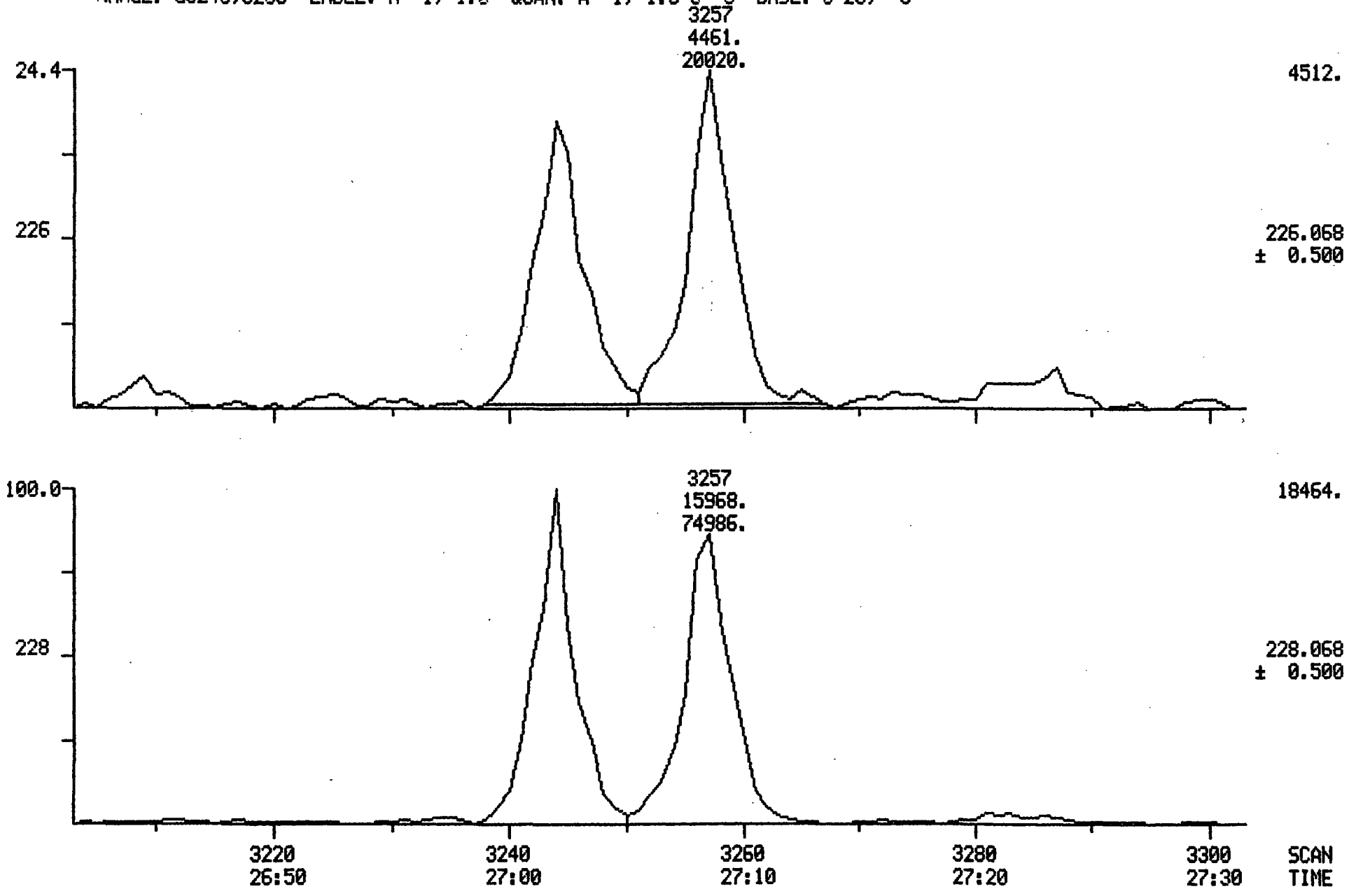
01424

MIDMASS CHROMATOGRAMS DATA: S59450X873 #3241 SCANS 3191 TO 3291
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3234,3248 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



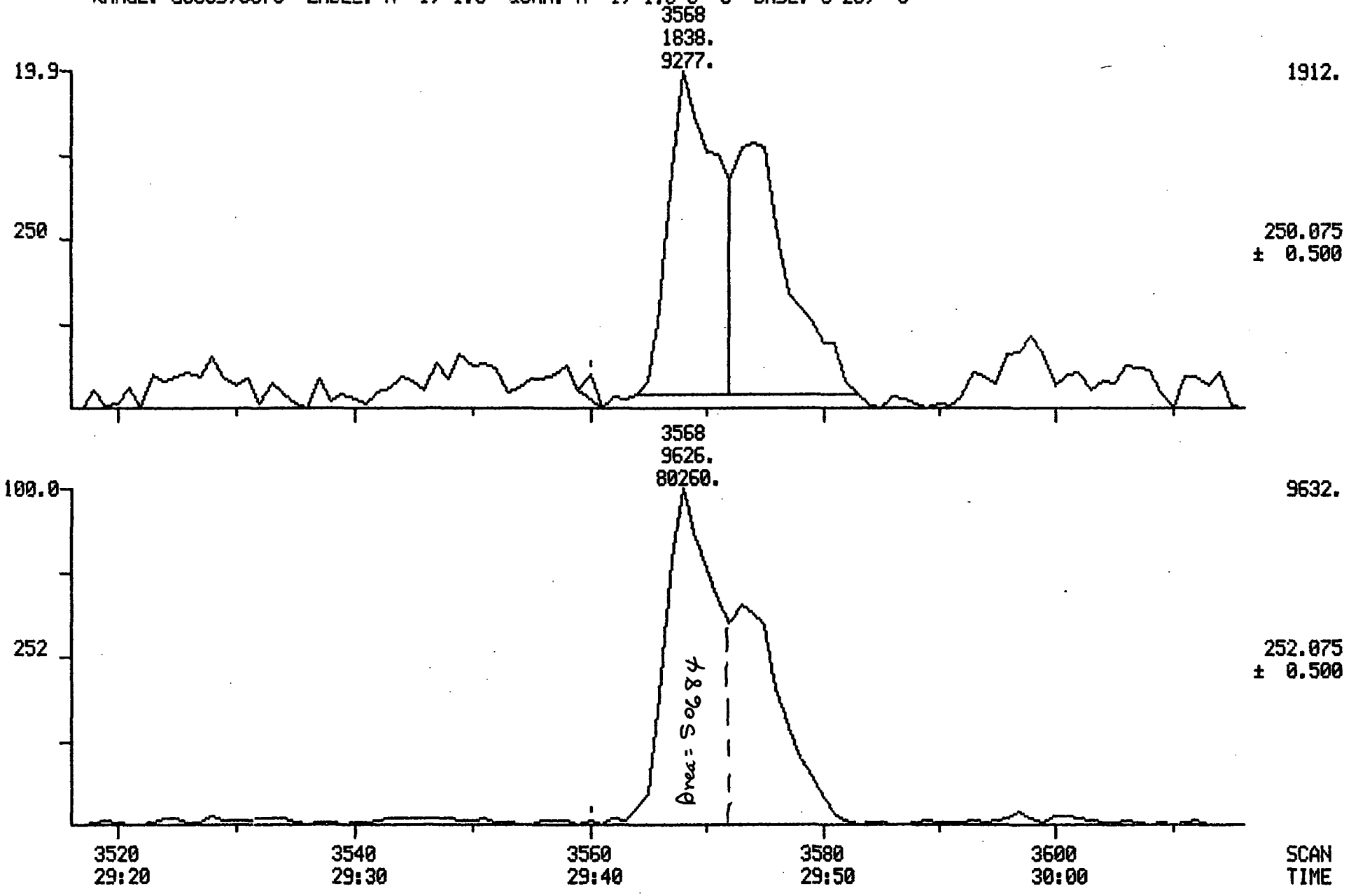
01425

MIDMASS CHROMATOGRAMS DATA: S59450X873 #3253 SCANS 3203 TO 3303
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3246,3260 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



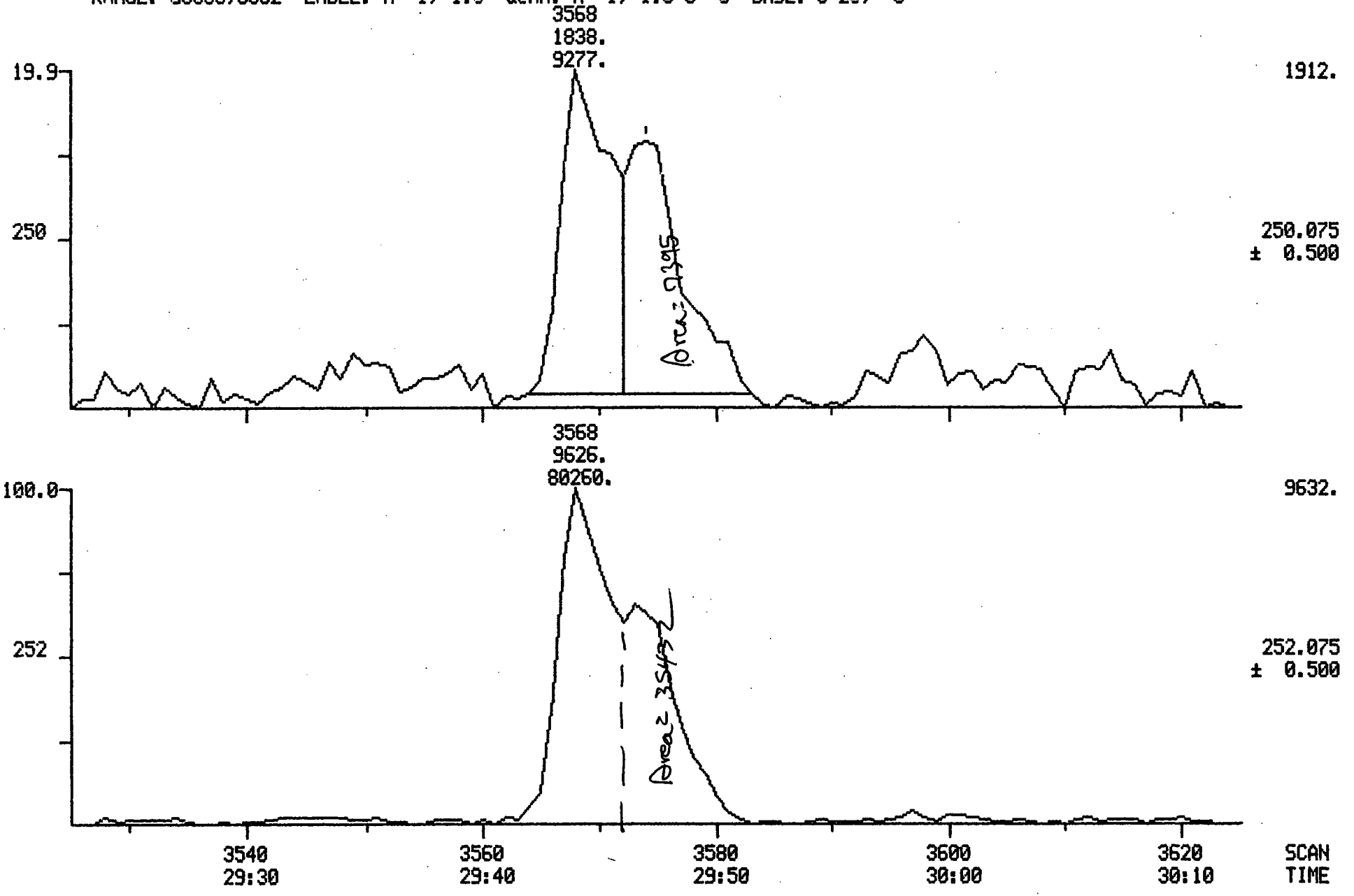
01426

MIDMASS CHROMATOGRAMS DATA: S59450X873 #3566 SCANS 3516 TO 3616
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3559,3573 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



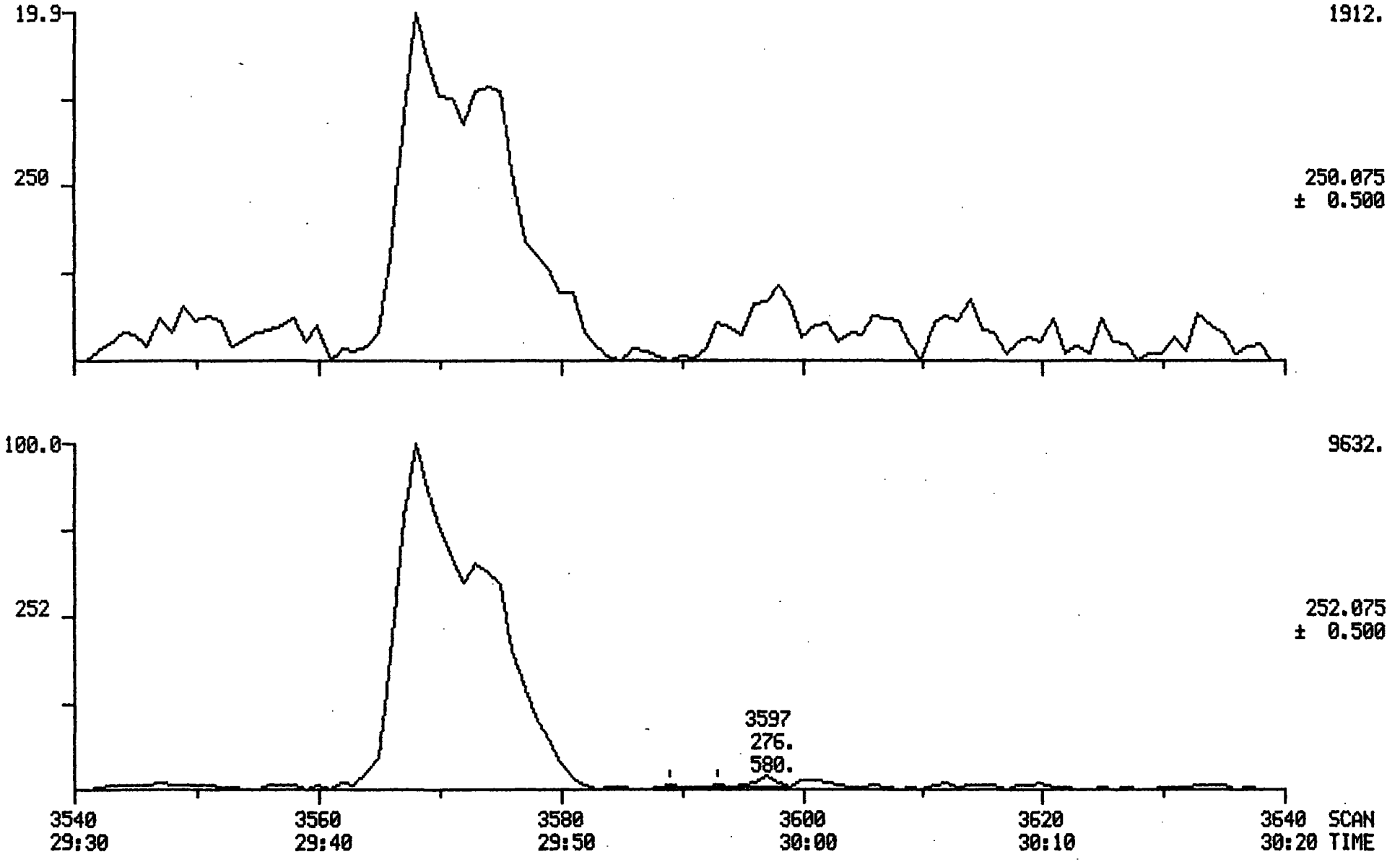
01427

MIDMASS CHROMATOGRAMS DATA: S59450X873 #3575 SCANS 3525 TO 3625
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3568,3582 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



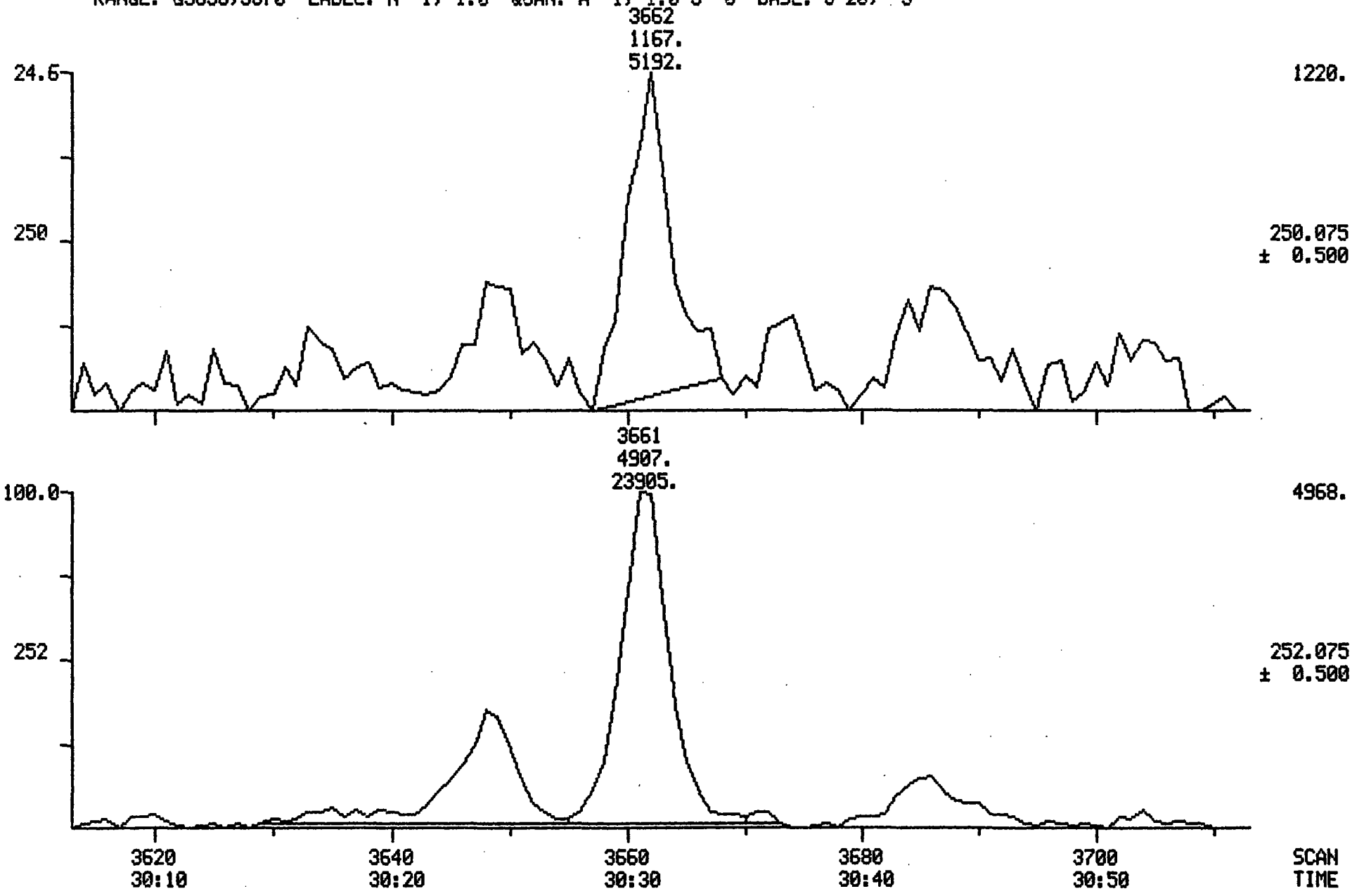
014428

MIDMASS CHROMATOGRAMS DATA: S59450X873 #3590 SCANS 3540 TO 3640
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3583,3597 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



01429

MIDMASS CHROMATOGRAMS DATA: S59450X873 #3663 SCANS 3613 TO 3713
06/06/88 21:36:00 CALI: 060688CX #2
SAMPLE: 59450-170 PAH WATER 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3656,3670 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59450X873

Data: S59450X873.TI
06/06/88 21:36:00
Sample: 59450-170 PAH WATER 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG/GW Acct. No.: 59436

01430

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(A)PYRENE	252 PH# 13
13	BENZO(A)PYRENE	250 PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3655	30:27	1	1.000	A BB	27550.	80.000	NG/ML	7.20
2	240	3249	27:04	1	0.889	A BB	26590.	47.137	NG/ML	4.24
3	228	3244	27:02	1	0.888	A BV	72702.	140.264	NG/ML	12.62
4	226	3244	27:02	1	0.888	A BV	18268.	150.796	NG/ML	13.57
5	228	3257	27:08	1	0.891	A VB	74986.	144.796	NG/ML	13.03
6	226	3257	27:08	1	0.891	A VB	20020.	137.543	NG/ML	12.37
7	252	3568	29:44	1	0.976	M XX	50684.	100.027	NG/ML	9.00
8	250	3568	29:44	1	0.976	A BV	9277.	67.288	NG/ML	6.05
9	252	3573	29:46	1	0.978	M XX	35432.	71.487	NG/ML	6.43
10	250	3574	29:47	1	0.978	A VB	7395.	57.306	NG/ML	5.16
11	252	3597	29:58	1	0.984	A BB	580.	1.126	NG/ML	0.10
12	252	3661	30:30	1	1.002	A VV	23905.	54.286	NG/ML	4.88
13	250	3662	30:31	1	1.002	A BB	5192.	59.457	NG/ML	5.35

COLUMN 1: J:AB13321
COLUMN 2: J:BB13321

59450-0170 MS
20%

05/13/88
UNITS ON AMOUNT: ug/ml

01431

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
001	alpha-BHC Rej	.0349	2.0	.0003	3.6	NA
002	LINDANE	.0022	.0	.0028	.0	NA
005	HEPTACHLOR	.0031	.0	.0020	.0	NA
012	DIELDRIN	.0074	.0	.0073	.0	.0073
013	ENDRIN	.0088	.4	.0103	.0	NA
018	p,p'-DDT	.0067	.1	.0071	.0	.0069
051	HEPTACHLOR IN TC	.0709	.5	.0722	.7	.0716

Spike Levels: Lindane, Heptachlor, Aldrin: 0.2 ug/ml $\left(\frac{1.0\,ml}{10\,ml}\right)$ = 0.02 ug/ml @20% = 0.004 ug/ml

Endrin, Dieldrin, P,P'-DDT: 0.5 ug/ml $\left(\frac{1.0\,ml}{10.\,ml}\right)$ = 0.05 ug/ml @ 20% = 0.01 ug/ml

Lindane

A) $\frac{89.5}{82.5}$(0.0035 ug/ml) = 0.003797 ug/ml

B) $\frac{74.0}{110.0}$(0.0035 ug/ml) = 0.002991 ug/ml ✓

→ $\frac{.002991}{.004}$(100%) = 75% ✓

Heptachlor

A) $\frac{65.0}{152.0}$(0.0075 ug/ml) = 0.003207 ug/ml

B) $\frac{71.0}{202.0}$(0.0075 ug/ml) = 0.002636 ug/ml

→ $\frac{.002636}{.004}$(100%) = 66% ✓

Aldrin

A) $\frac{36.5}{95.5}$(0.0075 ug/ml) = 0.002866 ug/ml

B) Coeluting Interference

→ $\frac{.002866}{.004}$(100%) = 72% ✓

Endrin

A) $\frac{34.0}{49.5}$(0.015 ug/ml) = 0.01030 ug/ml

B) $\frac{45.5}{67.0}$(0.015 ug/ml) = 0.01019 ug/ml

→ $\frac{.01019}{.01}$(100%) = 102% ✓

Dieldrin

A) $\frac{52.5}{49.5}$(0.0075 ug/ml) = 0.007955 ug/ml

B) $\frac{63.0}{63.5}$(0.0075 ug/ml) = 0.007441 ug/ml ✓

→ $\frac{.007441}{.01}$(100%) = 74% ✓

P,P'-DDT

A) $\frac{19.5}{64.0}$(0.025 ug/ml) = 0.007617 ug/ml ✓

B) $\frac{27.0}{95.5}$(0.025 ug/ml) = 0.007068 ug/ml

→ $\frac{.007068}{.01}$(100%) = 71% ✓

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

DBC

A) $\frac{30.0}{29.5}$(100) = 102% ✓

B) $\frac{28.0}{32.5}$(100) = 86% ✓

RESULT FILE: J:AB13321 05/13/88 59450-0170 LIBRARY: L:SS1018

01432

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha-BHC	1.650	1.617	6	120549	.0349	ug/ml
002	LINDANE	1.967	1.967	7	20549	.0022	ug/ml
005	HEPTACHLOR	3.267	3.267	8	35936	.0031	ug/ml
006	ALDRIN	4.100	4.100	10	21429	.0029	ug/ml
011	p,p'-DDE	7.583	7.483	11	61602	.0144	ug/ml
012	DIELDRIN	7.483	7.483	11	61602	.0074	ug/ml
013	ENDRIN	8.400	8.367	12	42366	.0088	ug/ml
015	ENDOSULFAN-B	8.567	8.367	12	42366	.0074	ug/ml
018	p,p'-DDT	12.750	12.767	13	40611	.0067	ug/ml
022	TOXAPHENE (peak 3)	12.433	12.767	13	40611	.1193	ug/ml
033	AROCLOR 1248(peak 2)	4.050	4.100	10	21429	.1830	ug/ml
051	HEPTACHLOR IN TC	3.283	3.267	8	35936	.0709	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: J:BB13321 05/13/88 59950-0170 LIBRARY: L:SSMIXS

01433

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC	1.417	1.367	5	5783	.0003	ug/ml
002	LINDANE	1.833	1.833	6	69187	.0028	ug/ml
005	HEPTACHLOR	2.267	2.267	7	65529	.0020	ug/ml
012	DIELDRIN	6.767	6.767	11	157008	.0073	ug/ml
013	ENDRIN	8.250	8.250	12	133031	.0103	ug/ml
018	p,p'-DDT	12.167	12.167	13	117434	.0071	ug/ml
019	METHOXYCHLOR	23.933	24.083	15	93481	.0187	ug/ml
020	TOXAPHENE (peak 1)	6.783	6.767	11	157008	.5246	ug/ml
025	AROCLOR 1016(peak 3)	2.250	2.267	7	65529	.0463	ug/ml
028	AROCLOR 1232(peak 2)	2.250	2.267	7	65529	.1033	ug/ml
031	AROCLOR 1242(peak 3)	2.250	2.267	7	65529	.0562	ug/ml
032	AROCLOR 1248(peak 1)	2.250	2.267	7	65529	.0638	ug/ml
035	AROCLOR 1254(peak 1)	5.100	5.050	10	19650	.0136	ug/ml
037	AROCLOR 1254(peak 3)	8.100	8.250	12	133031	.0884	ug/ml
039	AROCLOR 1254(peak 5)	11.867	12.167	13	117434	.0817	ug/ml
044	AROCLOR 1260(peak 5)	11.833	12.167	13	117434	.0860	ug/ml
046	AROCLOR 1260(peak 7)	24.017	24.083	15	93481	.0376	ug/ml
047	DBC (surrogate)	22.650	22.617	14	154229	.0169	ug/ml
048	ENDRIN KETONE	22.600	22.617	14	154229	.0028	ug/ml
051	HEPTACHLOR IN TC	2.283	2.267	7	65529	.0722	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

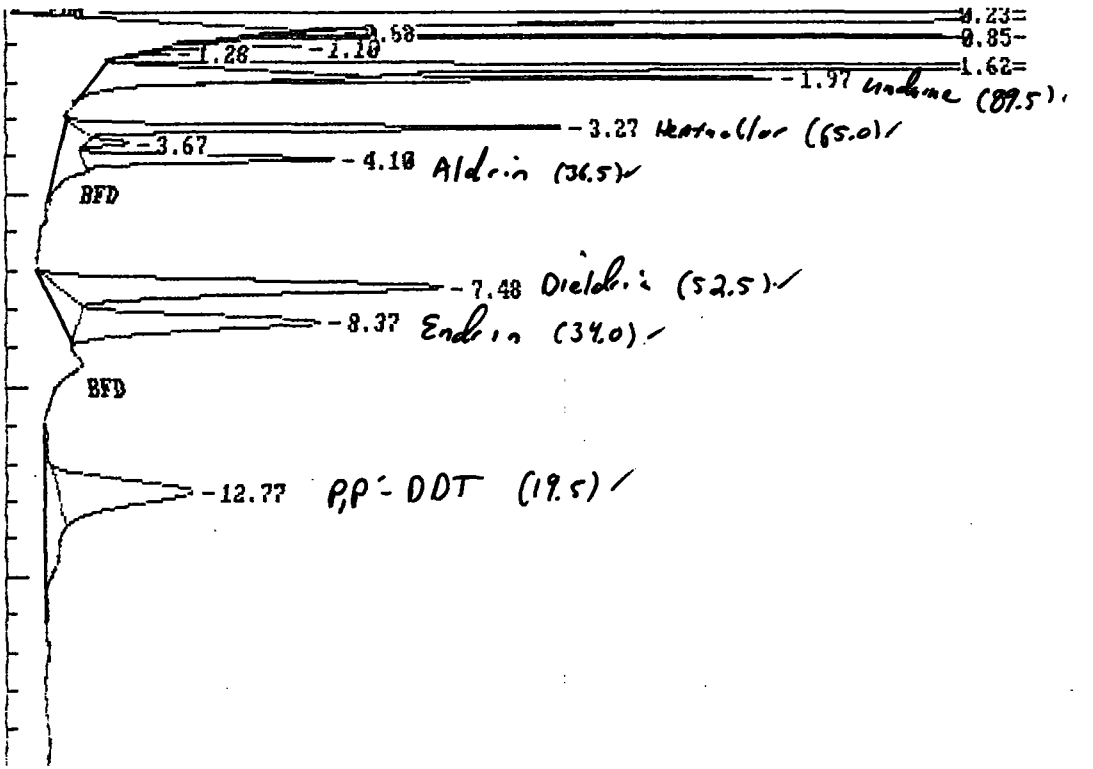
********** 05-13-1988 08:20:36 Version 4.1 **********
* Sample Name: 59450 0170 20% Data File: J:AB13321 01434
* Date: 05-13-1988 08:20:21 Method: M:ABPI *
* Interface: 10 Cycle#: 21 Operator SS Channel#: 0 Vial#: N.A. *
* Starting Peak Width: 10 Threshold: 1 Area Threshold: 100 *
****
* Instrument Type: HP 5880A Column Type: 6FT X 2MM ID GLASS *
* Solvent Description: 1.5% SP2250/1.95% SP2401 *
* Conditions: 190 DEGREES ISOTHERMAL *
* Detector 0: ECD Detector 1: *
* Misc. Information: 4 UL INJECTION LPT1: * *
****
Starting Delay: 0.00 Run Time: 0.00

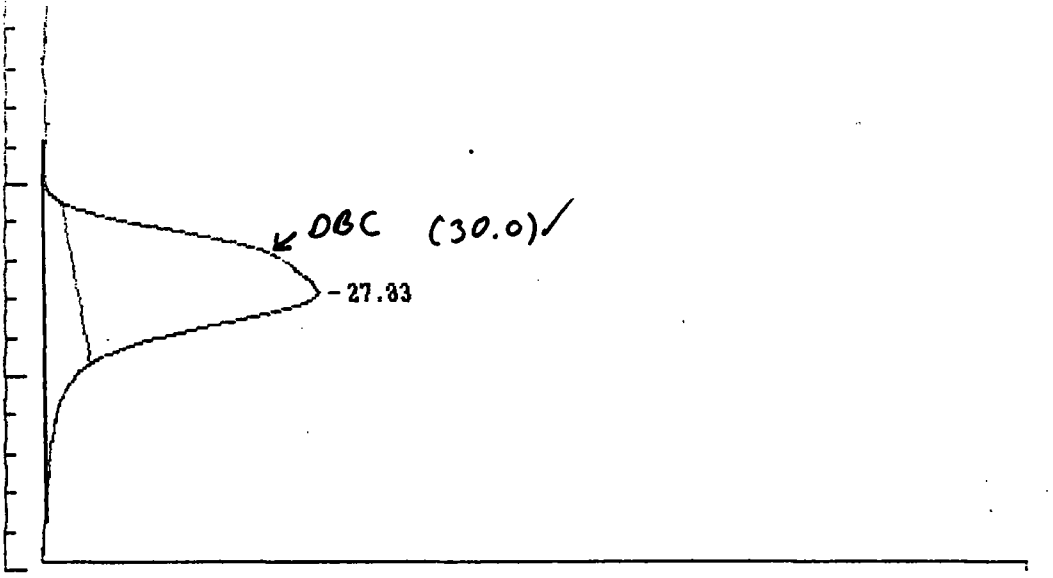
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	591414	49.1380	1	110844	100.000	5.3
2	0.68	1239	0.1029	1	346	0.209	3.6
3	0.85	21926	1.8217	1	6142	3.707	3.6
4	1.10	4373	0.3633	1	943	0.739	4.6
5	1.28	1401	0.1164	1	249	0.237	5.6
6	1.62	120549	10.0159	1	15150	20.383	8.0
7	1.97	20549	1.7073	1	3293	3.475	6.2
8	3.27	35936	2.9858	1	3319	6.076	10.8
9	3.67	3020	0.2510	1	295	0.511	10.2
10	4.10	21429	1.7804	1	1728	3.623	12.4
11	7.48	61602	5.1182	1	2631	10.416	23.4
12	8.37	42366	3.5200	1	1650	7.164	25.7
13	12.77	40611	3.3742	1	922	6.867	44.0
14	27.83	237163	19.7048	1	1646	40.101	144.1

Total Area: 1203577 Area Reject: 1000 One sample per 1.000 sec.

SS
5/25/88

Areas, times, and heights stored in: J:AB13321.ATB
Data File = J:AB13321.PTS Printed on 05-13-1988 at 08:21:03
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




OBC (30.0)
-27.83

AREA PERCENT REPORT

01436

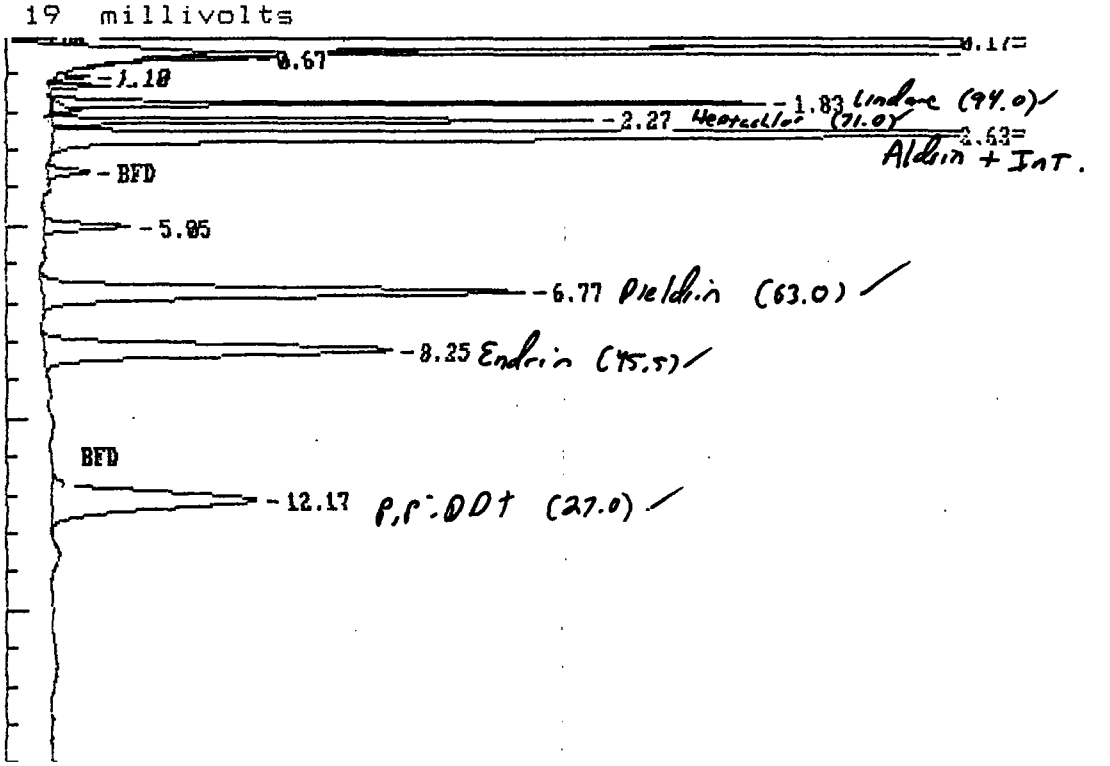
```
******************** 05-13-1988 07:21:22 Version 4.1 ********************
* Sample Name: 59450 0170 20%                    Data File: J:BB13321      *
* Date: 05-13-1988 07:21:06 Method: M:BBPI                                 *
* Interface: 12  Cycle#:  21   Operator SS  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS   *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                 *
* Conditions: 190 DEG ISOTHERMAL                                           *
*            Detector 0:                        Detector 1: ECD            *
* Misc. Information: 4 UL INJ                                              *
*****************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

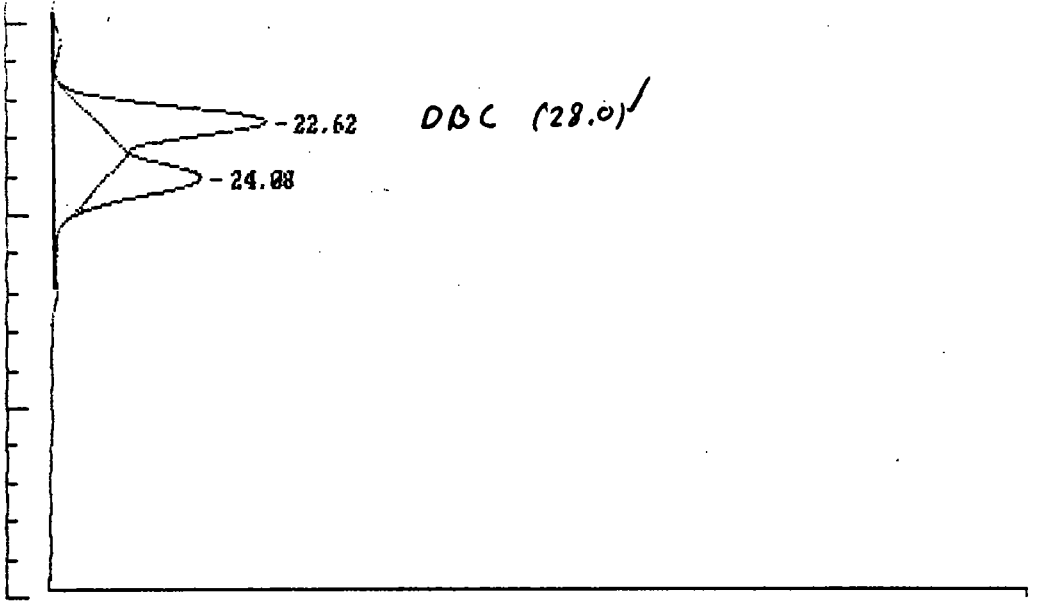
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1047548	45.5742	1	182302	100.000	5.7
2	0.53	38048	1.6553	1	14136	3.632	2.7
3	0.67	6262	0.2725	1	2151	0.598	2.9
4	1.10	4234	0.1842	1	647	0.404	6.5
5	1.37	5783	0.2516	1	1168	0.552	4.9
6	1.83	69187	3.0100	1	13164	6.605	5.3
7	2.27	65529	2.8509	1	10143	6.255	6.5
8	2.63	378595	16.4710	1	41599	36.141	9.1
9	3.62	8539	0.3715	1	794	0.815	10.7
10	5.05	19650	0.8549	1	1620	1.876	12.1
11	6.77	157008	6.8307	1	9011	14.988	17.4
12	8.25	133031	5.7876	1	6454	12.699	20.6
13	12.17	117434	5.1090	1	3818	11.210	30.8
14	22.62	154229	6.7098	1	3091	14.723	49.9
15	24.08	93481	4.0669	1	1800	8.924	51.9

SS
5/25/88

Total Area: 2298556 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB13321.ATB
Data File = J:BB13321.PTS Printed on 05-13-1988 at 07:21:50
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 19 millivolts





DBC (28.0)

01437

5/3/88 16:38:07 SCAN 1 OF 730
Acquisition started

01438

Acquire
05/03/88 16:37:00 + 0:03
Sample: CLP,59450,,59450-02MS,LOW,WATER,59450-02MS,VOA,EPA
Conds.: 100%/5ML
Formula:
Submitted by: RMAL

Run 3:S59450W983
Free sectors: 8831
Instrument: 5100
Analyst: GW

Acquiring
Scan: 1 of 730
Weight: 0.000
Acct. No: 59450

*** GC descriptor: V3 ***

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

Injector: 50 DegC
Interface: 220 DegC

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

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

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

Hold time (s)
Top: 0.00
Bottom: 0.05

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

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

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

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

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	127.00	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: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/3/88 17:14:42
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second
Centroid	730	55.7	2190.0	2.5	26287.	36. 12.

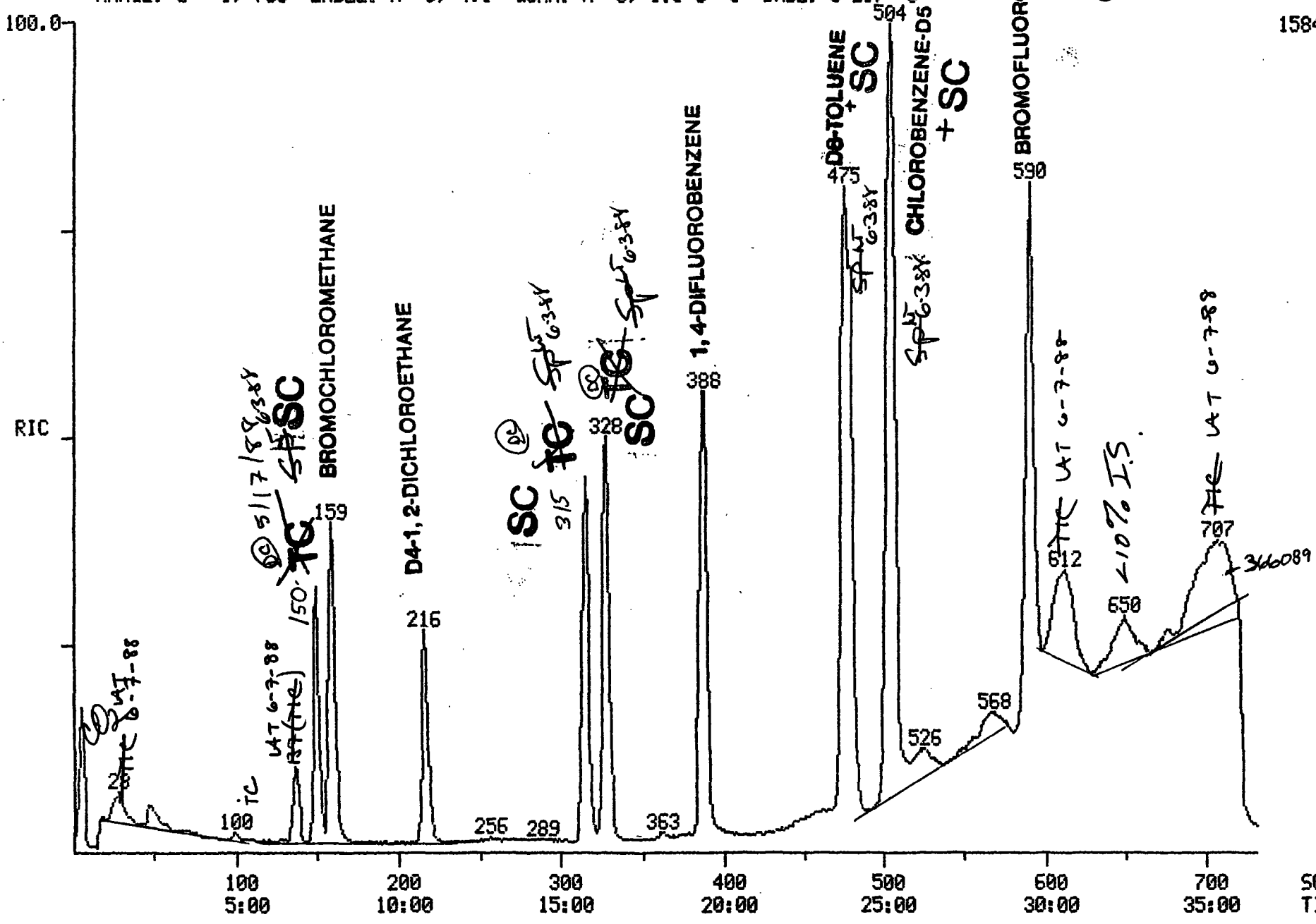
01439

RIC
05/03/88 16:37:00
SAMPLE: CLP,59450,,59450-02MS,LOW,WATER,59450-02MS,VOA,EPA
CONDS.: 100%/5ML
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59450W983 #4 SCANS 1 TO 730
CALI: 050288CW2 #3

TIC=Tentatively Identified Compound
TC=Target Compound
SC=Spike Compound

158464.



PROCEDURE: TCA DIAGNOSTIC REPORT 5/03/88 19:29:36
DATA FILE: S59450W983
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

01440

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	1	39	ISO1/TCO1
3	3	1	81	18	8	6	56	ISO2/TCO2
3	3	1	81	12	7	12	78	ISO3/TCO3
1	1	1	0	7	3	1	69	ISO4/TCO4

41 COMPOUNDS PROCESSED, 17 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-162	159	159	.	1	970	.	128	159	.	1
2	V1	10	-32	19	.	.	.	.	.	50	.	.	.
3	V1	15	-48	36	.	.	.	.	.	94	.	.	.
4	V1	25	-59	48	.	.	.	.	.	62	.	.	.
5	V1	35	-74	64	.	.	.	.	.	64	.	.	.
6	V1	45	-107	100	100	.	1	938	.	84	100	.	1
7	V1	50	-116	109	109	.	1	992	.	58	109	.	1
8	V1	65	-133	128	.	.	.	.	.	76	128	.	1
9	V1	80	-154	150	150	.	1	988	.	96	150	.	1
10	V2	1	-388	387	388	1	1	996	.	114	387	-1	1
11	V3	1	-503	503	503	.	1	1000	.	117	503	.	1
12	V1	90	-179	176	.	.	.	.	.	63	.	.	.
13	V1	95	-194	191	.	.	.	.	.	96	.	.	.
14	V1	100	-205	202	.	.	.	.	.	83	202	.	1
15	V2	10	-218	215	216	1	2	840	.	72	.	.	.
16	V1	2	-219	216	216	.	1	991	.	65	216	.	1
17	V1	110	-221	219	.	.	.	.	.	62	.	.	.
18	V2	15	-248	246	.	.	.	.	.	97	.	.	.
19	V2	20	-257	255	.	.	.	.	.	117	.	.	.
20	V2	25	-260	258	258	.	3	970	.	43	.	.	.
21	V2	30	-268	266	.	.	.	.	.	83	.	.	.
22	V2	35	-299	297	.	.	.	.	.	63	.	.	.
23	V2	40	-304	302	.	.	.	.	.	75	.	.	.
24	V2	45	-317	315	315	.	1	983	.	130	315	.	1
25	V2	60	-330	329	328	-1	1	989	.	78	328	.	1
26	V2	50	-331	330	.	.	.	.	.	129	.	.	.
27	V2	65	-334	333	.	.	.	.	.	75	.	.	.
28	V2	55	-334	333	.	.	.	.	.	97	.	.	.
29	V2	80	-393	392	.	.	.	.	.	173	.	.	.
30	V3	10	-405	404	405	1	4	874	.	58	.	.	.
31	V3	15	-441	441	441	.	3	921	.	58	.	.	.
32	V3	25	-447	447	.	.	.	.	.	83	.	.	.
33	V3	20	-449	449	.	.	.	.	.	164	.	.	.
34	V3	2	-476	476	475	-1	1	988	.	98	475	.	1
35	V3	35	-480	480	479	-1	1	986	.	92	479	.	1
36	V3	40	-507	506	506	.	1	986	.	112	506	.	1
37	V3	50	-549	548	.	.	.	.	.	106	.	.	.
38	V3	3	-591	590	590	.	1	987	.	95	590	.	1
39	V3	55	-612	611	.	.	.	.	.	104	611	.	1
40	V3	60	-615	614	.	.	.	.	.	106	613	.	1
41	V3	75	-628	627	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59450W983

01441

Data: S59450W983.TI
05/03/88 16:37:00
Sample: CLP,59450,,59450-02MS,LOW,WATER,59450-02MS,VOA,EPA
Conds.: 100%/5ML
Formula: Instrument: 5100 Weight: 0.000
Submitted by: RMAL Analyst: GW Acct. No.: 59450

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	C110	2-BUTANONE	72	V2#	10	78-93-3
16	CS15	1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
17	C065	1,2-DICHLOROETHANE	62	V1#	110	107-06-2
18	C115	1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
19	C120	CARBONTETRACHLORIDE	117	V2#	20	56-23-5
20	C125	VINYL ACETATE	43	V2#	25	108-05-4
21	C130	BROMODICHLOROMETHANE	83	V2#	30	75-27-4
22	C140	1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
23	C143	CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
24	C150	TRICHLOROETHENE	130	V2#	45	79-01-6
25	C165	BENZENE	78	V2#	60	71-43-2
26	C155	DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
27	C172	TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
28	C160	1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
29	C180	BROMOFORM	173	V2#	80	75-25-2
30	C205	4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
31	C210	2-HEXANONE	58	V3#	15	591-78-6
32	C225	1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5
33	C220	TETRACHLOROETHENE	164	V3#	20	127-18-4
34	CS05	TOLUENE-D8	98	SV3#	02	2037-26-5
35	C230	TOLUENE	92	V3#	35	108-88-3
36	C235	CHLOROBENZENE	112	V3#	40	108-90-7
37	C240	ETHYLBENZENE	106	V3#	50	100-41-4
38	CS10	BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
39	C245	STYRENE	104	V3#	55	100-42-5
40	M-XYLENE		106	V3#	60	108-38-3
41	O+P XYLENES		106	V3#	75	

01442

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	159	7:57	1	1.000	A BB	29554.	50.000 UG/L	8.83
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	100	5:00	1	0.629	A BB	1120.	0.935 UG/L	0.17
7	58	109	5:27	1	0.686	A BB	170.	1.912 UG/L	0.34
8	76	128	6:24	1	0.805	A BB	975.	0.660 UG/L	0.12
9	96	150	7:30	1	0.943	A BB	38611.	61.041 UG/L	10.77
10	114	387	19:21	10	1.000	A BB	169932.	50.000 UG/L	8.83
11	117	503	25:09	11	1.000	A BB	151923.	50.000 UG/L	8.83
12	NOT FOUND								
13	NOT FOUND								
14	83	202	10:06	1	1.270	A BB	66.	0.040 UG/L	0.01
15	NOT FOUND								
16	65	216	10:48	1	1.358	A BB	54081.	46.979 UG/L	8.29
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	130	315	15:45	10	0.814	A BB	58340.	50.922 UG/L	8.99
25	78	328	16:24	10	0.848	A BB	167762.	51.526 UG/L	9.09
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	98	475	23:45	11	0.944	A BB	177657.	48.828 UG/L	8.62
35	92	479	23:57	11	0.952	A BB	105106.	47.546 UG/L	8.39
36	112	506	25:18	11	1.006	A BB	132484.	50.617 UG/L	8.93
37	NOT FOUND								
38	95	590	29:30	11	1.173	A BB	101193.	48.999 UG/L	8.65
39	104	611	30:33	11	1.215	A BB	1112.	0.401 UG/L	0.07
40	106	613	30:39	11	1.219	A BB	10157.	6.200 UG/L	1.09
41	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:09	0.98	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:36		0.196						
3	2:24		0.294						
4	2:57		0.362						
5	3:42		0.454						
6	5:21	0.93	0.656	0.96	0.94	50.00	0.038	2.026	0.02
7	5:48	0.94	0.712	0.96	1.91	50.00	0.006	0.150	0.04
8	6:39	0.96	0.816	0.99	0.66	50.00	0.033	2.498	0.01
9	7:42	0.97	0.945	1.00	61.04	50.00	1.306	1.070	1.22
10	19:27	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	8:57		1.098						
13	9:42		1.190						

	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
					0.04	50.00	0.002	2.815	0.00
	10:15	0.99	1.258	1.01					
	10:54		0.560		46.98	50.00	1.830	1.948	0.94
	10:57	0.99	1.344	1.01					
	11:03		1.356						
	12:24		0.638						
	12:51		0.661						
	13:00		0.668						
	13:24		0.689						
	14:57		0.769						
	15:12		0.781		50.92	50.00	0.343	0.337	1.02
	15:51	0.99	0.815	1.00	51.53	50.00	0.987	0.958	1.03
	16:30	0.99	0.848	1.00					
	16:33		0.851						
	16:42		0.859						
	16:42		0.859						
	19:39		1.010						
	20:15		0.804						
	22:03		0.875						
	22:21		0.887						
	22:27		0.891		48.83	50.00	1.169	1.197	0.98
	23:48	1.00	0.944	1.00	47.55	50.00	0.692	0.728	0.95
	24:00	1.00	0.952	1.00	50.62	50.00	0.872	0.861	1.01
	25:21	1.00	1.006	1.00					
	27:27		1.089		49.00	50.00	0.666	0.680	0.98
	29:33	1.00	1.173	1.00	0.40	50.00	0.007	0.913	0.01
	30:36	1.00	1.214	1.00	6.20	50.00	0.067	0.539	0.12
	30:45	1.00	1.220	1.00					
	31:24		1.246						

01443

TCA FINISHED, 17 FOUND
FINISHED AT: 5/03/88 19:33:54

RMAL QUANTITATION SUMMARY FILE: S59450W983
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

01444

UNITS: UG/L

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	159	1	29554.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	387	2	169932.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	503	3	151923.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	475	3	177657.	1.169	48.828 98
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	590	3	101193.	0.666	48.999 98
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	216	1	54081.	1.830	46.979 94
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	109	1	170.	0.006	1.912 B
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96	150	1	38611.	1.306	61.041
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	315	2	58340.	0.343	50.922
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	328	2	167762.	0.987	51.526
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	479	3	105106.	0.692	47.546
37	V3# 40	C235 CHLOROBENZENE	112	506	3	132484.	0.872	50.617
38	V3# 50	C240 ETHYLBENZENE	106		3	NOT FOUND		
39	V3# 55	C245 STYRENE	104		3	NOT FOUND		
40	V3# 60	M-XYLENE	106	613	3	~~10157.~~	~~0.067~~	~~6.200~~
41	V3# 75	O+P XYLENES	106		3	NOT FOUND		

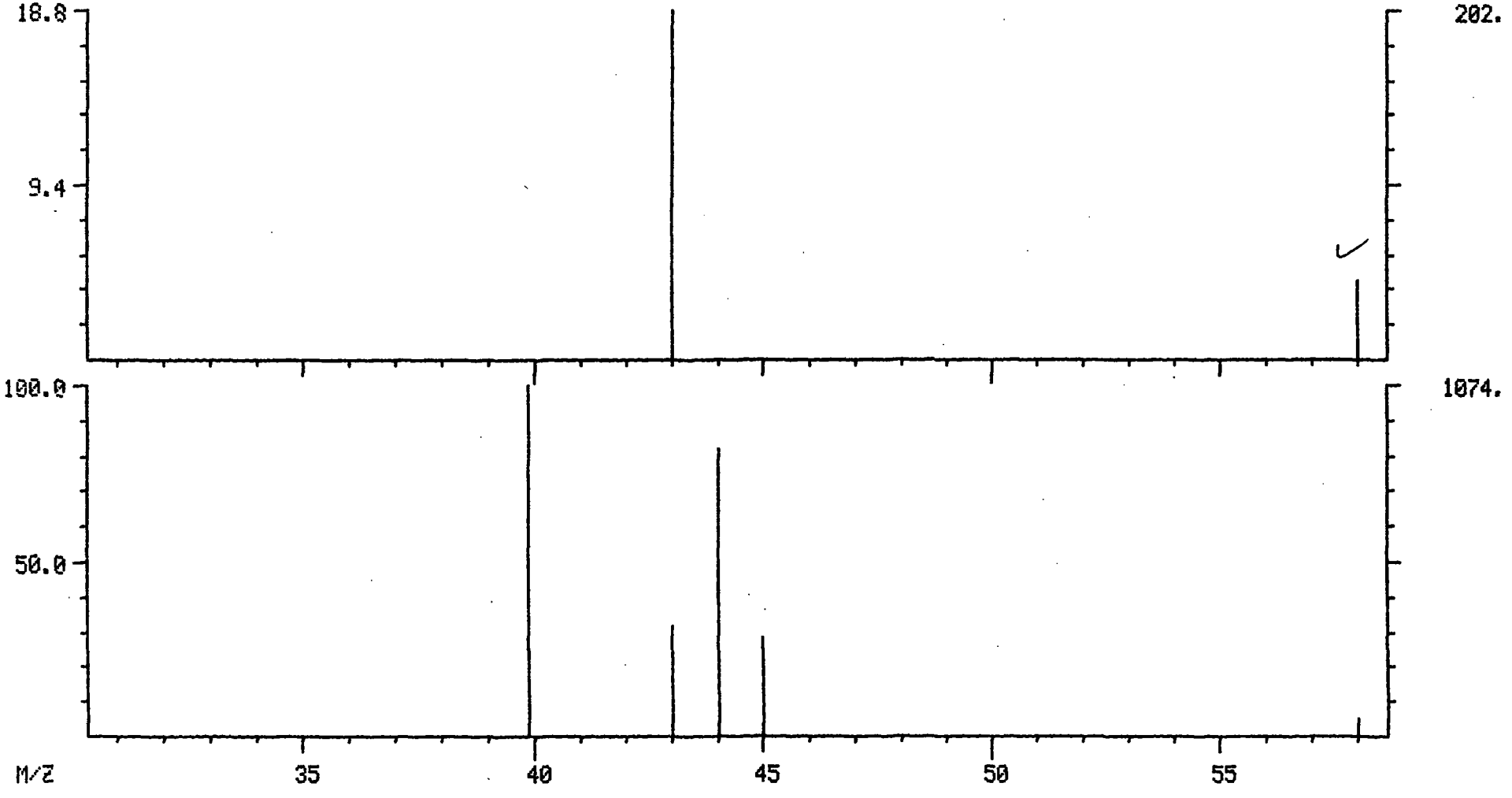
01445

DUAL MASS SPECTRUM
05/03/88 16:37:00 + 5:27
SAMPLE: CLP,59450,,59450-02MS,LOW,WATER,59450-02MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 84 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450W983 #109
CALI: 050288CW2 #3

BASE M/Z: 43/ 40
RIC: 246./ 2663.

acetone

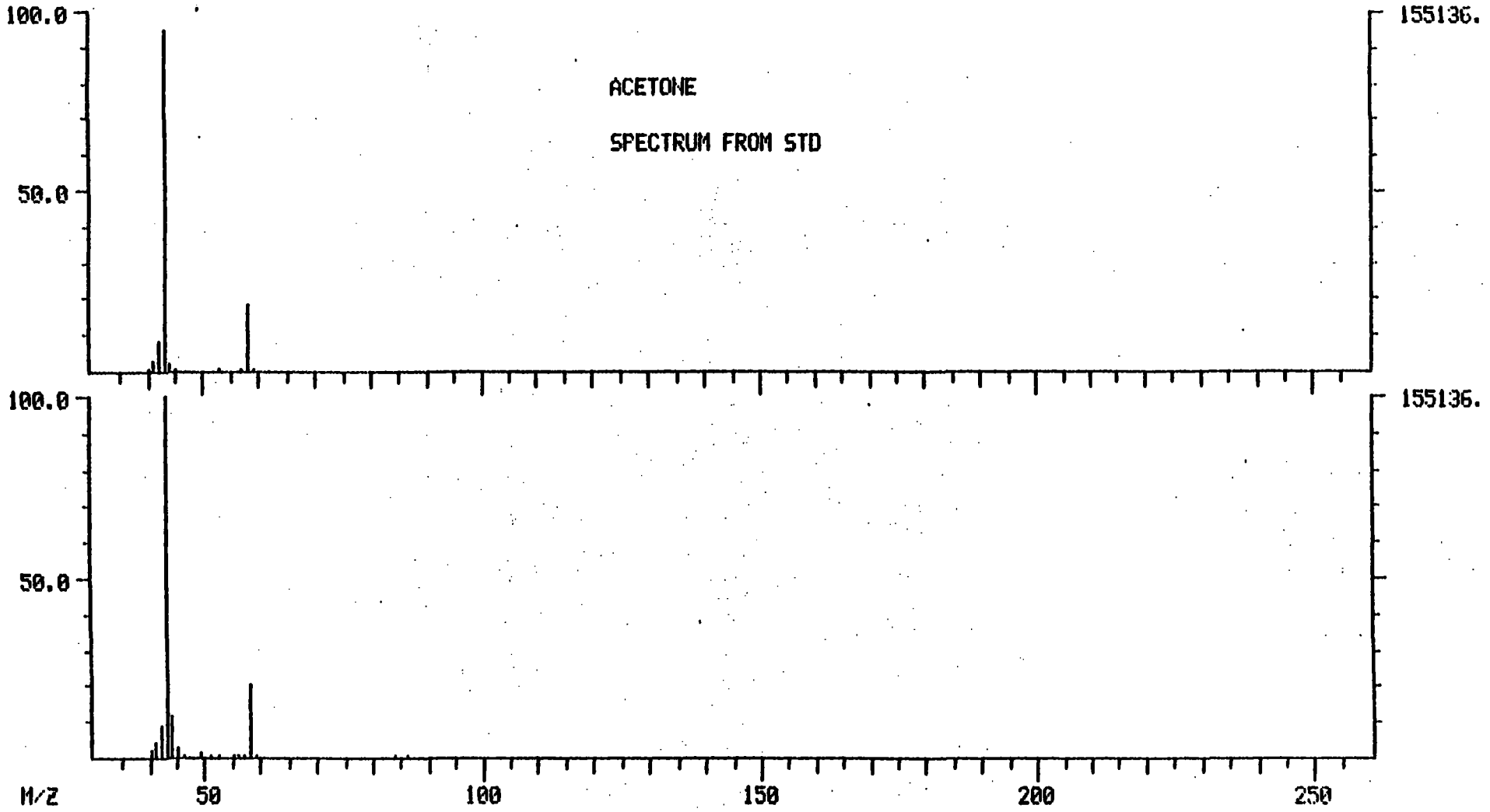


014446

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

DATA: STDJ198 #150
CALI: STDJ198 #1

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

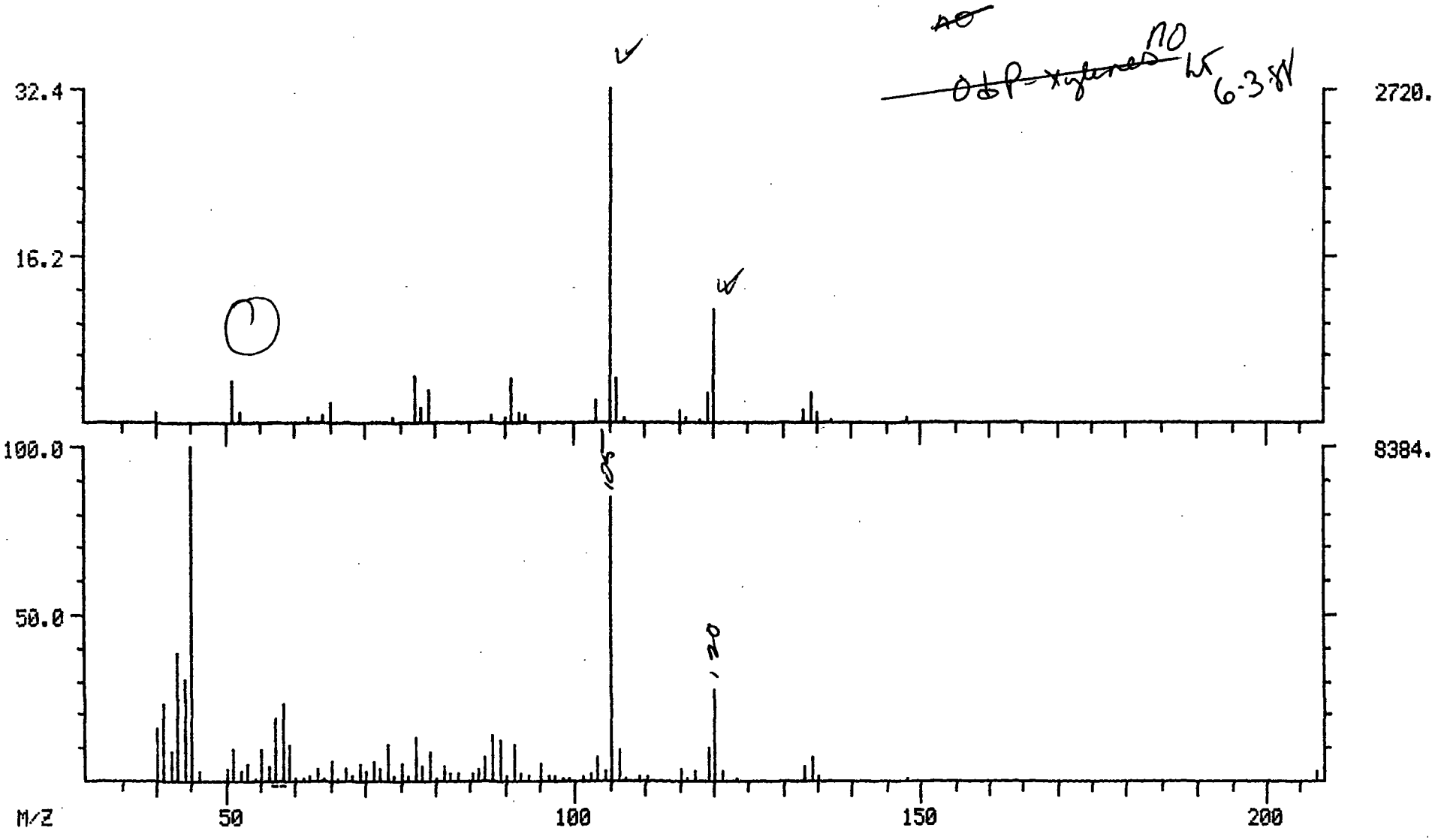


01447

DUAL MASS SPECTRUM
05/03/88 16:37:00 + 30:39
SAMPLE: CLP,59450,,59450-02MS,LOW,WATER,59450-02MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 250 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450W983 #613
CALI: 050288CW2 #3

BASE M/Z: 105/ 45
RIC: 7151./ 53375.

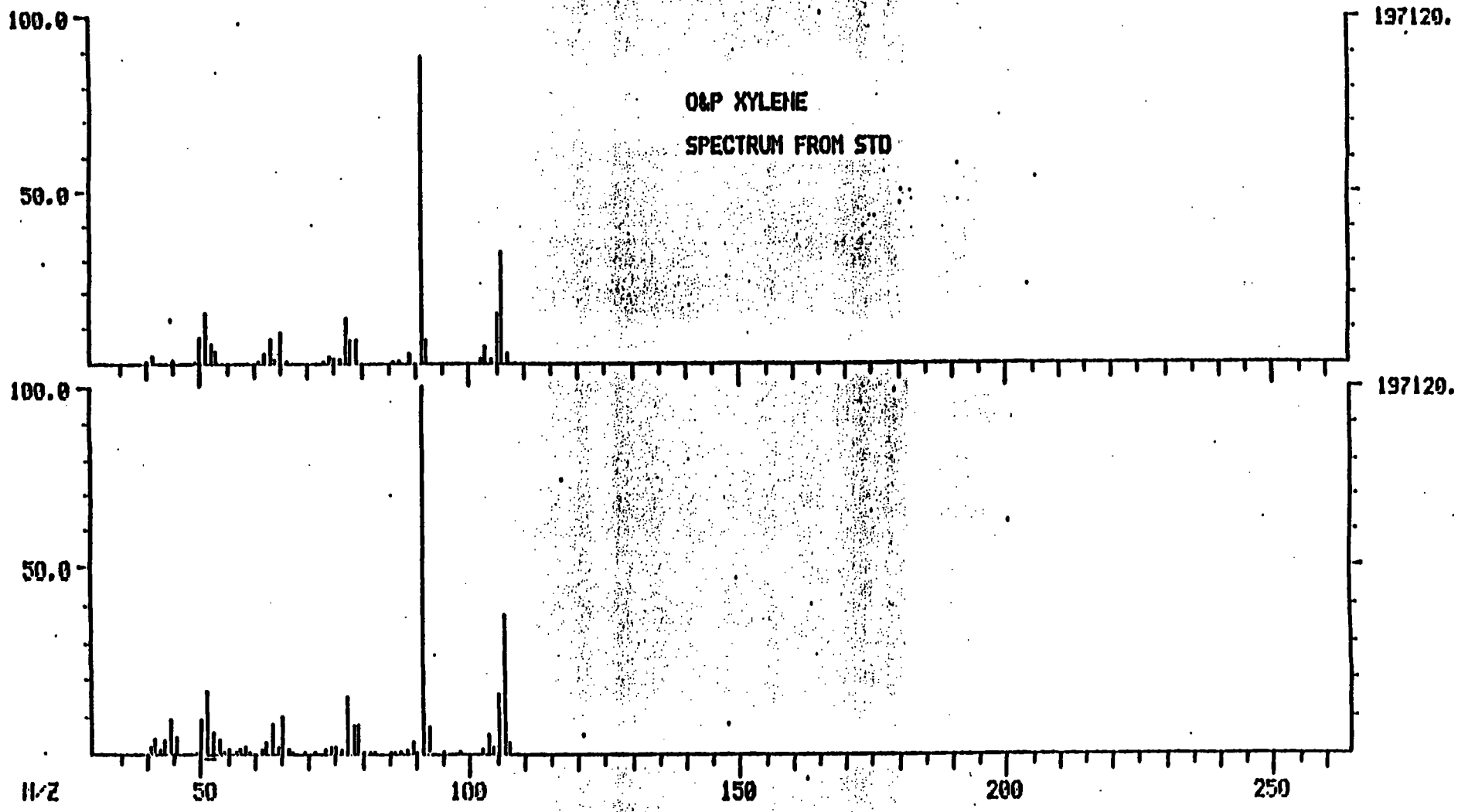


01448

DUAL MASS SPECTRUM
10/13/86 10:30:00 + 33:06
SAMPLE: 50 PPB MSL STANDARD 9-29-86 100%/5ML
COMMS.:
ENHANCED (S 15D 2N 0T)

DATA: STDJ198 #651
CALI: STDJ198 #1

BASE M/Z: 91/ 91
RIC: 485807./ 632031.

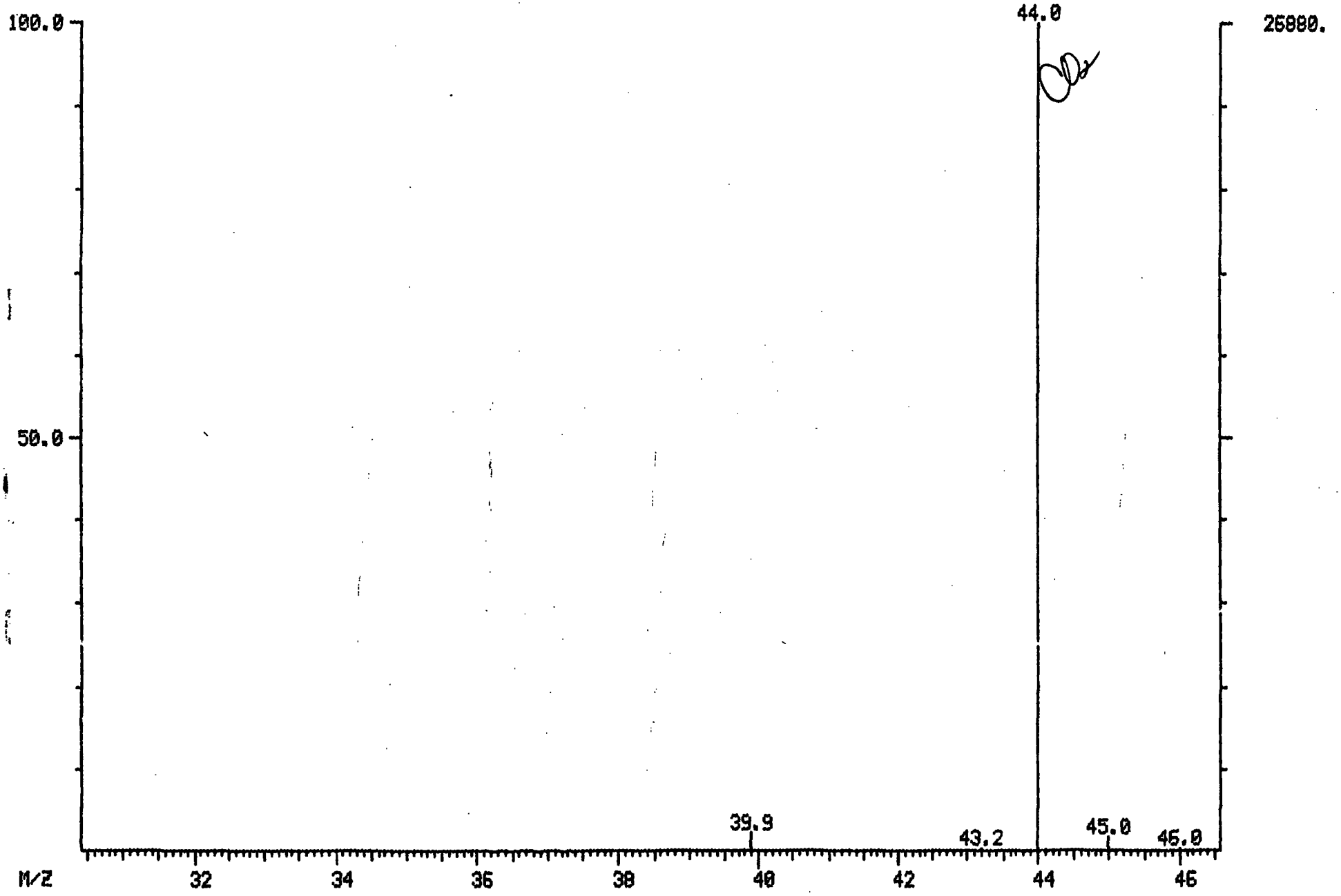


01449

MASS SPECTRUM
05/03/88 16:37:00 + 0:18
SAMPLE: CLP,59450,,59450-02MS,LOW,WATER,59450-02MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 60 DEG. C

DATA: S59450W983 #6
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 28064.



$\frac{ug}{mL} \times \frac{2.0\ mL}{1.06\ L} = 1.89\ ug/L$

01450

6/6/88 11:30:15 SCAN 1 OF 2800
Acquisition started

Acquire 35 Run 0:S59450U571 ACQUIRING
06/06/88 11:30:00 + 0:04 Free sectors: 20095 Scan: 5 of 2800
Sample: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2mL,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No:

********** 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 : 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	40.5	0.0
3	325 - 325	-	10.0	40.5			
4	325 - 325	-	0.0	40.5			

********** 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: 30
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	

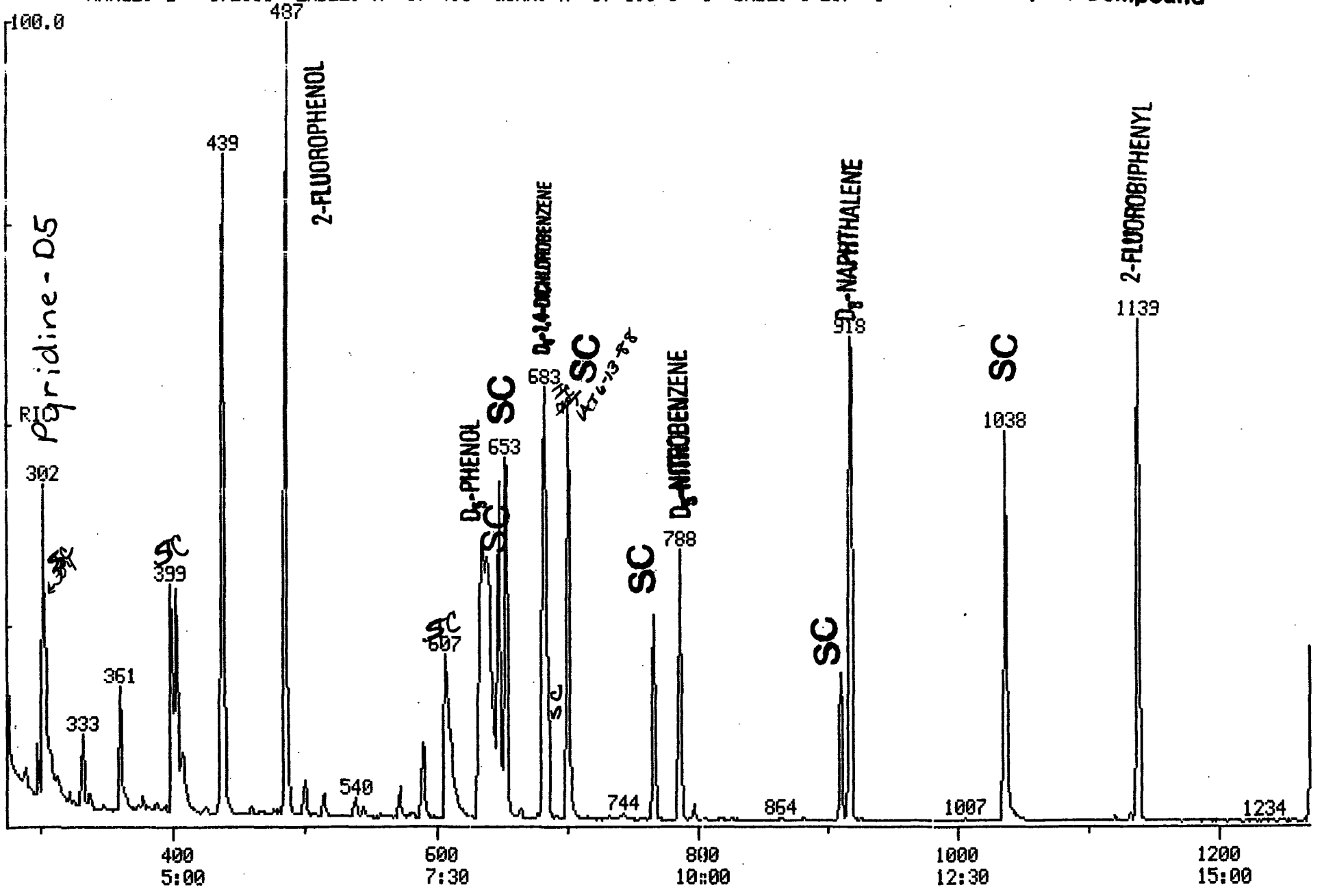
6/6/88 12:05:18
ACQUISITION COMPLETED
SCANS 1 TO 2800 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2800	181.5	2100.0	8.6	33847. 12.	16.

01451

RIC DATA: S59450U571 #4 SCANS 270 TO 1270
06/06/88 11:30:00 CALI: 060688CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

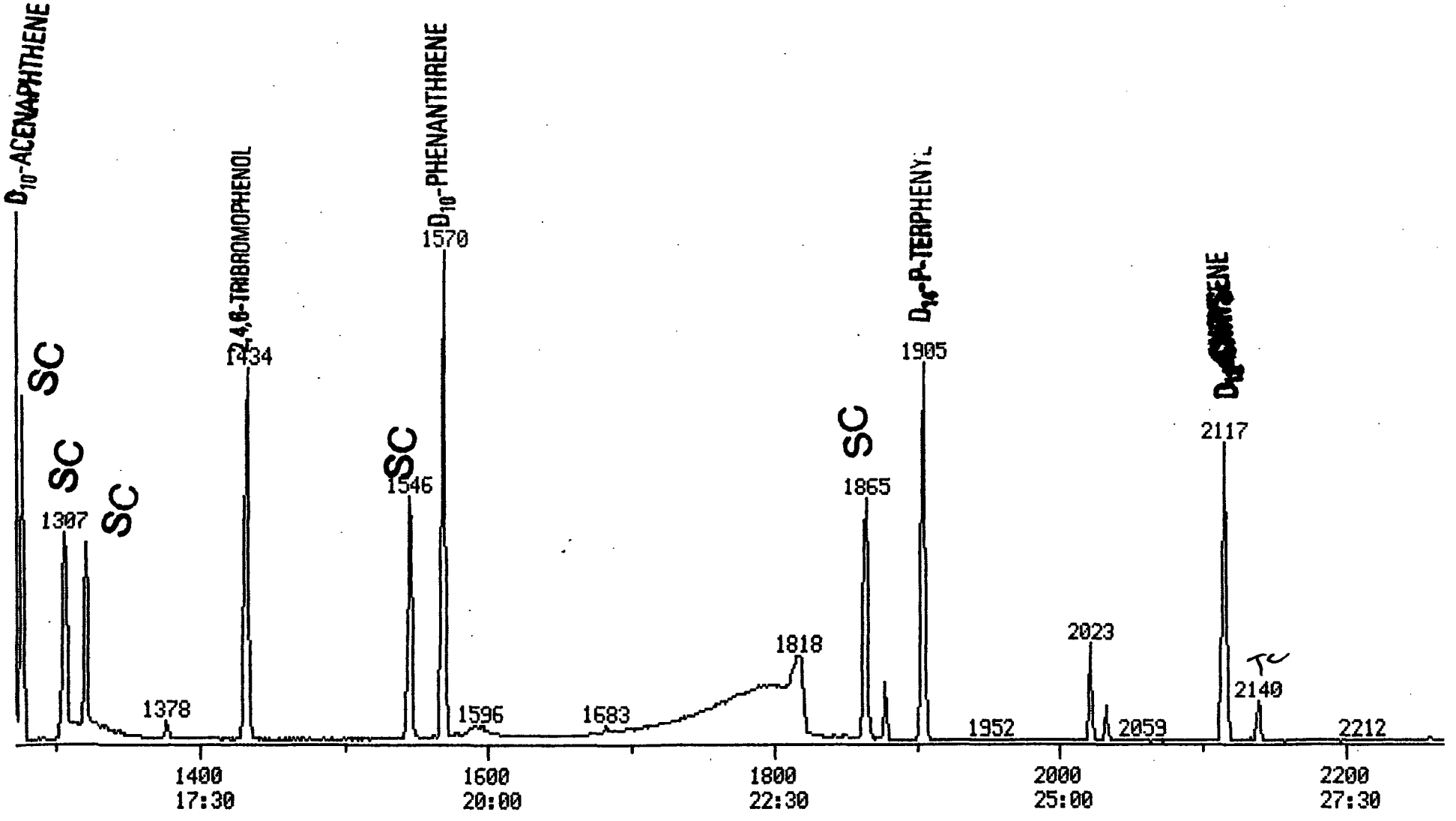
TC = Target Compound
SC = Spike Compound



01452

RIC DATA: 559450U571 #4 SCANS 1270 TO 2270
06/06/88 11:30:00 25 CALI: 060688CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

TC = Target Compound
SC = Spike Compound

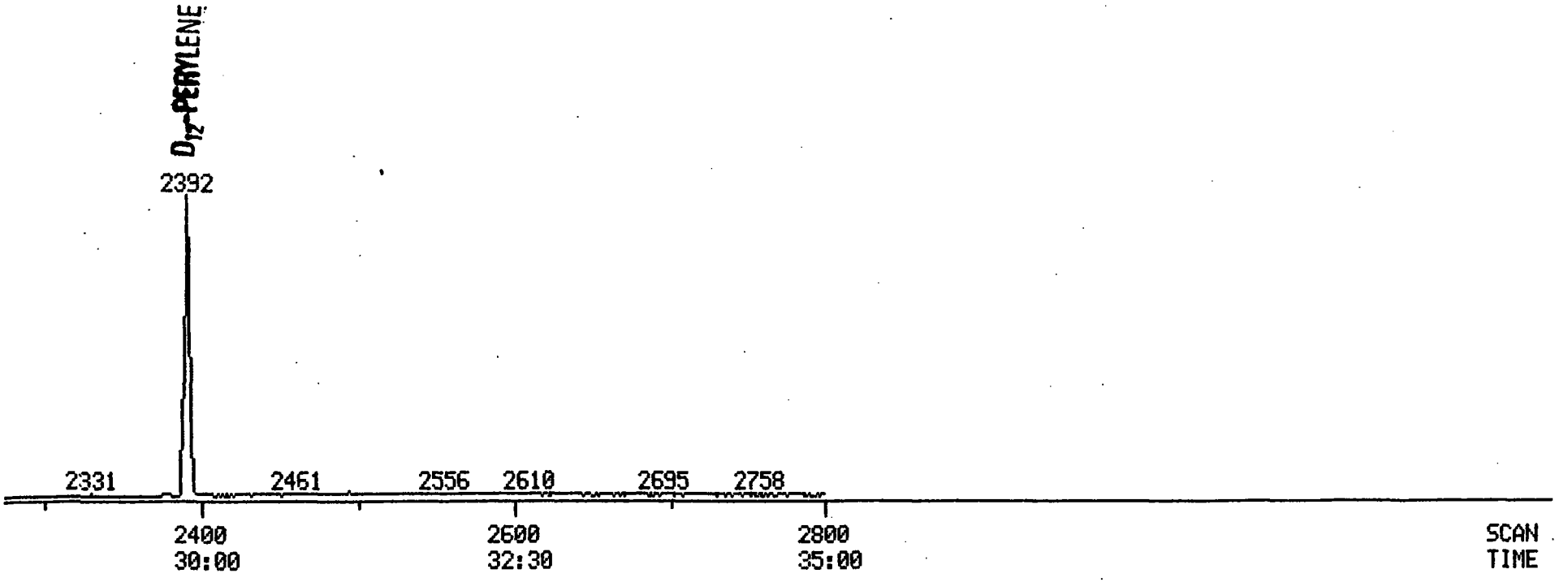


01453

RIC DATA: S59450U571 #4 SCANS 2270 TO 2800
06/06/88 11:30:00 MS CALI: 060688CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

TC=Target Compound
SC=Spike Compound

100.0 147456.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/06/88 12:17:44
DATA FILE: S59450U571
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 01454
REPORT: IS01

STANDARDS PROC	STANDARDS USED	STANDARDS POSS	STANDARDS RMS	PLUS UNKNOWNS PROC	PLUS UNKNOWNS USED	PLUS UNKNOWNS POSS	PLUS UNKNOWNS RMS	LIST NAMES STANDARD/UNKNOWN
1	1	1	0	7	5	4	96	IS01/TC01
3	3	1	32	18	6	1	125	IS02/TC02
3	3	1	32	12	5	1	89	IS03/TC03
3	3	1	170	18	7	1	106	IS04/TC04
3	3	1	170	10	4	1	120	IS05/TC05
3	3	1	127	8	4	1	209	IS06/TC06
3	3	1	80	14	7	1	60	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

77 COMPOUNDS PROCESSED, 25 FOUND

COMPOUND NO	LIB	ENTRY	SEARCH REF	PRED	SEL	DELTA	PEAKS	FIT	SAT PEAKS	CHRO M/Z	TOP	DELTA	PEAKS
1	S1	1	-681	683	683	.	1	968	.	152	683	.	1
2	S1	2	-486	487	487	.	1	995	.	112	487	.	1
3	S1	3	-634	635	634	-1	2	947	.	99	634	.	1
4	S1	105	-636	637	636	-1	2	968	.	94	636	.	1
5	S1	110	-648	649	.	.	.	.	.	93	648	.	1
6	S1	115	-652	653	653	.	1	994	.	128	653	.	1
7	S1	125	-675	676	.	.	.	.	.	146	.	.	.
8	S2	1	-916	918	918	.	1	995	.	136	918	.	1
9	S3	1	-1269	1272	1272	.	1	991	.	164	1272	.	1
10	S1	130	-685	685	685	.	1	968	.	146	685	.	1
11	S1	145	-713	714	.	.	.	.	.	108	.	.	.
12	S1	150	-717	718	.	.	.	.	.	146	.	.	.
13	S1	160	-737	738	.	.	.	.	.	108	.	.	.
14	S1	165	-742	743	.	.	.	.	.	45	.	.	.
15	S1	185	-765	766	.	.	.	.	.	108	.	.	.
16	S1	190	-769	770	768	-2	1	997	.	70	768	.	1
17	S1	200	-771	772	.	.	.	.	.	117	.	.	.
18	S2	2	-787	788	788	.	1	998	.	82	788	.	1
19	S2	10	-791	792	.	.	.	.	.	77	.	.	.
20	S2	20	-836	837	.	.	.	.	.	82	.	.	.
21	S2	25	-850	851	.	.	.	.	.	139	.	.	.
22	S2	30	-862	863	.	.	.	.	.	107	.	.	.
23	S2	35	-882	883	.	.	.	.	.	93	.	.	.
24	S2	40	-895	896	.	.	.	.	.	162	.	.	.
25	S2	45	-895	897	.	.	.	.	.	122	.	.	.
26	S2	55	-910	912	911	-1	1	989	.	180	911	.	1
27	S2	60	-921	923	.	.	.	.	.	128	922	.	1
28	S2	80	-939	941	.	.	.	.	.	127	.	.	.
29	S2	95	-959	961	.	.	.	.	.	225	.	.	.
30	S2	130	-1037	1039	1038	-1	1	992	.	107	1038	.	1
31	S2	145	-1057	1059	.	.	.	.	.	142	1058	.	1
32	S3	20	-1103	1105	.	.	.	.	.	237	.	.	.
33	S3	25	-1120	1122	.	.	.	.	.	196	.	.	.
34	S4	1	-1570	1571	1570	-1	1	992	.	188	1570	.	1
35	S3	30	-1127	1128	.	.	.	.	.	196	.	.	.
36	S3	3	-1138	1139	1139	.	1	996	.	172	1139	.	1
37	S3	40	-1154	1155	.	.	.	.	.	162	.	.	.
38	S3	45	-1185	1186	.	.	.	.	.	65	.	.	.
39	S3	55	-1232	1233	.	.	.	.	.	163	.	.	.
40	S3	65	-1238	1239	.	.	.	.	.	152	.	.	.
41	S3	70	-1244	1245	.	.	.	.	.	165	.	.	.
42	S3	75	-1270	1271	.	.	.	.	.	138	.	.	.
43	S3	80	-1277	1278	1278	.	1	994	.	153	1278	.	1
44	S3	85	-1289	1290	.	.	.	.	.	184	.	.	.
45	S3	95	-1307	1308	1307	-1	1	994	.	109	1307	.	1
46	S3	90	-1309	1310	.	.	.	.	.	168	.	.	.
47	S3	105	-1322	1323	1322	-1	1	982	.	165	1322	.	1
48	S3	130	-1378	1379	.	.	.	.	.	149	.	.	.
49	S3	135	-1380	1381	.	.	.	.	.	166	.	.	.
50	S3	140	-1383	1384	.	.	.	.	.	204	.	.	.
51	S3	150	-1397	1398	.	.	.	.	.	138	.	.	.
52	S4	10	-1407	1408	.	.	.	.	.	198	.	.	.
53	S4	15	-1412	1413	.	.	.	.	.	169	.	.	.
54	S3	2	-1433	1434	1434	.	1	965	.	330	1433	-1	1
55	S4	30	-1483	1484	.	.	.	.	.	248	.	.	.
56	S4	40	-1510	1511	.	.	.	.	.	284	.	.	.
57	S5	1	-2118	2117	2117	.	1	963	.	240	2117	.	1
58	S4	50	-1548	1548	1546	-2	1	987	.	266	1546	.	1
59	S4	65	-1576	1576	.	.	.	.	.	178	1574	.	1
60	S4	70	-1585	1585	.	.	.	.	.	178	.	.	.
61	S4	85	-1712	1712	.	.	.	.	.	149	1710	.	1
62	S4	110	-1820	1819	.	.	.	.	.	202	1819	.	1
63	S6	1	-2395	2392	2392	.	1	992	.	264	2392	.	1
64	S5	15	-1867	1866	1865	-1	1	997	.	202	1865	.	1
5	[illegible]	2	-1906	1905	1905	.	1	996	.	244	1905	.	1

66	S5	40	-2017	2015	.	.	.	.	.	149	.	.	.
67	S5	50	-2114	2112	.	.	.	.	.	228	.	.	.
68	S5	55	-2118	2116	.	.	.	.	.	252	.	.	.
69	S5	60	-2125	2123	.	.	.	.	.	228	.	.	.
70	S5	65	-2142	2140	2140	.	1	993	.	149	2140	.	1
71	S6	10	-2262	2260	2260	.	1	986	.	149	2260	.	1
72	S6	15	-2327	2325	.	.	.	.	.	252	.	.	.
73	S6	25	-2332	2330	.	.	.	.	.	252	.	.	.
74	S6	35	-2386	2383	.	.	.	.	.	252	.	.	.
75	S6	55	-2599	2596	.	.	.	.	.	276	.	.	.
76	S6	60	-2601	2598	.	.	.	.	.	278	.	.	.
77	S6	65	-2656	2653	.	.	.	.	.	276	.	.	.

Quantitation Report File: S59450U571

Data: S59450U571.TI
06/06/88 11:30:00 MS
Sample: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No.:

01456

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	C440	2,4-DICHLOROPHENOL	162 S2# 40	120-83-2
25	C430	BENZOIC ACID	122 S2# 45	65-85-0
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

01457

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	152	683	8:32	1	1.000	A BB	31179.	40.000 UG/ML	4.26
2	112	487	6:05	1	0.713	A BB	84307.	80.520 UG/ML	8.57
3	99	634	7:55	1	0.928	A BV	49236.	37.073 UG/ML	3.95
4	94	636	7:57	1	0.931	A BV	18325.	12.247 UG/ML	1.30
5	93	648	8:06	1	0.949	A VV	594.	0.497 UG/ML	0.05
6	128	653	8:10	1	0.956	A BB	48846.	43.497 UG/ML	4.63
7	NOT FOUND								
8	136	918	11:28	8	1.000	A BB	110517.	40.000 UG/ML	4.26
9	164	1272	15:54	9	1.000	A BB	51231.	40.000 UG/ML	4.26
10	146	685	8:34	1	1.003	A BB	17091.	13.841 UG/ML	1.47
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	70	768	9:36	1	1.124	A BB	14350.	17.310 UG/ML	1.84
17	NOT FOUND								
18	82	788	9:51	8	0.858	A BB	38364.	36.253 UG/ML	3.86
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	180	911	11:23	8	0.992	A BB	13991.	15.222 UG/ML	1.62
27	128	922	11:31	8	1.004	A BB	171.	0.058 UG/ML	0.01
28	NOT FOUND								
29	NOT FOUND								
30	107	1038	12:58	8	1.131	A BB	34900.	46.338 UG/ML	4.93
31	142	1058	13:13	8	1.153	A BB	105.	0.060 UG/ML	0.01
32	NOT FOUND								
33	NOT FOUND								
34	188	1570	19:37	34	1.000	A BV	80693.	40.000 UG/ML	4.26
35	NOT FOUND								
36	172	1139	14:14	9	0.895	A BV	74380.	39.427 UG/ML	4.20
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	153	1278	15:58	9	1.005	A BB	37146.	24.148 UG/ML	2.57
44	NOT FOUND								
45	109	1307	16:20	9	1.028	A BV	9517.	49.289 UG/ML	5.25
46	NOT FOUND								
47	165	1322	16:31	9	1.039	A BB	15225.	28.275 UG/ML	3.01
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	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:05	1.00	0.712	1.00	80.52	100.00	1.082	1.343	0.81
3	7:57	1.00	0.930	1.00	37.07	100.00	0.632	1.704	0.37
4	7:58	1.00	0.933	1.00	12.25	50.00	0.470	1.920	0.24
5	8:07	1.00	0.950	1.00	0.50	50.00	0.015	1.533	0.01
6	8:10	1.00	0.956	1.00	43.50	50.00	1.253	1.441	0.87
7	8:28		0.990						
8	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	8:35	1.00	1.004	1.00	13.84	50.00	0.439	1.584	0.28
11	8:56		1.045						
12	8:59		1.051						
13	9:14		1.080						
14	9:18		1.088						
15	9:35		1.121						
16	9:38	1.00	1.127	1.00	17.31	50.00	0.368	1.064	0.35
17	9:40		1.130						
18	9:52	1.00	0.859	1.00	36.25	50.00	0.278	0.383	0.73
19	9:55		0.863						
20	10:28		0.912						
21	10:39		0.927						
22	10:48		0.940						
23	11:03		0.962						
24	11:13		0.976						
25	11:13		0.976						
26	11:24	1.00	0.992	1.00	15.22	50.00	0.101	0.333	0.30
27	11:32	1.00	1.004	1.00	0.06	50.00	0.001	1.075	0.00
28	11:46		1.024						
29	12:01		1.046						
30	12:59	1.00	1.131	1.00	46.34	50.00	0.253	0.273	0.93
31	13:14	1.00	1.152	1.00	0.06	50.00	0.001	0.639	0.00
32	13:49		0.869						
33	14:01		0.882						
34	19:38	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:07		0.888						
36	14:15	1.00	0.896	1.00	39.43	50.00	1.161	1.473	0.79
37	14:27		0.909						
38	14:50		0.933						
39	15:25		0.970						
40	15:30		0.975						
41	15:34		0.980						
42	15:54		1.000						
43	15:59	1.00	1.006	1.00	24.15	50.00	0.580	1.201	0.48
44	16:08		1.015						
45	16:22	1.00	1.029	1.00	49.29	50.00	0.149	0.151	0.99
46	16:23		1.031						
47	16:33	1.00	1.041	1.00	28.27	50.00	0.238	0.420	0.57
48	17:15		1.085						
49	17:16		1.086						
50	17:19		1.089						

01458

Quantitation Report File: S59450U571

01459

Data: S59450U571.TI
06/06/88 11:30:00 MS
Sample: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	C730 BENZO(A)ANTHRACENE	228 S5# 50	56-55-3
68	C725 3,3'-DICHLOROBENZIDINE	252 S5# 55	91-94-1
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	1433	17:55	9	1.127	A BB	16190.	100.459 UG/ML	10.70
55	NOT FOUND								
56	NOT FOUND								
57	240	2117	26:28	57	1.000	A BB	55909.	40.000 UG/ML	4.26
58	266	1546	19:19	34	0.985	A BB	15839.	51.709 UG/ML	5.51
59	178	1574	19:40	34	1.003	A BB	123.	0.053 UG/ML	0.01
60	NOT FOUND								
61	149	1710	21:22	34	1.089	A BB	622.	0.197 UG/ML	0.02
62	202	1819	22:44	34	1.159	A BB	109.	0.049 UG/ML	0.01
63	264	2392	29:54	63	1.000	A BB	47414.	40.000 UG/ML	4.26
64	202	1865	23:19	57	0.881	A BB	56000.	34.153 UG/ML	3.64
65	244	1905	23:49	57	0.900	A BB	74419.	64.854 UG/ML	6.91
66	NOT FOUND								

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	149	2140	26:45	57	1.011	A VB	4534.	3.110 UG/ML	0.33
71	149	2260	28:15	63	0.945	A BB	1167.	0.514 UG/ML	0.05
72	NOT FOUND								
73	NOT FOUND								
74	NOT FOUND								
75	NOT FOUND								
76	NOT FOUND								
77	NOT FOUND								

01460

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
51	17:29		1.100						
52	17:35		0.896						
53	17:39		0.899						
54	17:56	1.00	1.128	1.00	100.46	100.00	0.126	0.126	1.00
55	18:32		0.944						
56	18:52		0.961						
57	26:29	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:21	1.00	0.985	1.00	51.71	50.00	0.157	0.152	1.03
59	19:42	1.00	1.003	1.00	0.05	50.00	0.001	1.146	0.00
60	19:49		1.009						
61	21:24	1.00	1.090	1.00	0.20	50.00	0.006	1.562	0.00
62	22:45	1.00	1.158	1.00	0.05	50.00	0.001	1.114	0.00
63	29:57	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:20	1.00	0.881	1.00	34.15	50.00	0.801	1.173	0.68
65	23:49	1.00	0.899	1.00	64.85	50.00	1.065	0.821	1.30
66	25:13		0.952						
67	26:25		0.998						
68	26:28		1.000						
69	26:34		1.003						
70	26:46	1.00	1.011	1.00	3.11	50.00	0.065	1.043	0.06
71	28:16	1.00	0.944	1.00	0.51	50.00	0.020	1.917	0.01
72	29:05		0.971						
73	29:09		0.973						
74	29:49		0.996						
75	32:29		1.085						
76	32:31		1.086						
77	33:12		1.109						

TCA FINISHED, 23 FOUND
FINISHED AT: 8/28/88 12:20:07

01461

RMAL QUANTITATION SUMMARY FILE: 5574300571
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	683	1	31179.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	110517.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1272	3	51231.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1570	4	80693.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2117	5	55909.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2392	6	47414.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	788	2	38364.	0.278	36.253
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1139	3	74380.	1.161	39.427
9	S5# 2	CS30 TERPHENYL-D14	244	1905	5	74419.	1.065	64.854
10	S1# 3	CS45 PHENOL-D5	99	634	1	49238.	0.632	37.073
11	S1# 2	CS50 2-FLUOROPHENOL	112	487	1	84307.	1.082	80.520
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1433	3	16190.	0.126	100.459
13	S1#105	C315 PHENOL	94	636	1	18325.	0.470	12.247 SP
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128	653	1	48846.	1.253	43.497 SP
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146	685	1	17091.	0.439	13.841 JP
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	768	1	14350.	0.368	17.310 SP
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	911	2	13991.	0.101	15.222 SP
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	1038	2	34900.	0.253	46.338 JP
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	1278	3	37146.	0.580	24.148 JP
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	1307	3	9517.	0.149	49.289 SP
51	S3#105	C570 2,4-DINITROTOLUENE	165	1322	3	15225.	0.238	28.275 SP
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	1546	4	15839.	0.157	51.709 SP
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	1865	5	56000.	0.801	34.153 JP
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	2140	5	4534.	0.065	3.110
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		

75	S6#					8	
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

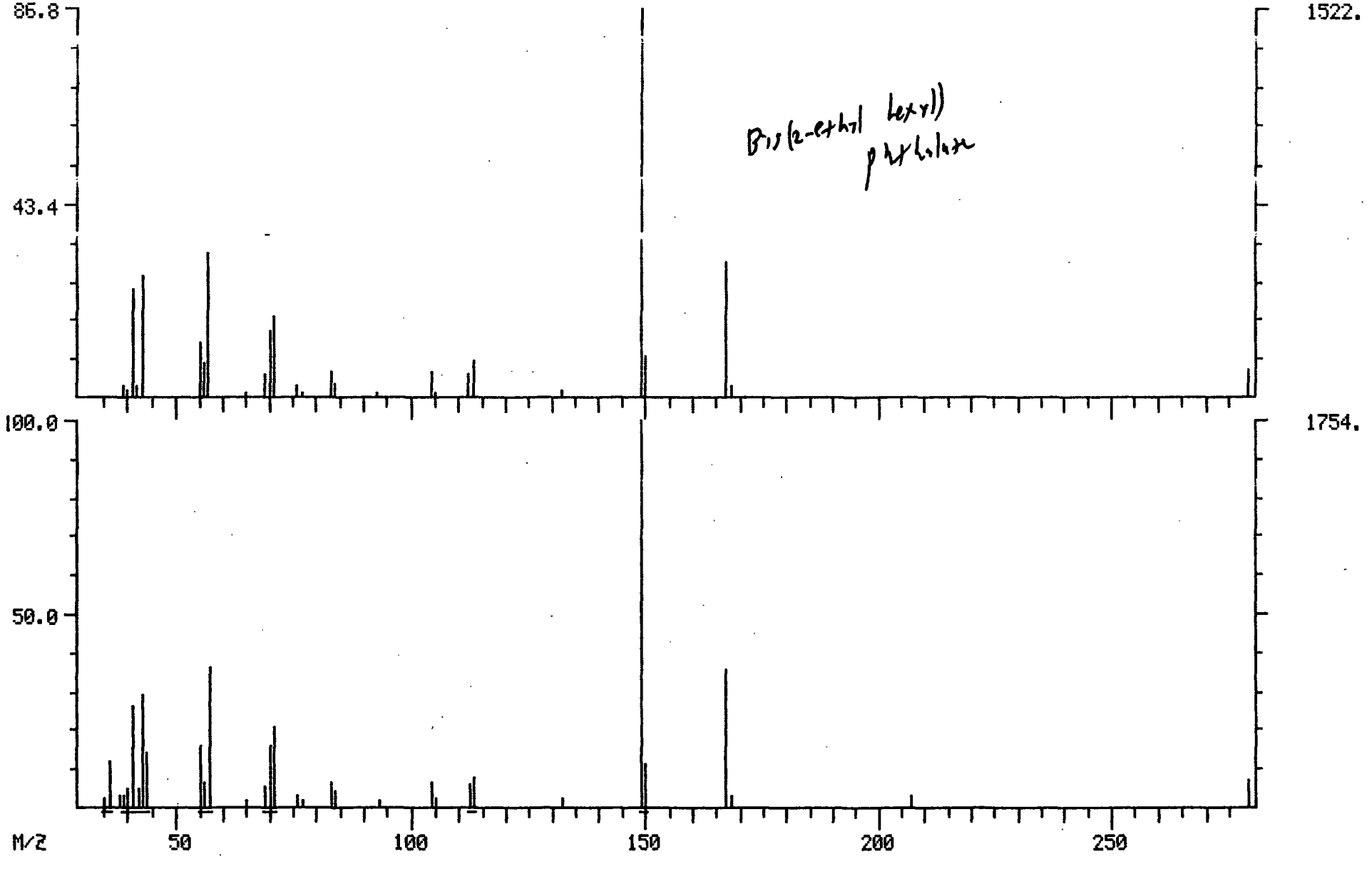
01462

01463

DUAL MASS SPECTRUM
06/06/88 11:30:00 + 26:45
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 289 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U571 #2140 BASE M/Z: 149/ 149
CALI: 060688CU #5 RIC: 5623./ 7111.

MS



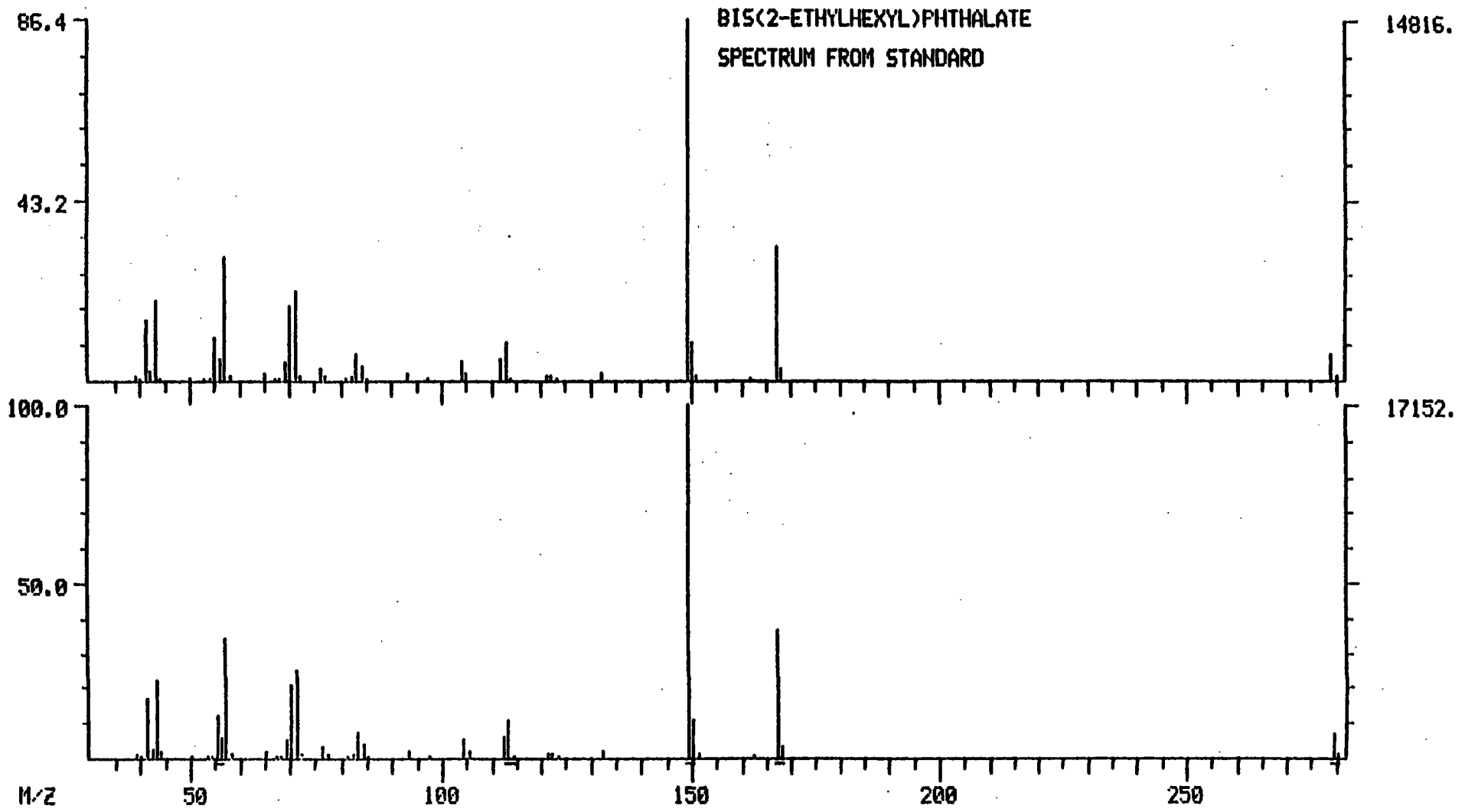
Bis(2-ethyl hexyl) phthalate

01464

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.



6/6/88 11:30:15 SCAN 1 OF 2800
Acquisition started

Acquire 5 Run 0:S59450U571 ACQUIRING 01465
06/06/88 11:30:00 + 0:04 Free sectors: 20095 Scan: 5 of 2800
Sample: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No:

********** 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 : 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	40.5	0.0
3	325 - 325	-	10.0	40.5			
4	325 - 325	-	0.0	40.5			

********** 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: 30
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	

6/6/88 12:05:18
ACQUISITION COMPLETED
SCANS 1 TO 2800 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2800	181.5	2100.0	8.6	33847. 12.	16.

PROCEDURE: TCA DIAGNOSTIC REPORT 6/08/88 16:50:42
DATA FILE: S59430U571
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

01466

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	6	4	295	ISO1/TCO1
3	3	1	32	14	4	1	117	ISO2/TCO2

26 COMPOUNDS PROCESSED, 9 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >						< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-681	683	683	.	1	968	.	152	683	.	1
2	S1	4	-303	302	302	.	1	978	.	84	302	.	1
3	S1	20	-304	303	304	1	2	991	.	79	304	.	1
4	S1	30	-399	399	399	.	2	990	.	93	399	.	1
5	S1	62	-464	464	.	.	.	.	.	93	.	.	.
6	S1	64	-495	495	.	.	.	.	.	107	.	.	.
7	S1	73	-526	526	.	.	.	.	.	106	.	.	.
8	S1	83	-562	562	.	.	.	.	.	107	.	.	.
9	S1	87	-583	584	.	.	.	.	.	107	.	.	.
10	S1	88	-603	604	607	3	1	984	.	107	607	.	1
11	S1	89	-611	612	607	-5	1	930	.	107	607	.	1
12	S1	92	-630	631	.	.	.	.	.	107	.	.	.
13	S1	122	-667	668	.	.	.	.	.	107	.	.	.
14	S2	1	-916	918	918	.	1	995	.	136	918	.	1
15	S3	1	-1269	1272	1272	.	1	991	.	164	1272	.	1
16	S1	137	-697	700	701	1	1	989	.	106	701	.	1
17	S1	142	-711	714	.	.	.	.	.	106	.	.	.
18	S1	187	-765	768	.	.	.	.	.	108	.	.	.
19	S1	202	-791	794	.	.	.	.	.	106	.	.	.
20	S1	203	-792	795	.	.	.	.	.	106	.	.	.
21	S1	204	-812	815	.	.	.	.	.	122	.	.	.
22	S2	27	-864	867	.	.	.	.	.	107	.	.	.
23	S2	37	-888	891	.	.	.	.	.	107	.	.	.
24	S2	47	-901	904	.	.	.	.	.	107	.	.	.
25	S2	57	-920	923	.	.	.	.	.	107	.	.	.
26	S2	150	-1079	1082	.	.	.	.	.	142	.	.	.

Quantitation Report File: S59450U571

Data: S59450U571.TI
06/06/88 11:30:00
Sample: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
onds.:
ormula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No.:

ms

01467

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	683	8:32	1	1.000	A BB	31179.	40.000 UG/ML	13.57
2	84	302	3:46	1	0.442	A BV	27498.	29.581 UG/ML	10.04
3	79	304	3:48	1	0.445	A BB	32539.	25.392 UG/ML	8.62
4	93	399	4:59	1	0.584	A BV	28792.	22.134 UG/ML	7.51
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	107	607	7:35	1	0.889	A BB	28204.	31.544 UG/ML	10.71
11	107	607	7:35	1	0.889	A BB	28204.	32.245 UG/ML	10.94
12	NOT FOUND								
13	NOT FOUND								
14	136	918	11:28	14	1.000	A BB	110517.	40.000 UG/ML	13.57
15	164	1272	15:54	15	1.000	A BB	51231.	40.000 UG/ML	13.57
16	106	701	8:46	1	1.026	A BB	48041.	33.796 UG/ML	11.47
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	NOT FOUND								
26	NOT FOUND								

01468

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:47	1.00	0.444	1.00	29.58	50.00	0.706	1.193	0.59
3	3:48	1.00	0.446	1.00	25.39	50.00	0.835	1.644	0.51
4	4:59	1.00	0.585	1.00	22.13	50.00	0.739	1.669	0.44
5	5:48		0.680						
6	6:11		0.726						
7	6:34		0.771						
8	7:01		0.824						
9	7:17		0.855						
10	7:32	1.01	0.884	1.01	31.54	50.00	0.724	1.147	0.63
11	7:38	0.99	0.896	0.99	32.25	50.00	0.724	1.122	0.64
12	7:52		0.924						
13	8:20		0.978						
14	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	8:43	1.01	1.022	1.00	33.80	50.00	1.233	1.824	0.68
17	8:53		1.043						
18	9:34		1.122						
19	9:53		1.160						
20	9:54		1.161						
21	10:09		1.191						
22	10:48		0.942						
23	11:06		0.968						
24	11:16		0.983						
25	11:30		1.349						
26	13:29		1.177						

TCA FINISHED, 9 FOUND
FINISHED AT: 6/08/88 16:54:05

RMAL QUANTITATION SUMMARY FILE: S59450U571
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

01469

UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	683	1	31179.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	110517.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1272	3	51231.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	302	1	27498.	0.706	29.581
5	S1# 20	PYRIDINE	79	304	1	32539.	0.835	25.392 ✓✓
6	S1# 30	2-PICOLINE	93	399	1	28792.	0.739	22.134 ✓
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	607	1	28204.	0.724	31.544 ✓
13	S1# 89	4-ETHYL PYRIDINE	107	607	1	28204.	0.724	~~32.245~~ ?
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	701	1	48041.	1.233	33.796 ✓
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		

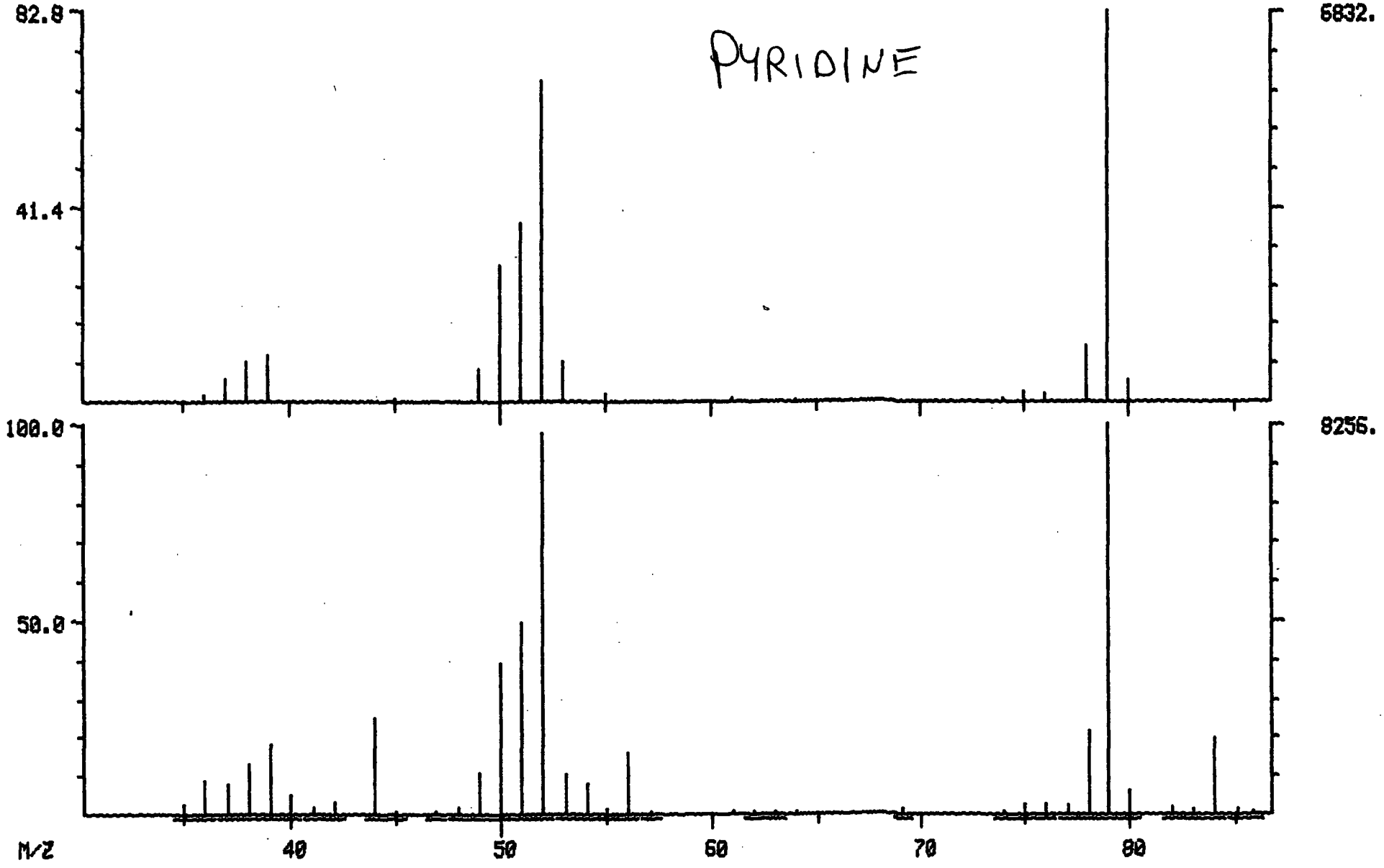
01470

DUAL MASS SPECTRUM
06/06/88 11:30:00 + 3:48
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 58 DEG. C
ENHANCED (S 15B 2N 0T)

MS

DATA: S59450U571 #304
CALI: 060688CU #5

BASE M/Z: 79/ 79
RIC: 23167./ 40191.

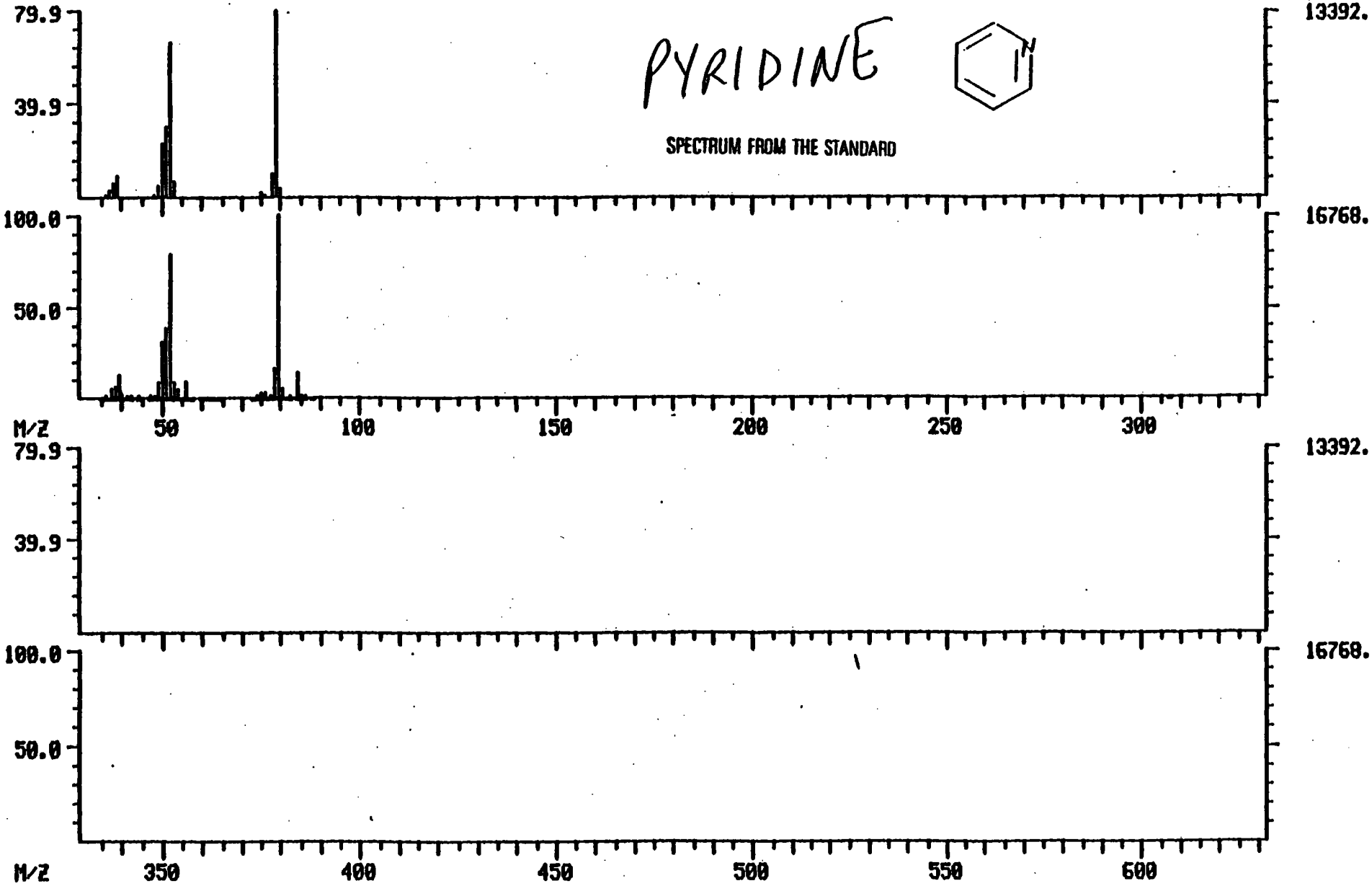


01471

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 4:10
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #334
CALI: 060288CR #5

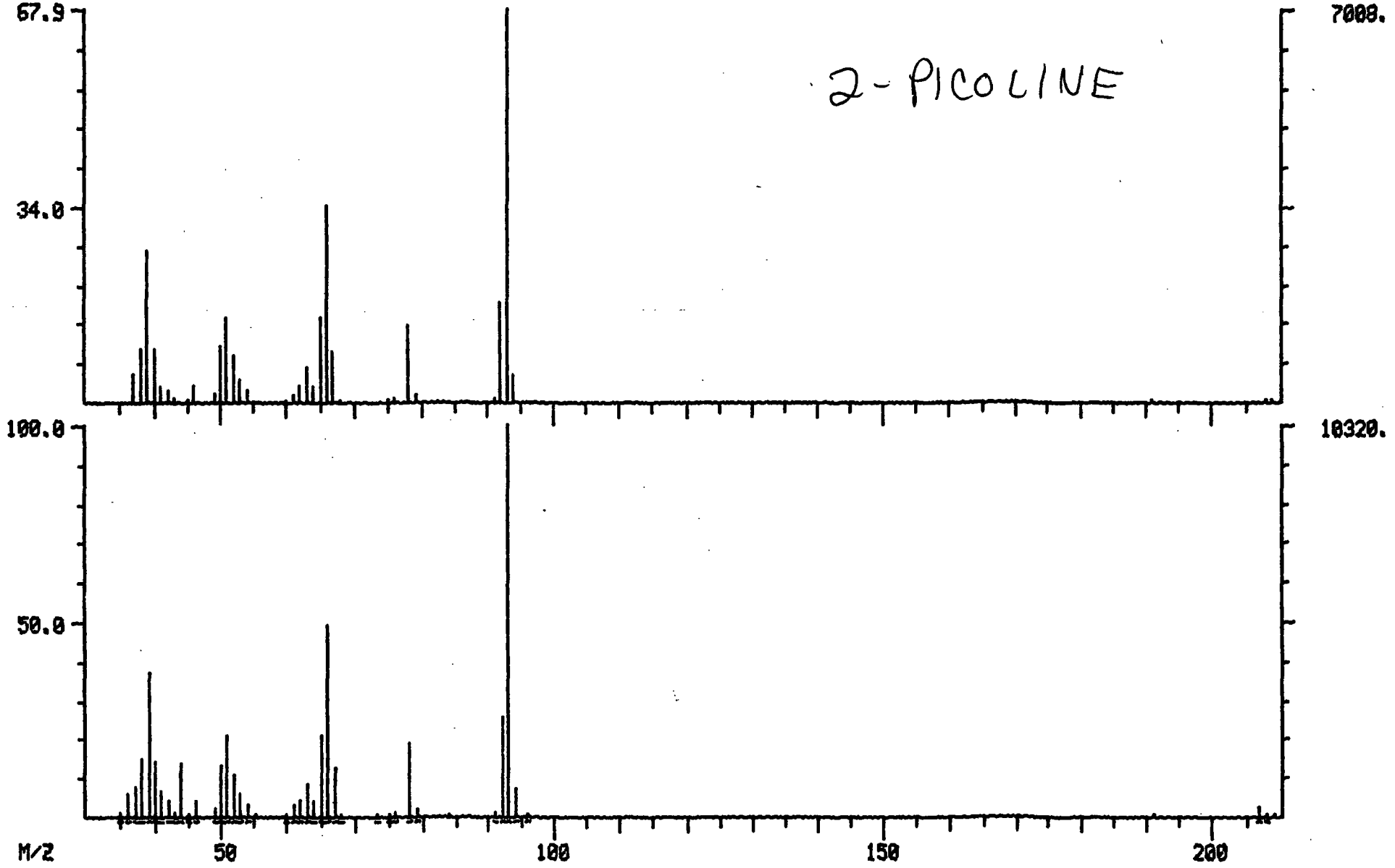
BASE M/Z: 79/ 79
RIC: 41855./ 60863.



01472

DUAL MASS SPECTRUM
06/06/88 11:30:00 + 4:59 m5
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 70 DEG. C
ENHANCED (5 15B 2N 0T)

DATA: S59450U571 #339 BASE M/Z: 93/ 93
CALI: 060688CU #5 RIC: 28639./ 44671.

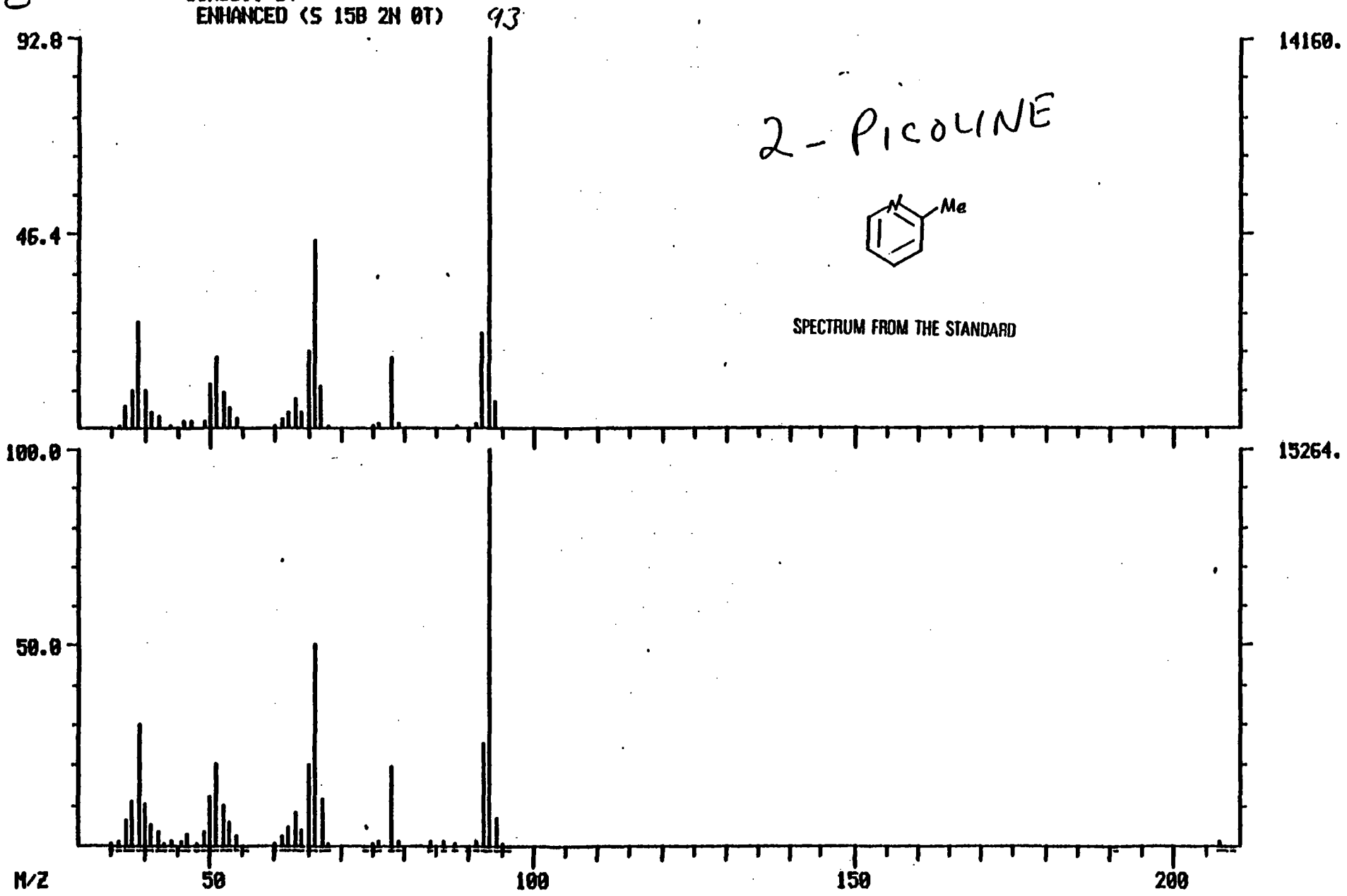


01473

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

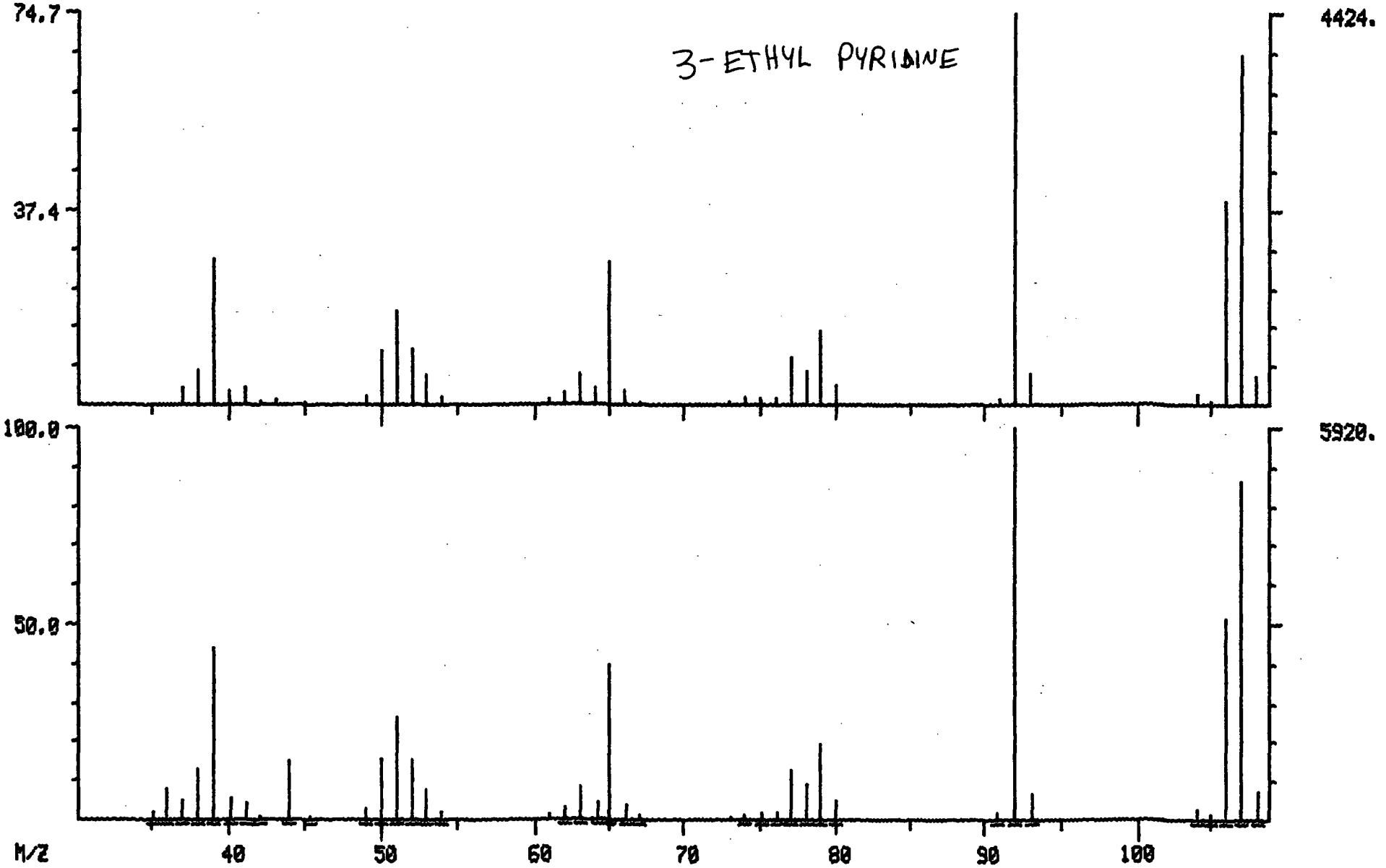
SPECTRUM FROM THE STANDARD

01474

DUAL MASS SPECTRUM
06/06/88 11:30:00 + 7:35
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

MS

DATA: S59450U571 #607 BASE M/Z: 92/ 92
CALI: 060688CU #5 RIC: 21823./ 31807.



01475

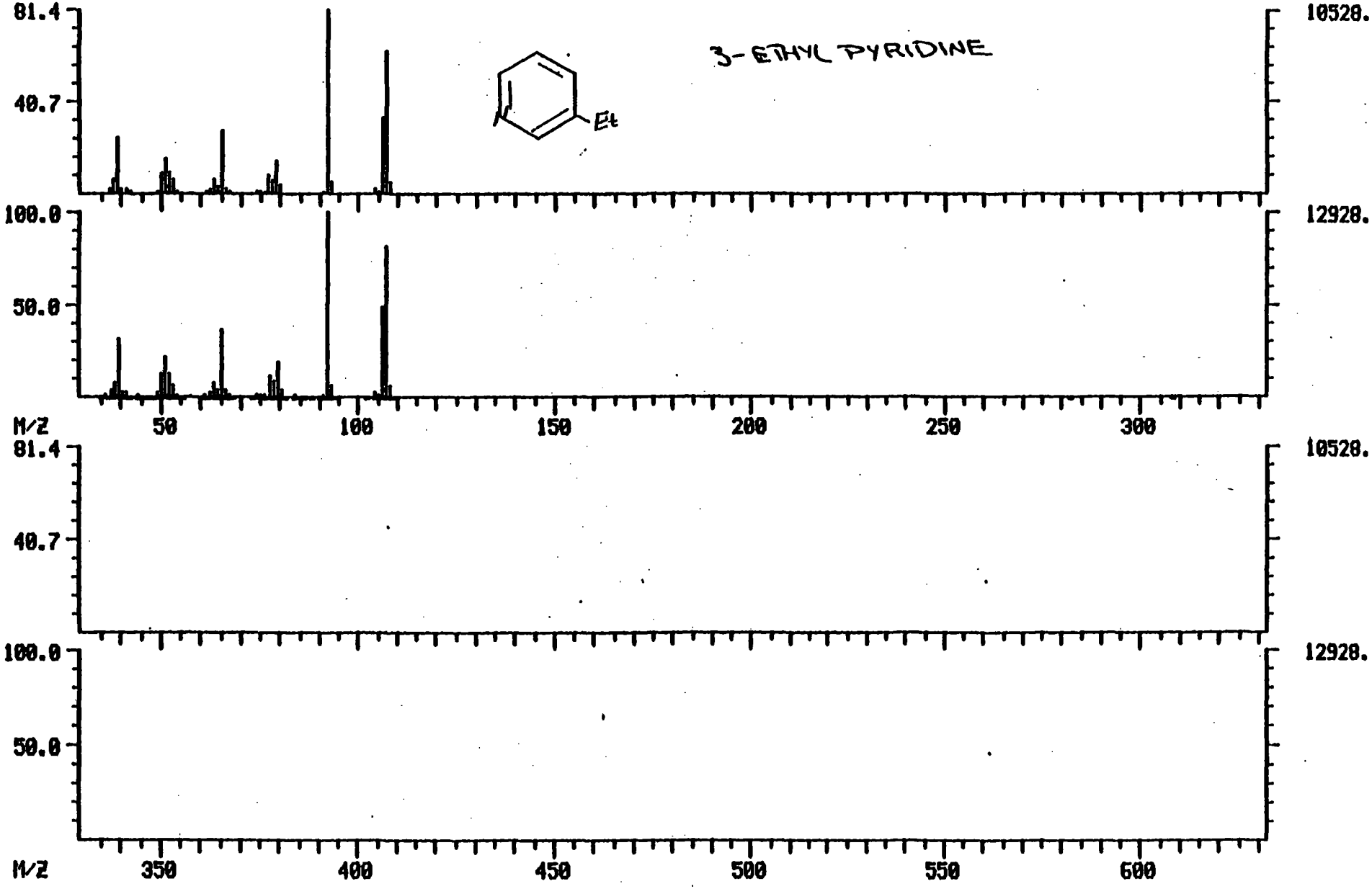
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:55
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #634
CALI: 060288CR #5

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

SPECTRUM FROM THE STANDARD

3-ETHYL PYRIDINE



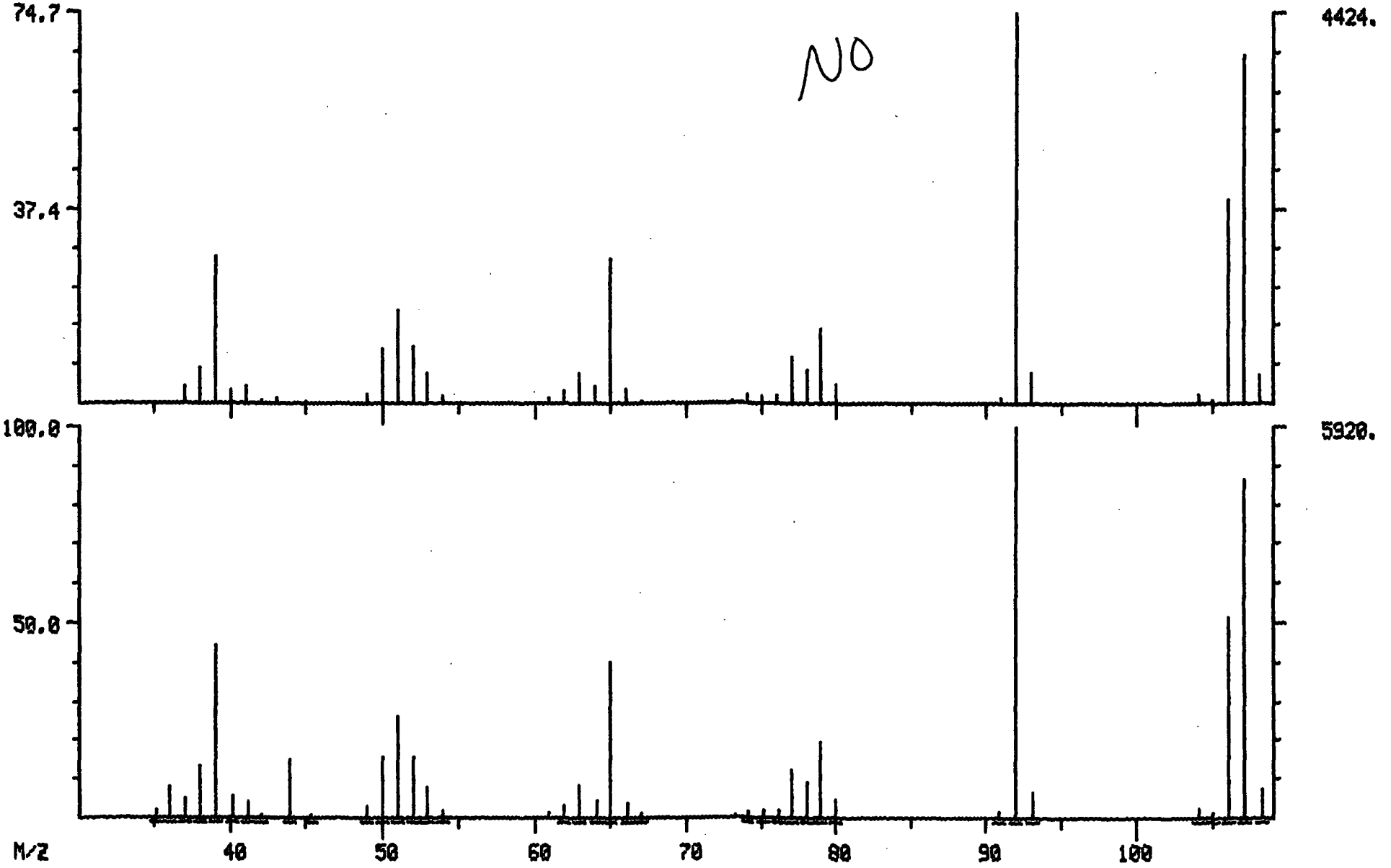
014176

DUAL MASS SPECTRUM
06/06/88 11:30:00 + 7:35
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

MS

DATA: 559450U571 #607
CALI: 060688CU #5

BASE M/Z: 92/ 92
RIC: 21823./ 31807.



014477

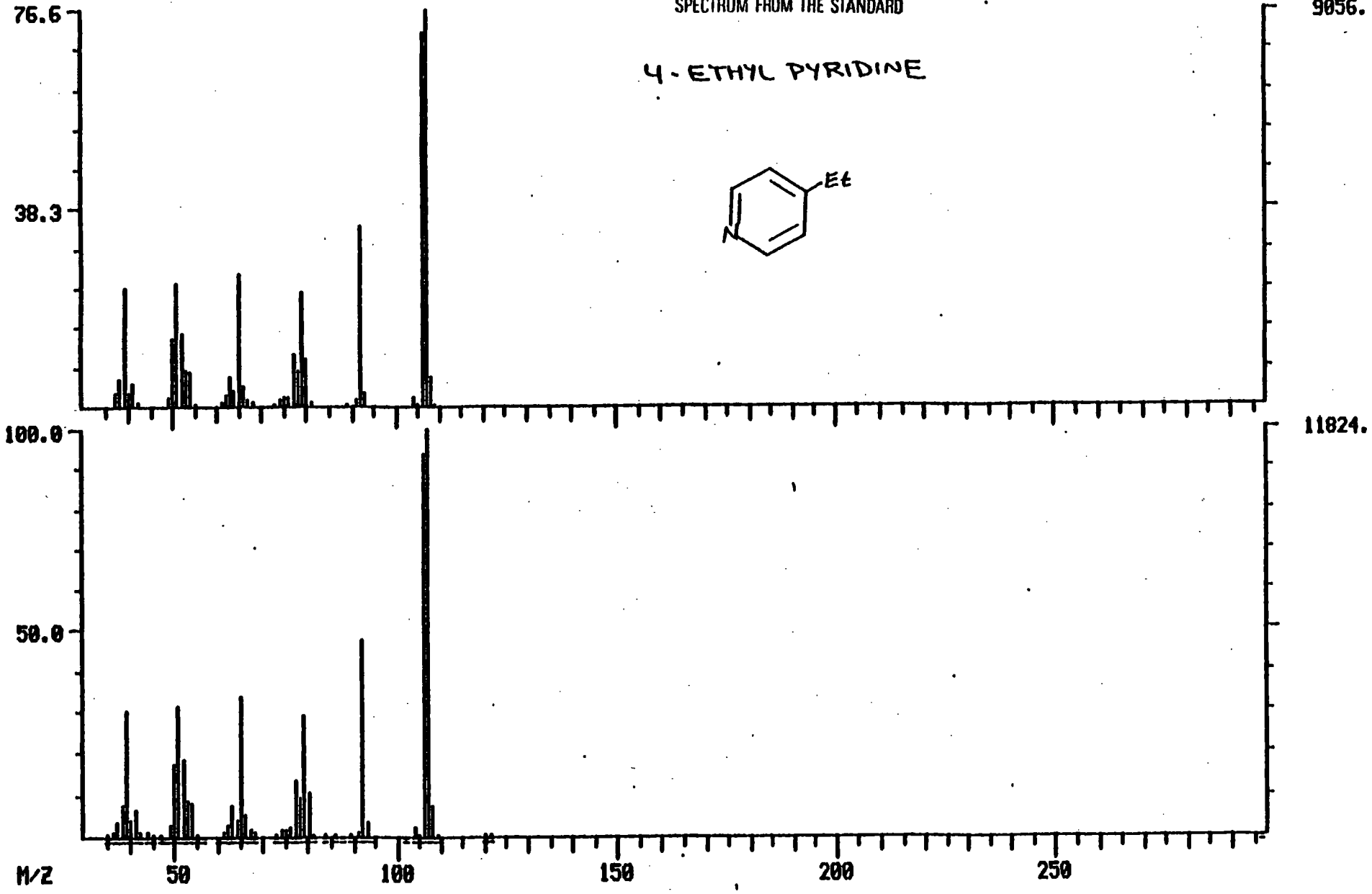
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:01
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #642
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47679./ 62655.

SPECTRUM FROM THE STANDARD

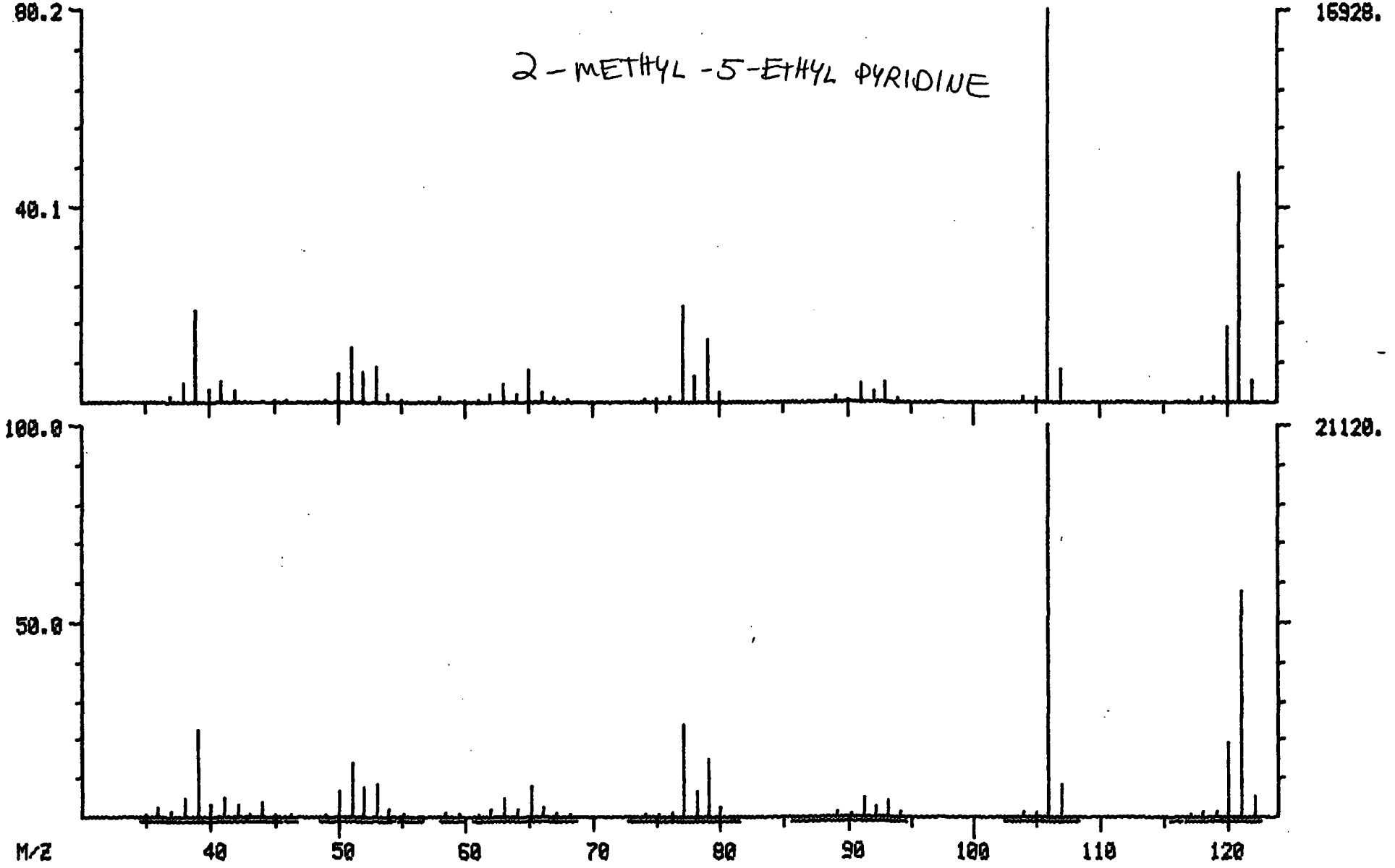
4-ETHYL PYRIDINE



014178

DUAL MASS SPECTRUM
06/06/88 11:30:00 + 8:46 ms
SAMPLE: CLP,59450,,0290,LOW,WATER,59450-0290 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 108 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U571 #701 BASE M/Z: 106/ 106
CALI: 060688CU #5 RIC: 62719./ 78335.

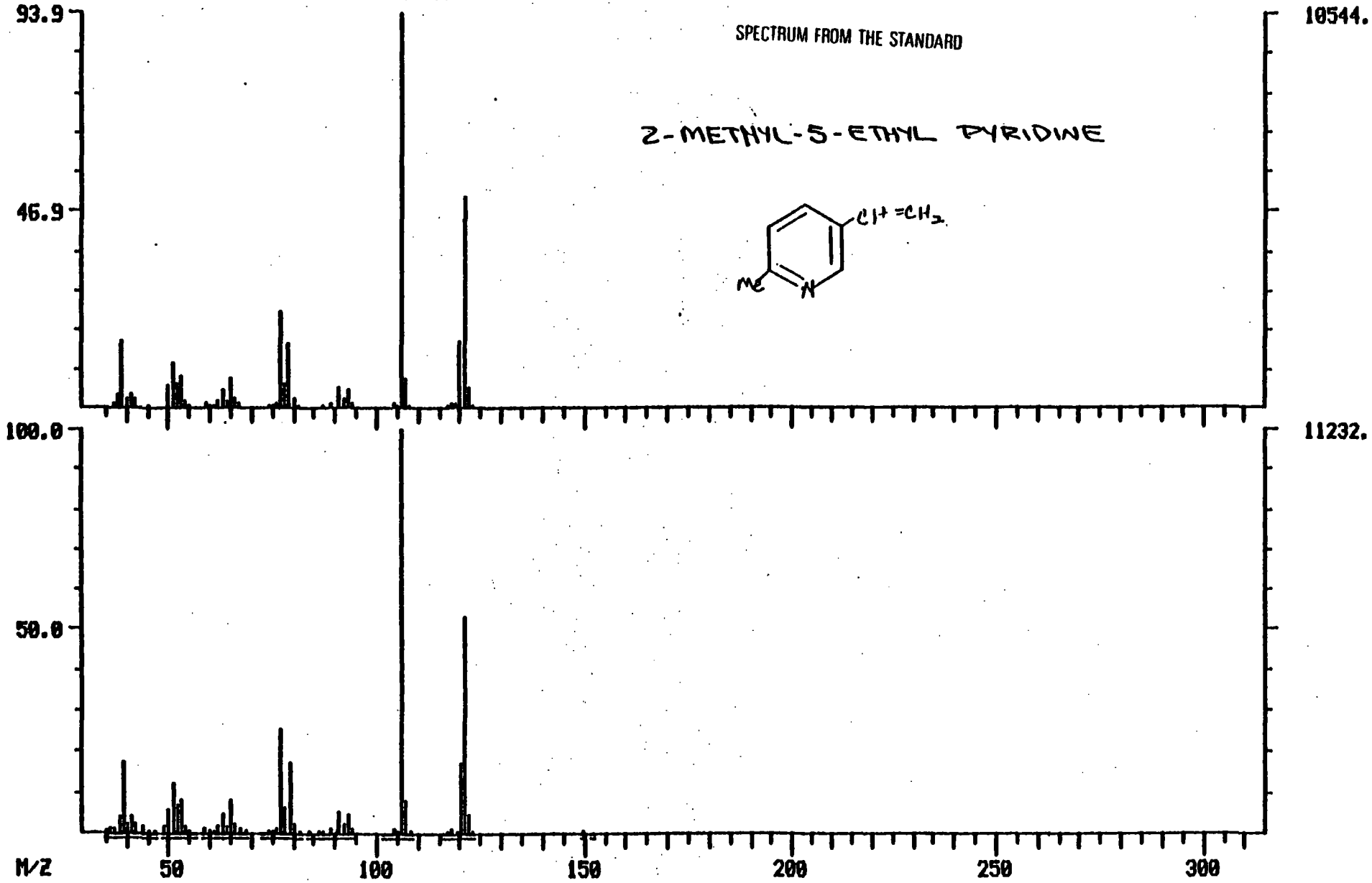


01479

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.



SPECTRUM FROM THE STANDARD

2-METHYL-5-ETHYL PYRIDINE

RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE: 3: S59450X897. STARTED : 6/09/88 1:52:41

6/8/88 23:47:51 SCAN 1 OF 3900
Acquisition started

01480

Acquire Run 3: S59450X897 ACQUIRING
06/08/88 23:47:00 + 0:03 Free sectors: 27943 Scan: 7 of 3900
Sample: 59450-0270 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59450

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

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

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

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

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

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	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	

6/9/88 0:16:17 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

6/9/88 0:20:26
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

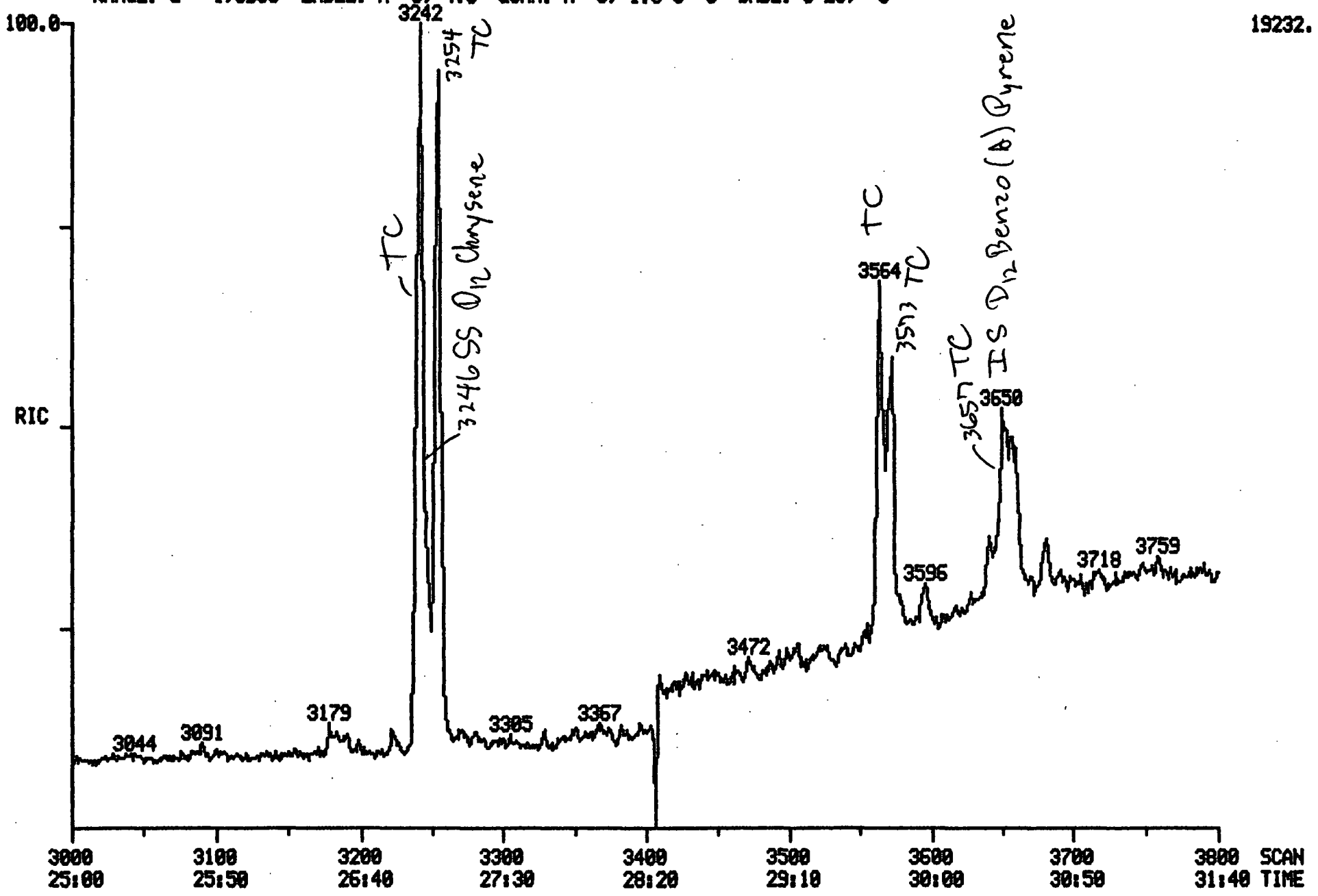
01481

MIDRIC
06/08/88 23:47:00
SAMPLE: 59450-0270 PAH H2O SPIKE 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: 559450X897 #1
CALI: 060888CX #2

SCANS 3000 TO 3800

TC = Target Compound



Quantitation Report File: S59450X897

Data: S59450X897.TI
06/08/88 23:47:00
Sample: 59450-0270 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59450

01482

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

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

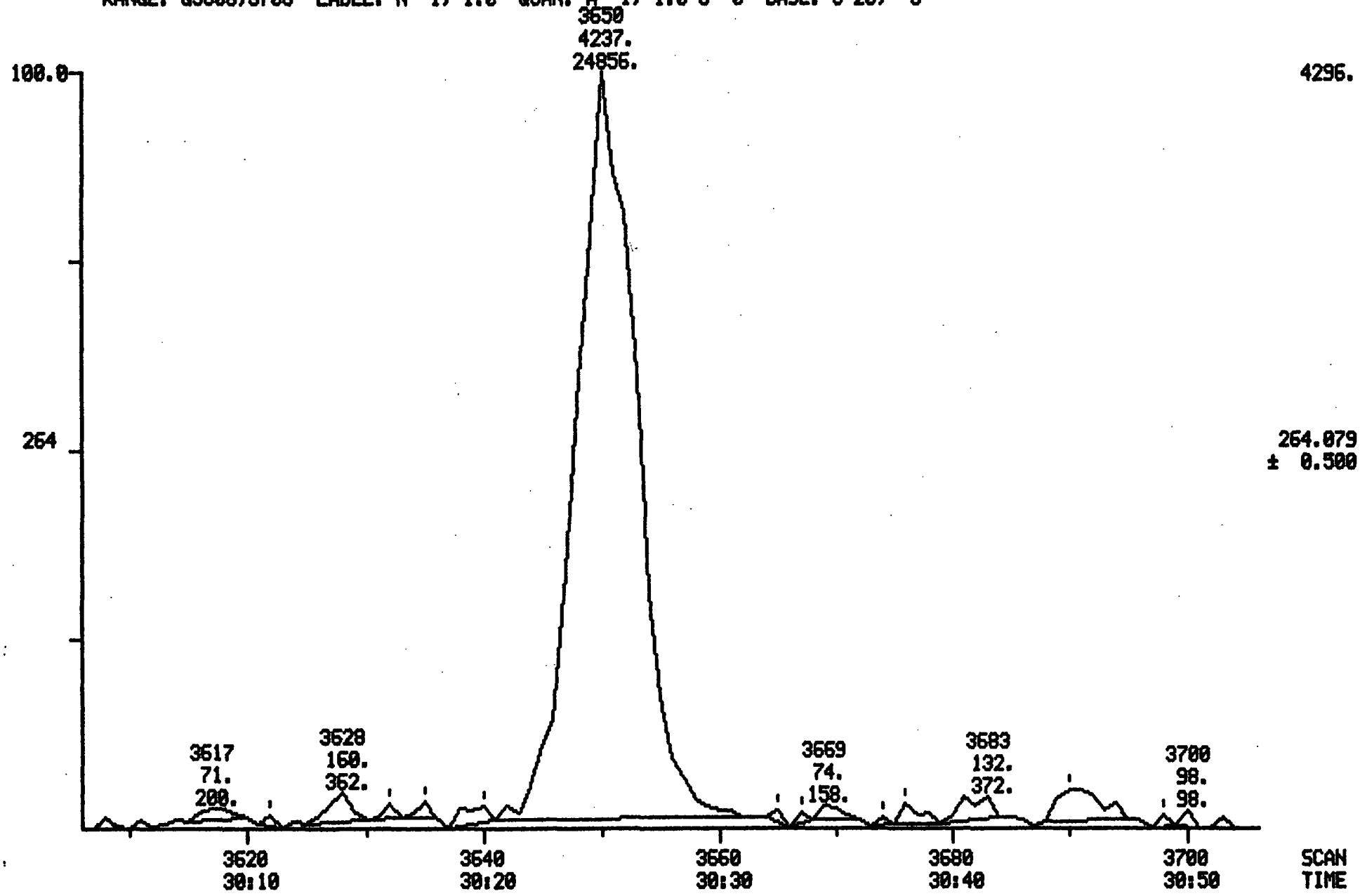
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3650	30:25	1	1.000	A BB	24856.	80.000	NG/ML	6.60
2	240	3246	27:03	1	0.889	A BV	25143.	52.966	NG/ML	4.37
3	228	3242	27:01	1	0.888	A BV	65580.	143.628	NG/ML	11.84
4	226	3242	27:01	1	0.888	A BV	15711.	147.709	NG/ML	12.18
5	228	3254	27:07	1	0.892	A VB	63239.	138.542	NG/ML	11.42
6	226	3254	27:07	1	0.892	A VB	16964.	140.935	NG/ML	11.62
7	252	3564	29:42	1	0.976	A BV	37428.	95.996	NG/ML	7.91
8	250	3564	29:42	1	0.976	A BV	7475.	63.027	NG/ML	5.20
~~9~~	250	3571	29:45	1	0.978	A VB	6969.	58.763	NG/ML	4.84
~~10~~	252	3564	29:42	1	0.976	A BV	37428.	59.644	NG/ML	4.92
~~11~~	250	3564	29:42	1	0.976	A BV	7475.	63.027	NG/ML	5.20
12	250	3571	29:45	1	0.978	A VB	6969.	58.763	NG/ML	4.84
13	250	3586	29:53	1	0.982	A BB	64.	0.623	NG/ML	0.05
14	252	3657	30:28	1	1.002	A VB	26006.	60.259	NG/ML	4.97
15	250	3659	30:29	1	1.002	A BB	5180.	49.093	NG/ML	4.05

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:04	1.00	0.888	1.00	52.97	80.00	1.012	1.528	0.66
3	27:01	1.00	0.887	1.00	143.63	80.00	2.638	1.470	1.80
4	27:01	1.00	0.887	1.00	147.71	80.00	0.632	0.342	1.85
5	27:09	1.00	0.891	1.00	138.54	80.00	2.544	1.469	1.73
6	27:09	1.00	0.891	1.00	140.93	80.00	0.682	0.387	1.76
7	29:43	1.00	0.975	1.00	96.00	80.00	1.506	1.255	1.20
8	29:47	1.00	0.978	1.00	63.03	80.00	0.301	0.382	0.79
9	29:47	1.00	0.978	1.00	58.76	80.00	0.280	0.382	0.73

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	29:47	1.00	0.978	1.00	59.64	80.00	1.506	2.020	0.75
11	29:47	1.00	0.978	1.00	63.03	80.00	0.301	0.382	0.79
12	29:47	1.00	0.978	1.00	58.76	80.00	0.280	0.382	0.73
13	29:41	1.01	0.982	1.00	0.62	80.00	0.003	0.330	0.01
14	30:30	1.00	1.001	1.00	60.26	80.00	1.046	1.389	0.75
15	30:30	1.00	1.001	1.00	49.09	80.00	0.208	0.340	0.61

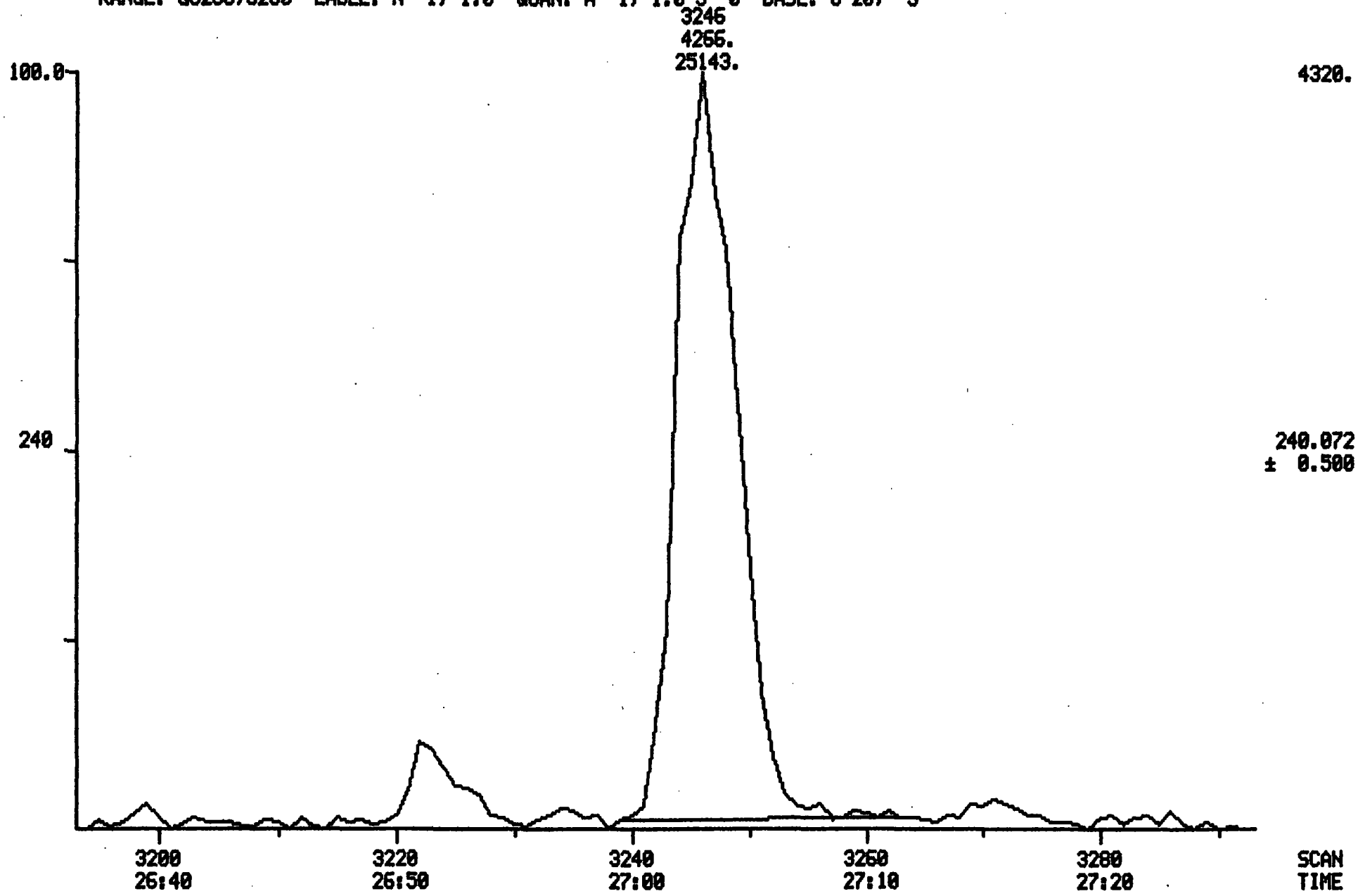
01484

MIDMASS CHROMATOGRAM DATA: 559450X897 #3656 SCANS 3606 TO 3706
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3606,3706 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



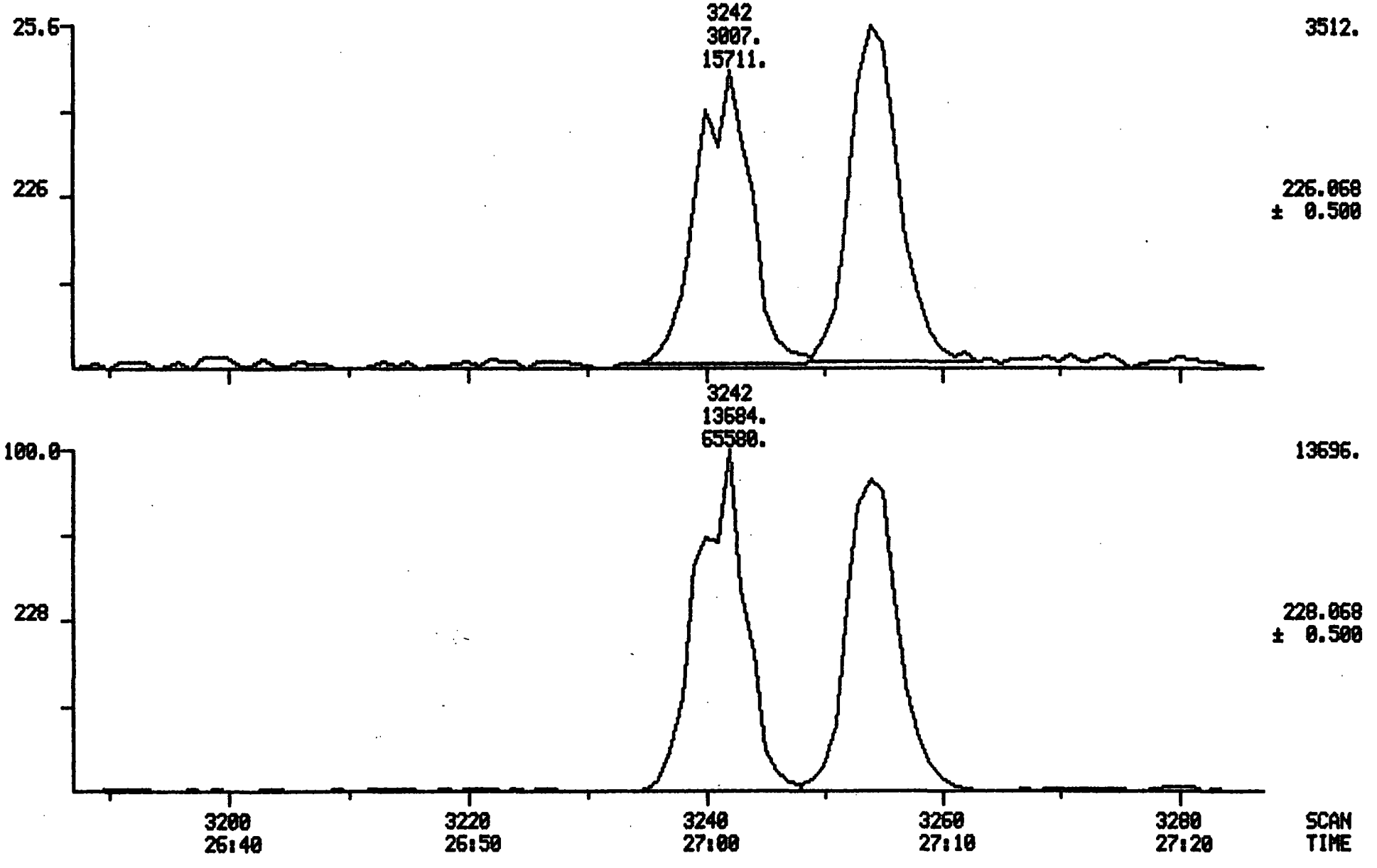
01485

MIDMASS CHROMATOGRAM DATA: 559450X897 #3243 SCANS 3193 TO 3293
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3236,3250 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



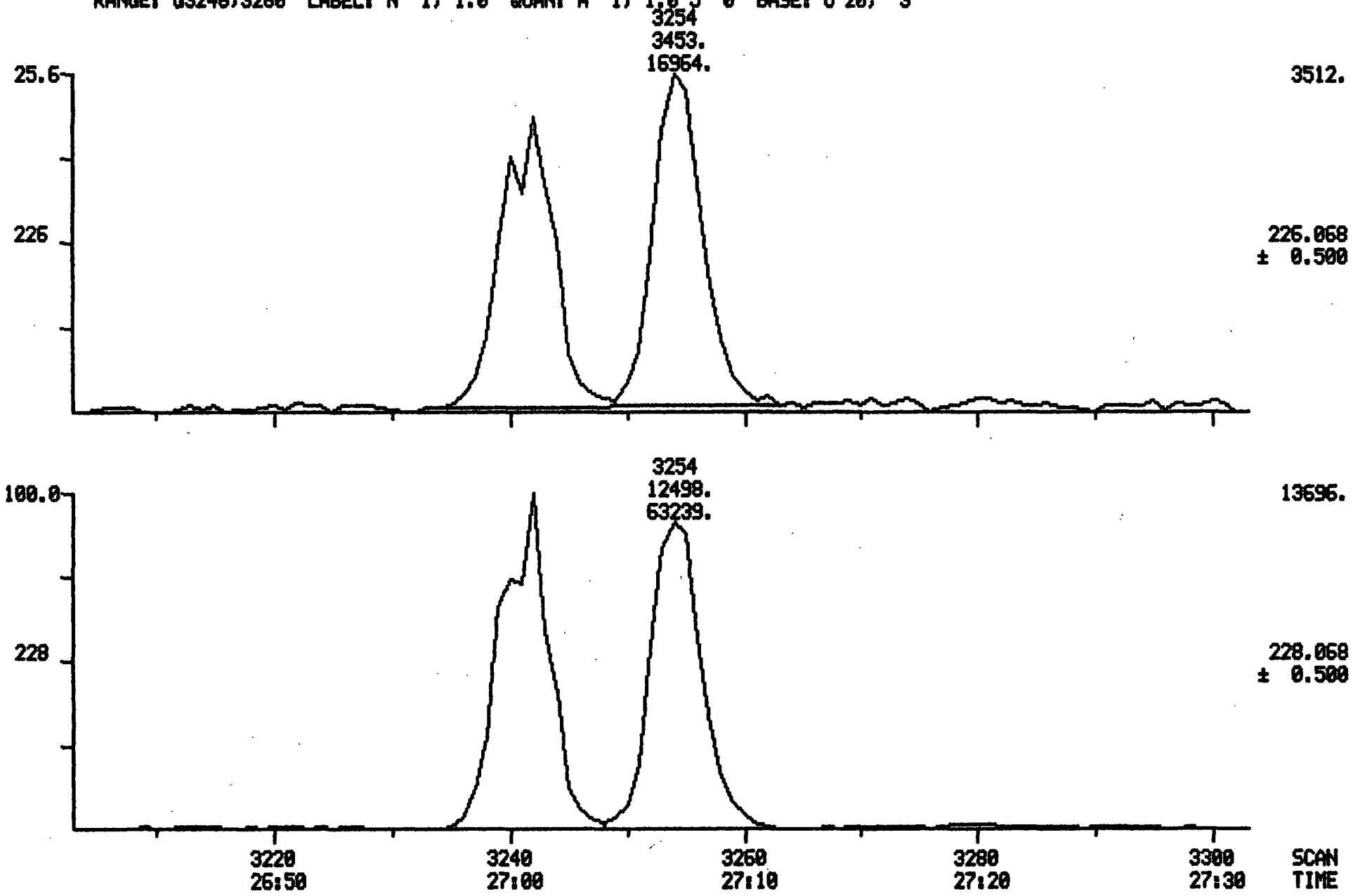
01486

MIDMASS CHROMATOGRAMS DATA: 559450X897 #3237 SCANS 3187 TO 3287
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3230,3244 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



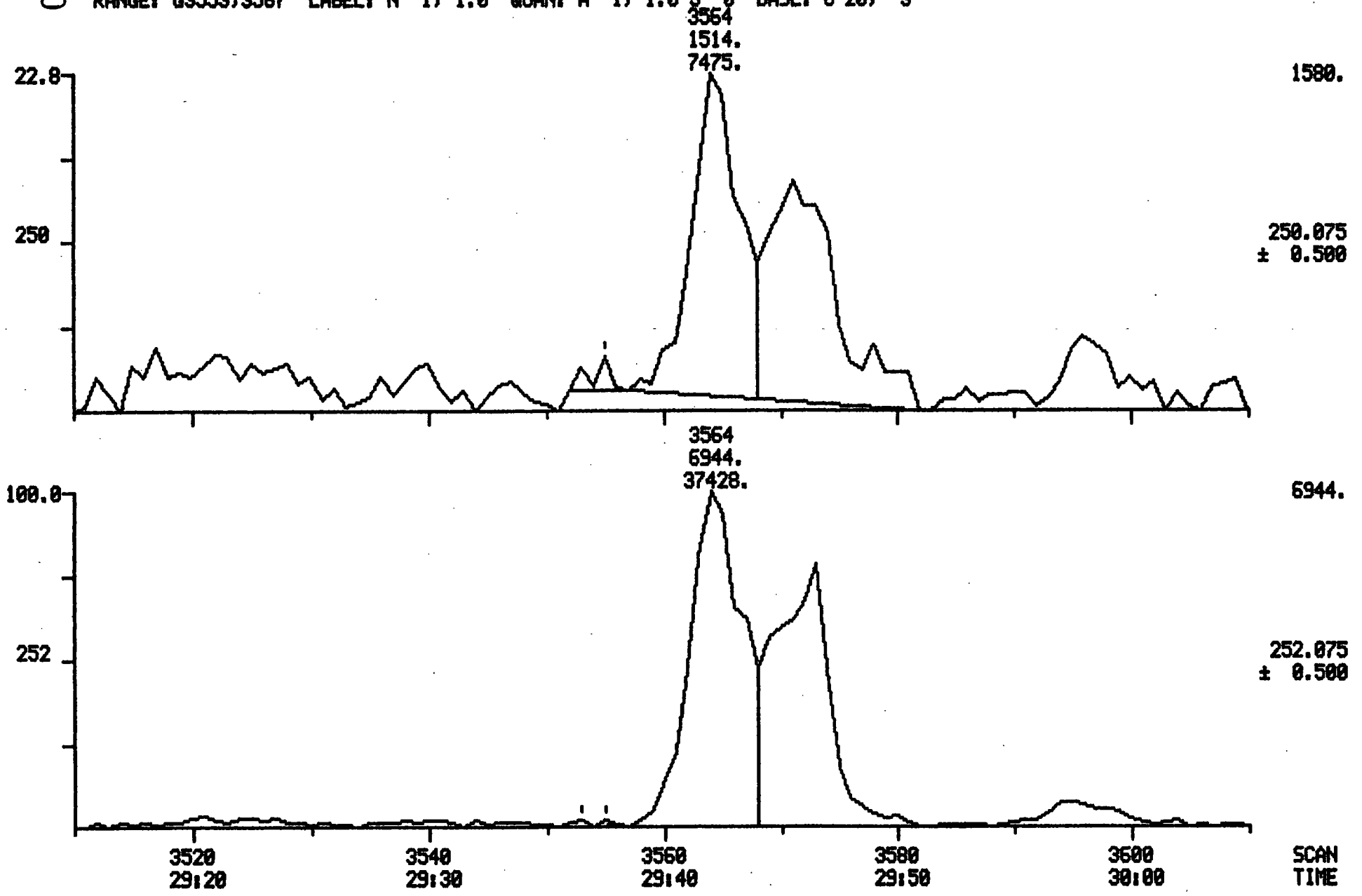
01487

MIDMASS CHROMATOGRAMS DATA: S59450X897 #3253 SCANS 3203 TO 3303
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100Z/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3246,3260 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



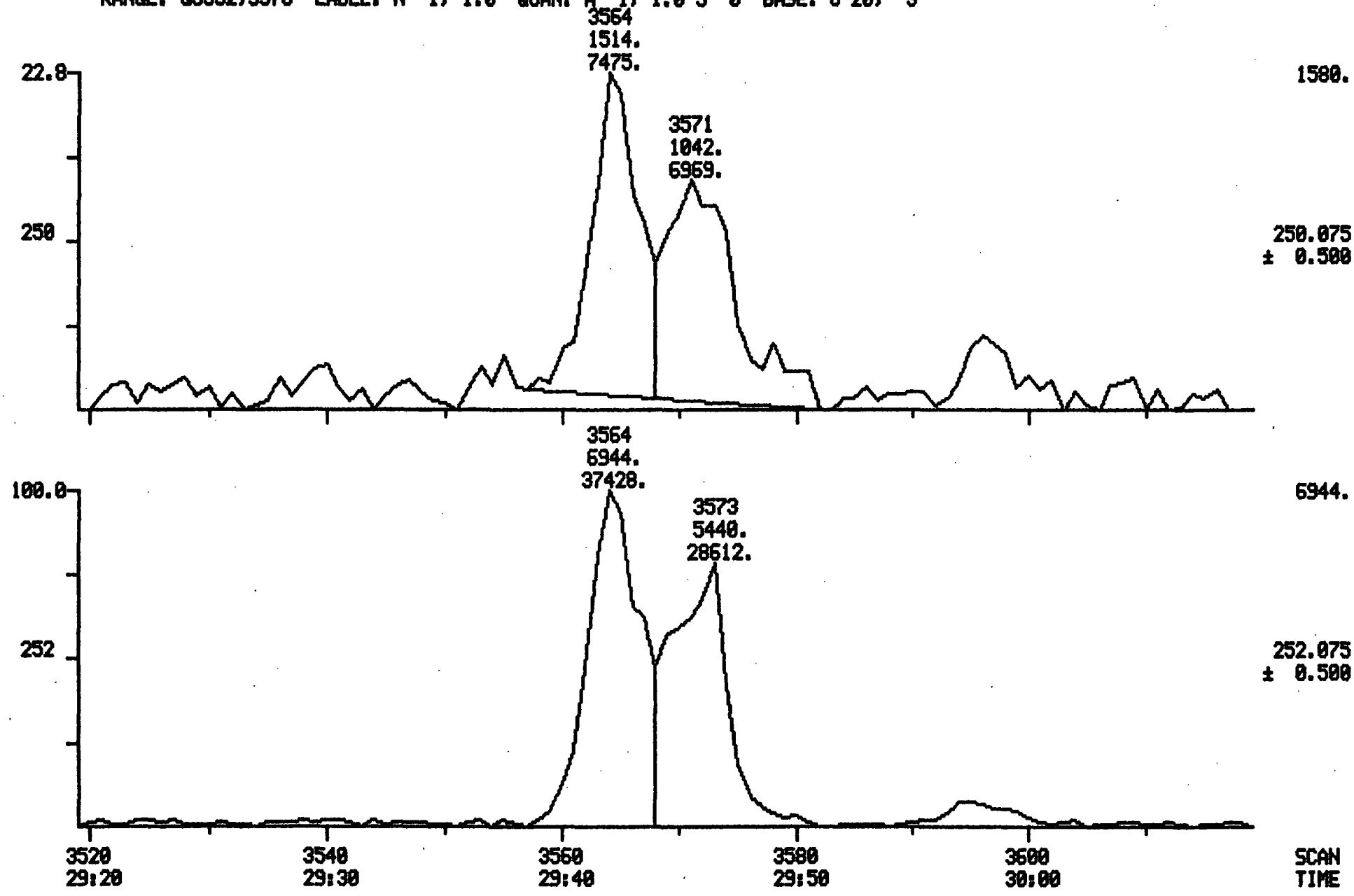
014488

MIDMASS CHROMATOGRAMS DATA: S59450X897 #3560 SCANS 3510 TO 3610
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3553,3567 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



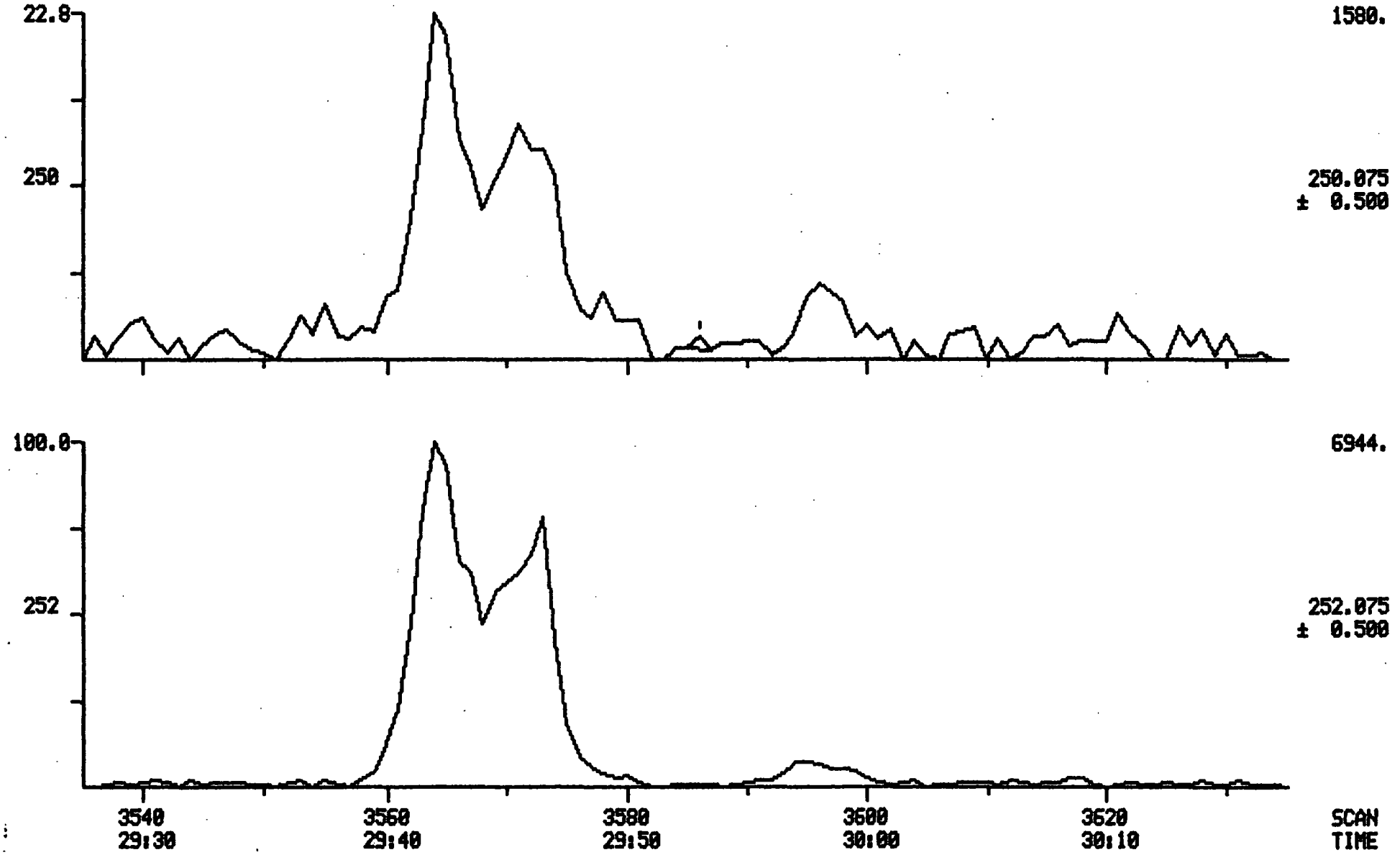
01483

MIDMASS CHROMATOGRAMS DATA: S59450X897 #3569 SCANS 3519 TO 3619
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3562,3576 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



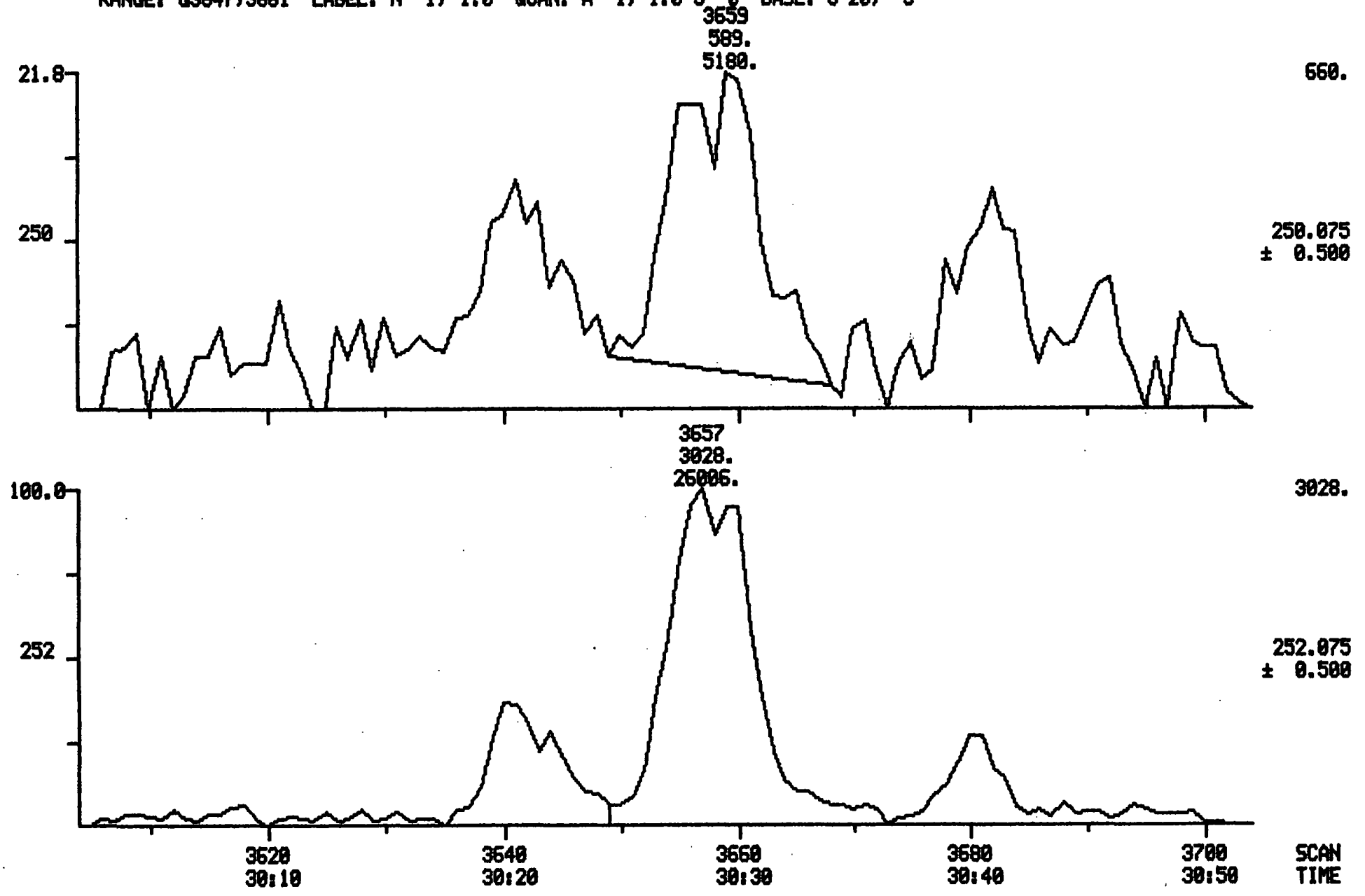
014 90

MIDMASS CHROMATOGRAMS DATA: S59450X897 #3585 SCANS 3535 TO 3635
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3578,3592 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



01491

MIDMASS CHROMATOGRAMS DATA: 559450X897 #3654 SCANS 3604 TO 3704
06/08/88 23:47:00 CALI: 060888CX #2
SAMPLE: 59450-0270 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3647,3661 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59450X897

01492

Data: S59450X897.TI
06/08/88 23:47:00
Sample: 59450-0270 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59450

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(A)PYRENE	252 PH# 13
12	BENZO(A)PYRENE	250 PH# 14

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3650	30:25	1	1.000	A BB	24856.	80.000	NG/ML	7.28
2	240	3246	27:03	1	0.889	A BV	25143.	52.966	NG/ML	4.82
3	228	3242	27:01	1	0.888	A BV	65580.	143.628	NG/ML	13.07
4	226	3242	27:01	1	0.888	A BV	15711.	147.709	NG/ML	13.44
5	228	3254	27:07	1	0.892	A VB	63239.	138.542	NG/ML	12.61
6	226	3254	27:07	1	0.892	A VB	16964.	140.935	NG/ML	12.82
7	252	3564	29:42	1	0.976	A BV	37428.	95.996	NG/ML	8.73
8	250	3564	29:42	1	0.976	A BV	7475.	82.050	NG/ML	7.47
9	252	3573	29:46	1	0.979	M XX	30793.	49.071	NG/ML	4.46
10	250	3571	29:45	1	0.978	A VB	6969.	58.763	NG/ML	5.35
11	252	3657	30:28	1	1.002	A VB	26006.	60.259	NG/ML	5.48
12	250	3659	30:29	1	1.002	A BB	5180.	49.093	NG/ML	4.47

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:04	1.00	0.888	1.00	52.97	80.00	1.012	1.528	0.66
3	27:01	1.00	0.887	1.00	143.63	80.00	2.638	1.470	1.80
4	27:01	1.00	0.887	1.00	147.71	80.00	0.632	0.342	1.85
5	27:09	1.00	0.891	1.00	138.54	80.00	2.544	1.469	1.73
6	27:09	1.00	0.891	1.00	140.94	80.00	0.682	0.387	1.76
7	29:43	1.00	0.975	1.00	96.00	80.00	1.506	1.255	1.20
8	29:43	1.00	0.976	1.00	82.05	80.00	0.301	0.293	1.03
9	29:47	1.00	0.978	1.00	49.07	80.00	1.239	2.020	0.61
10	29:47	1.00	0.978	1.00	58.76	80.00	0.280	0.382	0.73
11	30:30	1.00	1.001	1.00	60.26	80.00	1.046	1.389	0.75
12	30:30	1.00	1.001	1.00	49.09	80.00	0.208	0.340	0.61

59450-02MS

20%

01493

COLUMN 1: J:AB14015
COLUMN 2: J:BB14015

05/23/8

UNITS ON AMOUNT: ug/m

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
002	LINDANE	.0010	.0	.0006	.0	N
005	HEPTACHLOR	.0027	.0	.0020	.0	N
006	ALDRIN	.0028	.0	.0031	.0	.003
011	p,p'-DDE	.0207	.9	.0028	.0	N
012	DIELDRIN	.0096	.4	.0034	.2	N
013	ENDRIN	.0076	.4	.0097	.0	N
018	p,p'-DDT	.0017	.1	.0015	.3	N
047	DBC (surrogate)	.0104	.5	.0072	.3	N
051	HEPTACHLOR IN TC	.0649	.0	.0737	.0	N

Lindane

A) $\frac{24.0}{79.5}$ (.0035 ug/ml) = 0.001057 ug/ml

B) $\frac{20.0}{85.0}$ (0.0035 ug/ml) = 0.0008235 ug/ml

$\frac{0.0008235}{0.004}$ (100%) = ~~26%~~ 21%

Heptachlor

A) 56.0
B) 53.0

due to a back-up error we will need to use Areas in stead of P.H.

B) $\frac{0.002 \text{ ug/ml}}{0.004 \text{ ug/ml}}$ (100%) = 50%

Aldrin

A) $\frac{31.5}{91.0}$ (0.0075 ug/ml) = 0.002596 ug/ml

B) $\frac{36.0}{110.0}$ (0.0075 ug/ml) = 0.002455 ug/ml

$\frac{.002455}{.004}$ (100%) = 61%

Dieldrin

A) $\frac{66.0}{99.0}$ (0.0075 ug/ml) = 0.01010 ug/l

B) $\frac{45.0}{50.0}$ (0.0075 ug/ml) = 0.006750 ug/l

$\frac{.006750}{.01}$ (100) = 68%

Endrin

A) $\frac{29.5}{44.0}$ (0.015 ug/ml) = 0.01006 ug/l

B) $\frac{30.5}{48.0}$ (0.015 ug/ml) = 0.009531 ug/ml

$\frac{.009531}{.01}$ (100) = 95%

P,P'-DDT

A) $\frac{6.0}{61.0}$ (0.025 ug/ml) = 0.002459 ug/ml

B) $\frac{4.5}{77.0}$ (0.025 ug/ml) = 0.001461 ug/ml

$\frac{.001461}{.01}$ (100) = 15%

DBC

A) $\frac{15.5}{27.5}$ (100) = 56%

B) $\frac{7.5}{25.5}$ (100) = 27%

59450 -02ms

P,P'-DDE Col A P,P'-DDE & Dieldrin Co-elute 01494

$$.0028\ \text{ug/ml}\left(\frac{10.0\ \text{ml}}{1.05\ \ell}\right)\left(\frac{100\%}{20\%}\right) = 0.13\ \text{ug/}\ell$$

Please look at the integration

$$\frac{0.0075\ \text{ug/ml}}{38} = \frac{x}{32.5} \quad x = \frac{(0.00642)(10\text{ml})\left(\frac{100}{20}\right)}{1.05\text{L}} = 0.31\ \text{ug/L}$$

 59450 - 02MS

01495

RESULT FILE: J:AB14015 05/23/88 LIBRARY: L:DR101

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
002	LINDANE	1.967	1.967	6	13082	.0010	ug/
005	HEPTACHLOR	3.267	3.267	7	43246	.0027	ug/
006	ALDRIN	4.100	4.100	9	29323	.0028	ug/
011	p,p'-DDE	7.583	7.517	10	113229	.0207	ug/
012	DIELDRIN	7.483	7.517	10	113229	.0096	ug/
013	ENDRIN	8.400	8.367	11	46277	.0076	ug/
015	ENDOSULFAN-B	8.567	8.367	11	46277	.0059	ug/
018	p,p'-DDT	12.767	12.783	12	14508	.0017	ug/
022	TOXAPHENE (peak 3)	12.467	12.783	12	14508	.0311	ug/m
033	AROCLOR 1248(peak 2)	4.050	4.100	9	29323	.2051	ug/
043	AROCLOR 1260(peak 4)	13.150	12.783	12	14508	.0244	ug/
047	DBC (surrogate)	26.800	26.667	13	115336	.0104	ug/
051	HEPTACHLOR IN TC	3.267	3.267	7	43246	.0649	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

 59950-0215

01496

RESULT FILE: J:BB14015 05/23/88 LIBRARY: L:DRMIX

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
002	LINDANE	1.850	1.850	7	20161	.0006	ug/
005	HEPTACHLOR	2.300	2.300	8	83754	.0020	ug/
006	ALDRIN	2.800	2.800	10	63994	.0031	ug/
011	p,p'-DDE	6.483	6.483	14	56305	.0028	ug/
012	DIELDRIN	6.833	6.850	15	99504	.0034	ug/
013	ENDRIN	8.350	8.350	16	155102	.0097	ug/
018	p,p'-DDT	12.267	12.300	17	33840	.0015	ug/
020	TOXAPHENE (peak 1)	6.850	6.850	15	99504	.2680	ug/
024	AROCLOR 1016(peak 2)	1.700	1.733	6	1172	.0012	ug/m
025	AROCLOR 1016(peak 3)	2.267	2.300	8	83754	.0468	ug/
028	AROCLOR 1232(peak 2)	2.267	2.300	8	83754	.1070	ug/
030	AROCLOR 1242(peak 2)	1.700	1.733	6	1172	.0014	ug/
031	AROCLOR 1242(peak 3)	2.267	2.300	8	83754	.0597	ug/
032	AROCLOR 1248(peak 1)	2.267	2.300	8	83754	.0668	ug/
035	AROCLOR 1254(peak 1)	4.567	4.717	12	3141	.0031	ug/
036	AROCLOR 1254(peak 2)	5.150	5.133	13	2878	.0017	ug/
037	AROCLOR 1254(peak 3)	7.067	6.850	15	99504	.0825	ug/
038	AROCLOR 1254(peak 4)	8.167	8.350	16	155102	.0914	ug/
044	AROCLOR 1260(peak 5)	11.950	12.300	17	33840	.0202	ug/
047	DBC (surrogate)	22.817	22.883	19	88829	.0072	ug/
048	ENDRIN KETONE	22.833	22.883	19	88829	.0013	ug/
049	ISODRIN	3.683	3.633	11	10716	.0006	ug/
051	HEPTACHLOR IN TC	2.300	2.300	8	83754	.0737	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

01497

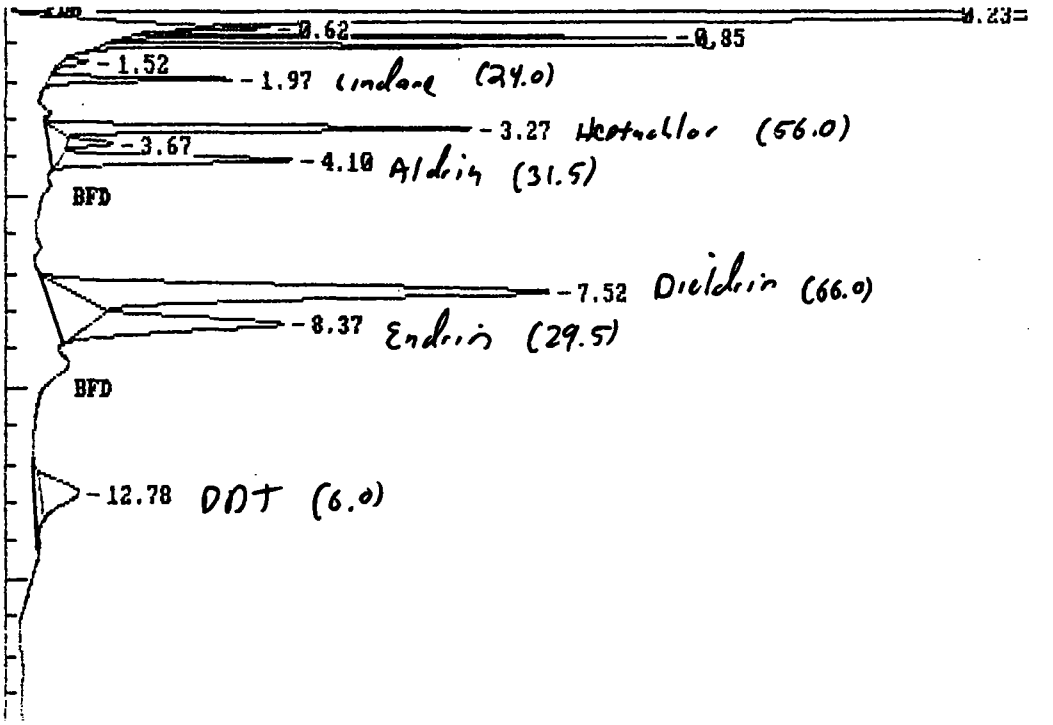
```
******************** 05-19-1988 20:58:38 Version 4.1 **********************
* Sample Name: 59450 02MS 20%                    Data File: J:AB14015      *
* Date: 05-19-1988 20:58:23 Method: M:ABPI                                 *
* Interface: 10  Cycle#:  15   Operator SS  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5880A                Column Type: 6FT X 2MM ID GLASS  *
*              Solvent Description: 1.5% SP2250/1.95% SP2401               *
* Conditions: 190 DEGREES ISOTHERMAL                                       *
*            Detector 0: ECD                    Detector 1:                 *
* Misc. Information: 4 UL INJECTION                    LPT1:          *   *
*************************************************************************
Starting Delay:    0.00                          Run Time:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	825136	65.6816	1	171045	100.000	4.8
2	0.62	4629	0.3685	1	717	0.561	6.5
3	0.85	19065	1.5176	1	5320	2.311	3.6
4	1.10	25545	2.0334	1	5859	3.096	4.4
5	1.52	2222	0.1768	1	254	0.269	8.8
6	1.97	13082	1.0413	1	1786	1.585	7.3
7	3.27	43246	3.4424	1	4073	5.241	10.6
8	3.67	4671	0.3718	1	445	0.566	10.5
9	4.10	29323	2.3341	1	2286	3.554	12.8
10	7.52	113229	9.0131	1	4654	13.722	24.3
11	8.37	46277	3.6837	1	1892	5.608	24.5
12	12.78	14508	1.1548	1	368	1.758	39.4
13	26.67	115336	9.1809	1	1143	13.978	100.9

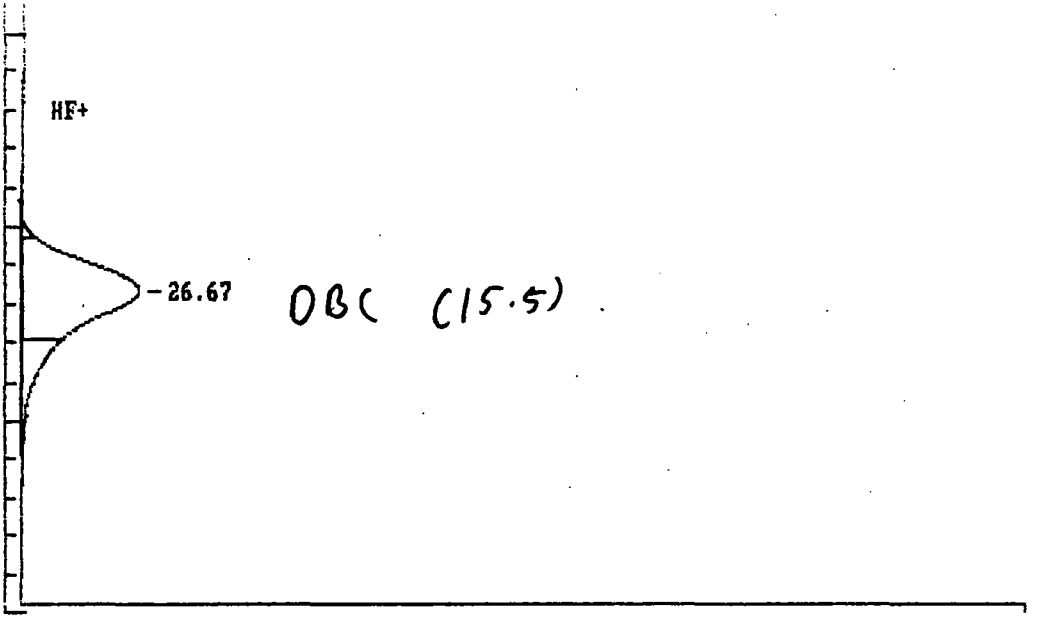
SS 5/26/88

Total Area: 1256267 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14015.ATB
Data File = J:AB14015.PTS Printed on 05-19-1988 at 20:59:04
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts



01498



OBC (15.5)

AREA PERCENT REPORT

01499

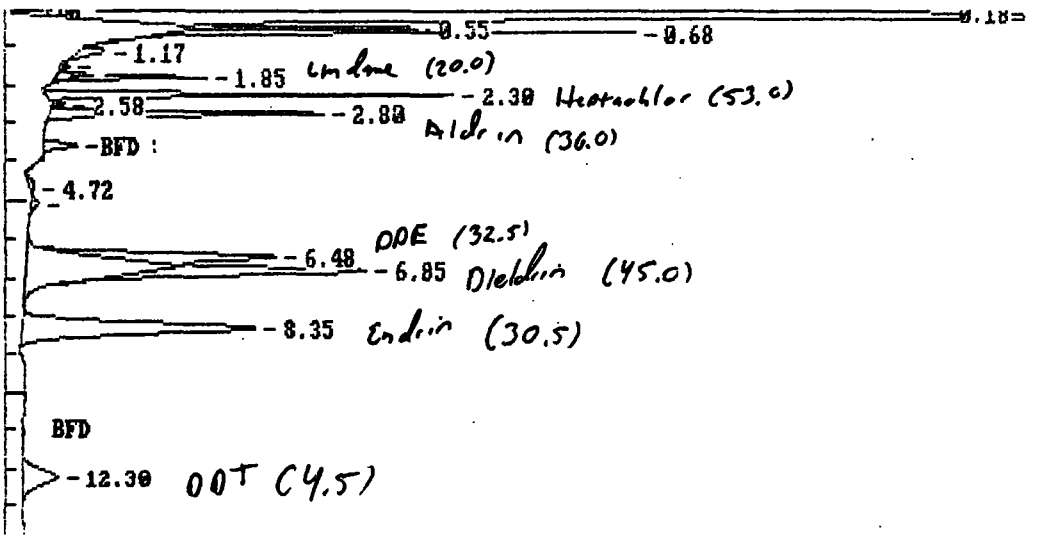
```
******************** 05-19-1988 20:50:07 Version 4.1 ********************
* Sample Name: 59450 02MS 20%                    Data File: J:BB14015     *
* Date: 05-19-1988 20:49:51 Method: M:BBPI                                *
* Interface: 12  Cycle#:  15   Operator SS  Channel#: 0    Vial#: N.A.    *
* 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:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1727683	69.6023	1	365487	100.000	4.7
2	0.55	16745	0.6746	1	6834	0.969	2.5
3	0.68	62116	2.5024	1	14710	3.595	4.2
4	1.17	9425	0.3797	1	840	0.545	11.2
5	1.57	1241	0.0500	1	295	0.072	4.2
6	1.73	1172	0.0472	1	294	0.068	4.0
7	1.85	20161	0.8122	1	4307	1.167	4.7
8	2.30	83754	3.3742	1	12788	4.848	6.5
9	2.58	1929	0.0777	1	370	0.112	5.2
10	2.80	63994	2.5781	1	8614	3.704	7.4
11	3.63	10716	0.4317	1	1064	0.620	10.1
12	4.72	3141	0.1265	1	115	0.182	27.3
13	5.13	2878	0.1159	1	223	0.167	12.9
14	6.48	56305	2.2683	1	4669	3.259	12.1
15	6.85	99504	4.0086	1	7294	5.759	13.6
16	8.35	155102	6.2485	1	7319	8.977	21.2
17	12.30	33840	1.3633	1	1090	1.959	31.1
18	20.78	43690	1.7601	1	860	2.529	50.8
19	22.88	88829	3.5786	1	1591	5.142	55.8

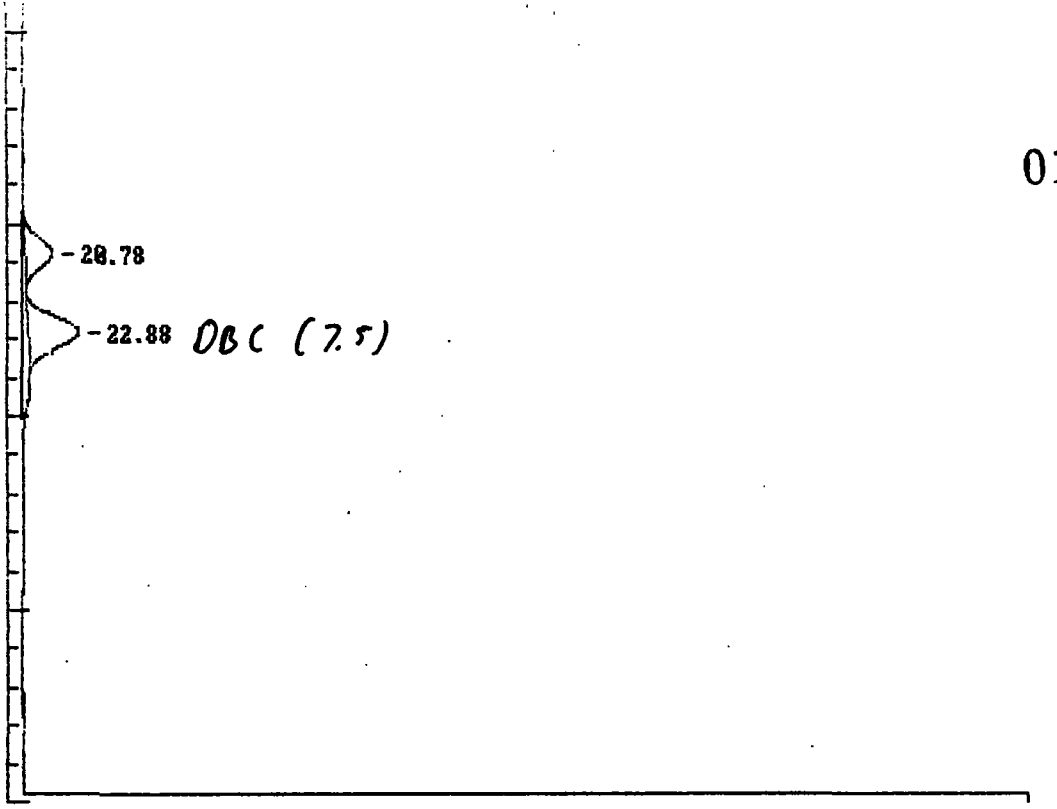
SS
5/26/88

Total Area: 2482222 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14015.ATB
Data File = J:BB14015.PTS Printed on 05-19-1988 at 20:50:34
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts



01500



5/3/88 5:57:31 SCAN 1 OF 730
Acquisition started

01501

Acquire
05/03/88 5:57:00 + 0:03
Sample: CLP,59450,,59450-05MS,LOW,WATER,59450-05MS,VOA,EPA
Conds.: 100%/5ML
Formula:
Submitted by: RMAL

Run 3:S59450W972
Free sectors: 10689
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.030
Acct. No: 59450

*** 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)	127.00	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

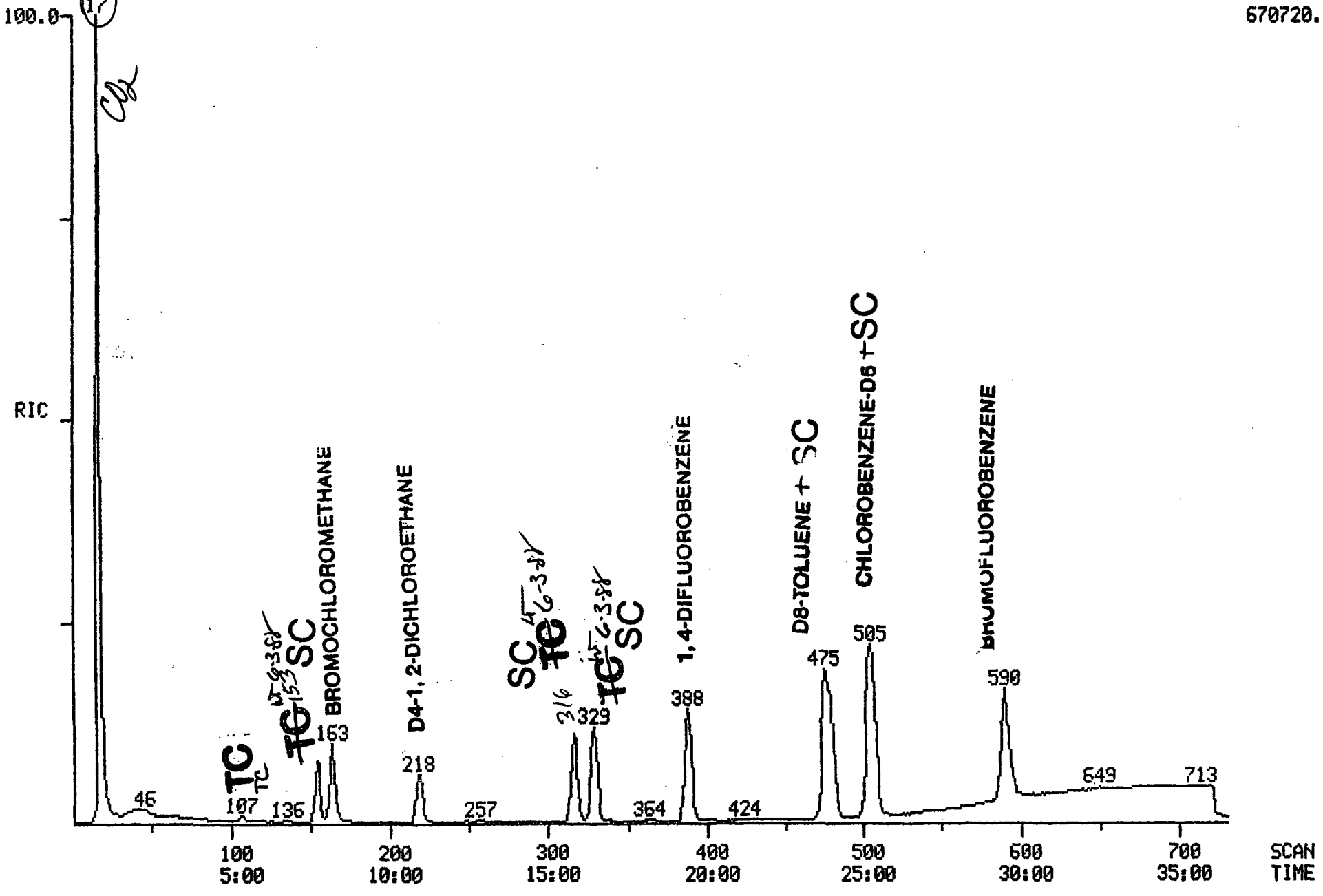
Electron multiplier voltage: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/3/88 6:34:05
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	35.9	2190.0	1.6	15158.	21.	7.

01502

RIC DATA: S59450W972 #4 SCANS 1 TO 730
05/03/88 5:57:00 CALI: 050288CW2 #3
SAMPLE: CLP,59450,,59450-05MS,LOW,WATER,59450-05MS,VOA,EPA
CONDS.: 100%/5ML
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



PROCEDURE: TCA DIAGNOSTIC REPORT 5/03/88 9:16:41
DATA FILE: S59450W972
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

01503

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	4	46	ISO1/TCO1
3	3	1	80	18	8	2	146	ISO2/TCO2
3	3	1	80	12	7	6	115	ISO3/TCO3
1	1	1	0	7	3	1	69	ISO4/TCO4

41 COMPOUNDS PROCESSED, 17 FOUND

< COMPOUND >				< ---------- SEARCH ---------- >				< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-162	163	163	.	1	977	.	128	163	.	1
2	V1	10	-32	31	.	.	.	.	.	50	.	.	.
3	V1	15	-48	47	.	.	.	.	.	94	.	.	.
4	V1	25	-60	59	.	.	.	.	.	62	.	.	.
5	V1	35	-74	74	.	.	.	.	.	64	.	.	.
6	V1	45	-107	107	107	.	1	987	.	84	107	.	1
7	V1	50	-116	116	116	.	4	1000	.	58	116	.	1
8	V1	65	-133	133	.	.	.	.	.	76	.	.	.
9	V1	80	-154	154	154	.	1	986	.	96	154	.	1
10	V2	1	-388	389	388	-1	1	996	.	114	388	.	1
11	V3	1	-502	503	503	.	1	998	.	117	503	.	1
12	V1	90	-180	180	.	.	.	.	.	63	.	.	.
13	V1	95	-194	194	.	.	.	.	.	96	.	.	.
14	V1	100	-205	205	.	.	.	.	.	83	.	.	.
15	V1	2	-218	218	218	.	1	989	.	65	219	1	1
16	V2	10	-218	218	219	1	1	941	.	72	219	.	1
17	V1	110	-221	221	.	.	.	.	.	62	.	.	.
18	V2	15	-248	248	.	.	.	.	.	97	248	.	1
19	V2	20	-257	257	.	.	.	.	.	117	.	.	.
20	V2	25	-260	260	257	-3	2	860	.	43	.	.	.
21	V2	30	-267	267	.	.	.	.	.	83	.	.	.
22	V2	35	-298	298	.	.	.	.	.	63	.	.	.
23	V2	40	-304	304	.	.	.	.	.	75	.	.	.
24	V2	45	-317	317	316	-1	1	978	.	130	316	.	1
25	V2	60	-329	329	329	.	1	987	.	78	329	.	1
26	V2	50	-330	330	.	.	.	.	.	129	.	.	.
27	V2	65	-333	333	.	.	.	.	.	75	.	.	.
28	V2	55	-333	333	.	.	.	.	.	97	.	.	.
29	V2	80	-393	393	.	.	.	.	.	173	.	.	.
30	V3	10	-405	405	403	-2	2	922	.	58	.	.	.
31	V3	15	-441	441	440	-1	3	950	.	58	.	.	.
32	V3	25	-447	447	.	.	.	.	.	83	.	.	.
33	V3	20	-448	448	.	.	.	.	.	164	.	.	.
34	V3	2	-475	475	475	.	1	988	.	98	475	.	1
35	V3	35	-480	479	479	.	1	987	.	92	479	.	1
36	V3	40	-506	506	506	.	1	983	.	112	506	.	1
37	V3	50	-549	549	.	.	.	.	.	106	.	.	.
38	V3	3	-590	590	590	.	1	989	.	95	590	.	1
39	V3	55	-611	611	.	.	.	.	.	104	.	.	.
40	V3	60	-615	615	.	.	.	.	.	106	.	.	.
41	V3	75	-628	628	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59450W972

01504

Data: S59450W972.TI
05/03/88 5:57:00
Sample: CLP,59450,,59450-05MS,LOW,WATER,59450-05MS,VOA,EPA
Conds.: 100%/5ML
Formula: Instrument: 5100 Weight: 0.030
Submitted by: RMAL Analyst: DC Acct. No.: 59450

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

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

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	163	8:09	1	1.000	A BB	32743.	50.000 UG/L	8.95
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	107	5:21	1	0.656	A BB	2808.	2.216 UG/L	0.40
7	58	116	5:48	1	0.712	A BB	373.	3.855 UG/L	0.69
8	NOT FOUND								
9	96	154	7:42	1	0.945	A BB	40390.	58.511 UG/L	10.48
10	114	388	19:24	10	1.000	A BB	182478.	50.000 UG/L	8.95
11	117	503	25:09	11	1.000	A BB	153763.	50.000 UG/L	8.95
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	219	10:57	1	1.344	A BB	53541.	43.281 UG/L	7.75
16	72	219	10:57	10	0.564	A BB	66.	0.603 UG/L	0.11
17	NOT FOUND								
18	97	248	12:24	10	0.639	A BB	1028.	0.912 UG/L	0.16
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	130	316	15:48	10	0.814	A BB	63682.	51.575 UG/L	9.23
25	78	329	16:27	10	0.848	A BB	169512.	50.066 UG/L	8.96
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	98	475	23:45	11	0.944	A BB	185835.	50.255 UG/L	9.00
35	92	479	23:57	11	0.952	A BB	101985.	48.656 UG/L	8.71
36	112	506	25:18	11	1.006	A BB	125178.	50.526 UG/L	9.05
37	NOT FOUND								
38	95	590	29:30	11	1.173	A BB	102565.	48.055 UG/L	8.60
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								

01505

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	1:36		0.196						
3	2:24		0.294						
4	3:00		0.368						
5	3:42		0.454						
6	5:21	1.00	0.656	1.00	2.22	50.00	0.086	1.935	0.04
7	5:48	1.00	0.712	1.00	3.85	50.00	0.011	0.148	0.08
8	6:39		0.816						
9	7:42	1.00	0.945	1.00	58.51	50.00	1.234	1.054	1.17
10	19:27	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	9:00		1.104						
13	9:42		1.190						

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	43.28	50.00	1.635	1.889	0.87
16	10:54	1.00	0.560	1.01	0.60	50.00	0.000	0.030	0.01
17	11:03		1.356						
18	12:24	1.00	0.638	1.00	0.91	50.00	0.006	0.309	0.02
19	12:51		0.661						
20	13:00		0.668						
21	13:21		0.686						
22	14:54		0.766						
23	15:12		0.781						
24	15:51	1.00	0.815	1.00	51.58	50.00	0.349	0.338	1.03
25	16:27	1.00	0.846	1.00	50.07	50.00	0.929	0.928	1.00
26	16:30		0.848						
27	16:39		0.856						
28	16:39		0.856						
29	19:39		1.010						
30	20:15		0.805						
31	22:03		0.877						
32	22:21		0.889						
33	22:24		0.891						
34	23:45	1.00	0.944	1.00	50.25	50.00	1.209	1.202	1.01
35	24:00	1.00	0.954	1.00	48.66	50.00	0.663	0.682	0.97
36	25:18	1.00	1.006	1.00	50.53	50.00	0.814	0.806	1.01
37	27:27		1.091						
38	29:30	1.00	1.173	1.00	48.06	50.00	0.667	0.694	0.96
39	30:33		1.215						
40	30:45		1.223						
41	31:24		1.249						

01506

TCA FINISHED, 17 FOUND
FINISHED AT: 5/03/88 9:20:40

01507

RMAL QUANTITATION SUMMARY FILE: S59450W972
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

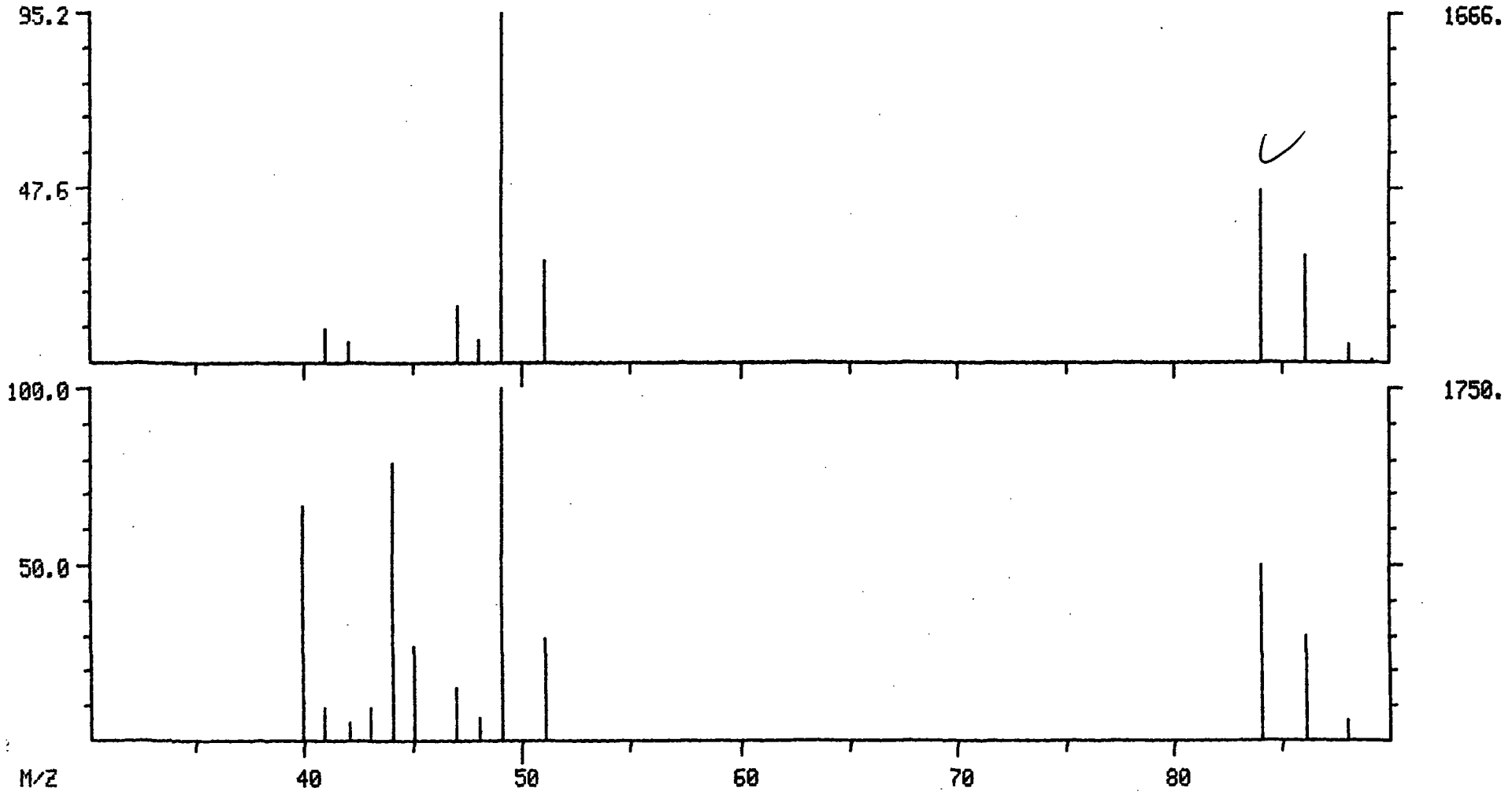
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	163	1	32743.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	388	2	182478.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	503	3	153763.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	475	3	185835.	1.209	50.255
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	590	3	102565.	0.667	48.055
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	219	1	53541.	1.635	43.281
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	2808.	0.086	2.216 B
12	V1# 50	C035 ACETONE	58	116	1	373.	0.011	3.855 B
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96	154	1	40390.	1.234	58.511
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	316	2	63682.	0.349	51.575
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78	329	2	169512.	0.929	50.066
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	479	3	101985.	0.663	48.657
37	V3# 40	C235 CHLOROBENZENE	112	506	3	125178.	0.814	50.526
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		

01508

DUAL MASS SPECTRUM
05/03/88 5:57:00 + 5:21
SAMPLE: CLP,59450,,59450-05MS,LOW,WATER,59450-05MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 84 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W972 #107 BASE M/Z: 49/ 49
CALI: 050288CW2 #3 RIC: 4183./ 7583.

methylene chloride



01509

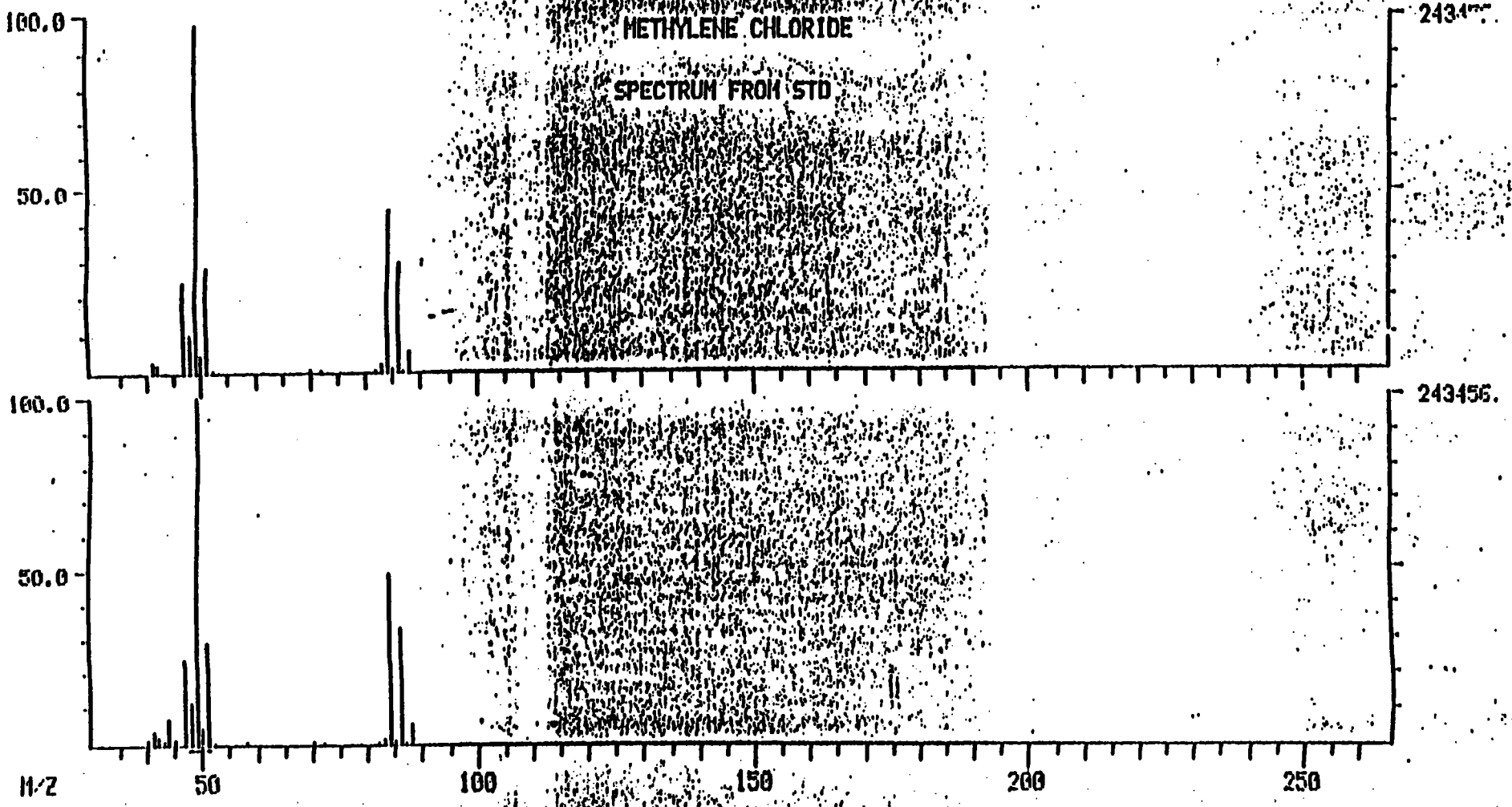
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
COMDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

SPECTRUM FROM STD

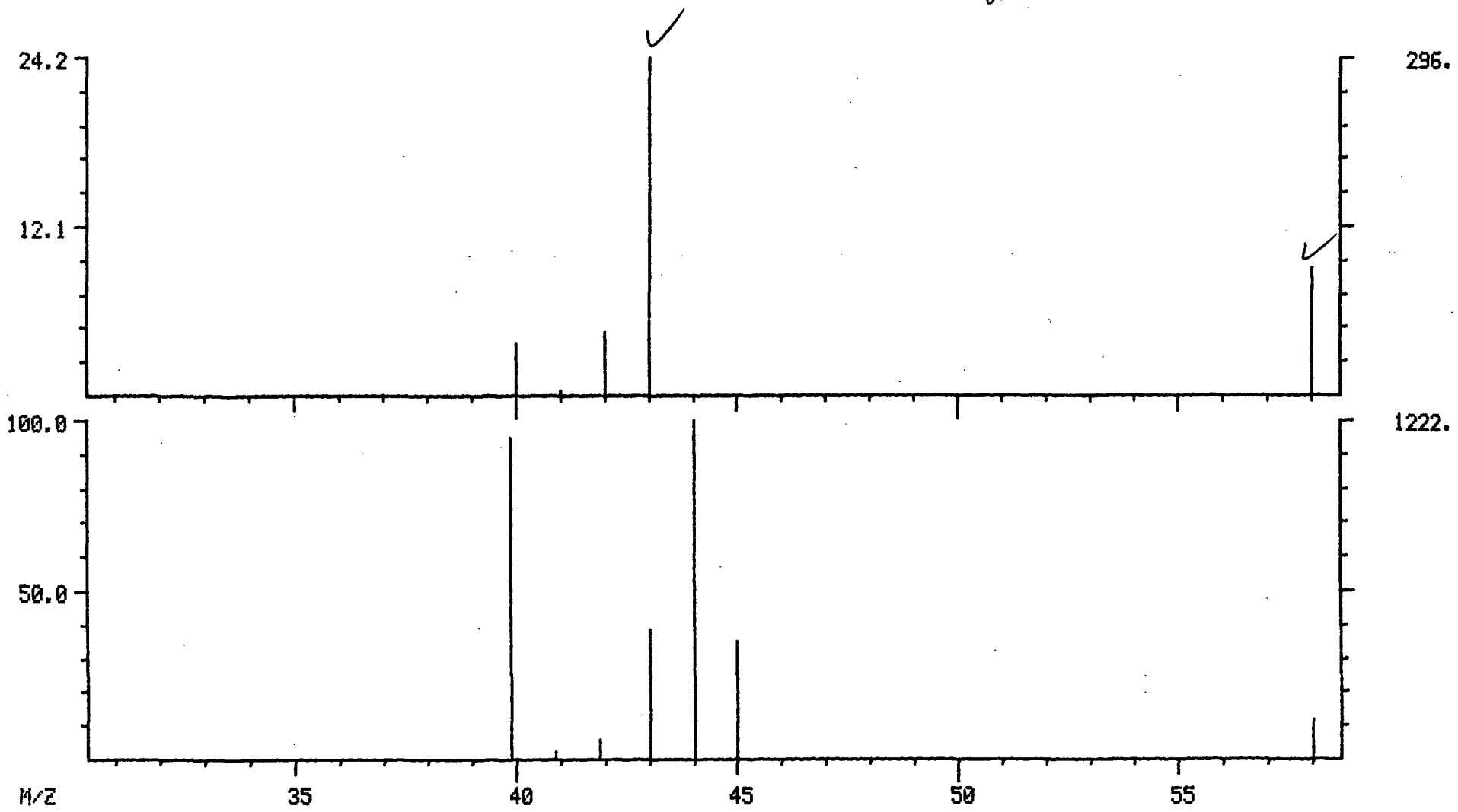


01510

DUAL MASS SPECTRUM
05/03/88 5:57:00 + 5:48
SAMPLE: CLP,59450,,59450-05MS,LOW,WATER,59450-05MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 87 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W972 #116 BASE M/Z: 43/ 44
CALI: 050288CW2 #3 RIC: 511./ 3499.

acetone

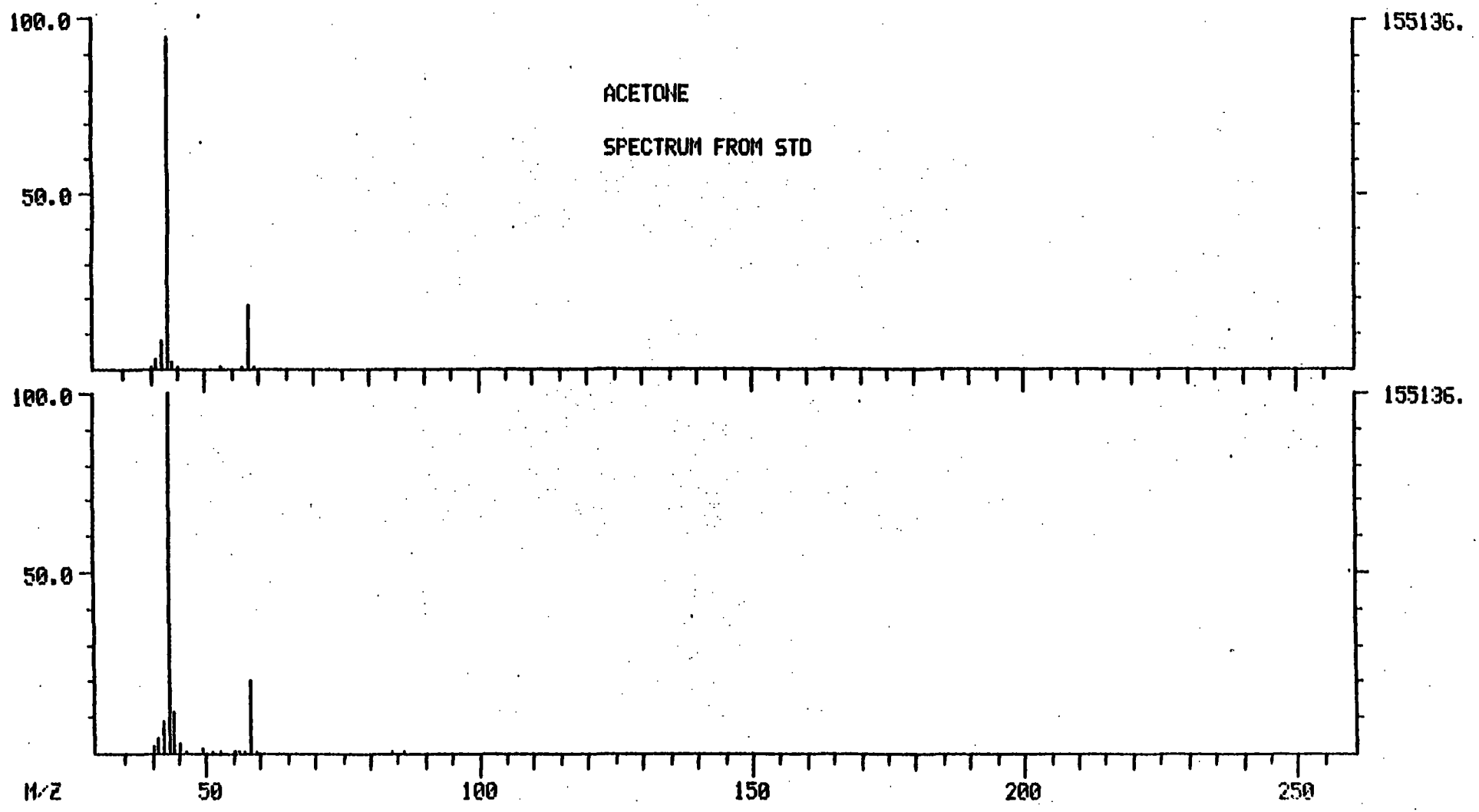


01511

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

DATA: STDJ198 #150
CALI: STDJ198 #1

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

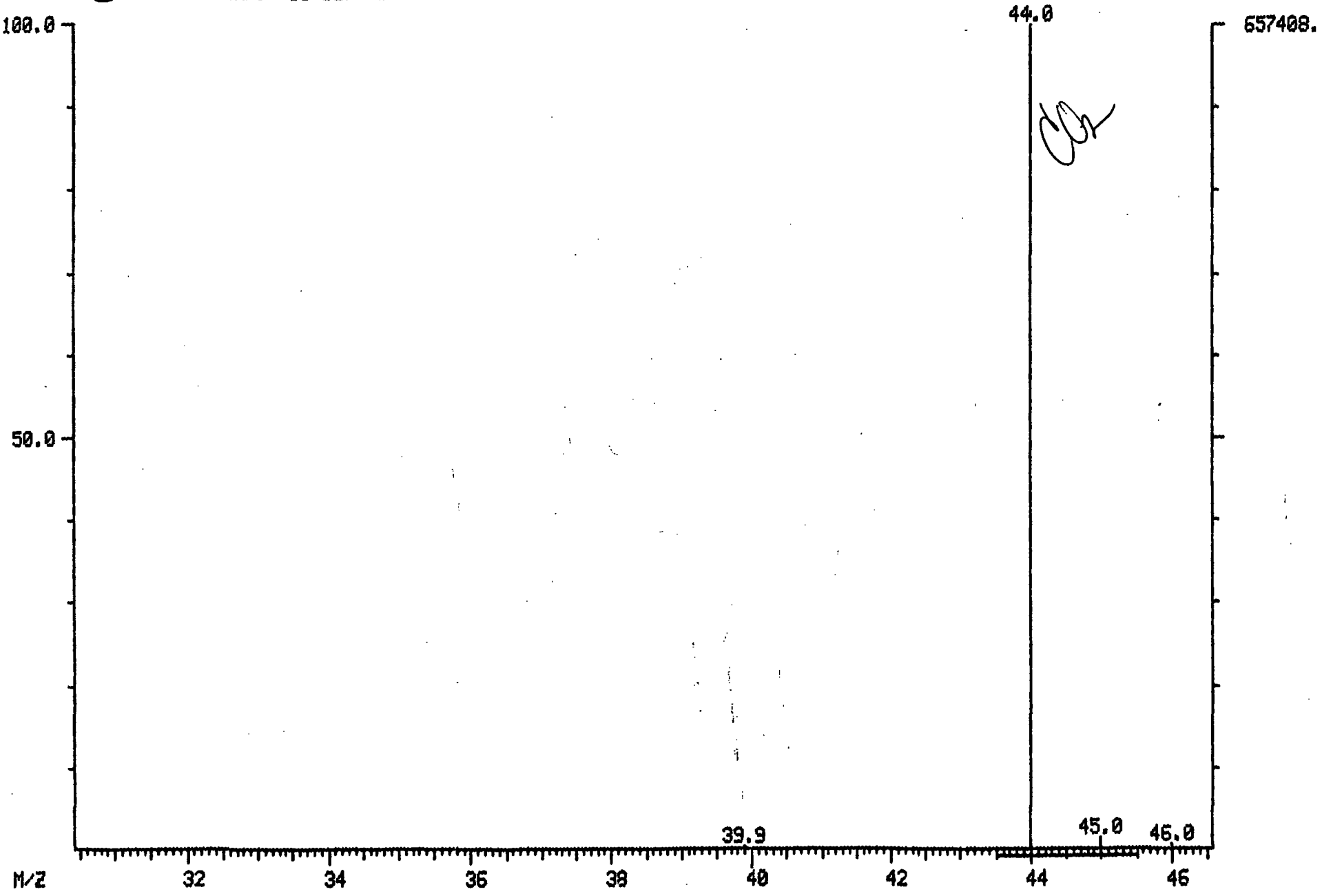


01512

MASS SPECTRUM
05/03/88 5:57:00 + 0:51
SAMPLE: CLP,59450,,59450-05MS,LOW,WATER,59450-05MS,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 60 DEG. C

DATA: 559450W972 #17
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 670720.



01513

MATRIX SPIKE DUPLICATE DATA

ORGANICS ANALYSIS DATA SHEET
(Page 1)

01514

Sample Number : 59450-01MSD

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59450-01MSD
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59450
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	05/03/88
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	50		SP
75-09-2	MethyleneChloride	1.3	J	B	124-48-1	Dibromochloromethane		5	U
67-64-1	Acetone	2.1	J	B	79-00-5	1,1,2-Trichloroethane		5	U
75-15-0	CarbonDisulfide		5	U	71-43-2	Benzene	48		SP
75-35-4	1,1-Dichloroethene	58		SP	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	47		SP
56-23-5	CarbonTetrachloride		5	U	108-90-7	Chlorobenzene	51		SP
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 Lab
Case No: N/A
Q.C.Report No: 59450

Organics Analysis Data Sheet

Sample Number
59450-01MSD

01515

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	1.89		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L		CAS Number	Compound	Value	ug/L	
108-95-2	Phenol	23		SP					
111-44-4	bis(-2-Chloroethyl)Ether		9	U	83-32-9	Acenaphthene	46		SP
95-57-8	2-Chlorophenol	88		SP	51-28-5	2,4-Dinitrophenol		47	U
541-73-1	1,3-Dichlorobenzene		9	U	100-02-7	4-Nitrophenol	120		SP
106-46-7	1,4-Dichlorobenzene	26		SP	132-64-9	Dibenzofuran		9	U
100-51-6	Benzyl Alcohol		9	U	121-14-2	2,4-Dinitrotoluene	56		SP
95-50-1	1,2-Dichlorobenzene		9	U	606-20-2	2,6-Dinitrotoluene		9	U
95-48-7	2-Methylphenol		9	U	84-66-2	Diethylphthalate		9	U
39638-32-9	bis(2-chloroisopropyl)Ether		9	U	7005-72-3	4-Chlorophenyl-phenylether		9	U
106-44-5	4-Methylphenol		9	U	86-73-7	Fluorene		9	U
621-64-7	N-Nitro-Di-n-Propylamine	38		SP	100-01-6	4-Nitroaniline		47	U
67-72-1	Hexachloroethane		9	U	534-52-1	4,6-Dinitro-2-Methylphenol		47	U
98-95-3	Nitrobenzene		9	U	86-30-6	N-Nitrosidiphenylamine (1)		9	U
78-59-1	Isophorone		9	U	101-55-3	4-Bromophenyl-phenylether		9	U
88-75-5	2-Nitrophenol		9	U	118-74-1	Hexachlorobenzene		9	U
105-67-9	2,4-Dimethylphenol		9	U	87-86-5	Pentachlorophenol	98		SP
65-85-0	Benzoic Acid		47	U	85-01-8	Phenanthrene		9	U
111-91-1	bis(2-Chloroethoxy) Methane		9	U	120-12-7	Anthracene		9	U
120-83-2	2,4-Dichlorophenol		9	U	84-74-2	Di-N-Butylphthalate	4.2		J
120-82-1	1,2,4-Trichlorobenzene	28		SP	206-44-0	Fluoranthene		9	U
91-20-3	Naphthalene		9	U	129-00-0	Pyrene	51		SP
106-47-8	4-Chloroaniline		9	U	85-68-7	Butylbenzylphthalate		9	U
87-68-3	Hexachlorobutadiene		9	U	91-94-1	3,3'-Dichlorobenzidine		19	U
59-50-7	4-Chloro-3-Methylphenol	96		SP	56-55-3	Benzo(a)Anthracene		9	U
91-57-6	2-Methylnaphthalene		9	U	117-81-7	bis(2-Ethylhexyl)Phthalate	34		B
77-47-4	Hexachlorocyclopentadiene		9	U	218-01-9	Chrysene		9	U
88-06-2	2,4,6-Trichlorophenol		9	U	117-84-0	Di-n-Octylphthalate	1.9		J B
95-95-4	2,4,5-Trichlorophenol		47	U	205-99-2	Benzo(b)Fluoranthene		9	U
91-58-7	2-Chloronaphthalene		9	U	207-08-9	Benzo(k)Fluoranthene		9	U
88-74-4	2-Nitroaniline		47	U	50-32-8	Benzo(a)Pyrene		9	U
131-11-4	Dimethyl Phthalate		9	U	193-39-5	Indeno(1,2,3-cd)Pyrene		9	U
208-96-8	Acenaphthylene		9	U	53-70-3	Dibenzo(a,h)Anthracene		9	U
99-09-2	3-Nitroaniline		47	U	191-24-2	Benzo(g,h,i)Perylene		9	U

(1)-Cannot be separated from diphenylamine.

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

Sample: 59450-01MSD
Date Analyzed: 06/03/88

Units: ug/L
Run Factor: 1.89

SURROGATE SPIKE RECOVERIES
PYRIDINES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
Pyridine-D5	100.0	50.8	51	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
49.0	SP	Pyridine	110-86-1
47.0	SP	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	
60.0	SP	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
	10 U	3,5-Lutidine	
	10 U	3,4-Lutidine	
69.0	SP	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

SP = Spike Compound

FORM I

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

Sample: 59450-01MSD
Date Analyzed: 06/08/88

Units: ng/L
Run Factor: 0.125

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	35.9	45	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
18	SP	Benzo(A)Anthracene
22	SP	Chrysene
22	SP	Benzo(B)Fluoranthene
9.0	J SP	Benzo(K)Fluoranthene
10	SP	Benzo(A)Pyrene

J = Value below detection limit (10 ppt).

Laboratory Name: Rocky Mountain Analytical Lab
Case No: 59450

Sample Number:
59450-01MSD

01518

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/28/88
Date Analyzed :05/13/88
Conc./Dil Factor : 50.0
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)	0.14		SP
76-44-8	Heptachlor	0.13		SP
309-00-2	Aldrin	0.13		SP
1204-57-3	Heptachlor Epoxide		0.05 U	
959-98-8	Endosulfan I		0.05 U	
60-57-1	Dieldrin	0.36		SP
72-55-9	4,4'-DDE		0.10 U	
72-20-8	Endrin	0.50		SP
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	0.34		SP
72-43-5	Methoxychlor		0.50 U	
53494-70-5	Endrin Ketone		0.10 U	
57-74-9	Chlordane		0.50 U	
8001-35-2	Toxaphene		1.00 U	
12674-11-2	Aroclor-1016		0.50 U	
11104-28-2	Aroclor-1221		0.50 U	
11141-16-5	Aroclor-1232		0.50 U	
53469-21-9	Aroclor-1242		0.50 U	
12672-29-6	Aroclor-1248		0.50 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 = 1000 ml
Ws = Weight of sample extracted (g) Ws = N/A
Vt = Volume of total extract (ul) Vt = 1000 ul

ORGANICS ANALYSIS DATA SHEET
(Page 1)

01519

Sample Number : 59450-02MSD

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59450-02MSD
Sample Matrix : Water
Data Released Authorized By : JCL

Case Number : N/A
Q.C. Report No: 59450
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	05/03/88
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	51		SP
75-09-2	MethyleneChloride		5	U	124-48-1	Dibromochloromethane		5	U
67-64-1	Acetone	2.2		J B	79-00-5	1,1,2-Trichloroethane		5	U
75-15-0	CarbonDisulfide		5	U	71-43-2	Benzene	51		SP
75-35-4	1,1-Dichloroethene	62		SP	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	49		SP
56-23-5	CarbonTetrachloride		5	U	108-90-7	Chlorobenzene	51		SP
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

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

01520

Sample: 59450-02MSD
Date Analyzed: 06/03/88

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	65.9	66	50-150

TARGET COMPOUNDS

Sample Concentration ug/l	Detection Limit(ppb)	Compound	CAS #
65.0	SP	Pyridine	110-86-1
71.0	SP	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	
71.0	SP	3-Ethyl Pyridine	
	10 U	4-Ethyl Pyridine	
	10 U	3,5-Lutidine	
	10 U	3,4-Lutidine	
79.0	SP	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

SP = Spike Compound

FORM I

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

Sample: 59450-02MSD
Date Analyzed: 06/09/88

Units: ng/L
Run Factor: 0.125

Surrogate Spike Recoveries

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC Limits
D12-Chrysene	80.0	52.4	66	10-118

Target Compounds

Sample Concentration(ng/l)	Detection Limit (ppt)	Compound
20	SP	Benzo(A)Anthracene
19	SP	Chrysene
15	SP	Benzo(B)Fluoranthene
6.3	J SP	Benzo(K)Fluoranthene
8.0	J SP	Benzo(A)Pyrene

J = Value below detection limit (10 ppt).

Laboratory Name : Rocky Mountain Analytical Lab
Case No: N/A
Q.C.Report No: 59450

Organics Analysis Data Sheet

Sample Number
59450-02MSD

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	2.00		
Percent Moisture (Decanted)	N/A		

CAS Number	Compound	Value	ug/L		CAS Number	Compound	Value	ug/L	
108-95-2	Phenol	85		SP					
111-44-4	bis(-2-Chloroethyl)Ether		10 U		83-32-9	Acenaphthene	50		SP
95-57-8	2-Chlorophenol	99		SP	51-28-5	2,4-Dinitrophenol		50 U	
541-73-1	1,3-Dichlorobenzene		10 U		100-02-7	4-Nitrophenol	120		SP
106-46-7	1,4-Dichlorobenzene	35		SP	132-64-9	Dibenzofuran		10 U	
100-51-6	Benzyl Alcohol		10 U		121-14-2	2,4-Dinitrotoluene	50		SP
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	44		SP	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	110		SP
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	36		SP	206-44-0	Fluoranthene		10 U	
91-20-3	Naphthalene		10 U		129-00-0	Pyrene	55		SP
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	100		SP	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		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 Lab
Case No: 59450

Sample Number: 59450-02MSD

01523

ORGANICS ANALYSIS DATA SHEET
(Page 3)

Pesticides/ PCB's:

Concentration : Low
Date Ext./Prep :04/28/88
Date Analyzed :05/19/88
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	0.31		SP
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

ORGANICS ANALYSIS DATA SHEET
(Page 1)

Sample Number : 59450-05MSD

Laboratory Name: Rocky Mountain Analytical Lab
Laboratory Sample ID. Number : 59450-05MSD
Sample Matrix : Water
Data Released Authorized By : JL

Case Number : N/A
Q.C. Report No: 59450
Contract No. : N/A
Date Sample Rec: 04/22/88

Volatile Compounds

Concentration :	Low
Date Extracted/Prepared :	N/A
Date Analyzed :	05/03/88
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	53		SP
75-09-2	MethyleneChloride	2.4		J B	124-48-1	Dibromochloromethane		5	U
67-64-1	Acetone	5.4		J B	79-00-5	1,1,2-Trichloroethane		5	U
75-15-0	CarbonDisulfide		5	U	71-43-2	Benzene	51		SP
75-35-4	1,1-Dichloroethene	60		SP	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	50		SP
56-23-5	CarbonTetrachloride		5	U	108-90-7	Chlorobenzene	53		SP
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

5/3/88 2:27:22 SCAN 1 OF 730
Acquisition started

Acquire
05/03/88 2:26:00 + 0:03
Sample: CLP,59450,,59450-01MSD,LOW,WATER,59450-01MSD,VOA,EPA
Conds.: 100%/5ML
Formula:
Submitted by: RMAL

Run 3:S59450W968
Free sectors: 11265
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730

01525

Weight: 0.030
Acct. No: 59450

*** GC descriptor: V3 ***

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

Injector: 50 DegC
Interface: 220 DegC

Seq. #	Temp (DegC)	Rate (C/min)	Time (minutes) period	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)	127.00	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: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/3/88 3:03:57
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per second	
Centroid	730	36.6	2190.0	1.7	14821.	20.	7.

01526

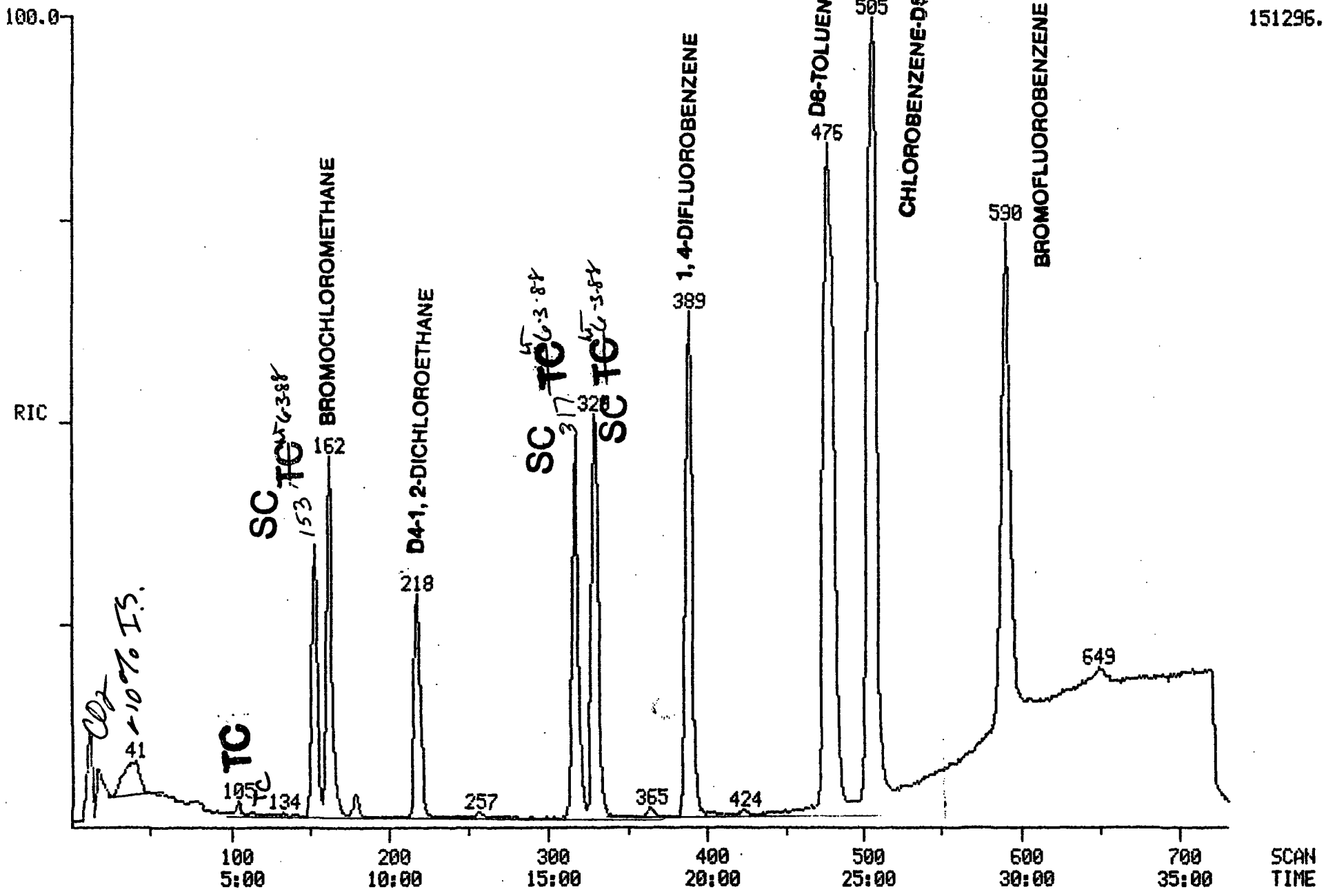
RIC
05/03/88 2:26:00
SAMPLE: CLP,59450,,59450-01MSD,LOW,WATER,59450-01MSD,VOA,EPA
CONDS.: 100%/5ML
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59450W968 #4
CALI: 050288CW2 #3

SCANS 1 TO 730

TIC = Tentatively Identified Compound

TC = Target Compound
SC = Spike Compound



PROCEDURE: TCA DIAGNOSTIC REPORT 5/03/88 8:53:49
DATA FILE: S59450W968
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

01527

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	3	40	IS01/TC01
3	3	1	26	18	8	6	50	IS02/TC02
3	3	1	26	12	7	8	102	IS03/TC03
1	1	1	0	7	4	1	51	IS04/TC04

41 COMPOUNDS PROCESSED, 18 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-162	162	162	.	1	971	.	128	162	.	1
2	V1	10	-32	27	.	.	.	.	.	50	.	.	.
3	V1	15	-48	44	.	.	.	.	.	94	.	.	.
4	V1	25	-60	56	.	.	.	.	.	62	.	.	.
5	V1	35	-74	71	.	.	.	.	.	64	.	.	.
6	V1	45	-107	105	105	.	1	978	.	84	104	-1	1
7	V1	50	-116	114	114	.	3	1000	.	58	114	.	1
8	V1	65	-133	132	.	.	.	.	.	76	.	.	.
9	V1	80	-154	153	153	.	1	989	.	96	153	.	1
10	V2	1	-388	389	389	.	1	996	.	114	389	.	1
11	V3	1	-502	504	504	.	1	993	.	117	504	.	1
12	V1	90	-180	180	.	.	.	.	.	63	.	.	.
13	V1	95	-194	194	.	.	.	.	.	96	.	.	.
14	V1	100	-205	205	.	.	.	.	.	83	.	.	.
15	V1	2	-218	218	218	.	1	989	.	65	218	.	1
16	V2	10	-218	218	218	.	3	913	.	72	.	.	.
17	V1	110	-221	221	.	.	.	.	.	62	.	.	.
18	V2	15	-248	248	.	.	.	.	.	97	.	.	.
19	V2	20	-257	257	.	.	.	.	.	117	.	.	.
20	V2	25	-260	260	261	1	2	861	.	43	.	.	.
21	V2	30	-267	267	.	.	.	.	.	83	.	.	.
22	V2	35	-298	298	.	.	.	.	.	63	.	.	.
23	V2	40	-304	305	.	.	.	.	.	75	.	.	.
24	V2	45	-317	318	317	-1	1	978	.	130	317	.	1
25	V2	60	-329	330	329	-1	1	988	.	78	329	.	1
26	V2	50	-330	331	.	.	.	.	.	129	.	.	.
27	V2	65	-333	333	.	.	.	.	.	75	.	.	.
28	V2	55	-333	333	.	.	.	.	.	97	.	.	.
29	V2	80	-393	393	.	.	.	.	.	173	.	.	.
30	V3	10	-405	405	405	.	2	924	.	58	404	-1	1
31	V3	15	-441	442	440	-2	4	954	.	58	441	1	1
32	V3	25	-447	448	.	.	.	.	.	83	.	.	.
33	V3	20	-448	449	.	.	.	.	.	164	.	.	.
34	V3	2	-475	476	476	.	1	993	.	98	476	.	1
35	V3	35	-480	481	480	-1	1	985	.	92	480	.	1
36	V3	40	-506	507	507	.	1	987	.	112	506	-1	1
37	V3	50	-549	550	.	.	.	.	.	106	.	.	.
38	V3	3	-590	590	590	.	1	984	.	95	590	.	1
39	V3	55	-611	611	.	.	.	.	.	104	.	.	.
40	V3	60	-615	615	615	.	1	852	.	106	.	.	.
41	V3	75	-628	628	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59450W968

Data: S59450W968.TI
05/03/88 2:26:00
Sample: CLP,59450,,59450-01MSD,LOW,WATER,59450-01MSD,VOA,EPA
Conds.: 100%/5ML
Formula: Instrument: 5100 Weight: 0.030
Submitted by: RMAL Analyst: DC Acct. No.: 59450

01528

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

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

01529

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	162	8:06	1	1.000	A BB	32616.	50.000 UG/L	9.06
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	104	5:12	1	0.642	A BB	1687.	1.336 UG/L	0.24
7	58	114	5:42	1	0.704	A BB	200.	2.075 UG/L	0.38
8	NOT FOUND								
9	96	153	7:39	1	0.944	A BB	39937.	58.080 UG/L	10.53
10	114	389	19:27	10	1.000	A BB	183798.	50.000 UG/L	9.06
11	117	504	25:12	11	1.000	A BB	154819.	50.000 UG/L	9.06
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	218	10:54	1	1.346	A BB	54248.	44.023 UG/L	7.98
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	130	317	15:51	10	0.815	A BB	61658.	49.577 UG/L	8.99
25	78	329	16:27	10	0.846	A BB	162875.	47.760 UG/L	8.66
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	58	404	20:12	11	0.802	A BB	375.	0.784 UG/L	0.14
31	58	441	22:03	11	0.875	A VB	267.	0.578 UG/L	0.10
32	NOT FOUND								
33	NOT FOUND								
34	98	476	23:48	11	0.944	A BB	186212.	50.013 UG/L	9.06
35	92	480	24:00	11	0.952	A BB	99850.	47.313 UG/L	8.58
36	112	506	25:18	11	1.004	A BB	126238.	50.607 UG/L	9.17
37	NOT FOUND								
38	95	590	29:30	11	1.171	A BB	106651.	49.629 UG/L	8.99
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	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:36		0.196						
3	2:24		0.294						
4	3:00		0.368						
5	3:42		0.454						
6	5:21	0.97	0.656	0.98	1.34	50.00	0.052	1.935	0.03
7	5:48	0.98	0.712	0.99	2.08	50.00	0.006	0.148	0.04
8	6:39		0.816						
9	7:42	0.99	0.945	1.00	58.08	50.00	1.224	1.054	1.16
10	19:27	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	9:00		1.104						
13	9:42		1.190						

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	1.01	44.02	50.00	1.663	1.889	0.88
16	10:54		0.560						
17	11:03		1.356						
18	12:24		0.638						
19	12:51		0.661						
20	13:00		0.668						
21	13:21		0.686						
22	14:54		0.766						
23	15:12		0.781						
24	15:51	1.00	0.815	1.00	49.58	50.00	0.335	0.338	0.99
25	16:27	1.00	0.846	1.00	47.76	50.00	0.886	0.928	0.96
26	16:30		0.848						
27	16:39		0.856						
28	16:39		0.856						
29	19:39		1.010						
30	20:15	1.00	0.805	1.00	0.78	50.00	0.002	0.154	0.02
31	22:03	1.00	0.877	1.00	0.58	50.00	0.002	0.149	0.01
32	22:21		0.889						
33	22:24		0.891						
34	23:45	1.00	0.944	1.00	50.01	50.00	1.203	1.202	1.00
35	24:00	1.00	0.954	1.00	47.31	50.00	0.645	0.682	0.95
36	25:18	1.00	1.006	1.00	50.61	50.00	0.815	0.806	1.01
37	27:27		1.091						
38	29:30	1.00	1.173	1.00	49.63	50.00	0.689	0.694	0.99
39	30:33		1.215						
40	30:45		1.223						
41	31:24		1.249						

01530

TCA FINISHED, 18 FOUND
FINISHED AT: 5/03/88 8:58:14

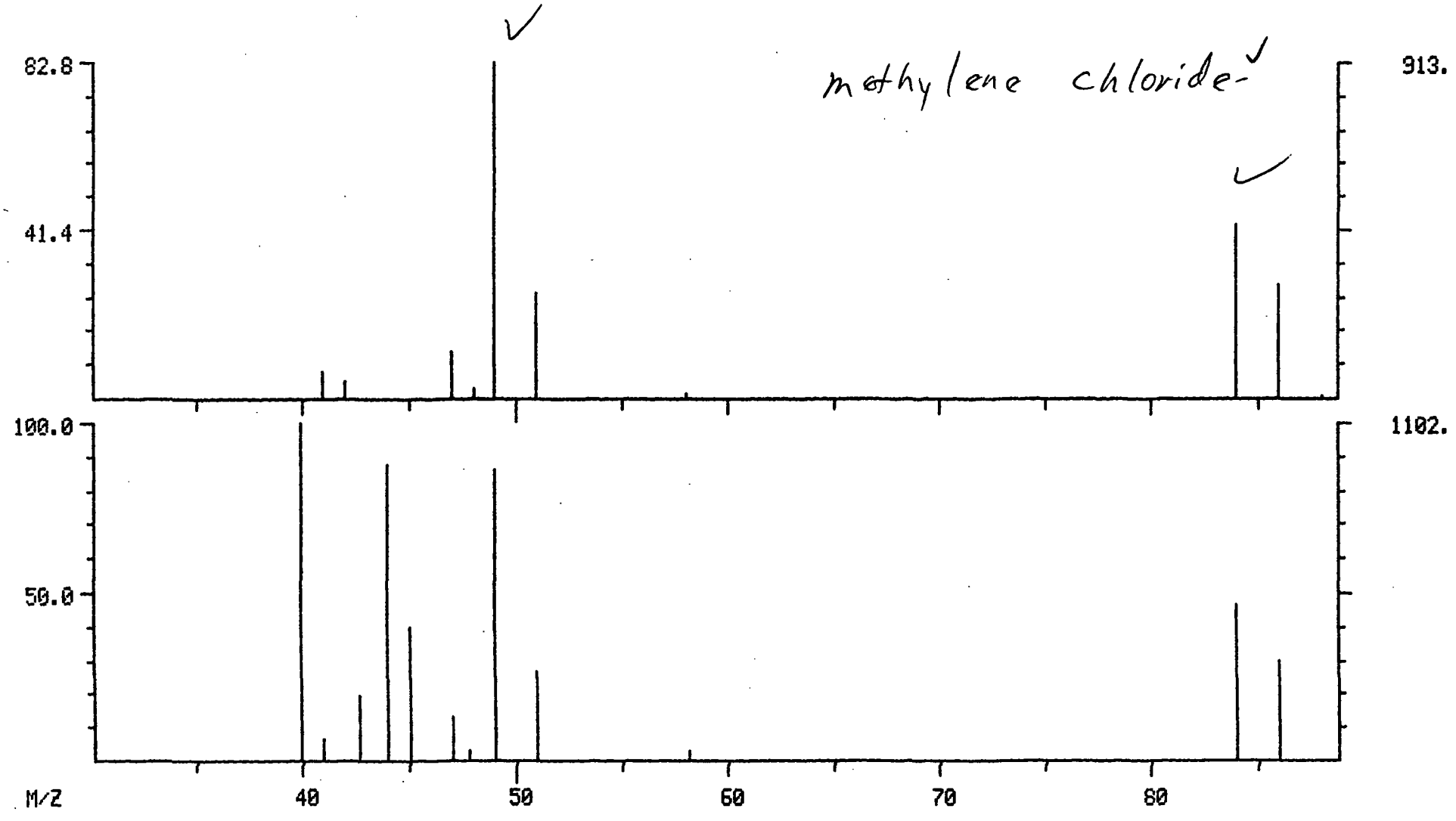
RMAL QUANTITATION SUMMARY FILE: S59450W968 01531
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	UNITS: UG/L AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	162	1	32616.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	183798.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	154819.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	476	3	186212.	1.203	50.013
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	590	3	106651.	0.689	49.629
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	218	1	54248.	1.663	44.023
7	V1# 10	CO10 CHLOROMETHANE	50		1	NOT FOUND		
8	V1# 15	CO15 BROMOMETHANE	94		1	NOT FOUND		
9	V1# 25	CO20 VINYL CHLORIDE	62		1	NOT FOUND		
10	V1# 35	CO25 CHLOROETHANE	64		1	NOT FOUND		
11	V1# 45	CO30 METHYLENE CHLORIDE	84	104	1	1687.	0.052	1.336
12	V1# 50	CO35 ACETONE	58	114	1	200.	0.006	2.075
13	V1# 65	CO40 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	CO45 1,1-DICHLOROETHENE	96	153	1	39937.	1.224	58.081
15	V1# 90	CO50 1,1-DICHLOROETHANE	63		1	NOT FOUND		
16	V1# 95	TRANS-1,2-DICHLOROETHENE	96		1	NOT FOUND		
17	V1#100	CO60 CHLOROFORM	83		1	NOT FOUND		
18	V1#110	CO65 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	317	2	61658.	0.335	49.577
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78	329	2	162875.	0.886	47.760
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	480	3	99850.	0.645	47.313
37	V3# 40	C235 CHLOROBENZENE	112	506	3	126238.	0.815	50.607
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		

01532

DUAL MASS SPECTRUM
05/03/88 2:26:00 + 5:12
SAMPLE: CLP,59450,,59450-01MSD,LOW,WATER,59450-01MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 82 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W968 #104 BASE M/Z: 49/ 40
CALI: 050288CW2 #3 RIC: 2259./ 5087.



01533

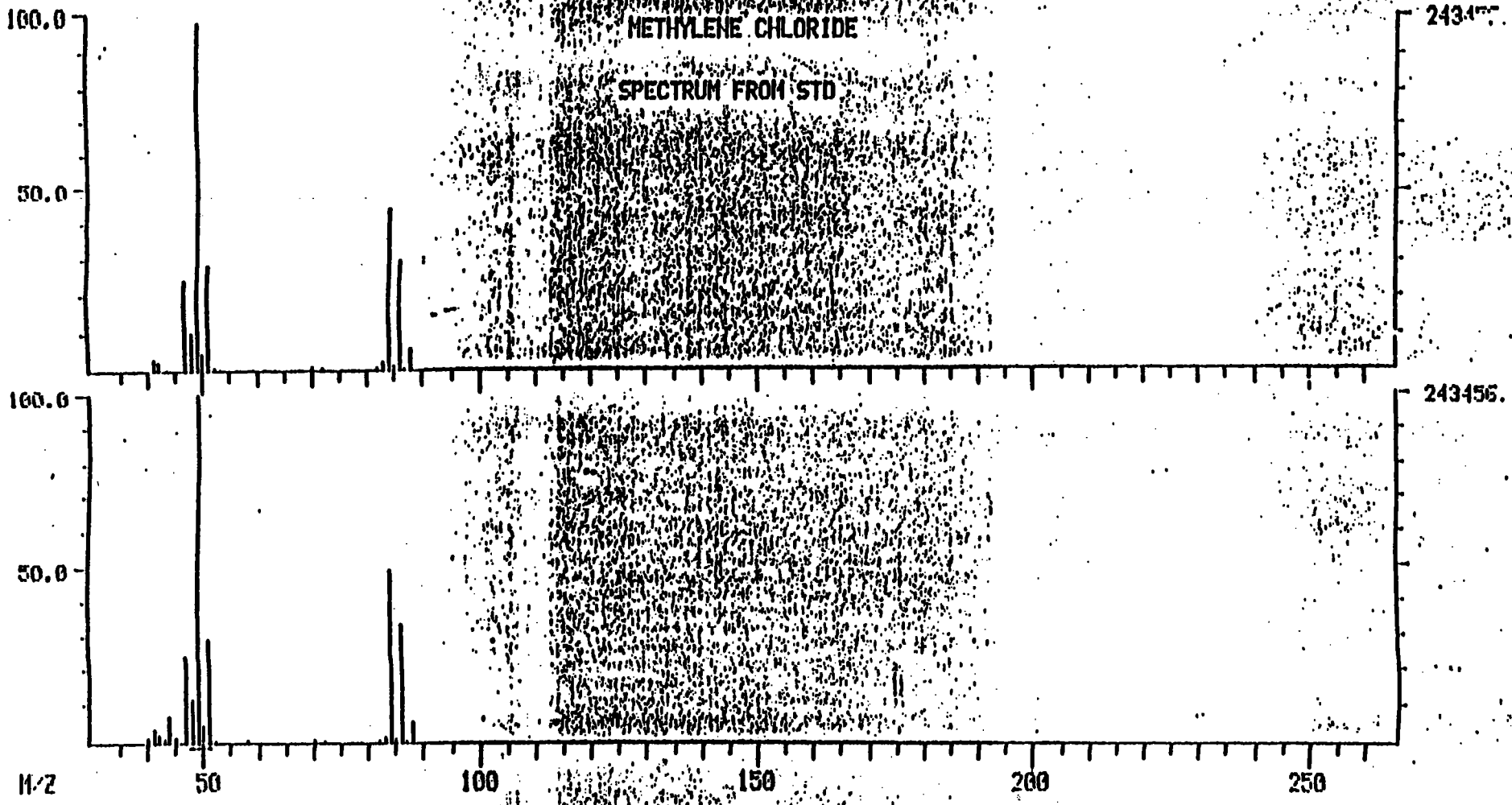
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100%/5ML
CONDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

SPECTRUM FROM STD

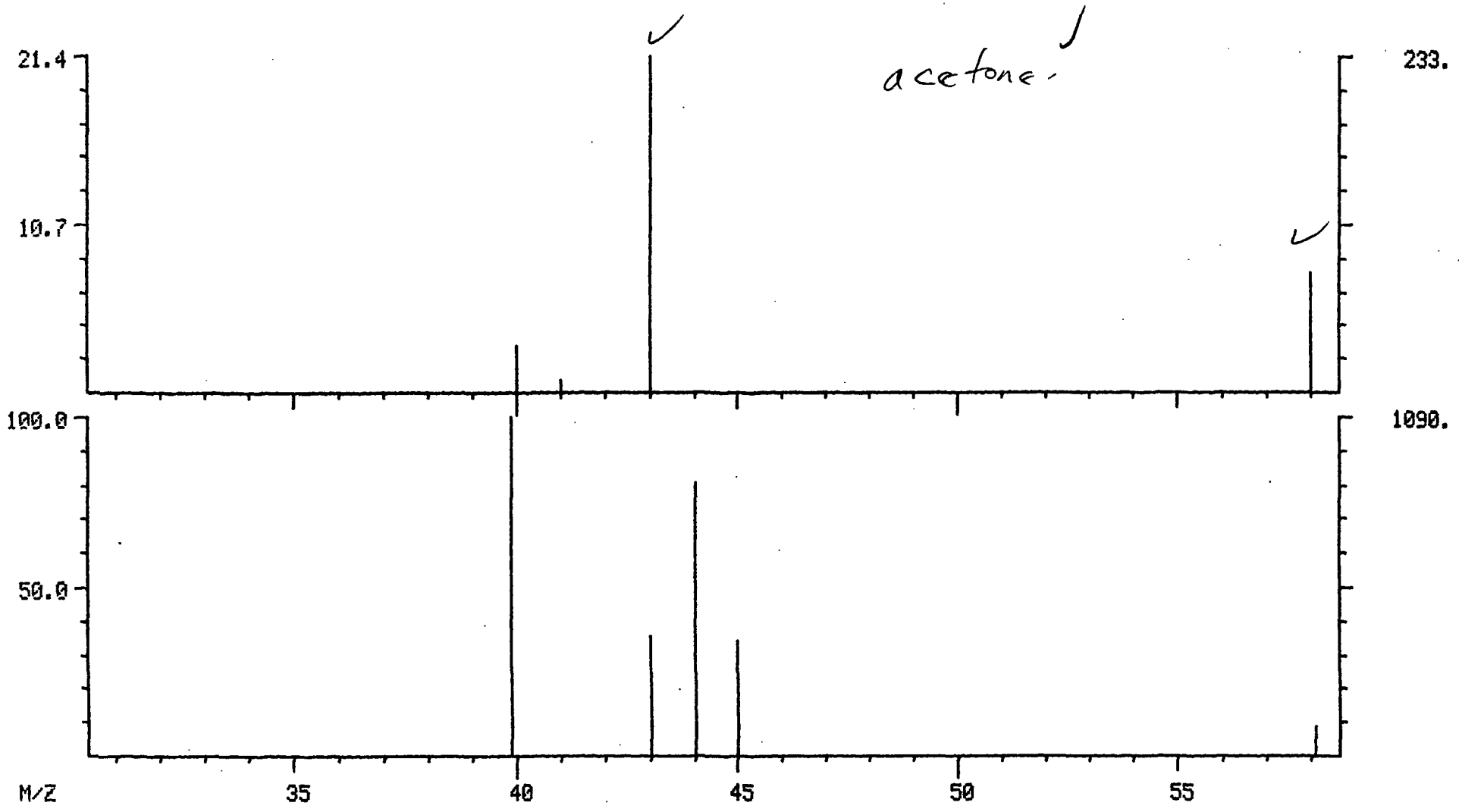


01534

DUAL MASS SPECTRUM
05/03/88 2:26:00 + 5:42
SAMPLE: CLP,59450,,59450-01MSD,LOW,WATER,59450-01MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 86 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W968 #114
CALI: 050288CW2 #3

BASE M/Z: 43/ 40
RIC: 356./ 2815.

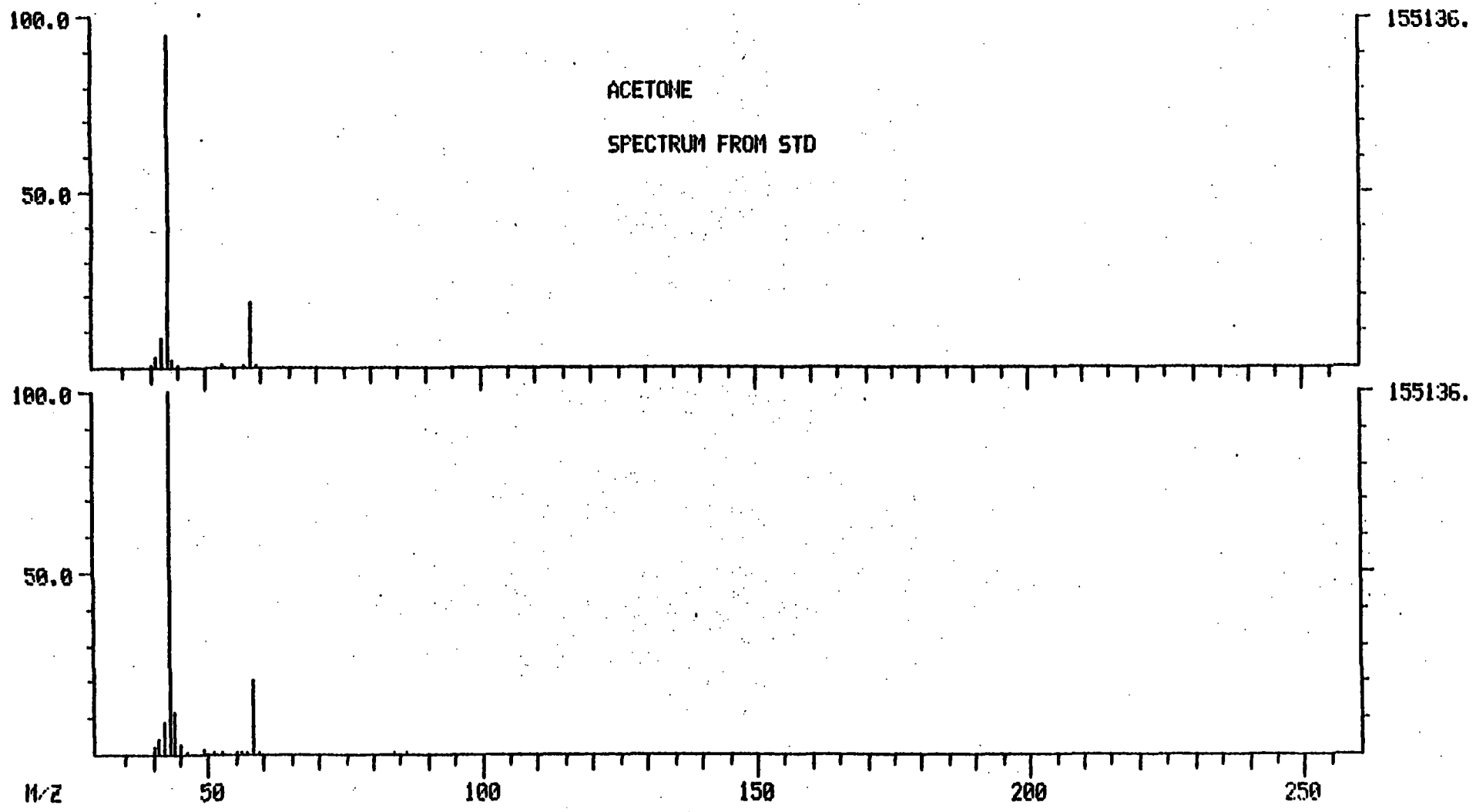


01535

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

DATA: STDJ198 #150
CALI: STDJ198 #1

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

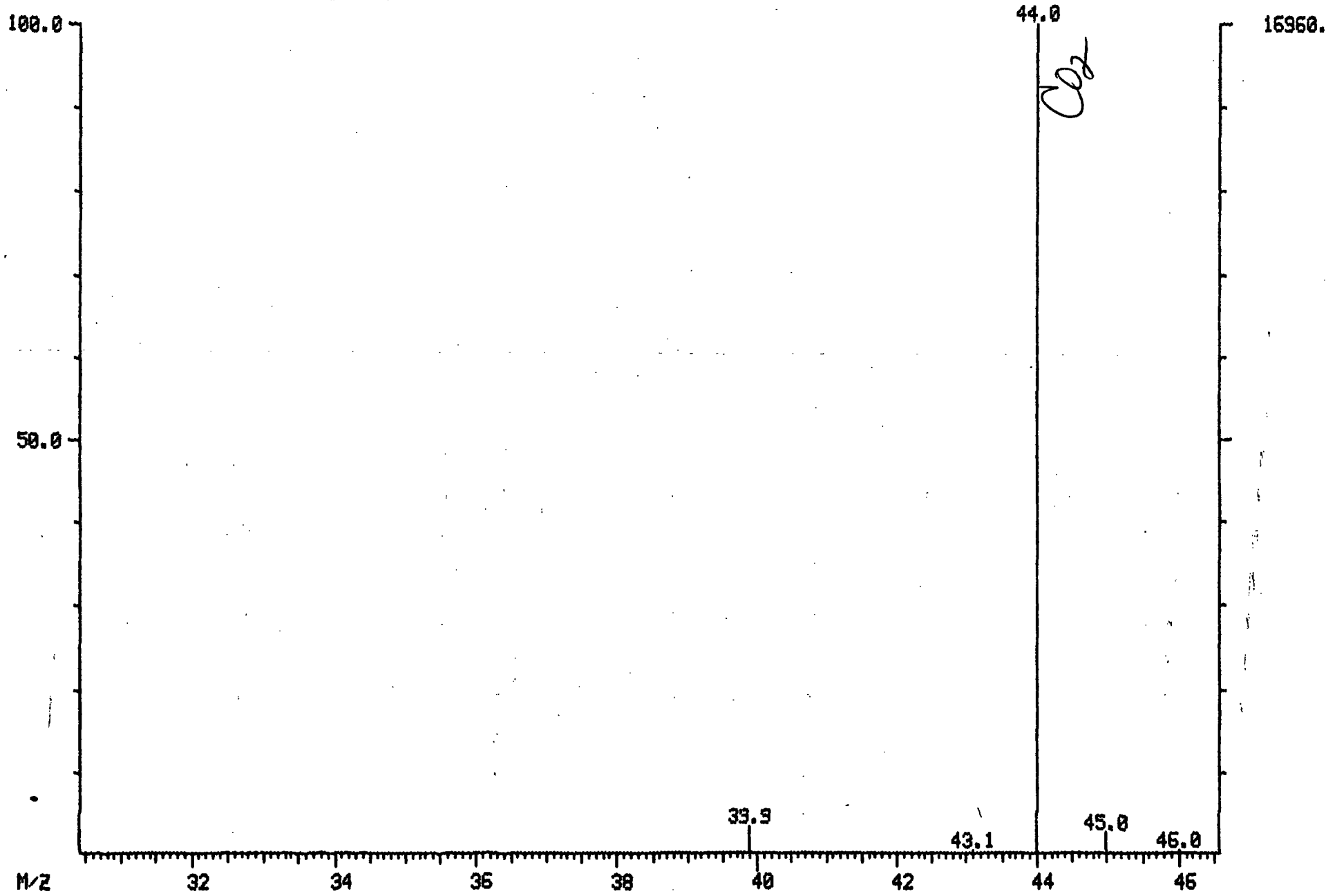


01536

MASS SPECTRUM
05/03/88 2:26:00 + 0:36
SAMPLE: CLP,59450,,59450-01MSD,LOW,WATER,59450-01MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 60 DEG. C

DATA: 559450W968 #12
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 17984.

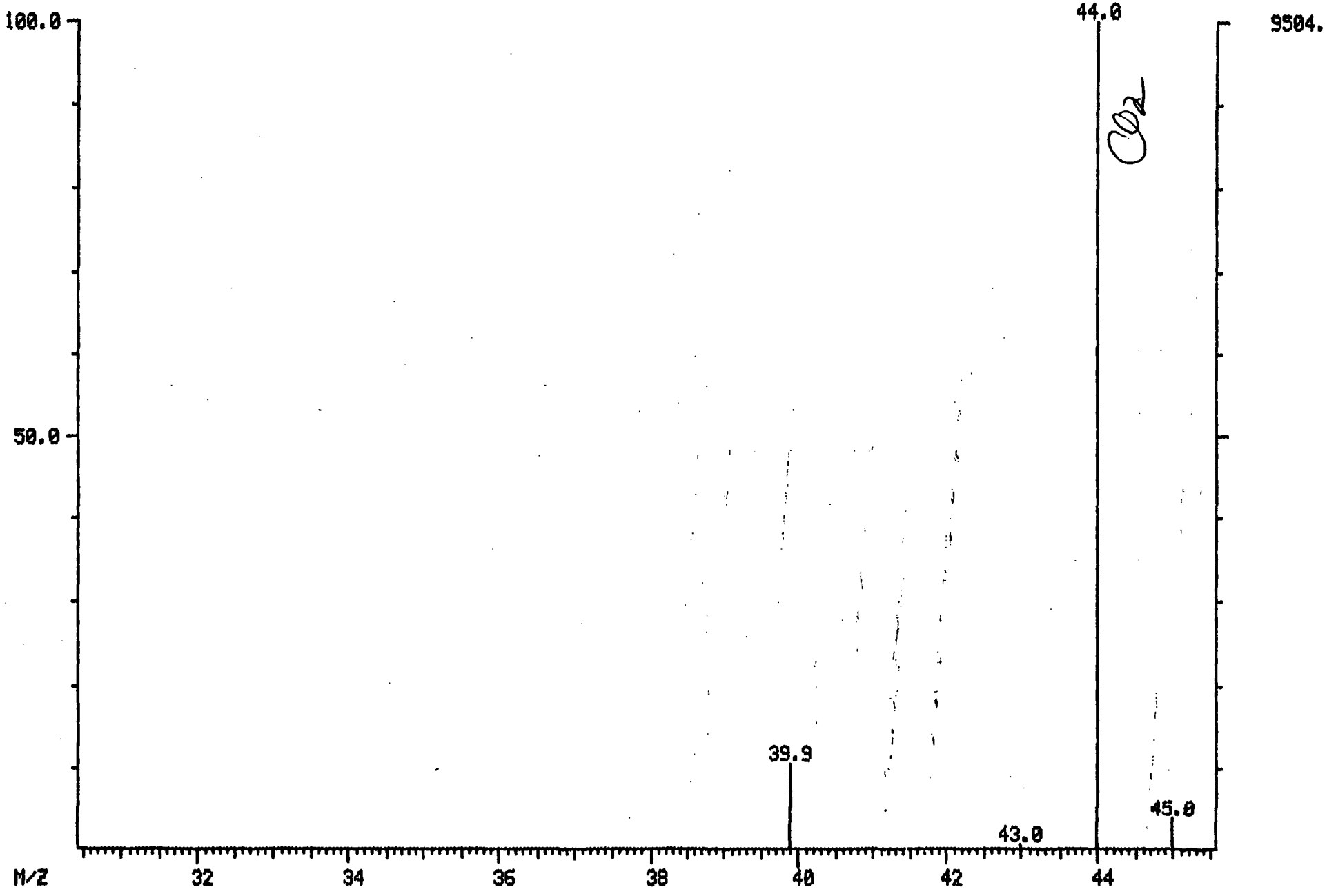


01537

MASS SPECTRUM
05/03/88 2:26:00 + 0:51
SAMPLE: CLP,59450,,59450-01MSD,LOW,WATER,59450-01MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 60 DEG. C

DATA: S59450W968 #17
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 10912.



$RF = \frac{2.0\,ml}{1.06} \times \frac{ug}{l} = 1.89$

6/3/88 19:57:12 SCAN 1 OF 2800
Acquisition started

01538

Acquire
06/03/88 19:57:00 + 0:04
Sample: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
Conds.:
Formula:
Submitted by: RMAL

Run 0:S59450U562
Free sectors: 23151
Instrument: 4500
Analyst: KS

ACQUIRING
Scan: 5 of 2800
Weight: 0.000
Acct. No:

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

Loaded GC Desc:ST Current GC oven tmp: 30 DegC
Current GC Desc:ST GC elapsed time : 0: 7 min

Injector : 250 DegC
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	40.5	0.0
3	325 - 325	-	10.0	40.5			
4	325 - 325	-	0.0	40.5			

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

Low mass: 35
High mass: 500

Up: 0.70 L*
Down: 0.00 L

Top: 0.00
Bottom: 0.05

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

Samp Int (ms): 0.150
Samp Int (ms): 0.150

Peak Width: 1000.
Inten/ion: 2

Min Peak Width: 3
ADC Threshold: 1

Min Frag Width %: 80
Baseline: 0

Min Area: 30

***** 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	

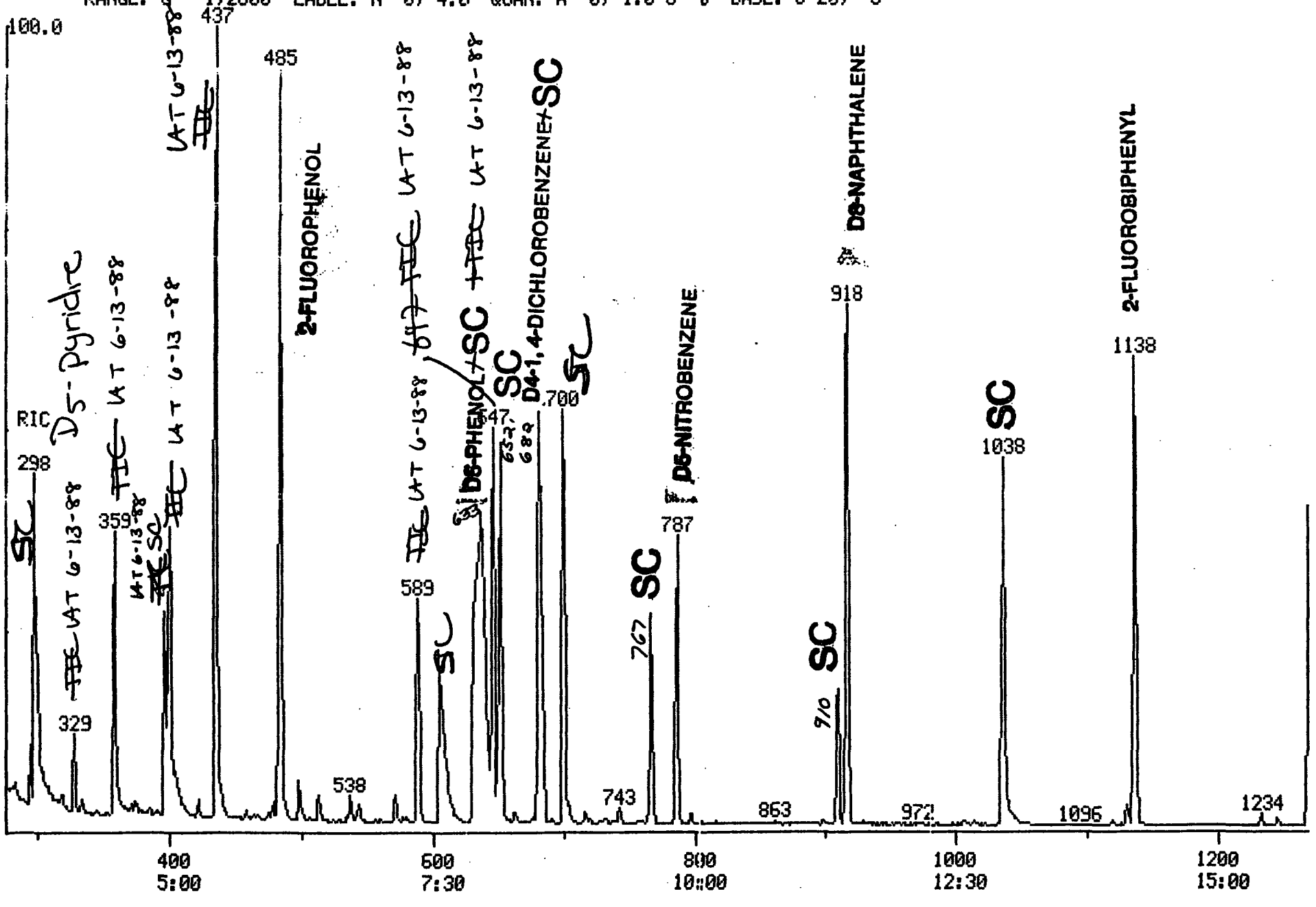
6/3/88 20:32:14
ACQUISITION COMPLETED
SCANS 1 TO 2800 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2800	192.2	2100.0	9.2	32681. 12.	16.

TC = Target Compound T.I.C.-Tent. Ident. Compound
SC = Spike Compound

RIC DATA: 559450U562 #4 SCANS 270 TO 1270
06/03/88 19:57:00 CALI: 060388CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
RANGE: C 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

01539



TC= Target Compound
SC= Spike Compound

01540

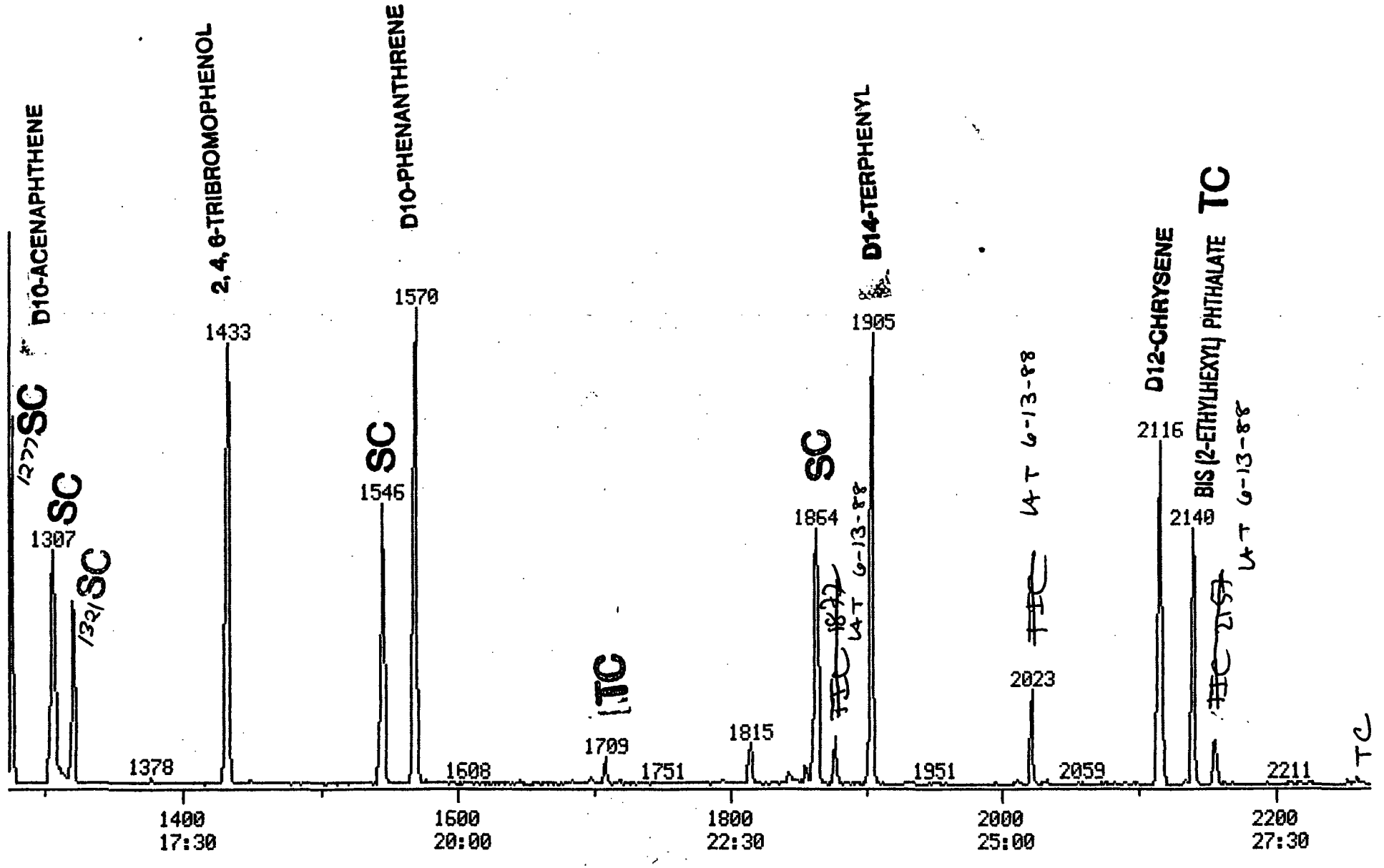
RIC
06/03/88 19:57:00 MSD
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: S59450U562 #4 SCANS 1270 TO 2270
CALI: 060388CU #5 OUT OF 270 TO 2800

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

100.0

1271



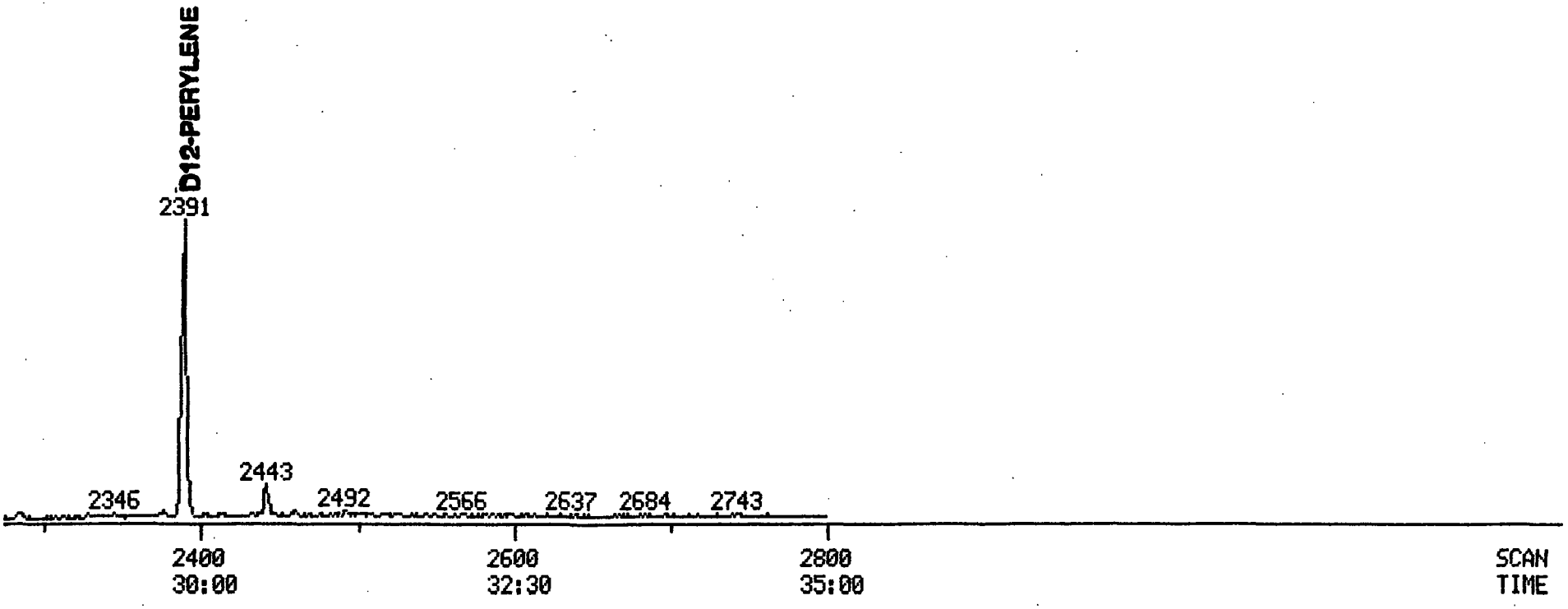
01541

TC=Target Compound
SC=Spike Compound

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

RIC DATA: S59450U562 #4 SCANS 2270 TO 2800
06/03/88 19:57:00 MSD CALI: 060388CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

100.0 123264.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/88 9:06:23
DATA FILE: S59450U562 MSD
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

---- STANDARDS -----				--- PLUS UNKNOWNS ---				- LIST NAMES -
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	7	5	4	132	ISO1/TCO1
3	3	1	0	18	7	1	315	ISO2/TCO2
3	3	1	0	12	5	1	63	ISO3/TCO3
3	3	1	44	18	7	1	95	ISO4/TCO4
3	3	1	44	10	4	1	87	ISO5/TCO5
3	3	1	23	8	5	1	146	ISO6/TCO6
3	3	1	27	14	7	1	72	ISO7/TCO7
1	1	1	0	4	1	1	0	ISO8/TCO8

77 COMPOUNDS PROCESSED, 27 FOUND

COMPOUND			SEARCH						SAT	CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-680	682	682	.	1	967	.	152	682	.	1
2	S1	2	-484	485	485	.	1	994	.	112	485	.	1
3	S1	3	-633	634	633	-1	2	944	.	99	633	.	1
4	S1	105	-635	636	634	-2	2	970	.	94	634	.	1
5	S1	110	-647	648	.	.	.	.	.	93	647	.	1
6	S1	115	-651	652	652	.	1	995	.	128	652	.	1
7	S1	125	-675	676	.	.	.	.	.	146	.	.	.
8	S2	1	-916	918	918	.	1	996	.	136	918	.	1
9	S3	1	-1269	1271	1271	.	1	995	.	164	1271	.	1
10	S1	130	-684	684	685	1	1	981	.	146	685	.	1
11	S1	145	-713	713	.	.	.	.	.	108	.	.	.
12	S1	150	-717	717	.	.	.	.	.	146	.	.	.
13	S1	160	-736	736	.	.	.	.	.	108	.	.	.
14	S1	165	-742	742	.	.	.	.	.	45	.	.	.
15	S1	185	-763	763	.	.	.	.	.	108	.	.	.
16	S1	190	-768	768	767	-1	1	998	.	70	767	.	1
17	S1	200	-771	771	.	.	.	.	.	117	.	.	.
18	S2	2	-787	787	787	.	1	998	.	82	787	.	1
19	S2	10	-790	790	.	.	.	.	.	77	.	.	.
20	S2	20	-835	835	.	.	.	.	.	82	.	.	.
21	S2	25	-849	849	.	.	.	.	.	139	.	.	.
22	S2	30	-862	862	.	.	.	.	.	107	.	.	.
23	S2	35	-881	881	.	.	.	.	.	93	.	.	.
24	S2	45	-892	892	886	-6	1	913	.	122	888	2	1
25	S2	40	-894	896	.	.	.	.	.	162	.	.	.
26	S2	55	-910	912	911	-1	1	992	.	180	910	-1	1
27	S2	60	-921	923	.	.	.	.	.	128	.	.	.
28	S2	80	-938	940	.	.	.	.	.	127	.	.	.
29	S2	95	-959	961	.	.	.	.	.	225	.	.	.
30	S2	130	-1037	1039	1038	-1	1	991	.	107	1038	.	1
31	S2	145	-1057	1059	.	.	.	.	.	142	1058	.	1
32	S3	20	-1104	1106	.	.	.	.	.	237	.	.	.
33	S3	25	-1121	1123	.	.	.	.	.	196	.	.	.
34	S4	1	-1569	1570	1570	.	1	993	.	188	1570	.	1
35	S3	30	-1127	1128	.	.	.	.	.	196	.	.	.
36	S3	3	-1138	1139	1138	-1	1	994	.	172	1138	.	1
37	S3	40	-1154	1155	.	.	.	.	.	162	.	.	.
38	S3	45	-1184	1185	.	.	.	.	.	65	.	.	.
39	S3	55	-1232	1233	.	.	.	.	.	163	.	.	.
40	S3	65	-1238	1239	.	.	.	.	.	152	.	.	.
41	S3	70	-1244	1245	.	.	.	.	.	165	1246	.	1
42	S3	75	-1269	1270	.	.	.	.	.	138	.	.	.
43	S3	80	-1277	1278	1277	-1	1	993	.	153	1277	.	1
44	S3	85	-1289	1290	.	.	.	.	.	184	.	.	.
45	S3	95	-1306	1307	1307	.	1	992	.	109	1307	.	1
46	S3	90	-1309	1310	.	.	.	.	.	168	.	.	.
47	S3	105	-1321	1322	1321	-1	1	994	.	165	1321	.	1
48	S3	130	-1377	1378	.	.	.	.	.	149	1376	.	1
49	S3	135	-1379	1380	.	.	.	.	.	166	.	.	.
50	S3	140	-1383	1384	.	.	.	.	.	204	.	.	.
51	S3	150	-1395	1396	.	.	.	.	.	138	.	.	.
52	S4	10	-1404	1405	.	.	.	.	.	198	.	.	.
53	S4	15	-1411	1412	.	.	.	.	.	169	.	.	.
54	S3	2	-1433	1434	1433	-1	1	972	.	330	1433	.	1
55	S4	30	-1482	1483	.	.	.	.	.	248	.	.	.
56	S4	40	-1509	1510	.	.	.	.	.	284	.	.	.
57	S5	1	-2116	2116	2116	.	1	960	.	240	2116	.	1
58	S4	50	-1546	1546	1546	.	1	985	.	266	1546	.	1
59	S4	65	-1575	1575	.	.	.	.	.	178	1573	.	1
60	S4	70	-1583	1583	.	.	.	.	.	178	.	.	.
61	S4	85	-1711	1711	1709	-2	1	944	.	149	1709	.	1

63	S6	1	-2391	2391	2391	.	1	989	.	264	2391	.		1
64	S5	15	-1865	1865	1864	-1	1	996	.	202	1864	.		1
65	S5	2	-1905	1905	1905	.	1	991	.	244	1905	.		1
66	S5	40	-2016	2016	.	.	.	.	.	149	.	.		.
67	S5	50	-2113	2113	.	.	.	.	.	228	.	.		.
68	S5	55	-2115	2115	.	.	.	.	.	252	.	.		.
69	S5	60	-2123	2123	.	.	.	.	.	228	.	.		.
70	S5	65	-2141	2141	2140	-1	1	990	.	149	2140	.		1
71	S6	10	-2260	2259	2259	.	1	997	.	149	2259	.		1
72	S6	15	-2324	2323	.	.	.	.	.	252	.	.		.
73	S6	25	-2329	2328	.	.	.	.	.	252	.	.		.
74	S6	35	-2382	2381	.	.	.	.	.	252	.	.		.
75	S6	55	-2595	2595	.	.	.	.	.	276	.	.		.
76	S6	60	-2597	2597	.	.	.	.	.	278	.	.		.
77	S6	65	-2652	2652	.	.	.	.	.	276	.	.		.

01543

QUANTITATION REPORT FILE: [illegible]

Data: S59450U562.TI
06/03/88 19:57:00 MSD
Sample: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	682	8:31	1	1.000	A BB	23721.	40.000 UG/ML	4.16
2	112	485	6:04	1	0.711	A BB	64187.	79.343 UG/ML	8.26
3	99	633	7:55	1	0.928	A BV	31169.	30.944 UG/ML	3.22
4	94	634	7:55	1	0.930	A BV	13890.	12.263 UG/ML	1.28
5	93	647	8:05	1	0.949	A BB	298.	0.328 UG/ML	0.03
6	128	652	8:09	1	0.956	A BB	38374.	46.571 UG/ML	4.85
7	NOT FOUND								
8	136	918	11:28	8	1.000	A BB	89346.	40.000 UG/ML	4.16
9	164	1271	15:53	9	1.000	A BB	43625.	40.000 UG/ML	4.16
10	146	685	8:34	1	1.004	A BB	13419.	13.928 UG/ML	1.45
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	70	767	9:35	1	1.125	A BB	12417.	20.291 UG/ML	2.11
17	NOT FOUND								
18	82	787	9:50	8	0.857	A BB	31449.	34.062 UG/ML	3.54
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	122	888	11:06	8	0.967	A BB	140.	0.352 UG/ML	0.04
25	NOT FOUND								
26	180	910	11:22	8	0.991	A BB	11032.	14.610 UG/ML	1.52
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	107	1038	12:58	8	1.131	A BB	30267.	51.052 UG/ML	5.31
31	142	1058	13:13	8	1.153	A BB	135.	0.093 UG/ML	0.01
32	NOT FOUND								
33	NOT FOUND								
34	188	1570	19:37	34	1.000	A BV	73208.	40.000 UG/ML	4.16
35	NOT FOUND								
36	172	1138	14:13	9	0.895	A BV	62401.	38.363 UG/ML	3.99
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	165	1246	15:34	9	0.980	A BB	81.	0.217 UG/ML	0.02
42	NOT FOUND								
43	153	1277	15:58	9	1.005	A BB	32253.	24.365 UG/ML	2.54
44	NOT FOUND								
45	109	1307	16:20	9	1.028	A BB	9728.	63.658 UG/ML	6.62
46	NOT FOUND								
47	165	1321	16:31	9	1.039	A BB	13329.	29.372 UG/ML	3.06
48	149	1376	17:12	9	1.083	A BB	121.	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	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:04	1.00	0.711	1.00	79.34	100.00	1.082	1.364	0.79
3	7:55	1.00	0.930	1.00	30.94	100.00	0.526	1.699	0.31
4	7:57	1.00	0.933	1.00	12.26	50.00	0.468	1.910	0.25
5	8:06	1.00	0.950	1.00	0.33	50.00	0.010	1.530	0.01
6	8:09	1.00	0.956	1.00	46.57	50.00	1.294	1.389	0.93
7	8:27		0.991						
8	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	8:34	1.00	1.004	1.00	13.93	50.00	0.453	1.625	0.28
11	8:55		1.047						
12	8:58		1.053						
13	9:13		1.081						
14	9:17		1.089						
15	9:33		1.120						
16	9:37	1.00	1.128	1.00	20.29	50.00	0.419	1.032	0.41
17	9:39		1.132						
18	9:51	1.00	0.858	1.00	34.06	50.00	0.282	0.413	0.68
19	9:53		0.862						
20	10:27		0.911						
21	10:37		0.926						
22	10:47		0.940						
23	11:01		0.961						
24	11:10	0.99	0.973	0.99	0.35	50.00	0.001	0.178	0.01
25	11:11		0.975						
26	11:23	1.00	0.992	1.00	14.61	50.00	0.099	0.338	0.29
27	11:31		1.004						
28	11:44		1.023						
29	12:00		1.046						
30	12:58	1.00	1.131	1.00	51.05	50.00	0.271	0.265	1.02
31	13:13	1.00	1.153	1.00	0.09	50.00	0.001	0.649	0.00
32	13:49		0.869						
33	14:01		0.883						
34	19:37	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:06		0.887						
36	14:14	1.00	0.896	1.00	38.36	50.00	1.144	1.491	0.77
37	14:26		0.909						
38	14:49		0.932						
39	15:25		0.970						
40	15:29		0.975						
41	15:34	1.00	0.980	1.00	0.22	50.00	0.001	0.342	0.00
42	15:52		0.999						
43	15:58	1.00	1.006	1.00	24.36	50.00	0.591	1.214	0.49
44	16:07		1.015						
45	16:20	1.00	1.028	1.00	63.66	50.00	0.178	0.140	1.27
46	16:22		1.031						
47	16:31	1.00	1.040	1.00	29.37	50.00	0.244	0.416	0.59
48	17:13	1.00	1.084	1.00	0.08	50.00	0.002	1.416	0.00
49	17:15		1.086						
50	17:18		1.089						

Quantitation Report File: S59450U562

Data: S59450U562.TI
06/03/88 19:57:00 MSD
Sample: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	C555	2,4,6-TRIBROMOPHENOL	330	S3# 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	240I	S5# 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	164I	S6# 01	1520-96-3
64	C715	PYRENE	202	S5# 15	129-00-0
65	C530	TERPHENYL-D14	244S	S5# 02	1718-51-0
66	C720	BUTYLBENZYLPHTHALATE	149	S5# 40	85-68-7
67	C730	BENZO(A)ANTHRACENE	228	S5# 50	56-55-3
68	C725	3,3'-DICHLOROBENZIDINE	252	S5# 55	91-94-1
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	1433	17:55	9	1.127	A BB	12088.	104.554 UG/ML	10.88
55	NOT FOUND								
56	NOT FOUND								
57	240	2116	26:27	57	1.000	A BB	51581.	40.000 UG/ML	4.16
58	266	1546	19:19	34	0.985	A BB	12914.	51.655 UG/ML	5.37
59	178	1573	19:40	34	1.002	A BB	187.	0.093 UG/ML	0.01
60	NOT FOUND								
61	149	1709	21:22	34	1.089	A BB	5508.	2.206 UG/ML	0.23
62	NOT FOUND								
63	264	2391	29:53	63	1.000	A BB	36462.	40.000 UG/ML	4.16
64	202	1864	23:18	57	0.881	A BB	47653.	27.153 UG/ML	2.83
65	244	1905	23:49	57	0.900	A BB	62706.	56.710 UG/ML	5.90
66	NOT FOUND								

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	149	2140	26:45	57	1.011	A VB	24023.	17.897 UG/ML	1.86
71	149	2259	28:14	63	0.945	A BB	1622.	1.004 UG/ML	0.10
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	17:27		1.098						
52	17:33		0.894						
53	17:38		0.899						
54	17:55	1.00	1.128	1.00	104.55	100.00	0.111	0.106	1.05
55	18:31		0.944						
56	18:52		0.961						
57	26:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:19	1.00	0.985	1.00	51.66	50.00	0.141	0.137	1.03
59	19:41	1.00	1.003	1.00	0.09	50.00	0.002	1.096	0.00
60	19:47		1.008						
61	21:23	1.00	1.090	1.00	2.21	50.00	0.060	1.364	0.04
62	22:44		1.159						
63	29:54	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:19	1.00	0.881	1.00	27.15	50.00	0.739	1.361	0.54
65	23:49	1.00	0.900	1.00	56.71	50.00	0.973	0.857	1.13
66	25:12		0.952						
67	26:25		0.998						
68	26:26		0.999						
69	26:32		1.003						
70	26:46	1.00	1.011	1.00	17.90	50.00	0.373	1.041	0.36
71	28:15	1.00	0.945	1.00	1.00	50.00	0.036	1.772	0.02
72	29:03		0.972						
73	29:07		0.974						
74	29:46		0.996						
75	32:26		1.085						
76	32:28		1.086						
77	33:09		1.109						

TGA FINISHED, 27 FOUND
FINISHED AT: 6/04/88 0:14:26

01549

RMAL QUANTITATION SUMMARY FILE: 539430U562
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	682	1	23721.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	89346.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1271	3	43625.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1570	4	73208.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2116	5	51581.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2391	6	36462.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	787	2	31449.	0.282	34.062
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1138	3	62401.	1.144	38.363
9	S5# 2	CS30 TERPHENYL-D14	244	1905	5	62706.	0.973	56.710
10	S1# 3	CS45 PHENOL-D5	99	633	1	31169.	0.526	30.944
11	S1# 2	CS50 2-FLUOROPHENOL	112	485	1	64187.	1.082	79.343
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1433	3	12088.	0.111	104.554
13	S1#105	C315 PHENOL	94	634	1	13890.	0.468	12.263
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128	652	1	38374.	1.294	46.571
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146	685	1	13419.	0.453	13.928
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	767	1	12417.	0.419	20.291
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	910	2	11032.	0.099	14.610
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	1038	2	30267.	0.271	51.052
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	1277	3	32253.	0.591	24.365
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	1307	3	9728.	0.178	63.658
51	S3#105	C570 2,4-DINITROTOLUENE	165	1321	3	13329.	0.244	29.372
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	1546	4	12914.	0.141	51.655
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	1709	4	5508.	0.060	2.206
64	S4#110	C655 FLUORANTHENE	202		4	NOT FOUND		
65	S5# 15	C715 PYRENE	202	1864	5	47653.	0.739	27.153
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	2140	5	24023.	0.373	17.897

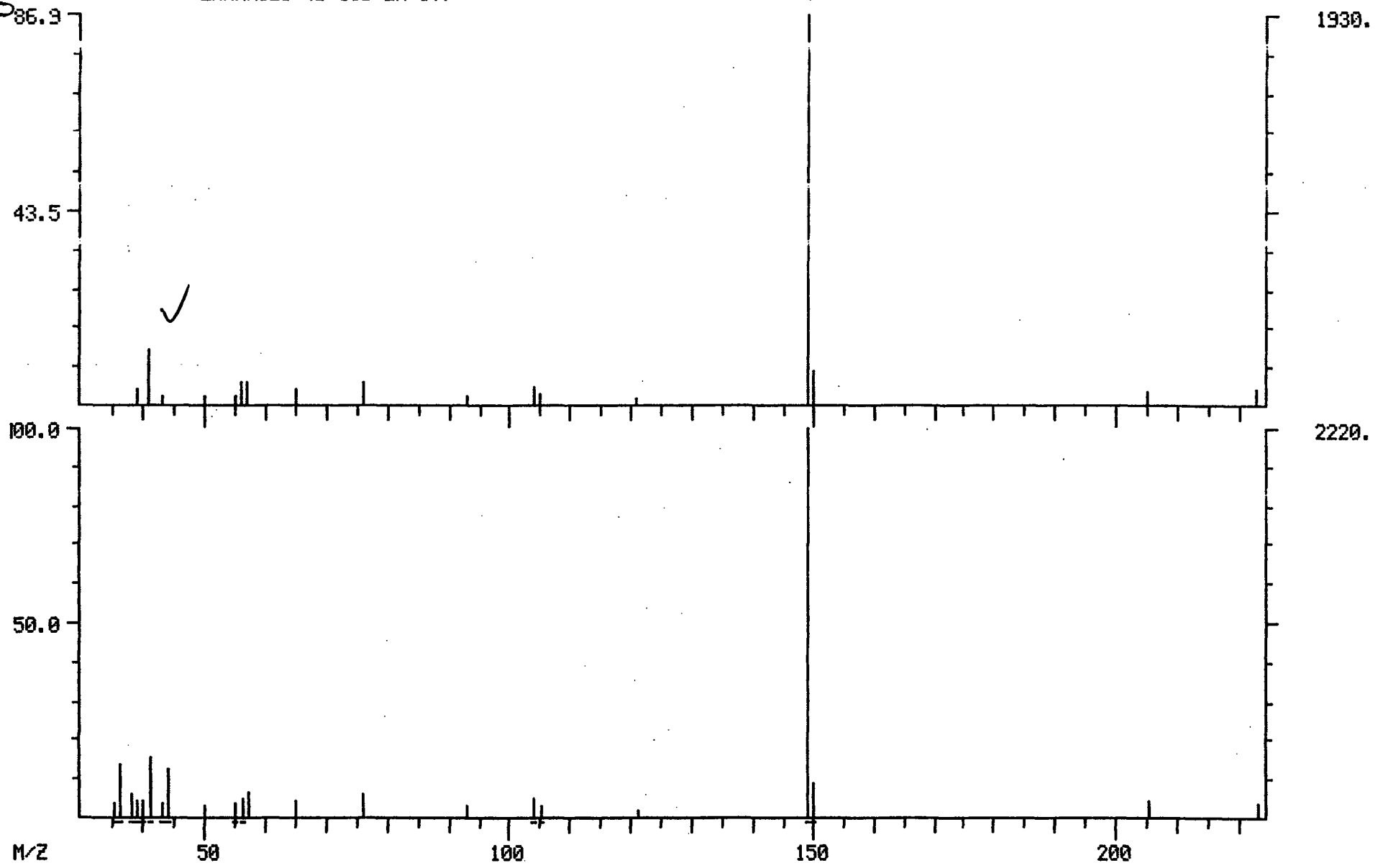
72	S6#	15	C765	BENZO(B)FLUORANTHEN	252	6	NOT	FOUND
73	S6#	25	C770	BENZO(K)FLUORANTHEN	252	6	NOT	FOUND
74	S6#	35	C775	BENZO(A)PYRENE	252	6	NOT	FOUND
75	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	6	NOT	FOUND
76	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	6	NOT	FOUND
77	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	6	NOT	FOUND

01551

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 21:22 m50
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 234 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U502 #1709 BASE M/Z: 149/ 149
CALI: 060388CU #5 RIC: 3387./ 4863.

di-n-butyl phthalate

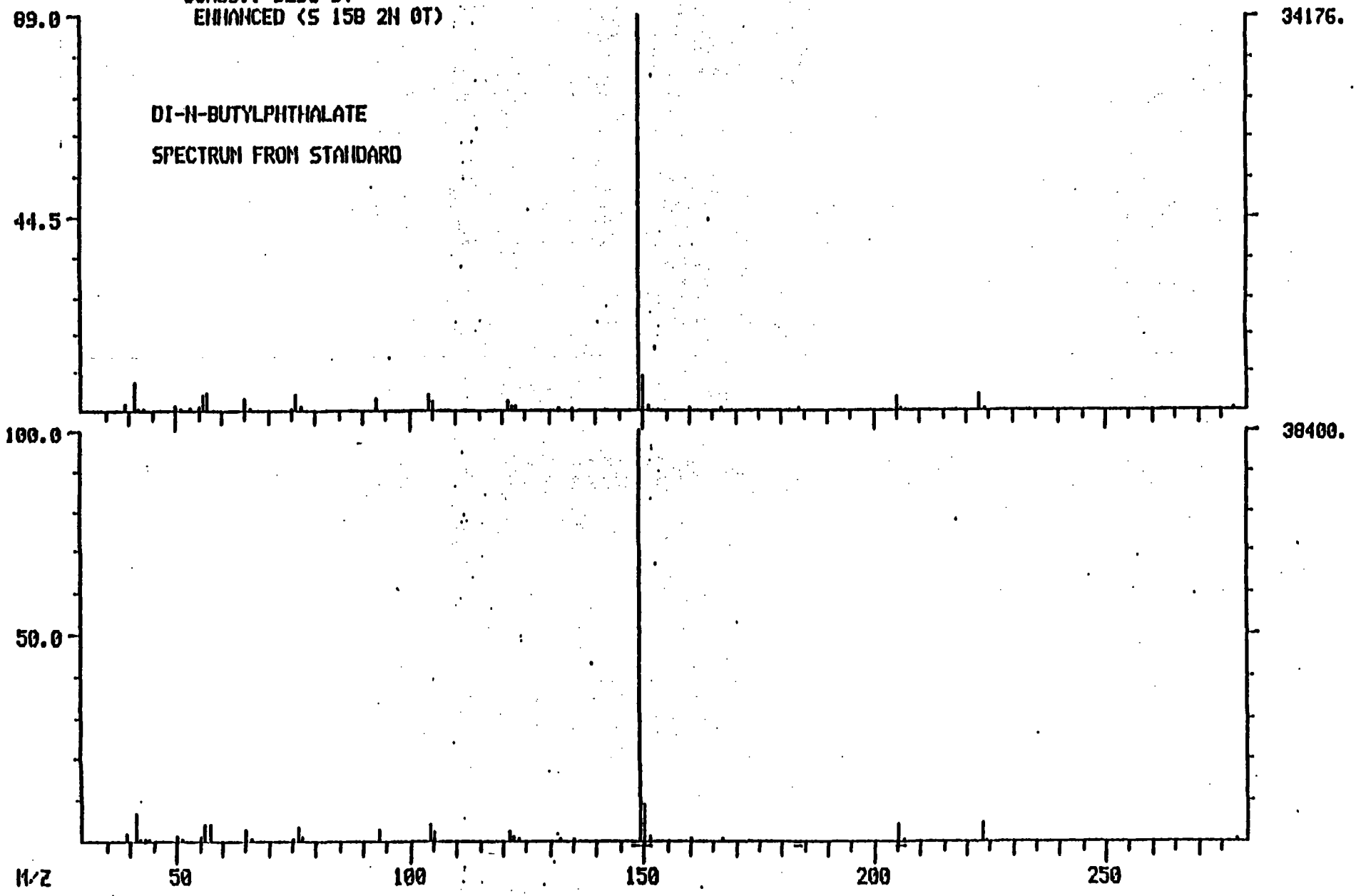


01552

DUAL MASS SPECTRUM
10/29/86 13:35:00 + 23:43
SAMPLE: 50PPM HSL STD
CONDS.: DESC ST
ENHANCED (5 150 2N 0T)

DATA: STDR810 #1898
CALI: 103086C #5

BASE M/Z: 149/ 149
RIC: 57599./ 63999.

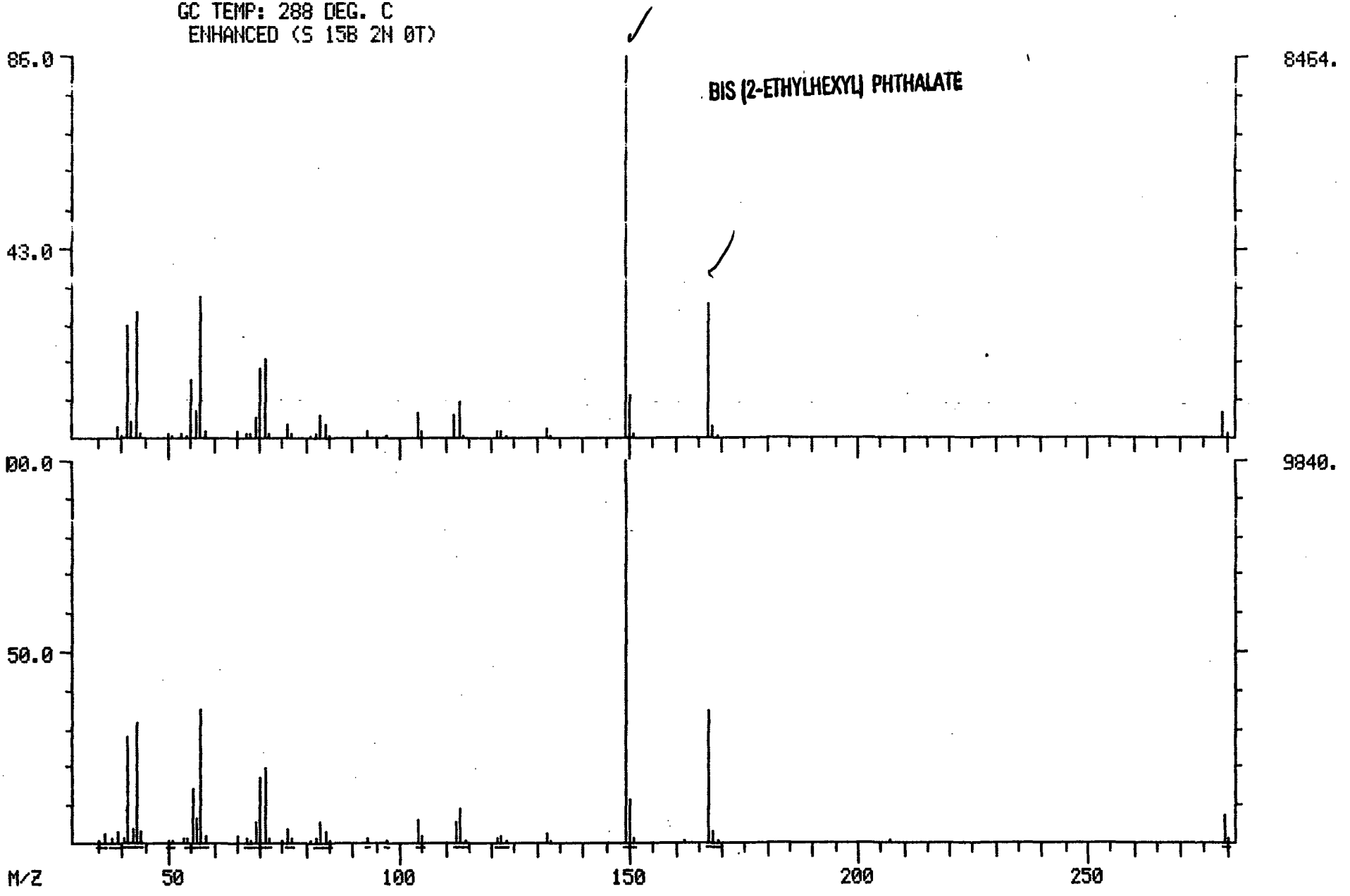


01553

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 26:45
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 288 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450U562 #2140 BASE M/Z: 149/ 149
CALI: 060388CU #5 RIC: 33663./ 38527.

350

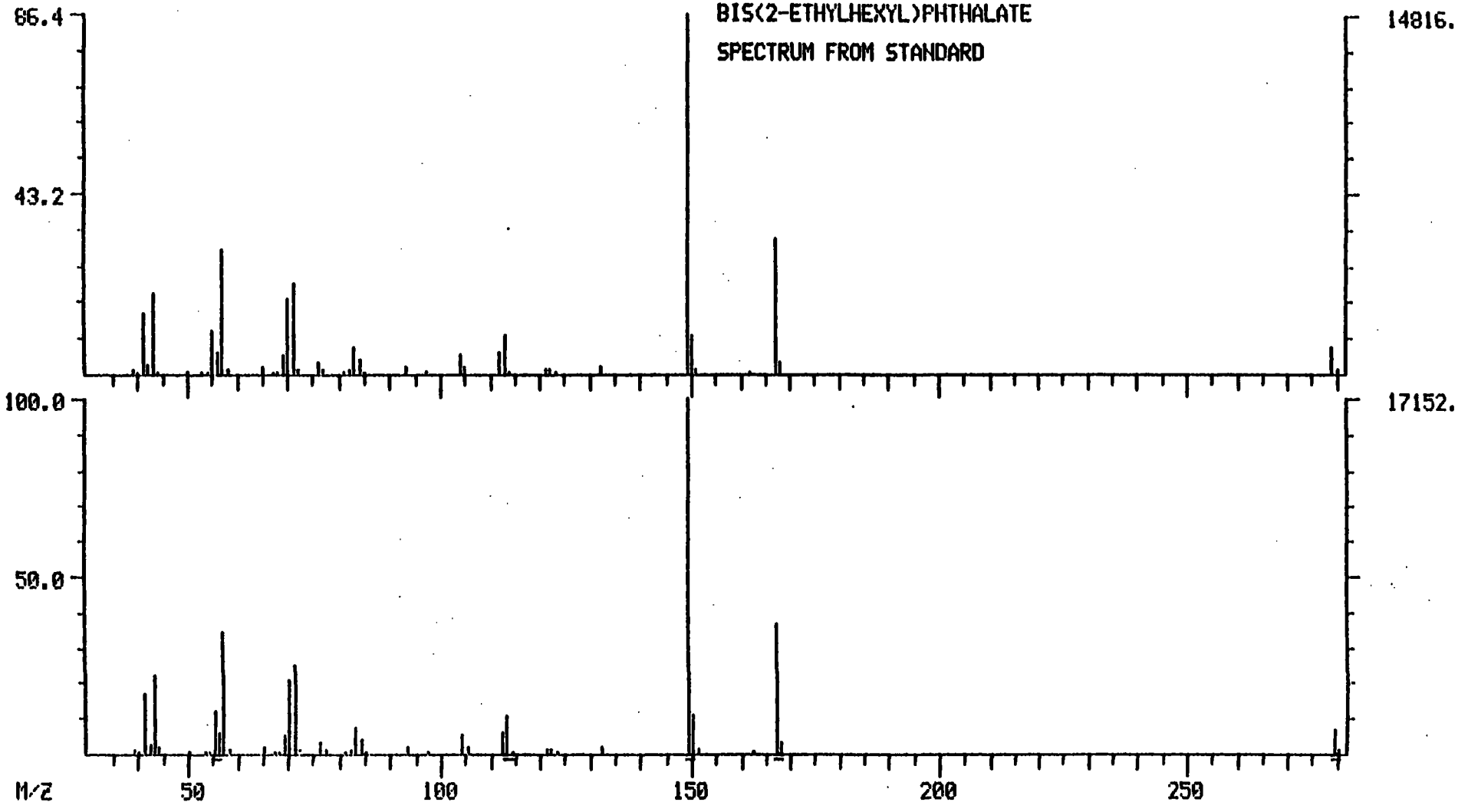


01554

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

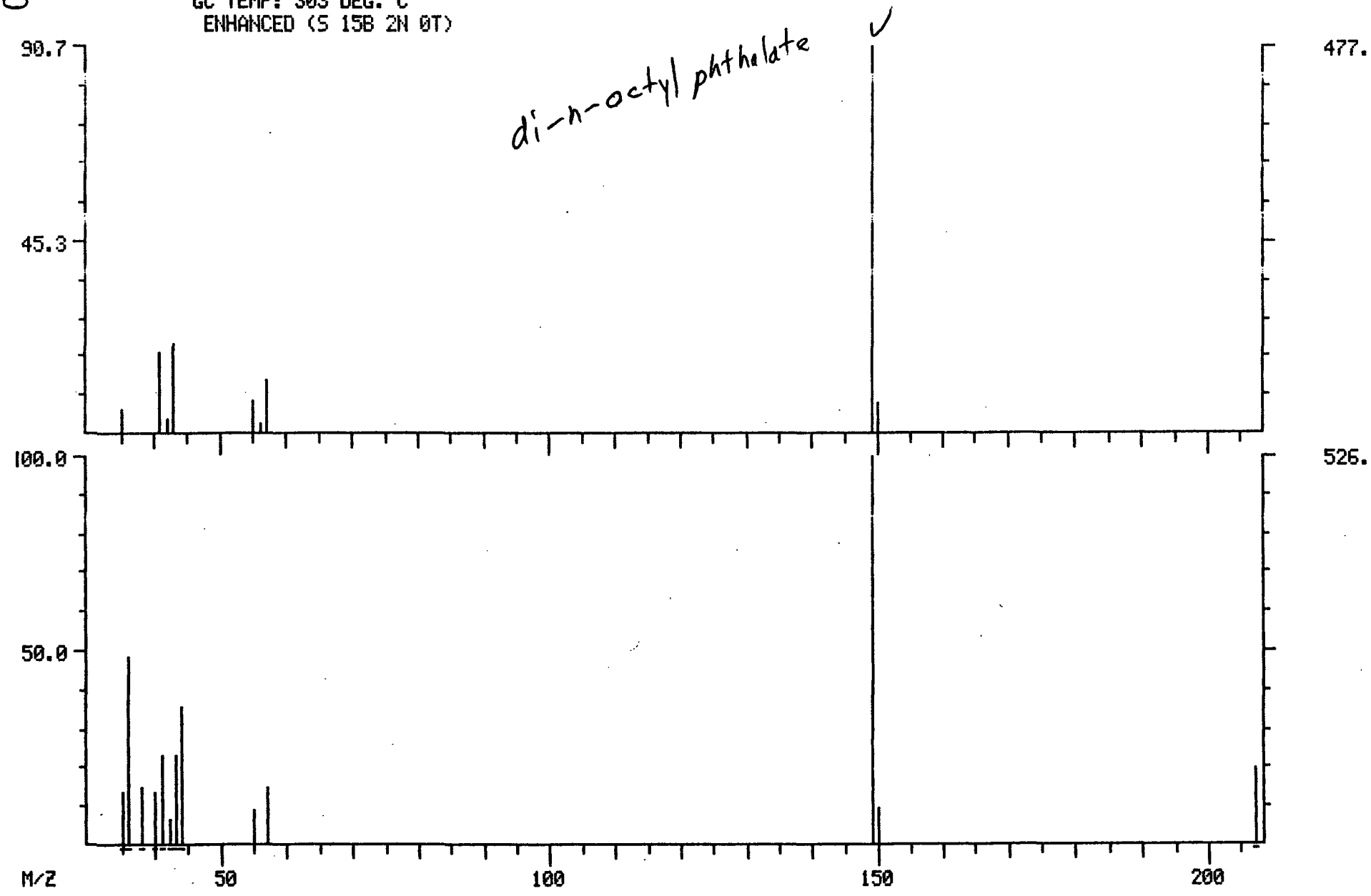
BASE M/Z: 149/ 149
RIC: 55167./ 63807.



01555

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 28:14 MSO
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 303 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450U562 #2259 BASE M/Z: 149/ 149
CALI: 060388CU #5 RIC: 886./ 1747.

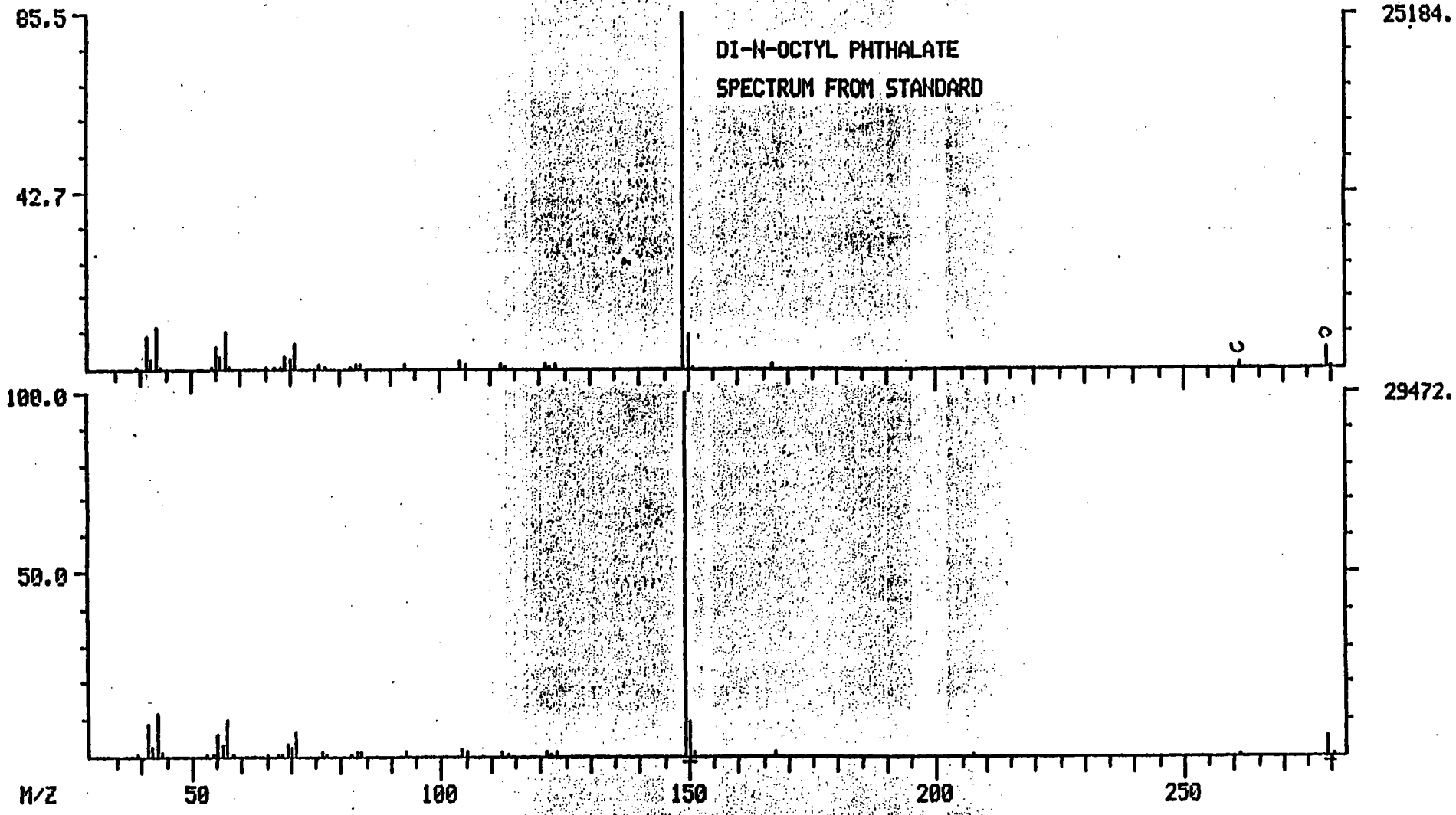


01556

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.



Quantitation Report File: [illegible]

01557

Data: S59450U562.TI
06/03/88 19:57:00 MSP
Sample: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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-5-METHYL PYRIDINE	106	S1#203	
20	3-ETHYL-4-METHYL PYRIDINE	106	S1#202	
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	682	8:31	1	1.000	A BB	23721.	40.000 UG/ML	13.54
2	84	298	3:43	1	0.437	A BB	26873.	25.417 UG/ML	8.60
3	79	300	3:45	1	0.440	A BB	23666.	26.002 UG/ML	8.80
4	93	397	4:58	1	0.582	A BV	21175.	24.791 UG/ML	8.39
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	107	605	7:34	1	0.887	A BB	22483.	31.866 UG/ML	10.79
11	107	605	7:34	1	0.887	A BB	22483.	30.989 UG/ML	10.49
12	NOT FOUND								
13	NOT FOUND								
14	136	918	11:28	14	1.000	A BB	89346.	40.000 UG/ML	13.54
15	164	1271	15:53	15	1.000	A BB	43625.	40.000 UG/ML	13.54
16	106	700	8:45	1	1.026	A BB	40867.	36.407 UG/ML	12.32
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	NOT FOUND								
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:44	1.00	0.439	1.00	25.42	50.00	0.906	1.783	0.51
3	3:46	1.00	0.442	1.00	26.00	50.00	0.798	1.535	0.52
4	4:58	1.00	0.583	1.00	24.79	50.00	0.714	1.440	0.50
5	5:46		0.678						
6	6:10		0.725						
7	6:34		0.771						
8	7:01		0.824						
9	7:16		0.855						
10	7:31	1.00	0.884	1.00	31.87	50.00	0.758	1.190	0.64
11	7:37	0.99	0.896	0.99	30.99	50.00	0.758	1.223	0.62
12	7:52		0.924						
13	8:19		0.978						
14	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	8:42	1.01	1.022	1.00	36.41	50.00	1.378	1.893	0.73
17	8:52		1.043						
18	9:34		1.125						
19	9:55		1.164						
20	9:55		1.164						
21	10:09		1.192						
22	10:48		0.942						
23	11:07		0.969						
24	11:16		0.984						
25	11:31		1.352						
26	13:29		1.177						

PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/88 16:18:59
DATA FILE: S59450U562
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

STANDARDS PROC	STANDARDS USED	STANDARDS POSS	STANDARDS RMS	PLUS UNKNOWNS PROC	PLUS UNKNOWNS USED	PLUS UNKNOWNS POSS	PLUS UNKNOWNS RMS	LIST NAMES STANDARD/UNKNOWN
1	1	1	0	13	6	4	307	IS01/TC01
3	3	1	0	14	4	1	108	IS02/TC02

26 COMPOUNDS PROCESSED, 9 FOUND

COMPOUND NO	LIB	ENTRY	SEARCH REF	PRED	SEL	DELTA	PEAKS	FIT	SAT PEAKS	CHRO M/Z	TOP	DELTA	PEAKS
1	S1	1	-680	682	682	.	1	967	.	152	682	.	1
2	S1	4	-299	298	298	.	1	993	.	84	298	.	1
3	S1	20	-301	300	300	.	2	992	.	79	300	.	1
4	S1	30	-397	396	397	1	2	988	.	93	397	.	1
5	S1	62	-462	462	.	.	.	.	.	93	.	.	.
6	S1	64	-494	494	.	.	.	.	.	107	.	.	.
7	S1	73	-525	525	.	.	.	.	.	106	.	.	.
8	S1	83	-561	561	.	.	.	.	.	107	.	.	.
9	S1	87	-582	582	.	.	.	.	.	107	.	.	.
10	S1	88	-602	602	605	3	1	991	.	107	605	.	1
11	S1	89	-610	610	605	-5	1	938	.	107	605	.	1
12	S1	92	-629	629	.	.	.	.	.	107	.	.	.
13	S1	122	-666	666	.	.	.	.	.	107	.	.	.
14	S2	1	-916	918	918	.	1	996	.	136	918	.	1
15	S3	1	-1269	1271	1271	.	1	995	.	164	1271	.	1
16	S1	137	-696	699	700	1	1	992	.	106	700	.	1
17	S1	142	-710	713	.	.	.	.	.	106	.	.	.
18	S1	187	-766	769	.	.	.	.	.	108	.	.	.
19	S1	203	-793	796	.	.	.	.	.	106	.	.	.
20	S1	202	-793	796	.	.	.	.	.	106	.	.	.
21	S1	204	-812	815	.	.	.	.	.	122	.	.	.
22	S2	27	-864	867	.	.	.	.	.	107	.	.	.
23	S2	37	-889	892	.	.	.	.	.	107	.	.	.
24	S2	47	-902	904	.	.	.	.	.	107	.	.	.
25	S2	57	-921	923	.	.	.	.	.	107	.	.	.
26	S2	150	-1079	1081	.	.	.	.	.	142	.	.	.

FINISHED AT: 6/04/88 16:21:33

RMAL QUANTITATION SUMMARY FILE: 5374S0U36Z
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	682	1	23721.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	89346.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1271	3	43625.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	298	1	26873.	0.906	25.417 x2 ÷ 100 = 51%
5	S1# 20	PYRIDINE	79	300	1	23666.	0.798	26.002 ✓
6	S1# 30	2-PICOLINE	93	397	1	21175.	0.714	24.791 ✓
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	605	1	22483.	0.758 ✓	31.866 ✓
13	S1# 89	4-ETHYL PYRIDINE	107	605	1	22483.	0.758 ✓	30.989 ✓
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	700	1	40867.	1.378	36.407 ✓
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		

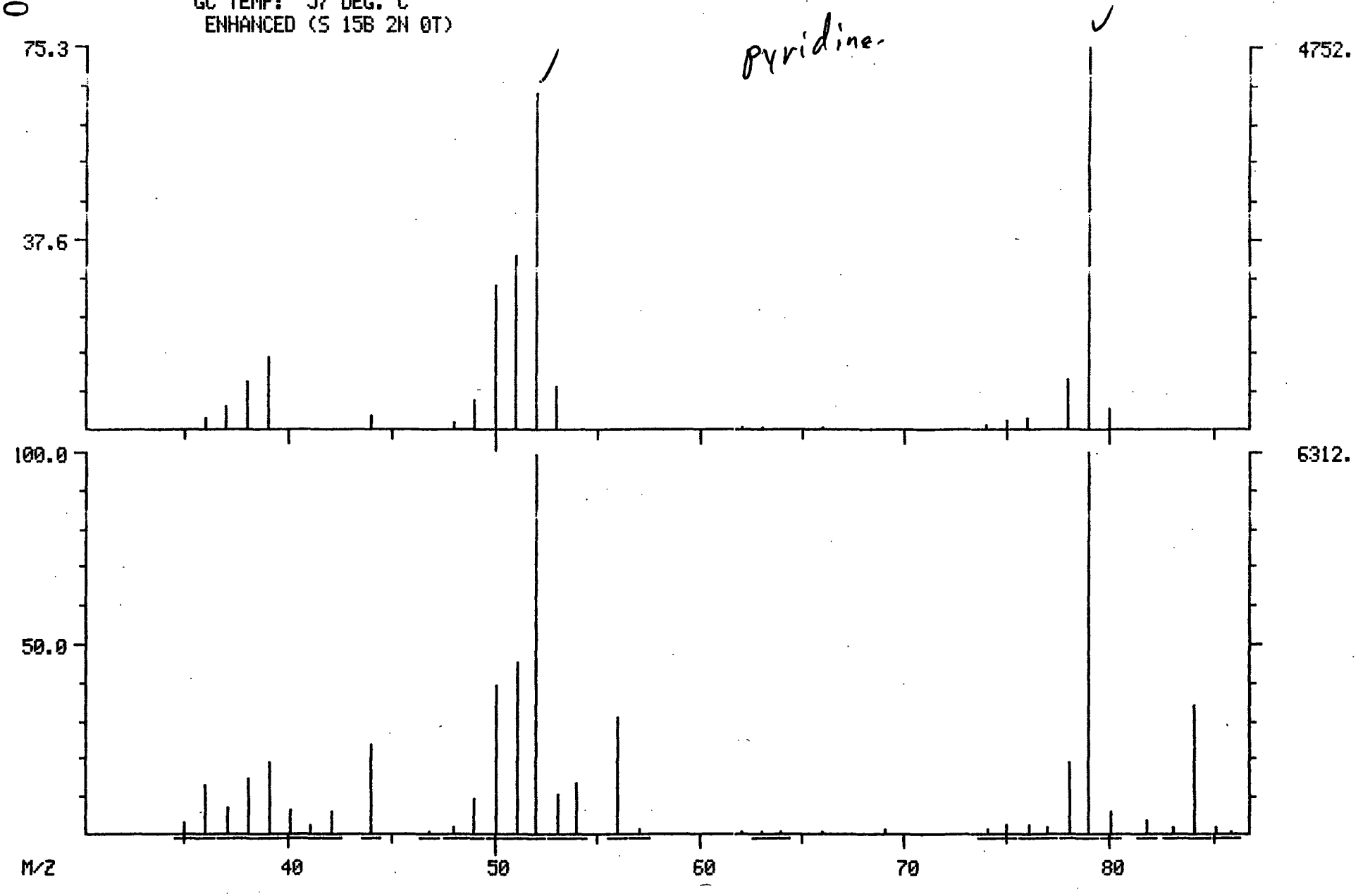
01561

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 3:45
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 57 DEG. C
ENHANCED (S 15B 2N 0T)

MSD

DATA: S59450U562 #300
CALI: 050388CU #5

BASE M/Z: 79/ 79
RIC: 17247./ 33215.

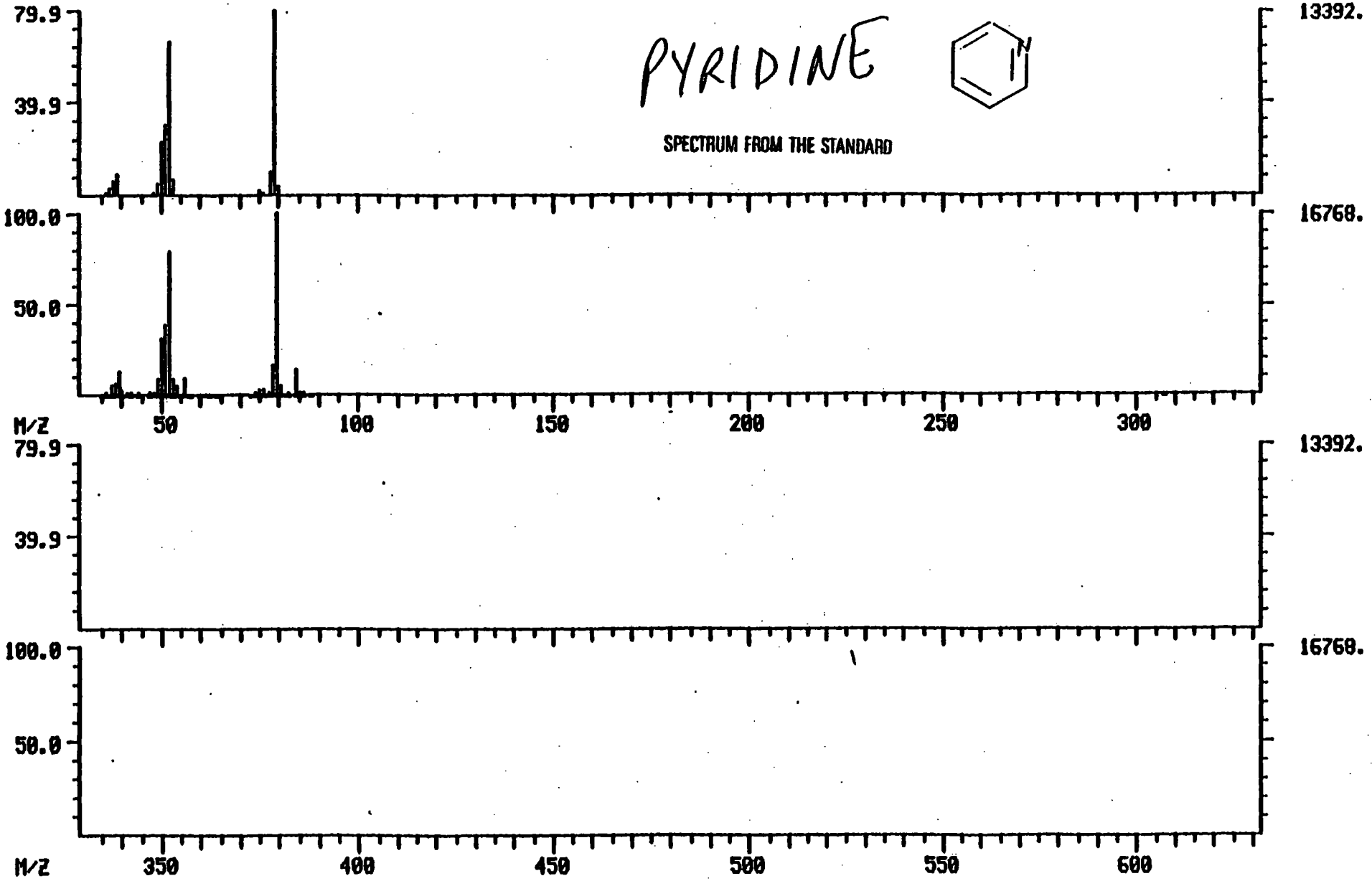


01562

DUAL MASS SPECTRUM
06/02/88 8:33:00 + 4:10
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #334
CALI: 060288CR #5

BASE M/Z: 79/ 79
RIC: 41855./ 60863.



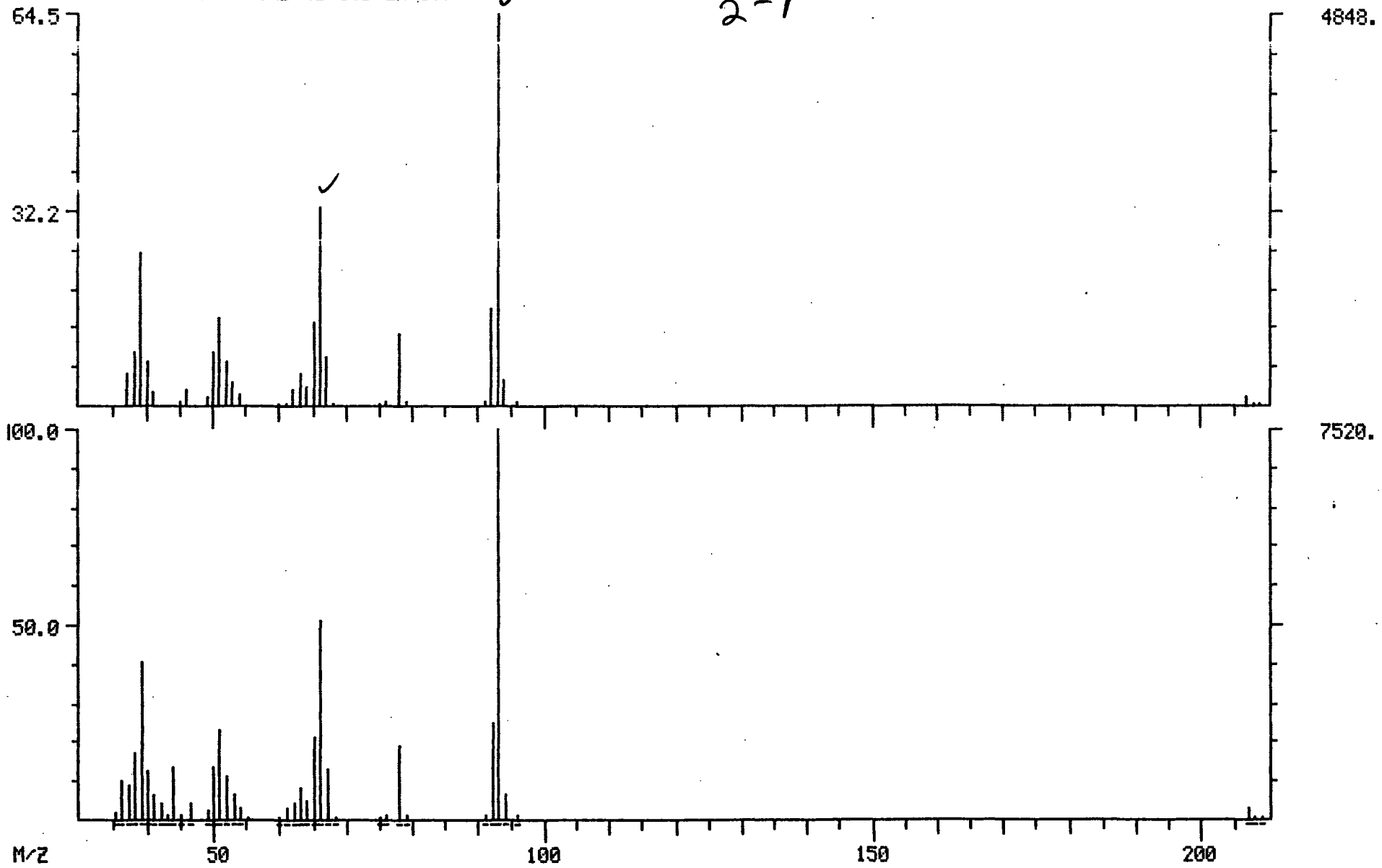
01563

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 4:58
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 70 DEG. C
ENHANCED (S 15B 2N 0T)

MSD

DATA: S59450U5G2 #397 BASE M/Z: 93/ 93
CALI: 060388CU #5 RIC: 19615./ 33855.

2-picoline

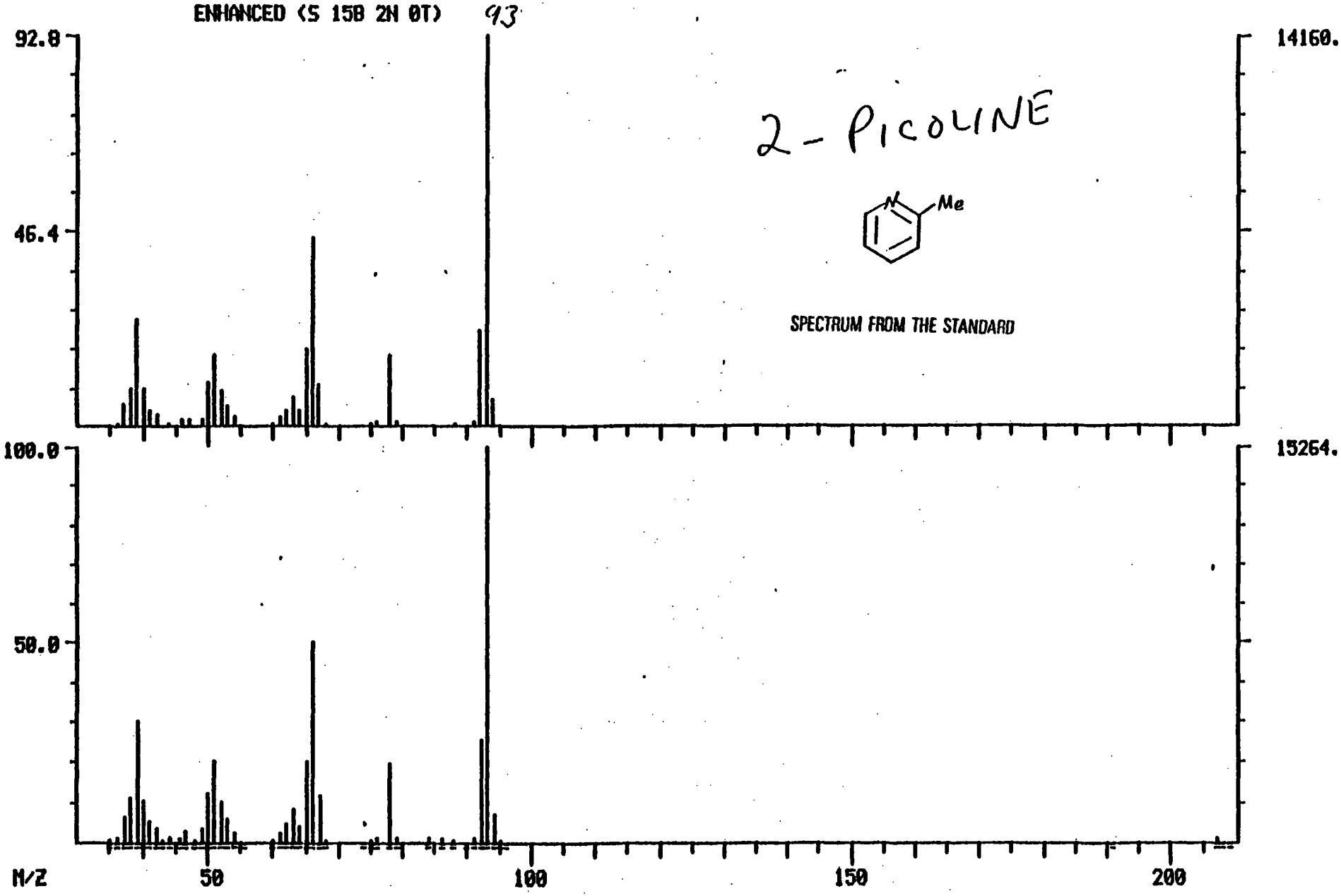


01564

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

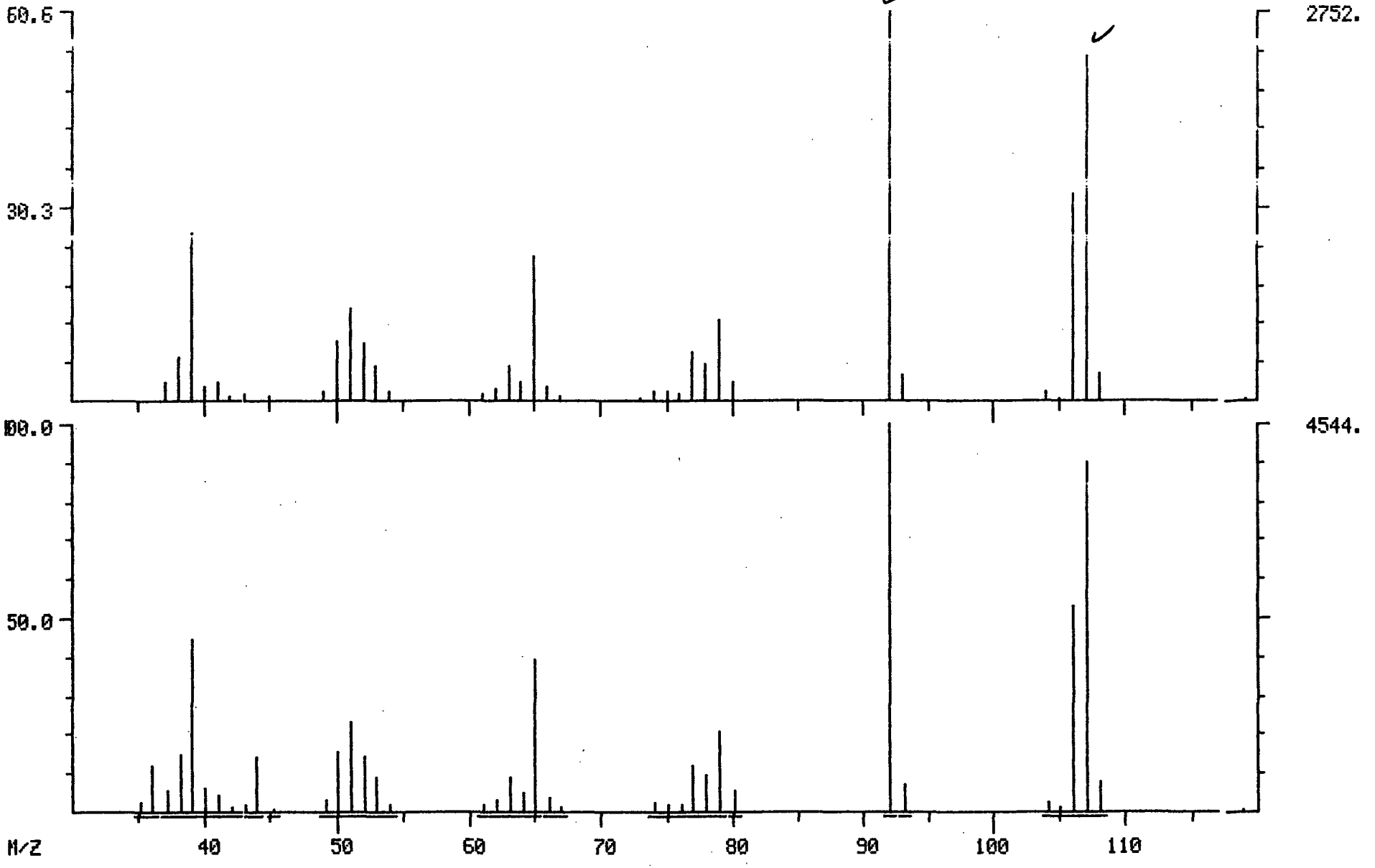
SPECTRUM FROM THE STANDARD

01565

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 7:34 MSO
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U5G2 #605 BASE M/Z: 92/ 92
CALI: 060388CU #5 RIC: 14207./ 25119.

3-ethyl pyridine



01566

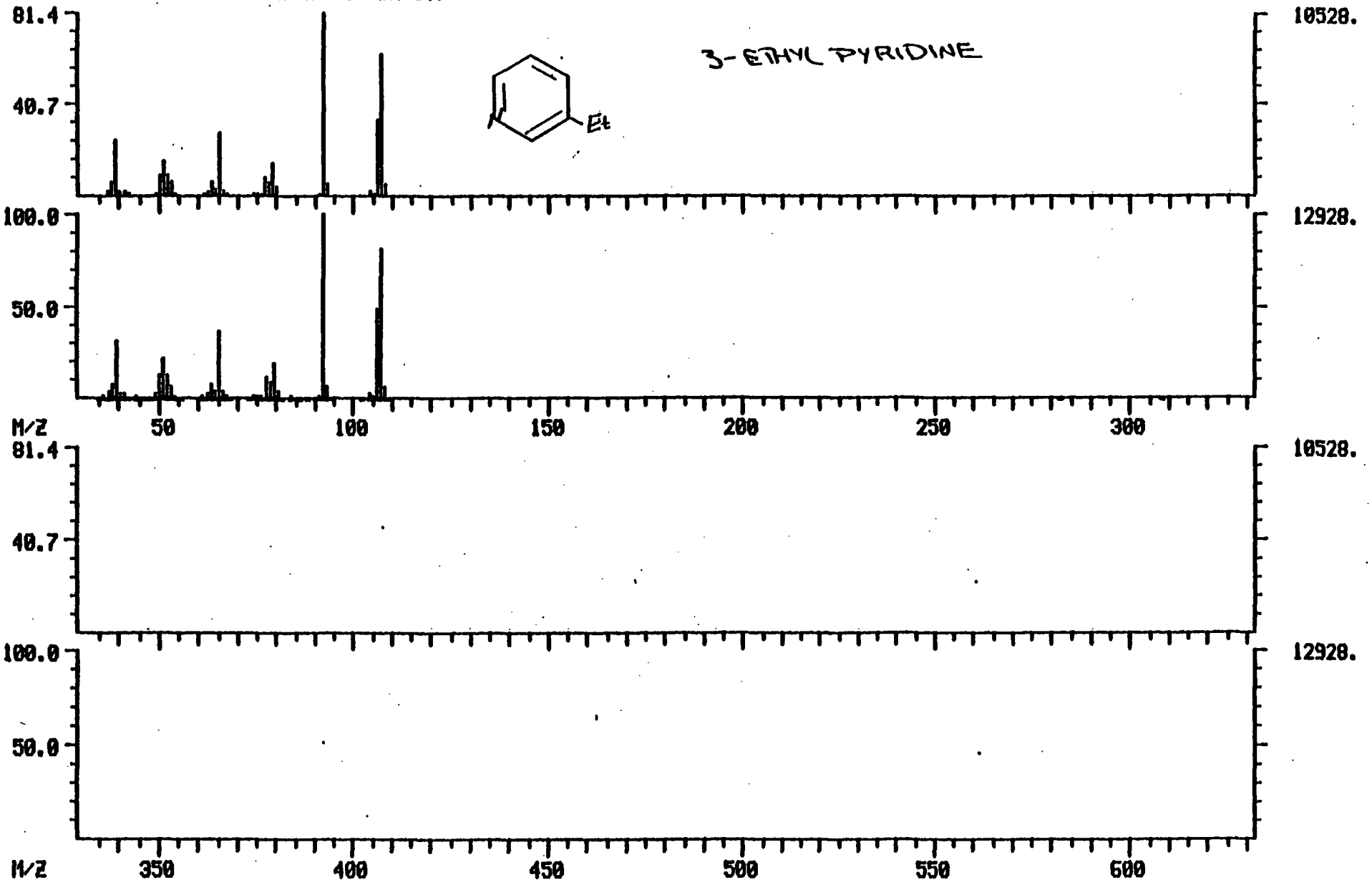
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:55
SAMPLE: 50PPM PYRIDINE STD 10/26/87
COND5.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #634
CALI: 060288CR #5

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

SPECTRUM FROM THE STANDARD

3-ETHYL PYRIDINE



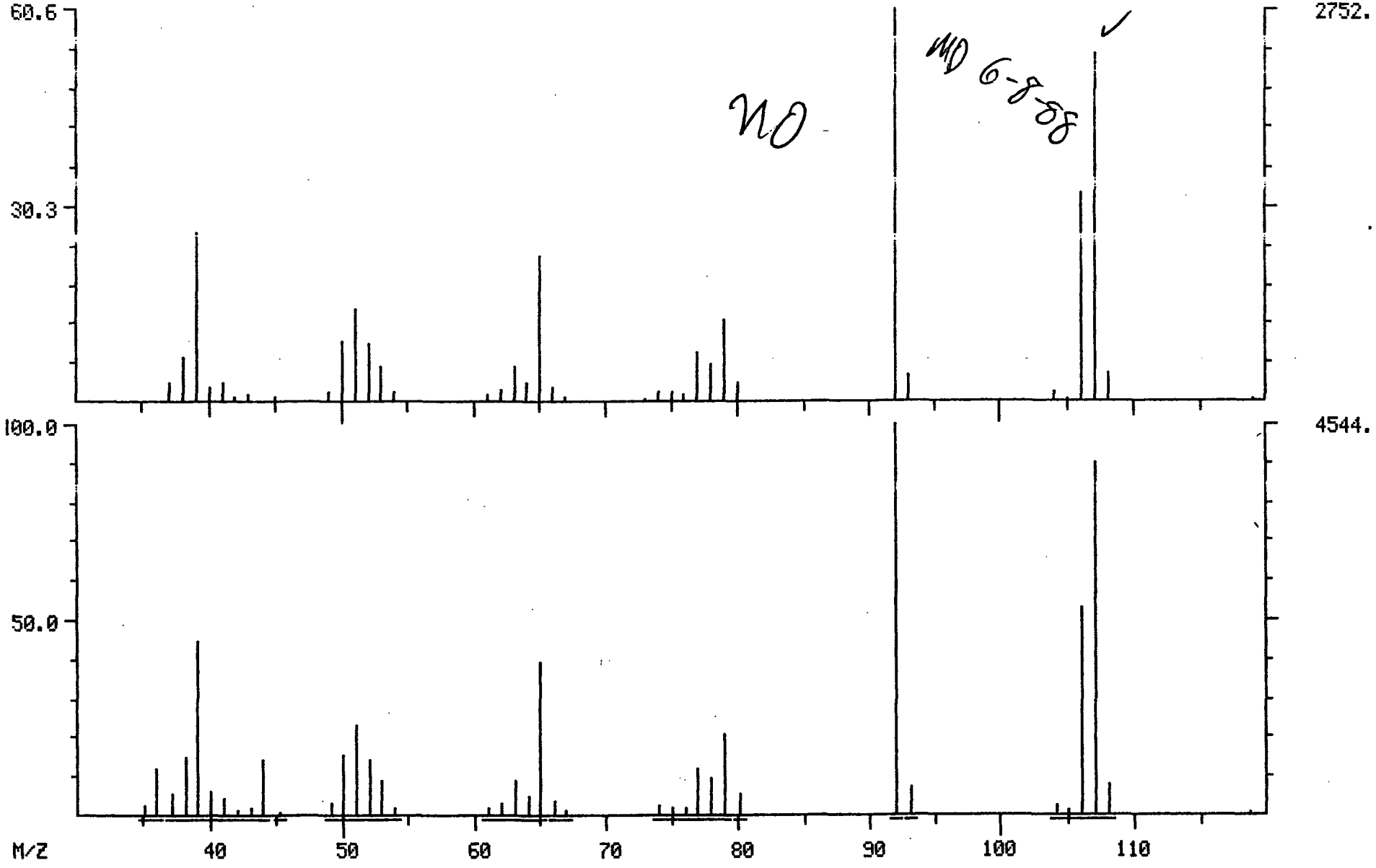
01567

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 7:34
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

350

DATA: S59450U562 #605 BASE M/Z: 92/ 92
CALI: 060388CU #5 RIC: 14207./ 25119.

~~4-ethyl pyridine~~



NO

MD 6-8-88

01568

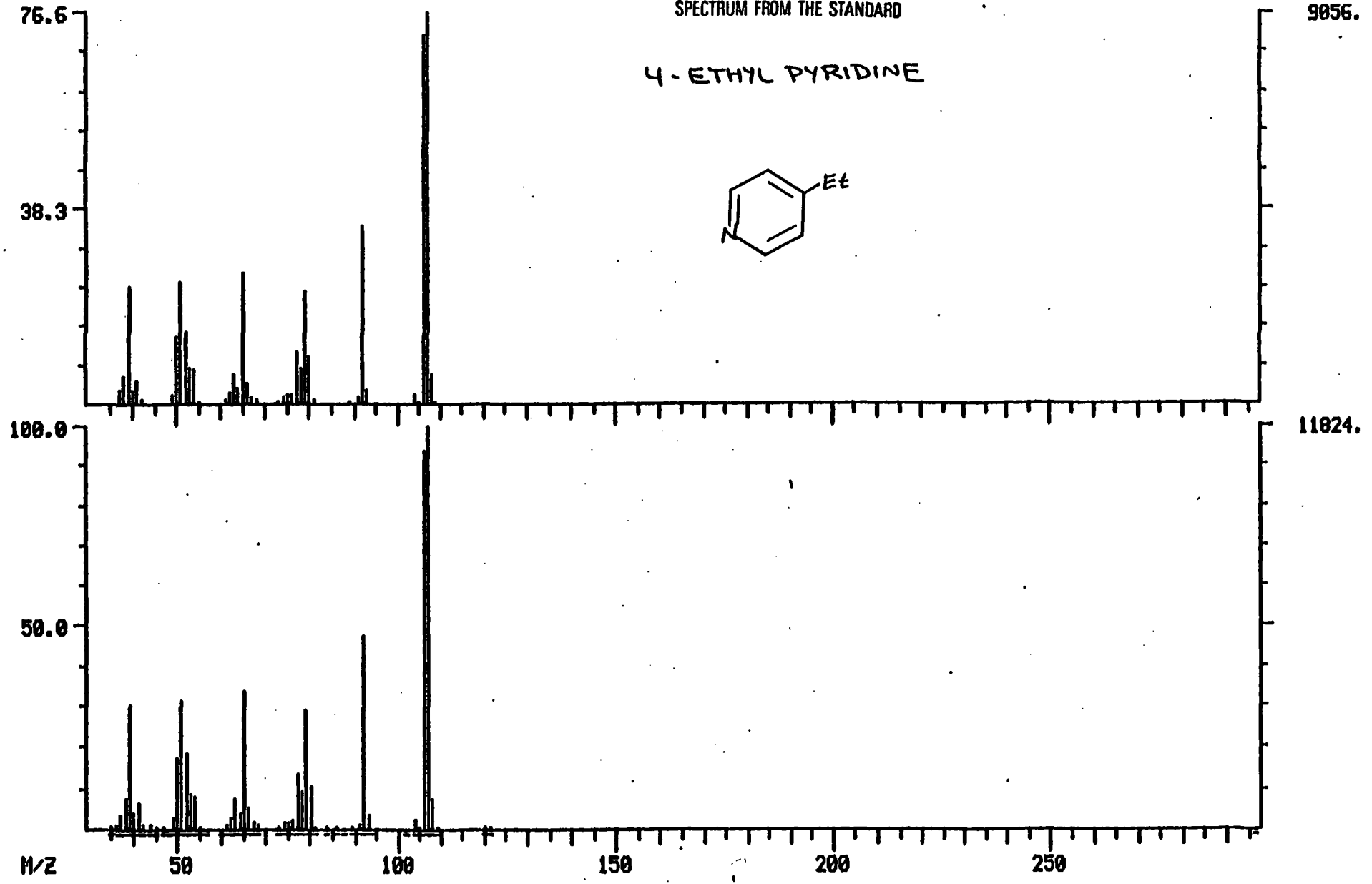
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:01
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #642
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47679./ 62655.

SPECTRUM FROM THE STANDARD

4-ETHYL PYRIDINE



01569

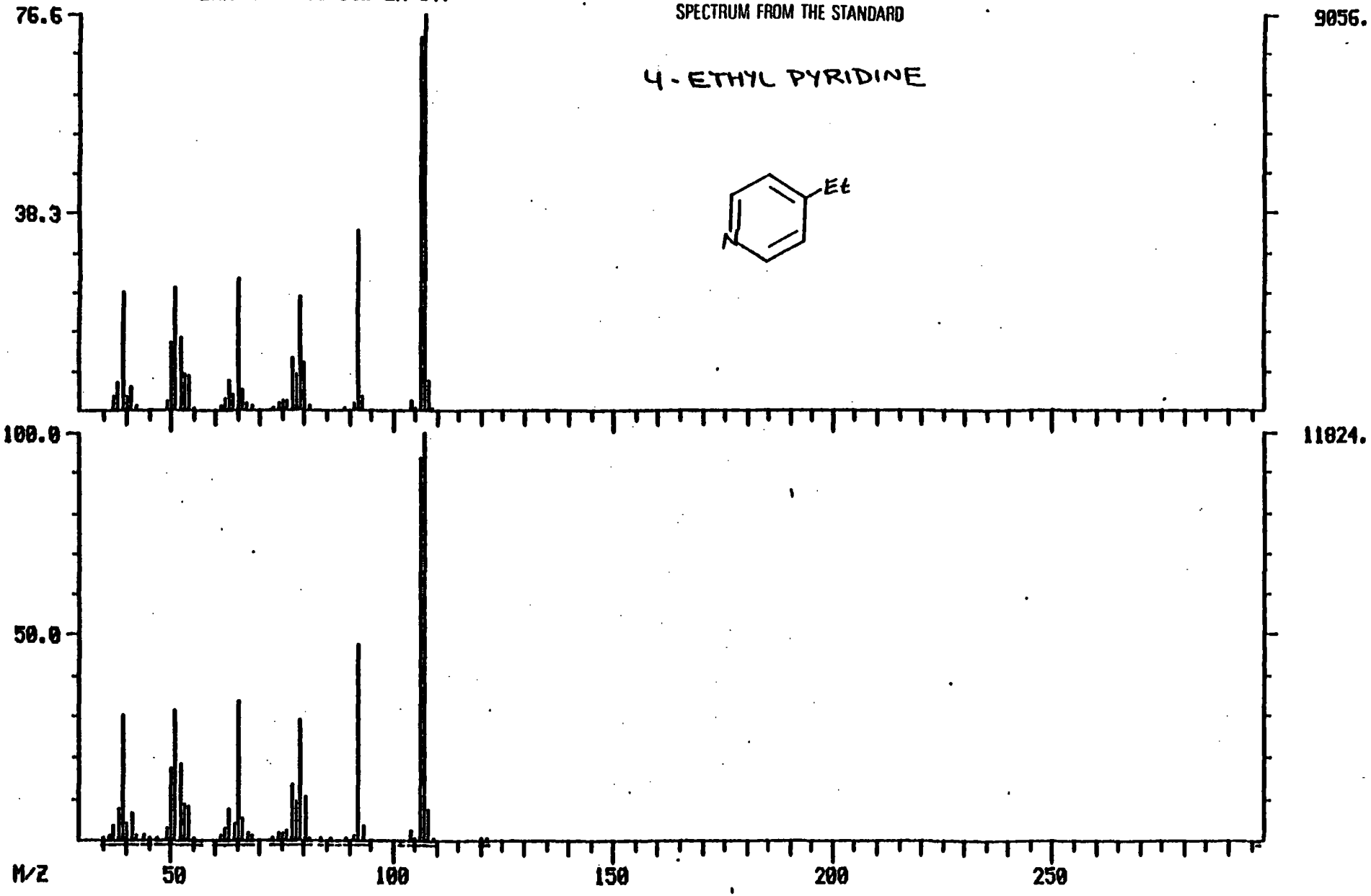
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:01
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (5 15B 2N 0T)

DATA: STDR976 #642
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47679./ 62655.

SPECTRUM FROM THE STANDARD

4-ETHYL PYRIDINE



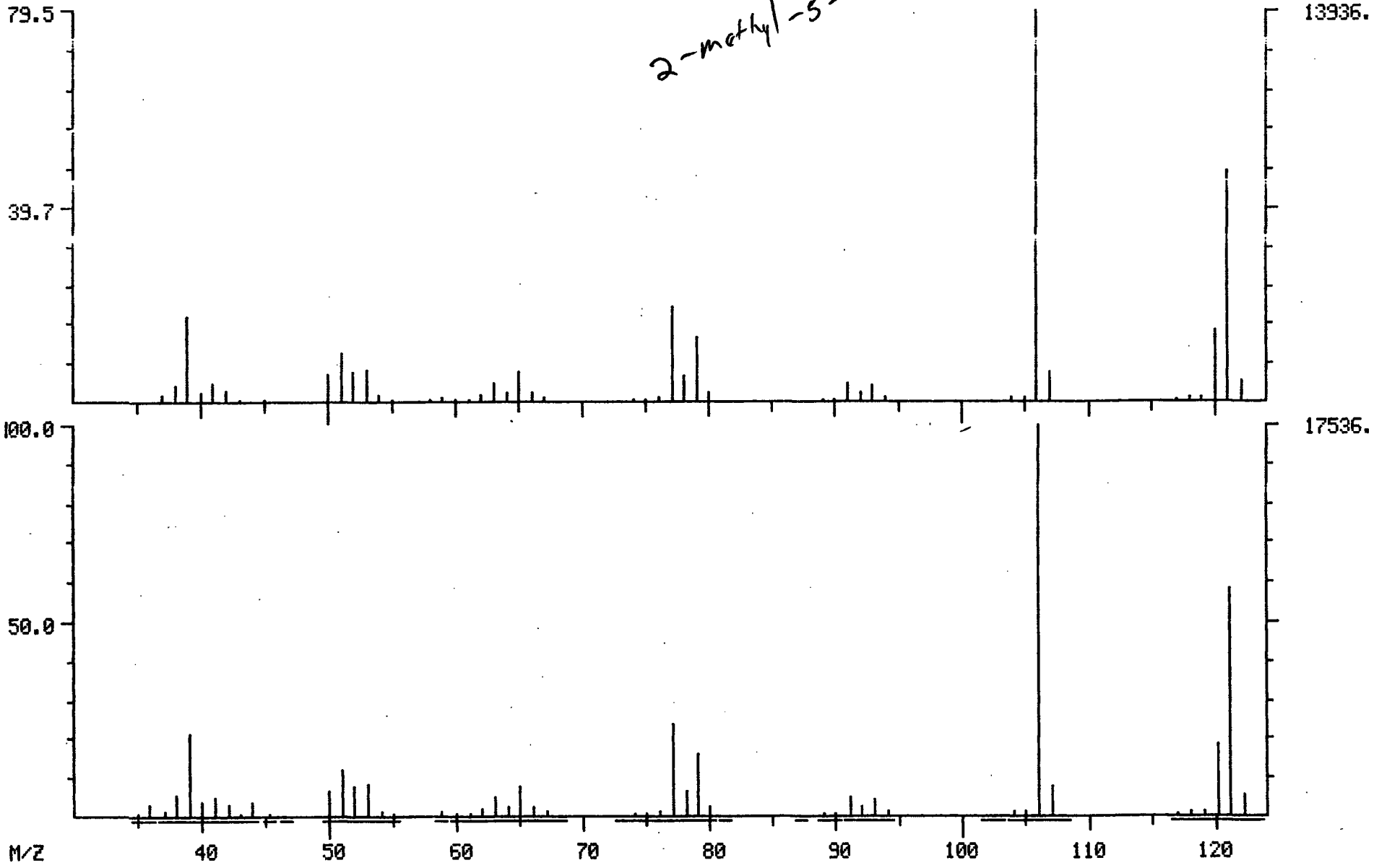
01570

DUAL MASS SPECTRUM
06/03/88 19:57:00 + 8:45
SAMPLE: CLP,59450,,0170,LOW,WATER,59450-0170 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 108 DEG. C
ENHANCED (S 15B 2N 0T)

MSD

DATA: S59450U5G2 #700 BASE M/Z: 106/ 105
CALI: 060388CU #5 RIC: 50623./ 64639.

2-methyl-5-ethyl pyridine

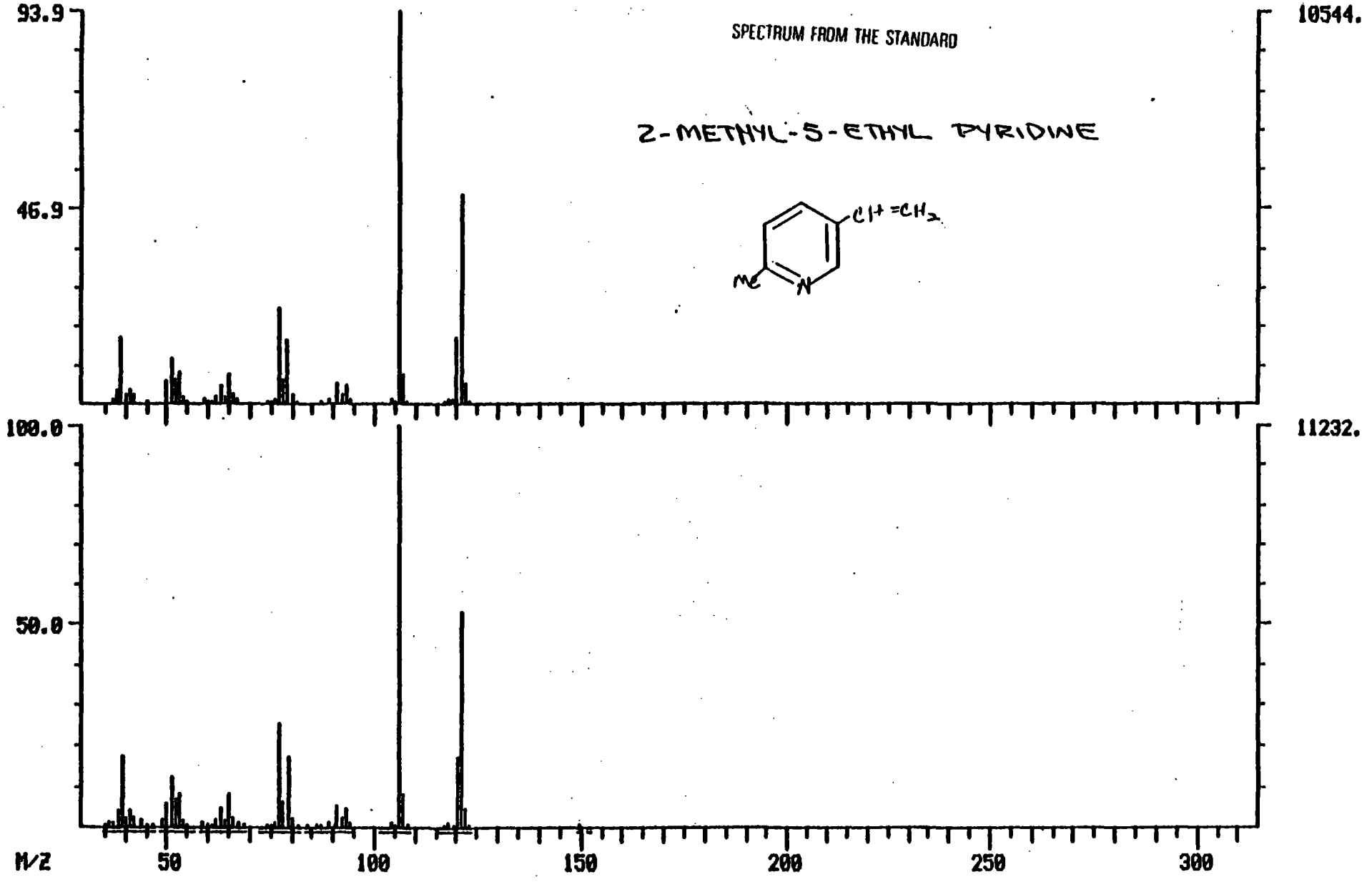


01571

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.



SPECTRUM FROM THE STANDARD

2-METHYL-5-ETHYL PYRIDINE

RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE:3:S59450X895. STARTED : 6/09/88 1:40:50

01572

6/8/88 22:07:53 SCAN 1 OF 3900
Acquisition started

Acquire Run 3:S59450X895 ACQUIRING
06/08/88 22:07:00 + 0:04 Free sectors: 28479 Scan: 8 of 3900
Sample: 59450-0190 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59450

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

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

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

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

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

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	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	

6/8/88 22:36:18 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

6/8/88 22:40:27
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

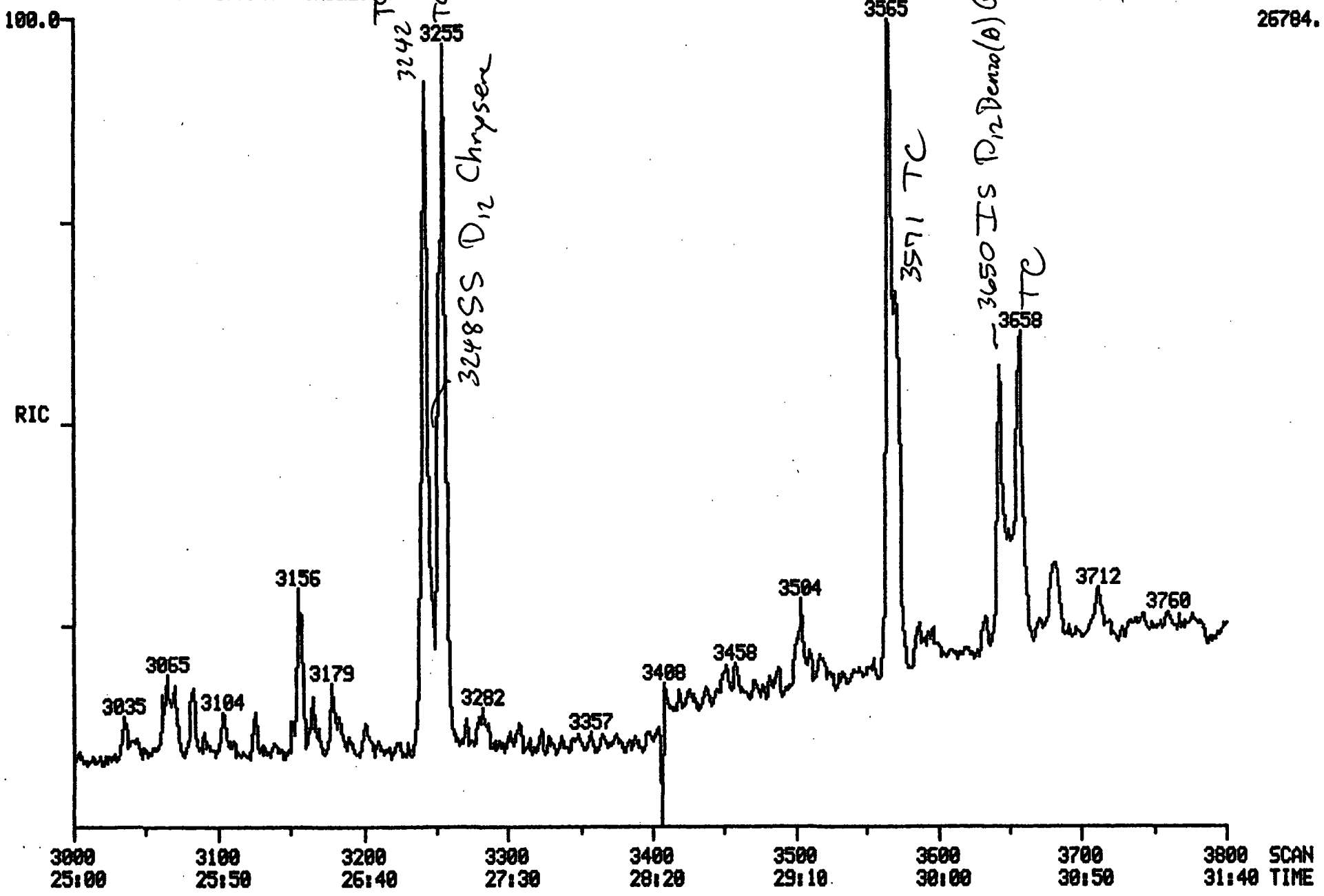
01573

MIDRIC
06/08/88 22:07:00
SAMPLE: 59450-0190 PAH H2O SPIKE 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: 559450X895 #1
CALI: 060888CX #2

SCANS 3000 TO 3800

TC = Target Compound



Quantitation Report File: S59450X895

Data: S59450X895.TI
06/08/88 22:07:00
Sample: 59450-0190 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59450

01574

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

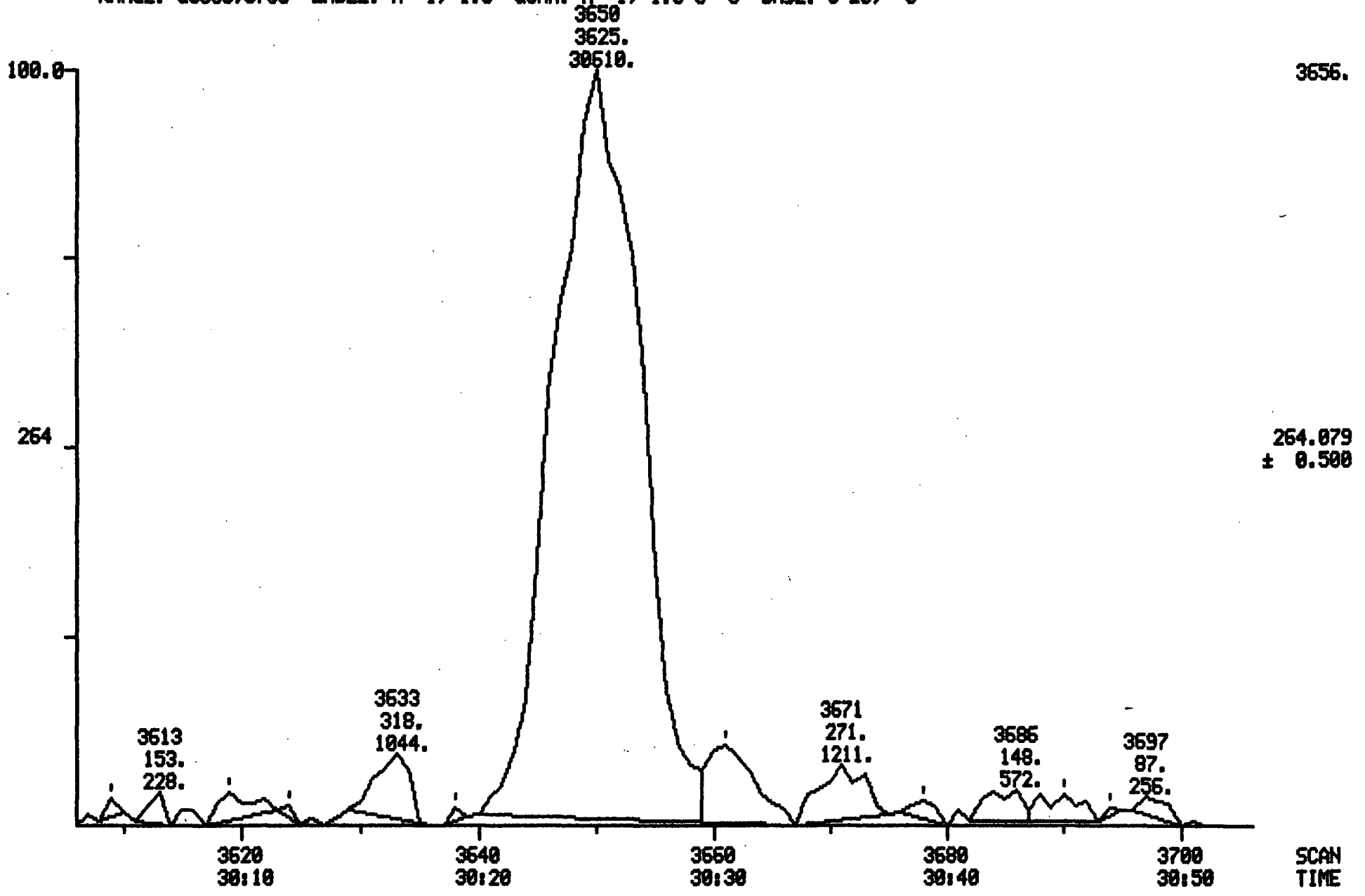
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3650	30:25	1	1.000	A BV	30610.	80.000	NG/ML	4.51
2	240	3248	27:04	1	0.890	A BB	20977.	35.883	NG/ML	2.02
3	228	3242	27:01	1	0.888	A BV	82109.	146.026	NG/ML	8.22
4	226	3242	27:01	1	0.888	A BV	22637.	172.820	NG/ML	9.73
5	228	3255	27:07	1	0.892	A VB	98257.	174.795	NG/ML	9.84
6	226	3255	27:07	1	0.892	A VB	26180.	176.623	NG/ML	9.95
7	252	3565	29:42	1	0.977	A BB	128014.	266.614	NG/ML	15.02
8	250	3566	29:43	1	0.977	A BB	28546.	195.452	NG/ML	11.01
9	252	3565	29:42	1	0.977	A BB	128014.	165.653	NG/ML	9.33
10	250	3566	29:43	1	0.977	A BB	28546.	195.452	NG/ML	11.01
11	252	3587	29:53	1	0.983	A BV	2098.	3.666	NG/ML	0.21
12	250	3586	29:53	1	0.982	A BV	984.	7.781	NG/ML	0.44
13	252	3658	30:29	1	1.002	A VB	42967.	80.846	NG/ML	4.55
14	250	3658	30:29	1	1.002	A BB	9620.	74.034	NG/ML	4.17

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:04	1.00	0.888	1.00	35.88	80.00	0.685	1.528	0.45
3	27:01	1.00	0.887	1.00	146.03	80.00	2.682	1.470	1.83
4	27:01	1.00	0.887	1.00	172.82	80.00	0.740	0.342	2.16
5	27:09	1.00	0.891	1.00	174.79	80.00	3.210	1.469	2.18
6	27:09	1.00	0.891	1.00	176.62	80.00	0.855	0.387	2.21
7	29:43	1.00	0.975	1.00	266.61	80.00	4.182	1.255	3.33
8	29:47	1.00	0.978	1.00	195.45	80.00	0.933	0.382	2.44
9	29:47	1.00	0.978	1.00	165.65	80.00	4.182	2.020	2.07
10	29:47	1.00	0.978	1.00	195.45	80.00	0.933	0.382	2.44
11	29:41	1.01	0.982	1.00	3.67	80.00	0.069	1.496	0.05

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	29:41	1.01	0.982	1.00	7.78	80.00	0.032	0.330	0.10
13	30:30	1.00	1.001	1.00	80.85	80.00	1.404	1.389	1.01
14	30:30	1.00	1.001	1.00	74.03	80.00	0.314	0.340	0.93

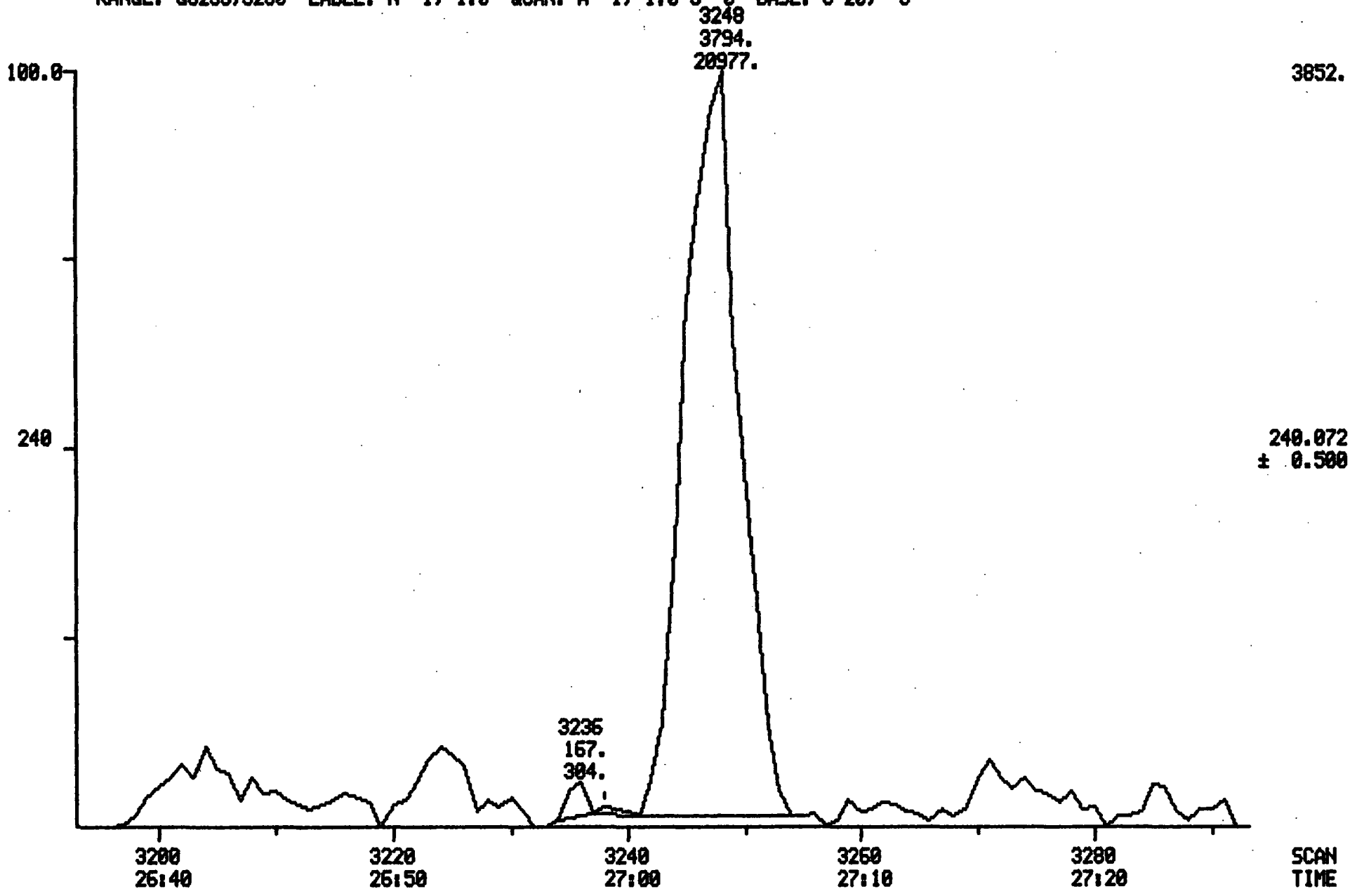
C1576

MIDMASS CHROMATOGRAM DATA: S59450X895 #3656 SCANS 3606 TO 3706
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3606,3706 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



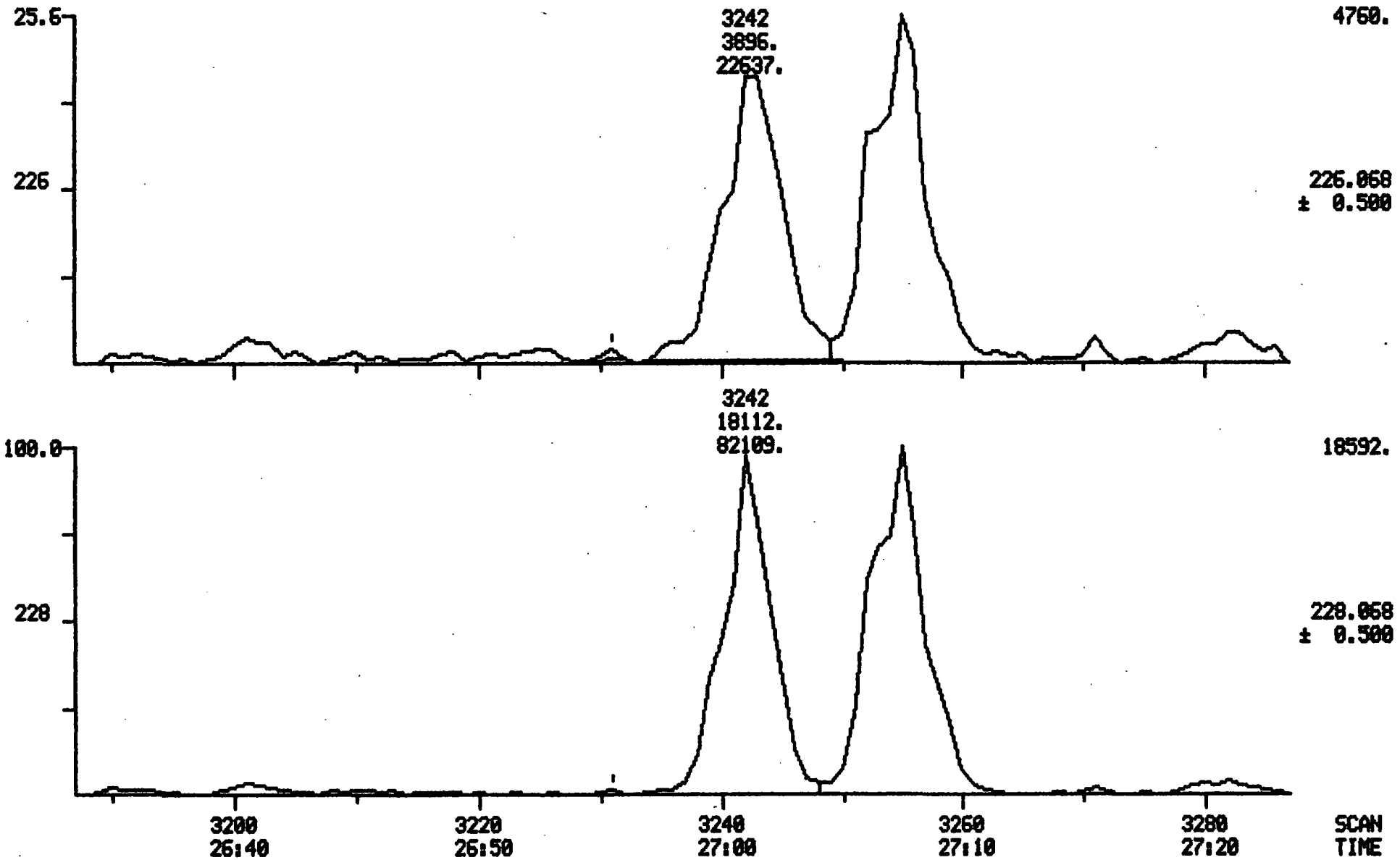
01577

MIDMASS CHROMATOGRAM DATA: S59450X895 #3243 SCANS 3193 TO 3293
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3236,3250 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



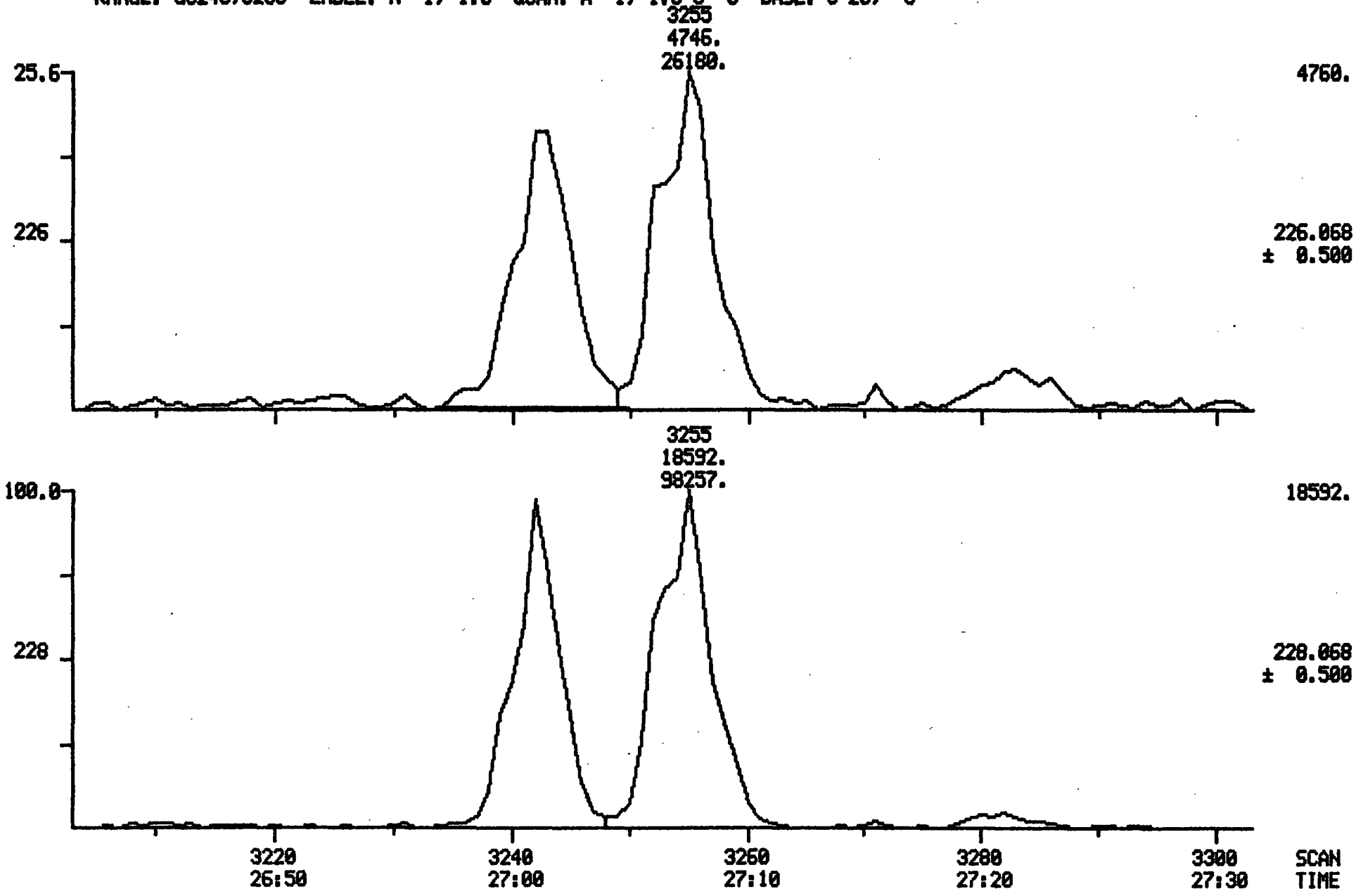
01578

MIDMASS CHROMATOGRAMS DATA: S59450X895 #3237 SCANS 3187 TO 3287
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3230,3244 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



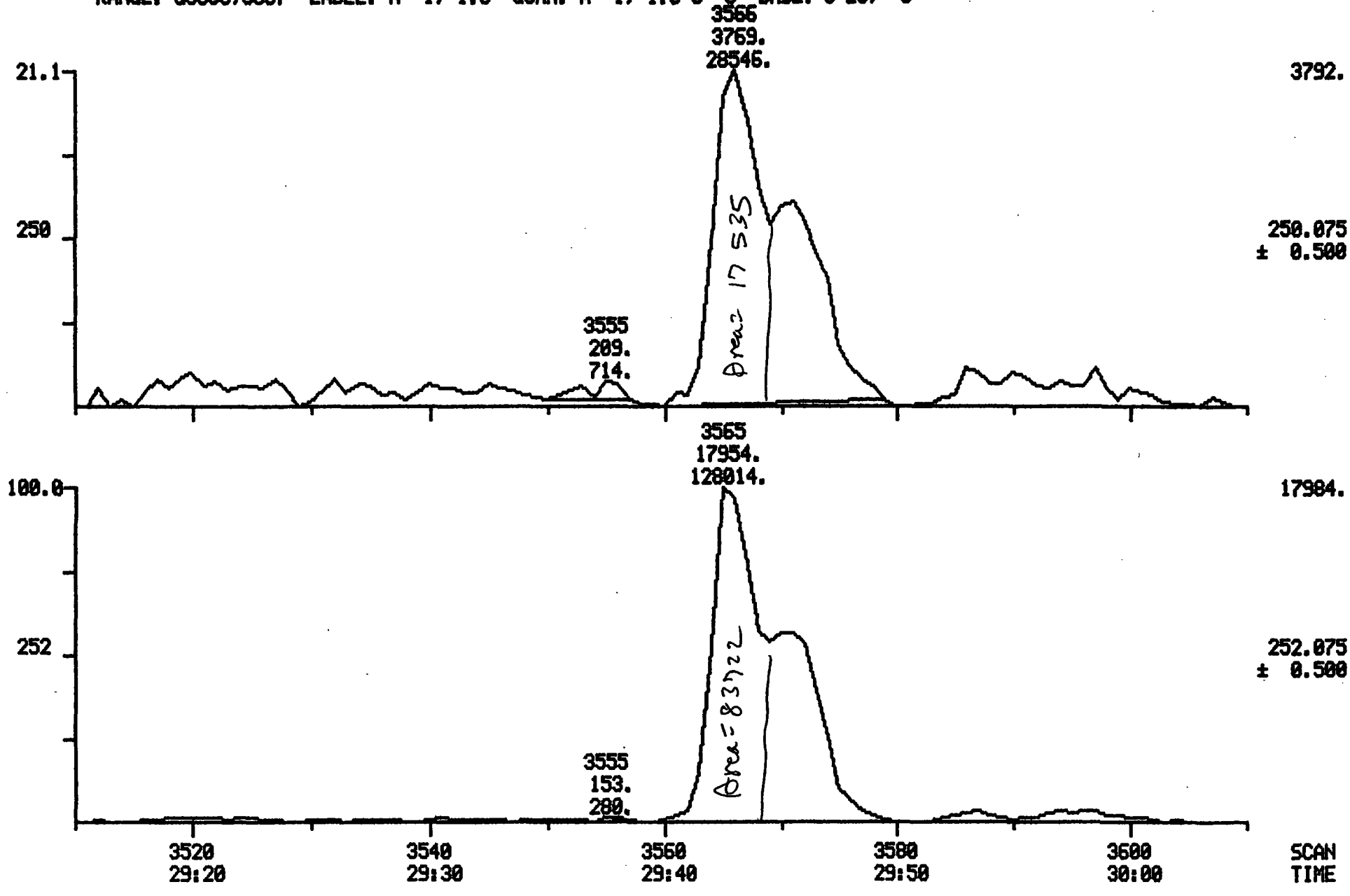
01579

MIDMASS CHROMATOGRAMS DATA: S59450X895 #3253 SCANS 3203 TO 3303
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3246,3260 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



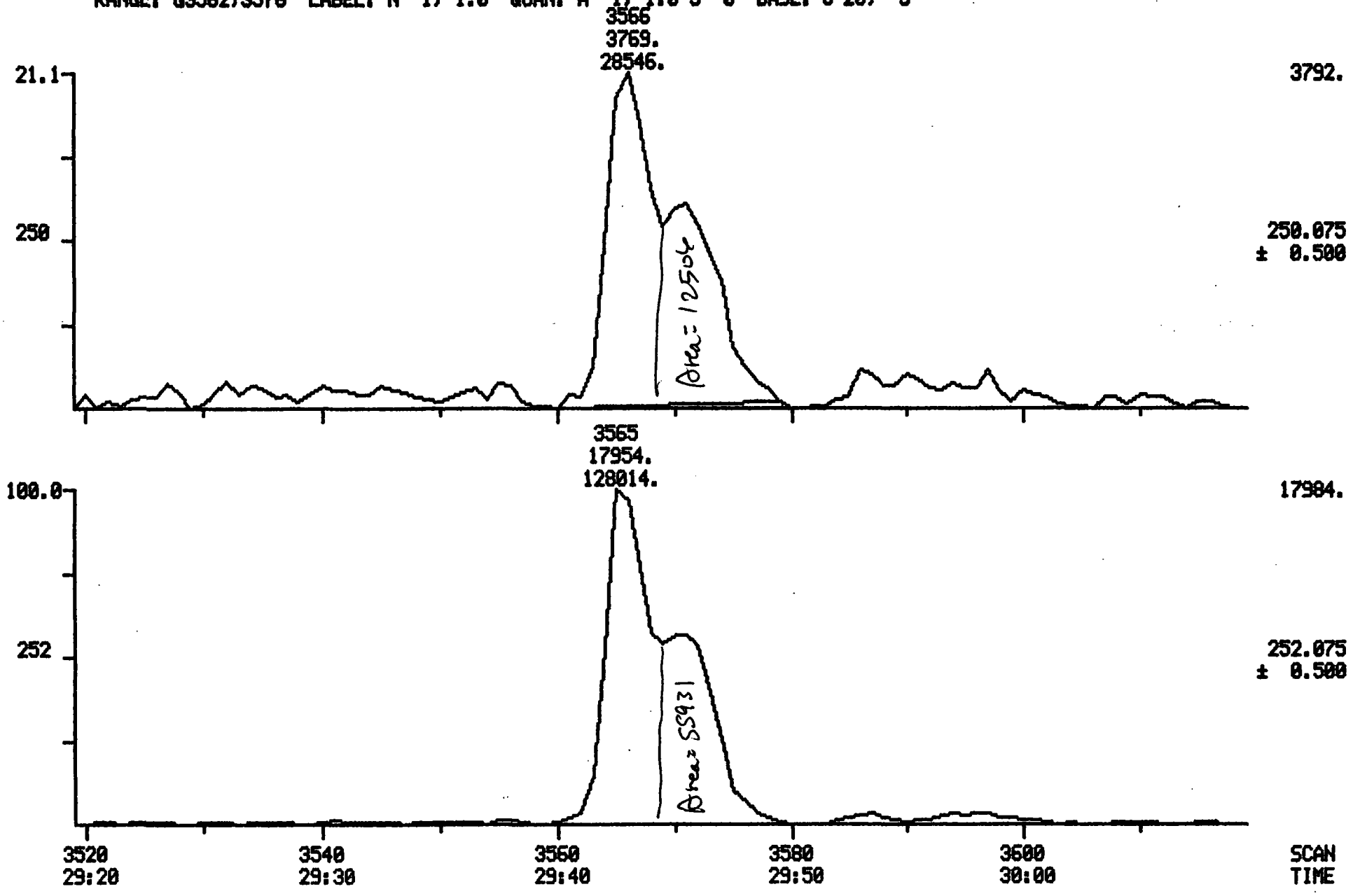
01580

MIDMASS CHROMATOGRAMS DATA: S59450X895 #3560 SCANS 3510 TO 3610
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3553,3567 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



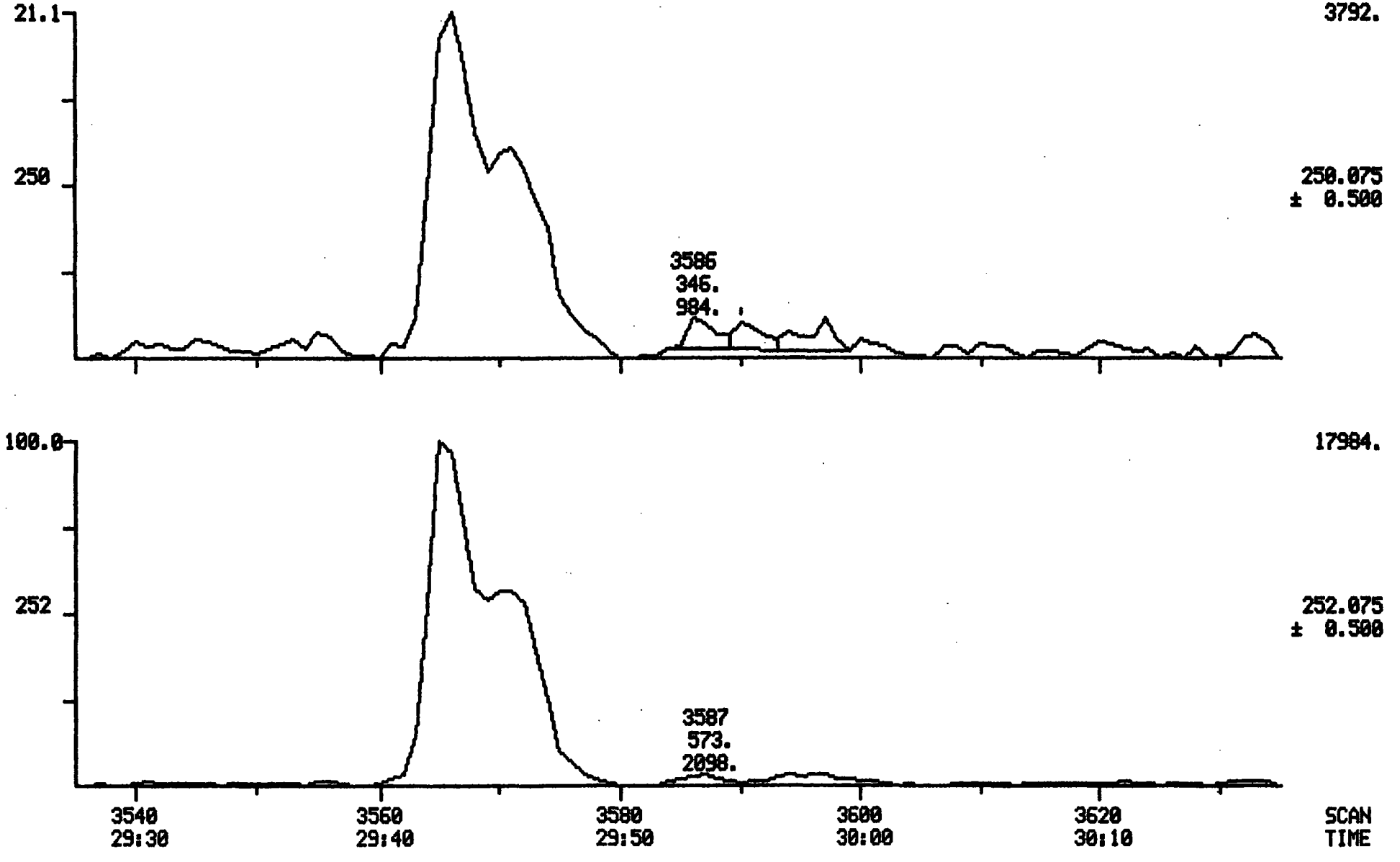
01581

MIDMASS CHROMATOGRAMS DATA: S59450X895 #3569 SCANS 3519 TO 3619
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3562,3576 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



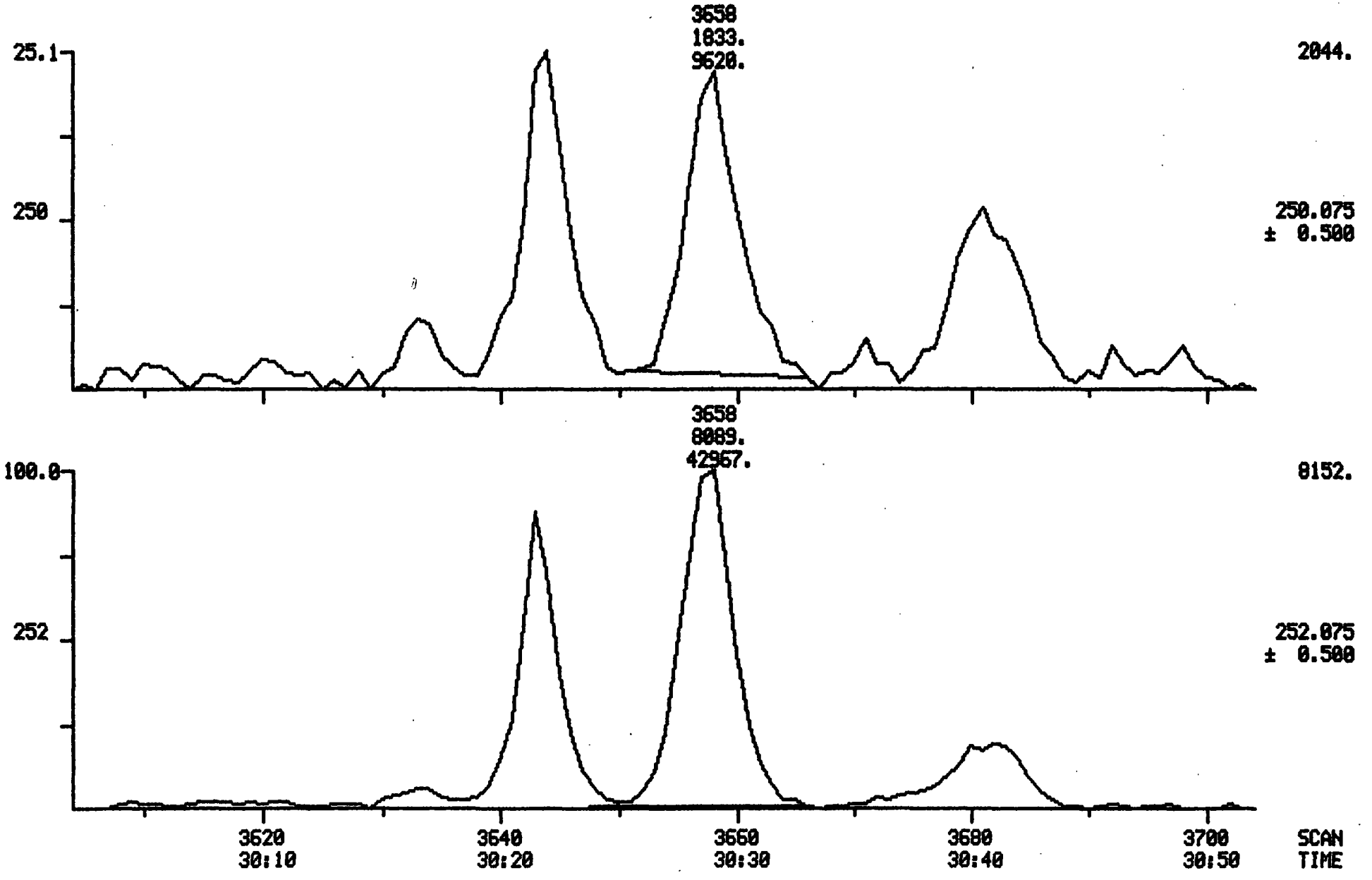
01582

MIDMASS CHROMATOGRAMS DATA: S59450X895 #3585 SCANS 3535 TO 3635
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3578,3592 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



01583

MIDMASS CHROMATOGRAMS DATA: S59450X895 #3654 SCANS 3604 TO 3704
06/08/88 22:07:00 CALI: 060888CX #2
SAMPLE: 59450-0190 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3647,3661 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: 859450X895

01584

Data: 859450X895.TI
06/08/88 22:07:00
Sample: 59450-0190 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59450

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	3650	30:25	1	1.000	A BV	30610.	80.000	NG/ML	5.55
2	240	3248	27:04	1	0.890	A BB	20977.	35.883	NG/ML	2.49
3	228	3242	27:01	1	0.888	A BV	82109.	146.026	NG/ML	10.13
4	226	3242	27:01	1	0.888	A BV	22637.	172.820	NG/ML	11.99
5	228	3255	27:07	1	0.892	A VB	98257.	174.795	NG/ML	12.13
6	226	3255	27:07	1	0.892	A VB	26180.	176.623	NG/ML	12.26
7	252	3565	29:42	1	0.977	M XX	83722.	174.368	NG/ML	12.10
8	250	3566	29:43	1	0.977	M XX	17535.	156.293	NG/ML	10.85
9	252	3571	29:45	1	0.978	M XX	55931.	72.376	NG/ML	5.02
10	250	3571	29:45	1	0.978	M XX	12506.	85.629	NG/ML	5.94
11	252	3587	29:53	1	0.983	A BV	2098.	3.666	NG/ML	0.25
12	250	3586	29:53	1	0.982	A BV	984.	7.781	NG/ML	0.54
13	252	3658	30:29	1	1.002	A VB	42967.	80.846	NG/ML	5.61
14	250	3658	30:29	1	1.002	A BB	9620.	74.034	NG/ML	5.14

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:04	1.00	0.888	1.00	35.88	80.00	0.685	1.528	0.45
3	27:01	1.00	0.887	1.00	146.03	80.00	2.682	1.470	1.83
4	27:01	1.00	0.887	1.00	172.82	80.00	0.740	0.342	2.16
5	27:09	1.00	0.891	1.00	174.79	80.00	3.210	1.469	2.18
6	27:09	1.00	0.891	1.00	176.62	80.00	0.855	0.387	2.21
7	29:43	1.00	0.975	1.00	174.37	80.00	2.735	1.255	2.18
8	29:43	1.00	0.976	1.00	156.29	80.00	0.573	0.293	1.95
9	29:47	1.00	0.978	1.00	72.38	80.00	1.827	2.020	0.90
10	29:47	1.00	0.978	1.00	85.63	80.00	0.409	0.382	1.07
11	29:41	1.01	0.982	1.00	3.67	80.00	0.069	1.496	0.05

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	29:41	1.01	0.982	1.00	7.78	80.00	0.032	0.330	0.10
13	30:30	1.00	1.001	1.00	80.85	80.00	1.404	1.389	1.01
14	30:30	1.00	1.001	1.00	74.03	80.00	0.314	0.340	0.93

COLUMN 1: J:AB13322
COLUMN 2: J:BB13322

59450-0190 MSD
20%

05/13/88
UNITS ON AMOUNT: ug/ml

01586

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
001	alpha-BHC	.0418	2.0	.0003	3.6	NA
002	LINDANE	.0020	.0	.0025	.0	NA
005	HEPTACHLOR	.0031	.0	.0019	.0	NA
012	DIELDRIN	.0071	.0	.0070	.0	.0070
013	ENDRIN	.0086	.4	.0099	.0	NA
018	p,p'-DDT	.0064	.1	.0069	.0	.0066
051	HEPTACHLOR IN TC	.0706	.5	.0694	.7	.0700

Lindane
A) $\frac{91.0}{82.5}$ (0.0035 ug/ml) = 0.003861 ug/ml
B) $\frac{87.0}{110.0}$ (0.0035 ug/ml) = 0.002768 ug/ml → $\frac{.002768}{.004}$ (100%) = 69%

Heptachlor
A) $\frac{63.0}{152.0}$ (0.0075 ug/ml) = 0.003169 ug/ml
B) $\frac{69.0}{202.0}$ (0.0075 ug/ml) = 0.002562 ug/ml → $\frac{.002562}{.004}$ (100%) = 64%

Aldrin
A) $\frac{33.0}{95.5}$ (0.0075 ug/ml) = 0.002592 ug/ml → $\frac{.002592}{.004}$ (100%) = 65%
B) ——— Coeluting Interference

Dieldrin
A) $\frac{50.0}{44.5}$ (0.0075 ug/ml) = 0.007576 ug/ml
B) $\frac{61.0}{\cancel{67.0}\ 63.5}$ (0.0075 ug/ml) = 0.007205 ug/ml → $\frac{.007205}{\cancel{.009}\ 0.01}$ (100%) = 72% AB

Endrin
A) $\frac{33.0}{49.5}$ (0.015 ug/ml) = 0.01 ug/ml
B) $\frac{44.0}{\cancel{63.5}\ 67.0}$ (0.015 ug/ml) = 0.009851 ug/ml → $\frac{.009851}{.01}$ (100%) = 99%

p,p'-DDT
A) $\frac{19.0}{64.0}$ (0.025 ug/ml) = 0.007422 ug/ml
B) $\frac{26.0}{95.5}$ (0.025 ug/ml) = 0.006806 ug/ml → $\frac{.006806}{.01}$ (100%) = 68%

DBC
A) $\frac{29.0}{29.5}$ (100%) = 98%

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

B) $\frac{26.0}{32.5}$ (100%) = 80%

RESULT FILE: J:A213322 05/13/88 59950-0190 LIBRARY: L:SS101B

01587

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha-BHC	1.650	1.617	6	144377	.0418	ug/ml
002	LINDANE	1.967	1.967	7	18789	.0020	ug/ml
005	HEPTACHLOR	3.267	3.267	8	35754	.0031	ug/ml
006	ALDRIN	4.100	4.100	10	21639	.0029	ug/ml
011	p,p'-DDE	7.583	7.483	11	59421	.0139	ug/ml
012	DIELDRIN	7.483	7.483	11	59421	.0071	ug/ml
013	ENDRIN	8.400	8.367	12	41388	.0086	ug/ml
015	ENDOSULFAN-B	8.567	8.367	12	41388	.0072	ug/ml
018	p,p'-DDT	12.750	12.767	13	38709	.0064	ug/ml
022	TOXAPHENE (peak 3)	12.433	12.767	13	38709	.1137	ug/ml
033	AROCLOR 1248(peak 2)	4.050	4.100	10	21639	.1848	ug/ml
051	HEPTACHLOR IN TC	3.283	3.267	8	35754	.0706	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

RESULT FILE: T:BB13322 05/13/88 5 9450-0190 LIBRARY: L:8SMIXB

01588

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNITS
001	alpha BHC ~	1.417	1.367	5	5249	.0003	ug/ml
002	LINDANE	1.833	1.833	7	61969	.0025	ug/ml
005	HEPTACHLOR	2.267	2.267	9	62951	.0019	ug/ml
012	DIELDRIN	6.767	6.767	13	150303	.0070	ug/ml
013	ENDRIN	8.250	8.250	14	127929	.0099	ug/ml
018	p,p'-DDT	12.167	12.167	15	112962	.0069	ug/ml
019	METHOXYCHLOR	23.933	24.067	17	89073	.0178	ug/ml
020	TOXAPHENE (peak 1)	6.783	6.767	13	150303	.5022	ug/ml
025	AROCLOR 1016(peak 3)	2.250	2.267	9	62951	.0444	ug/ml
028	AROCLOR 1232(peak 2)	2.250	2.267	9	62951	.0992	ug/ml
031	AROCLOR 1242(peak 3)	2.250	2.267	9	62951	.0540	ug/ml
032	AROCLOR 1248(peak 1)	2.250	2.267	9	62951	.0613	ug/ml
035	AROCLOR 1254(peak 1)	5.100	5.033	12	3974	.0027	ug/ml
037	AROCLOR 1254(peak 3)	8.100	8.250	14	127929	.0850	ug/ml
039	AROCLOR 1254(peak 5)	11.867	12.167	15	112962	.0786	ug/ml
044	AROCLOR 1260(peak 5)	11.833	12.167	15	112962	.0827	ug/ml
046	AROCLOR 1260(peak 7)	24.017	24.067	17	89073	.0358	ug/ml
047	DBC (surrogate)	22.650	22.617	16	145251	.0159	ug/ml
048	ENDRIN KETONE	22.600	22.617	16	145251	.0026	ug/ml
051	HEPTACHLOR IN TC	2.283	2.267	9	62951	.0694	ug/ml

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

AREA PERCENT REPORT

01589

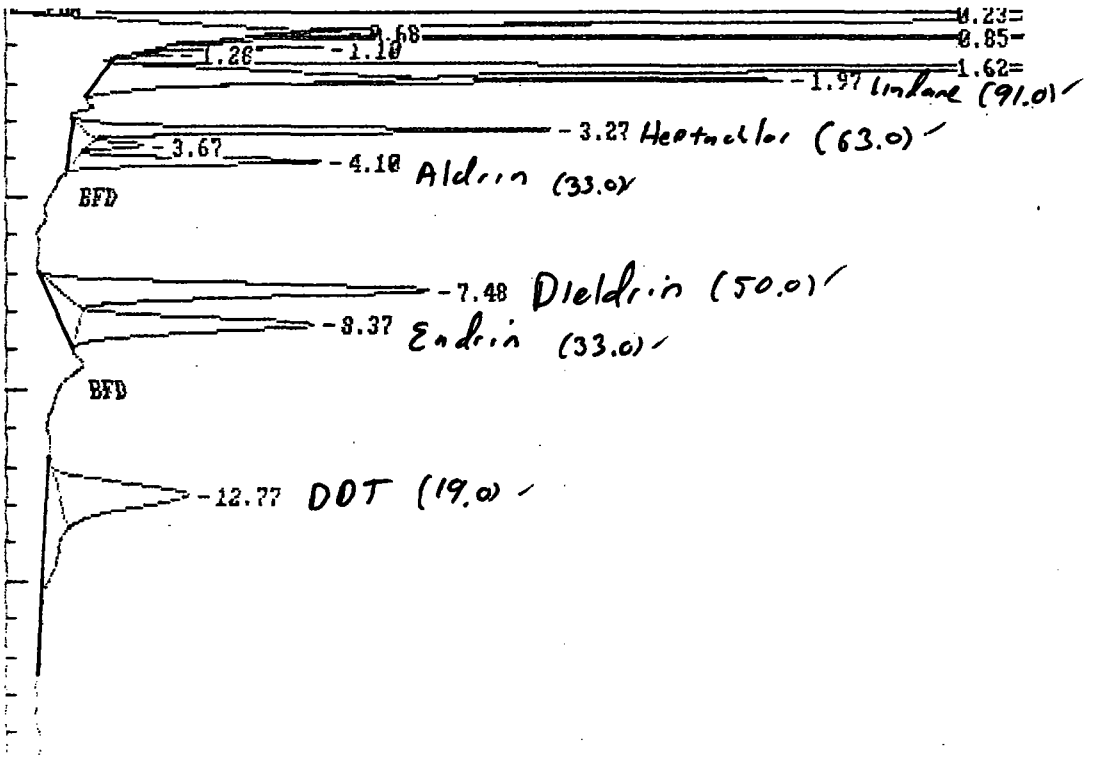
```
******************** 05-13-1988 08:22:35 Version 4.1 ********************
* Sample Name: 59450 0190 20%                    Data File: J:AB13322      *
* Date: 05-13-1988 08:22:18 Method: M:ABPI                                 *
* Interface: 10  Cycle#:  22   Operator SS  Channel#: 0    Vial#: N.A.     *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100             *
*************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS  *
*            Solvent Description: 1.5% SP2250/1.95% SP2401                *
* Conditions: 190 DEGREES ISOTHERMAL                                      *
*          Detector 0: ECD                  Detector 1:                   *
* Misc. Information: 4 UL INJECTION                    LPT1:        *     *
*************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

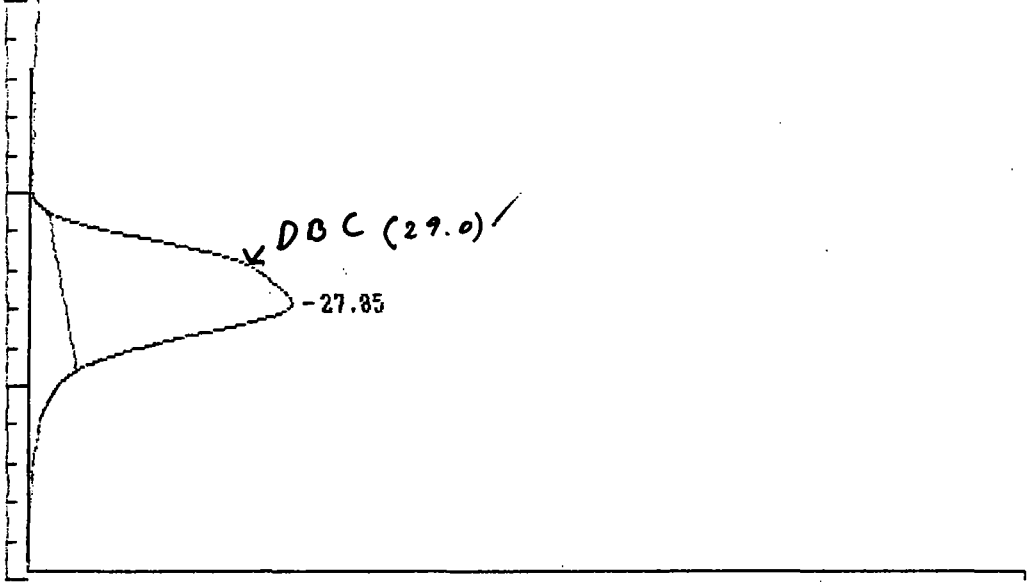
SS
5/26/88

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	575417	48.0183	1	110228	100.000	5.2
2	0.68	1275	0.1064	1	338	0.222	3.8
3	0.85	27576	2.3012	1	7740	4.792	3.6
4	1.10	4994	0.4167	1	1119	0.868	4.5
5	1.28	1654	0.1380	1	316	0.287	5.2
6	1.62	144377	12.0482	1	18244	25.091	7.9
7	1.97	18789	1.5679	1	3089	3.265	6.1
8	3.27	35754	2.9836	1	3213	6.213	11.1
9	3.67	3932	0.3281	1	376	0.683	10.4
10	4.10	21639	1.8057	1	1698	3.760	12.7
11	7.48	59421	4.9586	1	2541	10.327	23.4
12	8.37	41388	3.4538	1	1611	7.193	25.7
13	12.77	38709	3.2302	1	891	6.727	43.4
14	27.85	223407	18.6432	1	1565	38.825	142.7

Total Area: 1198328 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB13322.ATB
Data File = J:AB13322.PTS Printed on 05-13-1988 at 08:23:01
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 7 millivolts




DBC (29.0)
-27.85

AREA PERCENT REPORT

```
******************** 05-13-1988 07:23:24 Version 4.1 ********************
* Sample Name: 59450 0190 20%                    Data File: J:BB13322     *
* Date: 05-13-1988 07:23:07 Method: M:BBPI                                *
* Interface: 12  Cycle#:  22   Operator SS  Channel#: 0    Vial#: N.A.    *
* Starting Peak Width:  10   Threshold: 1  Area Threshold: 100            *
****************************************************************************
* Instrument Type: HP 5880A              Column Type: 6FT X 2MM ID GLASS  *
*          Solvent Description: 1.5% SP2250/1.95% SP2401                  *
* Conditions: 190 DEG ISOTHERMAL                                          *
*            Detector 0:                        Detector 1: ECD           *
* Misc. Information: 4 UL INJ                                             *
****************************************************************************
Starting Delay:    0.00                          Run Time:     0.00
```

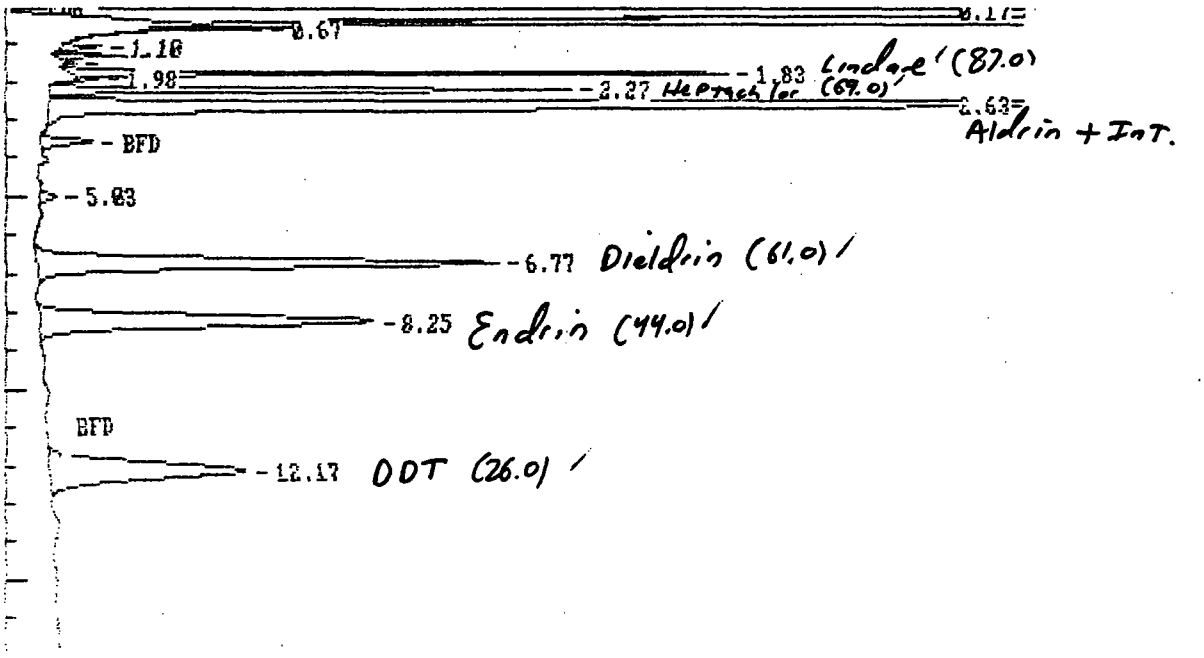
01591

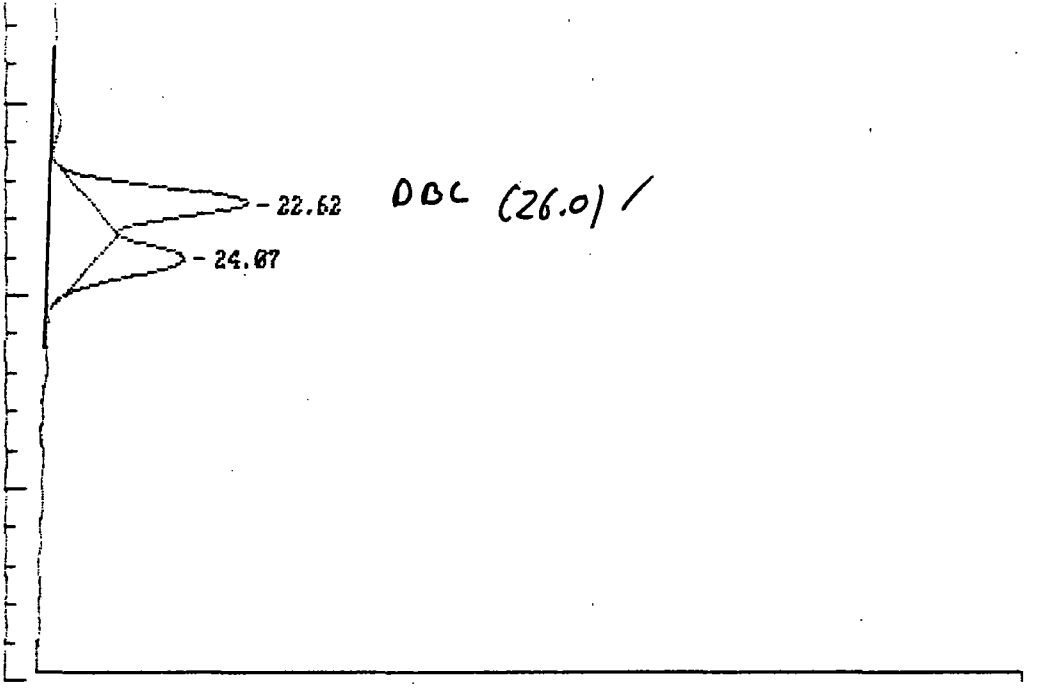
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.17	1018178	44.5003	1	180114	100.000	5.7
2	0.53	47502	2.0761	1	17743	4.665	2.7
3	0.67	7759	0.3391	1	2316	0.762	3.3
4	1.10	5825	0.2546	1	803	0.572	7.3
5	1.37	5249	0.2294	1	1295	0.515	4.1
6	1.55	1099	0.0480	1	279	0.108	3.9
7	1.83	61969	2.7084	1	12299	6.086	5.0
8	1.98	2478	0.1083	1	511	0.243	4.9
9	2.27	62951	2.7513	1	9796	6.183	6.4
10	2.63	434921	19.0086	1	49242	42.716	8.8
11	3.62	10606	0.4635	1	980	1.042	10.8
12	5.03	3974	0.1737	1	336	0.390	11.8
13	6.77	150303	6.5691	1	8630	14.762	17.4
14	8.25	127929	5.5912	1	6216	12.564	20.6
15	12.17	112962	4.9371	1	3687	11.095	30.6
16	22.62	145251	6.3483	1	2915	14.266	49.8
17	24.07	89073	3.8930	1	1711	8.748	52.1

SS
5/20/88

```
Total Area:      2288027    Area Reject:      1000  One sample per   1.000 sec.

Areas, times, and heights stored in: J:BB13322.ATB
Data File = J:BB13322.PTS  Printed on 05-13-1988 at 07:23:53
Start time:     0.00 min.  Stop time:    35.00 min.     Offset:    0 mv.
Full Range:  19  millivolts
```





DBC (26.0) /

01592

5/3/88 17:30:45 SCAN 1 OF 730

Acquisition started

01593

Acquire
05/03/88 17:30:00 + 0:03
Sample: CLP,59450,,59450-02MSD,LOW,WATER,59450-02MSD,VOA,EPA
Conds.: 100%/5ML
Formula:
Submitted by: RMAL

Run 3:S59450W984
Free sectors: 8591
Instrument: 5100
Analyst: GW

Acquiring
Scan: 1 of 730
Weight: 0.000
Acct. No: 59450

*** GC descriptor: V3 ***

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

Injector: 50 DegC
Interface: 220 DegC

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

Valve times (minutes)

	Open	Close
Sweep/Split	36.1	0.0
Divert	36.1	0.8

*** Scan Parameters ***

Low mass: 40 u
High mass: 260 u

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

Hold time (s)
Top: 0.00
Bottom: 0.05

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

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

Peak width: 1000.
Inten/ion: 2

Min peak width: 3
ADC threshold: 1

Min frag width %: 81
Baseline: 0

Min area: 20

MODE: EI (+) Centroid + Temp

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

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	127.00	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: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

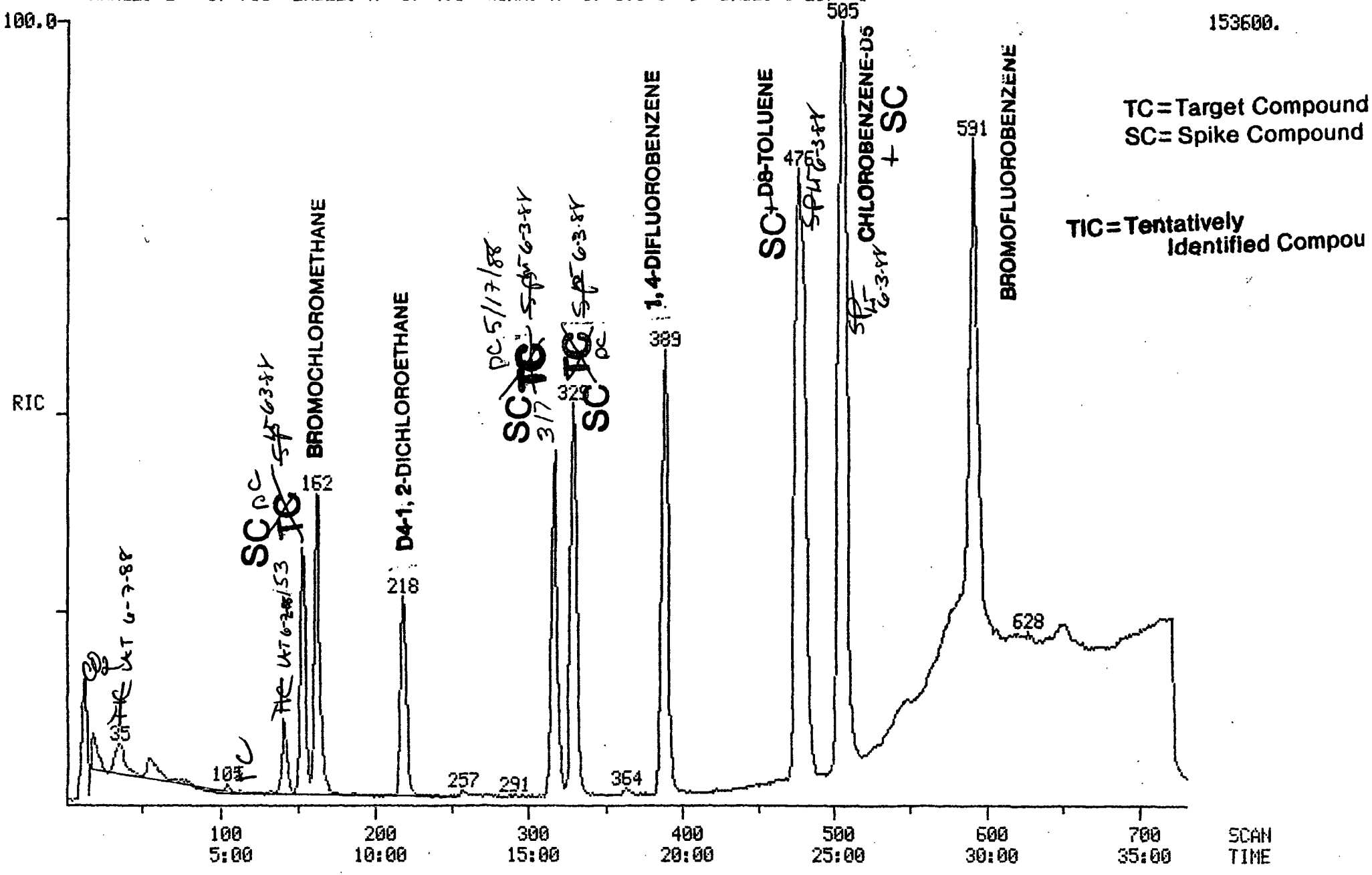
5/3/88 18:07:19

Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan per second		
Centroid	730	47.9	2190.0	2.2	22594.	31.	10.

01594

RIC DATA: S59450W984 #4 SCANS 1 TO 730
05/03/88 17:30:00 CALI: 050288CW2 #3
SAMPLE: CLP,59450,,59450-02MSD,LOW,WATER,59450-02MSD,VOA,EPA
CONDS.: 100%/5ML
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



PROCEDURE: TCA DIAGNOSTIC REPORT 5/03/88 19:35:20
DATA FILE: S59450W984
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 01595
REPORT: IS01

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	4	40	IS01/TC01
3	3	1	27	18	8	9	112	IS02/TC02
3	3	1	27	12	7	8	109	IS03/TC03
1	1	1	0	7	4	2	143	IS04/TC04

41 COMPOUNDS PROCESSED, 18 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-162	162	162	.	1	972	.	128	162	.	1
2	V1	10	-32	27	.	.	.	.	.	50	.	.	.
3	V1	15	-48	44	.	.	.	.	.	94	.	.	.
4	V1	25	-59	55	.	.	.	.	.	62	.	.	.
5	V1	35	-74	71	.	.	.	.	.	64	.	.	.
6	V1	45	-107	105	105	.	1	978	.	84	105	.	1
7	V1	50	-116	114	114	.	4	1000	.	58	114	.	1
8	V1	65	-133	132	.	.	.	.	.	76	132	.	1
9	V1	80	-154	153	153	.	1	990	.	96	153	.	1
10	V2	1	-388	389	389	.	1	998	.	114	389	.	1
11	V3	1	-503	504	504	.	1	998	.	117	504	.	1
12	V1	90	-179	179	.	.	.	.	.	63	.	.	.
13	V1	95	-194	194	.	.	.	.	.	96	.	.	.
14	V1	100	-205	205	.	.	.	.	.	83	.	.	.
15	V2	10	-218	218	219	1	3	804	.	72	.	.	.
16	V1	2	-219	219	218	-1	1	991	.	65	218	.	1
17	V1	110	-221	221	.	.	.	.	.	62	.	.	.
18	V2	15	-248	248	.	.	.	.	.	97	.	.	.
19	V2	20	-257	257	.	.	.	.	.	117	.	.	.
20	V2	25	-260	260	262	2	3	857	.	43	.	.	.
21	V2	30	-268	268	.	.	.	.	.	83	.	.	.
22	V2	35	-299	299	.	.	.	.	.	63	.	.	.
23	V2	40	-304	304	.	.	.	.	.	75	.	.	.
24	V2	45	-317	317	317	.	1	985	.	130	317	.	1
25	V2	60	-330	330	329	-1	1	988	.	78	329	.	1
26	V2	50	-331	331	.	.	.	.	.	129	.	.	.
27	V2	65	-334	334	.	.	.	.	.	75	.	.	.
28	V2	55	-334	334	.	.	.	.	.	97	.	.	.
29	V2	80	-393	393	.	.	.	.	.	173	.	.	.
30	V3	10	-405	405	403	-2	2	920	.	58	403	.	1
31	V3	15	-441	441	441	.	4	933	.	58	.	.	.
32	V3	25	-447	447	.	.	.	.	.	83	.	.	.
33	V3	20	-449	449	.	.	.	.	.	164	.	.	.
34	V3	2	-476	476	476	.	1	987	.	98	476	.	1
35	V3	35	-480	480	480	.	1	986	.	92	480	.	1
36	V3	40	-507	507	507	.	1	985	.	112	507	.	1
37	V3	50	-549	549	547	-2	2	925	.	106	.	.	.
38	V3	3	-591	590	591	1	1	992	.	95	591	.	1
39	V3	55	-612	611	.	.	.	.	.	104	612	.	2
40	V3	60	-615	614	.	.	.	.	.	106	.	.	.
41	V3	75	-628	627	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59450W984

01596

Data: S59450W984.TI
05/03/88 17:30:00
Sample: CLP,59450,,59450-02MSD,LOW,WATER,59450-02MSD,VOA,EPA
Conds.: 100%/5ML
Formula: Instrument: 5100 Weight: 0.000
Submitted by: RMAL Analyst: GW Acct. No.: 59450

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	C110	2-BUTANONE	72	V2#	10	78-93-3
16	CS15	1,2-DICHLOROETHANE-D4	65	SV1#	02	17060-07-0
17	C065	1,2-DICHLOROETHANE	62	V1#	110	107-06-2
18	C115	1,1,1-TRICHLOROETHANE	97	V2#	15	71-55-6
19	C120	CARBONTETRACHLORIDE	117	V2#	20	56-23-5
20	C125	VINYL ACETATE	43	V2#	25	108-05-4
21	C130	BROMODICHLOROMETHANE	83	V2#	30	75-27-4
22	C140	1,2-DICHLOROPROPANE	63	V2#	35CC	78-87-5
23	C143	CIS-1,3-DICHLOROPROPENE	75	V2#	40	10061-01-5
24	C150	TRICHLOROETHENE	130	V2#	45	79-01-6
25	C165	BENZENE	78	V2#	60	71-43-2
26	C155	DIBROMOCHLOROMETHANE	129	V2#	50	124-48-1
27	C172	TRANS-1,3-DICHLOROPROPE	75	V2#	65	10061-02-6
28	C160	1,1,2-TRICHLOROETHANE	97	V2#	55	79-00-5
29	C180	BROMOFORM	173	V2#	80	75-25-2
30	C205	4-METHYL-2-PENTANONE	58	V3#	10	108-10-1
31	C210	2-HEXANONE	58	V3#	15	591-78-6
32	C225	1,1,2,2-TETRACHLOROETHA	83	V3#	25SP	79-34-5
33	C220	TETRACHLOROETHENE	164	V3#	20	127-18-4
34	CS05	TOLUENE-D8	98	SV3#	02	2037-26-5
35	C230	TOLUENE	92	V3#	35	108-88-3
36	C235	CHLOROBENZENE	112	V3#	40	108-90-7
37	C240	ETHYLBENZENE	106	V3#	50	100-41-4
38	CS10	BROMOFLUOROBENZENE	95	SV3#	03	460-00-4
39	C245	STYRENE	104	V3#	55	100-42-5
40	M-XYLENE		106	V3#	60	108-38-3
41	O+P XYLENES		106	V3#	75	

01597

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	162	8:06	1	1.000	A BB	29365.	50.000	UG/L	8.88
2	NOT FOUND									
3	NOT FOUND									
4	NOT FOUND									
5	NOT FOUND									
6	84	105	5:15	1	0.648	A BB	1155.	0.971	UG/L	0.17
7	58	114	5:42	1	0.704	A BB	198.	2.241	UG/L	0.40
8	76	132	6:36	1	0.815	A BB	1014.	0.691	UG/L	0.12
9	96	153	7:39	1	0.944	A BB	38890.	61.878	UG/L	10.99
10	114	389	19:27	10	1.000	A BB	168230.	50.000	UG/L	8.88
11	117	504	25:12	11	1.000	A BB	149704.	50.000	UG/L	8.88
12	NOT FOUND									
13	NOT FOUND									
14	NOT FOUND									
15	NOT FOUND									
16	65	218	10:54	1	1.346	A BB	53253.	46.558	UG/L	8.27
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	130	317	15:51	10	0.815	A BB	57729.	50.898	UG/L	9.04
25	78	329	16:27	10	0.846	A BB	162805.	50.510	UG/L	8.97
26	NOT FOUND									
27	NOT FOUND									
28	NOT FOUND									
29	NOT FOUND									
30	58	403	20:09	11	0.800	A BB	122.	0.253	UG/L	0.04
31	NOT FOUND									
32	NOT FOUND									
33	NOT FOUND									
34	98	476	23:48	11	0.944	A BB	179040.	49.937	UG/L	8.87
35	92	480	24:00	11	0.952	A BB	106109.	48.711	UG/L	8.66
36	112	507	25:21	11	1.006	A BB	132167.	51.245	UG/L	9.11
37	NOT FOUND									
38	95	591	29:33	11	1.173	A VB	99410.	48.849	UG/L	8.68
39	104	612	30:36	11	1.214	A*BV	249.	0.091	UG/L	0.02
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	0.99	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:36		0.196						
3	2:24		0.294						
4	2:57		0.362						
5	3:42		0.454						
6	5:21	0.98	0.656	0.99	0.97	50.00	0.039	2.026	0.02
7	5:48	0.98	0.712	0.99	2.24	50.00	0.007	0.150	0.04
8	6:39	0.99	0.816	1.00	0.69	50.00	0.035	2.498	0.01
9	7:42	0.99	0.945	1.00	61.88	50.00	1.324	1.070	1.24
10	19:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
11	25:12	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
12	8:57		1.098						
13	9:42		1.190						

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
14	10:15		1.258						
15	10:54		0.560						
16	10:57	1.00	1.344	1.00	46.56	50.00	1.813	1.948	0.93
17	11:03		1.356						
18	12:24		0.638						
19	12:51		0.661						
20	13:00		0.668						
21	13:24		0.689						
22	14:57		0.769						
23	15:12		0.781						
24	15:51	1.00	0.815	1.00	50.90	50.00	0.343	0.337	1.02
25	16:30	1.00	0.848	1.00	50.51	50.00	0.968	0.958	1.01
26	16:33		0.851						
27	16:42		0.859						
28	16:42		0.859						
29	19:39		1.010						
30	20:15	1.00	0.804	1.00	0.25	50.00	0.001	0.161	0.01
31	22:03		0.875						
32	22:21		0.887						
33	22:27		0.891						
34	23:48	1.00	0.944	1.00	49.94	50.00	1.196	1.197	1.00
35	24:00	1.00	0.952	1.00	48.71	50.00	0.709	0.728	0.97
36	25:21	1.00	1.006	1.00	51.24	50.00	0.883	0.861	1.02
37	27:27		1.089						
38	29:33	1.00	1.173	1.00	48.85	50.00	0.664	0.680	0.98
39	30:36	1.00	1.214	1.00	0.09	50.00	0.002	0.913	0.00
40	30:45		1.220						
41	31:24		1.246						

01598

TCA FINISHED, 18 FOUND
FINISHED AT: 5/03/88 19:39:22

01599

RMAL QUANTITATION SUMMARY FILE: S59450W984
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

UNITS: UG/L

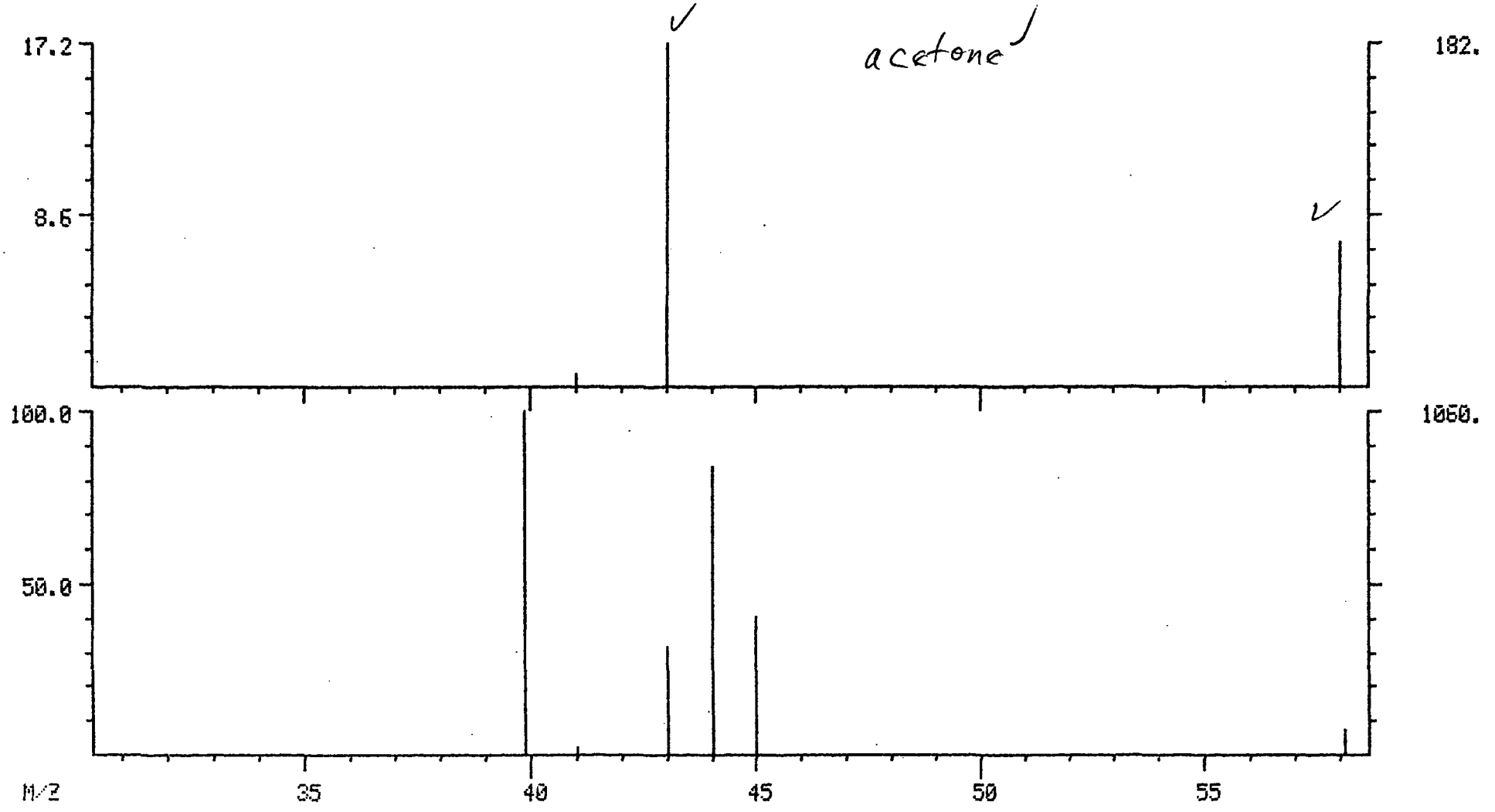
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	162	1	29365.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	168230.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	149704.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	476	3	179040.	1.196	49.937 100
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	99410.	0.664	48.849 98
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	218	1	53253.	1.813	46.558 93
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	114	1	198.	0.007	2.241 XB
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96	153	1	38890.	1.324	61.878 SC
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	317	2	57729.	0.343	50.898 SC
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78	329	2	162805.	0.968	50.510 SC
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	480	3	106109.	0.709	48.711 SC
37	V3# 40	C235 CHLOROBENZENE	112	507	3	132167.	0.883	51.245 SC
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		

01600

DUAL MASS SPECTRUM
05/03/88 17:30:00 + 5:42
SAMPLE: CLP,59450,,59450-02MSD,LOW,WATER,59450-02MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 86 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450W984 #114
CALI: 050288CW2 #3

BASE M/Z: 43/ 40
RIC: 264./ 2823.

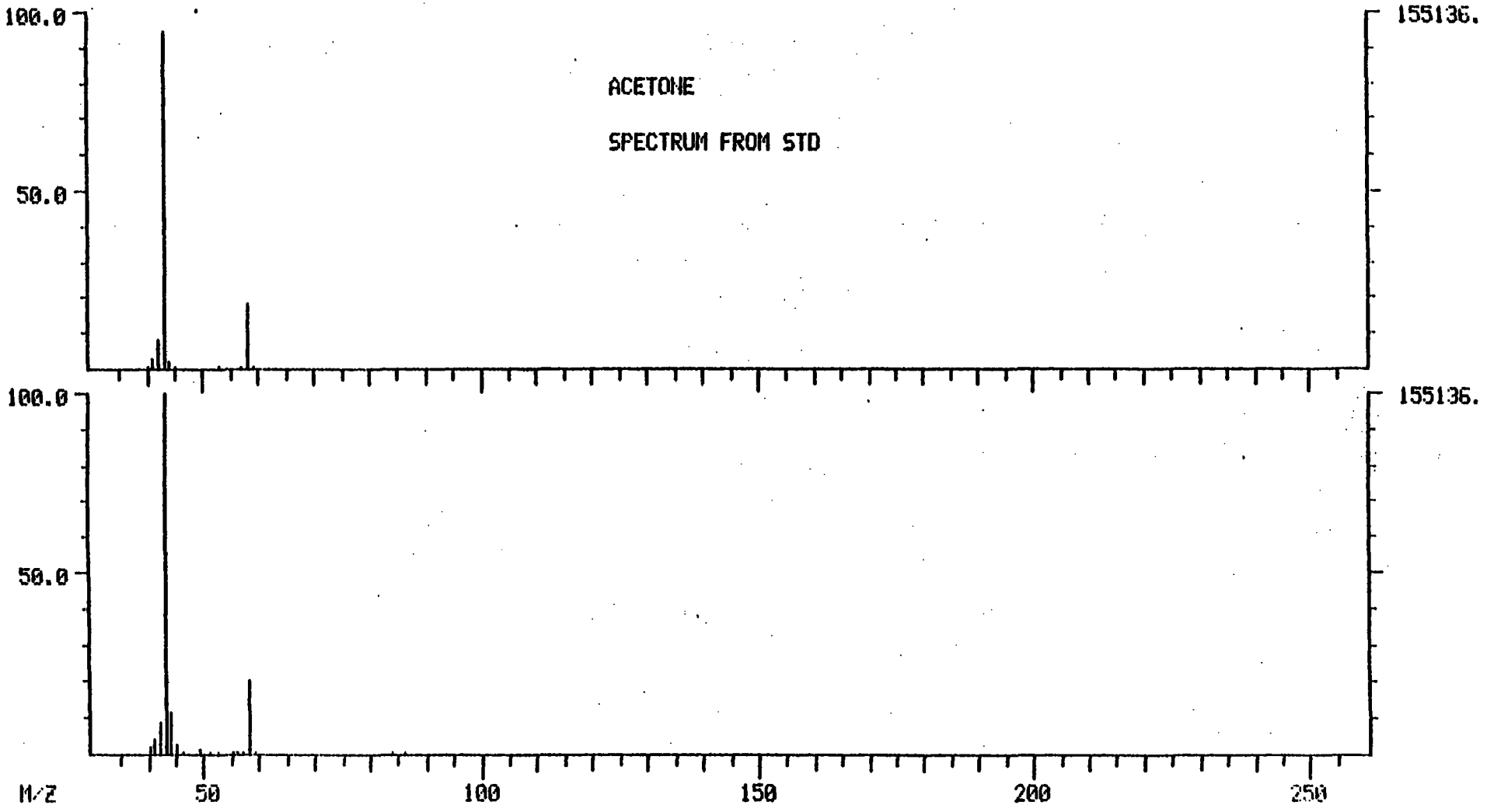


01601

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

DATA: STDJ198 #150
CALI: STDJ198 #1

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

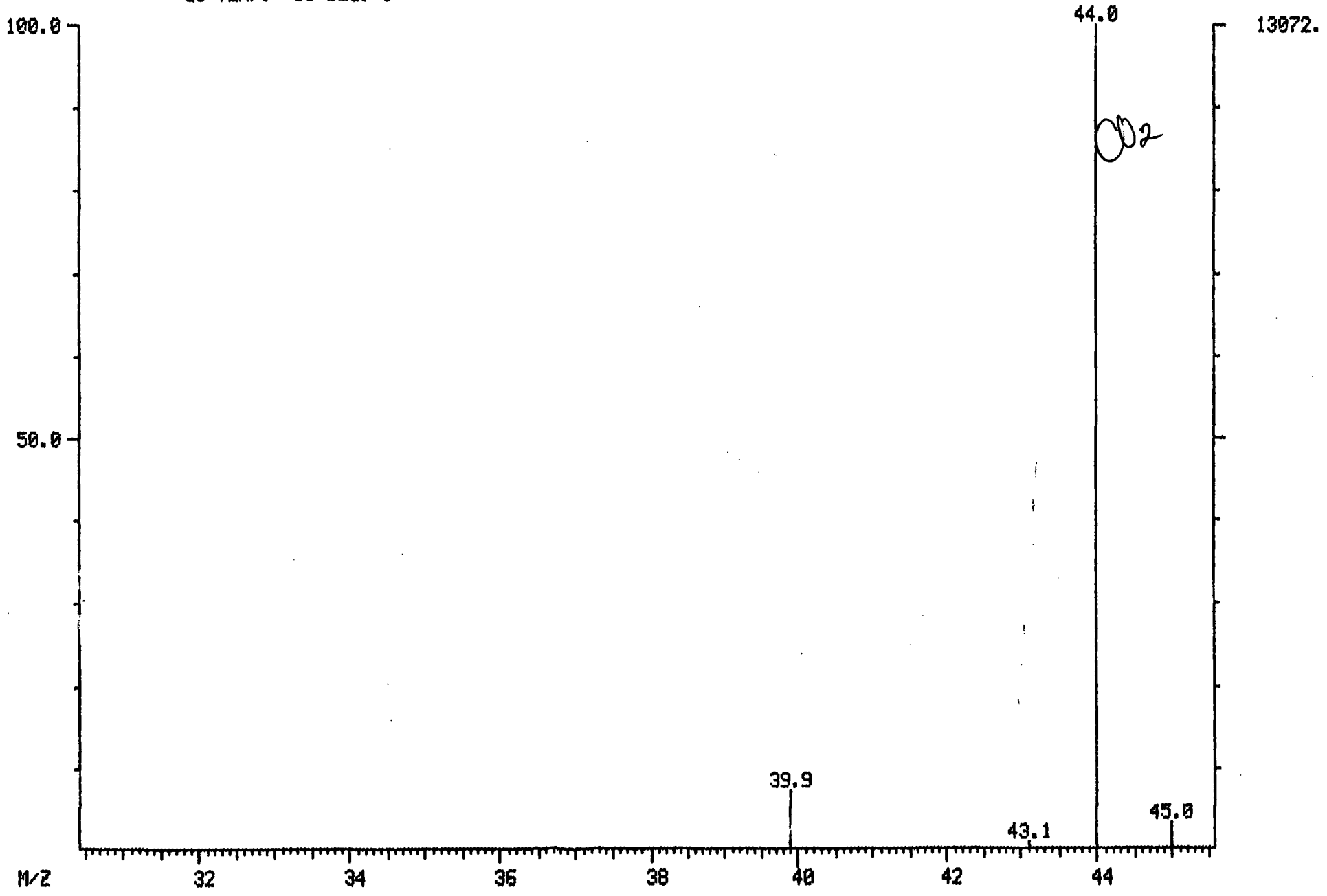


01602

MASS SPECTRUM
05/03/88 17:30:00 + 0:54
SAMPLE: CLP,59450,,59450-02MSD,LOW,WATER,59450-02MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 60 DEG. C

DATA: S59450W984 #18
CALI: 050288CW2 #3

BASE M/Z: 44
RIC: 14528.



RF=2

6/3/88 21:28:19 SCAN 1 OF 2800 C1603
Acquisition started

Acquire MSD Run 0:S59450U564 ACQUIRING
06/03/88 21:28:00 + 0:04 Free sectors: 22430 Scan: 5 of 2800
Sample: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS Acct. No:

********** 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 : 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	40.5	0.0
3	325 - 325	-	10.0	40.5			
4	325 - 325	-	0.0	40.5			

********** 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: 30
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	

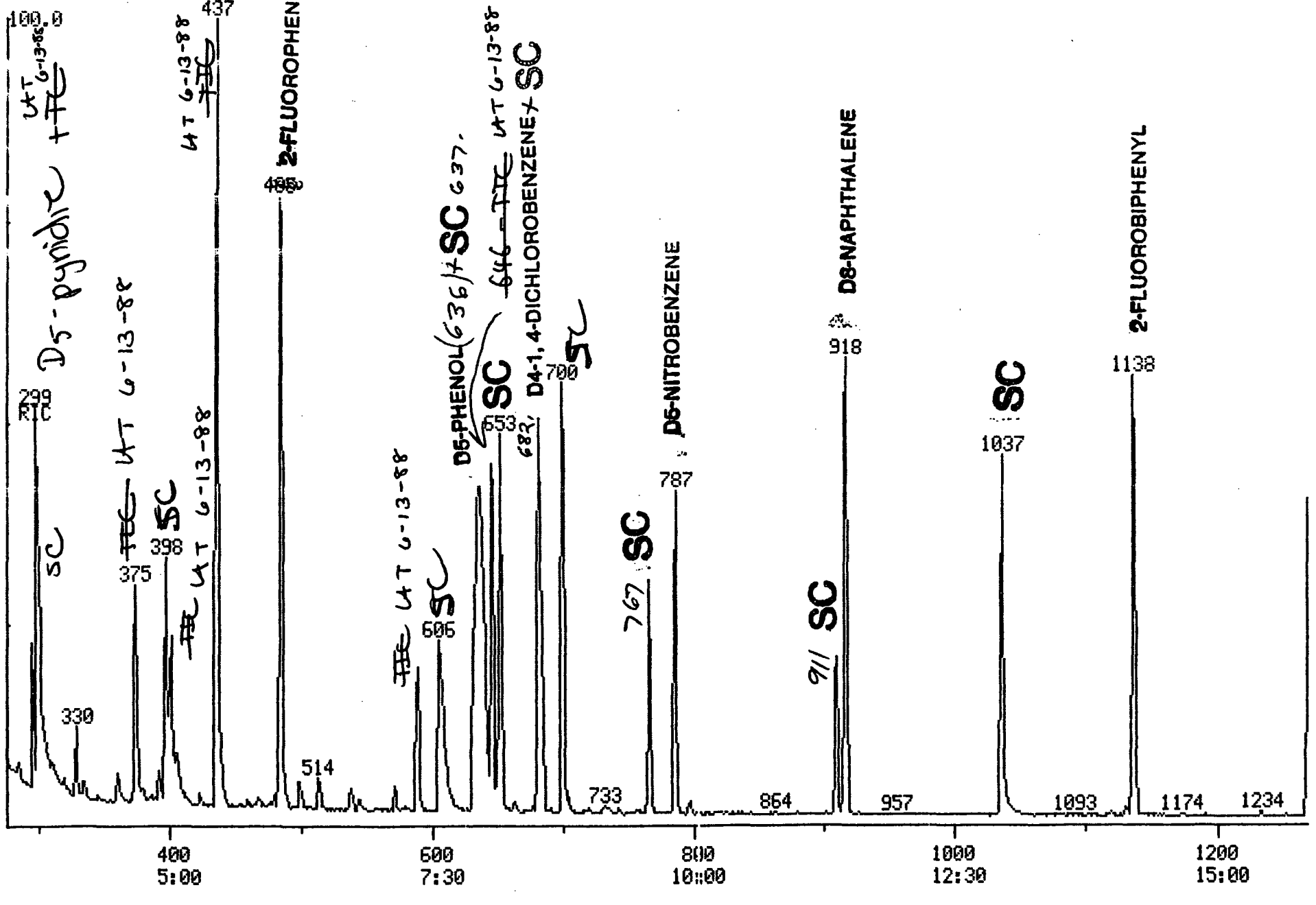
6/3/88 22:03:22
ACQUISITION COMPLETED
SCANS 1 TO 2800 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2800	193.6	2100.0	9.2	29664. 11.	14.

TC = Target Compound
SC = Spike Compound
T.I.C.-Tent. Ident. Compound

01604

RIC
06/03/88 21:28:00 MSD
DATA: 559450U564 #4 SCANS 270 TO 1270
CALI: 060388CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



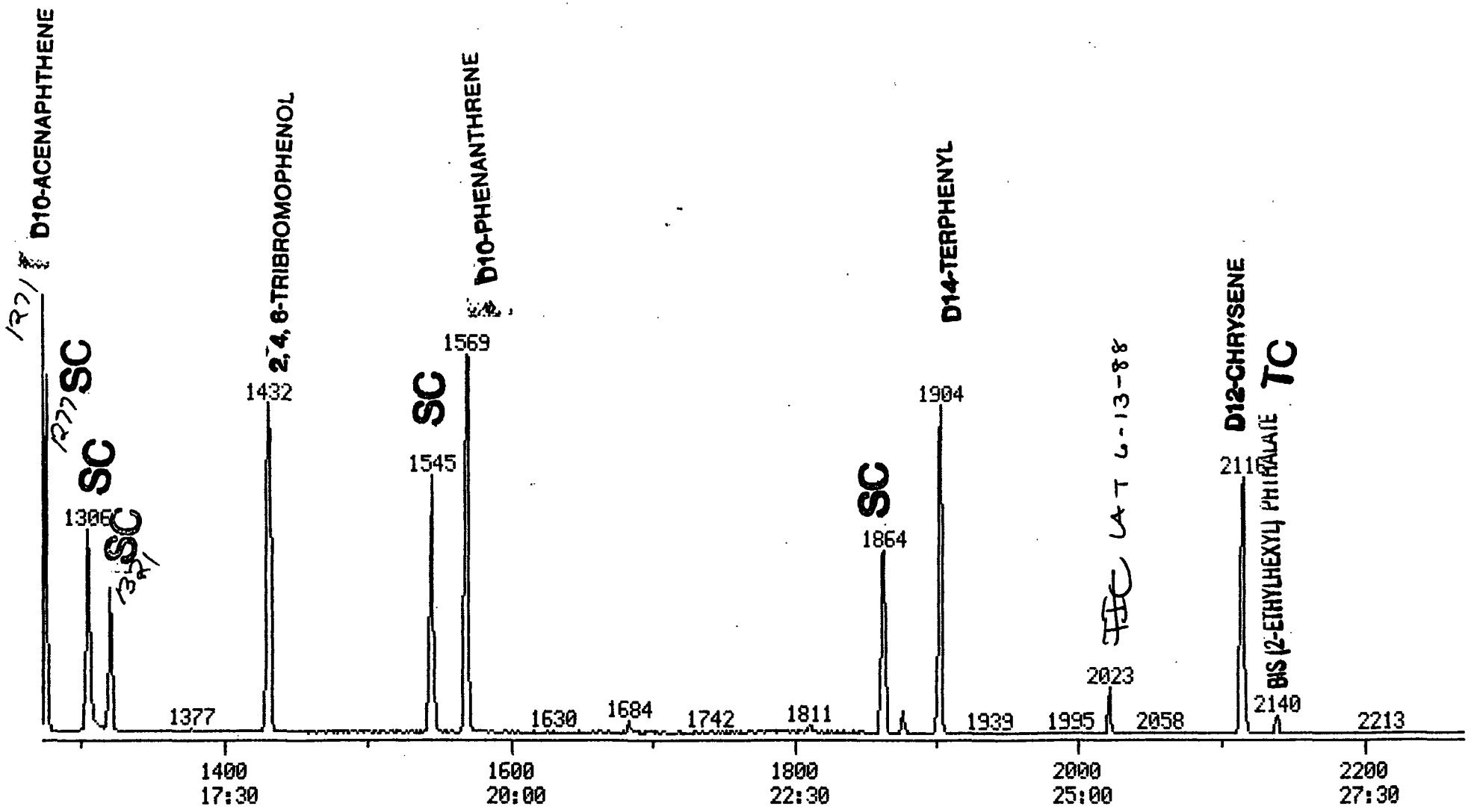
01605

RIC DATA: S59450U564 #4 SCANS 1270 TO 2270
06/03/88 21:28:00 MSD CALI: 060388CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

TC= Target Compound
SC= Spike Compound

100.0

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



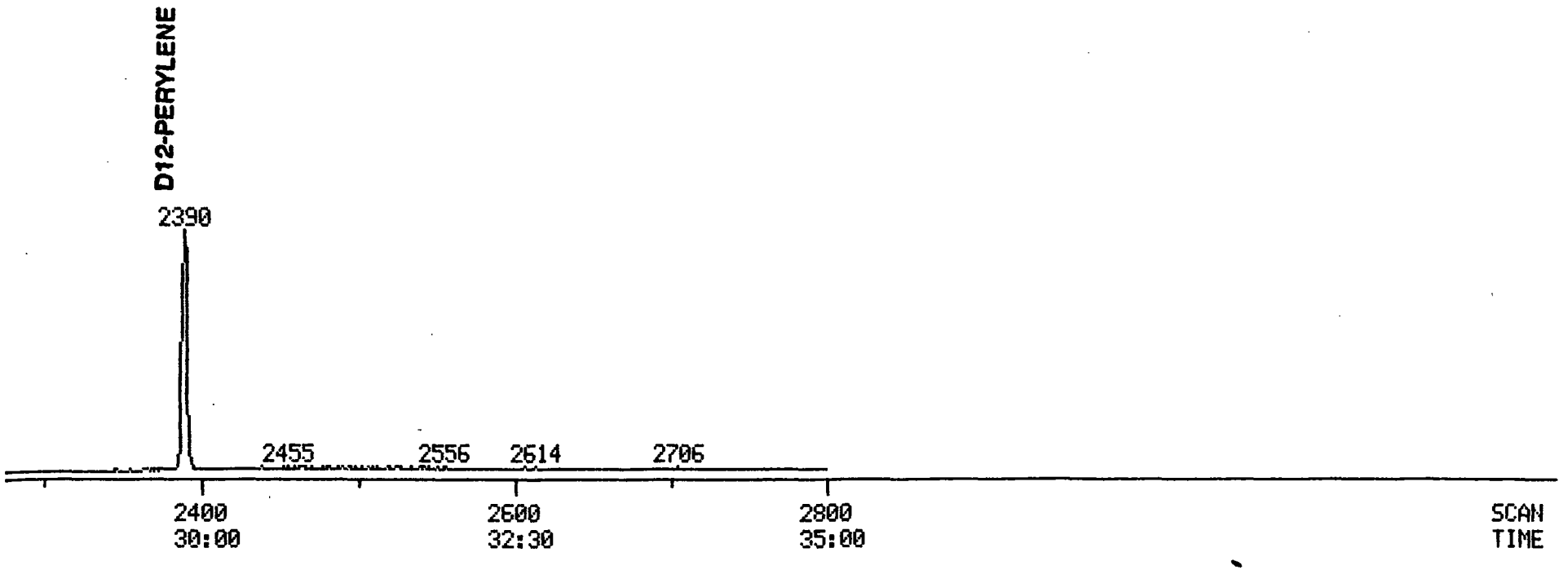
01606

RIC DATA: S59450U564 #4 SCANS 2270 TO 2800
06/03/88 21:28:00 M50 CALI: 060388CU #5 OUT OF 270 TO 2800
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
RANGE: G 1,2800 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

TC=Target Compound
SC=Spike Compound

100.0

T.I.C.-Tent. Idem. Compound 106624.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/86 9:26:47
DATA FILE: S59450U564
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 01607
REPORT: IS01

STANDARDS PROC	STANDARDS USED	STANDARDS POSS	STANDARDS RMS	PLUS UNKNOWNS PROC	PLUS UNKNOWNS USED	PLUS UNKNOWNS POSS	PLUS UNKNOWNS RMS	LIST NAMES STANDARD/UNKNOWN
1	1	1	0	7	5	1	73	IS01/TC01
3	3	1	0	18	6	1	130	IS02/TC02
3	3	1	0	12	5	1	102	IS03/TC03
3	3	1	88	18	7	1	88	IS04/TC04
3	3	1	88	10	4	1	121	IS05/TC05
3	3	1	75	8	4	1	115	IS06/TC06
3	3	1	27	14	6	1	67	IS07/TC07
1	1	1	0	4	1	1	0	IS08/TC08

77 COMPOUNDS PROCESSED, 24 FOUND

COMPOUND NO	LIB	ENTRY	SEARCH REF	PRED	SEL	DELTA	PEAKS	FIT	SAT PEAKS	CHRO M/Z	TOP	DELTA	PEAKS
1	S1	1	-680	682	682	.	1	965	.	152	682	.	1
2	S1	2	-484	485	485	.	1	996	.	112	485	.	1
3	S1	3	-633	635	636	1	1	970	.	99	636	.	1
4	S1	105	-635	637	638	1	1	964	.	94	637	-1	1
5	S1	110	-647	649	.	.	.	.	.	93	.	.	.
6	S1	115	-651	653	653	.	1	990	.	128	653	.	1
7	S1	125	-675	678	.	.	.	.	.	146	.	.	.
8	S2	1	-916	918	918	.	1	995	.	136	918	.	1
9	S3	1	-1269	1271	1271	.	1	992	.	164	1271	.	1
10	S1	130	-684	685	685	.	1	979	.	146	685	.	1
11	S1	145	-713	714	.	.	.	.	.	108	.	.	.
12	S1	150	-717	718	.	.	.	.	.	146	.	.	.
13	S1	160	-736	737	.	.	.	.	.	108	.	.	.
14	S1	165	-742	743	.	.	.	.	.	45	.	.	.
15	S1	185	-763	764	.	.	.	.	.	108	.	.	.
16	S1	190	-768	769	767	-2	1	995	.	70	767	.	1
17	S1	200	-771	772	.	.	.	.	.	117	.	.	.
18	S2	2	-787	788	787	-1	1	1000	.	82	787	.	1
19	S2	10	-790	791	.	.	.	.	.	77	.	.	.
20	S2	20	-835	836	.	.	.	.	.	82	.	.	.
21	S2	25	-849	850	.	.	.	.	.	139	.	.	.
22	S2	30	-862	863	.	.	.	.	.	107	.	.	.
23	S2	35	-881	882	.	.	.	.	.	93	.	.	.
24	S2	45	-892	893	.	.	.	.	.	122	.	.	.
25	S2	40	-894	895	.	.	.	.	.	162	.	.	.
26	S2	55	-910	911	911	.	1	990	.	180	911	.	1
27	S2	60	-921	922	.	.	.	.	.	128	.	.	.
28	S2	80	-938	939	.	.	.	.	.	127	.	.	.
29	S2	95	-959	960	.	.	.	.	.	225	.	.	.
30	S2	130	-1037	1038	1037	-1	1	993	.	107	1037	.	1
31	S2	145	-1057	1058	.	.	.	.	.	142	1057	.	1
32	S3	20	-1104	1105	.	.	.	.	.	237	.	.	.
33	S3	25	-1121	1122	.	.	.	.	.	196	.	.	.
34	S4	1	-1569	1569	1569	.	1	987	.	188	1569	.	1
35	S3	30	-1127	1128	.	.	.	.	.	196	.	.	.
36	S3	3	-1138	1139	1138	-1	1	996	.	172	1138	.	1
37	S3	40	-1154	1155	.	.	.	.	.	162	.	.	.
38	S3	45	-1184	1185	.	.	.	.	.	65	.	.	.
39	S3	55	-1232	1233	.	.	.	.	.	163	.	.	.
40	S3	65	-1238	1239	.	.	.	.	.	152	.	.	.
41	S3	70	-1244	1245	.	.	.	.	.	165	.	.	.
42	S3	75	-1269	1270	.	.	.	.	.	138	.	.	.
43	S3	80	-1277	1278	1277	-1	1	993	.	153	1277	.	1
44	S3	85	-1289	1289	.	.	.	.	.	184	.	.	.
45	S3	95	-1306	1306	1306	.	1	995	.	109	1306	.	1
46	S3	90	-1309	1309	.	.	.	.	.	168	.	.	.
47	S3	105	-1321	1321	1321	.	1	994	.	165	1321	.	1
48	S3	130	-1377	1377	.	.	.	.	.	149	.	.	.
49	S3	135	-1379	1379	.	.	.	.	.	166	.	.	.
50	S3	140	-1383	1383	.	.	.	.	.	204	.	.	.
51	S3	150	-1395	1395	.	.	.	.	.	138	.	.	.
52	S4	10	-1404	1404	.	.	.	.	.	198	.	.	.
53	S4	15	-1411	1411	.	.	.	.	.	169	.	.	.
54	S3	2	-1433	1433	1432	-1	1	964	.	330	1432	.	1
55	S4	30	-1482	1482	.	.	.	.	.	248	.	.	.
56	S4	40	-1509	1509	.	.	.	.	.	284	.	.	.
57	S5	1	-2116	2115	2115	.	1	964	.	240	2115	.	1
58	S4	50	-1546	1546	1545	-1	1	988	.	266	1545	.	1
59	S4	65	-1575	1575	.	.	.	.	.	178	.	.	.
60	S4	70	-1583	1583	.	.	.	.	.	178	.	.	.
61	S4	85	-1711	1711	.	.	.	.	.	149	1709	.	1

63	S6	1	-2391	2390	2390	.	1	991	.	264	2390	.	1
64	S5	15	-1865	1864	1863	-1	1	996	.	202	1863	.	1
65	S5	2	-1905	1904	1904	.	1	989	.	244	1904	.	1
66	S5	40	-2016	2015	.	.	.	.	.	149	.	.	.
67	S5	50	-2113	2112	.	.	.	.	.	228	.	.	.
68	S5	55	-2115	2114	.	.	.	.	.	252	.	.	.
69	S5	60	-2123	2122	.	.	.	.	.	228	.	.	.
70	S5	65	-2141	2140	2140	.	1	993	.	149	2140	.	1
71	S6	10	-2260	2259	.	.	.	.	.	149	.	.	.
72	S6	15	-2324	2323	.	.	.	.	.	252	.	.	.
73	S6	25	-2329	2328	.	.	.	.	.	252	.	.	.
74	S6	35	-2382	2381	.	.	.	.	.	252	.	.	.
75	S6	55	-2595	2594	.	.	.	.	.	276	.	.	.
76	S6	60	-2597	2596	.	.	.	.	.	278	.	.	.
77	S6	65	-2652	2651	.	.	.	.	.	276	.	.	.

01608

Quantitation Report File: S59450U564

Data: S59450U564.TI
06/03/88 21:28:00
Sample: CLP,59450,,0270,LOW,WATER,59450-0270 MSD 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	682	8:31	1	1.000	A BB	19613.	40.000 UG/ML	3.83
2	112	485	6:04	1	0.711	A BB	57831.	86.458 UG/ML	8.27
3	99	636	7:57	1	0.933	A BB	69170.	83.055 UG/ML	7.94
4	94	637	7:58	1	0.934	A BB	39780.	42.474 UG/ML	4.06
5	NOT FOUND								
6	128	653	8:10	1	0.957	A BB	33739.	49.522 UG/ML	4.74
7	NOT FOUND								
8	136	918	11:28	8	1.000	A BB	69158.	40.000 UG/ML	3.83
9	164	1271	15:53	9	1.000	A BB	31906.	40.000 UG/ML	3.83
10	146	685	8:34	1	1.004	A BB	13791.	17.313 UG/ML	1.66
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	70	767	9:35	1	1.125	A BB	11147.	22.031 UG/ML	2.11
17	NOT FOUND								
18	82	787	9:50	8	0.857	A BB	29145.	40.781 UG/ML	3.90
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	180	911	11:23	8	0.992	A BB	10623.	18.176 UG/ML	1.74
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	107	1037	12:58	8	1.130	A BB	23371.	50.928 UG/ML	4.87
31	142	1057	13:13	8	1.151	A BB	64.	0.057 UG/ML	0.01
32	NOT FOUND								
33	NOT FOUND								
34	188	1569	19:37	34	1.000	A BV	50431.	40.000 UG/ML	3.83
35	NOT FOUND								
36	172	1138	14:13	9	0.895	A BB	49433.	41.553 UG/ML	3.97
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	153	1277	15:58	9	1.005	A BB	24089.	24.881 UG/ML	2.38
44	NOT FOUND								
45	109	1306	16:19	9	1.028	A BB	6470.	57.889 UG/ML	5.54
46	NOT FOUND								
47	165	1321	16:31	9	1.039	A BB	8287.	24.968 UG/ML	2.39
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	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	6:04	1.00	0.711	1.00	86.46	100.00	1.179	1.364	0.86
3	7:55	1.00	0.930	1.00	83.06	100.00	1.411	1.699	0.83
4	7:57	1.00	0.933	1.00	42.47	50.00	1.623	1.910	0.85
5	8:06		0.950						
6	8:09	1.00	0.956	1.00	49.52	50.00	1.376	1.389	0.99
7	8:27		0.991						
8	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
9	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
10	8:34	1.00	1.004	1.00	17.31	50.00	0.563	1.625	0.35
11	8:55		1.047						
12	8:58		1.053						
13	9:13		1.081						
14	9:17		1.089						
15	9:33		1.120						
16	9:37	1.00	1.128	1.00	22.03	50.00	0.455	1.032	0.44
17	9:39		1.132						
18	9:51	1.00	0.858	1.00	40.78	50.00	0.337	0.413	0.82
19	9:53		0.862						
20	10:27		0.911						
21	10:37		0.926						
22	10:47		0.940						
23	11:01		0.961						
24	11:10		0.973						
25	11:11		0.975						
26	11:23	1.00	0.992	1.00	18.18	50.00	0.123	0.338	0.36
27	11:31		1.004						
28	11:44		1.023						
29	12:00		1.046						
30	12:58	1.00	1.131	1.00	50.93	50.00	0.270	0.265	1.02
31	13:13	1.00	1.153	1.00	0.06	50.00	0.001	0.649	0.00
32	13:49		0.869						
33	14:01		0.883						
34	19:37	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
35	14:06		0.887						
36	14:14	1.00	0.896	1.00	41.55	50.00	1.239	1.491	0.83
37	14:26		0.909						
38	14:49		0.932						
39	15:25		0.970						
40	15:29		0.975						
41	15:34		0.980						
42	15:52		0.999						
43	15:58	1.00	1.006	1.00	24.88	50.00	0.604	1.214	0.50
44	16:07		1.015						
45	16:20	1.00	1.028	1.00	57.89	50.00	0.162	0.140	1.16
46	16:22		1.031						
47	16:31	1.00	1.040	1.00	24.97	50.00	0.208	0.416	0.50
48	17:13		1.084						
49	17:15		1.086						
50	17:18		1.089						

Quantitation Report File: S59450U564

01612

Data: S59450U564.TI
06/03/88 21:28:00 MSD
Sample: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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	C730	BENZO(A)ANTHRACENE	228 S5# 50	56-55-3
68	C725	3,3'-DICHLOROBENZIDINE	252 S5# 55	91-94-1
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	1432	17:54	9	1.127	A BB	9028.	106.768 UG/ML	10.21
55	NOT FOUND								
56	NOT FOUND								
57	240	2115	26:26	57	1.000	A BB	32658.	40.000 UG/ML	3.83
58	266	1545	19:19	34	0.985	A BB	9154.	53.153 UG/ML	5.08
59	NOT FOUND								
60	NOT FOUND								
61	149	1709	21:22	34	1.089	A BB	411.	0.239 UG/ML	0.02
62	NOT FOUND								
63	264	2390	29:52	63	1.000	A BB	26192.	40.000 UG/ML	3.83
64	202	1863	23:17	57	0.881	A BB	30787.	27.708 UG/ML	2.65
65	244	1904	23:48	57	0.900	A BB	39034.	55.756 UG/ML	5.33
66	NOT FOUND								

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
67	NOT FOUND								
68	NOT FOUND								
69	NOT FOUND								
70	149	2140	26:45	57	1.012	A BB	1599.	1.881 UG/ML	0.18
71	NOT FOUND								
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	17:27		1.098						
52	17:33		0.894						
53	17:38		0.899						
54	17:55	1.00	1.128	1.00	106.77	100.00	0.113	0.106	1.07
55	18:31		0.944						
56	18:52		0.961						
57	26:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
58	19:19	1.00	0.985	1.00	53.15	50.00	0.145	0.137	1.06
59	19:41		1.003						
60	19:47		1.008						
61	21:23	1.00	1.090	1.00	0.24	50.00	0.007	1.364	0.00
62	22:44		1.159						
63	29:54	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
64	23:19	1.00	0.881	1.00	27.71	50.00	0.754	1.361	0.55
65	23:49	1.00	0.900	1.00	55.76	50.00	0.956	0.857	1.12
66	25:12		0.952						
67	26:25		0.998						
68	26:26		0.999						
69	26:32		1.003						
70	26:46	1.00	1.011	1.00	1.88	50.00	0.039	1.041	0.04
71	28:15		0.945						
72	29:03		0.972						
73	29:07		0.974						
74	29:46		0.996						
75	32:26		1.085						
76	32:28		1.086						
77	33:09		1.109						

TGA FINISHED; 24 FOUND
FINISHED AT: 6/04/88 9:34:47

RMAL QUANTITATION SUMMARY FILE: 5594J0U364
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	682	1	19613.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	69158.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1271	3	31906.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1569	4	50431.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2115	5	32658.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2390	6	26192.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	787	2	29145.	0.837	40.781
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1138	3	49433.	1.239	41.553
9	S5# 2	CS30 TERPHENYL-D14	244	1904	5	39034.	0.956	55.756
10	S1# 3	CS45 PHENOL-D5	99	636	1	69170.	1.411	83.055
11	S1# 2	CS50 2-FLUOROPHENOL	112	485	1	57831.	1.179	86.458
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1432	3	9028.	0.113	106.768
13	S1#105	C315 PHENOL	94	637	1	39780.	1.623	42.474
14	S1#110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
15	S1#115	C330 2-CHLOROPHENOL	128	653	1	33739.	1.376	49.522
16	S1#125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
17	S1#130	C340 1,4-DICHLOROBENZENE	146	685	1	13791.	0.563	17.313
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	767	1	11147.	0.455	22.031
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	911	2	10623.	0.123	18.176
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	1037	2	23371.	0.270	50.928
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	1277	3	24089.	0.604	24.881
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	1306	3	6470.	0.162	57.889
51	S3#105	C570 2,4-DINITROTOLUENE	165	1321	3	8287.	0.208	24.968
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	1545	4	9154.	0.145	53.153
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	1863	5	30787.	0.754	27.708
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	2140	5	1599.	0.039	1.881

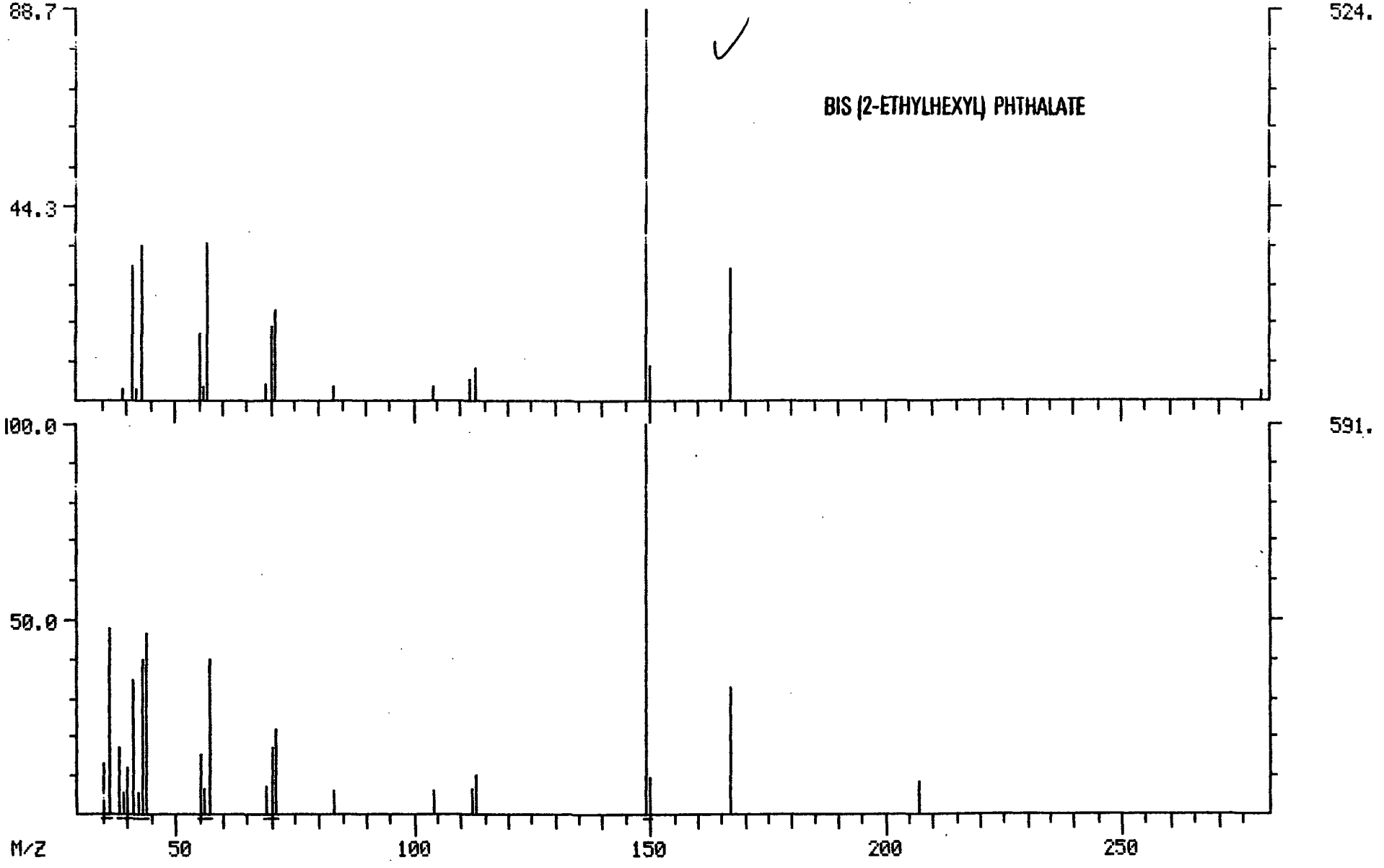
72	S6#	15	C765	BENZO(B)FLUORANTHEN	252	6	NOT	FOUND
73	S6#	25	C770	BENZO(K)FLUORANTHEN	252	6	NOT	FOUND
74	S6#	35	C775	BENZO(A)PYRENE	252	6	NOT	FOUND
75	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	6	NOT	FOUND
76	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	6	NOT	FOUND
77	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	6	NOT	FOUND

01616

DUAL MASS SPECTRUM
06/03/88 21:28:00 + 26:45
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 288 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450U564 #2140 BASE M/Z: 149/ 149
CALI: 060388CU #5 RIC: 1861./ 3011.

150

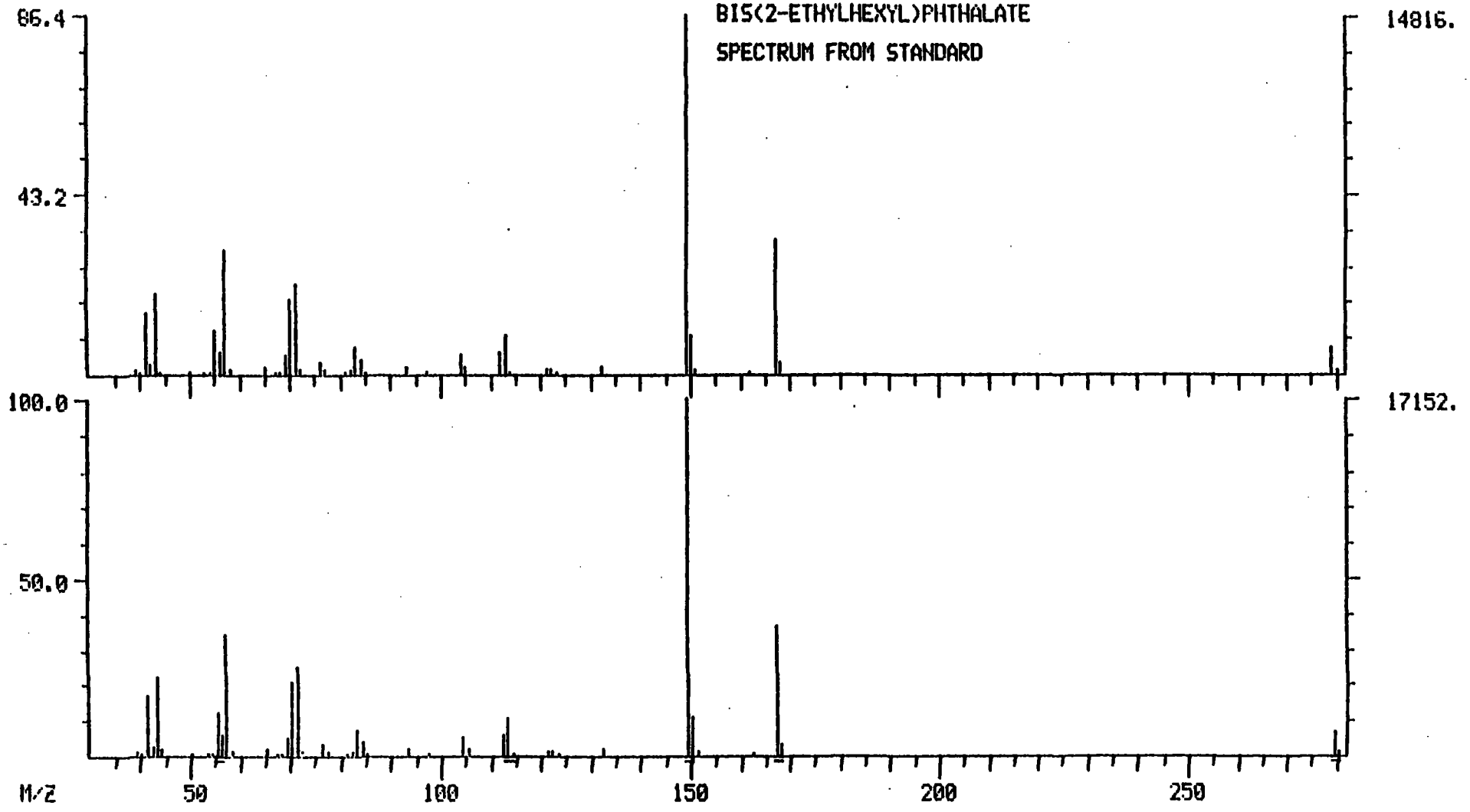


016617

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.



PROCEDURE: TCA DIAGNOSTIC REPORT 6/04/88 16:28:03
DATA FILE: S59450U564
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 01618
REPORT: ISO1

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	13	6	2	296	ISO1/TCO1
3	3	1	0	14	5	1	269	ISO2/TCO2

26 COMPOUNDS PROCESSED, 10 FOUND

COMPOUND			SEARCH						SAT	CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-680	682	682	.	1	965	.	152	682	.	1
2	S1	4	-299	299	299	.	1	989	.	84	299	.	1
3	S1	20	-301	301	301	.	1	990	.	79	301	.	1
4	S1	30	-397	397	398	1	2	991	.	93	398	.	1
5	S1	62	-462	462	.	.	.	.	.	93	.	.	.
6	S1	64	-494	495	.	.	.	.	.	107	.	.	.
7	S1	73	-525	526	.	.	.	.	.	106	.	.	.
8	S1	83	-561	562	.	.	.	.	.	107	.	.	.
9	S1	87	-582	583	.	.	.	.	.	107	.	.	.
10	S1	88	-602	603	606	3	1	986	.	107	606	.	1
11	S1	89	-610	611	606	-5	1	930	.	107	606	.	1
12	S1	92	-629	630	.	.	.	.	.	107	.	.	.
13	S1	122	-666	667	.	.	.	.	.	107	.	.	.
14	S2	1	-916	918	918	.	1	995	.	136	918	.	1
15	S3	1	-1269	1271	1271	.	1	992	.	164	1271	.	1
16	S1	137	-696	700	700	.	1	995	.	106	700	.	1
17	S1	142	-710	714	718	4	1	872	.	106	717	-1	1
18	S1	187	-766	770	.	.	.	.	.	108	.	.	.
19	S1	203	-793	797	.	.	.	.	.	106	.	.	.
20	S1	202	-793	797	.	.	.	.	.	106	.	.	.
21	S1	204	-812	816	.	.	.	.	.	122	.	.	.
22	S2	27	-864	868	.	.	.	.	.	107	.	.	.
23	S2	37	-889	892	.	.	.	.	.	107	.	.	.
24	S2	47	-902	905	.	.	.	.	.	107	.	.	.
25	S2	57	-921	924	.	.	.	.	.	107	.	.	.
26	S2	150	-1079	1082	.	.	.	.	.	142	.	.	.

Quantitation Report File: 59450U564

01619

Data: S59450U564.TI
06/03/88 21:28:00 MSD
Sample: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2mL,BNA,EPA
Conds.:
Formula: Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: KS 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-5-METHYL PYRIDINE	106 S1#203	
20	3-ETHYL-4-METHYL PYRIDINE	106 S1#202	
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	682	8:31	1	1.000	A BB	19613.	40.000 UG/ML	12.10
2	84	299	3:44	1	0.438	A BV	28788.	32.932 UG/ML	9.96
3	79	301	3:46	1	0.441	A BB	24593.	32.681 UG/ML	9.88
4	93	398	4:58	1	0.584	A BV	25020.	35.427 UG/ML	10.71
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	107	606	7:34	1	0.889	A BB	20633.	35.369 UG/ML	10.70
11	107	606	7:34	1	0.889	A BB	20633.	34.396 UG/ML	10.40
12	NOT FOUND								
13	NOT FOUND								
14	136	918	11:28	14	1.000	A BB	69158.	40.000 UG/ML	12.10
15	164	1271	15:53	15	1.000	A BB	31906.	40.000 UG/ML	12.10
16	106	700	8:45	1	1.026	A BB	36716.	39.560 UG/ML	11.96
17	106	717	8:58	1	1.051	A BB	200.	0.312 UG/ML	0.09

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	NOT FOUND								
26	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	8:31	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
2	3:44	1.00	0.439	1.00	32.93	50.00	1.174	1.783	0.66
3	3:46	1.00	0.442	1.00	32.68	50.00	1.003	1.535	0.65
4	4:58	1.00	0.583	1.00	35.43	50.00	1.021	1.440	0.71
5	5:46		0.678						
6	6:10		0.725						
7	6:34		0.771						
8	7:01		0.824						
9	7:16		0.855						
10	7:31	1.01	0.884	1.01	35.37	50.00	0.842	1.190	0.71
11	7:37	0.99	0.896	0.99	34.40	50.00	0.842	1.223	0.69
12	7:52		0.924						
13	8:19		0.978						
14	11:28	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
15	15:52	1.00	1.000	1.00	40.00	40.00	1.000	1.000	1.00
16	8:42	1.01	1.022	1.00	39.56	50.00	1.498	1.893	0.79
17	8:52	1.01	1.043	1.01	0.31	50.00	0.008	1.309	0.01
18	9:34		1.125						
19	9:55		1.164						
20	9:55		1.164						
21	10:09		1.192						
22	10:48		0.942						
23	11:07		0.969						
24	11:16		0.984						
25	11:31		1.352						
26	13:29		1.177						

TOR FINISHED: 13 FOUND
FINISHED AT: 6/04/88 16:30:56

01621

RMAL QUANTITATION SUMMARY FILE: 5374300564
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	682	1	19613.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	918	2	69158.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1271	3	31906.	1.000	40.000
4	S1# 4	PYRIDINE-D5	84	299	1	28788.	1.174	32,932 X2÷100=66%
5	S1# 20	PYRIDINE	79	301	1	24593.	1.003 ✓	32.681 ✓
6	S1# 30	2-PICOLINE	93	398	1	25020.	1.021 ✓	35.427 ✓
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	606	1	20633.	0.842 ✓	35.369 ✓
13	S1# 89	4-ETHYL PYRIDINE	107	606	1	20633.	0.842	34.396 ✓
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	700	1	36716.	1.498 ✓	39.560 ✓
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		

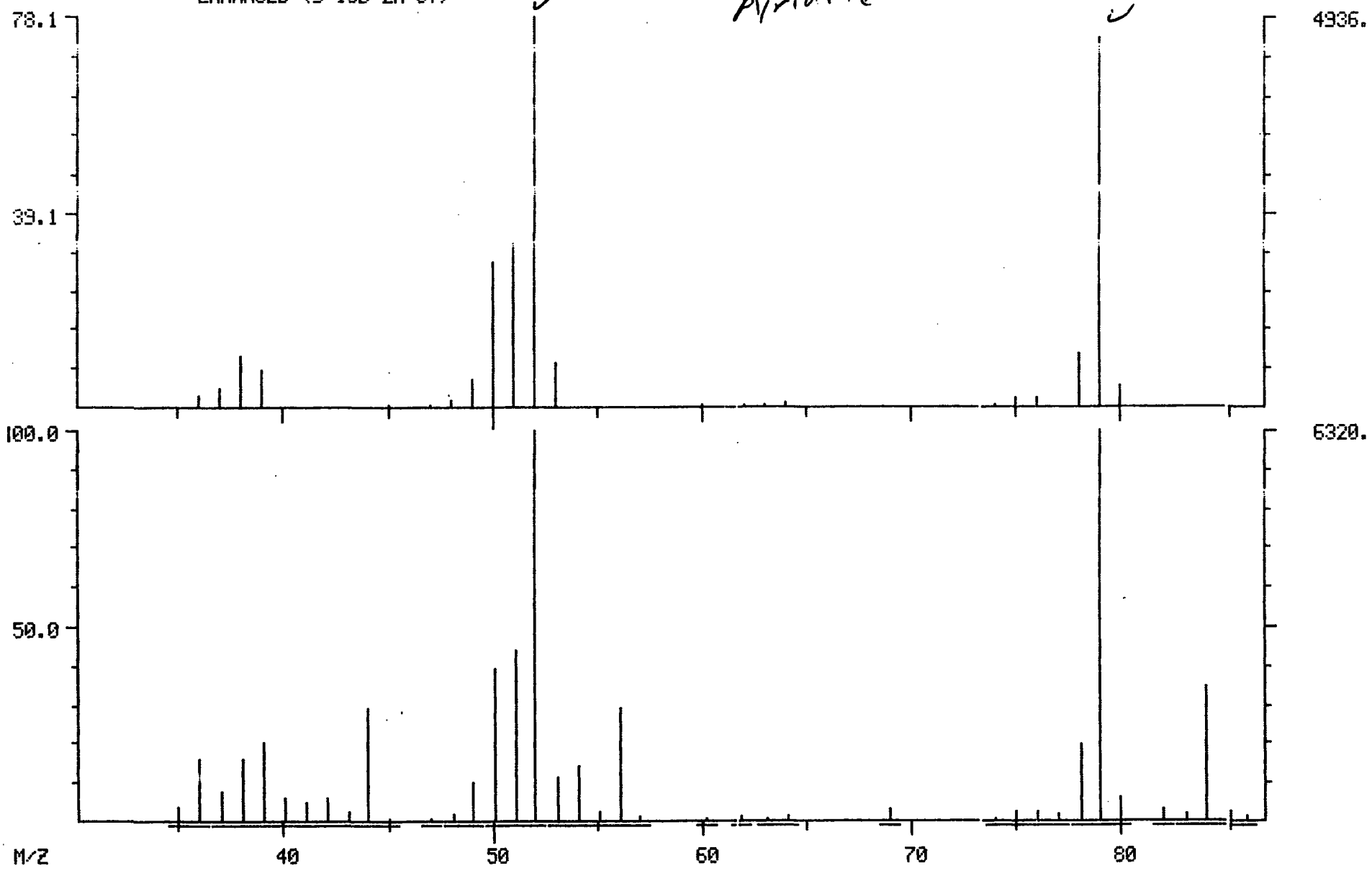
01622

DUAL MASS SPECTRUM
06/03/88 21:28:00 + 3:46
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 58 DEG. C
ENHANCED (S 15B 2N 0T)

MSD

DATA: S59450U5S1 H001 BASE M/Z: 52/ 79
CALI: 060388CU #5 RIC: 17471./ 34751.

pyridine



01623

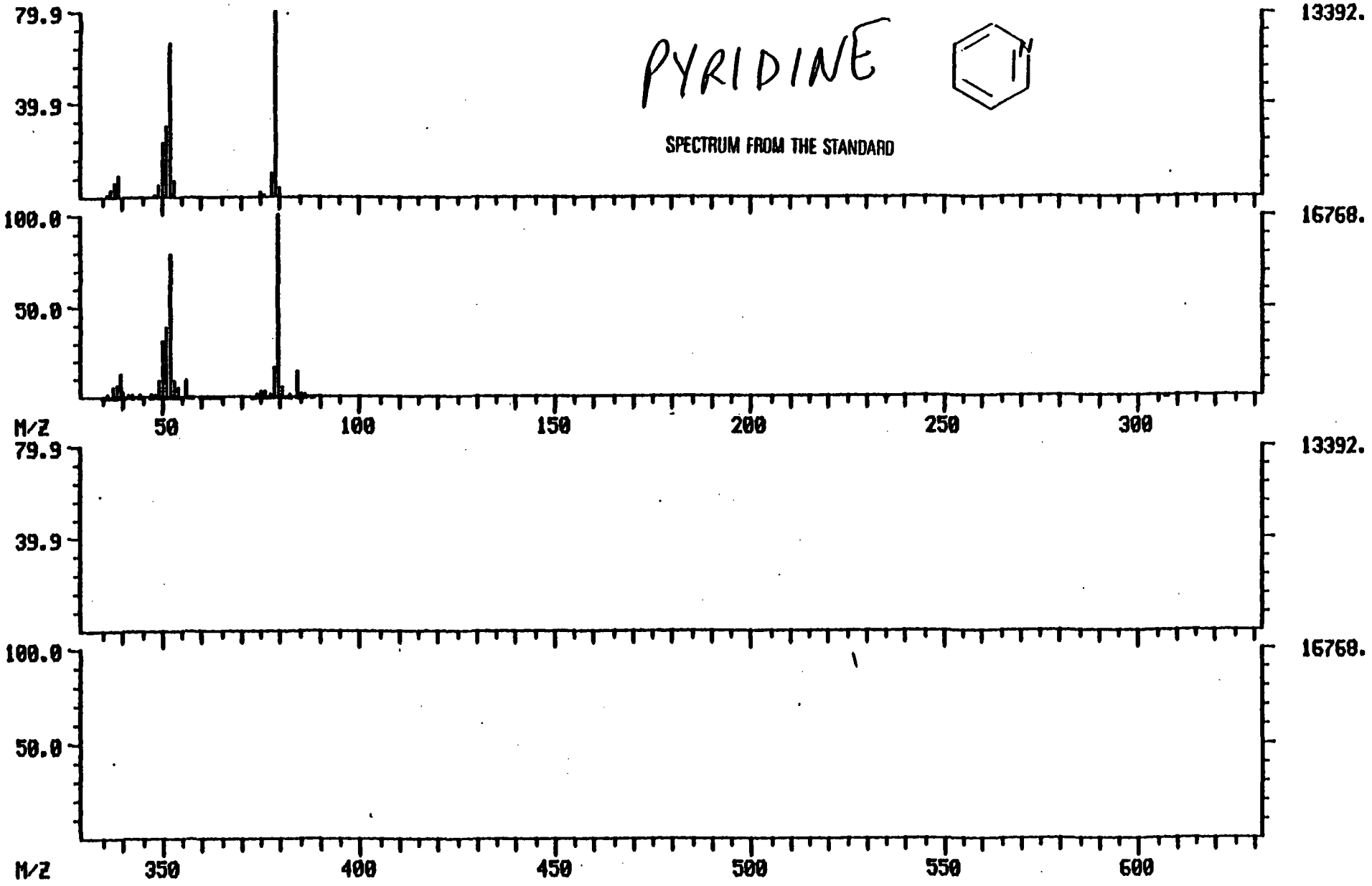
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 4:10
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #334
CALI: 060208CR #5

BASE M/Z: 79/ 79
RIC: 41855./ 60863.

PYRIDINE

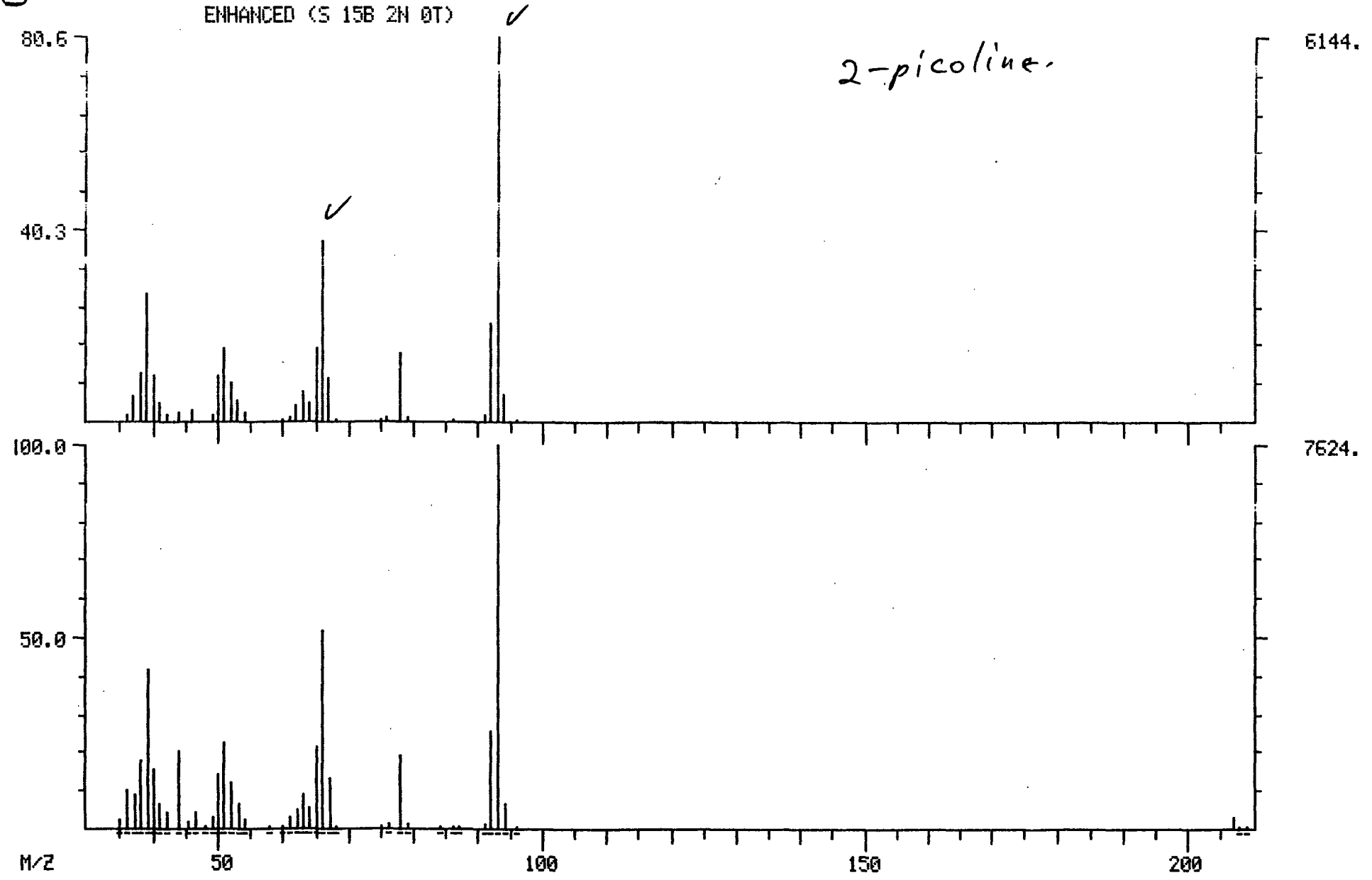
SPECTRUM FROM THE STANDARD



01624

DUAL MASS SPECTRUM
06/03/88 21:28:00 + 4:58
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 70 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U564 #398 BASE M/Z: 93/ 93
CALI: 060388CU #5 RIC: 23391./ 35583.

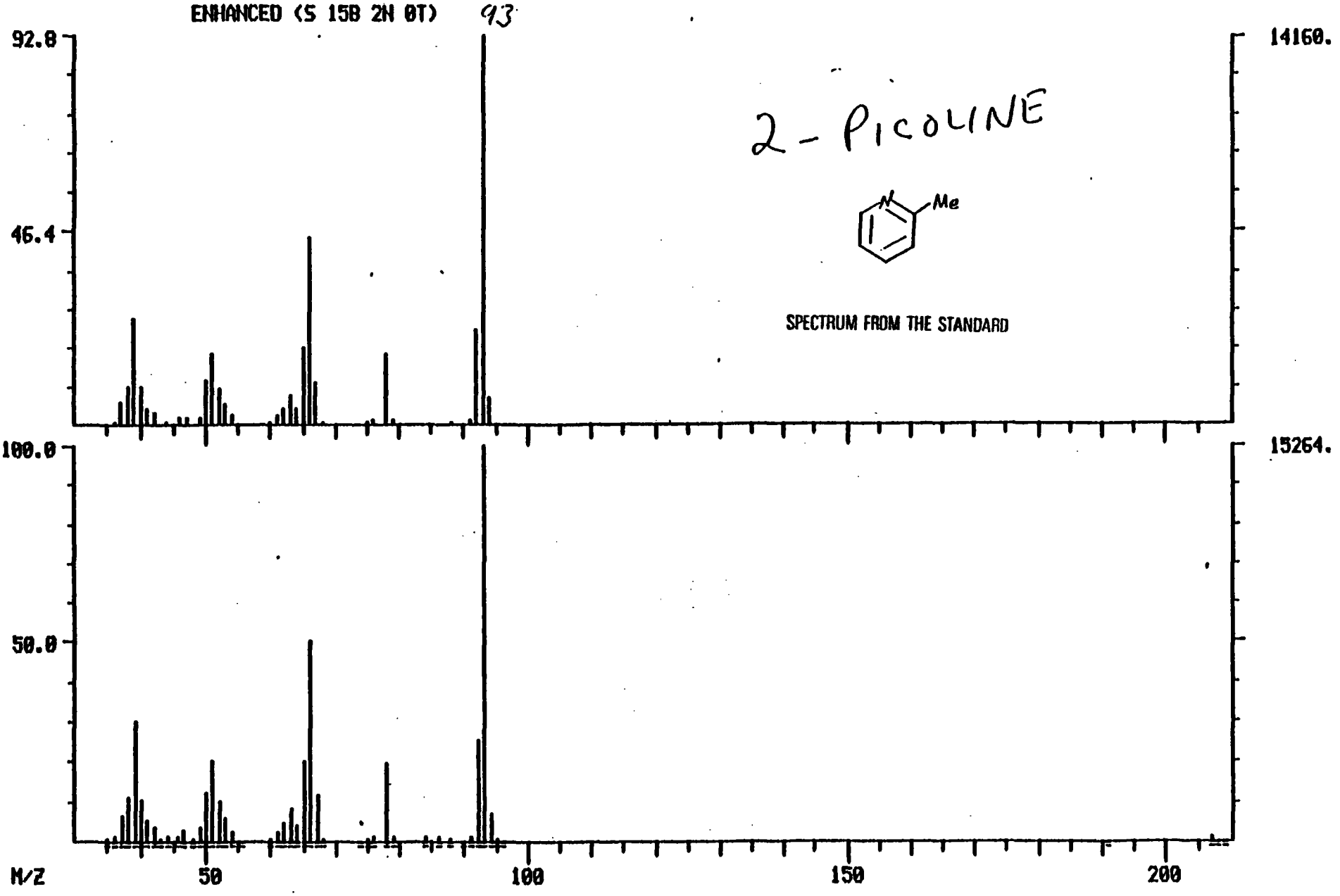


01625

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

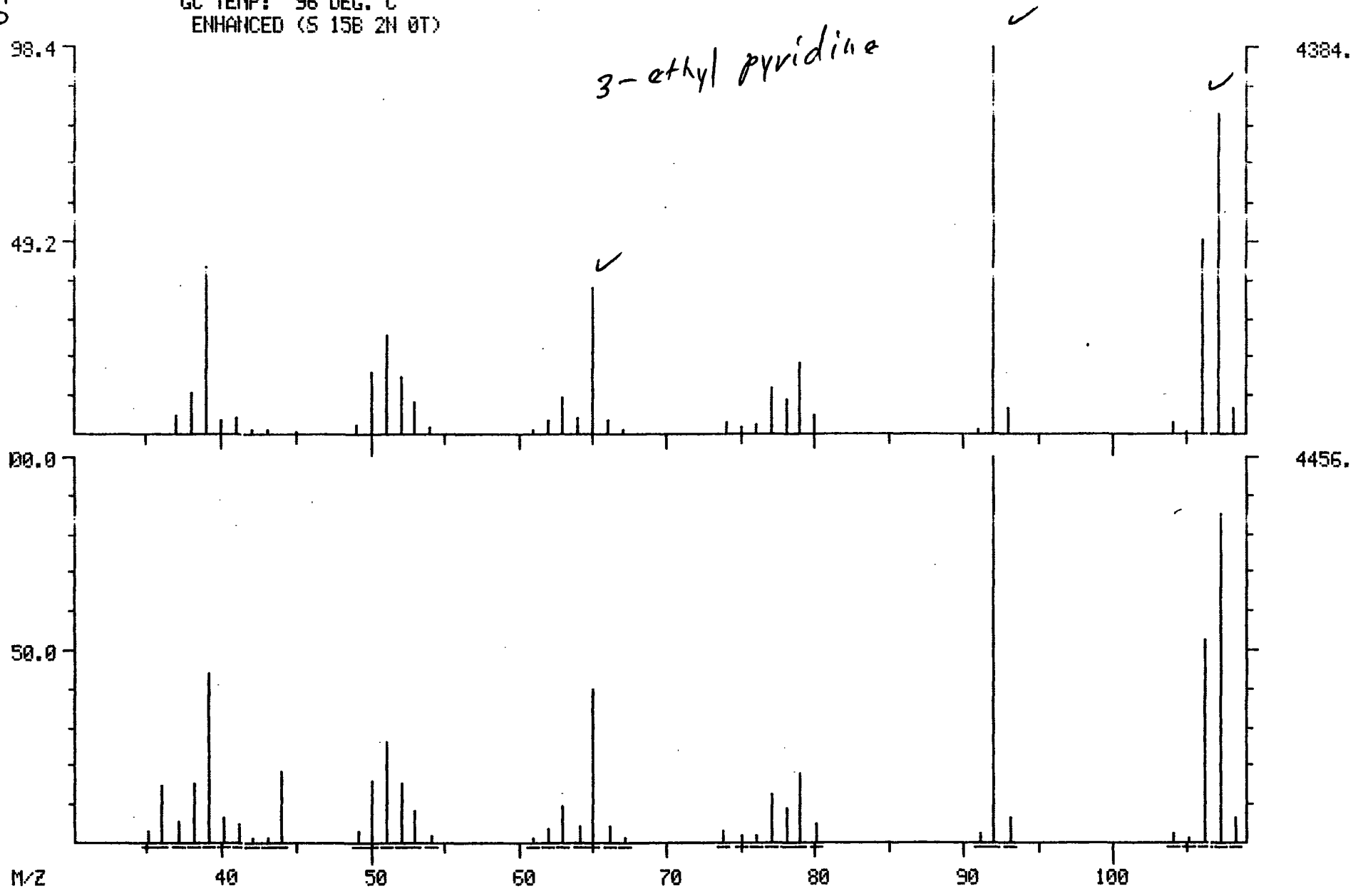
BASE M/Z: 93/ 93
RIC: 52351./ 60095.



01626

DUAL MASS SPECTRUM
06/03/88 21:28:00 + 7:34 MSD
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59150U561 #006 BASE M/Z: 92/ 92
CALI: 060388CU #5 RIC: 21951./ 24703.



016627

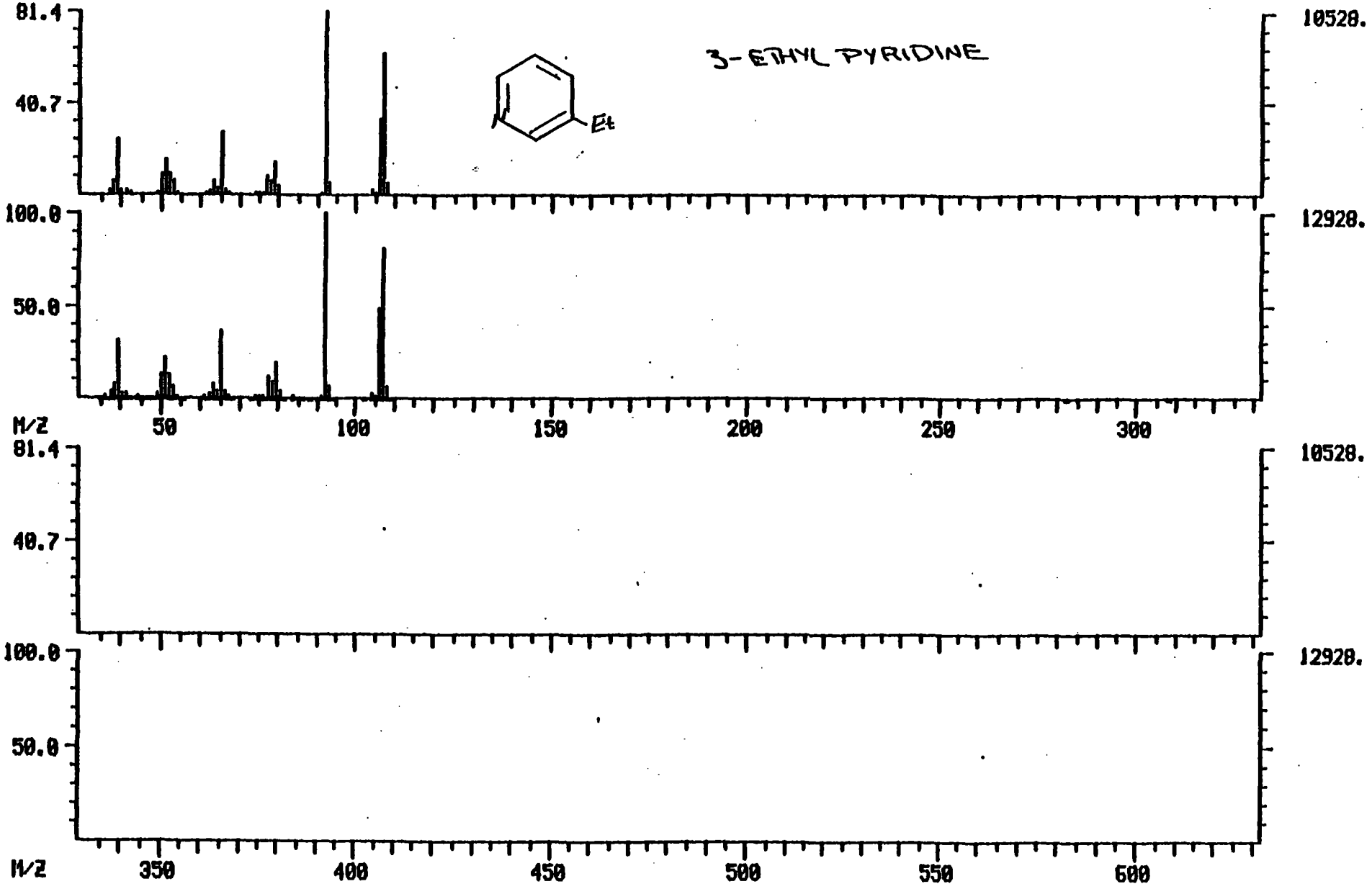
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 7:55
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #634
CALI: 060288CR #5

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

SPECTRUM FROM THE STANDARD

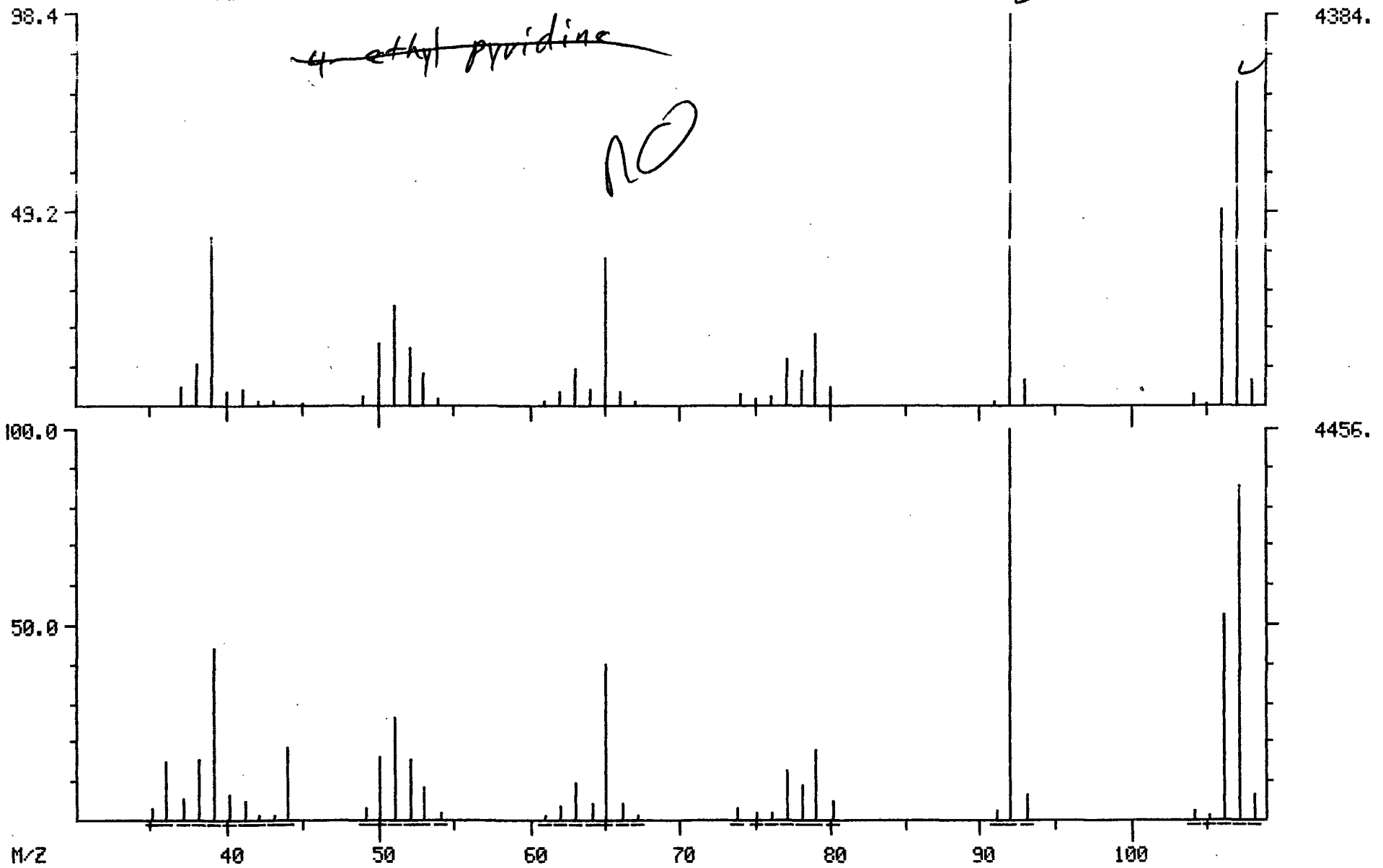
3-ETHYL PYRIDINE



01628

DUAL MASS SPECTRUM
06/03/88 21:28:00 + 7:34 MSD
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 96 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U564 #606 BASE M/Z: 92/ 92
CALI: 060388CU #5 RIC: 21951./ 24703.



~~4-ethyl pyridine~~

NO

01629

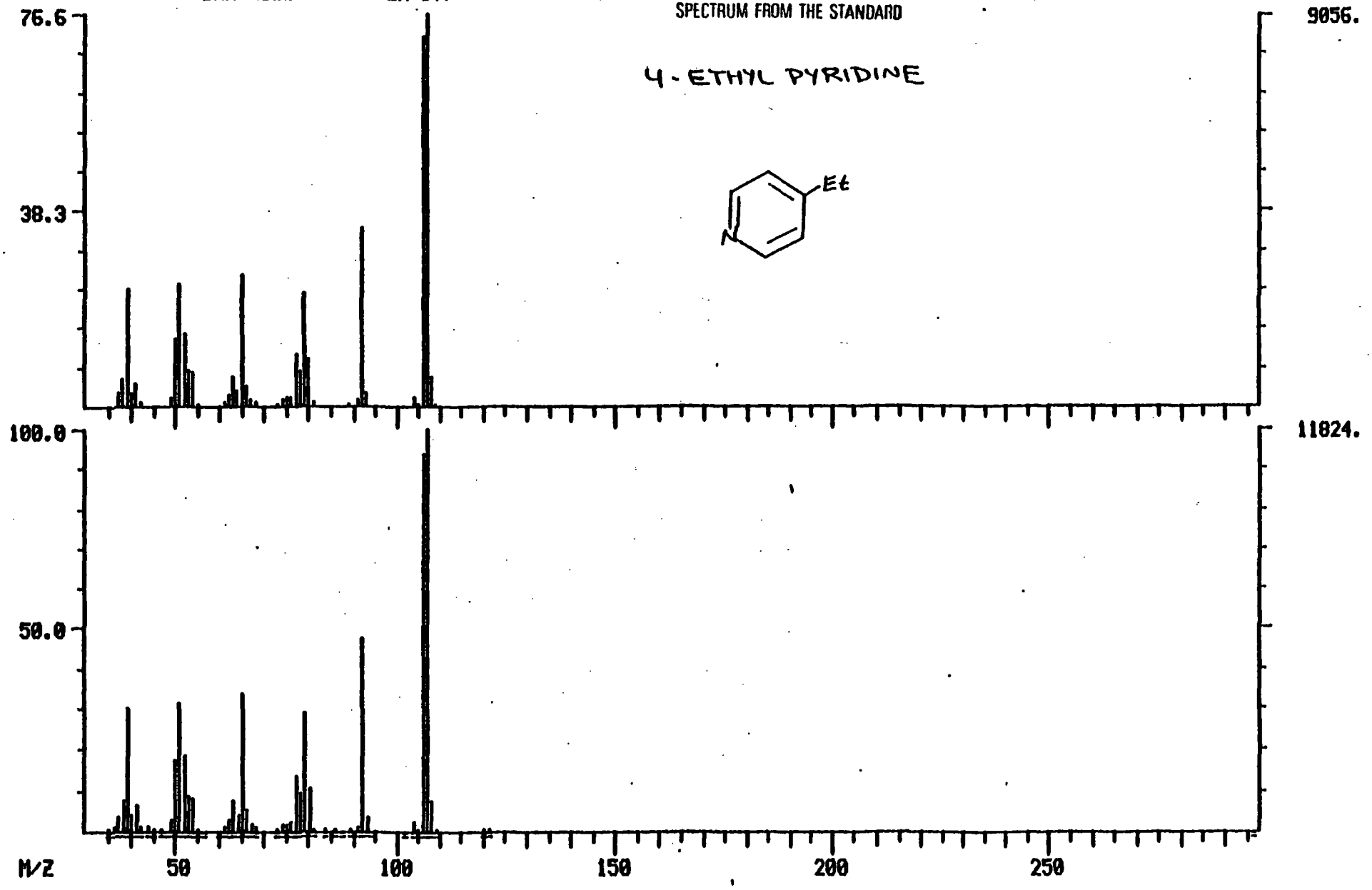
DUAL MASS SPECTRUM
06/02/88 8:33:00 + 8:01
SAMPLE: 50PPM PYRIDINE STD 10/26/87
CONDS.: ST
ENHANCED (S 15B 2N 0T)

DATA: STDR976 #642
CALI: 060288CR #5

BASE M/Z: 107/ 107
RIC: 47679./ 62655.

SPECTRUM FROM THE STANDARD

4-ETHYL PYRIDINE

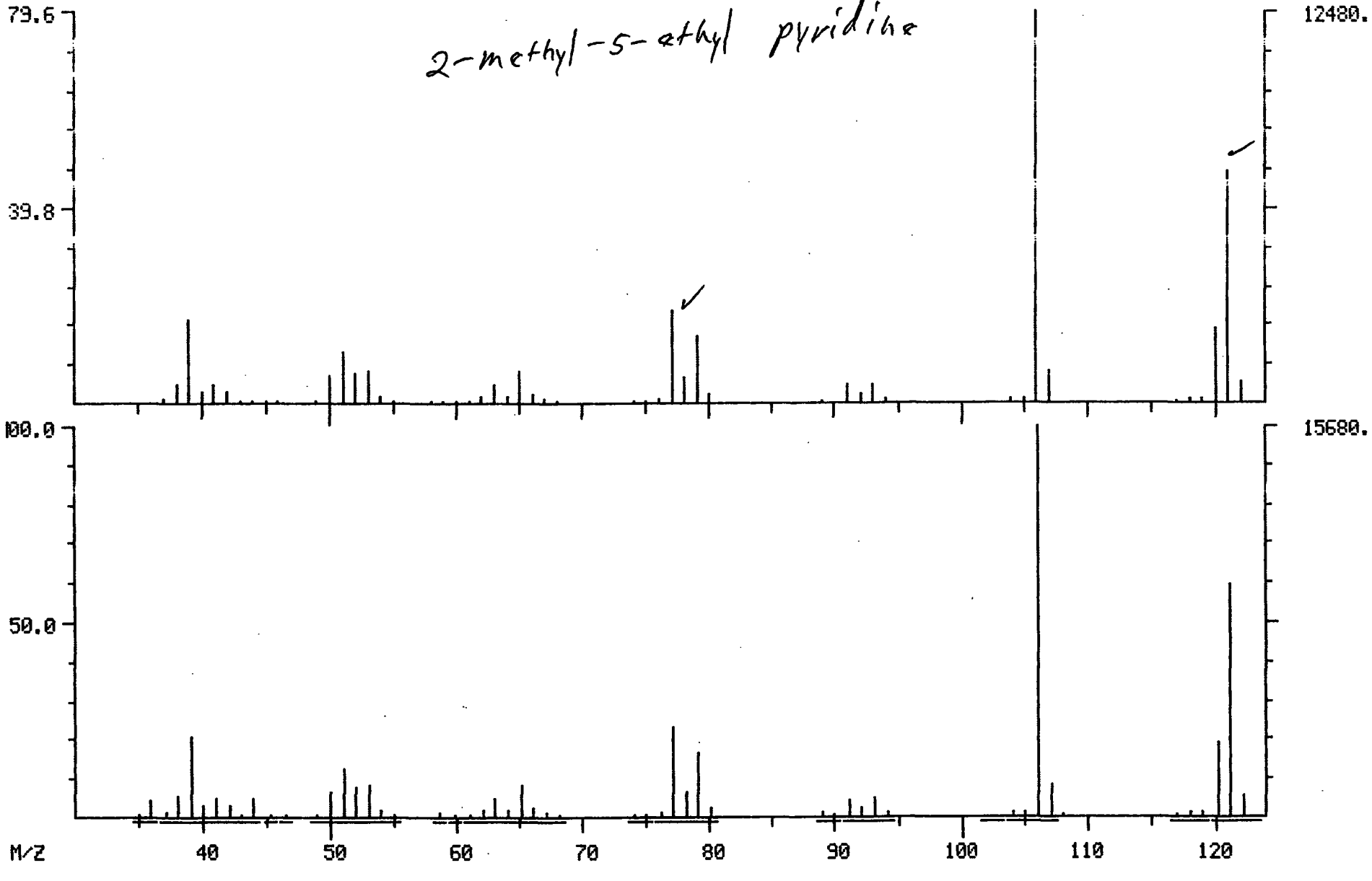


01630

DUAL MASS SPECTRUM
06/03/88 21:28:00 + 8:45 MSD
SAMPLE: CLP,59450,,0270,LOW,WATER,59450-0270 100%/2ML,BNA,EPA
CONDS.:
GC TEMP: 108 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450U5G4 #700 BASE M/Z: 106/ 105
CALI: 060388CU #5 RIC: 45695./ 58751.

2-methyl-5-ethyl pyridine

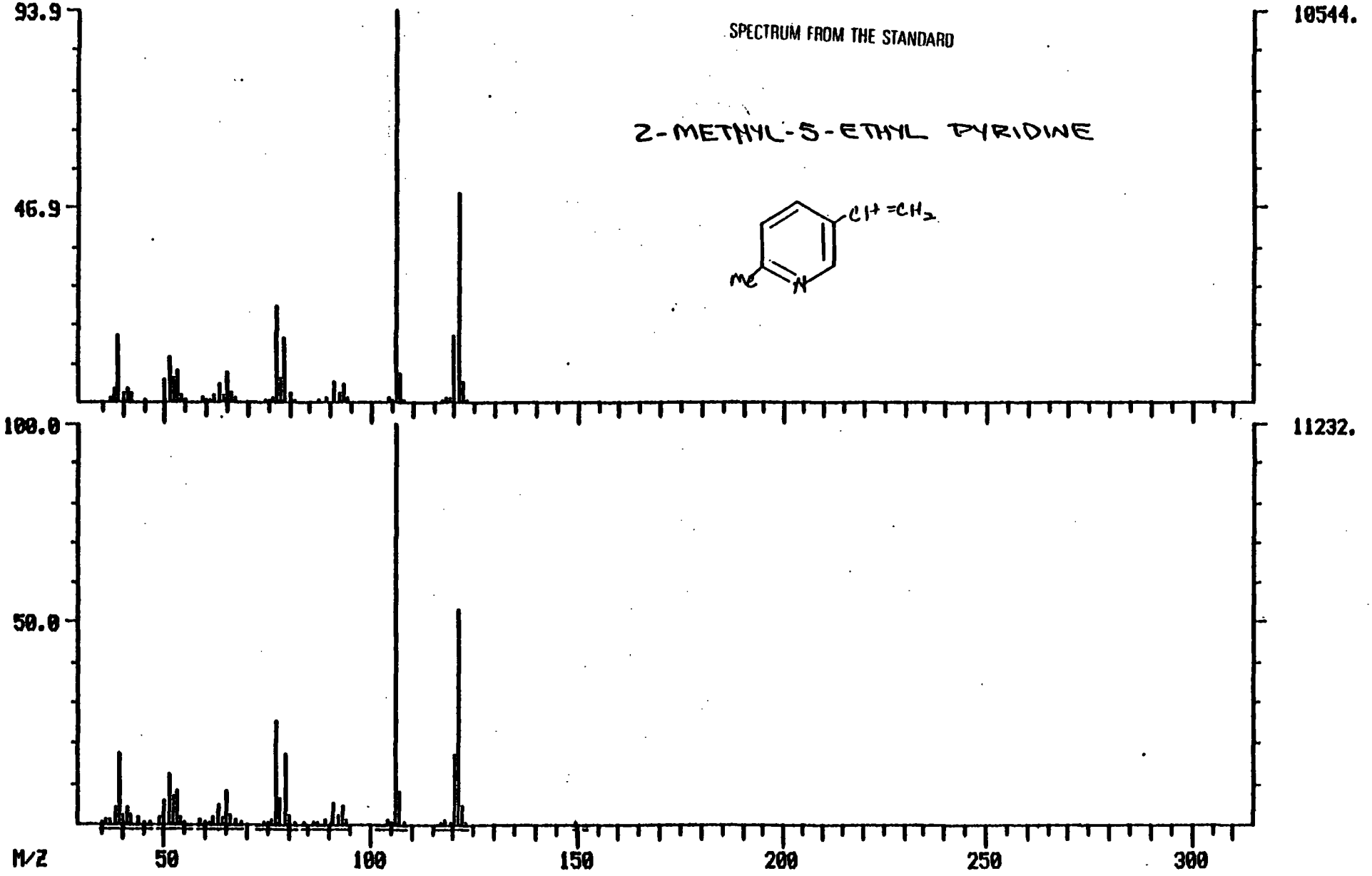


01631

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.



RMAL-GC/MS REILLY TAR & CHEMICAL CO. PROJECT PROCESSING PROGRAM
DATAFILE:3:S59450X898. STARTED : 6/09/88 1:58:38

01632

6/9/88 0:37:56 SCAN 1 OF 3900
Acquisition started

Acquire Run 3:S59450X898 ACQUIRING
06/09/88 0:37:00 + 0:04 Free sectors: 27675 Scan: 8 of 3900
Sample: 59450-0290 (MD) PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No: 59450

********** 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 : 300 DegC

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

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

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

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

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

6/9/88 1:06:21 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

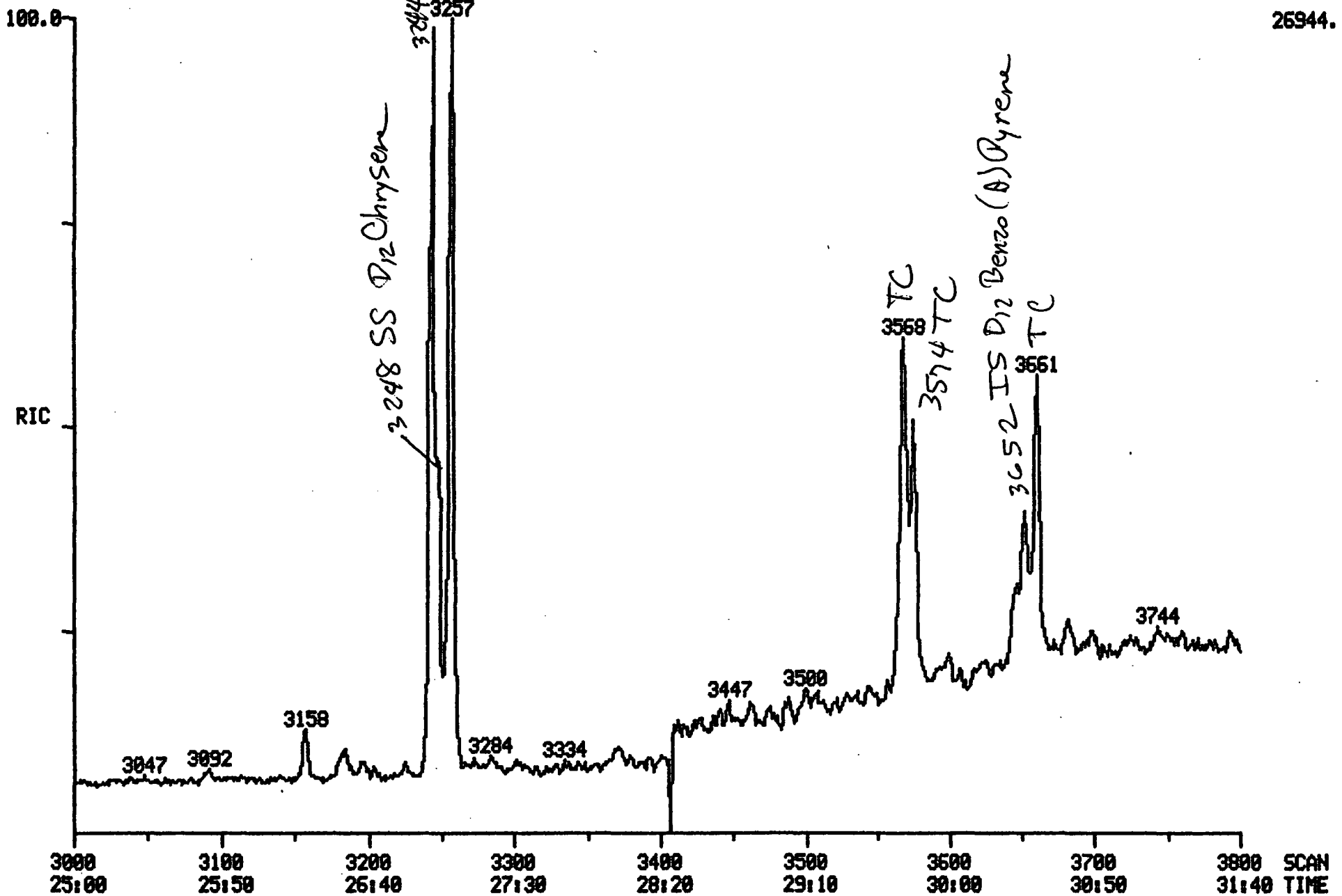
6/9/88 1:10:30
ACQUISITION COMPLETED
SCANS 1 TO 3406 Centroid
SCAN 3407 Suspended
SCANS 3408 TO 3900 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec

01633

MIDRIC
06/09/88 0:37:00
SAMPLE: 59450-0290 PAH H2O SPIKE 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: S59450X898 #1 SCANS 3000 TO 3800
CALI: 060888CX #2



Quantitation Report File: S59450X898

01634

Data: S59450X898.TI
06/09/88 0:37:00
Sample: 59450-0290 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59450

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

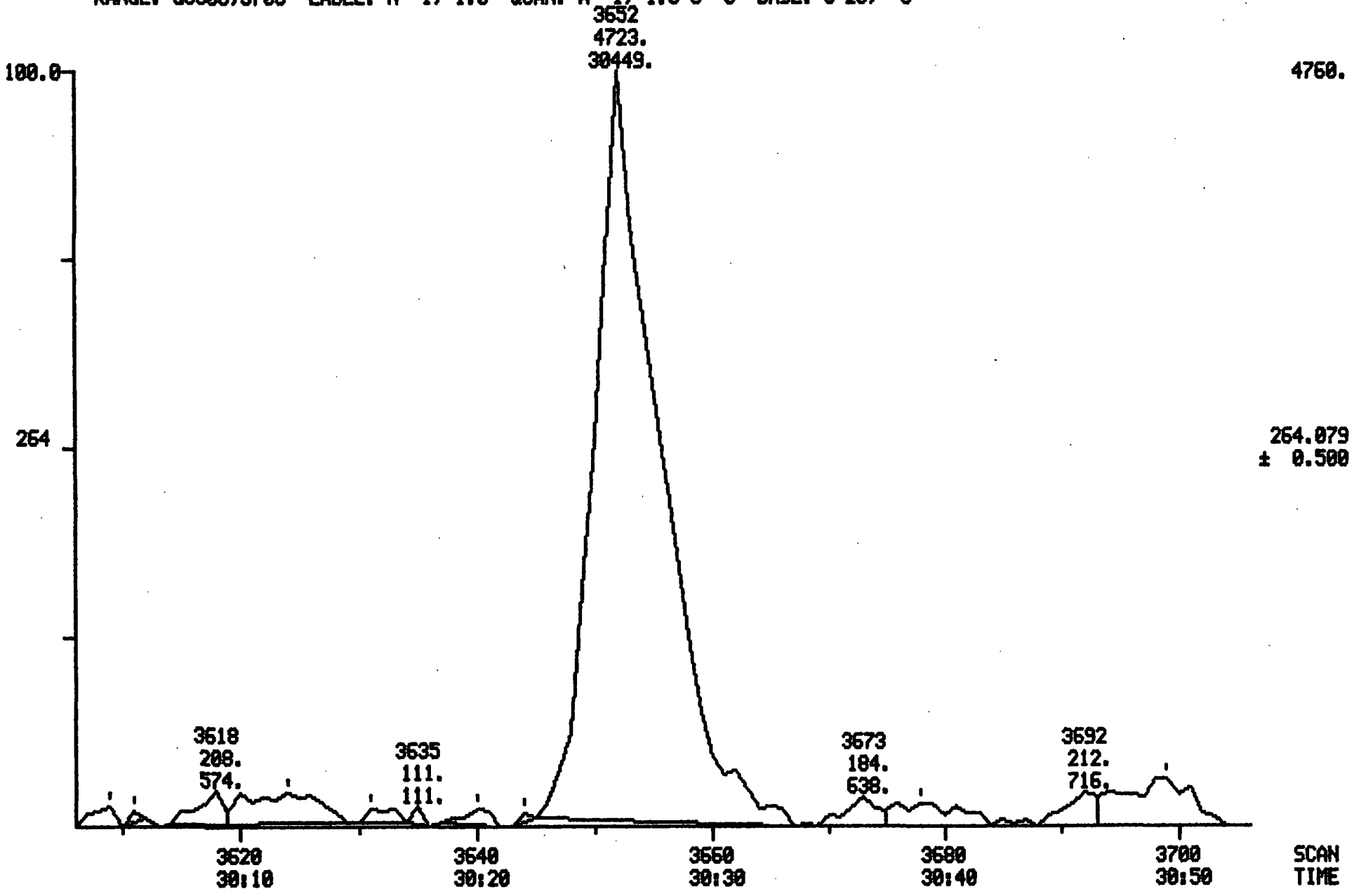
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3652	30:26	1	1.000	A BB	30449.	80.000	NG/ML	6.41
2	240	3248	27:04	1	0.889	A BV	30486.	52.426	NG/ML	4.20
3	228	3244	27:02	1	0.888	A BV	88486.	158.199	NG/ML	12.68
4	226	3244	27:02	1	0.888	A BV	22072.	169.389	NG/ML	13.57
5	228	3257	27:08	1	0.892	A VB	83811.	149.884	NG/ML	12.01
6	226	3257	27:08	1	0.892	A VB	21861.	148.264	NG/ML	11.88
7	252	3568	29:44	1	0.977	A BV	58234.	121.925	NG/ML	9.77
8	250	3568	29:44	1	0.977	A BV	12042.	82.888	NG/ML	6.64
9	252	3568	29:44	1	0.977	A BV	58234.	75.754	NG/ML	6.07
10	250	3568	29:44	1	0.977	A BV	12042.	82.888	NG/ML	6.64
11	252	3587	29:53	1	0.982	A BB	15.	0.026	NG/ML	0.00
12	250	3594	29:57	1	0.984	A BV	1176.	9.349	NG/ML	0.75
13	252	3661	30:30	1	1.002	A VB	33638.	63.627	NG/ML	5.10
14	250	3661	30:30	1	1.002	A BB	6888.	53.289	NG/ML	4.27

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:04	1.00	0.888	1.00	52.43	80.00	1.001	1.528	0.66
3	27:01	1.00	0.887	1.00	158.20	80.00	2.906	1.470	1.98
4	27:01	1.00	0.887	1.00	169.39	80.00	0.725	0.342	2.12
5	27:09	1.00	0.891	1.00	149.88	80.00	2.753	1.469	1.87
6	27:09	1.00	0.891	1.00	148.26	80.00	0.718	0.387	1.85
7	29:43	1.00	0.975	1.00	121.92	80.00	1.913	1.255	1.52
8	29:47	1.00	0.978	1.00	82.89	80.00	0.395	0.382	1.04
9	29:47	1.00	0.978	1.00	75.75	80.00	1.913	2.020	0.95
10	29:47	1.00	0.978	1.00	82.89	80.00	0.395	0.382	1.04
11	29:41	1.01	0.982	1.00	0.03	80.00	0.000	1.496	0.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	29:41	1.01	0.982	1.00	9.35	80.00	0.039	0.330	0.12
13	30:30	1.00	1.001	1.00	63.63	80.00	1.105	1.389	0.80
14	30:30	1.00	1.001	1.00	53.29	80.00	0.226	0.340	0.67

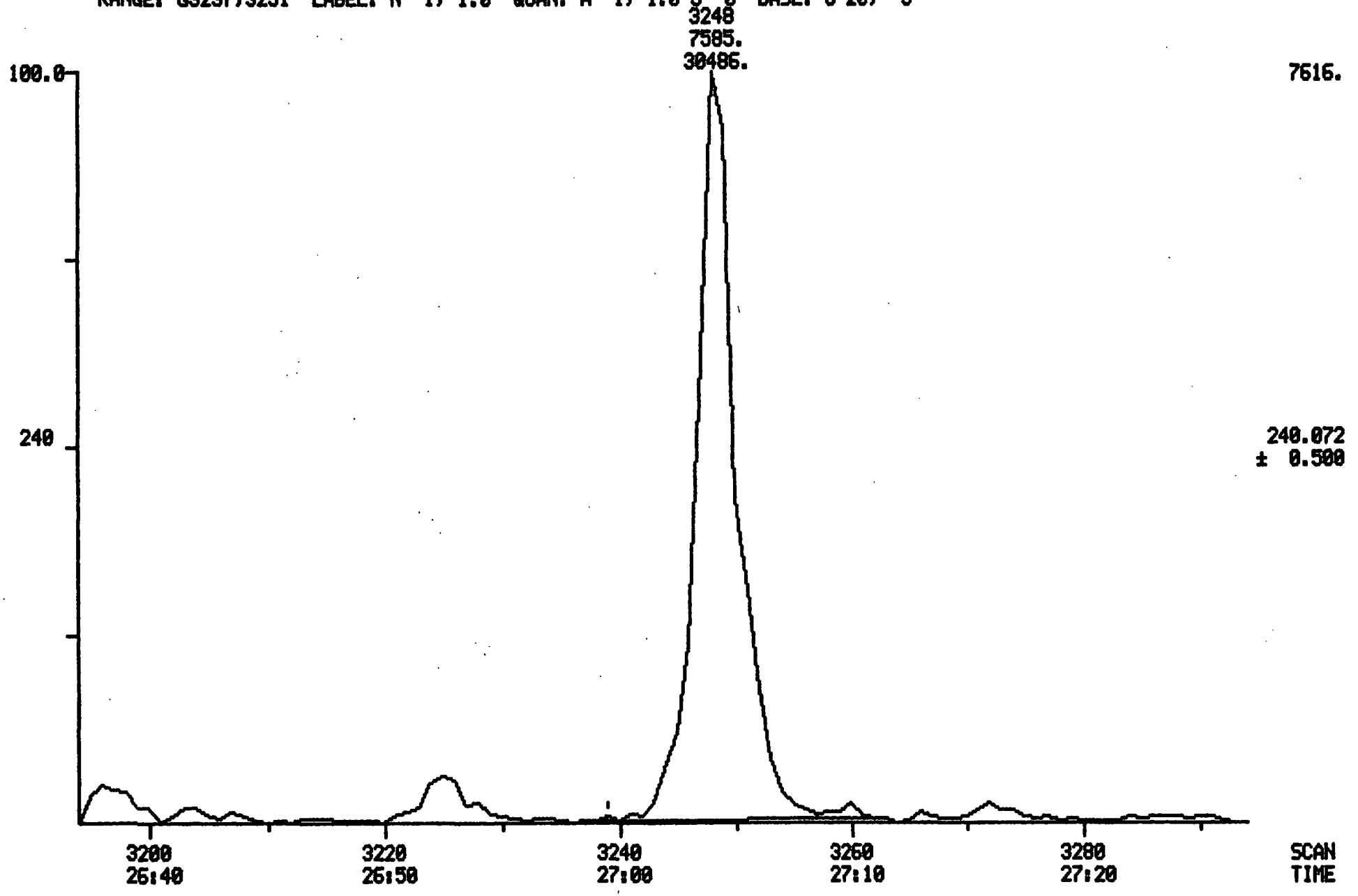
01636

MIDMASS CHROMATOGRAM DATA: S59450X898 #3656 SCANS 3606 TO 3706
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-BENZO(A)PYRENE 264IPH# 01
RANGE: G3606,3706 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



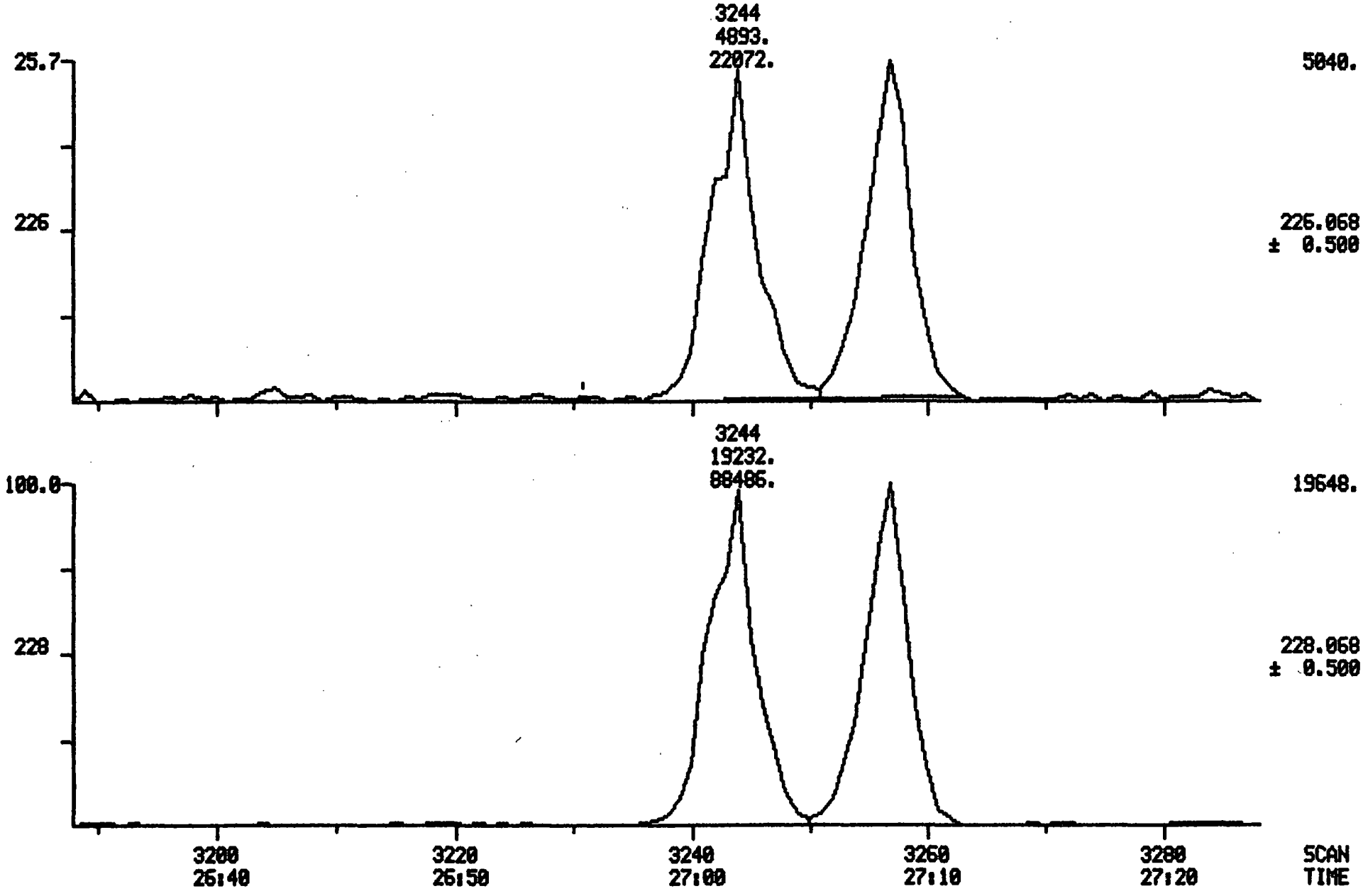
016637

MIDMASS CHROMATOGRAM DATA: S59450X898 #3244 SCANS 3194 TO 3294
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
D12-CHRYSENE 240SPH# 02
RANGE: G3237,3251 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



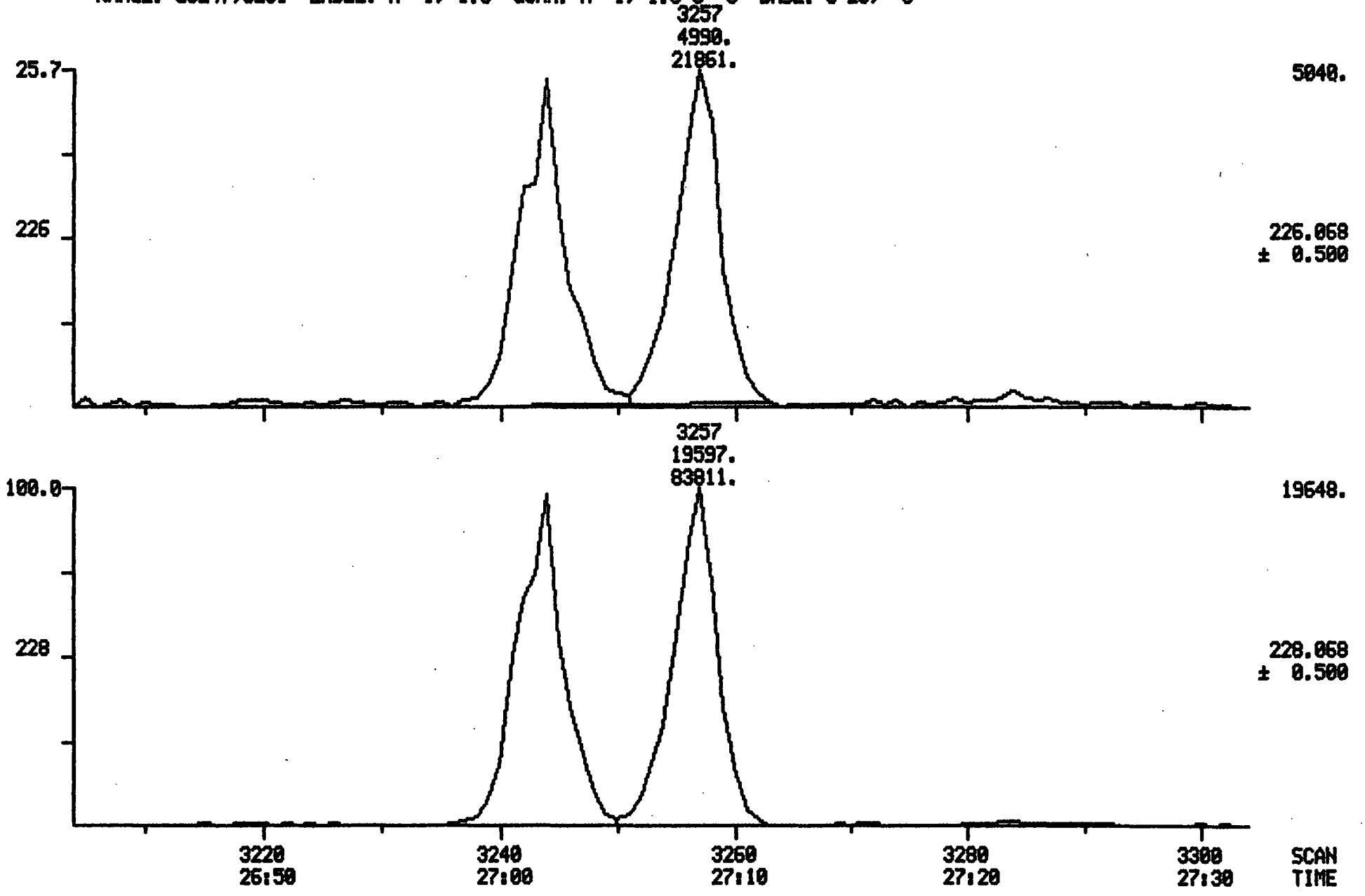
01638

MIDMASS CHROMATOGRAMS DATA: S59450X898 #3238 SCANS 3188 TO 3288
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)ANTHRACENE 228 PH# 03
RANGE: G3231,3245 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



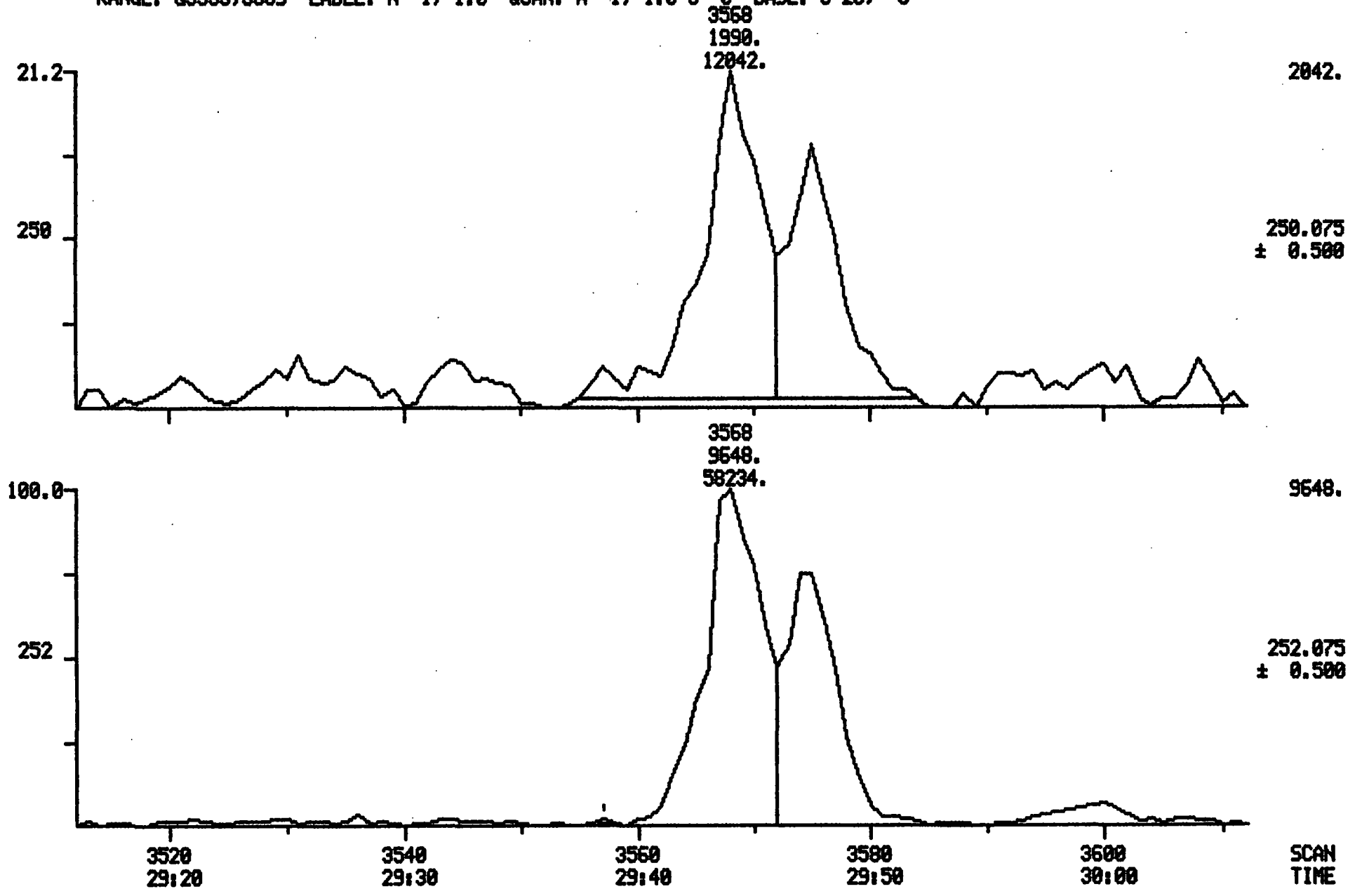
01639

MIDMASS CHROMATOGRAMS DATA: S59450X898 #3254 SCANS 3204 TO 3304
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
CHRYSENE 228 PH# 05
RANGE: G3247,3261 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



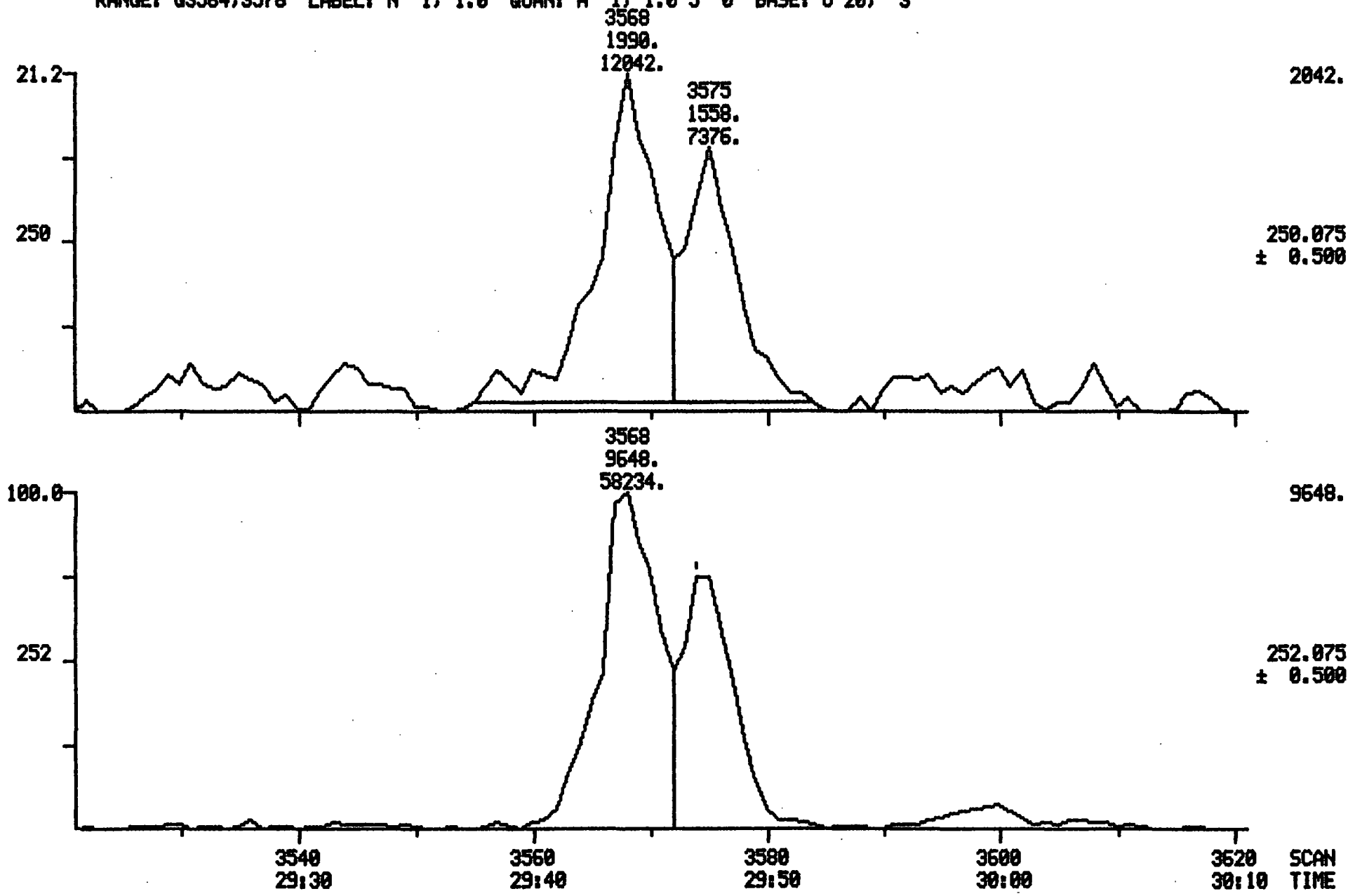
01640

MIDMASS CHROMATOGRAMS DATA: S59450X898 #3562 SCANS 3512 TO 3612
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(B)FLUORANTHENE 252 PH# 07
RANGE: G3555,3569 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



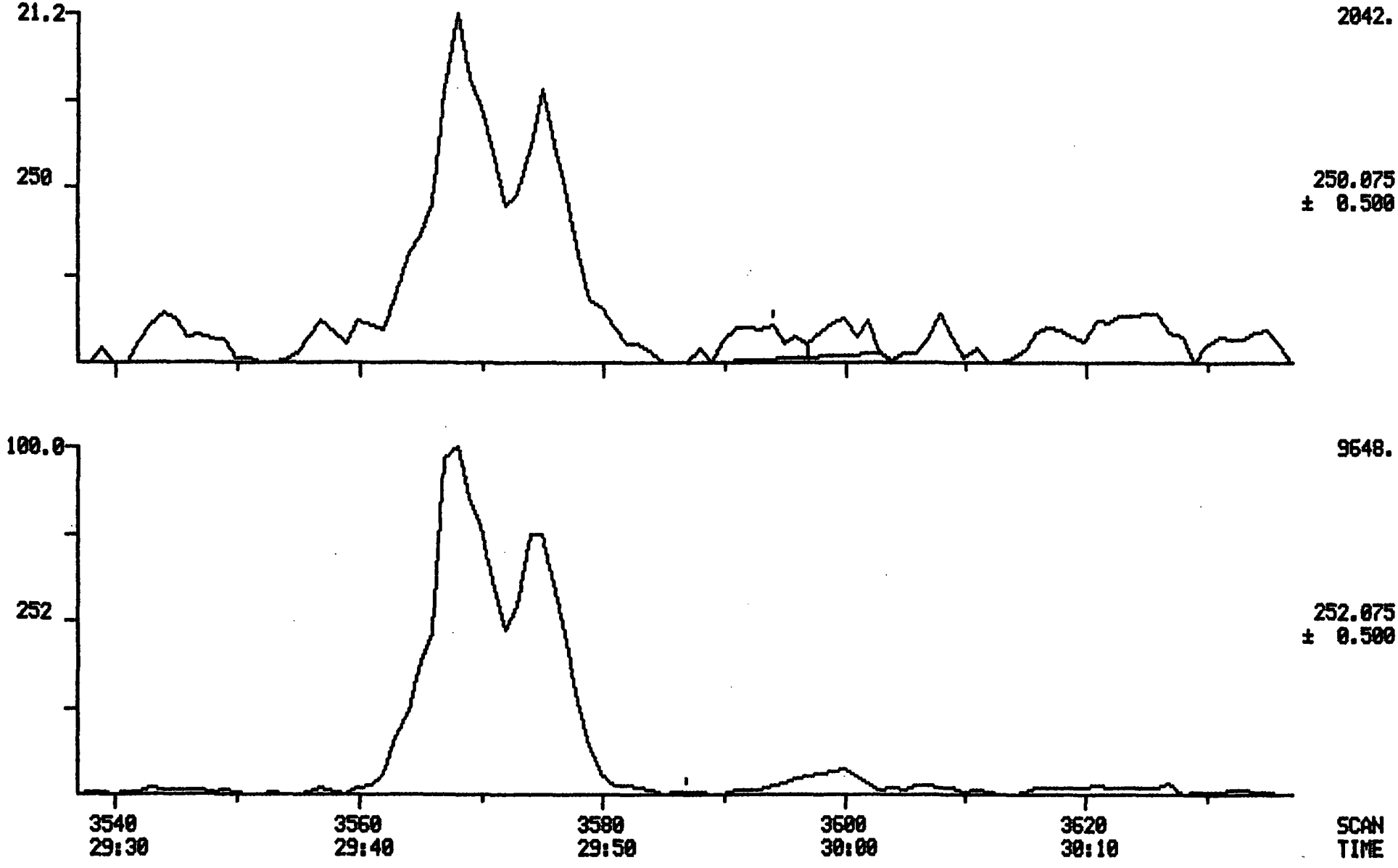
01641

MIDMASS CHROMATOGRAMS DATA: 559450X898 #3571 SCANS 3521 TO 3621
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(K)FLUORANTHENE 252 PH# 09
RANGE: G3564,3578 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



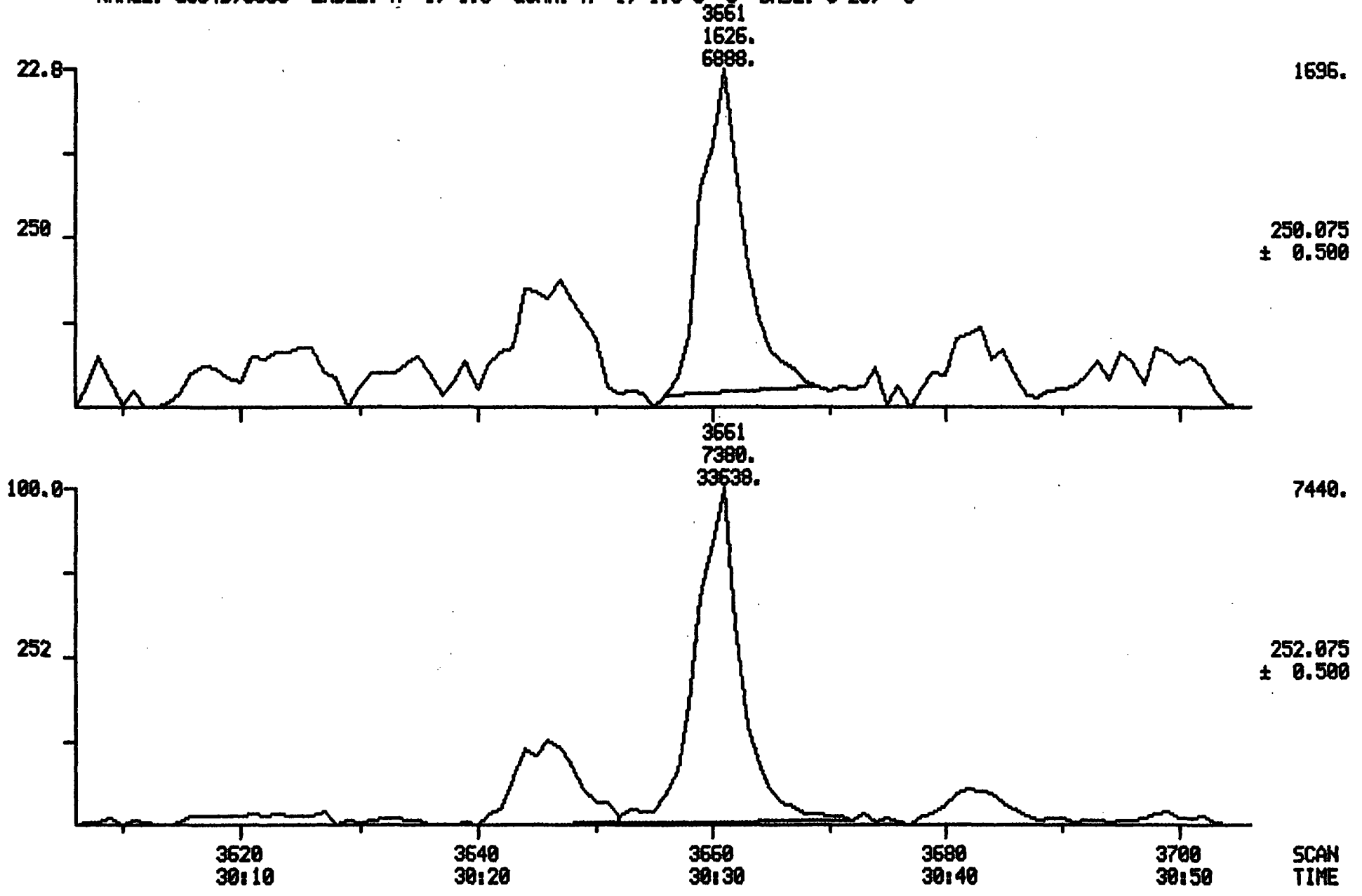
01642

MIDMASS CHROMATOGRAMS DATA: S59450X898 #3587 SCANS 3537 TO 3637
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(J)FLUORANTHENE 252 PH# 11
RANGE: G3580,3594 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



01643

MIDMASS CHROMATOGRAMS DATA: S59450X898 #3656 SCANS 3606 TO 3706
06/09/88 0:37:00 CALI: 060888CX #2
SAMPLE: 59450-0290 PAH H2O SPIKE 100%/0.5ML
CONDS.: 2 UL AUTO INJ
BENZO(A)PYRENE 252 PH# 13
RANGE: G3649,3663 LABEL: N 1, 1.0 QUAN: A 1, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: S59450X898

01644

Data: S59450X898.TI
06/09/88 0:37:00
Sample: 59450-0290 PAH H2O SPIKE 100%/0.5ML
Conds.: 2 UL AUTO INJ
Formula: Instrument: 4500 Weight: 80.000
Submitted by: RMAL Analyst: JGG Acct. No.: 59450

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(J)FLUORANTHENE	250 PH# 12
10	BENZO(A)PYRENE	252 PH# 13
11	BENZO(A)PYRENE	250 PH# 14
12	BENZO(K)FLUORANTHENE	252 PH# 09
13	BENZO(K)FLUORANTHENE	250 PH# 10

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	264	3652	30:26	1	1.000	A BB	30449.	80.000	NG/ML	6.58
2	240	3248	27:04	1	0.889	A BV	30486.	52.426	NG/ML	4.31
3	228	3244	27:02	1	0.888	A BV	88486.	✓158.199	NG/ML	13.01
4	226	3244	27:02	1	0.888	A BV	22072.	169.389	NG/ML	13.93
5	228	3257	27:08	1	0.892	A VB	83811.	✓149.884	NG/ML	12.33
6	226	3257	27:08	1	0.892	A VB	21861.	148.264	NG/ML	12.19
7	252	3568	29:44	1	0.977	A BV	58234.	✓121.925	NG/ML	10.03
8	250	3568	29:44	1	0.977	A BV	12042.	107.904	NG/ML	8.87
9	250	3594	29:57	1	0.984	A BV	1176.	9.349	NG/ML	0.77
10	252	3661	30:30	1	1.002	A VB	33638.	✓63.627	NG/ML	5.23
11	250	3661	30:30	1	1.002	A BB	6888.	53.289	NG/ML	4.38
12	252	3574	29:47	1	0.979	M XX	38675.	✓50.311	NG/ML	4.14
13	250	3575	29:47	1	0.979	M XX	7484.	51.511	NG/ML	4.24

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	30:28	1.00	1.000	1.00	80.00	80.00	1.000	1.000	1.00
2	27:04	1.00	0.888	1.00	52.43	80.00	1.001	1.528	0.66
3	27:01	1.00	0.887	1.00	158.20	80.00	2.906	1.470	1.98
4	27:01	1.00	0.887	1.00	169.39	80.00	0.725	0.342	2.12
5	27:09	1.00	0.891	1.00	149.88	80.00	2.753	1.469	1.87
6	27:09	1.00	0.891	1.00	148.26	80.00	0.718	0.387	1.85
7	29:43	1.00	0.975	1.00	121.92	80.00	1.913	1.255	1.52
8	29:43	1.00	0.976	1.00	107.90	80.00	0.395	0.293	1.35
9	29:41	1.01	0.982	1.00	9.35	80.00	0.039	0.330	0.12
10	30:30	1.00	1.001	1.00	63.63	80.00	1.105	1.389	0.80
11	30:30	1.00	1.001	1.00	53.29	80.00	0.226	0.340	0.67
12	29:47	1.00	0.978	1.00	50.31	80.00	1.270	2.020	0.63
13	29:47	1.00	0.978	1.00	51.51	80.00	0.246	0.382	0.64

 59450-02MSD

20% 01645

COLUMN 1: J:AB14016
COLUMN 2: J:BB14016

05/23/8

UNITS ON AMOUNT: ug/m

LIBRARY ENTRY	COMPONENT NAME	COLUMN 1 AMOUNT	COLUMN 1 %DIFF RT	COLUMN 2 AMOUNT	COLUMN 2 %DIFF RT	COLUMN AVERAGE
002	LINDANE	.0010	.0	.0006	.0	NA
005	HEPTACHLOR	.0026	.0	.0018	.0	NA
006	ALDRIN	.0022	.0	.0024	.0	.0023
011	p,p'-DDE	.0206	1.1	.0026	.0	NA
012	DIELDRIN	.0095	.2	.0035	.2	NA
013	ENDRIN	.0074	.4	.0099	.0	NA
018	p,p'-DDT	.0015	.0	.0016	.1	.001
047	DBC (surrogate)	.0097	.4	.0084	.1	NA
051	HEPTACHLOR IN TC	.0609	.0	.0692	.0	NA

Lindane

A) $\frac{22.5}{79.5}(0.0035\ ug/ml) = 0.000990\ ug/ml$ → $\frac{0.0008235}{.004}(100\%) = 21\%$

B) $\frac{20.0}{85.0}(0.0035\ ug/ml) = 0.0008235\ ug/ml$

Heptachlor

A)
B)

B) $\frac{0.0018\ ug/ml}{0.004\ ug/ml}(100\%) = 45\%$

Aldrin

A) $\frac{26.0}{91.0}(0.0075\ ug/ml) = 0.002143\ ug/ml$ → $\frac{.001909}{.004}(100\%) = 48\%$

B) $\frac{28.0}{110.0}(0.0075\ ug/ml) = 0.001909\ ug/ml$

Dieldrin

A) $\frac{65.5}{49.6}(0.0075\ ug/ml) = 0.01003\ ug/ml$ → $\frac{0.006600}{.01}(100\%) = 66\%$

B) $\frac{44.0}{50.0}(0.0075\ ug/ml) = 0.006600\ ug/ml$

Endrin

A) $\frac{28.5}{44.0}(0.015\ ug/ml) = 0.009716\ ug/ml$ → $\frac{.009688}{.01}(100\%) = 97\%$

B) $\frac{31.0}{48.0}(0.015\ ug/ml) = 0.009688\ ug/ml$

P,P'-DDT

A) $\frac{6.0}{61.0}(0.025\ ug/ml) = 0.002459\ ug/ml$ → $\frac{.001623}{.01}(100) = 16\%$

B) $\frac{5.0}{77.0}(0.025\ ug/ml) = 0.001623\ ug/ml$

DBC

A) $\frac{14.5}{27.5}(100\%) = 53\%$

B) $\frac{7.5}{25.5}(100\%) = 29\%$

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

 59450 - 02MSD

01646

RESULT FILE: J:AB14016 05/23/88 LIBRARY: L:DR101

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNIT
002	LINDANE	1.967	1.967	7	12298	.0010	ug/
005	HEPTACHLOR	3.267	3.267	9	40580	.0026	ug/
006	ALDRIN	4.100	4.100	11	22652	.0022	ug/
011	p,p'-DDE	7.583	7.500	12	112204	.0206	ug/
012	DIELDRIN	7.483	7.500	12	112204	.0095	ug/
013	ENDRIN	8.400	8.367	13	44968	.0074	ug/
015	ENDOSULFAN-B	8.567	8.367	13	44968	.0057	ug/
018	p,p'-DDT	12.767	12.767	14	12928	.0015	ug/
022	TOXAPHENE (peak 3)	12.467	12.767	14	12928	.0277	ug/m
033	AROCLOR 1248(peak 2)	4.050	4.100	11	22652	.1585	ug/
047	DBC (surrogate)	26.800	26.700	15	108248	.0097	ug/
051	HEPTACHLOR IN TC	3.267	3.267	9	40580	.0609	ug/

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

 59450-02MSD

01647

RESULT FILE: J:BB14016 05/23/88 LIBRARY: L:DRMIX

LIB ENT	COMPONENT NAME	RETENTION TIME EXPECTED	RETENTION TIME MEASURED	PEAK NUMB	PEAK AREA	AMOUNT	UNI
002	LINDANE	1.850	1.850	7	20398	.0006	ug/
005	HEPTACHLOR	2.300	2.300	8	78634	.0018	ug/
006	ALDRIN	2.800	2.800	10	50285	.0024	ug/
011	p,p'-DDE	6.483	6.483	14	52934	.0026	ug/
012	DIELDRIN	6.833	6.850	15	101361	.0035	ug/
013	ENDRIN	8.350	8.350	16	157392	.0099	ug/
018	p,p'-DDT	12.267	12.283	17	36458	.0016	ug/
020	TOXAPHENE (peak 1)	6.850	6.850	15	101361	.2730	ug/
023	AROCLOR 1016(peak 1)	1.300	1.350	4	834	.0016	ug/m
024	AROCLOR 1016(peak 2)	1.700	1.733	6	1368	.0014	ug/m
025	AROCLOR 1016(peak 3)	2.267	2.300	8	78634	.0440	ug/
028	AROCLOR 1232(peak 2)	2.267	2.300	8	78634	.1004	ug/
030	AROCLOR 1242(peak 2)	1.700	1.733	6	1368	.0017	ug/
031	AROCLOR 1242(peak 3)	2.267	2.300	8	78634	.0560	ug/
032	AROCLOR 1248(peak 1)	2.267	2.300	8	78634	.0627	ug/
035	AROCLOR 1254(peak 1)	4.567	4.600	12	1962	.0019	ug/
036	AROCLOR 1254(peak 2)	5.150	5.133	13	2379	.0014	ug/
037	AROCLOR 1254(peak 3)	7.067	6.850	15	101361	.0841	ug/
038	AROCLOR 1254(peak 4)	8.167	8.350	16	157392	.0927	ug/
044	AROCLOR 1260(peak 5)	11.950	12.283	17	36458	.0217	ug/
047	DBC (surrogate)	22.817	22.850	19	103510	.0084	ug/
048	ENDRIN KETONE	22.833	22.850	19	103510	.0015	ug/
049	ISODRIN	3.683	3.633	11	21985	.0012	ug/
051	HEPTACHLOR IN TC	2.300	2.300	8	78634	.0692	ug/

ColA p,p'DDE & Dieldrin co-elute

P,P'-DDE $0.0026\ ug/ml \left(\frac{10\ ml}{.99\ l}\right)\left(\frac{100\%}{20\%}\right) = 0.13\ ug/l$

please look at the integration -

ColB

$\frac{0.0075\ ug/ml}{38} = \frac{x}{31}$ $x = \frac{(0.0061\ ug/ml)(10\ ml)\left(\frac{100}{20}\right)}{0.99\ L} = 0.31\ ug/L$

~ = CALCULATED BY INTERPOLATION OUTSIDE THE RANGE OF APPLICABILITY

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

01648

```
******************** 05-19-1988 21:38:06 Version 4.1 ********************
* Sample Name: 59450 02MSD 20%                    Data File: J:AB14016     *
* Date: 05-19-1988 21:37:52 Method: M:ABPI                                 *
* 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:          *   *
*************************************************************************
```

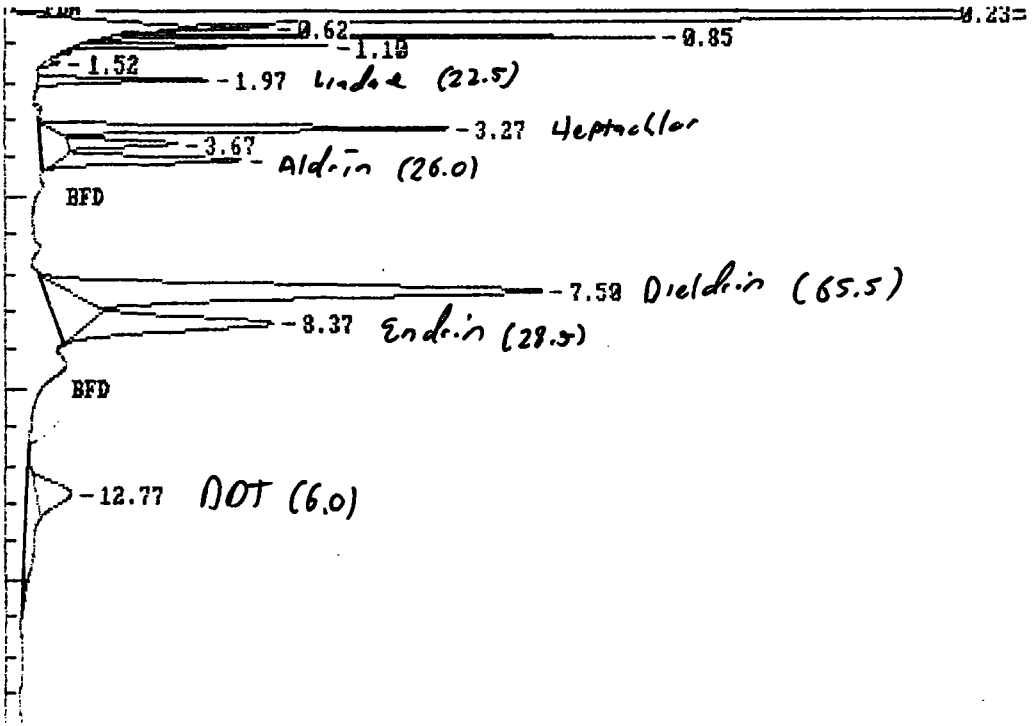
Starting Delay: 0.00 Run Time: 0.00

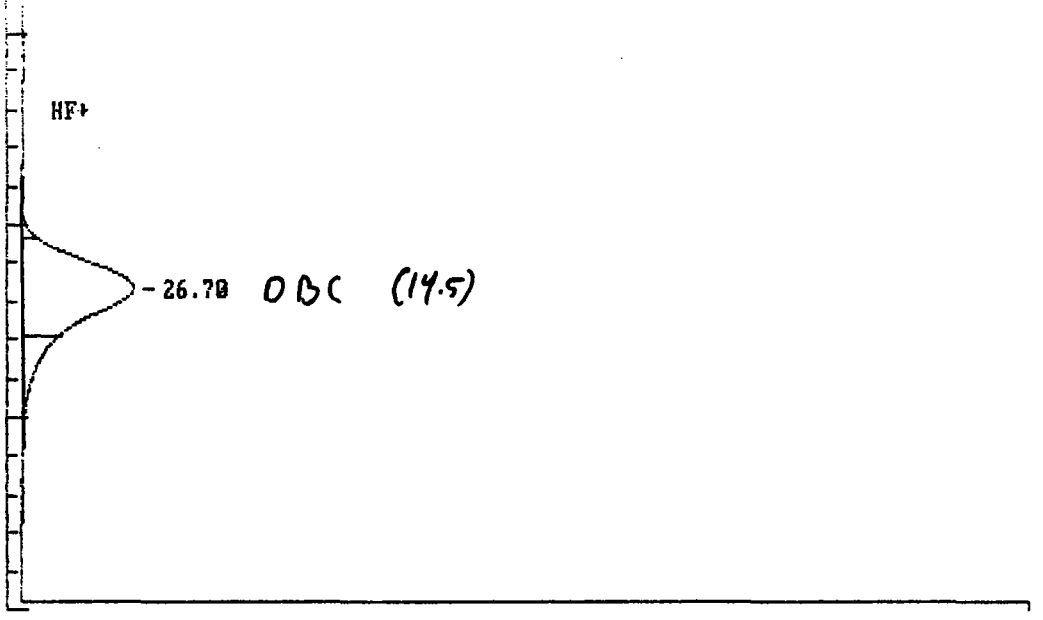
Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.23	779666	65.9555	1	157362	100.000	5.0
2	0.62	5341	0.4518	1	885	0.685	6.0
3	0.85	19167	1.6215	1	5393	2.458	3.6
4	1.10	10811	0.9146	1	2496	1.387	4.3
6	1.52	1099	0.0930	1	140	0.141	7.9
7	1.97	12298	1.0403	1	1677	1.577	7.3
9	3.27	40580	3.4328	1	3884	5.205	10.4
10	3.67	12148	1.0277	1	1071	1.558	11.3
11	4.10	22652	1.9162	1	1800	2.905	12.6
12	7.50	112204	9.4918	1	4625	14.391	24.3
13	8.37	44968	3.8040	1	1837	5.768	24.5
14	12.77	12928	1.0936	1	339	1.658	38.1
15	26.70	108248	9.1572	1	1093	13.884	99.1

SS
5/26/88

Total Area: 1182109 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:AB14016.ATB
Data File = J:AB14016.PTS Printed on 05-19-1988 at 21:38:32
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 10 millivolts





01649

AREA PERCENT REPORT

01650

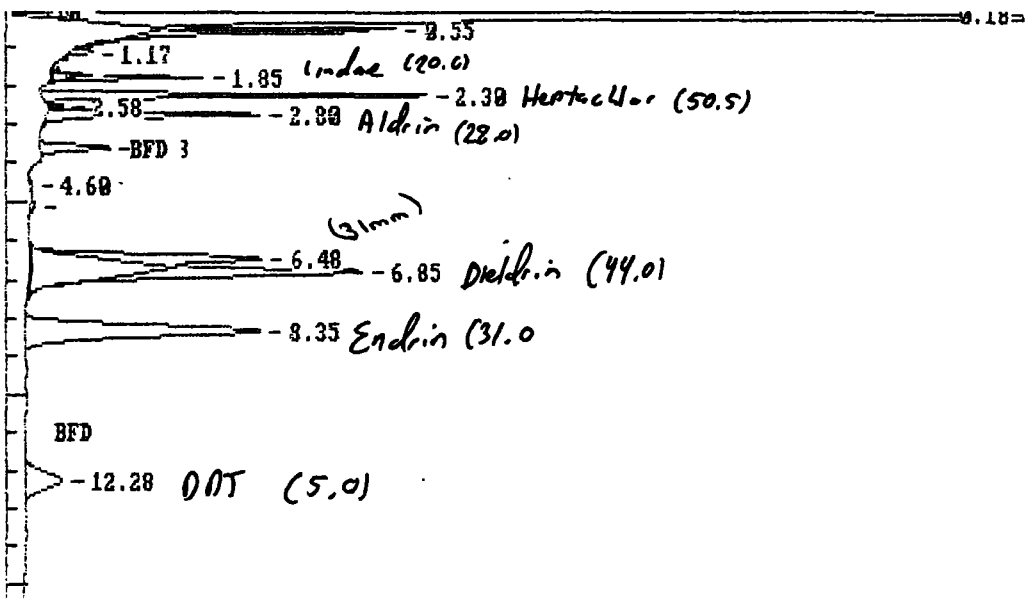
```
******************** 05-19-1988 21:28:56 Version 4.1 ********************
* Sample Name: 59450 02MSD 20%                    Data File: J:BB14016     *
* Date: 05-19-1988 21:28:40 Method: M:BBPI                                 *
* Interface: 12  Cycle#:  16   Operator SS  Channel#: 0    Vial#: N.A.     *
* 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 DEG ISOTHERMAL                                          *
*            Detector 0:                        Detector 1: ECD           *
* Misc. Information: 4 UL INJ                                             *
*************************************************************************
Starting Delay:   0.00                          Run Time:    0.00
```

Pk No.	Ret Time	Peak Area	Area %	B L	Peak Ht.	Normalized %	Area/ Height
1	0.18	1562742	67.8752	1	319669	100.000	4.9
2	0.55	58998	2.5625	1	7480	3.775	7.9
3	1.17	5124	0.2226	1	735	0.328	7.0
6	1.73	1368	0.0594	1	356	0.088	3.8
7	1.85	20398	0.8860	1	4364	1.305	4.7
8	2.30	78634	3.4153	1	12132	5.032	6.5
9	2.58	2747	0.1193	1	492	0.176	5.6
10	2.80	50285	2.1841	1	6743	3.218	7.5
11	3.63	21985	0.9549	1	2216	1.407	9.9
12	4.60	1962	0.0852	1	98	0.126	19.9
13	5.13	2379	0.1033	1	169	0.152	14.0
14	6.48	52934	2.2991	1	4377	3.387	12.1
15	6.85	101361	4.4025	1	7391	6.486	13.7
16	8.35	157392	6.8361	1	7432	10.072	21.2
17	12.28	36458	1.5835	1	1178	2.333	31.0
18	20.78	44099	1.9153	1	871	2.822	50.6
19	22.85	103510	4.4958	1	1826	6.624	56.7

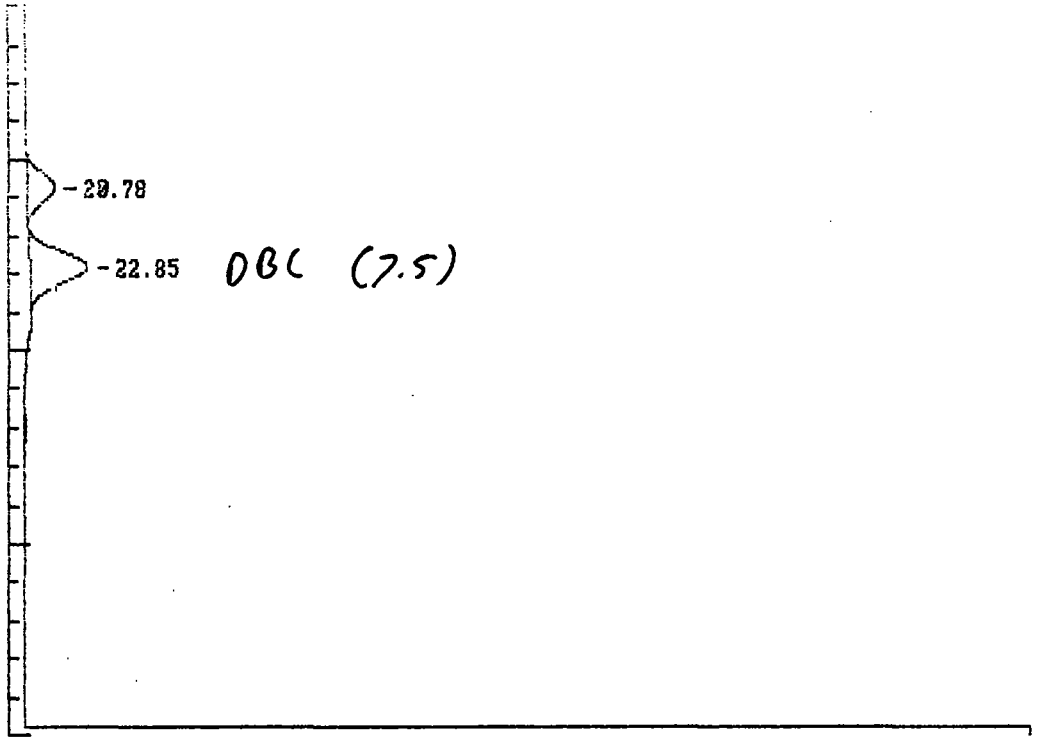
SS
5/26/81

Total Area: 2302374 Area Reject: 1000 One sample per 1.000 sec.

Areas, times, and heights stored in: J:BB14016.ATB
Data File = J:BB14016.PTS Printed on 05-19-1988 at 21:29:22
Start time: 0.00 min. Stop time: 35.00 min. Offset: 0 mv.
Full Range: 32 millivolts



01651



OBC (7.5)

5/3/88 6:49:56 SCAN 1 OF 730
Acquisition started

01652

Acquire
05/03/88 6:49:00 + 0:03
Sample: CLP,59450,,59450-05MSD,LOW,WATER,59450-05MSD,VOA,EPA
Conds.: 100%/5ML
Formula:
Submitted by: RMAL

Run 3:S59450W973
Free sectors: 10537
Instrument: 5100
Analyst: DC

Acquiring
Scan: 1 of 730
Weight: 0.030
Acct. No: 59450

*** 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)	127.00	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: -2271.
Electrometer Range: 10 ^-7
Electrometer zero: -4.4

5/3/88 7:26:30
Acquisition completed
Scans 1 to 730 centroid

Mode	Scans	Secs	out of	%	Peaks per scan per second		
Centroid	730	39.3	2190.0	1.8	15404.	21.	7.

01653

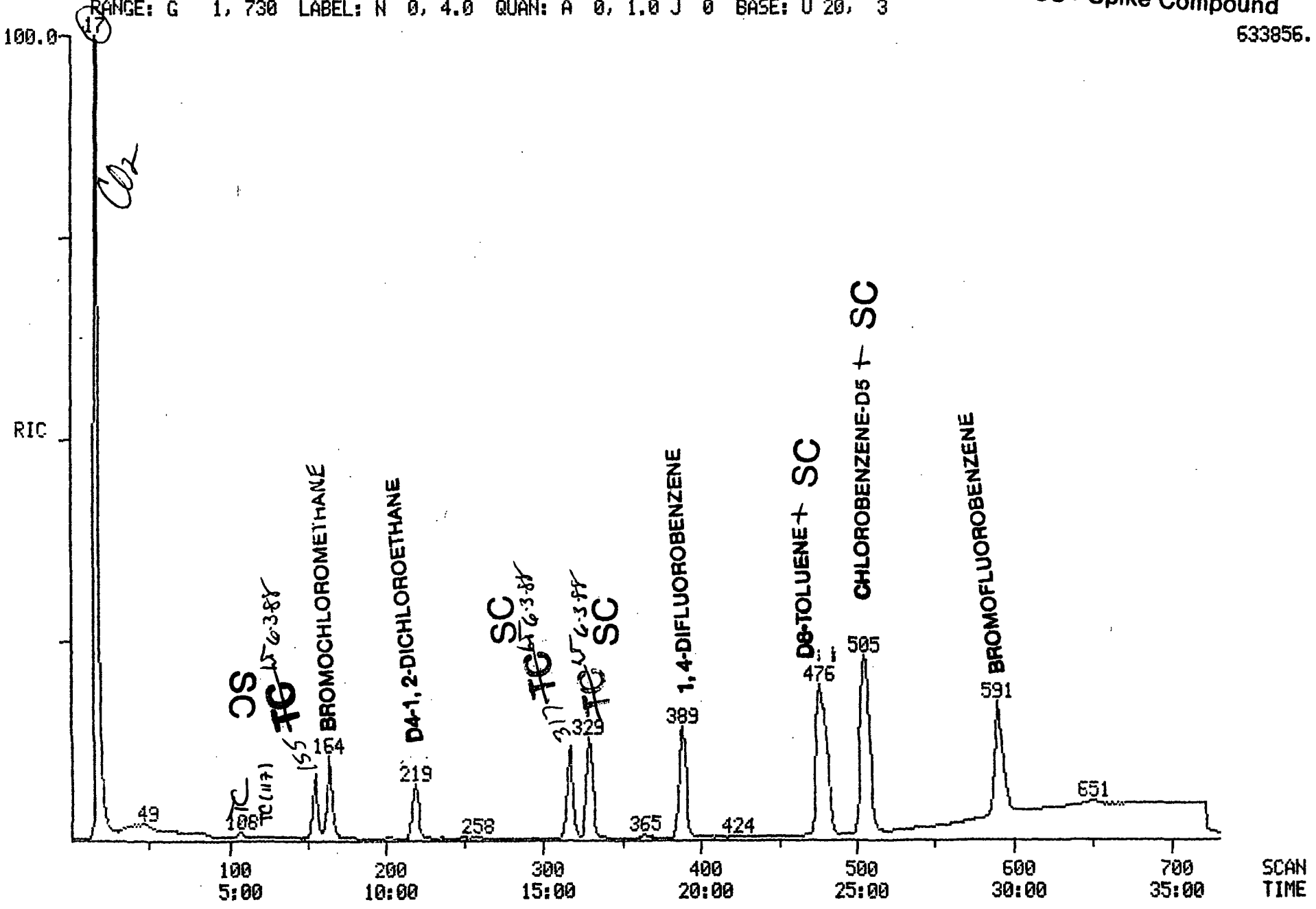
RIC
05/03/88 6:49:00
SAMPLE: CLP,59450,,59450-05MSD,LOW,WATER,59450-05MSD,VOA,EPA
CONDS.: 100%/5ML
RANGE: G 1, 730 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 559450W973 #4 SCANS 1 TO 730
CALI: 050288CW2 #3

TIC = Tentatively Identified Compound

TC = Target Compound
SC = Spike Compound

633856.



PROCEDURE: TCA DIAGNOSTIC REPORT 5/03/88 9:22:04
DATA FILE: S59450W973
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

01654

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	2	46	ISO1/TCO1
3	3	1	80	18	8	3	277	ISO2/TCO2
3	3	1	80	12	7	20	189	ISO3/TCO3
1	1	1	0	7	3	1	69	ISO4/TCO4

41 COMPOUNDS PROCESSED, 17 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	968	.	128	164	.	1
2	V1	10	-32	32	.	.	.	.	.	50	.	.	.
3	V1	15	-48	48	.	.	.	.	.	94	.	.	.
4	V1	25	-60	60	.	.	.	.	.	62	.	.	.
5	V1	35	-74	75	.	.	.	.	.	64	.	.	.
6	V1	45	-107	108	108	.	1	989	.	84	108	.	1
7	V1	50	-116	117	117	.	2	997	.	58	117	.	1
8	V1	65	-133	134	.	.	.	.	.	76	.	.	.
9	V1	80	-154	155	155	.	1	987	.	96	155	.	1
10	V2	1	-388	390	389	-1	1	998	.	114	389	.	1
11	V3	1	-502	504	504	.	1	996	.	117	504	.	1
12	V1	90	-180	182	.	.	.	.	.	63	.	.	.
13	V1	95	-194	196	.	.	.	.	.	96	.	.	.
14	V1	100	-205	207	.	.	.	.	.	83	.	.	.
15	V1	2	-218	220	219	-1	1	991	.	65	219	.	1
16	V2	10	-218	220	219	-1	3	955	.	72	219	.	1
17	V1	110	-221	223	.	.	.	.	.	62	.	.	.
18	V2	15	-248	250	.	.	.	.	.	97	248	.	1
19	V2	20	-257	259	.	.	.	.	.	117	.	.	.
20	V2	25	-260	262	268	6	1	855	.	43	.	.	.
21	V2	30	-267	269	.	.	.	.	.	83	.	.	.
22	V2	35	-298	300	.	.	.	.	.	63	.	.	.
23	V2	40	-304	306	.	.	.	.	.	75	.	.	.
24	V2	45	-317	319	317	-2	1	977	.	130	317	.	1
25	V2	60	-329	331	329	-2	1	989	.	78	329	.	1
26	V2	50	-330	332	.	.	.	.	.	129	.	.	.
27	V2	65	-333	334	.	.	.	.	.	75	.	.	.
28	V2	55	-333	334	.	.	.	.	.	97	.	.	.
29	V2	80	-393	393	.	.	.	.	.	173	.	.	.
30	V3	10	-405	405	404	-1	5	916	.	58	.	.	.
31	V3	15	-441	441	438	-3	4	953	.	58	.	.	.
32	V3	25	-447	447	.	.	.	.	.	83	.	.	.
33	V3	20	-448	448	.	.	.	.	.	164	.	.	.
34	V3	2	-475	475	476	1	1	991	.	98	475	-1	1
35	V3	35	-480	480	480	.	1	987	.	92	480	.	1
36	V3	40	-506	507	507	.	1	984	.	112	506	-1	1
37	V3	50	-549	550	.	.	.	.	.	106	.	.	.
38	V3	3	-590	591	591	.	1	986	.	95	591	.	1
39	V3	55	-611	612	.	.	.	.	.	104	.	.	.
40	V3	60	-615	616	.	.	.	.	.	106	.	.	.
41	V3	75	-628	629	.	.	.	.	.	106	.	.	.

Quantitation Report File: S59450W973

01655

Data: S59450W973.TI
05/03/88 6:49:00
Sample: CLP,59450,,59450-05MSD,LOW,WATER,59450-05MSD,VOA,EPA
Conds.: 100%/5ML
Formula: Instrument: 5100 Weight: 0.030
Submitted by: RMAL Analyst: DC Acct. No.: 59450

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

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

01656

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	164	8:12	1	1.000	A BB	32079.	50.000 UG/L	8.73
2	NOT FOUND								
3	NOT FOUND								
4	NOT FOUND								
5	NOT FOUND								
6	84	108	5:24	1	0.659	A BB	2983.	2.403 UG/L	0.42
7	58	117	5:51	1	0.713	A BB	516.	5.443 UG/L	0.95
8	NOT FOUND								
9	96	155	7:45	1	0.945	A BB	40704.	60.187 UG/L	10.51
10	114	389	19:27	10	1.000	A BB	175203.	50.000 UG/L	8.73
11	117	504	25:12	11	1.000	A BB	145701.	50.000 UG/L	8.73
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	65	219	10:57	1	1.335	A BB	54588.	45.041 UG/L	7.87
16	72	219	10:57	10	0.563	A BB	180.	1.713 UG/L	0.30
17	NOT FOUND								
18	97	248	12:24	10	0.638	A BB	1018.	0.940 UG/L	0.16
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	130	317	15:51	10	0.815	A BB	62926.	53.079 UG/L	9.27
25	78	329	16:27	10	0.846	A BB	166684.	51.275 UG/L	8.96
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	98	475	23:45	11	0.942	A BB	178453.	50.929 UG/L	8.90
35	92	480	24:00	11	0.952	A BB	99739.	50.218 UG/L	8.77
36	112	506	25:18	11	1.004	A BB	123286.	52.516 UG/L	9.17
37	NOT FOUND								
38	95	591	29:33	11	1.173	A BB	98667.	48.787 UG/L	8.52
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	1.01	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	1:36		0.196						
3	2:24		0.294						
4	3:00		0.368						
5	3:42		0.454						
6	5:21	1.01	0.656	1.00	2.40	50.00	0.093	1.935	0.05
7	5:48	1.01	0.712	1.00	5.44	50.00	0.016	0.148	0.11
8	6:39		0.816						
9	7:42	1.01	0.945	1.00	60.19	50.00	1.269	1.054	1.20
10	19:27	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	9:00		1.104						
13	9:42		1.190						

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	45.04	50.00	1.702	1.889	0.90
16	10:54	1.00	0.560	1.00	1.71	50.00	0.001	0.030	0.03
17	11:03		1.356						
18	12:24	1.00	0.638	1.00	0.94	50.00	0.006	0.309	0.02
19	12:51		0.661						
20	13:00		0.668						
21	13:21		0.686						
22	14:54		0.766						
23	15:12		0.781						
24	15:51	1.00	0.815	1.00	53.08	50.00	0.359	0.338	1.06
25	16:27	1.00	0.846	1.00	51.27	50.00	0.951	0.928	1.03
26	16:30		0.848						
27	16:39		0.856						
28	16:39		0.856						
29	19:39		1.010						
30	20:15		0.805						
31	22:03		0.877						
32	22:21		0.889						
33	22:24		0.891						
34	23:45	1.00	0.944	1.00	50.93	50.00	1.225	1.202	1.02
35	24:00	1.00	0.954	1.00	50.22	50.00	0.685	0.682	1.00
36	25:18	1.00	1.006	1.00	52.52	50.00	0.846	0.806	1.05
37	27:27		1.091						
38	29:30	1.00	1.173	1.00	48.79	50.00	0.677	0.694	0.98
39	30:33		1.215						
40	30:45		1.223						
41	31:24		1.249						

01657

TCA FINISHED, 17 FOUND
FINISHED AT: 5/03/88 9:26:24

01658

RMAL QUANTITATION SUMMARY FILE: S59450W973
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

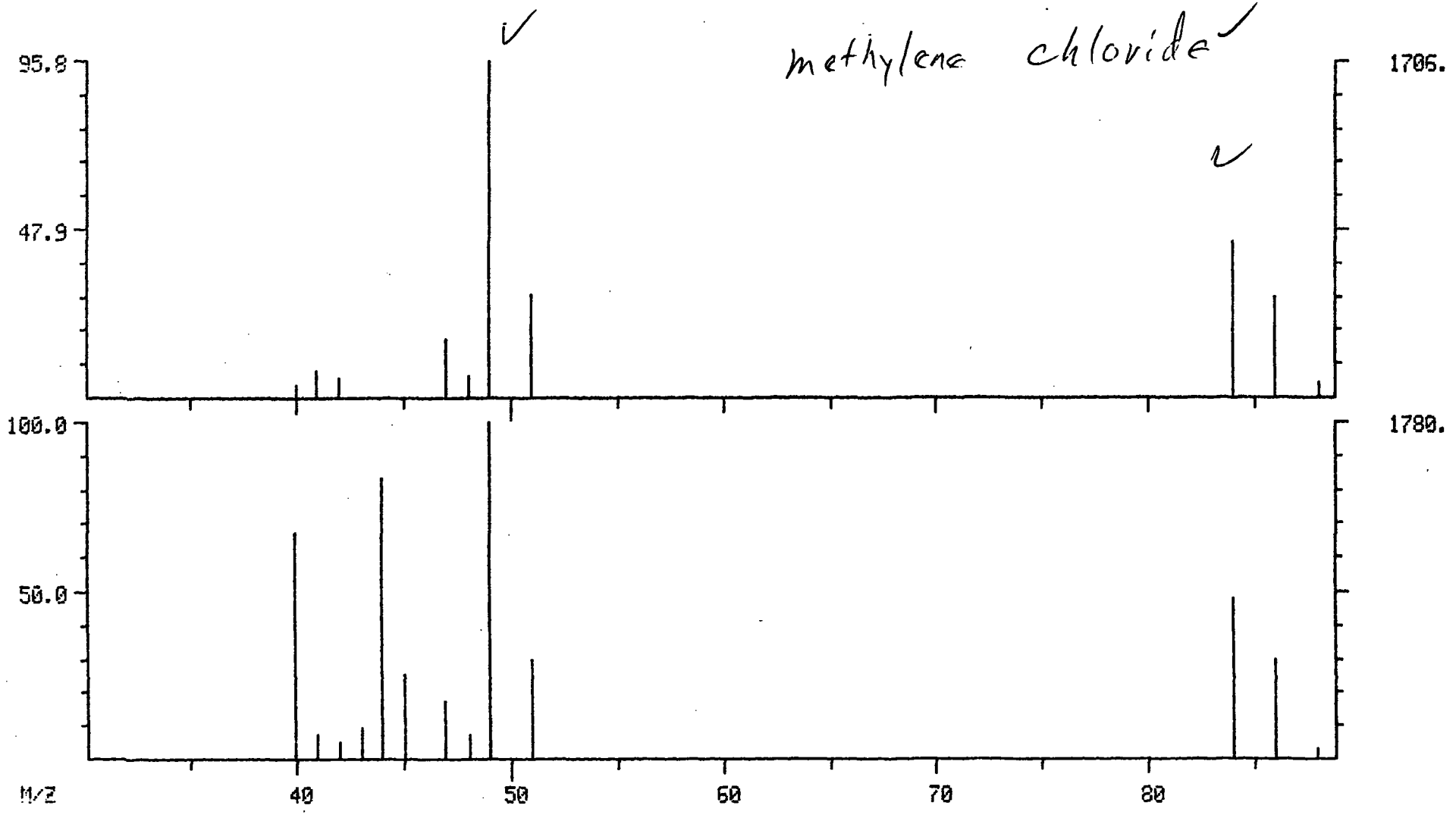
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	UNITS: UG/L AMOUNT
1	V1# 1	CI01 BROMOCHLOROMETHANE	128	164	1	32079.	1.000	50.000
2	V2# 1	CI10 1,4-DIFLUOROBENZENE	114	389	2	175203.	1.000	50.000
3	V3# 1	CI20 CHLOROBENZENE-D5	117	504	3	145701.	1.000	50.000
4	V3# 2	CS05 TOLUENE-D8	98	475	3	178453.	1.225	50.929
5	V3# 3	CS10 BROMOFLUOROBENZENE	95	591	3	98667.	0.677	48.787
6	V1# 2	CS15 1,2-DICHLOROETHANE-	65	219	1	54588.	1.702	45.041
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	108	1	2983.	0.093	2.403 B
12	V1# 50	C035 ACETONE	58	117	1	516.	0.016	5.443 B
13	V1# 65	C040 CARBON DISULFIDE	76		1	NOT FOUND		
14	V1# 80	C045 1,1-DICHLOROETHENE	96	155	1	40704.	1.269	60.187
15	V1# 90	C050 1,1-DICHLOROETHANE	63		1	NOT FOUND		
16	V1# 95	TRANS-1,2-DICHLOROETHENE	96		1	NOT FOUND		
17	V1#100	C060 CHLOROFORM	83		1	NOT FOUND		
18	V1#110	C065 1,2-DICHLOROETHANE	62		1	NOT FOUND		
19	V2# 10	C110 2-BUTANONE	72	219	2	180.	0.001	~~1.713~~
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	317	2	62926.	0.359	53.079
27	V2# 50	C155 DIBROMOCHLOROMETHAN	129		2	NOT FOUND		
28	V2# 55	C160 1,1,2-TRICHLOROETHA	97		2	NOT FOUND		
29	V2# 60	C165 BENZENE	78	329	2	166684.	0.951	51.275
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	480	3	99739.	0.685	50.218
37	V3# 40	C235 CHLOROBENZENE	112	506	3	123286.	0.846	52.516
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		

C1659

DUAL MASS SPECTRUM
05/03/88 6:49:00 + 5:24
SAMPLE: CLP,59450,,59450-05MSD,LOW,WATER,59450-05MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 84 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W973 #108
CALI: 050288CW2 #3

BASE M/Z: 49/ 49
RIC: 4295./ 7719.



01660

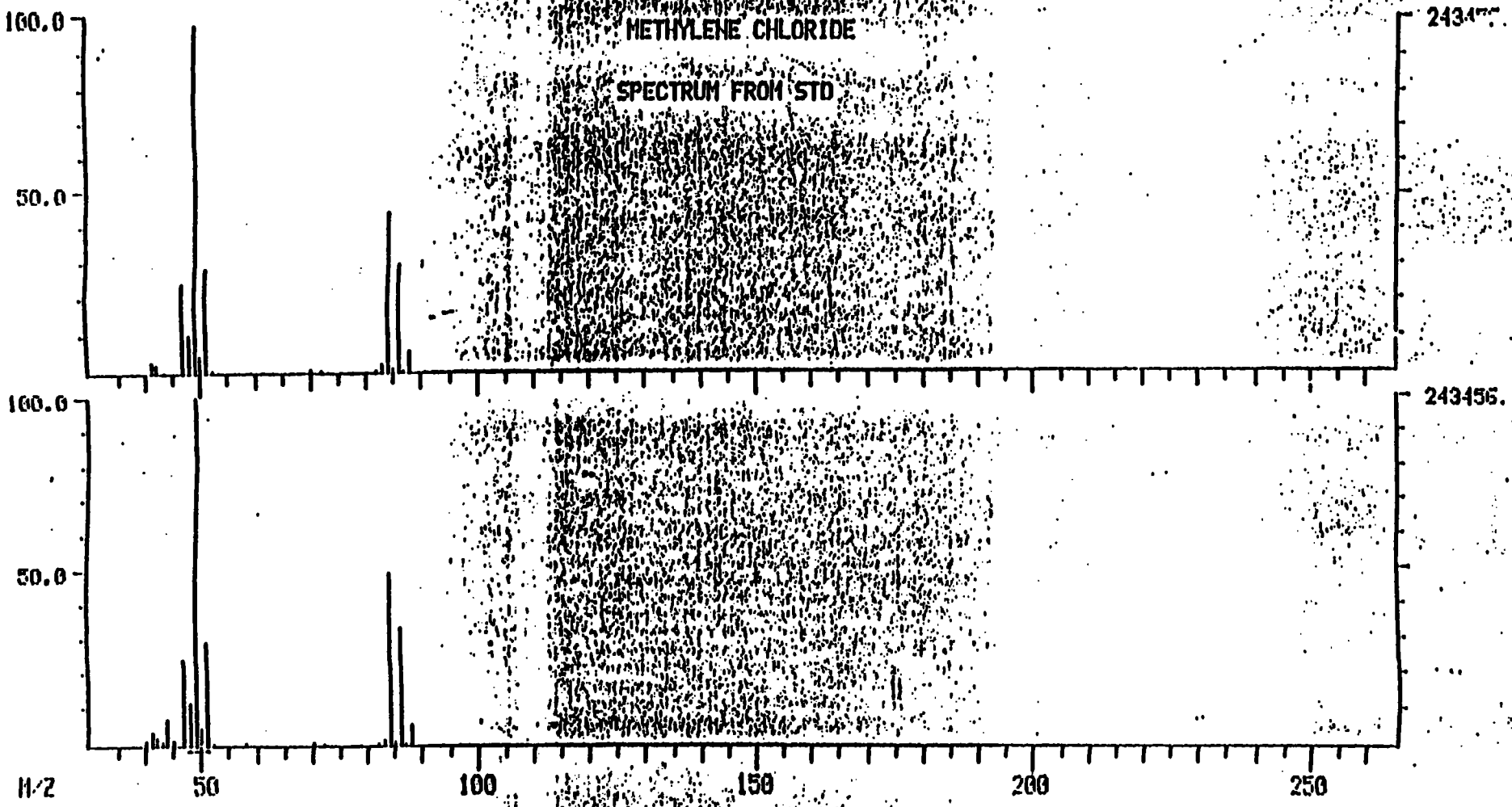
DUAL MASS SPECTRUM
10/13/86 10:38:00 + 6:55
SAMPLE: 50 PPB HSL STANDARD 9-29-86 100Z/5ML
COMDS.:
ENHANCED (S 15B 2N 0T)

DATA: STDJ198 #136
CALI: STDJ198 #1

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

METHYLENE CHLORIDE

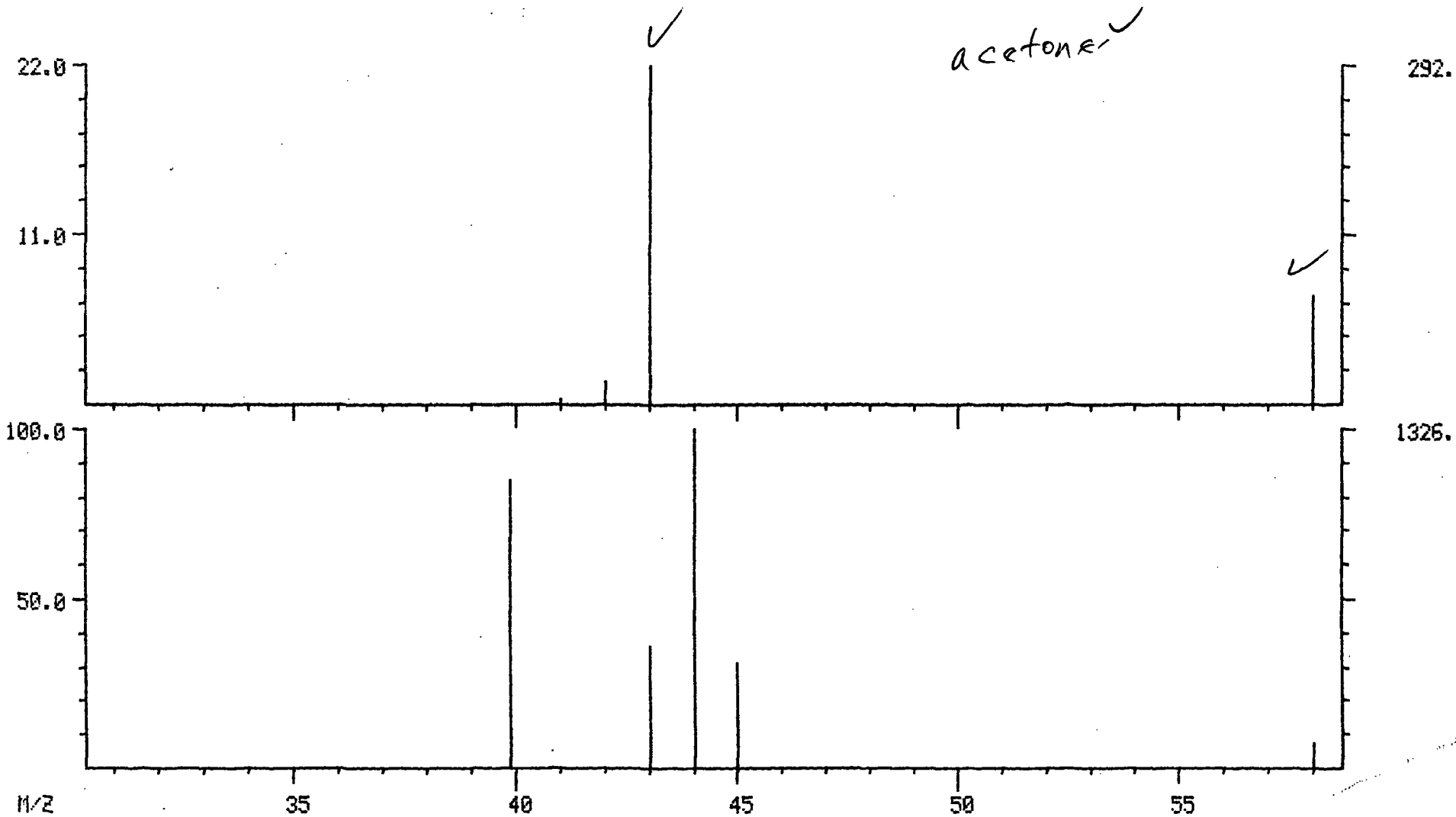
SPECTRUM FROM STD



01661

DUAL MASS SPECTRUM
05/03/88 6:49:00 + 5:51
SAMPLE: CLP,59450,,59450-05MSD,LOW,WATER,59450-05MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 87 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: 559450W973 #117 BASE M/Z: 43/ 44
CALI: 050288CW2 #3 RIC: 409./ 3443.

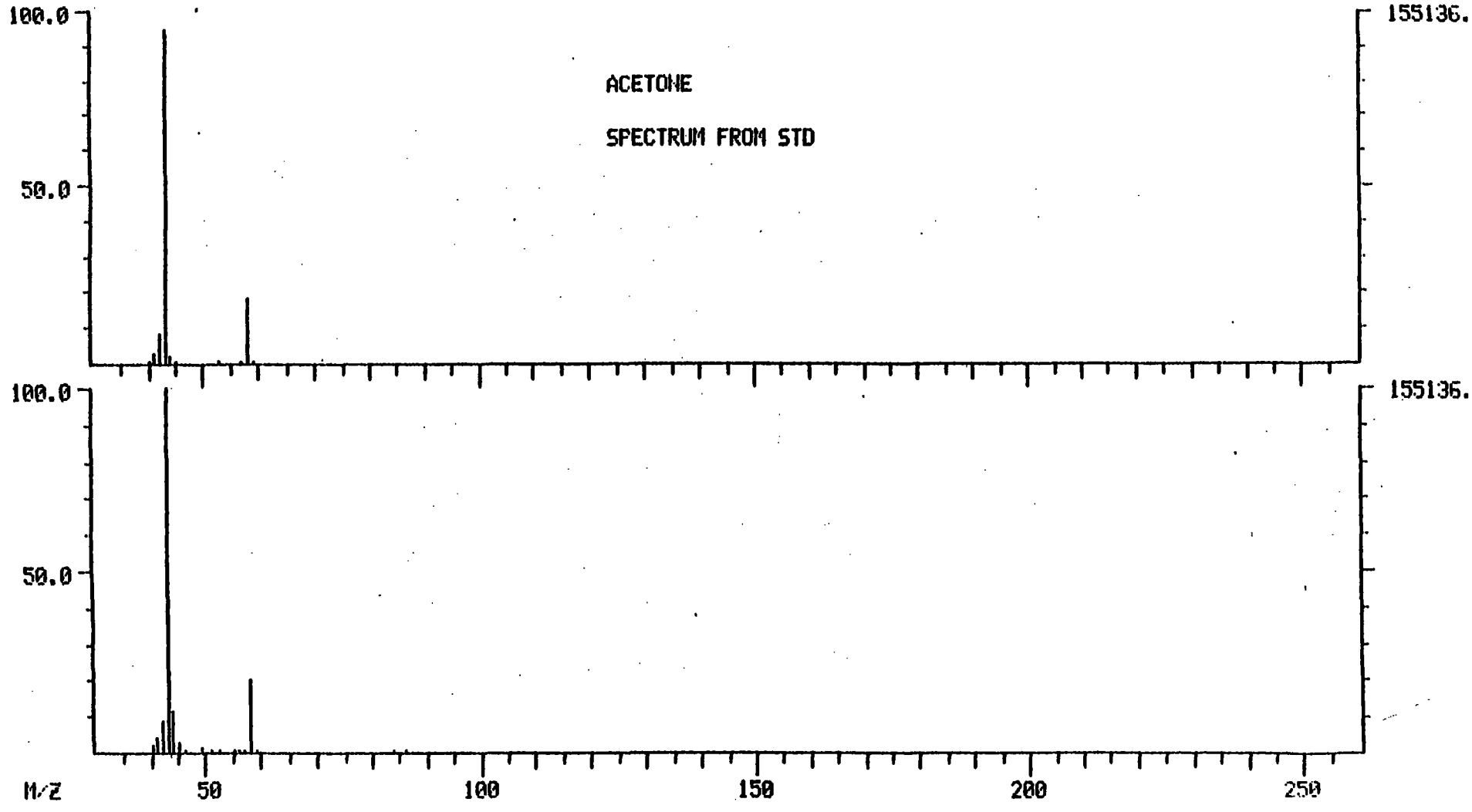


01662

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

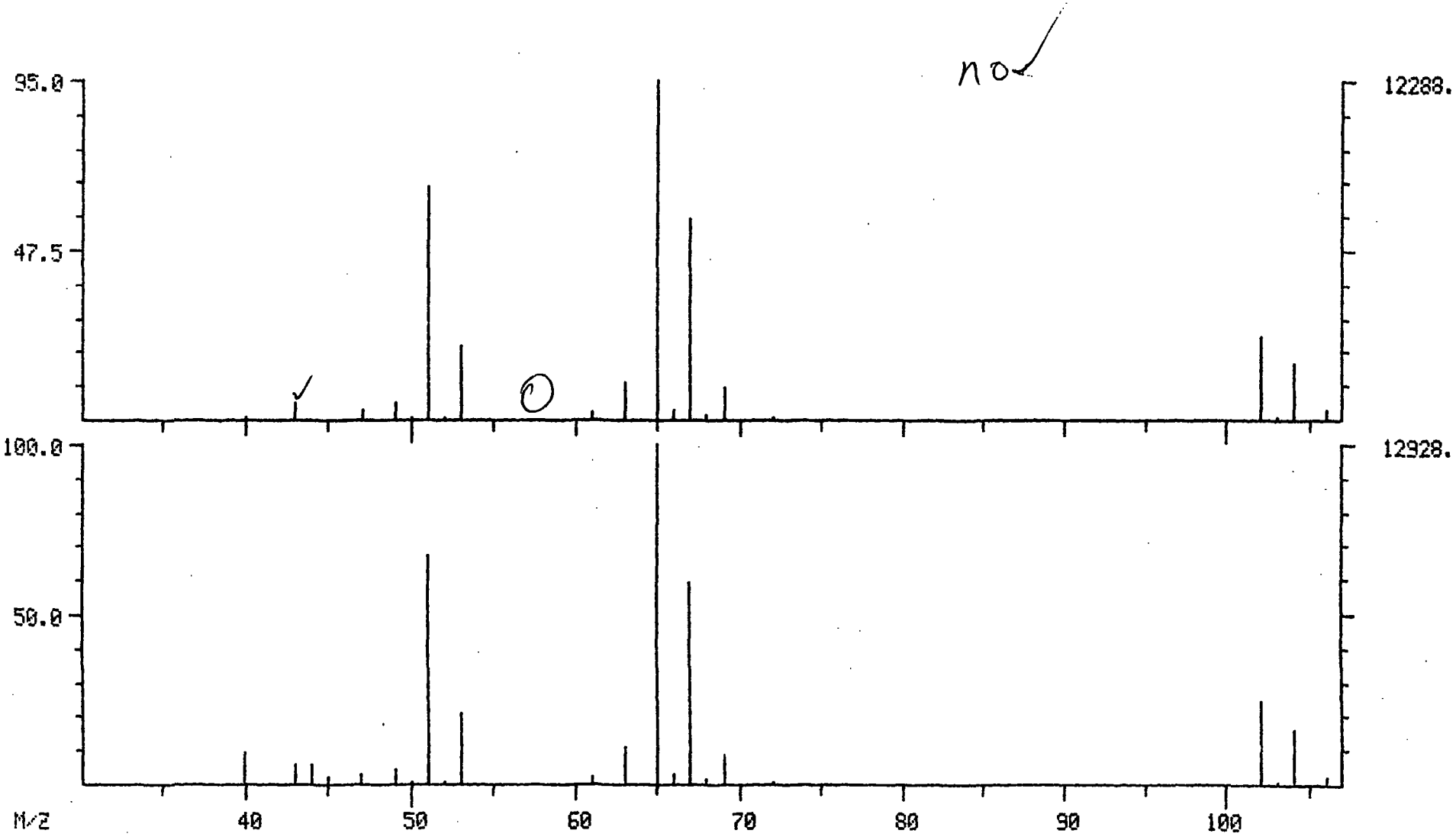
DATA: STDJ198 #150
CALI: STDJ198 #1

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



01663

DUAL MASS SPECTRUM
05/03/88 6:49:00 + 10:57
SAMPLE: CLP,59450,,59450-05MSD,LOW,WATER,59450-05MSD,VOA,EPA
CONDS.: 100%/5ML
GC TEMP: 123 DEG. C
ENHANCED (S 15B 2N 0T)

DATA: S59450W973 #219
CALI: 050288CW2 #3

BASE M/Z: 65/ 65
RIC: 41471./ 45433.