GC/MS SEMIVOA

METHOD/TEST 8270

INSTRUMENT U

INITIAL CALIBRATION DATE 04/08/92

SPECTRUM: U4900
INSTRUMENT: 4500
SAMPLE: DFTPP
CONDITIONS: QC DESC QD
444
ENHANCED (S 15B 2N OT)

04/08/92

RIC: 14528.
ANALYST: CR

000188

SPECTRUM FIT TO DFTPP CRITERIA

M/Z	INTEN	LIMITS	FOUND RA	
51	790.	30-60% OF 198	44.23	OK
68	0.	< 2% OF 69	0.00	OK
69	875.	NOT SPECIFIED	48.99	OK
70	0.	< 2% OF 69	0.00	OK
127	843.	40-60% OF 198	47.20	OK
197	0.	< 1% OF 198	0.00	OK
198	1786.	100% (BASE PK)	100.00	OK
199	133.	5-9% OF 198	7.45	OK
275	418.	10-30% OF 198	23.40	OK
365	66.	> 1% OF 198	3.70	OK
441	135.	< 100% OF 443	63.98	OK
442	1058.	> 40% OF 198	59.24	OK
443	211.	17-23% OF 442	19.94	OK

Mass List
04/08/92 6:46:00 + 5:33
Sample: DFTPP
Conds.: QC DESC GD
Enhanced (S 15B 2N OT)

Data: U4900 # 444
Call: 040892CU # 3

Base m/z: 198
RIC: 14528.

000189

38	0.00	0.00	0.
444			

Minima Min Inten: 52.
Maxima # 0

Mass	% RA	% RIC	Inten.
39?	6.61	0.81	118.
40	5.94	0.73	106.
50	12.43	1.53	222.
51	44.23	5.44	790.
57	4.70	0.58	84.
69	48.99	6.02	875.
74	4.59	0.56	82.
75	7.56	0.93	135.
77	46.19	5.68	825.
79	4.82	0.59	86.
81	4.14	0.51	74.
93	5.43	0.67	97.
98	4.26	0.52	76.
99	3.75	0.46	67.
107	14.00	1.72	250.
110	26.26	3.23	469.
111	3.25	0.40	58.
117	8.96	1.10	160.
127	47.20	5.80	843.
129	22.40	2.75	400.
148	3.36	0.41	60.
167	4.82	0.59	86.
179	4.93	0.61	88.
180	3.64	0.45	65.
186	13.72	1.69	245.
187	3.81	0.47	68.
196	3.75	0.46	67.
198	100.00	12.29	1786.
199	7.45	0.92	133.
205	3.47	0.43	62.
206	25.20	3.10	450.
217	7.33	0.90	131.
221	7.22	0.89	129.
224	13.10	1.61	234.
225	3.53	0.43	63.
227	5.82	0.72	104.
244	11.37	1.40	203.
255	44.57	5.48	796.
256	7.05	0.87	126.
258	3.98	0.49	71.
274	4.48	0.55	80.
275	23.40	2.88	418.
276	4.09	0.50	73.
277	2.91	0.36	52.
296	6.83	0.84	122.
365	3.70	0.45	66.
423	4.54	0.56	81.
441	7.56	0.93	135.
442	59.24	7.28	1058.
443	11.81	1.45	211.

Mass List
04/08/92 6:46:00 + 5:33
Sample: DFTPP
Conds.: QC DESC QD
Enhanced (S 15B 2N OT)

Data: U4900 # 444
Cali: 040892CU # 3

Base m/z: 198
RIC: 14528.

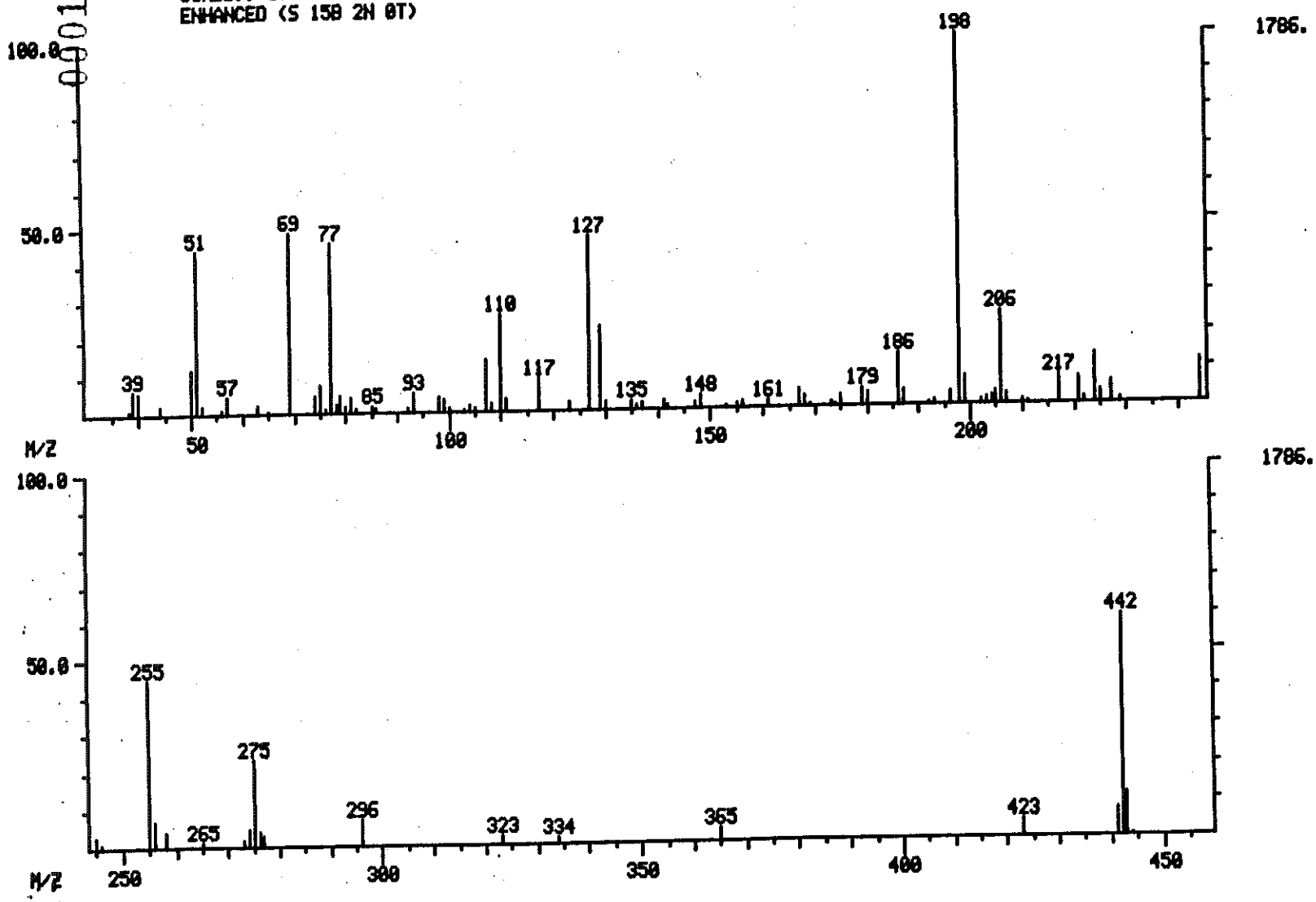
0. 000190

68	0.00	0.00	0.	Minima	Min Inten: 0.
70				Maxima	# 0
Mass	% RA	% RIC	Inten.		
69	48.99	6.02	875.		

MASS SPECTRUM
04/08/92 6:46:00 + 5:33
SAMPLE: DFTPP
CONDS.: GC DESC QD
ENHANCED (S 15B 2N 0T)

DATA: U4900 #444
CALI: 040892CU #3

BASE M/Z: 198
RIC: 14528.



000191

Enseco GC/MS
HSL CALIBRATION CHECK

INITIAL CALIBRATION:	20	PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50	PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80	PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120	PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160	PPM HSL STD	HSLU4902	04/08/92	8:15:00

Library Entry		Compound	Initial Calibration Response Factor Avg	Min	% RSD	Max	Continuing Calibratio Response Factor Min	% Dif M
S1	15	B003 N-NITROSODIMETH	0.949		4.2			
S1	100	B028 ANALINE	1.900		5.5			
S1	105	C315 PHENOL	1.811		5.5	30.0		
S1	110	C325 BIS(2-CHLOROETH	1.475		4.9			
S1	115	C330 2-CHLOROPHENOL	1.312		5.1			
S1	125	C335 1,3-DICHLOROBEN	1.448		4.0			
S1	130	C340 1,4-DICHLOROBEN	1.523		3.9	30.0		
S1	145	C345 BENZYL ALCOHOL	0.776		6.6			
S1	150	C350 1,2-DICHLOROBEN	1.408		4.2			
S1	160	C355 2-METHYLPHENOL	1.213		5.5			
S1	165	C360 BIS(2-CHLOROISO	2.292		5.2			
S1	185	C365 4-METHYLPHENOL	1.265		6.6			
S1	190	C370 N-NITROSO-DI-N-	1.043	0.050	5.4			
S1	200	C375 HEXACHLOROETHAN	0.593		4.4			
S2	10	C410 NITROBENZENE	0.445		8.3			
S2	20	C415 ISOPHORONE	0.813		6.6			
S2	25	C420 2-NITROPHENOL	0.202		9.6	30.0		
S2	30	C425 2,4-DIMETHYLPHE	0.311		10.6			
S2	35	C435 BIS(2-CHLOROETH	0.452		9.2			
S2	40	C440 2,4-DICHLOROPHE	0.287		10.3	30.0		
S2	45	C430 BENZOIC ACID	0.164		17.0			
S2	55	C445 1,2,4-TRICHLORO	0.324		6.4			
S2	60	C450 NAPHTHALENE	1.055		8.1			
S2	80	C455 4-CHLOROANALINE	0.381		14.3			
S2	95	C460 HEXACHLOROBUTAD	0.170		6.0	30.0		
S2	130	C465 4-CHLORO-3-METH	0.290		10.3	30.0		
S2	145	C470 2-METHYLNAPHTHA	0.606		7.8			
S3	20	C510 HEXACHLOROCYCLO	0.489	0.050	8.9			
S3	25	C515 2,4,6-TRICHLORO	0.394		10.9	30.0		
S3	30	C520 2,4,5-TRICHLORO	0.484		5.8			
S3	40	C525 2-CHLORONAPHTHA	1.333		8.7			
S3	45	C530 2-NITROANALINE	0.435		9.1			
S3	55	C535 DIMETHYLPHTHALA	1.361		8.6			
S3	65	C540 ACENAPHTHYLENE	1.983		8.8			
S3	70	C543 2,6-DINITROTOLU	0.326		8.4			
S3	75	C545 3-NITROANALINE	0.318		15.5			
S3	80	C550 ACENAPHTHENE	1.231		8.2	30.0		
S3	85	C555 2,4-DINITROPHEN	0.153	0.050	20.9			
S3	90	C565 DIBENZOFURAN	1.694		8.9			
S3	95	C560 4-NITROPHENOL	0.137	0.050	9.3			
S3	105	C570 2,4-DINITROTOLU	0.393		11.2			
S3	130	C580 DIETHYLPHTHALAT	1.329		8.5			
S3	135	C590 FLUORENE	1.368		8.2			
S3	140	C585 4-CHLOROPHENYL-	0.560		6.8			
S3	150	C595 4-NITROANALINE	0.260		28.2			
S4	10	C610 4,6-DINITRO-2-M	0.145		13.1			
S4	15	C615 N-NITROSODIPHEN	0.517		8.7	30.0		
S4	20	B091 AZOBENZENE	1.034		7.0			
S4	30	C625 4-BROMOPHENYL-P	0.219		7.3			
S4	40	C630 HEXACHLOROBENZE	0.261		5.3			
S4	50	C635 PENTACHLOROPHEN	0.159		12.5	30.0		
S4	65	C640 PHENANTHRENE	1.113		7.3			
S4	70	C645 ANTHRACENE	1.109		7.7			
S4	80	C646 CARBAZOLE	0.761		11.1			
S4	85	C650 DI-N-BUTYLPHTHA	1.283		7.1			
S4	110	C655 FLUORANTHENE	0.978		7.3	30.0		
S5	10	B113 BENZIDINE	0.104		23.7			
S5	15	C715 PYRENE	1.524		4.3			
S5	40	C720 BUTYLBENZYLPHTH	0.720		5.7			
S5	50	C730 BENZO(A)ANTHRAC	1.157		4.4			
S5	55	C725 3,3'-DICHLOROBE	0.415		12.7			
S5	60	C740 CHRYSENE	1.033		3.1			
S5	65	C745 BIS(2-ETHYLHEXY	1.061		5.8			
S6	10	C760 DI-N-OCTYL PHTH	2.124		8.9	30.0		
S6	15	C765 BENZO(B)FLUORAN	1.257		9.7			
S6	25	C770 BENZO(K)FLUORAN	1.154		3.3			
S6	35	C775 BENZO(A)PYRENE	1.084		4.9	30.0		
S6	55	C780 INDENO(1,2,3-CD	0.970		6.4			
S6	60	C785 DIBENZ(A,H)ANTH	0.803		9.2			
S6	65	C790 BENZO(G,H,I)PER	0.839		4.8			

5 pt. HSL
4/8/92
RAS

Enseco GC/MS
HSL CALIBRATION CHECK

000193

INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

	Library Entry	Compound	Initial Calibration Response Factor Avg	Min	% RSD Max	Continuing Calibration Response Factor Min	% Diff Ma
S2	2	CS20 NITROBENZENE-D5	0.430		7.5		
S3	3	CS25 2-FLUOROBIPHENY	1.479		8.5		
S5	2	CS30 TERPHENYL-D14	0.980		6.1		
S1	3	CS45 PHENOL-D5	1.661		4.6		
S1	2	CS50 2-FLUOROPHENOL	1.277		3.9		
S3	2	CS55 2,4,6-TRIBROMOP	0.176		11.1		

Enseco GC/MS
HSL CALIBRATION CHECK

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INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

		HSLU4905		HSLU4901		HSLU4904		HSLU4903		HSLU4902			
Lib	#	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
S1	15	20,	0.953	50,	0.999	80,	0.940	120,	0.890	160,	0.964		
S1	100	20,	1.756	50,	1.996	80,	1.976	120,	1.824	160,	1.949		
S1	105	20,	1.744	50,	1.728	80,	1.903	120,	1.745	160,	1.935		
S1	110	20,	1.482	50,	1.428	80,	1.523	120,	1.381	160,	1.561		
S1	115	20,	1.286	50,	1.266	80,	1.347	120,	1.251	160,	1.412		
S1	125	20,	1.442	50,	1.431	80,	1.485	120,	1.364	160,	1.518		
S1	130	20,	1.523	50,	1.510	80,	1.588	120,	1.433	160,	1.560		
S1	145	20,	0.721	50,	0.766	80,	0.823	120,	0.734	160,	0.834		
S1	150	20,	1.423	50,	1.385	80,	1.449	120,	1.317	160,	1.467		
S1	160	20,	1.193	50,	1.159	80,	1.258	120,	1.150	160,	1.304		
S1	165	20,	2.358	50,	2.159	80,	2.343	120,	2.172	160,	2.429		
S1	185	20,	1.212	50,	1.189	80,	1.337	120,	1.215	160,	1.372		
S1	190	20,	1.033	50,	0.986	80,	1.066	120,	1.004	160,	1.128		
S1	200	20,	0.592	50,	0.573	80,	0.599	120,	0.566	160,	0.633		
S2	10	20,	0.405	50,	0.413	80,	0.475	120,	0.445	160,	0.489		
S2	20	20,	0.743	50,	0.792	80,	0.864	120,	0.795	160,	0.869		
S2	25	20,	0.183	50,	0.183	80,	0.212	120,	0.203	160,	0.228		
S2	30	20,	0.262	50,	0.306	80,	0.329	120,	0.306	160,	0.351		
S2	35	20,	0.397	50,	0.433	80,	0.472	120,	0.448	160,	0.508		
S2	40	20,	0.245	50,	0.278	80,	0.304	120,	0.286	160,	0.324		
S2	45			50,	0.123	80,	0.169	120,	0.186	160,	0.176		
S2	55	20,	0.293	50,	0.321	80,	0.338	120,	0.319	160,	0.347		
S2	60	20,	0.940	50,	1.010	80,	1.095	120,	1.064	160,	1.167		
S2	80	20,	0.295	50,	0.372	80,	0.407	120,	0.392	160,	0.441		
S2	95	20,	0.158	50,	0.168	80,	0.178	120,	0.164	160,	0.183		
S2	130	20,	0.247	50,	0.278	80,	0.307	120,	0.293	160,	0.326		
S2	145	20,	0.546	50,	0.573	80,	0.645	120,	0.606	160,	0.659		
S3	20	20,	0.427	50,	0.481	80,	0.502	120,	0.485	160,	0.548		
S3	25	20,	0.338	50,	0.377	80,	0.411	120,	0.389	160,	0.454		
S3	30			50,	0.457	80,	0.485	120,	0.471	160,	0.522		
S3	40	20,	1.174	50,	1.307	80,	1.374	120,	1.314	160,	1.495		
S3	45			50,	0.391	80,	0.439	120,	0.425	160,	0.486		
S3	55	20,	1.193	50,	1.358	80,	1.408	120,	1.333	160,	1.513		
S3	65	20,	1.741	50,	1.966	80,	1.982	120,	1.992	160,	2.235		
S3	70	20,	0.295	50,	0.315	80,	0.335	120,	0.319	160,	0.368		
S3	75			50,	0.250	80,	0.337	120,	0.318	160,	0.366		
S3	80	20,	1.091	50,	1.201	80,	1.260	120,	1.233	160,	1.371		
S3	85			50,	0.111	80,	0.153	120,	0.157	160,	0.189		
S3	90	20,	1.494	50,	1.641	80,	1.747	120,	1.682	160,	1.907		
S3	95			50,	0.120	80,	0.148	120,	0.133	160,	0.145		
S3	105	20,	0.338	50,	0.370	80,	0.407	120,	0.396	160,	0.456		
S3	130	20,	1.167	50,	1.322	80,	1.367	120,	1.307	160,	1.480		
S3	135	20,	1.198	50,	1.338	80,	1.437	120,	1.373	160,	1.495		
S3	140	20,	0.502	50,	0.555	80,	0.588	120,	0.556	160,	0.600		
S3	150			50,	0.169	80,	0.242	120,	0.288	160,	0.342		
S4	10			50,	0.120	80,	0.148	120,	0.145	160,	0.166		
S4	15	20,	0.473	50,	0.487	80,	0.519	120,	0.519	160,	0.589		
S4	20	20,	0.975	50,	0.973	80,	1.055	120,	1.018	160,	1.147		
S4	30	20,	0.200	50,	0.219	80,	0.217	120,	0.214	160,	0.244		
S4	40	20,	0.248	50,	0.263	80,	0.260	120,	0.250	160,	0.283		
S4	50			50,	0.137	80,	0.160	120,	0.155	160,	0.185		
S4	65	20,	1.024	50,	1.100	80,	1.131	120,	1.069	160,	1.241		
S4	70	20,	1.004	50,	1.066	80,	1.115	120,	1.122	160,	1.237		
S4	80	20,	0.658	50,	0.734	80,	0.785	120,	0.739	160,	0.888		
S4	85	20,	1.167	50,	1.241	80,	1.338	120,	1.265	160,	1.402		
S4	110	20,	0.911	50,	0.953	80,	1.024	120,	0.924	160,	1.080		
S5	10			50,	0.127	80,	0.074	120,	0.094	160,	0.121		
S5	15	20,	1.502	50,	1.540	80,	1.630	120,	1.468	160,	1.482		
S5	40	20,	0.662	50,	0.716	80,	0.768	120,	0.706	160,	0.749		
S5	50	20,	1.142	50,	1.156	80,	1.180	120,	1.084	160,	1.223		
S5	55	20,	0.383	50,	0.390	80,	0.388	120,	0.405	160,	0.508		
S5	60	20,	1.037	50,	1.035	80,	1.039	120,	0.981	160,	1.071		
S5	65	20,	0.985	50,	1.020	80,	1.126	120,	1.053	160,	1.120		
S6	10	20,	1.856	50,	2.102	80,	2.389	120,	2.135	160,	2.139		
S6	15	20,	1.228	50,	1.236	80,	1.336	120,	1.164	160,	1.321		
S6	25	20,	1.164	50,	1.158	80,	1.210	120,	1.112	160,	1.125		
S6	35	20,	1.071	50,	1.060	80,	1.144	120,	1.015	160,	1.129		
S6	55	20,	0.927	50,	0.926	80,	0.950	120,	0.970	160,	1.077		
S6	60	20,	0.729	50,	0.754	80,	0.796	120,	0.816	160,	0.920		
S6	65	20,	0.832	50,	0.845	80,	0.812	120,	0.801	160,	0.903		

Enseco GC/MS
HSL CALIBRATION CHECK

000195

INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

		HSLU4905		HSLU4901		HSLU4904		HSLU4903		HSLU4902			
Lib	#	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
S2	2	20,	0.393	50,	0.410	80,	0.453	120,	0.422	160,	0.473		
S3	3	20,	1.300	50,	1.455	80,	1.530	120,	1.462	160,	1.647		
S5	2	20,	0.916	50,	0.979	80,	1.079	120,	0.960	160,	0.967		
S1	3	40,	1.631	100,	1.618	160,	1.739	240,	1.573	320,	1.744		
S1	2	40,	1.266	100,	1.308	160,	1.332	240,	1.202	320,	1.275		
S3	2	40,	0.146	100,	0.174	160,	0.183	240,	0.176	320,	0.200		

50 ug/M
Fixed RAS 4/8/92

Name List: HEDR1 Entry # 1 of 1
File Name: U4901

000196

(1)Format: BNACLP
(3)Sample ID: SSTD50
(5)Matrix: NA
(7)Fraction: BNA
(10)Analyst: RAS
(12)Extract Volume: NA
(14)Int. Ext. Vol.: NA
(16)Sample Amount: NA
(19)Run Factor: NA

(2)Case: STDU
(4)Level: NA
(6)Lab Sample ID: V#5681
(8)Type: CAL
(11)Quan List Units: UG/ML
(13)Extract Dilution: NA
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: NA

4/8/92 7:06:03 SCAN 1 OF 3250
Acquisition started

Acquire
04/08/92 7:06:00 + 0:04
Sample: CLP,STDU ,,SSTD50 ,NA ,NA ,V#5681,BNA,CAL ,
Conds.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M
Formula: NANA
Submitted by: RMAL

Run 2:U4901
Free sectors: 22319
Instrument: 4500
Analyst: RAS

ACQUIRING
Scan: 5 of 3250

Weight: 0.000
Acct. No: BNACLP

****
QC PARAMETERS
****

Loaded QC Desc:ST Current QC oven tmp: 30 DegC
Current QC Desc:ST QC elapsed time : 0: 3 min

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

Injector : 275 DegC
Int. oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

****
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

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

4/8/92 7:46:44
ACQUISITION COMPLETED
SCANS 1 TO 3250 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	3250	543.5	2437.5	22.3	49596. 15.	20.

PROCEDURE: TCA DIAGNOSTIC REPORT 4/08/92 7:48:5
DATA FILE: U4901
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 000197
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	9	9	4	77	IS01/TC01
3	3	1	0	18	18	4	68	IS02/TC02
3	3	1	0	13	13	2	69	IS03/TC03
3	3	1	0	18	17	1	66	IS04/TC04
3	3	1	0	10	10	2	99	IS05/TC05
3	3	1	58	9	9	1	125	IS06/TC06
3	3	1	47	15	15	16	72	IS07/TC07
1	1	1	0	4	4	1	56	IS08/TC08

82 COMPOUNDS PROCESSED, 81 FOUND

COMPOUND NO	LIB	ENTRY	SEARCH REF	SEARCH PRED	SEARCH SEL	SEARCH DELTA	SEARCH PEAKS	SAT FIT	SAT PEAKS	CHRO M/Z	CHRO TOP	CHRO DELTA	CHRO PEAK
1	S1	1	-806	807	807	.	1	978	.	152	807	.	
2	S1	15	-368	367	367	.	4	998	.	74	367	.	
3	S1	2	-578	577	578	1	1	993	.	112	578	.	
4	S1	3	-735	734	734	.	1	959	.	99	734	.	
5	S1	105	-738	737	737	.	1	982	.	94	737	.	
6	S1	100	-746	745	746	1	1	991	.	93	746	.	
7	S1	110	-757	756	756	.	1	978	.	93	756	.	
8	S1	115	-768	768	767	-1	1	992	.	128	767	.	
9	S1	125	-797	797	796	-1	1	989	.	146	796	.	
10	S2	1	-1053	1054	1054	.	1	996	.	136	1054	.	
11	S3	1	-1416	1417	1417	.	1	993	.	164	1417	.	
12	S1	130	-811	810	810	.	1	991	.	146	810	.	
13	S1	145	-830	829	830	1	1	997	.	108	830	.	
14	S1	150	-839	838	838	.	1	994	.	146	838	.	
15	S1	160	-849	848	848	.	1	985	.	108	848	.	
16	S1	165	-856	855	855	.	2	982	.	45	855	.	
17	S1	185	-878	878	877	-1	1	992	.	108	877	.	
18	S1	190	-881	881	880	-1	1	995	.	70	880	.	
19	S1	200	-904	904	903	-1	1	998	.	117	903	.	
20	S2	2	-910	910	910	.	1	997	.	82	910	.	
21	S2	10	-914	914	914	.	1	1000	.	77	914	.	
22	S2	20	-961	961	960	-1	1	980	.	82	960	.	
23	S2	25	-976	976	976	.	1	992	.	139	976	.	
24	S2	30	-982	982	982	.	1	995	.	107	982	.	
25	S2	45	-997	997	996	-1	2	999	.	122	996	.	
26	S2	35	-1002	1002	1002	.	1	996	.	93	1002	.	
27	S2	40	-1023	1023	1023	.	1	996	.	162	1023	.	
28	S2	55	-1042	1042	1042	.	1	993	.	180	1042	.	
29	S2	60	-1058	1058	1058	.	1	996	.	128	1058	.	
30	S2	80	-1067	1067	1067	.	1	977	.	127	1067	.	
31	S2	95	-1082	1082	1082	.	1	992	.	225	1082	.	
32	S2	130	-1163	1163	1163	.	1	991	.	107	1163	.	
33	S2	145	-1199	1199	1199	.	1	991	.	142	1199	.	
34	S3	20	-1232	1232	1231	-1	1	997	.	237	1231	.	
35	S3	25	-1257	1257	1256	-1	2	992	.	196	1256	.	
36	S3	30	-1264	1264	1263	-1	1	990	.	196	1263	.	
37	S4	1	-1729	1730	1730	.	1	991	.	188	1730	.	
38	S3	3	-1275	1275	1274	-1	1	1000	.	172	1274	.	
39	S3	40	-1301	1301	1300	-1	1	996	.	162	1300	.	
40	S3	45	-1321	1321	1320	-1	1	993	.	65	1320	.	
41	S3	55	-1358	1358	1358	.	1	972	.	163	1358	.	
42	S3	70	-1371	1371	1371	.	1	995	.	165	1371	.	
43	S3	65	-1388	1388	1387	-1	1	986	.	152	1387	.	
44	S3	75	-1406	1406	1406	.	1	997	.	138	1406	.	
45	S3	80	-1424	1424	1424	.	1	985	.	153	1424	.	
46	S3	85	-1428	1428	.	.	.	.	.	184	1427	.	
47	S3	95	-1438	1438	1438	.	1	993	.	109	1438	.	
48	S3	105	-1455	1455	1455	.	1	990	.	165	1454	-1	
49	S3	90	-1460	1460	1460	.	1	965	.	168	1460	.	
50	S3	130	-1505	1505	1505	.	1	963	.	149	1505	.	
51	S3	140	-1531	1531	1531	.	1	977	.	204	1530	-1	
52	S3	135	-1532	1532	1532	.	1	957	.	166	1532	.	
53	S3	150	-1534	1534	1532	-2	2	880	.	138	1532	.	
54	S4	10	-1540	1540	1540	.	1	977	.	198	1540	.	
55	S4	15	-1555	1555	1555	.	1	992	.	169	1555	.	
56	S4	20	-1565	1565	1564	-1	1	994	.	77	1564	.	
57	S3	2	-1582	1582	1582	.	1	957	.	330	1581	-1	
58	S4	30	-1634	1634	1634	.	1	982	.	248	1633	-1	
59	S4	40	-1648	1648	1647	-1	1	996	.	284	1647	.	
60	S5	1	-2286	2289	2289	.	1	991	.	240	2289	.	
61	S4	50	-1688	1688	1687	-1	1	987	.	266	1687	.	
62	S4	65	-1735	1735	1735	.	1	915	.	178	1735	.	
63	S4	70	-1746	1746	1746	.	1	946	.	178	1746	.	
64	S4	80	-1779	1779	1778	-1	1	999	.	167	1778	.	
65	S4	85	-1848	1848	1847	-1	1	942	.	149	1847	.	

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	.	1	981	.	[illegible]	[illegible]	.
67	86	1	-2593	2598	2598	.	1	909	.	184	2012	.
68	85	10	-2011	2012	2012	.	1	997	.	202	2035	.
69	85	15	-2034	2035	2035	.	1	984	.	244	2063	.
70	85	2	-2062	2063	2063	.	1	992	.	149	2164	.
71	85	40	-2163	2165	2164	-1	1	991	.	252	2278	.
72	85	55	-2276	2278	2278	.	1	995	.	149	2282	.
73	85	65	-2280	2282	2282	.	2	987	.	228	2287	.
74	85	50	-2285	2287	2287	.	2	991	.	228	2294	.
75	85	60	-2293	2295	2294	-1	1	1000	.	149	2412	.
76	86	10	-2409	2412	2412	.	2	983	.	252	2507	.
77	86	15	-2504	2507	2507	.	2	985	.	252	2513	.
78	86	25	-2510	2513	2513	.	1	975	.	252	2585	.
79	86	35	-2581	2585	2585	.	1	994	.	276	2913	1
80	86	55	-2904	2912	2912	.	1	987	.	278	2915	.
81	86	60	-2906	2914	2915	1	1	983	.	276	3004	-1
82	86	65	-2996	3005	3005	.						

00198

TCA FINISHED, 81 FOUND
FINISHED AT: 4/08/92 7:57:16

RMAL QUANTITATION SUMMARY FILE: U4901
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND 000199

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	807	1	16867.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1054	2	55416.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1417	3	25340.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1730	4	41399.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2289	5	25733.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2598	6	19105.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	910	2	28368.	0.472	43.394
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1274	3	46100.	1.229	59.203
9	S5# 2	CS30 TERPHENYL-D14	244	2063	5	31506.	1.024	47.842
10	S1# 3	CS45 PHENOL-D5	99	734	1	68227.	2.001	80.878
11	S1# 2	CS50 2-FLUOROPHENOL	112	578	1	55162.	1.458	89.739
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1581	3	10996.	0.100	173.963
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	367	1	21073.	1.055	47.358
14	S1#100	B028 ANALINE	93	746	1	42081.	2.614	38.183
15	S1#105	C315 PHENOL	94	737	1	36424.	2.276	37.945
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	756	1	30115.	2.015	35.437
17	S1#115	C330 2-CHLOROPHENOL	128	767	1	26701.	1.599	39.603
18	S1#125	C335 1,3-DICHLOROBENZENE	146	796	1	30176.	1.587	45.087
19	S1#130	C340 1,4-DICHLOROBENZENE	146	810	1	31837.	1.621	46.574
20	S1#145	C345 BENZYL ALCOHOL	108	830	1	16148.	1.126	34.015
21	S1#150	C350 1,2-DICHLOROBENZENE	146	838	1	29197.	1.544	44.850
22	S1#160	C355 2-METHYLPHENOL	108	848	1	24429.	1.693	34.227
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	855	1	45515.	2.588	41.706
24	S1#185	C365 4-METHYLPHENOL	108	877	1	25077.	1.772	33.560
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	880	1	20797.	1.397	35.314
26	S1#200	C375 HEXACHLOROETHANE	117	903	1	12082.	0.787	36.414
27	S2# 10	C410 NITROBENZENE	77	914	2	28595.	0.471	43.834
28	S2# 20	C415 ISOPHORONE	82	960	2	54838.	0.931	42.513
29	S2# 25	C420 2-NITROPHENOL	139	976	2	12683.	0.208	44.096
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	982	2	21217.	0.346	44.231
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1002	2	29964.	0.531	40.758
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1023	2	19286.	0.245	56.861
33	S2# 45	C430 BENZOIC ACID	122	996	2	8554.	0.187	33.100
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1042	2	22208.	0.238	67.457
35	S2# 60	C450 NAPHTHALENE	128	1058	2	69990.	1.053	47.957
36	S2# 80	C455 4-CHLOROANALINE	127	1067	2	25787.	0.418	44.572
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1082	2	11662.	0.102	82.147
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1163	2	19255.	0.364	38.164
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1199	2	39682.	0.642	44.624
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1231	3	15235.	0.284	84.685
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1256	3	11944.	0.297	63.481
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1263	3	14481.	0.339	67.425
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1300	3	41412.	1.201	54.412
44	S3# 45	C530 2-NITROANALINE	65	1320	3	12384.	0.546	35.832
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1358	3	43006.	1.379	49.223
46	S3# 65	C540 ACENAPHTHYLENE	152	1387	3	62260.	1.979	49.662
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1371	3	9984.	0.362	43.507
48	S3# 75	C545 3-NITROANALINE	138	1406	3	7932.	0.311	40.216
49	S3# 80	C550 ACENAPHTHENE	153	1424	3	38028.	1.189	50.477
50	S3# 85	C555 2,4-DINITROPHENOL	184	1427	3	3522.	0.155	35.848
51	S3# 90	C565 DIBENZOFURAN	168	1460	3	51968.	1.594	51.456
52	S3# 95	C560 4-NITROPHENOL	109	1438	3	3804.	0.137	43.701
53	S3#105	C570 2,4-DINITROTOLUENE	165	1454	3	11712.	0.453	40.797
54	S3#130	C580 DIETHYLPHTHALATE	149	1505	3	41861.	1.449	45.608
55	S3#135	C590 FLUORENE	166	1532	3	42367.	1.247	53.617
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1530	3	17594.	0.398	69.759
57	S3#150	C595 4-NITROANALINE	138	1532	3	5369.	0.211	40.178
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1540	4	6209.	0.150	40.062
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1555	4	25220.	0.542	44.958
60	S4# 20	B091 AZOBENZENE	77	1564	4	50353.	1.447	33.625
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1633	4	11323.	0.151	72.626
62	S4# 40	C630 HEXACHLOROBENZENE	284	1647	4	13633.	0.156	84.598
63	S4# 50	C635 PENTACHLOROPHENOL	266	1687	4	7068.	0.106	64.270
64	S4# 65	C640 PHENANTHRENE	178	1735	4	56926.	1.089	50.492
65	S4# 70	C645 ANTHRACENE	178	1746	4	55184.	1.112	47.940
66	S4# 80	C646 CARBAZOLE	167	1778	4	37992.	0.884	41.546
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1847	4	64218.	1.680	36.941
68	S4#110	C655 FLUORANTHENE	202	1986	4	49319.	0.950	50.169
69	S5# 10	B113 BENZIDINE	184	2012	5	4095.	0.006	1135.220
70	S5# 15	C715 PYRENE	202	2035	5	49545.	1.903	40.474
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2164	5	23039.	1.322	27.097
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2287	5	37197.	1.191	48.533
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2278	5	12555.	0.255	76.564
74	S5# 60	C740 CHRYSENE	228	2294	5	33284.	1.103	46.886

76	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	2412	6	50208.	3.535	29.713	
77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2507	6	29508.	1.274	48.479	
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2513	6	27659.	1.054	54.962	
79	S6#	35	C775	BENZO(A)PYRENE	252	2585	6	25326.	1.076	49.257	
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2913	6	22103.	0.906	51.088	
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2915	6	17999.	0.756	49.871	
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	3004	6	18032.	1.581	23.887	MQ'd

000200

RMAL QUANTITATION SUMMARY FILE: U4901
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

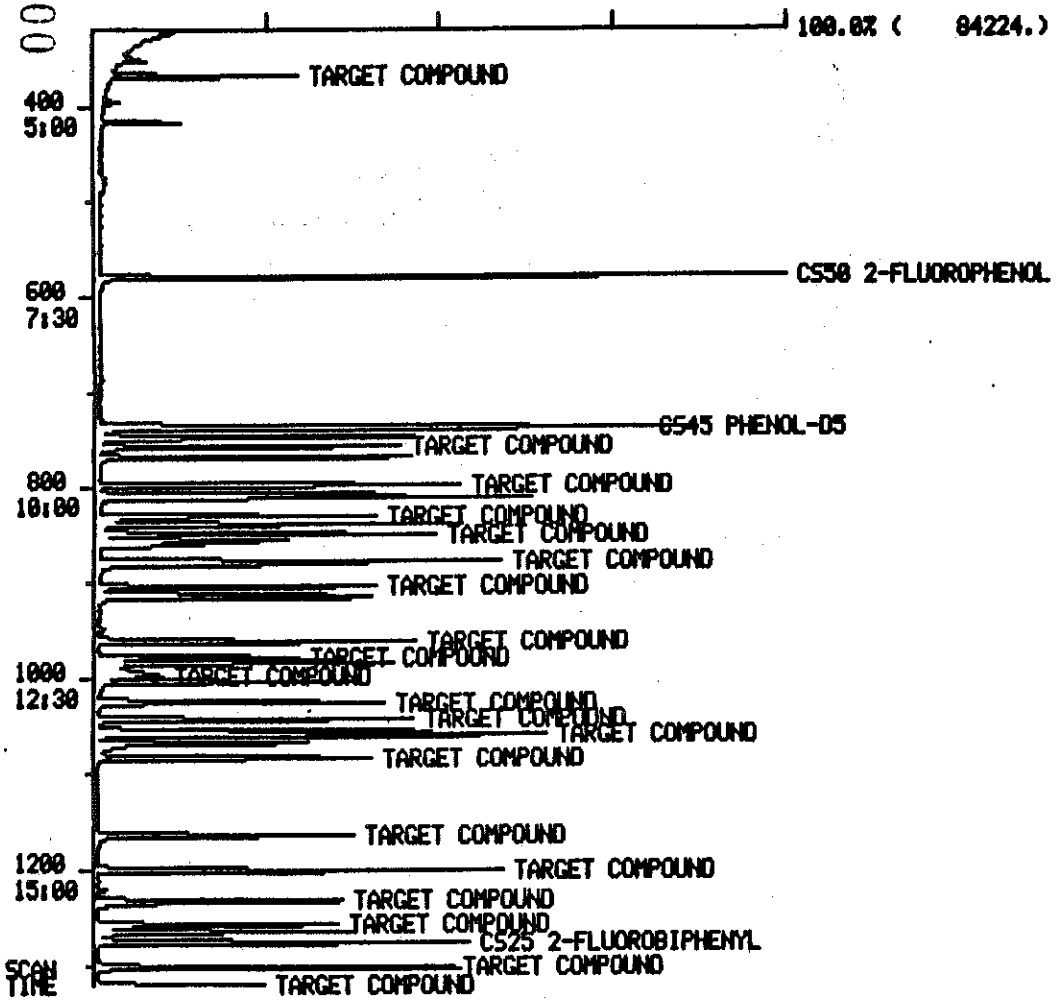
000201

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	807	1	16867.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1054	2	55416.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1417	3	25340.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1730	4	41399.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2289	5	25733.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2598	6	19105.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	910	2	28368.	0.472	43.394
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1274	3	46100.	1.229	59.203
9	S5# 2	CS30 TERPHENYL-D14	244	2063	5	31506.	1.024	47.842
10	S1# 3	CS45 PHENOL-D5	99	734	1	68227.	2.001	80.878
11	S1# 2	CS50 2-FLUOROPHENOL	112	578	1	55162.	1.458	89.739
12	S3# 2	CS55 2,4,6-TRIBROMOPHEND	330	1581	3	10996.	0.100	173.963
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	367	1	21073.	1.055	47.358
14	S1#100	B028 ANALINE	93	746	1	42081.	2.614	38.183
15	S1#105	C315 PHENOL	94	737	1	36424.	2.276	37.945
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	756	1	30115.	2.015	35.437
17	S1#115	C330 2-CHLOROPHENOL	128	767	1	26701.	1.599	39.603
18	S1#125	C335 1,3-DICHLOROBENZENE	146	796	1	30176.	1.587	45.087
19	S1#130	C340 1,4-DICHLOROBENZENE	146	810	1	31837.	1.621	46.574
20	S1#145	C345 BENZYL ALCOHOL	108	830	1	16148.	1.126	34.015
21	S1#150	C350 1,2-DICHLOROBENZENE	146	838	1	29197.	1.544	44.850
22	S1#160	C355 2-METHYLPHENOL	108	848	1	24429.	1.693	34.227
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	855	1	45515.	2.588	41.706
24	S1#185	C365 4-METHYLPHENOL	108	877	1	25077.	1.772	33.560
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	880	1	20797.	1.397	35.314
26	S1#200	C375 HEXACHLOROETHANE	117	903	1	12082.	0.787	36.414
27	S2# 10	C410 NITROBENZENE	77	914	2	28595.	0.471	43.834
28	S2# 20	C415 ISOPHORONE	82	960	2	54838.	0.931	42.513
29	S2# 25	C420 2-NITROPHENOL	139	976	2	12683.	0.208	44.096
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	982	2	21217.	0.346	44.231
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1002	2	29964.	0.531	40.758
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1023	2	19286.	0.245	56.861
33	S2# 45	C430 BENZOIC ACID	122	996	2	8554.	0.187	33.100
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1042	2	22208.	0.238	67.457
35	S2# 60	C450 NAPHTHALENE	128	1058	2	69990.	1.053	47.957
36	S2# 80	C455 4-CHLOROANALINE	127	1067	2	25787.	0.418	44.572
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1082	2	11662.	0.102	82.147
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1163	2	19255.	0.364	38.164
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1199	2	39682.	0.642	44.624
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1231	3	15235.	0.284	84.685
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1256	3	11944.	0.297	63.481
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1263	3	14481.	0.339	67.425
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1300	3	41412.	1.201	54.412
44	S3# 45	C530 2-NITROANALINE	65	1320	3	12384.	0.546	35.832
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1358	3	43006.	1.379	49.223
46	S3# 65	C540 ACENAPHTHYLENE	152	1387	3	62260.	1.979	49.662
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1371	3	9984.	0.362	43.507
48	S3# 75	C545 3-NITROANALINE	138	1406	3	7932.	0.311	40.216
49	S3# 80	C550 ACENAPHTHENE	153	1424	3	38028.	1.189	50.477
50	S3# 85	C555 2,4-DINITROPHENOL	184	1427	3	3522.	0.155	35.848
51	S3# 90	C565 DIBENZOFURAN	168	1460	3	51968.	1.594	51.456
52	S3# 95	C560 4-NITROPHENOL	109	1438	3	3804.	0.137	43.701
53	S3#105	C570 2,4-DINITROTOLUENE	165	1454	3	11712.	0.453	40.797
54	S3#130	C580 DIETHYLPHTHALATE	149	1505	3	41861.	1.449	45.608
55	S3#135	C590 FLUORENE	166	1532	3	42367.	1.247	53.617
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1530	3	17594.	0.398	69.759
57	S3#150	C595 4-NITROANALINE	138	1532	3	5369.	0.211	40.178
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1540	4	6209.	0.150	40.062
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1555	4	25220.	0.542	44.958
60	S4# 20	B091 AZOBENZENE	77	1564	4	50353.	1.447	33.625
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1633	4	11323.	0.151	72.626
62	S4# 40	C630 HEXACHLOROBENZENE	284	1647	4	13633.	0.156	84.598
63	S4# 50	C635 PENTACHLOROPHENOL	266	1687	4	7068.	0.106	64.270
64	S4# 65	C640 PHENANTHRENE	178	1735	4	56926.	1.089	50.492
65	S4# 70	C645 ANTHRACENE	178	1746	4	55184.	1.112	47.940
66	S4# 80	C646 CARBAZOLE	167	1778	4	37992.	0.884	41.546
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1847	4	64218.	1.680	36.941
68	S4#110	C655 FLUORANTHENE	202	1986	4	49319.	0.950	50.169
69	S5# 10	B113 BENZIDINE	184	2012	5	4095.	0.006	1135.220
70	S5# 15	C715 PYRENE	202	2035	5	49545.	1.903	40.474
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2164	5	23039.	1.322	27.097
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2287	5	37197.	1.191	48.533
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2278	5	12555.	0.255	76.564
74	S5# 60	C740 CHRYSENE	228	2294	5	33284.	1.103	46.886
75	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	2282	5	32807.	1.700	30.003
76	S6# 10	C760 DI-N-OCTYL PHTHALAT	149	2412	6	50208.	3.538	29.713

77	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2513	6	27659.	1.054	54.796
78	S6#	25	C775	BENZO(A)PYRENE	252	2585	6	25326.	1.076	49.257
79	S6#	35	C780	INDENO(1,2,3-CD)PYR	276	2913	6	22103.	0.906	51.088
80	S6#	55	C785	DIBENZ(A,H)ANTHRACE	278	2915	6	17999.	0.756	49.871
81	S6#	60	C790	BENZO(G,H,I)PERYLEN	276	3004	6	20170.	1.581	26.719

000203

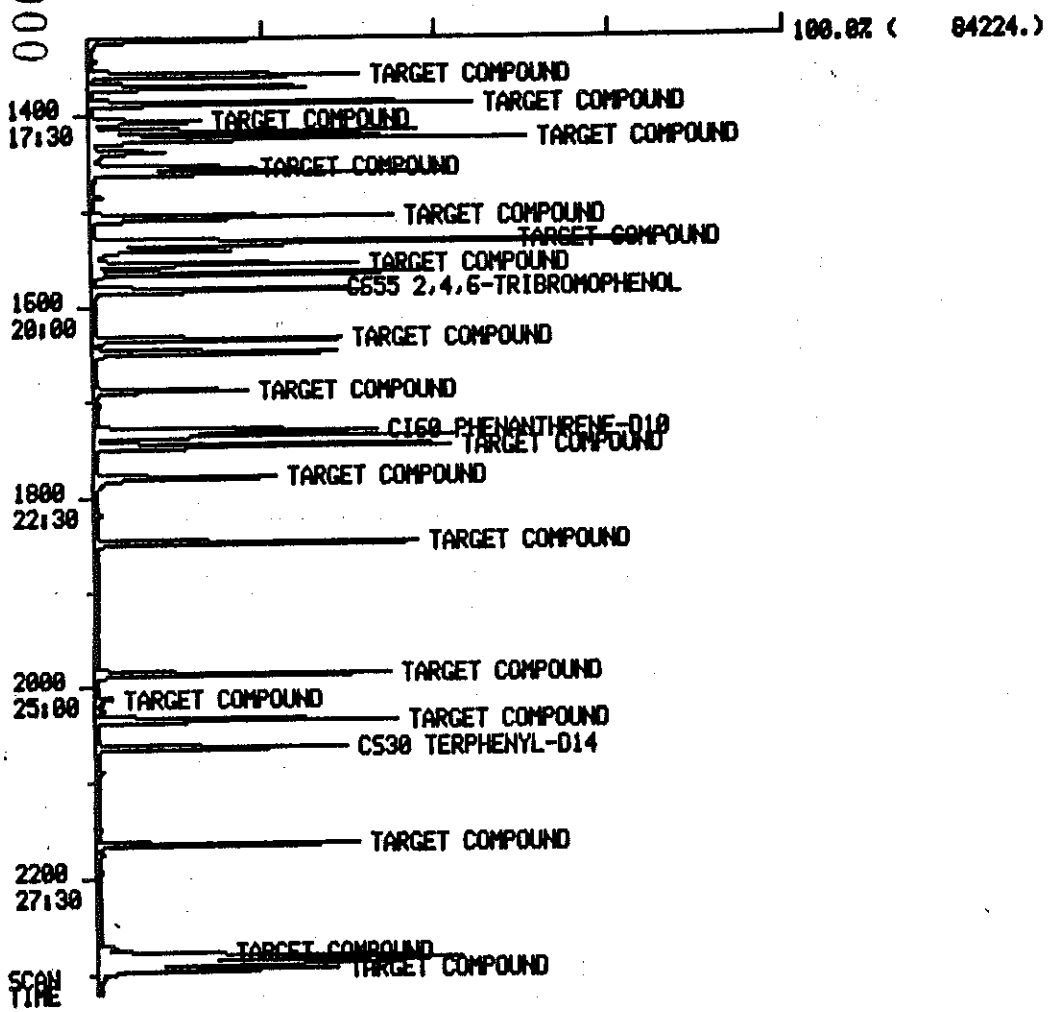
DATA FROM FILE: U4901 SCANS 320 TO 1320 ACQUIRED: 04/08/92 7:06:00
CALI: U4901 #3 OUT OF 320 TO 3200
SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



000204

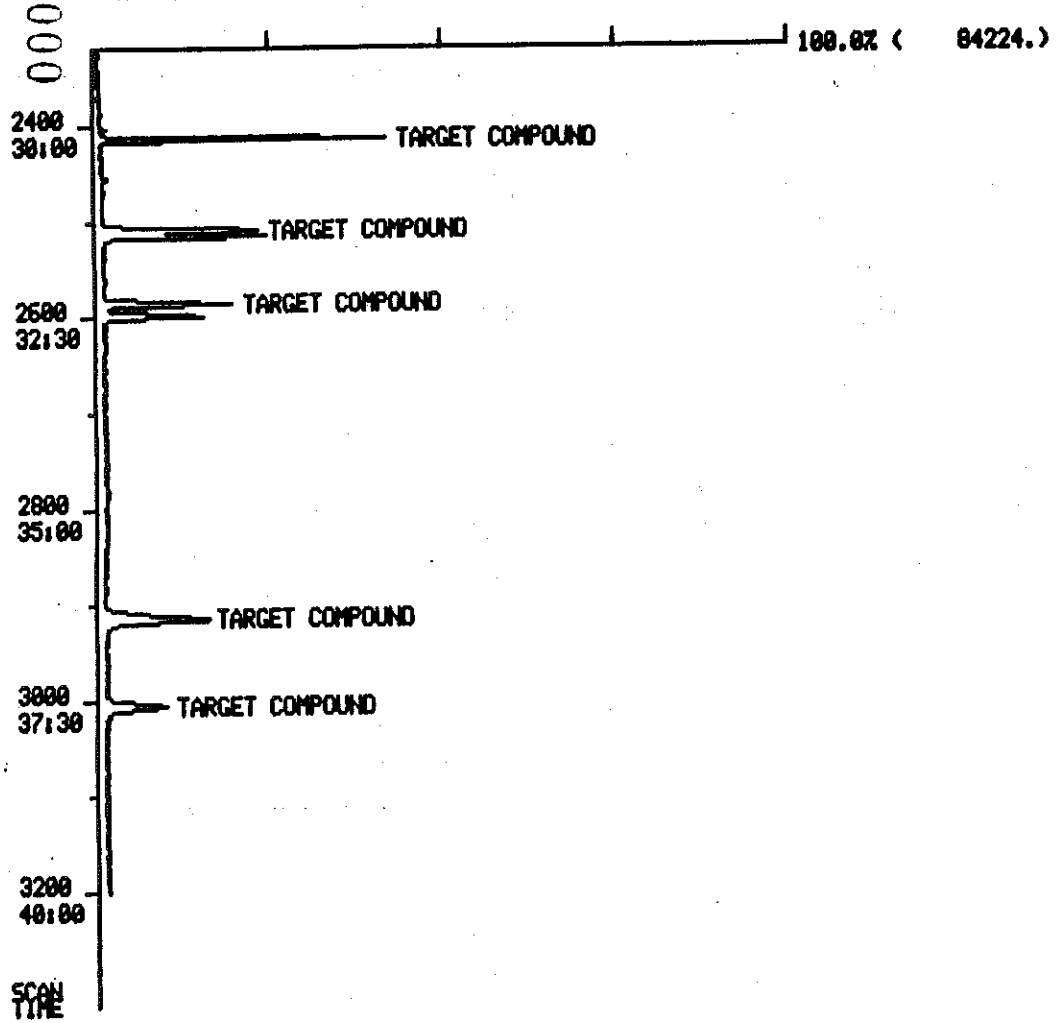
DATA FROM FILE: U4901 SCANS 1320 TO 2320 ACQUIRED: 04/08/92 7:06:00
CALI: U4901 #3 OUT OF 320 TO 3200

SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,U45681,BNA,CAL ,
CONDS.: UG/ML *NA *100Z/NA *(NA/NA)/NA NA M



000205

DATA FROM FILE: U4901 SCANS 2320 TO 3200 ACQUIRED: 04/08/92 7:06:00
CALI: U4901 #3 OUT OF 320 TO 3200
SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,U#5681,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



Duplicate Scan Report
Quan List File: U4901

2 SCAN DIFFERENCE DUPLICATE

COMP#	SCAN	COMP#	SCAN	DIFF.
5	2289	72	2287	-2
55	1532	56	1530	-2
55	1532	57	1532	0
56	1530	57	1532	2
80	2913	81	2915	2

5 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2598
9	2063
10	734
12	1581
14	746
32	1023
46	1387
51	1460
55	1532
72	2287
74	2294

160 PPM Fixed
RAS 4/8/92

000207

Name List: HEDR1 Entry # 1 of 1
File Name: U4902

(1)Format: BNACLP
(2)Case: STDU
(3)Sample ID: SSTD160
(4)Level: NA
(5)Matrix: NA
(6)Lab Sample ID: V#5681
(7)Fraction: BNA
(8)Type: CAL
(10)Analyst: RAS
(11)Quan List Units: UG/ML
(12)Extract Volume: NA
(13)Extract Dilution: NA
(14)Int. Ext. Vol.: NA
(15)Int. Ext. Vol. Used: NA
(16)Sample Amount: NA
(17)Percent Moisture: NA
(19)Run Factor: NA
(20)Surrogate Volume: NA

4/8/92 8:15:34 SCAN 1 OF 3250
Acquisition started

Acquire
04/08/92 8:15:00 + 0:04
Sample: CLP,STDU ,,SSTD160 ,NA ,NA ,V#5681,BNA,CAL ,
Conds.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M
Formula: NANA
Submitted by: RMAL

Run 2:U4902
Free sectors: 21806
Instrument: 4500
Analyst: RAS

ACQUIRING
Scan: 5 of 3250
Weight: 0.000
Acct. No: BNACLP

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

Loaded GC Desc:ST Current GC oven tmp: 28 DegC
Current GC Desc:ST GC elapsed time : 0: 3 min

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

Injector : 275 DegC
Int.oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

********** 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

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

4/8/92 8:56:14
ACQUISITION COMPLETED
SCANS 1 TO 3250 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	3250	519.0	2437.5	21.3	67257. 21.	28.

PROCEDURE: TCA DIAGNOSTIC REPORT 4/08/92 8:58:0
DATA FILE: U4902
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

000208

< STANDARDS				>< PLUS UNKNOWNS				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	9	36	52	ISO1/TC01
3	3	1	0	18	18	2	260	ISO2/TC02
3	3	1	0	13	13	2	51	ISO3/TC03
3	3	1	0	18	17	1	47	ISO4/TC04
3	3	1	0	10	10	1	65	ISO5/TC05
3	3	1	87	9	9	1	116	ISO6/TC06
3	3	1	18	15	15	16	81	ISO7/TC07
1	1	1	0	4	4	2	83	ISO8/TC08

82 COMPOUNDS PROCESSED, 81 FOUND

< COMPOUND		>< SEARCH					>< SAT	>< CHRO		
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAK
1	S1	1	-806	807	807	.	1	943	.	152	807	.	
2	S1	15	-368	370	370	.	6	1000	.	74	370	.	
3	S1	2	-578	580	580	.	2	994	.	112	580	.	
4	S1	3	-735	736	737	1	1	960	.	99	737	.	
5	S1	105	-738	739	739	.	1	990	.	94	739	.	
6	S1	100	-746	747	747	.	1	989	.	93	747	.	
7	S1	110	-757	758	758	.	1	982	.	93	758	.	
8	S1	115	-768	769	769	.	3	992	.	128	769	.	
9	S1	125	-797	798	797	-1	1	990	.	146	797	.	
10	S2	1	-1053	1054	1054	.	1	997	.	136	1054	.	
11	S3	1	-1416	1417	1417	.	1	994	.	164	1417	.	
12	S1	130	-811	812	810	-2	1	986	.	146	810	.	
13	S1	145	-830	831	832	1	1	1000	.	108	831	-1	
14	S1	150	-839	840	839	-1	1	993	.	146	839	.	
15	S1	160	-849	850	850	.	1	982	.	108	850	.	
16	S1	165	-856	857	856	-1	2	990	.	45	856	.	
17	S1	185	-878	879	880	1	1	995	.	108	880	.	
18	S1	190	-881	882	883	1	1	994	.	70	883	.	
19	S1	200	-904	905	903	-2	1	996	.	117	903	.	
20	S2	2	-910	911	912	1	1	1000	.	82	912	.	
21	S2	10	-914	915	916	1	1	995	.	77	916	.	
22	S2	20	-961	963	963	.	1	980	.	82	963	.	
23	S2	25	-976	978	977	-1	1	993	.	139	977	.	
24	S2	30	-982	984	983	-1	1	998	.	107	983	.	
25	S2	45	-997	999	1008	9	1	995	.	122	1008	.	
26	S2	35	-1002	1004	1003	-1	1	998	.	93	1003	.	
27	S2	40	-1023	1024	1024	.	1	992	.	162	1024	.	
28	S2	55	-1042	1043	1042	-1	1	993	.	180	1042	.	
29	S2	60	-1058	1059	1059	.	1	999	.	128	1059	.	
30	S2	80	-1067	1068	1068	.	1	986	.	127	1068	.	
31	S2	95	-1082	1083	1082	-1	1	997	.	225	1082	.	
32	S2	130	-1163	1164	1164	.	1	992	.	107	1164	.	
33	S2	145	-1199	1200	1200	.	1	987	.	142	1200	.	
34	S3	20	-1232	1233	1232	-1	1	992	.	237	1231	-1	
35	S3	25	-1257	1258	1257	-1	2	992	.	196	1256	-1	
36	S3	30	-1264	1264	1264	.	1	988	.	196	1264	.	
37	S4	1	-1729	1730	1730	.	1	987	.	188	1730	.	
38	S3	3	-1275	1276	1275	-1	1	997	.	172	1275	.	
39	S3	40	-1301	1302	1301	-1	1	998	.	162	1301	.	
40	S3	45	-1321	1322	1321	-1	1	995	.	65	1321	.	
41	S3	55	-1358	1359	1359	.	1	978	.	163	1359	.	
42	S3	70	-1371	1372	1372	.	1	998	.	165	1372	.	
43	S3	65	-1388	1389	1388	-1	1	989	.	152	1388	.	
44	S3	75	-1406	1407	1407	.	1	997	.	138	1407	.	
45	S3	80	-1424	1425	1425	.	1	984	.	153	1425	.	
46	S3	85	-1428	1429	.	.	.	.	.	184	1428	.	
47	S3	95	-1438	1439	1439	.	1	997	.	109	1439	.	
48	S3	105	-1455	1456	1456	.	1	991	.	165	1456	.	
49	S3	90	-1460	1461	1461	.	1	958	.	168	1461	.	
50	S3	130	-1505	1506	1506	.	1	960	.	149	1506	.	
51	S3	140	-1531	1532	1531	-1	1	979	.	204	1531	.	
52	S3	135	-1532	1533	1533	.	1	992	.	166	1533	.	
53	S3	150	-1534	1535	1535	.	1	975	.	138	1535	.	
54	S4	10	-1540	1541	1542	1	1	976	.	198	1542	.	
55	S4	15	-1555	1556	1556	.	1	977	.	169	1556	.	
56	S4	20	-1565	1566	1565	-1	1	993	.	77	1565	.	
57	S3	2	-1582	1583	1583	.	1	976	.	330	1582	-1	
58	S4	30	-1634	1635	1634	-1	1	979	.	248	1634	.	
59	S4	40	-1648	1649	1648	-1	1	999	.	284	1648	.	
60	S5	1	-2286	2290	2290	.	1	992	.	240	2290	.	
61	S4	50	-1688	1688	1688	.	1	990	.	266	1688	.	
62	S4	65	-1735	1736	1736	.	1	957	.	178	1736	.	
63	S4	70	-1746	1747	1747	.	1	941	.	178	1747	.	
64	S4	80	-1779	1780	1778	-2	1	997	.	167	1778	.	
65	S4	85	-1848	1849	1848	-1	1	939	.	149	1848	.	

67	S6	1	-2593	2599	2599	.	1	991	.	264	2577	.
68	S5	10	-2011	2013	2012	-1	1	995	.	184	2012	.
69	S5	15	-2034	2036	2036	.	1	995	.	202	2036	.
70	S5	2	-2062	2064	2064	.	1	982	.	244	2064	.
71	S5	40	-2163	2166	2164	-2	1	993	.	149	2164	.
72	S5	55	-2276	2280	2279	-1	1	988	.	252	2279	.
73	S5	65	-2280	2284	2283	-1	1	993	.	149	2283	.
74	S5	50	-2285	2289	2288	-1	2	991	.	228	2288	.
75	S5	60	-2293	2297	2296	-1	2	996	.	228	2296	.
76	S6	10	-2409	2414	2414	.	1	998	.	149	2414	.
77	S6	15	-2504	2509	2510	1	2	988	.	252	2509	-1
78	S6	25	-2510	2515	2516	1	2	991	.	252	2516	.
79	S6	35	-2581	2587	2587	.	1	980	.	252	2587	.
80	S6	55	-2904	2918	2919	1	2	990	.	276	2917	-2
81	S6	60	-2906	2920	2921	1	1	992	.	278	2921	.
82	S6	65	-2996	3013	3012	-1	1	988	.	276	3011	-1

00209

TCA FINISHED, 81 FOUND
FINISHED AT: 4/08/92 9:06:21

RMAL QUANTITATION SUMMARY FILE: U4902
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

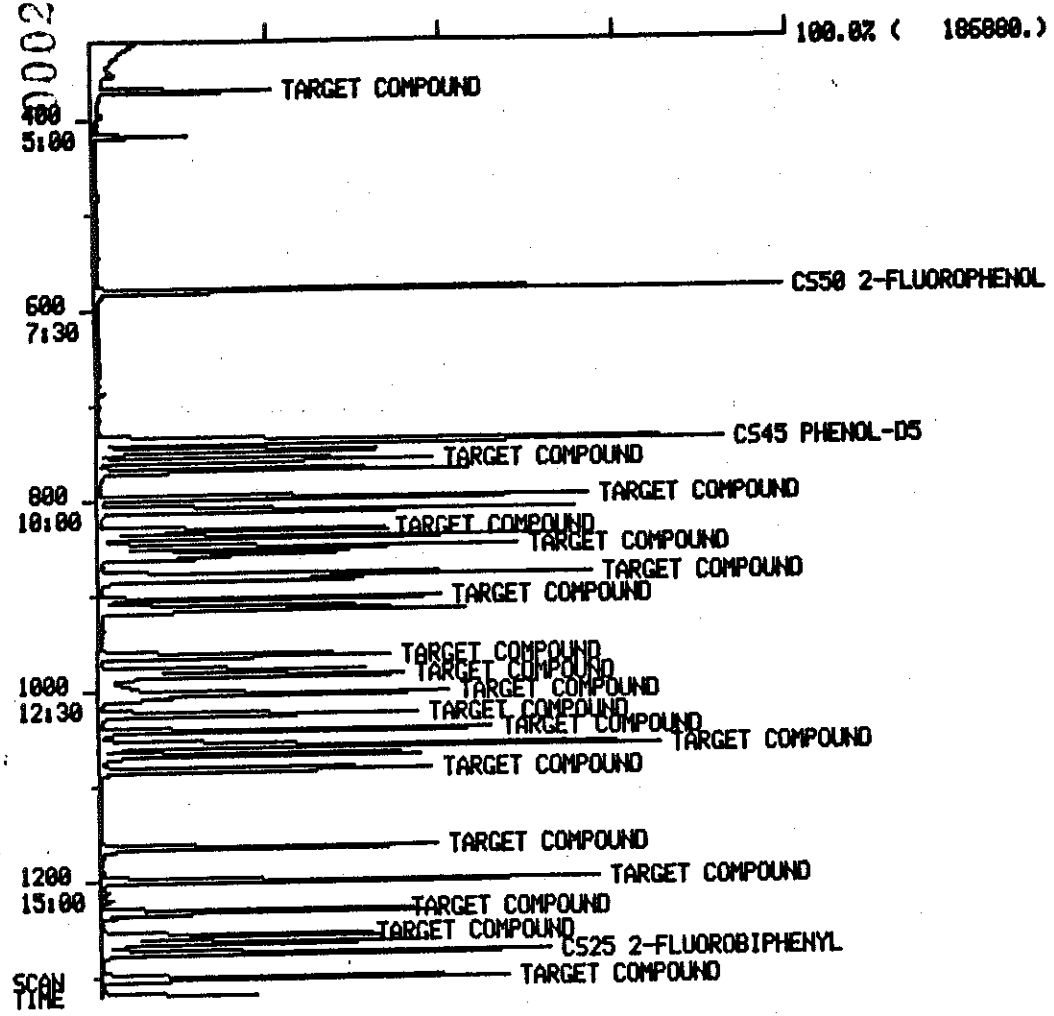
000210

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	807	1	14072.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1054	2	44940.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1417	3	20259.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1730	4	32879.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2290	5	23400.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2599	6	19312.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	912	2	85080.	0.472	160.484
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1275	3	133506.	1.229	214.452
9	S5# 2	CS30 TERPHENYL-D14	244	2064	5	90521.	1.024	151.162
10	S1# 3	CS45 PHENOL-D5	99	737	1	196322.	2.001	278.949
11	S1# 2	CS50 2-FLUOROPHENOL	112	580	1	143586.	1.458	279.981
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1582	3	32384.	0.100	640.828
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	370	1	54290.	1.055	146.241
14	S1#100	B028 ANALINE	93	747	1	109683.	2.614	119.290
15	S1#105	C315 PHENOL	94	739	1	108933.	2.276	136.023
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	758	1	87852.	2.015	123.909
17	S1#115	C330 2-CHLOROPHENOL	128	769	1	79458.	1.599	141.262
18	S1#125	C335 1,3-DICHLOROBENZENE	146	797	1	85417.	1.587	152.970
19	S1#130	C340 1,4-DICHLOROBENZENE	146	810	1	87790.	1.621	153.934
20	S1#145	C345 BENZYL ALCOHOL	108	831	1	46963.	1.126	118.574
21	S1#150	C350 1,2-DICHLOROBENZENE	146	839	1	82585.	1.544	152.058
22	S1#160	C355 2-METHYLPHENOL	108	850	1	73382.	1.693	123.236
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	856	1	136716.	2.588	150.158
24	S1#185	C365 4-METHYLPHENOL	108	880	1	77229.	1.772	123.879
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	883	1	63489.	1.397	129.221
26	S1#200	C375 HEXACHLOROETHANE	117	903	1	35612.	0.787	128.648
27	S2# 10	C410 NITROBENZENE	77	916	2	87948.	0.471	166.243
28	S2# 20	C415 ISOPHORONE	82	963	2	156150.	0.931	149.273
29	S2# 25	C420 2-NITROPHENOL	139	977	2	41049.	0.208	175.989
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	983	2	63062.	0.346	162.112
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1003	2	91405.	0.531	153.317
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1024	2	58192.	0.245	211.563
33	S2# 45	C430 BENZOIC ACID	122	1008	2	31612.	0.187	150.849
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1042	2	62441.	0.238	233.878
35	S2# 60	C450 NAPHTHALENE	128	1059	2	209748.	1.053	177.223
36	S2# 80	C455 4-CHLOROANALINE	127	1068	2	79255.	0.418	168.921
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1082	2	32850.	0.102	285.337
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1164	2	58549.	0.364	143.097
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1200	2	118525.	0.642	164.355
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1231	3	44409.	0.284	308.761
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1256	3	36803.	0.297	244.664
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1264	3	42273.	0.339	246.193
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1301	3	121164.	1.201	199.129
44	S3# 45	C530 2-NITROANALINE	65	1321	3	39386.	0.546	142.540
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1359	3	122610.	1.379	175.532
46	S3# 65	C540 ACENAPHTHYLENE	152	1388	3	181083.	1.979	180.666
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1372	3	29807.	0.362	162.466
48	S3# 75	C545 3-NITROANALINE	138	1407	3	29657.	0.311	188.077
49	S3# 80	C550 ACENAPHTHENE	153	1425	3	111119.	1.189	184.486
50	S3# 85	C555 2,4-DINITROPHENOL	184	1428	3	15289.	0.155	194.644
51	S3# 90	C565 DIBENZOFURAN	168	1461	3	154503.	1.594	191.352
52	S3# 95	C560 4-NITROPHENOL	109	1439	3	11757.	0.137	168.947
53	S3#105	C570 2,4-DINITROTOLUENE	165	1456	3	36919.	0.453	160.855
54	S3#130	C580 DIETHYLPHTHALATE	149	1506	3	119921.	1.449	163.423
55	S3#135	C590 FLUORENE	166	1533	3	121146.	1.247	191.766
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1531	3	48651.	0.398	241.277
57	S3#150	C595 4-NITROANALINE	138	1535	3	27708.	0.211	259.366
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1542	4	21894.	0.150	177.872
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1556	4	77501.	0.542	173.954
60	S4# 20	B091 AZOBENZENE	77	1565	4	150849.	1.447	126.839
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1634	4	32058.	0.151	258.904
62	S4# 40	C630 HEXACHLOROBENZENE	284	1648	4	37259.	0.156	291.121
63	S4# 50	C635 PENTACHLOROPHENOL	266	1688	4	24371.	0.106	279.036
64	S4# 65	C640 PHENANTHRENE	178	1736	4	163217.	1.089	182.284
65	S4# 70	C645 ANTHRACENE	178	1747	4	162658.	1.112	177.923
66	S4# 80	C646 CARBAZOLE	167	1778	4	116835.	0.884	160.872
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1848	4	184338.	1.680	133.517
68	S4#110	C655 FLUORANTHENE	202	1987	4	142022.	0.950	181.905
69	S5# 10	B113 BENZIDINE	184	2012	5	11344.	0.006	3458.430
70	S5# 15	C715 PYRENE	202	2036	5	138756.	1.903	124.654
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2164	5	70099.	1.322	90.668
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2288	5	114450.	1.191	164.219
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2279	5	47582.	0.255	319.098
74	S5# 60	C740 CHRYSENE	228	2296	5	100282.	1.103	155.347

76	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	2414	6	165234.	3.338	78.730
77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2509	6	102012.	1.274	165.801
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2516	6	86878.	1.054	170.787
79	S6#	35	C775	BENZO(A)PYRENE	252	2587	6	87185.	1.076	167.751
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2917	6	83165.	0.906	190.162
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2921	6	71104.	0.756	194.903
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	3011	6	69738.	1.581	91.390

DATA FROM FILE: U4902 SCANS 320 TO 1320 ACQUIRED: 04/08/92 8:15:00
CALI: U4902 #3 OUT OF 320 TO 3200

SAMPLE: CLP,STDU ,,SSTD160 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML %NA %100%/NA %(NA/NA)/NA NA M

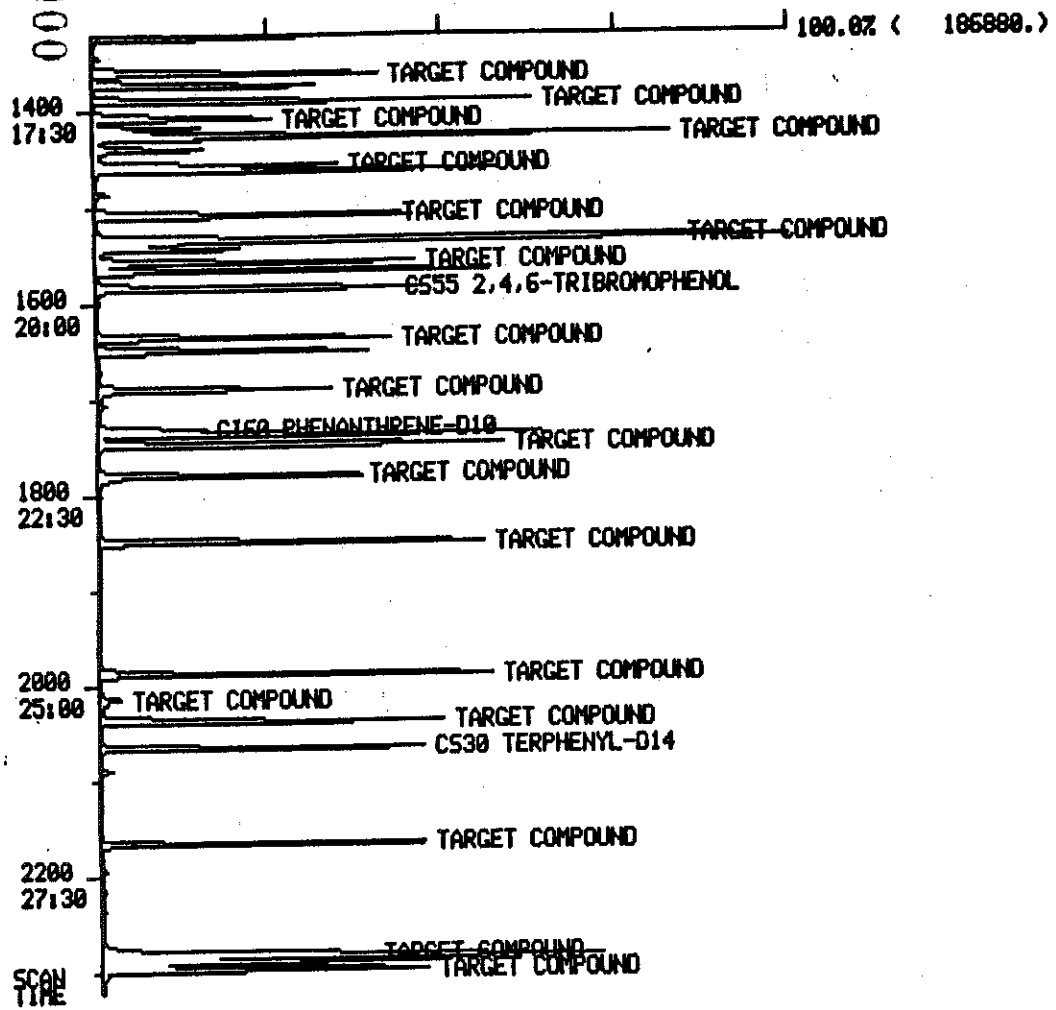


000212

000213

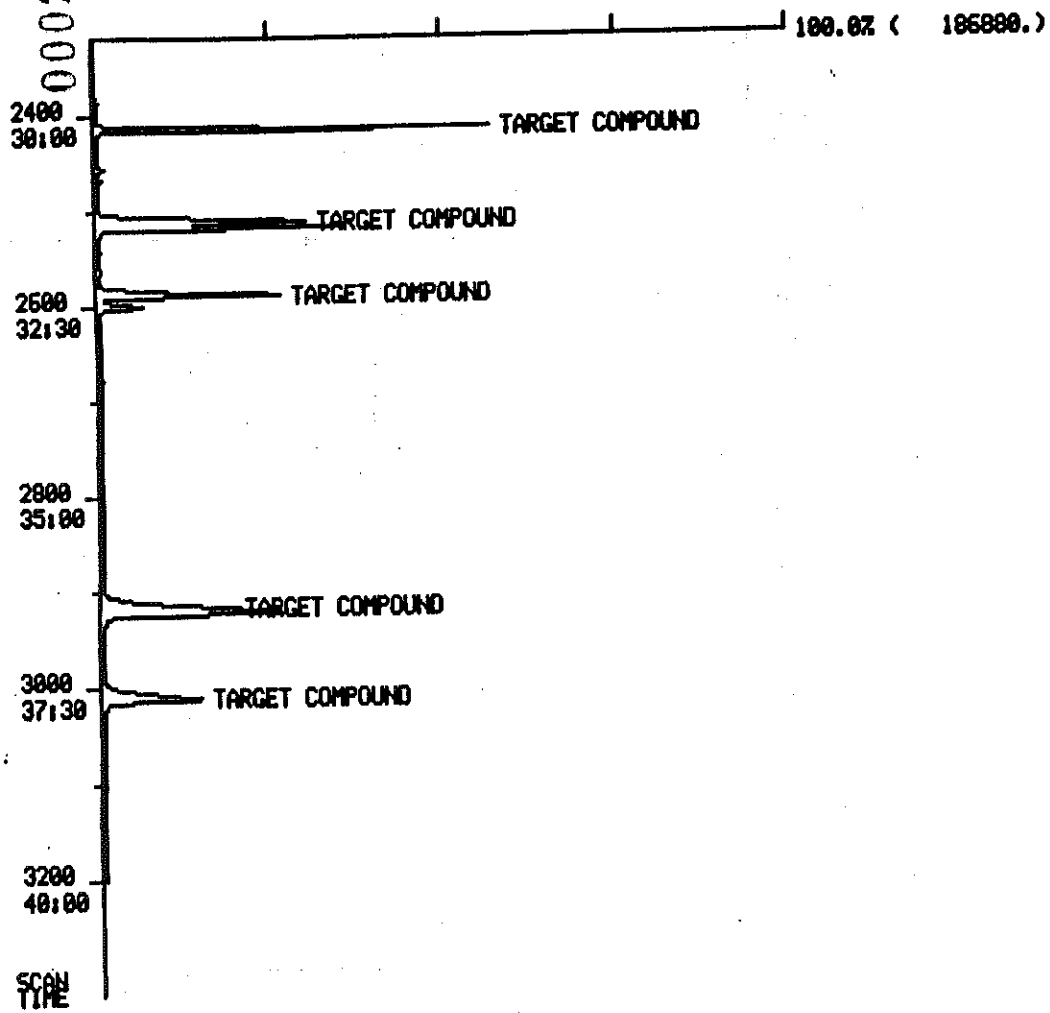
DATA FROM FILE: U4902 SCANS 1320 TO 2320 ACQUIRED: 04/08/92 8:15:00
CALI: U4902 #3 OUT OF 320 TO 3200

SAMPLE: CLP,STDU ,,SSTD160 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML %NA %100%/NA %(NA/NA)/NA NA M



DATA FROM FILE: U4902 SCANS 2320 TO 3200 ACQUIRED: 04/08/92 8:15:00
CALI: U4902 #3 OUT OF 320 TO 3200

SAMPLE: CLP,STDU ,,SSTD160 ,NA ,NA ,U#5681,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



0000214

Duplicate Scan Report
Quan List File: U4902

2 SCAN DIFFERENCE DUPLICATE

000215

COMP#	SCAN	COMP#	SCAN	DIFF
5	2290	72	2288	-2
10	737	15	739	2
55	1533	56	1531	-2
55	1533	57	1535	2

4 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2599
9	2064
10	737
12	1582
14	747
32	1024
46	1388
51	1461
55	1533
72	2288
74	2296

120 PPM Fixed
RAS 4/8/92

Name List: HEDR1 Entry # 1 of 1
File Name: U4903

000216

(1)Format: BNACLP
(3)Sample ID: SSTD120
(5)Matrix: NA
(7)Fraction: BNA
(10)Analyst: RAS
(12)Extract Volume: NA
(14)Int. Ext. Vol.: NA
(16)Sample Amount: NA
(19)Run Factor: NA

(2)Case: STDU
(4)Level: NA
(6)Lab Sample ID: V#5681
(8)Type: CAL
(11)Quan List Units: UG/ML
(13)Extract Dilution: NA
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: NA

4/8/92 9:20:49 SCAN 1 OF 3250
Acquisition started

Acquire
04/08/92 9:20:00 + 0:04
Sample: CLP,STDU ,,SSTD120 ,NA ,NA ,V#5681,BNA,CAL ,
Conds.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M
Formula: NANA
Submitted by: RMAL

Run 2:U4903
Free sectors: 21155
Instrument: 4500
Analyst: RAS

ACQUIRING
Scan: 5 of 3250
Weight: 0.000
Acct. No: BNACLP

********** QC PARAMETERS **********

Loaded QC Desc:ST Current QC oven tmp: 28 DegC Injector : 275 DegC
Current QC Desc:ST QC elapsed time : 0: 3 min Int.oven : 275 DegC

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

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

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

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

Min Peak Width: 3 Min Frag Width %: 80 Min Area: 30
ADC Threshold: 1 Baseline: 0

***** Mode: Centroid positive ion

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

4/8/92 10:01:29
ACQUISITION COMPLETED
SCANS 1 TO 3250 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan		per sec
Centroid	3250	510.4	2437.5	20.9	51803.	16.	21.

PROCEDURE: TCA DIAGNOSTIC REPORT 4/08/92 10:05:0
DATA FILE: U4903
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

00217

< STANDARDS				>< PLUS UNKNOWNS				>< - LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	9	6	50	ISO1/TC01
3	3	1	0	18	18	2	169	ISO2/TC02
3	3	1	0	13	13	2	64	ISO3/TC03
3	3	1	0	18	18	1	44	ISO4/TC04
3	3	1	0	10	10	1	77	ISO5/TC05
3	3	1	58	9	9	1	106	ISO6/TC06
3	3	1	99	15	15	8	84	ISO7/TC07
1	1	1	0	4	4	1	57	ISO8/TC08

82 COMPOUNDS PROCESSED, 82 FOUND

< COMPOUND		><	SEARCH					>< SAT	>< CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA PEAK
1	S1	1	-806	807	807	.	1	947	.	152	807	.
2	S1	15	-368	370	370	.	3	1000	.	74	370	.
3	S1	2	-578	579	579	.	1	993	.	112	579	.
4	S1	3	-735	736	736	.	1	971	.	99	736	.
5	S1	105	-738	739	738	-1	1	990	.	94	738	.
6	S1	100	-746	746	747	1	1	989	.	93	747	.
7	S1	110	-757	757	757	.	1	977	.	93	757	.
8	S1	115	-768	768	768	.	2	991	.	128	768	.
9	S1	125	-797	797	797	.	1	988	.	146	797	.
10	S2	1	-1053	1054	1054	.	1	997	.	136	1054	.
11	S3	1	-1416	1417	1417	.	1	993	.	164	1417	.
12	S1	130	-811	812	810	-2	1	988	.	146	810	.
13	S1	145	-830	831	831	.	1	1000	.	108	831	.
14	S1	150	-839	840	839	-1	1	992	.	146	839	.
15	S1	160	-849	850	849	-1	1	982	.	108	849	.
16	S1	165	-856	857	856	-1	2	990	.	45	856	.
17	S1	185	-878	879	879	.	1	995	.	108	879	.
18	S1	190	-881	882	882	.	1	996	.	70	882	.
19	S1	200	-904	905	903	-2	1	994	.	117	903	.
20	S2	2	-910	911	912	1	1	996	.	82	912	.
21	S2	10	-914	915	915	.	1	997	.	77	915	.
22	S2	20	-961	962	962	.	1	977	.	82	962	.
23	S2	25	-976	977	977	.	1	991	.	139	977	.
24	S2	30	-982	983	983	.	1	994	.	107	983	.
25	S2	45	-997	998	1004	6	1	997	.	122	1004	.
26	S2	35	-1002	1003	1003	.	1	1000	.	93	1003	.
27	S2	40	-1023	1024	1024	.	1	993	.	162	1024	.
28	S2	55	-1042	1043	1042	-1	1	990	.	180	1042	.
29	S2	60	-1058	1059	1059	.	1	921	.	128	1059	.
30	S2	80	-1067	1068	1068	.	1	985	.	127	1068	.
31	S2	95	-1082	1083	1083	.	1	996	.	225	1082	-1
32	S2	130	-1163	1164	1164	.	1	994	.	107	1164	.
33	S2	145	-1199	1200	1200	.	1	990	.	142	1200	.
34	S3	20	-1232	1232	1232	.	1	996	.	237	1231	-1
35	S3	25	-1257	1257	1256	-1	2	995	.	196	1256	.
36	S3	30	-1264	1264	1264	.	1	991	.	196	1264	.
37	S4	1	-1729	1730	1730	.	1	995	.	188	1729	-1
38	S3	3	-1275	1275	1275	.	1	997	.	172	1275	.
39	S3	40	-1301	1301	1301	.	1	997	.	162	1301	.
40	S3	45	-1321	1321	1321	.	1	992	.	65	1321	.
41	S3	55	-1358	1358	1358	.	1	972	.	163	1358	.
42	S3	70	-1371	1371	1371	.	1	996	.	165	1371	.
43	S3	65	-1388	1388	1388	.	1	994	.	152	1387	-1
44	S3	75	-1406	1406	1406	.	1	995	.	138	1406	.
45	S3	80	-1424	1424	1424	.	1	981	.	153	1424	.
46	S3	85	-1428	1428	1428	.	1	984	.	184	1427	-1
47	S3	95	-1438	1438	1438	.	1	1000	.	109	1438	.
48	S3	105	-1455	1455	1455	.	1	994	.	165	1455	.
49	S3	90	-1460	1460	1460	.	1	957	.	168	1460	.
50	S3	130	-1505	1505	1506	1	1	961	.	149	1506	.
51	S3	140	-1531	1531	1531	.	1	977	.	204	1531	.
52	S3	135	-1532	1532	1532	.	1	995	.	166	1532	.
53	S3	150	-1534	1534	1534	.	1	930	.	138	1534	.
54	S4	10	-1540	1540	1541	1	1	976	.	198	1541	.
55	S4	15	-1555	1555	1555	.	1	984	.	169	1555	.
56	S4	20	-1565	1565	1564	-1	1	997	.	77	1564	.
57	S3	2	-1582	1582	1582	.	1	959	.	330	1582	.
58	S4	30	-1634	1634	1634	.	1	982	.	248	1634	.
59	S4	40	-1648	1648	1647	-1	1	993	.	284	1647	.
60	S5	1	-2286	2289	2289	.	1	987	.	240	2289	.
61	S4	50	-1688	1688	1688	.	1	989	.	266	1687	-1
62	S4	65	-1735	1735	1735	.	1	955	.	178	1735	.
63	S4	70	-1746	1746	1746	.	1	942	.	178	1746	.
64	S4	80	-1779	1779	1778	-1	1	996	.	167	1778	.
65	S4	85	-1848	1849	1848	-1	1	944	.	149	1848	.

67	86	1	-2593	2598	2599	1	1	988	.	[illegible]	[illegible]	.
68	85	10	-2011	2012	2012	.	1	908	.	184	2011	-1
69	85	15	-2034	2035	2035	.	1	996	.	202	2035	.
70	85	2	-2062	2063	2063	.	1	989	.	244	2063	.
71	85	40	-2163	2165	2164	-1	1	990	.	149	2164	.
72	85	55	-2276	2279	2278	-1	1	990	.	252	2278	.
73	85	65	-2280	2283	2282	-1	1	995	.	149	2282	.
74	85	50	-2285	2288	2287	-1	2	992	.	228	2287	.
75	85	60	-2293	2296	2295	-1	1	994	.	228	2295	.
76	86	10	-2409	2413	2413	.	1	995	.	149	2413	.
77	86	15	-2504	2508	2508	.	2	986	.	252	2508	.
78	86	25	-2510	2514	2515	1	2	988	.	252	2515	.
79	86	35	-2581	2586	2586	.	1	975	.	252	2586	.
80	86	55	-2904	2913	2913	.	1	992	.	276	2912	-1
81	86	60	-2906	2915	2915	.	1	987	.	278	2915	.
82	86	65	-2996	3006	3007	1	1	980	.	276	3007	.

00218

TCA FINISHED, 82 FOUND
FINISHED AT: 4/08/92 10:13:13

RMAL QUANTITATION SUMMARY FILE: U4903
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

000219

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	807	1	14540.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1054	2	46334.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1417	3	21560.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1729	4	35009.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2289	5	21720.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2599	6	16126.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	912	2	58642.	0.472	107.285
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1275	3	94587.	1.229	142.768
9	S5# 2	CS30 TERPHENYL-D14	244	2063	5	62534.	1.024	112.503
10	S1# 3	CS45 PHENOL-D5	99	736	1	137194.	2.001	188.662
11	S1# 2	CS50 2-FLUOROPHENOL	112	579	1	104887.	1.458	197.938
12	S3# 2	CS55 2,4,6-TRIBROMOPHEND	330	1582	3	22748.	0.100	422.983
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	370	1	38813.	1.055	101.187
14	S1#100	B028 ANALINE	93	747	1	79564.	2.614	83.748
15	S1#105	C315 PHENOL	94	738	1	76135.	2.276	92.009
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	757	1	60252.	2.015	82.246
17	S1#115	C330 2-CHLOROPHENOL	128	768	1	54551.	1.599	93.860
18	S1#125	C335 1,3-DICHLOROBENZENE	146	797	1	59502.	1.587	103.130
19	S1#130	C340 1,4-DICHLOROBENZENE	146	810	1	62499.	1.621	106.060
20	S1#145	C345 BENZYL ALCOHOL	108	831	1	32030.	1.126	78.268
21	S1#150	C350 1,2-DICHLOROBENZENE	146	839	1	57446.	1.544	102.367
22	S1#160	C355 2-METHYLPHENOL	108	849	1	50159.	1.693	81.525
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	856	1	94727.	2.588	100.691
24	S1#185	C365 4-METHYLPHENOL	108	879	1	53018.	1.772	82.306
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	882	1	43787.	1.397	86.252
26	S1#200	C375 HEXACHLOROETHANE	117	903	1	24692.	0.787	86.329
27	S2# 10	C410 NITROBENZENE	77	915	2	61856.	0.471	113.405
28	S2# 20	C415 ISOPHORONE	82	962	2	110575.	0.931	102.524
29	S2# 25	C420 2-NITROPHENOL	139	977	2	28268.	0.208	117.545
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	983	2	42538.	0.346	106.060
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1003	2	62255.	0.531	101.280
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1024	2	39772.	0.245	140.244
33	S2# 45	C430 BENZOIC ACID	122	1004	2	19914.	0.187	92.168
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1042	2	44295.	0.238	160.917
35	S2# 60	C450 NAPHTHALENE	128	1059	2	147955.	1.053	121.250
36	S2# 80	C455 4-CHLOROANALINE	127	1068	2	54534.	0.418	112.734
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1082	2	22862.	0.102	192.604
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1164	2	40681.	0.364	96.434
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1200	2	84221.	0.642	113.272
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1231	3	31383.	0.284	205.029
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1256	3	25174.	0.297	157.257
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1264	3	30496.	0.339	166.887
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1301	3	85014.	1.201	131.287
44	S3# 45	C530 2-NITROANALINE	65	1321	3	27477.	0.546	93.440
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1358	3	86238.	1.379	116.011
46	S3# 65	C540 ACENAPHTHYLENE	152	1387	3	128848.	1.979	120.794
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1371	3	20622.	0.362	105.619
48	S3# 75	C545 3-NITROANALINE	138	1406	3	20550.	0.311	122.457
49	S3# 80	C550 ACENAPHTHENE	153	1424	3	79744.	1.189	124.406
50	S3# 85	C555 2,4-DINITROPHENOL	184	1427	3	10156.	0.155	121.493
51	S3# 90	C565 DIBENZOFURAN	168	1460	3	108778.	1.594	126.591
52	S3# 95	C560 4-NITROPHENOL	109	1438	3	8603.	0.137	116.160
53	S3#105	C570 2,4-DINITROTOLUENE	165	1455	3	25607.	0.453	104.837
54	S3#130	C580 DIETHYLPHTHALATE	149	1506	3	84517.	1.449	108.226
55	S3#135	C590 FLUORENE	166	1532	3	88790.	1.247	132.067
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1531	3	35993.	0.398	167.730
57	S3#150	C595 4-NITROANALINE	138	1534	3	18611.	0.211	163.699
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1541	4	15198.	0.150	115.960
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1555	4	54503.	0.542	114.892
60	S4# 20	B091 AZOBENZENE	77	1564	4	106913.	1.447	84.426
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1634	4	22512.	0.151	170.748
62	S4# 40	C630 HEXACHLOROBENZENE	284	1647	4	26251.	0.156	192.631
63	S4# 50	C635 PENTACHLOROPHENOL	266	1687	4	16255.	0.106	174.788
64	S4# 65	C640 PHENANTHRENE	178	1735	4	112263.	1.089	117.750
65	S4# 70	C645 ANTHRACENE	178	1746	4	117873.	1.112	121.090
66	S4# 80	C646 CARBAZOLE	167	1778	4	77581.	0.884	100.323
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1848	4	132848.	1.680	90.368
68	S4#110	C655 FLUORANTHENE	202	1986	4	97068.	0.950	116.763
69	S5# 10	B113 BENZIDINE	184	2011	5	6125.	0.006	2011.710
70	S5# 15	C715 PYRENE	202	2035	5	95649.	1.903	92.574
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2164	5	46017.	1.322	64.123
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2287	5	70602.	1.191	109.139
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2278	5	26412.	0.255	190.826
74	S5# 60	C740 CHRYSENE	228	2295	5	63894.	1.103	106.634

76	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	2413	6	103304.	3.538	72.730
77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2508	6	56330.	1.274	109.642
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2515	6	53803.	1.054	126.664
79	S6#	35	C775	BENZO(A)PYRENE	252	2586	6	49111.	1.076	113.163
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2912	6	46944.	0.906	128.548
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2915	6	39497.	0.756	129.656
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	3007	6	38761.	1.581	60.831

RMAL QUANTITATION SUMMARY FILE: U4903
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

000221

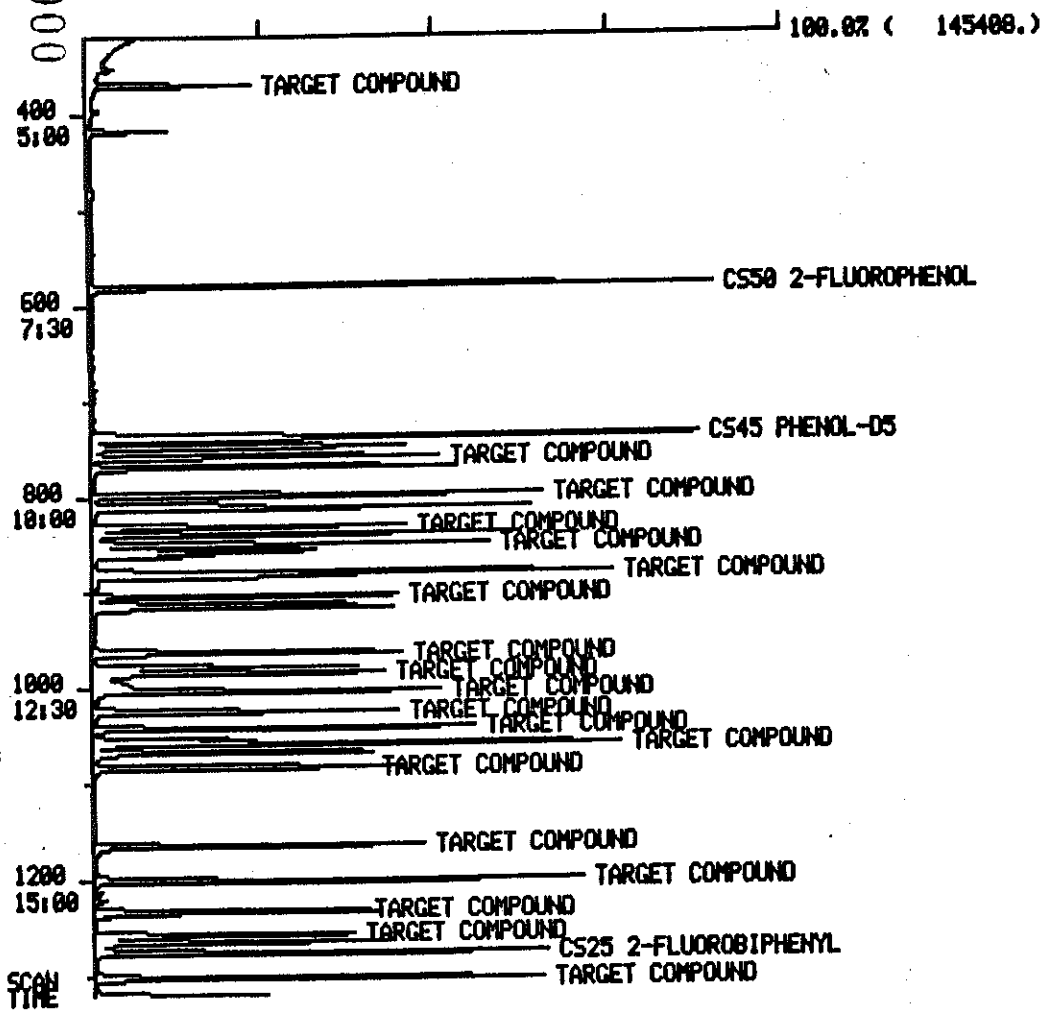
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	807	1	14540.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1054	2	46334.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1417	3	21560.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1729	4	35009.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2289	5	21720.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2599	6	16126.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	912	2	58642.	0.472	107.285
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1275	3	94587.	1.229	142.768
9	S5# 2	CS30 TERPHENYL-D14	244	2063	5	62534.	1.024	112.503
10	S1# 3	CS45 PHENOL-D5	99	736	1	137194.	2.001	188.662
11	S1# 2	CS50 2-FLUOROPHENOL	112	579	1	104887.	1.458	197.938
12	S3# 2	CS55 2,4,6-TRIBROMOPHEND	330	1582	3	22748.	0.100	422.983
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	370	1	38813.	1.055	101.187
14	S1#100	B028 ANALINE	93	747	1	79564.	2.614	83.748
15	S1#105	C315 PHENOL	94	738	1	76135.	2.276	92.009
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	757	1	60252.	2.015	82.246
17	S1#115	C330 2-CHLOROPHENOL	128	768	1	54551.	1.599	93.860
18	S1#125	C335 1,3-DICHLOROBENZENE	146	797	1	59502.	1.587	103.130
19	S1#130	C340 1,4-DICHLOROBENZENE	146	810	1	62499.	1.621	106.060
20	S1#145	C345 BENZYL ALCOHOL	108	831	1	32030.	1.126	78.268
21	S1#150	C350 1,2-DICHLOROBENZENE	146	839	1	57446.	1.544	102.367
22	S1#160	C355 2-METHYLPHENOL	108	849	1	50159.	1.693	81.525
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	856	1	94727.	2.588	100.691
24	S1#185	C365 4-METHYLPHENOL	108	879	1	53018.	1.772	82.306
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	882	1	43787.	1.397	86.252
26	S1#200	C375 HEXACHLOROETHANE	117	903	1	24692.	0.787	86.329
27	S2# 10	C410 NITROBENZENE	77	915	2	61856.	0.471	113.405
28	S2# 20	C415 ISOPHORONE	82	962	2	110575.	0.931	102.524
29	S2# 25	C420 2-NITROPHENOL	139	977	2	28268.	0.208	117.545
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	983	2	42538.	0.346	106.060
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1003	2	62255.	0.531	101.280
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1024	2	39772.	0.245	140.244
33	S2# 45	C430 BENZOIC ACID	122	1004	2	25919.	0.187	119.959
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1042	2	44295.	0.238	160.917
35	S2# 60	C450 NAPHTHALENE	128	1059	2	147955.	1.053	121.250
36	S2# 80	C455 4-CHLOROANALINE	127	1068	2	54534.	0.418	112.734
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1082	2	22862.	0.102	192.604
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1164	2	40681.	0.364	96.434
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1200	2	84221.	0.642	113.272
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1231	3	31383.	0.284	205.029
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1256	3	25174.	0.297	157.257
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1264	3	30496.	0.339	166.887
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1301	3	85014.	1.201	131.287
44	S3# 45	C530 2-NITROANALINE	65	1321	3	27477.	0.546	93.440
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1358	3	86238.	1.379	116.011
46	S3# 65	C540 ACENAPHTHYLENE	152	1387	3	128848.	1.979	120.794
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1371	3	20622.	0.362	105.619
48	S3# 75	C545 3-NITROANALINE	138	1406	3	20550.	0.311	122.457
49	S3# 80	C550 ACENAPHTHENE	153	1424	3	79744.	1.189	124.406
50	S3# 85	C555 2,4-DINITROPHENOL	184	1427	3	10156.	0.155	121.493
51	S3# 90	C565 DIBENZOFURAN	168	1460	3	108778.	1.594	126.591
52	S3# 95	C560 4-NITROPHENOL	109	1438	3	8603.	0.137	116.160
53	S3#105	C570 2,4-DINITROTOLUENE	165	1455	3	25607.	0.453	104.837
54	S3#130	C580 DIETHYLPHTHALATE	149	1506	3	84517.	1.449	108.226
55	S3#135	C590 FLUORENE	166	1532	3	88790.	1.247	132.067
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1531	3	35993.	0.398	167.730
57	S3#150	C595 4-NITROANALINE	138	1534	3	18611.	0.211	163.699
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1541	4	15198.	0.150	115.960
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1555	4	54503.	0.542	114.892
60	S4# 20	B091 AZOBENZENE	77	1564	4	106913.	1.447	84.426
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1634	4	22512.	0.151	170.748
62	S4# 40	C630 HEXACHLOROBENZENE	284	1647	4	26251.	0.156	192.631
63	S4# 50	C635 PENTACHLOROPHENOL	266	1687	4	16255.	0.106	174.788
64	S4# 65	C640 PHENANTHRENE	178	1735	4	112263.	1.089	117.750
65	S4# 70	C645 ANTHRACENE	178	1746	4	117873.	1.112	121.090
66	S4# 80	C646 CARBAZOLE	167	1778	4	77581.	0.884	100.323
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1848	4	132848.	1.680	90.368
68	S4#110	C655 FLUORANTHENE	202	1986	4	97068.	0.950	116.763
69	S5# 10	B113 BENZIDINE	184	2011	5	6125.	0.006	2011.710
70	S5# 15	C715 PYRENE	202	2035	5	95649.	1.903	92.574
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2164	5	46017.	1.322	64.123
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2287	5	70602.	1.191	109.139
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2278	5	26412.	0.255	190.826
74	S5# 60	C740 CHRYSENE	228	2295	5	63894.	1.103	106.634
75	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	2282	5	68581.	1.700	74.307
76	S6# 10	C760 DI-N-OCTYL PHTHALAT	149	2413	6	103304.	3.538	72.430

77	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2515	6	53803.	1.054	128.887
78	S6#	35	C775	BENZO(A)PYRENE	252	2586	6	49111.	1.076	113.163
79	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2912	6	46944.	0.906	128.548
80	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2915	6	39497.	0.756	129.656
81	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	3007	6	38761.	1.581	60.831

000223

DATA FROM FILE: U4903 SCANS 320 TO 1320 ACQUIRED: 04/08/92 9:20:00
CALI: U4903 #3 OUT OF 320 TO 3200

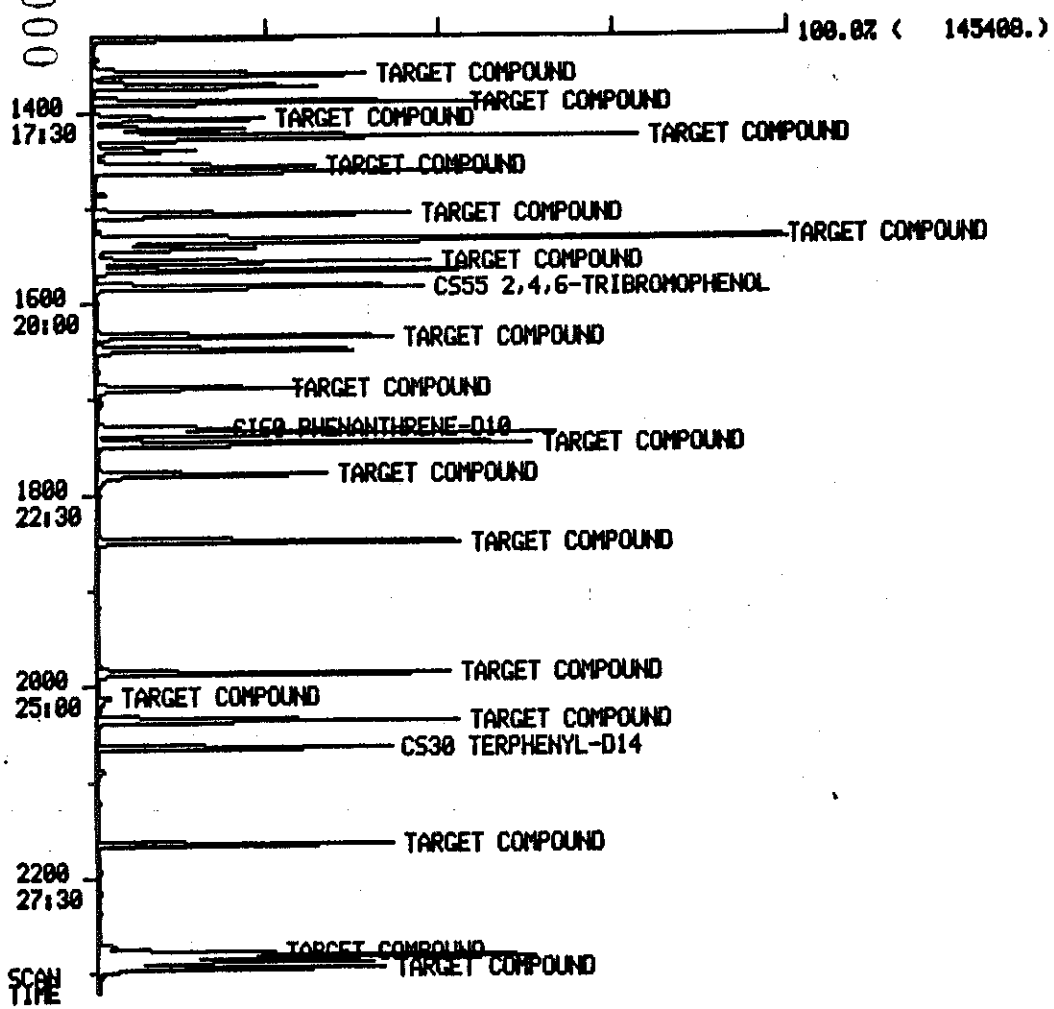
SAMPLE: CLP,STDU ,,SSTD120 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML %NA %100%/NA %(NA/NA)/NA NA M



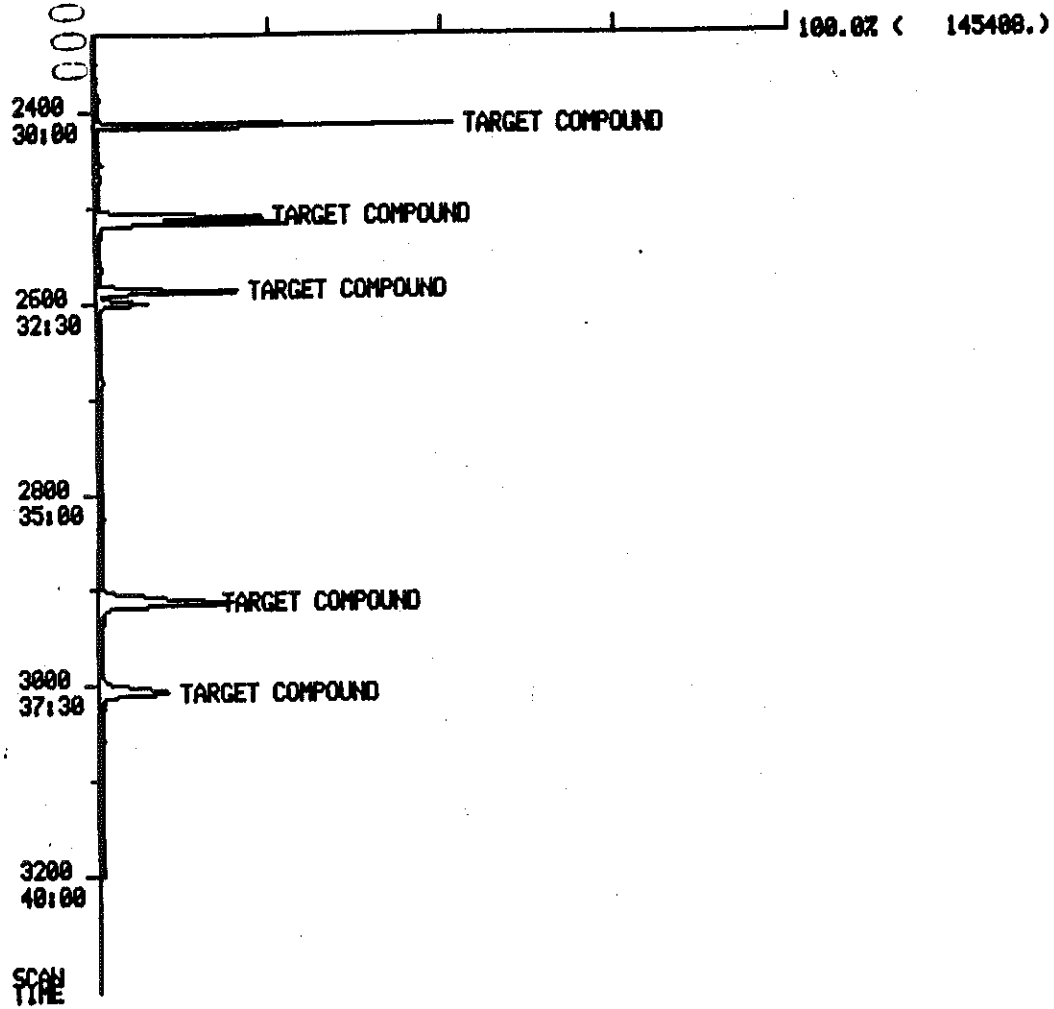
000224

DATA FROM FILE: U4903 SCANS 1320 TO 2320 ACQUIRED: 04/08/92 9:20:00
CALI: U4903 #3 OUT OF 320 TO 3200

SAMPLE: CLP,STDU ,,SSTD120 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML %NA *100%/NA *(NA/NA)/NA NA M



DATA FROM FILE: U4903 SCANS 2320 TO 3200 ACQUIRED: 04/08/92 9:20:00
CALI: U4903 #3 OUT OF 320 TO 3200
SAMPLE: CLP,STDU ,,SSTD120 ,NA ,NA ,U#5681,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



000225

Duplicate Scan Report
Quan List File: U4903

2 SCAN DIFFERENCE DUPLICATE

COMP#	SCAN	COMP#	SCAN	DIFF.
5	2289	72	2287	-2
10	736	15	738	2
31	1003	33	1004	1
55	1532	56	1531	-1
55	1532	57	1534	2

5 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2599
9	2063
10	736
12	1582
14	747
32	1024
46	1387
51	1460
55	1532
72	2287
74	2295

80PPM Fixed
RAS 4/8/92

000227

Name List: HEDR1 Entry # 1 of 1
File Name: U4904

(1)Format: BNACLP
(3)Sample ID: SSTD80
(5)Matrix: NA
(7)Fraction: BNA
(10)Analyst: RAS
(12)Extract Volume: NA
(14)Int. Ext. Vol.: NA
(16)Sample Amount: NA
(19)Run Factor: NA

(2)Case: STDU
(4)Level: NA
(6)Lab Sample ID: V#5681
(8)Type: CAL
(11)Quan List Units: UG/ML
(13)Extract Dilution: NA
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: NA

4/8/92 10:12:57 SCAN 1 OF 3250
Acquisition started

Acquire
04/08/92 10:12:00 + 0:10
Sample: CLP,STDU ,,SSTD80 ,NA ,NA ,V#5681,BNA,CAL ,
Conds.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M
Formula: NANA
Submitted by: RMAL

Run 2:U4904
Free sectors: 20625
Instrument: 4500
Analyst: RAS

ACQUIRING
Scan: 14 of 3250
Weight: 0.000
Acct. No: BNACLP

****
QC PARAMETERS
****

Loaded QC Desc:ST Current QC oven tmp: 29 DegC
Current QC Desc:ST QC elapsed time : 0:15 min

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

Injector : 275 DegC
Int. oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

****
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

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

4/8/92 10:53:37
ACQUISITION COMPLETED
SCANS 1 TO 3250 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	3250	487.2	2437.5	20.0	41437. 13.	17.

PROCEDURE: TCA
DATA FILE: U4904
REFERENCE: 11TABLE
NAME LIST: LLNL
REPORT: IS01

DIAGNOSTIC REPORT

4/08/92 10:59:5

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

000228

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	9	9	3	75	IS01/TC01
3	3	1	0	18	18	4	93	IS02/TC02
3	3	1	0	13	13	2	41	IS03/TC03
3	3	1	0	18	18	1	53	IS04/TC04
3	3	1	0	10	10	1	50	IS05/TC05
3	3	1	87	9	9	1	101	IS06/TC06
3	3	1	34	15	15	16	69	IS07/TC07
1	1	1	0	4	4	1	126	IS08/TC08

82 COMPOUNDS PROCESSED, 82 FOUND

COMPOUND NO	LIB	ENTRY	SEARCH REF	SEARCH PRED	SEARCH SEL	SEARCH DELTA	SEARCH PEAKS	FIT	SAT PEAKS	CHRO M/Z	CHRO TOP	CHRO DELTA	CHRO PEA
1	S1	1	-806	805	805	.	1	973	.	152	805	.	
2	S1	15	-368	363	362	-1	3	995	.	74	362	.	
3	S1	2	-578	575	576	1	1	993	.	112	576	.	
4	S1	3	-735	733	734	1	1	970	.	99	734	.	
5	S1	105	-738	736	736	.	1	986	.	94	736	.	
6	S1	100	-746	744	744	.	1	990	.	93	744	.	
7	S1	110	-757	755	755	.	1	981	.	93	755	.	
8	S1	115	-768	766	766	.	1	989	.	128	766	.	
9	S1	125	-797	796	795	-1	1	990	.	146	795	.	
10	S2	1	-1053	1052	1052	.	1	994	.	136	1052	.	
11	S3	1	-1416	1415	1415	.	1	993	.	164	1415	.	
12	S1	130	-811	810	809	-1	1	991	.	146	809	.	
13	S1	145	-830	829	829	.	1	998	.	108	829	.	
14	S1	150	-839	838	837	-1	1	988	.	146	837	.	
15	S1	160	-849	848	848	.	1	985	.	108	848	.	
16	S1	165	-856	855	855	.	2	992	.	45	855	.	
17	S1	185	-878	877	877	.	2	993	.	108	877	.	
18	S1	190	-881	880	880	.	1	998	.	70	880	.	
19	S1	200	-904	903	902	-1	1	994	.	117	902	.	
20	S2	2	-910	909	910	1	1	999	.	82	910	.	
21	S2	10	-914	913	914	1	1	997	.	77	914	.	
22	S2	20	-961	960	960	.	1	979	.	82	960	.	
23	S2	25	-976	975	976	1	1	991	.	139	975	-1	
24	S2	30	-982	981	981	.	1	996	.	107	981	.	
25	S2	45	-997	996	999	3	1	997	.	122	999	.	
26	S2	35	-1002	1001	1001	.	1	994	.	93	1001	.	
27	S2	40	-1023	1022	1022	.	1	991	.	162	1022	.	
28	S2	55	-1042	1041	1041	.	1	991	.	180	1041	.	
29	S2	60	-1058	1057	1057	.	1	1000	.	128	1057	.	
30	S2	80	-1067	1066	1066	.	1	912	.	127	1066	.	
31	S2	95	-1082	1081	1081	.	1	996	.	225	1081	.	
32	S2	130	-1163	1162	1162	.	1	995	.	107	1162	.	
33	S2	145	-1199	1198	1198	.	1	994	.	142	1198	.	
34	S3	20	-1232	1231	1230	-1	1	995	.	237	1230	.	
35	S3	25	-1257	1256	1255	-1	2	991	.	196	1255	.	
36	S3	30	-1264	1263	1262	-1	1	989	.	196	1262	.	
37	S4	1	-1729	1728	1728	.	1	988	.	188	1728	.	
38	S3	3	-1275	1274	1273	-1	1	997	.	172	1273	.	
39	S3	40	-1301	1300	1299	-1	1	1000	.	162	1299	.	
40	S3	45	-1321	1320	1319	-1	1	993	.	65	1319	.	
41	S3	55	-1358	1357	1357	.	1	978	.	163	1357	.	
42	S3	70	-1371	1370	1370	.	1	995	.	165	1370	.	
43	S3	65	-1388	1387	1386	-1	1	990	.	152	1386	.	
44	S3	75	-1406	1405	1405	.	1	995	.	138	1404	-1	
45	S3	80	-1424	1423	1423	.	1	978	.	153	1423	.	
46	S3	85	-1428	1427	1426	-1	1	988	.	184	1426	.	
47	S3	95	-1438	1437	1437	.	1	997	.	109	1437	.	
48	S3	105	-1455	1454	1453	-1	1	989	.	165	1453	.	
49	S3	90	-1460	1459	1459	.	1	961	.	168	1459	.	
50	S3	130	-1505	1504	1504	.	1	960	.	149	1504	.	
51	S3	140	-1531	1530	1529	-1	1	981	.	204	1529	.	
52	S3	135	-1532	1531	1530	-1	1	992	.	166	1531	1	
53	S3	150	-1534	1532	1532	.	1	966	.	138	1532	.	
54	S4	10	-1540	1538	1539	1	1	975	.	198	1539	.	
55	S4	15	-1555	1553	1553	.	1	987	.	169	1554	1	
56	S4	20	-1565	1563	1563	.	1	994	.	77	1563	.	
57	S3	2	-1582	1580	1580	.	1	962	.	330	1580	.	
58	S4	30	-1634	1632	1632	.	1	980	.	248	1632	.	
59	S4	40	-1648	1646	1646	.	1	995	.	284	1646	.	
60	S5	1	-2286	2288	2288	.	1	989	.	240	2288	.	
61	S4	50	-1688	1686	1686	.	1	991	.	266	1686	.	
62	S4	65	-1735	1734	1734	.	1	959	.	178	1734	.	
63	S4	70	-1746	1745	1744	-1	1	940	.	178	1744	.	
64	S4	80	-1779	1778	1777	-1	1	997	.	167	1777	.	
65	S4	85	-1848	1847	1846	-1	1	942	.	149	1846	.	

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
67	86	1	-2593	2596	2596	.	1	990	.	[illegible]	[illegible]	.
68	85	10	-2011	2011	2010	-1	1	912	.	184	2010	.
69	85	15	-2034	2034	2033	-1	1	995	.	202	2033	.
70	85	2	-2062	2062	2062	.	1	987	.	244	2062	.
71	85	40	-2163	2163	2163	.	1	990	.	149	2163	.
72	85	55	-2276	2277	2277	.	1	993	.	252	2277	.
73	85	65	-2280	2281	2281	.	1	995	.	149	2281	.
74	85	50	-2285	2286	2286	.	2	991	.	228	2286	.
75	85	60	-2293	2294	2293	-1	2	993	.	228	2293	.
76	86	10	-2409	2411	2412	1	1	997	.	149	2412	.
77	86	15	-2504	2506	2506	.	2	985	.	252	2506	.
78	86	25	-2510	2512	2512	.	2	986	.	252	2512	.
79	86	35	-2581	2584	2583	-1	1	976	.	252	2583	.
80	86	55	-2904	2913	2911	-2	1	996	.	276	2911	.
81	86	60	-2906	2915	2915	.	1	992	.	278	2915	.
82	86	65	-2996	3006	3007	1	1	983	.	276	3006	-1

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TCA FINISHED, 82 FOUND
FINISHED AT: 4/08/92 11:08:45

RMAL QUANTITATION SUMMARY FILE: U4904
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

000230

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	805	1	13057.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1052	2	42550.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1415	3	20031.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1728	4	33241.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2288	5	20200.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2596	6	14208.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	910	2	38541.	0.472	76.782
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1273	3	61284.	1.229	99.562
9	S5# 2	CS30 TERPHENYL-D14	244	2062	5	43605.	1.024	84.352
10	S1# 3	CS45 PHENOL-D5	99	734	1	90803.	2.001	139.049
11	S1# 2	CS50 2-FLUOROPHENOL	112	576	1	69585.	1.458	146.232
12	S3# 2	CS55 2,4,6-TRIBROMOPHEND	330	1580	3	14625.	0.100	292.700
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	362	1	24555.	1.055	71.286
14	S1#100	B028 ANALINE	93	744	1	51610.	2.614	60.494
15	S1#105	C315 PHENOL	94	736	1	49703.	2.276	66.888
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	755	1	39775.	2.015	60.460
17	S1#115	C330 2-CHLOROPHENOL	128	766	1	35188.	1.599	67.421
18	S1#125	C335 1,3-DICHLOROBENZENE	146	795	1	38775.	1.587	74.838
19	S1#130	C340 1,4-DICHLOROBENZENE	146	809	1	41460.	1.621	78.349
20	S1#145	C345 BENZYL ALCOHOL	108	829	1	21483.	1.126	58.458
21	S1#150	C350 1,2-DICHLOROBENZENE	146	837	1	37849.	1.544	75.107
22	S1#160	C355 2-METHYLPHENOL	108	848	1	32856.	1.693	59.466
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	855	1	61178.	2.588	72.416
24	S1#185	C365 4-METHYLPHENOL	108	877	1	34907.	1.772	60.345
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	880	1	27846.	1.397	61.081
26	S1#200	C375 HEXACHLOROETHANE	117	902	1	15651.	0.787	60.934
27	S2# 10	C410 NITROBENZENE	77	914	2	40440.	0.471	80.736
28	S2# 20	C415 ISOPHORONE	82	960	2	73534.	0.931	74.244
29	S2# 25	C420 2-NITROPHENOL	139	975	2	18035.	0.208	81.664
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	981	2	28038.	0.346	76.125
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1001	2	40166.	0.531	71.156
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1022	2	25891.	0.245	99.417
33	S2# 45	C430 BENZOIC ACID	122	999	2	11453.	0.187	57.722 no
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1041	2	28798.	0.238	113.924
35	S2# 60	C450 NAPHTHALENE	128	1057	2	93190.	1.053	83.162
36	S2# 80	C455 4-CHLOROANALINE	127	1066	2	34671.	0.418	78.048
37	S2# 95	C460 HEXACHLORDBUTADIENE	225	1081	2	15170.	0.102	139.169
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1162	2	26147.	0.364	67.494
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1198	2	54851.	0.642	80.332
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1230	3	20116.	0.284	141.452
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1255	3	16452.	0.297	110.617
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1262	3	19428.	0.339	114.434
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1299	3	55058.	1.201	91.516
44	S3# 45	C530 2-NITROANALINE	65	1319	3	17576.	0.546	64.332
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1357	3	56423.	1.379	81.696
46	S3# 65	C540 ACENAPHTHYLENE	152	1386	3	79397.	1.979	80.116
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1370	3	13420.	0.362	73.979
48	S3# 75	C545 3-NITROANALINE	138	1404	3	13495.	0.311	86.554
49	S3# 80	C550 ACENAPHTHENE	153	1423	3	50490.	1.189	84.780
50	S3# 85	C555 2,4-DINITROPHENOL	184	1426	3	6113.	0.155	78.710
51	S3# 90	C565 DIBENZOFURAN	168	1459	3	69986.	1.594	87.663
52	S3# 95	C560 4-NITROPHENOL	109	1437	3	5929.	0.137	86.165
53	S3#105	C570 2,4-DINITROTOLUENE	165	1453	3	16324.	0.453	71.933
54	S3#130	C580 DIETHYLPHTHALATE	149	1504	3	54757.	1.449	75.470
55	S3#135	C590 FLUORENE	166	1531	3	57580.	1.247	92.183
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1529	3	23547.	0.398	118.107
57	S3#150	C595 4-NITROANALINE	138	1532	3	9678.	0.211	91.622
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1539	4	9851.	0.150	79.160
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1554	4	34491.	0.542	76.574
60	S4# 20	B091 AZOBENZENE	77	1563	4	70109.	1.447	58.308
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1632	4	14452.	0.151	115.445
62	S4# 40	C630 HEXACHLOROBENZENE	284	1646	4	17286.	0.156	133.592
63	S4# 50	C635 PENTACHLOROPHENOL	266	1686	4	10651.	0.106	120.621
64	S4# 65	C640 PHENANTHRENE	178	1734	4	75220.	1.089	83.092
65	S4# 70	C645 ANTHRACENE	178	1744	4	74119.	1.112	80.191
66	S4# 80	C646 CARBAZOLE	167	1777	4	52214.	0.884	71.111
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1846	4	88963.	1.680	63.734
68	S4#110	C655 FLUORANTHENE	202	1985	4	68057.	0.950	86.220
69	S5# 10	B113 BENZIDINE	184	2010	5	2980.	0.006	1052.410
70	S5# 15	C715 PYRENE	202	2033	5	65851.	1.903	68.530
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2163	5	31034.	1.322	46.499
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2286	5	47673.	1.191	79.241
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2277	5	15676.	0.255	121.781
74	S5# 60	C740 CHRYSENE	228	2293	5	41969.	1.103	75.314

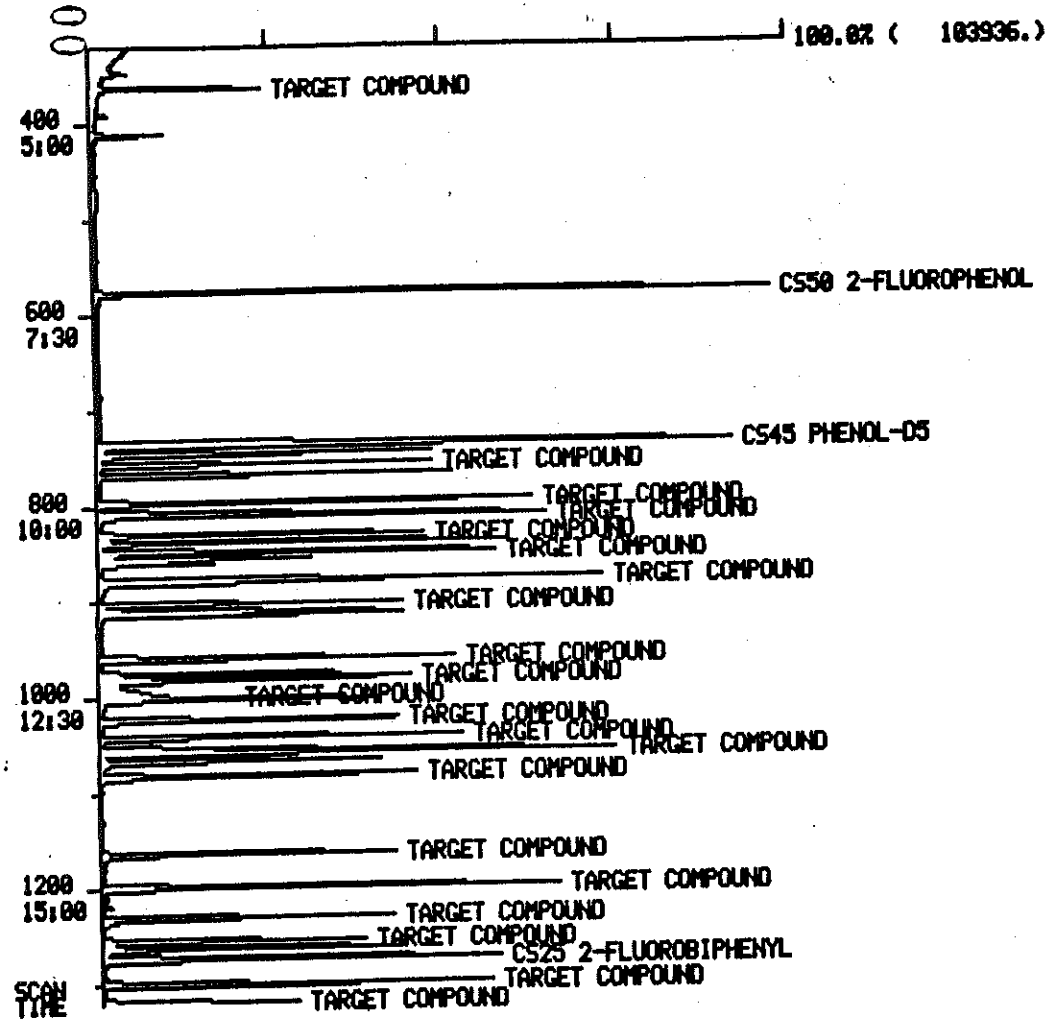
76	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	2412	6	67872.	[illegible]	[illegible]
77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2506	6	37967.	1.274	83.877
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2512	6	34377.	1.054	91.856
79	S6#	35	C775	BENZO(A)PYRENE	252	2583	6	32511.	1.076	85.026
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2911	6	26994.	0.906	83.898
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2915	6	22627.	0.756	84.303
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	3006	6	23064.	1.581	41.082

RMAL QUANTITATION SUMMARY FILE: U4904
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

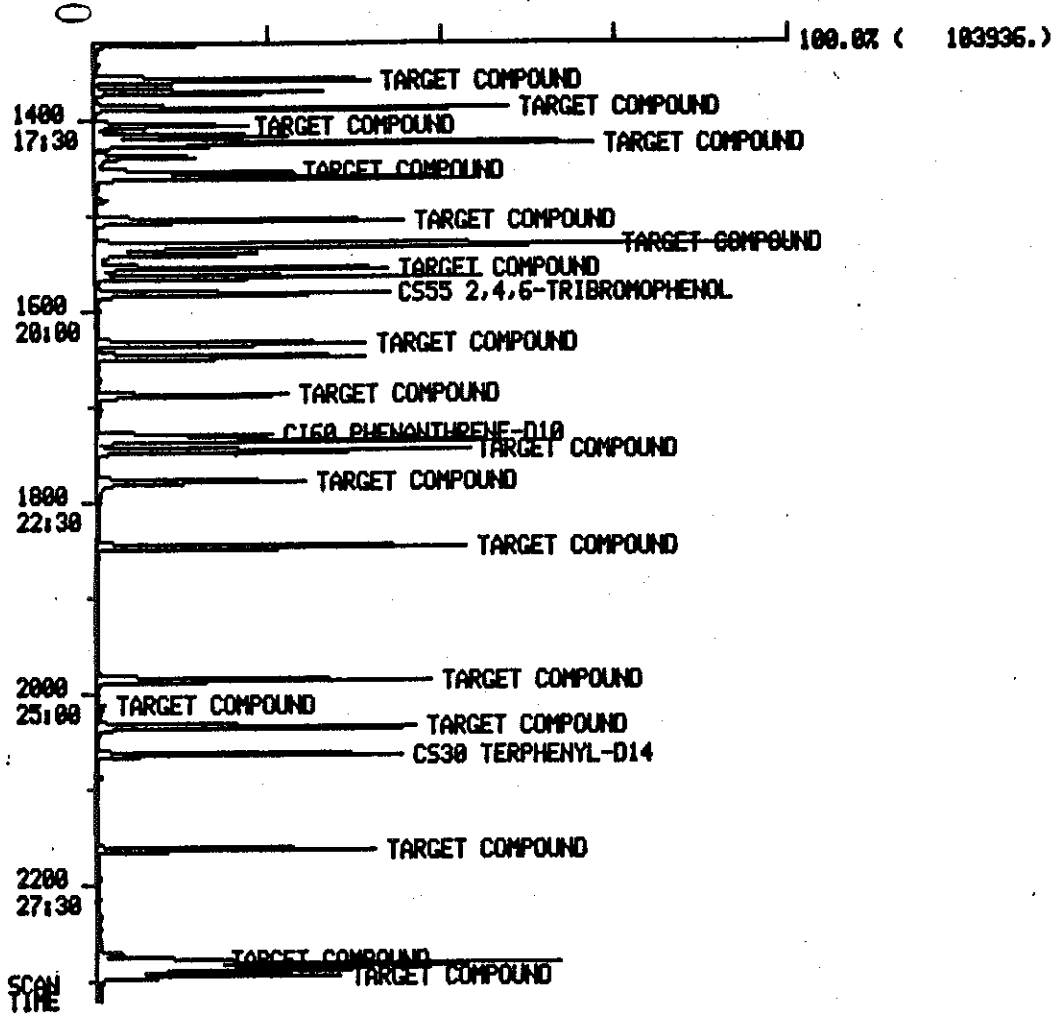
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	805	1	13057.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1052	2	42550.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1415	3	20031.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1728	4	33241.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2288	5	20200.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2596	6	14208.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	910	2	38541.	0.472	76.782
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1273	3	61284.	1.229	99.562
9	S5# 2	CS30 TERPHENYL-D14	244	2062	5	43605.	1.024	84.352
10	S1# 3	CS45 PHENOL-D5	99	734	1	90803.	2.001	139.049
11	S1# 2	CS50 2-FLUOROPHENOL	112	576	1	69585.	1.458	146.232
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1580	3	14625.	0.100	292.700
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	362	1	24555.	1.055	71.286
14	S1#100	B028 ANALINE	93	744	1	51610.	2.614	60.494
15	S1#105	C315 PHENOL	94	736	1	49703.	2.276	66.888
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	755	1	39775.	2.015	60.460
17	S1#115	C330 2-CHLOROPHENOL	128	766	1	35188.	1.599	67.421
18	S1#125	C335 1,3-DICHLOROBENZENE	146	795	1	38775.	1.587	74.838
19	S1#130	C340 1,4-DICHLOROBENZENE	146	809	1	41460.	1.621	78.349
20	S1#145	C345 BENZYL ALCOHOL	108	829	1	21483.	1.126	58.458
21	S1#150	C350 1,2-DICHLOROBENZENE	146	837	1	37849.	1.544	75.107
22	S1#160	C355 2-METHYLPHENOL	108	848	1	32856.	1.693	59.466
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	855	1	61178.	2.588	72.416
24	S1#185	C365 4-METHYLPHENOL	108	877	1	34907.	1.772	60.345
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	880	1	27846.	1.397	61.081
26	S1#200	C375 HEXACHLOROETHANE	117	902	1	15651.	0.787	60.934
27	S2# 10	C410 NITROBENZENE	77	914	2	40440.	0.471	80.736
28	S2# 20	C415 ISOPHORONE	82	960	2	73534.	0.931	74.244
29	S2# 25	C420 2-NITROPHENOL	139	975	2	18035.	0.208	81.664
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	981	2	28038.	0.346	76.125
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1001	2	40166.	0.531	71.156
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1022	2	25891.	0.245	99.417
33	S2# 45	C430 BENZOIC ACID	122	999	2	14414.	0.187	72.645
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1041	2	28798.	0.238	113.924
35	S2# 60	C450 NAPHTHALENE	128	1057	2	93190.	1.053	83.162
36	S2# 80	C455 4-CHLOROANALINE	127	1066	2	34671.	0.418	78.048
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1081	2	15170.	0.102	139.169
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1162	2	26147.	0.364	67.494
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1198	2	54851.	0.642	80.332
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1230	3	20116.	0.284	141.452
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1255	3	16452.	0.297	110.617
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1262	3	19428.	0.339	114.434
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1299	3	55058.	1.201	91.516
44	S3# 45	C530 2-NITROANALINE	65	1319	3	17576.	0.546	64.332
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1357	3	56423.	1.379	81.696
46	S3# 65	C540 ACENAPHTHYLENE	152	1386	3	79397.	1.979	80.116
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1370	3	13420.	0.362	73.979
48	S3# 75	C545 3-NITROANALINE	138	1404	3	13495.	0.311	86.554
49	S3# 80	C550 ACENAPHTHENE	153	1423	3	50490.	1.189	84.780
50	S3# 85	C555 2,4-DINITROPHENOL	184	1426	3	6113.	0.155	78.710
51	S3# 90	C565 DIBENZOFURAN	168	1459	3	69986.	1.594	87.663
52	S3# 95	C560 4-NITROPHENOL	109	1437	3	5929.	0.137	86.165
53	S3#105	C570 2,4-DINITROTOLUENE	165	1453	3	16324.	0.453	71.933
54	S3#130	C580 DIETHYLPHTHALATE	149	1504	3	54757.	1.449	75.470
55	S3#135	C590 FLUORENE	166	1531	3	57580.	1.247	92.183
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1529	3	23547.	0.398	118.107
57	S3#150	C595 4-NITROANALINE	138	1532	3	9678.	0.211	91.622
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1539	4	9851.	0.150	79.160
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1554	4	34491.	0.542	76.574
60	S4# 20	B091 AZOBENZENE	77	1563	4	70109.	1.447	58.308
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1632	4	14452.	0.151	115.445
62	S4# 40	C630 HEXACHLOROBENZENE	284	1646	4	17286.	0.156	133.592
63	S4# 50	C635 PENTACHLOROPHENOL	266	1686	4	10651.	0.106	120.621
64	S4# 65	C640 PHENANTHRENE	178	1734	4	75220.	1.089	83.092
65	S4# 70	C645 ANTHRACENE	178	1744	4	74119.	1.112	80.191
66	S4# 80	C646 CARBAZOLE	167	1777	4	52214.	0.884	71.111
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1846	4	88963.	1.680	63.734
68	S4#110	C655 FLUORANTHENE	202	1985	4	68057.	0.950	86.220
69	S5# 10	B113 BENZIDINE	184	2010	5	2980.	0.006	1052.410
70	S5# 15	C715 PYRENE	202	2033	5	65851.	1.903	68.530
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2163	5	31034.	1.322	46.499
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2286	5	47673.	1.191	79.241
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2277	5	15676.	0.255	121.781
74	S5# 60	C740 CHRYSENE	228	2293	5	41969.	1.103	75.314
75	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	2281	5	45494.	1.700	53.002
76	S6# 10	C760 DI-N-OCTYL PHTHALAT	149	2412	6	47892.	3.538	54.027

77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2505	6	[illegible]	[illegible]	[illegible]
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2512	6	34377.	1.054	91.856
79	S6#	35	C775	BENZO(A)PYRENE	252	2583	6	32511.	1.076	85.026
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2911	6	26994.	0.906	83.898
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2915	6	22627.	0.756	84.303
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	3006	6	23064.	1.581	41.082

DATA FROM FILE: U4904 SCANS 320 TO 1320 ACQUIRED: 04/08/92 10:12:00
CALI: U4904 #3 OUT OF 320 TO 3200
SAMPLE: CLP,STDU ,,SSTD80 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML %NA *100Z/NA *(NA/NA)/NA NA M



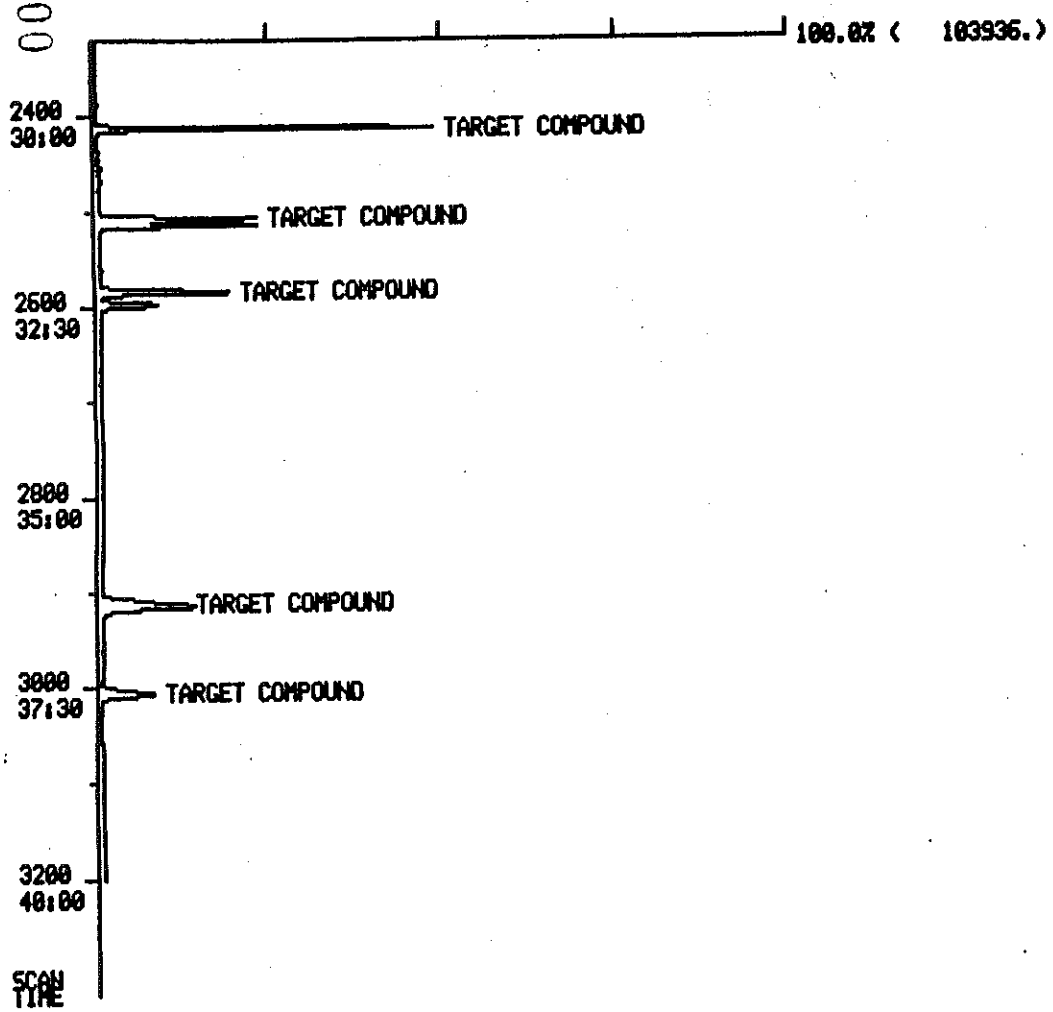
DATA FROM FILE: U4904 SCANS 1320 TO 2320 ACQUIRED: 04/08/92 10:12:00
CALI: U4904 #3 OUT OF 320 TO 3200
SAMPLE: CLP,STDU ,,SSTD80 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML %NA *100%/NA *(NA/NA)/NA NA M



000236

DATA FROM FILE: U4904 SCANS 2320 TO 3200 ACQUIRED: 04/08/92 10:12:00
CALI: U4904 #3 OUT OF 320 TO 3200

SAMPLE: CLP,STDU ,,SSTD80 ,NA ,NA ,V#5681,ENA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



Duplicate Scan Report
Quan List File: U4904

2 SCAN DIFFERENCE DUPLICATE

COMP#	SCAN	COMP#	SCAN	DIFF.
5	2288	72	2286	-2
10	734	15	736	2
31	1001	33	999	-2
55	1531	56	1529	-2
55	1531	57	1532	1

5 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2596
9	2062
10	734
12	1580
14	744
32	1022
46	1386
51	1459
55	1531
72	2286
74	2293

20 PPM Fixed
RAS 4/8/92

000238

Name List: HEDR1 Entry # 1 of 1
File Name: U4905

(1)Format: BNACLP
(2)Case: STDU
(3)Sample ID: SSTD20
(4)Level: NA
(5)Matrix: NA
(6)Lab Sample ID: V#5681
(7)Fraction: BNA
(8)Type: CAL
(10)Analyst: RAS
(11)Quan List Units: UG/ML
(12)Extract Volume: NA
(13)Extract Dilution: NA
(14)Int. Ext. Vol.: NA
(15)Int. Ext. Vol. Used: NA
(16)Sample Amount: NA
(17)Percent Moisture: NA
(19)Run Factor: NA
(20)Surrogate Volume: NA

4/8/92 11:04:58 SCAN 1 OF 3250
Acquisition started

Acquire
04/08/92 11:04:00 + 0:07
Sample: CLP,STDU ,,SSTD20 ,NA ,NA ,V#5681,BNA,CAL ,
Conds.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M
Formula: NANA
Submitted by: RMAL

Run 2:U4905
Free sectors: 20187
Instrument: 4500
Analyst: RAS

ACQUIRING
Scan: 10 of 3250

Weight: 0.000
Acct. No: BNACLP

********** QC PARAMETERS **********

Loaded QC Desc:ST Current QC oven tmp: 29 DegC
Current QC Desc:ST QC elapsed time : 0: 7 min

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

Injector : 275 DegC
Int.oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

********** 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

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

4/8/92 11:45:38
ACQUISITION COMPLETED
SCANS 1 TO 3250 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	3250	446.5	2437.5	18.3	26845. 8.	11.

PROCEDURE: TCA DIAGNOSTIC REPORT 4/08/92 11:52:0

DATA FILE: U4905

REFERENCE: 11TABLE

NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

REPORT: IS01

000239

STANDARDS				PLUS UNKNOWNS				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	9	1	98	IS01/TC01
3	3	1	0	18	18	4	119	IS02/TC02
3	3	1	0	13	13	2	47	IS03/TC03
3	3	1	0	18	18	1	66	IS04/TC04
3	3	1	0	10	10	1	179	IS05/TC05
3	3	1	58	9	9	1	123	IS06/TC06
3	3	1	99	15	14	8	99	IS07/TC07
1	1	1	0	4	4	1	183	IS08/TC08

82 COMPOUNDS PROCESSED, 81 FOUND

COMPOUND			SEARCH					SAT	CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA PEAK
1	S1	1	-806	805	805	.	1	974	.	152	805	.
2	S1	15	-368	363	363	.	1	999	.	74	362	-1
3	S1	2	-578	574	576	2	1	997	.	112	576	.
4	S1	3	-735	732	732	.	1	952	.	99	732	.
5	S1	105	-738	735	734	-1	1	985	.	94	734	.
6	S1	100	-746	743	743	.	1	988	.	93	743	.
7	S1	110	-757	754	754	.	1	982	.	93	754	.
8	S1	115	-768	765	765	.	1	991	.	128	765	.
9	S1	125	-797	795	795	.	1	989	.	146	795	.
10	S2	1	-1053	1052	1052	.	1	996	.	136	1052	.
11	S3	1	-1416	1415	1415	.	1	991	.	164	1415	.
12	S1	130	-811	809	808	-1	1	984	.	146	808	.
13	S1	145	-830	828	828	.	1	998	.	108	828	.
14	S1	150	-839	837	836	-1	1	992	.	146	836	.
15	S1	160	-849	847	847	.	1	986	.	108	847	.
16	S1	165	-856	854	854	.	2	988	.	45	854	.
17	S1	185	-878	876	875	-1	1	996	.	108	875	.
18	S1	190	-881	879	878	-1	1	995	.	70	878	.
19	S1	200	-904	902	902	.	1	993	.	117	902	.
20	S2	2	-910	908	909	1	1	1000	.	82	909	.
21	S2	10	-914	912	913	1	1	998	.	77	913	.
22	S2	20	-961	959	958	-1	1	980	.	82	958	.
23	S2	25	-976	974	975	1	1	992	.	139	975	.
24	S2	30	-982	980	980	.	1	994	.	107	980	.
25	S2	45	-997	996	999	3	2	993	.	122	998	-1
26	S2	35	-1002	1001	1001	.	1	997	.	93	1001	.
27	S2	40	-1023	1022	1022	.	1	992	.	162	1022	.
28	S2	55	-1042	1041	1040	-1	1	994	.	180	1040	.
29	S2	60	-1058	1057	1057	.	1	999	.	128	1057	.
30	S2	80	-1067	1066	1066	.	1	922	.	127	1066	.
31	S2	95	-1082	1081	1081	.	1	998	.	225	1081	.
32	S2	130	-1163	1162	1162	.	1	993	.	107	1162	.
33	S2	145	-1199	1198	1198	.	1	991	.	142	1198	.
34	S3	20	-1232	1231	1230	-1	1	998	.	237	1230	.
35	S3	25	-1257	1256	1255	-1	2	985	.	196	1254	-1
36	S3	30	-1264	1263	1262	-1	1	986	.	196	1261	-1
37	S4	1	-1729	1728	1728	.	1	991	.	188	1728	.
38	S3	3	-1275	1273	1273	.	1	998	.	172	1273	.
39	S3	40	-1301	1299	1299	.	1	997	.	162	1299	.
40	S3	45	-1321	1319	1318	-1	1	992	.	65	1319	1
41	S3	55	-1358	1356	1356	.	1	980	.	163	1356	.
42	S3	70	-1371	1369	1368	-1	1	992	.	165	1368	.
43	S3	65	-1388	1386	1385	-1	1	985	.	152	1385	.
44	S3	75	-1406	1404	1404	.	1	993	.	138	1404	.
45	S3	80	-1424	1422	1422	.	1	987	.	153	1422	.
46	S3	85	-1428	1426	1425	-1	1	983	.	184	1425	.
47	S3	95	-1438	1436	1436	.	1	940	.	109	1436	.
48	S3	105	-1455	1453	1453	.	1	990	.	165	1453	.
49	S3	90	-1460	1458	1458	.	1	966	.	168	1458	.
50	S3	130	-1505	1503	1503	.	1	961	.	149	1503	.
51	S3	140	-1531	1529	1529	.	1	945	.	204	1529	.
52	S3	135	-1532	1530	1530	.	1	988	.	166	1530	.
53	S3	150	-1534	1533	1537	4	1	879	.	138	.	.
54	S4	10	-1540	1539	1538	-1	1	969	.	198	1538	.
55	S4	15	-1555	1554	1553	-1	1	979	.	169	1553	.
56	S4	20	-1565	1564	1562	-2	1	994	.	77	1562	.
57	S3	2	-1582	1581	1580	-1	1	952	.	330	1579	-1
58	S4	30	-1634	1632	1632	.	1	985	.	248	1631	-1
59	S4	40	-1648	1646	1645	-1	1	993	.	284	1645	.
60	S5	1	-2286	2287	2287	.	1	992	.	240	2287	.
61	S4	50	-1688	1686	1686	.	1	984	.	266	1685	-1
62	S4	65	-1735	1733	1732	-1	1	953	.	178	1733	1
63	S4	70	-1746	1744	1743	-1	1	944	.	178	1743	.
64	S4	80	-1779	1777	1776	-1	1	995	.	167	1776	.
65	S4	85	-1848	1846	1846	.	1	943	.	149	1846	.

66	S4	110	-1788	1787	1787	.	.	[illegible]	.	[illegible]	[illegible]	.
67	S6	1	-2593	2596	2597	1	1	986	.	264	2596	-1
68	S5	10	-2011	2010	.	.	.	.	.	184	.	.
69	S5	15	-2034	2033	2032	-1	1	997	.	202	2032	.
70	S5	2	-2062	2061	2061	.	1	986	.	244	2060	.
71	S5	40	-2163	2163	2162	-1	1	994	.	149	2162	.
72	S5	55	-2276	2276	2276	.	1	986	.	252	2276	.
73	S5	65	-2280	2280	2280	.	1	996	.	149	2280	.
74	S5	50	-2285	2285	2285	.	2	986	.	228	2284	-1
75	S5	60	-2293	2294	2292	-2	1	992	.	228	2292	.
76	S6	10	-2409	2410	2411	1	1	995	.	149	2411	.
77	S6	15	-2504	2506	2506	.	2	975	.	252	2506	.
78	S6	25	-2510	2512	2512	.	2	982	.	252	2512	.
79	S6	35	-2581	2583	2583	.	1	970	.	252	2583	.
80	S6	55	-2904	2907	2906	-1	1	985	.	276	2906	.
81	S6	60	-2906	2909	2908	-1	1	980	.	278	2909	1
82	S6	65	-2996	2999	3001	2	1	900	.	276	3001	.

000240

TCA FINISHED, 81 FOUND
FINISHED AT: 4/08/92 12:00:40

RMAL QUANTITATION SUMMARY FILE: U4905
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	805	1	15017.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1052	2	54739.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1415	3	25266.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1728	4	39323.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2287	5	24695.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2596	6	19233.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	909	2	10762.	0.472	16.666
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1273	3	16425.	1.229	21.155
9	S5# 2	CS30 TERPHENYL-D14	244	2061	5	11314.	1.024	17.903
10	S1# 3	CS45 PHENOL-D5	99	732	1	24489.	2.001	32.606
11	S1# 2	CS50 2-FLUOROPHENOL	112	576	1	19016.	1.458	34.746
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1579	3	3695.	0.100	58.628
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	362	1	7159.	1.055	18.071
14	S1#100	B028 ANALINE	93	743	1	13187.	2.614	13.439
15	S1#105	C315 PHENOL	94	734	1	13095.	2.276	15.323
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	754	1	11126.	2.015	14.705
17	S1#115	C330 2-CHLOROPHENOL	128	765	1	9654.	1.599	16.083
18	S1#125	C335 1,3-DICHLOROBENZENE	146	795	1	10824.	1.587	18.164
19	S1#130	C340 1,4-DICHLOROBENZENE	146	808	1	11433.	1.621	18.786
20	S1#145	C345 BENZYL ALCOHOL	108	828	1	5413.	1.126	12.807
21	S1#150	C350 1,2-DICHLOROBENZENE	146	836	1	10683.	1.544	18.432
22	S1#160	C355 2-METHYLPHENOL	108	847	1	8956.	1.693	14.094
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	854	1	17708.	2.588	18.225
24	S1#185	C365 4-METHYLPHENOL	108	875	1	9104.	1.772	13.684
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	878	1	7753.	1.397	14.787
26	S1#200	C375 HEXACHLOROETHANE	117	902	1	4448.	0.787	15.057
27	S2# 10	C410 NITROBENZENE	77	913	2	11083.	0.471	17.199
28	S2# 20	C415 ISOPHORONE	82	958	2	20329.	0.931	15.955
29	S2# 25	C420 2-NITROPHENOL	139	975	2	5013.	0.208	17.645
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	980	2	7180.	0.346	15.153
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1001	2	10865.	0.531	14.962
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1022	2	6711.	0.245	20.031
33	S2# 45	C430 BENZOIC ACID	122		2	NOT FOUND		
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1040	2	8022.	0.238	24.668
35	S2# 60	C450 NAPHTHALENE	128	1057	2	25737.	1.053	17.853
36	S2# 80	C455 4-CHLOROANALINE	127	1066	2	8079.	0.418	14.137
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1081	2	4332.	0.102	30.892
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1162	2	6752.	0.364	13.548
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1198	2	14957.	0.642	17.028
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1230	3	5394.	0.284	30.071
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1254	3	4264.	0.297	22.729
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1261	3	4947.	0.339	23.101
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1299	3	14837.	1.201	19.552
44	S3# 45	C530 2-NITROANALINE	65	1319	3	4819.	0.546	13.984
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1356	3	15067.	1.379	17.296
46	S3# 65	C540 ACENAPHTHYLENE	152	1385	3	21998.	1.979	17.598
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1368	3	3726.	0.362	16.284
48	S3# 75	C545 3-NITROANALINE	138	1404	3	2892.	0.311	14.706
49	S3# 80	C550 ACENAPHTHENE	153	1422	3	13784.	1.189	18.350
50	S3# 85	C555 2,4-DINITROPHENOL	184	1425	3	1102.	0.155	11.249
51	S3# 90	C565 DIBENZOFURAN	168	1458	3	18874.	1.594	18.743
52	S3# 95	C560 4-NITROPHENOL	109	1436	3	1254.	0.137	14.448
53	S3#105	C570 2,4-DINITROTOLUENE	165	1453	3	4265.	0.453	14.900
54	S3#130	C580 DIETHYLPHTHALATE	149	1503	3	14746.	1.449	16.113
55	S3#135	C590 FLUORENE	166	1530	3	15133.	1.247	19.207
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1529	3	6343.	0.398	25.223
57	S3#150	C595 4-NITROANALINE	138		3	NOT FOUND		
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1538	4	2139.	0.150	14.530
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1553	4	9298.	0.542	17.450
60	S4# 20	B091 AZOBENZENE	77	1562	4	19168.	1.447	13.476
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1631	4	3942.	0.151	26.619
62	S4# 40	C630 HEXACHLOROBENZENE	284	1645	4	4876.	0.156	31.855
63	S4# 50	C635 PENTACHLOROPHENOL	266	1685	4	2178.	0.106	20.850
64	S4# 65	C640 PHENANTHRENE	178	1733	4	20138.	1.089	18.805
65	S4# 70	C645 ANTHRACENE	178	1743	4	19744.	1.112	18.058
66	S4# 80	C646 CARBAZOLE	167	1776	4	12943.	0.884	14.901
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1846	4	22945.	1.680	13.896
68	S4#110	C655 FLUORANTHENE	202	1984	4	17918.	0.950	19.189
69	S5# 10	B113 BENZIDINE	184		5	NOT FOUND		
70	S5# 15	C715 PYRENE	202	2032	5	18544.	1.903	15.786
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2162	5	8169.	1.322	10.012
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2284	5	14103.	1.191	19.175
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2276	5	4727.	0.255	30.038
74	S5# 60	C740 CHRYSENE	228	2292	5	12805.	1.103	18.796

75	S6#	05	C755	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
76	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	2411	6	17848.	3.538	10.472	
77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2506	6	11810.	1.274	19.274	
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2512	6	11190.	1.054	22.088	
79	S6#	35	C775	BENZO(A)PYRENE	252	2583	6	10301.	1.076	19.901	
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2906	6	8917.	0.906	20.473	
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2909	6	7015.	0.736	19.308	
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	3001	6	7999.	1.581	10.526	

RMAL QUANTITATION SUMMARY FILE: U4905 000243
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	805	1	15017.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	1052	2	54739.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1415	3	25266.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1728	4	39323.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	2287	5	24695.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2596	6	19233.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	909	2	10762.	0.472	16.666
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1273	3	16425.	1.229	21.155
9	S5# 2	CS30 TERPHENYL-D14	244	2061	5	11314.	1.024	17.903
10	S1# 3	CS45 PHENOL-D5	99	732	1	24489.	2.001	32.606
11	S1# 2	CS50 2-FLUOROPHENOL	112	576	1	19016.	1.458	34.746
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1579	3	3695.	0.100	58.628
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	362	1	7159.	1.055	18.071
14	S1#100	B028 ANALINE	93	743	1	13187.	2.614	13.439
15	S1#105	C315 PHENOL	94	734	1	13095.	2.276	15.323
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	754	1	11126.	2.015	14.705
17	S1#115	C330 2-CHLOROPHENOL	128	765	1	9654.	1.599	16.083
18	S1#125	C335 1,3-DICHLOROBENZENE	146	795	1	10824.	1.587	18.164
19	S1#130	C340 1,4-DICHLOROBENZENE	146	808	1	11433.	1.621	18.786
20	S1#145	C345 BENZYL ALCOHOL	108	828	1	5413.	1.126	12.807
21	S1#150	C350 1,2-DICHLOROBENZENE	146	836	1	10683.	1.544	18.432
22	S1#160	C355 2-METHYLPHENOL	108	847	1	8956.	1.693	14.094
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	854	1	17708.	2.588	18.225
24	S1#185	C365 4-METHYLPHENOL	108	875	1	9104.	1.772	13.684
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	878	1	7753.	1.397	14.787
26	S1#200	C375 HEXACHLOROETHANE	117	902	1	4448.	0.787	15.057
27	S2# 10	C410 NITROBENZENE	77	913	2	11083.	0.471	17.199
28	S2# 20	C415 ISOPHORONE	82	958	2	20329.	0.931	15.955
29	S2# 25	C420 2-NITROPHENOL	139	975	2	5013.	0.208	17.645
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	980	2	7180.	0.346	15.153
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	1001	2	10865.	0.531	14.962
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	1022	2	6711.	0.245	20.031
33	S2# 45	C430 BENZOIC ACID	122	991	2	3441.	0.187	13.481
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	1040	2	8022.	0.238	24.668
35	S2# 60	C450 NAPHTHALENE	128	1057	2	25737.	1.053	17.853
36	S2# 80	C455 4-CHLOROANALINE	127	1066	2	8079.	0.418	14.137
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	1081	2	4332.	0.102	30.892
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	1162	2	6752.	0.364	13.548
39	S2#145	C470 2-METHYLNAPHTHALENE	142	1198	2	14957.	0.642	17.028
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	1230	3	5394.	0.284	30.071
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1254	3	4264.	0.297	22.729
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1261	3	4947.	0.339	23.101
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1299	3	14837.	1.201	19.552
44	S3# 45	C530 2-NITROANALINE	65	1319	3	4819.	0.546	13.984
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1356	3	15067.	1.379	17.296
46	S3# 65	C540 ACENAPHTHYLENE	152	1385	3	21998.	1.979	17.598
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1368	3	3726.	0.362	16.284
48	S3# 75	C545 3-NITROANALINE	138	1404	3	2892.	0.311	14.706
49	S3# 80	C550 ACENAPHTHENE	153	1422	3	13784.	1.189	18.350
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55	S3#135	C590 FLUORENE	166	1530	3	15133.	1.247	19.207
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1529	3	6343.	0.398	25.223
57	S3#150	C595 4-NITROANALINE	138	1532	3	2145.	0.211	16.100
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1538	4	2139.	0.150	14.530
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1553	4	9298.	0.542	17.450
60	S4# 20	B091 AZOBENZENE	77	1562	4	19168.	1.447	13.476
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1631	4	3942.	0.151	26.619
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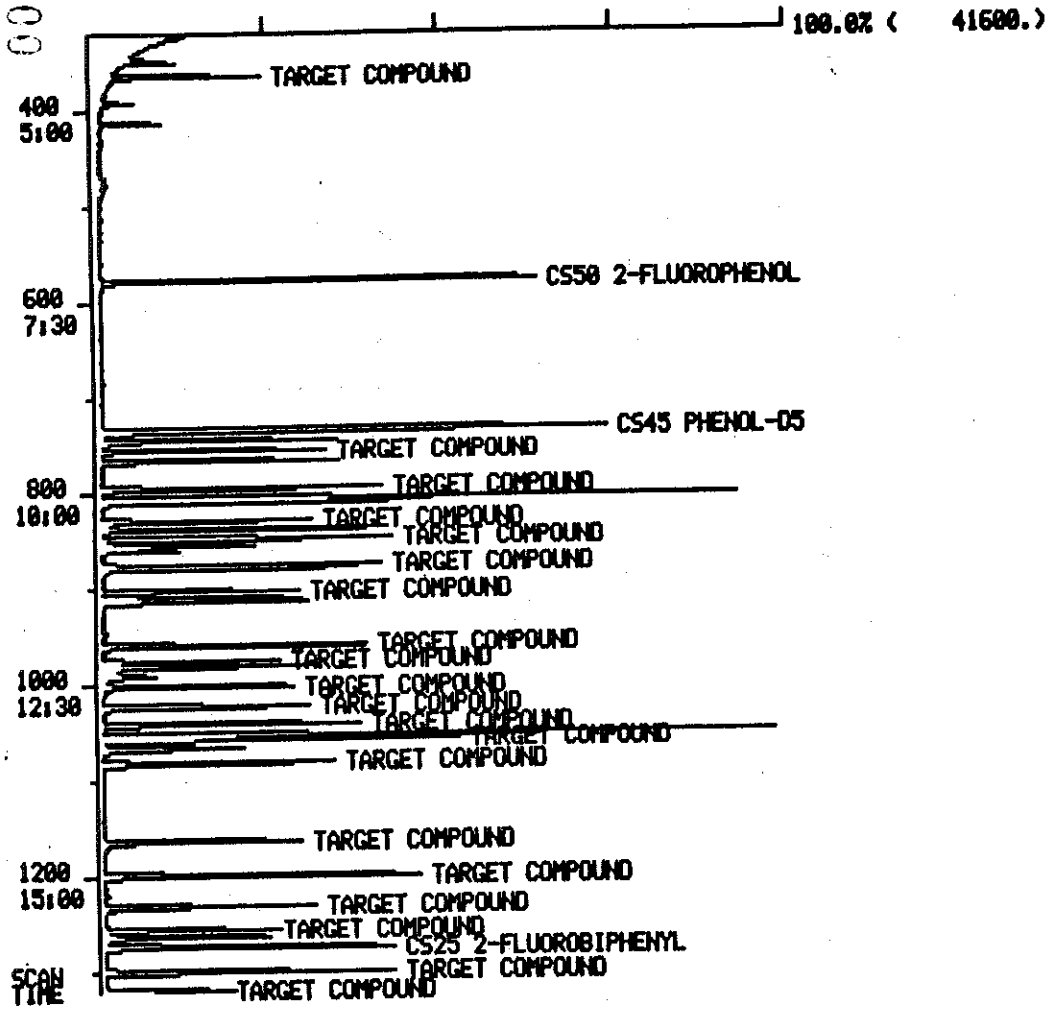
63	S4# 50	C635 PENTACHLOROPHENOL	266	1685	4	2178.	0.106	20.850
64	S4# 65	C640 PHENANTHRENE	178	1733	4	20138.	1.089	18.805
65	S4# 70	C645 ANTHRACENE	178	1743	4	19744.	1.112	18.058
66	S4# 80	C646 CARBAZOLE	167	1776	4	12943.	0.884	14.901
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1846	4	22945.	1.680	13.896
68	S4#110	C655 FLUORANTHENE	202	1984	4	17918.	0.950	19.189
69	S5# 10	B113 BENZIDINE	184		5	NOT FOUND		
70	S5# 15	C715 PYRENE	202	2032	5	18544.	1.903	15.786
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	2162	5	8169.	1.322	10.012
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	2284	5	14103.	1.191	19.175
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	2276	5	4727.	0.255	30.038
74	S5# 60	C740 CHRYSENE	228	2292	5	12805.	1.103	18.796
75	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	2280	5	12166.	1.700	11.594
76	S6# 10	C760 DI-N-OCTYL PHTHALAT	149	2411	6	17848.	3.538	10.492

77	S64	45	C765	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
78	S64	25	C770	BENZO(K)FLUORANTHEN	252	2512	6	11190.	1.054	22.088	
79	S64	35	C775	BENZO(A)PYRENE	252	2583	6	10301.	1.076	19.901	
80	S64	55	C780	INDENO(1,2,3-CD)PYR	276	2906	6	8917.	0.906	20.473	
81	S64	60	C785	DIBENZ(A,H)ANTHRACE	278	2909	6	7015.	0.756	19.308	
82	S64	65	C790	BENZO(G,H,I)PERYLEN	276	3001	6	7999.	1.581	10.526	

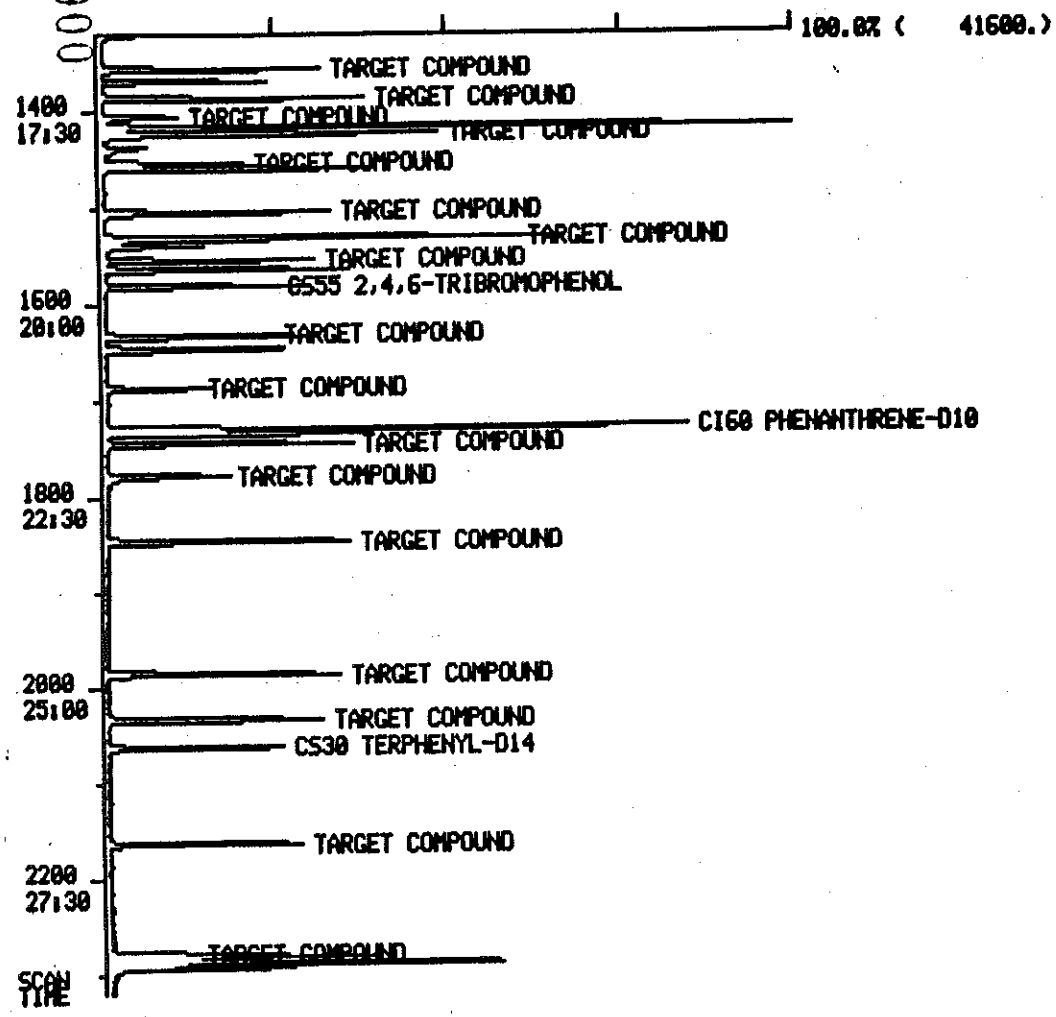
000245

DATA FROM FILE: U4905 SCANS 320 TO 1320 ACQUIRED: 04/08/92 11:04:00
CALI: U4905 #3 OUT OF 320 TO 3200

SAMPLE: CLP,STDU ,,SSTD20 ,NA ,NA ,V#5681,BNA,CAL ,
CONDS.: UG/ML %NA %100%/NA %(NA/NA)/NA NA M



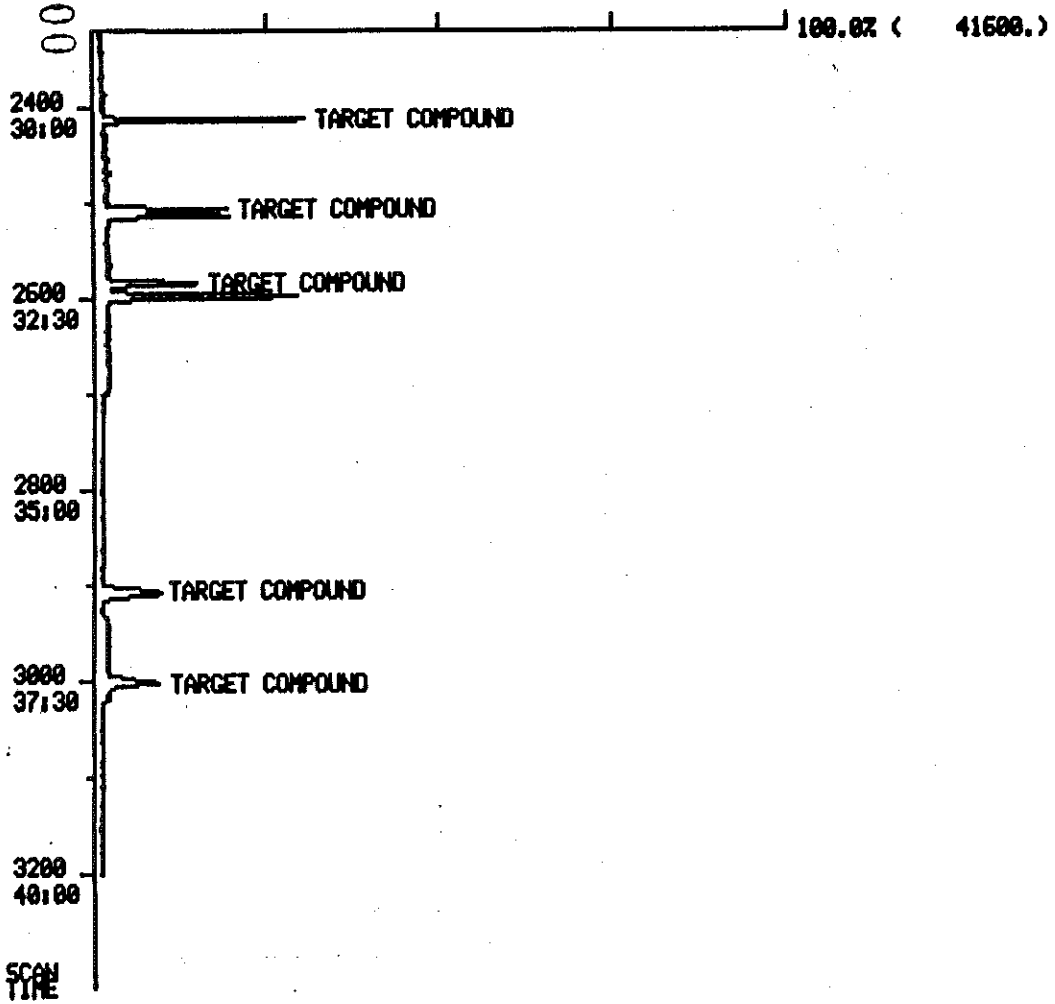
DATA FROM FILE: U4905 SCANS 1320 TO 2320 ACQUIRED: 04/08/92 11:04:00
CALI: U4905 #3 OUT OF 320 TO 3200
SAMPLE: CLP,STDU ,,SSTD20 ,NA ,NA ,U#5681,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



000246

000247

DATA FROM FILE: U4905 SCANS 2320 TO 3200 ACQUIRED: 04/08/92 11:04:00
CALI: U4905 #3 OUT OF 320 TO 3200
SAMPLE: CLP,STDU ,,SSTD20 ,NA ,NA ,V05681,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



Duplicate Scan Report
Quan List File: U4905

2 SCAN DIFFERENCE DUPLICATE

COMP#	SCAN	COMP#	SCAN	DIFF.
10	732	15	734	2
55	1530	56	1529	-1

2 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2596
9	2061
10	732
12	1579
14	743
32	1022
46	1385
51	1458
55	1530
72	2284
74	2292

GC/MS SEMIVOA

METHOD/TEST 8270

INSTRUMENT U

INITIAL CALIBRATION DATE 04/08/92

ANALYSIS RUN DATE 07/29/92

SAMPLES ASSOCIATED 01

Enseco - Rocky Mountain
Analytical Laboratory

BNA CONTINUOUS EXTRACTOR WORKSHEET

Project No.: _____
page 1 of 2

Analyte: Base/Neutral Refinery
Acid
BNA (combined)
TCLP (combined)
OTHER _____

QC LOT NO.: 11JUL921A
QC RUN NO.: 11JUL921A
TCLP CBC NO.: _____

SCS I.D. MS BNA SCS
CONC. 200/100 ug/ml
Ver. No. 5872
Amount Added 1.0ml
Date Made 7-9-92
Made by BE
Date Added 7-11-92
Added By LJ
Standard Addition

LCS I.D. _____
CONC. _____
Ver. No. _____
Amount Added _____
Date Made _____
Made By _____
Date Added _____
Added By _____
Witnessed By LJ

CH2Cl2 Brand B+J Lot No. BC858

LIMS Test Code: P-625-A

Sample No.	Amt. Ext. (ml)	Vol. C.F. H2O (mL)	Init pH	B/N pH	B/N D/T Start	Br	B/N D/T Stop	Chk	Acid pH	Acid D/T Start	Br	Acid D/T Stop	Chk	If Refinery Col. Cleaned: B/N Conc Vol.	Date	Br	Vol. Onto Col.	Date Clnd	Br	Final Vol. (ml)	Date Conc	Conc Br
01	940	~~500~~ 2500 LJ	7	>12	7-11-92 13:00	LJ	7.12.92 11:00	✓	1	7.12.92 12:30	JL	7.13.92 09:00	✓							1.0	7-14-92	LJ
02	960																					
04	980																					
05	1000																					
07	900																					
08	940																					
10	940																					
11	970																					
13	1000																					
14	1000																					
16	980																					
17	1000																					

Comments:

Reviewed by: AG
Date: 7-22-92

ENSECO - ROCKY MOUNTAIN ANALYTICAL LABORATORY GC/MS-SEMIVOLATILE ANALYSIS

PAGE NUMBER 154 TD 7/27/92 INSTRUMENT ID "U"

GC CONDITIONS									DETECTOR				
COL	PHASE	INJ TEMP	INIT TEMP	INIT TIME	RAMP RATE	FINAL TEMP	FLOW cc/min	PRESS psig	TYPE	EM	VAC. RANGE	SOURCE TEMP.	MASS RANGE
30m	DB-625	275	30 C	1.00 MIN	10C/MIN	325 C	--------	12	MS		10^-7 TORR	100 C	35-500/.75s

COMMENTS:

PROJ	SAMPLE	AMT	DIL/VOL	DATE	INIT	FILE	DISK	TAPE	IS OK	SS OK	DIL OK	COMMENTS
DFTPP	50ppm	-	-	7/29	TB	U7025	3:	Del				
↓	↓	-	-	↓	↓	26	↓	↓				Hit @ 12:50
HSLSTD		-	-			27						Low 1st Area
DFTPP		-	-			28						Hit @ 12:50
HSLSTD		-	-			29						Fixed/Updated
Refstd		-	-			30						↓
APQSTD	↓	-	-			31			✓			
	04Re	1000ml	20/1			32			✓	No	/	ARef Mtx effect proven ca ~~Repro~~. OK
	13Re	960ml	75/1			33			✓	/	/	ARef + 4 samples OK
	01Re	990ml	100/1			34			✓	No		ARef Mtx effect proven ca ~~Repro~~. OK
	01	30.0g	↓			35			✓	✓	No	ARef + Mesear + DBAH RP
	14	↓				36			✓	/	/	SAPQ + Hexa OK
↓	15	↓				37			✓	/	/	↓
	01	940ml	↓	↓	↓	38	↓		✓	/	/	AAPQ + Hexa ↓

BNA, S LIBRARIES

ANALYST: JB DATE: 7/30/92 000252

INTERNAL STANDARD AREA CHECK

STANDARD

FILENAME: U7029

	COMPOUND	AREA IN STANDARD	AREA LIMITS % OF AREA IN STANDARD LOW	HIGH
IS # 1	CI30 1,4-DICHLOROBEN	12984.	50	200
IS # 2	CI40 NAPHTHALENE-D8	50860.	50	200
IS # 3	CI50 ACENAPHTHENE-D1	26450.	50	200
IS # 4	CI60 PHENANTHRENE-D1	43062.	50	200
IS # 5	CI70 CHRYSENE-D12	30862.	50	200
IS # 6	CI75 PERYLENE-D12	33215.	50	200

SAMPLES

% OF AREA IN STANDARD

FILENAME	IS#1	IS#2	IS#3	IS#4	IS#5	IS#6
U7032	112	110	111	112	93	92
U7033	113	109	115	114	110	101
U7034	111	112	117	116	120	111
U7035	116	111	116	100	78	98
U7036	89	89	94	92	85	71
U7037	113	108	114	114	110	98
U7038	109	112	120	114	98	97
U7039	112	113	126	138	167	147
U7040	106	107	123	140	199	165
U7041	105	103	113	126	171	148

NOTE: * INDICATES THAT AN INTERNAL STANDARD AREA IS OUTSIDE QC LIMITS

SPECTRUM: U7028
INSTRUMENT: 4500
SAMPLE: DFTPP
CONDITIONS: GC DESC GD
% 275

07/29/92

RIC: 12672
ANALYST:

000253

SPECTRUM FIT TO DFTPP CRITERIA

M/Z	INTEN	LIMITS	FOUND RA	
51	689.	30-60% OF 198	41.36	OK
68	0.	< 2% OF 69	0.00	OK
69	814.	NOT SPECIFIED	48.86	OK
70	0.	< 2% OF 69	0.00	OK
127	820.	40-60% OF 198	49.22	OK
197	0.	< 1% OF 198	0.00	OK
198	1666.	100% (BASE PK)	100.00	OK
199	116.	5-9% OF 198	6.96	OK
275	358.	10-30% OF 198	21.49	OK
365	38.	> 1% OF 198	2.28	OK
441	154.	< 100% OF 443	62.86	OK
442	1156.	> 40% OF 198	69.39	OK
443	245.	17-23% OF 442	21.19	OK

TB
7/29/92

Mass List
07/29/92 12:50:00 + 3:26
Sample: DFTPP
Conds.: GC DESC QD

Data: U7028 # 275
Cali: U6995 # 3

Base m/z: 198
RIC: 12672.

000254

35 0.00 0.00 0. Minima Min Inten: 44.
443 Maxima # 0

Mass	% RA	% RIC	Inten.
36?F	11.88	1.56	198.
38?	4.74	0.62	79.
39?F	4.20	0.55	70.
40 F	18.91	2.49	315.
44	17.41	2.29	290.
49	4.14	0.54	69.
50 F	9.12	1.20	152.
51 F	41.36	5.44	689.
57	3.36	0.44	56.
69	48.86	6.42	814.
74 F	2.82	0.37	47.
75 F	6.36	0.84	106.
77 F	49.94	6.57	832.
78 F	3.84	0.51	64.
81 F	4.02	0.53	67.
84 F	3.18	0.42	53.
93	3.48	0.46	58.
107 F	11.16	1.47	186.
110 F	26.95	3.54	449.
111 F	3.60	0.47	60.
117	4.92	0.65	82.
127 F	49.22	6.47	820.
128 F	3.78	0.50	63.
129 F	14.41	1.89	240.
167 F	4.02	0.53	67.
179	2.88	0.38	48.
186 F	10.44	1.37	174.
187 F	3.18	0.42	53.
196 F	4.68	0.62	78.
198 F	100.00	13.15	1666.
199 F	6.96	0.92	116.
205 F	4.26	0.56	71.
206 F	17.29	2.27	288.
207	3.42	0.45	57.
217	5.28	0.69	88.
221 F	10.44	1.37	174.
224 F	9.54	1.25	159.
227	3.84	0.51	64.
244 F	8.22	1.08	137.
255 F	36.73	4.83	612.
256 F	6.36	0.84	106.
274 F	4.08	0.54	68.
275 F	21.49	2.83	358.
276 F	4.02	0.53	67.
296	4.02	0.53	67.
423 F	4.74	0.62	79.
441 F	9.24	1.22	154.
442 F	69.39	9.12	1156.
443 F	14.71	1.93	245.

Mass List
07/29/92 12:50:00 + 3:26
Sample: DFTPP
Conds.: GC DESC QD

Data: V7028 # 275
Cali: V6995 # 3

Base m/z: 198
RIC: 12672.

000255

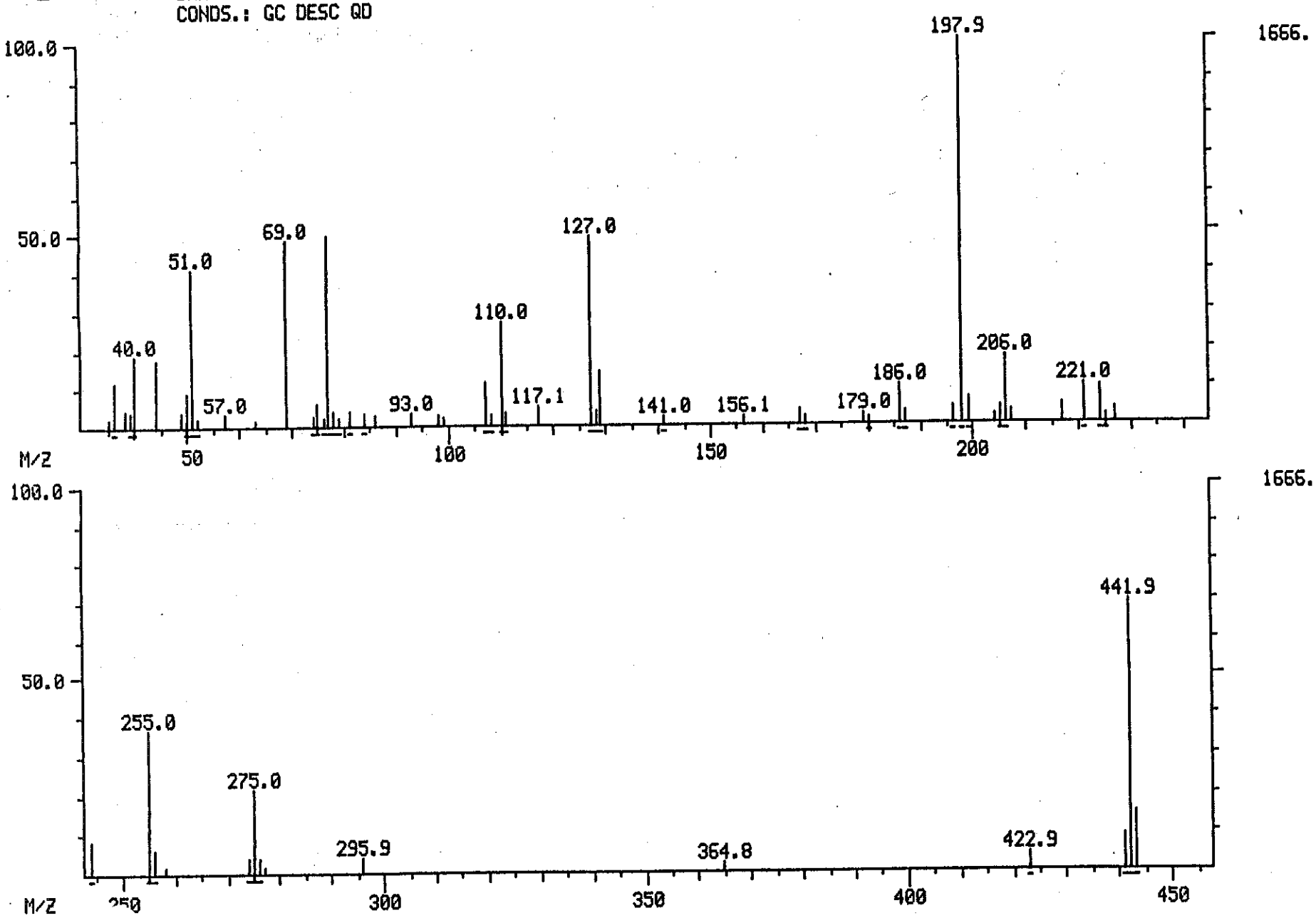
68	0.00	0.00	0.	Minima	Min Inten: 0.
70				Maxima	# 0
Mass	% RA	% RIC	Inten.		
69	48.86	6.42	814.		

000256

MASS SPECTRUM
07/29/92 12:50:00 + 3:26
SAMPLE: DFTPP
CONDS.: GC DESC QD

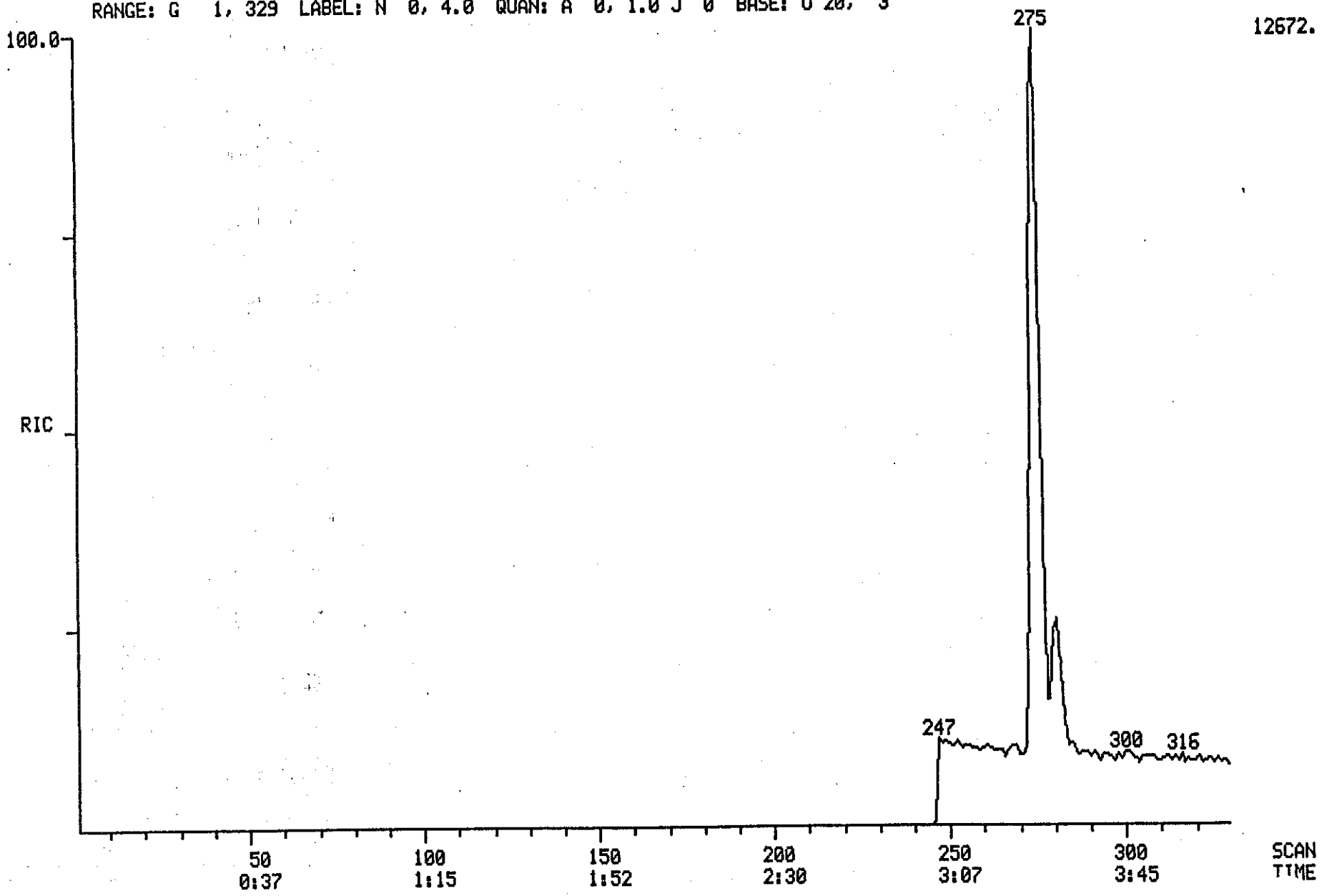
DATA: U7028 #275
CALI: U6995 #3

BASE M/Z: 198
RIC: 12672.



RIC
07/29/92 12:50:00
SAMPLE: DFTPP
CONDS.: GC DESC QD
RANGE: G 1, 329 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: U7028 #275 SCANS 1 TO 329
CALI: U6995 #3



Fixed/Updated

000258

7/29/92

Enseco GC/MS
HSL CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM HSL STD	U7029	07/29/92	13:01:00
INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

Library Entry		Compound	Initial Calibration Response Factor Avg	Min	% RSD	Max	Continuing Calibration Response Factor	Min	% Diff	Max
S1	15	B003 N-NITROSODIMETH	0.949		4.2		1.047		-10.3	
S1	100	B028 ANALINE	1.900		5.5		1.916		-0.8	
S1	105	C315 PHENOL	1.811		5.5	30.0	2.207		-21.9	30.0
S1	110	C325 BIS(2-CHLOROETH	1.475		4.9		1.766		-19.7	
S1	115	C330 2-CHLOROPHENOL	1.312		5.1		1.530		-16.6	
S1	125	C335 1,3-DICHLOROBEN	1.448		4.0		1.616		-11.6	
S1	130	C340 1,4-DICHLOROBEN	1.523		3.9	30.0	1.722		-13.1	30.0
S1	145	C345 BENZYL ALCOHOL	0.776		6.6		0.904		-16.5	
S1	150	C350 1,2-DICHLOROBEN	1.408		4.2		1.598		-13.5	
S1	160	C355 2-METHYLPHENOL	1.213		5.5		1.494		-23.2	
S1	165	C360 BIS(2-CHLOROISO	2.292		5.2		2.459		-7.3	
S1	185	C365 4-METHYLPHENOL	1.265		6.6		1.590		-25.7	
S1	190	C370 N-NITROSO-DI-N-	1.043	0.050	5.4		1.219	0.050	-16.9	
S1	200	C375 HEXACHLOROETHAN	0.593		4.4		0.642		-8.3	
S2	10	C410 NITROBENZENE	0.445		8.3		0.409		8.1	
S2	20	C415 ISOPHORONE	0.813		6.6		0.834		-2.6	
S2	25	C420 2-NITROPHENOL	0.202		9.6	30.0	0.235		-16.3	30.0
S2	30	C425 2,4-DIMETHYLPHE	0.311		10.6		0.319		-2.6	
S2	35	C435 BIS(2-CHLOROETH	0.452		9.2		0.487		-7.7	
S2	40	C440 2,4-DICHLOROPHE	0.287		10.3	30.0	0.291		-1.4	30.0
S2	45	C430 BENZOIC ACID	0.164		17.0		0.172		-4.9	
S2	55	C445 1,2,4-TRICHLORO	0.324		6.4		0.302		6.8	
S2	60	C450 NAPHTHALENE	1.055		8.1		1.127		-6.8	
S2	80	C455 4-CHLOROANALINE	0.381		14.3		0.364		4.5	
S2	95	C460 HEXACHLOROBUTAD	0.170		6.0	30.0	0.137		19.4	30.0
S2	130	C465 4-CHLORO-3-METH	0.290		10.3	30.0	0.334		-15.2	30.0
S2	145	C470 2-METHYLNAPHTHA	0.606		7.8		0.665		-9.7	
S3	20	C510 HEXACHLOROCYCLO	0.489	0.050	8.9		0.297	0.050	39.3	
S3	25	C515 2,4,6-TRICHLORO	0.394		10.9	30.0	0.334		15.2	30.0
S3	30	C520 2,4,5-TRICHLORO	0.484		5.8		0.386		20.2	
S3	40	C525 2-CHLORONAPHTHA	1.333		8.7		1.265		5.1	
S3	45	C530 2-NITROANALINE	0.435		9.1		0.420		3.4	
S3	55	C535 DIMETHYLPHTHALA	1.361		8.6		1.315		3.4	
S3	65	C540 ACENAPHTHYLENE	1.983		8.8		1.883		5.0	
S3	70	C543 2,6-DINITROTOLU	0.326		8.4		0.352		-8.0	
S3	75	C545 3-NITROANALINE	0.318		15.5		0.275		13.5	
S3	80	C550 ACENAPHTHENE	1.231		8.2	30.0	1.199		2.6	30.0
S3	85	C555 2,4-DINITROPHEN	0.153	0.050	20.9		0.137	0.050	10.5	
S3	90	C565 DIBENZOFURAN	1.694		8.9		1.675		1.1	
S3	95	C560 4-NITROPHENOL	0.137	0.050	9.3		0.099	0.050	27.7	
S3	105	C570 2,4-DINITROTOLU	0.393		11.2		0.443		-12.7	
S3	130	C580 DIETHYLPHTHALAT	1.329		8.5		1.279		3.8	
S3	135	C590 FLUORENE	1.368		8.2		1.325		3.1	
S3	140	C585 4-CHLOROPHENYL-	0.560		6.8		0.494		11.8	
S3	150	C595 4-NITROANALINE	0.260		28.2		0.178		31.5	
S4	10	C610 4,6-DINITRO-2-M	0.145		13.1		0.147		-1.4	
S4	15	C615 N-NITROSODIPHEN	0.517		8.7	30.0	0.516		0.2	30.0
S4	20	B091 AZOBENZENE	1.034		7.0		1.034		0.0	
S4	30	C625 4-BROMOPHENYL-P	0.219		7.3		0.202		7.8	
S4	40	C630 HEXACHLOROBENZE	0.261		5.3		0.229		12.3	
S4	50	C635 PENTACHLOROPHEN	0.159		12.5	30.0	0.127		20.1	30.0
S4	65	C640 PHENANTHRENE	1.113		7.3		1.070		3.9	
S4	70	C645 ANTHRACENE	1.109		7.7		1.080		2.6	
S4	80	C646 CARBAZOLE	0.761		11.1		0.763		-0.3	
S4	85	C650 DI-N-BUTYLPHTHA	1.283		7.1		1.459		-13.7	
S4	110	C655 FLUORANTHENE	0.978		7.3	30.0	1.075		-9.9	30.0
S5	10	B113 BENZIDINE	0.104		23.7					
S5	15	C715 PYRENE	1.524		4.3		1.583		-3.9	
S5	40	C720 BUTYLBENZYLPHTH	0.720		5.7		0.879		-22.1	
S5	50	C730 BENZO(A)ANTHRAC	1.157		4.4		1.383		-19.5	
S5	55	C725 3,3'-DICHLOROBE	0.415		12.7		0.268		35.4	
S5	60	C740 CHRYSENE	1.033		3.1		1.108		-7.3	
S5	65	C745 BIS(2-ETHYLHEXY	1.061		5.8		1.243		-17.2	
S6	10	C760 DI-N-OCTYL PHTH	2.124		8.9	30.0	2.029		4.5	30.0
S6	15	C765 BENZO(B)FLUORAN	1.257		5.7		1.210		3.7	
S6	25	C770 BENZO(K)FLUORAN	1.154		3.3		0.998		13.5	
S6	35	C775 BENZO(A)PYRENE	1.084		4.9	30.0	1.018		6.1	30.0
S6	55	C780 INDENO(1,2,3-CD	0.970		6.4		1.097		-13.1	
S6	60	C785 DIBENZ(A,H)ANTH	0.803		9.2		0.917		-14.2	
S6	65	C790 BENZO(G,H,I)PER	0.839		4.8		0.965		-15.0	

Enseco GC/MS
HSL CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM HSL STD	IC	U7029	07/29/92	13:01:00
INITIAL CALIBRATION:	20 PPM HSL STD		HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD		HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD		HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD		HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD		HSLU4902	04/08/92	8:15:00

Library Entry		Compound	Initial Calibration Response Factor Avg	Min	% RSD Max	Continuing Calibration Response Factor	Min	% Diff Max
S2	2	CS20 NITROBENZENE-D5	0.430		7.5	0.404		6.0
S3	3	CS25 2-FLUOROBIPHENY	1.479		8.5	1.308		11.6
S5	2	CS30 TERPHENYL-D14	0.980		6.1	0.983		-0.3
S1	3	CS45 PHENOL-D5	1.661		4.6	1.819		-9.5
S1	2	CS50 2-FLUOROPHENOL	1.277		3.9	1.504		-17.8
S3	2	CS55 2,4,6-TRIBROMOP	0.176		11.1	0.152		13.6

Enseco GC/MS
HSL CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM HSL STD	U7029	07/29/92	13:01:00
INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
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INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

		U7029		HSLU4905		HSLU4901		HSLU4904		HSLU4903		HSLU4902	
Lib	#	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
S1	15	50,	1.047	20,	0.953	50,	0.999	80,	0.940	120,	0.890	160,	0.964
S1	100	50,	1.916	20,	1.756	50,	1.996	80,	1.976	120,	1.824	160,	1.949
S1	105	50,	2.207	20,	1.744	50,	1.728	80,	1.903	120,	1.745	160,	1.935
S1	110	50,	1.766	20,	1.482	50,	1.428	80,	1.523	120,	1.381	160,	1.561
S1	115	50,	1.530	20,	1.286	50,	1.266	80,	1.347	120,	1.251	160,	1.412
S1	125	50,	1.616	20,	1.442	50,	1.431	80,	1.485	120,	1.364	160,	1.518
S1	130	50,	1.722	20,	1.523	50,	1.510	80,	1.588	120,	1.433	160,	1.560
S1	145	50,	0.904	20,	0.721	50,	0.766	80,	0.823	120,	0.734	160,	0.834
S1	150	50,	1.598	20,	1.423	50,	1.385	80,	1.449	120,	1.317	160,	1.467
S1	160	50,	1.494	20,	1.193	50,	1.159	80,	1.258	120,	1.150	160,	1.304
S1	165	50,	2.459	20,	2.358	50,	2.159	80,	2.343	120,	2.172	160,	2.429
S1	185	50,	1.590	20,	1.212	50,	1.189	80,	1.337	120,	1.215	160,	1.372
S1	190	50,	1.219	20,	1.033	50,	0.986	80,	1.066	120,	1.004	160,	1.128
S1	200	50,	0.642	20,	0.592	50,	0.573	80,	0.599	120,	0.566	160,	0.633
S2	10	50,	0.409	20,	0.405	50,	0.413	80,	0.475	120,	0.445	160,	0.489
S2	20	50,	0.834	20,	0.743	50,	0.792	80,	0.864	120,	0.795	160,	0.869
S2	25	50,	0.235	20,	0.183	50,	0.183	80,	0.212	120,	0.203	160,	0.228
S2	30	50,	0.319	20,	0.262	50,	0.306	80,	0.329	120,	0.306	160,	0.351
S2	35	50,	0.487	20,	0.397	50,	0.433	80,	0.472	120,	0.448	160,	0.508
S2	40	50,	0.291	20,	0.245	50,	0.278	80,	0.304	120,	0.286	160,	0.324
S2	45	50,	0.172			50,	0.123	80,	0.169	120,	0.186	160,	0.176
S2	55	50,	0.302	20,	0.293	50,	0.321	80,	0.338	120,	0.319	160,	0.347
S2	60	50,	1.127	20,	0.940	50,	1.010	80,	1.095	120,	1.064	160,	1.167
S2	80	50,	0.364	20,	0.295	50,	0.372	80,	0.407	120,	0.392	160,	0.441
S2	95	50,	0.137	20,	0.158	50,	0.168	80,	0.178	120,	0.164	160,	0.183
S2	130	50,	0.334	20,	0.247	50,	0.278	80,	0.307	120,	0.293	160,	0.326
S2	145	50,	0.665	20,	0.546	50,	0.573	80,	0.645	120,	0.606	160,	0.659
S3	20	50,	0.297	20,	0.427	50,	0.481	80,	0.502	120,	0.485	160,	0.548
S3	25	50,	0.334	20,	0.338	50,	0.377	80,	0.411	120,	0.389	160,	0.454
S3	30	50,	0.386			50,	0.457	80,	0.485	120,	0.471	160,	0.522
S3	40	50,	1.265	20,	1.174	50,	1.307	80,	1.374	120,	1.314	160,	1.495
S3	45	50,	0.420			50,	0.391	80,	0.439	120,	0.425	160,	0.486
S3	55	50,	1.315	20,	1.193	50,	1.358	80,	1.408	120,	1.333	160,	1.513
S3	65	50,	1.883	20,	1.741	50,	1.966	80,	1.982	120,	1.992	160,	2.235
S3	70	50,	0.352	20,	0.295	50,	0.315	80,	0.335	120,	0.319	160,	0.368
S3	75	50,	0.275			50,	0.250	80,	0.337	120,	0.318	160,	0.366
S3	80	50,	1.199	20,	1.091	50,	1.201	80,	1.260	120,	1.233	160,	1.371
S3	85	50,	0.137			50,	0.111	80,	0.153	120,	0.157	160,	0.189
S3	90	50,	1.675	20,	1.494	50,	1.641	80,	1.747	120,	1.682	160,	1.907
S3	95	50,	0.099			50,	0.120	80,	0.148	120,	0.133	160,	0.145
S3	105	50,	0.443	20,	0.338	50,	0.370	80,	0.407	120,	0.396	160,	0.456
S3	130	50,	1.279	20,	1.167	50,	1.322	80,	1.367	120,	1.307	160,	1.480
S3	135	50,	1.325	20,	1.198	50,	1.338	80,	1.437	120,	1.373	160,	1.495
S3	140	50,	0.494	20,	0.502	50,	0.555	80,	0.588	120,	0.556	160,	0.600
S3	150	50,	0.178			50,	0.169	80,	0.242	120,	0.288	160,	0.342
S4	10	50,	0.147			50,	0.120	80,	0.148	120,	0.145	160,	0.166
S4	15	50,	0.516	20,	0.473	50,	0.487	80,	0.519	120,	0.519	160,	0.589
S4	20	50,	1.034	20,	0.975	50,	0.973	80,	1.055	120,	1.018	160,	1.147
S4	30	50,	0.202	20,	0.200	50,	0.219	80,	0.217	120,	0.214	160,	0.244
S4	40	50,	0.229	20,	0.248	50,	0.263	80,	0.260	120,	0.250	160,	0.283
S4	50	50,	0.127			50,	0.137	80,	0.160	120,	0.155	160,	0.185
S4	65	50,	1.070	20,	1.024	50,	1.100	80,	1.131	120,	1.069	160,	1.241
S4	70	50,	1.080	20,	1.004	50,	1.066	80,	1.115	120,	1.122	160,	1.237
S4	80	50,	0.763	20,	0.658	50,	0.734	80,	0.785	120,	0.739	160,	0.888
S4	85	50,	1.459	20,	1.167	50,	1.241	80,	1.338	120,	1.265	160,	1.402
S4	110	50,	1.075	20,	0.911	50,	0.953	80,	1.024	120,	0.924	160,	1.080
S5	10					50,	0.127	80,	0.074	120,	0.094	160,	0.121
S5	15	50,	1.583	20,	1.502	50,	1.540	80,	1.630	120,	1.468	160,	1.482
S5	40	50,	0.879	20,	0.662	50,	0.716	80,	0.768	120,	0.706	160,	0.749
S5	50	50,	1.383	20,	1.142	50,	1.156	80,	1.180	120,	1.084	160,	1.223
S5	55	50,	0.268	20,	0.383	50,	0.390	80,	0.388	120,	0.405	160,	0.508
S5	60	50,	1.108	20,	1.037	50,	1.035	80,	1.039	120,	0.981	160,	1.071
S5	65	50,	1.243	20,	0.985	50,	1.020	80,	1.126	120,	1.053	160,	1.120
S6	10	50,	2.029	20,	1.856	50,	2.102	80,	2.389	120,	2.135	160,	2.139
S6	15	50,	1.210	20,	1.228	50,	1.236	80,	1.336	120,	1.164	160,	1.321
S6	25	50,	0.998	20,	1.164	50,	1.158	80,	1.210	120,	1.112	160,	1.125
S6	35	50,	1.018	20,	1.071	50,	1.060	80,	1.144	120,	1.015	160,	1.129
S6	55	50,	1.097	20,	0.927	50,	0.926	80,	0.950	120,	0.970	160,	1.077
S6	60	50,	0.917	20,	0.729	50,	0.754	80,	0.796	120,	0.816	160,	0.920
S6	65	50,	0.965	20,	0.832	50,	0.845	80,	0.812	120,	0.801	160,	0.903

Enseco GC/MS
HSL CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM HSL STD	U7029	07/29/92	13:01:00
INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

		U7029		HSLU4905		HSLU4901		HSLU4904		HSLU4903		HSLU4902	
Lib	#	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
S2	2	50,	0.404	20,	0.393	50,	0.410	80,	0.453	120,	0.422	160,	0.473
S3	3	50,	1.308	20,	1.300	50,	1.455	80,	1.530	120,	1.462	160,	1.647
S5	2	50,	0.983	20,	0.916	50,	0.979	80,	1.079	120,	0.960	160,	0.967
S1	3	100,	1.819	40,	1.631	100,	1.618	160,	1.739	240,	1.573	320,	1.744
S1	2	100,	1.504	40,	1.266	100,	1.308	160,	1.332	240,	1.202	320,	1.275
S3	2	100,	0.152	40,	0.146	100,	0.174	160,	0.183	240,	0.176	320,	0.200

Name List: HEDR1
File Name: U7029

Entry # 1 of 1

(1)Format: BNACLP
(3)Sample ID: SSTD50
(5)Matrix: NA
(7)Fraction: BNA
(10)Analyst:
(12)Extract Volume: NA
(14)Int. Ext. Vol.: NA
(16)Sample Amount: NA
(19)Run Factor: NA

(2)Case: STDU
(4)Level: NA
(6)Lab Sample ID: V#6274
(8)Type: CAL
(11)Quan List Units: UG/ML
(13)Extract Dilution: NA
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: NA

7/29/92 13:01:58 SCAN 1 OF 2760
Acquisition started

Acquire
07/29/92 13:01:00 + 0:04
Sample: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6274,BNA,CAL ,
Conds.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M
Formula: NANA
Submitted by: RMAL

Run 3:U7029
Free sectors: 26465
Instrument: 4500
Analyst:

ACQUIRING
Scan: 5 of 2760

Weight: 0.000
Acct. No: BNACLP

****
GC PARAMETERS
****

Loaded GC Desc:ST Current GC oven tmp: 28 DegC
Current GC Desc:ST GC elapsed time : 0: 3 min

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

Injector : 275 DegC
Int. oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

****
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

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	

7/29/92 13:36:30
ACQUISITION COMPLETED
SCANS 1 TO 2760 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2760	320.7	2070.0	15.5	48987. 18.	24.

PROCEDURE: TCA
DATA FILE: U7029
REFERENCE: 11TABLE
NAME LIST: LLNL
REPORT: IS01

DIAGNOSTIC REPORT

7/29/92 13:37:21

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

000263

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	9	9	3	62	IS01/TC01
3	3	1	33	18	18	2	54	IS02/TC02
3	3	1	33	13	13	2	73	IS03/TC03
3	3	1	32	18	18	1	85	IS04/TC04
3	3	1	32	10	10	1	111	IS05/TC05
3	3	1	23	9	9	1	130	IS06/TC06
3	3	1	80	15	14	32	126	IS07/TC07
1	1	1	0	4	4	1	185	IS08/TC08

82 COMPOUNDS PROCESSED, 81 FOUND

COMPOUND NO	LIB	ENTRY	SEARCH REF	SEARCH PRED	SEARCH SEL	DELTA	PEAKS	SAT FIT	PEAKS	CHRO M/Z	TOP	DELTA	PEAKS
1	S1	1	-598	584	584	.	1	961	.	152	584	.	1
2	S1	15	-220	208	207	-1	3	986	.	74	207	.	1
3	S1	2	-399	386	387	1	1	987	.	112	387	.	1
4	S1	100	-545	531	531	.	1	986	.	93	531	.	1
5	S1	3	-548	534	534	.	1	974	.	99	534	.	1
6	S1	105	-550	536	536	.	1	994	.	94	536	.	1
7	S1	110	-560	546	546	.	1	972	.	93	546	.	1
8	S1	115	-564	550	550	.	1	994	.	128	550	.	1
9	S1	125	-588	574	573	-1	1	990	.	146	573	.	1
10	S2	1	-827	811	811	.	1	993	.	136	811	.	1
11	S3	1	-1171	1153	1153	.	1	991	.	164	1153	.	1
12	S1	130	-601	586	587	1	1	990	.	146	587	.	1
13	S1	150	-626	611	611	.	1	993	.	146	611	.	1
14	S1	145	-628	613	613	.	1	993	.	108	613	.	1
15	S1	160	-651	636	636	.	1	973	.	108	636	.	1
16	S1	165	-652	637	637	.	1	991	.	45	638	1	1
17	S1	190	-676	661	661	.	1	985	.	70	661	.	1
18	S1	185	-679	664	665	1	1	991	.	108	665	.	1
19	S1	200	-684	669	669	.	1	989	.	117	669	.	1
20	S2	2	-697	682	681	-1	1	997	.	82	681	.	1
21	S2	10	-701	686	685	-1	1	995	.	77	685	.	1
22	S2	20	-747	731	731	.	1	970	.	82	731	.	1
23	S2	25	-759	743	743	.	1	980	.	139	743	.	1
24	S2	30	-776	760	760	.	1	991	.	107	760	.	1
25	S2	35	-793	777	777	.	1	997	.	93	777	.	1
26	S2	45	-805	789	788	-1	2	998	.	122	788	.	1
27	S2	40	-806	790	790	.	1	996	.	162	790	.	1
28	S2	55	-819	803	803	.	1	992	.	180	803	.	1
29	S2	60	-832	816	815	-1	1	1000	.	128	815	.	1
30	S2	80	-848	832	832	.	1	981	.	127	832	.	1
31	S2	95	-859	843	843	.	1	1000	.	225	843	.	1
32	S2	130	-949	933	934	1	1	983	.	107	934	.	1
33	S2	145	-967	951	950	-1	1	982	.	142	950	.	1
34	S3	20	-999	982	982	.	1	991	.	237	982	.	1
35	S3	25	-1026	1009	1010	1	1	998	.	196	1010	.	1
36	S3	30	-1033	1016	1017	1	2	999	.	196	1017	.	1
37	S4	1	-1468	1449	1449	.	1	984	.	188	1449	.	1
38	S3	3	-1044	1027	1027	.	1	997	.	172	1027	.	1
39	S3	40	-1062	1045	1044	-1	1	998	.	162	1044	.	1
40	S3	45	-1088	1071	1070	-1	1	995	.	65	1070	.	1
41	S3	55	-1131	1113	1113	.	1	959	.	163	1113	.	1
42	S3	70	-1140	1122	1122	.	1	997	.	165	1122	.	1
43	S3	65	-1143	1125	1125	.	1	991	.	152	1125	.	1
44	S3	75	-1171	1153	1153	.	1	992	.	138	1153	.	1
45	S3	80	-1178	1160	1160	.	1	985	.	153	1160	.	1
46	S3	85	-1192	1174	1175	1	1	984	.	184	1175	.	1
47	S3	90	-1213	1195	1195	.	1	948	.	168	1195	.	1
48	S3	95	-1215	1197	1200	3	1	972	.	109	1200	.	1
49	S3	105	-1219	1201	1201	.	1	992	.	165	1201	.	1
50	S3	130	-1274	1256	1256	.	1	952	.	149	1256	.	1
51	S3	135	-1282	1264	1263	-1	1	987	.	166	1263	.	1
52	S3	140	-1288	1270	1270	.	1	986	.	204	1270	.	1
53	S3	150	-1293	1275	1278	3	1	984	.	138	1276	-2	1
54	S4	10	-1300	1282	1282	.	1	985	.	198	1282	.	1
55	S4	15	-1313	1295	1295	.	1	961	.	169	1295	.	1
56	S4	20	-1319	1301	1301	.	1	1000	.	77	1301	.	1
57	S3	2	-1330	1312	1312	.	1	976	.	330	1312	.	1
58	S4	30	-1385	1367	1366	-1	1	905	.	248	1366	.	1
59	S4	40	-1391	1373	1372	-1	1	994	.	284	1372	.	1
60	S5	1	-2003	1983	1983	.	1	979	.	240	1983	.	1
61	S4	50	-1435	1415	1415	.	1	992	.	266	1415	.	1
62	S4	65	-1474	1454	1454	.	1	951	.	178	1454	.	1
63	S4	70	-1484	1464	1464	.	1	940	.	178	1464	.	1
64	S4	80	-1524	1504	1502	-2	1	995	.	167	1502	.	1

65	S4	85	-1604	1584	1586	2	1	925	.	147	1588	.	.	.
66	S4	110	-1714	1694	1693	-1	1	968	.	202	1693	.	.	1
67	S6	1	-2272	2250	2250	.	1	968	.	264	2250	.	.	1
68	S5	10	-1751	1732	.	.	.	.	.	184	.	.	.	.
69	S5	15	-1757	1738	1736	-2	1	991	.	202	1736	.	.	1
70	S5	2	-1798	1779	1779	.	1	968	.	244	1778	.	.	1
71	S5	40	-1904	1884	1886	2	1	995	.	149	1886	.	.	1
72	S5	50	-2002	1982	1981	-1	2	996	.	228	1981	.	.	1
73	S5	55	-2003	1983	1984	1	1	974	.	252	1983	.	-1	1
74	S5	60	-2009	1989	1988	-1	2	993	.	228	1988	.	.	1
75	S5	65	-2026	2006	2008	2	1	989	.	149	2008	.	.	1
76	S6	10	-2153	2132	2133	1	1	998	.	149	2133	.	.	1
77	S6	15	-2207	2186	2185	-1	2	988	.	252	2185	.	.	1
78	S6	25	-2212	2191	2190	-1	2	993	.	252	2190	.	.	1
79	S6	35	-2263	2242	2241	-1	2	997	.	252	2241	.	.	1
80	S6	55	-2445	2421	2422	1	1	990	.	276	2422	.	.	1
81	S6	60	-2448	2424	2426	2	1	988	.	278	2426	.	.	1
82	S6	65	-2488	2464	2462	-2	1	995	.	276	2462	.	.	1

000264

TCA FINISHED, 81 FOUND
FINISHED AT: 7/29/92 13:45:43

000265

RMAL QUANTITATION SUMMARY FILE: U7029
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

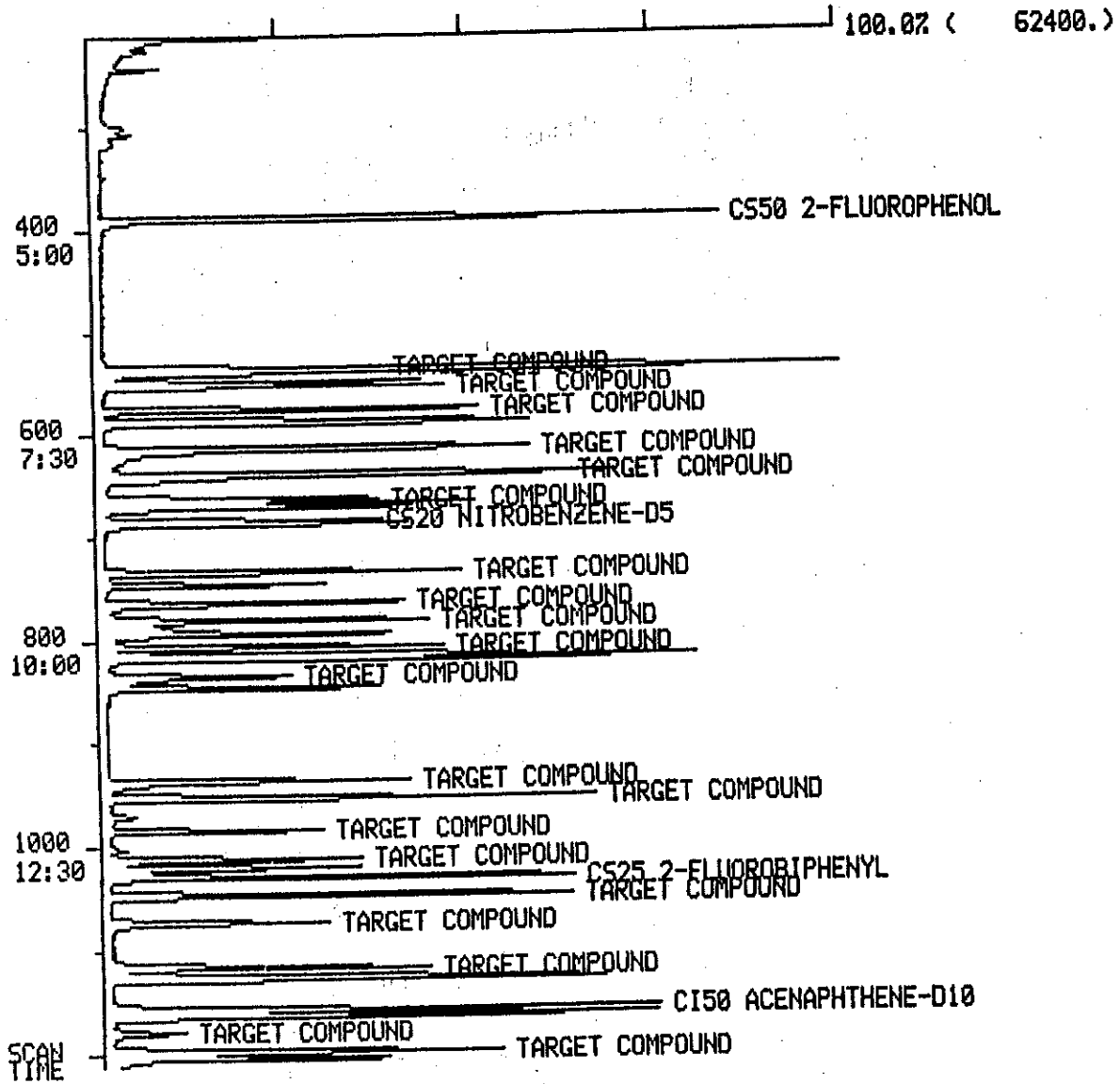
NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	584	1	12985.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	811	2	50861.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1153	3	26451.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1449	4	43063.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	1983	5	30863.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2250	6	33216.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	681	2	25671.	0.391	51.637
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1027	3	43233.	1.293	50.557
9	S5# 2	CS30 TERPHENYL-D14	244	1778	5	37917.	1.088	45.188
10	S1# 3	CS45 PHENOL-D5	99	534	1	59041.	1.643	110.684
11	S1# 2	CS50 2-FLUOROPHENOL	112	387	1	48810.	1.295	116.141
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1312	3	10067.	0.168	90.768
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	207	1	16991.	1.065	49.141
14	S1#100	B028 ANALINE	93	531	1	31092.	1.694	56.528
15	S1#105	C315 PHENOL	94	536	1	35817.	2.004	55.067
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	546	1	28672.	1.619	54.557
17	S1#115	C330 2-CHLOROPHENOL	128	550	1	24839.	1.443	53.040
18	S1#125	C335 1,3-DICHLOROBENZENE	146	573	1	26224.	1.542	52.403
19	S1#130	C340 1,4-DICHLOROBENZENE	146	587	1	27948.	1.586	54.289
20	S1#145	C345 BENZYL ALCOHOL	108	613	1	14679.	0.686	65.951
21	S1#150	C350 1,2-DICHLOROBENZENE	146	611	1	25931.	1.516	52.683
22	S1#160	C355 2-METHYLPHENOL	108	636	1	24248.	1.331	56.138
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	638	1	39909.	2.578	47.685
24	S1#185	C365 4-METHYLPHENOL	108	665	1	25807.	1.442	55.133
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	661	1	19784.	1.233	49.413
26	S1#200	C375 HEXACHLOROETHANE	117	669	1	10422.	0.632	50.765
27	S2# 10	C410 NITROBENZENE	77	685	2	25995.	0.397	51.547
28	S2# 20	C415 ISOPHORONE	82	731	2	53048.	0.814	51.272
29	S2# 25	C420 2-NITROPHENOL	139	743	2	14925.	0.209	56.153
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	760	2	20263.	0.254	62.658
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	777	2	30948.	0.461	52.828
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	790	2	18529.	0.283	51.417
33	S2# 45	C430 BENZOIC ACID	122	788	2	10916.	0.157	54.621
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	803	2	19173.	0.299	50.401
35	S2# 60	C450 NAPHTHALENE	128	815	2	71634.	1.008	55.911
36	S2# 80	C455 4-CHLOROANALINE	127	832	2	23144.	0.358	50.785
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	843	2	8727.	0.149	45.975
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	934	2	21237.	0.318	52.556
39	S2#145	C470 2-METHYLNAPHTHALENE	142	950	2	42280.	0.633	52.535
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	982	3	9810.	0.323	45.968
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	1010	3	11035.	0.353	47.238
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1017	3	12769.	0.415	46.478
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1044	3	41820.	1.216	51.998
44	S3# 45	C530 2-NITROANALINE	65	1070	3	13879.	0.456	45.979
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1113	3	43470.	1.365	48.163
46	S3# 65	C540 ACENAPHTHYLENE	152	1125	3	62270.	1.694	55.582
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1122	3	11629.	0.329	53.393
48	S3# 75	C545 3-NITROANALINE	138	1153	3	9094.	0.289	47.582
49	S3# 80	C550 ACENAPHTHENE	153	1160	3	39657.	1.168	51.354
50	S3# 85	C555 2,4-DINITROPHENOL	184	1175	3	4514.	0.175	39.068
51	S3# 90	C565 DIBENZOFURAN	168	1195	3	55367.	1.635	51.216
52	S3# 95	C560 4-NITROPHENOL	109	1200	3	3262.	0.107	46.135
53	S3#105	C570 2,4-DINITROTOLUENE	165	1201	3	14656.	0.472	46.984
54	S3#130	C580 DIETHYLPHTHALATE	149	1256	3	42291.	1.294	49.421
55	S3#135	C590 FLUORENE	166	1263	3	43822.	1.318	50.284
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1270	3	16350.	0.540	45.825
57	S3#150	C595 4-NITROANALINE	138	1276	3	5892.	0.095	93.808
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1282	4	7918.	0.152	48.425
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1295	4	27787.	0.431	59.900
60	S4# 20	B091 AZOBENZENE	77	1301	4	55633.	0.996	51.894
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1366	4	10848.	0.196	51.412
62	S4# 40	C630 HEXACHLOROBENZENE	284	1372	4	12312.	0.227	50.313
63	S4# 50	C635 PENTACHLOROPHENOL	266	1415	4	6833.	0.126	50.333
64	S4# 65	C640 PHENANTHRENE	178	1454	4	57601.	1.004	53.267
65	S4# 70	C645 ANTHRACENE	178	1464	4	58124.	1.019	52.981
66	S4# 80	C646 CARBAZOLE	167	1502	4	41096.	0.719	53.094
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1586	4	78521.	1.260	57.889
68	S4#110	C655 FLUORANTHENE	202	1693	4	57848.	1.061	50.624
69	S5# 10	B113 BENZIDINE	184		5	NOT FOUND		
70	S5# 15	C715 PYRENE	202	1736	5	61059.	1.659	47.714
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	1886	5	33899.	0.843	52.136
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	1981	5	53341.	1.363	50.712
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	1983	5	10338.	0.173	77.524

74	S5#	60	C740	CHRYSENE	228	1988	5	[illegible]	[illegible]	[illegible]
75	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149	2008	5	47943.	1.206	51.516
76	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	2133	6	84226.	1.935	52.420
77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2185	6	50253.	1.180	51.270
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2190	6	41433.	0.937	53.264
79	S6#	35	C775	BENZO(A)PYRENE	252	2241	6	42265.	0.952	53.437
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2422	6	45561.	1.027	53.407
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2426	6	38087.	0.860	53.355
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	2462	6	40049.	0.904	53.329

000267

DATA FROM FILE: U7029 SCANS 210 TO 1210 ACQUIRED: 07/29/92 13:01:00
CALI: U7029 #3 OUT OF 210 TO 2760

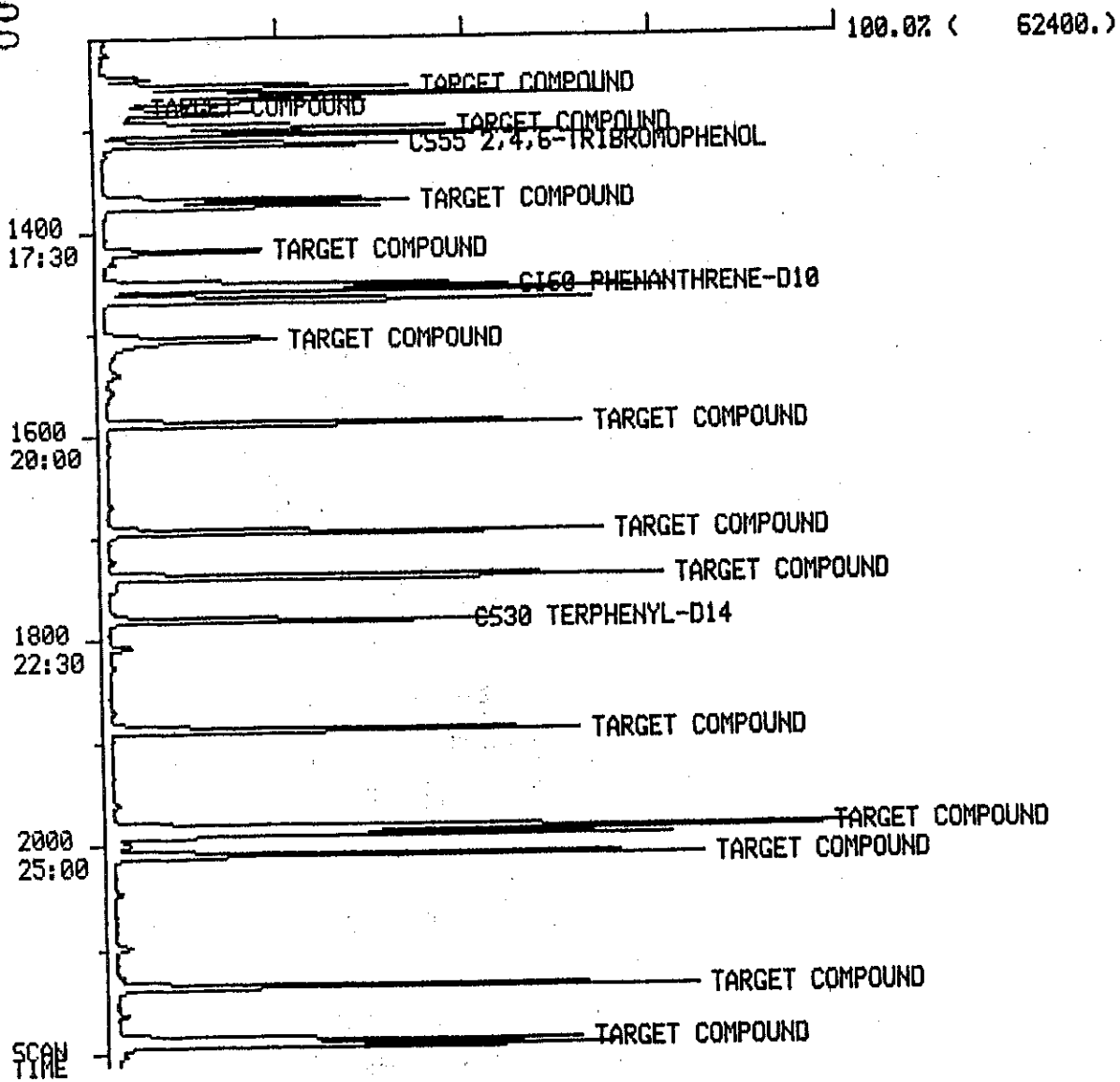
SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6274,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



000268

DATA FROM FILE: U7029 SCANS 1210 TO 2210 ACQUIRED: 07/29/92 13:01:00
CALI: U7029 #3 OUT OF 210 TO 2760

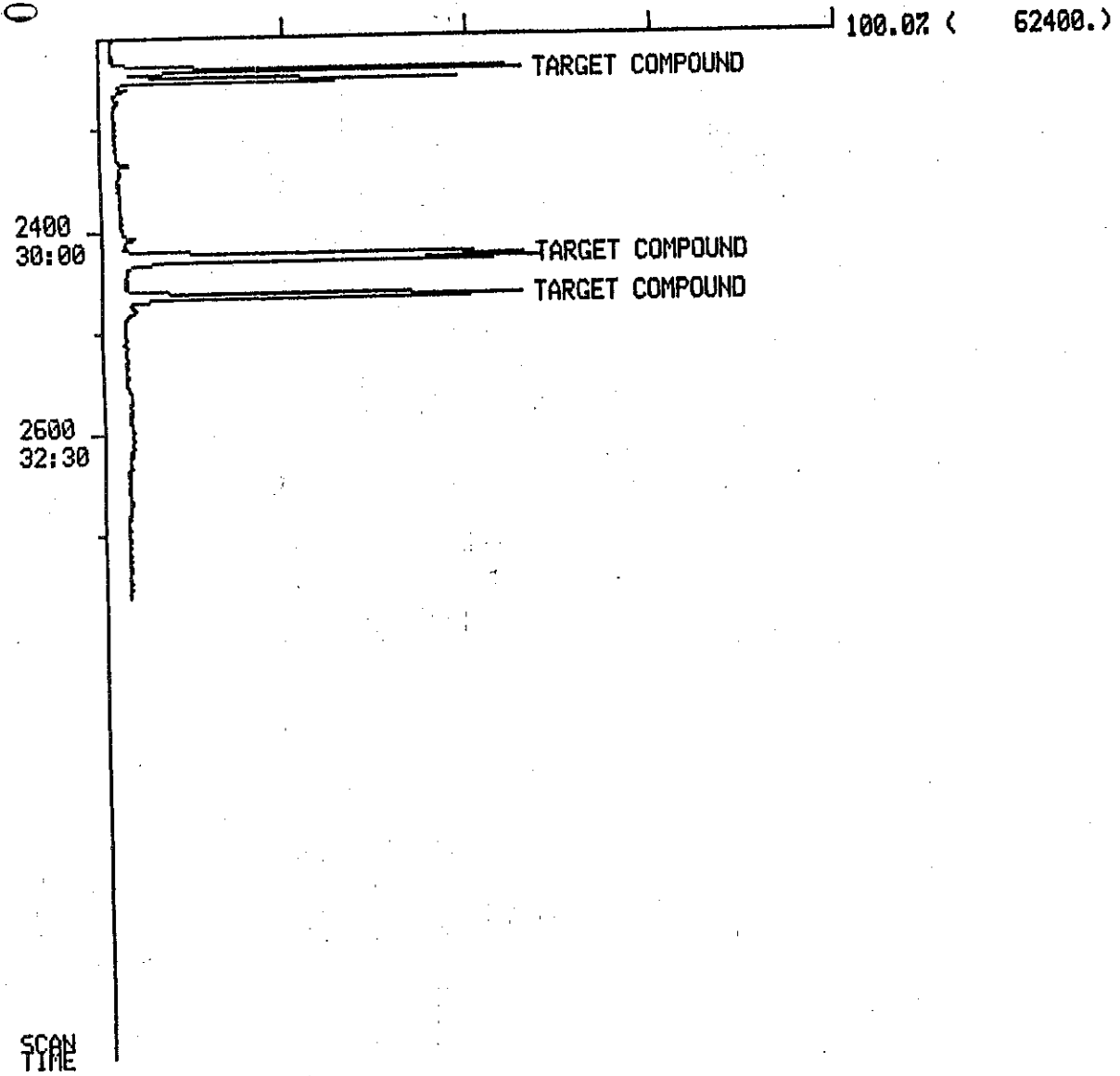
SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6274,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



000269

DATA FROM FILE: U7029 SCANS 2210 TO 2760 ACQUIRED: 07/29/92 13:01:00
CALI: U7029 #3 OUT OF 210 TO 2760

SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6274,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



Duplicate Scan Report
Quan List File: U7029

2 SCAN DIFFERENCE DUPLICATE

COMP#	SCAN	COMP#	SCAN	DIFF.
3	1153	48	1153	0
5	1983	72	1981	-2
5	1983	73	1983	0
10	534	15	536	2
20	613	21	611	-2
22	636	23	638	2
32	790	33	788	-2
52	1200	53	1201	1
72	1981	73	1983	2

9 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2250
9	1778
10	534
12	1312
20	613
24	665
32	790
46	1125

Fixed/Updated

000271 rb

7/29/92

Enseco GC/MS
AP9 CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM AP9 STD	U7031	07/29/92	14:53:00	
INITIAL CALIBRATION:	20 PPM AP9 STD	AP9U8965	09/03/91	16:43:00	
INITIAL CALIBRATION:	50 PPM AP9 STD	AP9U8963	09/03/91	14:51:00	
INITIAL CALIBRATION:	80 PPM AP9 STD	AP9U8966	09/03/91	17:32:00	
INITIAL CALIBRATION:	120 PPM AP9 STD	AP9U8967	09/03/91	18:21:00	
INITIAL CALIBRATION:	160 PPM AP9 STD	AP9U8964	09/03/91	15:55:00	

Library Entry		Compound	Initial Calibration Response Factor Avg	Min	% RSD Max	Continuing Calibration Response Factor	Min	% Diff Max
S1	10	B002 METHYLMETHACRYL	0.090		84.4			
S1	20	B004 PYRIDINE	1.710		1.7	1.413		17.4
S1	25	B005 ETHYLMETHACRYLA	1.778		2.3	0.981		44.8
S1	30	B006 2-PICOLINE	1.707		2.8	1.503		12.0
S1	40	B008 N-NITROSOMETHYL	1.159		2.7	0.441		61.9
S1	60	B012 METHYLMETHANESU	1.003		3.5	0.609		39.3
S1	70	B016 N-NITROSODIETHY	0.754		2.9	0.756		-0.3
S1	85	B021 ETHYLMETHANE SU	1.445		1.9	1.184		18.1
S1	95	B027 PENTACHLOROETHA	0.572		2.5	0.498		12.9
S1	170	B036 ACETOPHENONE	2.217		1.2	1.957		11.7
S1	175	B037 N-NITROSOPYRROL	0.749		3.7	0.833		-11.2
S1	180	B038 N-NITROSOMORPHO	1.120		1.6	0.725		35.3
S1	195	B040 O-TOLUIDINE	2.450		2.8	2.340		4.5
S2	15	B048 N-NITROSOPIPERI	0.435		4.4	0.232		46.7
S2	36	B050 O,O,O-TRIETHYLP	0.181		3.0	0.171		5.5
S2	50	B053 AA-DIMETHYLPHEN	1.276		12.0	0.968		24.1
S2	85	B058 2,6-DICHLOROPHE	0.250		4.4	0.253		-1.2
S2	90	B059 HEXACHLOROPROPE	0.151		4.2	0.145		4.0
S2	115	B062 P-PHENYLENE DIA	0.166		42.9	0.264		-59.0
S2	120	B063 N-NITROSO-DI-N-	0.273		3.5	0.267		2.2
S2	140	B067 SAFROLE	0.272		4.0	0.278		-2.2
S3	10	B075 1,2,4,5-TETRACH	0.615		3.4	0.482		21.6
S3	15	B076 ISOSAFROLE (#1)	0.105		3.5	0.062		41.0
S3	35	B077 ISOSAFROLE (#2)	0.604		3.6	0.558		7.6
S3	42	B078 1-CHLORONAPHTHA	1.143		3.3	1.072		6.2
S3	50	B079 1,4-NAPHTHOQUIN	0.465		18.9	0.448		3.7
S3	60	B080 M-DINITROBENZEN	0.227		9.9	0.252		-11.0
S3	100	B082 PENTACHLOROBENZ	0.518		3.1	0.435		16.0
S3	110	B083 1-NAPHTHYLAMINE	1.129		8.1	1.132		-0.3
S3	115	B084 2-NAPHTHYLAMINE	0.744		28.9	0.890		-19.6
S3	120	B085 2,3,4,6-TETRACH	0.231		8.4	0.279		-20.8
S3	143	B087 THIONAZIN	0.461		4.5	0.298		35.4
S3	145	B134 5-NITRO-O-TOLUI	0.429		6.6	0.429		0.0
S4	25	B092 SYM-TRINITROBEN	0.114		5.4	0.097		14.9
S4	31	B135 SULFOTEP	0.212		3.3	0.150		29.2
S4	32	B136 PHORATE	0.219		4.6	0.201		8.2
S4	35	B093 PHENACETIN	0.437		3.5	0.360		17.6
S4	41	B094 DIMETHOATE	0.503		4.8	0.420		16.5
S4	45	B095 4-AMINOBIPHENYL	0.525		32.3	0.652		-24.2
S4	55	B096 PRONAMIDE	0.405		3.1	0.329		18.8
S4	60	B097 PENTACHLORONITR	0.092		3.5	0.066		28.3
S4	71	B098 DISULFOTON	0.746		6.9	0.548		26.5
S4	83	B101 METHYL PARATHIO	0.398		4.5	0.333		16.3
S4	87	B102 PARATHION	0.288		7.0	0.199		30.9
S4	75	B137 2-SECBUTYL-4,6-	0.290		7.1	0.186		35.9
S4	100	B105 4-NITROQUINOLIN	0.101		11.9	0.072		28.7
S4	105	B106 METHAPYRILENE	0.557		13.5	0.516		7.4
S5	30	B116 P-DIMETHYL-AMIN	0.585		5.9	0.514		12.1
S5	35	B117 3,3'DIMETHYLBEN	0.266		45.1	0.491		-84.6
S5	45	B119 2-ACETYLAMINOFL	0.439		4.4	0.456		-3.9
S5	85	B123 3-METHYLCHOLANT	0.435		11.3	0.533		-22.5
S6	20	B125 7,12-DIMETHYLBE	0.835		4.6	0.524		37.2

Enseco GC/MS
AP9 CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM AP9 STD	U7031	07/29/92	14:53:00
INITIAL CALIBRATION:	20 PPM AP9 STD	AP9U8965	09/03/91	16:43:00
INITIAL CALIBRATION:	50 PPM AP9 STD	AP9U8963	09/03/91	14:51:00
INITIAL CALIBRATION:	80 PPM AP9 STD	AP9U8966	09/03/91	17:32:00
INITIAL CALIBRATION:	120 PPM AP9 STD	AP9U8967	09/03/91	18:21:00
INITIAL CALIBRATION:	160 PPM AP9 STD	AP9U8964	09/03/91	15:55:00

		U7031		AP9U8965		AP9U8963		AP9U8966		AP9U8967		AP9U8964	
Lib	#	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
S1	10			20,	0.220	50,	0.092	80,	0.061	120,	0.042	160,	0.035
S1	20	50,	1.413	20,	1.737	50,	1.742	80,	1.697	120,	1.705	160,	1.671
S1	25	50,	0.981	20,	1.781	50,	1.810	80,	1.711	120,	1.777	160,	1.813
S1	30	50,	1.503	20,	1.744	50,	1.714	80,	1.625	120,	1.714	160,	1.737
S1	40	50,	0.441	20,	1.157	50,	1.167	80,	1.107	120,	1.177	160,	1.187
S1	60	50,	0.609	20,	1.033	50,	1.042	80,	0.962	120,	1.003	160,	0.974
S1	70	50,	0.756	20,	0.762	50,	0.773	80,	0.717	120,	0.759	160,	0.760
S1	85	50,	1.184	20,	1.440	50,	1.481	80,	1.407	120,	1.459	160,	1.438
S1	95	50,	0.498	20,	0.587	50,	0.578	80,	0.548	120,	0.573	160,	0.574
S1	170	50,	1.957	20,	2.189	50,	2.240	80,	2.184	120,	2.236	160,	2.234
S1	175	50,	0.833	20,	0.718	50,	0.753	80,	0.726	120,	0.764	160,	0.785
S1	180	50,	0.725	20,	1.109	50,	1.117	80,	1.098	120,	1.141	160,	1.137
S1	195	50,	2.340	20,	2.397	50,	2.485	80,	2.359	120,	2.497	160,	2.513
S2	15	50,	0.232	20,	0.438	50,	0.443	80,	0.403	120,	0.454	160,	0.436
S2	36	50,	0.171	20,	0.179	50,	0.180	80,	0.173	120,	0.187	160,	0.185
S2	50	50,	0.968	20,	1.063	50,	1.463	80,	1.363	120,	1.289	160,	1.204
S2	85	50,	0.253	20,	0.237	50,	0.250	80,	0.241	120,	0.262	160,	0.260
S2	90	50,	0.145	20,	0.153	50,	0.158	80,	0.141	120,	0.154	160,	0.151
S2	115	50,	0.264	20,	0.057	50,	0.140	80,	0.179	120,	0.231	160,	0.224
S2	120	50,	0.267	20,	0.279	50,	0.277	80,	0.260	120,	0.283	160,	0.267
S2	140	50,	0.278	20,	0.266	50,	0.274	80,	0.256	120,	0.284	160,	0.278
S3	10	50,	0.482	20,	0.591	50,	0.634	80,	0.594	120,	0.634	160,	0.620
S3	15	50,	0.062	20,	0.102	50,	0.109	80,	0.100	120,	0.107	160,	0.106
S3	35	50,	0.558	20,	0.583	50,	0.619	80,	0.581	120,	0.629	160,	0.609
S3	42	50,	1.072	20,	1.119	50,	1.181	80,	1.093	120,	1.179	160,	1.142
S3	50	50,	0.448	20,	0.518	50,	0.553	80,	0.469	120,	0.460	160,	0.323
S3	60	50,	0.252	20,	0.214	50,	0.242	80,	0.234	120,	0.249	160,	0.194
S3	100	50,	0.435	20,	0.504	50,	0.537	80,	0.500	120,	0.530	160,	0.519
S3	110	50,	1.132	20,	1.042	50,	1.075	80,	1.073	120,	1.229	160,	1.227
S3	115	50,	0.890	20,	0.601	50,	0.528	80,	0.645	120,	1.018	160,	0.927
S3	120	50,	0.279	20,	0.226	50,	0.254	80,	0.225	120,	0.245	160,	0.204
S3	143	50,	0.298	20,	0.442	50,	0.490	80,	0.470	120,	0.462	160,	0.440
S3	145	50,	0.429	20,	0.394	50,	0.444	80,	0.431	120,	0.467	160,	0.411
S4	25	50,	0.097	20,	0.109	50,	0.121	80,	0.106	120,	0.117	160,	0.116
S4	31	50,	0.150	20,	0.210	50,	0.218	80,	0.202	120,	0.219	160,	0.209
S4	32	50,	0.201	20,	0.211	50,	0.217	80,	0.210	120,	0.234	160,	0.224
S4	35	50,	0.360	20,	0.413	50,	0.445	80,	0.433	120,	0.453	160,	0.441
S4	41	50,	0.420	20,	0.518	50,	0.528	80,	0.487	120,	0.514	160,	0.470
S4	45	50,	0.652	20,	0.351	50,	0.380	80,	0.489	120,	0.703	160,	0.700
S4	55	50,	0.329	20,	0.399	50,	0.416	80,	0.391	120,	0.421	160,	0.400
S4	60	50,	0.066	20,	0.093	50,	0.094	80,	0.088	120,	0.096	160,	0.090
S4	71	50,	0.548	20,	0.701	50,	0.732	80,	0.697	120,	0.788	160,	0.810
S4	83	50,	0.333	20,	0.405	50,	0.419	80,	0.380	120,	0.409	160,	0.379
S4	87	50,	0.199	20,	0.263	50,	0.297	80,	0.269	120,	0.305	160,	0.304
S4	75	50,	0.186	20,	0.262	50,	0.296	80,	0.277	120,	0.311	160,	0.306
S4	100	50,	0.072	20,	0.084	50,	0.103	80,	0.097	120,	0.117	160,	0.105
S4	105	50,	0.516	20,	0.656	50,	0.579	80,	0.526	120,	0.572	160,	0.451
S5	30	50,	0.514	20,	0.575	50,	0.612	80,	0.554	120,	0.553	160,	0.630
S5	35	50,	0.491	20,	0.455	50,	0.314	80,	0.209	120,	0.185	160,	0.167
S5	45	50,	0.456	20,	0.447	50,	0.433	80,	0.410	120,	0.440	160,	0.463
S5	85	50,	0.533	20,	0.513	50,	0.449	80,	0.388	120,	0.405	160,	0.418
S6	20	50,	0.524	20,	0.777	50,	0.854	80,	0.814	120,	0.861	160,	0.867

Name List: HEDR1
File Name: U7031

Entry # 1 of 1

000273

(1)Format: FIN
(2)Sample: 50 PPM AP9 STD
(3)Conditions: NA
(5)Submitted: RMAL

(4)Formula: V#6364
(6)Analyst:

7/29/92 14:53:53
Acquisition started

SCAN 1 OF 2760

Acquire
07/29/92 14:53:00 + 0:04
Sample: 50 PPM AP9 STD
Conds.: NA
Formula: V#6364
Submitted by: RMAL

Run 3:U7031
Free sectors: 25547

Instrument: 4500
Analyst:

ACQUIRING
Scan: 5 of 2760

Weight: 0.000
Acct. No: FIN

****

GC PARAMETERS

Loaded GC Desc:ST
Current GC Desc:ST

Current GC oven tmp: 29 DegC
GC elapsed time : 0: 3 min

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

****

Injector : 275 DegC
Int.oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

****

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

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	

7/29/92 15:28:26
ACQUISITION COMPLETED
SCANS 1 TO 2760 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2760	318.1	2070.0	15.4	43441.	16. 21.

7/29/92 15:35:12

DIAGNOSTIC REPORT

PROCEDURE: TCA
DATA FILE: U7031
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3 000274
REPORT: IS01

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	10	9	2	73	IS01/TC01
3	3	1	33	17	16	1	63	IS02/TC02
3	3	1	32	18	17	1	56	IS03/TC03
3	3	1	6	12	12	1	51	IS04/TC04
3	3	1	0	7	7	1	48	IS05/TC05
3	3	1	0	2	2	1	0	IS06/TC06
1	1	1	0					

58 COMPOUNDS PROCESSED, 55 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >		< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-598	584	584	.	1	960	.	152	584	.	1
2	S1	10	-217	209	.	.	.	.	.	41	.	.	.
3	S1	20	-218	210	210	.	1	983	.	79	210	.	1
4	S1	25	-275	266	266	.	1	992	.	41	266	.	1
5	S1	30	-311	301	301	.	1	996	.	93	301	.	1
6	S1	40	-330	320	320	.	2	997	.	42	320	.	1
7	S1	60	-374	363	362	-1	1	995	.	80	362	.	1
8	S1	70	-429	417	416	-1	1	995	.	102	416	.	1
9	S1	85	-479	466	466	.	1	991	.	79	466	.	1
10	S1	95	-551	537	536	-1	1	990	.	117	536	.	1
11	S2	1	-827	811	811	.	1	993	.	136	811	.	1
12	S3	1	-1171	1153	1153	.	1	992	.	164	1153	.	1
13	S1	175	-669	654	653	-1	1	991	.	100	653	.	1
14	S1	170	-672	657	656	-1	1	986	.	105	656	.	1
15	S1	180	-677	662	661	-1	1	961	.	56	662	1	1
16	S1	195	-678	663	663	.	1	995	.	106	663	.	1
17	S2	15	-729	713	712	-1	1	993	.	42	712	.	1
18	S2	36	-788	772	773	1	1	992	.	121	773	.	1
19	S2	50	-810	794	.	.	.	.	.	58	.	.	.
20	S2	85	-848	832	832	.	1	996	.	162	832	.	1
21	S2	90	-849	833	833	.	1	988	.	213	833	.	1
22	S2	115	-917	900	900	.	1	981	.	108	900	.	1
23	S2	120	-919	902	902	.	1	984	.	84	902	.	1
24	S2	140	-956	939	939	.	1	992	.	162	939	.	1
25	S3	10	-1000	983	983	.	1	986	.	216	983	.	1
26	S3	15	-1013	996	996	.	1	995	.	162	996	.	1
27	S4	1	-1468	1449	1449	.	1	987	.	188	1449	.	1
28	S3	35	-1058	1040	1041	1	1	990	.	162	1041	.	1
29	S3	42	-1065	1047	1047	.	1	986	.	162	1047	.	1
30	S3	50	-1100	1082	1082	.	1	990	.	158	1082	.	1
31	S3	60	-1132	1114	1114	.	1	999	.	168	1114	.	1
32	S3	100	-1205	1187	1186	-1	1	979	.	250	1186	.	1
33	S3	110	-1230	1212	1211	-1	1	986	.	143	1211	.	1
34	S3	120	-1242	1224	1223	-1	1	980	.	232	1223	.	1
35	S3	115	-1246	1228	1228	.	1	985	.	143	1228	.	1
36	S3	143	-1288	1270	1270	.	1	956	.	97	1270	.	1
37	S3	145	-1290	1272	1271	-1	1	989	.	152	1271	.	1
38	S4	31	-1354	1335	1336	1	1	991	.	97	1336	.	1
39	S4	32	-1375	1356	1357	1	1	990	.	121	1356	-1	1
40	S4	25	-1377	1358	.	.	.	.	.	213	1359	.	1
41	S4	35	-1385	1366	1366	.	1	995	.	108	1366	.	1
42	S4	41	-1409	1390	1390	.	1	981	.	87	1390	.	1
43	S5	1	-2003	1982	1982	.	1	979	.	240	1982	.	1
44	S4	60	-1436	1417	1417	.	1	987	.	237	1417	.	1
45	S4	45	-1438	1419	1419	.	1	996	.	169	1419	.	1
46	S4	55	-1458	1439	1440	1	1	991	.	173	1440	.	1
47	S4	75	-1479	1460	1460	.	1	974	.	211	1460	.	1
48	S4	71	-1482	1463	1462	-1	1	991	.	88	1462	.	1
49	S4	83	-1555	1536	1536	.	1	994	.	109	1536	.	1
50	S4	100	-1633	1613	1614	1	1	974	.	190	1613	-1	1
51	S4	87	-1637	1617	1617	.	1	990	.	97	1617	.	1
52	S4	105	-1657	1637	1637	.	1	993	.	58	1637	.	1
53	S6	1	-2272	2250	2250	.	1	966	.	264	2250	.	1
54	S5	30	-1829	1808	1808	.	1	987	.	120	1808	.	1
55	S5	35	-1897	1876	1876	.	1	992	.	212	1876	.	1
56	S5	45	-1948	1927	1927	.	1	994	.	181	1927	.	1
57	S6	20	-2207	2185	2184	-1	1	982	.	256	2184	.	1
58	S5	85	-2324	2301	2301	.	1	976	.	268	2301	.	1

RMAL QUANTITATION SUMMARY FILE: U7031 000275
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

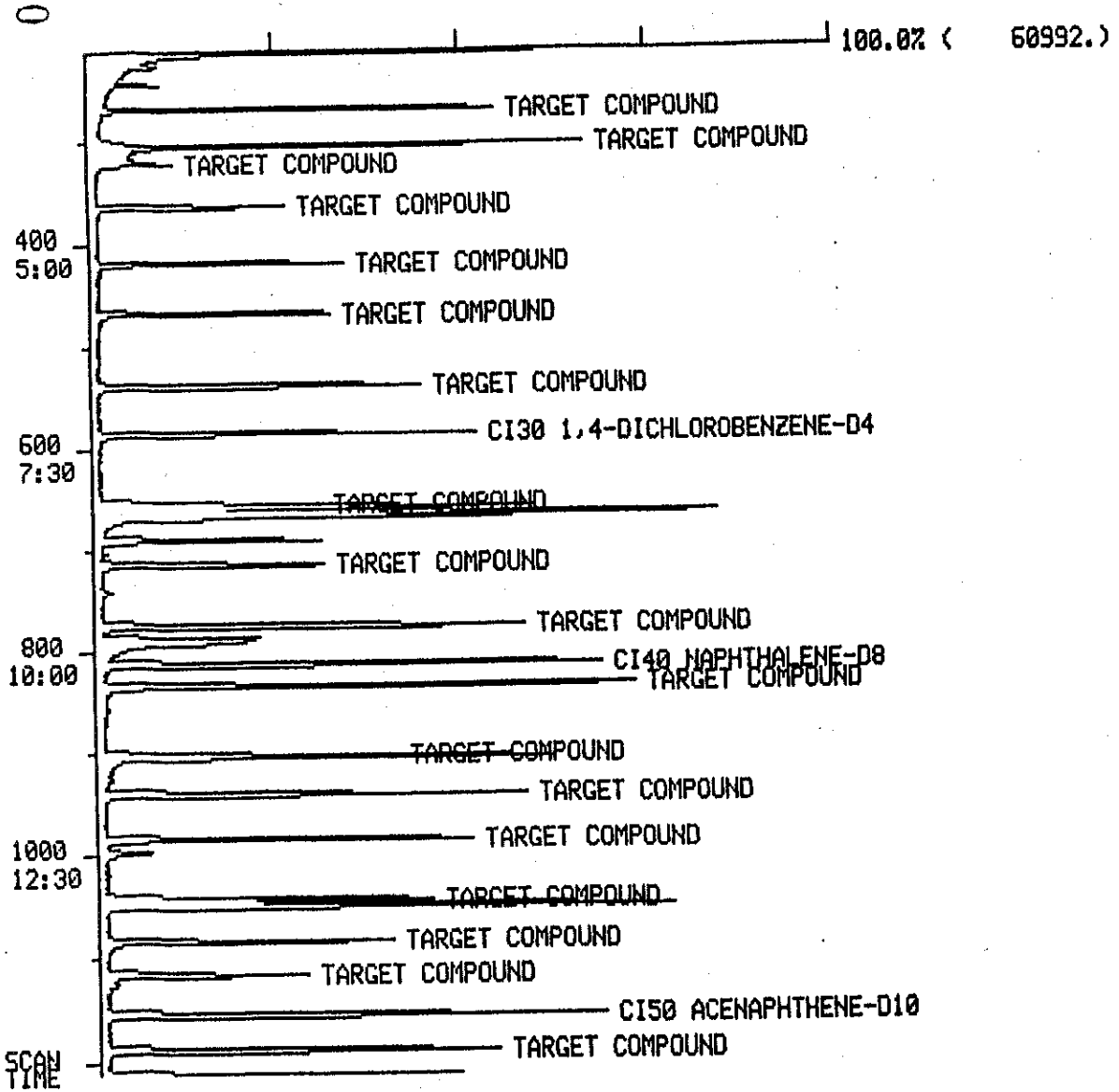
NO	LIBRARY ENTRY		NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1#	1	CI30 1,4-DICHLOROBENZENE	152	584	1	16459.	1.000	40.000
2	S2#	1	CI40 NAPHTHALENE-D8	136	811	2	64121.	1.000	40.000
3	S3#	1	CI50 ACENAPHTHENE-D10	164	1153	3	33739.	1.000	40.000
4	S4#	1	CI60 PHENANTHRENE-D10	188	1449	4	54806.	1.000	40.000
5	S5#	1	CI70 CHRYSENE-D12	240	1982	5	40645.	1.000	40.000
6	S6#	1	CI75 PERYLENE-D12	264	2250	6	37742.	1.000	40.000
7	S1#	10	B002 METHYLMETHACRYLATE	41		1	NOT FOUND		
8	S1#	20	B004 PYRIDINE	79	210	1	29066.	1.441	49.033
9	S1#	25	B005 ETHYLMETHACRYLATE	41	266	1	20192.	1.117	43.941
10	S1#	30	B006 2-PICOLINE	93	301	1	30913.	1.475	50.931
11	S1#	40	B008 N-NITROSOMETHYLETHY	42	320	1	9071.	0.577	38.192
12	S1#	60	B012 METHYLMETHANESULFON	80	362	1	12532.	0.658	46.253
13	S1#	70	B016 N-NITROSODIETHYLAMI	102	416	1	15548.	0.713	52.996
14	S1#	85	B021 ETHYLMETHANE SULFON	79	466	1	24357.	1.229	48.153
15	S1#	95	B027 PENTACHLOROETHANE	117	536	1	10251.	0.505	49.337
16	S1#	170	B036 ACETOPHENONE	105	656	1	40269.	1.996	49.026
17	S1#	175	B037 N-NITROSOPYRROLIDIN	100	653	1	17140.	0.808	51.525
18	S1#	180	B038 N-NITROSOMORPHOLINE	56	662	1	14921.	0.899	40.329
19	S1#	195	B040 O-TOLUIDINE	106	663	1	48136.	2.419	48.368
20	S2#	15	B048 N-NITROSOPIPERIDINE	42	712	2	18558.	0.280	41.342
21	S2#	36	B050 O,O,O-TRIETHYLPHOSP	121	773	2	13703.	0.163	52.313
22	S2#	50	B053 AA-DIMETHYLPHENETHY	58	785	2	77619.	0.734	65.944
23	S2#	85	B058 2,6-DICHLOROPHENOL	162	832	2	20241.	0.234	54.021
24	S2#	90	B059 HEXACHLOROPROPENE	213	833	2	11606.	0.166	43.683
25	S2#	115	B062 P-PHENYLENE DIAMINE	108	900	2	21142.	0.245	53.770
26	S2#	120	B063 N-NITROSO-DI-N-BUTY	84	902	2	21433.	0.275	48.555
27	S2#	140	B067 SAFROLE	162	939	2	22309.	0.271	51.365
28	S3#	10	B075 1,2,4,5-TETRACHLORO	216	983	3	20319.	0.549	43.887
29	S3#	15	B076 ISOSAFROLE (#1)	162	996	3	2606.	0.061	50.610
30	S3#	35	B077 ISOSAFROLE (#2)	162	1041	3	23519.	0.498	55.989
31	S3#	42	B078 1-CHLORONAPHTHALENE	162	1047	3	45213.	1.190	45.041
32	S3#	50	B079 1,4-NAPHTHOQUINONE	158	1082	3	18912.	0.458	48.907
33	S3#	60	B080 M-DINITROBENZENE	168	1114	3	10632.	0.264	47.735
34	S3#	100	B082 PENTACHLOROBENZENE	250	1186	3	18362.	0.483	45.060
35	S3#	110	B083 1-NAPHTHYLAMINE	143	1211	3	47725.	1.149	49.229
36	S3#	115	B084 2-NAPHTHYLAMINE	143	1228	3	37529.	0.844	52.691
37	S3#	120	B085 2,3,4,6-TETRACHLORO	232	1223	3	11758.	0.283	49.232
38	S3#	143	B087 THIONAZIN	97	1270	3	12586.	0.314	47.477
39	S3#	145	B134 5-NITRO-O-TOLUIDINE	152	1271	3	18077.	0.421	50.854
40	S4#	25	B092 SYM-TRINITROBENZENE	213	1359	4	6620.	0.101	48.000
41	S4#	31	B135 SULFOTEP	97	1336	4	10278.	0.141	53.110
42	S4#	32	B136 PHORATE	121	1356	4	13750.	0.174	57.822
43	S4#	35	B093 PHENACETIN	108	1366	4	24664.	0.357	50.381
44	S4#	41	B094 DIMETHOATE	87	1390	4	28788.	0.384	54.729
45	S4#	45	B095 4-AMINOBIPHENYL	169	1419	4	44701.	0.505	64.621
46	S4#	55	B096 PRONAMIDE	173	1440	4	22568.	0.325	50.622
47	S4#	60	B097 PENTACHLORONITROBEN	237	1417	4	4553.	0.072	45.853
48	S4#	71	B098 DISULFOTON	88	1462	4	37538.	0.509	53.846
49	S4#	75	B137 2-SECBUTYL-4,6-DINI	211	1460	4	12752.	0.182	51.187
50	S4#	83	B101 METHYL PARATHION	109	1536	4	22831.	0.312	53.388
51	S4#	87	B102 PARATHION	97	1617	4	13607.	0.179	55.481
52	S4#	100	B105 4-NITROQUINOLINE-1-	190	1613	4	4931.	0.070	51.763
53	S4#	105	B106 METHAPYRILENE	58	1637	4	35346.	0.564	45.714
54	S5#	30	B116 P-DIMETHYL-AMINO-AZ	120	1808	5	26111.	0.463	55.485
55	S5#	35	B117 3,3'DIMETHYLBENZIDI	212	1876	5	24960.	0.425	57.756
56	S5#	45	B119 2-ACETYLAMINOFLUORE	181	1927	5	23153.	0.542	42.073
57	S5#	85	B123 3-METHYLCHOLANTHREN	268	2301	5	27074.	0.570	46.729
58	S6#	20	B125 7,12-DIMETHYLBENZAN	256	2184	6	24715.	0.536	48.895

000276

DATA FROM FILE: U7031

SAMPLE: 50 PPM AP9 STD
CONDS.: NA

SCANS 210 TO 1210 ACQUIRED: 07/29/92 14:53:00
CALI: U7031 #3 OUT OF 210 TO 2760

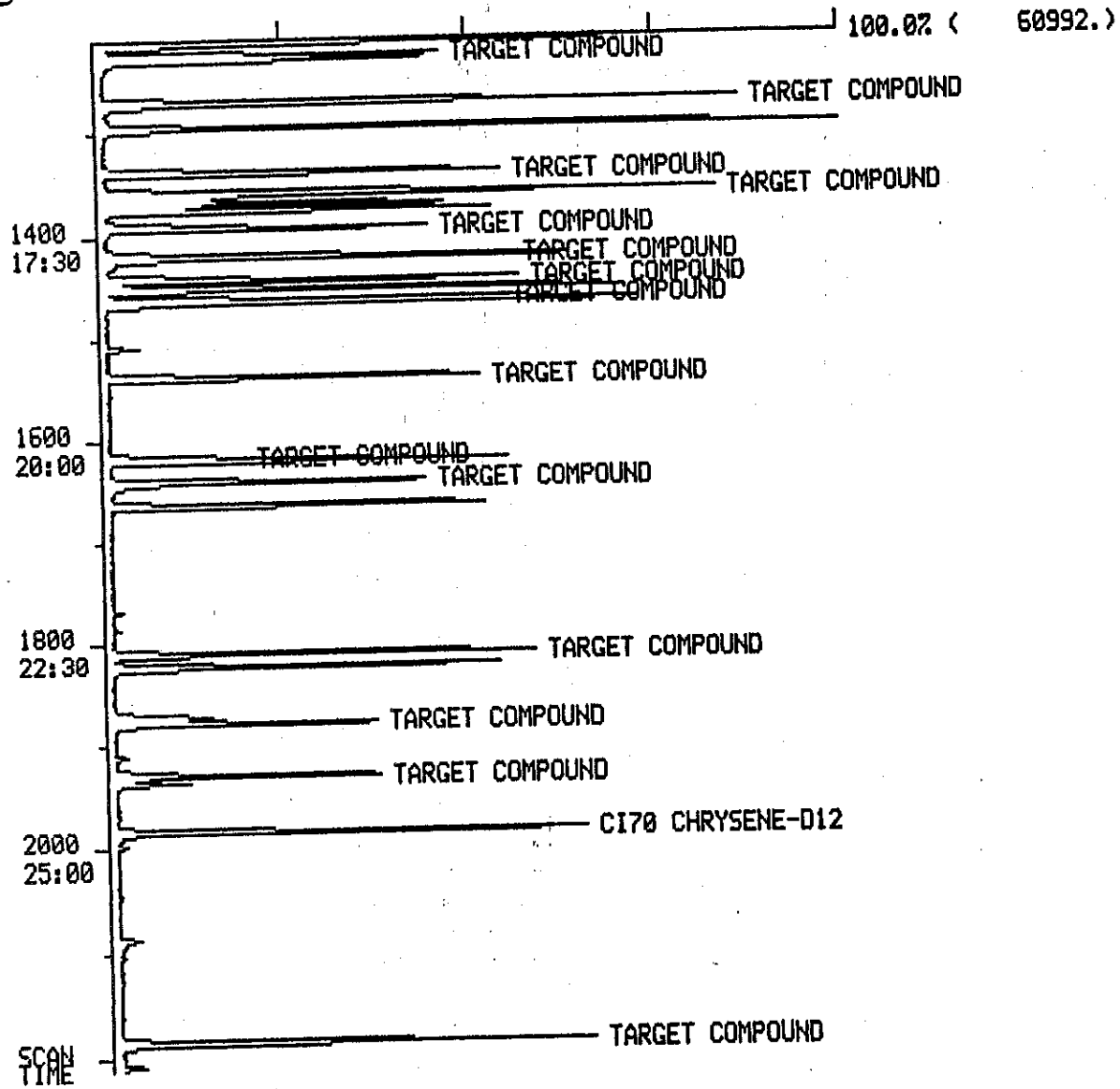


000277

DATA FROM FILE: U7031

SCANS 1210 TO 2210 ACQUIRED: 07/29/92 14:53:00
CALI: U7031 #3 OUT OF 210 TO 2760

SAMPLE: 50 PPM AP9 STD
CONDS.: NA

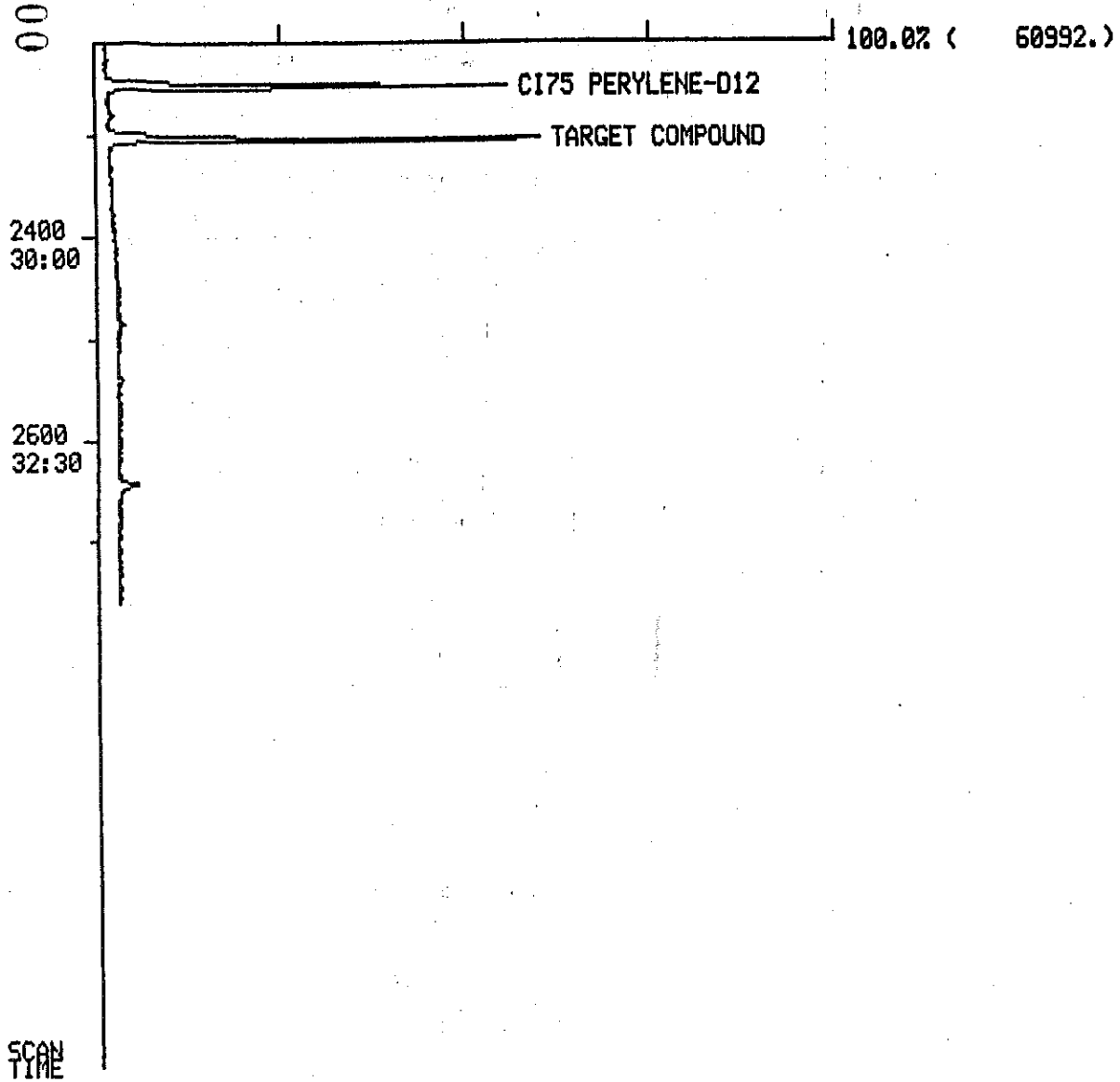


000278

DATA FROM FILE: U7031

SAMPLE: 50 PPM AP9 STD
CONDS.: NA

SCANS 2210 TO 2760 ACQUIRED: 07/29/92 14:53:00
CALI: U7031 #3 OUT OF 210 TO 2760



Duplicate Scan Report
Quan List File: U7031

2 SCAN DIFFERENCE DUPLICATE

COMP#	SCAN	COMP#	SCAN	DIFF.
18	662	19	663	1
23	832	24	833	1
25	900	26	902	2
38	1270	39	1271	1
45	1419	47	1417	-2
48	1462	49	1460	-2

6 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2250
16	656
36	1228
40	1359
46	1440
48	1462
51	1617
57	2301

Sample: U7038 Performance Check: U7028 Elapsed Time: 7:19:00
Sample: U7038 Calibration Stds.: U7031, U7030, U7029,
Invalid Response Factor (Library: S1, Entry: 10)

000280

Data Reduced by : TB Date: 8/3/92
Data Reviewed by: [illegible] Date: 8/3/92

Data File: U7038

Enseco GC/MS
Target Compound Data Summary Sheet

OK

Sample: [illegible]-01 WATER 8270CP-AP9-A
Conditions: 1.00UG/ML*1.00ML/*100%/100.%/*(NA/NA)/940.ML NA M
Date Analyzed: 07/29/92 20:09:00 Units: UG/L
Analyst: TB Run Factor: 1.06
Quan List Threshold: 1.00 Surrogate Vol.: 1.00

DX1

Surrogate Spike Recoveries
BNA, AQUEOUS, S LIBRARIES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	100.0	63.70	63.7	35 114
CS25 2-FLUOROBIPHENY	100.0	61.20	61.2	43 116
CS30 TERPHENYL-D14	100.0	51.30	51.3	33 141
CS45 PHENOL-D5	200.0	127.0	63.5	10 94
CS50 2-FLUOROPHENOL	200.0	110.0	55.0	21 100
CS55 2,4,6-TRIBROMOP	200.0	159.0	79.5	10 123

Target Compounds: BNAAP9

Scan #	Concentration Quan List UG/ML	Sample UG/L	Compound
~~203~~	~~591.637~~	~~627.~~	B002 METHYLMETHACRYLATE
	BDL		B003 N-NITROSODIMETHYLAMINE
	BDL		B004 PYRIDINE
	BDL		B005 ETHYLMETHACRYLATE
	BDL		B006 2-PICOLINE
	BDL		B008 N-NITROSOMETHYLETHYLAMINE
	BDL		B012 METHYLMETHANESULFONATE
	BDL		B016 N-NITROSODIETHYLAMINE
	BDL		B021 ETHYLMETHANE SULFONATE
~~540~~	~~1.843~~	~~1.95~~	B027 PENTACHLOROETHANE
	BDL		B028 ANALINE
	BDL		C315 PHENOL
	BDL		C325 BIS(2-CHLOROETHYL)ETHER
	BDL		C330 2-CHLOROPHENOL
	BDL		C335 1,3-DICHLOROBENZENE
	BDL		C340 1,4-DICHLOROBENZENE
	BDL		C345 BENZYL ALCOHOL
	BDL		C350 1,2-DICHLOROBENZENE
641	1.035	1.10 BDL	C355 2-METHYLPHENOL
	BDL		C360 BIS(2-CHLOROISOPROPYL)ETHER
	BDL		B036 ACETOPHENONE
	BDL		B037 N-NITROSOPYRROLIDINE
	BDL		B038 N-NITROSOMORPHOLINE
671	2.029	2.15 BDL	C365 4-METHYLPHENOL
	BDL		C370 N-NITROSO-DI-N-PROPYLAMINE
	BDL		B040 O-TOLUIDINE
	BDL		C375 HEXACHLOROETHANE
	BDL		C410 NITROBENZENE
	BDL		B048 N-NITROSOPIPERIDINE
	BDL		C415 ISOPHORONE
	BDL		C420 2-NITROPHENOL
~~763~~	~~1.257~~	~~1.33~~	C425 2,4-DIMETHYLPHENOL
	BDL		C435 BIS(2-CHLOROETHOXY)METHANE
	BDL		B050 O,O,O-TRIETHYLPHOSPHOROTHIOATE
	BDL		C440 2,4-DICHLOROPHENOL
~~788~~	~~6.843~~	~~7.25~~	C430 BENZOIC ACID
~~782~~	~~6.433~~	~~6.82~~	B053 AA-DIMETHYLPHENETHYLAMINE
	BDL		C445 1,2,4-TRICHLOROBENZENE
	BDL		C450 NAPHTHALENE
	BDL		C455 4-CHLOROANALINE
	BDL		B058 2,6-DICHLOROPHENOL
	BDL		B059 HEXACHLOROPROPENE
	BDL		C460 HEXACHLOROBUTADIENE
	BDL		B062 P-PHENYLENE DIAMINE
	BDL		B063 N-NITROSO-DI-N-BUTYLAMINE

TB 8/3/92 Yes

000281

		BDL	B067	SAFROLE
		BDL	C470	2-METHYLNAPHTHALENE
		BDL	B075	1,2,4,5-TETRACHLOROBENZENE
		BDL	B076	ISOSAFROLE (#1)
		BDL	C510	HEXACHLOROCYCLOPENTADIENE
		BDL	C515	2,4,6-TRICHLOROPHENOL
		BDL	C520	2,4,5-TRICHLOROPHENOL
		BDL	B077	ISOSAFROLE (#2)
		BDL	C525	2-CHLORONAPHTHALENE
		BDL	B078	1-CHLORONAPHTHALENE
		BDL	C530	2-NITROANALINE
		BDL	B079	1,4-NAPHTHOQUINONE
		BDL	C535	DIMETHYLPHTHALATE
		BDL	B080	M-DINITROBENZENE
		BDL	C540	ACENAPHTHYLENE
~~1124~~	~~1.157~~	~~1.23~~	C543	2,6-DINITROTOLUENE
		BDL	C545	3-NITROANALINE
		BDL	C550	ACENAPHTHENE
		BDL	C555	2,4-DINITROPHENOL
		BDL	C565	DIBENZOFURAN
		BDL	C560	4-NITROPHENOL
		BDL	B082	PENTACHLOROBENZENE
		BDL	C570	2,4-DINITROTOLUENE
		BDL	B083	1-NAPHTHYLAMINE
		BDL	B084	2-NAPHTHYLAMINE
		BDL	B085	2,3,4,6-TETRACHLOROPHENOL
		BDL	C580	DIETHYLPHTHALATE
		BDL	C590	FLUORENE
		BDL	C585	4-CHLOROPHENYL-PHENYL-ETHER
		BDL	B087	THIONAZIN
		BDL	B134	5-NITRO-O-TOLUIDINE
		BDL	C595	4-NITROANALINE
		BDL	C610	4,6-DINITRO-2-METHYLPHENOL
		BDL	C615	N-NITROSODIPHENYLAMINE
		BDL	B091	AZOBENZENE
		BDL	B092	SYM-TRINITROBENZENE
		BDL	C625	4-BROMOPHENYL-PHENYLETHER
		BDL	B135	SULFOTEP
		BDL	B136	PHORATE
		BDL	B093	PHENACETIN
		BDL	C630	HEXACHLOROBENZENE
		BDL	B094	DIMETHOATE
		BDL	B095	4-AMINOBIPHENYL
		BDL	C635	PENTACHLOROPHENOL
		BDL	B096	PRONAMIDE
		BDL	B097	PENTACHLORONITROBENZENE
		BDL	C640	PHENANTHRENE
		BDL	C645	ANTHRACENE
		BDL	B098	DISULFOTON
		BDL	B137	2-SECBUTYL-4,6-DINITROPHENOL
		BDL	B101	METHYL PARATHION
		BDL	C650	DI-N-BUTYLPHTHALATE
		BDL	B102	PARATHION
		BDL	B105	4-NITROQUINOLINE-1-OXIDE
		BDL	B106	METHAPYRILENE
		BDL	C655	FLUORANTHENE
~~1737~~	~~256.279~~	~~272.~~	B113	BENZIDINE
		BDL	C715	PYRENE
		BDL	B114	ARAMITE (#1)
		BDL	B116	P-DIMETHYL-AMINO-AZOBENZINE
		BDL	B117	3,3'DIMETHYLBENZIDINE
		BDL	B118	FAMPHUR
		BDL	C720	BUTYLBENZYLPHTHALATE
~~1930~~	~~1.606~~	~~1.70~~	B119	2-ACETYLAMINOFLUORENE
		BDL	C730	BENZO(A)ANTHRACENE
		BDL	C725	3,3'-DICHLOROBENZIDINE
		BDL	C740	CHRYSENE
2008	2.940	3.12 BDL	C745	BIS(2-ETHYLHEXYL)PHTHALATE
		BDL	B123	3-METHYLCHOLANTHRENE
		BDL	C760	DI-N-OCTYL PHTHALATE
		BDL	C765	BENZO(B)FLUORANTHENE
		BDL	B125	7,12-DIMETHYLBENZANTHRACENE
		BDL	C770	BENZO(K)FLUORANTHENE
		BDL	B126	HEXACHLOROPHENE
		BDL	C775	BENZO(A)PYRENE
		BDL	B129	DIBENZ(A,J)ACRIDINE
		BDL	C780	INDENO(1,2,3-CD)PYRENE
		BDL	C785	DIBENZ(A,H)ANTHRACENE
		BDL	C790	BENZO(G,H,I)PERYLENE

Name List: HEDR1 Entry # 1 of 1
File Name: U7038

(1)Format: BNAIND
(3)Sample: 01
(5)Comment: 8270CP-AP9-A
(11)Quan List Units: 1.00UG/ML
(13)Extract Dilution: 100.%
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: 1.00ML

(2)Project: 23727
(4)Matrix: WATER
(10)Analyst: TB
(12)Extract Volume: 1.00ML
(14)Int. Ext. Vol.: NA
(16)Sample Amount: 940.ML
(19)Run Factor: 1.06UG/L

7/29/92 20:09:32 SCAN 1 OF 2760
Acquisition started

Acquire
07/29/92 20:09:00 + 0:06
Sample: 23727-01 WATER 8270CP-AP9-A
Conds.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML
Formula: 1.06UG/L1.00ML
Submitted by: RMAL

Run 3:U7038
Free sectors: 18538
Instrument: 4500
Analyst: TB

ACQUIRING
Scan: 8 of 2760
NA M
Weight: 0.000
Acct. No: BNAIND

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

Loaded GC Desc:ST Current GC oven tmp: 29 DegC
Current GC Desc:ST GC elapsed time : 0: 7 min

Injector : 275 DegC
Int.oven : 275 DegC

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

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

Low mass: 35
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

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	

7/29/92 20:44:05
ACQUISITION COMPLETED
SCAN 1193 TRUNCATED: DATA RATE TOO HIGH
SCAN 1265 TRUNCATED: DATA RATE TOO HIGH
SCAN 1519 TRUNCATED: DATA RATE TOO HIGH
SCAN 1544 TRUNCATED: DATA RATE TOO HIGH
SCAN 1584 TRUNCATED: DATA RATE TOO HIGH
SCAN 1911 TRUNCATED: DATA RATE TOO HIGH
SCAN 1913 TRUNCATED: DATA RATE TOO HIGH
SCANS 1 TO 2760 Centroid

OK Doesn't affect data

Mode	Scans	Secs	Out of	%	Peaks	per scan	per sec
Centroid	2760	460.4	2070.0	22.2	236350.	86.	114.

PROCEDURE: TCA DIAGNOSTIC REPORT 7/29/92 20:46:09
DATA FILE: U7038
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01

< ---- STANDARDS ----- >				< --- PLUS UNKNOWNS --- >				< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	16	4	1	347	IS01/TC01
1	1	1	0	3	1	1	0	IS02/TC02
3	3	1	0	18	9	2	225	IS03/TC03
3	3	1	0	18	7	4	279	IS04/TC04
3	3	1	0	11	3	1	0	IS05/TC05
3	3	1	0	18	8	2	231	IS06/TC06
3	3	1	0	18	12	8	346	IS07/TC07
3	3	1	0	11	4	1	0	IS08/TC08
3	3	1	29	17	6	6	117	IS09/TC09
3	3	1	80	18	7	4	187	IS10/TC10
3	3	1	80	7	3	1	80	IS11/TC11
1	1	1	0	6	1	1	0	IS12/TC12

137 COMPOUNDS PROCESSED, 41 FOUND

< COMPOUND >			< ---------- SEARCH ---------- >					< SAT >	< ------ CHRO ------- >			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-583	585	585	.	1	969	.	152	584	-1	1
2	S1	15	-207	200	.	.	.	.	.	74	.	.	.
3	S1	20	-212	205	.	.	.	.	.	79	.	.	.
4	S1	10	-212	205	203	-2	1	853	.	41	203	.	1
5	S1	25	-266	261	.	.	.	.	.	41	.	.	.
6	S1	30	-301	297	.	.	.	.	.	93	.	.	.
7	S1	40	-320	316	.	.	.	.	.	42	.	.	.
8	S1	60	-362	360	.	.	.	.	.	80	.	.	.
9	S1	2	-387	385	389	4	1	989	.	112	389	.	1
10	S1	70	-416	415	.	.	.	.	.	102	.	.	.
11	S1	85	-466	467	.	.	.	.	.	79	.	.	.
12	S1	100	-531	534	.	.	.	.	.	93	533	.	1
13	S1	3	-534	537	538	1	1	978	.	99	538	.	1
14	S1	105	-536	539	.	.	.	.	.	94	.	.	.
15	S1	95	-536	539	.	.	.	.	.	117	540	.	1
16	S1	110	-546	549	.	.	.	.	.	93	.	.	.
17	S1	115	-550	552	.	.	.	.	.	128	552	.	1
18	S1	125	-573	575	.	.	.	.	.	146	.	.	.
19	S2	1	-810	812	812	.	1	991	.	136	812	.	1
20	S3	1	-1152	1154	1154	.	1	995	.	164	1154	.	1
21	S1	130	-587	590	.	.	.	.	.	146	.	.	.
22	S1	150	-611	614	.	.	.	.	.	146	.	.	.
23	S1	145	-613	615	.	.	.	.	.	108	.	.	.
24	S1	160	-636	638	641	3	1	872	.	108	641	.	1
25	S1	165	-638	640	641	1	2	886	.	45	.	.	.
26	S1	175	-653	655	.	.	.	.	.	100	.	.	.
27	S1	170	-656	658	657	-1	1	976	.	105	657	.	1
28	S1	190	-661	663	.	.	.	.	.	70	.	.	.
29	S1	180	-662	664	.	.	.	.	.	56	.	.	.
30	S1	195	-663	665	.	.	.	.	.	106	.	.	.
31	S1	185	-665	667	671	4	1	962	.	108	671	.	1
32	S1	200	-669	671	.	.	.	.	.	117	.	.	.
33	S2	2	-681	683	682	-1	1	995	.	82	682	.	1
34	S2	10	-685	687	684	-3	1	931	.	77	683	-1	1
35	S2	15	-712	714	.	.	.	.	.	42	715	.	1
36	S2	20	-731	732	.	.	.	.	.	82	.	.	.
37	S2	25	-743	744	.	.	.	.	.	139	.	.	.
38	S2	30	-760	761	764	3	1	857	.	107	763	-1	1
39	S2	36	-773	774	.	.	.	.	.	121	.	.	.
40	S2	35	-777	778	779	1	1	883	.	93	779	.	1
41	S2	50	-785	786	781	-5	1	893	.	58	782	1	1
42	S2	45	-788	789	788	-1	4	996	.	122	788	.	1
43	S2	40	-790	791	.	.	.	.	.	162	.	.	.
44	S2	55	-803	804	.	.	.	.	.	180	.	.	.
45	S2	60	-815	816	.	.	.	.	.	128	816	.	1
46	S2	80	-832	833	.	.	.	.	.	127	832	.	1
47	S2	85	-832	833	.	.	.	.	.	162	.	.	.
48	S2	90	-833	834	.	.	.	.	.	213	.	.	.
49	S2	95	-843	844	.	.	.	.	.	225	.	.	.
50	S2	115	-900	901	.	.	.	.	.	108	899	.	1
51	S2	120	-902	904	.	.	.	.	.	84	.	.	.
52	S2	130	-934	936	.	.	.	.	.	107	.	.	.
53	S2	140	-939	941	.	.	.	.	.	162	.	.	.
54	S2	145	-950	952	.	.	.	.	.	142	952	.	1
55	S3	20	-982	984	.	.	.	.	.	237	.	.	.

57	S3	15	-996	998	.	.	.	.	.	162	.	.	.
58	S3	25	-1010	1012	.	.	.	.	.	196	.	.	.
59	S4	1	-1448	1450	1450	.	1	987	.	188	1450	.	1
60	S3	30	-1017	1017	.	.	.	.	.	196	.	.	.
61	S3	3	-1027	1027	1027	.	1	996	.	172	1027	.	1
62	S3	35	-1041	1041	.	.	.	.	.	162	.	.	.
63	S3	40	-1044	1044	.	.	.	.	.	162	1044	.	1
64	S3	42	-1047	1047	.	.	.	.	.	162	.	.	.
65	S3	45	-1070	1070	1068	-2	1	858	.	65	.	.	.
66	S3	50	-1082	1082	.	.	.	.	.	158	.	.	.
67	S3	55	-1113	1113	.	.	.	.	.	163	.	.	.
68	S3	60	-1114	1114	.	.	.	.	.	168	.	.	.
69	S3	70	-1122	1122	.	.	.	.	.	165	1124	.	1
70	S3	65	-1125	1125	1125	.	1	951	.	152	1125	.	1
71	S3	75	-1153	1153	1149	-4	1	876	.	138	.	.	.
72	S3	80	-1160	1160	1160	.	2	948	.	153	1160	.	1
73	S3	85	-1175	1175	.	.	.	.	.	184	.	.	.
74	S3	100	-1186	1186	.	.	.	.	.	250	.	.	.
75	S3	90	-1195	1199	.	.	.	.	.	168	.	.	.
76	S3	95	-1200	1204	1205	1	2	915	.	109	.	.	.
77	S3	105	-1201	1205	.	.	.	.	.	165	1205	.	1
78	S3	110	-1211	1215	1211	-4	1	861	.	143	1211	.	1
79	S3	120	-1223	1227	.	.	.	.	.	232	.	.	.
80	S3	115	-1228	1232	1232	.	2	854	.	143	.	.	.
81	S3	130	-1256	1260	1256	-4	1	863	.	149	1256	.	1
82	S3	135	-1263	1267	.	.	.	.	.	166	.	.	.
83	S3	140	-1270	1274	.	.	.	.	.	204	.	.	.
84	S3	143	-1270	1274	1282	8	1	858	.	97	.	.	.
85	S3	145	-1271	1275	1276	1	1	854	.	152	1276	.	1
86	S3	150	-1276	1280	1282	2	2	912	.	138	.	.	.
87	S4	10	-1282	1286	.	.	.	.	.	198	.	.	.
88	S4	15	-1295	1299	1296	-3	1	930	.	169	1296	.	1
89	S4	20	-1301	1305	1306	1	1	914	.	77	.	.	.
90	S3	2	-1312	1314	1314	.	1	974	.	330	1313	-1	1
91	S4	31	-1336	1338	.	.	.	.	.	97	.	.	.
92	S4	32	-1356	1358	.	.	.	.	.	121	.	.	.
93	S4	25	-1359	1361	.	.	.	.	.	213	.	.	.
94	S4	30	-1366	1368	.	.	.	.	.	248	.	.	.
95	S4	35	-1366	1368	.	.	.	.	.	108	.	.	.
96	S4	40	-1372	1374	.	.	.	.	.	284	.	.	.
97	S4	41	-1390	1392	.	.	.	.	.	87	.	.	.
98	S5	1	-1982	1983	1983	.	1	977	.	240	1982	-1	1
99	S4	50	-1415	1416	.	.	.	.	.	266	.	.	.
100	S4	60	-1417	1418	.	.	.	.	.	237	.	.	.
101	S4	45	-1419	1420	.	.	.	.	.	169	1418	.	1
102	S4	55	-1440	1441	.	.	.	.	.	173	.	.	.
103	S4	65	-1454	1455	1455	.	2	883	.	178	1455	.	1
104	S4	75	-1460	1461	.	.	.	.	.	211	.	.	.
105	S4	71	-1462	1463	.	.	.	.	.	88	1464	.	1
106	S4	70	-1464	1465	1464	-1	3	890	.	178	1464	.	1
107	S4	83	-1536	1537	.	.	.	.	.	109	.	.	.
108	S4	85	-1586	1587	.	.	.	.	.	149	1587	.	1
109	S4	100	-1613	1614	.	.	.	.	.	190	.	.	.
110	S4	87	-1617	1618	.	.	.	.	.	97	.	.	.
111	S4	105	-1637	1638	.	.	.	.	.	58	1638	.	1
112	S4	110	-1693	1694	1692	-2	1	860	.	202	1693	1	1
113	S6	1	-2249	2251	2251	.	1	970	.	264	2251	.	1
114	S5	10	-1733	1735	.	.	.	.	.	184	1737	.	1
115	S5	15	-1736	1738	1736	-2	2	946	.	202	1736	.	1
116	S5	2	-1778	1780	1779	-1	1	972	.	244	1779	.	1
117	S5	20	-1784	1786	1789	3	2	869	.	185	.	.	.
118	S5	30	-1809	1811	.	.	.	.	.	120	1809	.	1
119	S5	38	-1873	1875	.	.	.	.	.	218	.	.	.
120	S5	35	-1877	1879	.	.	.	.	.	212	.	.	.
121	S5	40	-1886	1888	.	.	.	.	.	149	.	.	.
122	S5	45	-1928	1930	.	.	.	.	.	181	1930	.	1
123	S5	50	-1981	1982	.	.	.	.	.	228	1982	.	1
124	S5	55	-1983	1984	.	.	.	.	.	252	.	.	.
125	S5	60	-1988	1989	.	.	.	.	.	228	1987	.	1
126	S5	65	-2008	2009	2008	-1	1	990	.	149	2008	.	1
127	S6	10	-2133	2134	.	.	.	.	.	149	2133	.	1
128	S6	20	-2184	2185	.	.	.	.	.	256	.	.	.
129	S6	15	-2185	2187	.	.	.	.	.	252	.	.	.
130	S6	25	-2190	2192	.	.	.	.	.	252	.	.	.
131	S6	30	-2211	2213	.	.	.	.	.	196	.	.	.
132	S6	35	-2241	2243	.	.	.	.	.	252	.	.	.
133	S5	85	-2302	2304	.	.	.	.	.	268	.	.	.
134	S6	55	-2422	2424	.	.	.	.	.	276	.	.	.
135	S6	60	-2426	2428	.	.	.	.	.	278	.	.	.
136	S6	65	-2462	2464	.	.	.	.	.	276	.	.	.
137	S6	50	-2485	2487	.	.	.	.	.	279	.	.	.

000284

TCA FINISHED, 41 FOUND
FINISHED AT: 7/29/92 21:02:16

MAL QUANTITATION SUMMARY FILE: U7038
OMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

NO	LIBRARY ENTRY		NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1#	1	CI30 1,4-DICHLOROBENZENE	152	584	1	14157.	1.000	40.000
2	S2#	1	CI40 NAPHTHALENE-D8	136	812	2	56714.	1.000	40.000
3	S3#	1	CI50 ACENAPHTHENE-D10	164	1154	3	31841.	1.000	40.000
4	S4#	1	CI60 PHENANTHRENE-D10	188	1450	4	49260.	1.000	40.000
5	S5#	1	CI70 CHRYSENE-D12	240	1982	5	30392.	1.000	40.000
6	S6#	1	CI75 PERYLENE-D12	264	2251	6	32086.	1.000	40.000
7	S2#	2	CS20 NITROBENZENE-D5	82	682	2	36478.	0.404	63.716
8	S3#	3	CS25 2-FLUOROBIPHENYL	172	1027	3	63720.	1.308	61.219
9	S5#	2	CS30 TERPHENYL-D14	244	1779	5	38319.	0.983	51.313
10	S1#	3	CS45 PHENOL-D5	99	538	1	81963.	1.819	127.331
11	S1#	2	CS50 2-FLUOROPHENOL	112	389	1	58760.	1.504	110.420
12	S3#	2	CS55 2,4,6-TRIBROMOPHENO	330	1313	3	19297.	0.152	159.238
13	S1#	10	B002 METHYLMETHACRYLATE	41	203	1	5191.	0.025	591.637
14	S1#	15	B003 N-NITROSODIMETHYLAM	74		1	NOT FOUND		
15	S1#	20	B004 PYRIDINE	79		1	NOT FOUND		
16	S1#	25	B005 ETHYLMETHACRYLATE	41		1	NOT FOUND		
17	S1#	30	B006 2-PICOLINE	93		1	NOT FOUND		
18	S1#	40	B008 N-NITROSOMETHYLETHY	42		1	NOT FOUND		
19	S1#	60	B012 METHYLMETHANESULFON	80		1	NOT FOUND		
20	S1#	70	B016 N-NITROSODIETHYLAMI	102		1	NOT FOUND		
21	S1#	85	B021 ETHYLMETHANE SULFON	79		1	NOT FOUND		
22	S1#	95	B027 PENTACHLOROETHANE	117	540	1	325.	0.498	1.843
23	S1#	100	B028 ANALINE	93		1	NOT FOUND		
24	S1#	105	C315 PHENOL	94		1	NOT FOUND		
25	S1#	110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
26	S1#	115	C330 2-CHLOROPHENOL	128		1	NOT FOUND		
27	S1#	125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
28	S1#	130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND		
29	S1#	145	C345 BENZYL ALCOHOL	108		1	NOT FOUND		
30	S1#	150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND		
31	S1#	160	C355 2-METHYLPHENOL	108	641	1	547.	1.494	1.035
32	S1#	165	C360 BIS(2-CHLOROISOPROP	45		1	NOT FOUND		
33	S1#	170	B036 ACETOPHENONE	105		1	NOT FOUND		
34	S1#	175	B037 N-NITROSOPYRROLIDIN	100		1	NOT FOUND		
35	S1#	180	B038 N-NITROSOMORPHOLINE	56		1	NOT FOUND		
36	S1#	185	C365 4-METHYLPHENOL	108	671	1	1142.	1.590	2.029
37	S1#	190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND		
38	S1#	195	B040 O-TOLUIDINE	106		1	NOT FOUND		
39	S1#	200	C375 HEXACHLOROETHANE	117		1	NOT FOUND		
40	S2#	10	C410 NITROBENZENE	77		2	NOT FOUND		
41	S2#	15	B048 N-NITROSOPIPERIDINE	42		2	NOT FOUND		
42	S2#	20	C415 ISOPHORONE	82		2	NOT FOUND		
43	S2#	25	C420 2-NITROPHENOL	139		2	NOT FOUND		
44	S2#	30	C425 2,4-DIMETHYLPHENOL	107	763	2	568.	0.319	1.257
45	S2#	35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND		
46	S2#	36	B050 O,O,O-TRIETHYLPHOSP	121		2	NOT FOUND		
47	S2#	40	C440 2,4-DICHLOROPHENOL	162		2	NOT FOUND		
48	S2#	45	C430 BENZOIC ACID	122	788	2	1666.	0.172	6.843
49	S2#	50	B053 AA-DIMETHYLPHENETHY	58	782	2	8832.	0.968	6.433
50	S2#	55	C445 1,2,4-TRICHLOROBENZ	180		2	NOT FOUND		
51	S2#	60	C450 NAPHTHALENE	128		2	NOT FOUND		
52	S2#	80	C455 4-CHLOROANALINE	127		2	NOT FOUND		
53	S2#	85	B058 2,6-DICHLOROPHENOL	162		2	NOT FOUND		
54	S2#	90	B059 HEXACHLOROPROPENE	213		2	NOT FOUND		
55	S2#	95	C460 HEXACHLOROBUTADIENE	225		2	NOT FOUND		
56	S2#	115	B062 P-PHENYLENE DIAMINE	108		2	NOT FOUND		
57	S2#	120	B063 N-NITROSO-DI-N-BUTY	84		2	NOT FOUND		
58	S2#	130	C465 4-CHLORO-3-METHYL-P	107		2	NOT FOUND		
59	S2#	140	B067 SAFROLE	162		2	NOT FOUND		
60	S2#	145	C470 2-METHYLNAPHTHALENE	142		2	NOT FOUND		
61	S3#	10	B075 1,2,4,5-TETRACHLORO	216		3	NOT FOUND		
62	S3#	15	B076 ISOSAFROLE (#1)	162		3	NOT FOUND		
63	S3#	20	C510 HEXACHLOROCYCLOPENT	237		3	NOT FOUND		
64	S3#	25	C515 2,4,6-TRICHLOROPHEN	196		3	NOT FOUND		
65	S3#	30	C520 2,4,5-TRICHLOROPHEN	196		3	NOT FOUND		
66	S3#	35	B077 ISOSAFROLE (#2)	162		3	NOT FOUND		
67	S3#	40	C525 2-CHLORONAPHTHALENE	162		3	NOT FOUND		
68	S3#	42	B078 1-CHLORONAPHTHALENE	162		3	NOT FOUND		

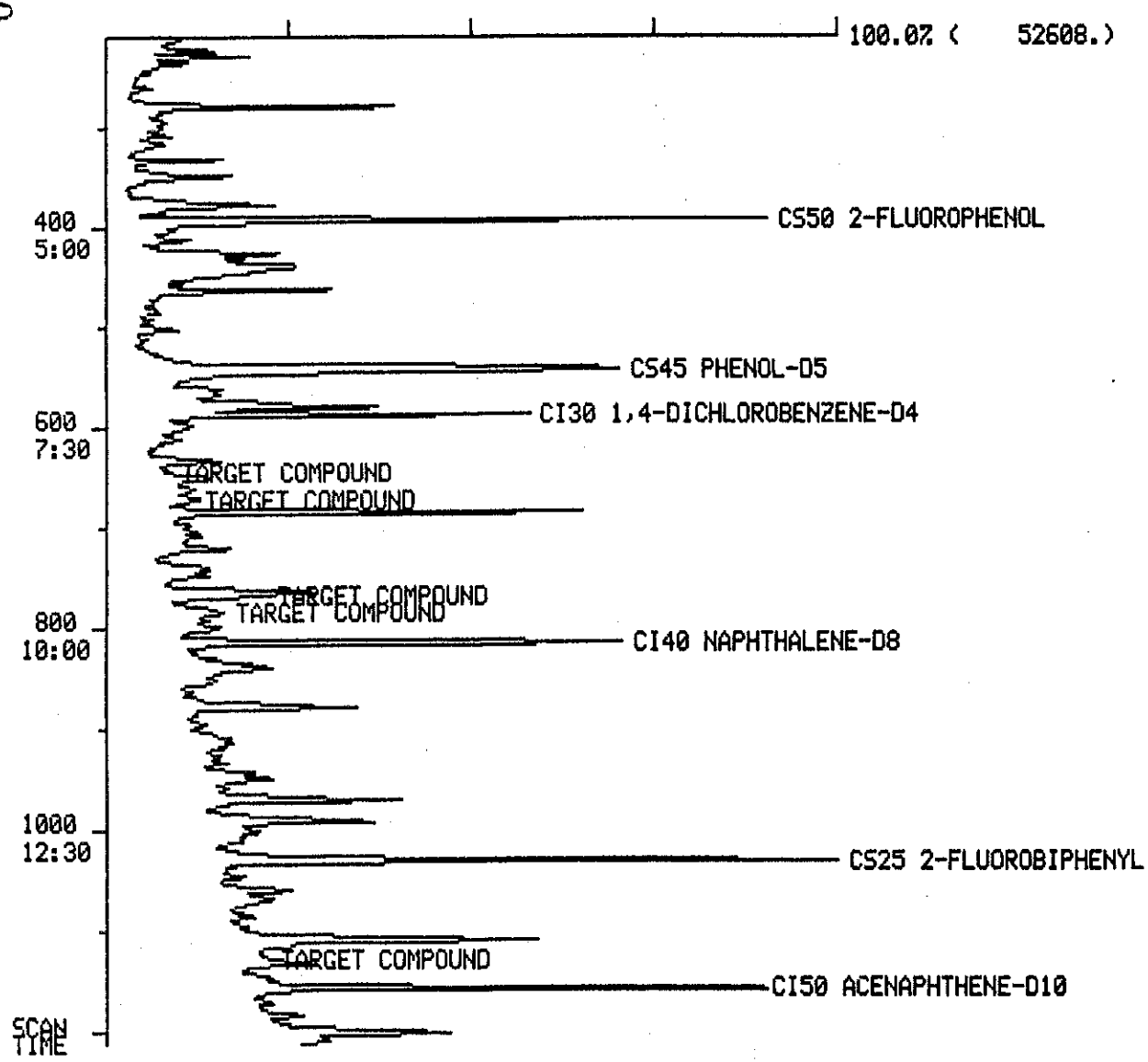
69	S3#	45	C535	2,4-DINITROTOLUENE	165		3	NOT FOUND		
70	S3#	50	B079	1,4-NAPHTHOQUINONE	158		3	NOT FOUND		
71	S3#	55	C535	DIMETHYLPHTHALATE	163		3	NOT FOUND		
72	S3#	60	B080	M-DINITROBENZENE	168		3	NOT FOUND		
73	S3#	65	C540	ACENAPHTHYLENE	152		3	NOT FOUND		
74	S3#	70	C543	2,6-DINITROTOLUENE	165	1124	3	324.	0.352	1.157
75	S3#	75	C545	3-NITROANALINE	138		3	NOT FOUND		
76	S3#	80	C550	ACENAPHTHENE	153		3	NOT FOUND		
77	S3#	85	C555	2,4-DINITROPHENOL	184		3	NOT FOUND		
78	S3#	90	C565	DIBENZOFURAN	168		3	NOT FOUND		
79	S3#	95	C560	4-NITROPHENOL	109		3	NOT FOUND		
80	S3#100		B082	PENTACHLOROBENZENE	250		3	NOT FOUND		
81	S3#105		C570	2,4-DINITROTOLUENE	165		3	NOT FOUND		
82	S3#110		B083	1-NAPHTHYLAMINE	143		3	NOT FOUND		
83	S3#115		B084	2-NAPHTHYLAMINE	143		3	NOT FOUND		
84	S3#120		B085	2,3,4,6-TETRACHLORO	232		3	NOT FOUND		
85	S3#130		C580	DIETHYLPHTHALATE	149		3	NOT FOUND		
86	S3#135		C590	FLUORENE	166		3	NOT FOUND		
87	S3#140		C585	4-CHLOROPHENYL-PHEN	204		3	NOT FOUND		
88	S3#143		B087	THIONAZIN	97		3	NOT FOUND		
89	S3#145		B134	5-NITRO-O-TOLUIDINE	152		3	NOT FOUND		
90	S3#150		C595	4-NITROANALINE	138		3	NOT FOUND		
91	S4#	10	C610	4,6-DINITRO-2-METHY	198		4	NOT FOUND		
92	S4#	15	C615	N-NITROSODIPHENYLAM	169		4	NOT FOUND		
93	S4#	20	B091	AZOBENZENE	77		4	NOT FOUND		
94	S4#	25	B092	SYM-TRINITROBENZENE	213		4	NOT FOUND		
95	S4#	30	C625	4-BROMOPHENYL-PHENY	248		4	NOT FOUND		
96	S4#	31	B135	SULFOTEP	97		4	NOT FOUND		
97	S4#	32	B136	PHORATE	121		4	NOT FOUND		
98	S4#	35	B093	PHENACETIN	108		4	NOT FOUND		
99	S4#	40	C630	HEXACHLOROBENZENE	284		4	NOT FOUND		
100	S4#	41	B094	DIMETHOATE	87		4	NOT FOUND		
101	S4#	45	B095	4-AMINOBIPHENYL	169		4	NOT FOUND		
102	S4#	50	C635	PENTACHLOROPHENOL	266		4	NOT FOUND		
103	S4#	55	B096	PRONAMIDE	173		4	NOT FOUND		
104	S4#	60	B097	PENTACHLORONITROBEN	237		4	NOT FOUND		
105	S4#	65	C640	PHENANTHRENE	178		4	NOT FOUND		
106	S4#	70	C645	ANTHRACENE	178		4	NOT FOUND		
107	S4#	71	B098	DISULFOTON	88		4	NOT FOUND		
108	S4#	75	B137	2-SECBUTYL-4,6-DINI	211		4	NOT FOUND		
109	S4#	83	B101	METHYL PARATHION	109		4	NOT FOUND		
110	S4#	85	C650	DI-N-BUTYLPHTHALATE	149		4	NOT FOUND		
111	S4#	87	B102	PARATHION	97		4	NOT FOUND		
112	S4#100		B105	4-NITROQUINOLINE-1-	190		4	NOT FOUND		
113	S4#105		B106	METHAPYRILENE	58		4	NOT FOUND		
114	S4#110		C655	FLUORANTHENE	202		4	NOT FOUND		
115	S5#	10	B113	BENZIDINE	184	1737	5	170.	0.001	256.279
116	S5#	15	C715	PYRENE	202		5	NOT FOUND		
117	S5#	20	B114	ARAMITE (#1)	185		5	NOT FOUND		
118	S5#	30	B116	P-DIMETHYL-AMINO-AZ	120		5	NOT FOUND		
119	S5#	35	B117	3,3'DIMETHYLBENZIDI	212		5	NOT FOUND		
120	S5#	38	B118	FAMPHUR	218		5	NOT FOUND		
121	S5#	40	C720	BUTYLBENZYLPHTHALAT	149		5	NOT FOUND		
122	S5#	45	B119	2-ACETYLAMINOFLUORE	181	1930	5	556.	0.456	1.606
123	S5#	50	C730	BENZO(A)ANTHRACENE	228		5	NOT FOUND		
124	S5#	55	C725	3,3'-DICHLOROBENZID	252		5	NOT FOUND		
125	S5#	60	C740	CHRYSENE	228		5	NOT FOUND		
126	S5#	65	C745	BIS(2-ETHYLHEXYL)PH	149	2008	5	2776.	1.243	2.940
127	S5#	85	B123	3-METHYLCHOLANTHREN	268		5	NOT FOUND		
128	S6#	10	C760	DI-N-OCTYL PHTHALAT	149		6	NOT FOUND		
129	S6#	15	C765	BENZO(B)FLUORANTHEN	252		6	NOT FOUND		
130	S6#	20	B125	7,12-DIMETHYLBENZAN	256		6	NOT FOUND		
131	S6#	25	C770	BENZO(K)FLUORANTHEN	252		6	NOT FOUND		
132	S6#	30	B126	HEXACHLOROPHENE	196		6	NOT FOUND		
133	S6#	35	C775	BENZO(A)PYRENE	252		6	NOT FOUND		
134	S6#	50	B129	DIBENZ(A,J)ACRIDINE	279		6	NOT FOUND		
135	S6#	55	C780	INDENO(1,2,3-CD)PYR	276		6	NOT FOUND		
136	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278		6	NOT FOUND		
137	S6#	65	C790	BENZO(G,H,I)PERYLEN	276		6	NOT FOUND		

000286

000257

DATA FROM FILE: U7038 SCANS 210 TO 1210 ACQUIRED: 07/29/92 20:09:00
CALI: U7038 #3 OUT OF 210 TO 2760

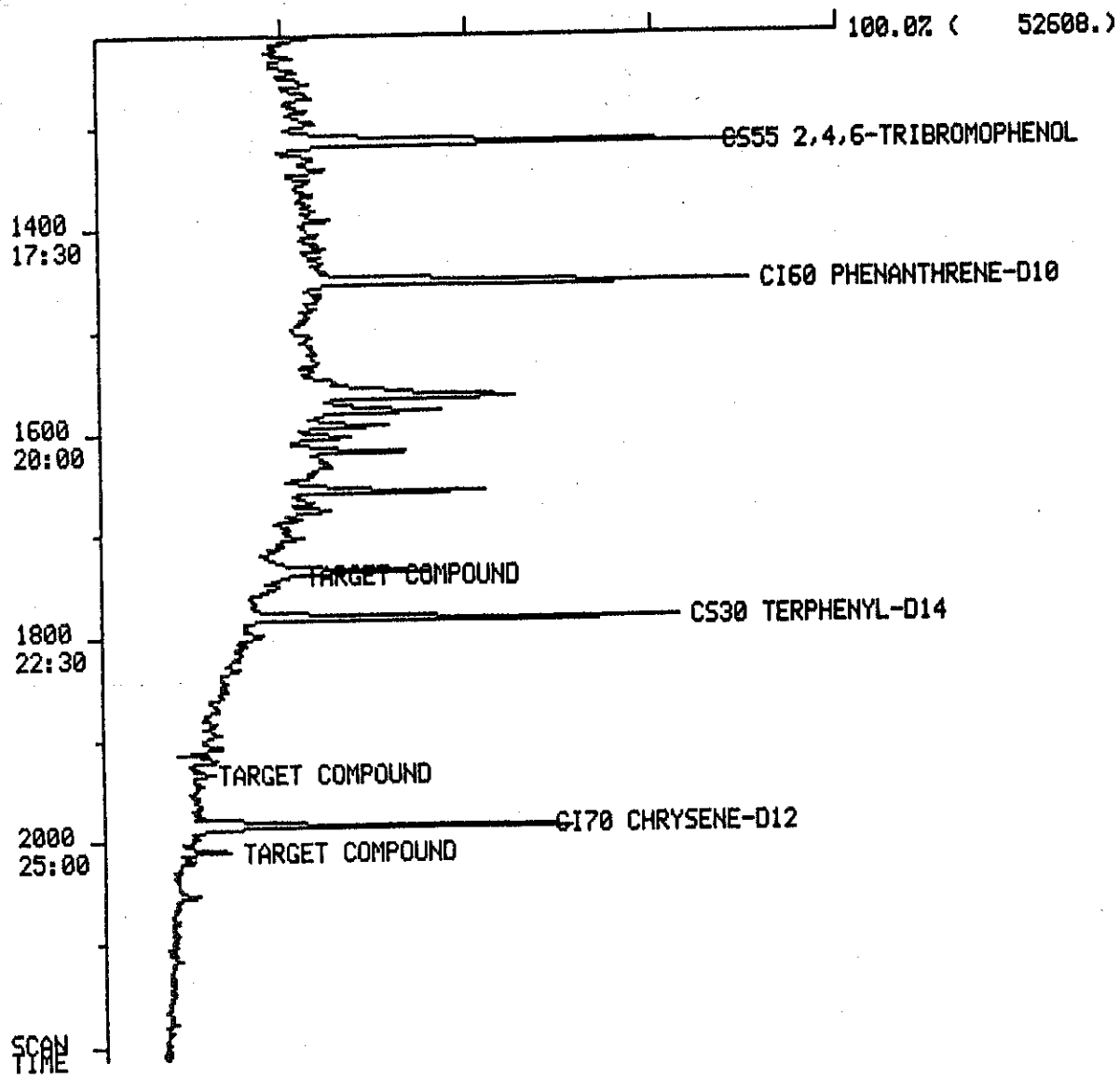
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML NA M



000288

DATA FROM FILE: U7038 SCANS 1210 TO 2210 ACQUIRED: 07/29/92 20:09:00
CALI: U7038 #3 OUT OF 210 TO 2760

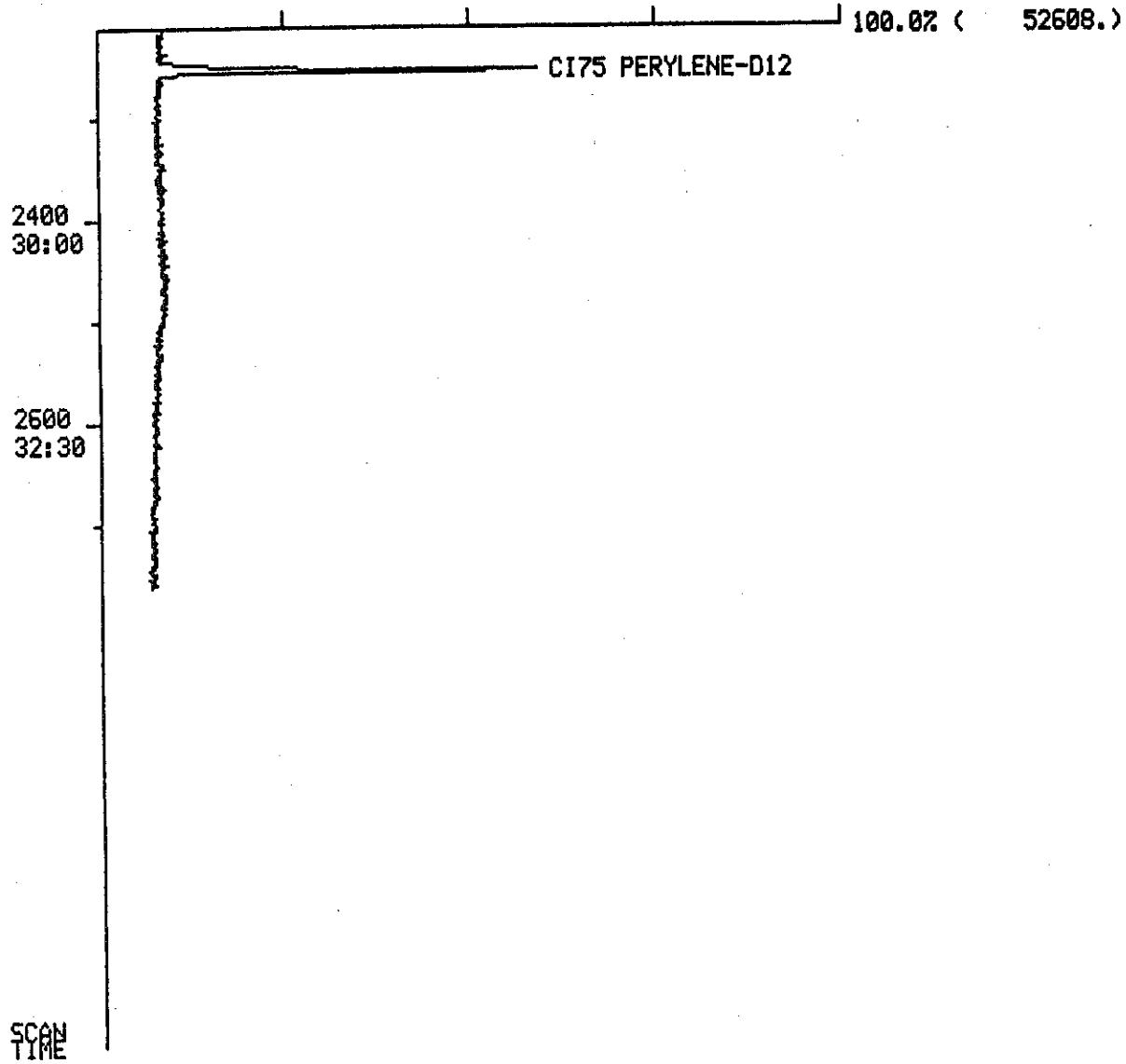
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML NA M



000269

DATA FROM FILE: U7038 SCANS 2210 TO 2760 ACQUIRED: 07/29/92 20:09:00
CALI: U7038 #3 OUT OF 210 TO 2760

SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML NA M



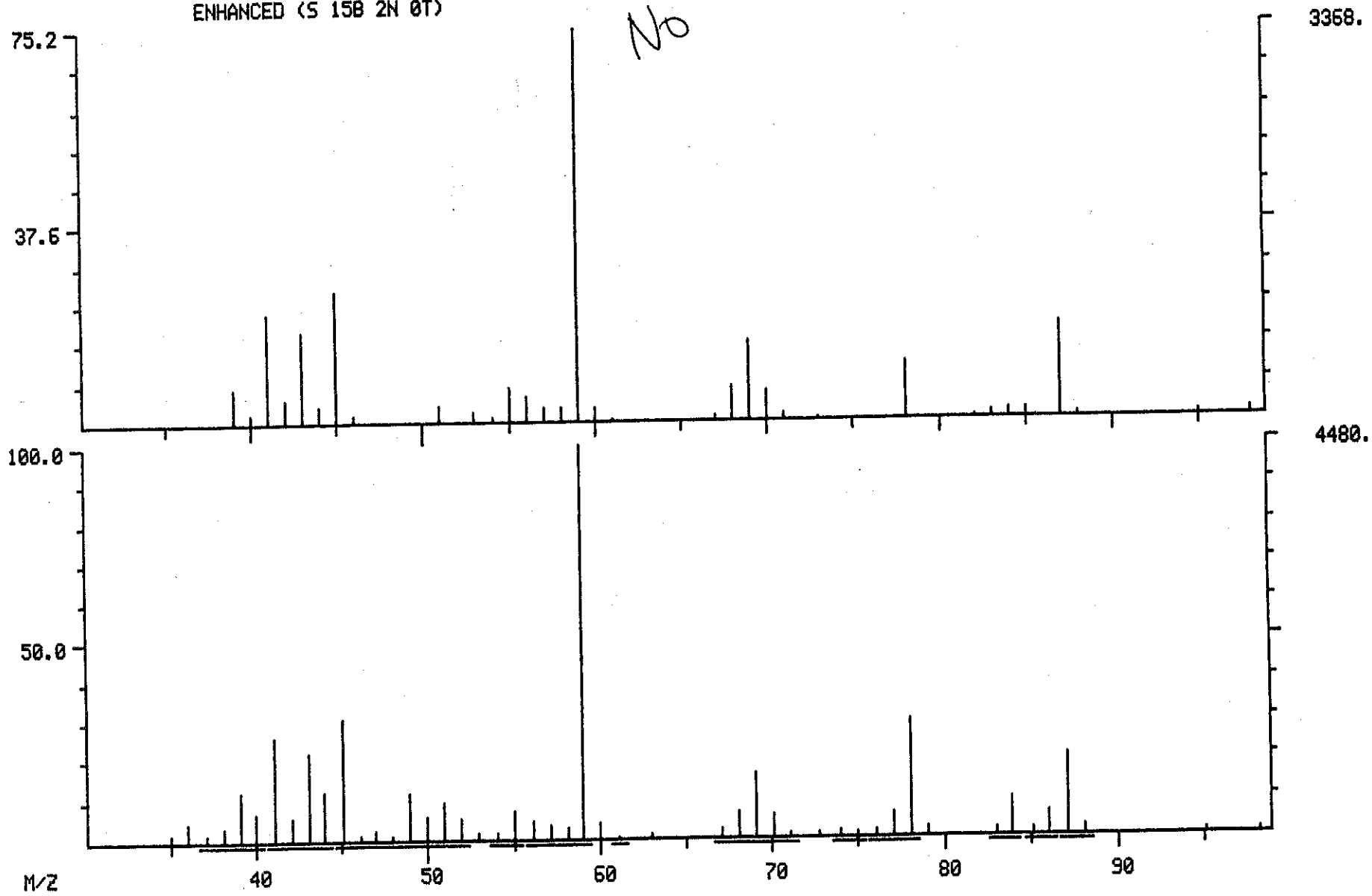
000290

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 2:32
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S1#10 M/Z 41 B002 METHYLMETHACRYLATE
ENHANCED (S 15B 2N 0T)

DATA: U7038 #203
CALI: U7038 #3

BASE M/Z: 59/ 59
RIC: 11087./ 18399.

No

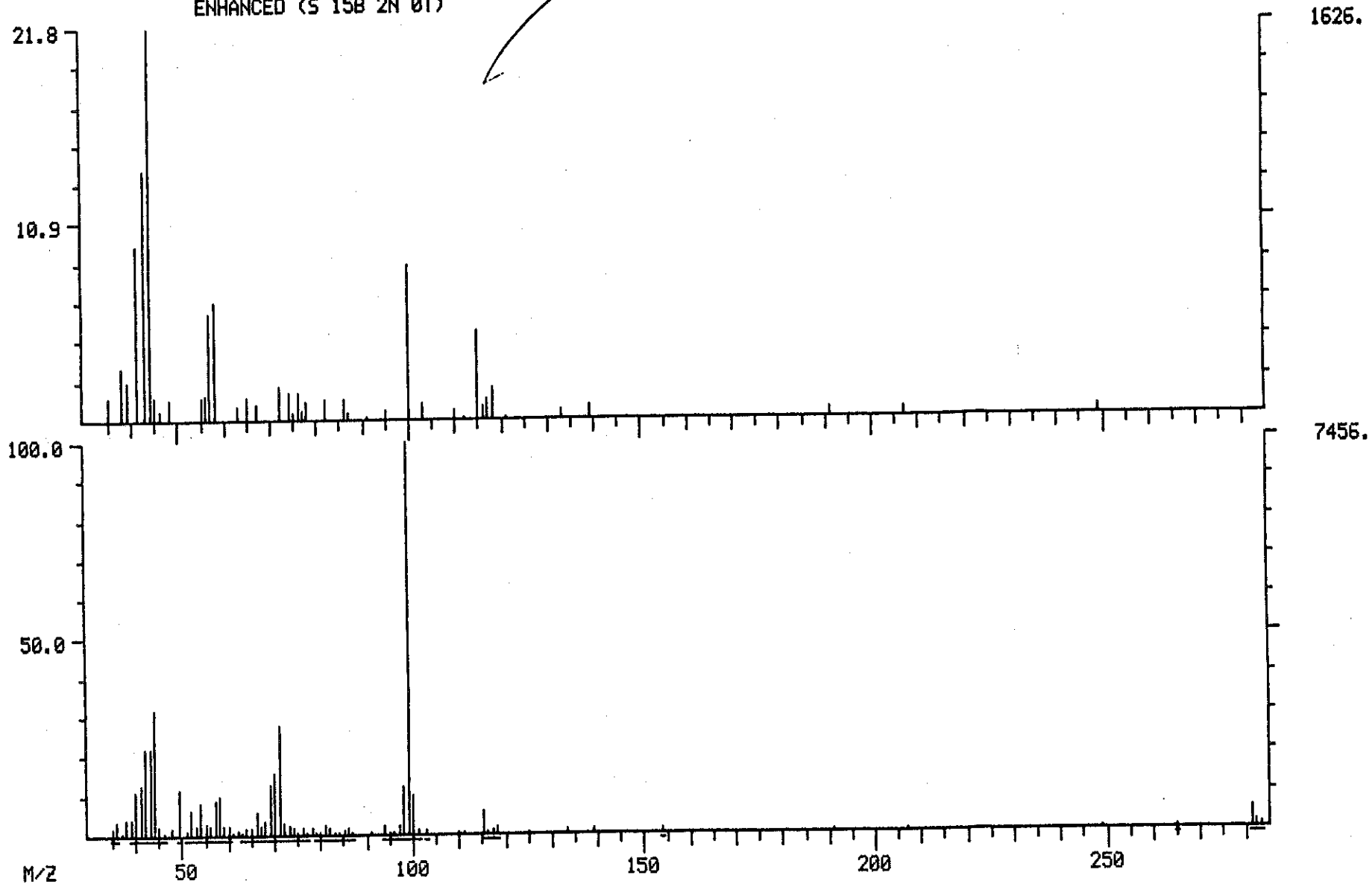


000291

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 6:45
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S1#95 M/Z 117 B027 PENTACHLOROETHANE
ENHANCED (S 15B 2N 0T)

DATA: U7038 #540
CALI: U7038 #3

BASE M/Z: 44/ 99
RIC: 7791./ 31807.

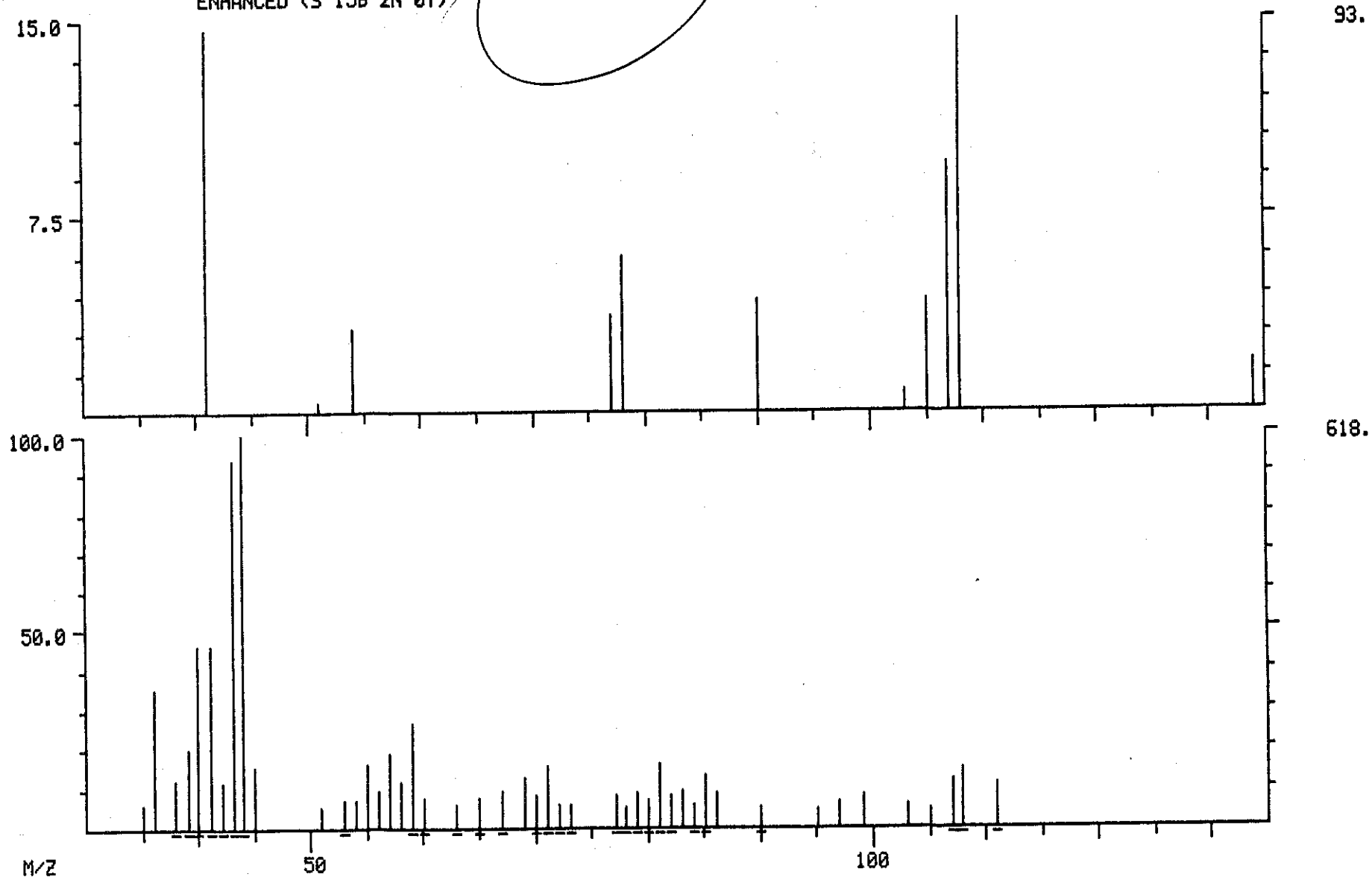


000292

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 8:01
SAMPLE: 23727-01 WATER 82700P-AP9-A
CONDS.: S1#160 M/Z 108 C355 2-METHYLPHENOL
ENHANCED (S 15B 2N 0T)

DATA: U7038 #641
CALI: U7038 #3

BASE M/Z: 108/ 44
RIC: 395./ 4543.

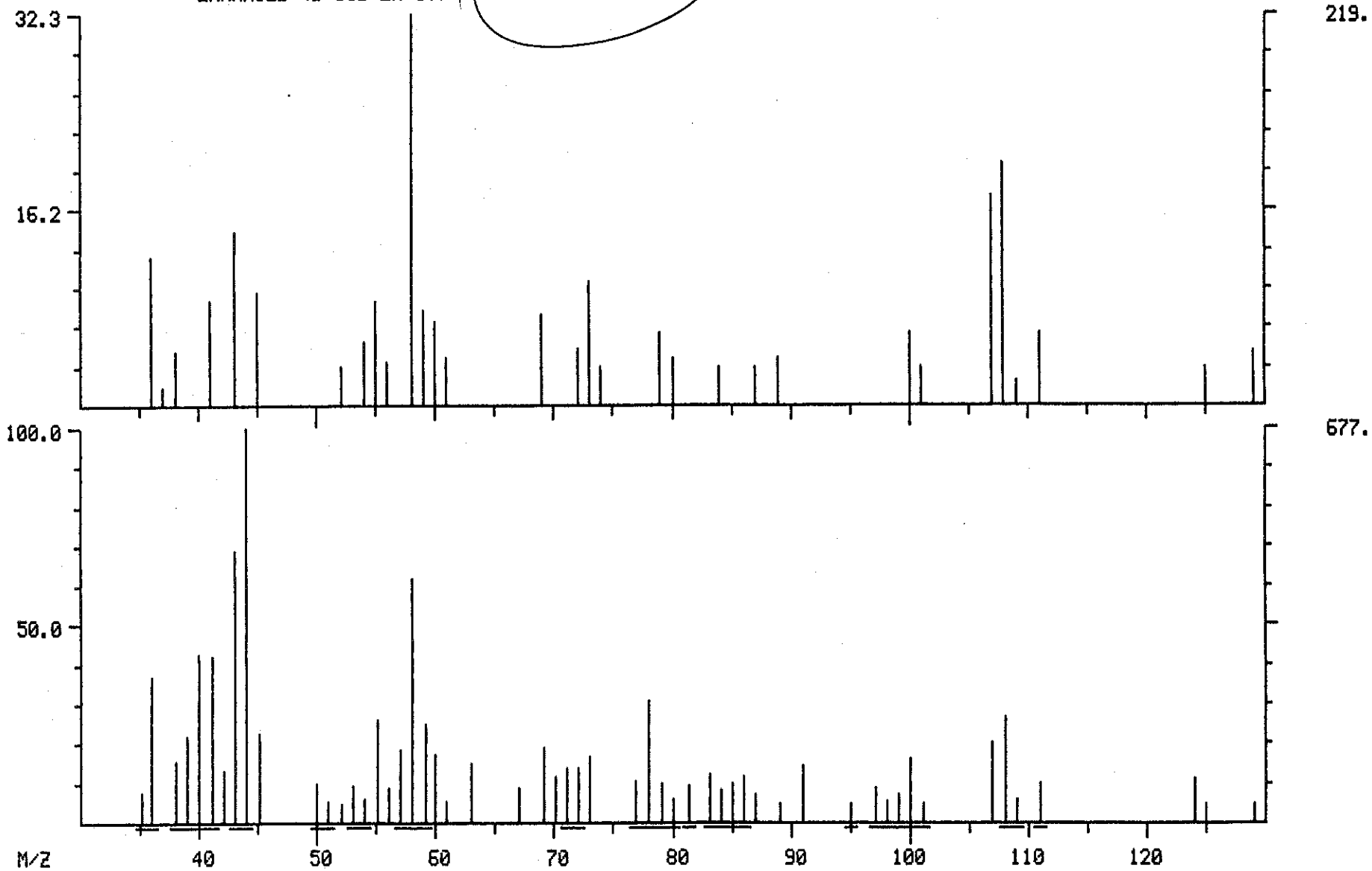


000293

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 8:23
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 51#185 M/Z 108 C365 4-METHYLPHENOL
ENHANCED (S 15B 2N 0T)

DATA: U7038 #671
CALI: U7038 #3

BASE M/Z: 58/ 44
RIC: 1565./ 6327.

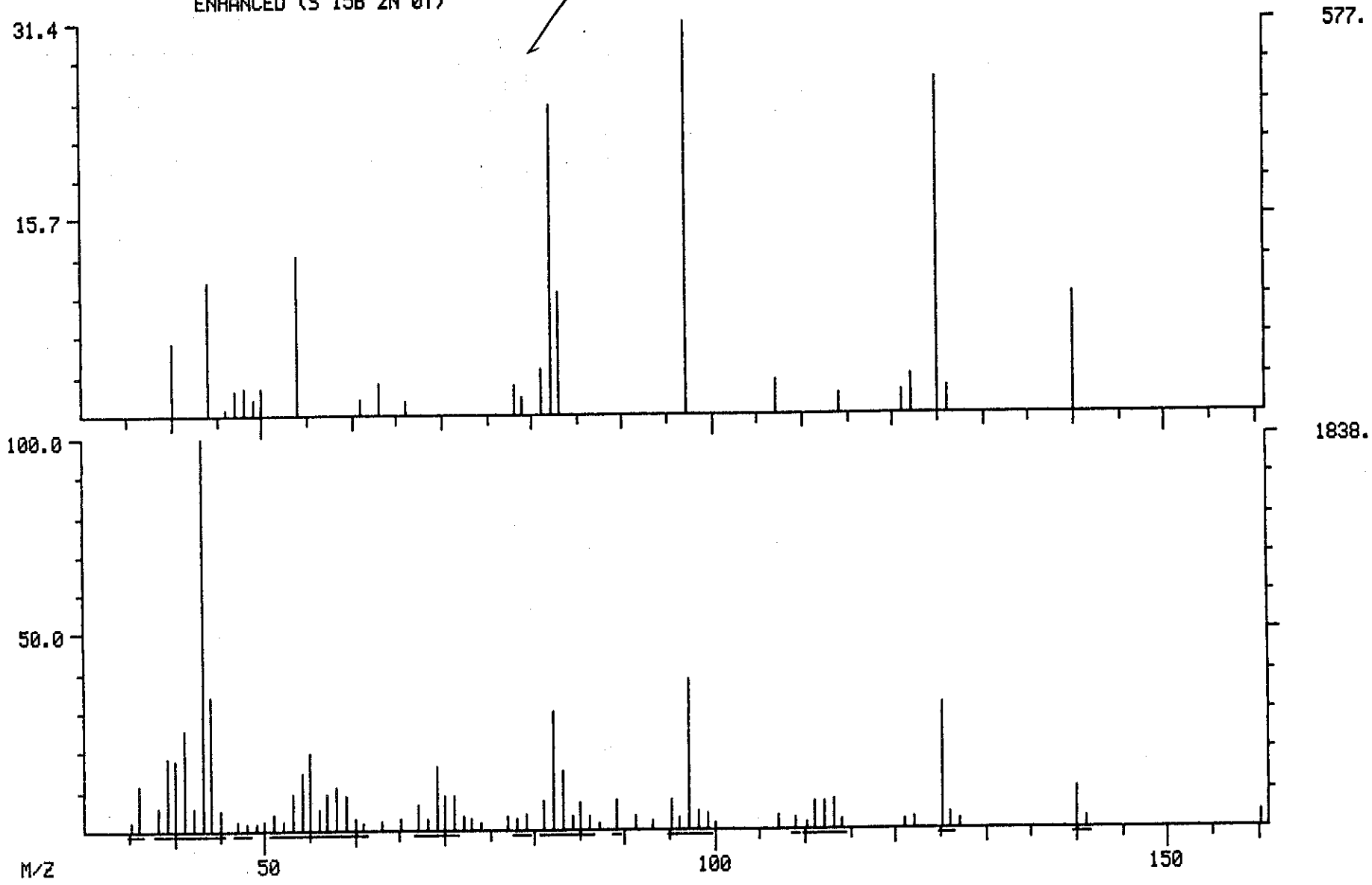


000294

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 9:32
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S2#30 M/Z 107 C425 2,4-DIMETHYLPHENOL
ENHANCED (S 15B 2N 0T)

DATA: U7038 #763
CALI: U7038 #3

BASE M/Z: 97/ 43
RIC: 3003./ 11503.

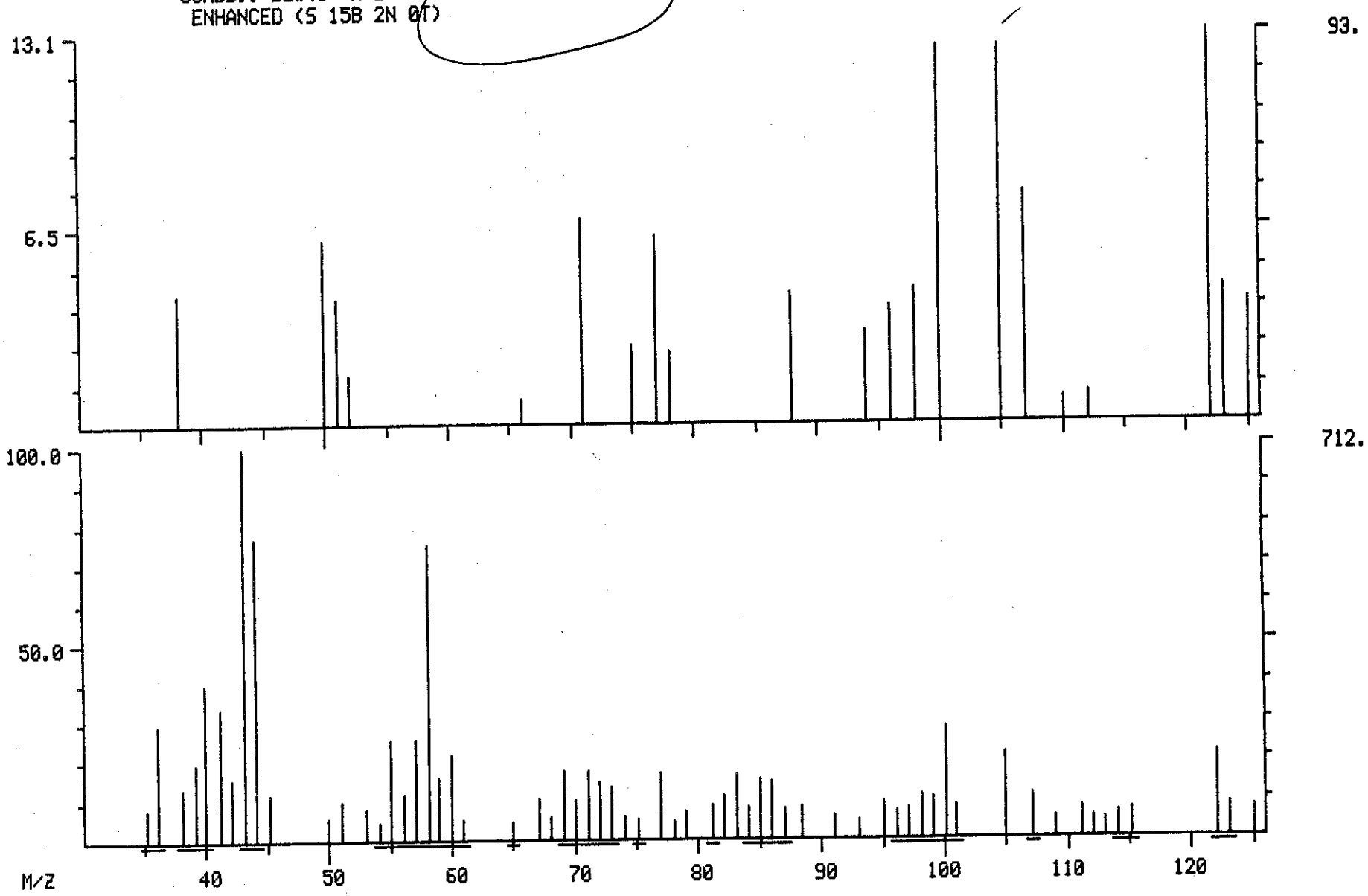


000295

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 9:51
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S2#45 M/Z 122 C430 BENZOIC ACID
ENHANCED (S 15B 2N 0T)

DATA: U7038 #788
CALI: U7038 #3

BASE M/Z: 122/ 43
RIC: 767./ 6927.

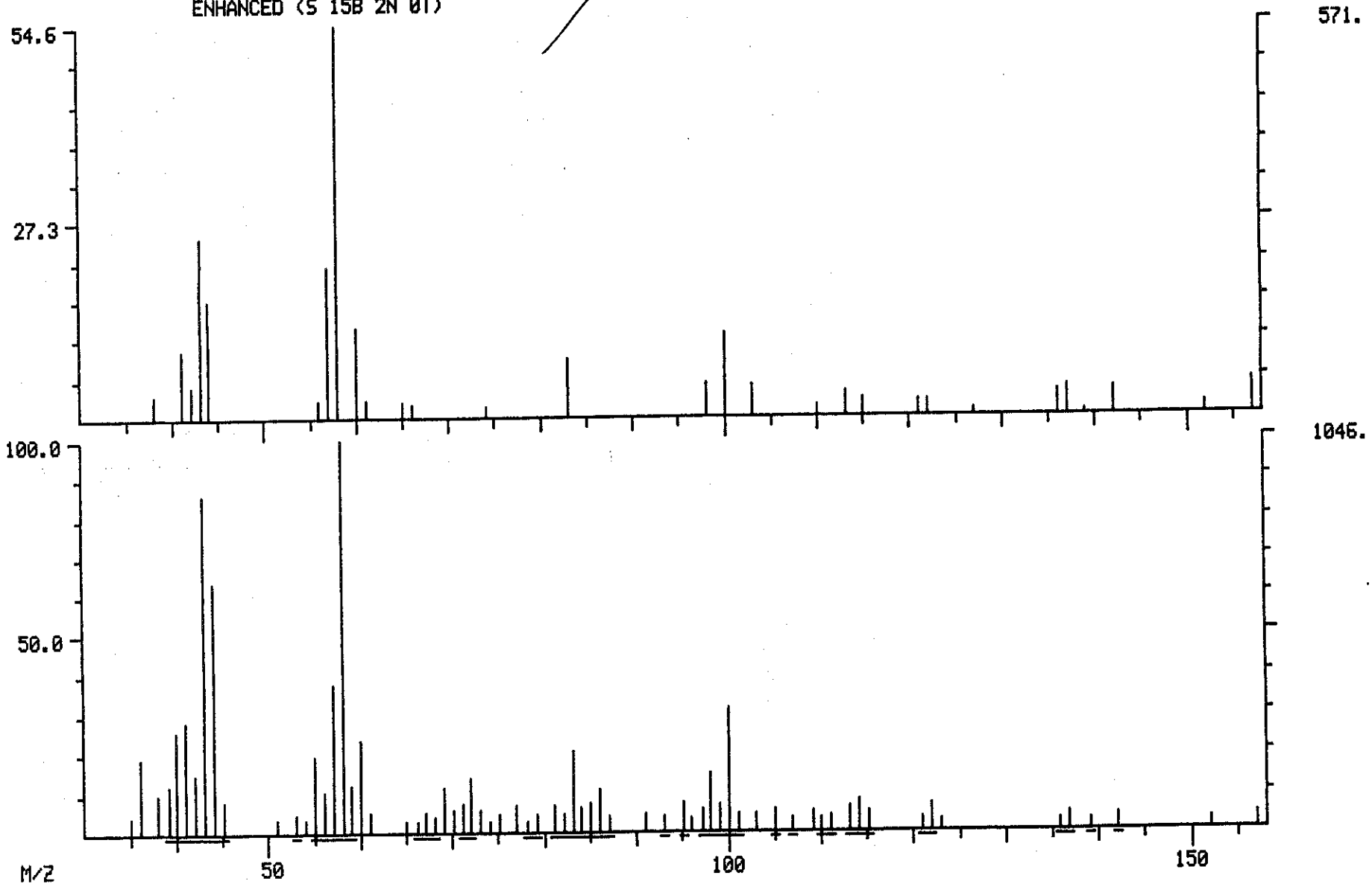


000296

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 9:46
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 52#50 M/Z 58 B053 AA-DIMETHYLPHENETHYLAMINE
ENHANCED (S 15B 2N 0T)

DATA: U7038 #782
CALI: U7038 #3

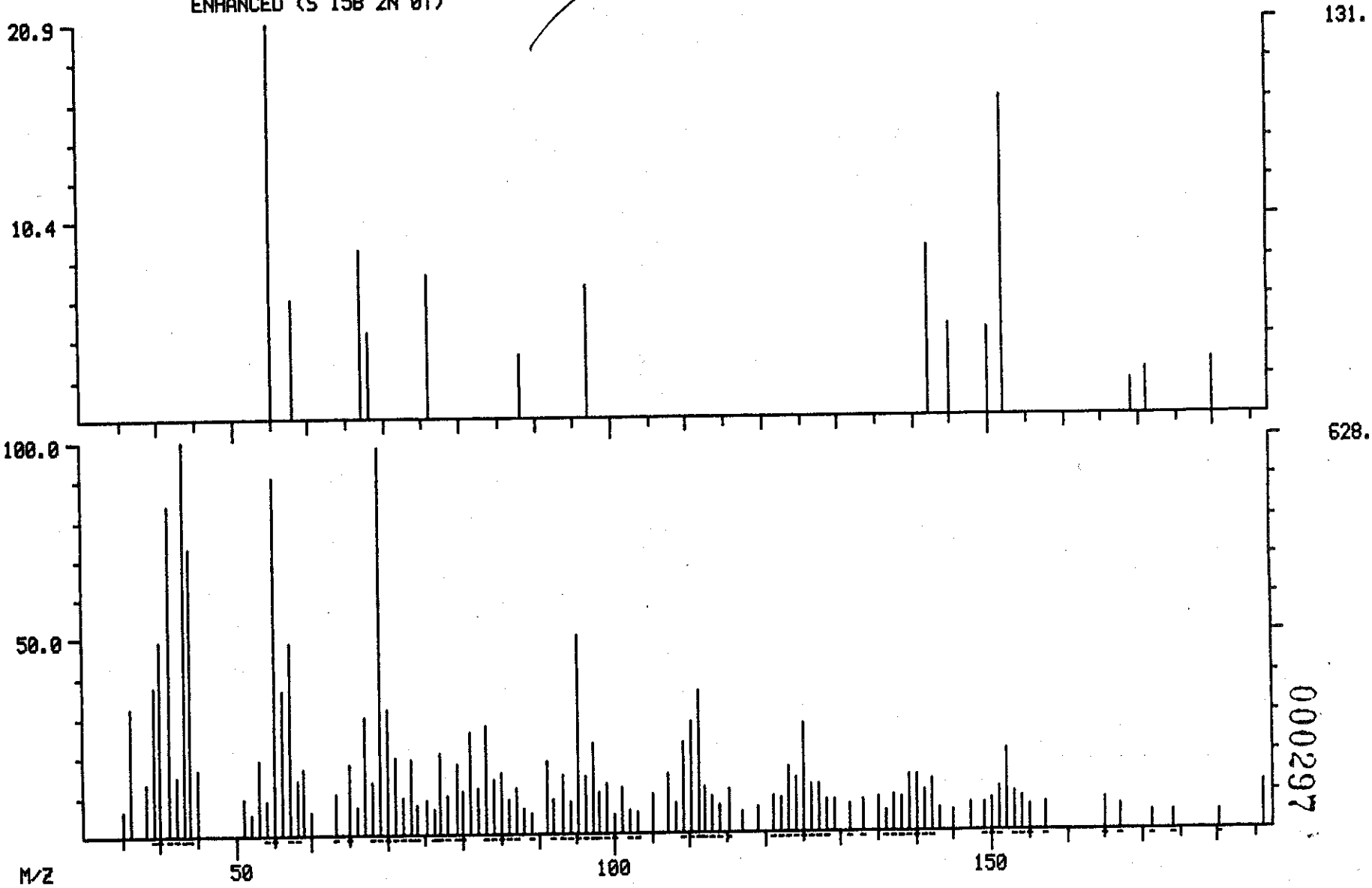
BASE M/Z: 58/ 58
RIC: 2287./ 8415.



DUAL MASS SPECTRUM
07/29/92 20:09:00 + 14:03
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S3#70 M/Z 165 C543 2,6-DINITROTOLUENE
ENHANCED (S 15B 2N 0T)

DATA: U7038 #1124
CALI: U7038 #3

BASE M/Z: 55/ 43
RIC: 631./ 11775.



000297

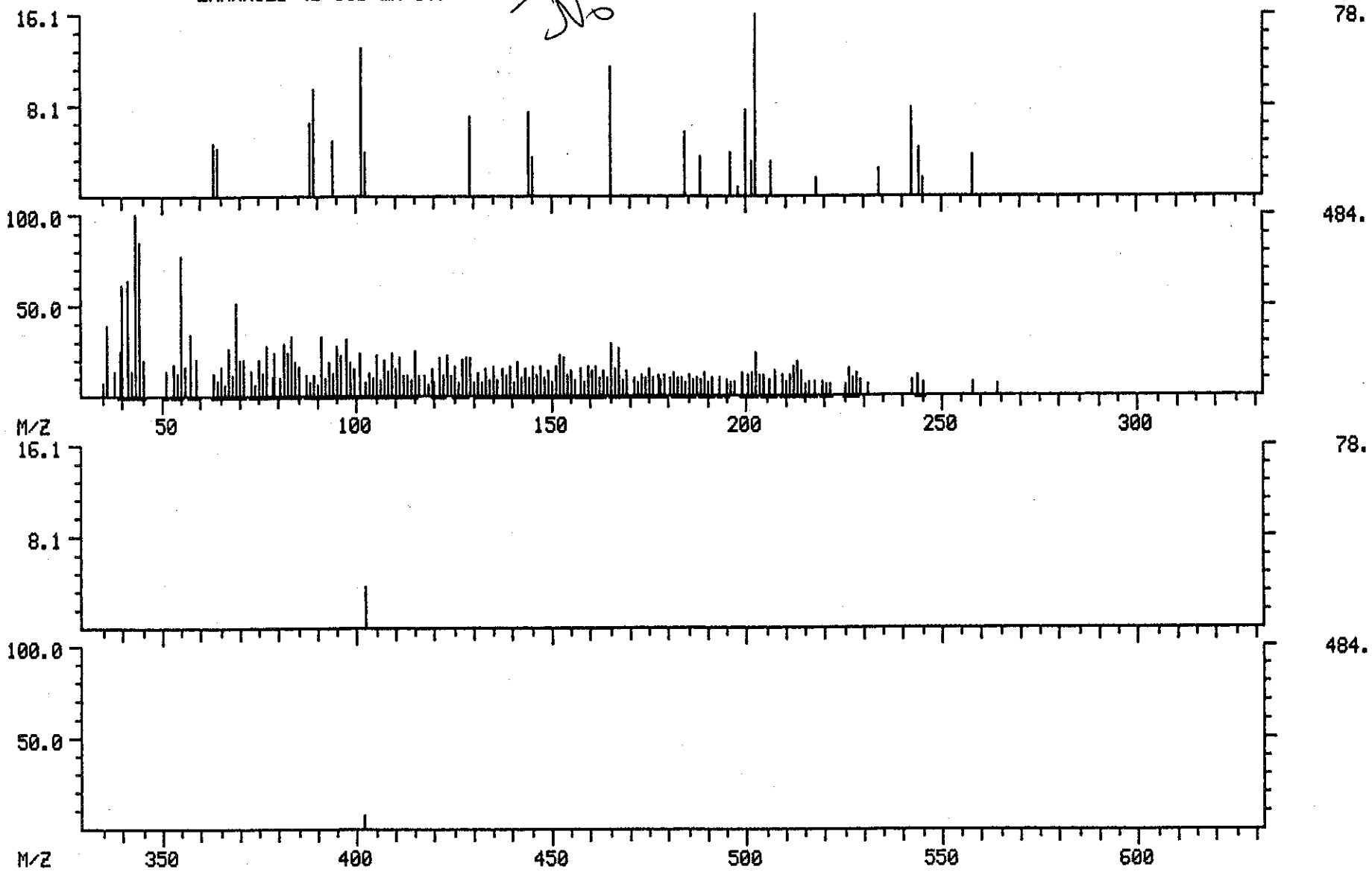
000298

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 21:43
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S5#10 M/Z 184 B113 BENZIDINE
ENHANCED (S 15B 2N 0T)

No

DATA: U7038 #1737
CALI: U7038 #3

BASE M/Z: 202/ 43
RIC: 700./ 13631.

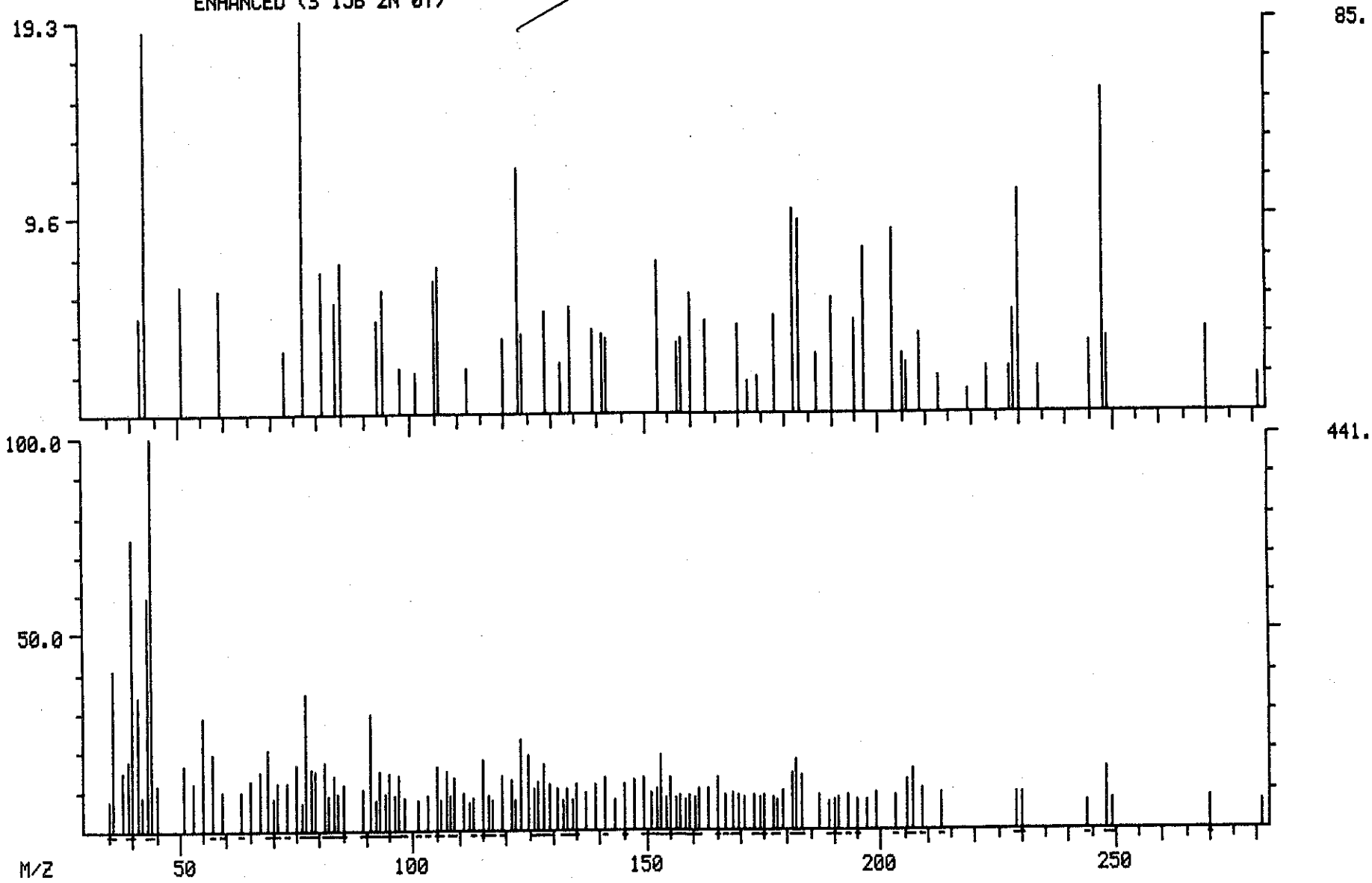


000299

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 24:07
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S5#45 M/Z 181 B119 2-ACETYLAMINOFLUORENE
ENHANCED (S 15B 2N 0T)

DATA: U7038 #1930
CALI: U7038 #3

BASE M/Z: 77/ 44
RIC: 1347./ 7319.

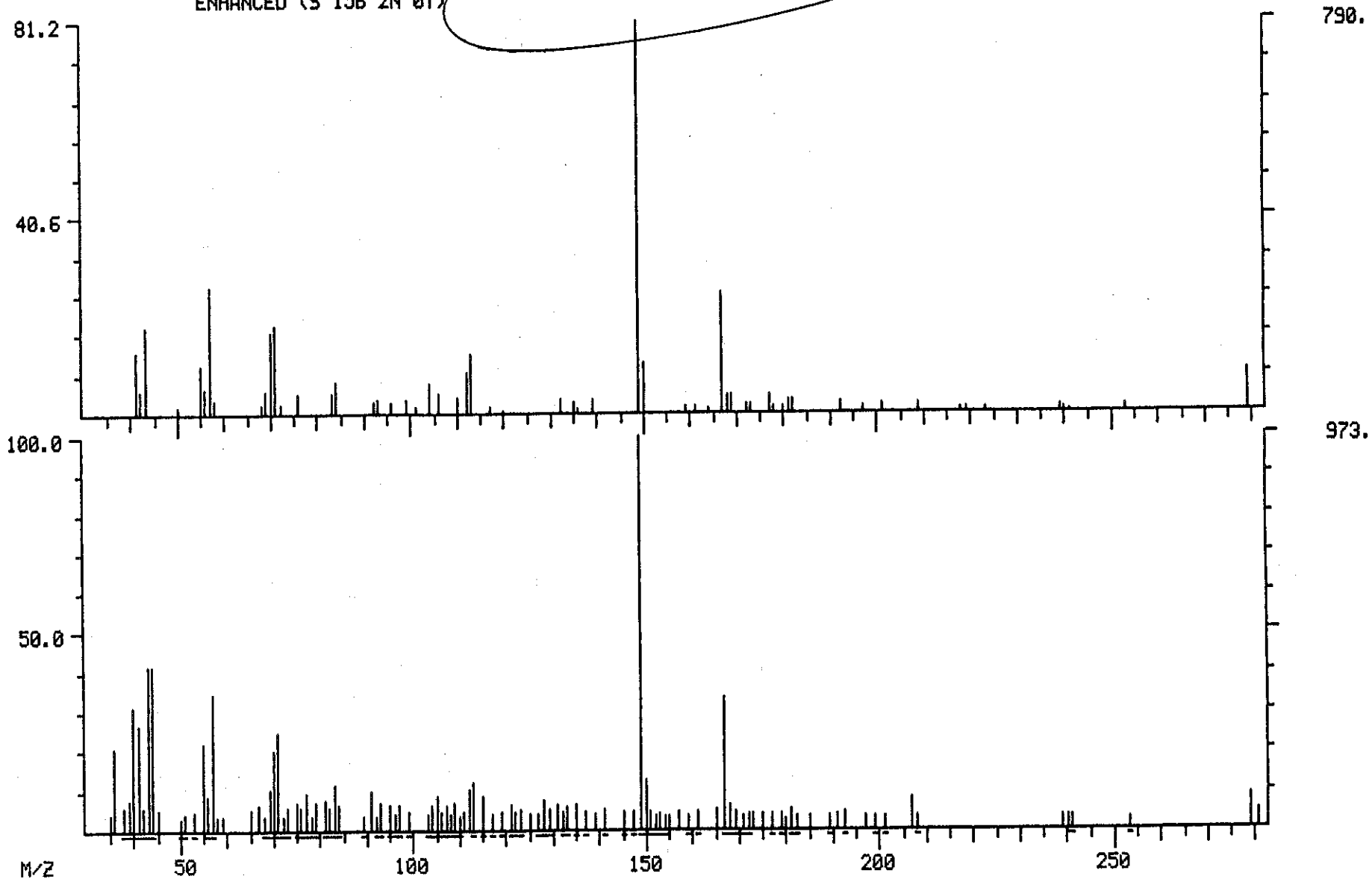


000300

DUAL MASS SPECTRUM
07/29/92 20:09:00 + 25:06
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: S5#65 M/Z 149 C745 BIS(2-ETHYLHEXYL)PHTHALATE
ENHANCED (S 15B 2N 0T)

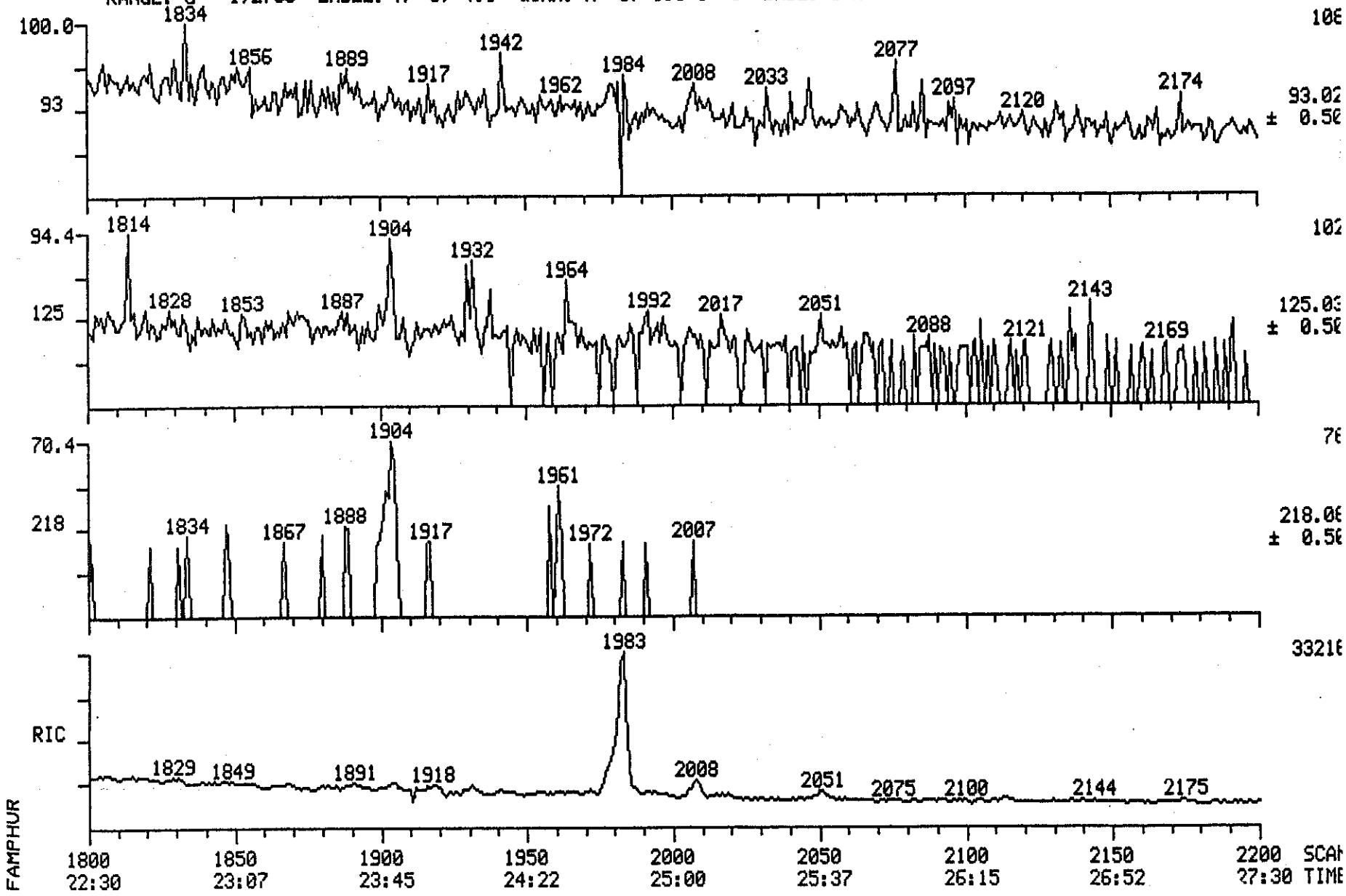
DATA: U7038 #2008
CALI: U7038 #3

BASE M/Z: 149/ 149
RIC: 3555./ 9071.



000301

RIC+MASS CHROMATOGRAMS DATA: U7038 #2008 SCANS 1800 TO 2200
07/29/92 20:09:00 CALI: U7038 #3
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML NA M
RANGE: G 1,2760 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

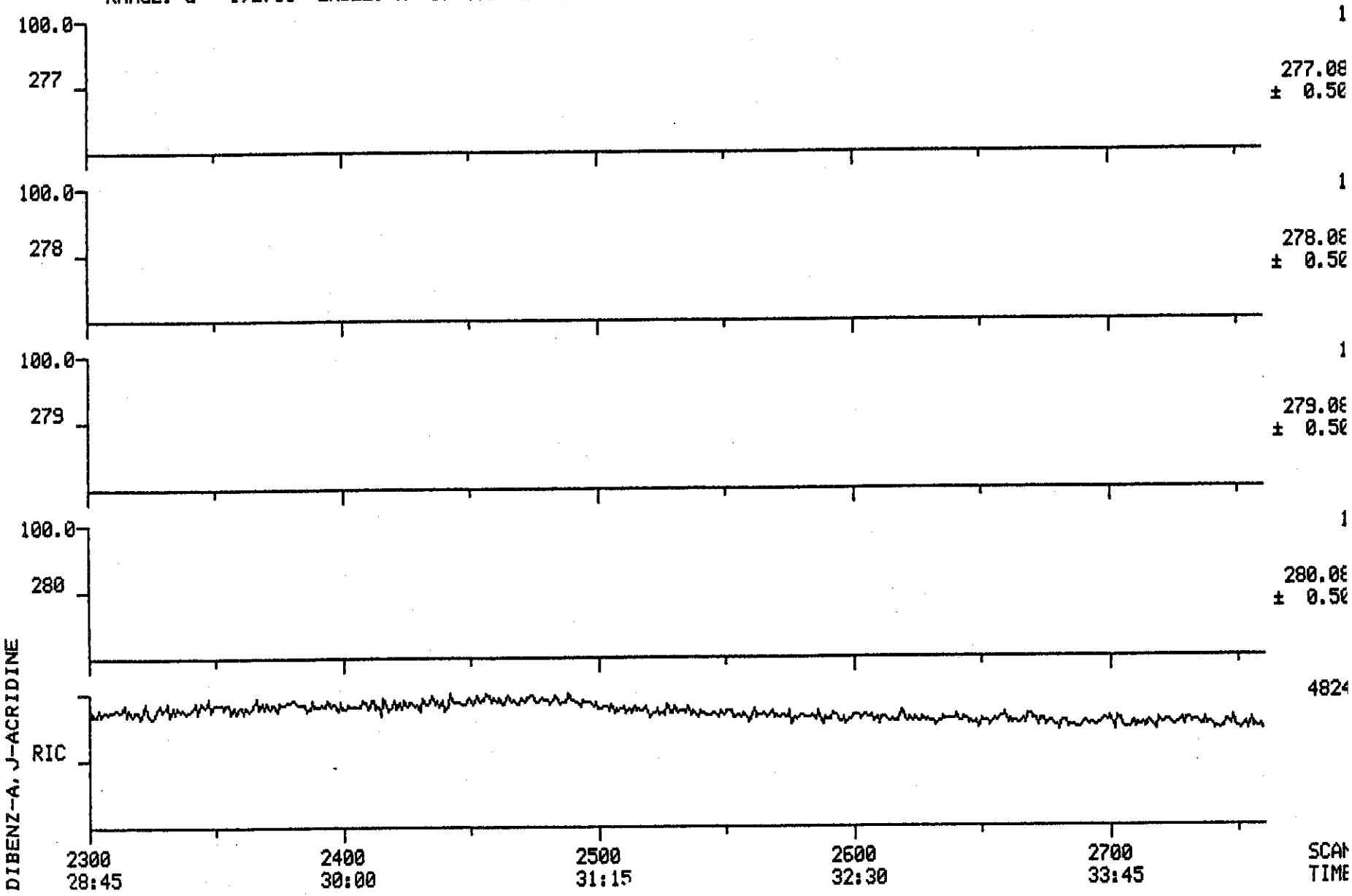


FAMPHUR

N/o

000302

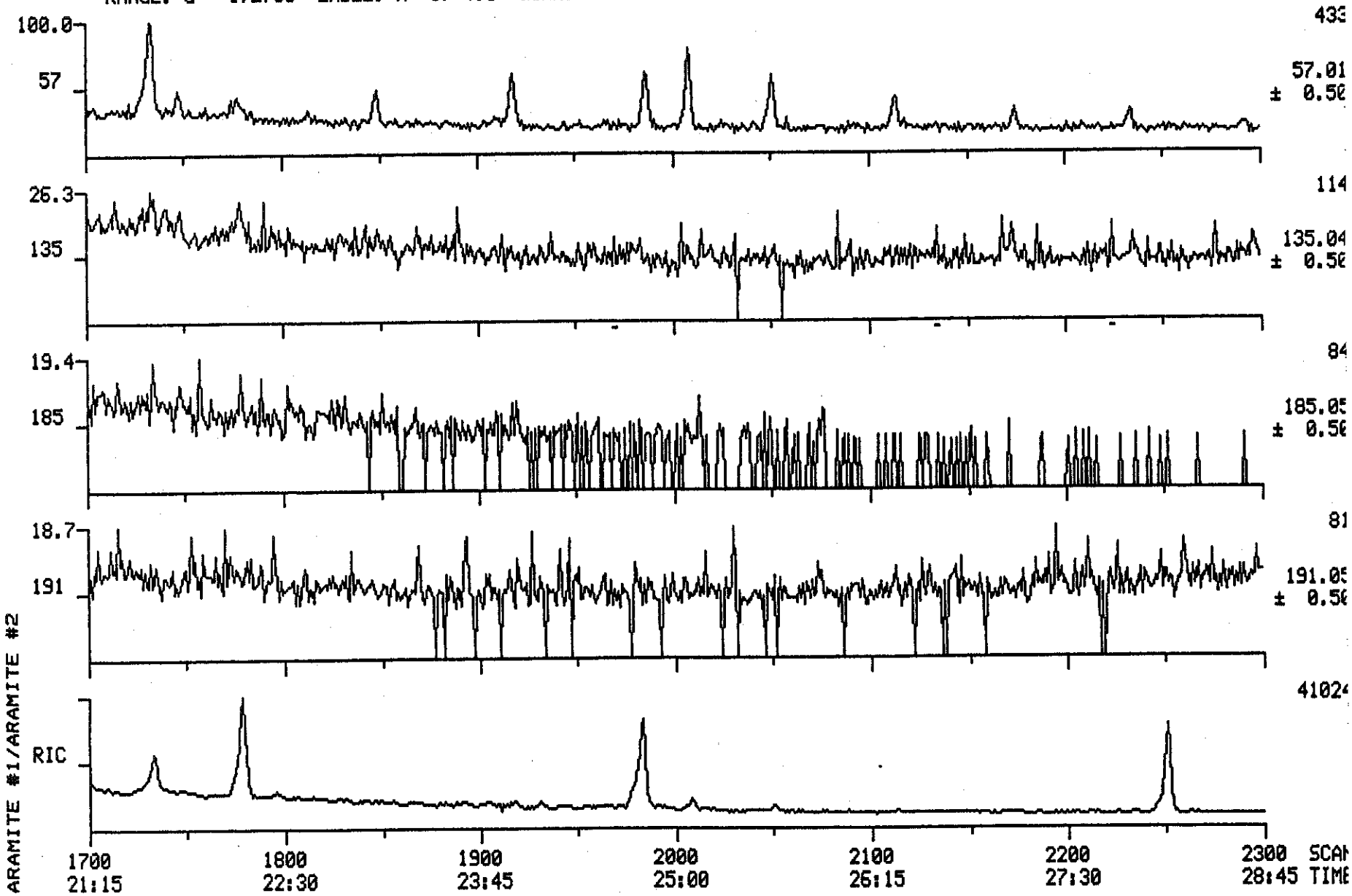
RIC+MASS CHROMATOGRAMS DATA: U7038 #2008 SCANS 2300 TO 2760
07/29/92 20:09:00 CALI: U7038 #3
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML NA M
RANGE: G 1,2760 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



No

000303

RIC+MASS CHROMATOGRAMS DATA: U7038 #2008 SCANS 1700 TO 2300
07/29/92 20:09:00 CALI: U7038 #3
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML NA M
RANGE: G 1,2760 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

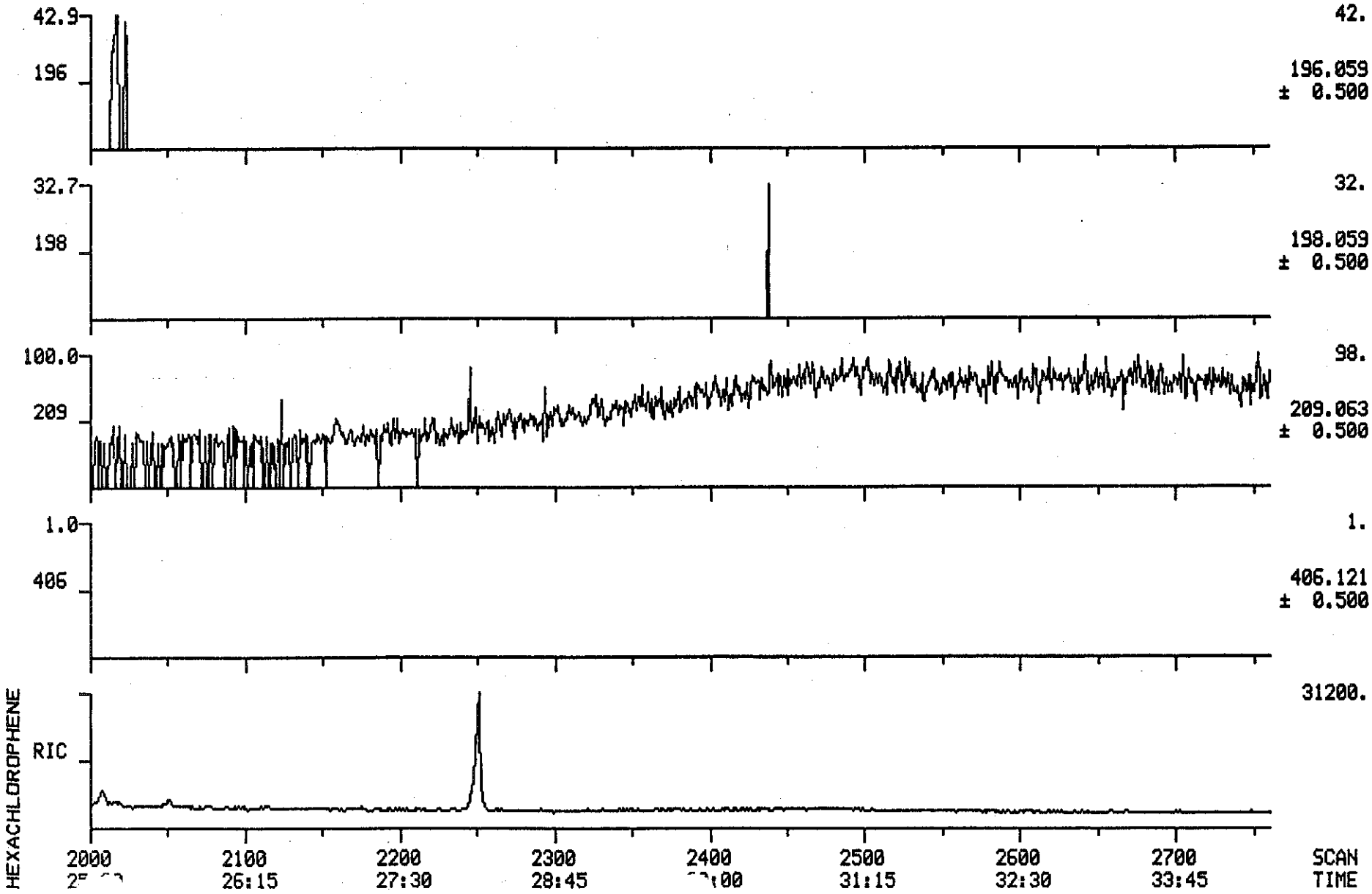


ARAMITE #1/ARAMITE #2

No

0003304

RIC+MASS CHROMATOGRAMS DATA: U7038 #2008 SCANS 2000 TO 2760
07/29/92 20:09:00 CALI: U7038 #3
SAMPLE: 23727-01 WATER 8270CP-AP9-A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/940.ML NA M
RANGE: G 1,2760 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



No

GC/MS SEMIVOA

METHOD/TEST 8270

INSTRUMENT 11

INITIAL CALIBRATION DATE 04/08/92

ANALYSIS RUN DATE 07/30/92

SAMPLES ASSOCIATED SCS, DCS

Enseco - Rocky Mountain
Analytical Laboratory

BNA CONTINUOUS EXTRACTOR WORKSHEET

Project No.: ____
page 1 of 1

Analyte: Base/Neutral — Refinery
Acid
BNA (combined)
TCLP (combined)
OTHER _____

CH2Cl2 Brand B+J Lot No. BC858

QC LOT NO.: 11JUL921A
QC RUN NO.: 11JUL921A
TCLP LBL NO.: _____

LIMS Test Code: 8-625-A

SCS I.D. MS BNA SCS
CONC. 200/100 ug/ml
Ver. No. 5872
Amount Added 1.0 ml
Date Made 7-9-92
Made by BF
Date Added 7-11-92
Added By LJ
Standard Addition

LCS I.D. BNA DCS
CONC. 200/100 ug/ml
Ver. No. 5867
Amount Added 0.5 ml
Date Made 6-30-92
Made By KAI/LJ
Date Added 7-11-92
Added By LJ
Witnessed By LJ

Sample No.	Amt. Ext. (ml)	Vol. C.F. H2O (mL)	Init pH	B/N pH	B/N D/T Start	Br	B/N D/T Stop	Chk	Acid pH	Acid D/T Start	Br	Acid D/T Stop	Chk	If Refinery Col. Cleaned: B/N Conc Vol.	Date	Br	Vol. Onto Col.	Date Clnd	Br	Final Vol. (ml)	Date Conc	Conc Br
DCS1	1000	500	7	>12	7-11-92 13:00	LJ	7-12-92 11:00	✓	✓	7-12-92 12:30	✓	7-13-92 09:00	✓							1.0	7-14-92	LJ
DCS2																						
BL																						

Comments:

Reviewed by: TC
Date: 7-15-92

ENSECO - ROCKY MOUNTAIN ANALYTICAL LABORATORY GC/MS-SEMIVOLATILE ANALYSIS

PAGE NUMBER 158 (cont'd) INSTRUMENT ID "U"

GC CONDITIONS									DETECTOR				
COL	PHASE	INJ TEMP	INIT TEMP	INIT TIME	RAMP RATE	FINAL TEMP	FLOW cc/min	PRESS psig	TYPE	EM	VAC. RANGE	SOURCE TEMP.	MASS RANGE
30m	DB-625	275	30 C	1.00 MIN	10C/MIN	325 C	--------	12	MS		10^-7 TORR	100 C	35-500/.75S

COMMENTS:

PROJ	SAMPLE	AMT	DIL/VOL	DATE (1992)	INIT	FILE	DISK	TAPE	IS OK	SS OK	DIL OK	COMMENTS
	~~07~~		~~100/1~~	~~7/30~~	~~CR~~	~~U7091~~	~~2~~	~~CR~~	~~7/30/92~~			~~AAP4~~
	~~16BR~~	~~980-1~~	↓			~~92~~		~~CR~~	↓			↓
DFTPP	50ppm			7/30	CR	U7077	2					Hit at 22:54
MSLSTD	↓					78						Fixed / Updated
AP4STD	↓					79						No AA dimethyl/phenthylamine.
	BL	1000-1	100/1			U7080			No	—	—	21 Jul 92-4A (RR)
	BL					81			No	—	—	23 Jul 92-1A (RR)
	BL					82			No	—	—	12 Jul 92-2A (RR)
AP4STD	50ppm					83						~~ABL~~ No AA dimethyl/phenthyl
	BL	1000-1	100/1			84			✓	✓	✓	~~AAP4~~ ABL (OK)
	CHK					U7085						~~AAP4~~ ABL.
	01	950-1				86						AAP4
	02	975-1				87						
	03	1000-1	50/1			88			Not	run	because carbole	AP4STD.

20003000

EMSECO - ROCKY MOUNTAIN ANALYTICAL LABORATORY GC/MS-SEMIVOLATILE ANALYSIS

PAGE NUMBER 159 INSTRUMENT ID "U"

GC CONDITIONS									DETECTOR				
COL	PHASE	INJ TEMP	INIT TEMP	INIT TIME	RAMP RATE	FINAL TEMP	FLOW cc/min	PRESS psig	TYPE	EM	VAC. RANGE	SOURCE TEMP.	MASS RANGE
10m	DB-625	275	30 C	1.00 MIN	10C/MIN	325 C	--------	12	MS		10^-7 TORR	100 C	35-500/.75S

COMMENTS:

PROJ	SAMPLE	AMT	DIL/VOL	DATE	INIT	FILE	DISK	TAPE	IS OK	SS OK	DIL OK	COMMENTS	
	04	1000-1	100/1	7/30	CR	U7089	2					MAP4	
	05	950-1				90							
	06	925-1				91							
	07	1000-1				92			NST RUN.				
	16RR	980-1				U7093				CR 7/30		; Hexa, IS.	
	BL	1000-1	100/1	7/30	CR	U7086	2		✓	✓	✓	16 Jul 92-5A	OK
	DCS1					87			✓	✓	✓		OK
	DCS2					88			✓	✓	✓		OK
	BL					89			✓	✓	✓	11 Jul 92-1A	OK
	DCS1					U7090			✓	✓	✓		OK
	DCS2					91			✓	✓	✓		OK
FC43	-	-	-	7/31	TB	073192CU	2:						
DFTPP	50ppm	-	-			U7092						1	

000308

BNA, S LIBRARIES

ANALYST: TB DATE: 7/31/92

INTERNAL STANDARD AREA CHECK

STANDARD

000309

FILENAME: U7078

	COMPOUND	AREA IN STANDARD	AREA LIMITS % OF AREA IN STANDARD LOW	HIGH
IS # 1	CI30 1,4-DICHLOROBEN	8243.	50	200
IS # 2	CI40 NAPHTHALENE-D8	32305.	50	200
IS # 3	CI50 ACENAPHTHENE-D1	17282.	50	200
IS # 4	CI60 PHENANTHRENE-D1	28420.	50	200
IS # 5	CI70 CHRYSENE-D12	16954.	50	200
IS # 6	CI75 PERYLENE-D12	17410.	50	200

SAMPLES

% OF AREA IN STANDARD

FILENAME	IS#1	IS#2	IS#3	IS#4	IS#5	IS#6
U7080	53	53	51	46*	40*	42*
U7081	51	50	48*	42*	39*	41*
U7082	55	51	50	46*	37*	39*
U7083	106	112	116	120	120	118
U7084	89	90	86	84	95	106
U7085	99	98	98	100	103	111
U7086	106	105	104	102	109	122
U7087	104	105	104	104	112	122
U7088	103	103	105	102	116	126
U7089	82	81	79	76	79	89
U7090	115	118	115	113	118	117
U7091	83	82	81	80	81	86

NOTE: * INDICATES THAT AN INTERNAL STANDARD AREA IS OUTSIDE QC LIMITS

SPECTRUM: U7077
INSTRUMENT: 4500
SAMPLE: DFTPP
CONDITIONS: GC DESC QD
253

07/30/92

RIC: 10352.
ANALYST: TB

000310

SPECTRUM FIT TO DFTPP CRITERIA

M/Z	INTEN	LIMITS	FOUND RA	
51	515.	30-60% OF 198	43.35	OK
68	0.	< 2% OF 69	0.00	OK
69	608.	NOT SPECIFIED	51.18	OK
70	0.	< 2% OF 69	0.00	OK
127	605.	40-60% OF 198	50.93	OK
197	0.	< 1% OF 198	0.00	OK
198	1188.	100% (BASE PK)	100.00	OK
199	85.	5-9% OF 198	7.15	OK
275	276.	10-30% OF 198	23.23	OK
365	32.	> 1% OF 198	2.69	OK
441	111.	< 100% OF 443	75.00	OK
442	668.	> 40% OF 198	56.23	OK
443	148.	17-23% OF 442	22.16	OK

CR 7/30/92

Mass List
07/30/92 22:54:00 + 3:10
Sample: DFTPP
Conds.: GC DESC GD

Data: U7077 # 253
Cali: .073092CU # 3

Base m/z: 198
RIC: 10352.

000311

35 0.00 0.00 0. Minima Min Inten: 47.
443 Maxima # 0

Mass	% RA	% RIC	Inten.
35?F	4.88	0.56	58.
36?F	17.26	1.98	205.
38?F	7.49	0.86	89.
39?F	4.38	0.50	52.
40	18.01	2.07	214.
44 F	18.52	2.13	220.
49 F	4.97	0.57	59.
50 F	10.52	1.21	125.
51 F	43.35	4.97	515.
57 F	6.48	0.74	77.
69 F	51.18	5.87	608.
75 F	8.33	0.96	99.
77 F	49.83	5.72	592.
79	3.96	0.45	47.
81 F	5.64	0.65	67.
84	4.80	0.55	57.
93 F	4.63	0.53	55.
107 F	12.46	1.43	148.
110 F	30.56	3.51	363.
111 F	5.05	0.58	60.
117	5.39	0.62	64.
127 F	50.93	5.84	605.
128 F	4.63	0.53	55.
129	15.74	1.81	187.
167 F	6.40	0.73	76.
175 F	3.96	0.45	47.
179 F	4.12	0.47	49.
186 F	10.52	1.21	125.
187 F	4.46	0.51	53.
196 F	4.55	0.52	54.
198 F	100.00	11.48	1188.
199 F	7.15	0.82	85.
204 F	3.96	0.45	47.
205 F	5.13	0.59	61.
206 F	20.20	2.32	240.
207 F	5.56	0.64	66.
217 F	6.40	0.73	76.
221 F	10.94	1.26	130.
224 F	11.11	1.28	132.
227 F	5.39	0.62	64.
244 F	8.84	1.01	105.
255 F	37.21	4.27	442.
256 F	7.74	0.89	92.
274 F	5.05	0.58	60.
275 F	23.23	2.67	276.
276 F	4.55	0.52	54.
296 F	6.57	0.75	78.
423 F	4.55	0.52	54.
441 F	9.34	1.07	111.
442 F	56.23	6.45	668.
443 F	12.46	1.43	148.

Mass List
07/30/92 22:54:00 + 3:10
Sample: DFTPP
Conds.: GC DESC QD

Data: U7077 # 253
Cali: 073092CU # 3

Base m/z: 198
RIC: 10352.

000312

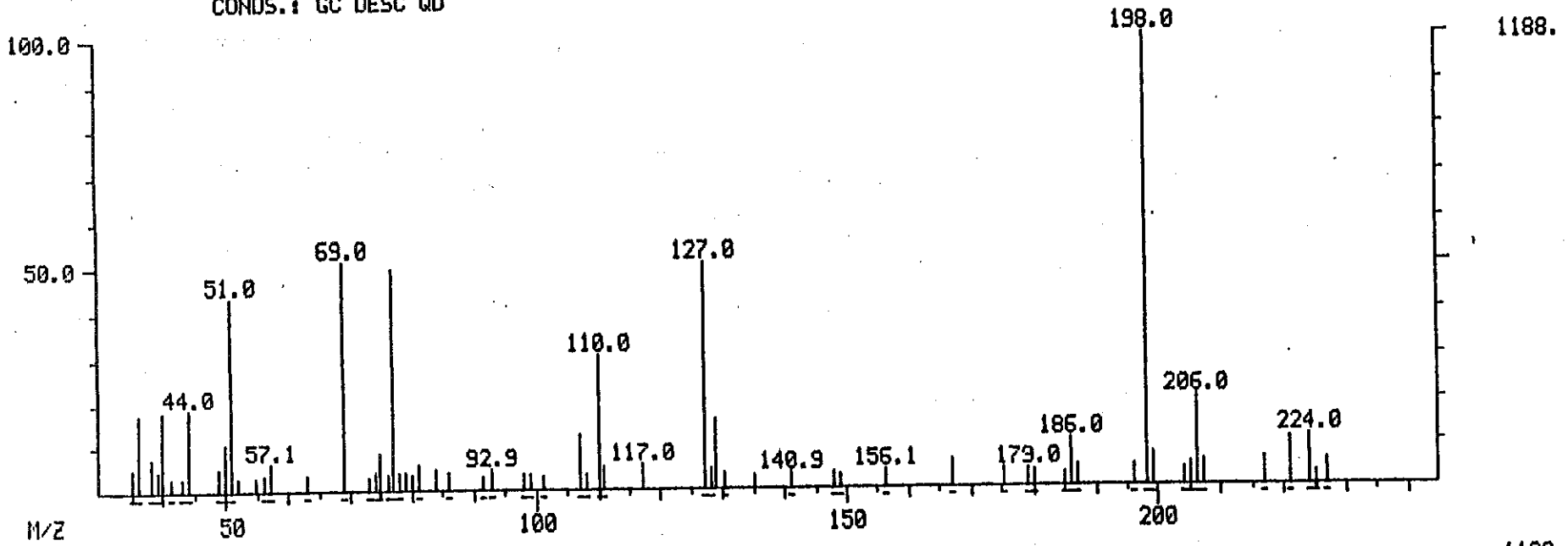
68	0.00	0.00	0.	Minima	Min Inten:	0.
70				Maxima	# 0	
Mass	% RA	% RIC	Inten.			
69 F	51.18	5.87	608.			

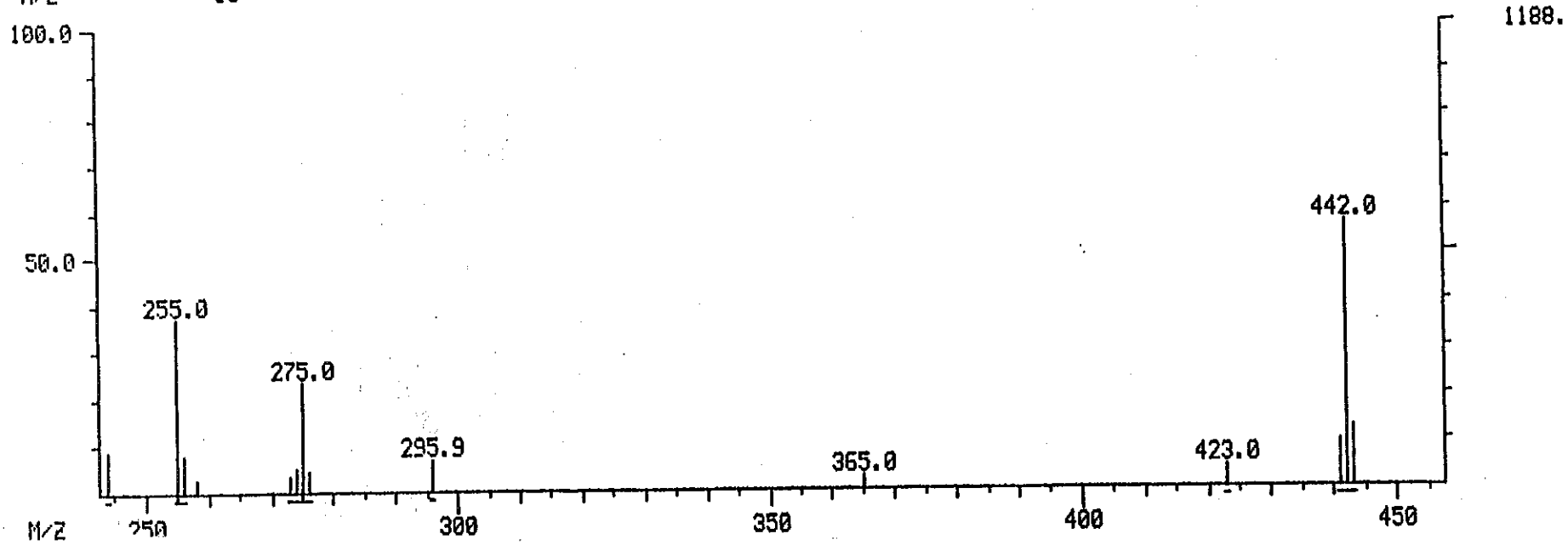
000313

MASS SPECTRUM
07/30/92 22:54:00 + 3:10
SAMPLE: DFTPP
CONDS.: GC DESC QD

DATA: U7077 #253
CALI: 073092CU #3

BASE M/Z: 198
RIC: 10352.



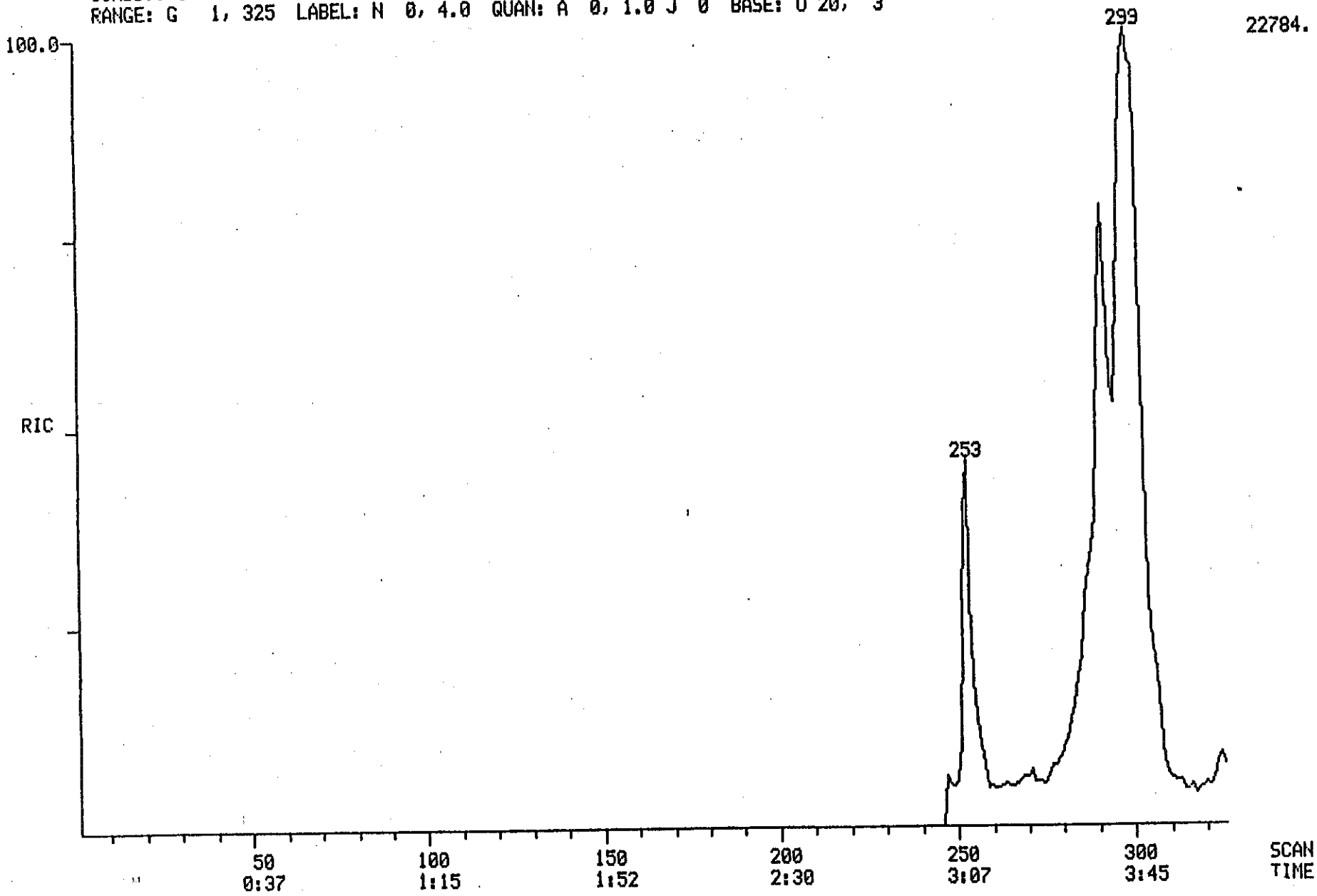


000314

RIC
07/30/92 22:54:00
SAMPLE: DFTPP
CONDS.: GC DESC QD
RANGE: G 1, 325 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: U7077 #253
CALI: 073092CU #3

SCANS 1 TO 325



Fixed / Updated
CR 7/21/92 00315

Enseco GC/MS
HSL CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM HSL STD	U7078	07/30/92	23:07:00
INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

Library Entry		Compound	Initial Calibration Response Factor Avg	Min	% RSD	Max	Continuing Calibration Response Factor	Min	% Diff	Max
S1	15	B003 N-NITROSODIMETH	0.949		4.2		1.156		-21.8	
S1	100	B028 ANALINE	1.900		5.5		1.768		6.9	
S1	105	C315 PHENOL	1.811		5.5	30.0	2.129		-17.6	30.0
S1	110	C325 BIS(2-CHLOROETH	1.475		4.9		1.684		-14.2	
S1	115	C330 2-CHLOROPHENOL	1.312		5.1		1.525		-16.2	
S1	125	C335 1,3-DICHLOROBEN	1.448		4.0		1.578		-9.0	
S1	130	C340 1,4-DICHLOROBEN	1.523		3.9	30.0	1.704		-11.9	30.0
S1	145	C345 BENZYL ALCOHOL	0.776		6.6		0.915		-17.9	
S1	150	C350 1,2-DICHLOROBEN	1.408		4.2		1.573		-11.7	
S1	160	C355 2-METHYLPHENOL	1.213		5.5		1.519		-25.2	
S1	165	C360 BIS(2-CHLOROISO	2.292		5.2		2.659		-16.0	
S1	185	C365 4-METHYLPHENOL	1.265		6.6		1.653		-30.7	
S1	190	C370 N-NITROSO-DI-N-	1.043	0.050	5.4		1.304	0.050	-25.0	
S1	200	C375 HEXACHLOROETHAN	0.593		4.4		0.659		-11.1	
S2	10	C410 NITROBENZENE	0.445		8.3		0.416		6.5	
S2	20	C415 ISOPHORONE	0.813		6.6		0.874		-7.5	
S2	25	C420 2-NITROPHENOL	0.202		9.6	30.0	0.228		-12.9	30.0
S2	30	C425 2,4-DIMETHYLPHE	0.311		10.6		0.321		-3.2	
S2	35	C435 BIS(2-CHLOROETH	0.452		9.2		0.489		-8.2	
S2	40	C440 2,4-DICHLOROPHE	0.287		10.3	30.0	0.300		-4.5	30.0
S2	45	C430 BENZOIC ACID	0.164		17.0		0.173		-5.5	
S2	55	C445 1,2,4-TRICHLORO	0.324		6.4		0.316		2.5	
S2	60	C450 NAPHTHALENE	1.055		8.1		1.118		-6.0	
S2	80	C455 4-CHLOROANALINE	0.381		14.3		0.315		17.3	
S2	95	C460 HEXACHLOROBUTAD	0.170		6.0	30.0	0.156		8.2	30.0
S2	130	C465 4-CHLORO-3-METH	0.290		10.3	30.0	0.351		-21.0	30.0
S2	145	C470 2-METHYLNAPHTHA	0.606		7.8		0.667		-10.1	
S3	20	C510 HEXACHLOROCYCLO	0.489	0.050	8.9		0.339	0.050	30.7	
S3	25	C515 2,4,6-TRICHLORO	0.394		10.9	30.0	0.363		7.9	30.0
S3	30	C520 2,4,5-TRICHLORO	0.484		5.8		0.423		12.6	
S3	40	C525 2-CHLORONAPHTHA	1.333		8.7		1.274		4.4	
S3	45	C530 2-NITROANALINE	0.435		9.1		0.442		-1.6	
S3	55	C535 DIMETHYLPHTHALA	1.361		8.6		1.358		0.2	
S3	65	C540 ACENAPHTHYLENE	1.983		8.8		1.875		5.4	
S3	70	C543 2,6-DINITROTOLU	0.326		8.4		0.348		-6.7	
S3	75	C545 3-NITROANALINE	0.318		15.5		0.327		-2.8	
S3	80	C550 ACENAPHTHENE	1.231		8.2	30.0	1.214		1.4	30.0
S3	85	C555 2,4-DINITROPHEN	0.153	0.050	20.9		0.168	0.050	-9.8	
S3	90	C565 DIBENZOFURAN	1.694		8.9		1.695		-0.1	
S3	95	C560 4-NITROPHENOL	0.137	0.050	9.3		0.109	0.050	20.4	
S3	105	C570 2,4-DINITROTOLU	0.393		11.2		0.471		-19.8	
S3	130	C580 DIETHYLPHTHALAT	1.329		8.5		1.327		0.2	
S3	135	C590 FLUORENE	1.368		8.2		1.372		-0.3	
S3	140	C585 4-CHLOROPHENYL-	0.560		6.8		0.506		9.6	
S3	150	C595 4-NITROANALINE	0.260		28.2		0.248		4.6	
S4	10	C610 4,6-DINITRO-2-M	0.145		13.1		0.162		-11.7	
S4	15	C615 N-NITROSODIPHEN	0.517		8.7	30.0	0.445		13.9	30.0
S4	20	B091 AZOBENZENE	1.034		7.0		1.110		-7.4	
S4	30	C625 4-BROMOPHENYL-P	0.219		7.3		0.206		5.9	
S4	40	C630 HEXACHLOROBENZE	0.261		5.3		0.236		9.6	
S4	50	C635 PENTACHLOROPHEN	0.159		12.5	30.0	0.136		14.5	30.0
S4	65	C640 PHENANTHRENE	1.113		7.3		1.077		3.2	
S4	70	C645 ANTHRACENE	1.109		7.7		1.076		3.0	
S4	80	C646 CARBAZOLE	0.761		11.1		0.833		-9.5	
S4	85	C650 DI-N-BUTYLPHTHA	1.283		7.1		1.463		-14.0	
S4	110	C655 FLUORANTHENE	0.978		7.3	30.0	1.052		-7.6	30.0
S5	10	B113 BENZIDINE	0.104		23.7					
S5	15	C715 PYRENE	1.524		4.3		1.743		-14.4	
S5	40	C720 BUTYLBENZYLPHTH	0.720		5.7		0.974		-35.3	
S5	50	C730 BENZO(A)ANTHRAC	1.157		4.4		1.368		-18.2	
S5	55	C725 3,3'-DICHLOROBE	0.415		12.7		0.282		32.0	
S5	60	C740 CHRYSENE	1.033		3.1		1.108		-7.3	
S5	65	C745 BIS(2-ETHYLHEXY	1.061		5.8		1.536		-44.8	
S6	10	C760 DI-N-OCTYL PHTH	2.124		8.9	30.0	2.188		-3.0	30.0
S6	15	C765 BENZO(B)FLUORAN	1.257		5.7		1.243		1.1	
S6	25	C770 BENZO(K)FLUORAN	1.154		3.3		0.955		17.2	
S6	35	C775 BENZO(A)PYRENE	1.084		4.9	30.0	1.002		7.6	30.0
S6	55	C780 INDENO(1,2,3-CD	0.970		6.4		1.029		-6.1	
S6	60	C785 DIBENZ(A,H)ANTH	0.803		9.2		0.870		-8.3	
S6	65	C790 BENZO(G,H,I)PER	0.839		4.8		0.914		-8.9	

Enseco GC/MS
HSL CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM HSL STD	U7078	07/30/92	23:07:00
INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

Library Entry			Compound	Initial Calibration Response Factor Avg	Min	% RSD Max	Continuing Calibration Response Factor	Min	% Diff Max
S2	2	CS20	NITROBENZENE-D5	0.430		7.5	0.412		4.2
S3	3	CS25	2-FLUOROBIPHENY	1.479		8.5	1.270		14.1
S5	2	CS30	TERPHENYL-D14	0.980		6.1	1.146		-16.9
S1	3	CS45	PHENOL-D5	1.661		4.6	1.827		-10.0
S1	2	CS50	2-FLUOROPHENOL	1.277		3.9	1.415		-10.8
S3	2	CS55	2,4,6-TRIBROMOP	0.176		11.1	0.164		6.8

Enseco GC/MS
HSL CALIBRATION CHECK

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INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

		U7078		HSLU4905		HSLU4901		HSLU4904		HSLU4903		HSLU4902	
Lib	#	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
S1	15	50,	1.156	20,	0.953	50,	0.999	80,	0.940	120,	0.890	160,	0.964
S1	100	50,	1.768	20,	1.756	50,	1.996	80,	1.976	120,	1.824	160,	1.949
S1	105	50,	2.129	20,	1.744	50,	1.728	80,	1.903	120,	1.745	160,	1.935
S1	110	50,	1.684	20,	1.482	50,	1.428	80,	1.523	120,	1.381	160,	1.561
S1	115	50,	1.525	20,	1.286	50,	1.266	80,	1.347	120,	1.251	160,	1.412
S1	125	50,	1.578	20,	1.442	50,	1.431	80,	1.485	120,	1.364	160,	1.518
S1	130	50,	1.704	20,	1.523	50,	1.510	80,	1.588	120,	1.433	160,	1.560
S1	145	50,	0.915	20,	0.721	50,	0.766	80,	0.823	120,	0.734	160,	0.834
S1	150	50,	1.573	20,	1.423	50,	1.385	80,	1.449	120,	1.317	160,	1.467
S1	160	50,	1.519	20,	1.193	50,	1.159	80,	1.258	120,	1.150	160,	1.304
S1	165	50,	2.659	20,	2.358	50,	2.159	80,	2.343	120,	2.172	160,	2.429
S1	185	50,	1.653	20,	1.212	50,	1.189	80,	1.337	120,	1.215	160,	1.372
S1	190	50,	1.304	20,	1.033	50,	0.986	80,	1.066	120,	1.004	160,	1.128
S1	200	50,	0.659	20,	0.592	50,	0.573	80,	0.599	120,	0.566	160,	0.633
S2	10	50,	0.416	20,	0.405	50,	0.413	80,	0.475	120,	0.445	160,	0.489
S2	20	50,	0.874	20,	0.743	50,	0.792	80,	0.864	120,	0.795	160,	0.869
S2	25	50,	0.228	20,	0.183	50,	0.183	80,	0.212	120,	0.203	160,	0.228
S2	30	50,	0.321	20,	0.262	50,	0.306	80,	0.329	120,	0.306	160,	0.351
S2	35	50,	0.489	20,	0.397	50,	0.433	80,	0.472	120,	0.448	160,	0.508
S2	40	50,	0.300	20,	0.245	50,	0.278	80,	0.304	120,	0.286	160,	0.324
S2	45	50,	0.173			50,	0.123	80,	0.169	120,	0.186	160,	0.176
S2	55	50,	0.316	20,	0.293	50,	0.321	80,	0.338	120,	0.319	160,	0.347
S2	60	50,	1.118	20,	0.940	50,	1.010	80,	1.095	120,	1.064	160,	1.167
S2	80	50,	0.315	20,	0.295	50,	0.372	80,	0.407	120,	0.392	160,	0.441
S2	95	50,	0.156	20,	0.158	50,	0.168	80,	0.178	120,	0.164	160,	0.183
S2	130	50,	0.351	20,	0.247	50,	0.278	80,	0.307	120,	0.293	160,	0.326
S2	145	50,	0.667	20,	0.546	50,	0.573	80,	0.645	120,	0.606	160,	0.659
S3	20	50,	0.339	20,	0.427	50,	0.481	80,	0.502	120,	0.485	160,	0.548
S3	25	50,	0.363	20,	0.338	50,	0.377	80,	0.411	120,	0.389	160,	0.454
S3	30	50,	0.423			50,	0.457	80,	0.485	120,	0.471	160,	0.522
S3	40	50,	1.274	20,	1.174	50,	1.307	80,	1.374	120,	1.314	160,	1.495
S3	45	50,	0.442			50,	0.391	80,	0.439	120,	0.425	160,	0.486
S3	55	50,	1.358	20,	1.193	50,	1.358	80,	1.408	120,	1.333	160,	1.513
S3	65	50,	1.875	20,	1.741	50,	1.966	80,	1.982	120,	1.992	160,	2.235
S3	70	50,	0.348	20,	0.295	50,	0.315	80,	0.335	120,	0.319	160,	0.368
S3	75	50,	0.327			50,	0.250	80,	0.337	120,	0.318	160,	0.366
S3	80	50,	1.214	20,	1.091	50,	1.201	80,	1.260	120,	1.233	160,	1.371
S3	85	50,	0.168			50,	0.111	80,	0.153	120,	0.157	160,	0.189
S3	90	50,	1.695	20,	1.494	50,	1.641	80,	1.747	120,	1.682	160,	1.907
S3	95	50,	0.109			50,	0.120	80,	0.148	120,	0.133	160,	0.145
S3	105	50,	0.471	20,	0.338	50,	0.370	80,	0.407	120,	0.396	160,	0.456
S3	130	50,	1.327	20,	1.167	50,	1.322	80,	1.367	120,	1.307	160,	1.480
S3	135	50,	1.372	20,	1.198	50,	1.338	80,	1.437	120,	1.373	160,	1.495
S3	140	50,	0.506	20,	0.502	50,	0.555	80,	0.588	120,	0.556	160,	0.600
S3	150	50,	0.248			50,	0.169	80,	0.242	120,	0.288	160,	0.342
S4	10	50,	0.162			50,	0.120	80,	0.148	120,	0.145	160,	0.166
S4	15	50,	0.445	20,	0.473	50,	0.487	80,	0.519	120,	0.519	160,	0.589
S4	20	50,	1.110	20,	0.975	50,	0.973	80,	1.055	120,	1.018	160,	1.147
S4	30	50,	0.206	20,	0.200	50,	0.219	80,	0.217	120,	0.214	160,	0.244
S4	40	50,	0.236	20,	0.248	50,	0.263	80,	0.260	120,	0.250	160,	0.283
S4	50	50,	0.136			50,	0.137	80,	0.160	120,	0.155	160,	0.185
S4	65	50,	1.077	20,	1.024	50,	1.100	80,	1.131	120,	1.069	160,	1.241
S4	70	50,	1.076	20,	1.004	50,	1.066	80,	1.115	120,	1.122	160,	1.237
S4	80	50,	0.833	20,	0.658	50,	0.734	80,	0.785	120,	0.739	160,	0.888
S4	85	50,	1.463	20,	1.167	50,	1.241	80,	1.338	120,	1.265	160,	1.402
S4	110	50,	1.052	20,	0.911	50,	0.953	80,	1.024	120,	0.924	160,	1.080
S5	10					50,	0.127	80,	0.074	120,	0.094	160,	0.121
S5	15	50,	1.743	20,	1.502	50,	1.540	80,	1.630	120,	1.468	160,	1.482
S5	40	50,	0.974	20,	0.662	50,	0.716	80,	0.768	120,	0.706	160,	0.749
S5	50	50,	1.368	20,	1.142	50,	1.156	80,	1.180	120,	1.084	160,	1.223
S5	55	50,	0.282	20,	0.383	50,	0.390	80,	0.388	120,	0.405	160,	0.508
S5	60	50,	1.108	20,	1.037	50,	1.035	80,	1.039	120,	0.981	160,	1.071
S5	65	50,	1.536	20,	0.985	50,	1.020	80,	1.126	120,	1.053	160,	1.120
S6	10	50,	2.188	20,	1.856	50,	2.102	80,	2.389	120,	2.135	160,	2.139
S6	15	50,	1.243	20,	1.228	50,	1.236	80,	1.336	120,	1.164	160,	1.321
S6	25	50,	0.955	20,	1.164	50,	1.158	80,	1.210	120,	1.112	160,	1.125
S6	35	50,	1.002	20,	1.071	50,	1.060	80,	1.144	120,	1.015	160,	1.129
S6	55	50,	1.029	20,	0.927	50,	0.926	80,	0.950	120,	0.970	160,	1.077
S6	60	50,	0.870	20,	0.729	50,	0.754	80,	0.796	120,	0.816	160,	0.920
S6	65	50,	0.914	20,	0.832	50,	0.845	80,	0.812	120,	0.801	160,	0.903

Enseco GC/MS
HSL CALIBRATION CHECK

CONTIN. CALIBRATION:	50 PPM HSL STD	U7078	07/30/92	23:07:00
INITIAL CALIBRATION:	20 PPM HSL STD	HSLU4905	04/08/92	11:04:00
INITIAL CALIBRATION:	50 PPM HSL STD	HSLU4901	04/08/92	7:06:00
INITIAL CALIBRATION:	80 PPM HSL STD	HSLU4904	04/08/92	10:12:00
INITIAL CALIBRATION:	120 PPM HSL STD	HSLU4903	04/08/92	9:20:00
INITIAL CALIBRARION:	160 PPM HSL STD	HSLU4902	04/08/92	8:15:00

		U7078		HSLU4905		HSLU4901		HSLU4904		HSLU4903		HSLU4902	
Lib	#	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
S2	2	50,	0.412	20,	0.393	50,	0.410	80,	0.453	120,	0.422	160,	0.473
S3	3	50,	1.270	20,	1.300	50,	1.455	80,	1.530	120,	1.462	160,	1.647
S5	2	50,	1.146	20,	0.916	50,	0.979	80,	1.079	120,	0.960	160,	0.967
S1	3	100,	1.827	40,	1.631	100,	1.618	160,	1.739	240,	1.573	320,	1.744
S1	2	100,	1.415	40,	1.266	100,	1.308	160,	1.332	240,	1.202	320,	1.275
S3	2	100,	0.164	40,	0.146	100,	0.174	160,	0.183	240,	0.176	320,	0.200

Name List: HEDR1
File Name: U7078

Entry # 1 of 1

000319

(1)Format: BNACLP
(3)Sample ID: SSTD50
(5)Matrix: NA
(7)Fraction: BNA
(10)Analyst: CR
(12)Extract Volume: NA
(14)Int. Ext. Vol.: NA
(16)Sample Amount: NA
(19)Run Factor: NA

(2)Case: STDU
(4)Level: NA
(6)Lab Sample ID: V#6433
(8)Type: CAL
(11)Quan List Units: UG/ML
(13)Extract Dilution: NA
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: NA

7/30/92 23:07:17 SCAN 1 OF 2760
Acquisition started

Acquire
07/30/92 23:07:00 + 0:04
Sample: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6433,BNA,CAL ,
Conds.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M
Formula: NANA
Submitted by: RMAL

Run 2:U7078
Free sectors: 15996
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 5 of 2760

Weight: 0.000
Acct. No: BNACLP

****
GC PARAMETERS
****

Loaded GC Desc:ST Current GC oven tmp: 28 DegC
Current GC Desc:ST GC elapsed time : 0: 3 min

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

Injector : 275 DegC
Int. oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

****
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

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	

7/30/92 23:41:50
ACQUISITION COMPLETED
SCANS 1 TO 2760 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec	
Centroid	2760	500.9	2070.0	24.2	66737.	24.	32.

7/30/92 23:46:12

DIAGNOSTIC REPORT

PROCEDURE: TCA
DATA FILE: U7078
REFERENCE: 11TABLE
NAME LIST: LLNL
REPORT: ISO1

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

000320

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	9	8	2	99	ISO1/TCO1
3	3	1	65	18	18	1	129	ISO2/TCO2
3	3	1	65	12	11	2	90	ISO3/TCO3
3	3	1	32	18	18	1	76	ISO4/TCO4
3	3	1	32	11	11	2	77	ISO5/TCO5
3	3	1	6	9	9	1	48	ISO6/TCO6
3	3	1	0	15	14	32	60	ISO7/TCO7
1	1	1	0	4	4	1	71	ISO8/TCO8

82 COMPOUNDS PROCESSED, 79 FOUND

COMPOUND NO	LIB	ENTRY	SEARCH REF	SEARCH PRED	SEARCH SEL	DELTA	PEAKS	SAT FIT	SAT PEAKS	CHRO M/Z	CHRO TOP	DELTA	PEAKS
1	S1	1	-577	573	573	.	1	969	.	152	574	1	1
2	S1	15	-201	197	196	-1	2	989	.	74	196	.	1
3	S1	2	-380	376	377	1	1	989	.	112	377	.	1
4	S1	100	-526	522	.	.	.	.	.	93	.	.	.
5	S1	3	-529	525	526	1	1	973	.	99	526	.	1
6	S1	105	-531	527	528	1	1	994	.	94	528	.	1
7	S1	110	-541	537	536	-1	1	974	.	93	536	.	1
8	S1	115	-544	540	540	.	1	996	.	128	540	.	1
9	S1	125	-568	564	563	-1	1	989	.	146	563	.	1
10	S2	1	-805	800	801	1	1	992	.	136	800	-1	1
11	S3	1	-1148	1142	1142	.	1	993	.	164	1142	.	1
12	S1	130	-581	577	576	-1	1	988	.	146	576	.	1
13	S1	150	-606	601	601	.	1	991	.	146	600	-1	1
14	S1	145	-608	603	604	1	1	995	.	108	604	.	1
15	S1	160	-631	626	628	2	1	980	.	108	628	.	1
16	S1	165	-633	628	628	.	1	987	.	45	628	.	1
17	S1	190	-656	651	651	.	1	987	.	70	651	.	1
18	S1	185	-660	655	656	1	1	992	.	108	656	.	1
19	S1	200	-664	659	658	-1	1	995	.	117	658	.	1
20	S2	2	-676	671	671	.	1	999	.	82	671	.	1
21	S2	10	-680	675	675	.	1	998	.	77	675	.	1
22	S2	20	-727	722	721	-1	1	971	.	82	721	.	1
23	S2	25	-738	733	732	-1	1	981	.	139	732	.	1
24	S2	30	-756	751	751	.	1	990	.	107	751	.	1
25	S2	35	-773	768	767	-1	1	997	.	93	767	.	1
26	S2	45	-784	779	783	4	1	996	.	122	783	.	1
27	S2	40	-785	780	781	1	1	994	.	162	781	.	1
28	S2	55	-798	793	792	-1	1	992	.	180	792	.	1
29	S2	60	-810	805	804	-1	1	997	.	128	804	.	1
30	S2	80	-827	822	.	.	.	.	.	127	.	.	.
31	S2	95	-838	833	832	-1	1	995	.	225	832	.	1
32	S2	130	-929	924	925	1	1	986	.	107	925	.	1
33	S2	145	-945	939	939	.	1	988	.	142	939	.	1
34	S3	20	-977	971	971	.	1	995	.	237	971	.	1
35	S3	25	-1005	999	999	.	2	994	.	196	999	.	1
36	S4	1	-1444	1437	1437	.	1	989	.	188	1437	.	1
37	S3	30	-1012	1007	1007	.	1	985	.	196	1007	.	1
38	S3	3	-1022	1016	1016	.	1	997	.	172	1016	.	1
39	S3	40	-1039	1033	1033	.	1	1000	.	162	1033	.	1
40	S3	45	-1066	1060	1060	.	1	995	.	65	1060	.	1
41	S3	55	-1109	1103	1103	.	1	968	.	163	1103	.	1
42	S3	70	-1118	1112	1112	.	1	989	.	165	1112	.	1
43	S3	65	-1120	1114	1113	-1	1	996	.	152	1113	.	1
44	S3	75	-1149	1143	1143	.	1	996	.	138	1143	.	1
45	S3	80	-1155	1149	1149	.	1	985	.	153	1149	.	1
46	S3	85	-1171	1165	1164	-1	1	986	.	184	1164	.	1
47	S3	90	-1190	1184	1184	.	1	954	.	168	1184	.	1
48	S3	95	-1195	1189	1191	2	1	974	.	109	1190	-1	1
49	S3	105	-1197	1191	1190	-1	1	991	.	165	1190	.	1
50	S3	130	-1252	1246	1246	.	1	951	.	149	1246	.	1
51	S3	135	-1259	1253	1252	-1	1	993	.	166	1252	.	1
52	S3	140	-1265	1258	1258	.	1	988	.	204	1258	.	1
53	S3	150	-1271	1264	1263	-1	2	987	.	138	1263	.	1
54	S4	10	-1277	1270	1271	1	1	980	.	198	1271	.	1
55	S4	15	-1290	1283	1284	1	1	961	.	169	1284	.	1
56	S4	20	-1297	1290	1289	-1	1	998	.	77	1289	.	1
57	S3	2	-1307	1300	1300	.	1	981	.	330	1300	.	1
58	S4	30	-1362	1355	1355	.	1	985	.	248	1354	-1	1
59	S4	40	-1368	1361	1360	-1	1	995	.	284	1360	.	1
60	S5	1	-1979	1970	1970	.	1	981	.	240	1970	.	1
61	S4	50	-1411	1404	1404	.	1	993	.	266	1404	.	1
62	S4	65	-1449	1442	1442	.	1	951	.	178	1442	.	1
63	S4	70	-1460	1453	1452	-1	1	943	.	178	1452	.	1
64	S4	80	-1497	1490	1490	.	1	993	.	167	1490	.	1

						1	938	.	[illegible]	[illegible]			1
65	S4	85	-1583	1575	1575	.	1	981	.	202	1680	.	1
66	S4	110	-1689	1681	1680	-1	1	969	.	264	2236	.	
67	S6	1	-2246	2236	2236	.	.	.	.	184	.	.	.
68	S5	10	-1731	1722	.	.	1	990	.	202	1724	.	1
69	S5	15	-1733	1724	1724	.	1	984	.	244	1766	.	1
70	S5	2	-1775	1766	1766	.	1	990	.	149	1874	.	1
71	S5	40	-1883	1874	1874	.	2	995	.	228	1967	-1	1
72	S5	50	-1978	1968	1968	.	1	979	.	252	1970	.	1
73	S5	55	-1980	1970	1970	.	2	989	.	228	1974	-1	1
74	S5	60	-1985	1975	1975	.	1	986	.	149	1996	.	1
75	S5	65	-2005	1995	1996	1	1	999	.	149	2121	.	1
76	S6	10	-2131	2121	2121	.	2	992	.	252	2171	.	1
77	S6	15	-2182	2171	2171	.	2	996	.	252	2176	.	1
78	S6	25	-2187	2176	2176	.	2	993	.	252	2226	.	1
79	S6	35	-2238	2227	2226	-1	1	991	.	276	2406	.	1
80	S6	55	-2419	2406	2406	.	1	992	.	278	2410	.	1
81	S6	60	-2423	2409	2410	1	1	991	.	276	2444	.	1
82	S6	65	-2459	2445	2444	-1							

000321

RMAL QUANTITATION SUMMARY FILE: U7078
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	574	1	8244.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	800	2	32306.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1142	3	17283.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1437	4	28421.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	1970	5	16955.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2236	6	17411.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	671	2	16649.	0.427	48.319
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1016	3	27446.	1.296	49.022
9	S5# 2	CS30 TERPHENYL-D14	244	1766	5	24283.	0.984	58.221
10	S1# 3	CS45 PHENOL-D5	99	526	1	37652.	1.966	92.931
11	S1# 2	CS50 2-FLUOROPHENOL	112	377	1	29171.	1.508	93.873
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1300	3	7079.	0.165	99.132
13	S1# 15	B003 N-NITROSODIMETHYLAM	74	196	1	11909.	1.200	48.152
14	S1#100	B028 ANALINE	93	536	1	18215.	2.032	43.486
15	S1#105	C315 PHENOL	94	528	1	21935.	2.247	47.359
16	S1#110	C325 BIS(2-CHLOROETHYL)E	93	536	1	17356.	1.836	45.865
17	S1#115	C330 2-CHLOROPHENOL	128	540	1	15718.	1.626	46.892
18	S1#125	C335 1,3-DICHLOROBENZENE	146	563	1	16265.	1.664	47.428
19	S1#130	C340 1,4-DICHLOROBENZENE	146	576	1	17557.	1.727	49.318
20	S1#145	C345 BENZYL ALCOHOL	108	604	1	9433.	1.047	43.721
21	S1#150	C350 1,2-DICHLOROBENZENE	146	600	1	16209.	1.591	49.422
22	S1#160	C355 2-METHYLPHENOL	108	628	1	15653.	1.568	48.425
23	S1#165	C360 BIS(2-CHLOROISOPROP	45	628	1	27398.	2.730	48.687
24	S1#185	C365 4-METHYLPHENOL	108	656	1	17039.	1.688	48.983
25	S1#190	C370 N-NITROSO-DI-N-PROP	70	651	1	13439.	1.329	49.058
26	S1#200	C375 HEXACHLOROETHANE	117	658	1	6788.	0.676	48.686
27	S2# 10	C410 NITROBENZENE	77	675	2	16800.	0.423	49.163
28	S2# 20	C415 ISOPHORONE	82	721	2	35288.	0.880	49.639
29	S2# 25	C420 2-NITROPHENOL	139	732	2	9213.	0.233	49.004
30	S2# 30	C425 2,4-DIMETHYLPHENOL	107	751	2	12948.	0.326	49.152
31	S2# 35	C435 BIS(2-CHLOROETHOXY)	93	767	2	19751.	0.524	46.636
32	S2# 40	C440 2,4-DICHLOROPHENOL	162	781	2	12122.	0.290	51.834
33	S2# 45	C430 BENZOIC ACID	122	783	2	6971.	0.192	44.884
34	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	792	2	12752.	0.294	53.748
35	S2# 60	C450 NAPHTHALENE	128	804	2	45137.	1.107	50.488
36	S2# 80	C455 4-CHLOROANALINE	127	831	2	12707.	0.383	41.070
37	S2# 95	C460 HEXACHLOROBUTADIENE	225	832	2	6315.	0.137	56.961
38	S2#130	C465 4-CHLORO-3-METHYL-P	107	925	2	14181.	0.362	48.468
39	S2#145	C470 2-METHYLNAPHTHALENE	142	939	2	26930.	0.662	50.350
40	S3# 20	C510 HEXACHLOROCYCLOPENT	237	971	3	7326.	0.281	60.323
41	S3# 25	C515 2,4,6-TRICHLOROPHEN	196	999	3	7842.	0.355	51.186
42	S3# 30	C520 2,4,5-TRICHLOROPHEN	196	1007	3	9131.	0.395	53.460
43	S3# 40	C525 2-CHLORONAPHTHALENE	162	1033	3	27527.	1.241	51.357
44	S3# 45	C530 2-NITROANALINE	65	1060	3	9552.	0.482	45.873
45	S3# 55	C535 DIMETHYLPHTHALATE	163	1103	3	29340.	1.352	50.234
46	S3# 65	C540 ACENAPHTHYLENE	152	1113	3	40513.	1.915	48.971
47	S3# 70	C543 2,6-DINITROTOLUENE	165	1112	3	7509.	0.368	47.219
48	S3# 75	C545 3-NITROANALINE	138	1143	3	7067.	0.252	64.874
49	S3# 80	C550 ACENAPHTHENE	153	1149	3	26226.	1.203	50.448
50	S3# 85	C555 2,4-DINITROPHENOL	184	1164	3	3621.	0.156	53.884
51	S3# 90	C565 DIBENZOFURAN	168	1184	3	36615.	1.660	51.063
52	S3# 95	C560 4-NITROPHENOL	109	1190	3	2348.	0.127	42.953
53	S3#105	C570 2,4-DINITROTOLUENE	165	1190	3	10165.	0.458	51.372
54	S3#130	C580 DIETHYLPHTHALATE	149	1246	3	28663.	1.339	49.560
55	S3#135	C590 FLUORENE	166	1252	3	29634.	1.368	50.149
56	S3#140	C585 4-CHLOROPHENYL-PHEN	204	1258	3	10925.	0.500	50.587
57	S3#150	C595 4-NITROANALINE	138	1263	3	5355.	0.120	103.489
58	S4# 10	C610 4,6-DINITRO-2-METHY	198	1271	4	5768.	0.158	51.292
59	S4# 15	C615 N-NITROSODIPHENYLAM	169	1284	4	15805.	0.452	49.208
60	S4# 20	B091 AZOBENZENE	77	1289	4	39442.	1.119	49.603
61	S4# 30	C625 4-BROMOPHENYL-PHENY	248	1354	4	7334.	0.197	52.421
62	S4# 40	C630 HEXACHLOROBENZENE	284	1360	4	8368.	0.228	51.764
63	S4# 50	C635 PENTACHLOROPHENOL	266	1404	4	4849.	0.121	56.428
64	S4# 65	C640 PHENANTHRENE	178	1442	4	38271.	1.077	50.011
65	S4# 70	C645 ANTHRACENE	178	1452	4	38231.	1.077	49.959
66	S4# 80	C646 CARBAZOLE	167	1490	4	29582.	0.644	64.652
67	S4# 85	C650 DI-N-BUTYLPHTHALATE	149	1575	4	51990.	1.498	48.834
68	S4#110	C655 FLUORANTHENE	202	1680	4	37364.	1.080	48.712
69	S5# 10	B113 BENZIDINE	184		5	NOT FOUND		
70	S5# 15	C715 PYRENE	202	1724	5	36938.	1.520	57.339
71	S5# 40	C720 BUTYLBENZYLPHTHALAT	149	1874	5	20636.	0.932	52.247
72	S5# 50	C730 BENZO(A)ANTHRACENE	228	1967	5	28992.	1.396	49.007
73	S5# 55	C725 3,3'-DICHLOROBENZID	252	1970	5	5986.	0.291	48.557
74	S5# 60	C740 CHRYSENE	228	1974	5	23485.	1.069	51.842
75	S5# 65	C745 BIS(2-ETHYLHEXYL)PH	149	1996	5	32551.	1.346	57.073

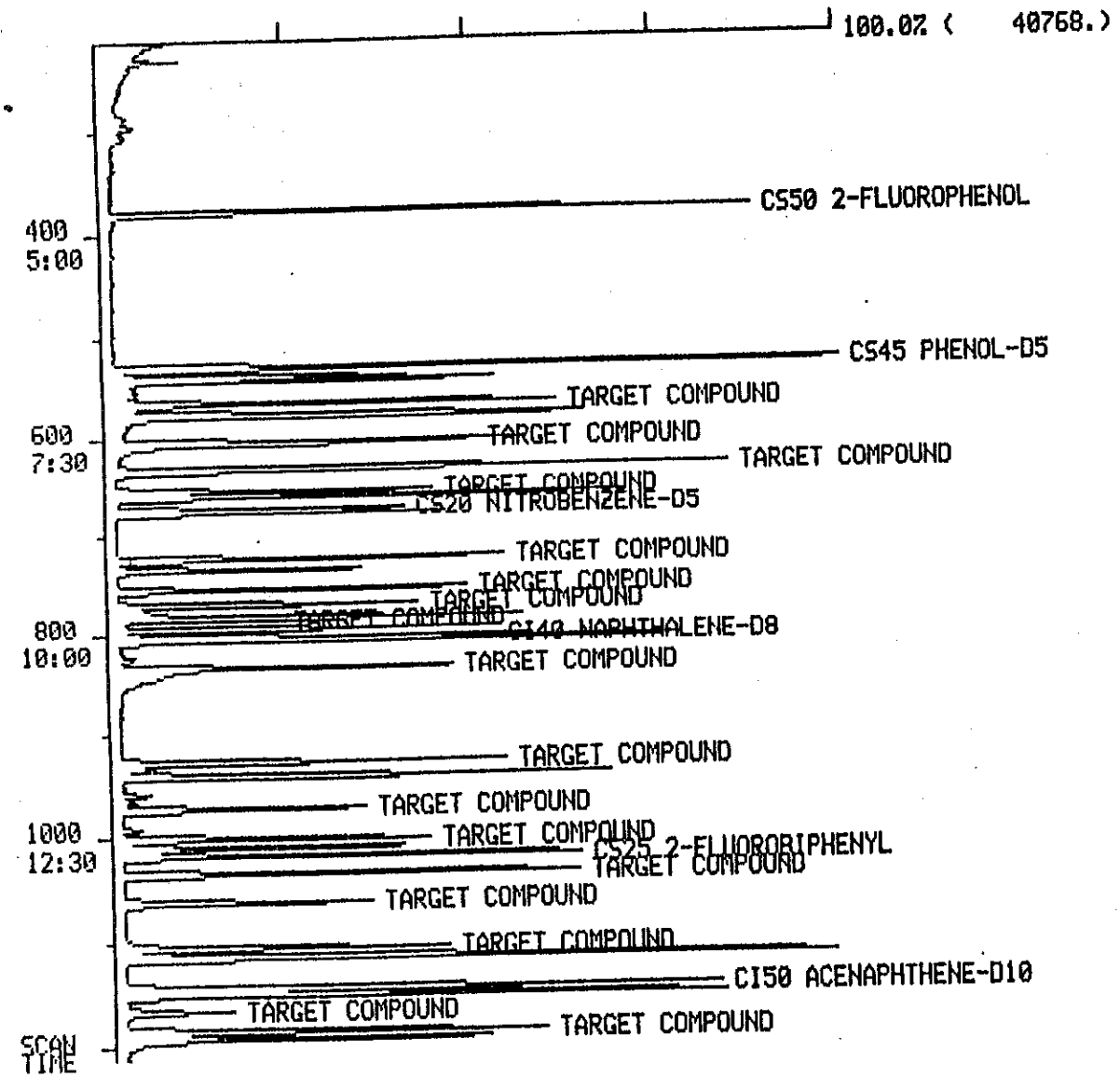
76	S6#	10	C760	DI-N-OCTYL PHTHALAT	149	2121	6	[illegible]	[illegible]	[illegible]
77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	2171	6	27050.	1.251	49.685
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	2176	6	20792.	0.985	48.501
79	S6#	35	C775	BENZO(A)PYRENE	252	2226	6	21806.	1.054	47.548
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	2406	6	22388.	1.080	47.610
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	2410	6	18937.	0.931	46.708
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	2444	6	19882.	0.949	48.1[illegible]

000323

000324

DATA FROM FILE: U7078 SCANS 210 TO 1210 ACQUIRED: 07/30/92 23:07:00
CALI: U7078 #3 OUT OF 210 TO 2760

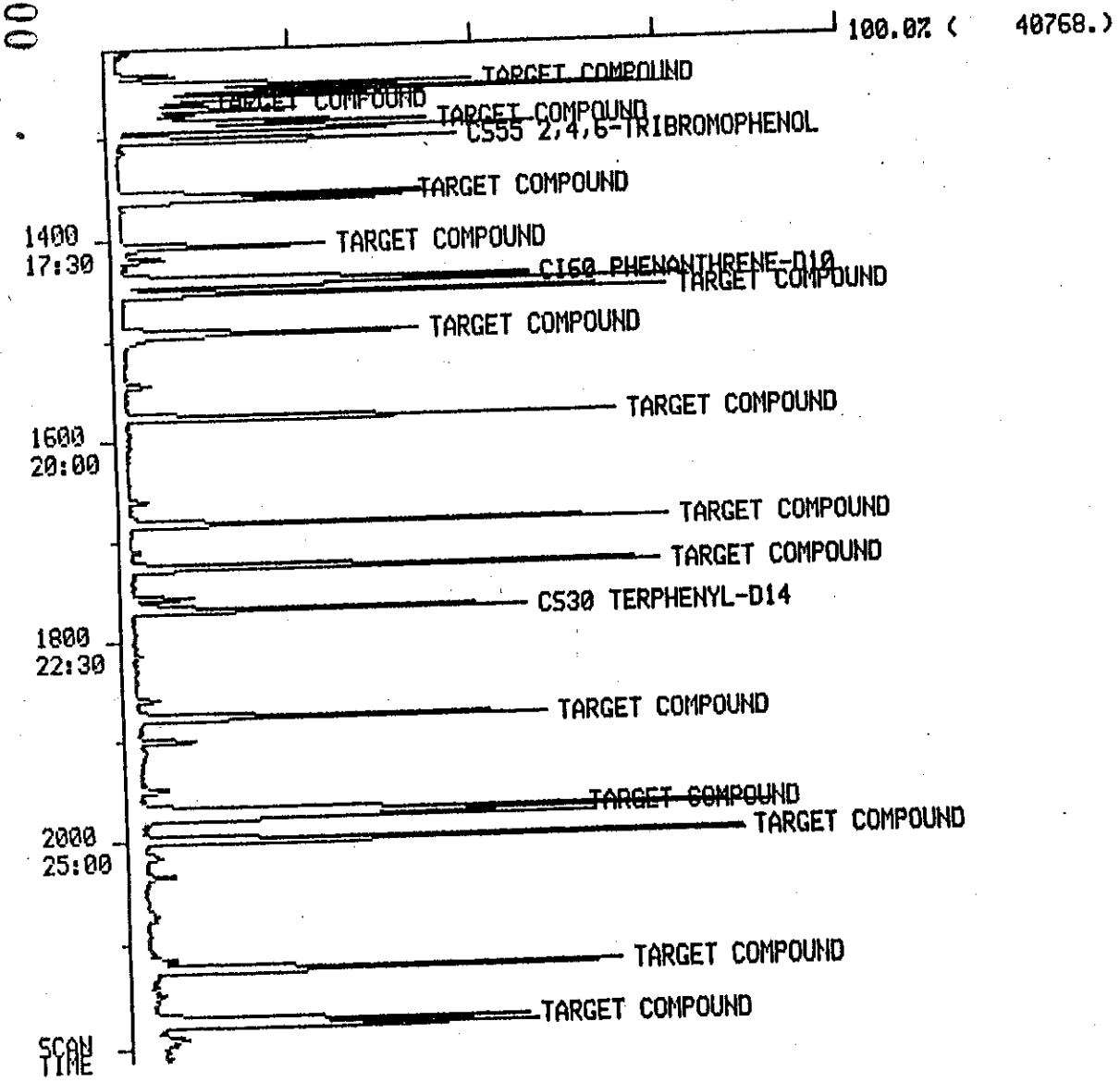
SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6433,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



000325

DATA FROM FILE: U7078 SCANS 1210 TO 2210 ACQUIRED: 07/30/92 23:07:00
CALI: U7078 #3 OUT OF 210 TO 2760

SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6433,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M

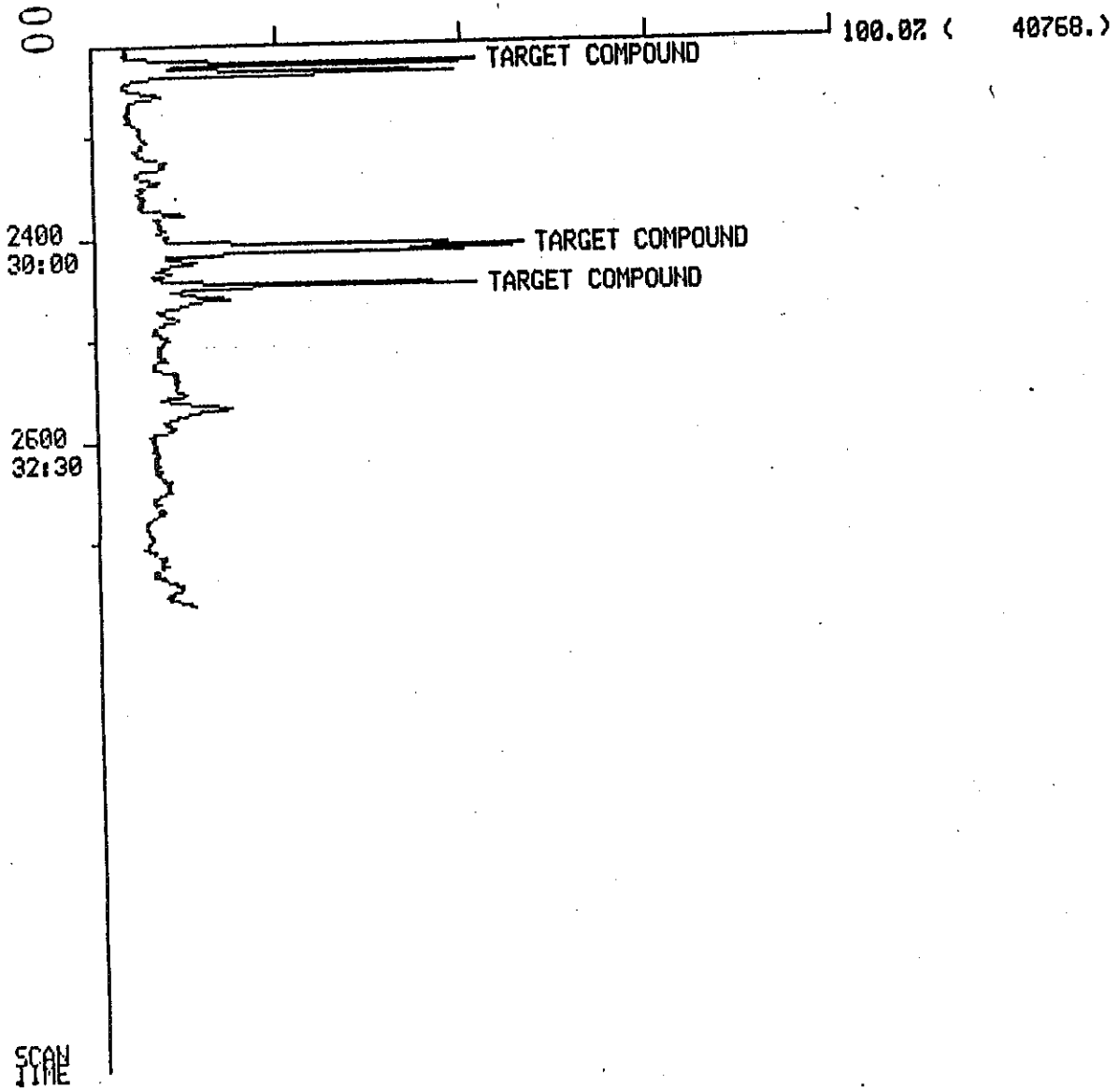


000326

DATA FROM FILE: U7078

SCANS 2210 TO 2760 ACQUIRED: 07/30/92 23:07:00
CALI: U7078 #3 OUT OF 210 TO 2760

SAMPLE: CLP,STDU ,,SSTD50 ,NA ,NA ,V#6433,BNA,CAL ,
CONDS.: UG/ML *NA *100%/NA *(NA/NA)/NA NA M



Duplicate Scan Report
Quan List File: U7078

000327

2 SCAN DIFFERENCE DUPLICATE

COMP#	SCAN	COMP#	SCAN	DIFF.
1	574	19	576	2
3	1142	48	1143	1
5	1970	73	1970	0
10	526	15	528	2
22	628	23	628	0
24	656	26	658	2
32	781	33	783	2
46	1113	47	1112	-1
52	1190	53	1190	0

9 Duplicate pair(s) found within a 2 scan difference.

COMPOUNDS OUT OF SCAN ORDER

COMP#	SCAN
6	2236
9	1766
10	526
12	1300
20	604
24	656
46	1113

QC LOT #: 11 July 92- 1A

DATE ANALYZED: 07/31/92

000328 (OK)

METHOD: 625
ORGANICS BY GC/MS
SCS (SURROGATE CONTROL SAMPLES)
BNA, AQUEOUS, S LIBRARIES

	DATA FILE	RUN FACTOR
ANALYST: CR INSTRUMENT: MATRIX: AQUEOUS	U7089	1.00

SAMPLE #	SAMPLE #	SAMPLE #	SAMPLE #	SAMPLE #
-01	10	19		
02	11	20		
04	13			
05	14			
07	16			
08	17			

COMPOUND	SPIKE CONC. UG/L	MEASURED CONC. UG/L	ACCURACY PERCENT RECOVERY	ACCURACY CONTROL LIMITS
CS20 NITROBENZENE-D5	100.	71.8	72	44-103
CS25 2-FLUOROBIPHENY	100.	57.9	58	41- 99
CS30 TERPHENYL-D14	100.	66.1	66	41-126
CS50 2-FLUOROPHENOL	200.	136.	68	37-100
CS45 PHENOL-D5	200.	134.	67	25-112
CS55 2,4,6-TRIBROMOP	200.	121.	60	40-115

NOTE: 80% OF ANALYTES MUST BE WITHIN CONTROL LIMITS
100% OF ANALYTES ARE WITHIN CONTROL LIMITS

SUPERVISOR APPROVAL :

Sample: U7089 Performance Check: U7077
Sample: U7089 Calibration Stds.: U7078,

Data Reduced by : TB Date: 7/31/92
Data Reviewed by: _____ Date: _____

Data File: U7089

000329

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: -BLANK WATER 11JUL92-1A
Conditions: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
Date Analyzed: 07/31/92 7:59:00 Units: UG/L
Analyst: CR Run Factor: 1.00
Quan List Threshold: 1.00 Surrogate Vol.: 1.00

Surrogate Spike Recoveries
BNA, AQUEOUS, S LIBRARIES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	100.0	71.80	71.8	44 103
CS25 2-FLUOROBIPHENY	100.0	57.90	57.9	41 99
CS30 TERPHENYL-D14	100.0	66.10	66.1	41 126
CS45 PHENOL-D5	200.0	134.0	67.0	25 112
CS50 2-FLUOROPHENOL	200.0	136.0	68.0	37 100
CS55 2,4,6-TRIBROMOP	200.0	121.0	60.5	40 115

Target Compounds: BNAHSLSTD

Scan #	Concentration Quan List UG/ML	Sample UG/L	Compound
~~187~~	~~1.519~~	~~1.52~~	B003 N-NITROSODIMETHYLAMINE
	BDL		B028 ANALINE
	BDL		C315 PHENOL
	BDL		C325 BIS(2-CHLOROETHYL)ETHER
	BDL		C330 2-CHLOROPHENOL
	BDL		C335 1,3-DICHLOROBENZENE
	BDL		C340 1,4-DICHLOROBENZENE
	BDL		C345 BENZYL ALCOHOL
	BDL		C350 1,2-DICHLOROBENZENE
	BDL		C355 2-METHYLPHENOL
	BDL		C360 BIS(2-CHLOROISOPROPYL)ETHER
	BDL		C365 4-METHYLPHENOL
	BDL		C370 N-NITROSO-DI-N-PROPYLAMINE
	BDL		C375 HEXACHLOROETHANE
	BDL		C410 NITROBENZENE
	BDL		C415 ISOPHORONE
	BDL		C420 2-NITROPHENOL
	BDL		C425 2,4-DIMETHYLPHENOL
	BDL		C435 BIS(2-CHLOROETHOXY)METHANE
	BDL		C440 2,4-DICHLOROPHENOL
	BDL		C430 BENZOIC ACID
	BDL		C445 1,2,4-TRICHLOROBENZENE
	BDL		C450 NAPHTHALENE
	BDL		C455 4-CHLOROANALINE
	BDL		C460 HEXACHLOROBUTADIENE
	BDL		C465 4-CHLORO-3-METHYL-PHENOL
	BDL		C470 2-METHYLNAPHTHALENE
	BDL		C510 HEXACHLOROCYCLOPENTADIENE
	BDL		C515 2,4,6-TRICHLOROPHENOL
	BDL		C520 2,4,5-TRICHLOROPHENOL
	BDL		C525 2-CHLORONAPHTHALENE
	BDL		C530 2-NITROANALINE
	BDL		C535 DIMETHYLPHTHALATE
	BDL		C540 ACENAPHTHYLENE
	BDL		C543 2,6-DINITROTOLUENE
	BDL		C545 3-NITROANALINE
	BDL		C550 ACENAPHTHENE
	BDL		C555 2,4-DINITROPHENOL
	BDL		C565 DIBENZOFURAN
	BDL		C560 4-NITROPHENOL
	BDL		C570 2,4-DINITROTOLUENE
	BDL		C580 DIETHYLPHTHALATE
	BDL		C590 FLUORENE
	BDL		C585 4-CHLOROPHENYL-PHENYL-ETHER
	BDL		C595 4-NITROANALINE
	BDL		C610 4,6-DINITRO-2-METHYLPHENOL
1283	1.692	1.69	C615 N-NITROSODIPHENYLAMINE
	BDL		B091 AZOBENZENE
	BDL		C625 4-BROMOPHENYL-PHENYLETHER
	BDL		C630 HEXACHLOROBENZENE
	BDL		C635 PENTACHLOROPHENOL

		BDL		C645 ANTHRACENE
		BDL		C646 CARBAZOLE
		BDL		C650 DI-N-BUTYLPHTHALATE
		BDL		C655 FLUORANTHENE
		BDL		B113 BENZIDINE
		BDL		C715 PYRENE
		BDL		C720 BUTYLBENZYLPHTHALATE
		BDL		C730 BENZO(A)ANTHRACENE
		BDL		C725 3,3'-DICHLOROBENZIDINE
		BDL		C740 CHRYSENE
		BDL		C745 BIS(2-ETHYLHEXYL)PHTHALATE
1996	2.077		2.08	C760 DI-N-OCTYL PHTHALATE
		BDL		C765 BENZO(B)FLUORANTHENE
		BDL		C770 BENZO(K)FLUORANTHENE
		BDL		C775 BENZO(A)PYRENE
		BDL		C780 INDENO(1,2,3-CD)PYRENE
		BDL		C785 DIBENZ(A,H)ANTHRACENE
		BDL		C790 BENZO(G,H,I)PERYLENE
		BDL		

000330

Name List: HEDR1 Entry # 1 of 1
File Name: U7089

(1)Format: BNAIND
(3)Sample: BLANK
(5)Comment: 11JUL92-1A
(11)Quan List Units: 1.00UG/ML
(13)Extract Dilution: 100.%
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: 1.00ML

(2)Project: 23727
(4)Matrix: WATER
(10)Analyst: CR
(12)Extract Volume: 1.00ML
(14)Int. Ext. Vol.: NA
(16)Sample Amount: 1000.ML
(19)Run Factor: 1.00UG/L

000331

7/31/92 7:59:13 SCAN 1 OF 2760
Acquisition started

Acquire Run 2:U7089 ACQUIRING
07/31/92 7:59:00 + 0:06 Free sectors: 14678 Scan: 8 of 2760
Sample: 23727-BLANK WATER 11JUL92-1A
Conds.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
Formula: 1.00UG/L1.00ML Instrument: 4500 Weight: 0.000
Submitted by: RMAL Analyst: CR Acct. No: BNAIND

GC PARAMETERS

Loaded GC Desc:ST Current GC oven tmp: 29 DegC Injector : 275 DegC
Current GC Desc:ST GC elapsed time : 0: 7 min Int.oven : 275 DegC

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

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

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

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	

7/31/92 8:33:49
ACQUISITION COMPLETED
SCANS 1 TO 2760 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2760	539.8	2070.0	26.1	24040. 9.	12.

PROCEDURE: TCA
DATA FILE: U7089
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: ISO1

000332

< ---- STANDARDS -----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	9	4	2	182	ISO1/TC01
3	3	1	49	18	4	1	88	ISO2/TC02
3	3	1	49	12	3	1	49	ISO3/TC03
3	3	1	0	18	4	1	60	ISO4/TC04
3	3	1	0	11	4	1	58	ISO5/TC05
3	3	1	57	9	3	1	57	ISO6/TC06
3	3	1	160	15	5	1	95	ISO7/TC07
1	1	1	0	4	1	1	0	ISO8/TC08

82 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	-573	573	573	.	1	974	.	152	573	.	1
2	S1	15	-196	188	187	-1	2	988	.	74	187	.	1
3	S1	2	-377	373	375	2	1	993	.	112	375	.	1
4	S1	3	-526	525	524	-1	1	983	.	99	524	.	1
5	S1	105	-528	527	.	.	.	.	.	94	525	.	1
6	S1	100	-536	535	.	.	.	.	.	93	.	.	.
7	S1	110	-536	535	.	.	.	.	.	93	.	.	.
8	S1	115	-540	539	.	.	.	.	.	128	539	.	1
9	S1	125	-563	563	.	.	.	.	.	146	.	.	.
10	S2	1	-799	800	800	.	1	994	.	136	800	.	1
11	S3	1	-1141	1142	1142	.	1	995	.	164	1142	.	1
12	S1	130	-576	576	.	.	.	.	.	146	.	.	.
13	S1	150	-600	600	.	.	.	.	.	146	.	.	.
14	S1	145	-604	604	.	.	.	.	.	108	.	.	.
15	S1	160	-628	628	.	.	.	.	.	108	.	.	.
16	S1	165	-628	628	.	.	.	.	.	45	.	.	.
17	S1	190	-651	651	.	.	.	.	.	70	.	.	.
18	S1	185	-656	656	.	.	.	.	.	108	.	.	.
19	S1	200	-658	658	.	.	.	.	.	117	.	.	.
20	S2	2	-671	671	670	-1	1	996	.	82	670	.	1
21	S2	10	-675	675	.	.	.	.	.	77	.	.	.
22	S2	20	-721	721	.	.	.	.	.	82	.	.	.
23	S2	25	-732	732	.	.	.	.	.	139	.	.	.
24	S2	30	-751	751	.	.	.	.	.	107	.	.	.
25	S2	35	-767	767	.	.	.	.	.	93	.	.	.
26	S2	40	-781	781	.	.	.	.	.	162	.	.	.
27	S2	45	-783	784	.	.	.	.	.	122	.	.	.
28	S2	55	-792	793	.	.	.	.	.	180	.	.	.
29	S2	60	-804	805	.	.	.	.	.	128	.	.	.
30	S2	80	-831	832	.	.	.	.	.	127	.	.	.
31	S2	95	-832	833	.	.	.	.	.	225	.	.	.
32	S2	130	-925	926	.	.	.	.	.	107	.	.	.
33	S2	145	-939	940	.	.	.	.	.	142	.	.	.
34	S3	20	-971	972	.	.	.	.	.	237	.	.	.
35	S3	25	-999	1000	.	.	.	.	.	196	.	.	.
36	S4	1	-1436	1437	1437	.	1	989	.	188	1436	-1	1
37	S3	30	-1007	1008	.	.	.	.	.	196	.	.	.
38	S3	3	-1016	1017	1016	-1	1	998	.	172	1016	.	1
39	S3	40	-1033	1034	.	.	.	.	.	162	.	.	.
40	S3	45	-1060	1061	.	.	.	.	.	65	.	.	.
41	S3	55	-1103	1104	.	.	.	.	.	163	.	.	.
42	S3	70	-1112	1113	.	.	.	.	.	165	.	.	.
43	S3	65	-1113	1114	.	.	.	.	.	152	.	.	.
44	S3	75	-1143	1144	.	.	.	.	.	138	.	.	.
45	S3	80	-1149	1150	.	.	.	.	.	153	.	.	.
46	S3	85	-1164	1165	.	.	.	.	.	184	.	.	.
47	S3	90	-1184	1185	.	.	.	.	.	168	.	.	.
48	S3	95	-1190	1191	.	.	.	.	.	109	.	.	.
49	S3	105	-1190	1191	.	.	.	.	.	165	.	.	.
50	S3	130	-1246	1247	.	.	.	.	.	149	.	.	.
51	S3	135	-1252	1253	.	.	.	.	.	166	.	.	.
52	S3	140	-1258	1259	.	.	.	.	.	204	.	.	.
53	S3	150	-1263	1264	.	.	.	.	.	138	.	.	.
54	S4	10	-1271	1272	.	.	.	.	.	198	.	.	.
55	S4	15	-1284	1285	.	.	.	.	.	169	1283	.	1
56	S4	20	-1289	1290	.	.	.	.	.	77	.	.	.
57	S3	2	-1300	1301	1300	-1	1	967	.	330	1299	-1	1
58	S4	30	-1354	1355	.	.	.	.	.	248	.	.	.
59	S4	40	-1360	1361	.	.	.	.	.	284	.	.	.
60	S5	1	-1969	1968	1968	.	1	983	.	240	1968	.	1
61	S4	50	-1404	1405	.	.	.	.	.	266	.	.	.
62	S4	65	-1442	1443	.	.	.	.	.	178	.	.	.
63	S4	70	-1452	1452	.	.	.	.	.	178	.	.	.
64	S4	80	-1490	1490	.	.	.	.	.	167	.	.	.
65	S4	85	-1575	1575	.	.	.	.	.	149	1575	.	1
66	S4	110	-1680	1680	.	.	.	.	.	202	.	.	.
67	S6	1	-2235	2235	2236	1	1	968	.	264	2236	.	1

68	S5	10	-1723	1723	.	.	.	.	.	202	1723	.	.	
69	S5	15	-1724	1724	.	.	1	984	.	244	1766	.	1	
70	S5	2	-1766	1766	1766	.	.	.	.	149	.	.	.	
71	S5	40	-1874	1874	.	.	.	.	.	228	.	.	.	
72	S5	50	-1967	1967	.	.	.	.	.	252	.	.	.	
73	S5	55	-1970	1970	.	.	.	.	.	228	.	.	.	
74	S5	60	-1974	1974	.	.	1	988	.	149	1996	.	1	
75	S5	65	-1996	1996	1996	.	.	.	.	149	.	.	.	
76	S6	10	-2121	2121	.	.	.	.	.	252	.	.	.	
77	S6	15	-2171	2171	.	.	.	.	.	252	.	.	.	
78	S6	25	-2176	2176	.	.	.	.	.	252	.	.	.	
79	S6	35	-2226	2226	.	.	.	.	.	276	.	.	.	
80	S6	55	-2406	2407	.	.	.	.	.	278	.	.	.	
81	S6	60	-2410	2411	.	.	.	.	.	276	.	.	.	
82	S6	65	-2444	2445	.	.	.	.	.					

000333

FINISHED AT: 7/31/92 9:21:41

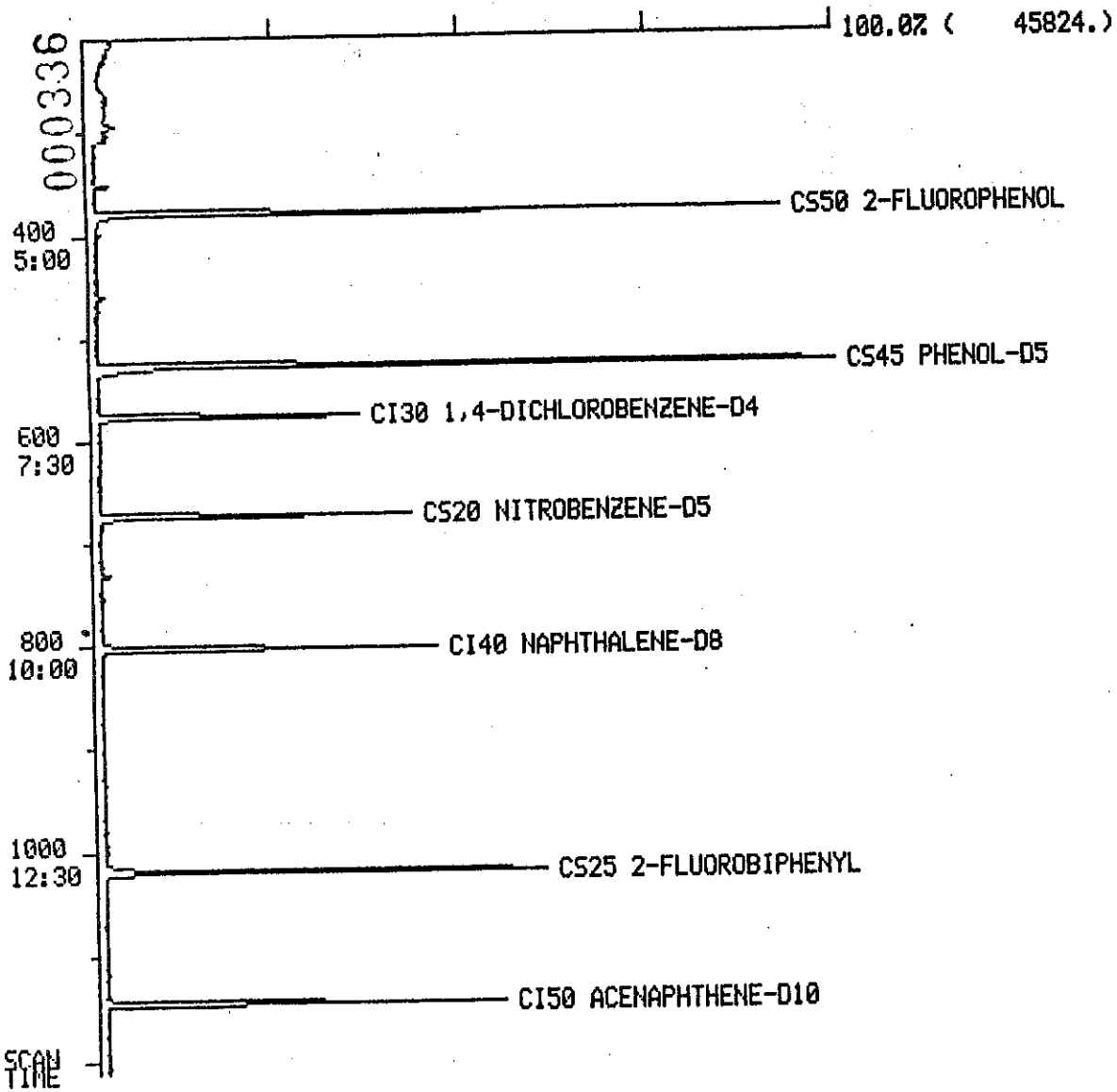
RMAL QUANTITATION SUMMARY FILE: U7089
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

NO	LIBRARY ENTRY		NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1#	1	CI30 1,4-DICHLOROBENZENE	152	573	1	6768.	1.000	40.000
2	S2#	1	CI40 NAPHTHALENE-D8	136	800	2	26233.	1.000	40.000
3	S3#	1	CI50 ACENAPHTHENE-D10	164	1142	3	13611.	1.000	40.000
4	S4#	1	CI60 PHENANTHRENE-D10	188	1436	4	21517.	1.000	40.000
5	S5#	1	CI70 CHRYSENE-D12	240	1968	5	13407.	1.000	40.000
6	S6#	1	CI75 PERYLENE-D12	264	2236	6	15491.	1.000	40.000
7	S2#	2	CS20 NITROBENZENE-D5	82	670	2	19402.	0.412	71.757
8	S3#	3	CS25 2-FLUOROBIPHENYL	172	1016	3	25040.	1.270	57.924
9	S5#	2	CS30 TERPHENYL-D14	244	1766	5	25392.	1.146	66.120
10	S1#	3	CS45 PHENOL-D5	99	524	1	41399.	1.827	133.931
11	S1#	2	CS50 2-FLUOROPHENOL	112	375	1	32636.	1.415	136.277
12	S3#	2	CS55 2,4,6-TRIBROMOPHENO	330	1299	3	6729.	0.164	120.700
13	S1#	15	B003 N-NITROSODIMETHYLAM	74	187	1	297.	1.156	1.519
14	S1#	100	B028 ANALINE	93		1	NOT FOUND		
15	S1#	105	C315 PHENOL	94		1	NOT FOUND		
16	S1#	110	C325 BIS(2-CHLOROETHYL)E	93		1	NOT FOUND		
17	S1#	115	C330 2-CHLOROPHENOL	128		1	NOT FOUND		
18	S1#	125	C335 1,3-DICHLOROBENZENE	146		1	NOT FOUND		
19	S1#	130	C340 1,4-DICHLOROBENZENE	146		1	NOT FOUND		
20	S1#	145	C345 BENZYL ALCOHOL	108		1	NOT FOUND		
21	S1#	150	C350 1,2-DICHLOROBENZENE	146		1	NOT FOUND		
22	S1#	160	C355 2-METHYLPHENOL	108		1	NOT FOUND		
23	S1#	165	C360 BIS(2-CHLOROISOPROP	45		1	NOT FOUND		
24	S1#	185	C365 4-METHYLPHENOL	108		1	NOT FOUND		
25	S1#	190	C370 N-NITROSO-DI-N-PROP	70		1	NOT FOUND		
26	S1#	200	C375 HEXACHLOROETHANE	117		1	NOT FOUND		
27	S2#	10	C410 NITROBENZENE	77		2	NOT FOUND		
28	S2#	20	C415 ISOPHORONE	82		2	NOT FOUND		
29	S2#	25	C420 2-NITROPHENOL	139		2	NOT FOUND		
30	S2#	30	C425 2,4-DIMETHYLPHENOL	107		2	NOT FOUND		
31	S2#	35	C435 BIS(2-CHLOROETHOXY)	93		2	NOT FOUND		
32	S2#	40	C440 2,4-DICHLOROPHENOL	162		2	NOT FOUND		
33	S2#	45	C430 BENZOIC ACID	122		2	NOT FOUND		
34	S2#	55	C445 1,2,4-TRICHLOROBENZ	180		2	NOT FOUND		
35	S2#	60	C450 NAPHTHALENE	128		2	NOT FOUND		
36	S2#	80	C455 4-CHLOROANALINE	127		2	NOT FOUND		
37	S2#	95	C460 HEXACHLOROBUTADIENE	225		2	NOT FOUND		
38	S2#	130	C465 4-CHLORO-3-METHYL-P	107		2	NOT FOUND		
39	S2#	145	C470 2-METHYLNAPHTHALENE	142		2	NOT FOUND		
40	S3#	20	C510 HEXACHLOROCYCLOPENT	237		3	NOT FOUND		
41	S3#	25	C515 2,4,6-TRICHLOROPHEN	196		3	NOT FOUND		
42	S3#	30	C520 2,4,5-TRICHLOROPHEN	196		3	NOT FOUND		
43	S3#	40	C525 2-CHLORONAPHTHALENE	162		3	NOT FOUND		
44	S3#	45	C530 2-NITROANALINE	65		3	NOT FOUND		
45	S3#	55	C535 DIMETHYLPHTHALATE	163		3	NOT FOUND		
46	S3#	65	C540 ACENAPHTHYLENE	152		3	NOT FOUND		
47	S3#	70	C543 2,6-DINITROTOLUENE	165		3	NOT FOUND		
48	S3#	75	C545 3-NITROANALINE	138		3	NOT FOUND		
49	S3#	80	C550 ACENAPHTHENE	153		3	NOT FOUND		
50	S3#	85	C555 2,4-DINITROPHENOL	184		3	NOT FOUND		
51	S3#	90	C565 DIBENZOFURAN	168		3	NOT FOUND		
52	S3#	95	C560 4-NITROPHENOL	109		3	NOT FOUND		
53	S3#	105	C570 2,4-DINITROTOLUENE	165		3	NOT FOUND		
54	S3#	130	C580 DIETHYLPHTHALATE	149		3	NOT FOUND		
55	S3#	135	C590 FLUORENE	166		3	NOT FOUND		
56	S3#	140	C585 4-CHLOROPHENYL-PHEN	204		3	NOT FOUND		
57	S3#	150	C595 4-NITROANALINE	138		3	NOT FOUND		
58	S4#	10	C610 4,6-DINITRO-2-METHY	198		4	NOT FOUND		
59	S4#	15	C615 N-NITROSODIPHENYLAM	169	1283	4	405.	0.445	1.692
60	S4#	20	B091 AZOBENZENE	77		4	NOT FOUND		
61	S4#	30	C625 4-BROMOPHENYL-PHENY	248		4	NOT FOUND		
62	S4#	40	C630 HEXACHLOROBENZENE	284		4	NOT FOUND		
63	S4#	50	C635 PENTACHLOROPHENOL	266		4	NOT FOUND		
64	S4#	65	C640 PHENANTHRENE	178		4	NOT FOUND		
65	S4#	70	C645 ANTHRACENE	178		4	NOT FOUND		
66	S4#	80	C646 CARBAZOLE	167		4	NOT FOUND		
67	S4#	85	C650 DI-N-BUTYLPHTHALATE	149		4	NOT FOUND		
68	S4#	110	C655 FLUORANTHENE	202		4	NOT FOUND		
69	S5#	10	B113 BENZIDINE	184		5	NOT FOUND		
70	S5#	15	C715 PYRENE	202		5	NOT FOUND		
71	S5#	40	C720 BUTYLBENZYLPHTHALAT	149		5	NOT FOUND		
72	S5#	50	C730 BENZO(A)ANTHRACENE	228		5	NOT FOUND		
73	S5#	55	C725 3,3'-DICHLOROBENZID	252		5	NOT FOUND		
74	S5#	60	C740 CHRYSENE	228		5	NOT FOUND		
75	S5#	65	C745 BIS(2-ETHYLHEXYL)PH	149	1996	5	1069.	1.536	2.077
76	S6#	10	C760 DI-N-OCTYL PHTHALAT	149		6	NOT FOUND		

77	S6#	15	C765	BENZO(B)FLUORANTHEN	252	6	NOT FOUND
78	S6#	25	C770	BENZO(K)FLUORANTHEN	252	6	NOT FOUND
79	S6#	35	C775	BENZO(A)PYRENE	252	6	NOT FOUND
80	S6#	55	C780	INDENO(1,2,3-CD)PYR	276	6	NOT FOUND
81	S6#	60	C785	DIBENZ(A,H)ANTHRACE	278	6	NOT FOUND
82	S6#	65	C790	BENZO(G,H,I)PERYLEN	276	6	NOT FOUND

DATA FROM FILE: U7089 SCANS 210 TO 1210 ACQUIRED: 07/31/92 7:59:00
CALI: U7089 #3 OUT OF 210 TO 2760

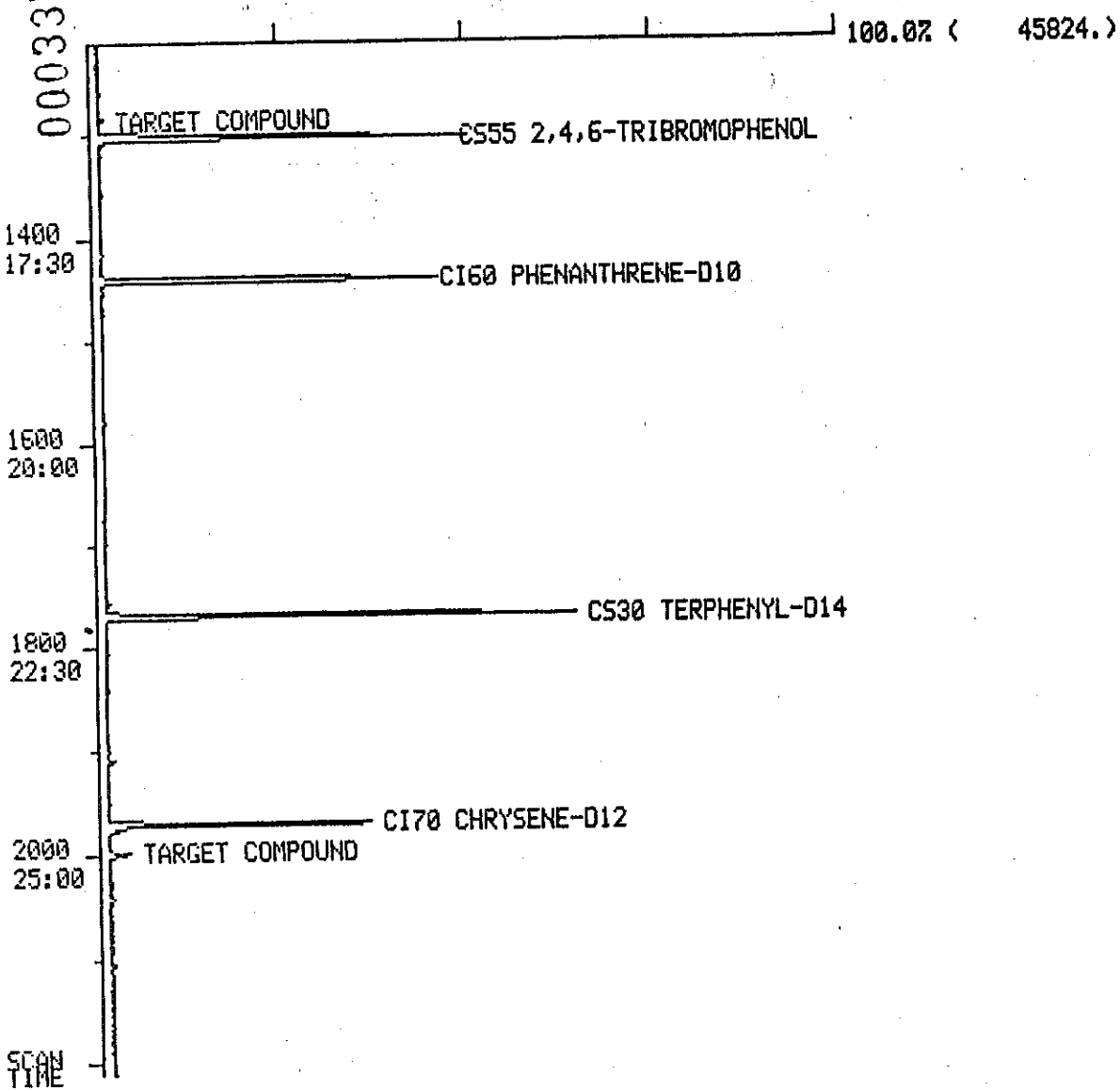
SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M



DATA FROM FILE: U7089 SCANS 1210 TO 2210 ACQUIRED: 07/31/92 7:59:00
CALI: U7089 #3 OUT OF 210 TO 2760

SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M

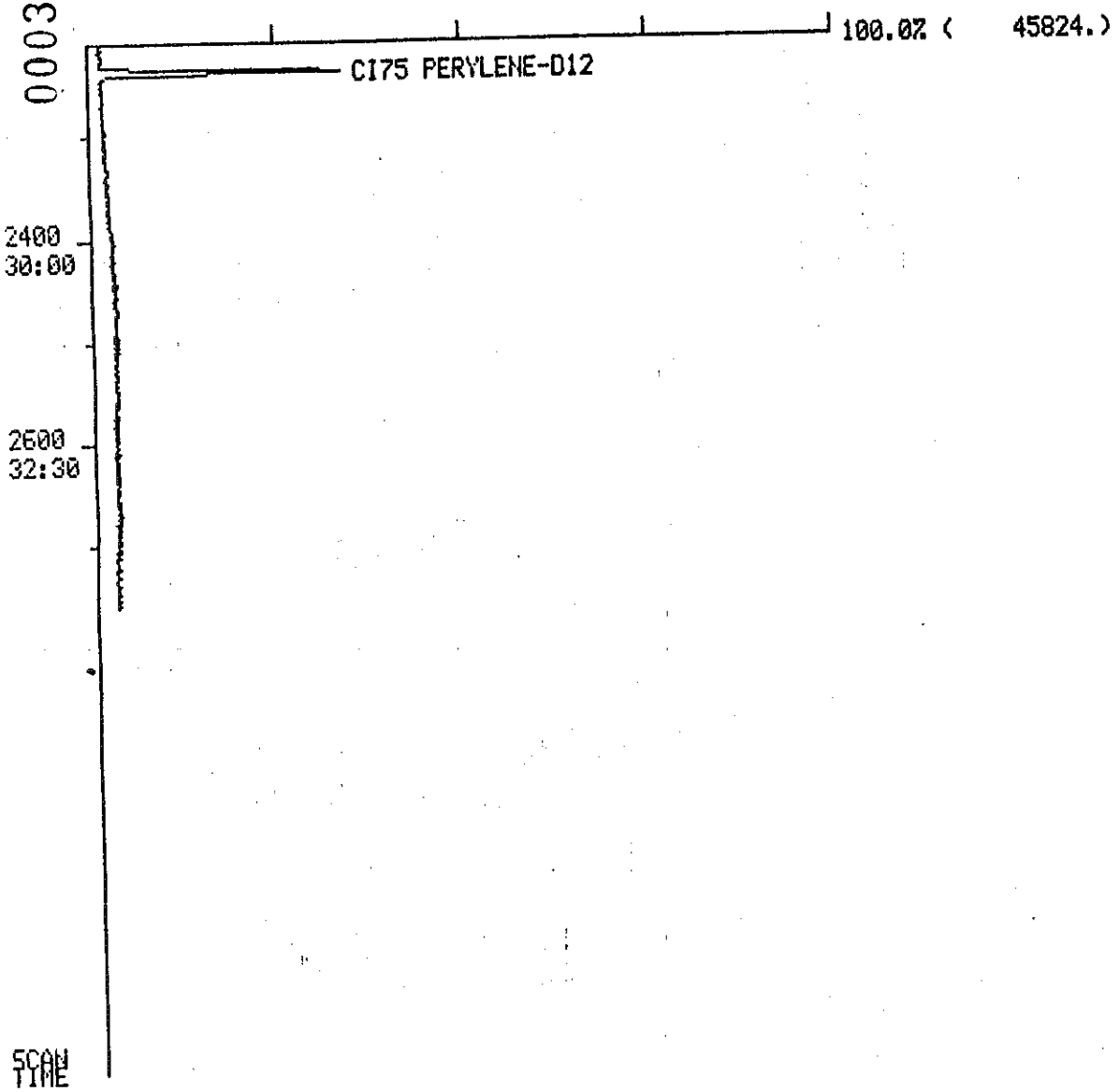
000337



DATA FROM FILE: U7089 SCANS 2210 TO 2760 ACQUIRED: 07/31/92 7:59:00
CALI: U7089 #3 OUT OF 210 TO 2760

SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M

000338

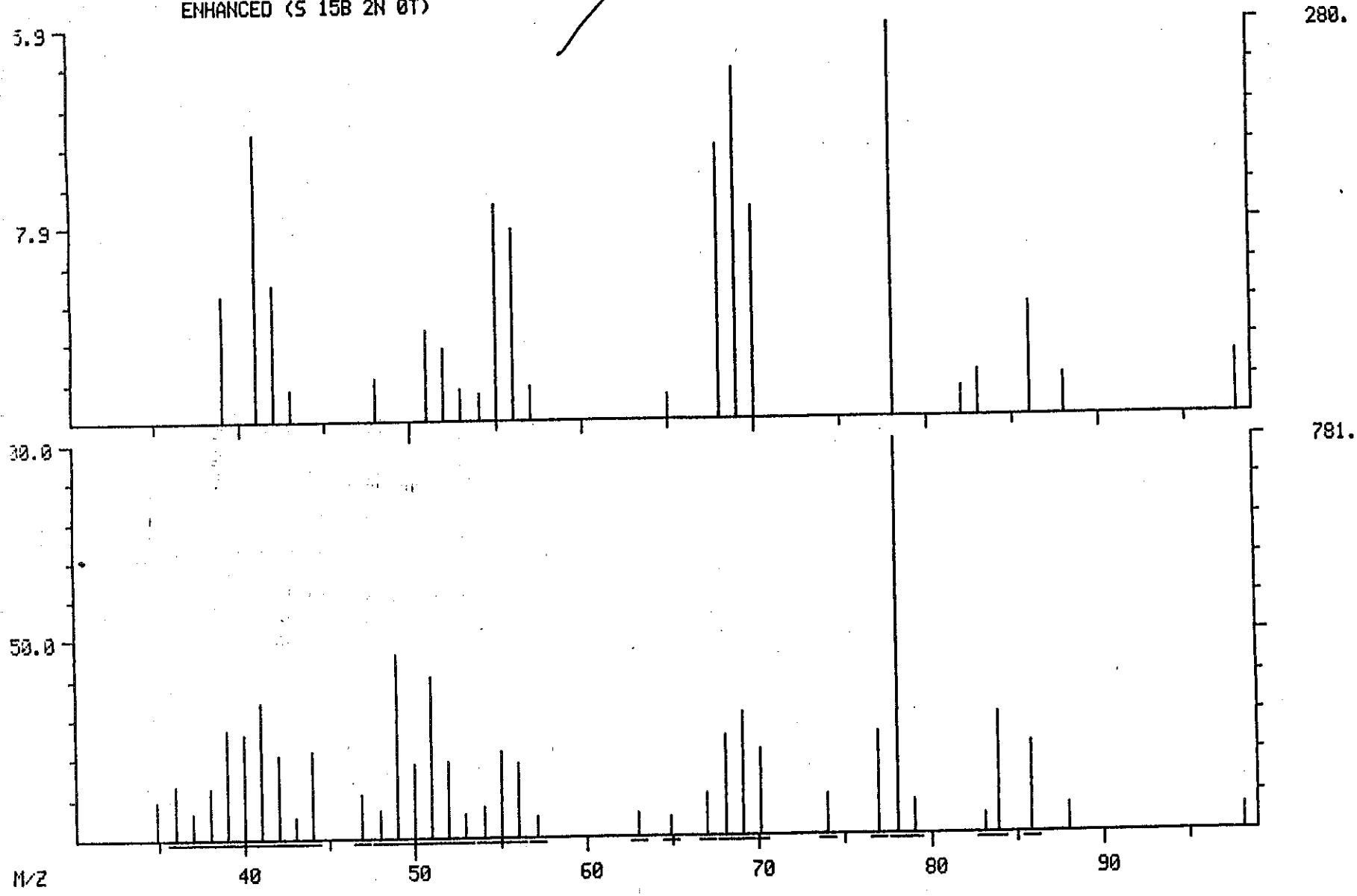


000339

DUAL MASS SPECTRUM
07/31/92 7:59:00 + 2:20
SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: S1#15 M/Z 74 B003 N-NITROSODIMETHYLAMINE
ENHANCED (S 15B 2N 0T)

DATA: U7089 #187
CALI: U7089 #3

BASE M/Z: 78/ 78
RIC: 2031./ 5399.

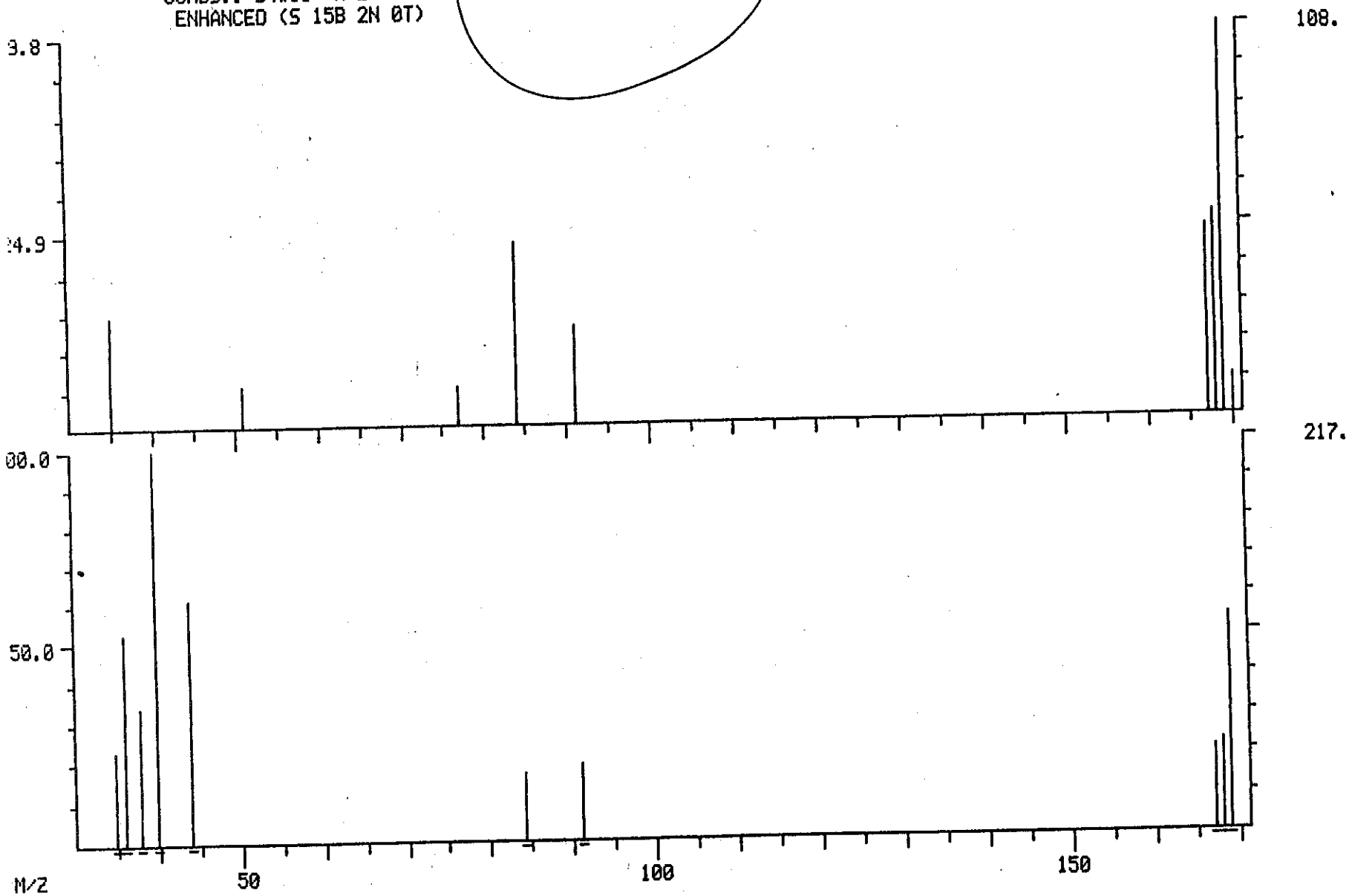


000340

DUAL MASS SPECTRUM
07/31/92 7:59:00 + 16:02
SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: S4#15 M/Z 169 C815 N-NITROSODIPHENYLAMINE
ENHANCED (S 15B 2N 0T)

DATA: U7089 #1283
CALI: U7089 #3

BASE M/Z: 169/ 40
RIC: 362./ 876.

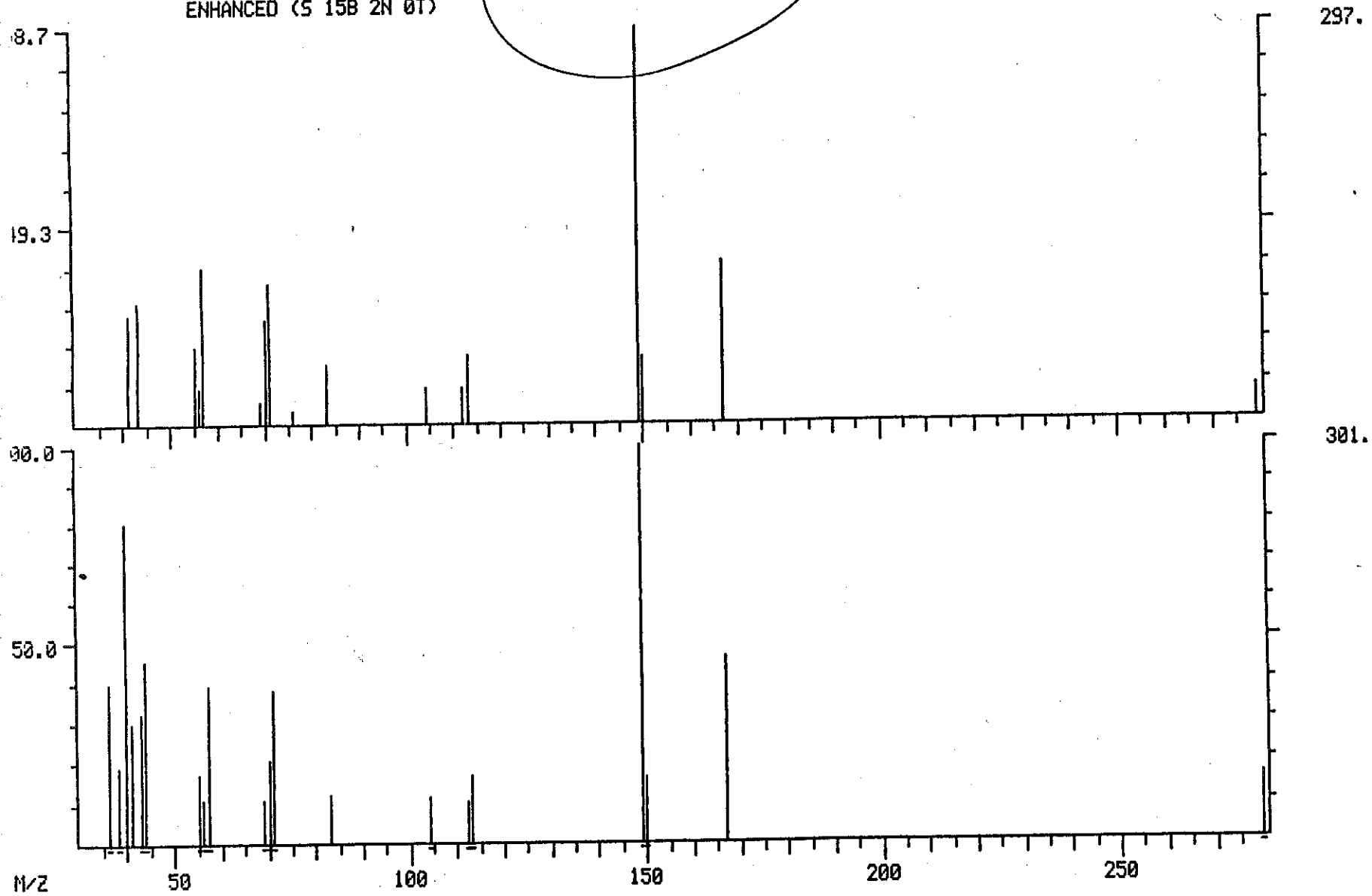


000341

DUAL MASS SPECTRUM
07/31/92 7:59:00 + 24:57
SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: S5#65 M/Z 149 C745 BIS(2-ETHYLHEXYL)PHTHALATE
ENHANCED (S 15B 2N 0T)

DATA: U7089 #1996
CALI: U7089 #3

BASE M/Z: 149/ 149
RIC: 1233./ 1851.



TIC SELECTION REPORT

DATA FILE: U7089

000342

THE FOLLOWING PEAKS WERE REJECTED BECAUSE AT LEAST 40 % OF THEIR SIZE WAS ACCOUNTED FOR BY TARGET COMPOUNDS ELUTING WITHIN 4 SCANS OF THE PEAK TOP.

SCAN	SIZE	AMOUNT
375	116086.	101.499
524	134702.	117.777
573	45748.	39.999
670	58455.	51.110
800	61855.	39.999
1016	82409.	46.071
1142	71548.	39.999
1300	76725.	46.038
1437	66661.	39.999
1766	92699.	66.525
1968	55737.	39.999
1996	3699.	2.654
1996	3872.	2.779
2236	53205.	39.999

TOTAL NUMBER OF UNIDENTIFIED PEAKS WITH SIZE GREATER THAN 5 % OF THE CLOSEST INTERNAL STANDARD THAT DOES NOT HAVE INTERFERENCES = 3

INTERNAL STANDARDS THAT HAVE RIC SIZE LESS THAN 50 % OR GREATER THAN 200 % OF THE ESTIMATED RIC SIZE ARE CONSIDERED TO HAVE INTERFERENCES AND WILL NOT BE USED FOR QUANTITATION.

#	INTERNAL STANDARD	RIC SIZE	PERCENT OF ESTIMATED RIC SIZE	SCAN
1	CI30 1,4-DICHLOROBENZENE	45748.	105	573
2	CI40 NAPHTHALENE-D8	61855.	148	800
3	CI50 ACENAPHTHENE-D10	71548.	146	1142
4	CI60 PHENANTHRENE-D10	66661.	136	1437
5	CI70 CHRYSENE-D12	55737.	169	1968
6	CI75 PERYLENE-D12	53205.	128	2236

* INDICATES INTERFERENCE

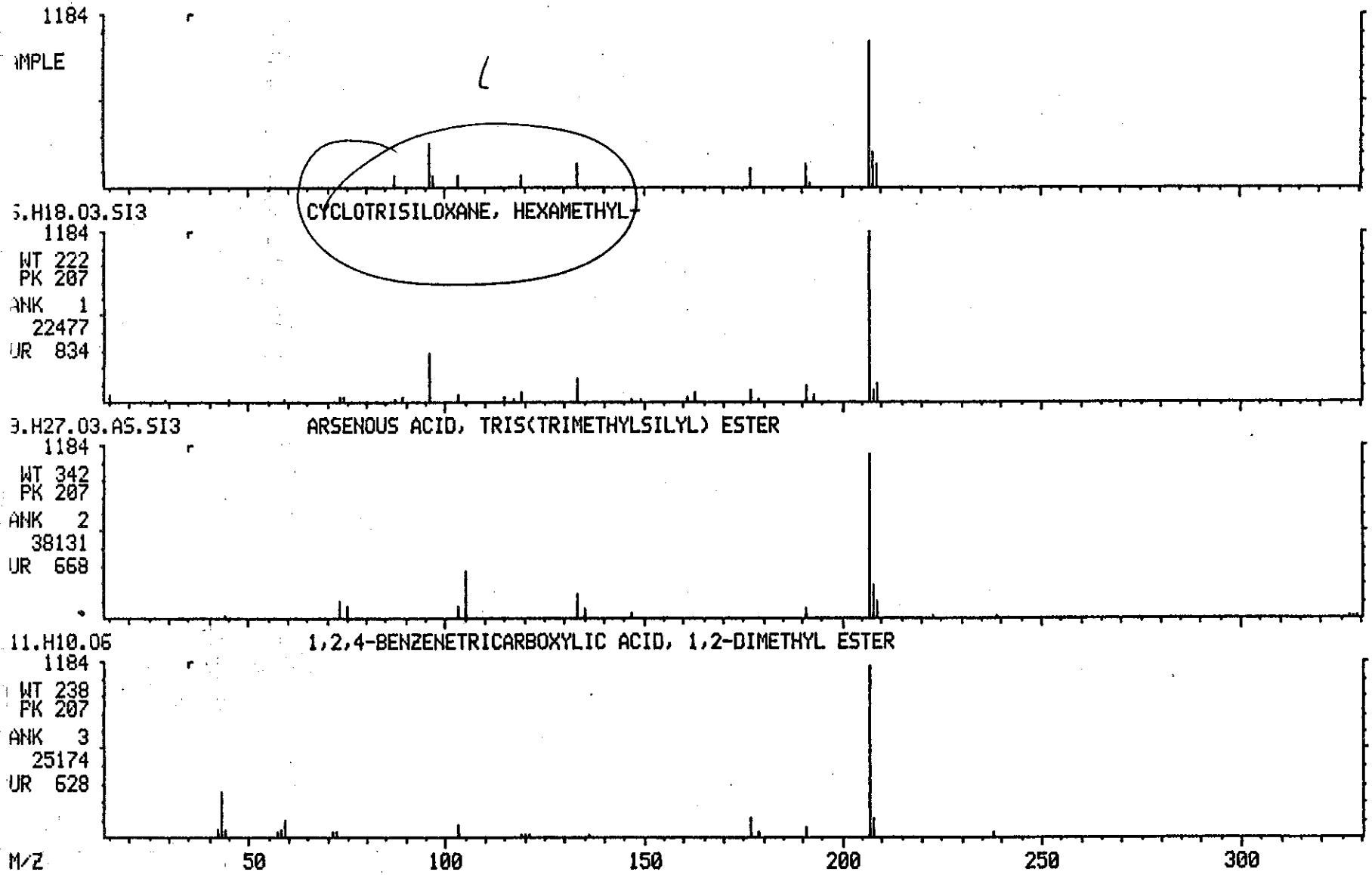
SIZE = AREA

000343

LIBRARY SEARCH (LIBRARYNB)
07/31/92 7:59:00 + 3:39
SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
ENHANCED (S 15B 2N 0T)

DATA: U7089 # 292
CALI: U7089 # 3

BASE M/Z: 207
RIC: 794.

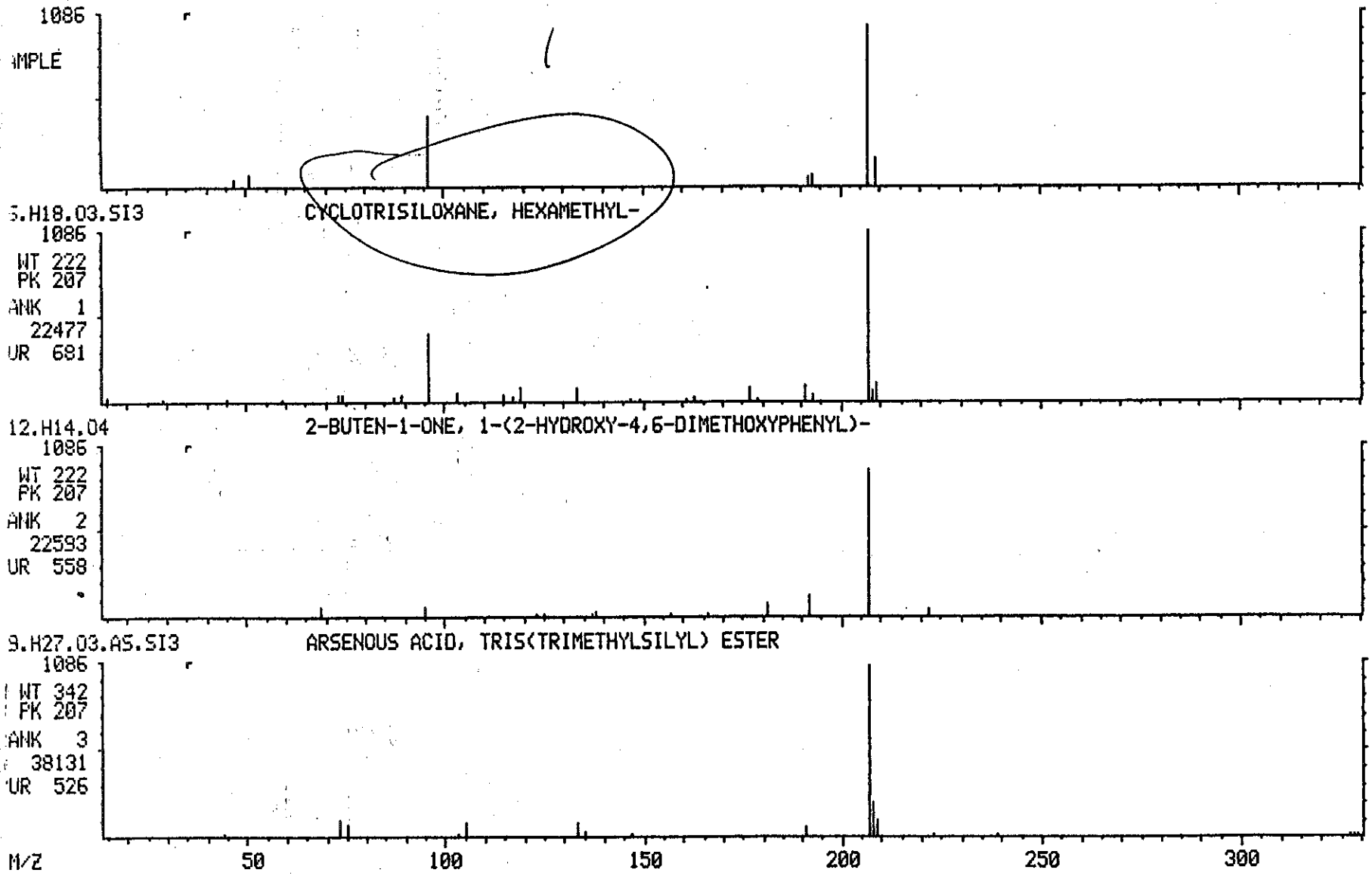


000344

LIBRARY SEARCH (LIBRARYNB)
07/31/92 7:59:00 + 3:47
SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
ENHANCED (S 15B 2N 0T)

DATA: U7089 # 303
CALI: U7089 # 3

BASE M/Z: 207
RIC: 425.

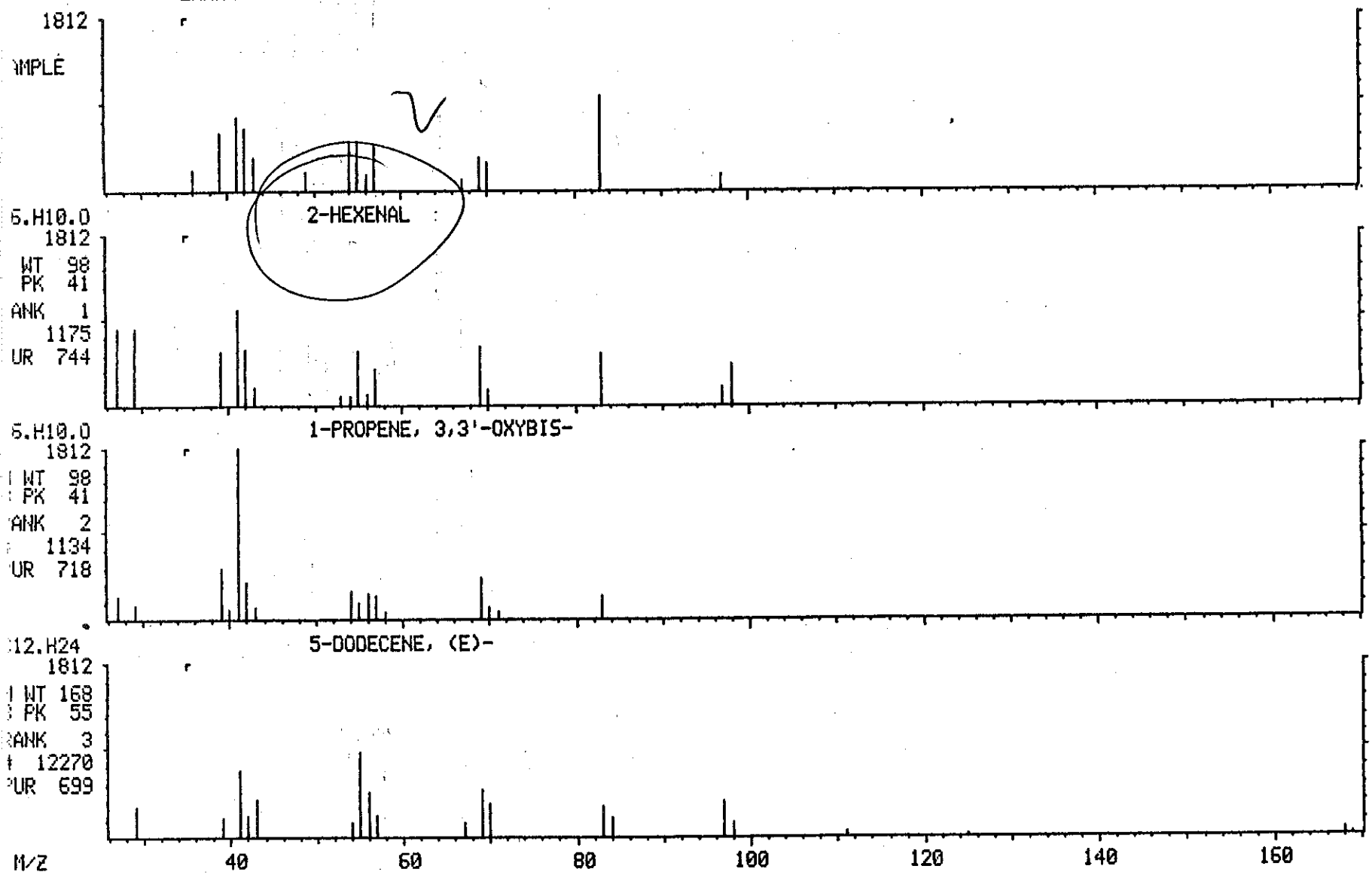


000345

LIBRARY SEARCH (LIBRARYNB)
07/31/92 7:59:00 + 4:21
SAMPLE: 23727-BLANK WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
ENHANCED (S 15B 2N 0T)

DATA: U7089 # 348
CALI: U7089 # 3

BASE M/Z: 83
RIC: 755.



DATA REDUCED BY: TB DATE: 7/31/92
DATA REVIEWED BY: ____ DATE: ____

DATA FILE: U7089

000346

ENSECO TIC REPORT (PAGE 1)

SAMPLE: 23727-BLANK WATER
CONDITIONS: 1.00UG/ML*1.00ML *100%/100.%

RUN FACTOR: 1.00
ANALYST: CR

#	SCAN	Q	C	CONCENTRATION IN SAMPLE (UG/L)	CAS #	COMPOUND
1	292		1	2.5	541-05-9	CYCLOTRISILOXANE, HEXAMETHYL-
2	303		1	4.0	541-05-9	CYCLOTRISILOXANE, HEXAMETHYL-
3	348		2	2.4	505-57-7	2-HEXENAL

DATA FILE: U7089

ENSECO TIC REPORT (PAGE 2)

000347

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

#	FIT	PURITY	INT. STD.	RT	RRT	AREA	HEIGHT	AMOUNT AS ANALYZED (UG/ML)	LIB	LIB #
1	860	834	1	3:39	0.510	2865.	813.	2.505	NB	22477.
2	720	681	1	3:47	0.529	4623.	587.	4.042	NB	22477.
3	803	744	1	4:21	0.607	2799.	908.	2.448	NB	1175.

QC LOT #: 11July92-1A

DATE ANALYZED: 07/31/92

000348

METHOD: 625
ORGANICS BY GC/MS
LCS (LABORATORY CONTROL SAMPLES)
BNA, AQUEOUS, S LIBRARIES

		DATA FILE	RUN FACTOR	CALI STANDARD
ANALYST: CR	LCS #1	U7090	1.00	U7078
INSTRUMENT:	LCS #2	U7091	1.00	U7078
MATRIX: AQUEOUS				

SAMPLE #	SAMPLE #	SAMPLE #	SAMPLE #	SAMPLE #
-01	10	19	06SD	-01SD Reprep #2
02	11	20	06AD	
04	13			
05	14	-05EB	-02	
07	16	06		
08	17	06MS		

COMPOUND	SPIKE CONC. UG/L	MEASURED CONCENTRATION UG/L LCS #1	LCS #2	AVERAGE
C315 PHENOL	100.	74.0	64.4	69.2
C330 2-CHLOROPHENOL	100.	73.0	64.2	68.6
C340 1,4-DICHLOROBENZENE	50.0	23.7	24.1	23.9
C370 N-NITROSO-DI-N-PROP	50.0	36.7	34.8	35.8
C445 1,2,4-TRICHLOROBENZ	50.0	25.7	24.8	25.2
C465 4-CHLORO-3-METHYL-P	100.	73.5	69.8	71.6
C550 ACENAPHTHENE	50.0	33.7	32.7	33.2
C560 4-NITROPHENOL	100.	78.6	94.2	86.4
C570 2,4-DINITROTOLUENE	50.0	36.0	35.1	35.6
C635 PENTACHLOROPHENOL	100.	49.7	55.1	52.4
C715 PYRENE	50.0	40.0	34.3	37.2

COMPOUND	ACCURACY AVERAGE % RECOVERY	ACCURACY CONTROL LIMITS	PRECISION RPD	PRECISION CONTROL LIMIT
C315 PHENOL	69	42-109	14.	33
C330 2-CHLOROPHENOL	69	50-104	13.	38
C340 1,4-DICHLOROBENZENE	48	31-101	1.7	33
C370 N-NITROSO-DI-N-PROPYLAM	71	49-109	5.3	30
C445 1,2,4-TRICHLOROBENZENE	50	29-100	3.6	33
C465 4-CHLORO-3-METHYL-PHENO	72	48-112	5.2	37
C550 ACENAPHTHENE	66	48- 99	3.0	27
C560 4-NITROPHENOL	86	29-124	18.	53
C570 2,4-DINITROTOLUENE	71	52-104	2.5	26
C635 PENTACHLOROPHENOL	52	25-132	10.	49
C715 PYRENE	74	51-116	15.	26

NOTE: 80% OF VALUES MUST BE WITHIN CONTROL LIMITS

100% OF AVERAGE PERCENT RECOVERIES ARE WITHIN CONTROL LIMITS
100% OF RPD ARE WITHIN CONTROL LIMITS

SUPERVISOR APPROVAL :

Sample: U7090 Performance Check: U7077 Elapsed Time:
Sample: U7090 Calibration Stds.: U7078,

Data Reduced by : MB Date: 7/31/92
Data Reviewed by: _____ Date: _____

Data File: U7090

OK

000349

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: -DCS1 WATER 11JUL92-1A
Conditions: 1.00UG/ML*1E-00ML *100%/100.% *(NA/NA)/1000.ML NA M
Date Analyzed: 07/31/92 8:44:00
Analyst: CR
Quan List Threshold: 1.00

Units: UG/L
Run Factor: 1.00
Surrogate Vol.: 1.00

Surrogate Spike Recoveries
BNA, AQUEOUS, S LIBRARIES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	100.0	82.80	82.8	44 103
CS25 2-FLUOROBIPHENY	100.0	68.00	68.0	41 99
CS30 TERPHENYL-D14	100.0	68.50	68.5	41 126
CS45 PHENOL-D5	200.0	150.0	75.0	25 112
CS50 2-FLUOROPHENOL	200.0	135.0	67.5	37 100
CS55 2,4,6-TRIBROMOP	200.0	124.0	62.0	40 115

Target Compounds: SPIKE

Scan #	Concentration Quan List UG/ML	Sample UG/L	Compound
530	74.032	74.0	C315 PHENOL
540	73.046	73.0	C330 2-CHLOROPHENOL
576	23.740	23.7	C340 1,4-DICHLOROBENZENE
651	36.726	36.7	C370 N-NITROSO-DI-N-PROPYLAMINE
792	25.671	25.7	C445 1,2,4-TRICHLOROBENZENE
929	73.532	73.5	C465 4-CHLORO-3-METHYL-PHENOL
1148	33.651	33.7	C550 ACENAPHTHENE
1199	78.600	78.6	C560 4-NITROPHENOL
1192	36.020	36.0	C570 2,4-DINITROTOLUENE
1407	49.708	49.7	C635 PENTACHLOROPHENOL
1725	40.015	40.0	C715 PYRENE

Name List: HEDR1 Entry # 1 of 1
File Name: U7090

(1)Format: BNAIND
(3)Sample: DCS1
(5)Comment: 11JUL92-1A
(11)Quan List Units: 1.00UG/ML
(13)Extract Dilution: 100.%
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: 1.00ML

(2)Project: 23727
(4)Matrix: WATER
(10)Analyst: CR
(12)Extract Volume: 1.00ML
(14)Int. Ext. Vol.: NA
(16)Sample Amount: 1000.ML
(19)Run Factor: 1.00UG/L

000350

7/31/92 8:44:53 SCAN 1 OF 2760
Acquisition started

Acquire
07/31/92 8:44:00 + 0:09
Sample: 23727-DCS1 WATER 11JUL92-1A
Conds.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
Formula: 1.00UG/L1.00ML
Submitted by: RMAL

Run 2:U7090
Free sectors: 14367
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 12 of 2760
Weight: 0.000
Acct. No: BNAIND

****
Loaded GC Desc:ST
Current GC Desc:ST

GC PARAMETERS
Current GC oven tmp: 28 DegC
GC elapsed time : 0: 7 min

****
Injector : 275 DegC
Int.oven : 275 DegC

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

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

****

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

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	

7/31/92 9:19:27
ACQUISITION COMPLETED
SCANS 1 TO 2760 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2760	575.4	2070.0	27.8	132092. 48.	64.

PROCEDURE: TCA
DATA FILE: U7090
REFERENCE: 11TABLE
NAME LIST: LLNL INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: IS01.

000351

< ---- STANDARDS -----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	5	5	1	59	IS01/TC01
3	3	1	49	8	8	1	121	IS02/TC02
3	3	2	0	8	8	1	249	IS03/TC03
3	3	1	29	4	4	1	53	IS04/TC04
3	3	1	27	5	5	1	82	IS05/TC05

23 COMPOUNDS PROCESSED, 23 FOUND

< COMPOUND		>< ---------- SEARCH ----------					>< SAT	>< ------ CHRO -------			>
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-573	574	574	.	1	980	.	152	574	.	1
2	S1	2	-377	377	377	.	1	994	.	112	377	.	1
3	S1	3	-526	527	528	1	1	979	.	99	528	.	1
4	S1	105	-528	529	529	.	1	984	.	94	530	1	1
5	S1	115	-540	541	541	.	1	989	.	128	540	-1	1
6	S2	1	-799	801	801	.	1	997	.	136	801	.	1
7	S3	1	-1141	1143	1143	.	1	995	.	164	1143	.	1
8	S1	130	-576	576	576	.	1	972	.	146	576	.	1
9	S1	190	-651	652	651	-1	1	990	.	70	651	.	1
10	S2	2	-671	672	671	-1	1	998	.	82	671	.	1
11	S2	55	-792	793	792	-1	1	995	.	180	792	.	1
12	S2	130	-925	927	929	2	1	988	.	107	929	.	1
13	S4	1	-1436	1438	1438	.	2	986	.	188	1438	.	1
14	S3	3	-1016	1018	1016	-2	1	998	.	172	1016	.	1
15	S3	80	-1149	1151	1148	-3	1	981	.	153	1148	.	1
16	S3	105	-1190	1192	1192	.	1	992	.	165	1192	.	1
17	S3	95	-1190	1192	1197	5	1	992	.	109	1199	2	1
18	S3	2	-1300	1302	1302	.	1	969	.	330	1301	-1	1
19	S5	1	-1969	1972	1972	.	1	976	.	240	1972	.	1
20	S4	50	-1404	1406	1407	1	1	986	.	266	1407	.	1
21	S6	1	-2235	2239	2239	.	1	979	.	264	2238	-1	1
22	S5	15	-1724	1726	1725	-1	1	992	.	202	1725	.	1
23	S5	2	-1766	1768	1768	.	1	979	.	244	1768	.	1

TCA FINISHED, 23 FOUND
FINISHED AT: 7/31/92 9:41:17

000352

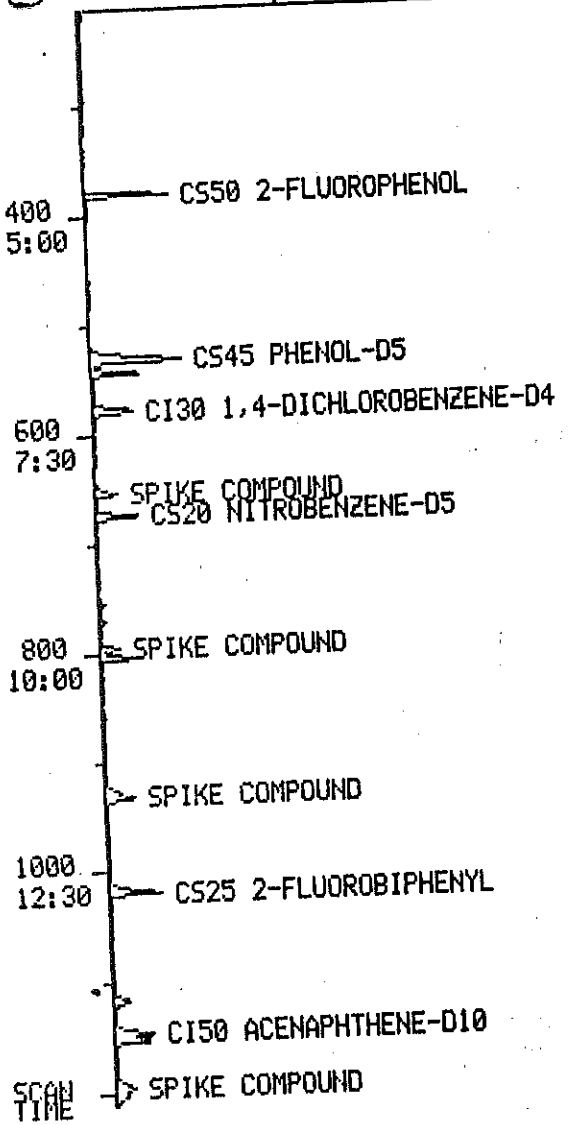
RMAL QUANTITATION SUMMARY FILE: U7090
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	UNITS: RRF	UG/ML AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	574	1	9486.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	801	2	37980.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1143	3	19830.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1438	4	32031.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	1972	5	20011.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2238	6	20286.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	671	2	32428.	0.412	82.838
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1016	3	42857.	1.270	68.047
9	S5# 2	CS30 TERPHENYL-D14	244	1768	5	39236.	1.146	68.451
10	S1# 3	CS45 PHENOL-D5	99	528	1	64999.	1.827	150.028
11	S1# 2	CS50 2-FLUOROPHENOL	112	377	1	45417.	1.415	135.308
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1301	3	10098.	0.164	124.322
13	S1#105	C315 PHENOL	94	530	1	37371.	2.129	74.032
14	S1#115	C330 2-CHLOROPHENOL	128	540	1	26422.	1.525	73.046
15	S1#130	C340 1,4-DICHLOROBENZENE	146	576	1	9592.	1.704	23.740
16	S1#190	C370 N-NITROSO-DI-N-PROP	70	651	1	11358.	1.304	36.726
17	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	792	2	7697.	0.316	25.671
18	S2#130	C465 4-CHLORO-3-METHYL-P	107	929	2	24518.	0.351	73.532
19	S3# 80	C550 ACENAPHTHENE	153	1148	3	20252.	1.214	33.651
20	S3# 95	C560 4-NITROPHENOL	109	1199	3	4235.	0.109	78.600
21	S3#105	C570 2,4-DINITROTOLUENE	165	1192	3	8402.	0.471	36.020
22	S4# 50	C635 PENTACHLOROPHENOL	266	1407	4	5433.	0.136	49.708
23	S5# 15	C715 PYRENE	202	1725	5	34890.	1.743	40.015

DATA FROM FILE: U7090 SCANS 210 TO 1210 ACQUIRED: 07/31/92 8:44:00
CALI: U7090 #3 OUT OF 210 TO 2760

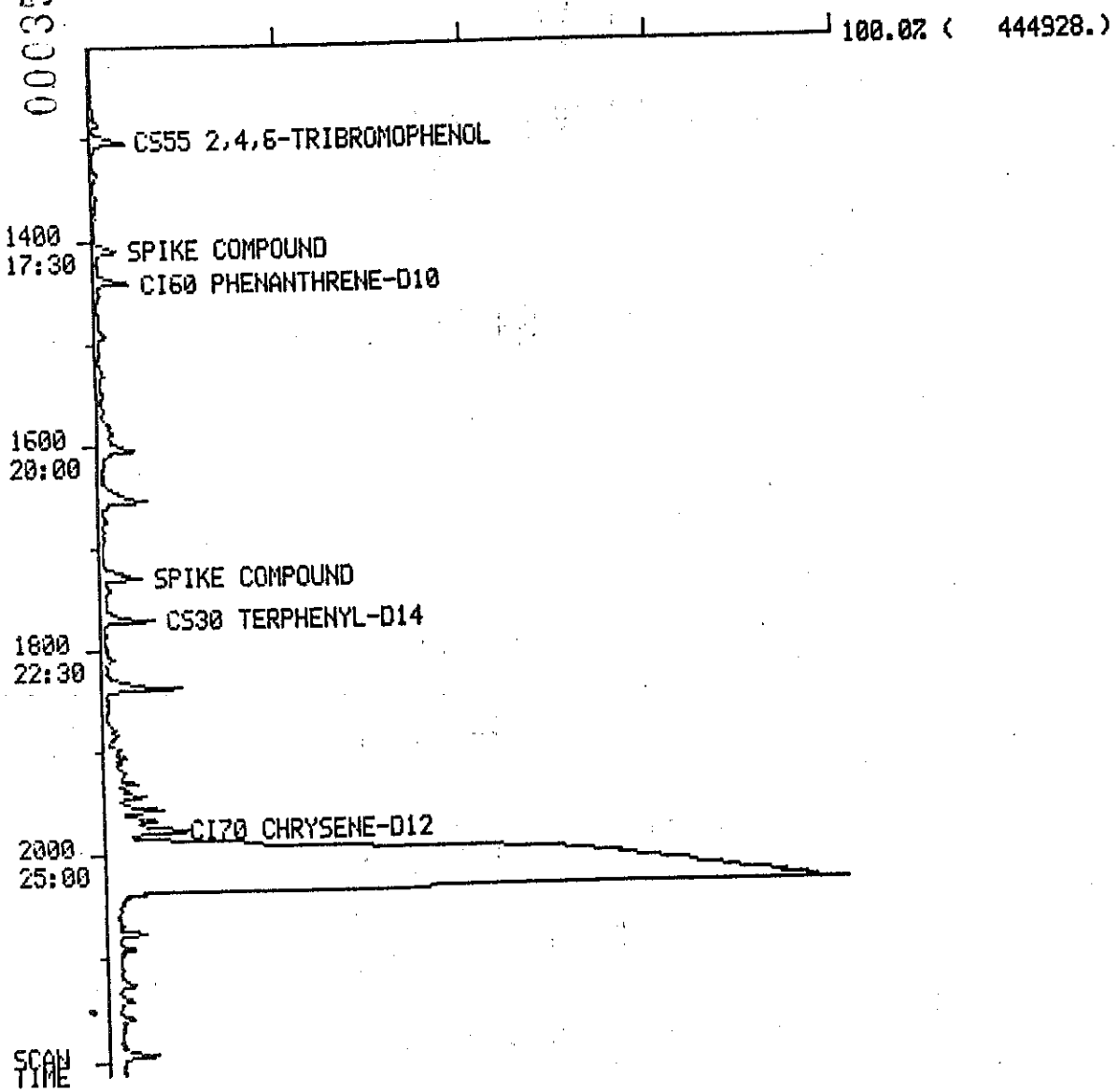
SAMPLE: 23727-DCS1 WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M

100.0% (444928.)



DATA FROM FILE: U7090 SCANS 1210 TO 2210 ACQUIRED: 07/31/92 8:44:00
CALI: U7090 #3 OUT OF 210 TO 2760

SAMPLE: 23727-DC51 WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M

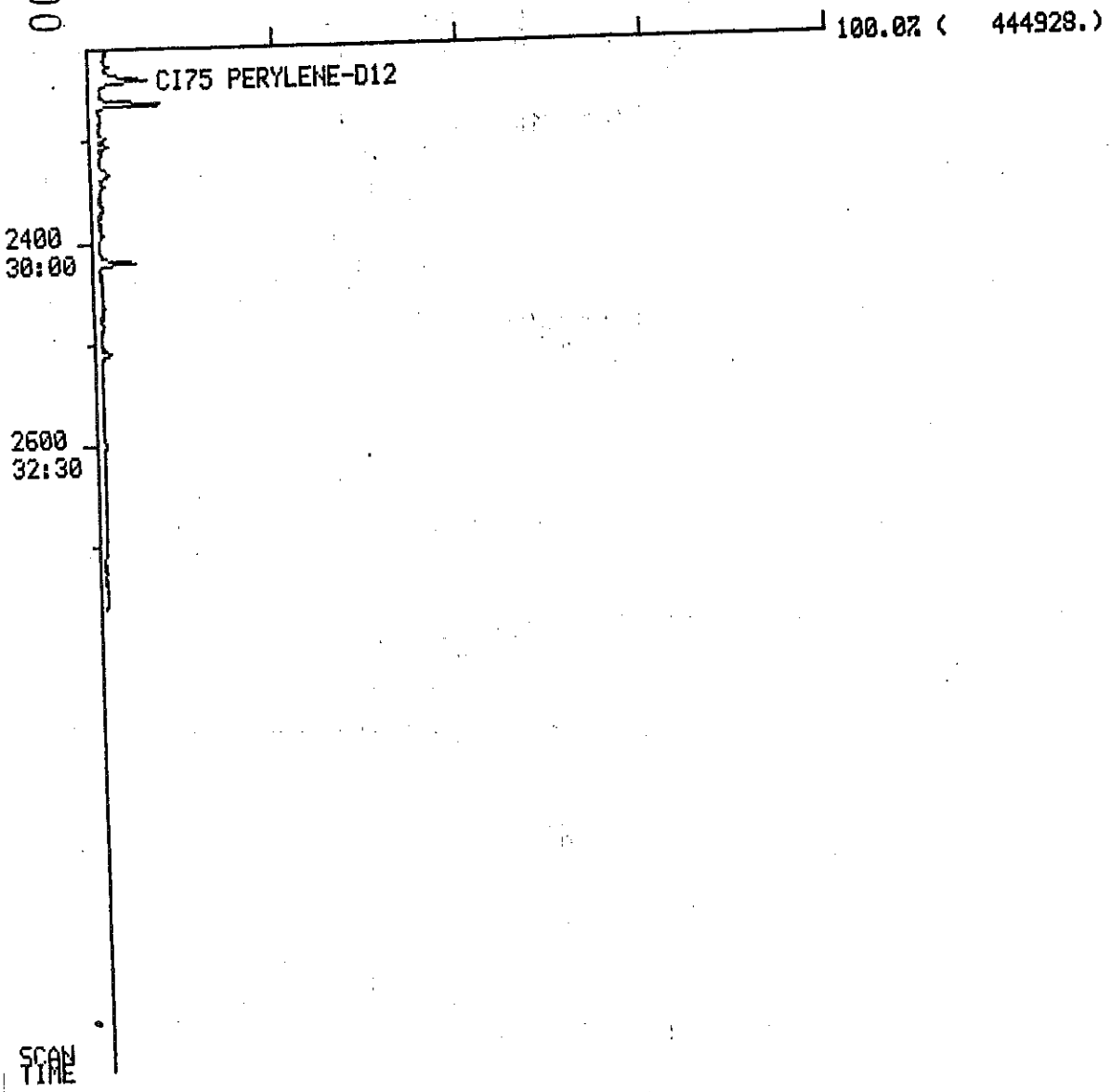


000354

000355

DATA FROM FILE: U7090 SCANS 2210 TO 2760 ACQUIRED: 07/31/92 8:44:00
CALI: U7090 #3 OUT OF 210 TO 2760

SAMPLE: 23727-DCS1 WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M



Sample: U7091 Performance Check: U7077 Elapsed Time:
Sample: U7091 Calibration Stds.: U7078,

Data File: U7091 /

Data Reduced by : TB Date: 7/31/92
Data Reviewed by: _____ Date: _____

0003508

Enseco GC/MS
Target Compound Data Summary Sheet

Sample: Y-DCS2 WATER 11JUL92-1A
Conditions: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
Date Analyzed: 07/31/92 9:31:00
Analyst: CR
Quan List Threshold: 1.00

Units: UG/L
Run Factor: 1.00
Surrogate Vol.: 1.00

Surrogate Spike Recoveries
BNA, AQUEOUS, S LIBRARIES

Compound	Surrogate Amount (ug) Spiked	Measured	% Recovery Measured	QC limits
CS20 NITROBENZENE-D5	100.0	74.60	74.6	44 103
CS25 2-FLUOROBIPHENY	100.0	64.70	64.7	41 99
CS30 TERPHENYL-D14	100.0	66.40	66.4	41 126
CS45 PHENOL-D5	200.0	127.0	63.5	25 112
CS50 2-FLUOROPHENOL	200.0	127.0	63.5	37 100
CS55 2,4,6-TRIBROMOP	200.0	123.0	61.5	40 115

Target Compounds: SPIKE

Scan #	Concentration Quan List UG/ML	Sample UG/L	Compound
526	64.401	64.4	C315 PHENOL
538	64.207	64.2	C330 2-CHLOROPHENOL
576	24.052	24.1	C340 1,4-DICHLOROBENZENE
649	34.784	34.8	C370 N-NITROSO-DI-N-PROPYLAMINE
791	24.803	24.8	C445 1,2,4-TRICHLOROBENZENE
923	69.819	69.8	C465 4-CHLORO-3-METHYL-PHENOL
1147	32.663	32.7	C550 ACENAPHTHENE
1187	94.245	94.2	C560 4-NITROPHENOL
1189	35.136	35.1	C570 2,4-DINITROTOLUENE
1403	55.078	55.1	C635 PENTACHLOROPHENOL
1723	34.264	34.3	C715 PYRENE

Name List: HEDR1 Entry # 1 of 1
File Name: U7091

000357

(1)Format: BNAIND
(3)Sample: DCS2
(5)Comment: 11JUL92-1A
(11)Quan List Units: 1.00UG/ML
(13)Extract Dilution: 100.%
(15)Int. Ext. Vol. Used: NA
(17)Percent Moisture: NA
(20)Surrogate Volume: 1.00ML

(2)Project: 23727
(4)Matrix: WATER
(10)Analyst: CR
(12)Extract Volume: 1.00ML
(14)Int. Ext. Vol.: NA
(16)Sample Amount: 1000.ML
(19)Run Factor: 1.00UG/L

7/31/92 9:31:27 SCAN 1 OF 2760
Acquisition started

Acquire
07/31/92 9:31:00 + 0:08
Sample: 23727-DCS2 WATER 11JUL92-1A
Conds.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M
Formula: 1.00UG/L1.00ML
Submitted by: RMAL

Run 2:U7091
Free sectors: 13204
Instrument: 4500
Analyst: CR

ACQUIRING
Scan: 11 of 2760
Weight: 0.000
Acct. No: BNAIND

****
GC PARAMETERS
****

Loaded GC Desc:ST Current GC oven tmp: 28 DegC
Current GC Desc:ST GC elapsed time : 0:11 min

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

Injector : 275 DegC
Int.oven : 275 DegC

	Open	Close
Sweep/Split	0.5	0.0
Divert	45.5	0.0

****
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

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	

7/31/92 10:06:00
ACQUISITION COMPLETED
SCANS 1 TO 2760 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2760	580.5	2070.0	28.0	46436.	17. 22.

DIAGNOSTIC REPORT

PROCEDURE: TCA
DATA FILE: U7C91
REFERENCE: 11TABLE
NAME LIST: LLNL
REPORT: IS01

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

000358

< ---- STANDARDS -----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
1	1	1	0	5	5	1	79	IS01/TC01
3	3	1	81	8	8	2	115	IS02/TC02
3	3	1	38	8	8	1	128	IS03/TC03
3	3	1	29	4	4	1	53	IS04/TC04
3	3	1	80	5	5	1	63	IS05/TC05

23 COMPOUNDS PROCESSED, 23 FOUND

< COMPOUND		>< ---------- SEARCH ----------					>< SAT	>< ------ CHRO ------- >		
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	S1	1	-573	573	573	.	1	975	.	152	573	.	1
2	S1	2	-377	374	374	.	1	993	.	112	374	.	1
3	S1	3	-526	524	524	.	1	977	.	99	524	.	1
4	S1	105	-528	526	526	.	1	988	.	94	526	.	1
5	S1	115	-540	539	538	-1	1	993	.	128	538	.	1
6	S2	1	-799	799	800	1	1	994	.	136	800	.	1
7	S3	1	-1141	1141	1141	.	1	995	.	164	1141	.	1
8	S1	130	-576	575	576	1	1	986	.	146	576	.	1
9	S1	190	-651	650	649	-1	2	993	.	70	649	.	1
10	S2	2	-671	670	670	.	1	998	.	82	670	.	1
11	S2	55	-792	792	792	.	1	999	.	180	791	-1	1
12	S2	130	-925	925	923	-2	1	993	.	107	923	.	1
13	S4	1	-1436	1436	1436	.	1	985	.	188	1436	.	1
14	S3	3	-1016	1015	1015	.	1	997	.	172	1015	.	1
15	S3	80	-1149	1148	1147	-1	1	986	.	153	1147	.	1
16	S3	105	-1190	1189	1189	.	1	992	.	165	1189	.	1
17	S3	95	-1190	1189	1187	-2	1	994	.	109	1187	.	1
18	S3	2	-1300	1299	1299	.	1	983	.	330	1299	.	1
19	S5	1	-1969	1968	1968	.	1	977	.	240	1968	.	1
20	S4	50	-1404	1404	1403	-1	1	989	.	266	1403	.	1
21	S6	1	-2235	2235	2235	.	1	969	.	264	2235	.	1
22	S5	15	-1724	1724	1723	-1	1	994	.	202	1723	.	1
23	S5	2	-1766	1766	1766	.	1	980	.	244	1766	.	1

TCA FINISHED, 23 FOUND
FINISHED AT: 7/31/92 14:04:23

RMAL QUANTITATION SUMMARY FILE: U7091
COMPOUNDS WITH AMOUNTS LESS THAN 1.00 REPORTED AS NOT FOUND

000359

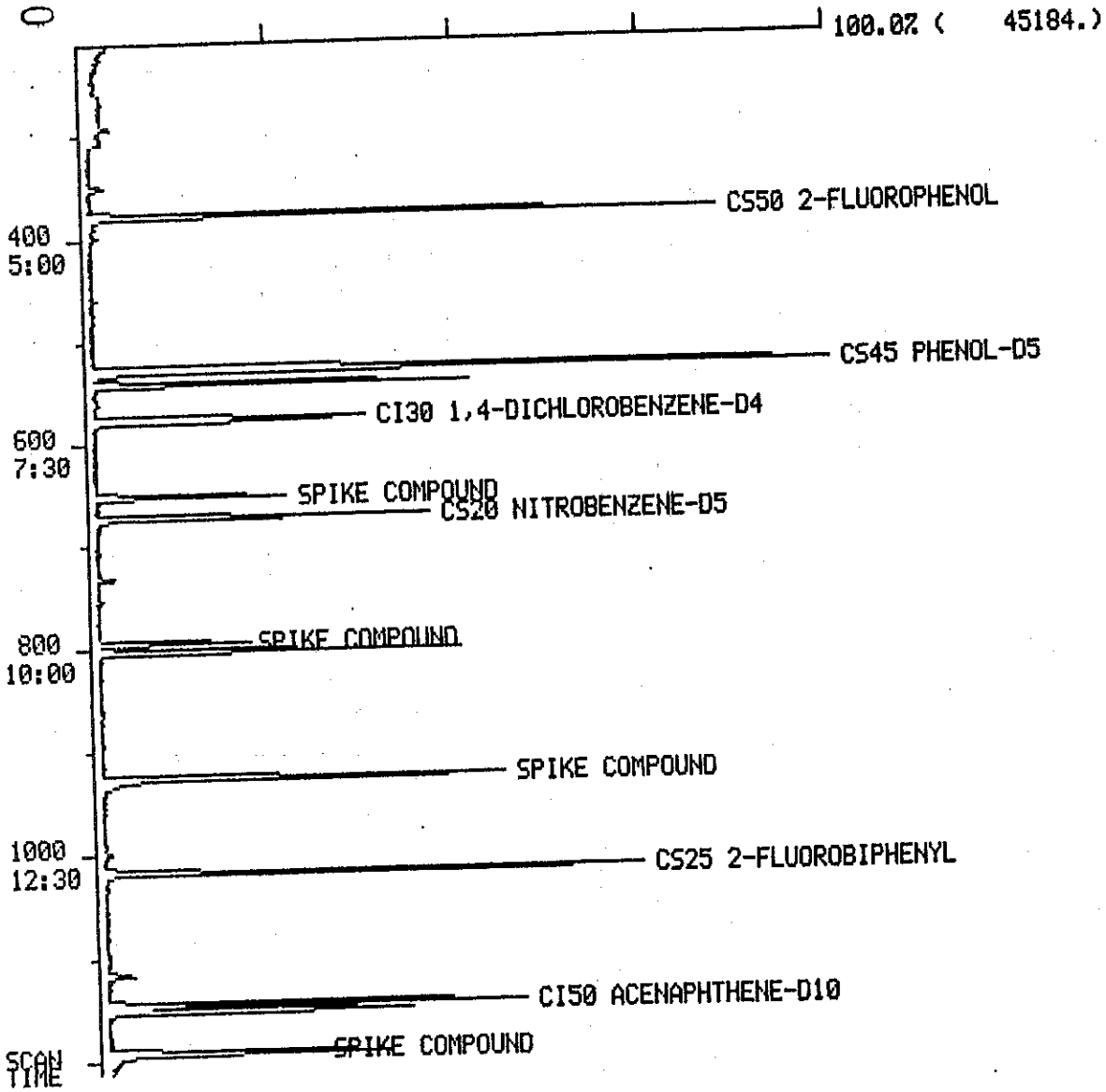
UNITS: UG/ML

NO	LIBRARY ENTRY	NAME	MASS	SCAN	REF	AREA	RRF	AMOUNT
1	S1# 1	CI30 1,4-DICHLOROBENZENE	152	573	1	6870.	1.000	40.000
2	S2# 1	CI40 NAPHTHALENE-D8	136	800	2	26485.	1.000	40.000
3	S3# 1	CI50 ACENAPHTHENE-D10	164	1141	3	13992.	1.000	40.000
4	S4# 1	CI60 PHENANTHRENE-D10	188	1436	4	22672.	1.000	40.000
5	S5# 1	CI70 CHRYSENE-D12	240	1968	5	13693.	1.000	40.000
6	S6# 1	CI75 PERYLENE-D12	264	2235	6	15008.	1.000	40.000
7	S2# 2	CS20 NITROBENZENE-D5	82	670	2	20360.	0.412	74.584
8	S3# 3	CS25 2-FLUOROBIPHENYL	172	1015	3	28753.	1.270	64.701
9	S5# 2	CS30 TERPHENYL-D14	244	1766	5	26041.	1.146	66.393
10	S1# 3	CS45 PHENOL-D5	99	524	1	39735.	1.827	126.639
11	S1# 2	CS50 2-FLUOROPHENOL	112	374	1	30961.	1.415	127.363
12	S3# 2	CS55 2,4,6-TRIBROMOPHENO	330	1299	3	7075.	0.164	123.451
13	S1#105	C315 PHENOL	94	526	1	23544.	2.129	64.401
14	S1#115	C330 2-CHLOROPHENOL	128	538	1	16820.	1.525	64.207
15	S1#130	C340 1,4-DICHLOROBENZENE	146	576	1	7038.	1.704	24.052
16	S1#190	C370 N-NITROSO-DI-N-PROP	70	649	1	7791.	1.304	34.784
17	S2# 55	C445 1,2,4-TRICHLOROBENZ	180	791	2	5186.	0.316	24.803
18	S2#130	C465 4-CHLORO-3-METHYL-P	107	923	2	16234.	0.351	69.819
19	S3# 80	C550 ACENAPHTHENE	153	1147	3	13870.	1.214	32.663
20	S3# 95	C560 4-NITROPHENOL	109	1187	3	3583.	0.109	94.245
21	S3#105	C570 2,4-DINITROTOLUENE	165	1189	3	5783.	0.471	35.136
22	S4# 50	C635 PENTACHLOROPHENOL	266	1403	4	4261.	0.136	55.078
23	S5# 15	C715 PYRENE	202	1723	5	20443.	1.743	34.264

000360

DATA FROM FILE: U7091 SCANS 210 TO 1210 ACQUIRED: 07/31/92 9:31:00
CALI: U7091 #3 OUT OF 210 TO 2760

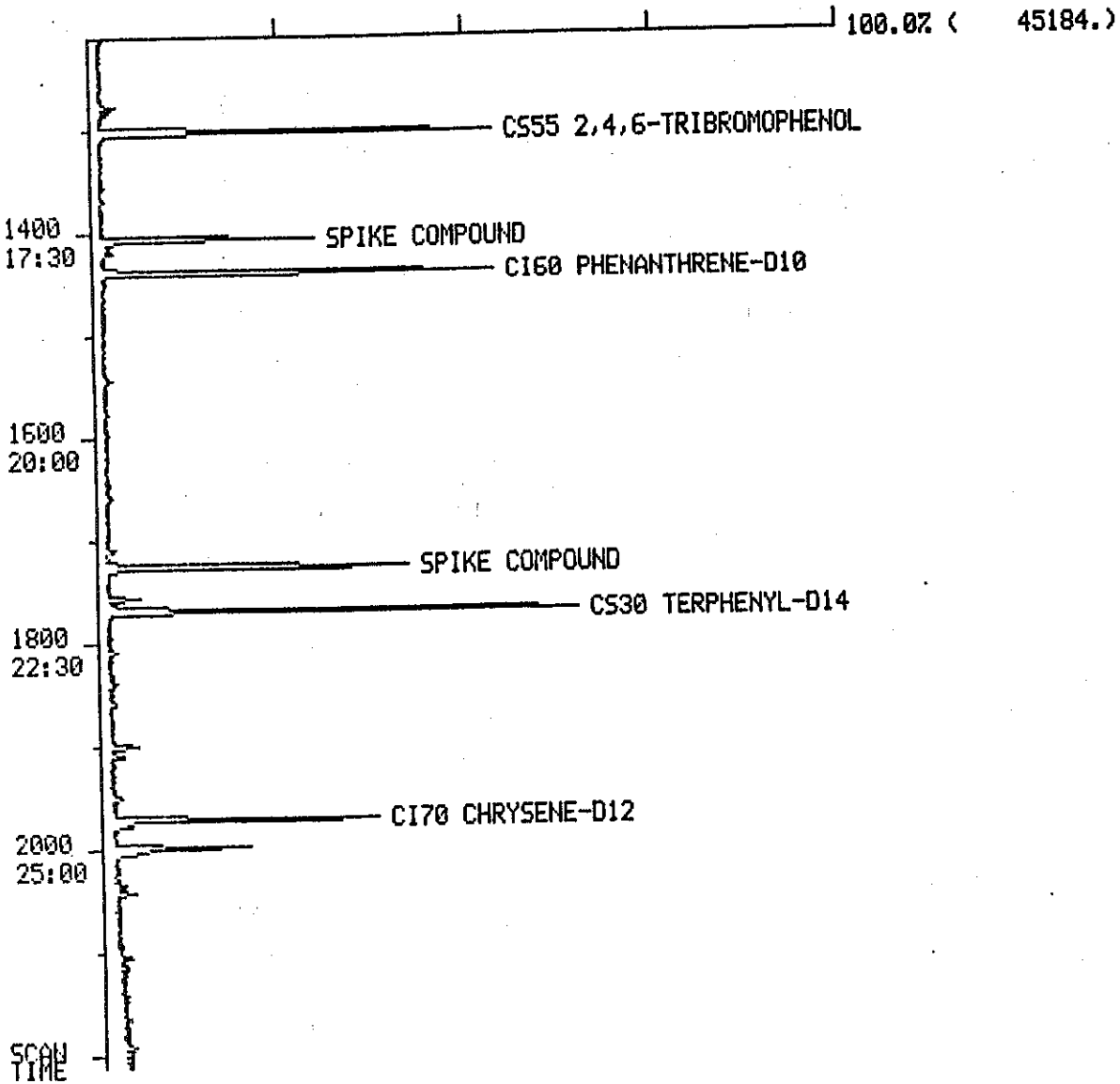
SAMPLE: 23727-DCS2 WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M



000361

DATA FROM FILE: U7091 SCANS 1210 TO 2210 ACQUIRED: 07/31/92 9:31:00
CALI: U7091 #3 OUT OF 210 TO 2760

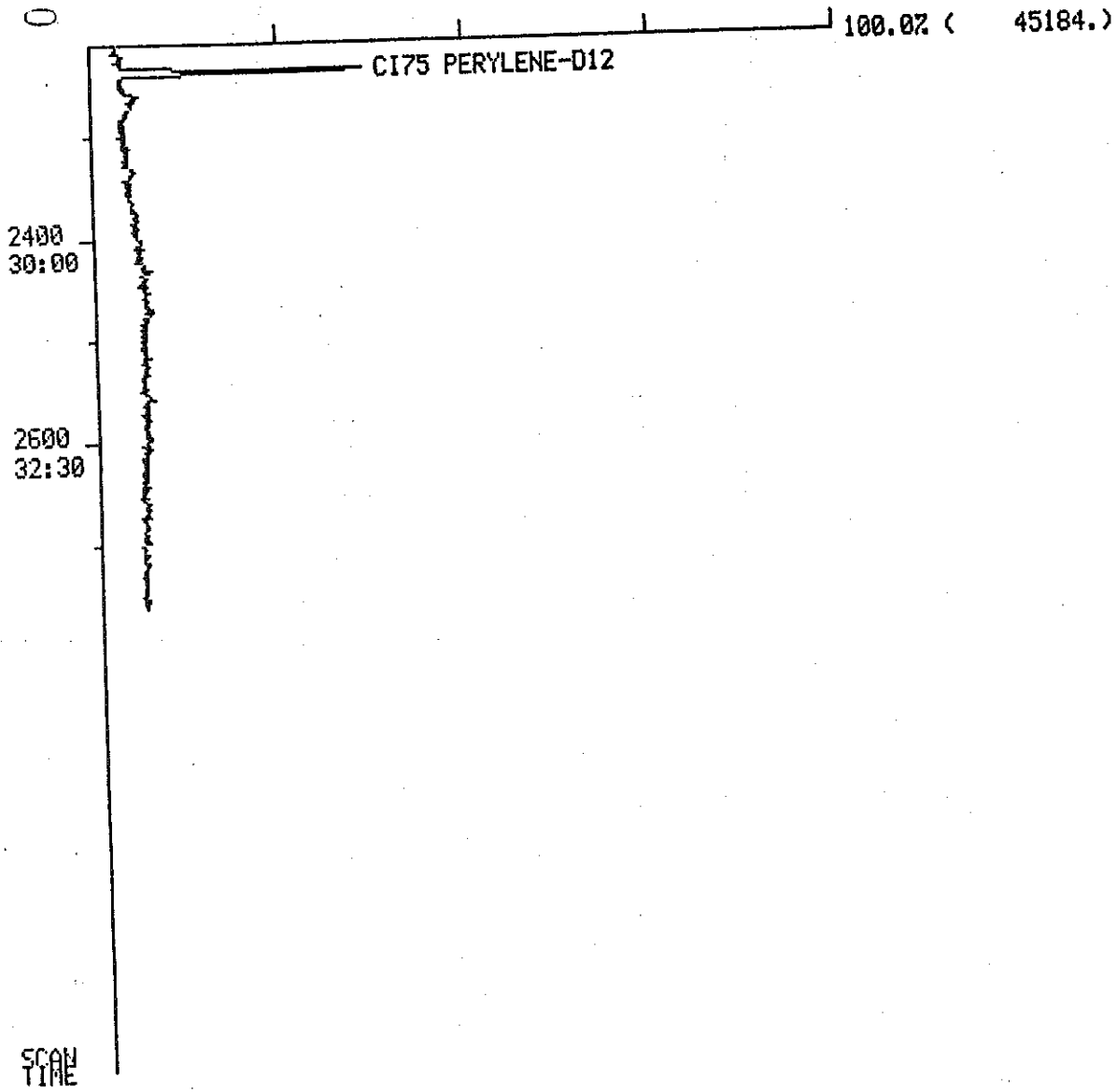
SAMPLE: 23727-DCS2 WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M



000362

DATA FROM FILE: U7091 SCANS 2210 TO 2760 ACQUIRED: 07/31/92 9:31:00
CALI: U7091 #3 OUT OF 210 TO 2760

SAMPLE: 23727-DCS2 WATER 11JUL92-1A
CONDS.: 1.00UG/ML*1.00ML *100%/100.% *(NA/NA)/1000.ML NA M



GC/MS VOA

METHOD/TEST 8080

INSTRUMENT W

INITIAL CALIBRATION DATE 07/26/92

000365

Reduced by: AB Date: 7/27/92
Reviewed by: [illegible] Date: 8/21/92

Initial Calibration Report

Project: OCP07_4, Channel: 59, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

Calibration curve type: Linear NOT forced through zero

Sample	Level	ID	Description
4	L5		INDIVIDUAL MIX AB 0.10UG/ML T=ST
5	L4		Individual Mix AB 0.05ug/mL T=ST
6	L3		Individual Mix AB 0.025ug/mL T=ST
7	L2		Individual Mix AB 0.01ug/mL T=ST
8	L1		Individual Mix AB 0.005ug/mL T=ST

%RSD Measured	%RSD Maximum	Compound
3.9	20.0	Tetrachloro-m-xylene (TCX)
4.8	20.0	alpha-BHC
3.0	20.0	gamma-BHC
4.5	20.0	beta-BHC
6.1	20.0	Heptachlor
3.9	20.0	delta-BHC
2.2	20.0	Aldrin
3.7	20.0	Heptachlor Epoxide
2.4	20.0	Endosulfan I
3.7	20.0	4,4'-DDE
1.7	20.0	Dieldrin
2.3	20.0	Endrin
4.1	20.0	4,4'-DDD
3.9	20.0	Endosulfan II
3.8	20.0	4,4'-DDT
4.2	20.0	Endrin Aldehyde
2.8	20.0	Endosulfan Sulfate
4.4	20.0	Dibutylchlorendate (DBC)
2.9	20.0	Methoxychlor
2.2	20.0	Endrin Ketone
3.4	20.0	Octachloronapthalene
6.9	20.0	Decachlorobiphenyl (DCB)

	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Samp 8 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Tetrachloro-m-xylene (TCX)								
	0.09474	0.05153	0.02534	0.01023	0.004927			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-5.3	3.1	1.4	2.3	-1.5			
alpha-BHC								
	0.09879	0.05313	0.02421	0.009613	0.005100			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-1.2	6.3	-3.2	-3.9	2.0			
gamma-BHC								
	0.1009	0.05155	0.02406	0.009872	0.005052			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	0.9	3.1	-3.8	-1.3	1.0			
beta-BHC								
	0.09465	0.05127	0.02518	0.01045	0.004882			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-5.3	2.5	0.7	4.5	-2.4			
Heptachlor								
	0.09499	0.05084	0.02474	0.01082	0.004810			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-5.0	1.7	-1.0	8.2	-3.8			
delta-BHC								
	0.1013	0.05158	0.02358	0.01009	0.005015			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	1.3	3.2	-5.7	0.9	0.3			
Aldrin								
	0.1002	0.05107	0.02421	0.01009	0.004999			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	0.2	2.1	-3.1	0.9	0.0			
Heptachlor Epoxide								
	0.09602	0.05097	0.02498	0.01042	0.004896			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-4.0	1.9	-0.1	4.2	-2.1			
Endosulfan I								
	0.09707	0.05087	0.02507	0.01020	0.004946			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-2.9	1.7	0.3	2.0	-1.1			
4,4'-DDE								
	0.1035	0.05063	0.02409	0.009682	0.005101			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	3.5	1.3	-3.6	-3.2	2.0			

Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Samp 8 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dieldrin							
0.1000	0.05090	0.02442	0.01004	0.005005			
0.1000	0.05000	0.02500	0.01000	0.005000			
0.0	1.8	-2.3	0.4	0.1			
Endrin							
0.09895	0.05068	0.02449	0.01028	0.004945			
0.1000	0.05000	0.02500	0.01000	0.005000			
-1.0	1.4	-2.0	2.8	-1.1			
4,4'-DDD							
0.1049	0.04950	0.02377	0.01004	0.005033			
0.1000	0.05000	0.02500	0.01000	0.005000			
4.9	-1.0	-4.9	0.4	0.7			
Endosulfan II							
0.09752	0.04940	0.02522	0.01054	0.004868			
0.1000	0.05000	0.02500	0.01000	0.005000			
-2.5	-1.2	0.9	5.4	-2.6			
4,4'-DDT							
0.1045	0.04908	0.02396	0.01014	0.005005			
0.1000	0.05000	0.02500	0.01000	0.005000			
4.5	-1.8	-4.2	1.4	0.1			
Endrin Aldehyde							
0.09538	0.05098	0.02509	0.01047	0.004881			
0.1000	0.05000	0.02500	0.01000	0.005000			
-4.6	2.0	0.4	4.7	-2.4			
Endosulfan Sulfate							
0.09777	0.05076	0.02468	0.01036	0.004921			
0.1000	0.05000	0.02500	0.01000	0.005000			
-2.2	1.5	-1.3	3.6	-1.6			
Dibutylchlorendate (DBC)							
0.09775	0.04915	0.02515	0.01064	0.004848			
0.1000	0.05000	0.02500	0.01000	0.005000			
-2.2	-1.7	0.6	6.4	-3.0			
Methoxychlor							
0.09938	0.04920	0.02497	0.01042	0.004905			
0.1000	0.05000	0.02500	0.01000	0.005000			
-0.6	-1.6	-0.1	4.2	-1.9			
Endrin Ketone							
0.1012	0.05013	0.02426	0.01019	0.004978			
0.1000	0.05000	0.02500	0.01000	0.005000			
1.2	0.3	-2.9	1.9	-0.4			

	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Samp 8 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dieldrin								
	0.1000	0.05090	0.02442	0.01004	0.005005			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	0.0	1.8	-2.3	0.4	0.1			
Endrin								
	0.09895	0.05068	0.02449	0.01028	0.004945			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-1.0	1.4	-2.0	2.8	-1.1			
4,4'-DDD								
	0.1049	0.04950	0.02377	0.01004	0.005033			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	4.9	-1.0	-4.9	0.4	0.7			
Endosulfan II								
	0.09752	0.04940	0.02522	0.01054	0.004868			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-2.5	-1.2	0.9	5.4	-2.6			
4,4'-DDT								
	0.1045	0.04908	0.02396	0.01014	0.005005			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	4.5	-1.8	-4.2	1.4	0.1			
Endrin Aldehyde								
	0.09538	0.05098	0.02509	0.01047	0.004881			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-4.6	2.0	0.4	4.7	-2.4			
Endosulfan Sulfate								
	0.09777	0.05076	0.02468	0.01036	0.004921			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-2.2	1.5	-1.3	3.6	-1.6			
Dibutylchlorendate (DBC)								
	0.09775	0.04915	0.02515	0.01064	0.004848			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-2.2	-1.7	0.6	6.4	-3.0			
Methoxychlor								
	0.09938	0.04920	0.02497	0.01042	0.004905			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-0.6	-1.6	-0.1	4.2	-1.9			
Endrin Ketone								
	0.1012	0.05013	0.02426	0.01019	0.004978			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	1.2	0.3	-2.9	1.9	-0.4			

	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Samp 8 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Octachloronapthalene								
	0.02511	0.02556	0.02387	0.02574	0.02473			
	0.02500	0.02500	0.02500	0.02500	0.02500			
	0.4	2.2	-4.5	3.0	-1.1			
Decachlorobiphenyl (DCB)								
	0.09494	0.04900	0.02564	0.01091	0.004768			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-5.1	-2.0	2.5	9.1	-4.6			

Reduced by: Date: 7/27/92
Reviewed by: Date: 8/21/92

Initial Calibration Report

000370

Project: OCP07_4, Channel: 60, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

Calibration curve type: Linear NOT forced through zero

Sample	Level ID	Description
4	L5	INDIVIDUAL MIX AB 0.10UG/ML T=ST
5	L4	Individual Mix AB 0.05ug/mL T=ST
6	L3	Individual Mix AB 0.025ug/mL T=ST
7	L2	Individual Mix AB 0.01ug/mL T=ST
8	L1	Individual Mix AB 0.005ug/mL T=ST

%RSD Measured	%RSD Maximum	Compound
6.4	20.0	Tetrachloro-m-xylene (TCX)
2.7	20.0	alpha-BHC
7.1	20.0	beta-BHC
3.3	20.0	gamma-BHC
3.4	20.0	delta-BHC
8.9	20.0	Heptachlor
2.7	20.0	Aldrin
5.4	20.0	Heptachlor Epoxide
4.2	20.0	Endosulfan I
2.0	20.0	4,4'-DDE
3.3	20.0	Dieldrin
3.4	20.0	Endrin
6.5	20.0	Endosulfan II
1.8	20.0	4,4'-DDD
7.0	20.0	Endrin Aldehyde
1.0	20.0	Endosulfan Sulfate
1.0	20.0	4,4'-DDT
3.7	20.0	Endrin Ketone
5.2	20.0	Methoxychlor
5.7	20.0	Dibutylchlorendate (DBC)
0.0	20.0	Octachloronapthalene
9.2	20.0	Decachlorobiphenyl (DCB)

	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Samp 8 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Tetrachloro-m-xylene (TCX)								
	0.09405	0.04901	0.02634	0.01063	0.004814			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-5.9	-2.0	5.4	6.3	-3.7			
alpha-BHC								
	0.09698	0.05177	0.02495	0.009971	0.004999			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-3.0	3.5	-0.2	-0.3	0.0			
beta-BHC								
	0.09151	0.05102	0.02589	0.01068	0.004806			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-8.5	2.0	3.6	6.8	-3.9			
gamma-BHC								
	0.09563	0.05165	0.02524	0.01008	0.004964			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-4.4	3.3	1.0	0.8	-0.7			
delta-BHC								
	0.09740	0.05242	0.02456	0.009907	0.005023			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-2.6	4.8	-1.8	-0.9	0.5			
Heptachlor								
	0.09219	0.05045	0.02519	0.01120	0.004708			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-7.8	0.9	0.8	12.0	-5.8			
Aldrin								
	0.09705	0.05146	0.02476	0.01019	0.004955			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-2.9	2.9	-0.9	1.9	-0.9			
Heptachlor Epoxide								
	0.09352	0.05125	0.02537	0.01055	0.004853			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-6.5	2.5	1.5	5.5	-2.9			
Endosulfan I								
	0.09461	0.05113	0.02546	0.01032	0.004903			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-5.4	2.3	1.8	3.2	-1.9			
4,4'-DDE								
	0.09955	0.05028	0.02457	0.01026	0.004950			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-0.4	0.6	-1.7	2.6	-1.0			

	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Samp 8 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dieldrin								
	0.09681	0.05102	0.02479	0.01037	0.004913			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-3.2	2.0	-0.8	3.7	-1.7			
Endrin								
	0.09653	0.05079	0.02496	0.01040	0.004902			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-3.5	1.6	-0.2	4.0	-2.0			
Endosulfan II								
	0.09508	0.04852	0.02613	0.01075	0.004796			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-4.9	-3.0	4.5	7.5	-4.1			
4,4'-DDD								
	0.1001	0.04912	0.02512	0.01023	0.004948			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	0.1	-1.8	0.5	2.3	-1.0			
Endrin Aldehyde								
	0.09162	0.05026	0.02654	0.01051	0.004829			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-8.4	0.5	6.2	5.1	-3.4			
Endosulfan Sulfate								
	0.1980	0.1010	0.05029	0.01983	0.01003			
	0.2000	0.1000	0.05000	0.02000	0.01000			
	-1.0	1.0	0.6	-0.8	0.3			
4,4'-DDT								
	0.1980	0.1010	0.05029	0.01983	0.01003			
	0.2000	0.1000	0.05000	0.02000	0.01000			
	-1.0	1.0	0.6	-0.8	0.3			
Endrin Ketone								
	0.09752	0.05011	0.02485	0.01053	0.004879			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-2.5	0.2	-0.6	5.3	-2.4			
Methoxychlor								
	0.09670	0.04902	0.02540	0.01073	0.004821			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-3.3	-2.0	1.6	7.3	-3.6			
Dibutylchlorendate (DBC)								
	0.09601	0.04918	0.02542	0.01078	0.004805			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-4.0	-1.6	1.7	7.8	-3.9			

	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Samp 8 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Octachloronapthalene								
			0.02500					
			0.02500					
Decachlorobiphenyl (DCB)								
	0.09141	0.04915	0.02635	0.01107	0.004708			
	0.1000	0.05000	0.02500	0.01000	0.005000			
	-8.6	-1.7	5.4	10.7	-5.8			

[OCP07_4] 59 T26JUL92,3,1
Reported on 27-JUL-1992 at 15:42

000374

Injection Report

Acquired on 27-JUL-1992 at 01:04

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : EVALUATION MIX B 0.1UG/ML
Sample Id : EVALB2
Sample Type : Sample Amount=1.00000
Bottle No : 3

AB 7/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.751	9.751	55379	255930	-0.000684	Tetrachloro-m-xylene (TCX)	4.3
11.027	10.960	12046	77448	0.00020	alpha-BHC	5.6
11.911	11.929	52707	406518	0.00062	gamma-BHC	6.4
12.196	12.196	3883	20786	-0.001171	beta-BHC	5.9A
13.169	13.156	15537	157470	0.00054	delta-BHC	8.8
14.151	14.102	6068993	36239252	0.09600	Aldrin	5.9
18.298	18.222	57108	375378	0.00070	4,4'-DDE	6.9
18.618	18.613	16087	167287	-0.000522	Dieldrin	8.8
20.044	19.920	4323214	30858888	0.09411	Endrin	6.9
20.662	20.751	44291	500162	0.00058	Endosulfan II	9.9
22.058	22.022	3797473	26757304	0.10161	4,4'-DDT	6.9
24.960	24.982	3009777	24805360	0.09663	Dibutylchlorendate (DBC)	8.0
26.227	26.191	114289	798964	0.00290	Endrin Ketone	6.9
31.547	31.507	1082333	9245967	0.02395	Octachloronapthalene	8.3

Totals			
Unknowns	2178716	13238967	N/A
Quantified	18653118	130666720	0.41545
Grand Total	20831834	143905680	0.41545

MISSING PEAKS

RT mins	Peak name
13.093	Heptachlor
15.964	Heptachlor Epoxide
17.382	Endosulfan I
20.547	4,4'-DDD
22.200	Endrin Aldehyde
22.942	Endosulfan Sulfate
25.907	Methoxychlor

RT mins	Peak name
31.733	Decachlorobiphenyl (DCB)

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 14:23

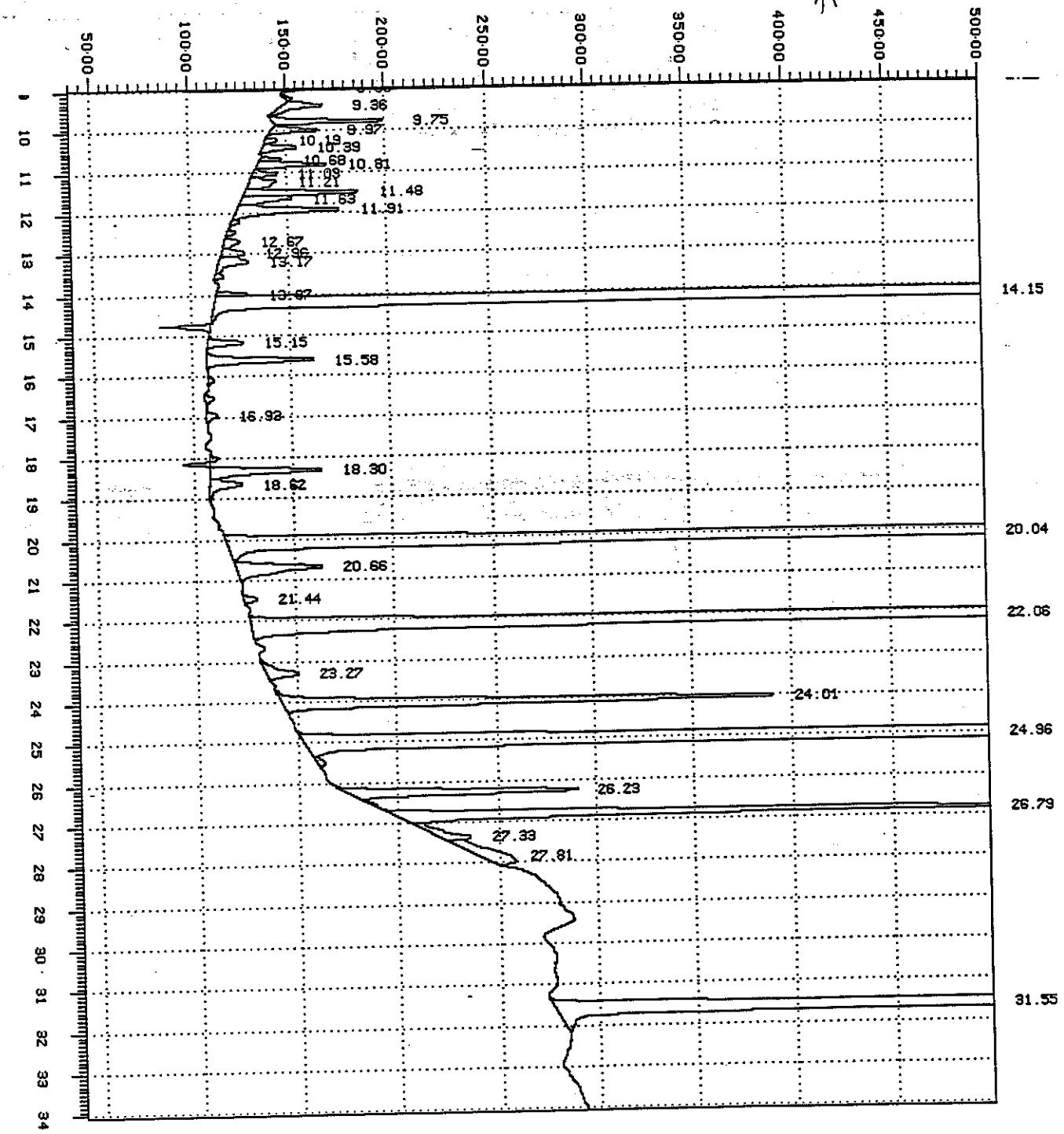
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,3,1

EVALUATION MIX B 0.1UG/ML. Amount : 1.000.

Acquired on 27-JUL-1992 at 01:04
Reported on 27-JUL-1992 at 15:12
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 01:04

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : EVALUATION MIX B 0.1UG/ML
Sample Id : EVALB2
Sample Type : Sample Amount=1.00000
Bottle No : 3

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
10.640	10.720	10238	47371	0.00024	alpha-BHC	5.1
11.240	11.213	28406	187150	-0.000895	beta-BHC	6.4
13.280	13.253	10094	68419	-0.001630	Heptachlor	6.9A
14.222	14.182	5814341	26978178	0.09331	Aldrin	4.5
16.764	16.702	8621	78259	-0.000851	Endosulfan I	I
17.573	17.644	62938	393160	0.00050	Dieldrin	5.9
19.253	19.253	39980	261474	0.00159	4,4'-DDD	6.1
19.742	19.756	23659	153734	-0.000494	Endrin Aldehyde	6.1
	20.733	3329113	19900706	0.09143	Endosulfan Sulfate/4,4'-DDT	
20.827	20.733	3329113	19900706	0.09143	- C1	5.9
22.787	22.742	116671	728589	0.00249	Endrin Ketone	6.1
23.267	23.147	4517	41833	-0.000290	Methoxychlor	6.7
24.911	24.880	2610850	17960482	0.09513	Dibutylchlorendate (DBC)	6.7
29.636	29.600	967183	6840048	0.02476	Octachloronapthalene	6.7

Totals			
Unknowns	6074603	33957020	N/A
Quantified	13026609	73639408	0.30529
Grand Total	19101212	107596432	0.30529

MISSING PEAKS

RT mins	Peak name
9.840	Tetrachloro-m-xylene (TCX)
11.404	gamma-BHC
11.720	delta-BHC
15.400	Heptachlor Epoxide
17.462	4,4'-DDE
18.449	Endrin
18.800	Endosulfan II

RT mins	Peak name
30.667	Decachlorobiphenyl (DCB)

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 14:22

Uncalibrated peaks use user factor (0.0000)

Injection Report

Acquired on 27-JUL-1992 at 01:54

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.10UG/ML T=ST
Sample Id : VER #6266
Sample Type : Standard Amount=1.00000
Bottle No : 4

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.671	9.671	8544480	31450614	0.09474	Tetrachloro-m-xylene (TCX)	3.7
11.053	11.040	9144778	41948524	0.09879	alpha-BHC	4.3
11.991	11.987	8959442	40825512	0.10092	gamma-BHC	4.5
12.169	12.164	4509706	21467598	0.09465	beta-BHC	4.5
13.102	13.093	7470370	40248036	0.09499	Heptachlor	5.9A
13.200	13.196	8379520	42094444	0.10131	delta-BHC	4.8A
14.133	14.129	6282271	37810460	0.10018	Aldrin	5.9
16.009	16.000	5777990	38236072	0.09602	Heptachlor Epoxide	6.4
17.391	17.382	5112150	35598172	0.09707	Endosulfan I	6.9
18.276	18.267	5156026	31985322	0.10354	4,4'-DDE	6.1
18.591	18.587	4890909	34282440	0.10004	Dieldrin	6.7
20.027	20.018	4523496	32439378	0.09895	Endrin	6.9
20.640	20.631	3741652	24447418	0.10490	4,4'-DDD	6.4
20.840	20.831	4268826	31842610	0.09752	Endosulfan II	7.2
22.040	22.031	3959821	27527118	0.10452	4,4'-DDT	6.9
22.209	22.200	3259232	25324974	0.09538	Endrin Aldehyde	8.0
22.951	22.942	3729710	29622956	0.09777	Endosulfan Sulfate	7.2
24.942	24.938	3054962	25091590	0.09775	Dibutylchlorendate (DBC)	7.7
25.916	25.907	2447976	18137136	0.09938	Methoxychlor	7.2
26.213	26.200	4134226	29489350	0.10123	Endrin Ketone	6.9
31.533	31.524	1154568	9556134	0.02511	Octachloronapthalene	8.3
31.800	31.787	3409952	31877368	0.09494	Decachlorobiphenyl (DCB)	9.1

Totals			
Unknowns	3795847	19491342	N/A
Quantified	111912056	681303296	2.09971
Grand Total	115707904	700794624	2.09971

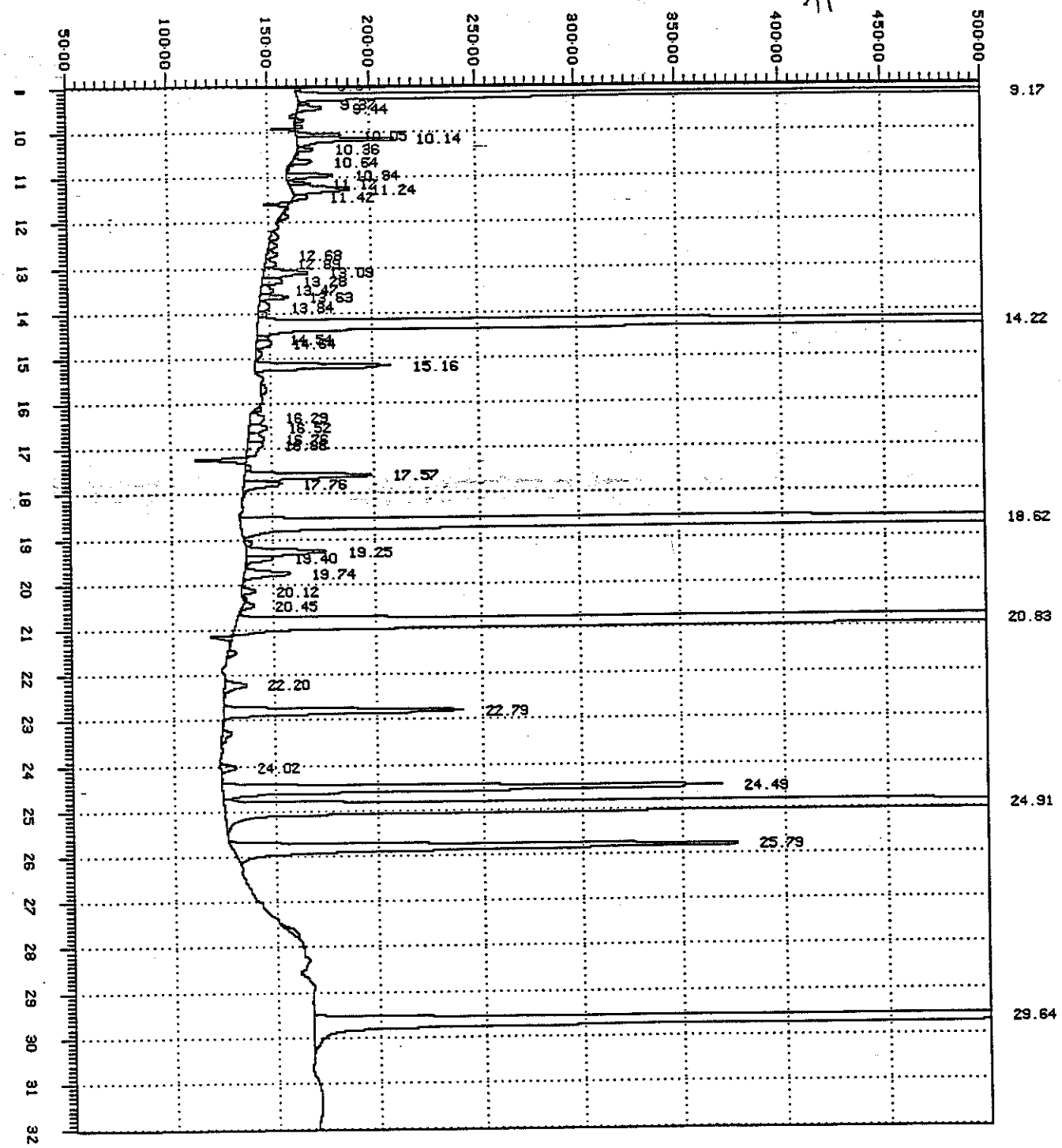
000380

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,3,1

EVALUATION MIX B 0.1UG/ML. Amount : 1.000.

Acquired on 27-JUL-1992 at 01:04
Reported on 27-JUL-1992 at 15:06
Box 1 (of 1)



MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:24

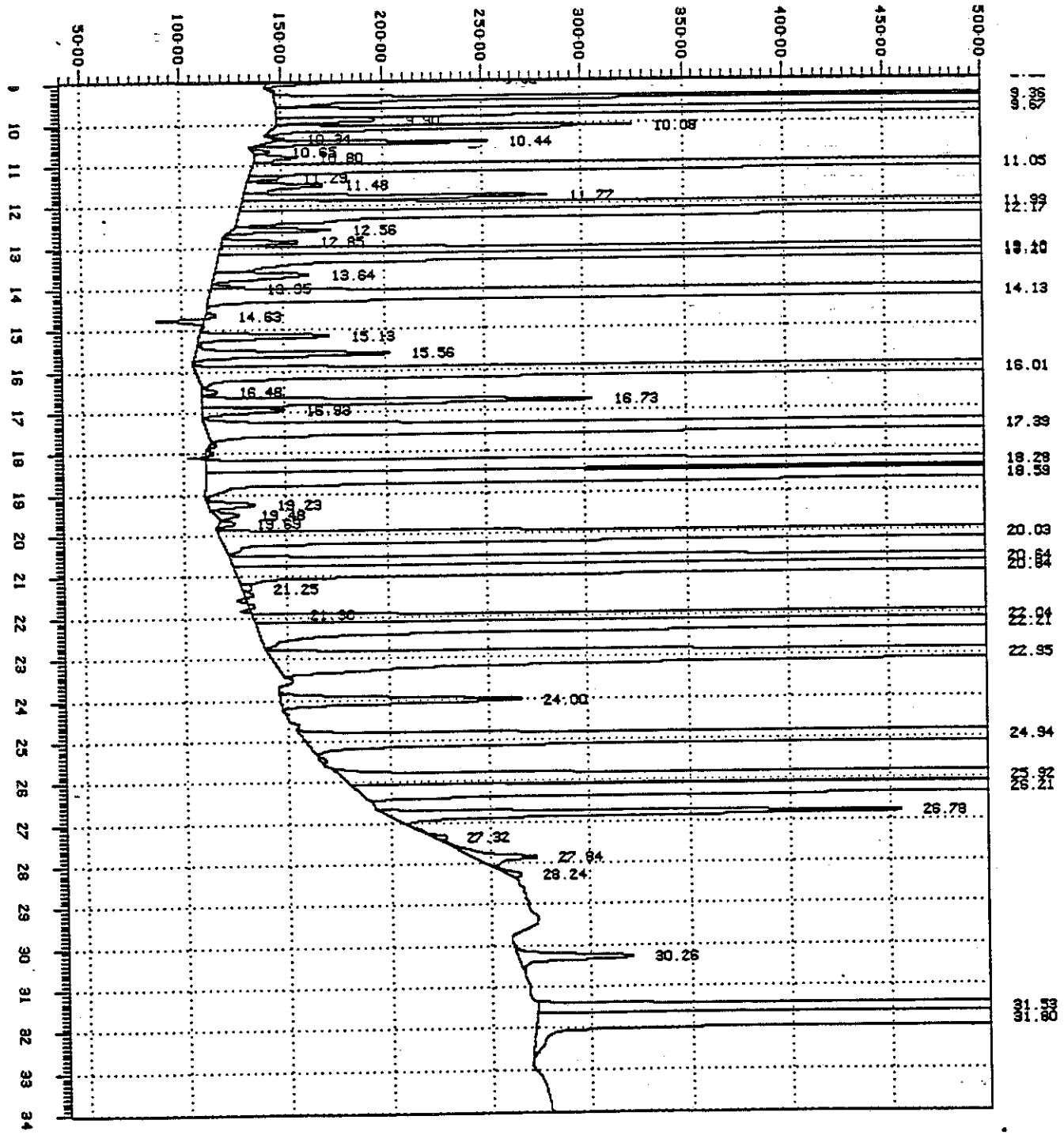
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,4,1

INDIVIDUAL MIX AB 0.10UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 01:54
Reported on 27-JUL-1992 at 15:12
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 01:54

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.10UG/ML T=ST
Sample Id : VER #6266
Sample Type : Standard Amount=1.00000
Bottle No : 4

AB 7/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.893	9.893	5786826	20323034	0.09405	Tetrachloro-m-xylene (TCX)	3.2
10.640	10.636	9319618	31059830	0.09698	alpha-BHC	3.5
11.151	11.151	3878344	15158212	0.09151	beta-BHC	3.7
11.324	11.320	8023477	29515472	0.09563	gamma-BHC	3.7
11.831	11.827	7243883	28252806	0.09740	delta-BHC	4.0
13.156	13.147	6848297	30492308	0.09219	Heptachlor	4.5
14.200	14.191	6054285	28050256	0.09705	Aldrin	4.5
15.462	15.453	5437659	27845264	0.09352	Heptachlor Epoxide	4.8
16.760	16.751	4939218	27013654	0.09461	Endosulfan I	5.3
17.542	17.538	4531904	24221526	0.09955	4,4'-DDE	5.3
17.733	17.724	4772208	26824686	0.09681	Dieldrin	5.6
18.600	18.591	4463980	25175102	0.09653	Endrin	5.6
18.951	18.947	3969258	23425798	0.09508	Endosulfan II	5.6
19.218	19.213	3276079	18967630	0.10008	4,4'-DDD	5.6
19.711	19.707	3037881	19180458	0.09162	Endrin Aldehyde	6.1
	20.733	7493974	42833992	0.19802	Endosulfan Sulfate/4,4'-DDT	
20.716	20.733	3685881	20512596	0.09427	- C1	6.4A
20.796	20.733	3808093	22321394	0.10268	- C1	6.4A
22.760	22.751	3630625	22887996	0.09752	Endrin Ketone	6.1
23.356	23.351	1979547	13091093	0.09670	Methoxychlor	6.4
24.889	24.880	2646619	18124338	0.09601	Dibutylchlorendate (DBC)	6.7
29.613	29.604	1011242	7211567	0.02610	Octachloronapthalene	6.9
30.724	30.711	2890408	21917948	0.09141	Decachlorobiphenyl (DCB)	7.5

Totals			
Unknowns	3031243	16325141	N/A
Quantified	101235320	501572928	2.03839
Grand Total	104266560	517898080	2.03839

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:25

Uncalibrated peaks use user factor (0.0000)

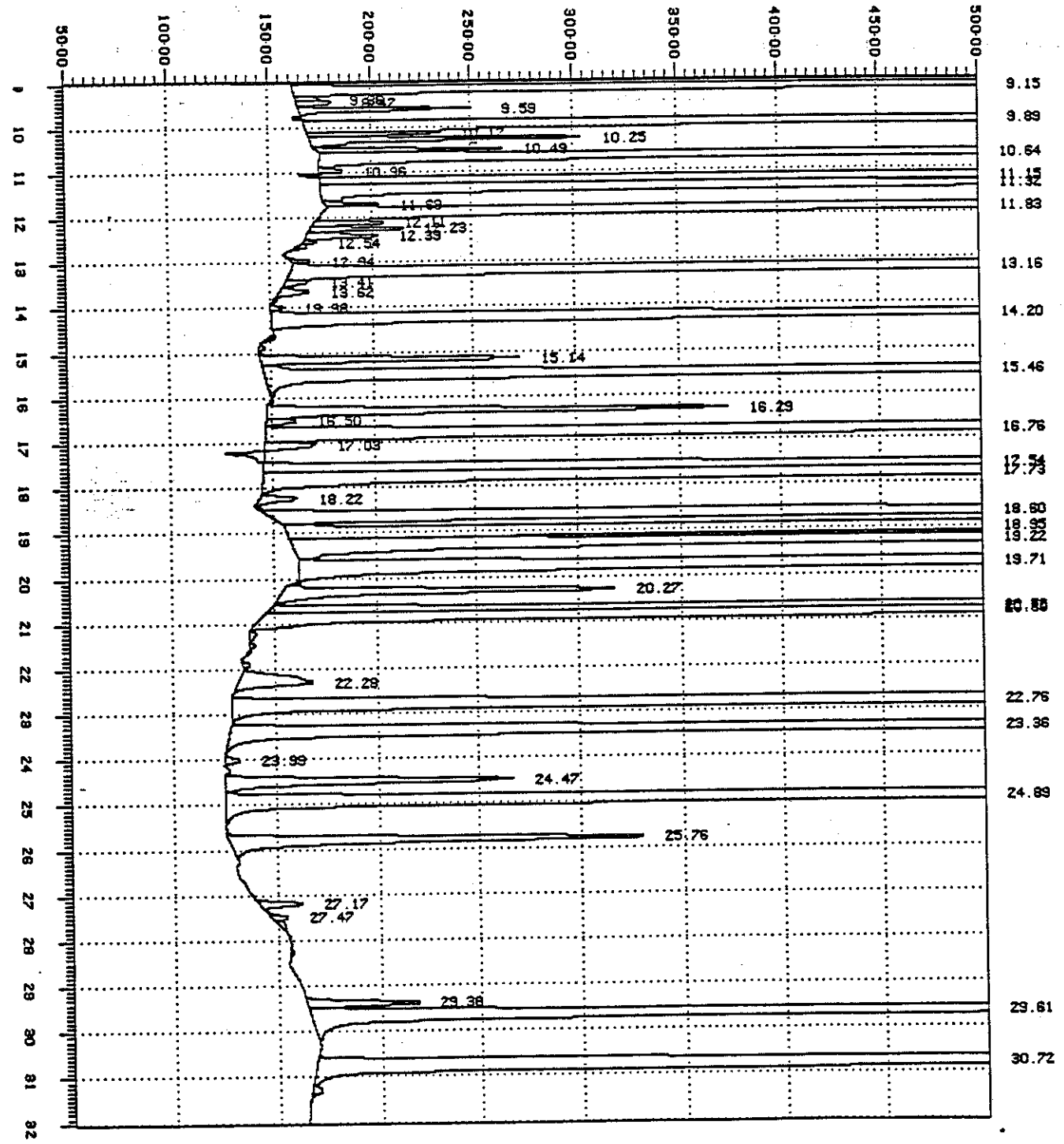
RMAL Chromatography System on DENCR3

000385

[OCP07_4] 60 T26JUL92,4,1

INDIVIDUAL MIX AB 0.10UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 01:54
Reported on 27-JUL-1992 at 15:06
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 02:45

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.05ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 5

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.671	9.671	4663436	17325344	0.05153	Tetrachloro-m-xylene (TCX)	3.5
11.036	11.040	5662406	22555992	0.05313	alpha-BHC	4.0
11.987	11.987	4666490	20928726	0.05155	gamma-BHC	4.5
12.164	12.164	2483926	11756999	0.05127	beta-BHC	4.5
13.093	13.093	3983469	21784756	0.05084	Heptachlor	5.3A
13.196	13.196	4305851	21395664	0.05158	delta-BHC	4.8A
14.129	14.129	3208689	19342706	0.05107	Aldrin	5.9
16.004	16.000	3094822	20512350	0.05097	Heptachlor Epoxide	6.4
17.382	17.382	2719412	18856036	0.05087	Endosulfan I	6.7
18.271	18.267	2516019	15724272	0.05063	4,4'-DDE	6.1
18.587	18.587	2498899	17611748	0.05090	Dieldrin	6.9
20.018	20.018	2317435	16690351	0.05068	Endrin	6.9
20.631	20.631	1767469	11506521	0.04950	4,4'-DDD	6.4
20.831	20.831	2144291	16283847	0.04940	Endosulfan II	7.5
22.036	22.031	1881041	12872044	0.04908	4,4'-DDT	7.2
22.200	22.200	1753445	13637894	0.05098	Endrin Aldehyde	8.0
22.942	22.942	1923202	15424669	0.05076	Endosulfan Sulfate	7.2
24.938	24.938	1537707	12718660	0.04915	Dibutylchlorendate (DBC)	8.0
25.907	25.907	1232545	8978334	0.04920	Methoxychlor	7.2
26.204	26.200	2058136	14579941	0.05013	Endrin Ketone	6.9
31.524	31.524	1159098	9676973	0.02556	Octachloronapthalene	8.0
31.791	31.787	1819661	16648071	0.04900	Decachlorobiphenyl (DCB)	9.1

Totals			
Unknowns	2783910	13989754	N/A
Quantified	59397452	356811872	1.08775
Grand Total	62181360	370801632	1.08775

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:24

Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

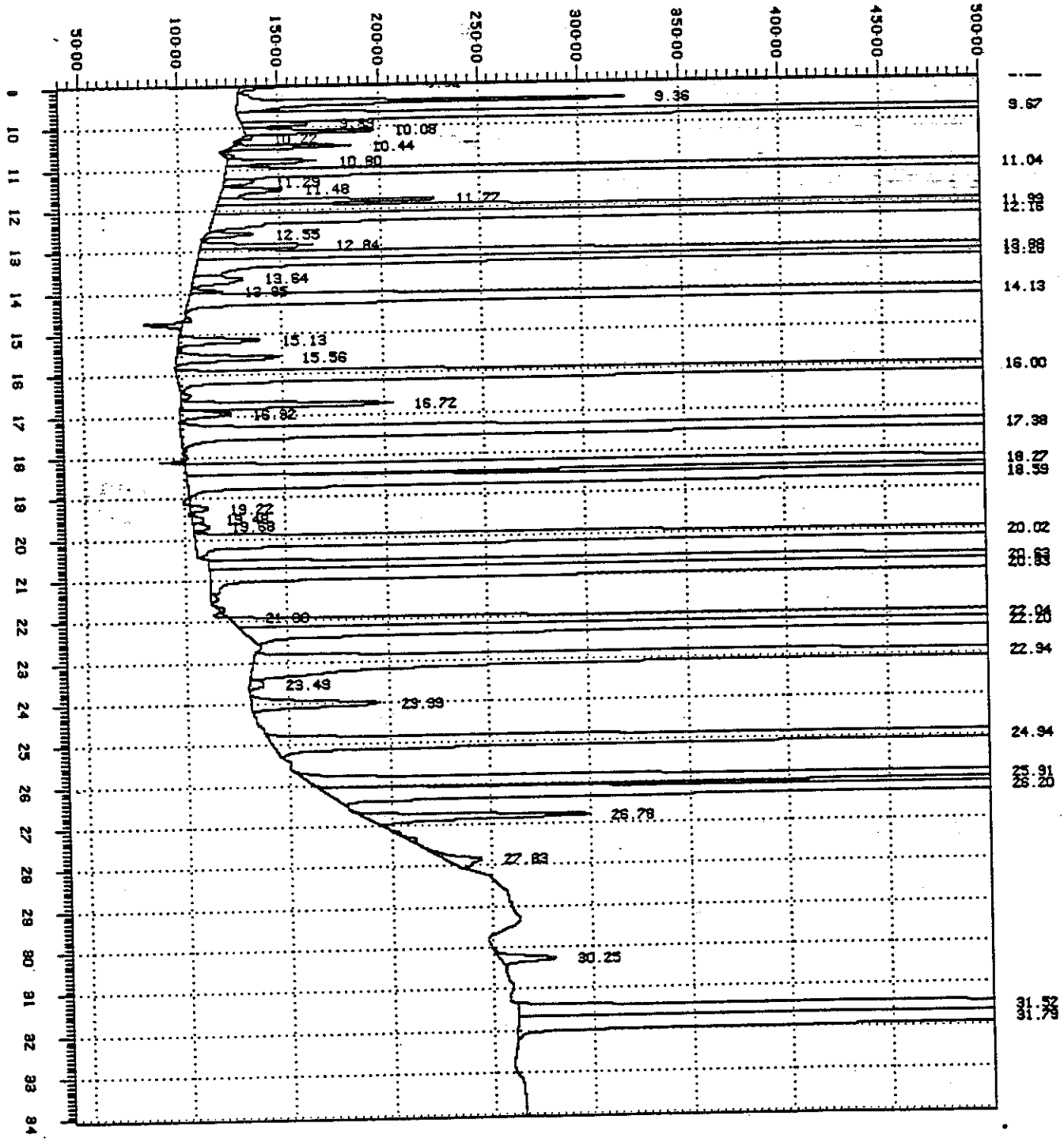
000388

[OCP07_4] 59 T26JUL92,5,1

Individual Mix AB 0.05ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 02:45
Reported on 27-JUL-1992 at 15:13
Box 1 (of 1)

AB 7/27/92



Injection Report

Acquired on 27-JUL-1992 at 02:45

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.05ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 5

OP 7/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.898	9.893	2999660	10694557	0.04901	Tetrachloro-m-xylene (TCX)	3.5
10.640	10.636	5091999	16564757	0.05177	alpha-BHC	3.2
11.156	11.151	2168124	8598179	0.05102	beta-BHC	3.7
11.329	11.320	4414911	16103858	0.05165	gamma-BHC	3.5
11.836	11.827	3901321	15197577	0.05242	delta-BHC	3.7
13.156	13.147	3810626	16955616	0.05045	Heptachlor	4.3
14.200	14.191	3261516	14988620	0.05146	Aldrin	4.5
15.462	15.453	3016400	15487562	0.05125	Heptachlor Epoxide	5.1
16.760	16.751	2727263	14743670	0.05113	Endosulfan I	5.1
17.547	17.538	2331177	12288791	0.05028	4,4'-DDE	5.3
17.733	17.724	2569559	14259552	0.05102	Dieldrin	5.3
18.600	18.591	2399578	13359995	0.05079	Endrin	5.6
18.951	18.947	2056395	12094905	0.04852	Endosulfan II	5.9
19.222	19.213	1609362	9289149	0.04912	4,4'-DDD	5.3
19.711	19.707	1664104	10636485	0.05026	Endrin Aldehyde	6.1
	20.733	3848596	21959302	0.10099	Endosulfan Sulfate/4,4'-DDT	
20.716	20.733	1950163	10809828	0.04917	- C1	6.4A
20.796	20.733	1898433	11149474	0.05075	- C1	6.4A
22.760	22.751	1881527	11832070	0.05011	Endrin Ketone	5.9
23.356	23.351	1016450	6676433	0.04902	Methoxychlor	6.1
24.889	24.880	1365226	9395027	0.04918	Dibutylchlorendate (DBC)	6.7
29.613	29.604	1014378	7191295	0.02603	Octachloronapthalene	6.7
30.720	30.711	1609059	11978179	0.04915	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	2290325	10320531	N/A
Quantified	54757232	270295584	1.08462
Grand Total	57047556	280616128	1.08462

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:25

Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

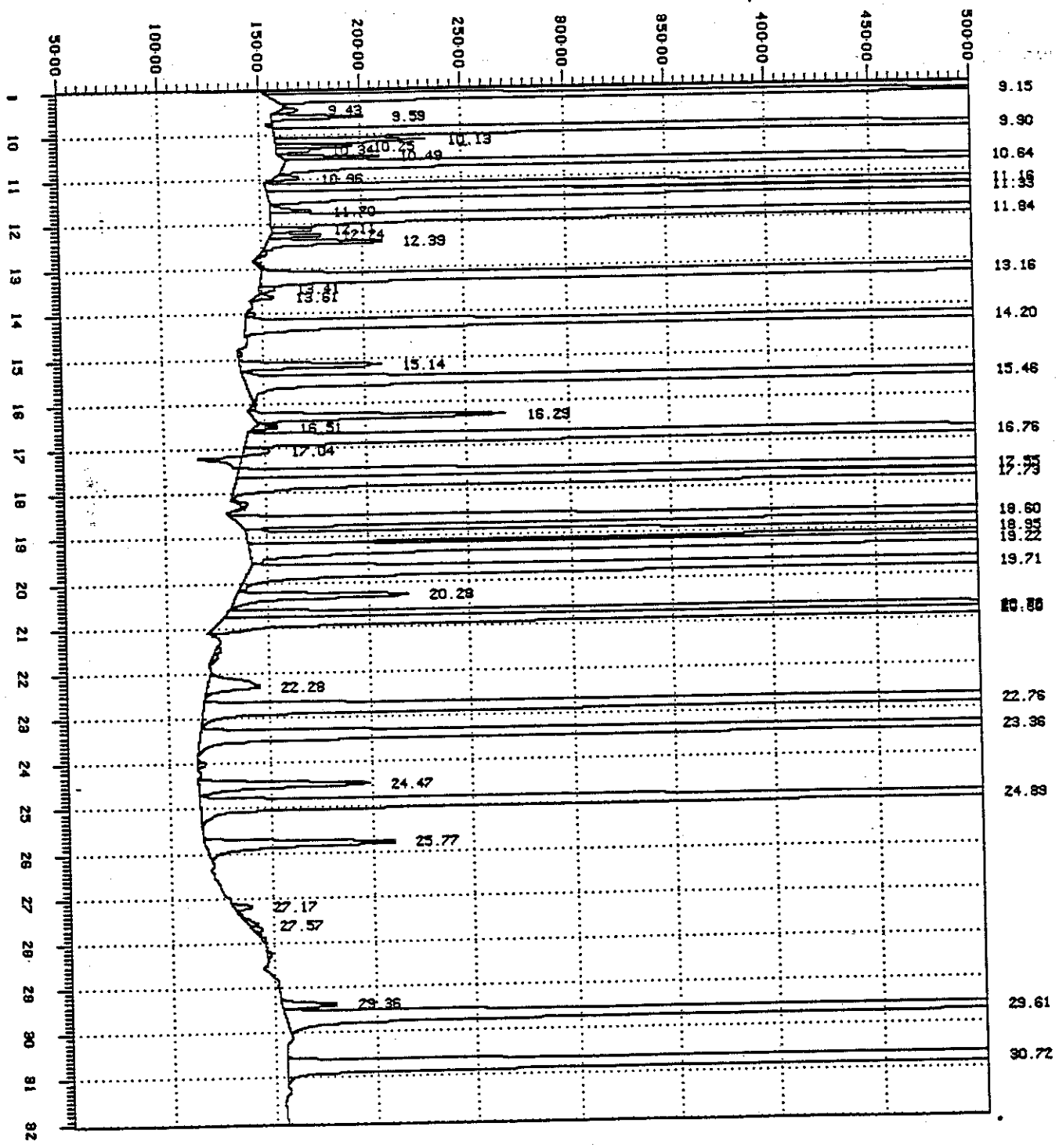
000391

[OCP07_4] 60 T26JUL92,5,1

Individual Mix AB 0.05ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 02:45
Reported on 27-JUL-1992 at 15:07
Box 1 (of 1)

AB 9/30/92



Injection Report

Acquired on 27-JUL-1992 at 03:35

RMAJ Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.025ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 6

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.671	9.671	2368651	8764481	0.02534	Tetrachloro-m-xylene (TCX)	3.5
11.040	11.040	2597176	10273056	0.02421	alpha-BHC	3.7
11.987	11.987	2205247	9852169	0.02406	gamma-BHC	4.3
12.164	12.164	1253891	5918029	0.02518	beta-BHC	4.5
13.093	13.093	1978233	10873322	0.02474	Heptachlor	5.3A
13.196	13.196	1913981	9743485	0.02358	delta-BHC	4.8A
14.129	14.129	1521549	9245002	0.02421	Aldrin	5.9
16.000	16.000	1537161	10288123	0.02498	Heptachlor Epoxide	6.4
17.382	17.382	1357774	9506081	0.02507	Endosulfan I	6.9
18.267	18.267	1183592	7565195	0.02409	4,4'-DDE	6.1
18.587	18.587	1195586	8629132	0.02442	Dieldrin	6.9
20.018	20.018	1119203	8147385	0.02449	Endrin	6.9
20.631	20.631	835090	5497346	0.02377	4,4'-DDD	6.7
20.831	20.831	1121148	8467168	0.02522	Endosulfan II	7.5
22.031	22.031	902713	6230886	0.02396	4,4'-DDT	7.2
22.200	22.200	871027	6823187	0.02509	Endrin Aldehyde	8.0
22.942	22.942	932183	7547704	0.02468	Endosulfan Sulfate	7.5
24.938	24.938	799328	6607735	0.02515	Dibutylchlorendate (DBC)	8.0
25.907	25.907	625545	4557467	0.02497	Methoxychlor	7.2
26.200	26.200	997743	7033234	0.02426	Endrin Ketone	6.7
31.524	31.524	1090395	9223902	0.02387	Octachloronapthalene	8.3
31.787	31.787	980617	8904220	0.02564	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	2475421	12706116	N/A
Quantified	29387832	179698304	0.54098
Grand Total	31863254	192404416	0.54098

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:24

Uncalibrated peaks use user factor (0.0000)

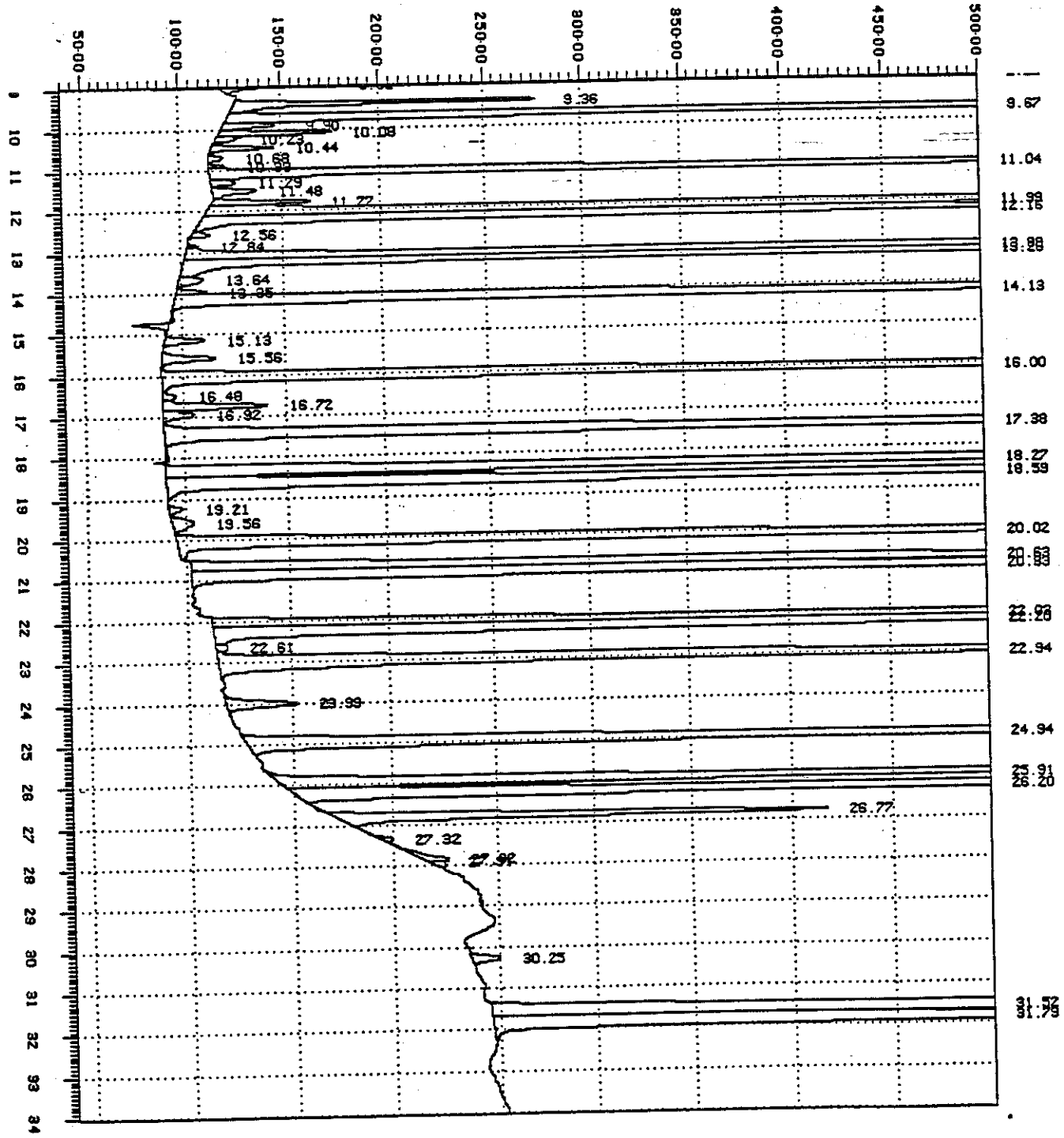
RMAL Chromatography System on DENCR3

000394

[OCP07_4] 59 T26JUL92,6,1

Individual Mix AB 0.025ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 03:35
Reported on 27-JUL-1992 at 15:13
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 03:35

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.025ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 6

AB 7/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.893	9.893	1653689	5848956	0.02634	Tetrachloro-m-xylene (TCX)	3.5
10.636	10.636	2467598	7967315	0.02495	alpha-BHC	3.2
11.151	11.151	1124859	4527319	0.02589	beta-BHC	3.7
11.320	11.320	2181207	8050322	0.02524	gamma-BHC	3.5
11.827	11.827	1793363	7111992	0.02456	delta-BHC	3.7
13.147	13.147	1957025	8766792	0.02519	Heptachlor	4.3
14.191	14.191	1612642	7342655	0.02476	Aldrin	4.5
15.453	15.453	1551222	7918368	0.02537	Heptachlor Epoxide	5.1
16.751	16.751	1393961	7501493	0.02546	Endosulfan I	5.3
17.538	17.538	1117172	6063344	0.02457	4,4'-DDE	5.3
17.724	17.724	1264130	7059016	0.02479	Dieldrin	5.3
18.591	18.591	1177697	6689455	0.02496	Endrin	5.6
18.947	18.947	1115284	6644210	0.02613	Endosulfan II	5.9
19.213	19.213	776551	4731084	0.02512	4,4'-DDD	5.6
19.707	19.707	855627	5738204	0.02654	Endrin Aldehyde	6.1
	20.733	1904144	11050218	0.05029	Endosulfan Sulfate/4,4'-DDT	
20.707	20.733	972674	5596158	0.02494	- C1	6.4A
20.787	20.733	931470	5454060	0.02428	- C1	6.9A
22.751	22.751	950448	5942379	0.02485	Endrin Ketone	5.9
23.351	23.351	530695	3497688	0.02540	Methoxychlor	6.4
24.880	24.880	722240	4964765	0.02542	Dibutylchlorendate (DBC)	6.7
29.604	29.604	966301	6907302	0.02500	Octachloronapthalene	6.9
30.711	30.711	902948	6618623	0.02635	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	2246277	11453264	N/A
Quantified	28018798	140941504	0.55718
Grand Total	30265074	152394768	0.55718

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:25

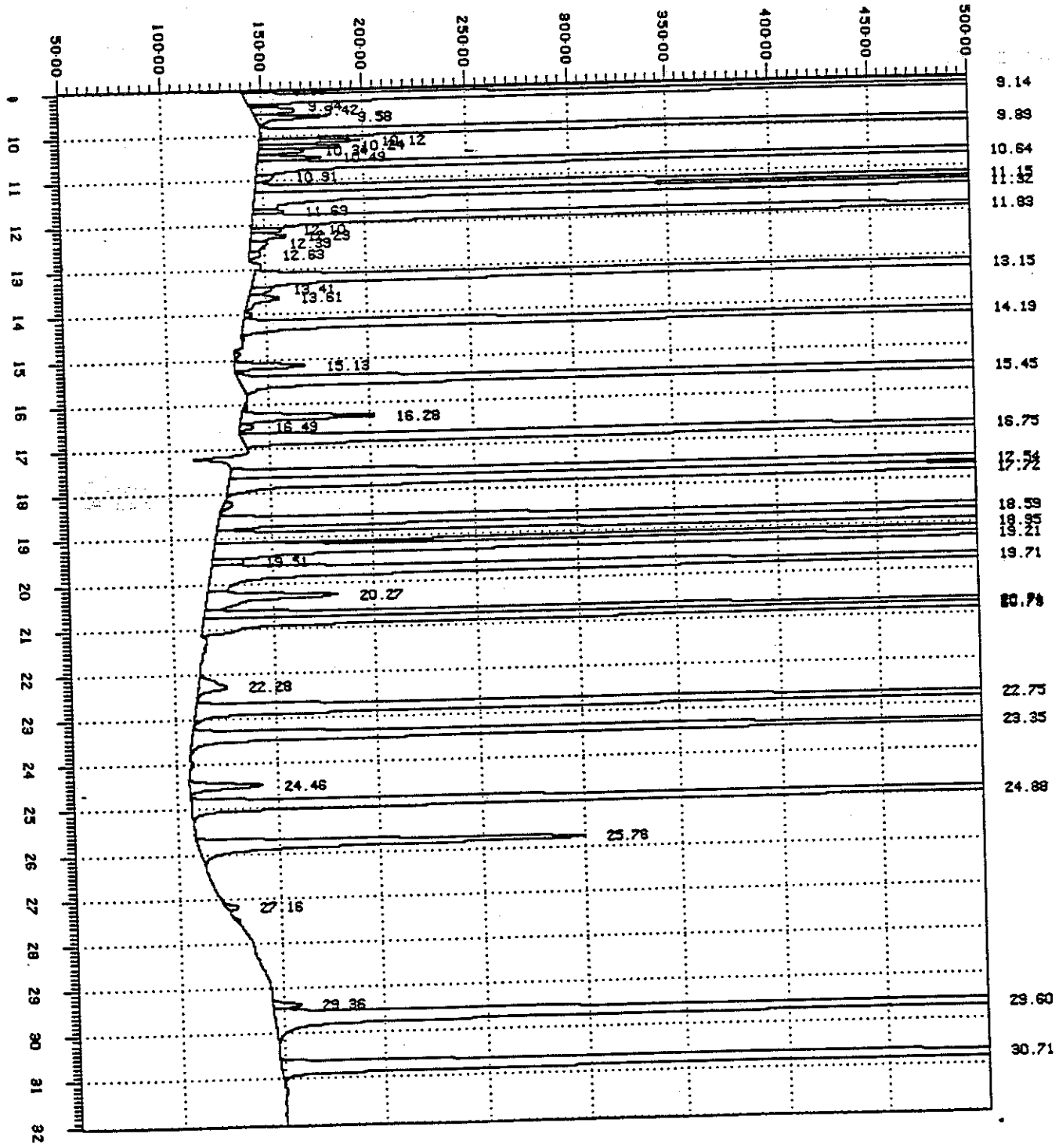
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,6,1

Individual Mix AB 0.025ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 03:35
Reported on 27-JUL-1992 at 15:07
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 04:26

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.01ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 7

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.676	9.671	1025952	3822578	0.01023	Tetrachloro-m-xylene (TCX)	3.5
11.040	11.040	1026366	4074883	0.00961	alpha-BHC	4.0
11.991	11.987	905770	4135752	0.00987	gamma-BHC	4.3
12.169	12.164	558062	2621277	0.01045	beta-BHC	4.5
13.098	13.093	888141	5051887	0.01082	Heptachlor	5.9A
13.196	13.196	777525	4130663	0.01009	delta-BHC	5.3A
14.129	14.129	636545	3931596	0.01009	Aldrin	6.1
16.004	16.000	680311	4563170	0.01042	Heptachlor Epoxide	6.4
17.382	17.382	596713	4115315	0.01020	Endosulfan I	6.7
18.271	18.267	495329	3137323	0.00968	4,4'-DDE	6.1
18.587	18.587	514568	3749022	0.01004	Dieldrin	6.9
20.018	20.018	472194	3513852	0.01028	Endrin	7.2
20.631	20.631	339756	2289139	0.01004	4,4'-DDD	6.9
20.831	20.831	489575	3720599	0.01054	Endosulfan II	7.2
22.036	22.031	368663	2577704	0.01014	4,4'-DDT	7.2
22.204	22.200	384248	2973151	0.01047	Endrin Aldehyde	8.0
22.942	22.942	401539	3222973	0.01036	Endosulfan Sulfate	7.2
24.938	24.938	353847	2914957	0.01064	Dibutylchlorendate (DBC)	8.0
25.907	25.907	266948	1901585	0.01042	Methoxychlor	6.9
26.204	26.200	414148	2926898	0.01019	Endrin Ketone	6.9
31.524	31.524	1154728	9727375	0.02574	Octachloronapthalene	8.3
31.787	31.787	444892	4023651	0.01091	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	1654598	8404243	N/A
Quantified	13195818	83125344	0.24123
Grand Total	14850416	91529584	0.24123

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:24

Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

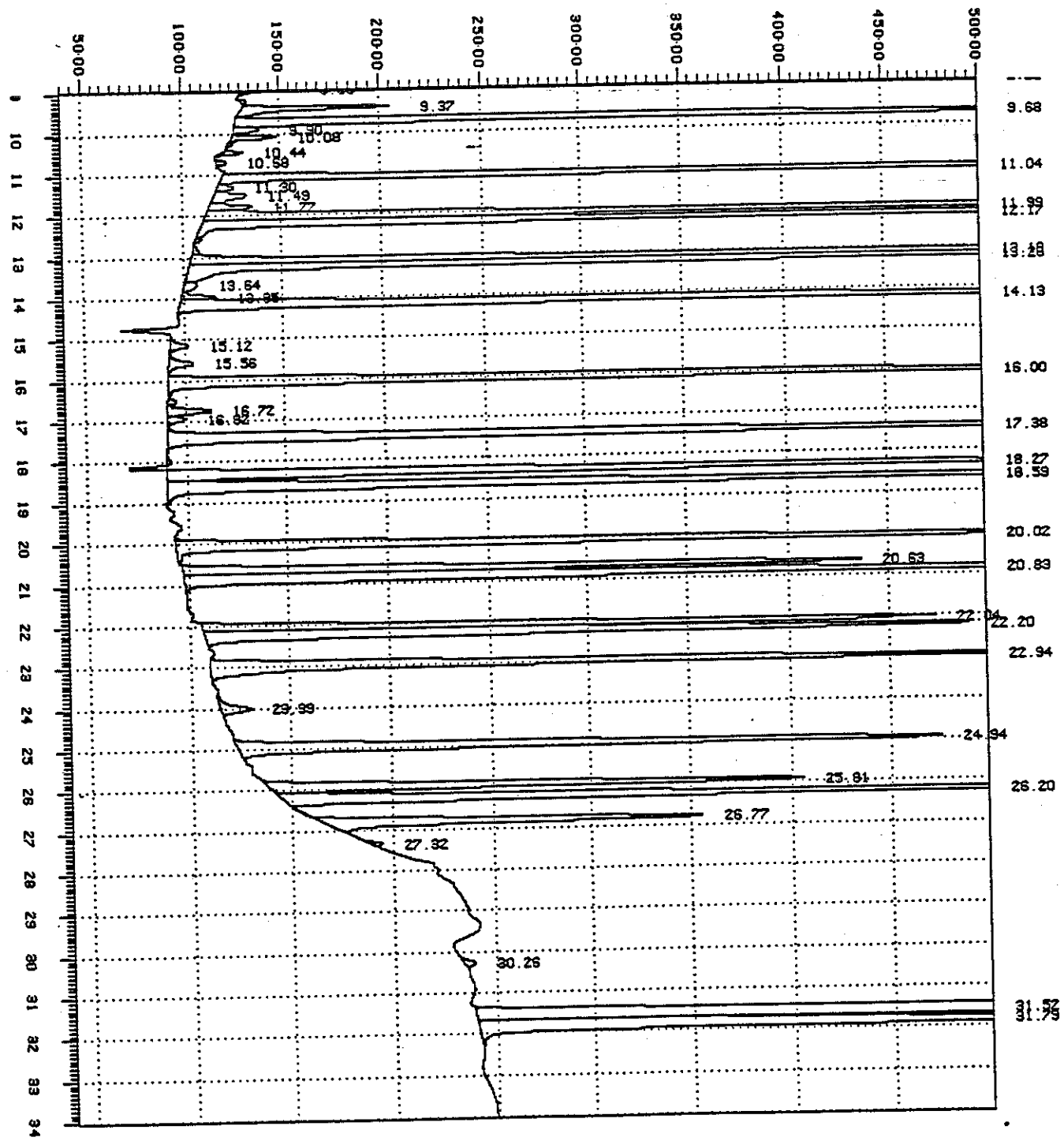
000400

[OCP07_4] 59 T26JUL92,7,1

Individual Mix AB 0.01ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 04:26
Reported on 27-JUL-1992 at 15:13
Box 1 (of 1)

AB 7/27/92



Injection Report

Acquired on 27-JUL-1992 at 04:26

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.01ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 7

AB 27/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.902	9.893	696593	2489937	0.01063	Tetrachloro-m-xylene (TCX)	3.5
10.644	10.636	1003813	3165848	0.00997	alpha-BHC	2.9
11.164	11.151	501272	2061912	0.01068	beta-BHC	4.0
11.329	11.320	918502	3426208	0.01008	gamma-BHC	3.5
11.836	11.827	714477	2859209	0.00991	delta-BHC	3.7
13.156	13.147	885785	4227723	0.01120	Heptachlor	4.5
14.200	14.191	688048	3167738	0.01019	Aldrin	4.3
15.458	15.453	703722	3584693	0.01055	Heptachlor Epoxide	4.8
16.760	16.751	623603	3231581	0.01032	Endosulfan I	5.3
17.542	17.538	477035	2599417	0.01026	4,4'-DDE	5.3
17.733	17.724	548494	3102971	0.01037	Dieldrin	5.3
18.596	18.591	510690	2928398	0.01040	Endrin	5.6
18.951	18.947	492516	2900202	0.01075	Endosulfan II	5.9
19.222	19.213	321213	1902165	0.01023	4,4'-DDD	5.6
19.711	19.707	384379	2426882	0.01051	Endrin Aldehyde	5.9
	20.733	818439	4498126	0.01983	Endosulfan Sulfate/4,4'-DDT	
20.716	20.733	422059	2462006	0.01037	- C1	6.4A
20.791	20.733	396380	2036120	0.00839	- C1	6.9A
22.756	22.751	409656	2602596	0.01053	Endrin Ketone	6.1
23.356	23.351	231752	1523783	0.01073	Methoxychlor	6.4
24.889	24.880	333204	2236745	0.01078	Dibutylchlorendate (DBC)	6.4
29.609	29.604	1005783	7240993	0.02621	Octachloronapthalene	6.9
30.716	30.711	427006	3024878	0.01107	Decachlorobiphenyl (DCB)	6.7

Totals			
Unknowns	1371575	6187614	N/A
Quantified	12695981	65202004	0.24518
Grand Total	14067556	71389616	0.24518

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:25

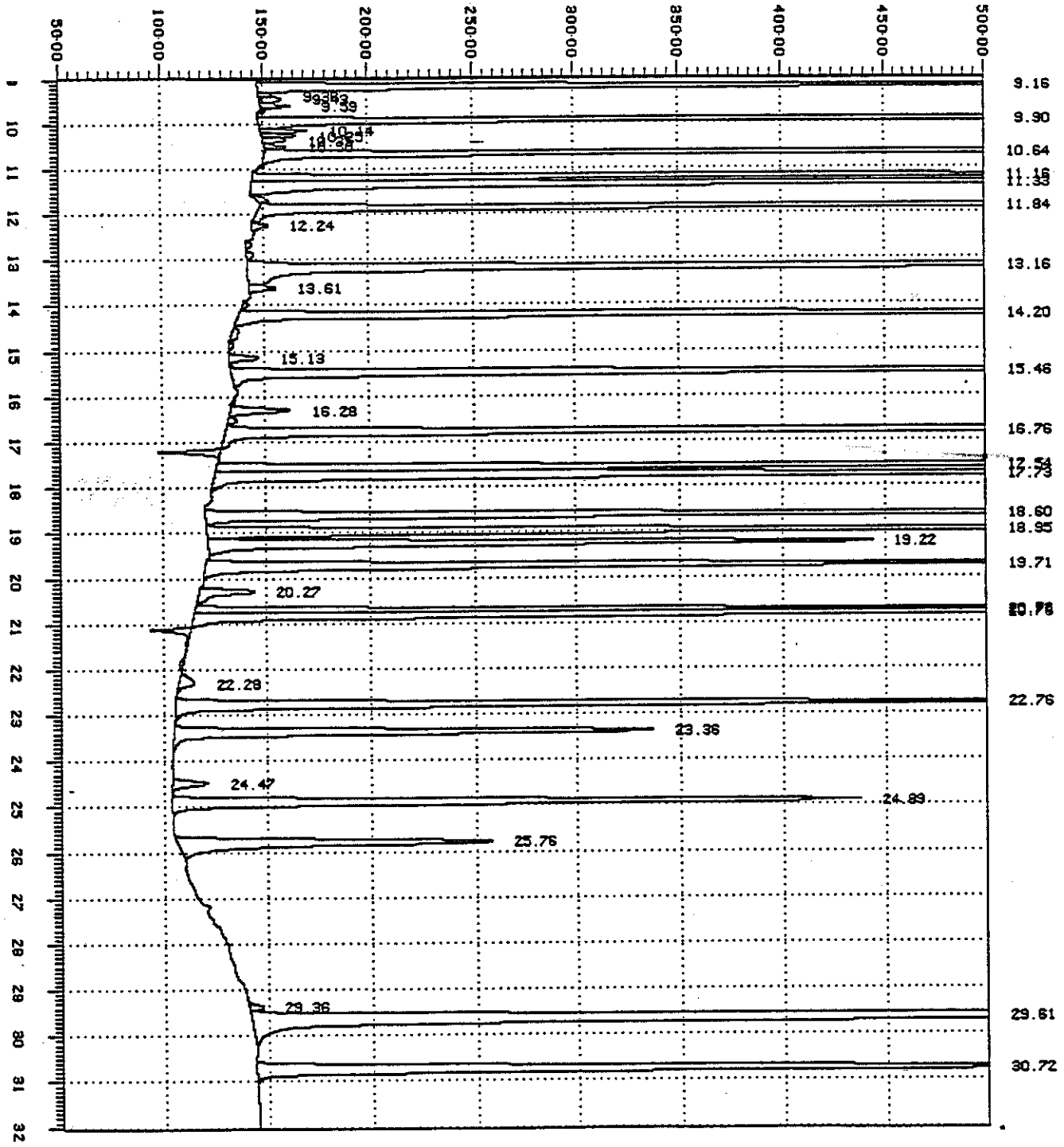
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,7,1

Individual Mix AB 0.01ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 04:26
Reported on 27-JUL-1992 at 15:08
Box 1 (of 1)



[OCP07_4] 59 T26JUL92,8,1
Reported on 27-JUL-1992 at 15:42

000404

Injection Report

Acquired on 27-JUL-1992 at 05:16

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.005ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 8

AB 7/29/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.667	9.671	533041	2090131	0.00493	Tetrachloro-m-xylene (TCX)	3.7
11.027	11.040	508927	2158332	0.00510	alpha-BHC	4.0
11.973	11.987	460281	2193691	0.00505	gamma-BHC	4.5
12.156	12.164	289943	1375563	0.00488	beta-BHC	4.5
13.084	13.093	459789	2539919	0.00481	Heptachlor	5.9A
13.182	13.196	383638	2017684	0.00501	delta-BHC	5.3A
14.116	14.129	327991	2018906	0.00500	Aldrin	5.9
15.987	16.000	358776	2388841	0.00490	Heptachlor Epoxide	6.4
17.369	17.382	312236	2212252	0.00495	Endosulfan I	6.9
18.258	18.267	254635	1729214	0.00510	4,4'-DDE	6.4
18.569	18.587	265940	2042083	0.00500	Dieldrin	7.2
20.004	20.018	242106	1772351	0.00495	Endrin	6.9
20.618	20.631	164764	1120802	0.00503	4,4'-DDD	6.7
20.818	20.831	252216	1885708	0.00487	Endosulfan II	7.2
22.018	22.031	176265	1220573	0.00500	4,4'-DDT	7.5
22.187	22.200	194874	1502690	0.00488	Endrin Aldehyde	7.7
22.924	22.942	196643	1580857	0.00492	Endosulfan Sulfate	7.5
24.920	24.938	174075	1440620	0.00485	Dibutylchlorendate (DBC)	8.0
25.889	25.907	125145	894698	0.00491	Methoxychlor	7.2
26.187	26.200	201083	1406270	0.00498	Endrin Ketone	6.9
31.498	31.524	1124891	9454980	0.02473	Octachloronapthalene	8.0
31.769	31.787	222806	1986145	0.00477	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	1414745	7604548	N/A
Quantified	7230064	47032312	0.12861
Grand Total	8644809	54636860	0.12861

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:24

Uncalibrated peaks use user factor (0.0000)

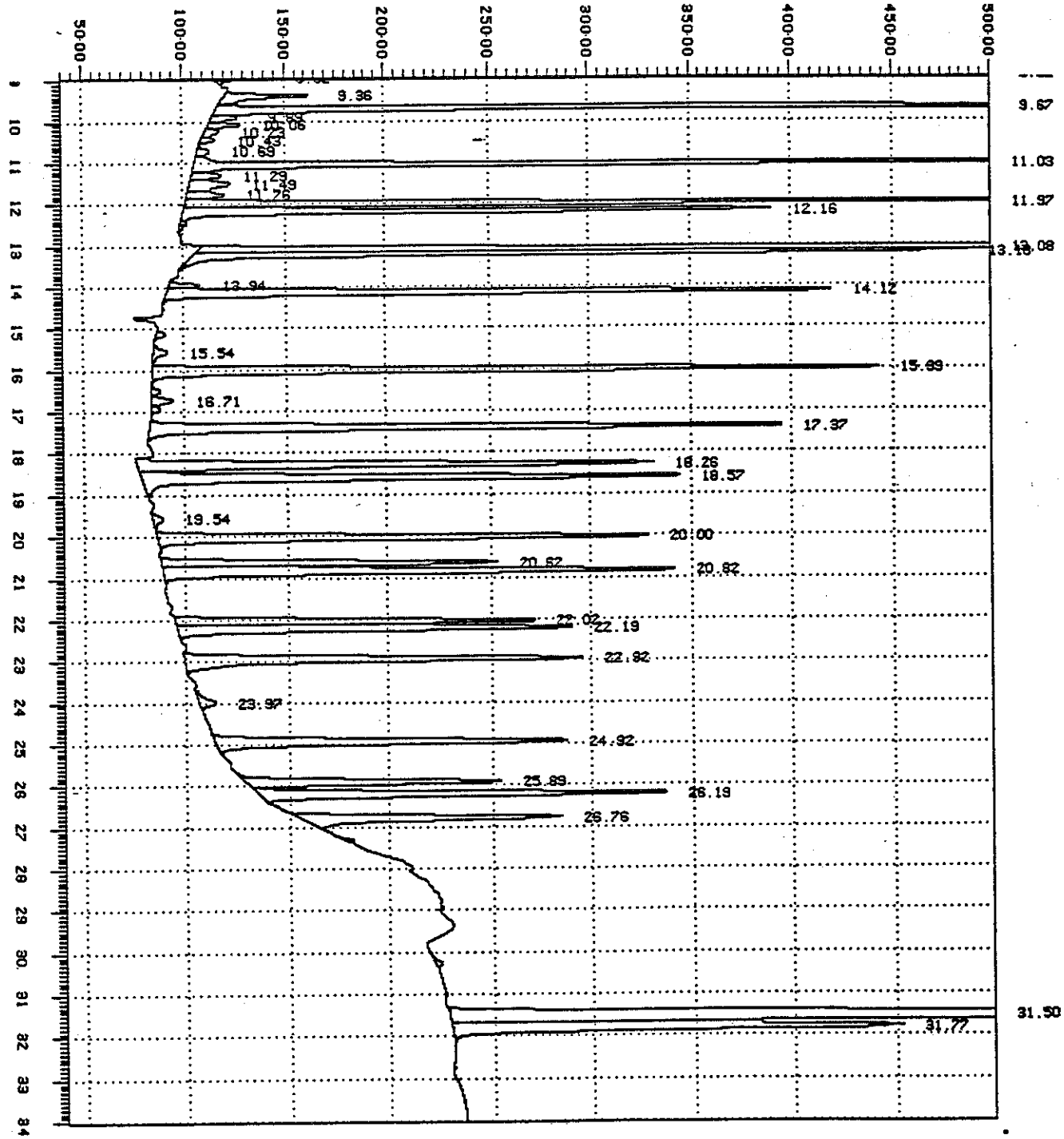
RMAL Chromatography System on DENCR3

000406

[OCP07_4] 59 T26JUL92,8,1

Individual Mix AB 0.005ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 05:16
Reported on 27-JUL-1992 at 15:14
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 05:16

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : Individual Mix AB 0.005ug/mL T=ST
Sample Id : Ver #6266
Sample Type : Standard Amount=1.00000
Bottle No : 8

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.893	9.893	352094	1247370	0.00481	Tetrachloro-m-xylene (TCX)	3.5
10.631	10.636	489701	1571749	0.00500	alpha-BHC	3.2
11.151	11.151	260099	1110915	0.00481	beta-BHC	4.0
11.316	11.320	467544	1865789	0.00496	gamma-BHC	3.5
11.822	11.827	341559	1441663	0.00502	delta-BHC	3.7
13.142	13.147	461676	2123605	0.00471	Heptachlor	4.3
14.182	14.191	357574	1668980	0.00496	Aldrin	4.5
15.444	15.453	371690	1920250	0.00485	Heptachlor Epoxide	4.8
16.742	16.751	331017	1701795	0.00490	Endosulfan I	5.1
17.529	17.538	235541	1312864	0.00495	4,4'-DDE	5.3
17.716	17.724	281473	1604318	0.00491	Dieldrin	5.3
18.582	18.591	263763	1508571	0.00490	Endrin	5.6
18.938	18.947	249972	1452170	0.00480	Endosulfan II	5.6
19.209	19.213	150032	899810	0.00495	4,4'-DDD	5.9
19.698	19.707	196696	1253251	0.00483	Endrin Aldehyde	6.1
	20.733	402451	2387906	0.01003	Endosulfan Sulfate/4,4'-DDT	
20.698	20.733	209610	1245251	0.00471	- C1	5.9A
20.778	20.733	192841	1142654	0.00424	- C1	6.9A
22.738	22.751	203414	1285635	0.00488	Endrin Ketone	6.1
23.338	23.351	112052	729420	0.00482	Methoxychlor	6.1
24.871	24.880	167417	1122354	0.00481	Dibutylchlorendate (DBC)	6.4
29.591	29.604	969013	7042226	0.02549	Octachloronapthalene	6.7
30.698	30.711	216384	1528224	0.00471	Decachlorobiphenyl (DCB)	6.9

Totals			
Unknowns	1133624	4883886	N/A
Quantified	6881162	36778864	0.12809
Grand Total	8014785	41662748	0.12809

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 10:25

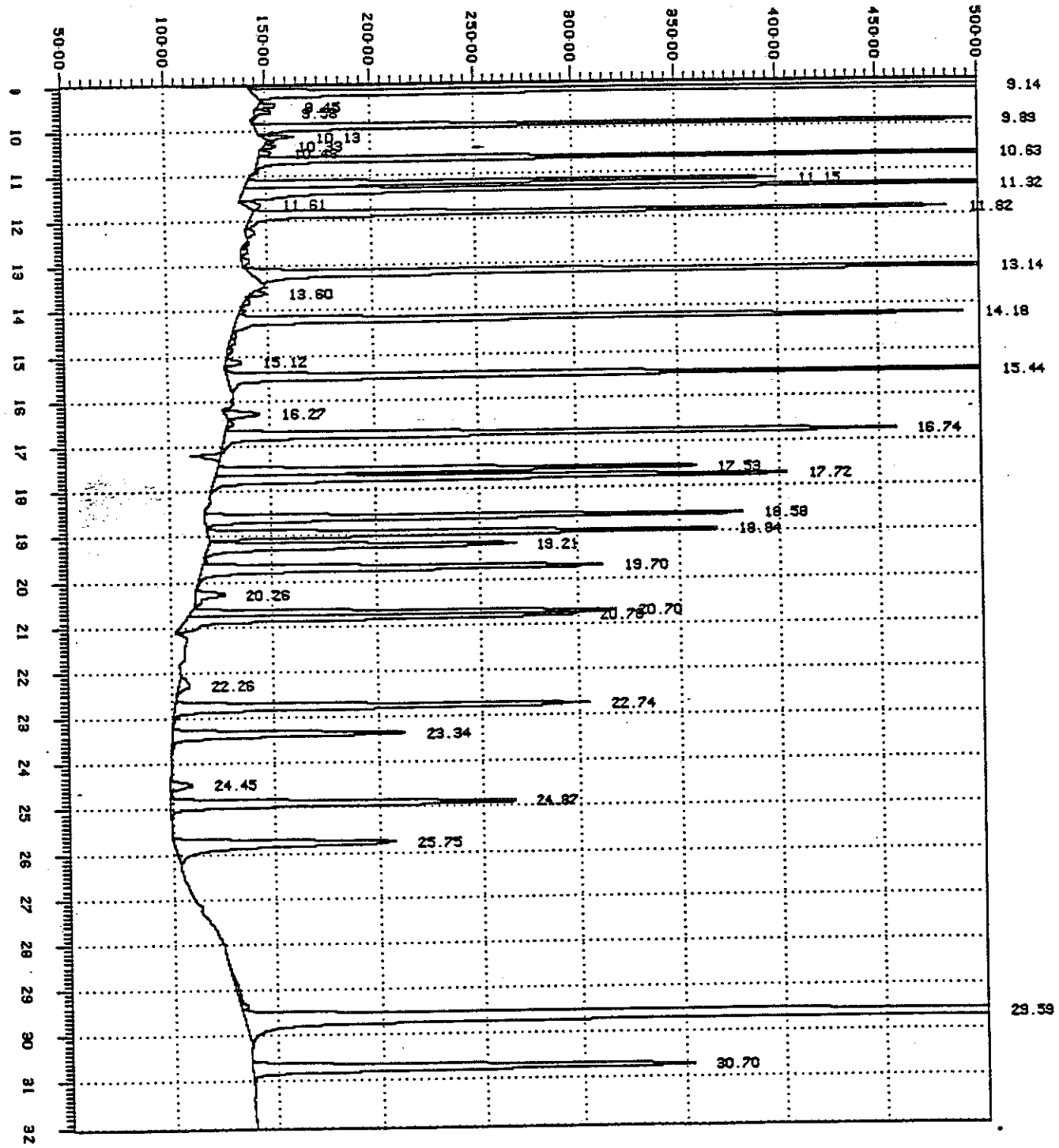
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,8,1

Individual Mix AB 0.005ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 05:16
Reported on 27-JUL-1992 at 15:08
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 06:06

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : ALPHA/GAMMA CHLORDANE 0.05UG/ML T=ST
Sample Id : Ver #5981
Sample Type : Standard Amount=1.00000
Bottle No : 9

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
16.711	16.711	2911027	20151460	0.05000	Gamma-Chlordane	6.7
17.307	17.307	3091087	21754820	0.05000	Alpha-Chlordane	6.9
24.924	24.924	1401023	11685301	0.05000	Dibutylchlorendate (DBC)	8.0
31.507	31.507	1166963	9851305	0.02500	Octachloronapthalene	8.3

Totals			
Unknowns	2097964	14579601	N/A
Quantified	8570099	63442884	0.17500
Grand Total	10668063	78022488	0.17500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... GACHLR_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:43

Uncalibrated peaks use user factor (0.0000)

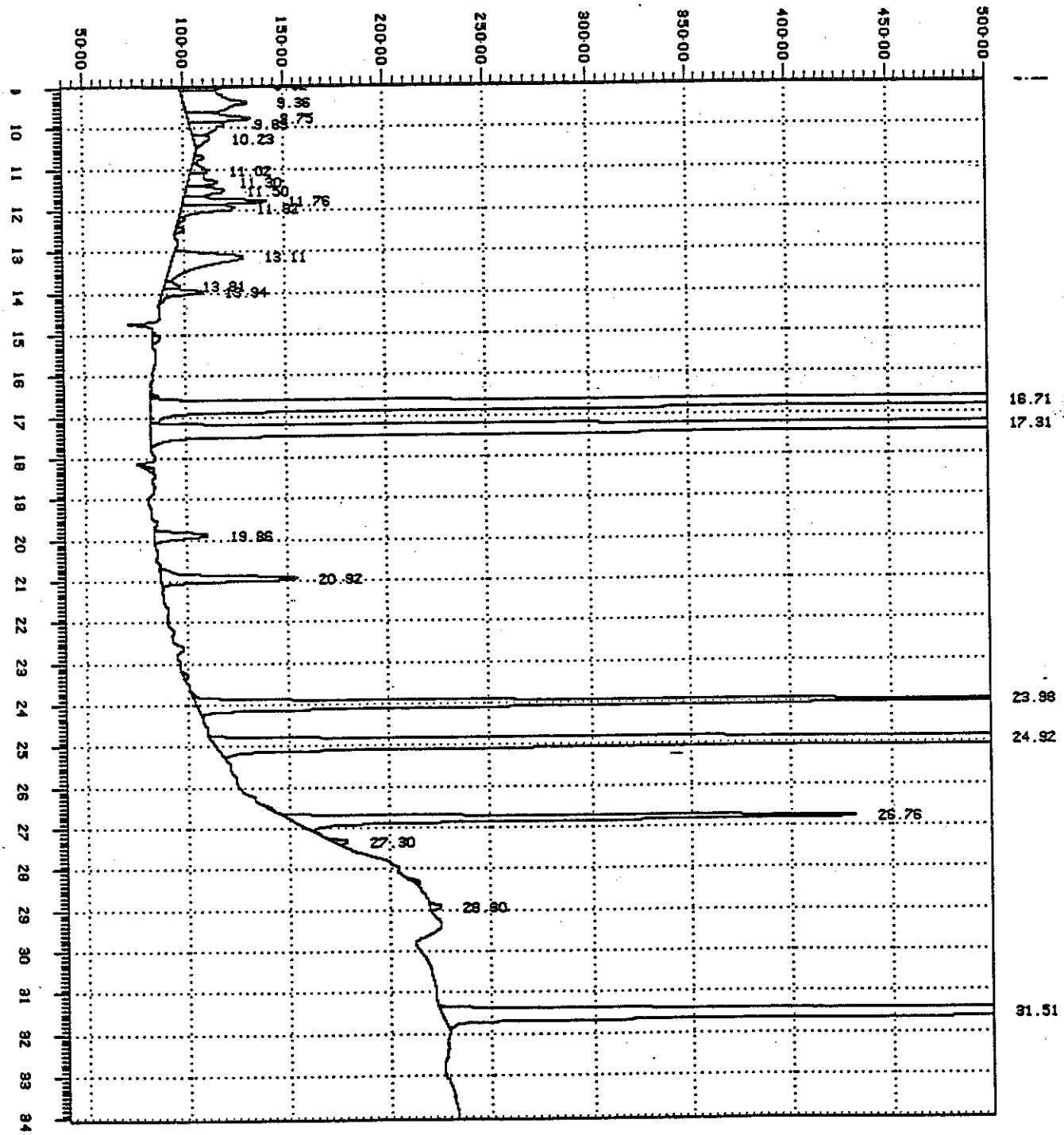
RMAL Chromatography System on DENCR3

000411

[OCP07_4] 59 T26JUL92,9,1

ALPHA/GAMMA CHLORDANE 0.05UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 06:06
Reported on 27-JUL-1992 at 15:14
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 06:06

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : ALPHA/GAMMA CHLORDANE 0.05UG/ML T=ST
Sample Id : Ver #5981
Sample Type : Standard Amount=1.00000
Bottle No : 9

AB 7/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
16.276	16.276	2906840	15705827	0.05000	Gamma-Chlordane	5.1
16.822	16.822	3042228	16800094	0.05000	Alpha-Chlordane	5.3
24.876	24.876	1257833	8679609	0.05000	Dibutylchlorendate (DBC)	6.7
29.600	29.600	1003466	7216258	0.02500	Octachloronapthalene	6.9

Totals			
Unknowns	1695650	8885501	N/A
Quantified	8210367	48401788	0.17500
Grand Total	9906017	57287288	0.17500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... GACHLR_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:35

Uncalibrated peaks use user factor (0.0000)

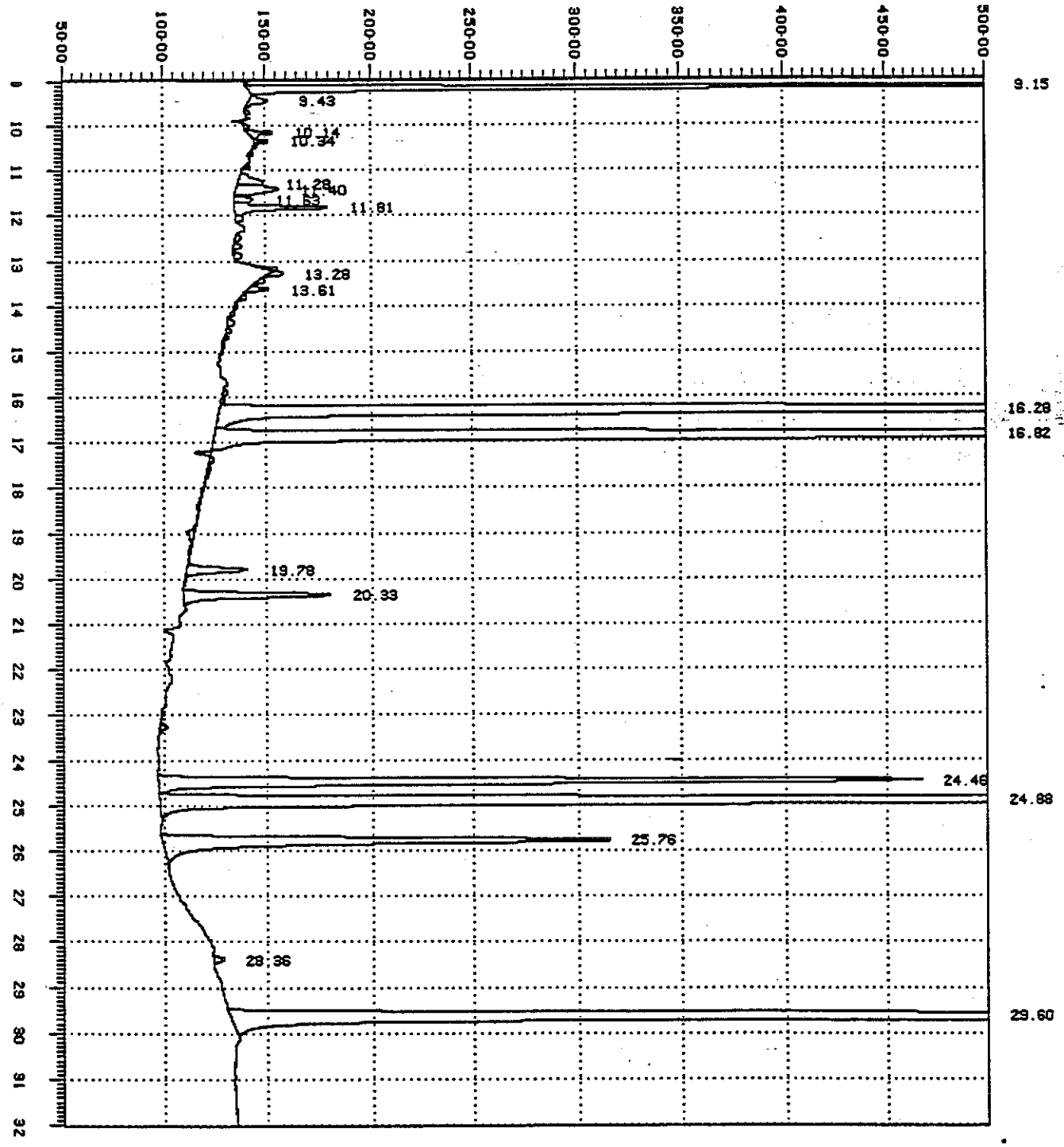
RMAL Chromatography System on DENCR3

000413

[OCP07_4] 60 T26JUL92,9,1

ALPHA/GAMMA CHLORDANE 0.05UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 06:06
Reported on 27-JUL-1992 at 15:08
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 06:56

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : TECHNICAL CHLORDANE 0.075UG/ML T=ST
Sample Id : Ver #5917
Sample Type : Standard Amount=1.00000
Bottle No : 10

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
13.093	13.093	272364	1884798	0.07500	Heptachlor	5.9
16.711	16.711	451708	3752434	0.07500	Gamma-Chlordane	7.2
17.307	17.307	386104	2796218	0.07500	Alpha-Chlordane	6.9
24.920	24.920	4835927	39738008	0.05000	Dibutylchlorendate (DBC)	8.0
31.507	31.507	1137441	9661169	0.02500	Octachloronapthalene	8.3

Totals			
Unknowns	3547837	23478876	N/A
Quantified	7083545	57832628	0.30000
Grand Total	10631381	81311504	0.30000

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1110176	8433450	0.07499	Technical Chlordane

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... TCHLOR_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:43

Uncalibrated peaks use user factor (0.0000)

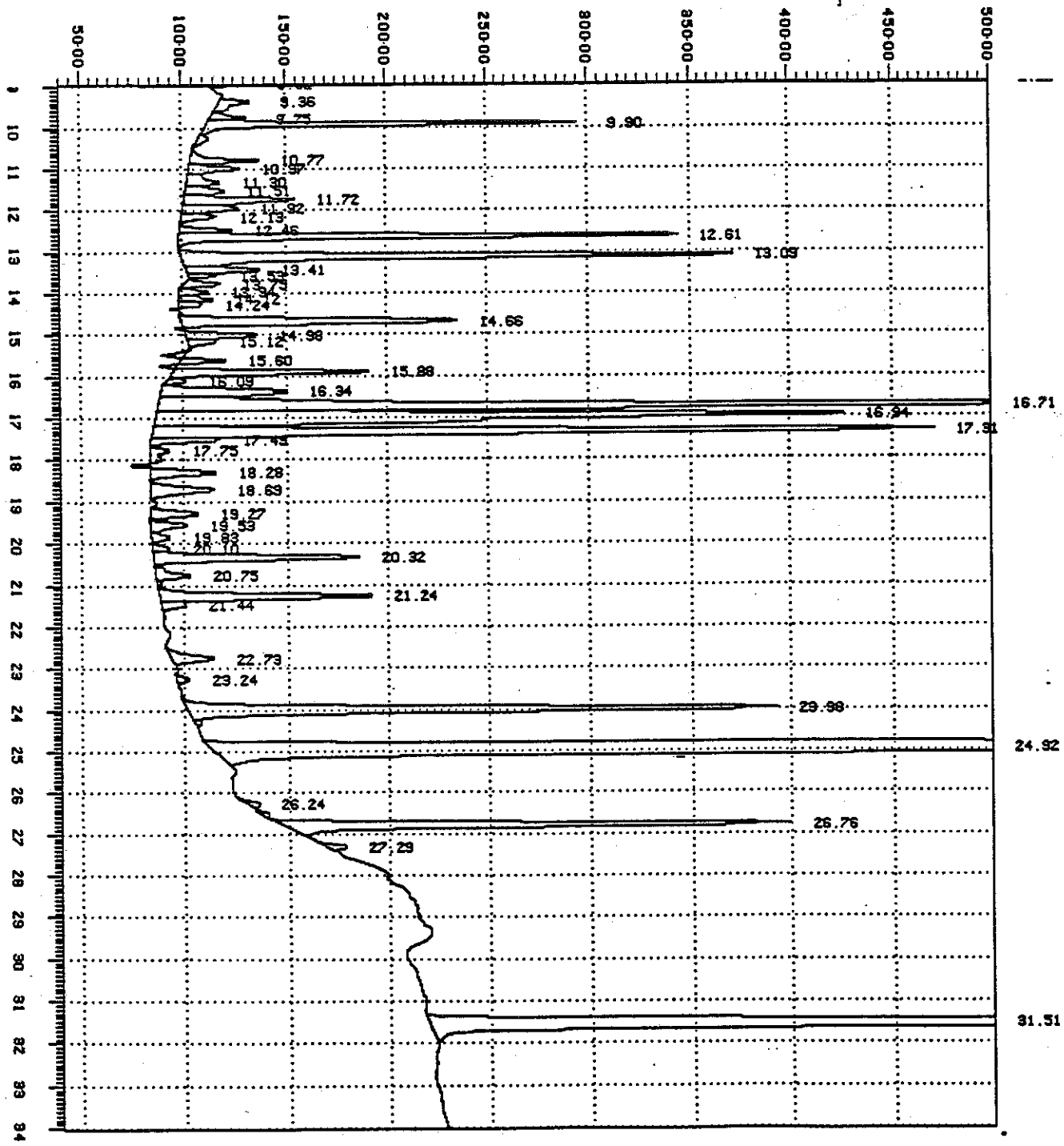
RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,10,1

TECHNICAL CHLORDANE 0.075UG/ML T=ST. Amount : 1.000.

000416

Acquired on 27-JUL-1992 at 06:56
Reported on 27-JUL-1992 at 15:14
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 06:56

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : TECHNICAL CHLORDANE 0.075UG/ML T=ST
Sample Id : Ver #5917
Sample Type : Standard Amount=1.00000
Bottle No : 10

ab 9/07/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
13.147	13.147	268772	1340239	0.07500	Heptachlor	4.5
16.276	16.276	449696	2314035	0.07500	Gamma-Chlordane	5.1
16.822	16.822	430770	2282543	0.07500	Alpha-Chlordane	5.3
24.871	24.871	4089282	28320302	0.05000	Dibutylchlorendate (DBC)	6.7
29.596	29.596	977931	7111752	0.02500	Octachloronapthalene	6.7

Totals			
Unknowns	3395967	17800534	N/A
Quantified	6216453	41368872	0.30000
Grand Total	9612420	59169408	0.30000

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1149239	5936817	0.07499	Technical Chlordane

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... TCHLOR_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:36

Uncalibrated peaks use user factor (0.0000)

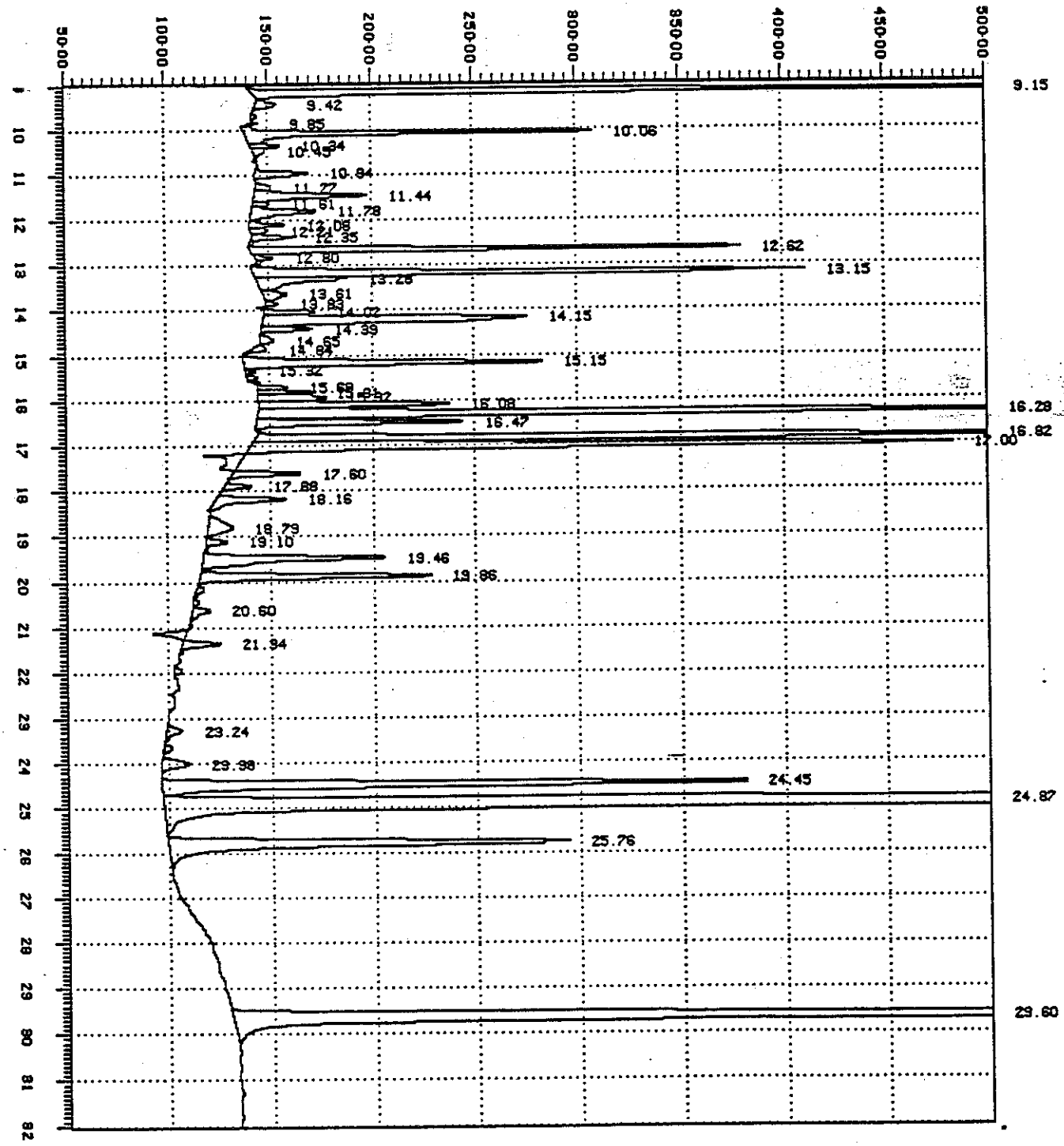
RMAL Chromatography System on DENCR3

000419

[OCP07_4] 60 T26JUL92,10,1

TECHNICAL CHLORDANE 0.075UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 06:56
Reported on 27-JUL-1992 at 15:09
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 07:46

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : TOXAPHENE 0.25UG/ML T=ST
Sample Id : Ver #5859a
Sample Type : Standard Amount=1.00000
Bottle No : 11

AB 7/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
18.258	18.258	85708	480278	0.25000	Toxaphene 1	7.5
18.489	18.489	93164	857734	0.25000	Toxaphene 2	9.9
19.342	19.342	102871	1201433	0.25000	Toxaphene 3	15.5A
20.658	20.658	170517	1553909	0.25000	Toxaphene 4	9.1
21.107	21.107	273654	3570190	0.25000	Toxaphene 5	11.2
22.222	22.222	196343	2596389	0.25000	Toxaphene 6	13.6
22.516	22.516	153348	1250234	0.25000	Toxaphene 7	10.1A
23.236	23.236	171120	1476127	0.25000	Toxaphene 8	8.3
24.924	24.924	1937189	22465000	0.05000	Dibutylchlorendate (DBC)	8.3
26.587	26.587	142464	945173	0.25000	Toxaphene 9	6.7
27.467	27.467	76543	481103	0.25000	Toxaphene 10	5.9A
31.511	31.511	1156400	9915528	0.02500	Octachloronapthalene	8.3

Totals			
Unknowns	4089376	28999902	N/A
Quantified	4559322	46793100	2.57500
Grand Total	8648698	75793000	2.57500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1465733	14412571	0.25000	Toxaphene

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... TOXAPH_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:44

Uncalibrated peaks use user factor (0.0000)

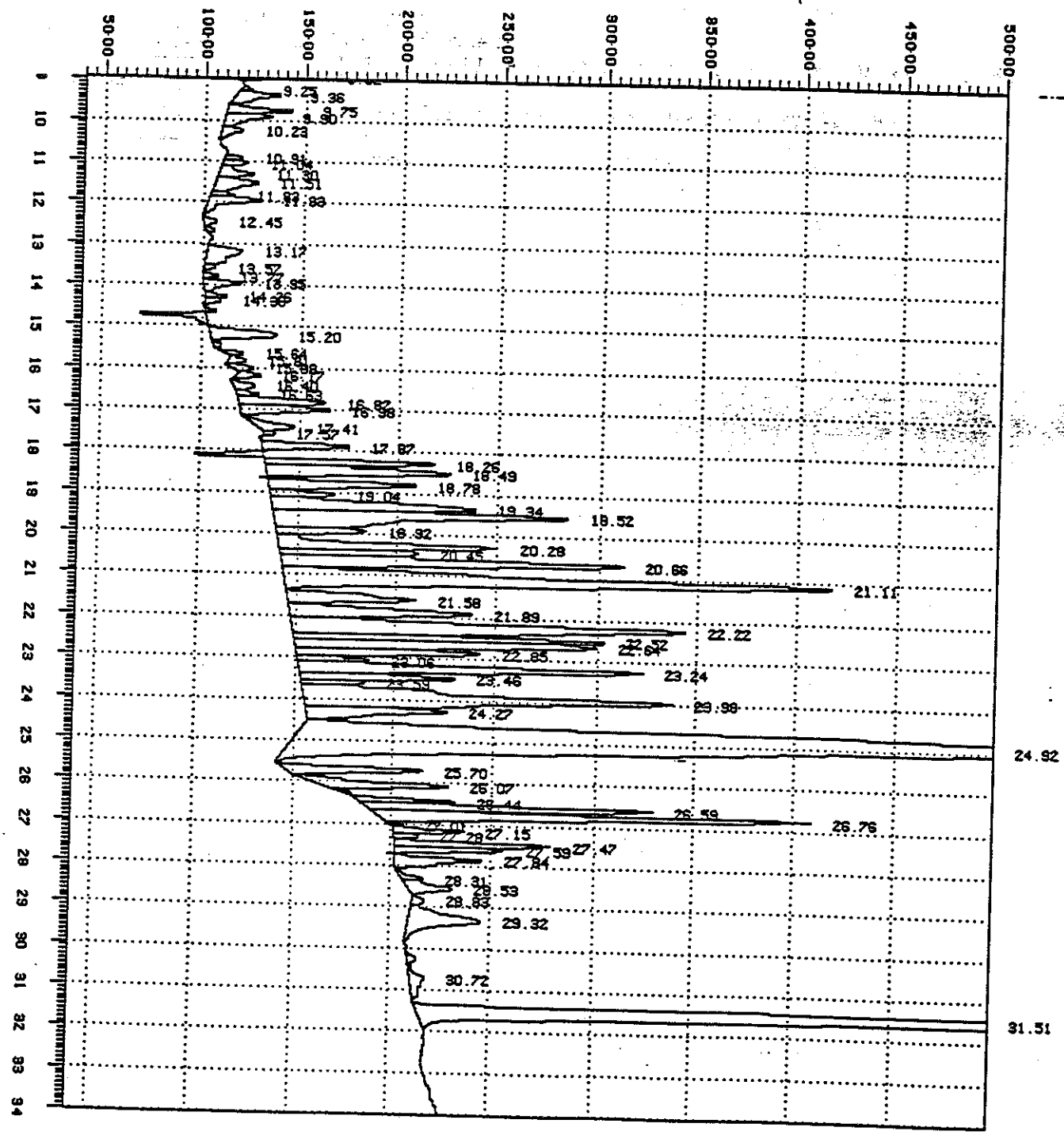
RMAL Chromatography System on DENCR3

000422

[OCP07_4] 59 T26JUL92,11,1

TOXAPHENE 0.25UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 07:46
Reported on 27-JUL-1992 at 15:15
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 07:46

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : TOXAPHENE 0.25UG/ML T=ST
Sample Id : Ver #5859a
Sample Type : Standard Amount=1.00000
Bottle No : 11

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
17.564	17.564	226938	1769212	0.25000	Toxaphene 1	6.9
18.547	18.547	222457	2682623	0.25000	Toxaphene 2	11.2
18.956	18.956	177290	1674877	0.25000	Toxaphene 3	9.1A
19.444	19.444	310043	2857286	0.25000	Toxaphene 4	9.1
20.364	20.364	177889	1779624	0.25000	Toxaphene 5	9.1
21.187	21.187	238852	2220021	0.25000	Toxaphene 6	9.1
21.738	21.738	206193	1842810	0.25000	Toxaphene 7	7.5
22.316	22.316	231334	3339791	0.25000	Toxaphene 8	15.2
22.618	22.618	239571	2112269	0.25000	Toxaphene 9	8.5
22.916	22.916	206881	2080876	0.25000	Toxaphene 10	10.1
24.884	24.884	1684663	11919929	0.05000	Dibutylchlorendate (DBC)	6.9
29.609	29.609	987852	7318414	0.02500	Octachloronapthalene	6.9

Totals			
Unknowns	6073135	46047196	N/A
Quantified	4909963	41597732	2.57500
Grand Total	10983098	87644928	2.57500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/ml	Peak name
2237448	22359388	0.25000	Toxaphene

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... TOXAPH_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:36

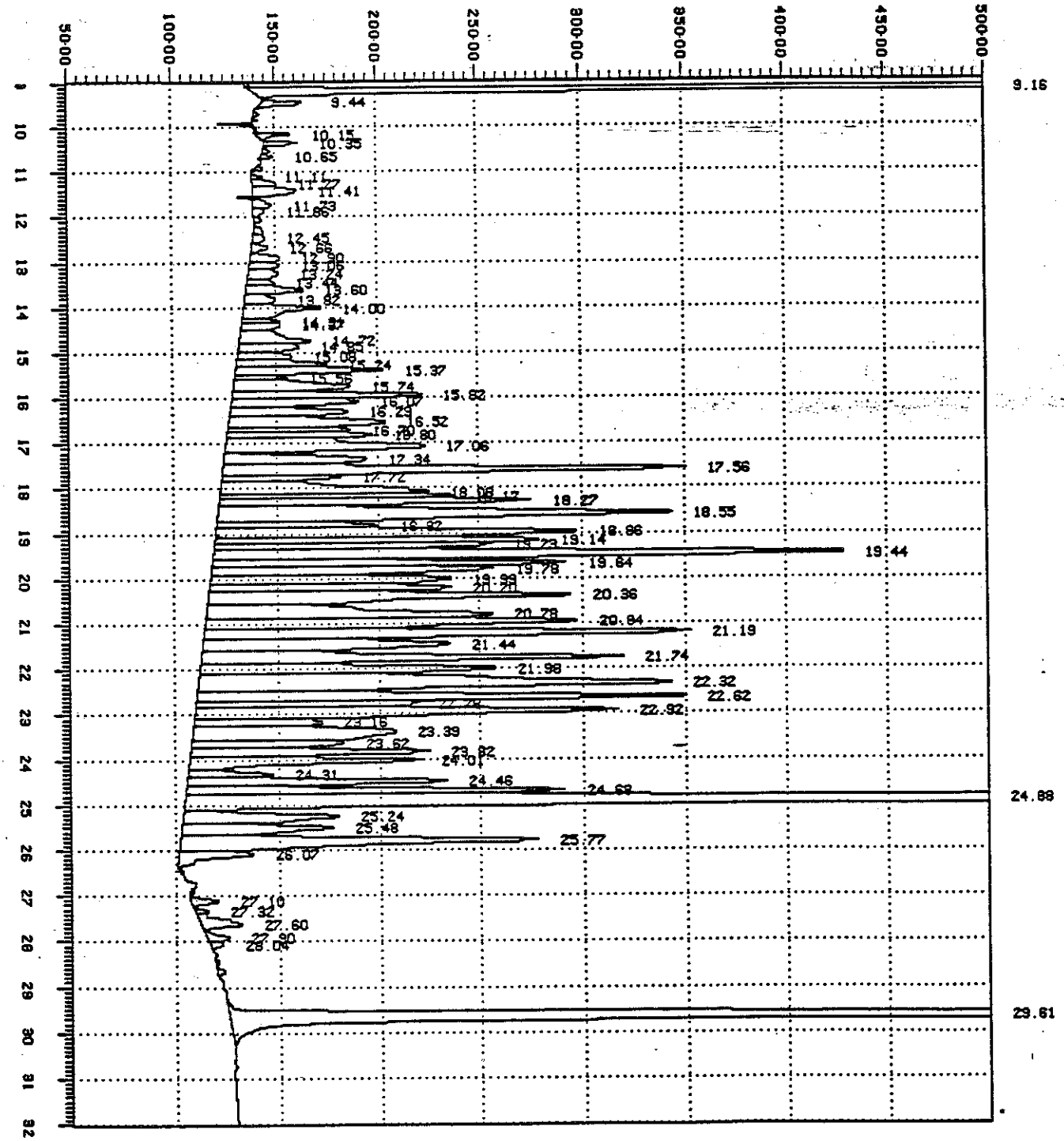
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,11,1

TOXAPHENE 0.25UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 07:46
Reported on 27-JUL-1992 at 15:09
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 08:37

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1016/1260 0.10/0.10UG/ML
Sample Id : Ver #5904
Sample Type : Standard Amount=1.00000
Bottle No : 12

AB 7/27/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.653	9.653	2218848	8214629	0.02000	Tetrachloro-m-xylene (TCX)	3.7
10.862	10.862	244983	1313575	0.10000	Aroclor 1016,1	4.3
11.880	11.880	442217	2669156	0.10000	Aroclor 1016,2	5.6
12.618	12.618	210055	1415326	0.10000	Aroclor 1016,3	5.6
12.978	12.978	549406	4067808	0.10000	Aroclor 1016,4	6.7
13.422	13.422	263297	1878277	0.10000	Aroclor 1016,5	5.9
13.804	13.804	168065	980093	0.10000	Aroclor 1016,6	5.3
13.969	13.969	210598	1255228	0.10000	Aroclor 1016,7	5.9
14.124	14.124	210578	1665974	0.10000	Aroclor 1016,8	7.2
14.973	14.973	234622	1354504	0.10000	Aroclor 1016,9	6.1
15.427	15.427	136616	1143392	0.10000	Aroclor 1016,10	9.3
18.942	18.942	190398	1724975	0.10000	Aroclor 1260,1	9.1
19.662	19.662	381149	2955173	0.10000	Aroclor 1260,2	7.2
20.231	20.231	443098	3289471	0.10000	Aroclor 1260,3	6.9
22.044	22.044	346385	2612892	0.10000	Aroclor 1260,4	7.2
22.320	22.320	257855	1916906	0.10000	Aroclor 1260,5	7.2
23.876	23.876	280501	2128560	0.10000	Aroclor 1260,6	7.2
24.276	24.276	167019	1597882	0.10000	Aroclor 1260,7	9.6
24.729	24.729	532831	4075972	0.10000	Aroclor 1260,8	7.5
26.493	26.493	178978	1209978	0.10000	Aroclor 1260,9	6.7
28.693	28.693	150726	1069766	0.10000	Aroclor 1260,10	6.7
31.498	31.498	1225156	10297574	0.02500	Octachloronapthalene	8.3
31.764	31.764	1130798	10245086	0.02000	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	4267348	26971294	N/A
Quantified	10174180	69082200	2.06500
Grand Total	14441528	96053496	2.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
2670438	17743334	0.10000	Aroclor 1016
2928940	22581574	0.10000	Aroclor 1260

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1660A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:44

Uncalibrated peaks use user factor (0.0000)

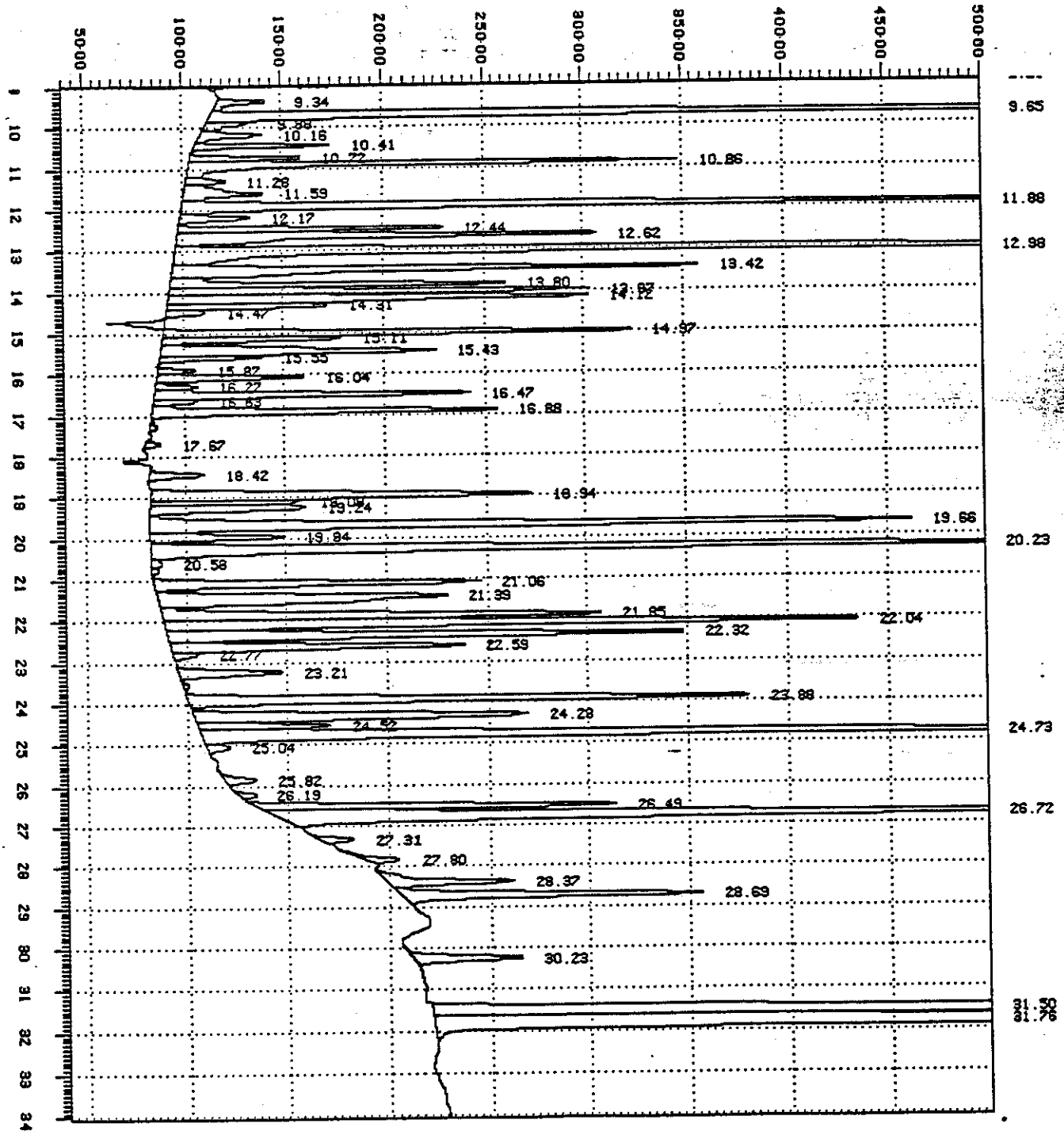
RMAL Chromatography System on DENCR3

000428

[OCP07_4] 59 T26JUL92,12,1

AR1016/1260 0.10/0.10UG/ML. Amount : 1.000.

Acquired on 27-JUL-1992 at 08:37
Reported on 27-JUL-1992 at 15:15
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 08:37

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1016/1260 0.10/0.10UG/ML
Sample Id : Ver #5904
Sample Type : Standard Amount=1.00000
Bottle No : 12

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.898	9.898	1534851	5665150	0.02000	Tetrachloro-m-xylene (TCX)	3.5
10.622	10.622	167668	800059	0.10000	Aroclor 1016,1	4.3
11.511	11.511	261658	1780328	0.10000	Aroclor 1016,2	6.9
11.978	11.978	224357	1006588	0.10000	Aroclor 1016,3	4.3
12.671	12.671	375871	2621904	0.10000	Aroclor 1016,4	6.9
12.942	12.942	234520	1190674	0.10000	Aroclor 1016,5	4.8
13.164	13.164	126942	706073	0.10000	Aroclor 1016,6	5.1
13.609	13.609	174957	912056	0.10000	Aroclor 1016,7	4.8
13.867	13.867	112928	677026	0.10000	Aroclor 1016,8	5.9A
14.258	14.258	182803	943240	0.10000	Aroclor 1016,9	5.1
14.662	14.662	172356	1134885	0.10000	Aroclor 1016,10	6.4
18.356	18.356	160656	923206	0.10000	Aroclor 1260,1	5.6
18.836	18.836	337295	2173144	0.10000	Aroclor 1260,2	6.1
19.813	19.813	375145	2342331	0.10000	Aroclor 1260,3	6.1
20.360	20.360	148108	1413452	0.10000	Aroclor 1260,4	10.9
21.004	21.004	375867	2643271	0.10000	Aroclor 1260,5	6.4
21.729	21.729	226990	1494192	0.10000	Aroclor 1260,6	6.4
22.764	22.764	216279	1349422	0.10000	Aroclor 1260,7	6.1
23.996	23.996	427503	2981009	0.10000	Aroclor 1260,8	6.4
25.369	25.369	213796	1621203	0.10000	Aroclor 1260,9	7.5
27.911	27.911	141487	791761	0.10000	Aroclor 1260,10	5.3
29.609	29.609	1038450	7614129	0.02500	Octachloronapthalene	6.9
30.711	30.711	1016583	7532997	0.02000	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	3881887	19874652	N/A
Quantified	8247073	50318100	2.06500
Grand Total	12128959	70192752	2.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
2034061	11772833	0.10000	Aroclor 1016
2623127	17732990	0.10000	Aroclor 1260

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1660A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:37

Uncalibrated peaks use user factor (0.0000)

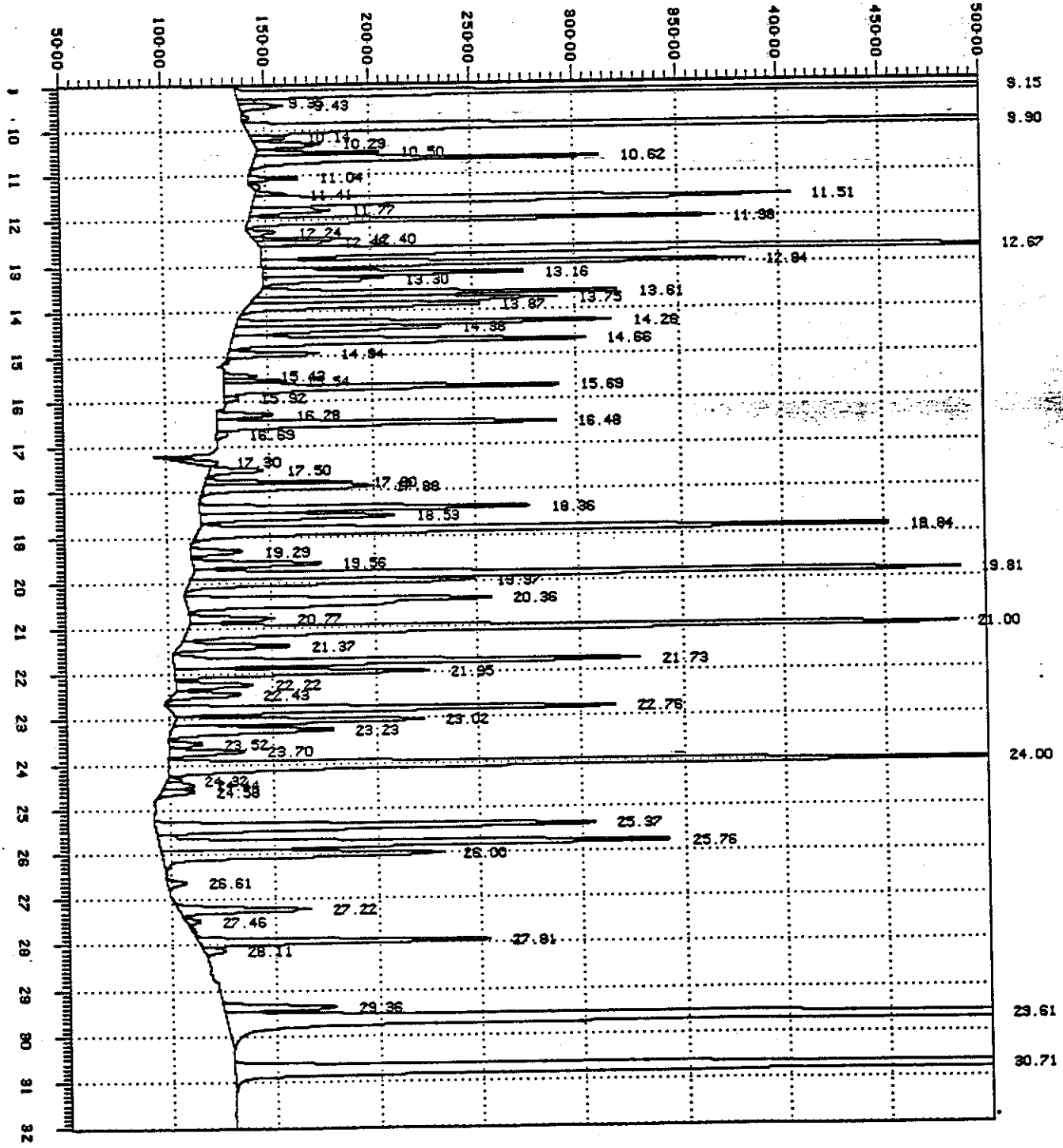
RMAL Chromatography System on DENCR3

000431

[OCP07_4] 60 T26JUL92,12,1

AR1016/1260 0.10/0.10UG/ML. Amount : 1.000.

Acquired on 27-JUL-1992 at 08:37
Reported on 27-JUL-1992 at 15:10
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 09:28

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1221 0.20UG/ML T=ST
Sample Id : Ver #5948
Sample Type : Standard Amount=1.00000
Bottle No : 13

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.893	9.893	1391615	5118498	0.02000	Tetrachloro-m-xylene (TCX)	3.2
10.289	10.289	201921	896755	0.20000	AR 1221,1	4.3
10.489	10.489	167064	655684	0.20000	AR 1221,2	4.0
10.613	10.613	453812	2229170	0.20000	AR 1221,3	4.5
11.507	11.507	103146	997087	0.20000	AR 1221,4	9.6
11.978	11.978	69608	283821	0.20000	AR 1221,5	4.0
12.667	12.667	103929	690644	0.20000	AR 1221,6	6.7
13.609	13.609	41994	214914	0.20000	AR 1221,7	4.8
29.609	29.609	973669	7211964	0.02500	Octachloronapthalene	6.9
30.711	30.711	856666	6330172	0.02000	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	2008379	9211639	N/A
Quantified	4363424	24628710	1.46500
Grand Total	6371803	33840348	1.46500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1141474	5968076	0.20006	AR 1221

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1221A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:37

Uncalibrated peaks use user factor (0.0000)

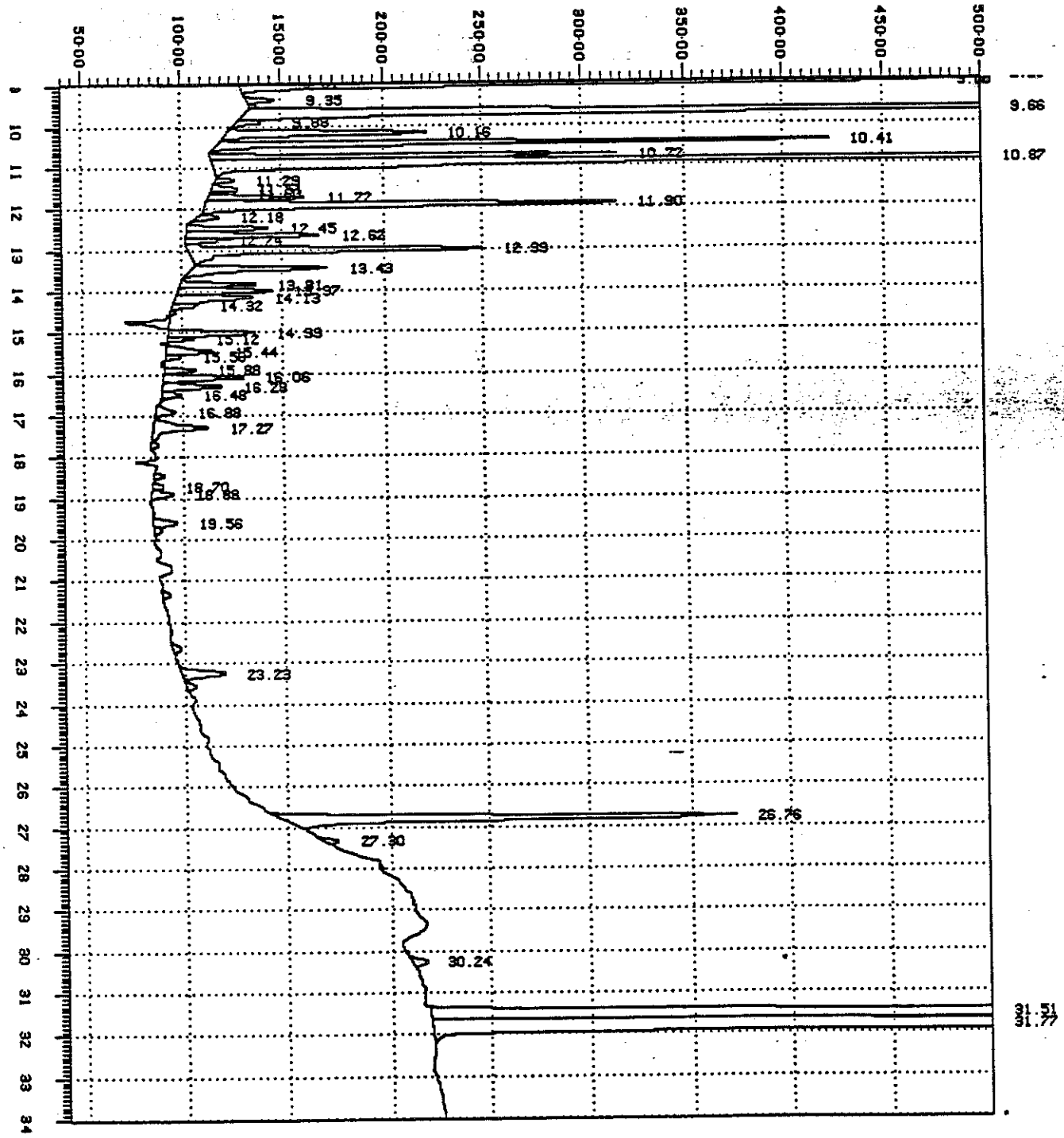
RMAL Chromatography System on DENCR3

000434

[OCP07_4] 59 T26JUL92,13,1

AR1221 0.20UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 09:28
Reported on 27-JUL-1992 at 15:15
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 09:28

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1221 0.20UG/ML T=ST
Sample Id : Ver #5948
Sample Type : Standard Amount=1.00000
Bottle No : 13

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.658	9.658	1941240	7352718	0.02000	Tetrachloro-m-xylene (TCX)	3.5
10.409	10.409	304726	1256674	0.20000	AR 1221,1	4.0
10.720	10.720	202222	956984	0.20000	AR 1221,2	4.8
10.867	10.867	606801	3201960	0.20000	AR 1221,3	4.5
11.898	11.898	204378	1249631	0.20000	AR 1221,4	5.6
12.987	12.987	146836	1045762	0.20000	AR 1221,5	6.4
13.431	13.431	66625	417517	0.20000	AR 1221,6	5.6
14.987	14.987	43198	139907	0.20000	AR 1221,7	6.1
31.511	31.511	1156100	9732218	0.02500	Octachloronapthalene	8.0
31.773	31.773	943414	8545716	0.02000	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	2521043	12664842	N/A
Quantified	5615540	33899088	1.46500
Grand Total	8136583	46563932	1.46500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1574786	8268437	0.20006	AR 1221

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1221A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:44

Uncalibrated peaks use user factor (0.0000)

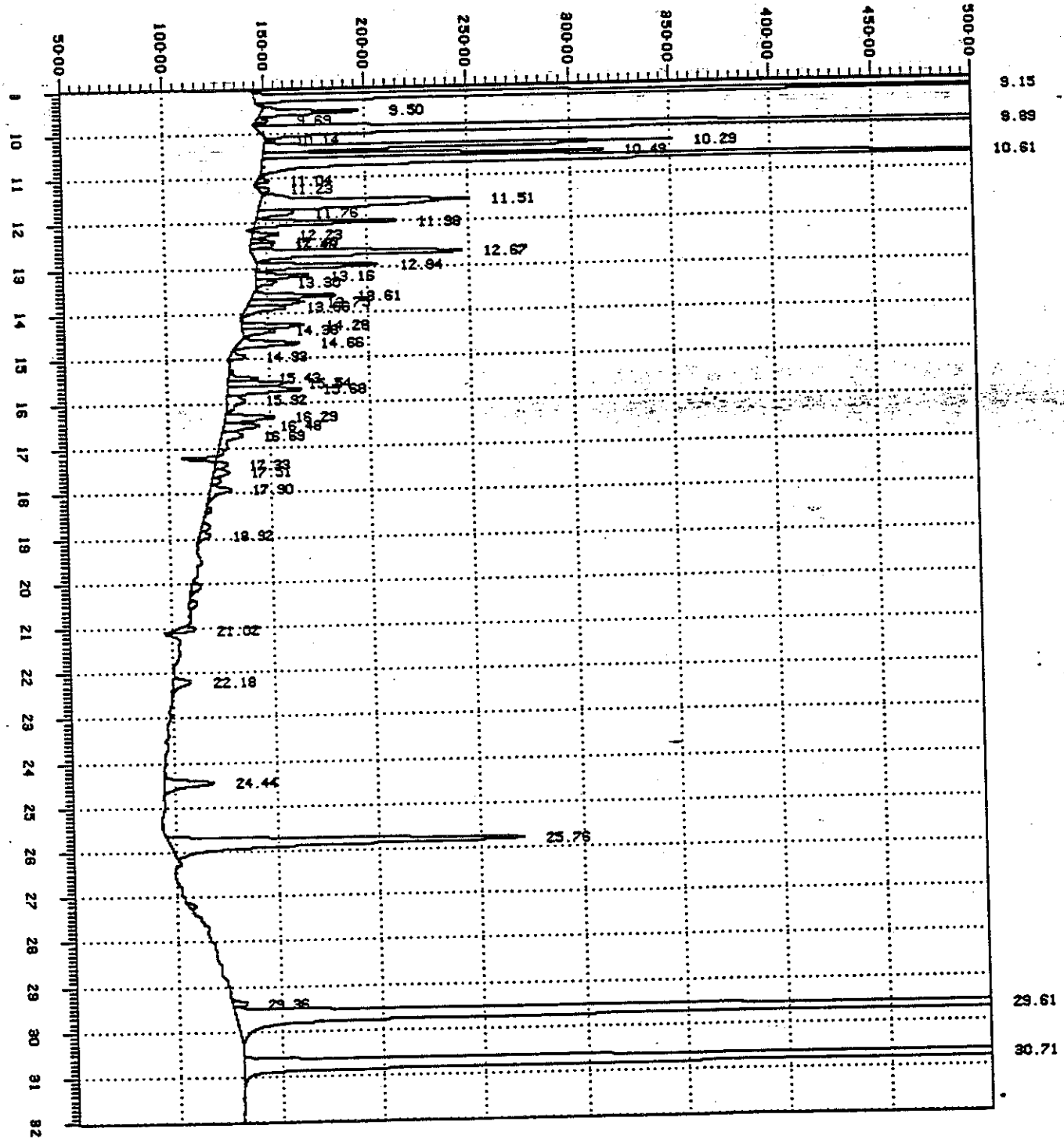
RMAL Chromatography System on DENCR3

000437

[OCP07_4] 60 T26JUL92,13,1

AR1221 0.20UG/ML T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 09:28
Reported on 27-JUL-1992 at 15:10
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 10:19

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1232 0.10ug/mL T=ST
Sample Id : Ver #5931
Sample Type : Standard Amount=1.00000
Bottle No : 14

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.653	9.653	2153361	7972738	0.02000	Tetrachloro-m-xylene (TCX)	3.5
10.409	10.409	119708	484134	0.10000	Aroclor 1232,1	4.0
10.862	10.862	291570	1505941	0.10000	Aroclor 1232,2	4.3
11.884	11.884	225573	1442813	0.10000	Aroclor 1232,3	5.9
12.982	12.982	248871	1839960	0.10000	Aroclor 1232,4	6.7
13.422	13.422	118603	799469	0.10000	Aroclor 1232,5	5.6
13.973	13.973	91259	525964	0.10000	Aroclor 1232,6	5.9
14.978	14.978	105362	575862	0.10000	Aroclor 1232,7	6.4
16.058	16.058	101006	624166	0.10000	Aroclor 1232,8	6.1
16.276	16.276	79185	469739	0.10000	Aroclor 1232,9	5.9
17.262	17.262	72478	577466	0.10000	Aroclor 1232,10	6.7
31.502	31.502	1104090	9317816	0.02500	Octachloronapthalene	8.3
31.764	31.764	1006546	9214308	0.02000	Decachlorobiphynel (DCB)	8.8

Totals			
Unknowns	2465720	12912919	N/A
Quantified	5717613	35350376	1.06500
Grand Total	8183333	48263296	1.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1453616	8845514	0.10000	Aroclor 1232

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1232A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:45

Uncalibrated peaks use user factor (0.0000)

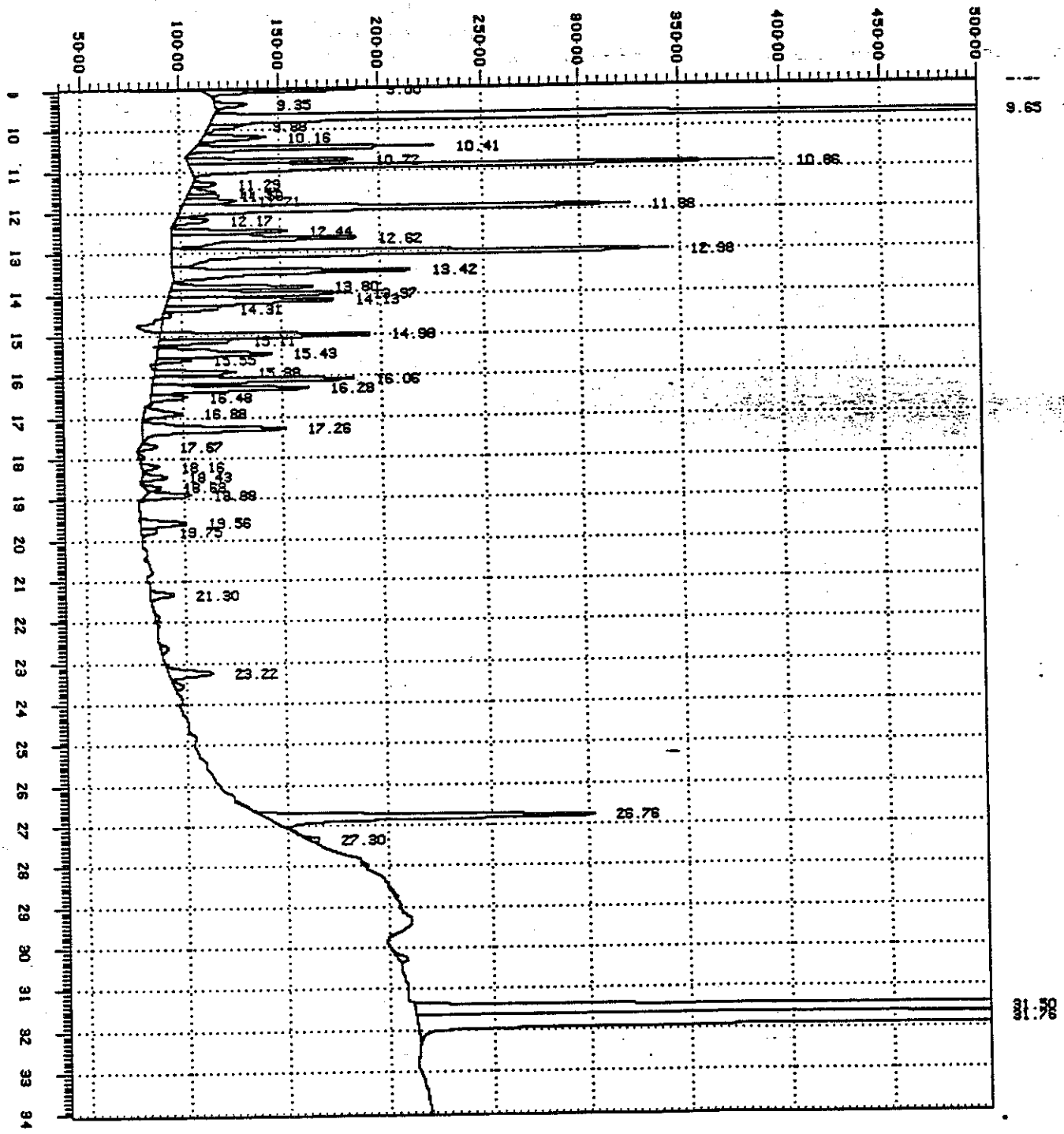
RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,14,1

000440

AR1232 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 10:19
Reported on 27-JUL-1992 at 15:16
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 10:19

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1232 0.10ug/mL T=ST
Sample Id : Ver #5931
Sample Type : Standard Amount=1.00000
Bottle No : 14

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.902	9.902	1505769	5484411	0.02000	Tetrachloro-m-xylene (TCX)	3.2
10.622	10.622	209522	1019455	0.10000	Aroclor 1232,1	4.3
11.516	11.516	127388	1062529	0.10000	Aroclor 1232,2	7.7
11.982	11.982	102779	468536	0.10000	Aroclor 1232,3	4.3
12.676	12.676	170756	1195241	0.10000	Aroclor 1232,4	6.7
12.951	12.951	106020	539965	0.10000	Aroclor 1232,5	4.8
13.613	13.613	78379	418738	0.10000	Aroclor 1232,6	5.1
14.382	14.382	43516	300657	0.10000	Aroclor 1232,7	7.5A
14.667	14.667	75094	482589	0.10000	Aroclor 1232,8	6.1
15.693	15.693	85429	580498	0.10000	Aroclor 1232,9	6.4
16.302	16.302	61608	402505	0.10000	Aroclor 1232,10	6.4
29.613	29.613	927932	6913747	0.02500	Octachloronapthalene	6.9
30.716	30.716	917870	6803377	0.02000	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	2140904	9798136	N/A
Quantified	4412061	25672248	1.06500
Grand Total	6552965	35470384	1.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1060489	6470714	0.10000	Aroclor 1232

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1232A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:38

Uncalibrated peaks use user factor (0.0000)

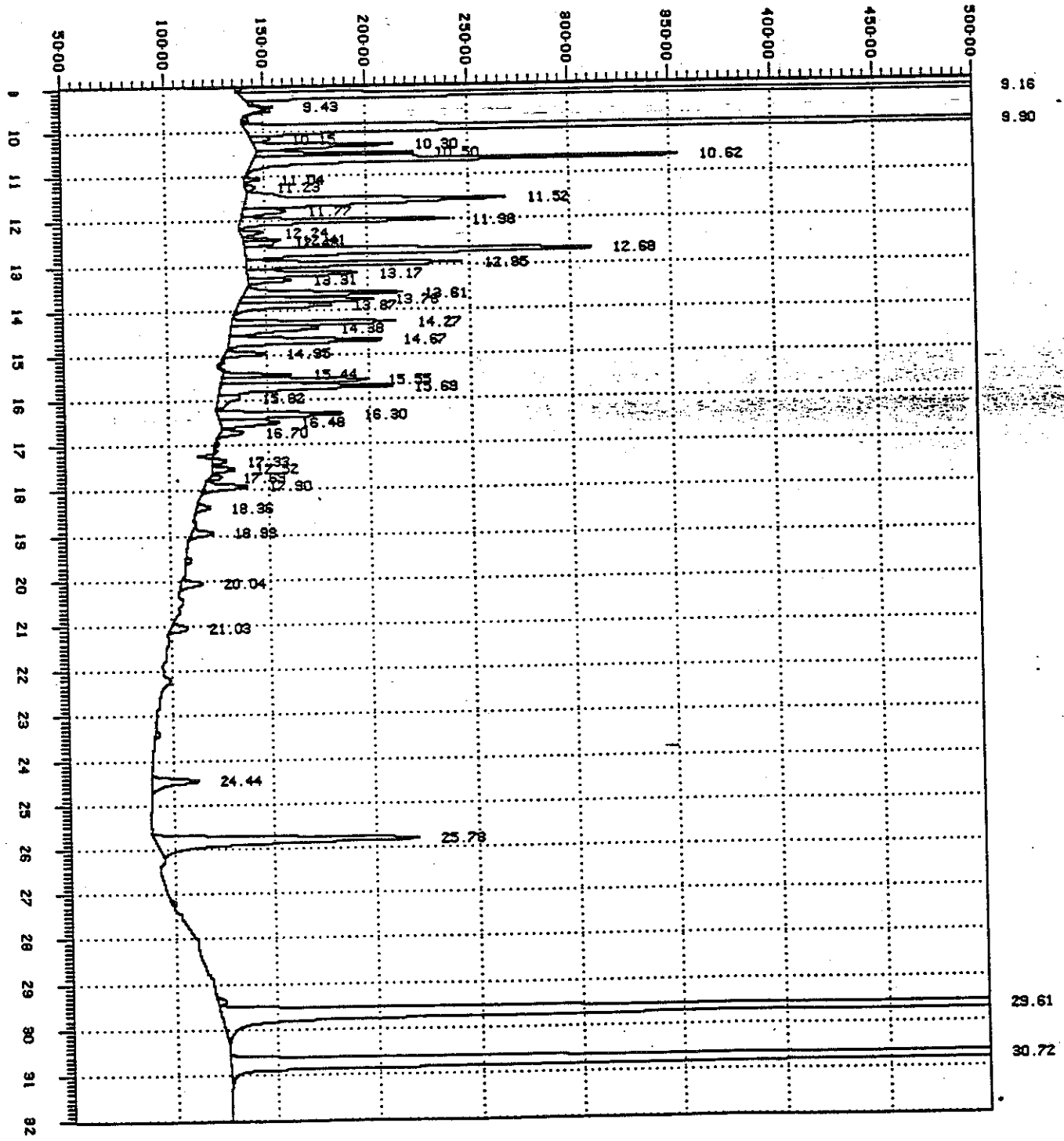
RMAL Chromatography System on DENCR3

000443

[OCP07_4] 60 T26JUL92,14,1

AR1232 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 10:19
Reported on 27-JUL-1992 at 15:10
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 11:11

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1242 0.10ug/mL T=ST
Sample Id : Ver #5901
Sample Type : Standard Amount=1.00000
Bottle No : 15

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.662	9.662	1966285	7226720	0.02000	Tetrachloro-m-xylene (TCX)	3.5
10.871	10.871	178482	842266	0.10000	Aroclor 1242,1	4.3
11.889	11.889	329770	1933376	0.10000	Aroclor 1242,2	5.6
12.991	12.991	398581	2745579	0.10000	Aroclor 1242,3	6.7
13.431	13.431	187111	1218068	0.10000	Aroclor 1242,4	5.6
14.133	14.133	150017	1155638	0.10000	Aroclor 1242,5	6.7
14.987	14.987	176146	1032812	0.10000	Aroclor 1242,6	6.7
16.067	16.067	176406	1116012	0.10000	Aroclor 1242,7	5.9
16.280	16.280	139952	862063	0.10000	Aroclor 1242,8	5.9
17.271	17.271	125366	1005149	0.10000	Aroclor 1242,9	6.7
18.884	18.884	43456	273258	0.10000	Aroclor 1242,10	6.4
31.507	31.507	1100563	9284437	0.02500	Octachloronapthalene	8.0
31.773	31.773	927910	8369765	0.02000	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	2576706	13835073	N/A
Quantified	5900045	37065140	1.06500
Grand Total	8476751	50900212	1.06500

MISSING PEAKS

No missing peaks.

000445

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1905287	12184221	0.10000	Aroclor 1242

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1242A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:45

Uncalibrated peaks use user factor (0.0000)

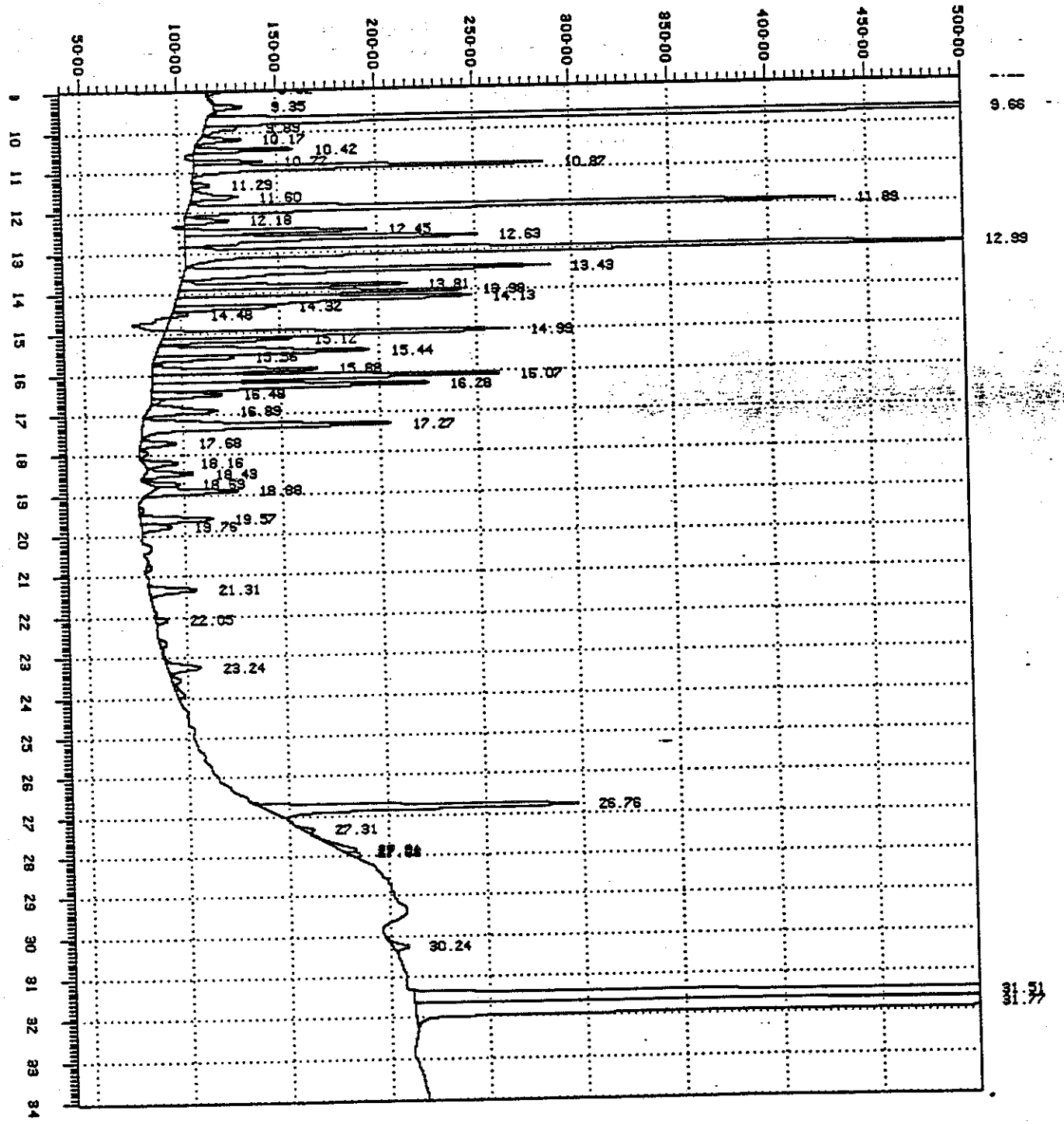
RMAL Chromatography System on DENCR3

000446

[OCP07_4] 59 T26JUL92,15,1

AR1242 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 11:11
Reported on 27-JUL-1992 at 15:16
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 11:11

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1242 0.10ug/mL T=ST
Sample Id : Ver #5901
Sample Type : Standard Amount=1.00000
Bottle No : 15

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.884	9.884	1368554	4960205	0.02000	Tetrachloro-m-xylene (TCX)	3.5
10.609	10.609	123026	586509	0.10000	Aroclor 1242,1	4.3
11.498	11.498	201952	1425316	0.10000	Aroclor 1242,2	6.9
11.964	11.964	170091	776153	0.10000	Aroclor 1242,3	4.3
12.658	12.658	280437	2026710	0.10000	Aroclor 1242,4	6.9
12.929	12.929	175073	924605	0.10000	Aroclor 1242,5	5.1
13.596	13.596	124235	648780	0.10000	Aroclor 1242,6	4.8
14.244	14.244	133037	683149	0.10000	Aroclor 1242,7	5.3
14.649	14.649	133181	871762	0.10000	Aroclor 1242,8	6.1
15.671	15.671	145434	992437	0.10000	Aroclor 1242,9	6.1
16.284	16.284	104806	689826	0.10000	Aroclor 1242,10	6.4
29.596	29.596	922357	6856258	0.02500	Octachloronapthalene	6.9
30.698	30.698	840402	6202333	0.02000	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	2245463	11171872	N/A
Quantified	4722585	27644044	1.06500
Grand Total	6968048	38815916	1.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
1591271	9625249	0.10000	Aroclor 1242

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1242A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:38

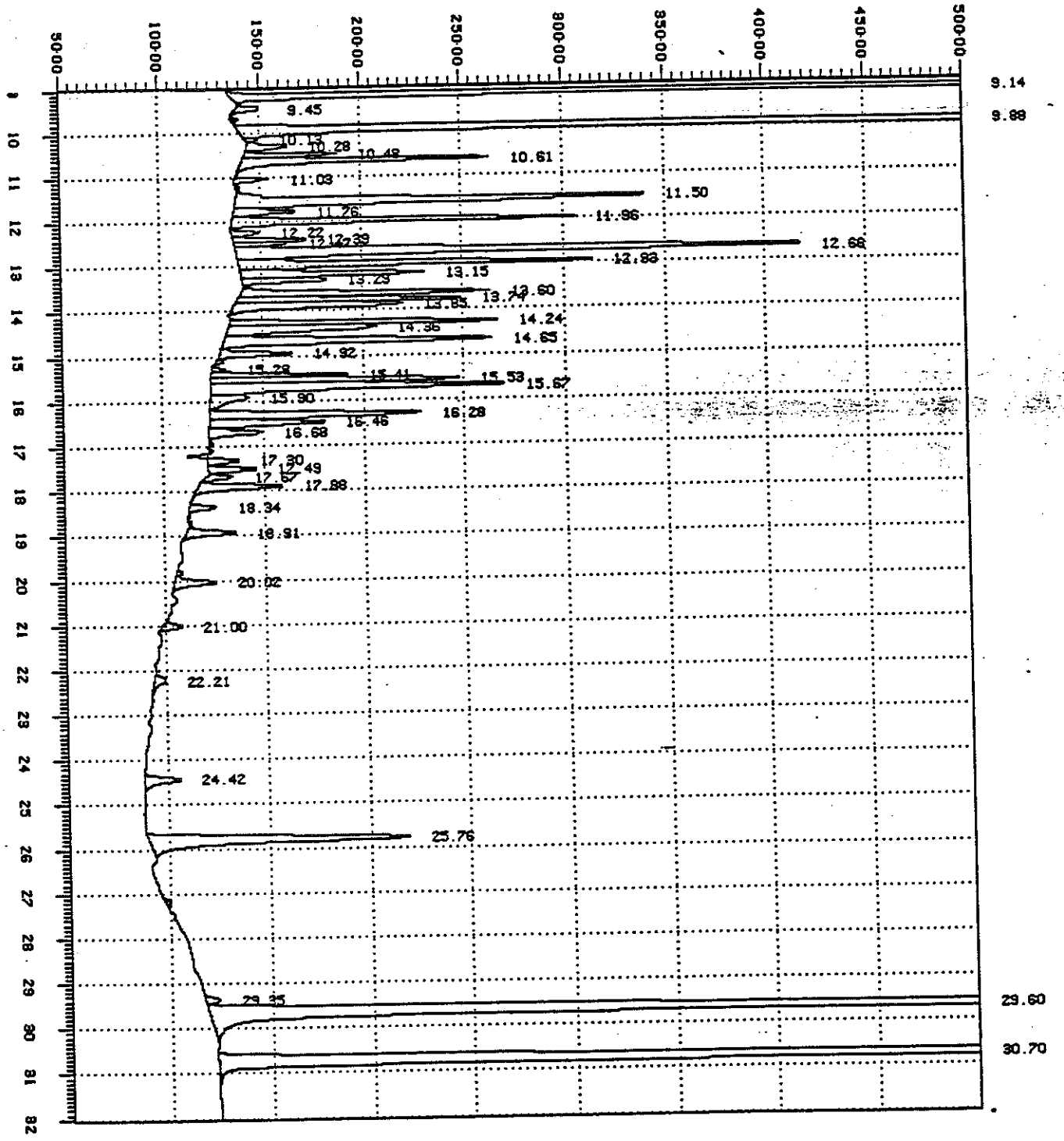
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,15,1

AR1242 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 11:11
Reported on 27-JUL-1992 at 15:11
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 12:02

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1248 0.10ug/mL T=ST
Sample Id : Ver #5902
Sample Type : Standard Amount=1.00000
Bottle No : 16

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.676	9.676	2289166	8419644	0.02000	Tetrachloro-m-xylene (TCX)	3.5
11.898	11.898	209826	1223953	0.10000	Ar 1248,1	5.6
12.996	12.996	327728	2444299	0.10000	Ar 1248,2	6.9
13.996	13.996	327227	1925972	0.10000	Ar 1248,3	5.9
14.996	14.996	342333	1887693	0.10000	Ar 1248,4	6.1
15.449	15.449	214897	1806928	0.10000	Ar 1248,5	8.8
16.080	16.080	391291	2470703	0.10000	Ar 1248,6	5.9
16.293	16.293	296512	1816210	0.10000	Ar 1248,7	5.9
17.280	17.280	250907	2101070	0.10000	Ar 1248,8	6.9
18.898	18.898	169948	1171918	0.10000	Ar 1248,9	6.7
19.578	19.578	120002	857868	0.10000	Ar 1248,10	6.9
31.520	31.520	1196754	10078909	0.02500	Octachloronapthalene	8.3
31.787	31.787	1078196	9826673	0.02000	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	3570859	20861484	N/A
Quantified	7214787	46031840	1.06500
Grand Total	10785646	66893324	1.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
2650671	17706616	0.10000	Ar 1248

000451

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1248A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:45

Uncalibrated peaks use user factor (0.0000)

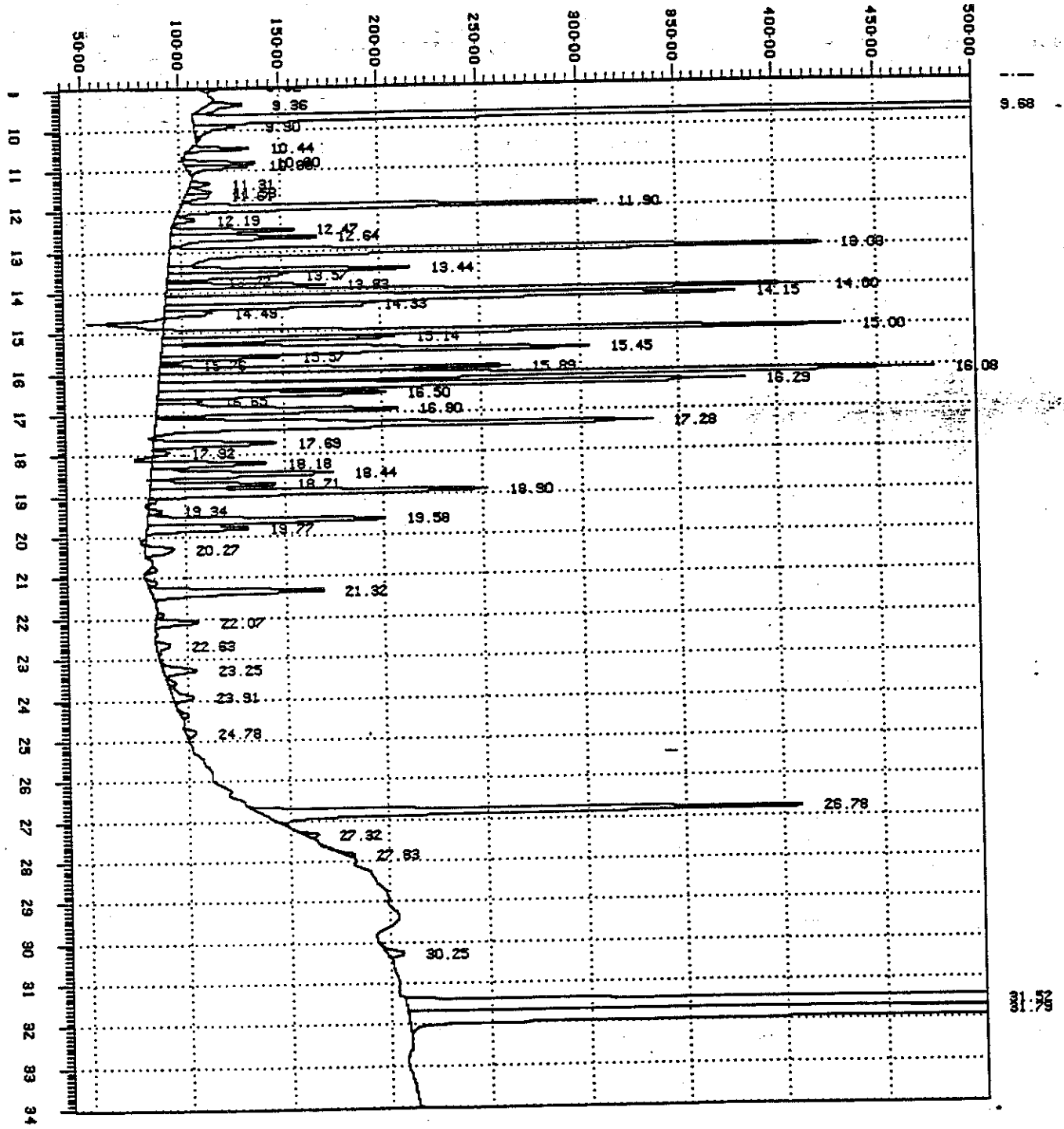
RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,16,1

000452

AR1248 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 12:02
Reported on 27-JUL-1992 at 15:17
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 12:02

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1248 0.10ug/mL T=ST
Sample Id : Ver #5902
Sample Type : Standard Amount=1.00000
Bottle No : 16

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.898	9.898	1466341	5409802	0.02000	Tetrachloro-m-xylene (TCX)	3.5
11.511	11.511	129846	752809	0.10000	AR 1248,1	5.3
12.667	12.667	226119	1689301	0.10000	AR 1248,2	7.2
13.604	13.604	268168	1435640	0.10000	AR 1248,3	5.1
14.258	14.258	281010	1443863	0.10000	AR 1248,4	5.1
14.662	14.662	254178	1668958	0.10000	AR 1248,5	6.1
15.684	15.684	330166	2148949	0.10000	AR 1248,6	6.1
16.293	16.293	223816	1419348	0.10000	AR 1248,7	6.1
16.476	16.476	180028	1178575	0.10000	AR 1248,8	6.4
17.889	17.889	159685	1049662	0.10000	AR 1248,9	5.9
18.916	18.916	93674	679691	0.10000	AR 1248,10	6.4
29.609	29.609	1003469	7437224	0.02500	Octachloronapthalene	6.9
30.711	30.711	980313	7217935	0.02000	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	3513550	19002204	N/A
Quantified	5596817	33531754	1.06500
Grand Total	9110366	52533960	1.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
2146693	13466797	0.10000	AR 1248

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1248A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:39

Uncalibrated peaks use user factor (0.0000)

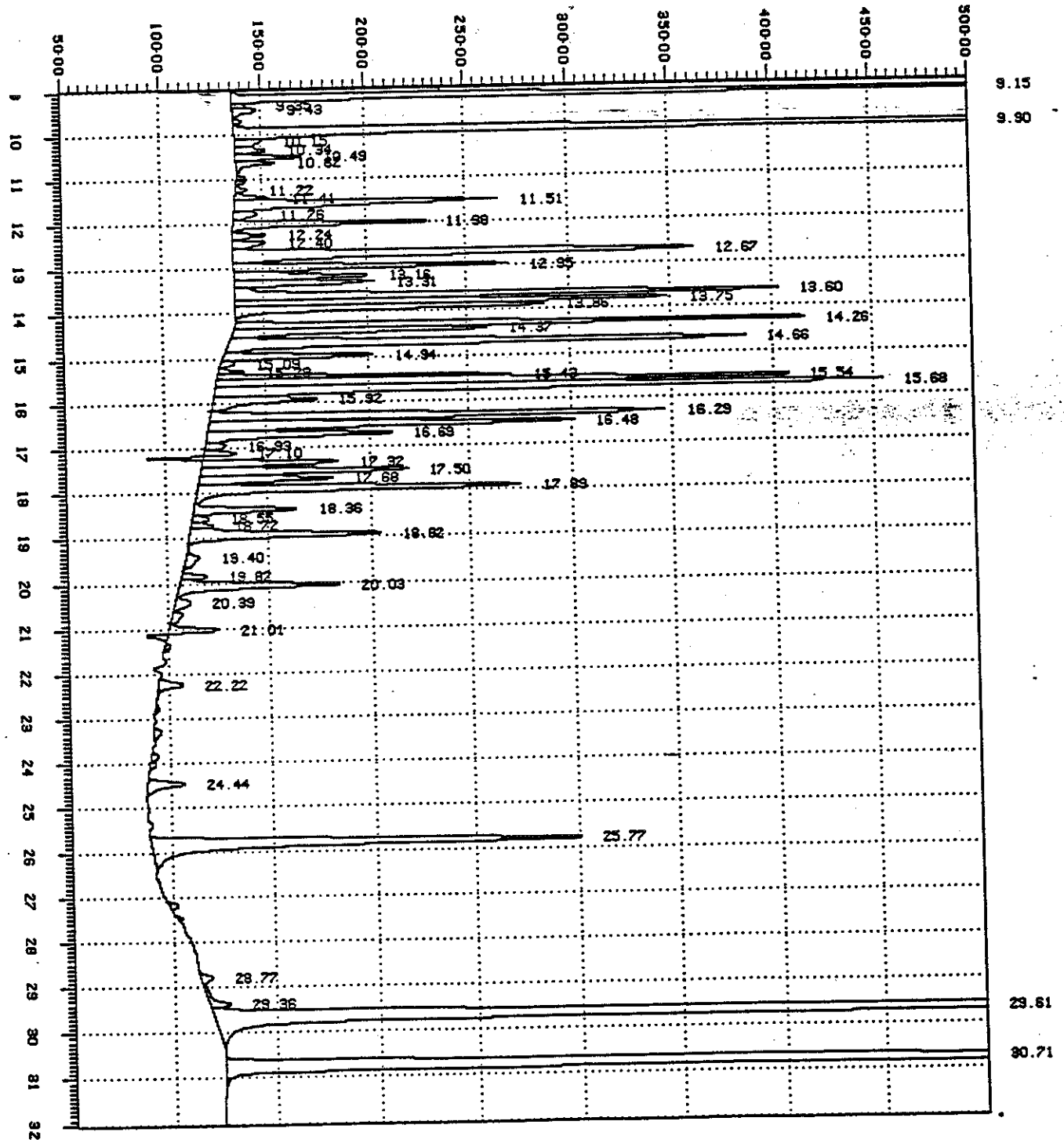
RMAL Chromatography System on DENCR3

000455

[OCP07_4] 60 T26JUL92,16,1

AR1248 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 12:02
Reported on 27-JUL-1992 at 15:11
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 12:54

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1254 0.10ug/mL T=ST
Sample Id : Ver #5903
Sample Type : Standard Amount=1.00000
Bottle No : 17

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.653	9.653	2131887	7871719	0.02000	Tetrachloro-m-xylene (TCX)	3.5
13.960	13.960	218546	1275148	0.10000	Aroclor 1254,1	5.6
14.960	14.960	113307	560061	0.10000	Aroclor 1254,2	5.6
16.044	16.044	153319	949091	0.10000	Aroclor 1254,3	5.9
16.458	16.458	266847	1756106	0.10000	Aroclor 1254,4	6.4
16.858	16.858	329062	2450897	0.10000	Aroclor 1254,5	6.7
18.404	18.404	195103	1308848	0.10000	Aroclor 1254,6	6.4
18.853	18.853	387184	2818752	0.10000	Aroclor 1254,7	6.9
19.538	19.538	281397	3382424	0.10000	Aroclor 1254,8	12.5
22.022	22.022	267181	1926226	0.10000	Aroclor 1254,9	6.9
23.871	23.871	92466	685063	0.10000	Aroclor 1254,10	6.9
31.467	31.467	1237258	10419539	0.02500	Octachloronapthalene	8.3
31.733	31.733	970257	8836434	0.02000	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	3530682	21880282	N/A
Quantified	6643815	44240312	1.06500
Grand Total	10174497	66120596	1.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
2304413	17112618	0.10000	Aroclor 1254

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1254A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:46

Uncalibrated peaks use user factor (0.0000)

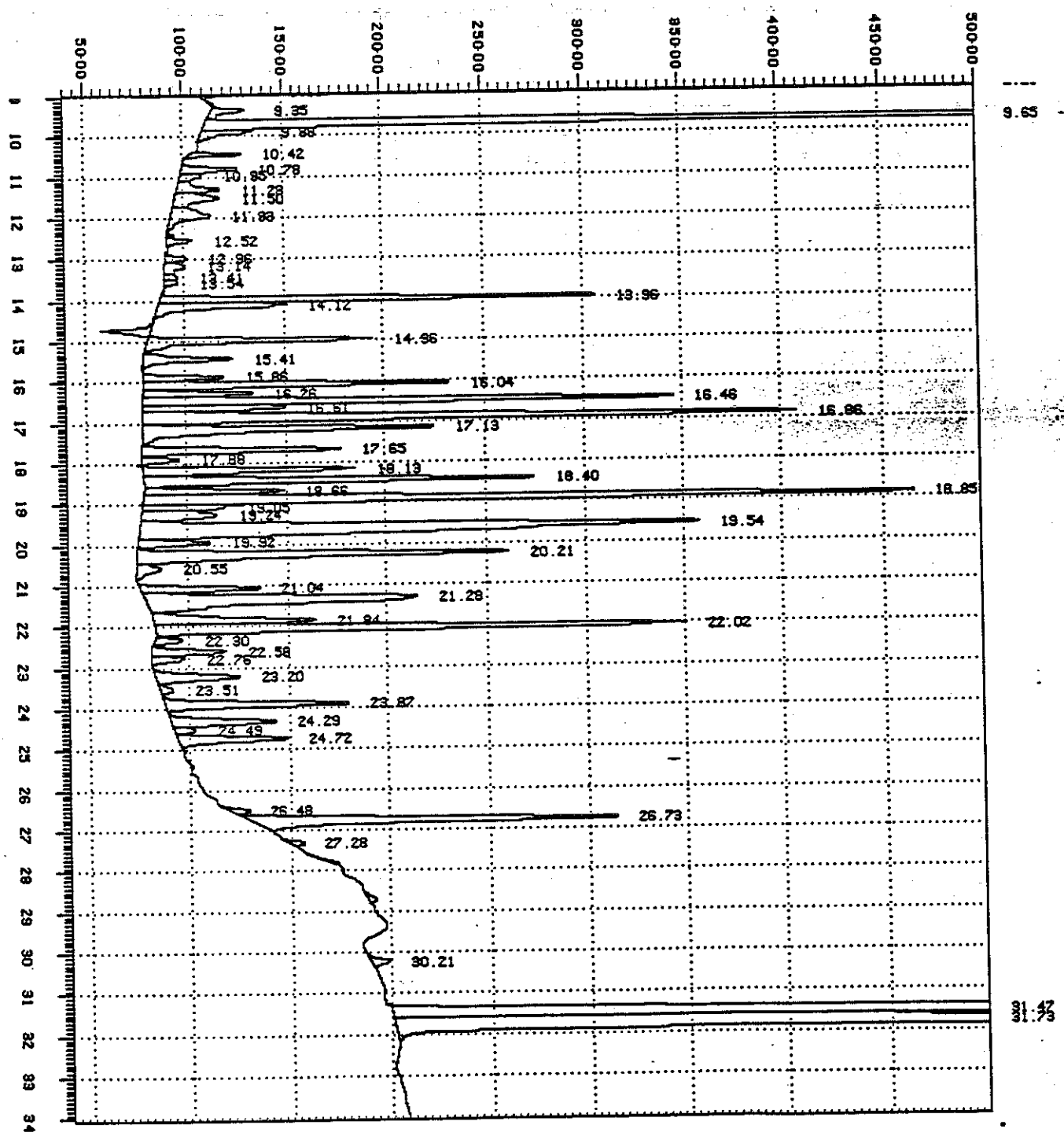
RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,17,1

000458

AR1254 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 12:54
Reported on 27-JUL-1992 at 15:17
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 12:54

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AR1254 0.10ug/mL T=ST
Sample Id : Ver #5903
Sample Type : Standard Amount=1.00000
Bottle No : 17

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.884	9.884	1439506	5236588	0.02000	Tetrachloro-m-xylene (TCX)	3.5
13.582	13.582	180069	893216	0.10000	Aroclor 1254,1	5.1
15.658	15.658	280318	1685015	0.10000	Aroclor 1254,2	5.6
16.444	16.444	360984	2199661	0.10000	Aroclor 1254,3	5.9
17.467	17.467	191627	1171120	0.10000	Aroclor 1254,4	5.9
17.853	17.853	338710	2250840	0.10000	Aroclor 1254,5	6.1
18.876	18.876	229708	2275499	0.10000	Aroclor 1254,6	9.9
19.782	19.782	159509	957793	0.10000	Aroclor 1254,7	6.1
19.964	19.964	148448	1331168	0.10000	Aroclor 1254,8	8.8
20.969	20.969	257899	1870039	0.10000	Aroclor 1254,9	6.4
22.187	22.187	79099	554862	0.10000	Aroclor 1254,10	6.4
29.569	29.569	1025498	7625601	0.02500	Octachloronapthalene	6.9
30.667	30.667	890746	6528892	0.02000	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	2935411	14333292	N/A
Quantified	5582119	34580292	1.06500
Grand Total	8517530	48913584	1.06500

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

Hght uV	Area uVs	ug/mL	Peak name
2226369	15189213	0.10000	Aroclor 1254

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... AR1254A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:39

Uncalibrated peaks use user factor (0.0000)

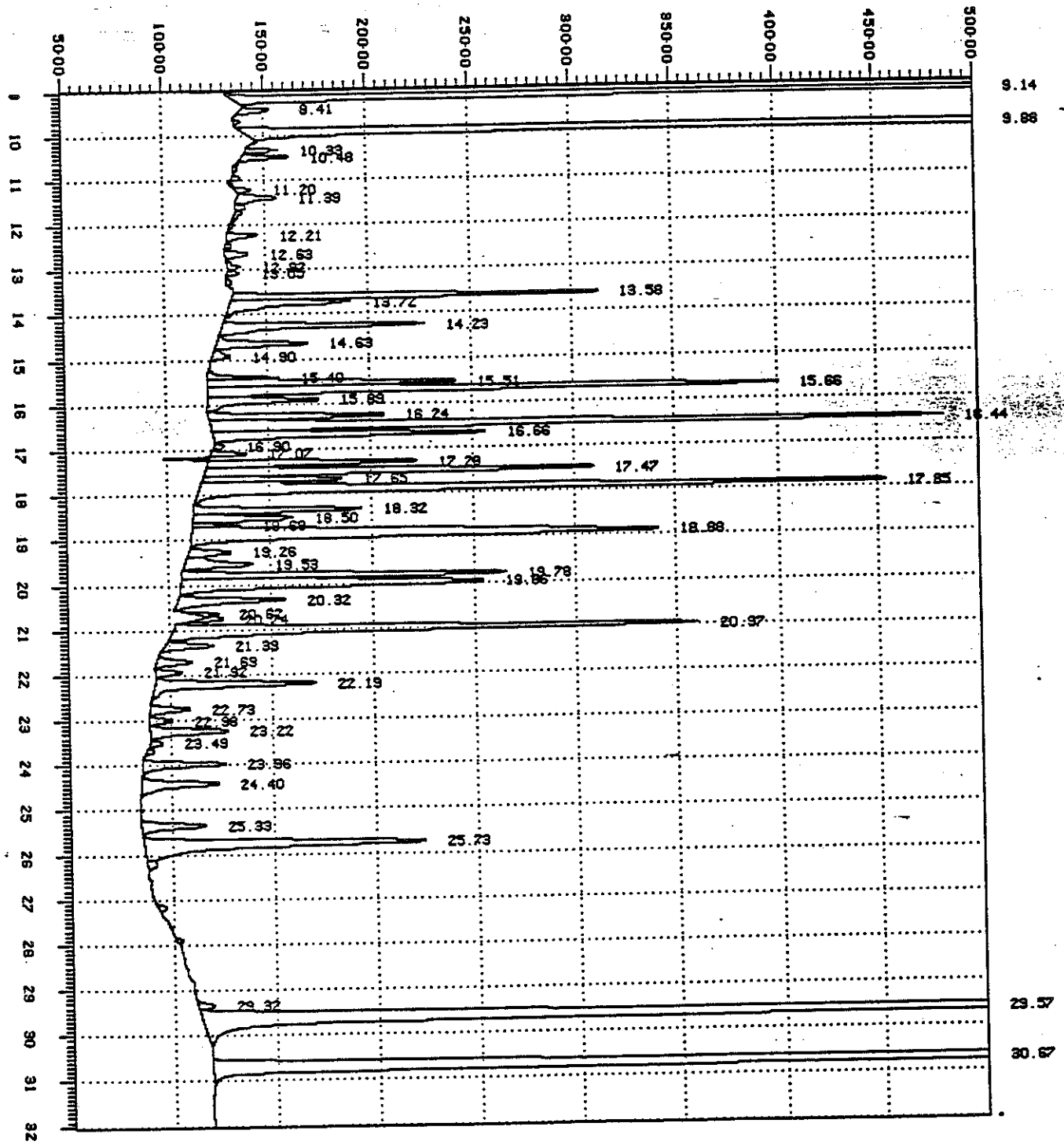
RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,17,1

AR1254 0.10ug/mL T=ST. Amount : 1.000.

Acquired on 27-JUL-1992 at 12:54
Reported on 27-JUL-1992 at 15:11
Box 1 (of 1)

ab 8/27/92



Injection Report

Acquired on 27-JUL-1992 at 13:45

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : APPIX.STD(4).1/.1/.25/.025ug/mLT=ST 5873
Sample Id : VER #5873
Sample Type : Standard Amount=1.00000
Bottle No : 18

ab 7/28/92

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
10.360	10.360	413254	1942710	0.10000	Diallate	4.5
15.542	15.542	1415218	9309173	0.02500	Isodrin	6.1
19.702	19.702	616399	4849115	0.10000	Chlorobenzilate	7.5
26.764	26.764	264818	1831340	0.25000	Kepone	6.7
31.507	31.507	1207267	10162841	0.02500	Octachloronapthalene	8.3

Totals			
Unknowns	2375461	12919399	N/A
Quantified	3916956	28095180	0.50000
Grand Total	6292417	41014580	0.50000

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... APPIX_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:47

Uncalibrated peaks use user factor (0.0000)

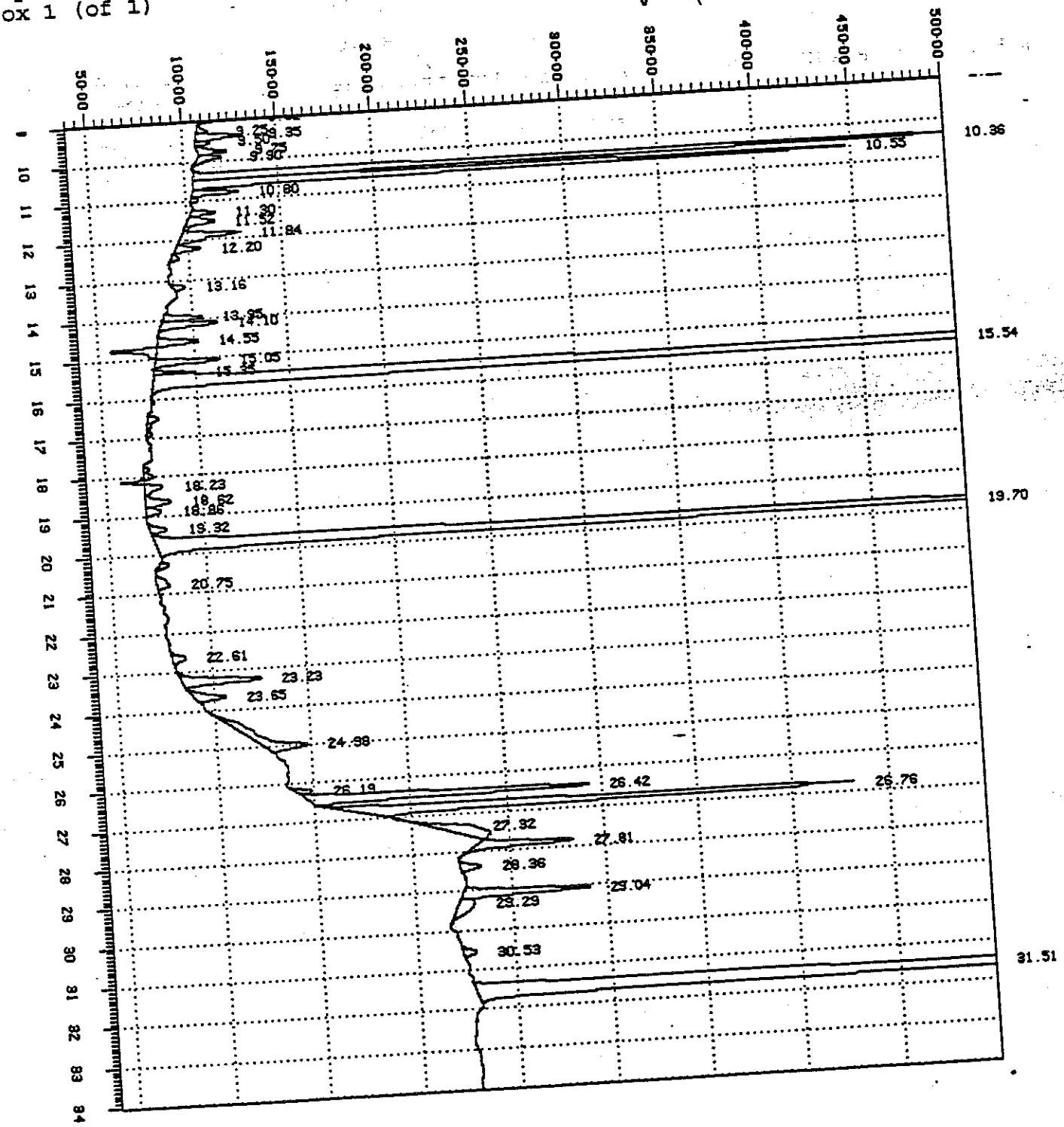
RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,18,1

APPIX.STD(4).1/.1/.25/.025ug/mLT=ST 5873.

Amount : 1.000.

Acquired on 27-JUL-1992 at 13:45
Reported on 27-JUL-1992 at 15:17
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 13:45

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : APPIX.STD(4).1/.1/.25/.025ug/mLT=ST 5873
Sample Id : VER #5873
Sample Type : Standard Amount=1.00000
Bottle No : 18

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
10.422	10.422	318628	1354150	0.10000	Diallate	4.0
15.129	15.129	1480912	7223766	0.02500	Isodrin	4.8
18.800	18.800	487232	3578939	0.10000	Chlorobenzilate	6.7
19.991	19.991	2203868	13285090	0.25000	Kepone	5.3
29.600	29.600	998921	7392890	0.02500	Octachloronapthalene	6.9

Totals			
Unknowns	2459355	15349887	N/A
Quantified	5489562	32834836	0.50000
Grand Total	7948917	48184724	0.50000

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... APPIX_A
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 15:40

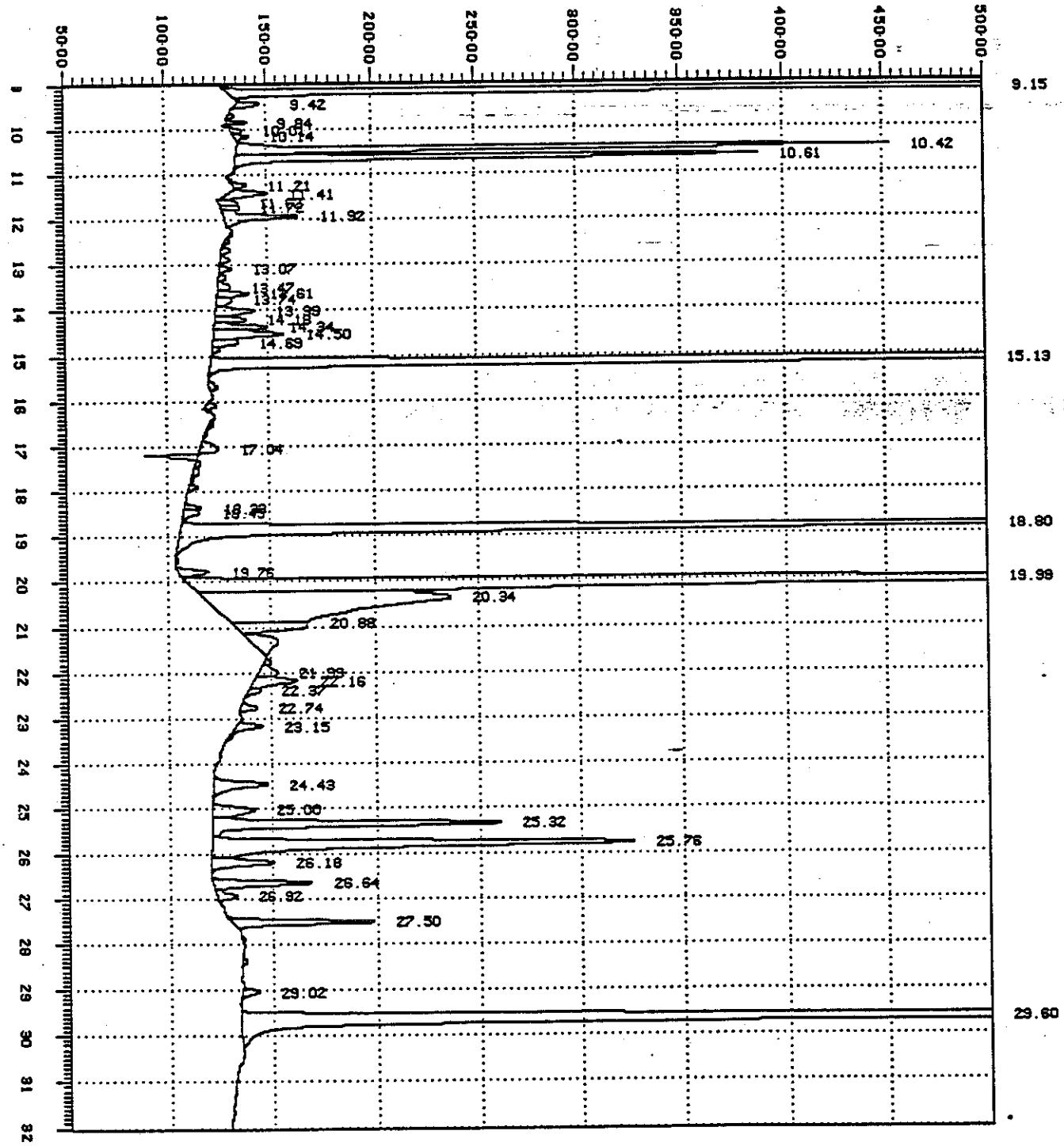
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,18,1

APPIX.STD(4).1/.1/.25/.025ug/mLT=ST 5873. Amount : 1.000.

Acquired on 27-JUL-1992 at 13:45
Reported on 27-JUL-1992 at 15:12
Box 1 (of 1)



GC/MS VOA

METHOD/TEST 8080

INSTRUMENT W

INITIAL CALIBRATION DATE 07/26/92

ANALYSIS RUN DATE 07/27/92

SAMPLES ASSOCIATED SCS, DCS

Enseco - Rocky Mountain Analytical Laboratory

Project No.: _____

EXTRACTABLE ORGANICS WORKSHEET

Analyte: OCP Matrix: H_2O

CH_2Cl_2 Brand B&J Lot No. BC858

Acetone Brand _____ Lot No. _____

Exchange Solvent HEXANE
Brand B&J Lot No. BB407

QC Lot No.: 13 Jul 92 1A
QC RUN NO.: 13 Jul 92 1A
TCLP LBL NO.: _____

LIMS Test Code: P-608-A

SCS I.D. OCP SCS Ind H_2O
Date Made 6/19/92
Made by BZ/SAB
Conc. 1.0 ug/mL
Ver. No. 6331
Amount Added 1.0 mL
Date Added 7/13/92
Added By PB

DCS I.D. OCP DCS Ind. H_2O
Date Made 7/13/92
Made By PB
Conc. 0.2/0.5 ug/mL
Ver. No. 5803
Amount Added 1.0 mL
Date Added 7/13/92
Added By PB

Standard Addition Witnessed By CC/AWA

Sample No.	Amt. Ext.	Init pH	Adj. pH	Date Ext.	Ext. By	Volume of Solvent Used	Volume of Solvent Rec.	Date Conc.	Conc. By	Solvent	Final Volume	Cleanup or Split?
BL	1000	7	–	7/13	PB/CC AWA	180 mL	>80%	7/14/92	MS	HEXANE	10.0 mL	yes
DCS1	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
DCS2												

Comments: All samples require Florisil Cleanup

Reviewed By: [illegible] Date: 8/21/92

000469

000470

Enseco - Rocky Mountain Analytical Laboratory

Project No._____

COLUMN CLEANUP RECORD

Page 1 of 1

Analyte: OCP

Matrix: H_2O

Test Code: P-608-A

Column Packing: Florisil
Brand: Baker
Lot No.: F12501
Cartridge Size: 1000 mg

1st Solvent: Hexane
Brand: B+J
Lot No.: BB407

2nd Solvent: Acetone
Brand: Baker
Lot No.: E48257

3rd Solvent: _____
Brand: _____
Lot No.: _____

Column Performance:
Std. I.D.: IND OCP CPS
Date Made: 7-15-92
Made By: LJ/BBS
Concentration: 0.1 ug/ml
Verif. No.: 6379
Amount Added: 2.0 ml
Date Added: 7-15-92
By: LJ
Witness: LJ
Proj. No. on Col. Perf.: _____

List all other projects that share this Col. Perf: _____ _____ _____

Sample Number	Volume of Extract	Volume on Column	Date Cleaned	By	Type of Cleanup	Date Conc.	By	Final Volume	Solvent
DCS1	10.0 ml	2.0 ml	7-15-92	LJ	Florisil	7-15-92	LJ	2.0 ml	Hexane
DCS2	↓	↓	↓	↓	↓	↓	↓	↓	↓
BL	↓	↓	↓	↓	↓	↓	↓	↓	↓

Comments:

Reviewed By: [illegible] Date: 8/21/92

Mon Jul 27 16:07:19 1992 Page 2

Laboratory: Enseco - RMAL Instrument: T-HP5880

Device: MCD0 Project: OCP07_4 Channel: 59
Analysis: T26JUL92 Run Sequence: T0726
Calibration: T0726 Method: TOCP Control:

Chan	Column Type	Film(um)	Length(m)	I.D.(mm)	Injector Temp(C)	Detector Type	Detector Temp	Atten	Range
59	RTx-35	1.00	30	0.53	220	ECD	325	0	0
60	RTx-5	1.50	30	0.53	220	ECD	325	0	

Temperature Program

Init(C)	Init(min.)	Prog.(C/min.)	Final(C)	Final(min)
50	1.0	20	200	0.0
		3.5	260	0.0
		10	280	11.0

Signal B:239.06
Signal C:393.01

Injection Volume:2 uL Carrier Gas:H2 Auxillary Gas:N2
Purge On :0.50 Purge Off :35.0

Pos	Sample Num.	Type	RF Upd	RT Upd	Level ID	Description/Comments
16	16	ST	I	I	A5	AR1248 0.10ug/mL T=ST
17	17	ST	I	I	A6	AR1254 0.10ug/mL T=ST
18	18	ST	I	I	P1	APPIX.STD(4).1/.1/.25/.025ug/mLT=ST 5873
19	19	SA				HEXANE T=QC
20	20	ST	N	N	L4	INDIVIDUAL MIX AB 0.05UG/ML 6266
21	21	SA				23308-BL L:24JUL925A R:26JUL925A E2
22	22	SA				23308-03 E2
23	23	SA				HEXANE T=QC
24	24	ST	N	N	L4	INDIVIDUAL MIX AB 0.05 UG/ML
25	25	SA				23727-BL L/R: 13JUL92-1A PET1
26	26	SA				23727-DCS1 L/R: 13JUL92-1A PET1
27	27	SA				23727-DCS2 L/R: 13JUL92-1A PET1
28	28	SA				23332-17 AMT=0.960L GOV
29	29	SA				23444-08 AMT=0.900L GOV
30	30	SA				23493-03 AMT=0.990L GOV

RF Update (N-none, I-initialize, A-average, U-update, L-initialize all)
RT Update (N-none, I-initialize, A-average)

Analyst: AB Date: 7/27/92

Mon Jul 27 16:07:19 1992 Page 3

Laboratory: Enseco - RMAL Instrument: T-HP5880

Device: MCD0 Project: OCP07_4 Channel: 59
Analysis: T26JUL92 Run Sequence: T0726
Calibration: T0726 Method: TOCP Control:

Chan	Column Type	Film(um)	Length(m)	I.D.(mm)	Injector Temp(C)	Detector Type	Detector Temp	Atten	Range
59	RTx-35	1.00	30	0.53	220	ECD	325	0	0
60	RTx-5	1.50	30	0.53	220	ECD	325	0	

Temperature Program

Init(C)	Init(min.)	Prog.(C/min.)	Final(C)	Final(min)
50	1.0	20	200	0.0
		3.5	260	0.0
		10	280	11.0

Signal B:239.06
Signal C:393.01

Injection Volume:2 uL Carrier Gas:H2 Auxillary Gas:N2
Purge On :0.50 Purge Off :35.0

Pos	Sample Num.	Type	RF Upd	RT Upd	Level ID	Description/Comments
31	31	SA				23516-03 AMT=1.000L GOV
32	32	SA				23518-03 AMT=1.040L GOV
33	33	SA				23520-03 AMT=1.050L GOV
34	34	SA				23562-13 AMT=0.990L GOV
35	35	SA				HEXANE T=QC
36	36	ST	N	N	L4	INDIVIDUAL MIX AB 0.05UG/ML 6266
37	37	SA				23858-BLANK RUN=17JUL92-7A GOV.
38	38	SA				23476-BLANK RUN=23JUL92-7A GOV
39	39	SA				23734-BLANK RUN=14JUL92-7A GOV
40	40	SA				23876-01 AMT=0.980L GOV
41	41	SA				23858-01 AMT=0.980L GOV
42	42	SA				23734-03 AMT=0.980L PDIL=10% GOV
43	43	SA				HEXANE BLANK
44	44	ST	N	N	L4	INDIVIDUAL MIX AB 0.05UG/ML 6266

RF Update (N-none, I-initialize, A-average, U-update, L-initialize all)
RT Update (N-none, I-initialize, A-average)

Analyst: AB Date: 7/28/92

Mon Jul 27 19:42:53 1992 Page 1

Reduced by: AB Date: 7/27/92
Reviewed by: ATO Date: 8/21/92

Check Standard Report

Description: INDIVIDUAL MIX AB 0.05 UG/ML
Sample: 24, Injection: 1, Acquired: 27-Jul-1992 18:51

000473

Project: OCP07_4, Channel: 59, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

0 of 22 compounds are outside control limits for channel 59
0 of 22 compounds are outside control limits for channel 60

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
59	9.66	9.67	-0.01	0.0500	0.0534	7	20	Tetrachloro-m-xyle
60	9.89	9.89	0.00	0.0500	0.0529	6	20	Tetrachloro-m-xyle
59	11.02	11.04	-0.02	0.0500	0.0547	9	20	alpha-BHC
60	10.63	10.64	-0.01	0.0500	0.0539	8	20	alpha-BHC
59	11.97	11.99	-0.02	0.0500	0.0535	7	20	gamma-BHC
60	11.31	11.32	-0.01	0.0500	0.0544	9	20	gamma-BHC
59	12.15	12.16	-0.02	0.0500	0.0546	9	20	beta-BHC
60	11.14	11.15	-0.01	0.0500	0.0530	6	20	beta-BHC
59	13.08	13.09	-0.02	0.0500	0.0516	3	20	Heptachlor
60	13.13	13.15	-0.01	0.0500	0.0513	3	20	Heptachlor
59	13.17	13.20	-0.02	0.0500	0.0521	4	20	delta-BHC
60	11.82	11.83	-0.01	0.0500	0.0513	3	20	delta-BHC
59	14.10	14.13	-0.03	0.0500	0.0540	8	20	Aldrin
60	14.17	14.19	-0.02	0.0500	0.0540	8	20	Aldrin
59	15.97	16.00	-0.03	0.0500	0.0533	7	20	Heptachlor Epoxide
60	15.43	15.45	-0.02	0.0500	0.0536	7	20	Heptachlor Epoxide
59	17.35	17.38	-0.03	0.0500	0.0533	7	20	Endosulfan I
60	16.73	16.75	-0.02	0.0500	0.0537	7	20	Endosulfan I
59	18.24	18.27	-0.03	0.0500	0.0535	7	20	4,4'-DDE
60	17.52	17.54	-0.02	0.0500	0.0533	7	20	4,4'-DDE
59	18.56	18.59	-0.03	0.0500	0.0535	7	20	Dieldrin
60	17.70	17.72	-0.02	0.0500	0.0542	8	20	Dieldrin
59	19.99	20.02	-0.03	0.0500	0.0521	4	20	Endrin
60	18.57	18.59	-0.02	0.0500	0.0531	6	20	Endrin
59	20.60	20.63	-0.03	0.0500	0.0523	5	20	4,4'-DDD
60	19.19	19.21	-0.02	0.0500	0.0542	8	20	4,4'-DDD
59	20.80	20.83	-0.03	0.0500	0.0521	4	20	Endosulfan II
60	18.92	18.95	-0.02	0.0500	0.0520	4	20	Endosulfan II

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max		Compound
59	22.00	22.03	-0.03	0.0500	0.0520	4	20		4,4'-DDT
60	20.68	20.73	-0.05	0.100	0.100	0	20	C	4,4'-DDT
59	22.17	22.20	-0.03	0.0500	0.0535	7	20		Endrin Aldehyde
60	19.68	19.71	-0.03	0.0500	0.0533	7	20		Endrin Aldehyde
59	22.91	22.94	-0.03	0.0500	0.0522	4	20		Endosulfan Sulfate
60	20.68	20.73	-0.05	0.100	0.100	0	20	C	Endosulfan Sulfate
59	24.91	24.94	-0.03	0.0500	0.0507	1	20		Dibutylchlorendate
60	24.86	24.88	-0.02	0.0500	0.0497	-1	20		Dibutylchlorendate
59	25.88	25.91	-0.03	0.0500	0.0519	4	20		Methoxychlor
60	23.32	23.35	-0.03	0.0500	0.0502	0	20		Methoxychlor
59	26.17	26.20	-0.03	0.0500	0.0497	-1	20		Endrin Ketone
60	22.72	22.75	-0.03	0.0500	0.0497	-1	20		Endrin Ketone
59	31.48	31.52	-0.04	0.0250	0.0261	4	20		Octachloronapthale
60	29.59	29.60	-0.02		0.0260	0	20	NL	Octachloronapthale
59	31.75	31.79	-0.04	0.0500	0.0530	6	20		Decachlorobiphenyl
60	30.68	30.71	-0.03	0.0500	0.0525	5	20		Decachlorobiphenyl

Injection Report

Acquired on 27-JUL-1992 at 18:51

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05 UG/ML
Sample Id : CHK2_OCPA
Sample Type : Standard Amount=1.00000
Bottle No : 24

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.658	9.671	4741080	17941268	0.05342	Tetrachloro-m-xylene (TCX)	3.5
11.022	11.040	5783192	23232104	0.05472	alpha-BHC	4.0
11.969	11.987	4854898	21730310	0.05353	gamma-BHC	4.5
12.147	12.164	2563869	12513870	0.05465	beta-BHC	4.8
13.076	13.093	4115738	22114440	0.05162	Heptachlor	5.9A
13.173	13.196	4235221	21595548	0.05206	delta-BHC	4.8A
14.102	14.129	3369567	20448346	0.05401	Aldrin	5.9
15.973	16.000	3227626	21446584	0.05334	Heptachlor Epoxide	6.7
17.351	17.382	2823922	19746054	0.05333	Endosulfan I	6.7
18.240	18.267	2620413	16607943	0.05351	4,4'-DDE	6.1
18.556	18.587	2598554	18478950	0.05346	Dieldrin	6.9
19.987	20.018	2370274	17165454	0.05213	Endrin	6.9
20.604	20.631	1858675	12150080	0.05225	4,4'-DDD	6.4
20.800	20.831	2252054	17148038	0.05207	Endosulfan II	7.5
22.000	22.031	1973904	13646065	0.05201	4,4'-DDT	7.2
22.169	22.200	1802154	14305469	0.05352	Endrin Aldehyde	8.3
22.911	22.942	1815546	15847230	0.05216	Endosulfan Sulfate	7.5
24.907	24.938	1563345	13113350	0.05070	Dibutylchlorendate (DBC)	8.0
25.876	25.907	1261195	9477749	0.05193	Methoxychlor	7.2
26.169	26.200	2021544	14465528	0.04974	Endrin Ketone	6.9
31.484	31.524	1174698	9821494	0.02609	Octachloronapthalene	8.3
31.751	31.787	1942132	17987990	0.05304	Decachlorobiphenyl (DCB)	9.1

Totals			
Unknowns	2952379	15672882	N/A
Quantified	60969604	370983904	1.13329
Grand Total	63921984	386656800	1.13329

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

Uncalibrated peaks use user factor (0.0000)

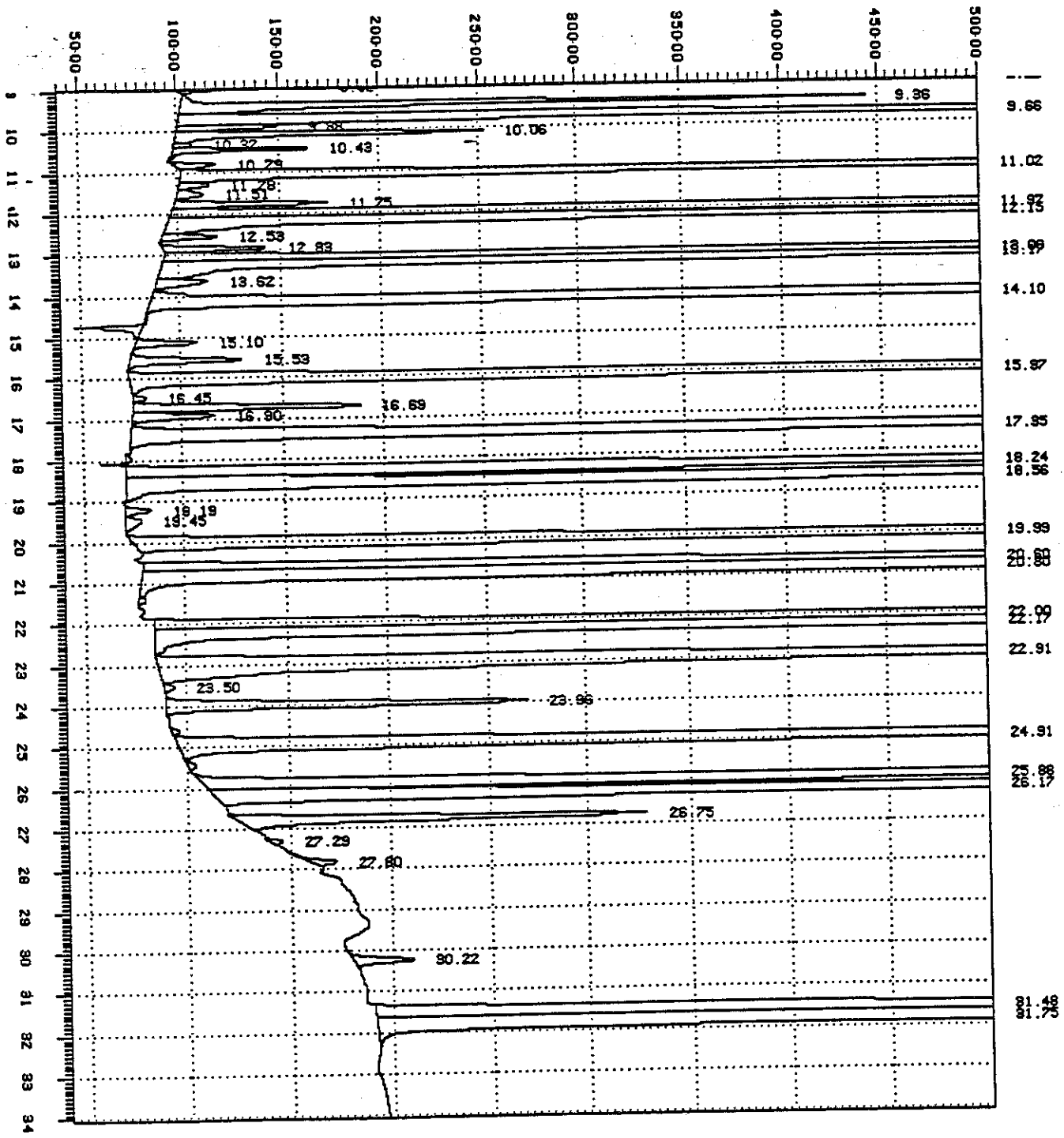
RMAL Chromatography System on DENCR3

000477

[OCP07_4] 59 T26JUL92,24,1

INDIVIDUAL MIX AB 0.05 UG/ML. Amount : 1.000.

Acquired on 27-JUL-1992 at 18:51
Reported on 27-JUL-1992 at 19:41
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 18:51

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05 UG/ML
Sample Id : CHK2 OCPA
Sample Type : Standard Amount=1.00000
Bottle No : 24

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.889	9.893	3009653	11525475	0.05290	Tetrachloro-m-xylene (TCX)	3.5
10.627	10.636	5105423	17253314	0.05391	alpha-BHC	3.2
11.142	11.151	2164659	8917399	0.05299	beta-BHC	4.0
11.311	11.320	4567577	16929388	0.05436	gamma-BHC	3.5
11.818	11.827	3617329	14871923	0.05129	delta-BHC	4.0
13.133	13.147	3887759	17226494	0.05128	Heptachlor	4.3
14.173	14.191	3448619	15727460	0.05403	Aldrin	4.5
15.431	15.453	3139070	16162570	0.05356	Heptachlor Epoxide	5.1
16.729	16.751	2819274	15479788	0.05374	Endosulfan I	5.3
17.516	17.538	2415698	13022985	0.05331	4,4'-DDE	5.3
17.702	17.724	2678817	15117365	0.05415	Dieldrin	5.3
18.569	18.591	2466896	13957088	0.05310	Endrin	5.3
18.924	18.947	2151736	12940754	0.05200	Endosulfan II	5.9
19.191	19.213	1657367	10258868	0.05423	4,4'-DDD	5.9
19.680	19.707	1700344	11255358	0.05325	Endrin Aldehyde	6.1
	20.733	3755057	21789014	0.10020	Endosulfan Sulfate/4,4'-DDT	
20.684	20.733	1808418	9803793	0.04449	- C1	6.4A
20.764	20.733	1946639	11985220	0.05463	- C1	6.4A
22.724	22.751	1832796	11727518	0.04966	Endrin Ketone	6.4
23.324	23.351	1016384	6834084	0.05019	Methoxychlor	6.4
24.858	24.880	1354169	9487280	0.04968	Dibutylchlorendate (DBC)	6.7
29.587	29.604	948624	7181558	0.02599	Octachloronapthalene	7.2
30.680	30.711	1695473	12769599	0.05251	Decachlorobiphenyl (DCB)	7.5

Totals			
Unknowns	2587190	13762437	N/A
Quantified	55432720	280435264	1.12634
Grand Total	58019908	294197696	1.12634

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

Uncalibrated peaks use user factor (0.0000)

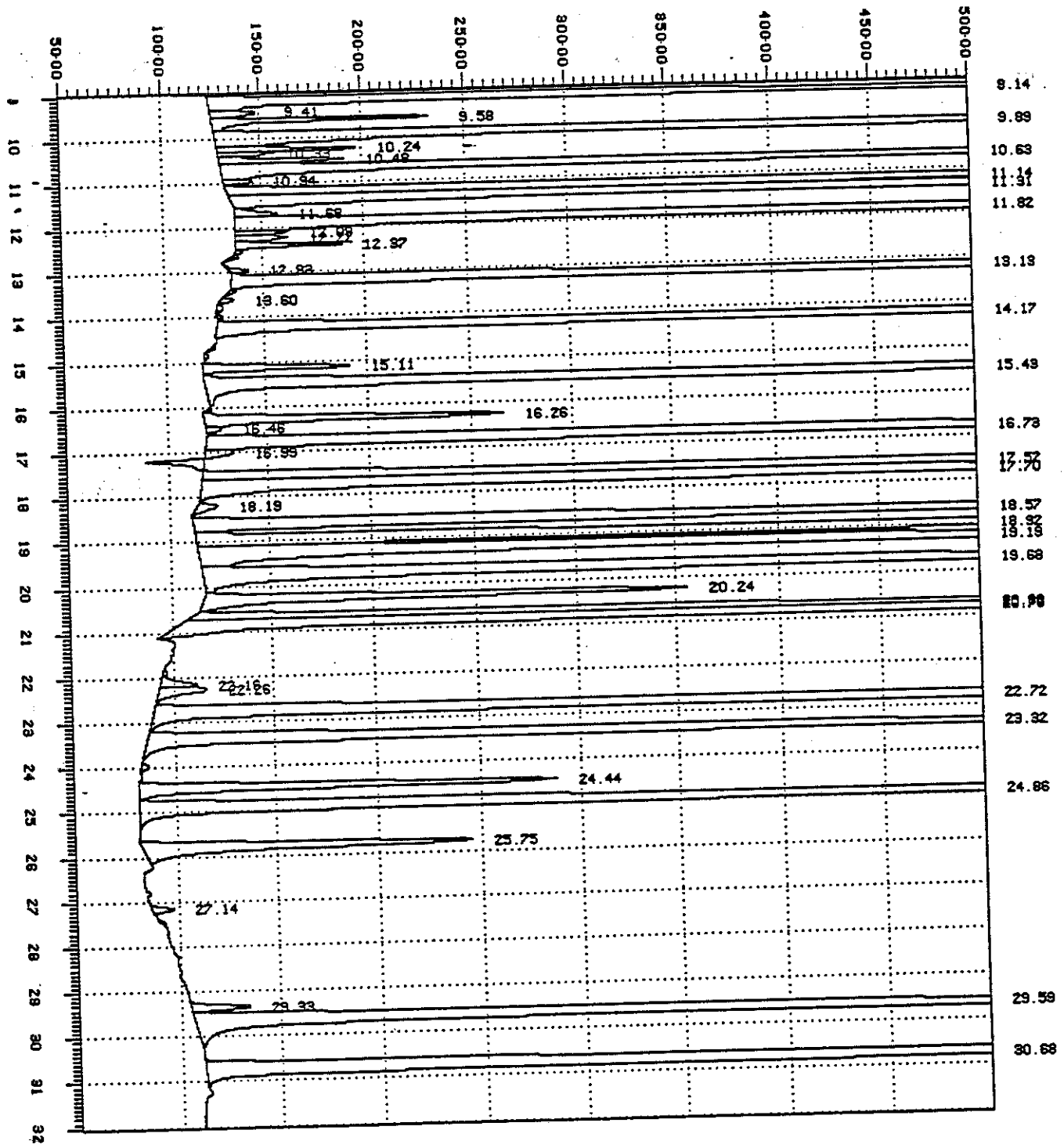
RMAL Chromatography System on DENCR3

000480

[OCP07_4] 60 T26JUL92,24,1

INDIVIDUAL MIX AB 0.05 UG/ML. Amount : 1.000.

Acquired on 27-JUL-1992 at 18:51
Reported on 27-JUL-1992 at 19:42
Box 1 (of 1)



Reduced by: AB Date: 7/27/92
Reviewed by: DLD Date: 8/21/92

Sample Summary

Description: -BL L/R: 13JUL92-1A PET1
Sample: 25, Injection: 1, Acquired: 27-Jul-1992 19:42

Project: OCP07_4, Channel: 59, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	1L	Reporting Units:	UG/L
Concentration Multiplier:	10.00		
Spike Multiplier:	1.000		

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Conc. Measured Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	%Recovery Low	%Recovery High
59	Dibutylchlorendate (DBC	0.08381	0.838	1.00	83.8	41	135
60	Dibutylchlorendate (DBC	0.08106	0.811	1.00	81.1	41	135
59	Tetrachloro-m-xylene (T	0.08708	0.871	1.00	87.1	48	136
60	Tetrachloro-m-xylene (T	0.09134	0.913	1.00	91.3	48	136
59	Decachlorobiphenyl (DCB	0.08952	0.895	1.00	89.5	48	136
60	Decachlorobiphenyl (DCB	0.08681	0.868	1.00	86.8	48	136

4 Compounds found above detection limit (Including IS and Surrogates).
0 Compounds found outside linear range.

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Tetrachloro-m-xylene (TC				0.871					
59	9.66	9.67	-0.01			28947448	0.0871	0.871	
60	9.88	9.89	-0.01			19743472	0.0913	0.913	
alpha-BHC					BDL				
59	11.12	11.04	0.08			119116	0.0003	0.0030	
60	10.67	10.64	0.03			827512	0.0027	0.0268	
gamma-BHC					BDL				
59	11.94	11.99	-0.05			196983	0	0.0010	
60	11.39	11.32	0.07			541490	0.0006	0.0062	
beta-BHC					BDL				
59	12.17	12.16	0.01			78048	-0.0009	-0.0091	
60	11.08	11.15	-0.07			262450	-0.0004	-0.0043	
Heptachlor					NC				
59		13.09							NF
60	13.05	13.15	-0.09			453685	-0.0004	-0.0044	

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
delta-BHC				ND					
59		13.20							NF
60		11.83							NF
Aldrin				ND					
59		14.13							NF
60		14.19							NF
Heptachlor Epoxide				NC					
59	16.06	16.00	0.06			24869	-0.0011	-0.0111	
60		15.45							NF
Endosulfan I				ND					
59		17.38							NF
60		16.75							NF
4,4'-DDE				NC					
59		18.27							NF
60	17.57	17.54	0.03			517732	0.0017	0.0167	
Dieldrin				ND					
59		18.59							NF
60		17.72							NF
Endrin				ND					
59		20.02							NF
60		18.59							NF
4,4'-DDD				ND					
59		20.63							NF
60		19.21							NF
Endosulfan II				NC					
59	20.74	20.83	-0.09			17544	-0.0009	-0.0091	
60		18.95							NF
4,4'-DDT				NC					
59		22.03							NF
60	20.63	20.73	-0.10			100997	-0.0006	-0.0061C	
Endrin Aldehyde				NC					
59		22.20							NF
60	19.76	19.71	0.05			23365	-0.0011	-0.0113	
Endosulfan Sulfate				NC					
59		22.94							NF
60	20.63	20.73	-0.10			100997	-0.0006	-0.0061C	
Dibutylchlorendate (DBC)				0.811					
59	24.91	24.94	-0.03			21542026	0.0838	0.838	
60	24.86	24.88	-0.02			15336633	0.0811	0.811	

Compound	Ch	Retention Time Meas.	Retention Time Pred.	Retention Time Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Methoxychlor						NC				
	59		25.91							NF
	60	23.36	23.35	0.00			22098	-0.0004	-0.0044	
Endrin Ketone						NC				
	59	26.23	26.20	0.03			39558	0.0003	0.0029	
	60		22.75							NF
Octachloronapthalene					0.238					
	59	31.49	31.52	-0.04			9210182	0.0238	0.238	
	60	29.58	29.60	-0.02			6718522	0.0243	0.243	
Decachlorobiphenyl (DCB)					0.868					
	59	31.76	31.79	-0.03			30079828	0.0895	0.895	
	60	30.68	30.71	-0.03			20834472	0.0868	0.868	

Injection Report

Acquired on 27-JUL-1992 at 19:42

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : 23727-BL L/R: 13JUL92-1A PET1
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 25

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.662	9.671	7641939	28947448	0.08708	Tetrachloro-m-xylene (TCX)	3.5
11.116	11.040	20999	119116	0.00030	alpha-BHC	5.3A
11.938	11.987	20334	196983	0.00010	gamma-BHC	11.7A
12.173	12.164	8608	78048	-0.000915	beta-BHC	11.7A
16.058	16.000	3466	24869	-0.001114	Heptachlor Epoxide	7.5
20.738	20.831	2843	17544	-0.000911	Endosulfan II	6.7
24.911	24.938	2634950	21542026	0.08381	Dibutylchlorendate (DBC)	8.0
26.231	26.200	5332	39558	0.00029	Endrin Ketone	7.7
31.489	31.524	1105555	9210182	0.02382	Octachloronapthalene	8.3
31.760	31.787	3231500	30079828	0.08952	Decachlorobiphenyl (DCB)	9.1

Totals			
Unknowns	4157804	25157472	N/A
Quantified	14675526	90255600	0.28198
Grand Total	18833330	115413072	0.28198

MISSING PEAKS

RT mins	Peak name
13.093	Heptachlor
13.196	delta-BHC
14.129	Aldrin
17.382	Endosulfan I
18.267	4,4'-DDE
18.587	Dieldrin
20.018	Endrin
20.631	4,4'-DDD
22.031	4,4'-DDT
22.200	Endrin Aldehyde
22.942	Endosulfan Sulfate

RT mins	Peak name
25.907	Methoxychlor

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

Uncalibrated peaks use user factor (0.0000)

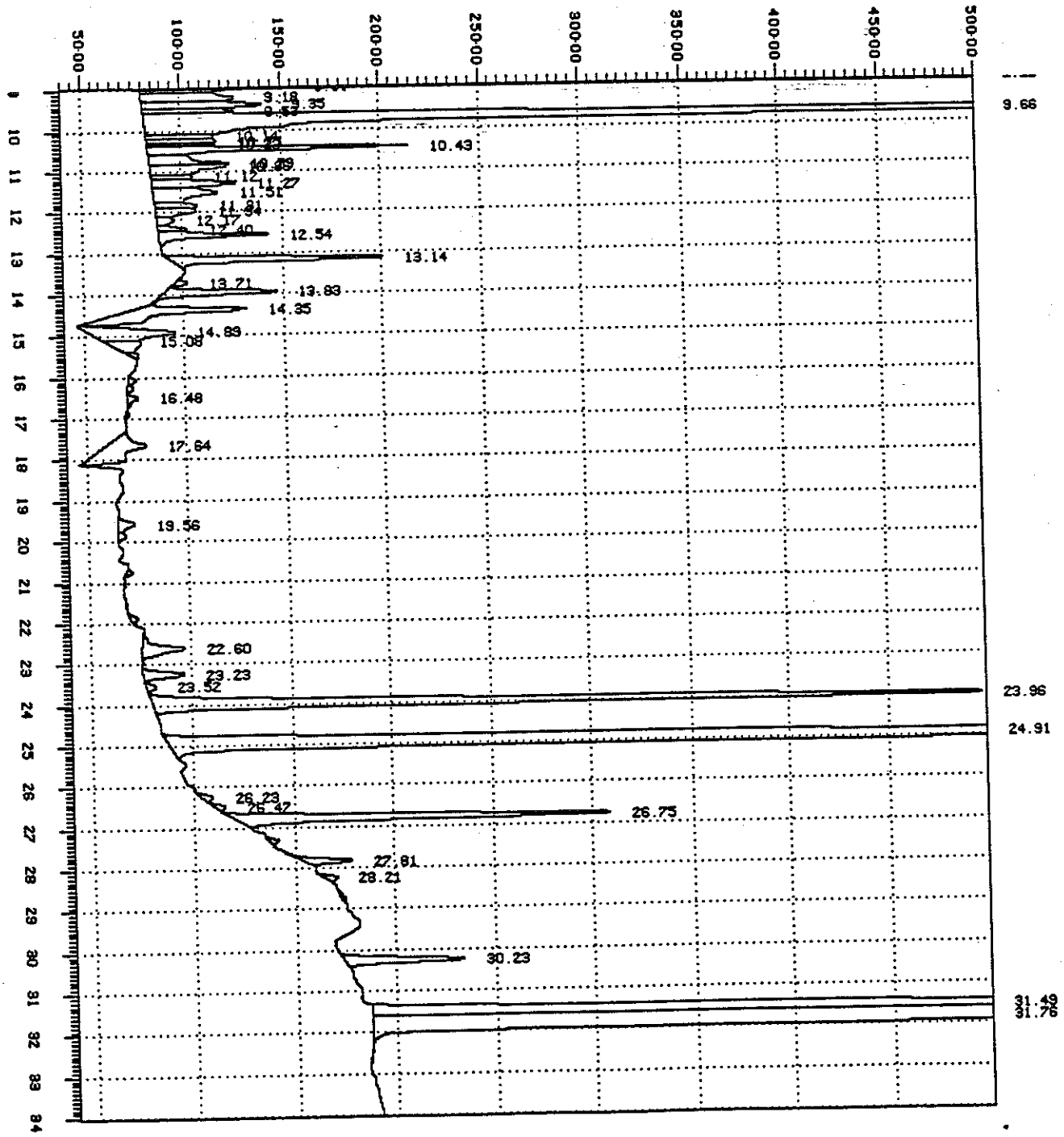
RMAL Chromatography System on DENCR3

000486

[OCP07_4] 59 T26JUL92,25,1

23727-BL L/R: 13JUL92-1A PET1. Amount : 1.000.

Acquired on 27-JUL-1992 at 19:42
Reported on 27-JUL-1992 at 20:20
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 19:42

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : 23727-BL L/R: 13JUL92-1A PET1
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 25

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.884	9.893	5135049	19743472	0.09134	Tetrachloro-m-xylene (TCX)	3.5
10.667	10.636	59916	827512	0.00268	alpha-BHC	I
11.080	11.151	51755	262450	-0.000430	beta-BHC	5.3A
11.391	11.320	49336	541490	0.00062	gamma-BHC	12.8A
13.053	13.147	94174	453685	-0.000442	Heptachlor	4.8
17.569	17.538	26251	517732	0.00167	4,4'-DDE	24.5A
19.756	19.707	3191	23365	-0.001126	Endrin Aldehyde	8.0
	20.733	13436	100997	-0.000605	Endosulfan Sulfate/4,4'-DDT	
20.631	20.733	13436	100997	-0.000605	- C1	7.5
23.356	23.351	3743	22098	-0.000436	Methoxychlor	6.4A
24.862	24.880	2250506	15336633	0.08106	Dibutylchlorendate (DBC)	6.7
29.582	29.604	941195	6718522	0.02432	Octachloronapthalene	6.9
30.684	30.711	2751677	20834472	0.08681	Decachlorobiphenyl (DCB)	7.5

Totals			
Unknowns	3966689	21574646	N/A
Quantified	11380228	65382424	0.28545
Grand Total	15346917	86957072	0.28545

MISSING PEAKS

RT mins	Peak name
11.827	delta-BHC
14.191	Aldrin
15.453	Heptachlor Epoxide
16.751	Endosulfan I
17.724	Dieldrin
18.591	Endrin
18.947	Endosulfan II
19.213	4,4'-DDD

RT mins	Peak name
22.751	Endrin Ketone

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

Uncalibrated peaks use user factor (0.0000)

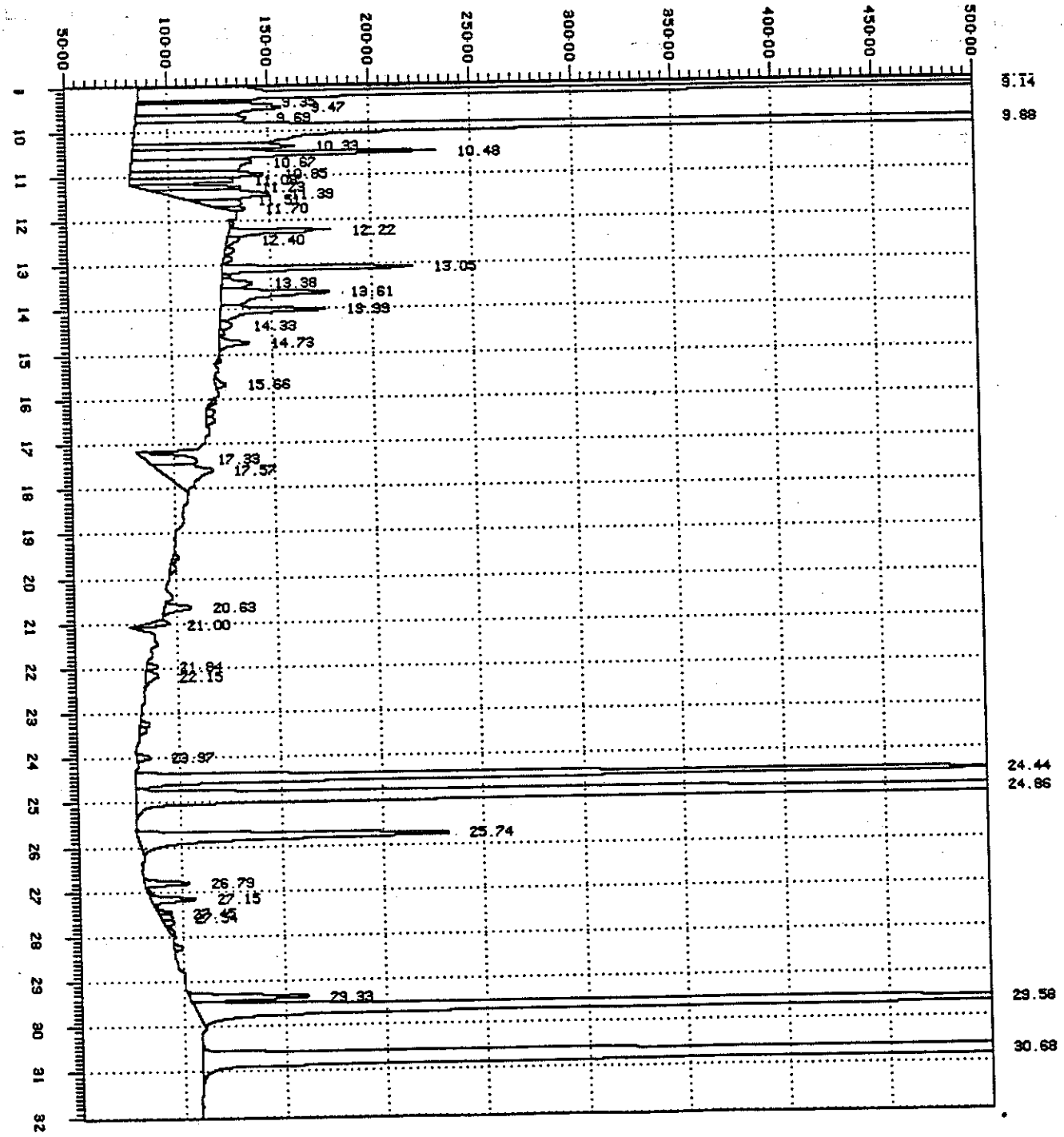
RMAL Chromatography System on DENCR3

000489

[OCP07_4] 60 T26JUL92,25,1

23727-BL L/R: 13JUL92-1A PET1. Amount : 1.000.

Acquired on 27-JUL-1992 at 19:42
Reported on 27-JUL-1992 at 20:20
Box 1 (of 1)



Reduced by: AB Date: 7/27/92
Reviewed by: ATL Date: 8/21/92

Matrix Spike Report
000490

Project: OCP07_4, Channel: 59, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

UNSPIKED SAMPLE Description: -BL L/R: 13JUL92-1A PET1
Sample: 25, Injection: 1, Acquired: 27-Jul-1992 19:42

MATRIX SPIKE Description: -DCS1 L/R: 13JUL92-1A PET1
Sample: 26, Injection: 1, Acquired: 27-Jul-1992 20:33

MATRIX SPIKE DUPLICATE Description: -DCS2 L/R: 13JUL92-1A PET1
Sample: 27, Injection: 1, Acquired: 27-Jul-1992 21:24

		Concentration (UG/L)				% Recovery					
		MS		MSD		Measured		Limits		RPD	
Ch	Sample	Spiked	Measured	Spiked	Measured	MS	MSD	Min	Max	Mes	Max
gamma-BHC											
59	0.0010	0.200	0.194	0.200	0.183	97	91	56	111	-6	12
60	0.0062	0.200	0.191	0.200	0.187	92	90	56	111	-2	12
Heptachlor											
59		0.200	0.221	0.200	0.200	110	100	50	121	-10	21
60	-0.0044	0.200	0.208	0.200	0.191	106	98	50	121	-9	21
Aldrin											
59		0.200	0.187	0.200	0.168	93	84	49	109	-10	16
60		0.200	0.195	0.200	0.178	98	89	49	109	-9	16
Dieldrin											
59		0.500	0.494	0.500	0.478	99	96	47	111	-3	13
60		0.500	0.495	0.500	0.474	99	95	47	111	-4	13
Endrin											
59		0.500	0.509	0.500	0.488	102	98	50	123	-4	16
60		0.500	0.519	0.500	0.496	104	99	50	123	-5	16
4,4'-DDT											
59		0.500	0.505	0.500	0.490	101	98	45	117	-3	14
60	-0.0061	0.500	0.467	0.500	0.436	95	88	45	117	-7	14

Mon Jul 27 21:35:00 1992 Page 1

Reduced by: [illegible] Date: 7/27/92
Reviewed by: [illegible] Date: 8/21/92

Sample Summary 000491

Description: -DCS1 L/R: 13JUL92-1A PET1
Sample: 26, Injection: 1, Acquired: 27-Jul-1992 20:33

Project: OCP07_4, Channel: 59, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	1L	Reporting Units:	UG/L
Concentration Multiplier:	10.00		
Spike Multiplier:	1.000		

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Conc. Measured Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	%Recovery Low	%Recovery High
59	Dibutylchlorendate (DBC	0.08500	0.850	1.00	85.0	41	135
60	Dibutylchlorendate (DBC	0.08193	0.819	1.00	81.9	41	135
59	Tetrachloro-m-xylene (T	0.08226	0.823	1.00	82.3	48	136
60	Tetrachloro-m-xylene (T	0.08201	0.820	1.00	82.0	48	136
59	Decachlorobiphenyl (DCB	0.08775	0.877	1.00	87.7	48	136
60	Decachlorobiphenyl (DCB	0.08538	0.854	1.00	85.4	48	136

10 Compounds found above detection limit (Including IS and Surrogates).
0 Compounds found outside linear range.

Compound / Ch	Retention Time Meas.	Retention Time Pred.	Retention Time Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Tetrachloro-m-xylene (TC				0.820					
59	9.67	9.67	0.00			27369636	0.0823	0.823	
60	9.89	9.89	0.00			17749392	0.0820	0.820	
alpha-BHC					NC				
59		11.04							NF
60	10.66	10.64	0.03			61345	0.0003	0.0029	
gamma-BHC				0.191					
59	11.98	11.99	-0.01			7993949	0.0194	0.194	
60	11.32	11.32	0.00			6166320	0.0191	0.191	
beta-BHC					ND				
59		12.16							NF
60		11.15							NF
Heptachlor				0.208					
59	13.08	13.09	-0.01			9756740	0.0221	0.221	
60	13.14	13.15	-0.01			7355083	0.0208	0.208	

000492

Compound	Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
delta-BHC						NC				
	59		13.20							NF
	60	11.80	11.83	-0.03			149241	0.0006	0.0057	
Aldrin					0.187					
	59	14.12	14.13	-0.01			7166428	0.0187	0.187	
	60	14.18	14.19	-0.01			5838492	0.0195	0.195	
Heptachlor Epoxide						NC				
	59	16.05	16.00	0.05			19198	-0.0011	-0.0113	
	60		15.45							NF
Endosulfan I						BDL				
	59	17.30	17.38	-0.08			28127	-0.0011	-0.0108	
	60	16.82	16.75	0.07			16154	-0.0011	-0.0107	
4,4'-DDE						BDL				
	59	18.26	18.27	0.00			295735	0.0004	0.0044	
	60	17.53	17.54	0.00			447620	0.0014	0.0138	
Dieldrin					0.494					
	59	18.57	18.59	-0.02			17085840	0.0493	0.494	
	60	17.71	17.72	-0.01			13835665	0.0495	0.495	
Endrin					0.509					
	59	20.00	20.02	-0.02			16776899	0.0509	0.509	
	60	18.58	18.59	-0.01			13657540	0.0519	0.519	
4,4'-DDD						BDL				
	59	20.60	20.63	-0.04			342758	0.0017	0.0170	
	60	19.21	19.21				244112	0.0015	0.0150	
Endosulfan II						NC				
	59		20.83							NF
	60	19.02	18.95	0.08			41343	-0.0010	-0.0100	
4,4'-DDT					0.467					
	59	22.02	22.03	-0.01			13242896	0.0505	0.505	
	60	20.78	20.73	0.05			10282049	0.0467	0.467	C
Endrin Aldehyde						NC				
	59		22.20							NF
	60	19.63	19.71	-0.08			430088	0.0008	0.0084	
Endosulfan Sulfate						NC				
	59		22.94							NF
	60	20.78	20.73	0.05			10282049	0.0467	0.467	C
Dibutylchlorendate (DBC)					0.819					
	59	24.92	24.94	-0.02			21844432	0.0850	0.850	
	60	24.86	24.88	-0.02			15499288	0.0819	0.819	

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Methoxychlor				ND					
59		25.91							NF
60		23.35							NF
Endrin Ketone				BDL					
59	26.19	26.20	-0.01			396563	0.0015	0.0152	
60	22.74	22.75	-0.01			241646	0.0004	0.0040	
Octachloronapthalene				0.247					
59	31.49	31.52	-0.03			9439913	0.0247	0.247	
60	29.59	29.60	-0.02			6914380	0.0250	0.250	
Decachlorobiphenyl (DCB)				0.854					
59	31.76	31.79	-0.03			29493200	0.0877	0.877	
60	30.69	30.71	-0.02			20498898	0.0854	0.854	

Injection Report

Acquired on 27-JUL-1992 at 20:33

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : -DCS1 L/R: 13JUL92-1A PET1
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 26

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.667	9.671	7567327	27369636	0.08226	Tetrachloro-m-xylene (TCX)	3.5
11.978	11.987	1802467	7993949	0.01945	gamma-BHC	4.5
13.084	13.093	1628339	9756740	0.02207	Heptachlor	5.9
14.116	14.129	1185443	7166428	0.01869	Aldrin	5.9
16.049	16.000	3027	19198	-0.001128	Heptachlor Epoxide	6.9
17.302	17.382	3822	28127	-0.001080	Endosulfan I	7.2
18.262	18.267	56409	295735	0.00044	4,4'-DDE	6.4
18.569	18.587	2418082	17085840	0.04935	Dieldrin	6.9
20.000	20.018	2296500	16776899	0.05094	Endrin	6.9
20.596	20.631	33091	342758	0.00170	4,4'-DDD	9.6
22.018	22.031	1845607	13242896	0.05048	4,4'-DDT	6.9
24.916	24.938	2654390	21844432	0.08500	Dibutylchlorendate (DBC)	7.7
26.191	26.200	53053	396563	0.00152	Endrin Ketone	7.2
31.493	31.524	1130783	9439913	0.02467	Octachloronapthalene	8.3
31.760	31.787	3186839	29493200	0.08775	Decachlorobiphenyl (DCB)	9.1

Totals			
Unknowns	4407527	21738442	N/A
Quantified	25865182	161252320	0.49210
Grand Total	30272710	182990768	0.49210

MISSING PEAKS

RT mins	Peak name

11.040 alpha-BHC
12.164 beta-BHC
13.196 delta-BHC
20.831 Endosulfan II
22.200 Endrin Aldehyde
22.942 Endosulfan Sulfate
25.907 Methoxychlor

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

Uncalibrated peaks use user factor (0.0000)

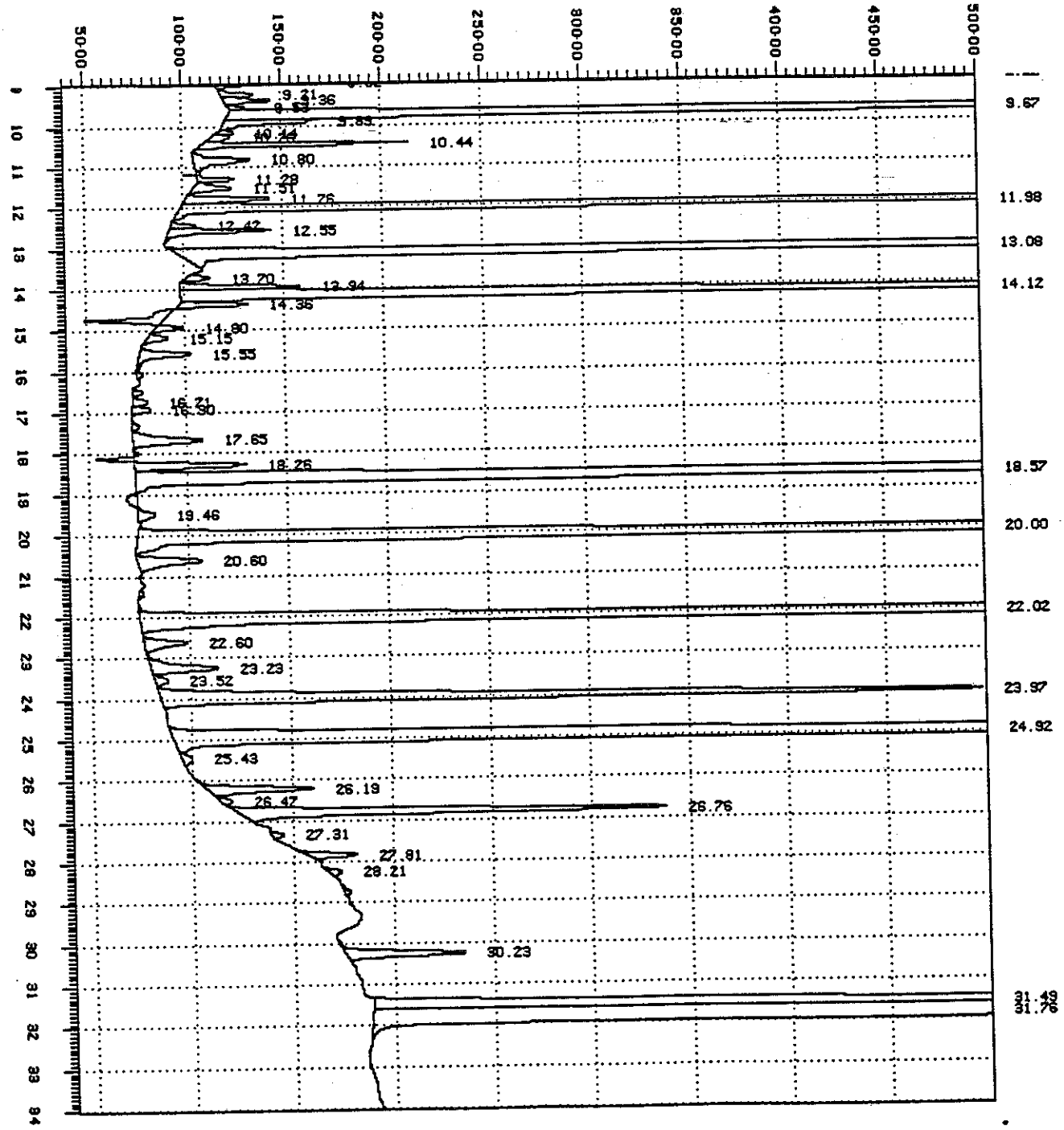
RMAL Chromatography System on DENCR3

000496

[OCP07_4] 59 T26JUL92,26,1

23727-DCS1 L/R: 13JUL92-1A PET1. Amount : 1.000.

Acquired on 27-JUL-1992 at 20:33
Reported on 27-JUL-1992 at 21:36
Box 1 (of 1)



Injection Report

Acquired on 27-JUL-1992 at 20:33

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : DCS1 L/R: 13JUL92-1A PET1
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 26

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.889	9.893	5007746	17749392	0.08201	Tetrachloro-m-xylene (TCX)	3.2
10.662	10.636	11939	61345	0.00029	alpha-BHC	4.5
11.316	11.320	1785280	6166320	0.01907	gamma-BHC	3.5
11.800	11.827	41231	149241	0.00057	delta-BHC	3.7
13.138	13.147	1604000	7355083	0.02084	Heptachlor	4.3
14.182	14.191	1276176	5838492	0.01951	Aldrin	4.5
16.818	16.751	7968	16154	-0.001072	Endosulfan I	32.0A
17.533	17.538	80048	447620	0.00138	4,4'-DDE	5.3A
17.711	17.724	2516126	13835665	0.04948	Dieldrin	5.3
18.578	18.591	2401852	13657540	0.05194	Endrin	5.3
19.022	18.947	5743	41343	-0.001001	Endosulfan II	9.1A
19.213	19.213	33903	244112	0.00150	4,4'-DDD	6.4A
19.627	19.707	30423	430088	0.00084	Endrin Aldehyde	12.5
	20.733	1663428	10282049	0.04672	Endosulfan Sulfate/4,4'-DDT	
20.782	20.733	1663428	10282049	0.04672	- C1	5.9
22.738	22.751	39379	241646	0.00040	Endrin Ketone	5.9
24.862	24.880	2287691	15499288	0.08193	Dibutylchlorendate (DBC)	6.7
29.587	29.604	959489	6914380	0.02503	Octachloronapthalene	6.7
30.689	30.711	2702207	20498898	0.08538	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	4100696	17535266	N/A
Quantified	22454630	119428664	0.48481
Grand Total	26555326	136963936	0.48481

MISSING PEAKS

RT mins	Peak name
11.151	beta-BHC
15.453	Heptachlor Epoxide
23.351	Methoxychlor

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

Uncalibrated peaks use user factor (0.0000)

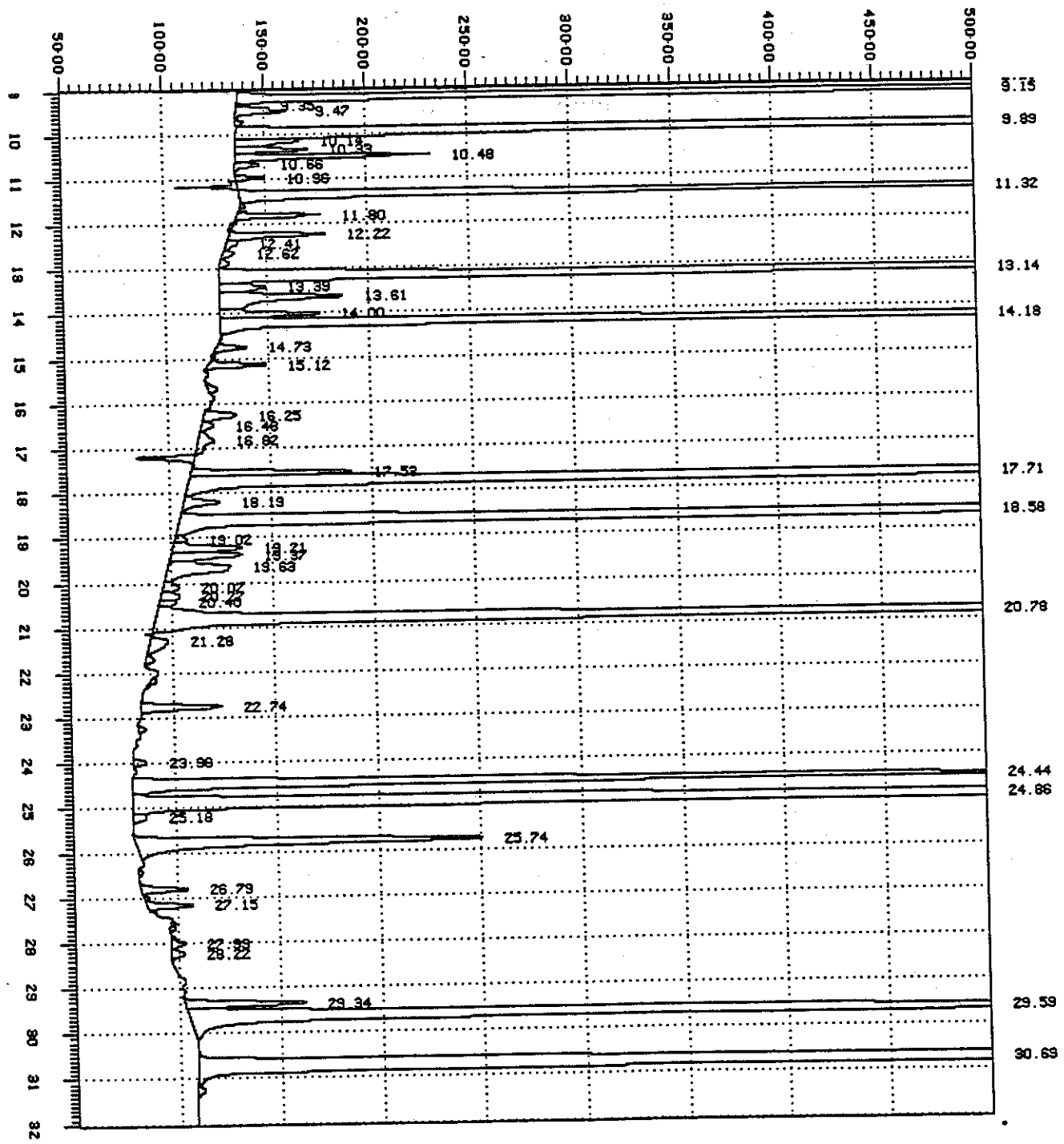
RMAL Chromatography System on DENCR3

000499

[OCP07_4] 60 T26JUL92,26,1

23727-DCS1 L/R: 13JUL92-1A PET1. Amount : 1.000.

Acquired on 27-JUL-1992 at 20:33
Reported on 27-JUL-1992 at 21:35
Box 1 (of 1)



Mon Jul 27 22:10:13 1992 Page 1

Reduced by: Date: 7/27/92
Reviewed by: Date: 8/21/92

Sample Summary 000500

Description: -DCS2 L/R: 13JUL92-1A PET1
Sample: 27, Injection: 1, Acquired: 27-Jul-1992 21:24

Project: OCP07_4, Channel: 59, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	1L	Reporting Units:	UG/L
Concentration Multiplier:	10.00		
Spike Multiplier:	1.000		

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Conc. Measured Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	%Recovery Low	%Recovery High
59	Dibutylchlorendate (DBC	0.08551	0.855	1.00	85.5	41	135
60	Dibutylchlorendate (DBC	0.08249	0.825	1.00	82.5	41	135
59	Tetrachloro-m-xylene (T	0.07639	0.764	1.00	76.4	48	136
60	Tetrachloro-m-xylene (T	0.07719	0.772	1.00	77.2	48	136
59	Decachlorobiphenyl (DCB	0.09196	0.920	1.00	92.0	48	136
60	Decachlorobiphenyl (DCB	0.08883	0.888	1.00	88.8	48	136

10 Compounds found above detection limit (Including IS and Surrogates).
0 Compounds found outside linear range.

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Tetrachloro-m-xylene (TC				0.764					
59	9.67	9.67	0.00			25452240	0.0764	0.764	
60	9.89	9.89	0.00			16717875	0.0772	0.772	
alpha-BHC					NC				
59		11.04							NF
60	10.67	10.64	0.03			104544	0.0004	0.0042	
gamma-BHC				0.183					
59	11.98	11.99	-0.01			7537492	0.0183	0.183	
60	11.32	11.32	0.00			6043951	0.0187	0.187	
beta-BHC					ND				
59		12.16							NF
60		11.15							NF
Heptachlor				0.191					
59	13.08	13.09	-0.01			8904361	0.0200	0.200	
60	13.14	13.15	0.00			6786880	0.0191	0.191	

000501

Compound	Ch	Retention Time Meas.	Retention Time Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
delta-BHC					NC					NF
	59		13.20							
	60	11.80	11.83	-0.02			238882	0.0009	0.0088	
Aldrin					0.168					
	59	14.12	14.13	-0.01			6473537	0.0168	0.168	
	60	14.18	14.19	-0.01			5360399	0.0178	0.178	
Heptachlor Epoxide					NC					
	59	16.04	16.00	0.04			20671	-0.0011	-0.0112	
	60		15.45							NF
Endosulfan I					NC					
	59	17.30	17.38	-0.08			18232	-0.0011	-0.0111	
	60		16.75							NF
4,4'-DDE					BDL					
	59	18.26	18.27	-0.01			325637	0.0005	0.0053	
	60	17.54	17.54	0.00			444577	0.0014	0.0136	
Dieldrin					0.474					
	59	18.56	18.59	-0.02			16559297	0.0478	0.478	
	60	17.71	17.72	-0.01			13254489	0.0474	0.474	
Endrin					0.488					
	59	20.00	20.02	-0.02			16071310	0.0488	0.488	
	60	18.58	18.59	-0.01			13053765	0.0496	0.496	
4,4'-DDD					BDL					
	59	20.59	20.63	-0.04			367443	0.0018	0.0181	
	60	19.21	19.21				172164	0.0011	0.0112	
Endosulfan II					NC					NF
	59		20.83							
	60	19.03	18.95	0.08			14293	-0.0011	-0.0111	
4,4'-DDT					0.436					
	59	22.01	22.03	-0.02			12846482	0.0490	0.490	
	60	20.78	20.73	0.04			9619933	0.0436	0.436	C
Endrin Aldehyde					NC					NF
	59		22.20							
	60	19.70	19.71	-0.01			223258	-0.0002	-0.0016	
Endosulfan Sulfate					NC					NF
	59		22.94							
	60	20.78	20.73	0.04			9619933	0.0436	0.436	C
Dibutylchlorendate (DBC)					0.825					
	59	24.91	24.94	-0.03			21974478	0.0855	0.855	
	60	24.86	24.88	-0.02			15603496	0.0825	0.825	

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Methoxychlor				ND					
59		25.91							NF
60		23.35							NF
Endrin Ketone				BDL					
59	26.18	26.20	-0.02			313830	0.0012	0.0123	
60	22.74	22.75	-0.01			239961	0.0004	0.0039	
Octachloronapthalene				0.245					
59	31.49	31.52	-0.03			9388855	0.0245	0.245	
60	29.59	29.60	-0.02			6849901	0.0248	0.248	
Decachlorobiphenyl (DCB)				0.888					
59	31.76	31.79	-0.03			30889202	0.0920	0.920	
60	30.69	30.71	-0.02			21309702	0.0888	0.888	

Injection Report

Acquired on 27-JUL-1992 at 21:24

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : -DCS2 L/R: 13JUL92-1A PET1
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 27

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.667	9.671	6996854	25452240	0.07639	Tetrachloro-m-xylene (TCX)	3.5
11.978	11.987	1718868	7537492	0.01831	gamma-BHC	4.5
13.084	13.093	1492912	8904361	0.02003	Heptachlor	5.6
14.116	14.129	1069237	6473537	0.01684	Aldrin	5.9
16.040	16.000	3128	20671	-0.001125	Heptachlor Epoxide	7.2
17.302	17.382	3056	18232	-0.001108	Endosulfan I	6.1
18.258	18.267	61934	325637	0.00053	4,4'-DDE	6.4
18.564	18.587	2336662	16559297	0.04780	Dieldrin	6.7
19.996	20.018	2193824	16071310	0.04878	Endrin	7.2
20.587	20.631	32168	367443	0.00181	4,4'-DDD	9.6
22.013	22.031	1804492	12846482	0.04898	4,4'-DDT	6.7
24.911	24.938	2669890	21974478	0.08551	Dibutylchlorendate (DBC)	8.0
26.182	26.200	43670	313830	0.00123	Endrin Ketone	6.9
31.493	31.524	1139098	9388855	0.02448	Octachloronapthalene	8.3
31.760	31.787	3303358	30889202	0.09196	Decachlorobiphenyl (DCB)	9.1

Totals			
Unknowns	4337222	22171826	N/A
Quantified	24869152	157143072	0.48043
Grand Total	29206374	179314896	0.48043

MISSING PEAKS

RT mins	Peak name

11.040 alpha-BHC
12.164 beta-BHC
13.196 delta-BHC
20.831 Endosulfan II
22.200 Endrin Aldehyde
22.942 Endosulfan Sulfate
25.907 Methoxychlor

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

Uncalibrated peaks use user factor (0.0000)

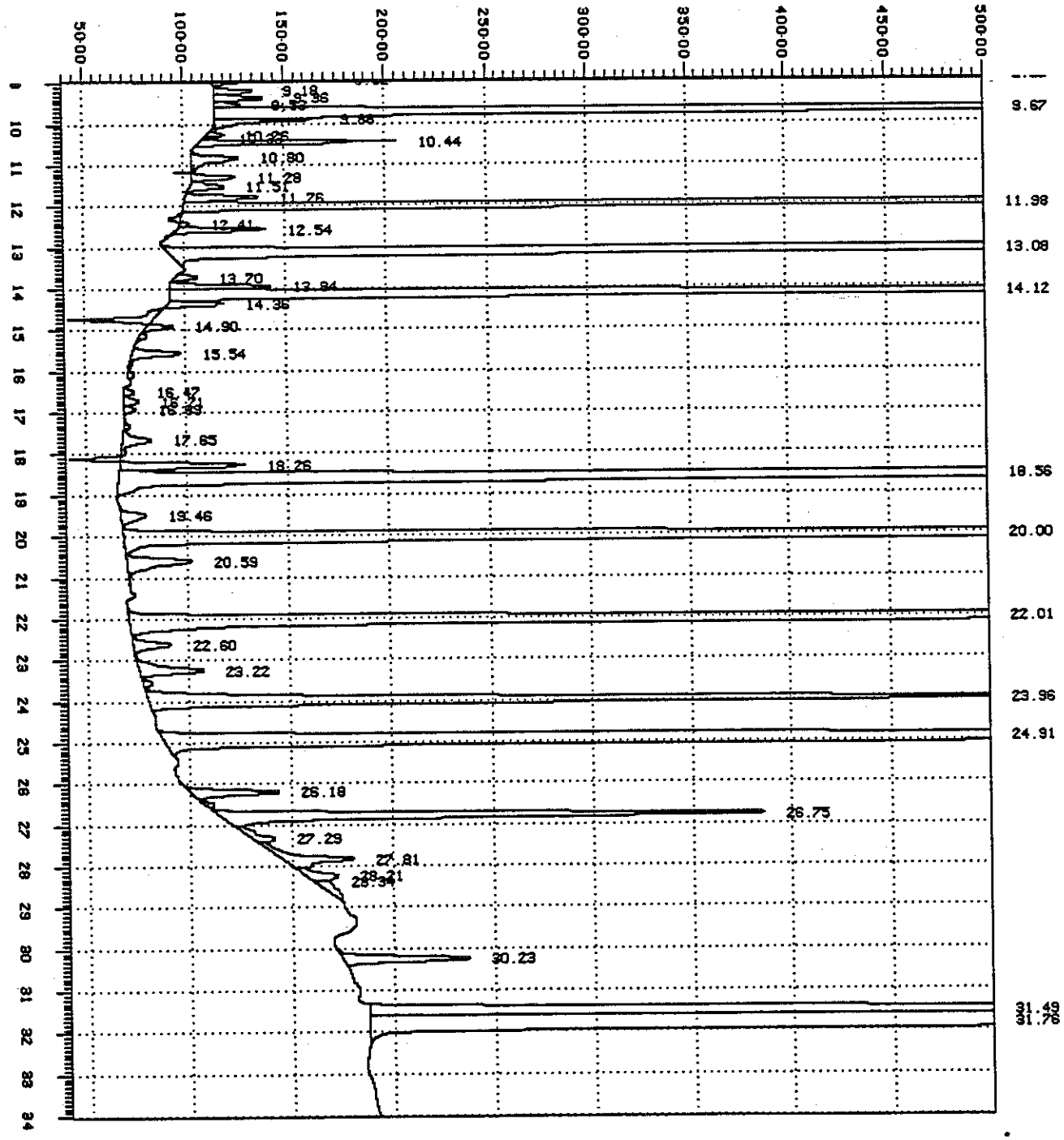
RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,27,1

000505

23727-DCS2 L/R: 13JUL92-1A PET1. Amount : 1.000.

Acquired on 27-JUL-1992 at 21:24
Reported on 27-JUL-1992 at 22:11
Box 1 (of 1)



000506

Injection Report

Acquired on 27-JUL-1992 at 21:24

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : -DCS2 L/R: 13JUL92-1A PET1
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 27

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.889	9.893	4666510	16717875	0.07719	Tetrachloro-m-xylene (TCX)	3.2
10.667	10.636	12983	104544	0.00042	alpha-BHC	5.6
11.320	11.320	1713131	6043951	0.01866	gamma-BHC	3.5
11.804	11.827	43830	238882	0.00088	delta-BHC	4.3
13.142	13.147	1478980	6786880	0.01909	Heptachlor	4.3
14.182	14.191	1150559	5360399	0.01784	Aldrin	4.5
17.538	17.538	80842	444577	0.00136	4,4'-DDE	5.3A
17.711	17.724	2409087	13254489	0.04736	Dieldrin	5.3
18.578	18.591	2310432	13053765	0.04960	Endrin	5.6
19.027	18.947	2728	14293	-0.001112	Endosulfan II	5.9
19.213	19.213	26466	172164	0.00112	4,4'-DDD	6.9
19.698	19.707	23539	223258	-0.000158	Endrin Aldehyde	9.1
	20.733	1626082	9619933	0.04364	Endosulfan Sulfate/4,4'-DDT	
20.778	20.733	1626082	9619933	0.04364	- C1	5.9
22.738	22.751	38107	239961	0.00039	Endrin Ketone	5.9
24.862	24.880	2282483	15603496	0.08249	Dibutylchlorendate (DBC)	6.7
29.587	29.604	951014	6849901	0.02479	Octachloronapthalene	6.9
30.689	30.711	2807395	21309702	0.08883	Decachlorobiphenyl (DCB)	7.5

Totals			
Unknowns	3960314	17668690	N/A
Quantified	21624170	116038072	0.47241
Grand Total	25584484	133706760	0.47241

MISSING PEAKS

RT mins	Peak name
11.151	beta-BHC
15.453	Heptachlor Epoxide
16.751	Endosulfan I
23.351	Methoxychlor

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 27-JUL-1992 at 19:29

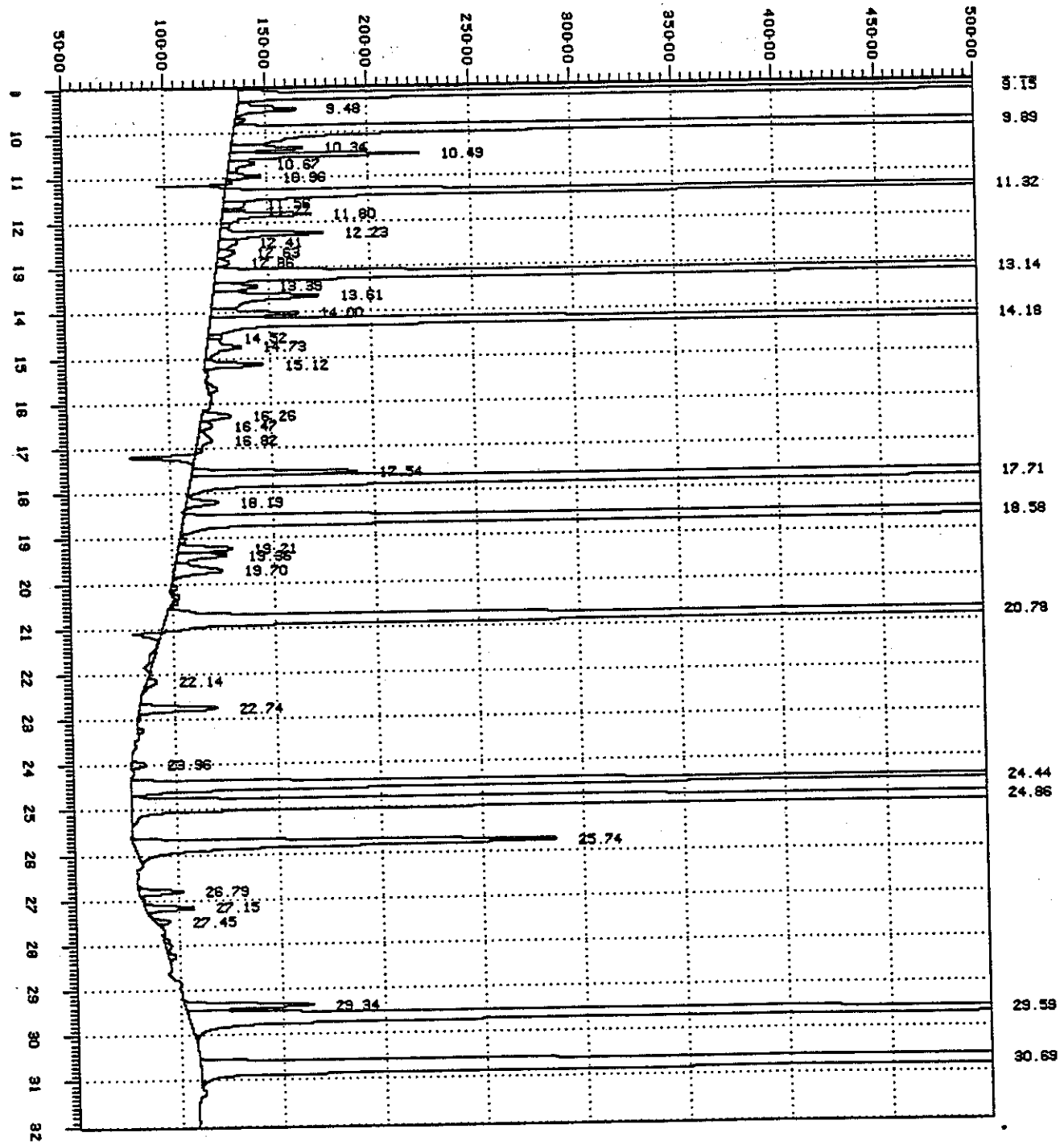
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP07_4] 60 T26JUL92,27,1

23727-DCS2 L/R: 13JUL92-1A PET1. Amount : 1.000.

Acquired on 27-JUL-1992 at 21:24
Reported on 27-JUL-1992 at 22:10
Box 1 (of 1)



Tue Jul 28 09:33:57 1992 Page 1

Reduced by: SG Date: 7/28/92
Reviewed by: [illegible] Date: 8/12/92

Check Standard Report

Description: INDIVIDUAL MIX AB 0.05UG/ML 6266
Sample: 36, Injection: 1, Acquired: 28-Jul-1992 04:59

000509

Project: OCP07-4, Channel: 59, Analysis: T26JUL92, Node: DENCR3
Analyst: SGRAVES, Calibration File: T0726, MCRPT Method: OCPA

0 of 22 compounds are outside control limits for channel 59
0 of 22 compounds are outside control limits for channel 60

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
59	9.67	9.67	0.00	0.0500	0.0515	3	20	Tetrachloro-m-xyle
60	9.90	9.89	0.01	0.0500	0.0526	5	20	Tetrachloro-m-xyle
59	11.04	11.04	0.00	0.0500	0.0523	5	20	alpha-BHC
60	10.64	10.64	0.01	0.0500	0.0510	2	20	alpha-BHC
59	11.98	11.99	-0.01	0.0500	0.0503	1	20	gamma-BHC
60	11.33	11.32	0.01	0.0500	0.0511	2	20	gamma-BHC
59	12.16	12.16	0.00	0.0500	0.0511	2	20	beta-BHC
60	11.16	11.15	0.00	0.0500	0.0508	2	20	beta-BHC
59	13.08	13.09	-0.01	0.0500	0.0461	-8	20	Heptachlor
60	13.15	13.15	0.00	0.0500	0.0463	-7	20	Heptachlor
59	13.19	13.20	-0.01	0.0500	0.0511	2	20	delta-BHC
60	11.83	11.83	0.00	0.0500	0.0509	2	20	delta-BHC
59	14.12	14.13	-0.01	0.0500	0.0498	0	20	Aldrin
60	14.20	14.19	0.00	0.0500	0.0509	2	20	Aldrin
59	15.99	16.00	-0.01	0.0500	0.0501	0	20	Heptachlor Epoxide
60	15.45	15.45	0.00	0.0500	0.0505	1	20	Heptachlor Epoxide
59	17.36	17.38	-0.02	0.0500	0.0504	1	20	Endosulfan I
60	16.75	16.75	0.00	0.0500	0.0509	2	20	Endosulfan I
59	18.25	18.27	-0.02	0.0500	0.0516	3	20	4,4'-DDE
60	17.53	17.54	0.00	0.0500	0.0520	4	20	4,4'-DDE
59	18.56	18.59	-0.02	0.0500	0.0509	2	20	Dieldrin
60	17.72	17.72	0.00	0.0500	0.0510	2	20	Dieldrin
59	20.00	20.02	-0.02	0.0500	0.0491	-2	20	Endrin
60	18.59	18.59	0.00	0.0500	0.0499	0	20	Endrin
59	20.61	20.63	-0.02	0.0500	0.0519	4	20	4,4'-DDD
60	19.20	19.21	-0.01	0.0500	0.0519	4	20	4,4'-DDD
59	20.81	20.83	-0.02	0.0500	0.0494	-1	20	Endosulfan II
60	18.94	18.95	-0.01	0.0500	0.0494	-1	20	Endosulfan II

SL 7/29/92 000510

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max		Compound
59	22.01	22.03	-0.02	0.0500	0.0503	1	20		4,4'-DDT
60	20.70	20.73	-0.04	0.100	0.101	1	20	C	4,4'-DDT
59	22.18	22.20	-0.02	0.0500	0.0521	4	20		Endrin Aldehyde
60	19.70	19.71	-0.01	0.0500	0.0518	4	20		Endrin Aldehyde
59	22.92	22.94	-0.02	0.0500	0.0502	0	20		Endosulfan Sulfate
60	20.70	20.73	-0.04	0.100	0.101	1	20	C	Endosulfan Sulfate
59	24.91	24.94	-0.03	0.0500	0.0509	2	20		Dibutylchlorendate
60	24.87	24.88	-0.01	0.0500	0.0506	1	20		Dibutylchlorendate
59	25.88	25.91	-0.03	0.0500	0.0493	-1	20		Methoxychlor
60	23.34	23.35	-0.01	0.0500	0.0501	0	20		Methoxychlor
59	26.18	26.20	-0.02	0.0500	0.0495	-1	20		Endrin Ketone
60	22.74	22.75	-0.01	0.0500	0.0509	2	20		Endrin Ketone
59	31.49	31.52	-0.04	0.0250	0.0251	0	20		Octachloronapthale
60	29.59	29.60	-0.01		0.0258	0	20	NL	Octachloronapthale
59	31.76	31.79	-0.03	0.0500	0.0527	5	20		Decachlorobiphenyl
60	30.70	30.71	-0.01	0.0500	0.0516	3	20		Decachlorobiphenyl

Injection Report

Acquired on 28-JUL-1992 at 04:59

RMAL Chromatography System on DENCR3

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05UG/ML 6266
Sample Id : CHK2 OCPA
Sample Type : Standard Amount=1.00000
Bottle No : 36

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.667	9.671	4687721	17306512	0.05147	Tetrachloro-m-xylene (TCX)	3.5
11.036	11.040	5568576	22195270	0.05228	alpha-BHC	4.0
11.978	11.987	4582870	20436086	0.05032	gamma-BHC	4.5
12.160	12.164	2476623	11721413	0.05111	beta-BHC	4.5
13.084	13.093	3736361	19806704	0.04610	Heptachlor	5.3A
13.187	13.196	4132592	21214034	0.05114	delta-BHC	4.8A
14.116	14.129	3159984	18869510	0.04981	Aldrin	5.9
15.987	16.000	3057834	20170122	0.05010	Heptachlor Epoxide	6.4
17.364	17.382	2665652	18669668	0.05036	Endosulfan I	6.9
18.249	18.267	2570420	16027303	0.05162	4,4'-DDE	6.1
18.564	18.587	2473115	17604094	0.05088	Dieldrin	6.7
19.996	20.018	2230905	16176933	0.04910	Endrin	7.2
20.613	20.631	1854067	12076175	0.05194	4,4'-DDD	6.4
20.809	20.831	2172210	16278173	0.04938	Endosulfan II	7.2
22.009	22.031	1893894	13204421	0.05034	4,4'-DDT	7.2
22.178	22.200	1786534	13940866	0.05213	Endrin Aldehyde	8.0
22.920	22.942	1850535	15248911	0.05018	Endosulfan Sulfate	7.5
24.911	24.938	1600847	13175795	0.05095	Dibutylchlorendate (DBC)	8.0
25.880	25.907	1226075	8999827	0.04932	Methoxychlor	7.2
26.178	26.200	2023827	14409293	0.04955	Endrin Ketone	6.9
31.489	31.524	1155544	9550930	0.02509	Octachloronapthalene	8.0
31.756	31.787	1917284	17881584	0.05272	Decachlorobiphenyl (DCB)	8.8

Totals			
Unknowns	2585488	12971248	N/A
Quantified	58823480	354963648	1.08587
Grand Total	61408968	367934912	1.08587

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 28-JUL-1992 at 05:37

Uncalibrated peaks use user factor (0.0000)

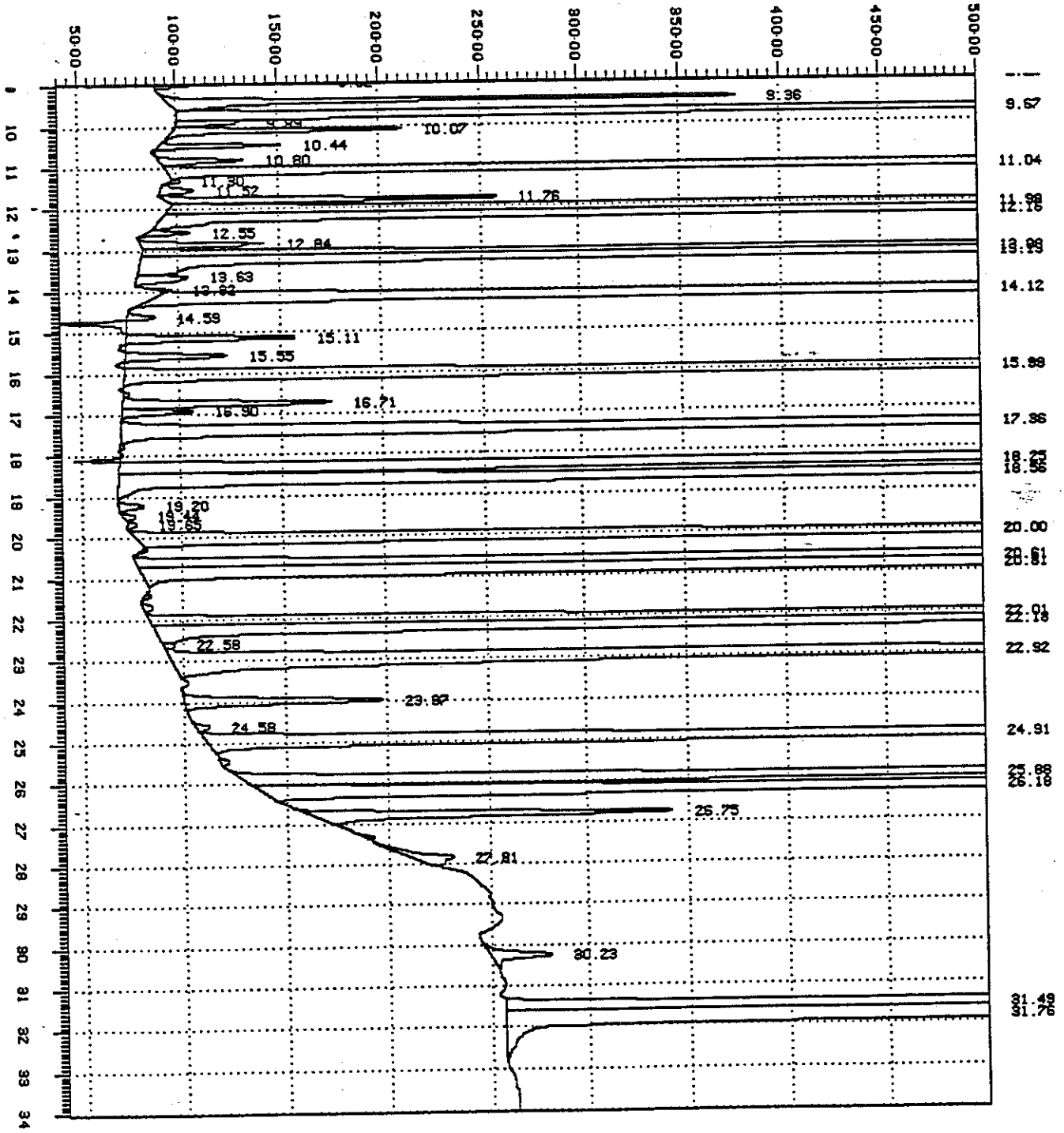
RMAL Chromatography System on DENCR3

[OCP07_4] 59 T26JUL92,36,1

000513

INDIVIDUAL MIX AB 0.05UG/ML 6266. Amount : 1.000.

Acquired on 28-JUL-1992 at 04:59
Reported on 28-JUL-1992 at 09:34
Box 1 (of 1)



Injection Report

Acquired on 28-JUL-1992 at 04:59

RMAL Chromatography System on DENCR3

SG 7/28/92

Analyst Name : SGRAVES
Lims Id : 1uL injected
Comment : T-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05UG/ML 6266
Sample Id : CHK2 OCPA
Sample Type : Standard Amount=1.00000
Bottle No : 36

PEAK INFORMATION

RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9.902	9.893	3139161	11462237	0.05260	Tetrachloro-m-xylene (TCX)	3.2
10.644	10.636	4973954	16326426	0.05102	alpha-BHC	3.2
11.156	11.151	2159380	8565826	0.05082	beta-BHC	3.7
11.329	11.320	4382101	15929543	0.05108	gamma-BHC	3.5
11.831	11.827	3757597	14769845	0.05094	delta-BHC	3.7
13.151	13.147	3555997	15600598	0.04627	Heptachlor	4.3
14.196	14.191	3238513	14821230	0.05087	Aldrin	4.5
15.453	15.453	2988139	15274817	0.05053	Heptachlor Epoxide	4.8
16.747	16.751	2699474	14685349	0.05092	Endosulfan I	5.3
17.533	17.538	2398266	12707938	0.05201	4,4'-DDE	5.3
17.720	17.724	2569145	14256809	0.05101	Dieldrin	5.3
18.587	18.591	2352808	13129666	0.04990	Endrin	5.3
18.938	18.947	2100212	12316324	0.04943	Endosulfan II	5.6
19.204	19.213	1694143	9812307	0.05187	4,4'-DDD	5.6
19.698	19.707	1702316	10958048	0.05181	Endrin Aldehyde	6.1
	20.733	3807316	21923136	0.10083	Endosulfan Sulfate/4,4'-DDT	
20.698	20.733	1897955	10513018	0.04779	- C1	6.4A
20.778	20.733	1909361	11410117	0.05196	- C1	6.9A
22.738	22.751	1886516	12019149	0.05091	Endrin Ketone	6.1
23.338	23.351	1034882	6827935	0.05015	Methoxychlor	6.4
24.871	24.880	1414035	9650256	0.05055	Dibutylchlorendate (DBC)	6.7
29.591	29.604	1010114	7138559	0.02584	Octachloronapthalene	6.7
30.698	30.711	1699601	12556331	0.05160	Decachlorobiphenyl (DCB)	7.2

Totals			
Unknowns	2128358	11294392	N/A
Quantified	54563672	270732352	1.09097
Grand Total	56692028	282026752	1.09097

SG 7/28/92

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... TOCP
Run sequence..... T0726
Calibration..... T0726
External standard calibration using area
Calibration last modified on 28-JUL-1992 at 05:37

Uncalibrated peaks use user factor (0.0000)

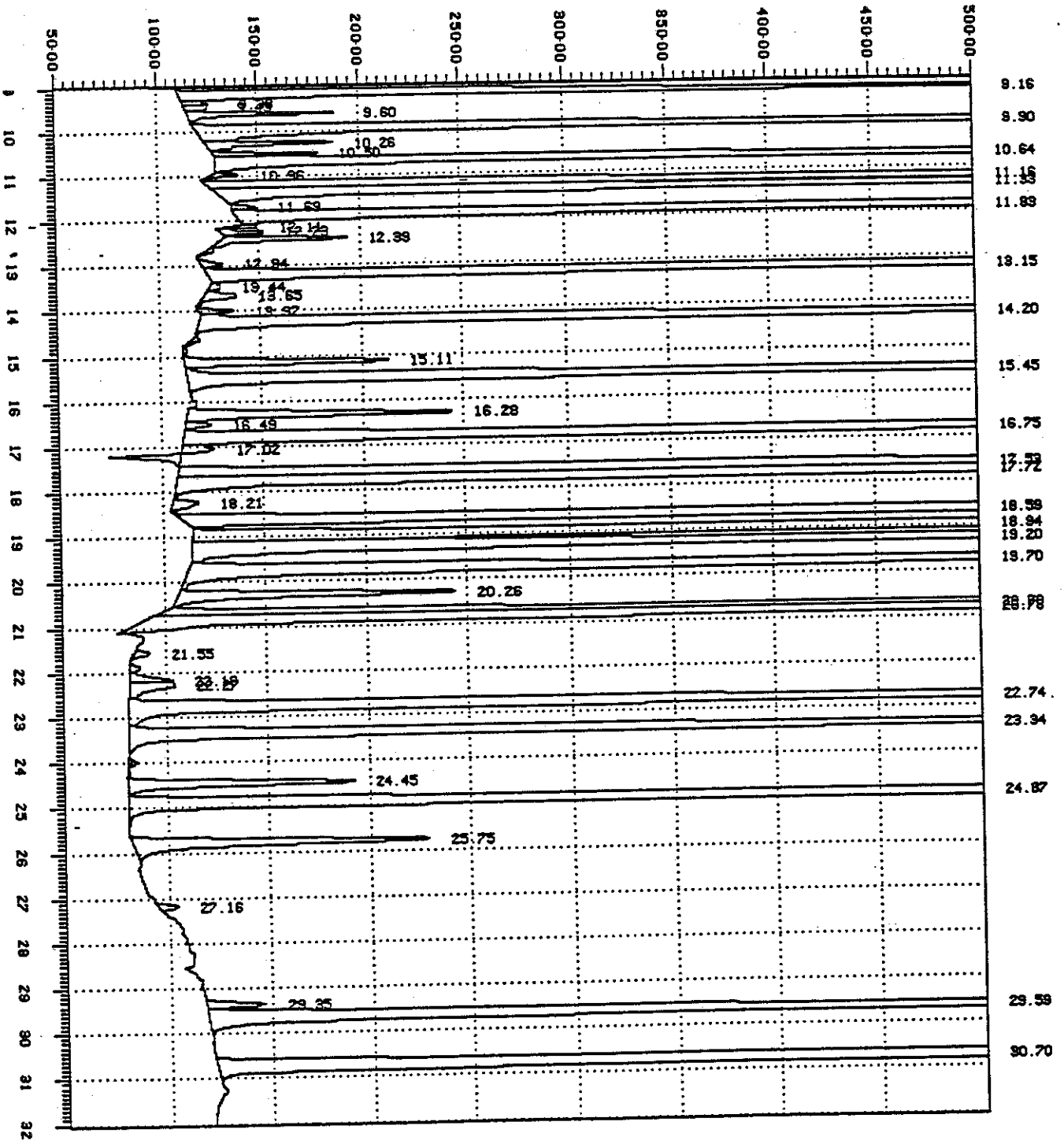
RMAL Chromatography System on DENCR3

000516

[OCP07_4] 60 T26JUL92,36,1

INDIVIDUAL MIX AB 0.05UG/ML 6266. Amount : 1.000.

Acquired on 28-JUL-1992 at 04:59
Reported on 28-JUL-1992 at 09:34
Box 1 (of 1)



GC/MS VOA

METHOD/TEST 8080

INSTRUMENT W

INITIAL CALIBRATION DATE 07/26/92

ANALYSIS RUN DATE 08/02/92

SAMPLES ASSOCIATED 01

Rocky Mountain Analytical Laboratory

Project No.: _____

EXTRACTABLE ORGANICS WORKSHEET

page 1 of 2

Analyte: OCP Matrix: H2O

CH2Cl2 Brand B&J Lot No. BC858

Acetone Brand _____ Lot No. _____

Exchange Solvent HEXANE Brand B&J Lot No. BB407

QC Lot No.: 13 Jul 92 1A

QC RUN NO.: 13 Jul 92 1A

TCLP LBL NO.: _____

LIMS Test Code: P-608-A

SCS I.D. OCP SCS Std. H2O Date Made 6/19/92 Made by BZ/SAB Conc. 1.0 µg/mL Ver. No. 6331 Amount Added 1.0 mL Date Added 7/13/92 Added By DB

DCS I.D. _____ Date Made _____ Made By _____ Conc. _____ Ver. No. _____ Amount Added _____ Date Added _____ Added By _____

Standard Addition Witnessed By CC/AWA

Sample No.	Amt. Ext.	Init pH	Adj. pH	Date Ext.	Ext. By AWA	Volume of Solvent Used	Volume of Solvent Rec.	Date Conc.	Conc. By	Solvent	Final Volume	Cleanup or Split?
01	925	7	—	7/13	PB/CC	180 mL	>80%	7/14/92	MS	HEXANE	10.0 mL	YES
02	950											
04	930											
05	980											
07	980											
08	980											
10	960											
11FB	970											
13	980											
14	1000											
16	1000											
17	1000											

Comments: All samples require Florisil Cleanup

Reviewed By: MS Date: 7-31-92

00001

Enseco - Rocky Mountain Analytical Laboratory

COLUMN CLEANUP RECORD

Project No. 000519

Page 1 of 1

Analyte: OCP	1st Solvent: Hexane	Column Performance:
Matrix: H_2O	Brand: BrJ	Std. I.D.: INP OCP CPS
Test Code: P-608-A	Lot No.: BB407	Date Made: 7-15-92
Column Packing: Florisil	2nd Solvent: Acetone	Made By: LJ/BBS
Brand: Baker	Brand: Baker	Concentration: 0.1 ug/ml
Lot No.: F12501	Lot No.: E48257	Verif. No.: 6379
Cartridge Size: 1000 mg	3rd Solvent:	Amount Added: 2.0 ml
	Brand:	Date Added: 7-15-92
	Lot No.:	By: LJ
		Witness: LJ
		Proj. No. on Col. Perf.:

List all other projects that share this Col. Perf: _____ _____ _____

Sample Number	Volume of Extract	Volume on Column	Date Cleaned	By	Type of Cleanup	Date Conc.	By	Final Volume	Solvent
01	10.0 ml	2.0 ml	7-15-92	LJ	Florisil	7-15-92	LJ	2.0 ml	Hexane
02									
04									
05									
07									
08									
10									
11									
13									
14									
16									
17									
19									
20									

Comments:

Reviewed By: [illegible] Date: 7-31-92

Enseco - Rocky Mountain Analytical Laboratory

Project No 000520

COLUMN CLEANUP RECORD

Page 1 of 1

Analyte: OCP

Matrix: H_2O

Test Code: P-609-A

Column Packing: Florisil
Brand: Baker
Lot No.: F12501
Cartridge Size: 100mg

1st Solvent: Acetone
Brand: Baker
Lot No.: EH6257

2nd Solvent: Hexane
Brand: B&J
Lot No.: AA403

3rd Solvent:
Brand:
Lot No.:

Column Performance: OI
Std. I.D.:
Date Made: 8/14/92
Made By:
Concentration:
Verif. No.:
Amount Added:
Date Added:
By:
Witness:
Proj. No on Col. Perf.:

List all other projects that share this Col. Perf:

Sample Number	Volume of Extract	Volume on Column	Date Cleaned	By	Type of Cleanup	Date Conc.	By	Final Volume	Solvent
01	10.0ml	2.0ml	8/14/92	OI	Florisil	8/14/92	OI	2.0ml	Hexane
02	↓	↓	↓	↓	↓	↓	↓	↓	↓
01	↓	↓	↓	↓	↓	↓	↓	↓	↓

Comments: ADDITIONAL EXTRACT WAS COLUMN CLEANED SO THAT THE SAMPLES COULD BE RE-RUN (ON 14 AUG 92 RUN)

Reviewed By: [illegible] Date: 8-14-92

Mon Aug 10 10:34:09 1992 Page 2

Laboratory: Enseco - RMAL Instrument: W

000521

Device: MCD0 Project: OCP07_4 Channel: 71
Analysis: W01AUG92 Run Sequence: W0801
Calibration: W0801 Method: WOCP1 Control: WOCP2

Chan	Collumn Type	Film(um)	Length(m)	I.D.(mm)	Injector Temp(C)	Detector Type	Detector Temp	Atten	Range
71	RTx35	1.00	30m	0.53	220	ECD	325	0	0
72	RTx5	1.50	30m	0.53	220	ECD	325	0	0

Temperature Program

Init(C)	Init(min.)	Prog.(C/min.)	Final(C)	Final(min)	
45	1.0	30	190	0.0	SIGNAL A=50.3
		3.5	270	0.0	SIGNAL B=46.9
		10	285	9.0	

Injection Volume:2UL Carrier Gas:H2 Auxillary Gas:N2
Purge On: 0.5min. Purge Off: 36min.

Pos	Sample Num.	Type	RF Upd	RT Upd	Level ID	Description/Comments
16	16	ST	I	I	A4	AR1242 0.10ug/mL T=ST ✓
17	17	ST	I	I	A5	AR1248 0.10ug/mL T=ST ✓
18	18	ST	I	I	A6	AR1254 0.10ug/mL T=ST ✓
19	19	ST	I	I	P1	APPIX.STD(4).1/.1/.25/.025ug/mLT=ST 5873 ✓
20	20	SA				HEXANE T=QC ✓
21	21	ST	N	N	L4	INDIVIDUAL MIX AB 0.05UG/ML 5446 ✓
22	22	SA				23727-01-SA AMT=0.925L PDIL=50% ✓
23	23	SA				23727-02-SA AMT=0.950L PDIL=50% ✓
24	24	SA				23727-04-SA AMT=0.930L PDIL=100% ✓
25	25	SA				23727-04-SA AMT=0.930L PDIL=50% ✗ NOT USED
26	26	SA				23727-05-SA AMT=0.980L PDIL=100% ✓
27	27	SA				23727-05-SA AMT=0.980L PDIL=50%
28	28	SA				23727-07-SA AMT=0.980L PDIL=100% ✓
29	29	SA				23727-07-SA AMT=0.980L PDIL=50%
30	30	SA				23727-08-SA AMT=0.980L PDIL=100% ✓

RF Update (N-none, I-initialize, A-average, U-update, L-initialize all)
RT Update (N-none, I-initialize, A-average)

Analyst: MB Date: 8-7-92

000522

Laboratory: Enseco - RMAL Instrument: W

evice: MCD0 Project: OCP07_4 Channel: 71
alysis: W01AUG92 Run Sequence: W0001
Calibration: W0001 Method: WOCP1 Control: WOCP2

Chan	Collumn Type	Film(um)	Length(m)	I.D.(mm)	Injector Temp(C)	Detector Type	Temp	Atten	Range
71	RTx35	1.00	30m	0.53	220	ECD	325	0	0
72	RTx5	1.50	30m	0.53	220	ECD	325	0	0

Temperature Program

Init(C)	Init(min.)	Prog.(C/min.)	Final(C)	Final(min)	
45	1.0	30	190	0.0	SIGNAL A=50.3
		3.5	270	0.0	SIGNAL B=46.9
		10	285	9.0	

Injection Volume:2UL Carrier Gas:H2 Auxillary Gas:N2
Purge On: 0.5min. Purge Off: 36min.

Pos	Sample Num.	Type	RF Upd	RT Upd	Level ID	Description/Comments
31	31	SA				23727-08-SA AMT=0.980L PDIL=50%
32	32	SA				HEXANE T=0C
33	33	ST	N	N	L4	INDIVIDUAL MIX AB 0.05UG/ML 5446 ✓
34	34	SA				23727-10-SA AMT=0.960L PDIL=100% ✓
35	35	SA				23727-11-FB AMT=0.970L PDIL=100% ✓
36	36	SA				23727-13-SA AMT=0.980L PDIL=100% ✓
37	37	SA				23727-14-SA AMT=1.00L PDIL=100% ✓
38	38	SA				23727-16-SA AMT=1.00L PDIL=100% ✓
39	39	SA				23727-16-SA AMT=1.00L PDIL=50%
40	40	SA				23727-17-SA AMT=1.00L PDIL=100% ✓
41	41	SA				23727-17-SA AMT=1.00L PDIL=50%
42	42	SA				23727-19-SA AMT=0.970L PDIL=100% ✓
43	43	SA				23727-19-SA AMT=0.970L PDIL=50%
44	44	SA				HEXANE T=0C
45	45	ST	N	N	L4	INDIVIDUAL MIX AB 0.05UG/ML 5446 ✓

RF Update (N-none, I-initialize, A-average, U-update, L-initialize all)
RT Update (N-none, I-initialize, A-average)

Analyst: MK Date: 8-7-92

Reduced by: [illegible] Date: 8-7-92
Reviewed by: [illegible] Date: 8/11/92

Check Standard Report

Description: INDIVIDUAL MIX AB 0.05UG/ML 5446
Sample: 21, Injection: 1, Acquired: 2-Aug-1992 10:13

000523

Project: OCP07_4, Channel: 71, Analysis: W01AUG92, Node: DENCR3
Analyst: MGOETZ, Calibration File: W0801, MCRPT Method: OCPA

0 of 21 compounds are outside control limits for channel 71
0 of 21 compounds are outside control limits for channel 72

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
71	8.21	8.20	0.01	0.0500	0.0540	8	20	Tetrachloro-m-xyle
72	9.12	9.14	-0.01	0.0500	0.0529	6	20	Tetrachloro-m-xyle
71	9.73	9.72	0.01	0.0500	0.0586	17	20	alpha-BHC
72	10.04	10.05	-0.01	0.0500	0.0539	8	20	alpha-BHC
71	10.80	10.79	0.01	0.0500	0.0576	15	20	gamma-BHC
72	10.89	10.90	-0.01	0.0500	0.0530	6	20	gamma-BHC
71	11.02	11.00	0.01	0.0500	0.0591	18	20	beta-BHC
72	10.67	10.68	-0.01	0.0500	0.0511	2	20	beta-BHC
71	12.03	12.02	0.01	0.0500	0.0552	10	20	Heptachlor
72	13.15	13.16	-0.01	0.0500	0.0535	7	20	Heptachlor
71	12.17	12.16	0.01	0.0500	0.0577	15	20	delta-BHC
72	11.51	11.52	-0.01	0.0500	0.0510	2	20	delta-BHC
71	13.18	13.16	0.01	0.0500	0.0566	13	20	Aldrin
72	14.41	14.42	-0.01	0.0500	0.0517	3	20	Aldrin
71	15.25	15.24	0.01	0.0500	0.0571	14	20	Heptachlor Epoxide
72	15.90	15.91	-0.01	0.0500	0.0517	3	20	Heptachlor Epoxide
71	16.74	16.73	0.01	0.0500	0.0578	16	20	Endosulfan I
72	17.40	17.41	-0.01	0.0500	0.0515	3	20	Endosulfan I
71	17.73	17.72	0.01	0.0500	0.0563	13	20	4,4'-DDE
72	18.28	18.29	-0.01	0.0500	0.0508	2	20	4,4'-DDE
71	18.03	18.01	0.01	0.0500	0.0575	15	20	Dieldrin
72	18.51	18.52	-0.01	0.0500	0.0523	5	20	Dieldrin
71	19.54	19.52	0.01	0.0500	0.0565	13	20	Endrin
72	19.48	19.49	-0.01	0.0500	0.0511	2	20	Endrin
71	20.24	20.23	0.01	0.0500	0.0557	11	20	4,4'-DDD
72	20.14	20.16	-0.01	0.0500	0.0514	3	20	4,4'-DDD
1	20.41	20.40	0.01	0.0500	0.0585	17	20	Endosulfan II
72	19.86	19.88	-0.01	0.0500	0.0519	4	20	Endosulfan II

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
71	21.70	21.68	0.01	0.0500	0.0544	9	20	4,4'-DDT
72	21.81	21.88	-0.07	0.100	0.103	3	20 C	4,4'-DDT
71	21.85	21.84	0.01	0.0500	0.0590	18	20	Endrin Aldehyde
72	20.70	20.71	-0.01	0.0500	0.0526	5	20	Endrin Aldehyde
71	22.64	22.62	0.01	0.0500	0.0562	12	20	Endosulfan Sulfate
72	21.81	21.88	-0.07	0.100	0.103	3	20 C	Endosulfan Sulfate
71	24.72	24.71	0.01	0.0500	0.0564	13	20	Dibutylchlorendate
72	26.24	26.25	-0.01	0.0500	0.0516	3	20	Dibutylchlorendate
71	25.72	25.71	0.01	0.0500	0.0480	-4	20	Methoxychlor
72	24.60	24.62	-0.01	0.0500	0.0499	0	20	Methoxychlor
71	26.00	25.99	0.01	0.0500	0.0566	13	20	Endrin Ketone
72	24.02	24.03	-0.01	0.0500	0.0517	3	20	Endrin Ketone
71	32.13	32.12	0.01	0.0500	0.0537	7	20	Decachlorobiphenyl
72	32.80	32.81	-0.01	0.0500	0.0522	4	20	Decachlorobiphenyl

Injection Report

Acquired on 2-AUG-1992 at 10:13

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05UG/ML 5446
Sample Id : CHK2 OCPA
Sample Type : Standard Amount=1.000000
Bottle No : 21

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
6		8.213	8.200	523648	1984955	0.05398	Tetrachloro-m-xylene (TCX)	3.5
10		9.729	9.716	649271	2475119	0.05856	alpha-BHC	3.7
12		10.804	10.791	527785	2195944	0.05758	gamma-BHC	4.3
13		11.018	11.004	244821	1147951	0.05906	beta-BHC	4.5
16		12.031	12.018	307853	1531293	0.05523	Heptachlor	4.8
17		12.169	12.156	443856	2096767	0.05774	delta-BHC	4.3
19		13.178	13.164	415429	2203297	0.05664	Aldrin	5.3
22		15.249	15.236	314721	1814359	0.05709	Heptachlor Epoxide	5.6
25		16.738	16.729	305242	1868631	0.05782	Endosulfan I	5.9
26		17.729	17.720	292678	1750514	0.05635	4,4'-DDE	5.6
27		18.027	18.013	312045	1946484	0.05751	Dieldrin	6.1
30		19.538	19.524	241698	1532986	0.05653	Endrin	6.1
31		20.240	20.227	188704	1168525	0.05572	4,4'-DDD	6.1
32		20.409	20.396	257283	1709129	0.05852	Endosulfan II	6.4
33		21.698	21.684	175145	1104084	0.05440	4,4'-DDT	6.7
34		21.849	21.836	202310	1385931	0.05898	Endrin Aldehyde	6.9
35		22.636	22.622	224756	1559998	0.05623	Endosulfan Sulfate	6.7
37		24.724	24.711	163870	1168154	0.05636	Dibutylchlorendate (DBC)	6.7
39		25.720	25.707	107762	774803	0.04798	Methoxychlor	6.9
40		25.996	25.987	224340	1554429	0.05657	Endrin Ketone	6.7
43		32.129	32.116	184090	1300047	0.05370	Decachlorobiphenyl (DCB)	6.9

Totals			
Unknowns	108768	535518	N/A
Quantified	6306505	34273400	1.18255
Grand Total	6415293	34808916	1.18255

000526

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... WOCP1
Run sequence..... W0801
Calibration..... W0801
External standard calibration using area
Calibration last modified on 3-AUG-1992 at 15:17

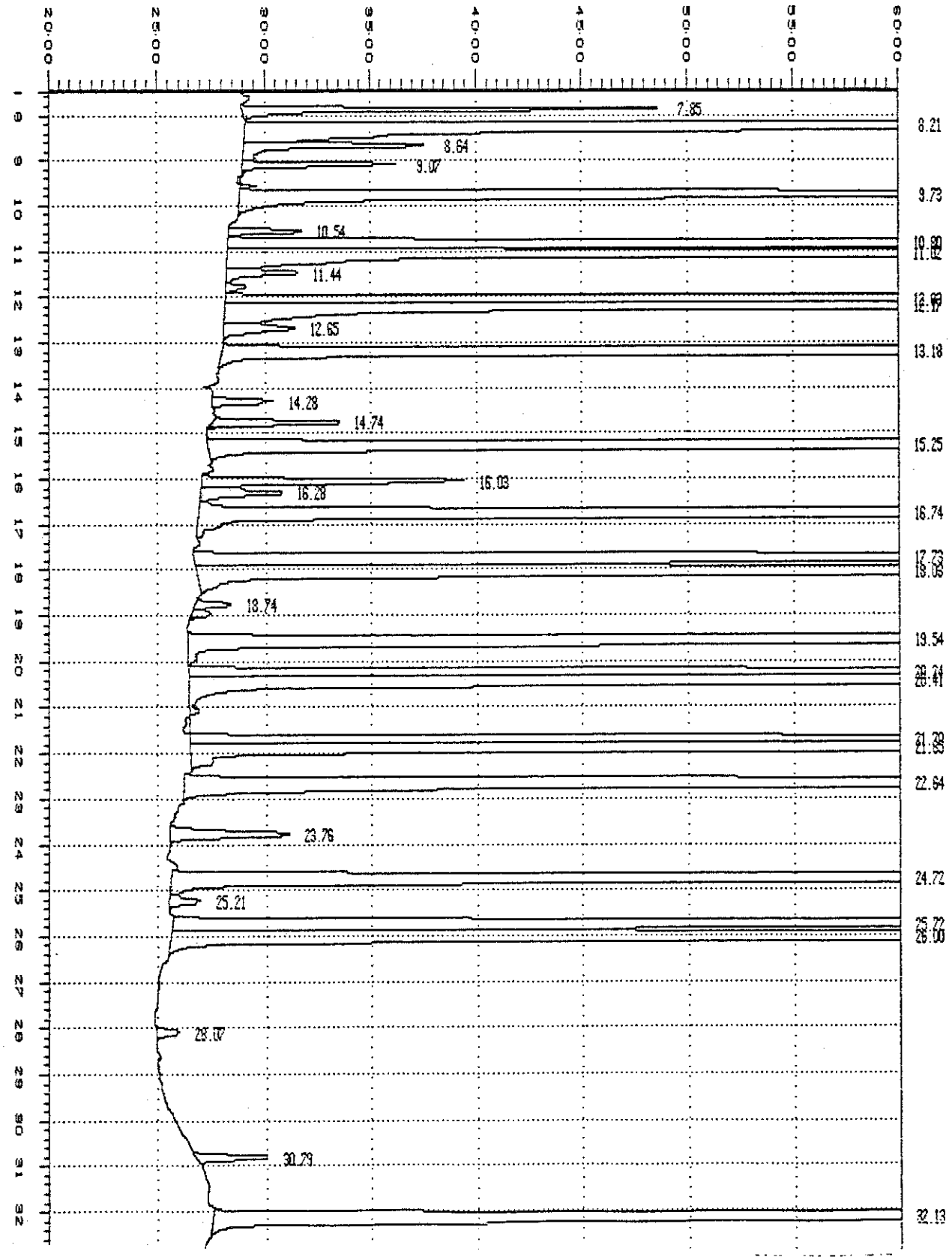
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000527

[OCP07_4] 71 W01AUG92,21,1

INDIVIDUAL MIX AB 0.05UG/ML 5446. Amount : 1.000.
J_5890, Dual ECD, Column: RTx-35,0.53mm, 0.53um, 30m
Acquired on 2-AUG-1992 at 10:13
Reported on 3-AUG-1992 at 16:00
Box 1 (of 1)



000528

Injection Report

Acquired on 2-AUG-1992 at 10:18

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05UG/ML 5446
Sample Id : CHK2 OCPA
Sample Type : Standard Amount=1.000000
Bottle No : 21

MG 8-7-92

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
7		9.124	9.138	416783	1704244	0.05285	Tetrachloro-m-xylene (TCX)	3.7
10		10.036	10.049	635965	2356434	0.05390	alpha-BHC	3.7
12		10.671	10.680	243183	1078915	0.05113	beta-BHC	4.0
13		10.893	10.902	561286	2266534	0.05305	gamma-BHC	3.7
15		11.507	11.520	445801	1995339	0.05104	delta-BHC	4.3
21		13.151	13.164	444226	2022590	0.05346	Heptachlor	4.5
22		14.413	14.422	418699	1978427	0.05166	Aldrin	4.5
24		15.898	15.907	371995	1916299	0.05169	Heptachlor Epoxide	4.8
26		17.400	17.413	329832	1809370	0.05153	Endosulfan I	5.3
28		18.280	18.289	297039	1659580	0.05078	4,4'-DDE	5.3
29		18.507	18.516	341720	1914165	0.05229	Dieldrin	5.3
31		19.480	19.489	305672	1694902	0.05109	Endrin	5.3
32		19.862	19.876	284505	1653452	0.05187	Endosulfan II	5.6
33		20.142	20.156	215835	1335422	0.05137	4,4'-DDD	5.6
34		20.698	20.711	211945	1377732	0.05259	Endrin Aldehyde	5.9
C1			21.880	548495	2991192	0.10283	4,4'-DDT/Endosulfan Sulfate	
36		21.809	21.880	269701	1343904	0.04632	- C1	6.9A
37		21.871	21.880	278794	1647288	0.05673	- C1	6.4A
40		24.022	24.031	290691	1780659	0.05170	Endrin Ketone	5.9
41		24.604	24.618	133628	872239	0.04993	Methoxychlor	6.1
43		26.240	26.249	199070	1297942	0.05164	Dibutylchlorendate (DBC)	6.1
46		32.800	32.813	219311	1521493	0.05223	Decachlorobiphenyl (DCB)	6.9

Totals			
Unknowns	112509	657151	N/A
Quantified	6915181	35226868	1.00862
Grand Total	7027691	35884020	1.00862

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... WOCP1
Run sequence..... W0801
Calibration..... W0801/
External standard calibration using area
Calibration last modified on 8-AUG-1992 at 15:17

Uncalibrated peaks use user factor (0.0000)

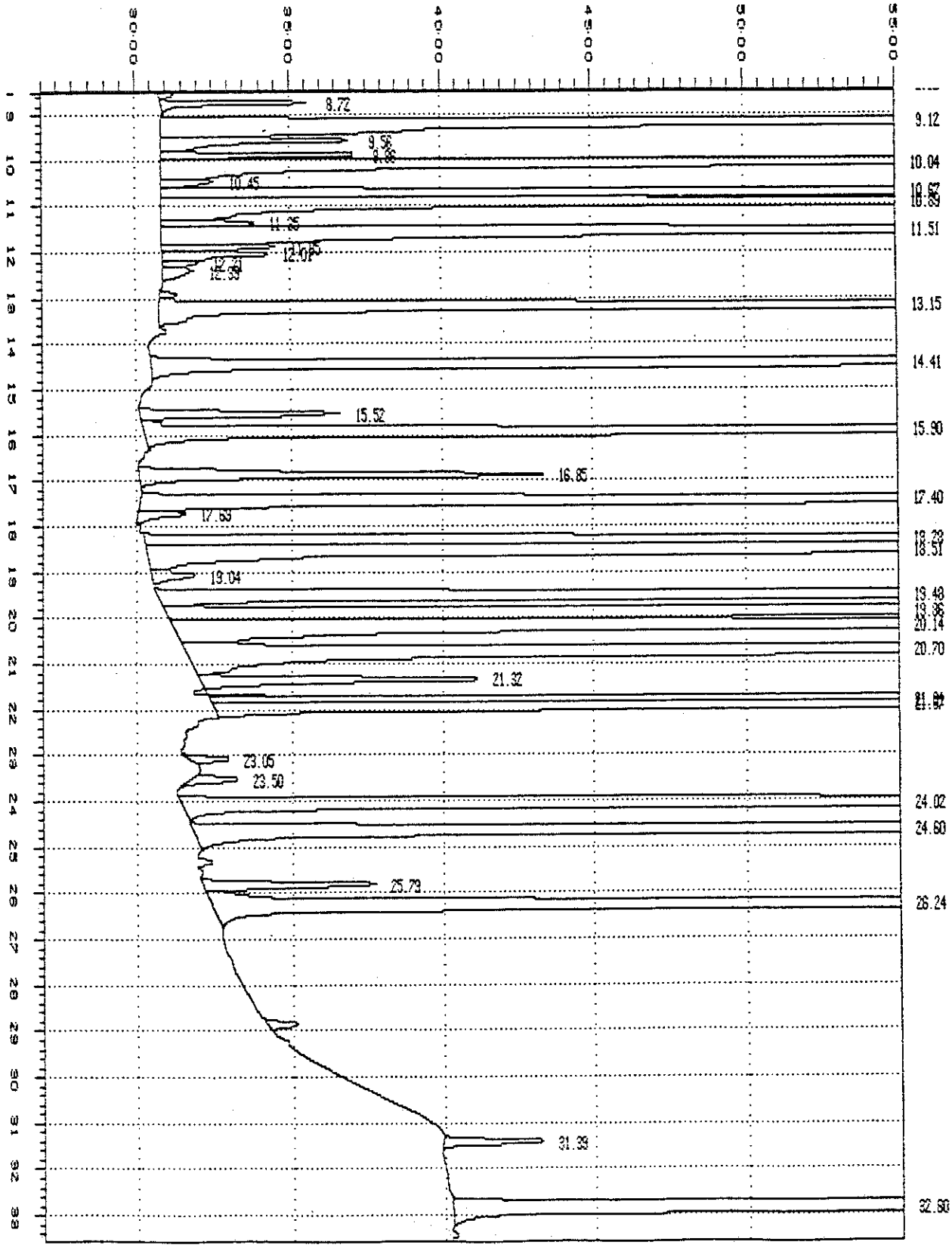
RMAL Chromatography System on DENCR3

000530

[OCP07_4] 72 W01AUG92,21,1

INDIVIDUAL MIX AB 0.05UG/ML 5446. Amount : 1.000.

Acquired on 2-AUG-1992 at 10:13
Reported on 3-AUG-1992 at 16:03
Box 1 (of 1)



Tue Aug 11 14:44:31 1992 Page 1 Reintegrated Peaks.

~~All compounds - ND~~ SCD 8/14

000531

Reduced by: SCD 8/11 Date:
Reviewed by: Date: 8/11/92

Sample Summary

ENDOSULFAN II = 0.269 µg/L

RLX2

Description: AMT=0.925L FDIL=50%
Sample: 22, Injection: 1, Acquired: 2-Aug-1992 11:00

Project: OCP07_4, Channel: 71, Analysis: W01AUG92, Node: DENCR3
Analyst: MGOETZ, Calibration File: W0801, MCRPT Method: OCPA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	50%	Extract Split:	1
Sample Amount:	0.925L	Reporting Units:	UG/L
Concentration Multiplier:	21.62		
Spike Multiplier:	1.081		

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Conc. Measured Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	%Recovery Low	%Recovery High
1	Dibutylchlorendate (DBC	0.07063	1.53	1.08	141 *	41	135
2	Dibutylchlorendate (DBC	0.04079	0.882	1.08	81.6	41	135
1	Tetrachloro-m-xylene (T	0.04799	1.04	1.08	96.0	48	136
2	Tetrachloro-m-xylene (T	0.03678	0.795	1.08	73.6	48	136
1	Decachlorobiphenyl (DCB	0.03896	0.842	1.08	77.9	48	136
2	Decachlorobiphenyl (DCB	0.04558	0.985	1.08	91.2	48	136

5 Compounds found above detection limit (Including IS and Surrogates).
Compounds found outside linear range.

Compound	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
etrachloro-m-xylene (TC				0.795					
	8.19	8.20	-0.01			1769759	0.0480	1.04	
	9.13	9.14	0.00			1190506	0.0368	0.795	
pha-BHC				~~0.155~~	RT OFF				
	9.72	9.72	0.01			306496	0.0072	0.155	
	9.98	10.05	-0.07			4484316	0.1017	2.20	
mma-BHC				~~0.148~~	ND				
	10.75	10.79	-0.04		RT OFF	929941	0.0241	0.521	Poor correlation
	10.88	10.90	-0.02			272800	0.0069	0.148	
ta-BHC				~~0.268~~	RT OFF				
	10.96	11.00	-0.04			290054	0.0135	0.291	
	10.61	10.68	-0.07			277411	0.0124	0.268	
ptachlor				~~1.49~~	ND				
	11.99	12.02	-0.03			1900114	0.0689	1.49	Poor correlation
	13.19	13.16	0.02			14268805	0.3805	8.23	

000532

Compound	Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
delta-BHC					~~0.386~~	NO				
	71	12.16	12.16	0.00			653648	0.0178	0.386	
	72	11.45	11.52	-0.07		RT OFF	2875553	0.0732	1.58	
Aldrin					~~0.427~~	RT OFF				
	71	13.26	13.16	0.10			775841	0.0197	0.427	
	72	14.43	14.42	0.01			8760674	0.2268	4.90	
Heptachlor Epoxide					~~0.259~~	RT OFF				
	71	15.17	15.24	-0.06			417456	0.0120	0.259	
	72	15.96	15.91	0.05			1898683	0.0512	1.11	
Endosulfan I					~~0.202~~	RT OFF				
	71	16.80	16.73	0.07			332165	0.0093	0.202	
	72	17.44	17.41	0.02			1130136	0.0321	0.694	
4,4'-DDE					~~0.207~~	ND				
	71	17.72	17.72				2899936	0.0937	2.03	poor correlation
	72	18.27	18.29	-0.02			295314	0.0096	0.207	
Dieldrin					~~NC~~	ND				NF
	71		18.01							
	72	18.56	18.52	0.04			936526	0.0257	0.555	
Endrin					~~0.262~~	RT OFF				
	71	19.57	19.52	0.05		ND	537418	0.0191	0.413	
	72	19.52	19.49	0.04			396023	0.0121	0.262	
4,4'-DDD					ND					NF
	71		20.23							NF
	72		20.16		0.269					
Endosulfan II					~~0.269~~	ND				
	71	20.41	20.40	0.02		RT doesn't match surrogate SCO 8/14/92	623648	0.0204	0.440	
	72	19.85	19.88	-0.02			407583	0.0125	0.269	
4,4'-DDT					~~NC~~	ND				NF
	71		21.68							C
	72	22.00	21.88	0.12			1118580	0.0386	0.834	
Endrin Aldehyde					~~NC~~	ND				NF
	71		21.84							
	72	20.64	20.71	-0.07			139975	0.0046	0.0998	
Endosulfan Sulfate					~~0.834~~	RT OFF				
	71	22.72	22.62	0.09			1161478	0.0415	0.897	
	72	22.00	21.88	0.12			1118580	0.0386	0.834	C
Dibutylchlorendate (DBC)					0.882 ✓					
	71	24.70	24.71	-0.01			1455569	0.0706	1.53	- matrix interfe
	72	26.25	26.25				1027229	0.0408	0.882	

Compound	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Methoxychlor				Ø.Ø913J	RT OFF ND				
71	25.62	25.71	-Ø.Ø8			93667	Ø.ØØ42	Ø.Ø913	
72	24.68	24.62	Ø.Ø6			256057	Ø.Ø14Ø	Ø.3Ø4	
Endrin Ketone				NC					NF
71		25.99							
72	24.12	24.Ø3	Ø.Ø9			4973642	Ø.1446	3.13	
Decachlorobiphenyl (DCB)				Ø.842					
71	32.11	32.12	Ø.ØØ			954612	Ø.Ø39Ø	Ø.842	
72	32.81	32.81	Ø.ØØ			1332349	Ø.Ø456	Ø.985	

RMAL Chromatography System on DENCR3

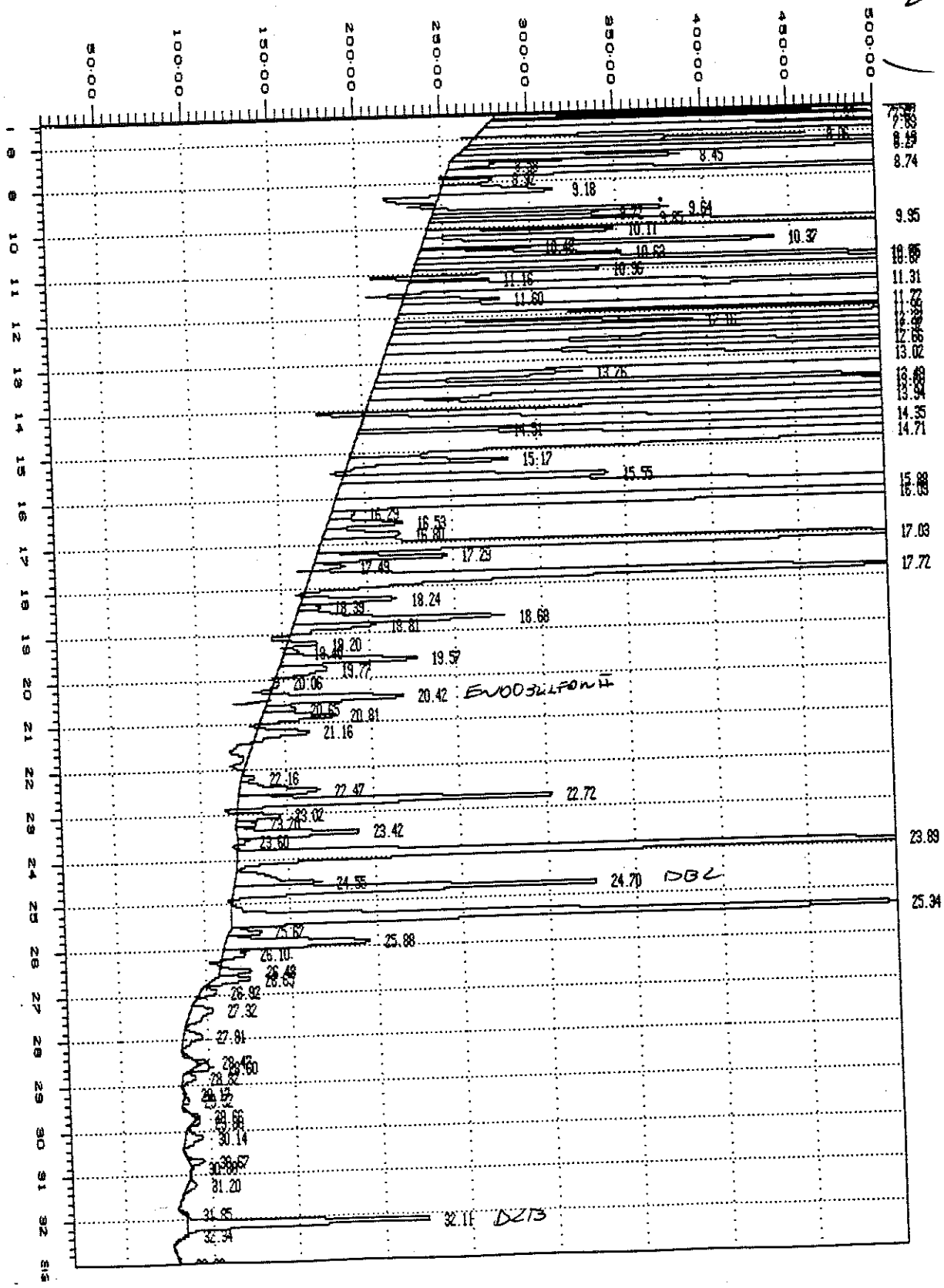
000534

[OCP07_4] 71 W01AUG92,22,1

23727-01-SA AMT=0.925L PDIL=50%. Amount : 1.000.
W_5890, Dual ECD, Column: RTx-35,0.53mm, 0.53um, 30m
Acquired on 2-AUG-1992 at 11:00
Reported on 6-AUG-1992 at 17:19
Box 1 (of 1)

MB 8-8-92
SEE 2ND PLOT

NOTE SCALE



Sat Aug 8 09:31:59 1992 Page 1

Please see integrated peak summary

Reduced by: Date: 8-8-92
Reviewed by: Date: 8/11/92

Sample Summary

000535

Description: AMT=0.925L PDIL=50%
Sample: 22, Injection: 1, Acquired: 2-Aug-1992 11:00

Project: OCP07_4, Channel: 71, Analysis: W01AUG92, Node: DENCR3
Analyst: MGOETZ, Calibration File: W0801, MCRPT Method: OCPA

RLX 2

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	50%	Extract Split:	1
Sample Amount:	0.925L	Reporting Units:	UG/L
Concentration Multiplier:	21.62		
Spike Multiplier:	1.081		

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Conc. Measured Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	%Recovery Low	%Recovery High
71	Dibutylchlorendate (DBC	0.07063	1.53	1.08	141 *	41	135
72	Dibutylchlorendate (DBC	0.04079	0.882	1.08	81.6	41	135
71	Tetrachloro-m-xylene (T	0.04799	1.04	1.08	96.0	48	136
72	Tetrachloro-m-xylene (T	0.04197	0.907	1.08	83.9	48	136
71	Decachlorobiphenyl (DCB	0.03896	0.842	1.08	77.9	48	136
72	Decachlorobiphenyl (DCB	0.04558	0.985	1.08	91.2	48	136

15 Compounds found above detection limit (Including IS and Surrogates).
0 Compounds found outside linear range.

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Tetrachloro-m-xylene (TC				0.907	SUR				
71	8.19	8.20	-0.01			1769759	0.0480	1.04	
72	9.13	9.14	0.00			1356382	0.0420	0.907	
alpha-BHC				~~0.155~~					
71	9.72	9.72	~~0.01~~		RI	306496	0.0072	0.155	
72	9.98	10.05	~~-0.07~~			4787237	0.1085	2.35	
gamma-BHC				0.300					
71	10.75	10.79	-0.04			1452496	0.0379	0.820	
72	10.89	10.90	-0.01			575193	0.0139	0.300	
beta-BHC				~~0.291~~					
71	10.96	11.00	~~-0.04~~		RI	290054	0.0135	0.291	
72	10.61	10.68	~~-0.07~~			509894	0.0236	0.511	
Heptachlor				~~1.49~~					
71	11.99	12.02	-0.03			1900114	0.0689	1.49	Interfe
72	13.19	13.16	0.02			15312943	0.4084	8.83	

000536

Compound	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
delta-BHC				~~0.386~~					
71	12.16	12.16	~~0.00~~			653648	0.0178	0.386	
72	11.45	11.52	~~-0.07~~			3630136	0.0921	1.99	
Aldrin				~~0.427~~					
71	13.26	13.16	~~0.10~~			775841	0.0197	0.427	
72	14.43	14.42	~~0.01~~			9314240	0.2411	5.21	
Heptachlor Epoxide				~~0.259~~					
71	15.17	15.24	~~-0.06~~			417456	0.0120	0.259	
72	15.96	15.91	~~0.05~~			2045324	0.0552	1.19	
Endosulfan I				~~0.202~~					
71	16.80	16.73	~~0.07~~			332165	0.0093	0.202	
72	17.44	17.41	~~0.02~~			1130136	0.0321	0.694	
4,4'-DDE				~~0.207~~					
71	17.72	17.72				2899936	0.0937	2.03	INTERFERE
72	18.27	18.29	-0.02			295314	0.0096	0.207	
Dieldrin					NC				NF
71		18.01							
72	18.56	18.52	0.04			936526	0.0257	0.555	
Endrin				~~0.262~~					
71	19.57	19.52	~~0.05~~			537418	0.0191	0.413	
72	19.52	19.49	~~0.04~~			396023	0.0121	0.262	
4,4'-DDD					ND				NF
71		20.23							NF
72		20.16							
Endosulfan II				0.374					
71	20.42	20.40	0.02			541908	0.0175	0.378	
72	19.86	19.88	-0.02			559924	0.0173	0.374	
4,4'-DDT					NC				NF
71		21.68							
72	22.00	21.88	0.12			1118580	0.0386	0.834	C
Endrin Aldehyde					NC				NF
71		21.84							
72	20.64	20.71	-0.07			139975	0.0046	0.0998	
Endosulfan Sulfate				~~0.834~~					
71	22.72	22.62	~~0.09~~			1161478	0.0415	0.897	
72	22.00	21.88	~~0.12~~			1118580	0.0386	0.834	C
Dibutylchlorendate (DBC)				0.882					
71	24.70	24.71	-0.01			1455569	0.0706	1.53	
72	26.25	26.25				1027229	0.0408	0.882	

000537

Compound	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Methoxychlor				~~0.0913~~	J				
71	25.62	25.71	-0.08			93667	0.0042	0.0913	
72	24.68	24.62	~~0.06~~			256057	0.0140	0.304	
Endrin Ketone					NC				NF
71		25.99							
72	24.12	24.03	0.09			4973642	0.1446	3.13	
Decachlorobiphenyl (DCB)				0.842					
71	32.11	32.12	0.00			954612	0.0390	0.842	
72	32.81	32.81	0.00			1332349	0.0456	0.985	

MS 8-8-92

Injection Report

Acquired on 2-AUG-1992 at 11:00

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AMT=0.925L FDIL=50%
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.000000
Bottle No : 22

MG 8-8-92

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
17		8.187	8.200	594882	1769759	0.04799	Tetrachloro-m-xylene (TCX)	3.2
25		9.724	9.716	96762	306496	0.00716	alpha-BHC	3.7
32		10.747	10.791	286925	1452496	0.03791	gamma-BHC	5.3
34		10.964	11.004	107254	290054	0.01348	beta-BHC	3.7A
39		11.987	12.018	427209	1900114	0.06894	Heptachlor	4.3
40		12.160	12.156	171793	653648	0.01783	delta-BHC	3.7A
45		13.262	13.164	117920	775841	0.01974	Aldrin	5.9A
52		15.173	15.236	91927	417456	0.01199	Heptachlor Epoxide	5.1
58		16.800	16.729	44589	332165	0.00933	Endosulfan I	8.0
62		17.720	17.720	366123	2899936	0.09369	4,4'-DDE	6.4
69		19.573	19.524	78629	537418	0.01910	Endrin	6.4
71		20.418	20.396	78237	541908	0.01749	Endosulfan II	7.5
77		22.716	22.622	180986	1161478	0.04150	Endosulfan Sulfate	6.4
83		24.702	24.711	209724	1455569	0.07063	Dibutylchlorendate (DBC)	6.7
85		25.622	25.707	18110	93667	0.00422	Methoxychlor	5.3
106		32.111	32.116	139607	954612	0.03896	Decachlorobiphenyl (DCB)	6.7

Totals			
Unknowns	21724386	130615568	N/A
Quantified	3010678	15542617	0.51997
Grand Total	24735064	146158192	0.51997

MISSING PEAKS

RT mins	Peak name

18.Ø13 Dieldrin
2Ø.227 4,4'-DDD
21.684 4,4'-DDT
21.836 Endrin Aldehyde
25.987 Endrin Ketone

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... WOCP1
Run sequence..... WØØØ1
Calibration..... WØØØ1
External standard calibration using area
Calibration last modified on 3-AUG-1992 at 15:17

Uncalibrated peaks use user factor (Ø.ØØØØ)

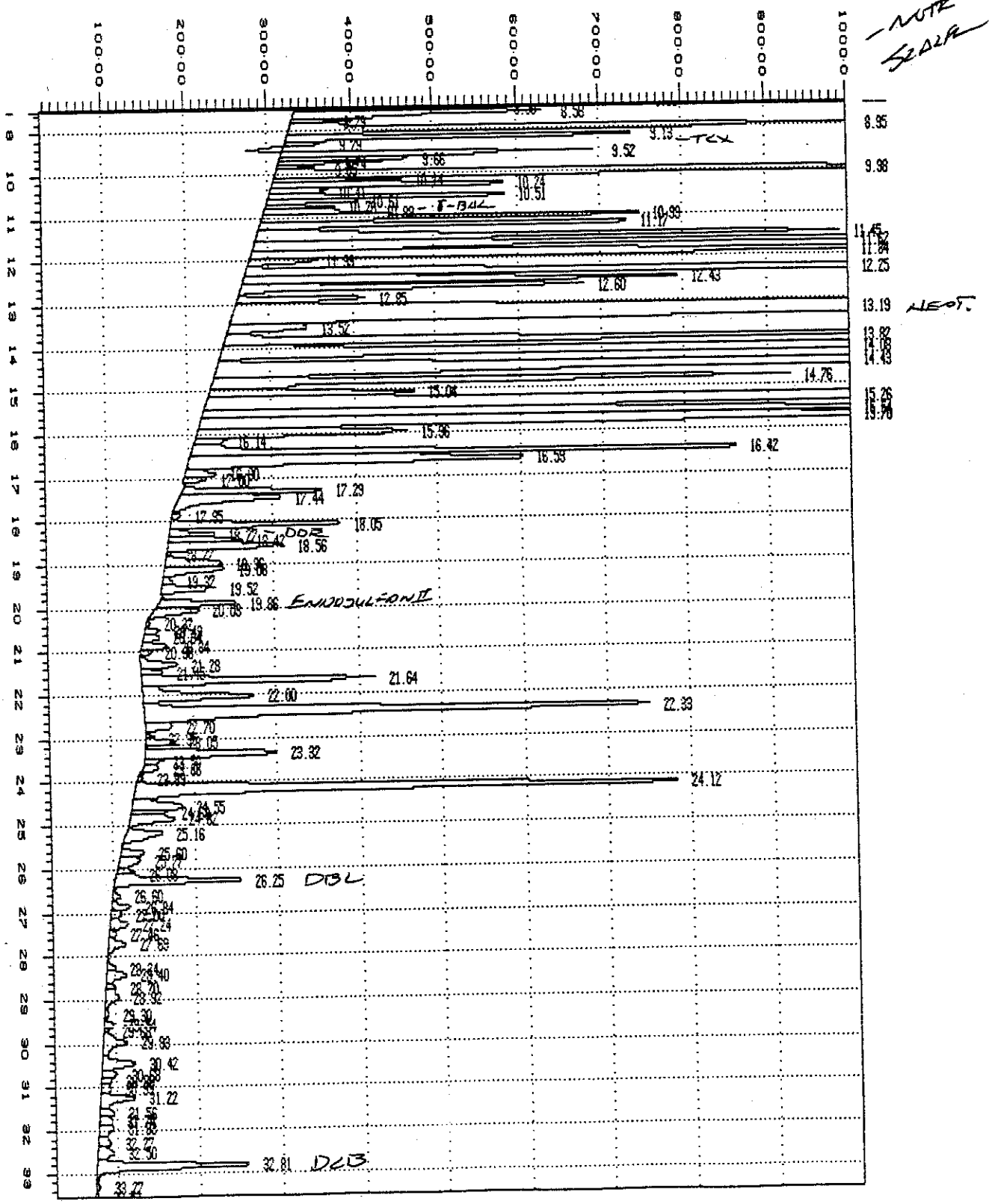
RMAL Chromatography System on DENCR3

000540

[OCP07_4] 72 W01AUG92,22,1

23727-01-SA AMT=0.925L PDIL=50%. Amount : 1.000.

Acquired on 2-AUG-1992 at 11:00
Reported on 8-AUG-1992 at 12:59
Box 1 (of 1)



Injection Report

Acquired on 2-AUG-1992 at 11:00

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AMT=0.925L PDIL=50%
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.000000
Bottle No : 22

Reintegrated Peaks.
gamma BHC
Endosulfan II.
8/11/92

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
17		8.187	8.200	594882	1769759	0.04799	Tetrachloro-m-xylene (TCX)	3.2
25		9.724	9.716	96762	306496	0.00716	alpha-BHC	3.7
32		10.747	10.791	223981	929941	0.02409	gamma-BHC	4.5
34		10.964	11.004	107254	290054	0.01348	beta-BHC	3.7A
39		11.987	12.018	427209	1900114	0.06894	Heptachlor	4.3
40		12.160	12.156	171793	653648	0.01783	delta-BHC	3.7A
45		13.262	13.164	117920	775841	0.01974	Aldrin	5.9A
52		15.173	15.236	91927	417456	0.01199	Heptachlor Epoxide	5.1
58		16.800	16.729	44589	332165	0.00933	Endosulfan I	8.0
62		17.720	17.720	366123	2899936	0.09369	4,4'-DDE	6.4
69		19.573	19.524	78629	537418	0.01910	Endrin	6.4
71		20.413	20.396	83005	623648	0.02036	Endosulfan II	7.5
77		22.716	22.622	180986	1161478	0.04150	Endosulfan Sulfate	6.4
83		24.702	24.711	209724	1455569	0.07063	Dibutylchlorendate (DBC)	6.7
85		25.622	25.707	18110	93667	0.00422	Methoxychlor	5.3
106		32.111	32.116	139607	954612	0.03896	Decachlorobiphenyl (DCB)	6.7

Totals			
Unknowns	21724386	130615568	N/A
Quantified	2952502	15101802	0.50902
Grand Total	24676888	145717376	0.50902

MISSING PEAKS

RT mins	Peak name

18.013 Dieldrin
20.227 4,4'-DDD
21.684 4,4'-DDT
21.836 Endrin Aldehyde
25.987 Endrin Ketone

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... WOCP1
Run sequence..... WØ8Ø1
Calibration..... WØ8Ø1
External standard calibration using area
Calibration last modified on 3-AUG-1992 at 15:17

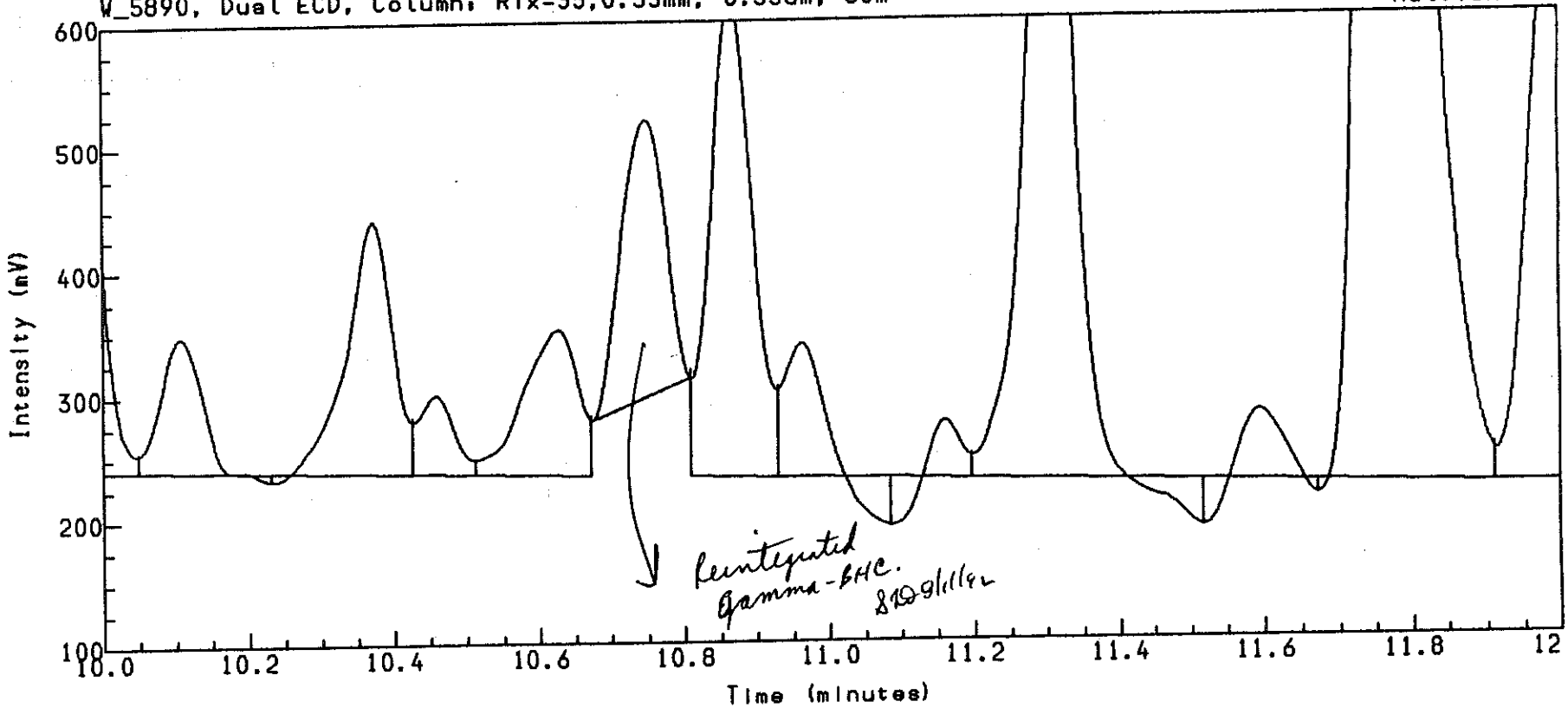
Uncalibrated peaks use user factor (Ø.ØØØØ)

000543

RMAL Chromatography System on DENCR3

Analysis Name : [OCP07_4] 71 W01AUG92,22,1.
AMT=0.925L PDIL=50% Amount : 1.000
W_5890, Dual ECD, Column: RTx-35,0.53mm, 0.53um, 30m

Multichrom



Instrument : HP5890
Channel Title : ECD INSTRUMENT W
Lims ID : SUM2 OCPA
Acquired on 2-AUG-1992 at 11:00
Reported on 11-AUG-1992 at 14:34

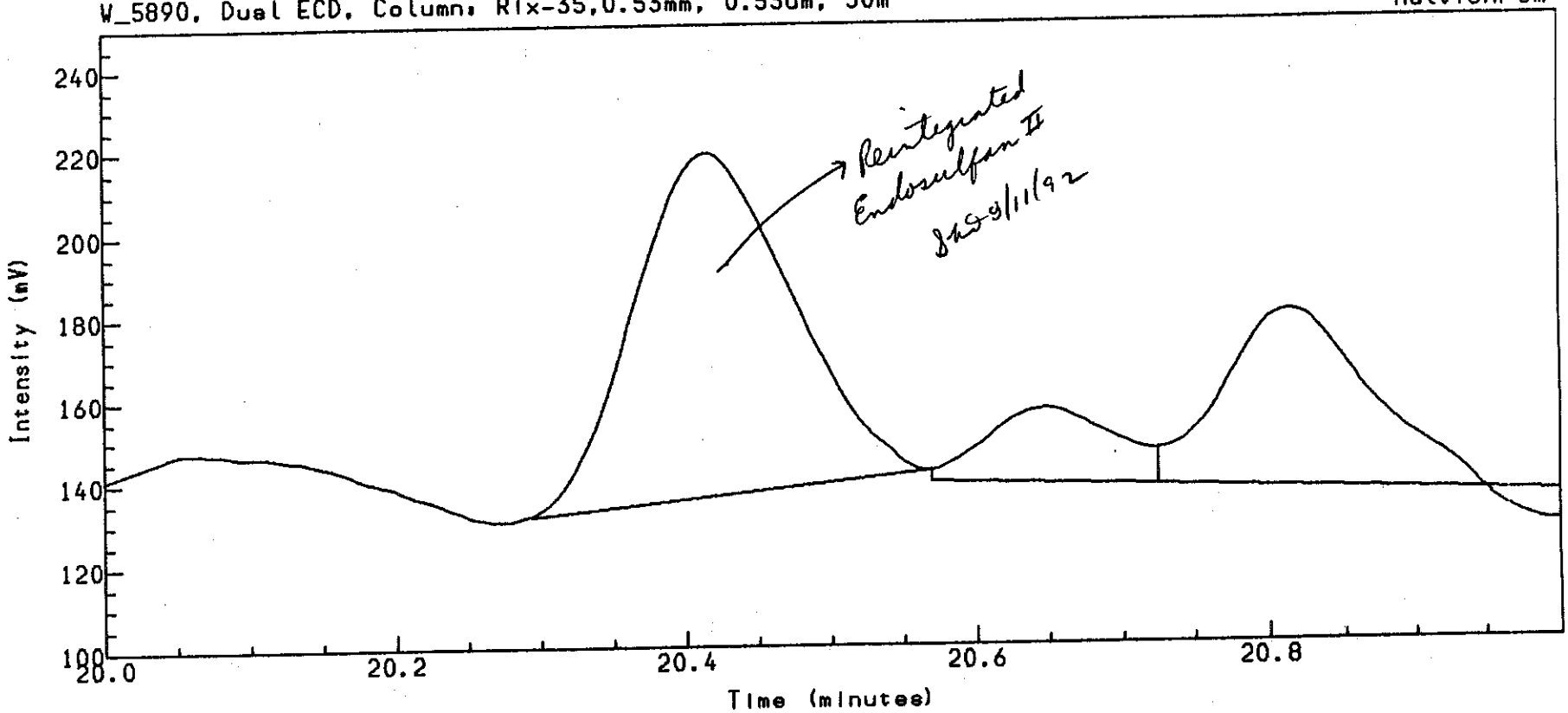
Method : WOCP1
Calibration : W0801
Run Sequence : W0801

000544

RMAL Chromatography System on DENCR3

Analysis Name : [OCP07_4] 71 W01AUG92,22,1.
AMT=0.925L PDIL=50% Amount : 1.000
W_5890, Dual ECD, Column: RTx-35,0.53mm, 0.53um, 30m

Multichrom



Instrument : HP5890
Channel Title : ECD INSTRUMENT W
Lims ID : SUM2 OCPA
Acquired on 2-AUG-1992 at 11:00
Reported on 11-AUG-1992 at 14:35

Method : WOCP1
Calibration : W0801
Run Sequence : W0801

Injection Report

000545

Acquired on 2-AUG-1992 at 11:00

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AMT=0.925L PDIL=50%
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 22

MG 8-8-92

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
15		9.133	9.138	415302	1356382	0.04197	Tetrachloro-m-xylene (TCX)	3.2
20		9.978	10.049	690985	4787237	0.10852	alpha-BHC	6.4
25		10.609	10.680	108884	509894	0.02363	beta-BHC	4.8A
27		10.889	10.902	131002	575193	0.01386	gamma-BHC	4.3
30		11.449	11.520	704859	3630136	0.09213	delta-BHC	4.3
38		13.187	13.164	745761	15312943	0.40838	Heptachlor	19.5
42		14.431	14.422	765098	9314240	0.24107	Aldrin	10.9
48		15.956	15.907	252871	2045324	0.05519	Heptachlor Epoxide	8.0
55		17.436	17.413	121594	1130136	0.03210	Endosulfan I	9.6A
58		18.271	18.289	54432	295314	0.00956	4,4'-DDE	5.6
60		18.556	18.516	139330	936526	0.02566	Dieldrin	5.9A
65		19.524	19.489	64314	396023	0.01211	Endrin	6.1
66		19.858	19.876	92445	559924	0.01728	Endosulfan II	5.9
70		20.640	20.711	19231	139975	0.00461	Endrin Aldehyde	7.7
C1			21.880	133241	1118580	0.03859	4,4'-DDT/Endosulfan Sulfate	
76		22.004	21.880	133241	1118580	0.03859	- C1	7.5
85		24.120	24.031	653608	4973642	0.14463	Endrin Ketone	6.9
87		24.680	24.618	43231	256057	0.01405	Methoxychlor	I
93		26.249	26.249	151078	1027229	0.04079	Dibutylchlorendate (DBC)	6.1
118		32.809	32.813	181534	1332349	0.04558	Decachlorobiphenyl (DCB)	6.7

Totals			
Unknowns	20635484	131579280	N/A
Quantified	5468800	49697104	1.36971
Grand Total	26104284	181276384	1.36971

000546

MISSING PEAKS

RT mins	Peak name
20.156	4,4'-DDD

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... WOCP1
Run sequence..... W0801
Calibration..... W0801
External standard calibration using area
Calibration last modified on 3-AUG-1992 at 15:17

Uncalibrated peaks use user factor (0.0000)

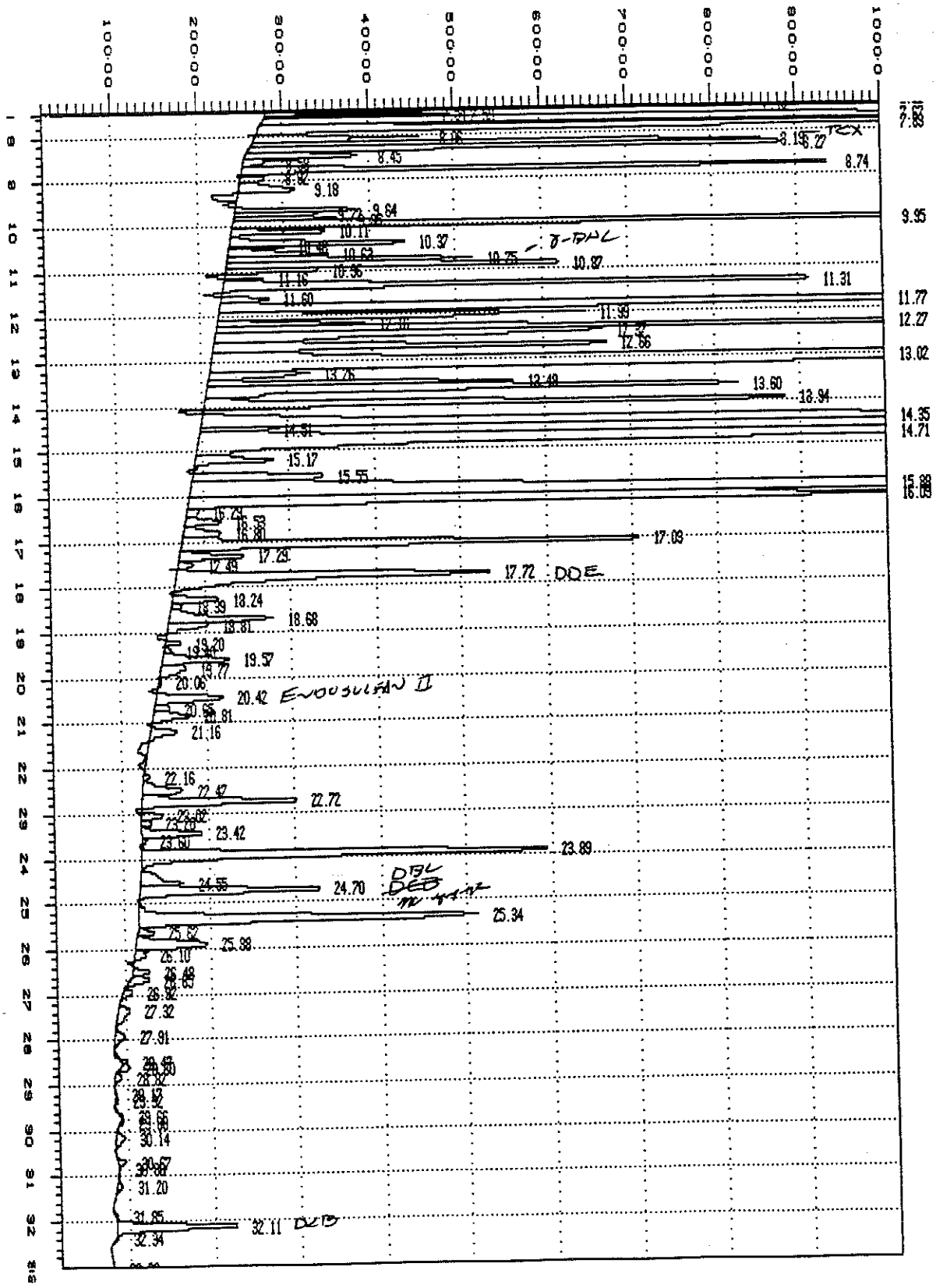
RMAL Chromatography System on DENCR3

000547

[OCP07_4] 71 W01AUG92,22,1

23727-01-SA AMT=0.925L PDIL=50%. Amount : 1.000.
W_5890, Dual ECD, Column: RTx-35,0.53mm, 0.53um, 30m
Acquired on 2-AUG-1992 at 11:00
Reported on 6-AUG-1992 at 17:20
Box 1 (of 1)

NOTE SCALE



RMAL Chromatography System on DENCR3

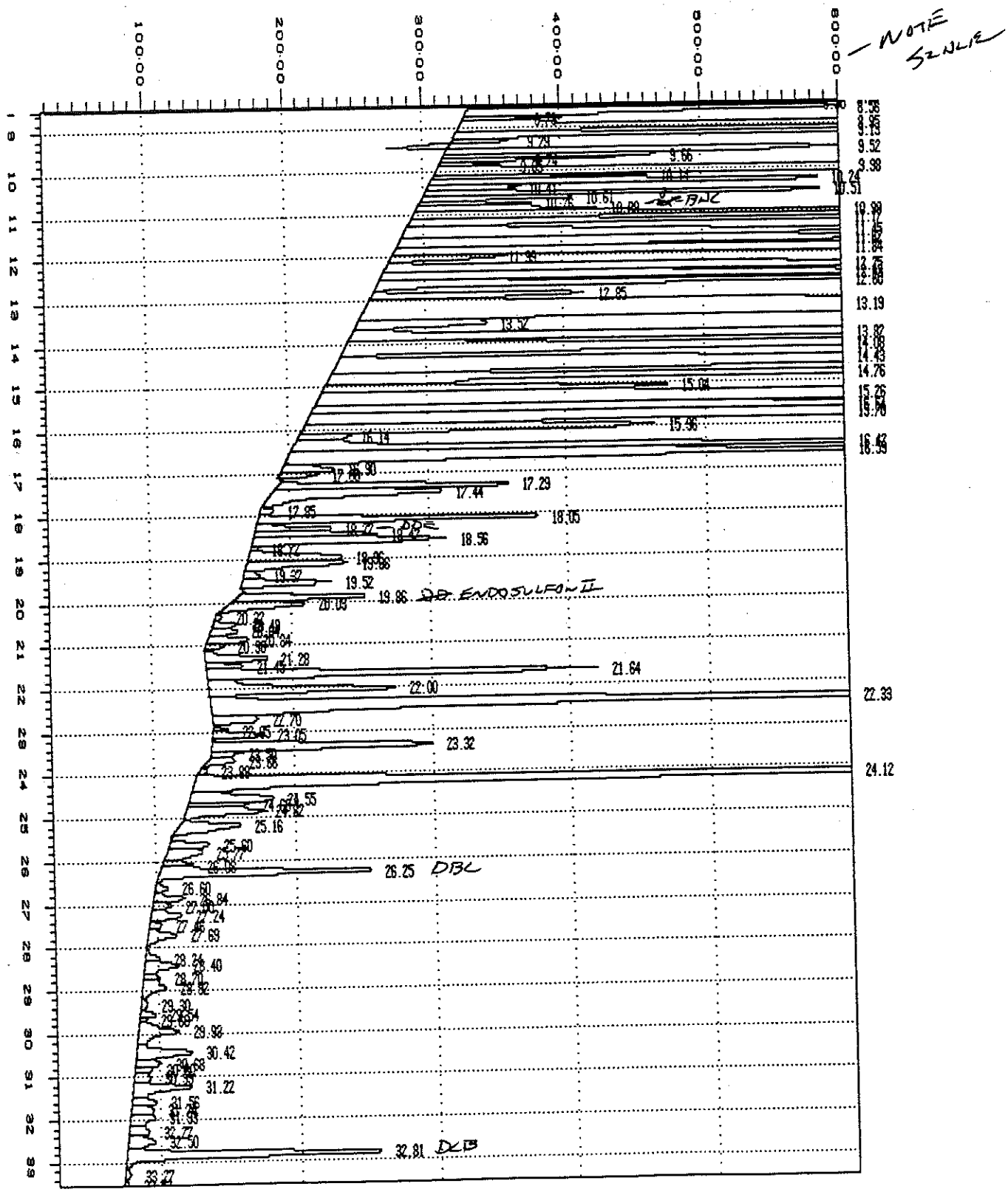
000548

[OCP07_4] 72 W01AUG92,22,1

AMT=0.925L PDIL=50%. Amount : 1.000.

MK 8-8-92 SEE 2ND PLOT

Acquired on 2-AUG-1992 at 11:00
Reported on 6-AUG-1992 at 17:28
Box 1 (of 1)



Injection Report

Acquired on 2-AUG-1992 at 11:00

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : AMT=0.925L PDIL=50%
Sample Id : SUM2 OCPA
Sample Type : Sample Amount=1.00000
Bottle No : 22

Reinjected Peaks gamma-BHC. ~~Beta-BHC~~ Endosulfan II.
SLO 8/11
SLO 8/11/92

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
15		9.133	9.138	398712	1190506	0.03678	Tetrachloro-m-xylene (TCX)	2.9
18		9.978	10.049	667079	4484316	0.10172	alpha-BHC	6.4
23		10.609	10.680	80027	277411	0.01240	beta-BHC	3.7A
25		10.884	10.902	86078	272800	0.00686	gamma-BHC	3.2
28		11.449	11.520	655562	2875553	0.07316	delta-BHC	4.0
35		13.187	13.164	712755	14268805	0.38050	Heptachlor	19.2
39		14.431	14.422	742245	8760674	0.22678	Aldrin	10.7
45		15.956	15.907	242718	1898683	0.05121	Heptachlor Epoxide	7.7
52		17.436	17.413	121594	1130136	0.03210	Endosulfan I	9.6A
55		18.271	18.289	54432	295314	0.00956	4,4'-DDE	5.6
57		18.556	18.516	139330	936526	0.02566	Dieldrin	5.9A
62		19.524	19.489	64314	396023	0.01211	Endrin	6.1
63		19.853	19.876	79293	407583	0.01246	Endosulfan II	5.3
67		20.640	20.711	19231	139975	0.00461	Endrin Aldehyde	7.7
C1			21.880	133241	1118580	0.03859	4,4'-DDT/Endosulfan Sulfate	
73		22.004	21.880	133241	1118580	0.03859	- C1	7.5
82		24.120	24.031	653608	4973642	0.14463	Endrin Ketone	6.9
84		24.680	24.618	43231	256057	0.01405	Methoxychlor	I
90		26.249	26.249	151078	1027229	0.04079	Dibutylchlorendate (DBC)	6.1
115		32.809	32.813	181534	1332349	0.04558	Decachlorobiphenyl (DCB)	6.7

Totals			
Unknowns	19627884	121406032	N/A
Quantified	5226063	46042164	1.26954
Grand Total	24853946	167448192	1.26954

MISSING PEAKS

RT mins	Peak name
20.156	4,4'-DDD

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

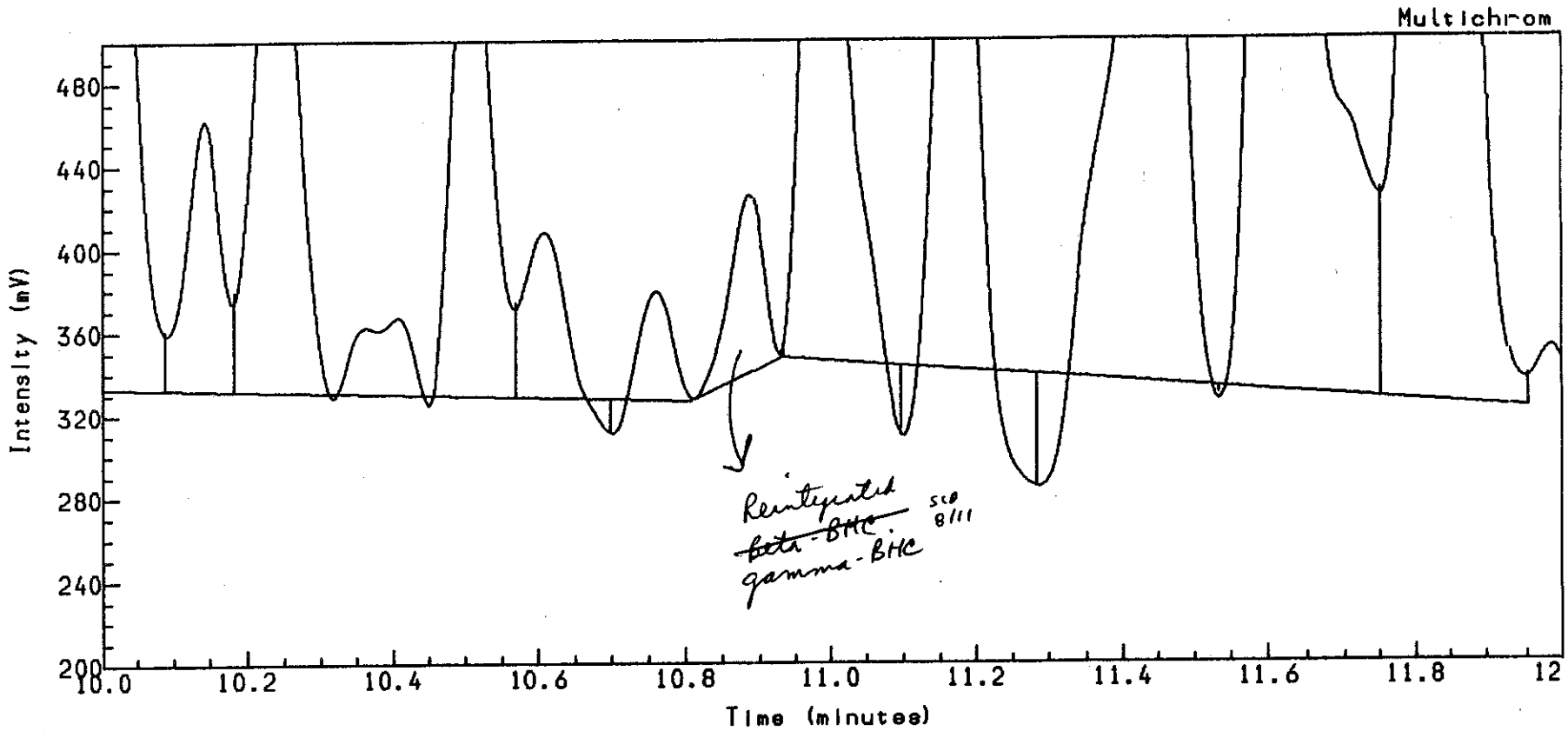
Method..... WOCP1
Run sequence..... WØ8Ø1
Calibration..... WØ8Ø1
External standard calibration using area
Calibration last modified on 3-AUG-1992 at 15:17

Uncalibrated peaks use user factor (Ø.ØØØØ)

000551

RMAL Chromatography System on DENCR3

Analysis Name : [OCP07_4] 72 W01AUG92,22,1.
AMT=0.925L PDIL=50% Amount : 1.000



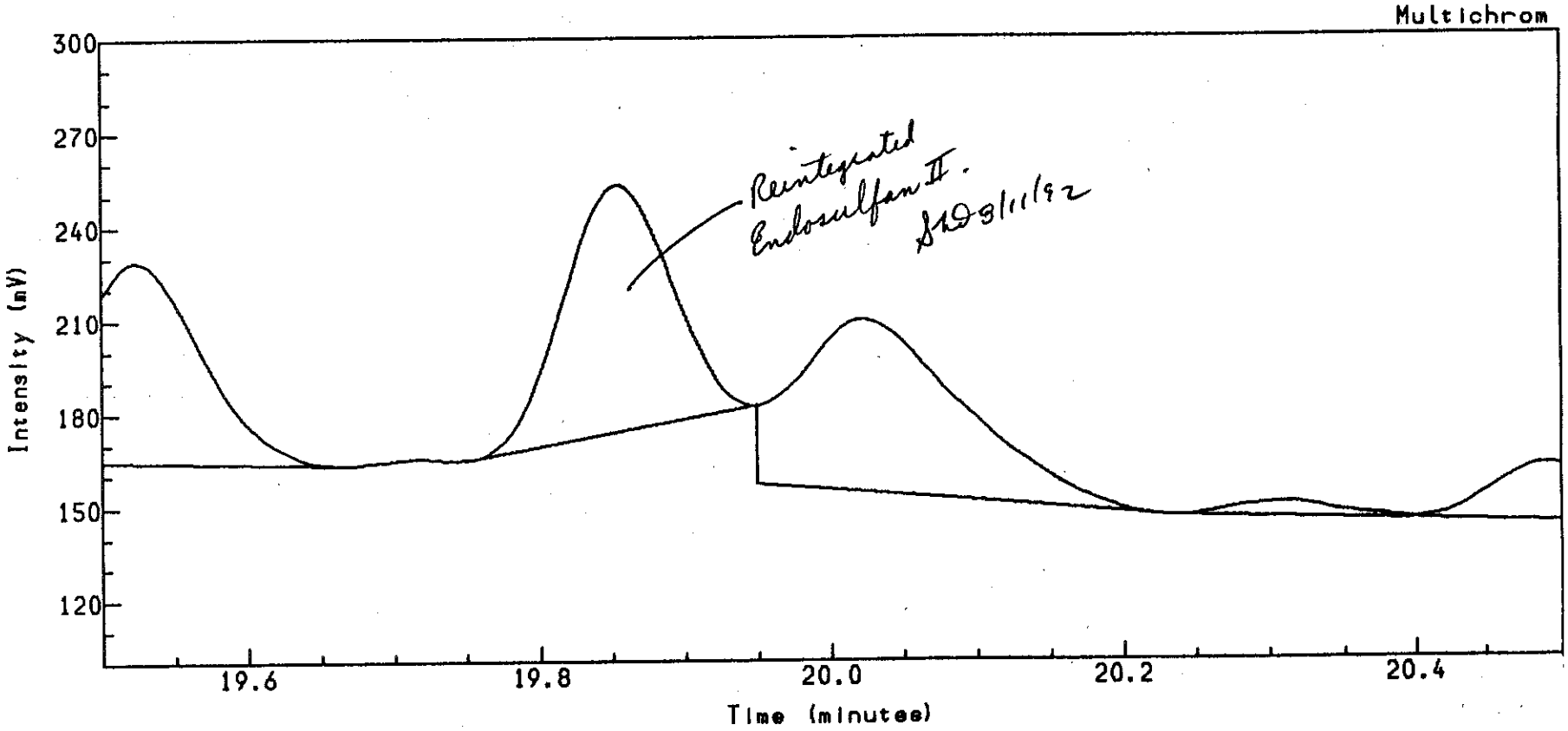
Instrument : HP5890
Channel Title : ECD INSTRUMENT W
Lims ID : SUM2 OCPA
Acquired on 2-AUG-1992 at 11:00
Reported on 11-AUG-1992 at 14:43

Method : WOCP1
Calibration : W0801
Run Sequence : W0801

000552

RMAL Chromatography System on DENCR3

Analysis Name : [OCP07_4] 72 W01AUG92,22.1.
AMT=0.925L PDIL=50% Amount : 1.000



Instrument : HP5890
Channel Title : ECD INSTRUMENT W
Lims ID : SUM2 OCPA
Acquired on 2-AUG-1992 at 11:00
Reported on 11-AUG-1992 at 14:39

Method : WOCP1
Calibration : W0801
Run Sequence : W0801

Sat Aug 8 09:35:58 1992 Page 1

Reduced by: MK Date: 8-8-92
Reviewed by: [illegible] Date: 8/11/92

Check Standard Report

000553

Description: INDIVIDUAL MIX AB 0.05UG/ML 5446
ample: 33, Injection: 1, Acquired: 2-Aug-1992 19:47

Project: OCP07_4, Channel: 71, Analysis: W01AUG92, Node: DENCR3
Analyst: MGOETZ, Calibration File: W0801, MCRPT Method: OCPA

2 of 21 compounds are outside control limits for channel 71
0 of 21 compounds are outside control limits for channel 72

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
71	8.21	8.20	0.01	0.0500	0.0556	11	20	Tetrachloro-m-xyle
72	9.12	9.14	-0.01	0.0500	0.0538	8	20	Tetrachloro-m-xyle
71	9.72	9.72	0.01	0.0500	0.0601	20*	20	alpha-BHC
72	10.04	10.05	-0.01	0.0500	0.0554	11	20	alpha-BHC
71	10.80	10.79	0.00	0.0500	0.0590	18	20	gamma-BHC
72	10.89	10.90	-0.01	0.0500	0.0542	8	20	gamma-BHC
71	11.01	11.00	0.01	0.0500	0.0593	19	20	beta-BHC
72	10.67	10.68	-0.01	0.0500	0.0521	4	20	beta-BHC
71	12.02	12.02	0.00	0.0500	0.0568	14	20	Heptachlor
72	13.15	13.16	-0.02	0.0500	0.0539	8	20	Heptachlor
71	12.16	12.16	0.00	0.0500	0.0595	19	20	delta-BHC
72	11.50	11.52	-0.02	0.0500	0.0530	6	20	delta-BHC
71	13.17	13.16	0.00	0.0500	0.0583	17	20	Aldrin
72	14.40	14.42	-0.02	0.0500	0.0529	6	20	Aldrin
71	15.24	15.24	0.00	0.0500	0.0588	18	20	Heptachlor Epoxide
72	15.89	15.91	-0.02	0.0500	0.0522	4	20	Heptachlor Epoxide
71	16.73	16.73	0.00	0.0500	0.0581	16	20	Endosulfan I
72	17.39	17.41	-0.02	0.0500	0.0520	4	20	Endosulfan I
71	17.72	17.72	0.00	0.0500	0.0593	19	20	4,4'-DDE
72	18.27	18.29	-0.02	0.0500	0.0532	6	20	4,4'-DDE
71	18.02	18.01	0.00	0.0500	0.0583	17	20	Dieldrin
72	18.49	18.52	-0.02	0.0500	0.0526	5	20	Dieldrin
71	19.52	19.52	0.00	0.0500	0.0587	17	20	Endrin
72	19.47	19.49	-0.02	0.0500	0.0525	5	20	Endrin
71	20.23	20.23	0.00	0.0500	0.0583	17	20	4,4'-DDD
72	20.13	20.16	-0.03	0.0500	0.0538	8	20	4,4'-DDD
1	20.40	20.40	0.00	0.0500	0.0597	19	20	Endosulfan II
72	19.85	19.88	-0.02	0.0500	0.0525	5	20	Endosulfan II

000554

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
	21.68	21.68	0.00	0.0500	0.0570	14	20	4,4'-DDT
72	21.86	21.88	-0.02	0.100	0.104	4	20 C	4,4'-DDT
71	21.84	21.84	0.00	0.0500	0.0607	21*	20	Endrin Aldehyde
72	20.68	20.71	-0.03	0.0500	0.0544	9	20	Endrin Aldehyde
71	22.62	22.62	0.00	0.0500	0.0576	15	20	Endosulfan Sulfate
72	21.86	21.88	-0.02	0.100	0.104	4	20 C	Endosulfan Sulfate
71	24.72	24.71	0.00	0.0500	0.0576	15	20	Dibutylchlorendate
72	26.22	26.25	-0.03	0.0500	0.0516	3	20	Dibutylchlorendate
71	25.71	25.71	0.00	0.0500	0.0493	-1	20	Methoxychlor
72	24.59	24.62	-0.03	0.0500	0.0507	1	20	Methoxychlor
71	25.98	25.99	0.00	0.0500	0.0586	17	20	Endrin Ketone
72	24.00	24.03	-0.03	0.0500	0.0528	6	20	Endrin Ketone
71	32.11	32.12	0.00	0.0500	0.0543	9	20	Decachlorobiphenyl
72	32.78	32.81	-0.03	0.0500	0.0532	6	20	Decachlorobiphenyl

Injection Report

Acquired on 2-AUG-1992 at 19:47

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05UG/ML 5446
Sample Id : CHK2 OCPA
Sample Type : Standard Amount=1.000000
Bottle No : 33

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
7		8.209	8.200	543839	2042224	0.05557	Tetrachloro-m-xylene (TCX)	3.5
11		9.724	9.716	672559	2540949	0.06012	alpha-BHC	3.7
13		10.796	10.791	541574	2249451	0.05900	gamma-BHC	4.0
14		11.013	11.004	252877	1152605	0.05931	beta-BHC	4.3
17		12.022	12.018	322719	1573947	0.05682	Heptachlor	5.1
18		12.160	12.156	466673	2161637	0.05953	delta-BHC	4.3
20		13.169	13.164	431262	2260913	0.05834	Aldrin	5.3
23		15.240	15.236	323644	1866169	0.05876	Heptachlor Epoxide	5.6
26		16.729	16.729	313644	1878716	0.05814	Endosulfan I	5.9
27		17.720	17.720	317929	1842338	0.05933	4,4'-DDE	5.6
28		18.018	18.013	318020	1973281	0.05832	Dieldrin	6.1
31		19.524	19.524	249487	1591031	0.05871	Endrin	6.1
32		20.227	20.227	202005	1222519	0.05832	4,4'-DDD	5.9
33		20.396	20.396	264294	1743079	0.05971	Endosulfan II	6.4
34		21.684	21.684	184839	1155741	0.05696	4,4'-DDT	6.7
35		21.836	21.836	209019	1425617	0.06072	Endrin Aldehyde	6.7
36		22.622	22.622	232580	1596777	0.05759	Endosulfan Sulfate	6.4
38		24.716	24.711	170017	1192339	0.05756	Dibutylchlorendate (DBC)	6.7
40		25.707	25.707	112512	795611	0.04932	Methoxychlor	6.9
41		25.982	25.987	236033	1608155	0.05858	Endrin Ketone	6.4
44		32.111	32.116	187871	1313791	0.05428	Decachlorobiphenyl (DCB)	6.7

Totals			
Unknowns	93700	479605	N/A
Quantified	6555875	35194896	1.21501
Grand Total	6649575	35674500	1.21501

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

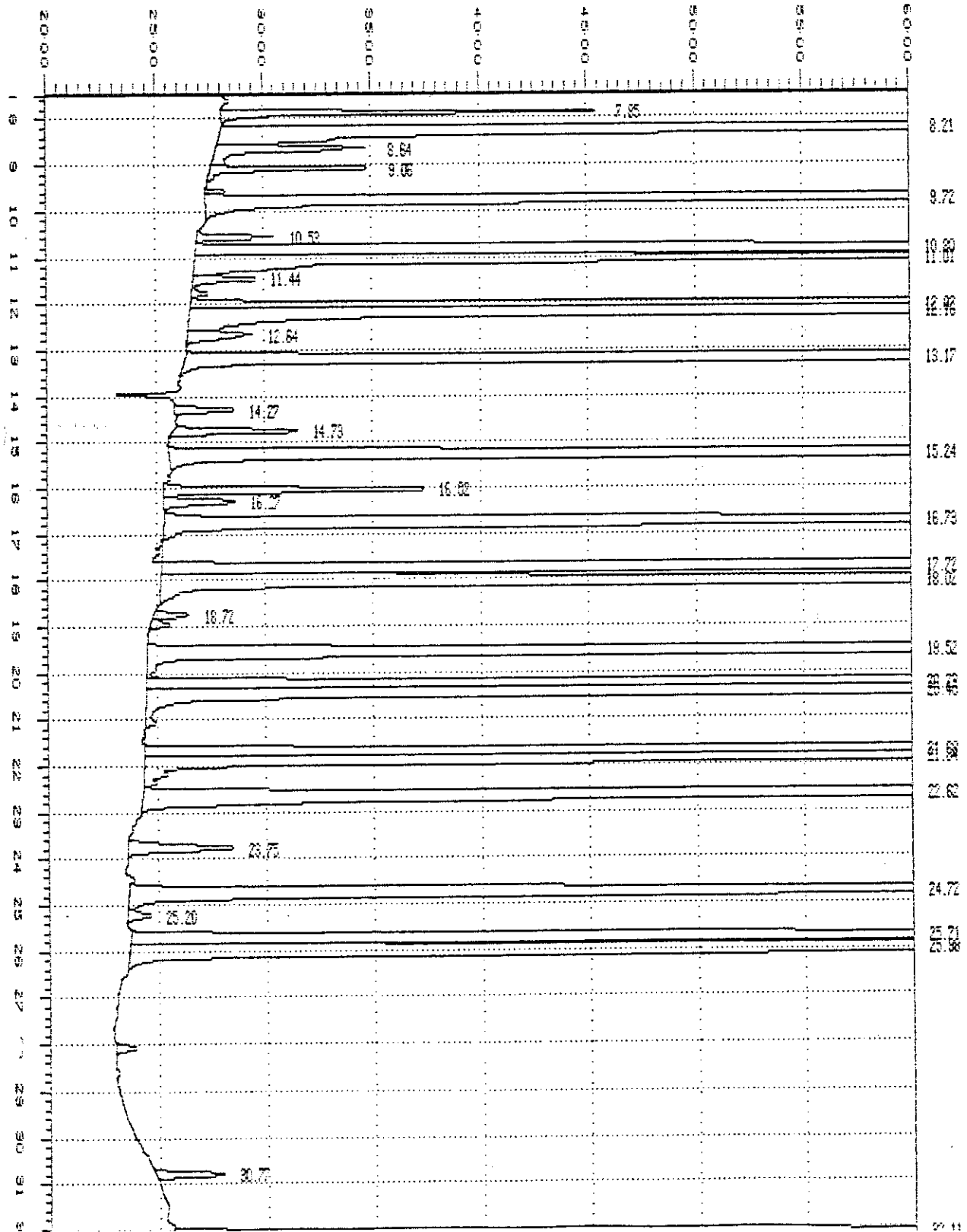
Method..... WOCP1
Run sequence..... W0801
Calibration..... W0801
External standard calibration using area
Calibration last modified on 3-AUG-1992 at 15:17

Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[OCP87_4] 71 W91AUG92,38,1

INDIVIDUAL MIX AB 0.05UG/ML 5446. Amount : 1.000.
W_5890, Dual ECD, Column: RTx-35,0.53mm, 0.53um, 30m
Acquired on 2-AUG-1992 at 19:47
Reported on 8-AUG-1992 at 14:51
Box 1 (of 1)



Injection Report

Acquired on 2-AUG-1992 at 19:47

RMAL Chromatography System on DENCR3

Analyst Name : MGOETZ
Lims Id : 2uL injected
Comment : W-5880,DUAL ECD Rtx-35,0.53,1.00um, Rtx-5, 0.53,1.5um
Method Title :
Sample Name : INDIVIDUAL MIX AB 0.05UG/ML 5446
Sample Id : CHK2 OCPA
Sample Type : Standard Amount=1.000000
Bottle No : 33

PEAK INFORMATION

Peak	GRP	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
7		9.124	9.138	429662	1734026	0.05378	Tetrachloro-m-xylene (TCX)	3.7
10		10.036	10.049	659687	2424370	0.05542	alpha-BHC	3.5
12		10.667	10.680	250968	1099943	0.05214	beta-BHC	4.0
13		10.889	10.902	579612	2316324	0.05420	gamma-BHC	3.7
15		11.502	11.520	476123	2072918	0.05299	delta-BHC	4.3
20		13.147	13.164	454230	2039954	0.05393	Heptachlor	4.3
21		14.404	14.422	431455	2027049	0.05291	Aldrin	4.5
23		15.889	15.907	380010	1936725	0.05224	Heptachlor Epoxide	4.8
25		17.391	17.413	338223	1827192	0.05204	Endosulfan I	5.1
26		18.267	18.289	322363	1739508	0.05319	4,4'-DDE	5.3
27		18.493	18.516	346262	1925119	0.05259	Dieldrin	5.1
29		19.467	19.489	313822	1740594	0.05246	Endrin	5.3
30		19.853	19.876	291865	1673212	0.05249	Endosulfan II	5.6
31		20.129	20.156	232335	1338630	0.05377	4,4'-DDD	5.6
32		20.684	20.711	220257	1423163	0.05435	Endrin Aldehyde	5.9
C1			21.880	298906	3039786	0.10449	4,4'-DDT/Endosulfan Sulfate	
34		21.858	21.880	298906	3039786	0.10449	- C1	10.1
36		24.004	24.031	297380	1819463	0.05283	Endrin Ketone	5.9
37		24.591	24.618	137841	885014	0.05067	Methoxychlor	5.9
39		26.222	26.249	203560	1297196	0.05161	Dibutylchlorendate (DBC)	6.1
42		32.782	32.813	223485	1548586	0.05318	Decachlorobiphenyl (DCB)	6.7

Totals			
Unknowns	96128	552772	N/A
Quantified	6888046	35968772	1.11131
Grand Total	6984174	36521544	1.11131

MISSING PEAKS

No missing peaks.

PEAK GROUP INFORMATION

No peak group information.

ANALYSIS SUMMARY

Method..... WOCP1
Run sequence..... W0801
Calibration..... W0801
External standard calibration using area
Calibration last modified on 3-AUG-1992 at 15:17

Uncalibrated peaks use user factor (0.0000)

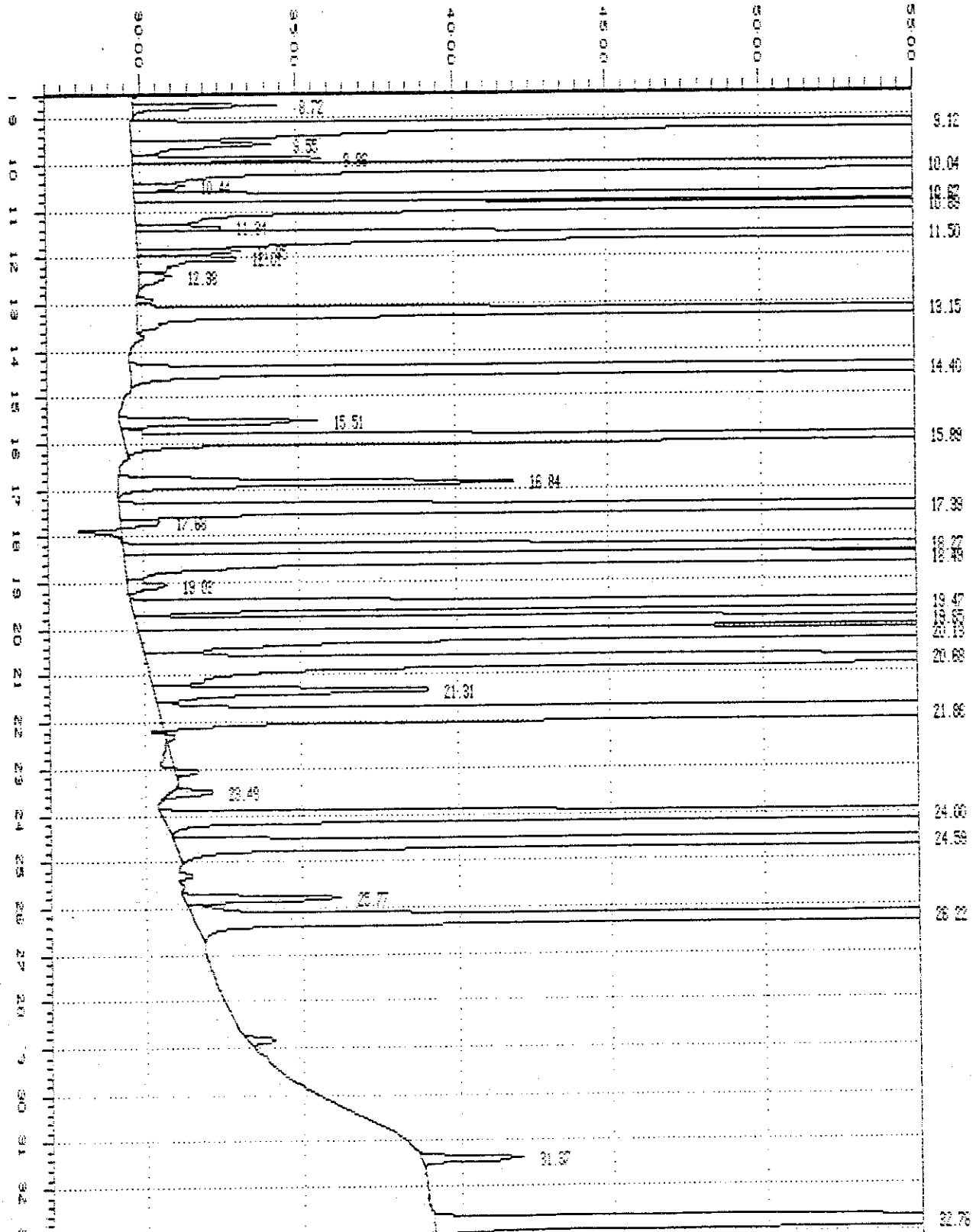
RMAL Chromatography System on DENCR3

000560

COCP97_43 72 W01AUG92,98,1

INDIVIDUAL MIX AB 0.05UG/ML 5446. Amount : 1.000.

Acquired on 2-AUG-1992 at 19:47
Reported on 8-AUG-1992 at 14:52
Box 1 (of 1)



QUALITY ASSURANCE PROJECT PLAN

FOR

CHEMICAL WASTE MANAGEMENT, INC.
Vickery, Ohio

ADDENDUM TO THE GROUND WATER MONITORING PLAN

MAY 29, 1992

VOLUME 4

PREPARED BY:

TEXAS WORLD OPERATIONS, INC.
Houston, Texas

000562

GC SEMIVOA

METHOD/TEST 8150

INSTRUMENT N

INITIAL CALIBRATION DATE 08/02/92

RECEIVED
NOV 30 1992
QUALITY ASSURANCE SECTION
ENVIRONMENTAL SCIENCES DIV.

Wed Aug 5 14:22:53 1992 Page 1

Reduced by: MB Date: 8/5/92
Reviewed by: [illegible] Date: 9/11/92

Initial Calibration Report

000563

Project: HRB08_1, Channel: 63, Analysis: N02AUG92, Node: DENCR3
Analyst: LLOR, Calibration File: N0802, MCRPT Method: HRBA

Calibration curve type: Linear NOT forced through zero

Sample	Level ID	Description
3	L5	HERB CSA 20% T=ST #6348
4	L4	HERB CSA 10% T=ST #6348
5	L3	HERB CSA 5% T=ST #6348
6	L2	HERB CSA 4% T=ST #6348
7	L1	HERB CSA 2% T=ST #6348

%RSD Measured	%RSD Maximum	Compound
3.8	20.0	Dalapon
5.8	20.0	DCAA
4.4	20.0	Dicamba
6.8	20.0	MCPP
3.1	20.0	MCPA
6.1	20.0	Dichlorprop
5.1	20.0	2,4-D
3.7	20.0	Silvex
3.6	20.0	2,4,5-t
4.0	20.0	2,4-DB
4.3	20.0	Dinoseb

All RSD's ≤ 7%

	Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dalapon	0.9514	0.5154	0.2529	0.2048	0.09819			
	1.000	0.5000	0.2500	0.2000	0.1000			
	-4.9	3.1	1.2	2.4	-1.8			
DCAA	0.4631	0.2596	0.1284	0.1038	0.04848			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-7.4	3.9	2.7	3.8	-3.0			
Dicamba	0.09431	0.05185	0.02540	0.02048	0.00980			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-5.7	3.7	1.6	2.4	-2.0			
MCPP	97.98	53.31	22.81	20.71	10.06			
	100.0	50.00	25.00	20.00	10.00			
	-2.0	6.6	-8.8	3.5	0.6			
MCPA	96.02	51.13	25.39	20.33	9.849			
	100.0	50.00	25.00	20.00	10.00			
	-4.0	2.3	1.6	1.7	-1.5			
Dichlorprop	0.2304	0.1304	0.06445	0.05170	0.02424			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-7.8	4.3	3.1	3.4	-3.0			
2,4-D	0.4674	0.2575	0.1296	0.1025	0.04867			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-6.5	3.0	3.7	2.5	-2.7			
Silvex	0.09539	0.05205	0.02511	0.02024	0.00989			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-4.6	4.1	0.4	1.2	-1.1			
2,4,5-t	0.09542	0.05184	0.02531	0.02017	0.00988			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-4.6	3.7	1.3	0.8	-1.2			
2,4-DB	0.9566	0.5204	0.2464	0.2060	0.09869			
	1.000	0.5000	0.2500	0.2000	0.1000			
	-4.3	4.1	-1.4	3.0	-1.3			

8/5/92

000565

	Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dinoseb								
	0.2359	0.1296	0.06406	0.05066	0.02454			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-5.6	3.6	2.5	1.3	-1.8			

MW 8/5/92

Wed Aug 5 14:56:34 1992 Page 1

000566

Reduced by: [illegible] Date: 8/5/92
Reviewed by: [illegible] Date: 8/11/92

Initial Calibration Report

Project: HRB08_1, Channel: 64, Analysis: N02AUG92, Node: DENCR3
Analyst: LLOR, Calibration File: N0802, MCRPT Method: HRBA

Calibration curve type: Linear NOT forced through zero

Sample	Level ID	Description
3	L5	HERB CSA 20% T=ST #6348
4	L4	HERB CSA 10% T=ST #6348
5	L3	HERB CSA 5% T=ST #6348
6	L2	HERB CSA 4% T=ST #6348
7	L1	HERB CSA 2% T=ST #6348

%RSD Measured	%RSD Maximum	Compound
7.0	20.0	Dalapon
10.3	20.0	DCAA
7.5	20.0	Dicamba
8.7	20.0	MCPP
4.6	20.0	MCPA
13.4	20.0	Dichlorprop
9.2	20.0	2,4-D
7.2	20.0	Silvex
6.9	20.0	2,4,5-T
8.8	20.0	Dinoseb
8.1	20.0	2,4-DB

All RPD's ≤ 13.5%

000567

	Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dalapon	0.9179	0.5092	0.2680	0.2064	0.09598			
	1.000	0.5000	0.2500	0.2000	0.1000			
	-8.2	1.8	7.2	3.2	-4.0			
DCAA	0.4406	0.2553	0.1364	0.1071	0.04679			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-11.9	2.1	9.1	7.1	-6.4			
Dicamba	0.09085	0.05151	0.02680	0.02059	0.009594			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-9.2	3.0	7.2	3.0	-4.1			
MCPP	91.23	49.69	27.08	21.36	9.428			
	100.0	50.00	25.00	20.00	10.00			
	-8.8	-0.6	8.3	6.8	-5.7			
MCPA	94.15	51.58	25.57	20.55	9.767			
	100.0	50.00	25.00	20.00	10.00			
	-5.8	3.2	2.3	2.7	-2.3			
Dichlorprop	0.2147	0.1249	0.07043	0.05512	0.02281			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-14.1	0.0	12.7	10.2	-8.8			
2,4-D	0.4481	0.2548	0.1376	0.1036	0.04742			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-10.4	1.9	10.1	3.6	-5.2			
Silvex	0.09166	0.05088	0.02684	0.02067	0.009586			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-8.3	1.8	7.3	3.4	-4.1			
2,4,5-T	0.09200	0.05093	0.02683	0.02052	0.009619			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-8.0	1.9	7.3	2.6	-3.8			
Dinoseb	0.2260	0.1261	0.06863	0.05206	0.02370			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-9.6	0.9	9.8	4.1	-5.2			

MH 8/5/92

	Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
2,4-DB								
	0.9048	0.5107	0.2654	0.2126	0.09490			
	1.000	0.5000	0.2500	0.2000	0.1000			
	-9.5	2.1	6.2	6.3	-5.1			

Injection Report

Acquired on 3-AUG-1992 at 00:22

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 20% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.227	4.231	535241	1514507	0.91793	Dalapon	2.7
11	11.547	11.551	346383	951212	0.44056	DCAA	2.9
13	11.987	11.991	256980	714886	0.09085	Dicamba	2.9
14	12.289	12.262	210851	647619	91.23177	MCPP	3.2
15	13.000	12.964	247292	933002	94.15285	MCPA	3.7
18	14.000	14.004	196400	704717	0.21473	Dichlorprop	3.7
19	14.498	14.498	202275	663242		D-BOB	3.2
20	15.093	15.102	332123	1553416	0.44807	2,4-D	4.0
27	18.520	18.530	307911	1470235	0.09166	Silvex	4.8
30	20.396	20.409	267381	1477950	0.09200	2,4,5-T	5.3
32	22.618	22.627	302919	1840572	0.22598	Dinoseb	5.9
33	23.040	23.053	250520	1589026	0.90476	2,4-DB	6.1

Totals			
Unknowns	200296	607815	N/A
Quantified	3456276	14060385	188.81114
Grand Total	3656572	14668200	188.81114

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

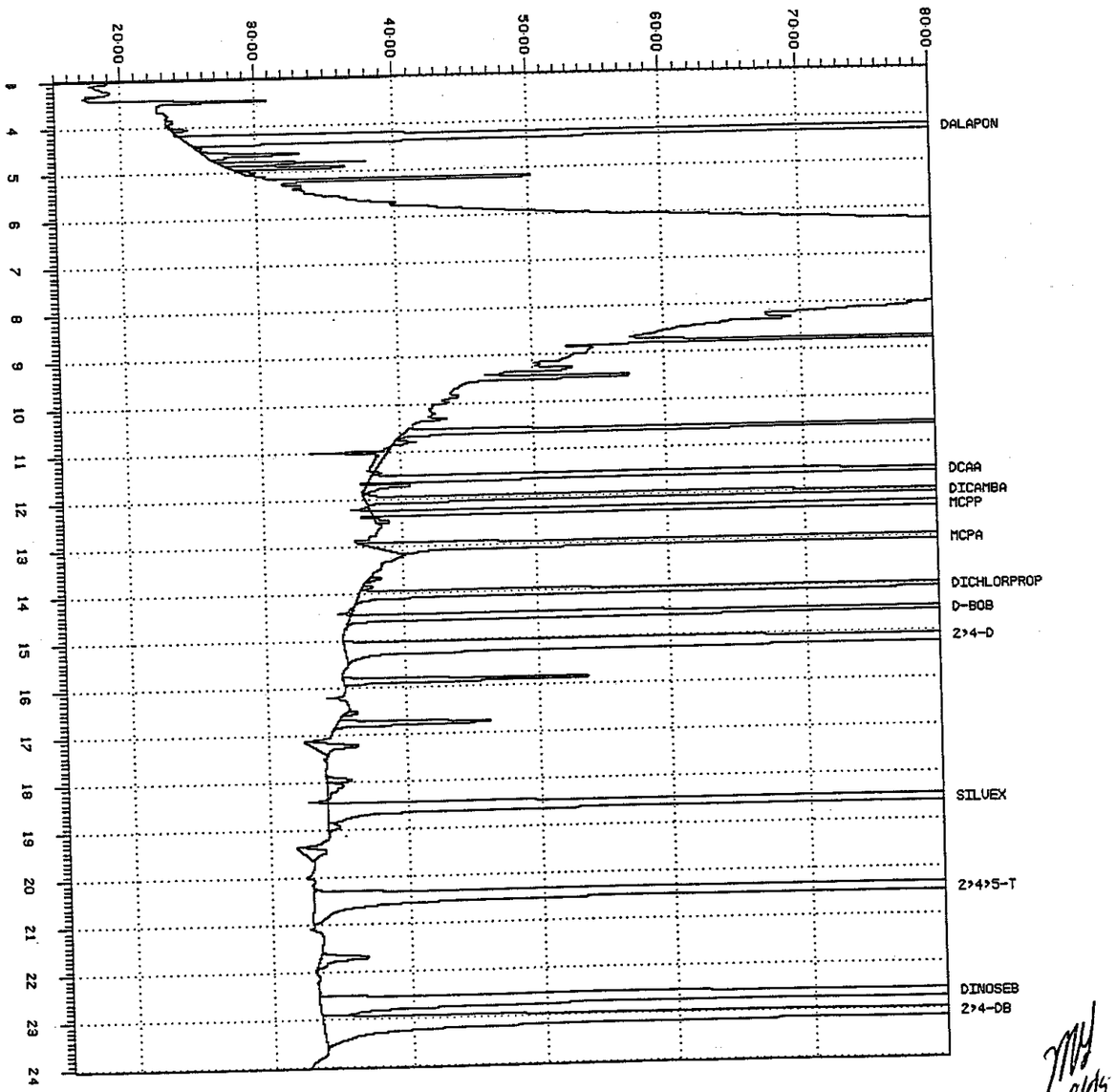
MY 5/8/92

RMAL Chromatography System on DENCR3

000571

[HRB08_1] 64 N02AUG92,3,1

HERB CSA 20% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 00:22
Reported on 5-AUG-1992 at 14:58
Box 1 (of 1)



MH 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 00:22

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 20% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	3.573	3.560	299793	778906	0.95137	Dalapon	2.1
11	9.587	9.573	229564	474696	0.46312	DCAA	2.1
12	9.809	9.796	155318	324275	0.09431	Dicamba	2.1
13	10.204	10.169	137774	384576	97.98432	MCPP	2.7
14	10.484	10.440	168796	531759	96.02448	MCPA	3.2
16	11.244	11.231	131092	345530	0.23042	Dichlorprop	2.7
17	11.676	11.667	224332	698068	0.46738	2,4-D	2.9
20	12.556	12.538	116853	320715		D-BOB	2.7
25	14.404	14.396	198258	716762	0.09539	Silvex	3.5
26	15.253	15.249	169909	700208	0.09542	2,4,5-t	3.7
28	17.262	17.258	160469	738639	0.95657	2,4-DB	4.8
29	17.400	17.391	207930	1026563	0.23590	Dinoseb	4.5

Totals			
Unknowns	152597	519041	N/A
Quantified	2200088	7040698	197.59866
Grand Total	2352685	7559739	197.59866

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

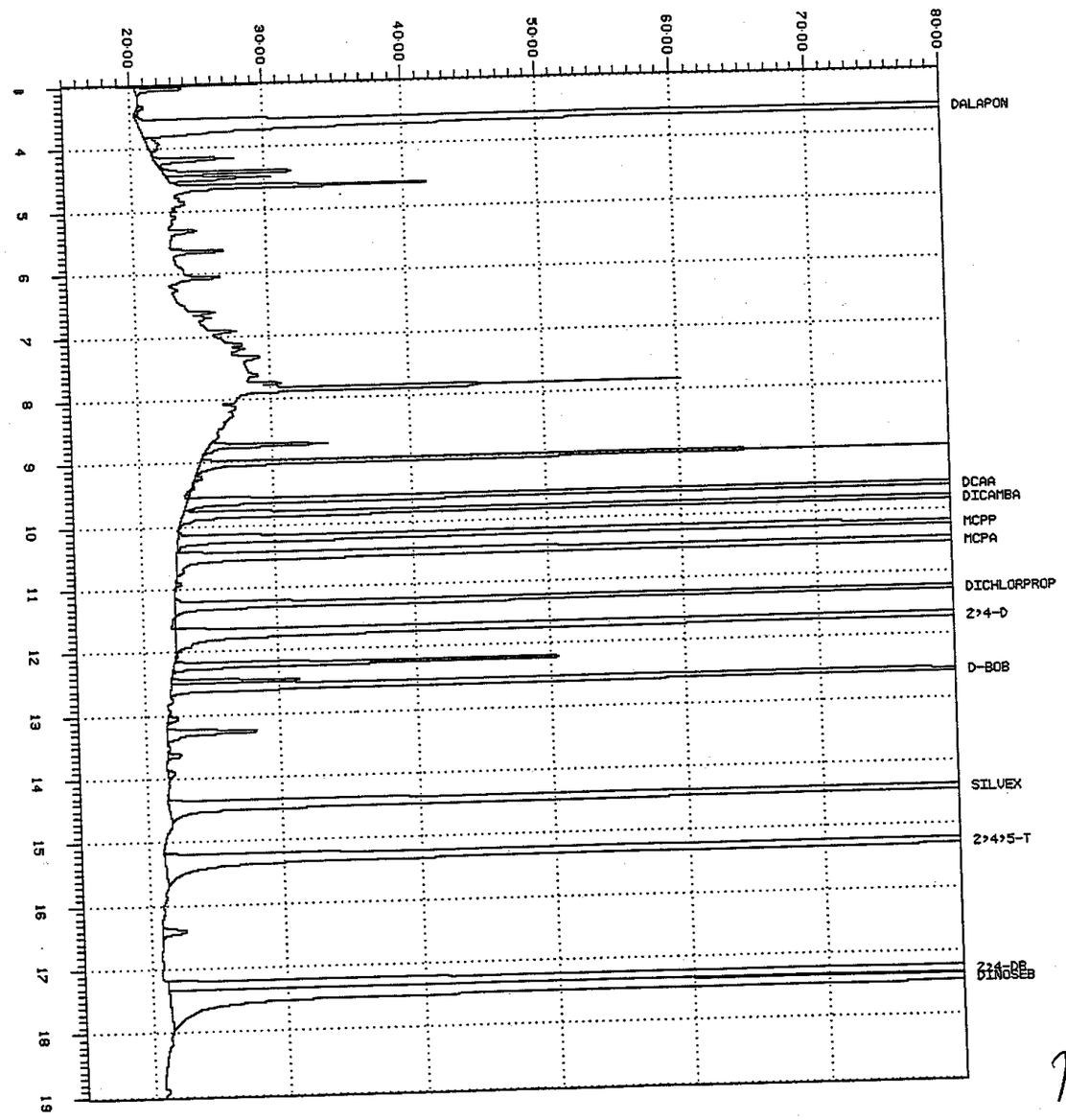
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000574

[HRB08_1] 63 N02AUG92,3,1

HERB CSA 20% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 00:22
Reported on 5-AUG-1992 at 14:24
Box 1 (of 1)



[HRB08_1] 63 N02AUG92,4,1
Reported on 5-AUG-1992 at 14:23

000575

Injection Report

Acquired on 3-AUG-1992 at 01:00

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 10% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 4

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.569	3.560	162505	433775	0.51538	Dalapon	2.1
9	9.587	9.573	128884	276301	0.25964	DCAA	2.1
10	9.804	9.796	85523	181403	0.05185	Dicamba	2.1
11	10.187	10.169	90815	221935	53.31244	MCPP	2.4
12	10.467	10.440	108914	299745	51.13145	MCPA	2.7
13	11.240	11.231	72932	201375	0.13043	Dichlorprop	2.7
14	11.676	11.667	125820	397117	0.25755	2,4-D	2.9
18	12.551	12.538	116405	316066		D-BOB	2.7
21	14.404	14.396	107657	391264	0.05205	Silvex	3.5
22	15.253	15.249	90364	381413	0.05184	2,4,5-t	4.0
24	17.262	17.258	86445	404886	0.52043	2,4-DB	4.8
25	17.400	17.391	113794	578155	0.12955	Dinoseb	4.5

Totals			
Unknowns	90007	297032	N/A
Quantified	1290058	4083434	106.41262
Grand Total	1380065	4380466	106.41262

MISSING PEAKS

No missing peaks.

MH 9/15/

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

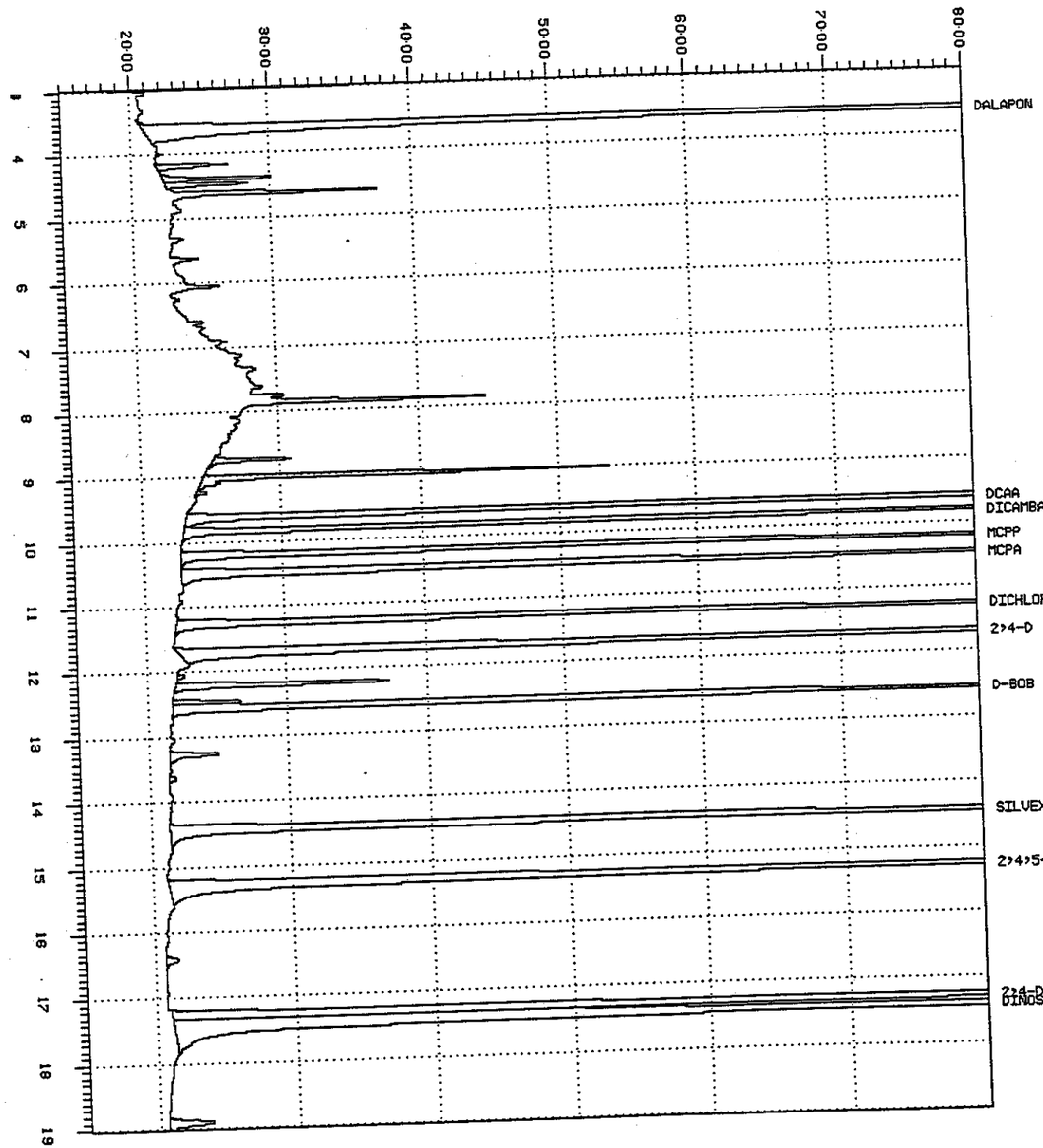
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000577

[HRB08_1] 63 N02AUG92,4,1

HERB CSA 10% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 01:00
Reported on 5-AUG-1992 at 14:25
Box 1 (of 1)



Injection Report

Acquired on 3-AUG-1992 at 01:00

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 10% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 4

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.218	4.231	301576	876519	0.50922	Dalapon	2.7
12	11.538	11.551	207343	582012	0.25532	DCAA	2.9
14	11.978	11.991	150438	417733	0.05151	Dicamba	2.9
15	12.258	12.262	127571	329030	49.69041	MCPP	2.9
16	12.970	12.964	156239	517452	51.58001	MCPA	3.5
18	13.991	14.004	118607	420472	0.12494	Dichlorprop	3.7
19	14.489	14.498	200847	661290		D-BOB	3.5
20	15.084	15.102	195485	929318	0.25475	2,4-D	4.0
25	18.511	18.530	179183	845586	0.05088	Silvex	4.8
26	20.387	20.409	153090	844955	0.05093	2,4,5-T	5.3
28	22.613	22.627	180655	1080334	0.12609	Dinoseb	5.9
29	23.036	23.053	145408	937045	0.51072	2,4-DB	5.9

Totals			
Unknowns	157131	623810	N/A
Quantified	2116441	8441745	103.20480
Grand Total	2273572	9065555	103.20480

MISSING PEAKS

No missing peaks.

MH 4/5/6

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

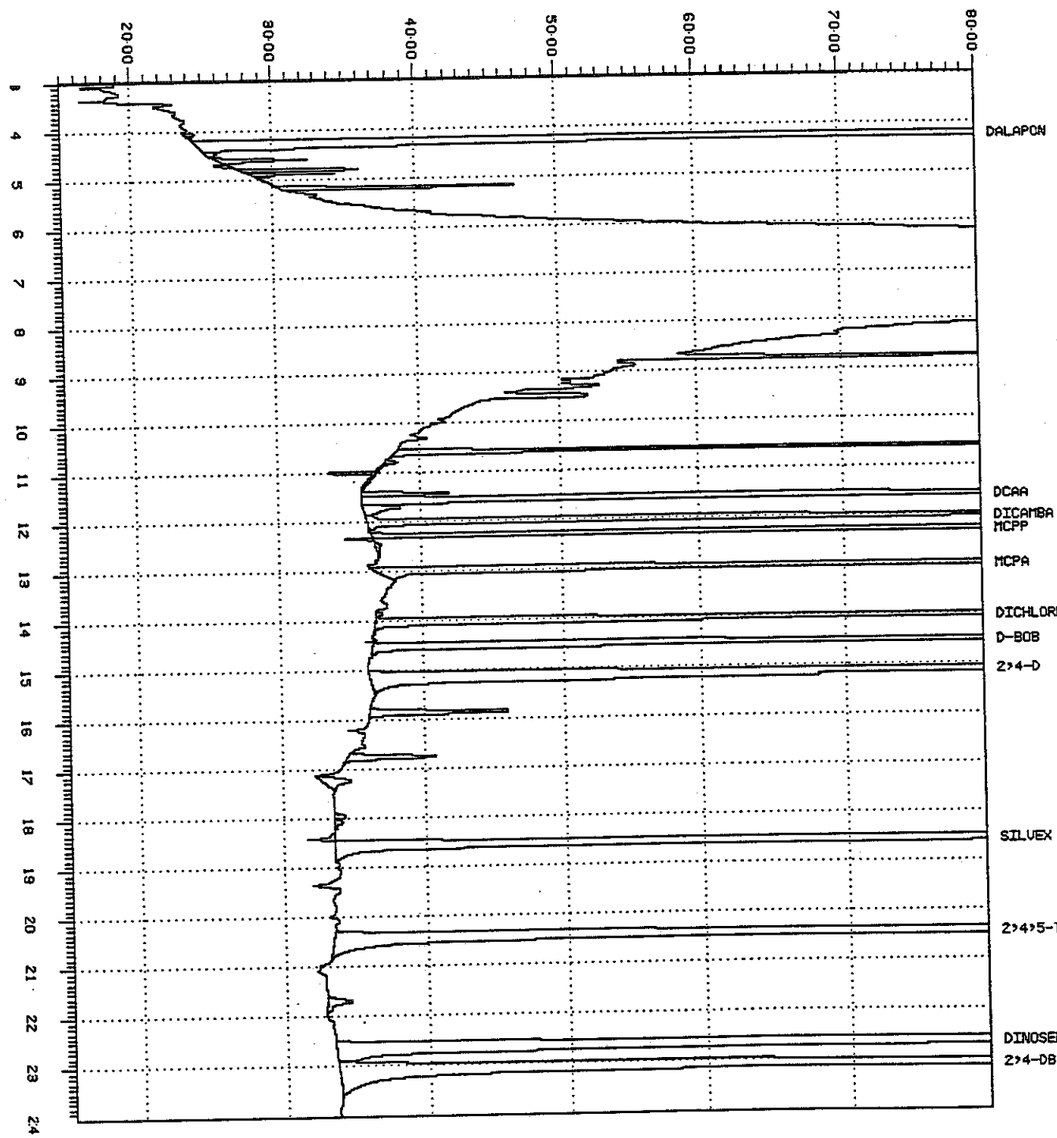
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000580

[HRB08_1] 64 N02AUG92,4,1

HERB CSA 10% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 01:00
Reported on 5-AUG-1992 at 14:58
Box 1 (of 1)



MJ 8/5/K

Injection Report

Acquired on 3-AUG-1992 at 01:37

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 5% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 5

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.560	3.560	93301	244033	0.25295	Dalapon	2.1
9	9.573	9.573	71914	160133	0.12841	DCAA	2.1
10	9.796	9.796	46415	99917	0.02540	Dicamba	2.1
11	10.169	10.169	50440	120205	22.80962	MCPP	2.4
12	10.440	10.440	67079	179350	25.38788	MCPA	2.7
13	11.231	11.231	41671	114822	0.06445	Dichlorprop	2.9
14	11.667	11.667	69016	230388	0.12963	2,4-D	3.2
16	12.538	12.538	119101	331270		D-BOB	2.9
18	14.396	14.396	55008	204731	0.02511	Silvex	3.5
19	15.249	15.249	46677	202857	0.02531	2,4,5-t	4.0
20	17.258	17.258	44314	211634	0.24641	2,4-DB	4.8
21	17.391	17.391	64619	326133	0.06406	Dinoseb	4.5

Totals			
Unknowns	55918	234022	N/A
Quantified	769555	2425473	49.15923
Grand Total	825472	2659494	49.15923

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

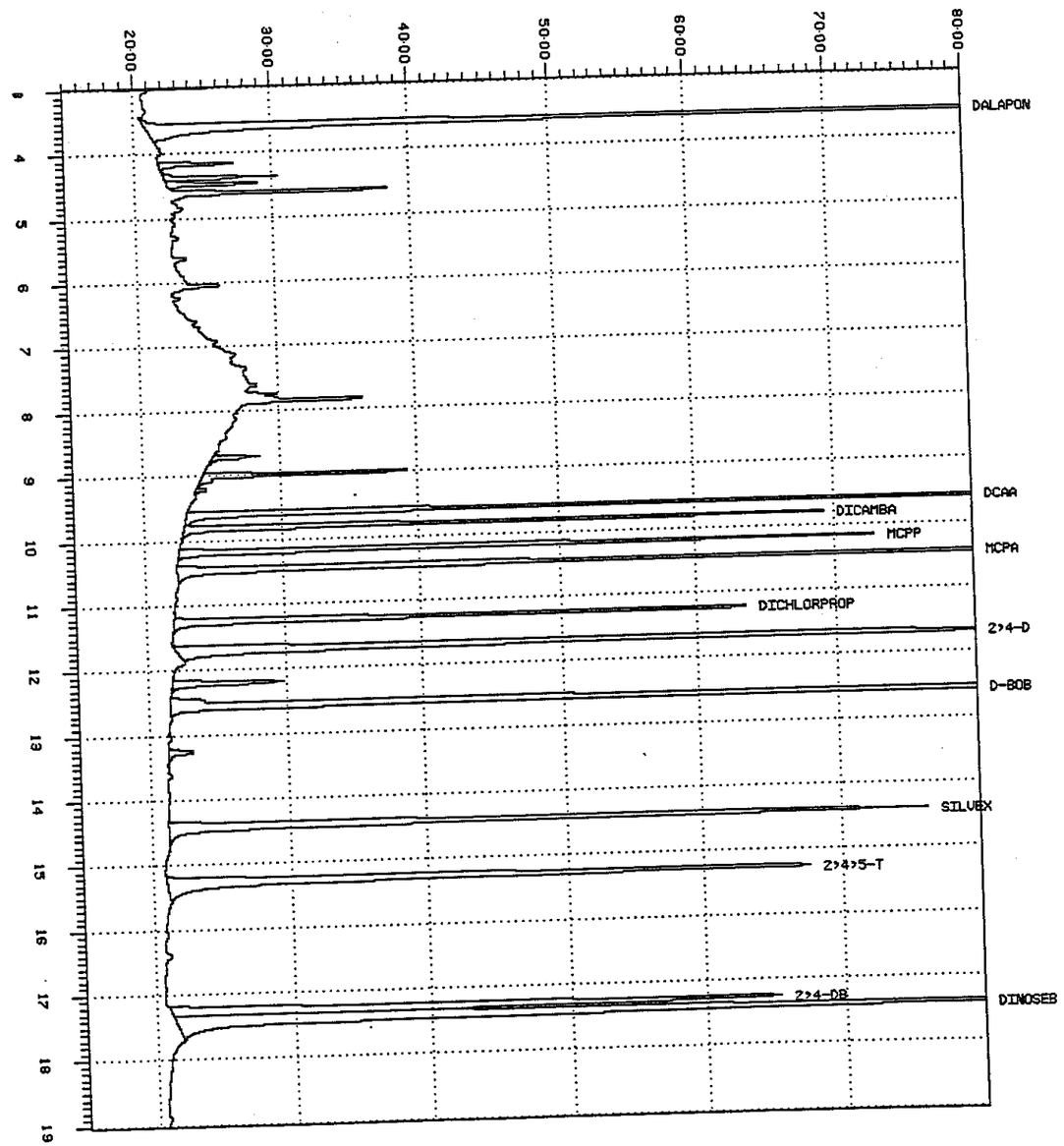
MH 8/15/

RMAL Chromatography System on DENCR3

000583

[HRB08_1] 63 N02AUG92,5,1

HERB CSA 5% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 01:37
Reported on 5-AUG-1992 at 14:25
Box 1 (of 1)



MB 8/5/92

[HRB08_1] 64 N02AUG92,5,1
Reported on 5-AUG-1992 at 14:58

000584

Injection Report

Acquired on 3-AUG-1992 at 01:37

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 5% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 5

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
3	4.231	4.231	182713	501031	0.26798	Dalapon	2.4
11	11.551	11.551	123826	345668	0.13638	DCAA	2.9
13	11.991	11.991	86080	231663	0.02680	Dicamba	2.9
14	12.262	12.262	69973	156189	27.08140	MCPP	2.4
15	12.964	12.964	92486	264406	25.56790	MCPA	3.2
16	14.004	14.004	70482	248384	0.07043	Dichlorprop	3.5
17	14.498	14.498	205037	659243		D-BOB	3.5
18	15.102	15.102	117159	552050	0.13756	2,4-D	4.0
21	18.530	18.530	99607	478362	0.02684	Silvex	4.8
22	20.409	20.409	83607	474524	0.02683	2,4,5-T	5.3
24	22.627	22.627	107757	644076	0.06863	Dinoseb	5.6
25	23.053	23.053	80523	532406	0.26541	2,4-DB	5.9

Totals			
Unknowns	99334	436235	N/A
Quantified	1319249	5088002	53.67616
Grand Total	1418583	5524237	53.67616

MISSING PEAKS

No missing peaks.

MH 8/15

[HRB08_1] 64 N02AUG92,5,1
Reported on 5-AUG-1992 at 14:58

000585

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

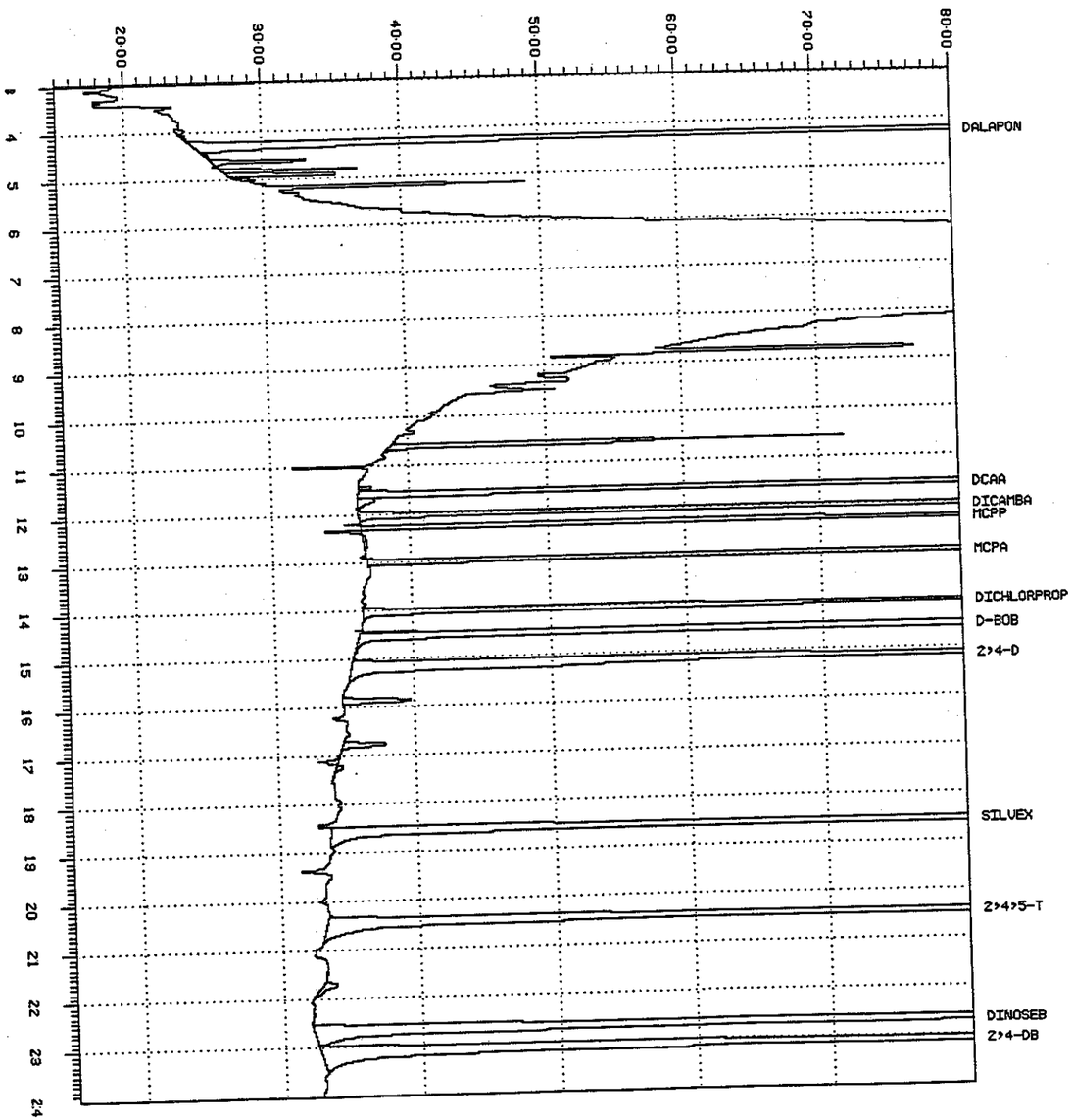
Uncalibrated peaks use user factor (0.0000)

MW 8/5/

RMAL Chromatography System on DENCR3 000586

[HRB08_1] 64 N02AUG92,5,1

HERB CSA 5% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 01:37
Reported on 5-AUG-1992 at 14:58
Box 1 (of 1)



Injection Report

Acquired on 3-AUG-1992 at 02:14

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 4% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 6

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.573	3.560	74378	200012	0.20483	Dalapon	2.4
10	9.591	9.573	58969	132310	0.10383	DCAA	2.1
11	9.809	9.796	36729	80967	0.02048	Dicamba	2.1
12	10.178	10.169	46472	109501	20.70844	MCPP	2.4
13	10.453	10.440	55609	148862	20.33470	MCPA	2.7
15	11.249	11.231	33617	93689	0.05170	Dichlorprop	2.7
16	11.680	11.667	55913	185905	0.10247	2,4-D	3.2
19	12.551	12.538	115478	322549		D-BOB	2.7
21	14.413	14.396	43601	163229	0.02024	Silvex	3.7
22	15.267	15.249	36049	160336	0.02017	2,4,5-t	4.0
23	17.276	17.258	36283	175529	0.20601	2,4-DB	4.8
24	17.409	17.391	52089	261809	0.05066	Dinoseb	4.5

Totals			
Unknowns	156284	1206109	N/A
Quantified	645186	2034698	41.82355
Grand Total	801470	3240808	41.82355

MISSING PEAKS

No missing peaks.

MB 8/5/92

000588

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

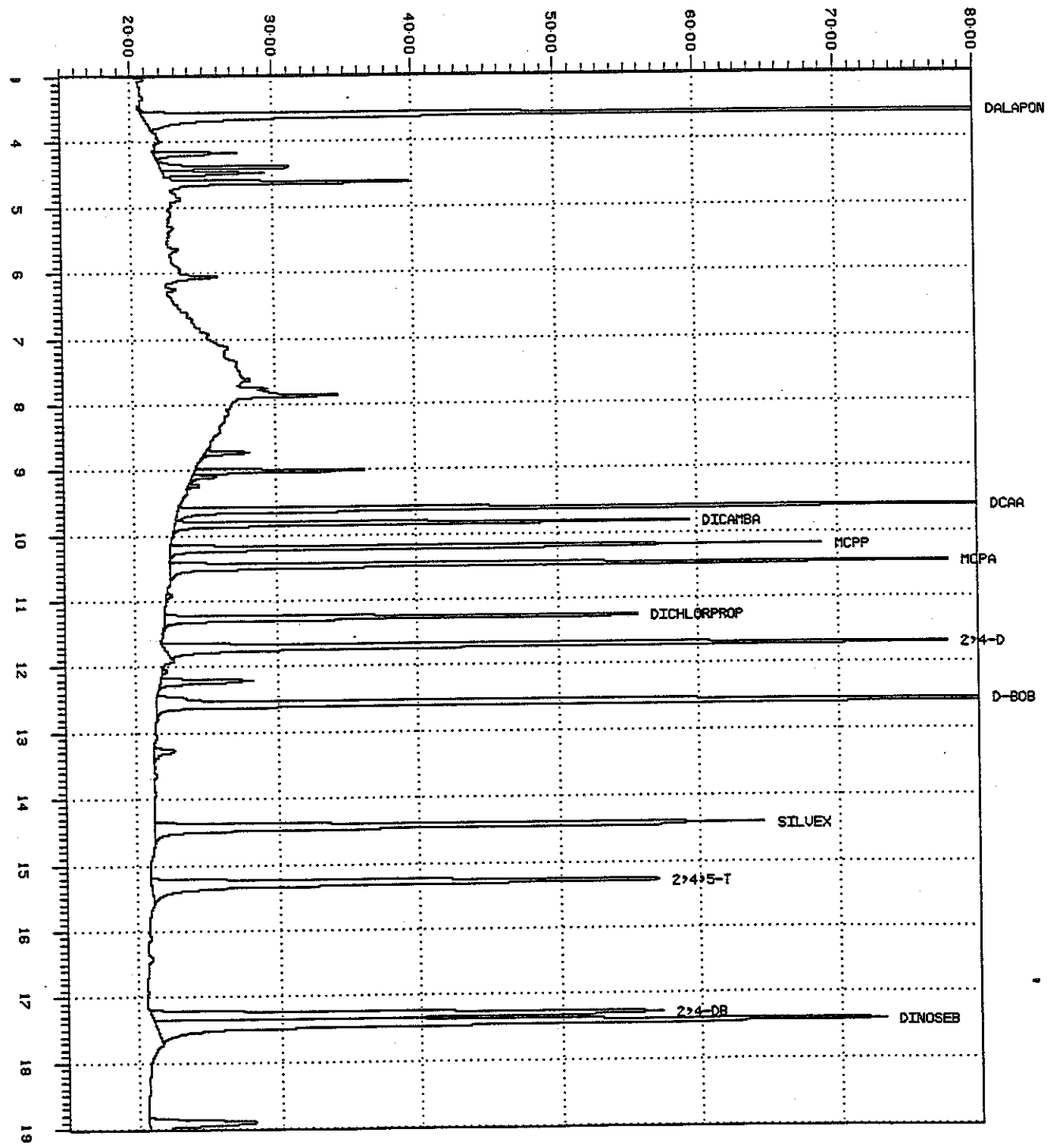
MOY
8/5/92

RMAL Chromatography System on DENCR3

000589

[HRB08_1] 63 N02AUG92,6,1

IERB CSA 4% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 02:14
Reported on 5-AUG-1992 at 14:26
Box 1 (of 1)



MH 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 02:14

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 4% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 6

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.222	4.231	146573	411782	0.20638	Dalapon	2.7
11	11.542	11.551	103746	292077	0.10707	DCAA	2.7
13	11.982	11.991	70648	187937	0.02059	Dicamba	2.7
14	12.249	12.262	55080	114332	21.35656	MCPP	2.4
15	12.951	12.964	76886	219050	20.54859	MCPA	3.2
17	13.996	14.004	58673	203377	0.05512	Dichlorprop	3.7
18	14.489	14.498	200949	668901		D-BOB	3.5
19	15.093	15.102	96979	450027	0.10359	2,4-D	4.0
22	18.515	18.530	82512	390579	0.02067	Silvex	4.5
23	20.396	20.409	68795	383772	0.02052	2,4,5-T	5.1
25	22.618	22.627	88855	526883	0.05206	Dinoseb	5.6
26	23.044	23.053	66652	452511	0.21263	2,4-DB	6.1

Totals			
Unknowns	313426	2525470	N/A
Quantified	1116347	4301228	42.70380
Grand Total	1429773	6826698	42.70380

MISSING PEAKS

No missing peaks.

MB 8/5/92

[HRB08_1] 64 N02AUG92,6,1
Reported on 5-AUG-1992 at 14:58

000591

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

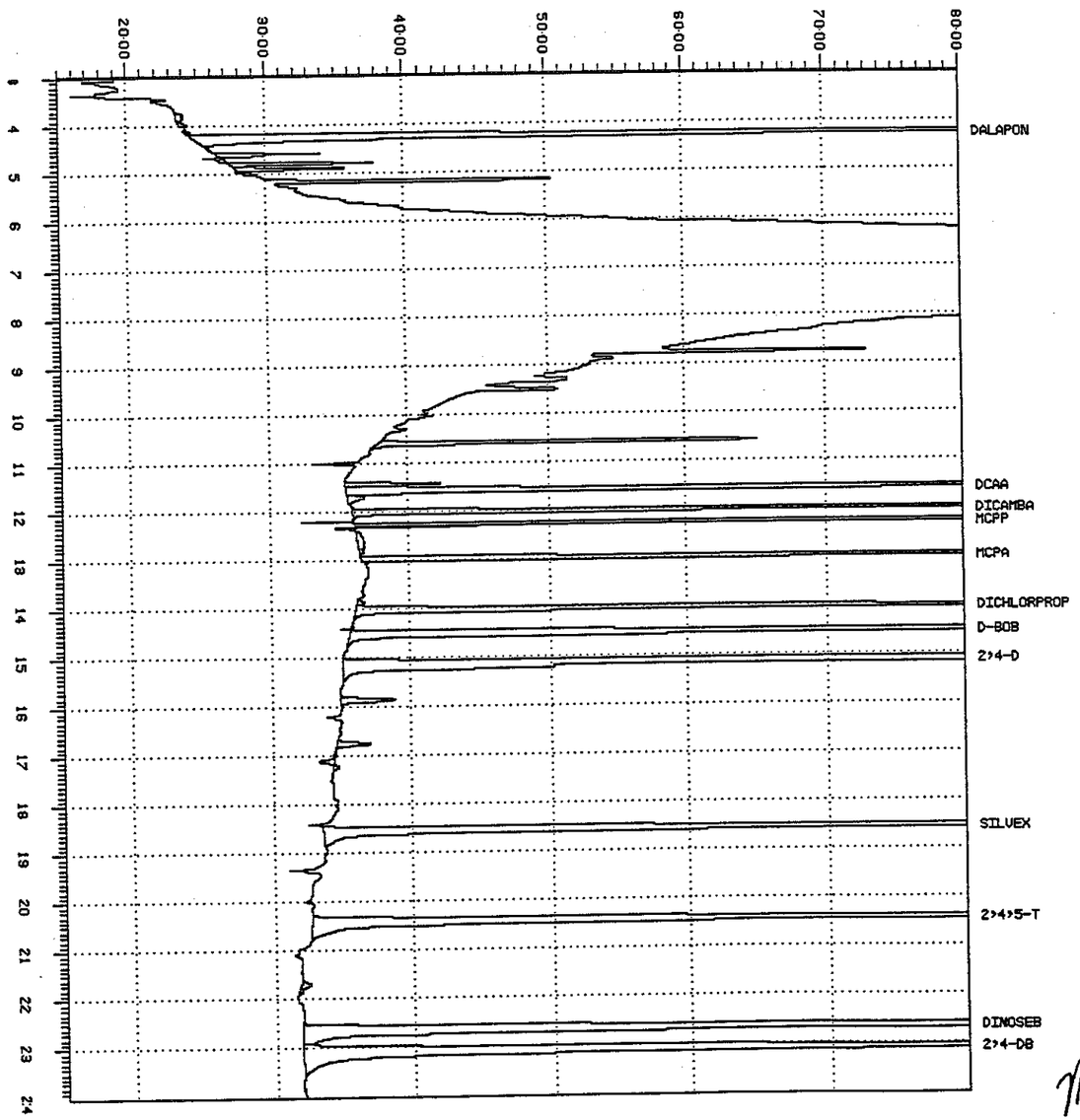
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000592

[HRB08_1] 64 N02AUG92,6,1

HERB CSA 4% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 02:14
Reported on 5-AUG-1992 at 14:59
Box 1 (of 1)



MH 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 02:51

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 2% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 7

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.578	3.560	41969	115431	0.09819	Dalapon	2.4
11	9.596	9.573	33572	78294	0.04848	DCAA	2.1
12	9.813	9.796	19868	45002	0.00980	Dicamba	2.4
13	10.182	10.169	29429	70534	10.06101	MCPP	2.4
14	10.453	10.440	33734	94374	9.84876	MCPA	2.7
15	11.253	11.231	18792	54106	0.02424	Dichlorprop	2.9
16	11.693	11.667	30930	108627	0.04867	2,4-D	3.2
18	12.556	12.538	116122	319096		D-BOB	2.9
20	14.418	14.396	22181	85455	0.00989	Silvex	3.7
21	15.276	15.249	18519	85040	0.00988	2,4,5-t	4.3
22	17.289	17.258	19148	93395	0.09869	2,4-DB	5.1
23	17.418	17.391	28918	151502	0.02454	Dinoseb	4.8

Totals			
Unknowns	64314	227246	N/A
Quantified	413181	1300856	20.28215
Grand Total	477495	1528102	20.28215

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

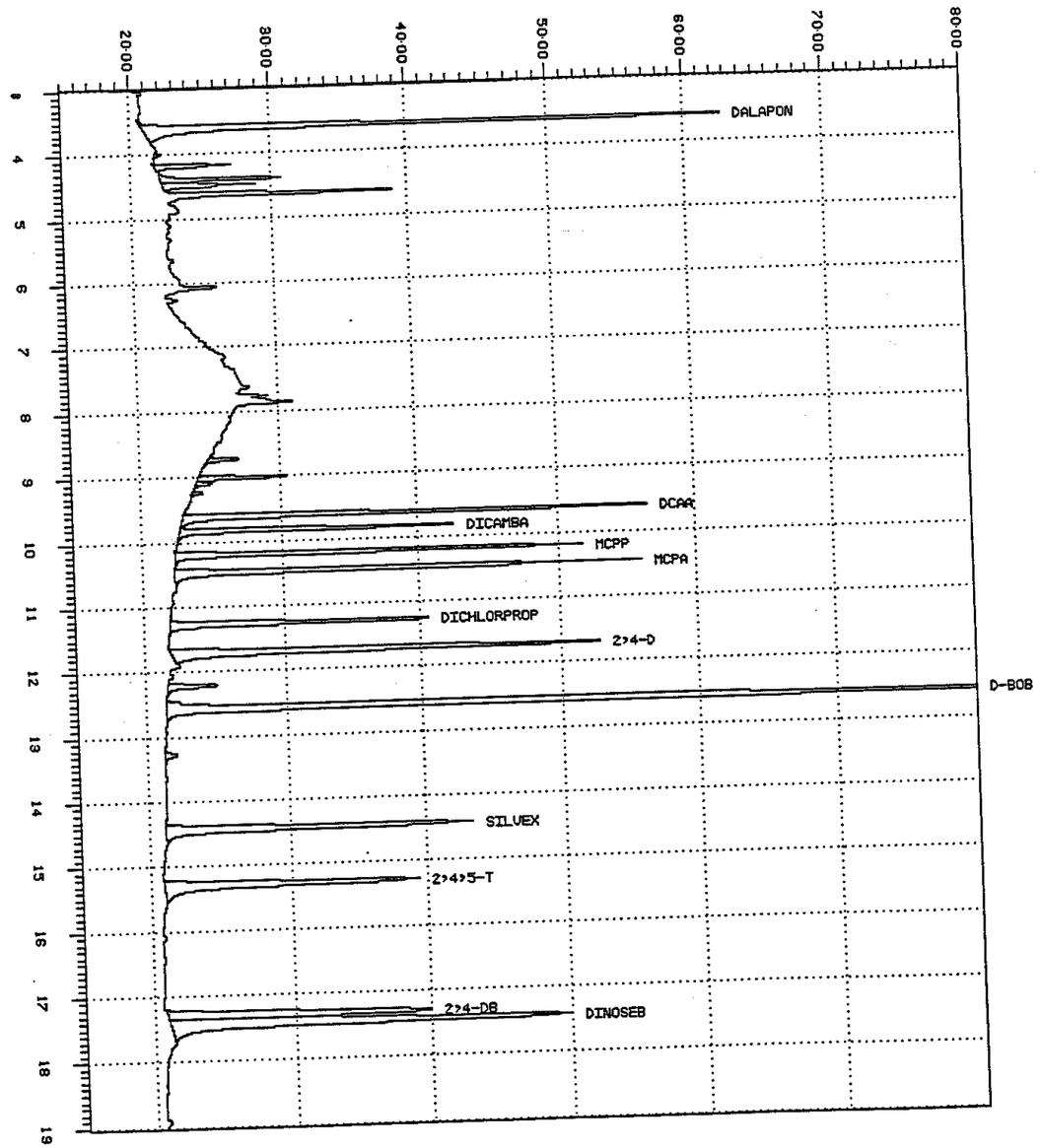
MH 8/5/

RMAL Chromatography System on DENCR3

[HRB08_1] 63 N02AUG92,7,1

000595

HERB CSA 2% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 02:51
Reported on 5-AUG-1992 at 14:26
Box 1 (of 1)



Injection Report

Acquired on 3-AUG-1992 at 02:51

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 2% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 7

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
3	4.240	4.231	87343	239165	0.09598	Dalapon	2.4
11	11.560	11.551	62252	171830	0.04679	DCAA	2.9
13	12.000	11.991	39496	104687	0.00959	Dicamba	2.9
14	12.262	12.262	26712	22394	9.42790	MCPP	2.1
15	12.964	12.964	43158	113533	9.76726	MCPA	2.9
16	14.015	14.004	34581	100840	0.02281	Dichlorprop	3.5
17	14.511	14.498	199652	670239		D-BOB	3.5
18	15.116	15.102	57760	268471	0.04742	2,4-D	4.0
21	18.536	18.530	46258	220404	0.00959	Silvex	4.5
22	20.422	20.409	37786	215345	0.00962	2,4,5-T	5.1
23	22.640	22.627	52243	310699	0.02370	Dinoseb	5.6
24	23.071	23.053	37834	257392	0.09490	2,4-DB	5.9

Totals			
Unknowns	90410	320811	N/A
Quantified	725076	2694999	19.55556
Grand Total	815487	3015810	19.55556

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

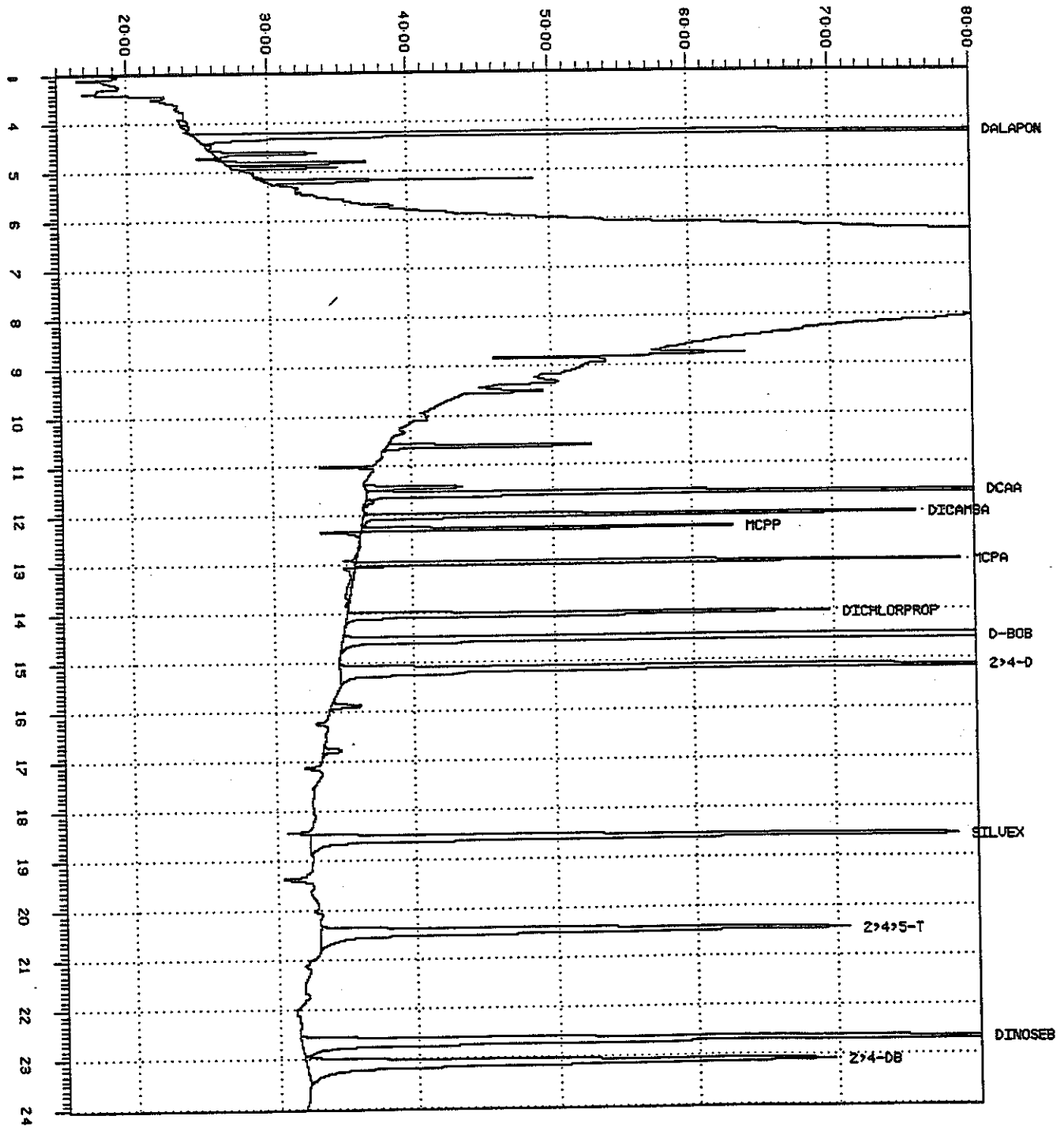
Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3 000593

[HRB08_1] 64 N02AUG92,7,1

HERB CSA 2% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 02:51
Reported on 5-AUG-1992 at 14:59
Box 1 (of 1)



000599

GC/MS VOA

METHOD/TEST 8150

INSTRUMENT N

INITIAL CALIBRATION DATE 08/02/92

Wed Aug 5 14:22:53 1992 Page 1

Reduced by: MB Date: 8/5/92 Initial Calibration Report
Reviewed by: RO Date: 8/11/92

Project: HRB08_1, Channel: 63, Analysis: N02AUG92, Node: DENCR3
Analyst: LLOR, Calibration File: N0802, MCRPT Method: HRBA

000600

Calibration curve type: Linear NOT forced through zero

Sample	Level ID	Description
3	L5	HERB CSA 20% T=ST #6348
4	L4	HERB CSA 10% T=ST #6348
5	L3	HERB CSA 5% T=ST #6348
6	L2	HERB CSA 4% T=ST #6348
7	L1	HERB CSA 2% T=ST #6348

%RSD Measured	%RSD Maximum	Compound
3.8	20.0	Dalapon
5.8	20.0	DCAA
4.4	20.0	Dicamba
6.8	20.0	MCPP
3.1	20.0	MCPA
6.1	20.0	Dichlorprop
5.1	20.0	2,4-D
3.7	20.0	Silvex
3.6	20.0	2,4,5-t
4.0	20.0	2,4-DB
4.3	20.0	Dinoseb

All RRFs ≤ 7%

000601

	Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dalapon								
	0.9514	0.5154	0.2529	0.2048	0.09819			
	1.000	0.5000	0.2500	0.2000	0.1000			
	-4.9	3.1	1.2	2.4	-1.8			
DCAA								
	0.4631	0.2596	0.1284	0.1038	0.04848			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-7.4	3.9	2.7	3.8	-3.0			
Dicamba								
	0.09431	0.05185	0.02540	0.02048	0.00980			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-5.7	3.7	1.6	2.4	-2.0			
MCPP								
	97.98	53.31	22.81	20.71	10.06			
	100.0	50.00	25.00	20.00	10.00			
	-2.0	6.6	-8.8	3.5	0.6			
MCPA								
	96.02	51.13	25.39	20.33	9.849			
	100.0	50.00	25.00	20.00	10.00			
	-4.0	2.3	1.6	1.7	-1.5			
Dichlorprop								
	0.2304	0.1304	0.06445	0.05170	0.02424			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-7.8	4.3	3.1	3.4	-3.0			
2,4-D								
	0.4674	0.2575	0.1296	0.1025	0.04867			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-6.5	3.0	3.7	2.5	-2.7			
Silvex								
	0.09539	0.05205	0.02511	0.02024	0.00989			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-4.6	4.1	0.4	1.2	-1.1			
2,4,5-t								
	0.09542	0.05184	0.02531	0.02017	0.00988			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-4.6	3.7	1.3	0.8	-1.2			
2,4-DB								
	0.9566	0.5204	0.2464	0.2060	0.09869			
	1.000	0.5000	0.2500	0.2000	0.1000			
	-4.3	4.1	-1.4	3.0	-1.3			

SKKR

000602

	Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dinoseb								
	0.2359	0.1296	0.06406	0.05066	0.02454			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-5.6	3.6	2.5	1.3	-1.8			

8/5/92

000603

Reduced by: [illegible] Date: 8/5/92
Reviewed by: [illegible] Date: ~~8/10/92~~ 8/11/92 SLO 8/11

Initial Calibration Report

Project: HRB08_1, Channel: 64, Analysis: N02AUG92, Node: DENCR3
Analyst: LLOR, Calibration File: N0802, MCRPT Method: HRBA

Calibration curve type: Linear NOT forced through zero

Sample	Level ID	Description
3	L5	HERB CSA 20% T=ST #6348
4	L4	HERB CSA 10% T=ST #6348
5	L3	HERB CSA 5% T=ST #6348
6	L2	HERB CSA 4% T=ST #6348
7	L1	HERB CSA 2% T=ST #6348

%RSD Measured	Maximum	Compound
7.0	20.0	Dalapon
10.3	20.0	DCAA
7.5	20.0	Dicamba
8.7	20.0	MCPP
4.6	20.0	MCPA
13.4	20.0	Dichlorprop
9.2	20.0	2,4-D
7.2	20.0	Silvex
6.9	20.0	2,4,5-T
8.8	20.0	Dinoseb
8.1	20.0	2,4-DB

All RPD's ≤ 13.5%

000604

	Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
Dalapon								
	0.9179	0.5092	0.2680	0.2064	0.09598			
	1.000	0.5000	0.2500	0.2000	0.1000			
	-8.2	1.8	7.2	3.2	-4.0			
DCAA								
	0.4406	0.2553	0.1364	0.1071	0.04679			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-11.9	2.1	9.1	7.1	-6.4			
Dicamba								
	0.09085	0.05151	0.02680	0.02059	0.009594			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-9.2	3.0	7.2	3.0	-4.1			
MCPP								
	91.23	49.69	27.08	21.36	9.428			
	100.0	50.00	25.00	20.00	10.00			
	-8.8	-0.6	8.3	6.8	-5.7			
MCPA								
	94.15	51.58	25.57	20.55	9.767			
	100.0	50.00	25.00	20.00	10.00			
	-5.8	3.2	2.3	2.7	-2.3			
Dichlorprop								
	0.2147	0.1249	0.07043	0.05512	0.02281			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-14.1	0.0	12.7	10.2	-8.8			
2,4-D								
	0.4481	0.2548	0.1376	0.1036	0.04742			
	0.5000	0.2500	0.1250	0.1000	0.05000			
	-10.4	1.9	10.1	3.6	-5.2			
Silvex								
	0.09166	0.05088	0.02684	0.02067	0.009586			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-8.3	1.8	7.3	3.4	-4.1			
2,4,5-T								
	0.09200	0.05093	0.02683	0.02052	0.009619			
	0.1000	0.05000	0.02500	0.02000	0.01000			
	-8.0	1.9	7.3	2.6	-3.8			
Dinoseb								
	0.2260	0.1261	0.06863	0.05206	0.02370			
	0.2500	0.1250	0.06250	0.05000	0.02500			
	-9.6	0.9	9.8	4.1	-5.2			

MH 8/5/92

000605

Samp 3 Meas True %Diff	Samp 4 Meas True %Diff	Samp 5 Meas True %Diff	Samp 6 Meas True %Diff	Samp 7 Meas True %Diff	Meas True %Diff	Meas True %Diff	Meas True %Diff
2,4-DB							
0.9048	0.5107	0.2654	0.2126	0.09490			
1.000	0.5000	0.2500	0.2000	0.1000			
-9.5	2.1	6.2	6.3	-5.1			

Injection Report

Acquired on 3-AUG-1992 at 00:22

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 20% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.227	4.231	535241	1514507	0.91793	Dalapon	2.7
11	11.547	11.551	346383	951212	0.44056	DCAA	2.9
13	11.987	11.991	256980	714886	0.09085	Dicamba	2.9
14	12.289	12.262	210851	647619	91.23177	MCPP	3.2
15	13.000	12.964	247292	933002	94.15285	MCPA	3.7
18	14.000	14.004	196400	704717	0.21473	Dichlorprop	3.7
19	14.498	14.498	202275	663242		D-BOB	3.2
20	15.093	15.102	332123	1553416	0.44807	2,4-D	4.0
27	18.520	18.530	307911	1470235	0.09166	Silvex	4.8
30	20.396	20.409	267381	1477950	0.09200	2,4,5-T	5.3
32	22.618	22.627	302919	1840572	0.22598	Dinoseb	5.9
33	23.040	23.053	250520	1589026	0.90476	2,4-DB	6.1

Totals			
Unknowns	200296	607815	N/A
Quantified	3456276	14060385	188.81114
Grand Total	3656572	14668200	188.81114

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

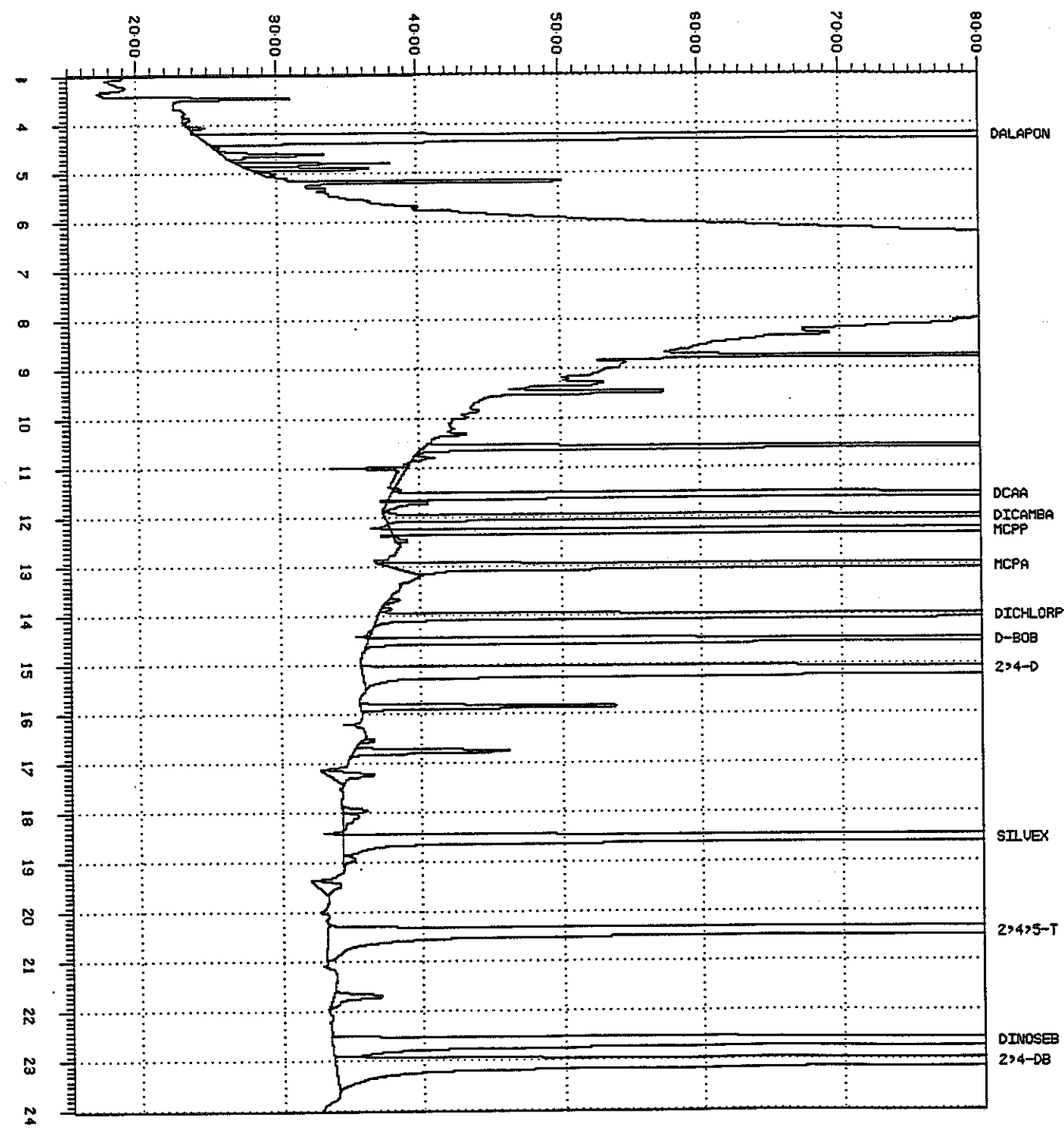
MH 8/5/92

RMAL Chromatography System on DENCR3

000608

[HRB08_1] 64 N02AUG92,3,1

HERB CSA 20% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 00:22
Reported on 5-AUG-1992 at 14:58
Box 1 (of 1)



MH 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 00:22

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 20% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	3.573	3.560	299793	778906	0.95137	Dalapon	2.1
11	9.587	9.573	229564	474696	0.46312	DCAA	2.1
12	9.809	9.796	155318	324275	0.09431	Dicamba	2.1
13	10.204	10.169	137774	384576	97.98432	MCPP	2.7
14	10.484	10.440	168796	531759	96.02448	MCPA	3.2
16	11.244	11.231	131092	345530	0.23042	Dichlorprop	2.7
17	11.676	11.667	224332	698068	0.46738	2,4-D	2.9
20	12.556	12.538	116853	320715		D-BOB	2.7
25	14.404	14.396	198258	716762	0.09539	Silvex	3.5
26	15.253	15.249	169909	700208	0.09542	2,4,5-t	3.7
28	17.262	17.258	160469	738639	0.95657	2,4-DB	4.8
29	17.400	17.391	207930	1026563	0.23590	Dinoseb	4.5

Totals			
Unknowns	152597	519041	N/A
Quantified	2200088	7040698	197.59866
Grand Total	2352685	7559739	197.59866

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

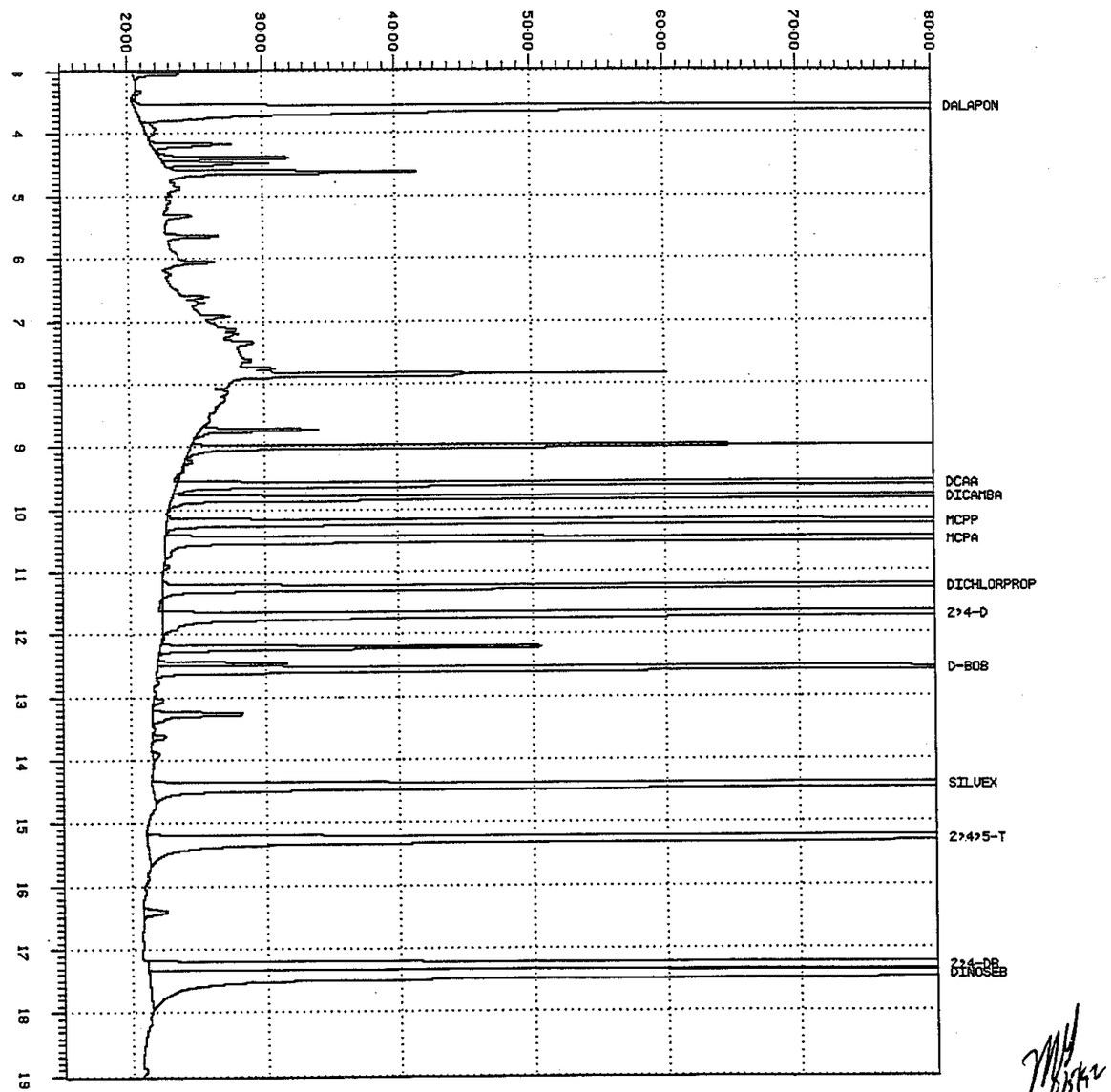
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000611

[HRB08_1] 63 N02AUG92,3,1

ERB CSA 20% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 00:22
Reported on 5-AUG-1992 at 14:24
Box 1 (of 1)



Injection Report

Acquired on 3-AUG-1992 at 01:00

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 10% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 4

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.569	3.560	162505	433775	0.51538	Dalapon	2.1
9	9.587	9.573	128884	276301	0.25964	DCAA	2.1
10	9.804	9.796	85523	181403	0.05185	Dicamba	2.1
11	10.187	10.169	90815	221935	53.31244	MCPP	2.4
12	10.467	10.440	108914	299745	51.13145	MCPA	2.7
13	11.240	11.231	72932	201375	0.13043	Dichlorprop	2.7
14	11.676	11.667	125820	397117	0.25755	2,4-D	2.9
18	12.551	12.538	116405	316066		D-BOB	2.7
21	14.404	14.396	107657	391264	0.05205	Silvex	3.5
22	15.253	15.249	90364	381413	0.05184	2,4,5-t	4.0
24	17.262	17.258	86445	404886	0.52043	2,4-DB	4.8
25	17.400	17.391	113794	578155	0.12955	Dinoseb	4.5

Totals			
Unknowns	90007	297032	N/A
Quantified	1290058	4083434	106.41262
Grand Total	1380065	4380466	106.41262

MISSING PEAKS

No missing peaks.

MH 9/15/92

000613

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

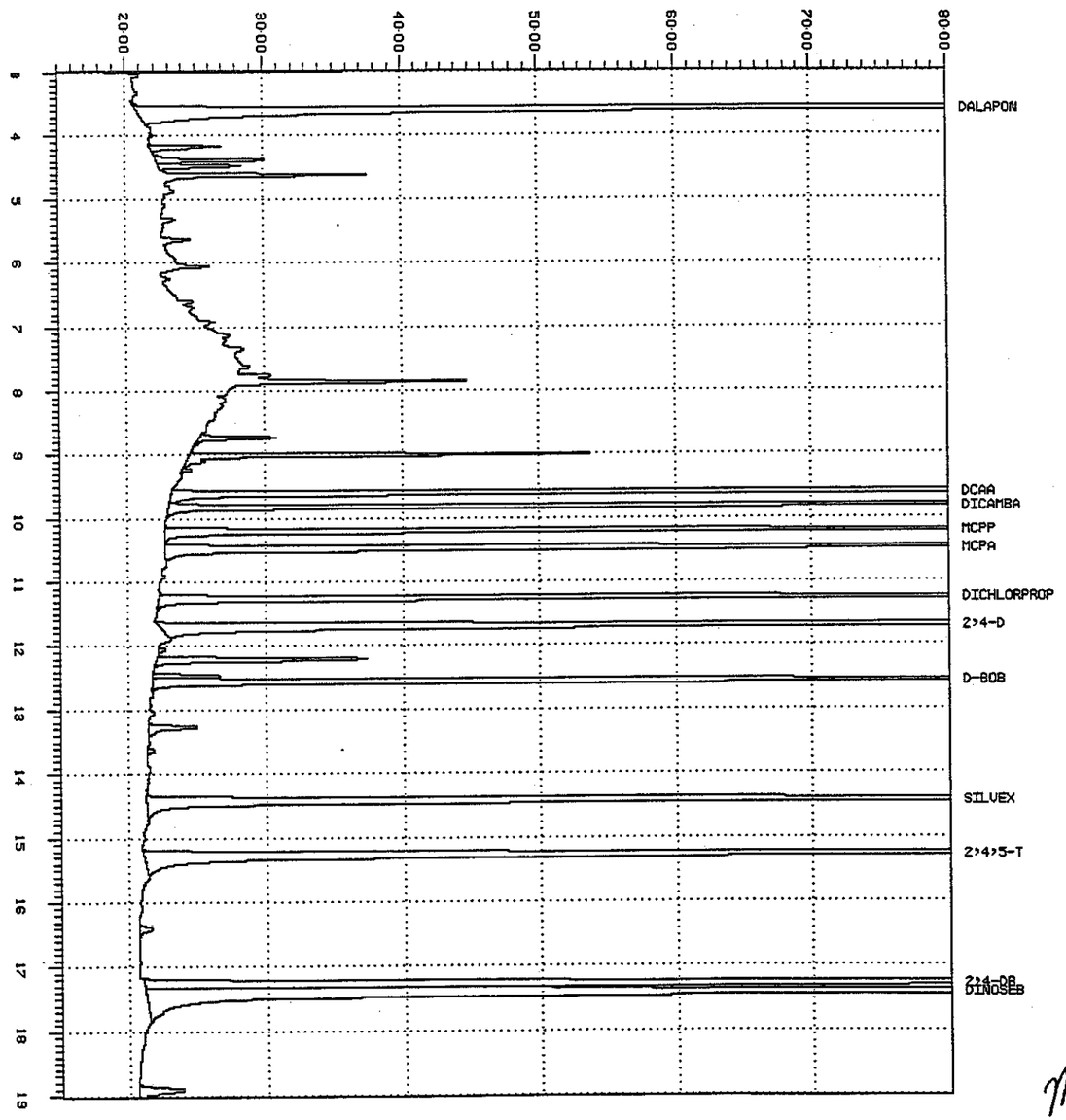
MH 8/5/92

RMAL Chromatography System on DENCR3

000614

[HRB08_1] 63 N02AUG92,4,1

HERB CSA 10% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 01:00
Reported on 5-AUG-1992 at 14:25
Box 1 (of 1)



MH 8/5/92

000615

Injection Report

Acquired on 3-AUG-1992 at 01:00

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 10% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 4

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.218	4.231	301576	876519	0.50922	Dalapon	2.7
12	11.538	11.551	207343	582012	0.25532	DCAA	2.9
14	11.978	11.991	150438	417733	0.05151	Dicamba	2.9
15	12.258	12.262	127571	329030	49.69041	MCPP	2.9
16	12.970	12.964	156239	517452	51.58001	MCPA	3.5
18	13.991	14.004	118607	420472	0.12494	Dichlorprop	3.7
19	14.489	14.498	200847	661290		D-BOB	3.5
20	15.084	15.102	195485	929318	0.25475	2,4-D	4.0
25	18.511	18.530	179183	845586	0.05088	Silvex	4.8
26	20.387	20.409	153090	844955	0.05093	2,4,5-T	5.3
28	22.613	22.627	180655	1080334	0.12609	Dinoseb	5.9
29	23.036	23.053	145408	937045	0.51072	2,4-DB	5.9

Totals			
Unknowns	157131	623810	N/A
Quantified	2116441	8441745	103.20480
Grand Total	2273572	9065555	103.20480

MISSING PEAKS

No missing peaks.

MH 6/15/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

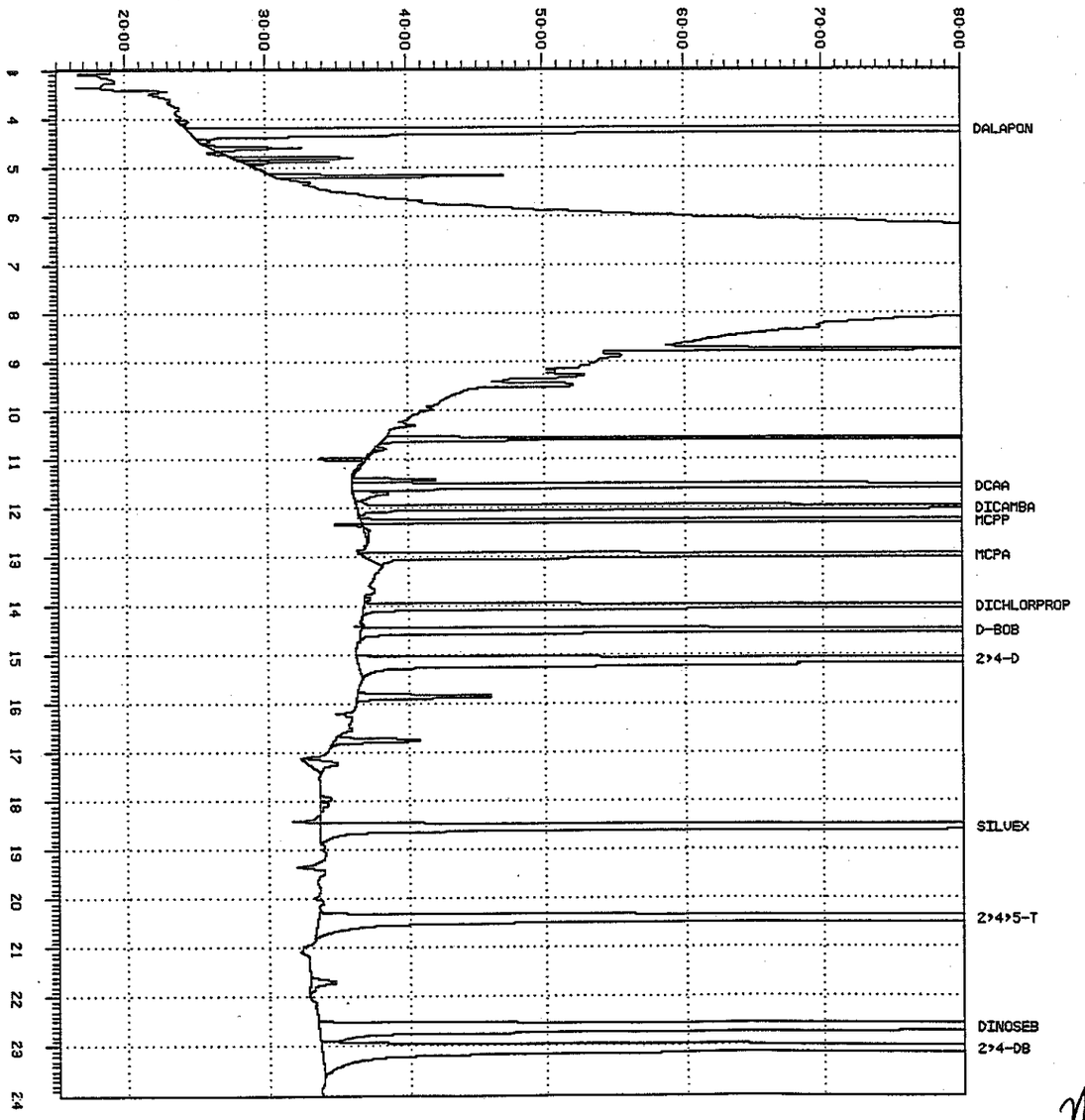
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N02AUG92,4,1

000617

HERB CSA 10% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 01:00
Reported on 5-AUG-1992 at 14:58
Box 1 (of 1)



MH 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 01:37

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 5% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 5

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.560	3.560	93301	244033	0.25295	Dalapon	2.1
9	9.573	9.573	71914	160133	0.12841	DCAA	2.1
10	9.796	9.796	46415	99917	0.02540	Dicamba	2.1
11	10.169	10.169	50440	120205	22.80962	MCPP	2.4
12	10.440	10.440	67079	179350	25.38788	MCPA	2.7
13	11.231	11.231	41671	114822	0.06445	Dichlorprop	2.9
14	11.667	11.667	69016	230388	0.12963	2,4-D	3.2
16	12.538	12.538	119101	331270		D-BOB	2.9
18	14.396	14.396	55008	204731	0.02511	Silvex	3.5
19	15.249	15.249	46677	202857	0.02531	2,4,5-t	4.0
20	17.258	17.258	44314	211634	0.24641	2,4-DB	4.8
21	17.391	17.391	64619	326133	0.06406	Dinoseb	4.5

Totals			
Unknowns	55918	234022	N/A
Quantified	769555	2425473	49.15923
Grand Total	825472	2659494	49.15923

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

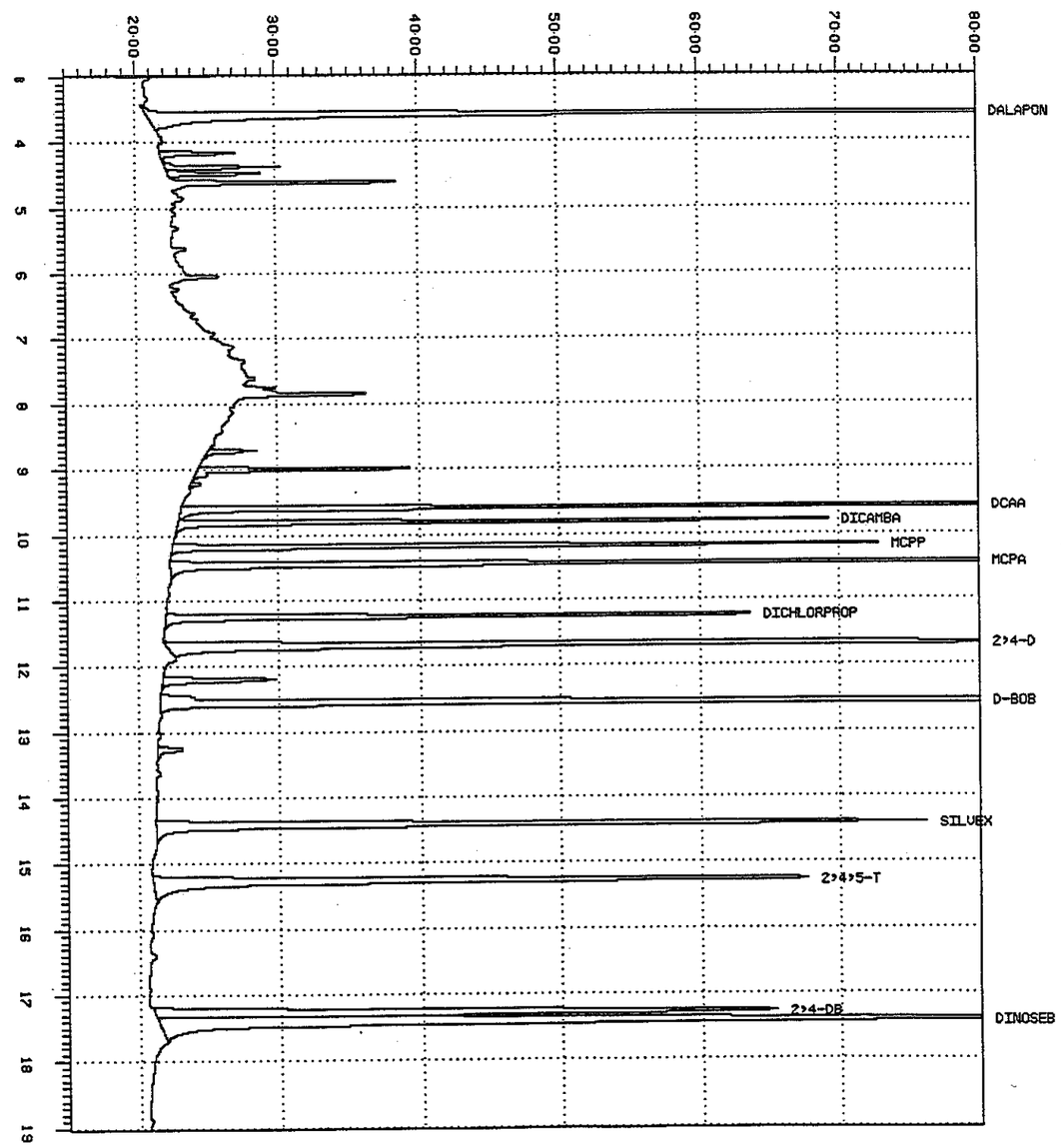
MH 8/15/92

RMAL Chromatography System on DENCR3

[HRB08_1] 63 N02AUG92,5,1

000620

ERB CSA 5% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 01:37
Reported on 5-AUG-1992 at 14:25
Box 1 (of 1)



MG 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 01:37

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 5% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 5

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
3	4.231	4.231	182713	501031	0.26798	Dalapon	2.4
11	11.551	11.551	123826	345668	0.13638	DCAA	2.9
13	11.991	11.991	86080	231663	0.02680	Dicamba	2.9
14	12.262	12.262	69973	156189	27.08140	MCPP	2.4
15	12.964	12.964	92486	264406	25.56790	MCPA	3.2
16	14.004	14.004	70482	248384	0.07043	Dichlorprop	3.5
17	14.498	14.498	205037	659243		D-BOB	3.5
18	15.102	15.102	117159	552050	0.13756	2,4-D	4.0
21	18.530	18.530	99607	478362	0.02684	Silvex	4.8
22	20.409	20.409	83607	474524	0.02683	2,4,5-T	5.3
24	22.627	22.627	107757	644076	0.06863	Dinoseb	5.6
25	23.053	23.053	80523	532406	0.26541	2,4-DB	5.9

Totals			
Unknowns	99334	436235	N/A
Quantified	1319249	5088002	53.67616
Grand Total	1418583	5524237	53.67616

MISSING PEAKS

No missing peaks.

MH 8/5/9

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

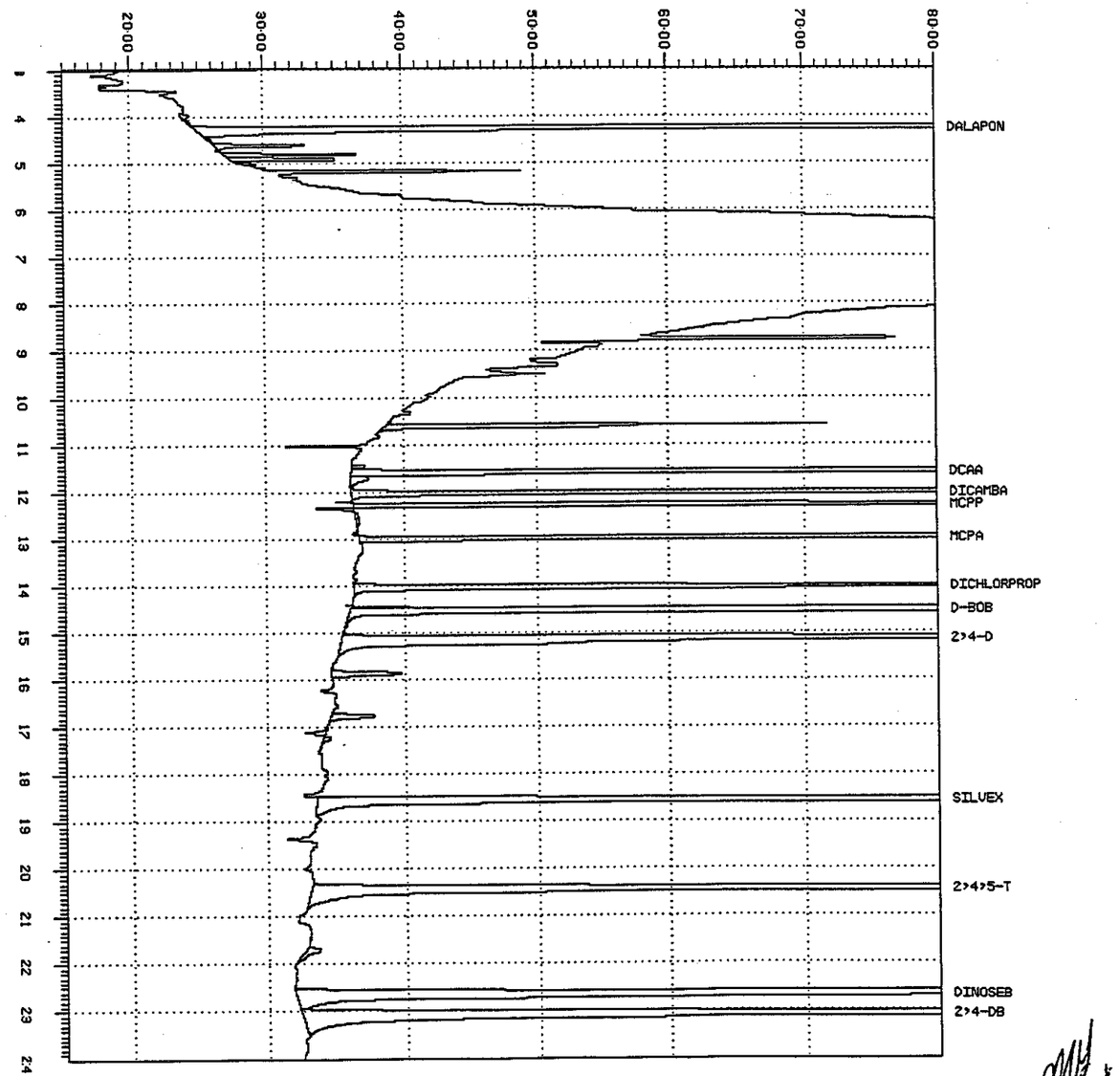
MH 8/15/92

RMAL Chromatography System on DENCR3

000623

[HRB08_1] 64 N02AUG92,5,1

IERB CSA 5% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 01:37
Reported on 5-AUG-1992 at 14:58
Box 1 (of 1)



000624

Injection Report

Acquired on 3-AUG-1992 at 02:14

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 4% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 6

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.573	3.560	74378	200012	0.20483	Dalapon	2.4
10	9.591	9.573	58969	132310	0.10383	DCAA	2.1
11	9.809	9.796	36729	80967	0.02048	Dicamba	2.1
12	10.178	10.169	46472	109501	20.70844	MCPP	2.4
13	10.453	10.440	55609	148862	20.33470	MCPA	2.7
15	11.249	11.231	33617	93689	0.05170	Dichlorprop	2.7
16	11.680	11.667	55913	185905	0.10247	2,4-D	3.2
19	12.551	12.538	115478	322549		D-BOB	2.7
21	14.413	14.396	43601	163229	0.02024	Silvex	3.7
22	15.267	15.249	36049	160336	0.02017	2,4,5-t	4.0
23	17.276	17.258	36283	175529	0.20601	2,4-DB	4.8
24	17.409	17.391	52089	261809	0.05066	Dinoseb	4.5

Totals			
Unknowns	156284	1206109	N/A
Quantified	645186	2034698	41.82355
Grand Total	801470	3240808	41.82355

MISSING PEAKS

No missing peaks.

MB 8/5/92

000625

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

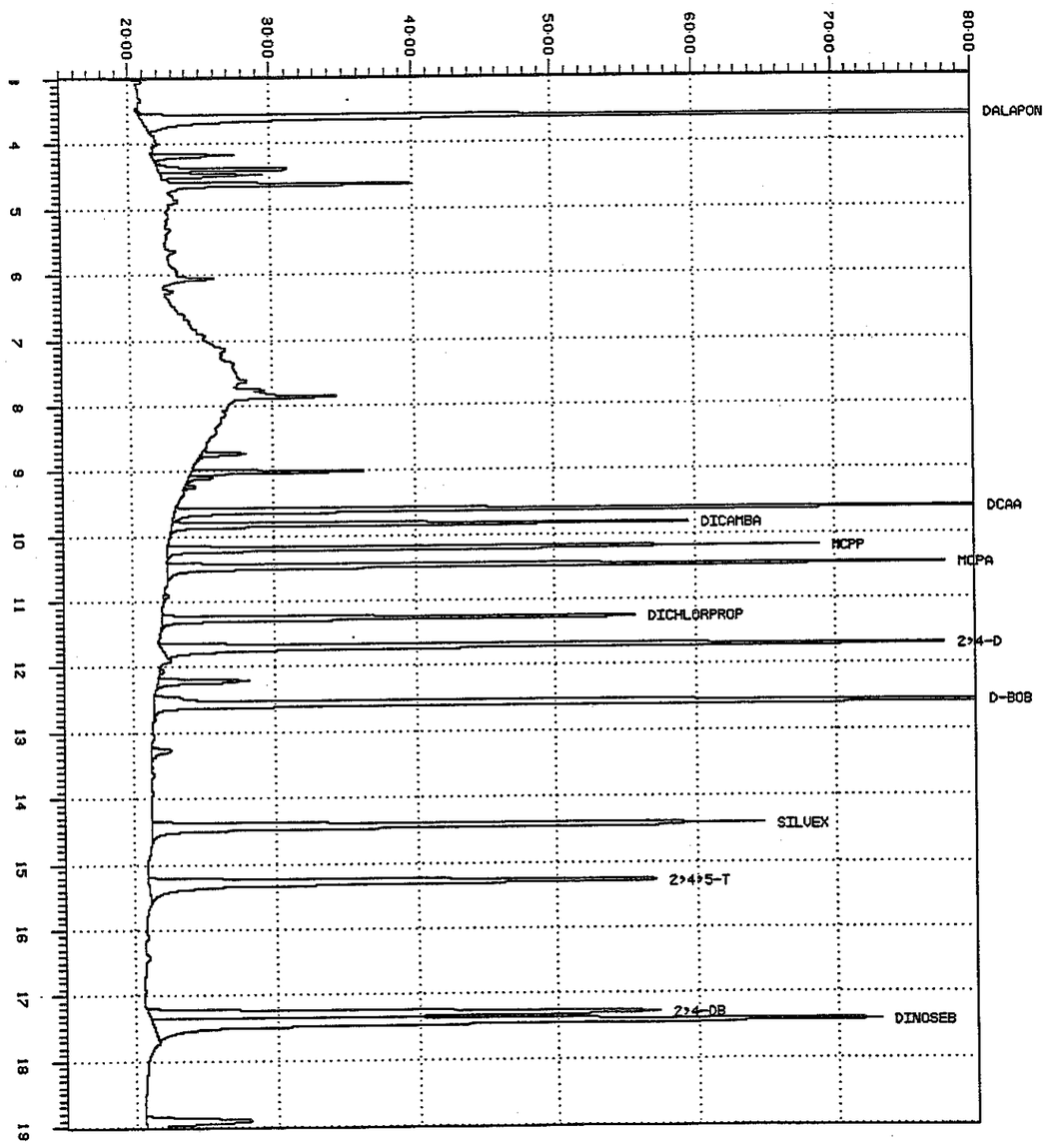
MH 8/5/92

RMAL Chromatography System on DENCR3

[HRB08_1] 63 N02AUG92,6,1

000626

HERB CSA 4% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 02:14
Reported on 5-AUG-1992 at 14:26
Box 1 (of 1)



MH 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 02:14

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 4% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 6

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.222	4.231	146573	411782	0.20638	Dalapon	2.7
11	11.542	11.551	103746	292077	0.10707	DCAA	2.7
13	11.982	11.991	70648	187937	0.02059	Dicamba	2.7
14	12.249	12.262	55080	114332	21.35656	MCPP	2.4
15	12.951	12.964	76886	219050	20.54859	MCPA	3.2
17	13.996	14.004	58673	203377	0.05512	Dichlorprop	3.7
18	14.489	14.498	200949	668901		D-BOB	3.5
19	15.093	15.102	96979	450027	0.10359	2,4-D	4.0
22	18.515	18.530	82512	390579	0.02067	Silvex	4.5
23	20.396	20.409	68795	383772	0.02052	2,4,5-T	5.1
25	22.618	22.627	88855	526883	0.05206	Dinoseb	5.6
26	23.044	23.053	66652	452511	0.21263	2,4-DB	6.1

Totals			
Unknowns	313426	2525470	N/A
Quantified	1116347	4301228	42.70380
Grand Total	1429773	6826698	42.70380

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

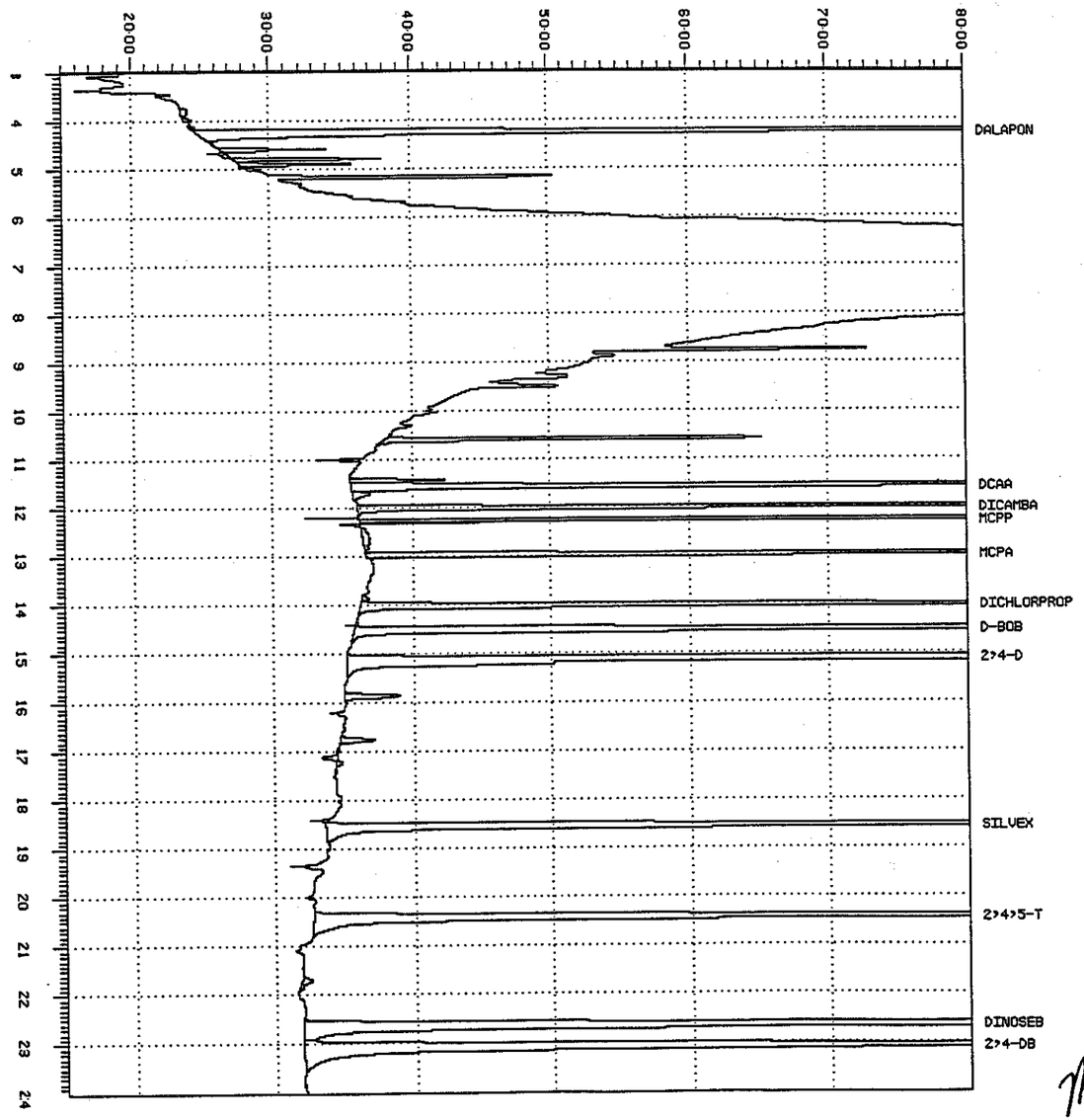
MH 4/15/92

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N02AUG92,6,1

000629

HERB CSA 4% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 02:14
Reported on 5-AUG-1992 at 14:59
Box 1 (of 1)



MH 8/5/92

Injection Report

Acquired on 3-AUG-1992 at 02:51

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 2% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 7

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.578	3.560	41969	115431	0.09819	Dalapon	2.4
11	9.596	9.573	33572	78294	0.04848	DCAA	2.1
12	9.813	9.796	19868	45002	0.00980	Dicamba	2.4
13	10.182	10.169	29429	70534	10.06101	MCPP	2.4
14	10.453	10.440	33734	94374	9.84876	MCPA	2.7
15	11.253	11.231	18792	54106	0.02424	Dichlorprop	2.9
16	11.693	11.667	30930	108627	0.04867	2,4-D	3.2
18	12.556	12.538	116122	319096		D-BOB	2.9
20	14.418	14.396	22181	85455	0.00989	Silvex	3.7
21	15.276	15.249	18519	85040	0.00988	2,4,5-t	4.3
22	17.289	17.258	19148	93395	0.09869	2,4-DB	5.1
23	17.418	17.391	28918	151502	0.02454	Dinoseb	4.8

Totals			
Unknowns	64314	227246	N/A
Quantified	413181	1300856	20.28215
Grand Total	477495	1528102	20.28215

MISSING PEAKS

No missing peaks.

MH 8/15/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

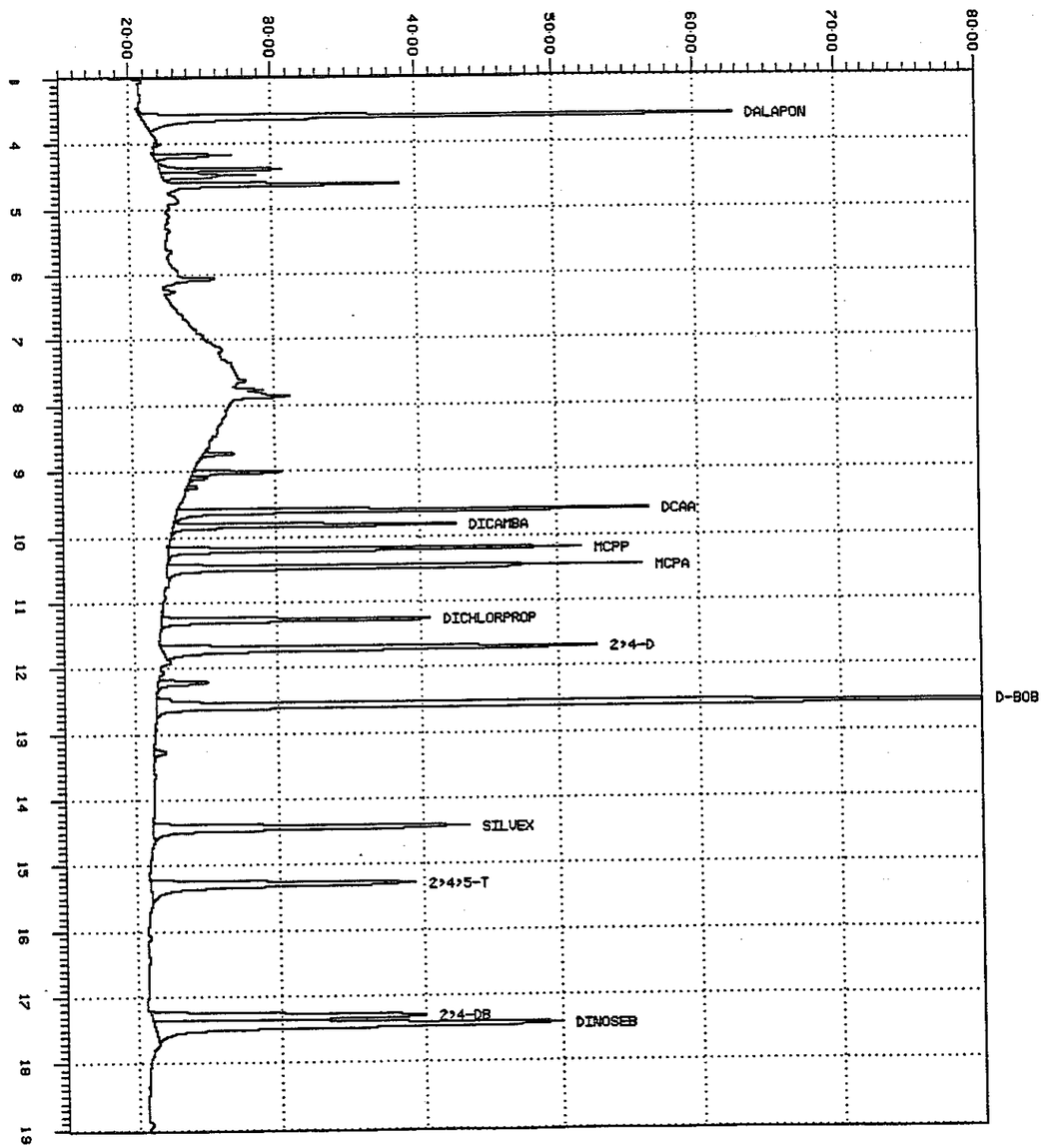
Uncalibrated peaks use user factor (0.0000)

MH 8/5/92

RMAL Chromatography System on DENCR3 000632

[HRB08_1] 63 N02AUG92,7,1

HERB CSA 2% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 3-AUG-1992 at 02:51
Reported on 5-AUG-1992 at 14:26
Box 1 (of 1)



MK 9/5/9

Injection Report

Acquired on 3-AUG-1992 at 02:51

RMAL Chromatography System on DENCR3

Analyst Name : LLOR
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 2% T=ST #6348
Sample Id : #6348
Sample Type : Standard Amount=1.00000
Bottle No : 7

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
3	4.240	4.231	87343	239165	0.09598	Dalapon	2.4
11	11.560	11.551	62252	171830	0.04679	DCAA	2.9
13	12.000	11.991	39496	104687	0.00959	Dicamba	2.9
14	12.262	12.262	26712	22394	9.42790	MCPP	2.1
15	12.964	12.964	43158	113533	9.76726	MCPA	2.9
16	14.015	14.004	34581	100840	0.02281	Dichlorprop	3.5
17	14.511	14.498	199652	670239		D-BOB	3.5
18	15.116	15.102	57760	268471	0.04742	2,4-D	4.0
21	18.536	18.530	46258	220404	0.00959	Silvex	4.5
22	20.422	20.409	37786	215345	0.00962	2,4,5-T	5.1
23	22.640	22.627	52243	310699	0.02370	Dinoseb	5.6
24	23.071	23.053	37834	257392	0.09490	2,4-DB	5.9

Totals			
Unknowns	90410	320811	N/A
Quantified	725076	2694999	19.55556
Grand Total	815487	3015810	19.55556

MISSING PEAKS

No missing peaks.

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0802
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

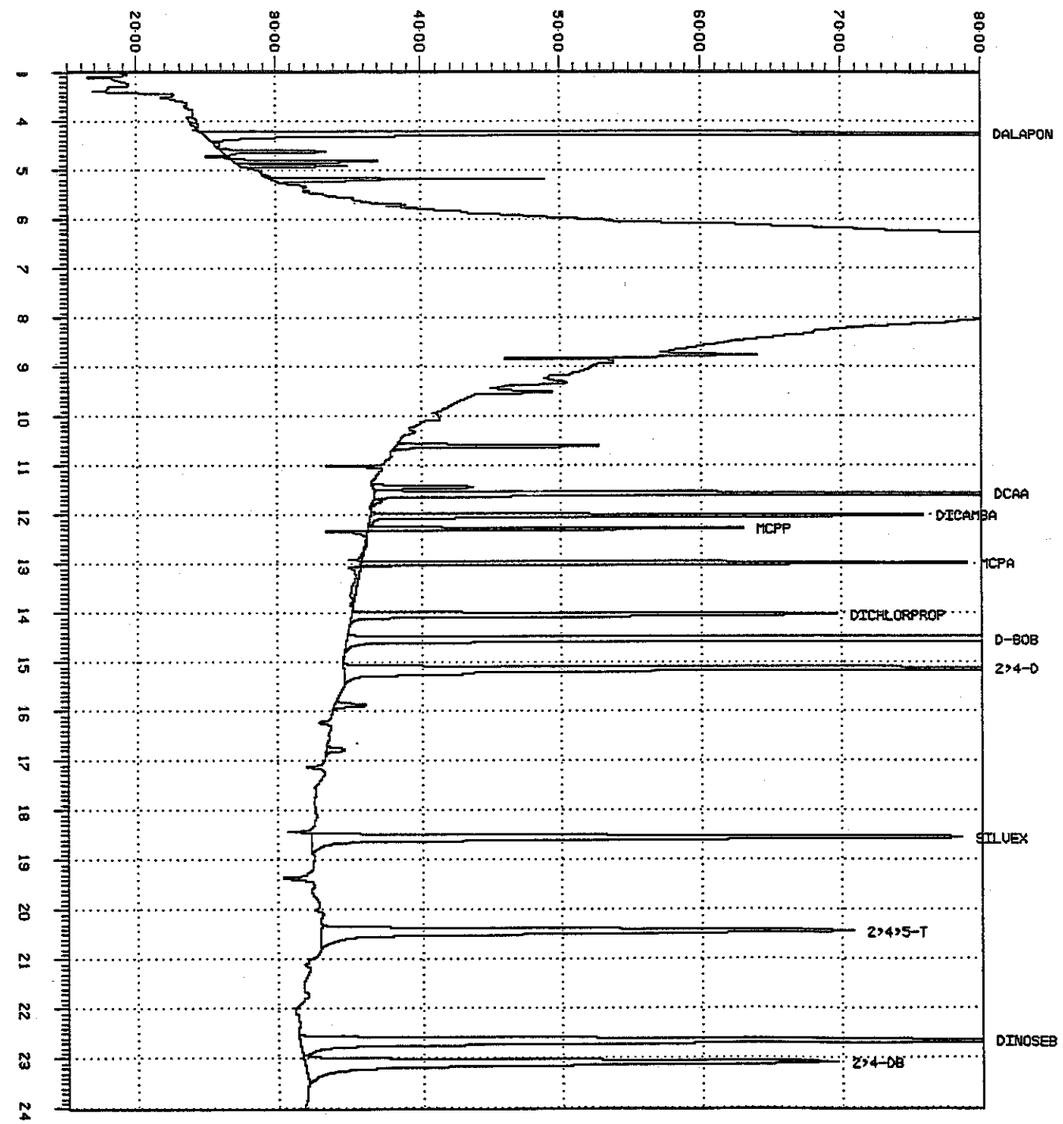
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N02AUG92,7,1

000635

HERB CSA 2% T=ST #6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 3-AUG-1992 at 02:51
Reported on 5-AUG-1992 at 14:59
Box 1 (of 1)



MH 8/5/92

000636

GC/MS VOA

METHOD/TEST 8150

INSTRUMENT _____

INITIAL CALIBRATION DATE 08/02/92

ANALYSIS RUN DATE 08/04/92

SAMPLES ASSOCIATED SCS, DCS

nseco - Rocky Mountain Analytical Laboratory

Project No.: _____

HERBICIDE WORKSHEET

page 1 of 1

METHOD: 8150
MATRIX: H_2O

QC Lot: 09JUL921A

QC Run: 09JUL921A

TCLP LBL #: _____
Test Code P-8150-AP1-A

SCS ID: Hrb SCS
Date Made: 6-3-92
Made By: RE/MS
Conc.: 5.0 ug/ml
Verif. No.: 6203
Amt. Added: 1.0 ml
Date Added: 7-9-92
By: LJ
Witness: LJ

DCS ID: Hrb DCS
Date Made: 7-9-92
Made By: LJ
Conc.: 5/1/1 ug/ml
Verif. No.: 6378
Amt. Added: 1.0 ml
Date Added: 7-9-92
By: LJ
Witness: LJ

~~METHYLATION STD.: _____~~
~~Date Made: _____~~
~~Made By: _____~~
~~Conc.: _____~~
~~Verif. No.: _____~~
~~Amt Added: _____~~
~~Date Added: _____~~
~~By: _____~~
~~Witness: _____~~
see sample folder

E. Ether Brand: B+J Lot No.: BC 750 MeOH Brand: Bdf Lot No.: BB225 Hexane Brand: Bdf Lot No.: BB407

Sample Number	Amt. Ext. (ml)	Int pH	Adj pH	Ext. Date	By	Vol. Ether Used	Vol. Ether Rec.	Saline Wash	Date Hydro.	By	Ether Wash Date	By	Vol. Ether Used	Vol. Ether Rec.	Date Methyl	By	Final Vol (mL)	Solvent
DCS1	1000	7	<2	7-9-92	LJ	250ml	~150ml	—	7-11-92	DI	7-13-92	LJ	40ml	>80%	7/27/92	MS	10.0	HEXANE
DCS2	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
BL	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓

00053

Comments:

Reviewed By: [signature] Date: 7/27/92

Tue Aug 4 11:18:52 1992 Page 1

Laboratory: Enseco - RMAL Instrument: N

000638

Device: MCD0 Project: HRB08_1 Channel: 63
Analysis: N02AUG92 Run Sequence: N0804
Calibration: N0802 Method: HERBUS1 Control: HERBUS

Chan	Column Type	Film(um)	Length(m)	I.D.(mm)	Injector Temp(C)	Detector Type	Temp	Atten	Range
63	RTx-5	0.25	30	0.25	240	ECD	325	0	0
64	RTx-20	0.25	35	0.25		ECD	325	0	0

Temperature Program

Init(C)	Init(min.)	Prog.(C/min.)	Final(C)	Final(min)	SIGNALS
50	2.00	20.0	160	2.0	Ch63 12.6
		1.3	180	0.0	Ch64 42.2
		30.0	280	1.5	

Injection Volume: 2 UL Carrier Gas:H2 Auxillary Gas:N2
Purge On :0.60 Purge Off :26.5

Pos	Sample Num.	Type	RF Upd	RT Upd	Level ID	Description/Comments
1	1	SA				PRIMER T=QC
2	2	SA				HEXANE BLANK T=QC
3	3	ST	N	N	L3	HERB CSA 5% T=ST V=6348
4	4	SA				AUX-09JUL92-1A-09JUL92-1A PET1
5	5	SA				DCS-09JUL92-1A-DCS1 PET1
6	6	SA				DCS-09JUL92-1A-DCS2 PET1
7	7	SA				AMT=0.940L PET1
8	8	SA				AMT=1.00L PET1
9	9	SA				AMT=0.960L PET1
10	10	SA				AMT=0.980L PET1
11	11	SA				AMT=0.990L PET1
12	12	SA				AMT=0.980L PET1
13	13	SA				AMT=0.940L PET1
14	14	SA				HEXANE BLANK T=QC
15	15	ST	N	N	L3	HERB CSA 5% T=ST V=6348

RF Update (N-none, I-initialize, A-average, U-update, L-initialize all)
RT Update (N-none, I-initialize, A-average)

Analyst: MH Date: 8/5/92

000639

Laboratory: Enseco - RMAL Instrument: N

Device: MCD0 Project: HRB08_1 Channel: 63
Analysis: N02AUG92 Run Sequence: N0804
Calibration: N0802 Method: HERBUS1 Control: HERBUS

Chan	Column Type	Film(um)	Length(m)	I.D.(mm)	Injector Temp(C)	Detector Type	Temp	Atten	Range
63	RTx-5	0.25	30	0.25	240	ECD	325	0	0
64	RTx-20	0.25	35	0.25		ECD	325	0	0

Temperature Program

Init(C)	Init(min.)	Prog.(C/min.)	Final(C)	Final(min)	SIGNALS
50	2.00	20.0	160	2.0	Ch63 12.6
		1.3	180	0.0	Ch64 42.2
		30.0	280	1.5	

Injection Volume: 2 UL Carrier Gas:H2 Auxillary Gas:N2
Purge On :0.60 Purge Off :26.5

Pos	Sample Num.	Type	RF Upd	RT Upd	Level ID	Description/Comments
16	16	SA				AMT=1.00L PET1
17	17	SA				AMT=1.00L PET1
18	18	SA				AMT=1.00L PET1
19	19	SA				AMT=0.990L PET1
20	20	SA				AMT=0.990L PET1
21	21	SA				AMT=0.940L PET1
22	22	SA				AMT=0.900L PET1
23	23	SA				METHYLATION STANDARD
24	24	SA				HEXANE BLANK T=QC
25	25	ST	N	N	L3	HERB CSA 5% T=ST V=6348

RF Update (N-none, I-initialize, A-average, U-update, L-initialize all)
RT Update (N-none, I-initialize, A-average)

Analyst: MH Date: 8/5/92

Wed Aug 5 15:22:06 1992 Page 1

000640

Reduced by: MM Date: 8/5/92
Reviewed by: AD Date: 8/11/92

Check Standard Report

Description: HERB CSA 5% T=ST V=6348
Sample: 3, Injection: 1, Acquired: 4-Aug-1992 13:52

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Area Sample	%Diff	Concentration
63	D-BOB	396679	396679	0	0.0250
64	D-BOB	822173	822173	0	0.0250

0 of 12 compounds are outside control limits for channel 63
0 of 12 compounds are outside control limits for channel 64

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
63	3.56	3.56	0.00	0.250	0.229	-9	20	Dalapon
64	4.23	4.23	0.00	0.250	0.233	-7	20	Dalapon
63	9.57	9.57	0.00	0.125	0.123	-2	20	DCAA
64	11.55	11.55	0.00	0.125	0.123	-2	20	DCAA
63	9.79	9.80	0.00	0.0250	0.0245	-2	20	Dicamba
64	11.98	11.99	-0.01	0.0250	0.0244	-2	20	Dicamba
63	10.16	10.17	-0.01	25.0	21.8	-13	20	MCPP
64	12.25	12.26	-0.01	25.0	25.5	2	20	MCPP
63	10.44	10.44	0.00	25.0	23.9	-5	20	MCPA
64	12.96	12.96	0.00	25.0	24.1	-4	20	MCPA
63	11.23	11.23	0.00	0.0625	0.0625	0	20	Dichlorprop
64	14.00	14.00	-0.01	0.0625	0.0598	-4	20	Dichlorprop
63	11.66	11.67	0.00	0.125	0.130	4	20	2,4-D
64	15.09	15.10	-0.01	0.125	0.126	1	20	2,4-D
63	12.53	12.54	0.00		0.0250	0	30 IS	D-BOB
64	14.49	14.50	0.00		0.0250	0	30 IS	D-BOB
63	14.39	14.40	0.00	0.0250	0.0247	-1	20	Silvex
64	18.52	18.53	-0.01	0.0250	0.0253	1	20	Silvex
63	15.24	15.25	0.00	0.0250	0.0251	0	20	2,4,5-t
64	20.40	20.41	-0.01	0.0250	0.0249	0	20	2,4,5-t
63	17.25	17.26	-0.01	0.250	0.240	-4	20	2,4-DB
64	23.04	23.05	-0.01	0.250	0.253	1	20	2,4-DB
63	17.38	17.39	-0.01	0.0625	0.0684	9	20	Dinoseb
64	22.61	22.63	-0.01	0.0625	0.0656	5	20	Dinoseb

All RPDs ≤ 13%

All RTs ≤ 0.01

000641

Injection Report

Acquired on 4-AUG-1992 at 13:52

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.560	3.560	106389	268851	0.22863	Dalapon	2.1
9	9.569	9.573	83705	185061	0.12275	DCAA	2.1
10	9.791	9.796	53616	116164	0.02454	Dicamba	2.1
11	10.160	10.169	58575	139436	21.78911	MCPP	2.4
12	10.436	10.440	77386	205246	23.87029	MCPA	2.4
13	11.227	11.231	48141	134002	0.06245	Dichlorprop	2.7
14	11.662	11.667	79281	275799	0.12958	2,4-D	3.2
17	12.533	12.538	142361	396679		D-BOB	2.7
19	14.391	14.396	64700	241788	0.02474	Silvex	3.5
20	15.244	15.249	53361	241110	0.02511	2,4,5-t	4.0
23	17.249	17.258	51603	247409	0.23994	2,4-DB	5.1
24	17.382	17.391	77203	412554	0.06837	Dinoseb	4.5

Totals			
Unknowns	67540	263138	N/A
Quantified	896322	2864101	46.58553
Grand Total	963862	3127239	46.58553

MISSING PEAKS

No missing peaks.

MM 9/8/92

000642

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

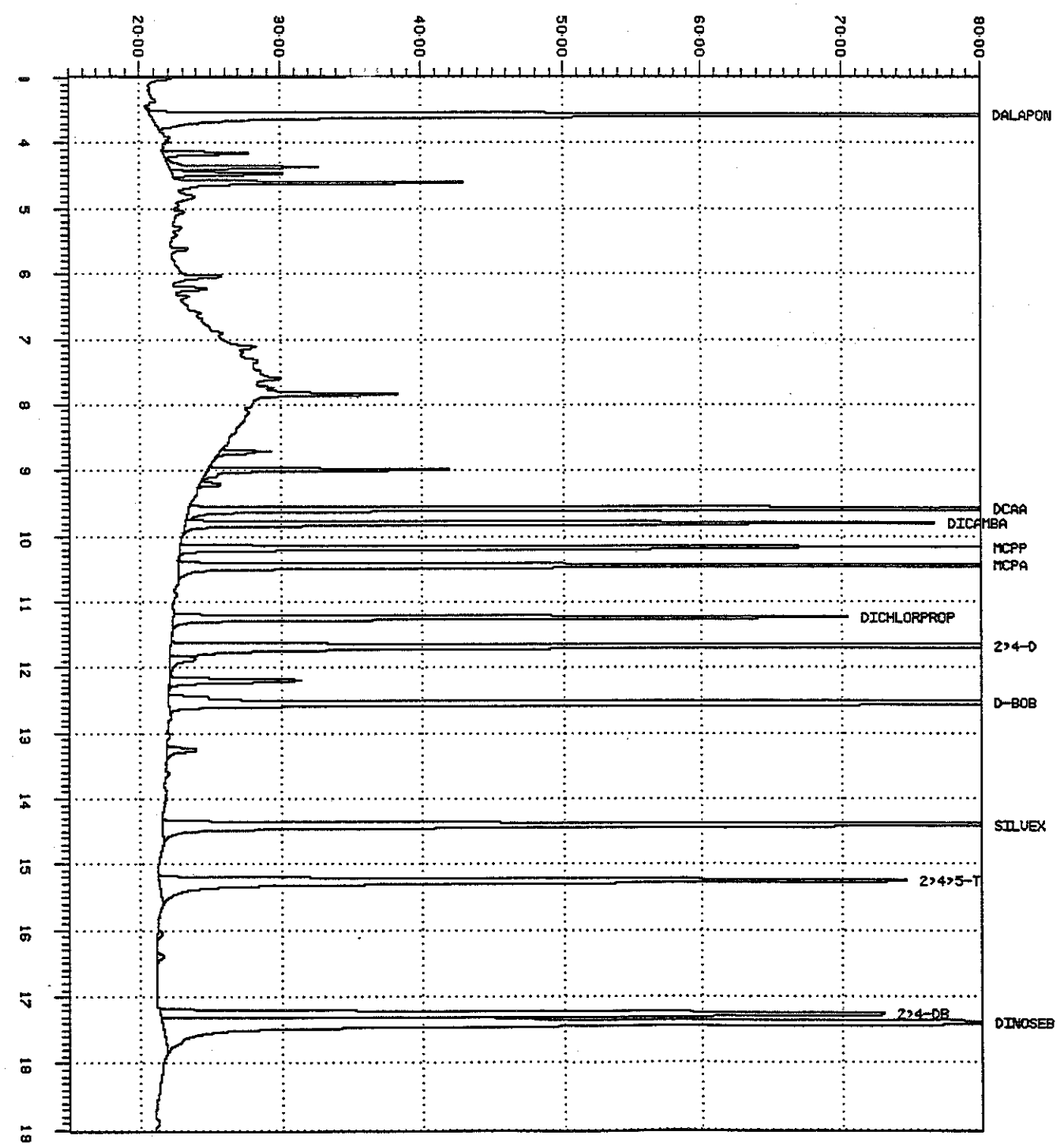
MH 8/5/92

RMAL Chromatography System on DENCR3

000643

[HRB08_1] 63 N04AUG92,3,1

HERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 13:52
Reported on 5-AUG-1992 at 15:30
Box 1 (of 1)



MH 8/5/92

000644

Injection Report

Acquired on 4-AUG-1992 at 13:52

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.231	4.231	211324	557888	0.23323	Dalapon	2.4
11	11.547	11.551	142203	397432	0.12269	DCAA	2.9
13	11.982	11.991	100112	266534	0.02440	Dicamba	2.9
14	12.253	12.262	82143	179649	25.48393	MCPP	2.7
15	12.960	12.964	107230	312110	24.10443	MCPA	2.9
16	13.996	14.004	81325	268203	0.05979	Dichlorprop	3.5
17	14.493	14.498	248202	822173		D-BOB	3.5
18	15.093	15.102	135532	641938	0.12588	2,4-D	4.0
22	18.516	18.530	116833	566737	0.02526	Silvex	4.5
23	20.396	20.409	98533	555212	0.02491	2,4,5-T	5.1
25	22.613	22.627	128772	774457	0.06556	Dinoseb	5.6
26	23.040	23.053	93153	638074	0.25272	2,4-DB	5.9

Totals			
Unknowns	121092	334525	N/A
Quantified	1545362	5980409	50.52281
Grand Total	1666454	6314934	50.52281

MISSING PEAKS

No missing peaks.

MH 4/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

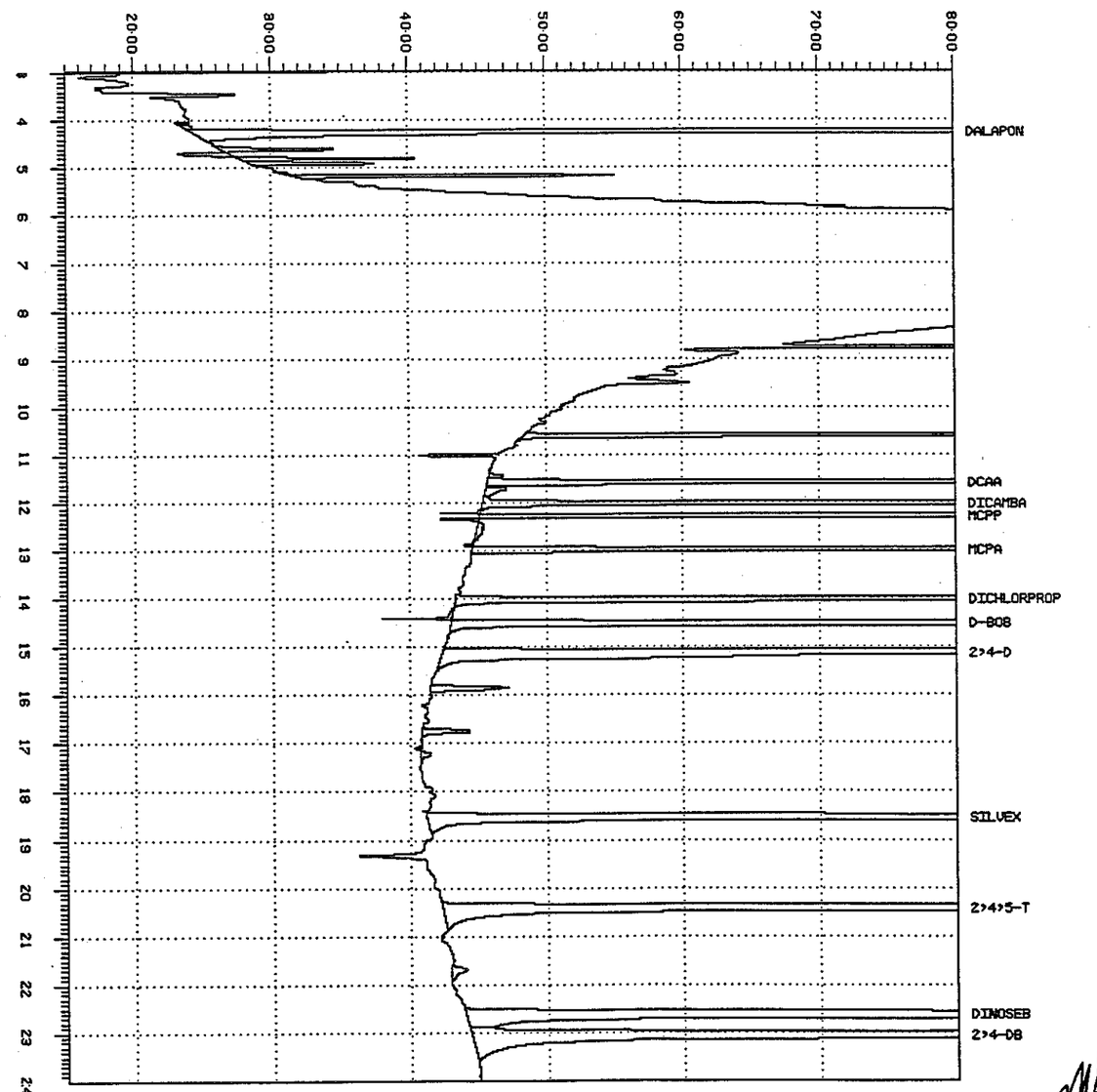
MH 5/25/92

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N04AUG92,3,1

000646

HERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 13:52
Reported on 5-AUG-1992 at 15:31
Box 1 (of 1)



X

Wed Aug 5 16:16:46 1992 Page 1

Reduced by: MG Date: 8/5/92
Reviewed by: SLO Date: 8/11/92

All TCND

Sample Summary

000164A

Description: AUX-09JUL92-1A-09JUL92-1A PET1
Sample: 4, Injection: 1, Acquired: 4-Aug-1992 14:29

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	1.0L	Reporting Units:	UG/L
Concentration Multiplier:	10.00		
Spike Multiplier:	1.000		

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Sample	%Diff	Concentration
63	D-BOB	396679	347844	-12	0.0250
64	D-BOB	822173	743044	-10	0.0250

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	Low	High
63	DCAA	0.2997	3.00	5.00	59.9	51	138
64	DCAA	0.2989	2.99	5.00	59.8	51	138

1 Compounds found above detection limit (Including IS and Surrogates).
0 Compounds found outside linear range.

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dalapon					NC				
63	3.51	3.56	-0.05			426018	0.4544	4.54	
64		4.23							NF
DCAA				2.99					
63	9.58	9.57	0.01		surr	345538	0.2997	3.00	
64	11.54	11.55	-0.01			750918	0.2989	2.99	
Dicamba					ND				
63		9.80							NF
64		11.99							NF
MCPP					NC				
63	10.19	10.17	0.02			24731	-3.418	-34.2	
64		12.26							NF
MCPA					NC				
63	10.46	10.44	0.02			30951	-3.231	-32.3	
64		12.96							NF

000648

Compound	Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dichlorprop					ND					
	63		11.23							NF
	64		14.00							NF
2,4-D					ND					
	63		11.67							NF
	64		15.10							NF
D-BOB					0.250 J					
	63	12.54	12.54	0.00			347844	0.0250	0.250	IS
	64	14.49	14.50	0.00		IS	743044	0.0250	0.250	IS
Silvex					NC					
	63	14.31	14.40	-0.08			10631	-0.0004	-0.0043	
	64		18.53							NF
2,4,5-t					ND					
	63		15.25							NF
	64		20.41							NF
2,4-DB					ND					
	63		17.26							NF
	64		23.05							NF
Dinoseb					ND					
	63		17.39							NF
	64		22.63							NF

8/5/92

Injection Report

Acquired on 4-AUG-1992 at 14:29

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : AUX-09JUL92-1A-09JUL92-1A PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 4

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
3	3.507	3.560	76911	426018	0.45442	Dalapon	4.0
13	9.582	9.573	150768	345538	0.29966	DCAA	2.4
14	10.187	10.169	5681	24731	-3.418044	MCPP	3.2
15	10.462	10.440	10150	30951	-3.231377	MCPA	2.7
20	12.542	12.538	123024	347844		D-BOB	2.7
24	14.311	14.396	1885	10631	-0.000426	Silvex	5.6

Totals			
Unknowns	677811	4141069	N/A
Quantified	368419	1185714	-5.895765
Grand Total	1046230	5326783	-5.895765

MISSING PEAKS

RT mins	Peak name
9.796	Dicamba
11.231	Dichlorprop
11.667	2,4-D
15.249	2,4,5-t
17.258	2,4-DB
17.391	Dinoseb

MM 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

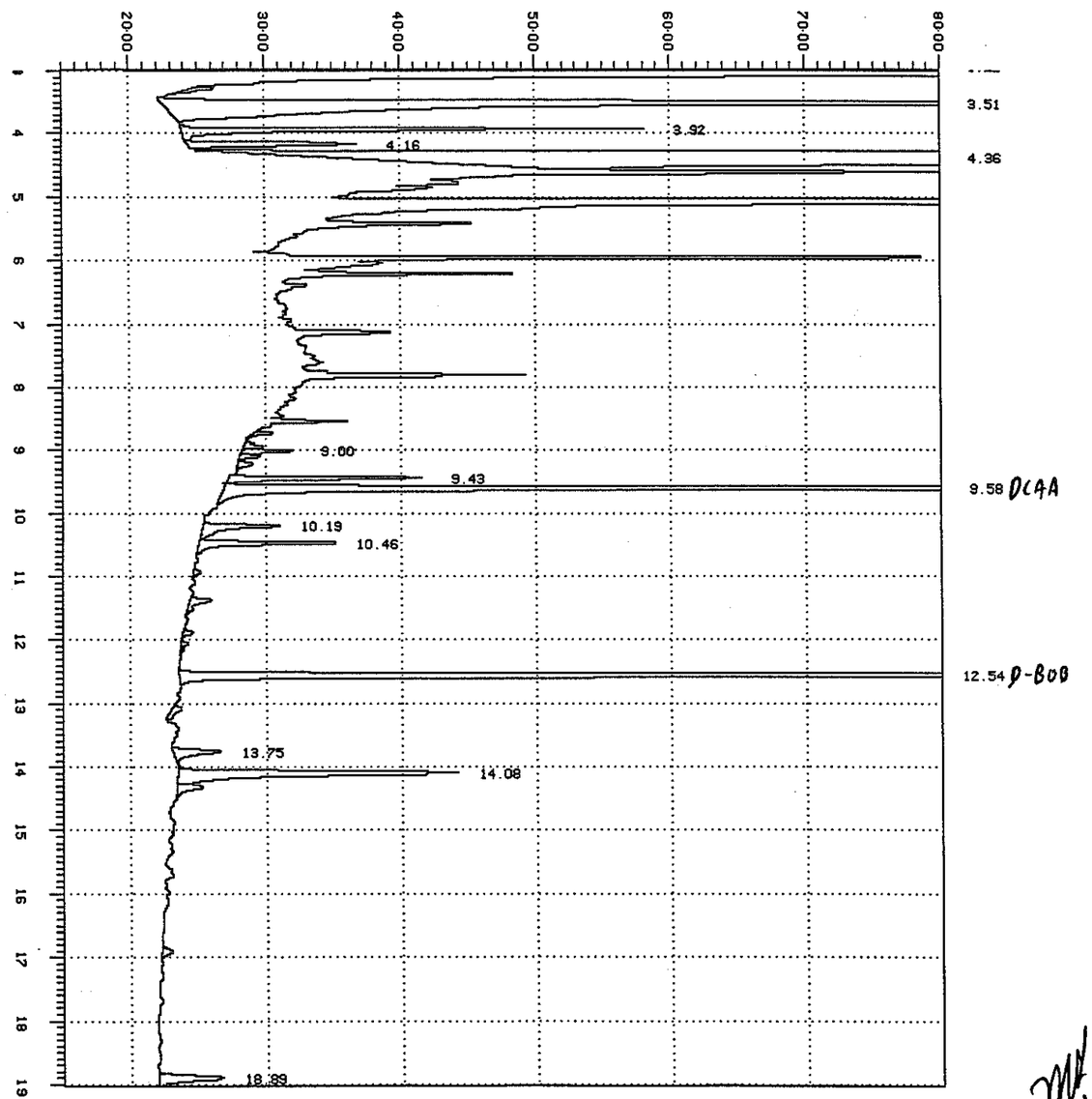
MB 8/5/92

RMAL Chromatography System on DENCR3

000651

[HRB08_1] 63 N04AUG92,4,1

AUX-09JUL92-1A-09JUL92-1A 23727 PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 14:29
Reported on 5-AUG-1992 at 16:45
Box 1 (of 1)



MH 8/5/92

000652

Injection Report

Acquired on 4-AUG-1992 at 14:29

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : AUX-09JUL92-1A-09JUL92-1A PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 4

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9	11.542	11.551	246512	750918	0.29895	DCAA	2.9
14	14.493	14.498	223121	743044		D-BOB	3.5

Totals			
Unknowns	614966	2832293	N/A
Quantified	469633	1493962	0.29895
Grand Total	1084599	4326256	0.29895

MISSING PEAKS

RT mins	Peak name
4.231	Dalapon
11.991	Dicamba
12.262	MCPP
12.964	MCPA
14.004	Dichlorprop
15.102	2,4-D
18.530	Silvex
20.409	2,4,5-T
22.627	Dinoseb
23.053	2,4-DB

MG 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

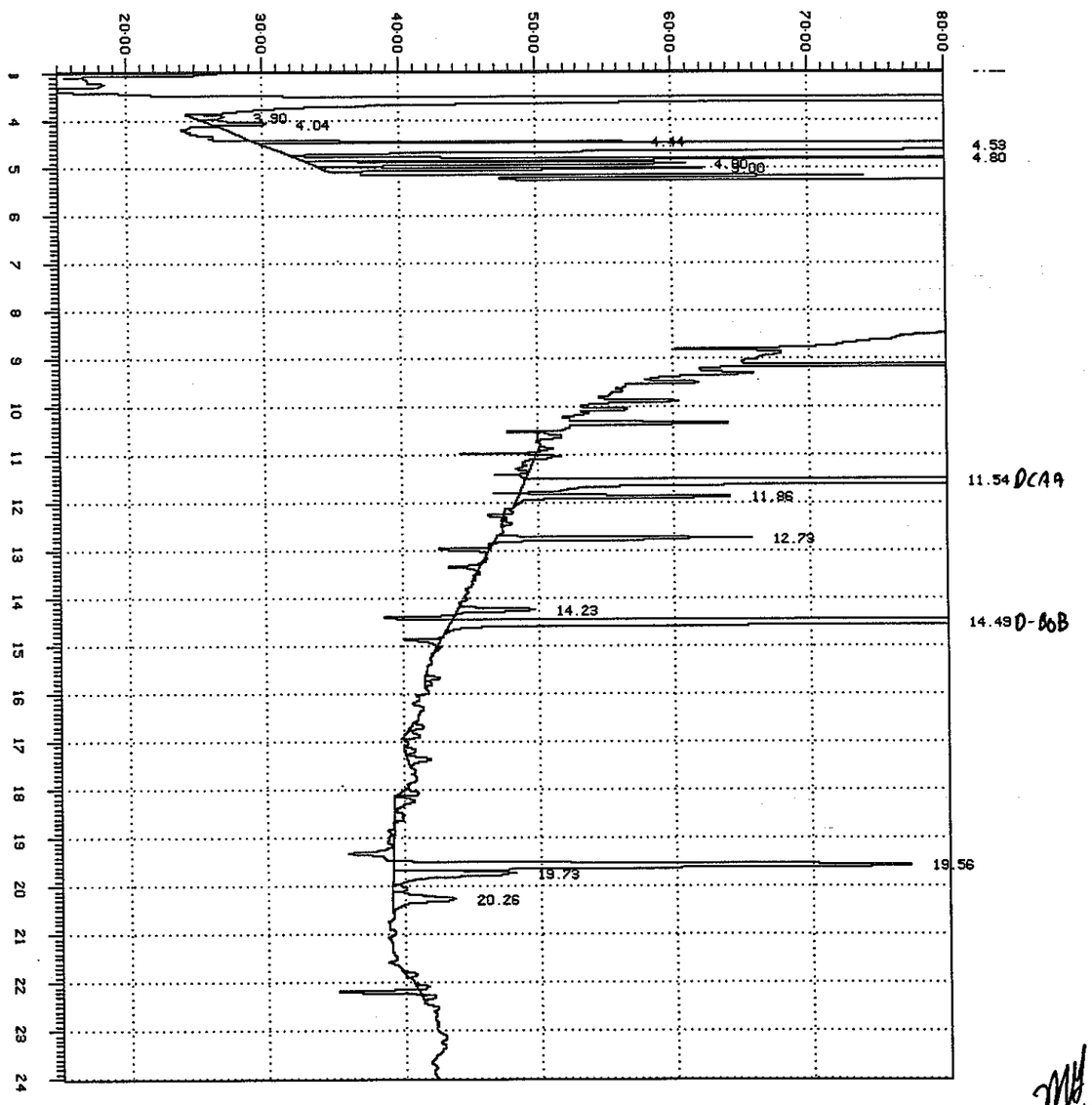
MH
8/5/92

RMAL Chromatography System on DENCR3

000654

[HRB08_1] 64 N04AUG92,4,1

AUX-09JUL92-1A-09JUL92-1A 23727 PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 14:29
Reported on 5-AUG-1992 at 16:46
Box 1 (of 1)



MH 8/5/92

Wed Aug 5 16:42:25 1992 Page 1

000655

Reduced by: MH Date: 8/5/92
Reviewed by: [illegible] Date: 8/11/92

DCS Report

QC Category: HERBA QC Lot: 09JUL92-1A

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

DCS #1 Description: DCS-09JUL92-1A-DCS1- PET1
Sample: 5, Injection: 1, Acquired: 4-Aug-1992 15:07

DCS #2 Description: DCS-09JUL92-1A-DCS2- PET1
Sample: 6, Injection: 1, Acquired: 4-Aug-1992 15:45

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	1.0L	Reporting Units:	UG/L
Concentration Multiplier:	10.00		
Spike Multiplier:	1.000		

Sample #	Sample #	Sample #	Sample #	Sample #

	Concentration UG/L								
		Measured			%Recovery			RPD	
Ch	Spiked	DCS1	DCS2	Avg.	Meas.	Min	Max	Meas.	Max
2,4-D									
63	5.00	3.60	3.70	3.65	73	36	126	-3	33
64	5.00	3.05	3.20	3.13	63	36	126	-5	33
Silvex									
63	1.00	0.781	0.831	0.806	81	52	135	-6	28
64	1.00	0.747	0.825	0.786	79	52	135	-10	28
2,4,5-T				0.755	76			-7	
63	1.00	0.736	0.782	~~0.759~~	~~76~~	41	158	~~-6~~	34
64	1.00	0.728	0.791	~~0.760~~	~~76~~	41	158	~~-8~~	34

80 percent of average recovery and RPD values must be within control limits
100.0 percent of average recoveries are within control limits
100.0 percent of RPD values are within control limits

See DCS Report All TCWD except for 000656 spike compounds

Wed Aug 5 16:17:05 1992 Page 1

Reduced by: MM Date: 8/5/92
Reviewed by: [illegible] Date: 8/11/92

Sample Summary
RLXI

Description: DCS-09JUL92-1A-DCS1- PET1
Sample: 5, Injection: 1, Acquired: 4-Aug-1992 15:07

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	1.0L	Reporting Units:	UG/L
Concentration Multiplier:	10.00		
Spike Multiplier:	1.000		

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Sample	%Diff	Concentration
63	D-BOB	396679	335011	-16	0.0250
64	D-BOB	822173	728950	-11	0.0250

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	Low	High
63	DCAA	0.3602	3.60	5.00	72.0	51	138
64	DCAA	0.3505	3.51	5.00	70.1	51	138

4 Compounds found above detection limit (Including IS and Surrogates).
0 Compounds found outside linear range.

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dalapon					NC				
63	3.50	3.56	-0.06			257782	0.2665	2.66	
64		4.23							NF
DCAA				3.51					
63	9.57	9.57	0.00			393177	0.3602	3.60	
64	11.55	11.55	0.00			849127	0.3505	3.51	
Dicamba					ND				
63		9.80							NF
64		11.99							NF
MCPP					NC				
63	10.17	10.17	0.00			23258	-3.568	-35.7	
64		12.26							NF
MCPA					NC				
63	10.45	10.44	0.01			19485	-5.181	-51.8	
64		12.96							NF

000657

Compound	Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dichlorprop					BDL					
	63	11.24	11.23	0.00			2982	-0.0123	-0.122	
	64	13.98	14.00	-0.02			29315	-0.0004	-0.0039	
2,4-D					3.05	sp				
	63	11.66	11.67	-0.01			570777	0.3596	3.60	
	64	15.09	15.10	-0.01			1203055	0.3053	3.05	
D-BOB					0.250 J	IS				
	63	12.53	12.54	0.00			335011	0.0250	0.250	IS
	64	14.49	14.50	0.00			728950	0.0250	0.250	IS
Silvex					0.747	sp				
	63	14.38	14.40	-0.01			615372	0.0781	0.781	
	64	18.52	18.53	-0.01			1331828	0.0747	0.747	
2,4,5-t					0.728	sp				
	63	15.24	15.25	-0.01			567945	0.0736	0.736	
	64	20.39	20.41	-0.02			1300282	0.0728	0.728	
2,4-DB					ND					
	63		17.26							NF
	64		23.05							NF
Dinoseb					NC					
	63		17.39							NF
	64	22.57	22.63	-0.05			79694	-0.0073	-0.0730	

MB 8/5/92

000658

Injection Report

Acquired on 4-AUG-1992 at 15:07

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : DCS-09JUL92-1A-DCS1- PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 5

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
3	3.498	3.560	40036	257782	0.26649	Dalapon	4.5
12	9.569	9.573	174024	393177	0.36019	DCAA	2.4
13	10.173	10.169	5667	23258	-3.568391	MCPP	2.9
14	10.449	10.440	6102	19485	-5.180810	MCPA	2.9
16	11.236	11.231	847	2982	-0.012246	Dichlorprop	3.5
18	11.658	11.667	157516	570777	0.35955	2,4-D	3.2
19	12.533	12.538	121518	335011		D-BOB	2.7
24	14.382	14.396	162040	615372	0.07809	Silvex	3.5
25	15.236	15.249	125929	567945	0.07364	2,4,5-t	4.0

Totals			
Unknowns	792731	5877619	N/A
Quantified	793679	2785790	-7.623477
Grand Total	1586410	8663409	-7.623477

MISSING PEAKS

RT mins	Peak name
9.796	Dicamba
17.258	2,4-DB
17.391	Dinoseb

MG 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

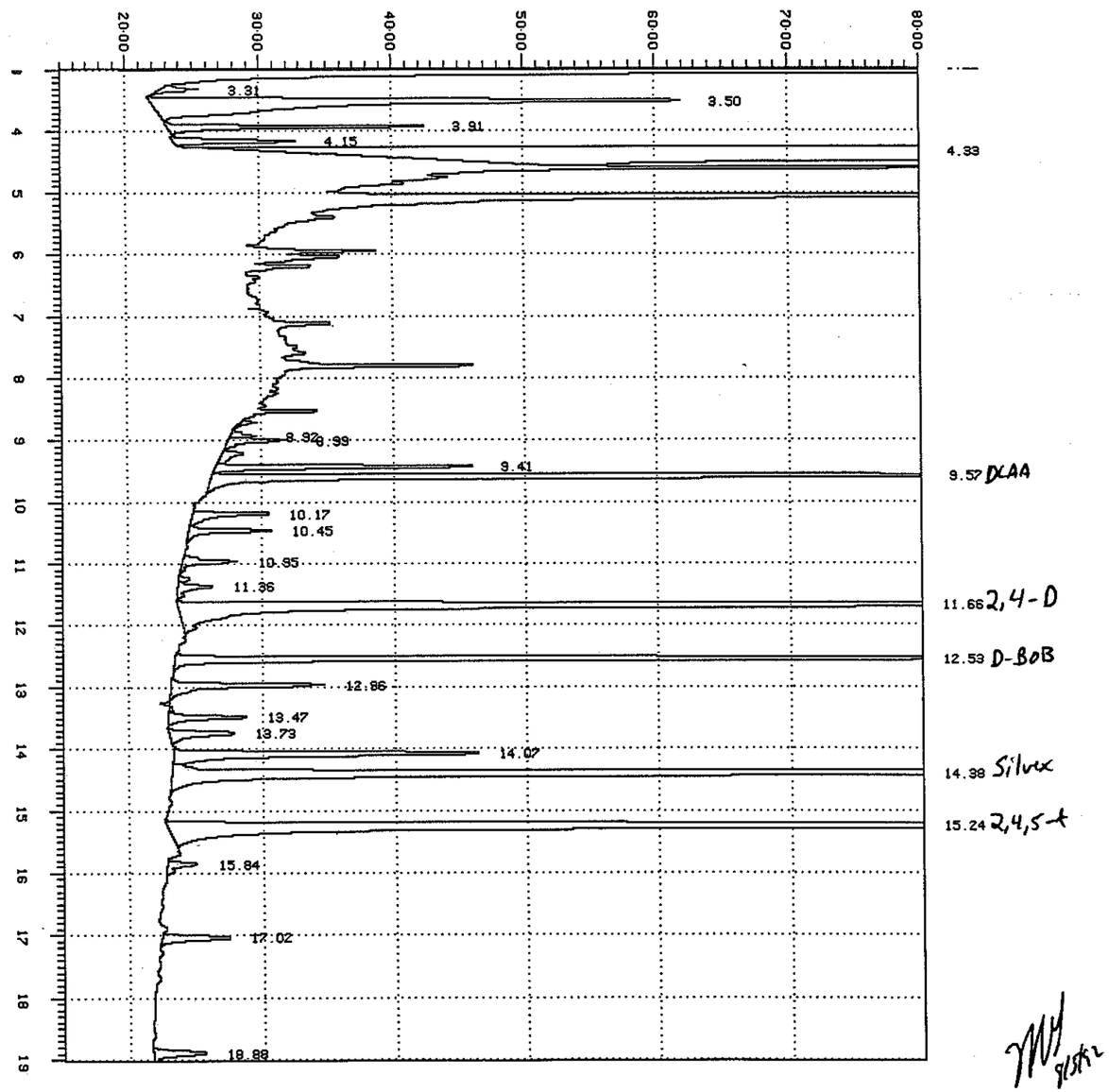
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000660

[HRB08_1] 63 N04AUG92,5,1

DCS-09JUL92-1A-DCS1- PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 15:07
Reported on 5-AUG-1992 at 16:45
Box 1 (of 1)



MH 9/15/92

Injection Report

Acquired on 4-AUG-1992 at 15:07

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : DCS-09JUL92-1A-DCS1- PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 5

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9	11.547	11.551	284507	849127	0.35052	DCAA	2.9
14	13.982	14.004	8266	29315	-0.000391	Dichlorprop	3.7
16	14.493	14.498	219877	728950		D-BOB	3.5
17	15.093	15.102	256914	1203055	0.30532	2,4-D	4.3
29	18.516	18.530	269831	1331828	0.07472	Silvex	4.8
32	20.391	20.409	217479	1300282	0.07279	2,4,5-T	5.3
34	22.573	22.627	12372	79694	-0.007299	Dinoseb	5.9

Totals			
Unknowns	412693	1848595	N/A
Quantified	1269246	5522251	0.79567
Grand Total	1681939	7370846	0.79567

MISSING PEAKS

RT mins	Peak name
4.231	Dalapon
11.991	Dicamba
12.262	MCPP
12.964	MCPA
23.053	2,4-DB

DNH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

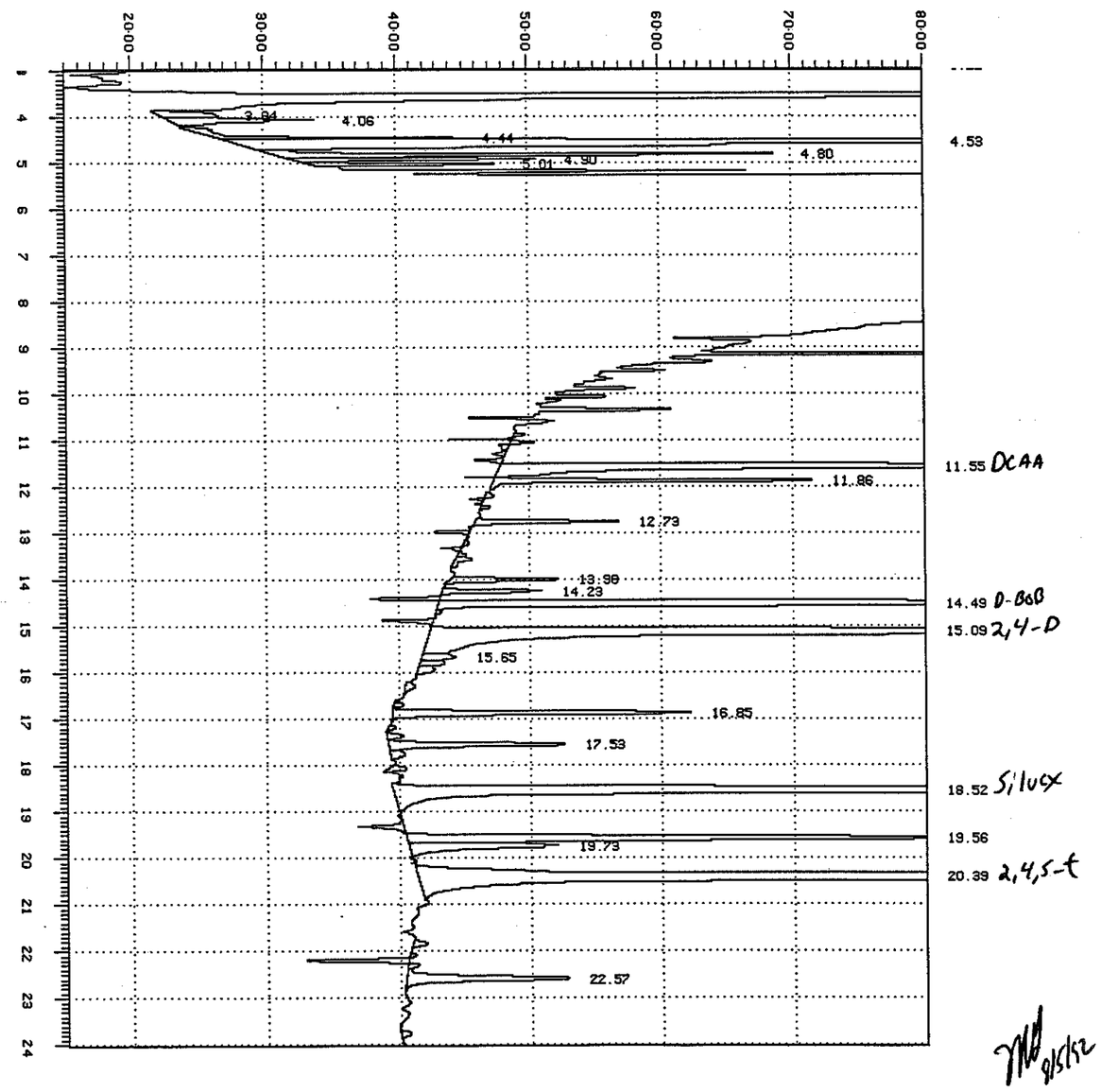
MB 8/5/92

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N04AUG92,5,1

000663

DCS-09JUL92-1A-DCS1-[illegible] PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 15:07
Reported on 5-AUG-1992 at 16:46
Box 1 (of 1)



MH 9/5/92

See DCS Report

All ND except for spike compounds

Wed Aug 5 16:17:27 1992 Page 1

Reduced by: DMG Date: 8/5/92
Reviewed by: [illegible] Date: 8/11/92

000664 Sample Summary

RLA

Description: DCS-09JUL92-1A-DCS2- PET1
Sample: 6, Injection: 1, Acquired: 4-Aug-1992 15:45

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	1.0L	Reporting Units:	UG/L
Concentration Multiplier:	10.00		
Spike Multiplier:	1.000		

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Sample	%Diff	Concentration
63	D-BOB	396679	337303	-15	0.0250
64	D-BOB	822173	719890	-12	0.0250

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	Low	High
63	DCAA	0.3916	3.92	5.00	78.3	51	138
64	DCAA	0.3931	3.93	5.00	78.6	51	138

4 Compounds found above detection limit (Including IS and Surrogates).
0 Compounds found outside linear range.

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dalapon				NC				
63	3.50	3.56	-0.06		269635	0.2788	2.79	
64		4.23						NF
DCAA				3.92 SUR				
63	9.57	9.57			427394	0.3916	3.92	
64	11.55	11.55			930161	0.3931	3.93	
Dicamba				ND				
63		9.80						NF
64		11.99						NF
MCPP				~~BDL~~ ND				
63	10.17	10.17	0.00		27311	-2.531	-25.3	
64	12.19	12.26	-0.07 RT		37	6.534	65.3	
MCPA				NC				
63	10.45	10.44	0.01		22548	-4.631	-46.3	
64		12.96						NF

000665

Compound / Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dichlorprop					BDL				
63	11.24	11.23	0.00			1172	-0.0135	-0.135	
64	13.98	14.00	-0.02			29911	-0.0001	-0.0011	
2,4-D				3.20	sp				
63	11.66	11.67	-0.01			590161	0.3700	3.70	
64	15.09	15.10	-0.01			1238201	0.3197	3.20	
D-BOB				0.250 J	IS				
63	12.53	12.54	0.00			337303	0.0250	0.250	IS
64	14.50	14.50	0.00			719890	0.0250	0.250	IS
Silvex				0.825	sp				
63	14.39	14.40	-0.01			658112	0.0831	0.831	
64	18.52	18.53	-0.01			1444850	0.0826	0.825	
2,4,5-t				0.782	sp				
63	15.24	15.25	-0.01			605987	0.0782	0.782	
64	20.40	20.41	-0.01			1389697	0.0791	0.791	
2,4-DB					ND				
63		17.26							NF
64		23.05							NF
Dinoseb					NC				
63		17.39							NF
64	22.58	22.63	-0.05			92105	-0.0057	-0.0567	

8/5/92

Injection Report

Acquired on 4-AUG-1992 at 15:45

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : DCS-09JUL92-1A-DCS2-[illegible] PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 6

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.498	3.560	44322	269635	0.27884	Dalapon	4.3
11	9.573	9.573	184405	427394	0.39158	DCAA	2.1
12	10.173	10.169	6434	27311	-2.530827	MCPP	3.2
13	10.449	10.440	7202	22548	-4.631401	MCPA	2.7
15	11.236	11.231	424	1172	-0.013479	Dichlorprop	2.7
17	11.658	11.667	164486	590161	0.37002	2,4-D	3.2
18	12.533	12.538	122576	337303		D-BOB	2.9
22	14.387	14.396	171068	658112	0.08305	Silvex	3.7
23	15.236	15.249	131316	605987	0.07816	2,4,5-t	4.3

Totals			
Unknowns	640351	3931713	N/A
Quantified	832232	2939624	-5.974055
Grand Total	1472583	6871337	-5.974055

MISSING PEAKS

RT mins	Peak name
9.796	Dicamba
17.258	2,4-DB
17.391	Dinoseb

MW 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

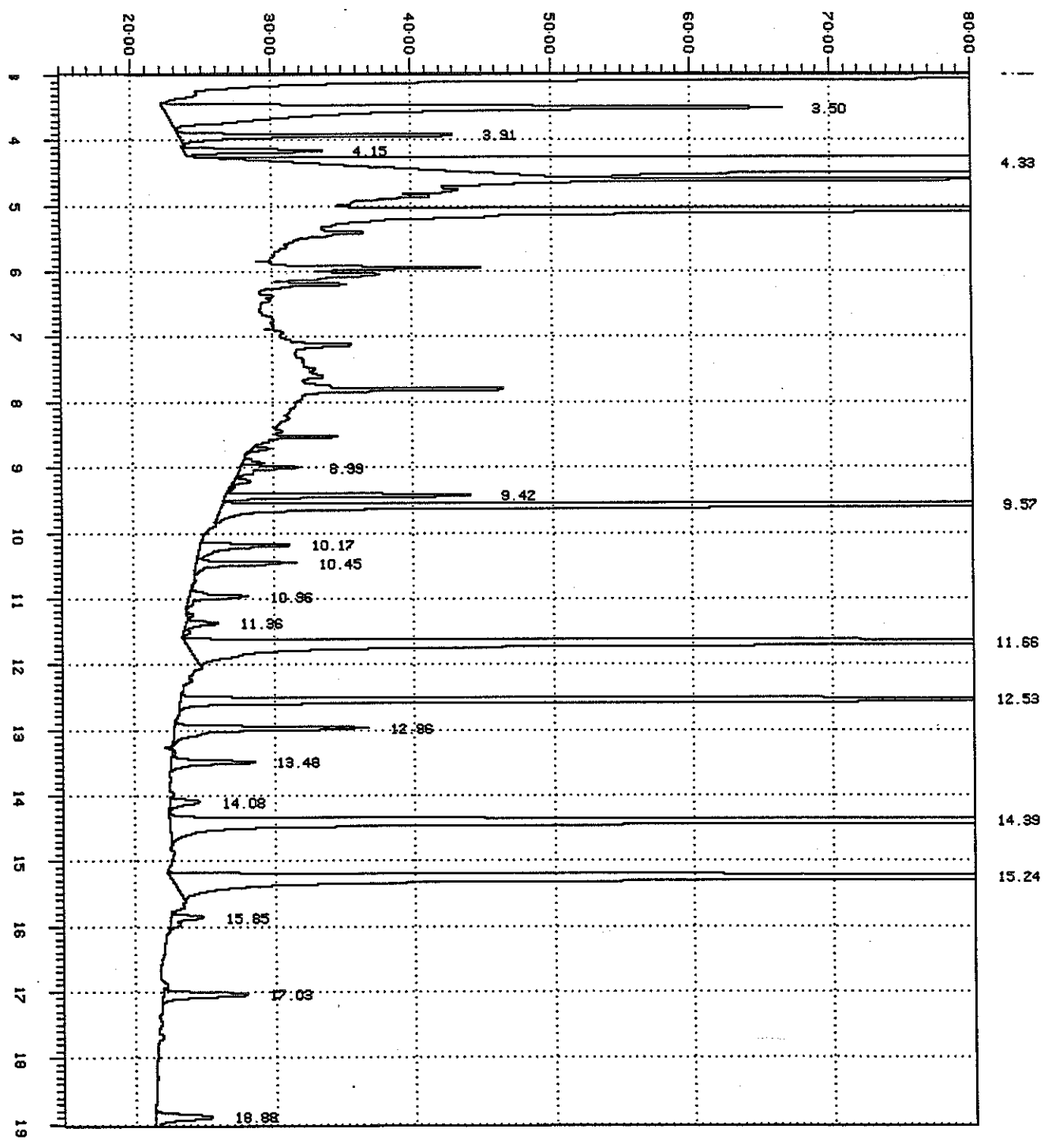
Uncalibrated peaks use user factor (0.0000)

8/5/92

RMAL Chromatography System on DENCR3 000668

[HRB08_1] 63 N04AUG92,6,1

DCS-09JUL92-1A-DCS2-23727 PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 15:45
Reported on 5-AUG-1992 at 16:45
Box 1 (of 1)



MK 8/5/92

Injection Report

Acquired on 4-AUG-1992 at 15:45

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : DCS-09JUL92-1A-DCS2- PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 6

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
9	11.551	11.551	302771	930161	0.39305	DCAA	2.9
11	12.191	12.262	888	37	6.53404	MCPP	3.5
15	13.982	14.004	8469	29911	-0.000111	Dichlorprop	3.5
17	14.498	14.498	222277	719890		D-BOB	3.5
18	15.093	15.102	268389	1238201	0.31968	2,4-D	4.3
28	18.516	18.530	285938	1444850	0.08255	Silvex	4.8
30	20.396	20.409	231654	1389697	0.07913	2,4,5-T	5.3
32	22.578	22.627	14799	92105	-0.005670	Dinoseb	5.9

Totals			
Unknowns	439489	1945280	N/A
Quantified	1335185	5844852	7.40267
Grand Total	1774674	7790132	7.40267

MISSING PEAKS

RT mins	Peak name
4.231	Dalapon
11.991	Dicamba
12.964	MCPA
23.053	2,4-DB

MH 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

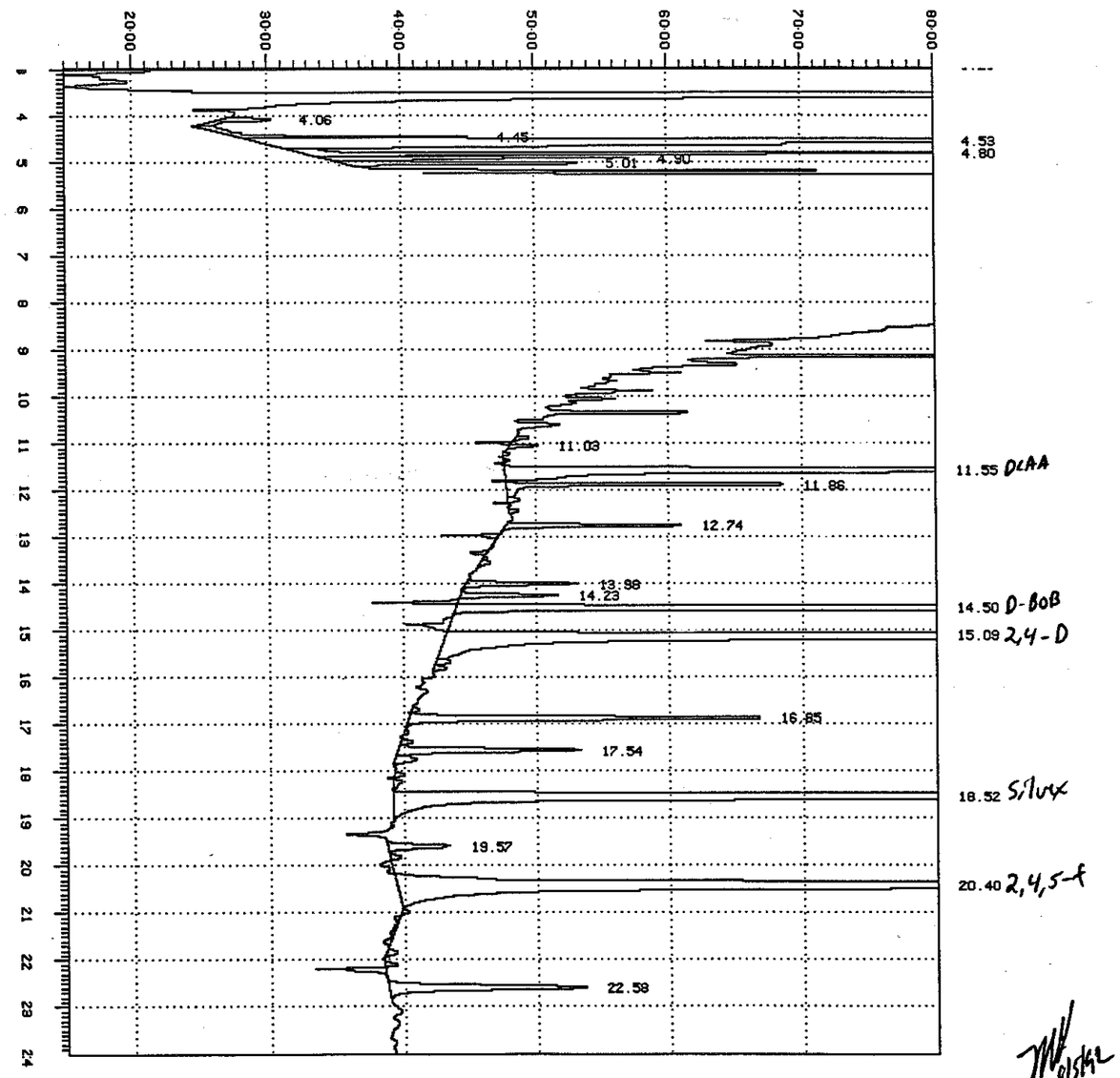
MM 8/5/92

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N04AUG92,6,1

000671

)CS-09JUL92-1A-DCS2-23727 PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 15:45
Reported on 5-AUG-1992 at 16:46
Box 1 (of 1)



Wed Aug 5 15:28:16 1992 Page 1

Reduced by: [illegible] Date: 8/5/92
Reviewed by: [illegible] Date: 8/11/92

Check Standard Report

000672

Description: HERB CSA 5% T=ST V=6348
Sample: 15, Injection: 1, Acquired: 4-Aug-1992 21:24

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Sample	%Diff	Concentration
63	D-BOB	396679	314394	-21	0.0250
64	D-BOB	822173	635246	-23	0.0250

0 of 12 compounds are outside control limits for channel 63
3 of 12 compounds are outside control limits for channel 64

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max		Compound
63	3.57	3.56	0.01	0.250	0.265	6	20		Dalapon
64	4.23	4.23	0.00	0.250	0.289	16	20		Dalapon
63	9.59	9.57	0.01	0.125	0.122	-2	20		DCAA
64	11.55	11.55	0.00	0.125	0.120	-4	20		DCAA
63	9.80	9.80	0.01	0.0250	0.0253	1	20		Dicamba
64	11.99	11.99	0.00	0.0250	0.0231	-7	20		Dicamba
63	10.18	10.17	0.01	25.0	20.7	-17	20		MCPP
64	12.25	12.26	-0.01	25.0	15.3	-39*	20		MCPP
63	10.45	10.44	0.01	25.0	20.6	-18	20		MCPA
64	12.96	12.96	0.00	25.0	15.3	-39*	20		MCPA
63	11.24	11.23	0.01	0.0625	0.0579	-7	20		Dichlorprop
64	14.00	14.00	-0.01	0.0625	0.0524	-16	20		Dichlorprop
63	11.68	11.67	0.01	0.125	0.120	-4	20		2,4-D
64	15.09	15.10	-0.01	0.125	0.114	-9	20		2,4-D
63	12.55	12.54	0.01		0.0250	0	30	IS	D-BOB
64	14.49	14.50	0.00		0.0250	0	30	IS	D-BOB
63	14.40	14.40	0.00	0.0250	0.0243	-3	20		Silvex
64	18.52	18.53	-0.01	0.0250	0.0229	-8	20		Silvex
63	15.25	15.25	0.00	0.0250	0.0236	-5	20		2,4,5-t
64	20.39	20.41	-0.02	0.0250	0.0215	-14	20		2,4,5-t
63	17.26	17.26	0.00	0.250	0.225	-10	20		2,4-DB
64	23.04	23.05	-0.01	0.250	0.194	-22*	20		2,4-DB
63	17.40	17.39	0.00	0.0625	0.0636	2	20		Dinoseb
64	22.61	22.63	-0.01	0.0625	0.0578	-8	20		Dinoseb

All RPDs ≤ 17% except MCPP @ -39% ch64, MCPA @ -39% ch64

2,4-DB @ -22% ch64

All hits will quant. ch64

All RTs ≤ 0.02 min

γ

Injection Report

Acquired on 4-AUG-1992 at 21:24

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 15

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	3.573	3.560	100664	240919	0.26518	Dalapon	1.9
12	9.587	9.573	67733	146259	0.12230	DCAA	2.1
13	9.804	9.796	44021	94412	0.02527	Dicamba	2.1
14	10.178	10.169	51164	106636	20.68087	MCPP	2.1
15	10.453	10.440	60425	146370	20.59051	MCPA	2.4
16	11.240	11.231	37743	99887	0.05789	Dichlorprop	2.7
17	11.676	11.667	65486	206015	0.12046	2,4-D	3.2
20	12.548	12.538	114947	314394		D-8OB	2.7
22	14.400	14.396	52042	188591	0.02432	Silvex	3.5
23	15.253	15.249	42339	180672	0.02363	2,4,5-t	4.0
24	17.262	17.258	40689	184740	0.22454	2,4-DB	4.5
25	17.396	17.391	64357	307536	0.06357	Dinoseb	4.3

Totals			
Unknowns	62485	304606	N/A
Quantified	741611	2216430	42.19855
Grand Total	804096	2521037	42.19855

MISSING PEAKS

No missing peaks.

000674

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

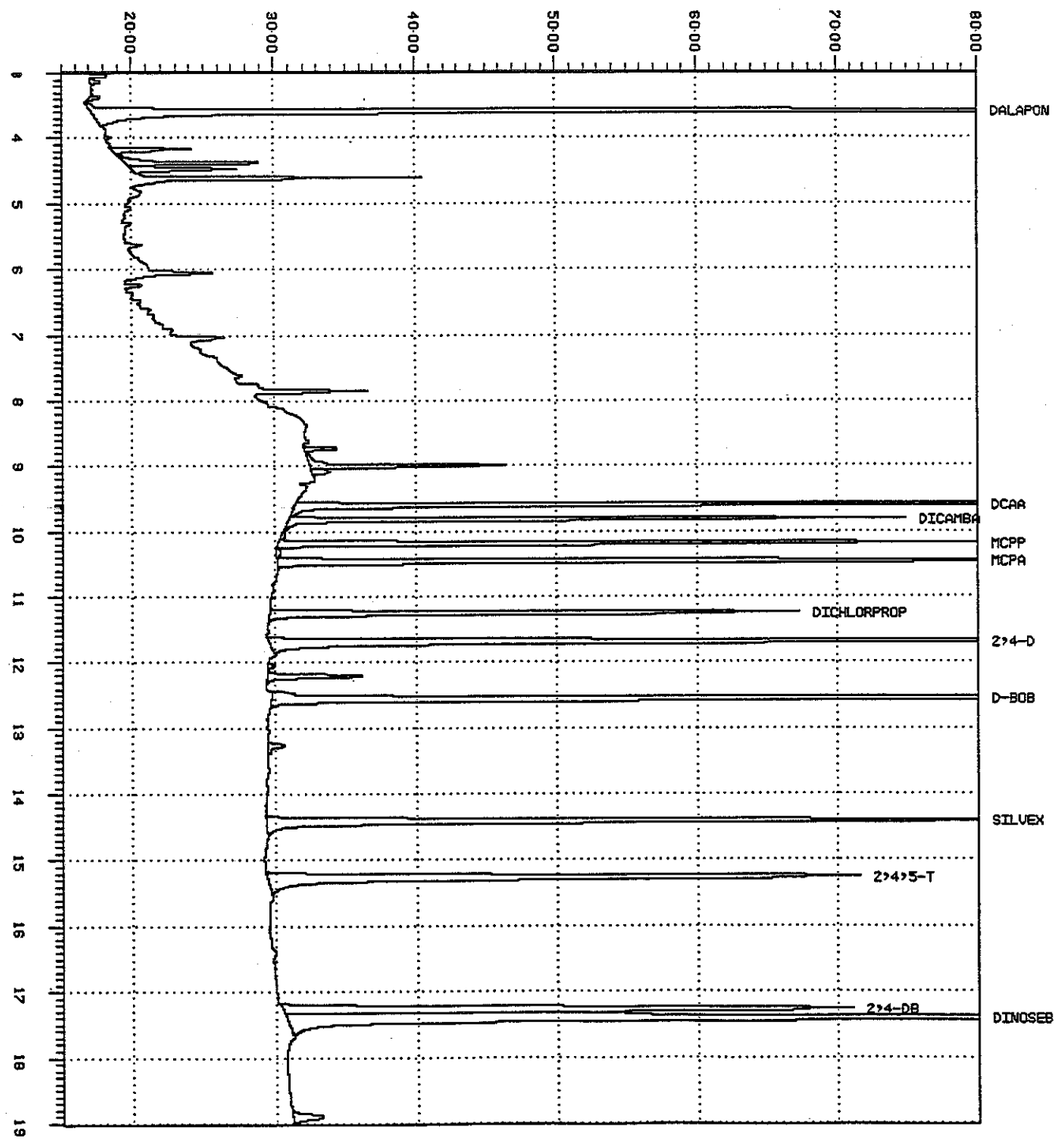
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

000675

[HRB08_1] 63 N04AUG92,15,1

'ERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 21:24
Reported on 5-AUG-1992 at 15:30
Box 1 (of 1)



Injection Report

Acquired on 4-AUG-1992 at 21:24

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 15

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.231	4.231	208222	514235	0.28910	Dalapon	2.1
10	11.547	11.551	113628	302078	0.12006	DCAA	2.7
12	11.987	11.991	79814	196829	0.02314	Dicamba	2.7
13	12.253	12.262	51558	64470	15.33314	MCPP	2.1
14	12.960	12.964	73680	159493	15.33790	MCPA	2.7
15	13.996	14.004	60202	184808	0.05236	Dichlorprop	3.5
16	14.493	14.498	197515	635246		D-BOB	3.5
17	15.093	15.102	105879	459893	0.11415	2,4-D	4.0
20	18.516	18.530	88172	403080	0.02288	Silvex	4.5
21	20.391	20.409	71216	378632	0.02149	2,4,5-T	5.1
22	22.613	22.627	98609	541672	0.05775	Dinoseb	5.3
23	23.040	23.053	67828	399983	0.19377	2,4-DB	5.6

Totals			
Unknowns	152036	685128	N/A
Quantified	1216322	4240419	31.56575
Grand Total	1368358	4925547	31.56575

MISSING PEAKS

No missing peaks.

MG 8/5/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

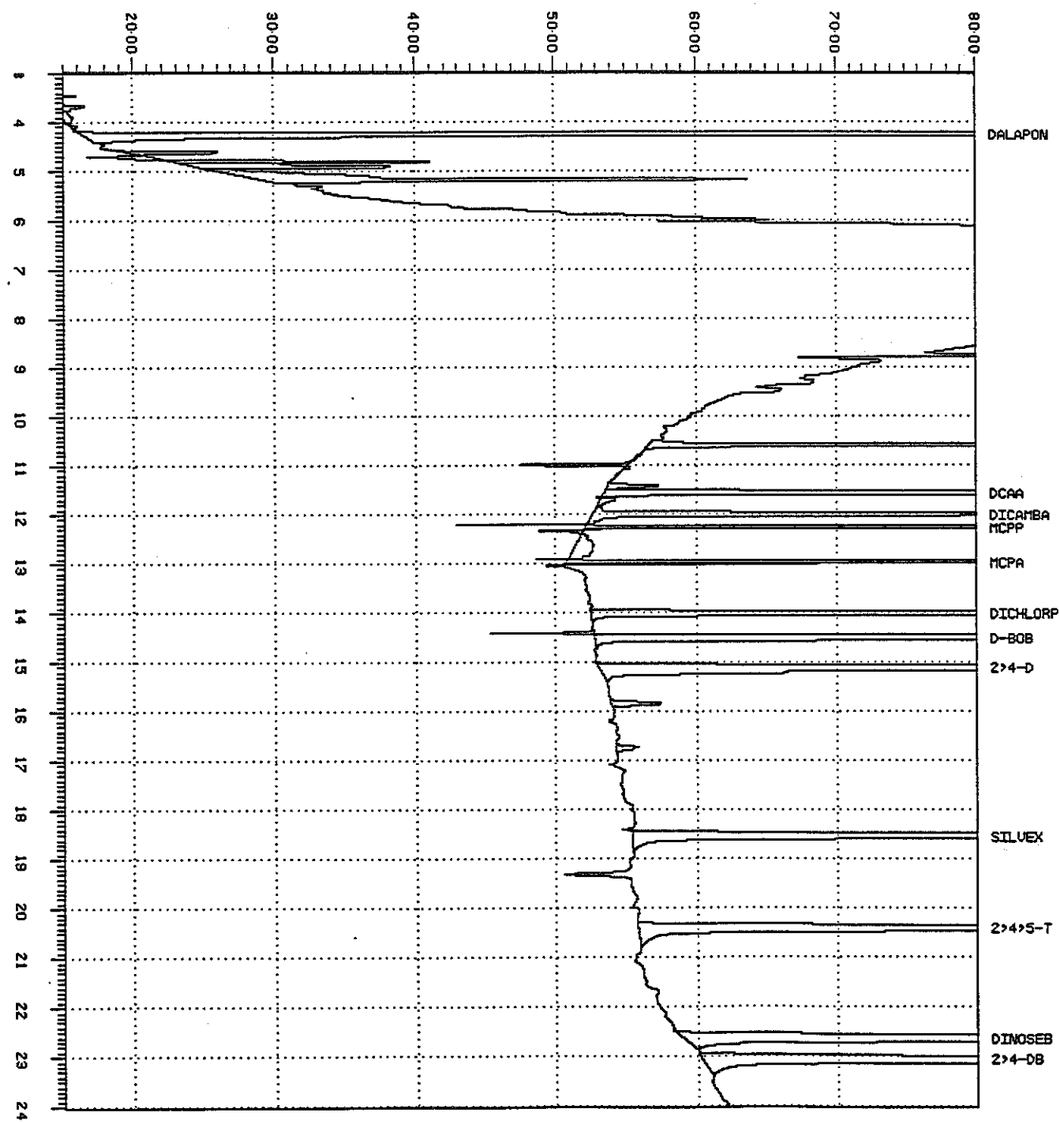
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N04AUG92,15,1

000678

IERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 21:24
Reported on 5-AUG-1992 at 15:31
Box 1 (of 1)



Good Methylation Standard
All TC's 71 82%

000679

Wed Aug 5 16:22:59 1992 Page 1

Reduced by: MM Date: 8/7/92
Reviewed by: MO Date: 8/11/92

Sample Summary

RLXI

Description: -METHYLATION STANDARD
Sample: 23, Injection: 1, Acquired: 5-Aug-1992 02:22

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBMTH

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	10ML	Reporting Units:	UG/ML
Concentration Multiplier:	1.000		
Spike Multiplier:	0.1000		

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Area Sample	%Diff	Concentration
63	D-BOB	396679	315500	-20	0.0250
64	D-BOB	822173	612865	-25	0.0250

5 Compounds found above detection limit (Including IS and Surrogates).
1 Compounds found outside linear range.

Compound Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/ML	Flag	Area	Extract UG/ML	Sample UG/ML	Flag
Dalapon					NC				
63		3.56							NF
64	4.28	4.23	0.05			6766	-0.0515	-0.0515	
DCAA				0.263					
63	9.58	9.57	0.01		Surr	279383	0.2634	0.263	105%
64	11.56	11.55	0.01			573939	0.2742	0.274	
Dicamba					ND				
63		9.80							NF
64		11.99							NF
MCPP					NC				
63	10.24	10.17	0.07			8540	-7.376	-7.38	
64		12.26							NF
MCPA					NC				
63	10.46	10.44	0.02			1842	-8.491	-8.49	
64		12.96							NF
Dichlorprop					NC				
63		11.23							NF
64	14.00	14.00	0.00			12469	-0.0046	-0.0046	

Compound	Retention Time h	Meas.	Pred.	Diff.	Final Concentration UG/ML	Flag	Area	Extract UG/ML	Sample UG/ML	Flag
2,4-D					0.205					
	63	11.68	11.67	0.01			368003	0.2370	0.237	
	64	15.12	15.10	0.01			712851	0.2048	0.205	
D-BOB					0.0250E					
	63	12.55	12.54	0.01			315500	0.0250	0.0250IS	
	64	14.51	14.50	0.01			612865	0.0250	0.0250IS	
Silvex					0.0465					
	63	14.40	14.40	0.01			367128	0.0488	0.0488	
	64	18.54	18.53	0.01			722440	0.0465	0.0465	
2,4,5-t					0.0453					
	63	15.26	15.25	0.01			350222	0.0475	0.0475	
	64	20.42	20.41	0.01			703526	0.0453	0.0453	
2,4-DB						ND				
	63		17.26							NF
	64		23.05							NF
Dinoseb						ND				
	63		17.39							NF
	64		22.63							NF

82%

IS

93%

91%

8/7/92

Injection Report

Acquired on 5-AUG-1992 at 02:22

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : -METHYLATION STANDARD
Sample Id : SUM2 HRBMTH
Sample Type : Sample Amount=1.00000
Bottle No : 23

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
11	9.582	9.573	117652	279383	0.26345	DCAA	2.4
12	10.236	10.169	1378	8540	-7.376171	MCPP	6.4
13	10.462	10.440	643	1842	-8.490777	MCPA	2.7
15	11.680	11.667	91274	368003	0.23702	2,4-D	3.5
16	12.547	12.538	112575	315500		D-BOB	2.9
20	14.404	14.396	94494	367128	0.04882	Silvex	3.5
21	15.258	15.249	71515	350222	0.04752	2,4,5-t	4.3

Totals			
Unknowns	521841	5297518	N/A
Quantified	489531	1690618	-15.270131
Grand Total	1011372	6988136	-15.270131

MISSING PEAKS

RT mins	Peak name
3.560	Dalapon
9.796	Dicamba
11.231	Dichlorprop
17.258	2,4-DB
17.391	Dinoseb

MW 8/7/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

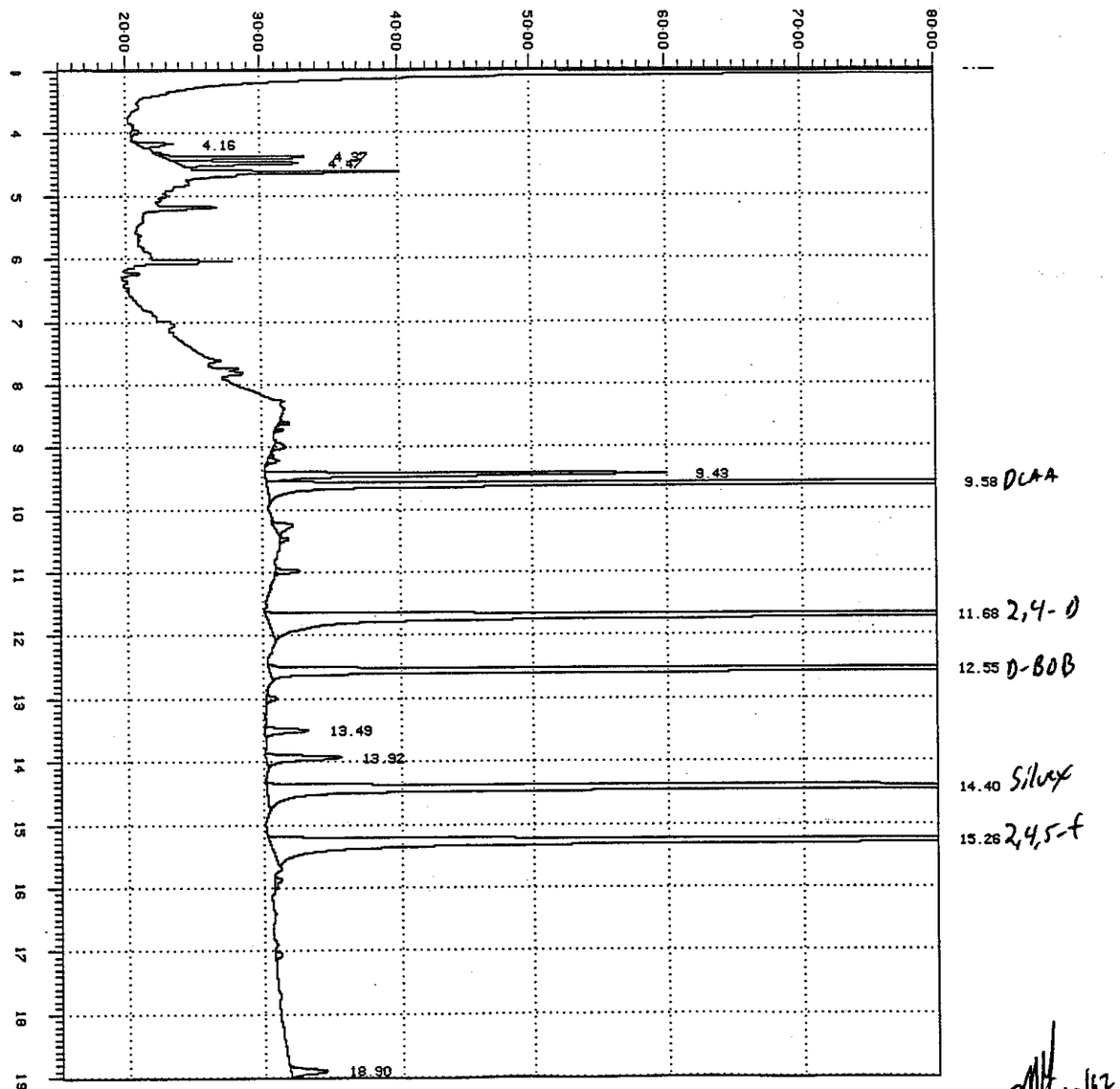
Uncalibrated peaks use user factor (0.0000)

MW 8/17/92

RMAL Chromatography System on DENCR3

[HRB08_1] 63 N04AUG92,23,1

23727-METHYLATION STANDARD. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 5-AUG-1992 at 02:22
Reported on 7-AUG-1992 at 11:35
Box 1 (of 1)



8/7/92

Injection Report

Acquired on 5-AUG-1992 at 02:22

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : ,-METHYLATION STANDARD
Sample Id : SUM2 HRBMTH
Sample Type : Sample Amount=1.00000
Bottle No : 23

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	4.280	4.231	1696	6766	-0.051544	Dalapon	5.3
10	11.560	11.551	190198	573939	0.27417	DCAA	2.9
13	14.000	14.004	3517	12469	-0.004572	Dichlorprop	3.5
14	14.507	14.498	189551	612865		D-BOB	3.5
15	15.116	15.102	152191	712851	0.20478	2,4-D	4.0
19	18.538	18.530	151273	722440	0.04654	Silvex	4.5
21	20.418	20.409	119745	703526	0.04533	2,4,5-T	5.3

Totals			
Unknowns	762394	7587635	N/A
Quantified	808171	3344856	0.51470
Grand Total	1570565	10932491	0.51470

MISSING PEAKS

RT mins	Peak name
11.991	Dicamba
12.262	MCPP
12.964	MCPA
22.627	Dinoseb
23.053	2,4-DB

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

MH 8/7/92

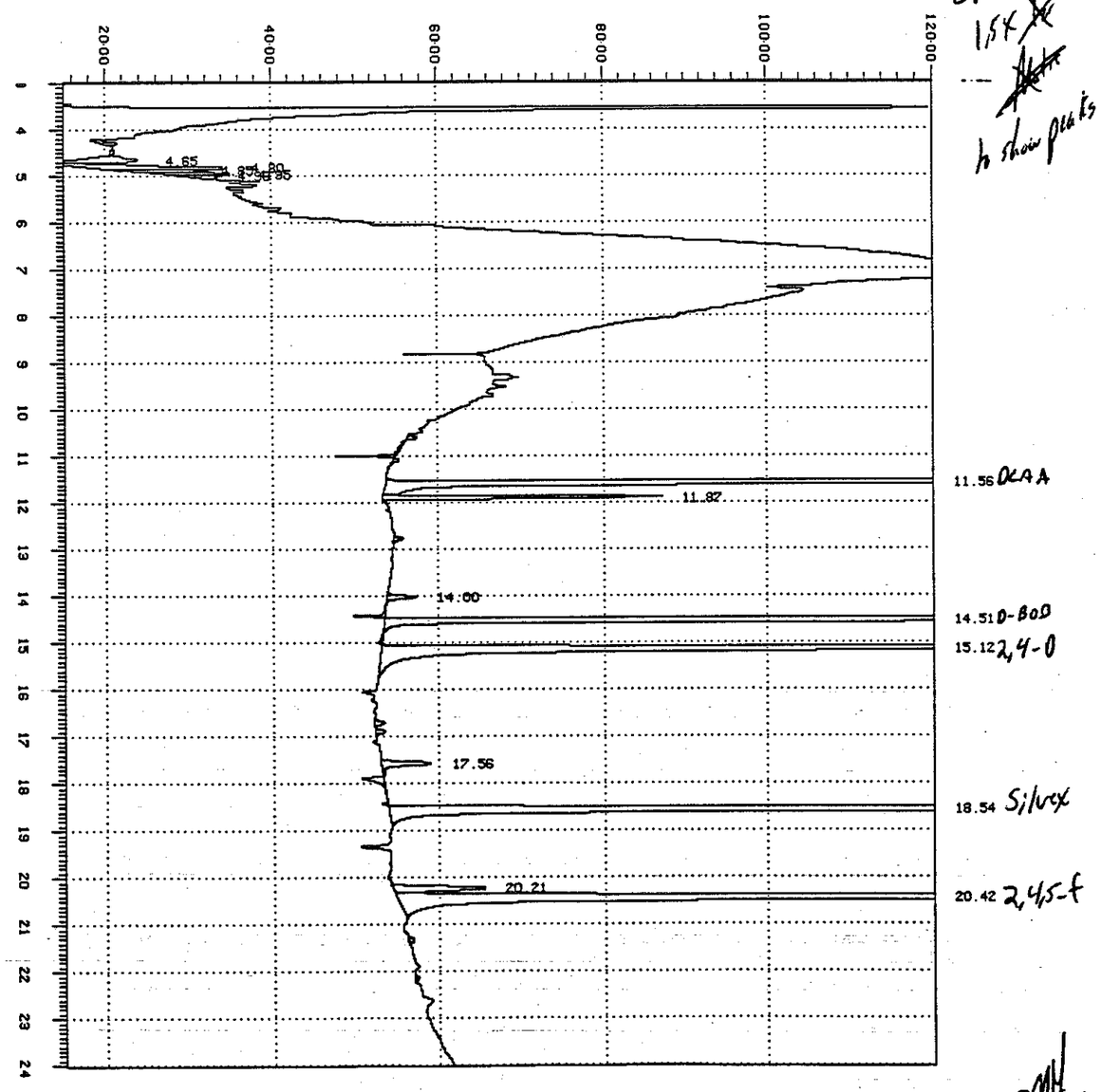
000686

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N04AUG92,23,1

-METHYLATION STANDARD. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 5-AUG-1992 at 02:22
Reported on 7-AUG-1992 at 11:44
Box 1 (of 1)

Elec. Dil
1.5X
h show peaks



000687
000686

GC SEMIVOA

METHOD/TEST 8150

INSTRUMENT N

INITIAL CALIBRATION DATE 08/02/92

ANALYSIS RUN DATE 08/04/92

SAMPLES ASSOCIATED 01

nseco - Rocky Mountain Analytical Laboratory

Project No.: _____

HERBICIDE WORKSHEET

METHOD: 8150
MATRIX: H_2O
QC Lot: 09JUL921A
QC Run: 09JUL921A
TCLP LBL #: _____
Test Code P-8150-AP9-A

SCS ID: Hrb SCS
Date Made: 6-3-92
Made By: RE/MS
Conc.: 5.0 ug/ml
Verif. No.: 6203
Amt. Added: 1.0 ml
Date Added: 7-9-92
By: LJ
Witness: LJ

DCS ID: _____
Date Made: _____
Made By: _____
Conc.: _____
Verif. No.: _____
Amt. Added: _____
Date Added: _____
By: _____
Witness: _____

METHYLATION STD.: ~~HB/MEAL STD.~~
Date Made: 6/25/92
Made By: MG
Conc.: 1555 ug/ml
Verif. No.: 6345
Amt Added: 0.5 ml.
Date Added: 7/27/92
By: MS
Witness: _____

E. Ether Brand: B+J Lot No.: BC750 MeOH Brand: Bf Lot No.: BB225 Hexane Brand: Bf Lot No.: BB407

Sample Number	Amt. Ext. (ml)	Int pH	Adj pH	Ext. Date	By	Vol. Ether Used	Vol. Ether Rec.	Saline Wash	Date Hydro.	By	Ether Wash Date	By	Vol. Ether Used	Vol. Ether Rec.	Date Methyl	By	Final Vol (mL)	Solvent
01	940	7	<2	7-9-92	LJ	250 ml	~150 ml	—	7-11-92	DI	7-13-92	LJ	40 ml	>80%	7/27/92	MS	10.0	HEXANE
02	1000																	
04	960																	
05	980																	
07	990																	
08	980																	
10	940																	
11	1000																	
13																		
14																		

000688

Comments:

Reviewed By: FB Date: 7/27/92

Tue Aug 4 11:18:52 1992 Page 1

Laboratory: Enseco - RMAL Instrument: N

000689

Device: MCD0 Project: HRB08_1 Channel: 63
Analysis: N02AUG92 Run Sequence: N0804
Calibration: N0802 Method: HERBUS1 Control: HERBUS

Chan	Column Type	Film(um)	Length(m)	I.D.(mm)	Injector Temp(C)	Detector Type	Temp	Atten	Range
63	RTx-5	0.25	30	0.25	240	ECD	325	0	0
64	RTx-20	0.25	35	0.25		ECD	325	0	0

Temperature Program

Init(C)	Init(min.)	Prog.(C/min.)	Final(C)	Final(min)	SIGNALS
50	2.00	20.0	160	2.0	Ch63 12.6
		1.3	180	0.0	Ch64 42.2
		30.0	280	1.5	

Injection Volume: 2 UL Carrier Gas:H2 Auxillary Gas:N2
Purge On :0.60 Purge Off :26.5

Pos	Sample Num.	Type	RF Upd	RT Upd	Level ID	Description/Comments
1	1	SA				PRIMER T=QC
2	2	SA				HEXANE BLANK T=QC
3	3	ST	N	N	L3	HERB CSA 5% T=ST V=6348
[illegible]	4	SA				AUX-09JUL92-1A-09JUL92-1A PET1
5	5	SA				DCS-09JUL92-1A-DCS1- PET1
6	6	SA				DCS-09JUL92-1A-DCS2 PET1
7	7	SA				-01-SA AMT=0.940L PET1
8	8	SA				-02-SA AMT=1.00L PET1
9	9	SA				-04-SA AMT=0.960L PET1
10	10	SA				05-SA AMT=0.980L PET1
11	11	SA				-07-SA AMT=0.990L PET1
12	12	SA				8-SA AMT=0.980L PET1
13	13	SA				10-SA AMT=0.940L PET1
14	14	SA				HEXANE BLANK T=QC
15	15	ST	N	N	L3	HERB CSA 5% T=ST V=6348

Update (N-none, I-initialize, A-average, U-update, L-initialize all)
RT Update (N-none, I-initialize, A-average)

Analyst: MH Date: 8/5/92

Wed Aug 5 15:22:06 1992 Page 1

Reduced by: MH Date: 8/5/92
Reviewed by: AHO Date: 8/11/92

Check Standard Report

Description: HERB CSA 5% T=ST V=6348
Sample: 3, Injection: 1, Acquired: 4-Aug-1992 13:52

000690

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Area Sample	%Diff	Concentration
63	D-BOB	396679	396679	0	0.0250
64	D-BOB	822173	822173	0	0.0250

0 of 12 compounds are outside control limits for channel 63
0 of 12 compounds are outside control limits for channel 64

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max	Compound
63	3.56	3.56	0.00	0.250	0.229	-9	20	Dalapon
64	4.23	4.23	0.00	0.250	0.233	-7	20	Dalapon
63	9.57	9.57	0.00	0.125	0.123	-2	20	DCAA
64	11.55	11.55	0.00	0.125	0.123	-2	20	DCAA
63	9.79	9.80	0.00	0.0250	0.0245	-2	20	Dicamba
64	11.98	11.99	-0.01	0.0250	0.0244	-2	20	Dicamba
63	10.16	10.17	-0.01	25.0	21.8	-13	20	MCPP
64	12.25	12.26	-0.01	25.0	25.5	2	20	MCPP
63	10.44	10.44	0.00	25.0	23.9	-5	20	MCPA
64	12.96	12.96	0.00	25.0	24.1	-4	20	MCPA
63	11.23	11.23	0.00	0.0625	0.0625	0	20	Dichlorprop
64	14.00	14.00	-0.01	0.0625	0.0598	-4	20	Dichlorprop
63	11.66	11.67	0.00	0.125	0.130	4	20	2,4-D
64	15.09	15.10	-0.01	0.125	0.126	1	20	2,4-D
63	12.53	12.54	0.00		0.0250	0	30	IS D-BOB
64	14.49	14.50	0.00		0.0250	0	30	IS D-BOB
63	14.39	14.40	0.00	0.0250	0.0247	-1	20	Silvex
64	18.52	18.53	-0.01	0.0250	0.0253	1	20	Silvex
63	15.24	15.25	0.00	0.0250	0.0251	0	20	2,4,5-t
64	20.40	20.41	-0.01	0.0250	0.0249	0	20	2,4,5-t
63	17.25	17.26	-0.01	0.250	0.240	-4	20	2,4-DB
64	23.04	23.05	-0.01	0.250	0.253	1	20	2,4-DB
63	17.38	17.39	-0.01	0.0625	0.0684	9	20	Dinoseb
64	22.61	22.63	-0.01	0.0625	0.0656	5	20	Dinoseb

All RPDs ≤ 13%

All RTs ≤ 0.0

Injection Report

Acquired on 4-AUG-1992 at 13:52

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
2	3.560	3.560	106389	268851	0.22863	Dalapon	2.1
9	9.569	9.573	83705	185061	0.12275	DCAA	2.1
10	9.791	9.796	53616	116164	0.02454	Dicamba	2.1
11	10.160	10.169	58575	139436	21.78911	MCPP	2.4
12	10.436	10.440	77386	205246	23.87029	MCPA	2.4
13	11.227	11.231	48141	134002	0.06245	Dichlorprop	2.7
14	11.662	11.667	79281	275799	0.12958	2,4-D	3.2
17	12.533	12.538	142361	396679		D-BOB	2.7
19	14.391	14.396	64700	241788	0.02474	Silvex	3.5
20	15.244	15.249	53361	241110	0.02511	2,4,5-t	4.0
23	17.249	17.258	51603	247409	0.23994	2,4-DB	5.1
24	17.382	17.391	77203	412554	0.06837	Dinoseb	4.5

Totals			
Unknowns	67540	263138	N/A
Quantified	896322	2864101	46.58553
Grand Total	963862	3127239	46.58553

MISSING PEAKS

No missing peaks.

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

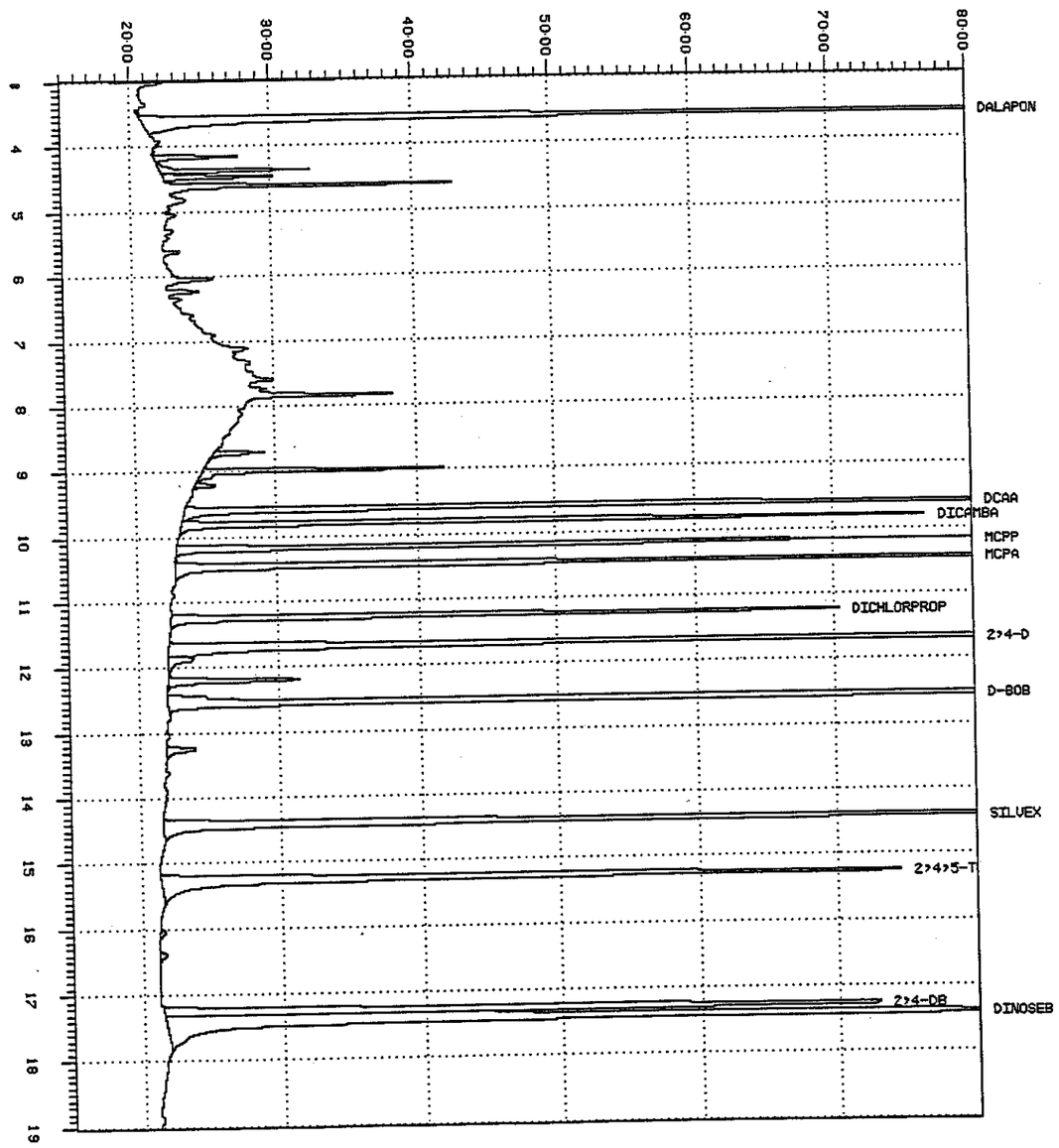
Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3

[HRB08_1] 63 N04AUG92,3,1

HERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 13:52
Reported on 5-AUG-1992 at 15:30
Box 1 (of 1)

000693



MK 8/13/92

Injection Report

Acquired on 4-AUG-1992 at 13:52

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 3

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.231	4.231	211324	557888	0.23323	Dalapon	2.4
11	11.547	11.551	142203	397432	0.12269	DCAA	2.9
13	11.982	11.991	100112	266534	0.02440	Dicamba	2.9
14	12.253	12.262	82143	179649	25.48393	MCPP	2.7
15	12.960	12.964	107230	312110	24.10443	MCPA	2.9
16	13.996	14.004	81325	268203	0.05979	Dichlorprop	3.5
17	14.493	14.498	248202	822173		D-BOB	3.5
18	15.093	15.102	135532	641938	0.12588	2,4-D	4.0
22	18.516	18.530	116833	566737	0.02526	Silvex	4.5
23	20.396	20.409	98533	555212	0.02491	2,4,5-T	5.1
25	22.613	22.627	128772	774457	0.06556	Dinoseb	5.6
26	23.040	23.053	93153	638074	0.25272	2,4-DB	5.9

Totals			
Unknowns	121092	334525	N/A
Quantified	1545362	5980409	50.52281
Grand Total	1666454	6314934	50.52281

MISSING PEAKS

No missing peaks.

MH 8/15/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

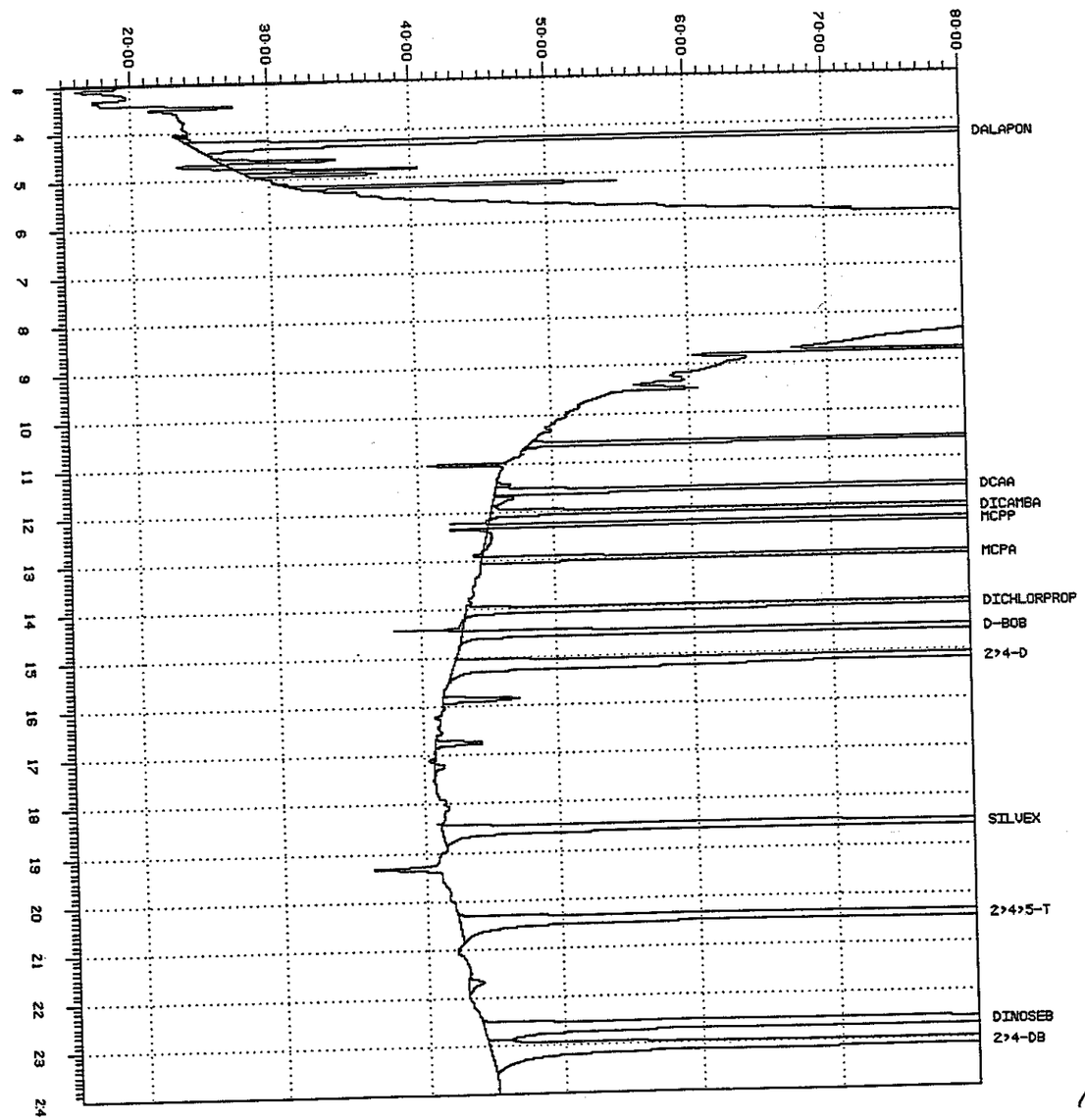
MH 5/25/92

000696

RMAL Chromatography System on DENCR3

[HRB08_1] 64 N04AUG92,3,1

HERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 13:52
Reported on 5-AUG-1992 at 15:31
Box 1 (of 1)



SCO 8/11/92 2,4-D = ND ~~1.40 ug/L~~

000697 2,4,5-T = NDL ~~0.103 ug/L~~ J

Wed Aug 5 16:17:46 1992 Page 1

Reduced by: MG Date: 8/7/92
Reviewed by: SKO Date: 8/11/92

Sample Summary

RLx1

Description: [illegible]-SA AMT=0.940L PET1
Sample: 7, Injection: 1, Acquired: 4-Aug-1992 16:22

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Analysis Units:	UG/ML	Extract Volume:	10ML
Extract Dilution %:	100%	Extract Split:	1
Sample Amount:	0.940L	Reporting Units:	UG/L
Concentration Multiplier:	10.64		
Spike Multiplier:	1.064		

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Area Sample	%Diff	Concentration
63	D-BOB	396679	385592	-3	0.0250
64	D-BOB	822173	474845	-42	0.0250

Quench 63 due to low IS
on ch 63 IS ≤ -30%

Ch	Surrogate Name	Conc. Measured Extract UG/ML	Conc. Measured Sample UG/L	Conc. Spiked Sample UG/L	%Recovery Meas.	%Recovery Low	%Recovery High
63	DCAA	0.3863	4.11	5.32	77.3	51	138
64	DCAA	0.6685	7.11	5.32	134	51	138

6 Compounds found above detection limit (Including IS and Surrogates).
1 Compounds found outside linear range.

Compound	Ch	Retention Time Meas.	Retention Time Pred.	Retention Time Diff.	Final Concentration UG/L	Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dalapon						BDL				
	63	3.49	3.56	-0.07			243000	0.2090	2.22	
	64	4.27	4.23	0.04			3507	-0.0531	-0.565	
DCAA					4.11					
	63	9.56	9.57	-0.01			482567	0.3863	4.11	
	64	11.54	11.55	-0.01			1004788	0.6685	7.11	
Dicamba					0.960					
	63	9.80	9.80				692224	0.1705	1.81	
	64	12.00	11.99	0.01			508509	0.0902	0.960	
MCPP						BDL				
	63	10.20	10.17	0.03			52755	2.490	26.5	
	64	12.24	12.26	-0.03			360829	72.45	771	
MCPA					416					
	63	10.45	10.44	0.01			292382	39.11	416	
	64	13.00	12.96	0.03			693457	97.81	1040	

Surr

NDL

Compound	Ch	Retention Time Meas.	Pred.	Diff.	Final Concentration UG/L Flag	Area	Extract UG/ML	Sample UG/L	Flag
Dichlorprop					2 ~~.94 B~~ ND				
	63	11.22	11.23	-0.01		493122	0.2762	2.94	
	64	13.96	14.00	-0.05 RT		951829	0.4129	4.39	
2,4-D					~~0.739~~ 1.40 ND				
	63	11.62	11.67	-0.04 RT OFF		270848	0.1312	1.40	
	64	15.12	15.10	0.02		241008	0.0695	~~0.739~~	
D-BOB					0.266 J IS				
	63	12.52	12.54	-0.01		385592	0.0250	0.266	IS
	64	14.49	14.50	0.00		474845	0.0250	0.266	IS
Silvex					~~0.399~~ ND				
	63	14.33	14.40	-0.07 RT		348372	0.0375	0.399	
	64	18.52	18.53	-0.01		888328	0.0766	0.815	
2,4,5-t					~~0.103 J~~ BDL				
	63	15.26	15.25	0.01		101268	0.0097	0.103	
	64	20.40	20.41	0.00		216463	0.0154	0.164	
2,4-DB					BDL				
	63	17.28	17.26	0.03		49183	0.0282	0.300	
	64	23.11	23.05	0.05		440173	0.3135	3.34	
Dinoseb					BDL				
	63	17.48	17.39	0.09		363433	0.0608	0.647	
	64	22.72	22.63	0.10		87150	-0.0008	-0.0086	

8/7/

Injection Report

Acquired on 4-AUG-1992 at 16:22

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : 23727-01-SA AMT=0.940L PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 7

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
3	3.493	3.560	52443	243000	0.20900	Dalapon	4.3
20	9.560	9.573	226157	482567	0.38634	DCAA	2.1
22	9.796	9.796	312964	692224	0.17048	Dicamba	2.4
26	10.200	10.169	24540	52755	2.48953	MCPP	2.1
28	10.449	10.440	99680	292382	39.10654	MCPA	2.9
34	11.222	11.231	170286	493122	0.27618	Dichlorprop	2.7
37	11.622	11.667	59311	270848	0.13121	2,4-D	4.5
44	12.524	12.538	109250	385592		D-BOB	3.2
56	14.329	14.396	66047	348372	0.03752	Silvex	6.1
62	15.262	15.249	23058	101268	0.00971	2,4,5-t	4.5
76	17.284	17.258	13871	49183	0.02822	2,4-DB	3.7A
77	17.484	17.391	71972	363433	0.06081	Dinoseb	5.1

Totals			
Unknowns	6857896	25015498	N/A
Quantified	1229579	3774747	42.90555
Grand Total	8087475	28790244	42.90555

MISSING PEAKS

No missing peaks.

MG 9/7K

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

MW 8-17

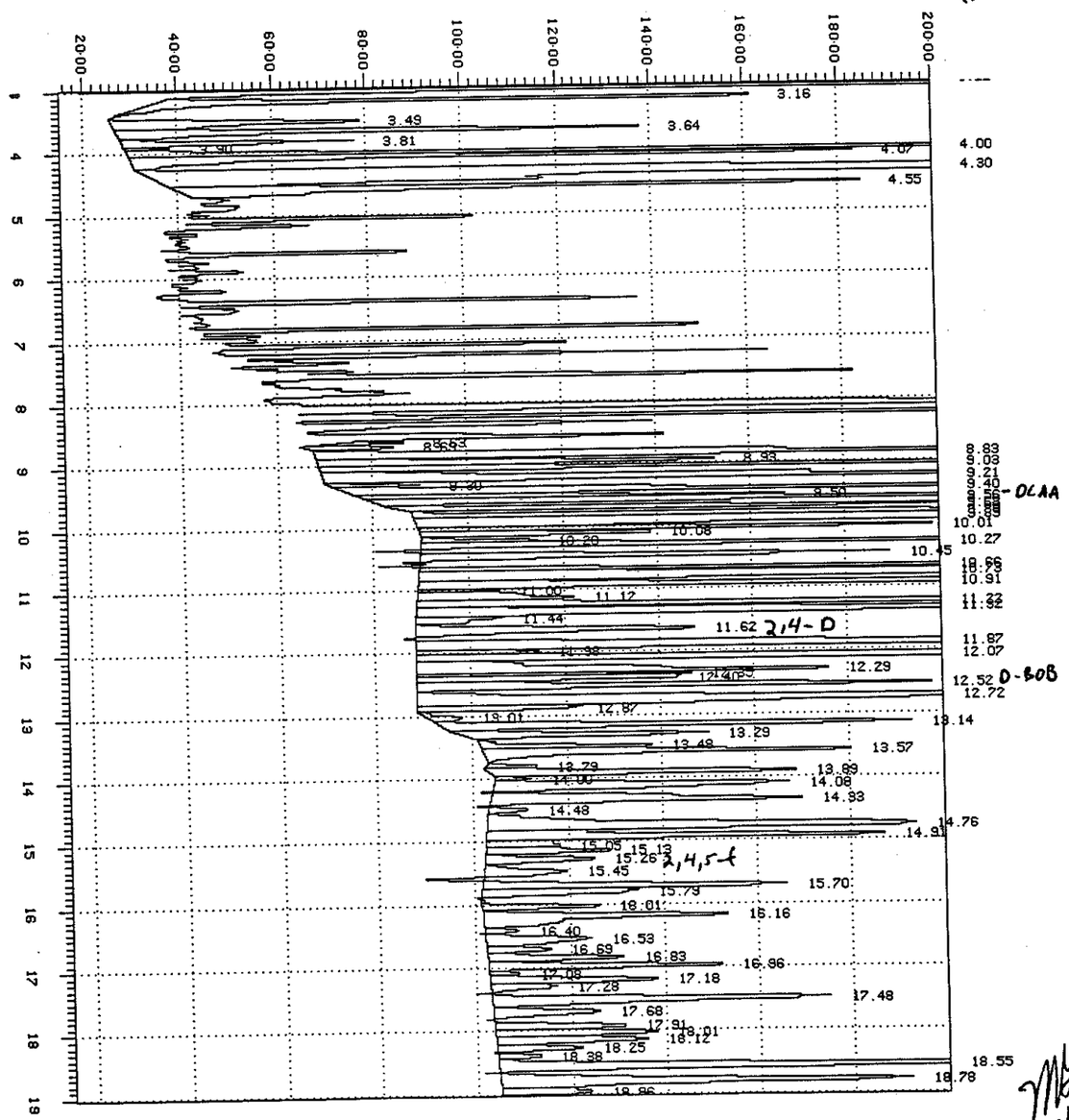
RMAL Chromatography System on DENCR3

000701

[HRB08_1] 63 N04AUG92,7,1

AMT=0.940L PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 16:22
Reported on 7-AUG-1992 at 11:25
Box 1 (of 1)

Elec. Dil 2.5X Gr matrix



8/7/92

Injection Report

Acquired on 4-AUG-1992 at 16:22

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : AMT=0.940L PET1
Sample Id : SUM2 HRBA
Sample Type : Sample Amount=1.00000
Bottle No : 7

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
5	4.271	4.231	2141	3507	-0.053103	Dalapon	1.9
20	11.542	11.551	356831	1004788	0.66851	DCAA	2.7
23	12.000	11.991	120388	508509	0.09023	Dicamba	6.4A
26	12.236	12.262	93209	360829	72.44644	MCPP	4.3
33	12.996	12.964	228110	693457	97.81211	MCPA	3.2
40	13.956	14.004	251072	951829	0.41294	Dichlorprop	3.5
43	14.493	14.498	152328	474845		D-BOB	3.2
46	15.124	15.102	34229	241008	0.06950	2,4-D	7.5
66	18.516	18.530	133030	888328	0.07662	Silvex	5.9
77	20.404	20.409	41956	216463	0.01543	2,4,5-T	4.8A
89	22.724	22.627	16013	87150	-0.000805	Dinoseb	6.7
91	23.107	23.053	58113	440173	0.31347	2,4-DB	7.7

Totals			
Unknowns	10515839	43582464	N/A
Quantified	1487419	5870886	171.85135
Grand Total	12003258	49453352	171.85135

MISSING PEAKS

No missing peaks.

MM 8/7/92

ANALYSIS SUMMARY

Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

9/7/92

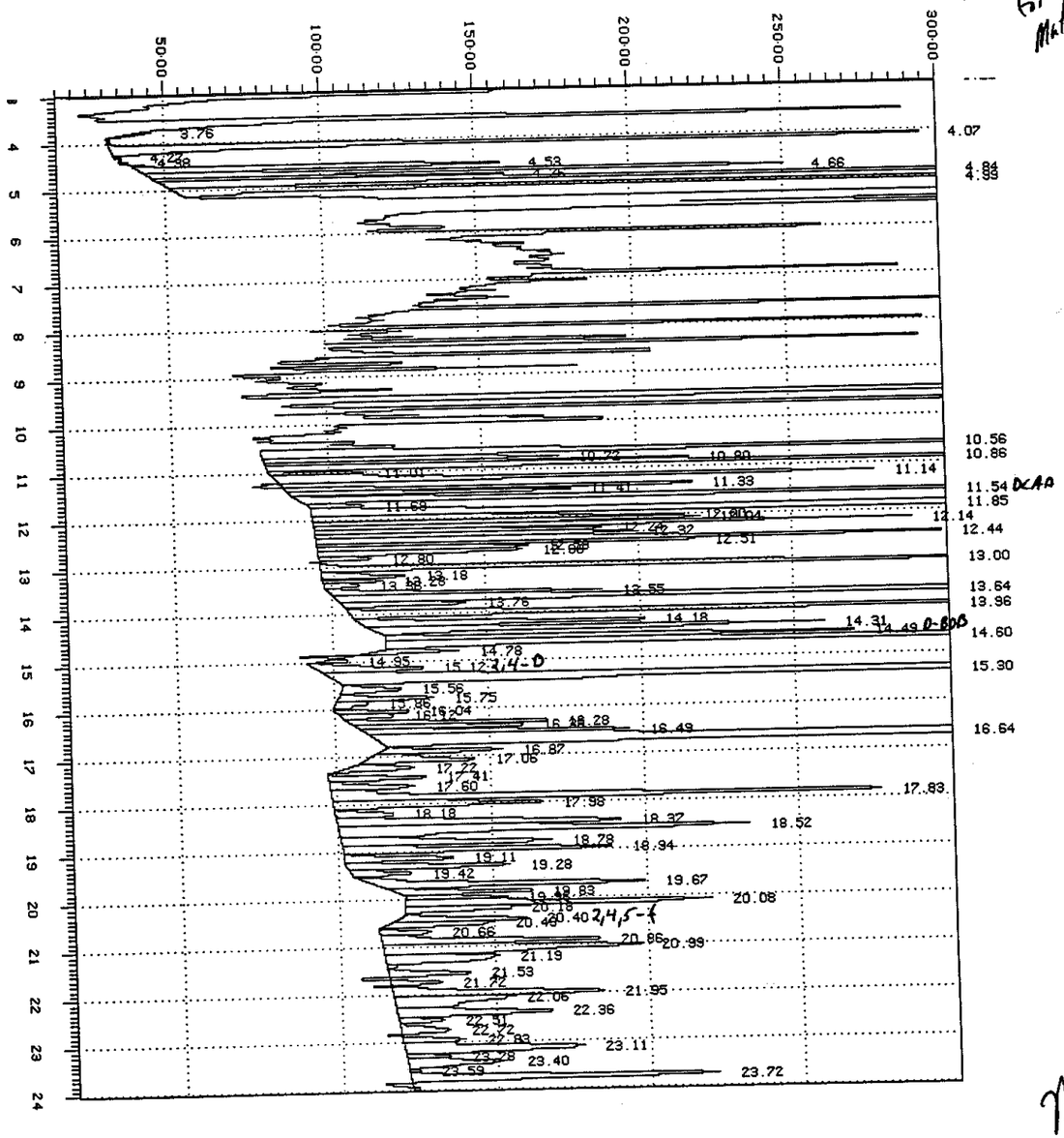
RMAL Chromatography System on DENCR3

000704

[HRB08_1] 64 N04AUG92,7,1

\MT=0.940L PET1. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 16:22
Reported on 7-AUG-1992 at 11:38
Box 1 (of 1)

Elec. Dil. 3.75x Gr Matrix



JMH 8/7/92

Wed Aug 5 15:28:16 1992 Page 1

Reduced by: MG Date: 8/5/92
Reviewed by: [illegible] Date: 8/11/92

Check Standard Report

Description: HERB CSA 5% T=ST V=6348
Sample: 15, Injection: 1, Acquired: 4-Aug-1992 21:24

Project: HRB08_1, Channel: 63, Analysis: N04AUG92, Node: DENCR3
Analyst: MGRAVES, Calibration File: N0802, MCRPT Method: HRBA

Comparison of internal standard areas with standard sample 3

Ch	Internal Standard	Area Standard	Sample	%Diff	Concentration
63	D-BOB	396679	314394	-21	0.0250
64	D-BOB	822173	635246	-23	0.0250

0 of 12 compounds are outside control limits for channel 63
3 of 12 compounds are outside control limits for channel 64

Ch	Retention Time Meas.	Pred.	Diff	Conc. ug/mL Added	Measured	%Diff	Max		Compound
63	3.57	3.56	0.01	0.250	0.265	6	20		Dalapon
64	4.23	4.23	0.00	0.250	0.289	16	20		Dalapon
63	9.59	9.57	0.01	0.125	0.122	-2	20		DCAA
64	11.55	11.55	0.00	0.125	0.120	-4	20		DCAA
63	9.80	9.80	0.01	0.0250	0.0253	1	20		Dicamba
64	11.99	11.99	0.00	0.0250	0.0231	-7	20		Dicamba
63	10.18	10.17	0.01	25.0	20.7	-17	20		MCPP
64	12.25	12.26	-0.01	25.0	15.3	-39*	20		MCPP
63	10.45	10.44	0.01	25.0	20.6	-18	20		MCPA
64	12.96	12.96	0.00	25.0	15.3	-39*	20		MCPA
63	11.24	11.23	0.01	0.0625	0.0579	-7	20		Dichlorprop
64	14.00	14.00	-0.01	0.0625	0.0524	-16	20		Dichlorprop
63	11.68	11.67	0.01	0.125	0.120	-4	20		2,4-D
64	15.09	15.10	-0.01	0.125	0.114	-9	20		2,4-D
63	12.55	12.54	0.01		0.0250	0	30	IS	D-BOB
64	14.49	14.50	0.00		0.0250	0	30	IS	D-BOB
63	14.40	14.40	0.00	0.0250	0.0243	-3	20		Silvex
64	18.52	18.53	-0.01	0.0250	0.0229	-8	20		Silvex
63	15.25	15.25	0.00	0.0250	0.0236	-5	20		2,4,5-t
64	20.39	20.41	-0.02	0.0250	0.0215	-14	20		2,4,5-t
63	17.26	17.26	0.00	0.250	0.225	-10	20		2,4-DB
64	23.04	23.05	-0.01	0.250	0.194	-22*	20		2,4-DB
63	17.40	17.39	0.00	0.0625	0.0636	2	20		Dinoseb
64	22.61	22.63	-0.01	0.0625	0.0578	-8	20		Dinoseb

All RPDs ≤ 17% except MCPP @ -39% ch 64
MCPA @ -39% ch 64
2,4-DB @ -22% ch 64
all hits will qual. ch 64
All RTs ≤ 0.02 min

[HRB08_1] 63 N04AUG92,15,1
Reported on 5-AUG-1992 at 15:29

Injection Report

Acquired on 4-AUG-1992 at 21:24

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title : METHOD FOR HERBICIDES
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 15

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	3.573	3.560	100664	240919	0.26518	Dalapon	1.9
12	9.587	9.573	67733	146259	0.12230	DCAA	2.1
13	9.804	9.796	44021	94412	0.02527	Dicamba	2.1
14	10.178	10.169	51164	106636	20.68087	MCPP	2.1
15	10.453	10.440	60425	146370	20.59051	MCPA	2.4
16	11.240	11.231	37743	99887	0.05789	Dichlorprop	2.7
17	11.676	11.667	65486	206015	0.12046	2,4-D	3.2
20	12.548	12.538	114947	314394		D-BOB	2.7
22	14.400	14.396	52042	188591	0.02432	Silvex	3.5
23	15.253	15.249	42339	180672	0.02363	2,4,5-t	4.0
24	17.262	17.258	40689	184740	0.22454	2,4-DB	4.5
25	17.396	17.391	64357	307536	0.06357	Dinoseb	4.3

Totals			
Unknowns	62485	304606	N/A
Quantified	741611	2216430	42.19855
Grand Total	804096	2521037	42.19855

MISSING PEAKS

No missing peaks.

MG 8/5/92

ANALYSIS SUMMARY

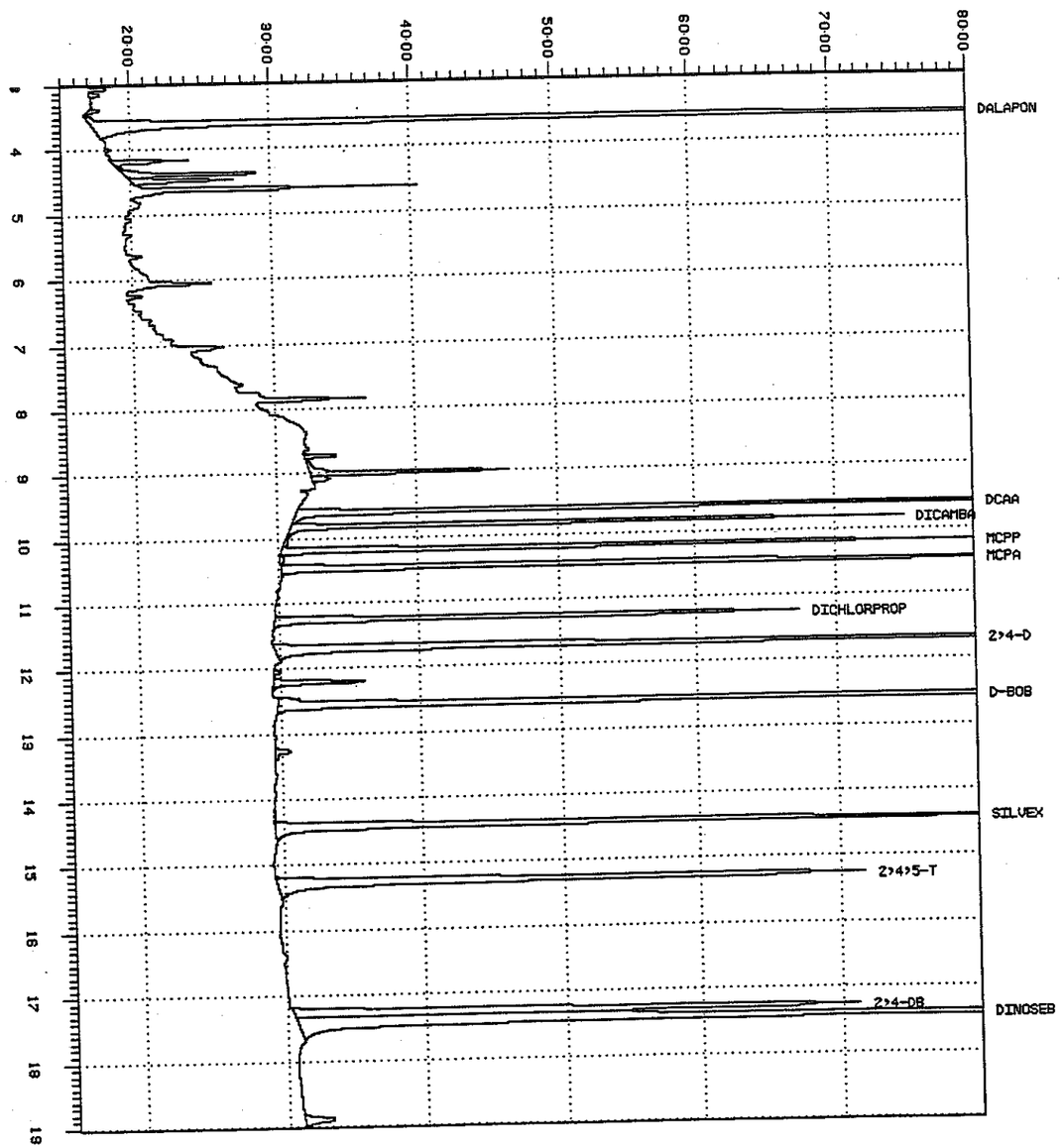
Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:21

Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3 000708

[HRB08_1] 63 N04AUG92,15,1

HERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-5 .25um,30m,.25mm
Acquired on 4-AUG-1992 at 21:24
Reported on 5-AUG-1992 at 15:30
Box 1 (of 1)



Injection Report

Acquired on 4-AUG-1992 at 21:24

RMAL Chromatography System on DENCR3

Analyst Name : MGRAVES
Lims Id : 2uL INJECTED
Comment : HP5890 Dual ECD Columns/RTx-5,RTx-20,0.25um,30m,0.25mm id
Method Title :
Sample Name : HERB CSA 5% T=ST V=6348
Sample Id : CHK2 HRBA
Sample Type : Standard Amount=1.00000
Bottle No : 15

PEAK INFORMATION

Peak	RT mins	RT Exp	Hght uV	Area uVs	ug/mL	Peak name	Width
4	4.231	4.231	208222	514235	0.28910	Dalapon	2.1
10	11.547	11.551	113628	302078	0.12006	DCAA	2.7
12	11.987	11.991	79814	196829	0.02314	Dicamba	2.7
13	12.253	12.262	51558	64470	15.33314	MCPP	2.1
14	12.960	12.964	73680	159493	15.33790	MCPA	2.7
15	13.996	14.004	60202	184808	0.05236	Dichlorprop	3.5
16	14.493	14.498	197515	635246		D-BOB	3.5
17	15.093	15.102	105879	459893	0.11415	2,4-D	4.0
20	18.516	18.530	88172	403080	0.02288	Silvex	4.5
21	20.391	20.409	71216	378632	0.02149	2,4,5-T	5.1
22	22.613	22.627	98609	541672	0.05775	Dinoseb	5.3
23	23.040	23.053	67828	399983	0.19377	2,4-DB	5.6

Totals			
Unknowns	152036	685128	N/A
Quantified	1216322	4240419	31.56575
Grand Total	1368358	4925547	31.56575

MISSING PEAKS

No missing peaks.

MG 8/5

ANALYSIS SUMMARY

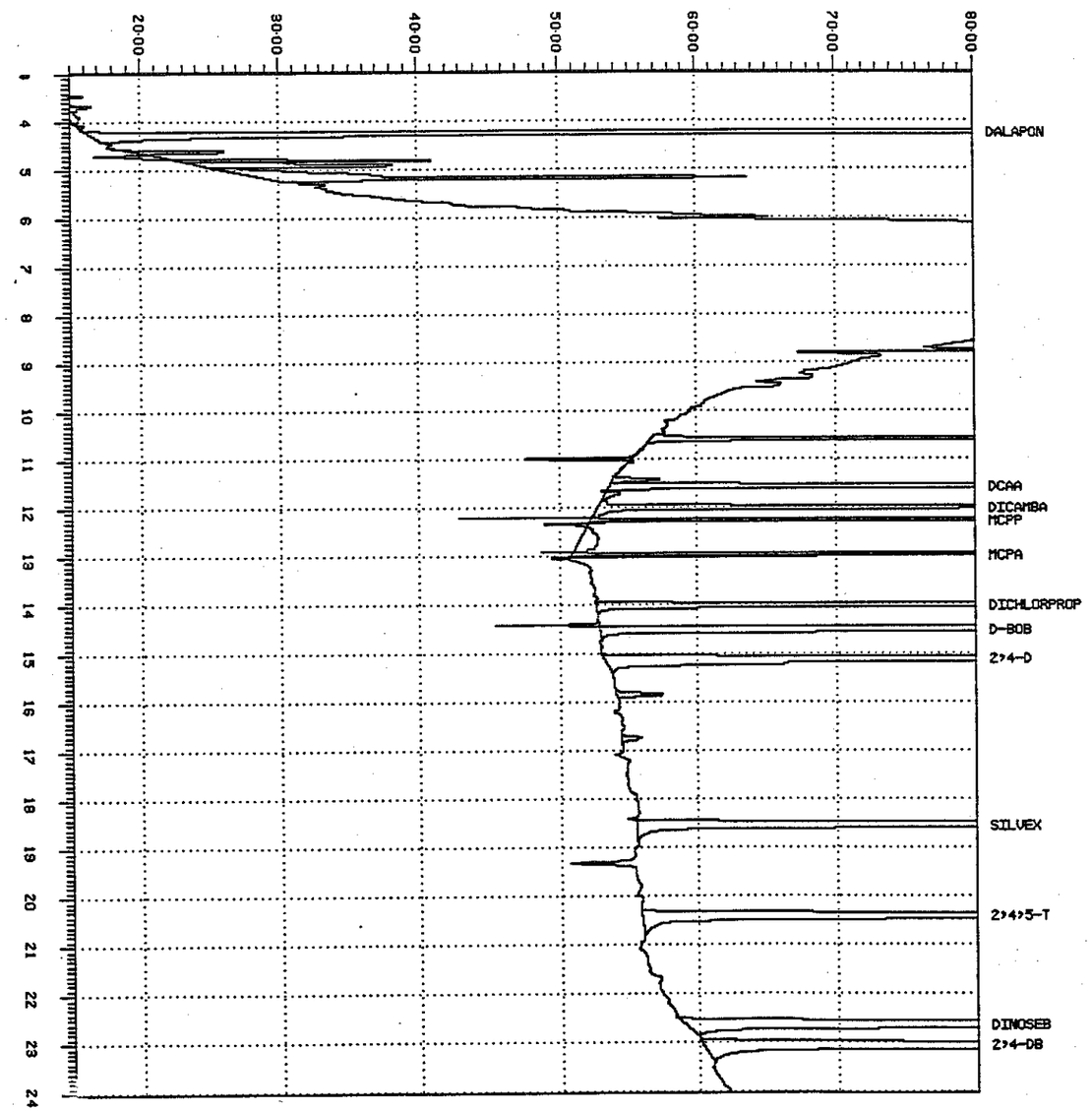
Method..... HERBUS1
Run sequence..... N0804
Calibration..... N0802
Internal standard calibration using area
Calibration last modified on 5-AUG-1992 at 14:55

Uncalibrated peaks use user factor (0.0000)

RMAL Chromatography System on DENCR3 000711

[HRB08_1] 64 N04AUG92,15,1

.ERB CSA 5% T=ST V=6348. Amount : 1.000.
Inst.N/HP5890-Dual ECD Columns/RTx-20, 0.25um,30m,0.25mm
Acquired on 4-AUG-1992 at 21:24
Reported on 5-AUG-1992 at 15:31
Box 1 (of 1)



METALS RAW DATA

PACKAGE

INDUSTRIAL - INORGANIC MERCURY PREP/ANALYSIS

QC Lot 15 JUL92 1A

Analyst BR

Sample Prep by BR/RS Date 15 JUL92

Date 7-16-92

Time On

Time Off

Corr. Coeff. 0.999

DCS lot #

Calib lot #

Bottle #	Std (ppm)	MV Reading
79	0.0	0.000
9	~~0.0005~~ 0.0002	0.016
~~1537~~ 18	~~0.001 CCV~~ 0.0005	0.038
78	~~0.002~~ 0.001	0.079
10	~~0.004~~ 0.002	0.171

Bottle Number	Matrix	Sample Number	Sample Mass	Sample Aliquot	MV	Initial Conc.	D/F	Final Conc.	%REC RPD
71		ICV			0.081	0.000975		~~ND (0.002)~~ 0.000975 (0.001)	98
10		ICB			0.000			ND (0.001)	
24		BLK #1	10 mL	134.5	0.000		101	ND (0.002)	
11	TCLP-L	DCS			0.082	0.000987		~~0.00~~ 0.00987 (0.01)	99
212		DCS			0.084	0.00101		0.01012 (0.01)	101
206		-01			0.000			ND (0.002)	
21		01MS			0.081	0.000975		0.00975	
38		-01			0.000			ND (0.002)	
5		02			0.000			ND (0.002)	
18		02DU			0.000			ND (0.002)	
~~78~~ 20		02MS			0.082	0.000987		0.00987 (0.01)	99
24		02SD			0.085	0.00102		0.0102 (0.01)	102
30		CCV			0.083				100
86		CCB			0.000			ND (0.002)	
19		03			0.000			ND (0.002)	
64		03DU			0.000			ND (0.002)	
86		03MS			0.088	0.001057		0.01057 (0.01)	
141		03SD			0.086	0.00103		0.01034 (0.01)	
2		04			0.034	0.000427		0.00427	
1		04DU			0.039	0.000485		0.00485	
121		04MS			0.120	0.00143		0.0143 (0.01)	
14		04SD			0.125	0.001489		0.001489 (0.01)	
19		CCV 05			0.087				105
7		CCB 05			0.000			ND (0.002)	
		CCV							
		CCB 5/C							

Additional Comments

04, 04DU, MS, SD failed to homogenize with reagents and dissolved the potassium permanganate

INDUSTRIAL-INORGANIC MERCURY PREP/ANALYSIS

QC Lot 15Jul92/B

Sample Prep by BR/95 Date 15Jul92

Analyst _____

Date _____

Time On _____

Time Off _____

Corr. Coeff. _____

DCS lot # _____

Calib lot # _____

Bottle #	Std (ppm)	MV Reading
	0.0	
	0.0005	
	0.001 CCV	
	0.002	
	0.004	

Bottle Number	Matrix	Sample Number	Sample Mass	Sample Aliquot	MV	Initial Conc.	D/F	Final Conc.	%REC RPD
85	TCLP-L	Blank #1	10ml	136.5ml	0.000		10X	ND (0.002)	
80		DCS			0.081	0.000975		0.00975 (0.01)	
7		DCS			0.086	0.00103		0.01034 (0.01)	
192		-05	10ml		0.000			ND (0.002)	
29		-05DU			0.000			ND (0.002)	
183		-05MS			0.083	0.000999		0.00999 (0.01)	100
15		-05SD			0.086	0.001034		0.00103 (0.01)	103
2		-01			0.006			ND (0.002)	
127		-01DU			0.000			ND (0.002)	
1		-01MS			0.081	0.000975		0.00975 (0.01)	98
21		CCV			0.083	0.000999		0.00999	99
122		CCB			0.000			ND (0.002)	
48		-01SD	10ml		0.079	0.000952	10X	0.00952 (0.01)	95
76		-02			0.000			ND (0.002)	
9		-03			0.000			ND (0.002)	
164		-04			0.000			ND (0.002)	
21		-05			0.000			ND (0.002)	
381		-06			0.000			ND (0.002)	
13		-06DU			0.000			ND (0.002)	
179		-06MS			0.082	0.000987		0.00987 (0.010)	9[illegible]
187		-06SD			0.083	0.000999		0.00999 (0.01)	100
3		-01			0.006			ND (0.002)	
21		CCV			0.087				104
93		CCB			0.000			ND (0.002)	
~~49~~ 95									

Additional Comments

INDUSTRIAL - INORGANIC MERCURY PREP/ANALYSIS

QC Lot 15 Jul 92 1C

Sample Prep by BR/RS Date 15 Jul 92.

Analyst _____

Date _____

Time On _____

Time Off _____

Corr. Coeff. _____

DCS lot # _____

Calib lot # _____

Bottle #	Std (ppm)	MV Reading
	0.0	
	0.0005	
	0.001 CCV	
	0.002	
	0.004	

Bottle Number	Matrix	Sample Number	Sample Mass	Sample Aliquot	MV	Initial Conc.	D/F	Final Conc.	%REC RPD
49	TCLP-L	Blank #1	10 ml	136.5	0.000		10X	ND (0.002)	
121		DCS			0.081	0.000975		0.00975 (	(0.01) 98
74		DCS			0.082	0.000987		0.00987 (	(0.01)
149		-01DU	10 ml		0.000			ND (0.002)	
10		-01MS			0.081	0.000975		0.00975	(0.01)
4		-01SD			0.086	0.00103		0.0103	(0.01)
56		-02			0.000			ND (0.002)	
17		-03			0.000			ND (0.002)	
53		Blank #2			0.000			ND (0.002)	
3		-01			0.000			ND (0.002)	
14		CCV			0.087				105
92		CCB			0.000			ND (0.002)	
16		-01DU	10 ml		0.000		10X	ND (0.002)	
41		-01MS			0.089	0.001069		0.01069	
102		-01SD			0.087	0.001045		0.01045	
84		-02			0.000			ND (0.002)	
5		CCV			0.081		~~1~~ 95		98
178		CCB			0.000		~~1~~ 95	ND (0.002)	

Additional Comments .

INDUSTRIAL - INORGANIC MERCURY PREP/ANALYSIS

QC Lot 15Jul92 1D

Sample Prep by BR/95 Date _____

Analyst _____

Date _____

Time On _____

Time Off _____

Corr. Coeff. _____

DCS lot # _____

Calib lot # _____

Bottle #	Std (ppm)	MV Reading
	0.0	
	0.0005	
	0.001 CCV	
	0.002	
	0.004	

Bottle Number	Matrix	Sample Number	Sample Mass	Sample Aliquot	MV	Initial Conc.	D/F	Final Conc.	%REC RPD
112	TCLP-OE	Blank #1	~~10.5~~	136.5	0.000	Nd 00613	500X	ND (0.1)	
12	↓	DCS	0.2g		0.050	~~0.000568~~	34/25	~~15.34~~ 20.95	(31.0) DH
13	↓	DCS	0.2g		0.049	0.000602	34/25	~~15.05~~ 20.55	(31.0) 7/22
9	TCLP-OE	-03	0.2g		0.000			ND (0.1)	
72	↓	-03DU	↓		0.000			ND (0.1)	
18	↓	-03MS	↓		0.077	0.001104		0.522239	RC 20/0002
29	↓	-03SD	↓		0.081	0.009758	↓	0.487870	
96	↓	CCV			0.087		~~.99~~		104
27	↓	CCB		↓	0.000		~~.95~~	ND (0.1)	
~~178~~									

Additional Comments

INDUSTRIAL - INORGANIC MERCURY PREP/ANALYSIS

QC Lot 15Jul92IE

Sample Prep by BR/GS Date 15 Jul 92

Analyst _____

Date _____

Time On _____

Time Off _____

Corr. Coeff. _____

DCS lot # _____

Calib lot # _____

Bottle #	Std (ppm)	MV Reading
	0.0	
	0.0005	
	0.001 CCV	
	0.002	
	0.004	

Bottle Number	Matrix	Sample Number	Sample Mass	Sample Aliquot	MV	Initial Conc.	D/F	Final Conc.	%REC RPD
CS 4 9	AD	Blank	100	136.5	0.000		1	ND (0.002)	
7		DCS			0.081	0.000975		0.000975 (0.001)	
99		DCS			0.081	0.000975		0.000975 (0.001)	
CS 4 4		-01	100		0.000			ND (0.0002)	
75		-01MS			0.081	0.000975		0.000975 (0.001)	
105		-01SD			0.083	0.000999		0.000999 (0.001)	
187		-02			0.000			ND (0.0002)	
198		-04			0.000			ND (0.0002)	
23		-05			0.000			ND (0.0002)	
32		-07			0.000			ND (0.0002)	
174		CCV			0.070				96
162		CCB			0.000			ND (0.0002)	
214		-08	100		0.000			ND (0.0002)	
56		-10			0.000			ND (0.0002)	
148		-11			0.000			ND (0.0002)	
125		-13			0.000			ND (0.0002)	
204		-14			0.000			ND (0.0002)	
62		-16			0.000			ND (0.0002)	
133		-17			0.000			ND (0.0002)	
16		-19			0.000			ND (0.0002)	
86		-20			0.000			ND (0.0002)	
46		-09			0.000			ND (0.0002)	
20		CCV			0.089				106
89		CCB			0.000			ND (0.0002)	
8		-10	100				2		
6		~~CCV~~ -10MS							
37		~~CCB~~ -10SD							
95		CCV							
90		CCB							

Additional Comments

INDUSTRIAL METALS -- GFAA

Instrument 2380I Analyst CD Date 09/17/92 Element Pb
Type (W/P) P Matrix Modifier (NH4)2HPO4 Background Correction BD
ICV/FCV T.V. 0.0500 CCV 0.0500
Analytical Spike Value 0.0200 Units mg/L

#	Sampl Type	QC Lot Number	Sample Number	Sample Result in mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec
40	Calib	---	Std. 0	0.000	AZ	--	0.0	--
41	Calib	---	Std. 1	0.059	abs	--	0.02	--
42	Calib	---	Std. 2	0.0484	--	--	0.05	--
43	Calib		Std. 3	0.0842			0.10	
1			CRA	0.0077	1	1		154
2			ICV	0.0523	1	1		105
3			CCV	0.0514	1	1		103
4			ICB	<0.0050	1	1		
5	AT	01SEP922A	BLANK	<0.0050	1	1	ND (0.0050)	
6	AT	01SEP922A	BLANK+	0.0235	1	1		118
7	AT	01SEP922A	DCS	0.0365	1	1	0.0365(0.030)	123 REC
8	AT	01SEP922A	DCS	0.0373	1	1	0.0373(0.030)	2.2 RPD
9	AT	01SEP922A	-01	<0.0050	1	1	ND (0.0050)	
10	AT	01SEP922A	-01+	0.0172	1	1		86
11	AT	01SEP922A	-02	<0.0050	1	1	NOT USED	DILUTE
12	AT	01SEP922A	-02+	<0.0050	1	1		0
13	AT	01SEP922A	-03	<0.0050	1	1	NOT USED	DILUTE
14	AT	01SEP922A	-03+	<0.0050	1	1		0
15	AT	01SEP922A	CCV	0.0534	1	1		107
16	AT	01SEP922A	CCB	<0.0050	1	1		
	AT	01SEP922A	-04	0.0079	1	1	NOT USED	DILUTE
	AT	01SEP922A	-04+	0.0173	1	1		47
19	AT	01SEP922A	-05	<0.0050	1	1	ND (0.010)	
20	AT	01SEP922A	-05+	0.0089	1	1		44
21	AT	01SEP922A	-06	0.0414	1	1	NOT USED	DILUTE
22	AT	01SEP922A	-06+	0.0465	1	1		26
23	AT	01SEP922A	-07	0.0060	1	1	NOT USED RE	ANALIZE
24	AT	01SEP922A	-07+	0.0239	1	1		90
25	AT	01SEP922A	-08	<0.0050	1	1	NOT USED	DILUTE
26	AT	01SEP922A	-08+	<0.0050	1	1		0
27	AT	01SEP922A	CCV	0.0504	1	1		101
28	AT	01SEP922A	CCB	<0.0050	1	1		
29	AT	01SEP922A	-08MS	<0.0050	1	1	NOT USED	DILUTE
30	AT	01SEP922A	-08MS+	<0.0050	1	1		0
31	AT	01SEP922A	-08SD	<0.0050	1	1	ND(0.030)	
32	AT	01SEP922A	-08SD+	0.0110	1	1		55
33	AT	01SEP922A	-09	<0.0050	1	1	NOT USED	DILUTE
34	AT	01SEP922A	-09+	<0.0050	1	1		0
35	AT	01SEP922A	-09DU	<0.0050	1	1	NOT USED	DILUTE

INDUSTRIAL METALS -- GFAA

Instrument 2380I Analyst CD Date 09/17/92 Element Pb
T (W/P) P Matrix Modifier (NH4)2HPO4 Background Correction BD
I CV T.V. 0.0500 CCV 0.0500
Analytical Spike Value 0.0200 Units mg/L

#	Sampl Type	QC Lot Number	Sample Number	Sample Result in mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec
40	Calib	---	Std. 0	0.000	AZ	--	0.0	--
41	Calib	---	Std. 1	0.059	abs	--	0.02	--
42	Calib	---	Std. 2	0.0484	--	--	0.05	--
43	Calib		Std. 3	0.0842			0.10	
1	AT	01SEP922A	-09DU+	<0.0050	1	1		0
2	AT	01SEP922A	-10	<0.0050	1	1	NOT USED	DILUTE
3	AT	01SEP922A	-10+	<0.0050	1	1		0
4	AT	01SEP922A	CCV	0.0480	1	1		96
5	AT	01SEP922A	CCB	<0.0050	1	1		
6	AT	01SEP922A	-11	<0.0050	1	1	NOT USED	DILUTE
7	AT	01SEP922A	-11+	<0.0050	1	1		0
8	AT	01SEP922A	-12	<0.0050	1	1	NOT USED	DILUTE
9	AT	01SEP922A	-12+	0.0064	1	1		32
10	AT	01SEP922A	-13	0.0099	1	1	NOT USED	DILUTE
11	AT	01SEP922A	-13+	0.0177	1	1		39
12	AT	01SEP922A	-14	<0.0050	1	1	ND (0.010)	
13	AT	01SEP922A	-14+	0.0135	1	1		68
14	AT	01SEP922A	-15	<0.0050	1	1	ND (0.0050)	
15	AT	01SEP922A	-15+	0.0231	1	1		116
16	AT	01SEP922A	CCV	0.0467	1	1		93
17	AT	01SEP922A	CCB	<0.0050	1	1		
[illegible]	AT	01SEP922A	-02	<0.0050	1	2	NOT USED	DILUTE
[illegible]	AT	01SEP922A	-02+	<0.0050	1	2		0
20	AT	01SEP922A	-03	<0.0050	1	2	NOT USED	DILUTE
21	AT	01SEP922A	-03+	<0.0050	1	2		0
22	AT	01SEP922A	-04	<0.0050	1	2	NOT USED	DILUTE
23	AT	01SEP922A	-04+	0.0055	1	2		28
24	AT	01SEP922A	-06	0.0183	1	2	NOT USED	DILUTE
25	AT	01SEP922A	-06+	0.0341	1	2		79
26	AT	01SEP922A	-07	<0.0050	1	1	ND (0.0050)	
27	AT	01SEP922A	-07+	0.0205	1	1		102
28	AT	01SEP922A	CCV	0.0452	1	1		90
29	AT	01SEP922A	CCB	<0.0050	1	1		
30	AT	01SEP922A	-08	<0.0050	1	2	NOT USED	DILUTE
31	AT	01SEP922A	-08+	0.0061	1	2		30
32	AT	01SEP922A	-08SD	<0.0050	1	2	ND(0.030)	
33	AT	01SEP922A	-08SD+	0.0143	1	2		72
34	AT	01SEP922A	-09	<0.0050	1	2	ND (0.020)	
35	AT	01SEP922A	-09+	0.0146	1	2		73

INDUSTRIAL METALS -- GFAA

Instrument 2380I Analyst CD Date 09/17/92 Element Pb
T (W/P) P Matrix Modifier (NH4)2HPO4 Background Correction BD
I, FCV T.V. 0.0500 CCV 0.0500
Analytical Spike Value 0.0200 Units mg/L

#	Sampl Type	QC Lot Number	Sample Number	Sample Result in mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec
40	Calib	---	Std. 0	0.000	AZ	--	0.0	--
41	Calib	---	Std. 1	0.059	abs	--	0.02	--
42	Calib	---	Std. 2	0.0484	--	--	0.05	--
43	Calib		Std. 3	0.0842			0.10	
1	AT	01SEP922A	-09DU	<0.0050	1	2	ND (0.020)	
2	AT	01SEP922A	-09DU+	0.0135	1	2		68
3	AT	01SEP922A	-10	<0.0050	1	2	ND (0.020)	
4	AT	01SEP922A	-10+	0.0155	1	2		78
5	AT	01SEP922A	CCV	0.0459	1	1		92
6	AT	01SEP922A	CCB	<0.0050	1	1		
7	AT	01SEP922A	-11	<0.0050	1	2	ND (0.010)	
8	AT	01SEP922A	-11+	0.0169	1	2		84
9	AT	01SEP922A	-12	<0.0050	1	2	ND (0.010)	
10	AT	01SEP922A	-12+	0.0191	1	2		96
11	AT	01SEP922A	-13	0.0098	1	2	NOT USED	DILUTE
12	AT	01SEP922A	-13+	0.0219	1	2		60
13	AT	01SEP922A	-02	<0.0050	1	5	ND (0.050)	
14	AT	01SEP922A	-02+	0.0107	1	5		54
15	AT	01SEP922A	-03	<0.0050	1	5	ND (0.025)	
16	AT	01SEP922A	-03+	0.0201	1	5		100
17	AT	01SEP922A	CCV	0.0451	1	1		90
	AT	01SEP922A	CCB	<0.0050	1	1		
	AT	01SEP922A	-04	<0.0050	1	5	ND (0.025)	
20	AT	01SEP922A	-04+	0.0215	1	5		108
21	AT	01SEP922A	-06	0.0184	1	5	NOT USED	DILUTE
22	AT	01SEP922A	-06+	0.0340	1	5		78
23	AT	01SEP922A	-08	<0.0050	1	5	ND (0.025)	
24	AT	01SEP922A	-08+	0.0175	1	5		88
25	AT	01SEP922A	-13	0.0096	1	5	0.048(0.025)	
26	AT	01SEP922A	-13+	0.0274	1	5		89
27	AT	01SEP922A	-06	<0.0050	1	10	ND (0.050)	
28	AT	01SEP922A	-06+	0.0222	1	10		111
29	AD	17SEP922A	CCV/DCS	0.0487	1	1	0.0487(0.050)	97
30	AD	17SEP922A	CCB	<0.0050	1	1		
31	AD	17SEP922A	-01	<0.0050	1	1	NOT USED	DILUTE
32	AD	17SEP922A	-01+	<0.0050	1	1		0
33	AD	17SEP922A	-01	<0.0050	1	2	ND (0.020)	
34	AD	17SEP922A	-01+	0.0084	1	2		42
35	AD	17SEP922A	CCV/DCS	0.0450	1	1	0.0450(0.050)	90

INDUSTRIAL METALS -- GFAA

Instrument 2380I Analyst CD Date 09/17/92 Element Pb
T (W/P) P Matrix Modifier (NH4)2HPO4 Background Correction BD
I. FCV T.V. 0.0500 CCV 0.0500
Analytical Spike Value 0.0200 Units mg/L

#	Sampl Type	QC Lot Number	Sample Number	Sample Result in mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec
40	Calib	---	Std. 0	0.000	AZ	--	0.0	--
41	Calib	---	Std. 1	0.059	abs	--	0.02	--
42	Calib	---	Std. 2	0.0484	--	--	0.05	--
43	Calib		Std-3	0.0842			0.10	
1			CCB	<0.0050	1	1		
2								
3								
4								
5								
6								
7								
8								
9								
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35								

Comments:

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

INDUSTRIAL METALS -- GFAA

Instrument 2380E Analyst DH Date 07/14/92 Element Pb
Tube (W/P) PLATFORM Matrix Modifier (NH4)2HPO4 Background Correction BD
ICV/FCV _____ T.V. 0.0500 CCV 0.0500
Analytical Spike Value 0.0200 Units mg/L

#	Sampl Type	QC Lot Number	Sample Number	Sample Result in mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec
40	Calib	---	Std. 0	0.000	AZ	--	0.000	--
41	Calib	---	Std. 1	0.079	abs	--	0.0200	--
42	Calib	---	Std. 2	0.0468	--	--	0.0500	--
43	Calib		Std. 3	0.1063			0.100	
1			CRA	0.0033	1	1		66
2			ICV	0.0244	1	2		100
3			CCV	0.0525	1	1		105
4			ICB	<0.0050	1	1		
5	AD	14JUL921A	-01	0.0078	1	1	NOT USED	DILUTE
6	AD	14JUL921A	-01+	0.0187	1	1		54
7	AD	14JUL921A	-02	0.0260	1	1	NOT USED	DILUTE
8	AD	14JUL921A	-02+	0.0408	1	1		74
9	AD	14JUL921A	-04	0.0214	1	1	NOT USED	DILUTE
10	AD	14JUL921A	-04+	0.0271	1	1		28
11	AD	14JUL921A	-05	0.0275	1	1	NOT USED	DILUTE
12	AD	14JUL921A	-05+	0.0318	1	1		22
13	AD	14JUL921A	-07	0.0172	1	1	NOT USED	DILUTE
14	AD	14JUL921A	-07+	0.0239	1	1		34
15	AD	14JUL921A	CCV/DCS	0.0456	1	1	0.0456(0.050)	91
16	AD	14JUL921A	CCB	<0.0050	1	1		
17	AD	14JUL921A	-08	0.0098	1	1	NOT USED	DILUTE
18	AD	14JUL921A	-08+	0.0243	1	1		72
19	AD	14JUL921A	-10	0.0244	1	1	NOT USED	DILUTE
20	AD	14JUL921A	-10+	0.0301	1	1		28
21	AD	14JUL921A	-11	<0.0050	1	1	ND (0.0050)	
22	AD	14JUL921A	-11+	0.0189	1	1		94
23	AD	14JUL921A	-13	0.0074	1	1	NOT USED	DILUTE
24	AD	14JUL921A	-13+	0.0205	1	1		66
25	AD	14JUL921A	-14	<0.0050	1	1	NOT USED	DILUTE
26	AD	14JUL921A	-14+	<0.0050	1	1		0
27	AD	14JUL921A	CCV/DCS	0.0455	1	1	0.0455(0.050)	91
28	AD	14JUL921A	CCB	<0.0050	1	1		
29	AD	14JUL921A	-16	0.0118	1	1	NOT USED	DILUTE
30	AD	14JUL921A	-16+	0.0237	1	1		60
31	AD	14JUL921A	-17	0.0058	1	1	NOT USED	DILUTE
32	AD	14JUL921A	-17+	0.0192	1	1		67
33	AD	14JUL921A	-19	<0.0050	1	1	ND (0.0050)	
34	AD	14JUL921A	-19+	0.0196	1	1		98
35	AD	14JUL921A	-20	<0.0050	1	1	ND (0.0050)	

INDUSTRIAL METALS -- GFAA

Instrument 2380E Analyst DH Date 07/14/92 Element Pb
Type (W/P) PLATFORM Matrix Modifier (NH4)2HPO4 Background Correction BD
IV/FCV _____ T.V. 0.0500 CCV 0.0500
Analytical Spike Value 0.0200 Units mg/L

#	Sampl Type	QC Lot Number	Sample Number	Sample Result in mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec
40	Calib	---	Std. 0	0.000	AZ	--	0.000	--
41	Calib	---	Std. 1	0.079	abs	--	0.0200	--
42	Calib	---	Std. 2	0.0468	--	--	0.0500	--
43	Calib		Std. 3	0.1063			0.100	
1	AD	14JUL921A	-20MS+	0.0193	1	1	0.0193(0.020)	96
2	AD	14JUL921A	-20SD+	0.0229	1	1	0.0229(0.020)	
3	AD	14JUL921A	CCV	0.0460	1	1		92
4	AD	14JUL921A	CCB	<0.0050	1	1		
5	AD	14JUL921A	-01	<0.0050	1	2	ND (0.010)	
6	AD	14JUL921A	-01+	0.0180	1	2		90
7	AD	14JUL921A	-02	0.0069	1	2	RERUN	
8	AD	14JUL921A	-02+	0.0227	1	2		79
9	AD	14JUL921A	-04	0.0074	1	2	RERUN	
10	AD	14JUL921A	-04+	0.0231	1	2		78
11	AD	14JUL921A	-05	0.0106	1	2	NOT USED	DILUTE
12	AD	14JUL921A	-05+	0.0225	1	2		60
13	AD	14JUL921A	-07	0.0096	1	2	NOT USED	DILUTE
14	AD	14JUL921A	-07+	0.0222	1	2		63
15	AD	14JUL921A	CCV	0.0455	1	1		91
16	AD	14JUL921A	CCB	<0.0050	1	1		
17	AD	14JUL921A	-08	<0.0050	1	2	ND (0.010)	
18	AD	14JUL921A	-08+	0.0211	1	2		106
19	AD	14JUL921A	-10	0.0077	1	2	NOT USED	DILUTE
20	AD	14JUL921A	-10+	0.0196	1	2		60
21	AD	14JUL921A	-13	<0.0050	1	2	ND (0.020)	
22	AD	14JUL921A	-13+	0.0140	1	2		70
23	AD	14JUL921A	-14	<0.0050	1	2	ND (0.010)	
24	AD	14JUL921A	-14+	0.0218	1	2		109
25	AD	14JUL921A	-16	0.0072	1	2	0.014(0.010)	
26	AD	14JUL921A	-16+	0.0241	1	2		84
27	AD	14JUL921A	CCV	0.0502	1	1		100
28	AD	14JUL921A	CCB	<0.0050	1	1		
29	AD	14JUL921A	-17	0.0080	1	2	NOT USED	DILUTE
30	AD	14JUL921A	-17+	0.0232	1	2		76
31	AD	14JUL921A	-02	0.0074	1	2	NOT USED	DILUTE
32	AD	14JUL921A	-02+	0.0213	1	2		70
33	AD	14JUL921A	-04	0.0060	1	2	NOT USED	DILUTE
34	AD	14JUL921A	-04+	0.0193	1	2		66
35	AD	14JUL921A	-05	0.0059	1	5	0.030(0.025)	

INDUSTRIAL METALS -- GFAA

Instrument 2380E Analyst DH Date 07/14/92 Element Pb
Tube (W/P) PLATFORM Matrix Modifier (NH4)2HPO4 Background Correction BD
IV/FCV _____ T.V. 0.0500 CCV 0.0500
Analytical Spike Value 0.0200 Units mg/L

#	Sampl Type	QC Lot Number	Sample Number	Sample Result in mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec
40	Calib	---	Std. 0	0.000	AZ	--	0.000	--
41	Calib	---	Std. 1	0.079	abs	--	0.0200	--
42	Calib	---	Std. 2	0.0468	--	--	0.0500	--
43	Calib		Std. 3	0.1063			0.1000	
1	AD	14JUL921A	-05+	0.0235	1	5		88
2	AD	14JUL921A	-07	<0.0050	1	5	ND (0.050)	
3	AD	14JUL921A	-07+	0.0137	1	5		68
4	AD	14JUL921A	CCV	0.0455	1	1		91
5	AD	14JUL921A	CCB	<0.0050	1	1		
6	AD	14JUL921A	-10	<0.0050	1	5	ND (0.025)	
7	AD	14JUL921A	-10+	0.0210	1	5		105
8	AD	14JUL921A	-02	<0.0050	1	5	ND (0.025)	
9	AD	14JUL921A	-02+	0.0176	1	5		88
10	AD	14JUL921A	-04	<0.0050	1	5	ND (0.025)	
11	AD	14JUL921A	-04+	0.0213	1	5		106
12	AD	14JUL921A	-17	<0.0050	1	5	ND (0.025)	
13	AD	14JUL921A	-17+	0.0187	1	5		94
14	AD	14JUL921A	CCV	0.0473	1	1		95
15	AD	14JUL921A	CCB	<0.0050	1	1		
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								

Comments: _____

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

INDUSTRIAL METALS -- GFAA 000726

Instrument 5100 Analyst J. Maccha Date 14 July 92 Element As

Tube (W/P) Platform Matrix Modifier Ni Background Correcton Bz

ICV/FCV ICV 2 T.V. 0.0474 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units= mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--	0.0	--
(41)	Calib.	---	Std. 1	0.077 abs	--	--	0.020	--
(42)	Calib.	---	Std. 2	0.0481	--	--	0.050	--
(43)	Calib.	---	Std. 3	0.0957	--	--	0.100	--
1			CRA	0.0077	1x	1x		154
2			ICV	0.0230	1x	2x		97
3			CCV	0.0515	1x	1x		103
4			ICB	<0.005	1x	1x		
5	AD	14Jul92 1J	DCS	0.0317	1x	1x	0.0317 (0.030)	106
6			DCS	0.0291	1x	1x	0.0291 (0.030)	97 8.6 RPD
7			01	0.1655	1x	1x		
8			01+	0.2477			Dilution	
9			02	>.100				
10			02+	>.100			Dilute	
11			04	0.0224			0.0224 (0.005)	
12			04+	0.0422				99
13			05	>.100				
14			05+	>.100	1x	1x	Dilute	
15			CCV	0.0547	1x	1x		109
16			CCB	<0.005	1x	1x		
17			07	0.0263	1x	1x		
18			07+	0.0326			Dilute	
19			08	0.0406				
20			08+	0.0085			Dilute	
21			10	>.100				
22			10+	>.100			Dilution	
23	Recal		11	<0.005			ND (0.005)	
24			11ms	0.0229			0.0229 (0.020)	115
25			11SD	0.0217	1x	1x	0.0217 (0.020)	109
26	7/14/92		CCV	OUT	1x	1x		
27			CCB		1x	1x		
28	JM		13		1x	1x		
29			13+					
30			14					
31			14+					
32			16					
33			16+					
34			17					
35			17+					

Comments:

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

000727

INDUSTRIAL METALS -- GFAA

Instrument 5100 Analyst J. Malecha Date 14 July 92 Element As

Tube (W/P) Platform Matrix Modifier Ni Background Correcton BZ

ICV/FCV ICV 2 T.V. 0.0474 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units=mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--	0.0	--
(41)	Calib.	---	Std. 1	0.060 abs	--	--	0.020	--
(42)	Calib.	---	Std. 2	0.0505	--	--	0.050	--
(43)	calib.	---	Std. 3	0.0882	--	--	0.100	--
1			CRA	0.0065	1	1		130
2			ICV	0.0217	1	2		92
3			CCV	0.0543	1	1		109
4			ICB	<0.005	1	1		
5	AD	14 Jul 92 15	01	0.0770	1	2	0.154 (0.010)	
6			01+	0.0959	1	2		95
7			02	0.0198	1	2	0.0396 (0.010)	
8			02+	0.0357	1	2		80
9			05	0.0131	1	2	0.0262 (0.010)	
10			05+	0.0308	1	2		89
11			07	0.0159	1	2	0.0318 (0.010)	
12			07+	0.0331	1	2		90
13			08	0.0505	1	2		
14			08+	0.0628	1	2	Dilution (5x)	
15			CCV	0.0477	1	1		
16			CCB	<0.005	1	1		
17			10	0.0066	1	2	0.0132 (0.010)	
18			10+	0.0258	1	2		96
19			11	<0.005	1	1	ND (0.010)	
20			11A1	0.0248	1	1	0.0248 (0.020)	124
21			11A2	0.0250	1	1	0.0250 (0.020)	125
22			13	0.0078	1	1	~~0.0130 (0.0016)~~ (0.005)	
23			13+	0.0300	1	1		111
24			14	0.0058	1	1		
25			14+	0.0122	1	1	Dilution (2x)	32
26			CCV	0.0485	1	1		97
27			CCB	<0.005	1	1		
28			16	0.0149	1	1		
29			16+	0.0274	1	1	Dilution (2x)	
30			17	0.0753	1	1		
31			17+	0.0877	1	1	Dilution (2x)	
32			19	0.0770	1	1		
33			19+	0.0840	1	1	Dilution (2x)	
34			20	<0.005	1	1	ND (0.010)	
35	V	V	20+	0.0249	1	1		125

Comments:

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

000728

INDUSTRIAL METALS -- GFAA

Instrument 5100 Analyst J. MALLOLA Date 14 JULY 92 Element As

Tube (W/P) PLATFORM Matrix Modifier Ni Background Correcton BZ

ICV/FCV ICV 2 T.V. 0.0474 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units= mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--		--
(41)	Calib.	---	Std. 1	abs	--	--		--
(42)	Calib.	---	Std. 2		--	--		--
(43)								
1	AD	14 July 92 1 3	23727 08	0.0227	1	5		
2			08+	0.0382	1	5	Dilution (10x)	
3			CCV	0.0463	1	1		93
4			CCB	<0.005	1	1		
5			14	0.0128	1	2	0.0256 (0.010)	
6			14+	0.0305	1	2		89
7			16	0.0074	1	2	0.0148 (0.010)	
8			16+	0.0259	1	2		93
9			17	0.0579	1	2		
10			17+	0.0562	1	2	Dilute (5x)	
11			19	0.0520	1	2	~~0.1110~~ (0.010)	Dif 8/9
12			19+	0.0764	1	2	0.110	88
13			08	0.0110	1	10	0.110 (0.050)	
14			08+	0.0281	1	10		86
15			CCV	0.0481	1	1		96
16			CCB	<0.005	1	1		
17			17	0.0250	1	5	0.125 (0.025)	
18			17+	0.0432	1	5		91
19			CCV	0.0472	1	1		94
20			CCB	<0.005	1	1		
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								

Comments:

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

INDUSTRIAL METALS -- GFAA 000729

Instrument 5100 Analyst J. Malecha Date 07/15/92 Element Tl

Tube (W/P) Platform Matrix Modifier H_2SO_4 Background Correcton Bz

ICV/FCV ICV 4 T.V. 0.1007 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units=mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--	0.0	--
(41)	Calib.	---	Std. 1	0.079 abs	--	--	0.020	--
(42)	Calib.	---	Std. 2	0.0420	--	--	0.050	--
(43)	calib	---	Std. 3	0.1084	--	--	0.100	--
1			CRA	0.0044	1	1		88
2			ICV	0.0260	1	4		103
3			CCV	0.0518	1	1		104
4			ICB	<0.005	1	1		
5	AD	15 JUL 92 IJ	DCS	0.0300	1	1	0.0300 (0.030)	100
6			DCS	0.0298	1	1	0.0298 (0.030)	99 0.7 RPD
7			2 01	<0.005	1	1		
8			01+	<0.005			DILUTE	
9			02	<0.005				
10			02+	<0.005			DILUTE	
11			04	<0.005				
12			04+	<0.005			DILUTE	
13			05	<0.005				
14			05+	<0.005			DILUTE	
15			CCV	0.0470	1	1		94
16			CCB	<0.005	1	1		
17			07	<0.005	1	1		
18			07+	<0.005			DILUTE	
19			08	<0.005				
20			08+	<0.005			DILUTE	
21			10	<0.005				
22			10+	<0.005			DILUTE	
23			11	<0.005			ND (0.010)	
24			11MS	0.0153			0.0153 (0.020)	77
25			11SD	0.0153			0.0153 (0.020)	77
26			CCV	0.0488	1	1		98
27			CCB	<0.005	1	1		
28			13	<0.005				
29			13+	<0.005			DILUTE	
30			14	<0.005				
31			14+	<0.005			DILUTE	
32			16	<0.005				
33			16+	<0.005			DILUTE	
34			17	<0.005				
35			17+	<0.005			DILUTE	

Comments: 23727 - 11, FB, Poor Recovery Due to Matrix Interference

JM 7/15/92

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

INDUSTRIAL METALS -- GFAA 000730

Instrument 5100 Analyst J. Malecha Date 07/15/92 Element Tl

Tube (W/P) Platform Matrix Modifier H_2SO_4 Background Correcton Bz

ICV/FCV ICV 4 T.V. 0.1007 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units= mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--		--
(41)	Calib.	---	Std. 1	abs	--	--		--
(42)	Calib.	---	Std. 2		--	--		--
(43)								
1	AD	15 Jun 92 IJ	19	<0.005	1	1		
2			19+	<0.005	1	1	DILUTE	
3			CCV	0.0524	1	1		105
4			CCB	<0.005	1	1		
5			20	<0.005	1	1	ND (0.005)	
6			20+	~~<0.005~~ 0.0198	1	1		96
7			01	<0.005	1	2		
8			01+	<0.005	1	2	DILUTE	
9			02	<0.005	1	2		
10			02+	<0.005	1	2	DILUTE	
11			04	<0.005	1	2		
12			04+	<0.005	1	2	DILUTE	
13			05	<0.005	1	2		
14			05+	<0.005	1	2	DILUTE	
15			CCV	0.0515	1	1		103
16			CCB	<0.005	1	1		
17			07	<0.005	1	2		
18			07+	<0.005	1	2	DILUTE	
19			08	<0.005	1	2		
20			08+	<0.005	1	2	DILUTE	
21			10	<0.005	1	2		
22			10+	<0.005	1	2	DILUTE	
23			13	<0.005	1	2		
24			13+	<0.005	1	2	DILUTE	
25			14	<0.005	1	2		
26			14+	<0.005	1	2	DILUTE	
27			CCV	0.0516	1	1		103
28			CCB	<0.005	1	1		
29			16	<0.005	1	2		
30			16+	<0.005	1	2	DILUTE	
31			17	<0.005	1	2		
32			17+	<0.005	1	2	DILUTE	
33			19	<0.005	1	2		
34			19+	<0.005	1	2	DILUTE	
35			01 ~~20+~~	<0.005	1	~~2~~ 5		

Comments: 23727-20 TB, Poor Spike Recovery Due to Matrix Interference

JM 07/15/92

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

000731

INDUSTRIAL METALS -- GFAA

Instrument 5100 Analyst J. Malecha Date 07/15/92 Element Tl

Tube (W/P) Platform Matrix Modifier H_2SO_4 Background Correction B_2

ICV/FCV ICV 4 T.V. 0.1007 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units=mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--		--
(41)	Calib.	---	Std. 1	abs	--	--		--
(42)	Calib.	---	Std. 2		--	--		--
(43)								
1	AD	15July92	1323727 01	<0.005	1	5	Dilute	
2			02	<0.005	1	5		
3			02+	<0.005	1	5	Dilute	
4			CCV	0.0529	1	1		106
5			CCB	<0.005	1	1		
6			04	<0.005	1	5		
7			04+	<0.005	1	5	Dilute	
8			05	<0.005	1	5		
9			05+	<0.005	1	5	Dilute	
10			07	<0.005	1	5		
11			07+	<0.005	1	5	Dilute	
12			08	<0.005	1	5		
13			08+	<0.005	1	5	Dilute	
14			10	<0.005	1	5		
15			10+	<0.005	1	5	Dilute	
16			CCV	0.0515	1	1		103
17			CCB	<0.005	1	1		
18			13	<0.005	1	5		
19			13+	<0.005	1	5	Dilute	
20			14	<0.005	1	5		
21			14+	<0.005	1	5	Dilute	
22			16	<0.005	1	5		
23			16+	~~<0.020~~ 0.0070	1	5	Dilute	
24			17	<0.005	1	5		
25			17+	<0.005	1	5	Dilute	
26			19	<0.005	1	5		
27			19+	<0.005	1	5	Dilute	
28			CCV	0.0527	1	1		105
29			CCB	<0.005	1	1		
30			01	<0.005	1	10		
31			01+	0.00109	1	10	Dilute	
32			02	<0.005	1	10		
33			02+	<0.005	1	10	Dilute	
34			04	<0.005	1	10		
35			04+	0.0057	1	10	Dilute	

Comments:

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

000732

INDUSTRIAL METALS -- GFAA

Instrument 5100 Analyst J. Malecha Date 07/15/92 Element Tl

Tube (W/P) Platform Matrix Modifier H_2SO_4 Background Correction Bz

ICV/FCV ICV 4 T.V. 0.1007 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units= mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--		--
(41)	Calib.	---	Std. 1	abs	--	--		--
(42)	Calib.	---	Std. 2		--	--		--
(43)								
1	AD	15JUL92 13	05	<0.005	1	10		
2			05+	<0.005	1	10	DILUTE	
3			07	<0.005	1	10		
4			07+	0.0051	1	10	DILUTE	
5			CCV	0.0523	1	1		105
6			CCB	<0.005	1	1		
7			08	<0.005	1	10		
8			08+	<0.005	1	10	DILUTE	
9			10	<0.005	1	10		
10			10+	<0.005	1	10	DILUTE	
11			13	<0.005	1	10	ND(0.10)	
12			13+	0.0118	1	10		59
13			14	<0.005	1	10	ND (0.10)	
14			14+	0.0114	1	10		57
15			16	<0.005	1	10		
16			16+	0.0061	1	10	DILUTE	
17			CCV	0.0521	1	1		104
18			CCB	<0.005	1	1		
19			17	<0.005	1	10		
20			17+	0.0050	1	10	DILUTE	
21			19	<0.005	1	10		
22			19+	0.0077	1	10	DILUTE	
23			01	<0.005	1	20	ND (0.10)	
24			01+	0.0159	1	20		80
25			02	<0.005	1	20	ND (0.20)	
26			02+	0.0105	1	20		53
27			04	<0.005	1	20	ND (0.20)	
28			04+	0.0143	1	20		72
29			CCV	0.0520	1	1		104
30			CCB	<0.005	1	1		
31			05	<0.005	1	20		
32			05+	0.0074	1	20	DILUTE	
33			07	<0.005	1	20		
34			07+	0.0068	1	20	DILUTE	
35			08	<0.005	1	20	ND (0.20)	

Comments:

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

INDUSTRIAL METALS -- GFAA

Instrument 5100 Analyst J. Malecha Date 07/15/92 Element Tl

Tube (W/P) Platform Matrix Modifier H_2SO_4 Background Correction BZ

ICV/FCV ICV 4 T.V. 0.1007 mg/L CCV 0.050 Units mg/L

Analytical Spike Value 0.020 Units mg/L

Tray Pstn	Sample Type	QC Lot Number	Sample Number	Sample Result Units=mg/L	Prep DF	Anal DF	Sample Conc. (Units)	RPD % Rec.
(40)	Calib.	---	Std. 0	0.000 AZ	--	--		--
(41)	Calib.	---	Std. 1	abs	--	--		--
(42)	Calib.	---	Std. 2		--	--		--
(43)								
1	AD	15 Jul 92 IJ	08+	0.0150	1	20		75
2			10	<0.005	1	20	ND (0.20)	
3			10+	0.0114	1	20		57
4			16	<0.005	1	20	ND (0.10)	
5			16+	0.0171	1	20		86
6			CCV	0.0512	1	1		102
7			CCB	<0.005	1	1		
8			17	<0.005	1	20	RE-RUN	
9			17+	<0.005	1	20	~~Dilute in~~	
10			19	RE-	1	20	RE-RUN	
11			19+	RUN	1	20	"	
12			05	<0.005	1	50	ND (0.50)	
13			05+	0.0155	1	50		78
14			07	<0.005	1	50	ND (0.25)	
15			07+	0.0171	1	50		86
16			17	<0.005	1	~~50~~ 20	RE-RUN	
17			17+	<0.005	1	~~50~~ 20		
18			CCV	0.0526	1	1		105
19			CCB	<0.005	1	1		
20			19	<0.005	1	20	ND (0.20)	
21			19+	0.0158	1	20		79
22			17	<0.005	1	20	ND (0.20)	
23			17+	0.0081	1	20		41
24			CCV	0.0513	1	1		103
25			CCB	<0.005	1	1		
26								
27								
28								
29								
30								
31								
32								
33								
34								
35								

Comments:

Note: Units on tape are ug/L unless otherwise stated. (over for tape)

Method: ROCKY1 Standard: STD1-Blank

000734

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	.01779	.00129	-.00621	-.00007	.00493	-.00043	.00321
#1	.01814	.00143	-.00671	-.00014	.00500	-.00014	.00314
#2	.01743	.00114	-.00571	.00000	.00486	-.00071	.00329

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	.00379	.00043	.07264	.00064	.00000	.07221	.00014
#1	.00371	.00029	.07286	.00071	.00000	.06771	.00014
#2	.00386	.00057	.07243	.00057	.00000	.07671	.00014

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	.00075	.00157	.00143	.00621	.13179	.01407	-.00707
#1	.00071	.00157	.00171	.00929	.13386	.01486	-.00686
#2	.00079	.00157	.00114	.00314	.12971	.01329	-.00729

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	.00307	-.00071	.05079	.1258	.00014	-.00300	.00021
#1	.00157	-.00071	.05114	.1256	.00014	-.00257	.00100
#2	.00457	-.00071	.05043	.1260	.00014	-.00343	-.00057

Elem	Ti	V	Zn	TBLCHK
Avge	.00000	-.00221	.01221	.17479
#1	.00000	-.00214	.01214	.17086
#2	.00000	-.00229	.01229	.17871

Method: ROCKY1 Standard: STD3

000735

em	Al	Sb	As	Ba	Be	B	Cd
e	.48929	.13929	.18757	.99893	.81507	.20993	.43093
#1	.48986	.14186	.19257	.99957	.81600	.21029	.43086
#2	.48871	.13671	.18257	.99829	.81414	.20957	.43100

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	1.4544	.47264	.58857	.11336	.06814	.67200	.00007
#1	1.4557	.47243	.59157	.11314	.06836	.68157	.00000
#2	1.4530	.47286	.58557	.11357	.06793	.66243	.00014

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	.47011	.52493	.14943	1.1388	.26379	.04729	.91414
#1	.46950	.52643	.14943	1.1380	.26271	.04743	.91257
#2	.47071	.52343	.14943	1.1396	.26486	.04714	.91571

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	.00186	-.00171	.80329	.1670	.95593	-.00250	.09800
#1	.00143	-.00186	.79757	.1677	.95671	-.00457	.09600
#2	.00229	-.00157	.80900	.1663	.95514	-.00043	.10000

Elem	Ti	V	Zn	TBLCHK
Avge	.11657	.24586	.39221	.50221
#1	.11657	.24643	.39271	.50157
#2	.11657	.24529	.39171	.50286

Method: ROCKY1 Standard: STD4

000736

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	.02179	.00436	-.02314	.00343	.00493	.05743	.00257
#1	.02129	.00271	-.01914	.00343	.00500	.05771	.00257
#2	.02229	.00600	-.02714	.00343	.00486	.05714	.00257

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	13.827	.00107	.07443	.00071	-.00007	.06236	17.513
#1	13.845	.00143	.07514	.00071	.00000	.05529	17.414
#2	13.808	.00071	.07371	.00071	-.00014	.06943	17.612

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	4.6653	.00164	.00100	.00857	.20300	1.3819	-.00493
#1	4.6609	.00157	.00143	.00543	.20129	1.3779	-.00443
#2	4.6697	.00171	.00057	.01171	.20471	1.3860	-.00543

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	9.5653	-.00100	7.4452	.2748	.04879	.00300	.00150
#1	9.5636	-.00100	7.4121	.2747	.04871	.00443	.00057
#2	9.5670	-.00100	7.4783	.2749	.04886	.00157	.00243

Elem	Ti	V	Zn	TBLCHK
Avge	.00100	-.00214	.01171	.23679
#1	.00100	-.00200	.01171	.23500
#2	.00100	-.00229	.01171	.23857

Method: ROCKY1 Standard: STD5

000737

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	.01786	-.00114	-.00486	.00614	.00471	.00029	.00279
#1	.01671	-.00171	-.00257	.00614	.00471	.00014	.00300
#2	.01900	-.00057	-.00714	.00614	.00471	.00043	.00257

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	.00393	.00100	.07007	.00071	.00000	.06664	1.7745
#1	.00386	.00086	.06957	.00057	.00000	.05914	1.8086
#2	.00400	.00114	.07057	.00086	.00000	.07414	1.7404

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	.00143	.00143	.00257	.01229	.12964	.01579	-.00379
#1	.00057	.00143	.00300	.01129	.12914	.01229	-.00400
#2	.00229	.00143	.00214	.01329	.13014	.01929	-.00357

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	.00629	-.00064	33.995	.8024	.00164	.17693	.00071
#1	.00714	-.00071	34.480	.8074	.00171	.17800	.00143
#2	.00543	-.00057	33.511	.7974	.00157	.17586	.00000

Elem	Ti	V	Zn	TBLCHK
Avge	.00007	-.00243	.01257	.17207
#1	.00014	-.00271	.01229	.16814
#2	.00000	-.00214	.01286	.17600

Method: ROCKY1 Standard: STD2

000738

Elem	Al	Sb	As	Ba	Be	B	Cd
e	.01764	.00036	-.00236	-.00014	.00500	.00014	.00257
#1	.01800	-.00014	-.00329	-.00029	.00500	.00029	.00257
#2	.01729	.00086	-.00143	.00000	.00500	.00000	.00257

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	.00114	.00064	.07093	.00071	-.00004	.06229	.00007
#1	.00100	.00043	.07029	.00057	-.00007	.05329	.00014
#2	.00129	.00086	.07157	.00086	.00000	.07129	.00000

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	-.00079	.00164	.00157	.00586	.13007	.01093	-.00407
#1	-.00100	.00157	.00100	.00200	.12929	.00986	-.00457
#2	-.00057	.00171	.00214	.00971	.13086	.01200	-.00357

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	.00221	.19914	.04964	.1249	.00000	.03593	.00164
#1	.00114	.20014	.05000	.1247	.00000	.03600	.00143
#2	.00329	.19814	.04929	.125	.00000	.03586	.00186

Elem	Ti	V	Zn	TBLCHK
Avge	.00000	-.00264	.01186	.17457
[illegible]	.00000	-.00271	.01157	.17371
#2	.00000	-.00257	.01214	.17543

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Method: ROCKY1

000739

F ment	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
	308.215	STD3	STD1-Blank	21.1400	-.375990	07/31/92 07:44:03
Sb	206.838	STD3	STD1-Blank	7.26739	-.009344	07/31/92 07:44:03
As	193.696	STD3	STD1-Blank	5.50195	.034191	07/31/92 07:44:03
Ba	493.409	STD3	STD1-Blank	1.00100	.000072	07/31/92 07:44:03
Be	313.042	STD3	STD1-Blank	1.23767	-.006100	07/31/92 07:44:03
B	249.678	STD3	STD1-Blank	4.74555	.002034	07/31/92 07:44:03
Cd	228.802	STD3	STD1-Blank	2.34947	-.007552	07/31/92 07:44:03
Ca	317.933	STD4	STD1-Blank	7.23432	-.027387	07/31/92 07:46:04
Cr	267.716	STD3	STD1-Blank	2.10415	-.000902	07/31/92 07:44:03
Co	228.616	STD3	STD1-Blank	1.95469	-.141994	07/31/92 07:44:03
Cu	324.754	STD3	STD1-Blank	8.87776	-.005707	07/31/92 07:44:03
Fe	259.940	STD3	STD1-Blank	146.690	.000000	07/31/92 07:44:03
Pb	220.353	STD3	STD1-Blank	1.65709	-.119666	07/31/92 07:44:03
Li	670.784	STD5	STD1-Blank	5.63584	-.000805	07/31/92 07:48:03
Mg	279.079	STD4	STD1-Blank	21.4382	-.016079	07/31/92 07:46:04
Mn	257.610	STD3	STD1-Blank	1.91237	-.003005	07/31/92 07:44:03
Mo	202.030	STD3	STD1-Blank	6.75095	-.009644	07/31/92 07:44:03
Ni	231.604	STD3	STD1-Blank	.882284	-.005483	07/31/92 07:44:03
P	214.914	STD3	STD1-Blank	8.87576	-1.16970	07/31/92 07:44:03
K	766.491	STD4	STD1-Blank	73.1070	-1.02872	07/31/92 07:46:04
Se	196.026	STD3	STD1-Blank	10.8455	.076693	07/31/92 07:44:03
SiO2	251.611	STD4	STD1-Blank	22.3798	-.068738	07/31/92 07:46:04
Ag	328.068	STD2	STD1-Blank	5.00357	.003574	07/31/92 07:49:48
Na[Lo]	588.995	STD4	STD1-Blank	13.5237	-.686811	07/31/92 07:46:04
Na[Hi]	330.223	STD5	STD1-Blank	738.942	-92.9484	07/31/92 07:48:03
	407.771	STD3	STD1-Blank	1.04626	-.000149	07/31/92 07:44:03
Tl	190.864	STD2	STD1-Blank	25.6881	.077064	07/31/92 07:49:48
Sn	189.989	STD3	STD1-Blank	10.2213	-.002190	07/31/92 07:44:03
Ti	334.941	STD3	STD1-Blank	8.57354	.000000	07/31/92 07:44:03
V	292.402	STD3	STD1-Blank	4.00264	.008863	07/31/92 07:44:03
Zn	213.856	STD3	STD1-Blank	2.65192	-.032391	07/31/92 07:44:03
TBLCHK	223.061	STD3	STD1-Blank	3.05410	-.533813	07/31/92 07:44:03

Analysis Report Fri 07-31-92 07:58:28 AM page 1

Method: ROCKY1 Sample Name: ICV Operator: DH 000740
Run Time: 07/31/92 07:56:59
Comment: INORG VENTURES
Mode: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	1.014237	1.099159	.9926103	.9962176	.9896346	.9783347	.9807482
#1	1.021704	1.083129	.9823625	.9897112	.9866377	.9746095	.9821038
#2	1.006771	1.115188	1.002858	1.002724	.9926315	.9820598	.9793925

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	20.73614	1.005638	.9937553	.9989598	1.016757	.9856755	1.064369
#1	20.73201	1.003215	.9948823	.9932820	1.032456	.9920777	1.048267
#2	20.74028	1.008062	.9926283	1.004638	1.001057	.9792733	1.080472

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	20.27023	.9871055	.9991063	1.010851	1.062837	20.80418	1.010958
#1	20.20053	.9843724	1.000553	1.019661	1.058210	20.72585	1.022600
#2	20.33994	.9898387	.9976592	1.002040	1.067464	20.88251	.9993153

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	2.185373	1.030964	202.2266	215.0378	.9899858	9.862995	.9922919
#1	2.172546	1.029877	199.6049	213.4654	.9840819	9.784099	.9988391
#2	2.198201	1.032051	204.8482	216.6101	.9958897	9.941893	.9857447

Elem	Ti	V	Zn	TBLCHK
Avge	.9897847	1.008276	.9979783	.0658813
#1	.9799883	1.005150	.9935988	.0643542
#2	.9995810	1.011402	1.002358	.0674084

Method: ROCKY1 Sample Name: ICS Operator: DH 000741
Run Time: 07/31/92 07:59:34
Comment: SPEX
: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	484.9483	.0112334	-.084690	.0002366	-.001254	-.016100	-.002220
#1	488.9116	H.0603474	-.083416	.0003023	-.001362	-.015161	-.002222
#2	480.9850	-.037881	-.085964	.0001709	-.001147	-.017038	-.002218

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	462.5432	8.614967	.0048816	9.359549	172.3457	-.041173	.0004026
#1	463.1220	8.640615	.0041779	9.441153	173.2043	-.041768	.0000000
#2	461.9645	8.589319	.0055853	9.277947	171.4871	-.040577	.0008051

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	506.0034	8.623758	-.000036	8.708492	.3046420	-.214099	.1135258
#1	508.4042	8.652053	.0025188	8.696556	.2668862	-.234987	.0963427
#2	503.6025	8.595463	-.002590	8.720429	.3423977	-.193212	.1307089

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	.0801813	.0033349	.0540948	25.14504	.0042598	.0555688	-.066496
#1	.0819543	.0038387	.0608566	24.41224	.0043345	.0722679	-.076783
#2	.0784084	.0028312	.0473329	25.87784	.0041850	.0388697	-.056209

Elem	Ti	V	Zn	TBLCHK
Avge	8.797651	8.765400	-.002930	H1.001091
#1	8.882758	8.804076	-.003057	H1.006326
#2	8.712545	8.726723	-.002803	H.9958550

Method: ROCKY1 Sample Name: ICB Operator: DH

Run Time: 07/31/92 08:06:55

Comment: 0792

: CONC Corr. Factor: 1

000742

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	.0089272	-.004118	.0145134	.0000715	.0000914	.0023772	-.000840
#1	.0044575	-.000967	-.014559	.0000715	.0000893	.0000029	-.001175
#2	.0133969	-.007270	.0435854	.0000714	.0000936	.0047516	-.000504

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	.0046506	.0011896	.0002680	.0018847	-.000001	-.010301	.0016102
#1	.0025837	.0011974	.0007002	.0019007	-.000001	-.016443	.0008051
#2	.0067176	.0011818	-.000164	.0018688	-.000001	-.004158	.0024154

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	.0054863	.0001355	.0067508	.0019505	.0346504	.2402089	.0441401
#1	.0023924	-.000000	.0057864	-.000946	.0321559	.2140993	.0642718
#2	.0085801	.0002716	.0077152	.0048471	.0371450	.2663186	.0240083

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	-.016093	.0021515	.0067619	1.366599	.0000000	.0146791	.0196864
#1	-.017672	.0007144	.0048299	1.634508	.0000000	.0330246	.0240902
#2	-.014513	.0035885	.0086938	1.098689	.0000000	-.003666	.0152826

Elem	Ti	V	Zn	TBLCHK
Avge	.0055169	-.001081	.0020716	H.0172338
#1	.0000045	-.000229	.0013256	H.0089442
#2	.0110292	-.001932	.0028175	H.0255235

Method: ROCKY1 Sample Name: CCV/DCS Operator: DH

000743

Run Time: 07/31/92 14:46:48

ment: 31JUL921A

: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	1.068207	1.066429	1.015775	1.042692	1.090249	1.047211	1.028957
#1	1.092619	1.100045	1.016033	1.049055	1.095717	1.050589	1.031951
#2	1.043794	1.032812	1.015517	1.036329	1.084780	1.043832	1.025963

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	20.80695	1.068267	.9959557	1.014029	1.085172	1.096605	1.065577
#1	20.87295	1.073106	1.003409	1.019743	1.095673	1.083095	1.072421
#2	20.74094	1.063427	.9885025	1.008315	1.074672	1.110114	1.058733

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	21.24357	1.041202	1.065673	1.012480	1.329753	20.02475	1.094077
#1	21.35847	1.045845	1.066159	1.009397	1.309856	19.90101	1.159136
#2	21.12866	1.036560	1.065187	1.015562	1.349651	20.14848	1.029018

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	2.322195	1.066901	201.0655	215.6947	1.013004	10.60578	1.051209
#1	2.344593	1.071559	201.9542	215.7424	1.019057	10.68644	1.060068
#2	2.299797	1.062242	200.1768	215.6471	1.006950	10.52511	1.042350

Elem	Ti	V	Zn	TBLCHK
Avge	1.038814	1.070913	1.058171	.1175829
#1	1.040036	1.075488	1.059872	.1101658
#2	1.037592	1.066338	1.056469	.1250000

Method: ROCKYi Sample Name: CCB Operator: DH

000744

Run Time: 07/31/92 14:48:31
Comment: 31JUL921A
(: CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	.0558565	-.004320	-.008106	.0010008	.0009760	-.001030	-.000678
#1	.0467636	.0096744	-.019461	.0010723	.0009760	-.001366	-.000846
#2	.0649474	-.018314	.0032493	.0009294	.0009759	-.000695	-.000511

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	.0176983	.0026891	.0097635	.0025080	.0052313	.0018931	.0016102
#1	.0215249	.0002837	.0096376	.0031435	.0104711	-.008280	.0016102
#2	.0138716	.0050944	.0098894	.0018725	-.000009	.0120665	.0016102

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	.0070385	.0004040	.0062685	.0000533	.1991999	.0940361	.0170498
#1	-.000588	.0002683	.0086799	-.001405	.2144007	.1336303	-.014724
#2	.0146648	.0005397	.0038571	.0015118	.1839992	.0544420	.0488239

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	-.009693	.0039536	.1159174	7.460657	.0002242	.0054632	.0211246
#1	-.008130	.0064563	.1207473	7.309917	.0002989	-.018392	.0313894
#2	-.011255	.0014508	.1110875	7.611396	.0001495	.0293186	.0108597

Elem	Ti	V	Zn	TBLCHK
Avge	.0140893	-.001379	.0066225	.0643542
#1	.0134796	-.001354	.0062479	.0643542
#2	.0146991	-.001404	.0069970	.0643542

Analysis Report Fri 07-31-92 02:54:23 PM page 1

Method: ROCKY1 Sample Name: ~~011~~ 01 SA Operator: DH 000745
Run Time: 07/31/92 14:53:25 DH 7/31
Γ ment: 31JUL921A
I : CONC Corr. Factor: 2

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	.0793840	.0144109	.1191060	.0332442	.0015041	2.362738	-.000019
#1	.1004796	.0615205	.1274560	.0332448	.0015011	2.363416	-.001026
#2	.0582885	-.032699	.1107559	.0332435	.0015071	2.362059	.0009866

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	264.8876	.0079023	.0311003	.0001123	.6092243	.0257090	.7318546
#1	264.8206	.0070060	.0293254	-.001157	.5882713	.0280402	.7358801
#2	264.9546	.0087987	.0328751	.0013817	.6301774	.0233778	.7278289

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	141.2570	.2578932	.0294886	.0348145	1.110552	12.89760	.0035907
#1	140.8253	.2589840	.0342985	.0252449	1.147191	12.32368	.0020295
#2	141.6388	.2568024	.0246788	.0443841	1.073913	13.47191	.0051518

Elem	SiO2	Ag	Na[Lo]	Na[Hi] ✓	Sr	Tl	Sn
Avge	99.34032	-.004049	1381.689	1525.190	13.23459	.0582175	-.033540
#1	99.38821	-.005488	1383.978	1526.001	13.24923	.1024425	-.018791
#2	99.29243	-.002609	1379.400	1524.378	13.21994	.0139924	-.048290

Elem	Ti	V	Zn	TBLCHK
Avge	-.000376	.0328046	.0130585	.3917975
#1	-.002820	.0340026	.0115880	.4044502
#2	.0020682	.0316066	.0145289	.3791448

Analysis Report Fri 07-31-92 03:38:58 PM page 1

Method: ROCKY1 Sample Name: CCV Operator: DH
Run Time: 07/31/92 15:37:56
ment: 31JUL921A
: CONC Corr. Factor: 1

000746

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	1.041789	.9658984	.9678376	1.045701	1.077833	1.054370	1.002845
#1	1.049579	.9832314	.9898458	1.047489	1.080393	1.053349	1.005184
#2	1.033998	.9485655	.9458294	1.043913	1.075274	1.055390	1.000506

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	20.20520	1.029225	.9633492	1.007662	1.069319	1.031326	1.082082
#1	20.15641	1.030897	.9602396	1.008296	1.085036	1.027465	1.080472
#2	20.25399	1.027553	.9664587	1.007028	1.053603	1.035187	1.083692

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	21.09434	1.017297	1.039150	.9877141	1.304315	19.85647	1.059100
#1	21.23492	1.017433	1.019867	.9903260	1.289362	19.58426	1.058331
#2	20.95376	1.017161	1.058434	.9851021	1.319267	20.12868	1.059869

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	2.232970	1.047207	201.3147	213.2576	1.001943	10.39490	1.023900
#1	2.223675	1.048648	200.9264	213.5575	1.002765	10.34898	1.020295
#2	2.242265	1.045766	201.7030	212.9578	1.001121	10.44083	1.027504

Elem	Ti	V	Zn	TBLCHK
Avge	1.036365	1.052084	1.029684	.0970768
#1	1.038798	1.053315	1.031183	.0896597
#2	1.033931	1.050853	1.028185	.1044939

Method: ROCKY1 Sample Name: ICS Operator: DH
Run Time: 07/31/92 15:40:32
Comment:
1 : CONC Corr. Factor: 1

000747

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	469.5829	L-.086460	H.1997865	.0014740	H.0114577	-.007803	.0010736
#1	472.3918	-.041092	H.2453802	.0014589	H.0113981	-.006133	.0010677
#2	466.7740	L-.131828	H.1541929	.0014890	H.0115172	-.009472	.0010795

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	446.0561	8.735311	H.0107047	9.095493	177.4469	-.000696	.0036230
#1	447.5658	8.769786	H.0108630	9.136778	178.4997	.0102565	.0040256
#2	444.5465	8.700836	H.0105464	9.054208	176.3941	-.011649	.0032205

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	511.4087	8.777636	-.001326	8.335384	.7706502	-.004949	.1591979
#1	513.6517	8.822030	-.003578	8.379148	.7696543	.2326157	.0678080
#2	509.1657	8.733241	.0009260	8.291620	.7716460	-.242514	H.2505878

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	.0575187	-.001230	.3236028	30.10514	.0042598	.1204879	-.036174
#1	.0322762	.0003153	.3216708	29.85032	.0041850	.2380129	-.017073
#2	.0827612	-.002775	.3255347	30.35996	.0043345	.0029628	-.055274

Elem	Ti	V	Zn	TBLCHK
Avge	8.816931	9.001095	.0043411	H1.079406
#1	8.824238	9.055750	.0029539	H1.085297
#2	8.809623	8.946440	.0057283	H1.073516

Method: ROCKY1 Sample Name: ICB Operator: DH 000748
Run Time: 07/31/92 15:45:36
C ment:
i · CONC Corr. Factor: 1

Elem	Al	Sb	As	Ba	Be	B	Cd
Avge	.0634936	-.003411	-.030546	.0004289	.0007991	-.003071	-.001013
#1	.0680458	-.028846	-.034504	.0000714	.0007991	-.002054	-.001181
#2	.0589414	.0220243	-.026588	.0007864	.0007992	-.004087	-.000846

Elem	Ca	Cr	Co	Cu	Fe	Pb	Li
Avge	.0100450	.0019399	.0098999	-.000020	-.000010	-.017523	.0012077
#1	.0081316	.0008882	.0088704	-.000653	-.000009	-.006894	.0008051
#2	.0119583	.0029916	H.0109295	.0006127	-.000011	-.028152	.0016102

Elem	Mg	Mn	Mo	Ni	P	K	Se
Avge	-.008384	.0002666	-.000001	.0003364	.2393767	-.173224	.0247616
#1	-.025277	.0005394	-.002895	.0021819	.2451686	-.202920	-.002335
#2	.0085086	-.000006	.0028925	-.001509	.2335848	-.143529	.0518583

Elem	SiO2	Ag	Na[Lo]	Na[Hi]	Sr	Tl	Sn
Avge	-.028782	.0000163	.1951276	6.300286	.0001495	-.038564	.0021510
#1	-.033534	-.000700	.1902977	6.199838	.0001495	-.029378	-.002304
#2	-.024029	.0007321	.1999575	6.400735	.0001495	-.047750	.0066063

Elem	Ti	V	Zn	TBLCHK
Avge	.0116348	-.001439	.0064380	H.0536649
#1	.0110203	-.001467	.0062422	H.0591187
#2	.0122493	-.001411	.0066338	H.0482112

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QUALITY ASSURANCE SECTION
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TEXAS WORLD OPERATIONS, INC.
ORGANIC DATA VALIDATION GUIDELINES

EPA SW-846 METHOD 8140
ORGANOPHOSPHORUS PESTICIDES ANALYSIS
(SEPTEMBER, 1986)

Prepared By:

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Texas World Operations, Inc.

December 1992

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TEXAS WORLD OPERATIONS, INC.
ORGANIC DATA VALIDATION GUIDELINES

EPA SW-846 METHOD 8140
ORGANOPHOSPHORUS PESTICIDES ANALYSIS

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December 1992
Version 1.0

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APPENDICES

Appendix A Acronym List

Appendix B Data Qualifier Definitions

1.0 INTRODUCTION

This document is designed to offer guidance in laboratory data evaluation and validation of organophosphorus pesticides in water, soil, and solid waste sample analyses. In some areas, specific guidelines and criteria are available. In other, less objective areas, only general guidance is offered due to the complexities and uniqueness of data relative to specific samples. The reviewer has a responsibility to inform the user concerning data quality and limitations, based on his/her technical judgment and evaluation, to assist the user in the proper use of the data.

Those areas where specific criteria are included are primarily areas in which definitive method performance requirements are established. These requirements are concerned with specifications that are not strictly sample dependent. They specify performance requirements normally under a laboratory's control. These specific areas include calibration standards, blanks, matrix spikes, and surrogate recoveries. Calculation and transcription errors must be rectified by laboratory resubmission of corrected data sheets if verification of the reported result is in doubt.

2.0 HOLDING TIMES

2.1 Objective

The objective is to ascertain the validity of results based on the holding time of the sample from the time of collection to the time of extraction and analysis.

2.2 Criteria

All samples and extracts must be iced or refrigerated at 4 ^{o}C. Sodium thiosulfate should be added to water samples containing residual chlorine. (Although not used for qualification, these criteria are noteworthy.)

All samples must be extracted within seven days of collection and completely analyzed within 40 days of extraction. (Method 8140 allows a 14-day holding time for soils. The ENSECO standard operating procedure (SOP) does not.)

2.3 Evaluation Procedure

Actual holding times are established by comparing the collection date on the chain-of-custody form with the dates of extraction and analysis found in the laboratory raw data. Holding times are determined as follows:

Extraction Holding Time (Days) = Extraction Date - Collection Date
Analysis Holding Time (Days) = Analysis Date - Extraction Date

2.4 Action

1. If the seven-day extraction holding time or the 40-day analysis holding time (after extraction) is exceeded, estimate (J) positive results and (UJ) non-detected results.

2. If the seven-day extraction holding time or the 40-day analysis holding time (after extraction) is grossly exceeded, estimate (J) positive results and reject (R) non-detected results. Grossly exceeded is defined as twice the acceptable holding time.

3.0 CALIBRATION

3.1 Objective

Compliance requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analysis run, and continuing calibration verification documents satisfactory performance of the instrument over specific time periods during sample analysis.

Calibration will be performed by the use of a calibration curve through linear regression.

3.2 Criteria

1. Initial Calibration

   a. External calibration standards for all analytes must be prepared and analyzed at a minimum of five concentrations. One of the standards should be near but above the method detection limit which the laboratory has established. The other concentrations should define the range of the detector used.

   b. The correlation coefficients of the calibration curve are expected to exceed 0.995 for each analyte.

   c. Both a and b apply to each GC column and instrument used for quantitation.

2. Continuing Calibration

   a. The working calibration curve or calibration factor must be verified on each working day, every ten investigative samples in the analysis sequence, and at the end of the analysis sequence by measuring a mid-level standard. The response for any analyte must be within ±15% of the initial calibration regression curve on the quantitation column or else the test must be repeated using a fresh calibration standard, or a new calibration curve or calibration factor must be generated.

      In addition, the retention time of any analyte should fall within the retention time window of that analyte from the initial calibration. The response for any analyte must be within ±20% of the initial calibration regression curve on the confirmation column.

3.3 Evaluation Procedure

1. Initial Calibration

   a. Check the raw data and recalculate the correlation coefficients of 10-20% of the compounds.

   b. Verify that the correlation coefficients exceed 0.995 for all compounds on all columns used for quantitation.

   c. If errors are detected, pursue the explanation via more comprehensive recalculation.

2. Continuing Calibration

   a. Check the raw data and recalculate 10-20% of the %Ds.

   b. Verify that the %Ds are less than or equal to 15% or 20% of the response on the regresssion curve for the quantitation and confirmation columns, respectively.

   c. If errors are detected, pursue the explanation via more comprehensive recalculation.

3.4 Action

1. Initial Calibration

   a. Estimate (J) positive results and (UJ) non-detected results for those compounds whose correlation coefficients are less than 0.995 in the associated initial calibration.

   b. Use professional judgment to reject (R) non-detected results for those compounds whose correlation coefficients are very low.

2. Continuing Calibration

   a. Estimate (J) positive results for those compounds whose %Ds on the quantitation column exceed 15% in the associated continuing calibration.

   b. Estimate (J) positive results and (UJ) non-detected results for those compounds whose %Ds on the quantitation column exceed 25% in the associated continuing calibration.

   c. Estimate (J) positive results and reject (R) non-detected results for those compounds whose %Ds on the quantitation column exceed 50% in the associated continuing calibration.

d. Provide a comment in the data validation report for those positive result whose %Ds on the confirmation column exceed 20% in the associated continuing calibration.

4.0 BLANKS

4.1 Objective

The assessment of method blank analysis results is to determine the existence and magnitude of contamination problems. If problems with any method blank exist, all data associated with the method blank must be carefully evaluated to determine whether or not there is an inherent variability in the data for the batch, or if the problem is an isolated occurrence not affecting other data. ("Associated" refers to those samples extracted and analyzed with a particular method blank.)

4.2 Criteria

A laboratory reagent blank (method blank) must be extracted and analyzed with each set of samples extracted (one every twenty samples) and when there is a change in reagents. No contaminants should be present in the blank(s).

4.3 Evaluation Procedure

1. Review the results of all associated blank(s) and raw data (chromatograms, mass spectra, quantitation reports, or data system printouts).

2. Verify that method blank analysis has been reported per matrix, per concentration, per GC system used to analyze samples, and per extraction batch.

4.4 Action

1. If a target compound is found in the method blank but not in the samples, no action is taken.

2. If a target compound is found in the method blank and is also found in the sample, apply the following:

    a. If the sample concentration is less than 5 times the blank concentration and less than the MDL: Report the MDL followed by (UJ).

    b. If the sample concentration is less than or equal to 5 times the blank concentration and greater than or equal to the MDL: Report the value followed by (UJ).

    c. If the sample concentration is greater than 5 times the blank concentration and greater than the MDL: Report the value unqualified.

3. If an associated method blank was not extracted and analyzed for the samples, estimate (J) positive results.

4. If an associated method blank was not extracted and analyzed for the samples, and there are positive results for the same target compound in all samples, reject (R) the positive results for that target compound in all samples.

5.0 SURROGATES

5.1 Objective

Laboratory performance on individual samples is established by means of spiking activities. The evaluation of the results of these surrogate spikes is not necessarily straightforward. The sample itself may produce effects due to such factors as interferences and high concentrations of analytes. Since the effects of the sample matrix are frequently outside the control of the laboratory and may present relatively unique problems, the review and validation of data based on specific sample results is frequently subjective and demands analytical experience and professional judgment. Accordingly, this section consists primarily of guidelines.

5.2 Criteria

1. The analyst should monitor the extraction and analysis processes by spiking each standard, sample, and blank with one or two surrogates (e.g., organophosphorus pesticides not expected to be present in the sample).

2. Surrogate recoveries must fall within the control limits set by the laboratory.

3. Surrogates must be added to the samples prior to the extraction process.

4. Samples in which surrogate recoveries are outside the control limits must be reanalyzed.

5. Samples reanalyzed due to failed surrogate recoveries which fail again must be reextracted and reanalyzed or the data must be "flagged as estimated concentration."

5.3 Evaluation Procedure

1. Check raw data (i.e., chromatograms, quantitation list, etc.) to verify the recoveries.

2. If recoveries are not within the control limits, check the raw data for possible interferences.

3. Check to verify that appropriate reanalyses or reextractions were performed.

5.4 Action

1. If the surrogate recovery is greater than the laboratory control limits, estimate (J) positive results. (Determine that high bias was not due to interference with the surrogate compound only.)

2. If the surrogate recovery is less than the laboratory control limits but greater than 10%, estimate (J) positive results and (UJ) non-detected results.

3. If the surrogate recovery is greater than zero but less than 10%, estimate (J) positive results and reject (R) non-detected results.

4. If zero pesticide surrogate recovery is reported, the reviewer should examine the sample chromatogram to determine if the surrogate may be present, but slightly outside its retention time window. If this is the case, in addition to assessing surrogate recovery for quantitative bias, the overriding consideration is to investigate the qualitative validity of the extraction and analysis. If the surrogate is not present, estimate (J) positive results and reject (R) non-detected results.

5. If appropriate reanalyses or reextractions were not performed, provide a comment in the validation report.

6.0 MATRIX SPIKE ANALYSIS

6.1 Objective

These data are generated to determine long-term precision and accuracy of the analytical method on various matrices. These data alone cannot be used to evaluate the precision and accuracy of individual samples.

6.2 Criteria

The laboratory is required to collect a portion of their samples to monitor spike recoveries. The frequency of spiked sample analyses must be one matrix spike (MS) and one matrix spike duplicate (MSD) per extraction batch (up to 20 samples). Samples are spiked with the following compounds: diazanon, methyl parathion, malathion, and ethion. The spike concentrations and acceptance limits are:

	Spiking Concentrations		Acceptance Limits	
Compounds	Soil/Sediment (ug/Kg)	Water (ug/L)	% Recovery	RPD
Diazanon	330	10	20-160	20
Methyl parathion	330	10	20-160	20
Malation	330	10	20-160	20
Ethion	330	10	20-160	20

80% of the spike analytes must fall within the control limits.

6.3 Evaluation Procedure

1. Inspect results for the MS/MSD percent recoveries and relative percent differences (RPDs).

2. Verify transcriptions from raw data and verify calculations.

3. Verify that 80% of the MS/MSD recoveries and RPD fall within the control limits set by the laboratory.

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

D_1 = MS Concentration.
D_2 = MSD Concentration.

6.4 Action

No action is taken on MS/MSD data alone to qualify an entire batch. However, using informed professional judgment the data reviewer may use the MS/MSD results in conjunction with other QC criteria and determine the need for some qualification of data.

7.0 ADDITIONAL QUALITY CONTROL

7.1 Objective

Laboratory control samples are required to establish acceptable accuracy and precision prior to any sample analyses and if any compound is outside its recovery range in the matrix spike analyses. (Data are not likely to be included as a deliverable.)

7.2 Criteria

It is not likely that the laboratory control sample data will be included in the data package. If provided, the laboratory control sample recovery should be comparable to the data from Tables 3 and 4 within the method.

7.3 Evaluation Procedure

Evaluate the accuracy of the data.

7.4 Action

Discuss any areas of concern in the comments portion of the report.

8.0 COMPOUND IDENTIFICATION

8.1 Objective

The objective of the criteria for GC qualitative analysis is to minimize the number of erroneous identifications of compounds.

8.2 Criteria

1. The laboratory must establish retention time windows for each analyte on each GC column used for sample analysis. This is done by making three injections of all compounds throughout a 72-hour period, and calculating three times the standard deviation for each analyte.

   Daily retention time windows are then established using the initial mid-level standard of the sequence as the midpoint of the window. All succeeding standards in an analysis sequence must fall within this daily retention time window. However, the experience of the analyst should weigh heavily in the interpretation of chromatograms.

2. Second column confirmation is required for all samples that contain any target compounds. GC/MS confirmation may also be done for any compound at sufficient concentration that has been confirmed on both columns.

3. If peak detection and identification are prevented due to interferences, further cleanup is required. Interferences are a major problem in pesticide determinations.

8.3 Evaluation Procedure

1. Review Form I or the equivalent results summary, the associated raw data (chromatograms and data system printouts), and Form X or the equivalent summary. Confirm the reported positive results and verify the reported non-detected results using appropriate retention times and retention time windows.

2. Verify that positive identifications have dissimilar column analysis or GC/MS analysis.

3. Verify that cleanup techniques were employed for samples with interference.

8.4 Action

1. If second column confirmation data are not provided and a positive result is evident in the primary data, reject (R) the positive result.

2. If the criteria for positive identification (i.e. peak within its window on both columns or any evident shifts explained) are not met, and it is clear that an error in identification has occurred, change the result to non-detected (U).

3. If the criteria for identification are not met, and the misidentified peak(s) cause interference with potential detection of the target compound, then the value should be reported as an estimated quantitation limit (UJ).

4. If identification of any target compound is obscured by interference, professional judgment should be applied to estimate (UJ) the quantitation limits. (If no cleanup techniques were employed, provide a comment in the validation report.)

9.0 COMPOUND QUANTITATION

9.1 Objective

The objective is to ensure that the reported quantitation results and detection limits are accurate.

9.2 Criteria

1. Compound quantitation, as well as the adjustment of the method detection limit (MDL), must be calculated according to the method. Linear regression will be used.

2. If the response for the peak exceeds the linear range of the system, the extract must be diluted and reanalyzed.

3. Results are reported to 2 significant figures.

9.3 Evaluation Procedure

1. Examine the raw data to verify the correct calculation of all sample results. Quantitation lists, chromatograms, sample preparation logs, dilutions, and cleanups are compared to the reported sample results and quantitation limits.

2. Verify that responses for target compounds and standard peaks were measured consistently, i.e., all values were determined by either integrated areas or peak heights, not both.

3. Verify that if the response for any target compound exceeded the linear range of the system, the sample was diluted and reanalyzed.

4. According to the ENSECO SOP, the concentration of the analyte (ng/uL which equals ug/mL) may be read directly from the external standard table. Calculate 1 or 2 results in this manner. Results may be obtained by taking the concentration of the analyte from the external standard table and proceeding according to the equation below.

5. Verify 10-20% of the calculations without using the external standard table but rather by recalculating the concentration of the analyte (ng/uL which equals ug/mL) through linear regression using a calculator. Proceed according to the equation below.

$$\text{Concentration (ug/L or ug/Kg)} = C \times \frac{V_t \times D}{(V_s \text{ or } W)}$$

where:

C = Concentration of the analyte as read from the external standard table or calculated, ng/uL.
V_t = Volume of total extract, uL.
D = Dilution factor.
V_s = Volume of water extracted, mL.
W = Weight of soil extracted, g.

9.4 Action

1. If major discrepancies are found which prevent determination of the correct result, resubmittal will be necessary to resolve the problem.

2. If the response for any target compound exceeds the linear range of the system and the sample was not diluted and reanalyzed, the value should be qualified with an (E).

10.0 SYSTEM PERFORMANCE

10.1 Objective

A thorough review of on-going data acquisition and examination of the raw data can yield indicators of instrument performance.

10.2 Criteria

Instrument performance indicators are as follows:

1. Abrupt, discrete baseline changes indicating electronic or detector changes.

2. Poor chromatographic performance characterized by high background levels, shifts in absolute retention times of standards, large extraneous peak interferences, baseline rise at elevated temperature, loss of peak resolution, and peak tailing or peak splitting which could result in inaccurate quantitation.

10.3 Action

Based on the performance indicators discussed previously, the data reviewer must decide if the system has degraded to the point of affecting data quality or validity. If data quality may have been affected, data should be qualified based on the reviewer's technical judgment and subjective evaluation.

11.0 OVERALL DATA ASSESSMENT

The overall data assessment represents the quality of the majority of the data. It can only be assigned once the data validation process is complete. At this point, each data point for each analytical result has been assigned a data qualifier based upon deficiencies in one or more of the QC categories (i.e. holding times, calibration, etc.). All results have been qualified. Determine which qualifier has been assigned to the majority of the analytical results and assign that qualifier as the overall data assessment qualifier.

APPENDIX A
ACRONYM LIST

ACRONYM LIST

%D	Percent Difference
MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
%RSD	Percent Relative Standard Deviation
SD	Standard Deviation
SOP	Standard Operating Procedure

APPENDIX B

DATA QUALIFIER DEFINITIONS

DATA QUALIFIER DEFINITIONS

A Data are acceptable, with qualifications.

E The associated value exceeds calibration range. Dilute and reanalyze.

J The associated value is an estimated quantity.

R Data are rejected.

U The compound was analyzed for but not detected at or above the method detection limit.

UJ The compound was analyzed for but not detected at or above the method detection limit. The associated value is an estimated quantity.

V Data are valid.

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TEXAS WORLD OPERATIONS, INC.
ORGANIC DATA VALIDATION GUIDELINES

WATER MISCIBLE SOLVENTS
BY GC/FID
USING DIRECT AQUEOUS INJECTION

Prepared By:

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Approved for Use:_____
Texas World Operations, Inc.

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TEXAS WORLD OPERATIONS, INC.
ORGANIC DATA VALIDATION GUIDELINES

WATER MISCIBLE SOLVENTS
BY GC/FID
USING DIRECT AQUEOUS INJECTION

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1.0 INTRODUCTION

This document is designed to offer guidance in laboratory data evaluation and validation of the following water miscible solvents in water, soil, and solid waste sample analyses:

1-Butanol	1-Propanol
2-Butanol	Acetone
Ethanol	Iso-butanol
Isopropanol	Methanol
Methyl ethyl ketone	Methyl isobutyl ketone

In some areas, specific guidelines and criteria are available. In other, less objective areas, only general guidance is offered due to the complexities and uniqueness of data relative to specific samples. The reviewer has a responsibility to inform the user concerning data quality and limitations, based on his/her technical judgment and evaluation, to assist the user in the proper use of the data.

Those areas where specific criteria are included are primarily areas in which definitive method performance requirements are established. These requirements are concerned with specifications that are not strictly sample dependent. They specify performance requirements normally under a laboratory's control. These specific areas include calibration standards, blanks, duplicate control samples, and matrix spikes. Calculation and transcription errors must be rectified by laboratory resubmission of corrected data sheets if verification of the reported result is in doubt.

2.0 HOLDING TIMES

2.1 Objective

The objective is to ascertain the validity of results based on the holding time of the sample from the time of collection to the time of extraction and analysis.

2.2 Criteria

All samples and extracts should be iced or refrigerated at 4 ^{o}C. Sodium thiosulfate should be added to water samples containing residual chlorine. (Although not used for qualification, these criteria are noteworthy.) These criteria are not present in the ENSECO standard operating procedure (SOP) and are for advisory purposes only.

Water:
All samples must be analyzed within 14 days of collection.

Soil:
All samples must be extracted within 14 days of collection and completely analyzed within 40 days of extraction.

2.3 Evaluation Procedure

Actual holding times are established by comparing the collection date on the chain-of-custody form with the dates of extraction and analysis found in the laboratory raw data. Holding times are determined as follows:

Extraction Holding Time (Days) = Extraction Date - Collection Date
Analysis Holding Time (Days) = Analysis Date - Extraction Date

2.4 Action

1. If the 14-day water analysis holding time, the 14-day soil extraction holding time, or the 40-day soil analysis holding time (after extraction) is exceeded, estimate (J) positive results and (UJ) non-detected results.

2. If the 14-day water analysis holding time, the 14-day soil extraction holding time, or the 40-day soil analysis holding time (after extraction) is grossly exceeded, estimate (J) positive results and reject (R) non-detected results. Grossly exceeded is defined as twice the acceptable holding time.

3.0 CALIBRATION

3.1 Objective

Compliance requirements for satisfactory instrument calibration are established to ensure that the instrument is capable of producing acceptable quantitative data. Initial calibration demonstrates that the instrument is capable of acceptable performance at the beginning of the analysis run, and continuing calibration verification documents satisfactory performance of the instrument over specific time periods during sample analysis.

Calibration will be performed by the use of a calibration curve through linear regression.

3.2 Criteria

1. Initial Calibration

   a. External calibration standards for all analytes must be prepared and analyzed daily (see section 9.2 of ENSECO SOP) at a minimum of five concentrations. The standards will be analyzed at the following concentrations:

5 ug/mL	50 ug/mL
10 ug/mL	100 ug/mL
25 ug/mL	

   Additional levels may be analyzed at the analyst's discretion.

   b. The percent relative standard deviations (%RSDs) of the calibration factors (CFs) must be less than or equal to 20% if the average CF is to be used in place of the calibration curve for calculations.

   c. Both a and b apply to each GC column and instrument used for quantitation.

2. Continuing Calibration

   a. The working calibration curve must be verified on each working day (immediately following the analysis of the daily calibration curve), every ten investigative samples in the analysis sequence, and at the end of the analysis sequence by measuring a mid-level standard. The response for any analyte must be within ±15% relative percent difference (RPD) of the average CF from the initial calibration or else a new calibration curve or calibration factor must be generated.

3.3 Evaluation Procedure

1. Initial Calibration

   a. Check the raw data and recalculate the correlation coefficients of 10-20% of the compounds.

   b. Verify that the %RSDs are less than or equal to 20% of the average CFs.

   c. If errors are detected, pursue the explanation via more comprehensive recalculation.

2. Continuing Calibration

   a. Check the raw data and recalculate 10-20% of the RPDs.

   b. Verify that the RPDs are less than or equal to 15% of the average CF from the initial calibration.

   c. If errors are detected, pursue the explanation via more comprehensive recalculation.

$$CF = \frac{\text{total area of peak}}{\text{standard concentration (ug/mL)}}$$

$$\%RSD = \frac{SD}{x} \times 100$$

$$SD = \sum_{i=1}^{n} \frac{(X_i - x)^2}{(n-1)}$$

where:

x = Mean of 5 calibration factors.

$$RPD = \frac{R_1 - R_2}{R_1 + R_2 / 2} \times 100$$

R_1 = Calibration factor from first analysis.
R_2 = Calibration factor from subsequent analysis.

3.4 Action

1. Initial Calibration

   a. Estimate (J) positive results for those compounds whose %RSDs exceed 20% in the associated initial calibration.

   b. Estimate (J) positive results and (UJ) non-detected results for those compounds whose %RSDs exceed 50% in the associated initial calibration.

   c. Estimate (J) positive results and reject (R) non-detected results for those compounds whose %RSDs exceed 100% in the associated initial calibration.

2. Continuing Calibration

   a. Estimate (J) positive results for those compounds whose RPDs exceed 15% in the associated continuing calibration.

   b. Estimate (J) positive results and (UJ) non-detected results for those compounds whose RPDs exceed 25% in the associated continuing calibration.

   c. Estimate (J) positive results and reject (R) non-detected results for those compounds whose RPDs exceed 50% in the associated continuing calibration.

4.0 BLANKS

4.1 Objective

The assessment of method blank analysis results is to determine the existence and magnitude of contamination problems. If problems with any method blank exist, all data associated with the method blank must be carefully evaluated to determine whether or not there is an inherent variability in the data for the batch, or if the problem is an isolated occurrence not affecting other data. ("Associated" refers to those samples extracted and analyzed with a particular method blank.)

4.2 Criteria

A laboratory reagent blank (method blank) must be extracted and analyzed with each set of samples extracted (one every twenty samples). The blank must be analyzed before the samples are analyzed. No contaminants should be present in the blank(s).

4.3 Evaluation Procedure

1. Review the results of all associated blank(s) and raw data (chromatograms, quantitation reports, or data system printouts).

2. Verify that method blank analysis has been reported per matrix, per concentration, per GC system used to analyze samples, and per extraction batch.

4.4 Action

1. If a target compound is found at any concentration in the method blank but not in the samples, no action is taken.

2. If a target compound is found at any concentration in the method blank and is also found in the sample, apply the following:

    a. If the sample concentration is less than 5 times the blank concentration and less than the MDL: Report the MDL followed by (UJ).

    b. If the sample concentration is less than or equal to 5 times the blank concentration and greater than or equal to the MDL: Report the value followed by (UJ).

    c. If the sample concentration is greater than 5 times the blank concentration and greater than the MDL: Report the value unqualified.

3. If an associated method blank was not extracted and analyzed for the samples, estimate (J) positive results.

4. If an associated method blank was not extracted and analyzed for the samples, and there are positive results for the same target compound in all samples, reject (R) the positive results for that target compound in all samples.

5.0 MATRIX SPIKE ANALYSIS

5.1 Objective

These data are generated to determine long-term precision and accuracy of the analytical method on various matrices. These data alone cannot be used to evaluate the precision and accuracy of individual samples.

5.2 Criteria

The laboratory is required to collect a portion of their samples to monitor spike recoveries. The frequency of spiked sample analyses must be one matrix spike (MS) and one matrix spike duplicate (MSD) per extraction batch (up to 20 samples). Samples are spiked with the following compounds: methanol, 1-propanol, and 1-butanol. The spike concentrations and control limits are matrix specific and will be determined at the time of analyses any provided in the raw data.

5.3 Evaluation Procedure

1. Inspect results for the MS/MSD percent recoveries and relative percent differences (RPDs).

2. Verify transcriptions from raw data and verify calculations.

3. Verify that the MS/MSD recoveries and RPD fall within the control limits set by the laboratory.

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

D_1 = MS Concentration.
D_2 = MSD Concentration.

5.4 Action

No action is taken on MS/MSD data alone to qualify an entire batch. However, using informed professional judgment the data reviewer may use the MS/MSD results in conjunction with other QC criteria and determine the need for some qualification of data.

6.0 ADDITIONAL QUALITY CONTROL

6.1 Objective

Laboratory control samples establish acceptable accuracy and precision prior to any sample analyses.

6.2 Criteria

Duplicate control samples (DCSs) will be provided in the raw data. The frequency of the DCS analyses will be one with each calibration curve and additionally one per extraction batch (up to 20 samples). DCS analyses are spiked with the following compounds: methanol, 1-propanol, and 1-butanol. The spike concentrations and control limits are:

	Spiking	Acceptance Limits	
Compounds	Concentrations(mg/L)	% Recovery	RPD
Methanol	25	50-150	20
1-Propanol	25	50-150	20
1-Butanol	25	50-150	20

6.3 Evaluation Procedure

Evaluate the accuracy of the data.

6.4 Action

The DCS data are for advisory purposes only. Discuss any areas of concern in the comments portion of the report.

7.0 COMPOUND IDENTIFICATION

7.1 Objective

The objective of the criteria for GC qualitative analysis is to minimize the number of erroneous identifications of compounds.

7.2 Criteria

1. The laboratory should establish retention time windows for each analyte on each GC column used for sample analysis. This should be done by making three injections of all compounds throughout a 72-hour period, and calculating three times the standard deviation for each analyte.

   Daily retention time windows should then be established using the initial mid-level standard of the sequence as the midpoint of the window. All succeeding standards in an analysis sequence should fall within this daily retention time window. However, the experience of the analyst should weigh heavily in the interpretation of chromatograms.

   These criteria are not found in the ENSECO SOP but are for advisory purposes only.

2. If peak detection and identification are prevented due to interferences, it may be necessary to re-extract the samples or dilute out the interferences.

7.3 Evaluation Procedure

1. Review Form I or the equivalent results summary, the associated raw data (chromatograms and data system printouts), and Form X or the equivalent summary. Confirm the reported positive results and verify the reported non-detected results using appropriate retention times and retention time windows.

7.4 Action

1. If the criteria for positive identification (i.e. peak within its window or any evident shifts explained) are not met, and it is clear that an error in identification has occurred, change the result to non-detected (U).

2. If the criteria for identification are not met, and the misidentified peak(s) cause interference with potential detection of the target compound, then the value should be reported as an estimated quantitation limit (UJ).

3. If identification of any target compound is obscured by interference, professional judgment should be applied to estimate (UJ) the quantitation limits.

8.0 COMPOUND QUANTITATION

8.1 Objective

The objective is to ensure that the reported quantitation results and detection limits are accurate.

8.2 Criteria

1. Compound quantitation, as well as the adjustment of the method detection limit (MDL), must be calculated according to the method.

2. If the response for the peak exceeds the linear range of the system, the extract must be diluted and reanalyzed.

3. When reporting concentrations of analyte present in samples, results are reported to 2 significant figures.

4. When reporting concentrations of analyte present in spiked samples, results are reported to 3 significant figures.

5. When reporting percent recoveries and relative percent deviations for the purposes of quality control, results are reported to 2 significant figures unless the recovery values exceed 100% in which case they are reported to 3 significant figures.

6. Reporting units are mg/L for aqueous samples and mg/Kg for solid samples.

8.3 Evaluation Procedure

1. Examine the raw data to verify the correct calculation of all sample results. Quantitation lists, chromatograms, sample preparation logs, dilutions, and cleanups are compared to the reported sample results and quantitation limits.

2. Verify that responses for target compounds and standard peaks were measured consistently, i.e., all values were determined by either integrated areas or peak heights, not both.

3. Verify that if the response for any target compound exceeded the linear range of the system, the sample was diluted and reanalyzed.

4. Calculate results as follows:

$$\text{Concentration (mg/L or mg/Kg)} = \frac{A_x \times V_e \times D}{CF_a \times \times (V_s \text{ or } W)}$$

where:

A_x = Response for the analyte in the sample, using peak area or height.
CF_a = Average calibration factor from the initial calibration, 1/ug/mL.
V_e = Volume of total extract, mL.
D = Dilution factor.
V_s = Volume of aqueous sample extracted, mL.
W = Weight of solid extracted, g.

V_e and V_s are equivalent in the case of aqueous samples because they do not undergo extraction.

8.4 Action

1. If major discrepancies are found which prevent determination of the correct result, resubmittal will be necessary to resolve the problem.

2. If the response for any target compound exceeds the linear range of the system and the sample was not diluted and reanalyzed, the value should be qualified with an (E).

9.0 SYSTEM PERFORMANCE

9.1 Objective

A thorough review of on-going data acquisition and examination of the raw data can yield indicators of instrument performance.

9.2 Criteria

Instrument performance indicators are as follows:

1. Abrupt, discrete baseline changes indicating electronic or detector changes.

2. Poor chromatographic performance characterized by high background levels, shifts in absolute retention times of standards, large extraneous peak interferences, baseline rise at elevated temperature, loss of peak resolution, and peak tailing or peak splitting which could result in inaccurate quantitation.

9.3 Action

Based on the performance indicators discussed previously, the data reviewer must decide if the system has degraded to the point of affecting data quality or validity. If data quality may have been affected, data should be qualified based on the reviewer's technical judgment and subjective evaluation.

10.0 OVERALL DATA ASSESSMENT

The overall data assessment represents the quality of the majority of the data. It can only be assigned once the data validation process is complete. At this point, each data point for each analytical result has been assigned a data qualifier based upon deficiencies in one or more of the QC categories (i.e. holding times, calibration, etc.). All results have been qualified. Determine which qualifier has been assigned to the majority of the analytical results and assign that qualifier as the overall data assessment qualifier.

APPENDIX A
ACRONYM LIST

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MDL	Method Detection Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
RPD	Relative Percent Difference
%RSD	Percent Relative Standard Deviation
SD	Standard Deviation.
SOP	Standard Operating Procedure

APPENDIX B

DATA QUALIFIER DEFINITIONS

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A	Data are acceptable, with qualifications.
E	The associated value exceeds calibration range. Dilute and reanalyze.
J	The associated value is an estimated quantity.
R	Data are rejected.
U	The compound was analyzed for but not detected at or above the method detection limit.
UJ	The compound was analyzed for but not detected at or above the method detection limit. The associated value is an estimated quantity.
V	Data are valid.