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2/2

Analytical and Supporting Laboratory

Quality Control Data For

DOE – Hanford North Slope

LEVEL IV Deliverable

VOLUME 2 OF 2

Prepared by: Environmental Science & Engineering, Inc.
August 1994

Organochlorine Pesticides

& PCBs

9513394.2547

Case Narrative

SDG No.: 51446
Pesticides/PCBs

1. The USEPA contract laboratory program statement of work for organics analysis dated 3/90 revision OLM01.8 was followed.

2. The following codes are used on the data report:
   NC = Not Confirmed by the other column.
   BDL = Below Detection Limit.
   RW = out of Retention time Window

3. On FORM 6E two compounds have %RSD >30% and two compounds have %RSD >20% on the DB608 column. The results are acceptable.

4. On FORM 6G the % resolution is 54.6% between 4,4'-DDE and dieldrin on the DB608 column. The results are acceptable.

5. An X qualifier is used on FORM I PEST to indicate TCL compounds whose concentrations exceed the calibration range of the GC/EC instrument. Quantitation is done at a subsequent dilution.

6. Sample WC1-01 has high matrix interferences. These interferences caused erratic surrogate and spike recoveries. The method blank surrogate recoveries are within QC limits. The results for the samples are acceptable.

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Quality Control Summary Reports

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC Column(1): DB608 ID: .53 (mm) GC Column(2): DB1701 ID: .53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC #	TCX 2 %REC #	DCB 1 %REC #	DCB 2 %REC #	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK1	96	96	105	105			0
02	WC1-01	93	57 *	9 *	0 *			3
03	WC1-01MS	94	51 *	8 *	0 *			3
04	WC1-01MSD	81	49 *	2 *	14 *			3
05	WC1-01DL	86	61	9 *	18 *			2
06								
07								
08								
09								
10								
11								
12								
13								
14								
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27								
28								
29								
30								

	ADVISORY QC LIMITS
TCX = Tetrachloro-m-xylene	(60 -150)
DCB = Decachlorobiphenyl	(60 -150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No: 44022 SAS No.: SDG No.: 51446

Matrix Spike - EPA Sample No.: WC1-01

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	17	0.0	35	206 *	46-127
Heptachlor	17	25	33	47	35-130
Aldrin	17	6.4	15	51	34-132
Dieldrin	34	0.0	16	47	31-134
Endrin	34	150	170	59	42-139
4,4'-DDT	34	6.4	15	25	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
gamma-BHC (Lindane)	17	20	118	54 *	50	46-127
Heptachlor	17	26	6 *	155 *	31	35-130
Aldrin	17	2.6	-22 *	503 *	43	34-132
Dieldrin	34	12	35	29	38	31-134
Endrin	34	140	-29 *	587 *	45	42-139
4,4'-DDT	34	30	69	94 *	50	23-134

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 5 out of 6 outside limits

Spike Recovery: 4 out of 12 outside limits

COMMENTS:

4C
PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLK1

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Lab Sample ID: MB*QC*1 Lab File ID:

Matrix:(soil/water) SOIL Extraction: (SepF/Cont/Sonc) SONC

Sulfur Cleanup: (Y/N) Y Date Extracted: 07/18/94

Date Analyzed (1): 07/22/94 Date Analyzed (2): 07/22/94

Time Analyzed (1): 0331 Time Analyzed (2): 0412

Instrument ID (1): HP58907 Instrument ID (2): HP58907

GC Column (1): DB608 ID:.53 (mm) GC Column (2): DB1701 ID:.53 (mm)

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	WC1-01	CDMHNSS3*43	07/22/94	07/22/94
02	WC1-01MS	SPM1*CDMHNSS3	07/22/94	07/22/94
03	WC1-01MSD	SPM2*CDMHNSS3	07/22/94	07/22/94
04	WC1-01DL	CDMHNSS3*43	07/22/94	07/22/94
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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21				
22				
23				
24				
25				
26				

COMMENTS:

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Matrix: (soil/water) SOIL Lab Sample ID: CDMHNSS3*43

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 3 decanted: (Y/N) Y Date Received: 07/17/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/18/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.5	P
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	25.	PX
309-00-2	Aldrin	6.4	P
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.4	U
72-55-9	4,4'-DDE	21.	
72-20-8	Endrin	150.	PX
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	UX
50-29-3	4,4'-DDT	6.4	P
72-43-5	Methoxychlor	17.	UX
53494-70-5	Endrin ketone	3.4	UX
742-93-4	Endrin aldehyde	3.4	UX
5103-71-9	alpha-Chlordane	1.7	U
5566-34-7	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	34.	U
11104-28-2	Aroclor-1221	69.	U
11141-16-5	Aroclor-1232	34.	U
53469-21-9	Aroclor-1242	34.	U
12672-29-6	Aroclor-1248	34.	U
11097-69-1	Aroclor-1254	34.	U
11096-82-5	Aroclor-1260	34.	U

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01DL

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Matrix: (soil/water) SOIL Lab Sample ID: CDMHNSS3*43

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 3 decanted: (Y/N) Y Date Received: 07/17/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/18/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 10.0

GPC Cleanup: (Y/N) Y pH: Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	17.	UD
319-85-7	beta-BHC	17.	UD
319-86-8	delta-BHC	17.	UD
58-89-9	gamma-BHC (Lindane)	17.	UD
76-44-8	Heptachlor	26.	PD
309-00-2	Aldrin	17.	UD
1024-57-3	Heptachlor epoxide	17.	UD
959-98-8	Endosulfan I	17.	UD
60-57-1	Dieldrin	34.	UD
72-55-9	4,4'-DDE	34.	UD
72-20-8	Endrin	190.	PD
33213-65-9	Endosulfan II	34.	UD
72-54-8	4,4'-DDD	34.	UD
1031-07-8	Endosulfan sulfate	34.	UD
50-29-3	4,4'-DDT	34.	UD
72-43-5	Methoxychlor	170.	UD
53494-70-5	Endrin ketone	40.	D
742-93-4	Endrin aldehyde	34.	UD
5103-71-9	alpha-Chlordane	17.	UD
5566-34-7	gamma-Chlordane	17.	UD
8001-35-2	Toxaphene	1700.	UD
12674-11-2	Aroclor-1016	340.	UD
11104-28-2	Aroclor-1221	690.	UD
11141-16-5	Aroclor-1232	340.	UD
53469-21-9	Aroclor-1242	340.	UD
12672-29-6	Aroclor-1248	340.	UD
11097-69-1	Aroclor-1254	340.	UD
11096-82-5	Aroclor-1260	340.	UD

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Software Version: 4.0<1C29>
Sample Name : CDMHNSS3*43 7-18-94 Time : 7/22/94 12:49 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/24

Interface Serial # : NONE Data Acquisition Time: 7/22/94 04:12 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A024.RAW
Result File : C:\TC4\HP58907\862A024.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A024.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A024.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A024.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

N Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 125

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	4.541		5577	B	3884	-------
2	4.671		321357	*B	104158	-------
3	4.766		4643	*B	-4720	-------
4	4.821		141897	*V	54273	-------
5	5.042		173816	B	42133	-------
6	5.207	TCX	138438	B	45248	0.1857
	5.394		132141	*B	40064	-------
	5.588		393267	*B	50048	-------
	5.728		35375	B	13445	-------
10	5.815		54813	V	17198	-------
11	5.941		127078	*B	28416	-------
12	6.142		17439	B	5697	-------
13	6.288		111333	B	22439	-------
14	6.387		53026	V	15971	-------
15	6.469		161885	V	39437	-------

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
16	6.583		10969	B	4462	-------
17	6.689		94830	V	16495	-------
18	6.834	ALPHA-BHC	30424	*B	9729	0.1948
19	6.954		45472	B	9942	-------
20	7.187		3982203	B	860164	-------
21	7.487		7524	B	2134	-------
23	7.691		20495	B	5249	-------
24	7.833		370790	V	86199	-------
25	8.038		2627486	V	531004	-------
26	8.273		1180097	B	246344	-------
27	8.458		154549	B	32437	-------
28	8.691		1062292	V	185637	-------
29	9.054	HEPTACHLOR RW	1244758	V	186239	0.6529
30	9.208		2190921	V	400987	-------
31	9.485		6198	B	1397	-------
32	9.730		703780	B	105201	-------
33	9.900		339712	*V	60219	-------
34	10.151	ALDRIN	462127	*B	76351	0.0193
35	10.357		362125	B	71077	-------
36	10.585		977862	B	115872	-------
37	10.914		487895	B	54551	-------
38	11.112		129384	*V	28306	-------
39	11.398		810109	*B	96638	-------
40	11.518		1024223	*V	136122	-------
41	11.660		205448	*V	41971	-------
42	11.745		181450	*V	39554	-------
43	11.939		198882	B	35326	-------
44	12.078		275913	V	35890	-------
45	12.232		189882	V	31491	-------
46	12.654		4237334	B	464244	-------
47	13.130	GAMMA-CHLORDANE	285645	*B	55423	0.3831
48	13.399		413248	B	49245	-------
49	13.709	ALPHA-CHLORDANE	26813	B	4875	-0.6241
50	13.967	ENDOSULFAN A	15010431	*B	783466	0.6316
51	14.350		334422	*E	72226	-------
52	14.571		26257	B	5294	-------
53	14.722		83026	B	18650	-------
54	14.986	P,P'-DDE	219905	*B	49355	0.2700
55	15.168	DIELDRIN NC	647253	B	99009	0.3899
56	15.421		194779	B	34843	-------
57	15.486		111177	V	29042	-------
58	15.601		88869	B	24880	-------
59	15.743		116311	B	27582	-------
60	15.840		394203	V	79319	-------
61	16.018		94446	B	19150	-------
62	16.116		56046	V	9683	-------
63	16.267		2474771	*B	480513	-------
64	16.434	ENDRIN	3093306	*V	523633	0.2073
65	16.510		2029384	*V	481444	-------
66	16.757		1174582	B	238947	-------
67	16.986	ENDOSULFAN B	12228	*B	7946	-0.2304
68	17.145		533721	B	122501	-------
69	17.267		9415601	V	398831	-------
70	17.748		1124471	*V	215668	-------
71	17.894	P,P'-DDT	340543	*B	93832	0.2445
72	18.039	ENDRIN ALDEHYDE	510065	*B	109414	-0.1534
73	18.188		14382	B	5060	-------
74	18.308		110784	B	25814	-------
75	18.426	ENDOSULFAN SULFATE	100066	*B	35815	-0.0855
76	18.633		5785727	*B	238534	-------
77	19.100		20355362	*V	243513	-------
78	20.458	METHOXYCHLOR	718338	*V	145235	0.5168
79	20.558	ENDRIN KETONE	876094	*V	151610	0.0476
80	20.712		741688	*V	135305	-------
81	20.899		434310	B	93852	-------
82	21.047		4385485	V	295775	-------
83	21.267		3794473	V	324563	-------
84	21.474		951546	V	148509	-------
85	21.753		6342251	V	388243	-------
86	21.975		1653674	V	263986	-------
87	22.345		1324622	B	159992	-------
88	22.578		988285	V	119649	-------
89	22.696		552252	V	110381	-------
90	22.926		847490	B	118150	-------
91	23.089		216141	V	46918	-------

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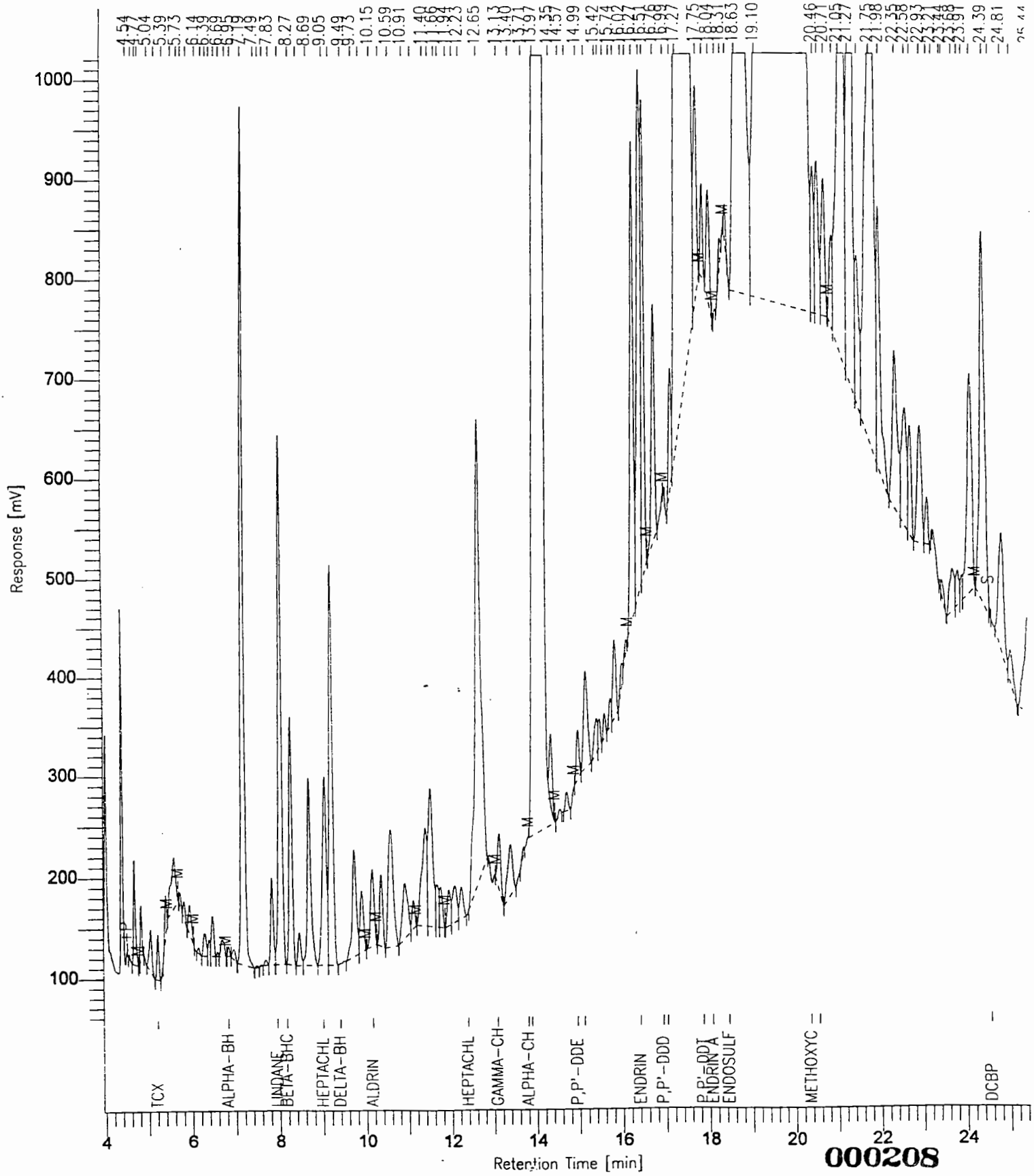
Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
[illegible]	23.210		7705	B	4140	-------
93	23.399		15089	B	7393	-------
94	23.442		71917	V	15784	-------
95	23.683		335136	B	42168	-------
96	23.809		189127	V	35191	-------
97	23.908		95830	V	25707	-------
98	24.094		1738714	*V	221168	-------
99	24.389		2939720	*B	373664	-------
100	24.527	DCBP	19070	*V	20265	-0.0991
101	24.813		1004605	B	118579	-------
102	25.025		229851	V	32973	-------
103	25.435		1064662	B	100381	-------
104	25.704		21137	B	7154	-------
106	25.886		101391	B	16754	-------
107	26.281		46800	B	14563	-------
108	26.385		208181	V	28930	-------
109	26.525		35583	V	8683	-------
110	26.702		7141	B	1630	-------
111	26.884		51109	B	9719	-------
112	27.000		5978	B	1382	-------
113	27.386		26043	B	6003	-------
114	27.806		826856	B	58663	-------
115	28.028		71552	V	26802	-------
116	28.074		183732	V	27237	-------
117	28.191		30963	V	14410	-------
118	28.322		81630	V	17183	-------
119	28.580		994864	V	54596	-------
120	28.922		36909	E	3390	-------
122	29.248		1361416	B	87231	-------
123	29.480		682601	V	59352	-------
124	29.747		205900	V	27089	-------
			127182903		13002782	

Chromatogram

Sample Name : CDMHNSS3*43 7-18-94
FileName : C:\TC4\HP58907\862A024.RAW
Method :
Start Time : 3.95 min End Time : 25.42 min
Scale Factor: 0.0 Plot Offset: 60 mV

Sample #:
Date : 7/22/94 12:49 PM
Time of Injection: 7/22/94 04:12 AM
Low Point : 59.75 mV High Point : 1024.00 mV
Plot Scale: 964.3 mV



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Software Version: 4.0<1C29>
Sample Name : CDMHNSS3*43 1:100 7-18-94 Time : 7/22/94 02:50 PM
S e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/33

Interface Serial # : NONE Data Acquisition Time: 7/22/94 10:13 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A033.RAW
Result File : C:\TC4\HP58907\862A033.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A033.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A033.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A033.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

N Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 68

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	4.824		4071	B	562	-------
9	7.167		34671	B	8060	-------
11	8.013		17134	V	3424	-------
12	8.245		8061	V	1605	-------
13	8.659		5749	B	1211	-------
14	9.026	HEPTACHLOR BDL	7888	B	1280	0.3419
	9.173		11165	V	1938	-------
	1.538		5083	B	689	-------
--	2.005		4204	B	303	-------
25	12.604		57597	B	5072	-------
29	14.047		2414100	B	333198	-------
32	15.816		7263	B	654	-------
33	16.225		25028	*B	5170	-------
34	16.390	ENDRIN BDL	25536	*B	5171	-0.0606
-	16.470		19587	*V	4091	-------

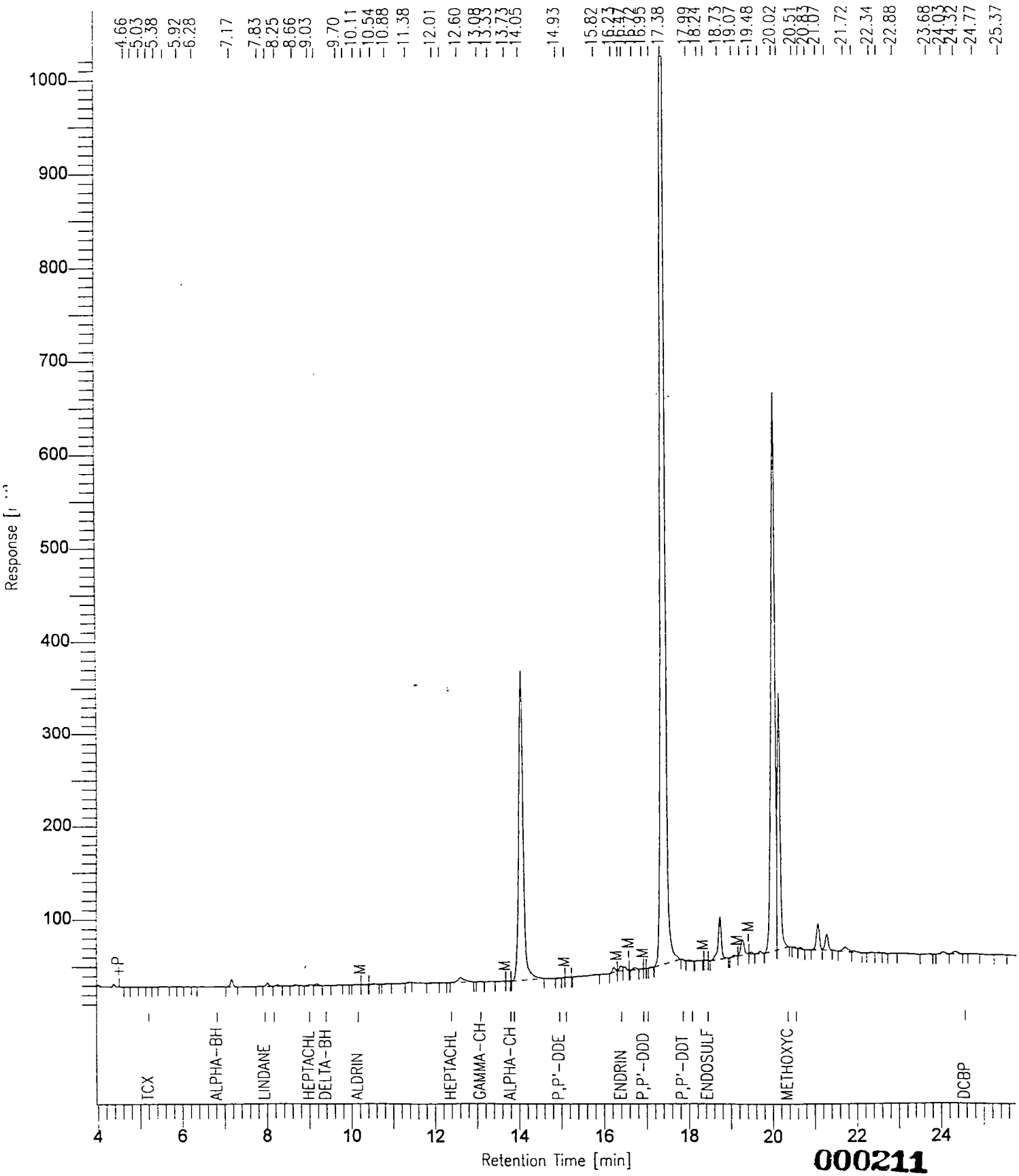
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
36	16.717		11833	B	2324	-------
38	17.113	ENDOSULFAN B	3992	B	873	0.5155
39	17.380		7846590	B	972407	-------
40	17.989	ENDRIN ALDEHYDE BDL	5408	B	1112	-0.4318
43	18.731		249135	B	44899	-------
44	19.068		8821	*B	1836	-------
45	19.268		95966	*B	16180	-------
46	19.483		9503	B	2567	-------
47	19.695		13047	B	2946	-------
48	20.020		3762546	B	596884	-------
49	20.140		1293663	V	275400	-------
51	20.656		6774	B	1551	-------
53	21.073		134273	B	27200	-------
54	21.281		82073	V	16501	-------
55	21.720		45712	B	5008	-------
56	21.918		11828	V	1737	-------
57	22.335		4552	B	618	-------
58	22.500		4213	V	696	-------
61	24.027		15829	B	2230	-------
62	24.316		19419	B	2593	-------
63	24.766		4196	B	494	-------
64	25.365		4791	B	560	-------
68	29.181		5107	B	474	-------
			16286409		2349522	

9513394.2554

Chromatogram

Sample Name : CDMHNSS3*43 1:100 7-18-94
F : C:\TC4\HP58907\862A033.RAW
M :
Start Time : 3.96 min End Time : 25.76 min
Scale Factor: 0.0 Plot Offset: 2 mV

Sample #:
Date : 7/22/94 02:50 PM
Time of Injection: 7/22/94 10:13 AM
Low Point : 2.12 mV High Point : 1024.00 mV
Plot Scale: 1021.9 mV



Software Version: 4.0<1C29>
Sample Name : CDMHNSS3*43 1:10 7-18-94 Time : 7/25/94 09:47 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/34

Interface Serial # : NONE Data Acquisition Time: 7/22/94 10:53 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A034.RAW
Result File : C:\TC4\HP58907\862A034.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A034.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A034.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A034.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 114

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	4.663		21664	B	6810	-------
2	4.814		15587	B	5055	-------
3	4.881		9609	V	2351	-------
4	5.028		15059	V	3009	-------
5	5.194	TCX	12861	B	4140	-0.0557
6	5.378		6522	*B	1886	-------
7	5.474		8179	*B	2176	-------
8	5.589		14188	*V	2809	-------
10	5.796		5429	V	1260	-------
11	5.920		13824	V	3372	-------
13	6.277		12993	B	2677	-------
14	6.368		5777	V	1697	-------
15	6.449		11981	V	2914	-------
17	6.681		9192	B	1830	-------
20	7.162		447067	B	110864	-------

Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
	7.821		33633	V	7729	-------
25	8.010		236980	V	55667	-------
26	8.242		93313	B	21780	-------
27	8.424		10851	V	2191	-------
28	8.659		91175	V	16016	-------
29	9.017	HEPTACHLOR	97551	B	16114	0.2414
30	9.171		144690	V	30007	-------
31	9.692		48188	B	7163	-------
32	9.858		24473	*V	4218	-------
33	10.104	ALDRIN	39635	*B	6991	-0.4447
34	10.310		25990	B	5374	-------
35	10.529		72614	B	8824	-------
36	10.865		37723	B	4274	-------
37	11.059		9418	V	2060	-------
38	11.364		49260	*B	8835	-------
39	11.457		37524	*V	7381	-------
41	11.689		10776	V	2297	-------
42	11.899		20662	B	3356	-------
43	11.998		23645	V	3259	-------
44	12.171		15283	V	2444	-------
45	12.596		586438	*B	60907	-------
46	13.067	GAMMA-CHLORDANE	22099	*B	4526	-0.0980
47	13.324		34921	B	4902	-------
48	13.718	ALPHA-CHLORDANE	4780	*B	1396	-0.5592
49	13.993		10591775	B	975976	-------
50	14.654		42216	E	3108	-------
51	14.931	P,P'-DDE	19005	*B	4384	-0.0997
52	15.118	DIELDRIN	78849	B	11449	0.0594
53	15.408		29233	B	3101	-------
54	15.544		9681	V	2108	-------
55	15.795		54918	B	9476	-------
56	15.978		15885	B	3370	-------
--	16.050		7438	V	1750	-------
	16.220		272042	*B	58977	-------
	16.384	ENDRIN	289627	*B	59092	-0.0948
60	16.462		250220	*V	56279	-------
61	16.710		153306	B	31390	-------
62	16.927	P,P'-DDD	21368	*B	3941	0.0258
63	17.101	ENDOSULFAN B	50657	*B	11766	0.4471
64	17.320		12859980	B	921756	-------
65	17.697		79259	*E	18989	-------
66	17.839	P,P'-DDT	34247	*B	10610	-0.0613
67	17.989		59845	B	12614	-------
69	18.271		20937	*B	3278	-------
70	18.385	ENDOSULFAN SULFATE GPC	23297	*B	7076	-0.3075
71	18.729		2780491	B	516269	-------
72	18.868		43757	E	10424	-------
73	19.066		147853	V	25938	-------
74	19.268		1320210	V	204596	-------
75	19.479		146204	V	34307	-------
76	19.605		26138	V	7779	-------
77	19.694		212304	*V	50139	-------
78	19.937		16152114	*B	889671	-------
79	20.401	METHOXYCHLOR	14159	*B	4489	0.2355
80	20.506	ENDRIN KETONE	41813	*B	11011	-0.2030
81	20.662		70955	B	16023	-------
82	20.839		21452	B	4084	-------
83	21.073		1525743	*B	310384	-------
84	21.279		1185041	*V	241848	-------
85	21.426		26291	*E	5674	-------
86	21.721		686402	B	70661	-------
87	21.918		156653	V	26276	-------
88	22.312		144345	B	15724	-------
89	22.502		95392	V	13107	-------
90	22.630		62174	V	11768	-------
91	22.859		91325	V	10237	-------
--	23.010		37109	V	6320	-------
	23.145		31480	V	4784	-------
	23.598		16229	B	2497	-------
97	24.031		177715	B	26914	-------
98	24.314		314723	*B	44637	-------
100	24.763		86710	B	10120	-------
101	24.932		24476	V	3585	-------
102	25.349		132653	B	10982	-------
103	25.821		21536	V	2840	-------

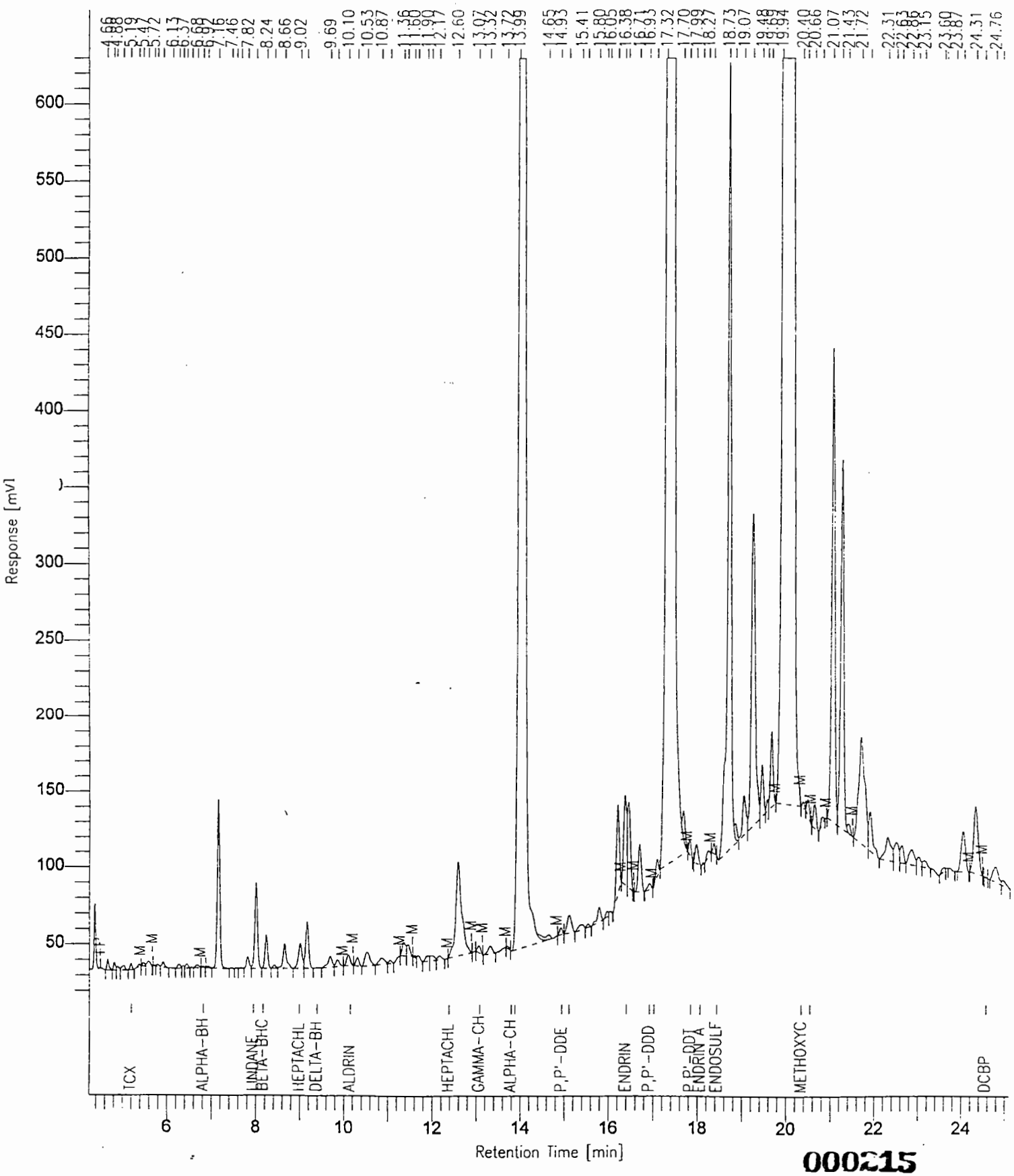
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
104	25.952		7627	V	1438	-------
105	26.260		14612	B	2152	-------
106	26.915		119080	B	7060	-------
107	27.318		38959	B	4023	-------
108	27.717		78399	B	5836	-------
109	27.909		7066	V	2394	-------
110	27.972		17620	V	2487	-------
111	28.316		16636	B	2091	-------
112	28.476		51332	V	4190	-------
113	29.169		65900	B	5944	-------
114	29.393		4873	B	775	-------
			53560883		5282529	

95133354.2566

Chromatogram

Sa 'ame : CDMHNSS3*43 1:10 7-18-94
Fi : C:\TC4\HP58907\862A034.RAW
Me :
Start Time : 4.25 min End Time : 25.11 min
Scale Factor: 0.0 Plot Offset: 12 mV

Sample #:
Date : 7/25/94 09:47 AM
Time of Injection: 7/22/94 10:53 AM
Low Point : 11.78 mV High Point : 630.05 mV
Plot Scale: 618.3 mV



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Software Version: 4.0<1C29>
Sample Name : CDMHNSS3*43 7-18-94 Time : 7/26/94 02:20 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/26

Interface Serial # : NONE Data Acquisition Time: 7/22/94 04:52 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B025.RAW
Result File : C:\TC4\HP58907\862B025.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B025.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B025.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B025.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 59

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	2.811		1669726	*B	394588	-------
2	2.933		22577	E	11714	-------
3	2.981		62769	V	22914	-------
4	3.125		3538493	V	583321	-------
5	3.335		108359	E	28574	-------
6	3.448		721511	V	207906	-------
7	3.562		361488	V	117919	-------
8	3.604	TCX	252943	V	93797	-0.0503
9	3.687		292875	V	90352	-------
10	3.800		10912	B	5186	-------
11	3.881		124220	*B	37285	-------
12	3.991		399188	*B	109769	-------
13	4.132		238518	*V	63112	-------
14	4.180		92225	*V	44859	-------
17	4.430		19463	B	8332	-------

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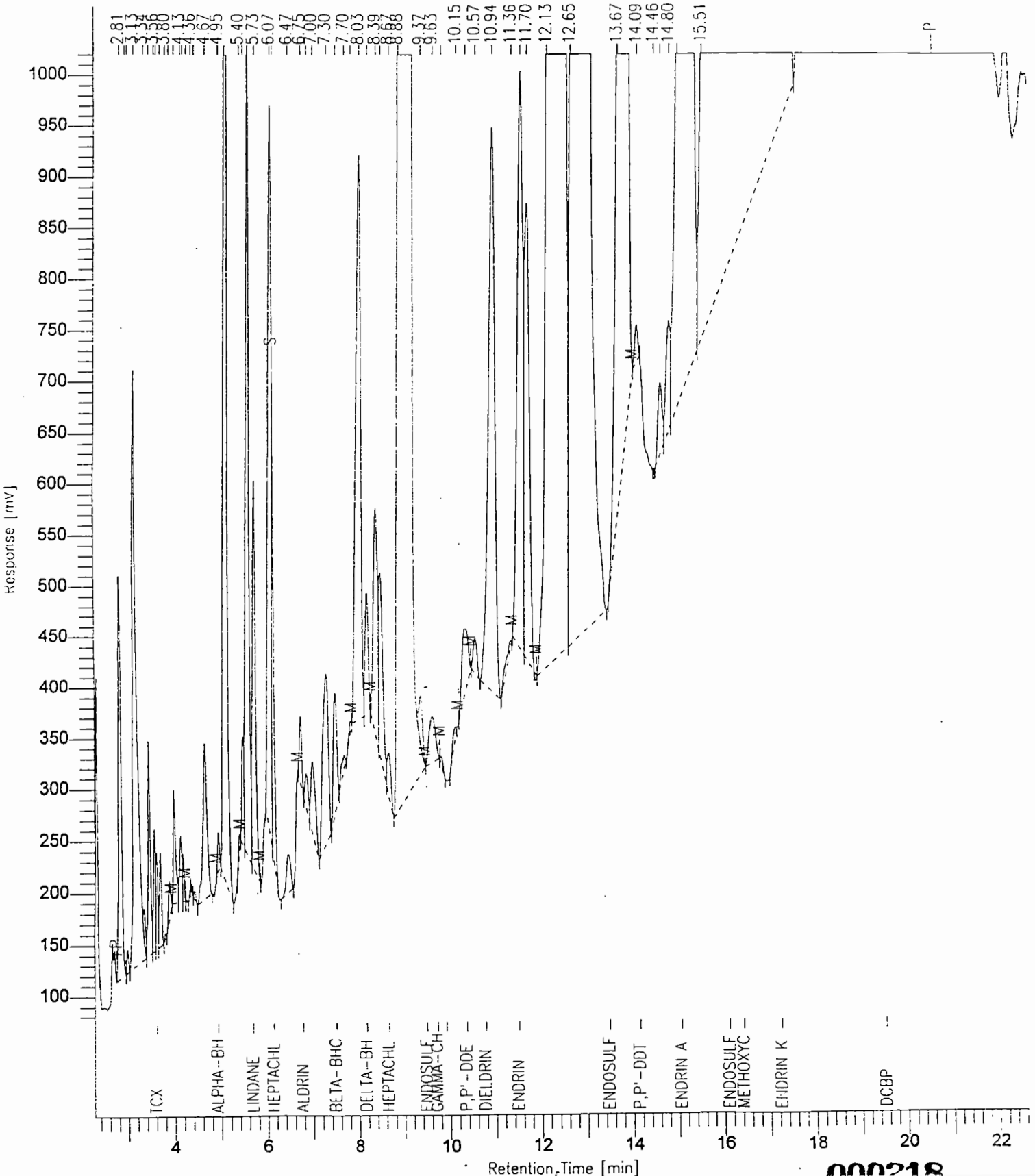
Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
	4.667		927737	B	151056	-------
19	4.949	ALPHA-BHC	102506	*B	36576	0.4388
20	5.090		5097284	B	811067	-------
21	5.403		58672	*B	18138	-------
22	5.488		323027	*B	106410	-------
23	5.584		3746117	*V	788783	-------
24	5.731		1731075	*V	382873	-------
25	6.074		3621205	*B	716398	-------
26	6.120	HEPTACHLOR NC	1147912	*V	485064	-0.2282
27	6.465		247062	B	37104	-------
28	6.746	ALDRIN	229862	*B	65657	-0.3931
29	6.869		158442	B	33793	-------
30	7.002		470988	V	70493	-------
31	7.303		1422138	B	166194	-------
32	7.497	BETA-BHC NC	647928	B	117699	0.0136
33	7.698		97540	V	11847	-------
34	7.837		52651	*B	10911	-------
35	8.025		4053826	*B	551225	-------
36	8.197	DELTA-BHC NC	540438	*V	117093	0.4242
37	8.386		1457942	B	222792	-------
38	8.484		1066228	V	181028	-------
39	8.670	HEPTACHLOR EPOXIDE NC	238499	V	41848	0.3132
40	8.880		16803412	B	745604	-------
41	9.374		277290	*E	48633	-------
42	9.634		438750	*B	45267	-------
43	9.824		23245	B	6045	-------
44	10.149		87027	B	5844	-------
45	10.349	P,P'-DDE	611225	*B	63969	-0.0540
46	10.567		196616	B	34458	-------
47	10.937		5327258	B	553183	-------
48	11.355		122966	B	3188	-------
49	11.552	ENDRIN	4855468	*B	564887	0.5177
50	11.696		3303305	*V	444826	-------
	12.133		18431860	B	604298	-------
	12.647		19676176	V	582717	-------
53	13.673		8498897	*B	457913	-------
54	14.094	P,P'-DDT	175660	*B	36715	-0.3587
56	14.608		458459	B	69677	-------
57	14.799		711891	V	107143	-------
58	14.980	ENDRIN ALDEHYDE	9845250	V	349730	-0.4651
59	15.507		20221159	V	284369	-------
			145420261		11952141	

Chromatogram

Sample Name : CDMHNSS3*43 7-18-94
FileName : C:\TC4\HP58907\862B025.RAW
Method :
Start Time : 2.27 min End Time : 22.61 min
Scale Factor: 0.0 Plot Offset: 74 mV

Sample #:
Date : 7/26/94 02:20 PM
Time of Injection: 7/22/94 04:52 AM
Low Point : 73.99 mV High Point : 1020.08 mV
Plot Scale: 946.1 mV



Software Version: 4.0<1C29>
S-- le Name : CDMHNSS3*43 1:100 7-18-94 Time : 7/25/94 11:42 AM
S le Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/35

Interface Serial # : NONE Data Acquisition Time: 7/22/94 10:53 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B034.RAW
Result File : C:\TC4\HP58907\862B034.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B034.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B034.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B034.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

I..._e Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 63

DATA REPORT

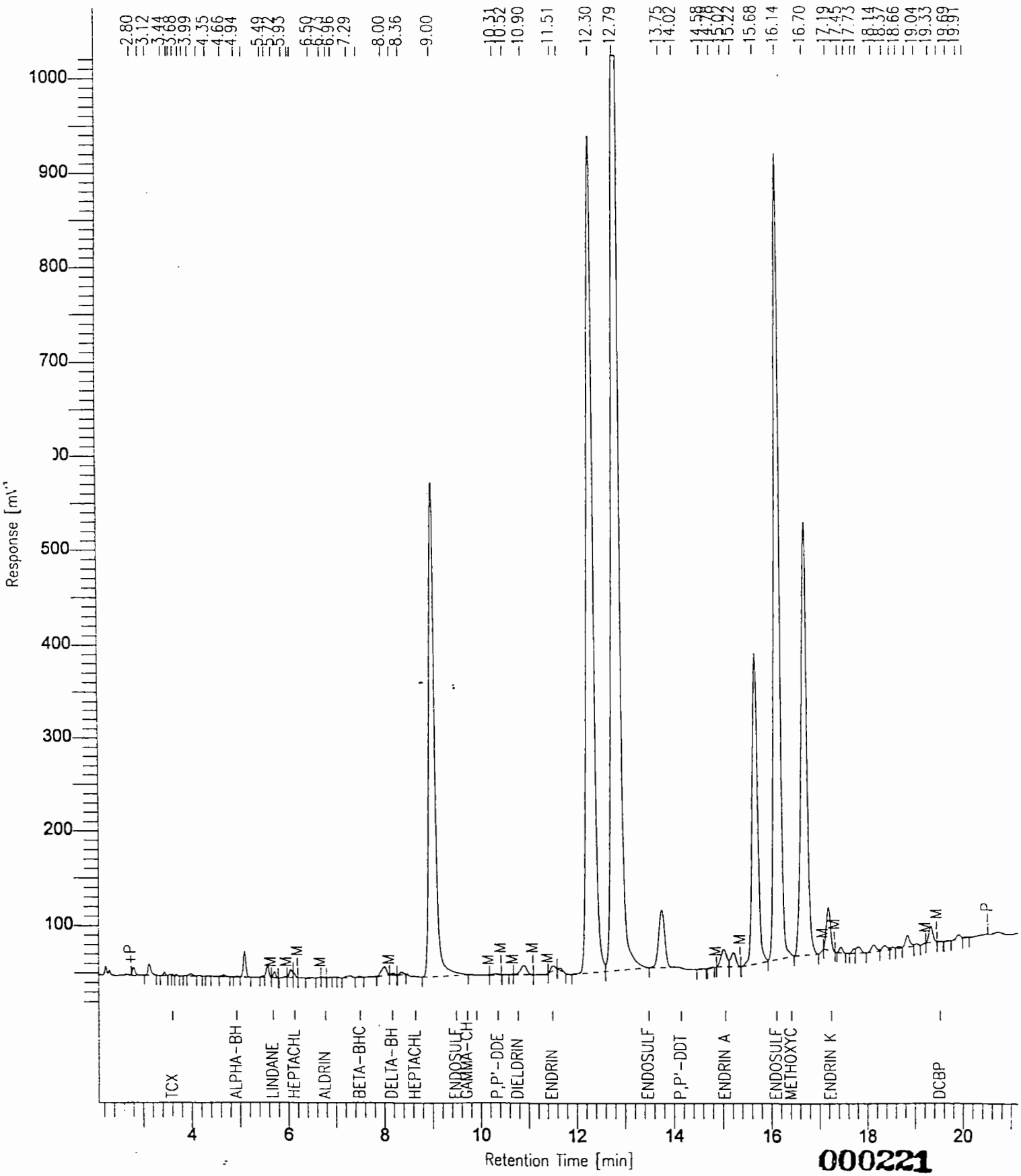
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	2.804		33963	*B	8780	-------
3	3.123		51472	B	12157	-------
4	3.444		11055	B	3929	-------
10	3.985		15969	V	2873	-------
15	5.097		101955	V	27406	-------
--	5.573		48879	V	12925	-------
	5.716	LINDANE NC	22075	*B	6109	0.5968
	6.055		36609	*B	8235	-------
21	6.100	HEPTACHLOR BPL	14751	*V	5421	-0.5543
25	7.294		19745	B	2096	-------
	8.003		69450	*B	9252	-------
	8.359		14288	B	2741	-------
	9.000		4309045	B	525505	-------
	10.899		91268	*B	9923	-------
	1.510	ENDRIN BPL	32640	*B	5084	0.1448

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
36	11.646		12713	B	2267	-------
37	12.296		8426708	B	889081	-------
38	12.793		11304012	V	970882	-------
39	13.749		526962	B	60211	-------
43	15.019	ENDRIN ALDEHYDE NC	153642	*B	18335	-0.2056
44	15.220		109467	*V	14717	-------
45	15.676		2579192	B	330483	-------
46	16.138	ENDOSULFAN SULFATE NC	6608844	V	855910	0.1857
47	16.703		3714336	B	459742	-------
48	17.192	ENDRIN KETONE NC	266645	*B	44352	-0.2929
49	17.451		29971	B	6226	-------
51	17.729		20478	B	4985	-------
52	17.820		48728	V	6821	-------
53	18.137		55442	B	7583	-------
54	18.365		38165	V	5069	-------
55	18.525		11944	V	2265	-------
56	18.660		11309	V	1956	-------
57	18.841		79063	V	12107	-------
58	19.035		10866	V	2036	-------
59	19.326		96442	*B	16831	-------
62	19.907		29655	B	4760	-------
			39007748		4359053	

Chromatogram

S Name : CDMHNSS3*43 1:100 7-18-94
F ne : C:\TC4\HP58907\862B034.RAW
Method :
Start Time : 2.08 min End Time : 21.15 min
Scale Factor: 0.0 Plot Offset: 11 mV

Sample #:
Date : 7/25/94 11:42 AM
Time of Injection: 7/22/94 10:53 AM
Low Point : 10.99 mV High Point : 1024.00 mV
Plot Scale: 1013.0 mV



Software Version: 4.0<1C29>
Sample Name : CDMHNSS3*43 1:10 7-18-94 Time : 7/25/94 11:59 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/36

Interface Serial # : NONE Data Acquisition Time: 7/22/94 11:34 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B035.RAW
Result File : C:\TC4\HP58907\862B035.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B035.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B035.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B035.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 75

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	2.806		233277	*B	59091	-------
2	2.980		17661	V	4301	-------
3	3.121		368930	V	85775	-------
5	3.446		75462	V	27141	-------
6	3.560		41152	V	14506	-------
7	3.603	TCX	27014	V	11370	-0.0784
8	3.685		33981	V	11633	-------
10	3.876		35491	V	7591	-------
11	3.986		77584	V	18102	-------
12	4.130		37720	V	9855	-------
13	4.173		18328	V	8033	-------
15	4.359		15509	V	3427	-------
16	4.428		11210	V	3105	-------
18	4.663		88008	V	16335	-------
19	4.942	ALPHA-BHC NC	19247	*B	5639	0.3098

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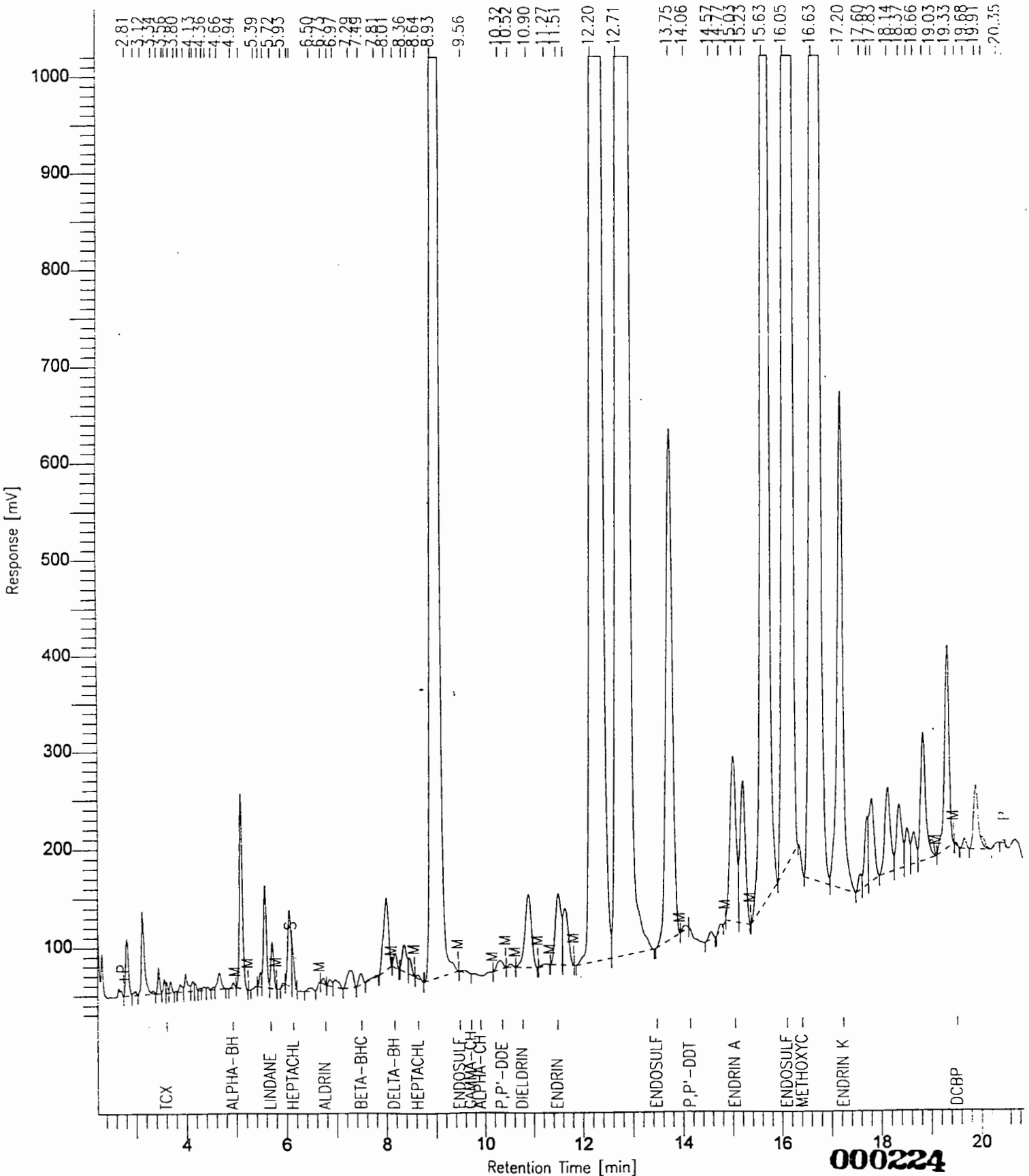
Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
20	5.099		811741	*B	199770	-------
22	5.487		46737	*B	15049	-------
23	5.577		440390	*V	105809	-------
24	5.721	LINDANE NC	189050	*V	48449	0.6825
26	6.061		359911	*B	78571	-------
27	6.107	HEPTACHLOR	118236	*V	48480	-0.4456
28	6.499		25183	B	3406	-------
29	6.732		20182	*B	5796	-------
30	6.864		33137	B	7030	-------
31	6.973		57208	V	7671	-------
32	7.289		157451	B	17643	-------
33	7.485	BETA-BHC NC	63318	B	11414	-0.1480
34	7.810		18815	B	1249	-------
35	8.006		537223	*B	74121	-------
36	8.178	DELTA-BHC NC	66643	*B	15078	0.1904
37	8.361		180404	*B	27963	-------
38	8.462		73054	*V	16994	-------
39	8.636	HEPTACHLOR EPOXIDE NC	18685	*B	3647	-0.0866
40	8.930		13135234	*B	960581	-------
41	9.558		15645	B	1834	-------
42	10.317	P,P'-DDE	80173	*B	9139	-0.3656
43	10.521		20710	B	3577	-------
44	10.901		713976	*B	75672	-------
45	11.268		17620	B	1668	-------
46	11.512	ENDRIN	619671	*B	73634	0.1666
47	11.648		437331	*V	58664	-------
48	12.200		17726264	B	941438	-------
49	12.707		19295799	V	936138	-------
50	13.754		4690610	*B	529797	-------
51	14.060		28594	*B	4064	-------
52	14.571		45603	B	7798	-------
53	14.773		28839	B	4866	-------
	15.029	ENDRIN ALDEHYDE NC	1445100	*B	170208	-0.1410
	15.226		1069964	*V	145564	-------
56	15.627		11518573	B	885300	-------
57	16.053	ENDOSULFAN SULFATE NC	13104571	B	850392	-0.3394
58	16.627		13578730	B	858260	-------
59	17.195	ENDRIN KETONE	4004550	V	516801	-0.2738
60	17.595		80083	B	15502	-------
61	17.742		334642	V	68976	-------
62	17.825		608806	V	84325	-------
63	18.144		673038	B	87260	-------
64	18.373		496841	V	65645	-------
65	18.529		232819	V	39088	-------
66	18.661		211807	V	32285	-------
67	18.845		938222	V	132486	-------
68	19.027		66413	E	12726	-------
69	19.333		1375884	*B	211601	-------
71	19.681		46781	B	10753	-------
72	19.909		435400	B	65962	-------
73	20.035		38210	E	6625	-------
74	20.352		14749	B	1669	-------
			111449195		8844344	

Chromatogram

Sample Name : CDMHNSS3*43 1:10 7-18-94
FileName : C:\TC4\HP58907\862B035.RAW
Method :
Start Time : 2.22 min End Time : 20.87 min
Scale Factor: 0.0 Plot Offset: 24 mV

Sample #:
Date : 7/25/94 11:59 AM
Time of Injection: 7/22/94 11:34 AM
Low Point : 23.60 mV High Point : 1020.08 mV
Plot Scale: 996.5 mV



9513354.2561

Standards Data

6D

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Instrument ID: HP58907 Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: DB608 ID: .53 (mm) Date(s) Analyzed: 07/21/94 07/22/94

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	6.82	6.82	6.82	6.82	6.77	6.87
beta-BHC	8.17	8.17	8.16	8.16	8.11	8.21
delta-BHC	9.39	9.39	9.39	9.39	9.34	9.44
gamma-BHC (Lindane)	7.95	7.95	7.95	7.95	7.90	8.00
Heptachlor	9.00	9.00	8.99	9.00	8.95	9.05
Aldrin	10.15	10.15	10.15	10.15	10.10	10.20
Heptachlor epoxide	12.38	12.38	12.38	12.38	12.31	12.45
Endosulfan I	13.88	13.88	13.88	13.88	13.81	13.95
Dieldrin	15.11	15.11	15.11	15.11	15.04	15.18
4,4'-DDE	14.95	14.95	14.95	14.95	14.88	15.02
Endrin	16.40	16.40	16.40	16.40	16.33	16.47
Endosulfan II	17.03	17.03	17.03	17.03	16.96	17.10
4,4'-DDD	16.93	16.92	16.92	16.92	16.85	16.99
Endosulfan sulfate	18.45	18.44	18.44	18.44	18.37	18.51
4,4'-DDT	17.85	17.85	17.85	17.85	17.78	17.92
Methoxychlor	20.36	20.35	20.35	20.35	20.28	20.42
Endrin ketone	20.55	20.55	20.55	20.55	20.48	20.62
Endrin aldehyde	18.07	18.07	18.07	18.07	18.00	18.14
alpha-Chlordane	13.80	13.80	13.79	13.80	13.73	13.87
gamma-Chlordane	13.08	13.08	13.08	13.08	13.01	13.15
Tetrachloro-m-xylene	5.20	5.20	5.20	5.20	5.15	5.25
Decachlorobiphenyl	24.55	24.55	24.55	24.55	24.45	24.65

* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are +/- 0.05 minutes for all compounds that elute before Heptachlor epoxide, +/- 0.07 minutes for all other compounds, except +/- 0.10 minutes for Decachlorobiphenyl.

6D

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Instrument ID: HP58907 Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: DB1701 ID: .53 (mm) Date(s) Analyzed: 07/21/94 07/22/94

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	4.93	4.93	4.93	4.93	4.88	4.98
beta-BHC	7.50	7.50	7.50	7.50	7.45	7.55
delta-BHC	8.16	8.16	8.16	8.16	8.11	8.21
gamma-BHC (Lindane)	5.68	5.68	5.68	5.68	5.63	5.73
Heptachlor	6.13	6.13	6.13	6.13	6.08	6.18
Aldrin	6.77	6.77	6.78	6.77	6.72	6.82
Heptachlor epoxide	8.64	8.64	8.64	8.64	8.57	8.71
Endosulfan I	9.49	9.49	9.49	9.49	9.42	9.56
Dieldrin	10.77	10.77	10.77	10.77	10.70	10.84
4,4'-DDE	10.35	10.36	10.36	10.35	10.28	10.42
Endrin	11.49	11.49	11.49	11.49	11.42	11.56
Endosulfan II	13.48	13.48	13.48	13.48	13.41	13.55
4,4'-DDD	13.48	13.48	13.48	13.48	13.41	13.55
Endosulfan sulfate	16.11	16.11	16.11	16.11	16.04	16.18
4,4'-DDT	14.14	14.15	14.15	14.14	14.07	14.21
Methoxychlor	16.42	16.42	16.41	16.42	16.35	16.49
Endrin ketone	17.24	17.24	17.24	17.24	17.17	17.31
Endrin aldehyde	15.05	15.05	15.05	15.05	14.98	15.12
alpha-Chlordane	9.91	9.91	9.91	9.91	9.84	9.98
gamma-Chlordane	9.72	9.72	9.72	9.72	9.65	9.79
Tetrachloro-m-xylene	3.61	3.61	3.61	3.61	3.56	3.66
Decachlorobiphenyl	19.52	19.52	19.52	19.52	19.42	19.62

* Surrogate retention times are measured from Standard Mix A analyses.

Retention time windows are +/- 0.05 minutes for all compounds that elute before Heptachlor epoxide, +/- 0.07 minutes for all other compounds, except +/- 0.10 minutes for Decachlorobiphenyl.

6E

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Instrument ID: HP58907 Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: DB608 ID: .53 (mm) Date(s) Analyzed: 07/21/94 07/22/94

COMPOUND	CALIBRATION FACTORS LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	2612000	3127450	5088338	3609263	36.2
beta-BHC	1770800	2319400	2593100	2227767	18.8
delta-BHC	2161600	2582700	4093750	2946017	34.5
gamma-BHC (Lindane)	2798800	3293050	4882513	3658121	29.8
Heptachlor	5276400	5238300	5629413	5381371	4.0
Aldrin	3371200	3477650	4357613	3735488	14.5
Heptachlor epoxide	4533600	4449750	4820463	4601271	4.2
Endosulfan I	3892400	3922900	4259800	4025033	5.1
Dieldrin	3428500	3545200	4256106	3743269	12.0
4,4'-DDE	2613100	2883900	3645169	3047390	17.6
Endrin	3082700	3210275	3804081	3365685	11.4
Endosulfan II	3595300	3497225	4011781	3701435	7.4
4,4'-DDD	1870300	2071100	2722800	2221400	20.1
Endosulfan sulfate	3403700	3413550	3683356	3500202	4.5
4,4'-DDT	2505700	2781900	3353006	2880202	15.0
Methoxychlor	1893460	1910110	1823603	1875724	2.4
Endrin ketone	3373000	3621225	4118538	3704254	10.2
Endrin aldehyde	2857000	2736550	2749581	2781044	2.4
alpha-Chlordane	4306400	4316000	4750138	4457513	5.7
gamma-Chlordane	4399600	4313700	4633775	4449025	3.7
Tetrachloro-m-xylene	3558400	3719550	4064250	3780733	6.8
Decachlorobiphenyl	6095500	5563100	4876188	5511596	11.1

* Surrogate calibration factors are measured from Standard Mix A analyses.

%RSD must be less than or equal 20.0% for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6E

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Instrument ID: HP58907 Level (x low): low 1.0 mid 4.0 high 16.0

GC Column: DB1701 ID: .53 (mm) Date(s) Analyzed: 07/21/94 07/22/94

COMPOUND	CALIBRATION FACTORS LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	12426400	13974400	15760550	14053783	11.9
beta-BHC	7843400	7277300	7468575	7529758	3.8
delta-BHC	10524800	11704500	14103338	12110879	15.1
gamma-BHC (Lindane)	12621000	13966650	15078338	13888663	8.9
Heptachlor	15851000	15587600	15552663	15663754	1.0
Aldrin	11969600	12410050	14005113	12794921	8.4
Heptachlor epoxide	12891200	12671850	13372313	12978454	2.8
Endosulfan I	11970200	11794150	12286600	12016983	2.1
Dieldrin	11274000	11816825	12507644	11866156	5.2
4,4'-DDE	9019000	9819525	11643613	10160713	13.2
Endrin	10522900	10961675	11521100	11001892	4.5
Endosulfan II	11059600	10470325	11220800	10916908	3.6
,4'-DDD	7375500	7767650	9158806	8100652	11.6
ndosulfan sulfate	8399300	8597625	8863119	8620015	2.7
4,4'-DDT	8681600	9456325	10424925	9520950	9.2
Methoxychlor	5322440	4976335	4459996	4919590	8.8
Endrin ketone	8566800	9137075	9665313	9123063	6.0
Endrin aldehyde	6063600	6556850	7590588	6737013	11.6
alpha-Chlordane	13927200	13465550	13747300	13713350	1.7
gamma-Chlordane	13500200	13007600	13481150	13329650	2.1
Tetrachloro-m-xylene	11629000	11113000	10587063	11109688	4.7
Decachlorobiphenyl	10900300	10183125	9248213	10110546	8.2

* Surrogate calibration factors are measured from Standard Mix A analyses.

%RSD must be less than or equal 20.0% for all compounds except the surrogates, where %RSD must be less than or equal to 30.0%. Up to two target compounds, but not surrogates, may have %RSD greater than 20.0% but less than or equal to 30.0%.

6F

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Instrument ID: HP58907 Date(s) Analyzed: 07/21/94 07/21/94

GC Column: DB608 ID: .53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	0.50	*1	17.13	17.06	17.20	86952
		*2	19.51	19.44	19.58	157688
		*3	19.68	19.61	19.75	136494
		4				
		5				
Aroclor 1016	0.10	*1	7.89	7.82	7.96	206910
		*2	9.06	8.99	9.13	317670
		*3	11.45	11.38	11.52	135310
		4				
		5				
Aroclor 1221	0.20	*1	4.67	4.60	4.74	48750
		*2	6.17	6.10	6.24	45825
		*3	6.71	6.64	6.78	119110
		4				
		5				
Aroclor 1232	0.10	*1	6.72	6.65	6.79	79060
		*2	7.89	7.82	7.96	96430
		*3	9.06	8.99	9.13	120300
		4				
		5				
Aroclor 1242	0.10	*1	7.89	7.82	7.96	157010
		*2	9.06	8.99	9.13	232130
		*3	12.79	12.72	12.86	76190
		4				
		5				
Aroclor 1248	0.10	*1	9.06	8.99	9.13	211160
		*2	11.45	11.38	11.52	176690
		*3	12.79	12.72	12.86	250370
		4				
		5				
Aroclor 1254	0.10	*1	13.43	13.36	13.50	275400
		*2	15.50	15.43	15.57	367670
		*3	17.81	17.74	17.88	260060
		4				
		5				
Aroclor 1260	0.10	*1	16.43	16.36	16.50	304340
		*2	17.81	17.74	17.88	300650
		*3	19.35	19.28	19.42	408140
		4				
		5				

* Denotes required peaks

6F

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Instrument ID: HP58907 Date(s) Analyzed: 07/21/94 07/21/94

GC Column: DB1701 ID: .53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	0.50	*1	14.34	14.27	14.41	332736
		*2	15.57	15.50	15.64	334010
		*3	15.87	15.80	15.94	305142
		4				
		5				
Aroclor 1016	0.10	*1	5.06	4.99	5.13	463990
		*2	5.97	5.90	6.04	918650
		*3	6.76	6.69	6.83	664820
		4				
		5				
Aroclor 1221	0.20	*1	3.15	3.08	3.22	196370
		*2	4.11	4.04	4.18	132105
		*3	4.43	4.36	4.50	334390
		4				
		5				
Aroclor 1232	0.10	*1	4.43	4.36	4.50	277320
		*2	5.06	4.99	5.13	215780
		*3	5.97	5.90	6.04	428260
		4				
		5				
Aroclor 1242	0.10	*1	5.06	4.99	5.13	357360
		*2	5.96	5.89	6.03	713990
		*3	8.52	8.45	8.59	498340
		4				
		5				
Aroclor 1248	0.10	*1	5.97	5.90	6.04	674820
		*2	6.76	6.69	6.83	870970
		*3	8.53	8.46	8.60	1019340
		4				
		5				
Aroclor 1254	0.10	*1	8.48	8.41	8.55	884350
		*2	10.57	10.50	10.64	724110
		*3	13.40	13.33	13.47	737050
		4				
		5				
Aroclor 1260	0.10	*1	11.13	11.06	11.20	679870
		*2	12.04	11.97	12.11	814920
		*3	15.79	15.72	15.86	1114880
		4				
		5				

* Denotes required peaks

6G

PESTICIDE ANALYTE RESOLUTION SUMMARY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC Column (1): DB608 ID: .53 (mm) Instrument ID (1): HP58907

EPA Sample No. (Standard 1): RESC11 Lab Sample ID (1): CK*RESC*1

Date Analyzed (1): 07/21/94 Time Analyzed (1): 1608

	ANALYTE	RT	RESOLUTION (%)
01	Tetrachloro-m-xylene	5.20	100
02	gamma-Chlordane	13.09	100
03	Endosulfan I	13.89	100
04	4,4'-DDE	14.96	54.6
05	Dieldrin	15.12	100
06	Endosulfan sulfate	18.45	100
07	Methoxychlor	20.36	92.4
08	Endrin ketone	20.56	100
09	Decachlorobiphenyl	24.56	

GC column (2): DB1701 ID:.53 (mm) Instrument Id (2): HP58907

EPA Sample No. (Standard 2): RESC21 Lab sample ID (2): CK*RESC*1

Date Analyzed (2): 07/21/94 Time Analyzed (2): 1648

	ANALYTE	RT	RESOLUTION (%)
01	Tetrachloro-m-xylene	3.61	100
02	Endosulfan I	9.49	89.3
03	gamma-Chlordane	9.72	100
04	4,4'-DDE	10.36	96.1
05	Dieldrin	10.77	100
06	Endosulfan sulfate	16.11	100
07	Methoxychlor	16.42	100
08	Endrin ketone	17.24	100
09	Decachlorobiphenyl	19.52	

Resolution of two adjacent peaks must be calculated as a percentage of the height of the smaller peak, and must be greater than or equal to 60.0%.

7D
PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC column: DB608 ID: .53 (mm) Init. Calib.Date(s): 07/21/94 07/21/94

EPA Sample No. (PIBLK): Date Analyzed:

Lab Sample ID (PIBLK): Time Analyzed:

EPA Sample No. (PEM): PEM11 Date Analyzed: 07/21/94

Lab Sample ID (PEM): CK*PEM*1 Time Analyzed: 1648

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	6.82	6.77	6.87	0.0088	0.010	12.0
beta-BHC	8.17	8.11	8.21	0.010	0.010	0.0
gamma-BHC (Lindane)	7.95	7.90	8.00	0.0089	0.010	11.0
Endrin	16.40	16.33	16.47	0.047	0.050	6.0
4.4'-DDT	17.85	17.78	17.92	0.11	0.10	10.0
hoxychlor	20.35	20.28	20.42	0.24	0.25	4.0

4,4'-DDT % breakdown (1): 0.9 Endrin % breakdown (1): 5.1

Combined % breakdown (1): 6.0

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC column: DB608 ID: .53 (mm) Init. Calib.Date(s): 07/21/94 07/21/94

EPA Sample No. (PIBLK): PIBLK11 Date Analyzed: 07/22/94

Lab Sample ID (PIBLK): MB*PIBLK*1 Time Analyzed: 0211

EPA Sample No. (PEM): PEM12 Date Analyzed: 07/22/94

Lab Sample ID (PEM): CK*PEM*2 Time Analyzed: 0251

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	6.83	6.77	6.87	0.0089	0.010	11.0
beta-BHC	8.17	8.11	8.21	0.0098	0.010	2.0
gamma-BHC (Lindane)	7.95	7.90	8.00	0.0089	0.010	11.0
Endrin	16.41	16.33	16.47	0.048	0.050	4.0
4,4'-DDT	17.85	17.78	17.92	0.10	0.10	0.0
Methoxychlor	20.36	20.28	20.42	0.24	0.25	4.0

4,4'-DDT % breakdown (1): 1.0 Endrin % breakdown (1): 5.4

Combined % breakdown (1): 6.4

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC column: DB1701 ID: .53 (mm) Init. Calib.Date(s): 07/22/94 07/22/94

EPA Sample No. (PIBLK): Date Analyzed:

Lab Sample ID (PIBLK): Time Analyzed:

EPA Sample No. (PEM): PEM21 Date Analyzed: 07/21/94

Lab Sample ID (PEM): CK*PEM*1 Time Analyzed: 1729

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	4.93	4.88	4.98	0.0094	0.010	6.0
beta-BHC	7.50	7.45	7.55	0.010	0.010	0.0
gamma-BHC (Lindane)	5.68	5.63	5.73	0.0092	0.010	8.0
Endrin	11.50	11.42	11.56	0.047	0.050	6.0
4,4'-DDT	14.16	14.07	14.21	0.10	0.10	0.0
hoxychlor	16.42	16.35	16.49	0.24	0.25	4.0

4,4'-DDT % breakdown (1): 0.0 Endrin % breakdown (1): 5.7

Combined % breakdown (1): 5.7

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC column: DB1701 ID: .53 (mm) Init. Calib.Date(s): 07/22/94 07/22/94

EPA Sample No. (PIBLK): PIBLK11 Date Analyzed: 07/22/94

Lab Sample ID (PIBLK): MB*PIBLK*1 Time Analyzed: 0251

EPA Sample No. (PEM): PEM22 Date Analyzed: 07/22/94

Lab Sample ID (PEM): CK*PEM*2 Time Analyzed: 0331

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	4.92	4.88	4.98	0.0096	0.010	4.0
beta-BHC	7.49	7.45	7.55	0.011	0.010	10.0
gamma-BHC (Lindane)	5.68	5.63	5.73	0.0095	0.010	5.0
Endrin	11.49	11.42	11.56	0.048	0.050	4.0
4,4'-DDT	14.15	14.07	14.21	0.10	0.10	0.0
Methoxychlor	16.41	16.35	16.49	0.24	0.25	4.0

4,4'-DDT % breakdown (1): 0.0 Endrin % breakdown (1): 6.2

Combined % breakdown (1): 6.2

QC LIMITS:

RPD of amounts in PEM must be less than or equal to 25.0%

4,4'-DDT breakdown must be less than or equal to 20.0%

Endrin breakdown must be less than or equal to 20.0%

Combined breakdown must be less than or equal to 30.0%

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Name: ESE Contract: 1944022G

Lab Code: ESE Case No: 44022 SAS No: SDG No: 51446

GC Column: DB608 ID: .53 (mm) Init. Calib. Date(s) 07/21/94 07/21/94

EPA Sample No.(PIBLK): PIBLK12 Date Analyzed: 07/22/94

Lab Sample ID (PIBLK): MB*PIBLK*2 Time Analyzed: 1214

EPA Sample No.(INDA): INDAM12 Date Analyzed: 07/22/94

Lab Sample ID (INDA): CCS*INDAM*2 Time Analyzed: 1254

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	6.81	6.77	6.87	0.021	0.020	5.0
gamma-BHC (Lindane)	7.94	7.90	8.00	0.021	0.020	5.0
Heptachlor	8.98	8.95	9.05	0.019	0.020	5.0
Endosulfan I	13.87	13.81	13.95	0.019	0.020	5.0
Dieldrin	15.10	15.04	15.18	0.037	0.040	7.5
Endrin	16.39	16.33	16.47	0.037	0.040	7.5
4,4'-DDD	16.91	16.85	16.99	0.039	0.040	2.5
4'-DDT	17.84	17.78	17.92	0.039	0.040	2.5
hoxychlor	20.34	20.28	20.42	0.19	0.20	5.0
Tetrachloro-m-xylene	5.19	5.15	5.25	0.020	0.020	0.0
Decachlorobiphenyl	24.53	24.45	24.65	0.032	0.040	20.0

EPA Sample No.(INDB): INDBM12 Date Analyzed : 07/22/94

Lab Sample ID (INDB): CCS*INDBM*2 Time Analyzed : 1334

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	RT WINDOW RT	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	8.16	8.11	8.21	0.020	0.020	0.0
delta-BHC	9.38	9.34	9.44	0.021	0.020	5.0
Aldrin	10.14	10.10	10.20	0.020	0.020	0.0
Heptachlor epoxide	12.37	12.31	12.45	0.019	0.020	5.0
4,4'-DDE	14.93	14.88	15.02	0.038	0.040	5.0
Endosulfan II	17.01	16.96	17.10	0.036	0.040	10.0
Endosulfan sulfate	18.43	18.37	18.51	0.036	0.040	10.0
Endrin ketone	20.54	20.48	20.62	0.041	0.040	2.5
Endrin aldehyde	18.06	18.00	18.14	0.035	0.040	12.5
alpha-Chlordane	13.78	13.73	13.87	0.018	0.020	10.0
gamma-Chlordane	13.07	13.01	13.15	0.019	0.020	5.0
Tetrachloro-m-xylene	5.19	5.15	5.25	0.020	0.020	0.0
cachlorobiphenyl	24.54	24.45	24.65	0.033	0.040	17.5

LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.

7E

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No: 44022 SAS No: SDG No: 51446

GC Column: DB1701 ID: .53 (mm) Init. Calib. Date(s) 07/22/94 07/22/94

EPA Sample No.(PIBLK): PIBLK12 Date Analyzed: 07/22/94

Lab Sample ID (PIBLK): MB*PIBLK*2 Time Analyzed: 1254

EPA Sample No.(INDA): INDAM22 Date Analyzed: 07/22/94

Lab Sample ID (INDA): CCS*INDAM*2 Time Analyzed: 1334

INDIVIDUAL MIX A COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	4.93	4.88	4.98	0.021	0.020	5.0
gamma-BHC (Lindane)	5.68	5.63	5.73	0.021	0.020	5.0
Heptachlor	6.14	6.08	6.18	0.020	0.020	0.0
Endosulfan I	9.49	9.42	9.56	0.020	0.020	0.0
Dieldrin	10.78	10.70	10.84	0.040	0.040	0.0
Endrin	11.50	11.42	11.56	0.040	0.040	0.0
4,4'-DDD	13.49	13.41	13.55	0.040	0.040	0.0
4,4'-DDT	14.15	14.07	14.21	0.039	0.040	2.5
Methoxychlor	16.42	16.35	16.49	0.19	0.20	5.0
Tetrachloro-m-xylene	3.61	3.56	3.66	0.021	0.020	5.0
Decachlorobiphenyl	19.53	19.42	19.62	0.036	0.040	10.0

EPA Sample No.(INDB): INDBM22 Date Analyzed : 07/22/94

Lab Sample ID (INDB): CCS*INDBM*2 Time Analyzed : 1414

INDIVIDUAL MIX B COMPOUND	RT	RT WINDOW FROM	RT WINDOW RT	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
beta-BHC	7.50	7.45	7.55	0.021	0.020	5.0
delta-BHC	8.17	8.11	8.21	0.021	0.020	5.0
Aldrin	6.78	6.72	6.82	0.021	0.020	5.0
Heptachlor epoxide	8.65	8.57	8.71	0.021	0.020	5.0
4,4'-DDE	10.36	10.28	10.42	0.042	0.040	5.0
Endosulfan II	13.48	13.41	13.55	0.041	0.040	2.5
Endosulfan sulfate	16.11	16.04	16.18	0.038	0.040	5.0
Endrin ketone	17.24	17.17	17.31	0.038	0.040	5.0
Endrin aldehyde	15.05	14.98	15.12	0.038	0.040	5.0
alpha-Chlordane	9.91	9.84	9.98	0.020	0.020	0.0
gamma-Chlordane	9.72	9.65	9.79	0.021	0.020	5.0
Tetrachloro-m-xylene	3.61	3.56	3.66	0.020	0.020	0.0
Decachlorobiphenyl	19.52	19.42	19.62	0.036	0.040	10.0

QC LIMITS: RPD of amounts in the Individual Mixes must be less than or equal to 25.0%.

8D
PESTICIDE ANALYTICAL SEQUENCE

La ame: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC Column: DB608 ID: .53 (mm) Init. Calib. Date(s): 07/21/94 07/22/94

Instrument ID: HP58907

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 5.20 DCB: 24.55

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT #	DCB RT #
01	RESC11	CK*RESC*1	07/21/94	1608	5.20	24.56
02	PEM11	CK*PEM*1	07/21/94	1648	5.20	24.55
03	AR166011	ICV*AR1660*1	07/21/94	1729	5.20	24.55
04	AR122111	ICV*AR1221*1	07/21/94	1809	5.20	24.55
05	AR123211	ICV*AR1232*1	07/21/94	1849	5.20	24.55
06	AR124211	ICV*AR1242*1	07/21/94	1929	5.20	24.55
07	AR124811	ICV*AR1248*1	07/21/94	2009	5.20	24.55
08	AR125411	ICV*AR1254*1	07/21/94	2050	5.20	24.55
09	TOXAPH11	ICV*TOXAPH*1	07/21/94	2130	5.20	24.55
10	INDAL11	ICV*INDAL*1	07/21/94	2210	5.20	24.55
11	INDBL11	ICV*INDBL*1	07/21/94	2250	5.20	24.55
12	INDAM11	ICV*INDAM*1	07/21/94	2330	5.20	24.55
13	INDBM11	ICV*INDBM*1	07/22/94	0011	5.20	24.55
14	INDAH11	ICV*INDAH*1	07/22/94	0051	5.20	24.55
15	INDBH11	ICV*INDBH*1	07/22/94	0131	5.19	24.55
16	PIBLK11	MB*PIBLK*1	07/22/94	0211	5.20	24.56
17	PEM12	CK*PEM*2	07/22/94	0251	5.20	24.56
18	PBLK1	MB*QC*1	07/22/94	0331	5.20	24.56
19	WC1-01	CDMHNSS3*43	07/22/94	0412	5.21	24.53
20	WC1-01MS	SPM1*CDMHNSS	07/22/94	0532	5.21	24.55
21	WC1-01MSD	SPM2*CDMHNSS	07/22/94	0652	5.20	24.59
22	WC1-01DL	CDMHNSS3*43	07/22/94	1053	5.19	24.52
23	PIBLK12	MB*PIBLK*2	07/22/94	1214	5.19	24.53
24	INDAM12	CCS*INDAM*2	07/22/94	1254	5.19	24.53
25	INDBM12	CCS*INDBM*2	07/22/94	1334	5.19	24.54
26						
27						
28						
29						
30						
31						
32						

QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GC Column: DB1701 ID: .53 (mm) Init. Calib. Date(s): 07/21/94 07/22/94

Instrument ID: HP58907

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
TCX: 3.61 DCB: 19.52

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	TCX RT	#	DCB RT	#
01	RESC21	CK*RESC*1	07/21/94	1648	3.61		19.52	
02	PEM21	CK*PEM*1	07/21/94	1729	3.61		19.53	
03	AR166021	ICV*AR1660*1	07/21/94	1809	3.61		19.53	
04	AR122121	ICV*AR1221*1	07/21/94	1849	3.61		19.53	
05	AR123221	ICV*AR1232*1	07/21/94	1929	3.61		19.52	
06	AR124221	ICV*AR1242*1	07/21/94	2009	3.61		19.52	
07	AR124821	ICV*AR1248*1	07/21/94	2050	3.61		19.52	
08	AR125421	ICV*AR1254*1	07/21/94	2130	3.61		19.52	
09	TOXAPH21	ICV*TOXAPH*1	07/21/94	2210	3.61		19.52	
10	INDAL21	ICV*INDAL*1	07/21/94	2250	3.61		19.52	
11	INDBL21	ICV*INDBL*1	07/21/94	2330	3.61		19.52	
12	INDAM21	ICV*INDAM*1	07/22/94	0011	3.61		19.52	
13	INDBM21	ICV*INDBM*1	07/22/94	0051	3.61		19.52	
14	INDAH21	ICV*INDAH*1	07/22/94	0131	3.61		19.52	
15	INDBH21	ICV*INDBH*1	07/22/94	0211	3.61		19.52	
16	PIBLK21	MB*PIBLK*1	07/22/94	0251	3.61		19.52	
17	PEM22	CK*PEM*2	07/22/94	0331	3.60		19.52	
18	PBLK1	MB*QC*1	07/22/94	0412	3.61		19.52	
19	WC1-01	CDMHNSS3*43	07/22/94	0452	3.60			*
20	WC1-01MS	SPM1*CDMHNSS	07/22/94	0612	3.61			*
21	WC1-01MSD	SPM2*CDMHNSS	07/22/94	0732	3.60		19.55	
22	WC1-01DL	CDMHNSS3*43	07/22/94	1134	3.60		19.51	
23	PIBLK22	MB*PIBLK*2	07/22/94	1254	3.61		19.53	
24	INDAM22	CCS*INDAM*2	07/22/94	1334	3.61		19.53	
25	INDBM22	CCS*INDBM*2	07/22/94	1414	3.61		19.52	
26								
27								
28								
29								
30								
31								
32								

QC LIMITS
TCX = Tetrachloro-m-xylene (± 0.05 MINUTES)
DCB = Decachlorobiphenyl (± 0.10 MINUTES)

Column used to flag retention time values with an asterisk.
* Values outside of QC limits.

9A
PESTICIDE FLORISIL CARTRIDGE CHECK

Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Florisil Cartridge Lot Number: 511H08556 Date of Analysis: 5-11-94

GC Column(1): DB608 ID: .53 (mm) GC Column (2): DB1701 ID: .53 (mm)

COMPOUND	SPIKE ADDED (ng)	SPIKE RECOVERED (ng)	% REC #	QC LIMITS
alpha-BHC	0.010	0.0096	96.0	80-120
gamma-BHC (Lindane)	0.010	0.0099	99.0	80-120
Heptachlor	0.010	0.011	110.0	80-120
Endosulfan I	0.010	0.011	110.0	80-120
Dieldrin	0.020	0.021	105.0	80-120
Endrin	0.020	0.021	105.0	80-120
4,4'-DDD	0.020	0.023	115.0	80-120
4,4'-DDT	0.020	0.021	105.0	80-120
Methoxychlor	0.10	0.11	110.0	80-120
Tetrachloro-m-xylene	0.010	0.0100	100.0	80-120
Decachlorobiphenyl	0.020	0.023	115.0	80-120

Column to be used to flag recovery with an asterisk.
* Values outside of QC limits.

THIS CARTRIDGE LOT APPLIES TO THE FOLLOWING SAMPLES, BLANKS, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PBLK1	MB*QC*1	07/22/94	07/22/94
02	WC1-01	CDMHNSS3*43	07/22/94	07/22/94
03	WC1-01MS	SPM1*CDMHNSS	07/22/94	07/22/94
04	WC1-01MSD	SPM2*CDMHNSS	07/22/94	07/22/94
05	WC1-01DL	CDMHNSS3*43	07/22/94	07/22/94
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22				
23				

9B
PESTICIDE GPC CALIBRATION

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

GPC Column 7131002A Calibration Date: 7-13-94

GC Column(1): DB608 ID: .53 (mm) GC Column (2): DB1701 ID: .53 (mm)

COMPOUND	SPIKE ADDED (ng)	SPIKE RECOVERED (ng)	% REC #	QC LIMITS
gamma-BHC (Lindane)	50	50	100	80-110
Heptachlor	50	42	80	80-110
Aldrin	50	43	90	80-110
Dieldrin	100	98	100	80-110
Endrin	100	99	100	80-110
4,4'-DDT	100	99	100	80-110

Column to be used to flag recovery with an asterisk.
* Values outside of QC limits.

THIS GPC CALIBRATION APPLIES TO THE FOLLOWING SAMPLES, BLANKS, MS, AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PBLK1	MB*QC*1	07/22/94	07/22/94
02	WC1-01	CDMHNSS3*43	07/22/94	07/22/94
03	WC1-01MS	SPM1*CDMHNSS	07/22/94	07/22/94
04	WC1-01MSD	SPM2*CDMHNSS	07/22/94	07/22/94
05	WC1-01DL	CDMHNSS3*43	07/22/94	07/22/94
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10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO

WC1-01

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Lab Sample ID : CDMHNSS3*43 Date(s) Analyzed: 07/22/94 07/22/94

Instrument ID (1): HP58907 Instrument ID (2): HP58907

GC Column(1): DB608 ID: .53 (mm) GC Column(2): DB1701 ID:.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	6.83	6.77	6.87	3.34	
	2	4.95	4.88	4.98	2.52	32.5
Heptachlor	1	9.05	8.95	9.05	81.49	
	2	6.12	6.08	6.18	25.25	222.7
Aldrin	1	10.15	10.10	10.20	45.57	
	2	6.75	6.72	6.82	6.35	617.6
4,4'-DDE	1	14.99	14.88	15.02	26.15	
	2	10.35	10.28	10.42	21.35	22.5
Endrin	1	16.43	16.33	16.43	330.44	
	2	11.55	11.42	11.56	151.90	117.5
4,4'-DDT	1	17.89	17.78	17.89	41.98	
	2	14.09	14.07	14.09	6.37	559.0
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO

WC1-01DL

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Lab Sample ID : CDMHNSS3*43 Date(s) Analyzed: 07/22/94 07/22/94

Instrument ID (1): HP58907 Instrument ID (2): HP58907

GC Column(1): DB608 ID: .53 (mm) GC Column(2): DB1701 ID:.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
Heptachlor	1	9.02	8.95	9.05	63.86	
	2	6.11	6.08	6.18	26.01	145.5
Endrin	1	16.38	16.33	16.47	309.39	
	2	11.51	11.42	11.56	193.86	59.6
Endrin ketone	1	20.51	20.48	20.62	39.60	
	2	17.20	17.17	17.31	1503.0	3695.5
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					
	1					
	2					

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO

WC1-01MS

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Lab Sample ID : SPM1*CDMHNSS3*43 Date(s) Analyzed: 07/22/94 07/22/94

Instrument ID (1): HP58907 Instrument ID (2): HP58907

GC Column(1): DB608 ID: .53 (mm) GC Column(2): DB1701 ID:.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	6.84	6.77	6.87	3.53	
	2	4.95	4.88	4.98	3.09	14.2
gamma-BHC (Lindane)	1	7.98	7.90	8.00	34.96	
	2	5.73	5.63	5.73	52.61	50.5
Heptachlor	1	9.01	8.95	9.05	33.01	
	2	6.11	6.08	6.18	38.52	16.7
Aldrin	1	10.16	10.10	10.20	72.01	
	2	6.76	6.72	6.82	15.46	365.8
Dieldrin	1	15.13	15.04	15.13	16.23	
	2	10.83	10.70	10.84	17.73	9.2
4,4'-DDE	1	14.99	14.88	14.99	16.32	
	2	10.33	10.28	10.33	23.52	44.1
Endrin	1	16.44	16.33	16.44	347.84	
	2	11.55	11.42	11.56	167.63	107.5
4,4'-DDT	1	17.90	17.78	17.92	57.24	
	2	14.15	14.07	14.15	15.23	275.8

10A
PESTICIDE IDENTIFICATION SUMMARY
FOR SINGLE COMPONENT ANALYTES

EPA SAMPLE NO

WC1-01MSD

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Lab Sample ID : SPM2*CDMHNSS3*43 Date(s) Analyzed: 07/22/94 07/22/94

Instrument ID (1): HP58907 Instrument ID (2): HP58907

GC Column(1): DB608 ID: .53 (mm) GC Column(2): DB1701 ID:.53 (mm)

ANALYTE	COL	RT	RT WINDOW FROM	RT WINDOW TO	CONCENTRATION	%D
alpha-BHC	1	6.83	6.77	6.87	2.08	
	2	4.95	4.88	4.98	3.46	66.3
gamma-BHC (Lindane)	1	7.97	7.90	8.00	19.65	
	2	5.72	5.63	5.73	43.22	119.9
Heptachlor	1	9.04	8.95	9.05	52.81	
	2	6.11	6.08	6.18	26.50	99.3
Aldrin	1	10.16	10.10	10.20	26.25	
	2	6.77	6.72	6.82	2.60	909.6
Dieldrin	1	15.14	15.04	15.14	39.46	
	2	10.78	10.70	10.84	11.69	237.6
4,4'-DDE	1	14.97	14.88	14.97	31.21	
	2	10.38	10.28	10.38	19.79	57.7
Endrin	1	16.42	16.33	16.42	283.20	
	2	11.53	11.42	11.56	141.74	99.8
4,4'-DDT	1	17.87	17.78	17.92	64.46	
	2	14.17	14.07	14.17	30.20	113.4

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Primary Column

Turbochrom Sequence File : C:\TC4\HP58907\862A.SEQ
Created by : VIC on : 7/22/94 11:04 AM
Edited by : VIC on : 7/22/94 11:17 AM
Description :

Number of Times Edited : 3

Sequence File Header Information:

Number of Rows : 39
Instrument Type : 760 / 900 Series Intelligent Interface
Injection Type : DUAL

Sequence Sample Descriptions - Channel A

Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend
1	Sample	RESC			1.000	1.000	1.000	1.000	1.000	1.000	0.000
2	Sample	INDAH			1.000	1.000	1.000	1.000	1.000	1.000	0.000
3	Sample	INDBH			1.000	1.000	1.000	1.000	1.000	1.000	0.000
4	Sample	RESC			1.000	1.000	1.000	1.000	1.000	1.000	0.000
5	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
6	Cal:Replace	CK*RESC*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
7	Sample	CK*PEM*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
8	Cal:Replace	ICV*AR1660*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
9	Cal:Replace	ICV*AR1221*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
10	Cal:Replace	ICV*AR1232*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
11	Cal:Replace	ICV*AR1242*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
12	Cal:Replace	ICV*AR1248*1			1.000	1.000	1.000	1.000	1.000	1.000	0.00(
13	Cal:Replace	ICV*AR1254*1			1.000	1.000	1.000	1.000	1.000	1.000	0.00
14	Cal:Replace	ICV*TOXAPH*1			1.000	1.000	1.000	1.000	1.000	1.000	0.00(
15	Cal:Replace	ICV*INDAL*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
16	Cal:Replace	ICV*INDBL*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
17	Cal:Replace	ICV*INDAM*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
18	Cal:Replace	ICV*INDBM*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
19	Cal:Replace	ICV*INDAH*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
20	Cal:Replace	ICV*INDBH*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
21	Sample	MB*PIBLK*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
22	Sample	CK*PEM*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000
23	Sample	MB*QC*1 7-18-94			1.000	1.000	1.000	1.000	1.000	1.000	0.000
24	Sample	CDMHNSS3*43 7-1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
25	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
26	Sample	SPM1*CDMHNSS3*4			1.000	1.000	1.000	1.000	1.000	1.000	0.000
27	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
28	Sample	SPM2*CDMHNSS3*4			1.000	1.000	1.000	1.000	1.000	1.000	0.000
29	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
30	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
31	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
32	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
33	Sample	CDMHNSS3*43 1:1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
34	Sample	CDMHNSS3*43 1:1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
35	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
36	Sample	MB*PIBLK*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000
37	Cal:Replace	CCS*INDAM*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000
38	Cal:Replace	CCS*INDBM*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000
39	Sample	NO SHOT			1.000	1.000	1.000	1.000	1.000	1.000	0.000

Sequence Process Information - Channel A

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Updat RT
		-	2	HP58907	DB608	862A	ALL	862A001	862A001			-	-	-
		-	3	HP58907	DB608	862A	ALL	862A002	862A002			-	-	-
		-	4	HP58907	DB608	862A	ALL	862A003	862A003			-	-	-
4	-	-	5	HP58907	DB608	862A	ALL	862A004	862A004			-	-	-
5	-	-	6	HP58907	DB608	862A	ALL	862A005	862A005			-	-	-
6	-	-	7	HP58907	DB608	862ARES	CLPS	862A006	862A006			N	1	R
7	-	-	8	HP58907	DB608	862APEM	CLPEM	862A007	862A007			-	-	-
8	-	-	9	HP58907	DB608	862A1660	CLPPCB	862A008	862A008			N	1	R
9	-	-	10	HP58907	DB608	862A1221	CLPPCB	862A009	862A009			N	1	R
10	-	-	11	HP58907	DB608	862A1232	CLPPCB	862A010	862A010			N	1	R
11	-	-	12	HP58907	DB608	862A1242	CLPPCB	862A011	862A011			N	1	R
12	-	-	13	HP58907	DB608	862A1248	CLPPCB	862A012	862A012			N	1	R
13	-	-	14	HP58907	DB608	862A1254	CLPPCB	862A013	862A013			N	1	R
14	-	-	15	HP58907	DB608	862ATOX	CLPPCB	862A014	862A014			N	1	R
15	-	-	16	HP58907	DB608	862AAL	CLPS	862A015	862A015			N	1	R
16	-	-	17	HP58907	DB608	862ABL	CLPS	862A016	862A016			N	1	R
17	-	-	18	HP58907	DB608	862AAM	CLPS	862A017	862A017			N	1	R
18	-	-	19	HP58907	DB608	862ABM	CLPS	862A018	862A018			N	1	R
19	-	-	20	HP58907	DB608	862AAH	CLPS	862A019	862A019			N	1	R
20	-	-	21	HP58907	DB608	862ABH	CLPS	862A020	862A020			N	1	R
21	-	-	22	HP58907	DB608	862A	ALL	862A021	862A021			-	-	-
22	-	-	23	HP58907	DB608	862APEM	CLPEM	862A022	862A022			-	-	-
23	-	-	24	HP58907	DB608	862A	ALL	862A023	862A023			-	-	-
24	-	-	25	HP58907	DB608	862A	ALL	862A024	862A024			-	-	-
25	-	-	26	HP58907	DB608	862A	ALL	862A025	862A025			-	-	-
26	-	-	27	HP58907	DB608	862A	ALL	862A026	862A026			-	-	-
27	-	-	28	HP58907	DB608	862A	ALL	862A027	862A027			-	-	-
28	-	-	29	HP58907	DB608	862A	ALL	862A028	862A028			-	-	-
29	-	-	30	HP58907	DB608	862A	ALL	862A029	862A029			-	-	-
30	-	-	31	HP58907	DB608	862A	ALL	862A030	862A030			-	-	-
31	-	-	32	HP58907	DB608	862A	ALL	862A031	862A031			-	-	-
32	-	-	33	HP58907	DB608	862A	ALL	862A032	862A032			-	-	-
33	-	-	34	HP58907	DB608	862A	ALL	862A033	862A033			-	-	-
34	-	-	35	HP58907	DB608	862A	ALL	862A034	862A034			-	-	-
	-	-	36	HP58907	DB608	862A	ALL	862A035	862A035			-	-	-
	-	-	37	HP58907	DB608	862A	ALL	862A036	862A036			-	-	-
	-	-	38	HP58907	DB608	862AAM	CLPS	862A037	862A037			N	1	N
38	-	-	39	HP58907	DB608	862ABM	CLPS	862A038	862A038			N	1	N
39	-	-	40	HP58907	DB608	862A	ALL	862A039	862A039			-	-	-

Software Version: 4.0<1C29>
Sample Name : CK*RESC*1 Time : 7/22/94 12:00 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/6

Interface Serial # : NONE Data Acquisition Time: 7/21/94 04:08 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A006.RAW
Result File : C:\TC4\HP58907\862A006.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A006.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A006.RST
Calib Method : C:\TC4\HP58907\862ARES from C:\TC4\HP58907\862A006.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 12

DATA REPORT

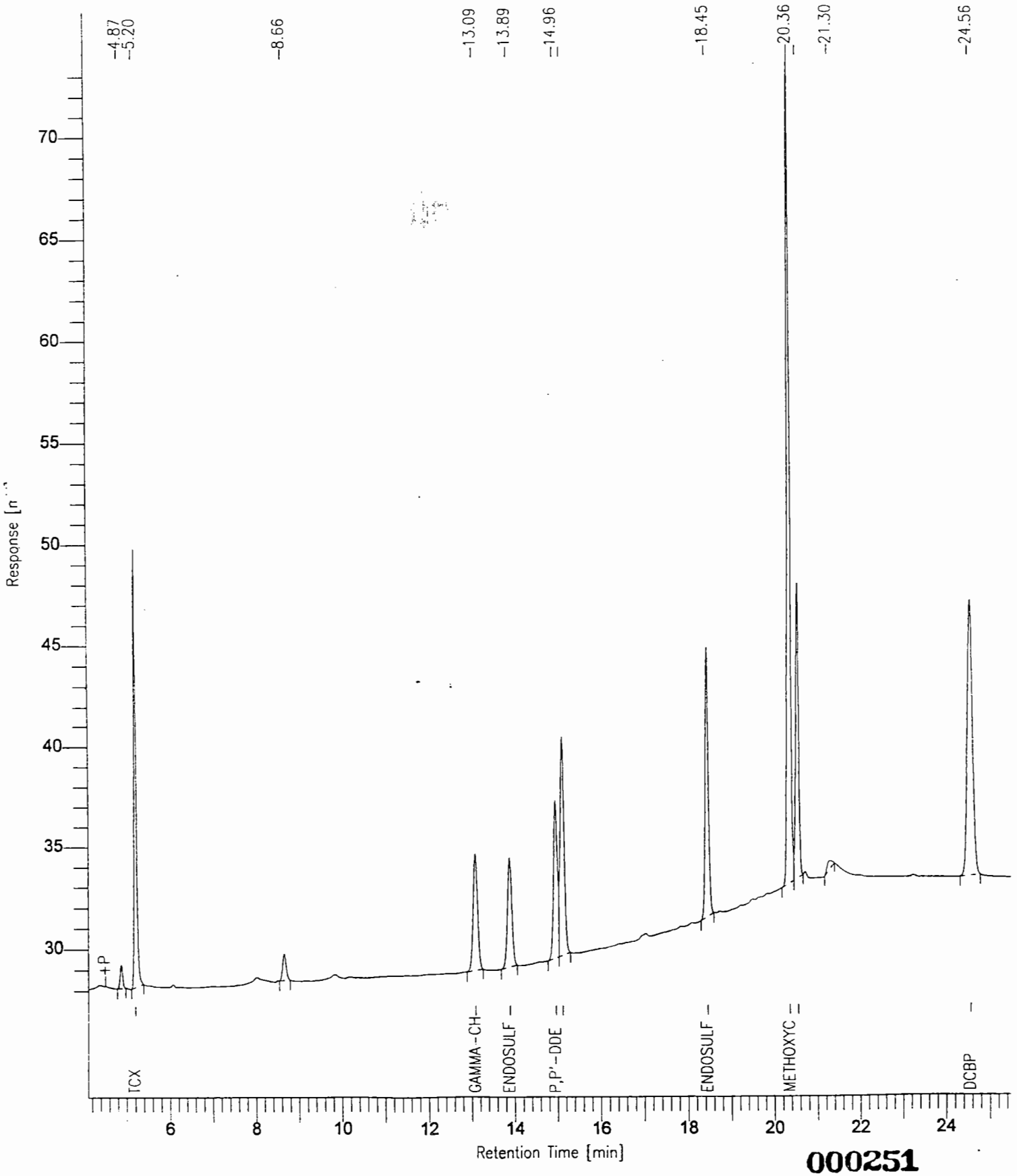
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.200	TCX	72524	B	21613	6e-15	0.0200
4	13.092	GAMMA-CHLORDANE	40894	B	5694	4e-15	0.0100
5	13.890	ENDOSULFAN A	37527	B	5328	3e-15	0.0100
6	14.959	P,P'-DDE	49712	B	7728	-2e-15	0.0200
7	15.120	DIELDRIN	68744	V	10782	-8e-16	0.0200
8	18.452	ENDOSULFAN SULFATE	66809	B	13361	-6e-15	0.0200
9	20.360	METHOXYCHLOR	187720	B	40805	2e-15	0.1000
10	20.555	ENDRIN KETONE	68472	V	14649	7e-15	0.0200
12	24.560	DCBP	114416	B	13671	-3e-15	0.0200
			706816		133632		0.2400

9513354.2574

Chromatogram

S Name : CK*RESC*1
F e : C:\TC4\HP58907\862A006.RAW
M :
Start Time : 4.11 min End Time : 25.48 min
Scale Factor: 0.0 Plot Offset: 27 mV

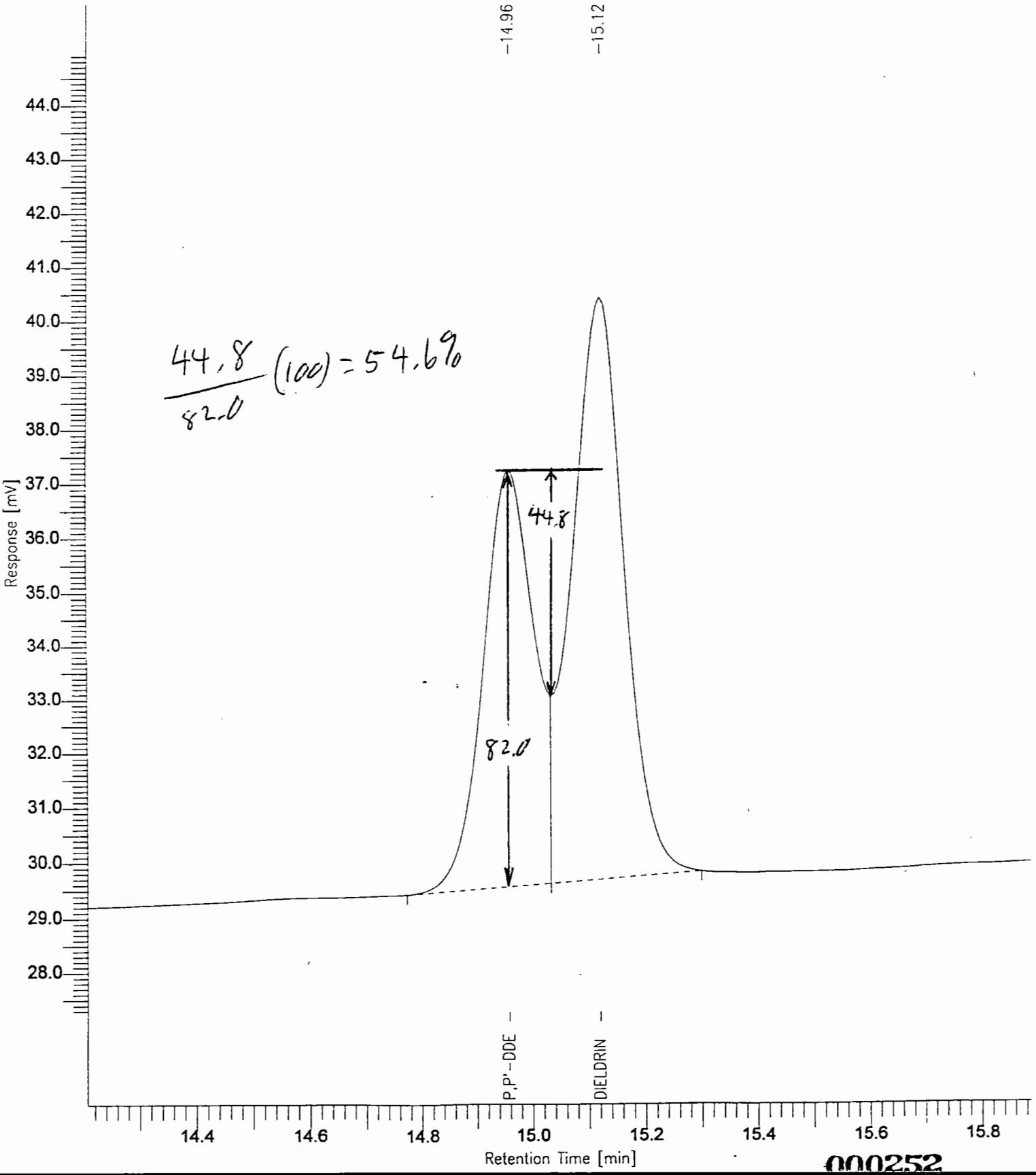
Sample #:
Date : 7/22/94 12:00 PM
Time of Injection: 7/21/94 04:08 PM
Low Point : 27.27 mV High Point : 73.89 mV
Plot Scale: 46.6 mV



Chromatogram

Sample Name : CK*RESC*1
FileName : C:\TC4\HP58907\862A006.RAW
Method :
Start Time : 14.21 min End Time : 15.89 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:00 PM
Time of Injection: 7/21/94 04:08 PM
Low Point : 27.27 mV High Point : 44.97 mV
Plot Scale: 17.7 mV

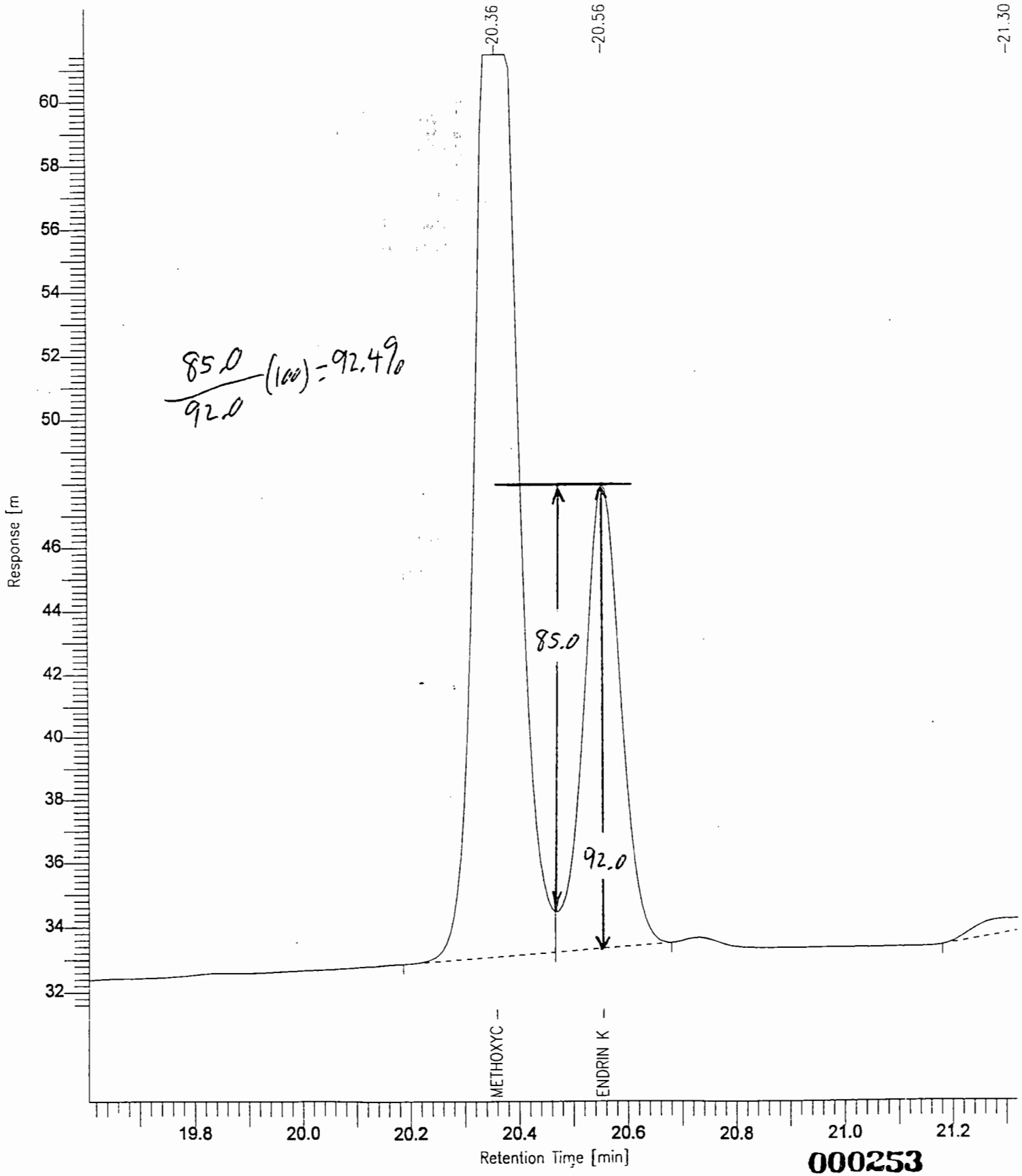


$\frac{44.8}{82.0}(100) = 54.6\%$

Chromatogram

Name : CK*RESC*1
File : C:\TC4\HP58907\862A006.RAW
Start Time : 19.61 min End Time : 21.32 min
Scale Factor: 0.0 Plot Offset: 31 mV

Sample #:
Date : 7/22/94 12:01 PM
Time of Injection: 7/21/94 04:08 PM
Low Point : 31.48 mV High Point : 61.44 mV
Plot Scale: 30.0 mV



$\frac{85.0}{92.0}(100) = 92.4\%$

Software Version: 4.0<1C29>
Sample Name : CK*PEM*1 Time : 7/22/94 12:02 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/7

Interface Serial # : NONE Data Acquisition Time: 7/21/94 04:48 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A007.RAW
Result File : C:\TC4\HP58907\862A007.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A007.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A007.RST
Calib Method : C:\TC4\HP58907\862APEM from C:\TC4\HP58907\862A007.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 777.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 15

DATA REPORT

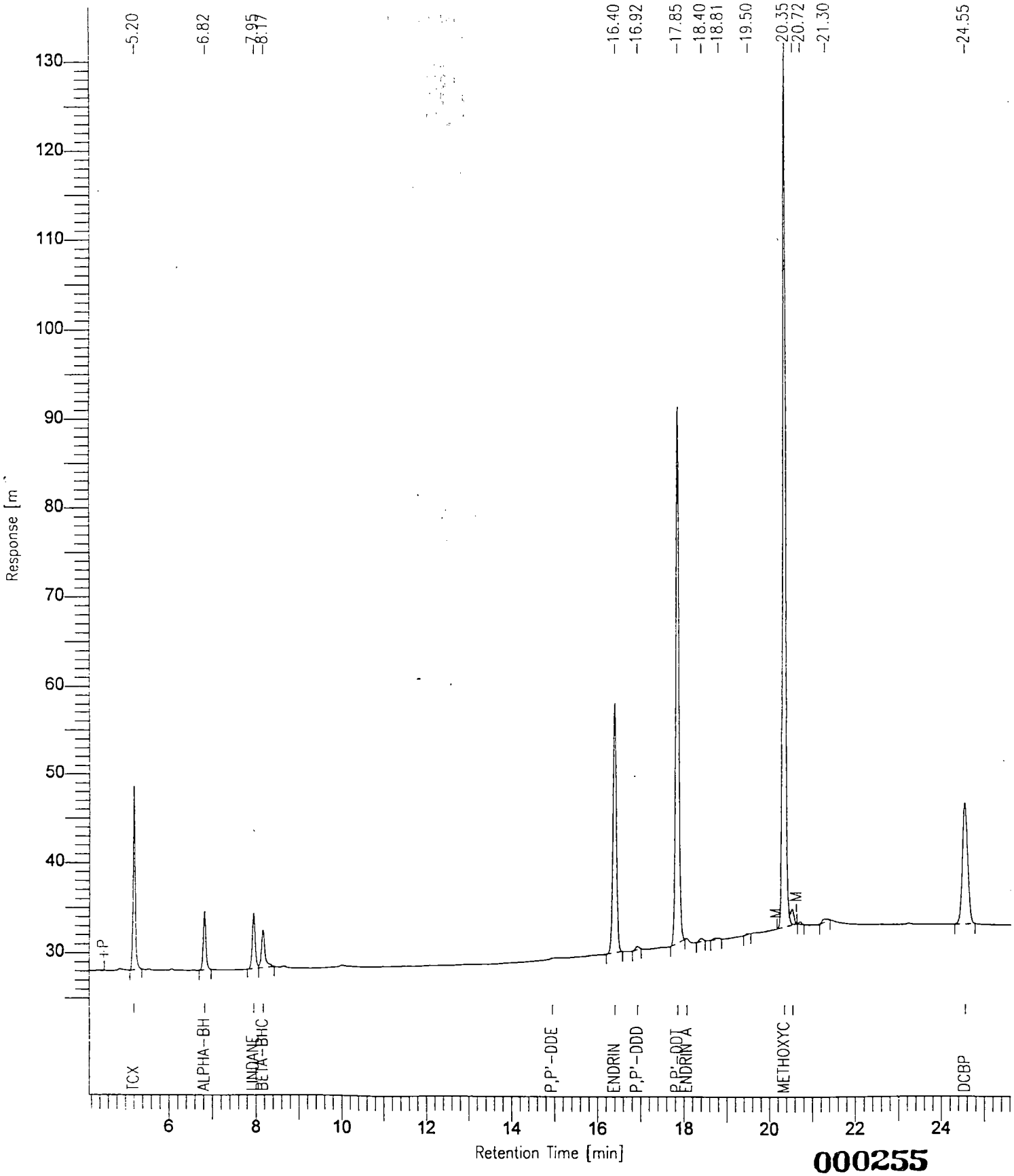
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	5.196	TCX	70823	B	20774	-0.0118
2	6.820	ALPHA-BHC	27523	B	6453	-0.0095
3	7.947	LINDANE	29325	B	6122	-0.0104
4	8.165	BETA-BHC	24160	V	4157	-0.0038
5	16.398	ENDRIN	151766	B	28034	-0.0100
6	16.923	P,P'-DDD	2051	B	357	-0.0012
7	17.846	P,P'-DDT	294126	B	60164	-0.0228
11	20.350	METHOXYCHLOR	453533	*B	98445	-0.0135
12	20.540	ENDRIN KETONE	8737	*E	1673	-0.0386
15	24.546	DCBP	113266	B	13479	-0.0194
			1175310		239658	

9513354.2576

Chromatogram

Name : CK*PEM*1
File : C:\TC4\HP58907\862A007.RAW
Start Time : 4.15 min End Time : 25.62 min
Scale Factor: 0.0 Plot Offset: 24 mV

Sample #:
Date : 7/22/94 12:02 PM
Time of Injection: 7/21/94 04:48 PM
Low Point : 24.47 mV High Point : 130.90 mV
Plot Scale: 106.4 mV



000255

Software Version: 4.0<1C29>
Sample Name : ICV*AR1660*1 Time : 7/22/94 12:03 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/8

Interface Serial # : NONE Data Acquisition Time: 7/21/94 05:29 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A008.RAW
Result File : C:\TC4\HP58907\862A008.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A008.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A008.RST
Calib Method : C:\TC4\HP58907\862A1660 from C:\TC4\HP58907\862A008.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 45

DATA REPORT

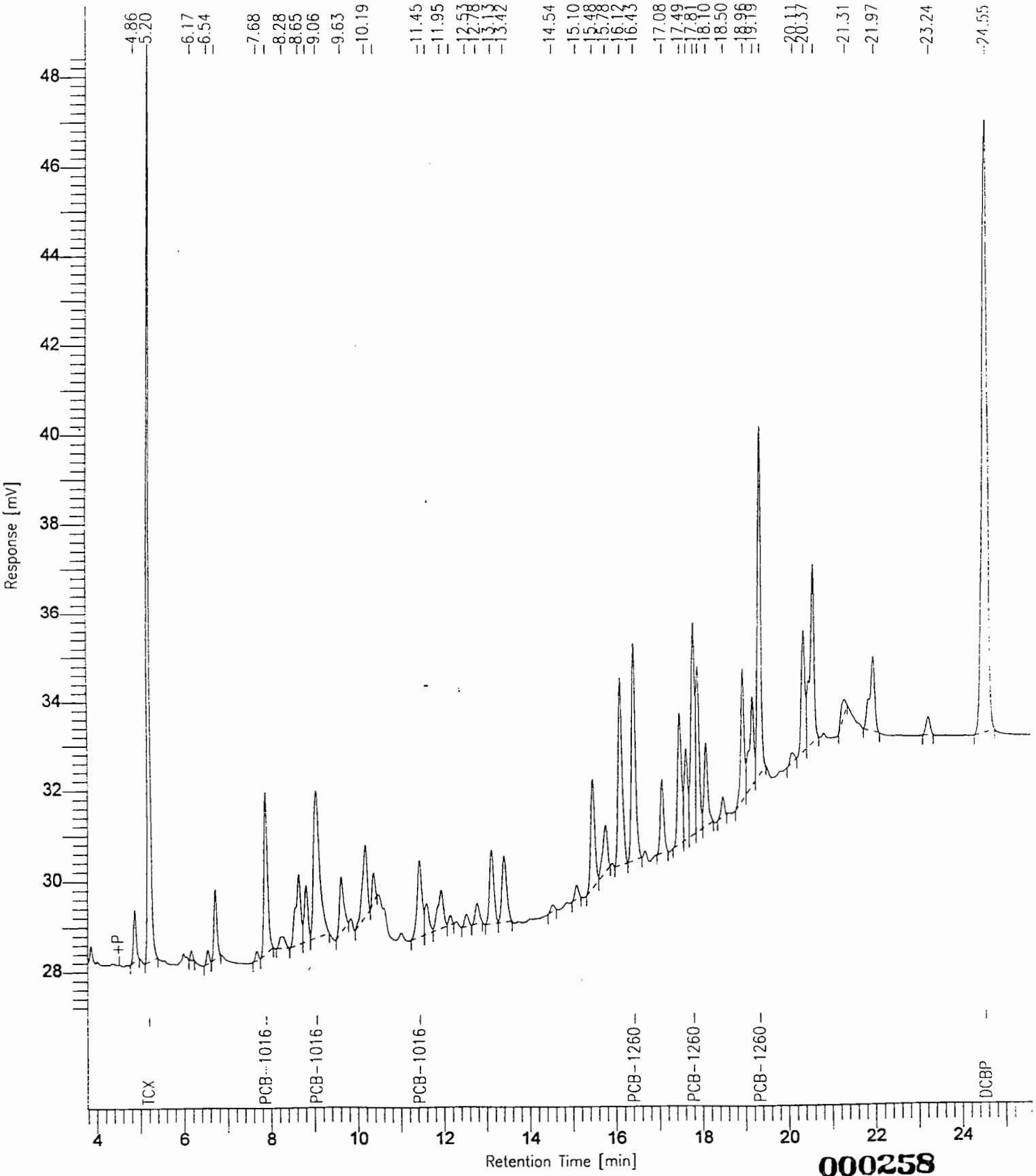
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.195	TCX	73018	B	21390	6e-15	0.0200
5	6.713		7316	B	1526	-------	7.3156e-08
7	7.886	PCB-1016-1	20691	B	3574	5e-15	0.1000
9	8.651		13009	B	1540	-------	1.3009e-07
10	8.819		7279	V	1244	-------	7.2788e-08
11	9.058	PCB-1016-2	31767	V	3248	-1e-15	0.1000
12	9.629		8292	B	1218	-------	8.2922e-08
13	10.187		12426	B	1569	-------	1.2426e-07
15	11.445	PCB-1016-3	13531	B	1691	1e-15	0.1000
17	11.945		8059	V	839	-------	8.0594e-08
21	13.126		11584	B	1633	-------	1.1584e-07
22	13.419		11402	V	1458	-------	1.1402e-07
25	15.484		16044	B	2421	-------	1.6044e-07
26	15.783		8276	V	1034	-------	8.2758e-08
27	16.122		27622	B	4224	-------	2.7622e-07

Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
28	16.431	PCB-1260-1	30434	B	4891	-6e-15	0.1000
29	17.084		9282	B	1651	-------	9.2822e-08
30	17.491		19073	B	2961	-------	1.9073e-07
31	17.642		11664	V	2045	-------	1.1664e-07
32	17.806	PCB-1260-2	30065	V	4788	-4e-15	0.1000
33	17.908		19638	V	3736	-------	1.9638e-07
34	18.104		11111	V	1879	-------	1.1111e-07
36	18.962		16503	B	2976	-------	1.6503e-07
37	19.190		14985	V	2010	-------	1.4985e-07
38	19.349	PCB-1260-3	40814	V	7896	-5e-15	0.1000
40	20.365		16402	V	2766	-------	1.6402e-07
41	20.580		27254	V	4038	-------	2.7254e-07
43	21.971		13744	B	1703	-------	1.3744e-07
45	24.547	DCBP	115490	B	13809	0.0000	0.0200
			646775		105757		0.6400

Chromatogram

Sample Name : ICV*AR1660*1
FileName : C:\TC4\HP58907\862A008.RAW
Method :
Start Time : 3.77 min End Time : 25.62 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:04 PM
Time of Injection: 7/21/94 05:29 PM
Low Point : 27.02 mV High Point : 48.52 mV
Plot Scale: 21.5 mV



Software Version: 4.0<1C29>
Sample Name : ICV*AR1221*1 Time : 7/22/94 12:04 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/9

Interface Serial # : NONE Data Acquisition Time: 7/21/94 06:09 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A009.RAW
Result File : C:\TC4\HP58907\862A009.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A009.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A009.RST
Calib Method : C:\TC4\HP58907\862A1221 from C:\TC4\HP58907\862A009.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 13

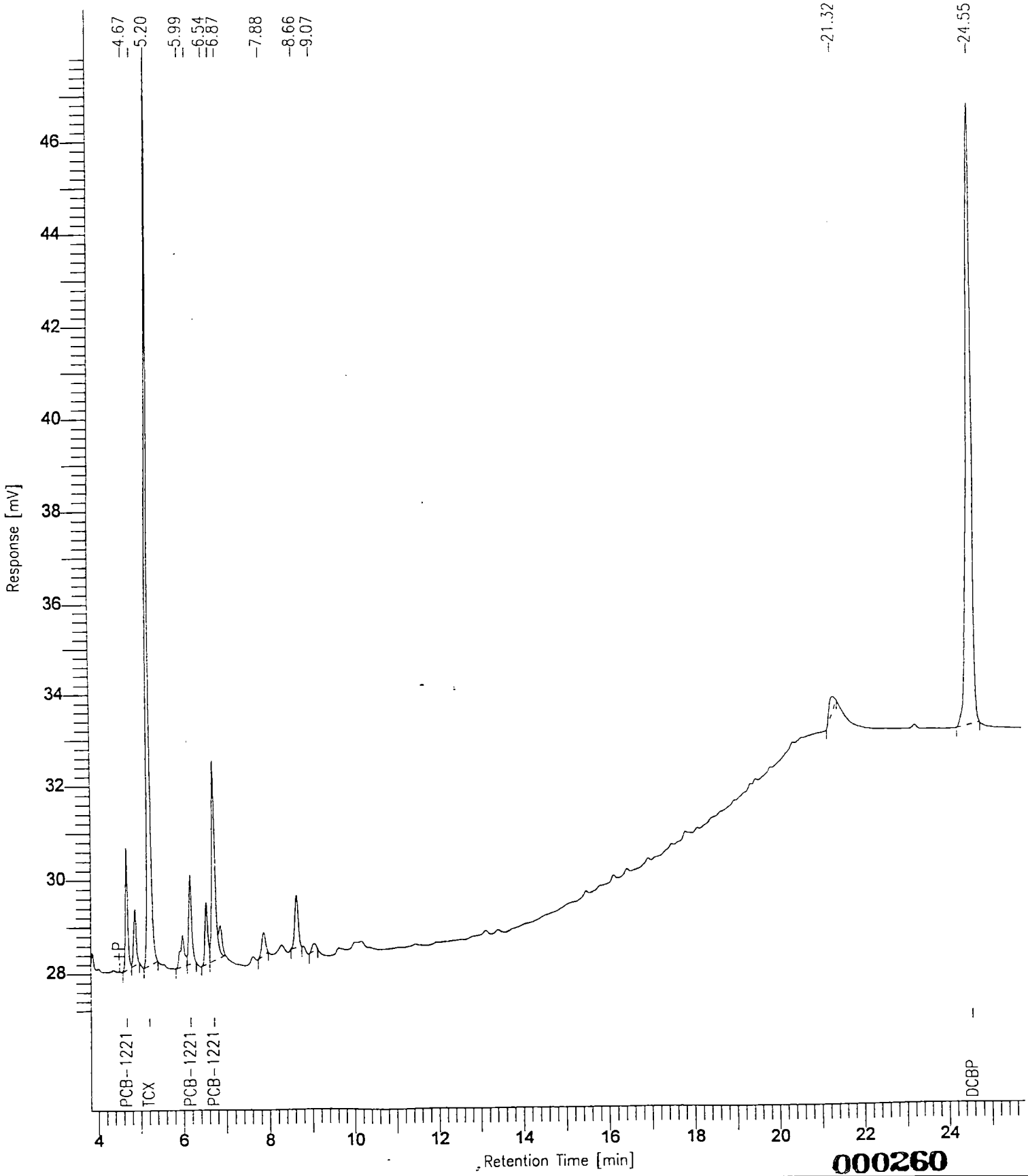
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	4.668	PCB-1221-1	9750	B	2618	1e-15	0.2000
3	5.196	TCX	75979	B	21100	0.0000	0.0200
5	6.165	PCB-1221-2	9165	V	1907	-2e-15	0.2000
6	6.544		6488	B	1338	-------	6.4882e-08
7	6.713	PCB-1221-3	23822	V	4284	6e-15	0.2000
	8.655		6255	B	1117	-------	6.2548e-08
	24.551	DCBP	115678	B	13577	2e-15	0.0200
			247137		45940		0.6400

Chromatogram

Sample Name : ICV*AR1221*1
FileName : C:\TC4\HP58907\862A009.RAW
Method :
Start Time : 3.82 min End Time : 25.76 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:04 PM
Time of Injection: 7/21/94 06:09 PM
Low Point : 27.06 mV High Point : 47.86 mV
Plot Scale: 20.8 mV



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Software Version: 4.0<1C29>
ple Name : ICV*AR1232*1 Time : 7/22/94 12:05 PM
le Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/10

Interface Serial # : NONE Data Acquisition Time: 7/21/94 06:49 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A010.RAW
Result File : C:\TC4\HP58907\862A010.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A010.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A010.RST
Calib Method : C:\TC4\HP58907\862A1232 from C:\TC4\HP58907\862A010.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

e Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 20

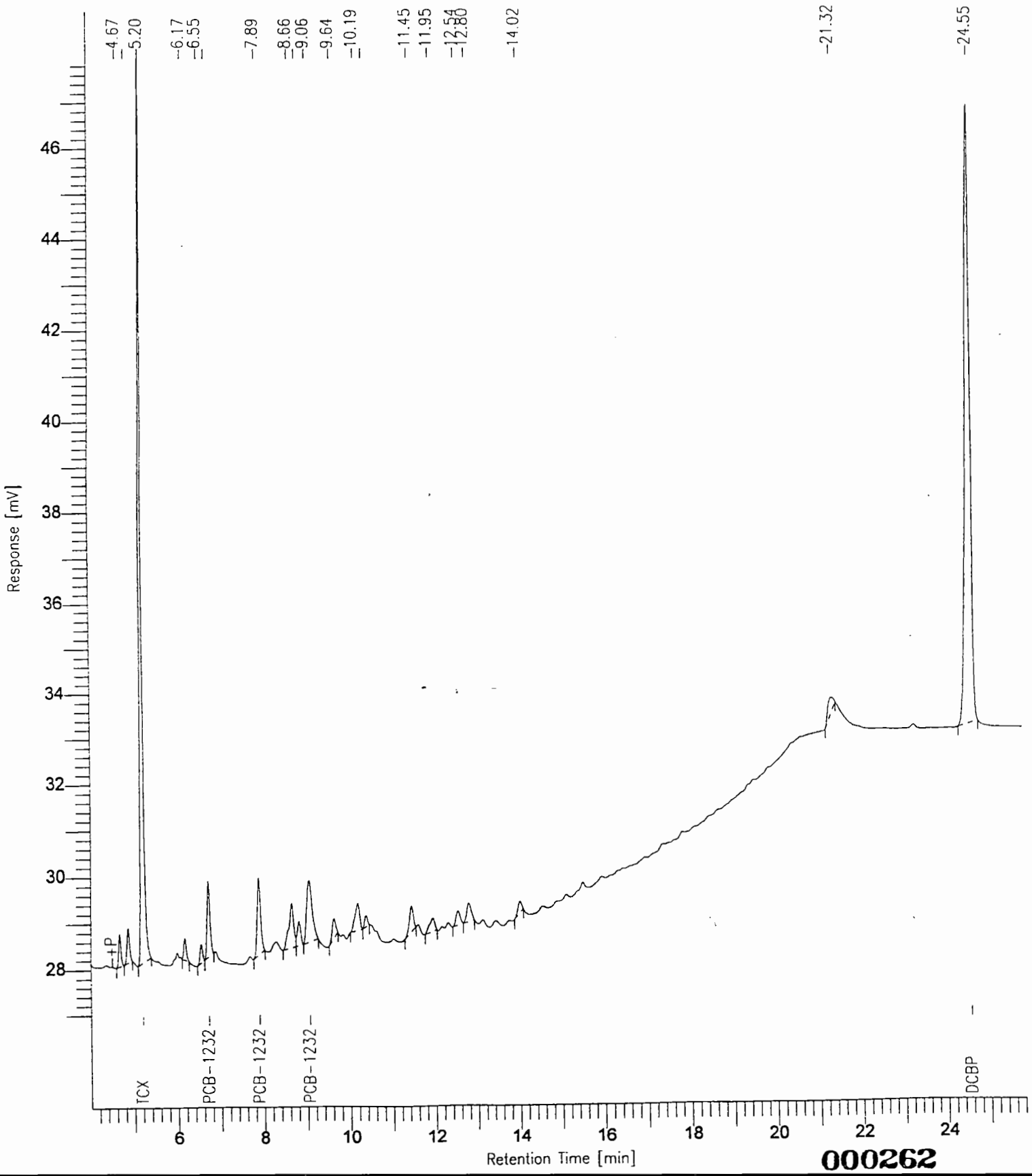
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
3	5.197	TCX	74088	B	21315	2e-15	0.0200
6	6.716	PCB-1232-1	7906	B	1652	5e-15	0.1000
7	7.891	PCB-1232-2	9643	B	1663	-3e-15	0.1000
8	8.657		7542	B	964	-------	7.5419e-08
10	9.062	PCB-1232-3	12030	B	1329	8e-15	0.1000
^^	24.551	DCBP	115805	B	13690	4e-15	0.0200
			227014		40614		0.3400

Chromatogram

Sample Name : ICV*AR1232*1
FileName : C:\TC4\HP58907\862A010.RAW
Method :
Start Time : 4.01 min End Time : 25.81 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:05 PM
Time of Injection: 7/21/94 06:49 PM
Low Point : 26.99 mV High Point : 47.96 mV
Plot Scale: 21.0 mV



Software Version: 4.0<1C29>
Sample Name : ICV*AR1242*1 Time : 7/22/94 12:05 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/11

Interface Serial # : NONE Data Acquisition Time: 7/21/94 07:29 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A011.RAW
Result File : C:\TC4\HP58907\862A011.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A011.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A011.RST
Calib Method : C:\TC4\HP58907\862A1242 from C:\TC4\HP58907\862A011.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 31

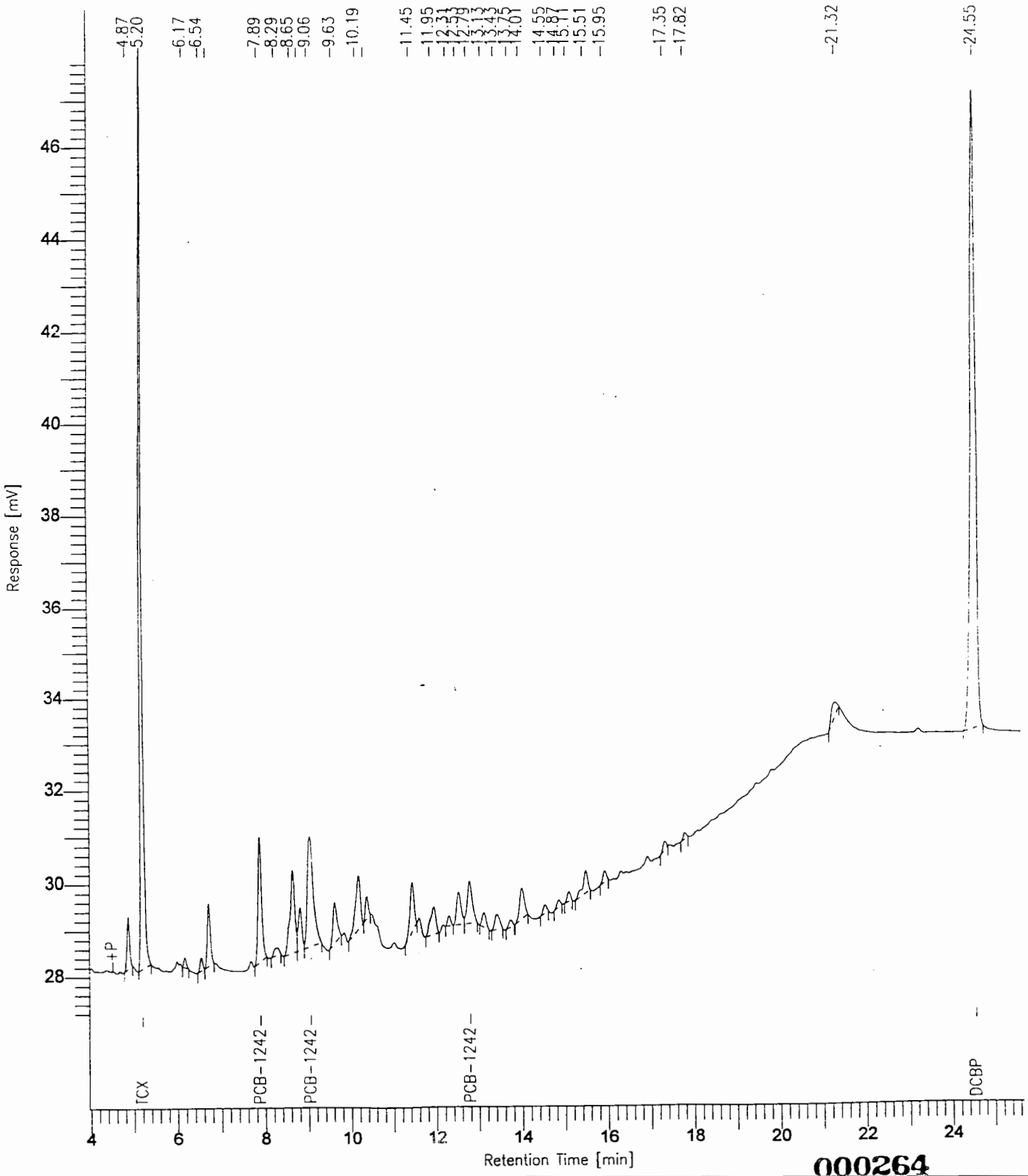
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.195	TCX	76583	B	22086	-1e-15	0.0200
5	6.715		6628	B	1352	-------	6.6278e-08
6	7.889	PCB-1242-1	15701	B	2688	5e-15	0.1000
8	8.654		13853	B	1773	-------	1.3853e-07
10	9.055	PCB-1242-2	23213	V	2360	-9e-15	0.1000
	9.632		6058	B	872	-------	6.0582e-08
	0.189		9488	B	1148	-------	9.4883e-08
	1.448		7100	B	1054	-------	7.0997e-08
18	12.793	PCB-1242-3	7619	V	906	6e-15	0.1000
31	24.551	DCBP	120482	B	13990	-5e-15	0.0200
			286725		48229		0.3400

Chromatogram

Sample Name : ICV*AR1242*1
FileName : C:\TC4\HP58907\862A011.RAW
Method :
Start Time : 3.96 min End Time : 25.67 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:05 PM
Time of Injection: 7/21/94 07:29 PM
Low Point : 27.15 mV High Point : 47.95 mV
Plot Scale: 20.8 mV



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Software Version: 4.0<1C29>
S e Name : ICV*AR1248*1 Time : 7/22/94 12:05 PM
S .e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/12

Interface Serial # : NONE Data Acquisition Time: 7/21/94 08:09 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A012.RAW
Result File : C:\TC4\HP58907\862A012.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A012.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A012.RST
Calib Method : C:\TC4\HP58907\862A1248 from C:\TC4\HP58907\862A012.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 33

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.196	TCX	73636	B	20904	5e-15	0.0200
3	7.889		8688	B	1532	-------	8.6879e-08
4	8.654		9499	B	1248	-------	9.4992e-08
6	9.059	PCB-1248-1	21116	B	2132	0.0000	0.1000
9	10.192		11176	B	1768	-------	1.1176e-07
	11.449	PCB-1248-2	17669	B	2191	0.0000	0.1000
	.605		6537	V	910	-------	6.5369e-08
	..948		15672	V	1393	-------	1.5672e-07
14	12.305		12629	V	1061	-------	1.2629e-07
15	12.533		18827	V	1875	-------	1.8827e-07
16	12.792	PCB-1248-3	25037	V	2173	-6e-15	0.1000
17	13.125		6160	V	774	-------	6.1603e-08
18	13.432		5644	B	655	-------	5.6439e-08
	14.010		12024	V	1354	-------	1.2024e-07
	3.504		7285	V	1062	-------	7.2847e-08

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
33	24.549	DCBP	117101	B	13505	-3e-15	0.0200
			368699		54538		0.3400

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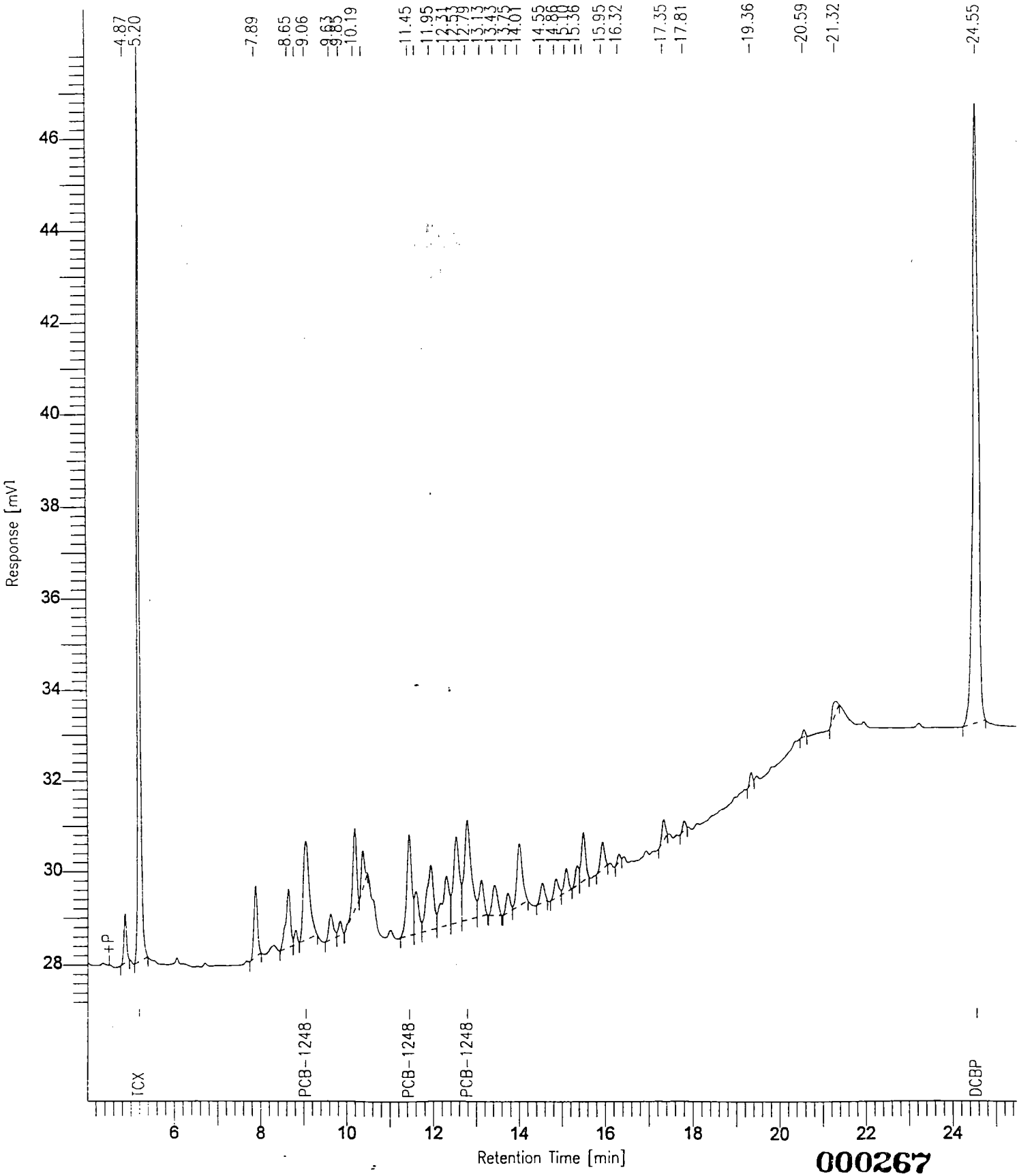
Chromatogram

Sa ame : ICV*AR1248*1
Fi e : C:\TC4\HP58907\862A012.RAW
Metnoa :
Start Time : 4.01 min End Time : 25.48 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:05 PM
Time of Injection: 7/21/94 08:09 PM
Low Point : 27.06 mV High Point : 47.80 mV
Plot Scale: 20.7 mV

Page 1 of 1



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Software Version: 4.0<1C29>
Sample Name : ICV*AR1254*1 Time : 7/22/94 12:06 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/13

Interface Serial # : NONE Data Acquisition Time: 7/21/94 08:50 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A013.RAW
Result File : C:\TC4\HP58907\862A013.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A013.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A013.RST
Calib Method : C:\TC4\HP58907\862A1254 from C:\TC4\HP58907\862A013.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 30

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.196	TCX	73592	B	21174	-7e-15	0.0200
3	8.656		6352	B	1095	-------	6.3523e-08
4	10.196		10173	B	1679	-------	1.0173e-07
9	13.129		22901	B	3104	-------	2.2901e-07
10	13.425	PCB-1254-1	27540	V	3184	6e-15	0.1000
11	13.742		8387	V	1148	-------	8.3874e-08
12	14.542		9111	B	1239	-------	9.1109e-08
13	14.858		9029	V	1200	-------	9.0294e-08
14	15.100		14095	V	2056	-------	1.4095e-07
15	15.501	PCB-1254-2	36767	V	4693	-4e-15	0.1000
16	15.785		6599	V	782	-------	6.5987e-08
17	15.941		20620	V	2763	-------	2.0620e-07
18	16.124		17054	V	2286	-------	1.7054e-07
19	16.435		16387	V	2298	-------	1.6387e-07
21	17.345		7895	B	1342	-------	7.8948e-08

Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	7.482		13031	V	1995	-------	1.3031e-07
23	17.642		7850	V	1246	-------	7.8497e-08
24	17.808	PCB-1254-3	26006	V	3885	7e-15	0.1000
30	24.551	DCBP	116669	B	13723	-1e-15	0.0200
			450058		70891		0.3400

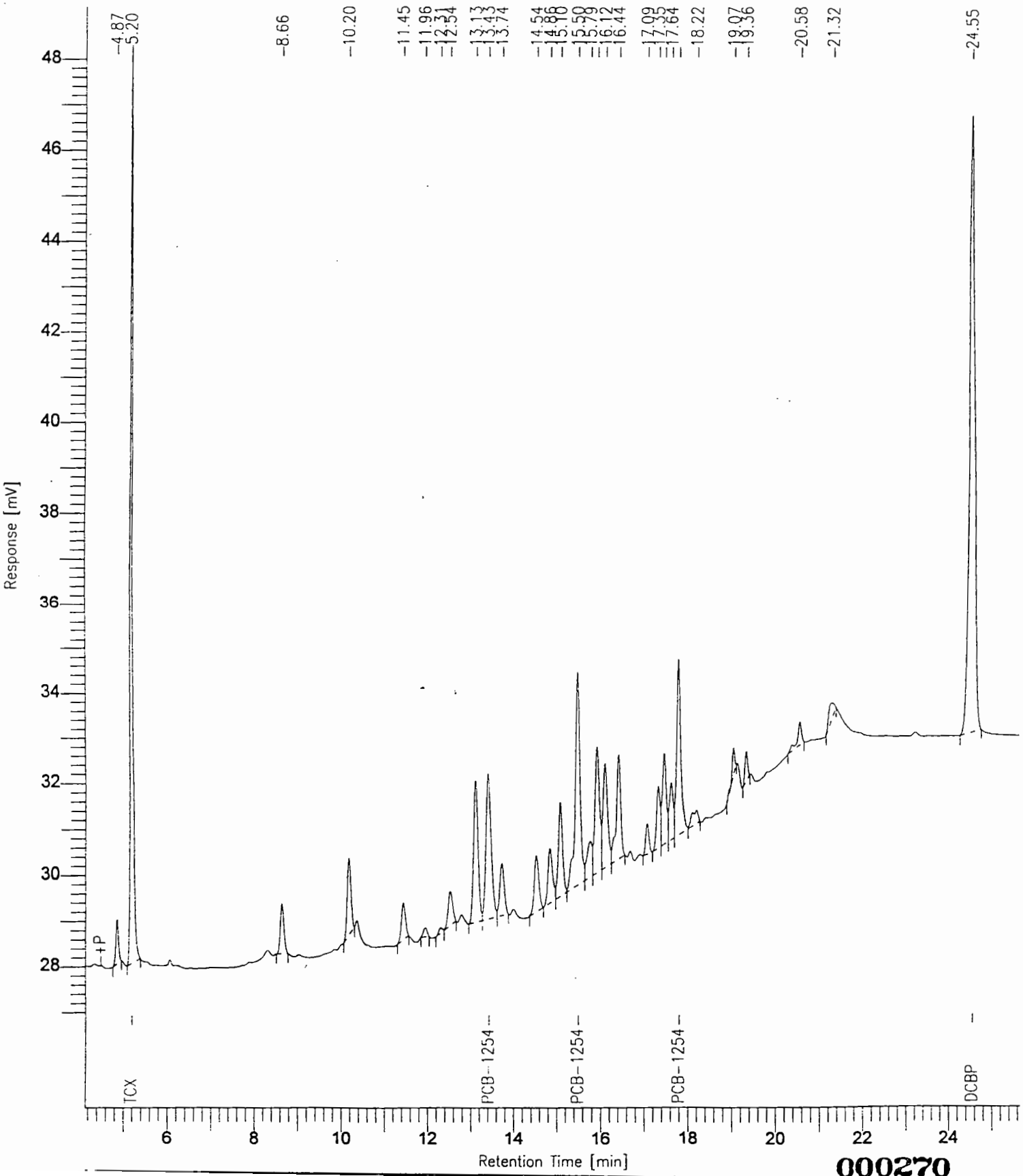
Chromatogram

Sample Name : ICV*AR1254*1
FileName : C:\TC4\HP58907\862A013.RAW
Method :
Start Time : 4.15 min
Scale Factor: 0.0

End Time : 25.67 min
Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:06 PM
Time of Injection: 7/21/94 08:50 PM
Low Point : 26.94 mV
Plot Scale: 21.2 mV

High Point : 48.10 mV



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Software Version: 4.0<1C29>
Sample Name : ICV*TOXAPH*1 Time : 7/22/94 12:06 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/14

Interface Serial # : NONE Data Acquisition Time: 7/21/94 09:30 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A014.RAW
Result File : C:\TC4\HP58907\862A014.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A014.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A014.RST
Calib Method : C:\TC4\HP58907\862ATOX from C:\TC4\HP58907\862A014.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 49

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.197	TCX	73874	B	21104	2e-15	0.0200
3	8.657		6350	B	1086	-------	6.3495e-08
7	13.153		6594	B	807	-------	6.5938e-08
10	14.326		7383	V	631	-------	7.3826e-08
11	14.680		7110	B	884	-------	7.1097e-08
[illegible]	[illegible]4.914		7399	V	1047	-------	7.3989e-08
	5.074		11656	V	1289	-------	1.1656e-07
	.634		16034	V	2042	-------	1.6034e-07
17	[illegible].926		18806	V	2575	-------	1.8806e-07
20	16.479		8558	B	1444	-------	8.5579e-08
21	16.587		6661	V	1223	-------	6.6615e-08
22	16.774		15611	V	1792	-------	1.5611e-07
[illegible]3	17.133	TOXAPHENE-1	43476	B	5097	8e-15	0.5000
	17.547		27897	B	2476	-------	2.7897e-07
	[illegible]7.847		40676	V	5468	-------	4.0676e-07

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
27	18.059		31537	V	5235	-------	3.1537e-07
28	18.145		26004	V	4531	-------	2.6004e-07
29	18.269		10125	V	2004	-------	1.0125e-07
30	18.444		42048	V	4692	-------	4.2048e-07
31	18.692		14308	V	2468	-------	1.4308e-07
32	18.828		14846	V	2255	-------	1.4846e-07
33	18.954		18239	V	2727	-------	1.8239e-07
34	19.100		27966	V	3080	-------	2.7966e-07
35	19.514	TOXAPHENE~2	78844	V	10039	-2e-15	0.5000
36	19.684	TOXAPHENE~3	68247	V	8639	5e-15	0.5000
37	19.995		8565	B	1857	-------	8.5653e-08
39	20.287		14269	V	2488	-------	1.4269e-07
40	20.391		13353	V	2168	-------	1.3353e-07
41	20.538		33146	V	4470	-------	3.3146e-07
46	21.975		6209	B	973	-------	6.2090e-08
47	22.671		8295	B	703	-------	8.2954e-08
49	24.551	DCBP	114624	B	13840	-4e-15	0.0200
			828710		121131		1.5400

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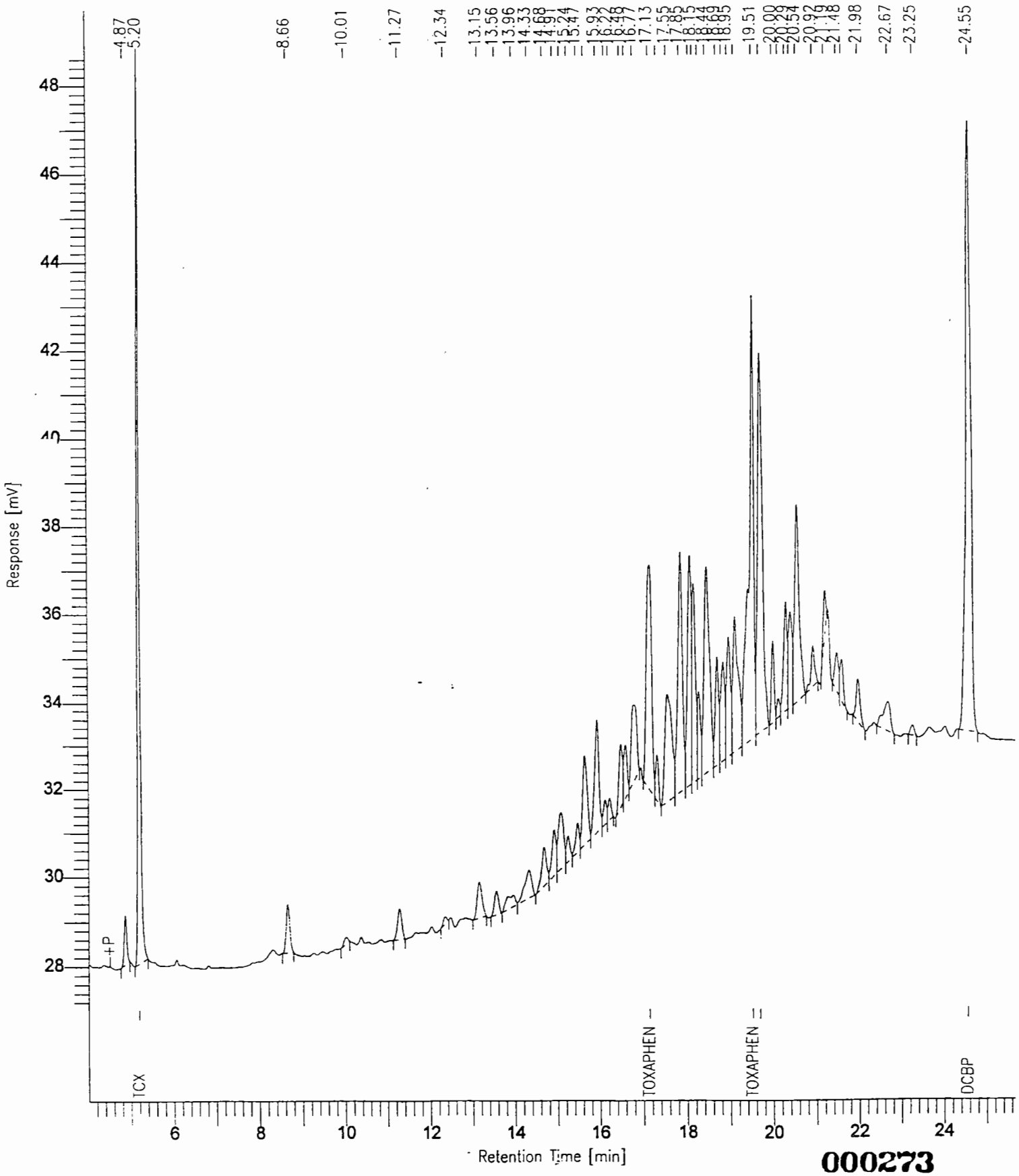
Chromatogram

S: Name : ICV*TOXAPH*1
F: e : C:\TC4\HP58907\862A014.RAW
Method :
Start Time : 4.01 min End Time : 25.67 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:06 PM
Time of Injection: 7/21/94 09:30 PM
Low Point : 27.04 mV High Point : 48.64 mV
Plot Scale: 21.6 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDAL*1 Time : 7/22/94 12:07 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/15

Interface Serial # : NONE Data Acquisition Time: 7/21/94 10:10 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A015.RAW
Result File : C:\TC4\HP58907\862A015.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A015.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A015.RST
Calib Method : C:\TC4\HP58907\862AAL from C:\TC4\HP58907\862A015.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 14

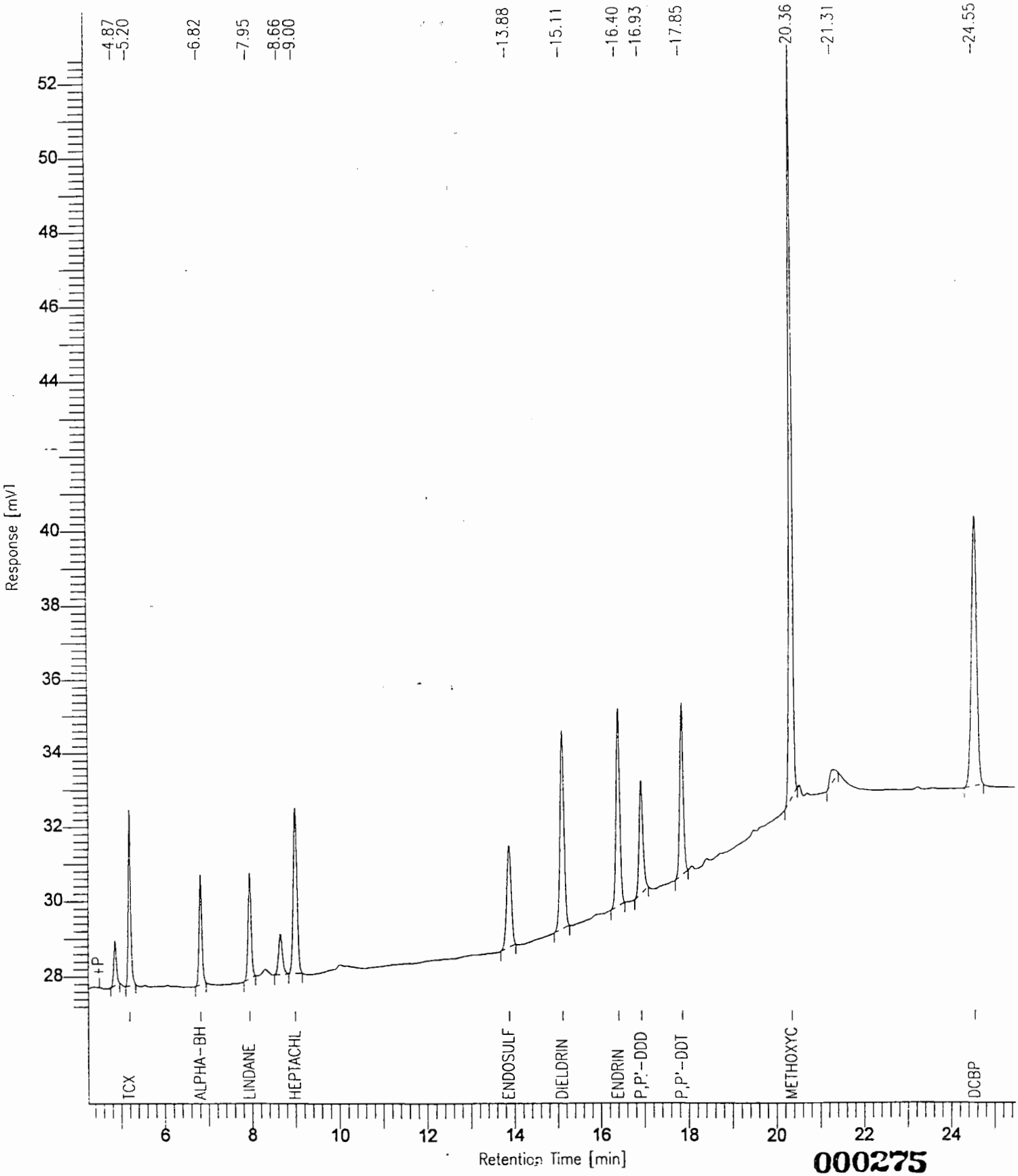
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.199	TCX	17792	B	4715	-7e-15	0.0050
3	6.821	ALPHA-BHC	13060	B	2921	-9e-16	0.0050
4	7.948	LINDANE	13994	B	2816	0.0000	0.0050
6	8.997	HEPTACHLOR	26382	V	4428	-4e-15	0.0050
7	13.881	ENDOSULFAN A	19462	B	2708	-3e-15	0.0050
8	15.112	DIELDRIN	34285	B	5350	-5e-15	0.0100
9	16.401	ENDRIN	30827	B	5342	6e-15	0.0100
10	16.927	P,P'-DDD	18703	B	3044	1e-14	0.0100
11	17.853	P,P'-DDT	25057	B	4677	0.0000	0.0100
12	20.358	METHOXYCHLOR	94673	B	20120	-1e-15	0.0500
14	24.550	DCBP	60955	B	7269	-1e-15	0.0100
			355191		63388		0.1250

Chromatogram

Sa ame : ICV*INDAL*1
Fi : C:\TC4\HP58907\862A015.RAW
Me :
Start Time : 4.25 min End Time : 25.48 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:07 PM
Time of Injection: 7/21/94 10:10 PM
Low Point : 27.08 mV High Point : 52.65 mV
Plot Scale: 25.6 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDBL*1 Time : 7/22/94 12:08 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/16

Interface Serial # : NONE Data Acquisition Time: 7/21/94 10:50 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A016.RAW
Result File : C:\TC4\HP58907\862A016.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A016.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A016.RST
Calib Method : C:\TC4\HP58907\862ABL from C:\TC4\HP58907\862A016.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 17

DATA REPORT

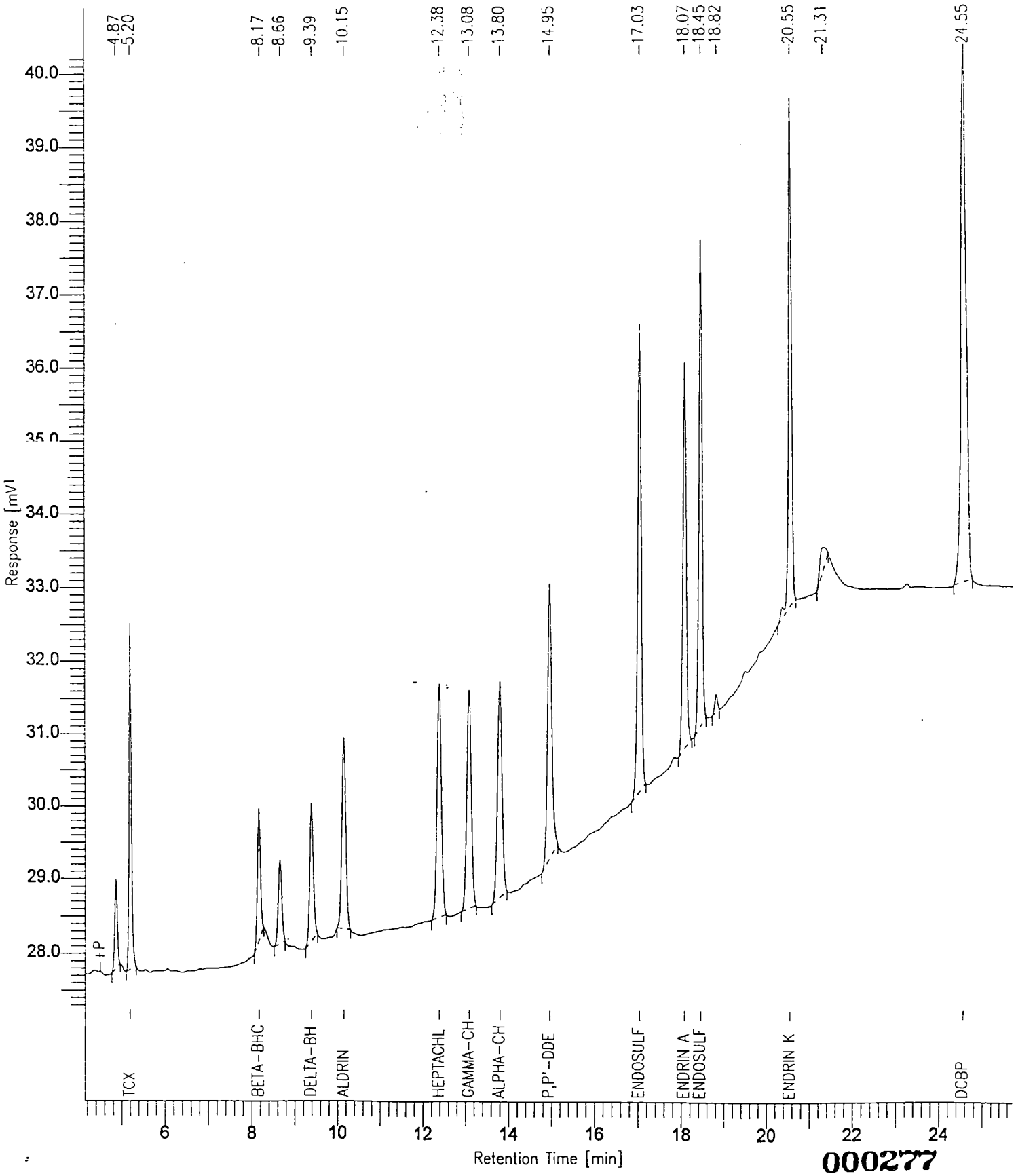
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.199	TCX	17708	B	4740	5e-15	0.0050
3	8.167	BETA-BHC	8854	B	1799	9e-15	0.0050
5	9.393	DELTA-BHC	10808	B	1875	-3e-15	0.0050
6	10.150	ALDRIN	16856	B	2626	8e-15	0.0050
7	12.384	HEPTACHLOR EPOXIDE	22668	B	3214	1e-15	0.0050
8	13.082	GAMMA-CHLORDANE	21998	B	3007	-3e-15	0.0050
9	13.797	ALPHA-CHLORDANE	21532	B	2982	9e-16	0.0050
10	14.950	P,P'-DDE	26131	B	3781	-4e-15	0.0100
11	17.028	ENDOSULFAN B	35953	B	6383	-3e-15	0.0100
12	18.071	ENDRIN ALDEHYDE	28570	B	5274	-4e-15	0.0100
13	18.446	ENDOSULFAN SULFATE	34037	B	6633	-1e-15	0.0100
15	20.551	ENDRIN KETONE	33730	B	6940	1e-15	0.0100
17	24.551	DCBP	61005	B	7250	7e-15	0.0100
			339849		56504		0.0950

9513394.2587

Chromatogram

S: ame : ICV*INDBL*1
F: e : C:\TC4\HP58907\862A016.RAW
Method :
Start Time : 4.15 min End Time : 25.71 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:08 PM
Time of Injection: 7/21/94 10:50 PM
Low Point : 27.25 mV High Point : 40.25 mV
Plot Scale: 13.0 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDAM*1 Time : 7/22/94 12:09 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/17

Interface Serial # : NONE Data Acquisition Time: 7/21/94 11:30 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A017.RAW
Result File : C:\TC4\HP58907\862A017.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A017.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A017.RST
Calib Method : C:\TC4\HP58907\862AAM from C:\TC4\HP58907\862A017.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 19

DATA REPORT

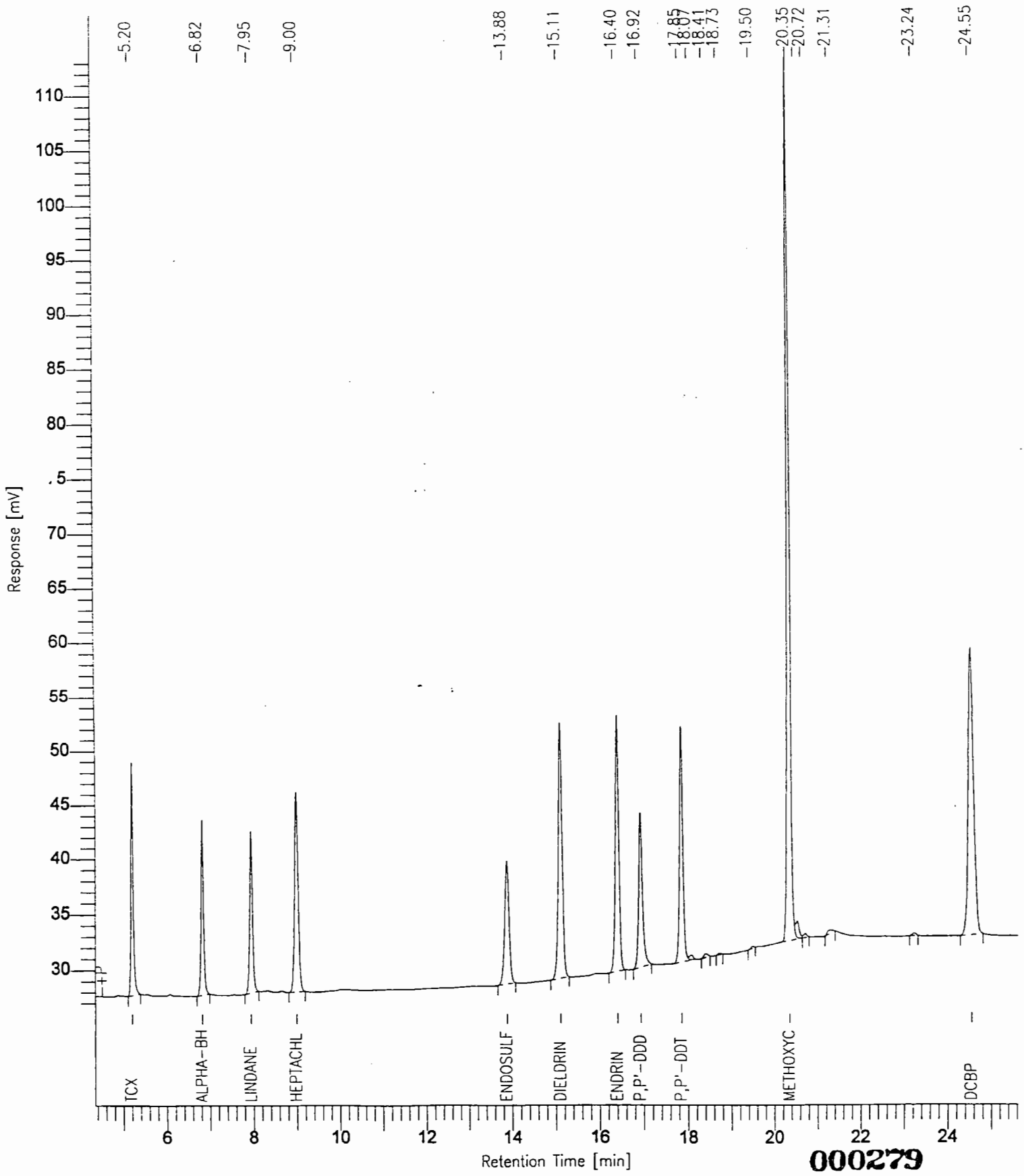
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	5.197	TCX	74391	B	21427	8e-15	0.0200
2	6.821	ALPHA-BHC	62549	B	15916	-3e-15	0.0200
3	7.948	LINDANE	65861	B	14679	4e-15	0.0200
4	8.995	HEPTACHLOR	104766	B	18219	9e-15	0.0200
5	13.879	ENDOSULFAN A	78458	B	11085	-6e-15	0.0200
6	15.109	DIELDRIN	141808	B	23338	-5e-15	0.0400
7	16.400	ENDRIN	128411	B	23426	1e-14	0.0400
8	16.923	P,P'-DDD	82844	B	14078	8e-15	0.0400
9	17.850	P,P'-DDT	111276	B	21578	-9e-15	0.0400
14	20.353	METHOXYCHLOR	382022	B	80991	-1e-15	0.2000
19	24.552	DCBP	222524	B	26174	3e-15	0.0400
			1454910		270912		0.5000

9513354.2588

Chromatogram

Name : ICV*INDAM*1
Name : C:\TC4\HP58907\862A017.RAW
Method :
Start Time : 4.34 min End Time : 25.62 min
Scale Factor: 0.0 Plot Offset: 26 mV

Sample #:
Date : 7/22/94 12:09 PM
Time of Injection: 7/21/94 11:30 PM
Low Point : 26.05 mV High Point : 113.16 mV
Plot Scale: 87.1 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDBM*1 Time : 7/22/94 12:09 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/18

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:11 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A018.RAW
Result File : C:\TC4\HP58907\862A018.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A018.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A018.RST
Calib Method : C:\TC4\HP58907\862ABM from C:\TC4\HP58907\862A018.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 19

DATA REPORT

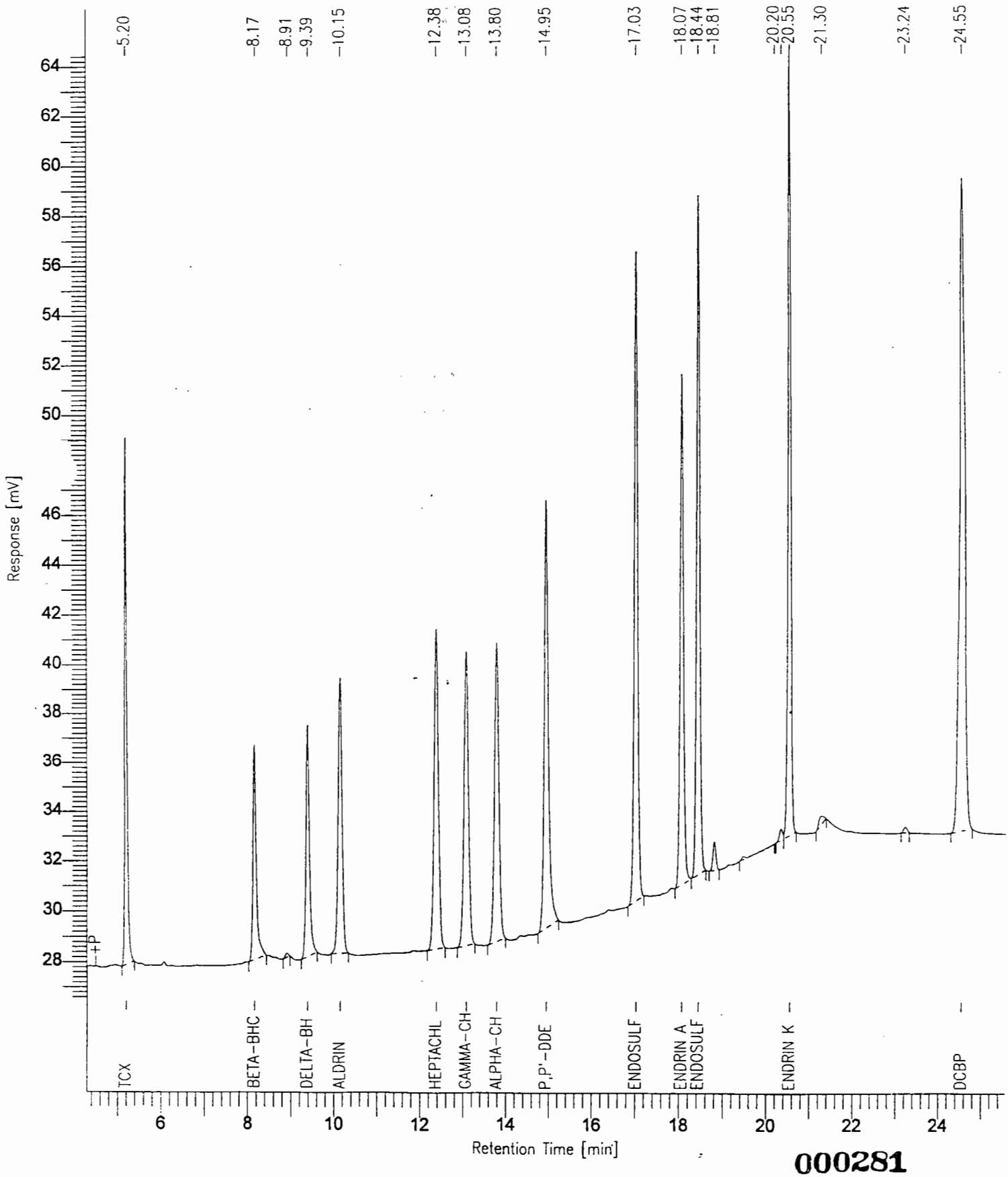
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	5.197	TCX	74192	B	21457	8e-15	0.0200
2	8.165	BETA-BHC	46388	B	8652	1e-14	0.0200
4	9.392	DELTA-BHC	51654	B	9308	-5e-15	0.0200
5	10.149	ALDRIN	69553	B	11148	-1e-15	0.0200
6	12.380	HEPTACHLOR EPOXIDE	88995	B	12910	-7e-15	0.0200
7	13.080	GAMMA-CHLORDANE	86274	B	11875	-9e-16	0.0200
8	13.795	ALPHA-CHLORDANE	86320	B	12073	4e-15	0.0200
9	14.946	P,P'-DDE	115356	B	17239	8e-16	0.0400
10	17.025	ENDOSULFAN B	139889	B	26172	0.0000	0.0400
11	18.067	ENDRIN ALDEHYDE	109462	B	20564	0.0000	0.0400
12	18.442	ENDOSULFAN SULFATE	136542	V	27350	6e-15	0.0400
16	20.548	ENDRIN KETONE	144849	V	31623	-2e-15	0.0400
19	24.550	DCBP	222323	B	26317	2e-15	0.0400
			1371797		236689		0.3800

9513354.2589

Chromatogram

Sa ame : ICV*INDBM*1
Fi : C:\TC4\HP58907\862A018.RAW
Method :
Start Time : 4.29 min End Time : 25.57 min
Scale Factor: 0.0 Plot Offset: 26 mV

Sample #:
Date : 7/22/94 12:09 PM
Time of Injection: 7/22/94 12:11 AM
Low Point : 26.47 mV High Point : 64.45 mV
Plot Scale: 38.0 mV



000281

Software Version: 4.0<1C29>
Sample Name : ICV*INDAH*1 Time : 7/22/94 12:09 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/19

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:51 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A019.RAW
Result File : C:\TC4\HP58907\862A019.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A019.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A019.RST
Calib Method : C:\TC4\HP58907\862AAH from C:\TC4\HP58907\862A019.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 23

DATA REPORT

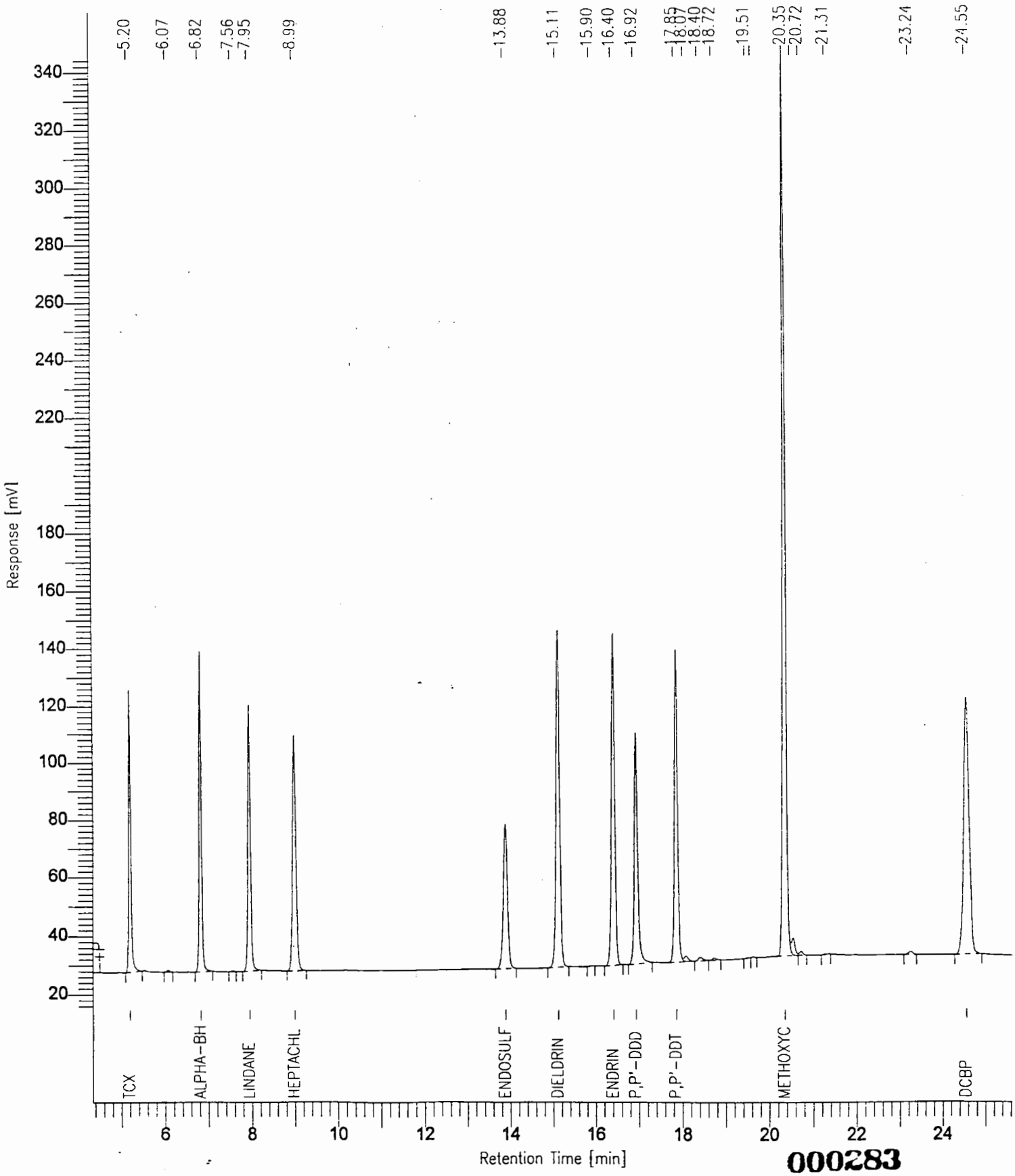
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	5.195	TCX	325140	B	98199	0.0000	0.0800
3	6.819	ALPHA-BHC	407067	B	111559	-2e-15	0.0800
5	7.945	LINDANE	390601	B	92856	4e-15	0.0800
6	8.993	HEPTACHLOR	450353	B	81698	4e-15	0.0800
7	13.881	ENDOSULFAN A	340784	B	49943	6e-15	0.0800
8	15.111	DIELDRIN	680977	B	117230	-5e-15	0.1600
10	16.400	ENDRIN	608653	B	115211	7e-15	0.1600
11	16.921	P,P'-DDD	435648	B	80094	6e-15	0.1600
12	17.849	P,P'-DDT	536481	B	108590	-7e-15	0.1600
18	20.353	METHOXYCHLOR	1458882	B	311764	-7e-15	0.8000
23	24.550	DCBP	780190	B	89147	4e-15	0.1600
			6414778		1256291		2.0000

9513354.2590

Chromatogram

Sa ame : ICV*INDAH*1
Fi : C:\TC4\HP58907\862A019.RAW
Me :
Start Time : 4.34 min End Time : 25.62 min
Scale Factor: 0.0 Plot Offset: 15 mV

Sample #:
Date : 7/22/94 12:09 PM
Time of Injection: 7/22/94 12:51 AM
Low Point : 14.82 mV High Point : 344.60 mV
Plot Scale: 329.8 mV



000283

Software Version: 4.0<1C29>
Sample Name : ICV*INDBH*1 Time : 7/22/94 12:10 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/20

Interface Serial # : NONE Data Acquisition Time: 7/22/94 01:31 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A020.RAW
Result File : C:\TC4\HP58907\862A020.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A020.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A020.RST
Calib Method : C:\TC4\HP58907\862ABH from C:\TC4\HP58907\862A020.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 24

DATA REPORT

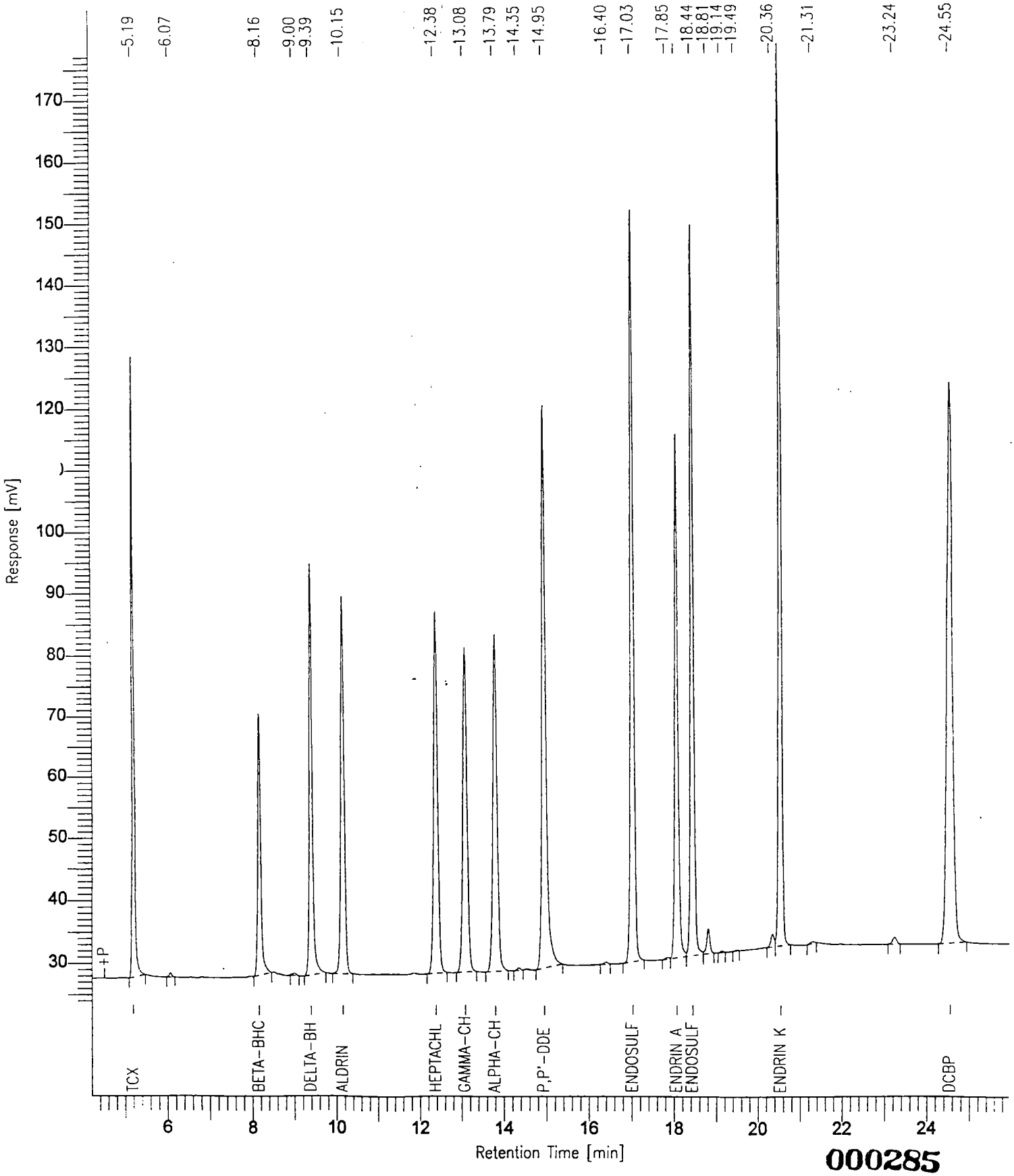
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	5.194	TCX	331778	B	100794	8e-15	0.0800
3	8.162	BETA-BHC	207448	B	42487	-7e-15	0.0800
5	9.390	DELTA-BHC	327500	B	67035	5e-15	0.0800
6	10.148	ALDRIN	348609	B	61193	-2e-15	0.0800
7	12.380	HEPTACHLOR EPOXIDE	385637	B	58588	4e-15	0.0800
8	13.079	GAMMA-CHLORDANE	370702	B	52668	5e-15	0.0800
9	13.793	ALPHA-CHLORDANE	380011	B	54590	-6e-15	0.0800
11	14.945	P,P'-DDE	583227	B	91125	-2e-15	0.1600
13	17.025	ENDOSULFAN B	641885	B	121826	-1e-14	0.1600
15	18.067	ENDRIN ALDEHYDE	439933	V	84698	-1e-15	0.1600
16	18.441	ENDOSULFAN SULFATE	589337	V	118143	0.0000	0.1600
21	20.547	ENDRIN KETONE	658966	V	144459	-2e-15	0.1600
24	24.551	DCBP	796055	B	90619	-7e-15	0.1600
			6061086		1088223		1.5200

95133554:2591

Chromatogram

Name : ICV*INDBH*1
Name : C:\TC4\HP58907\862A020.RAW
Method :
Start Time : 4.20 min End Time : 25.95 min
Scale Factor: 0.0 Plot Offset: 23 mV

Sample #:
Date : 7/22/94 12:10 PM
Time of Injection: 7/22/94 01:31 AM
Low Point : 23.37 mV High Point : 177.20 mV
Plot Scale: 153.8 mV



Software Version: 4.0<1C29>
Sample Name : MB*PIBLK*1 Time : 7/22/94 12:19 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/21

Interface Serial # : NONE Data Acquisition Time: 7/22/94 02:11 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A021.RAW
Result File : C:\TC4\HP58907\862A021.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A021.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A021.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A021.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 10

DATA REPORT

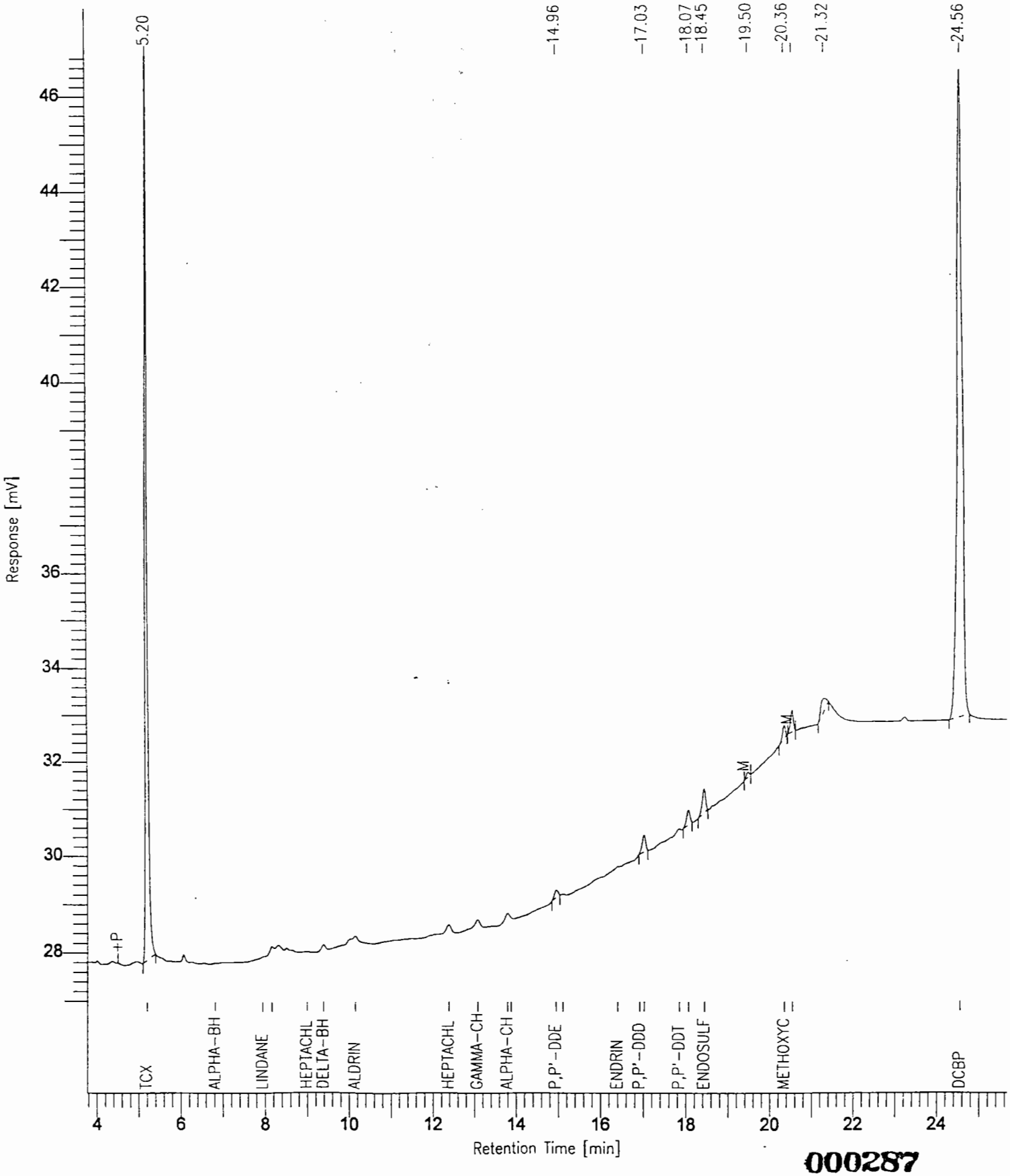
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	5.199	TCX	71501	B	20477	0.0433
10	24.555	DCBP	115912	B	13588	0.0173
			187412		34065	

9513354.2592

Chromatogram

Sa ame : MB*PIBLK*1
Fi : C:\TC4\HP58907\862A021.RAW
Me :
Start Time : 3.77 min End Time : 25.67 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:19 PM
Time of Injection: 7/22/94 02:11 AM
Low Point : 26.98 mV High Point : 46.87 mV
Plot Scale: 19.9 mV



000287

Software Version: 4.0<1C29>
Sample Name : CK*PEM*2 Time : 7/22/94 12:33 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/22

Interface Serial # : NONE Data Acquisition Time: 7/22/94 02:51 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A022.RAW
Result File : C:\TC4\HP58907\862A022.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A022.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A022.RST
Calib Method : C:\TC4\HP58907\862APEM from C:\TC4\HP58907\862A022.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 777.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 16

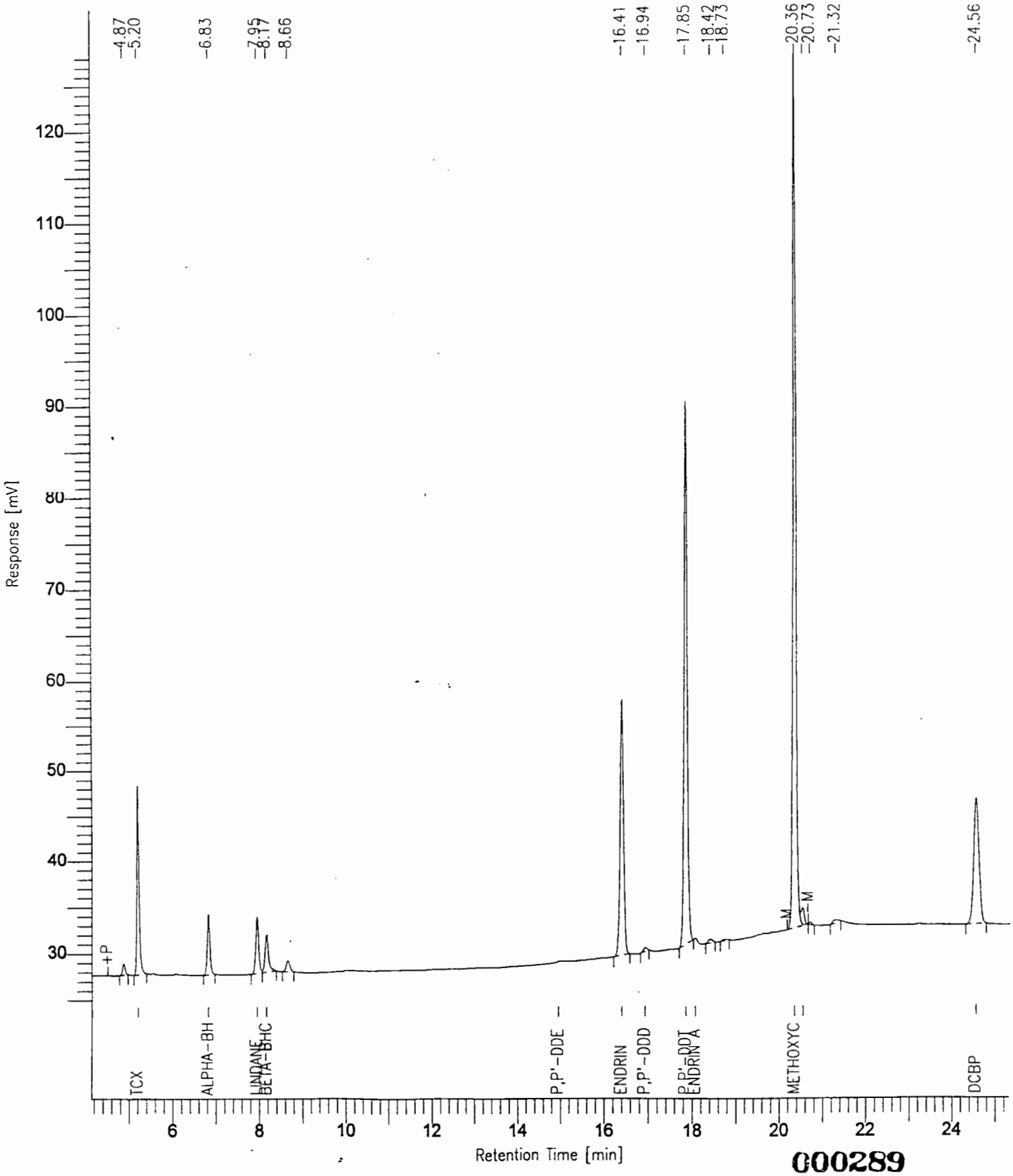
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	5.200	TCX	71344	B	20639	0.0507
3	6.825	ALPHA-BHC	27816	B	6504	0.0553
4	7.951	LINDANE	29394	B	6120	0.0435
5	8.170	BETA-BHC	22761	V	4053	0.0554
7	16.405	ENDRIN	152534	B	28242	0.0317
8	16.936	P,P'-DDD	2200	B	388	0.0743
9	17.854	P,P'-DDT	291109	B	59404	0.0245
12	20.356	METHOXYCHLOR	449569	*B	96036	0.0167
13	20.547	ENDRIN KETONE	9236	*E	1747	-0.0035
16	24.558	DCBP	114717	B	13750	0.0272
			1170680		236883	

Chromatogram

Sa ame : CK*PEM*2
Fi : C:\TC4\HP58907\862A022.RAW
Me :
Start Time : 4.14 min End Time : 25.33 min
Scale Factor: 0.0 Plot Offset: 24 mV

Sample #:
Date : 7/22/94 12:33 PM
Time of Injection: 7/22/94 02:51 AM
Low Point : 24.30 mV High Point : 128.13 mV
Plot Scale: 103.8 mV



Software Version: 4.0<1C29>
Sample Name : HEXANE Time : 7/22/94 01:52 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/25

Interface Serial # : NONE Data Acquisition Time: 7/22/94 04:52 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A025.RAW
Result File : C:\TC4\HP58907\862A025.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A025.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A025.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A025.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 89

DATA REPORT

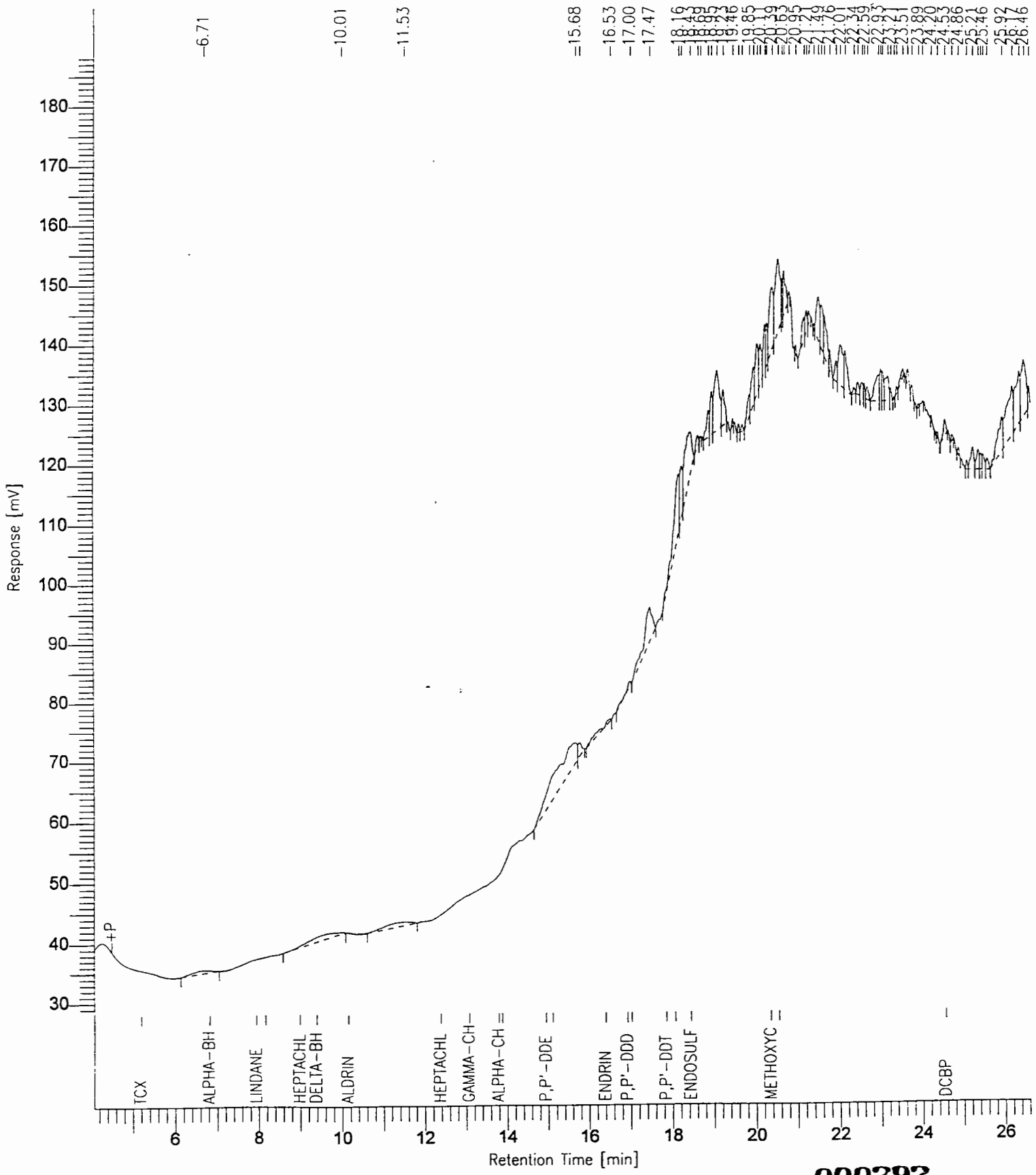
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	6.712		16886	B	481	-------
2	10.014		40782	B	268	-------
3	11.527		31813	B	599	-------
4	15.680		193457	B	3480	-------
5	15.783		14839	V	2332	-------
6	16.529		16344	B	385	-------
7	16.997	ENDOSULFAN B	7617	B	740	-0.1635
8	17.466		84090	B	5949	-------
9	18.158	ENDRIN ALDEHYDE	102224	B	9955	0.5052
10	18.227		44054	V	8904	-------
11	18.432	ENDOSULFAN SULFATE	104223	V	7480	-0.0525
12	18.620		9007	B	1892	-------
14	18.873		21888	B	4464	-------
15	18.950		29190	V	7192	-------
16	19.078		92193	V	10038	-------

P	Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
17	19.228		29446	V	5996	-------
21	19.852		18771	B	3664	-------
22	19.952		33203	V	6129	-------
23	20.037		42698	V	8280	-------
24	20.109		30202	V	6793	-------
25	20.222		30111	V	7680	-------
26	20.261		20163	V	7151	-------
27	20.390	METHOXYCHLOR	75376	V	10505	0.1835
28	20.535	ENDRIN KETONE	105806	V	12239	-0.0645
29	20.631		13636	V	6955	-------
30	20.669		31531	V	7507	-------
33	21.150		18602	B	3793	-------
34	21.207		13068	V	3629	-------
35	21.265		5865	V	2255	-------
37	21.490		39494	V	7285	-------
38	21.565		35177	V	7270	-------
39	21.633		35079	V	6843	-------
40	21.759		10775	V	3395	-------
41	21.912		12055	B	3459	-------
42	22.010		52493	V	6731	-------
43	22.124		33352	V	6403	-------
44	22.339		4097	B	1133	-------
45	22.429		7737	B	2007	-------
46	22.539		10087	V	2371	-------
47	22.587		5953	V	2462	-------
48	22.660		8473	V	2203	-------
49	22.926		32475	B	4325	-------
50	22.980		17287	V	5257	-------
51	23.023		14778	V	4995	-------
52	23.149		26405	V	4078	-------
53	23.214		5677	V	2128	-------
	23.510		8547	B	1494	-------
	1.626		7702	B	2480	-------
	.3.730		5316	V	1918	-------
63	24.526	DCBP	12229	B	2773	-0.1028
66	25.059		4246	B	1543	-------
67	25.207		20878	V	3726	-------
68	25.342		15934	V	3401	-------
69	25.405		9036	V	2722	-------
70	25.458		10111	V	2578	-------
71	25.553		7819	V	1836	-------
72	25.918		54945	B	5739	-------
73	26.170		99513	V	8110	-------
74	26.346		74417	V	8706	-------
75	26.455		82394	V	9529	-------
76	26.580		9463	V	3763	-------
77	27.145		7361	B	1557	-------
78	27.285		7147	B	1747	-------
80	27.531		9452	B	1876	-------
82	27.933		8601	B	2233	-------
83	27.991		13391	V	2741	-------
84	28.185		22705	V	3716	-------
85	28.408		124964	V	11012	-------
86	28.491		116223	V	10290	-------
87	29.234		13283	B	1615	-------
88	29.688		78614	B	6122	-------
89	29.884		9100	V	1694	-------
			2461870		334005	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862A025.RAW
Method :
Start Time : 4.08 min End Time : 26.62 min
Scale Factor: 0.0 Plot Offset: 28 mV

Sample #:
Date : 7/22/94 01:52 PM
Time of Injection: 7/22/94 04:52 AM
Low Point : 28.07 mV High Point : 188.48 mV
Plot Scale: 160.4 mV



9513394.2595

Software Version: 4.0<1C29>
Sa Name : HEXANE Time : 7/22/94 02:08 PM
Sa e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/27

Interface Serial # : NONE Data Acquisition Time: 7/22/94 06:12 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A027.RAW
Result File : C:\TC4\HP58907\862A027.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A027.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A027.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A027.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 89

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	6.686		24659	B	637	-------
2	9.998		44483	B	309	-------
3	15.657		107096	B	1787	-------
4	16.254		12678	B	493	-------
6	17.422		120926	B	8222	-------
	[illegible].750	P,P'-DDT	10521	V	1260	-0.5578
	390		334430	B	16225	-------
[illegible]	447	ENDOSULFAN SULFATE	113015	V	14346	0.0271
10	18.628		44742	V	8834	-------
11	18.759		66171	V	8116	-------
12	18.984		142876	V	13269	-------
13	19.072		44108	V	10716	-------
14	19.191		72056	V	9119	-------
15	[illegible].309		4657	V	1651	-------
16	[illegible].366		7635	V	2802	-------

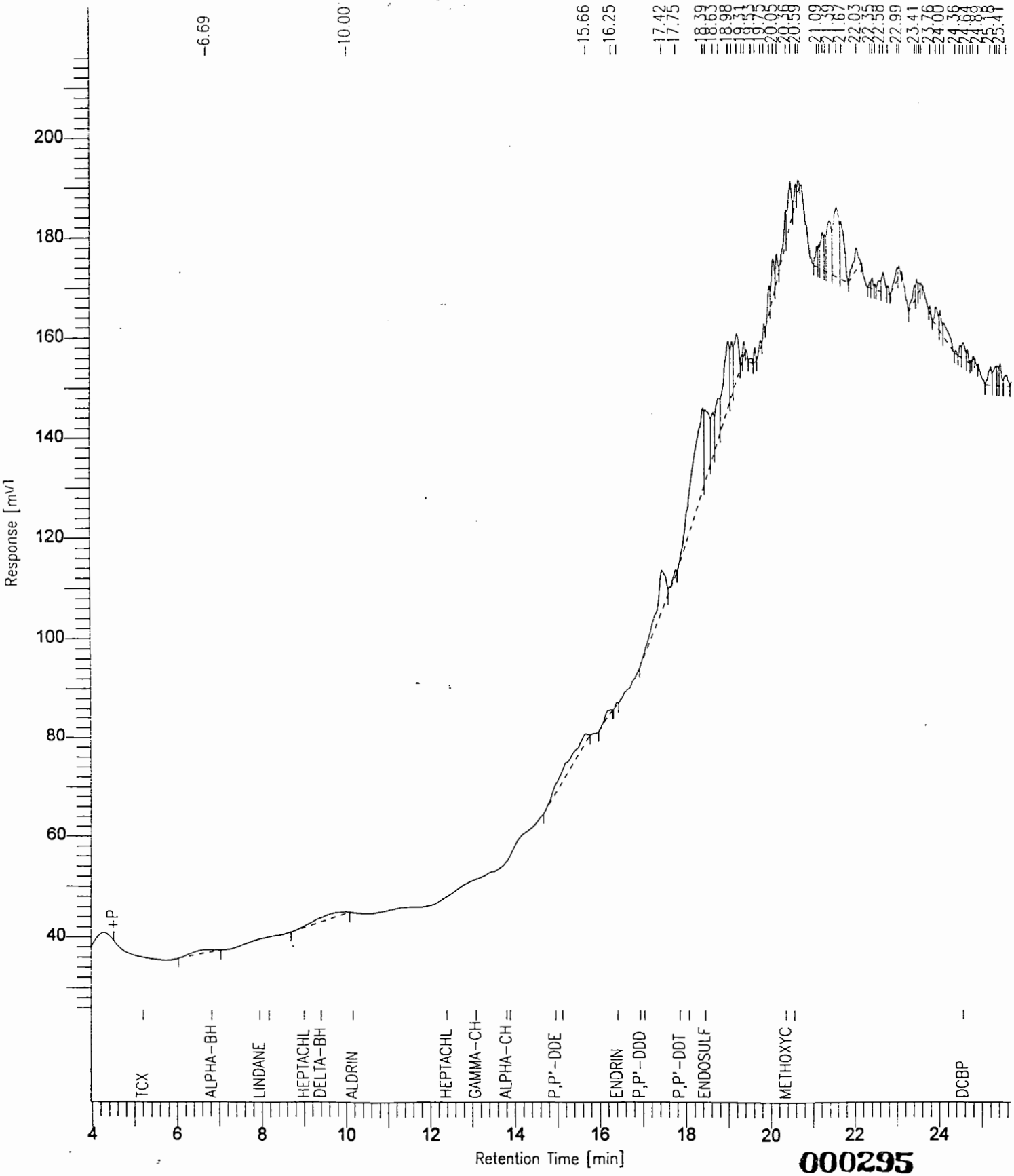
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
17	19.531		4122	B	922	-------
18	19.621		7109	B	2855	-------
19	19.754		6919	B	1666	-------
20	19.832		6068	B	2298	-------
21	19.963		21553	B	5661	-------
22	20.050		41068	V	7922	-------
23	20.139		21945	V	5735	-------
24	20.357	METHOXYCHLOR	33305	V	6952	0.0172
25	20.467		57382	V	8802	-------
26	20.593	ENDRIN KETONE	15910	V	3832	0.2191
27	20.650		8232	V	2710	-------
28	21.086		14842	B	4151	-------
29	21.133		11875	V	4715	-------
30	21.218		40473	V	7471	-------
31	21.278		19840	V	7338	-------
32	21.385		79159	V	10501	-------
33	21.551		138986	V	14025	-------
34	21.672		81713	V	11738	-------
35	22.025		40048	B	4527	-------
37	22.402		7152	V	2239	-------
39	22.582		10964	V	2171	-------
40	22.661		21501	V	4122	-------
41	22.767		4554	V	1716	-------
42	22.993		15381	B	2675	-------
43	23.040		6575	V	2287	-------
44	23.405		18304	B	3222	-------
45	23.456		10404	V	3564	-------
46	23.514		5262	V	1858	-------
49	23.903		20399	B	3777	-------
50	23.999		16040	V	4150	-------
51	24.089		27660	V	2804	-------
53	24.468		7530	B	2296	-------
54	24.540	DCBP	17023	V	3304	-0.0449
55	24.637		6161	V	2434	-------
59	25.179		21297	B	3660	-------
60	25.303		21175	V	3942	-------
61	25.341		12146	V	4090	-------
62	25.406		17383	V	4568	-------
63	25.550		15077	V	2455	-------
64	26.091		114305	B	6648	-------
65	26.478		99485	V	6580	-------
66	26.857		4067	B	1577	-------
68	27.088		4554	V	1224	-------
69	27.147		7496	V	1886	-------
70	27.229		18116	V	3283	-------
71	27.366		8414	V	2208	-------
72	27.515		9032	B	1833	-------
75	27.776		4306	B	1274	-------
76	27.987		5375	B	897	-------
78	28.207		8252	B	1607	-------
79	28.428		24695	B	3357	-------
80	28.500		4776	V	1575	-------
84	29.172		4380	B	1231	-------
85	29.317		4414	B	1497	-------
86	29.483		5433	B	1024	-------
87	29.628		10497	B	1631	-------
			2420194		312268	

9513354.2596

Chromatogram

S: Name : HEXANE
F: : C:\TC4\HP58907\862A027.RAW
M: :
Start Time : 3.96 min End Time : 25.67 min
Scale Factor: 0.0 Plot Offset: 26 mV

Sample #:
Date : 7/22/94 02:08 PM
Time of Injection: 7/22/94 06:12 AM
Low Point : 25.69 mV High Point : 216.49 mV
Plot Scale: 190.8 mV



Software Version: 4.0<1C29>
Sample Name : HEXANE
Time : 7/22/94 02:45 PM
Sample Number:
Study :
Operator : VIC

Instrument : HP5890A_-_7
Channel : A
A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/29

Interface Serial # : NONE
Data Acquisition Time: 7/22/94 07:32 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A029.RAW
Result File : C:\TC4\HP58907\862A029.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A029.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A029.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A029.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul
Area Reject : 3953.000000
Sample Amount : 1.0000
Dilution Factor : 1.00

Noise Threshold: 15
Area Threshold : 444
Bunch Factor: 1
Multiplier : 1.0000
Divisor : 1.0000
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 43

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	15.686		115544	B	1634	-------
2	17.441		34631	B	3824	-------
3	18.422	ENDOSULFAN SULFATE	316981	B	8778	-0.1077
4	18.751		102393	V	6706	-------
5	18.980		92948	V	6469	-------
7	19.675		11557	B	1168	-------
9	20.035		19875	B	2871	-------
10	20.114		8190	V	1724	-------
11	20.456	METHOXYCHLOR	14855	B	1643	0.5059
12	20.551	ENDRIN KETONE	5030	V	899	0.0139
14	21.274		16065	B	2510	-------
15	21.328		6236	V	1815	-------
17	21.678		4654	B	845	-------
18	22.048		21582	B	2677	-------
19	22.160		16387	V	2509	-------

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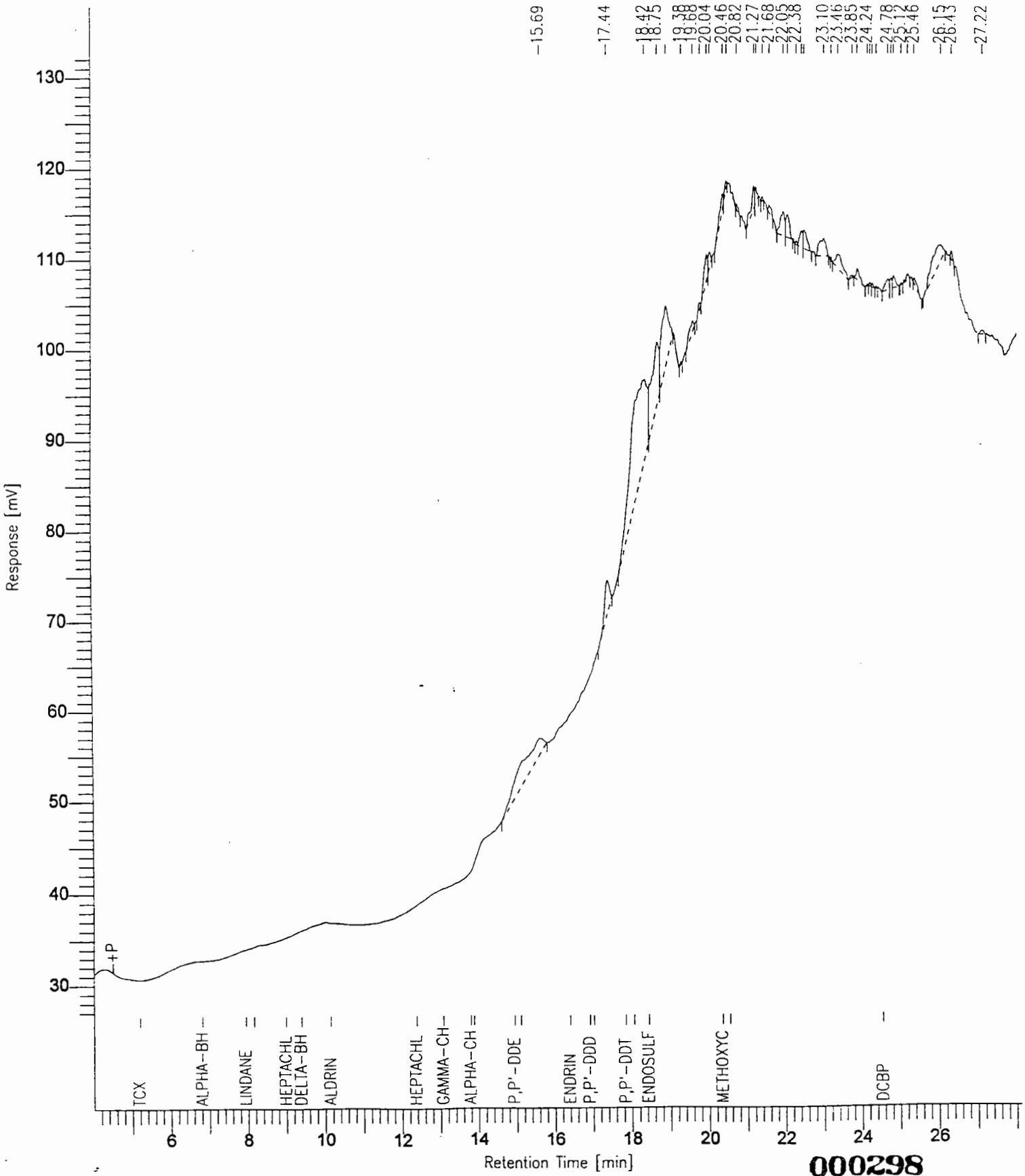
Peak	Det Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
21	22.526		10494	V	1856	-------
22	22.585		14278	V	2075	-------
23	23.095		23031	B	1955	-------
25	23.464		20273	B	1515	-------
27	23.974		7684	B	1254	-------
32	24.777		8955	B	1223	-------
33	24.857		4570	V	1204	-------
34	24.921		6833	V	1361	-------
38	26.145		47808	B	1788	-------
41	28.413		9589	B	904	-------
42	29.556		12283	B	976	-------
			952726		62184	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862A029.RAW
Method :
Start Time : 4.01 min End Time : 28.11 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 02:45 PM
Time of Injection: 7/22/94 07:32 AM
Low Point : 26.59 mV High Point : 132.59 mV
Plot Scale: 106.0 mV



9513354.2598

Software Version: 4.0<1C29>
Sample Name : HEXANE
Sample Number:
Operator : VIC

Time : 7/22/94 02:45 PM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/30

Channel : A A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 08:12 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A030.RAW
Result File : C:\TC4\HP58907\862A030.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A030.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A030.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A030.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 3953.000000
Dilution Factor : 1.00

Noise Threshold: 15
Area Threshold : 444
Bunch Factor: 1
Multiplier : 1.0000
Divisor : 1.0000
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 15

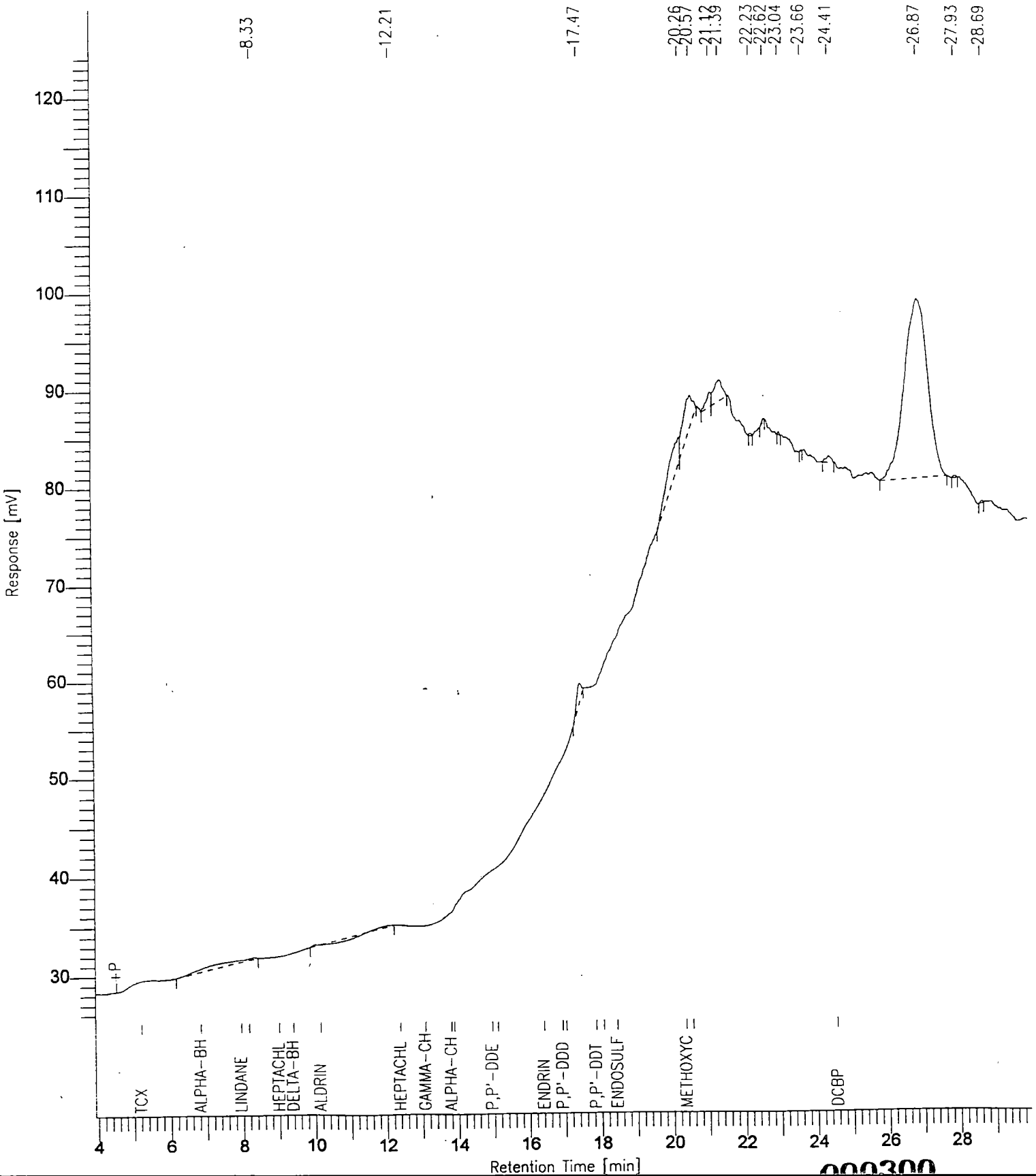
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	8.331		32855	B	141	-------
2	12.206		7650	B	17	-------
3	17.468		18670	B	1918	-------
4	20.262	METHOXYCHLOR	77158	B	2615	-0.4468
5	20.572	ENDRIN KETONE	71545	V	3300	0.1159
[illegible]	[illegible]1.120		14134	B	1544	-------
[illegible]	[illegible].385		36165	V	2161	-------
1[illegible]	[illegible].412	DCBP	7081	B	697	-0.5680
13	[illegible]6.870		843136	B	18478	-------
			1108393		30870	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862A030.RAW
Method :
Start Time : 3.91 min End Time : 29.95 min
Scale Factor: 0.0 Plot Offset: 25 mV

Sample #:
Date : 7/22/94 02:45 PM
Time of Injection: 7/22/94 08:12 AM
Low Point : 25.20 mV High Point : 124.20 mV
Plot Scale: 99.0 mV



9513354.2599

Software Version: 4.0<1C29>
Sample Name : HEXANE
Sample Number:
Operator : VIC

Time : 7/22/94 02:46 PM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/31

Channel : A A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 08:53 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A031.RAW
Result File : C:\TC4\HP58907\862A031.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A031.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A031.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A031.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 3953.000000
Dilution Factor : 1.00

N__ Threshold: 15
Area Threshold : 444
Bunch Factor: 1
Multiplier : 1.0000
Divisor : 1.0000
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 9

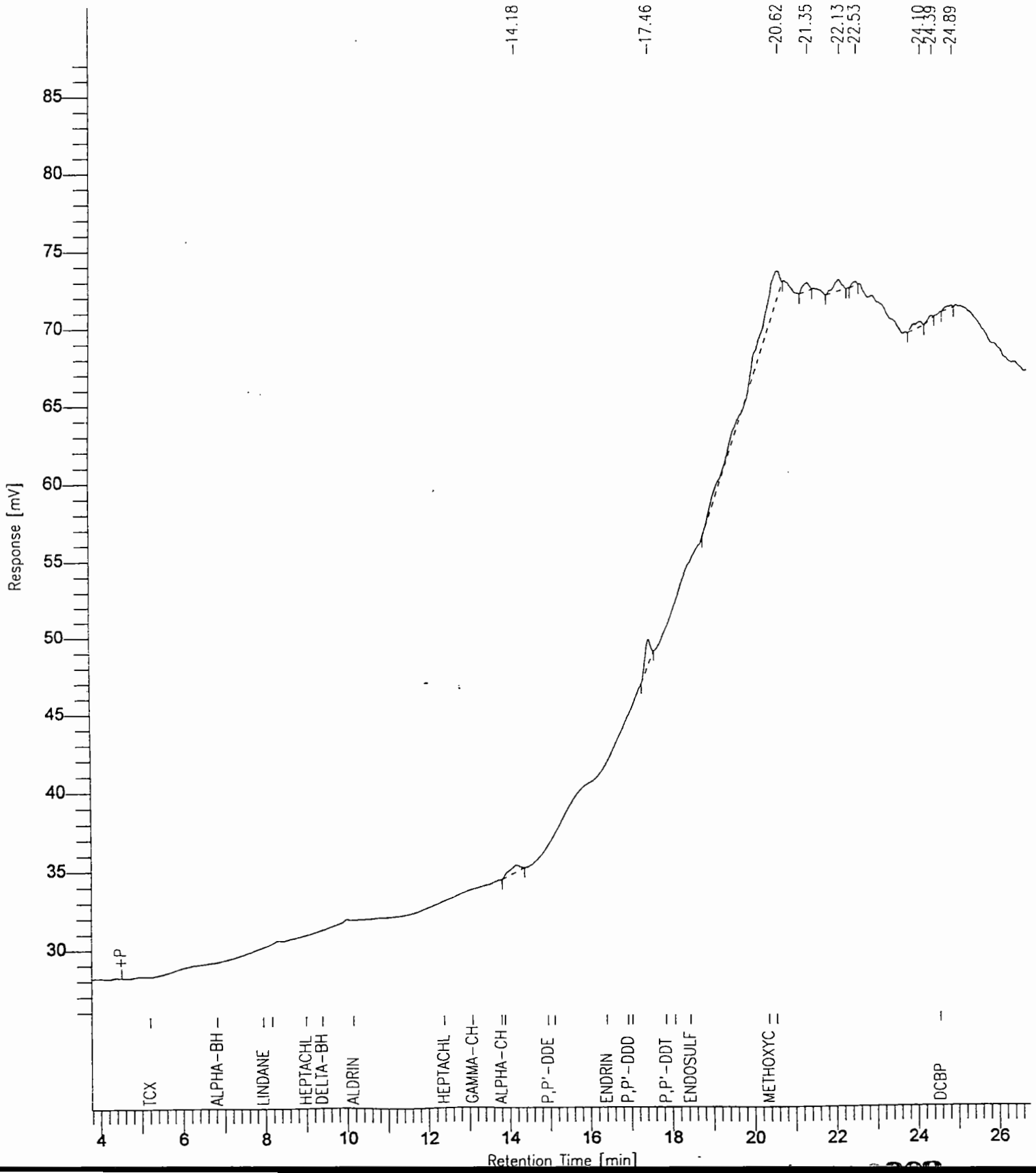
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	14.180		8885	B	440	-------
2	17.460		15751	B	1691	-------
3	20.623	ENDRIN KETONE	85738	B	1789	0.3632
4	21.349		6234	B	561	-------
5	22.127		10186	B	752	-------
7	24.095		6151	B	371	-------
			132945		5605	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862A031.RAW
Method :
Start Time : 3.77 min End Time : 26.75 min
Scale Factor: 0.0 Plot Offset: 26 mV

Sample #:
Date : 7/22/94 02:46 PM
Time of Injection: 7/22/94 08:53 AM
Low Point : 25.71 mV High Point : 87.74 mV
Plot Scale: 62.0 mV



Software Version: 4.0<1C29>
Sample Name : HEXANE
Sample Number:
Operator : VIC

Time : 7/22/94 02:46 PM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/32

Channel : A A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 09:33 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A032.RAW
Result File : C:\TC4\HP58907\862A032.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A032.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A032.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A032.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 3953.000000
Dilution Factor : 1.00

Noise Threshold: 15
Area Threshold : 444
Bunch Factor: 1
Multiplier : 1.0000
Divisor : 1.0000
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 5

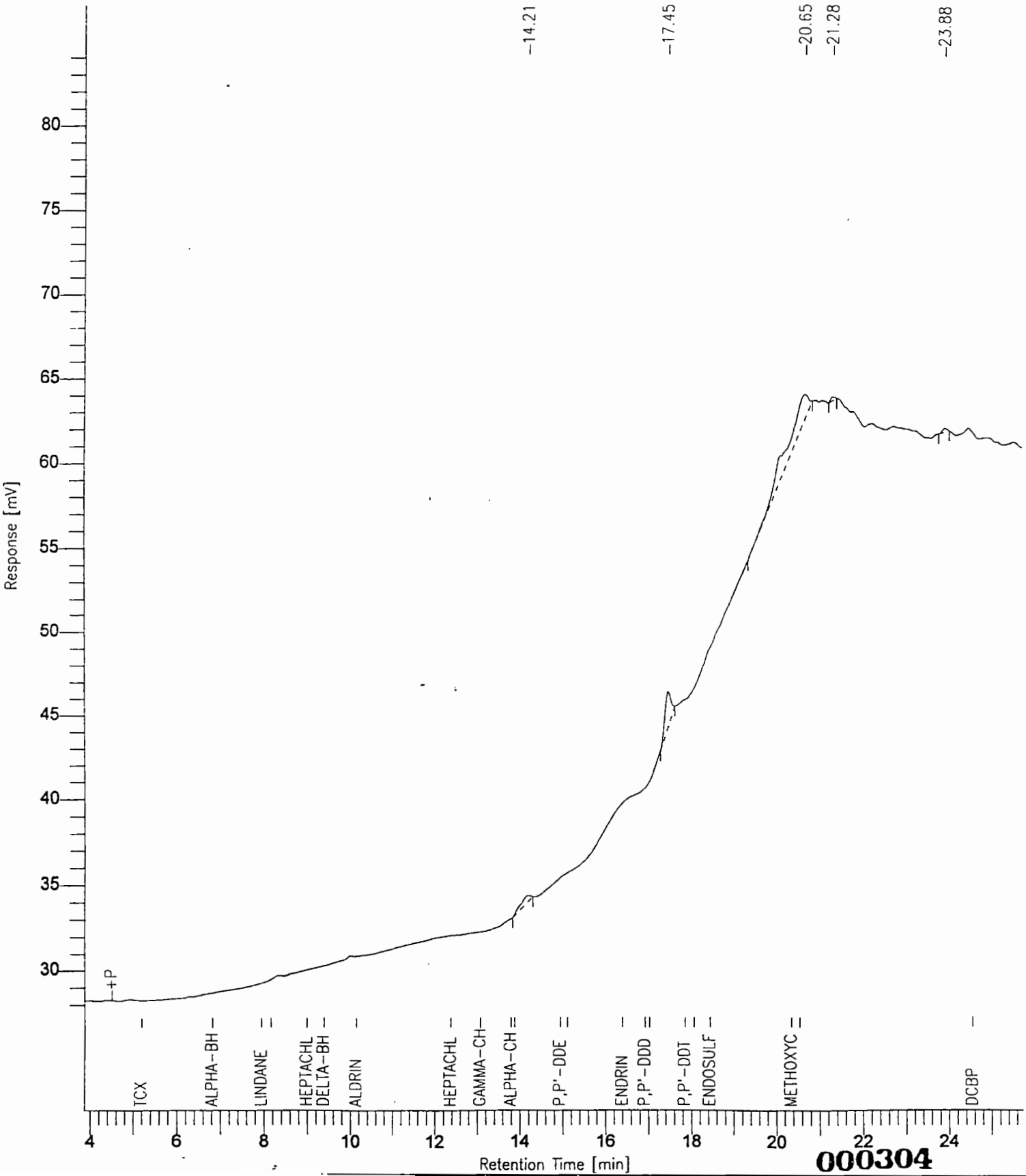
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	14.211		7267	B	319	-------
2	17.454		21310	B	2176	-------
3	20.649	ENDRIN KETONE	64424	B	1408	0.4898
			93000		3904	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862A032.RAW
Method :
Start Time : 3.87 min End Time : 25.76 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 02:46 PM
Time of Injection: 7/22/94 09:33 AM
Low Point : 27.23 mV High Point : 84.30 mV
Plot Scale: 57.1 mV



Software Version: 4.0<1C29>
S le Name : HEXANE Time : 7/25/94 09:56 AM
S e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/35

Interface Serial # : NONE Data Acquisition Time: 7/22/94 11:34 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A035.RAW
Result File : C:\TC4\HP58907\862A035.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A035.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A035.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A035.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 20

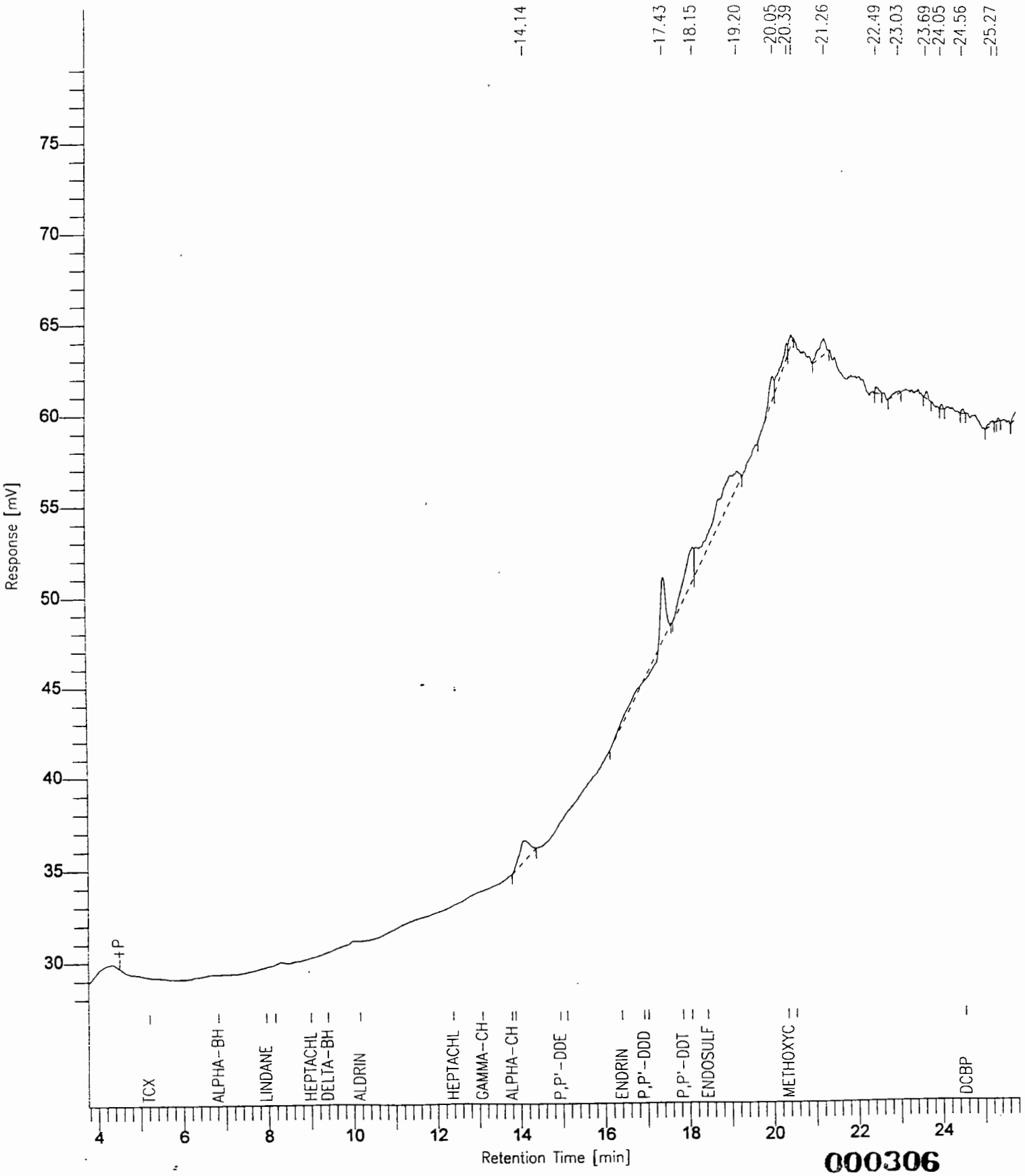
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	14.140		19603	B	1054	-------
2	17.426		33789	B	3501	-------
3	18.146	ENDRIN ALDEHYDE	33350	B	1801	0.4351
4	19.196		71760	V	909	-------
5	20.050		12437	B	1309	-------
6	20.390	METHOXYCHLOR	11572	V	826	0.1798
	1.263		10910	B	892	-------
	7.061		6190	B	233	-------
			199611		10523	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862A035.RAW
Method :
Start Time : 3.75 min End Time : 25.82 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/25/94 09:56 AM
Time of Injection: 7/22/94 11:34 AM
Low Point : 27.24 mV High Point : 79.78 mV
Plot Scale: 52.5 mV



9513554.2602

Software Version: 4.0<1C29>
Sample Name : MB*PIBLK*2 Time : 7/25/94 09:57 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/36

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:14 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A036.RAW
Result File : C:\TC4\HP58907\862A036.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A036.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A036.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A036.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 10

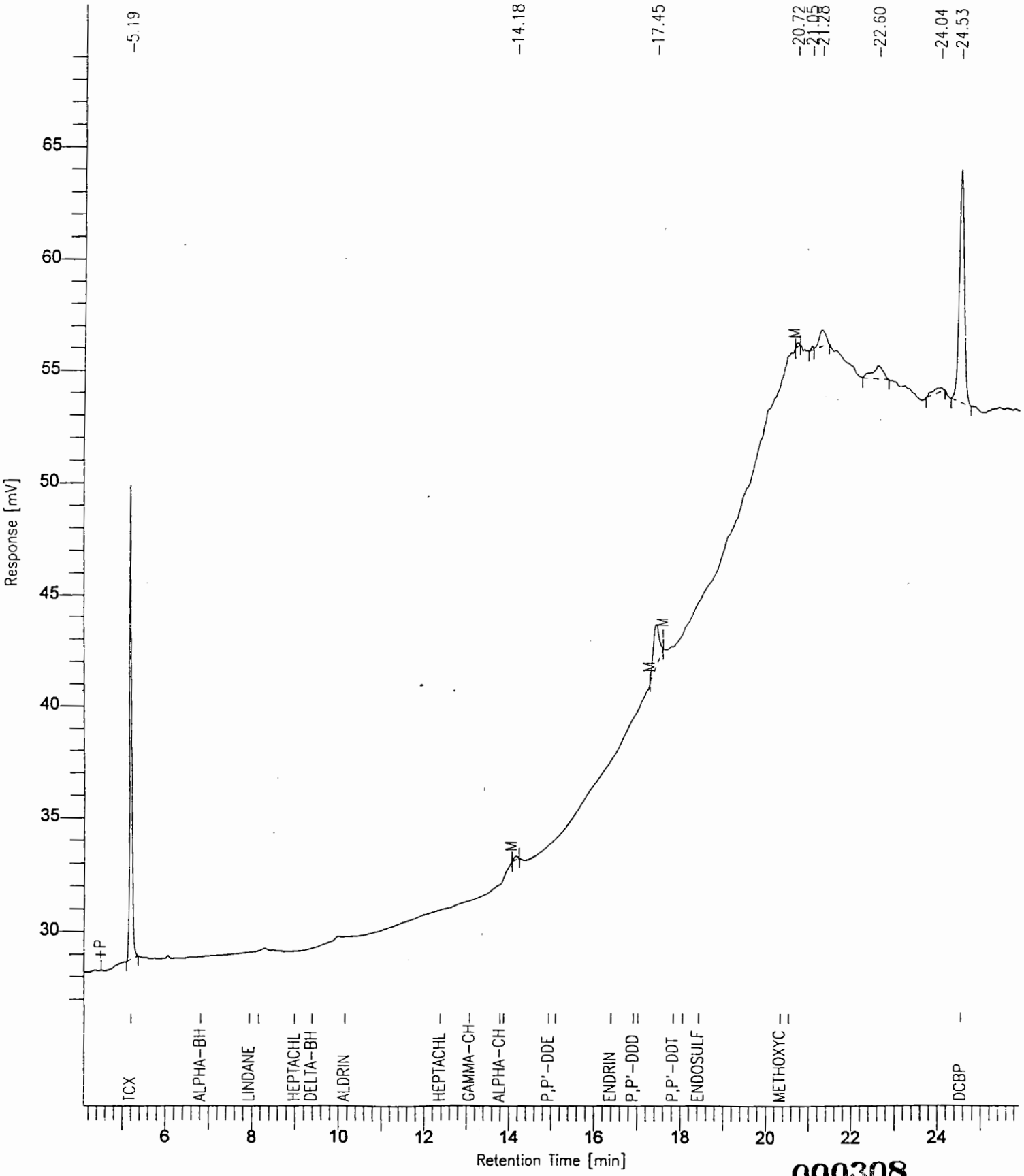
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	5.192	TCX	70914	B	21201	-0.1002
3	17.448		18108	*B	1893	-------
6	21.283		7784	V	730	-------
7	22.600		10161	B	577	-------
9	24.529	DCBP	86595	B	10458	-0.0904
10	26.683		14283	B	634	-------
--			207845		35493	

Chromatogram

Sample Name : MB*PIBLK*2
FileName : C:\TC4\HP58907\862A036.RAW
Method :
Start Time : 4.09 min End Time : 25.91 min
Scale Factor: 0.0 Plot Offset: 26 mV

Sample #:
Date : 7/25/94 09:57 AM
Time of Injection: 7/22/94 12:14 PM
Low Point : 26.38 mV High Point : 69.20 mV
Plot Scale: 42.8 mV



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Software Version: 4.0<1C29>
Sample Name : CCS*INDAM*2 Time : 7/25/94 09:58 AM
S e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/37

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:54 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A037.RAW
Result File : C:\TC4\HP58907\862A037.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A037.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A037.RST
Calib Method : C:\TC4\HP58907\862AAM from C:\TC4\HP58907\862A037.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

N Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 19

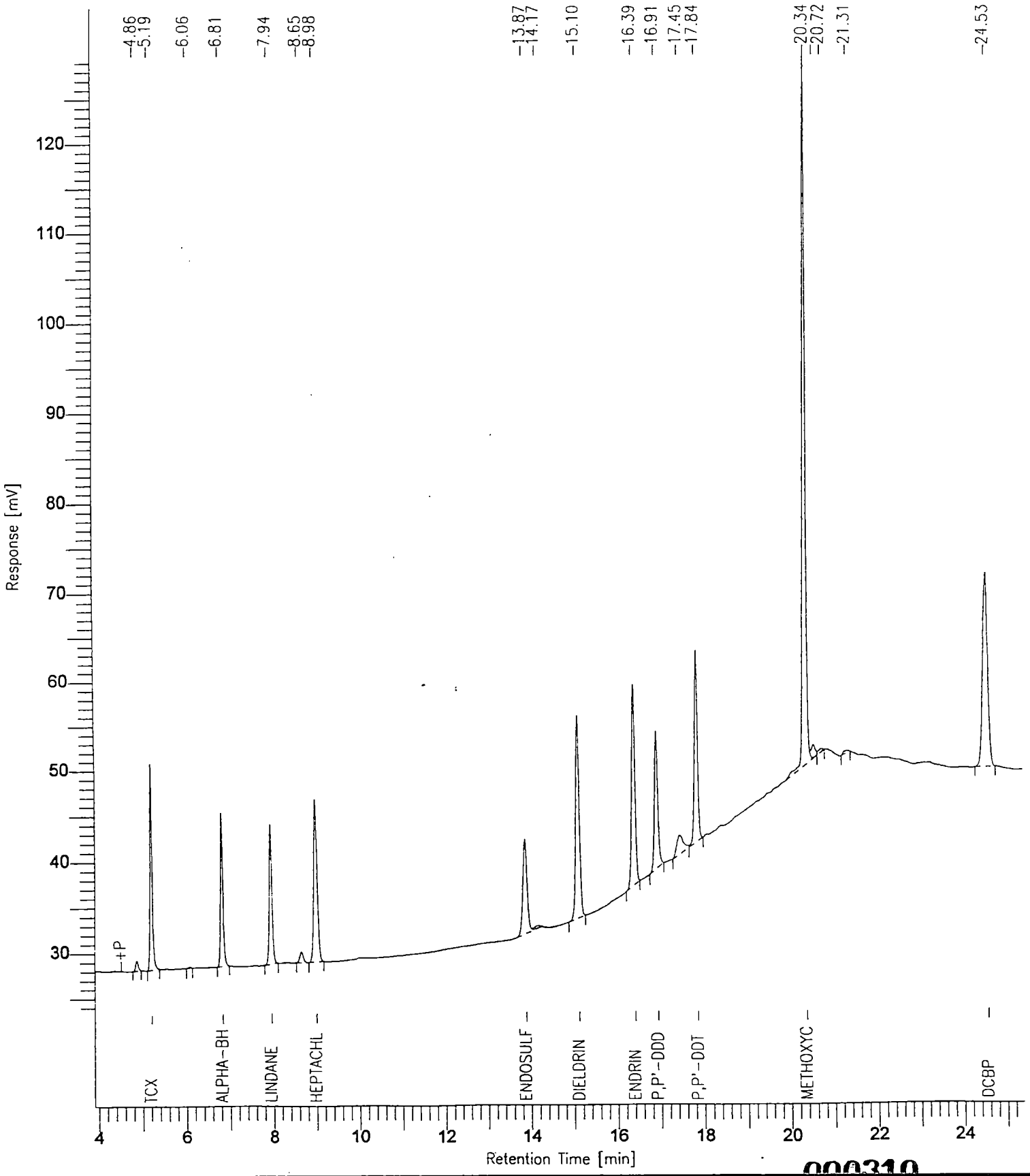
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	5.190	TCX	76112	B	23004	-0.1430	0.0200
4	6.811	ALPHA-BHC	64555	B	16915	-0.1465	0.0200
5	7.936	LINDANE	67624	B	15469	-0.1414	0.0200
7	8.983	HEPTACHLOR	100085	B	17901	-0.1289	0.0200
8	13.865	ENDOSULFAN A	72833	B	10416	-0.0985	0.0200
10	15.095	DIELDRIN	132521	B	22470	-0.0914	0.0400
	16.386	ENDRIN	119938	B	22404	-0.0865	0.0400
	.909	P,P'-DDD	81614	B	15324	-0.0878	0.0400
--	.839	P,P'-DDT	107477	V	21562	-0.0609	0.0400
15	20.343	METHOXYCHLOR	365407	B	79929	-0.0514	0.2000
19	24.534	DCBP	179185	B	21948	-0.0697	0.0400
			1367350		267343		0.5000

Chromatogram

Sample Name : CCS*INDAM*2
FileName : C:\TC4\HP58907\862A037.RAW
Method :
Start Time : 3.90 min End Time : 25.39 min
Scale Factor: 0.0 Plot Offset: 23 mV

Sample #:
Date : 7/25/94 09:58 AM
Time of Injection: 7/22/94 12:54 PM
Low Point : 23.28 mV High Point : 129.74 mV
Plot Scale: 106.5 mV



Software Version: 4.0<1C29>
Sample Name : CCS*INDBM*2 Time : 7/25/94 09:58 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/38

Interface Serial # : NONE Data Acquisition Time: 7/22/94 01:34 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A038.RAW
Result File : C:\TC4\HP58907\862A038.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A038.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A038.RST
Calib Method : C:\TC4\HP58907\862ABM from C:\TC4\HP58907\862A038.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Peak Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 18

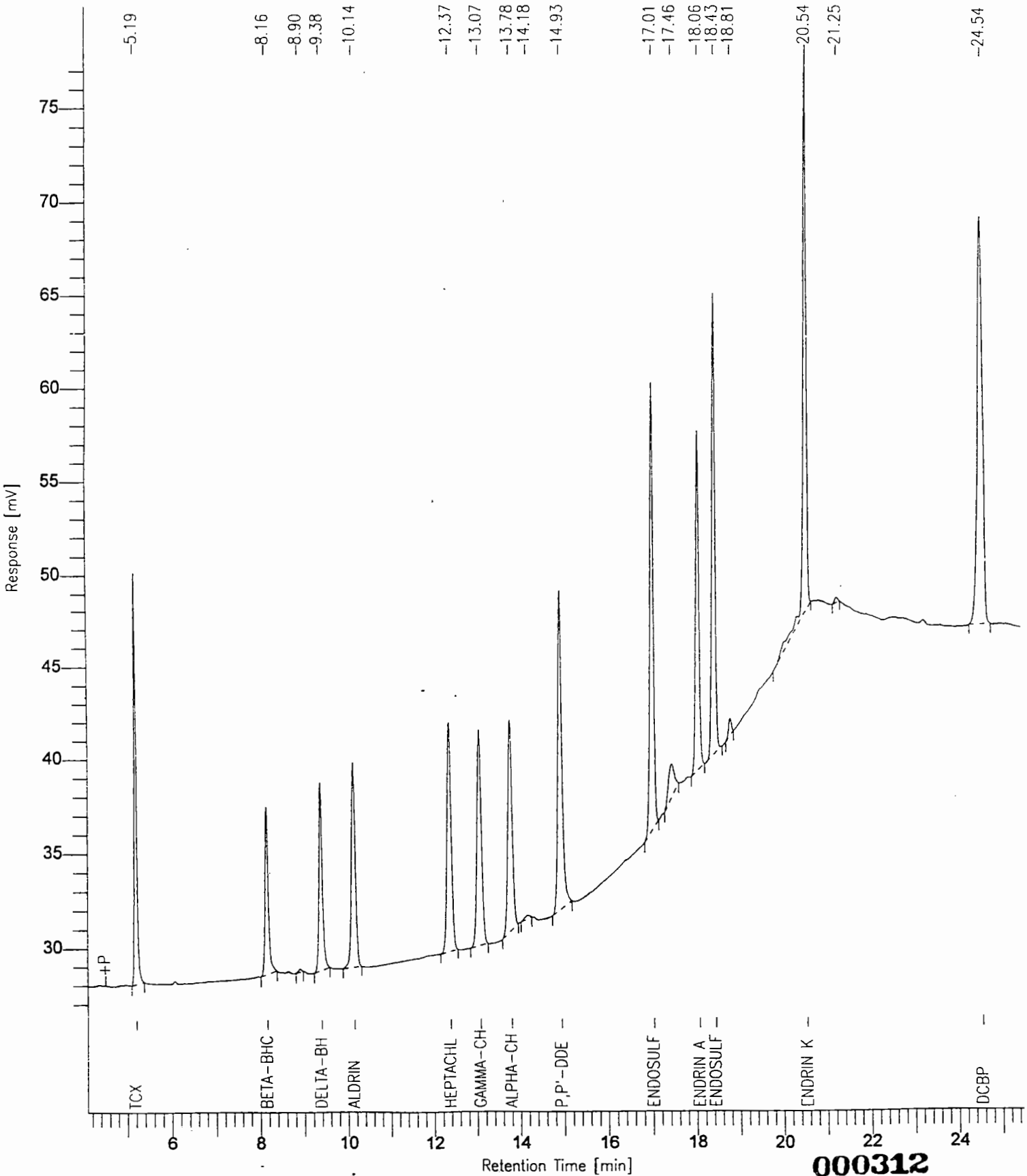
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	5.190	TCX	75771	B	22282	-0.1234	0.0200
2	8.155	BETA-BHC	45752	B	8940	-0.1156	0.0200
4	9.380	DELTA-BHC	52979	B	9997	-0.1248	0.0200
5	10.138	ALDRIN	69029	B	10921	-0.1057	0.0200
6	12.369	HEPTACHLOR EPOXIDE	84485	B	12238	-0.0930	0.0200
[illegible]	13.067	GAMMA-CHLORDANE	81879	B	11484	-0.1024	0.0200
	13.782	ALPHA-CHLORDANE	78586	B	11285	-0.1014	0.0200
	14.934	P,P'-DDE	110636	B	17164	-0.0787	0.0400
11	17.014	ENDOSULFAN B	126758	B	24144	-0.0627	0.0400
13	18.059	ENDRIN ALDEHYDE	95267	B	18401	-0.0464	0.0400
14	18.434	ENDOSULFAN SULFATE	122762	V	24901	-0.0420	0.0400
16	20.541	ENDRIN KETONE	148488	B	29933	-0.0373	0.0400
18	24.538	DCBP	182645	B	22053	-0.0470	0.0400
			1275038		223742		0.3800

Chromatogram

Sample Name : CCS*INDBM*2
FileName : C:\TC4\HP58907\862A038.RAW
Method :
Start Time : 4.09 min End Time : 25.48 min
Scale Factor: 0.0 Plot Offset: 26 mV

Sample #:
Date : 7/25/94 09:58 AM
Time of Injection: 7/22/94 01:34 PM
Low Point : 26.19 mV High Point : 77.93 mV
Plot Scale: 51.7 mV



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Secondary Column

Turbochrom Sequence File : C:\TC4\HP58907\862B.SEQ
Created by : VIC on : 7/25/94 10:07 AM
Edited by : VIC on : 7/25/94 10:29 AM
Description :

Number of Times Edited : 4

Sequence File Header Information:

Number of Rows : 39
Instrument Type : 760 / 900 Series Intelligent Interface
Injection Type : DUAL

Sequence Sample Descriptions - Channel B

Row	Type	Sample Name	Sample Number	Study Name	Sample Amount	ISTD Amount	Sample Volume	Dil. Factor	Mult	Divisor	Addend
1	Sample	RESC			1.000	1.000	1.000	1.000	1.000	1.000	0.000
2	Sample	RESC			1.000	1.000	1.000	1.000	1.000	1.000	0.000
3	Sample	INDAH			1.000	1.000	1.000	1.000	1.000	1.000	0.000
4	Sample	INDBH			1.000	1.000	1.000	1.000	1.000	1.000	0.000
5	Sample	PESC			1.000	1.000	1.000	1.000	1.000	1.000	0.000
6	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
7	Cal:Replace	CK*RESC*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
8	Sample	CK*PEM*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
9	Cal:Replace	ICV*AR1660*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
10	Cal:Replace	ICV*AR1221*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
11	Cal:Replace	ICV*AR1232*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
12	Cal:Replace	ICV*AR1242*1			1.000	1.000	1.000	1.000	1.000	1.000	0.00
13	Cal:Replace	ICV*AR1248*1			1.000	1.000	1.000	1.000	1.000	1.000	0.0(
14	Cal:Replace	ICV*AR1254*1			1.000	1.000	1.000	1.000	1.000	1.000	0.00
15	Cal:Replace	ICV*TOXAPH*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
16	Cal:Replace	ICV*INDAL*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
17	Cal:Replace	ICV*INDBL*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
18	Cal:Replace	ICV*INDAM*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
19	Cal:Replace	ICV*INDBM*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
20	Cal:Replace	ICV*INDAH*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
21	Cal:Replace	ICV*INDBH*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
22	Sample	MB*PIBLK*1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
23	Sample	CK*PEM*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000
24	Sample	MB*QC*1 7-18-94			1.000	1.000	1.000	1.000	1.000	1.000	0.000
25	Sample	CDMHNSS3*43 7-1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
26	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
27	Sample	SPM1*CDMHNSS3*4			1.000	1.000	1.000	1.000	1.000	1.000	0.000
28	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
29	Sample	SPM2*CDMHNSS3*4			1.000	1.000	1.000	1.000	1.000	1.000	0.000
30	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
31	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
32	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
33	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
34	Sample	CDMHNSS3*43 1:1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
35	Sample	CDMHNSS3*43 1:1			1.000	1.000	1.000	1.000	1.000	1.000	0.000
36	Sample	HEXANE			1.000	1.000	1.000	1.000	1.000	1.000	0.000
37	Sample	MB*PIBLK*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000
38	Cal:Replace	CCS*INDAM*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000
39	Cal:Replace	CCS*INDBM*2			1.000	1.000	1.000	1.000	1.000	1.000	0.000

Sequence Process Information - Channel B

Row	Site	Rack	Vial	Inst Method	Process Method	Calib Method	Report Format	Raw File	Result File	Baseline File	Modified Raw File	Cal Rpt	Level Name	Updat RT
		-	1	HP58907	DB1701	862B	BALL	862B001	862B001			-	-	-
		-	2	HP58907	DB1701	862B	BALL	862B002	862B002			-	-	-
	-	-	3	HP58907	DB1701	862B	BALL	862B003	862B003			-	-	-
4	-	-	4	HP58907	DB1701	862B	BALL	862B004	862B004			-	-	-
5	-	-	5	HP58907	DB1701	862B	BALL	862B005	862B005			-	-	-
6	-	-	6	HP58907	DB1701	862B	BALL	862B006	862B006			-	-	-
7	-	-	7	HP58907	DB1701	862BRES	CLPS	862B007	862B007			N	1	R
8	-	-	8	HP58907	DB1701	862BPEM	CLPEM	862B008	862B008			-	-	-
9	-	-	9	HP58907	DB1701	862B1660	CLPPCB	862B009	862B009			N	1	R
10	-	-	10	HP58907	DB1701	862B1221	CLPPCB	862B010	862B010			N	1	R
11	-	-	11	HP58907	DB1701	862B1232	CLPPCB	862B011	862B011			N	1	R
12	-	-	12	HP58907	DB1701	862B1242	CLPPCB	862B012	862B012			N	1	R
13	-	-	13	HP58907	DB1701	862B1248	CLPPCB	862B013	862B013			N	1	R
14	-	-	14	HP58907	DB1701	862B1254	CLPPCB	862B014	862B014			N	1	R
15	-	-	15	HP58907	DB1701	862BTOX	CLPPCB	862B015	862B015			N	1	R
16	-	-	16	HP58907	DB1701	862BAL	CLPS	862B016	862B016			N	1	R
17	-	-	17	HP58907	DB1701	862BBL	CLPS	862B017	862B017			N	1	R
18	-	-	18	HP58907	DB1701	862BAM	CLPS	862B018	862B018			N	1	R
19	-	-	19	HP58907	DB1701	862BBM	CLPS	862B019	862B019			N	1	R
20	-	-	20	HP58907	DB1701	862BAH	CLPS	862B020	862B020			N	1	R
21	-	-	21	HP58907	DB1701	862BBH	CLPS	862B021	862B021			N	1	R
22	-	-	22	HP58907	DB1701	862B	BALL	862B022	862B022			-	-	-
23	-	-	23	HP58907	DB1701	862BPEM	CLPEM	862B023	862B023			-	-	-
24	-	-	24	HP58907	DB1701	862B	BALL	862B024	862B024			-	-	-
25	-	-	25	HP58907	DB1701	862B	BALL	862B025	862B025			-	-	-
26	-	-	26	HP58907	DB1701	862B	BALL	862B026	862B026			-	-	-
27	-	-	27	HP58907	DB1701	862B	BALL	862B027	862B027			-	-	-
28	-	-	28	HP58907	DB1701	862B	BALL	862B028	862B028			-	-	-
29	-	-	29	HP58907	DB1701	862B	BALL	862B029	862B029			-	-	-
30	-	-	30	HP58907	DB1701	862B	BALL	862B030	862B030			-	-	-
31	-	-	31	HP58907	DB1701	862B	BALL	862B031	862B031			-	-	-
32	-	-	32	HP58907	DB1701	862B	BALL	862B032	862B032			-	-	-
33	-	-	33	HP58907	DB1701	862B	BALL	862B033	862B033			-	-	-
34	-	-	34	HP58907	DB1701	862B	BALL	862B034	862B034			-	-	-
	-	-	35	HP58907	DB1701	862B	BALL	862B035	862B035			-	-	-
		-	36	HP58907	DB1701	862B	BALL	862B036	862B036			-	-	-
	-	-	37	HP58907	DB1701	862B	BALL	862B037	862B037			-	-	-
38	-	-	38	HP58907	DB1701	862BAM	CLPS	862B038	862B038			N	1	N
39	-	-	39	HP58907	DB1701	862BBM	CLPS	862B039	862B039			N	1	N

Software Version: 4.0<1C29>
Sample Name : CK*RESC*1 Time : 7/25/94 10:44 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/8

Interface Serial # : NONE Data Acquisition Time: 7/21/94 04:48 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B007.RAW
Result File : C:\TC4\HP58907\862B007.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B007.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B007.RST
Calib Method : C:\TC4\HP58907\862BRES from C:\TC4\HP58907\862B007.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 16

DATA REPORT

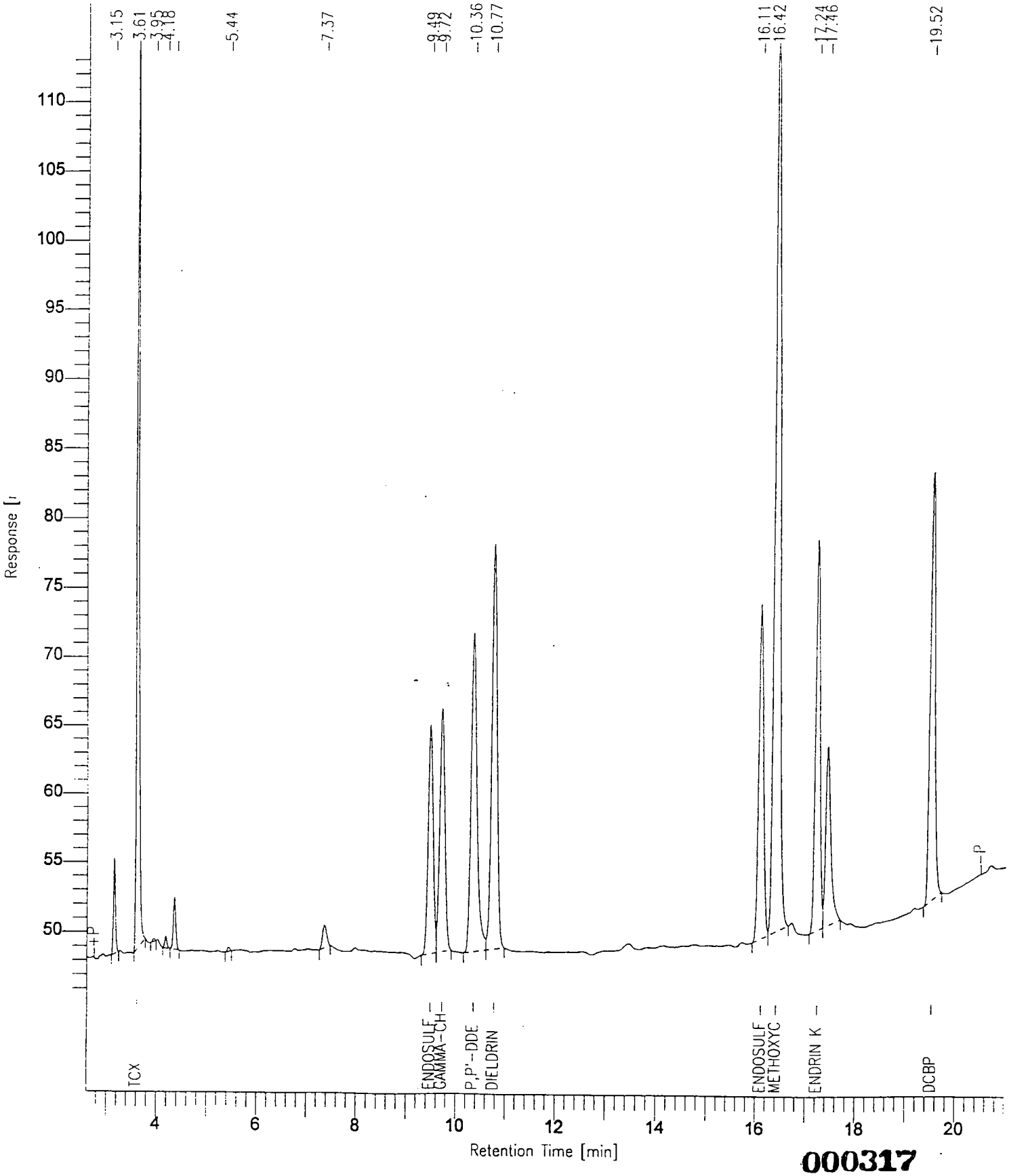
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.606	TCX	217155	B	69838	8e-16	0.0200
8	9.487	ENDOSULFAN A	114783	B	16557	9e-15	0.0100
9	9.722	GAMMA-CHLORDANE	126990	V	17685	9e-15	0.0100
10	10.359	P,P'-DDE	192138	B	23097	0.0000	0.0200
11	10.774	DIELDRIN	219421	V	29279	-5e-15	0.0200
12	16.111	ENDOSULFAN SULFATE	163602	B	24255	-1e-15	0.0200
13	16.419	METHOXYCHLOR	499459	V	67760	-3e-15	0.1000
14	17.244	ENDRIN KETONE	176041	B	28313	1e-15	0.0200
16	19.524	DCBP	206116	B	31105	-2e-15	0.0200
			1915706		307890		0.2400

9513354 2607

Chromatogram

Sample Name : CK*RESC*1
File : C:\TC4\HP58907\862B007.RAW
Method :
Start Time : 2.60 min End Time : 21.01 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 10:44 AM
Time of Injection: 7/21/94 04:48 PM
Low Point : 45.18 mV High Point : 113.65 mV
Plot Scale: 68.5 mV



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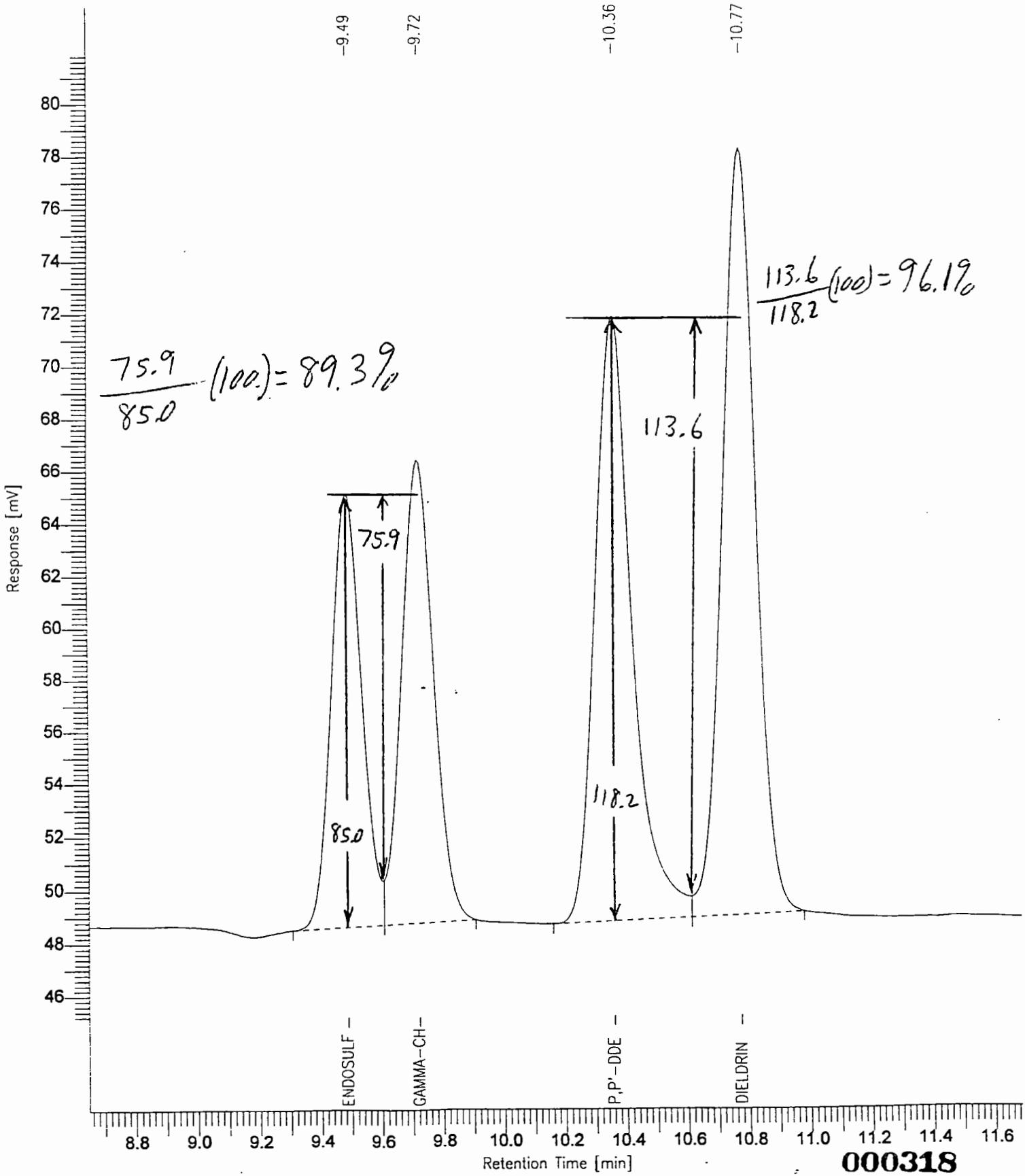
Chromatogram

Sample Name : CK*RESC*1
FileName : C:\TC4\HP58907\862B007.RAW
Method :
Start Time : 8.65 min End Time : 11.69 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 10:45 AM
Time of Injection: 7/21/94 04:48 PM
Low Point : 45.18 mV High Point : 81.86 mV
Plot Scale: 36.7 mV



9513354:2608

Software Version: 4.0<1C29>
Sample Name : CK*PEM*1 Time : 7/25/94 10:45 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/9

Interface Serial # : NONE Data Acquisition Time: 7/21/94 05:29 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B008.RAW
Result File : C:\TC4\HP58907\862B008.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B008.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B008.RST
Calib Method : C:\TC4\HP58907\862BPEM from C:\TC4\HP58907\862B008.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 777.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Peak Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 18

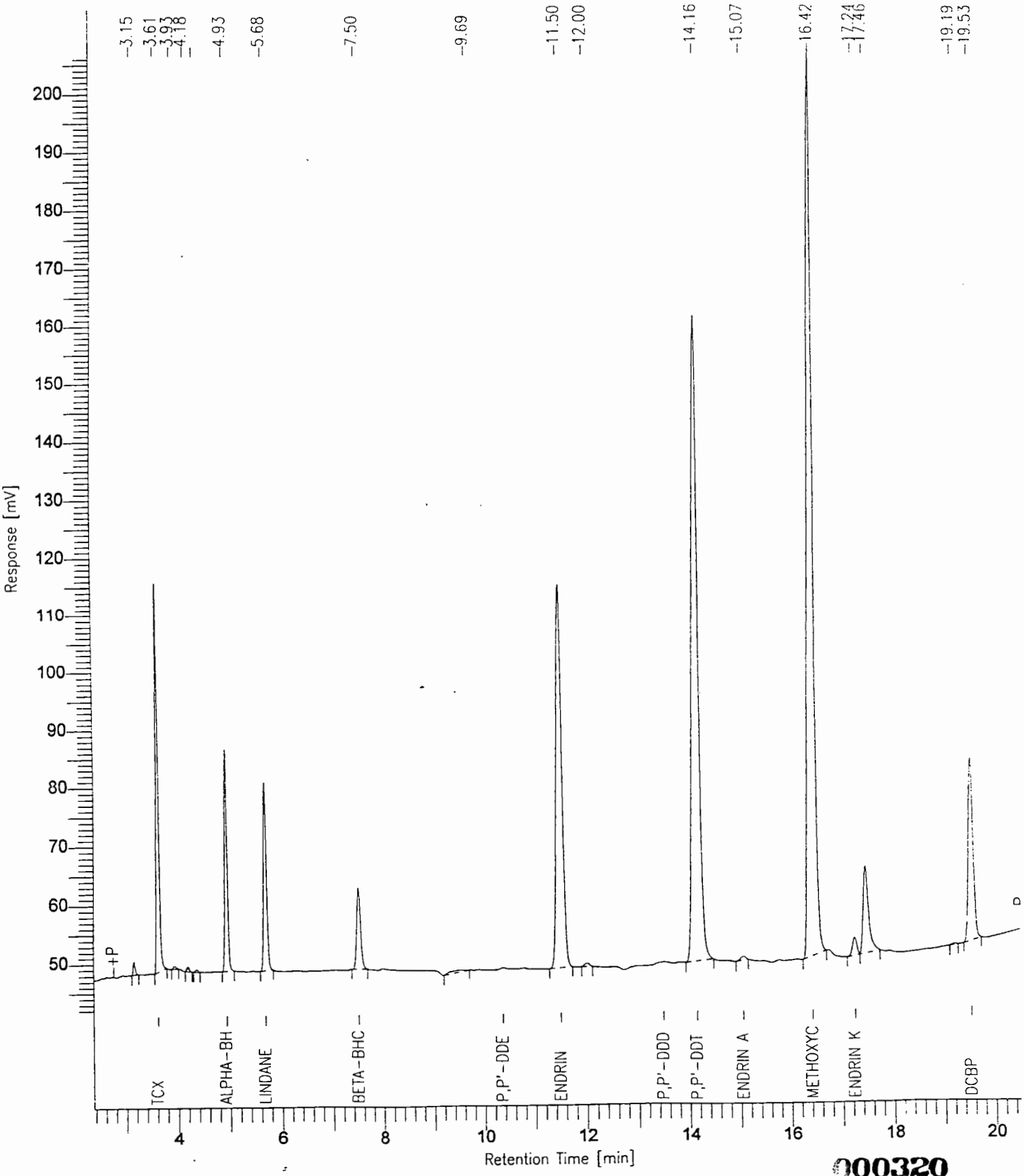
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	3.607	TCX	209585	B	67044	0.0326
6	4.929	ALPHA-BHC	131192	B	38042	0.0308
7	5.684	LINDANE	129107	B	32242	0.0350
8	7.501	BETA-BHC	74423	B	13832	0.0669
10	11.496	ENDRIN	514359	B	66298	0.0245
12	14.155	P,P'-DDT	960064	B	111697	0.0696
[illegible]	15.065	ENDRIN ALDEHYDE	4656	B	647	0.0994
[illegible]	[illegible]6.421	METHOXYCHLOR	1181741	B	156225	0.0246
[illegible]	7.242	ENDRIN KETONE	18026	B	3005	0.0009
18	19.526	DCBP	206267	B	31402	0.0272
			3429420		520432	

Chromatogram

Sample Name : CK*PEM*1
FileName : C:\TC4\HP58907\862B008.RAW
Method :
Start Time : 2.36 min End Time : 20.49 min
Scale Factor: 0.0 Plot Offset: 41 mV

Sample #:
Date : 7/25/94 10:45 AM
Time of Injection: 7/21/94 05:29 PM
Low Point : 41.02 mV High Point : 206.45 mV
Plot Scale: 165.4 mV



9513354.2609

Software Version: 4.0<1C29>
Sample Name : ICV*AR1660*1 Time : 7/25/94 10:47 AM
S le Number: Study :
C ator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/10

Interface Serial # : NONE Data Acquisition Time: 7/21/94 06:09 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B009.RAW
Result File : C:\TC4\HP58907\862B009.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B009.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B009.RST
Calib Method : C:\TC4\HP58907\862B1660 from C:\TC4\HP58907\862B009.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

N Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 47

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	3.149		18665	B	6627	-------	1.8665e-07
2	3.607	TCX	220449	B	70986	2e-15	0.0200
6	4.350		15542	B	4440	-------	1.5542e-07
7	4.427		23895	V	6025	-------	2.3895e-07
9	5.061	PCB-1016-1	46399	B	10810	-4e-15	0.1000
10	5.423		10934	B	2797	-------	1.0934e-07
--	5.506		18340	V	4097	-------	1.8340e-07
	5.782		9682	B	2197	-------	9.6820e-08
	.965	PCB-1016-2	91865	V	16536	5e-15	0.1000
14	6.245		47036	V	6581	-------	4.7036e-07
15	6.482		30118	V	5315	-------	3.0118e-07
16	6.763	PCB-1016-3	66482	V	8155	-4e-15	0.1000
17	7.366		53912	B	7622	-------	5.3912e-07
18	7.612		39044	V	4784	-------	3.9044e-07
19	8.058		7683	B	1159	-------	7.6826e-08

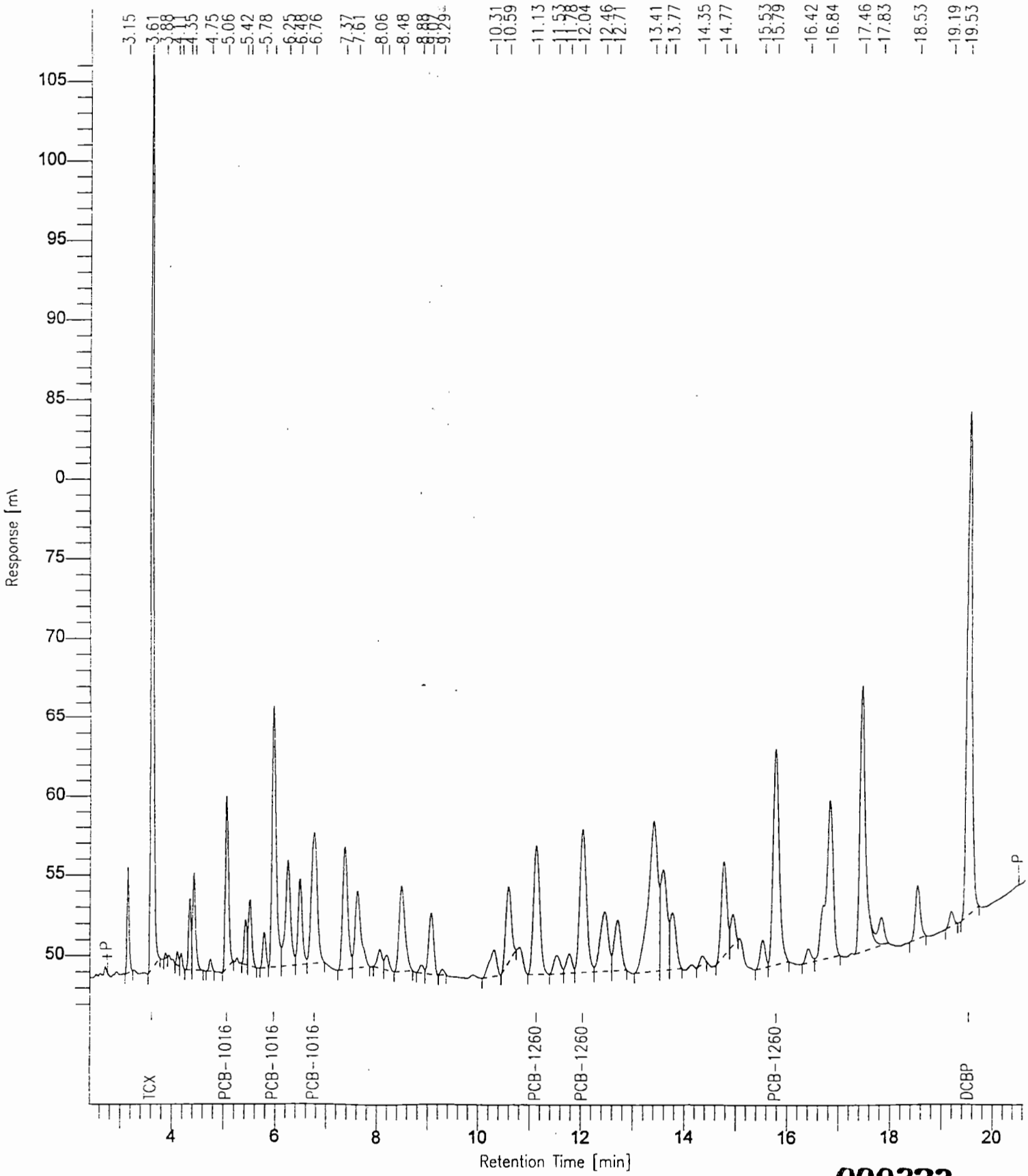
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
20	8.191		5623	V	911	-------	5.6235e-08
21	8.484		43265	B	5294	-------	4.3265e-07
23	9.067		25838	V	3788	-------	2.5838e-07
25	10.307		16446	B	1626	-------	1.6446e-07
26	10.590		35389	B	4716	-------	3.5389e-07
27	11.132	PCB-1260-1	67987	B	8007	1e-15	0.1000
28	11.534		10360	B	1130	-------	1.0360e-07
29	11.776		9511	V	1200	-------	9.5114e-08
30	12.038	PCB-1260-2	81492	V	8900	1e-15	0.1000
31	12.459		40667	V	3662	-------	4.0667e-07
32	12.710		28074	V	3109	-------	2.8074e-07
33	13.407		121401	B	9363	-------	1.2140e-06
34	13.588		54939	V	6200	-------	5.4939e-07
35	13.767		28037	V	3477	-------	2.8037e-07
37	14.770		44986	B	5821	-------	4.4986e-07
38	14.946		11717	V	1891	-------	1.1717e-07
39	15.532		12173	B	1722	-------	1.2173e-07
40	15.785	PCB-1260-3	111488	V	13539	-5e-15	0.1000
41	16.420		6288	B	867	-------	6.2876e-08
42	16.838		97640	V	9861	-------	9.7640e-07
43	17.461		127619	B	16776	-------	1.2762e-06
44	17.831		14387	E	1643	-------	1.4387e-07
45	18.533		21989	B	3262	-------	2.1989e-07
47	19.525	DCBP	208485	B	31741	5e-15	0.0200
			1925846		306637		0.6400

9513354:2610

Chromatogram

Name : ICV*AR1660*1
me : C:\TC4\HP58907\862B009.RAW
Method :
Start Time : 2.41 min End Time : 20.63 min
Scale Factor: 0.0 Plot Offset: 47 mV

Sample #:
Date : 7/25/94 10:47 AM
Time of Injection: 7/21/94 06:09 PM
Low Point : 46.53 mV High Point : 106.66 mV
Plot Scale: 60.1 mV



Software Version: 4.0<1C29>
Sample Name : ICV*AR1221*1 Time : 7/25/94 10:47 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/11

Interface Serial # : NONE Data Acquisition Time: 7/21/94 06:49 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B010.RAW
Result File : C:\TC4\HP58907\862B010.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B010.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B010.RST
Calib Method : C:\TC4\HP58907\862B1221 from C:\TC4\HP58907\862B010.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 14

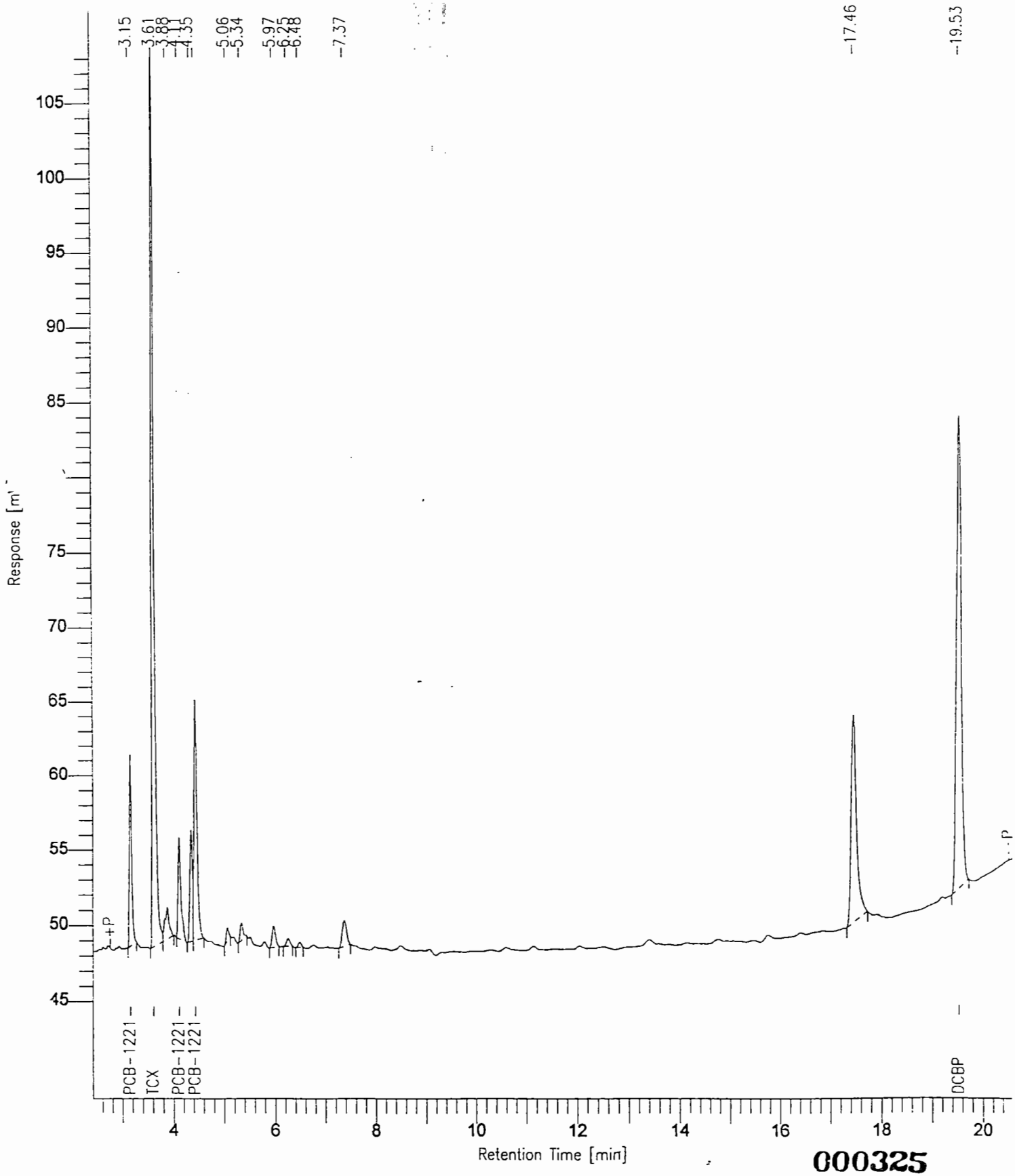
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	3.152	PCB-1221-1	39274	B	12789	-4e-15	0.2000
2	3.607	TCX	229228	B	70798	-3e-15	0.0200
3	3.878		12171	V	2069	-------	1.2171e-07
4	4.109	PCB-1221-2	26421	B	6760	6e-15	0.2000
5	4.345		26492	B	7442	-------	2.6492e-07
6	4.429	PCB-1221-3	66878	V	16191	-5e-15	0.2000
9	5.967		6538	B	1397	-------	6.5378e-08
12	7.367		10189	B	1696	-------	1.0189e-07
13	17.459		101664	B	13842	-------	1.0166e-06
14	19.525	DCBP	207288	B	31631	0.0000	0.0200
			726141		164615		0.6400

Chromatogram

Name : ICV*AR1221*1
e : C:\TC4\HP58907\862B010.RAW
Start Time : 2.41 min End Time : 20.58 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 10:47 AM
Time of Injection: 7/21/94 06:49 PM
Low Point : 44.69 mV High Point : 108.09 mV
Plot Scale: 63.4 mV



Software Version: 4.0<1C29>
Sample Name : ICV*AR1232*1 Time : 7/25/94 10:47 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/12

Interface Serial # : NONE Data Acquisition Time: 7/21/94 07:29 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B011.RAW
Result File : C:\TC4\HP58907\862B011.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B011.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B011.RST
Calib Method : C:\TC4\HP58907\862B1232 from C:\TC4\HP58907\862B011.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 22

DATA REPORT

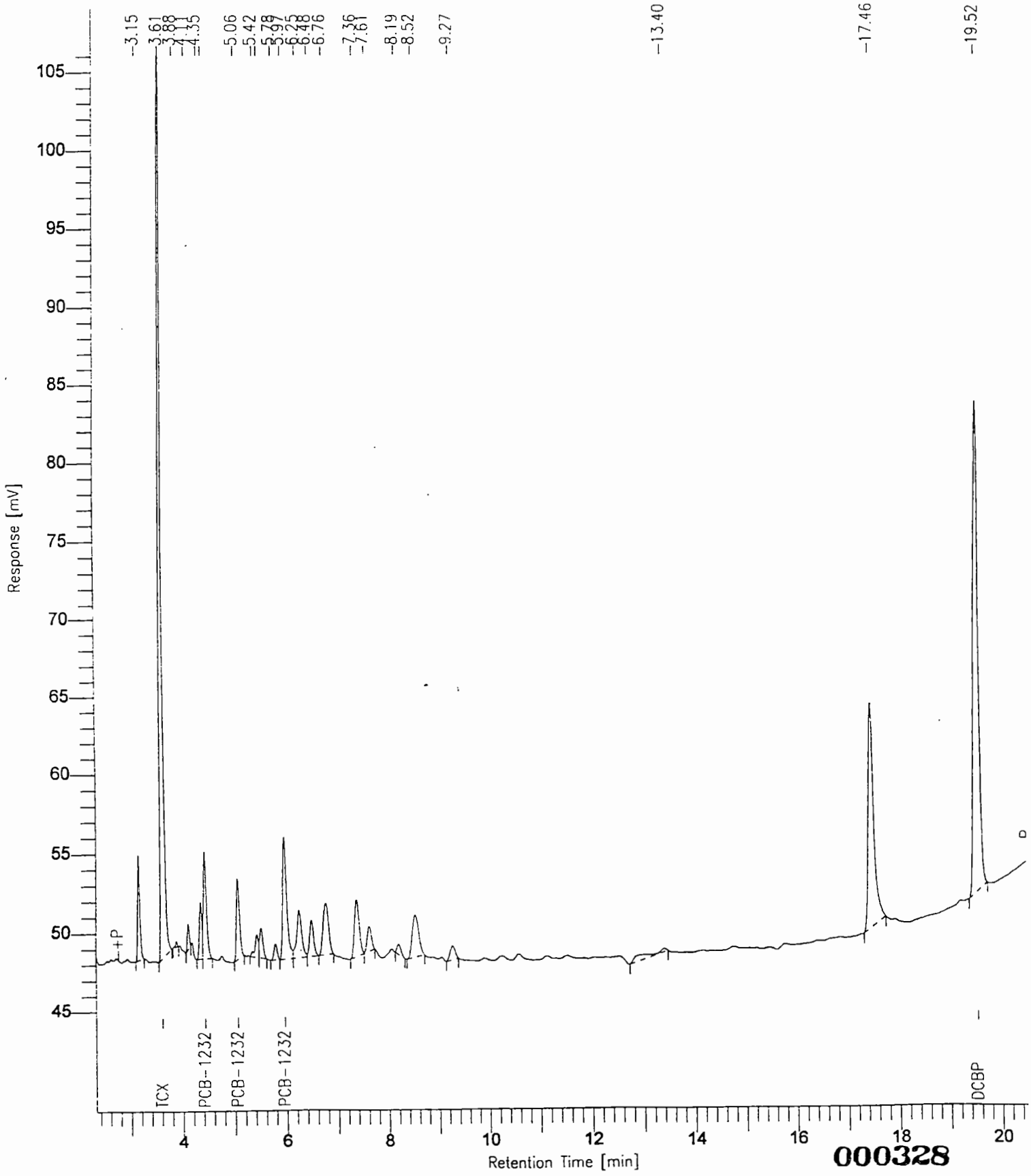
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	3.150		19765	B	6713	-------	1.9765e-07
2	3.607	TCX	222047	B	70355	-4e-15	0.0200
5	4.347		12543	B	3590	-------	1.2543e-07
6	4.428	PCB-1232-1	27732	V	6802	7e-15	0.1000
7	5.061	PCB-1232-2	21578	B	5084	7e-15	0.1000
8	5.423		6811	B	1426	-------	6.8108e-08
9	5.506		8403	V	1894	-------	8.4031e-08
11	5.965	PCB-1232-3	42826	B	7739	1e-15	0.1000
12	6.245		20690	V	3013	-------	2.0690e-07
13	6.481		12234	V	2268	-------	1.2234e-07
14	6.763		24362	B	3233	-------	2.4362e-07
15	7.364		23734	B	3612	-------	2.3734e-07
16	7.611		9216	V	1572	-------	9.2158e-08
18	8.522		24001	B	2659	-------	2.4001e-07
19	9.267		6376	B	890	-------	6.3759e-08

Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
-							
	13.397		8384	B	201	-------	8.3842e-08
21	17.457		106513	B	14388	-------	1.0651e-06
22	19.523	DCBP	211096	B	31697	7e-15	0.0200
			808311		167135		0.3400

Chromatogram

Sample Name : ICV*AR1232*1
FileName : C:\TC4\HP58907\862B011.RAW
Method :
Start Time : 2.31 min End Time : 20.49 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 10:47 AM
Time of Injection: 7/21/94 07:29 PM
Low Point : 44.61 mV High Point : 106.06 mV
Plot Scale: 61.5 mV



9513354.2613

Software Version: 4.0<1C29>
Sample Name : ICV*AR1242*1 Time : 7/25/94 10:48 AM
.e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/13

Interface Serial # : NONE Data Acquisition Time: 7/21/94 08:09 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B012.RAW
Result File : C:\TC4\HP58907\862B012.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B012.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B012.RST
Calib Method : C:\TC4\HP58907\862B1242 from C:\TC4\HP58907\862B012.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

l : Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 30

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	3.149		20220	B	7148	-------	2.0220e-07
2	3.606	TCX	232358	B	73803	-3e-15	0.0200
6	4.350		15652	B	4449	-------	1.5652e-07
7	4.427		21874	V	5529	-------	2.1874e-07
9	5.060	PCB-1242-1	35736	B	8345	6e-15	0.1000
10	5.423		8385	B	2152	-------	8.3852e-08
	5.505		13922	V	3141	-------	1.3922e-07
	5.781		7884	B	1726	-------	7.8841e-08
	5.964	PCB-1242-2	71399	V	12660	0.0000	0.1000
14	6.244		36044	V	5045	-------	3.6044e-07
15	6.482		23017	V	4037	-------	2.3017e-07
16	6.761		50499	V	6254	-------	5.0499e-07
17	7.362		48418	B	6863	-------	4.8418e-07
18	7.611		30632	V	3740	-------	3.0632e-07
20	8.191		11399	V	1740	-------	1.1399e-07

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
21	8.521	PCB-1242-3	49834	B	5269	-1e-14	0.1000
22	9.249		27303	B	2296	-------	2.7303e-07
24	10.229		7844	B	795	-------	7.8435e-08
25	10.574		7760	B	1061	-------	7.7603e-08
29	17.459		89111	B	12234	-------	8.9111e-07
30	19.523	DCBP	220938	B	33287	5e-15	0.0200
			1030229		201575		0.3400

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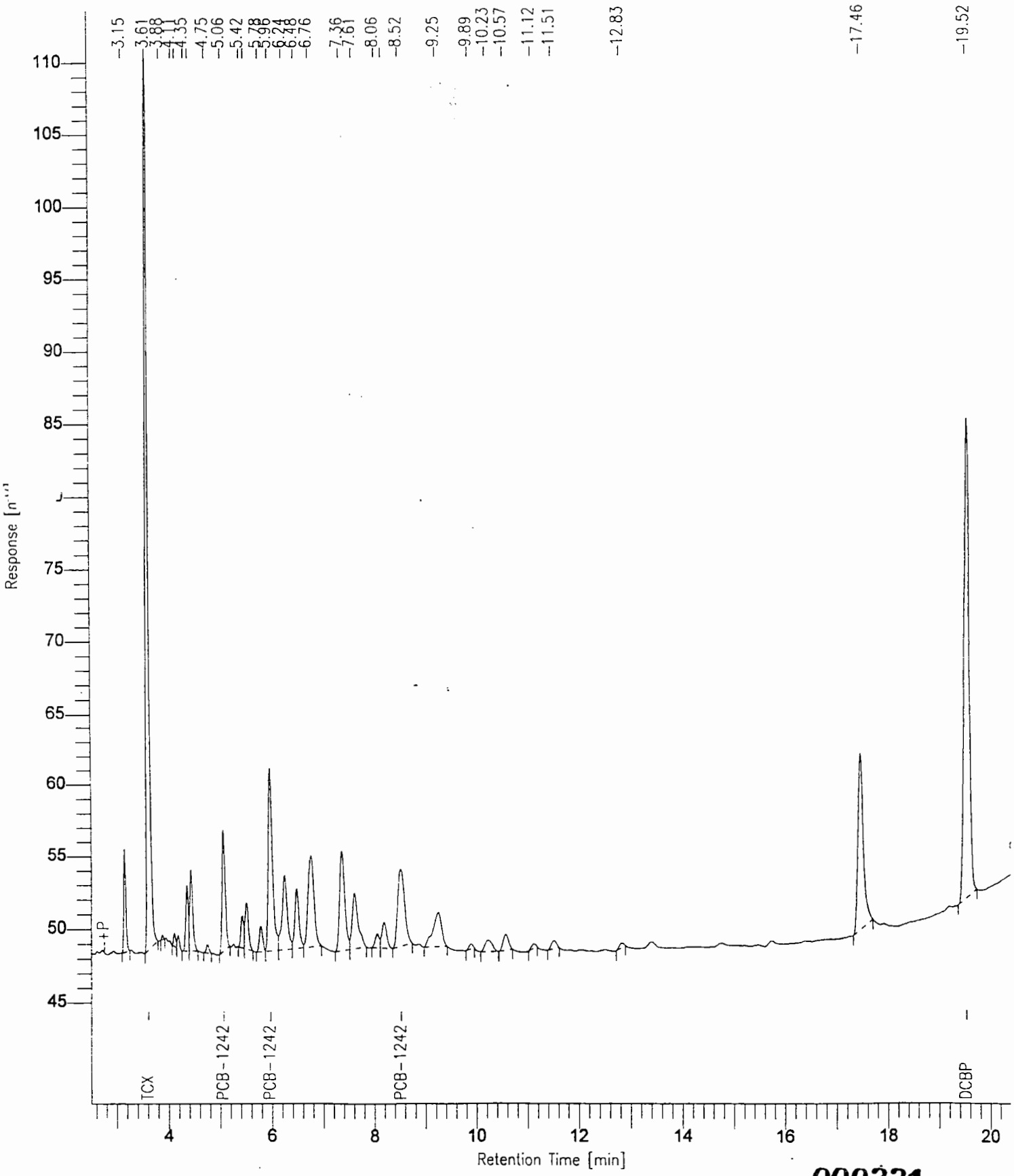
Chromatogram

S Name : ICV*AR1242*1
F : C:\TC4\HP58907\862B012.RAW
M :
Start Time : 2.50 min End Time : 20.39 min
Scale Factor: 0.0 Plot Offset: 44 mV

Sample #:
Date : 7/25/94 10:48 AM
Time of Injection: 7/21/94 08:09 PM
Low Point : 44.41 mV High Point : 110.32 mV
Plot Scale: 65.9 mV



Software Version: 4.0<1C29>
Sample Name : ICV*AR1248*1 Time : 7/25/94 10:48 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/14

Interface Serial # : NONE Data Acquisition Time: 7/21/94 08:50 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B013.RAW
Result File : C:\TC4\HP58907\862B013.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B013.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B013.RST
Calib Method : C:\TC4\HP58907\862B1248 from C:\TC4\HP58907\862B013.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 29

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	3.149		16473	B	5837	-------	1.6473e-07
2	3.607	TCX	224465	B	70408	4e-15	0.0200
5	4.353		12382	V	3336	-------	1.2382e-07
6	5.061		21341	B	4930	-------	2.1341e-07
7	5.424		7181	B	1704	-------	7.1808e-08
8	5.506		5987	V	1395	-------	5.9871e-08
10	5.965	PCB-1248-1	67482	B	11864	-2e-15	0.1000
11	6.240		27839	V	3588	-------	2.7839e-07
12	6.482		17123	V	3230	-------	1.7123e-07
13	6.763	PCB-1248-2	87097	B	10642	2e-15	0.1000
14	7.364		66589	B	9515	-------	6.6589e-07
15	7.611		51697	V	6825	-------	5.1697e-07
16	8.057		7964	B	1521	-------	7.9640e-08
17	8.193		26813	V	3885	-------	2.6813e-07
18	8.525	PCB-1248-3	101934	B	10353	1e-15	0.1000

Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
	9.241		62509	B	4798	-------	6.2509e-07
20	9.900		7600	B	1020	-------	7.6002e-08
21	10.240		17240	B	1678	-------	1.7240e-07
22	10.572		18301	B	2350	-------	1.8301e-07
23	11.123		7788	B	1029	-------	7.7877e-08
24	11.513		12480	B	1517	-------	1.2480e-07
25	12.823		9114	B	1081	-------	9.1140e-08
28	17.458		97064	B	12923	-------	9.7064e-07
29	19.522	DCBP	210949	B	31910	2e-15	0.0200
			1185410		207338		0.3400

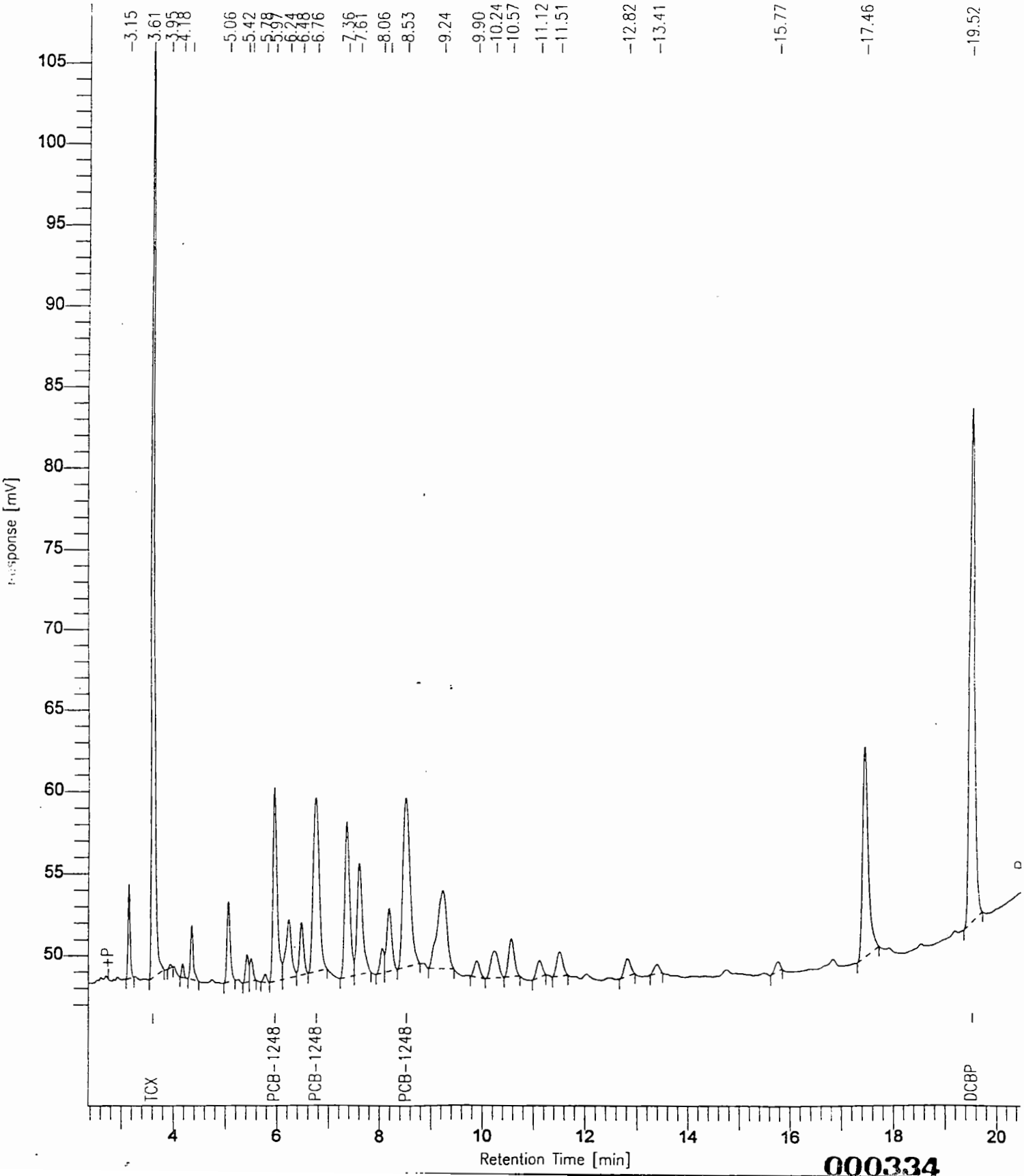
Chromatogram

Sample Name : ICV*AR1248*1
FileName : C:\TC4\HP58907\862B013.RAW
Method :
Start Time : 2.36 min
Scale Factor: 0.0

End Time : 20.49 min
Plot Offset: 46 mV

Sample #:
Date : 7/25/94 10:48 AM
Time of Injection: 7/21/94 08:50 PM
Low Point : 46.45 mV
Plot Scale: 59.3 mV

High Point : 105.71 mV



Software Version: 4.0<1C29>
Sample Name : ICV*AR1254*1 Time : 7/25/94 10:49 AM
S e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/15

Interface Serial # : NONE Data Acquisition Time: 7/21/94 09:30 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B014.RAW
Result File : C:\TC4\HP58907\862B014.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B014.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B014.RST
Calib Method : C:\TC4\HP58907\862B1254 from C:\TC4\HP58907\862B014.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

I : Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 30

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	3.148		15704	B	5605	-------	1.5704e-07
2	3.605	TCX	214400	B	68385	-3e-15	0.0200
5	4.351		10566	V	3081	-------	1.0566e-07
8	6.729		38073	B	5763	-------	3.8073e-07
9	7.359		28745	B	4285	-------	2.8745e-07
10	7.602		8050	V	1212	-------	8.0496e-08
	8.480	PCB-1254-1	88435	B	9739	6e-15	0.1000
	8.879		11785	V	1678	-------	1.1785e-07
14	9.071		84088	V	8266	-------	8.4088e-07
15	9.278		25016	V	3601	-------	2.5016e-07
16	9.896		20877	B	2816	-------	2.0877e-07
17	10.216		50710	B	5051	-------	5.0710e-07
18	10.572	PCB-1254-2	72411	B	9278	6e-15	0.1000
19	11.128		41384	B	4780	-------	4.1384e-07
20	11.512		45850	B	5478	-------	4.5850e-07

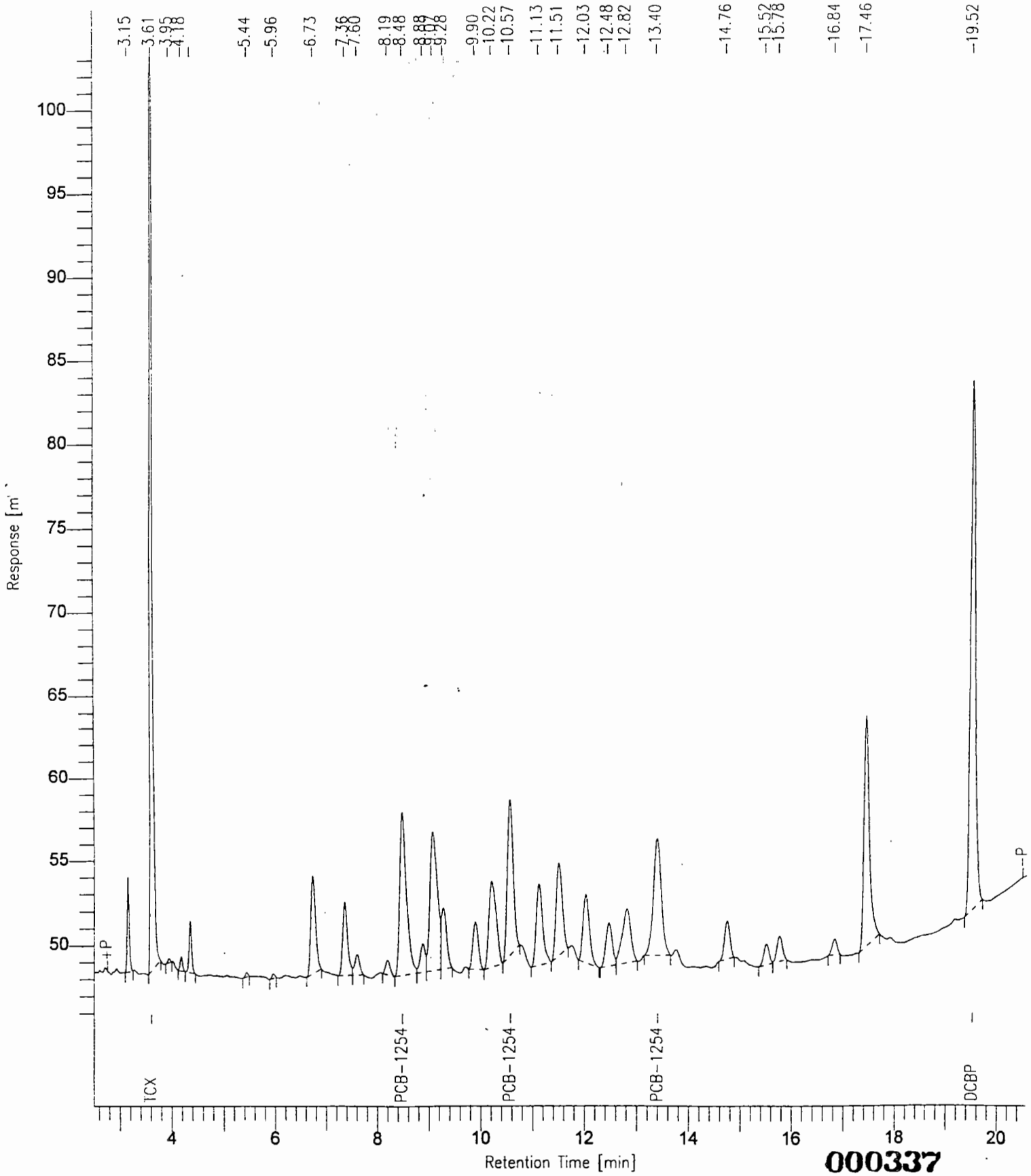
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
21	12.033		34707	B	4019	-------	3.4707e-07
22	12.476		21629	B	2542	-------	2.1629e-07
23	12.820		36662	V	3174	-------	3.6662e-07
24	13.404	PCB-1254-3	73705	B	6925	-2e-15	0.1000
25	14.755		16632	B	2228	-------	1.6632e-07
26	15.520		8820	B	1218	-------	8.8202e-08
27	15.777		11114	V	1469	-------	1.1114e-07
28	16.844		6189	B	924	-------	6.1894e-08
29	17.456		100857	B	13877	-------	1.0086e-06
30	19.521	DCBP	209055	B	31633	-7e-15	0.0200
			1275464		207025		0.3400

9513354.2617

Chromatogram

S Name : ICV*AR1254*1
F e : C:\TC4\HP58907\862B014.RAW
N :
Start Time : 2.50 min End Time : 20.58 min
Scale Factor: 0.0 Plot Offset: 46 mV

Sample #:
Date : 7/25/94 10:49 AM
Time of Injection: 7/21/94 09:30 PM
Low Point : 45.98 mV High Point : 103.22 mV
Plot Scale: 57.2 mV



000337

Software Version: 4.0<1C29>
Sample Name : ICV*TOXAPH*1 Time : 7/25/94 10:49 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/16

Interface Serial # : NONE Data Acquisition Time: 7/21/94 10:10 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B015.RAW
Result File : C:\TC4\HP58907\862B015.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B015.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B015.RST
Calib Method : C:\TC4\HP58907\862BTOX from C:\TC4\HP58907\862B015.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 47

DATA REPORT

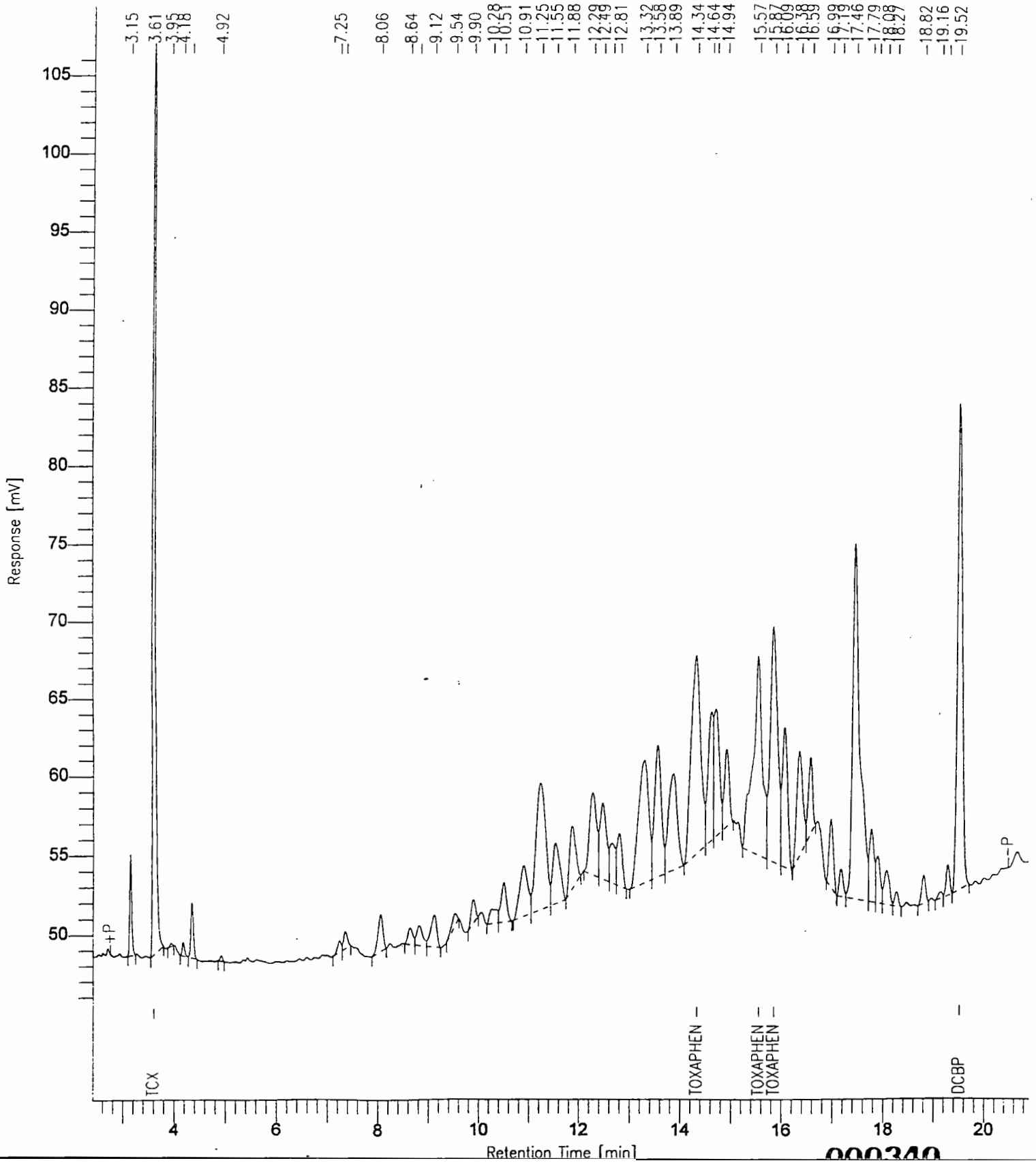
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
1	3.148		18247	B	6419	-------	1.8247e-07
2	3.605	TCX	225347	B	70474	2e-15	0.0200
5	4.352		12374	V	3549	-------	1.2374e-07
8	7.362		5964	V	1089	-------	5.9638e-08
9	8.056		16477	B	2353	-------	1.6477e-07
10	8.643		7388	B	1054	-------	7.3876e-08
11	8.826		10878	V	1253	-------	1.0878e-07
12	9.124		16987	V	2046	-------	1.6987e-07
13	9.536		6194	B	767	-------	6.1943e-08
14	9.903		9064	B	1458	-------	9.0644e-08
15	10.278		9793	B	899	-------	9.7929e-08
16	10.508		19205	V	2490	-------	1.9205e-07
17	10.909		36906	B	3215	-------	3.6906e-07
18	11.247		110023	V	8019	-------	1.1002e-06
19	11.546		39887	V	3844	-------	3.9887e-07

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
	1.883		34149	B	3956	-------	3.4149e-07
21	12.292		51131	B	5242	-------	5.1131e-07
22	12.487		44218	V	4829	-------	4.4218e-07
23	12.667		19915	V	2515	-------	1.9915e-07
24	12.812		23588	V	3361	-------	2.3588e-07
25	13.315		110918	B	7785	-------	1.1092e-06
26	13.577		79773	V	8400	-------	7.9773e-07
27	13.890		74798	V	6109	-------	7.4798e-07
28	14.338	TOXAPHENE-1	166368	B	12772	-6e-15	0.5000
29	14.639		59066	V	8219	-------	5.9066e-07
30	14.724		60184	V	8148	-------	6.0184e-07
31	14.937		33313	V	4932	-------	3.3313e-07
32	15.566	TOXAPHENE-2	167005	B	12796	8e-16	0.5000
33	15.865	TOXAPHENE-3	152571	V	15154	0.0000	0.5000
34	16.088		65592	V	8929	-------	6.5592e-07
35	16.377		54962	B	6641	-------	5.4962e-07
36	16.592		28363	V	4876	-------	2.8363e-07
37	16.994		24655	B	4359	-------	2.4655e-07
38	17.187		9549	B	1724	-------	9.5487e-08
39	17.460		227452	V	22884	-------	2.2745e-06
40	17.788		30419	V	4646	-------	3.0419e-07
41	17.907		17545	V	2976	-------	1.7545e-07
42	18.081		16093	V	2158	-------	1.6093e-07
44	18.818		9659	B	1798	-------	9.6594e-08
46	19.300		9622	V	1955	-------	9.6221e-08
47	19.520	DCBP	207939	B	31341	-1e-15	0.0200
			2323581		307433		1.5400

Chromatogram

Sample Name : ICV*TOXAPH*1
FileName : C:\TC4\HP58907\862B015.RAW
Method :
Start Time : 2.41 min End Time : 20.91 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 10:49 AM
Time of Injection: 7/21/94 10:10 PM
Low Point : 45.30 mV High Point : 106.43 mV
Plot Scale: 61.1 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDAL*1 Time : 7/25/94 10:50 AM
le Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/17

Interface Serial # : NONE Data Acquisition Time: 7/21/94 10:50 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B016.RAW
Result File : C:\TC4\HP58907\862B016.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B016.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B016.RST
Calib Method : C:\TC4\HP58907\862BAL from C:\TC4\HP58907\862B016.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

e Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 17

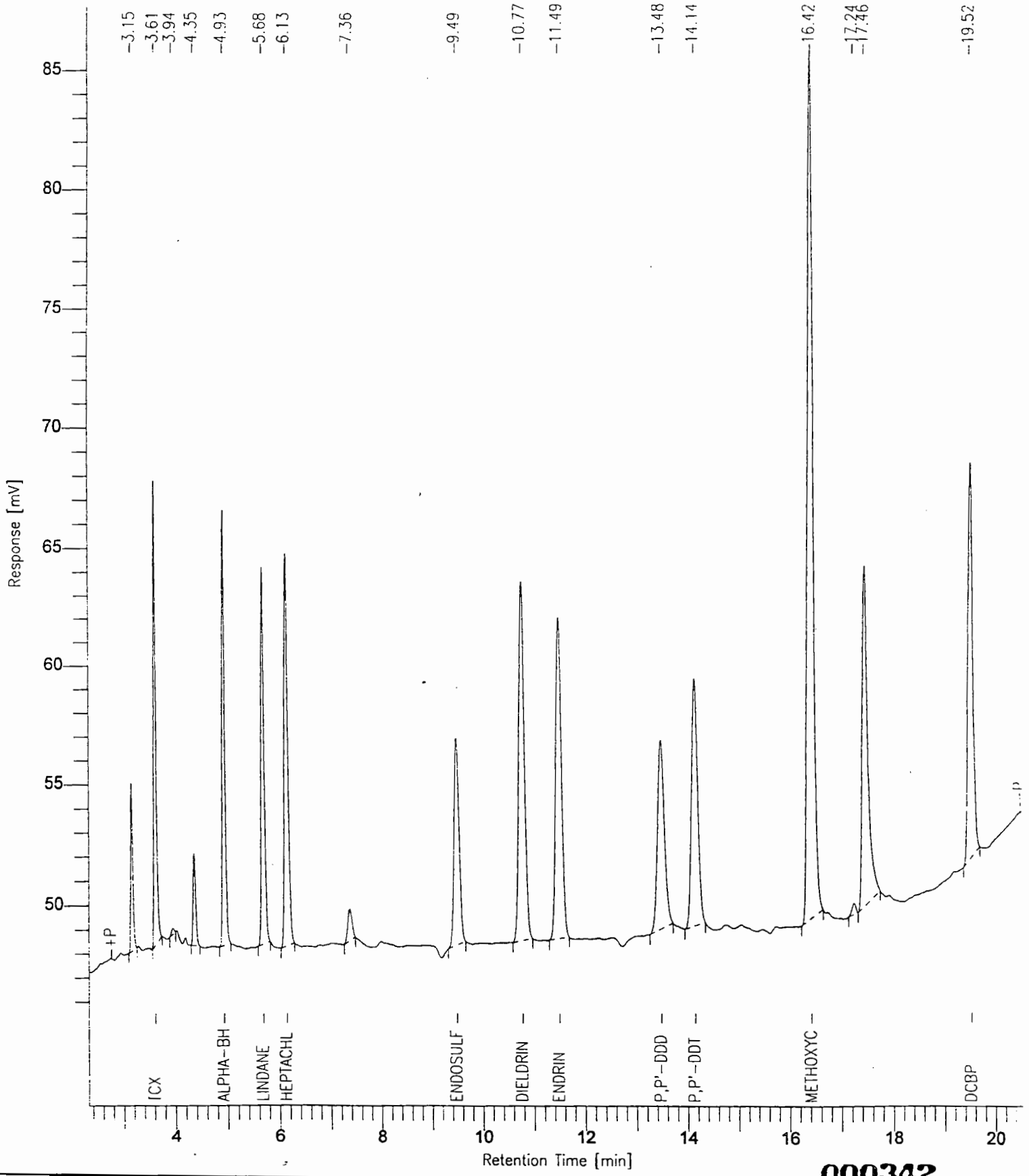
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.606	TCX	58145	B	19452	-8e-16	0.0050
5	4.926	ALPHA-BHC	62132	B	18240	-8e-15	0.0050
6	5.681	LINDANE	63105	B	15822	0.0000	0.0050
7	6.134	HEPTACHLOR	79255	B	16472	5e-15	0.0050
9	9.485	ENDOSULFAN A	59851	B	8626	7e-15	0.0050
10	10.771	DIELDRIN	112740	B	15078	-3e-15	0.0100
	11.490	ENDRIN	105229	B	13498	-3e-15	0.0100
	13.479	P,P'-DDD	73755	B	7877	-4e-15	0.0100
[illegible]	14.142	P,P'-DDT	86816	B	10354	-5e-15	0.0100
14	16.418	METHOXYCHLOR	266122	B	36384	7e-15	0.0500
17	19.522	DCBP	109003	B	16709	0.0000	0.0100
			1076153		178512		0.1250

Chromatogram

Sample Name : ICV*INDAL*1
FileName : C:\TC4\HP58907\862B016.RAW
Method :
Start Time : 2.31 min End Time : 20.54 min
Scale Factor: 0.0 Plot Offset: 46 mV

Sample #:
Date : 7/25/94 10:50 AM
Time of Injection: 7/21/94 10:50 PM
Low Point : 45.51 mV High Point : 85.74 mV
Plot Scale: 40.2 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDBL*1 Time : 7/25/94 10:50 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/18

Interface Serial # : NONE Data Acquisition Time: 7/21/94 11:30 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B017.RAW
Result File : C:\TC4\HP58907\862B017.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B017.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B017.RST
Calib Method : C:\TC4\HP58907\862BBL from C:\TC4\HP58907\862B017.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Area Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 19

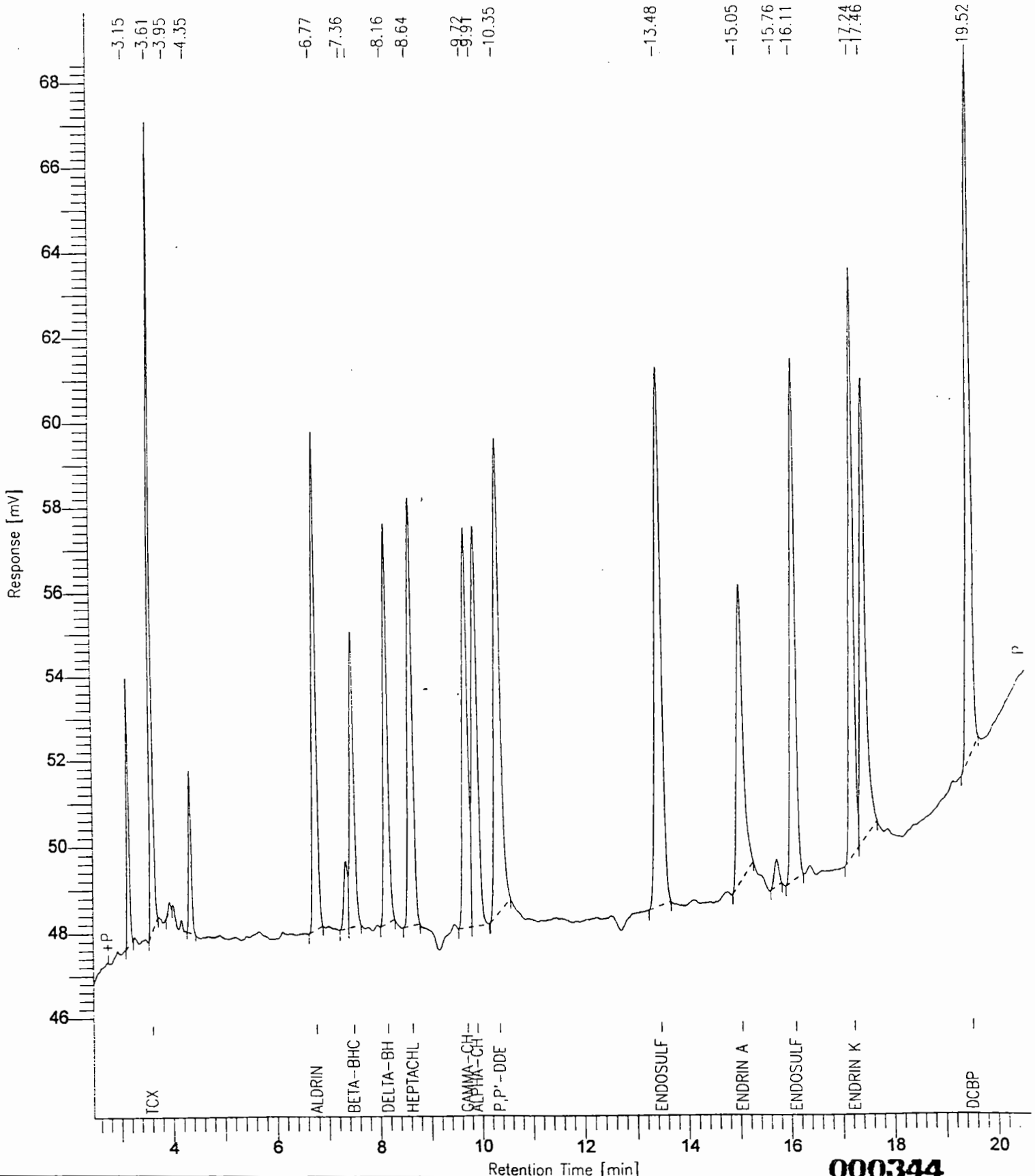
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.605	TCX	57084	B	19136	2e-15	0.0050
5	6.772	ALDRIN	59848	B	11741	4e-15	0.0050
7	7.496	BETA-BHC	39217	V	6931	8e-16	0.0050
8	8.161	DELTA-BHC	52624	B	9412	-4e-15	0.0050
9	8.642	HEPTACHLOR EPOXIDE	64456	B	10084	-3e-15	0.0050
10	9.717	GAMMA-CHLORDANE	67501	B	9430	-7e-15	0.0050
	9.909	ALPHA-CHLORDANE	69636	V	9421	7e-15	0.0050
	10.353	P,P'-DDE	90190	B	11182	-8e-15	0.0100
--	13.476	ENDOSULFAN B	110596	B	12713	2e-15	0.0100
14	15.048	ENDRIN ALDEHYDE	60636	B	7011	-4e-15	0.0100
16	16.107	ENDOSULFAN SULFATE	83993	B	12329	7e-15	0.0100
17	17.240	ENDRIN KETONE	85668	B	13875	0.0000	0.0100
19	19.521	DCBP	108226	B	16628	-8e-15	0.0100
			949675		149892		0.0950

Chromatogram

Sample Name : ICV*INDBL*1
FileName : C:\TC4\HP58907\862B017.RAW
Method :
Start Time : 2.45 min End Time : 20.63 min
Scale Factor: 0.0 Plot Offset: 46 mV

Sample #:
Date : 7/25/94 10:51 AM
Time of Injection: 7/21/94 11:30 PM
Low Point : 45.83 mV High Point : 68.57 mV
Plot Scale: 22.7 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDAM*1 Time : 7/25/94 10:51 AM
S le Number: Study :
(ator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/19

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:11 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B018.RAW
Result File : C:\TC4\HP58907\862B018.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B018.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B018.RST
Calib Method : C:\TC4\HP58907\862BAM from C:\TC4\HP58907\862B018.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 18

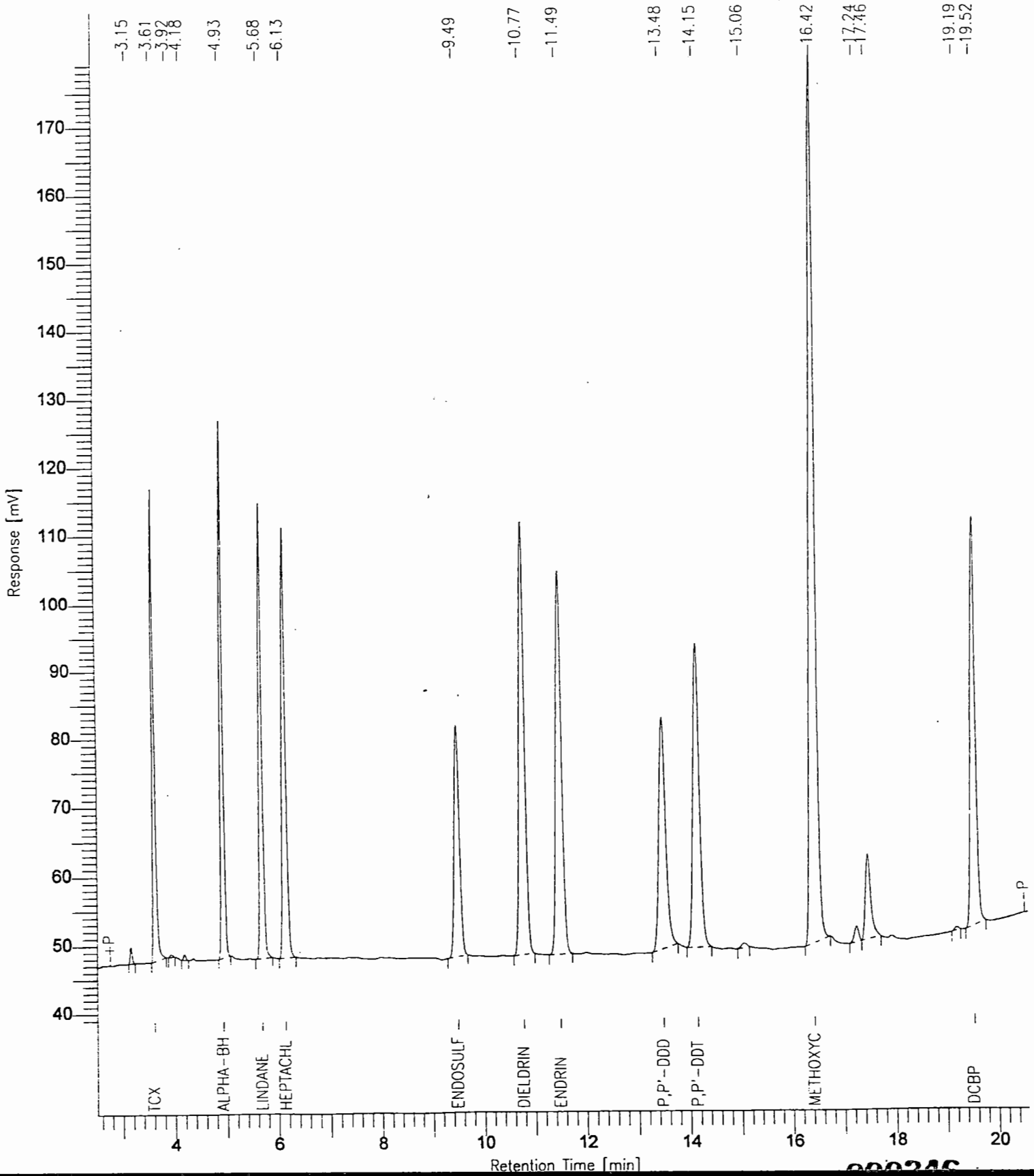
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.606	TCX	222260	B	69385	-6e-15	0.0200
5	4.927	ALPHA-BHC	279488	B	78803	-4e-15	0.0200
6	5.682	LINDANE	279333	B	66943	3e-15	0.0200
7	6.134	HEPTACHLOR	311752	B	63129	6e-15	0.0200
8	9.485	ENDOSULFAN A	235883	B	33790	-2e-15	0.0200
9	10.773	DIELDRIN	472673	B	63583	-2e-15	0.0400
	11.493	ENDRIN	438467	B	56315	3e-15	0.0400
	13.482	P,P'-DDD	310706	B	33878	-2e-15	0.0400
	14.145	P,P'-DDT	378253	B	44607	3e-15	0.0400
14	16.417	METHOXYCHLOR	995267	B	131252	-7e-15	0.2000
18	19.521	DCBP	407325	B	60180	-1e-15	0.0400
			4331405		701865		0.5000

Chromatogram

Sample Name : ICV*INDAM*1
FileName : C:\TC4\HP58907\862B018.RAW
Method :
Start Time : 2.50 min End Time : 20.58 min
Scale Factor: 0.0 Plot Offset: 39 mV

Sample #:
Date : 7/25/94 10:51 AM
Time of Injection: 7/22/94 12:11 AM
Low Point : 38.88 mV High Point : 179.91 mV
Plot Scale: 141.0 mV



Software Version: 4.0<1C29>
Sample Name : ICV*INDBM*1 Time : 7/25/94 10:51 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/20

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:51 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B019.RAW
Result File : C:\TC4\HP58907\862B019.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B019.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B019.RST
Calib Method : C:\TC4\HP58907\862BBM from C:\TC4\HP58907\862B019.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Peak Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 23

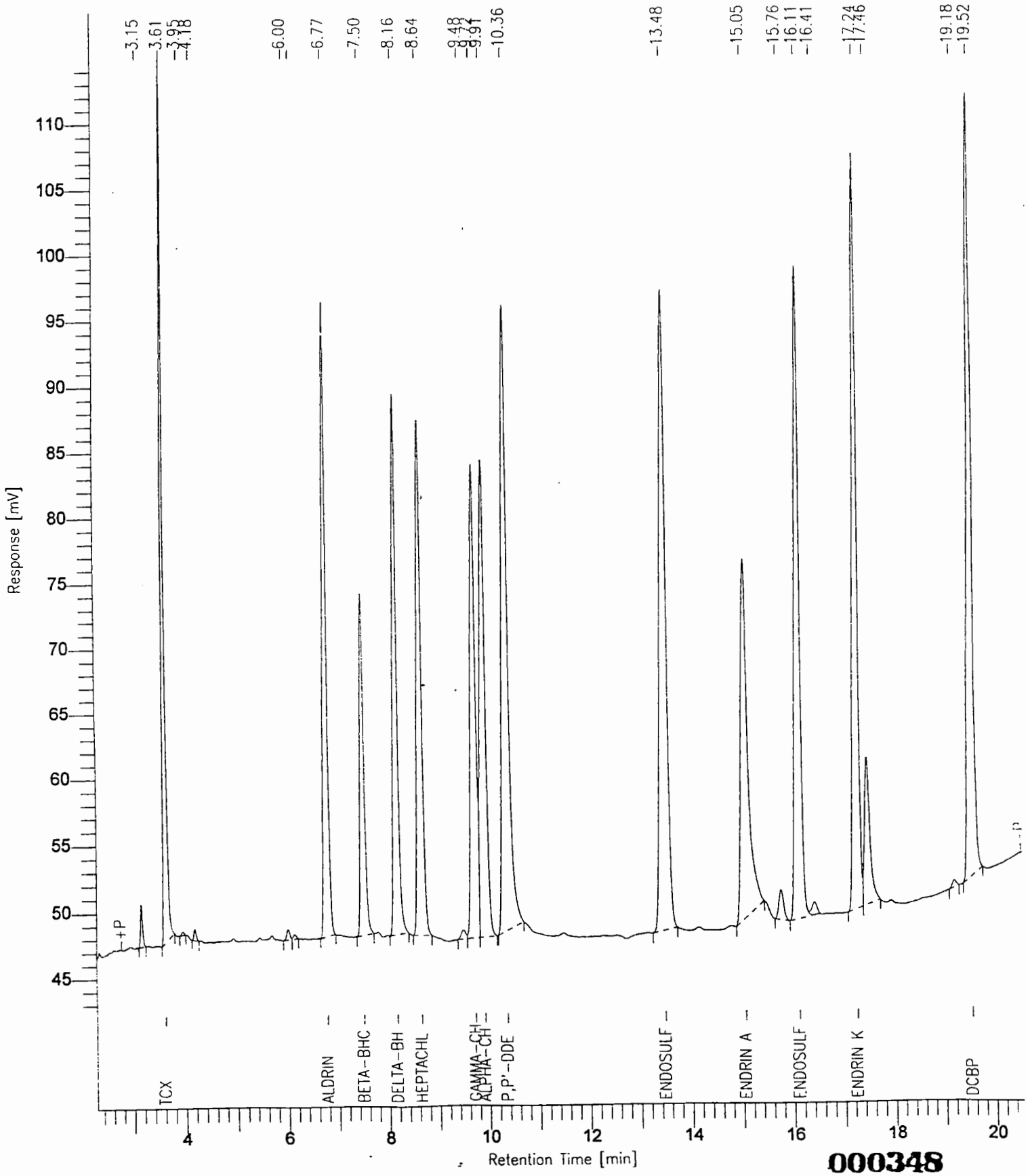
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.605	TCX	212847	B	67358	-2e-15	0.0200
7	6.773	ALDRIN	248201	B	48277	3e-15	0.0200
8	7.496	BETA-BHC	145546	B	26086	8e-16	0.0200
9	8.162	DELTA-BHC	234090	B	41316	7e-15	0.0200
10	8.643	HEPTACHLOR EPOXIDE	253437	B	39409	-7e-15	0.0200
--	9.719	GAMMA-CHLORDANE	260152	V	36137	5e-15	0.0200
	9.910	ALPHA-CHLORDANE	269311	V	36445	7e-15	0.0200
	).355	P,P'-DDE	392781	B	47704	3e-15	0.0400
15	13.479	ENDOSULFAN B	418813	B	48861	-5e-15	0.0400
16	15.050	ENDRIN ALDEHYDE	262274	B	27473	-3e-15	0.0400
18	16.108	ENDOSULFAN SULFATE	343905	B	49887	-6e-15	0.0400
20	17.242	ENDRIN KETONE	365483	B	57845	-8e-15	0.0400
23	19.520	DCBP	406413	B	60038	-8e-15	0.0400
			3813250		586834		0.3800

Chromatogram

Sample Name : ICV*INDBM*1
FileName : C:\TC4\HP58907\862B019.RAW
Method :
Start Time : 2.27 min End Time : 20.54 min
Scale Factor: 0.0 Plot Offset: 42 mV

Sample #:
Date : 7/25/94 10:51 AM
Time of Injection: 7/22/94 12:51 AM
Low Point : 42.13 mV High Point : 114.93 mV
Plot Scale: 72.8 mV



9513394.2623

Software Version: 4.0<1C29>
Sample Name : ICV*INDAH*1 Time : 7/25/94 10:52 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/21

Interface Serial # : NONE Data Acquisition Time: 7/22/94 01:31 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B020.RAW
Result File : C:\TC4\HP58907\862B020.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B020.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B020.RST
Calib Method : C:\TC4\HP58907\862BAH from C:\TC4\HP58907\862B020.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 24

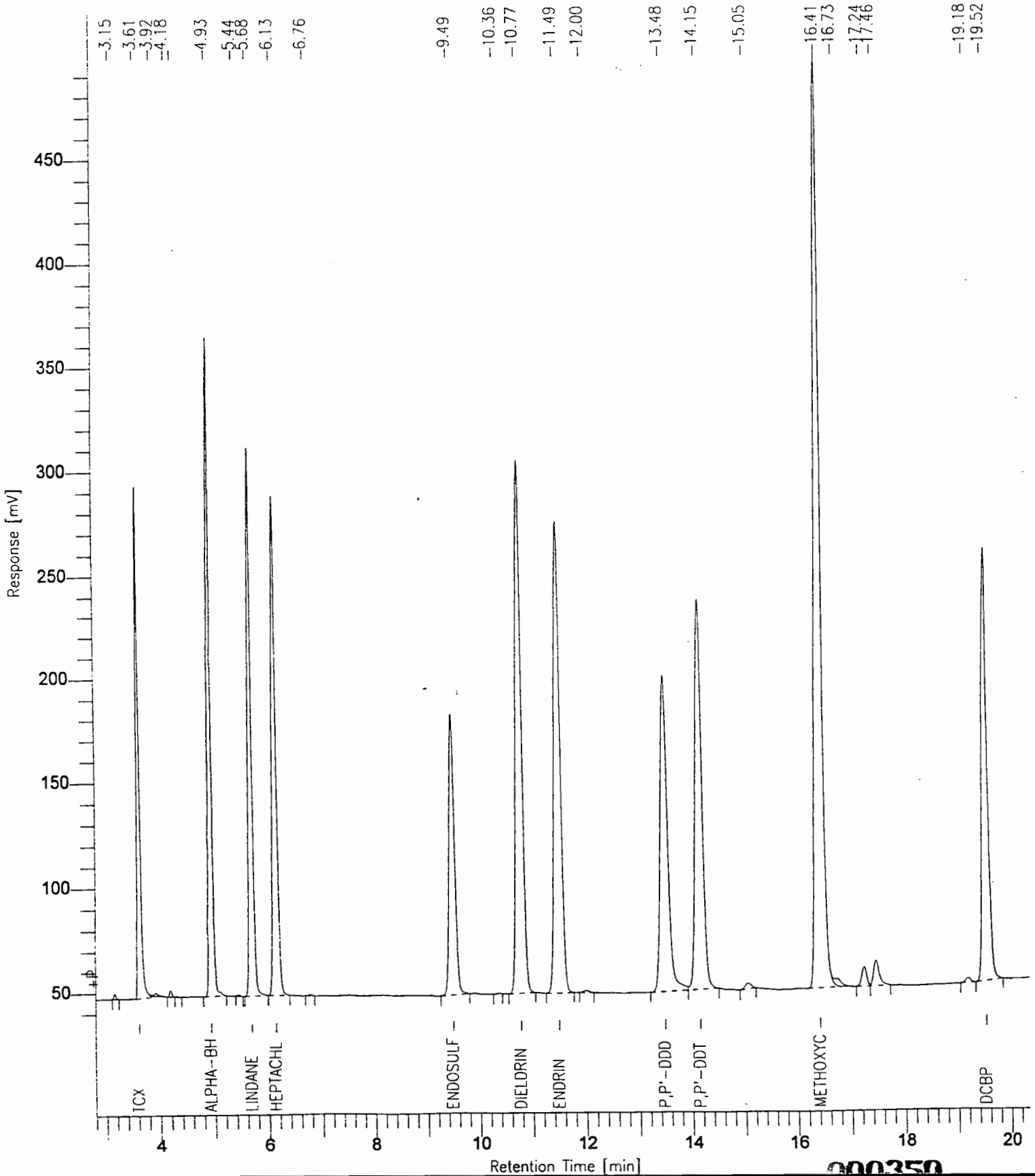
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.605	TCX	846965	B	245998	6e-15	0.0800
6	4.928	ALPHA-BHC	1260844	B	316469	5e-15	0.0800
8	5.683	LINDANE	1206267	B	264339	-6e-15	0.0800
9	6.134	HEPTACHLOR	1244213	B	239966	-4e-15	0.0800
11	9.486	ENDOSULFAN A	982928	B	134478	6e-15	0.0800
[illegible]	10.774	DIELDRIN	2001223	B	256238	-5e-15	0.1600
[illegible]	1.492	ENDRIN	1843376	B	226681	-1e-15	0.1600
16	3.480	P,P'-DDD	1465409	B	151226	-9e-16	0.1600
17	14.147	P,P'-DDT	1667988	V	187739	0.0000	0.1600
19	16.413	METHOXYCHLOR	3567997	B	448821	0.0000	0.8000
24	19.520	DCBP	1479714	B	208220	0.0000	0.1600
			17566925		2680176		2.0000

Chromatogram

Sample Name : ICV*INDAH*1
FileName : C:\TC4\HP58907\862B020.RAW
Method :
Start Time : 2.79 min End Time : 20.35 min
Scale Factor: 0.0 Plot Offset: 36 mV

Sample #:
Date : 7/25/94 10:52 AM
Time of Injection: 7/22/94 01:31 AM
Low Point : 35.62 mV High Point : 498.46 mV
Plot Scale: 462.8 mV



Software Version: 4.0<1C29>
S le Name : ICV*INDBH*1 Time : 7/25/94 10:52 AM
S e Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/22

Interface Serial # : NONE Data Acquisition Time: 7/22/94 02:11 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B021.RAW
Result File : C:\TC4\HP58907\862B021.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B021.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B021.RST
Calib Method : C:\TC4\HP58907\862BBH from C:\TC4\HP58907\862B021.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

N Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 29

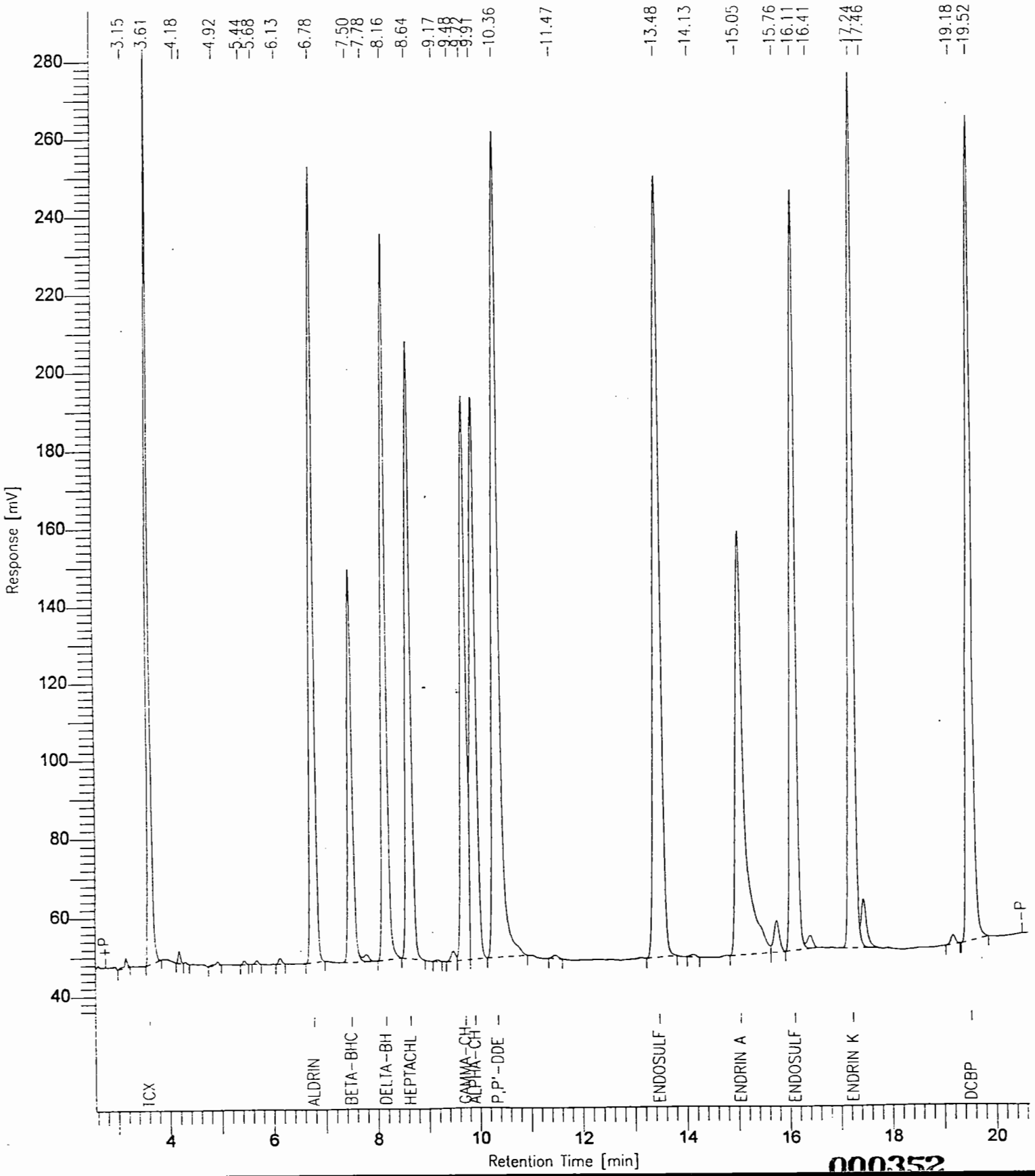
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.605	TCX	848582	B	248729	-2e-15	0.0800
9	6.775	ALDRIN	1120409	B	204829	2e-15	0.0800
10	7.496	BETA-BHC	597486	B	101383	-8e-16	0.0800
12	8.164	DELTA-BHC	1128267	B	187003	6e-15	0.0800
13	8.644	HEPTACHLOR EPOXIDE	1069785	B	158997	1e-15	0.0800
16	9.718	GAMMA-CHLORDANE	1078492	V	145164	7e-15	0.0800
	9.910	ALPHA-CHLORDANE	1099784	V	144624	4e-15	0.0800
	.356	P,P'-DDE	1862978	B	212671	8e-15	0.1600
20	3.478	ENDOSULFAN B	1795328	B	201009	-2e-15	0.1600
22	15.048	ENDRIN ALDEHYDE	1214494	B	109215	-8e-16	0.1600
24	16.107	ENDOSULFAN SULFATE	1418099	B	195890	1e-15	0.1600
26	17.242	ENDRIN KETONE	1546450	B	225883	-5e-15	0.1600
29	19.521	DCBP	1512280	B	213186	6e-15	0.1600
			16292433		2348583		1.5200

Chromatogram

Sample Name : ICV*INDBH*1
FileName : C:\TC4\HP58907\862B021.RAW
Method :
Start Time : 2.55 min End Time : 20.63 min
Scale Factor: 0.0 Plot Offset: 34 mV

Sample #:
Date : 7/25/94 10:52 AM
Time of Injection: 7/22/94 02:11 AM
Low Point : 34.40 mV High Point : 280.87 mV
Plot Scale: 246.5 mV



Software Version: 4.0<1C29>
ıle Name : MB*PIBLK*1 Time : 7/25/94 11:14 AM
ıe Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/23

Interface Serial # : NONE Data Acquisition Time: 7/22/94 02:51 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B022.RAW
Result File : C:\TC4\HP58907\862B022.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B022.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B022.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B022.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

ɜ Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 16

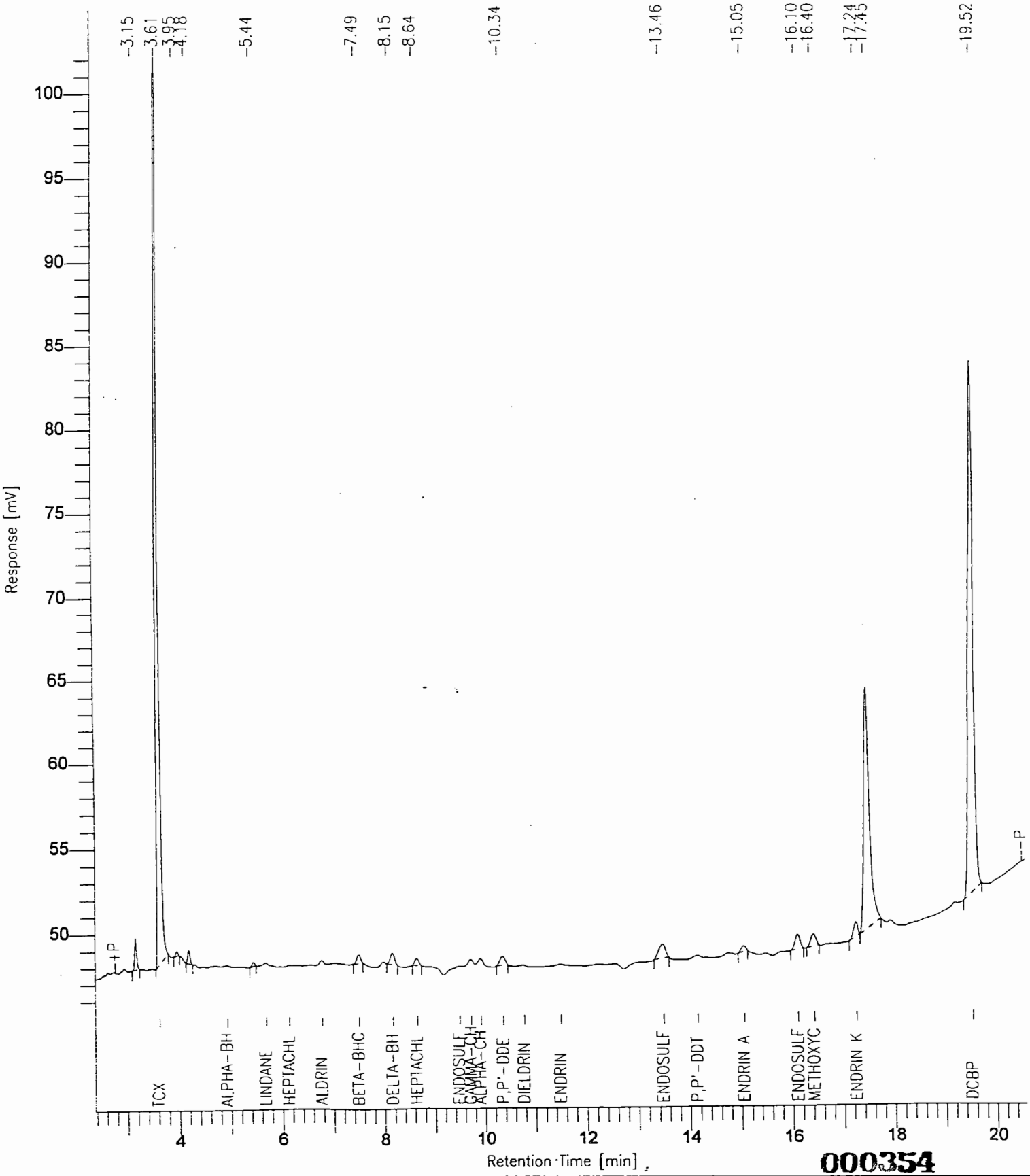
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	3.605	TCX	214267	B	67406	-0.0187
15	17.454		108746	B	14390	-------
16	19.520	DCBP	211044	B	31901	-0.0032
			534057		113697	

Chromatogram

Sample Name : MB*PIBLK*1
FileName : C:\TC4\HP58907\862B022.RAW
Method :
Start Time : 2.36 min End Time : 20.58 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 11:14 AM
Time of Injection: 7/22/94 02:51 AM
Low Point : 45.03 mV High Point : 102.17 mV
Plot Scale: 57.1 mV



Software Version: 4.0<1C29>
Sample Name : CK*PEM*2 Time : 7/25/94 11:15 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/24

Interface Serial # : NONE Data Acquisition Time: 7/22/94 03:31 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B023.RAW
Result File : C:\TC4\HP58907\862B023.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B023.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B023.RST
Calib Method : C:\TC4\HP58907\862BPEM from C:\TC4\HP58907\862B023.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 777.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 18

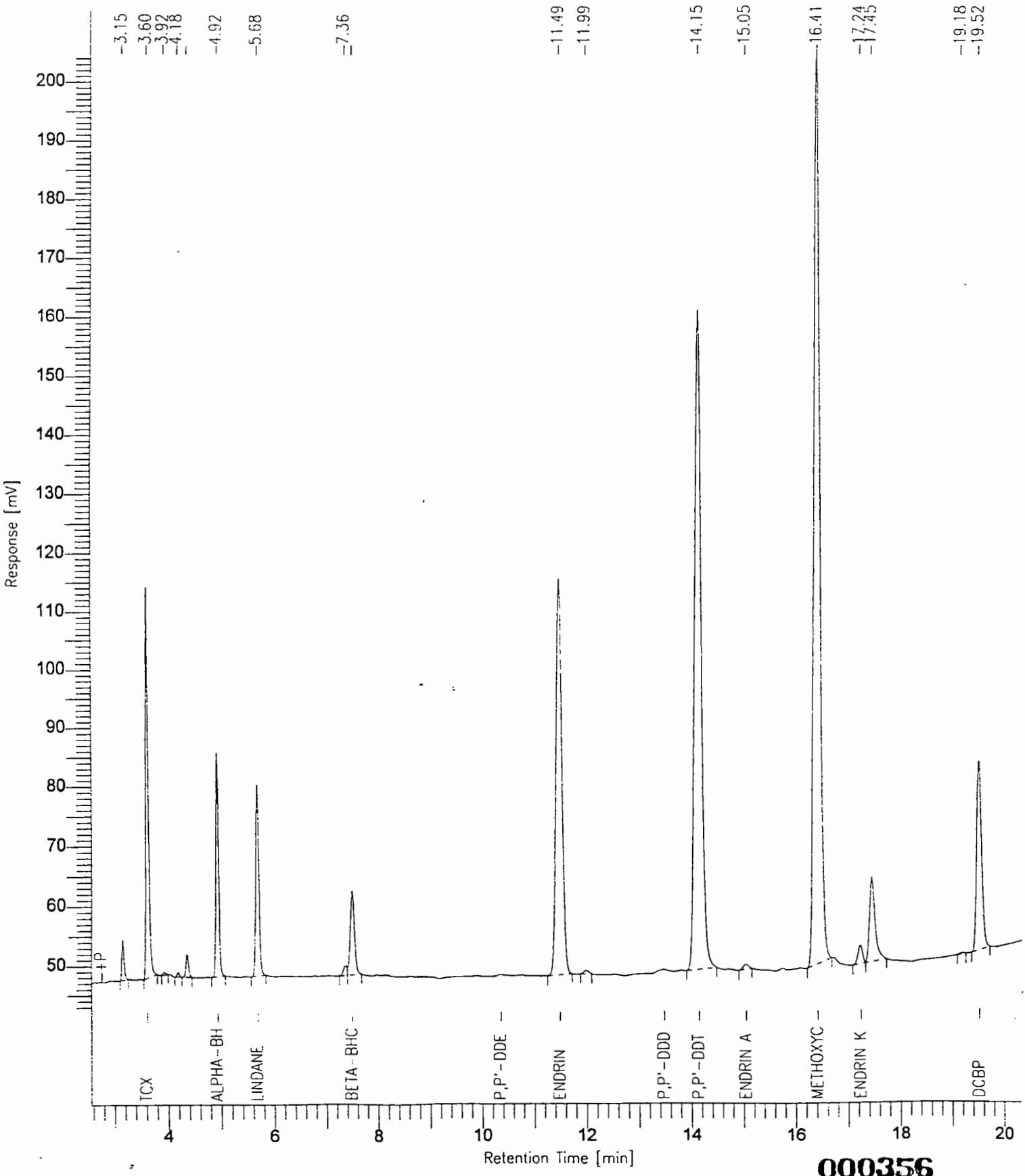
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	3.604	TCX	215046	B	66883	-0.0594
6	4.923	ALPHA-BHC	133789	B	38063	-0.0821
7	5.678	LINDANE	132204	B	32241	-0.0766
9	7.493	BETA-BHC	80887	V	14152	-0.0353
10	11.487	ENDRIN	527638	B	67342	-0.0498
12	14.145	P,P'-DDT	980840	B	112179	-0.0012
	15.051	ENDRIN ALDEHYDE	6135	B	828	0.0081
	.414	METHOXYCHLOR	1195705	B	155531	-0.0164
15	17.235	ENDRIN KETONE	18697	B	3098	-0.0400
18	19.520	DCBP	211675	B	31921	-0.0070
			3502615		522239	

Chromatogram

Sample Name : CK*PEM*2
FileName : C:\TC4\HP58907\862B023.RAW
Method :
Start Time : 2.55 min End Time : 20.35 min
Scale Factor: 0.0 Plot Offset: 42 mV

Sample #:
Date : 7/25/94 11:15 AM
Time of Injection: 7/22/94 03:31 AM
Low Point : 42.05 mV High Point : 204.68 mV
Plot Scale: 162.6 mV



Software Version: 4.0<1C29>
Sample Name : HEXANE
ple Number:
perator : VIC

Time : 7/25/94 11:22 AM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/27

Channel : B A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 05:32 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B026.RAW
Result File : C:\TC4\HP58907\862B026.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B026.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B026.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B026.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 10789.000000
Dilution Factor : 1.00

e Threshold: 33
Area Threshold : 444
Bunch Factor: 1
Multiplier : 1.0000
Divisor : 1.0000
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 15

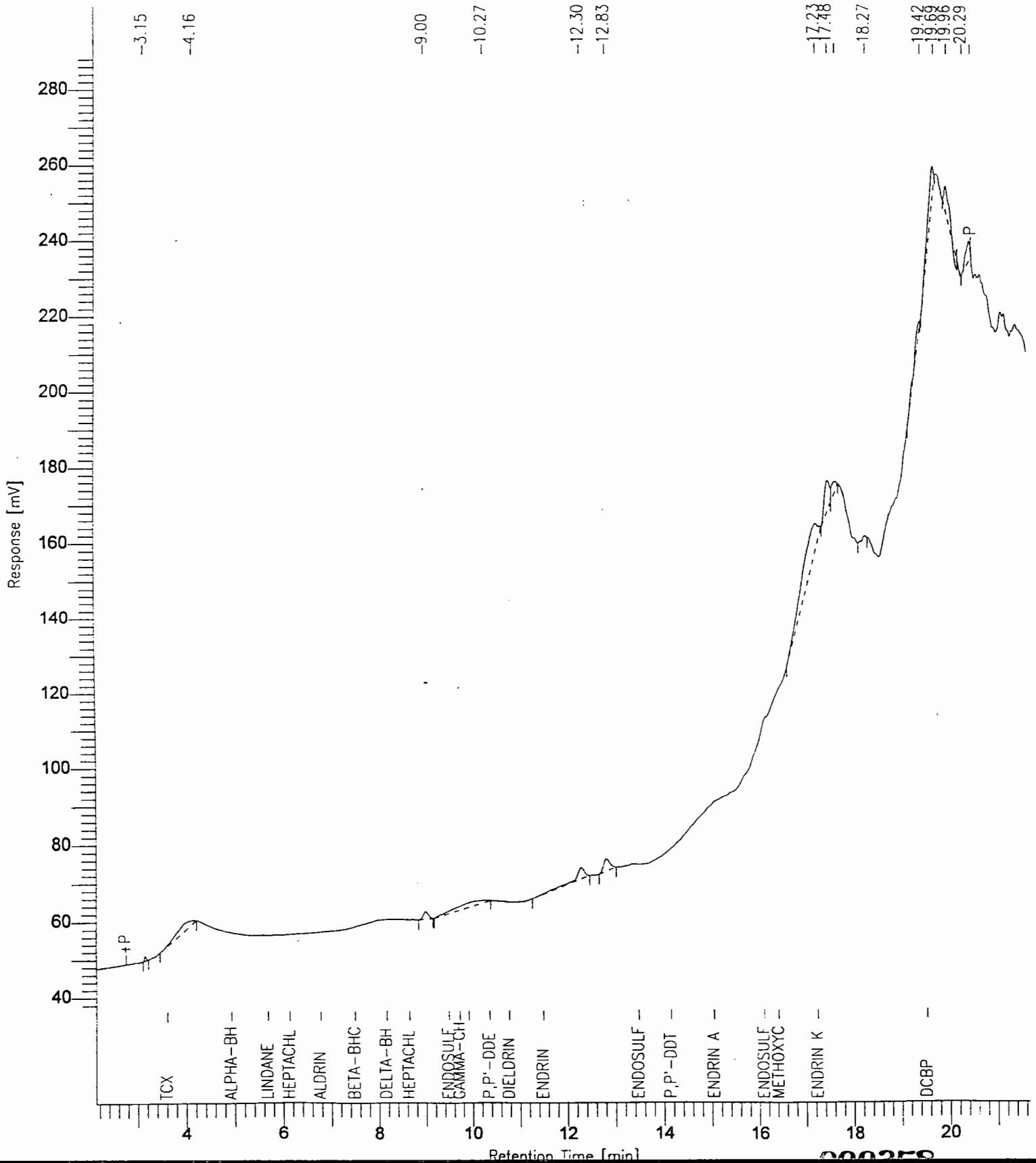
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	4.156		47398	B	770	-------
3	9.002		14909	B	1972	-------
4	10.268		52847	B	546	-------
5	12.303		38029	B	2933	-------
6	12.833		29973	B	3172	-------
7	17.227	ENDRIN KETONE	233005	B	7177	-0.0884
	17.476		61827	B	8134	-------
	17.631		22743	V	2716	-------
	19.417	DCBP	36574	B	1934	-0.5351
12	19.694		87695	B	8364	-------
13	19.962		32455	B	6345	-------
15	20.465		35124	*B	5131	-------
			692577		49196	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862B026.RAW
Method :
Start Time : 2.13 min End Time : 21.67 min
Scale Factor: 0.0 Plot Offset: 36 mV

Sample #:
Date : 7/25/94 11:22 AM
Time of Injection: 7/22/94 05:32 AM
Low Point : 36.29 mV High Point : 289.31 mV
Plot Scale: 253.0 mV



9513554.2628

Software Version: 4.0<1C29>
Sample Name : HEXANE
S e Number:
O ator : VIC

Time : 7/25/94 11:31 AM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/29

Channel : B A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 06:52 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B028.RAW
Result File : C:\TC4\HP58907\862B028.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B028.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B028.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B028.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 10789.000000
Dilution Factor : 1.00

Threshold: 33
Multiplier : 1.0000

Area Threshold : 444
Divisor : 1.0000

Bunch Factor: 1
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 15

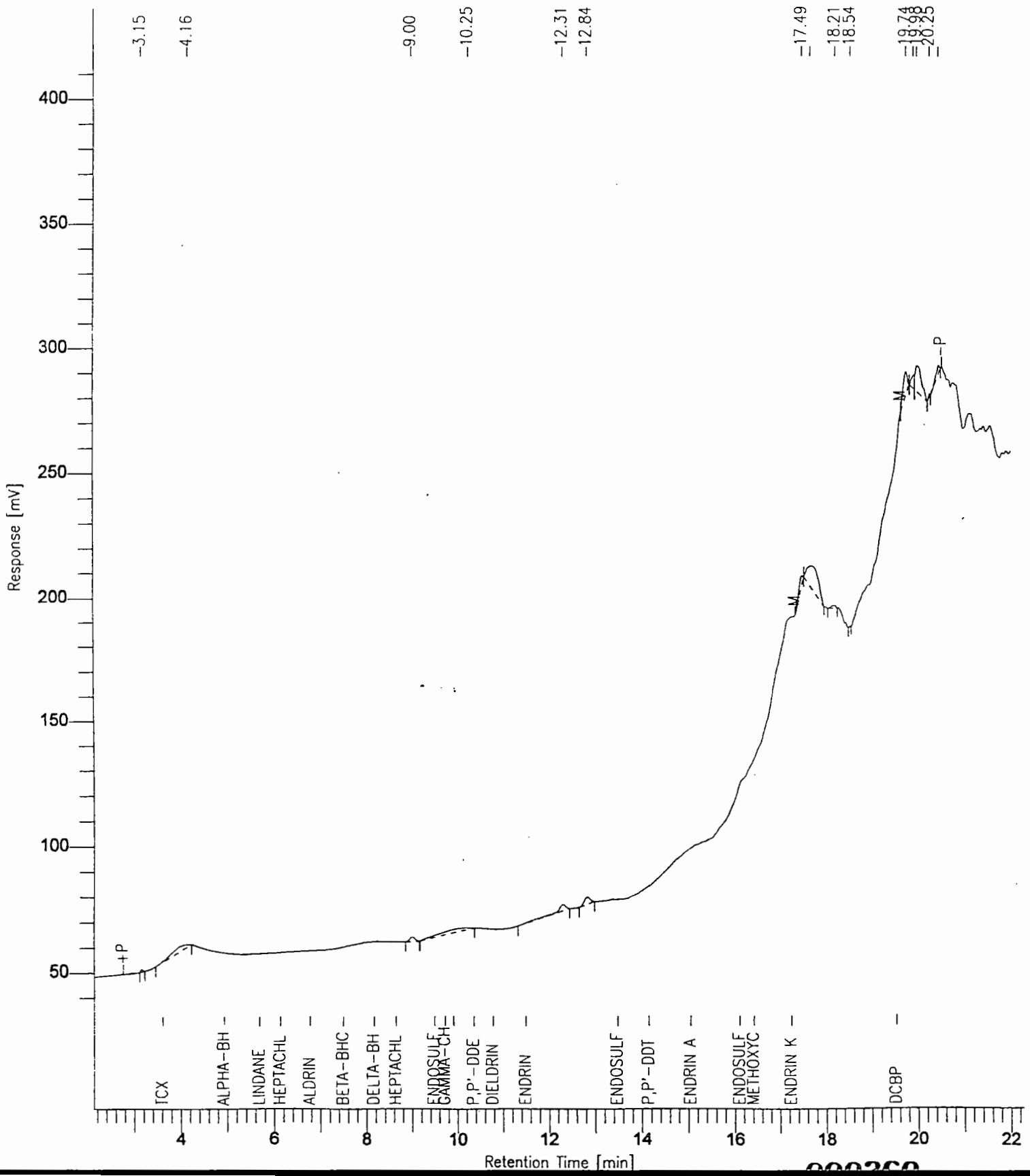
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	4.155		50004	B	875	-------
3	9.002		13917	B	1774	-------
4	10.252		59185	B	561	-------
5	12.310		32712	B	2469	-------
6	12.838		26043	B	2792	-------
7	17.488		29405	*B	4015	-------
	17.672		157085	B	8309	-------
	9.735		62506	*B	9240	-------
	.902		22612	B	5552	-------
13	19.976		103554	V	10580	-------
15	20.445		20318	B	3260	-------
			577343		49426	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862B028.RAW
Method :
Start Time : 2.13 min End Time : 22.28 min
Scale Factor: 0.0 Plot Offset: 32 mV

Sample #:
Date : 7/25/94 11:31 AM
Time of Injection: 7/22/94 06:52 AM
Low Point : 32.44 mV High Point : 417.05 mV
Plot Scale: 384.6 mV



Software Version: 4.0<1C29>
Sample Name : HEXANE
Sample Number:
Operator : VIC

Time : 7/25/94 11:37 AM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/31

Channel : B A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 08:12 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B030.RAW
Result File : C:\TC4\HP58907\862B030.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B030.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B030.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B030.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 10789.000000
Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 14

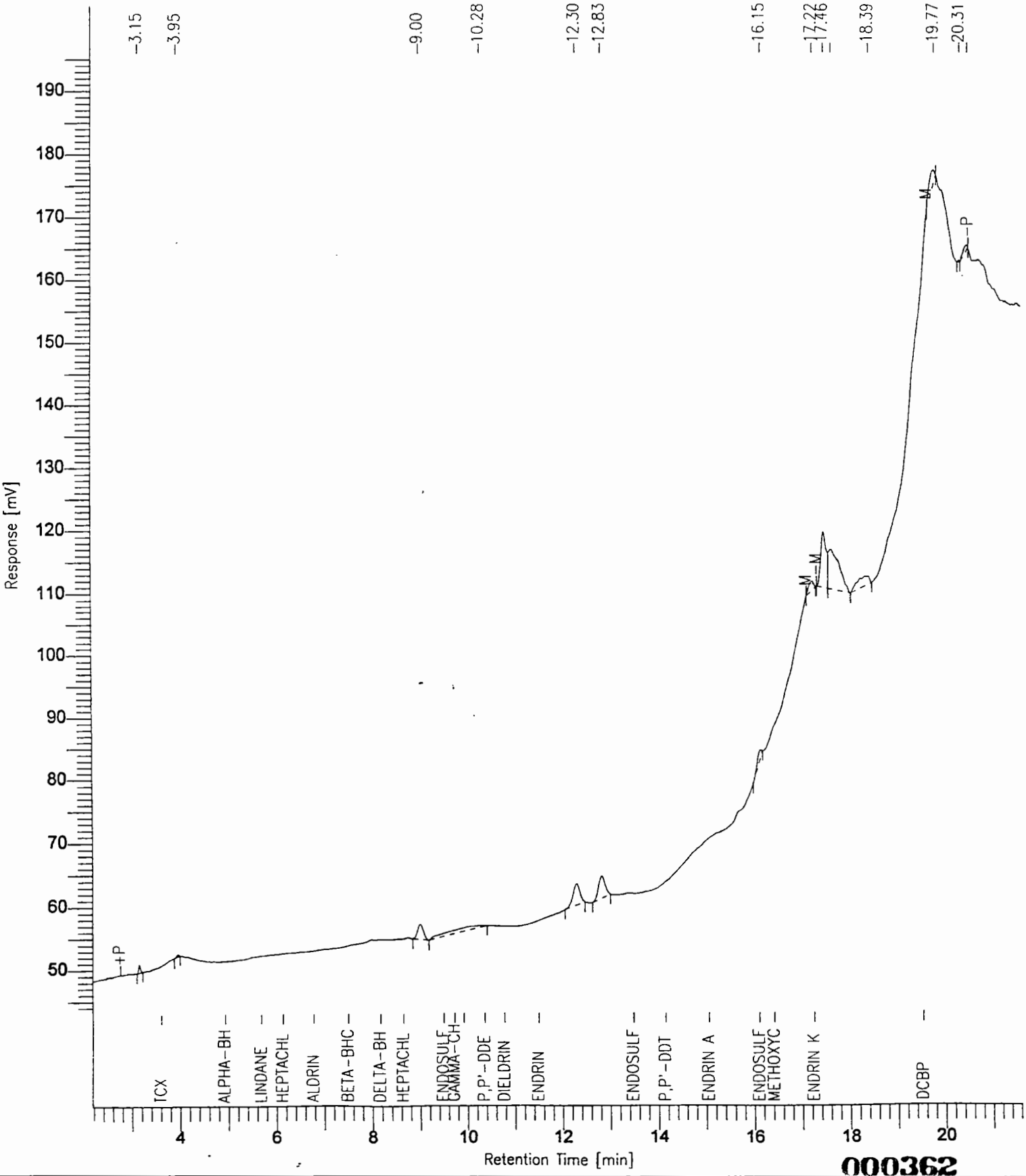
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
3	8.999		20479	B	2417	-------
4	10.282		31161	B	265	-------
5	12.298		34137	B	3338	-------
6	12.829		33518	B	3448	-------
7	16.153	ENDOSULFAN SULFATE	11174	B	1375	0.2766
	17.456		70167	B	8792	-------
	17.618		101621	V	6279	-------
	18.392		27673	B	1318	-------
14	19.767		24011	*B	2363	-------
			353940		29595	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862B030.RAW
Method :
Start Time : 2.17 min End Time : 21.62 min
Scale Factor: 0.0 Plot Offset: 43 mV

Sample #:
Date : 7/25/94 11:37 AM
Time of Injection: 7/22/94 08:12 AM
Low Point : 43.02 mV High Point : 195.92 mV
Plot Scale: 152.9 mV



Software Version: 4.0<1C29>
le Name : HEXANE Time : 7/25/94 11:38 AM
le Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/33

Interface Serial # : NONE Data Acquisition Time: 7/22/94 09:33 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B032.RAW
Result File : C:\TC4\HP58907\862B032.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B032.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B032.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B032.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 5

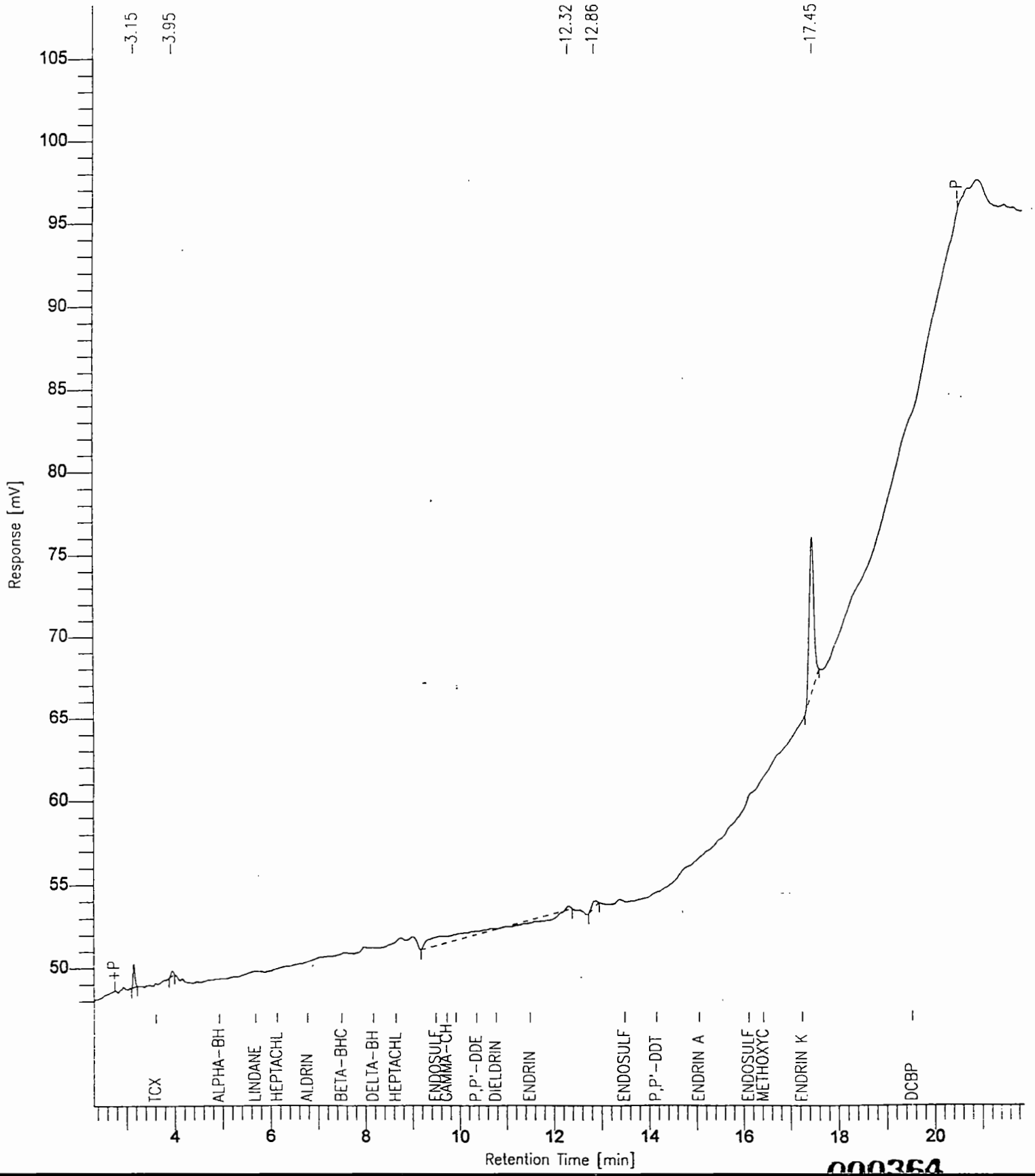
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
3	12.320		15724	B	179	-------
5	17.454		64150	B	9598	-------
			79874		9778	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862B032.RAW
Method :
Start Time : 2.31 min End Time : 21.90 min
Scale Factor: 0.0 Plot Offset: 47 mV

Sample #:
Date : 7/25/94 11:38 AM
Time of Injection: 7/22/94 09:33 AM
Low Point : 47.25 mV High Point : 105.34 mV
Plot Scale: 58.1 mV



Software Version: 4.0<1C29>
Sample Name : HEXANE
Sample Number:
Operator : VIC

Time : 7/25/94 11:38 AM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/34

Channel : B A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 10:13 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B033.RAW
Result File : C:\TC4\HP58907\862B033.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B033.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B033.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B033.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 10789.000000
Dilution Factor : 1.00

Peak Threshold: 33
Area Threshold : 444
Bunch Factor: 1
Multiplier : 1.0000
Divisor : 1.0000
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 3

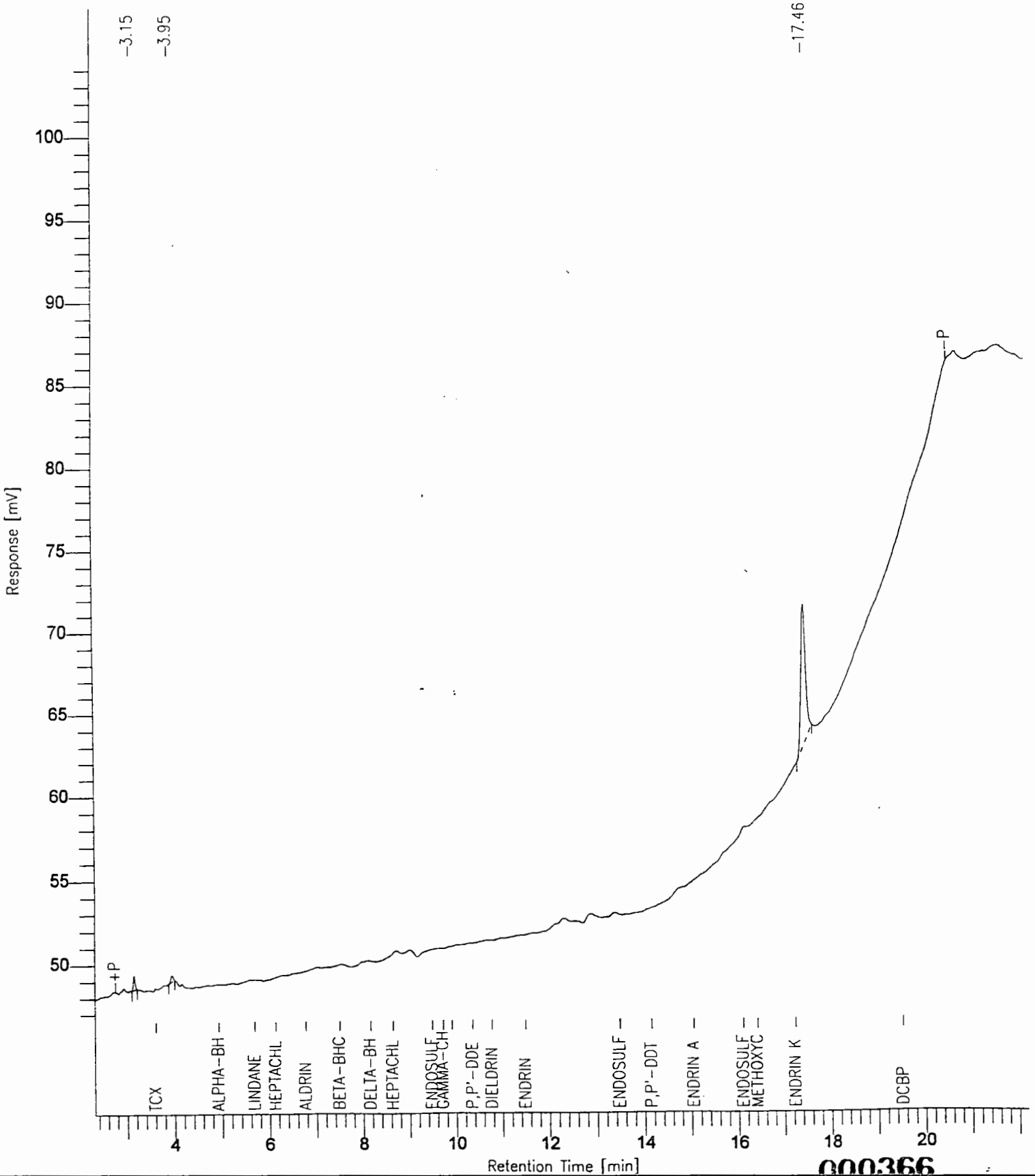
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
3	17.455		59941	B	8714	-------
			59941		8714	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862B033.RAW
Method :
Start Time : 2.31 min End Time : 22.19 min
Scale Factor: 0.0 Plot Offset: 47 mV

Sample #:
Date : 7/25/94 11:38 AM
Time of Injection: 7/22/94 10:13 AM
Low Point : 46.56 mV High Point : 104.91 mV
Plot Scale: 58.3 mV



Software Version: 4.0<1C29>
Sample Name : HEXANE
.e Number:
Operator : VIC

Time : 7/25/94 01:29 PM
Study :

Instrument : HP5890A_-_7
AutoSampler : HP7673A
Rack/Vial : 0/37

Channel : B A/D mV Range : 1000

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:14 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B036.RAW
Result File : C:\TC4\HP58907\862B036.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B036.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B036.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B036.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul
Sample Amount : 1.0000

Area Reject : 10789.000000
Dilution Factor : 1.00

e Threshold: 33
Area Threshold : 444
Bunch Factor: 1
Multiplier : 1.0000
Divisor : 1.0000
Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 12

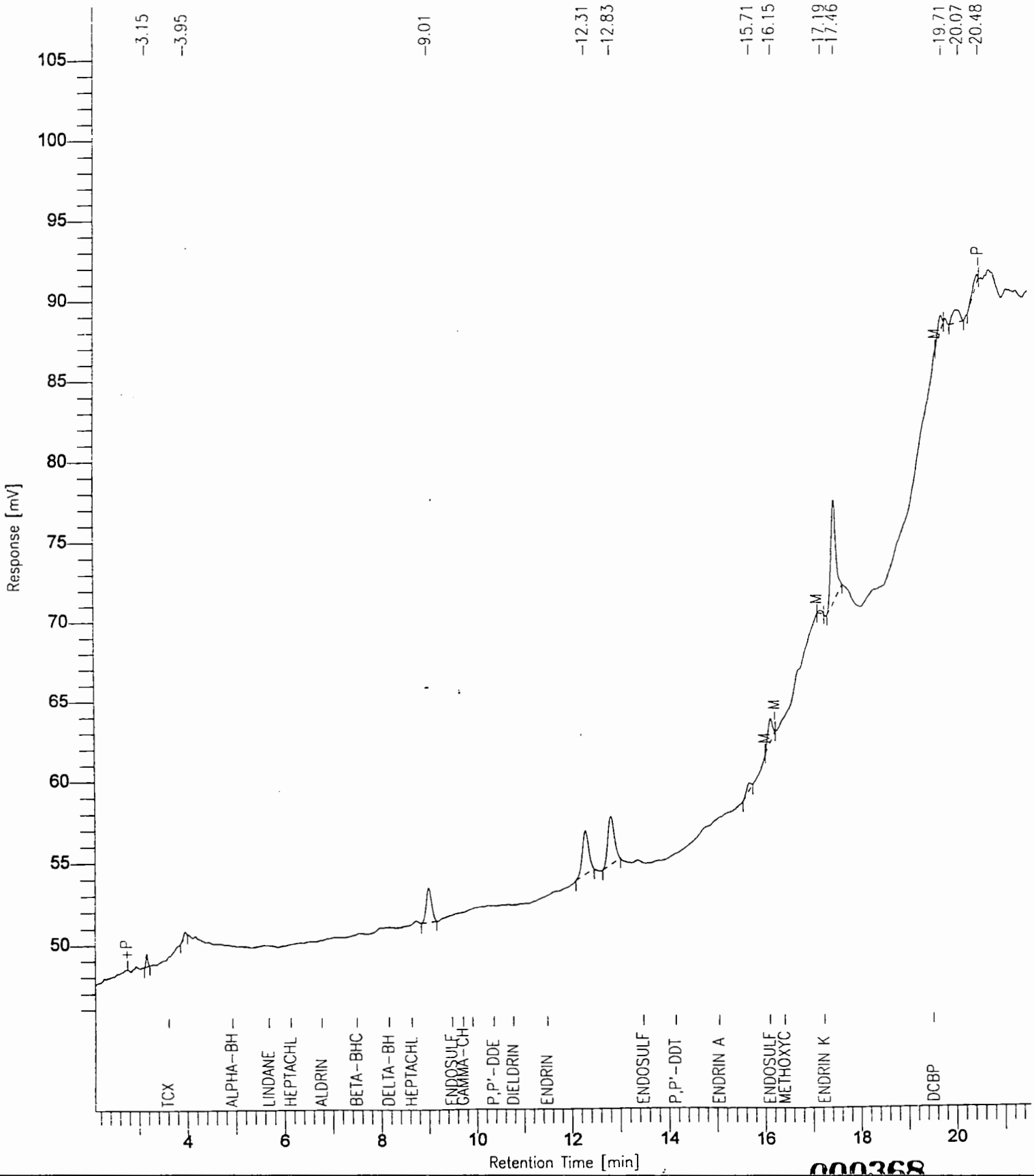
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
3	9.005		16749	B	2117	-------
4	12.305		25037	B	2706	-------
5	12.833		28076	B	2984	-------
9	17.457		45019	B	6457	-------
			114881		14264	

Chromatogram

Sample Name : HEXANE
FileName : C:\TC4\HP58907\862B036.RAW
Method :
Start Time : 2.08 min End Time : 21.53 min
Scale Factor: 0.0 Plot Offset: 46 mV

Sample #:
Date : 7/25/94 01:29 PM
Time of Injection: 7/22/94 12:14 PM
Low Point : 45.50 mV High Point : 105.34 mV
Plot Scale: 59.8 mV



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Software Version: 4.0<1C29>
Sample Name : MB*PIBLK*2 Time : 7/25/94 01:29 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/38

Interface Serial # : NONE Data Acquisition Time: 7/22/94 12:54 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B037.RAW
Result File : C:\TC4\HP58907\862B037.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B037.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B037.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B037.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Peak Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 12

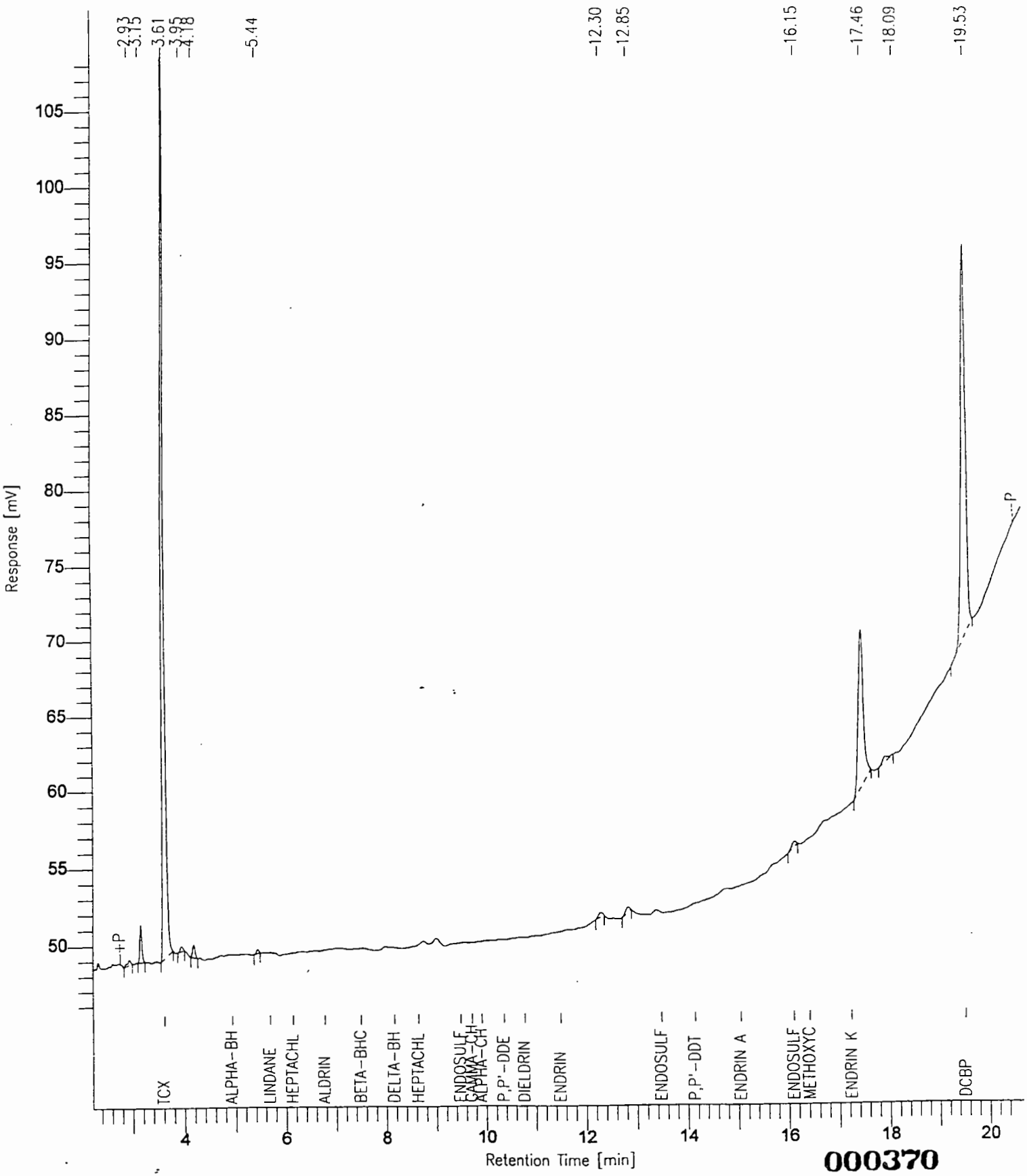
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
3	3.607	TCX	214059	B	68779	0.0412
10	17.457		74745	B	10628	-------
12	19.525	DCBP	170700	B	26088	0.0205
			459503		105495	

Chromatogram

Sample Name : MB*PIBLK*2
FileName : C:\TC4\HP58907\862B037.RAW
Method :
Start Time : 2.22 min End Time : 20.68 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 01:30 PM
Time of Injection: 7/22/94 12:54 PM
Low Point : 45.39 mV High Point : 108.58 mV
Plot Scale: 63.2 mV



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9513354.2634

Software Version: 4.0<1C29>
File Name : CCS*INDAM*2 Time : 7/25/94 01:30 PM
File Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/39

Interface Serial # : NONE Data Acquisition Time: 7/22/94 01:34 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B038.RAW
Result File : C:\TC4\HP58907\862B038.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B038.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B038.RST
Calib Method : C:\TC4\HP58907\862BAM from C:\TC4\HP58907\862B038.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Peak Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 20

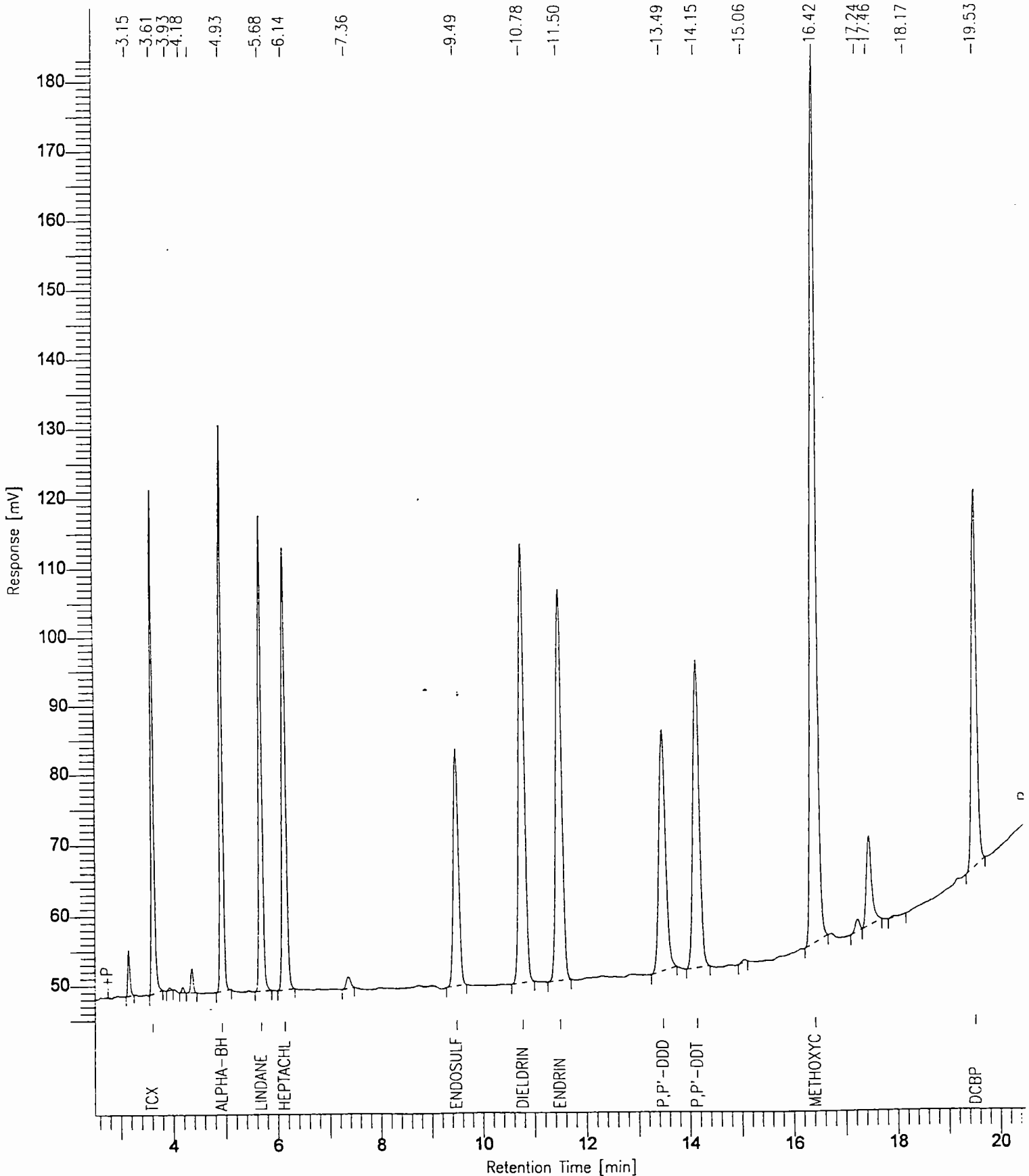
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.607	TCX	229701	B	72498	0.0386	0.0200
6	4.929	ALPHA-BHC	291527	B	81708	0.0375	0.0200
7	5.684	LINDANE	288373	B	68680	0.0477	0.0200
8	6.137	HEPTACHLOR	316236	B	64044	0.0487	0.0200
10	9.489	ENDOSULFAN A	237654	B	33936	0.0364	0.0200
	10.777	DIELDRIN	473672	B	63443	0.0373	0.0400
	11.496	ENDRIN	438381	B	56534	0.0312	0.0400
	13.485	P,P'-DDD	311239	B	34568	0.0192	0.0400
14	14.149	P,P'-DDT	370554	B	44301	0.0261	0.0400
16	16.419	METHOXYCHLOR	952866	B	128236	0.0109	0.2000
20	19.525	DCBP	362088	B	54789	0.0201	0.0400
			4272292		702737		0.5000

Chromatogram

Sample Name : CCS*INDAM*2
FileName : C:\TC4\HP58907\862B038.RAW
Method :
Start Time : 2.50 min End Time : 20.49 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 01:30 PM
Time of Injection: 7/22/94 01:34 PM
Low Point : 44.79 mV High Point : 183.68 mV
Plot Scale: 138.9 mV



Software Version: 4.0<1C29>
Sample Name : CCS*INDBM*2 Time : 7/25/94 01:31 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/40

Interface Serial # : NONE Data Acquisition Time: 7/22/94 02:14 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B039.RAW
Result File : C:\TC4\HP58907\862B039.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B039.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B039.RST
Calib Method : C:\TC4\HP58907\862BBM from C:\TC4\HP58907\862B039.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 5555.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 25

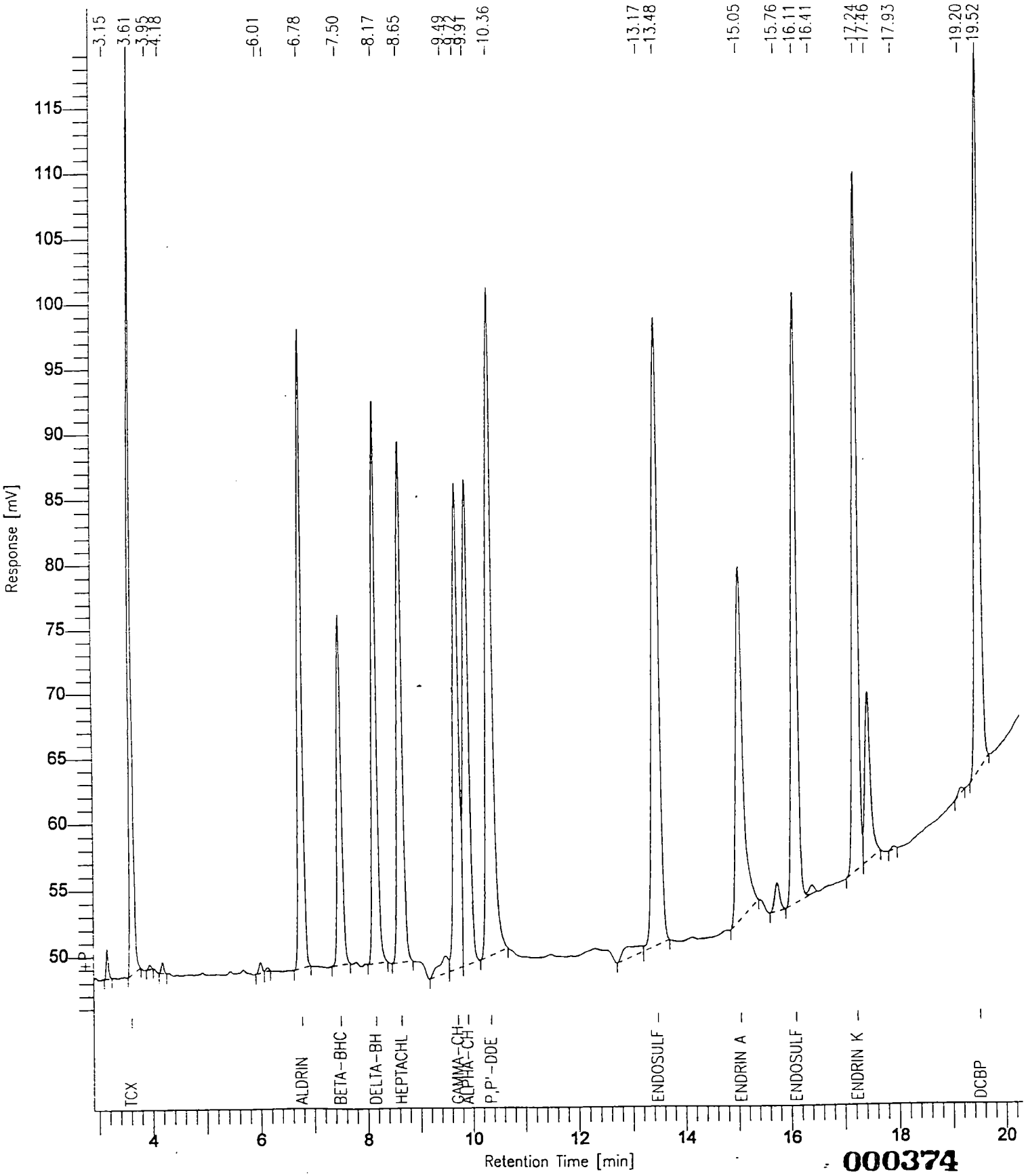
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]	NG INJECTED
2	3.606	TCX	222558	B	70357	0.0323	0.0200
7	6.777	ALDRIN	256721	B	49271	0.0494	0.0200
8	7.499	BETA-BHC	150177	B	26896	0.0360	0.0200
9	8.166	DELTA-BHC	245451	B	43199	0.0420	0.0200
10	8.647	HEPTACHLOR EPOXIDE	262829	B	39971	0.0441	0.0200
13	9.721	GAMMA-CHLORDANE	277787	V	37298	0.0260	0.0200
	9.914	ALPHA-CHLORDANE	274815	V	37274	0.0407	0.0200
	10.359	P,P'-DDE	415540	B	51269	0.0438	0.0400
16	13.482	ENDOSULFAN B	424175	V	48231	0.0251	0.0400
17	15.052	ENDRIN ALDEHYDE	251835	B	27206	0.0132	0.0400
19	16.109	ENDOSULFAN SULFATE	330081	B	47102	0.0089	0.0400
21	17.244	ENDRIN KETONE	345921	B	53996	0.0099	0.0400
25	19.524	DCBP	370367	B	55616	0.0174	0.0400
			3828257		587687		0.3800

Chromatogram

Sample Name : CCS*INDBM*2
FileName : C:\TC4\HP58907\862B039.RAW
Method :
Start Time : 2.89 min End Time : 20.30 min
Scale Factor: 0.0 Plot Offset: 45 mV

Sample #:
Date : 7/25/94 01:31 PM
Time of Injection: 7/22/94 02:14 PM
Low Point : 45.35 mV High Point : 119.03 mV
Plot Scale: 73.7 mV



9513354.2636

Raw QC Data

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK1

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Matrix: (soil/water) SOIL Lab Sample ID: MB*QC*1

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: decanted: (Y/N) Y Date Received: 00/00/00

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/18/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 7.0 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	1.7	U
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	1.7	U
76-44-8	Heptachlor	1.7	U
309-00-2	Aldrin	1.7	U
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	3.3	U
72-55-9	4,4'-DDE	3.3	U
72-20-8	Endrin	3.3	U
33213-65-9	Endosulfan II	3.3	U
72-54-8	4,4'-DDD	3.3	U
1031-07-8	Endosulfan sulfate	3.3	U
50-29-3	4,4'-DDT	3.3	U
72-43-5	Methoxychlor	17.	U
53494-70-5	Endrin ketone	3.3	U
742-93-4	Endrin aldehyde	3.3	U
5103-71-9	alpha-Chlordane	1.7	U
5566-34-7	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	33.	U
11104-28-2	Aroclor-1221	67.	U
11141-16-5	Aroclor-1232	33.	U
53469-21-9	Aroclor-1242	33.	U
12672-29-6	Aroclor-1248	33.	U
11097-69-1	Aroclor-1254	33.	U
11096-82-5	Aroclor-1260	33.	U

9513594.2637

Software Version: 4.0<1C29>
Sample Name : MB*QC*1 7-18-94 PBLK1 Time : 7/22/94 12:35 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/23

Interface Serial # : NONE Data Acquisition Time: 7/22/94 03:31 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A023.RAW
Result File : C:\TC4\HP58907\862A023.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A023.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A023.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A023.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Peak Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 25

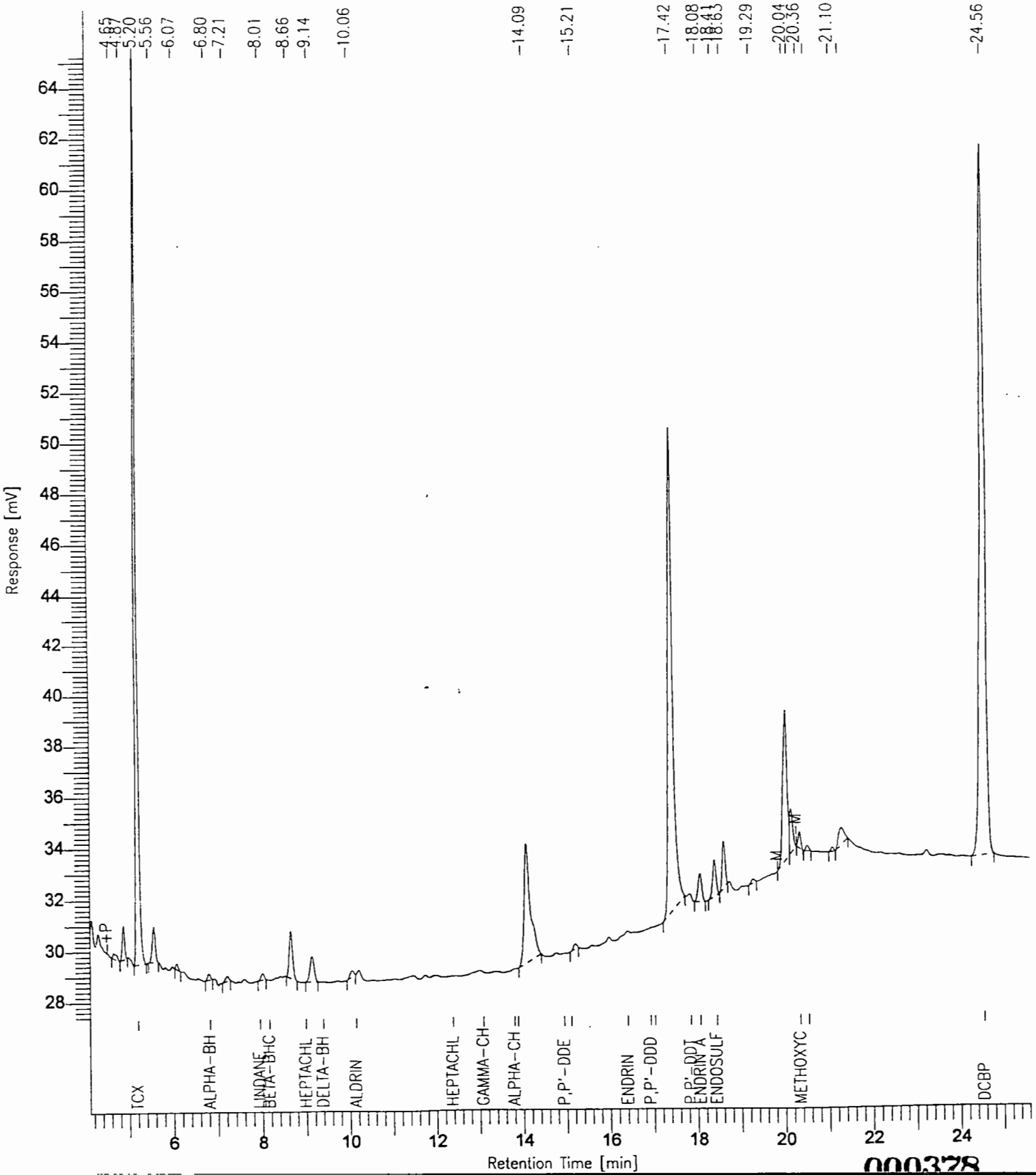
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	4.871		5052	B	1331	-------
3	5.198	TCX	143483	B	45495	0.0258
4	5.562		6625	B	1387	-------
9	8.657		9979	B	1867	-------
10	9.139		6589	B	1004	-------
12	14.087		47513	B	4681	-------
	17.420		144018	B	19174	-------
	8.081	ENDRIN ALDEHYDE	6435	B	1100	0.0777
16	18.410	ENDOSULFAN SULFATE BDL	7871	B	1437	-0.1732
17	18.626		8842	B	1831	-------
19	20.042		40644	*B	5944	-------
20	20.163		8632	*V	1750	-------
24	21.307		6362	B	673	-------
25	24.555	DCBP	234527	B	28198	0.0168

Chromatogram

Sample Name : MB*QC*1 7-18-94 PBLK1
FileName : C:\TC4\HP58907\862A023.RAW
Method :
Start Time : 4.11 min End Time : 25.62 min
Scale Factor: 0.0 Plot Offset: 27 mV

Sample #:
Date : 7/22/94 12:35 PM
Time of Injection: 7/22/94 03:31 AM
Low Point : 27.31 mV High Point : 65.21 mV
Plot Scale: 37.9 mV



Software Version: 4.0<1C29>
Sample Name : MB*QC*1 7-18-94 PBLK1 Time : 7/25/94 11:17 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/25

Interface Serial # : NONE Data Acquisition Time: 7/22/94 04:12 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B024.RAW
Result File : C:\TC4\HP58907\862B024.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B024.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B024.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B024.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Peak Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 34

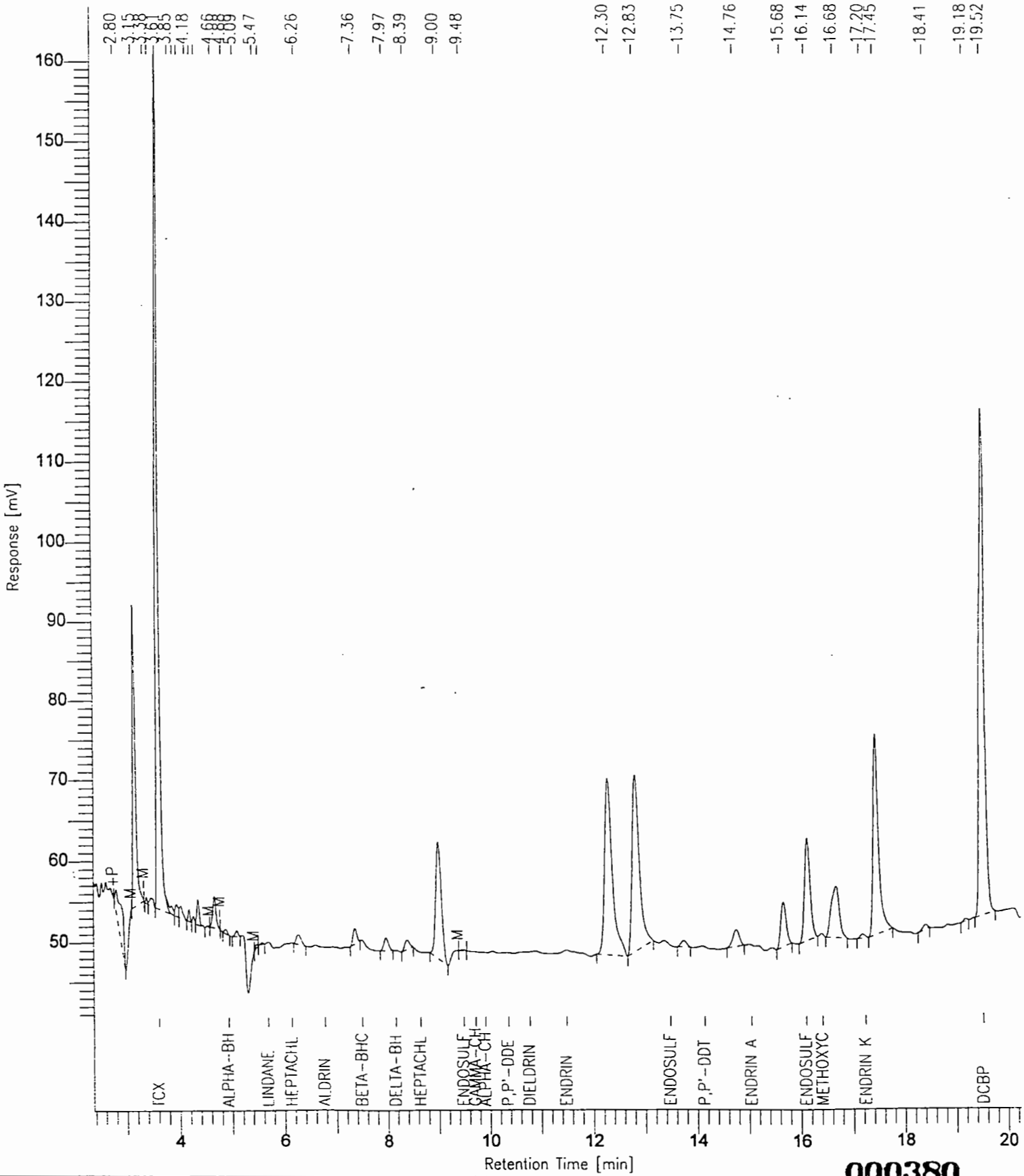
DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	2.796		37535	B	2601	-------
2	3.149		137260	*B	38155	-------
5	3.605	TCX	425785	B	126620	-0.0169
12	4.664		16932	*B	3920	-------
21	9.002		110919	B	14530	-------
23	12.299		228346	B	21940	-------
	12.828		211000	B	21842	-------
	14.764		17993	B	2015	-------
	15.677		39743	B	5483	-------
28	16.137	ENDOSULFAN SULFATE N C	93579	B	12689	0.1786
29	16.684		67499	B	6305	-------
31	17.450		181128	B	25076	-------
34	19.520	DCBP	427884	B	63762	-0.0030
			1995602		344937	

Chromatogram

Sample Name : MB*QC*1 7-18-94 PBLK1
FileName : C:\TC4\HP58907\862B024.RAW
Method :
Start Time : 2.36 min End Time : 20.25 min
Scale Factor: 0.0 Plot Offset: 41 mV

Sample #:
Date : 7/25/94 11:17 AM
Time of Injection: 7/22/94 04:12 AM
Low Point : 40.58 mV High Point : 160.95 mV
Plot Scale: 120.4 mV



000380

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01MS

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Matrix: (soil/water) SOIL Lab Sample ID: SPM1*CDMHNSS3*43

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 3 decanted: (Y/N) Y Date Received: 07/17/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/18/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	3.1	
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	35.	P
76-44-8	Heptachlor	33.	
309-00-2	Aldrin	15.	P
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	16.	
72-55-9	4,4'-DDE	16.	P
72-20-8	Endrin	170.	P
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U
50-29-3	4,4'-DDT	15.	P
72-43-5	Methoxychlor	17.	U
53494-70-5	Endrin ketone	3.4	U
742-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.7	U
5566-34-7	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	34.	U
11104-28-2	Aroclor-1221	69.	U
11141-16-5	Aroclor-1232	34.	U
53469-21-9	Aroclor-1242	34.	U
12672-29-6	Aroclor-1248	34.	U
11097-69-1	Aroclor-1254	34.	U
11096-82-5	Aroclor-1260	34.	U

Software Version: 4.0<1C29>
Sample Name : SPM1*CDMHNSS3*43 7-18-94 Time : 7/22/94 02:07 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/26

Interface Serial # : NONE Data Acquisition Time: 7/22/94 05:32 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A026.RAW
Result File : C:\TC4\HP58907\862A026.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A026.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A026.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A026.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 140

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	4.542		9512	B	5529	-------
2	4.673		302719	B	96865	-------
3	4.732		61203	V	31565	-------
4	4.823		235099	V	58616	-------
5	5.044		216477	V	42853	-------
6	5.210	TCX	139641	B	44531	0.2467
7	5.397		111212	*B	32926	-------
8	5.593		407658	*B	56259	-------
9	5.729		43254	B	14815	-------
10	5.819		37499	V	12963	-------
11	5.943		117520	B	23999	-------
12	6.146		10495	B	4139	-------
13	6.272		173512	B	37796	-------
14	6.391		62830	V	18163	-------
15	6.471		144244	V	35428	-------

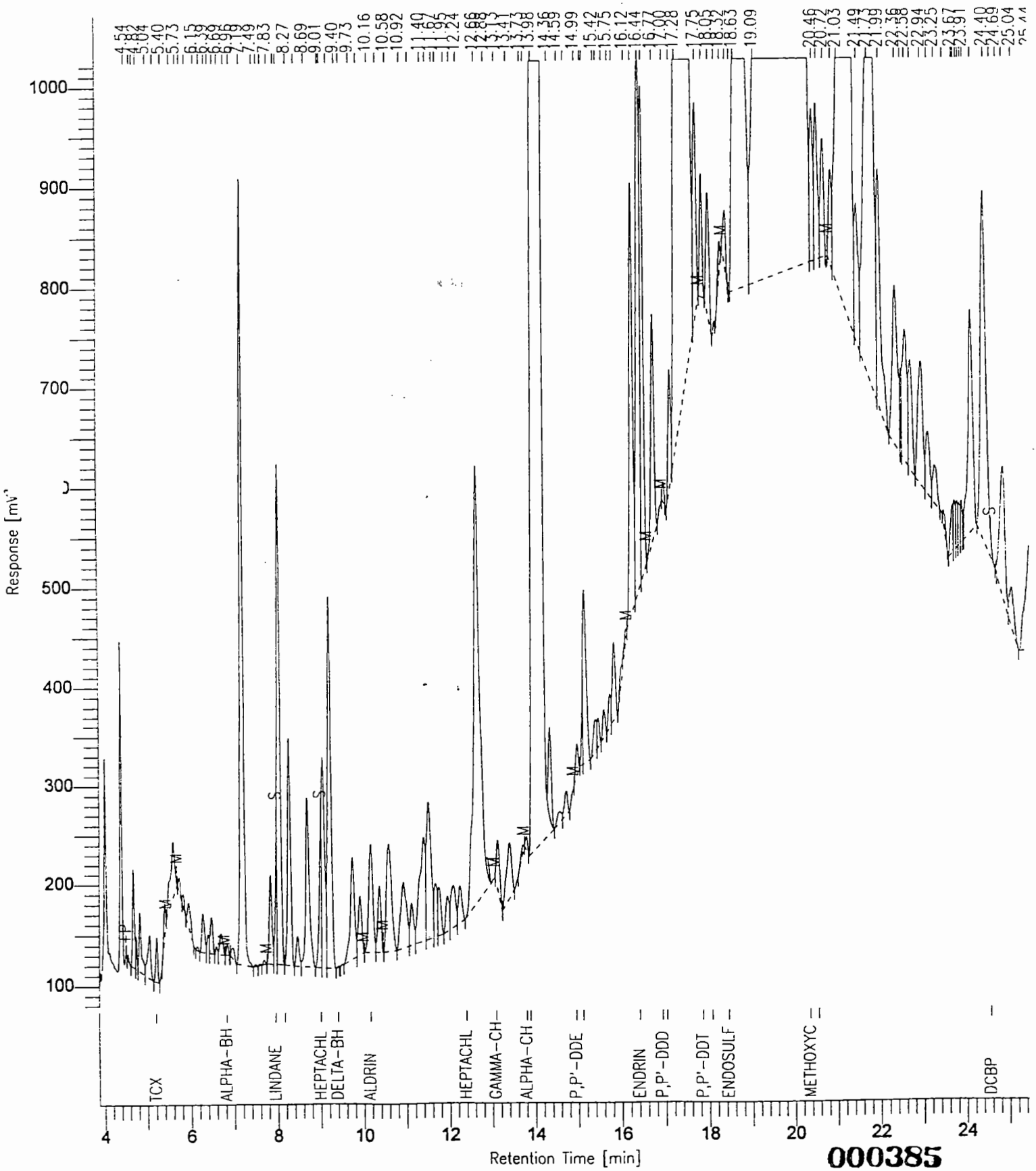
I	et Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
16	6.583		23387	V	7755	-------
17	6.687		105756	*V	20930	-------
18	6.836	ALPHA-BHC	32206	*B	10372	0.2150
19	6.957		49851	B	10556	-------
20	7.189		3745819	B	790739	-------
21	7.487		7165	B	2128	-------
22	7.592		4213	B	1339	-------
23	7.685		13899	B	4388	-------
24	7.833		376804	*B	87515	-------
25	7.980	LINDANE	335737	*V	154559	0.4026
26	8.039		2377350	*V	502013	-------
27	8.274		1100708	B	228724	-------
28	8.460		141194	B	29417	-------
29	8.694		986203	V	169174	-------
30	9.013	HEPTACHLOR	504185	*B	159790	0.2038
31	9.053		1052077	*V	211814	-------
32	9.210		2035386	V	375482	-------
35	9.731		696678	B	101604	-------
36	9.905		331222	*V	58058	-------
37	10.160	ALDRIN	730280	*B	108362	0.1104
38	10.359		344077	*V	65463	-------
39	10.582		906191	B	107921	-------
40	10.920		637748	B	65320	-------
41	11.114		235252	V	41667	-------
42	11.402		971859	V	103955	-------
43	11.518		1066212	V	138179	-------
44	11.670		274017	V	53051	-------
45	11.749		237687	V	47702	-------
46	11.946		191990	B	34468	-------
47	12.079		330349	V	41396	-------
48	12.236		218600	V	36641	-------
[illegible]	12.656		4442962	B	439318	-------
	12.882		67757	E	14520	-------
	13.130	GAMMA-CHLORDANE	264324	*B	52110	0.3829
52	13.410		477142	B	55915	-------
53	13.725		45764	*B	6544	-------
54	13.806	ALPHA-CHLORDANE	41174	*B	13263	0.0808
55	13.980		14456587	B	791953	-------
56	14.358		425590	E	92026	-------
57	14.588		84223	B	11316	-------
58	14.739		129314	V	23678	-------
59	14.993	P,P'-DDE	137280	*B	31472	0.3122
60	15.127	DIELDRIN	167751	*B	102452	0.1169
61	15.166		920426	*V	174247	-------
62	15.424		178562	B	31958	-------
63	15.478		100324	V	29945	-------
64	15.614		116779	B	29076	-------
65	15.749		143487	V	33565	-------
66	15.848		378608	V	77703	-------
67	16.123		151489	*B	13177	-------
68	16.274		2297977	*B	430208	-------
69	16.437	ENDRIN	3256196	*V	530193	0.2236
70	16.514		2038288	*V	492365	-------
71	16.765		1110335	B	225807	-------
72	16.995	ENDOSULFAN B	57664	*B	20024	-0.1759
73	17.149		509853	B	118050	-------
74	17.280		9183616	V	390943	-------
75	17.751		1060752	*V	216104	-------
76	17.898	P,P'-DDT	464327	*B	123135	0.2696
77	18.049	ENDRIN ALDEHYDE	596147	B	123006	-0.1015
78	18.190		15077	B	6357	-------
79	18.320		123181	B	29328	-------
80	18.442	ENDOSULFAN SULFATE	216085	*B	55896	0.0025
81	18.536		5774	*B	-4752	-------
82	18.630		5292739	*V	232199	-------
[illegible]	19.093		17402475	*V	222877	-------
	20.463	METHOXYCHLOR	788362	*V	147756	0.5406
	20.562	ENDRIN KETONE	780396	*V	150810	0.0671
86	20.717		574491	*V	112126	-------
87	20.897		450809	B	94989	-------
88	21.033		6640896	V	224627	-------
89	21.486		838792	V	137771	-------
90	21.727		5722131	V	315157	-------
91	21.987		1539480	V	237700	-------
92	22.358		1332770	B	160647	-------

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
93	22.488		165124	V	86127	-------
94	22.578		987429	V	132237	-------
95	22.699		653929	V	110086	-------
96	22.941		984731	B	123899	-------
97	23.094		403144	V	62183	-------
98	23.254		262657	V	37997	-------
99	23.456		53285	B	11143	-------
100	23.667		194205	B	47125	-------
101	23.702		170068	V	50347	-------
102	23.762		125307	V	46690	-------
103	23.807		145097	V	42484	-------
104	23.866		112722	V	42187	-------
105	23.914		46418	V	29850	-------
106	24.094		1698387	V	222379	-------
107	24.401		3014632	B	351367	-------
108	24.547	DCBP	17894	*E	4628	-0.0177
109	24.687		18906	*B	12512	-------
110	24.827		1067954	V	127823	-------
111	25.043		287523	V	39111	-------
112	25.443		1019728	B	107010	-------
115	25.837		66567	B	17079	-------
116	25.913		227067	V	29564	-------
117	26.038		51611	V	14293	-------
118	26.159		7381	V	3069	-------
119	26.215		8558	V	4526	-------
120	26.253		4185	V	2934	-------
121	26.358		258190	V	31904	-------
122	26.473		73414	V	24644	-------
123	26.526		99060	V	23478	-------
124	26.631		138295	V	28348	-------
125	26.947		1043308	V	93564	-------
126	26.993		267155	V	96051	-------
127	27.039		903187	V	102184	-------
128	27.416		503116	V	49904	-------
129	27.804		727253	B	57379	-------
130	27.991		100564	V	22908	-------
131	28.101		136930	V	19356	-------
132	28.449		207126	B	32306	-------
133	28.605		543147	V	52358	-------
134	28.772		7944	E	4055	-------
136	28.853		13359	V	4515	-------
137	29.261		519349	B	47661	-------
138	29.401		23072	V	9158	-------
139	29.747		10228	B	3952	-------
			124534339		13566868	

Chromatogram

S: Name : SPM1*CDMHNSS3*43 7-18-94
F: : C:\TC4\HP58907\862A026.RAW
Method :
Start Time : 3.87 min End Time : 25.43 min
Scale Factor: 0.0 Plot Offset: 73 mV

Sample #:
Date : 7/22/94 02:07 PM
Time of Injection: 7/22/94 05:32 AM
Low Point : 73.26 mV High Point : 1024.00 mV
Plot Scale: 950.7 mV



Software Version: 4.0<1C29>
Sample Name : SPM1*CDMHNSS3*43 7-18-94 Time : 7/25/94 11:27 AM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/28

Interface Serial # : NONE Data Acquisition Time: 7/22/94 06:12 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B027.RAW
Result File : C:\TC4\HP58907\862B027.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B027.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B027.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B027.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 64

DATA REPORT

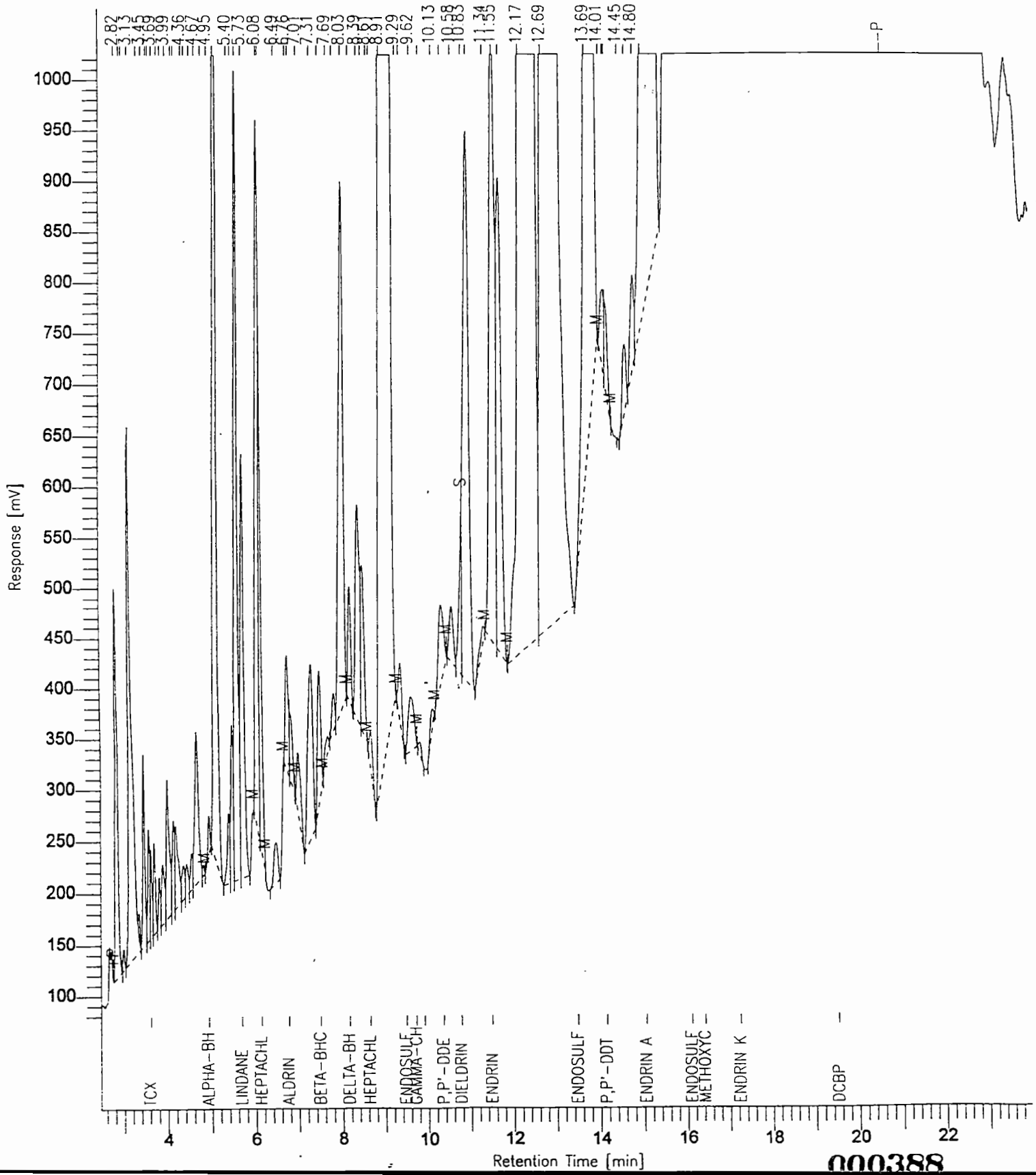
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	2.816		1623978	*B	383447	-------
2	2.933		18351	E	9969	-------
3	2.983		56803	V	21004	-------
4	3.126		3036395	B	526522	-------
5	3.337		70234	E	22859	-------
6	3.450		624059	V	188823	-------
7	3.565		352672	V	107847	-------
8	3.605	TCX	225033	V	86053	-0.0254
9	3.690		294123	V	89021	-------
10	3.802		161131	V	49633	-------
11	3.881		277994	V	57663	-------
12	3.993		646582	V	134389	-------
13	4.136		340580	V	87736	-------
14	4.185		415901	V	79916	-------
15	4.361		158011	V	32878	-------

Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
16	4.433		132243	V	30515	-------
17	4.550		135082	V	35036	-------
18	4.669		893285	V	148050	-------
19	4.815		28228	*V	10606	-------
20	4.951	ALPHA-BHC	125937	*B	38264	0.4815
21	5.093		4953400	B	790296	-------
22	5.402		285854	B	67635	-------
23	5.485		602011	V	153213	-------
24	5.589		3921861	V	799231	-------
25	5.732	LINDANE vsb 7-26-94	2142526	V	417464	-------
26	6.078		3324486	*B	702508	-------
27	6.113	HEPTACHLOR	1750745	*V	571761	-0.3369
28	6.486		262876	B	39464	-------
29	6.758	ALDRIN	559313	*B	113834	-0.2193
30	6.813		304932	*V	66943	-------
31	7.009		376181	B	60004	-------
32	7.310		1400383	B	171298	-------
33	7.501	BETA-BHC NC	712247	*B	129447	0.0644
34	7.692		120337	*B	16365	-------
35	7.831		182443	B	36979	-------
36	8.029		3694582	V	519944	-------
37	8.201	DELTA-BHC NC	485276	*B	112352	0.4800
38	8.391		1436339	B	213991	-------
39	8.492		860517	*V	163878	-------
41	8.679		202454	*V	39170	-------
42	8.913		14206707	*B	719539	-------
44	9.379		305052	*V	58649	-------
45	9.623		504943	*B	53594	-------
46	9.832		52190	B	11637	-------
47	10.132		119503	B	16648	-------
48	10.334	P,P'-DDE	673528	*B	78976	-0.2051
49	10.581		368233	B	54951	-------
	10.827	DIELDRIN	611101	*V	176252	0.4982
	10.945		4945396	*V	541410	-------
52	11.336		170332	*B	15197	-------
53	11.553	ENDRIN	5358075	*B	577725	0.5250
54	11.706		3563430	*V	465866	-------
55	12.167		17417803	B	590749	-------
56	12.693		18648074	V	570992	-------
57	13.693		7429144	*B	427591	-------
59	14.114		421660	*V	78023	-------
60	14.147	P,P'-DDT	419837	*V	77081	0.0118
62	14.613		400121	B	66894	-------
63	14.797		563661	V	93358	-------
64	14.973	ENDRIN ALDEHYDE	6602209	V	270913	-0.5094
			119976381		12272052	

Chromatogram

Sample Name : SPM1*CDMHNSS3*43 7-18-94
FileName : C:\TC4\HP58907\862B027.RAW
Method :
Start Time : 2.45 min End Time : 23.97 min
Scale Factor: 0.0 Plot Offset: 80 mV

Sample #:
Date : 7/25/94 11:27 AM
Time of Injection: 7/22/94 06:12 AM
Low Point : 79.88 mV High Point : 1024.00 mV
Plot Scale: 944.1 mV



1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01MSD

Lab Name: ESE Contract: 1944022G

Lab Code: ESE Case No.: 44022 SAS No.: SDG No.: 51446

Matrix: (soil/water) SOIL Lab Sample ID: SPM2*CDMHNSS3*43

Sample wt/vol: 30.0 (g/mL) G Lab File ID:

% Moisture: 3 decanted: (Y/N) Y Date Received: 07/17/94

Extraction: (SepF/Cont/Sonc) SONC Date Extracted: 07/18/94

Concentrated Extract Volume: 5000 (uL) Date Analyzed: 07/22/94

Injection Volume: 1.0 (uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) Y pH: 6.2 Sulfur Cleanup: (Y/N) Y

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	2.1	P
319-85-7	beta-BHC	1.7	U
319-86-8	delta-BHC	1.7	U
58-89-9	gamma-BHC (Lindane)	20.	P
76-44-8	Heptachlor	26.	P
309-00-2	Aldrin	2.6	P
1024-57-3	Heptachlor epoxide	1.7	U
959-98-8	Endosulfan I	1.7	U
60-57-1	Dieldrin	12.	P
72-55-9	4,4'-DDE	20.	P
72-20-8	Endrin	140.	P
33213-65-9	Endosulfan II	3.4	U
72-54-8	4,4'-DDD	3.4	U
1031-07-8	Endosulfan sulfate	3.4	U
50-29-3	4,4'-DDT	30.	P
72-43-5	Methoxychlor	17.	U
53494-70-5	Endrin ketone	3.4	U
742-93-4	Endrin aldehyde	3.4	U
5103-71-9	alpha-Chlordane	1.7	U
5566-34-7	gamma-Chlordane	1.7	U
8001-35-2	Toxaphene	170.	U
12674-11-2	Aroclor-1016	34.	U
11104-28-2	Aroclor-1221	69.	U
11141-16-5	Aroclor-1232	34.	U
53469-21-9	Aroclor-1242	34.	U
12672-29-6	Aroclor-1248	34.	U
11097-69-1	Aroclor-1254	34.	U
11096-82-5	Aroclor-1260	34.	U

Software Version: 4.0<1C29>
Sample Name : SPM2*CDMHNSS3*43 7-18-94 Time : 7/22/94 02:44 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : A A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/28

Interface Serial # : NONE Data Acquisition Time: 7/22/94 06:52 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862A028.RAW
Result File : C:\TC4\HP58907\862A028.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862A028.RST
Proc Method : C:\TC4\HP58907\DB608 from C:\TC4\HP58907\862A028.RST
Calib Method : C:\TC4\HP58907\862A from C:\TC4\HP58907\862A028.RST
Sequence File : C:\TC4\HP58907\862A.SEQ

Sample Volume : 1 ul Area Reject : 3953.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 120

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
2	4.668		259818	B	86530	-------
3	4.818		127946	B	47508	-------
4	5.039		154597	B	35376	-------
5	5.202	TCX	120705	B	40299	0.0866
6	5.388		71230	*B	26331	-------
8	5.485		47049	*V	14919	-------
9	5.582		160848	*V	28248	-------
10	5.726		31130	B	11370	-------
11	5.810		38354	V	12208	-------
12	5.934		116284	B	29253	-------
13	6.141		19487	B	5806	-------
14	6.286		80878	B	16380	-------
15	6.379		31362	V	9420	-------
16	6.466		119972	V	29614	-------
17	6.577		9888	V	3758	-------

9513354.2644

Peak	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
-	6.703		74143	*V	11623	-------
19	6.833	ALPHA-BHC	18970	*B	5859	0.1693
20	6.951		33074	B	7796	-------
21	7.178		3203243	B	727144	-------
22	7.469		5131	B	1597	-------
23	7.583		4531	B	1484	-------
24	7.684		11757	B	3327	-------
25	7.829		148796	*B	42374	-------
26	7.967	LINDANE	188690	*B	104321	0.2349
27	8.027		1958662	*V	427020	-------
28	8.261		960481	B	208715	-------
29	8.443		114820	V	25091	-------
30	8.679		801563	V	150901	-------
31	9.036	HEPTACHLOR	806653	B	128096	0.4548
32	9.194		1737631	V	335116	-------
33	9.469		15579	B	3039	-------
34	9.722		475033	V	71708	-------
35	9.879		241402	V	43579	-------
36	10.156	ALDRIN	266204	*B	41684	0.0702
37	10.340		322418	*V	61615	-------
38	10.578		754372	B	91796	-------
39	10.888		154675	B	21580	-------
40	11.099		31558	B	7275	-------
41	11.319		79340	B	10766	-------
42	11.511		473388	*B	84237	-------
43	11.722		11945	B	2893	-------
44	11.901		125502	B	21603	-------
45	12.071		91113	V	12123	-------
46	12.210		53648	V	9358	-------
47	12.629		3920618	B	415891	-------
48	13.113	GAMMA-CHLORDANE	166391	*B	35046	0.2494
49	13.365		134991	B	17872	-------
[illegible]	13.772	ALPHA-CHLORDANE	4843	*B	1674	-0.1691
	3.980		15442761	B	876985	-------
	4.315		138092	E	22051	-------
53	14.503		45861	V	7215	-------
54	14.585		6333	V	3248	-------
55	14.703		48602	V	8005	-------
56	14.967	P,P'-DDE	262430	*B	55359	0.1437
57	15.143	DIELDRIN	407960	B	70908	0.2223
58	15.387		99136	B	20276	-------
59	15.469		99839	V	18204	-------
60	15.591		22216	V	4778	-------
61	15.826		346496	B	60829	-------
62	15.995		91634	B	20209	-------
63	16.251		2132877	*B	406614	-------
64	16.415	ENDRIN	2651104	*V	480626	0.0940
65	16.491		1314696	*V	331017	-------
66	16.743		1005530	B	206469	-------
67	16.955	P,P'-DDD	111724	B	18666	0.1898
68	17.135		82599	*B	21009	-------
69	17.260		12387471	*B	574919	-------
70	17.725		143245	*E	36452	-------
71	17.873	P,P'-DDT	522889	*B	126963	0.1276
72	18.019	ENDRIN ALDEHYDE	135919	*B	29357	-0.2653
74	18.392	ENDOSULFAN SULFATE	22086	*B	4363	-0.2732
75	18.697		5517400	B	495849	-------
76	18.888		564754	V	110153	-------
77	19.102		233489	V	48555	-------
78	19.260		4168661	V	414374	-------
79	19.513		164953	*V	38311	-------
80	19.713		1431046	*B	262283	-------
81	19.887		12254650	*V	423477	-------
82	20.437	METHOXYCHLOR	10154	B	5110	0.4150
83	20.540	ENDRIN KETONE	65859	B	16727	-0.0409
84	20.693		145057	V	31186	-------
[illegible]	20.860		65445	B	16311	-------
	21.080		5783262	V	603273	-------
	1.273		6038316	V	620923	-------
88	21.764		4899520	V	505986	-------
89	21.951		1184630	V	218109	-------
90	22.334		288372	B	44071	-------
91	22.558		565596	V	87104	-------
92	22.670		433418	V	78703	-------
93	22.915		626856	B	89478	-------

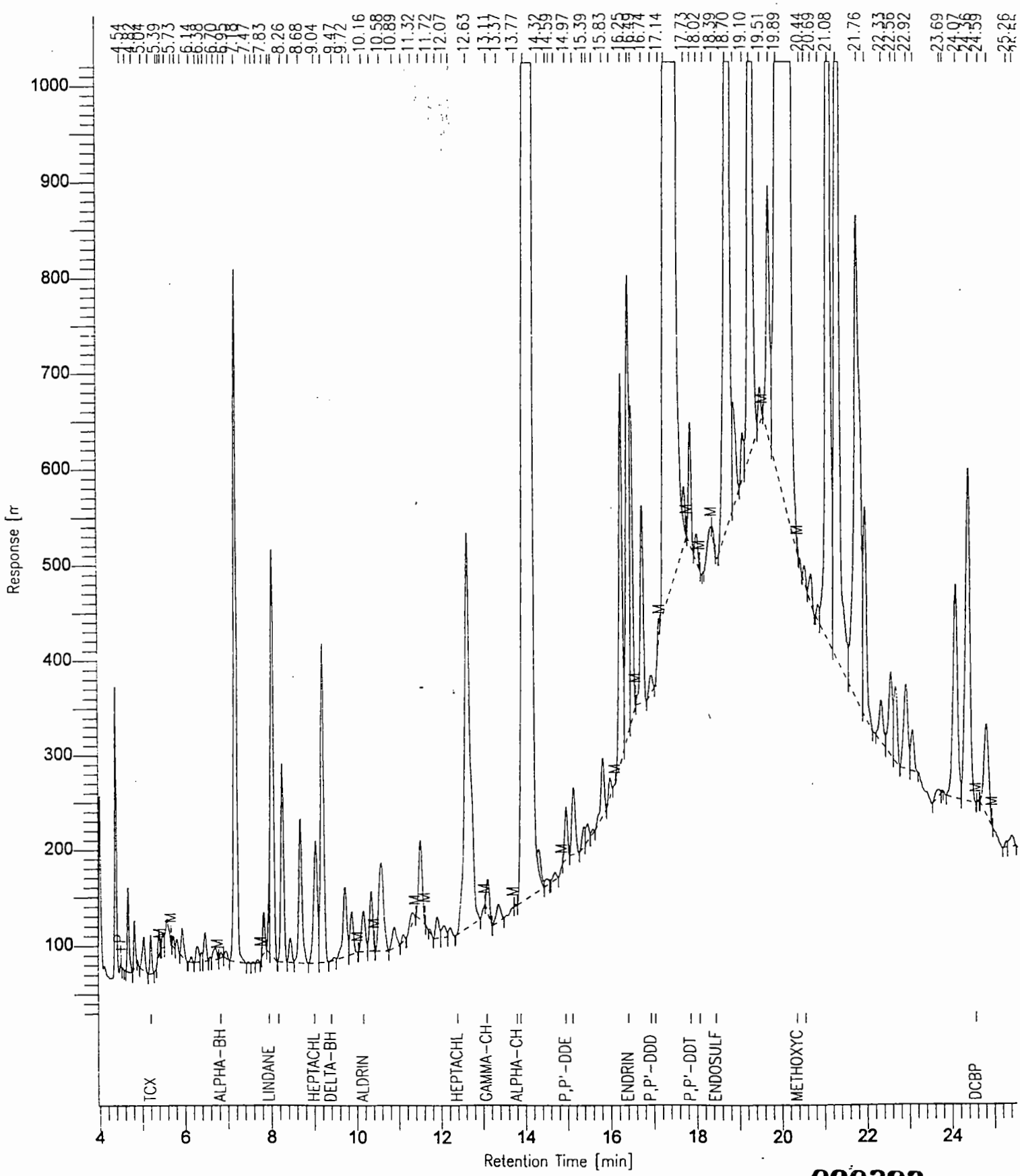
Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
94	23.070		232647	V	43138	-------
95	23.688		63839	B	6309	-------
96	23.750		4655	V	2233	-------
97	24.068		1681927	B	223877	-------
98	24.357		2627938	V	349171	-------
99	24.589	DCBP	4582	*B	2137	0.1535
100	24.793		745978	*B	96914	-------
101	25.258		23238	B	6595	-------
102	25.387		91347	V	12120	-------
104	25.690		8759	V	2442	-------
105	25.852		55240	B	6336	-------
106	26.142		4456	B	1468	-------
107	26.343		16861	B	2868	-------
108	26.466		5677	B	2139	-------
109	26.533		13726	V	5325	-------
110	26.957		1438454	V	42109	-------
111	27.734		23596	B	4800	-------
112	27.956		196290	V	14369	-------
113	28.382		68090	B	8672	-------
114	28.573		272576	V	23525	-------
116	29.212		831242	V	62723	-------
117	29.432		368667	V	35765	-------
118	29.672		9146	E	1415	-------
119	29.782		9212	V	2114	-------
			109541794		12004294	

9513594.2645

Chromatogram

Name : SPM2*CDMHNSS3*43 7-18-94
ne : C:\TC4\HP58907\862A028.RAW
d :
Start Time : 3.96 min End Time : 25.53 min
Scale Factor: 0.0 Plot Offset: 30 mV

Sample #:
Date : 7/22/94 02:44 PM
Time of Injection: 7/22/94 06:52 AM
Low Point : 29.97 mV High Point : 1024.00 mV
Plot Scale: 994.0 mV



000393

Software Version: 4.0<1C29>
Sample Name : SPM2*CDMHNSS3*43 7-18-94 Time : 7/26/94 02:35 PM
Sample Number: Study :
Operator : VIC

Instrument : HP5890A_-_7 Channel : B A/D mV Range : 1000
AutoSampler : HP7673A
Rack/Vial : 0/30

Interface Serial # : NONE Data Acquisition Time: 7/22/94 07:32 AM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.5000 pts/sec

Raw Data File : C:\TC4\HP58907\862B029.RAW
Result File : C:\TC4\HP58907\862B029.RST
Inst Method : C:\TC4\HP58907\HP58907 from C:\TC4\HP58907\862B029.RST
Proc Method : C:\TC4\HP58907\DB1701 from C:\TC4\HP58907\862B029.RST
Calib Method : C:\TC4\HP58907\862B from C:\TC4\HP58907\862B029.RST
Sequence File : C:\TC4\HP58907\862B.SEQ

Sample Volume : 1 ul Area Reject : 10789.000000
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 33 Area Threshold : 444 Bunch Factor: 1
Multiplier : 1.0000 Divisor : 1.0000 Addend : 0.0000

Instrument Conditions:
HP58907 GC #3126A36767; CHANNEL A:DB608 0.53mm ID; CHANNEL B:DB1701 0.53mm ID

Total number of peaks detected: 75

DATA REPORT

Peak #	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
1	2.808		1354252	*B	331871	-------
2	2.933		22011	E	11569	-------
3	2.981		58149	V	20927	-------
4	3.121		2348068	V	489689	-------
5	3.336		103982	E	27182	-------
6	3.447		613328	V	184290	-------
7	3.561		301486	V	101324	-------
8	3.603	TCX	219906	V	87598	-0.0892
9	3.686		246498	V	78806	-------
10	3.797		10967	B	4678	-------
11	3.878		205798	V	47220	-------
12	3.988		461738	V	119119	-------
13	4.130		266560	V	68397	-------
14	4.178		125295	V	47004	-------
15	4.268		15399	V	5979	-------

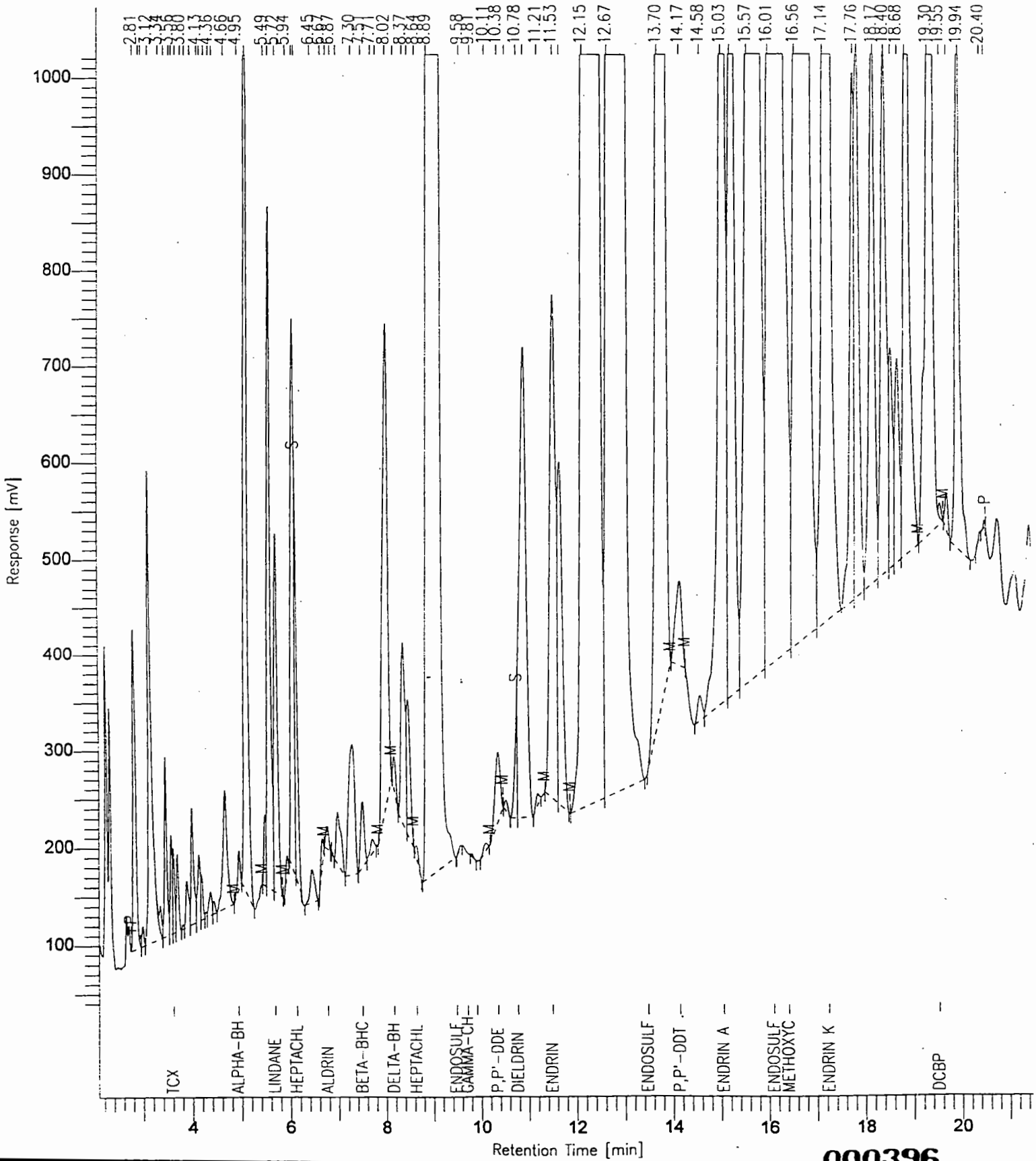
Result File : 862B029.RST, Printed On 7/26/94 02:35 PM

F	Ret Time [min]	Component Name	Area [uV-sec]	BL	Height [uV]	Delta RT [%]
16	4.361		107376	V	24482	-------
17	4.425		41936	V	13189	-------
18	4.663		769805	*V	121305	-------
19	4.945	ALPHA-BHC	140867	*B	39012	0.3692
20	5.107		4655360	B	870632	-------
21	5.487		228543	*B	72513	-------
22	5.581		3163440	*V	709377	-------
23	5.723	LINDANE 7-26-94 USB	1760150	*V	375145	-------
24	5.939		71190	B	20369	-------
25	6.072		2688907	*B	573753	-------
26	6.113	HEPTACHLOR	1204295	*V	432948	-0.3369
27	6.449		225816	B	33896	-------
28	6.666		108995	*B	26308	-------
29	6.771	ALDRIN	94123	*B	23123	-0.0281
31	6.984		380913	B	53269	-------
32	7.302		1204550	B	134544	-------
33	7.507	BETA-BHC NC	360230	B	66470	0.1525
34	7.713		87160	V	13792	-------
36	8.017		3771700	*B	501014	-------
37	8.180	DELTA-BHC NC	140647	*B	34694	0.2145
38	8.374		1190210	*B	190350	-------
39	8.477		728407	*V	141886	-------
40	8.639	HEPTACHLOR EPOXIDE NC	54292	B	11528	-0.0435
41	8.890		17658104	B	856422	-------
42	9.577		15605	B	3143	-------
44	10.114		52698	B	7340	-------
45	10.378	P,P'-DDE	566601	*B	71750	0.2257
46	10.539		49235	B	11112	-------
47	10.780	DIELDRIN	402658	*B	130968	0.0650
48	10.922		4752694	*V	489686	-------
49	11.209		60879	B	10755	-------
50	11.534	ENDRIN	4530766	*B	525621	0.3575
	11.674		2507919	*V	357542	-------
	2.153		21908176	B	784343	-------
53	12.667		22475828	V	772773	-------
54	13.700		11207621	*B	699220	-------
55	14.166	P,P'-DDT	832657	*B	89190	0.1482
56	14.584		175603	B	26337	-------
57	15.027	ENDRIN ALDEHYDE	8653697	V	676503	-0.1550
58	15.213		7159995	V	669133	-------
59	15.567		16527700	V	655182	-------
60	16.007		17521205	V	637809	-------
61	16.560		15394673	V	615960	-------
62	17.137		9595306	V	599728	-------
63	17.764		3234400	B	548705	-------
64	17.847		3921198	V	564028	-------
65	18.173		4425930	V	549976	-------
66	18.399		4298538	V	540280	-------
67	18.539		1219767	V	229169	-------
68	18.678		1384502	V	211641	-------
69	18.837		5317697	*V	522130	-------
70	19.300		6261893	*B	500692	-------
71	19.547	DCBP	56626	*E	14439	0.1316
72	19.692		159719	B	38246	-------
73	19.937		3641529	B	514736	-------
74	20.395		20222	B	3110	-------
75	20.483		17313	*B	7827	-------
			225541307		19044747	

Chromatogram

Sample Name : SPM2*CDMHNSS3*43 7-18-94
FileName : C:\TC4\HP58907\862B029.RAW
Method :
Start Time : 2.08 min End Time : 21.48 min
Scale Factor: 0.0 Plot Offset: 38 mV

Sample #:
Date : 7/26/94 02:35 PM
Time of Injection: 7/22/94 07:32 AM
Low Point : 37.98 mV High Point : 1024.00 mV
Plot Scale: 986.0 mV



9513354.2647

Other Relevant Documents

ESE ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.

CHROMATOGRAPHIC ANALYSIS LOG

Date: 7-21-94
Analyst: VIC BAUDER 1781
Project: CDM- HANFORD N. SITE
Case No.: 19940226 0203
Instrument ID: HP5890 G.C.
Data System ID: TURBOCHROM 4.0
Analysis Type: CLP-PEST- 3/90

COLUMN A/B
Length: 30m
OD: 3288237/4321663
ID: 0.53 mm
Phase: DB608 / DB1701
Thickness: 0.83 / 1.0 µm
Support: FUSED SILICA
Loading: NA

INJECTOR A/B
Type: ON COLUMN
Temp °C: 150 40/min 250
Volume: 1
Carrier Gas: HELIUM
Type: UHC
Flow Rate: 7.0 / 16.0 mL/min
CONSTANT FLOW

DETECTOR A/B
Type: EC · Ni 63
Attn.: 1 / 0
Range: 0 / 2
Temp °C: 300
Make-up: 5% CH_4 / Ar

Oven Temp. Initial: 140 °C for 1 Min.
Rate A: 20 Final Temp A °C: 190 for 0 Min.
Rate B: 3 Final B °C: 220 for 0 Min.
8 275 14

Comments:
TURBOCHROM FILES: 862A*.* + 862B*.*

Run No.	Sample No.		Run No.	Sample No.	Run No.	Sample No.
1	RESC	731:90	28	HEXANE		
2	RESC	90	29	CDMHNSS3*43MOD 7-18-94		
3	INDAH	80	30	HEXANE		
4	INDBH	80	31	HEXANE		
5	RESC	90	32	HEXANE		
6	HEXANE		33	HEXANE		
7	RESC	731:90	34	CDMHNSS3*43 1:100 7-18-94		
8	PEM	91	35	CDMHNSS3*43 1:10 7-18-94		
9	AR1660	90	36	HEXANE		
10	AR1221		37	PIBLK	731:90	
11	AR1232		38	INDAM	80	
12	AR1242		39	INDBM	80	
13	AR1248					
14	AR1254					
15	TOXAPH	90				
16	INDAL	80				
17	INDBL					
18	INDAM					
19	INDBM					
20	INDAH					
21	INDBH	80				
22	PIBLK	90				
23	PEM	731:91				
24	CDMHNSS3*BLK	7-18-94				
25	CDMHNSS3*43					
26	HEXANE					
27	CDMHNSS3*43MS	7-18-94				

FORM 87303

BOOK NO. B-747

ESE ENVIRONMENTAL SCIENCE AND ENGINEERING, INC.

CHROMATOGRAPHIC ANALYSIS LOG

Date: 7/18/94
Analyst: FF (279 D)
Project: N/A
Case No.: N/A
Instrument ID: 1002 A
Data System ID: N/A
Analysis Type: 3/91 OCP

COLUMN		INJECTOR		DETECTOR	
Length		Type		Type	
OD		Temp °C		Attn.	
ID		Volume		Range	
Phase		Carrier Gas		Temp °C	
Thickness		Type		Make-up	
Support		Flow Rate			
Loading					

Oven Temp. Initial ____ °C ____ for ____ Min.
Rate A ____ Final Temp A °C ____ for ____ Min.
Rate B ____ Final B °C ____ for ____ Min.

Comments: GPC chk = 1.0 ml 3/90 Sow GPC chk FF F90.26 in 10 ml methylene

6-17-8

SPIKE chk / End std = 1.0 ml 3/90 matrix x 731.84 + 1.0 ml 3/90 / unr 731.89

Run No.	Sample No.	Run No.	Sample No.	Run No.	Sample No.
1	GPC chk				
2	SPK. chk		w/FF 7/18/94		
3	~~CDMHN 153~~ GPC FF 7/18/94 meth		d = ~~32~~ 32		
4	~~CDMHN~~ BLK		c = 19		
5	43		w = 9		
6	43MS		Sensitivity = 0.5		
7	43MSD		Range = 0.5		
8	end std				
			meth lot = 10 cm / h.g		
			chart speed =	HI 295	

BOOK NO: 731

FORM 87303

ESE ENVIRONMENTAL SCIENCE AND ENGINEERING INC.

ORGANIC LABORATORY EXTRACTION LOG SHEET

BOOK NO: 0229

PROJECT: COM- HANFORD N. SLOPE
PROJECT NO.: 1944 0226 0203 CASE NO.: NA
EXTRACTOR(S): NM
DATE: 7/18/94

EXTRACTION METHOD: 3/90 CLP OCP Soil
SAMPLE FRACTION: SS
CLEAN-UP: GPC/FLORISIL
TIME: 8:00
CHECKED BY: GAK
BALANCE USED: 5

SAMPLE NO. COMHWSS1-43	VOLUME-ml MASS-gr.	INITIAL/ FINAL pH	TYPE/DATE OF CLEAN-UP	FINAL VOL SOLVENT	SURROGATE ADDED Y/N	COMMENTS
NM 7/18/94 W.I. ~~COMHWSS1-43~~	30gr	6.23	GPC/Florisil	10.0ml Hex	yes	All Samples receives 2.0ml
43ms		—				3/90 CLP PEST Surrogate
43msD		—				0.2ug/ml TCX/DCBP 731:89
BLK		—				exp. 12/17/94 VIC BAUDER
						NM W.I 7/18/94
						~~6ms, 6~~ 43ms, 43msD
						receives 1.0ml 3/90 CLP
						PEST MATRIX SPIKE
						VIC BAUDER 0.5-1.0ug/ml
NOTE* Samples *	43ms/msD could only conc to					731:84 exp. 12/20/94
	2.0ml Diluted to 20ml into 2 GCT.					
	Samples were really thick. NM 7/18/94					SPIKED: TMW
						WIT: AJ

CHAIN-OF-CUSTODY RECORD

M 87262

PROJECT CDM - HANDFORD N- Slope

Notebook No. 1033

Continued From Page

19440226 0203 3/90 OCP Soil Sor
NM 55

COM HUSS# 43, 43MS, 43MSD, BLK

1 Weighed up 30gram Soil w/ Powered
Na_2SO_4 to dry
2 Added spike to each
3 Added 150ml 50/50 ACETONE/$MeCl_2$
4 Sonicated for 3min, Centrifuged for 5min
5 Drained through silane wool funnels
6 Repeated steps 3-5 twice more
Conc to -- 10ml added micro-snyders
w/ BALLS conc to 1.0ml brought
to 10ml in E.C.T NM 7/18/94

Note * Samples * 43ms/msd could only be
conc to -- 2.0ml samples were to
thick Diluted to 20ml in
2 ECT NM 7/18/94
on GPC 100 2 DD 7/18/94
only one of 2 ms/msd followed on GPC
please make the final volume 2.5ml Hex
instead of 5ml Hex DD 7/19/94

Concentrated to 10ml, Solvent exchanged to Hexane
Brought * 43, BLK to 5.0ml. Brought *43ms, 43msD to 2.5ml
Put 2.0ml through Florisil Cartridge Lot# H08550
Eluted with 5ml 90% Hexane/Acetone
Concentrated to 1ml
Brought to 2.0ml in Amber vials DJD 7-19-94

Clean = Amber vials to Fridge 19
unclean = shorty vials to Fridge 82

Continued on Page

Read and Understood By

T. Mathis 7/18/94 Larry Dechaw 7-19-94
Signed Date Signed Date

SAMPLES CDM HNSS# 43

3/90 CLP OCP SONICATIONS

EXTRACTION SOLVENT: 50/50 $MeCl_2$/ACETONE

1) Decant aqueous layer from sample, discard stones, sticks, leaves: weigh up **30.0g** soil into Teflon beaker, NM 7/18

2) Add **60.0g** baked Na_2SO_4 (granular or powdered) to dry
3) Method blank is **30.0g** of Na_2SO_4

4) Weigh **50.0g** sample into 250ml beaker, add **50ml** HPLC H_2O to all, stir for 1 hour, check and tabulate pH.

5) Tune sonicator.
6) Spike samples, Immediately add 100ml of 50/50 MeCl/Acetone
7) Sonicate for 3 minutes with 3/4 inch horn, power at 10, and duty cycle at 50%, 1s pulse. Centrifuge at 1000 RPM for 5 minutes, decant extract into KD-receiver through funnels packed with silane treated glasswool and baked sodium sulfate
8) Repeat steps (7) two more times

9) Conc. to 10mls with snyder attachment at 60-80 °C

10) Conc. to 1ml with microsnyder attachment, take to 10.0ml with MeCl in GCT.
11) Load on GPC, check if calibrated within 1 week, GPC check peaks should have <5% shift from previous run 7/18/9

12) Conc extracts off GPC to 10ml using KD-receivers, make copies of GPC chart and include with logsheets 7-19-94
13) Solvent exchange to hexane, take to 5.0ml Hexane

14) Run 2.0ml through florisil catridge, elute with 8ml of 10% acetone in hexane, collect in receivers. Check if performance chk done on catridge, tabulate lot#. Catridge must be rinsed with 10ml of 10% acetone in hexane prior to use.
15) Conc to <2ml using modified microsnyders, quantitatively transfer to amber vials, top to 2.0ml mark with hexane
16) Clean fraction to fidge C, unclead to B2 in vials

QC Required: MS —
MSD —
BLANK —

Chain of Custody

FRIDGE A NM 7/18	0020 7/18/94 TO 19clean DJD 7-19-94 B2 unclean
TO FRIDGE 15 WJ 7-20-94	

9513354.2650

Notebook No. 00731

PROJECT STD. PREP. FOR CLP-PEST - 3/90

Continued From Page

CLP PESTICIDES/PCB (3/90 SOW)
CALIBRATION MIX 1 C-177-02
EXP = 3/96 ISO-OCTANE NSI ENVIRONMENTAL SOLUTIONS

	UG/ML	INDAH NG/ML	INDAM NG/ML	INDAL NG/ML
ALPHA-BHC	8.	80.	20.	5.
GAMMA-BHC	8.	80.	20.	5.
4,4'-DDD	16.	160.	40.	10.
4,4'-DDT	16.	160.	40.	10.
DIELDRIN	16.	160.	40.	10.
ENDOSULFAN I	8.	80.	20.	5.
ENDRIN	16.	160.	40.	10.
HEPTACHLOR	8.	80.	20.	5.
4,4'-METHOXYCHLOR	80.	800.	200.	50.
TETRACHLORO-M-XYLENE	8.	80.	20.	5.
DECACHLOROBIPHENYL	16.	160.	40.	10.

0.5ML → 50.ML HEXANE; 25ML → 100.ML HEXANE

0.5ML → 200 ML HEXANE

CLP PESTICIDES/PCB (3/90 SOW)
CALIBRATION MIX 2 C-176-02
HEXANE USED IS GHS BRAND NON-SPECTRO LOT# BG656
EXP = 3/96 ISO-OCTANE NSI ENVIRONMENTAL SOLUTIONS

	UG/ML	INDBH NG/ML	INDBM NG/ML	INDBL NG/ML
ALDRIN	8.	80.	20.	5.
BETA-BHC	8.	80.	20.	5.
DELTA-BHC	8.	80.	20.	5.
ALPHA-CHLORDANE	8.	80.	20.	5.
GAMMA-CHLORDANE	8.	80.	20.	5.
4,4'-DDE	16.	160.	40.	10.
ENDOSULFAN II	16.	160.	40.	10.
ENDOSULFAN SULFATE	16.	160.	40.	10.
ENDRIN ALDEHYDE	16.	160.	40.	10.
ENDRIN KETONE	16.	160.	40.	10.
HEPTACHLOR EPOXIDE	8.	80.	20.	5.
TETRACHLORO-M-XYLENE	8.	80.	20.	5.
DECACHLORO BIPHENYL	16.	160.	40.	10.

0.5ML → 50.ML HEXANE; 25.ML → 100.ML HEXANE

0.5ML → 200 ML HEXANE

Continued on Page

Neta S. Eh 3-29-94 Read and Understood By 4/1/94

Signed Date Signed Date

PROJECT STD. PREP. FOR CLP-PEST-3/90

Continued From Page

CLP PESTICIDES/PCB (3/90 SOW)
PERFORMANCE EVALUATION MIX C-180-01
EXP: 4/95, ISO-OCTANE NSI ENVIRONMENTAL SOLUTIONS

~~UG~~ USE LT 3-30-94	UG/mL		PEM NG/mL
ALPHA-BHC	1.		10.
BETA-BHC	1.		10.
GAMMA-BHC	1.		10.
4,4'-DDT	10.	0.2 ML →	100.
ENDRIN	5.	20. ML	50.
4,4'-METHOXYCHLOR	25.	HEXANE	250.
TETRACHLORO-M-XYLENE	2.	640 GRAM	20.
DECACHLOROBIPHENYL	2.	NON-SPECIF LOT# BG656	20.

4-13-94 VIC BAUDER REMADE PEM AS ABOVE USING PEM C-180-01 AND HEXANE LOT # BG656 Robert R. Ritter 4/15/94

4-19-94 VIC BAUDER REMADE PEM AS ABOVE USING PEM C-180-01 AND HEXANE LOT #BH188 Robert R. Ritter 4/26/94

4-26-94 VIC BAUDER REMADE PEM AS ABOVE USING PEM C180-01 AND HEXANE LOT # BH188 Robert R. Ritter 4/26/94

5-3-94 Vic BAUDER REMADE PEM 0.1 ML → USING PEM C-180-01 AND HEXANE LOT # BH188. 10 ML HEXANE TOTAL Robert R. Ritter 5/12/94

5-12-94 VIC BAUDER REMADE PEM 0.1 ML → USING PEM C-180-01 AND HEXANE LOT # BH188. 10. ML HEXANE TOTAL Robert R. Ritter 5/12/94

5-21-94 VIC BAUDER REMADE PEM 0.1 ML → USING PEM C-180-01 AND HEXANE LOT # BH188 10. ML HEXANE TOTAL Robert R. Ritter 5/25/94

5-29-94 VIC BAUDER REMADE PEM 0.1 ML → USING PEM C-180-01 AND HEXANE LOT # BH188 10 ML HEXANE TOTAL CRR 6/6/94

6-6-94 VIC BAUDER REMADE PEM 0.1 ML → USING PEM C-180-01 AND HEXANE LOT # BH188 10. ML HEXANE TOTAL Robert R. Ritter 6/7/94

Continued on Page

Nick S. [illegible] 3-30-94 Read and Understood By Robert R. Ritter 4/7/94

Signed Date Signed Date

PROJECT MATRIX SPIKE PREP. CLP-PEST-3/90

Notebook No. 00731

Continued From Page

COMPOUND	INDIVIDUAL PRIMARIES NOTEBOOK:PAGE	① UG/ML	VOLUME ADDED ML	STOCK MATRIX SPIKE UG/ML		MATRIX SPIKE UG/ML
LINDANE	933 : 40	1000.	1.	20.		0.5
HEPTACHLOR	933 : 40	1000.	1.	20.	2.5 ML	0.5
ALDRIN	933 : 40	1000.	1.	20.	→	0.5
DIELDRIN	933 : 41	1000.	2.	40.	100 ML TOTAL	1.0
ENDRIN	933 : 41	1000.	2.	40.	IN METHANOL	1.0
4,4'-DDT	933 : 42	1000.	2.	40.		1.0
			50. ML TOTAL IN ACETONE → B+J BRAND LOT # BH059		B+J BRAND LOT # BE686	

① INDIVIDUAL PRIMARIES MADE BY JOE K. 4-5-94, SOLUTION C IN ACETONE WAS USED.

REMADE MATRIX SPIKE 5-6-94 VSB

STOCK MATRIX SPIKE → 5 ML → MATRIX SPIKE
200 ML METHANOL → B+J BRAND LOT # BE686 Robert R. Roberts 5/6/94

REMADE MATRIX SPIKE 6-20-94 VSB

STOCK MATRIX SPIKE → 5 ML → MATRIX SPIKE
200 ML METHANOL → B+J BRAND LOT # BE686 Robert R. Roberts 6/20/94

Continued on Page

Nat S. [illegible] 4-20-94 Robert R. Roberts 5-6-94

Read and Understood By

Signed Date Signed Date

PROJECT SURROGATE PREP. CLP-PEST-3/90

Continued From Page

PESTICIDE SURROGATE MIX
RESTEK LOT # A 002789 CATALOG # 31000
DATE MADE = 9/93 IN ACETONE

	UG/ML		STOCK UG/ML		SURROGATE SPIKE UG/ML
TCX	200.	0.5 ML →	2.	20. ML →	0.2
DCBP	200.	50. ML ACETONE	2.	200. ML ACETONE	0.2

ACETONE USED IS LOT # BH059 B+J BRAND.

VIC BAUER REMADE SURROGATE SPIKE AS ABOVE ON 5-94
USED ACETONE LOT # BH059 B+J BRAND. Robert R. Roberts 5/6/94

Continued on Page

Nick S. Burke 4-26-94 Read and Understood By Robert R. Roberts 5/6/94

Signed Date Signed Date

PROJECT SURROGATE PREP. CLP-PEST-3/90

Continued From Page

PESTICIDE SURROGATE MIX
RESTEK LOT # A0027789 CATALOG # 32000
DATE MADE = 9/93 IN ACETONE

	UG/mL		STOCK UG/mL		SURROGATE SPIKE UG/mL
TCX	200.	1.0 mL → 50.mL ACETONE	4.	10.mL → 200.mL ACETONE	0.2
DCBP	200.		4.		0.2

DONE 2X FOR 400 mL TOTAL.

ACETONE USED IS LOT # BH440 B+J BRAND

REMADE SURROGATE SPIKE AS ABOVE ON 6-17-94 VSP.
ACETONE USED IS LOT # BH440 B+J BRAND 7/5/94 Robert Rotter

Continued on Page

5-17-94 Nancy L. Zahn Robert Rotter 5/17/94
Read and Understood By

Signed Date Signed Date

PROJECT STD. PREP. FOR CLP-PEST-3/90

Notebook No. 00731

Continued From Page

PESTICIDE RESOLUTION CHECK MIX RESTEK LOT# A000056, CATALOG #32001

	UG/ML		RESC NG/ML
GAMMA-CHLORDANE	1.0		10.
ENDOSULFAN I	0.98		9.8
DIELDRIN	1.98	0.5ML	19.8
4,4'-DDE	1.98		19.8
ENDOSULFAN SULFATE	2.0		20.
ENDRIN KETONE	2.02	50.ML TOTAL	20.2
METHOXYCHLOR	9.98	HEXANE	99.8
TCX ①	2.0	0.5ML	20.
DCBP	2.0		20.

HEXANE B+J BRAND NON-SPECIFIC LOT# BH188

ACETONE B+J BRAND LOT # BH440

SOURCE: NSI ENVIRONMENTAL SOLUTIONS INC.

	CATALOG-LOT #	SOLVENT	EXPIRATION DATE	UG/ML	VOLUME ADDED ML	FINAL VOLUME ACETONE ML	STOCK UG/ML
PCB-1016	125-01-06	ISOOCTANE	5-95	1000.	1.	100.	10.
PCB-1260	129-01-07	ISOOCTANE	8-96	1002.	1.	100.	10.
PCB-1221	126-01-05	ISOOCTANE	4-97	1005.	1.	50.	20.
PCB-1232	107-01-07	METHANOL	2-95	1010.	1.	100.	10.
PCB-1242	132-01-03	ISOOCTANE	10-97	1001.	1.	100.	10.
PCB-1254	135-01-03	ISOOCTANE	10-97	1012.	1.	100.	10.
TOXAPHENE	111-01-07	METHANOL	3-96	1007.	1.	50.	20.
PCB-1248	108-01-06	ISOOCTANE	2-96	5005.	1.	50.	100.

5. / 50 ACETONE → 10. UG/ML

	STOCK UG/ML	VOLUME ADDED ML	VOLUME OF 2UG/ML TCX/DCBP ADDED ML ①	FINAL VOLUME HEXANE ML	PCB CONC. NG/ML	TCX/DCBP CONC. NG/ML
PCB-1016	10.	1.	1.	100.	100.	20.
PCB-1260	10	1.			100.	
PCB-1221	20.	1.	1.	100.	200.	20.
PCB-1232	10.	1.	1.	100.	100.	20.
PCB-1242	10.	1.	1.	100.	100.	20.
PCB-1254	10.	1.	1.	100.	100.	20.
TOXAPHENE	20.	2.5	1.	100.	500.	20.
PCB-1248	10.	1.	1.	100.	100.	20.

	STOCK ② UG/ML		RIBCK NG/ML
TCX	4.0	0.5ML → 100.ML HEXANE	20.
DCBP	4.0		20.

① SEE PAGE 87 THIS NOTEBOOK 00731 (VIC BAUPER) FOR STD. PREP.

② SEE PAGE 89 THIS NOTEBOOK 00731 (VIC BAUPER) FOR STD. PREP.

Continued on Page

Nita S. Lee 5-21-94 Read and Understood By Robert R. Richardson 5/24/94

Signed Date Signed Date

JECT STD Prep for CLP Pes 2/40 PEM

Continued From Page 81

- Remade PEM 1ml into 10ml Hexane lot BH188 using PEML-180-01 as on pg 00731:81 LFS 6-13-94

- Remade as above 6-21-94 LFS
New bottle-same lot

- Remade as above 6-27-94 LFS

- Remade as above 7-5-94 LFS
- Remade as above 7-11-94 LFS
- REMADE AS ABOVE 7-18-94 VSB

Continued on Page

Signed 6-13-94 Date

Read and Understood By Signed 6-15-94 Date

PROJECT OCP PRIMARY STOCKS

Notebook No. 933

Continued From Page

1) AHBHC A) Chem Serv LOT: 112-86A 98% B) CHEM SERV LOT 45-45B 98%

A) .025 g → 25 ml Hexane = 1000 µg/ml

B) .025 g → 25 ml Hexane = 1,000 µg/ml

2) LINDANE A) Chem Serv 99.5% Lot: 84-33B .025g → 25 ml Hex = 1,000 µg/ml

B) Chem Serv 99.0% Lot: 20-42D .025g → 25 ml Hex = 1000 µg/ml

C) Chem Serv 99.5% Lot: 84-18B .025g → 25 ml ACE = 1000 µg/ml

3) Δ-BHC A) Chem Serv 98% Lot: 126-47A .025g → 25 ml Hex = 1,000 µg/ml

B) EPA 99.6% Lot X800 .025g → 25 ml Hex = 1,000 µg/ml

4) HEPTACHLOR A) Chem Serv 99.5% LOT: 85-153B .025g → 25 ml Hex = 1000 µg/ml

B) EPA 99.8% LOT: E06H .025g → 25 ml Hex = 1000 µg/ml

C) CHEM SERV 99.5% LOT 85-133B .025g → 25 ml ACE = 1,000 µg/ml

5) B-BHC A) CHEM SERV 98.0 LOT 92-76A .025g → 25 ml Hex = 1,000 µg/ml

B) " " " .025g → 25 ml Hex = 1,000 µg/ml

6) ALDRIN A) SARM 99.8 LOT: A379 .025g → 25 ml Hex = 1,000 µg/ml

B) EPA 99% LOT: H501 .025g → 25 ml Hex = 1,000 µg/ml

C) SARM 99.8% LOT: A379 .025g → 25 ml ACE = 1,000 µg/ml

Continued on Page

Read and Understood By

Joe Hostetler — Signed — April 5, 1994 — Date

Mark Mathews — Signed — 4/14/94 — Date

SUBJECT OCP Primary Stocks

Continued From Page

7) ISODRIN	A) SARM	99.8%	LOT: A403	.025g	→ 25 ml	HEX =	1,000 µg/ml
	B) EPA	99.3%	LOT: E040	.025g	→ 25 ml	HEX =	1,000 µg/ml
	C) SARM	99.8%	LOT: A403	.025g	→ 25 ml	ACE =	1,000 µg/ml
8) HEPTACHLOR EPOXIDE	A) CHEM SERV	97.0%	LOT: 83-100A	.025g	→ 25 ml	HEX =	1,000 µg/ml
	B) CHEM SERV	99%	LOT: 14-1K	.025g	→ 25 ml	HEX =	1,000 µg/ml
9) ENDOSULFAN-A	A) CHEM SERV	99.5%	LOT: 36-62A	.025g	→ 25 ml	HEX =	1,000 µg/ml
	B) EPA	99.8%	LOT: C09E	.025g	→ 25 ml	HEX =	1,000 µg/ml
	C) CHEM SERV	99.5%	LOT: 36-62A	.025g	→ 25 ml	ACE =	1,000 µg/ml
10) PP-DDE	A) CHEM SERV	99.0%	LOT: 105-62A	.025g	→ 25 ml	HEX =	1,000 µg/ml
	B) CHEM SERV	99.3%	LOT: 23-27E	.025g	→ 25 ml	HEX =	1,000 µg/ml
11) DIELDRIN	A) SARM	99.7%	LOT: A401	.025g	→ 25 ml	HEX =	1,000 µg/ml
	B) EPA	99.5%	LOT: A04B	.025g	→ 25 ml	HEX =	1,000 µg/ml
	C) SARM	99.7%	LOT: A401	.025g	→ 25 ml	ACE =	1,000 µg/ml
12) ENDRIN	A) SARM	99.6%	LOT: A402	.025g	→ 25 ml	HEX =	1,000 µg/ml
	B) CHEM SERV	99%	LOT: 100-19B	.025g	→ 25 ml	HEX =	1,000 µg/ml
	C) ~~CHEM SERV~~ SARM	99.6%	LOT: A402	.025g	→ 25 ml	ACE =	1,000 µg/ml
13) PP-DDD	A) SARM	99.4%	LOT: A410	.025g	→ 25 ml	HEX =	1,000 µg/ml
	B) CHEM SERV	99%	LOT: 19-13A	.025g	→ 25 ml	HEX =	1,000 µg/ml

Continued on Page

Read and Understood By

Signed	Date	Signed	Date
[signature]	April 5, 1994	[signature]	4/14/94

Notebook No. 933

PROJECT OCP Primary Stocks

Continued From Page

14)	ENDOSULFAN B	A)	Chem Serv	99%	LOT: 114-116A	.025g	→ 25ml Hex	=	1,000 µg/ml
		B)	Chem Serv	99%	LOT 96-63A	.025g	→ 25ml Hex	=	1,000 µg/ml
		C)	Chem Serv	99%	LOT: 114-116A	.025g	→ 25ml ACE	=	1,000 µg/ml
15)	PP-DDT	A)	SARM	99.1%	LOT: A400	.025g	→ 25ml Hex	=	1,000 µg/ml
		B)	CHEM SERV	99%	LOT: 114-57A	.025g	→ 25ml Hex	=	1,000 µg/ml
		C)	SARM	99.1%	LOT: A400	.025g	→ 25ml ACE	=	1,000 µg/ml
16)	ENDRIN ALDHYDE	A)	AXACT	99%	LOT: ~~13737~~ correct #	.025g	→ 25ml HEX		1,000 µg/ml
		B)	Accustd	99+	LOT MUS-22265-4	.025g	→ 25ml Hex	=	1,000 µg/ml
17)	ENDOSULFAN SO4	A)	SARM	98.6%	LOT: A405	.025g	→ 25ml Hex	=	1,000 µg/ml
		B)	CHEM SERV	98%	LOT: 30-99B	.025g	→ 25ml Hex	=	1,000 µg/ml
18)	Methoxychlor	A)	CHEM SERV	98%	LOT: 83-43A	.025g	→ 25ml Hex	=	1,000 µg/ml
		B)	CHEM SERV	99%	LOT 30-40	.025g	→ 25ml Hex	=	1,000 µg/ml
		C)	CHEM SERV	98%	LOT: 83-43A	.025g	→ 25ml ACE	=	1,000 µg/ml
19)	ENDRIN KETONE	A)	AXACT	98%	LOT: 13740	.025g	→ 25ml Hex	=	1,000 µg/ml
		B)	EPA	95.1%	LOT C041L	.0100g	→ 10ml Hex	=	1,000 µg/ml
20)	TCX	A)	Aldrich	95.9%	KY 00052481	.025g	→ 25ml Hex	=	1,000 µg/ml
		B)	"	"	"	.025g	→ 25ml Hex	=	1,000 µg/ml

Continued on Page

Read and Understood By

Joe Kostelnik Jr — Signed — April 5, 1994 — Date

Mark Mattz — Signed — 4/14/94 — Date

9513354.2655

Metals

1. COVER PAGE AND CASE NARRATIVE

2510354.2656

U. S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

SOW No. 3/90

EPA Sample No.	Lab Sample ID
BG1-01	CDMHNSS3*42
BKG-01	CDMHNSS3*3
BKG-01	CDMHNSS3*4
BKG-01	CDMHNSS3*5
BKG-02	CDMHNSS3*6
SP-01	CDMHNSS3*7
SP-01	CDMHNSS3*8
WC1-01	CDMHNSS3*43
WC1-01S	SPM1*CDMHNSS3*43
WC1-01S	SPM2*CDMHNSS3*43

Were ICP interelement corrections applied? Yes/No YES

Were ICP background corrections applied? Yes/No YES
If yes, were raw data generated before application of background corrections? Yes/No NO

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name:

Date: Title:

U. S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

SOW No. 3/90

EPA Sample No.	Lab Sample ID
BG1-01	CDMHNSS3*42
BKG-01	CDMHNSS3*3
BKG-01	CDMHNSS3*4
BKG-01	CDMHNSS3*5
BKG-02	CDMHNSS3*6
SP-01	CDMHNSS3*7
SP-01	CDMHNSS3*8
WC1-01	CDMHNSS3*43
WC1-01S	SPM2*CDMHNSS3*43
WC1-01S	SPM1*CDMHNSS3*43

Were ICP interelement corrections applied? Yes/No

Were ICP background corrections applied? Yes/No
If yes, were raw data generated before application of background corrections? Yes/No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name:

Date: Title:

U. S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

SOW No. 3/90

EPA Sample No.	Lab Sample ID
BG1-01	CDMHNSS3*42
BKG-01	CDMHNSS3*3
BKG-01	CDMHNSS3*4
BKG-01	CDMHNSS3*5
BKG-02	CDMHNSS3*6
SP-01	CDMHNSS3*7
SP-01	CDMHNSS3*8
WC1-01	CDMHNSS3*43
WC1-01S	SPM1*CDMHNSS3*43
WC1-01S	SPM2*CDMHNSS3*43

Were ICP interelement corrections applied? Yes/No

Were ICP background corrections applied? Yes/No
If yes, were raw data generated before application of background corrections? Yes/No

Comments: _____

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: _____ Name: _____

Date: _____ Title: _____

U. S. EPA - CLP

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

SOW No. 3/90

EPA Sample No.	Lab Sample ID
BG1-01	CDMHNSS3*42
BKG-01	CDMHNSS3*3
BKG-01	CDMHNSS3*4
BKG-01	CDMHNSS3*5
BKG-02	CDMHNSS3*6
SP-01	CDMHNSS3*7
SP-01	CDMHNSS3*8
WC1-01	CDMHNSS3*43
WC1-01S	SPM1*CDMHNSS3*43
WC1-01S	SPM2*CDMHNSS3*43

Were ICP interelement corrections applied? Yes/No

Were ICP background corrections applied? Yes/No
If yes, were raw data generated before application of background corrections? Yes/No

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name:

Date: Title:

9513354.2658

2. **DATA SUMMARY** (Form 1)

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG No.: G51090

Matrix (soil/water): SOIL Lab Sample ID: CDMHNSS3*43

Level (low/med): Date Received: 07/17/94

% Solids: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium	219.00		N	NR
7440-41-7	Beryllium				
7440-43-9	Cadmium	0.51	U		NR
7440-70-2	Calcium				
7440-47-3	Chromium	9.72		N	NR
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead	11.80		N	NR
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium				
7440-22-4	Silver	0.51	U		NR
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN

3/90

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG No.: G51090

Matrix (soil/water): SOIL Lab Sample ID: CDMHNSS3*43

Level (low/med): Date Received: 07/17/94

% Solids: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic	1.88		N	F
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium				
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead				
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN

3/90

U.S. EPA - CLP

1

INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG No.: G51090

Matrix (soil/water): SOIL Lab Sample ID: CDMHNSS3*43

Level (low/med): Date Received: 07/17/94

% Solids: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium				
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead				
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury				
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium	0.25	U	N	F
7440-22-4	Silver				
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN

3/90

U.S. EPA - CLP

1
INORGANIC ANALYSIS DATA SHEET

EPA SAMPLE NO.

WC1-01

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG No.: G51090

Matrix (soil/water): SOIL Lab Sample ID: CDMHNSS3*43

Level (low/med): Date Received: 07/17/94

% Solids: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

CAS No.	Analyte	Concentration	C	Q	M
7429-90-5	Aluminum				
7440-36-0	Antimony				
7440-38-2	Arsenic				
7440-39-3	Barium				
7440-41-7	Beryllium				
7440-43-9	Cadmium				
7440-70-2	Calcium				
7440-47-3	Chromium				
7440-48-4	Cobalt				
7440-50-8	Copper				
7439-89-6	Iron				
7439-92-1	Lead				
7439-95-4	Magnesium				
7439-96-5	Manganese				
7439-97-6	Mercury	0.10	U	N	CV
7440-02-0	Nickel				
7440-09-7	Potassium				
7782-49-2	Selenium				
7440-22-4	Silver				
7440-23-5	Sodium				
7440-28-0	Thallium				
7440-62-2	Vanadium				
7440-66-6	Zinc				
	Cyanide				

Color Before: Clarity Before: Texture:

Color After: Clarity After: Artifacts:

Comments:

FORM I - IN

3/90

3. **QC SUMMARY** (FORM 2-14)

95133554.2661

ICAP Metals

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Initial Calibration Source: SPEX

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium				1.0	0.99	99.0			NR
Beryllium									
Cadmium				1.0	0.97	97.0			NR
Calcium									
Chromium				1.0	0.99	99.0			NR
Cobalt									
Copper									
Iron									
Lead				1.0	0.98	98.0			NR
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver				1.0			1.00	100.0	NR
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Initial Calibration Source: SPEX

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									NR
Beryllium									
[illegible]ium	1.0	1.00	100.0						NR
[illegible]cium									
Chromium	1.0	1.01	101.0						NR
Cobalt									
Copper									
Iron									
Lead	1.0	1.01	101.0						NR
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									NR
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Initial Calibration Source: SPEX

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium	1.0	0.99	99.0	0.5	0.50	100.0	0.50	100.0	NR
Beryllium									
Cadmium				0.5	0.51	102.0	0.50	100.0	NR
Calcium									
Chromium				0.5	0.51	102.0	0.51	102.0	NR
Cobalt									
Copper									
Iron									
Lead				0.5	0.50	100.0	0.50	100.0	NR
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver	1.0	1.02	102.0	0.5	0.51	102.0	0.51	102.0	NR
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
ium			0.0		0.0				0.000		NR
yllium											
Cadmium			0.0		0.0				0.000		NR
Calcium											
Chromium			0.0		0.0				0.000		NR
Cobalt											
Copper											
Iron											
Lead			0.0		0.0				0.012		NR
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver			0.0		0.0				0.000		NR
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium									0.000		NR
Beryllium											
Cadmium									0.000		NR
Calcium											
Chromium									0.000		NR
Cobalt											
Copper											
Iron											
Lead									0.000		NR
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver									0.000		NR
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

WC1-01$MS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium	75-125	300.7930		219.2178		194.81	41.9	N	NR
Beryllium									
nium	75-125	4.8635		0.0000		4.87	99.9		NR
ium									
Chromium	75-125	27.9927		9.7201		19.48	93.8		NR
Cobalt									
Copper									
Iron									
Lead	75-125	88.6467		11.8189		48.70	157.8	N	NR
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver	75-125	4.7788		0.0000		4.87	98.1		NR
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD WC1-01$MSD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium	75-125	285.1088		219.2178		199.73	33.0	N	NR
Beryllium									
Cadmium	75-125	4.9892		0.0000		4.99	100.0		NR
Calcium									
Chromium	75-125	23.6759		9.7201		19.97	69.9	N	NR
Cobalt									
Copper									
Iron									
Lead	75-125	66.1554		11.8189		49.93	108.8		NR
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver	75-125	4.7925		0.0000		4.99	96.0		NR
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

FORM V (Part 1) - IN

3/90

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: ICP SAS No.: SDG.No.: G51090

Solid LCS Source: ERA

Aqueous LCS Source:

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium				196.1	183.9		0.0	0.0	93.8
Beryllium									
Cadmium				4.9	4.8		80.0	108.0	98.0
Calcium									
Chromium				19.6	18.2		79.0	109.0	92.9
Cobalt									
Copper									
Iron									
Lead				49.0	46.5		79.0	109.0	94.9
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver				4.9	4.7		73.0	107.0	95.9
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Barium	493.40		200.0	20.0	P
Cadmium	228.80		5.0	5.0	P
Chromium	267.70		10.0	10.0	P
Lead	220.30		3.0	100.0	P
Silver	328.00		10.0	5.0	P

Comments:

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number: PE5100

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Arsenic	193.70	BZ	10.0	2.5	F
Selenium	196.00	BZ	5.0	2.5	F

Comments:

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 02/15/94

Flame AA ID Number: BK400

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.2	CV

Comments:

ENVIROFORMS/INORGANIC CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	MN
Aluminum	308.20					
Antimony	206.80					
Arsenic	193.60	0.0091340		0.0003720		
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80					
Calcium	317.90					-0.0018800
Chromium	267.70					
Cobalt	228.60			0.0000710		
Copper	324.70					
Iron	259.90					
Lead	220.30	0.0020210				-0.0022420
Magnesium	279.00			0.0002940		-0.0052840
Manganese	257.60	0.0000240	0.0000150	0.0000580	0.0000380	
Mercury						
Nickel	231.60					
Potassium	766.40					
Selenium	196.00	0.0038590		0.0023470	0.0006650	0.0023000
Silver	328.00					0.0001790
Sodium	589.00					
Thallium	190.80	-0.0001690		0.0004090	0.0003700	-0.0108300
Vanadium	292.40			0.0001780		
Zinc	213.80			0.0000850	0.0000400	
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B
ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: BA	BE	CD	CO	CR
Aluminum	308.20				-0.0145850	
Antimony	206.80				-0.0035060	0.0117370
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80		0.0042080			
Calcium	317.90					
Chromium	267.70		0.0002570			
Cobalt	228.60	0.0008820		0.0006270		0.0003870
Copper	324.70					
Iron	259.90		0.0007080			
Lead	220.30					
Magnesium	279.00				-0.0017760	-0.0012550
Manganese	257.60		0.0001130			
Mercury						
Nickel	231.60				0.0006390	
Potassium	766.40					
Selenium	196.00		0.0020100		0.0030620	0.0015230
Silver	328.00					
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40					0.0003190
Zinc	213.80					
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: CU	MO	NI	PB	V
Aluminum	308.20		0.0135050			0.0041440
Antimony	206.80		0.0059640	-0.0081770		-0.0033430
Arsenic	193.60		0.0015360			0.0102360
Barium	493.40					
Beryllium	313.00					0.0042470
Cadmium	228.80			-0.0002510		
Calcium	317.90					
Chromium	267.70		-0.0029540			0.0006160
Cobalt	228.60			0.0004180		
Copper	324.70		0.0007150			
Iron	259.90					
Lead	220.30		0.0016320			-0.0010490
Magnesium	279.00		-0.0110400	-0.0015080		
Manganese	257.60			0.0001570		
Mercury						
Nickel	231.60		-0.0004060			
Potassium	766.40					
Selenium	196.00		0.0024970	0.0015040		0.0020000
Silver	328.00					-0.0014600
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40		0.0011430			
Zinc	213.80	0.0027620	-0.0004980	0.0032420		
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: AS	SN	TI	TL	ZN
Aluminum	308.20					
Antimony	206.80		0.0048600	0.0017150		
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80	0.0087800				
Calcium	317.90			-0.0012870		
Chromium	267.70			0.0001450		
Cobalt	228.60			0.0015940		
Copper	324.70			0.0003030		
Iron	259.90					
Lead	220.30					
Magnesium	279.00					
Manganese	257.60					
Mercury						
Nickel	231.60				0.0002880	
Potassium	766.40					
Selenium	196.00			0.0012360		0.0016530
Silver	328.00			-0.0002010		
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40			0.0005860		
Zinc	213.80					
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

12

ICP LINEAR RANGES (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	5.00	1000000.0	P
Antimony	5.00	100000.0	P
Arsenic	5.00	100000.0	P
Barium	5.00	100000.0	P
Beryllium	5.00	100000.0	P
Cadmium	5.00	100000.0	P
Calcium	5.00	1000000.0	P
Chromium	5.00	100000.0	P
Cobalt	5.00	100000.0	P
Copper	5.00	100000.0	P
Iron	5.00	1000000.0	P
Lead	5.00	100000.0	P
Magnesium	5.00	1000000.0	P
Manganese	5.00	100000.0	P
Nickel	5.00	100000.0	P
Potassium	5.00	1000000.0	P
Selenium	5.00	100000.0	P
Silver	5.00	100000.0	P
Sodium	5.00	500000.0	P
Thallium	5.00	100000.0	P
Vanadium	5.00	100000.0	P
Zinc	5.00	100000.0	P

Comments:

GFAA Metals – Arsenic

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Initial Calibration Source: PE-PURE

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic	50.0	54.50	109.0	50.0	50.80	101.6	52.00	104.0	F
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Initial Calibration Source: PE-PURE

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic				50.0	50.70	101.4	53.20	106.4	F
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
rsenic			0.5		0.6		1.3		0.300		F
rium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic			1.8						0.000		F
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

WC1-01~~8~~MS

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic	75-125	4.3560		1.8760		3.92	63.3	N	F
Barium									
yllium									
ium									
Ca..cium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

FORM V (Part 1) - IN

3/90

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD WC1-01S MSD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic	75-125	4.3374		1.8760		4.03	61.1	N	F
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Solid LCS Source: ESE

Aqueous LCS Source:

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic				3.8	3.8		80.0	122.0	100.0
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Barium	493.40		200.0	20.0	P
Cadmium	228.80		5.0	5.0	P
Chromium	267.70		10.0	10.0	P
Lead	220.30		3.0	100.0	P
Silver	328.00		10.0	5.0	P

Comments:

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number: PE5100

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Arsenic	193.70	BZ	10.0	2.5	F
Selenium	196.00	BZ	5.0	2.5	F

Comments:

FORM X - IN

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 02/15/94

Flame AA ID Number: BK400

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.2	CV

Comments:

ENVIROFORMS/INORGANIC CLP

11A
ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	MN
Aluminum	308.20					
Antimony	206.80					
Arsenic	193.60	0.0091340		0.0003720		
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80					
Calcium	317.90					-0.0018800
Chromium	267.70					
Cobalt	228.60			0.0000710		
Copper	324.70					
Iron	259.90					
Lead	220.30	0.0020210				-0.0022420
Magnesium	279.00			0.0002940		-0.0052840
Manganese	257.60	0.0000240	0.0000150	0.0000580	0.0000380	
Mercury						
Nickel	231.60					
Potassium	766.40					
Selenium	196.00	0.0038590		0.0023470	0.0006650	0.0023000
Silver	328.00					0.0001790
Sodium	589.00					
Thallium	190.80	-0.0001690		0.0004090	0.0003700	-0.0108300
Vanadium	292.40			0.0001780		
Zinc	213.80			0.0000850	0.0000400	
Cyanide						

ments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: BA	BE	CD	CO	CR
Aluminum	308.20				-0.0145850	
Antimony	206.80				-0.0035060	0.0117370
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80		0.0042080			
Calcium	317.90					
Chromium	267.70		0.0002570			
Cobalt	228.60	0.0008820		0.0006270		0.0003870
Copper	324.70					
Iron	259.90		0.0007080			
Lead	220.30					
Magnesium	279.00				-0.0017760	-0.0012550
Manganese	257.60		0.0001130			
Mercury						
Nickel	231.60				0.0006390	
Potassium	766.40					
Selenium	196.00		0.0020100		0.0030620	0.0015230
Silver	328.00					
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40					0.0003190
Zinc	213.80					
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: CU	MO	NI	PB	V
Aluminum	308.20		0.0135050			0.0041440
Antimony	206.80		0.0059640	-0.0081770		-0.0033430
Arsenic	193.60		0.0015360			0.0102360
Barium	493.40					
Beryllium	313.00					0.0042470
Cadmium	228.80			-0.0002510		
Calcium	317.90					
Chromium	267.70		-0.0029540			0.0006160
Cobalt	228.60			0.0004180		
Copper	324.70		0.0007150			
Iron	259.90					
Lead	220.30		0.0016320			-0.0010490
Magnesium	279.00		-0.0110400	-0.0015080		
Manganese	257.60			0.0001570		
Mercury						
Nickel	231.60		-0.0004060			
Potassium	766.40					
Selenium	196.00		0.0024970	0.0015040		0.0020000
Silver	328.00					-0.0014600
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40		0.0011430			
Zinc	213.80	0.0027620	-0.0004980	0.0032420		
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B
ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: AS	SN	TI	TL	ZN
Aluminum	308.20					
Antimony	206.80		0.0048600	0.0017150		
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80	0.0087800				
Calcium	317.90			-0.0012870		
Chromium	267.70			0.0001450		
Cobalt	228.60			0.0015940		
Copper	324.70			0.0003030		
Iron	259.90					
Lead	220.30					
Magnesium	279.00					
Manganese	257.60					
Mercury						
Nickel	231.60				0.0002880	
Potassium	766.40					
Selenium	196.00			0.0012360		0.0016530
Silver	328.00			-0.0002010		
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40			0.0005860		
Zinc	213.80					
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

12

ICP LINEAR RANGES (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	5.00	1000000.0	P
Antimony	5.00	100000.0	P
Arsenic	5.00	100000.0	P
Barium	5.00	100000.0	P
Beryllium	5.00	100000.0	P
Cadmium	5.00	100000.0	P
Calcium	5.00	1000000.0	P
Chromium	5.00	100000.0	P
Cobalt	5.00	100000.0	P
Copper	5.00	100000.0	P
Iron	5.00	1000000.0	P
Lead	5.00	100000.0	P
Magnesium	5.00	1000000.0	P
Manganese	5.00	100000.0	P
Nickel	5.00	100000.0	P
Potassium	5.00	1000000.0	P
Selenium	5.00	100000.0	P
Silver	5.00	100000.0	P
Sodium	5.00	500000.0	P
Thallium	5.00	100000.0	P
Vanadium	5.00	100000.0	P
Zinc	5.00	100000.0	P

Comments:

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Method: F

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
BG1-01	07/18/94	1.05	0
BKG-01	07/18/94	1.02	0
BKG-01	07/18/94	1.04	0
BKG-01	07/18/94	1.04	0
BKG-02	07/18/94	1.06	0
LCSS	07/18/94	1.06	0
PBS	07/18/94	1.00	1
PBS	07/18/94	1.01	0
SP-01	07/18/94	1.00	0
SP-01	07/18/94	1.02	0
WC1-01	07/18/94	1.01	0
WC1-01S	07/18/94	1.05	0
WC1-01S	07/18/94	1.02	0

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14
ANALYSIS RUN LOG

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Instrument ID Number: Method: F

Start Date: 07/18/94 End Date: 07/18/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ICV	1.00	1914				X																					
PBS	1.00	1924				X																					
PBS	1.00	1929				X																					
LCSS	1.00	1934				X																					
BKG-01	1.00	1939				X																					
BKG-01	1.00	1944				X																					
KG-01	1.00	1949				X																					
XG-02	1.00	1953				X																					
SP-01	1.00	1958				X																					
SP-01	1.00	2003				X																					
CCV	1.00	2008				X																					
CCB	1.00	2013				X																					
BG1-01	1.00	2018				X																					
WC1-01	1.00	2022				X																					
WC1-01S	1.00	2032				X																					
WC1-01S	1.00	2027				X																					
BKG-01L	5.00	2105				X																					
CCV	1.00	2112				X																					
CCB	1.00	2117				X																					
SA0	2.00	2257				X																					
SA1	1.00	2300				X																					
SA2	1.00	2302				X																					
SA3	1.00	2305				X																					
SA0	2.00	2307				X																					
SA1	1.00	2310				X																					
SA2	1.00	2312				X																					
SA3	1.00	2314				X																					
SA0	1.00	2156				X																					
SA1	1.00	2159				X																					
SA2	1.00	2201				X																					
SA3	1.00	2204				X																					
SA0	1.00	2206				X																					

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: AS SAS No.: SDG.No.: G51090

Instrument ID Number: Method: F

Start Date: 07/18/94 End Date: 07/18/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
SA1	1.00	2208				X																					
SA2	1.00	2211				X																					
SA3	1.00	2213				X																					
SA0	1.00	2216				X																					
SA1	1.00	2218				X																					
SA2	1.00	2220				X																					
SA3	1.00	2223				X																					
CCV	1.00	2230				X																					
CCB	1.00	2235				X																					
SA0	1.00	2317				X																					
SA1	1.00	2319				X																					
SA2	1.00	2322				X																					
SA3	1.00	2324				X																					
SA0	1.00	2327				X																					
SA1	1.00	2329				X																					
SA2	1.00	2331				X																					
SA3	1.00	2334				X																					
SA0	1.00	2336				X																					
SA1	1.00	2339				X																					
SA2	1.00	2341				X																					
SA3	1.00	2344				X																					
CCV	1.00	2349				X																					
CCB	1.00	2354				X																					

FORM XIV - IN

3/90

95133394.2679

GFAA Metals – Selenium

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Initial Calibration Source: PE-PURE

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	80.0	80.60	100.8	50.0	49.60	99.2	50.10	100.2	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Initial Calibration Source: PE-PURE

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				50.0	49.50	99.0	49.20	98.4	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			0.3		0.0	U	0.1		1.200		F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

9513354.2681

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
rsenic											
rium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury											
Nickel											
Potassium											
Selenium			0.0	U					0.000		F
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

FORM III - IN

3/90

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD WC1-01~~8~~MS

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	75-125	0.3824		0.0305		1.01	34.8	N	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD WC1-01S/MSD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium	75-125	0.4271		0.0305		1.02	38.9	N	F
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

FORM V (Part 1) - IN

3/90

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Solid LCS Source: ESE

Aqueous LCS Source:

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury									
Nickel									
Potassium									
Selenium				0.9	1.0		75.0	123.0	111.1
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Barium	493.40		200.0	20.0	P
Cadmium	228.80		5.0	5.0	P
Chromium	267.70		10.0	10.0	P
Lead	220.30		3.0	100.0	P
Silver	328.00		10.0	5.0	P

Comments:

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number: PE5100

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Arsenic	193.70	BZ	10.0	2.5	F
Selenium	196.00	BZ	5.0	2.5	F

Comments:

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 02/15/94

Flame AA ID Number: BK400

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.2	CV

ments:

ENVIROFORMS/INORGANIC CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	MN
Aluminum	308.20					
Antimony	206.80					
Arsenic	193.60	0.0091340		0.0003720		
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80					
Calcium	317.90					-0.0018800
Chromium	267.70					
Cobalt	228.60			0.0000710		
Copper	324.70					
Iron	259.90					
Lead	220.30	0.0020210				-0.0022420
Magnesium	279.00			0.0002940		-0.0052840
Manganese	257.60	0.0000240	0.0000150	0.0000580	0.0000380	
Mercury						
Nickel	231.60					
Potassium	766.40					
Selenium	196.00	0.0038590		0.0023470	0.0006650	0.0023000
Silver	328.00					0.0001790
Sodium	589.00					
Thallium	190.80	-0.0001690		0.0004090	0.0003700	-0.0108300
Vanadium	292.40			0.0001780		
Zinc	213.80			0.0000850	0.0000400	
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: BA	BE	CD	CO	CR
Aluminum	308.20				-0.0145850	
Antimony	206.80				-0.0035060	0.0117370
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80		0.0042080			
Calcium	317.90					
Chromium	267.70		0.0002570			
Cobalt	228.60	0.0008820		0.0006270		0.0003870
Copper	324.70					
Iron	259.90		0.0007080			
Lead	220.30					
Magnesium	279.00				-0.0017760	-0.0012550
Manganese	257.60		0.0001130			
Mercury						
Nickel	231.60				0.0006390	
Potassium	766.40					
Selenium	196.00		0.0020100		0.0030620	0.0015230
Silver	328.00					
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40					0.0003190
Zinc	213.80					
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: CU	MO	NI	PB	V
Aluminum	308.20		0.0135050			0.0041440
Antimony	206.80		0.0059640	-0.0081770		-0.0033430
Arsenic	193.60		0.0015360			0.0102360
Barium	493.40					
Beryllium	313.00					0.0042470
Cadmium	228.80			-0.0002510		
Calcium	317.90					
Chromium	267.70		-0.0029540			0.0006160
Cobalt	228.60			0.0004180		
Copper	324.70		0.0007150			
Iron	259.90					
Lead	220.30		0.0016320			-0.0010490
Magnesium	279.00		-0.0110400	-0.0015080		
Manganese	257.60			0.0001570		
Mercury						
Nickel	231.60		-0.0004060			
Potassium	766.40					
Selenium	196.00		0.0024970	0.0015040		0.0020000
Silver	328.00					-0.0014600
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40		0.0011430			
Zinc	213.80	0.0027620	-0.0004980	0.0032420		
Cyanide						

Comments:

9513354.2686

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: AS	SN	TI	TL	ZN
Aluminum	308.20					
Antimony	206.80		0.0048600	0.0017150		
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80	0.0087800				
Calcium	317.90			-0.0012870		
Chromium	267.70			0.0001450		
Cobalt	228.60			0.0015940		
Copper	324.70			0.0003030		
Iron	259.90					
Lead	220.30					
Magnesium	279.00					
Manganese	257.60					
Mercury						
Nickel	231.60				0.0002880	
Potassium	766.40					
Selenium	196.00			0.0012360		0.0016530
Silver	328.00			-0.0002010		
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40			0.0005860		
Zinc	213.80					
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

12

ICP LINEAR RANGES (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	5.00	1000000.0	P
Antimony	5.00	100000.0	P
Arsenic	5.00	100000.0	P
Barium	5.00	100000.0	P
Beryllium	5.00	100000.0	P
Cadmium	5.00	100000.0	P
Calcium	5.00	1000000.0	P
Chromium	5.00	100000.0	P
Cobalt	5.00	100000.0	P
Copper	5.00	100000.0	P
Iron	5.00	1000000.0	P
Lead	5.00	100000.0	P
Magnesium	5.00	1000000.0	P
Manganese	5.00	100000.0	P
Nickel	5.00	100000.0	P
Potassium	5.00	1000000.0	P
Selenium	5.00	100000.0	P
Silver	5.00	100000.0	P
Sodium	5.00	500000.0	P
Thallium	5.00	100000.0	P
Vanadium	5.00	100000.0	P
Zinc	5.00	100000.0	P

Comments:

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Method: F

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
BG1-01	07/18/94	1.05	0
BKG-01	07/18/94	1.02	0
BKG-01	07/18/94	1.04	0
BKG-01	07/18/94	1.04	0
BKG-02	07/18/94	1.06	0
LCSS	07/18/94	1.06	0
PBS	07/18/94	1.00	1
PBS	07/18/94	1.01	0
SP-01	07/18/94	1.00	0
SP-01	07/18/94	1.02	0
WC1-01	07/18/94	1.01	0
WC1-01S	07/18/94	1.02	0
WC1-01S	07/18/94	1.01	0

FORM XIII - IN

3/90

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: SE SAS No.: SDG.No.: G51090

Instrument ID Number: Method: F

Start Date: 07/18/94 End Date: 07/19/94

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ICV	1.00	0004																			X						
PBS	1.00	0010																			X						
PBS	1.00	0015																			X						
LCSS	1.00	0027																			X						
BKG-01	1.00	0033																			X						
BKG-01	1.00	0039																			X						
CCV	1.00	0122																			X						
CCB	1.00	0128																			X						
BKG-01	1.00	0134																			X						
BKG-02	1.00	0139																			X						
SP-01	1.00	0145																			X						
SP-01	1.00	0151																			X						
BG1-01	1.00	0156																			X						
WC1-01	1.00	0202																			X						
WC1-01S	1.00	0845																			X						
WC1-01S	1.00	0850																			X						
BKG-01A	2.00	0858																			X						
CCV	1.00	0224																			X						
CCB	1.00	0229																			X						
CCV	1.00	0822																			X						
CCB	1.00	0828																			X						
CCV	1.00	0905																			X						
CCB	1.00	0911																			X						

FORM XIV - IN

3/90

9513354.2688

Mercury

U.S. EPA - CLP

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Initial Calibration Source: PE-PURE

Continuing Calibration Source: ESE

Concentration Units: UG/L

Analyte	Initial Calibration True	Initial Calibration Found	Initial Calibration %R(1)	Continuing Calibration True	Continuing Calibration Found	Continuing Calibration %R(1)	Continuing Calibration Found	Continuing Calibration %R(1)	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	5.0	4.82	96.4	5.0	4.75	95.0	4.40	88.0	CV
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury			0.0		0.0				0.042		CV
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

FORM III - IN

3/90

U.S. EPA - CLP

3
BLANKS

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Preparation Blank Matrix (soil/water): SOIL

Preparation Blank Concentration Units (ug/L or mg/kg): MG/KG

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											
Antimony											
Arsenic											
Barium											
Beryllium											
Cadmium											
Calcium											
Chromium											
Cobalt											
Copper											
Iron											
Lead											
Magnesium											
Manganese											
Mercury									0.000		CV
Nickel											
Potassium											
Selenium											
Silver											
Sodium											
Thallium											
Vanadium											
Zinc											
Cyanide											

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

WC1-01~~8~~MS

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
[illegible]yllium									
[illegible]nium									
C[illegible]cium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	75-125	1.4328		0.0000		2.55	56.2	N	CV
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

FORM V (Part 1) - IN

3/90

U.S. EPA - CLP

5A
SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD WC1-01~~S~~MSD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Matrix (soil/water): SOIL Level (low/med):

% Solids for Sample: 97.2

Concentration Units (ug/L or mg/kg dry weight): MG/KG

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
Chromium									
Cobalt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury	75-125	1.1950		0.0000		2.41	49.6	N	CV
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

Comments:

U.S. EPA - CLP

7

LABORATORY CONTROL SAMPLE

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Solid LCS Source: ESE

Aqueous LCS Source:

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Aluminum									
Antimony									
Arsenic									
Barium									
Beryllium									
Cadmium									
Calcium									
[illegible]omium									
[illegible]lt									
Copper									
Iron									
Lead									
Magnesium									
Manganese									
Mercury				2.5	2.6		0.0	0.0	104.0
Nickel									
Potassium									
Selenium									
Silver									
Sodium									
Thallium									
Vanadium									
Zinc									
Cyanide									

FORM VII - IN

3/90

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Barium	493.40		200.0	20.0	P
Cadmium	228.80		5.0	5.0	P
Chromium	267.70		10.0	10.0	P
Lead	220.30		3.0	100.0	P
Silver	328.00		10.0	5.0	P

Comments:

FORM X - IN

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 04/18/94

Flame AA ID Number:

Furnace AA ID Number: PE5100

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Arsenic	193.70	BZ	10.0	2.5	F
Selenium	196.00	BZ	5.0	2.5	F

Comments:

ENVIROFORMS/INORGANIC CLP

10

INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: Date: 02/15/94

Flame AA ID Number: BK400

Furnace AA ID Number:

Analyte	Wave-length (nm)	Back-ground	CRDL (ug/L)	IDL (ug/L)	M
Mercury	253.70		0.2	0.2	CV

Comments:

95I3354.2693

ENVIROFORMS/INORGANIC CLP

11A

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: Al	Ca	Fe	Mg	MN
Aluminum	308.20					
Antimony	206.80					
Arsenic	193.60	0.0091340		0.0003720		
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80					
alcium	317.90					-0.0018800
romium	267.70					
obalt	228.60			0.0000710		
Copper	324.70					
Iron	259.90					
Lead	220.30	0.0020210				-0.0022420
Magnesium	279.00			0.0002940		-0.0052840
Manganese	257.60	0.0000240	0.0000150	0.0000580	0.0000380	
Mercury						
Nickel	231.60					
Potassium	766.40					
Selenium	196.00	0.0038590		0.0023470	0.0006650	0.0023000
Silver	328.00					0.0001790
Sodium	589.00					
Thallium	190.80	-0.0001690		0.0004090	0.0003700	-0.0108300
Vanadium	292.40			0.0001780		
Zinc	213.80			0.0000850	0.0000400	
Cyanide						

mments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: BA	BE	CD	CO	CR
Aluminum	308.20				-0.0145850	
Antimony	206.80				-0.0035060	0.0117370
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80		0.0042080			
Calcium	317.90					
Chromium	267.70		0.0002570			
Cobalt	228.60	0.0008820		0.0006270		0.0003870
Copper	324.70					
Iron	259.90		0.0007080			
Lead	220.30					
Magnesium	279.00				-0.0017760	-0.0012550
Manganese	257.60		0.0001130			
Mercury						
Nickel	231.60				0.0006390	
Potassium	766.40					
Selenium	196.00		0.0020100		0.0030620	0.0015230
Silver	328.00					
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40					0.0003190
Zinc	213.80					
Cyanide						

Comments:

95133542694

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: CU	MO	NI	PB	V
Aluminum	308.20		0.0135050			0.0041440
Antimony	206.80		0.0059640	-0.0081770		-0.0033430
Arsenic	193.60		0.0015360			0.0102360
Barium	493.40					
Beryllium	313.00					0.0042470
Cadmium	228.80			-0.0002510		
Calcium	317.90					
Chromium	267.70		-0.0029540			0.0006160
Cobalt	228.60			0.0004180		
Copper	324.70		0.0007150			
Iron	259.90					
Lead	220.30		0.0016320			-0.0010490
Magnesium	279.00		-0.0110400	-0.0015080		
Manganese	257.60			0.0001570		
Mercury						
Nickel	231.60		-0.0004060			
Potassium	766.40					
Selenium	196.00		0.0024970	0.0015040		0.0020000
Silver	328.00					-0.0014600
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40		0.0011430			
Zinc	213.80	0.0027620	-0.0004980	0.0032420		
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

11B

ICP INTERELEMENT CORRECTION FACTORS (Annually)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 01/19/94

Analyte	Wave-length (nm)	Interelement Correction Factors for: AS	SN	TI	TL	ZN
Aluminum	308.20					
Antimony	206.80		0.0048600	0.0017150		
Arsenic	193.60					
Barium	493.40					
Beryllium	313.00					
Cadmium	228.80	0.0087800				
Calcium	317.90			-0.0012870		
Chromium	267.70			0.0001450		
Cobalt	228.60			0.0015940		
Copper	324.70			0.0003030		
Iron	259.90					
Lead	220.30					
Magnesium	279.00					
Manganese	257.60					
Mercury						
Nickel	231.60				0.0002880	
Potassium	766.40					
Selenium	196.00			0.0012360		0.0016530
Silver	328.00			-0.0002010		
Sodium	589.00					
Thallium	190.80					
Vanadium	292.40			0.0005860		
Zinc	213.80					
Cyanide						

Comments:

ENVIROFORMS/INORGANIC CLP

12

ICP LINEAR RANGES (QUARTERLY)

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HANNSL

Lab Code: ESE Case No.: SAS No.: SDG No.: G48756

ICP ID Number: JA61 Date: 04/18/94

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Aluminum	5.00	1000000.0	P
Antimony	5.00	100000.0	P
Arsenic	5.00	100000.0	P
Barium	5.00	100000.0	P
Beryllium	5.00	100000.0	P
Cadmium	5.00	100000.0	P
Calcium	5.00	1000000.0	P
Chromium	5.00	100000.0	P
Cobalt	5.00	100000.0	P
Copper	5.00	100000.0	P
Iron	5.00	1000000.0	P
Lead	5.00	100000.0	P
Magnesium	5.00	1000000.0	P
Manganese	5.00	100000.0	P
Nickel	5.00	100000.0	P
Potassium	5.00	1000000.0	P
Selenium	5.00	100000.0	P
Silver	5.00	100000.0	P
Sodium	5.00	500000.0	P
Thallium	5.00	100000.0	P
Vanadium	5.00	100000.0	P
Zinc	5.00	100000.0	P

Comments:

U.S. EPA - CLP

13
PREPARATION LOG

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Method: CV

EPA Sample No.	Preparation Date	Weight (gram)	Volume (mL)
BG1-01	07/18/94	0.22	0
BKG-01	07/18/94	0.21	0
BKG-01	07/18/94	0.22	0
BKG-01	07/18/94	0.22	0
BKG-02	07/18/94	0.21	0
LCSS	07/18/94	0.20	0
PBS	07/18/94	1.00	1
PBS	07/18/94	0.22	0
SP-01	07/18/94	0.21	0
SP-01	07/18/94	0.20	0
WC1-01	07/18/94	0.20	0
WC1-01S	07/18/94	0.20	0
WC1-01S	07/18/94	0.21	0

FORM XIII - IN

3/90

95135354.2696

U.S. EPA - CLP

14
ANALYSIS RUN LOG

Lab Name: E.S.E. (GAINESVILLE LAB) Contract: CDM-HNFD

Lab Code: ESE Case No.: HG SAS No.: SDG.No.: G51090

Instrument ID Number: Method: CV

Start Date: 07/18/94 End Date: 07/18/94

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ICV	1.00																	X									
PBS	1.00																	X									
PBS	1.00																	X									
LCSS	1.00																	X									
BKG-01	1.00																	X									
BKG-01	1.00																	X									
BKG-01	1.00																	X									
-02	1.00																	X									
1	1.00																	X									
SP-01	1.00																	X									
CCV	1.00																	X									
CCB	1.00																	X									
BG1-01	1.00																	X									
WC1-01	1.00																	X									
WC1-01S	1.00																	X									
WC1-01S	1.00																	X									
CCV	1.00																	X									
CCB	1.00																	X									

FORM XIV - IN

3/90

4. INSTRUMENT RAW DATA

95135B4.2697

ICAP Metals

026

(2)

BK# 3 PG# 000027

JA 61 ICAP

Instrument Log

Analyst: Gary Price Date: 7/18/94

PROFILING	Initial	Final
Time		
Temp	76°F	
Humidity	72%	
Entr. Slit	742	
Ele. Cd		
Argon Tank Level	—	
Argon Regulator (psi)	~80	

Element File Used EJE

File Name 718Gcf/718Gcf2/718Gcf3

Method No. SW6010

OPTIMIZATION

Cu/Mn 1422/1059 = 1.342

Coolant flow (LPM) 15.0

Coolant mass flow 15.0

Nebulizer flow (LPM) 0.75

Nebulizer mass flow 0.56

Forward power 1.1KW

Reflected power ~4W

Peristaltic pump 850

Viewing height 15.5 mm above coil

Y tongue 1 mm above torch

Maintenance/Comments:

Samples Analyzed:

CDMHNSW3 x3 / CDMHNSS3 x 3-8, 42, 43 / EISWP1 x1-4

Read & Understood By: [signature] 7/18/94

Method: ESE Slope = Conc(SIR)/IR

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag3280	328.068	STD4	STD1-Blank	2.03528	-.004613	07/18/94 02:18:56
Al3082	308.215	STD3	STD1-Blank	2.83656	-.110815	07/18/94 02:18:56
As1936	193.696	STD2	STD1-Blank	4.34075	.007524	07/18/94 02:18:56
B_2496	249.678	STD5	STD1-Blank	8.93027	-.007740	07/18/94 02:18:56
Ba4934	493.409	STD2	STD1-Blank	2.92483	.000097	07/18/94 02:18:56
Be3130	313.042	STD2	STD1-Blank	2.84920	-.003419	07/18/94 02:18:56
Ca	317.933	STD3	STD1-Blank	1.57078	-.043563	07/18/94 02:18:56
Ca	307.603	STD3	STD1-Blank	12.0219	-.021639	07/18/94 02:18:56
Cd2288	228.802	STD2	STD1-Blank	3.63403	-.000969	07/18/94 02:18:56
Co2286	228.616	STD2	STD1-Blank	3.10956	-.002280	07/18/94 02:18:56
Cr2677	267.716	STD2	STD1-Blank	1.91763	-.003707	07/18/94 02:18:56
Cu3247	324.754	STD2	STD1-Blank	2.02922	-.004058	07/18/94 02:18:56
Fe	259.940	STD3	STD1-Blank	3.04934	-.006099	07/18/94 02:18:56
Fe	271.441	STD3	STD1-Blank	24.9072	-.059777	07/18/94 02:18:56
K_7664	766.491	STD3	STD1-Blank	57.9441	-.830533	07/18/94 02:18:56
Mg2790	279.079	STD3	STD1-Blank	16.6475	-.002220	07/18/94 02:18:56
Mn2576	257.610	STD2	STD1-Blank	2.46656	-.024008	07/18/94 02:18:56
Mo2020	202.030	STD5	STD1-Blank	4.47628	-.001492	07/18/94 02:18:56
Na5889	588.995	STD3	STD1-Blank	3.30382	-.241179	07/18/94 02:18:56
Ni2316	231.604	STD2	STD1-Blank	4.11509	-.002469	07/18/94 02:18:56
Pb2203	220.353	STD2	STD1-Blank	5.35865	-.008217	07/18/94 02:18:56
S 58	206.838	STD2	STD1-Blank	8.64700	-.001729	07/18/94 02:18:56
S 0	196.026	STD2	STD1-Blank	4.98877	-.765278	07/18/94 02:18:56
Si2881	288.158	STD5	STD1-Blank	4.66708	-.083385	07/18/94 02:18:56
Sn1899	189.989	STD5	STD1-Blank	6.03801	-.094595	07/18/94 02:18:56
Ti3349	334.941	STD5	STD1-Blank	2.39693	-.000639	07/18/94 02:18:56
Tl1908	190.864	STD2	STD1-Blank	10.8541	.028221	07/18/94 02:18:56
V_2924	292.402	STD2	STD1-Blank	2.66231	.002662	07/18/94 02:18:56
Zn2138	213.856	STD2	STD1-Blank	1.85404	-.003337	07/18/94 02:18:56

Method: ESE Slope = IR/Conc(SIR)

Element	Wavelen	High std	Low std	Slope	BEC	Date Standardized
Ag3280	328.068	STD4	STD1-Blank	.491333	.004613	07/18/94 02:18:56
Al3082	308.215	STD3	STD1-Blank	.352540	.110815	07/18/94 02:18:56
As1936	193.696	STD2	STD1-Blank	.230375	.007524	07/18/94 02:18:56
B_2496	249.678	STD5	STD1-Blank	.111979	.007740	07/18/94 02:18:56
Ba4934	493.409	STD2	STD1-Blank	.341900	.000097	07/18/94 02:18:56
Be3130	313.042	STD2	STD1-Blank	.350976	.003419	07/18/94 02:18:56
Ca	317.933	STD3	STD1-Blank	.636627	.043563	07/18/94 02:18:56
Ca	307.603	STD3	STD1-Blank	.083182	.021639	07/18/94 02:18:56
Cd2288	228.802	STD2	STD1-Blank	.275176	.000969	07/18/94 02:18:56
Co2286	228.616	STD2	STD1-Blank	.321589	.002280	07/18/94 02:18:56
Cr2677	267.716	STD2	STD1-Blank	.521478	.003707	07/18/94 02:18:56
Cu3247	324.754	STD2	STD1-Blank	.492800	.004058	07/18/94 02:18:56
Fe	259.940	STD3	STD1-Blank	.327940	.006099	07/18/94 02:18:56
F	271.441	STD3	STD1-Blank	.040149	.059777	07/18/94 02:18:56
K_ 4	766.491	STD3	STD1-Blank	.017258	.830533	07/18/94 02:18:56
Mg2790	279.079	STD3	STD1-Blank	.060069	.002220	07/18/94 02:18:56
Mn2576	257.610	STD2	STD1-Blank	.405424	.024008	07/18/94 02:18:56
Mo2020	202.030	STD5	STD1-Blank	.223400	.001492	07/18/94 02:18:56
Na5889	588.995	STD3	STD1-Blank	.302680	.241179	07/18/94 02:18:56

Element	Wavelen	High std	Low std	Slope	BEC	Date Standardized
Ni2316	231.604	STD2	STD1-Blank	.243008	.002469	07/18/94 02:18:56
Pb2203	220.353	STD2	STD1-Blank	.186614	.008217	07/18/94 02:18:56
Sb2068	206.838	STD2	STD1-Blank	.115647	.001729	07/18/94 02:18:56
Se1960	196.026	STD2	STD1-Blank	.200450	.765278	07/18/94 02:18:56
Si2881	288.158	STD5	STD1-Blank	.214267	.083385	07/18/94 02:18:56
Sn1899	189.989	STD5	STD1-Blank	.165618	.094595	07/18/94 02:18:56
Ti3349	334.941	STD5	STD1-Blank	.417200	.000639	07/18/94 02:18:56
Tl1908	190.864	STD2	STD1-Blank	.092131	.028221	07/18/94 02:18:56
V_2924	292.402	STD2	STD1-Blank	.375614	.002662	07/18/94 02:18:56
Zn2138	213.856	STD2	STD1-Blank	.539362	.003337	07/18/94 02:18:56

Method: ESE Sample Name: CCV*STD2*1 Operator: GLP
Run Time: 07/18/94 15:54:35
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	-.0049	1.016	-.0039	.9871	.9856	-.0348
SDev	.0012	.0078	.006	.0000	.0039	.0018	.0044
%RSD	160.4	159.5	.5773	.2609	.3945	.1857	12.72
#1	-.0005	-.0110	1.021	-.0039	.9891	.9869	-.0354
#2	.0003	.0039	1.018	-.0039	.9826	.9835	-.0301
#3	-.0021	-.0074	1.010	-.0039	.9897	.9864	-.0389

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9705	.9842	.9856	.9835	.0044	.0039	.0152
SDev	.0082	.0038	.0047	.0032	.0021	.3312	.0102
%RSD	.8434	.3851	.4782	.3299	48.84	8575.	66.80
#1	.9657	.9799	.9805	.9835	.0066	-.1004	.0041
#2	.9658	.9867	.9866	.9803	.0042	.3747	.0241
#3	.9799	.9861	.9897	.9868	.0024	-.8627	.0174

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9830	.0010	-.0024	.9870	.9834	.9896	.9825
SDev	.0022	.0026	.0132	.0066	.0078	.0076	.0174
%RSD	.2278	253.8	546.4	.6729	.7902	.7638	1.765
#1	.9828	.0025	-.0152	.9859	.9784	.9983	.9676
#2	.9808	.0025	.0112	.9810	.9924	.9861	.9785
#3	.9853	-.0020	-.0033	.9941	.9795	.9844	1.002

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0043	-.0041	.0004	.9917	.9838	.9796
SDev	.0009	.0074	.0007	.0443	.0014	.0051
%RSD	21.72	182.6	194.8	4.469	.1440	.5242
#1	.0033	-.0090	.0005	.9539	.9843	.9770
#2	.0052	-.0078	.0010	1.040	.9822	.9763
#3	.0043	.0045	-.0004	.9806	.9849	.9856

Method: ESE Sample Name: CCV*STD4*1 Operator: GLP
Run Time: 07/18/94 15:59:18
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9981	.0030	-.0069	-.0012	.0009	-.0000	-.0333
SDev	.0042	.0053	.0062	.0037	.0004	.0000	.0019
%RSD	.4166	173.8	89.69	313.8	50.92	.6085	5.765
#1	.9963	-.0013	-.0037	.0030	.0004	-.0000	-.0329
#2	.9951	.0015	-.0141	-.0042	.0010	-.0000	-.0354
#3	1.003	.0089	-.0030	-.0024	.0013	-.0000	-.0316

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0017	.0018	.0019	.0039	.3245	.0167
SDev	.0004	.0009	.0013	.0010	.0014	.2669	.0158
%RSD	59.42	57.35	69.06	53.88	36.46	82.25	94.55
#1	-.0002	.0015	.0013	.0028	.0055	.3399	.0111
	-.0009	.0008	.0009	.0008	.0030	.0502	.0044
	-.0010	.0027	.0032	.0020	.0030	.5833	.0344

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0000	.0012	.0095	.0001	.0169	.0057	.0283
SDev	.0003	.0024	.0055	.0044	.0059	.0036	.0074
%RSD	83090.	197.9	58.09	3153.	35.13	61.96	25.97
#1	-.0003	.0021	.0112	-.0037	.0197	.0068	.0200
#2	.0002	-.0015	.0033	.0049	.0101	.0018	.0310
#3	.0002	.0030	.0139	-.0008	.0208	.0086	.0340

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0205	.0008	.0005	-.0104	.0005	.0005
SDev	.0065	.0044	.0003	.0090	.0000	.0008
%RSD	41.24	536.7	57.72	86.52	.6085	160.2
#1	.0296	.0045	.0003	-.0000	.0005	.0007
#2	.0128	.0020	.0003	-.0155	.0005	-.0004
#3	.0193	-.0041	.0008	-.0155	.0005	.0011

Method: ESE Sample Name: ICV*ICAP19*1 Operator: GLP
Run Time: 07/18/94 16:01:30
C ent:
M CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0007	.0123	1.025	.0033	.0004	.9939	.9846
SDev	.0008	.0144	.028	.0027	.0003	.0049	.0120
%RSD	120.4	117.1	2.775	82.45	75.00	.4935	1.214

000500

#1	-.0007	-.0042	1.027	.0062	.0004	.9948	.9844
#2	-.0015	.0225	.9961	.0027	.0007	.9886	.9727
#3	.0001	.0185	1.053	.0009	.0001	.9982	.9966

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.003	.9924	1.008	.9836	1.015	.1391	1.004
SDev	.004	.0056	.009	.0039	.007	.0483	.027
%RSD	.3986	.5687	.9026	.3955	.6908	34.69	2.665
#1	.9983	.9915	1.003	.9829	1.015	.1545	1.004
#2	1.003	.9872	1.001	.9801	1.008	.0850	.9770
#3	1.006	.9964	1.018	.9878	1.022	.1777	1.030

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9904	1.017	.0390	1.010	1.007	1.003	.9911
SDev	.0053	.006	.0058	.003	.031	.010	.0192
%RSD	.5359	.6351	14.78	.2608	3.051	1.000	1.940
#1	.9916	1.015	.0429	1.009	1.008	.9991	.9795
#2	.9846	1.011	.0324	1.008	.9757	.9956	.9805
#3	.9951	1.024	.0416	1.013	1.037	1.014	1.013

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0623	.0173	.9913	1.001	1.004	1.011
SDev	.0057	.0104	.0048	.039	.005	.009
%RSD	9.122	60.02	.4866	3.908	.5101	.8502
#1	.0557	.0095	.9919	1.033	1.003	1.008
#2	.0660	.0290	.9862	.9576	.9995	1.003
#3	.0651	.0132	.9957	1.013	1.010	1.020

Method: ESE Sample Name: ICV*ICAP7*1 Operator: GLP
Run Time: 07/18/94 16:03:40
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.020	1.014	-.0002	1.010	.9938	.0021	-.0096
SDev	.008	.013	.0105	.012	.0086	.0003	.0038
%RSD	.8182	1.323	4340.	1.161	.8669	15.63	39.69
#1	1.025	1.012	.0078	1.020	.9984	.0023	-.0140
#2	1.011	1.002	.0036	.9970	.9838	.0023	-.0077
#3	1.025	1.028	-.0121	1.011	.9990	.0017	-.0071

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0022	.0010	.0014	.0049	.0276	10.07	.0222
SDev	.0011	.0013	.0010	.0007	.0020	.27	.0102
%RSD	49.79	130.8	68.10	14.45	7.091	2.700	45.77

#1	.0034	.0024	.0025	.0053	.0299	9.982	.0311
#2	.0012	-.0000	.0005	.0041	.0262	9.854	.0111
#3	.0021	.0006	.0013	.0053	.0268	10.38	.0244

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0016	.0036	1.026	.0001	.0144	-.0023	.0261
SDev	.0005	.0005	.002	.0032	.0093	.0089	.0174
%RSD	30.54	14.47	.1967	2352.	64.43	377.3	66.83
#1	.0021	.0039	1.024	.0037	.0126	-.0121	.0140
#2	.0011	.0039	1.028	-.0025	.0061	-.0001	.0181
#3	.0016	.0030	1.027	-.0008	.0244	.0051	.0461

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5330	.0029	.0024	.0076	.0009	.0058
SDev	.0210	.0068	.0003	.0141	.0025	.0002
%RSD	3.942	231.4	11.55	186.2	292.6	3.893
#1	.5402	.0103	.0022	.0157	.0037	.0055
#2	.5093	.0017	.0022	.0157	-.0011	.0059
#3	.5495	-.0032	.0027	-.0087	-.0000	.0059

Method: ESE Sample Name: ICS*A*1 Operator: GLP
Run Time: 07/18/94 16:05:45
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0048	507.2	.1483	.0020	.0046	.0004	470.1
SDev	.0015	2.7	.0319	.0038	.0002	.0003	2.2
%RSD	32.43	.5378	21.54	184.2	3.685	81.52	.4698
#1	-.0030	507.7	.1161	.0063	.0045	.0006	471.2
#2	-.0058	509.6	.1800	-.0009	.0045	.0000	471.5
#3	-.0054	504.2	.1488	.0007	.0048	.0006	467.5

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0049	-.0056	.0041	.0032	175.7	-.5099	502.1
SDev	.0021	.0015	.0014	.0004	1.2	.2960	2.2
%RSD	43.29	26.57	32.88	12.48	.6733	58.05	.4371
#1	-.0027	-.0048	.0056	.0036	176.4	-.7958	502.7
#2	-.0069	-.0073	.0029	.0028	176.4	-.5292	503.9
#3	-.0052	-.0046	.0040	.0032	174.3	-.2047	499.7

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0024	.0084	.2220	-.0058	.0158	.0152	.0320
SDev	.0005	.0045	.0018	.0014	.0126	.0062	.0024
%RSD	21.82	52.99	.7874	24.54	80.00	40.93	7.436
#1	.0024	.0129	.2227	-.0041	.0177	.0220	.0342

#2	.0018	.0084	.2200	-.0066	.0274	.0100	.0325
#3	.0029	.0040	.2233	-.0066	.0023	.0135	.0295

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0087	.0353	.0067	.0817	-.0043	.0169
SDev	.0141	.0027	.0006	.0811	.0011	.0006
%RSD	161.7	7.615	8.245	99.28	25.21	3.409
#1	.0071	.0351	.0070	.1183	-.0039	.0175
#2	-.0199	.0381	.0061	.1381	-.0055	.0167
#3	-.0134	.0327	.0070	-.0113	-.0035	.0164

Method: ESE Sample Name: ICS*AB*1 Operator: GLP
Run Time: 07/18/94 16:07:57
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9883	509.5	.2087	-.0077	.4901	.4805	471.1
SDev	.0070	2.6	.0764	.0037	.0017	.0023	2.0
%RSD	.7048	.5148	36.60	48.57	.3393	.4770	.4281
#1	.9916	509.6	.1545	-.0106	.4896	.4819	472.5
#2	.9929	512.0	.2961	-.0035	.4920	.4818	472.1
#3	.9802	506.8	.1756	-.0090	.4887	.4779	468.8

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9716	.4372	.4656	.4899	175.8	-.4945	503.9
SDev	.0086	.0042	.0026	.0025	.8	.1593	2.2
%RSD	.8833	.9574	.5634	.5053	.4503	32.22	.4351
#1	.9785	.4419	.4685	.4893	176.5	-.3554	504.4
#2	.9744	.4357	.4647	.4926	176.0	-.4597	505.7
#3	.9620	.4339	.4635	.4877	175.0	-.6683	501.5

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4571	.0072	.2608	.8935	.9213	.0019	.0462
SDev	.0015	.0029	.0017	.0158	.0075	.0192	.0068
%RSD	.3237	40.08	.6377	1.767	.8181	1019.	14.65
#1	.4580	.0051	.2590	.9015	.9293	.0237	.0396
#2	.4579	.0105	.2623	.9036	.9143	-.0124	.0458
#3	.4554	.0060	.2610	.8753	.9202	-.0056	.0531

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0128	.0271	.0023	.1455	.4668	.9779
SDev	.0011	.0221	.0003	.0211	.0039	.0038
%RSD	8.292	81.83	12.19	14.51	.8318	.3877
#1	-.0122	.0490	.0021	.1695	.4685	.9820
#2	-.0140	.0274	.0026	.1297	.4696	.9745

:	-.0122	.0048	.0021	.1374	.4624	.9772

Method: ESE Sample Name: MB*REACENTS*1 Operator: GLP
Run Time: 07/18/94 16:20:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0027	-.0078	-.0140	.0012	.0000	.0000	-.0439
SDev	.0024	.0141	.0142	.0000	.0002	.0000	.0039
%RSD	87.84	181.8	101.6	.2988	3481e6	60.18	8.945
#1	-.0010	-.0008	-.0037	.0012	.0001	.0000	-.0407
#2	-.0018	.0015	-.0080	.0012	-.0002	.0000	-.0483
#3	-.0054	-.0240	-.0302	.0012	.0001	.0000	-.0426

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0009	-.0010	-.0022	.0004	.0030	.1004	-.0033
SDev	.0006	.0012	.0015	.0011	.0040	.2839	.0101
%RSD	72.66	120.1	70.57	265.0	131.1	282.7	303.8
#1	-.0002	.0002	-.0022	.0012	.0073	.3863	-.0055
:	-.0009	-.0023	-.0037	-.0008	.0024	-.1816	-.0122
:	-.0015	-.0010	-.0006	.0008	-.0006	.0966	.0077

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0005	.0003	.0106	-.0045	.0119	-.0040	.0057
SDev	.0003	.0016	.0092	.0054	.0100	.0036	.0012
%RSD	58.02	534.3	86.83	120.4	84.05	89.52	21.44
#1	-.0003	.0012	.0165	-.0025	.0176	-.0069	.0050
#2	-.0008	.0012	.0152	-.0004	.0003	.0000	.0050
#3	-.0003	-.0015	.0000	-.0107	.0176	-.0052	.0071

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0364	-.0073	.0010	-.0089	-.0041	-.0007
SDev	.0051	.0043	.0003	.0022	.0025	.0006
%RSD	14.13	58.61	28.85	25.01	60.18	86.12
#1	.0314	-.0114	.0013	-.0067	-.0027	-.0004
#2	.0417	-.0028	.0008	-.0089	-.0027	-.0004
#3	.0360	-.0077	.0008	-.0111	-.0069	-.0015

Method: ESE Sample Name: MB*QC*1 Operator: GLP
Run Time: 07/18/94 16:22:48
C ent:
M CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.1857	-.0094	.0180	.0019	.0002	.0790

SDev	.0008	.0063	.0014	.0010	.0003	.0003	.0036
%RSD	642.6	3.364	14.55	5.727	15.79	174.9	4.515
#1	-.0005	.1796	-.0090	.0191	.0021	.0000	.0806
#2	-.0001	.1921	-.0109	.0174	.0019	-.0000	.0749
#3	.0011	.1853	-.0082	.0174	.0016	.0006	.0815

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0002	-.0011	-.0006	.0026	.6076	.3013	.0810
SDev	.0000	.0016	.0012	.0010	.0042	.1077	.0153
%RSD	6.992	151.5	180.6	39.75	.6832	35.74	18.85
#1	-.0002	.0002	-.0018	.0024	.6123	.3747	.0976
#2	-.0002	-.0030	.0005	.0016	.6062	.1777	.0677
#3	-.0002	-.0005	-.0006	.0036	.6044	.3515	.0777

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0274	.0021	.5445	.0011	.0083	.0023	.0208
SDev	.0005	.0018	.0104	.0024	.0090	.0129	.0027
%RSD	1.812	86.01	1.907	216.4	108.3	556.2	12.74
#1	.0269	.0039	.5425	-.0016	.0141	.0156	.0178
#2	.0279	.0003	.5352	.0025	-.0021	.0017	.0228
#3	.0274	.0021	.5557	.0025	.0130	-.0103	.0218

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4235	-.0066	.0035	.0074	.0002	.0025
SDev	.0073	.0076	.0003	.0136	.0011	.0004
%RSD	1.723	116.2	7.880	182.2	453.8	14.58
#1	.4151	-.0127	.0037	-.0044	-.0006	.0025
#2	.4272	.0020	.0032	.0045	.0015	.0022
#3	.4281	-.0090	.0037	.0222	-.0001	.0029

Method: ESE Sample Name: SP*QC*1 Operator: GLP
Run Time: 07/18/94 16:24:54
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0476	2.058	1.924	.9743	1.875	.0481	9.313
SDev	.0008	.005	.010	.0135	.007	.0003	.051
%RSD	1.786	.2661	.5269	1.386	.3627	.7028	.5490
#1	.0486	2.060	1.915	.9886	1.876	.0477	9.303
#2	.0470	2.051	1.921	.9618	1.868	.0483	9.267
#3	.0474	2.062	1.935	.9725	1.881	.0483	9.368

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0488	.4631	.1859	.2368	1.457	9.696	9.555
SDev	.0014	.0047	.0022	.0008	.009	.107	.056

D	2.790	1.014	1.185	.3554	.5941	1.104	.5902
#1	.0497	.4625	.1877	.2371	1.458	9.820	9.570
#2	.0496	.4588	.1834	.2359	1.447	9.634	9.493
#3	.0473	.4681	.1865	.2375	1.464	9.634	9.603

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4924	.4772	9.794	.4649	.4746	.4684	1.890
SDev	.0030	.0031	.022	.0082	.0050	.0026	.044
%RSD	.6153	.6524	.2217	1.759	1.049	.5511	2.351
#1	.4930	.4790	9.818	.4694	.4689	.4707	1.864
#2	.4891	.4736	9.776	.4554	.4775	.4690	1.864
#3	.4950	.4790	9.769	.4698	.4775	.4656	1.941

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5087	.9556	.4720	1.896	.4703	.4734
SDev	.0074	.0079	.0010	.009	.0037	.0041
%RSD	1.453	.8261	.2030	.4733	.7861	.8630
#1	.5115	.9646	.4729	1.906	.4724	.4728
#2	.5143	.9499	.4710	1.890	.4660	.4696
#3	.5003	.9523	.4720	1.890	.4724	.4777

Method: ESE Sample Name: CDMHNSS3*3 Operator: GLP
Run Time: 07/18/94 16:27:08
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0041	79.50	.1374	.0716	1.298	.0040	262.8
SDev	.0016	.32	.0378	.0062	.007	.0000	.6
%RSD	39.59	.4026	27.52	8.633	.5034	.0605	.2249
#1	-.0025	79.18	.1678	.0780	1.292	.0040	262.2
#2	-.0057	79.81	.1495	.0710	1.305	.0040	263.3
#3	-.0041	79.52	.0951	.0657	1.296	.0040	262.9

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	.0931	.0861	.1707	237.6	8.004	61.84
SDev	.0013	.0008	.0018	.0011	.8	.162	.20
%RSD	325.8	.8149	2.028	.6189	.3471	2.029	.3164
#1	.0006	.0939	.0865	.1699	236.7	7.873	61.63
#2	.0015	.0924	.0877	.1719	237.9	8.186	62.02
#3	-.0010	.0931	.0842	.1703	238.3	7.954	61.88

	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.173	.0073	5.482	.1071	.0839	.0052	.0229
SDev	.012	.0056	.027	.0055	.0129	.0116	.0044
%RSD	.2936	76.72	.4969	5.179	15.39	220.4	19.35

#1	4.162	.0055	5.462	.1066	.0705	.0186	.0211
#2	4.186	.0028	5.513	.1128	.0963	-.0006	.0196
#3	4.171	.0135	5.470	.1017	.0850	-.0022	.0279

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.936	.0046	14.51	.1021	.5450	.4482
SDev	.014	.0026	.06	.0261	.0006	.0002
%RSD	.3445	56.50	.4132	25.56	.1038	.0402
#1	3.923	.0017	14.47	.0920	.5449	.4482
#2	3.935	.0067	14.57	.1317	.5457	.4484
#3	3.950	.0054	14.48	.0825	.5446	.4481

Method: ESE Sample Name: CDMHNSS3*4 Operator: GLP
Run Time: 07/18/94 16:29:26
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0043	85.32	.1105	.0670	1.259	.0042	311.1
SDev	.0008	.82	.0155	.0022	.015	.0000	2.3
%RSD	19.53	.9620	13.99	3.299	1.162	.4737	.7272
#1	-.0035	86.26	.1244	.0693	1.275	.0042	313.5
#2	-.0052	84.78	.0938	.0667	1.249	.0043	309.1
#3	-.0043	84.90	.1133	.0649	1.251	.0042	310.6

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0001	.0877	.0984	.1947	218.3	11.68	62.61
SDev	.0019	.0027	.0002	.0020	4.0	.18	.54
%RSD	1468.	3.075	.2096	1.044	1.825	1.576	.8633
#1	-.0020	.0900	.0987	.1970	222.9	11.78	63.22
#2	-.0002	.0848	.0983	.1930	215.9	11.47	62.23
#3	.0018	.0884	.0983	.1942	216.2	11.79	62.36

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.703	.0038	4.650	.1209	.0777	.0092	.0204
SDev	.030	.0027	.025	.0031	.0166	.0187	.0112
%RSD	.8043	70.11	.5430	2.546	21.35	203.0	54.86
#1	3.736	.0067	4.679	.1226	.0881	.0009	.0096
#2	3.679	.0015	4.639	.1227	.0586	-.0039	.0319
#3	3.694	.0032	4.632	.1173	.0863	.0306	.0196

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.897	.0029	13.40	.0900	.4804	.4476
SDev	.039	.0084	.15	.0609	.0047	.0035
%RSD	1.001	286.0	1.113	67.61	.9851	.7777

#1	3.940	-.0012	13.57	.1580	.4656	.4514
#2	3.864	.0126	13.29	.0405	.4763	.4447
#3	3.886	-.0026	13.34	.0716	.4794	.4465

Method: ESE Sample Name: CDMHNSS3*5 Operator: GLP
Run Time: 07/18/94 16:31:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0021	76.71	.0739	.0662	.9234	.0034	42.03
SDev	.0008	.35	.0056	.0046	.0044	.0003	.16
%RSD	40.90	.4542	7.577	6.898	.4796	10.06	.3811
#1	-.0018	76.31	.0798	.0665	.9183	.0038	41.86
#2	-.0014	76.86	.0734	.0705	.9253	.0032	42.04
#3	-.0030	76.96	.0686	.0614	.9265	.0032	42.18

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	.0772	.1236	.1760	230.5	12.74	48.87
SDev	.0005	.0023	.0007	.0002	2.0	.05	.24
%RSD	281.1	2.930	.5511	.1203	.8715	.4200	.4954
#1	-.0001	.0798	.1244	.1757	228.3	12.77	48.60
#2	-.0001	.0756	.1232	.1761	232.3	12.68	48.95
#3	.0007	.0763	.1232	.1761	230.9	12.77	49.06

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.469	.0047	4.310	.1179	.0551	.0078	.0037
SDev	.018	.0009	.022	.0064	.0162	.0053	.0100
%RSD	.5152	18.66	.5109	5.421	29.35	67.68	271.7
#1	3.450	.0048	4.290	.1108	.0705	.0124	.0130
#2	3.473	.0056	4.306	.1231	.0383	.0090	-.0068
#3	3.485	.0038	4.333	.1198	.0564	.0020	.0049

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.318	-.0018	16.91	.0418	.5942	.4317
SDev	.029	.0110	.08	.0440	.0025	.0018
%RSD	.6762	619.1	.4562	105.3	.4193	.4195
#1	4.287	.0103	16.82	.0854	.5914	.4304
#2	4.323	-.0044	16.93	-.0026	.5950	.4311
#3	4.345	-.0111	16.97	.0425	.5963	.4338

M[illegible]d: ESE Sample Name: CDMHNSS3*6 Operator: GLP
R[illegible]ime: 07/18/94 16:33:30
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0004	76.38	.0936	.0629	.9665	.0034	41.76
SDev	.0013	.57	.0208	.0053	.0088	.0003	.25
%RSD	342.3	.7514	22.19	8.458	.9059	9.109	.5871
#1	.0007	76.13	.1159	.0682	.9625	.0032	41.60
#2	-.0017	75.98	.0748	.0630	.9604	.0032	41.65
#3	-.0001	77.04	.0902	.0576	.9765	.0037	42.04

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0010	.0814	.1223	.1730	228.7	12.33	47.06
SDev	.0004	.0030	.0020	.0008	.4	.21	.32
%RSD	43.61	3.665	1.609	.4671	.1944	1.662	.6868
#1	.0011	.0836	.1228	.1724	228.2	12.15	46.97
#2	.0014	.0780	.1201	.1728	229.1	12.55	46.80
#3	.0005	.0826	.1239	.1739	228.8	12.30	47.42

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.488	.0051	4.119	.1246	.0593	-.0070	.0145
SDev	.023	.0023	.025	.0094	.0112	.0106	.0084
%RSD	.6484	44.46	.6097	7.522	18.89	152.8	57.75
#1	3.475	.0075	4.119	.1194	.0555	-.0017	.0235
#2	3.474	.0030	4.094	.1190	.0720	.0000	.0132
#3	3.514	.0048	4.144	.1354	.0506	-.0192	.0069

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.096	-.0068	17.21	.0611	.5936	.4356
SDev	.022	.0066	.13	.0281	.0053	.0042
%RSD	.5479	96.51	.7633	45.99	.8865	.9725
#1	4.087	-.0140	17.16	.0752	.5918	.4308
#2	4.080	-.0012	17.11	.0793	.5895	.4389
#3	4.122	-.0052	17.36	.0287	.5996	.4370

Method: ESE Sample Name: CDMHNSS3*7 Operator: GLP
Run Time: 07/18/94 16:35:37
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0017	59.10	.0868	.0663	1.078	.0030	58.88
SDev	.0027	.49	.0209	.0029	.013	.0003	.53
%RSD	161.2	.8340	24.13	4.316	1.176	10.57	.8959
#1	.0013	58.54	.0851	.0631	1.064	.0026	58.31
#2	-.0040	59.34	.0668	.0687	1.084	.0032	58.99
#3	-.0023	59.44	.1086	.0671	1.087	.0032	59.35

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm

_e	.0008	.0693	.0851	.1411	188.2	13.34	41.20
SDev	.0018	.0015	.0018	.0016	1.5	.15	.31
%RSD	220.3	2.155	2.141	1.138	.7750	1.139	.7524
#1	-.0009	.0690	.0845	.1396	186.7	13.32	40.86
#2	.0007	.0680	.0837	.1408	188.4	13.20	41.29
#3	.0026	.0710	.0872	.1428	189.6	13.50	41.45

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.371	.0047	3.940	.0909	.0780	.0045	.0125
SDev	.026	.0023	.028	.0038	.0132	.0080	.0097
%RSD	.7740	50.33	.7086	4.198	16.98	177.1	77.80
#1	3.344	.0029	3.914	.0927	.0902	.0019	.0237
#2	3.374	.0038	3.937	.0865	.0639	-.0019	.0071
#3	3.396	.0073	3.970	.0935	.0799	.0136	.0067

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.952	.0033	12.96	.0660	.4586	.3972
SDev	.043	.0026	.12	.0351	.0030	.0039
%RSD	.8684	76.81	.9045	53.14	.6460	.9925
#1	4.915	.0004	12.83	.0257	.4552	.3931
	4.941	.0051	13.01	.0830	.4607	.3974
	4.999	.0045	13.05	.0893	.4599	.4010

Method: ESE Sample Name: CDMHNSS3*8 Operator: GLP
Run Time: 07/18/94 16:37:39
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0016	73.05	.1018	.0749	1.310	.0043	94.96
SDev	.0005	.36	.0170	.0073	.008	.0003	.39
%RSD	29.78	.4925	16.69	9.734	.6313	7.622	.4113
#1	-.0011	73.44	.1206	.0816	1.319	.0045	95.15
#2	-.0019	72.74	.0973	.0672	1.303	.0045	94.51
#3	-.0019	72.97	.0875	.0761	1.309	.0040	95.21

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	.0938	.0912	.1738	220.7	18.97	49.76
SDev	.0023	.0025	.0010	.0004	.9	.15	.28
%RSD	336.4	2.618	1.058	.2264	.3854	.7653	.5586
#1	.0010	.0936	.0920	.1742	221.7	18.99	50.03
	-.0018	.0915	.0901	.1739	220.4	18.82	49.48
	.0028	.0964	.0913	.1734	220.0	19.11	49.77

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.563	.0057	4.380	.1104	.1243	.0077	.0017

SDev	.016	.0027	.035	.0052	.0106	.0184	.0121
%RSD	.3484	47.12	.8082	4.751	8.505	240.5	701.6
#1	4.578	.0057	4.405	.1058	.1124	-.0132	.0067
#2	4.546	.0030	4.340	.1161	.1277	.0148	-.0120
#3	4.565	.0084	4.396	.1091	.1327	.0215	.0105

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	4.364	.0572	13.61	.0404	.5469	1.140
SDev	.014	.0048	.08	.0299	.0012	.002
%RSD	.3213	8.354	.5656	73.94	.2197	.1367
#1	4.378	.0627	13.69	.0682	.5480	1.139
#2	4.350	.0546	13.54	.0441	.5456	1.140
#3	4.363	.0543	13.60	.0088	.5472	1.142

Method: ESE Sample Name: CDMHNSS3*42 Operator: GLP
Run Time: 07/18/94 16:41:25
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0006	75.83	.0728	.0604	.7493	.0029	29.16
SDev	.0002	.33	.0133	.0062	.0062	.0000	.07
%RSD	40.08	.4318	18.30	10.22	.8223	.3703	.2436
#1	-.0004	75.78	.0771	.0675	.7487	.0029	29.16
#2	-.0008	76.18	.0834	.0569	.7557	.0029	29.23
#3	-.0004	75.54	.0578	.0567	.7434	.0029	29.09

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	.0632	.1093	.1213	177.7	17.04	41.32
SDev	.0005	.0014	.0014	.0004	.6	.16	.18
%RSD	158.8	2.219	1.256	.3230	.3584	.9528	.4352
#1	-.0001	.0642	.1092	.1213	177.4	16.99	41.31
#2	-.0009	.0616	.1080	.1217	178.4	17.22	41.51
#3	.0000	.0637	.1108	.1209	177.2	16.91	41.15

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	3.050	.0034	3.579	.1087	.0575	.0003	.0339
SDev	.008	.0029	.023	.0015	.0009	.0078	.0096
%RSD	.2672	84.75	.6292	1.360	1.489	2844.	28.42
#1	3.050	.0022	3.591	.1100	.0583	-.0066	.0433
#2	3.059	.0013	3.593	.1091	.0576	.0088	.0343
#3	3.042	.0067	3.553	.1071	.0566	-.0014	.0240

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.385	-.0005	10.55	.0630	.3935	.3851
SDev	.014	.0113	.05	.0225	.0025	.0018

D	.2599	2107.	.4906	35.73	.6424	.4766
#1	5.381	.0024	10.55	.0468	.3948	.3846
#2	5.400	.0091	10.60	.0886	.3951	.3871
#3	5.373	-.0130	10.50	.0535	.3906	.3835

Method: ESE Sample Name: CCV*QC*1 Operator: GLP
Run Time: 07/18/94 16:44:55
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5135	5.061	.7166	.5064	.5037	.5110	5.007
SDev	.0028	.043	.0161	.0027	.0044	.0046	.045
%RSD	.5502	.8560	2.242	.5400	.8767	.8935	.8971
#1	.5102	5.018	.6986	.5040	.4990	.5063	4.960
#2	.5151	5.105	.7296	.5058	.5077	.5154	5.050
#3	.5151	5.061	.7215	.5093	.5042	.5114	5.011

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5050	.5033	.5102	.5030	4.993	4.964	5.083
v	.0014	.0018	.0037	.0049	.033	.153	.040
	.2773	.3546	.7184	.9761	.6558	3.088	.7961
#1	.5035	.5023	.5074	.4985	4.957	5.080	5.046
#2	.5061	.5054	.5143	.5083	5.021	5.022	5.126
#3	.5055	.5023	.5089	.5022	5.001	4.790	5.076

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5044	.5154	5.020	.5184	.5038	.5074	.7173
SDev	.0042	.0066	.057	.0127	.0139	.0075	.0097
%RSD	.8397	1.283	1.134	2.442	2.767	1.474	1.358
#1	.4999	.5103	4.954	.5042	.4895	.5126	.7160
#2	.5083	.5228	5.059	.5284	.5174	.5108	.7083
#3	.5049	.5130	5.045	.5227	.5045	.4988	.7277

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0130	.5196	.4999	.7267	.5055	.5069
SDev	.0055	.0084	.0037	.0144	.0037	.0048
%RSD	42.23	1.614	.7323	1.984	.7395	.9483
#1	.0151	.5101	.4959	.7415	.5016	.5014
#2	.0170	.5261	.5031	.7127	.5090	.5102
#3	.0067	.5224	.5007	.7260	.5058	.5091

Method: ESE Sample Name: CCB*QC*1 Operator: GLP
Run Time: 07/18/94 16:47:25
Comment:

Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0011	.0004	.0040	-.0042	.0006	-.0000	-.0123
SDev	.0000	.0050	.0181	.0036	.0004	.0000	.0051
%RSD	.2038	1301.	451.3	85.84	76.38	324800.	41.46
#1	.0011	.0043	-.0090	-.0006	.0007	-.0000	-.0068
#2	.0011	.0021	-.0037	-.0042	.0010	.0000	-.0169
#3	.0011	-.0053	.0248	-.0078	.0001	-.0000	-.0131

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0008	-.0004	-.0005	.0009	.0053	.0077	.0044
SDev	.0017	.0016	.0016	.0010	.0019	.2909	.0153
%RSD	217.1	395.6	301.5	107.7	35.25	3766.	344.9
#1	-.0002	-.0010	.0009	.0020	.0073	.3284	.0178
#2	.0005	.0015	-.0003	.0008	.0037	-.0657	.0077
#3	-.0027	-.0017	-.0022	.0000	.0049	-.2395	-.0122

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0002	-.0012	.0106	.0016	.0162	.0029	.0250
SDev	.0000	.0014	.0052	.0008	.0108	.0078	.0061
%RSD	.5767	114.9	48.81	49.73	67.04	267.6	24.36
#1	.0002	.0003	.0139	.0025	.0262	-.0052	.0280
#2	.0002	-.0024	.0046	.0008	.0176	.0035	.0180
#3	.0002	-.0015	.0132	.0016	.0047	.0104	.0291

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0118	-.0029	.0003	-.0052	.0000	-.0004
SDev	.0097	.0033	.0010	.0205	.0014	.0006
%RSD	82.07	114.0	299.8	395.8	325600.	167.7
#1	.0230	-.0016	.0013	.0067	.0005	.0004
#2	.0062	-.0065	-.0006	-.0289	-.0016	-.0008
#3	.0062	-.0004	.0003	.0067	.0011	-.0007

Method: ESE Sample Name: CDMHNSS3*43 Operator: GLP
Run Time: 07/18/94 16:49:56
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0028	57.51	.0764	.0647	2.154	.0024	33.42
SDev	.0006	.14	.0087	.0031	.009	.0003	.13
%RSD	22.52	.2352	11.33	4.830	.4287	13.63	.3741
#1	-.0027	57.42	.0822	.0665	2.150	.0020	33.34
#2	-.0022	57.67	.0806	.0666	2.164	.0026	33.56
#3	-.0035	57.45	.0665	.0611	2.147	.0026	33.34

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0001	.0539	.0955	.1130	199.5	11.95	35.56
SDev	.0009	.0017	.0027	.0010	.4	.54	.14
%RSD	606.3	3.171	2.791	.8955	.1967	4.551	.3972
#1	.0006	.0529	.0940	.1131	199.3	11.82	35.44
#2	-.0009	.0558	.0986	.1139	199.9	12.54	35.71
#3	.0007	.0529	.0940	.1119	199.2	11.48	35.52

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.205	.0027	3.732	.1016	.1161	.0240	.0054
SDev	.007	.0024	.031	.0116	.0186	.0010	.0129
%RSD	.3347	88.67	.8317	11.39	16.01	4.121	238.1
#1	2.202	.0053	3.727	.0964	.1113	.0245	-.0087
#2	2.213	.0009	3.765	.1149	.1367	.0246	.0166
#3	2.199	.0018	3.704	.0936	.1005	.0229	.0083

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	5.225	.0190	9.319	.0683	.3288	.3507
SDev	.016	.0102	.032	.0490	.0015	.0032
%RSD	.2977	53.95	.3454	71.73	.4710	.9194
#1	5.220	.0306	9.305	.0743	.3285	.3481
#2	5.242	.0117	9.356	.1141	.3305	.3543
#3	5.212	.0146	9.296	.0166	.3274	.3496

Method: ESE Sample Name: SD*CDMHN553*43 Operator: GLP
Run Time: 07/18/94 16:52:34
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0007	12.22	.0032	.0118	.4565	.0008	7.185
SDev	.0014	.07	.0092	.0048	.0024	.0000	.043
%RSD	205.7	.5894	289.1	40.46	.5334	.2633	.6010
#1	.0015	12.19	.0086	.0135	.4557	.0008	7.168
#2	-.0009	12.17	-.0074	.0064	.4545	.0008	7.152
#3	.0015	12.30	.0083	.0154	.4592	.0008	7.234

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	.0115	.0200	.0251	43.03	2.700	7.556
SDev	.0007	.0019	.0035	.0012	.33	.180	.085
%RSD	251.0	16.28	17.42	4.921	.7649	6.654	1.126
#1	-.0003	.0098	.0164	.0253	42.91	2.704	7.497
#2	-.0009	.0111	.0203	.0237	42.77	2.519	7.517
#3	.0004	.0135	.0234	.0262	43.40	2.878	7.653

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960

Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4736	.0004	.7967	.0208	.0331	.0112	.0256
SDev	.0030	.0027	.0065	.0019	.0139	.0036	.0096
%RSD	.6324	764.6	.8183	9.319	42.10	32.07	37.57
#1	.4721	.0004	.7936	.0201	.0417	.0140	.0263
#2	.4716	-.0023	.8041	.0193	.0170	.0072	.0348
#3	.4770	.0030	.7923	.0230	.0405	.0124	.0156

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.120	.0003	1.977	.0046	.0699	.0763
SDev	.004	.0130	.010	.0344	.0005	.0013
%RSD	.3761	3823.	.5088	755.4	.7502	1.705
#1	1.124	.0117	1.973	.0379	.0704	.0777
#2	1.116	.0031	1.969	-.0309	.0694	.0751
#3	1.120	-.0138	1.988	.0066	.0698	.0762

Method: ESE Sample Name: SPX*CDMHNSS3*43 Operator: GLP
Run Time: 07/18/94 16:55:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2589	31.58	.3967	.2850	1.346	.2602	19.49
SDev	.0008	.07	.0160	.0072	.003	.0003	.03
%RSD	.3141	.2285	4.035	2.536	.2073	.1269	.1682
#1	.2597	31.56	.4089	.2934	1.346	.2604	19.51
#2	.2581	31.66	.3786	.2809	1.348	.2598	19.49
#3	.2589	31.52	.4025	.2808	1.343	.2604	19.45

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.2518	.2806	.3028	.3128	103.0	8.761	20.54
SDev	.0018	.0016	.0016	.0006	.4	.047	.02
%RSD	.7276	.5678	.5308	.1987	.3853	.5346	.0990
#1	.2537	.2790	.3010	.3133	103.0	8.788	20.52
#2	.2517	.2808	.3041	.3121	103.3	8.788	20.56
#3	.2500	.2821	.3034	.3129	102.6	8.707	20.55

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.373	.2598	4.454	.3141	.3206	.2626	.3696
SDev	.002	.0014	.011	.0115	.0048	.0106	.0070
%RSD	.1486	.5293	.2471	3.664	1.507	4.033	1.908
#1	1.373	.2600	4.466	.3106	.3257	.2574	.3619
#2	1.374	.2610	4.450	.3270	.3201	.2747	.3757
#3	1.371	.2583	4.445	.3048	.3160	.2556	.3711

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm

[illegible]	2.633	.2616	4.953	.4018	.4232	.4334
SDev	.007	.0091	.009	.0215	.0003	.0033
%RSD	.2613	3.482	.1846	5.340	.0770	.7678
#1	2.631	.2612	4.954	.4055	.4229	.4368
#2	2.641	.2527	4.962	.3788	.4233	.4331
#3	2.628	.2709	4.944	.4212	.4235	.4302

Method: ESE Sample Name: SPM1*CDMHNSS3*43 Operator: GLP
Run Time: 07/18/94 16:57:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0491	24.41	2.066	1.091	3.088	.0532	40.36
SDev	.0008	.15	.013	.005	.026	.0003	.25
%RSD	1.651	.6049	.6511	.4982	.8314	.5976	.6203
#1	.0482	24.43	2.078	1.086	3.090	.0534	40.28
#2	.0491	24.54	2.052	1.089	3.112	.0534	40.64
#3	.0499	24.25	2.069	1.096	3.061	.0528	40.15

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
[illegible] s	ppm	ppm	ppm	ppm	ppm	ppm	ppm
[illegible]	.0499	.5410	.2874	.3737	168.2	16.46	24.89
SDev	.0023	.0036	.0014	.0030	.6	.08	.16
%RSD	4.668	.6599	.4722	.8116	.3305	.4996	.6567
#1	.0476	.5383	.2873	.3736	168.0	16.37	24.88
#2	.0523	.5451	.2888	.3768	168.9	16.53	25.06
#3	.0499	.5397	.2861	.3708	167.8	16.47	24.73

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.361	.5077	14.00	.5978	.9101	.5163	1.968
SDev	.013	.0026	.11	.0090	.0155	.0095	.047
%RSD	.5557	.5073	.8007	1.507	1.707	1.850	2.364
#1	2.358	.5062	13.97	.6056	.8942	.5227	1.983
#2	2.375	.5107	14.12	.5998	.9253	.5053	2.005
#3	2.350	.5062	13.90	.5879	.9107	.5209	1.916

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.74	1.038	3.435	2.008	.6126	.6987
SDev	.08	.005	.026	.035	.0037	.0032
%RSD	.6490	.4737	.7663	1.765	.6005	.4574
#1	12.75	1.036	3.438	1.972	.6119	.6959
[illegible]	12.82	1.043	3.459	2.042	.6166	.7022
[illegible]	12.65	1.034	3.407	2.009	.6093	.6979

Method: ESE Sample Name: SPM2*CDMHNSS3*43 Operator: GLP

Run Time: 07/18/94 16:59:33
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0480	23.65	2.092	1.081	2.855	.0538	42.49
SDev	.0029	.16	.025	.012	.019	.0003	.36
%RSD	6.037	.6966	1.171	1.093	.6486	.5736	.8511
#1	.0475	23.76	2.064	1.079	2.872	.0540	42.61
#2	.0511	23.74	2.111	1.093	2.857	.0539	42.78
#3	.0454	23.46	2.100	1.070	2.835	.0534	42.09

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0500	.5289	.2371	.3335	81.08	16.72	24.90
SDev	.0007	.0050	.0031	.0029	.87	.57	.17
%RSD	1.339	.9371	1.309	.8725	1.073	3.388	.6829
#1	.0492	.5279	.2371	.3343	81.71	16.10	25.00
#2	.0503	.5342	.2402	.3359	81.43	17.21	25.01
#3	.0504	.5244	.2340	.3303	80.09	16.84	24.71

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	2.123	.5121	13.72	.5589	.6625	.5207	2.017
SDev	.018	.0076	.07	.0050	.0112	.0086	.034
%RSD	.8423	1.483	.5051	.8987	1.696	1.655	1.696
#1	2.131	.5150	13.79	.5535	.6580	.5108	1.995
#2	2.136	.5177	13.74	.5600	.6752	.5246	2.057
#3	2.103	.5034	13.65	.5633	.6542	.5266	2.000

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	12.61	1.034	3.364	2.032	.6088	.7114
SDev	.09	.011	.030	.043	.0057	.0046
%RSD	.7437	1.053	.8974	2.121	.9434	.6448
#1	12.62	1.036	3.385	2.051	.6090	.7118
#2	12.69	1.043	3.378	2.062	.6144	.7159
#3	12.50	1.022	3.330	1.982	.6029	.7067

Method: ESE Sample Name: ICS*A*2 Operator: GLP
Run Time: 07/18/94 17:02:17
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0056	521.1	.2754	-.0029	.0048	.0000	482.7
SDev	.0008	2.0	.0552	.0054	.0006	.0000	2.1
%RSD	15.25	.3890	20.04	188.2	12.24	64.75	.4268
#1	-.0058	519.6	.2750	-.0029	.0054	.0000	481.5
#2	-.0046	523.4	.2204	.0025	.0042	.0000	485.1

[illegible]	-.0062	520.4	.3307	-.0083	.0048	.0000	481.5

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0034	-.0063	.0039	.0012	174.3	-.6258	514.6
SDev	.0006	.0004	.0025	.0025	.6	.2765	2.5
%RSD	17.87	6.365	64.62	204.0	.3349	44.19	.4863
#1	-.0039	-.0065	.0063	.0028	174.5	-.4017	513.0
#2	-.0028	-.0066	.0040	.0024	174.8	-.5408	517.5
#3	-.0036	-.0058	.0013	-.0016	173.6	-.9348	513.4

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0028	.0070	.2194	.0017	.0104	.0307	.0506
SDev	.0003	.0014	.0169	.0045	.0201	.0210	.0294
%RSD	9.268	19.85	7.691	259.7	193.9	68.34	58.09
#1	.0031	.0058	.2154	-.0033	.0336	.0410	.0199
#2	.0027	.0067	.2379	.0053	-.0001	.0066	.0536
#3	.0026	.0085	.2048	.0032	-.0024	.0445	.0785

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0022	.0485	.0070	.1977	-.0034	.0177
[illegible]	.0110	.0042	.0010	.0875	.0022	.0004
[illegible]	500.4	8.750	13.63	44.25	64.75	2.504
#1	-.0050	.0445	.0080	.1262	-.0059	.0175
#2	.0099	.0530	.0070	.1716	-.0017	.0183
#3	-.0115	.0479	.0061	.2952	-.0026	.0175

Method: ESE Sample Name: ICS*AB*2 Operator: GLP
Run Time: 07/18/94 17:04:28
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	1.013	522.8	.1491	-.0006	.5035	.4968	483.7
SDev	.008	5.3	.0904	.0070	.0059	.0057	5.2
%RSD	.8255	1.004	60.59	1244.	1.169	1.146	1.072
#1	1.022	528.1	.2523	.0075	.5089	.5023	489.2
#2	1.011	517.6	.0838	-.0038	.4972	.4910	478.9
#3	1.006	522.6	.1114	-.0054	.5042	.4972	483.0

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.9901	.4521	.4780	.5063	175.2	-.6451	516.1
[illegible]	.0087	.0049	.0072	.0044	2.2	.2434	5.1
[illegible]	.8795	1.077	1.513	.8657	1.241	37.72	.9851
#1	.9999	.4574	.4863	.5100	177.5	-.3670	521.5
#2	.9872	.4477	.4728	.5015	173.2	-.8189	511.4
#3	.9832	.4513	.4751	.5076	174.8	-.7494	515.4

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4699	.0102	.2773	.9195	.9497	.0175	.0552
SDev	.0046	.0042	.0109	.0108	.0314	.0230	.0337
%RSD	.9866	41.10	3.947	1.173	3.308	131.3	61.10
#1	.4747	.0150	.2888	.9319	.9842	.0428	.0615
#2	.4655	.0088	.2762	.9130	.9422	-.0020	.0853
#3	.4695	.0070	.2669	.9134	.9227	.0117	.0188

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0034	.0421	.0034	.1178	.4825	1.001
SDev	.0154	.0090	.0006	.0239	.0063	.014
%RSD	457.4	21.46	16.36	20.31	1.307	1.428
#1	.0122	.0462	.0031	.0973	.4893	1.017
#2	-.0037	.0317	.0031	.1120	.4769	.9903
#3	-.0186	.0483	.0040	.1440	.4814	.9951

Method: ESE Sample Name: CCV*QC*2 Operator: SLP
Run Time: 07/18/94 17:08:22
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.5104	5.046	.7226	.5046	.5015	.5068	4.934
SDev	.0029	.034	.0150	.0041	.0022	.0035	.040
%RSD	.5661	.6727	2.074	.8194	.4415	.6831	.8172
#1	.5078	5.067	.7275	.5093	.5025	.5086	4.967
#2	.5098	5.007	.7057	.5021	.4990	.5029	4.889
#3	.5135	5.064	.7344	.5022	.5031	.5091	4.947

Elem	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4973	.4990	.5052	.5008	4.877	4.925	5.075
SDev	.0043	.0057	.0056	.0034	.040	.215	.046
%RSD	.8698	1.151	1.116	.6877	.8164	4.373	.8967
#1	.4973	.5023	.5070	.5034	4.919	5.103	5.096
#2	.4930	.4923	.4989	.4969	4.841	4.987	5.023
#3	.5017	.5023	.5097	.5022	4.869	4.686	5.106

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.4997	.5118	4.990	.5135	.5049	.5040	.7164
SDev	.0022	.0049	.024	.0065	.0078	.0068	.0151
%RSD	.4471	.9645	.4852	1.266	1.549	1.355	2.105
#1	.4999	.5121	4.987	.5079	.5099	.5039	.7019
#2	.4974	.5067	4.967	.5120	.5089	.4972	.7154
#3	.5019	.5166	5.015	.5206	.4959	.5109	.7320

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0173	.5142	.4963	.7252	.5023	.4996
SDev	.0046	.0091	.0030	.0200	.0029	.0032
%RSD	26.66	1.763	.6029	2.757	.5833	.6373
#1	.0226	.5212	.4973	.7459	.5037	.5002
#2	.0151	.5040	.4930	.7237	.4989	.4961
#3	.0142	.5175	.4987	.7060	.5043	.5024

Method: ESE Sample Name: CCB*QC*2 Operator: GLP
Run Time: 07/18/94 17:11:32
Comment:
Mode: CONC Corr. Factor: 1

Elem	Ag3280	Al3082	As1936	B_2496	Ba4934	Be3130	Ca
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0108	.0073	-.0030	.0002	.0002	-.0058
SDev	.0014	.0110	.0149	.0055	.0002	.0003	.0034
%RSD	351.3	101.6	204.3	183.1	86.60	174.3	58.35
#1	.0003	-.0229	.0232	.0030	.0004	.0006	-.0037
#2	.0019	-.0014	.0049	-.0077	.0001	-.0000	-.0040
#3	-.0010	-.0082	-.0062	-.0042	.0001	.0000	-.0096

	Cd2288	Co2286	Cr2677	Cu3247	Fe	K_7664	Mg2790
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	.0004	-.0027	-.0024	.0023	.0098	.2511	-.0055
SDev	.0001	.0019	.0023	.0013	.0024	.2074	.0318
%RSD	27.58	70.43	95.31	56.74	25.00	82.61	572.4
#1	.0003	-.0010	-.0022	.0032	.0122	.4790	.0111
#2	.0005	-.0023	-.0003	.0028	.0098	.2009	.0144
#3	.0005	-.0048	-.0049	.0008	.0073	.0734	-.0422

Elem	Mn2576	Mo2020	Na5889	Ni2316	Pb2203	Sb2068	Se1960
Units	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0003	.0015	.0137	-.0037	.0144	-.0063	.0131
SDev	.0005	.0005	.0063	.0011	.0075	.0095	.0190
%RSD	149.9	34.88	45.99	29.28	51.83	149.2	145.4
#1	-.0003	.0021	.0139	-.0025	.0101	-.0172	.0131
#2	.0002	.0012	.0198	-.0041	.0230	-.0001	.0320
#3	-.0008	.0012	.0073	-.0045	.0101	-.0017	-.0059

Elem	Si2881	Sn1899	Ti3349	Tl1908	V_2924	Zn2138
Units	ppm	ppm	ppm	ppm	ppm	ppm
Avge	-.0059	-.0004	.0005	.0059	.0002	.0001
SDev	.0043	.0065	.0007	.0247	.0013	.0002
%RSD	72.34	1626.	152.5	418.5	765.9	164.6
	-.0106	-.0077	.0013	.0155	-.0000	-.0000
#2	-.0050	.0045	.0003	.0244	.0016	.0004
#3	-.0022	.0020	-.0002	-.0222	-.0011	.0000

GFAA Metals – Arsenic

(2)

ELEMENT: As METHOD # ASM3233-011 BK# 39 PG# 107A
ANALYST: K. McCaule EMP. # 3472 DATE: 7/18/94

SAMPLES ANALYZED:

CDMHNSS3 # 3-8, 42, 43

BATCH # G51098
GFAA upload
RAM 7/18/94

INSTRUMENT PARAMETERS:

Inst. model	5100 B
Wavelength	193.7
Bandwidth	0.7
EDL/HCL#	3237
Energy/Watts	52
Power Supply	#2 B
HGA model	HGA-600
Tube type	Pyro/Plat
Sample aliq.	20 ul
Modifier	500 ppm Pd(NO3)2
Modifier aliq.	5 ul
Zeeman type	Longitudinal

STANDARDS:

1000 ppm stock	
Manufacturer	SPEX
Lot number	3-NSAS
Date received	1/20/94
Date expires	1/15/95
Working Standards	
Date prep'ed:	
10 mg/L std.	7/11/94
100 ug/L std.	7/18/94
10 ug/L std.	7/18/94

CALIBRATION CURVE:

	conc.	abs.
Blank	0	0
Std.1	2.5	0.010
Std.2	5.0	0.027
Std.3	10	0.046
Std.4	25	0.097
Std.5	50	0.213
Std.6	100	0.404
Std.7		
Std.8		
c.c.:	0.9920 Linear	
Det. L.	3.5 ug/L	

HGA KEYBOARD ENTRIES:

STEP	1	2	3	4	5
Temp(C)	140	1100	2200	20	2600
Ramp (sec)	5	10	0	1	1
Hold (sec)	50	20	4	5	5
Read Step			*		
Gas (ml/min)	300	300	20	300	300

PREVENTATIVE MAINTENANCE/COMMENTS:

RAM 7/18/94 ~~Changes~~ Changes to runlog reflect changes to raw data. RAM 7/18/94

READ AND UNDERSTOOD BY: Jim D. Ropero 7/18/94

~~000407~~

Analyst: R. McCauley Date: 7/18/94 Element As Inst. 5100 B Book: 39 Pg: 107B

Print #	Sample I. D.	Peak Area	Conc. (ppb)	Target (ppb)	Comments
1	Calib. Blank	-0.0020	-0.5		
2	Standard 1	0.0094	2.5		
3	Standard 2	0.0273	7.3		
4	Standard 3	0.0452	8.7		
5	Standard 4	0.0968	20.6		
6	Standard 5	0.2128	52.7		
7	Standard 6	0.4039	96		CC: 0.99920 Linear
8	ICV*SPEX*1	0.2224	54.5	50	109.0%REC
9	MB*REAGENT*1	0.0014	0.3		
10	MB*QC*1	0.0032	0.8		
11	SP*QC*1	0.1650	40.4	40	101.0%REC
12	CDMHNSS3*3	0.2142	52.5		
13	CDMHNSS3*4	0.2022	49.5		
14	CDMHNSS3*5	0.0858	21		
15	CDMHNSS3*6	0.0873	21.4		
16	CDMHNSS3*7	0.0679	16.6		
17	CDMHNSS3*8	0.1045	25.6		
18	CCV*QC*1	0.2074	50.8	50	101.6%REC
19	CCB*QC*1	0.0021	0.5		
20	CDMHNSS3*42	0.0735	18		
21	CDMHNSS3*43	0.0843	20.7		
22	SPM1*CDMHNSS3*43	0.1760	43.1	40	56.0%REC 43.1 - 20.7 = 22.4
23	SPM2*CDMHNSS3*43	0.1815	44.5	40	59.5%REC 44.5 - 20.7 = 23.8
24	SPX*CDMHNSS3*7	0.2175	53.3	100	90.0%REC 100 ÷ [(53.3 x 2) - 16.6]
25	SD*CDMHNSS3*3 1:5	0.0487	11.9		(11.9 x 5) ÷ 52.5 x 100 = 113%
26	SD*CDMHNSS3*3 1:5	0.0483	11.8		(11.8 x 5) ÷ 52.5 x 100 = 112%
27	CCV*QC*2	0.2122	52	50	104.0%REC
28	CCB*QC*2	0.0026	0.6		
29	SA0*CDMHNSS3*3	0.2226	54.5		
30	SA1*CDMHNSS3*3	0.2782	68.2	20	
31	SA2*CDMHNSS3*3	0.3830	93.8	40	CONC.
32	SA3*CDMHNSS3*3	0.4416	108.2	60	CC
33	SA0*CDMHNSS3*4	0.1715	42		
34	SA1*CDMHNSS3*4	0.2559	62.7	20	
35	SA2*CDMHNSS3*4	0.3716	91	40	CONC.
36	SA3*CDMHNSS3*4	0.4480	109.8	60	CC
37	SA0*CDMHNSS3*5	0.0951	23.3		
38	SA1*CDMHNSS3*5	0.1657	40.6	20	
39	SA2*CDMHNSS3*5	0.2427	59.4	40	CONC. 27.9
40	SA3*CDMHNSS3*5	0.3002	73.5	60	CC 0.9983
41	SA0*CDMHNSS3*6	0.0924	22.6		
42	SA1*CDMHNSS3*6	0.1615	39.6	20	
43	SA2*CDMHNSS3*6	0.2304	56.4	40	CONC. 26.3
44	SA3*CDMHNSS3*6	0.3024	74.1	60	CC 0.9999
45	SA0*CDMHNSS3*7	0.0630	15.4		
46	SA1*CDMHNSS3*7	0.1488	36.5	20	
47	SA2*CDMHNSS3*7	0.2164	53	40	CONC. 17.2

Data not used. SPX not Req'd.

SA3 exceeded absorbance of highest standard. Diluted 1:2 and reanalyzed. See #51-58.

9513354.2711

Analyst: R. McCauley Date: 7/18/94 Element As Inst. 5100 B Book: 39 Pg: 107 C

Print #	Sample I. D.	Peak Area	Conc. (ppb)	Target (ppb)	Comments
48	SA3*CDMHNSS3*7	0.2962	72.6	60	cc: 0.9996
49	CCV*QC*3	0.2068	50.7	50	101.4%REC
50	CCB*QC*3	0.0051	1.3		
51	SA0*CDMHNSS3*3 1:2	0.1136	27.8		
52	SA1*CDMHNSS3*3	0.1898	46.5	20	
53	SA2*CDMHNSS3*3	0.2883	70.6	40	CONC. 26.1 x 2
54	SA3*CDMHNSS3*3	0.3655	89.5	60	CC 0.9987
55	SA0*CDMHNSS3*4 1:2	0.0872	21.4		
56	SA1*CDMHNSS3*4	0.1808	44.3	20	
57	SA2*CDMHNSS3*4	0.2767	67.8	40	CONC 19.7 x 2
58	SA3*CDMHNSS3*4	0.3573	87.5	60	CC 0.9992
59	SA0*CDMHNSS3*8	0.1138	27.9		
60	SA1*CDMHNSS3*8	0.1836	45	20	
61	SA2*CDMHNSS3*8	0.2629	64.4	40	CONC 28.6
62	SA3*CDMHNSS3*8	0.3449	84.5	60	CC 0.9994
63	SA0*CDMHNSS3*42	0.0753	18.5		
64	SA1*CDMHNSS3*42	0.1619	39.7	20	
65	SA2*CDMHNSS3*42	0.2298	56.3	40	CONC 18.1
66	SA3*CDMHNSS3*42	0.3260	79.9	60	CC 0.9981
67	SA0*CDMHNSS3*43	0.0817	20		
68	SA1*CDMHNSS3*43	0.1787	43.8	20	
69	SA2*CDMHNSS3*43	0.2677	65.6	40	CONC 18.4
70	SA3*CDMHNSS3*43	0.3574	87.5	60	CC 0.9998
71	CCV*QC*4	0.2173	53.2	50	106.4%REC
72	CCB*QC*4	0.0072	1.8		

3

Element File: AS_FURN.GEL Element: As Wavelength: 193.7
Date: 07/18/94 Time: 18:37 Slit: 0.70 L
Data File: 2AS_7_18.DAT ID/Wt File: AS.IDW Lamp Current: 6
Technique: HGA Calib. Type: Linear Energy: 53
Remark 1: CDMHNSS3*3-8,42,43
Remark 2: Analyzed by RICK MCCAULEY
Remark 3: JULY 18, 1994 Data on RAM 3
Remark 4: 5100-B
Remark 5: Lamp No. 3237 (EDL) Modifier: 500 PPM PD(NO3)2

As ID: Calib. Blank Seq. No.: 00001 A/S Pos.: 36 Date: 07/18/94

Replicate 1 Time: 18:39
Peak Area (A-s): 0.001 Peak Height (A): 0.016
Background Pk Area (A-s): 0.006 Background Pk Height (A): 0.012
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.2

Replicate 2 Time: 18:41
Peak Area (A-s): -0.001 Peak Height (A): 0.013
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.9

Mean Conc (ug/L): -0.5 SD: 0.49 RSD(%): 90.15

Auto-zero performed.

As ID: Standard 1 Seq. No.: 00002 A/S Pos.: 1 Date: 07/18/94

Replicate 1 Time: 18:44
Peak Area (A-s): 0.011 Peak Height (A): 0.042
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.011
Concentration (ug/L): 2.9

Replicate 2 Time: 18:46
Peak Area (A-s): 0.008 Peak Height (A): 0.045
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.008
Concentration (ug/L): 2.0

Mean Conc (ug/L): 2.5 SD: 0.61 RSD(%): 24.72

Standard number 1 applied. [2.5]
Correlation coefficient: 1.00000 Slope: 0.0037

As ID: Standard 2 Seq. No.: 00003 A/S Pos.: 1 Date: 07/18/94

Replicate 1 Time: 18:49
Peak Area (A-s): 0.029 Peak Height (A): 0.092
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.029
Concentration (ug/L): 7.8

Replicate 2
Time: 18:51
Peak Area (A-s): 0.025
Peak Height (A): 0.081
Background Pk Area (A-s): 0.008
Background Pk Height (A): 0.016
B. Corrected Pk Area (A-s): 0.025
C(ntration (ug/L): 6.7

Mean Conc (ug/L): 7.3 SD: 0.77 RSD(%): 10.54

Standard number 2 applied. [5.0]
Correlation coefficient: 0.90873 Slope: 0.0052

As ID: Standard 3 Seq. No.: 00004 A/S Pos.: 1 Date: 07/18/94

Replicate 1
Time: 18:54
Peak Area (A-s): 0.043
Peak Height (A): 0.143
Background Pk Area (A-s): 0.014
Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.043
Concentration (ug/L): 8.2

Replicate 2
Time: 18:56
Peak Area (A-s): 0.048
Peak Height (A): 0.142
Background Pk Area (A-s): 0.010
Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.048
Concentration (ug/L): 9.2

Mean Conc (ug/L): 8.7 SD: 0.69 RSD(%): 7.95

Standard number 3 applied. [10.0]
C(lation coefficient: 0.98202 Slope: 0.0047

As ID: Standard 4 Seq. No.: 00005 A/S Pos.: 2 Date: 07/18/94

Replicate 1
Time: 18:59
Peak Area (A-s): 0.087
Peak Height (A): 0.317
Background Pk Area (A-s): 0.015
Background Pk Height (A): 0.024
Blank Corrected Pk Area (A-s): 0.087
Concentration (ug/L): 18.6

Replicate 2
Time: 19:01
Peak Area (A-s): 0.106
Peak Height (A): 0.344
Background Pk Area (A-s): 0.016
Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.106
Concentration (ug/L): 22.6

Mean Conc (ug/L): 20.6 SD: 2.85 RSD(%): 13.84

Standard number 4 applied. [25.0]
Correlation coefficient: 0.99076 Slope: 0.0040

As ID: Standard 5 Seq. No.: 00006 A/S Pos.: 2 Date: 07/18/94

Replicate 1
Time: 19:04
P Area (A-s): 0.216
Peak Height (A): 0.644
B ·ound Pk Area (A-s): 0.022
Background Pk Height (A): 0.036
Blai.. Corrected Pk Area (A-s): 0.216
Concentration (ug/L): 53.4

Replicate 2 Time: 19:06
Peak Area (A-s): 0.210 Peak Height (A): 0.664
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.210
Concentration (ug/L): 52.0

Mean Conc (ug/L): 52.7 SD: 0.96 RSD(%): 1.82

Standard number 5 applied. [50.0]
Correlation coefficient: 0.99768 Slope: 0.0042

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Peak Area (A-s): 0.220 Peak Height (A): 0.671
Background Pk Area (A-s): 0.018 Background Pk Height (A): 0.039
Blank Corrected Pk Area (A-s): 0.220
Concentration (ug/L): 53.9

Replicate 2 Time: 19:17
Peak Area (A-s): 0.225 Peak Height (A): 0.733
Background Pk Area (A-s): 0.015 Background Pk Height (A): 0.037
Blank Corrected Pk Area (A-s): 0.225
Concentration (ug/L): 55.1

Mean Conc (ug/L): 54.5 SD: 0.84 RSD(%): 1.54

As ID: MB*REAGENT*1 Seq. No.: 00009 A/S Pos.: 4 Date: 07/18/94

Replicate 1 Time: 19:24
Peak Area (A-s): 0.002 Peak Height (A): 0.017
Background Pk Area (A-s): 0.007 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.4

Replicate 2 Time: 19:27
Peak Area (A-s): 0.001 Peak Height (A): 0.014
Background Pk Area (A-s): 0.012 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.3

Mean Conc (ug/L): 0.3 SD: 0.03 RSD(%): 10.05

As ID: MB*QC*1 Seq. No.: 00010 A/S Pos.: 5 Date: 07/18/94

Replicate 1 Time: 19:29
Peak Area (A-s): 0.000 Peak Height (A): 0.016
Background Pk Area (A-s): 0.014 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.1

Replicate 2 Time: 19:32
Peak Area (A-s): 0.006 Peak Height (A): 0.015
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 1.5

Mean Conc (ug/L): 0.8 SD: 1.05 RSD(%): 131.89

As ID: SP*QC*1 Seq. No.: 00011 A/S Pos.: 6 Date: 07/18/94

Replicate 1 Time: 19:34
Peak Area (A-s): 0.165 Peak Height (A): 0.445
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.165
Concentration (ug/L): 40.3

Replicate 2 Time: 19:37
Peak Area (A-s): 0.165 Peak Height (A): 0.542
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.033

Blank Corrected Pk Area (A-s): 0.165
Concentration (ug/L): 40.5

Mean Conc (ug/L): 40.4 SD: 0.15 RSD(%): 0.36

As ID: CDMHNSS3*3 Seq. No.: 00012 A/S Pos.: 7 Date: 07/18/94

Replicate 1 Time: 19:39
Peak Area (A-s): 0.211 Peak Height (A): 0.562
Background Pk Area (A-s): 1.332 Background Pk Height (A): 1.799
Blank Corrected Pk Area (A-s): 0.211
Concentration (ug/L): 51.7

Replicate 2 Time: 19:41
Peak Area (A-s): 0.217 Peak Height (A): 0.541
Background Pk Area (A-s): 1.444 Background Pk Height (A): 1.812
Blank Corrected Pk Area (A-s): 0.217
Concentration (ug/L): 53.3

Mean Conc (ug/L): 52.5 SD: 1.12 RSD(%): 2.13

As ID: CDMHNSS3*4 Seq. No.: 00013 A/S Pos.: 8 Date: 07/18/94

Replicate 1 Time: 19:44
Peak Area (A-s): 0.204 Peak Height (A): 1.070
Background Pk Area (A-s): 1.475 Background Pk Height (A): 2.383
Blank Corrected Pk Area (A-s): 0.204
Concentration (ug/L): 50.0

Replicate 2 Time: 19:46
Peak Area (A-s): 0.200 Peak Height (A): 2.134
Background Pk Area (A-s): 1.482 Background Pk Height (A): 2.150
Blank Corrected Pk Area (A-s): 0.200
Concentration (ug/L): 49.1

Mean Conc (ug/L): 49.5 SD: 0.67 RSD(%): 1.35

As ID: CDMHNSS3*5 Seq. No.: 00014 A/S Pos.: 9 Date: 07/18/94

Replicate 1 Time: 19:49
Peak Area (A-s): 0.079 Peak Height (A): 0.223
Background Pk Area (A-s): 1.332 Background Pk Height (A): 1.230
Blank Corrected Pk Area (A-s): 0.079
Concentration (ug/L): 19.4

Replicate 2 Time: 19:51
Peak Area (A-s): 0.092 Peak Height (A): 0.229
Background Pk Area (A-s): 1.305 Background Pk Height (A): 1.213
Blank Corrected Pk Area (A-s): 0.092
Concentration (ug/L): 22.6

Mean Conc (ug/L): 21.0 SD: 2.22 RSD(%): 10.58

As ID: CDMHNSS3*6 Seq. No.: 00015 A/S Pos.: 10 Date: 07/18/94

Replicate 1 — Time: 19:53
Peak Area (A-s): 0.085 — Peak Height (A): 0.249
Background Pk Area (A-s): 1.337 — Background Pk Height (A): 1.304
B Corrected Pk Area (A-s): 0.085
C ntration (ug/L): 20.7

Replicate 2 — Time: 19:56
Peak Area (A-s): 0.090 — Peak Height (A): 0.238
Background Pk Area (A-s): 1.333 — Background Pk Height (A): 1.231
Blank Corrected Pk Area (A-s): 0.090
Concentration (ug/L): 22.1

Mean Conc (ug/L): 21.4 SD: 0.94 RSD(%): 4.37

As ID: CDMHNSS3*7 Seq. No.: 00016 A/S Pos.: 11 Date: 07/18/94

Replicate 1 — Time: 19:58
Peak Area (A-s): 0.066 — Peak Height (A): 0.159
Background Pk Area (A-s): 1.076 — Background Pk Height (A): 0.987
Blank Corrected Pk Area (A-s): 0.066
Concentration (ug/L): 16.2

Replicate 2 — Time: 20:01
Peak Area (A-s): 0.069 — Peak Height (A): 0.177
Background Pk Area (A-s): 1.031 — Background Pk Height (A): 0.964
Blank Corrected Pk Area (A-s): 0.069
Concentration (ug/L): 17.0

M Conc (ug/L): 16.6 SD: 0.53 RSD(%): 3.22

As ID: CDMHNSS3*8 Seq. No.: 00017 A/S Pos.: 12 Date: 07/18/94

Replicate 1 — Time: 20:03
Peak Area (A-s): 0.099 — Peak Height (A): 0.276
Background Pk Area (A-s): 1.202 — Background Pk Height (A): 1.154
Blank Corrected Pk Area (A-s): 0.099
Concentration (ug/L): 24.3

Replicate 2 — Time: 20:06
Peak Area (A-s): 0.110 — Peak Height (A): 0.285
Background Pk Area (A-s): 1.215 — Background Pk Height (A): 1.146
Blank Corrected Pk Area (A-s): 0.110
Concentration (ug/L): 26.9

Mean Conc (ug/L): 25.6 SD: 1.81 RSD(%): 7.05

As ID: CCV*QC*1 Seq. No.: 00018 A/S Pos.: 13 Date: 07/18/94

Replicate 1 — Time: 20:08
Peak Area (A-s): 0.215 — Peak Height (A): 0.693
Background Pk Area (A-s): 0.089 — Background Pk Height (A): 0.125
Blank Corrected Pk Area (A-s): 0.215
C entration (ug/L): 52.6

Rep cate 2 — Time: 20:10
Peak Area (A-s): 0.200 — Peak Height (A): 0.704

Background Pk Area (A-s): 0.064 Background Pk Height (A): 0.138
Blank Corrected Pk Area (A-s): 0.200
Concentration (ug/L): 49.0

Mean Conc (ug/L): 50.8 SD: 2.59 RSD(%): 5.09

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As ID: CCB*QC*1 Seq. No.: 00019 A/S Pos.: 14 Date: 07/18/94

Replicate 1 Time: 20:13
Peak Area (A-s): 0.002 Peak Height (A): 0.015
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.5

Replicate 2 Time: 20:15
Peak Area (A-s): 0.002 Peak Height (A): 0.016
Background Pk Area (A-s): 0.008 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.5

Mean Conc (ug/L): 0.5 SD: 0.04 RSD(%): 8.01

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As ID: CDMHNSS3*42 Seq. No.: 00020 A/S Pos.: 15 Date: 07/18/94

Replicate 1 Time: 20:18
Peak Area (A-s): 0.075 Peak Height (A): 0.240
Background Pk Area (A-s): 1.239 Background Pk Height (A): 1.166
Blank Corrected Pk Area (A-s): 0.075
Concentration (ug/L): 18.3

Replicate 2 Time: 20:20
Peak Area (A-s): 0.072 Peak Height (A): 0.245
Background Pk Area (A-s): 1.343 Background Pk Height (A): 1.250
Blank Corrected Pk Area (A-s): 0.072
Concentration (ug/L): 17.7

Mean Conc (ug/L): 18.0 SD: 0.45 RSD(%): 2.50

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As ID: CDMHNSS3*43 Seq. No.: 00021 A/S Pos.: 16 Date: 07/18/94

Replicate 1 Time: 20:22
Peak Area (A-s): 0.087 Peak Height (A): 0.188
Background Pk Area (A-s): 1.122 Background Pk Height (A): 0.902
Blank Corrected Pk Area (A-s): 0.087
Concentration (ug/L): 21.3

Replicate 2 Time: 20:25
Peak Area (A-s): 0.082 Peak Height (A): 0.185
Background Pk Area (A-s): 1.167 Background Pk Height (A): 0.945
Blank Corrected Pk Area (A-s): 0.082
Concentration (ug/L): 20.0

Mean Conc (ug/L): 20.7 SD: 0.97 RSD(%): 4.69
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As ID: SPM1*CDMHNSS3*43 Seq. No.: 00022 A/S Pos.: 17 Date: 07/18/94

KAM 7/18/94

Re``cate 1 Time: 20:27
Pe Area (A-s): 0.172 Peak Height (A): 0.463
Background Pk Area (A-s): 0.674 Background Pk Height (A): 0.572
Blank Corrected Pk Area (A-s): 0.172
Concentration (ug/L): 42.1

Replicate 2 Time: 20:30
Peak Area (A-s): 0.180 Peak Height (A): 0.456
Background Pk Area (A-s): 0.655 Background Pk Height (A): 0.524
Blank Corrected Pk Area (A-s): 0.180
Concentration (ug/L): 44.1

Mean Conc (ug/L): 43.1 SD: 1.36 RSD(%): 3.15

As ID: SPM2*CDMHNSS3*43 Seq. No.: 00023 A/S Pos.: 18 Date: 07/18/94

KAM 7/18/94

Replicate 1 Time: 20:32
Peak Area (A-s): 0.177 Peak Height (A): 0.395
Background Pk Area (A-s): 0.634 Background Pk Height (A): 0.530
Blank Corrected Pk Area (A-s): 0.177
Concentration (ug/L): 43.4

Replicate 2 Time: 20:35
Peak Area (A-s): 0.186 Peak Height (A): 0.412
Background Pk Area (A-s): 0.633 Background Pk Height (A): 0.519
B'--'. Corrected Pk Area (A-s): 0.186
C ntration (ug/L): 45.5

Mean Conc (ug/L): 44.5 SD: 1.47 RSD(%): 3.31

As ID: SPX*CDMHNSS3*7 Seq. No.: 00024 A/S Pos.: 19 Date: 07/18/94

Replicate 1 Time: 20:46
Peak Area (A-s): 0.222 Peak Height (A): 0.583
Background Pk Area (A-s): 0.530 Background Pk Height (A): 0.478
Blank Corrected Pk Area (A-s): 0.222
Concentration (ug/L): 54.3

Replicate 2 Time: 20:48
Peak Area (A-s): 0.213 Peak Height (A): 0.596
Background Pk Area (A-s): 0.545 Background Pk Height (A): 0.480
Blank Corrected Pk Area (A-s): 0.213
Concentration (ug/L): 52.3

Mean Conc (ug/L): 53.3 SD: 1.47 RSD(%): 2.75

As ID: SD*CDMHNSS3*3 Seq. No.: 00025 A/S Pos.: 20 Date: 07/18/94

Replicate 1 Time: 20:53
P--k Area (A-s): 0.050 Peak Height (A): 0.132
B round Pk Area (A-s): 0.328 Background Pk Height (A): 0.363
Bla. Corrected Pk Area (A-s): 0.050
Concentration (ug/L): 12.1

Replicate 2 | Time: 20:55
Peak Area (A-s): 0.048 | Peak Height (A): 0.132
Background Pk Area (A-s): 0.306 | Background Pk Height (A): 0.338
Blank Corrected Pk Area (A-s): 0.048
Concentration (ug/L): 11.7

Mean Conc (ug/L): 11.9 SD: 0.31 RSD(%): 2.58

As ID: SD*CDMHNSS3*3 Seq. No.: 00026 A/S Pos.: 20 Date: 07/18/94

Replicate 1 | Time: 21:05
Peak Area (A-s): 0.051 | Peak Height (A): 0.113
Background Pk Area (A-s): 0.306 | Background Pk Height (A): 0.348
Blank Corrected Pk Area (A-s): 0.051
Concentration (ug/L): 12.6

Replicate 2 | Time: 21:08
Peak Area (A-s): 0.045 | Peak Height (A): 0.111
Background Pk Area (A-s): 0.342 | Background Pk Height (A): 0.337
Blank Corrected Pk Area (A-s): 0.045
Concentration (ug/L): 11.1

Mean Conc (ug/L): 11.8 SD: 1.08 RSD(%): 9.14

As ID: CCV*QC*2 Seq. No.: 00027 A/S Pos.: 13 Date: 07/18/94

Replicate 1 | Time: 21:12
Peak Area (A-s): 0.215 | Peak Height (A): 0.688
Background Pk Area (A-s): 0.036 | Background Pk Height (A): 0.054
Blank Corrected Pk Area (A-s): 0.215
Concentration (ug/L): 52.7

Replicate 2 | Time: 21:14
Peak Area (A-s): 0.209 | Peak Height (A): 0.681
Background Pk Area (A-s): 0.039 | Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): 0.209
Concentration (ug/L): 51.3

Mean Conc (ug/L): 52.0 SD: 1.04 RSD(%): 2.01

As ID: CCB*QC*2 Seq. No.: 00028 A/S Pos.: 14 Date: 07/18/94

Replicate 1 | Time: 21:17
Peak Area (A-s): 0.003 | Peak Height (A): 0.017
Background Pk Area (A-s): 0.008 | Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 0.7

Replicate 2 | Time: 21:19
Peak Area (A-s): 0.002 | Peak Height (A): 0.011
Background Pk Area (A-s): 0.008 | Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.5

Mean Conc (ug/L): 0.6 SD: 0.14 RSD(%): 22.49

As ID: SA0*CDMHNSS3*3 Seq. No.: 00029 A/S Pos.: 1 Date: 07/18/94

Replicate 1 Time: 21:37
Peak Area (A-s): 0.223 Peak Height (A): 0.603
Background Pk Area (A-s): 1.365 Background Pk Height (A): 1.763
Blank Corrected Pk Area (A-s): 0.223
Concentration (ug/L): 54.5

As ID: SA1*CDMHNSS3*3 Seq. No.: 00030 A/S Pos.: 2 Date: 07/18/94

Replicate 1 Time: 21:39
Peak Area (A-s): 0.278 Peak Height (A): 0.598
Background Pk Area (A-s): 1.430 Background Pk Height (A): 1.824
Blank Corrected Pk Area (A-s): 0.278
Concentration (ug/L): 68.2

As ID: SA2*CDMHNSS3*3 Seq. No.: 00031 A/S Pos.: 3 Date: 07/18/94

Replicate 1 Time: 21:42
Peak Area (A-s): 0.383 Peak Height (A): 0.898
Background Pk Area (A-s): 1.471 Background Pk Height (A): 1.878
Blank Corrected Pk Area (A-s): 0.383
Concentration (ug/L): 93.8

As ID: SA3*CDMHNSS3*3 Seq. No.: 00032 A/S Pos.: 4 Date: 07/18/94

Replicate 1 Time: 21:44
Peak Area (A-s): 0.442 Peak Height (A): 1.040
Background Pk Area (A-s): 1.436 Background Pk Height (A): 1.752
Blank Corrected Pk Area (A-s): 0.442
Concentration (ug/L): 108.2

As ID: SA0*CDMHNSS3*4 Seq. No.: 00033 A/S Pos.: 5 Date: 07/18/94

Replicate 1 Time: 21:47
Peak Area (A-s): 0.172 Peak Height (A): 0.531
Background Pk Area (A-s): 1.495 Background Pk Height (A): 1.946
Blank Corrected Pk Area (A-s): 0.172
Concentration (ug/L): 42.0

As ID: SA1*CDMHNSS3*4 Seq. No.: 00034 A/S Pos.: 6 Date: 07/18/94

Replicate 1 Time: 21:49
Peak Area (A-s): 0.256 Peak Height (A): 0.573
Background Pk Area (A-s): 1.504 Background Pk Height (A): 1.923
Blank Corrected Pk Area (A-s): 0.256
Concentration (ug/L): 62.7

As ID: SA2*CDMHNSS3*4 Seq. No.: 00035 A/S Pos.: 7 Date: 07/18/94

Replicate 1 Time: 21:51
Peak Area (A-s): 0.372 Peak Height (A): 2.377

Background Pk Area (A-s): 1.491   Background Pk Height (A): 1.930
Blank Corrected Pk Area (A-s): 0.372
Concentration (ug/L): 91.0

As ID: SA3*CDMHNSS3*4   Seq. No.: 00036   A/S Pos.: 8   Date: 07/18/94

Sample abs. is greater than that of the largest standard.
Replicate 1   Time: 21:54
Peak Area (A-s): 0.448   Peak Height (A): 2.295
Background Pk Area (A-s): 1.482   Background Pk Height (A): 1.745
Blank Corrected Pk Area (A-s): 0.448
Concentration (ug/L): 109.8

As ID: SA0*CDMHNSS3*5   Seq. No.: 00037   A/S Pos.: 9   Date: 07/18/94

Replicate 1   Time: 21:56
Peak Area (A-s): 0.095   Peak Height (A): 0.238
Background Pk Area (A-s): 1.288   Background Pk Height (A): 1.136
Blank Corrected Pk Area (A-s): 0.095
Concentration (ug/L): 23.3

As ID: SA1*CDMHNSS3*5   Seq. No.: 00038   A/S Pos.: 10   Date: 07/18/94

Replicate 1   Time: 21:59
Peak Area (A-s): 0.166   Peak Height (A): 0.432
Background Pk Area (A-s): 1.275   Background Pk Height (A): 1.054
Blank Corrected Pk Area (A-s): 0.166
Concentration (ug/L): 40.6

As ID: SA2*CDMHNSS3*5   Seq. No.: 00039   A/S Pos.: 11   Date: 07/18/94

Replicate 1   Time: 22:01
Peak Area (A-s): 0.243   Peak Height (A): 0.599
Background Pk Area (A-s): 1.271   Background Pk Height (A): 1.058
Blank Corrected Pk Area (A-s): 0.243
Concentration (ug/L): 59.4

As ID: SA3*CDMHNSS3*5   Seq. No.: 00040   A/S Pos.: 12   Date: 07/18/94

Replicate 1   Time: 22:04
Peak Area (A-s): 0.300   Peak Height (A): 0.764
Background Pk Area (A-s): 1.252   Background Pk Height (A): 1.035
Blank Corrected Pk Area (A-s): 0.300
Concentration (ug/L): 73.5

As ID: SA0*CDMHNSS3*6   Seq. No.: 00041   A/S Pos.: 13   Date: 07/18/94

Replicate 1   Time: 22:06
Peak Area (A-s): 0.092   Peak Height (A): 0.234
Background Pk Area (A-s): 1.232   Background Pk Height (A): 1.029
Blank Corrected Pk Area (A-s): 0.092
Concentration (ug/L): 22.6

As ID: SA1*CDMHNSS3*6 Seq. No.: 00042 A/S Pos.: 14 Date: 07/18/94

R cate 1 Time: 22:08
Peak Area (A-s): 0.162 Peak Height (A): 0.436
Background Pk Area (A-s): 1.253 Background Pk Height (A): 1.051
Blank Corrected Pk Area (A-s): 0.162
Concentration (ug/L): 39.6

As ID: SA2*CDMHNSS3*6 Seq. No.: 00043 A/S Pos.: 15 Date: 07/18/94

Replicate 1 Time: 22:11
Peak Area (A-s): 0.230 Peak Height (A): 0.623
Background Pk Area (A-s): 1.267 Background Pk Height (A): 1.035
Blank Corrected Pk Area (A-s): 0.230
Concentration (ug/L): 56.4

As ID: SA3*CDMHNSS3*6 Seq. No.: 00044 A/S Pos.: 16 Date: 07/18/94

Replicate 1 Time: 22:13
Peak Area (A-s): 0.302 Peak Height (A): 0.782
Background Pk Area (A-s): 1.254 Background Pk Height (A): 1.065
Blank Corrected Pk Area (A-s): 0.302
Concentration (ug/L): 74.1

A- ID: SA0*CDMHNSS3*7 Seq. No.: 00045 A/S Pos.: 17 Date: 07/18/94

Rep. cate 1 Time: 22:16
Peak Area (A-s): 0.063 Peak Height (A): 0.167
Background Pk Area (A-s): 1.002 Background Pk Height (A): 0.821
Blank Corrected Pk Area (A-s): 0.063
Concentration (ug/L): 15.4

As ID: SA1*CDMHNSS3*7 Seq. No.: 00046 A/S Pos.: 18 Date: 07/18/94

Replicate 1 Time: 22:18
Peak Area (A-s): 0.149 Peak Height (A): 0.330
Background Pk Area (A-s): 0.997 Background Pk Height (A): 0.814
Blank Corrected Pk Area (A-s): 0.149
Concentration (ug/L): 36.5

As ID: SA2*CDMHNSS3*7 Seq. No.: 00047 A/S Pos.: 19 Date: 07/18/94

Replicate 1 Time: 22:20
Peak Area (A-s): 0.216 Peak Height (A): 0.547
Background Pk Area (A-s): 1.017 Background Pk Height (A): 0.863
Blank Corrected Pk Area (A-s): 0.216
Concentration (ug/L): 53.0

ID: SA3*CDMHNSS3*7 Seq. No.: 00048 A/S Pos.: 20 Date: 07/18/94

Replicate 1 Time: 22:23
Peak Area (A-s): 0.296 Peak Height (A): 0.725

Background Pk Area (A-s): 0.994   Background Pk Height (A): 0.818
Blank Corrected Pk Area (A-s): 0.296
Concentration (ug/L): 72.6

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As   ID: CCV*QC*3   Seq. No.: 00049   A/S Pos.: 21   Date: 07/18/94

Replicate 1   Time: 22:30
Peak Area (A-s): 0.202   Peak Height (A): 0.578
Background Pk Area (A-s): 0.073   Background Pk Height (A): 0.092
Blank Corrected Pk Area (A-s): 0.202
Concentration (ug/L): 49.4

Replicate 2   Time: 22:33
Peak Area (A-s): 0.212   Peak Height (A): 0.617
Background Pk Area (A-s): 0.074   Background Pk Height (A): 0.098
Blank Corrected Pk Area (A-s): 0.212
Concentration (ug/L): 52.0

Mean Conc (ug/L):   50.7   SD: 1.84   RSD(%): 3.63

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As   ID: CCB*QC*3   Seq. No.: 00050   A/S Pos.: 22   Date: 07/18/94

Replicate 1   Time: 22:35
Peak Area (A-s): 0.006   Peak Height (A): 0.015
Background Pk Area (A-s): 0.011   Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 1.4

Replicate 2   Time: 22:38
Peak Area (A-s): 0.005   Peak Height (A): 0.017
Background Pk Area (A-s): 0.009   Background Pk Height (A): 0.019
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 1.1

Mean Conc (ug/L):   1.3   SD: 0.16   RSD(%): 12.79

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As   ID: SA0*CDMHNSS3*3   Seq. No.: 00051   A/S Pos.: 3   Date: 07/18/94

Replicate 1   Time: 22:57
Peak Area (A-s): 0.114   Peak Height (A): 0.256
Background Pk Area (A-s): 0.690   Background Pk Height (A): 0.577
Blank Corrected Pk Area (A-s): 0.114
Concentration (ug/L): 27.8

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As   ID: SA1*CDMHNSS3*3   Seq. No.: 00052   A/S Pos.: 4   Date: 07/18/94

Replicate 1   Time: 23:00
Peak Area (A-s): 0.190   Peak Height (A): 0.470
Background Pk Area (A-s): 0.740   Background Pk Height (A): 0.596
Blank Corrected Pk Area (A-s): 0.190
Concentration (ug/L): 46.5

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As   ID: SA2*CDMHNSS3*3   Seq. No.: 00053   A/S Pos.: 5   Date: 07/18/94
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Replicate 1 Time: 23:02
Peak Area (A-s): 0.288 Peak Height (A): 0.689
Background Pk Area (A-s): 0.749 Background Pk Height (A): 0.580
Blank Corrected Pk Area (A-s): 0.288
Concentration (ug/L): 70.6

As ID: SA3*CDMHNSS3*3 Seq. No.: 00054 A/S Pos.: 6 Date: 07/18/94

Replicate 1 Time: 23:05
Peak Area (A-s): 0.366 Peak Height (A): 0.907
Background Pk Area (A-s): 0.759 Background Pk Height (A): 0.593
Blank Corrected Pk Area (A-s): 0.365
Concentration (ug/L): 89.5

As ID: SA0*CDMHNSS3*4 Seq. No.: 00055 A/S Pos.: 7 Date: 07/18/94

Replicate 1 Time: 23:07
Peak Area (A-s): 0.087 Peak Height (A): 0.227
Background Pk Area (A-s): 0.802 Background Pk Height (A): 0.624
Blank Corrected Pk Area (A-s): 0.087
Concentration (ug/L): 21.4

As ID: SA1*CDMHNSS3*4 Seq. No.: 00056 A/S Pos.: 8 Date: 07/18/94

Replicate 1 Time: 23:10
Peak Area (A-s): 0.181 Peak Height (A): 0.445
Background Pk Area (A-s): 0.792 Background Pk Height (A): 0.612
Blank Corrected Pk Area (A-s): 0.181
Concentration (ug/L): 44.3

As ID: SA2*CDMHNSS3*4 Seq. No.: 00057 A/S Pos.: 9 Date: 07/18/94

Replicate 1 Time: 23:12
Peak Area (A-s): 0.277 Peak Height (A): 0.681
Background Pk Area (A-s): 0.802 Background Pk Height (A): 0.614
Blank Corrected Pk Area (A-s): 0.277
Concentration (ug/L): 67.8

As ID: SA3*CDMHNSS3*4 Seq. No.: 00058 A/S Pos.: 10 Date: 07/18/94

Replicate 1 Time: 23:14
Peak Area (A-s): 0.357 Peak Height (A): 0.926
Background Pk Area (A-s): 0.806 Background Pk Height (A): 0.621
Blank Corrected Pk Area (A-s): 0.357
Concentration (ug/L): 87.5

As ID: SA0*CDMHNSS3*8 Seq. No.: 00059 A/S Pos.: 11 Date: 07/18/94

Replicate 1 Time: 23:17
Peak Area (A-s): 0.114 Peak Height (A): 0.264
Background Pk Area (A-s): 1.118 Background Pk Height (A): 0.922
Blank Corrected Pk Area (A-s): 0.114
Concentration (ug/L): 27.9

As ID: SA1*CDMHNSS3*8 Seq. No.: 00060 A/S Pos.: 12 Date: 07/18/94

Replicate 1 Time: 23:19
Peak Area (A-s): 0.184 Peak Height (A): 0.440
Background Pk Area (A-s): 1.133 Background Pk Height (A): 0.916
Blank Corrected Pk Area (A-s): 0.184
Concentration (ug/L): 45.0

As ID: SA2*CDMHNSS3*8 Seq. No.: 00061 A/S Pos.: 13 Date: 07/18/94

Replicate 1 Time: 23:22
Peak Area (A-s): 0.263 Peak Height (A): 0.706
Background Pk Area (A-s): 1.138 Background Pk Height (A): 0.919
Blank Corrected Pk Area (A-s): 0.263
Concentration (ug/L): 64.4

As ID: SA3*CDMHNSS3*8 Seq. No.: 00062 A/S Pos.: 14 Date: 07/18/94

Replicate 1 Time: 23:24
Peak Area (A-s): 0.345 Peak Height (A): 0.886
Background Pk Area (A-s): 1.119 Background Pk Height (A): 0.942
Blank Corrected Pk Area (A-s): 0.345
Concentration (ug/L): 84.5

As ID: SA0*CDMHNSS3*42 Seq. No.: 00063 A/S Pos.: 15 Date: 07/18/94

Replicate 1 Time: 23:27
Peak Area (A-s): 0.075 Peak Height (A): 0.195
Background Pk Area (A-s): 1.220 Background Pk Height (A): 1.030
Blank Corrected Pk Area (A-s): 0.075
Concentration (ug/L): 18.5

As ID: SA1*CDMHNSS3*42 Seq. No.: 00064 A/S Pos.: 16 Date: 07/18/94

Replicate 1 Time: 23:29
Peak Area (A-s): 0.162 Peak Height (A): 0.387
Background Pk Area (A-s): 1.220 Background Pk Height (A): 1.050
Blank Corrected Pk Area (A-s): 0.162
Concentration (ug/L): 39.7

As ID: SA2*CDMHNSS3*42 Seq. No.: 00065 A/S Pos.: 17 Date: 07/18/94

Replicate 1 Time: 23:31
Peak Area (A-s): 0.230 Peak Height (A): 0.580
Background Pk Area (A-s): 1.217 Background Pk Height (A): 1.040
Blank Corrected Pk Area (A-s): 0.230
Concentration (ug/L): 56.3

As ID: SA3*CDMHNSS3*42 Seq. No.: 00066 A/S Pos.: 18 Date: 07/18/94

Replicate 1 Time: 23:34
Peak Area (A-s): 0.326 Peak Height (A): 0.853

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Background Pk Area (A-s): 1.238 Background Pk Height (A): 0.995
Blank Corrected Pk Area (A-s): 0.326
C ›ntration (ug/L): 79.9

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As ID: SA0*CDMHNSS3*43 Seq. No.: 00067 A/S Pos.: 19 Date: 07/18/94

Replicate 1 Time: 23:36
Peak Area (A-s): 0.082 Peak Height (A): 0.165
Background Pk Area (A-s): 1.053 Background Pk Height (A): 0.789
Blank Corrected Pk Area (A-s): 0.082
Concentration (ug/L): 20.0

~~~~~~

As ID: SA1*CDMHNSS3*43 Seq. No.: 00068 A/S Pos.: 20 Date: 07/18/94

Replicate 1 Time: 23:39
Peak Area (A-s): 0.179 Peak Height (A): 0.346
Background Pk Area (A-s): 1.051 Background Pk Height (A): 0.812
Blank Corrected Pk Area (A-s): 0.179
Concentration (ug/L): 43.8

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As ID: SA2*CDMHNSS3*43 Seq. No.: 00069 A/S Pos.: 21 Date: 07/18/94

Replicate 1 Time: 23:41
Peak Area (A-s): 0.268 Peak Height (A): 0.534
Background Pk Area (A-s): 1.046 Background Pk Height (A): 0.803
B' k Corrected Pk Area (A-s): 0.268
C ntration (ug/L): 65.6

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As ID: SA3*CDMHNSS3*43 Seq. No.: 00070 A/S Pos.: 22 Date: 07/18/94

Replicate 1 Time: 23:44
Peak Area (A-s): 0.357 Peak Height (A): 0.702
Background Pk Area (A-s): 1.049 Background Pk Height (A): 0.793
Blank Corrected Pk Area (A-s): 0.357
Concentration (ug/L): 87.5

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As ID: CCV*QC*4 Seq. No.: 00071 A/S Pos.: 23 Date: 07/18/94

Replicate 1 Time: 23:49
Peak Area (A-s): 0.219 Peak Height (A): 0.559
Background Pk Area (A-s): 0.075 Background Pk Height (A): 0.092
Blank Corrected Pk Area (A-s): 0.219
Concentration (ug/L): 53.6

Replicate 2 Time: 23:52
Peak Area (A-s): 0.216 Peak Height (A): 0.525
Background Pk Area (A-s): 0.052 Background Pk Height (A): 0.071
Blank Corrected Pk Area (A-s): 0.216
Concentration (ug/L): 52.9

M Conc (ug/L): 53.2 SD: 0.53 RSD(%): 0.99

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As ID: CCB*QC*4 Seq. No.: 00072 A/S Pos.: 24 Date: 07/18/94

Replicate 1 Time: 23:54
Peak Area (A-s): 0.008 Peak Height (A): 0.017
Background Pk Area (A-s): 0.011 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): 0.008
Concentration (ug/L): 2.0

Replicate 2 Time: 23:57
Peak Area (A-s): 0.006 Peak Height (A): 0.019
Background Pk Area (A-s): 0.010 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 1.6

Mean Conc (ug/L): 1.8 SD: 0.27 RSD(%): 15.32
~~~~~~

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GFAA Metals – Selenium

(2)

ELEMENT: Se METHOD # ASm3233-013 BK# 41 PG# 6-A

ANALYST: Jeri Ropeo EMP. # 3354 DATE: 7/18/94

SAMPLES ANALYZED:

CDMHNSS3 x 3-8, 42, 43

BATCH #

G 51102
7/19/94
LMS

INSTRUMENT PARAMETERS:

Inst. model	5100-A
Wavelength	196.0
Bandwidth	2.0 (Low)
EDL/HCL#	402
Energy/Watts	55
Power Supply	Sys II B
HGA model	600
Tube type	pyro with Platform
Sample aliq.	20ul
Modifier	500ppm Pd (NO3)2
Modifier aliq.	5ul
Zeeman type	Longitudinal

STANDARDS:

1000 ppm stock	
Manufacturer	SPEX
Lot number	3-705E
Date received	11/22/93
Date expires	11/20/94
Working Standards	
Date prep'ed:	
10 mg/L std.	7/11/94
100 ug/L std.	7/18/94
10 ug/L std.	7/18/94
50ug/L STD	7/18/94

CALIBRATION CURVE:

	conc.	abs.
Blank	0.0ug/L	0.002
Std.1	2.5	0.010
Std.2	25.0	0.062
Std.3	50.0	0.126
Std.4	100	0.229
Std.5		
Std.6		
Std.7		
Std.8		
c.c.:	0.99842 (Linear)	
Det. L.	2.5 ug/L	

HGA KEYBOARD ENTRIES:

STEP	1	2	3	4	5
Temp(C)	150	1100	20	2200	2600
Ramp (sec)	5	5	1	0	1
Hold (sec)	55	35	5	5	5
Read Step				*	
Gas (ml/min)	300	300	300	0	300

PREVENTATIVE MAINTENANCE/COMMENTS:

Changes made to ~~raw data~~ analog VE MFB 7/19/94 reflect changes made to raw data MFB 7/19/94

READ AND UNDERSTOOD BY: Lisa Swayze 7/19/94

Analyst: JERI Ropero Date: 7/18/94 Element Sc Inst. 5100-A Book: 41 Pg: 6-B

Print #	Sample I. D.	Peak Area	Conc. (ppb)	Target (ppb)	Comments
1	Calib. Blank	-0.0005	-0.1		
2	Standard 1	0.0085	2		
3	Standard 2	0.0226	6.6		
4	Standard 3	0.0626	---		Abs a Little High See #7
5	Standard 4	0.1244	89.7		
6	Standard 5	0.2271	131.5		
7	Standard 3	0.0599	25.7		CC= 0.99842 (Linear)
8	ICV*PEPURE*1	0.1871	80.6	80	100.8% rec
9	MB*REAGENT*1	0.0027	1.2		
10	MB*QC*1	0.0024	1.1		
11	SP*QC*1	0.0290	12.5		Pour up fresh + rerun
12	SP*QC*1	0.0245	10.5	10	105% rec
* 13	CDHNSS3*3	0.0015	0.6		
* 14	CDHNSS3*4	0.0009	0.4		
15	CCV*QC*1	0.1297	55.9	50	Pour up fresh + rerun
16	CCB*QC*1	-0.0001	-0.1		
17	CCV*QC*1	0.1151	49.6	50	99.2% rec
18	CCB*QC*1	0.0007	0.3		
* 19	CDHNSS3*5	0.0026	1.1		
* 20	CDHNSS3*6	0.0002	0.1		
* 21	CDHNSS3*7	0.0010	0.4		
* 22	CDHNSS3*8	-0.0010	-0.4		
* 23	CDHNSS3*42	-0.0003	-0.1		
* 24	CDHNSS3*43	0.0006	0.3		
* 25	SPM1*CDHNSS3*43	0.0094	4.1	10	High RSD See #34 + 35
* 26	SPM2*CDHNSS3*43	0.0077	3.3	10	
* 27	SPX*CDHNSS3*5	0.0937	40.4		
28	CCV*QC*2	0.1163	50.1		
29	CCB*QC*2	-0.0021	-0.9		
30	CCV*QC*3	0.1149	49.5		
31	CCB*QC*3	0.0001	0.1		
* 32	SPM1*CDHNSS3*43	0.0122	5.3		High RSD See #34 + 35
* 33	SPM2*CDHNSS3*43	0.0102	4.4		
* 34	SPM1*CDHNSS3*43	0.0088	3.8	10	38% rec
* 35	SPM2*CDHNSS3*43	0.0098	4.2	10	42% rec
* 36	SPX*CDHNSS3*5	0.1150	49.5	100	49.5 x 2 = 99 99% rec
37	CCV*QC*4	0.1142	49.2	50	98.4% rec
38	CCB*QC*4	-0.0007	-0.3		

* Note Field group is ~~CDH~~ CDMHNSS3

(3)

Element File: SE_FURN.GEL Element: Se Wavelength: 196.0
Date: 07/18/94 Time: 23:18 Slit: 2.00 L
Data File: A:SE_7_18.DAT ID/Wt File: 1DPB_7_2.IDW Lamp Current: 0
Technique: HGA Calib. Type: Nonlinear Energy: 55
Remark 1: CDMHNSS3*3-8,42,43
Remark 2: Analyzed by JERI ROPERO
Remark 3: JULY 18, 1994 Data on JDR#3
Remark 4: 5100-A POWER SUPPLY- SYS II ~~#2~~ B mfb WF 7/19/94
Remark 5: Lamp# 402 (EDL-SYS II) Modifier: 500 ppm Pd(NO3)2

Se ID: Calib. Blank Seq. No.: 00001 A/S Pos.: 36 Date: 07/18/94

Replicate 1 Time: 23:18
Peak Area (A-s): -0.001 Peak Height (A): 0.010
Background Pk Area (A-s): 0.019 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -0.5

Replicate 2 Time: 23:21
Peak Area (A-s): 0.004 Peak Height (A): 0.014
Background Pk Area (A-s): 0.022 Background Pk Height (A): 0.015
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.4

Mean Conc (ug/L): -0.1 SD: 0.65 RSD(%): 733.59

Auto-zero performed.

Se ID: Standard 1 Seq. No.: 00002 A/S Pos.: 1 Date: 07/18/94

Replicate 1 Time: 23:23
Peak Area (A-s): 0.010 Peak Height (A): 0.021
Background Pk Area (A-s): 0.024 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.009
Concentration (ug/L): 2.1

Replicate 2 Time: 23:26
Peak Area (A-s): 0.010 Peak Height (A): 0.024
Background Pk Area (A-s): 0.022 Background Pk Height (A): 0.018
Blank Corrected Pk Area (A-s): 0.008
Concentration (ug/L): 1.9

Mean Conc (ug/L): 2.0 SD: 0.11 RSD(%): 5.39

Standard number 1 applied. [2.5]
Correlation coefficient: 1.00000 Slope: 0.0034

Se ID: Standard 2 Seq. No.: 00003 A/S Pos.: 1 Date: 07/18/94

Replicate 1 Time: 23:29
Peak Area (A-s): 0.025 Peak Height (A): 0.063
Background Pk Area (A-s): 0.032 Background Pk Height (A): 0.025
Blank Corrected Pk Area (A-s): 0.024
Concentration (ug/L): 6.9

Replicate 2 Time: 23:32
Peak Area (A-s): 0.023 Peak Height (A): 0.066
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.022
Concentration (ug/L): 6.4

Mean Conc (ug/L): 6.6 SD: 0.41 RSD(%): 6.17

Standard number 2 applied. [10.0]
Correlation coefficient: 1.00000 Slope: 0.0041

Se ID: Standard 3 Seq. No.: 00004 A/S Pos.: 2 Date: 07/18/94

Sample abs. exceeds the range of the calibration function.
Replicate 1 Time: 23:35
Peak Area (A-s): 0.067 Peak Height (A): 0.137
Background Pk Area (A-s): 0.043 Background Pk Height (A): 0.049
Blank Corrected Pk Area (A-s): 0.066
Concentration (ug/L): ----------

Sample abs. exceeds the range of the calibration function.
Replicate 2 Time: 23:38
Peak Area (A-s): 0.061 Peak Height (A): 0.142
Background Pk Area (A-s): 0.040 Background Pk Height (A): 0.048
Blank Corrected Pk Area (A-s): 0.060
Concentration (ug/L): ----------

Sample abs. exceeds the range of the calibration function.
Mean Conc (ug/L): ---- SD: ---- RSD(%): ----

S-shaped calibration curve detected. 2-coef. equation used.
Standard number 3 applied. [25.0]
Correlation coefficient: 0.98196 Slope: 0.0032

Se ID: Standard 4 Seq. No.: 00005 A/S Pos.: 2 Date: 07/18/94

Replicate 1 Time: 23:40
Peak Area (A-s): 0.127 Peak Height (A): 0.280
Background Pk Area (A-s): 0.054 Background Pk Height (A): 0.093
Blank Corrected Pk Area (A-s): 0.125
Concentration (ug/L): 90.5

Replicate 2 Time: 23:43
Peak Area (A-s): 0.126 Peak Height (A): 0.287

Background Pk Area (A-s): 0.060 Background Pk Height (A): 0.102
Blank Corrected Pk Area (A-s): 0.124
Concentration (ug/L): 88.8

Mean Conc (ug/L): 89.7 SD: 1.20 RSD(%): 1.34

S-shaped calibration curve detected. 2-coef. equation used.
Standard number 4 applied. [50.0]
Correlation coefficient: 0.99197 Slope: 0.0030

Se ID: Standard 5 Seq. No.: 00006 A/S Pos.: 2 Date: 07/18/94

Replicate 1 Time: 23:46
Peak Area (A-s): 0.230 Peak Height (A): 0.482
Background Pk Area (A-s): 0.095 Background Pk Height (A): 0.164
Blank Corrected Pk Area (A-s): 0.228
Concentration (ug/L): 132.3

Replicate 2 Time: 23:49
Peak Area (A-s): 0.228 Peak Height (A): 0.450
Background Pk Area (A-s): 0.103 Background Pk Height (A): 0.164
Blank Corrected Pk Area (A-s): 0.226
Concentration (ug/L): 130.7

Mean Conc (ug/L): 131.5 SD: 1.09 RSD(%): 0.83

Standard number 5 applied. [100.0]
Correlation coefficient: 0.98300 Slope: 0.0029

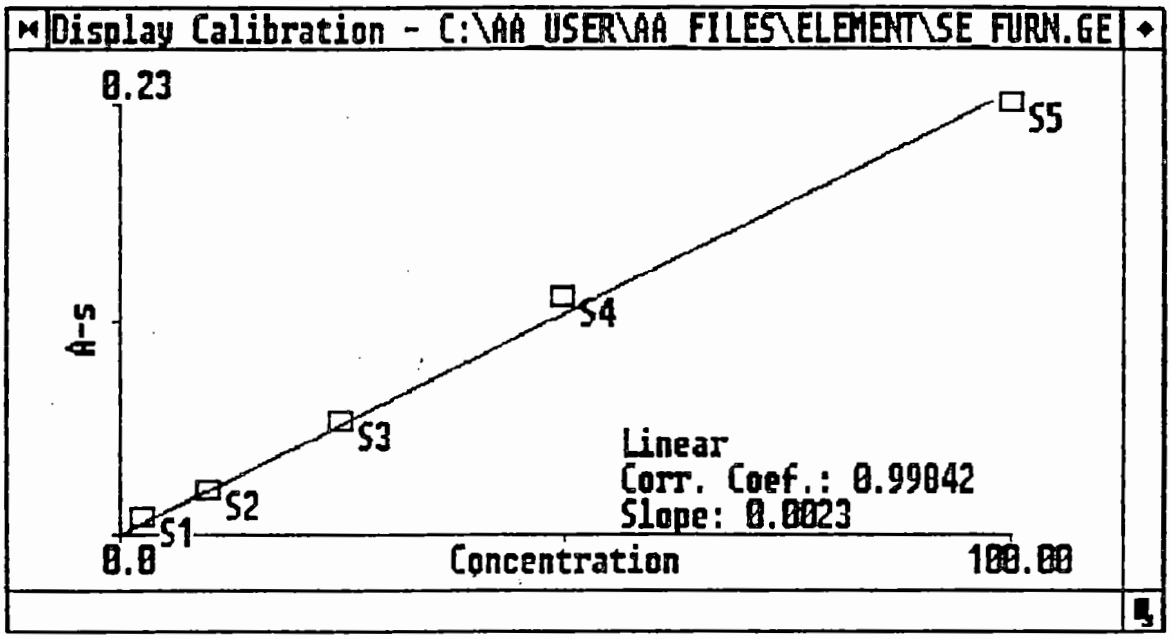
Se ID: Standard 3 Seq. No.: 00007 A/S Pos.: 2 Date: 07/18/94

Replicate 1 Time: 23:56
Peak Area (A-s): 0.065 Peak Height (A): 0.137
Background Pk Area (A-s): 0.046 Background Pk Height (A): 0.050
Blank Corrected Pk Area (A-s): 0.064
Concentration (ug/L): 27.4

Replicate 2 Time: 23:59
Peak Area (A-s): 0.058 Peak Height (A): 0.124
Background Pk Area (A-s): 0.036 Background Pk Height (A): 0.046
Blank Corrected Pk Area (A-s): 0.056
Concentration (ug/L): 24.0

Mean Conc (ug/L): 25.7 SD: 2.40 RSD(%): 9.35

Standard number 3 applied. [25.0]
Correlation coefficient: 0.99842 Slope: 0.0023



Se ID: ICV*PEPURE*1 Seq. No.: 00008 A/S Pos.: 13 Date: 07/19/94

Replicate 1 Time: 00:04
Peak Area (A-s): 0.200 Peak Height (A): 0.447
Background Pk Area (A-s): 0.090 Background Pk Height (A): 0.147
Blank Corrected Pk Area (A-s): 0.198
Concentration (ug/L): 85.4

Replicate 2 Time: 00:07
Peak Area (A-s): 0.178 Peak Height (A): 0.357
Background Pk Area (A-s): 0.084 Background Pk Height (A): 0.127
Blank Corrected Pk Area (A-s): 0.176
Concentration (ug/L): 75.8

Mean Conc (ug/L): 80.6 SD: 6.76 RSD(%): 8.39

Se ID: MB*REAGENT*1 Seq. No.: 00009 A/S Pos.: 14 Date: 07/19/94

Replicate 1 Time: 00:10
Peak Area (A-s): 0.002 Peak Height (A): 0.011
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.0

Replicate 2 Time: 00:13
Peak Area (A-s): 0.007 Peak Height (A): 0.011
Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.006
Concentration (ug/L): 2.4

Mean Conc (ug/L): 1.2 SD: 1.70 RSD(%): 145.69

Se ID: MB*QC*1 Seq. No.: 00010 A/S Pos.: 15 Date: 07/19/94

Replicate 1 Time: 00:15
Peak Area (A-s): 0.007 Peak Height (A): 0.009
Background Pk Area (A-s): 0.022 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 2.3

Replicate 2 Time: 00:18
Peak Area (A-s): 0.001 Peak Height (A): 0.012
Background Pk Area (A-s): 0.027 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.000
Concentration (ug/L): -0.2

Mean Conc (ug/L): 1.1 SD: 1.79 RSD(%): 170.36

Se ID: SP*QC*1 Seq. No.: 00011 A/S Pos.: 16 Date: 07/19/94

Replicate 1 Time: 00:21
Peak Area (A-s): 0.033 Peak Height (A): 0.071
Background Pk Area (A-s): 0.031 Background Pk Height (A): 0.028
Blank Corrected Pk Area (A-s): 0.031
Concentration (ug/L): 13.4

Replicate 2 Time: 00:24
Peak Area (A-s): 0.029 Peak Height (A): 0.072
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.031
Blank Corrected Pk Area (A-s): 0.027
Concentration (ug/L): 11.6

Mean Conc (ug/L): 12.5 SD: 1.27 RSD(%): 10.15

Se ID: SP*QC*1 Seq. No.: 00012 A/S Pos.: 16 Date: 07/19/94

Replicate 1 Time: 00:27
Peak Area (A-s): 0.026 Peak Height (A): 0.062
Background Pk Area (A-s): 0.035 Background Pk Height (A): 0.027
Blank Corrected Pk Area (A-s): 0.024
Concentration (ug/L): 10.4

Replicate 2 Time: 00:30
Peak Area (A-s): 0.027 Peak Height (A): 0.060
Background Pk Area (A-s): 0.033 Background Pk Height (A): 0.026

Blank Corrected Pk Area (A-s): 0.025
Concentration (ug/L): 10.7

Mean Conc (ug/L): 10.5 SD: 0.25 RSD(%): 2.37

Se ID: CDMHNSS3 ~~CDHNSS3~~*3 mfb wr 7/19/94 Seq. No.: 00013 A/S Pos.: 17 Date: 07/19/94

Replicate 1 Time: 00:33
Peak Area (A-s): 0.005 Peak Height (A): 0.013
Background Pk Area (A-s): 0.284 Background Pk Height (A): 0.399
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 1.5

Replicate 2 Time: 00:36
Peak Area (A-s): 0.001 Peak Height (A): 0.016
Background Pk Area (A-s): 0.356 Background Pk Height (A): 0.225
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.2

Mean Conc (ug/L): 0.6 SD: 1.23 RSD(%): 193.27

Se ID: CDMHNSS3 ~~CDHNSS3~~*4 mfb wr 7/19/94 Seq. No.: 00014 A/S Pos.: 18 Date: 07/19/94

Replicate 1 Time: 00:39
Peak Area (A-s): 0.002 Peak Height (A): 0.018
Background Pk Area (A-s): 0.362 Background Pk Height (A): 0.478
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.1

Replicate 2 Time: 00:41
Peak Area (A-s): 0.003 Peak Height (A): 0.013
Background Pk Area (A-s): 0.346 Background Pk Height (A): 0.442
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.7

Mean Conc (ug/L): 0.4 SD: 0.42 RSD(%): 109.49

Se ID: CCV*QC*1 Seq. No.: 00015 A/S Pos.: 21 Date: 07/19/94

Replicate 1 Time: 00:44
Peak Area (A-s): 0.131 Peak Height (A): 0.269
Background Pk Area (A-s): 0.104 Background Pk Height (A): 0.103
Blank Corrected Pk Area (A-s): 0.130
Concentration (ug/L): 55.8

Replicate 2 Time: 00:47
Peak Area (A-s): 0.131 Peak Height (A): 0.285
Background Pk Area (A-s): 0.070 Background Pk Height (A): 0.099
Blank Corrected Pk Area (A-s): 0.130
Concentration (ug/L): 55.9

Mean Conc (ug/L): 55.9 SD: 0.04 RSD(%): 0.06

Se ID: CCB*QC*1 Seq. No.: 00016 A/S Pos.: 22 Date: 07/19/94

Replicate 1 Time: 00:50

Peak Area (A-s): 0.000 Peak Height (A): 0.010
Background Pk Area (A-s): 0.026 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.6

Replicate 2 Time: 00:52
Peak Area (A-s): 0.003 Peak Height (A): 0.011
Background Pk Area (A-s): 0.023 Background Pk Height (A): 0.014
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.5

Mean Conc (ug/L): -0.1 SD: 0.81 RSD(%): 1483.06

Se ID: CCV*QC*1 Seq. No.: 00017 A/S Pos.: 21 Date: 07/19/94

Replicate 1 Time: 01:22
Peak Area (A-s): 0.118 Peak Height (A): 0.261
Background Pk Area (A-s): 0.061 Background Pk Height (A): 0.087
Blank Corrected Pk Area (A-s): 0.116
Concentration (ug/L): 50.2

Replicate 2 Time: 01:26
Peak Area (A-s): 0.115 Peak Height (A): 0.245
Background Pk Area (A-s): 0.063 Background Pk Height (A): 0.085
Blank Corrected Pk Area (A-s): 0.114
Concentration (ug/L): 48.9

Mean Conc (ug/L): 49.6 SD: 0.87 RSD(%): 1.75

Se ID: CCB*QC*1 Seq. No.: 00018 A/S Pos.: 22 Date: 07/19/94

Replicate 1 Time: 01:28
Peak Area (A-s): 0.004 Peak Height (A): 0.012
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 1.0

Replicate 2 Time: 01:31
Peak Area (A-s): 0.001 Peak Height (A): 0.011
Background Pk Area (A-s): 0.020 Background Pk Height (A): 0.013
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.4

Mean Conc (ug/L): 0.3 SD: 1.02 RSD(%): 361.53

Se ID: ~~CDHNSS3~~ CDMNSS3*5 mfb wc 7/19/94 Seq. No.: 00019 A/S Pos.: 19 Date: 07/19/94

Replicate 1 Time: 01:34
Peak Area (A-s): 0.004 Peak Height (A): 0.016
Background Pk Area (A-s): 0.249 Background Pk Height (A): 0.281
Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 1.1

Replicate 2 Time: 01:37
Peak Area (A-s): 0.004 Peak Height (A): 0.016
Background Pk Area (A-s): 0.264 Background Pk Height (A): 0.285

Blank Corrected Pk Area (A-s): 0.003
Concentration (ug/L): 1.2

Mean Conc (ug/L): 1.1 SD: 0.07 RSD(%): 5.80

Se ID: ~~CDMHNSS3~~ CDMHNSS3*6 MFB WI 7/19/94 Seq. No.: 00020 A/S Pos.: 20 Date: 07/19/94

Replicate 1 Time: 01:39
Peak Area (A-s): 0.002 Peak Height (A): 0.012
Background Pk Area (A-s): 0.270 Background Pk Height (A): 0.154
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.0

Replicate 2 Time: 01:42
Peak Area (A-s): 0.002 Peak Height (A): 0.018
Background Pk Area (A-s): 0.267 Background Pk Height (A): 0.270
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.2

Mean Conc (ug/L): 0.1 SD: 0.09 RSD(%): 90.68

Se ID: ~~CDMHNSS3~~ CDMHNSS3*7 MFB WI 7/19/94 Seq. No.: 00021 A/S Pos.: 23 Date: 07/19/94

Replicate 1 Time: 01:45
Peak Area (A-s): 0.004 Peak Height (A): 0.017
ackground Pk Area (A-s): 0.221 Background Pk Height (A): 0.127
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.8

Replicate 2 Time: 01:48
Peak Area (A-s): 0.002 Peak Height (A): 0.015
Background Pk Area (A-s): 0.234 Background Pk Height (A): 0.273
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.0

Mean Conc (ug/L): 0.4 SD: 0.56 RSD(%): 125.58

Se ID: ~~CDMHNSS3~~ CDMHNSS3*8 MFB WI 7/19/94 Seq. No.: 00022 A/S Pos.: 24 Date: 07/19/94

Replicate 1 Time: 01:51
Peak Area (A-s): 0.002 Peak Height (A): 0.010
Background Pk Area (A-s): 0.267 Background Pk Height (A): 0.149
Blank Corrected Pk Area (A-s): 0.000
Concentration (ug/L): 0.0

Replicate 2 Time: 01:53
Peak Area (A-s): -0.000 Peak Height (A): 0.012
Background Pk Area (A-s): 0.273 Background Pk Height (A): 0.148
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.9

Mean Conc (ug/L): -0.4 SD: 0.63 RSD(%): 143.03

Se ID: ~~CDMHNSS3~~ CDMHNSS3*42 MFB WI 7/19/94 Seq. No.: 00023 A/S Pos.: 25 Date: 07/19/94

Replicate 1 Time: 01:56

Peak Area (A-s): 0.002 Peak Height (A): 0.013
Background Pk Area (A-s): 0.269 Background Pk Height (A): 0.260
Blank Corrected Pk Area (A-s): 0.001
Concentration (ug/L): 0.4

Replicate 2 Time: 01:59
Peak Area (A-s): 0.000 Peak Height (A): 0.009
Background Pk Area (A-s): 0.270 Background Pk Height (A): 0.289
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.6

Mean Conc (ug/L): -0.1 SD: 0.69 RSD(%): 537.24

Se ID: ~~CDHNSS3~~ CDMHNSS3*43 mfb us 7/19/94 Seq. No.: 00024 A/S Pos.: 26 Date: 07/19/94

Replicate 1 Time: 02:02
Peak Area (A-s): 0.001 Peak Height (A): 0.013
Background Pk Area (A-s): 0.227 Background Pk Height (A): 0.114
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.2

Replicate 2 Time: 02:04
Peak Area (A-s): 0.003 Peak Height (A): 0.010
Background Pk Area (A-s): 0.222 Background Pk Height (A): 0.177
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.8

Mean Conc (ug/L): 0.3 SD: 0.72 RSD(%): 264.61

Se ID: SPM1*~~CDHNSS3~~ CDMHNSS3*43 mfb us 7/19/94 Seq. No.: 00025 A/S Pos.: 27 Date: 07/19/94

Replicate 1 Time: 02:07
Peak Area (A-s): 0.013 Peak Height (A): 0.034
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.011
Concentration (ug/L): 4.7

Replicate 2 Time: 02:10
Peak Area (A-s): 0.010 Peak Height (A): 0.040
Background Pk Area (A-s): 0.143 Background Pk Height (A): 0.065
Blank Corrected Pk Area (A-s): 0.008
Concentration (ug/L): 3.4

Mean Conc (ug/L): 4.1 SD: 0.94 RSD(%): 23.08

Se ID: SPM2*~~CDHNSS3~~ CDMHNSS3*43 mfb 7/19/94 Seq. No.: 00026 A/S Pos.: 28 Date: 07/19/94

Replicate 1 Time: 02:13
Peak Area (A-s): 0.007 Peak Height (A): 0.025
Background Pk Area (A-s): 0.132 Background Pk Height (A): 0.117
Blank Corrected Pk Area (A-s): 0.005
Concentration (ug/L): 2.3

Replicate 2 Time: 02:15
Peak Area (A-s): 0.012 Peak Height (A): 0.030
Background Pk Area (A-s): 0.134 Background Pk Height (A): 0.068

Blank Corrected Pk Area (A-s): 0.010
Concentration (ug/L): 4.3

Mean Conc (ug/L): 3.3 SD: 1.44 RSD(%): 43.51

Se ID: SPX*~~CDHNSS3~~ CDMANSS3 *5 mB 7/19/94 Seq. No.: 00027 A/S Pos.: 29 Date: 07/19/94

Replicate 1 Time: 02:18
Peak Area (A-s): 0.076 Peak Height (A): 0.202
Background Pk Area (A-s): 0.141 Background Pk Height (A): 0.160
Blank Corrected Pk Area (A-s): 0.075
Concentration (ug/L): 32.1

Replicate 2 Time: 02:21
Peak Area (A-s): 0.114 Peak Height (A): 0.277
Background Pk Area (A-s): 0.157 Background Pk Height (A): 0.103
Blank Corrected Pk Area (A-s): 0.113
Concentration (ug/L): 48.6

Mean Conc (ug/L): 40.4 SD: 11.66 RSD(%): 28.89

Se ID: CCV*QC*2 Seq. No.: 00028 A/S Pos.: 30 Date: 07/19/94

Replicate 1 Time: 02:24
Peak Area (A-s): 0.118 Peak Height (A): 0.248
Background Pk Area (A-s): 0.076 Background Pk Height (A): 0.084
Blank Corrected Pk Area (A-s): 0.116
Concentration (ug/L): 50.1

Replicate 2 Time: 02:27
Peak Area (A-s): 0.118 Peak Height (A): 0.242
Background Pk Area (A-s): 0.063 Background Pk Height (A): 0.083
Blank Corrected Pk Area (A-s): 0.116
Concentration (ug/L): 50.1

Mean Conc (ug/L): 50.1 SD: 0.02 RSD(%): 0.04

Se ID: CCB*QC*2 Seq. No.: 00029 A/S Pos.: 31 Date: 07/19/94

Replicate 1 Time: 02:29
Peak Area (A-s): -0.001 Peak Height (A): 0.011
Background Pk Area (A-s): 0.026 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -1.3

Replicate 2 Time: 02:32
Peak Area (A-s): 0.001 Peak Height (A): 0.009
Background Pk Area (A-s): 0.028 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.001
Concentration (ug/L): -0.5

Mean Conc (ug/L): -0.9 SD: 0.61 RSD(%): 67.70

Se ID: CCV*QC*3 Seq. No.: 00030 A/S Pos.: 30 Date: 07/19/94

Replicate 1
Time: 08:22
Peak Area (A-s): 0.112
Peak Height (A): 0.201
Background Pk Area (A-s): 0.065
Background Pk Height (A): 0.067
Blank Corrected Pk Area (A-s): 0.111
Concentration (ug/L): 47.6

Replicate 2
Time: 08:25
Peak Area (A-s): 0.121
Peak Height (A): 0.226
Background Pk Area (A-s): 0.059
Background Pk Height (A): 0.075
Blank Corrected Pk Area (A-s): 0.119
Concentration (ug/L): 51.3

Mean Conc (ug/L): 49.5 SD: 2.60 RSD(%): 5.25

Se ID: CCB*QC*3 Seq. No.: 00031 A/S Pos.: 31 Date: 07/19/94

Replicate 1 Time: 08:28
Peak Area (A-s): 0.000 Peak Height (A): 0.011
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.017
Blank Corrected Pk Area (A-s): -0.002
Concentration (ug/L): -0.7

Replicate 2 Time: 08:31
Peak Area (A-s): 0.004 Peak Height (A): 0.010
Background Pk Area (A-s): 0.025 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): 0.002
Concentration (ug/L): 0.8

Mean Conc (ug/L): 0.1 SD: 1.07 RSD(%): 1948.27

Se ID: SPM1*~~CDHNSS3~~ CDMHNSS3 *43 mfd 7/19/94 Seq. No.: 00032 A/S Pos.: 27 Date: 07/19/94

Replicate 1 Time: 08:34
Peak Area (A-s): 0.011 Peak Height (A): 0.031
Background Pk Area (A-s): 0.109 Background Pk Height (A): 0.091
Blank Corrected Pk Area (A-s): 0.010
Concentration (ug/L): 4.1

Replicate 2 Time: 08:36
Peak Area (A-s): 0.017 Peak Height (A): 0.037
Background Pk Area (A-s): 0.133 Background Pk Height (A): 0.060
Blank Corrected Pk Area (A-s): 0.015
Concentration (ug/L): 6.4

Mean Conc (ug/L): 5.3 SD: 1.64 RSD(%): 31.10

Se ID: SPM2*~~CDHNSS3~~ CDMHNSS3 *43 Seq. No.: 00033 A/S Pos.: 28 Date: 07/19/94

mfd 7/19/94

Replicate 1 Time: 08:39
Peak Area (A-s): 0.006 Peak Height (A): 0.031
Background Pk Area (A-s): 0.168 Background Pk Height (A): 0.105
Blank Corrected Pk Area (A-s): 0.004
Concentration (ug/L): 1.8

Replicate 2 Time: 08:42
Peak Area (A-s): 0.018 Peak Height (A): 0.041
Background Pk Area (A-s): 0.137 Background Pk Height (A): 0.063

Blank Corrected Pk Area (A-s): 0.016
Concentration (ug/L): 6.9

Mean Conc (ug/L): 4.4 SD: 3.63 RSD(%): 83.07

Se ID: SPM1*~~CDHNSS3~~ CDMHNSS3 *43 mfd 7/19/94 Seq. No.: 00034 A/S Pos.: 27 Date: 07/19/94

Replicate 1 Time: 08:45
Peak Area (A-s): 0.012 Peak Height (A): 0.038
Background Pk Area (A-s): 0.138 Background Pk Height (A): 0.062
Blank Corrected Pk Area (A-s): 0.010
Concentration (ug/L): 4.3

Replicate 2 Time: 08:48
Peak Area (A-s): 0.009 Peak Height (A): 0.026
Background Pk Area (A-s): 0.127 Background Pk Height (A): 0.110
Blank Corrected Pk Area (A-s): 0.007
Concentration (ug/L): 3.2

Mean Conc (ug/L): 3.8 SD: 0.80 RSD(%): 21.19

Se ID: SPM2*~~CDHNSS3~~ CDMHNSS3 *43 Seq. No.: 00035 A/S Pos.: 28 Date: 07/19/94

mfd WI 7/19/94

Replicate 1 Time: 08:50
Peak Area (A-s): 0.012 Peak Height (A): 0.037
Background Pk Area (A-s): 0.139 Background Pk Height (A): 0.070
Blank Corrected Pk Area (A-s): 0.011
Concentration (ug/L): 4.5

Replicate 2 Time: 08:53
Peak Area (A-s): 0.011 Peak Height (A): 0.032
Background Pk Area (A-s): 0.139 Background Pk Height (A): 0.072
Blank Corrected Pk Area (A-s): 0.009
Concentration (ug/L): 3.9

Mean Conc (ug/L): 4.2 SD: 0.42 RSD(%): 9.82

Se ID: SPX*~~CDHNSS3~~ CDMHNSS3 ✓ 5 *5 mfd 7/19/94 WI Seq. No.: 00036 A/S Pos.: 29 Date: 07/19/94

Replicate 1 Time: 08:58
Peak Area (A-s): 0.115 Peak Height (A): 0.293
Background Pk Area (A-s): 0.153 Background Pk Height (A): 0.106
Blank Corrected Pk Area (A-s): 0.114
Concentration (ug/L): 48.9

Replicate 2 Time: 09:01
Peak Area (A-s): 0.118 Peak Height (A): 0.286
Background Pk Area (A-s): 0.152 Background Pk Height (A): 0.112
Blank Corrected Pk Area (A-s): 0.116
Concentration (ug/L): 50.2

Mean Conc (ug/L): 49.5 SD: 0.88 RSD(%): 1.78

Se ID: CCV*QC*4 Seq. No.: 00037 A/S Pos.: 30 Date: 07/19/94

Replicate 1 Time: 09:05

Peak Area (A-s): 0.120 Peak Height (A): 0.243
Background Pk Area (A-s): 0.077 Background Pk Height (A): 0.087
Blank Corrected Pk Area (A-s): 0.118
Concentration (ug/L): 50.9

plicate 2 Time: 09:08
.eak Area (A-s): 0.112 Peak Height (A): 0.227
Background Pk Area (A-s): 0.065 Background Pk Height (A): 0.077
Blank Corrected Pk Area (A-s): 0.110
Concentration (ug/L): 47.4

Mean Conc (ug/L): 49.2 SD: 2.48 RSD(%): 5.04

Se ID: CCB*QC*4 Seq. No.: 00038 A/S Pos.: 31 Date: 07/19/94

Replicate 1 Time: 09:11
Peak Area (A-s): -0.001 Peak Height (A): 0.012
Background Pk Area (A-s): 0.026 Background Pk Height (A): 0.016
Blank Corrected Pk Area (A-s): -0.003
Concentration (ug/L): -1.2

Replicate 2 Time: 09:13
Peak Area (A-s): 0.003 Peak Height (A): 0.013
Background Pk Area (A-s): 0.024 Background Pk Height (A): 0.016
lank Corrected Pk Area (A-s): 0.001
ncentration (ug/L): 0.6

Mean Conc (ug/L): -0.3 SD: 1.23 RSD(%): 420.44

Mercury

9513354.2729

(2)

MERCURY SAMPLE RUN LOG

BK#: 31 PG#: 47

METHOD: ASM3233-042 MATRIX: SOILS QC TYPE: FDER

ANALYST: K. BRAKEFIELD EMP.# 3216 DATE: 07/18/94

SAMPLES ANALYZED: BATCH #, DATE, INITIALS

CDMHNSS3*3-8,42,43 G51092 07/18/94 KSB

INSTRUMENT PARAMETERS:

Inst. model: BUCK 400
Wavelength: 253.7

CALIBRATION CURVE:

C.C.: 0.9997
Det.Limit: 0.2 UG/L
Calib. type: QUAD

STANDARDS:

	Std.#1	Std.#2
10 ppm stock		
Manufacturer:	HI PURITY	HI PURITY
Lot No.:	490404	490126
Exp.date:	12/94	12/94
Working Stds. made:	07/18/94	07/18/94
100 OR 80 ug/l std.	100 UG/L	

COMMENTS:

Peak No.	Sample I.D.	Peak Ht.	Conc. ug/l	Target	Comments
1	0.0 PPB	0.5			
2	0.2	2.25			
3	0.5	5.25			
4	1.0	10.0			
5	2.0	18.75			
6	5.0	44.0			
7	7.0	55.25			
8	10.0	74.0			CC= 0.9997
9	ICV*PE-PURE*1	41.5	4.82	5.0	96%
10	MB*REAGENT*1	0.5	0.042		
11	MB*QC*1	0.25	0.019		
12	SP*QC*1	45.0	5.32	5.0	106%
13	CDMHNSS3*3	0.25	0.019		
14	CDMHNSS3*4	0.5	0.042		
15	CDMHNSS3*5	0.25	0.019		

READ AND UNDERSTOOD BY: Jeri D. Rogers *DATE:* 7/18/94

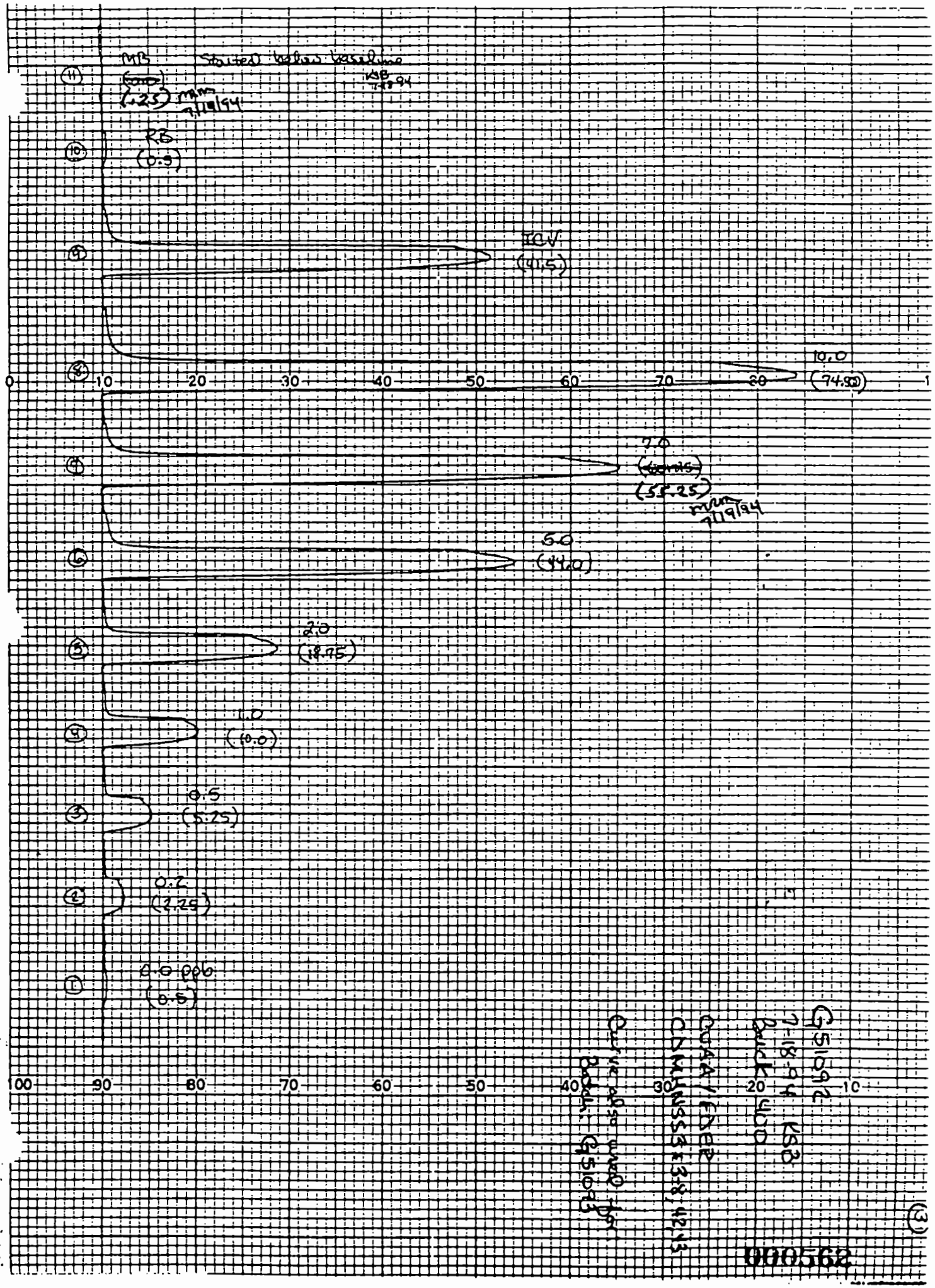
MERCURY SAMPLE RUN LOG

BK#: 31 PG#: 48

Peak No.	Sample I.D.	Peak Ht.	Conc. ug/l	Target	Comments
16	CDMHNSS3*6	0.25	0.019		
17	CDMHNSS3*7	0.25	0.019		
18	CDMHNSS3*8	0.25	0.019		
19	CCV*QC*1	41.0	4.75	5.0	95%
20	CCB*QC*1	0.0	0.0		
21	CDMHNSS3*42	0.5	0.042		
22	CDMHNSS3*43	0.25	0.019		
23	SPM1*CDMHNSS3*43	26.25	2.81	5.0	56%
24	SPM2CDMHNSS3*43	23.5	2.48	5.0	50%
25	CCV*QC*2	38.5	4.40	5.0	88%
26	CCB*QC*2	0.0	0.0		

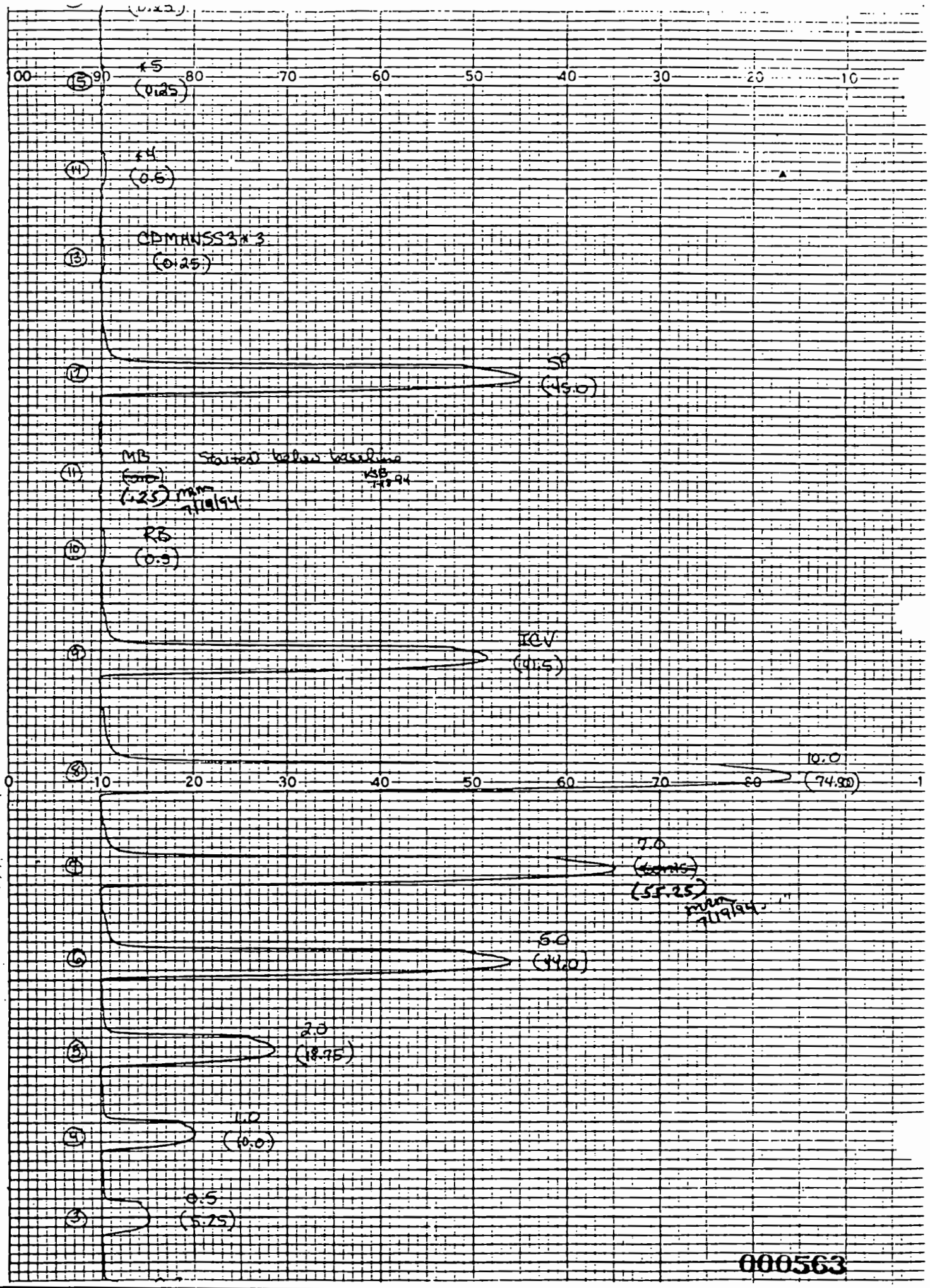
READ AND UNDERSTOOD BY: Jeri D. Rogers *DATE:* 7/18/94

9513354.2730



(3)

000562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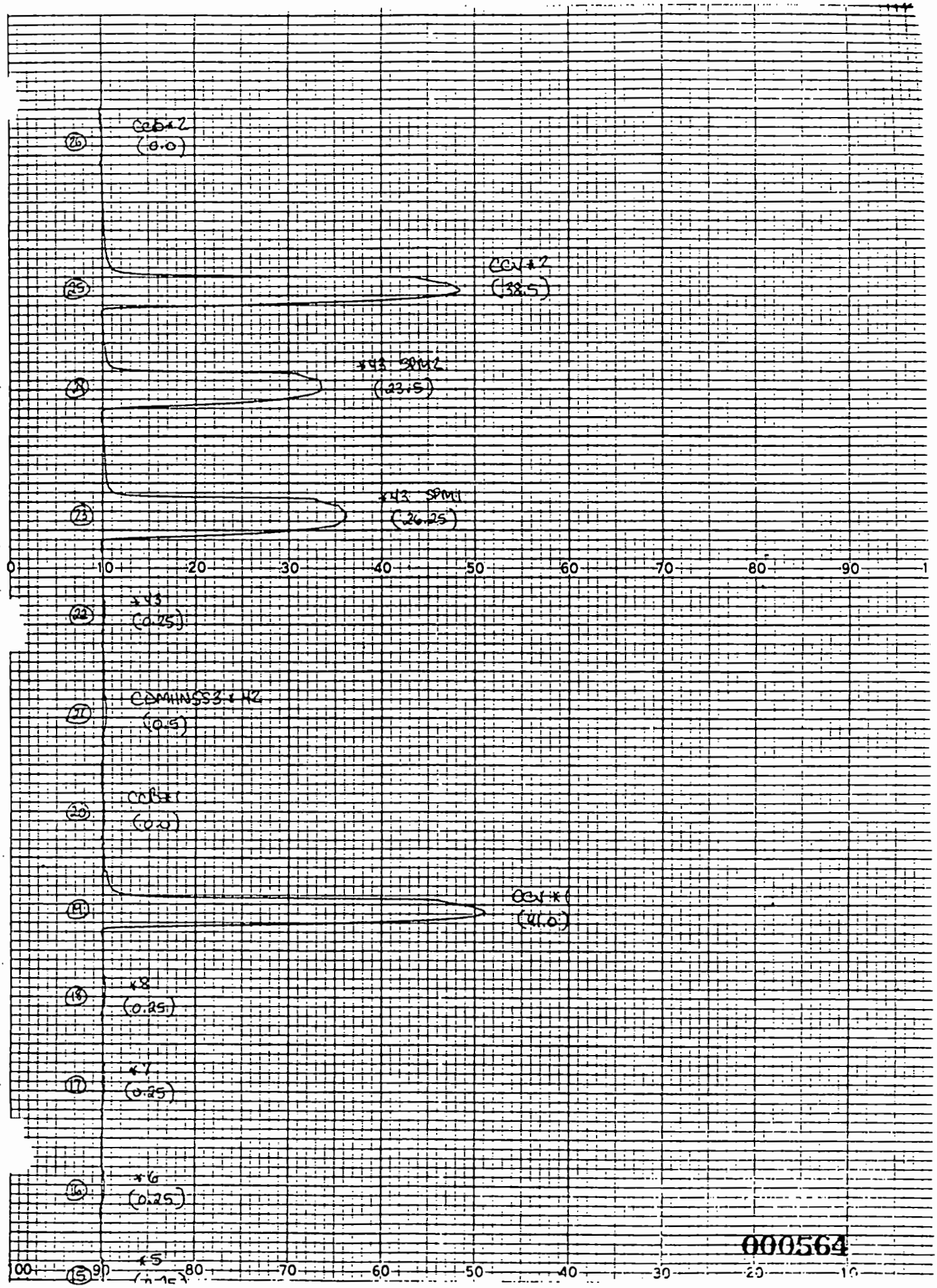
90
80
70
60
50
40
30
20
10
0
10
20
30
40
50
60
70
80
1
15
x5
(0.25)
14
x4
(0.5)
13
CDMANSS3 x 3
(0.25)
12
SP
(45.0)
11
MB
(.25)
started below baseline
KSB 7-8-94
10
RB
(0.5)
9
TCV
(41.5)
8
10.0
(74.50)
7
7.0
(55.25)
6
6.0
(44.0)
5
2.0
(18.75)
4
1.0
(10.0)
3
0.5
(5.25)

000563


26
CCB*2
(0.0)
25
CCV*2
(38.5)
24
*43 SPM2
(23.5)
23
*43 SPM1
(26.25)
0
10
20
30
40
50
60
70
80
90
1
22
*43
(0.25)
21
CDMHNSS3*42
(0.5)
20
CCB*1
(0.0)
19
CCV*1
(41.0)
18
*8
(0.25)
17
*7
(0.25)
16
*6
(0.25)
15
*5
100
90
80
70
60
50
40
30
20
10

5. SAMPLE PREP LOGSHEETS

9513554.2732

ICAP Metals

(4)

ATOMIC SPECTROSCOPY SAMPLE PREP

000126

Book No. 24 Pg. No.

****

Matrix SOILS Method/QC Type ICAP/FDER

SOP No. ASM3233-004 Lot No.(s) NA

Spike Solutions Used	Prep Date	Prep'd by	Exp. Date
1. ICAP/CLP SPK SOLN	6-28-94	DVN	7-31-94
2.			

Final Vol. (mL) 100 Pipets Used 10ml CLASS "A" VOL. PIPET

Balance No. 13 Hood No. 7 Hotplate No. 5

****

Sample No.	Weight (g)/ Init.Vol.(mL)	Spike Information
RE BLANK	—	
MB	1.0188	
SP1	1.0199	10ml #1
CDMHN553*3	1.0117	
4	1.0098	
DVN 7-18-94 UI 85	1.0252	
6	1.0392	
7	1.0179	
8	1.0483	
42	1.0256	
43	1.0108	
43spm1	1.0562	10ml #1
43spm2	1.0302	10ml #1

David U. Arthur 7-18-94
Signed Date

Read & Understood By 7/18/94
Date

000567

ICAP SPIKE SOLUTION
(CLP/FDER/USAEC MATRIX)

Notebook: 12 Page: 17

Element	Manufacturer	Lot No.	Exp. Date	Stock Conc.(ppm)	Volume Used(mL)	Final Conc.(ppm)
Al	High Purity	390505	07/94	10000	2.0	20.0
Sb	SPEX	3-86SB	02/95	1000	5.0	5.0
As	SPEX	3-105AS	01/95	1000	20.0	20.0
Ba	SPEX	3-107BA	10/94	1000	20.0	20.0
Be	SPEX	3-56BE	02/95	1000	0.5	0.5
B	SPEX	3-139B	03/95	1000	10.0	10.0
Cd	SPEX	3-131CD	04/95	1000	0.5	0.5
Ca	SPEX	H-12CA	12/94	10000	10.0	100.0
Cr	SPEX	3-124CR	02/95	1000	2.0	2.0
Co	SPEX	3-100CO	03/95	1000	5.0	5.0
Cu	High Purity	390813	10/94	1000	2.5	2.5
Fe	High Purity	490222	04/95	10000	1.0	10.0
Pb	SPEX	4-9PB	03/95	1000	5.0	5.0
Li	SPEX	2-252LI	10/94	1000	5.0	5.0
Mg	SPEX	G-245MG	01/95	10000	10.0	100.0
Mn	SPEX	3-112MN	02/95	1000	5.0	5.0
Mo	High Purity	390706	10/94	1000	5.0	5.0
Ni	SPEX	2-266NI	10/94	1000	5.0	5.0
K	SPEX	H-274K	02/95	10000	10.0	100.0
Se	SPEX	3-70SE	12/94	1000	20.0	20.0
Ag	High Purity	390511	09/94	1000	0.5	0.5
Na	SPEX	G-64NA	03/95	10000	10.0	100.0
Sr	SPEX	3-15SR	10/94	1000	5.0	5.0
Tl	SPEX	3-21TL	02/95	1000	20.0	20.0
Sn	High Purity	490504	07/95	1000	10.0	10.0
Ti	SPEX	3-38TI	02/95	1000	5.0	5.0
V	High Purity	390719	10/94	1000	5.0	5.0
Zn	SPEX	3-50ZN	10/94	1000	5.0	5.0

ICAP CLP/FDER/USAEC spike solution made to a final acid concentration of 20%(v/v) HCl, and to a final volume of 1000 mL.

This solution expires: 07/31/94 (Good for 33 days).

Stored at room temperature.

Prepared by: David V. Richard Date: 6-28-94

Read and understood by: Kent Brakefield Date: 6-28-94

CLPFDER.ICP

ICAP - CALIBRATION STANDARDS

Notebook: 2 Page: 9

Standard 2

Element	Manufacturer	Lot No.	Exp. Date	Stock Conc. (ppm)	Volume Used (mL)	Final Conc. (ppm)
As	SPEX	3-105AS	01/95	1000	1.0	1.0
Se	SPEX	3-70SE	11/94	1000	1.0	1.0
Tl	SPEX	3-21TL	02/95	1000	1.0	1.0
Sb	SPEX	3-86SB	02/95	1000	1.0	1.0
Ba	SPEX	3-107BA	04/95	1000	1.0	1.0
Be	SPEX	3-56BE	02/95	1000	1.0	1.0
Cd	SPEX	3-131CD	04/95	1000	1.0	1.0
Co	SPEX	3-100CO	03/95	1000	1.0	1.0
Cr	SPEX	3-124CR	02/95	1000	1.0	1.0
Cu	High Purity	390813	10/94	1000	1.0	1.0
Pb	SPEX	4-9PB	03/95	1000	1.0	1.0
Mn	SPEX	3-112MN	02/95	1000	1.0	1.0
Ni	SPEX	2-266NI	10/94	1000	1.0	1.0
V	High Purity	390719	10/94	1000	1.0	1.0
Zn	SPEX	3-50ZN	10/94	1000	1.0	1.0

Standard 3

Al	SPEX	F-246AL	02/95	10000	1.0	10.0
Ca	SPEX	H-12CA	12/94	10000	1.0	10.0
Fe	High Purity	490222	04/95	10000	1.0	10.0
Mg	SPEX	G-245MG	11/94	10000	1.0	10.0
K	SPEX	H-274K	04/95	10000	10.0	100.0
Na	SPEX	G-64NA	03/95	10000	1.0	10.0

Standard 4

Ag	High Purity	390629	10/94	1000	1.0	1.0

Standard 5

B	SPEX	3-139B	03/95	1000	1.0	1.0
La	SPEX	3-71LA	10/94	1000	1.0	1.0
Li	SPEX	3-147LI	04/95	1000	1.0	1.0
Mo	High Purity	390706	10/94	1000	1.0	1.0
P	High Purity	390819	10/94	1000	1.0	1.0
Si	SPEX	3-11SI	10/94	1000	1.0	1.0
Sr	SPEX	3-15SR	10/94	1000	1.0	1.0
Sn	High Purity	390526	10/94	1000	1.0	1.0
Ti	SPEX	3-38TI	02/95	1000	1.0	1.0

Standards made to a final acid concentration of 5% (v/v) HCl and 5% (v/v) HNO_3, and to a final volume of 1000 mL.

This solution expires: 08/15/94 (Good for 33 days).
Stored at room temperature.

Prepared by: Kent Brakefield Date: 7-13-94

Read and understood by: [illegible] Date: 7/13/94

ICAP - CCV SOLUTION

Notebook: 2 Page: 10

Element	Manufacturer	Lot No.	Exp. Date	Stock Conc.(ppm)	Volume Used(mL)	Final Conc.(ppm)
As	SPEX	3-105AS	01/95	1000	1.4	0.7
Se	SPEX	3-70SE	11/94	1000	1.4	0.7
Tl	SPEX	3-21TL	02/95	1000	1.4	0.7
Sb	SPEX	3-86SB	02/95	1000	1.0	0.5
Ba	SPEX	3-107BA	04/95	1000	1.0	0.5
Be	SPEX	3-56BE	02/95	1000	1.0	0.5
Cd	SPEX	3-131CD	04/95	1000	1.0	0.5
Co	SPEX	3-100CO	03/95	1000	1.0	0.5
Cr	SPEX	3-124CR	02/95	1000	1.0	0.5
Cu	High Purity	390813	10/94	1000	1.0	0.5
Pb	SPEX	4-9PB	03/95	1000	1.0	0.5
Mn	SPEX	3-112MN	02/95	1000	1.0	0.5
Ni	SPEX	2-266NI	10/94	1000	1.0	0.5
V	High Purity	390719	10/94	1000	1.0	0.5
Zn	SPEX	3-50ZN	10/94	1000	1.0	0.5
Ag	High Purity	390629	10/94	1000	1.0	0.5
B	SPEX	3-139B	03/95	1000	1.0	0.5
Mo	High Purity	390706	10/94	1000	1.0	0.5
Sr	SPEX	3-15SR	10/94	1000	1.0	0.5
Sn	High Purity	390526	10/94	1000	1.0	0.5
Ti	SPEX	3-38TI	02/95	1000	1.0	0.5
Al	SPEX	F-246AL	02/95	10000	1.0	5.0
Ca	SPEX	H-12CA	12/94	10000	1.0	5.0
Fe	High Purity	490222	04/95	10000	1.0	5.0
Mg	SPEX	G-245MG	11/94	10000	1.0	5.0
K	SPEX	H-274K	04/95	10000	1.0	5.0
Na	SPEX	G-64NA	03/95	10000	1.0	5.0
Li	SPEX	3-147LI	04/95	1000	1.0	5.0

ICAP - CCV solution made to a final acid concentration of 5% (v/v) HCl and 5% (v/v) HNO_3, and to a final volume of 2000 mL.

This solution expires: 08/15/94 (Good for 33 days).

Stored at room temperature.

Prepared by: Date: Read and understood by: Date:

7/13/94 7-13-94

Page 1 of 1

CCVSOLN.ICP

ICAP - ICV 19 & 7 SOLUTIONS

Notebook: 2 Page: 11

ICV 19

Solution	Manufacturer	Lot No.	Exp. Date	Volume Used(mL)
QC19	SPEX	5-181 AS	08/94	5.0

ICV 7

Solution	Manufacturer	Lot No.	Exp. Date	Volume Used(mL)
QC 7	SPEX	5-129 AS	08/94	5.0

ICV Solutions made to a final acid concentration of 5% (v/v) HCl and 5% (v/v) HNO_3, and to a final volume of 500 mL.

This solution expires: 08/15/94 (Good for 33 days).

Stored at room temperature.

Prepared by: Date: Read and understood by: Date:

7/15/94 7/15/94

ICAP - ICS A & AB SOLUTIONS

Notebook: 2 Page: 12

ICS A

Solution	Manufacturer	Lot No.	Exp. Date	Volume Used(mL)
AS STD, (Interferents A)	PE-Pure	6-22AS	12/94	50.0

ICS AB

Solution	Manufacturer	Lot No.	Exp. Date	Volume Used(mL)
AS STD, (Interferents A)	PE-Pure	6-22AS	12/94	50.0
AS STD, (Analytes B)	PE-Pure	5-81AS	09/94	5.0

ICS Solutions made to a final acid concentration of 6%(v/v) HCl, and to a final volume of 500 mL.

This solution expires: 08/15/94 (Good for 33 days).

Stored at room temperature.

Prepared by: Date: Read and understood by: Date:

Gary L Price 7/15/94 M. L. Manner 7/15/94

ICSSOLNS.ICP

GFAA Metals – Arsenic

9513354.2736

4

ATOMIC SPECTROSCOPY SAMPLE PREP

Book No. 24 Pg. No. 000228

Matrix SOILS Method/QC Type GFAA/FDER

SOP No. ASM3233-003 Lot No.(s) NA

Spike Solutions Used	Prep Date	Prep'd by	Exp. Date
1. ASM3233-007 SOLN "A"	7-5-94	DDZ	8-6-94
2.			

Final Vol. (mL) 100 Pipets Used BIOHIT 1000 # 2

Balance No. 13 Hood No. 7 Hotplate No. 6

Sample No.	Weight (g) / Init.Vol.(mL)	Spike Information
RF BLANK	—	
MB	1.0114	
SP1	1.0630	1ml #1
CDMHNSS) # 3	1.0232	
4	1.0438	
5	1.0425	
6	1.0620	
7	1.0030	
8	1.0160	
42	1.0495	
43	1.0116	
43 spm1	1.0223	1ml #1
43 spm2	1.0510	1ml #1

David V. Nichol 7-19-94
Signed Date

Read & Understood By 7/18/94
Date

ASM 3233-007 Solution "A"

Element	Stock Conc. (ppm)	Mls. Used	Final Conc. (ppb)	Target (ppb)	Manufacturer	Lot Number	Date Expires
As	1000	4.0	4000	40	Spex	3-105AS	1/95
Cr	1000	2.0	2000	20	Spex	3-124CR	4/95
Pb	1000	2.0	2000	20	Spex	4-9PB	3/95
Mo	1000	2.0	2000	20	High Purity	390706	10/94
Se	1000	1.0	1000	10	Spex	3-70SE	12/94
Tl	1000	5.0	5000	50	Spex	3-21TL	2/95
V	1000	2.0	2000	20	High Purity	390719	10/94

Pipets Used: 2,4,5 mls Class "A" volumetrics; Eppendorf #120565

Final Volume = 1000 mls

Note: Solution is 1% conc. HNO_3

Solution Expires: 8/06/94

Made by — Date: 7-5-94

Read & Understood by — Date: 7-5-94

As, Se, Tl, Pb--10 ppm solution and working standards

1000 ppm Stock Solutions:

Element	Manufacturer	Lot Number	Date Received	Date Expires
As	Spex	3-105AS	1/20/94	1/15/95
Se	Spex	3-70SE	11/22/93	11/30/94
Tl	Mallinckrodt	H584 KJSG-P	4/93	10/94
Pb	Mallinckrodt	H544 KLBY-P	11/93	2/95

10 ppm solution: 2.0 ml of each stock solution was transferred to a 200 ml volumetric flask containing 10 ml conc. HNO_3, and was brought up to volume with DI water. (Expires: 8/12/94)

Keith Geigler — 7-11-94 — [illegible] — 7-11-94

Made by — Date — Read & Understood by — Date

****

Daily Working Standards:

100 ppb - 2.0 ml of the 10 ppm solution was transferred to a 200 ml volumetric flask containing 10 ml conc. HNO_3 and was brought up to volume with DI water.

50 ppb - 0.5 ml of the 10 ppm solution was transferred to a 100 ml volumetric flask containing 5.0 ml conc. HNO_3 and was brought up to volume with DI water.

10 ppb - 10 ml of the 100 ppb working standard was transferred to a 100 ml volumetric flask containing 5.0 ml conc. HNO_3 and was brought up to volume with DI water.

4.0 ppb - 4 ml of the 100 ppb working standard was transferred to a 100 ml volumetric flask containing 5.0 ml conc. HNO_3 and was brought up to volume with DI water.

NOTE: All standards and solutions are 5% conc. HNO_3 and are stored at room temperature.

Signed	Date	Witnessed by	Date
Keith Geigler	7-11-94	[illegible]	7-11-94
Keith Geigler	7-12-94	Lisa Swayze	7-12-94
Lisa Swayze	7/13/94	[illegible]	7/13/94
Keith Geigler	7/14/94	Lisa Swayze	7/14/94
Keith Geigler	7/15/94	Marlene Brown	7/15/94
Keith Geigler	7/18/94	Marlene Brown	7/18/94

(Continued on back side)

ICV--SPEX (Solution 1)

Stock Solution:

Manufacturer	Lot Number	Date Received	Date Expires
Spex	5-181AS	8/93	8/15/94

0.25 ml of the 100 ppm stock solution was transferred to a 500 ml volumetric flask containing 25 ml of conc. HNO_3 and 10 ml H_2O_2 and was diluted to volume with DI water.

Element	Stock Solution Conc. (ppm)	ICV Solution Conc. (ppb)
Sb	100	50
As	100	50
Be	100	50
Cd	100	50
Ca	100	50
Cr	100	50
Co	100	50
Cu	100	50
Fe	100	50
Pb	100	50
Mg	100	50
Mn	100	50
Mo	100	50
Ni	100	50
Se	100	50
Tl	100	50
Ti	100	50
V	100	50
Zn	100	50

Note: Solution is 5% conc. HNO_3 and 2% H_2O_2, and is stored at room temperature.

Solution Expires: 12/27/94

K. McCauley 6/27/94 Luis D. Rosario 6/27/94

Made by Date Read & Understood by Date

9513354.2738

GFAA Metals – Selenium

ATOMIC SPECTROSCOPY SAMPLE PREP

Book No. 24 Pg. No. 000528

Matrix SOILS Method/QC Type GFAA/FDER

SOP No. ASM3233-003 Lot No.(s) NA

Spike Solutions Used	Prep Date	Prep'd by	Exp. Date
1. ASM3233-007 SOLN "A"	7-5-94	DDZ	8-6-94
2.			

Final Vol. (mL) 100 Pipets Used BIOHIT 1000 # 2

Balance No. 13 Hood No. 7 Hotplate No. 6

Sample No.	Weight (g) / Init.Vol.(mL)	Spike Information
RF BLANK	—	
MB	1.0114	
SP1	1.0630	1ml #1
CDMHNSS3 # 3	1.0232	
4	1.0438	
5	1.0425	
6	1.0620	
7	1.0030	
8	1.0160	
42	1.0495	
43	1.0116	
43 spm1	1.0223	1ml #1
43 spm2	1.0510	1ml #1

David V. Nichol 7-18-94
Signed Date

Jeffrey L. Fitts 7/18/94
Read & Understood By Date

Book No. 12 Page No. 21

ASM 3233-007 Solution "A"

Element	Stock Conc. (ppm)	Mls. Used	Final Conc. (ppb)	Target (ppb)	Manufacturer	Lot Number	Date Expires
As	1000	4.0	4000	40	Spex	3-105AS	1/95
Cr	1000	2.0	2000	20	Spex	3-124CR	4/95
Pb	1000	2.0	2000	20	Spex	4-9PB	3/95
Mo	1000	2.0	2000	20	High Purity	390706	10/94
Se	1000	1.0	1000	10	Spex	3-70SE	12/94
Tl	1000	5.0	5000	50	Spex	3-21TL	2/95
V	1000	2.0	2000	20	High Purity	390719	10/94

Pipets Used: 2,4,5 mls Class "A" volumetrics; Eppendorf #120565

Final Volume = 1000 mls

Note: Solution is 1% conc. HNO_3

Solution Expires: 8/06/94

Made by — Date: 7-5-94

Read & Understood by — Date: 7-5-94

As, Se, Tl, Pb--10 ppm solution and working standards

1000 ppm Stock Solutions:

Element	Manufacturer	Lot Number	Date Received	Date Expires
As	Spex	3-105AS	1/20/94	1/15/95
Se	Spex	3-70SE	11/22/93	11/30/94
Tl	Mallinckrodt	H584 KJSG-P	4/93	10/94
Pb	Mallinckrodt	H544 KLBY-P	11/93	2/95

10 ppm solution: 2.0 ml of each stock solution was transferred to a 200 ml volumetric flask containing 10 ml conc. HNO_3, and was brought up to volume with DI water. (Expires: 8/12/94)

Keith Gerzler — 7-11-94 — [signature] — 7-11-94

Made by — Date — Read & Understood by — Date

****

Daily Working Standards:

100 ppb - 2.0 ml of the 10 ppm solution was transferred to a 200 ml volumetric flask containing 10 ml conc. HNO_3 and was brought up to volume with DI water.

50 ppb - 0.5 ml of the 10 ppm solution was transferred to a 100 ml volumetric flask containing 5.0 ml conc. HNO_3 and was brought up to volume with DI water.

10 ppb - 10 ml of the 100 ppb working standard was transferred to a 100 ml volumetric flask containing 5.0 ml conc. HNO_3 and was brought up to volume with DI water.

4.0 ppb - 4 ml of the 100 ppb working standard was transferred to a 100 ml volumetric flask containing 5.0 ml conc. HNO_3 and was brought up to volume with DI water.

NOTE: All standards and solutions are 5% conc. HNO_3 and are stored at room temperature.

Signed	Date	Witnessed by	Date
Keith Gerzler	7-11-94	[signature]	7-11-94
Keith Gerzler	7-12-94	Lisa Swarze	7-12-94
Lisa Swarze	7/13/94	[signature]	7/13/94
Keith Gerzler	7/14/94	Lisa Swarze	7/14/94
Keith Gerzler	7/15/94	Marlene Barnes	7/15/94
Keith Gerzler	7/18/94	Marlene Barnes	7/18/94
Marlene Barnes	7/19/94	Lisa Swarze	7/19/94

(Continued on back side)

Notebook No. 8

PROJECT ICV – PE Pure (As – 80 ppb)

Continued From Page —

Stock Solution:
PE Pure, Lot No. 4-84AS, Cas No. 7697-37-2
Received – 8/14/92 Expires – 8/93

Transferred 0.8 ml of the stock solution to a 1000 ml volumetric flask. Added 50.0 ml of conc HNO_3. Then diluted to volume with D.I. water.

Note: Solution is 5% conc HNO_3

Element	Stock Solution Conc (ppm)	ICV Solution Conc (ppb)
As	100	80
Be	↓	↓
Cr	↓	↓
Co	↓	↓
Cu	↓	↓
Fe	↓	↓
Pb	↓	↓
Mn	↓	↓
Ni	↓	↓
Zn	↓	↓
Cd	25	20
Se	25	20
V	250	200
Al	500	400
Hg	5	4

Continued on Page

Read and Understood By

Signed: [illegible] Date: 4/19/93 Signed: Jesi D. Rogers Date: 4/19/93

Mercury

ATOMIC SPECTROSCOPY SAMPLE PREP

MERCURY Book No.: 13 Pg.No.: 145

Matrix: SOILS
SOP No.: ASM3233-042
Method/QC Type: CVAA/FDER
Lot No.(s): N/A

	Spike Solutions Used	Prep Date	Prep'd by	Exp. Date
1.	ICV PE-PURE Hg SOLN.	7/14/94	LMS	1/14/95
2.	100ppb Hg SPIKE SOLN.	7/18/94	KSB	7/19/94

Final Vol.(ml): 100 mL
Pipets Used: RAININ

Balance No.: 13 Hood No.: N/A Hotplate No.: N/A

SAMPLE NO.	WEIGHT(g) OR Init.Vol.(ml)	SPIKE INFO./COMMENT
ICV*PE-PURE*1	-----	100mL #1
MB*REAGENT*1	100mL	
MB*QC*1	0.2205 g	
SP*QC*1	0.2010 g	5.0mL #2
CDMHNSS3*3	0.2051 g	
CDMHNSS3*4	0.2217 g	
CDMHNSS3*5	0.2160 g	
CDMHNSS3*6	0.2128 g	
CDMHNSS3*7	0.2069 g	
CDMHNSS3*8	0.2043 g	
CDMHNSS3*42	0.2173 g	
CDMHNSS3*43	0.2045 g	
SPM1*CDMHNSS3*43	0.2019 g	5.0mL #2
SPM2*CDMHNSS3*43	0.2134 g	5.0mL #2

Kent Brakefield 7-18-94
Signed Date

Jeri D. Rogers 7-18-94
Read and Understood By Date

PROJECT 100 ppb Hg SOL'NS

Continued From Page —

#1 HIGH PURITY LOT # 490404 REC'D: 6/94 EXP 12/94

TRANSFER 1 mL OF 10ppm STOCK SOL'N INTO 100 mL VOLUMETRIC FLASK. ADD 1 mL CONC. HNO_3 AND BRING TO VOLUME E DI.

#2 HIGH PURITY LOT # 490126 REC'D 6/94 EXP 12/94

SAME AS ABOVE. FINAL VOLUME 100 mL 1% HNO_3

STANDARDS REMADE DAILY

INITIALS	DATE
KNG	7/4/94
LMS	7/5/94
CAH	7/6/94
KSB	7/8/94
KNG	7/7/94
KNG	7/9/94
CAH	7/10/94
MSS	7-10-94
LMS	7-12-94
KSB	7-13-94
LMS	7-14-94
MSS	7-14-94
KNG	7-16-94
MSS	7-15-94
MSS	7-17-94
KSB	7-18-94

Continued on Page —

Read and Understood By

Signed	Date	Signed	Date
[illegible]	6/30/94	[illegible]	7/1/94

[redacted]

PROJECT 5.0 µg/L Hg ICV SOL'N

Continued From Page —

NEAT SOLN: PE PURE LOT # 5-227AS REC'D 4/94 EXP. 5/22/95

TRANSFERRED 1.0 mL OF 5.0 µg/mL Hg NEAT SOL'N TO 1000 mL VOLUMETRIC FLASK. ADDED 10 mL CONC. HNO_3. DILUTED TO VOLUME

SOL'N GOOD FOR SIX MONTHS
FINAL CONC = 5.0 µg/L Hg
USED BIOHIT 1000 #2

REMADE

DATE	INITIALS
5/16/94	CAH
5/30/94	LMS
5/25/94	MSS
5/30/94	MSS
6/5/94	MSS
6/8/94	BC
6/17/94	KNG
6/22/94	CAH
6/28/94	LMS
7/5/94	LMS
7/9/94	KNG
7/14/94	LMS
~~7/14/94~~	~~MSS~~ WR 7-14-94 MSS

Continued on Page —

Read and Understood By

Signed	Date	Signed	Date
C. Hall	5/12/94	Pam Brakefield	5-12-94

Dilution Factor and

Holding Time Report

LAB SAMPLE	CDM SAMPLE	NAME	DIL	BATCH	PAGE 1
CLINSS3*43	WC1-01	Heptachlor	10	G51446	
		Endrin	10		
		Endosulfan sulfate	10		
		Methoxychlor	10		
		Endrin ketone	10		
		Endrin aldehyde	10		
		PHENOL	2	G51539	
		BIS(2-CHLOROETHYL)ET	2		
		2-CHLOROPHENOL	2		
		1,3-DICHLOROBENZENE	2		
		1,4-DICHLOROBENZENE	2		
		1,2-DICHLOROBENZENE	2		
		2-METHYLPHENOL	2		
		4-METHYLPHENOL	2		
		2,2'-OXYBIS(1-CHLORO	2		
		N-NITROSODI-N-PROPYL	2		
		HEXACHLOROETHANE	2		
		NITROBENZENE	2		
		ISOPHORONE	2		
		2-NITROPHENOL	2		
		2,4-DIMETHYLPHENOL	2		
		BIS(2-CHLOROETHOXY)M	2		
		2,4-DICHLOROPHENOL	2		
		1,2,4-TRICH'BENZENE	2		
		NAPHTHALENE	2		
		4-CHLOROANILINE	2		
		HEXACHLOROBUTADIENE	2		
		4-CHLORO-3-METHYLPHE	2		
		2-METHYLNAPHTHALENE	2		
		HEXACHLOROCYCLOPENTA	2		
		2,4,6-TRICH'PHENOL	2		
		2,4,5-TRICH'PHENOL	2		
		2-CHLORONAPHTHALENE	2		
		2-NITROANILINE	2		
		DIMETHYL PHTHALATE	2		
		ACENAPHTHYLENE	2		
		2,6-DINITROTOLUENE	2		
		3-NITROANILINE	2		
		ACENAPHTHENE	2		
		2,4-DINITROPHENOL	2		
		4-NITROPHENOL	2		
		DIBENZOFURAN	2		
		2,4-DINITROTOLUENE	2		
		DIETHYL PHTHALATE	2		
		4-CHLOROPHENYLPHENYL	2		
		FLUORENE	2		
		4-NITROANILINE	2		
		2-METHYL-4,6-DINITRO	2		
		N-NITROSODIPHE'AMINE	2		
		4-BROMOPHENYL PHENYL	2		
		HEXACHLOROBENZENE	2		
		PENTACHLPHENOL	2		
		PHENANTHRENE	2		
		ANTHRACENE	2		

LAB SAMPLE	CDM SAMPLE	NAME	DIL	BATCH	PAGE
		CARBAZOLE	2		
		DI-N-BUTYL PHTHALATE	2		
		FLUORANTHENE	2		
		PYRENE	2		
		BUTYLBENZYLPHTHALATE	2		
		3,3-DICHL'BENZIDINE	2		
		BENZO(A)ANTHRACENE	2		
		CHRYSENE	2		
		BIS(2-ETHYLHEXYL)PHT	2		
		DI-N-OCTYL PHTHALATE	2		
		BENZO(B)FLUORANTHENE	2		
		BENZO(K)FLUORANTHENE	2		
		BENZO(A)PYRENE	2		
		INDENO(1,2,3-CD)PYRE	2		
		DIBEN(A,H)ANTHRACENE	2		
		BENZO(GHI)PERYLENE	2		

LE	BATCH	STORET*METHOD	STORET NAME	FAILURE
CD...NSS3*43	ALL HOLDING TIMES MET			

Chain–of–Custody Forms

F62

CHAIN OF CUSTODY RECORD

CDM Federal Programs Corporation

PROJECT NAME HANFORD N. SLOPE

PROJECT NUMBER 6110-009

Field Log Book Reference No. 1

SAMPLE NUMBER			DATE	TIME	SAMPLE LOCATION	SAMPLE TYPE	ANALYSES: 4260	4270/4280	6010/7000	NUMBER OF CONTAINERS	LOG. BOOK PG. NO.	REMARKS
941214	BG1-01	002	7/15/94	0730	PSN1214 BOC3C6	SOIL	X			2x125ML	33	CDMHN553*42
42 941214	BG1-01	002	7/15/94	0730	PSN-1214 BOC3C6	SOIL		X		1x250ML	33	
941214	BG1-01	002	7/15/94	0730	PSN1214 BOC3C6	SOIL			X	1x250ML	33	
941214	WC1-01	000	7/15/94	0900	PSN1214 BOC3C7	SOIL	X			2x125ML	33	CDMHN553*43
43 941214	WC1-01	000	7/15/94	0900	PSN1214 BOC3C7	SOIL		X		1x250ML	33	
941214	WC1-01	000	7/15/94	0900	PSN1214 BOC3C7	SOIL			X	2x250ML	33	EXTRA VOLUME

ESE SAMPLE RECEIVING
LDD: 7/20/94
Field Group #: CDMHN553 *
Strat List: CDMHN553.1
Custody Seal(s) Intact?: Y N N.A.

SAMPLED BY (SIGN) [signature]

Cooler Temp. (°C): 4°
Preservation Audited? Y N N.A.

RELINQUISHED BY (SIGN)	RELINQUISHED BY (SIGN)	RELINQUISHED BY (SIGN)	RELINQUISHED BY (SIGN)	RELINQUISHED BY (SIGN)
① BRADLEY R ZOLLA	② Michael F McGowan	③	④	⑤
DATE/TIME (7/15/94 1010:20)	DATE/TIME (7/15/94 1300)	DATE/TIME (/)	DATE/TIME (/)	DATE/TIME (/)
RECEIVED BY (SIGN)	RECEIVED BY (SIGN)	RECEIVED BY (SIGN)	RECEIVED BY (SIGN)	RECEIVED BY (SIGN)
① Michael F McGowan	② Ta Ainbill	③	④	⑤
DATE/TIME (7/15/94 1020)	DATE/TIME (7/15/94 1300)	DATE/TIME (/)	DATE/TIME (/)	DATE/TIME (/)

METHOD OF SHIPMENT	SHIPPED BY (SIGN)	RECEIVED FOR LABORATORY BY (SIGN)	DATE/TIME
Fed Ex 158484211	Michael F McGowan	[signature]	(7/16/94 1200)

Copies: Ship with Samples

LEGEND: Original: Return to Sample Traffic Control Center

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