report.hw.152032.1995-03-01.Analytical_Data_Package_Pest/PCB_Water

Magnesonics 130031

Analytical Data Package For

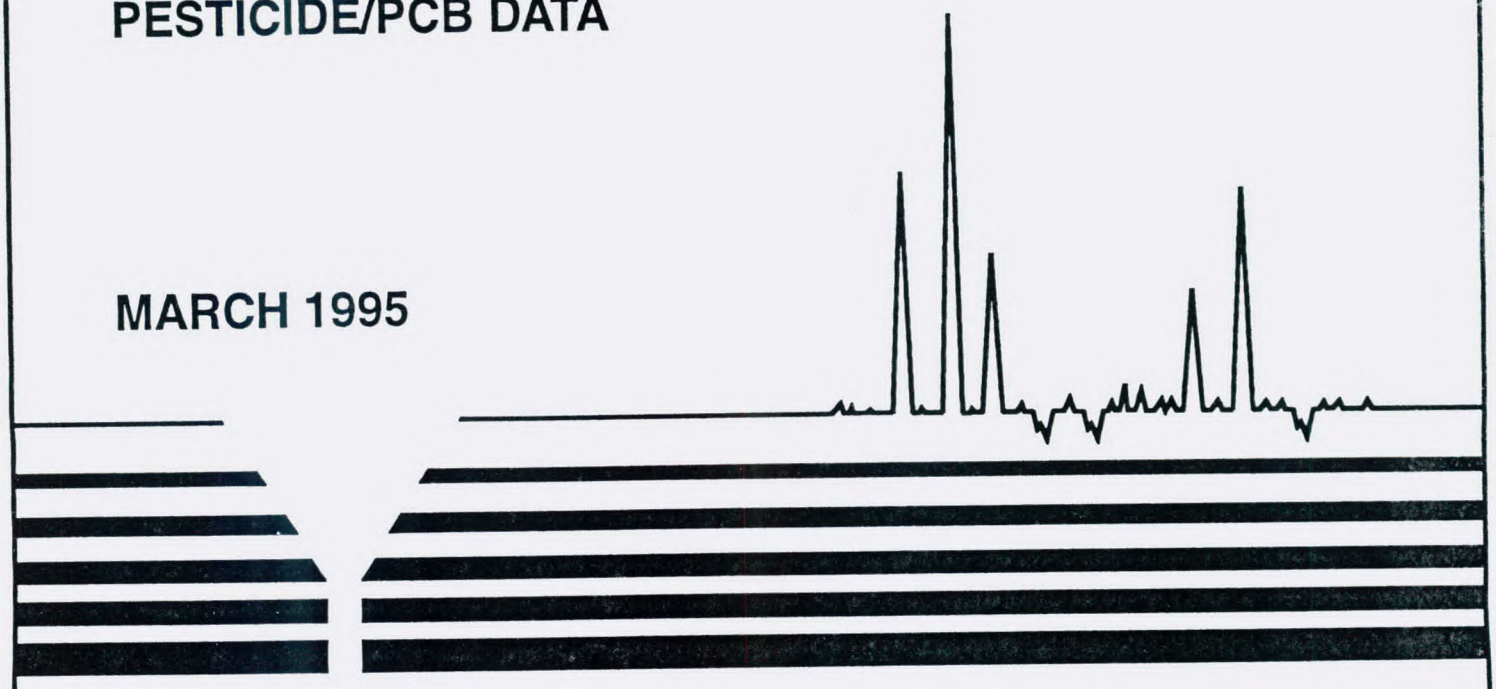
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

REGION 1
CONTRACT #: C003180
CASE #: SH195 SDG#: A026

Water Samples
RECEIVED: March 23, 1995

PESTICIDE/PCB DATA

MARCH 1995



H2M LABS, INC.
Environmental Testing Laboratories
575 Broad Hollow Road, Melville, N.Y. 11747

Case: SH195
SDG: A026

H2M LABS, INC.

PESTICIDES/PCBs

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2E

WATER PESTICIDE SURROGATE RECOVERY

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ CD03180 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

GC Column(1): RTX-5 ID: 0.53 (mm) GC Column(2): RTX-35 ID: 0.53 (mm)

	EPA SAMPLE NO.	TCX 1 %REC	#	TCX 2 %REC	#	DCB 1 %REC	#	DCB 2 %REC	#	OTHER (1)	OTHER (2)	TOT OUT
01	PBLK01	83		74		91		83				0
02	MSB-03-27	75		67		86		78				0
03	MW03E2	101		96		144		100				0
04	MW07E2	78		65		81		76				0
05												
06												
07												
08												
09												
10												
11												
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27												
28												
29												
30												

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

\# Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

P 0003

WATER PESTICIDE MATRIX SPIKE BLANK RECOVERY

Lab Name: H2M LABS, INC. Contract: ~~NYDEC~~ C003180 (A) 4/17/95

Lab Code: _____ Case No: SH195 SAS No: _____ SDG No: A026

Matrix Spike - Sample No.: MSB-3-27

Compound	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MSB CONCENTRATION (ug/L)	MSB % REC	#	QC LIMITS REC.
gamma-BHC (Lindane)	0.50	0	0.380	76		56-123
Heptachlor	0.50	0	0.435	87		40-131
Aldrin	0.50	0	0.365	73		40-120
Dieldrin	1.0	0	0.825	83		52-126
Endrin	1.0	0	0.856	86		56-121
4,4' DDT	1.0	0	0.784	78		38-127

* Values outside of QC limits

Spike Recovery: 0 out of 6 outside limits

COMMENTS: _____

FORM III PEST-3

4C

EPA SAMPLE NO.

PESTICIDE METHOD BLANK SUMMARY

PBLK01

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

Lab Sample ID: B-3-27 Lab File ID: AC03884.CDF

Matrix: (soil/water) WATER Extraction:(SepF/Cont/Sonc) SEPF

Sulfur Cleanup: (Y/N) N Date Extracted: 3/27/95

Date Analyzed (1): 3/28/95 Date Analyzed (2): 3/28/95

Time Analyzed (1): 20:19:39 Time Analyzed (2): 20:19:39

Instrument ID (1): HPA Instrument ID (2): HPB

GC Column(1): RTX-5 ID: 0.53 (mm) GC Column(2): RTX-35 ID: 0.53 (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	MSB-03-27	MSB-03-27	3/28/95	3/28/95
02	MW03E2	9507026	3/28/95	3/28/95
03	MW07E2	9507027	3/28/95	3/28/95
04				
05				
06				
07				
08				
09				
10				
11				
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25				
26				

COMMENTS: _____

P 0005

***** IDL *****

HP 5890(0) 02/16/95

	RTX-5		RTX-35
	NG INJ		NG INJ
PROPACHLOR	0.0237	PROPACHLOR	0.0063
ALPHA-BHC	0.0009	ALPHA-BHC	0.0004
GAMMA-BHC	0.0018	GAMMA-BHC	0.0004
HEPTACHLOR	0.0009	HEPTACHLOR	0.0006
ENDOSULFAN I	0.0020	ENDOSULFAN I	0.0008
DIELDRIN	0.0023	DIELDRIN	0.0004
ENDRIN	0.0034	ENDRIN	0.0020
4,4'-DDD	0.0034	4,4'-DDD	0.0015
4,4'-DDT	0.0022	4,4'-DDT	0.0010
METHOXYCHLOR	0.0177	METHOXYCHLOR	0.0111
BETA-BHC	0.0002	BETA-BHC	0.0002
DELTA-BHC	0.0003	DELTA-BHC	0.0002
ALDRIN	0.0002	ALDRIN	0.0002
HEPT. EPOXIDE	0.0002	HEPT. EPOXIDE	0.0001
G. CHLORDANE	0.0003	G. CHLORDANE	0.0003
A. CHLORDANE	0.0003	A. CHLORDANE	0.0002
4,4'-DDE	0.0020	4,4'-DDE	0.0006
ENDOSULFAN II	0.0004	ENDOSULFAN II	0.0008
ENDRIN ALDEHYDE	0.0004	ENDRIN ALDEHYDE	0.0005
ENDO. SULFATE	0.0008	ENDO. SULFATE	0.0006
ENDRIN KETONE	0.0004	ENDRIN KETONE	0.0005
Technical Chlordane	0.0293	Technical Chlordane	0.0755
TOXAPHENE	0.0789	TOXAPHENE	0.0283
AR1016	0.0129	AR1016	0.0248
AR1260	0.0153	AR1260	0.0151

H2M LABS, INC.

II. SAMPLE DATA PACKAGE FOR PESTICIDES/PCBS

A. QUALIFIERS FOR REPORTING ORGANICS DATA

B. REPORTS

C. CHROMATOGRAMS AND DATA SYSTEM REPORTS

H2M LABS, INC.

QUALIFIERS FOR REPORTING ORGANICS DATA

Value - If the result is a value greater than or equal to the quantification limit, report the value.

U - Indicates compound was analyzed for but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to

$$\frac{330\ U}{D} \times df \quad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

For example, at 24% moisture, $D = \frac{100-24}{100} = 0.76$

$$\frac{330\ U}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For semivolatile soil samples, the extract must be concentrated to 0.5 mL, and the sensitivity of the analysis is not compromised by the cleanup procedures. Similarly, pesticide samples subjected to GPC are concentrated to 5.0 mL. Therefore, the CRQL values in Exhibit C will apply to all samples, regardless of cleanup. However, if a sample extract cannot be concentrated to the protocol-specified volume (see Exhibit C), this fact must be accounted for in reporting the sample quantitation limit.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed or when the mass spectral data indicates the presence of a compound that meets the identification criteria but the result is less than the specified quantification limit but greater than zero. (e.g.: If limit of quantification is 10 ug/l and a concentration of 3 ug/l is calculated, report as 3J.) The sample quantitation limit must be adjusted for dilution as discussed for the U flag.

N - Indicates presumptive evidence of a compound. This flag is only used for tentatively identified compounds, where the identification is based on a mass spectral library search. It is applied to all TIC results. For generic characterization of a TIC, such as chlorinated hydrocarbon, the N code is not used.

P - This flag is used for a pesticide/Aroclor target analyte when there is greater than 25% difference for detected concentrations between the two GC columns (see Form X). The lower of the two values is reported on Form I and flagged with a "P".

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, do not apply this flag, instead use a Laboratory-defined flag, discussed below.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified target compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. If one or more compounds have a response greater than full scale, except as noted in Exhibit D, the sample or extract must be diluted and re-analyzed according to the specifications in Exhibit D. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate copies of Form I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number. NOTE: For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of the peak representing the single isomer exceeds 200 ug/l or the peak representing the two coeluting isomers on that GC column exceeds 400 ug/l. Similarly, if the two 1,2-Dichloroethene isomers coelute, a diluted analysis is not required unless the concentration exceeds 400 ug/l.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample, and all concentration values reported on that Form I are flagged with the "D" flag. This flag alerts data users that any discrepancies between the concentrations reported may be due to dilution of the sample or extract.

A - This flag indicates that a TIC is a suspected aldol-condensation product.

X - Other specific flags may be required to properly define the results. If used, they must be fully described, and such description attached to the Sample Data Summary Package and the SDG narrative. Begin by using "X". If more than one flag is required, use "Y" and "Z" as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags as needed. For instance, the "X" flag might combine "A", "B", and "D" flags for some samples. The Laboratory defined flags limited to the letters "X", "Y" and "Z".

The combination of flags "BU" or "UB" is expressly prohibited. Blank contaminants are flagged "B" only when they are detected in the sample.

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW03E2

Lab Name: H2M LABS, INC. Contract: ~~NDEGB~~ C003180 AP 2/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

Matrix: (soil/water) WATER Lab Sample ID: 9507026

Sample wt/vol: 980 (g/mL) mL Lab File ID: BC03888.CDF

% Moisture: _____ decanted: (Y/N) N Date Received: 3/23/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 3/27/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 3/28/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

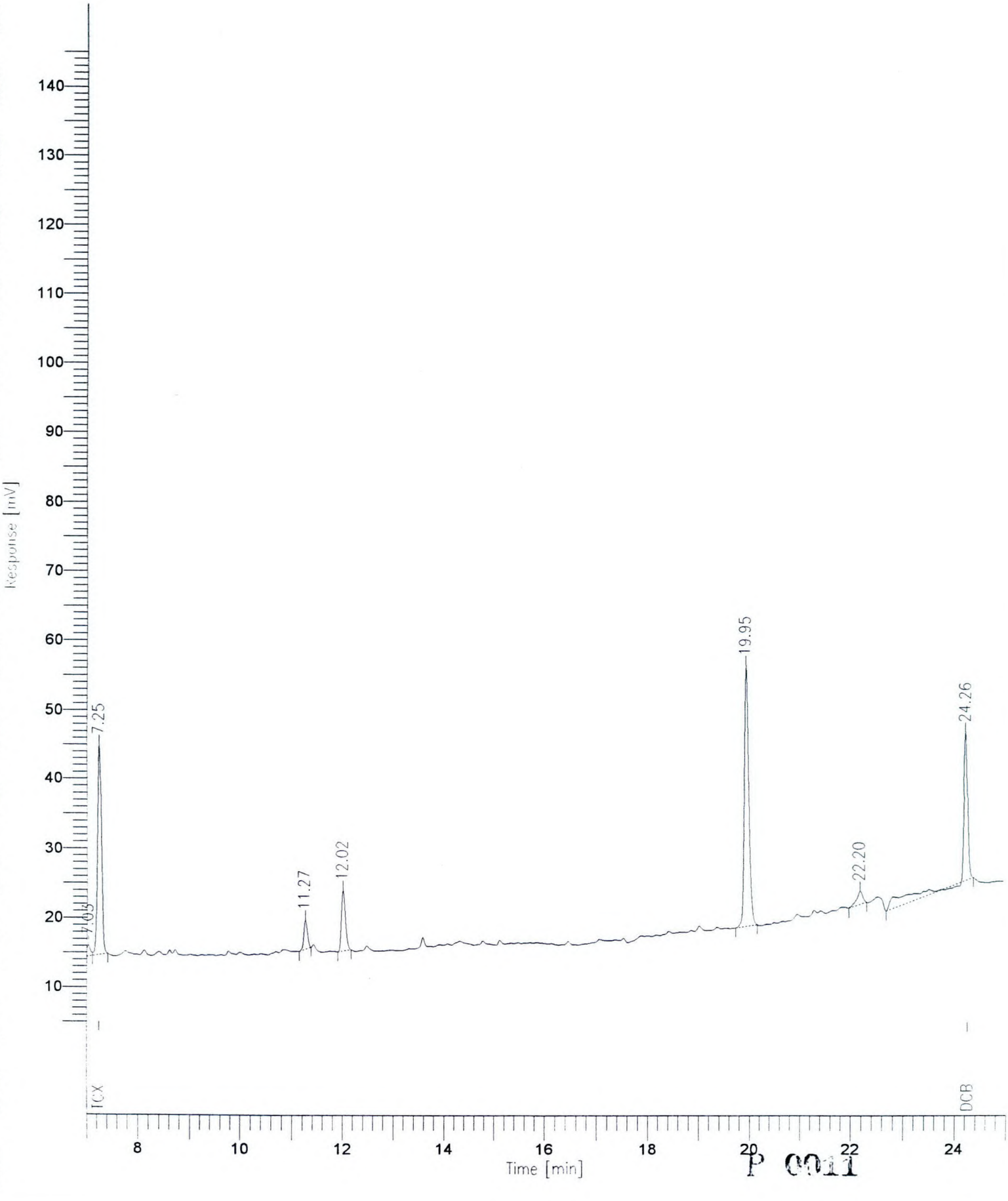
GPC Cleanup: (Y/N) N pH: _____ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.051	U
319-85-7	beta-BHC	0.051	U
319-86-8	delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.051	U
309-00-2	Aldrin	0.051	U
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.51	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.051	U
5103-74-2	gamma-Chlordane	0.051	U
8001-35-2	Toxaphene	5.1	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

Chromatogram

Sample Name : MW03E2
FileName : C:\TC4\DATA2\AC03888.raw
Method : HP
Start Time : 7.00 min End Time : 25.00 min
Scale Factor: 0.0 Plot Offset: 5 mV

Sample #: 9507026 Page 1 of 1
Date : 3/29/95 12:28 PM
Time of Injection: 3/28/95 11:08 PM
Low Point : 5.00 mV High Point : 145.00 mV
Plot Scale: 140.0 mV



P 001

Software Version: 4.0<3H19>
Sample Name : MW03E2 Time : 3/29/95 12:28 PM
Sample Number: 9507026 Study : 3-26-95
Operator :

Instrument : 970_-_2 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 9079570557 Data Acquisition Time: 3/28/95 11:08 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.0000 pts/sec

Raw Data File : C:\TC4\DATA2\AC03888.RAW
Result File : C:\TC4\DATA2\AC03888.RST
Inst Method : C:\TC4\DATA\HP from C:\TC4\DATA2\AC03888.RST
Proc Method : C:\TC4\DATA2\HPA.mth
Calib Method : C:\TC4\DATA2\HPA.mth
Sequence File : C:\TC4\DATA2\H0326.SEQ

Sample Volume : 2.0000 ul Area Reject : 5000.000000
Sample Amount : 980.0000 Dilution Factor : 1.00

Noise Threshold: 50 Area Threshold : 7000 Bunch Factor: 1
Multiplier : 5.0000 Divisor : 1.0000 Addend : 0.0000
User1 : HPA User2 : RTX-5
User3 : 0.53 User4 :
User5 : PIBLK01

Instrument Conditions:

Total number of peaks detected: 7

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HPA
COLUMN: RTX-5 0.53mm

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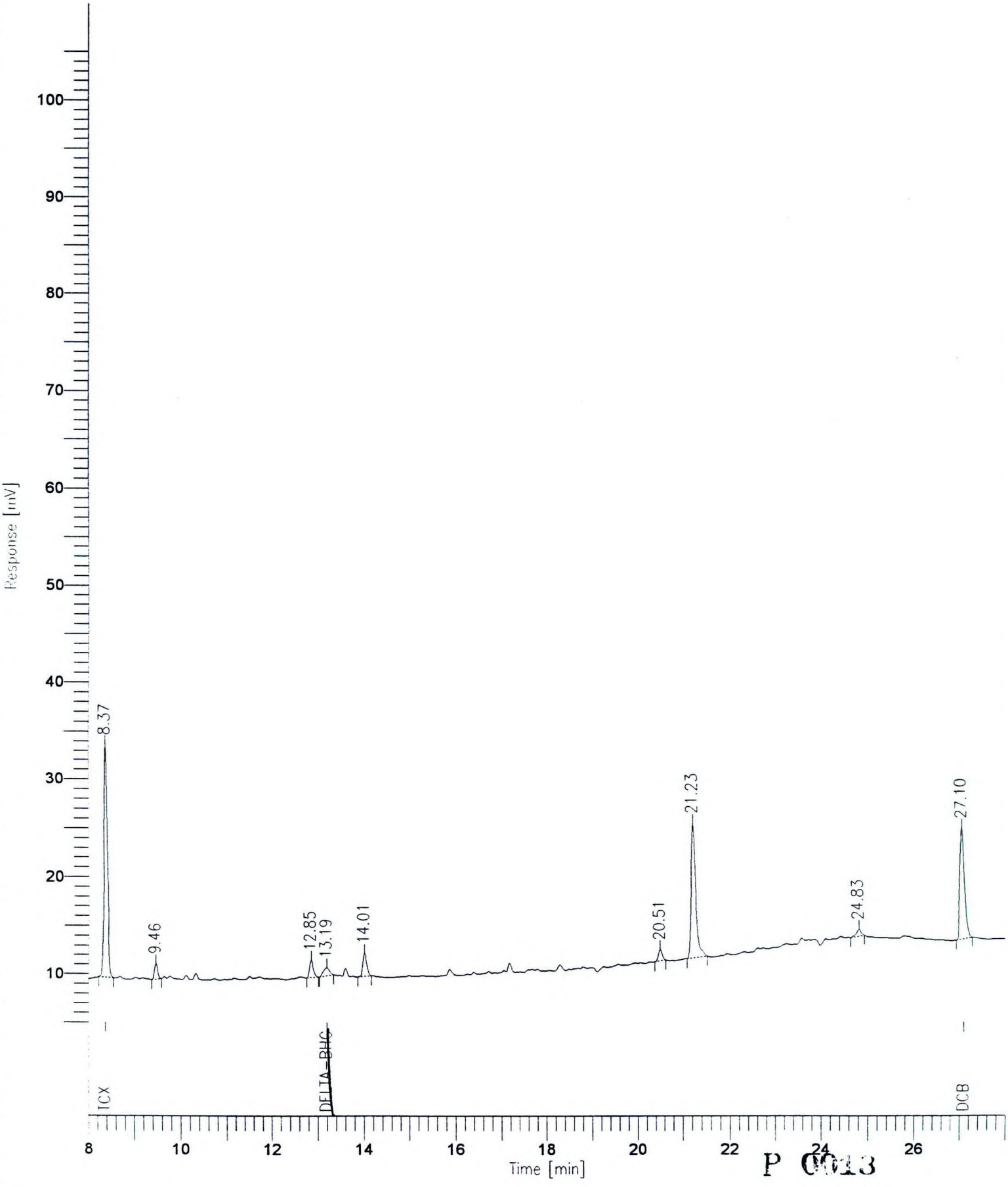
Peak Name	Concentration	Peak Retention Time [min]	Peak Area [µV·s]	Peak Height [µV]	Raw Amount
	0.235	7.03	9418	1666	0.0471
TCX	0.201	7.25	158558	30370	0.0402
	0.537	11.27	21494	4262	0.1075
	1.243	12.02	49704	8781	0.2485
	5.858	19.95	234318	37580	1.1716
	0.407	22.20	16271	1934	0.0814
DCB	0.287	24.26	159248	21603	0.0575
				106197	1.7537

P 0012

Chromatogram

Sample Name : MW03E2
FileName : C:\TC4\DATA2\BC03888.raw
Method : HP
Start Time : 8.00 min End Time : 28.00 min
Scale Factor: 0.0 Plot Offset: 5 mV

Sample #: 9507026 Page 1 of 1
Date : 3/29/95 12:28 PM
Time of Injection: 3/28/95 11:08 PM
Low Point : 5.00 mV High Point : 105.00 mV
Plot Scale: 100.0 mV



P 0013

Software Version: 4.0<3H19>
Sample Name : MW03E2 Time : 3/29/95 12:28 PM
Sample Number: 9507026 Study : 3-26-95
Operator :

Instrument : 970_-_2 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 9079570557 Data Acquisition Time: 3/28/95 11:08 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.0000 pts/sec

Raw Data File : C:\TC4\DATA2\BC03888.RAW
Result File : C:\TC4\DATA2\BC03888.RST
Inst Method : C:\TC4\DATA\HP from C:\TC4\DATA2\BC03888.RST
Proc Method : C:\TC4\DATA2\HPB.mth
Calib Method : C:\TC4\DATA2\HPB.mth
Sequence File : C:\TC4\DATA2\H0326.SEQ

Sample Volume : 2.0000 ul Area Reject : 5000.000000
Sample Amount : 980.0000 Dilution Factor : 1.00

Noise Threshold: 25 Area Threshold : 5000 Bunch Factor: 1
Multiplier : 5.0000 Divisor : 1.0000 Addend : 0.0000
User1 : HPB User2 : RTX-35
User3 : 0.53 User4 :
User5 : PIBLK01

Instrument Conditions:

Total number of peaks detected: 12

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HPB
COLUMN: RTX-35 0.53mm

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Peak Name	Concentration	Peak Retention Time [min]	Peak Area [µV·s]	Peak Height [µV]	Raw Amount
	65.764	1.06	2630550	285508	13.1527
	0.288	1.67	11534	2328	0.0577
	1.111	5.25	44452	7171	0.2223
TCX	0.191	8.37	121182	23943	0.0383
	0.196	9.46	7832	1627	0.0392
	0.253	12.85	10102	1804	0.0505
~~DELTA BHC~~ W1	0.013	13.19	7673	812	0.0027
	0.353	14.01	14106	2424	0.0705
	0.180	20.51	7182	1202	0.0359
	2.349	21.23	93950	13880	0.4698
DCB	0.199	27.10	82130	11443	0.0399
				352141	14.1794

P 0014

1D

PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

MW07E2

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

Matrix: (soil/water) WATER Lab Sample ID: 9507027

Sample wt/vol: 990 (g/mL) mL Lab File ID: BC03889.CDF

% Moisture: _____ decanted: (Y/N) N Date Received: 3/23/95

Extraction: (SepF/Cont/Sonc) SEPF Date Extracted: 3/27/95

Concentrated Extract Volume: 10000 (uL) Date Analyzed: 3/28/95

Injection Volume: 2.0 (uL) Dilution Factor: 1

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

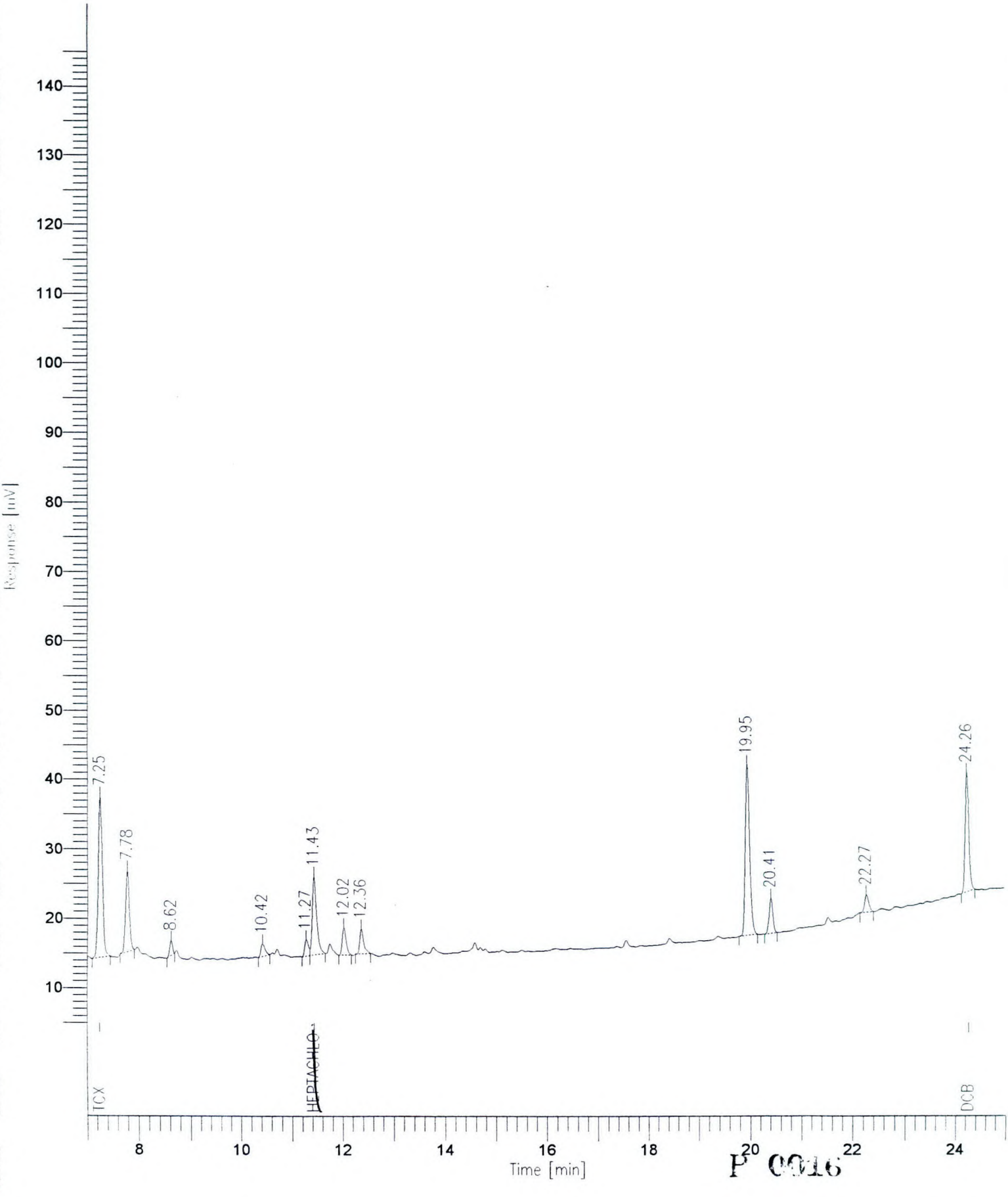
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/L	Q
319-84-6	alpha-BHC	0.051	U
319-85-7	beta-BHC	0.051	U
319-86-8	delta-BHC	0.051	U
58-89-9	gamma-BHC (Lindane)	0.051	U
76-44-8	Heptachlor	0.051	U
309-00-2	Aldrin	0.051	U
1024-57-3	Heptachlor epoxide	0.051	U
959-98-8	Endosulfan I	0.051	U
60-57-1	Dieldrin	0.10	U
72-55-9	4,4'-DDE	0.10	U
72-20-8	Endrin	0.10	U
33213-65-9	Endosulfan II	0.10	U
72-54-8	4,4'-DDD	0.10	U
1031-07-8	Endosulfan sulfate	0.10	U
50-29-3	4,4'-DDT	0.10	U
72-43-5	Methoxychlor	0.51	U
53494-70-5	Endrin ketone	0.10	U
7421-36-3	Endrin aldehyde	0.10	U
5103-71-9	alpha-Chlordane	0.051	U
5103-74-2	gamma-Chlordane	0.051	U
8001-35-2	Toxaphene	5.1	U
12674-11-2	Aroclor-1016	1.0	U
11104-28-2	Aroclor-1221	2.0	U
11141-16-5	Aroclor-1232	1.0	U
53469-21-9	Aroclor-1242	1.0	U
12672-29-6	Aroclor-1248	1.0	U
11097-69-1	Aroclor-1254	1.0	U
11096-82-5	Aroclor-1260	1.0	U

P

Chromatogram

Sample Name : MW07E2
FileName : C:\TC4\DATA2\AC03889.raw
Method : HP
Start Time : 7.00 min
End Time : 25.00 min
Scale Factor: 0.0
Plot Offset: 5 mV

Sample #: 9507027
Date : 3/29/95 12:29 PM
Time of Injection: 3/28/95 11:50 PM
Low Point : 5.00 mV
High Point : 145.00 mV
Plot Scale: 140.0 mV



P 0016

Software Version: 4.0<3H19>
Sample Name : MW07E2 Time : 3/29/95 12:29 PM
Sample Number: 9507027 Study : 3-26-95
Operator :

Instrument : 970_-_2 Channel : A A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 9079570557 Data Acquisition Time: 3/28/95 11:50 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.0000 pts/sec

Raw Data File : C:\TC4\DATA2\AC03889.RAW
Result File : C:\TC4\DATA2\AC03889.RST
Inst Method : C:\TC4\DATA\HP from C:\TC4\DATA2\AC03889.RST
Proc Method : C:\TC4\DATA2\HPA.mth
Calib Method : C:\TC4\DATA2\HPA.mth
Sequence File : C:\TC4\DATA2\H0326.SEQ

Sample Volume : 2.0000 ul Area Reject : 5000.000000
Sample Amount : 990.0000 Dilution Factor : 1.00

Noise Threshold: 50 Area Threshold : 7000 Bunch Factor: 1
Multiplier : 5.0000 Divisor : 1.0000 Addend : 0.0000
User1 : HPA User2 : RTX-5
User3 : 0.53 User4 :
User5 : PIBLK01

Instrument Conditions:

Total number of peaks detected: 13

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HPA
COLUMN: RTX-5 0.53mm

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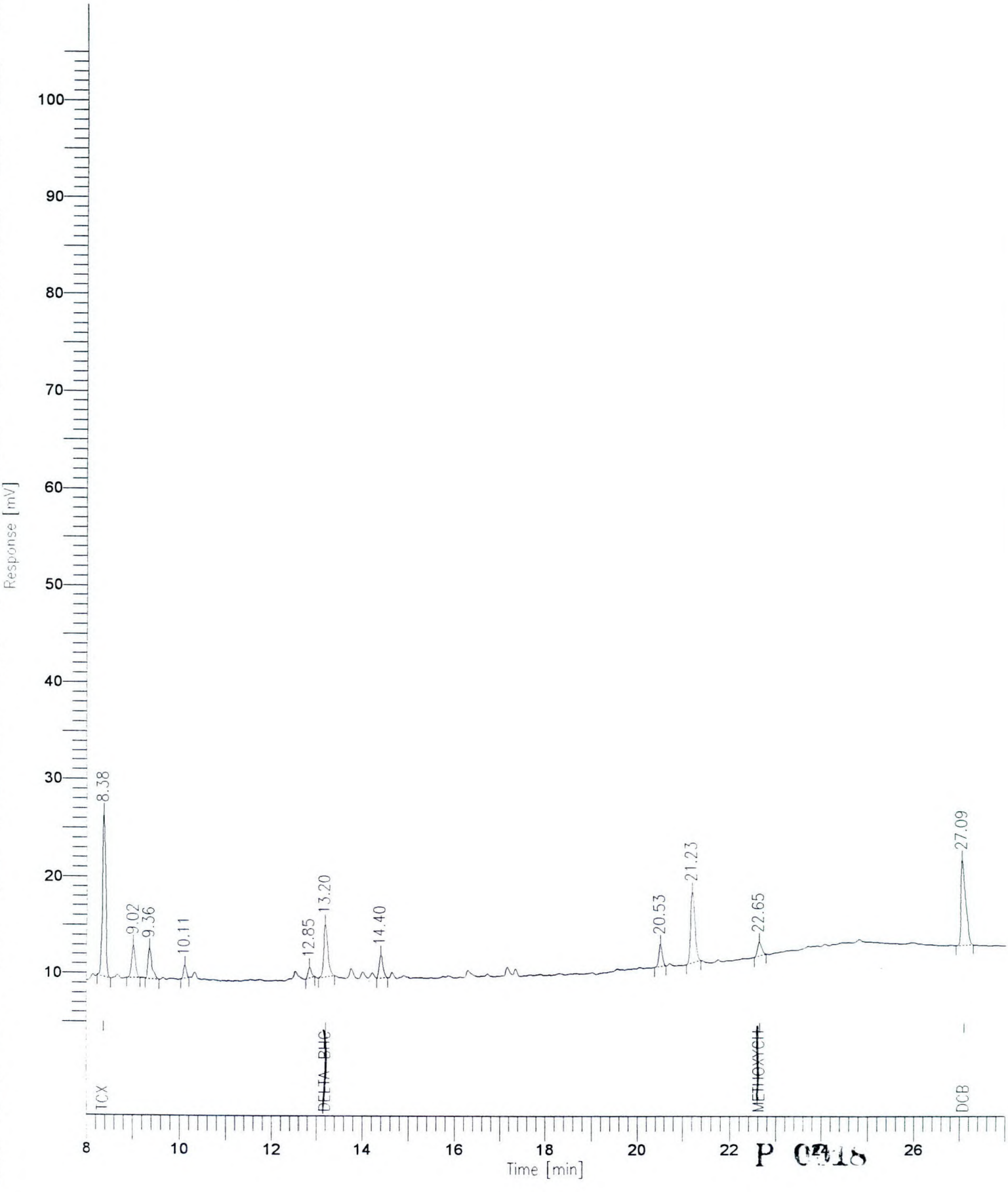
Peak Name	Concentration	Peak Retention Time [min]	Peak Area [µV·s]	Peak Height [µV]	Raw Amount
	0.183	6.65	7337	1370	0.0367
TCX	0.156	7.25	122824	23222	0.0312
	1.437	7.78	57472	11724	0.2874
	0.215	8.62	8604	2182	0.0430
	0.270	10.42	10816	1886	0.0541
	0.328	11.27	13139	2432	0.0657
~~HEPTACHLOR~~ W2	0.081	11.43	69580	11338	0.0162
	0.550	12.02	22016	4005	0.1101
	0.507	12.36	20270	3638	0.1013
	3.734	19.95	149341	24693	0.7467
	0.637	20.41	25486	5096	0.1274
	0.350	22.27	14016	2478	0.0701
DCB	0.161	24.26	89282	17265	0.0322
				111328	1.7221

P 0017

Chromatogram

Sample Name : MW07E2
FileName : C:\TC4\DATA2\BC03889.raw
Method : HP
Start Time : 8.00 min End Time : 28.00 min
Scale Factor: 0.0 Plot Offset: 5 mV

Sample #: 9507027 Page 1 of 1
Date : 3/29/95 12:29 PM
Time of Injection: 3/28/95 11:50 PM
Low Point : 5.00 mV High Point : 105.00 mV
Plot Scale: 100.0 mV



Software Version: 4.0<3H19>
Sample Name : MW07E2 Time : 3/29/95 12:29 PM
Sample Number: 9507027 Study : 3-26-95
Operator :

Instrument : 970_-_2 Channel : B A/D mV Range : 1000
AutoSampler :
Rack/Vial : 0/0

Interface Serial # : 9079570557 Data Acquisition Time: 3/28/95 11:50 PM
Delay Time : 0.00 min.
End Time : 30.00 min.
Sampling Rate : 2.0000 pts/sec

Raw Data File : C:\TC4\DATA2\BC03889.RAW
Result File : C:\TC4\DATA2\BC03889.RST
Inst Method : C:\TC4\DATA\HP from C:\TC4\DATA2\BC03889.RST
Proc Method : C:\TC4\DATA2\HPB.mth
Calib Method : C:\TC4\DATA2\HPB.mth
Sequence File : C:\TC4\DATA2\H0326.SEQ

Sample Volume : 2.0000 ul Area Reject : 5000.000000
Sample Amount : 990.0000 Dilution Factor : 1.00

Noise Threshold: 25 Area Threshold : 5000 Bunch Factor: 1
Multiplier : 5.0000 Divisor : 1.0000 Addend : 0.0000
User1 : HPB User2 : RTX-35
User3 : 0.53 User4 :
User5 : PIBLK01

Instrument Conditions:

Total number of peaks detected: 17

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HPB
COLUMN: RTX-35 0.53mm

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Peak Name	Concentration	Peak Retention Time [min]	Peak Area [µV·s]	Peak Height [µV]	Raw Amount
	5.298	1.03	211902	22426	1.0595
	0.155	2.21	6203	1122	0.0310
	0.157	2.94	6266	1069	0.0313
	3.183	5.26	127302	19497	0.6365
	0.200	6.11	8014	910	0.0401
	0.188	6.37	7510	1229	0.0375
TCX	0.130	8.38	82457	16930	0.0260
	0.464	9.02	18560	3458	0.0928
	0.457	9.36	18292	3232	0.0915
	0.141	10.11	5632	1321	0.0282
	0.139	12.85	5568	1061	0.0278
~~DELTA-BHC~~ W1	0.061	13.20	34827	5500	0.0122
	0.333	14.40	13339	2397	0.0667
	0.309	20.53	12368	2363	0.0618
	1.172	21.22	46863	7449	0.2343

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Peak Name	Concentration	Peak Retention Time [min]	Peak Area [µV·s]	Peak Height [µV]	Raw Amount
METHOXYCHLOR W1	0.050	22.65	9645	1474	0.0099
DCB	0.153	27.09	62982	8807	0.0306
				100246	2.5178

III. STANDARD DATA PACKAGE FOR PESTICIDES/PCBS

A. INITIAL CALIBRATION OF SINGLE COMP. ANALYTES (VI-1)
B. INITIAL CALIBRATIONS OF SINGLE COMP. ANALYTES (VI-2)
C. INITIAL CALIBRATION OF MULTI- COMP. ANALYTES (VI-3)
D. RESOLUTION SUMMARY (VI-4)
E. MULTI-LEVEL INITIAL CALIBRATIONS OF MULTI- COMP. ANALYTES (VI-5) (OPTIONAL)
F. CALIBRATION VERIFICATION SUMMARY FOR PERFORMANCE EVALUATION MIX (VII-1)
G. CALIBRATION VERIFICATION SUMMARY FOR INDIVIDUAL STANDARDS (VII-2)
H. CALIBRATION VERIFICATION SUMMARY FOR MULTICOMP. ANALYTES (VII-3) [OPTIONAL]
I. ANALYTICAL SEQUENCE (VIII)
J. FLORISIL CARTRIDGE CHECK (IX-1)
K. GPC CALIBRATION CHECK (IF NEEDED) (IX-2)
L. IDENTIFICATION SUMMARY FOR SINGLE COMP. ANALYTES (X-1)
M. IDENTIFICATION SUMMARY FOR MULTI- COMP. ANALYTES (X-2)
N. CHROMATOGRAMS COLUMN RTX-5
O. CHROMATOGRAMS COLUMN RTX-35
P. GPC COLUMN CALIBRATIONS (IF NEEDED)
Q. FLORISIL CHECK CHROMATOGRAM

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

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

GC Column: RTX-5 ID: 0.53 (mm) Date(s) Analyzed: 3/27/95 3/27/95

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	8.37	8.36	8.36	8.36	8.31	8.41
beta-BHC	9.15	9.15	9.15	9.15	9.10	9.20
delta-BHC	10.02	10.03	10.02	10.02	9.97	10.07
gamma-BHC (Lindane)	9.32	9.31	9.31	9.31	9.26	9.36
Heptachlor	11.41	11.40	11.41	11.41	11.36	11.46
Aldrin	12.44	12.45	12.44	12.44	12.39	12.49
Heptachlor epoxide	13.63	13.63	13.63	13.63	13.56	13.70
Endosulfan I	14.72	14.71	14.71	14.71	14.64	14.78
Dieldrin	15.50	15.49	15.49	15.49	15.42	15.56
4,4'-DDE	15.36	15.37	15.36	15.36	15.29	15.43
Endrin	16.15	16.14	16.15	16.15	16.08	16.22
Endosulfan II	16.43	16.43	16.42	16.43	16.36	16.50
4,4'-DDD	16.62	16.61	16.61	16.61	16.54	16.68
Endosulfan sulfate	17.67	17.67	17.67	17.67	17.60	17.74
4,4'-DDT	17.70	17.70	17.70	17.70	17.63	17.77
Methoxychlor	19.37	19.37	19.37	19.37	19.30	19.44
Endrin ketone	19.05	19.06	19.05	19.06	18.99	19.13
Endrin aldehyde	16.98	16.98	16.98	16.98	16.91	17.05
alpha-Chlordane	14.78	14.78	14.78	14.78	14.71	14.85
gamma-Chlordane	14.33	14.34	14.33	14.33	14.26	14.40
Tetrachloro-m-xylene	7.24	7.23	7.23	7.23	7.18	7.28
Decachlorobiphenyl	24.26	24.25	24.25	24.25	24.20	24.30

* 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.

P 0022

6D

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: H2M LABS, INC. Contract: ~~NDEGB~~ C003180 4/11/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

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

GC Column: RTX-35 ID: 0.53 (mm) Date(s) Analyzed: 3/27/95 3/27/95

COMPOUND	RT OF STANDARDS LOW	MID	HIGH	MEAN RT	RT WINDOW FROM	TO
alpha-BHC	10.54	10.54	10.54	10.54	10.49	10.59
beta-BHC	12.06	12.06	12.06	12.06	12.01	12.11
delta-BHC	13.21	13.21	13.21	13.21	13.16	13.26
gamma-BHC (Lindane)	11.81	11.81	11.81	11.81	11.76	11.86
Heptachlor	13.08	13.07	13.08	13.08	13.03	13.13
Aldrin	14.14	14.14	14.14	14.14	14.09	14.19
Heptachlor epoxide	15.86	15.86	15.86	15.86	15.79	15.93
Endosulfan I	17.00	16.99	17.00	17.00	16.93	17.07
Dieldrin	17.91	17.91	17.91	17.91	17.84	17.98
4,4'-DDE	17.62	17.62	17.62	17.62	17.55	17.69
Endrin	18.96	18.95	18.96	18.96	18.89	19.03
Endosulfan II	19.51	19.51	19.51	19.51	19.44	19.58
4,4'-DDD	19.29	19.29	19.29	19.29	19.22	19.36
Endosulfan sulfate	20.90	20.90	20.90	20.90	20.83	20.97
4,4'-DDT	20.24	20.23	20.23	20.23	20.16	20.30
Methoxychlor	22.61	22.60	22.60	22.60	22.53	22.67
Endrin ketone	23.01	23.01	23.01	23.01	22.94	23.08
Endrin aldehyde	20.42	20.42	20.42	20.42	20.35	20.49
alpha-Chlordane	16.93	16.93	16.93	16.93	16.86	17.00
gamma-Chlordane	16.46	16.46	16.46	16.46	16.39	16.53
Tetrachloro-m-xylene	8.36	8.36	8.36	8.36	8.31	8.41
Decachlorobiphenyl	27.09	27.08	27.08	27.08	27.03	27.13

* 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: H2M LABS, INC. Contract: ~~NDECB~~ 003180 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

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

GC Column: RTX-5 ID: 0.53 (mm) Date(s) Analyzed: 3/27/95 3/27/95

COMPOUND	CALIBRATION FACTORS LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	4366500	5080169	4844847	4763839	7.63
beta-BHC	2336000	2407163	2266648	2336604	3.01
delta-BHC	3750000	4468575	4595231	4271269	10.67
gamma-BHC (Lindane)	4292875	4793375	4506563	4530938	5.54
Heptachlor	4265050	4294200	3958200	4172483	4.46
Aldrin	3827750	4114725	4156803	4033093	4.44
Heptachlor epoxide	3868725	3956963	3849734	3891807	1.47
Endosulfan I	3345150	3527613	3266144	3379635	3.97
Dieldrin	3021475	3362006	3106609	3163364	5.60
4,4'-DDE	2773800	3175988	3217208	3055665	8.02
Endrin	2682100	2948244	2761592	2797312	4.88
Endosulfan II	2900400	2989153	2873472	2921008	2.07
4,4'-DDD	1925475	2322316	2341679	2196490	10.69
Endosulfan sulfate	1963175	2221600	2326425	2170400	8.61
4,4'-DDT	2146188	2659644	2476670	2427501	10.72
Methoxychlor	1335630	1301195	1132508	1256444	8.65
Endrin ketone	2889550	3038909	2921822	2950094	2.66
Endrin aldehyde	2288700	2314363	2265734	2289599	1.06
alpha-Chlordane	3894800	3932013	3758958	3861923	2.36
gamma-Chlordane	3861675	3891944	3777475	3843698	1.54
Tetrachloro-m-xylene	4050825	3941300	3359978	3784034	9.81
Decachlorobiphenyl	2926150	2769938	2297966	2664684	12.27

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

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 AD 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date(s): 3/26/95 3/27/95

EPA Sample No.(PIBLK): PIBLK05 Date Analyzed: 3/28/95

LAB Sample ID (PIBLK): PIBLK05 Time Analyzed: 18:55:29

EPA Sample No.(PEM): PEM04 Date Analyzed: 3/28/95

LAB Sample ID (PEM): PEM04 Time Analyzed: 19:37:35

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	8.36	8.31	8.41	0.022	0.020	9.7
beta-BHC	9.15	9.10	9.20	0.025	0.020	24.3
gamma-BHC (Lindane)	9.31	9.26	9.36	0.024	0.020	17.8
Endrin	16.14	16.08	16.22	0.115	0.100	15.3
4,4'-DDT	17.69	17.63	17.77	0.218	0.200	9.2
Methoxychlor	19.36	19.30	19.44	0.550	0.500	10.0

4,4'-DDT % breakdown(1): 0.0 Endrin % breakdown (1): 7.5

Combined % breakdown(1): 7.5

6E

PESTICIDE INITIAL CALIBRATION OF SINGLE COMPONENT ANALYTES

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

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

GC Column: RTX-35 ID: 0.53 (mm) Date(s) Analyzed: 3/27/95 3/27/95

COMPOUND	CALIBRATION FACTORS LOW	MID	HIGH	MEAN	%RSD
alpha-BHC	2770700	3235913	3220397	3075670	8.59
beta-BHC	1606750	1798163	1591728	1665547	6.91
delta-BHC	2151750	2860338	2769339	2593809	14.86
gamma-BHC (Lindane)	2735100	3027375	3066891	2943122	6.16
Heptachlor	2072350	2027838	1987013	2029067	2.10
Aldrin	2158550	2697369	2644472	2500130	11.88
Heptachlor epoxide	2342500	2626513	2438069	2469027	5.85
Endosulfan I	2109550	2156206	2127697	2131151	1.10
Dieldrin	2014525	2171775	2109772	2098691	3.77
4,4'-DDE	1726863	2221350	2105972	2018061	12.82
Endrin	1629700	1748788	1744473	1707654	3.96
Endosulfan II	1659388	1970375	1809688	1813150	8.58
4,4'-DDD	1482100	1672500	1664753	1606451	6.71
Endosulfan sulfate	1395313	1745525	1650102	1596980	11.34
4,4'-DDT	1700550	1836225	1854600	1797125	4.68
Methoxychlor	1035843	970362	865830	957345	8.96
Endrin ketone	1721850	2129019	1950474	1933781	10.55
Endrin aldehyde	1372975	1585231	1445395	1467867	7.35
alpha-Chlordane	2376725	2640963	2432009	2483232	5.61
gamma-Chlordane	2358600	2628831	2429308	2472246	5.67
Tetrachloro-m-xylene	3240800	3167888	2784553	3064414	8.00
Decachlorobiphenyl	2214500	2059113	1791295	2021636	10.59

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

6F

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 (AA) 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

Instrument ID: HPA Date(s) Analyzed: 3/26/95 3/27/95

GC Column: RTX-5 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	1.000	*1	15.37	15.30	15.44	39823
		*2	16.78	16.71	16.85	82005
		*3	20.24	20.17	20.31	55581
		4				
		5				
Aroclor-1016	0.200	*1	10.13	10.06	10.20	105950
		*2	10.92	10.85	10.99	335450
		*3	11.22	11.15	11.29	127625
		4				
		5				
Aroclor-1221	0.400	*1	7.85	7.78	7.92	44060
		*2	8.15	8.08	8.22	38402
		*3	8.33	8.26	8.40	113416
		4				
		5				
Aroclor-1232	0.200	*1	10.15	10.08	10.22	46175
		*2	10.94	10.87	11.01	150133
		*3	11.26	11.19	11.33	89196
		4				
		5				
Aroclor-1242	0.200	*1	10.15	10.08	10.22	88468
		*2	10.94	10.87	11.01	302809
		*3	11.25	11.18	11.32	141721
		4				
		5				
Aroclor-1248	0.200	*1	10.93	10.86	11.00	143490
		*2	11.96	11.89	12.03	128586
		*3	12.96	12.89	13.03	139937
		4				
		5				
Aroclor-1254	0.200	*1	13.88	13.81	13.95	189051
		*2	14.53	14.46	14.60	228182
		*3	15.64	15.57	15.71	238939
		4	16.38	16.31	16.45	279785
		5				
Aroclor-1260	0.200	*1	20.63	20.56	20.70	165550
		*2	20.85	20.78	20.92	82421
		*3	21.00	20.93	21.07	100893
		4				
		5				

* Denotes required peaks

6F

PESTICIDE INITIAL CALIBRATION OF MULTICOMPONENT ANALYTES

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 (A) 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

Instrument ID: HPB Date(s) Analyzed: 3/26/95 3/27/95

GC Column: RTX-35 ID: 0.53 (mm)

COMPOUND	AMOUNT (ng)	PEAK	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR
Toxaphene	1.000	*1	19.71	19.64	19.78	66512
		*2	21.11	21.04	21.18	35535
		*3	23.27	23.20	23.34	29774
		4				
		5				
Aroclor-1016	0.200	*1	11.69	11.62	11.76	176155
		*2	12.98	12.91	13.05	298558
		*3	13.45	13.38	13.52	116615
		4				
		5				
Aroclor-1221	0.400	*1	9.62	9.55	9.69	47503
		*2	10.09	10.02	10.16	27615
		*3	10.31	10.24	10.38	90230
		4				
		5				
Aroclor-1232	0.200	*1	11.72	11.65	11.79	93400
		*2	13.00	12.93	13.07	139955
		*3	13.48	13.41	13.55	38145
		4				
		5				
Aroclor-1242	0.200	*1	11.72	11.65	11.79	146073
		*2	13.01	12.94	13.08	242363
		*3	13.48	13.41	13.55	67058
		4				
		5				
Aroclor-1248	0.200	*1	12.99	12.92	13.06	163909
		*2	14.05	13.98	14.12	109154
		*3	14.99	14.92	15.06	120428
		4				
		5				
Aroclor-1254	0.200	*1	15.93	15.86	16.00	67554
		*2	16.60	16.53	16.67	173483
		*3	17.78	17.71	17.85	89738
		4	19.06	18.99	19.13	108793
		5				
Aroclor-1260	0.200	*1	21.46	21.39	21.53	139249
		*2	23.10	23.03	23.17	76235
		*3	23.24	23.17	23.31	166331
		4				
		5				

* Denotes required peaks

P 0027

PESTICIDE ANALYTE RESOLUTION SUMMARY

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003480 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

GC Column(1): RTX-5 ID: 0.53 (mm) Instrument ID (1): HPA

EPA Sample No.(Standard 1): RESC01 Lab Sample ID (1): RESC01

Date Analyzed (1): 3/26/95 Time Analyzed (1): 19:06:04

	ANALYTE	RT	RESOLUTION (%)
01	Tetrachloro-m-xylene	7.23	100
02	gamma-Chlordane	14.33	100
03	Endosulfan I	14.71	100
04	4,4'-DDE	15.36	71
05	Dieldrin	15.49	71
06	Endosulfan sulfate	17.67	100
07	Endrin ketone	19.05	100
08	Methoxychlor	19.37	100
09	Decachlorobiphenyl	24.25	100

GC Column(2): RTX-35 ID: 0.53 (mm) Instrument ID (2): HPB

EPA Sample No. (Standard 2): RESC01 Lab Sample ID (2): RESC01

Date Analyzed (2): 3/26/95 Time Analyzed (2): 19:06:04

	ANALYTE	RT	RESOLUTION (%)
01	Tetrachloro-m-xylene	8.36	100
02	gamma-Chlordane	16.45	100
03	Endosulfan I	16.99	100
04	4,4'-DDE	17.61	100
05	Dieldrin	17.91	100
06	Endosulfan sulfate	20.90	100
07	Methoxychlor	22.60	100
08	Endrin ketone	23.00	100
09	Decachlorobiphenyl	27.07	100

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: H2M LABS, INC. Contract: ~~NDEGB~~ C603180 AB 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date(s): 3/26/95 3/27/95

EPA Sample No.(PIBLK): _____ Date Analyzed: _____

LAB Sample ID (PIBLK): _____ Time Analyzed: _____

EPA Sample No.(PEM): PEM01 Date Analyzed: 3/26/95

LAB Sample ID (PEM): PEM01 Time Analyzed: 19:52:10

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	8.36	8.31	8.41	0.019	0.020	6.7
beta-BHC	9.14	9.10	9.20	0.021	0.020	6.2
gamma-BHC (Lindane)	9.30	9.26	9.36	0.020	0.020	1.8
Endrin	16.14	16.08	16.22	0.101	0.100	1.4
4,4'-DDT	17.69	17.63	17.77	0.204	0.200	1.8
Methoxychlor	19.36	19.30	19.44	0.502	0.500	0.4

4,4'-DDT % breakdown(1): 0.0 Endrin % breakdown (1): 8.9

Combined % breakdown(1): 8.9

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: H2M LABS, INC. Contract: ~~NDECB~~ C003180 AB 4/11/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date(s): 3/26/95 3/27/95

EPA Sample No.(PIBLK): PIBLK01 Date Analyzed: 3/27/95

LAB Sample ID (PIBLK): PIBLK01 Time Analyzed: 6:41:02

EPA Sample No.(PEM): PEM02 Date Analyzed: 3/27/95

LAB Sample ID (PEM): PEM02 Time Analyzed: 7:27:26

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	8.36	8.31	8.41	0.018	0.020	8.2
beta-BHC	9.15	9.10	9.20	0.021	0.020	3.0
gamma-BHC (Lindane)	9.31	9.26	9.36	0.019	0.020	3.5
Endrin	16.15	16.08	16.22	0.099	0.100	1.4
4,4'-DDT	17.70	17.63	17.77	0.197	0.200	1.7
Methoxychlor	19.37	19.30	19.44	0.483	0.500	3.3

4,4'-DDT % breakdown(1): 0.0 Endrin % breakdown (1): 8.6

Combined % breakdown(1): 8.6

7D

PESTICIDE CALIBRATION VERIFICATION SUMMARY

Lab Name: H2M LABS, INC. Contract: ~~NDEQB~~ C003180 RD 4/17/95

Lab Code: _____ Case No.: SH195 SAS No.: _____ SDG No.: A026

GC Column: RTX-5 ID: 0.53 (mm) Init. Calib. Date(s): 3/26/95 3/27/95

EPA Sample No.(PIBLK): PIBLK07 Date Analyzed: 3/29/95

LAB Sample ID (PIBLK): PIBLK07 Time Analyzed: 15:56:35

EPA Sample No.(PEM): PEM05 Date Analyzed: 3/29/95

LAB Sample ID (PEM): PEM05 Time Analyzed: 16:39:17

PEM COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALC AMOUNT (ng)	NOM AMOUNT (ng)	RPD
alpha-BHC	8.36	8.31	8.41	0.022	0.020	11.0
beta-BHC	9.15	9.10	9.20	0.025	0.020	24.2
gamma-BHC (Lindane)	9.31	9.26	9.36	0.024	0.020	18.5
Endrin	16.14	16.08	16.22	0.120	0.100	20.2
4,4'-DDT	17.69	17.63	17.77	0.223	0.200	11.6
Methoxychlor	19.36	19.30	19.44	0.551	0.500	10.1

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

Combined % breakdown(1): 0.0