ORGANICS ANALYSIS DATA SHEET - Page 7 TCL-6

Sample Number
R2118
LOW LEVEL SOLID

Laboratory Name Mead CompuChem
Lab Sample ID No. 3201

Case Number 1764-SAS 548-R
QC Report No. 127-30

Multiply all Values and Detection Limits by 1 ☐ or 10 ☐ or ☐ _____
(Check Box for Appropriate Factor)

PESTICIDES Det. Lim. x 10

PP#	CAS#		ug/kg
(39P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

		DIOXINS	ug/kg
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.080U

GC SCREEN DATA SHEET

Laboratory Name Mead CompuChem

Case Number 1764

Sample ID Number	Fraction	GC Detectable* Medium Level	Date of Screen	Level of GC/MS Analysis**
R2118 3201	VOA			
	B/N/A			
	Pesticides	NO		L
	Dioxin	NO		L
	VOA			
	B/N/A			
	Pesticides			
	Dioxin			
	VOA			
	B/N/A			
	Pesticides			
	Dioxin			
	VOA			
	B/N/A			
	Pesticides			
	Dioxin			
	VOA			
	B/N/A			
	Pesticides			
	Dioxin			
	VOA			
	B/N/A			
	Pesticides			
	Dioxin			
	VOA			
	B/N/A			
	Pesticides			
	Dioxin			

*Answer Yes or No.
**Indicate "M" for medium level GC/MS analysis.
Indicate "L" for low level GC/MS analysis.

017503

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ORGANICS ANALYSIS DATA SHEET - Page 4

Lab Name Mead CompuChem EPA Case# 1764

CompuChem# 3201

Sample Number
R2118

A. SURROGATE SPIKE RESULTS

COMPOUND	Fraction	Concentration Total (ug)	(Surrogates only) Spike Added (ug)	% Recovery
d_8-Toluene	VOA			
d^4-1,2-Dichloroethane	VOA			

COMPOUND	Fraction	Concentration Total (ug)	(Surrogates only) Spike Added ug)	% Recovery
2-Fluorophenol	FSCC			
Pentafluorophenol	FSCC			
d_5-Nitrobenzene	FSCC			
2-Fluorobiphenyl	FSCC			
2-Fluoroaniline	FSCC			
Decafluorobiphenyl	FSCC			

COMPOUND	Fraction	Concentration Total (ug/L)	(Surrogates only) Spike Added (ug/L)	% Recovery
1,2,3,4-TCDD	TCDD	15.7	25	63

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A 30

DATA REPORTING QUALIFIERS

The attached list of footnotes is used by Mead CompuChem to qualify data results. This list incorporates and/or supersedes footnotes suggested in EPA contracts. Explicit definitions of the footnotes are also provided.

As specified contractually ~~and also enforced by Enterra personnel~~, notations or changes to data values are initialled by the CompuChem employee making and/or approving the change.

To eliminate any confusion between footnotes and initials, the following procedure is employed:

1. Footnotes are indicated to the left of the data value.

2. Initials are indicated to the right of the data value.

3. Initials are circled.

For example:

(87V) 79-01-6 Tricloroethylene ..... ug/l ~~BU~~ Q 1000 (KH)

Footnote value initial

The reported value of 1000 ug/l trichloroethylene has been calculated from a secondary ion (as indicated by Footnote Q). This notation has been initialled by a CompuChem employee with initials KH.

017505

LIST OF COMMONLY USED FOOTNOTES FOR EPA

II	Indistinguishable Isomers.
I	Presence indicated by extracted ion current profile; definitive spectra not obtainable due to interference.
Q	Quantitated from secondary ion.
CI	Concentration estimated; interferences present with primary quantitation ions.
D	Sample analysis using a _____ dilution.
SE	Sample extract could not be concentrated to 1.0 ml, thus the detection limits are higher than normal.
DL	Detection limits are adjusted to show change in sample quantity processed. The surrogate recoveries are not available.
SR	Surrogate recoveries are not available because it was necessary to dilute the extract, based on GC screening results.
SC	Suspected laboratory contaminant.
LT	Less than the specified detection limit but greater than one half of the detection limit (present but BDL).
EV	Estimated value. This footnote is used when estimating a concentration for a tentatively identified compound.
H	Volatile vial received with headspace.
SV	Amount corrected for sample volume.
DC	Compound calculated from a _____ dilution.
CR	Compound calculated using total RIC area. All secondary ions saturated.
PC	Pesticide or PCB confirmed by GC/MS.
PN	Pesticide or PCB cannot be confirmed by GC/MS.
U	Compound analyzed for but not detected. The number is the minimum detection limit.
BDL	Below Detection Limit

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QUALITY ASSURANCE NOTICE

Due to a laboratory accident the volatile
portion of this sample was not analyzed. - no sample left for repeat.

Susan R. Selepe
Quality Assurance Analyst

017507

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QUALITY ASSURANCE NOTICE

Due to insufficient sample remaining, the semi-volatile + dry wt. portion of this sample was not analyzed.

Susan R. Setzer
Quality Assurance Analyst

017508

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QUALITY CONTROL NOTICE

CASE# 1764

QC report# 127,30

Due to a poor sample matrix, the pesticide sample spike performed in this case was diluted 100:1. Accurate quantitation was still difficult however. Under normal quality control standards,another sample spike would have been performed. However, the other sample in this case batch showed similar matrix problems. Therefore, we are reporting the original pesticide sample spike and duplicate data.

Paul Mills

Paul Mills

Quality Assurance-Director 6/17/83

017509

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LOW SOLIDS

3208 3201 R2118
SAMPLE NO. ORIGINAL NO. EPA NO.
ASSOCIATED SAMPLE NOS: 3201, 3234

LAB NAME: MEAD COMPUCHEM
QC REPORT NO: 127-30

CASE NO: 1764

PPG	CAS#	COMPOUNDS	DRAG SAMPLE RESULTS	QC SAMPLE RESULTS	SPIKE ADDED ug/kg	% RECOVERY
(89P)	309-00-2	aldrin	ND	53.3	83.2	64
(90P)	60-57-1	dieldrin	ND	64.7	80.4	80
(91P)	57-74-9	chlordane				
(92P)	50-29-3	4,4'-DDT				
(93P)	72-55-9	4,4'-DDE				
(94P)	72-54-8	4,4'-DDD				
(95P)	115-29-7	endosulfan I				
(96P)	115-29-7	endosulfan II				
(97P)	1031-07-8	endosulfan sulfate				
(98P)	72-20-8	endrin				
(99P)	7421-43-4	endrin aldehyde				
(100P	76-44-8	heptachlor	ND	44.5	81.6	55
(101P	1024-57-3	heptachlor epoxide				
(102P	319-84-6	BHC-Alpha				
(103P	319-85-7	BHC-Beta				
(104P	319-86-8	BHC-Delta				
(105P	58-89-9	BHC-Gamma				
(106P	53469-21-9	PCB-1242				
(107P	11097-69-7	PCB-1254				
(108P	11104-28-2	PCB-1221				
(109P	11141-16-5	PCB-1232				
(110P	12672-29-6	PCB-1248				
(111P	11096-82-5	PCB-1260				
(112P	12674-11-2	PCB-1016				
(113P	8001-35-2	toxaphene				
		DIOXINS				
(129D)	1746-01-6	2,3,7,8-tetrachlorodibenzo p-dioxin				

Solid samples are prepared using a weighed portion, data is reported on a per weight basis.

Mead & 002

017510

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PESTICIDES DUPLICATE ANALYSIS

LOW SOLIDS

LAB NAME: Mead ComboChem®
QC REPORT No: 127-30
CASE NO: 1764

3209 3201 R2118
QC PLE NO. ORIGINAL NO. EPA NO.
ASSOCIATED SAMPLE NOS:

PPB	COMPOUNDS	QC SAMPLE RESULTS ug/kg	ORIG. SAMPLE RESULTS ug/kg	RELATIVE PERCENT DIFFERENCE
	Pesticides			
	PCB's			
39P	aldrin	120	53.3	77
90P	dieldrin	70	64.7	8
100P	heptachlor	140	44.5	104

S/S

*Liquid samples are prepared using a weighed portion, all data is reported on a per weight basis.

017511

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ORGANICS ANALYSIS DATA SHEET - Page 3

LOW LEVEL SOLID

Laboratory Name Mead CompuChem
Lab Sample ID No. Blank 3486
associated samples 3201, 3234

Case Number 1764
QC Report No. 136-28

Multiply Detection Limits by 1 ☐ or 10 ☐ or ☐
(Check Box for Appropriate Factor)

PESTICIDES

PP#	CAS#		ug/kg
(39P)	309-00-2	aldrin	4.0U
(90P)	60-57-1	dieldrin	4.0U
(91P)	57-74-9	chlordane	4.0U
(92P)	50-29-3	4,4'-DDT	4.0U
(93P)	72-55-9	4,4'-DDE	4.0U
(94P)	72-54-8	4,4'-DDD	4.0U
(95P)	115-29-7	endosulfan I	4.0U
(96P)	115-29-7	endosulfan II	4.0U
(97P)	1031-07-8	endosulfan sulfate	4.0U
(98P)	78-20-8	endrin	4.0U
(99P)	7421-43-4	endrin aldehyde	4.0U
(100P)	76-44-8	heptachlor	4.0U
(101P)	1024-57-3	heptachlor epoxide	4.0U
(102P)	319-84-6	BHC-Alpha	4.0U
(103P)	319-85-7	BHC-Beta	4.0U
(104P)	319-86-8	BHC-Delta	4.0U
(105P)	58-89-9	BHC-Gamma	4.0U
(106P)	53469-21-9	PCB-1242	4.0U
(107P)	11097-69-7	PCB-1254	4.0U
(108P)	11104-28-2	PCB-1221	4.0U
(109P)	11141-16-5	PCB-1232	4.0U
(110P)	12672-29-6	PCB-1248	4.0U
(111P)	11096-82-5	PCB-1260	4.0U
(112P)	12674-11-2	PCB-1016	4.0U
(113P)	8001-35-2	toxaphene	4.0U

DIOXINS

			ug/kg
(129B)	1746-01-6	2,3,7,8-tetrachlorodibenzo-p-dioxin	0.080U

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ORGANICS ANALYSIS DATA SHEET

Lab Name: Mead CompuChem

CASE# 1764

QC REPORT# 136-28

Lab Sample I.D. No. 3486 Blank-TCDD

Associated samples 3201, 3234

A. SURROGATE SPIKE RESULTS

COMPOUND	FRACTION	Unit Area Conc.	(Surrogates only) Spike Added	(Surrogates only) Unit Area	(Surrogates only) % Recovery
1,2,3,4-TCDD	PEST	205	250		82

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COMPUCHEM NO. 3486 DATE ______

IDENTIFIER TCDD - LOW LEVEL SOLID

COMPOUND LIST - NO. ____

COUNTER	COMPOUND NUMBER	COMPOUNDS	QUANT. REPORT VALUE	x	CORRECTION FACTOR	=	RESULTS (ug/kg)	DETECTION LIMIT(ug/kg)
5	469	2378-TCDD			*		BDL	20 x 0.008*

SURROGATE (1234-TCDD) RECOVERY =

$$\frac{\text{Quant Report Value M/E 320 (1234-TCDD)}^{\dagger}}{\text{250 (Spike Level) pg/ul}} \times 100\% =$$

$$\frac{205}{250} \times 100\% = \boxed{82\ \%}$$

† Quant. Report value M/E 230 (1234-TCDD) =

$$\frac{\text{200 pg/ul}}{\text{Area M/E 332 (Sample)}} \times \frac{\text{Area M/E 320 (1234-TCDD)}}{\text{RF Shift Std.}} =$$

$$\frac{200}{\ } \times \ \_\_\_\_ = \boxed{\ }$$

CORRECTION FACTOR =

$$\frac{\text{Final Extract Volume (ml)}\ (0.1)}{\text{0.1 ml}} \times \frac{\text{50 g}}{\text{Vol. Extracted (g)}\ (50.)} \times 0.008 = \boxed{0.008^{*}}$$

017514

JRT 6/83

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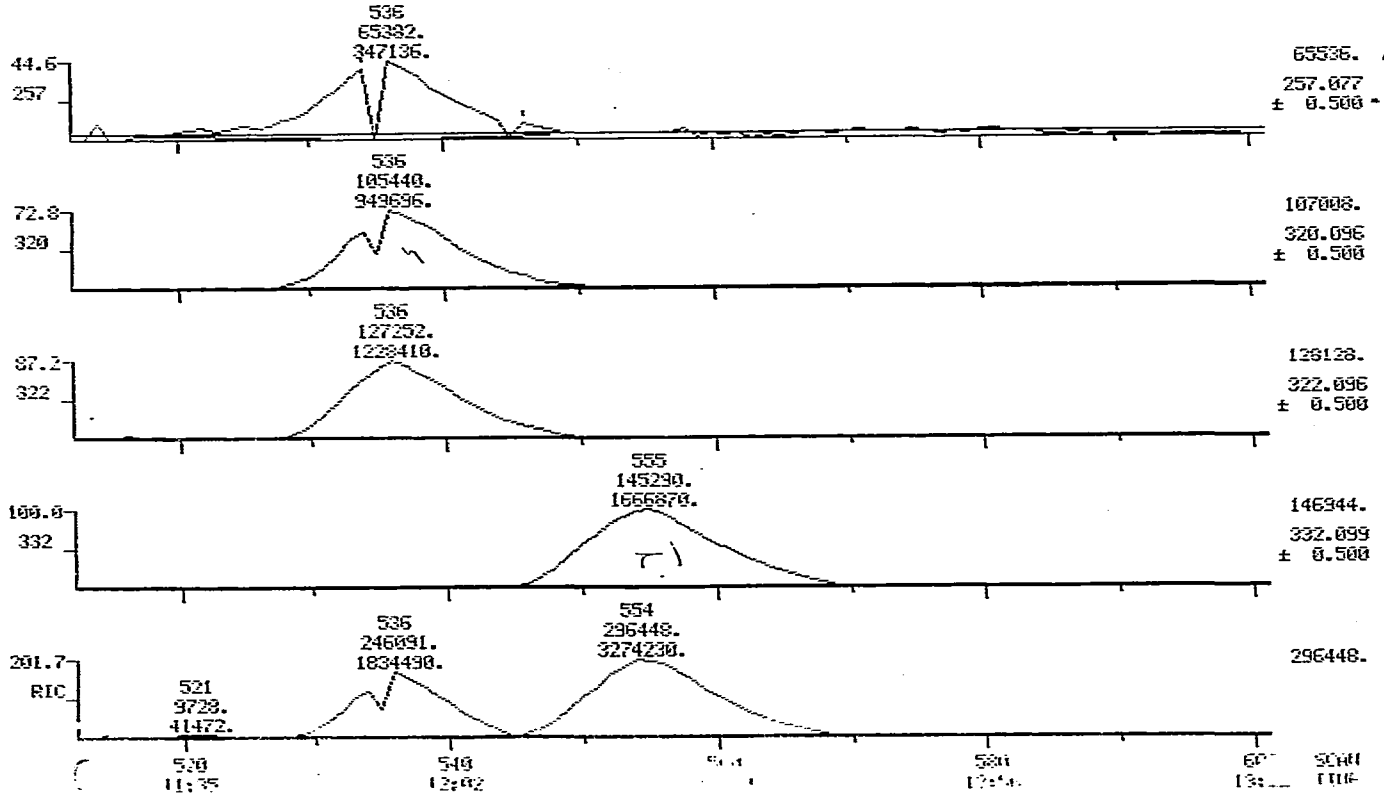
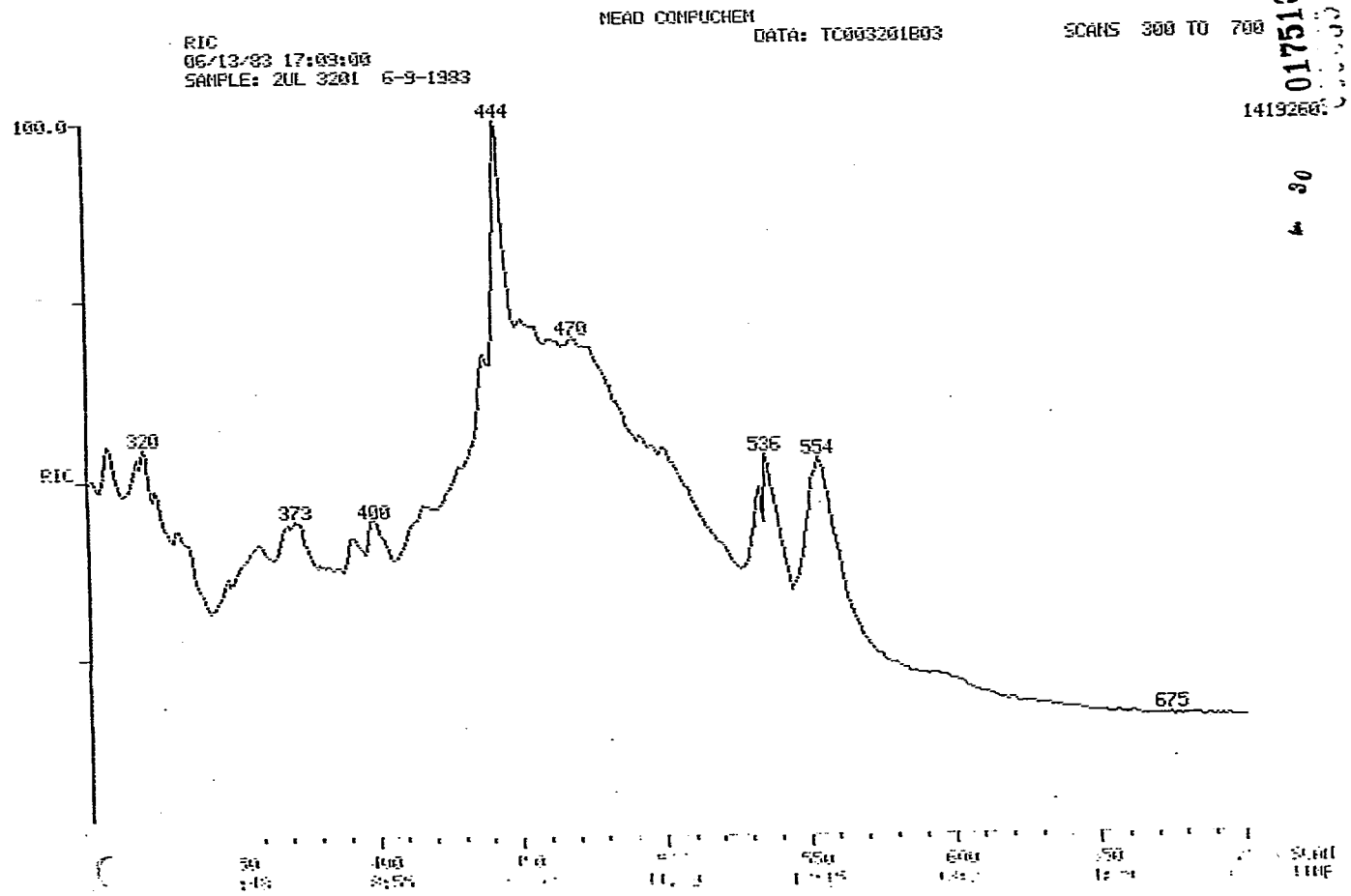
1746-01-6

NEAD COMPUCHEM

RIC + MASS CHROMATOGRAMS
06/13/83 17:09:00
SAMPLE: 2UL 3201 6-9-1983
2,3,7,8-TCDD

DATA: TC003201B03 SCANS 512 TO 601




MEAD COMPUCHEM
DATA: TC003201B03
SCANS 300 TO 700
RIC
06/13/83 17:03:00
SAMPLE: 2UL 3201 6-9-1983
100.0
RIC
444
470
320
373
400
536
554
675

MEAD COMPUCHEM

QUANTITATION REPORT FILE: TC003201B03

DATA: TC003201B03.TI
DATE: 6/13/83 17:09:00
SAMPLE: 2UL 3201 6-9-1983
SUBMITTED BY: 03 ANALYST: 727

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

NO	NAME
1	*13C12-2,3,7,8-TCDD(INTERNAL STANDARD)
2	1,2,3,4-TCDD
3	1,2,3,4-TCDD
4	1,2,3,4-TCDD
5	2,3,7,8-TCDD
6	2,3,7,8-TCDD
7	2,3,7,8-TCDD

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	332	555	12:22	1	1.000	A BB	1788810.	200.000 PG/UL	26.19
2	320	536	11:57	1	0.966	A*BB	1052280.	157.240 PG/UL	20.59
	322	536	11:57	1	0.966	A BB	1294070.	194.736 PG/UL	25.50
	257	536	11:57	1	0.966	A*VB	610048.	211.664 PG/UL	27.72
4	NOT FOUND								
5	NOT FOUND								
6	NOT FOUND								

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	12:15	1.01	1.000	1.00	200.00	200.00	1.000	1.000	1.00
2	11:59	1.00	0.969	1.00	157.24	200.00	0.588	0.748	0.79
3	11:58	1.00	0.968	1.00	194.74	200.00	0.723	0.743	0.97
4	11:58	1.00	0.968	1.00	211.66	200.00	0.341	0.322	1.06
5	12:22		1.000			200.00		0.555	
6	12:22		1.000			200.00		0.741	
7	12:24		1.002			200.00		0.260	

C017517

PROCEDURE: RK DIAGNOSTIC REPORT 6/13/83 21:50:14
DATA FILE: TC003201B03
REFERENCE: TC
METHOD: TC INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: TCS

---- STANDARDS ----				>< --- PLUS UNKNOWNS ---				>< - LIST NAMES - >
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
_	2	2	2	7	4	1	3	TCS/TCU

7 COMPOUNDS PROCESSED, 4 FOUND

COMPOUND ><		SEARCH					>< SAT ><		CHRO		
NO	LIB ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT PEAKS	M/E	TOF	DELTA	PEAKS
1	TC 1	555	554	554	.	2	832 .	332	555	1	1
2	TC 2	537	536	536	.	1	922 .	320	536	.	2
3	TC 3	537	536	536	.	1	922 .	322	536	.	1
4	TC 4	537	536	536	.	1	922 .	257	536	.	2
5	TC 5	557	556	.	.	.	. .	320	.	.	.
6	TC 6	557	556	.	.	.	. .	322	.	.	.
7	TC 7	-559	558	.	.	.	. .	257	.	.	.

017518

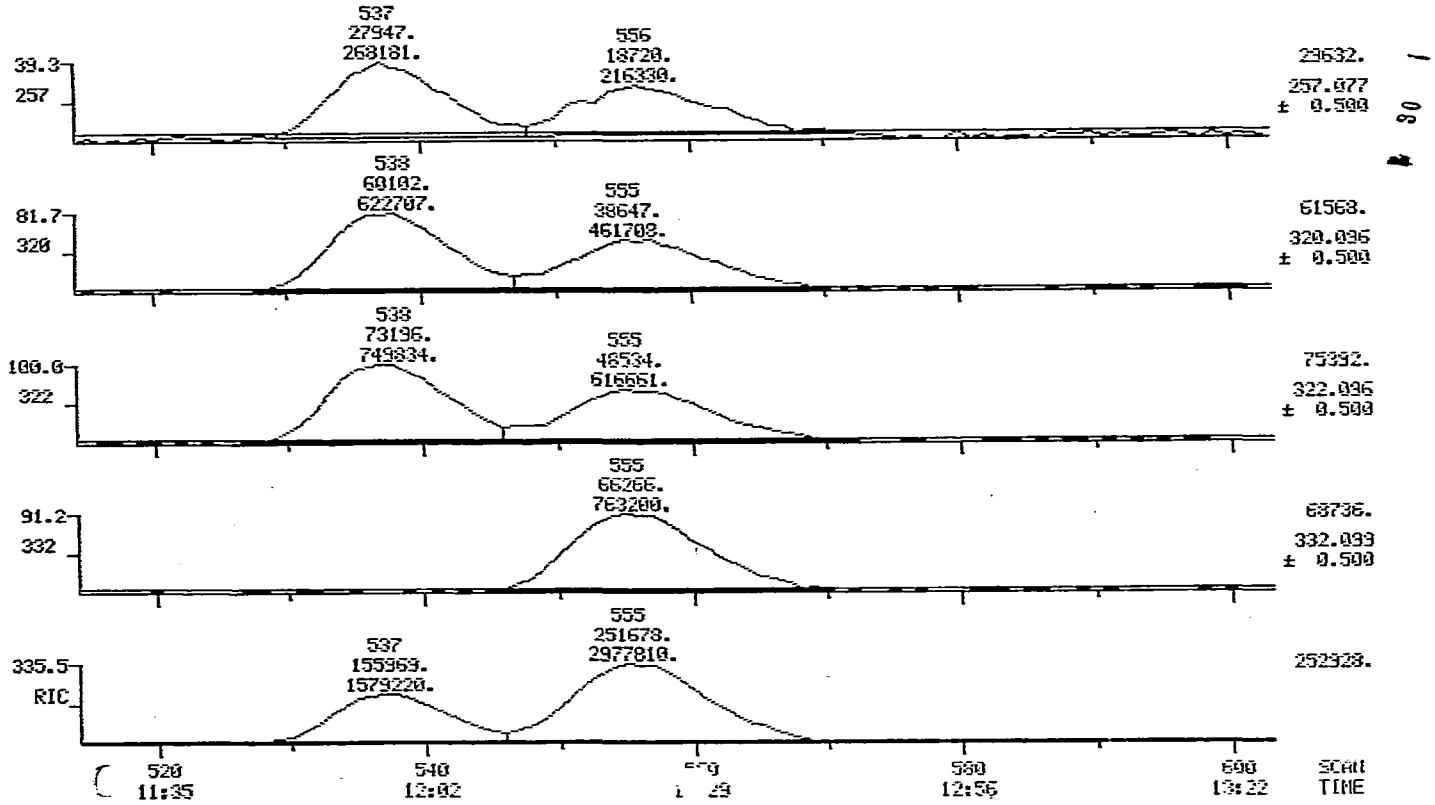
30 4 C[illegible]07

MEAD COMPUCHEM

RIC + MASS CHROMATOGRAMS
06/13/83 9:42:00
SAMPLE: 2UL TCDD STD #6949 ON #3
2,3,7,8-TCDD

DATA: TS830613A03

SCANS 514 TO



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017520

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Column A

1.5% 2250/1.95% 2401 Supelco
Cond.: 190, isothermal
Ar/CH_4, 25 cc/min.

Peaks, 0250 Standard

1A Alpha-BHC
2A Beta-BHC
3A Gamma-BHC
4A Heptachlor Epoxide
5A Alpha-Chlordane
6A p,p'-DDE
7A p,p'-DDD
8A p,p'-DDT
9A Endosulfan Sulfate

Peaks, 0266 Standard

10A Delta-BHC
11A Heptachlor
12A Aldrin
13A Delta-Chlordane
14A Endosulfan I
15A Dieldrin
16A Endrin
17A Endosulfan II
18A Endrin Aldehyde

Column B

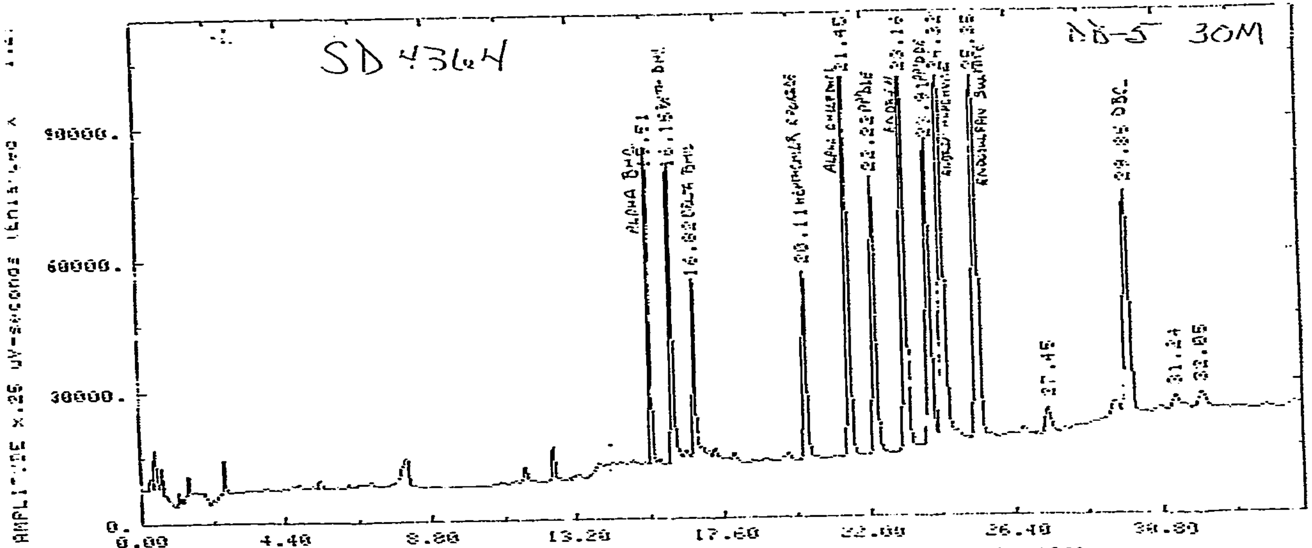
Capillary Column DB-5 30M
50 for 1 then 210 at 20
hold 1 then 250 at 3 hold 20
Ar/CH_4, 50 cm/sec

Peaks, 0250 Standard

1B Alpha-BHC
2B Beta-BHC
3B Gamma-BHC
4B Heptachlor Epoxide
5B Alpha-Chlordane
6B p,p'-DDE
7B p,p'-DDD
8B Endosulfan Sulfate
9B p,p'-DDT

Peaks, 0266 Standard

10B Delta-BHC
11B Heptachlor
12B Aldrin
13B Delta-Chlordane
14B Endosulfan I
15B Dieldrin
16B Endrin and Endosulfan II
17B Endrin Aldehyde



SAMPLE: SD 4364 INJECTED AT 12:17:46 ON JUN 8, 1983
Method: CAP09 Raw: R9327 Proc: P9327

017522

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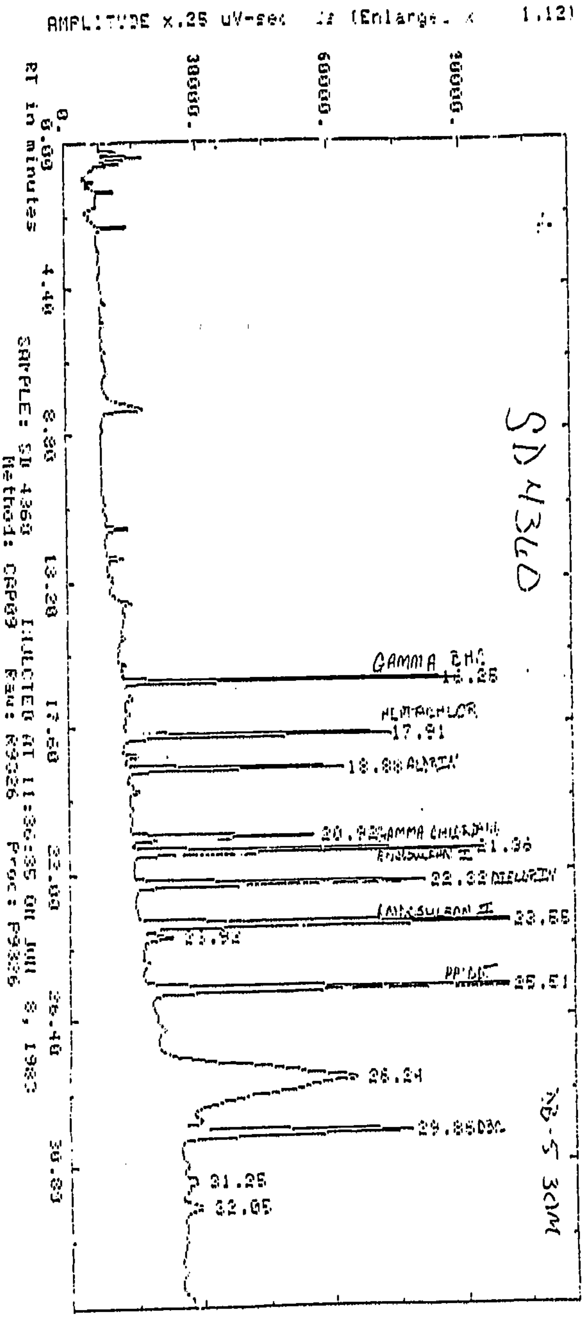
AMPLITUDE x.25 uV-sec (Enlarge x 1.12)
30000.
60000.
90000.
RT in minutes
4.40
8.80
13.20
17.60
22.00
26.40
30.80
SD 4360
GAMMA BHC
HEPTACHLOR
17.91
ALDRIN
20.92 GAMMA CHLORDANE
22.32 DIELDRIN
23.55
25.51
28.24
29.85
DB-5 30M
31.25
32.05
SAMPLE: SD 4360 INJECTED AT 11:36:35 ON JUN 8, 1983
Method: CRP09 Raw: R9326 Proc: P9326

017523

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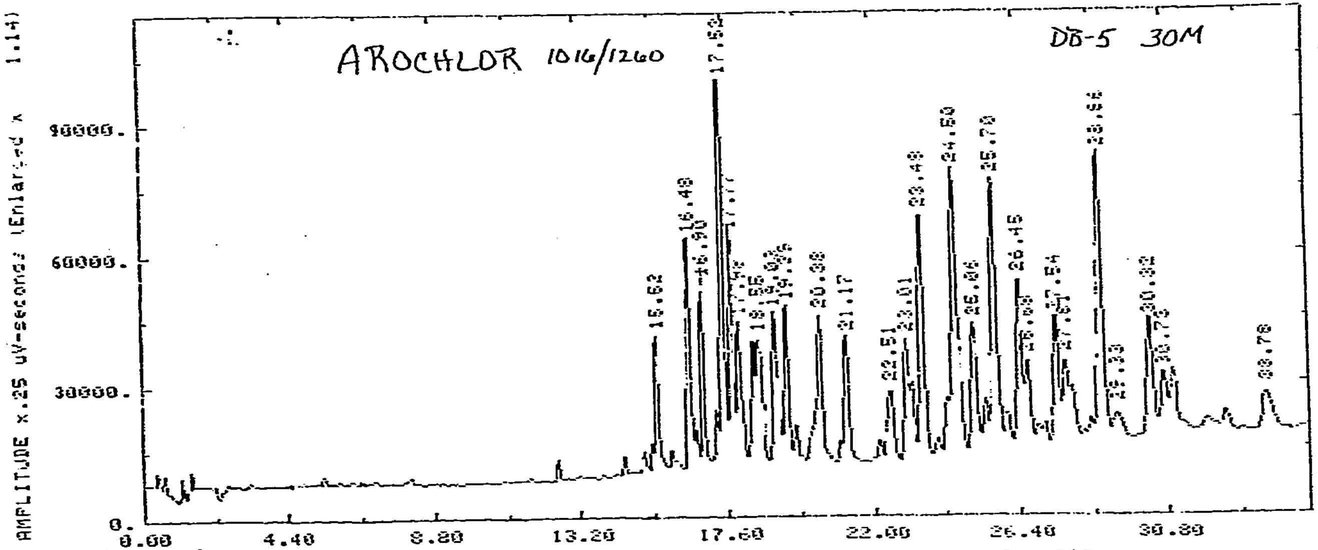

SAMPLE: SD ARMX INJECTED AT 21:19:54 ON JUN 8, 1983
Method: CAP09 Raw: R9340 Proc: P9340

017524

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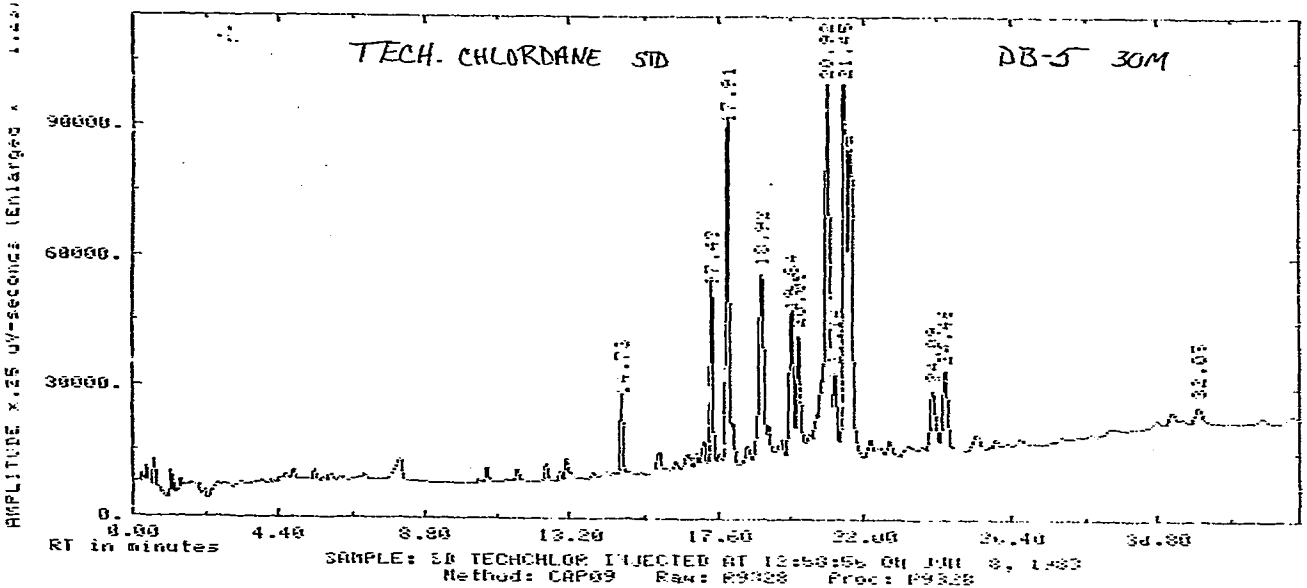

TECH. CHLORDANE STD
DB-5 30M
AMPLITUDE x.25 uV-seconds (Enlarged x
90000.
60000.
30000.
0.
0.00
4.40
8.80
13.20
17.60
22.00
30.80
RT in minutes
14.73
17.49
17.91
18.92
20.92
21.45
32.05
SAMPLE: SD TECHCHLOR INJECTED AT 12:58:56 ON JUN 8, 1983
Method: CAP09 Raw: P9328 Proc: P9328

017525

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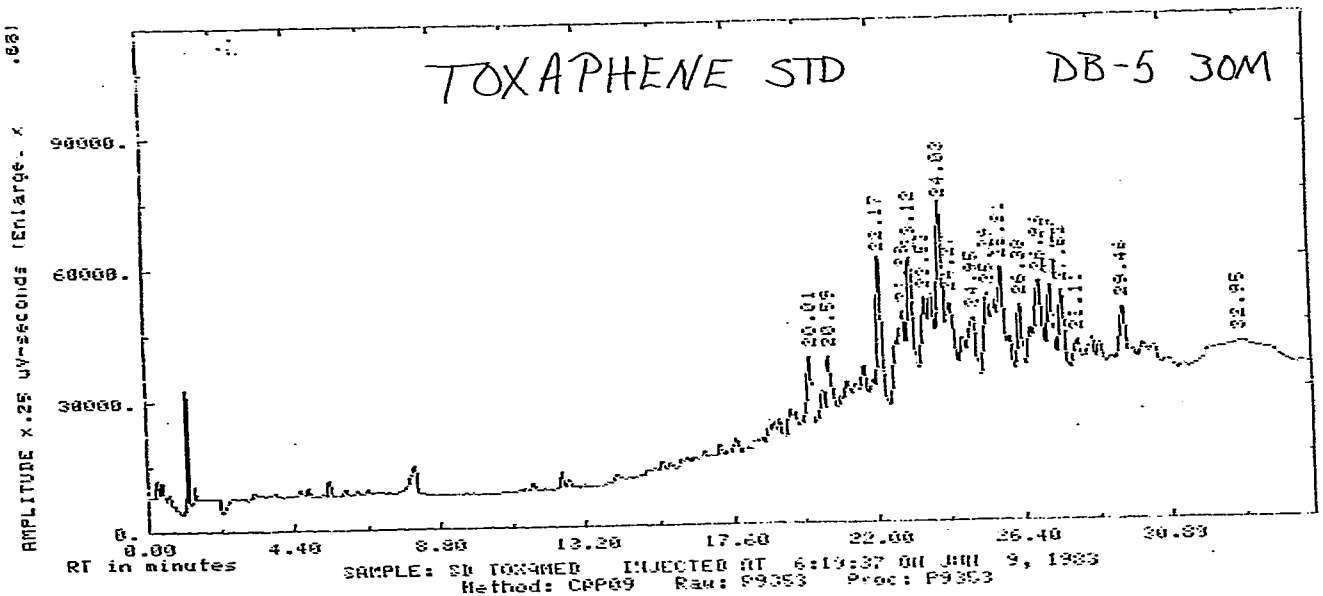
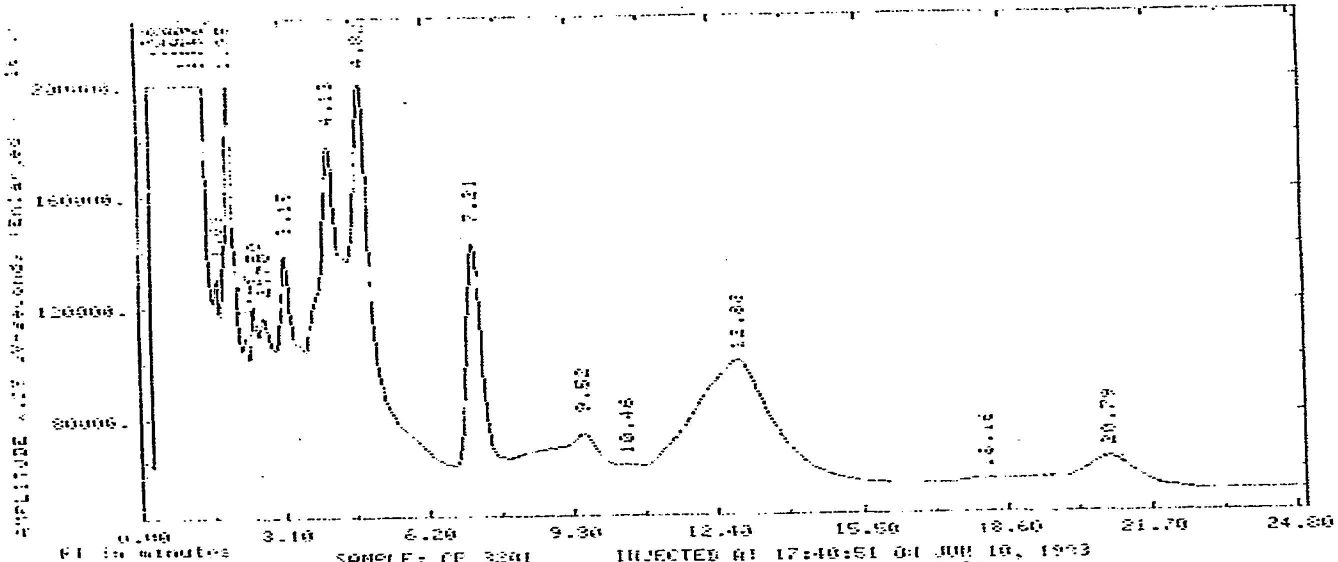
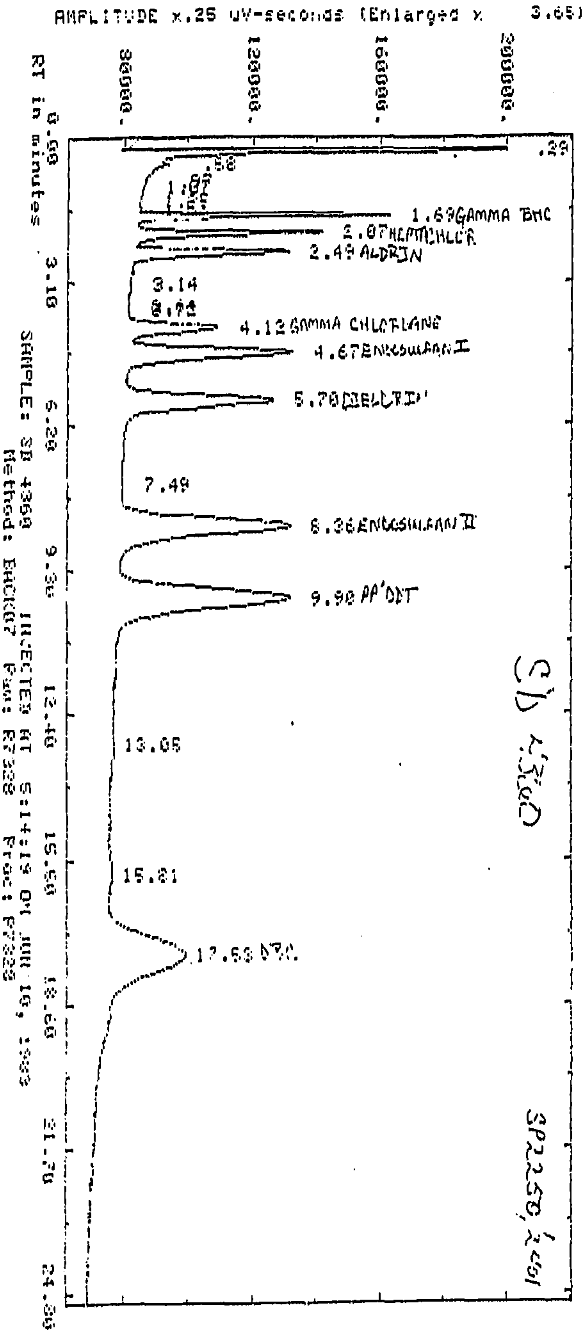

TOXAPHENE STD
DB-5 30M
AMPLITUDE x.25 uV-seconds (Enlarge- x .68)
90000.
60000.
30000.
0.
0.00
4.40
8.80
13.20
17.60
22.00
26.40
30.80
RT in minutes
20.01
20.56
22.17
24.02
29.46
32.95
SAMPLE: SD TOXAMED INJECTED AT 6:19:37 ON JUL 9, 1983
Method: CPP09 Raw: P9353 Proc: P9353



SAMPLE: CF 3201 INJECTED AT 17:40:51 ON JUN 10, 1993
Method: RAN107 Raw: R7355 Proc: R7355

017527


AMPLITUDE x.25 uV-seconds (Enlarged x 3.65)
80000.
120000.
160000.
200000.
RT in minutes
1.69 GAMMA BHC
2.07 HEPTACHLOR
2.49 ALDRIN
3.14
4.12 GAMMA CHLORDANE
4.67 ENDOSULFAN I
5.70 DIELDRIN
7.49
8.36 ENDOSULFAN II
9.90 PP'DDT
13.05
15.81
17.63 DBC
SAMPLE: SB +368
Method: BACK07

017528

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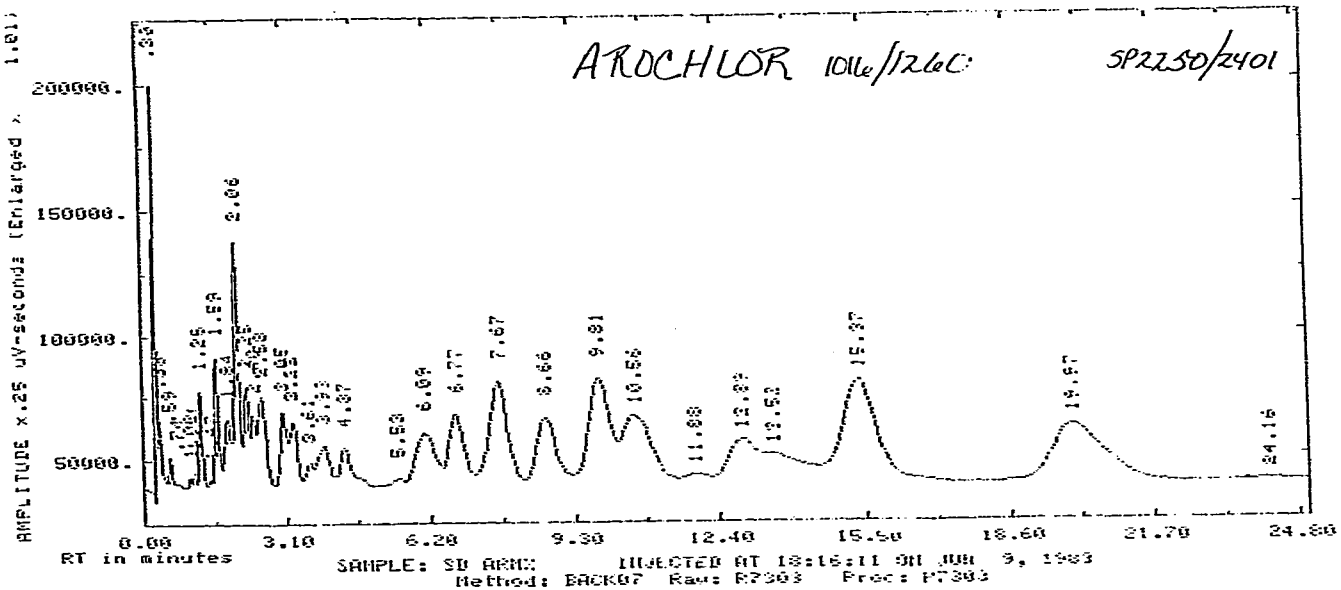
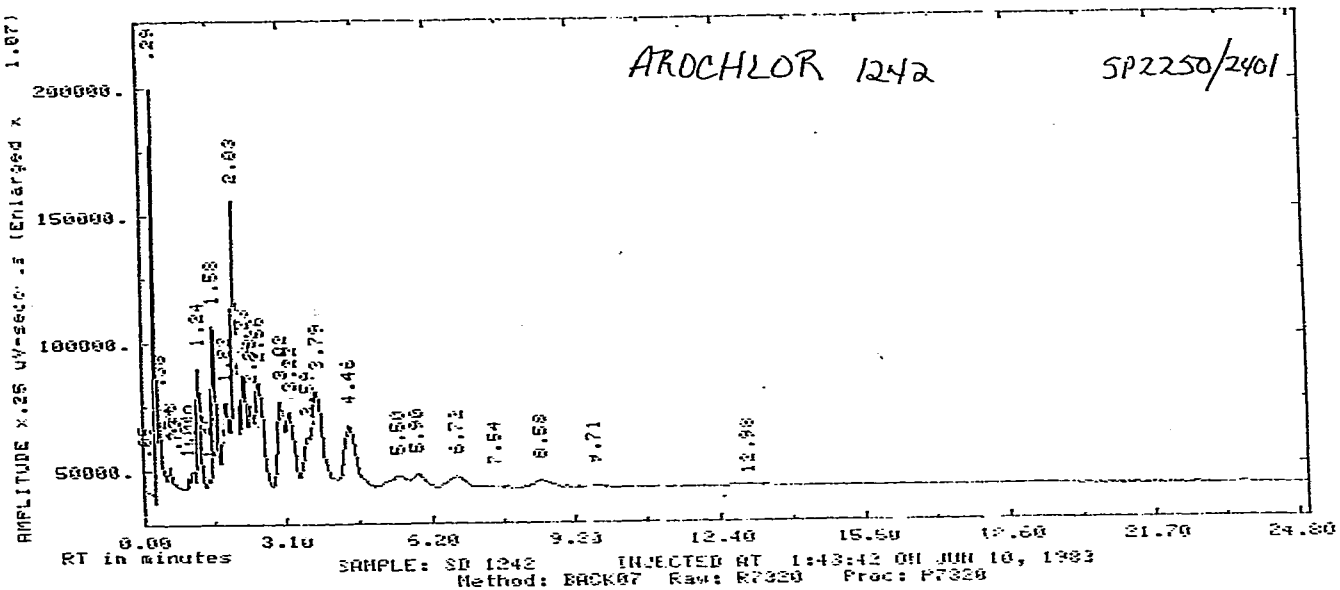
AMPLITUDE x.25 uV-sec
.39
1.35 ALPHA BHC
1.93 BETA BHC
2.23 DELTA BHC
2.45
3.73 HEPTACHLOR EPOXIDE
4.52 ALPHA CHLORDANE
5.40 PP'DDE
6.93 ENDRIN
8.25 PP'DDD
9.37
10.91 ENDRIN ALDEHYDE
13.24 ENDOSULFAN SULFATE
15.82
17.60 DBC
RT in minutes
SAMPLE: SD 4364
Method: BACK02
INJECTED AT 5:40:36 ON JUN 10, 1983
Proc: P7329

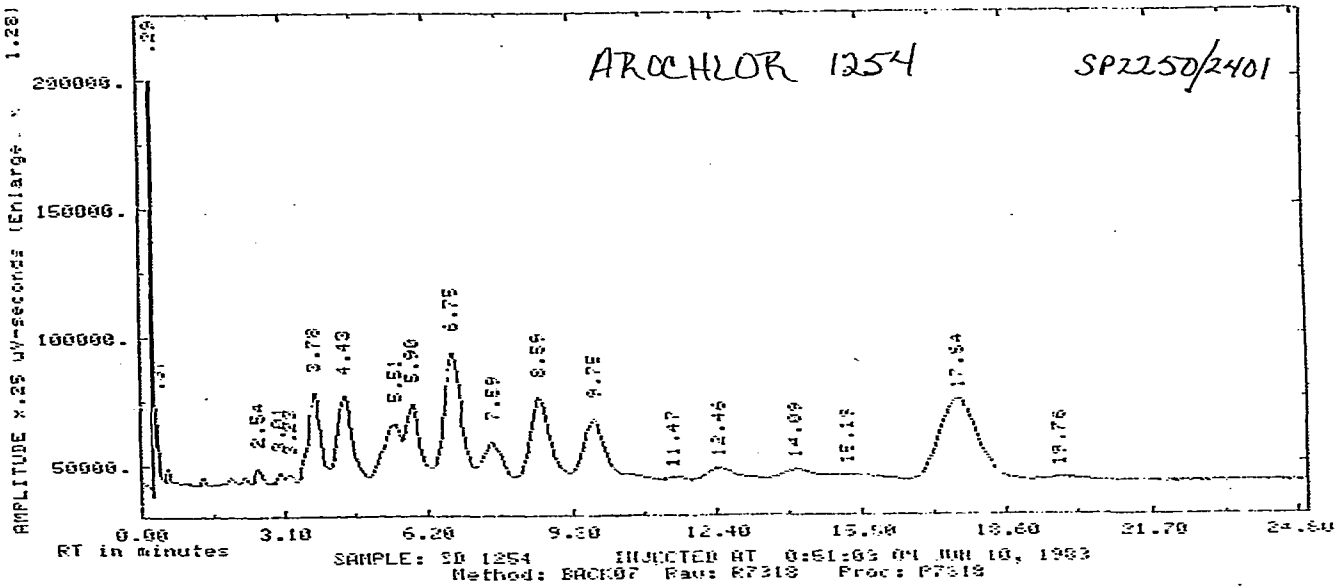
017529

017530

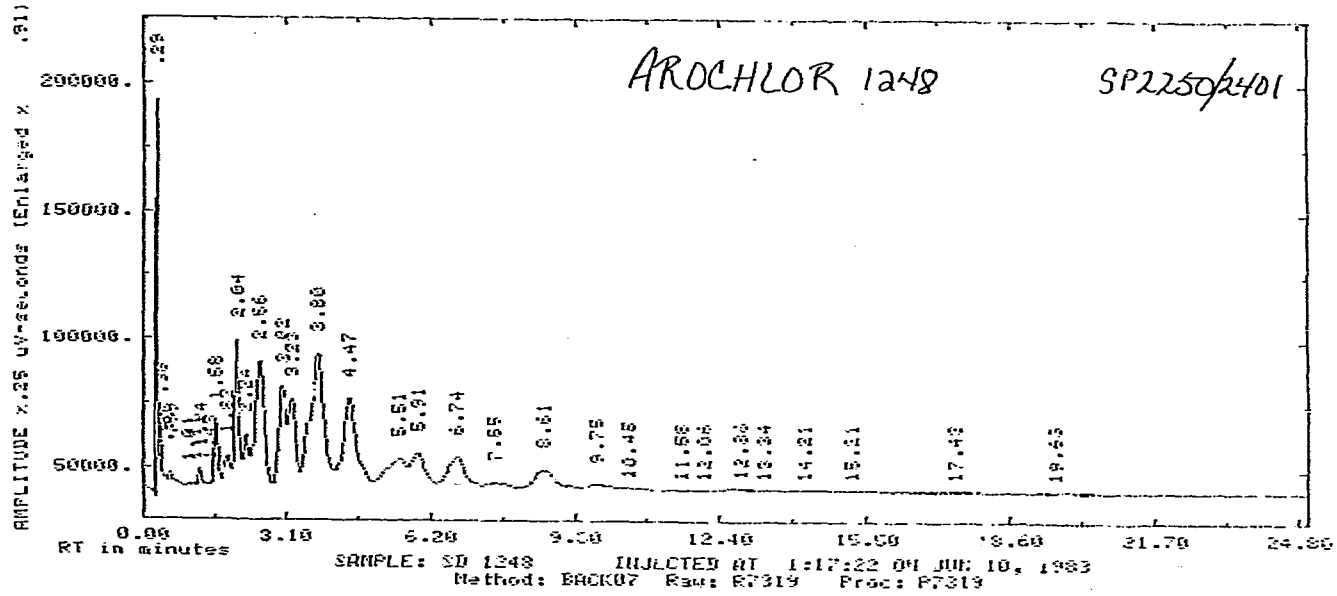

AROCHLOR 1016/1260
SP2250/2401
AMPLITUDE x.25 uV-seconds (Enlarged x 1.0)
200000.
150000.
100000.
50000.
2.06
1.25
1.59
5.83
6.09
6.77
7.67
8.66
9.81
10.56
11.88
13.82
14.53
15.37
14.67
24.16
0.00
3.10
6.20
9.30
12.40
15.50
18.60
21.70
24.80
RT in minutes
SAMPLE: SB ARM: INJECTED AT 18:16:11 ON JUN 9, 1988
Method: BACK07 Raw: R7303 Proc: P7303


AROCHLOR 1242
SP2250/2401
AMPLITUDE x.25 uV-secs x.5 (Enlarged x 1.07)
200000.
150000.
100000.
50000.
0.00
3.10
6.20
9.33
12.40
15.50
18.60
21.70
24.80
RT in minutes
SAMPLE: SD 1242 INJECTED AT 1:43:42 ON JUN 10, 1983
Method: BACK07 Raw: R7320 Proc: P7320

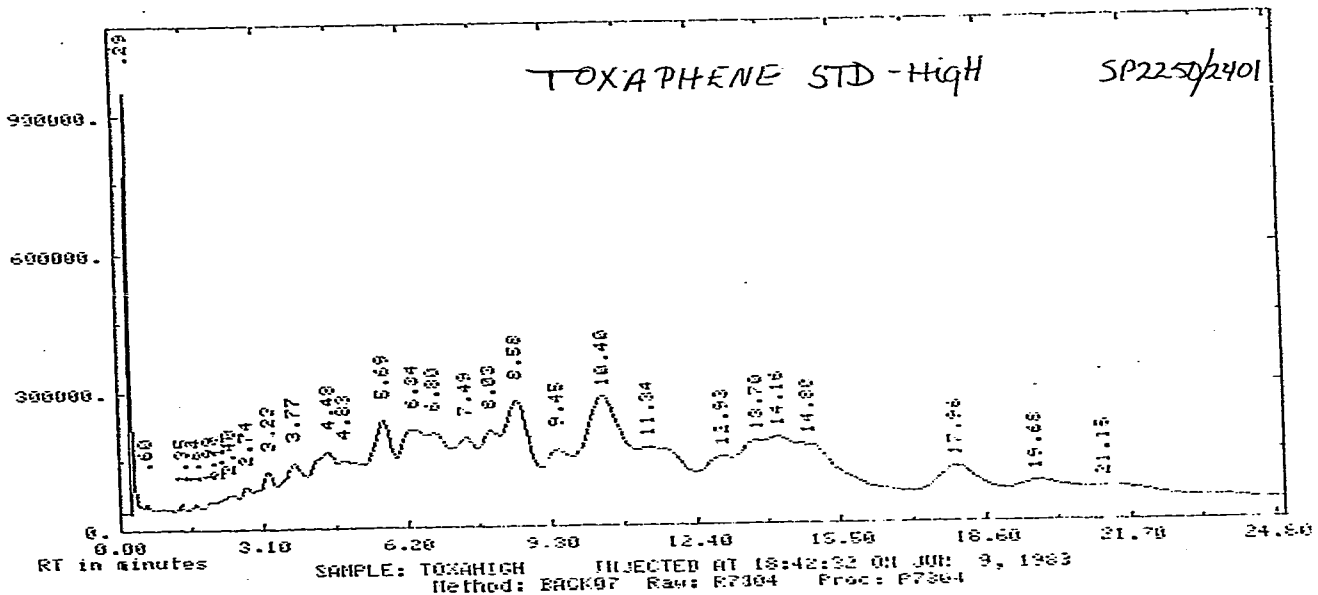
017532


AROCHLOR 1254
SP2250/2401
AMPLITUDE x.25 uV-seconds (Enlarge 1.28)
200000.
150000.
100000.
50000.
2.54
3.78
4.43
5.51
5.90
6.75
7.59
8.56
9.75
11.47
12.46
14.09
15.18
17.54
18.76
0.00
3.10
6.20
9.30
12.40
15.50
18.60
21.70
24.80
RT in minutes
SAMPLE: SB 1254 INJECTED AT 0:01:03 AM NOV 10, 1993
Method: BACK07 Raw: R7318 Proc: P7318

017533


AROCHLOR 1248
SP2250/2401
AMPLITUDE x.25 uV-seconds (Enlarged x .01)
200000.
150000.
100000.
50000.
0.00
3.10
6.20
9.30
12.40
15.50
18.60
21.70
24.80
RT in minutes
.29
2.64
2.86
3.80
4.47
5.51
5.91
6.74
7.65
8.61
9.75
10.48
11.58
12.06
12.84
13.34
14.21
15.31
17.43
19.43
SAMPLE: SD 1248 INJECTED AT 1:17:22 04 JUN 10, 1983
Method: BACK07 Raw: R7319 Proc: P7319

017534


TOXAPHENE STD - HIGH
SP2250/2401
900000.
600000.
300000.
0.
.60
1.25
1.84
2.14
2.22
3.77
4.48
4.88
5.69
6.34
6.80
7.49
8.03
8.58
9.45
10.40
11.34
13.93
14.15
14.80
17.46
19.68
21.15
0.00
3.10
6.20
9.30
12.40
15.50
18.60
21.70
24.80
RT in Minutes
SAMPLE: TOXAHIGH INJECTED AT 18:42:32 ON JUN 9, 1983
Method: BACK07 Raw: R7304 Proc: P7304

DETECTION LIMIT SUMMARY FOR
VOA OF HAZARDIOUS SUBSTANCE LIST COMPOUNDS

Compound I.D.	Mead CompuChem® Low Level Water Detection Limits (ug/l)*	Low Level Solid Detection Limits (ug/kg)*	Medium Level Detection Limits (ug/g)*	3 x Standard Deviation ng on-column
Bromochloromethane (IS)				
Chloroethane	5	2.5	5	1
Vinyl Chloride	5	2.5	5	1
Chloroethane	5	2.5	5	1
Bromomethane	5	2.5	5	2
Acrolein	100	50	100	48
Acrylonitrile	100	50	100	36
Methylene Chloride	5	2.5	5	2
Trichlorofluoromethane	5	2.5	5	1
1,1-Dichloroethylene	5	2.5	5	2
1,1-Dichloroethane	5	2.5	5	3
1,2-Trans-Dichloroethylene	5	2.5	5	4
Chloroform	5	2.5	5	3
1,2-Dichloroethane	5	2.5	5	4
1,1,1-Trichloroethane	5	2.5	5	2
Carbon tetrachloride	5	2.5	5	2
Bromodichloromethane	5	2.5	5	3
1,4-Dichlorobutane (IS)				
1,2-Dichloropropane	5	2.5	5	4
Trans-1,3-Dichloropropylene	5	2.5	5	1
Trichloroethylene	5	2.5	5	2
Benzene	5	2.5	5	4
Cis-1,3-Dichloropropene	10	5.0	10	2
1,1,2-Trichloroethane	5	2.5	5	11
1, 2-Dibromochloromethane	5	2.5	5	3
Bromoform	5	2.5	5	2
...,2,2-Tetrachloroethylene	5	2.5	5	1
1,1,2,2-Tetrachloroethane	5	2.5	5	1
Toluene	5	2.5	5	1
Chlorobenzene	5	2.5	5	1
Ethylbenzene	5	2.5	5	1
2-Chloroetnyl vinyl ether	5	2.5	5	1
d_4-1,2 Dichloroethane (Surr.)				
d_5- Benzene (Int.Std.)				
d_8 - Toluene (Surr.)				
Acetone	100	50	100	19
2-Butanone	200	100	200	8
4-Metnyl-2-Pentanone	100	50	100	30
2-Hexanone	100	50	100	13
Carbon disulfide	10	5	10	1
Vinyl acetate	10	5	10	5
Styrene	5	2.5	5	2
Xylene	5	2.5	5	2

*Estimated MDL
**3-Sigma DL

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DETECTION LIMIT SUMMARY FOR
SEMIVOLATILE HAZARDIOUS SUBSTANCE LIST COMPOUNDS

Compound I.D.	Mead CompuChem® Low Level Water Detection Limits (ug/l)*	Low Level Solid Detection Limits (ug/kg)*	Medium Level Detection Limits (ug/g)*	3 x Standard Deviation** ng on-column
d_3-PHENOL (IS)	20	400	10	
N-NITROSODIMETHYLAMINE	20	400	10	3
PHENOL	20	400	10	4
ANILINE	20	400	10	10
BIS(2-CHLOROETHYL)ETHER	20	400	10	6
2-CHLOROPHENOL	20	400	10	4
1,3-DICHLOROBENZENE	20	400	10	5
1,4-DICHLOROBENZENE	20	400	10	4
1,2-DICHLOROBENZENE	20	400	10	4
BENZYL ALCOHOL	40	800	20	4
BIS(2-CHLOROISOPROPYL)ETHER	40	800	20	8
2-METHYLPHENOL	20	400	10	3
HEXACHLOROETHANE	20	400	10	4
4-METHYLPHENOL	20	400	10	3
2-FLUOROPHENOL (Surr.)				
PENTAFLUOROPHENOL (Surr.)				
d_5-PHENOL (Surr)				
d_5-NITROBENZENE (Surr.)				
DECAFLUOROBIPHENYL (Surr.)				
2-FLUOROANILINE (Surr)				
2-FLUOROBIPHENYL (Surr)				
d_8- NAPHTHALENE (IS)				
N-NITROSO-DI-N-PROPYLAMINE	40	800	20	8
NITROBENZENE	20	400	10	4
ISOPHORONE	20	400	10	3
2-NITROPHENOL	40	800	20	2
2,4-DIMETHYLPHENOL	20	400	10	2
BIS(2-CHLOROETHOXY)METHANE	40	800	20	6
2,4-DICHLOROPHENOL	20	400	10	5
1,2,4-TRICHLOROBENZENE	20	400	10	5
4-CHLOROANILINE	100	2000	50	27
BENZOIC ACID	200	4000	100	10
HEXACHLOROBUTADIENE	20	400	10	10
P-CHLORO-M-CRESOL	40	800	20	4
2-METHYLNAPTHALENE	40	800	20	3
HEXACHLOROCYCLOPENTADIENE	20	400	10	7
2,4,6-TRICHLOROPHENOL	20	400	10	10
2-CHLORONAPHTHALENE	20	400	10	4
ACENAPHTHYLENE	20	400	10	3
DIMETHYLPHTHALATE	20	400	10	6
NAPHTHALENE	20	400	10	5
2,6-DINITROTOLUENE	40	800	20	4

*Estimated MDL
**3-Sigma DL

DETECTION LIMIT SUMMARY FOR
SEMIVOLATILE HAZARDOUS SUBSTANCE LIST COMPOUNDS

Compound I.D.	Mead CompuChem® Low Level Water Detection Limits (ug/l)*	Low Level Solid Detection Limits (ug/kg)*	Medium Level Detection Limits (ug/g)*	3 x Standard Deviation** ng on-column
2,4-DINITROTOLUENE	40	800	20	8
2-NITROANILINE	200	4000	100	19
3-NITROANILINE	200	4000	100	9
DIBENZOFURAN	20	400	10	3
4-NITROANILINE	200	4000	100	5
2,4,5-TRICHLOROPHENOL	200	4000	100	5
d10-PHENANTHRENE (IS)				
ACENAPHTHENE	20	400	10	4
2,4-DINITROPHENOL	100	2000	50	7
4-NITROPHENOL	100	4000	100	11
FLUORENE	20	400	10	4
4-CHLOROPHENYL PHENYL ETHER	20	400	10	5
DIETHYLPHTHALATE	20	400	10	4
4,6-DINITRO-O-CRESOL	40	800	20	2
DI[illegible]NYLAMINE (N-NITROSO)	20	400	10	14
4-[illegible]MOPHENYL PHENYL ETHER	20	400	10	6
HEXACHLOROBENZENE	20	400	10	9
PHENANTHRENE	20	400	10	5
ANTHRACENE	20	400	10	5
FLUORANTHENE	20	400	10	9
PYRENE	20	400	10	6
1,2-DIPHENYLHYDRAZINE (AZOBENZENE)	40	800	20	3
DI-N-BUTYLPHTHALATE	20	400	10	13
PENTACHLOROPHENOL	40	800	20	10
d12-CHRYSENE (IS)				
BENZO(A)ANTHRACENE	20	400	10	10
[illegible]ENE	20	400	10	8
[illegible]DICHLOROBENZIDINE	40	800	20	20
[illegible]BENZYLPHTHALATE	20	400	10	4
BIS(2-ETHYLHEXYL)PHTHALATE	20	400	10	16
DI-N-OCTYLPHTHALATE	20	400	10	6
BENZIDINE	80	1600	40	>20
BENZO(A)PYRENE	40	800	20	9
INDENO(1,2,3-C,D)PYRENE	40	800	20	10
DIBENZO(A,H)ANTHRACENE	40	800	20	8
BENZO(G,H,I)PERYLENE	40	800	20	8
BENZO(B)FLUORANTHENE				7
BENZO(K)FLUORANTHENE				>20

*Estimated MDL
**3-Sigma CL

DETECTION LIMIT SUMMARY FOR
PESTICIDES HAZARDOUS SUBSTANCE LIST COMPOUNDS

Compound I.D.	Mead CompuChem® Low Level Water Detection Limits (ug/l)*	Low Level Solid Detection Limits (ug/kg)*	Medium Level Detection Limits (ug/g)*	3 x Standard Deviation** ng on-column
ALPHA BHC	0.1	4.0	0.01	0.0019
BETA BHC	0.1	4.0	0.01	0.0030
DELTA BHC	0.1	4.0	0.01	0.0008
HEPTACHLOR EPOXIDE	0.1	4.0	0.01	0.0013
CHLORODANE	0.1	4.0	0.01	0.0008
DDE	0.1	4.0	0.01	0.0007
DDD	0.1	4.0	0.01	0.0062
DDT	0.1	4.0	0.01	0.0136
ENDOSULFAN SULFATE	0.1	4.0	0.01	0.0091
GAMMA BHC	0.1	4.0	0.01	0.0023
HEPTACHLOR	0.1	4.0	0.01	0.0027
GAMMA CHLORDANE	0.1	4.0	0.01	0.0025
ENDOSULFAN I	0.1	4.0	0.01	0.0039
ENDOSULFAN II	0.1	4.0	0.01	0.0126
ALDRIN	0.1	4.0	0.01	0.0032
DIELDRIN	0.1	4.0	0.01	0.0043
ENDRIN	0.1	4.0	0.01	0.0082
TCDD	0.002	0.08	0.002	

*Estimated MDL
**3-Sigma DL