Versar INC.

ENVIRONMENTAL RISK MANAGEMENT

Versar INC.

ORIGINAL (Red)

1,1,1,1611

PESTICIDE ANALYSIS - TCLP
DATA SUMMARY PACKAGE

CLIENT : VERSAR DIV. 31
SITE : CDM
PROJECT: 420.1 B#2
CONTROL: 2536
DATE : 05/21/90

Versar INC

ORIGINAL
(Red)

I. NARRATIVE

II. QC SUMMARY

Versar INC.

ORIGINAL
(Red)

Pesticide Fraction Analysis Narrative

Client: Versar Div. 31; Camp, Dresser, McGee
Lab Operations Project No. 420.1 B#2; Control 2536 - Leechates
May 21, 1990

Please find enclosed the analytical data and calculated results for the analysis of the samples received at Versar on 19 April, 1990. The package contains raw data, calculated and summarized results, as well as any QC samples processed with the sample batch.

All standard and QC data would indicate that the analysis is valid and representative for the samples without further qualification.

Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager of his designee, as verified by the following signature.

Reza Karimi

Dr. Reza Karimi
Section Chief
Applied Chromatography
Laboratory Operations

Versar INC.

ORIGINAL (Red)

Pesticide Fraction Analysis Detail
Client: Versar Div. 31; Camp, Dresser, McGee
Lab Operations Project No. 420.1 B#2; Control 2536 - Leechates
May 21, 1990

Please find enclosed the analytical data and calculated results for the analysis of the samples received at Versar on 19 April, 1990. The samples were requested for analysis of TCLP pesticides under method 608 protocol. The samples were not extracted within the holding time prescribed in the Statement of Work. The date of extraction was 8 May, 1990, for the following samples:

SAMPLES

Field ID#	Lab ID#
*1	*16418

*Denotes sample chosen for QC extraction (MS/MSD).

All criteria were adhered to during analysis. All calibration standard results were acceptable where required. All data has been reviewed for completeness and validity. None of the samples contained any of the compounds of interest at levels above the reported detection limits.

Sample extracts were analyzed on a mixed phase, SP2250/SP2401, packed column under five point calibration for the individual pesticides, and with a full set of multicomponent standards to allow for quantitation of tentatively identified results. The primary analysis of these extracts was completed in a single analytical sequence.

Linearity criteria were met prior to analysis of calibration standards and sample extracts.

Degradation checks performed prior to, and at intervals throughout the analysis had results within the contractual limit of 20 percent.

DBC shift was monitored throughout the analytical sequence and remained well within the contract limit of 2.0% for packed column analyses.

All standard comparison result qualified data for quantitation of results. Where standard comparison results exceeded the prescribed limits, sample analyses were discontinued and a new sequence was initiated. Since no sample analyses were performed after an outlying standard result, no further analyses were required.

Versar INC.

ORIGINAL
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The sample preparation section of the report includes sample comments in which each sequence is further detailed. Comments include discussion of each analytical sequence. In addition, sample preparation comments are included which may include discussion of any difficulties encountered during the analysis.

The QC section of the report includes surrogate recoveries, matrix spike and matrix spike duplicate recoveries, as well as method blank results. Surrogate recoveries for the case exhibit good extraction efficiency with none of the seven recoveries outside the QC limit windows. Matrix spike and matrix spike duplicate recoveries exhibit good extraction efficiency with zero of eight spike recoveries outside of the prescribed QC window limits. Precision for the two spiked extracts, as demonstrated by the relative percent difference (RPD) results, was good with none of the four results above the prescribed limits. No qualified identifications, or significant contamination were observed in the laboratory blank.

If you have any questions regarding the pesticide analyses detailed herein, please feel free to call me at your convenience.

Christopher E. Bunker
Data Quality Analyst
Applied Chromatography
Laboratory Operations

WATER PESTICIDE SURROGATE RECOVERY

ORIGINAL (Red)

Lab Name: VERSAR Contract: _____

Lab Code: VERSAR Case No.: R3-7 SAS No.: _____ SDG No.: 1

	EPA SAMPLE NO.	S1 (DBC) #	OTHER
01	PBLK49	74	
02	EXTBLANK1	75	
03	EXTBLANK2	75	
04	1	75	
05	1MS	81	
06	1MSD	82	
07	~~41~~	~~93~~	
08			
09			
10			
11			
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

ADVISORY QC LIMITS (24-154)

S1 (DBC) = Dibutylchlorendate

Column used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

FORM II PEST-1

1/87 Rev

5/14/90

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

ORIGINAL (Red)

Lab Name: VERSAR, INC. Contract: _____

Lab Code: VERSAR Case No.: A3-7 SAS No.: _____ SDG No.: 1

Matrix Spike - EPA Sample No.: 1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
Lindane	50.00	0	54.77	110	56-123
Heptachlor	50.00	0	52.11	104	40-131
~~Aldrin~~ Endrin	50.00	0	44.86	100	40-120
~~Dieldrin~~ Methoxychlor	50.00	0	44.43	90	52-126
~~Endrin~~					56-121
~~4,4' DDT~~					38-127
Toxaphene					

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Lindane	50.00	55.81	112	2	15	56-123
Heptachlor	50.00	52.92	106	2	20	40-131
~~Aldrin~~ Endrin	50.00	51.14	102	2	22	40-120
~~Dieldrin~~ Methoxychlor	50.00	48.56	97	7	18	52-126
~~Endrin~~					21	56-121
~~4,4' DDT~~					27	38-127
Toxaphene						

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

* Values outside of QC limits

RPD: 0 out of 4 outside limits
Spike Recovery: 0 out of 8 outside limits

COMMENTS: Calculations based on primary analysis on Inst A, SP8250/SP2401 column.

FORM III PEST-1 1/87 Rev.

90003
5/14/90

PESTICIDE METHOD BLANK SUMMARY

ORIGINAL (Red)

Lab Name: VERSAR, INC Contract: _____

Lab Code: VERSAR Case No.: R3-7 SAS No.: _____ SDG No.: 1

Lab Sample ID: RB8049 Lab File ID: _____

Matrix: (soil/water) WATER Level: (low/med) LOW

Date Extracted: 05-08-90 Extraction: (SepF/~~Cont/Sonc~~) WRIST SHAKER

Date Analyzed (1): 05-11-90 Date Analyzed (2): —

Time Analyzed (1): 1911 Time Analyzed (2): —

Instrument ID (1): A Instrument ID (2): —

GC Column ID (1): SP2250/SP2401 GC Column ID (2): —

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	EXTBLANK1	EXTBLANK1	05-11-90	
02	EXTBLANK2	EXTBLANK2	05-11-90	
03	1	16418	05-11-90	
04	1ms	16418ms	05-11-90	
05	1msd	16418msd	05-11-90	
06	~~11~~	~~16960~~	~~05-11-90~~	
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

FORM IV PEST

1/87 Re

100994
5/14/90

III. SAMPLE DATA PACKAGE

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1 ORIGINAL (Red)

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: R3-7 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 16418

Sample wt/vol: 20.00 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. dec. Date Extracted: 05/08/90

Extraction: (SepF/Wrist Shaker) WRIST SHAKER Date Analyzed: 05/11/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor Epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	5.0	U
72-20-8	Endrin	5.0	U
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan Sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin Ketone	5.0	U
5103-71-9	alpha-Chlordane	5.0	U
5103-74-2	gamma-Chlordane	5.0	U
8001-35-2	Toxaphene	50	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U

100099
ga
5/14/90

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

1

VERSAR# 16418

MATRIX IS: WATER

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: A

Run Date: 05/11/90

Inject Vol 2.00 (uL)

Case No.: ~~VERSGDM~~ R3-7

Contract:

SAS No.:

GC Column ID: SP2250/SP2401

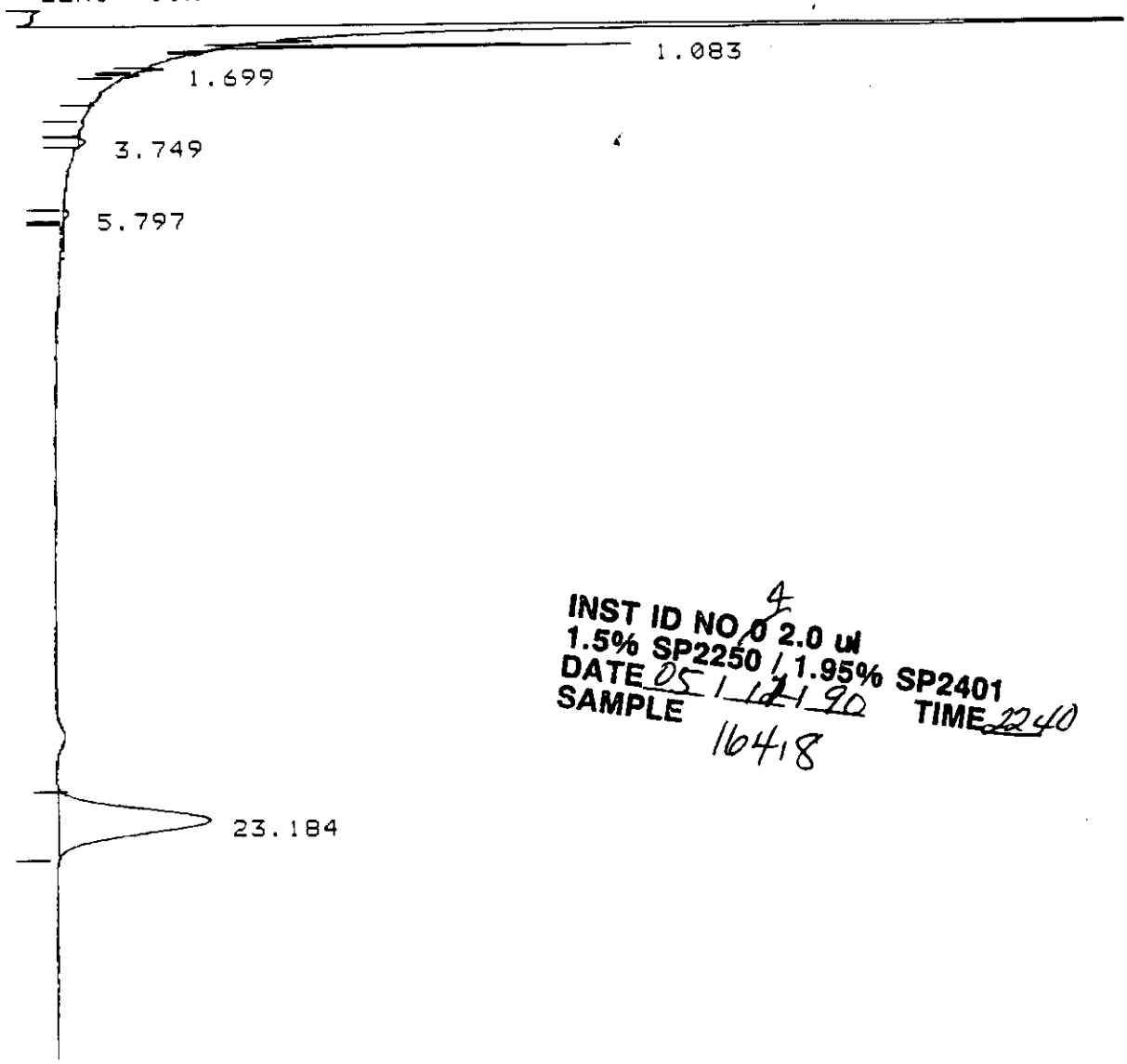
Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/L)	DETECTION LIMIT (ug/L)	
alpha-BHC	2.03	2.07	0.00	0	992722	0.000	2.00	0.000	500.00	0.00	2.50	
beta-BHC	2.82	2.88	0.00	0	297343	0.000	2.00	0.000	500.00	0.00	2.50	
delta-BHC	3.29	3.35	0.00	0	917492	0.000	2.00	0.000	500.00	0.00	2.50	
gamma-BHC	2.49	2.55	0.00	0	814856	0.000	2.00	0.000	500.00	0.00	2.50	
Heptachlor	3.05	3.11	0.00	0	863854	0.000	2.00	0.000	500.00	0.00	2.50	
Aldrin	3.62	3.70	0.00	0	800269	0.000	2.00	0.000	500.00	0.00	2.50	
Hept. epoxide	5.27	5.37	0.00	0	769525	0.000	2.00	0.000	500.00	0.00	2.50	
Endosulfan I	6.57	6.71	0.00	0	718902	0.000	2.00	0.000	500.00	0.00	2.50	
Dieldrin	7.97	8.13	0.00	0	790896	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDE	7.50	7.66	0.00	0	698639	0.000	2.00	0.000	500.00	0.00	5.00	
Endrin	9.73	9.93	0.00	0	523658	0.000	2.00	0.000	500.00	0.00	5.00	
Endosulfan II	11.57	11.81	0.00	0	713173	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDD	11.26	11.48	0.00	0	572143	0.000	2.00	0.000	500.00	0.00	5.00	
Endo.sulfate	17.82	18.18	0.00	0	514163	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'DDT	13.39	13.67	0.00	0	504926	0.000	2.00	0.000	500.00	0.00	5.00	
Methoxychlor	25.17	25.67	0.00	0	261003	0.000	2.00	0.000	500.00	0.00	25.00	
Endrin ketone	24.26	24.76	0.00	0	723623	0.000	2.00	0.000	500.00	0.00	5.00	
a. Chlordane	6.40	6.52	0.00	0	741797	0.000	2.00	0.000	500.00	0.00	5.00	
g. Chlordane	5.88	6.00	0.00	0	768348	0.000	2.00	0.000	500.00	0.00	5.00	
Toxaphene	14.36	14.65	0.00	0	282124	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1016	2.75	2.81	0.00	0	64752	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1221	1.57	1.61	0.00	0	18596	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1232	2.39	2.43	0.00	0	30823	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1242	3.74	3.82	0.00	0	51936	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1248	5.17	5.27	0.00	0	107949	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1254	7.77	7.93	0.00	0	151284	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1260	11.91	12.15	0.00	0	271936	0.000	2.00	0.000	500.00	0.00	50.00	
DBC	22.59	23.05	*23.18	100470	674216	0.149	2.00	0.075	500.00	37.25	5.00	HIT

14-May-90

ORIGINAL
(Red)

CHART SPEED 0.5 CM/MIN
AT : 16 ZERO: 10%



INST ID NO 4 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 12 / 90 TIME 2240
SAMPLE 16418

varian (sunnyvale, calif) p/n 13-906362-00

T' E: CLP PESTICIDES 22:40 11 MAY 90 ORIGINAL (Red)

CHANNEL NO: 3 SAMPLE: 16418 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		14407	1.083		14407	BB	2.40
2		902	1.699		902	BB	2.95
3	ALDRIN ort	984	3.749	0.079	984	BB	? 7.95
4	G-CHLORDAN ort	1183	5.797	-0.163	1183	BB	11.45
5	DBC	100470	23.184	0.304	100470	BB	? 48.10
TOTALS:		117946		0.220	117946		

DETECTED PKS: 6 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -21

'CK: 3 VIAL: 10 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXTBLANK1

Lab Name: VERSAR, INC. Contract: _

Lab Code: VERSAR Case No.: R3-7 SAS No.: SDG No.: 1

ORIGINAL (Red)

Matrix: (soil/water) WATER Lab Sample ID: EXTBLANK1

Sample wt/vol: 20.00 (g/ml) ML Lab File ID: ____

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 05/08/90

Extraction: (SepF/Wrist Shaker) WRIST SHAKER Date Analyzed: 05/11/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor Epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	5.0	U
72-20-8	Endrin	5.0	U
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan Sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin Ketone	5.0	U
5103-71-9	alpha-Chlordane	5.0	U
5103-74-2	gamma-Chlordane	5.0	U
8001-35-2	Toxaphene	50	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U

5/14/90

PESTICIDE SAMPLE TABLE

R3-7

EPA SAMPLE NUMBER

EXTBLANK1

Lab Name: VERSAR, INC.

Case No.: ~~VERSCDM-2536,2~~ ORIGINAL (Red)

Lab Code: VERSAR

Contract:

Instrument ID: A

SAS No.:

Run Date: 05/11/90

GC Column ID: SP2250/SP2401

MATRIX IS: WATER

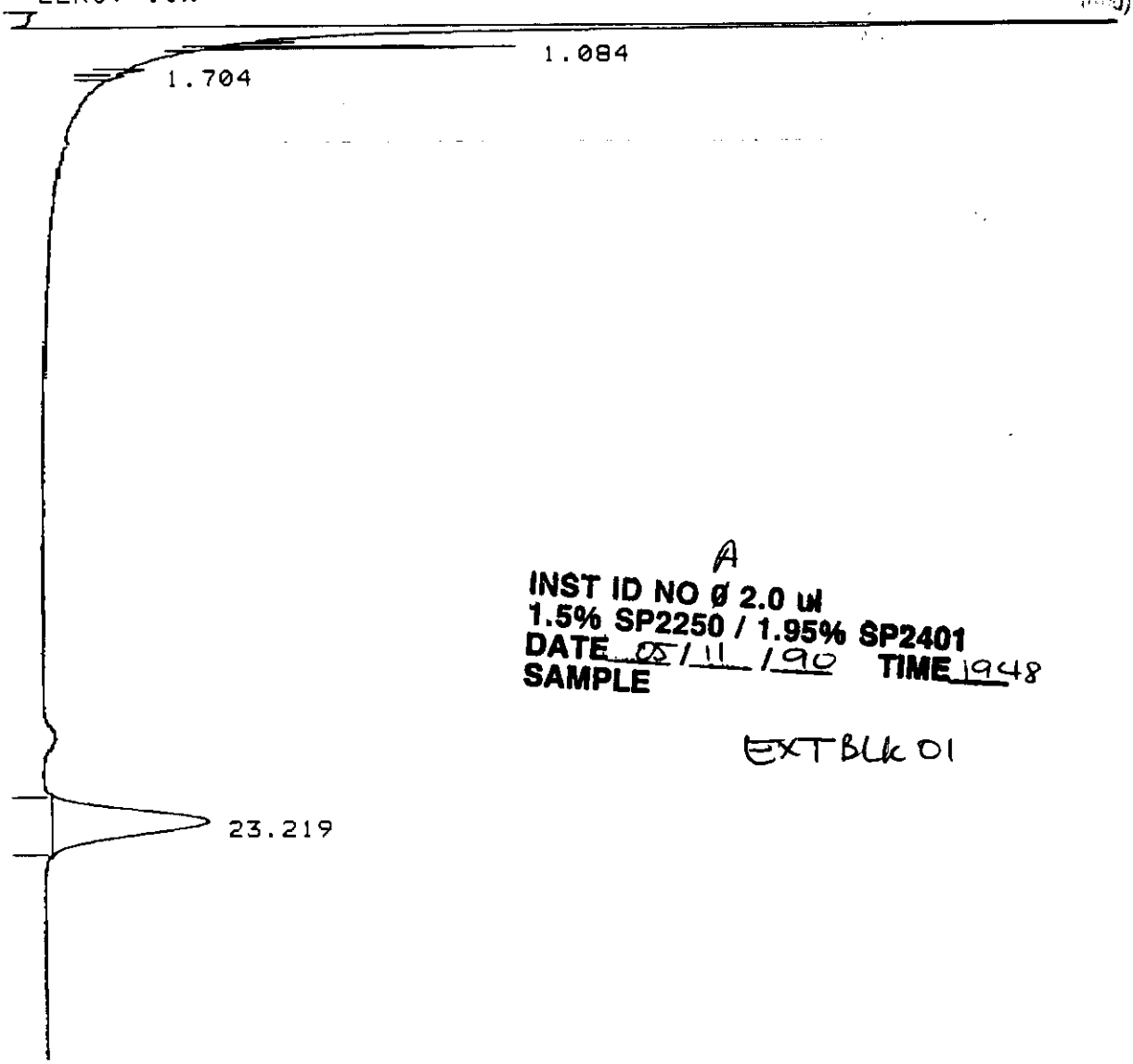
Inject Vol 2.00 (uL)

Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/L)	DETECTION LIMIT (ug/L)	
alpha-BHC	2.03	2.07	0.00	0	992722	0.000	2.00	0.000	500.00	0.00	2.50	
beta-BHC	2.82	2.88	0.00	0	297343	0.000	2.00	0.000	500.00	0.00	2.50	
delta-BHC	3.29	3.35	0.00	0	917492	0.000	2.00	0.000	500.00	0.00	2.50	
gamma-BHC	2.49	2.55	0.00	0	814856	0.000	2.00	0.000	500.00	0.00	2.50	
Heptachlor	3.05	3.11	0.00	0	863854	0.000	2.00	0.000	500.00	0.00	2.50	
Aldrin	3.62	3.70	0.00	0	800269	0.000	2.00	0.000	500.00	0.00	2.50	
Hept. epoxide	5.27	5.37	0.00	0	769525	0.000	2.00	0.000	500.00	0.00	2.50	
Endosulfan I	6.57	6.71	0.00	0	718982	0.000	2.00	0.000	500.00	0.00	2.50	
Dieldrin	7.97	8.13	0.00	0	790896	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDE	7.50	7.66	0.00	0	698639	0.000	2.00	0.000	500.00	0.00	5.00	
Endrin	9.73	9.93	0.00	0	523658	0.000	2.00	0.000	500.00	0.00	5.00	
Endosulfan II	11.57	11.81	0.00	0	713173	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDD	11.26	11.48	0.00	0	572143	0.000	2.00	0.000	500.00	0.00	5.00	
Endo.sulfate	17.82	18.18	0.00	0	514163	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'DDT	13.39	13.67	0.00	0	504926	0.000	2.00	0.000	500.00	0.00	5.00	
Methoxychlor	25.17	25.67	0.00	0	261003	0.000	2.00	0.000	500.00	0.00	25.00	
Endrin ketone	24.26	24.76	0.00	0	723623	0.000	2.00	0.000	500.00	0.00	5.00	
a. Chlordane	6.40	6.52	0.00	0	741797	0.000	2.00	0.000	500.00	0.00	5.00	
g. Chlordane	5.88	6.00	0.00	0	768348	0.000	2.00	0.000	500.00	0.00	5.00	
Toxaphene	14.36	14.65	0.00	0	282124	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1016	2.75	2.81	0.00	0	64752	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1221	1.57	1.61	0.00	0	18596	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1232	2.39	2.43	0.00	0	30823	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1242	3.74	3.82	0.00	0	51936	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1248	5.17	5.27	0.00	0	107949	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1254	7.77	7.93	0.00	0	151284	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1260	11.91	12.15	0.00	0	271936	0.000	2.00	0.000	500.00	0.00	50.00	
DBC	22.59	23.05	*23.22	101106	674216	0.150	2.00	0.075	500.00	37.49	5.00	HIT

11-May-90

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



A
INST ID NO Ø 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 1948
SAMPLE

EXTBLK 01

100015

yvale, calif p/n 33-906362-00

ORIGINAL (Red)

TI E: CLP PESTICIDES 19:48 11 MAY 90

CHANNEL NO: 3 SAMPLE: EXTBLK 01 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		10564	1.084		10564	BB	2.35
2		870	1.704		870	BB	2.80
3	DBC	101106	23.219	0.339	101106	BB	? 58.65
TOTALS:		112540		0.339	112540		

DETECTED PKS: 4 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -23

RACK: 3 VIAL: 4 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXTBLANK2

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: R3-7 SAS No.: SDG No.: 1

ORIGINAL (Red)

Matrix: (soil/water) WATER Lab Sample ID: EXTBLANK2

Sample wt/vol: 20.00 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. dec. Date Extracted: 05/08/90

Extraction: (SepF/Wrist Shaker) WRIST SHAKER Date Analyzed: 05/11/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor Epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	5.0	U
72-20-8	Endrin	5.0	U
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan Sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin Ketone	5.0	U
5103-71-9	alpha-Chlordane	5.0	U
5103-74-2	gamma-Chlordane	5.0	U
8001-35-2	Toxaphene	50	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U

5/14/90

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

EXTBLANK2

Lab Name: VERSAR, INC.

Case No.: ~~VERSCBM~~ R3-7

Lab Code: VERSAR

Contract:

Instrument ID: A

SAS No.:

Run Date: 05/11/90

GC Column ID: SP2250/SP2401

MATRIX IS: WATER

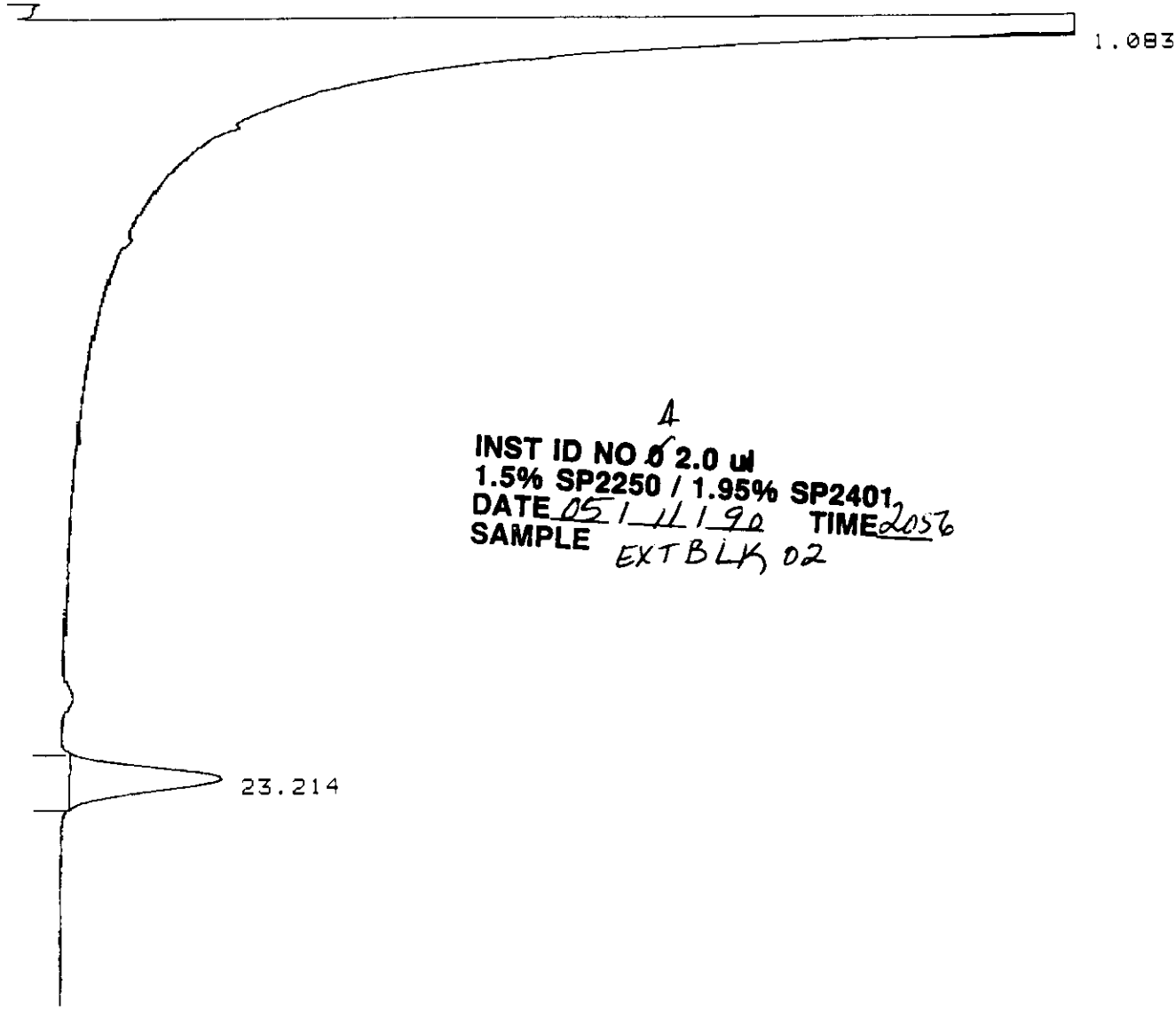
Inject Vol 2.00 (uL)

Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/L)	DETECTION LIMIT (ug/L)	
alpha-BHC	2.03	2.07	0.00	0	992722	0.000	2.00	0.000	500.00	0.00	2.50	
beta-BHC	2.82	2.88	0.00	0	297343	0.000	2.00	0.000	500.00	0.00	2.50	
delta-BHC	3.29	3.35	0.00	0	917492	0.000	2.00	0.000	500.00	0.00	2.50	
gamma-BHC	2.49	2.55	0.00	0	814856	0.000	2.00	0.000	500.00	0.00	2.50	
Heptachlor	3.05	3.11	0.00	0	863854	0.000	2.00	0.000	500.00	0.00	2.50	
Aldrin	3.62	3.70	0.00	0	800269	0.000	2.00	0.000	500.00	0.00	2.50	
Hept. epoxide	5.27	5.37	0.00	0	769525	0.000	2.00	0.000	500.00	0.00	2.50	
Endosulfan I	6.57	6.71	0.00	0	718902	0.000	2.00	0.000	500.00	0.00	2.50	
Dieldrin	7.97	8.13	0.00	0	790896	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDE	7.50	7.66	0.00	0	698639	0.000	2.00	0.000	500.00	0.00	5.00	
Endrin	9.73	9.93	0.00	0	523658	0.000	2.00	0.000	500.00	0.00	5.00	
Endosulfan II	11.57	11.81	0.00	0	713173	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDD	11.26	11.48	0.00	0	572143	0.000	2.00	0.000	500.00	0.00	5.00	
Endo.sulfate	17.82	18.18	0.00	0	514163	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'DDT	13.39	13.67	0.00	0	504926	0.000	2.00	0.000	500.00	0.00	5.00	
Methoxychlor	25.17	25.67	0.00	0	261003	0.000	2.00	0.000	500.00	0.00	25.00	
Endrin ketone	24.26	24.76	0.00	0	723623	0.000	2.00	0.000	500.00	0.00	5.00	
a. Chlordane	6.40	6.52	0.00	0	741797	0.000	2.00	0.000	500.00	0.00	5.00	
g. Chlordane	5.88	6.00	0.00	0	768348	0.000	2.00	0.000	500.00	0.00	5.00	
Toxaphene	14.36	14.65	0.00	0	282124	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1016	2.75	2.81	0.00	0	64752	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1221	1.57	1.61	0.00	0	18596	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1232	2.39	2.43	0.00	0	30823	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1242	3.74	3.82	0.00	0	51936	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1248	5.17	5.27	0.00	0	107949	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1254	7.77	7.93	0.00	0	151284	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1260	11.91	12.15	0.00	0	271936	0.000	2.00	0.000	500.00	0.00	50.00	
DBC	22.59	23.05	*23.21	101130	674216	0.150	2.00	0.075	500.00	37.50	5.00	HIT

ORIGINAL (Red)

CH. , SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ 4 2.0 uL
1.5% SP2250 / 1.95% SP2401,
DATE 05/11/90 TIME 2056
SAMPLE EXTBLK 02

varian sunnyvale, calif p/n 13-906362-00

TITLE: CLP PESTICIDES 20:56 11 MAY 90

ORIGINAL (Red)

(NEL NO: 3 SAMPLE: EXTBLK 02 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		11795	1.083		11795	BB	2.10
2	DBC	101130	23.214	0.334	101130	BB	?130.50
TOTALS:		112925		0.334	112925		

DETECTED PKS: 2 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: 12

RACK: 3 VIAL: 5 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT

ORIGINAL
(Red)

IV. STANDARDS DATA

8D

PESTICIDE EVALUATION STANDARDS SUMMARY

ORIGINAL (Red)

Lab Name: VERSAR Contract: _____

Lab Code: VERSAR Case No.: R3-7 SAS No.: _____ SDG No.: 1

Instrument ID: A GC Column ID: SP2250/SP2401

Dates of Analyses: 05/11/90 to 05/12/90

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
ALDRIN	759310	759310	759310	0.0	
ENDRIN	505670	505670	505670	0.0	(1)
4,4'-DDT	485890	485890	485890	0.0	
DBC	626270	626270	626270	0.0	

(1) If > 10.0% RSD, plot a standard curve and determine the ng for each sample in that set from the curve.

Evaluation Check for 4,4'-DDT/Endrin Breakdown
(percent breakdown expressed as total degradation)

		DATE ANALYZED	TIME ANALYZED	ENDRIN	4,4'-DDT	COMBINED (2)	
	INITIAL						
01	EVAL MIX B	05/11/90	0202	0.0	0.0		
02	EVAL MIX B	05/11/90	2133	0.0	3.3		UEB 5/21/90
03	EVAL MIX B						
04	EVAL MIX B						
05	EVAL MIX B						
06	EVAL MIX B						
07	EVAL MIX B						
08	EVAL MIX B						
09	EVAL MIX B						
10	EVAL MIX B						
11	EVAL MIX B						
12	EVAL MIX B						
13	EVAL MIX B						
14	EVAL MIX B						

(2) See Form instructions.

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

ORIGINAL (Red)

Lab Name:_____VERSAR_____ Contract:_____

Lab Code: ____VERSAR Case No.: R3-7 SAS No.: SDG No.:1

Instrument ID: ____A GC Column ID: ___SP2250/SP2401

Dates of Analyses:__05/11/90 to __05/12/90

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	_EVALA	B789	05/11/90	0202	0.000	
02	_EVALB	B789	05/11/90	0202	0.000	
03	_EVALC	B789	05/11/90	0202	0.000	
04	_INDA	B989	05/11/90	0236	0.101	
05	_INDA	B990	05/11/90	0310	0.232	
06	_INDA	B991	05/11/90	0343	0.315	
07	_INDA	B992	05/11/90	0417	0.206	
08	_INDA	B993	05/11/90	0451	0.096	
09	_INDB	B994	05/11/90	0524	0.280	
10	_INDB	B995	05/11/90	0558	0.481	
11	_INDB	B996	05/11/90	0632	0.809	
12	_INDB	B997	05/11/90	0714	1.041	
13	_INDB	B998	05/11/90	0748	1.072	
14	_TCHL	A910	05/11/90	1239	1.509	
15	_TOXAPH	B767	05/11/90	1312	1.553	
16	_AR1660	B699	05/11/90	1348	1.544	
17	_AR1221	A321	05/11/90	1435	1.636	
18	_AR1232	B684	05/11/90	1509	1.641	
19	_AR1242	B762	05/11/90	1543	1.601	
20	_AR1248	B948	05/11/90	1616	1.584	
21	_AR1254	B761	05/11/90	1727	1.671	
22	_ZZZZZ	ZZZZZ	05/11/90	1801	1.658	
23	_ZZZZZ	ZZZZZ	05/11/90	1837	1.514	
24	_PBLK49	RB8049	05/11/90	1911	1.553	
25	_EXTBLK01	EXTBLK01	05/11/90	1948	1.584	
26	_EXTBLK02	EXTBLK02	05/11/90	2056	1.562	
27	_EVALB	B789	05/11/90	2133	1.488	
28	_11	16960	05/11/90	2206	1.474	
29	_1	16418	05/11/90	2240	1.431	
30	_1MS	16418MS	05/11/90	2314	1.282	
31	_1MSD	16418MSD	05/11/90	2348	1.089	
32	_INDA	B991	05/12/90	0056	1.072	
33	_INDB	B996	05/12/90	0129	1.033	
34						
35						
36						
37						
38						

* Values outside of QC limits (2.0% for packed columns, 0.3% for capillary columns)

FORM VIII PEST-2

ORIGINAL (Red)

	EPA SAMPLE NO.	ALDRIN AREA	ENDRIN AREA	ENDRIN A AREA	ENDRIN K AREA	DDT AREA	DDE AREA	DDD AREA	DBC RT	DBC AREA	CONC (ug/ml)
01	EVALA	75931	50567	0	0	48589	0	0	22.857	62627	0.05
02	EVALB	75931	50567	0	0	48589	0	0	22.857	62627	0.05
03	EVALC	75931	50567	0	0	48589	0	0	22.857	62627	0.05
04	INDA								22.834		
05	INDA								22.804		
06	INDA								22.785		
07	INDA								22.81		
08	INDA								22.879		
09	INDB								22.921		
10	INDB								22.967		
11	INDB								23.042		
12	INDB								23.095		
13	INDB								23.102		
14	TCHL								23.202		
15	TOXAPH								23.212		
16	AR1660								23.21		
17	AR1221								23.231		
18	AR1232								23.232		
19	AR1242								23.223		
20	AR1248								23.219		
21	AR1254								23.239		
22	ZZZZZ								23.236		
23	ZZZZZ								23.203		
24	PBLK49								23.212		
25	EXTBLK01								23.219		
26	EXTBLK02								23.214		
27	EVALB	79363	49646	0	0	51377	0	1726	23.197	66506	0.05
28	11								23.194		
29	1								23.184		
30	1MS								23.15		
31	1MSD								23.106		
32	INDA								23.102		
33	INDB								23.093		
34											
35											
36											
37											
38											

Stat 25 of 90

100035

PESTICIDE/PCB STANDARDS ENTRY FORM

ORIGINAL (Red)

Lab Name: VERSAR, INC. Case No.: R3-7

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/11,12/90 GC Column ID: SP2250/SP2401

Inject Vol: 2.00 (uL) Window Width: 1.0%

COMPOUND	CONC. IN STD (uG/ML)	WINDOW WIDTH	FIRST STD RT	FIRST STD RAW AREA	SECOND STD RT	SECOND STD RAW AREA	THIRD STD RT	THIRD STD RAW AREA
alpha-BHC	0.08	0.02	2.05	158836	0.00	0	2.05	159700
beta-BHC	0.08	0.03	2.85	47575	0.00	0	2.86	47672
delta-BHC	0.08	0.03	3.32	146799	0.00	0	3.33	146624
gamma-BHC	0.08	0.03	2.52	130377	2.55	133643	0.00	0
Heptachlor	0.08	0.03	3.08	138217	0.00	0	3.09	137849
Aldrin	0.08	0.04	3.66	128043	3.70	129953	0.00	0
Hept. epoxide	0.08	0.05	5.32	123124	5.38	124631	0.00	0
Endosulfan I	0.08	0.07	6.64	115024	6.72	115761	0.00	0
Dieldrin	0.08	0.08	8.05	126543	8.14	127502	0.00	0
4'-DDE	0.08	0.08	7.58	111782	0.00	0	7.61	112876
Endrin	0.08	0.10	9.83	83785	0.00	0	9.86	80742
Endosulfan II	0.08	0.12	11.69	114108	11.83	116043	0.00	0
4,4'-DDD	0.08	0.11	11.37	91543	0.00	0	11.41	92058
Endo.sulfate	0.08	0.18	18.00	82266	0.00	0	18.05	81186
4,4'DDT	0.08	0.14	13.53	80788	13.68	85068	0.00	0
Methoxychlor	0.08	0.25	25.42	41761	0.00	0	25.49	39982
Endrin ketone	0.08	0.25	24.51	115780	24.80	116801	0.00	0
. Chlordane	0.08	0.06	6.46	118687	0.00	0	6.48	119507
g. Chlordane	0.08	0.06	5.94	122936	0.00	0	5.96	122336
Toxaphene	2.50	0.15	14.50	1410620	0.00	0	0.00	0
Aroclor-1016	1.00	0.03	2.78	129504	0.00	0	0.00	0
Aroclor-1221	5.00	0.02	1.59	185960	0.00	0	0.00	0
Aroclor-1232	2.50	0.02	2.41	154115	0.00	0	0.00	0
Aroclor-1242	2.50	0.04	3.78	259680	0.00	0	0.00	0
Aroclor-1248	1.00	0.05	5.22	215898	0.00	0	0.00	0
Aroclor-1254	1.00	0.08	7.85	302568	0.00	0	0.00	0
Aroclor-1260	1.00	0.12	12.03	543872	0.00	0	0.00	0
DBC	0.10	0.23	22.82	134843	23.10	109519	23.09	110326

14-May-90

PESTICIDE/PCB STANDARDS SUMMARY

ORIGINAL (Red)

Lab Name:_____VERSAR, INC. Contract:_____

Lab Code: ____VERSAR Case No.:R3-7 SAS No.:___ SDG NO.: __1

Instrument ID:_____A GC Column ID: ___SP2250/SP2401

DATE(S) OF ANALYSIS	FROM:____05/11/90 TO:____05/11/90	DATE OF ANALYSIS _05/12/90
TIME(S) OF ANALYSIS	FROM:____0236 TO:____1727	TIME OF ANALYSIS _0056
		EPA SAMPLE NO. (STANDARD) B991 ___INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.05	2.03	2.07	992722	0.00	0	Y	0
beta-BHC	2.85	2.82	2.88	297343	0.00	0	Y	0
delta-BHC	3.32	3.29	3.35	917492	0.00	0	Y	0
gamma-BHC	2.52	2.49	2.55	814856	2.55	835269	Y	-3
Heptachlor	3.08	3.05	3.11	863854	0.00	0	Y	0
Aldrin	3.66	3.62	3.70	800269	3.70	812206	Y	-1
Hept. epoxide	5.32	5.27	5.37	769525	5.38	778944	Y	-1
Endosulfan I	6.64	6.57	6.71	718902	6.72	723506	Y	-1
Dieldrin	8.05	7.97	8.13	790896	8.14	796888	Y	-1
4,4'-DDE	7.58	7.50	7.66	698639	0.00	0	Y	0
Endrin	9.83	9.73	9.93	523658	0.00	0	Y	0
'Endosulfan II	11.69	11.57	11.81	713173	11.83	725269	Y	-2
4,4'-DDD	11.37	11.26	11.48	572143	0.00	0	Y	0
Endo.sulfate	18.00	17.82	18.18	514163	0.00	0	Y	0
4,4'DDT	13.53	13.39	13.67	504926	13.68	531675	Y	-5
Methoxychlor	25.42	25.17	25.67	261003	0.00	0	Y	0
Endrin ketone	24.51	24.26	24.76	723623	24.80	730006	Y	-1
a. Chlordane	6.46	6.40	6.52	741797	0.00	0	Y	0
g. Chlordane	5.94	5.88	6.00	768348	0.00	0	Y	0
Toxaphene	14.50	14.36	14.65	282124	0.00	0	Y	0
Aroclor-1016	2.78	2.75	2.81	64752	0.00	0	Y	0
Aroclor-1221	1.59	1.57	1.61	18596	0.00	0	Y	0
Aroclor-1232	2.41	2.39	2.43	30823	0.00	0	Y	0
Aroclor-1242	3.78	3.74	3.82	51936	0.00	0	Y	0
Aroclor-1248	5.22	5.17	5.27	107949	0.00	0	Y	0
Aroclor-1254	7.85	7.77	7.93	151284	0.00	0	Y	0
Aroclor-1260	12.03	11.91	12.15	271936	0.00	0	Y	0

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. Identification of such analytes is based primarily on pattern recognition

PESTICIDE/PCB STANDARDS SUMMARY

ORIGINAL (Red)

Lab Name:_____VERSAR, INC. Contract:_____

Lab Code: ____VERSAR Case No.:R3-7 SAS No.:___ SDG NO.: __1

Instrument ID:_____A GC Column ID: ___SP2250/SP2401

DATE(S) OF ANALYSIS	FROM:____05/11/90 TO:____05/11/90	DATE OF ANALYSIS _05/12/90
TIME(S) OF ANALYSIS	FROM:____0236 TO:____1727	TIME OF ANALYSIS _0129 EPA SAMPLE NO. B996 (STANDARD) ___INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.05	2.03	2.07	992722	2.05	998125	Y	-1
beta-BHC	2.85	2.82	2.88	297343	2.86	297950	Y	-0
delta-BHC	3.32	3.29	3.35	917492	3.33	916400	Y	0
gamma-BHC	2.52	2.49	2.55	814856	0.00	0	Y	0
Heptachlor	3.08	3.05	3.11	863854	3.09	861556	Y	0
Aldrin	3.66	3.62	3.70	800269	0.00	0	Y	0
Hept. epoxide	5.32	5.27	5.37	769525	0.00	0	Y	0
Endosulfan I	6.64	6.57	6.71	718902	0.00	0	Y	0
Dieldrin	8.05	7.97	8.13	790896	0.00	0	Y	0
4,4'-DDE	7.58	7.50	7.66	698639	7.61	705475	Y	-1
Endrin	9.83	9.73	9.93	523658	9.86	504638	Y	4
Endosulfan II	11.69	11.57	11.81	713173	0.00	0	Y	0
4,4'-DDD	11.37	11.26	11.48	572143	11.41	575363	Y	-1
Endo.sulfate	18.00	17.82	18.18	514163	18.05	507413	Y	1
4,4'DDT	13.53	13.39	13.67	504926	0.00	0	Y	0
Methoxychlor	25.42	25.17	25.67	261003	25.49	249888	Y	4
Endrin ketone	24.51	24.26	24.76	723623	0.00	0	Y	0
a. Chlordane	6.46	6.40	6.52	741797	6.48	746919	Y	-1
g. Chlordane	5.94	5.88	6.00	768348	5.96	764600	Y	0
Toxaphene	14.50	14.36	14.65	282124	0.00	0	Y	0
Aroclor-1016	2.78	2.75	2.81	64752	0.00	0	Y	0
Aroclor-1221	1.59	1.57	1.61	18596	0.00	0	Y	0
Aroclor-1232	2.41	2.39	2.43	30823	0.00	0	Y	0
Aroclor-1242	3.78	3.74	3.82	51936	0.00	0	Y	0
Aroclor-1248	5.22	5.17	5.27	107949	0.00	0	Y	0
Aroclor-1254	7.85	7.77	7.93	151284	0.00	0	Y	0
Aroclor-1260	12.03	11.91	12.15	271936	0.00	0	Y	0

Under QNT Y/N: enter Y if quantitation was performed, N if not performed.
%D must be less than or equal to 15.0% for quantitation, and less than or equal to 20.0% for confirmation.

Note: Determining that no compounds were found above the CRQL is a form of quantitation, and therefore at least one column must meet the 15.0% criteria.

For multicomponent analytes, the single largest peak that is characteristic of the component should be used to establish retention time and %D. .dentification of such analytes is based primarily on pattern recognition

page_2_of_2_

PCB STANDARD TABLE

ORIGINAL (2nd)

Lab Name: VERSAR, INC. Case No.: R3-7

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/11,12/90 GC Column ID: SP2250/SP2401

Inject Vol: 2.00 (uL) Window Width: 1.0% PCBSTDA

MULTI-COMPONENT ANALYTE	STAND CONC (ug/ml)	PEAK #	BEGINNING STANDARD RT	BEGINNING STANDARD AREA	CAL. FACTOR	FINAL STANDARD RT	FINAL STANDARD AREA	CAL. FACTOR	%D RT	%D CAL FACTOR
	2.50	1	8.08	161719		X	0		100	
		2	12.09	287014		X	0		100	
Toxaphene		3	14.50	483072	282124	X	0	0	100	100
		4	16.42	171329		X	0		100	
		5	20.66	307485		X	0		100	
	1.00	1	2.85	66334		X	0		100	
		2	3.10	86309		X	0		100	
T Chl		3	4.20	51809	345583	X	0	0	100	100
		4	6.00	270891		X	0		100	
		5	6.50	215822		X	0		100	
	5.00	1	1.18	21803		X	0		100	
		2	1.42	5169		X	0		100	
Aroclor-1221		3	1.59	8981	18596	X	0	0	100	100
		4	1.71	33376		X	0		100	
		5	1.92	116631		X	0		100	
	2.50	1	1.71	9217		X	0		100	
		2	1.92	41347		X	0		100	
Aroclor-1232		3	2.41	27342	30823	X	0	0	100	100
		4	2.79	19486		X	0		100	
		5	3.06	56725		X	0		100	
	1.00	1	X	0		X	0		0	
		2	X	0		X	0		0	
		3	X	0	0	X	0	0	0	0
		4	X	0		X	0		0	
		5	X	0		X	0		0	

14-May-90

ORIGINAL (Red)

PCB STANDARD TABLE

Lab Name: VERSAR, INC. Case No.: R3-7

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/11,12/90 GC Column ID: SP2250/SP2401

Inject Vol: 2.00 (uL) Window Width: 1.0% PCBSTDB

MULTI-COMPONENT ANALYTE	STAND CONC (ug/ml)	PEAK #	BEGINNING STANDARD RT	BEGINNING STANDARD AREA	CAL. FACTOR	FINAL STANDARD RT	FINAL STANDARD AREA	CAL. FACTOR	%D RT	%D CAL FACTOR
	1.00	1	1.92	13947		X	0		100	
		2	2.41	20783		X	0		100	
Aroclor-1016		3	2.78	18215	64752	X	0	0	100	100
		4	3.05	54119		X	0		100	
		5	3.32	22440		X	0		100	
	2.50	1	3.33	51070		X	0		100	
		2	3.55	39031		X	0		100	
Aroclor-1242		3	3.78	65025	51936	X	0	0	100	100
		4	4.44	54965		X	0		100	
		5	4.75	49588		X	0		100	
	1.00	1	3.78	38831		X	0		100	
		2	4.44	27294		X	0		100	
Aroclor-1248		3	5.22	23920	107949	X	0	0	100	100
		4	5.51	70958		X	0		100	
		5	6.46	54894		X	0		100	
	1.00	1	6.25	69819		X	0		100	
		2	7.55	12912		X	0		100	
Aroclor-1254		3	7.85	38017	151284	X	0	0	100	100
		4	8.43	70229		X	0		100	
		5	9.54	111591		X	0		100	
	1.00	1	9.51	62102		X	0		100	
		2	10.66	137634		X	0		100	
Aroclor-1260		3	12.03	79333	271936	X	0	0	100	100
		4	13.56	150083		X	0		100	
		5	14.48	114720		X	0		100	

CURVE #_____1 INSTRUMENT ID _____A

CASE # _____R3-7 COLUMN _____SP2250/SP2401

ANALYSIS DATE _____05/11,12/90 ANALYST _____EDZ

CONTRACT #_____

INJECTION VOLUME = 2.00 ul

ORIGINAL (Red)

ANALYTE	STD #1 CONC = 0.02 ug/ml		STD #2 CONC = 0.05 ug/ml		STD #3 CONC = 0.08 ug/ml		STD #4 CONC = 0.10 ug/ml		STD #5 CONC = 0.15 ug/ml	
	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA
ALPHA-BHC	2.04	35354	2.04	94832	2.05	159747	2.06	219390	2.06	310822
BETA-BHC	2.84	11564	2.84	29602	2.85	47765	2.86	63136	2.86	86215
DELTA-BHC	3.31	33162	3.31	90675	3.32	147418	3.33	200250	3.33	278714
GAMMA-BHC	2.53	31341	2.52	79131	2.52	129847	2.52	167222	2.53	255538
HEPTACHLOR	3.07	31790	3.07	84265	3.08	138900	3.09	187486	3.09	262894
ALDRIN	3.67	31498	3.66	78213	3.66	127188	3.66	163285	3.67	246124
HEPTACHLOR EPOXIDE	5.33	30320	5.32	76634	5.32	121841	5.32	156819	5.33	233305
ENDOSULFAN I	6.66	28651	6.64	71713	6.64	114599	6.63	146358	6.65	213921
DIELDRIN	8.07	31368	8.05	78680	8.04	126399	8.04	160060	8.06	237956
4,4'-DDE	7.55	26586	7.57	69768	7.58	113312	7.61	150703	7.61	200745
ENDRIN	9.79	20186	9.80	53081	9.83	84487	9.86	110807	9.86	150225
ENDOSULFAN II	11.71	28811	11.69	71543	11.67	114308	11.68	143240	11.71	209860
4,4'-DDD	11.32	21792	11.34	57697	11.37	92231	11.41	121887	11.41	165920
ENDOSULFAN SULFATE	17.93	19551	17.95	51586	18.00	82656	18.05	109736	18.05	150270
4,4'-DDT	13.55	18683	13.53	48076	13.50	82467	13.51	106263	13.55	159019
METHOXYCHLOR	25.32	10334	25.35	25725	25.45	41568	25.50	56208	25.50	74573
ENDRIN KETONE (NR)	24.53	29176	24.50	71693	24.47	116665	24.49	144911	24.57	215422
ENDRIN ALDEHYDE	14.95	17348	14.93	43623	14.90	78798	14.91	99000	14.95	146860
ALPHA-CHLORDANE (NR)	6.43	28508	6.44	73393	6.46	120158	6.48	158637	6.48	215454
GAMMA-CHLORDANE (NR)	5.92	29661	5.93	76201	5.94	123372	5.96	163633	5.96	224689
T.CHLORDANE	X	X	X	X	X	X	X	X	X	X
TOXAPHENE	X	X	X	X	X	X	X	X	X	X
AROCLOR-1016	X	X	X	X	X	X	X	X	X	X
AROCLOR-1221	X	X	X	X	X	X	X	X	X	X
AROCLOR-1232	X	X	X	X	X	X	X	X	X	X
AROCLOR-1242	X	X	X	X	X	X	X	X	X	X
AROCLOR-1248	X	X	X	X	X	X	X	X	X	X
AROCLOR-1254	X	X	X	X	X	X	X	X	X	X
AROCLOR-1260	X	X	X	X	X	X	X	X	X	X
DIBUTYLCHLORENDATE	22.83	27886	22.80	67165	22.79	106874	22.81	134822	22.88	198062

CURVE #_____1 INSTRUMENT ID _____A

CASE # _____R3-7 COLUMN _____SP2250/SP240

ANALYSIS DATE _____05/11,12/90 ANALYST _____EDZ

CONTRACT #_____

INJECTION VOLUME = 2.00 ul

ANALYTE	STD #1 CALIBRATION FACTOR	STD #2 CALIBRATION FACTOR	STD #3 CALIBRATION FACTOR	STD #4 CALIBRATION FACTOR	STD #5 CALIBRATION FACTOR
ALPHA-BHC	883850	948320	998419	1096950	1036073
BETA-BHC	289100	296020	298531	315680	287383
DELTA-BHC	829050	906750	921363	1001250	929047
GAMMA-BHC	783525	791310	811544	836110	851793
HEPTACHLOR	794750	842650	868125	937430	876313
ALDRIN	787450	782130	794925	816425	820413
HEPTACHLOR EPOXIDE	758000	766340	761506	784095	777683
ENDOSULFAN I	716275	717130	716244	731790	713070
DIELDRIN	784200	786800	789994	800300	793187
4,4'-DDE	664650	697680	708200	753515	669150
ENDRIN	504650	530810	528044	554035	500750
ENDOSULFAN II	720275	715430	714425	716200	699533
4,4'-DDD	544800	576970	576444	609435	553067
ENDOSULFAN SULFATE	488775	515860	516600	548680	500900
4,4'-DDT	467075	480760	515419	531315	530063
METHOXYCHLOR	258350	257250	259800	281040	248577
ENDRIN KETONE (NR)	729400	716930	729156	724555	718073
ENDRIN ALDEHYDE	433700	436230	492488	495000	489533
ALPHA-CHLORDANE (NR)	712700	733930	750988	793185	718180
GAMMA-CHLORDANE (NR)	741525	762010	771075	818165	748963
T.CHLORDANE	0	0	0	0	0
TOXAPHENE	0	0	0	0	0
AROCLOR-1016	0	0	0	0	0
AROCLOR-1221	0	0	0	0	0
AROCLOR-1232	0	0	0	0	0
AROCLOR-1242	0	0	0	0	0
AROCLOR-1248	0	0	0	0	0
AROCLOR-1254	0	0	0	0	0
AROCLOR-1260	0	0	0	0	0
DIBUTYLCHLORENDATE	697150	671650	667963	674110	660207

CURVE # 1 INSTRUMENT ID A

CASE # R3-7 COLUMN SP2250/SP2401

ANALYSIS DATE 05/11,12/90 ANALYST EDZ

CONTRACT #

INJECTION VOLUME = 2.00 ul

ORIGINAL (Red)

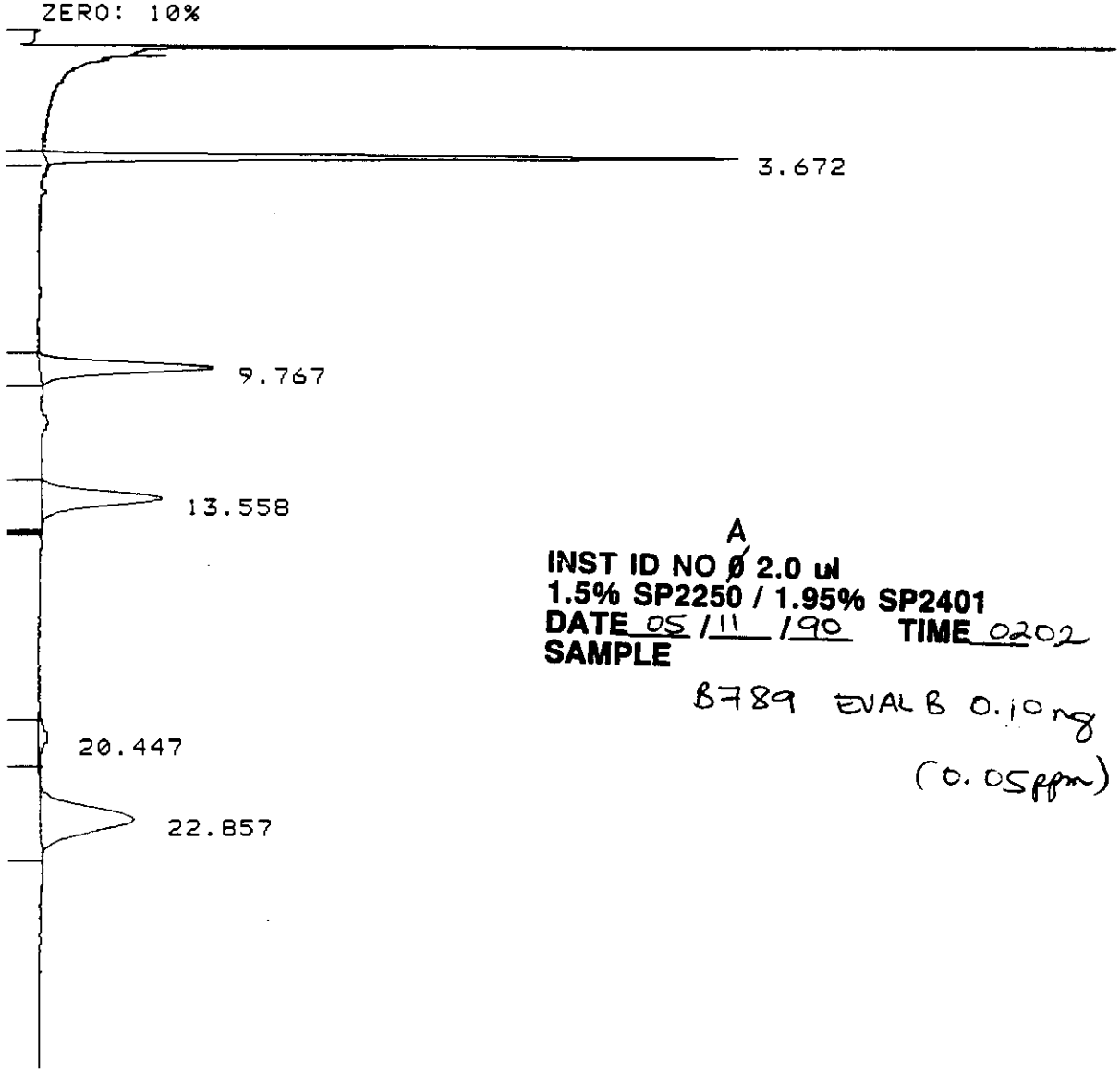
ANALYTE	AVERAGE CALIBRATION FACTOR	%RSD	RETENTION TIME WINDOW (min)	AVERAGE RT	CURVE ADJUSTED AREA FOR MID STANDARD
ALPHA-BHC	992722	8	0.02	2.05	158835.59
BETA-BHC	297343	4	0.03	2.85	47574.87
DELTA-BHC	917492	7	0.03	3.32	146798.69
GAMMA-BHC	814856	4	0.03	2.52	130377.03
HEPTACHLOR	863854	6	0.03	3.08	138216.59
ALDRIN	800269	2	0.04	3.66	128042.99
HEPTACHLOR EPOXIDE	769525	1	0.05	5.32	123123.99
ENDOSULFAN I	718902	1	0.07	6.64	115024.28
DIELDRIN	790896	1	0.08	8.05	126543.37
4,4'-DDE	698639	5	0.08	7.58	111782.24
ENDRIN	523658	4	0.10	9.83	83785.24
ENDOSULFAN II	713173	1	0.12	11.69	114107.63
4,4'-DDD	572143	4	0.11	11.37	91542.89
ENDOSULFAN SULFATE	514163	4	0.18	18.00	82266.08
4,4'-DDT	504926	6	0.14	13.53	80788.23
METHOXYCHLOR	261003	5	0.25	25.42	41760.53
ENDRIN KETONE (NR)	723623	1	0.25	24.51	115779.67
ENDRIN ALDEHYDE	469390	7	0.15	14.93	75102.43
ALPHA-CHLORDANE (NR)	741797	4	0.06	6.46	118687.44
GAMMA-CHLORDANE (NR)	768348	4	0.06	5.94	122935.63
T.CHLORDANE	0	0	0.01	0.00	0.00
TOXAPHENE	0	0	0.01	0.00	0.00
AROCLOR-1016	0	0	0.01	0.00	0.00
AROCLOR-1221	0	0	0.01	0.00	0.00
AROCLOR-1232	0	0	0.01	0.00	0.00
AROCLOR-1242	0	0	0.01	0.00	0.00
AROCLOR-1248	0	0	0.01	0.00	0.00
AROCLOR-1254	0	0	0.01	0.00	0.00
AROCLOR-1260	0	0	0.01	0.00	0.00
DIBUTYLCHLORENDATE	674216	2	0.23	22.82	~~107874.53~~

134843.2 - adjusted area for conc. 0.10 ug/ml

gc 5/14/90

ORIGINAL (Red)

ıRT SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~Ø~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 0202
SAMPLE
B789 EVAL B 0.10 ng
(0.05 ppm)

TITLE: CLP PESTICIDES 2:02 11 MAY 90

CHANNEL NO: 3 SAMPLE: B789 EVAL.05 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
	LDRIN	75931	3.672	-0.068	75931	BB	?	7.60
2	ENDRIN	50567	9.767	-0.193	50567	BB	?	20.30
3	DDT	48589	13.558	-0.262	48589	BB		27.65
4		4584	20.447		4584	BV		42.45
5	DBC	62627	22.857	-0.483	62627	VB		46.65
TOTALS:		242298		-1.006	242298			

ECTED PKS: 5 REJECTED PKS: 0

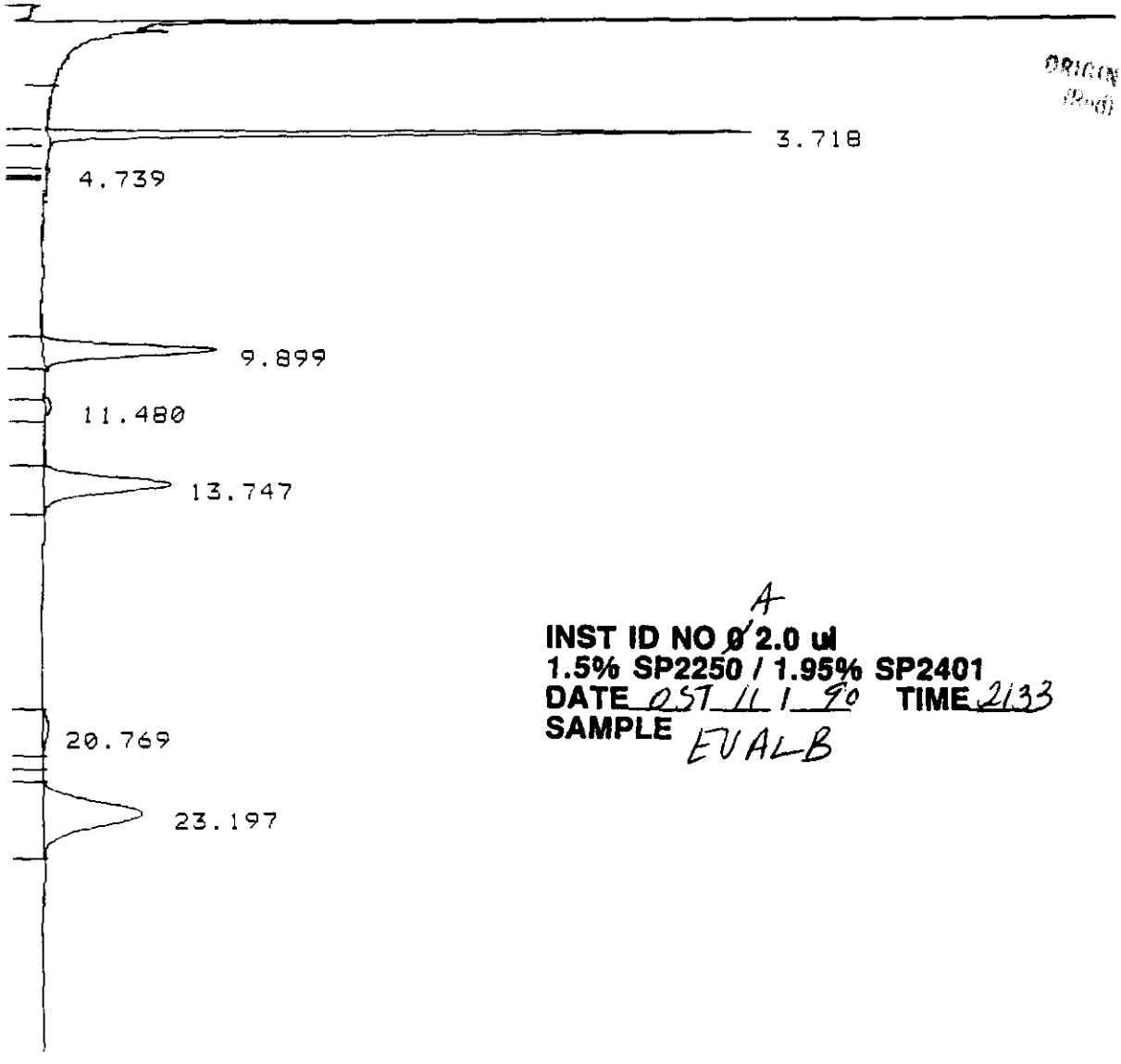
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -13

RACK: 1 VIAL: 1 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



ORIGINAL

INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE OCT 11 1 90 TIME 2133
SAMPLE EVALB

varian 'sunnyvale, calif. p/n 13-906362-00

TITLE: CLP PESTICIDES 21:33 11 MAY 90

ORIGINAL (Red)

C NEL NO: 3 SAMPLE: EVAL B METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	ALDRIN	79363	3.718	0.048	79363	BB	? 7.70
2	ENDRIN	49646	9.899	0.039	49646	BB	? 20.50
3	DDD	1726	11.480	0.070	1726	BB	? 22.40
4	DDT	51377	13.747	0.197	51377	BB	28.05
5		4790	20.769		4790	BB	42.65
6	DBC	66506	23.197	0.317	66506	BB	47.00
TOTALS:		253408		0.671	253408		

DETECTED PKS: 7 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -24

PACK: 3 VIAL: 7 INJ: 1

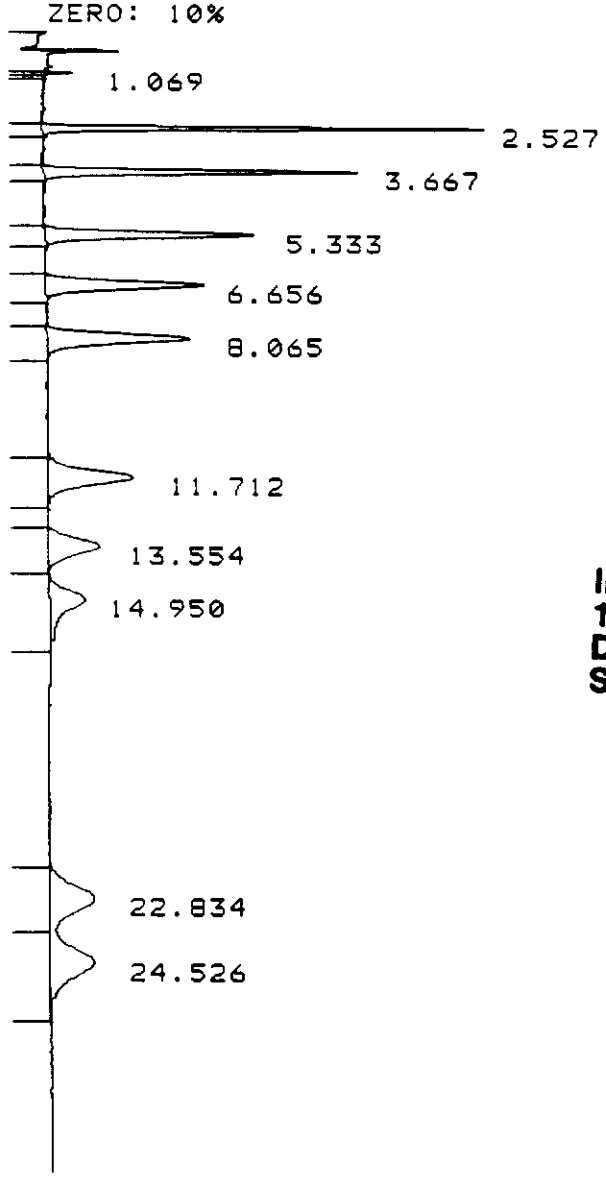
NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT

water, Summy

100038

ORIGINAL (Red)

C. .T SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 0236
SAMPLE

B989 INDA 0.04 ng
(0.02 ppm)

20003

TITLE: CLP PESTICIDES 2:36 11 MAY 90

CHANNEL NO: 3 SAMPLE: B989 INDA.02 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		873	1.069		873	BB	2.35
	G-BHC	31341	2.527	-0.053	31341	BB	5.30
	ALDRIN	31498	3.667	-0.073	31498	BB	? 7.55
	HEPT EPOX	30320	5.333	-0.107	30320	BB	11.15
R 11/90 5	~~A-CHLORDANA-ENDOS~~	28651	6.656	0.116	28651	BB	13.80
6	DIELDRIN	31368	8.065	-0.155	31368	BB	16.60
R 11/90 7	~~DDD~~ B-ENDOS	28811	11.712	0.195	28811	BB	24.50
8	DDT	18683	13.554	-0.266	18683	BV	27.70
9	ENDRIN ALD	17348	14.950	-0.320	17348	VB	34.00
10	DBC	27886	22.834	-0.506	27886	BV	47.45
11	ENDRIN KET	29176	24.526	-0.534	29176	VB	51.10
TOTALS:		275955		-1.706	275955		

DETECTED PKS: 11 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

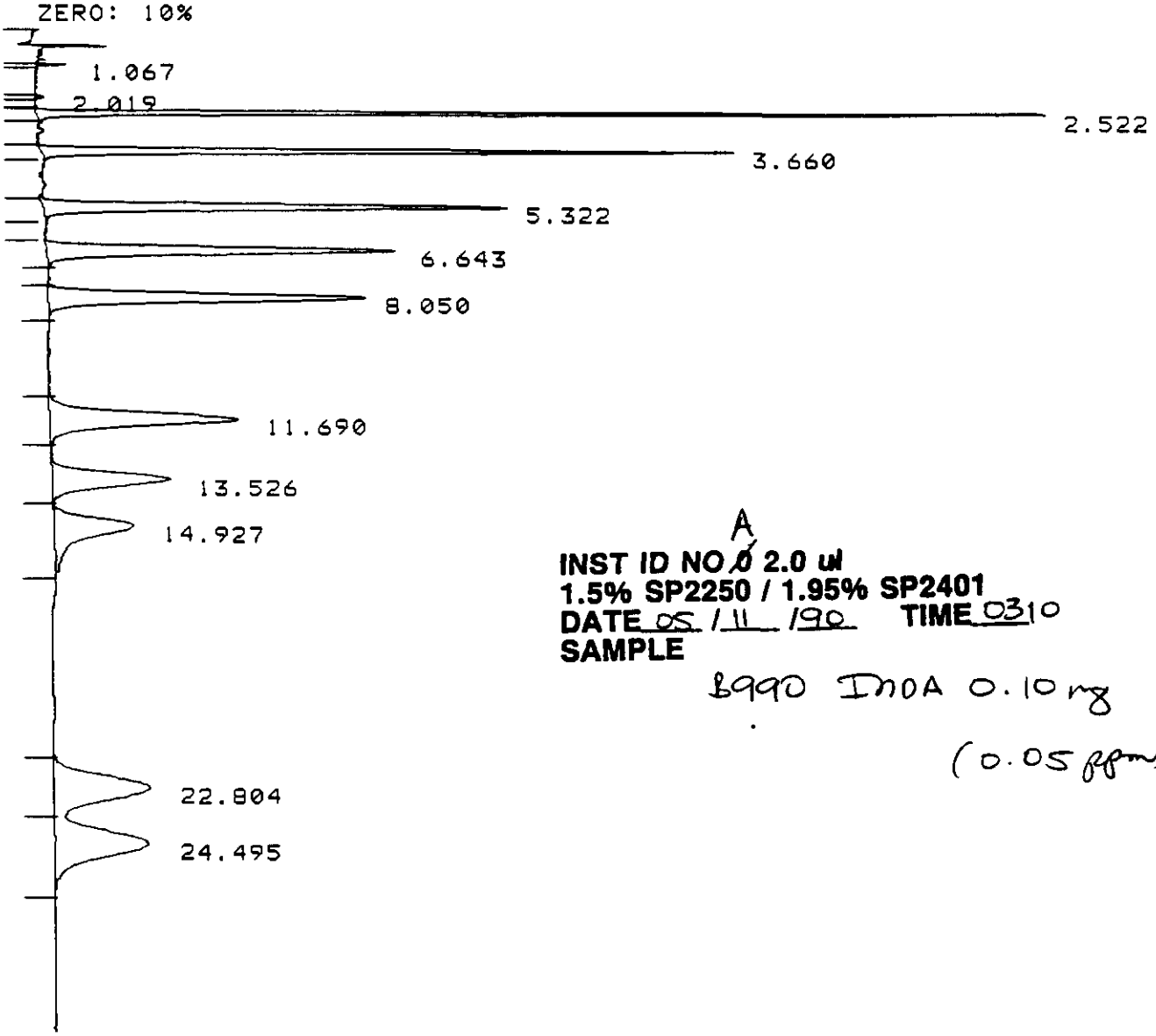
NOISE: 41.3 OFFSET: -24

RACK: 1 VIAL: 2 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

ORIGINAL (Red)

C. RT SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 0310
SAMPLE
8990 IndA 0.10 ng
(0.05 ppm)

100030

ORIGINAL

TITLE: CLP PESTICIDES 3:10 11 MAY 90

CHANNEL NO: 3 SAMPLE: B990 INDA.05 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
		1020	1.067		1020	BB	2.35
	;-BHC	79131	2.522	-0.058	79131	BB	5.20
3	ALDRIN	78213	3.660	-0.080	78213	BB	7.60
4	HEPT EPOX	76634	5.322	-0.118	76634	BB	11.00
5	~~A-CHLORDANA-ENDOS~~	71713	6.643	0.103	71713	BB	13.60
6	DIELDRIN	78680	8.050	-0.170	78680	BB	16.45
7	~~DDD~~ B-ENDOS	71543	11.690	0.170	71543	BV	24.60
8	DDT	48076	13.526	-0.294	48076	VV	27.90
9	ENDRIN ALD	43623	14.927	-0.343	43623	VB	35.30
0	DBC	67165	22.804	-0.536	67165	BV	46.85
.1	ENDRIN KET	71693	24.495	-0.565	71693	VB	51.10
TOTALS:		687491		-1.891	687491		

-R 11/90

-R 11/90

DETECTED PKS: 12 REJECTED PKS: 1

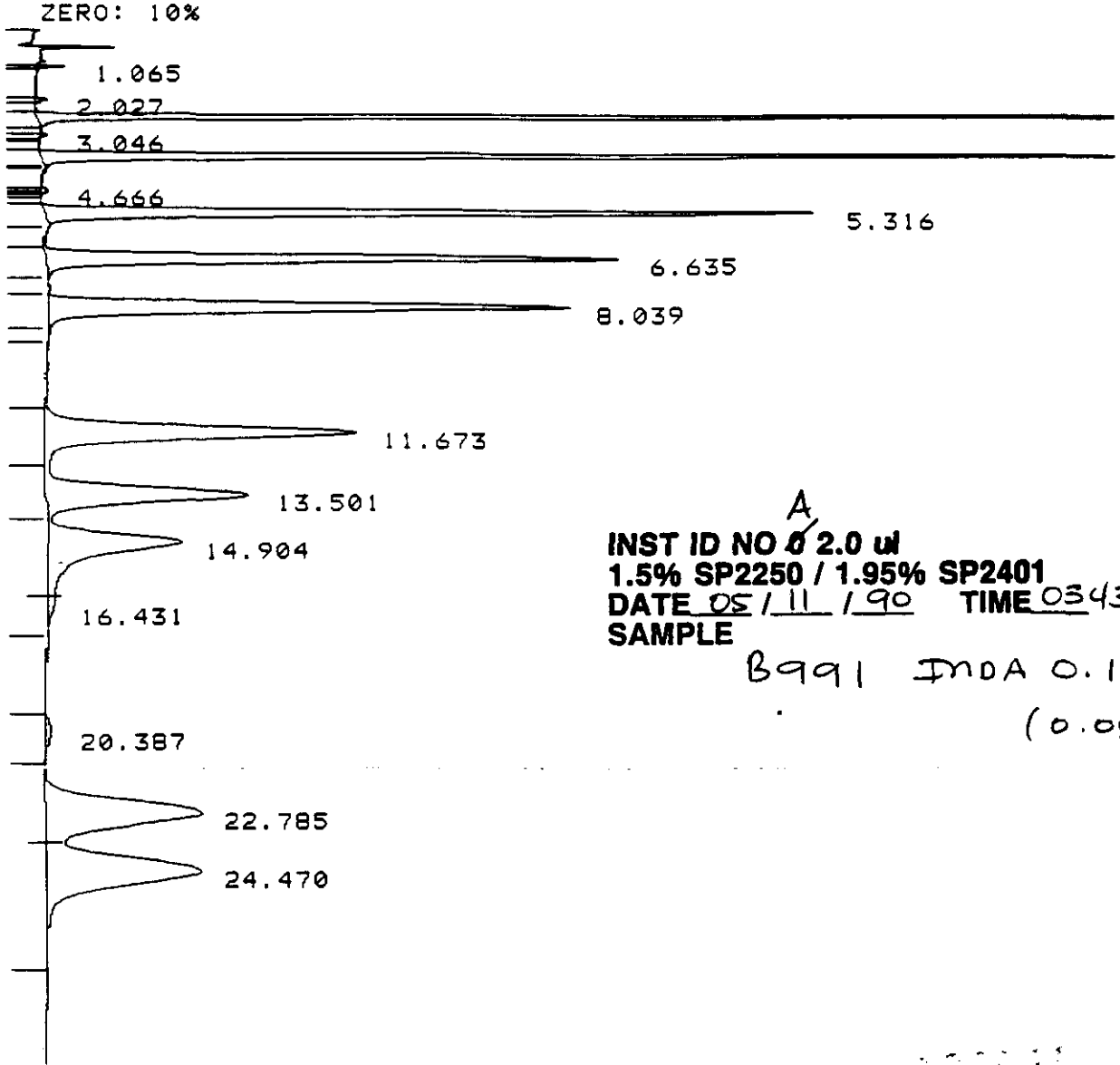
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -9

RACK: 1 VIAL: 4 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 0343
SAMPLE
B991 IMDA 0.16 ng
(0.08 ppm)

TITLE: CLP PESTICIDES 3:43 11 MAY 90

CHANNEL NO: 3 SAMPLE: B991 INDA.08 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		1002	1.065		1002	BB	2.45
2	A-BHC	754	2.027	-0.053	754	BB	4.50
3	G-BHC	129847	2.518	-0.062	129847	BB	5.15
4	ALDRIN	127188	3.655	-0.085	127188	BV	7.45
5	HEPT EPOX	121841	5.316	-0.124	121841	BB	10.90
6	~~A-CHLORDAN~~ A-ENDOS	114599	6.635	0.095	114599	BB	13.65
7	DIELDRIN	126399	8.039	-0.181	126399	BB	16.55
8	~~DDD~~ B-ENDOS	114308	11.673	0.153	114308	BV	24.30
9	DDT	82467	13.501	-0.319	82467	VV	27.65
10	ENDRIN ALD	78798	14.904	-0.366	78798	VV	34.40
11		4078	16.431		4078	VB	? 75.40
12		3286	20.387		3286	BV	44.80
13	DBC	106874	22.785	-0.555	106874	VV	46.70
14	ENDRIN KET	116665	24.470	-0.590	116665	VB	50.75
TOTALS:		1128110		-2.087	1128110		

DETECTED PKS: 18 REJECTED PKS: 4

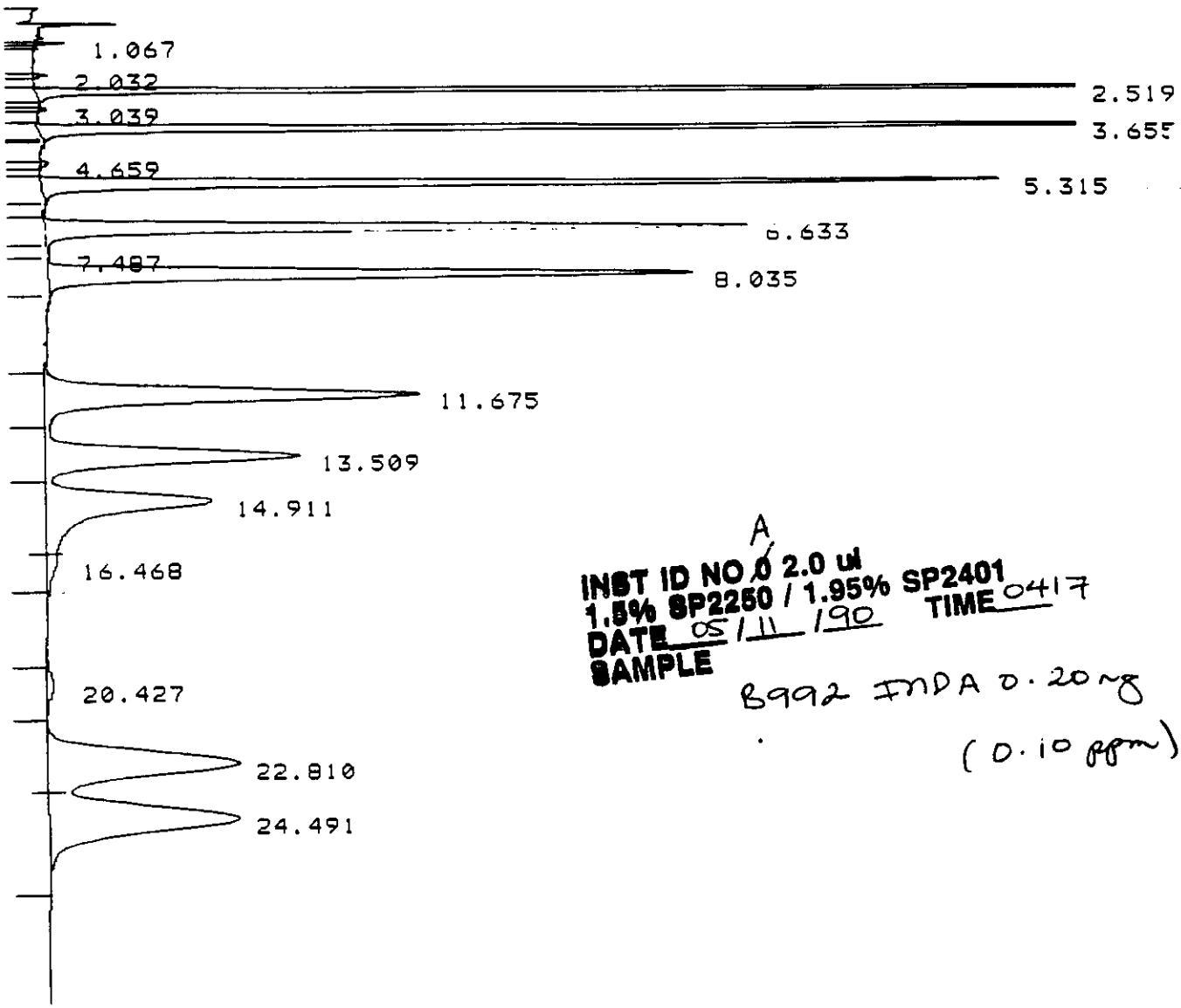
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -16

RACK: 1 VIAL: 5 INJ: 1

NOTE :
: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
O' * OUTSIDE RETENTION TIME WINDOW
BLO STANDARDS

CHART SPEED 0.5 CM/MIN
A' N: 16 ZERO: 10%



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 0417
SAMPLE B992 FMDA 0.20 ng
(0.10 ppm)

)

T. _E: CLP PESTICIDES 4:17 11 MAY 90

CHANNEL NO: 3 SAMPLE: B992 INDA.10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1122	1.067		1122	BB		2.40
2	A-BHC	866	2.032	-0.048	866	BB		4.20
3	G-BHC	167222	2.519	-0.061	167222	BB		5.05
	LDRIN	163285	3.655	-0.085	163285	BV		7.40
		885	4.659		885	BB	?	6.65
	IEPT EPOX	156819	5.315	-0.125	156819	BB		10.75
7	~~A-CHLORDANE~~ A-ENDO	146358	6.633	0.093	146358	BV		13.55
8	DIELDRIN	160060	8.035	-0.185	160060	VB	?	15.00
9	~~DDD~~ B-ENDOS	143240	11.675	0.155	143240	BV		24.30
10	DDT	106263	13.509	-0.311	106263	VV		27.35
11	ENDRIN ALD	99000	14.911	-0.359	99000	VV		34.25
12		4866	16.468		4866	VB	?	76.20
13		3991	20.427		3991	BV		44.30
14	DBC	134822	22.810	-0.530	134822	VV		46.65
15	ENDRIN KET	144911	24.491	-0.569	144911	VB		50.70
TOTALS:		1433710		-2.025	1433710			

DETECTED PKS: 18 REJECTED PKS: 3

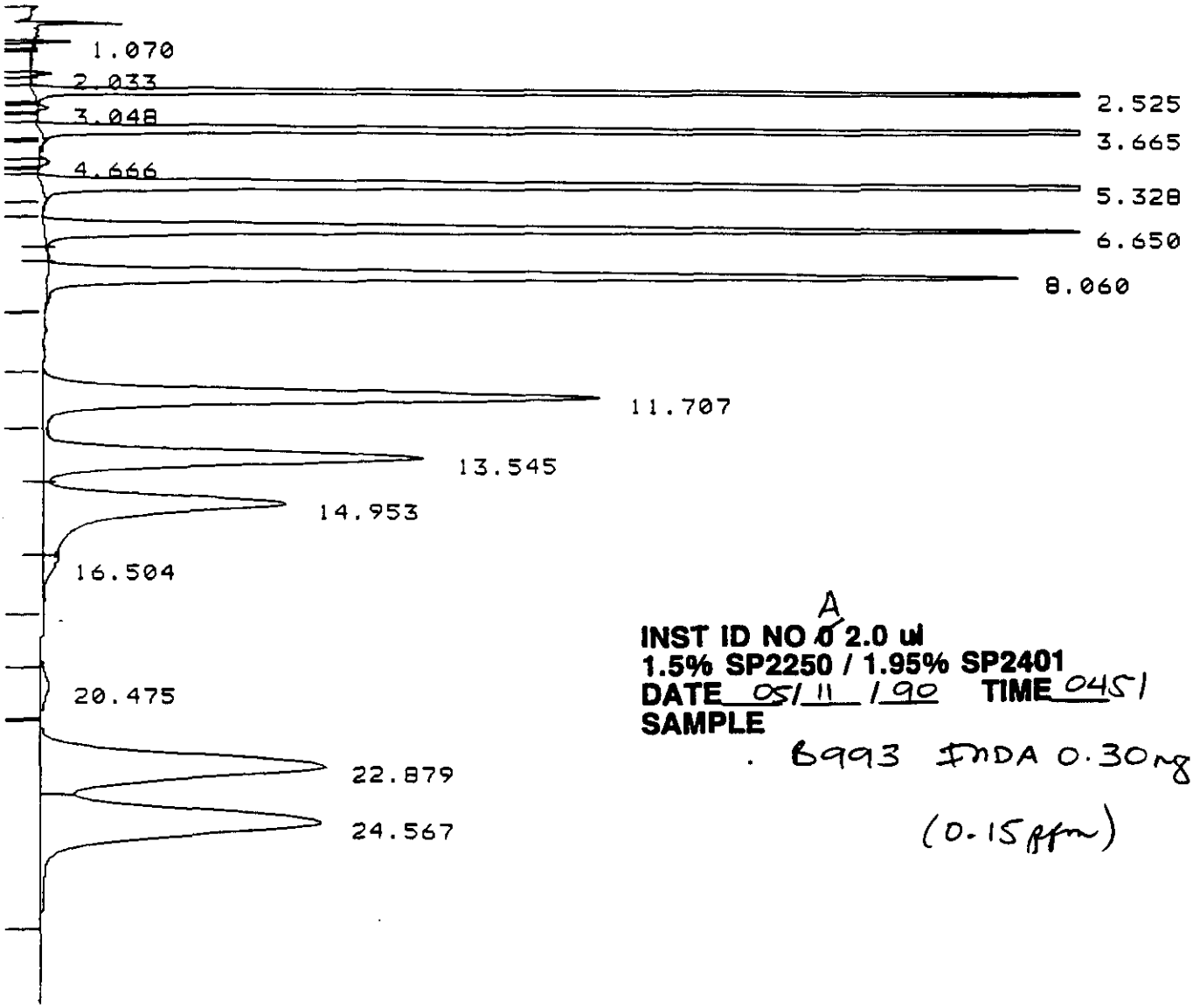
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -12

RACK: 1 VIAL: 7 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: r6 ZERO: 10%



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 0451
SAMPLE
. B993 FNDA 0.30ng
(0.15ppm)

ORIGINAL
(Red)

TITLE: CLP PESTICIDES

ANNEL NO: 3 SAMPLE: B993 INDA.15 4:51 11 MAY 90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1414	1.070		1414	BV		2.50
2	A-BHC	1491	2.033	-0.047	1491	BB		4.45
3	G-BHC	255538	2.525	-0.055	255538	BB		4.95
4	HEPTACHLOR	1013	3.048	-0.072	1013	BB		5.70
5	ALDRIN	246124	3.665	-0.075	246124	BV		7.25
	HEPT EPOX	1387	4.666		1387	BB	?	9.00
TKR 7/11/90	~~A CHLORDANE~~	233305	5.328	-0.112	233305	BB		10.60
9	DIELDRIN	213921	6.650	0.110	213921	BB		13.40
TKR 7/11/90 10	~~DDD~~ B-ENDOS	237956	8.060	-0.160	237956	BB		14.10
11	DDT	209860	11.707	0.187	209860	BV		24.30
12	ENDRIN ALD	159019	13.545	-0.275	159019	VV		27.35
13		146860	14.953	-0.317	146860	VV		34.30
14		9063	16.504		9063	VB	?	75.60
15	DBC	5288	20.475		5288	BV		41.05
16	ENDRIN KET	198062	22.879	-0.461	198062	VV		46.45
		215422	24.567	-0.493	215422	VB		50.30
TOTALS:		2135720		-1.770	2135720			

DETECTED PKS: 18 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

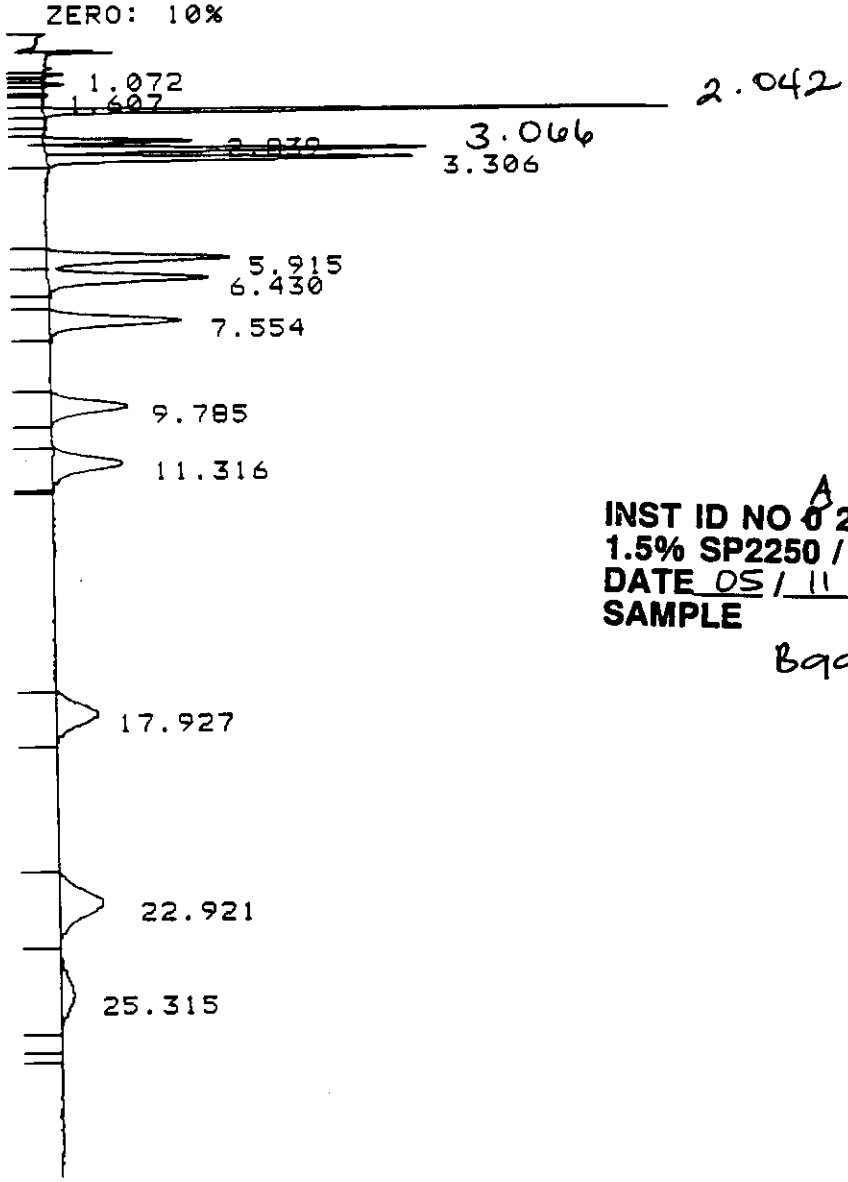
NOISE: 41.3 OFFSET: -19

RACK: 1 VIAL: 8 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

ORIGINAL
(Red)

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 0524
SAMPLE
B994 INDB 0.04 ng
(0.02 ppm)

100047

ORIGINAL
(Red)

TIT · CLP PESTICIDES 5:24 11 MAY 90

CHA EL NO: 3 SAMPLE: B994 INDB ~~.20~~ .02 JKR 07/11/90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		699	1.072		699	BB	2.45
2		998	1.338		998	BB	3.25
3	A-BHC	35354	2.042	-0.038	35354	BB	4.30
4	B-BHC	11564	2.839	-0.051	11564	BV	6.05
5	HEPTACHLOR	31790	3.066	-0.054	31790	VV	6.40
6	D-BHC	33162	3.306	-0.054	33162	VB	6.95
7	G-CHLORDAN	29661	5.915	-0.105	29661	BV	12.30
8	A-CHLORDAN	28508	6.430	-0.110	28508	VB	13.60
9	DDE	26586	7.554	-0.126	26586	BB	15.60
10	ENDRIN	20186	9.785	-0.175	20186	BB	20.45
11	DDD	21792	11.316	-0.204	21792	BB	23.15
12	ESS	19551	17.927	-0.323	19551	BB	? 36.95
13	DBC	27914	22.921	-0.419	27914	BV	47.40
14	~~ENDRIN KET~~ Methoxychlor	10334	25.315	0.255	10334	VB	? 56.50
TOTALS:		298099		-1.404	298099		

ZR 7/11/90

DETECTED PKS: 15 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

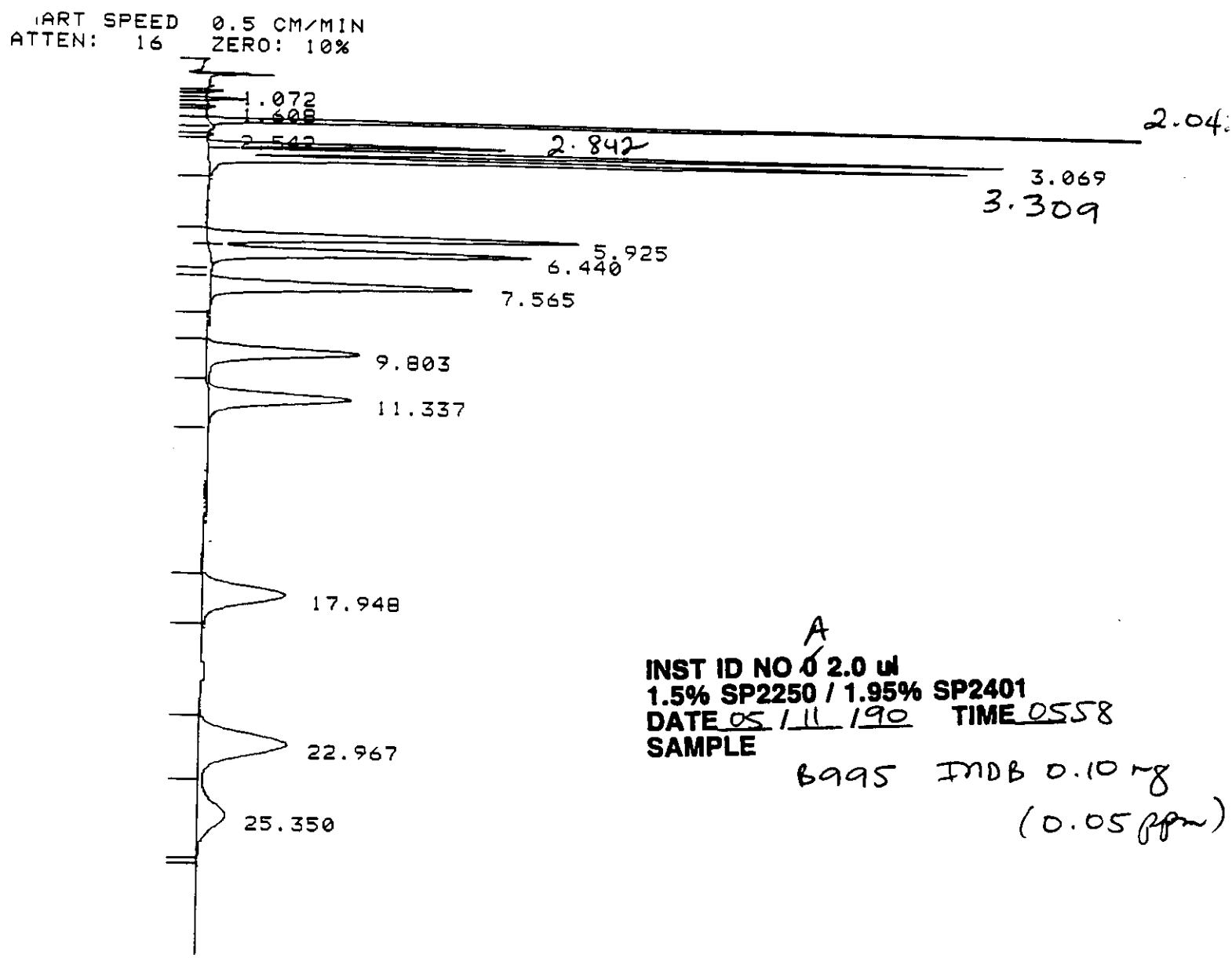
NOISE: 41.3 OFFSET: -22

RA 1 VIAL: 10 INJ: 1

NOTES:
C : 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

ORIGINAL
(Red)

906362.00



100010

ORIGINAL
(Red)

TIT'E: CLP PESTICIDES 5:58 11 MAY 90

CHANNEL NO: 3 SAMPLE: B995 INDB.~~50~~ .05 JKR 05/11/90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		740	1.072		740	BB	2.50
2		2047	1.337		2047	BB	3.05
3	A-BHC	94832	2.042	-0.038	94832	BB	4.20
4	B-BHC	29602	2.842	-0.048	29602	VV	6.00
5	HEPTACHLOR	84265	3.069	-0.051	84265	VV	6.35
6	BHC	90675	3.309	-0.051	90675	VB	6.90
7	-CHLORDAN	76201	5.925	-0.095	76201	BV	12.20
8	H-CHLORDAN	73393	6.440	-0.100	73393	VB	13.45
9	DDE	69768	7.565	-0.115	69768	BB	15.55
10	ENDRIN	53081	9.803	-0.157	53081	BV	20.25
11	DDD	57697	11.337	-0.183	57697	VB	23.45
12	ESS	51586	17.948	-0.302	51586	BB	? 36.65
13	DBC	69610	22.967	-0.373	69610	BV	46.95
14	~~ENDRIN KET~~ Methoxychlor	25725	25.350	0.290	25725	VB	54.20
90							
OT	LS:	779222		-1.223	779222		

ETECTED PKS: 16 REJECTED PKS: 2

IVISOR: 1.00000 MULTIPLIER: 10000.0

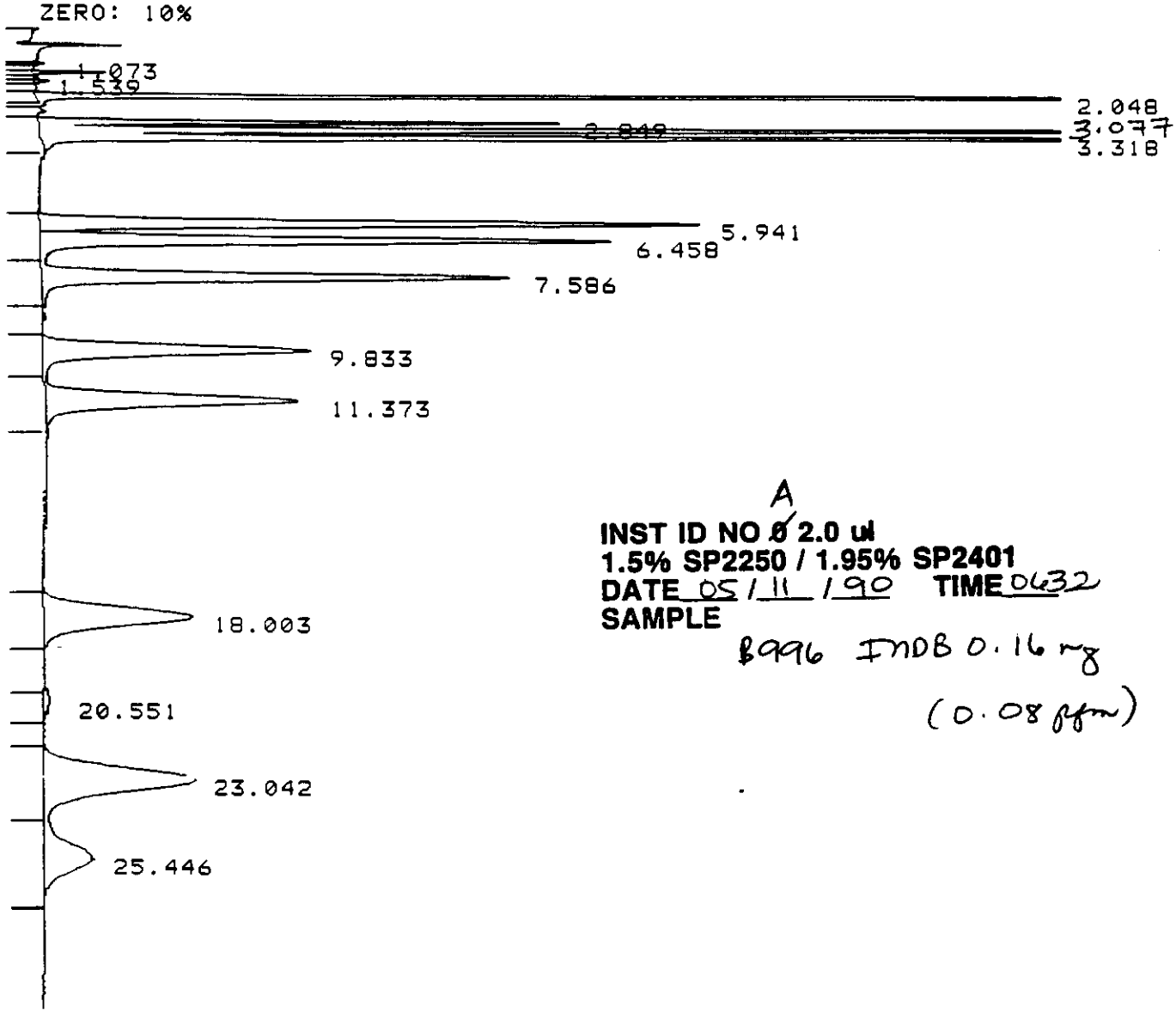
OISE: 41.3 OFFSET: -19

ACK: 1 VIAL: 11 INJ: 1

OTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

ORIGINAL
(Red)

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 0632
SAMPLE
B996 INDB 0.16 mg
(0.08 ppm)

100051

ORIGINAL (Red)

TITLE: CLP PESTICIDES 6:32 11 MAY 90

CHANNEL NO: 3 SAMPLE: B996 INDB.08 METHOD: CLP-3A

PEAK #	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		3430	1.342		3430	BV		3.10
2		753	1.612		753	VB	?	2.35
3	A-BHC	159747	2.048	-0.032	159747	BV		4.10
4	B-BHC	47765	2.849	-0.041	47765	BV		6.05
5	HEPTACHLOR	138900	3.077	-0.043	138900	VV		6.25
6	D-BHC	147418	3.318	-0.042	147418	VB		6.75
7	G-CHLORDAN	123372	5.941	-0.079	123372	BV		12.20
8	A-CHLORDAN	120158	6.458	-0.082	120158	VV		13.45
9	DDE	113312	7.586	-0.094	113312	VB		15.65
1	NDRIN	84487	9.833	-0.127	84487	BV		20.20
1	DD	92231	11.373	-0.147	92231	VB		23.35
1	ESS	82656	18.003	-0.247	82656	BB	?	36.65
13		2537	20.551		2537	BB	?	19.00
14	DBC	110057	23.042	-0.298	110057	BV	?	67.10
15	METHOXYCHL	41568	25.446	-0.264	41568	VB		53.30
TOTALS:		1268390		-1.496	1268390			

D ICTED PKS: 18 REJECTED PKS: 3

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -16

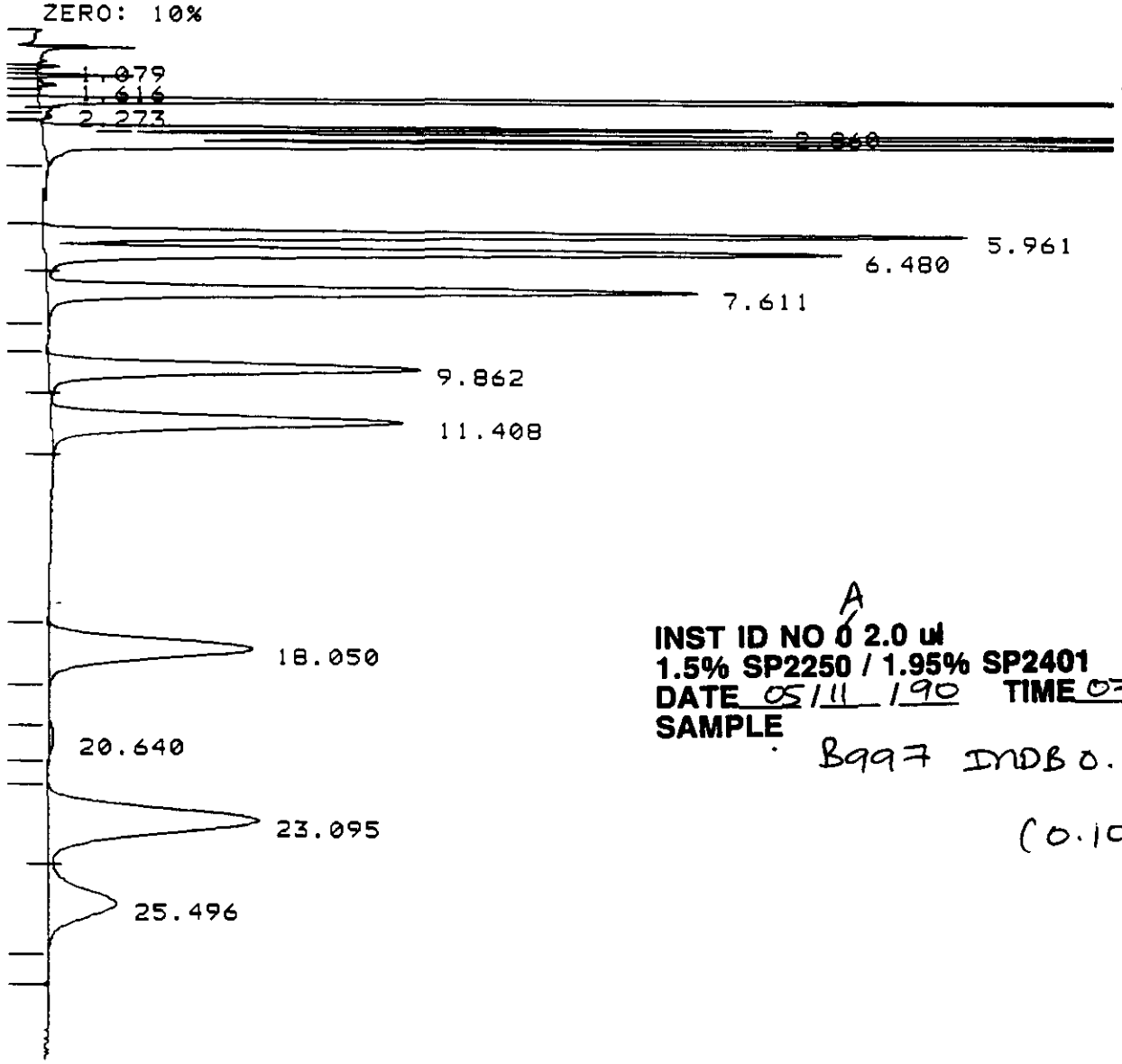
RACK: 1 VIAL: 13 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

100052

ORIGINAL
(Red)

C RT SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO 0 A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 0714
SAMPLE
B997 INDB 0.20 ng
(0.10 ppm)

100078

ORIGINAL (Red)

TITLE: CLP PESTICIDES 7:14 11 MAY 90

CHANNEL NO: 3 SAMPLE: B997 INDB.10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		803	1.079		803	BB	2.35
2		4315	1.347		4315	BV	3.05
3		1408	1.616		1408	VB	3.85
	A-BHC	219390	2.057	-0.023	219390	BV	4.10
	~~G-BHC~~	623	2.542	-0.038	623	T	3.95
6	B-BHC	63136	2.860	-0.030	63136	VV	6.05
7	HEPTACHLOR	187486	3.089	-0.031	187486	VV	6.25
8	D-BHC	200250	3.331	-0.029	200250	VB	6.75
9	G-CHLORDAN	163633	5.961	-0.059	163633	BV	12.10
10	A-CHLORDAN	158637	6.480	-0.060	158637	VV	13.35
11	DDE	150703	7.611	-0.069	150703	VB	15.65
12	ENDRIN	110807	9.862	-0.098	110807	BV	20.20
13	DDD	121887	11.408	-0.112	121887	VB	23.55
14	ESS	109736	18.050	-0.200	109736	BB	? 36.90
15		3402	20.640		3402	BB	? 42.90
16	DBC	145657	23.095	-0.245	145657	BV	47.15
17	METHOXYCHL	56208	25.496	-0.214	56208	VB	53.35
TOTALS:		1698080		-1.208	1698080		

DETECTED PKS: 18 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

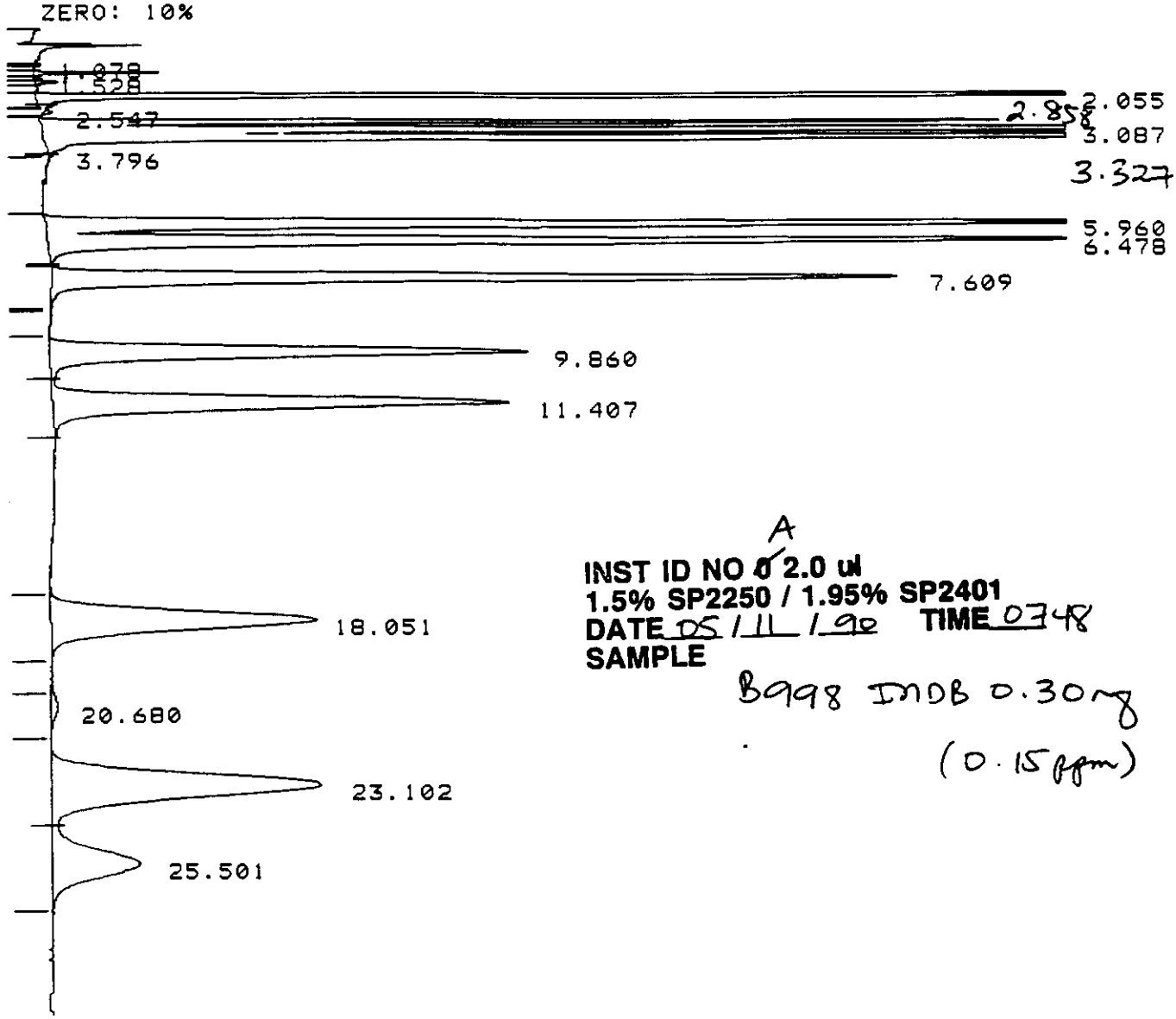
NOISE: 41.3 OFFSET: -16

RACK: 1 VIAL: 14 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
C * OUTSIDE RETENTION TIME WINDOW
L) STANDARDS

ORIGINAL (Red)

CHART SPEED 0.5 CM/MIN
A :N: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 0748
SAMPLE
B998 INDB 0.30 ng
(0.15 ppm)

200033

ORIGINAL (Red)

TITLE: CLP PESTICIDES 7:48 11 MAY 90

CHANNEL NO: 3 SAMPLE: B998 INDB.15 METHOD: CLP-3A

PE. NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		5870	1.345		5870	VV	3.05
2		1332	1.614		1332	VB	4.20
3	A-BHC	310822	2.055	-0.025	310822	BV	4.00
4	~~G-BHC~~	862	2.547	-0.033	862	T	3.80
5	B-BHC	86215	2.858	-0.032	86215	VV	5.95
6	HEPTACHLOR	262894	3.087	-0.033	262894	VV	6.10
7	D-BHC	278714	3.327	-0.033	278714	VV	6.65
	-CHLORDAN	224689	5.960	-0.060	224689	BV	12.00
	-CHLORDAN	215454	6.478	-0.062	215454	VB	13.20
1	DE	200745	7.609	-0.071	200745	BB	15.35
11	ENDRIN	150225	9.860	-0.100	150225	BV	20.35
12	DDD	165920	11.407	-0.113	165920	VB	23.55
13	ESS	150270	18.051	-0.199	150270	BB	? 36.85
14		4854	20.680		4854	BV	39.65
15	DBC	197320	23.102	-0.238	197320	VV	46.90
16	METHOXYCHL	74573	25.501	-0.209	74573	VB	54.00
T	LS:	2330760		-1.208	2330760		

DETECTED PKS: 21 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

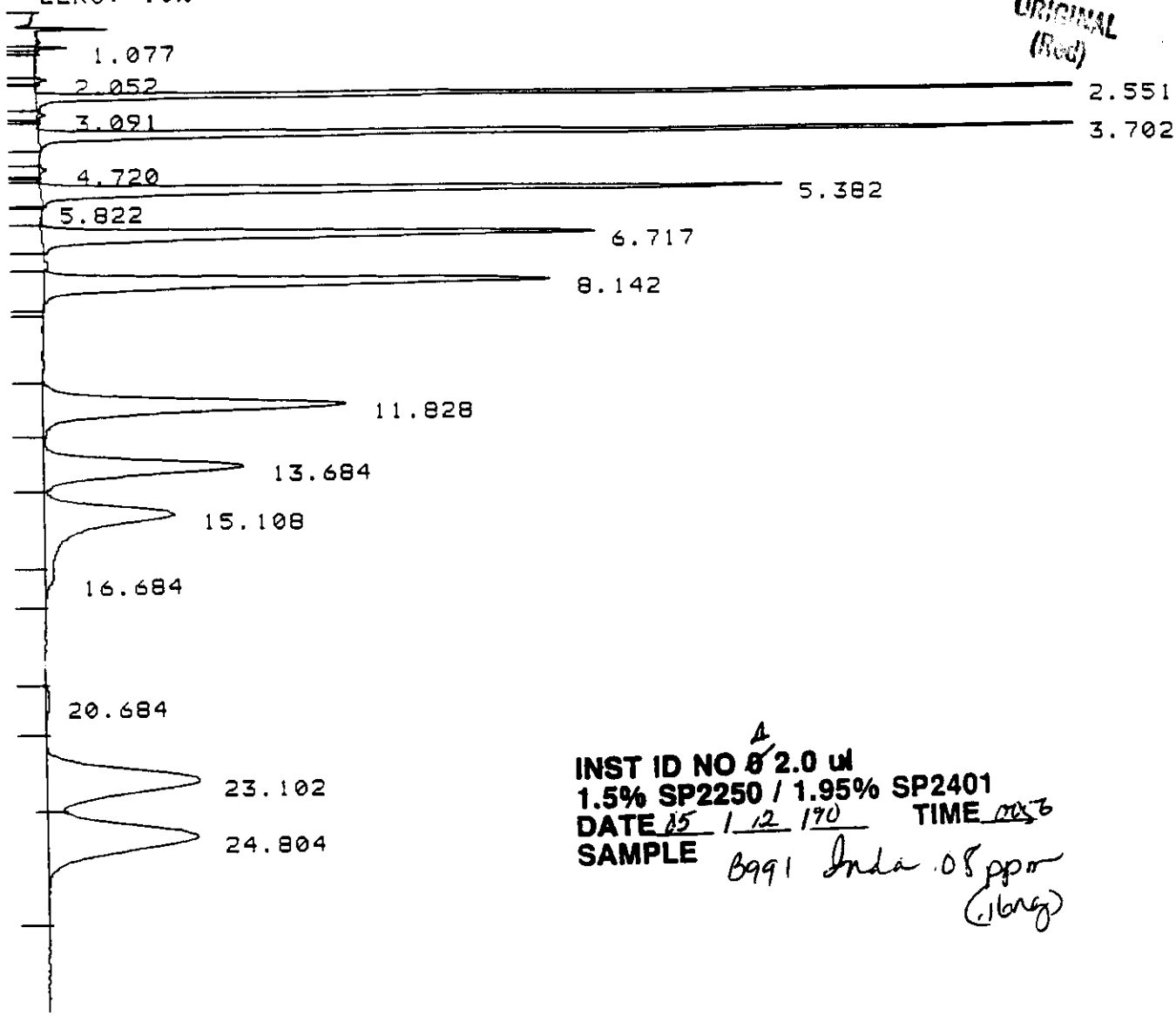
NOISE: 41.3 OFFSET: -18

RACK: 2 VIAL: 1 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%

ORIGINAL (Red)



INST ID NO ~~8~~ 1 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 15 / 12 / 90 TIME 0056
SAMPLE B991 Inda .08 ppm (.16ng)

100057

TITLE: CLP PESTICIDES 0:56 12 MAY 90

ORIGINAL (Red)

CHANNEL NO: 3 SAMPLE: B991 INDA.08 METHOD: CLP-3A

PK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1170	1.077		1170	BV		2.35
2	A-BHC	758	2.052	-0.008	758	BV		4.30
3	G-BHC	133643	2.551	0.021	133643	VV		5.20
4	HEPTACHLOR	585	3.091	0.001	585	T	?	10.00
5	ALDRIN	129953	3.702	0.032	129953	VB	?	4.95
6		958	4.720		958	BB		10.60
7	HEPT EPOX	124631	5.382	0.052	124631	BV		11.05
8	A-ENDOSULF	115761	6.717	0.067	115761	BB		13.90
9	DIELDRIN	127502	8.142	0.082	127502	BB		16.70
10	B-ENDOSULF	116043	11.828	0.118	116043	BV		24.55
11	DDT	85068	13.684	0.134	85068	VV		27.85
12	ENDRIN ALD	80108	15.108	0.158	80108	VV		35.15
13		3893	16.684		3893	VB	?	67.80
14		3298	20.684		3298	BV		40.85
15	DBC	109519	23.102	0.222	109519	VV		47.20
16	ENDRIN KET	116801	24.804	0.234	116801	VB		50.95
TOTALS:		1149690		1.113	1149690			

DETECTED PKS: 19 REJECTED PKS: 3

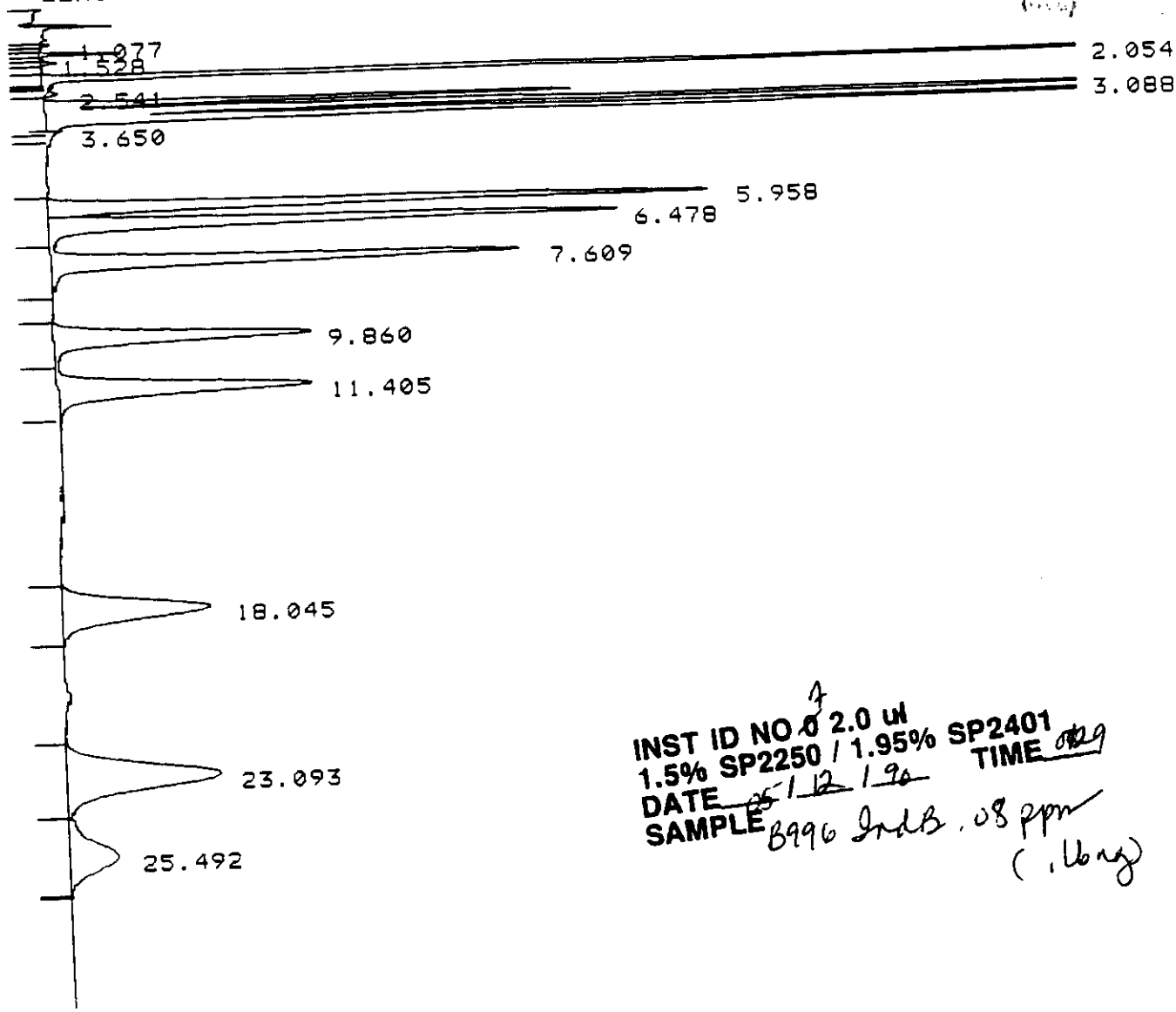
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -24

RACK: 4 VIAL: 1 INJ: 1

NC
_: 1.5% SP2250/1.95% SP2401
HMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO 7 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/12/90 TIME 0829
SAMPLE B996 IndB .08 ppm
(.16 ng)

varian Sunnyvale, Calif. p/n 13-906362-00

100059

ORIGINAL (Red)

TITLE: CLP PESTICIDES 1:29 12 MAY 90

CHANNEL NO: 3 SAMPLE: B996 INDB.08 METHOD: CLP-3A

P NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		3787	1.344		3787	BV		3.05
2		892	1.613		892	VB		4.00
3	A-BHC	159700	2.054	-0.006	159700	BV		4.15
4	G-BHC	1034	2.541	0.011	1034	T	?	6.85
5	B-BHC	47672	2.857	-0.003	47672	VV		6.05
6	HEPTACHLOR	137849	3.088	-0.002	137849	VV		6.25
7	D-BHC	146624	3.329	-0.001	146624	VV		6.80
8	G-CHLORDAN	122336	5.958	-0.002	122336	BV		12.25
9	A-CHLORDAN	119507	6.478	-0.002	119507	VV		13.55
10	DDE	112876	7.609	-0.001	112876	VB		15.70
11	ENDRIN	80742	9.860	0.000	80742	BV		20.30
12	DDD	92058	11.405	-0.005	92058	VB		23.60
13	ESS	81186	18.045	-0.005	81186	BB	?	36.75
14	DBC	110326	23.093	0.213	110326	BV		47.30
15	METHOXYCHL	39982	25.492	-0.008	39982	VB		54.00
TOTALS:		1256570		0.189	1256570			

DETECTED PKS: 20 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

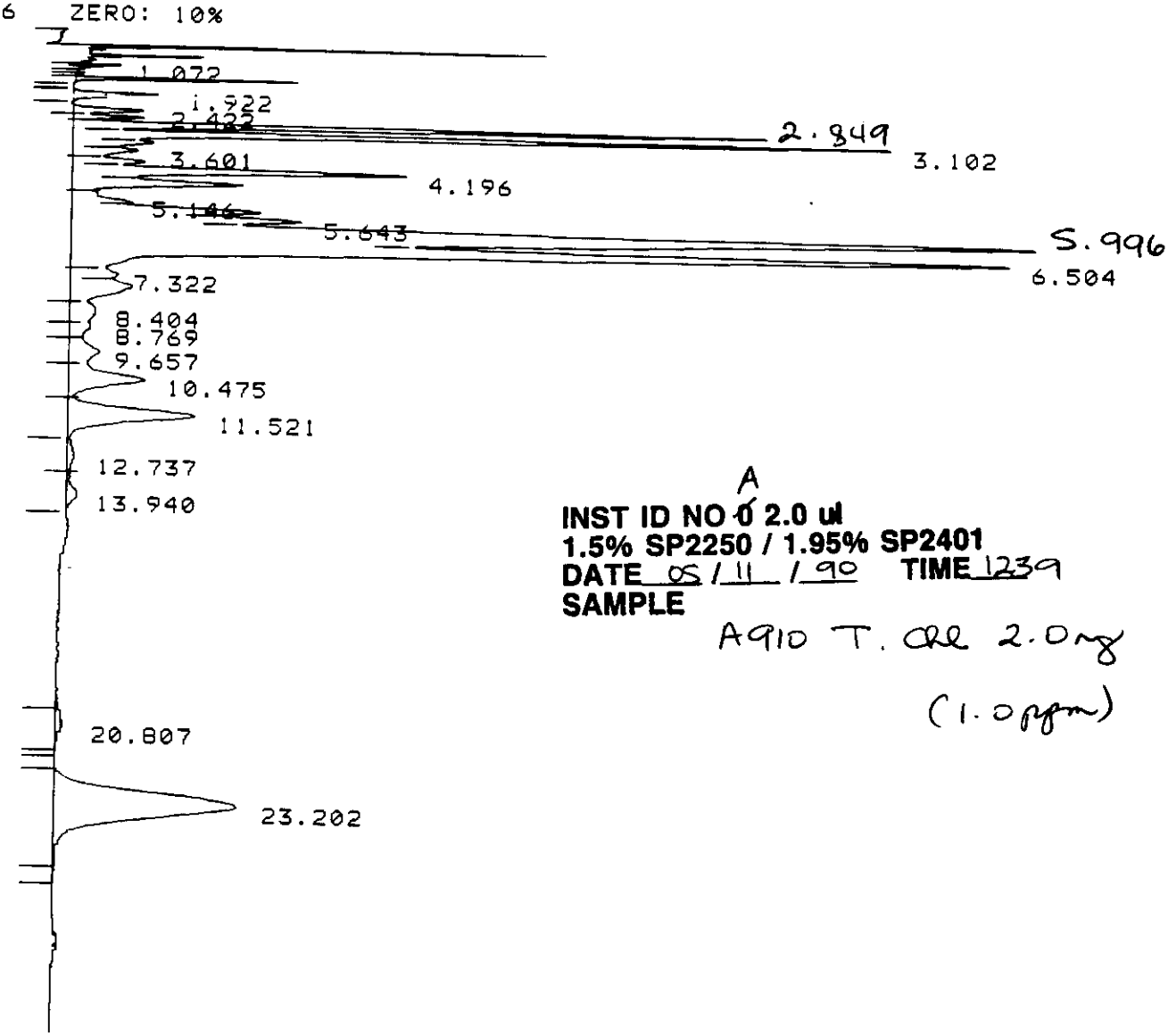
NOISE: 36.4 OFFSET: -19

RACK: 4 VIAL: 2 INJ: 1

NOTES:
: 1.5% SP2250/1.95% SP2401
INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT

ORIGINAL (Red)

ART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 1239
SAMPLE
A910 T. Chl 2.0 ng
(1.0 ppm)

100031

ORIGINAL (Red)

TITLE: CLP PESTICIDES 12:39 11 MAY 90

CHANNEL NO: 3 SAMPLE: A910 T.CHL METHOD: CLP-3A

PEAK	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1611	1.072		1611	BV		2.70
2		678	1.120		678	VB	?	2.55
3		10869	1.477		10869	VB		3.15
4		5632	1.922		5632	BV		4.40
5	A-BHC	2662	2.014	-0.046	2662	VV	?	5.05
6		8091	2.422		8091	VV	?	7.75
7		6519	2.619		6519	VV		6.10
8	B-BHC	66334	2.849	-0.011	66334	VV		6.20
9	HEPTACHLOR	86309	3.102	0.012	86309	VV		6.65
1	D-BHC	12434	3.358	0.028	12434	VV	?	7.80
11	ALDRIN	12069	3.601	-0.069	12069	VV	?	10.50
12		11592	3.939		11592	VV	?	13.10
13		51809	4.196		51809	VV		9.50
14		32736	4.578		32736	VV		12.50
15		12138	5.146		12138	VV	?	14.40
16	HEPT EPOX	35224	5.393	0.063	35224	VV	?	13.50
17		42651	5.643		42651	VV	?	14.80
18	G-CHLORDAN	270891	5.996	0.036	270891	VV		20.80
9	A-CHLORDAN	215822	6.504	0.024	215822	VV		14.65
20		12247	7.322		12247	VV	?	21.10
21	DDE	26091	7.662	0.052	26091	VV	?	34.25
22		13151	8.404		13151	VV	?	26.10
23		6795	8.769		6795	VV	?	
24	ENDRIN	14367	9.657	-0.203	14367	VV	?	38.90
25		31373	10.475		31373	VV		25.05
26	DDD	49796	11.521	0.111	49796	VV		25.20
27		4251	12.737		4251	VV	?	42.80
28	DDT	5573	13.940	0.390	5573	VB		28.25
29		3142	20.807		3142	BB		40.45
30	DBC	132380	23.202	0.322	132380	BB		47.65
TOTALS:		1185240		0.709	1185240			

DETECTED PKS: 31 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -19

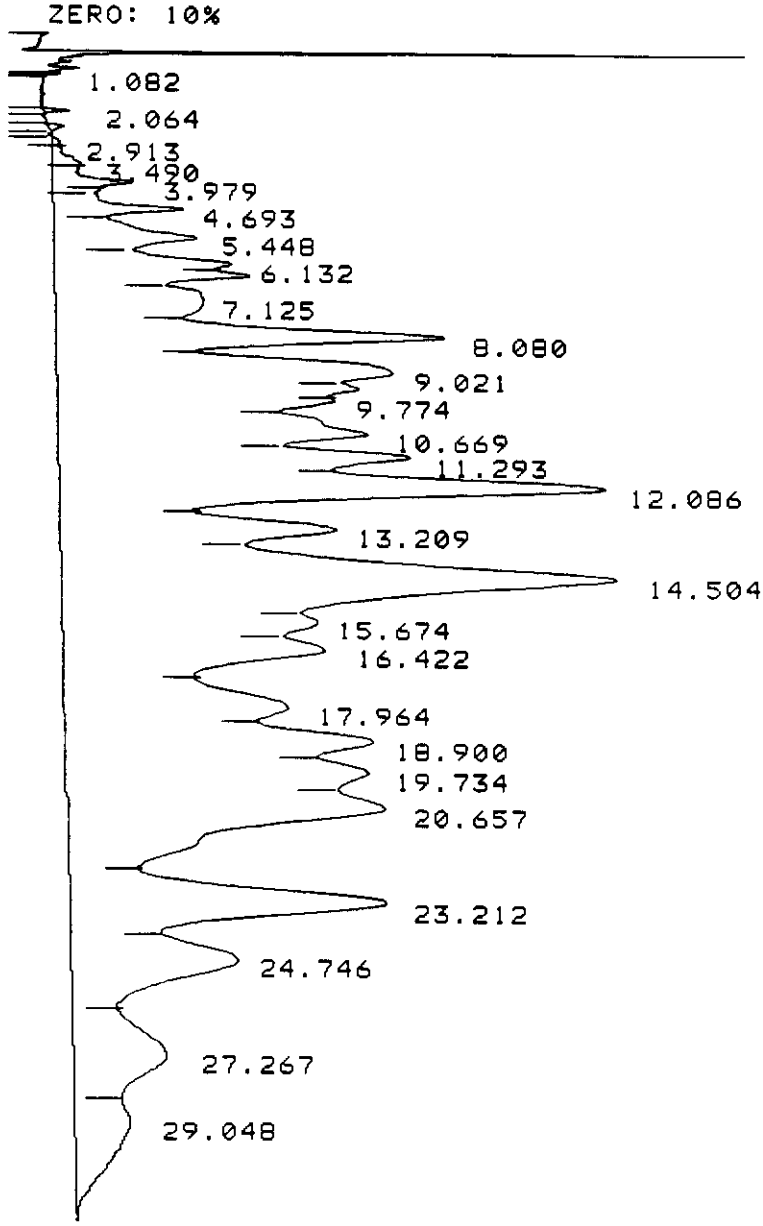
RAC 2 VIAL: 2 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

100032

ORIGINAL (Red)

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 1312
SAMPLE
B767 TOXAPH 5.0γ
(2.5 ppm)

100033

TITLE: CLP PESTICIDES 13:12 11 MAY 90

CHANNEL NO: 3 SAMPLE: B767 TOXAPH METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	A-BHC	1470	2.064	0.004	1470	BB	4.45
2	G-BHC	1360	2.482	-0.048	1360	BB	7.05
3	B-BHC	1242	2.913	0.053	1242	BV	? 10.70
4		7388	3.490		7388	VV	? 14.00
5		19078	3.979		19078	VV	? 14.30
6		5125	4.132		5125	VV	?
7		35106	4.693		35106	VV	16.50
8	HEPT EPOX	61160	5.448	0.118	61160	VV	? 29.80
9	G-CHLORDAN	51395	6.132	0.172	51395	VV	? 28.70
10	A-CHLORDAN	50600	6.444	-0.036	50600	VV	? 14.05
11		94124	7.125		94124	VV	? 47.00
12	DIELDRIN	161719	8.080	0.020	161719	VV	32.10
		177785	9.021		177785	VV	? 55.50
14		79831	9.449		79831	VV	? 12.30
15	ENDRIN	74963	9.774	-0.086	74963	VV	? 6.75
16		180462	10.669		180462	VV	? 59.50
17	DDD	148351	11.293	-0.117	148351	VV	? 35.20
18		287014	12.086		287014	VV	? 45.95
19	DDT	144136	13.209	-0.341	144136	VV	? 54.00
20	ENDRIN ALD	483072	14.504	-0.446	483072	VV	? 74.25
21		114364	15.674		114364	VV	? 23.40
22		171329	16.422		171329	VV	? 32.00
23	ESS	164716	17.964	-0.086	164716	VV	? 87.00
24		188932	18.900		188932	VV	? 58.50
25		182451	19.734		182451	VV	? 43.40
26		307485	20.657		307485	VV	?102.75
27	DBC	238055	23.212	0.332	238055	VV	57.40
28	ENDRIN KET	164552	24.746	0.176	164552	VV	? 95.50
29		125662	27.267		125662	VV	?115.40
30		74818	29.048		74818	VB	? 58.15
TOTALS:		3797740		-0.285	3797740		

DETECTED PKS: 31 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

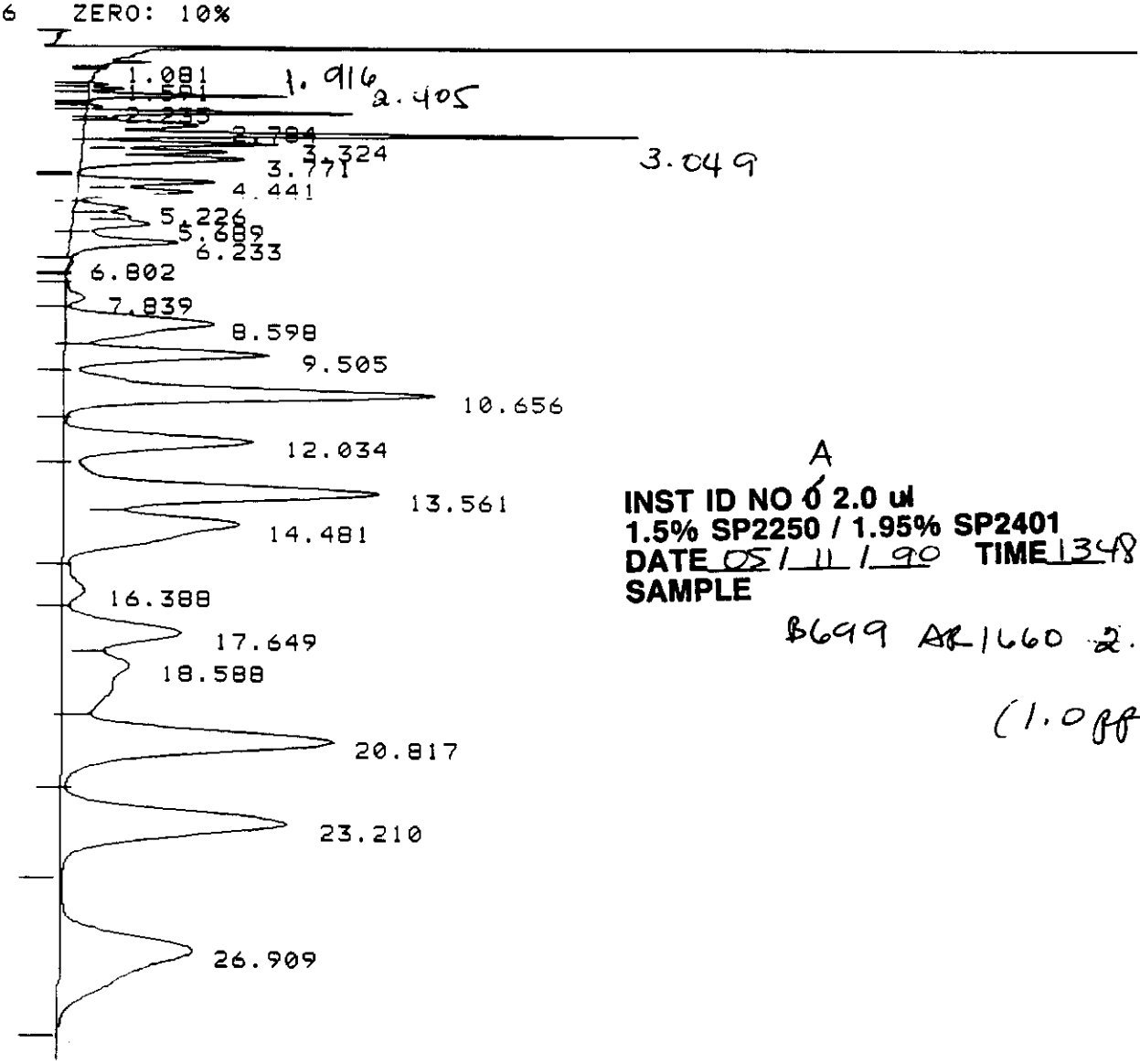
NOISE: 41.3 OFFSET: -14

RACK: 2 VIAL: 4 INJ: 1

NOTES:
'L: 1.5% SP2250/1.95% SP2401
..IT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

varian sunnyvale, calif. p/n 03-906362-00

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



A

INST ID NO 0 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 1348
SAMPLE
B699 AR1660 2.0ng
(1.0 ppm)

100033

ile, calif p/n 03-906362-00

TITLE: CLP PESTICIDES 13:48 11 MAY 90

CHANNEL NO: 3 SAMPLE: B699 AR1660 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		970	1.591		970	BV		3.85
2		1784	1.710		1784	VV		3.70
3		13947	1.916		13947	VB		4.55
4		1017	2.235		1017	BV		4.55
5		20783	2.405		20783	VV		5.15
6	G-BHC	2142	2.552	0.022	2142	VV	?	2.70
7		18215	2.784		18215	VV	?	5.55
8	B-BHC	3177	2.877	0.017	3177	VV	?	
9	HEPTACHLOR	54119	3.049	-0.041	54119	VV		6.45
10	D-BHC	22440	3.324	-0.006	22440	VV	?	7.75
11		16538	3.552		16538	VV		9.05
12	ALDRIN	32025	3.771	0.101	32025	VB		13.90
13		22566	4.441		22566	BV		11.65
14		21159	4.746		21159	VV		13.45
15	HEPT EPOX	9252	5.226	-0.104	9252	VV	?	11.70
16		8274	5.493		8274	VV	?	14.80
17		16511	5.689		16511	VV	?	17.20
18		26884	6.233		26884	VV		13.35
19	A-ENDOSULF	694	6.802	0.152	694	T	?	7.60
20	DIELDRIN	5720	7.839	-0.221	5720	BV		17.20
21		68305	8.598		68305	VV		33.05
22		62102	9.505		62102	VV		20.50
23		137634	10.656		137634	VV		22.65
24	B-ENDOSULF	79333	12.034	0.324	79333	VV		28.00
25	DDT	150083	13.561	0.011	150083	VV	?	30.35
26		114720	14.481		114720	VV		49.15
27		13740	16.388		13740	VV		34.80
[illegible]	ESS	69894	17.649	-0.401	69894	VV		39.40
[illegible]		75440	18.588		75440	VV	?	97.25
30		180656	20.817		180656	VV		43.15
31	DBC	161291	23.210	0.330	161291	VV		47.05
32		148751	26.909		148751	VB		69.75
TOTALS:		1560170		0.184	1560170			

[illegible]TECTED PKS: 33 REJECTED PKS: 1

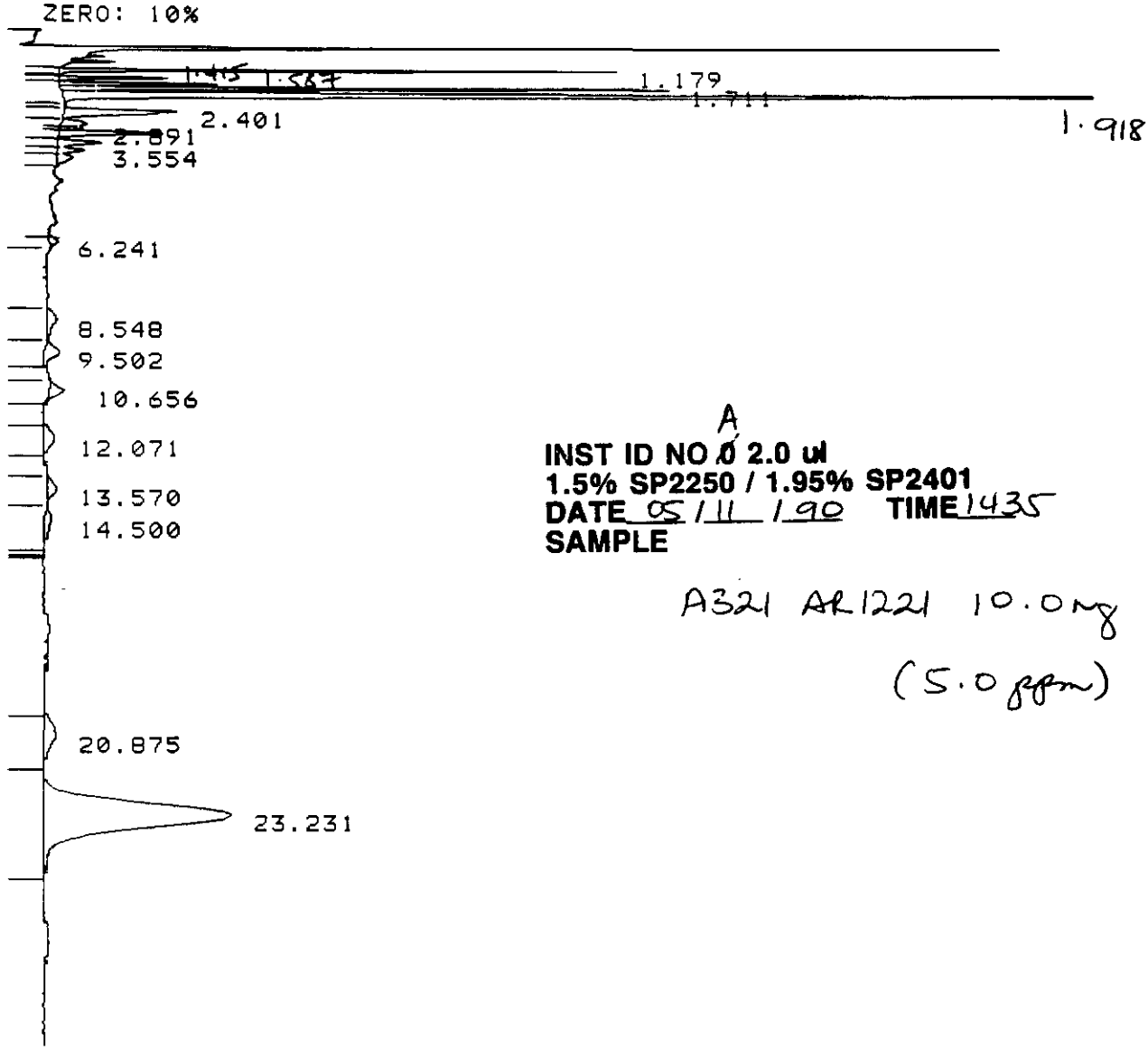
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -41

RACK: 2 VIAL: 5 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

RT SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 1435
SAMPLE

A321 AR1221 10.0 ng
(5.0 ppm)

100037

TITLE: CLP PESTICIDES 14:35 11 MAY 90

CHANNEL NO: 3 SAMPLE: A321 AR1221 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		21803	1.179		21803	BB		2.65
2		5169	1.415		5169	BV		3.20
3		8981	1.587		8981	VV		4.00
4		33376	1.711		33376	VV		3.70
5		116631	1.918		116631	VB		4.85
6		15357	2.401		15357	BV		9.80
		3367	2.785		3367	VV	?	6.60
8	B-BHC	1667	2.891	0.031	1667	VV	?	1.90
9	HEPTACHLOR	9625	3.052	-0.038	9625	VV		6.10
10	D-BHC	4482	3.328	-0.002	4482	VV		7.30
11		2764	3.554		2764	VV		7.15
12	ALDRIN	2521	3.767	0.097	2521	VB	?	11.90
13		1637	6.241		1637	BB		12.75
14		5495	8.548		5495	BV	?	30.80
15		4816	9.502		4816	VB		19.80
16		4004	10.656		4004	BB		17.65
17		4315	12.071		4315	BB	?	30.75
18	DDT	4152	13.570	0.020	4152	BV		26.25
19		2678	14.500		2678	VB		28.10
20		7950	20.875		7950	BV		43.20
21	DBC	132891	23.231	0.351	132891	VB		47.60
TOTALS:		393681		0.459	393681			

DETECTED PKS: 21 REJECTED PKS: 0

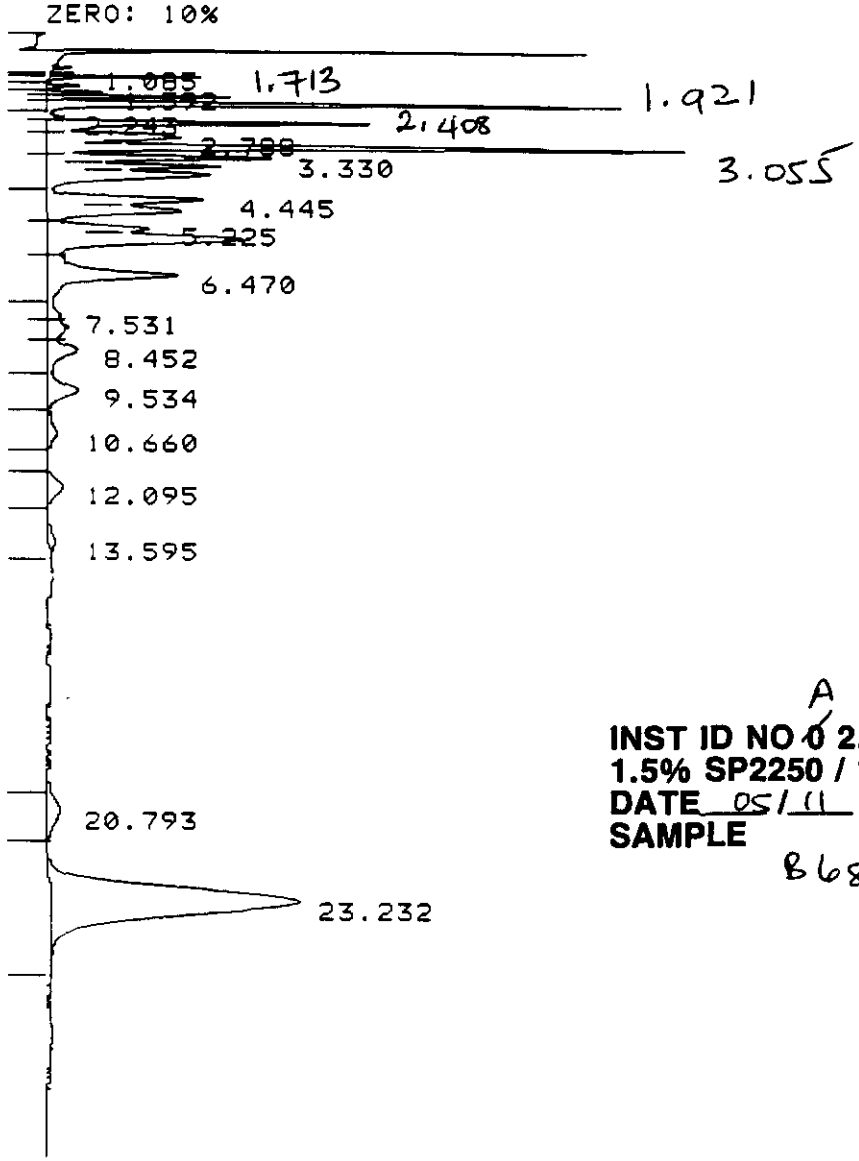
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 51.0 OFFSET: -16

RACK: 2 VIAL: 7 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
OPT= OUTSIDE RETENTION TIME WINDOW
8 0 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 1509
SAMPLE
B684 AR1232 5.0ng
(2.5 ppm)

100033

ORIGINAL (Red)

)TITLE: CLP PESTICIDES 15:09 11 MAY 90

CHANNEL NO: 3 SAMPLE: B684 AR1232 METHOD: CLP-3A

PEAK	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		761	1.085		761	BV		2.30
2		5487	1.181		5487	VV		2.60
3		1491	1.417		1491	VV		3.20
4		2852	1.592		2852	VV		3.95
5		9217	1.713		9217	VV		3.75
6		41347	1.921		41347	VV		4.85
7		27342	2.408		27342	VV		5.50
8		19486	2.788		19486	VV	?	7.00
9	B-BHC	3961	2.877	0.017	3961	VV	?	
10	HEPTACHLOR	56725	3.055	-0.035	56725	VV	?	4.10
1	D-BHC	23822	3.330	0.000	23822	VV	?	7.95
12		18192	3.556		18192	VV	?	9.60
13	ALDRIN	29909	3.779	0.109	29909	VV	?	15.40
14		25054	4.445		25054	VV	?	10.70
15		24734	4.739		24734	VV	?	16.40
16	HEPT EPOX	15295	5.225	-0.105	15295	VV	?	12.30
17		42992	5.505		42992	VV		17.45
18	A-CHLORDAN	34534	6.470	-0.010	34534	VV		15.25
19	DDE	3023	7.531	-0.079	3023	VV	?	18.50
0	DIELDRIN	6038	7.862	-0.198	6038	VV	?	31.70
21		9191	8.452		9191	VV		22.10
22		9665	9.534		9665	VV		23.40
23		2936	10.660		2936	VB	?	28.00
24		5437	12.095		5437	BV		25.65
25	DDT	2131	13.595	0.045	2131	VB	?	31.85
26		6872	20.793		6872	BV		42.95
27	DBC	158315	23.232	0.352	158315	VB		47.00
TOTALS:		586809		0.096	586809			

DETECTED PKS: 28 REJECTED PKS: 1

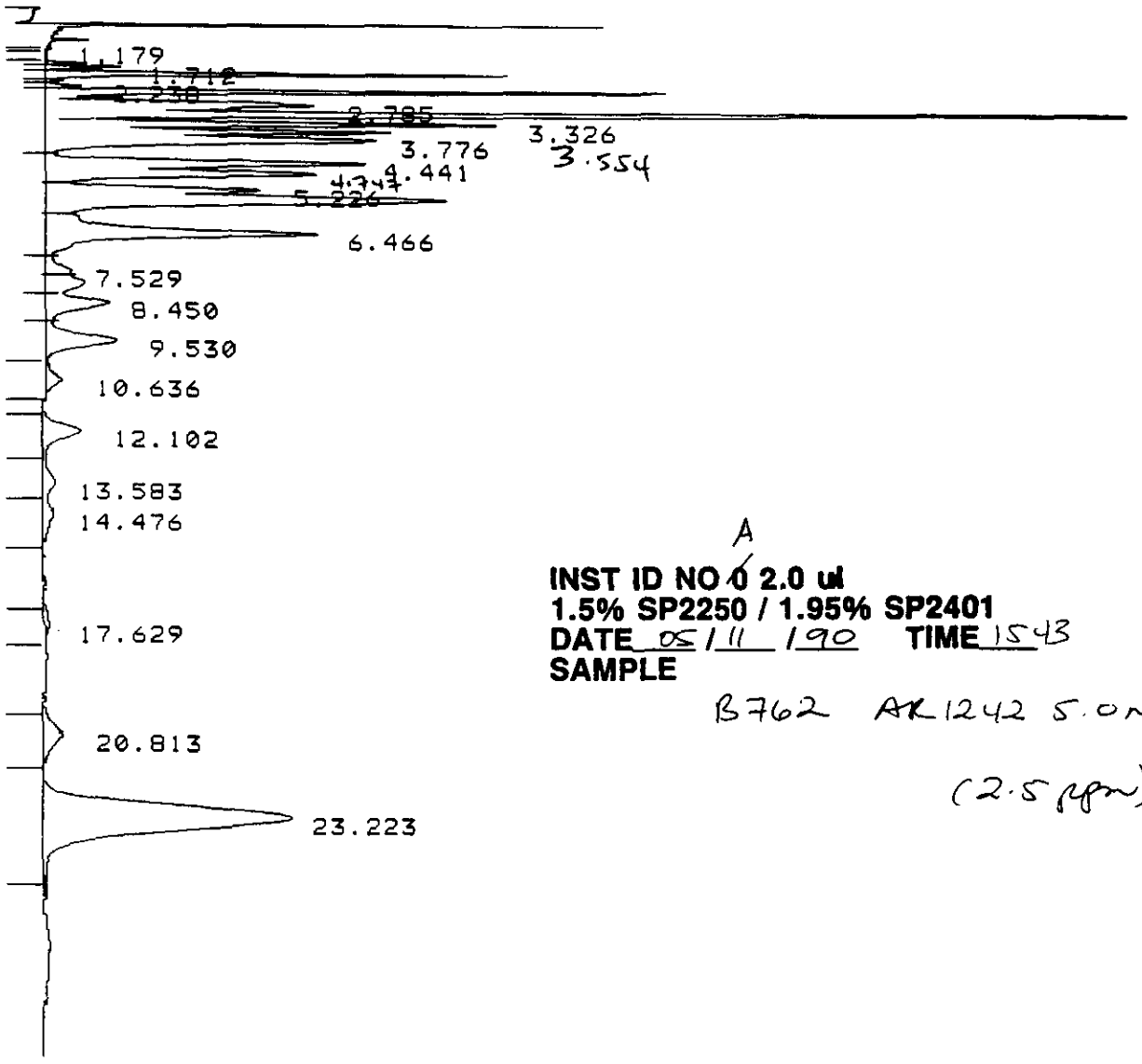
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 51.0 OFFSET: -22

RACK: 2 VIAL: 8 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



A

INST ID NO 0 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 **TIME** 1543
SAMPLE
B762 AR1242 5.0ng
(2.5 ppm)

TITLE: CLP PESTICIDES 15:43 11 MAY 90

C. .NNEL NO: 3 SAMPLE: B762 AR1242 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		2232	1.592		2232	BV		3.95
2		4124	1.712		4124	VV		3.75
3		33990	1.917		33990	VV		4.60
4		2651	2.238		2651	VV		5.20
5		47863	2.406		47863	VV		5.20
6	G-BHC	5076	2.555	0.025	5076	VV	?	3.40
	B-BHC	49897	2.785	-0.075	49897	VV	?	5.75
8	HEPTACHLOR	124750	3.051	-0.039	124750	VV		6.30
9	D-BHC	51070	3.326	-0.004	51070	VV		7.90
10		39031	3.554		39031	VV		9.00
11	ALDRIN	65025	3.776	0.106	65025	VV	?	15.15
12		54965	4.441		54965	VV		12.55
13		49588	4.747		49588	VV	?	14.40
14	HEPT EPOX	34175	5.226	-0.104	34175	VV	?	12.50
15		95557	5.501		95557	VV		17.10
16	A-CHLORDAN	77570	6.466	-0.014	77570	VV		15.10
17	DDE	7493	7.529	-0.081	7493	VV	?	22.30
18	DIELDRIN	14367	7.865	-0.195	14367	VV	?	31.45
19		21272	8.450		21272	VV		22.00
20		26843	9.530		26843	VV		24.05
21		6474	10.636		6474	VB	?	26.00
22		14912	12.102		14912	BV		26.25
23	DDT	5943	13.583	0.033	5943	VV		32.20
24		6377	14.476		6377	VB		40.60
25	ESS	2361	17.629	-0.421	2361	BB		38.10
26		10296	20.813		10296	BV		40.45
27	DBC	169224	23.223	0.343	169224	VB		47.00
TOTALS:		1023130		-0.426	1023130			

DETECTED PKS: 29 REJECTED PKS: 2

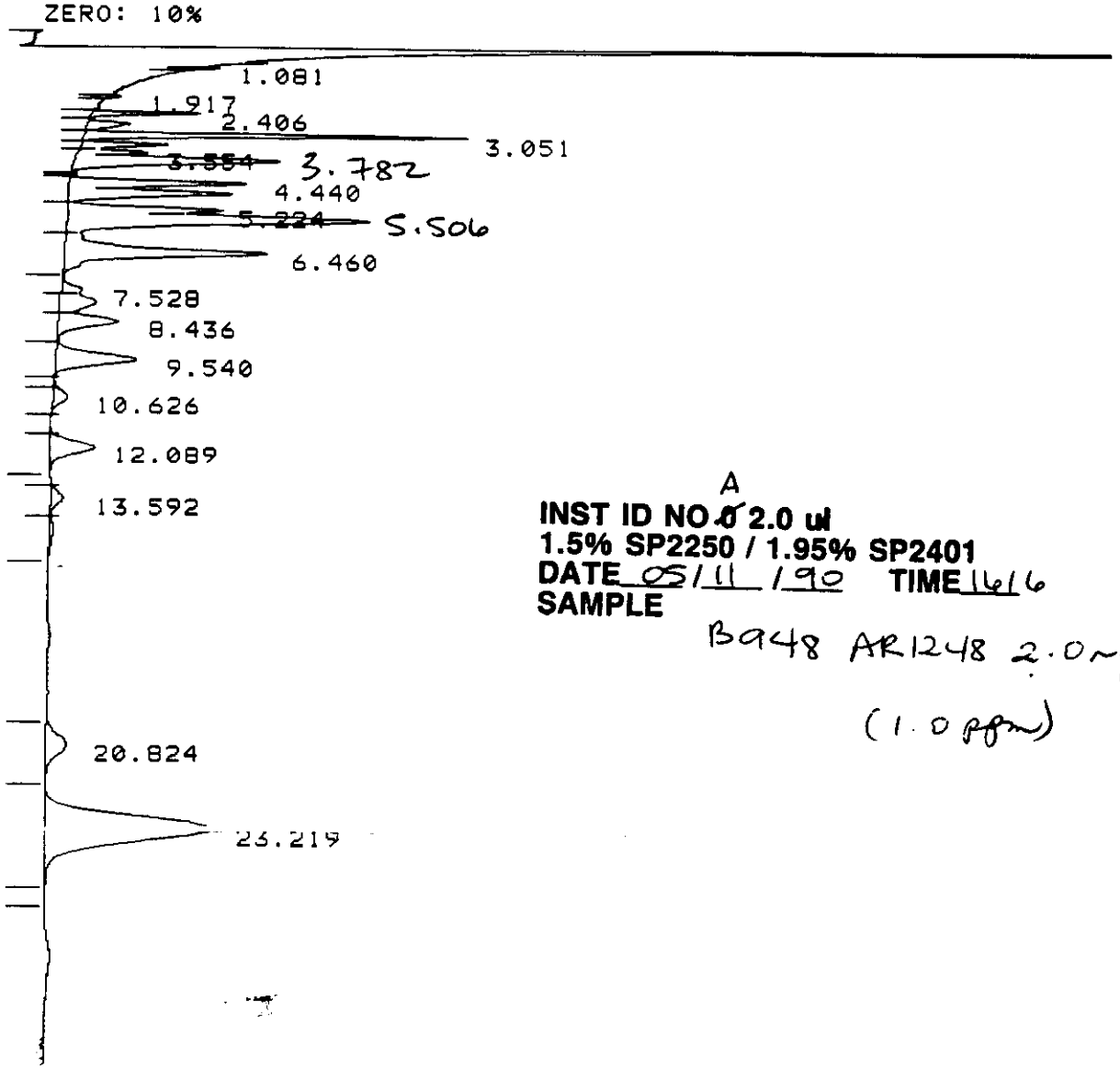
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 51.0 OFFSET: -10

RAC 2 VIAL: 10 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



A
INST ID NO. 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 1616
SAMPLE
B948 AR1248 2.0ng
(1.0 ppm)

100070

TITLE: CLP PESTICIDES 16:16 11 MAY 90

CHANNEL NO: 3 SAMPLE: B948 AR1248 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		611	1.081		611	BB		1.75
2		619	1.917		619	BB		3.05
7		7909	2.406		7909	BV		5.00
		6115	2.707		6115	VV		9.60
5	HEPTACHLOR	35997	3.051	-0.039	35997	VV		6.30
6	D-BHC	9745	3.327	-0.003	9745	VV		7.10
7		7163	3.554		7163	VV	?	7.00
8		38831	3.782		38831	VB		12.60
9		27294	4.440		27294	BV		10.95
10		28100	4.742		28100	VV		12.50
11	HEPT EPOX	23920	5.224	-0.106	23920	VV	?	11.80
12		70958	5.506		70958	VV		16.55
13	A-CHLORDAN	54894	6.460	-0.020	54894	VV		14.70
14	DDE	4341	7.528	-0.082	4341	VV	?	15.80
15	DIELDRIN	12248	7.888	-0.172	12248	VV	?	25.45
16		17021	8.436		17021	VV		18.40
17		26055	9.540		26055	VB		21.00
18		5397	10.626		5397	BB		22.65
19		17047	12.089		17047	BB		25.55
20	DDT	7040	13.592	0.042	7040	BB		25.90
21		13379	20.824		13379	BV		41.70
22	DBC	118005	23.219	0.339	118005	VB		47.55
TOTALS:		532689		-0.041	532689			

DETECTED PKS: 22 REJECTED PKS: 0

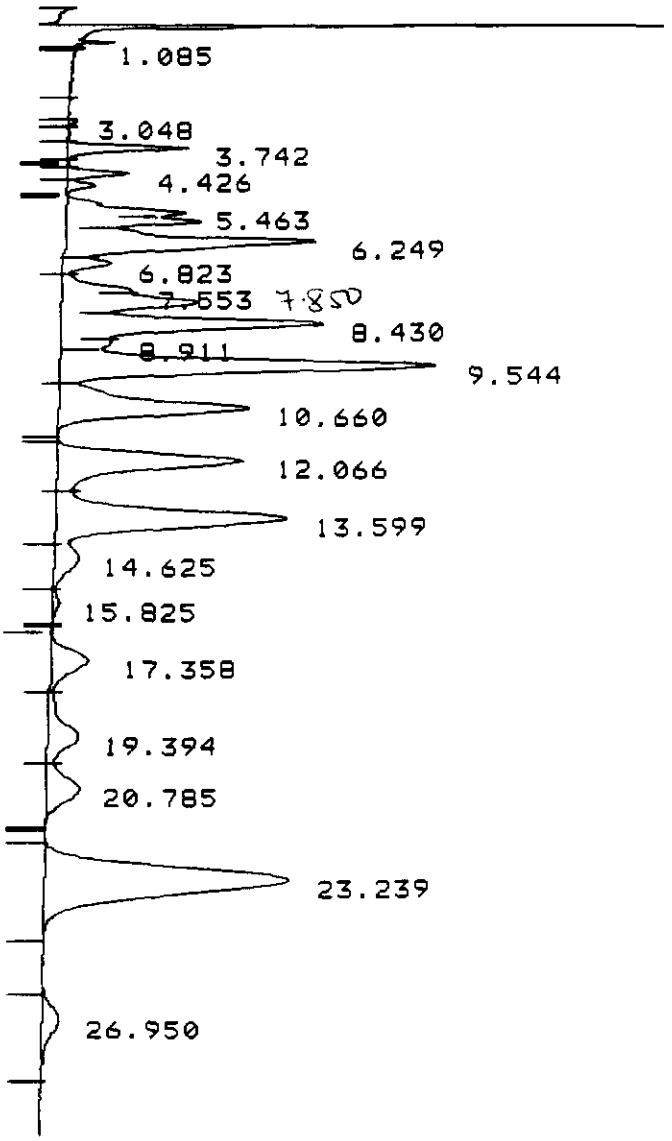
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 51.0 OFFSET: -24

RACK: 2 VIAL: 11 INJ: 1

NOT :
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



A
INST ID NO. 0 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11 /90 TIME 1727
SAMPLE

B761 AR1254 2.0 ng
(1.0 ppm)

varian /sunnyvale, calif. p/n 03-900062-00

TITLE: CLP PESTICIDES 17:27 11 MAY 90

CHANNEL NO: 3 SAMPLE: B761 AR1254 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	HEPTACHLOR	649	3.048	-0.042	649	BB		5.90
2	ALDRIN	15512	3.742	0.072	15512	BV	?	9.70
3		7570	4.426		7570	BV		9.45
4		3968	4.737		3968	VB		10.20
5	HEPT EPOX	22802	5.463	0.133	22802	BV	?	13.20
6		22985	5.698		22985	VV	?	17.15
7		69819	6.249		69819	VV		18.90
8	A-ENDOSULF	9015	6.823	0.173	9015	VV	?	15.70
9	DDE	12912	7.553	-0.057	12912	VV	?	19.40
10	DIELDRIN	38017	7.850	-0.210	38017	VV		23.80
11		70229	8.430		70229	VV		18.95
12		9470	8.911		9470	VV	?	3.00
13		111591	9.544		111591	VV	?	19.05
14		68524	10.660		68524	VB		23.10
15		69241	12.066		69241	BV		26.05
16	DDT	97446	13.599	0.049	97446	VV	?	30.00
17	ENDRIN ALD	13485	14.625	-0.325	13485	VV	?	43.05
18		2957	15.825		2957	VV		16.80
19		19726	17.358		19726	VV		39.85
20		19495	19.394		19495	VV		40.65
21		19312	20.785		19312	VB		39.40
22	DBC	153572	23.239	0.359	153572	BB		46.95
23		12687	26.950		12687	BB		52.80
TOTALS:		870984		0.152	870984			

DETECTED PKS: 25 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -42

RACK: 2 VIAL: 13 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

Versar INC.

ORIGINAL (Red)

REAGENT BLANK DATA

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK49 ORIGINAL (Red)

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: R3-7 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: RB8049

Sample wt/vol: 20.00 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 05/08/90

Extraction: (SepF/Wrist Shaker) WRIST SHAKER Date Analyzed: 05/11/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor Epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	5.0	U
72-20-8	Endrin	5.0	U
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan Sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin Ketone	5.0	U
5103-71-9	alpha-Chlordane	5.0	U
5103-74-2	gamma-Chlordane	5.0	U
8001-35-2	Toxaphene	50	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U

100072
5/14/90

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

PBLK49

VERSAR# RB0049

MATRIX IS: WATER

Lab Name: VERSAR, INC.

Case No.: ~~VERSCBM-2536,2565~~ R3-7

Lab Code: VERSAR

Contract:

Instrument ID: A

SAS No.:

Run Date: 05/11/90

GC Column ID: SP2250/SP2401

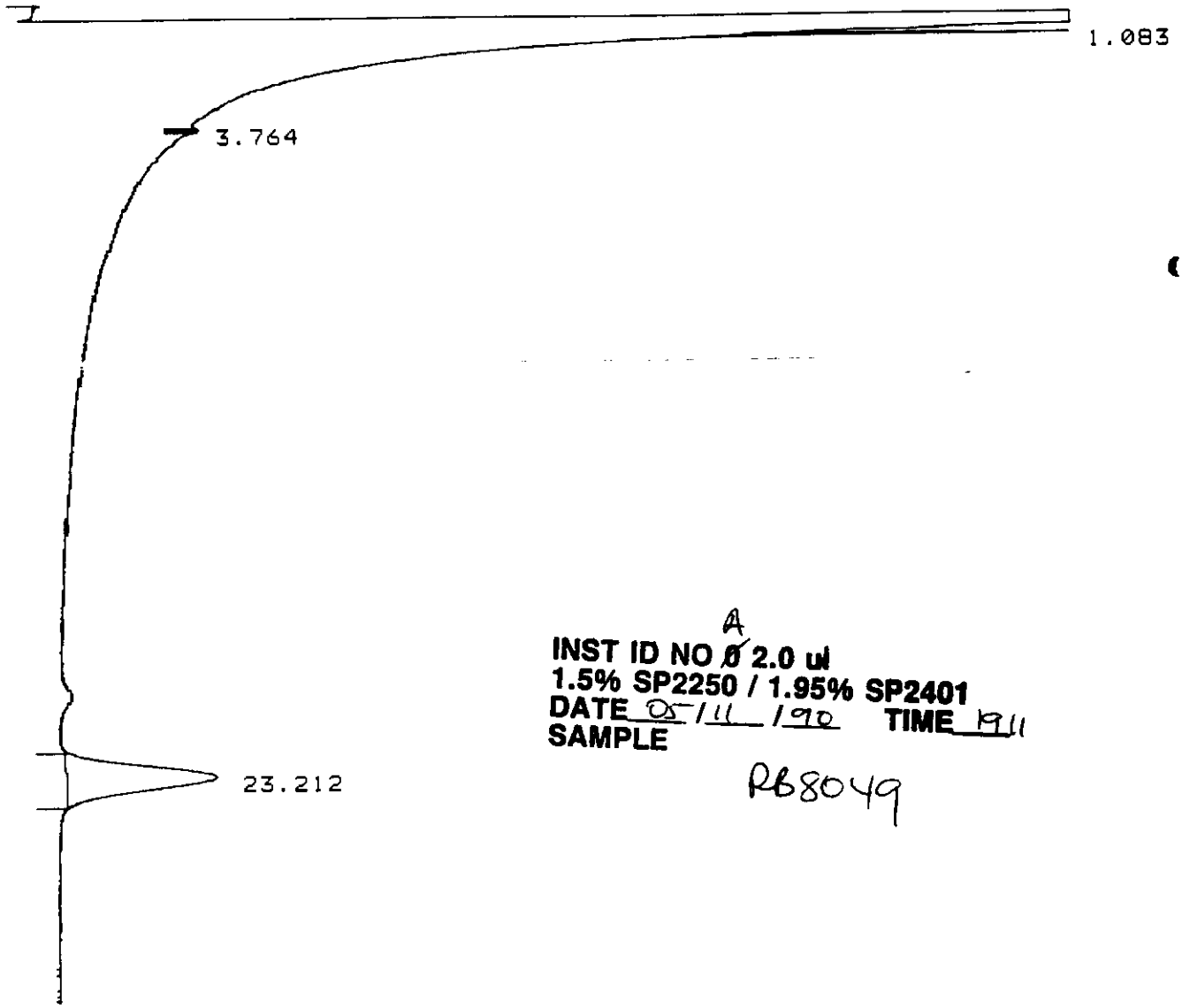
Inject Vol 2.00 (uL)

Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/L)	DETECTION LIMIT (ug/L)	
alpha-BHC	2.03	2.07	0.00	0	992722	0.000	2.00	0.000	500.00	0.00	2.50	
beta-BHC	2.82	2.88	0.00	0	297343	0.000	2.00	0.000	500.00	0.00	2.50	
delta-BHC	3.29	3.35	0.00	0	917492	0.000	2.00	0.000	500.00	0.00	2.50	
gamma-BHC	2.49	2.55	0.00	0	814856	0.000	2.00	0.000	500.00	0.00	2.50	
Heptachlor	3.05	3.11	0.00	0	863854	0.000	2.00	0.000	500.00	0.00	2.50	
Aldrin	3.62	3.70	0.00	0	800269	0.000	2.00	0.000	500.00	0.00	2.50	
Hept. epoxide	5.27	5.37	0.00	0	769525	0.000	2.00	0.000	500.00	0.00	2.50	
Endosulfan I	6.57	6.71	0.00	0	718982	0.000	2.00	0.000	500.00	0.00	2.50	
Dieldrin	7.97	8.13	0.00	0	790896	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDE	7.50	7.66	0.00	0	698639	0.000	2.00	0.000	500.00	0.00	5.00	
Endrin	9.73	9.93	0.00	0	523658	0.000	2.00	0.000	500.00	0.00	5.00	
Endosulfan II	11.57	11.81	0.00	0	713173	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDD	11.26	11.48	0.00	0	572143	0.000	2.00	0.000	500.00	0.00	5.00	
Endo.sulfate	17.82	18.18	0.00	0	514163	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'DDT	13.39	13.67	0.00	0	504926	0.000	2.00	0.000	500.00	0.00	5.00	
Methoxychlor	25.17	25.67	0.00	0	261003	0.000	2.00	0.000	500.00	0.00	25.00	
Endrin ketone	24.26	24.76	0.00	0	723623	0.000	2.00	0.000	500.00	0.00	5.00	
a. Chlordane	6.40	6.52	0.00	0	741797	0.000	2.00	0.000	500.00	0.00	5.00	
g. Chlordane	5.88	6.00	0.00	0	768348	0.000	2.00	0.000	500.00	0.00	5.00	
Toxaphene	14.36	14.65	0.00	0	282124	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1016	2.75	2.81	0.00	0	64752	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1221	1.57	1.61	0.00	0	18596	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1232	2.39	2.43	0.00	0	30823	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1242	3.74	3.82	0.00	0	51936	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1248	5.17	5.27	0.00	0	107949	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1254	7.77	7.93	0.00	0	151284	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1260	11.91	12.15	0.00	0	271936	0.000	2.00	0.000	500.00	0.00	50.00	
DBC	22.59	23.05	23.21	99337	674216	0.147	2.00	0.074	500.00	36.83	5.00	HIT

11-May-90

CHART SPEED 0.5 CM/MIN
AT N: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME 1911
SAMPLE
RB8049

varian 'sunnyvale,calif.p/m 03-906362-00

TITLE: CLP PESTICIDES 19:11 11 MAY 90

ORIGINAL (Red)

CHANNEL NO: 3 SAMPLE: RB8049 METHOD: CLP-3A

PE N	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		11715	1.083		11715	BB	2.20
2	ALDRIN ORT	517	3.764	0.094	517	BV	? 4.90
3	DBC	99337	23.212	0.332	99337	BB	? 37.70
TOTALS:		111569		0.426	111569		

DETECTED PKS: 4 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -15

RACK: 3 VIAL: 2 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
8080 STANDARDS

Versar INC.

MATRIX SPIKE DATA

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1MS ORIGINAL (Red)

Lab Name: VERSAR, INC. Contract: _

Lab Code: VERSAR Case No.: R3-7 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 16418MS

Sample wt/vol: 20.00 (g/ml) ML Lab File ID: ____

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 05/08/90

Extraction: (SepF/Wrist Shaker) WRIST SHAKER Date Analyzed: 05/11/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor Epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	5.0	U
72-20-8	Endrin	5.0	U
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan Sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin Ketone	5.0	U
5103-71-9	alpha-Chlordane	5.0	U
5103-74-2	gamma-Chlordane	5.0	U
8001-35-2	Toxaphene	50	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U

100683
5/14/90

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

| 1MS |

VERSAR# 16418MS

MATRIX IS: WATER

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: A

Run Date: 05/11/90

Inject Vol 2.00 (uL)

Case No.: ~~VERSEDM~~ R3-7

Contract:

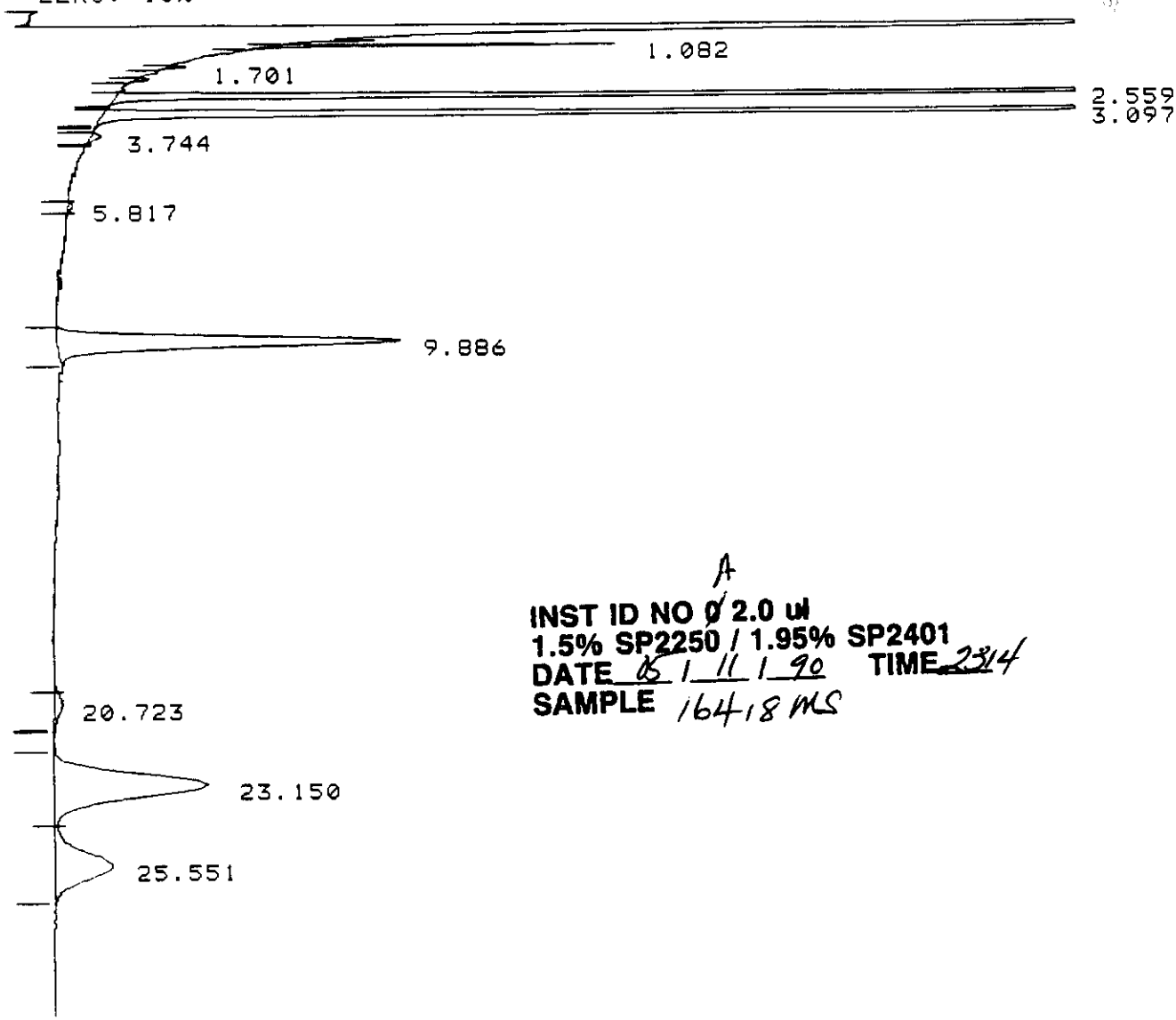
SAS No.:

GC Column ID: SP2250/SP2401

Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/L)	DETECTION LIMIT (ug/L)	
alpha-BHC	2.03	2.07	2.05	915	992722	0.001	2.00	0.000	500.00	0.23	2.50	BDL
beta-BHC	2.82	2.88	0.00	0	297343	0.000	2.00	0.000	500.00	0.00	2.50	
delta-BHC	3.29	3.35	0.00	0	917492	0.000	2.00	0.000	500.00	0.00	2.50	
gamma-BHC	2.49	2.55	*2.56	178512	814856	0.219	2.00	0.110	500.00	54.77	2.50	HIT
Heptachlor	3.05	3.11	3.10	180063	863854	0.208	2.00	0.104	500.00	52.11	2.50	HIT
Aldrin	3.62	3.70	*3.74	1632	800269	0.002	2.00	0.001	500.00	0.51	2.50	BDL
Hept. epoxide	5.27	5.37	0.00	0	769525	0.000	2.00	0.000	500.00	0.00	2.50	
Endosulfan I	6.57	6.71	0.00	0	718902	0.000	2.00	0.000	500.00	0.00	2.50	
Dieldrin	7.97	8.13	0.00	0	790896	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDE	7.50	7.66	0.00	0	698639	0.000	2.00	0.000	500.00	0.00	5.00	
Endrin	9.73	9.93	9.89	104435	523658	0.199	2.00	0.100	500.00	49.86	5.00	HIT
Endosulfan II	11.57	11.81	0.00	0	713173	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDD	11.26	11.48	0.00	0	572143	0.000	2.00	0.000	500.00	0.00	5.00	
Endo.sulfate	17.82	18.18	0.00	0	514163	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'DDT	13.39	13.67	0.00	0	504926	0.000	2.00	0.000	500.00	0.00	5.00	
Methoxychlor	25.17	25.67	25.55	46910	261003	0.180	2.00	0.090	500.00	44.93	25.00	HIT
Endrin ketone	24.26	24.76	0.00	0	723623	0.000	2.00	0.000	500.00	0.00	5.00	
a. Chlordane	6.40	6.52	0.00	0	741797	0.000	2.00	0.000	500.00	0.00	5.00	
g. Chlordane	5.88	6.00	0.00	0	768348	0.000	2.00	0.000	500.00	0.00	5.00	
Toxaphene	14.36	14.65	0.00	0	282124	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1016	2.75	2.81	0.00	0	64752	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1221	1.57	1.61	0.00	0	18596	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1232	2.39	2.43	0.00	0	30823	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1242	3.74	3.82	0.00	0	51936	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1248	5.17	5.27	0.00	0	107949	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1254	7.77	7.93	0.00	0	151284	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1260	11.91	12.15	0.00	0	271936	0.000	2.00	0.000	500.00	0.00	50.00	
DBC	22.59	23.05	*23.15	109252	674216	0.162	2.00	0.081	500.00	40.51	5.00	HIT

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 11 / 90 TIME 2314
SAMPLE 16418 MS

certain sunnyvale, calif p/n 13-906362-00

TITLE: CLP PESTICIDES 23:14 11 MAY 90

CHANNEL NO: 3 SAMPLE: 16418MS METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		12560	1.082		12560	BB	2.35
2		952	1.701		952	BB	3.15
3	A-BHC	915	2.054	-0.006	915	BB	3.15
4	G-BHC	178512	2.559	0.029	178512	BB	5.10
5	HEPTACHLOR	180063	3.097	0.007	180063	BB	6.20
6	ALDRIN	1632	3.744	0.074	1632	BB	8.30
7	G-CHLORDAN	1157	5.817	-0.143	1157	BB	11.35
8	ENDRIN	104435	9.886	0.026	104435	BB	? 20.45
9		5534	20.723		5534	BB	? 37.55
10	DBC	109252	23.150	0.270	109252	BV	47.30
11	METHOXYCHL	46910	25.551	0.051	46910	VB	53.25
TOTALS:		641922		0.308	641922		

DETECTED PKS: 11 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -22

RACK: 3 VIAL: 11 INJ: 1

NOTES:
IL: 1.5% SP2250/1.95% SP2401
MT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT

varian Sunnyvale, calif. p/n 03-90

Versar INC.

MATRIX SPIKE DUPLICATE DATA

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1MSD

Lab Name: VERSAR, INC. Contract:

Lab Code: VERSAR Case No.: R3-7 SAS No.: SDG No.: 1

Matrix: (soil/water) WATER Lab Sample ID: 16418MSD

Sample wt/vol: 20.00 (g/ml) ML Lab File ID:

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. _____ dec. _____ Date Extracted: 05/08/90

Extraction: (SepF/Wrist Shaker) WRIST SHAKER Date Analyzed: 05/11/90

GPC Cleanup: (Y/N) N pH: ____ Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
319-84-6	alpha-BHC	2.5	U
319-85-7	beta-BHC	2.5	U
319-86-8	delta-BHC	2.5	U
58-89-9	gamma-BHC (Lindane)	2.5	U
76-44-8	Heptachlor	2.5	U
309-00-2	Aldrin	2.5	U
1024-57-3	Heptachlor Epoxide	2.5	U
959-98-8	Endosulfan I	2.5	U
60-57-1	Dieldrin	5.0	U
72-55-9	4,4'-DDE	5.0	U
72-20-8	Endrin	5.0	U
33213-65-9	Endosulfan II	5.0	U
72-54-8	4,4'-DDD	5.0	U
1031-07-8	Endosulfan Sulfate	5.0	U
50-29-3	4,4'-DDT	5.0	U
72-43-5	Methoxychlor	25	U
53494-70-5	Endrin Ketone	5.0	U
5103-71-9	alpha-Chlordane	5.0	U
5103-74-2	gamma-Chlordane	5.0	U
8001-35-2	Toxaphene	50	U
12674-11-2	Aroclor-1016	25	U
11104-28-2	Aroclor-1221	25	U
11141-16-5	Aroclor-1232	25	U
53469-21-9	Aroclor-1242	25	U
12672-29-6	Aroclor-1248	25	U
11097-69-1	Aroclor-1254	50	U
11096-82-5	Aroclor-1260	50	U

5/14/90

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

1MSD

VERSAR# 16418MSD

MATRIX IS: WATER

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: A

Run Date: 05/11/90

Inject Vol 2.00 (uL)

Case No.: VERSEBM R3-7

Contract:

SAS No.:

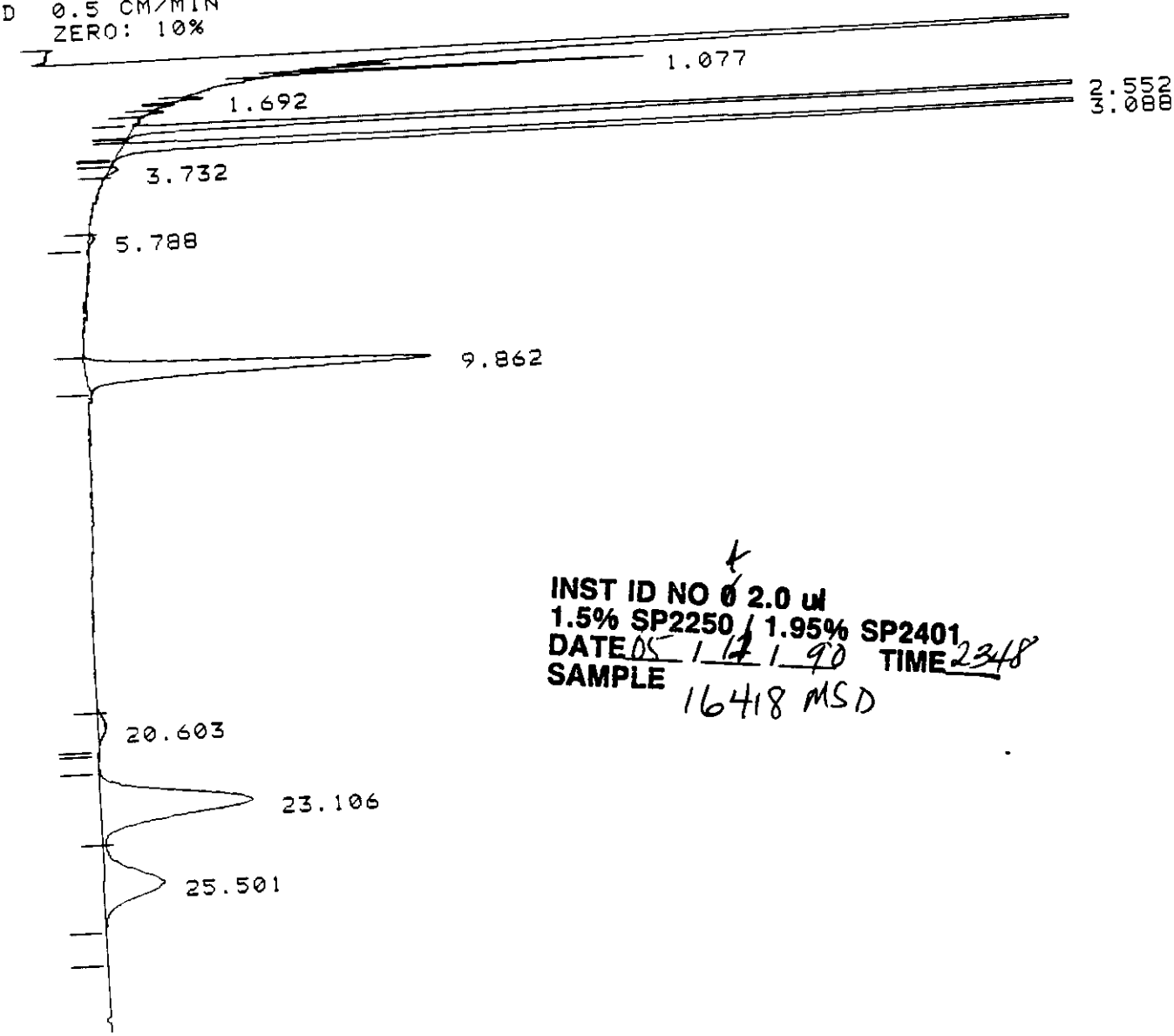
GC Column ID: SP2250/SP2401

Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/L)	DETECTION LIMIT (ug/L)	
alpha-BHC	2.03	2.07	2.05	979	992722	0.001	2.00	0.000	500.00	0.25	2.50	BDL
beta-BHC	2.82	2.88	0.00	0	297343	0.000	2.00	0.000	500.00	0.00	2.50	
delta-BHC	3.29	3.35	0.00	0	917492	0.000	2.00	0.000	500.00	0.00	2.50	
gamma-BHC	2.49	2.55	2.55	181895	814856	0.223	2.00	0.112	500.00	55.81	2.50	HIT
Heptachlor	3.05	3.11	3.09	182862	863854	0.212	2.00	0.106	500.00	52.92	2.50	HIT
Aldrin	3.62	3.70	*3.73	1433	800269	0.002	2.00	0.001	500.00	0.45	2.50	BDL
Hept. epoxide	5.27	5.37	0.00	0	769525	0.000	2.00	0.000	500.00	0.00	2.50	
Endosulfan I	6.57	6.71	0.00	0	718902	0.000	2.00	0.000	500.00	0.00	2.50	
Dieldrin	7.97	8.13	0.00	0	790896	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDE	7.50	7.66	0.00	0	698639	0.000	2.00	0.000	500.00	0.00	5.00	
Endrin	9.73	9.93	9.86	107128	523658	0.205	2.00	0.102	500.00	51.14	5.00	HIT
Endosulfan II	11.57	11.81	0.00	0	713173	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'-DDD	11.26	11.48	0.00	0	572143	0.000	2.00	0.000	500.00	0.00	5.00	
Endo.sulfate	17.82	18.18	0.00	0	514163	0.000	2.00	0.000	500.00	0.00	5.00	
4,4'DDT	13.39	13.67	0.00	0	504926	0.000	2.00	0.000	500.00	0.00	5.00	
Methoxychlor	25.17	25.67	25.50	50697	261003	0.194	2.00	0.097	500.00	48.56	25.00	HIT
Endrin ketone	24.26	24.76	0.00	0	723623	0.000	2.00	0.000	500.00	0.00	5.00	
a. Chlordane	6.40	6.52	0.00	0	741797	0.000	2.00	0.000	500.00	0.00	5.00	
g. Chlordane	5.88	6.00	0.00	0	768348	0.000	2.00	0.000	500.00	0.00	5.00	
Toxaphene	14.36	14.65	0.00	0	282124	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1016	2.75	2.81	0.00	0	64752	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1221	1.57	1.61	0.00	0	18596	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1232	2.39	2.43	0.00	0	30823	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1242	3.74	3.82	0.00	0	51936	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1248	5.17	5.27	0.00	0	107949	0.000	2.00	0.000	500.00	0.00	25.00	
Aroclor-1254	7.77	7.93	0.00	0	151284	0.000	2.00	0.000	500.00	0.00	50.00	
Aroclor-1260	11.91	12.15	0.00	0	271936	0.000	2.00	0.000	500.00	0.00	50.00	
DBC	22.59	23.05	*23.11	110722	674216	0.164	2.00	0.082	500.00	41.06	5.00	HIT

ORIGINAL (Red)

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO 0 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 2348
SAMPLE 16418 MSD

100030

T : CLP PESTICIDES 23:48 11 MAY 90

CHANNEL NO: 3 SAMPLE: 16418MSD METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		13474	1.077		13474	BB	2.35
2		1215	1.692		1215	BB	2.95
3	A-BHC	979	2.051	-0.009	979	BB	3.40
4	G-BHC	181895	2.552	0.022	181895	BB	5.10
5	HEPTACHLOR	182862	3.088	-0.002	182862	BB	6.15
6	ALDRIN	1433	3.732	0.062	1433	BB	7.35
7	G-CHLORDAN	1477	5.788	-0.172	1477	BB	11.30
8	ENDRIN	107128	9.862	0.002	107128	BB	? 20.35
9		5718	20.603		5718	BB	? 36.85
10	DBC	110722	23.106	0.226	110722	BV	47.15
11	METHOXYCHL	50697	25.501	0.001	50697	VB	52.55
TOTALS:		657600		0.130	657600		

..TECTED PKS: 11 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -20

RACK: 3 VIAL: 13 INJ: 1

NOTES:
: 1.5% SP2250/1.95% SP2401
INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT

Sunnyvale, Calif. 94086 (408) 734-9600

Versar INC.

ORIGINAL (Red)

VI. SAMPLE PREPARATION PACKAGE

1. Parameter Request Sheet
2. Screening Data Summary (soils only)
3. Comments
   a. Extraction
   b. Volatiles
   c. Semivolatiles
   d. Pesticides
4. Extraction Worksheets
   a. Chronicle
   b. Dry Weight Factor (soils only)
   c. Dilution Factor (B) Worksheets
5. Injection Sequence Logs
6. Chain of Custody

VERSAR LABORATORY OPERATIONS
*** ~~REVISED~~ PARAMETER REQUEST SHEET ***

ORIGINAL

Deliver To: 46

Control: 2536
Code: VERSCDM
Batch: 2
Job Number: 420.1.0

Case: R3-7
SDG: 1
Quote: 9000194 - 90
Charge:

Manager: BECKMAN
Company: VERSAR DIV 31

Site: CDM

Received: 19-APR-90
Due: 17-MAY-90

Sampled: 18-APR-90
Report: 17-MAY-90

Comments: Protocols-Organic SOW 2/88; Inorganic Metals SOW 787 and CN SOW 788; TCLP by the new reg. Do sample QC on field # 1.

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
BNAL - 48									
	16419	A	1	QC FOR BNA MID SOILS	SLUDGE	C-82	XBNA		
	16420	A	2		SLUDGE	C-82	XBNA		
low acc	16421	A	3		SLUDGE	C-82	XBNA		
	16422	A	5	MID	SLUDGE	C-82	XBNA		
	16423	B	6	7 TOTAL	SLUDGE	C-82	XBNA		
	16424	B	7		SLUDGE	C-82	XBNA		
CLPM - 43									
	16401	A	1		SLUDGE	C-82			
	16402	A	2		SLUDGE	C-82			
	16403	A	3		SLUDGE	C-82			
	16404	A	5		SLUDGE	C-82			
	16405	B	6		SLUDGE	C-82			
	16432	B	7		SLUDGE	C-82			
CNM - 44									
	16406	A	1		SLUDGE	C-82	TS		
	16407	A	2		SLUDGE	C-82	TS		
	16408	A	3		SLUDGE	C-82	TS		
	16409	A	5		SLUDGE	C-82	TS		
	16410	B	6		SLUDGE	C-82	TS		
	16411	B	7		SLUDGE	C-82	TS		
PEST - 47									
	16412	A	1		SLUDGE	C-82	XPES		
low GPC	16413	A	2		SLUDGE	C-82	XPES		
	16414	A	3		SLUDGE	C-82	XPES		
	16415	A	5	MID/NO QC	SLUDGE	C-82	XPES		
	16416	B	6	1 RB, 1 MSD 4 TOTAL	SLUDGE	C-82	XPES		
	16417	B	7		SLUDGE	C-82	XPES		
TCBN - 48									
	16418	B	1		SLUDGE	C-82	TCLM	TCLX	XTCB
							TCPS	XTCP	TCHB
							XTCH		
TCHB - 47									
	16418	B	1		SLUDGE	C-82	TCLM	TCLX	TCBN
							XTCB	TCPS	XTCP
							XTCH		
TCLM - 43									

Continued ->

100038

Control #: 2536

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
	16418	B		1	SLUDGE	C-82	TCLX TCPS XTCH	TCBN XTCP	XTCB TCHB
TCLV - 48									
	16425	B		1	SLUDGE	GCMS	ZHE		
TCLX - 43									
	16418	B		1	SLUDGE	C-82	TCLM TCPS XTCH	TCBN XTCP	XTCB TCHB
TCPS - 47									
	16418	B		1	SLUDGE	C-82	TCLM XTCB XTCH	TCLX XTCP	TCBN TCHB
TS - 44									
	16406	A		1	SLUDGE	C-82	CNM		
	16407	A		2	SLUDGE	C-82	CNM		
	16408	A		3	SLUDGE	C-82	CNM		
	16409	A		5	SLUDGE	C-82	CNM		
	16410	B		6	SLUDGE	C-82	CNM		
	16411	B		7	SLUDGE	C-82	CNM		
VOAL - 48									
	16426	B		1	SLUDGE	GCMS			
	16427	B		2	SLUDGE	GCMS			
	16428	B		3	SLUDGE	GCMS			
	16429	B		5	SLUDGE	GCMS			
	16430	B		6	SLUDGE	GCMS			
	16431	B		7	SLUDGE	GCMS			
XBNA - 46									
	16419	A		1	SLUDGE	C-82	BNAL		
	16420	A		2	SLUDGE	C-82	BNAL		
	16421	A		3	SLUDGE	C-82	BNAL		
	16422	A		5	SLUDGE	C-82	BNAL		
	16423	B		6	SLUDGE	C-82	BNAL		
	16424	B		7	SLUDGE	C-82	BNAL		
XPES - 46									
	16412	A		1	SLUDGE	C-82	PEST		
	16413	A		2	SLUDGE	C-82	PEST		
	16414	A		3	SLUDGE	C-82	PEST		
	16415	A		5	SLUDGE	C-82	PEST		
	16416	B		6	SLUDGE	C-82	PEST		
	16417	B		7	SLUDGE	C-82	PEST		
XTCB - 46									
	16418	B		1	SLUDGE	C-82	TCLM TCPS XTCH	TCLX XTCP	TCBN TCHB
[redacted] 46									
	16418	B		1	SLUDGE	C-82	TCLM XTCB TCHB	TCLX TCPS	TCBN XTCP
XTCP - 46									
	16418	B		1	SLUDGE	C-82	TCLM XTCB XTCH	TCLX TCPS	TCBN TCHB
ZHE - 43									
	16425	B		1	SLUDGE	GCMS	TCLV		

VERSAR LABORATORY OPERATIONS
PARAMETER REQUEST SHEET

Deliver To: 46

Control: 2536
Code: VERSCDM
Batch: 2
Job Number: 420.1.0

Case: R3-7
SDG: 1
Quote: 9000194 - 90
Charge:

Manager: BECKMAN
Company: VERSAR DIV 31

Site: CDM

Received: 19-APR-90
Due: 17-MAY-90

Sampled: 18-APR-90
Report: 17-MAY-90
Disposal: 20-AUG-90

QC Level:
Deliver:

Rep Type:
Required: 1 Full

Comments: Protocols-Organic SOW 2/88; Inorganic Metals SOW 787 and CN SOW 788; TCLP by the new reg. Do sample QC on field # 1.

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests
BNAL - 48							
	16419	A	1		SLUDGE	C-82	XBNA
	16420	A	2		SLUDGE	C-82	XBNA
	16421	A	3		SLUDGE	C-82	XBNA
	16422	A	5		SLUDGE	C-82	XBNA
	16423	B	6		SLUDGE	C-82	XBNA
	16424	B	7		SLUDGE	C-82	XBNA
CLPM - 43							
	16401	A	1		SLUDGE	C-82	
	16402	A	2		SLUDGE	C-82	
	16403	A	3		SLUDGE	C-82	
	16404	A	5		SLUDGE	C-82	
	16405	B	6		SLUDGE	C-82	
	16432	B	7		SLUDGE	C-82	
CNM - 44							
	16406	A	1		SLUDGE	C-82	TS
	16407	A	2		SLUDGE	C-82	TS
	16408	A	3		SLUDGE	C-82	TS
	16409	A	5		SLUDGE	C-82	TS
	16410	B	6		SLUDGE	C-82	TS
	16411	B	7		SLUDGE	C-82	TS
PEST - 47							
	16412	A	1		SLUDGE	C-82	XPES
	16413	A	2		SLUDGE	C-82	XPES
	16414	A	3		SLUDGE	C-82	XPES
	16415	A	5		SLUDGE	C-82	XPES
	16416	B	6		SLUDGE	C-82	XPES
	16417	B	7		SLUDGE	C-82	XPES
TCBN - 48							
	16418	B	1		SLUDGE	C-82	TCLM TCLX XTCB TCPS XTCP
TCLM - 43							
	16418	B	1		SLUDGE	C-82	TCLX TCBN XTCB TCPS XTCP

Continued ->

Control #: 2536

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests
TCLV - 48							
	16425	B		1	SLUDGE	GCMS	ZHE
TCLX - 43							
	16418	B		1	SLUDGE	C-82	TCLM TCBN XTCB TCPS XTCP
TCPS - 47							
	16418	B		1	SLUDGE	C-82	TCLM TCLX TCBN XTCB XTCP
TS - 44							
	16406	A		1	SLUDGE	C-82	CNM
	16407	A		2	SLUDGE	C-82	CNM
	16408	A		3	SLUDGE	C-82	CNM
	16409	A		5	SLUDGE	C-82	CNM
	16410	B		6	SLUDGE	C-82	CNM
	16411	B		7	SLUDGE	C-82	CNM
VOAL - 48							
	16426	B		1	SLUDGE	GCMS	
	16427	B		2	SLUDGE	GCMS	
	16428	B		3	SLUDGE	GCMS	
	16429	B		5	SLUDGE	GCMS	
	16430	B		6	SLUDGE	GCMS	
	16431	B		7	SLUDGE	GCMS	
XBNA - 46							
	16419	A		1	SLUDGE	C-82	BNAL
	16420	A		2	SLUDGE	C-82	BNAL
	16421	A		3	SLUDGE	C-82	BNAL
	16422	A		5	SLUDGE	C-82	BNAL
	16423	B		6	SLUDGE	C-82	BNAL
	16424	B		7	SLUDGE	C-82	BNAL
XPES - 46							
	16412	A		1	SLUDGE	C-82	PEST
	16413	A		2	SLUDGE	C-82	PEST
	16414	A		3	SLUDGE	C-82	PEST
	16415	A		5	SLUDGE	C-82	PEST
	16416	B		6	SLUDGE	C-82	PEST
	16417	B		7	SLUDGE	C-82	PEST
XTCB - 46							
	16418	B		1	SLUDGE	C-82	TCLM TCLX TCBN TCPS XTCP
XTCP - 46							
	16418	B		1	SLUDGE	C-82	TCLM TCLX TCBN XTCB TCPS
ZHE - 43							
	16425	B		1	SLUDGE	GCMS	TCLV

100037

5/17

EXTRACTS READY FOR ANALYSIS

DATE 05-08-90

CODE ~~GH 10M~~ VERSCHU BATCH ~~1~~ 2,4 CONTROL # 5/17 2536, 5/21 2565

DATE RECEIVED 04-19 04-23-90 DATE EXTRACTED 05-08-90

OF EXTRACT 9 # OF SAMPLES 2

MATRIX Lech PARAMETER TCPS (608) LOCATION Fridge 5

IS THIS A RE-EXTRACTION? NO

COMMENTS

TECHNICIAN SIGNATURE

==========

SUPERVISOR USE ONLY

PROVIDE AN EXPLANATION IF ANSWER IS NO

Was the extraction holding time met?	☑ YES	☐ NO
Was proper QC performed with the extraction?	☑ YES	☐ NO
Are all columns complete, initialed, and dated?	☑ YES	☐ NO
Is column information accurate?	☑ YES	☐ NO
Is header information complete and accurate?	☑ YES	☐ NO
Were the correct standards used in the extraction?	☑ YES	☐ NO
Are final volumes correct?	☑ YES	☐ NO
Are sample comments included, initialed and dated?	☑ YES	☐ NO
Are dry weights included with the data package?	☐ YES	☑ NO H_2O
Are dry weights correct?	☐ YES	☑ NO correct

What clean-up procedure was used? None

SUPERVISOR SECTION CHIEF

Office of Enforcement

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pe[illegible]lvania 19106

CHAIN OF CUS[illegible]ODY RECORD

PROJ. NO.: R3-7

PROJECT NAME: R3-7

SAMPLERS: (Signature) Sharon E. Schaffer, Laurie B. Wyl[illegible]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TCLP VOA	TCLP BNA/Metals	VOA	BNA	Pest./PCB		REMARKS
1	4/18/90	1000		X	Location 1 (Sludge)	10	2	2	2	1~~2~~	1~~2~~		Tag #'S 3-10683362, 53, 54, 55, 56, 57, 58, 60
					~~Location 2~~ SES 4/18/90					SES 4/18/90	SES 4/18/90		
					~~Location 3~~ SES 4/18/90								
					~~Location 5~~ SES 4/18/90								
					~~Location 6~~ SES 4/18/90								

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sharon E. Schaffer	4/18/90 2000				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) J. L. Morrison	Date / Time 4/19/90 0900	Remarks Shipped via Federal Express Airbill # 2294123705	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pe /lvania 19106

CHAIN OF CU:)DY RECORD

PROJ. NO.: R3-7

PROJECT NAME: R3-7

SAMPLERS: (Signature) Sharon E. Schaeffer, Laurie B Wizl

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TAL Metals	Cyanide					REMARKS Tag #'s.
1	4/18/90	1000		X	Location 1 (Sludge)	2	1	1					3-1068341, 62.

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sharon E Schaeffer	4/18/90 2000				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) J. L. Monson	4/19/90	Date / Time 0900	Remarks Shipped via Federal Express Airbill # 2294123705

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.: R3-7
PROJECT NAME: R3-7
SAMPLERS: (Signature) Sharon E. Schaffer, Laurie B. Wyl

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	~~Semi-Vol~~	VOA	BNA	PCB/Pest.	TAL Metals	Cyanide		REMARKS Tag #'s
2	4/18/90	1135		X	Location 2	6	2	1	1	1	1			3-1068363, 63, 64, 65, 66, 67
3	4/18/90	1145		X	Location 3	6	2	1	1	1	1			3-1068368, 69, 70, 71, 72, 73
5	4/18/90	1430		X	Location 5	6	2	1	1	1	1			3-1068374, 75, 76, 77, 78, 79
6	4/18/90	1455		X	Location 6	~~6~~ 10	2	~~1~~ 2	~~1~~ 2	~~1~~ 2	~~1~~ 2			3-1068380, 81, 82, 83, 84, 85, 86, 87, 88, 89
7	4/18/90	1505		X	Location 7	~~6~~ 10	2	~~1~~ 2	~~1~~ 2	~~1~~ 2	~~1~~ 2			3-1068390, 91, 92, 93, 94, 95, 96, 97, 98, 99

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sharon E. Schaffer	4/18/90 2000				
Relinquished by: (Signature)	Date / Time	Received by: (Signature) J. R. Morrison	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature) J. R. Morrison	Date / Time 4/19/90 0900	Remarks Shipped via Federal Express Airbill # 4026936093	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

PROJECT VERSAM BATCH 2,4 CASE B3-7

MATRIX HCH PREPARATION PARAMETER TCPS CONTROL 2536, 2565

VERSAR SAMPLE NUMBER 1648, MS/MSD	Clear, Colorless Hot DN 5-8-90
FIELD SAMPLE NUMBER 1	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER 16960	Clear, Colorless Hot DN 5-8-90
FIELD SAMPLE NUMBER 11	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER EQ BLANK 1	Clear Colorless Hot DN 5-8-90
FIELD SAMPLE NUMBER	
SOIL SAMPLE pH	

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

PROJECT VERSAR BATCH 24 CASE B3-7

MATRIX H2O PREPARATION PARAMETER TCLP CONTROL 2536, 2565

VERSAR SAMPLE NUMBER	Clear, colorless H2O. pH. 5.190
~~FIELD~~ BLANK 2	
FIELD SAMPLE NUMBER	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER	
FIELD SAMPLE NUMBER	
SOIL SAMPLE pH	
VERSAR SAMPLE NUMBER	
FIELD SAMPLE NUMBER	
SOIL SAMPLE pH	

Shake Out

VERSAR INC — PEST TYPE WATER SAMPLE PREPARATION SHEET -BY CONTINUOUS EXTRACTION

CONTROL 2565 2536

PROJECT VERSCAN — EXTRACTION PARAMETER TCPS — MATRIX SPIKE SOLUTION B475 — PAGE 1 OF 1

CASE A3-7 — EXTRACTION START DATE 05-08-90

BATCH 3,4 — DATE EXTRACTION COMPLETE 05-08-90 — SURROGATE SPIKE SOLUTION B961

DATE 05-08-90 — ADSORBENT BATCH NUMBER —

VERSAR SAMPLE NUMBER	FIELD SAMPLE NUMBER	SAMPLE VOLUME IN ML.	SPIKE SURR.	SPIKE MS	DATE PEST RECOVERED	DATE PEST CONCENTRN	INITIAL EXTRACT FINAL VOL.	ACID CLEANED YES/NO	VOLUME TO COLUMN CLEAN UP	FINAL CLEANED VOLUME	SAMPLE COMMENTS
16418	1	20ml	1ml	—	05 08 90	DA	10ml	NO	NA	10ml	
16418MS	1	20ml	1ml	1ml			10ml			10ml	
16418MSD	1	20ml	1ml	1ml			10ml			10ml	
16960	11	20ml	1ml	—			10ml			10ml	
RB 8044	PBLK 44	20ml	1ml	—			10ml			10ml	
RB 8050	PBLK 50	20ml	1ml	—			10ml			10ml	
MDL 3080	—	20ml	1ml	1ml			10ml			10ml	
Ex/BLANK1	—	20ml	1ml	—			10ml			10ml	
Ex/BLANK2		20ml	1ml				10ml			10ml	
		DA	DA 5-8-90	DA 5-8-90	DA	DA	DA 5-8-90	DA 5-8-90	DA 5-8-90	DA	

PESTICIDES DILUTION FACTOR TABLE

Lab Name: VERSAR, INC. Case No.: VERSCDM 2536,2565

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/11,12/90 GC Column ID: SP2250/SP2401

Inject 2.00 (uL) Window Width: 1.0%

Extraction Date: 05/08/90 Extraction Chemist: DN

DILUTION FACTOR (DF) = (NG INJECTED)/(UL INJECTED)*DF = CONC (UG/KG OR UG/L) DFWATER

	MATRIX	EPA SAMPLE #	LAB SAMPLE ID #	VOL (ml) OF SAMPLE	% MOISTURE	INITIAL EXT FINAL VOL (ML)	ALIQUOT TO PEST (ML)	FINAL PEST VOL (ML)	DILUTION AT INSTRUMENT	DILUTION FACTOR (ml/L)
1	WATER	PBLK49	RB8049	20	0.00	10.00	10.00	10.00	1.0	500.00
2	WATER	PBLK50	RB8050	20	0.00	10.00	10.00	10.00	1.0	500.00
3	WATER	MSTD3080	MSTD3080	20	0.00	10.00	10.00	10.00	1.0	500.00
4	WATER	EXTBLANK1	EXTBLANK1	20	0.00	10.00	10.00	10.00	1.0	500.00
5	WATER	EXTBLANK2	EXTBLANK2	20	0.00	10.00	10.00	10.00	1.0	500.00
6	WATER	1	16418	20	0.00	10.00	10.00	10.00	1.0	500.00
7	WATER	1MS	16418MS	20	0.00	10.00	10.00	10.00	1.0	500.00
8	WATER	1MSD	16418MSD	20	0.00	10.00	10.00	10.00	1.0	500.00
9	WATER	11	16960	20	0.00	10.00	10.00	10.00	1.0	500.00
10	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
11	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
12	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
13	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
14	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
15	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
16	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
17	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
18	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
19	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
20	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
21	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
22	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
23	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
24	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
25	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
26	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
27	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
28	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
29	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR
30	WATER	X	X	X	0.00	10.00	10.00	10.00	1.0	ERR

If sample matrix is SOIL, DF adjusted to meet EPA-CLP specified limits (1.201x).

DATE 5/11/90 SUBJECT INJECT LOG #4 PROJECT NO.

Oper. E. Zelsdorf Date 05-11-90
Detec. ECD Temp. 300 °C
Column 6' x 4mm Type Sp2250/Sp2401
Carrier Gas N2 at ____ ml/min
Oven 215 °C for 30 min to 150 °C
for ____ min at ____ °C/min
Inst. ID A Baseline ____
Project VERSIDER Cont. Parameter 2080
VERS.COM

ORIGINAL (Red)

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID
1	1/ 1		B789 EVAL.05
2	1/ 2		B989 INDA.02
3	1/ 4		B990 INDA.05
4	1/ 5		B991 INDA.08
5	1/ 7		B992 INDA.10
6	1/ 8		B993 INDA.15
7	1/10		B994 INDB.~~20~~ .02 OPEN 05/11/90
8	1/11		B995 INDB.~~50~~ .05 DRY 05/11/90
9	1/13		B996 INDB.08
10	1/14		B997 INDB.10
11	2/ 1		B998 INDB.15
12	2/ 2		A910 T.CHL
13	2/ 4		B767 TOXAPH
14	2/ 5		B699 AR1660
15	2/ 7		A321 AR1221
16	2/ 8		B684 AR1232
17	2/10		B762 AR1242
18	2/11		B948 AR1248
19	2/13		B761 AR1254
20	2/14		PBLK45
21	3/ 1		17467
22	3/ 2		RB8049
23	3/ 4		EXTBLK 01
24	3/ 5		EXTBLK 02
25	3/ 7		EVAL B
26	3/ 8		16960
27	3/10		16418
28	3/11		16418MS
29	3/13		16418MSD
30	3/14		MSTD 3080
31	4/ 1		B991 INDA.08
32	4/ 2		B996 INDB.08
33	4/ 4		

TNESSED AND UNDERSTOOD
SIGNED Marge Nyu DATE 5/11/90 SIGNED E. D. [illegible] 05/11/90

SINGLE CHANNEL METHOD: CLP-3A 20:53 11 MAY 90

SECTION 1: BASIC
PAGE 1
ANALYSIS PARAMETERS
CHANNEL: 3
CALCULATION: ES
AREA/HT: A
STOP TIME: 30.00
NUMB EXPECTED PKS: 300
EQUILIBRATION TIME: 10
UNRETAINED PK TIME: 0.00
UNIDENT PK FACTOR: 1.000000
SLICE WIDTH: 10

PAGE 2
SAMPLE PARAMETERS
RUN TYPE: A
SAMPLE ID: EXTBLK 01
DIVISOR: 1.000000
AMT STD: 1.000000
MLTPLR: 10000.00

INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME
SAMPLE
Method

PAGE 3
REPORT INSTRUCTIONS
WHERE TO REPORT: L
COPIES: 1
TITLE: CLP PESTICIDES
FORMAT: E
DECIMAL PLACE: 0
RESULT UNITS: AREA
REPORT UNIDENT PKS: Y
REPORT INSTRUMENT CONDITIONS: N

PAGE 4
PLOT INSTRUCTIONS
PLOT: N
ZERO OFFSET: 10
ANNOTATION
RETENTION TIME: Y
PLOT CONTROL: N
TIME TICKS: N
TIME EVENTS: N
PK START/END: Y

PAGE 5
CHART SPEED
PAGES OR CM/MIN: C
INIT VALUE: 0.5

PAGE 6
PLOT ATTEN
INIT PLOT ATTEN: 16

SECTION 2: TIME EVENTS
PAGE 1

LINE#	TIME	EVENT	VALUE
1	0.00	PR	500

varian /sunnyvale, calif. p/n 03-906362-00

3	0.00	TS	5.0
4	0.00	WI	4
5	0.00	II	1.00

SECTION 3: PEAK TABLE
PAGE 1
STD PK#: 0
RELATIVE RETEN PK#: 0
RESOLUTION PK#: 0
RESOLUTION MINIMUM: 0.0
FACT%: 0.0
IDENTIFICATION TIME WINDOWS +/-
REF
%: 10
MIN: 0.00
NON REF
%: 3
MIN: 0.00

PAGE 2

PK#	TIME	NAME	FACTOR	AMOUNT	REF	GR#	MUST LO	MUST HI
1	2.06	A-BHC	1.000000	1.000000			0.000000	0.000000
2	2.53	G-BHC	1.000000	1.000000			0.000000	0.000000
3	2.86	B-BHC	1.000000	1.000000			0.000000	0.000000
4	3.09	HEPTACHLOR	1.000000	1.000000			0.000000	0.000000
5	3.33	D-BHC	1.000000	1.000000			0.000000	0.000000
6	3.67	ALDRIN	1.000000	1.000000			0.000000	0.000000
7	5.33	HEPT EPOX	1.000000	1.000000			0.000000	0.000000
8	5.96	G-CHLORDAN	1.000000	1.000000			0.000000	0.000000
9	6.48	A-CHLORDAN	1.000000	1.000000			0.000000	0.000000
10	6.65	A-ENDOSULF	1.000000	1.000000			0.000000	0.000000
11	7.61	DDE	1.000000	1.000000			0.000000	0.000000
12	8.06	DIELDRIN	1.000000	1.000000			0.000000	0.000000
13	9.86	ENDRIN	1.000000	1.000000			0.000000	0.000000
14	11.41	DDD	1.000000	1.000000			0.000000	0.000000
15	11.71	B-ENDOSULF	1.000000	1.000000			0.000000	0.000000
16	13.55	DDT	1.000000	1.000000			0.000000	0.000000
17	14.95	ENDRIN ALD	1.000000	1.000000			0.000000	0.000000
18	18.05	ESS	1.000000	1.000000			0.000000	0.000000
19	22.88	DBC	1.000000	1.000000			0.000000	0.000000
20	24.57	ENDRIN KET	1.000000	1.000000			0.000000	0.000000
21	25.50	METHOXYCHL	1.000000	1.000000			0.000000	0.000000

SECTION 4: GC INSTRUMENT CONTROL
PAGE 1
COL TEMP
ISO/INIT COL TEMP: 205
INIT HOLD TIME: 30.00

PAGE 2
DETECTORS
DET A TYPE: ECD
DET B TYPE:

LN#	TIME	SIDE	ATTN	RANGE	ZERO
1	0.00	A	32	10	Y
2	0.00	B			Y

INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME
SAMPLE

Method

PAGE 3
TEMP/FLOW
INJ A TEMP: 240
INJ B TEMP: 0
ION TEMP: 300
TCD TEMP:
TCD FIL TEMP:
AUX TEMP:
COL A FLOW:
COL B FLOW:

PAGE 4

SECTION 7: POST RUN
PAGE 1
FILE NAME:
SAVE INSTRUCTIONS
TYPE:
WHERE TO SAVE: M

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TRANSMIT RAW DATA: N
REPLOT WITH BASELINES: Y
RAW DATA LOCATION: L
TRANSMIT REPORT: N

PAGE 2
METHOD LINKING INSTRUCTIONS
METHOD:
LINK CALC RESULTS: N
PROGRAM EXECUTION
PROGRAM:
PARAMETERS:
RESERVE PRINTER: N

SECTION 9: SAMPLE LIST+A/S CONTROL
PAGE 1
AUTOSAMPLER CONTROL
INJECT/CALIBRATION: 1
INJECT/ANALYSIS: 1
SAMP VOLUME: 2
VISTA AUTOSAMPLER ONLY
A/S MODE: MR
PURGE PULSES: 2
INJECT TIME: 0.03

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID	DIVISOR	AMT STD	MLTPLR
1	1/ 1		B789 EVALB			
2	1/ 2		B989 INDA.02			
3	1/ 4		B990 INDA.05			
4	1/ 5		B991 INDA.08			
5	1/ 7		B992 INDA.10			
6	1/ 8		B993 INDA.15			
7	1/10		B994 INDB.20			
8	1/11		B995 INDB.50			
9	1/13		B996 INDB.08			
10	1/14		B997 INDB.10			
11	2/ 1		B998 INDB.15			
12	2/ 2		A910 T.CHL			
13	2/ 4		B767 TOXAPH			
14	2/ 5		B699 AR1660			
15	2/ 7		A321 AR1221			
16	2/ 8		B684 AR1232			
17	2/10		B762 AR1242			
18	2/11		B948 AR1248			
19	2/13		B761 AR1254			
20	2/14		PBLK45			
21	3/ 1		19467			
22	3/ 2		RB8049			
23	3/ 4		EXTBLK 01			
23	3/ 5		EXTBLK 02			
25	3/ 7		EVAL B			
26	3/ 8		16960			
27	3/10		16418			
28	3/11		16418MS			
29	3/13		16418MSD			
30	3/14		MSTD 3080			
31	4/ 1		B991 INDA.08			
32	4/ 2		B996 INDB.08			

INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/11/90 TIME
SAMPLE

Method

SECTION 10: NOTE PAD
PAGE 1

LINE#	VALUE
1	COL: 1.5% SP2250/1.95% SP2401
2	AMT INJ.2UL/INSTRUMENT LETTER A
3	ORT= OUTSIDE RETENTION TIME WINDOW
4	VERSELDE 2561 WATER CLP CONF
5	VERSCDM 2536,2565 WATER M608 QUANT

varian /sunnyvale,calif.p/n 03-90b-02-00

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

MSTD3000

Lab Name: VERSAR, INC. Case No.: VERSCBM RS-7

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/12/90 GC Column ID: SP2250/SP2401

MATRIX IS: WATER

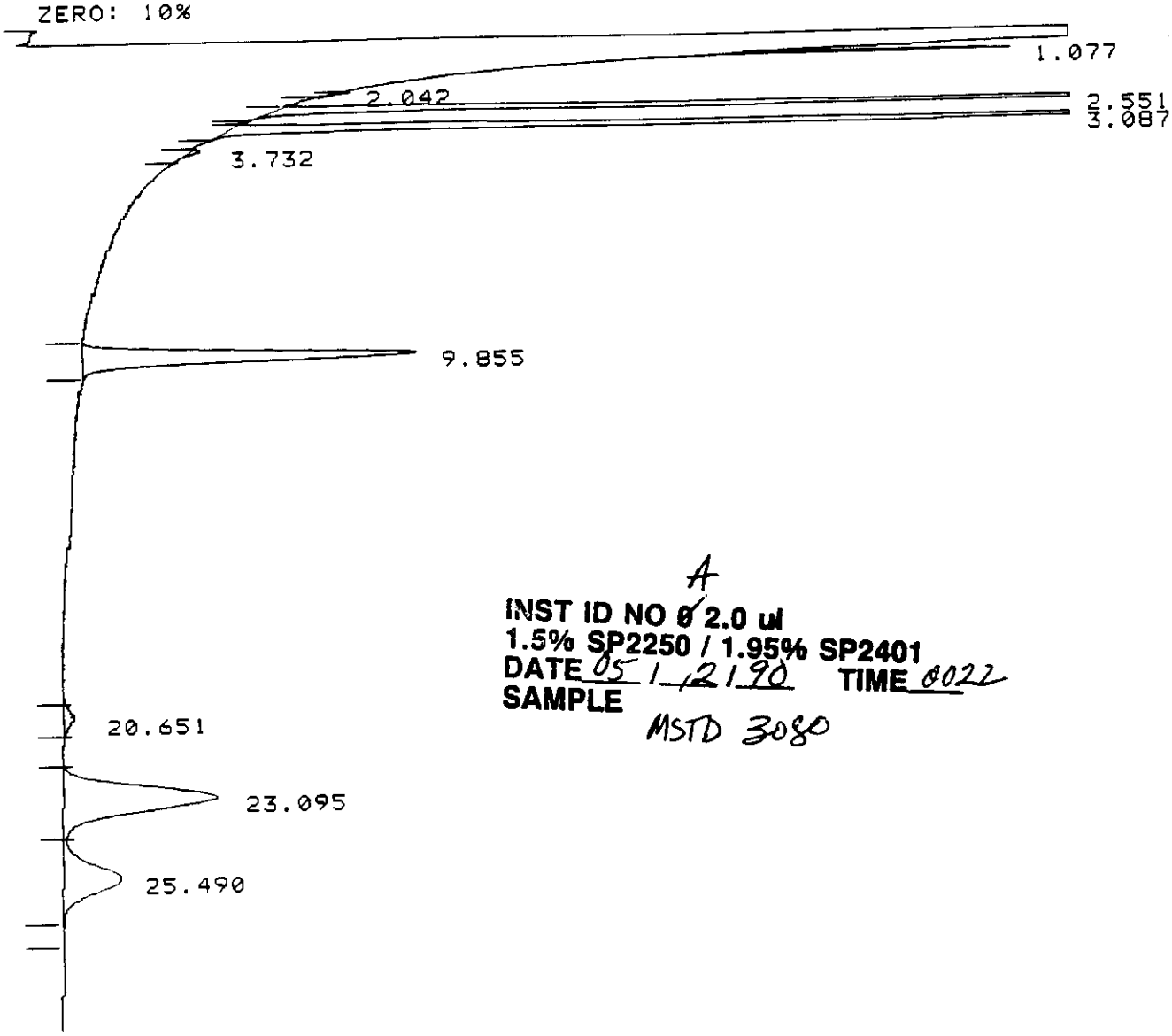
Inject Vol 2.00 (uL) Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/L)	DETECTION LIMIT (ug/L)		% Rec
alpha-BHC	2.03	2.07	2.04	556	992722	0.001	2.00	0.000	500.00	0.14	2.50	BDL	
beta-BHC	2.82	2.88	0.00	0	297343	0.000	2.00	0.000	500.00	0.00	2.50		
delta-BHC	3.29	3.35	0.00	0	917492	0.000	2.00	0.000	500.00	0.00	2.50		
gamma-BHC	2.49	2.55	2.55	182269	814856	0.224	2.00	0.112	500.00	55.92	2.50	HIT	112
Heptachlor	3.05	3.11	3.09	180471	863854	0.209	2.00	0.104	500.00	52.23	2.50	HIT	104
Aldrin	3.62	3.70	3.73	1849	800269	0.002	2.00	0.001	500.00	0.58	2.50	BDL	
Hept. epoxide	5.27	5.37	0.00	0	769525	0.000	2.00	0.000	500.00	0.00	2.50		
Endosulfan I	6.57	6.71	0.00	0	718902	0.000	2.00	0.000	500.00	0.00	2.50		
Dieldrin	7.97	8.13	0.00	0	790896	0.000	2.00	0.000	500.00	0.00	5.00		
4,4'-DDE	7.50	7.66	0.00	0	698639	0.000	2.00	0.000	500.00	0.00	5.00		
Endrin	9.73	9.93	9.86	102025	523658	0.195	2.00	0.097	500.00	48.71	5.00	HIT	97
Endosulfan II	11.57	11.81	0.00	0	713173	0.000	2.00	0.000	500.00	0.00	5.00		
4,4'-DDD	11.26	11.48	0.00	0	572143	0.000	2.00	0.000	500.00	0.00	5.00		
Endo.sulfate	17.82	18.18	0.00	0	514163	0.000	2.00	0.000	500.00	0.00	5.00		
4,4'DDT	13.39	13.67	0.00	0	504926	0.000	2.00	0.000	500.00	0.00	5.00		
Methoxychlor	25.17	25.67	25.49	50044	261003	0.192	2.00	0.096	500.00	47.93	25.00	HIT	96
Endrin ketone	24.26	24.76	0.00	0	723623	0.000	2.00	0.000	500.00	0.00	5.00		
a. Chlordane	6.40	6.52	0.00	0	741797	0.000	2.00	0.000	500.00	0.00	5.00		
g. Chlordane	5.88	6.00	0.00	0	768348	0.000	2.00	0.000	500.00	0.00	5.00		
Toxaphene	14.36	14.65	0.00	0	282124	0.000	2.00	0.000	500.00	0.00	50.00		
Aroclor-1016	2.75	2.81	0.00	0	64752	0.000	2.00	0.000	500.00	0.00	25.00		
Aroclor-1221	1.57	1.61	0.00	0	18596	0.000	2.00	0.000	500.00	0.00	25.00		
Aroclor-1232	2.39	2.43	0.00	0	30823	0.000	2.00	0.000	500.00	0.00	25.00		
Aroclor-1242	3.74	3.82	0.00	0	51936	0.000	2.00	0.000	500.00	0.00	25.00		
Aroclor-1248	5.17	5.27	0.00	0	107949	0.000	2.00	0.000	500.00	0.00	25.00		
Aroclor-1254	7.77	7.93	0.00	0	151284	0.000	2.00	0.000	500.00	0.00	50.00		
Aroclor-1260	11.91	12.15	0.00	0	271936	0.000	2.00	0.000	500.00	0.00	50.00		
DBC	22.59	23.05	23.10	109376	674216	0.162	2.00	0.081	500.00	40.56	5.00	HIT	81

QA 5/14/

14-May-90

CHART SPEED 0.5 CM/MIN
ATTEN: 16 ZERO: 10%



INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 12 / 90 TIME 0022
SAMPLE
MSTD 3080

varian sunnyvale, cal 13-906362-00

TITLE: CLP PESTICIDES 0:22 12 MAY 90

CHANNEL NO: 3 SAMPLE: MSTD 3080 METHOD: CLP-3A

F	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		9778	1.077		9778	BB	2.15
2	A-BHC	556	2.042	-0.018	556	BB	1.95
3	G-BHC	182269	2.551	0.021	182269	BB	5.10
4	HEPTACHLOR	180471	3.087	-0.003	180471	BB	6.15
5	ALDRIN	1849	3.732	0.062	1849	BB	6.80
6	ENDRIN	102025	9.855	-0.005	102025	BB	? 20.25
7		4888	20.651		4888	BB	? 40.30
8	DBC	109376	23.095	0.215	109376	BV	46.65
9	METHOXYCHL	50044	25.490	-0.010	50044	VB	52.55
TOTALS:		641256		0.262	641256		

DETECTED PKS: 9 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -12

ACK: 3 VIAL: 14 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSELDE 2561 WATER CLP CONF
VERSCDM 2536,2565 WATER M608 QUANT