Versar INC.

ENVIRONMENTAL RISK MANAGEMENT

ORIGINAL
(Red)

Versar INC.

441606

PESTICIDE ANALYSIS
ANALYTICAL DATA PACKAGE

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

6850 VERSAR CENTER • P.O. BOX 1549 • SPRINGFIELD, VIRGINIA 22151 • TELEPHONE: (703) 750-3000

Versar INC.

I. NARRATIVE

II. QC SUMMARY

Versar INC.

Pesticide Fraction Analysis Narrative
Client: Versar Div. 31; Camp, Dresser, McGee
Lab Operations Project No. 420.1 B#2; Control 2536 - Soils
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.

Pesticide Fraction Analysis Detail
Client: Versar Div. 31; Camp, Dresser, McGee
Lab Operations Project No. 420.1 B#2; Control 2536 - Soils
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 full organics including pesticides and PCBs under EPA-CLP protocol. All of the samples were extracted and analyzed within the holding time prescribed in the Statement of Work. The date of extraction was 26 April and 29 April, 1990, for the following low and med soils respectively:

SAMPLES

Field ID#	Lab ID#
*1	*16412
2	16413
3	16414
5	16415
6	16416
7	16417

*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 pesticides or PCBs at levels above the reported detection limits.

Sample extracts were analyzed on two different packed column chromatographic systems. The primary analyses were performed on a mixed phase, SP2250/SP2401, packed column with a full set of multicomponent standards to allow for quantitation of tentatively identified results. The primary analysis of these extracts was completed in two analytical sequences. Samples requiring further analysis were analyzed on a 3%SP2100 packed column analytical system. The confirmation analyses were completed in two analytical sequences.

Linearity criteria were met prior to analysis of calibration standards and sample extracts, although linearity is not required in confirmation analyses.

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 three of the four analytical sequences. Where "ND" is reported, it denoted that the surrogate was not detected. The reagent blank for the

Versar INC.

low soils did not contain DBC though it was recorded as having been spiked. The GPC blank was not spiked with surrogate. Where "DL" is reported, it denotes that the surrogate was effectively diluted out of the sample. The confirmation analysis for the low soils, performed on instrument C on 05/17/90, had DBC exceeding the contract limit of 2.0%. The samples, field numbers 3 and 7, had DBC shifts of 2.12 and 2.22 percent. The sample extracts were not reanalyzed under a new sequence, but the retention time windows for the compounds of interest were adjusted to match the shift of DBC. No compounds confirmed, had there been a possibility of a confirmed identification, the samples would have required reanalysis in a new analytical sequence.

All standard comparison result qualified data for quantitation of results. The only outlying standards were observed after completion of sample analyses, therefore no reanalyses were required. 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.

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 for both low and med extracts, matrix spike and matrix spike duplicate recoveries, as well as method blank results. Surrogate recoveries for the case exhibits good extraction efficiency with only one of seven lows and none of three med recoveries outside the QC limit windows. Matrix spike and matrix spike duplicate recoveries exhibit poor extraction efficiency with six of twelve 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 poor with none of the results within 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

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: VERSAR, INC Contract: —

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

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (DBC) #	OTHER DBC
01	PBLK 66	~~DD~~ *	ND *
02	GPC BLANK	~~DD~~ *	NA
03	1 DL	~~D~~ *	43
04	1 MS DL	~~D~~ *	53
05	1 MSD DL	~~D~~ *	57
06	2	~~26~~	51
07	3	~~32~~	64
08	7	~~36~~	72
09			
10		DBB	
11		5/21/90	
12			
13			
14			
15			
16			
17			
18			
19			
20			
21			
22			
23			
24			
25			
26			
27			
28			
29			
30			

RECOVERIES RECALCULATED DUE TO GPC NOTATION ERROR. SURROGATE RECS FOR DBC. DBB 5/21/90

ADVISORY QC LIMITS (20-150)

S1 (DBC) = Dibutylchlorendate

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

ND = None detected

NA - NOT SPIKED

page 1 of 1

FORM II PEST-2 1/87 Rev

100033

QA 5/17/90

SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: VERSAR, INC Contract: _____

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

Level: (low/med) MED

	EPA SAMPLE NO.	S1 (DBC) #	OTHER
01	PBLK81	82	
02	5	72	
03	6	84	
04			
05			
06			
07			
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 (20-150)

S1 (DBC) = Dibutylchlorendate

Column to be used to flag recovery values

* Values outside of QC limits

D Surrogates diluted out

FORM II PEST-2

1/87 Rev

100000

KC
5-9-90

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: R37 SAS No.: _____ SDG No.: 1

Matrix Spike - EPA Sample No.: 1 Level: (low/med) Low

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Lindane	79.04	0	0	0 *	46-127
Heptachlor	79.04	0	0	0 *	35-130
Aldrin	79.04	0	35.79	45	34-132
Dieldrin	197.59	0	0	0 *	31-134
Endrin	197.59	0	0	0 *	42-139
4,4' DDT	197.59	0	0	0 *	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Lindane	79.04	51.15	65	200 *	50	46-127
Heptachlor	79.04	63.95	81	200 *	31	35-130
Aldrin	79.04	81.11	103	78 *	43	34-132
Dieldrin	197.59	205.15	104	200 *	38	31-134
Endrin	197.59	238.90	121	200 *	45	42-139
4,4' DDT	197.59	251.28	127 *	200 *	50	23-134

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

* Values outside of QC limits

RPD: 6 out of 6 outside limits
Spike Recovery: 6 out of 12 outside limits

COMMENTS: Calculations based on ~~3~~ SPZ30/SPZ401 quant analysis. Extracts were 1/10 dilutions.

FORM III PEST-2 1/87 Rev

CEB 5/21/90

PESTICIDE METHOD BLANK SUMMARY

Lab Name: VERSAR INC Contract: —

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

Lab Sample ID: RB7966 Lab File ID: —

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

Date Extracted: 04-26-90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 05-16-90 Date Analyzed (2): 05-17-90

Time Analyzed (1): 1850 Time Analyzed (2): 1406

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

GC Column ID (1): SP2250/SP2401 GC Column ID (2): 3% SP2100

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	GPC BLANK	GPC BLANK	05-16-90	05-17-90
02	1 DL	16412	05-16-90	05-17-90
03	1 MS DL	16412MS	05-17-90	05-17-90
04	1 MSD DL	16412 MSD	05-17-90	05-17-90
05	2	16415	05-17-90	
06	3	16414	05-17-90	05-17-90
07	7	16424	05-17-90	05-17-90
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 Rev.

100033

gc
5/17/90

PESTICIDE METHOD BLANK SUMMARY

Lab Name: VERSAR, INC Contract: _____

Lab Code: VERSAR Case No.: B3-7 SAS No.: _____ SDG No.: 1

Lab Sample ID: ~~RB7981~~ PBLK 81 Lab File ID: _____

Matrix: (soil/water) SOIL Level: (low/med) MED

Date Extracted: 04/29/90 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 05/03/90 Date Analyzed (2): 05/07/90

Time Analyzed (1): 0326 Time Analyzed (2): 0915

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

GC Column ID (1): SP2250/SP2401 GC Column ID (2): 5%SP2100

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	5	16415	05/03/90	05/07/90
02	6	16416	05/03/90	05/07/90
03				
04				
05				
06				
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 Rev

100039

KC
5-9-90

Versar INC.

III. SAMPLE DATA PACKAGE

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1DL ORIGINAL (Red)

Lab Name: VERSAR, INC. Contract: _

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

Matrix: (soil/water) SOIL Lab Sample ID: 16412

Sample wt/vol: 30.02 (g/ml) G Lab File ID: ____

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

% Moisture: not dec. 32.7 dec. _____ Date Extracted: 04/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/16/90

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor Epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan Sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin Ketone	240	U
5103-71-9	alpha-Chlordane	240	U
5103-74-2	gamma-Chlordane	240	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

5/17/90

D

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

IDL

VERSAAA 16412 1/10

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/16/90 GC Column ID: SP2250/SP2401

Inject Vol 2.00 (uL) Window Width: 1.0%

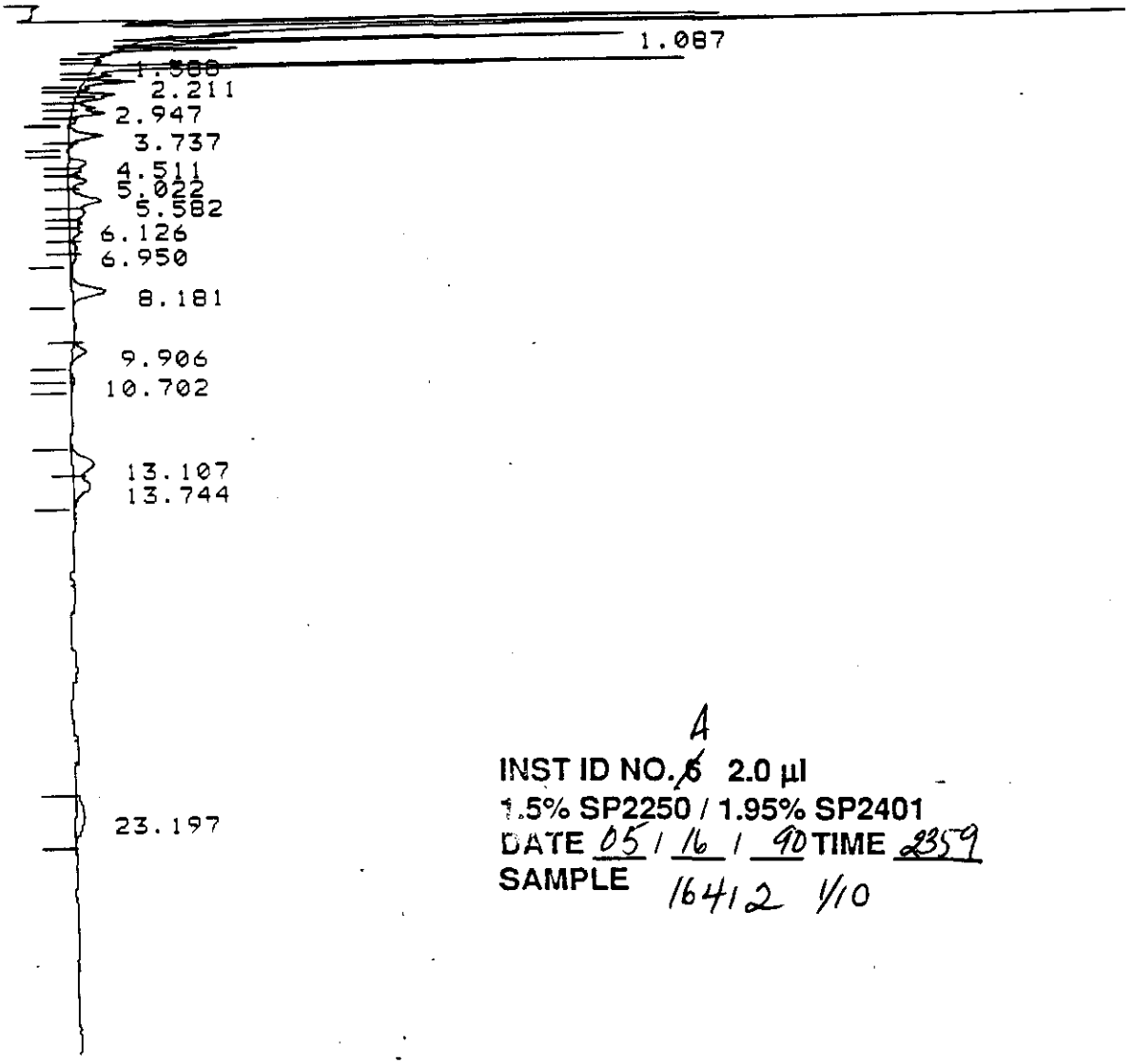
COMPOUND	RT WINDOW FROM	TO	SAMPLE RT	AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.02	2.06	2.03	691	934825	0.001	2.00	0.000	23778.11	8.79	118.89	BDL
beta-BHC	2.81	2.86	0.00	0	265290	0.000	2.00	0.000	23778.11	0.00	118.89	
delta-BHC	3.27	3.33	3.31	802	825980	0.001	2.00	0.000	23778.11	11.54	118.89	BDL
gamma-BHC	2.51	2.56	*2.57	3032	817180	0.004	2.00	0.002	23778.11	44.40	118.89	BDL
Heptachlor	3.03	3.09	*3.10	3504	784710	0.004	2.00	0.002	23778.11	53.09	118.89	BDL
Aldrin	3.64	3.71	*3.74	5512	795263	0.007	2.00	0.003	23778.11	82.40	118.89	BDL
Hept. epoxide	5.29	5.39	0.00	0	757790	0.000	2.00	0.000	23778.11	0.00	118.89	
Endosulfan I	6.60	6.73	0.00	0	698663	0.000	2.00	0.000	23778.11	0.00	118.89	
Dieldrin	7.99	8.15	*8.18	9239	764030	0.012	2.00	0.006	23778.11	143.77	237.78	BDL
4,4'-DDE	7.47	7.62	0.00	0	641295	0.000	2.00	0.000	23778.11	0.00	237.78	
Endrin	9.68	9.87	0.00	0	467110	0.000	2.00	0.000	23778.11	0.00	237.78	
Endosulfan II	11.61	11.84	0.00	0	687163	0.000	2.00	0.000	23778.11	0.00	237.78	
4,4'-DDD	11.19	11.42	0.00	0	518890	0.000	2.00	0.000	23778.11	0.00	237.78	
Endo.sulfate	17.71	18.06	0.00	0	460163	0.000	2.00	0.000	23778.11	0.00	237.78	
4,4'DDT	13.43	13.70	*13.74	6325	517845	0.013	2.00	0.007	23778.11	158.99	237.78	BDL
Methoxychlor	25.02	25.53	0.00	0	234220	0.000	2.00	0.000	23778.11	0.00	1188.91	
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	23778.11	0.00	237.78	
a. Chlordane	6.36	6.49	6.35	2369	679363	0.003	2.00	0.002	23778.11	41.45	237.78	BDL
g. Chlordane	5.85	5.97	5.92	3363	700305	0.005	2.00	0.002	23778.11	57.09	237.78	BDL
Toxaphene	11.81	12.05	0.00	0	89524	0.000	2.00	0.000	23778.11	0.00	2377.81	
Aroclor-1016	2.73	2.79	0.00	0	48234	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1242	3.48	3.56	0.00	0	52209	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1248	4.65	4.75	0.00	0	84633	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1254	7.71	7.87	0.00	0	139387	0.000	2.00	0.000	23778.11	0.00	2377.81	
Aroclor-1260	13.28	13.54	0.00	0	291550	0.000	2.00	0.000	23778.11	0.00	2377.81	
DBC	22.67	23.13	*23.20	5604	647515	0.009	2.00	0.004	23778.11	102.90	237.78	BDL

D

12/0412

17-May-90

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



INST ID NO. ~~6~~ A 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 16 / 90 TIME 2359
SAMPLE 16412 1/10

100010

TITLE: CLP PESTICIDES 23:59 16 MAY 90

CHANNEL NO: 3 SAMPLE: 16412 1/10 METHOD: CLP-3A

PEAK	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		22130	1.087		22130	BV		2.90
2		5492	1.288		5492	VB		2.60
3		513	1.588		513	BV		6.55
4		37755	1.803		37755	VV		4.05
5	A-BHC	691	2.027	-0.053	691	T		4.05
6		4081	2.211		4081	VV		4.90
7		718	2.390		718	VV		2.75
8	G-BHC	3052	2.567	-0.013	3052	VV	?	5.10
9		2448	2.655		2448	VV	?	8.75
10	B-BHC OUT	2186	2.947	0.057	2186	VV		6.35
11	~~HEPTACHL~~OR	3504	3.101	-0.019	3504	VV		6.25
12	D-BHC	802	3.314	-0.046	802	VV		5.55
13	ALDRIN	5512	3.737	-0.003	5512	VV		9.80
14		607	3.941		607	VB	?	15.60
15		3318	4.511		3318	BV	?	11.50
16		1222	4.669		1222	VV	?	16.70
17		3067	5.022		3067	VV		12.45
18	~~HEPT EPOX~~ OUT	7483	5.582	0.142	7483	VV		15.60
19	G-CHLORDAN	3363	5.916	-0.104	3363	VV	?	10.30
20		1799	6.126		1799	VV	?	
21	A-CHLORDAN	2369	6.349	-0.191	2369	VV	?	17.35
22	A-ENDOSULF	1597	6.950	0.160	1597	VV	?	20.80
23		1230	7.084		1230	VV	?	29.50
24	DIELDRIN	9239	8.181	-0.039	9239	VB		18.40
25	ENDRIN	3910	9.906	-0.054	3910	BV		17.65
26		771	10.702		771	VV	?	18.30
27		9007	13.107		9007	BV	?	26.90
28	DDT	6925	13.744	-0.076	6925	VB	?	37.75
29	DBC	5604	23.197	-0.143	5604	BB		48.60
TOTALS:		150395		-0.382	150395			

DETECTED PKS: 31 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -19

PACK: 2 VIAL: 11 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

Vantage, Inc.

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

1DL

VERSAR# 16412 1/10

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

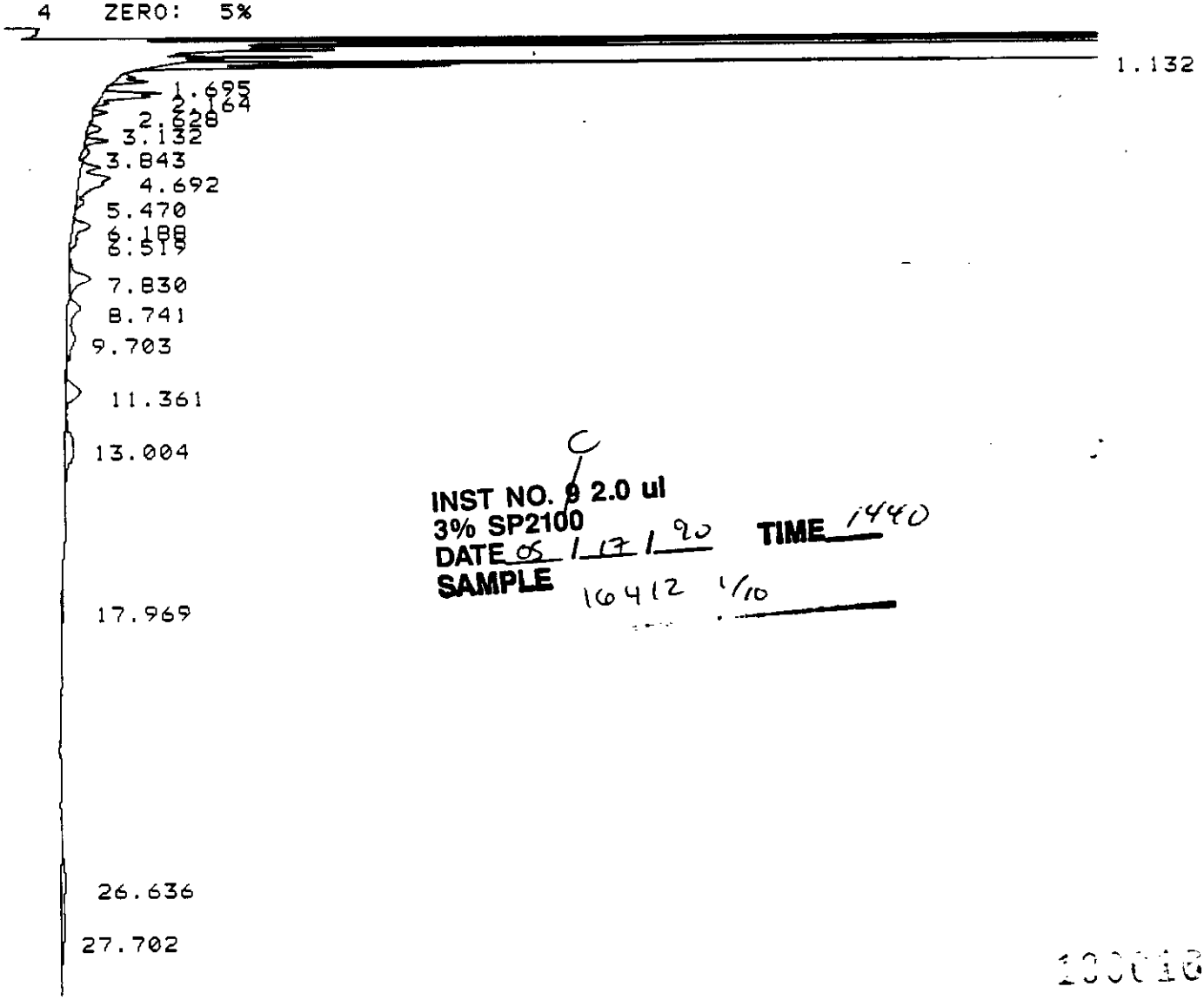
Run Date: 05/17/90 GC Column ID: 3% SP2100

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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	23778.11	0.00	118.89	
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	23778.11	0.00	118.89	
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	23778.11	0.00	118.89	
gamma-BHC	2.15	2.19	0.00	0	160115	0.000	2.00	0.000	23778.11	0.00	118.89	
Heptachlor	3.48	3.55	0.00	0	146420	0.000	2.00	0.000	23778.11	0.00	118.89	
Aldrin	4.32	4.41	0.00	0	174460	0.000	2.00	0.000	23778.11	0.00	118.89	
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	23778.11	0.00	118.89	
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	23778.11	0.00	118.89	
Dieldrin	7.72	7.88	0.00	0	171100	0.000	2.00	0.000	23778.11	0.00	237.78	
4,4'-DDE	7.70	7.85	0.00	0	131805	0.000	2.00	0.000	23778.11	0.00	237.78	
Endrin	8.61	8.78	0.00	0	118720	0.000	2.00	0.000	23778.11	0.00	237.78	
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	23778.11	0.00	237.78	
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	23778.11	0.00	237.78	
Endo.sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	23778.11	0.00	237.78	
4,4'DDT	12.79	13.04	0.00	0	76645	0.000	2.00	0.000	23778.11	0.00	237.78	
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	23778.11	0.00	1188.91	
Endrin ketone	14.62	14.91	0.00	0	116505	0.000	2.00	0.000	23778.11	0.00	237.78	
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	23778.11	0.00	237.78	
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	23778.11	0.00	237.78	
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	23778.11	0.00	2377.81	
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	23778.11	0.00	1188.91	
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	23778.11	0.00	2377.81	
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	23778.11	0.00	2377.81	
DBC	26.31	26.84	26.64	1607	109830	0.015	2.00	0.007	23778.11	173.96	237.78	BDL

ORIGINAL
(Red)

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. 9 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 1440
SAMPLE 16412 1/10

100018

ORIGINAL (Red)

TITLE: CLP PESTICIDES 14:40 17 MAY 90

Q NEL NO: 2 SAMPLE: 16412 1/10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		11242	1.132		11242	BV	2.95
2		4057	1.259		4057	VB	3.20
3		743	1.695		743	VB	4.70
4	B-BHC N/A	1250	2.052	0.092	1250	BV	? 5.30
5	G-BHC N/A	1152	2.164	0.004	1152	VV	? 7.40
6	HEPTACHLOR N/A	797	3.522	0.022	797	VV	8.20
7	ALDRIN N/A	787	4.354	0.014	787	BV	11.60
8		1785	4.692		1785	VV	? 13.90
9		1350	4.853		1350	VV	? 22.80
10	G-CHLORDAN N/A	1293	6.188	0.098	1293	BV	17.20
11	DDE/DIELD. N/A	2236	7.830	0.060	2236	BV	21.35
12	ENDRIN N/A	1424	8.741	0.061	1424	VV	23.20
13	DDD N/A	1124	9.703	-0.087	1124	VV	22.40
14	ESS N/A	1543	11.361	-0.089	1543	VV	25.90
15	DDT N/A	2060	13.004	0.144	2060	VB	51.20
16	DBC	1607	26.636	0.106	1607	BV	? 70.40
7		1020	27.702		1020	VB	?134.40
TOTALS:		35470		0.425	35470		

DETECTED PKS: 26 REJECTED PKS: 9

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -14

F .: 2 VIAL: 8 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
'ERSCDM CTL 2536 PEST SOILS
_NGIBLOM CTL 2660 PEST SOILS

N/A - Analyte not present in primary analysis.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

2

Lab ____VERSAR, INC.___ Contract:_

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

Matrix: (soil/water)SOIL Lab Sample ID: ___16413

Sample wt/vol: 30.08 (g/ml) G Lab File ID: ____

Level: (low/med) LOW Date Received: ___04/19/90

% Moisture: not dec. 30.2 dec._____ Date Extracted:___04/26/90

Extraction: (SepF/Cont/Sonc) ____SONC Date Analyzed: ___05/17/90

GPC Cleanup: (Y/N)Y pH:____8.1 Dilution Factor: _1.0

2288.07

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_UG/KG	Q
319-84-6	alpha-BHC	11	U
319-85-7	beta-BHC	11	U
319-86-8	delta-BHC	11	U
58-89-9	gamma-BHC (Lindane)	11	U
76-44-8	Heptachlor	11	U
309-00-2	Aldrin	11	U
1024-57-3	Heptachlor Epoxide	11	U
959-98-8	Endosulfan I	11	U
60-57-1	Dieldrin	23	U
72-55-9	4,4'-DDE	23	U
72-20-8	Endrin	23	U
33213-65-9	Endosulfan II	23	U
72-54-8	4,4'-DDD	23	U
1031-07-8	Endosulfan Sulfate	23	U
50-29-3	4,4'-DDT	23	U
72-43-5	Methoxychlor	110	U
53494-70-5	Endrin Ketone	23	U
5103-71-9	alpha-Chlordane	23	U
5103-74-2	gamma-Chlordane	23	U
8001-35-2	Toxaphene	230	U
12674-11-2	Aroclor-1016	110	U
11104-28-2	Aroclor-1221	110	U
11141-16-5	Aroclor-1232	110	U
53469-21-9	Aroclor-1242	110	U
12672-29-6	Aroclor-1248	110	U
11097-69-1	Aroclor-1254	230	U
11096-82-5	Aroclor-1260	230	U

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

2

VERSAR# 16413

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/17/90 GC Column ID: SP2250/SP2401

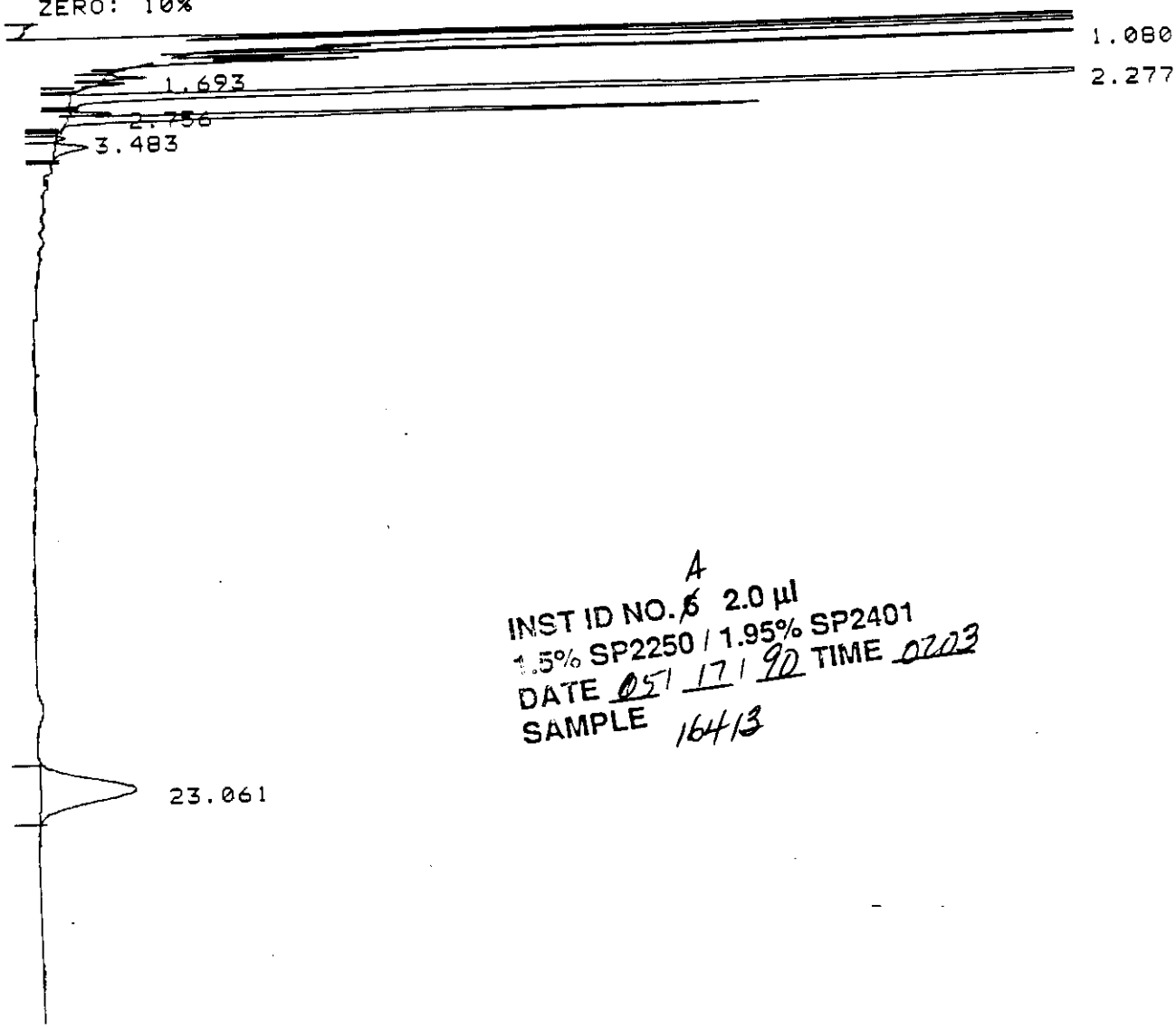
Inject Vol 2.00 (uL) Window Width: 1.0%

COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	MG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.02	2.06	0.00	0	334825	0.000	2.00	0.000	1144.04	0.00	5.72	
beta-BHC	2.81	2.86	0.00	0	265290	0.000	2.00	0.000	1144.04	0.00	5.72	
delta-BHC	3.27	3.33	0.00	0	825980	0.000	2.00	0.000	1144.04	0.00	5.72	
gamma-BHC	2.31	2.36	0.00	0	817180	0.000	2.00	0.000	1144.04	0.00	5.72	
Heptachlor	3.03	3.09	0.00	0	784710	0.000	2.00	0.000	1144.04	0.00	5.72	
Aldrin	3.64	3.71	0.00	0	795265	0.000	2.00	0.000	1144.04	0.00	5.72	
Hept. epoxide	5.29	5.39	0.00	0	757790	0.000	2.00	0.000	1144.04	0.00	5.72	
Endosulfan I	6.60	6.73	0.00	0	698665	0.000	2.00	0.000	1144.04	0.00	5.72	
Dieldrin	7.99	8.15	0.00	0	764030	0.000	2.00	0.000	1144.04	0.00	11.44	
4,4'-DDE	7.47	7.62	0.00	0	641295	0.000	2.00	0.000	1144.04	0.00	11.44	
Endrin	9.68	9.87	0.00	0	467110	0.000	2.00	0.000	1144.04	0.00	11.44	
Endosulfan II	11.61	11.84	0.00	0	687165	0.000	2.00	0.000	1144.04	0.00	11.44	
4,4'-DDD	11.19	11.42	0.00	0	518830	0.000	2.00	0.000	1144.04	0.00	11.44	
Endo.sulfate	17.71	18.06	0.00	0	460165	0.000	2.00	0.000	1144.04	0.00	11.44	
4,4'DDT	13.43	13.70	0.00	0	517845	0.000	2.00	0.000	1144.04	0.00	11.44	
Methoxychlor	25.02	25.53	0.00	0	234220	0.000	2.00	0.000	1144.04	0.00	57.20	
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	1144.04	0.00	11.44	
a. Chlordane	6.36	6.49	0.00	0	679365	0.000	2.00	0.000	1144.04	0.00	11.44	
g. Chlordane	5.85	5.97	0.00	0	700305	0.000	2.00	0.000	1144.04	0.00	11.44	
Toxaphene	11.81	12.05	0.00	0	89324	0.000	2.00	0.000	1144.04	0.00	114.40	
Aroclor-1016	2.73	2.79	0.00	0	48294	0.000	2.00	0.000	1144.04	0.00	57.20	
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	1144.04	0.00	57.20	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	1144.04	0.00	57.20	
Aroclor-1242	3.48	3.56	0.00	0	32209	0.000	2.00	0.000	1144.04	0.00	57.20	
Aroclor-1248	4.63	4.73	0.00	0	84633	0.000	2.00	0.000	1144.04	0.00	57.20	
Aroclor-1254	7.71	7.87	0.00	0	139987	0.000	2.00	0.000	1144.04	0.00	114.40	
Aroclor-1260	13.28	13.54	0.00	0	291550	0.000	2.00	0.000	1144.04	0.00	114.40	
DBC	22.67	23.13	23.06	65625	647315	0.101	2.00	0.051	1144.04	57.97	11.44	HIT

100013

JPH 17-May-90

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



INST ID NO. ~~6~~ A 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 0203
SAMPLE 16413

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

TITLE: CLP PESTICIDES 2:03 17 MAY 90

CHANNEL NO: 3 SAMPLE: 16413 METHOD: CLP-3A

P.	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		72278	1.080		72278	BV		2.40
2		2264	1.180		2264	T	?	2.60
3		721	1.221		721	T	?	0.90
4		11333	1.288		11333	VB	?	1.60
5		2640	1.693		2640	BB		3.30
6		1574	1.859		1574	BB		3.05
7		385764	2.277		385764	BV		4.55
8		3167	2.756		3167	BV	?	5.50
9	B-BHC ot	64718	2.937	0.047	64718	VB		6.15
10		782	3.483		782	BV		5.80
11	ALDRIN ot	6211	3.751	0.011	6211	VB		11.50
12	DBC	65625	23.061	-0.279	65625	BB	?	56.20
TOTALS:		617077		-0.221	617077			

DETECTED PKS: 14 REJECTED PKS: 2

ISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -39

RACK: 3 VIAL: 1 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
TRSCDM CTL 2565 PESTICIDE SOILS
XMD CTL2694 PESTICIDE WATERS

varian /sunnyvale, calif p/n 13-9(

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

3

Lab Versar INC.____VERSAR, INC.___ Contract:_

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

Matrix: (soil/water)SOIL Lab Sample ID: ___16414

Sample wt/vol: 30.73 (g/ml) G Lab File ID: ____

Level: (low/med) LOW Date Received: ___04/19/90

% Moisture: not dec. 24.4 dec._____ Date Extracted:___04/26/90

Extraction: (SepF/Cont/Sonc) ____SONC Date Analyzed: ___05/17/90

GPC Cleanup: (Y/N)Y pH:____8.2 Dilution Factor: _1.0

2067.85

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_UG/KG	Q
319-84-6	alpha-BHC	10	U
319-85-7	beta-BHC	10	U
319-86-8	delta-BHC	10	U
58-89-9	gamma-BHC (Lindane)	10	U
76-44-8	Heptachlor	10	U
309-00-2	Aldrin	10	U
1024-57-3	Heptachlor Epoxide	10	U
959-98-8	Endosulfan I	10	U
60-57-1	Dieldrin	21	U
72-55-9	4,4'-DDE	21	U
72-20-8	Endrin	21	U
33213-65-9	Endosulfan II	21	U
72-54-8	4,4'-DDD	21	U
1031-07-8	Endosulfan Sulfate	21	U
50-29-3	4,4'-DDT	21	U
72-43-5	Methoxychlor	100	U
53494-70-5	Endrin Ketone	21	U
5103-71-9	alpha-Chlordane	21	U
5103-74-2	gamma-Chlordane	21	U
8001-35-2	Toxaphene	210	U
12674-11-2	Aroclor-1016	100	U
11104-28-2	Aroclor-1221	100	U
11141-16-5	Aroclor-1232	100	U
53469-21-9	Aroclor-1242	100	U
12672-29-6	Aroclor-1248	100	U
11097-69-1	Aroclor-1254	210	U
11096-82-5	Aroclor-1260	210	U

1C0022

ORIGINAL (R.4)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER: 3

VERSAR# 16414

MATRIX IS: SOIL

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: A

Run Date: 05/17/90

Inject Vol 2.00 (uL)

Case No.: R3-7

Contract:

SAS No.:

GC Column ID: SP2250/SP2401

Window Width: 1.0%

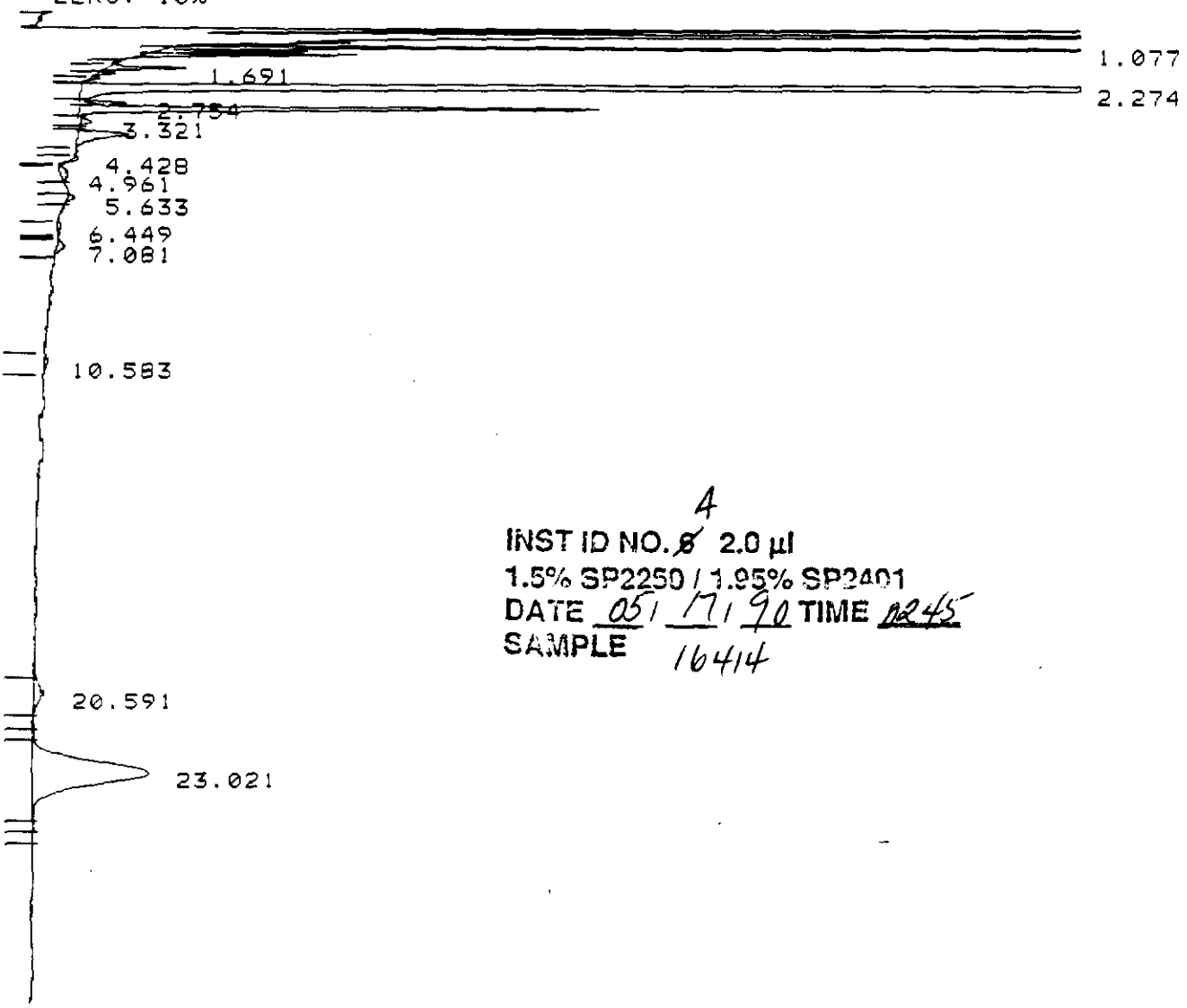
COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.02	2.06	0.00	0	934825	0.000	2.00	0.000	1033.92	0.00	5.17	
beta-BHC	2.81	2.86	0.00	0	265290	0.000	2.00	0.000	1033.92	0.00	5.17	
delta-BHC	3.27	3.33	3.32	1210	825980	0.001	2.00	0.001	1033.92	0.76	5.17	BDL
gamma-BHC	2.51	2.56	0.00	0	817180	0.000	2.00	0.000	1033.92	0.00	5.17	
Heptachlor	3.03	3.09	0.00	0	784710	0.000	2.00	0.000	1033.92	0.00	5.17	
Aldrin	3.64	3.71	3.70	9363	795263	0.012	2.00	0.006	1033.92	6.09	5.17	HIT
Hept. epoxide	5.29	5.39	0.00	0	757790	0.000	2.00	0.000	1033.92	0.00	5.17	
Endosulfan I	6.60	6.73	0.00	0	698663	0.000	2.00	0.000	1033.92	0.00	5.17	
Dieldrin	7.99	8.15	0.00	0	764030	0.000	2.00	0.000	1033.92	0.00	10.34	
4,4'-DDE	7.47	7.62	0.00	0	641295	0.000	2.00	0.000	1033.92	0.00	10.34	
Endrin	9.68	9.87	0.00	0	467110	0.000	2.00	0.000	1033.92	0.00	10.34	
Endosulfan II	11.61	11.84	0.00	0	687165	0.000	2.00	0.000	1033.92	0.00	10.34	
4,4'-DDD	11.19	11.42	0.00	0	518890	0.000	2.00	0.000	1033.92	0.00	10.34	
Endo.sulfate	17.71	18.06	0.00	0	460165	0.000	2.00	0.000	1033.92	0.00	10.34	
4,4'DDT	13.43	13.70	0.00	0	517845	0.000	2.00	0.000	1033.92	0.00	10.34	
Methoxychlor	23.02	23.53	0.00	0	234220	0.000	2.00	0.000	1033.92	0.00	51.70	
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	1033.92	0.00	10.34	
a. Chlordane	6.36	6.49	6.45	860	679565	0.001	2.00	0.001	1033.92	0.65	10.34	BDL
g. Chlordane	5.85	5.97	0.00	0	700305	0.000	2.00	0.000	1033.92	0.00	10.34	
Toxaphene	11.81	12.05	0.00	0	89524	0.000	2.00	0.000	1033.92	0.00	103.39	
Aroclor-1016	2.73	2.79	0.00	0	48294	0.000	2.00	0.000	1033.92	0.00	51.70	
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	1033.92	0.00	51.70	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	1033.92	0.00	51.70	
Aroclor-1242	3.48	3.56	0.00	0	32209	0.000	2.00	0.000	1033.92	0.00	51.70	
Aroclor-1248	4.65	4.75	0.00	0	84633	0.000	2.00	0.000	1033.92	0.00	51.70	
Aroclor-1254	7.71	7.87	0.00	0	139987	0.000	2.00	0.000	1033.92	0.00	103.39	
Aroclor-1260	13.28	13.54	0.00	0	291550	0.000	2.00	0.000	1033.92	0.00	103.39	
DBC	22.67	23.13	23.02	83222	647515	0.129	2.00	0.064	1033.92	66.44	10.34	HIT

100033

17-May-90

ORIGINAL
(Red)

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



INST ID NO. ~~8~~ 4 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 0245
SAMPLE 16414

ORIGINAL (Red)

TITLE: CLP PESTICIDES 2:45 17 MAY 90

Q NEL NO: 3 SAMPLE: 16414 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		66624	1.077		66624	BV	2.40
2		7378	1.175		7378	VV	2.85
3		11116	1.287		11116	VB	2.85
4		5495	1.691		5495	BV	3.75
5		1250	1.858		1250	VV	3.30
6		903	1.997		903	VB	2.80
7		708979	2.274		708979	BV	4.70
8		1495	2.754		1495	T	? 6.40
9	B-BHC	50612	2.932	0.042	50612	VV	6.20
10	D-BHC	1210	3.321	-0.039	1210	T	8.70
11	ALDRIN	9365	3.697	-0.043	9365	VB	11.35
12		1409	4.428		1409	BB	6.80
13		1878	4.961		1878	BB	? 13.30
14		1110	5.633		1110	BB	? 5.25
15	A-CHLORDAN	860	6.449	-0.091	860	BB	? 16.35
16		1663	7.081		1663	BB	13.45
7		1276	10.583		1276	BB	21.40
18		5557	20.591		5557	BB	? 36.60
19	DBC	83222	23.021	-0.319	83222	BB	46.85
TOTALS:		961402		-0.450	961402		

DETECTED PKS: 20 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

(SE: 36.4 OFFSET: -36

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
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

VA rartan /sunnyvale,calif.p/n 13-906362-00

ORIGINAL (RED)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER: 3

VERSAR# 16414

MATRIX IS: SOIL

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: C

Run Date: 05/17/90

Inject Vol 2.00 (uL)

Case No.: GSXMD #2694

Contract:

SAS No.:

GC Column ID: 3% SP2100

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/kg)	DETECTION LIMIT (ug/kg)
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	1033.92	0.00	5.17
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	1033.92	0.00	5.17
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	1033.92	0.00	5.17
gamma-BHC	2.15	2.19	0.00	0	160115	0.000	2.00	0.000	1033.92	0.00	5.17
Heptachlor	3.48	3.55	0.00	0	146420	0.000	2.00	0.000	1033.92	0.00	5.17
Aldrin	4.32	4.41	0.00	0	174460	0.000	2.00	0.000	1033.92	0.00	5.17
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	1033.92	0.00	5.17
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	1033.92	0.00	5.17
Dieldrin	7.72	7.88	0.00	0	171100	0.000	2.00	0.000	1033.92	0.00	10.34
4,4'-DDE	7.70	7.85	0.00	0	131805	0.000	2.00	0.000	1033.92	0.00	10.34
Endrin	8.61	8.78	0.00	0	118720	0.000	2.00	0.000	1033.92	0.00	10.34
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	1033.92	0.00	10.34
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	1033.92	0.00	10.34
Endo.sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	1033.92	0.00	10.34
4,4'DDT	12.79	13.04	0.00	0	76645	0.000	2.00	0.000	1033.92	0.00	10.34
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	1033.92	0.00	51.70
Endrin ketone	14.62	14.31	0.00	0	116505	0.000	2.00	0.000	1033.92	0.00	10.34
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	1033.92	0.00	10.34
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	1033.92	0.00	10.34
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	1033.92	0.00	103.39
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	1033.92	0.00	51.70
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	1033.92	0.00	51.70
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	1033.92	0.00	51.70
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	1033.92	0.00	51.70
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	1033.92	0.00	51.70
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	1033.92	0.00	103.39
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	1033.92	0.00	103.39
DBC	26.31	26.84	~~22.09~~ 14.66		109830	~~0.000~~ 0.13	2.00	~~0.000~~ 0.00	1033.92	~~0.00~~ 66.78	10.34

NZ7 CB 5/21/90

0.932 shift

ALDRIN WINDOW EXTENDED TO 4.45

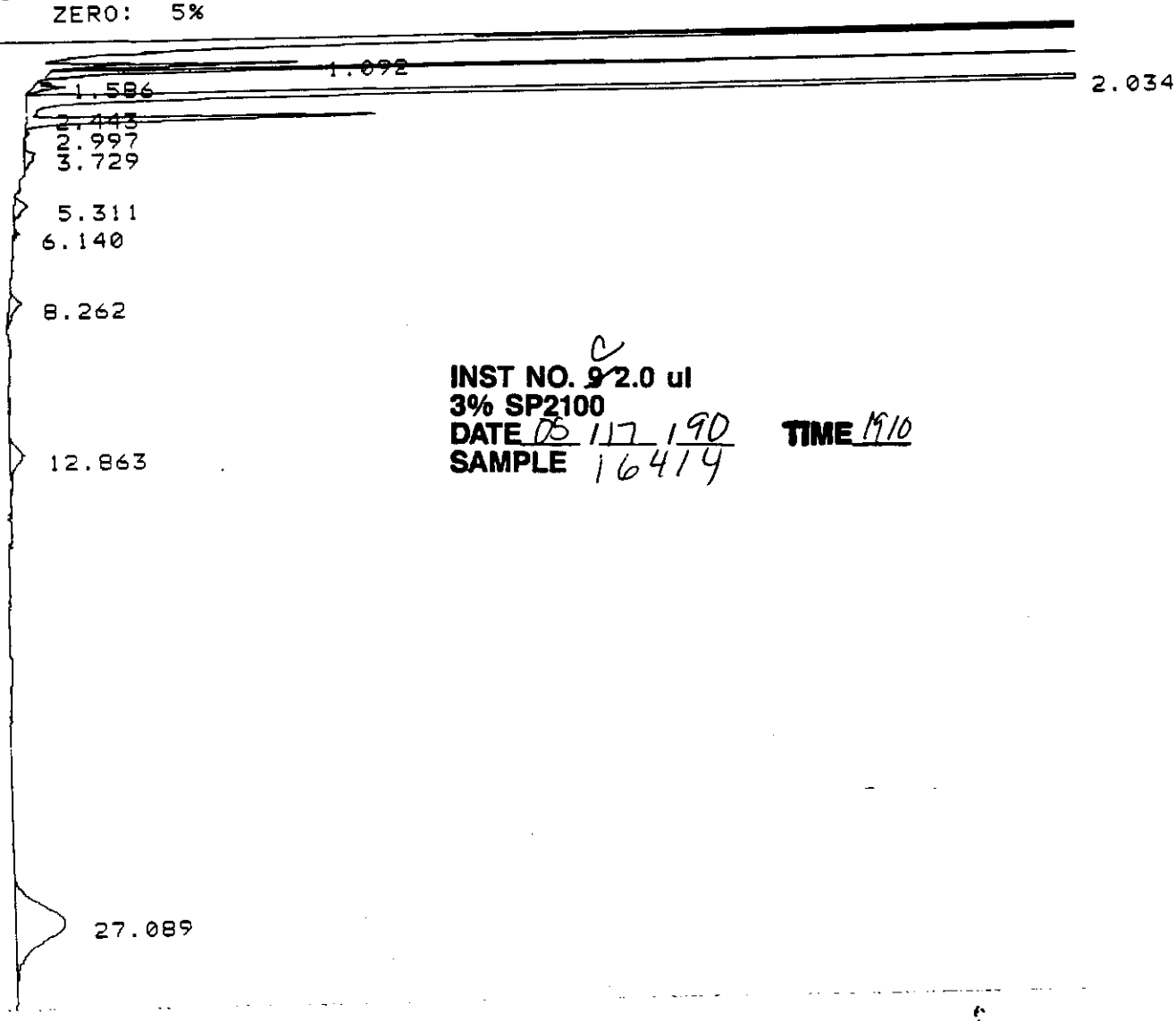
UEB 5/21/90

CF 05/17/90

17-May-90

ale calif p/n 03-906362-01

C T SPEED 0.5 CM/MIN
ATIEN: 4 ZERO: 5%



INST NO. ~~9~~ C 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 1510
SAMPLE 16414

100037

ORIGINAL (Red)

TITLE: CLP PESTICIDES 19:10 17 MAY 90

CHANNEL NO: 2 SAMPLE: 16414 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		2986	1.092		2986	BV	3.10
2		14182	1.272		14182	VV	3.45
3		812	1.703		812	VV	5.00
4	B-BHC ORT	89952	2.034	0.074	89952	VV	5.40
5		9588	2.725		9588	VV	6.95
6	HEPT EPOX NA	916	5.311	0.001	916	BB	16.40
7	ENDRIN ORT	1173	8.262	-0.418	1173	BB	22.00
8	DDT NA	2013	12.863	0.003	2013	BB	? 36.10
9	DBC	14166	27.089	0.559	14166	BB	? 73.50
TOTALS:		135788		0.219	135788		

DETECTED PKS: 17 REJECTED PKS: 8

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -11

RACK: 3 VIAL: 1 INJ: 1

NA: not calculable, analyte not present in primary analysis

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

varian /sunnyvale, calif. p/n 03-906362-01

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

7

Lab Versar INC.____VERSAR, INC.___ Contract:_

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

Matrix: (soil/water)SOIL Lab Sample ID: ___16424

Sample wt/vol: 30.29 (g/ml) G Lab File ID: ____

Level: (low/med) LOW Date Received: ___04/19/90

% Moisture: not dec. 4.7 dec._____ Date Extracted:___04/26/90

Extraction: (SepF/Cont/Sonc) ____SONC Date Analyzed: ___05/17/90

GPC Cleanup: (Y/N)Y pH:____8.0 Dilution Factor: _1.0

1664.22

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)_UG/KG	Q
319-84-6	alpha-BHC	8.3	U
319-85-7	beta-BHC	8.3	U
319-86-8	delta-BHC	8.3	U
58-89-9	gamma-BHC (Lindane)	8.3	U
76-44-8	Heptachlor	8.3	U
309-00-2	Aldrin	8.3	U
1024-57-3	Heptachlor Epoxide	8.3	U
959-98-8	Endosulfan I	8.3	U
60-57-1	Dieldrin	17	U
72-55-9	4,4'-DDE	17	U
72-20-8	Endrin	17	U
33213-65-9	Endosulfan II	17	U
72-54-8	4,4'-DDD	17	U
1031-07-8	Endosulfan Sulfate	17	U
50-29-3	4,4'-DDT	17	U
72-43-5	Methoxychlor	83	U
53494-70-5	Endrin Ketone	17	U
5103-71-9	alpha-Chlordane	17	U
5103-74-2	gamma-Chlordane	17	U
8001-35-2	Toxaphene	170	U
12674-11-2	Aroclor-1016	83	U
11104-28-2	Aroclor-1221	83	U
11141-16-5	Aroclor-1232	83	U
53469-21-9	Aroclor-1242	83	U
12672-29-6	Aroclor-1248	83	U
11097-69-1	Aroclor-1254	170	U
11096-82-5	Aroclor-1260	170	U

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

7

VERSAR# 16424

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

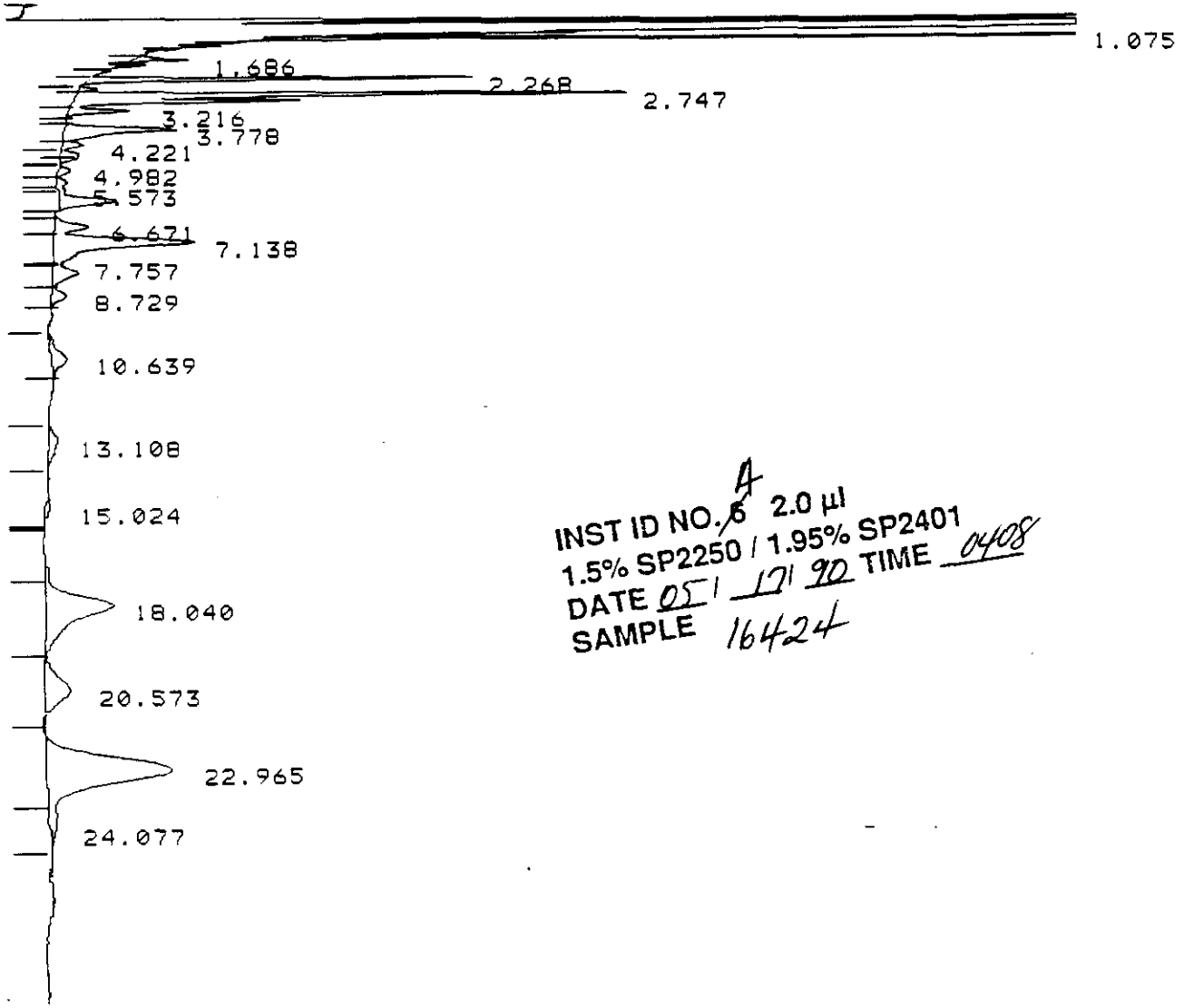
Instrument ID: A SAS No.:

Run Date: 05/17/90 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 =	MG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.02	2.06	0.00	0	934825	0.000	2.00	0.000	832.11	0.00	4.16	
beta-BHC	2.81	2.86	0.00	0	263230	0.000	2.00	0.000	832.11	0.00	4.16	
delta-BHC	3.27	3.33	0.00	0	825980	0.000	2.00	0.000	832.11	0.00	4.16	
gamma-BHC	2.51	2.56	2.55	1465	817180	0.002	2.00	0.001	832.11	0.75	4.16	BDL
Heptachlor	3.03	3.09	0.00	0	784710	0.000	2.00	0.000	832.11	0.00	4.16	
Aldrin	3.64	3.71	3.78	20646	795265	0.026	2.00	0.013	832.11	10.80	4.16	HIT
Hept. epoxide	5.29	5.39	5.34	1426	757790	0.002	2.00	0.001	832.11	0.78	4.16	BDL
Endosulfan I	6.60	6.73	6.67	7561	698665	0.011	2.00	0.005	832.11	4.50	4.16	HIT
Dieldrin	7.99	8.15	8.05	7678	764030	0.010	2.00	0.005	832.11	4.18	8.32	BDL
4,4'-DDE	7.47	7.62	0.00	0	641295	0.000	2.00	0.000	832.11	0.00	8.32	
Endrin	9.68	9.87	0.00	0	467110	0.000	2.00	0.000	832.11	0.00	8.32	
Endosulfan II	11.61	11.84	0.00	0	687165	0.000	2.00	0.000	832.11	0.00	8.32	
4,4'-DDD	11.19	11.42	0.00	0	518890	0.000	2.00	0.000	832.11	0.00	8.32	
Endo.sulfate	17.71	18.06	18.04	46352	460165	0.101	2.00	0.050	832.11	41.92	8.32	HIT
4,4'DDT	13.43	13.70	0.00	0	517845	0.000	2.00	0.000	832.11	0.00	8.32	
Methoxychlor	25.02	25.53	0.00	0	234220	0.000	2.00	0.000	832.11	0.00	41.61	
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	832.11	0.00	8.32	
a. Chlordane	6.36	6.49	0.00	0	679365	0.000	2.00	0.000	832.11	0.00	8.32	
g. Chlordane	5.85	5.97	5.90	12140	700305	0.017	2.00	0.009	832.11	7.21	8.32	BDL
Toxaphene	11.81	12.05	0.00	0	89324	0.000	2.00	0.000	832.11	0.00	83.21	
Aroclor-1016	2.73	2.79	0.00	0	48294	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1242	3.48	3.56	0.00	0	32209	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1248	4.65	4.75	0.00	0	84633	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1254	7.71	7.87	0.00	0	139987	0.000	2.00	0.000	832.11	0.00	83.21	
Aroclor-1260	13.28	13.54	0.00	0	291350	0.000	2.00	0.000	832.11	0.00	83.21	
DBC	22.67	23.13	22.97	93218	647315	0.144	2.00	0.072	832.11	59.90	8.32	HIT

CHART SPEED 0.5 CM/MIN
A: 1: 16 ZERO: 10%



INST ID NO. ~~6~~ A 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 0408
SAMPLE 16424

100031

TITLE: CLP PESTICIDES 4:08 17 MAY 90

CHANNEL NO: 3 SAMPLE: 16424 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
		66613	1.075		66613	BV		2.35
		1106	1.273		1106	T		2.00
3		3873	1.686		3873	BV		3.30
4		1013	1.787		1013	VV		2.35
5		1499	1.850		1499	VB		2.10
6		27764	2.268		27764	BB		4.75
7	G-BHC	1465	2.554	-0.026	1465	BV		5.20
8		51644	2.747		51644	VV		6.20
9	B-BHC	22536	2.925	0.035	22536	VV	?	7.20
10		6797	3.216		6797	VB		6.30
11	ALDRIN	20646	3.778	0.038	20646	BV		10.50
12		3018	4.221		3018	VV		9.05
13		2676	4.508		2676	VV	?	9.80
14		1633	4.586		1633	VV	?	11.70
15		2081	4.982		2081	VV		11.55
16	HEPT EPOX	1426	5.336	-0.104	1426	VV	?	10.00
17		707	5.573		707	VV	?	2.40
18	G-CHLORDAN	12140	5.896	-0.124	12140	VB	?	10.80
19	A-ENDOSULF	7561	6.671	-0.119	7561	BV	?	14.35
20	.	40517	7.138		40517	VV	?	16.75
21	DIELDRIN	7678	8.053	-0.167	7678	VV		18.90
22		3844	8.729		3844	VB		14.45
23		8428	10.639		8428	BB	?	38.30
24		6212	13.108		6212	BV		35.85
25	ENDRIN ALD	1295	15.024	-0.246	1295	VB		20.95
26	ESS	46362	18.040	-0.210	46362	BV		41.45
27		18366	20.573		18366	VV		45.95
28	DBC	93218	22.965	-0.375	93218	VV		50.15
29		5527	24.077		5527	VB	?	
TOTALS:		467645		-1.298	467645			

DETECTED PKS: 31 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -44

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
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

varian sunnyvale, calif. p/n 13 906302 00

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER: 7

VERSAR# 16424

MATRIX IS: SOIL

Lab Name: VERSAR, INC. Case No.: GSXMD #2694

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/17/90 GC Column ID: 3% SP2100

Inject Vol 2.00 (uL) Window Width: 1.0%

COMPOUND	RT WINDOW FROM	TO	SAMPLE RT	AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	832.11	0.00	4.16	
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	832.11	0.00	4.16	
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	832.11	0.00	4.16	
gamma-BHC	2.15	2.19	0.00	0	160115	0.000	2.00	0.000	832.11	0.00	4.16	
Heptachlor	3.46	3.55	0.00	0	146420	0.000	2.00	0.000	832.11	0.00	4.16	
Aldrin	4.32	4.41	0.00	0	174460	0.000	2.00	0.000	832.11	0.00	4.16	CEB 5/21/90
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	832.11	0.00	4.16	
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	832.11	0.00	4.16	
Dieldrin	7.72	7.88	0.00	0	171100	0.000	2.00	0.000	832.11	0.00	8.32	
4,4'-DDE	7.70	7.85	0.00	0	131805	0.000	2.00	0.000	832.11	0.00	8.32	
Endrin	8.61	8.78	0.00	0	118720	0.000	2.00	0.000	832.11	0.00	8.32	
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	832.11	0.00	8.32	
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	832.11	0.00	8.32	
Endo.sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	832.11	0.00	8.32	
4,4'DDT	12.79	13.04	0.00	0	76645	0.000	2.00	0.000	832.11	0.00	8.32	
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	832.11	0.00	41.61	
Endrin ketone	14.62	14.91	0.00	0	116505	0.000	2.00	0.000	832.11	0.00	8.32	
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	832.11	0.00	8.32	
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	832.11	0.00	8.32	
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	832.11	0.00	83.21	
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	832.11	0.00	41.61	
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	832.11	0.00	83.21	
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	832.11	0.00	83.21	
DBC	26.31	26.84	0.00	0	109830	~~0.000~~ 0.18	2.00	~~0.000~~ 0.09	832.11	~~0.00~~ 73.16	8.32	487

18 shift DBC

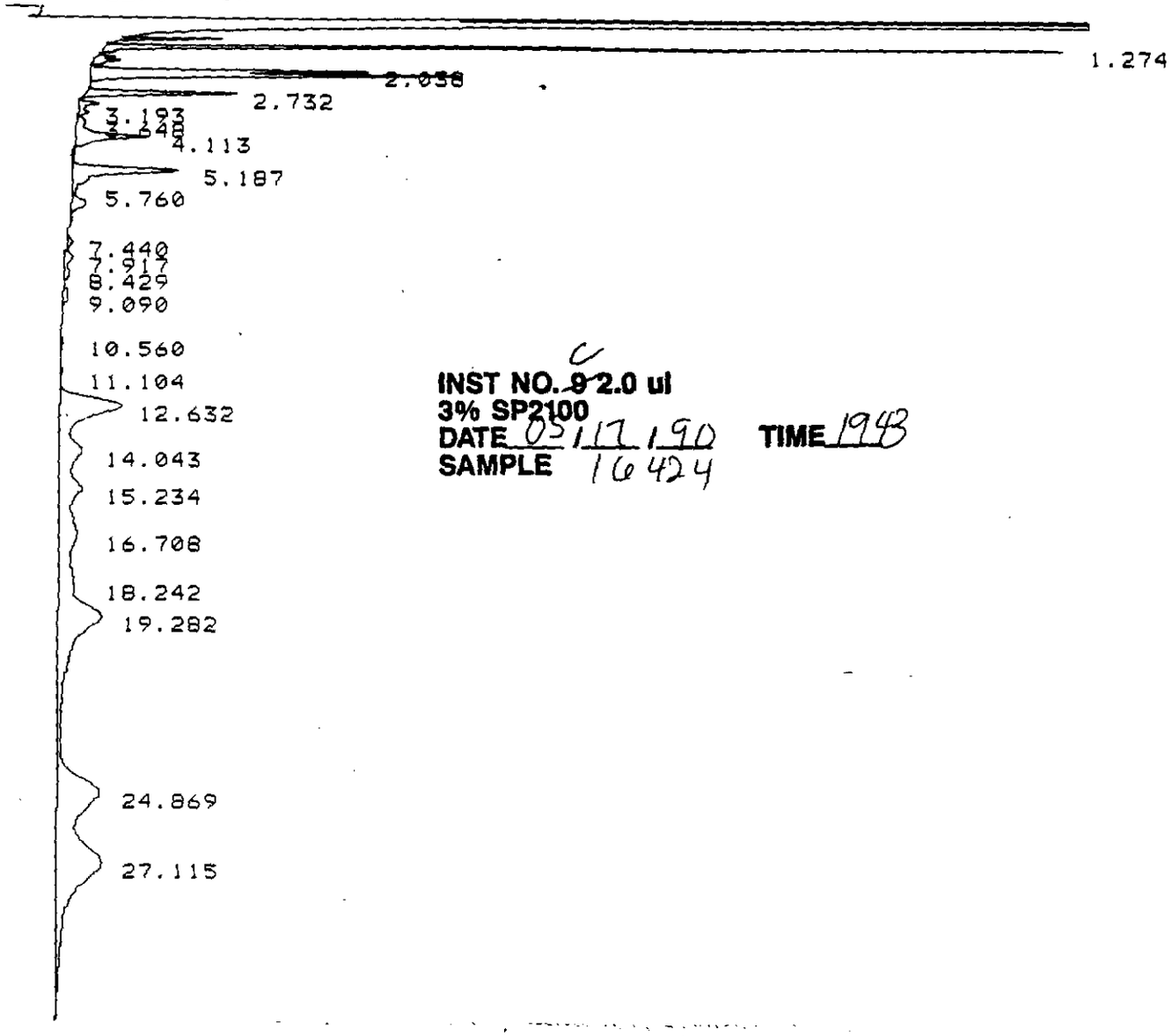
ALDRIN WINDOW EXTENDED TO 4.45 CEB 5/21/90

CF 05/17/90

17-May-90

SATCBDAT CTL 2611 PEST SOILS

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~9~~ C 2.0 ul
3% SP2100
DATE 05/17/90 TIME 1943
SAMPLE 16424

varian / sunnyvale, calif. p/ J-906362-01

TITLE: CLP PESTICIDES 19:43 17 MAY 90

CHANNEL NO: 2 SAMPLE: 16424 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		13566	1.274		13566	BV	3.50
2	B-BHC ORT	5756	2.038	0.078	5756	VV	? 5.10
3	G-BHC NA	8602	2.166	0.006	8602	VB	6.05
4		4138	2.732		4138	BV	6.80
5		3792	4.113		3792	VB	10.85
6	HEPT EPOXORT	5219	5.187	-0.123	5219	DV	12.35
7		770	5.436		770	VV	? 21.20
8	G-CHLORDANORT	1162	6.212	0.122	1162	VB	19.20
9	DDT ORT	9422	12.632	-0.228	9422	VV	35.20
10		4238	14.043		4238	VV	? 49.20
11	END KETONE ORT	4227	15.234	0.504	4227	VV	? 63.20
2		5271	16.708		5271	VV	? 76.20
13		2907	18.242		2907	VV	? 74.70
14	METHOXYCHL NA	15252	19.282	-0.008	15252	VV	?111.30
15		13494	24.869		13494	VV	76.50
16	DBC	19314	27.115	0.585	19314	VB	86.10
TOTALS:		117130		0.936	117130		

DETECTED PKS: 30 REJECTED PKS: 14

ISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -12

RACK: 3 VIAL: 2 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

GPC BLK

Lab Versar INC. VERSAR, INC. Contract:

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

Matrix: (soil/water)SOIL Lab Sample ID: GPC BLK

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

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

% Moisture: not dec. 0.0 dec. Date Extracted: 04/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/16/90

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

1601.33

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.0	U
319-85-7	beta-BHC	8.0	U
319-86-8	delta-BHC	8.0	U
58-89-9	gamma-BHC (Lindane)	8.0	U
76-44-8	Heptachlor	8.0	U
309-00-2	Aldrin	8.0	U
1024-57-3	Heptachlor Epoxide	8.0	U
959-98-8	Endosulfan I	8.0	U
60-57-1	Dieldrin	16	U
72-55-9	4,4'-DDE	16	U
72-20-8	Endrin	16	U
33213-65-9	Endosulfan II	16	U
72-54-8	4,4'-DDD	16	U
1031-07-8	Endosulfan Sulfate	16	U
50-29-3	4,4'-DDT	16	U
72-43-5	Methoxychlor	80	U
53494-70-5	Endrin Ketone	16	U
5103-71-9	alpha-Chlordane	16	U
5103-74-2	gamma-Chlordane	16	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	80	U
11104-28-2	Aroclor-1221	80	U
11141-16-5	Aroclor-1232	80	U
53469-21-9	Aroclor-1242	80	U
12672-29-6	Aroclor-1248	80	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

D

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

BPC BLK

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/16/90 GC Column ID: SP2250/SP2401

MATRIX IS: SOIL

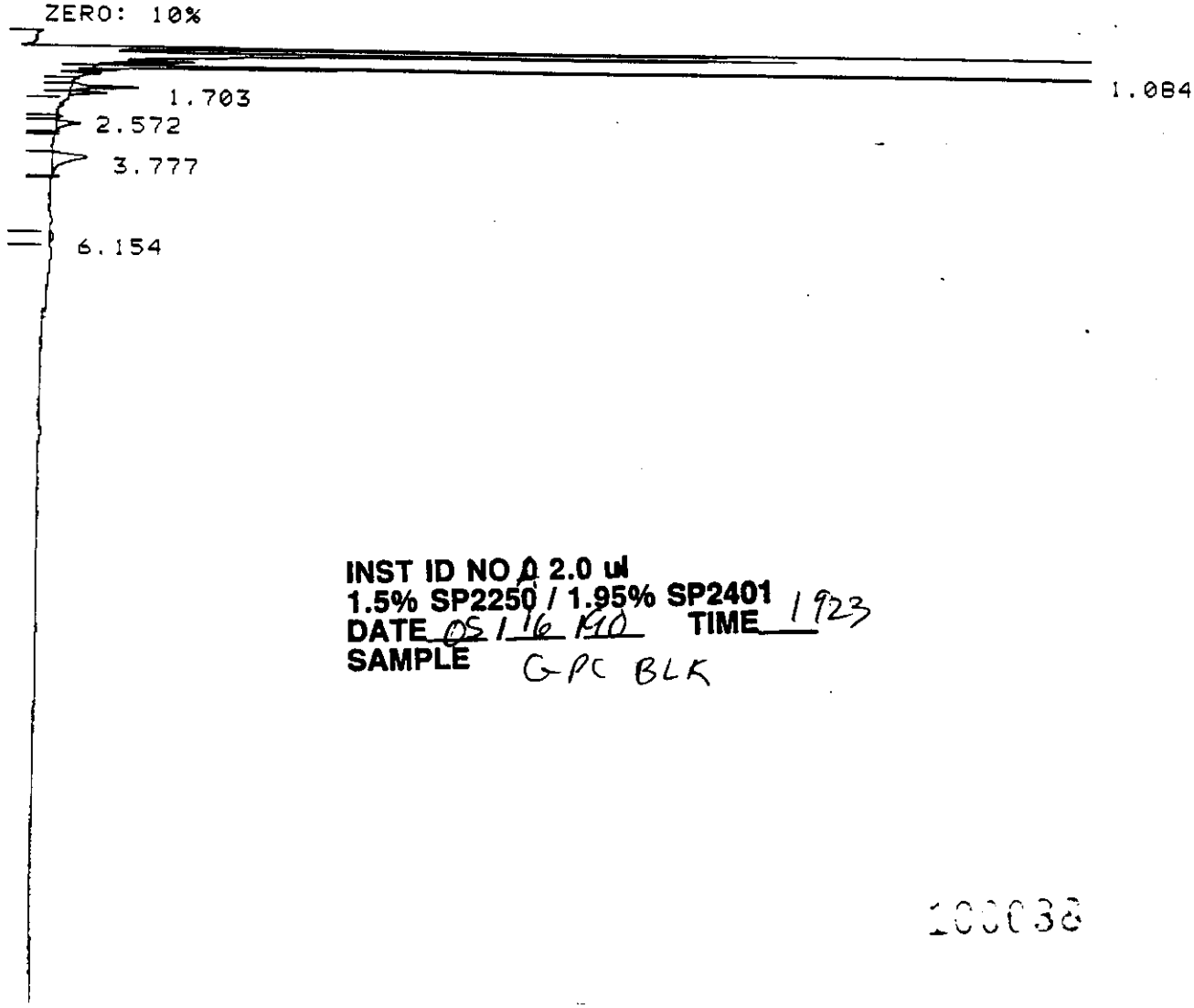
Inject Vol 2.00 (uL) Window Width: 1.0%

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/kg)	DETECTION LIMIT (ug/kg)
alpha-BHC	2.02	2.06	0.00	0	934825	0.000	2.00	0.000	800.67	0.00	4.00
beta-BHC	2.81	2.86	0.00	0	263290	0.000	2.00	0.000	800.67	0.00	4.00
delta-BHC	3.27	3.33	0.00	0	825980	0.000	2.00	0.000	800.67	0.00	4.00
gamma-BHC	2.51	2.56	0.00	0	817180	0.000	2.00	0.000	800.67	0.00	4.00
Heptachlor	3.03	3.09	0.00	0	784710	0.000	2.00	0.000	800.67	0.00	4.00
Aldrin	3.64	3.71	0.00	0	793263	0.000	2.00	0.000	800.67	0.00	4.00
Hept. epoxide	3.29	3.39	0.00	0	757790	0.000	2.00	0.000	800.67	0.00	4.00
Endosulfan I	6.60	6.73	0.00	0	638663	0.000	2.00	0.000	800.67	0.00	4.00
Dieldrin	7.99	8.15	0.00	0	764030	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDE	7.47	7.62	0.00	0	641293	0.000	2.00	0.000	800.67	0.00	8.01
Endrin	9.68	9.87	0.00	0	467110	0.000	2.00	0.000	800.67	0.00	8.01
Endosulfan II	11.61	11.84	0.00	0	687163	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDD	11.19	11.42	0.00	0	518890	0.000	2.00	0.000	800.67	0.00	8.01
Endo.sulfate	17.71	18.06	0.00	0	460163	0.000	2.00	0.000	800.67	0.00	8.01
4,4'DDT	13.43	13.70	0.00	0	517843	0.000	2.00	0.000	800.67	0.00	8.01
Methoxychlor	25.02	25.53	0.00	0	234220	0.000	2.00	0.000	800.67	0.00	40.03
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	800.67	0.00	8.01
a. Chlordane	6.36	6.49	0.00	0	679363	0.000	2.00	0.000	800.67	0.00	8.01
g. Chlordane	5.85	5.97	0.00	0	700305	0.000	2.00	0.000	800.67	0.00	8.01
Toxaphene	11.81	12.05	0.00	0	89524	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1016	2.73	2.79	0.00	0	48294	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1232	2.76	2.82	0.00	0	24103	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1242	3.48	3.56	0.00	0	52209	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1248	4.65	4.75	0.00	0	84633	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1254	7.71	7.87	0.00	0	139987	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1260	13.28	13.54	0.00	0	291350	0.000	2.00	0.000	800.67	0.00	80.07
DBC	22.67	23.13	0.00	0	647313	0.000	2.00	0.000	800.67	0.00	8.01

D

CF 05/16/90

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 / 16 / 10 TIME 1923
SAMPLE GPC BLK

100038

TITLE: CLP PESTICIDES 19:23 16 MAY 90

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

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		62115	1.084		62115	BV	2.40
2		657	1.289		657	T	2.45
3		4564	1.703		4564	BV	3.90
4		2514	1.875		2514	VB	3.85
5		2636	2.773		2636	VB	6.45
6	ALDRIN	7769	3.777	0.037	7769	BB	12.95
7	G-CHLORDAN	850	6.154	0.134	850	BB	13.90
TOTALS:		81105		0.171	81105		

D CTED PKS: 9 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -15

RACK: 2 VIAL: 8 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
^MT INJ.2UL/INSTRUMENT LETTER A
T= OUTSIDE RETENTION TIME WINDOW
_RSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

GPC BLK

MATRIX IS: SOIL

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: C

Run Date: 05/17/90

Inject Vol 2.00 (uL)

Case No.: GSXMD #2694

Contract:

SAS No.:

GC Column ID: 3% SP2100

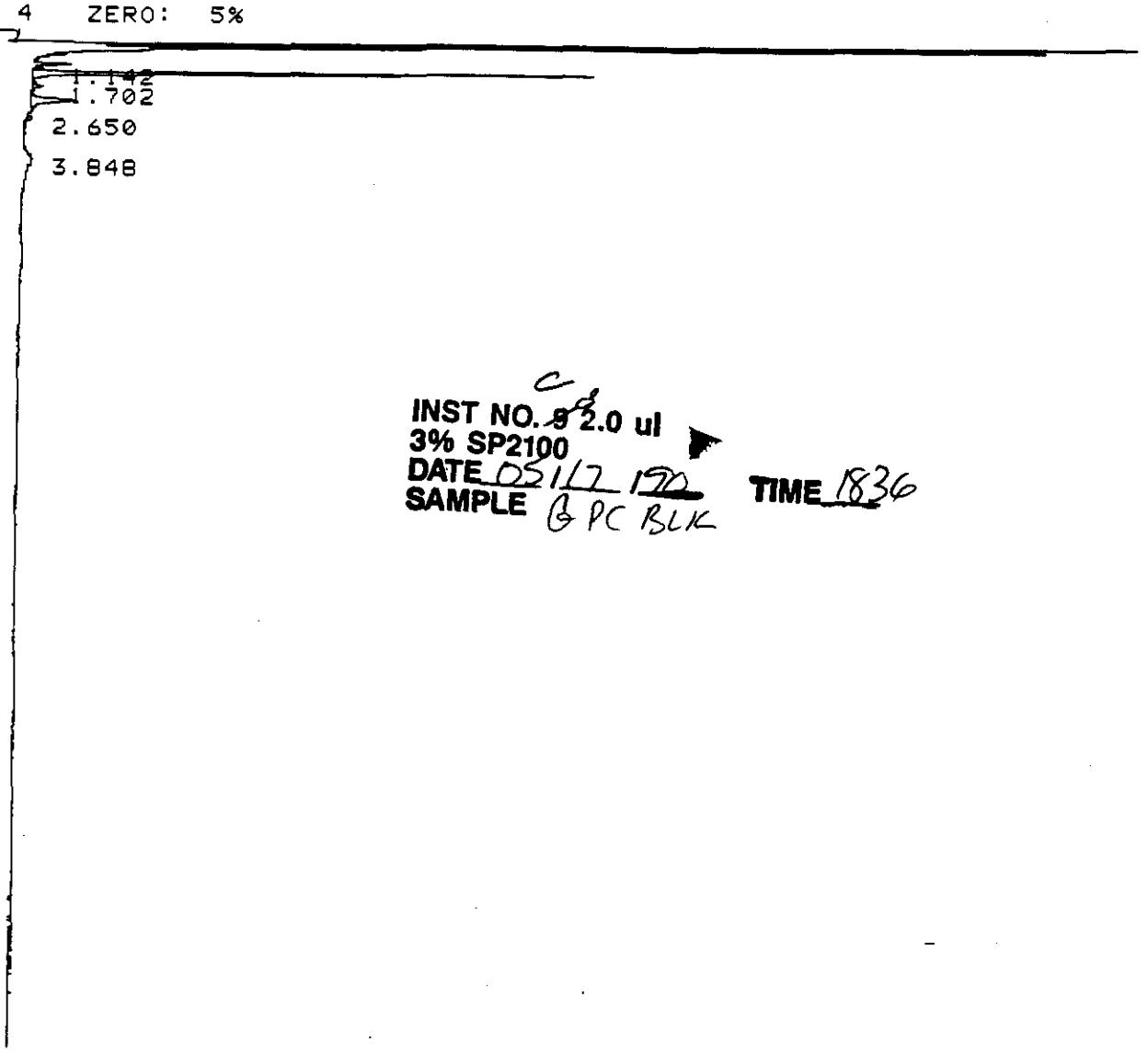
Window Width: 1.0%

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/kg)	DETECTION LIMIT (ug/kg)
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	800.67	0.00	4.00
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	800.67	0.00	4.00
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	800.67	0.00	4.00
gamma-BHC	2.15	2.19	0.00	0	160115	0.000	2.00	0.000	800.67	0.00	4.00
Heptachlor	3.48	3.55	0.00	0	146420	0.000	2.00	0.000	800.67	0.00	4.00
Aldrin	4.32	4.41	0.00	0	174460	0.000	2.00	0.000	800.67	0.00	4.00
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	800.67	0.00	4.00
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	800.67	0.00	4.00
Dieldrin	7.72	7.88	0.00	0	171100	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDE	7.70	7.85	0.00	0	131805	0.000	2.00	0.000	800.67	0.00	8.01
Endrin	8.61	8.78	0.00	0	118720	0.000	2.00	0.000	800.67	0.00	8.01
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	800.67	0.00	8.01
Endo. sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	800.67	0.00	8.01
4,4'DDT	12.79	13.04	0.00	0	76645	0.000	2.00	0.000	800.67	0.00	8.01
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	800.67	0.00	40.03
Endrin ketone	14.62	14.91	0.00	0	116505	0.000	2.00	0.000	800.67	0.00	8.01
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	800.67	0.00	8.01
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	800.67	0.00	8.01
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	800.67	0.00	80.07
DBC	26.31	26.84	0.00	0	109830	0.000	2.00	0.000	800.67	0.00	8.01

CJ 05/17/90

varian / sunnyvale, calif. p/n 03-906362-01

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~8~~ C 2.0 ul
3% SP2100
DATE 05/17/90 TIME 1836
SAMPLE GPC BLK

100011

T..LE: CLP PESTICIDES 18:36 17 MAY 90

CHANNEL NO: 2 SAMPLE: GPCBLK METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		7416	1.274		7416	VV	3.40
2	G-BHC	1419	2.103	-0.057	1419	VB	7.55
TOTALS:		8835		-0.057	8835		

DETECTED PKS: 8 REJECTED PKS: 6

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -13

RACK: 2 VIAL: 14 INJ: 1

..TES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

varian /sunnyv

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

5

Lab Name: VERSAR, INC. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: 16415

Sample wt/vol: 1 (g/ml) G Lab File ID:

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

% Moisture: not dec. 50 dec. Date Extracted: 04/29/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/03/90

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	99	U
319-85-7	beta-BHC	99	U
319-86-8	delta-BHC	99	U
58-89-9	gamma-BHC (Lindane)	99	U
76-44-8	Heptachlor	99	U
309-00-2	Aldrin	99	U
1024-57-3	Heptachlor Epoxide	99	U
959-98-8	Endosulfan I	99	U
60-57-1	Dieldrin	200	U
72-55-9	4,4'-DDE	200	U
72-20-8	Endrin	200	U
33213-65-9	Endosulfan II	200	U
72-54-8	4,4'-DDD	200	U
1031-07-8	Endosulfan Sulfate	200	U
50-29-3	4,4'-DDT	200	U
72-43-5	Methoxychlor	990	U
53494-70-5	Endrin Ketone	200	U
5103-71-9	alpha-Chlordane	200	U
5103-74-2	gamma-Chlordane	200	U
8001-35-2	Toxaphene	2000	U
12674-11-2	Aroclor-1016	990	U
11104-28-2	Aroclor-1221	990	U
11141-16-5	Aroclor-1232	990	U
53469-21-9	Aroclor-1242	990	U
12672-29-6	Aroclor-1248	990	U
11097-69-1	Aroclor-1254	2000	U
11096-82-5	Aroclor-1260	2000	U

KC 5-8-90

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

5

VERSAR# 16415

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

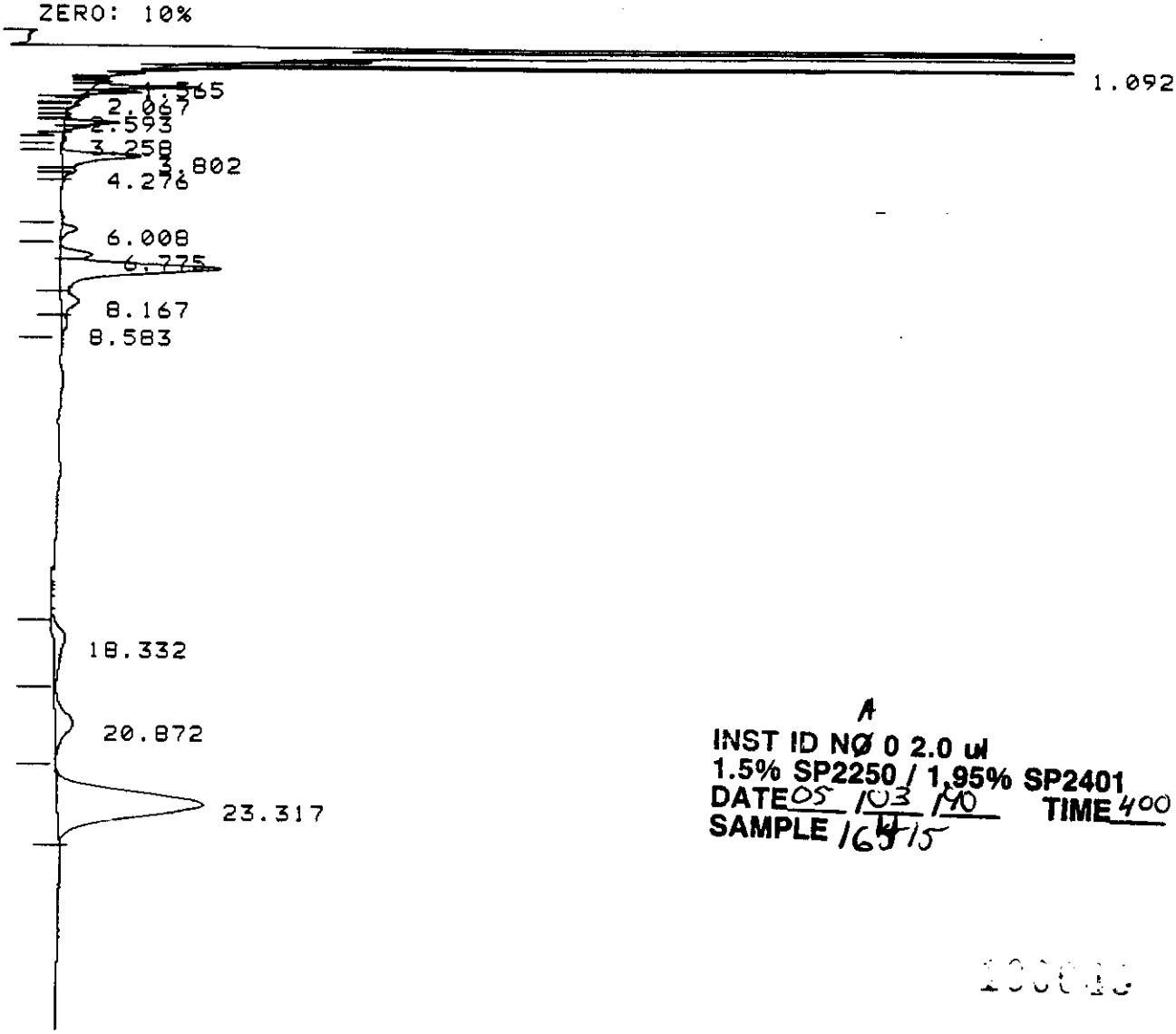
Run Date: 05/03/90 GC Column ID: SP2250/SP2401

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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.07	2.11	0.00	0	1114930	0.000	2.00	0.000	19847.30	0.00	99.24	
beta-BHC	2.87	2.93	2.88	1913	317915	0.006	2.00	0.003	19847.30	59.71	99.24	BDL
delta-BHC	3.35	3.41	0.00	0	997120	0.000	2.00	0.000	19847.30	0.00	99.24	
gamma-BHC	2.56	2.61	0.00	0	935415	0.000	2.00	0.000	19847.30	0.00	99.24	
Heptachlor	3.10	3.17	0.00	0	957460	0.000	2.00	0.000	19847.30	0.00	99.24	
Aldrin	3.72	3.79	*3.80	16970	927280	0.018	2.00	0.009	19847.30	181.61	99.24	HIT
Hept. epoxide	5.41	5.52	0.00	0	866180	0.000	2.00	0.000	19847.30	0.00	99.24	
Endosulfan I	6.75	6.89	6.78	6396	795955	0.008	2.00	0.004	19847.30	79.74	99.24	BDL
Dieldrin	8.18	8.35	0.00	0	879365	0.000	2.00	0.000	19847.30	0.00	198.47	
4,4'-DDE	7.65	7.80	0.00	0	745515	0.000	2.00	0.000	19847.30	0.00	198.47	
Endrin	9.91	10.11	0.00	0	515005	0.000	2.00	0.000	19847.30	0.00	198.47	
Endosulfan II	11.90	12.14	0.00	0	762190	0.000	2.00	0.000	19847.30	0.00	198.47	
4,4'-DDD	11.47	11.70	0.00	0	615405	0.000	2.00	0.000	19847.30	0.00	198.47	
Endo.sulfate	18.16	18.53	18.33	12111	527590	0.023	2.00	0.011	19847.30	227.80	198.47	HIT
4,4'DDT	13.77	14.05	0.00	0	573385	0.000	2.00	0.000	19847.30	0.00	198.47	
Methoxychlor	25.64	26.15	0.00	0	268850	0.000	2.00	0.000	19847.30	0.00	992.37	
Endrin ketone	24.94	25.45	0.00	0	785310	0.000	2.00	0.000	19847.30	0.00	198.47	
a. Chlordane	6.51	6.64	0.00	0	793830	0.000	2.00	0.000	19847.30	0.00	198.47	
g. Chlordane	5.99	6.11	6.01	3548	829210	0.004	2.00	0.002	19847.30	42.46	198.47	BDL
Toxaphene	10.67	10.89	0.00	0	277048	0.000	2.00	0.000	19847.30	0.00	1984.73	
Aroclor-1016	2.86	2.92	0.00	0	64579	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1221	1.91	1.95	0.00	0	21445	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1242	3.53	3.61	0.00	0	70122	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1248	4.71	4.81	0.00	0	89358	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1254	8.38	8.54	0.00	0	204613	0.000	2.00	0.000	19847.30	0.00	1984.73	
Aroclor-1260	13.51	13.79	0.00	0	291297	0.000	2.00	0.000	19847.30	0.00	1984.73	
DBC	23.23	23.70	23.32	105864	738735	0.143	2.00	0.072	19847.30	1422.10	198.47	HIT

C 05/04/90

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



A
INST ID NØ 0 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 03 / 90 TIME 400
SAMPLE 16 4 15

100013

TITLE: CLP PESTICIDES 4:00 3 MAY 90

CHANNEL NO: 3 SAMPLE: 16415 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		90671	1.092		90671	BV		2.40
2		1146	1.201		1146	T		1.90
3		606	1.293		606	T		1.70
		620	1.565		620	BV	?	3.00
		8128	1.718		8128	VV		4.30
		3445	1.885		3445	VB		3.20
7		5191	2.792		5191	BV		6.85
8	B-BHC	1913	2.881		1913	VB	?	11.70
9	HEPTACHLOR	532	3.258	0.038	532	BB	?	10.05
10	ALDRIN	16970	3.802	-0.058	16970	BV		13.00
11		1329	4.244		1329	VV	?	2.50
12		962	4.276		962	VB	?	13.30
13	G-Chlordane	3548	6.008		3548	BV		13.85
	A-CHLORDAN	6396	6.775	0.015	6396	VV	?	14.60
15	~~A-ENDOSULF~~	49594	7.180	0.160	49594	VV		18.75
16	DDE ne	7018	8.167	0.227	7018	VV	?	28.25
17	DIELDRIN	2509	8.583	0.083	2509	VB	?	67.20
18	ESS	12111	18.332	-0.528	12111	BV	?	74.20
19		14726	20.872		14726	VV	?	57.10
20	DBC	105864	23.317		105864	VB		49.40
TOTALS:		333279		-0.063	333279			

DETECTED PKS: 23 REJECTED PKS: 3

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -14

RACK: 2 VIAL: 7 INJ: 1

NOTES:
C[illegible]: 1.5% SP2250/1.95% SP2401
INJ.2UL/INSTRUMENT LETTER A
[illegible]= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

5

VERSAR# 16415

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

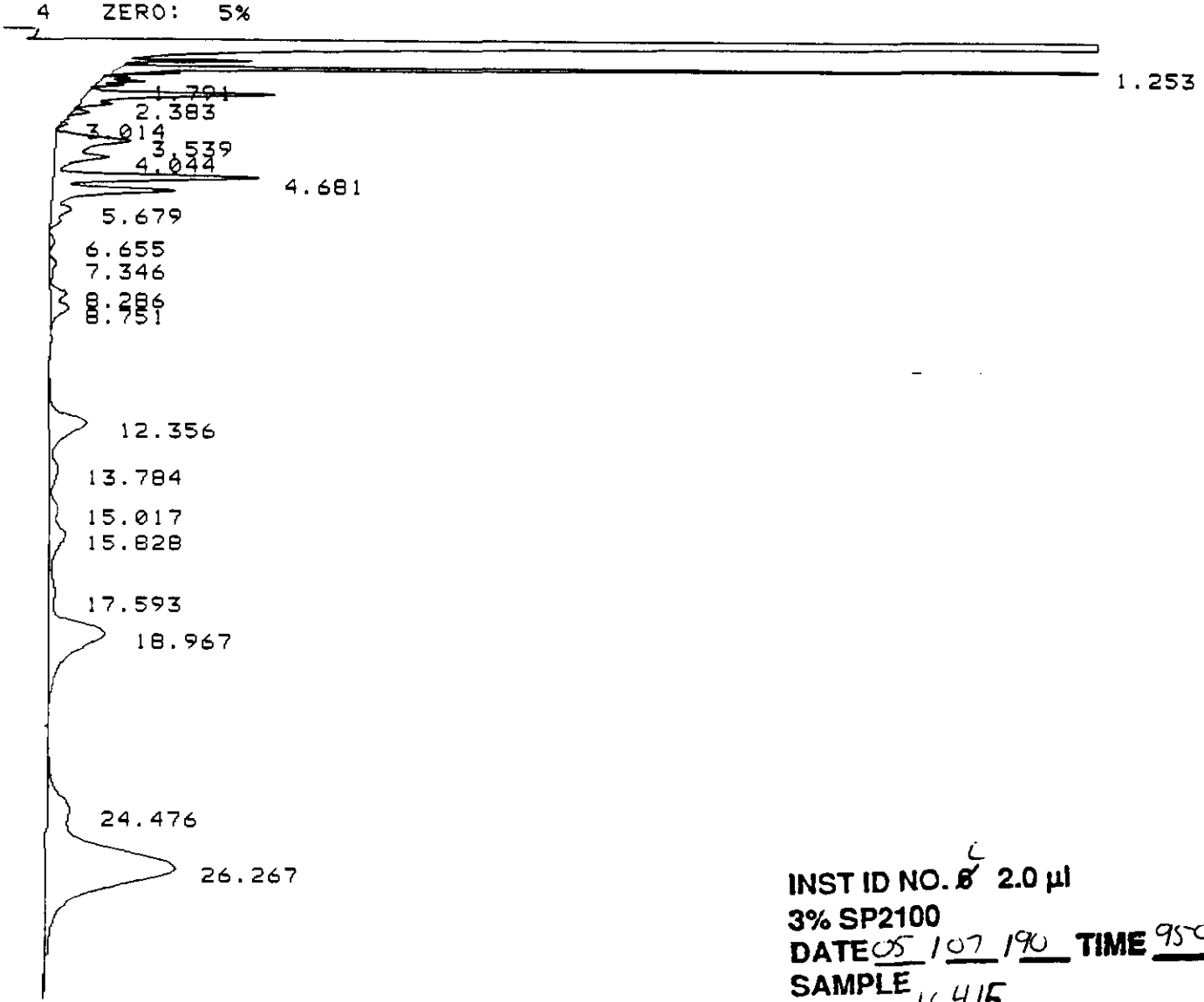
Run Date: 05/07/90 GC Column ID: 3% SP2100

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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	1.81	1.85	0.00	0	189575	0.000	2.00	0.000	19847.30	0.00	99.24	
beta-BHC	1.94	1.98	0.00	0	78890	0.000	2.00	0.000	19847.30	0.00	99.24	
delta-BHC	2.19	2.24	0.00	0	175880	0.000	2.00	0.000	19847.30	0.00	99.24	
gamma-BHC	2.13	2.17	0.00	0	189055	0.000	2.00	0.000	19847.30	0.00	99.24	
Heptachlor	3.45	3.52	0.00	0	183170	0.000	2.00	0.000	19847.30	0.00	99.24	
Aldrin	4.27	4.36	0.00	0	207215	0.000	2.00	0.000	19847.30	0.00	99.24	
Hept. epoxide	5.23	5.33	0.00	0	202575	0.000	2.00	0.000	19847.30	0.00	99.24	
Endosulfan I	6.52	6.65	0.00	0	193720	0.000	2.00	0.000	19847.30	0.00	99.24	
Dieldrin	7.63	7.79	0.00	0	212085	0.000	2.00	0.000	19847.30	0.00	198.47	
4,4'-DDE	7.61	7.76	0.00	0	169325	0.000	2.00	0.000	19847.30	0.00	198.47	
Endrin	8.51	8.69	0.00	0	133405	0.000	2.00	0.000	19847.30	0.00	198.47	
Endosulfan II	8.72	8.90	0.00	0	184485	0.000	2.00	0.000	19847.30	0.00	198.47	
4,4'-DDD	9.60	9.80	0.00	0	136730	0.000	2.00	0.000	19847.30	0.00	198.47	
Endo.sulfate	11.21	11.44	0.00	0	110700	0.000	2.00	0.000	19847.30	0.00	198.47	
4,4'DDT	12.61	12.87	0.00	0	138335	0.000	2.00	0.000	19847.30	0.00	198.47	
Methoxychlor	18.89	19.27	0.00	0	59465	0.000	2.00	0.000	19847.30	0.00	992.37	
Endrin ketone	14.44	14.73	0.00	0	186290	0.000	2.00	0.000	19847.30	0.00	198.47	
a. Chlordane	6.64	6.77	0.00	0	178260	0.000	2.00	0.000	19847.30	0.00	198.47	
g. Chlordane	5.99	6.11	0.00	0	184460	0.000	2.00	0.000	19847.30	0.00	198.47	
Toxaphene	9.80	10.00	0.00	0	73140	0.000	2.00	0.000	19847.30	0.00	1984.73	
Aroclor-1016	3.79	3.87	0.00	0	20785	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1232	2.57	2.63	0.00	0	13130	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1242	3.21	3.27	0.00	0	30021	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1248	4.49	4.59	0.00	0	44109	0.000	2.00	0.000	19847.30	0.00	992.37	
Aroclor-1254	9.42	9.62	0.00	0	73184	0.000	2.00	0.000	19847.30	0.00	1984.73	
Aroclor-1260	13.04	13.30	0.00	0	88941	0.000	2.00	0.000	19847.30	0.00	1984.73	
DBC	25.37	26.49	26.27	40235	187215	0.215	2.00	0.107	19847.30	2132.73	198.47	HIT

KC
08-May-90

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~B~~ C 2.0 µl
3% SP2100
DATE 05 / 07 / 90 TIME 950
SAMPLE 16415

100016

TITLE: CLP PESTICIDES 9:50 7 MAY 90

CHANNEL NO: 2 SAMPLE: 16415 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		22897	1.253		22897	BV		3.65
2		784	1.671		784	T		3.90
3	~~G-BHC~~	6916	2.066	-0.094	6916	VV		8.70
4		897	2.383		897	VV		5.90
5	HEPTACHLOR	5882	3.539	0.039	5882	VV	?	19.80
6		3365	4.044		3365	VV	?	14.60
		9002	4.681		9002	VV		10.95
	~~HEPT EPOX~~	6840	5.089	-0.221	6840	VV		12.60
9		1443	5.679		1443	VV		16.00
10		1328	8.286		1328	VV	?	21.30
11	~~ENDRIN~~	1908	8.751	0.071	1908	VB	- ?	28.90
12	~~DDT~~	6564	12.356	-0.504	6564	BV		38.85
13		1730	13.784		1730	VV		45.60
14	~~END KETONE~~	1366	15.017	0.287	1366	VV	?	36.50
15		3579	15.828		3579	VV	?	56.55
16		1608	17.593		1608	VV	?	35.20
	METHOXYCHL	14041	18.967	-0.323	14041	VB		54.50
		5655	24.476		5655	BV	?	68.70
19	DBC	40235	26.267	-0.263	40235	VB		73.25
TOTALS:		136040		-1.008	136040			

DETECTED PKS: 28 REJECTED PKS: 9

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -13

RACK: 3 VIAL: 1 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT• OUTSIDE RETENTION TIME WINDOW
IHARL 2542 LOW SOILS/PEST QUANT
IALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

6

Lab Name: VERSAR, INC. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: 16416

Sample wt/vol: 1 (g/ml) G Lab File ID:

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

% Moisture: not dec. 51 dec. Date Extracted: 04/29/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/03/90

GPC Cleanup: (Y/N) N pH: 7.8 Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor Epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan Sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin Ketone	240	U
5103-71-9	alpha-Chlordane	240	U
5103-74-2	gamma-Chlordane	240	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

KC 5-8-90

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

6

VERSAR# 16416

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/03/90 GC Column ID: SP2250/SP2401

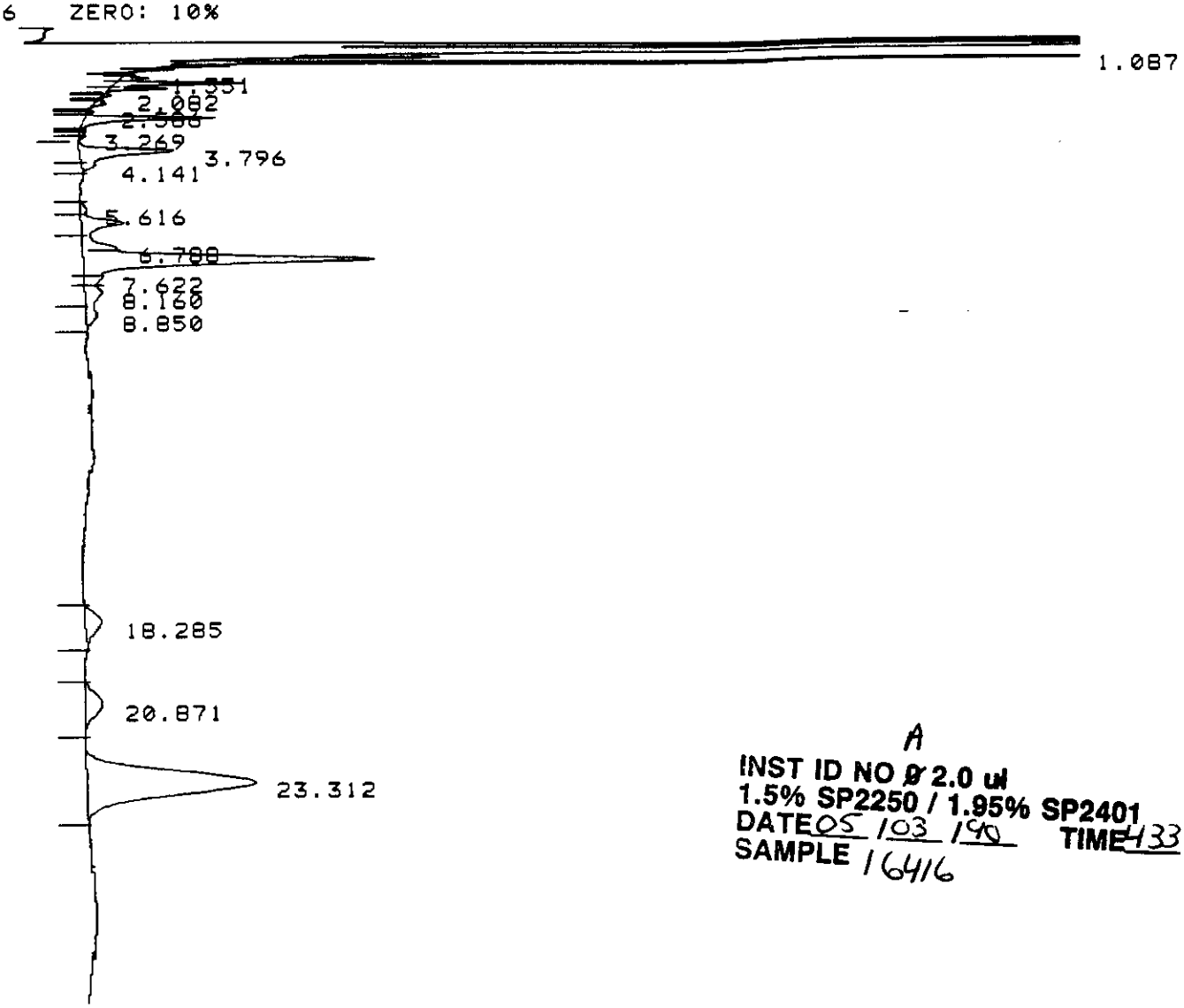
Inject Vol 2.00 (uL) Window Width: 1.0%

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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.07	2.11	2.08	584	1114930	0.001	2.00	0.000	23699.58	6.21	118.50	BDL
beta-BHC	2.87	2.93	0.00	0	317915	0.000	2.00	0.000	23699.58	0.00	118.50	
delta-BHC	3.35	3.41	0.00	0	997120	0.000	2.00	0.000	23699.58	0.00	118.50	
gamma-BHC	2.56	2.61	0.00	0	935415	0.000	2.00	0.000	23699.58	0.00	118.50	
Heptachlor	3.10	3.17	0.00	0	957460	0.000	2.00	0.000	23699.58	0.00	118.50	
Aldrin	3.72	3.79	*3.80	20185	927280	0.022	2.00	0.011	23699.58	257.95	118.50	HIT
Hept. epoxide	5.41	5.52	0.00	0	866180	0.000	2.00	0.000	23699.58	0.00	118.50	
Endosulfan I	6.75	6.89	6.79	7670	795955	0.010	2.00	0.005	23699.58	114.19	118.50	BDL
Dieldrin	8.18	8.35	0.00	0	879365	0.000	2.00	0.000	23699.58	0.00	237.00	
4,4'-DDE	7.65	7.80	0.00	0	745515	0.000	2.00	0.000	23699.58	0.00	237.00	
Endrin	9.91	10.11	0.00	0	515005	0.000	2.00	0.000	23699.58	0.00	237.00	
Endosulfan II	11.90	12.14	0.00	0	762190	0.000	2.00	0.000	23699.58	0.00	237.00	
4,4'-DDD	11.47	11.70	0.00	0	615405	0.000	2.00	0.000	23699.58	0.00	237.00	
Endo.sulfate	18.16	18.53	18.29	10147	527590	0.019	2.00	0.010	23699.58	227.90	237.00	BDL
4,4'DDT	13.77	14.05	0.00	0	573385	0.000	2.00	0.000	23699.58	0.00	237.00	
Methoxychlor	25.64	26.15	0.00	0	268850	0.000	2.00	0.000	23699.58	0.00	1184.98	
Endrin ketone	24.94	25.45	0.00	0	785310	0.000	2.00	0.000	23699.58	0.00	237.00	
a. Chlordane	6.51	6.64	0.00	0	793830	0.000	2.00	0.000	23699.58	0.00	237.00	
g. Chlordane	5.99	6.11	6.00	11337	829210	0.014	2.00	0.007	23699.58	162.01	237.00	BDL
Toxaphene	10.67	10.89	0.00	0	277048	0.000	2.00	0.000	23699.58	0.00	2369.96	
Aroclor-1016	2.86	2.92	0.00	0	64579	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1221	1.91	1.95	0.00	0	21445	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1242	3.53	3.61	0.00	0	70122	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1248	4.71	4.81	0.00	0	89358	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1254	8.38	8.54	0.00	0	204613	0.000	2.00	0.000	23699.58	0.00	2369.96	
Aroclor-1260	13.51	13.79	0.00	0	291297	0.000	2.00	0.000	23699.58	0.00	2369.96	
DBC	23.23	23.70	23.31	123585	738735	0.167	2.00	0.084	23699.58	1982.38	237.00	HIT

CJ 05/04/90

100051

CH SPEED 0.5 CM/MIN
ATION: 16 ZERO: 10%



A
INST ID NO Ø 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 /03 /90 TIME 433
SAMPLE 16416

100[illegible]

TITLE: CLP PESTICIDES 4:33 3 MAY 90

CHANNEL NO: 3 SAMPLE: 16416 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		117846	1.087		117846	BV		2.40
2		1628	1.199		1628	T		2.00
3		1025	1.291		1025	T		2.25
4		2153	1.551		2153	BV		4.10
5		10068	1.715		10068	VV		4.70
		3644	1.881		3644	VB		3.35
	A-BHC	584	2.082	-0.058	584	BB	?	4.00
		1435	2.340		1435	BB	?	5.65
9		14302	2.788		14302	VB		6.30
10	HEPTACHLOR OPT	518	3.304	0.084	518	VV	?	11.80
11	ALDRIN	20185	3.796	-0.064	20185	VV		12.60
12		2337	4.141		2337	VB	?	27.80
13	HEPT EPOX OPT	1666	5.616	-0.004	1666	BV	?	20.80
14	a-chlordan	11337	6.003		11337	VV		16.35
15	A-CHLORDAN	7670	6.788	0.028	7670	VV	?	20.20
	A-ENDOSULFAN	79159	7.150	0.130	79159	VV		16.50
17		4129	7.622		4129	VV	?	
18	DDE OPT	6911	8.160	0.220	6911	VV	?	19.70
19		3799	8.850		3799	VB	?	14.00
20		10147	18.285		10147	BB	?	45.70
21		12772	20.871		12772	BV		46.15
22		123585	23.312		123585	VB		47.75
TOTALS:		436900		0.336	436900			

DETECTED PKS: 24 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -94

RACK: 2 VIAL: 8 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
INJ.2UL/INSTRUMENT LETTER A
.. = OUTSIDE RETENTION TIME WINDOW
ESE AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

6

VERSAR# 16416

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/07/90 GC Column ID: 3% SP2100

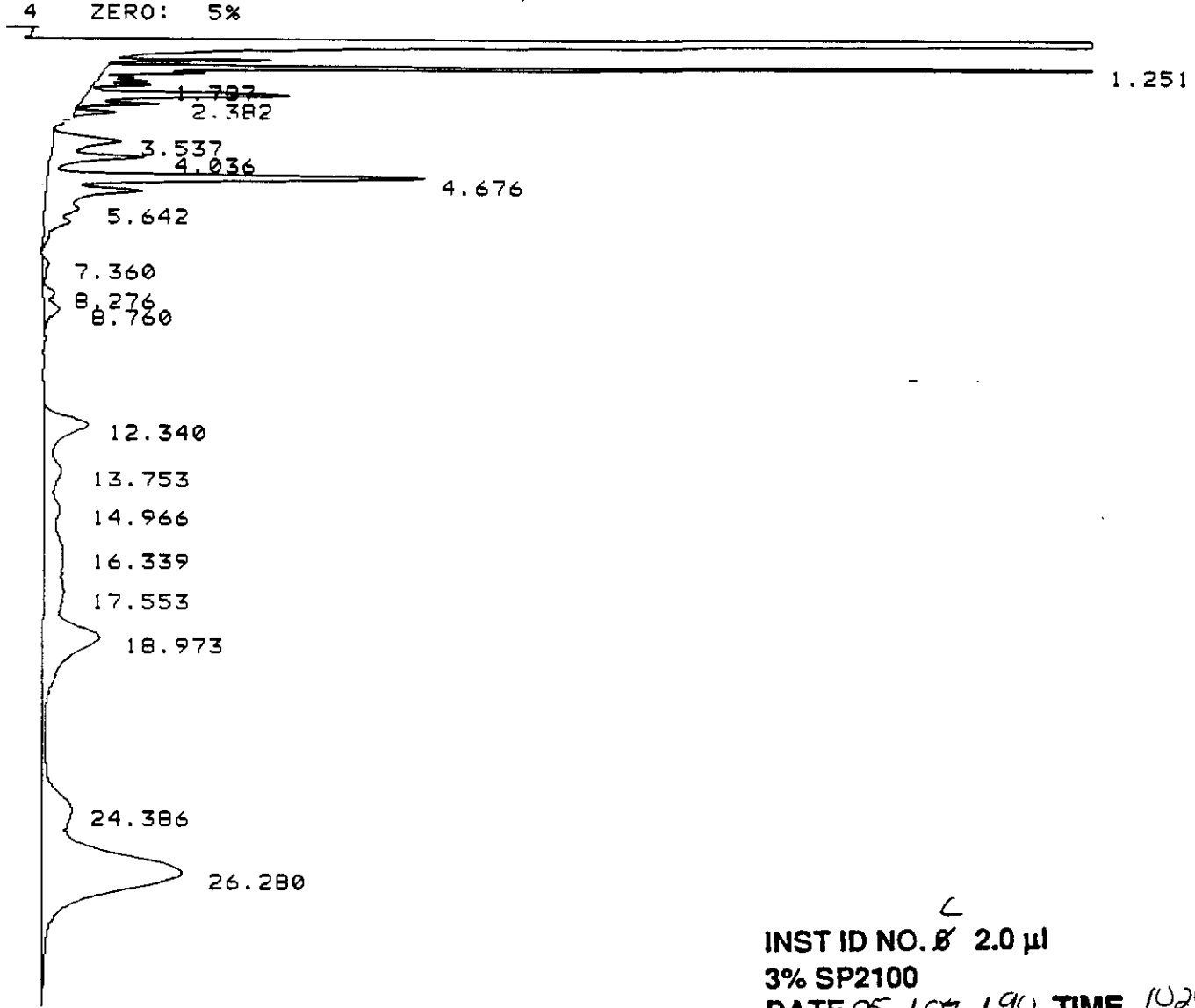
Inject Vol 2.00 (uL) Window Width: 1.0%

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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	1.81	1.85	0.00	0	189575	0.000	2.00	0.000	23699.58	0.00	118.50	
beta-BHC	1.94	1.98	0.00	0	78890	0.000	2.00	0.000	23699.58	0.00	118.50	
delta-BHC	2.19	2.24	0.00	0	175880	0.000	2.00	0.000	23699.58	0.00	118.50	
gamma-BHC	2.13	2.17	0.00	0	189055	0.000	2.00	0.000	23699.58	0.00	118.50	
Heptachlor	3.45	3.52	0.00	0	183170	0.000	2.00	0.000	23699.58	0.00	118.50	
Aldrin	4.27	4.36	0.00	0	207215	0.000	2.00	0.000	23699.58	0.00	118.50	
Hept. epoxide	5.23	5.33	0.00	0	202575	0.000	2.00	0.000	23699.58	0.00	118.50	
Endosulfan I	6.52	6.65	0.00	0	193720	0.000	2.00	0.000	23699.58	0.00	118.50	
Dieldrin	7.63	7.79	0.00	0	212085	0.000	2.00	0.000	23699.58	0.00	237.00	
4,4'-DDE	7.61	7.76	0.00	0	169325	0.000	2.00	0.000	23699.58	0.00	237.00	
Endrin	8.51	8.69	0.00	0	133405	0.000	2.00	0.000	23699.58	0.00	237.00	
Endosulfan II	8.72	8.90	0.00	0	184485	0.000	2.00	0.000	23699.58	0.00	237.00	
4,4'-DDD	9.60	9.80	0.00	0	136730	0.000	2.00	0.000	23699.58	0.00	237.00	
Endo.sulfate	11.21	11.44	0.00	0	110700	0.000	2.00	0.000	23699.58	0.00	237.00	
4,4'DDT	12.61	12.87	0.00	0	138335	0.000	2.00	0.000	23699.58	0.00	237.00	
Methoxychlor	18.89	19.27	0.00	0	59465	0.000	2.00	0.000	23699.58	0.00	1184.98	
Endrin ketone	14.44	14.73	0.00	0	186290	0.000	2.00	0.000	23699.58	0.00	237.00	
a. Chlordane	6.64	6.77	0.00	0	178260	0.000	2.00	0.000	23699.58	0.00	237.00	
g. Chlordane	5.99	6.11	0.00	0	184460	0.000	2.00	0.000	23699.58	0.00	237.00	
Toxaphene	9.80	10.00	0.00	0	73140	0.000	2.00	0.000	23699.58	0.00	2369.96	
Aroclor-1016	3.79	3.87	0.00	0	20785	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1232	2.57	2.63	0.00	0	13130	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1242	3.21	3.27	0.00	0	30021	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1248	4.49	4.59	0.00	0	44109	0.000	2.00	0.000	23699.58	0.00	1184.98	
Aroclor-1254	9.42	9.62	0.00	0	73184	0.000	2.00	0.000	23699.58	0.00	2369.96	
Aroclor-1260	13.04	13.30	0.00	0	88941	0.000	2.00	0.000	23699.58	0.00	2369.96	
DBC	25.97	26.49	26.28	43116	187215	0.230	2.00	0.115	23699.58	2729.03	237.00	HIT

KC

08-May-90

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~B~~ C 2.0 µl
3% SP2100
DATE 05 / 07 / 90 TIME 1024
SAMPLE 16416

TITLE: CLP PESTICIDES 10:24 7 MAY 90

CHANNEL NO: 2 SAMPLE: 16416 METHOD: CLP-2A

PEAK #	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		27209	1.251		27209	BV		3.80
2		1708	1.399		1708	VV	?	5.45
3		878	1.667		878	VV		3.85
4	~~A-BHC~~	1010	1.787	-0.043	1010	VV		3.75
5	G-BHC	7858	2.112	-0.048	7858	VV	?	10.75
6		1890	2.382		1890	VV		5.20
7		1120	2.646		1120	VB	?	7.55
8	~~HEPTACHLOR~~	5307	3.537	0.037	5307	BV	?	19.40
9		4957	4.036		4957	VV		12.10
		16851	4.676		16851	VV		11.15
	~~HEPT EPOX~~	6509	5.082	-0.228	6509	VV		14.45
12		2492	5.642		2492	VV	?	25.65
13	~~G-CHLORDAN~~	2429	6.038	-0.052	2429	VB	?	18.00
14		748	7.360		748	BV	-	22.40
15		865	8.276		865	VV	?	22.80
16	~~ENDRIN~~	1616	8.760	0.080	1616	VB		28.80
17	DDT	6798	12.340	-0.520	6798	BV		35.65
18		3473	13.753		3473	VV		64.00
19	~~END KETONE~~	2939	14.966	0.236	2939	VV	?	51.20
		5861	16.339		5861	VV	?	81.60
21		5028	17.553		5028	VV	?	41.60
22	~~METHOXYCHL~~	15653	18.973	-0.317	15653	VV	?	105.45
23		8832	24.386		8832	VV	?	71.20
24	DBC	43116	26.280	-0.250	43116	VB		73.10
TOTALS:		175147		-1.105	175147			

DETECTED PKS: 25 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -1

RACK: 3 VIAL: 2 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
* OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

Versar INC.

IV. STANDARDS DATA

8D
PESTICIDE EVALUATION STANDARDS SUMMARY

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:__05/02/90 to __05/03/90

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
ALDRIN_____	871800	881610	914100	2.5	
ENDRIN_____	495950	498840	522460	2.9	(1)
4,4'-DDT____	554850	550680	586300	3.4	
DBC_____	773550	704300	717420	5.0	

(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	05/02/90	2109	0.0	0.0	
02	EVAL MIX B	05/03/90	0615	0.0	0.0	
03	EVAL MIX B	05/03/90	1355	0.0	0.0	
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.

100033

CL 05/04/90

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

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: 05/02/90 to 05/03/90

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	B787	05/02/90	2001	0.000	
02	EVALB	B789	05/02/90	2109	0.047	
03	EVALC	B790	05/02/90	2144	0.077	
04	INDA	B775	05/02/90	2218	0.119	
05	INDB	B776	05/02/90	2252	0.136	
06	TOXAPH	B767	05/02/90	2327	0.230	
07	AR1660	B699	05/03/90	0002	0.562	
08	AR1221	B321	05/03/90	0036	0.788	
09	AR1232	B684	05/03/90	0110	0.894	
10	AR1242	B762	05/03/90	0144	0.830	
11	AR1248	B696	05/03/90	0217	0.758	
12	AR1254	B761	05/03/90	0251	0.779	
13	PBLK81	SBLK81	05/03/90	0326	0.766	
14	5	16415	05/03/90	0400	0.736	
15	6	16416	05/03/90	0433	0.758	
16	MSTD3056	MSTD3056	05/03/90	0507	0.685	
17	ZZZZZ	ZZZZZ	05/03/90	0541	0.690	
18	EVALB	B789	05/03/90	0615	0.651	
19	ZZZZZ	ZZZZZ	05/03/90	0648	0.524	
20	ZZZZZ	ZZZZZ	05/03/90	0722	0.272	
21	ZZZZZ	ZZZZZ	05/03/90	0756	0.094	
22	ZZZZZ	ZZZZZ	05/03/90	0830	0.017	
23	ZZZZZ	ZZZZZ	05/03/90	0904	0.196	
24	AR1242	B762	05/03/90	0938	0.192	
25	INDA	B775	05/03/90	1012	0.183	
26	ZZZZZ	ZZZZZ	05/03/90	1045	0.004	
27	ZZZZZ	ZZZZZ	05/03/90	1119	0.089	
28	ZZZZZ	ZZZZZ	05/03/90	1153	0.068	
29	EVALB	B789	05/03/90	1355	0.417	
30	AR1242	B762	05/03/90	1428	0.409	
31	INDA	B775	05/03/90	1502	0.507	
32	INDB	B776	05/03/90	1536	0.758	
33						
34						
35						
36						
37						
38						

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

CT 3/04/90

	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	17436	9919	0	0	11097	0	0	23.49	15471	0.01
02	EVALB	88161	49884	0	0	55068	0	0	23.479	70430	0.05
03	EVALC	182820	104492	0	0	117260	0	0	23.472	143484	0.1
04	INDA								23.462		
05	INDB								23.458		
06	TOXAPH								23.436		
07	AR1660								23.358		
08	AR1221								23.385		
09	AR1232								23.28		
10	AR1242								23.295		
11	AR1248								23.312		
12	AR1254								23.307		
13	PBLKB1								23.31		
14	5								23.317		
15	6								23.312		
16	MSTD3056								23.329		
17	ZZZZZ								23.328		
18	EVALB	88126	52848	0	0	57430	0	0	23.337	71298	0.05
19	ZZZZZ								23.367		
20	ZZZZZ								23.426		
21	ZZZZZ								23.468		
22	ZZZZZ								23.494		
23	ZZZZZ								23.536		
24	AR1242								23.535		
25	INDA								23.533		
26	ZZZZZ								23.489		
27	ZZZZZ								23.511		
28	ZZZZZ								23.506		
29	EVALB	90293	52873	0	0	59934	0	0	23.588	73259	0.05
30	AR1242								23.586		
31	INDA								23.609		
32	INDB								23.312		
33											
34											
35											
36											
37											
38											

cf 05/04/90

100000

8D

PESTICIDE EVALUATION STANDARDS SUMMARY

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: 05/16/90 to 05/17/90

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
ALDRIN	699900	686850	731300	4.8	
ENDRIN	441850	446775	478080	4.3	(1)
4,4'-DDT	462300	413250	492100	8.7	
DBC	369950	372600	618830	4.7	

(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	05/16/90	0436	0.0	0.0	
02	EVAL MIX B	05/16/90	2220	0.0	0.0	
03	EVAL MIX B	05/17/90	0534	0.0	0.0	
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.

FORM VIII PEST-1

JPH 05-17-90

D

8E

D

PESTICIDE EVALUATION STANDARDS SUMMARY

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: 05/16/90 to 05/17/90

D

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	B787	05/16/90	0402	0.000	
02	EVALB	B788	05/16/90	0436	0.052	
03	EVALC	B789	05/16/90	0509	0.096	
04	INDA	B973	05/16/90	0617	0.148	
05	INDB	B974	05/16/90	0650	0.183	
06	TOXAPH	B767	05/16/90	0725	0.257	
07	AR1660	B699	05/16/90	0800	0.013	
08	AR1242	B762	05/16/90	0834	0.231	
09	AR1248	B948	05/16/90	0907	0.392	
10	AR1254	B761	05/16/90	0941	0.549	
11	ZZZZZ	ZZZZZ	05/16/90	1707	1.007	
12	ZZZZZ	ZZZZZ	05/16/90	1741	ND	*
13	ZZZZZ	ZZZZZ	05/16/90	1815	1.090	
14	PBLK66	PBLK7966	05/16/90	1850	ND	*
15	GPCBLANK	GPCBLK	05/16/90	1923	ND	*
16	EVALB	B788	05/16/90	2220	1.238	
17	1DL	16412DL	05/16/90	2359	1.147	
18	1MSDL	16412MSDL	05/17/90	0040	0.946	
19	1MSDDL	16412MSDDL	05/17/90	0122	0.532	
20	2	16413	05/17/90	0203	0.554	
21	3	16414	05/17/90	0245	0.379	
22	INDA	B973	05/17/90	0327	0.297	
23	7	16424	05/17/90	0408	0.135	
24	ZZZZZ	ZZZZZ	05/17/90	0450	ND	*
25	EVALB	B788	05/17/90	0534	0.039	
26	INDA	B973	05/17/90	0616	0.044	
27	INDB	B974	05/17/90	0658	0.031	
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						

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

100032

104 05-17-90

FORM VIII PEST-2

D

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)
011_EVALA	13998	8837	0	0	9246	0	0	22.934	11399	0.01
021_EVALB	27474	17871	0	0	16530	0	0	22.922	22904	0.02
031_EVALC	75130	47808	0	0	45210	0	0	22.912	61883	0.05
041_INDA								22.9		
051_INDB								22.832		
061_TOXAPH								22.875		
071_AR1660								22.937		
081_AR1242								22.987		
091_AR1248								23.024		
101_AR1254								23.06		
111_ZZZZZ								23.165		
121_ZZZZZ								0		
131_ZZZZZ								23.184		
141_PBLK66								0		
151_BPCBLANK								0		
161_EVALB	27611	18333	0	0	15718	0	0	23.218	23457	0.02
171_IDL								23.197		
181_IMSDL								23.151		
191_IMSDDL								23.056		
201_2								23.061		
211_3								23.021		
221_INDA								23.002		
231_7								22.965		
241_ZZZZZ								0		
251_EVALB	28151	18212	0	0	15046	0	0	22.943	22427	0.02
261_INDA								22.924		
271_INDB								22.927		
281										
291										
301										
311										
321										
331										
341										
351										
361										
371										
381										

D

100035

05-17-90

8D
PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name:_____VERSAR_____ Contract:_____

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

Instrument ID: ____C GC Column ID: ___3% SP2100

Dates of Analyses:__05/05/90 to __05/07/90

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
ALDRIN_____	187350	180880	187325	2.0	
ENDRIN_____	128875	126350	132720	2.5	(1)
4,4'-DDT____	111300	114170	126055	6.7	
DBC_____	163975	166030	172155	2.5	

(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	05/05/90	0410			0.0
02	EVAL MIX B	05/05/90	1401			0.0
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.

100031
KC
5-8-90

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: VERSAR Contract: _____

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

Instrument ID: C GC Column ID: 3% SP2100

Dates of Analyses: 05/05/90 to 05/07/90

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	B788	05/05/90	0336	0.000	
02	EVALB	B789	05/05/90	0410	0.191	
03	EVALC	B790	05/05/90	0443	0.214	
04	INDA	B973	05/05/90	0517	0.264	
05	INDB	B776	05/05/90	0551	0.260	
06	TOXAPH	B767	05/05/90	0624	0.164	
07	AR1660	B699	05/05/90	0658	0.226	
08	AR1221	A321	05/05/90	0732	0.375	
09	AR1232	B684	05/05/90	0856	0.512	
10	AR1242	B762	05/05/90	0930	0.501	
11	AR1248	B948	05/05/90	1004	0.665	
12	AR1254	B761	05/05/90	1038	0.592	
13	ZZZZZ	ZZZZZ	05/05/90	1112	0.512	
14	ZZZZZ	ZZZZZ	05/05/90	1145	0.635	
15	ZZZZZ	ZZZZZ	05/05/90	1220	0.520	
16	ZZZZZ	ZZZZZ	05/05/90	1253	0.531	
17	ZZZZZ	ZZZZZ	05/05/90	1328	0.470	
18	EVALB	B789	05/05/90	1401	0.382	
19	PBLK81	RB7981	05/07/90	0915	0.306	
20	5	16415	05/07/90	0950	0.401	
21	6	16416	05/07/90	1024	0.451	
22	INDA	B973	05/07/90	1058	0.443	
23	INDB	B776	05/07/90	1132	0.539	
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						

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

100085

KC 5-8-90

	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	7494	5155	0	0	4452	0	0	26.162	6559	0.02
02	EVALB	18088	12635	0	0	11417	0	0	26.212	16603	0.05
03	EVALC	37465	26544	0	740	25211	0	0	26.218	34431	0.1
04	INDA								26.231		
05	INDB								26.23		
06	TOXAPH								26.205		
07	AR1660								26.221		
08	AR1221								26.26		
09	AR1232								26.296		
10	AR1242								26.293		
11	AR1248								26.336		
12	AR1254								26.317		
13	ZZZZZ								26.296		
14	ZZZZZ								26.328		
15	ZZZZZ								26.298		
16	ZZZZZ								26.301		
17	ZZZZZ								26.285		
18	EVALB	22271	15107	0	0	13813	0	0	26.262	18635	0.05
19	PBLK81								26.242		
20	5								26.267		
21	6								26.28		
22	INDA								26.278		
23	INDB								26.303		
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											

100100

KC 5-8-90

8D
PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name:_____VERSAR_____ Contract:_____

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

Instrument ID: ____C GC Column ID: ___3% SP2100

Dates of Analyses:__05/17/90 to __05/17/90

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (<=10.0%)	
ALDRIN_____	184650	183900	157110	8.9	
ENDRIN_____	127100	134725	119225	6.1	(1)
4,4'-DDT____	70300	75450	77580	5.0	
DBC_____	106550	115250	111495	3.9	

(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	05/17/90	0336			0.0
02	EVAL MIX B	05/17/90	1513			0.0
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.

100037

ORIGINAL (Red)

8E
PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: VERSAR Contract: _____

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

Instrument ID: C GC Column ID: 3% SP2100

Dates of Analyses: 05/17/90 to 05/17/90

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	B787	05/17/90	0302	0.000	
02	EVALB	B788	05/17/90	0336	0.219	
03	EVALC	B790	05/17/90	0444	0.124	
04	INDA	B973	05/17/90	0517	0.162	
05	INDB	B974	05/17/90	0551	0.192	
06	TOXAPH	B767	05/17/90	0625	0.226	
07	AR1660	B699	05/17/90	0659	0.102	
08	AR1242	B762	05/17/90	0736	0.188	
09	AR1248	B948	05/17/90	0809	0.260	
10	AR1254	B761	05/17/90	0843	0.422	
11	ZZZZZ	ZZZZZ	05/17/90	1006	0.460	
12	ZZZZZ	ZZZZZ	05/17/90	1040	0.162	
13	ZZZZZ	ZZZZZ	05/17/90	1333	ND	*
14	PBLK66	RB7966	05/17/90	1406	ND	*
15	1DL	16412	05/17/90	1440	0.415	
16	EVALB	B788	05/17/90	1513	0.565	
17	1MSDL	16412MS	05/17/90	1656	ND	*
18	1MSDDL	16412MSD	05/17/90	1730	ND	*
19	GPCBLK	GPCBLK	05/17/90	1836	ND	*
20	3	16414	05/17/90	1910	2.122	*
21	7	16424	05/17/90	1943	2.221	*
22	INDA	B973	05/17/90	2020	2.303	*
23	INDB	B974	05/17/90	2054	2.296	*
24						
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						

CDB 5/21/90

ND: Dis. standard set to not detected due to interfering peaks.

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

100038

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	3693	2542	0	0	1406	0	0	26.526	2131	0.01
02	EVALB	7356	5389	0	0	3018	0	0	26.584	4610	0.02
03	EVALC	31422	23845	1522	715	15516	0	0	26.559	22299	0.1
04	INDA								26.569		
05	INDB								26.577		
06	TOXAPH								26.586		
07	AR1660								26.553		
08	AR1242								26.576		
09	AR1248								26.595		
10	AR1254								26.638		
11	ZZZZZ								26.648		
12	ZZZZZ								26.569		
13	ZZZZZ								0		
14	PBLK66								0		
15	IDL								26.636		
16	EVALB	4162	2909	0	0	1645	0	0	26.676	2858	0.02
17	INSDL								0		
18	INSDDL								0		
19	GPCBLK								0		
20	3								27.089		
21	7								27.115		
22	INDA								27.137		
23	INDB								27.135		
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											

CF 05/17/90

100033

ORIGINAL
(Red)

PESTICIDE/PCB STANDARDS ENTRY FORM

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/02,03/90 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
pha-BHC	0.10	0.02	2.09	222986	0.00	0	0.00	0
eta-BHC	0.10	0.03	2.90	63583	0.00	0	0.00	0
delta-BHC	0.10	0.03	3.38	199424	0.00	0	0.00	0
gamma-BHC	0.10	0.03	2.59	187083	2.60	200265	2.61	189531
Heptachlor	0.10	0.03	3.14	191492	0.00	0	0.00	0
Aldrin	0.10	0.04	3.76	185456	3.77	217681	3.78	188284
Hept. epoxide	0.10	0.05	5.47	173236	5.49	197033	5.50	179246
Endosulfan I	0.10	0.07	6.82	159191	6.85	178644	6.86	166200
Dieldrin	0.10	0.08	8.27	175873	8.29	192484	8.32	182513
4'-DDE	0.10	0.08	7.73	149103	0.00	0	0.00	0
Endrin	0.10	0.10	10.01	103001	0.00	0	0.00	0
Endosulfan II	0.10	0.12	12.02	152438	12.05	160467	12.09	159114
4,4'-DDD	0.10	0.12	11.59	123081	0.00	0	0.00	0
Endo.sulfate	0.10	0.18	18.35	105518	0.00	0	0.00	0
4,4'DDT	0.10	0.14	13.91	114677	13.92	120730	13.98	121898
Methoxychlor	0.10	0.26	25.90	53770	0.00	0	0.00	0
Endrin ketone	0.10	0.25	25.19	157062	25.27	158892	25.35	161554
Chlordane	0.10	0.07	6.58	158766	0.00	0	0.00	0
g. Chlordane	0.10	0.06	6.05	165842	0.00	0	0.00	0
Toxaphene	2.50	0.11	10.78	1385240	0.00	0	0.00	0
Aroclor-1016	1.00	0.03	2.89	129158	0.00	0	0.00	0
Aroclor-1221	5.00	0.02	1.93	214450	0.00	0	0.00	0
Aroclor-1232	2.50	0.03	2.79	120545	0.00	0	0.00	0
Aroclor-1242	2.50	0.04	3.57	350610	~~0.00~~ 3.40	347120	~~0.00~~ 2.61	263335
Aroclor-1248	1.00	0.05	4.76	178716	0.00	0	0.00	0
Aroclor-1254	1.00	0.08	8.46	409226	0.00	0	0.00	0
Aroclor-1260	1.00	0.14	13.65	582594	0.00	0	0.00	0
DBC	0.10	0.23	23.46	147747	23.53	179375	23.61	154410

04-May-90

100070

(Red)

PESTICIDE/PCB STANDARDS ENTRY FORM

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/02,03/90 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	FOURTH STD RT	FOURTH STD RAW AREA	FIFTH STD RT	FIFTH STD RAW AREA
alpha-BHC	0.10	0.02	2.09	222986	2.10	206327	0.00	0
beta-BHC	0.10	0.03	2.90	63583	2.92	54418	0.00	0
delta-BHC	0.10	0.03	3.38	199424	3.40	157923	0.00	0
gamma-BHC	0.10	0.03	2.59	187083	0.00	0	0.00	0
Heptachlor	0.10	0.03	3.14	191492	3.15	180484	0.00	0
Aldrin	0.10	0.04	3.76	185456	0.00	0	0.00	0
Hept. epoxide	0.10	0.05	5.47	173236	0.00	0	0.00	0
Endosulfan I	0.10	0.07	6.82	159191	0.00	0	0.00	0
eldrin	0.10	0.08	8.27	175873	0.00	0	0.00	0
4,4'-DDE	0.10	0.08	7.73	149103	7.78	141779	0.00	0
Endrin	0.10	0.10	10.01	103001	10.08	95995	0.00	0
Endosulfan II	0.10	0.12	12.02	152438	0.00	0	0.00	0
4,4'-DDD	0.10	0.12	11.59	123081	11.65	119742	0.00	0
Endo. sulfate	0.10	0.18	18.35	105518	18.47	90064	0.00	0
4,4'DDT	0.10	0.14	13.91	114677	0.00	0	0.00	0
Methoxychlor	0.10	0.26	25.90	53770	25.99	70218	0.00	0
drin ketone	0.10	0.25	25.19	157062	0.00	0	0.00	0
a. Chlordane	0.10	0.07	6.58	158766	6.62	163867	0.00	0
g. Chlordane	0.10	0.06	6.05	165842	6.09	141799	0.00	0
Toxaphene	2.50	0.11	10.78	1385240	0.00	0	0.00	0
Aroclor-1016	1.00	0.03	2.89	129158	0.00	0	0.00	0
Aroclor-1221	5.00	0.02	1.93	214450	0.00	0	0.00	0
Aroclor-1232	2.50	0.03	2.79	120545	0.00	0	0.00	0
Aroclor-1242	2.50	0.04	3.57	350610	0.00	0	0.00	0
Aroclor-1248	1.00	0.05	4.76	178716	0.00	0	0.00	0
Aroclor-1254	1.00	0.08	8.46	409226	0.00	0	0.00	0
Aroclor-1260	1.00	0.14	13.65	582594	0.00	0	0.00	0
DBC	0.10	0.23	23.46	147747	23.61	154504	0.00	0

100071

04-May-90

9

PESTICIDE/PCB STANDARDS SUMMARY

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:____05/02/90	DATE OF ANALYSIS	_05/03/90
	TO:____05/03/90	TIME OF ANALYSIS	_1012
TIME(S) OF ANALYSIS	FROM:____2218	EPA SAMPLE NO. (STANDARD)	___INDA
	TO:____0251		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.09	2.07	2.11	1114930	0.00	0	Y	0
beta-BHC	2.90	2.87	2.93	317915	0.00	0	Y	0
delta-BHC	3.38	3.35	3.41	997120	0.00	0	Y	0
gamma-BHC	2.59	2.56	2.61	935415	2.60	1001325	Y	-7
Heptachlor	3.14	3.10	3.17	957460	0.00	0	Y	0
Aldrin	3.76	3.72	3.79	927280	3.77	1088405	Y	-17
Hept. epoxide	5.47	5.41	5.52	866180	5.49	985165	Y	-14
Endosulfan I	6.82	6.75	6.89	795955	6.85	893220	Y	-12
Dieldrin	8.27	8.18	8.35	879365	8.29	962420	Y	-9
4,4'-DDE	7.73	7.65	7.80	745515	0.00	0	Y	0
Endrin	10.01	9.91	10.11	515005	0.00	0	Y	0
Endosulfan II	12.02	11.90	12.14	762190	12.05	802335	Y	-5
4,4'-DDD	11.59	11.47	11.70	615405	0.00	0	Y	0
Endo.sulfate	18.35	18.16	18.53	527590	0.00	0	Y	0
4,4'DDT	13.91	13.77	14.05	573385	13.92	603650	Y	-5
Methoxychlor	25.90	25.64	26.15	268850	0.00	0	Y	0
Endrin ketone	25.19	24.94	25.45	785310	25.27	794460	Y	-1
a. Chlordane	6.58	6.51	6.64	793830	0.00	0	Y	0
g. Chlordane	6.05	5.99	6.11	829210	0.00	0	Y	0
Toxaphene	10.78	10.67	10.89	277048	0.00	0	Y	0
Aroclor-1016	2.89	2.86	2.92	64579	0.00	0	Y	0
Aroclor-1221	1.93	1.91	1.95	21445	0.00	0	Y	0
Aroclor-1232	2.79	2.76	2.82	24109	0.00	0	Y	0
Aroclor-1242	3.57	3.53	3.61	70122	~~0.00~~ 3.58	69424 0	Y	1 0
Aroclor-1248	4.76	4.71	4.81	89358	0.00	0	Y	0
Aroclor-1254	8.46	8.38	8.54	204613	0.00	0	Y	0
Aroclor-1260	13.65	13.51	13.79	291297	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

FORM IX PEST 1/87 REV.

05-09-90 100072

ORIGINAL (Red)

PESTICIDE/PCB STANDARDS SUMMARY

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:____05/02/90	DATE OF ANALYSIS	_05/03/90
	TO:____05/03/90	TIME OF ANALYSIS	_1502
TIME(S) OF ANALYSIS	FROM:____2218	EPA SAMPLE NO. (STANDARD)	___INDA
	TO:____0251		

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.09	2.07	2.11	1114930	0.00	0	Y	0
beta-BHC	2.90	2.87	2.93	317915	0.00	0	Y	0
delta-BHC	3.38	3.35	3.41	997120	0.00	0	Y	0
gamma-BHC	2.59	2.56	2.61	935415	2.61	947655	Y	-1
Heptachlor	3.14	3.10	3.17	957460	0.00	0	Y	0
Aldrin	3.76	3.72	3.79	927280	3.78	941420	Y	-2
Hept. epoxide	5.47	5.41	5.52	866180	5.50	896230	Y	-3
Endosulfan I	6.82	6.75	6.89	795955	6.86	831000	Y	-4
Dieldrin	8.27	8.18	8.35	879365	8.32	912565	Y	-4
4,4'-DDE	7.73	7.65	7.80	745515	0.00	0	Y	0
Endrin	10.01	9.91	10.11	515005	0.00	0	Y	0
Endosulfan II	12.02	11.90	12.14	762190	12.09	795570	Y	-4
4,4'-DDD	11.59	11.47	11.70	615405	0.00	0	Y	0
Endo.sulfate	18.35	18.16	18.53	527590	0.00	0	Y	0
4,4'DDT	13.91	13.77	14.05	573385	13.98	609490	Y	-6
Methoxychlor	25.90	25.64	26.15	268850	0.00	0	Y	0
Endrin ketone	25.19	24.94	25.45	785310	25.35	807770	Y	-3
a. Chlordane	6.58	6.51	6.64	793830	0.00	0	Y	0
g. Chlordane	6.05	5.99	6.11	829210	0.00	0	Y	0
Toxaphene	10.78	10.67	10.89	277048	0.00	0	Y	0
Aroclor-1016	2.89	2.86	2.92	64579	0.00	0	Y	0
Aroclor-1221	1.93	1.91	1.95	21445	0.00	0	Y	0
Aroclor-1232	2.79	2.76	2.82	24109	0.00	0	Y	0
Aroclor-1242	3.57	3.53	3.61	70122	~~0.00~~ 3.69	72667 ~~0~~	Y	-4 ~~0~~
Aroclor-1248	4.76	4.71	4.81	89358	0.00	0	Y	0
Aroclor-1254	8.46	8.38	8.54	204613	0.00	0	Y	0
Aroclor-1260	13.65	13.51	13.79	291297	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

FORM IX PEST 1/87 REV.

05.09.90

100073

ORIGINAL (Red)

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name:_____VERSAR, INC. Contract:_____

Lab Code: ____VERSAR Case No.:R3-7 SAS No.:__ SDG NO.: _____

Instrument ID:_____A GC Column ID: ___SP2250/SP2401

DATE(S) OF ANALYSIS	FROM:____05/02/90 TO:____05/03/90	DATE OF ANALYSIS _05/03/90
TIME(S) OF ANALYSIS	FROM:____2218 TO:____0251	TIME OF ANALYSIS _1536
		EPA SAMPLE NO. (STANDARD) ___INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.09	2.07	2.11	1114930	2.10	1031635	Y	7
beta-BHC	2.90	2.87	2.93	317915	2.92	272090	Y	14
delta-BHC	3.38	3.35	3.41	997120	3.40	789615	Y	21
gamma-BHC	2.59	2.56	2.61	935415	0.00	0	Y	0
Heptachlor	3.14	3.10	3.17	957460	3.15	902420	Y	6
Aldrin	3.76	3.72	3.79	927280	0.00	0	Y	0
Hept. epoxide	5.47	5.41	5.52	866180	0.00	0	Y	0
Endosulfan I	6.82	6.75	6.89	795955	0.00	0	Y	0
Dieldrin	8.27	8.18	8.35	879365	0.00	0	Y	0
4,4'-DDE	7.73	7.65	7.80	745515	7.78	708895	Y	5
Endrin	10.01	9.91	10.11	515005	10.08	479975	Y	7
Endosulfan II	12.02	11.90	12.14	762190	0.00	0	Y	0
4,4'-DDD	11.59	11.47	11.70	615405	11.65	598710	Y	3
Endo. sulfate	18.35	18.16	18.53	527590	18.47	450320	Y	15
4,4'DDT	13.91	13.77	14.05	573385	0.00	0	Y	0
Methoxychlor	25.90	25.64	26.15	268850	25.99	351090	Y	-31
Endrin ketone	25.19	24.94	25.45	785310	0.00	0	Y	0
a. Chlordane	6.58	6.51	6.64	793830	6.62	819335	Y	-3
g. Chlordane	6.05	5.99	6.11	829210	6.09	708995	Y	14
Toxaphene	10.78	10.67	10.89	277048	0.00	0	Y	0
Aroclor-1016	2.89	2.86	2.92	64579	0.00	0	Y	0
Aroclor-1221	1.93	1.91	1.95	21445	0.00	0	Y	0
Aroclor-1232	2.79	2.76	2.82	24109	0.00	0	Y	0
Aroclor-1242	3.57	3.53	3.61	70122	0.00	0	Y	0
Aroclor-1248	4.76	4.71	4.81	89358	0.00	0	Y	0
Aroclor-1254	8.46	8.38	8.54	204613	0.00	0	Y	0
Aroclor-1260	13.65	13.51	13.79	291297	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

FORM IX PEST

5-09-90

12/87 REV.

ORIGINAL
(Red)

PCB STANDARD TABLE

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/02,03/90 GC Column ID: SP2250/SP2401

Inject Vol: 2.00 (uL) Window Width: 1%

PCBA

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	8.16	172143		X	0		100	
		2	9.10	190824		X	0		100	
Toxaph		3	10.78	193441	277048	X	0	0	100	100
		4	12.21	306948		X	0		100	
		5	14.65	521885		X	0		100	
	1.00	1	2.42	22596		X	0		100	
		2	2.81	19346		X	0		100	
Aroclor-1016		3	2.89	4357	64579	X	0	0	100	100
		4	3.07	58503		X	0		100	
		5	3.35	24356		X	0		100	
	5.00	1	1.60	10295		X	0		100	
		2	1.72	37243		X	0		100	
Aroclor-1221		3	1.93	132668	21445	X	0	0	100	100
		4	2.41	22191		X	0		100	
		5	3.07	12053		X	0		100	
	2.50	1	1.72	9768		X	0		100	
		2	1.93	43352		X	0		100	
Aroclor-1232		3	2.79	24112	24109	X	0	0	100	100
		4	3.34	24539		X	0		100	
		5	3.57	18775		X	0		100	
	2.50	1	3.06	131005		X	0		100	
		2	3.34	53437		X	0		100	
Aroclor-1242		3	3.57	40776	70122	X	0	0	100	100
		4	3.79	68261		X	0		100	
		5	4.46	57129		X	0		100	

ORIGINAL
(Red)

PCB STANDARD TABLE

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/02,03/90 GC Column ID: SP2250/SP2401

Inject Vol: 2.00 (uL) Window Width: 1%

PCBB1

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	2.42	22596		X	0		100	
		2	2.81	19346		X	0		100	
Aroclor-1016		3	2.89	4357	64579	X	0	0	100	100
		4	3.07	58503		X	0		100	
		5	3.35	24356		X	0		100	
	1.00	1	10.73	145946		X	0		100	
		2	12.12	83553		X	0		100	
Aroclor-1260		3	13.65	158853	291297	X	0	0	100	100
		4	14.57	120445		X	0		100	
		5	17.76	73796		X	0		100	
	2.50	1	3.06	131005		3.09	130139		-1	
		2	3.34	53437		3.37	52772		-1	
Aroclor-1242		3	3.57	40776	70122	3.60	40404	69424	-1	1
		4	3.79	68261		3.83	67065		-1	
		5	4.46	57129		4.50	56741		-1	
	1.00	1	2.72	6500		X	0		100	
		2	3.06	39319		X	0		100	
Aroclor-1248		3	4.76	30446	89358	X	0	0	100	100
		4	5.24	25783		X	0		100	
		5	5.53	76668		X	0		100	
	1.00	1	6.27	76999		X	0		100	
		2	7.88	59624		X	0		100	
Aroclor-1254		3	8.46	77139	204613	X	0	0	100	100
		4	9.58	120430		X	0		100	
		5	10.69	75033		X	0		100	

ORIGINAL (Red)

PCB STANDARD TABLE

Versar INC.

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/02,03/90 GC Column ID: SP2250/SP2401

Inject Vol: 2.00 (uL) Window Width: 1% PCBB2

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	2.42	22596		X	0		100	
		2	2.81	19346		X	0		100	
Aroclor-1016		3	2.89	4357	64579	X	0	0	100	100
		4	3.07	58503		X	0		100	
		5	3.35	24356		X	0		100	
	1.00	1	10.73	145946		X	0		100	
		2	12.12	83553		X	0		100	
Aroclor-1260		3	13.65	158853	291297	X	0	0	100	100
		4	14.57	120445		X	0		100	
		5	17.76	73796		X	0		100	
	2.50	1	3.06	131005		3.10	135242		-1	
		2	3.34	53437		3.38	54980		-1	
Aroclor-1242		3	3.57	40776	70122	3.61	41949	72667	-1	-4
		4	3.79	68261		3.83	72343		-1	
		5	4.46	57129		4.51	58820		-1	
	1.00	1	2.72	6500		X	0		100	
		2	3.06	39319		X	0		100	
oclor-1248		3	4.76	30446	89358	X	0	0	100	100
		4	5.24	25783		X	0		100	
		5	5.53	76668		X	0		100	
	1.00	1	6.27	76999		X	0		100	
		2	7.88	59624		X	0		100	
Aroclor-1254		3	8.46	77139	204613	X	0	0	100	100
		4	9.58	120430		X	0		100	
		5	10.69	75033		X	0		100	

UEB 5/21/90

100071

21-May-90

ORIGINAL (Red)

PESTICIDE/PCB STANDARDS ENTRY FORM

Versar INC.

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/16/90 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	0.10	0.02	2.04	186965	0.00	0	0.00	0
beta-BHC	0.10	0.03	2.84	53058	0.00	0	0.00	0
elta-BHC	0.10	0.03	3.30	165196	0.00	0	0.00	0
gamma-BHC	0.10	0.03	2.53	163436	2.54	153485	2.53	163512
Heptachlor	0.10	0.03	3.06	156942	0.00	0	0.00	0
Aldrin	0.10	0.04	3.67	159053	3.69	150472	3.67	159715
Hept. epoxide	0.10	0.05	5.34	151558	5.36	144284	5.34	153602
Endosulfan I	0.10	0.07	6.66	139733	6.69	134463	6.67	142603
Dieldrin	0.10	0.08	8.07	152806	8.11	147316	8.08	156716
4,4'-DDE	0.10	0.08	7.55	128259	0.00	0	0.00	0
drin	0.10	0.10	9.78	93422	0.00	0	0.00	0
dosulfan II	0.10	0.12	11.72	137433	11.78	137024	11.74	141912
4,4'-DDD	0.10	0.11	11.31	103778	0.00	0	0.00	0
Endo.sulfate	0.10	0.18	17.89	92033	0.00	0	0.00	0
4,4'DDT	0.10	0.14	13.57	103569	13.63	90217	13.58	96117
Methoxychlor	0.10	0.25	25.27	46844	0.00	0	0.00	0
Endrin ketone	0.10	0.25	24.58	139556	24.69	130529	24.61	136138
a. Chlordane	0.10	0.06	6.43	135913	0.00	0	0.00	0
. Chlordane	0.10	0.06	5.91	140061	0.00	0	0.00	0
oxaphene	2.50	0.12	11.93	447620	0.00	0	0.00	0
Aroclor-1016	1.00	0.03	2.76	96588	0.00	0	0.00	0
Aroclor-1221	5.00	0.02	1.72	226290	0.00	0	0.00	0
Aroclor-1232	2.50	0.03	2.79	120545	0.00	0	0.00	0
Aroclor-1242	2.50	0.04	3.52	261045	0.00	0	0.00	0
Aroclor-1248	1.00	0.05	4.70	169266	0.00	0	0.00	0
Aroclor-1254	1.00	0.08	7.79	279974	0.00	0	0.00	0
Aroclor-1260	1.00	0.13	13.41	583100	0.00	0	0.00	0
DBC	0.10	0.23	22.90	129503	23.00	124484	22.92	129364

100073

D
D
D
D

ORIGINAL (RED)

PESTICIDE/PCB STANDARDS ENTRY FORM

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/16/90 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	FOURTH STD RT	FOURTH STD RAW AREA	FIFTH STD RT	FIFTH STD RAW AREA
alpha-BHC	0.10	0.02	2.04	186965	2.04	196425	0.00	0
beta-BHC	0.10	0.03	2.84	53058	2.84	57153	0.00	0
delta-BHC	0.10	0.03	3.30	165196	3.31	175630	0.00	0
gamma-BHC	0.10	0.03	2.53	163436	0.00	0	0.00	0
Heptachlor	0.10	0.03	3.06	156942	3.07	167225	0.00	0
Aldrin	0.10	0.04	3.67	159053	0.00	0	0.00	0
Hept. epoxide	0.10	0.05	5.34	151558	0.00	0	0.00	0
Endosulfan I	0.10	0.07	6.66	139733	0.00	0	0.00	0
ieldrin	0.10	0.08	8.07	152806	0.00	0	0.00	0
4,4'-DDE	0.10	0.08	7.55	128259	7.55	134461	0.00	0
Endrin	0.10	0.10	9.78	93422	9.79	98566	0.00	0
Endosulfan II	0.10	0.12	11.72	137433	0.00	0	0.00	0
4,4'-DDD	0.10	0.11	11.31	103778	11.32	109712	0.00	0
Endo.sulfate	0.10	0.18	17.89	92033	17.91	94471	0.00	0
4,4'DDT	0.10	0.14	13.57	103569	0.00	0	0.00	0
Methoxychlor	0.10	0.25	25.27	46844	25.31	46526	0.00	0
drin ketone	0.10	0.25	24.58	139556	0.00	0	0.00	0
a. Chlordane	0.10	0.06	6.43	135913	6.43	142301	0.00	0
g. Chlordane	0.10	0.06	5.91	140061	5.92	147646	0.00	0
Toxaphene	2.50	0.12	11.93	447620	0.00	0	0.00	0
Aroclor-1016	1.00	0.03	2.76	96588	0.00	0	0.00	0
Aroclor-1221	5.00	0.02	1.72	226290	0.00	0	0.00	0
Aroclor-1232	2.50	0.03	2.79	120545	0.00	0	0.00	0
Aroclor-1242	2.50	0.04	3.52	261045	0.00	0	0.00	0
Aroclor-1248	1.00	0.05	4.70	169266	0.00	0	0.00	0
Aroclor-1254	1.00	0.08	7.79	279974	0.00	0	0.00	0
Aroclor-1260	1.00	0.13	13.41	583100	0.00	0	0.00	0
DBC	0.10	0.23	22.90	129503	22.93	131092	0.00	0

D

100073

AH
17-May-90

PESTICIDE/PCB STANDARDS SUMMARY

LaVersar INC. VERSAR, INC. Contract:_____

ab Code: ____VERSAR Case No.:R3-7 SAS No.:__ SDG NO.: __1

Instrument ID:_____A GC Column ID: ___SP2250/SP2401

DATE(S) OF ANALYSIS	FROM:____05/16/90 TO:____05/16/90	DATE OF ANALYSIS _05/17/90 TIME OF ANALYSIS _0327
TIME(S) OF ANALYSIS	FROM:____0617 TO:____0650	EPA SAMPLE NO. (STANDARD) ___INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.04	2.02	2.06	934825	0.00	0	Y	0
beta-BHC	2.84	2.81	2.86	265290	0.00	0	Y	0
delta-BHC	3.30	3.27	3.33	825980	0.00	0	Y	0
gamma-BHC	2.53	2.51	2.56	817180	2.54	767425	Y	6
Heptachlor	3.06	3.03	3.09	784710	0.00	0	Y	0
Aldrin	3.67	3.64	3.71	795265	3.69	752360	Y	5
Hept. epoxide	5.34	5.29	5.39	757790	5.36	721420	Y	5
Endosulfan I	6.66	6.60	6.73	698665	6.69	672315	Y	4
Dieldrin	8.07	7.99	8.15	764030	8.11	736580	Y	4
4,4'-DDE	7.55	7.47	7.62	641295	0.00	0	Y	0
Endrin	9.78	9.68	9.87	467110	0.00	0	Y	0
Endosulfan II	11.72	11.61	11.84	687165	11.78	685120	Y	0
4,4'-DDD	11.31	11.19	11.42	518890	0.00	0	Y	0
Endo.sulfate	17.89	17.71	18.06	460165	0.00	0	Y	0
4,4'DDT	13.57	13.43	13.70	517845	13.63	451085	Y	13
Methoxychlor	25.27	25.02	25.53	234220	0.00	0	Y	0
Endrin ketone	24.58	24.34	24.83	697780	24.69	652645	Y	6
a. Chlordane	6.43	6.36	6.49	679565	0.00	0	Y	0
g. Chlordane	5.91	5.85	5.97	700305	0.00	0	Y	0
Toxaphene	11.93	11.81	12.05	89524	0.00	0	Y	0
Aroclor-1016	2.76	2.73	2.79	48294	0.00	0	Y	0
Aroclor-1221	1.72	1.70	1.74	22629	0.00	0	Y	0
Aroclor-1232	2.79	2.76	2.82	24109	0.00	0	Y	0
Aroclor-1242	3.52	3.48	3.56	52209	0.00	0	Y	0
Aroclor-1248	4.70	4.65	4.75	84633	0.00	0	Y	0
Aroclor-1254	7.79	7.71	7.87	139987	0.00	0	Y	0
Aroclor-1260	13.41	13.28	13.54	291550	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

page_2_of_2_

PESTICIDE/PCB STANDARDS SUMMARY

Lab 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:____05/16/90 TO:____05/16/90	DATE OF ANALYSIS	_05/17/90
TIME(S) OF ANALYSIS	FROM:____0617 TO:____0650	TIME OF ANALYSIS	_0616
		EPA SAMPLE NO. (STANDARD)	___INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.04	2.02	2.06	934825	0.00	0	Y	0
beta-BHC	2.84	2.81	2.86	265290	0.00	0	Y	0
delta-BHC	3.30	3.27	3.33	825980	0.00	0	Y	0
gamma-BHC	2.53	2.51	2.56	817180	2.53	817560	Y	-0
Heptachlor	3.06	3.03	3.09	784710	0.00	0	Y	0
Aldrin	3.67	3.64	3.71	795265	3.67	798575	Y	-0
Hept. epoxide	5.34	5.29	5.39	757790	5.34	768010	Y	-1
Endosulfan I	6.66	6.60	6.73	698665	6.67	713015	Y	-2
Dieldrin	8.07	7.99	8.15	764030	8.08	783580	Y	-3
4,4'-DDE	7.55	7.47	7.62	641295	0.00	0	Y	0
Endrin	9.78	9.68	9.87	467110	0.00	0	Y	0
Endosulfan II	11.72	11.61	11.84	687165	11.74	709560	Y	-3
4,4'-DDD	11.31	11.19	11.42	518890	0.00	0	Y	0
Endo.sulfate	17.89	17.71	18.06	460165	0.00	0	Y	0
4,4'DDT	13.57	13.43	13.70	517845	13.58	480585	Y	7
Methoxychlor	25.27	25.02	25.53	234220	0.00	0	Y	0
Endrin ketone	24.58	24.34	24.83	697780	24.61	680690	Y	2
a. Chlordane	6.43	6.36	6.49	679565	0.00	0	Y	0
g. Chlordane	5.91	5.85	5.97	700305	0.00	0	Y	0
Toxaphene	11.93	11.81	12.05	89524	0.00	0	Y	0
Aroclor-1016	2.76	2.73	2.79	48294	0.00	0	Y	0
Aroclor-1221	1.72	1.70	1.74	22629	0.00	0	Y	0
Aroclor-1232	2.79	2.76	2.82	24109	0.00	0	Y	0
Aroclor-1242	3.52	3.48	3.56	52209	0.00	0	Y	0
Aroclor-1248	4.70	4.65	4.75	84633	0.00	0	Y	0
Aroclor-1254	7.79	7.71	7.87	139987	0.00	0	Y	0
Aroclor-1260	13.41	13.28	13.54	291550	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

D

9

PESTICIDE/PCB STANDARDS SUMMARY

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:____05/16/90 TO:____05/16/90	DATE OF ANALYSIS _05/17/90
TIME(S) OF ANALYSIS FROM:____0617 TO:____0650	TIME OF ANALYSIS _0658
	EPA SAMPLE NO. (STANDARD) ___INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.04	2.02	2.06	934825	2.04	982125	Y	-5
beta-BHC	2.84	2.81	2.86	265290	2.84	285765	Y	-8
delta-BHC	3.30	3.27	3.33	825980	3.31	878150	Y	-6
gamma-BHC	2.53	2.51	2.56	817180	0.00	0	Y	0
Heptachlor	3.06	3.03	3.09	784710	3.07	836125	Y	-7
Aldrin	3.67	3.64	3.71	795265	0.00	0	Y	0
Hept. epoxide	5.34	5.29	5.39	757790	0.00	0	Y	0
Endosulfan I	6.66	6.60	6.73	698665	0.00	0	Y	0
Dieldrin	8.07	7.99	8.15	764030	0.00	0	Y	0
4,4'-DDE	7.55	7.47	7.62	641295	7.55	672305	Y	-5
Endrin	9.78	9.68	9.87	467110	9.79	492830	Y	-6
Endosulfan II	11.72	11.61	11.84	687165	0.00	0	Y	0
4,4'-DDD	11.31	11.19	11.42	518890	11.32	548560	Y	-6
Endo.sulfate	17.89	17.71	18.06	460165	17.91	472355	Y	-3
4,4'DDT	13.57	13.43	13.70	517845	0.00	0	Y	0
Methoxychlor	25.27	25.02	25.53	234220	25.31	232630	Y	1
Endrin ketone	24.58	24.34	24.83	697780	0.00	0	Y	0
a. Chlordane	6.43	6.36	6.49	679565	6.43	711505	Y	-5
g. Chlordane	5.91	5.85	5.97	700305	5.92	738230	Y	-5
Toxaphene	11.93	11.81	12.05	89524	0.00	0	Y	0
Aroclor-1016	2.76	2.73	2.79	48294	0.00	0	Y	0
Aroclor-1221	1.72	1.70	1.74	22629	0.00	0	Y	0
Aroclor-1232	2.79	2.76	2.82	24109	0.00	0	Y	0
Aroclor-1242	3.52	3.48	3.56	52209	0.00	0	Y	0
Aroclor-1248	4.70	4.65	4.75	84633	0.00	0	Y	0
Aroclor-1254	7.79	7.71	7.87	139987	0.00	0	Y	0
Aroclor-1260	13.41	13.28	13.54	291550	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

page_1_of_2_

FORM IX PEST

JPH 05-17-90

1/87 REV.

D

D

D

ORIGINAL (Red)

PCB STANDARD TABLE

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/16/90 GC Column ID: SP2250/SP2401

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

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	7.97	49336			0		100	
		2	11.15	50089			0		100	
Toxaphene		3	11.93	101451	89524		0	0	100	100
		4	14.32	177496			0		100	
		5	18.64	69246			0		100	
	1.00	1	1.90	12223			0		100	
		2	2.38	18152			0		100	
Aroclor-1016		3	2.76	13605	48294		0	0	100	100
		4	2.84	3249			0		100	
		5	3.02	47359			0		100	
	5.00	1	1.19	23892			0		100	
		2	1.60	10295			0		100	
Aroclor-1221		3	1.72	37243	22629		0	0	100	100
		4	1.93	132668			0		100	
		5	2.41	22191			0		100	
	2.50	1	1.72	9768			0		100	
		2	1.93	43352			0		100	
Aroclor-1232		3	2.79	24112	24109		0	0	100	100
		4	3.34	24539			0		100	
		5	3.57	18773			0		100	
	2.50	1	3.02	98909			0		100	
		2	3.29	40096			0		100	
Aroclor-1242		3	3.52	30742	52209		0	0	100	100
		4	3.74	49329			0		100	
		5	4.40	41970			0		100	

D

CA 05/16/90

100633

16-May-90

D

PCB STANDARD TABLE

Lab Name: VERSAR, INC. Case No.: N3-7

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/16/90 GC Column ID: SP2250/SP2401

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

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	3.73	33732		X	0		100	
		2	4.41	23932		X	0		100	
Aroclor-1248		3	4.70	25018	84633	X	0	0	100	100
		4	5.18	21563		X	0		100	
		5	5.46	63020		X	0		100	
	1.00	1	5.66	19517		X	0		100	
		2	6.20	61390		X	0		100	
Aroclor-1254		3	7.79	44261	139987	X	0	0	100	100
		4	8.37	59476		X	0		100	
		5	9.48	95328		X	0		100	
	1.00	1	10.53	122878		X	0		100	
		2	11.90	68838		X	0		100	
Aroclor-1260		3	13.41	132804	291330	X	0	0	100	100
		4	14.31	100187		X	0		100	
		5	20.57	138393		X	0		100	
	1.00	1	X	0		X	0		0	
		2	X	0		X	0		0	
Aroclor-1232		3	X	0	0	X	0	0	0	0
		4	X	0		X	0		0	
		5	X	0		X	0		0	
	1.00	1	X	0		X	0		0	
		2	X	0		X	0		0	
Aroclor-1242		3	X	0	0	X	0	0	0	0
		4	X	0		X	0		0	
		5	X	0		X	0		0	

D

100034

16-May-90

ORIGINAL (Red)

PESTICIDE/PCB STANDARDS ENTRY FORM

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/05,07/90 GC Column ID: 3% SP2100

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	0.10	0.02	1.83	37915	0.00	0	1.83	40191
beta-BHC	0.10	0.02	1.96	15778	0.00	0	1.96	18111
delta-BHC	0.10	0.02	2.22	35176	0.00	0	2.22	38081
gamma-BHC	0.10	0.02	2.15	37811	2.16	40810	0.00	0
Heptachlor	0.10	0.03	3.48	36634	0.00	0	3.49	39227
Aldrin	0.10	0.04	4.31	41443	4.32	45692	0.00	0
Hept. epoxide	0.10	0.05	5.28	40515	5.28	45814	0.00	0
Endosulfan I	0.10	0.07	6.59	38744	6.59	41846	0.00	0
Dieldrin	0.10	0.08	7.71	42417	7.73	45925	0.00	0
4,4'-DDE	0.10	0.08	7.69	33985	0.00	0	7.70	38686
Endrin	0.10	0.09	8.60	26681	0.00	0	8.62	32189
Endosulfan II	0.10	0.09	8.81	36897	8.84	40078	0.00	0
4'-DDD	0.10	0.10	9.70	27346	0.00	0	9.72	37373
Endo.sulfate	0.10	0.11	11.33	22140	0.00	0	11.37	33951
4,4'DDT	0.10	0.13	12.74	27667	12.77	30604	0.00	0
Methoxychlor	0.10	0.19	19.08	11893	0.00	0	19.14	11605
Endrin ketone	0.10	0.15	14.59	37258	14.62	40329	0.00	0
a. Chlordane	0.10	0.07	6.71	35652	0.00	0	6.72	39622
g. Chlordane	0.10	0.06	6.05	36892	0.00	0	6.06	40536
Toxaphene	2.50	0.10	9.90	365700	0.00	0	0.00	0
Aroclor-1016	1.00	0.04	3.83	41570	0.00	0	0.00	0
Aroclor-1221	5.00	0.02	1.50	58370	0.00	0	0.00	0
Aroclor-1232	2.50	0.03	2.60	65650	0.00	0	0.00	0
Aroclor-1242	2.50	0.03	3.24	150105	0.00	0	0.00	0
Aroclor-1248	1.00	0.05	4.54	88218	0.00	0	0.00	0
Aroclor-1254	1.00	0.10	9.52	146368	0.00	0	0.00	0
Aroclor-1260	1.00	0.13	13.17	177882	0.00	0	0.00	0
DBC	0.10	0.26	26.23	37443	26.28	41431	26.30	36511

KC
5-8-90

ORIGINAL (Red)

9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name:_____VERSAR, INC. Contract:_____

Lab Code: ____VERSAR Case No.:R3-7 SAS No.:__ SDG NO.: _____

Instrument ID:_____C GC Column ID: ___3% SP2100

DATE(S) OF ANALYSIS	FROM:____05/05/90 TO:____05/05/90	DATE OF ANALYSIS _05/07/90
TIME(S) OF ANALYSIS	FROM:____0517 TO:____1038	TIME OF ANALYSIS _1058
		EPA SAMPLE NO. (STANDARD) ___INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	1.83	1.81	1.85	189575	0.00	0	Y	0
beta-BHC	1.96	1.94	1.98	78890	0.00	0	Y	0
delta-BHC	2.22	2.19	2.24	175880	0.00	0	Y	0
gamma-BHC	2.15	2.13	2.17	189055	2.16	204050	Y	-8
Heptachlor	3.48	3.45	3.52	183170	0.00	0	Y	0
Aldrin	4.31	4.27	4.36	207215	4.32	228460	Y	-10
Hept. epoxide	5.28	5.23	5.33	202575	5.28	229070	Y	-13
Endosulfan I	6.59	6.52	6.65	193720	6.59	209230	Y	-8
Dieldrin	7.71	7.63	7.79	212085	7.73	229625	Y	-8
4,4'-DDE	7.69	7.61	7.76	169925	0.00	0	Y	0
Endrin	8.60	8.51	8.69	133405	0.00	0	Y	0
Endosulfan II	8.81	8.72	8.90	184485	8.84	200390	Y	-9
4,4'-DDD	9.70	9.60	9.80	136730	0.00	0	Y	0
Endo.sulfate	11.33	11.21	11.44	110700	0.00	0	Y	0
4,4'DDT	12.74	12.61	12.87	138335	12.77	153020	Y	-11
Methoxychlor	19.08	18.89	19.27	59465	0.00	0	Y	0
Endrin ketone	14.59	14.44	14.73	186290	14.62	201645	Y	-8
a. Chlordane	6.71	6.64	6.77	178260	0.00	0	Y	0
g. Chlordane	6.05	5.99	6.11	184460	0.00	0	Y	0
Toxaphene	9.90	9.80	10.00	73140	0.00	0	Y	0
Aroclor-1016	3.83	3.79	3.87	20785	0.00	0	Y	0
Aroclor-1221	1.50	1.49	1.52	5837	0.00	0	Y	0
Aroclor-1232	2.60	2.57	2.63	13130	0.00	0	Y	0
Aroclor-1242	3.24	3.21	3.27	30021	0.00	0	Y	0
Aroclor-1248	4.54	4.49	4.59	44109	0.00	0	Y	0
Aroclor-1254	9.52	9.42	9.62	73184	0.00	0	Y	0
Aroclor-1260	13.17	13.04	13.30	88941	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

KC 5-8-90

100033

9

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name:_____VERSAR, INC. Contract:_____

Lab Code: ____VERSAR Case No.:R3-7 SAS No.:__ SDG NO.: _____

Instrument ID:_____C GC Column ID: ___3% SP2100

DATE(S) OF ANALYSIS	FROM:____05/05/90 TO:____05/05/90	DATE OF ANALYSIS _05/07/90
TIME(S) OF ANALYSIS	FROM:____0517 TO:____1038	TIME OF ANALYSIS _1132
		EPA SAMPLE NO. (STANDARD) ___INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	1.83	1.81	1.85	189575	1.83	200955	Y	-6
beta-BHC	1.96	1.94	1.98	78890	1.96	90555	Y	-15
delta-BHC	2.22	2.19	2.24	175880	2.22	190405	Y	-8
gamma-BHC	2.15	2.13	2.17	189055	0.00	0	Y	0
Heptachlor	3.48	3.45	3.52	183170	3.49	196135	Y	-7
Aldrin	4.31	4.27	4.36	207215	0.00	0	Y	0
Hept. epoxide	5.28	5.23	5.33	202575	0.00	0	Y	0
Endosulfan I	6.59	6.52	6.65	193720	0.00	0	Y	0
Dieldrin	7.71	7.63	7.79	212085	0.00	0	Y	0
4,4'-DDE	7.69	7.61	7.76	169925	7.70	193430	Y	-14
Endrin	8.60	8.51	8.69	133405	8.62	160945	Y	-21
Endosulfan II	8.81	8.72	8.90	184485	0.00	0	Y	0
4,4'-DDD	9.70	9.60	9.80	136730	9.72	186865	Y	-37
Endo.sulfate	11.33	11.21	11.44	110700	11.37	169755	Y	-53
4,4'DDT	12.74	12.61	12.87	138335	0.00	0	Y	0
Methoxychlor	19.08	18.89	19.27	59465	19.14	58025	Y	2
Endrin ketone	14.59	14.44	14.73	186290	0.00	0	Y	0
a. Chlordane	6.71	6.64	6.77	178260	6.72	198110	Y	-11
g. Chlordane	6.05	5.99	6.11	184460	6.06	202680	Y	-10
Toxaphene	9.90	9.80	10.00	73140	0.00	0	Y	0
Aroclor-1016	3.83	3.79	3.87	20785	0.00	0	Y	0
Aroclor-1221	1.50	1.49	1.52	5837	0.00	0	Y	0
Aroclor-1232	2.60	2.57	2.63	13130	0.00	0	Y	0
Aroclor-1242	3.24	3.21	3.27	30021	0.00	0	Y	0
Aroclor-1248	4.54	4.49	4.59	44109	0.00	0	Y	0
Aroclor-1254	9.52	9.42	9.62	73184	0.00	0	Y	0
Aroclor-1260	13.17	13.04	13.30	88941	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.

page_2_of_2_

ORIGINAL (Red)

PCB STANDARD TABLE

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

Lab Code: Contract:

Instrument ID: C SAS No.:

Run Date: 05/05/90 GC Column ID: 3%SP2100

Inject Vol: 2.00 (uL) Window Width: 1%

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	7.38	37850		X	0		100	
		2	9.44	97902		X	0		100	
Toxaphene		3	9.90	37890	73140	X	0	0	100	100
		4	10.87	68308		X	0		100	
		5	12.61	123752		X	0		100	
	1.00	1	2.35	7492		X	0		100	
		2	2.60	5599		X	0		100	
Aroclor-1016		3	3.83	10024	20785	X	0	0	100	100
		4	4.53	8390		X	0		100	
		5	5.48	10064		X	0		100	
	5.00	1	1.11	7152		X	0		100	
		2	1.35	1921		X	0		100	
Aroclor-1221		3	1.50	3361	5837	X	0	0	100	100
		4	1.71	11086		X	0		100	
		5	1.85	34845		X	0		100	
	2.50	1	1.86	13115		X	0		100	
		2	2.35	9573		X	0		100	
Aroclor-1232		3	2.60	6440	13130	X	0	0	100	100
		4	3.04	21582		X	0		100	
		5	3.24	14939		X	0		100	
	2.50	1	2.36	17746		X	0		100	
		2	3.05	43760		X	0		100	
Aroclor-1242		3	3.24	30229	30021	X	0	0	100	100
		4	5.42	39913		X	0		100	
		5	6.03	18459		X	0		100	

100033

KC 5-7-90

PCB STANDARD TABLE

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

Lab Code: Contract:

Instrument ID: C SAS No.:

Run Date: 05/05/90 GC Column ID: 3%SP2100

Inject Vol: 2.00 (uL) Window Width: 1%

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	3.05	14219		X	0		100	
		2	3.85	14227		X	0		100	
Aroclor-1248		3	4.54	12701	44109	X	0	0	100	100
		4	5.42	32871		X	0		100	
		5	6.04	14200		X	0		100	
	1.00	1	7.51	17261		X	0		100	
		2	8.00	23878		X	0		100	
Aroclor-1254		3	9.52	40690	73184	X	0	0	100	100
		4	11.15	32205		X	0		100	
		5	13.20	32334		X	0		100	
	1.00	1	11.22	40089		X	0		100	
		2	12.12	16587		X	0		100	
Aroclor-1260		3	13.17	36965	88941	X	0	0	100	100
		4	15.20	35973		X	0		100	
		5	21.18	48267		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	
	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	

100030

KC 5-7-90

PESTICIDE/PCB STANDARDS ENTRY FORM

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/17/90 GC Column ID: 3% SP2100

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	0.10	0.02	1.84	31700	0.00	0	1.87	22599
beta-BHC	0.10	0.02	1.97	12968	0.00	0	2.00	8691
delta-BHC	0.10	0.02	2.23	28006	0.00	0	2.27	17520
gamma-BHC	0.10	0.02	2.17	32023	2.20	16757	0.00	0
Heptachlor	0.10	0.04	3.51	29284	0.00	0	3.57	18620
Aldrin	0.10	0.04	4.37	34892	4.43	16489	0.00	0
Hept. epoxide	0.10	0.05	5.34	33781	5.42	14889	0.00	0
Endosulfan I	0.10	0.07	6.66	31442	6.77	13829	0.00	0
Dieldrin	0.10	0.08	7.80	34220	7.93	15160	0.00	0
4,4'-DDE	0.10	0.08	7.77	26361	0.00	0	7.91	14818
Endrin	0.10	0.09	8.70	23744	0.00	0	8.84	13534
Endosulfan II	0.10	0.09	8.91	28243	9.07	12468	0.00	0
4,4'-DDD	0.10	0.10	9.82	20448	0.00	0	9.99	12048
Endo. sulfate	0.10	0.11	11.46	18066	0.00	0	11.66	9805
4,4'DDT	0.10	0.13	12.92	15329	13.16	7587	0.00	0
Methoxychlor	0.10	0.19	19.33	7414	0.00	0	19.70	3759
Endrin ketone	0.10	0.15	14.77	23301	15.04	22849	0.00	0
Tr. Chlordane	0.10	0.07	6.78	27876	0.00	0	6.89	15786
Chlordane	0.10	0.06	6.11	29224	0.00	0	6.21	16359
Toxaphene	2.50	0.10	10.03	441945	0.00	0	0.00	0
Aroclor-1016	1.00	0.04	3.87	77406	0.00	0	0.00	0
Aroclor-1221	5.00	0.02	1.50	58370	0.00	0	0.00	0
Aroclor-1232	2.50	0.03	2.60	55675	0.00	0	0.00	0
Aroclor-1242	2.50	0.05	4.58	165005	0.00	0	0.00	0
Aroclor-1248	1.00	0.04	3.88	91152	0.00	0	0.00	0
Aroclor-1254	1.00	0.10	9.63	178684	0.00	0	0.00	0
Aroclor-1260	1.00	0.13	13.34	238722	0.00	0	0.00	0
DBC	0.10	0.27	26.58	21966	27.14	13396	27.14	14206

17-May-90

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name:_____VERSAR, INC. Contract:_____

Lab Code: ____VERSAR Case No.:R3-7 SAS No.:__ SDG NO.: _____1

Instrument ID:_____C GC Column ID: ___3% SP2100

DATE(S) OF ANALYSIS	FROM:____05/17/90	DATE OF ANALYSIS	_05/17/90
	TO:____05/17/90	TIME OF ANALYSIS	_2020
TIME(S) OF ANALYSIS	FROM:____0517	EPA SAMPLE NO.	B973
	TO:____0843	(STANDARD)	___INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	1.84	1.82	1.86	158500	0.00	0	Y	0
beta-BHC	1.97	1.95	1.99	64840	0.00	0	Y	0
delta-BHC	2.23	2.21	2.26	140030	0.00	0	Y	0
gamma-BHC	2.17	2.15	2.19	160115	2.20	83785	Y	48
Heptachlor	3.51	3.48	3.55	146420	0.00	0	Y	0
Aldrin	4.37	4.32	4.41	174460	4.43	82445	Y	53
Hept. epoxide	5.34	5.28	5.39	168905	5.42	74445	Y	56
Endosulfan I	6.66	6.59	6.73	157210	6.77	69145	Y	56
Dieldrin	7.80	7.72	7.88	171100	7.93	75800	Y	56
4,4'-DDE	7.77	7.70	7.85	131805	0.00	0	Y	0
Endrin	8.70	8.61	8.78	118720	0.00	0	Y	0
Endosulfan II	8.91	8.82	9.00	141215	9.07	62340	Y	56
4,4'-DDD	9.82	9.72	9.92	102240	0.00	0	Y	0
Endo.sulfate	11.46	11.35	11.57	90330	0.00	0	Y	0
4,4'DDT	12.92	12.79	13.04	76645	13.16	37935	Y	51
Methoxychlor	19.33	19.13	19.52	37070	0.00	0	Y	0
Endrin ketone	14.77	14.62	14.91	116505	15.04	114245	Y	2
a. Chlordane	6.78	6.71	6.85	139380	0.00	0	Y	0
g. Chlordane	6.11	6.05	6.17	146120	0.00	0	Y	0
Toxaphene	10.03	9.93	10.13	88389	0.00	0	Y	0
Aroclor-1016	3.87	3.83	3.91	38703	0.00	0	Y	0
Aroclor-1221	1.50	1.49	1.52	5837	0.00	0	Y	0
Aroclor-1232	2.60	2.57	2.63	11135	0.00	0	Y	0
Aroclor-1242	4.58	4.53	4.63	33001	0.00	0	Y	0
Aroclor-1248	3.88	3.84	3.92	45576	0.00	0	Y	0
Aroclor-1254	9.63	9.53	9.73	89342	0.00	0	Y	0
Aroclor-1260	13.34	13.21	13.47	119361	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

page_2_of_2_

FORM IX PEST 1/87 REV.

5/17/90

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:_____C GC Column ID: ___3% SP2100

DATE(S) OF ANALYSIS FROM:____05/17/90 TO:____05/17/90	DATE OF ANALYSIS _05/17/90
TIME(S) OF ANALYSIS FROM:____0517 TO:____0843	TIME OF ANALYSIS _2054
	EPA SAMPLE NO. (STANDARD) B974 ___INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	1.84	1.82	1.86	158500	1.87	112995	Y	29
beta-BHC	1.97	1.95	1.99	64840	2.00	43455	Y	33
delta-BHC	2.23	2.21	2.26	140030	2.27	87600	Y	37
gamma-BHC	2.17	2.15	2.19	160115	0.00	0	Y	0
Heptachlor	3.51	3.48	3.55	146420	3.57	93100	Y	36
Aldrin	4.37	4.32	4.41	174460	0.00	0	Y	0
Hept. epoxide	5.34	5.28	5.39	168905	0.00	0	Y	0
Endosulfan I	6.66	6.59	6.73	157210	0.00	0	Y	0
Dieldrin	7.80	7.72	7.88	171100	0.00	0	Y	0
4,4'-DDE	7.77	7.70	7.85	131805	7.91	74090	Y	44
Endrin	8.70	8.61	8.78	118720	8.84	67670	Y	43
Endosulfan II	8.91	8.82	9.00	141215	0.00	0	Y	0
4,4'-DDD	9.82	9.72	9.92	102240	9.99	60240	Y	41
Endo.sulfate	11.46	11.35	11.57	90330	11.66	49025	Y	46
4,4'DDT	12.92	12.79	13.04	76645	0.00	0	Y	0
Methoxychlor	19.33	19.13	19.52	37070	19.70	18795	Y	49
Endrin ketone	14.77	14.62	14.91	116505	0.00	0	Y	0
a. Chlordane	6.78	6.71	6.85	139380	6.89	78930	Y	43
g. Chlordane	6.11	6.05	6.17	146120	6.21	81795	Y	44
Toxaphene	10.03	9.93	10.13	88389	0.00	0	Y	0
Aroclor-1016	3.87	3.83	3.91	38703	0.00	0	Y	0
Aroclor-1221	1.50	1.49	1.52	5837	0.00	0	Y	0
Aroclor-1232	2.60	2.57	2.63	11135	0.00	0	Y	0
Aroclor-1242	4.58	4.53	4.63	33001	0.00	0	Y	0
Aroclor-1248	3.88	3.84	3.92	45576	0.00	0	Y	0
Aroclor-1254	9.63	9.53	9.73	89342	0.00	0	Y	0
Aroclor-1260	13.34	13.21	13.47	119361	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

5/17/90

PCB STANDARD TABLE

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/17/90 GC Column ID: 3%SP2100

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

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	7.46	47081		X	0		100	
		2	9.55	110906		X	0		100	
Toxaphene		3	10.03	41101	88389	X	0	0	100	100
		4	11.01	80576		X	0		100	
		5	12.78	162281		X	0		100	
	1.00	1	2.37	10848		X	0		100	
		2	3.07	26827		X	0		100	
Aroclor-1016		3	3.87	14106	38703	X	0	0	100	100
		4	4.58	11582		X	0		100	
		5	5.54	14043		X	0		100	
	5.00	1	1.11	7152		X	0		100	
		2	1.35	1921		X	0		100	
Aroclor-1221		3	1.50	3361	5837	X	0	0	100	100
		4	1.71	11086		X	0		100	
		5	1.85	34845		X	0		100	
	2.50	1	1.71	3139		X	0		100	
		2	2.35	9573		X	0		100	
Aroclor-1232		3	2.60	6440	11135	X	0	0	100	100
		4	3.04	21582		X	0		100	
		5	3.24	14939		X	0		100	
	2.50	1	3.88	30456		X	0		100	
		2	4.29	27190		X	0		100	
Aroclor-1242		3	4.58	26824	33001	X	0	0	100	100
		4	5.47	55037		X	0		100	
		5	6.09	25500		X	0		100	

PCB STANDARD TABLE

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/17/90 GC Column ID: 3%SP2100

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

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	3.07	16172		X	0		100	
		2	3.27	8632		X	0		100	
Aroclor-1248		3	3.88	16129	45576	X	0	0	100	100
		4	4.58	13487		X	0		100	
		5	5.47	36731		X	0		100	
	1.00	1	7.59	20628		X	0		100	
		2	8.08	28296		X	0		100	
Aroclor-1254		3	9.63	49363	89342	X	0	0	100	100
		4	11.28	39165		X	0		100	
		5	13.37	41231		X	0		100	
	1.00	1	11.38	53221		X	0		100	
		2	12.28	22447		X	0		100	
Aroclor-1260		3	13.34	49575	119361	X	0	0	100	100
		4	15.40	49170		X	0		100	
		5	21.47	64309		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	
	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	

100031

EPA SAMPLE NO.

PESTICIDE/PCB IDENTIFICATION

1MSDL

Lab Name: VERSAR, INC Contract: _____

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

GC Column ID (1): SP2250/SP2401 GC Column ID (2): 3% SP2100

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

Lab Sample ID: 16412 MS 1/10

Lab File ID: _____ (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME	RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01	G-BHC	Column 1	2.51	2.56	Y	N
02		Column 2	2.15	2.19	N	N
03	Heptachlor	Column 1	3.03	3.09	Y	N
04		Column 2	3.48	3.55	N	N
05	Aldrin	Column 1	3.64	3.71	Y	N
06		Column 2	4.32	4.41	N	N
07	Dieldrin	Column 1	7.99	8.15	Y	N
08		Column 2	7.72	7.88	N	N
09	Endrin	Column 1	9.68	9.87	Y	N
10		Column 2	8.61	8.78	N	N
11	DDT	Column 1	13.43	13.70	Y	N
12		Column 2	12.79	13.04	N	N

Comments: _____

FORM X PEST

1/87 Rev.

qa
5/21/90

ORIGINAL (Red)

EPA SAMPLE NO.

PESTICIDE/PCB IDENTIFICATION

1MSDOL

Lab Name: VERSAR, INC Contract: _____

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

GC Column ID (1): SP2250/SP2401 GC Column ID (2): 3%, SP2100

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

Lab Sample ID: 16412MSD 1/10

Lab File ID: _____ (only if confirmed by GC/MS)

	PESTICIDE/PCB	RETENTION TIME		RT WINDOW OF STANDARD FROM	TO	QUANT? (Y/N)	GC/MS? (Y/N)
01	G-BHC	Column 1		2.561	2.56	Y	N
02		Column 2		2.15	2.19	N	N
03	Heptachlor	Column 1		3.03	3.09	Y	N
04		Column 2		3.48	3.55	N	N
05	Aldrin	Column 1		3.64	3.71	Y	N
06		Column 2		4.32	4.41	N	N
07	Dieldrin	Column 1	8.14	7.99	8.15	Y	N
08		Column 2		7.72	7.88	N	N
09	Endrin	Column 1		9.68	9.87	Y	N
10		Column 2		8.61	8.78	N	N
11	DDT	Column 1	13.64	13.43	13.70	Y	N
12		Column 2		12.79	13.04	N	N

Comments: _____

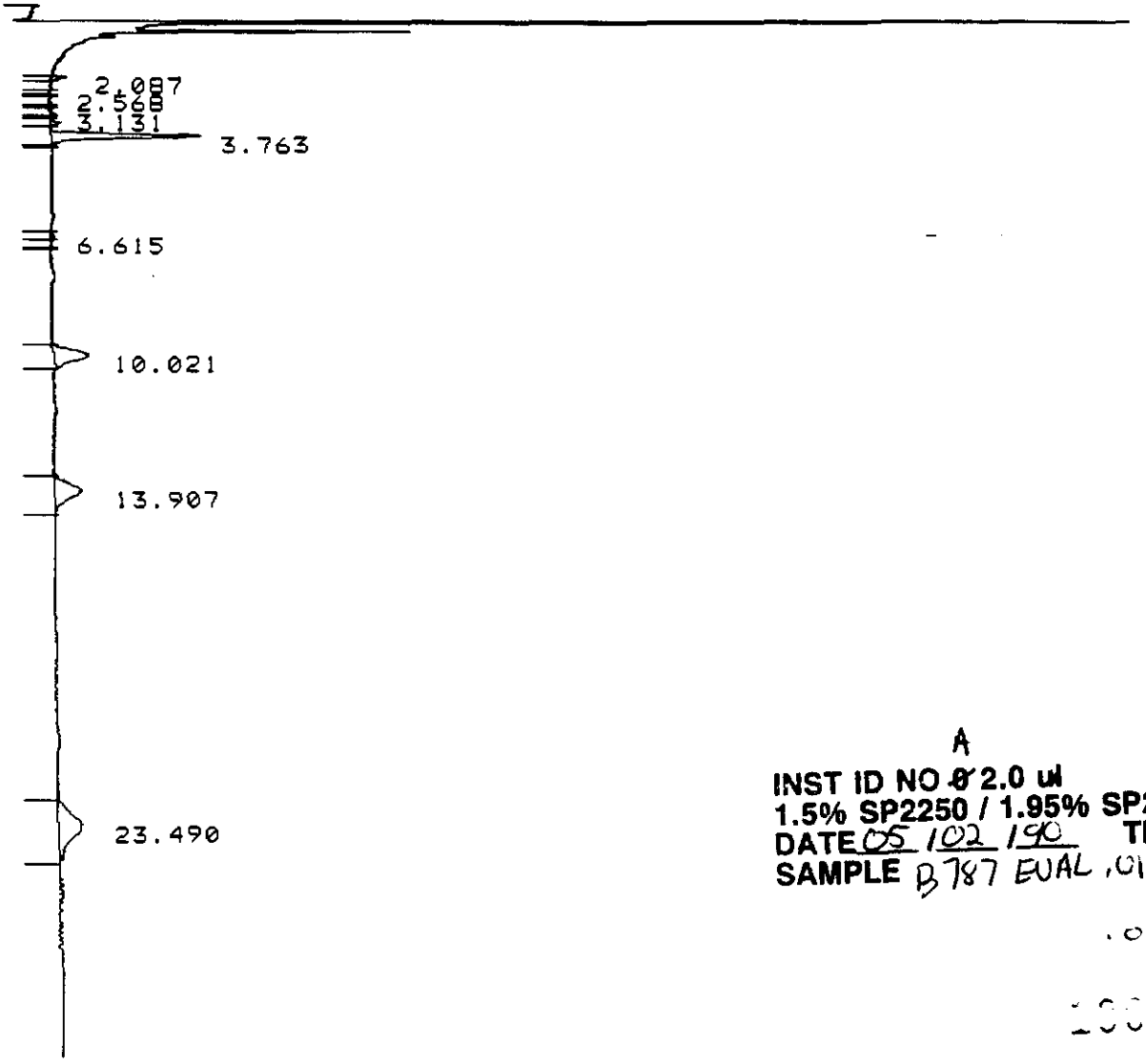
FORM X PEST

1/87 Rev.

100033

5/21/90

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



A
INST ID NO 8 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 /02 /90 TIME 3001
SAMPLE B787 EUAL .01 pp –
.02ng

100037

TITLE: CLP PESTICIDES 20:01 2 MAY 90

CHANNEL NO: 3 SAMPLE: B787 EVAL.01 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	~~A-BHC~~	1039	2.087	-0.053	1039	BB		4.25
	~~HEPTACHLO~~R	527	3.131	-0.089	527	VV	?	4.70
		854	3.372		854	VV	?	8.15
4	ALDRIN	17436	3.763	-0.097	17436	VV		7.95
5	~~A-CHLORDAN~~	566	6.615	-0.145	566	BB		7.80
6	ENDRIN	9919	10.021	-0.259	9919	BB	?	20.70
7	DDT	11097	13.907	-0.383	11097	BB	?	28.35
8	DBC	15471	23.490	-0.620	15471	BB		50.30
TOTALS:		56909		-1.646	56909			

DETECTED PKS: 12 REJECTED PKS: 4

DIVISOR: 1.00000 MULTIPLIER: 10000.0

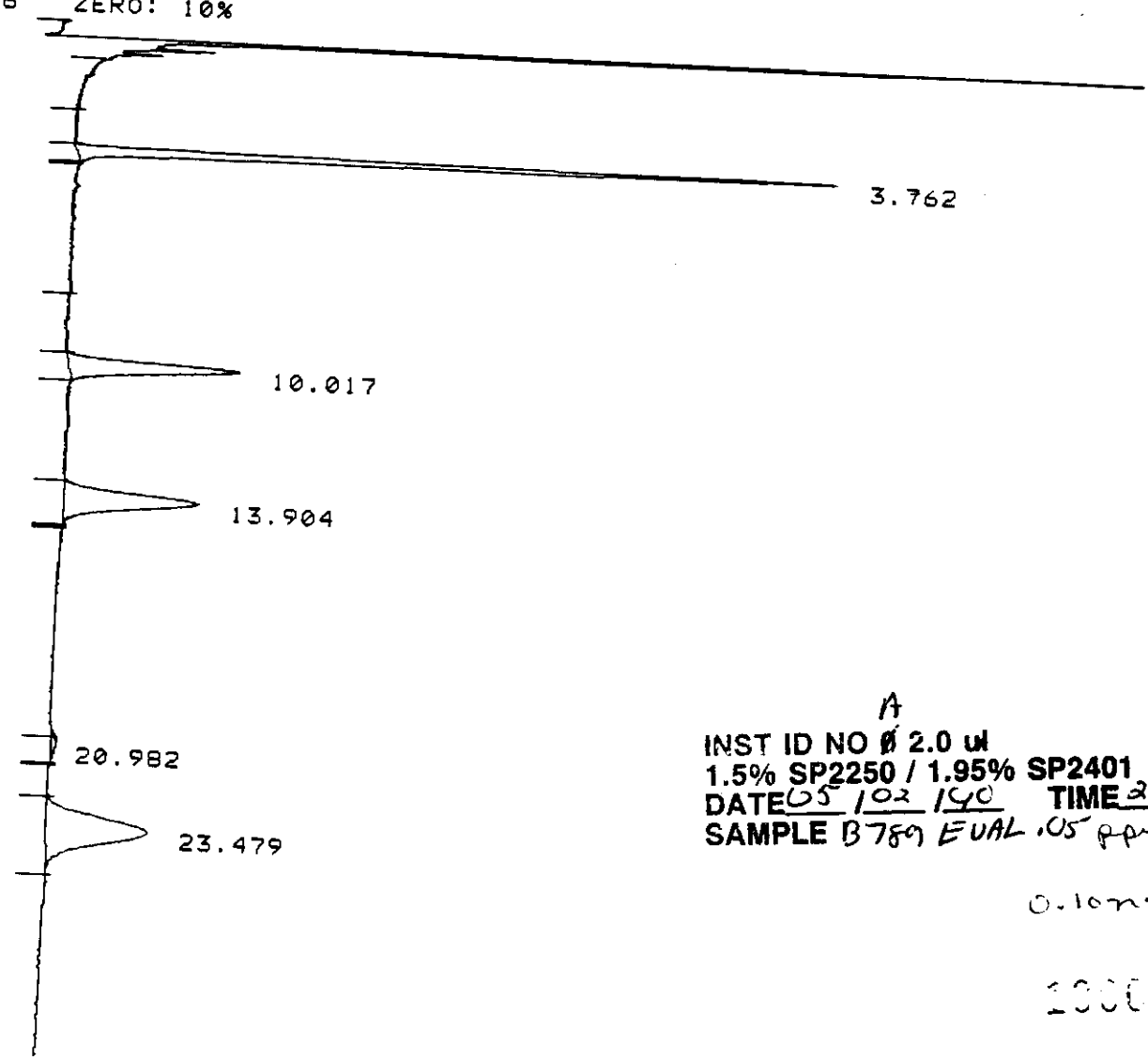
NOISE: 43.7 OFFSET: -14

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
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

ORIGINAL (Red)

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



A
INST ID NO ~~B~~ 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 02 / 90 TIME 2109
SAMPLE B789 EVAL .05 ppm

0.10mg

100030

varian /sunnyvale calif

ORIGINAL
(Red)

TITLE: CLP PESTICIDES 21:09 2 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)
1	ALDRIN	88161	3.762	-0.098	88161	BV	?	7.80
2	ENDRIN	49884	10.017	-0.263	49884	BB	?	21.60
3	DDT	55068	13.904	-0.386	55068	BB	?	28.10
4		3008	20.982		3008	BB	?	71.65
5	DBC	70430	23.479	-0.631	70430	BB		48.15
TOTALS:		266551		-1.378	266551			

DETECTED PKS: 6 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -25

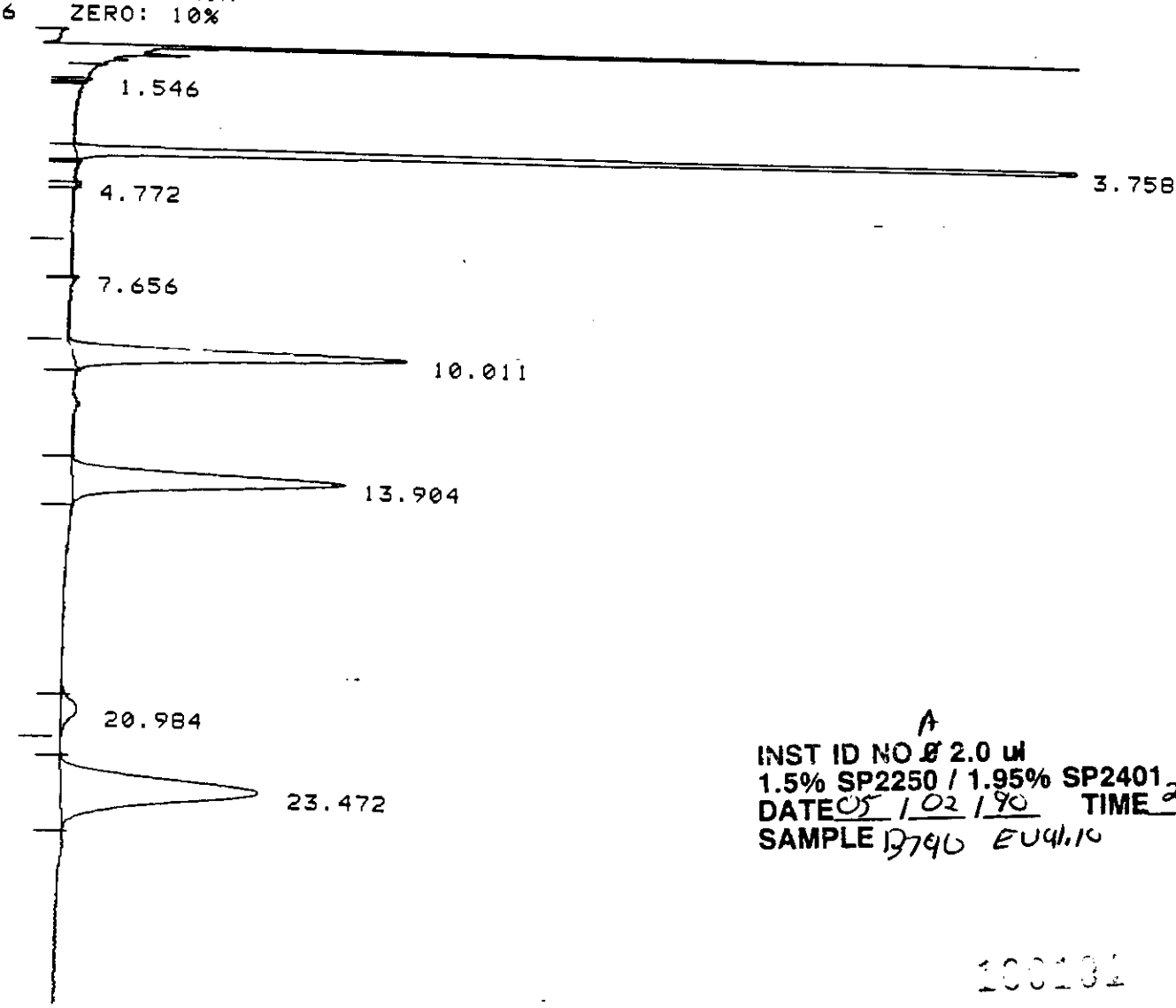
RACK: 1 VIAL: 4 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
OOT= OUTSIDE RETENTION TIME WINDOW
AVTEX CTL 2592 AND 2655 PCB WATER
RSCDM CTL 2536 PESTICIDE SOILS

180100

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 / 02 / 90 TIME 2144
SAMPLE 13790 EU41.10

100131

ORIGINAL (Red)

TITLE: CLP PESTICIDES 21:44 2 MAY 90

CHANNEL NO: 3 SAMPLE: B790 EVAL.10 METHOD: CLP-3A

PEAK N	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
	ALDRIN	182820	3.758	-0.102	182820	BV	?	7.60
2		592	4.772		592	BB	?	5.15
3	ENDRIN	104492	10.011	-0.269	104492	BB	?	6.80
4	DDT	117260	13.904	-0.386	117260	BB	?	27.70
5		9745	20.984		9745	BB	?	45.05
6	DBC	143484	23.472	-0.638	143484	BB		47.85
TOTALS:		558393		-1.395	558393			

DETECTED PKS: 9 REJECTED PKS: 3

DIVISOR: 1.00000 MULTIPLIER: 10000.0

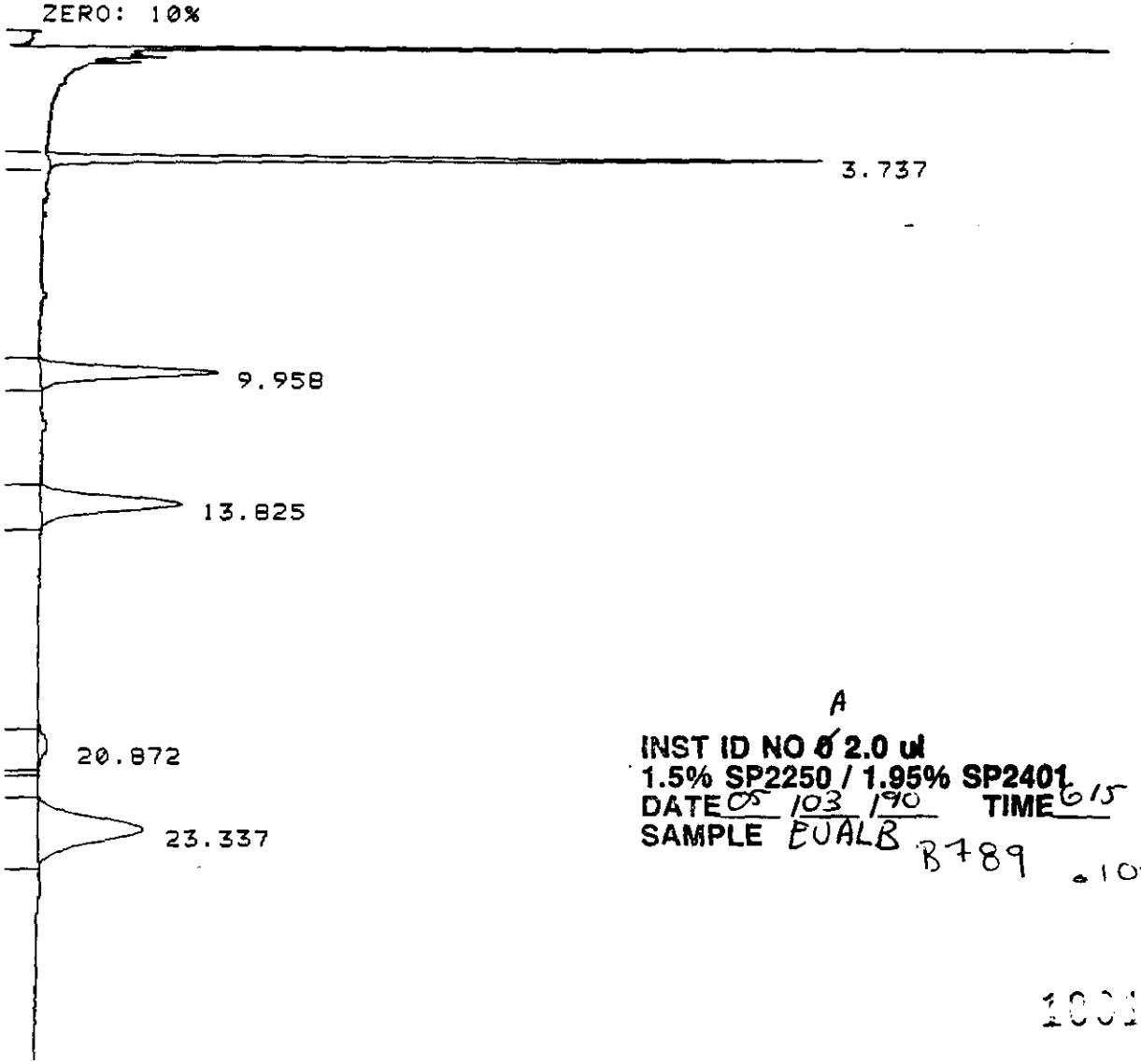
NOISE: 43.7 OFFSET: -19

RACK: 1 VIAL: 5 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

ORIGINAL

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 / 03 / 90 TIME 615
SAMPLE EUALB B789 .10mg

100103

ORIGINAL
(Red)

TITLE: CLP PESTICIDES

CHANNEL NO: 3 SAMPLE: EVALB 6:15 3 MAY 90

METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
	ALDRIN	88126	3.737		88126	BB	?	7.75
	ENDRIN	52848	9.958		52848	BB	?	20.70
3	DDT	57430	13.825		57430	BB		27.95
4		4656	20.872		4656	BB		39.20
5	DBC	71298	23.337		71298	BB		47.80
TOTALS:		274358			274358			

DETECTED PKS: 5 REJECTED PKS: 0

D_ ISOR: 1.00000 MULTIPLIER: 10000.0

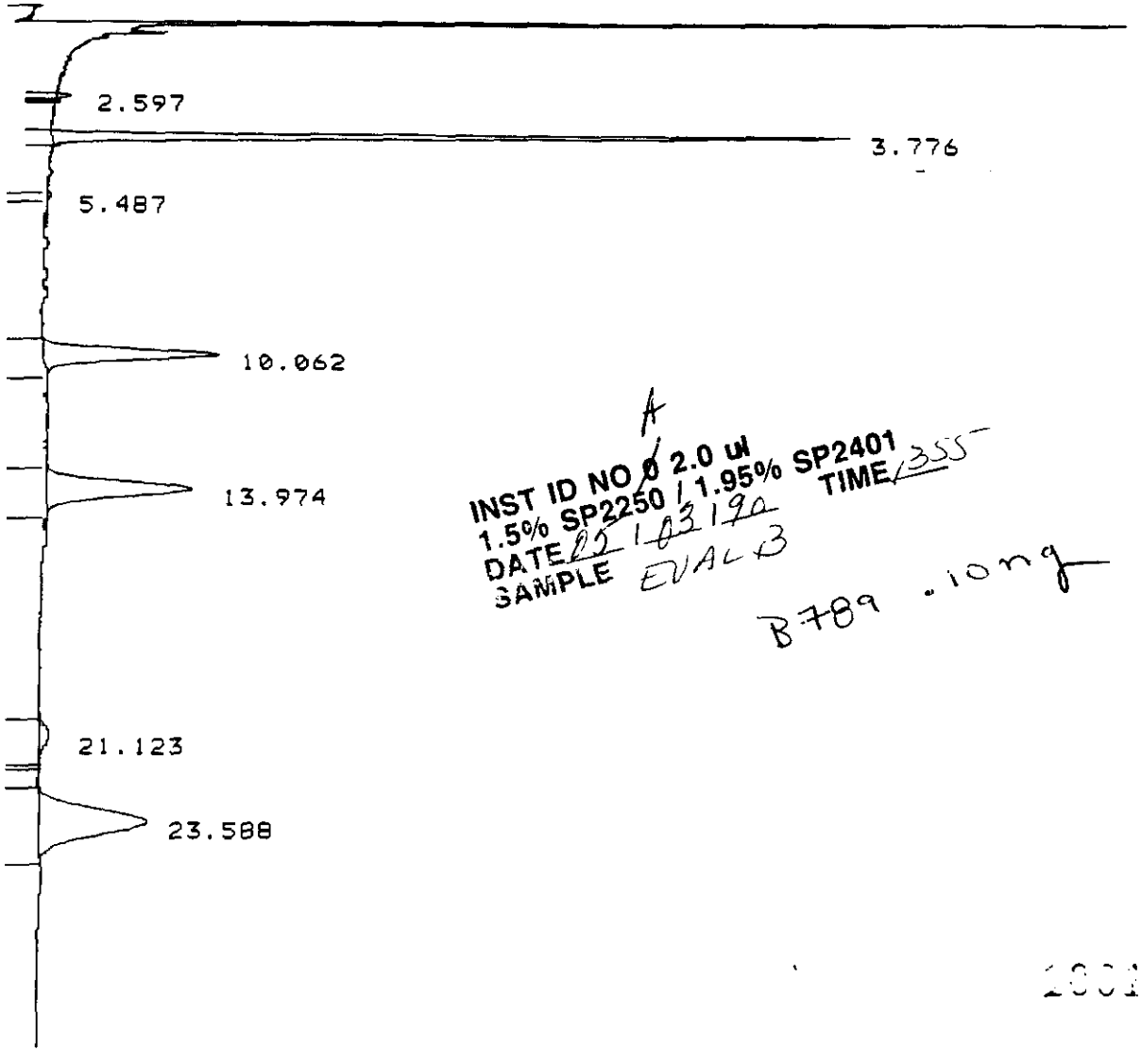
NOISE: 43.7 OFFSET: -16

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
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

100134

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



INST ID NO Ø 2.0 uL
1.5% SP2250 / 1.95% SP2401
DATE 03/03/90 TIME 1355
SAMPLE EVAL 3

B789 .10mg

100105

ORIGINAL
(RED)

TITLE: CLP PESTICIDES 13:55 3 MAY 90

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

PE N.	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	~~G-BHC~~	1434	2.597	-0.063	1434	BB		5.80
2	ALDRIN	90293	3.776	-0.084	90293	BB	?	7.75
3	~~HEPT EP~~OX	675	5.487	-0.133	675	BB	?	20.35
4	ENDRIN	52873	10.062	-0.218	52873	BB		20.95
5	DDT	59934	13.974	-0.316	59934	BB		28.20
6		5357	21.123		5357	BB		40.00
7	DBC	73259	23.588	-0.522	73259	BB		48.00
TOTALS:		283825		-1.336	283825			

DETECTED PKS: 7 REJECTED PKS: 0

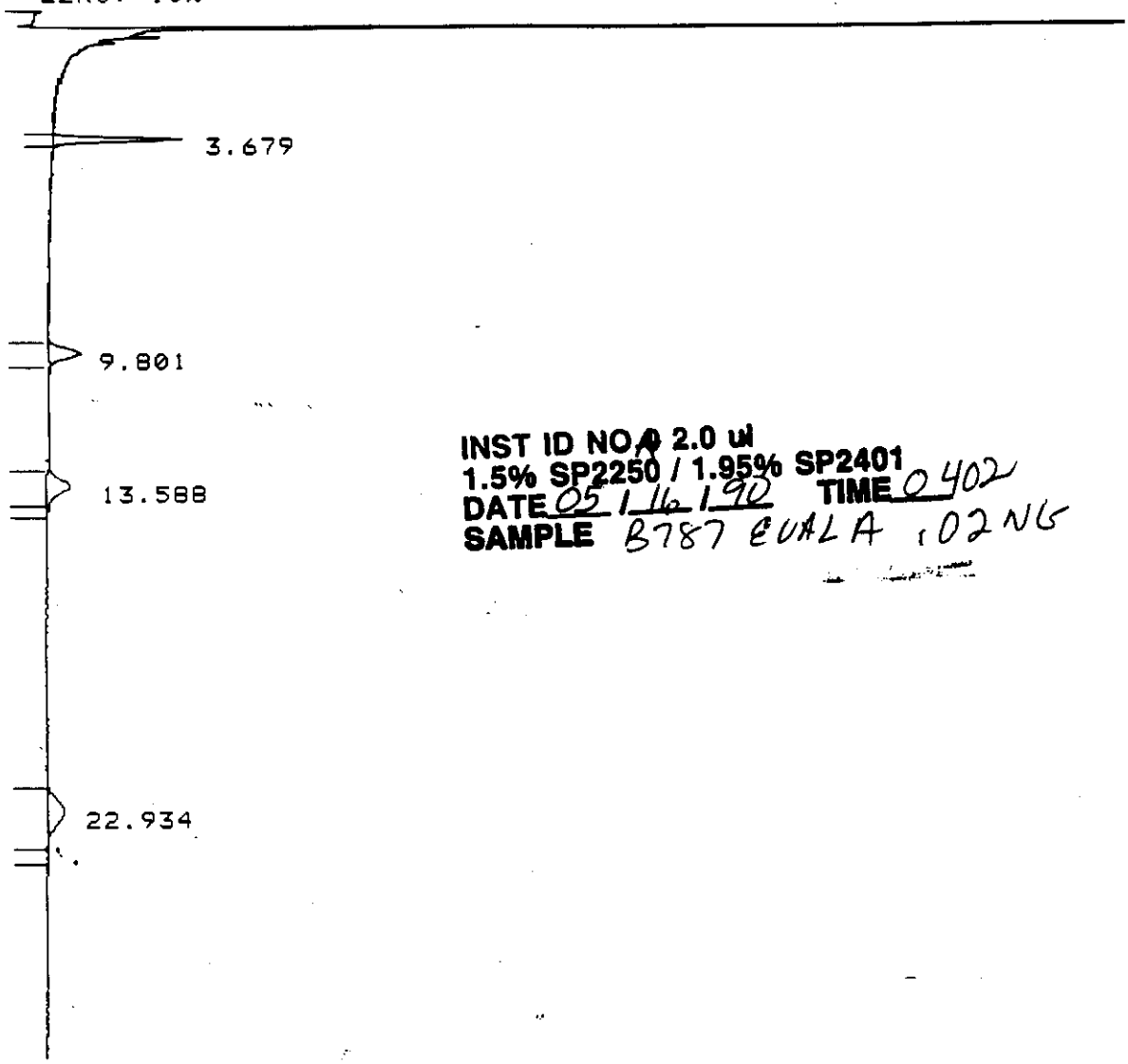
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -28

RACK: 3 VIAL: 14 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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



INST ID NO. 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 16 / 90 TIME 0402
SAMPLE B787 EVALA .02NG

varian sunnyvale, calif. p/n 03-906362-0

TITLE: CLP PESTICIDES 4:02 16 MAY 90

C NEL NO: 3 SAMPLE: ~~B934-AR1660~~ B787 Eval.01 JKR 05/16/90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	ALDRIN	13998	3.679	-0.061	13998	BB	?	7.75
2	ENDRIN	8837	9.801	-0.159	8837	BB	?	21.65
3	DDT	9246	13.588	-0.232	9246	BB	?	27.75
4	DBC	11399	22.934	-0.406	11399	BB		46.80
TOTALS:		43480		-0.858	43480			

DETECTED PKS: 4 REJECTED PKS: 0

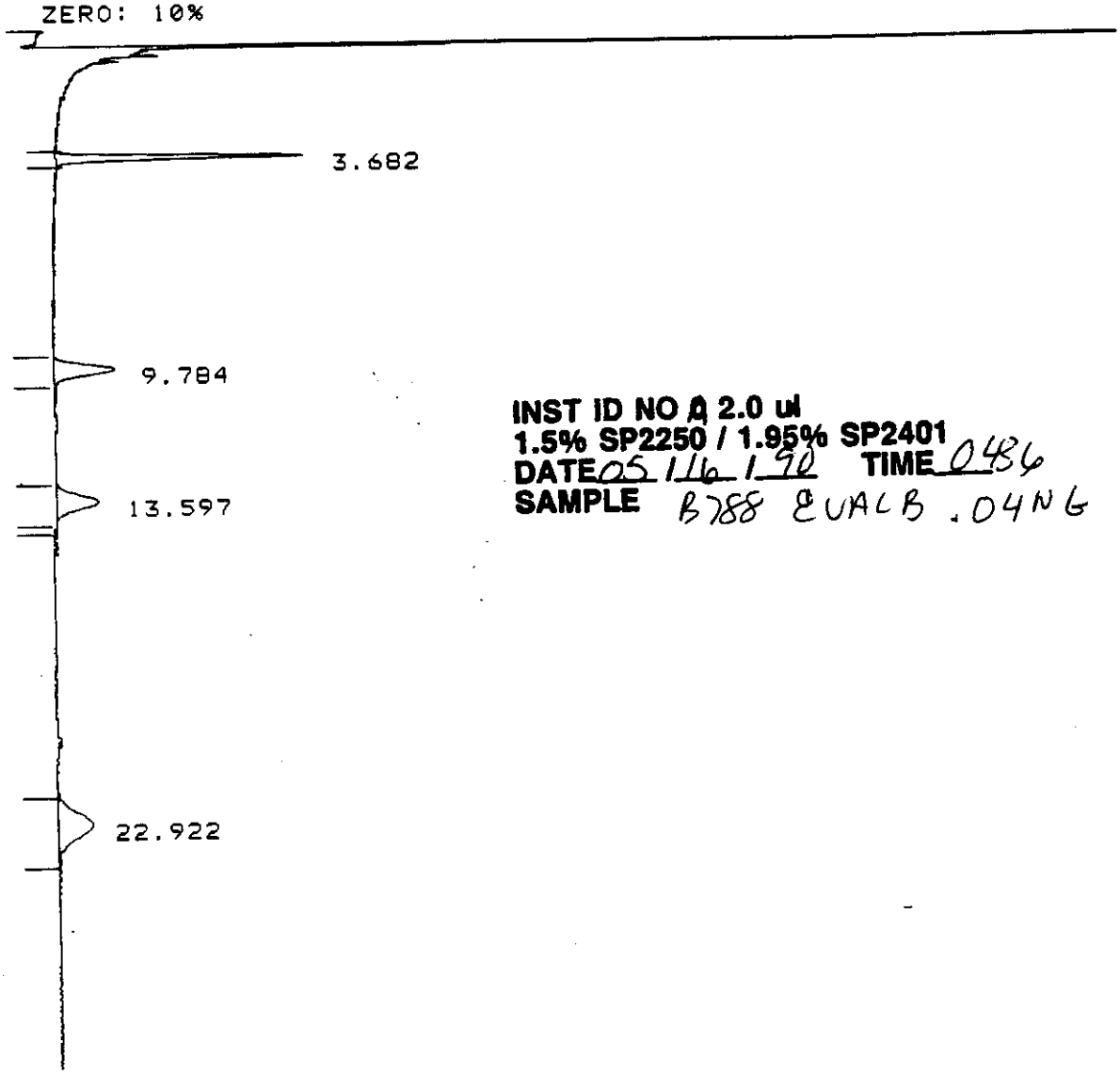
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -10

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
OMC WAUK CTL2638 AND 2672 PCB WATERS

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



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/90 TIME 0486
SAMPLE B788 EUALB .04NG

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

TITLE: CLP PESTICIDES 4:36 16 MAY 90

CHANNEL NO: 3 SAMPLE: ~~B939 AR1242~~ B788 EV9/.02 JKR 05/16/90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	ALDRIN	27474	3.682	-0.058	27474	BB	?	7.70
2	ENDRIN	17871	9.784	-0.176	17871	BB	?	20.25
3	DDT	16530	13.597	-0.223	16530	BB		27.65
4	DBC	22904	22.922	-0.418	22904	BB		46.65
TOTALS:		84779		-0.875	84779			

DETECTED PKS: 4 REJECTED PKS: 0

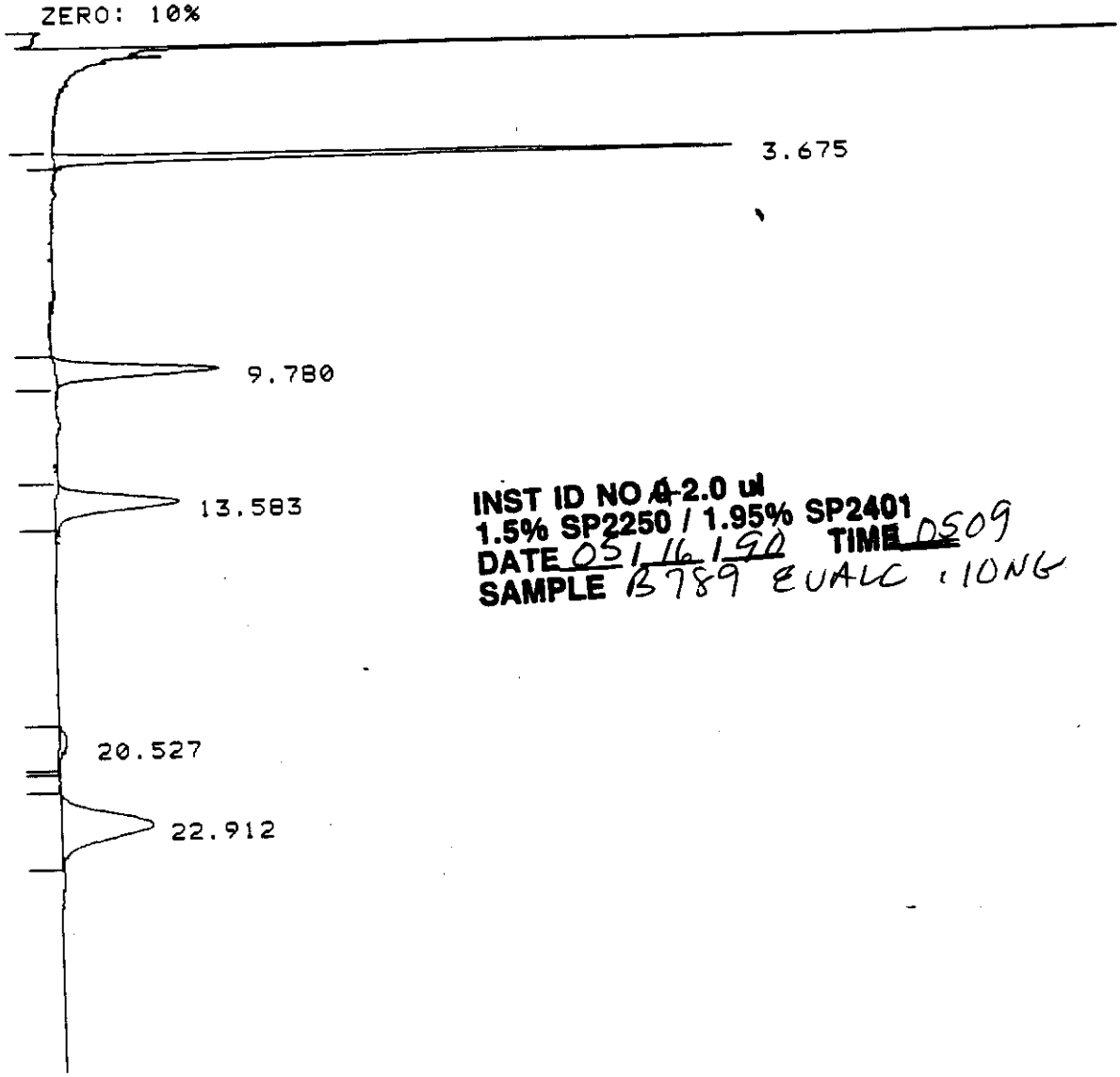
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -8

RACK: 1 VIAL: 2 INJ: 1

ES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
OMC WAUK CTL2638 AND 2672 PCB WATERS

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



INST ID NO 4 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/90 TIME 0509
SAMPLE B789 EUALC 10NG

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

TITLE: CLP PESTICIDES 5:09 16 MAY 90

CHANNEL NO: 3 SAMPLE: ~~B994 AR1248~~ B789 Eval.05 JKR 05/16/90 METHOD: CLP-3A

PK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	ALDRIN	75130	3.675	-0.065	75130	BB	?	7.65
2	ENDRIN	47808	9.780	-0.180	47808	BB	?	20.35
3	DDT	49210	13.583	-0.237	49210	BB		27.35
4		4317	20.527		4317	BB		40.50
5	DBC	61883	22.912	-0.428	61883	BB		46.95
TOTALS:		238348		-0.910	238348			

DETECTED PKS: 5 REJECTED PKS: 0

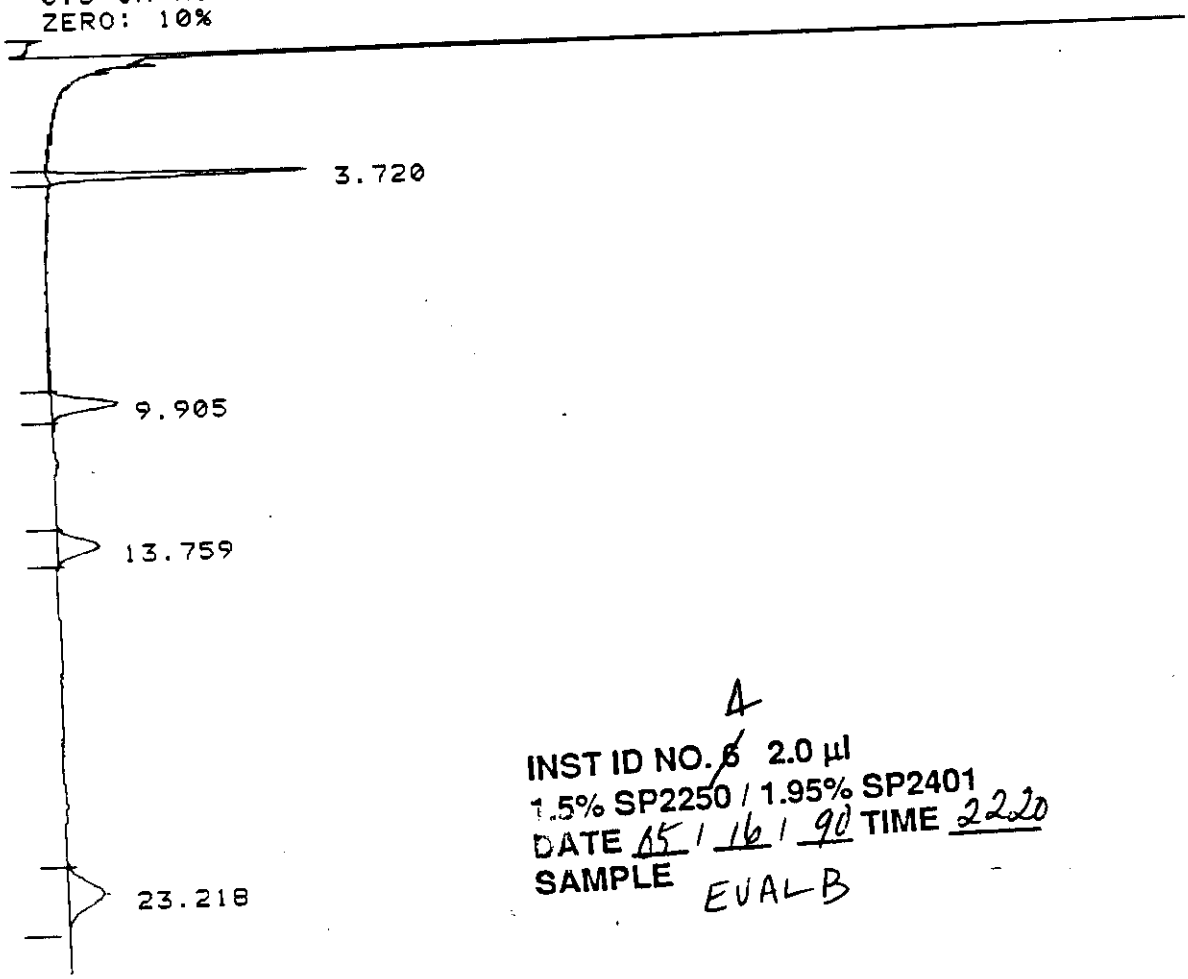
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -21

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
OMC WAUK CTL2638 AND 2672 PCB WATERS

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



INST ID NO. ~~6~~ 4 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 16 / 90 TIME 2220
SAMPLE EVAL-B

100113

TITLE: CLP PESTICIDES 22:20 16 MAY 90

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

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	ALDRIN	27611	3.720	-0.020	27611	BB	?	7.80
2	ENDRIN	18333	9.905	-0.055	18333	BB	?	21.30
3	DDT	15718	13.759	-0.061	15718	BB		27.25
4	DBC	23457	23.218	-0.122	23457	BB		46.70
TALS:		85119		-0.258	85119			

DETECTED PKS: 4 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

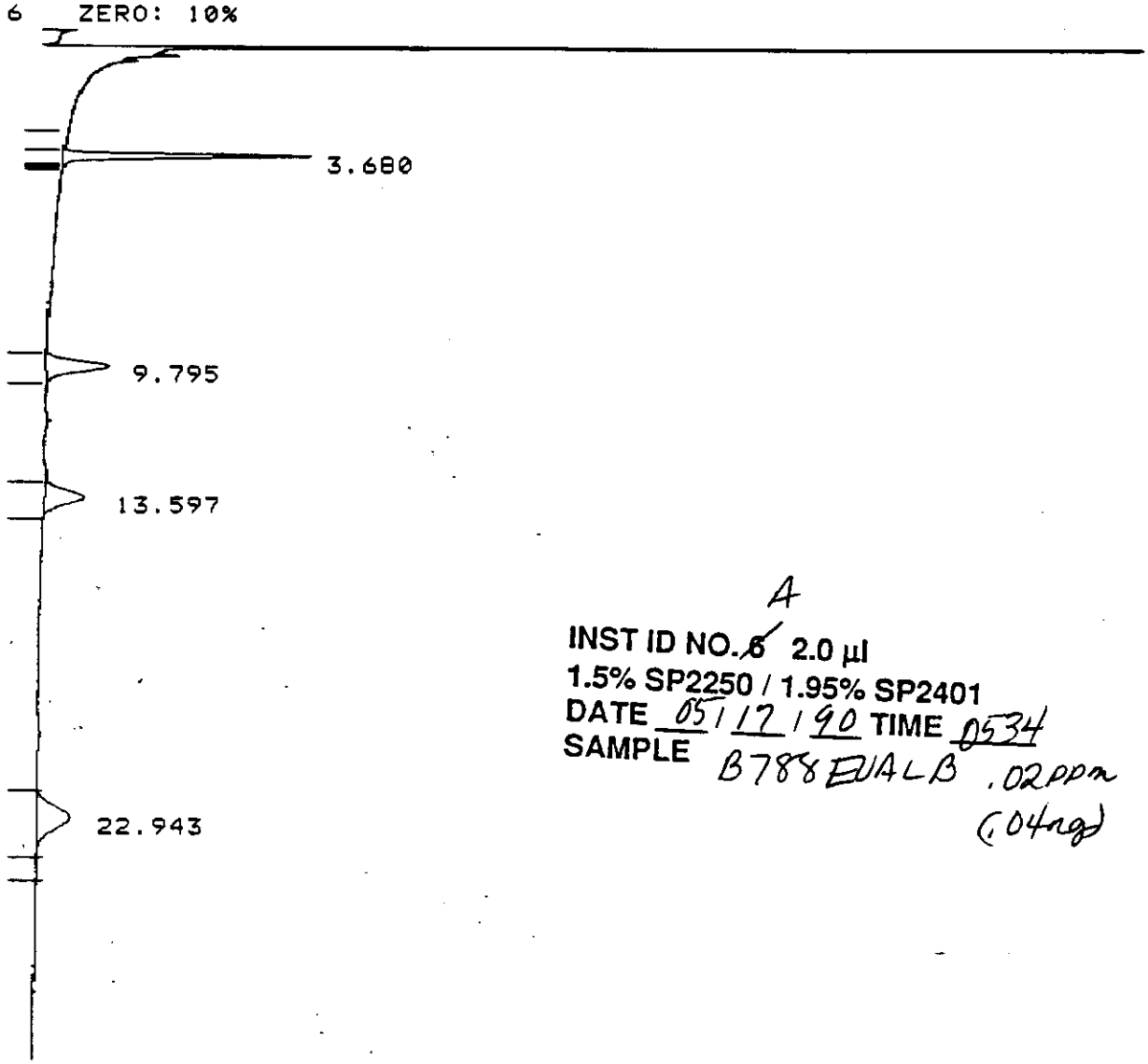
NOISE: 41.3 OFFSET: -42

RACK: 2 VIAL: 10 INJ: 1

ES:
OL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

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

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



INST ID NO. ~~6~~ A 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05/17/90 TIME 0534
SAMPLE B788 EVALB .02ppm
(.04ng)

varian Sunnyvale, Calif. p/n 03-906362-00

TITLE: CLP PESTICIDES 5:34 17 MAY 90

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

P	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	ALDRIN	28151	3.680	-0.060	28151	BV ?	7.70
2	ENDRIN	18212	9.795	-0.165	18212	BB	14.50
3	DDT	15046	13.597	-0.223	15046	BB	25.95
4	DBC	22427	22.943	-0.397	22427	BB	46.60
TOTALS:		83836		-0.845	83836		

DETECTED PKS: 5 REJECTED PKS: 1

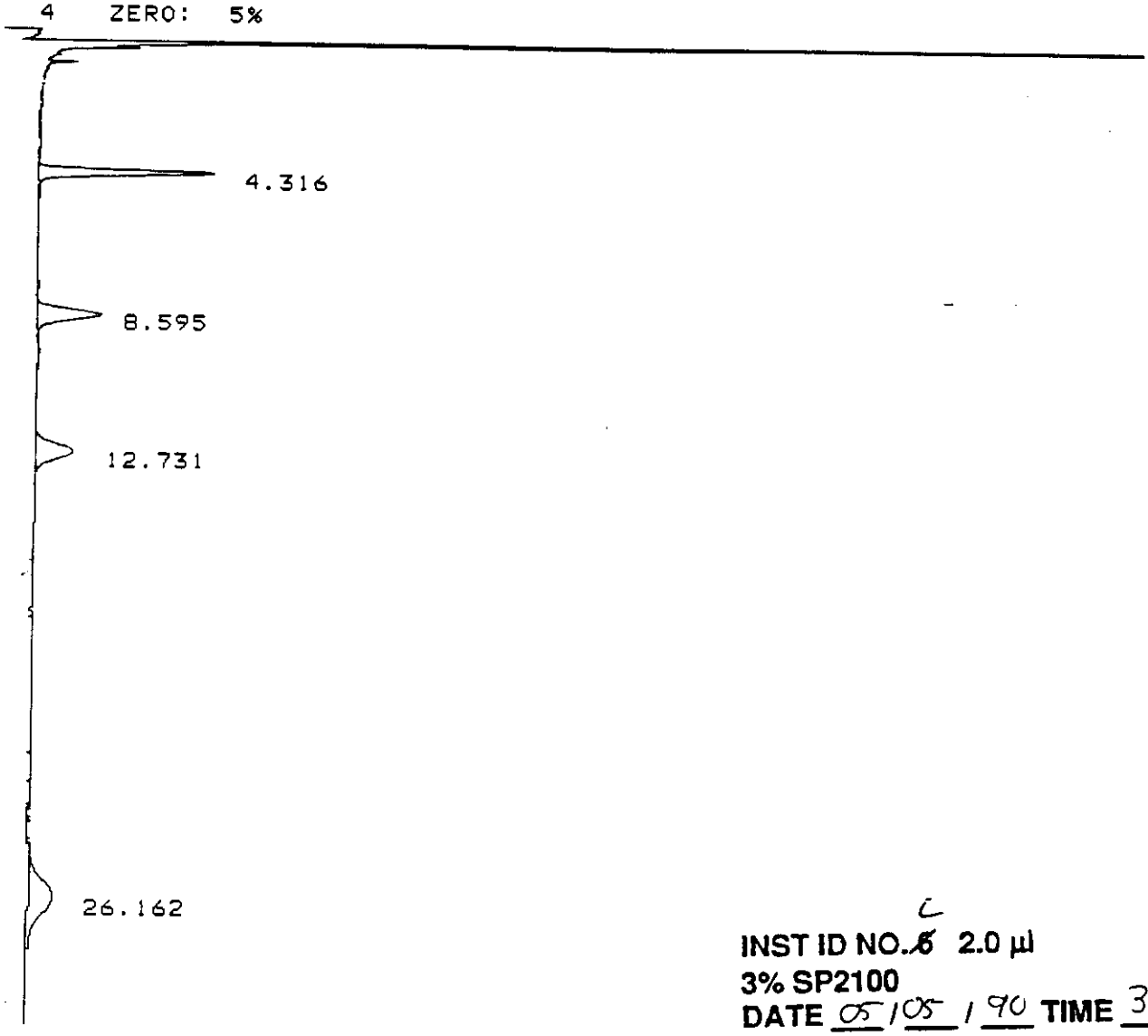
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -48

RACK: 3 VIAL: 8 INJ: 1

NOTES:
^OL: . 1.5% SP2250/1.95% SP2401
1T INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~5~~ C 2.0 µl
3% SP2100
DATE 05/05/90 TIME 336
SAMPLE B758 EUU1.02 1 17
(0.04 mg)

TITLE: CLP PESTICIDES 3:36 5 MAY 90

CHANNEL NO: 2 SAMPLE: B7BB EVAL.02 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	ALDRIN	7394	4.316	-0.024	7394	BB	? 11.25
2	ENDRIN	5155	8.595	-0.085	5155	BB	? 21.95
3	DDT	4452	12.731	-0.129	4452	BB	? 31.10
4	DBC	6559	26.162	-0.368	6559	BB	51.20
TOTALS:		23560		-0.606	23560		

DETECTED PKS: 4 REJECTED PKS: 0

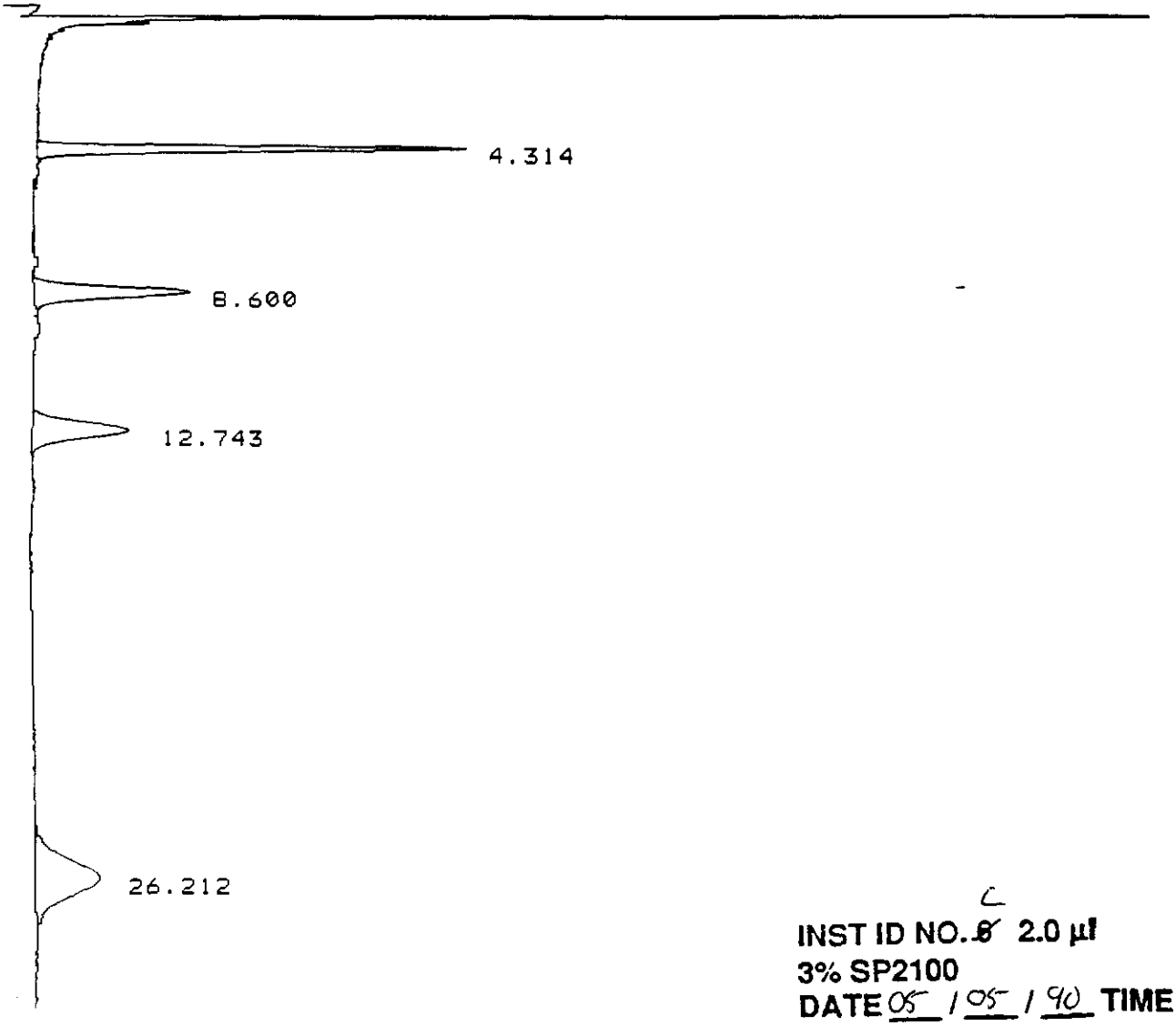
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOT [illegible]: 8.5 OFFSET: -14

RACK: 1 VIAL: 2 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
CLP STANDARDS - QUANT

Cr r SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~8~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 410
SAMPLE B 789 EVAL. 05 ppm
(DJB 8-8)

TITLE: CLP PESTICIDES 4:10 5 MAY 90

CH EL NO: 2 SAMPLE: B789 EVAL.05 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	ALDRIN	18088	4.314	-0.026	18088	BB	? 11.30
2	ENDRIN	12635	8.600	-0.080	12635	BB	? 21.95
3	DDT	11417	12.743	-0.117	11417	BB	? 31.45
4	DBC	16603	26.212	-0.318	16603	BB	? 69.25
TOTALS:		58743		-0.541	58743		

DE TED PKS: 4 REJECTED PKS: 0

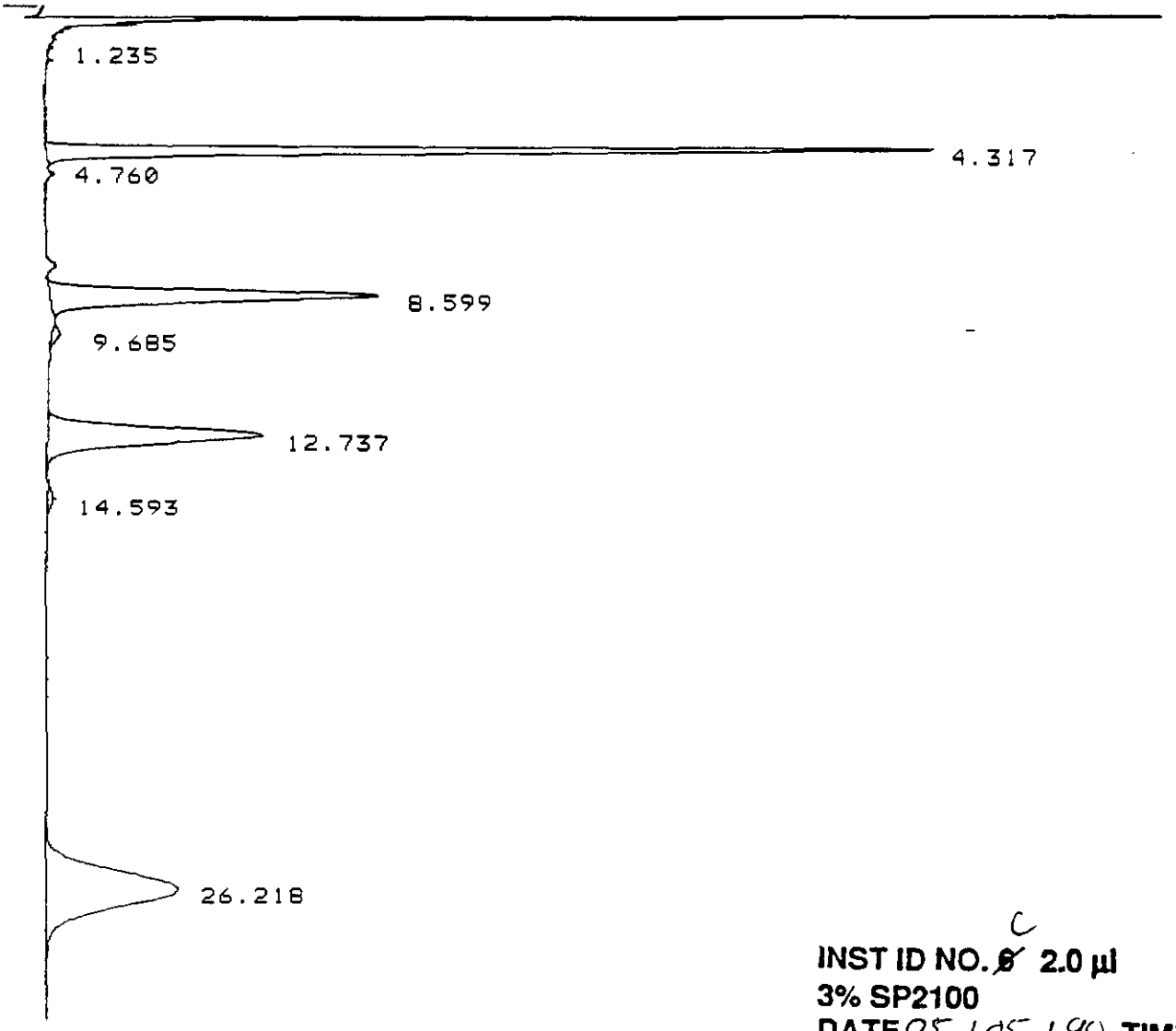
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 8.5 OFFSET: -14

RACK: 1 VIAL: 4 INJ: 1

NO 3:
STRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
CLP STANDARDS - QUANT

CHART SPEED 0.5 CM/MIN
AT 1: 4 ZERO: 5%



INST ID NO. ~~6~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 443
SAMPLE B-790 EQUAL 10 ppm

TITLE: CLP PESTICIDES 4:43 5 MAY 90

CH EL NO: 2 SAMPLE: B790 EVAL.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	ALDRIN	37465	4.317	-0.023	37465	BV	?	11.50
2	ENDRIN	26544	8.599	-0.081	26544	BB	?	22.45
3	DDT	25211	12.737	-0.123	25211	BB	?	31.25
4	END KETONE	740	14.593	-0.137	740	BB		32.00
5	DBC	34431	26.218	-0.312	34431	BB	?	69.15
TOTALS:		124391		-0.676	124391			

DETECTED PKS: 9 REJECTED PKS: 4

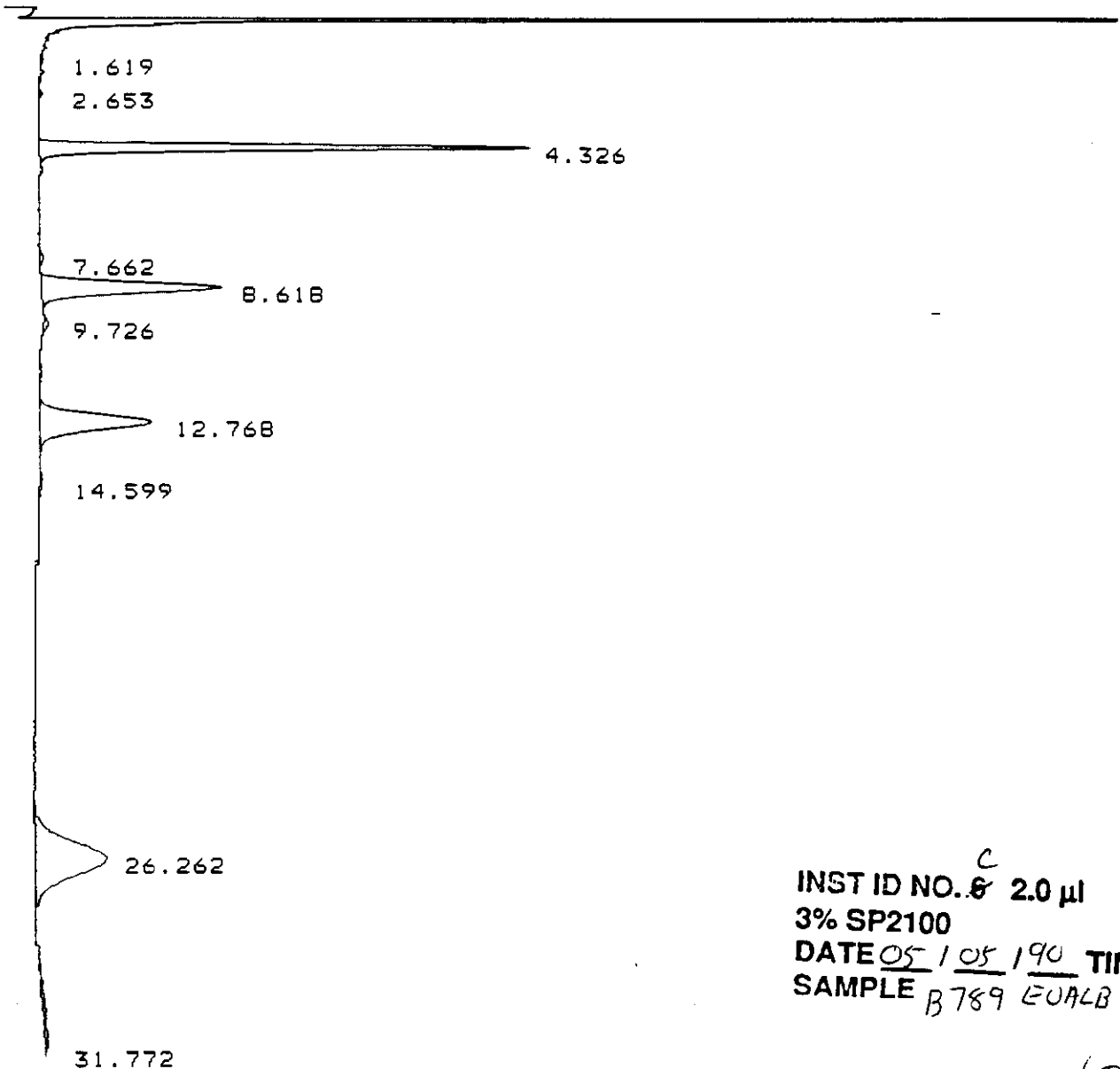
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 8.5 OFFSET: -9

RACK: 1 VIAL: 5 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
CLP STANDARDS - QUANT

CHART SPEED 0.5 CM/MIN
ATT : 4 ZERO: 5%



INST ID NO. ~~8~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 1401
SAMPLE B789 EOALB 0.05ppm

100 (0.10 ng)

TITLE: CLP PESTICIDES 14:01 5 MAY 90

CHANNEL NO: 2 SAMPLE: B789 EVALB METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	ALDRIN	22271	4.326	-0.014	22271	BB		11.70
2	ENDRIN	15107	8.618	-0.062	15107	VB	?	22.35
3	DDT	13813	12.766	-0.092	13813	BB	?	31.55
	DBC	18635	26.262	-0.268	18635	BB	?	69.25
		1272	31.772		1272	BB	?	76.80
TOTALS:		71098		-0.436	71098			

DETECTED PKS: 11 REJECTED PKS: 6

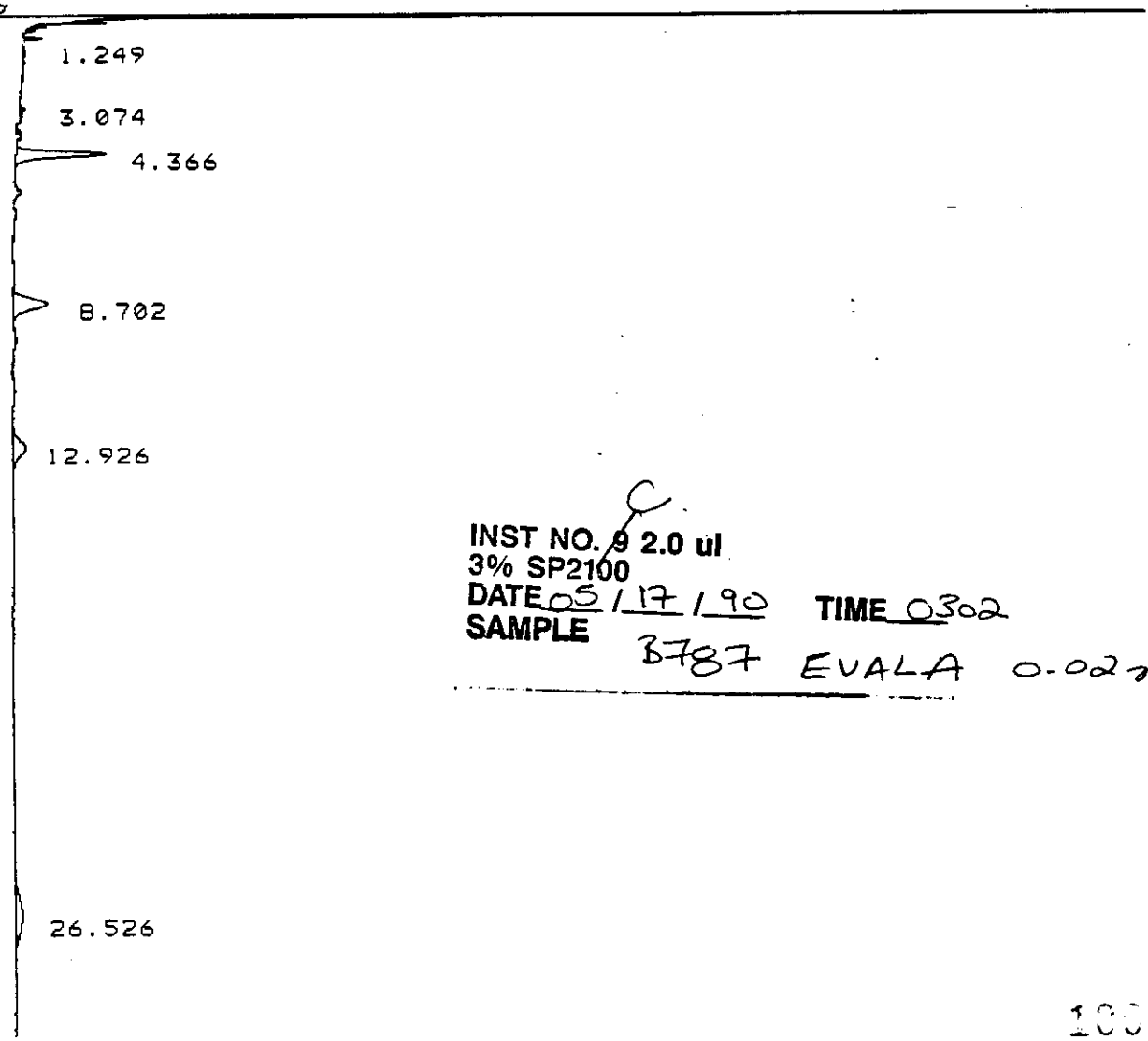
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NC E: 6.1 OFFSET: -18

RACK: 2 VIAL: 13 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~9~~ C 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 0302
SAMPLE
B787 EVALA 0.02 mg

100130

13 906362.00

TABLE: CLP PESTICIDES 3:02 17 MAY 90

CHANNEL NO: 2 SAMPLE: B787 EVAL.01 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	ALDRIN	3693	4.366	0.026	3693	BB	11.00
2	ENDRIN	2542	8.702	0.022	2542	BB	? 20.20
3	DDT	1406	12.926	0.066	1406	BB	? 31.35
4	DBC	2131	26.526	-0.004	2131	BB	? 63.35
TOTALS:		9772		0.110	9772		

DETECTED PKS: 7 REJECTED PKS: 3

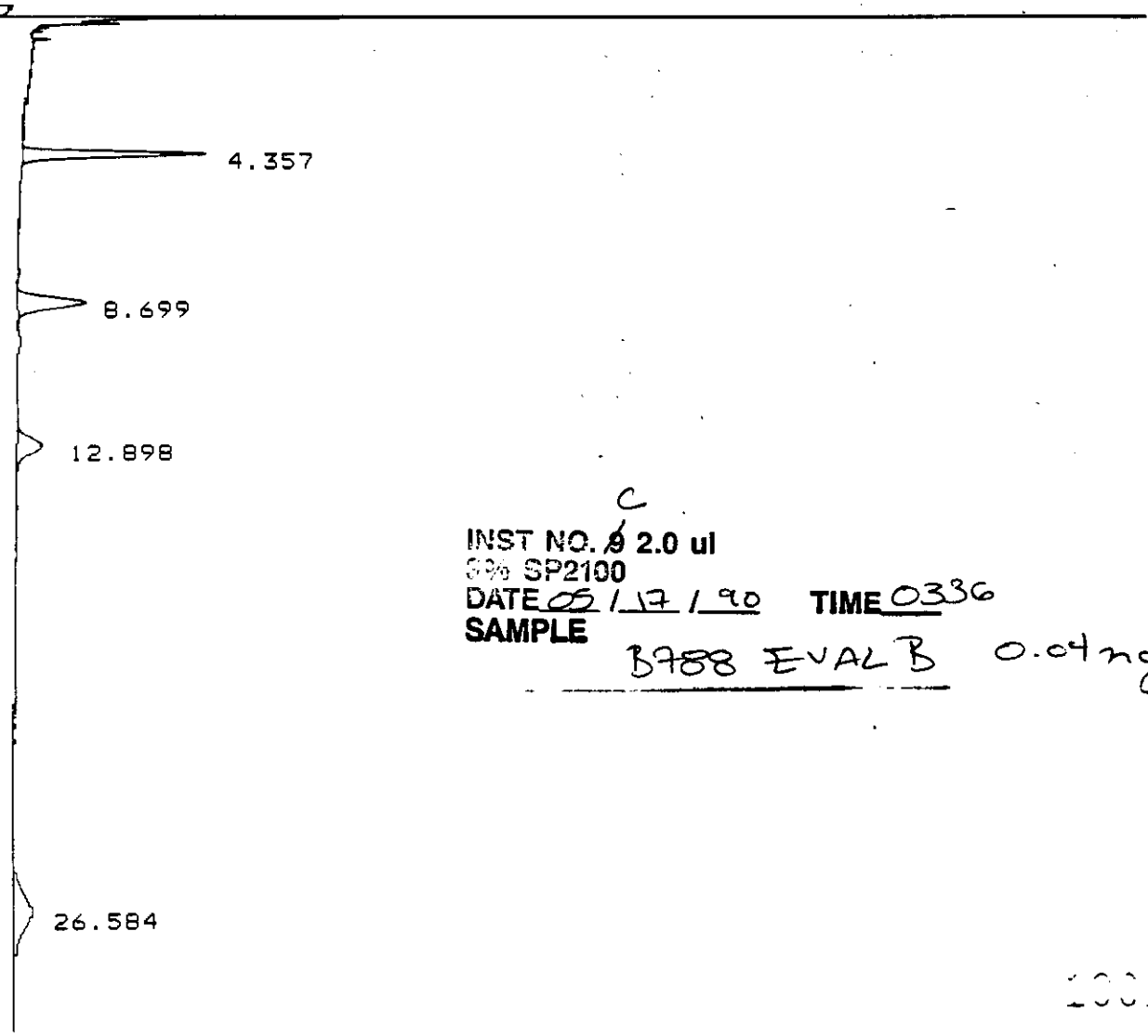
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 7.3 OFFSET: -13

R K: 1 VIAL: 1 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
GIBLOM CTL 2660 PEST SOILS

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~9~~ C 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 0336
SAMPLE
B788 EVAL B 0.04 ng

100187

T_LE: CLP PESTICIDES 3:36 17 MAY 90

CHANNEL NO: 2 SAMPLE: B788 EVAL.02 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	ALDRIN	7356	4.357	0.017	7356	BB	? 11.00
2	ENDRIN	5389	8.699	0.019	5389	BB	? 21.90
3	DDT	3018	12.898	0.038	3018	BB	? 30.75
4	DBC	4610	26.584	0.054	4610	BB	? 71.10
TOTALS:		20373		0.128	20373		

DETECTED PKS: 4 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

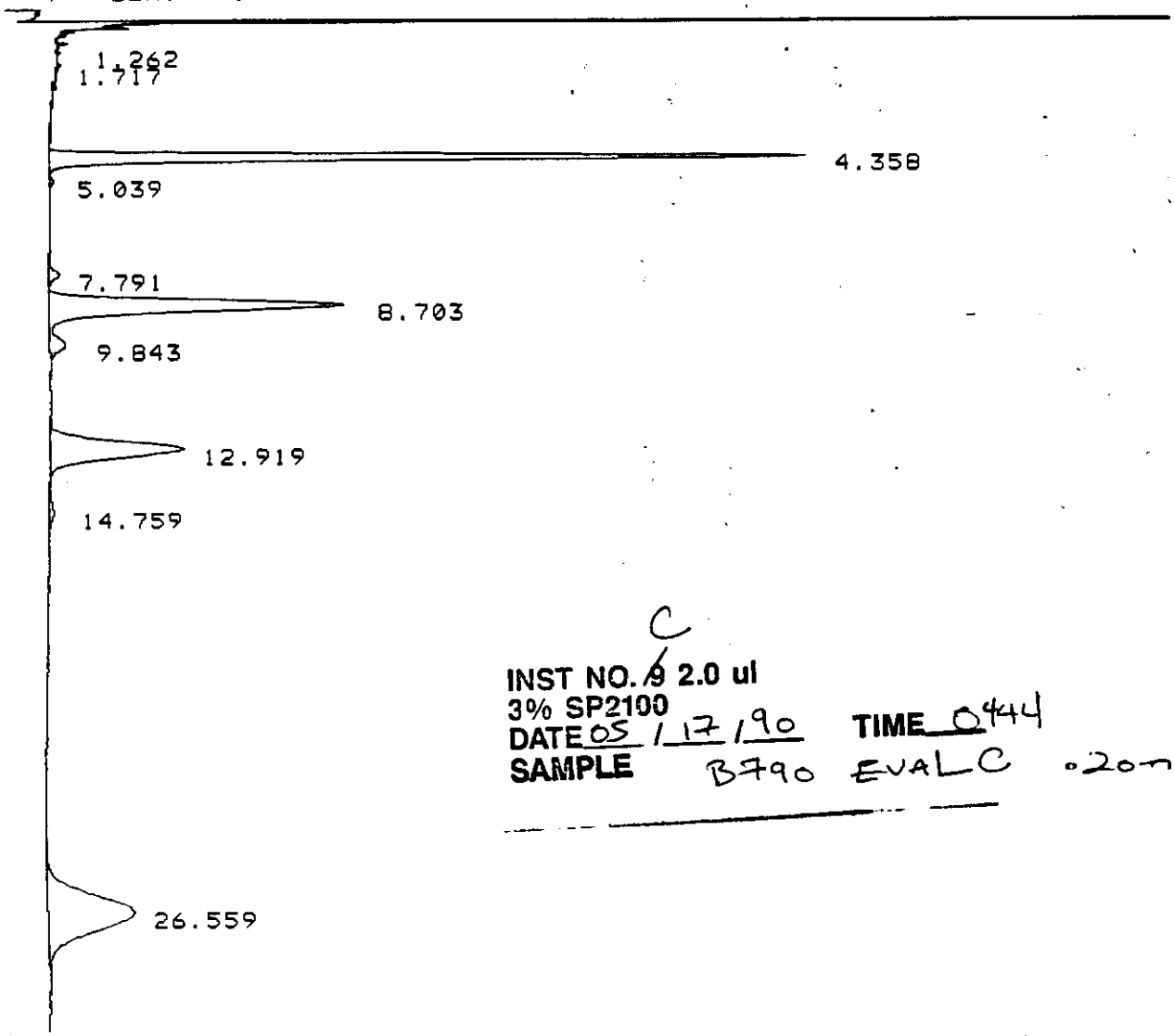
NOISE: 7.3 OFFSET: -16

R .: 1 VIAL: 2 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
IGIBLOM CTL 2660 PEST SOILS

varian 'sunnyvale, calif. p/

CH T SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~9~~ C 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 0444
SAMPLE B790 EVAL C .20ng

100183

TITLE: CLP PESTICIDES 4:44 17 MAY 90

CHANNEL NO: 2 SAMPLE: B790 EVAL.10 METHOD: CLP-2A

PK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	ALDRIN	31422	4.358	0.018	31422	BB	?	11.40
2	ENDRIN	23845	8.703	0.023	23845	VV		21.80
3	ENDRIN ALD	1522	9.843	0.003	1522	VB		26.80
4	DDT	15516	12.919	0.059	15516	BV		31.10
5	END KETONE	715	14.759	0.029	715	T		40.00
6	DBC	22299	26.559	0.029	22299	BB	?	70.40
TOTALS:		95319		0.161	95319			

DETECTED PKS: 11 REJECTED PKS: 5

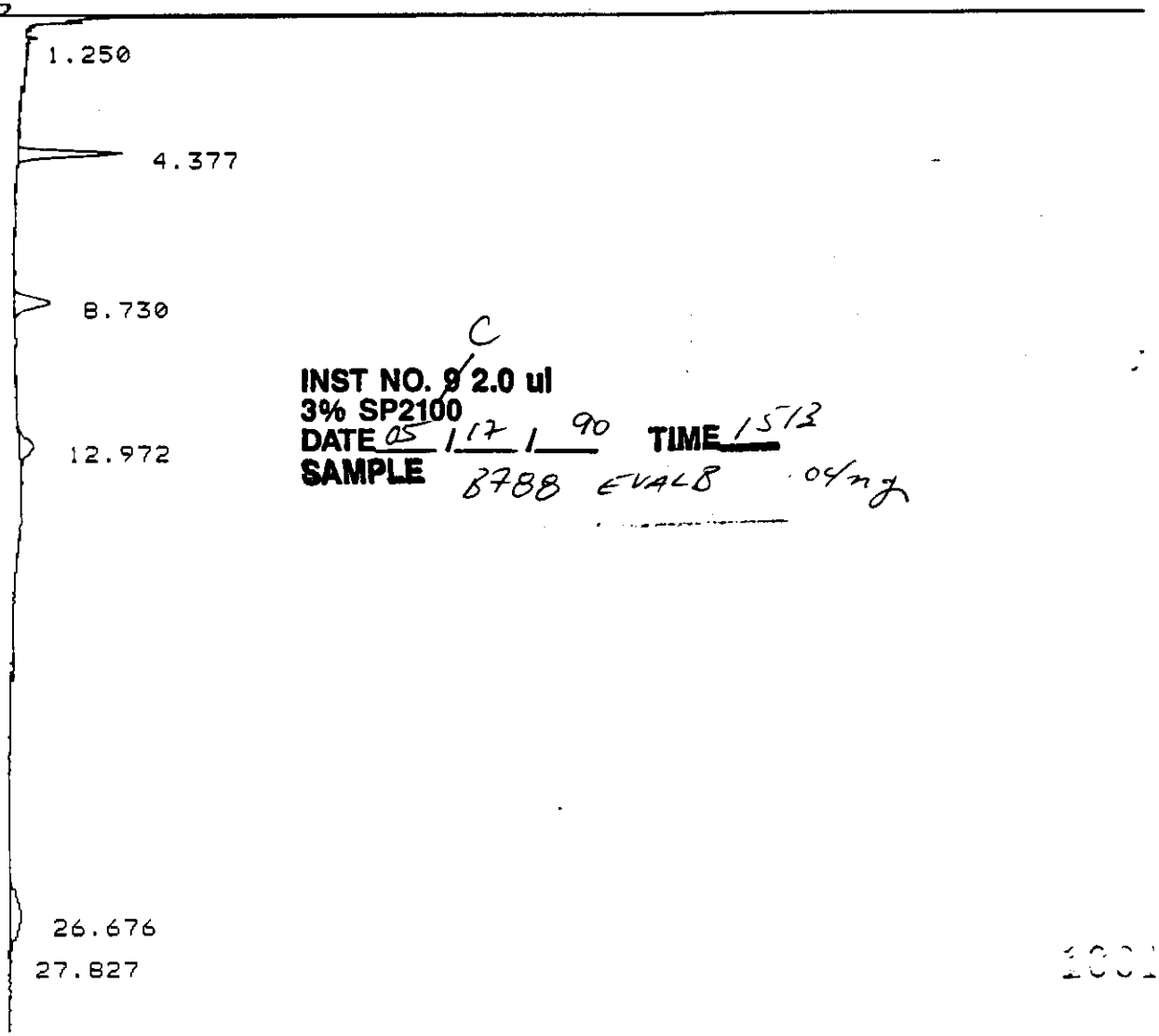
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 7.3 OFFSET: -16

RACK: 1 VIAL: 5 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~9~~ C 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 1513
SAMPLE 8788 EVAL8 .04mg

100131

TITLE: CLP PESTICIDES 15:13 17 MAY 90

CHANNEL NO: 2 SAMPLE: EVALB METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	ALDRIN	4162	4.377	0.037	4162	BB	? 11.40
2	ENDRIN	2909	8.730	0.050	2909	BB	? 21.40
3	DDT	1645	12.972	0.112	1645	BB	27.20
4	DBC	2858	26.676	0.146	2858	BV	? 71.20
TOTALS:		11574		0.345	11574		

DETECTED PKS: 6 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

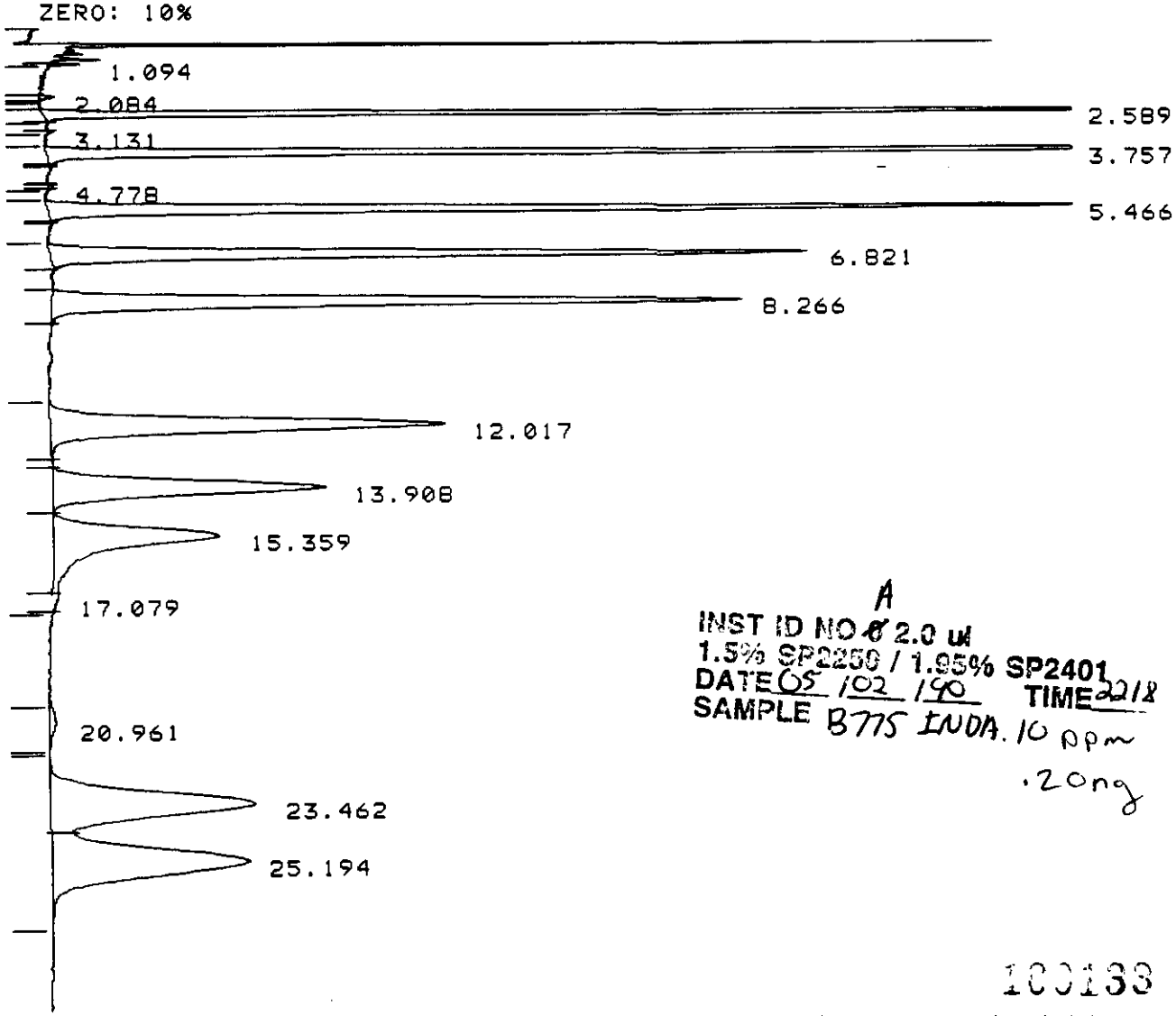
SE: 6.1 OFFSET: -14

RACK: 2 VIAL: 10 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
SXMD CTL 2694 PESTICIDE WATER
ERSCDM CTL 2536 PEST SOILS
NGIBLOM CTL 2660 PEST SOILS

varian /sunnyvale,calif.p/n C

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 / 02 / 90 TIME 2212
SAMPLE B775 INDA. 10 ppm
.20ng

100133

TITLE: CLP PESTICIDES 22:18 2 MAY 90

CH EL NO: 3 SAMPLE: B775 INDA.10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1180	1.094		1180	BB		2.35
2	~~A-BHC~~	1054	2.084	-0.056	1054	BB		4.85
3	G-BHC	187083	2.589	-0.071	187083	BV		5.25
4	ALDRIN	185456	3.757	-0.103	185456	BV	?	7.65
-		533	4.778		533	BV	?	2.60
	HEPT EPOX	173236	5.466	-0.154	173236	BV	?	11.10
7	A-CHLORDAN	159191	6.821	0.061	159191	BB	?	13.90
8	DIELDRIN	175873	8.266	-0.234	175873	BB	?	16.75
9	DDD	152438	12.017	0.127	152438	BB		24.95
10	DDT	114677	13.908	-0.382	114677	BV		27.80
11	ENDRIN ALD	103759	15.359	-0.431	103759	VV		35.30
12		4370	20.961		4370	BV		41.95
13	DBC	147747	23.462	-0.648	147747	VV		47.55
14	ENDRIN KET	157062	25.194	-0.706	157062	VB		52.05
TOTALS:		1563660		-2.597	1563660			

)

DETECTED PKS: 21 REJECTED PKS: 7

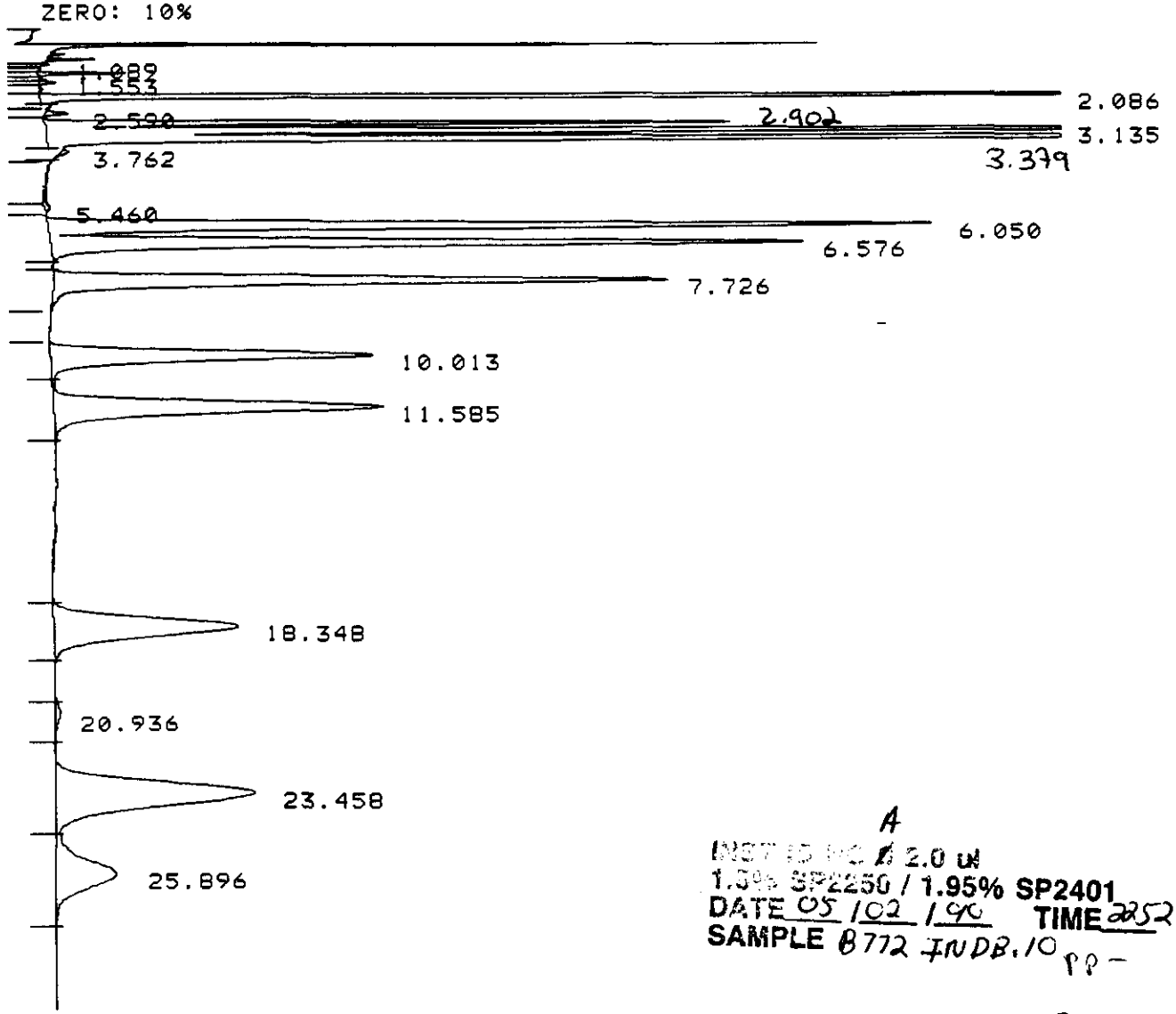
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -21

RACK: 1 VIAL: 7 INJ: 1

NO :
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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



A
INST ED INC Ø 2.0 uL
1.5% SP2250 / 1.95% SP2401
DATE 05 / 02 / 90 TIME 2252
SAMPLE B772 IN DB.10 pp-
.20mg

100130

TITLE: CLP PESTICIDES 22:52 2 MAY 90

NNEL NO: 3 SAMPLE: B776 INDB.10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		4295	1.365		4295	BV		3.15
2		929	1.640		929	VB		4.25
3	A-BHC	222986	2.086	-0.054	222986	BV		4.20
4	G-BHC	2013	2.590	-0.070	2013	T	?	6.80
5	B-BHC	63583	2.902	-0.078	63583	VV		6.15
6	HEPTACHLOR	191492	3.135	-0.085	191492	VV		6.30
7	D-BHC	199424	3.379	-0.101	199424	VV		6.90
	ALDRIN	1310	3.762	-0.098	1310	T	?	27.35
9	HEPT EPOX	926	5.460	-0.160	926	BV	?	11.20
10	G-CHLORDAN	165842	6.050	-0.170	165842	VV-		12.25
11	A-CHLORDAN	158766	6.576	-0.184	158766	VB		13.60
12	DDE	149103	7.726	-0.214	149103	BB		15.65
13	ENDRIN	103001	10.013	-0.267	103001	BV		20.55
14	DDD	123081	11.585	-0.305	123081	VB		23.90
15	ESS	105518	18.348	-0.512	105518	BB	?	37.65
16		4304	20.936		4304	BV		42.10
17	DBC	147679	23.458	-0.652	147679	VV		47.80
18	ENDRIN KET	53770	25.896	-0.004	53770	VB		55.70
TOTALS:		1698020		-2.954	1698020			

DETECTED PKS: 21 REJECTED PKS: 3

DIVISOR: 1.00000 MULTIPLIER: 10000.0

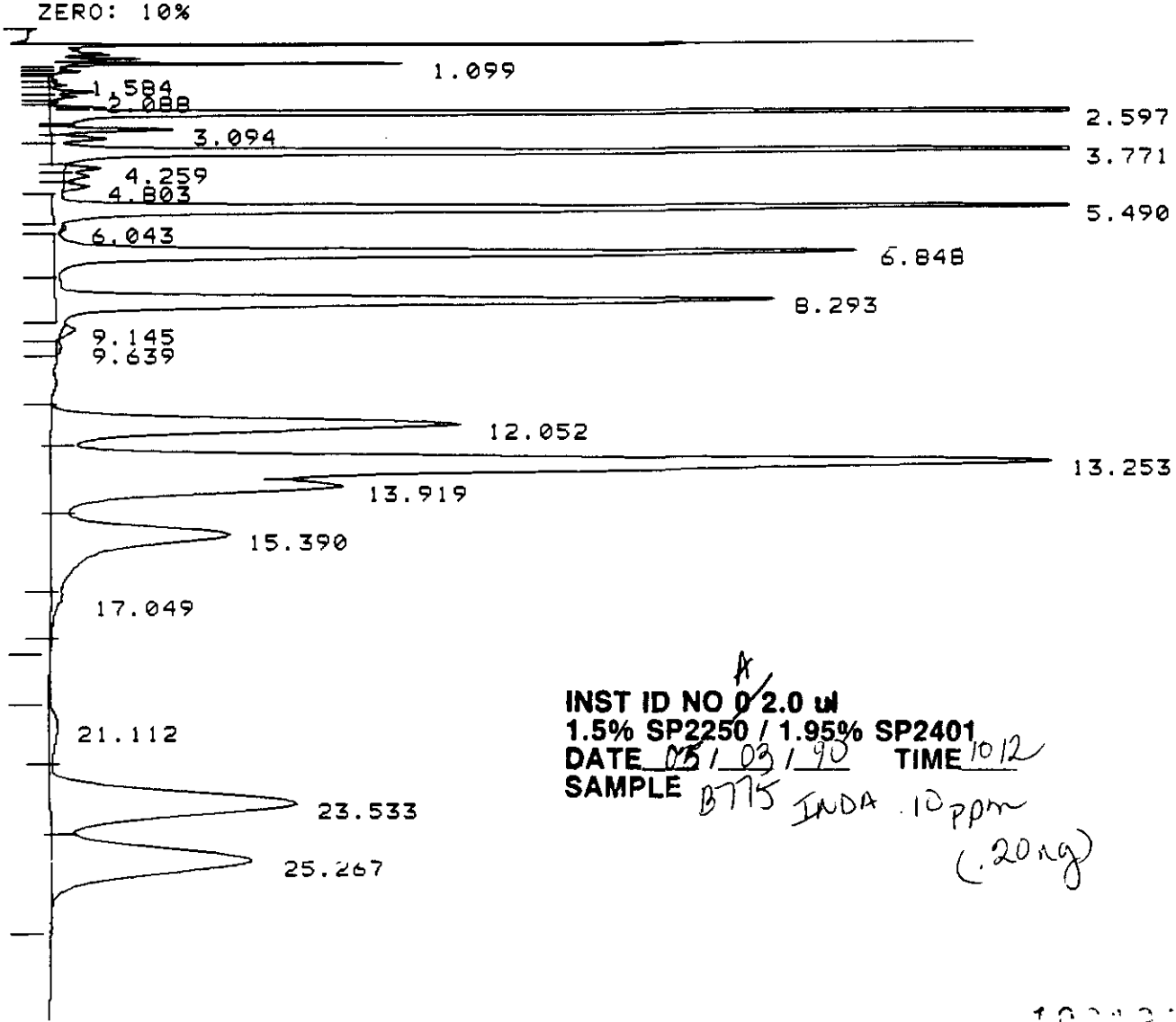
NOISE: 43.7 OFFSET: -22

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
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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

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 / 03 / 90 TIME 1012
SAMPLE B775 INDA .10 ppm
(.20 ng)

TITLE: CLP PESTICIDES 10:12 3 MAY 90

CHANNEL NO: 3 SAMPLE: B775 INDA.10 METHOD: CLP-3A

PE N	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		12854	1.099		12854	BV		2.45
2		884	1.315		884	VB		2.50
3		732	1.584		732	BV	?	6.90
4		1547	1.724		1547	VV		5.10
5		3441	1.940		3441	VV		4.60
6	~~A-BHC~~	2347	2.088	-0.052	2347	VV		6.10
7		578	2.264		578	VV	?	4.90
8		3687	2.437		3687	VV	?	5.10
9	G-BHC	200265	2.597	-0.063	200265	VV		5.20
		13484	3.094		13484	VV		7.10
		7280	3.359		7280	VV	?	9.10
12	ALDRIN	217681	3.771	-0.089	217681	VV		7.65
13		4299	4.259		4299	T	-	11.25
14		3811	4.489		3811	T	?	19.05
15		3955	4.803		3955	T	?	14.40
16	HEPT EPOX	197033	5.490	-0.130	197033	VV		11.35
17	~~G-CHLORDAN~~	715	6.043	-0.177	715	T	?	9.60
18	A-CHLORDAN	178644	6.848	0.088	178644	VV	?	11.00
	DIELDRIN	192484	8.293	-0.207	192484	VV		17.10
		3124	9.145		3124	T	?	26.75
21		610	9.639		610	T	?	7.50
22	DDD	160467	12.052	0.162	160467	BV	?	25.15
23		421630	13.253		421630	VV		27.45
24	DDT	120730	13.919	-0.371	120730	VV	?	37.75
25	ENDRIN ALD	120600	15.390	-0.400	120600	VV		36.45
26		6718	17.049		6718	VB	?	62.60
27		9340	21.112		9340	BV		68.15
28	DBC	179375	23.533	-0.577	179375	VV		47.80
29	ENDRIN KET	158892	25.267	-0.633	158892	VB		51.95
TOTALS:		2227210		-2.449	2227210			

DETECTED PKS: 31 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

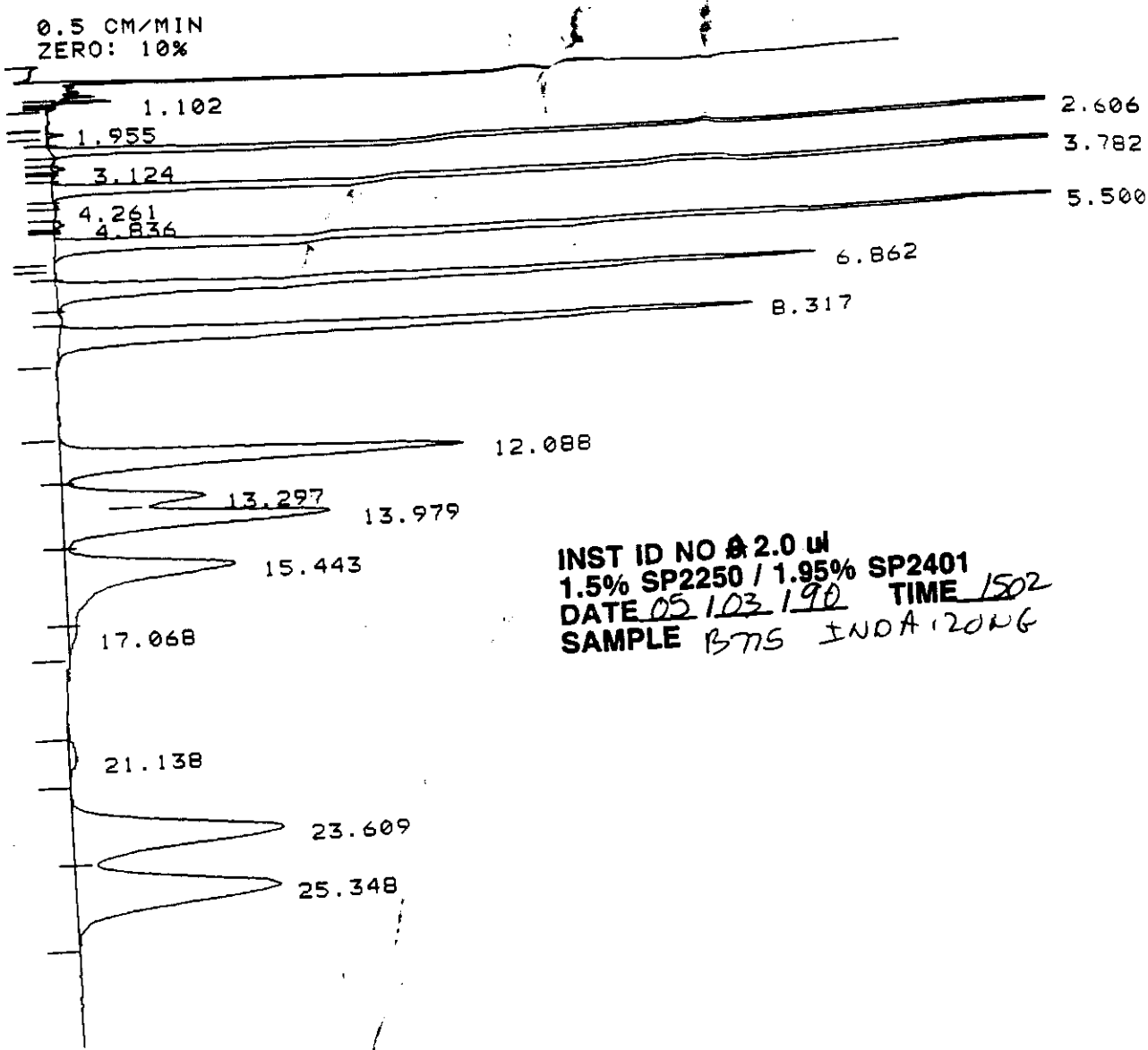
NOISE: 43.7 OFFSET: -16

RAC 3 VIAL: 8 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

100130

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



INST ID NO 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/03/90 TIME 1502
SAMPLE B775 INDA 120NG

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

100130

ORIGINAL (Red)

TIT : CLP PESTICIDES 15:02 3 MAY 90

CHANNEL NO: 3 SAMPLE: B775 INDA.10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		2166	1.102		2166	BV		2.50
2	~~A-BHC~~	1413	2.098	-0.042	1413	VB		5.25
3	G-BHC	189531	2.606	-0.054	189531	BB		5.20
4	HEPTACHLOR	1214	3.124	-0.096	1214	BB	?	7.45
5	ALDRIN	188284	3.782	-0.078	188284	VV		7.65
6		1182	4.836		1182	BV	?	6.00
7	HEPT EPOX	179246	5.500	-0.120	179246	VB		11.05
8	~~A-CHLORDANE~~ ENDO I	166200	6.862	0.102	166200	BB		14.00
9	DIELDRIN	182513	8.317	-0.183	182513	BB		16.85
10	~~DDDENDO I~~	159114	12.088	0.198	159114	BV		24.90
11		59785	13.297		59785	VV	?	27.30
12	DDT	121898	13.979	-0.311	121898	VV		29.85
13	ENDRIN ALD	112508	15.443	-0.347	112508	VV		36.30
		4750	17.068		4750	VB	?	70.50
		4211	21.138		4211	BV		42.70
16	DBC	154410	23.609	-0.501	154410	VV		47.80
17	ENDRIN KET	161554	25.348	-0.552	161554	VB		52.10
TOTALS:		1689980		-1.984	1689980			

DETECTED PKS: 22 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

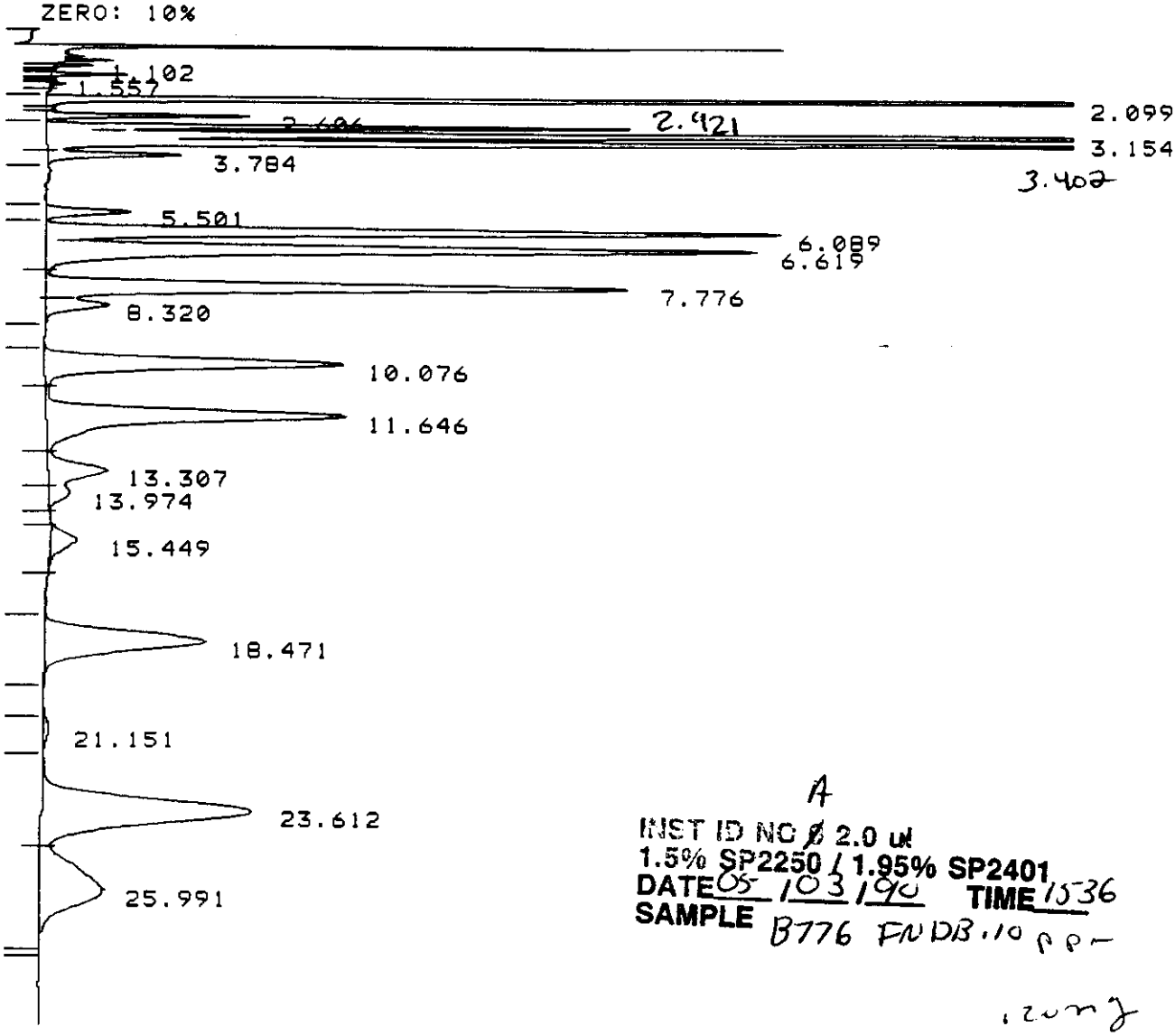
NO : 43.7 OFFSET: -15

RACK: 4 VIAL: 2 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
F$E AVTEX CTL 2592 AND 2655 PCB WATER
RSCDM CTL 2536 PESTICIDE SOILS

ORIGINAL
(Red)

CHART SPEED 0.5 CM/MIN
AT 1: 16 ZERO: 10%



A

INST ID NO Ø 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 03 / 90 TIME 1536
SAMPLE B776 FNDB .10 ppm

.20mg

100141

ORIGINAL
(Red)

TITLE: CLP PESTICIDES 15:36 3 MAY 90

CHANNEL NO: 3 SAMPLE: B776 INDB.10 METHOD: CLP-3A

PE. NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1563	1.102		1563	BB		2.65
2		4193	1.373		4193	BB		3.30
3		988	1.652		988	VB		3.50
4	A-BHC	206327	2.099	-0.041	206327	BV		4.25
5	G-BHC	17680	2.606	-0.054	17680	VV	?	3.50
6	B-BHC	54418	2.921	-0.059	54418	VV		6.25
7	HEPTACHLOR	180484	3.154	-0.066	180484	VV		6.40
8	D-BHC	157923	3.402	-0.078	157923	VV		7.05
9	ALDRIN	18487	3.784	-0.076	18487	VB		8.85
	HEPT EPOX	14904	5.501	-0.119	14904	BV		11.35
	G-CHLORDAN	141799	6.089	-0.131	141799	VV		12.80
12	A-CHLORDAN	163867	6.619	-0.141	163867	VV		14.05
13	DDE	141779	7.776	-0.164	141779	VV	-	16.05
14	DIELDRIN	16704	8.320	-0.180	16704	VB	?	19.10
15	ENDRIN	95995	10.076	-0.204	95995	BV		20.80
16	DDD	119742	11.646	-0.244	119742	VV		23.55
17		25919	13.307		25919	VV	?	31.05
18	DDT	8378	13.974	-0.316	8378	VB	?	45.65
	ENDRIN ALD	12118	15.449	-0.341	12118	BB		31.30
20	ESS	90064	18.471	-0.389	90064	BB		37.20
21		3978	21.151		3978	BV		39.20
22	DBC	154504	23.612	-0.498	154504	VV		48.05
23	ENDRIN KET	70218	25.991	0.091	70218	VB	?	69.70
TOTALS:		1702030		-3.010	1702030			

DETECTED PKS: 25 REJECTED PKS: 2

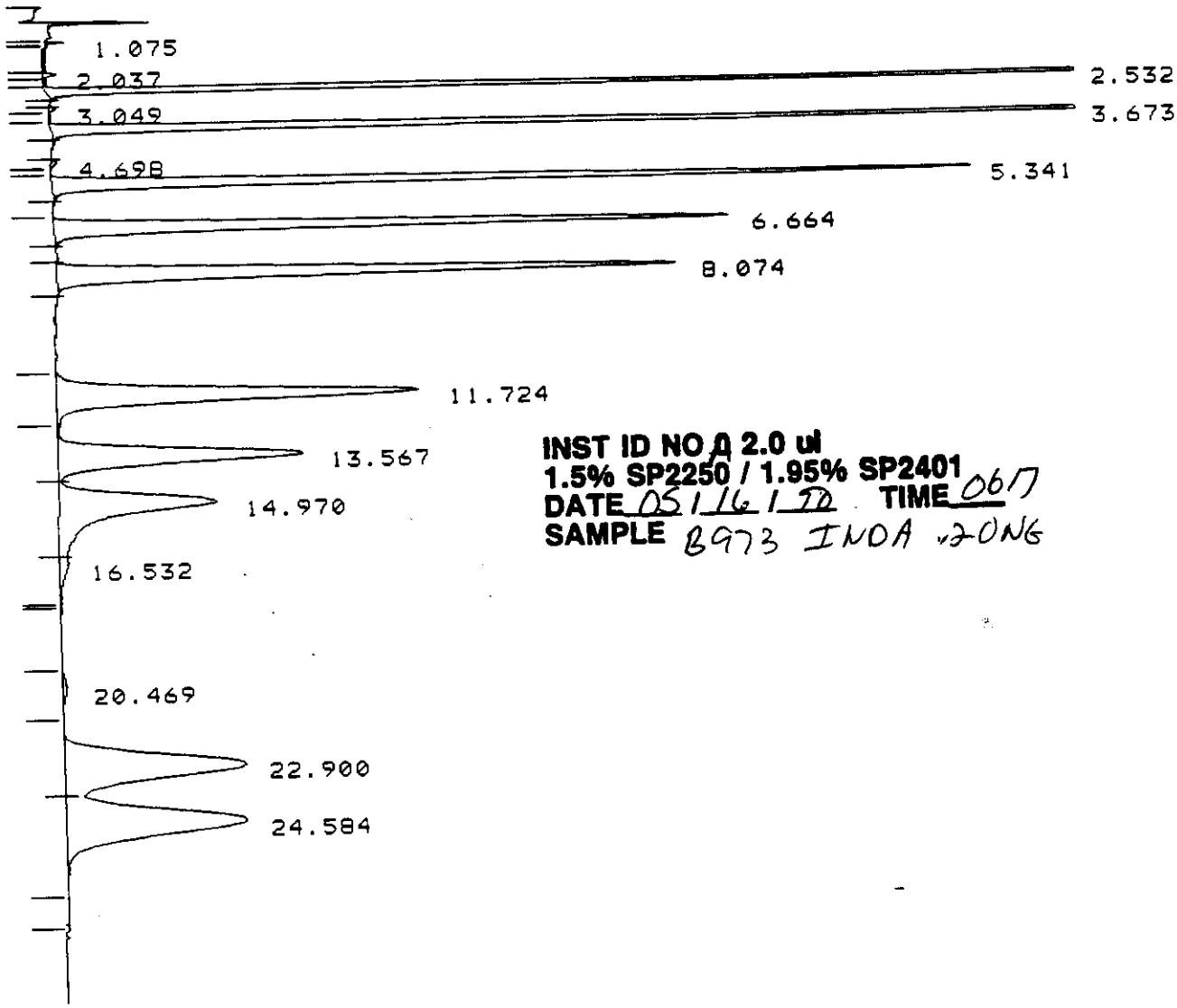
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -17

RACK: 4 VIAL: 4 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
OPT= OUTSIDE RETENTION TIME WINDOW
AVTEX CTL 2592 AND 2655 PCB WATER
SCDM CTL 2536 PESTICIDE SOILS

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



INST ID NO Д 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/10 TIME 0617
SAMPLE B973 INDA .20NG

TITLE: CLP PESTICIDES B9T3 INDA.10 6:17 16 MAY 90

ORIGINAL (Red)

CHANNEL NO: 3 SAMPLE: ~~RB8016~~ JKR 05/16/90 METHOD: CLP-3A

PK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		729	1.075		729	BB		2.50
2	~~A-BHC~~	976	2.037	-0.043	976	BB		4.65
3	G-BHC	163436	2.532	-0.048	163436	BB		5.10
4	~~HEPTACHLOR~~	772	3.049	-0.071	772	BB		5.90
5	ALDRIN	159053	3.673	-0.067	159053	BB	?	7.50
6		1164	4.698		1164	BB		9.30
7	HEPT EPOX	151558	5.341	-0.099	151558	BB		10.85
8	A-ENDOSULF	139733	6.664	-0.126	139733	BB		13.65
9	DIELDRIN	152806	8.074	-0.146	152806	BB		16.45
10	~~DDE~~ B-Endosulf	137433	11.724	0.204	137433	BV		24.30
11	DDT	103569	13.567	-0.253	103569	VV		27.45
12	ENDRIN ALD	95678	14.970	-0.300	95678	VV		34.55
13		5598	16.532		5598	VB	?	75.40
14		3569	20.469		3569	BV		41.85
15	DBC	129503	22.900	-0.440	129503	VV		47.00
16	ENDRIN KET	139556	24.584	-0.476	139556	VB		50.20
TOTALS:		1385130		-1.865	1385130			

DETECTED PKS: 16 REJECTED PKS: 0

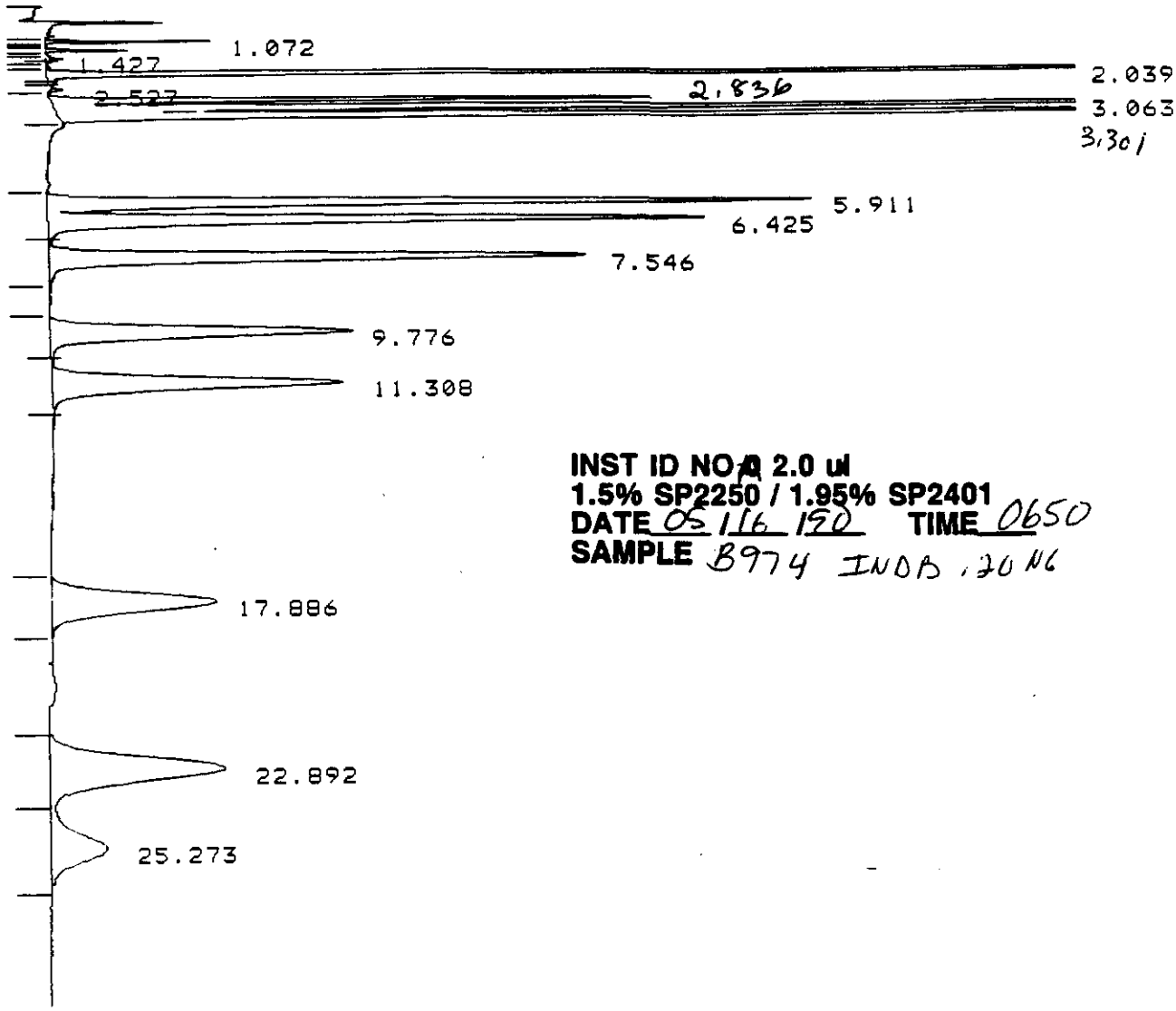
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -8

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
OMC WAUK CTL2638 AND 2672 PCB WATERS

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



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/90 TIME 0650
SAMPLE B974 INDB .20 NG

100143

TITLE: CLP PESTICIDES B974 IND B.10 JKR 6:50 16 MAY 90

CHANNEL NO: 3 SAMPLE: ~~18297~~ 05/16/90 METHOD: CLP-3A

PK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		6167	1.072		6167	BV	2.45
2		4061	1.335		4061	VV	3.00
3		955	1.604		955	VV	3.85
4	A-BHC	186965	2.039	-0.041	186965	VV	4.05
5	~~G-BHC~~	967	2.527	-0.053	967	T	? 6.30
6	B-BHC	53058	2.836	-0.054	53058	VV	5.95
7	HEPTACHLOR	156942	3.063	-0.057	156942	VV	6.20
8	D-BHC	165196	3.301	-0.059	165196	VB	6.70
9	G-CHLORDAN	140061	5.911	-0.109	140061	BV	12.10
10	A-CHLORDAN	135913	6.425	-0.115	135913	VV	13.35
11	DDE	128259	7.546	-0.134	128259	VB	15.50
12	ENDRIN	93422	9.776	-0.184	93422	BV	20.00
13	DDD	103778	11.308	-0.212	103778	VB	23.25
14	ESS	92033	17.886	-0.364	92033	BB	? 36.50
15	DBC	124736	22.892	-0.448	124736	BV	46.85
16	~~ENDRIN KET~~ Methoxychlor	46844	25.273	0.213	46844	VB	53.25
	ALS:	1439360		-1.617	1439360		

DETECTED PKS: 21 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

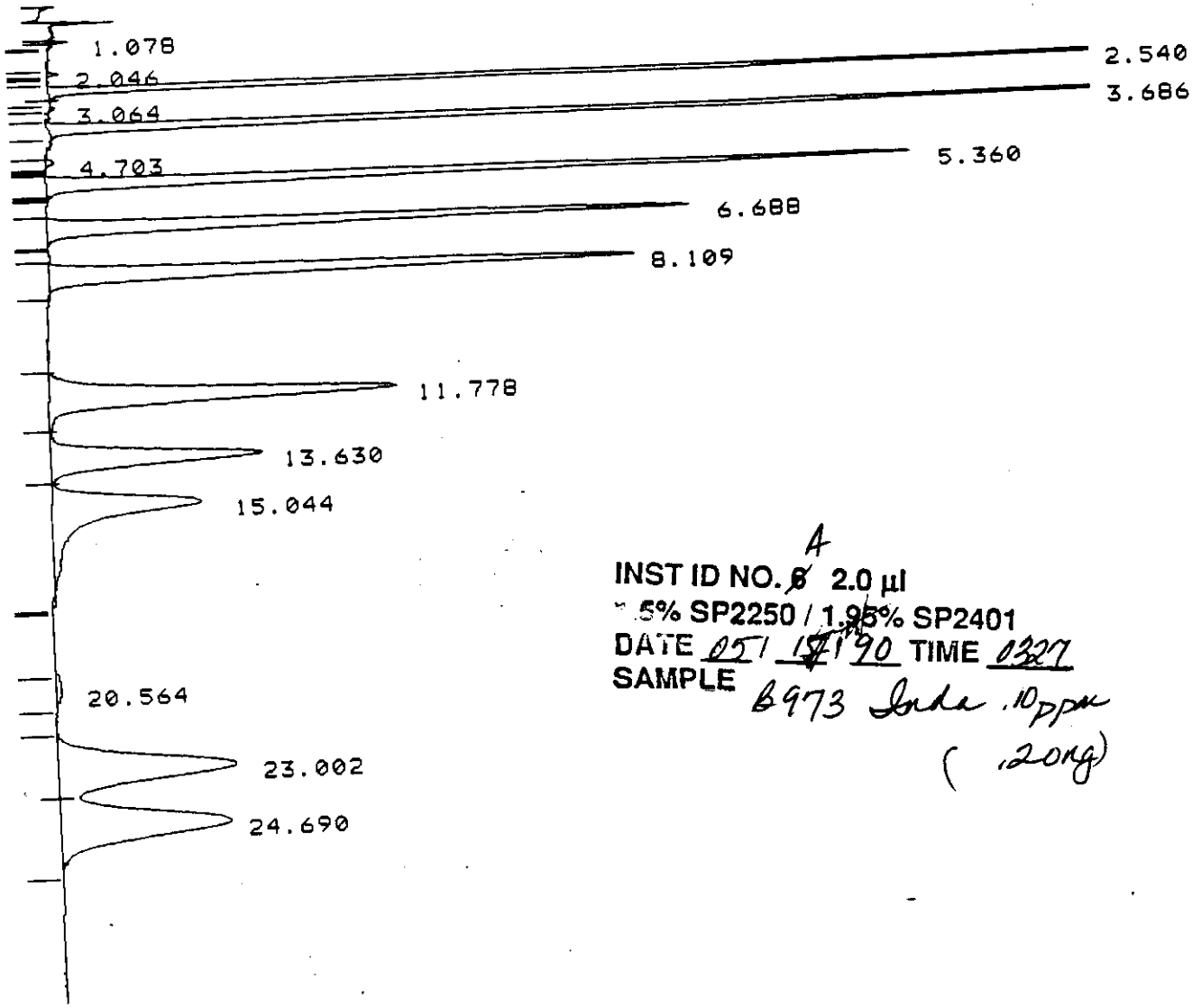
NOISE: 41.3 OFFSET: -14

RACK: 1 VIAL: 8 INJ: 1

ES:
OL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
OMC WAUK CTL2638 AND 2672 PCB WATERS

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

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



INST ID NO. ~~6~~ 4 2.0 µl
.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 0327
SAMPLE B973 Intra .10ppm
(.20ng)

varian Sunnyvale, Calif. p/n 03-906362-00

100147

TITLE: CLP PESTICIDES 3:27 17 MAY 90

CHANNEL NO: 3 SAMPLE: B973 INDA.10 METHOD: CLP-3A

PF	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		770	1.078		770	BV		2.55
2	A-BHC	912	2.046	-0.034	912	BV		4.50
3	G-BHC	153485	2.540	-0.040	153485	BB		5.15
4	HEPTACHLOR	571	3.064	-0.056	571	BB	?	5.85
5	ALDRIN	150472	3.686	-0.054	150472	BB		7.50
6		1151	4.703		1151	BB		9.05
7	HEPT EPOX	144284	5.360	-0.080	144284	BV		11.00
8	A-ENDOSULF	134463	6.688	-0.102	134463	BB		13.80
9	DIELDRIN	147316	8.109	-0.111	147316	BB		16.65
10	B-ENDOSULF	137024	11.778	-0.172	137024	BV		24.70
11	DDT	90217	13.630	-0.190	90217	VV		27.75
12	ENDRIN ALD	97132	15.044	-0.226	97132	VB		34.55
13		3075	20.564		3075	BB	?	36.00
14	DBC	124484	23.002	-0.338	124484	BV		46.90
15	ENDRIN KET	130529	24.690	-0.370	130529	VB		50.55
TOTALS:		1315880		-1.773	1315880			

ECTED PKS: 18 REJECTED PKS: 3

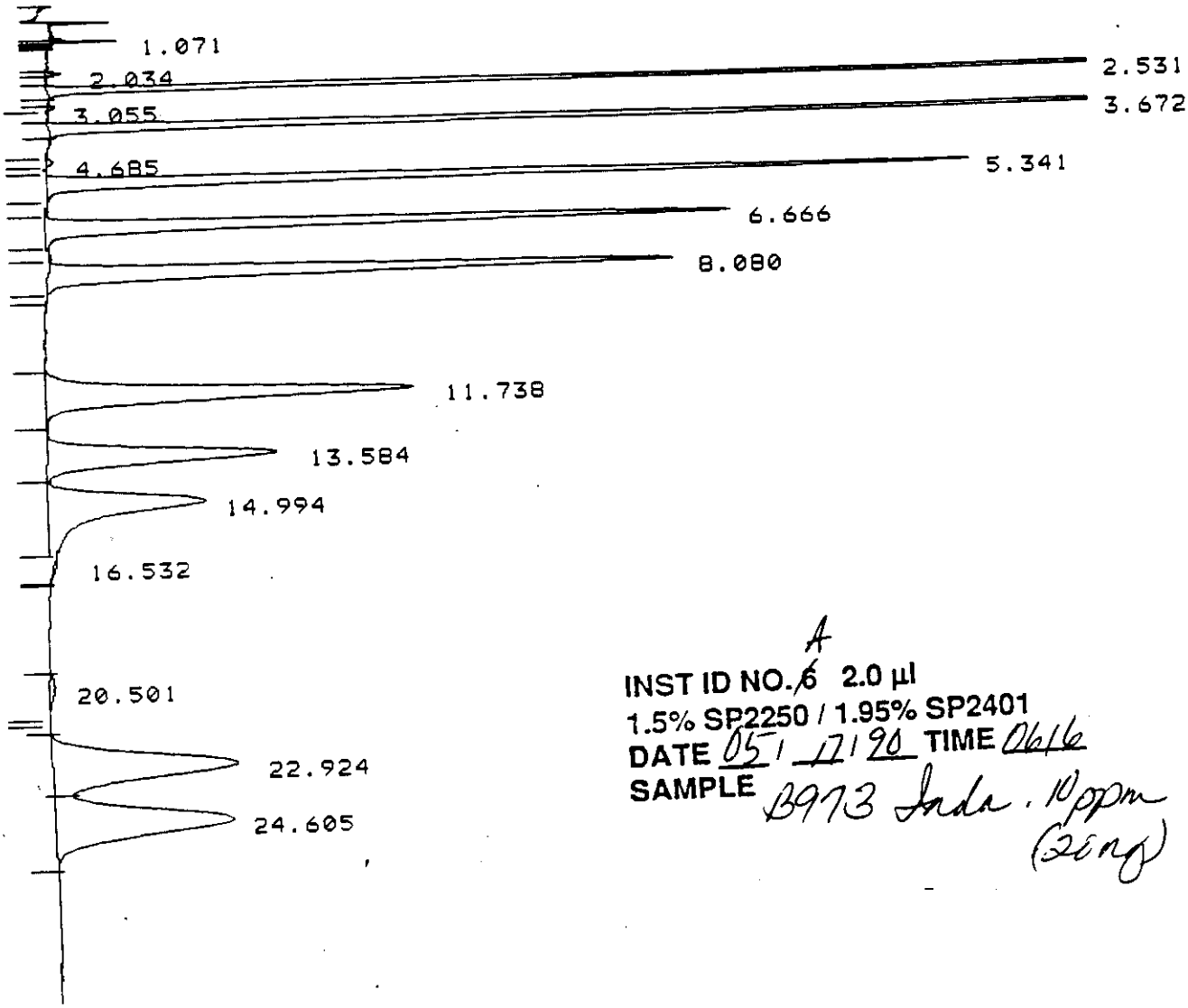
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -47

RACK: 3 VIAL: 4 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
MT INJ.2UL/INSTRUMENT LETTER A
RT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

HART SPEED 0.5 CM/MIN
TTEN: 16 ZERO: 10%



INST ID NO. ~~6~~ A 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 0616
SAMPLE B973 Inda. 10ppm (20ng)

TITLE: CLP PESTICIDES 6:16 17 MAY 90

NEL NO: 3 SAMPLE: B973 INDA.10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		2309	1.071		2309	BB	2.30
2	A-BHC	975	2.034	-0.046	975	BB	4.65
3	G-BHC	163512	2.531	-0.049	163512	BB	5.10
4	HEPTACHLOR	688	3.055	-0.065	688	BB	5.30
5	ALDRIN	159715	3.672	-0.068	159715	BB	7.45
6		1026	4.685		1026	BB	9.85
7	HEPT EPOX	153602	5.341	-0.099	153602	BB	10.95
8	A-ENDOSULF	142603	6.666	-0.124	142603	BB	13.75
9	DIELDRIN	156716	8.080	-0.140	156716	BB	16.50
10	B-ENDOSULF	141912	11.738	-0.212	141912	BV	24.60
11	DDT	96117	13.584	-0.236	96117	VV	27.60
12	ENDRIN ALD	98089	14.994	-0.276	98089	VV	34.75
13		783	16.532		783	T	? 61.30
14		3777	20.501		3777	BB	38.90
15	DBC	129364	22.924	-0.416	129364	BV	46.90
16	ENDRIN KET	136138	24.605	-0.455	136138	VB	50.90
TOTALS:		1387330		-2.186	1387330		

DETECTED PKS: 17 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

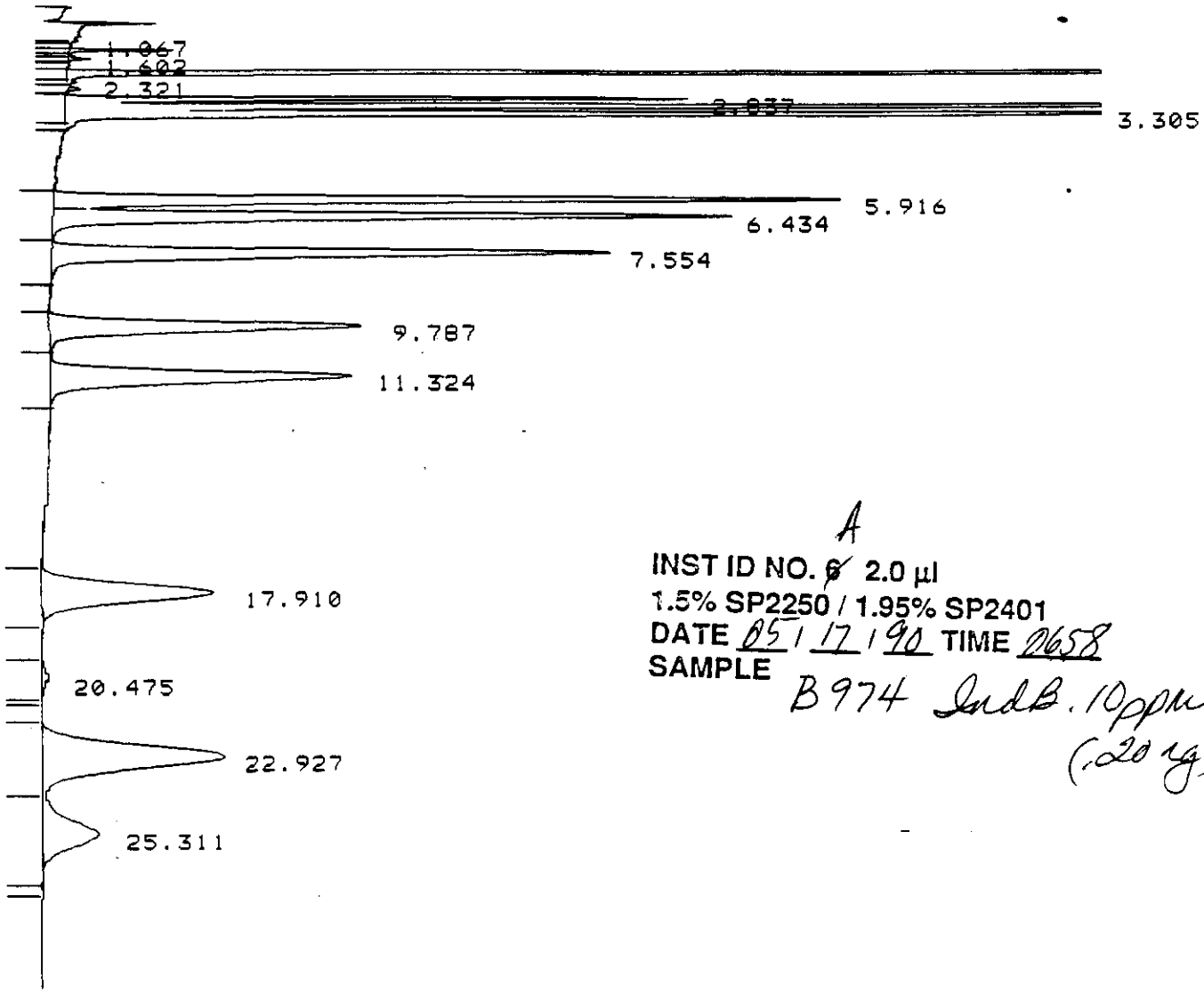
NOISE: 36.4 OFFSET: -42

RACK: 3 VIAL: 10 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

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

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



A
INST ID NO. ~~6~~ 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 2658
SAMPLE
B974 IndB. 10ppm
(.20 ng)

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

TITLE: CLP PESTICIDES 6:58 17 MAY 90

CHANNEL NO: 3 SAMPLE: B974 INDB.10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		5040	1.336		5040	BV		3.05
2		1109	1.602		1109	VB	?	2.00
3	A-BHC	196425	2.040	-0.040	196425	BV		4.10
4	G-BHC	1177	2.529	-0.051	1177	T		5.75
5	B-BHC	57153	2.837	-0.053	57153	VV		6.05
6	HEPTACHLOR	167225	3.065	-0.055	167225	VV		6.20
7	D-BHC	175630	3.305	-0.055	175630	VV		6.75
8	G-CHLORDAN	147646	5.916	-0.104	147646	BV		12.20
9	A-CHLORDAN	142301	6.434	-0.106	142301	VV		13.40
10	DDE	134461	7.554	-0.126	134461	VB		15.55
11	ENDRIN	98566	9.787	-0.173	98566	BV		20.25
12	DDD	109712	11.324	-0.196	109712	VB		23.35
13	ESS	94471	17.910	-0.340	94471	BB	?	36.80
14		3566	20.475		3566	BB		40.25
15	DBC	131092	22.927	-0.413	131092	BV		46.90
16	ENDRIN KET	46526	25.311	0.251	46526	VB		53.55
TOTALS:		1512100		-1.461	1512100			

DETECTED PKS: 21 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

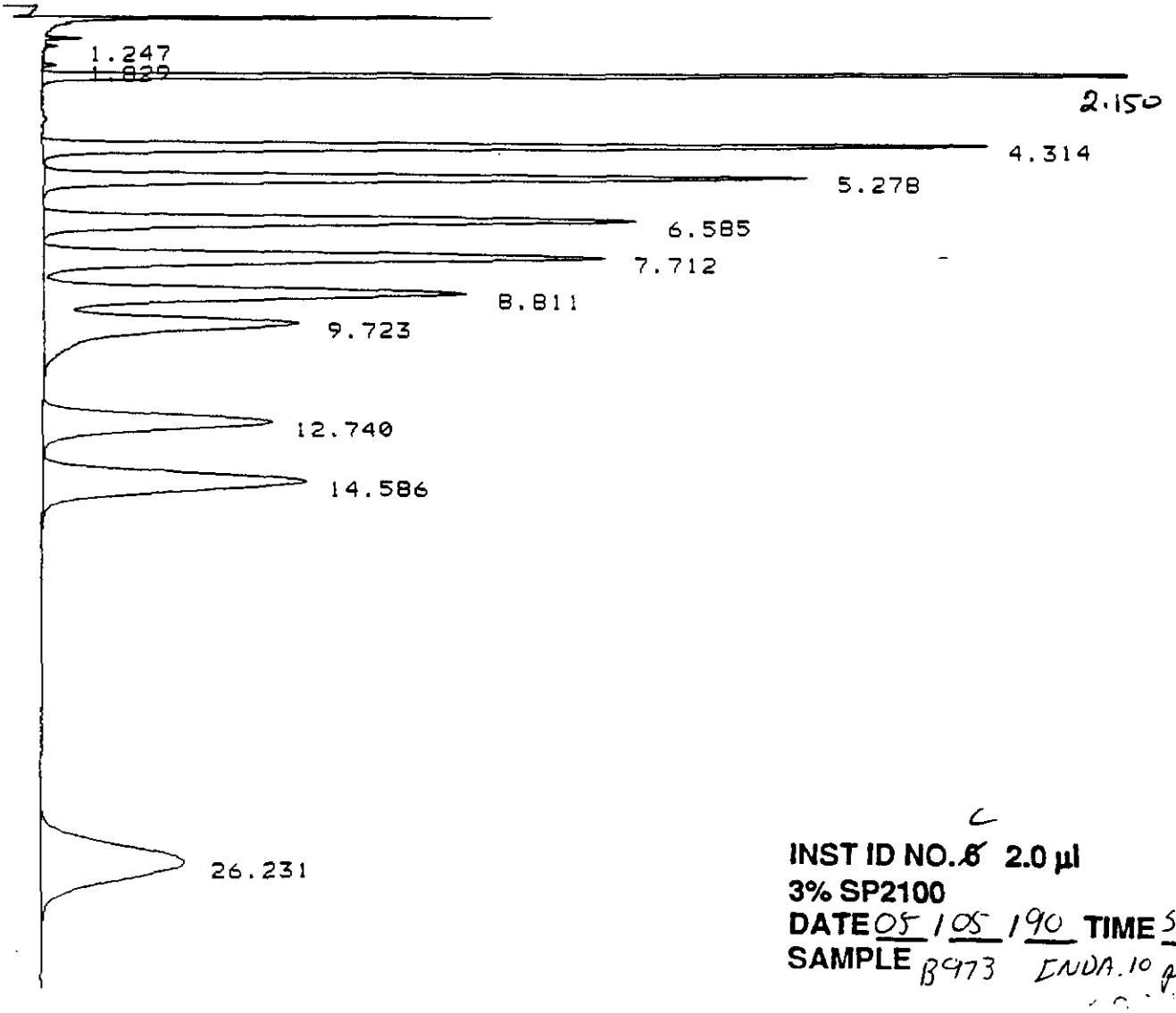
NOISE: 36.4 OFFSET: -83

CH: 3 VIAL: 11 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
^SXMD CTL2694 PESTICIDE WATERS

varian /sunnyvale, calif. p/n

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. 6 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 517
SAMPLE B973 ENDA.10 ppm
(~20 ng)

TITLE: CLP PESTICIDES 5:17 5 MAY 90

CHANNEL NO: 2 SAMPLE: B973 INDA.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
	G-BHC	37811	2.150	-0.010	37811	VB	5.80
2	ALDRIN	41443	4.314	-0.026	41443	BB	? 11.55
3	HEPT EPOX	40515	5.278	-0.032	40515	BB	13.80
4	A-ENDOSULF	38744	6.585	-0.045	38744	BV	17.10
5	~~DDE~~/DIELD.	42417	7.712	-0.058	42417	VV	19.80
6	B-ENDOSULF	36897	8.811	-0.079	36897	VV	22.85
7	~~DDD~~ End. ALD.	30046	9.723	-0.067	30046	VB	27.85
8	DDT	27667	12.740	-0.120	27667	BV	31.45
9	END KETONE	37258	14.586	-0.144	37258	VB	36.45
	DBC	37443	26.231	-0.299	37443	BB	? 68.10
TOTALS:		370241		-0.880	370241		

DETECTED PKS: 12 REJECTED PKS: 2

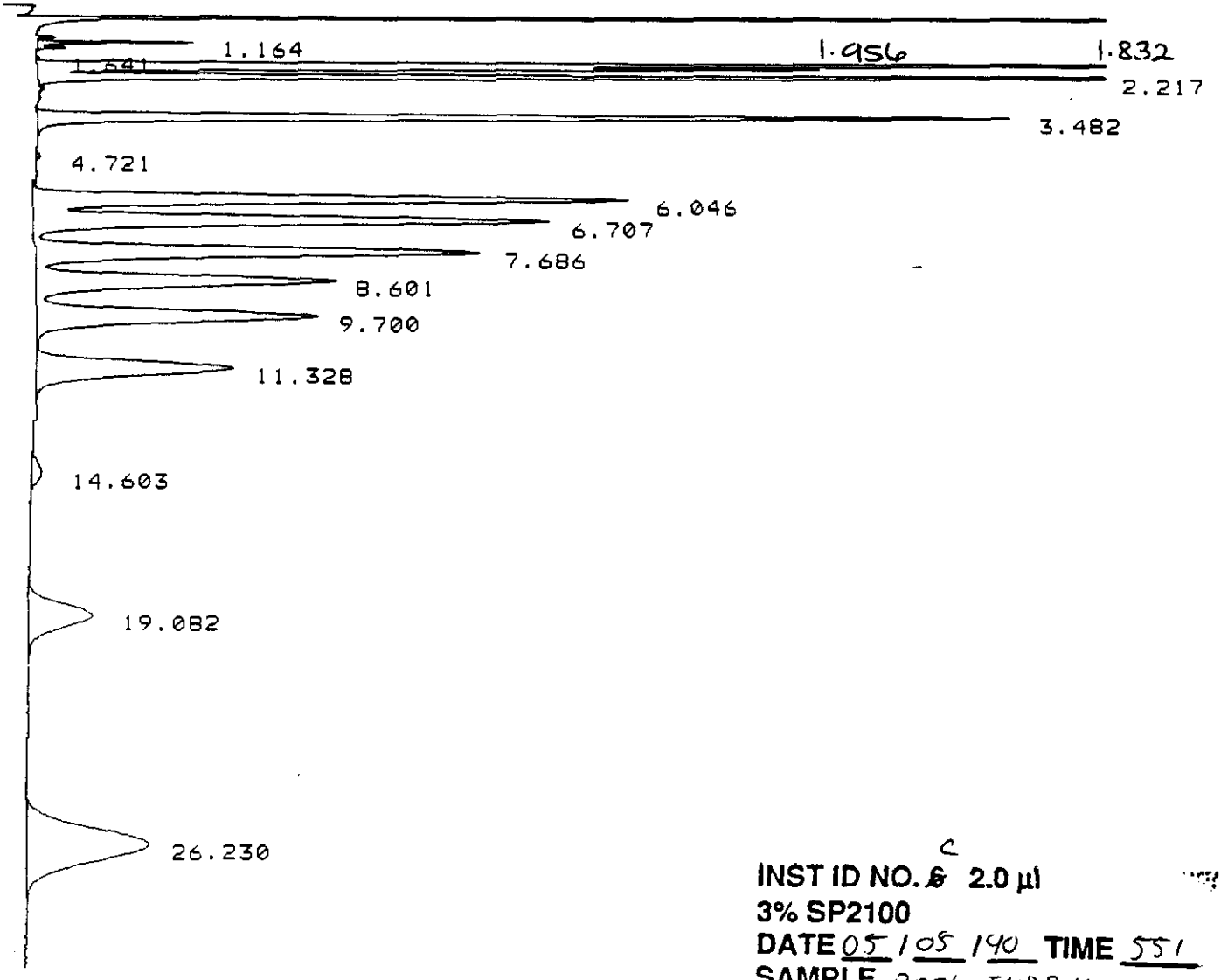
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 8.5 OFFSET: -16

RACK: 1 VIAL: 7 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
CLP STANDARDS - QUANT

CI .T SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~6~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 551
SAMPLE B776 INDB.10 ppm

ORIGINAL (Red)

TI :: CLP PESTICIDES 5:51 5 MAY 90

CHANNEL NO: 2 SAMPLE: B776 INDB.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		2105	1.164		2105	BV		3.25
2	A-BHC	37915	1.832	0.002	37915	VV		5.20
3	B-BHC	15778	1.956	-0.004	15778	VV	?	6.70
4	D-BHC	35176	2.217	-0.003	35176	VV		6.05
	HEPTACHLOR	36634	3.482	-0.018	36634	BB		9.45
	G-CHLORDAN	36892	6.046	-0.044	36892	BV	?	15.95
7	A-CHLORDAN	35652	6.707	-0.053	35652	VV	?	17.70
8	DDE ~~DIELD~~.	33985	7.686	-0.084	33985	VV		19.50
9	ENDRIN	26681	8.601	-0.079	26681	VV	-	22.40
10	DDD	27346	9.700	-0.090	27346	VV		24.50
11	ESS	22140	11.328	-0.122	22140	VB		28.90
12	~~END KETONE~~	1395	14.603	-0.127	1395	BB		33.60
13	METHOXYCHL	11893	19.082	-0.208	11893	BB		47.20
14	DBC	32451	26.230	-0.300	32451	BB	?	67.75
TO LS:		356043		-1.130	356043			

DETECTED PKS: 18 REJECTED PKS: 4

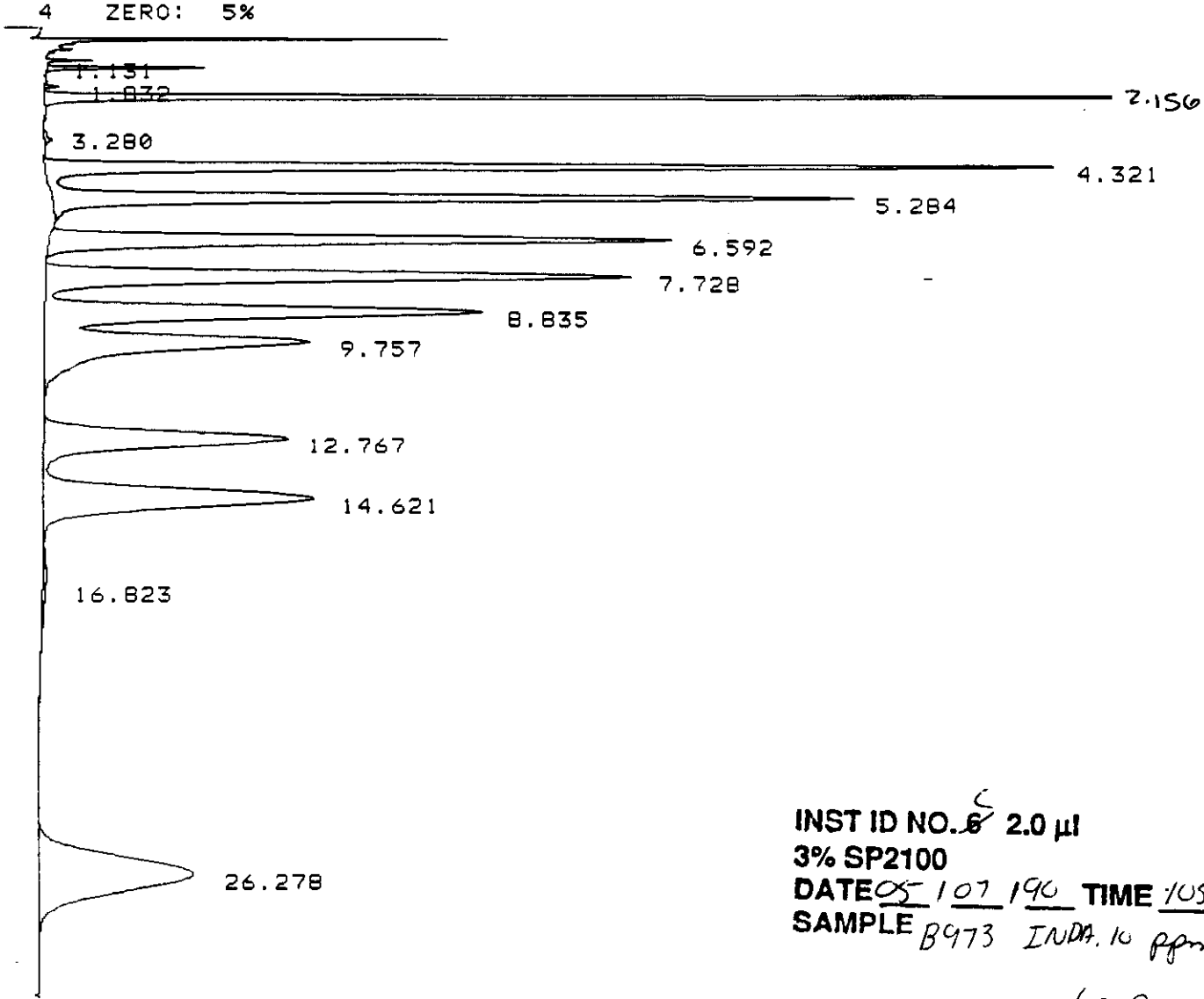
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 8.5 OFFSET: -18

RACK: 1 VIAL: 8 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
CLP STANDARDS - QUANT

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~6~~ 5 2.0 µl
3% SP2100
DATE 05 / 07 / 90 TIME 1058
SAMPLE B973 INDA. 10 ppm
(0.20 ng)

TITLE: CLP PESTICIDES 10:58 7 MAY 90

CHANNEL NO: 2 SAMPLE: B973 INDA.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		2291	1.254		2291	VB		3.60
2	G-BHC	40810	2.156	-0.004	40810	VB		5.80
3	ALDRIN	45692	4.321	-0.019	45692	BV	?	11.65
	HEPT EPOX	45814	5.284	-0.026	45814	VB	?	14.50
	A-ENDOSULF	41846	6.592	-0.038	41846	BB	?	17.45
6	~~DDE~~/DIELD.	45925	7.728	-0.042	45925	BV		20.15
7	B-ENDOSULF	40078	8.835	-0.055	40078	VV		23.35
8	~~DDD~~ END. ALDR.	33855	9.757	-0.033	33855	VB	-	28.95
9	DDT	30604	12.767	-0.093	30604	BV		31.85
10	END KETONE	40329	14.621	-0.109	40329	VV		37.10
11		1446	16.823		1446	T	?	43.20
12	DBC	41431	26.278	-0.252	41431	BB	?	68.95
TOTALS:		410121		-0.671	410121			

DETECTED PKS: 17 REJECTED PKS: 5

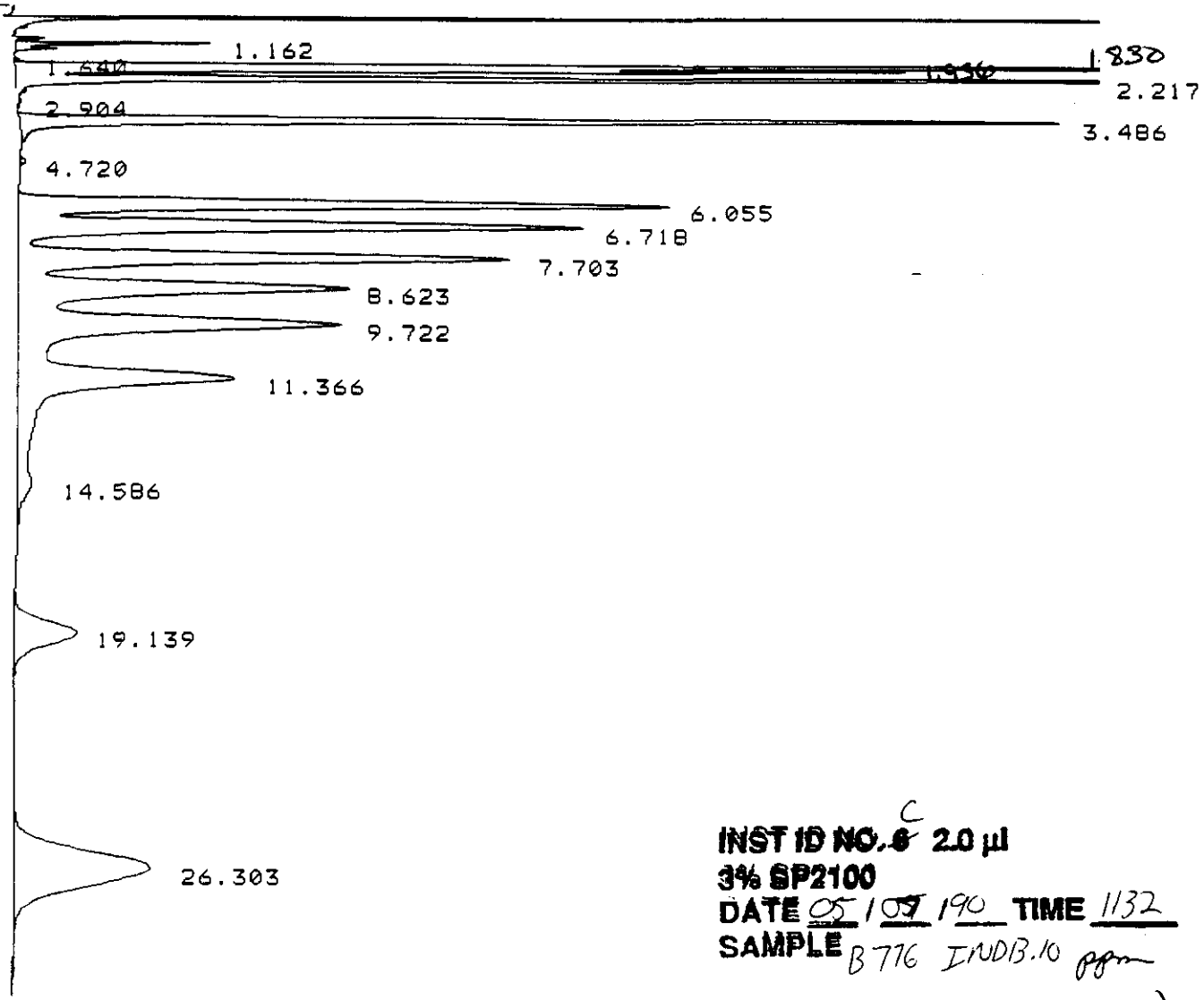
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -12

RACK: 3 VIAL: 4 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~8~~ C 2.0 µl
3% SP2100
DATE 05 / 09 / 90 TIME 1132
SAMPLE B776 INDB.10 ppm
(0.20ng)

100150

TITLE: CLP PESTICIDES 11:32 7 MAY 90

CHANNEL NO: 2 SAMPLE: B776 INDB.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		2607	1.162		2607	BV		3.20
2	A-BHC	40191	1.830	0.000	40191	VV		5.15
[illegible]	B-BHC	18111	1.956	-0.004	18111	VV	?	6.50
[illegible]	D-BHC	38081	2.217	-0.003	38081	VV		6.10
	HEPTACHLOR	39227	3.486	-0.014	39227	VB		9.60
6	G-CHLORDAN	40536	6.055	-0.035	40536	BV	?	16.35
7	A-CHLORDAN	39622	6.718	-0.042	39622	VV	?	18.10
8	DDE/~~DIEL~~D.	38686	7.703	-0.067	38686	VV		20.15
9	ENDRIN	32189	8.623	-0.057	32189	VV		24.00
10	DDD	37373	9.722	-0.068	37373	VV		26.40
11	ESS	33951	11.366	-0.084	33951	VV		31.55
12	~~END KETONE~~	3003	14.586	-0.144	3003	VB	?	57.30
[illegible]	METHOXYCHL	11605	19.139	-0.151	11605	BB		46.85
	DBC	36511	26.303	-0.227	36511	BB		69.00
TOTALS:		411693		-0.896	411693			

DETECTED PKS: 19 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

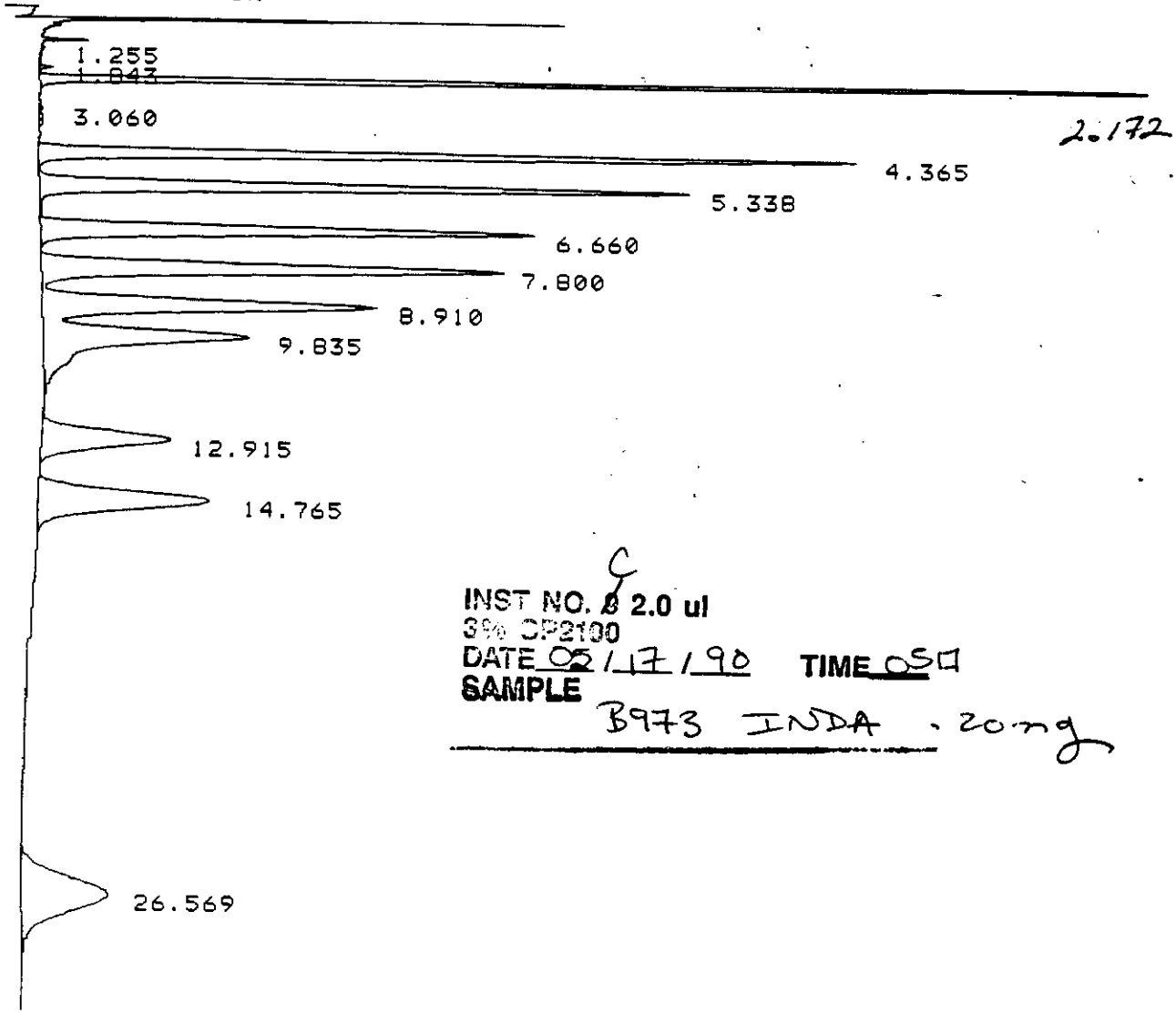
NOISE: 6.1 OFFSET: -11

RACK: 3 VIAL: 5 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
F[illegible]GIALBA 2562 LOW SOILS/PEST QUANT
SCDM 2536 MED SOILS/PEST CONF

(00159W

C RT SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. C 2.0 ul
3% OP2100
DATE 02/17/90 TIME 05
SAMPLE
B973 INDA .20mg

TITLE: CLP PESTICIDES 5:17 17 MAY 90

CHANNEL NO: 2 SAMPLE: B973 INDA.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1	G-BHC	32023	2.172	0.012	32023	VB	5.50
2	ALDRIN	34892	4.365	0.025	34892	BV	11.30
3	HEPT EPOX	33781	5.338	0.028	33781	VV	13.75
4	A-ENDOSULF	31442	6.660	0.030	31442	VV	17.00
5	~~DDE~~/DIELD.	34220	7.800	0.030	34220	VV	19.80
6	B-ENDOSULF	28243	8.910	0.020	28243	VV	22.75
7	ENDRIN ALD	24833	9.835	-0.005	24833	VB	28.10
8	DDT	15329	12.915	0.055	15329	BV	31.30
9	END KETONE	23301	14.765	0.035	23301	VB	36.05
10	DBC	21918	26.569	0.039	21918	BB	? 69.55
TOTALS:		279982		0.269	279982		

DETECTED PKS: 16 REJECTED PKS: 6

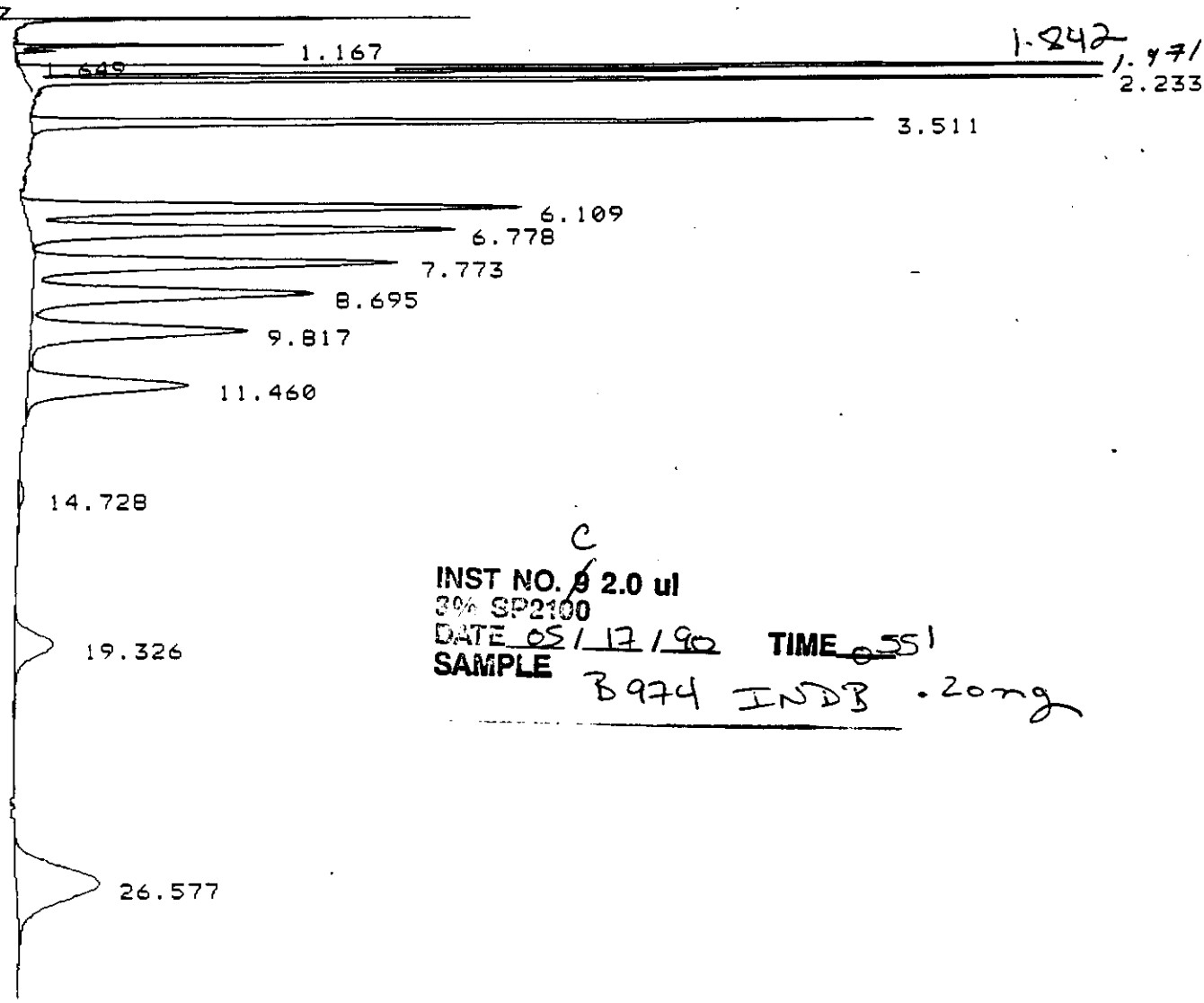
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 7.3 OFFSET: -19

RACK: 1 VIAL: 7 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
MD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~B~~ C 2.0 ul
3% SP2100
DATE 05/17/90 TIME 0551
SAMPLE B974 INDB .20ng

100132

TITLE: CLP PESTICIDES 5:51 17 MAY 90

CH NEL NO: 2 SAMPLE: B974 INDB.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		3018	1.167		3018	BV		2.85
2	A-BHC	31700	1.842	0.012	31700	VV		4.75
3	B-BHC	12968	1.971	0.011	12968	VV	?	5.70
4	D-BHC	28006	2.233	0.013	28006	VV		5.70
5	HEPTACHLOR	29284	3.511	0.011	29284	BV	?	9.15
6	G-CHLORDAN	29224	6.109	0.019	29224	BV	?	15.65
7	A-CHLORDAN	27876	6.778	0.018	27876	VB	?	17.60
8	DDE/~~DIELD~~.	26361	7.773	0.003	26361	BV	?	19.20
9	ENDRIN	23744	8.695	0.015	23744	VV	?	21.95
10	~~ENDRIN ALD~~	20448	9.817	-0.023	20448	VV		23.55
11	ESS DDD	18066	11.460	0.010	18066	VB		28.00
12	~~END KETONE~~	825	14.728	-0.002	825	BB		32.00
13	METHOXYCHL	7414	19.326	0.036	7414	BB		46.40
14	DBC	21966	26.577	0.047	21966	BB	?	70.65
TOTALS:		280900		0.170	280900			

DE ECTED PKS: 18 REJECTED PKS: 4

DIVISOR: 1.00000 MULTIPLIER: 10000.0

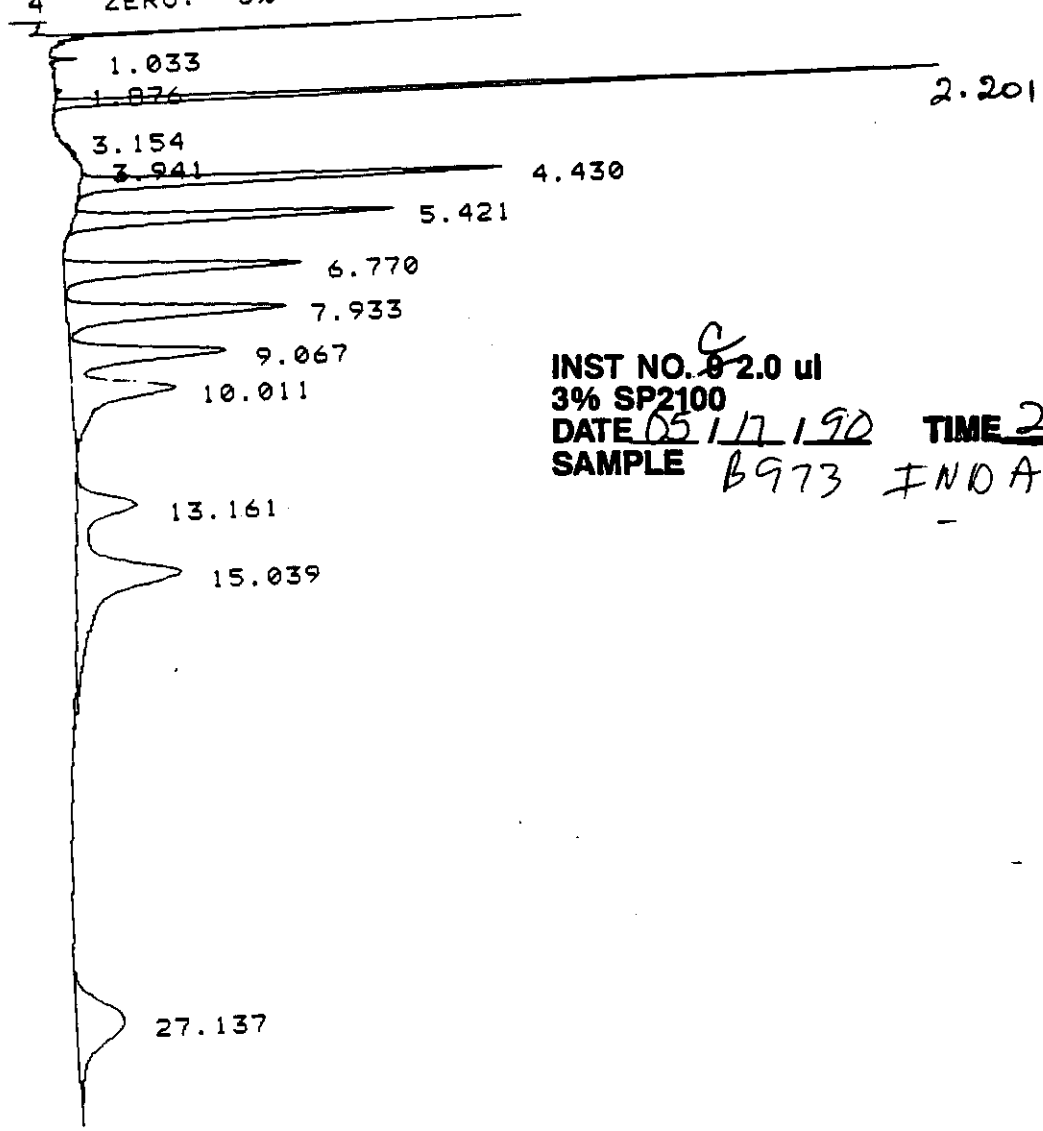
NOISE: 7.3 OFFSET: -14

RACK: 1 VIAL: 8 INJ: 1

NOTES:
(STRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

varian /sunnyvale,calif p/c 03-906362-00

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~9~~ 6 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 2020
SAMPLE B973 INDA .20NG

varian /sunnyvale,calif.p/n 03-906362-01

TITLE: CLP PESTICIDES 20:20 17 MAY 90

C .NEL NO: 2 SAMPLE: B973 INDA.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	~~D-BHC~~ G-BHC	16757	2.201	-0.019	16757	VB		5.45
2	ALDRIN	16489	4.430	0.090	16489	BB	?	8.30
3	HEPT EPOX	14889	5.421	0.111	14889	BB		13.45
4	A-~~CHLORDANE~~ ENDOSULF	13829	6.770	0.010	13829	BV		17.05
5	~~DDE~~ DIELD.	15160	7.933	0.163	15160	VV		20.05
6	B-ENDOSULF	12468	9.067	0.177	12468	VV		23.35
7	ENDRIN ALD	12353	10.011	0.171	12353	VB		29.85
8	DDT	7587	13.161	0.301	7587	BV		33.80
9	END KETONE	22849	15.039	0.309	22849	VB		42.35
10	DBC	13396	27.137	0.607	13396	BB	?	77.40
TOTALS:		145777		1.920	145777			

DETECTED PKS: 16 REJECTED PKS: 6

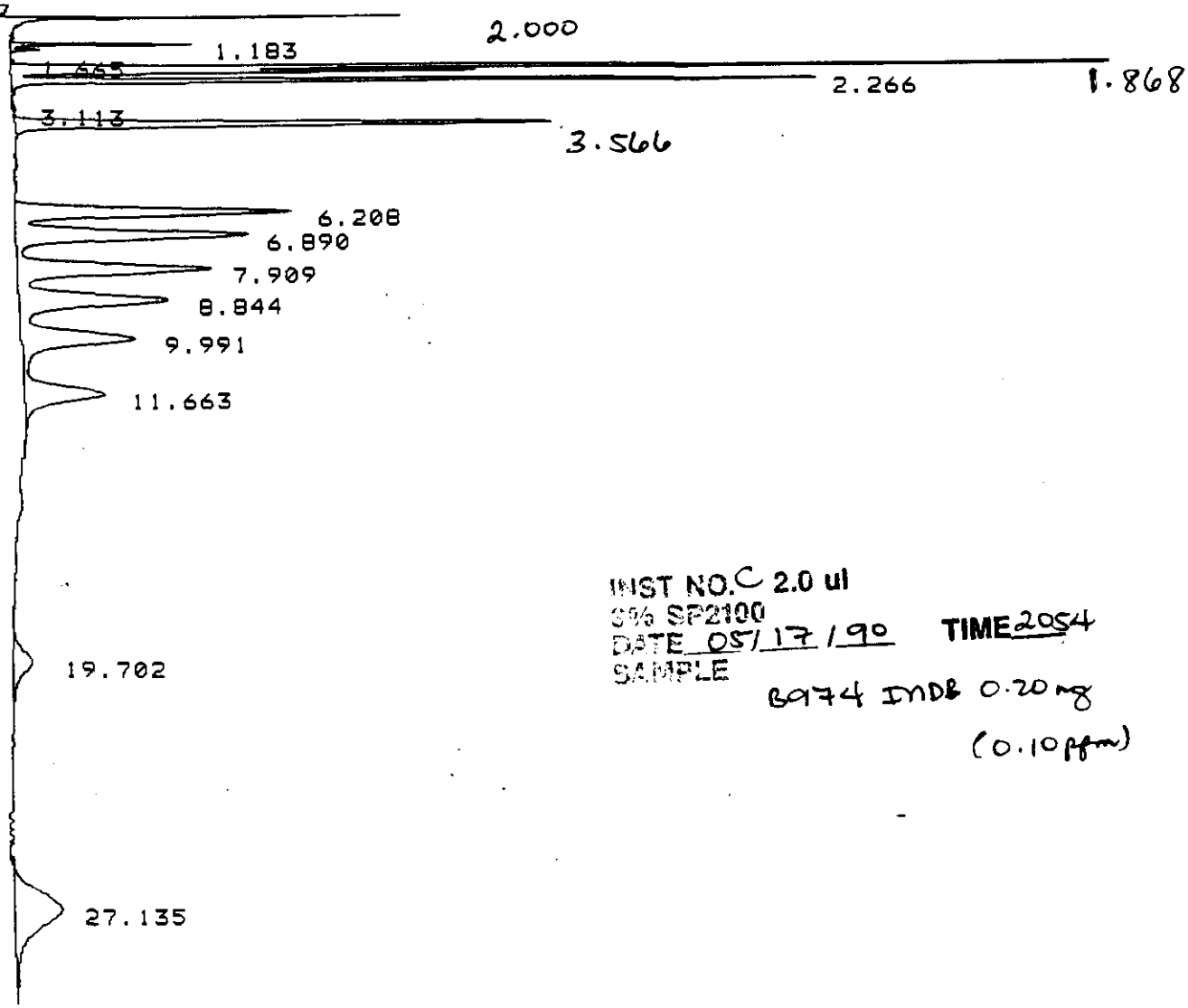
/ISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -3

RACK: 3 VIAL: 4 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
RT= OUTSIDE RETENTION TIME WINDOW
ERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

CHART SPEED 0.5 CM/MIN
A[illegible]N: 4 ZERO: 5%



INST NO. C 2.0 ul
3% SP2100
DATE 05/17/90 TIME 2054
SAMPLE
B974 INDB 0.20 mg
(0.10 ppm)

varian /sunnyvale, calif.p/n 03-906362-01

TITLE: CLP PESTICIDES 20:54 17 MAY 90

C' 'NEL NO: 2 SAMPLE: B974 INDB.10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		2061	1.183		2061	BV		2.85
2	A-BHC	22599	1.868	0.038	22599	VV		4.70
3	B-BHC	8691	2.000	0.040	8691	VV	?	5.70
4	D-BHC	17520	2.266	0.046	17520	VV		5.65
5	HEPTACHLOR	18620	3.566	0.066	18620	VB		9.20
6	G-CHLORDAN	16359	6.208	0.118	16359	BV	?	15.75
7	A-CHLORDAN	15786	6.890	0.130	15786	VV	?	17.70
8	DDE ~~DIELD.~~	14818	7.909	0.139	14818	VV		20.00
9	B-ENDOSULF	13534	8.844	-0.046	13534	VV		23.50
10	~~ENDRIN ALD~~ DDD	12048	9.991	0.151	12048	VV		26.70
11	ESS	9805	11.663	0.213	9805	VB	?	32.45
12	METHOXYCHL	3759	19.702	0.412	3759	BB		49.60
13	DBC	14206	27.135	0.605	14206	BB		76.20
TOTALS:		169806		1.912	169806			

: ECTED PKS: 18 REJECTED PKS: 5

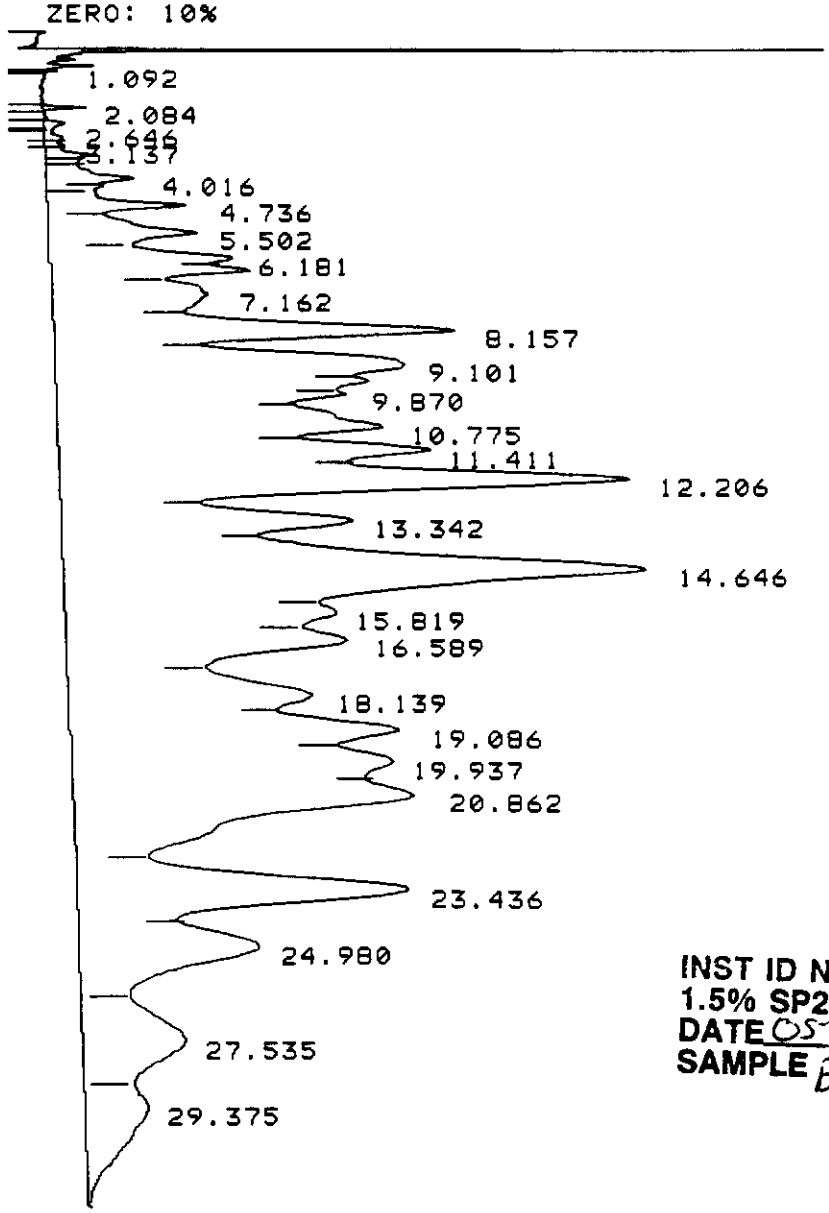
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -14

RACK: 3 VIAL: 5 INJ: 1

NOTES:
INSTRUMENT ID: C
)LUMN: 3% SP2100
JECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

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



INST ID NO A 2.0 uL
1.5% SP2250 / 1.95% SP2401
DATE 05/02/90 TIME 2327
SAMPLE B767 Toxaph

5.0 ng

100138

TITLE: CLP PESTICIDES 23:27 2 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	2531	2.084	-0.056	2531	BB	4.60
2		2302	2.502		2302	BV	9.20
	B-BHC	2593	2.901	-0.079	2593	VV	? 4.50
	HEPTACHLOR	2091	3.137	-0.083	2091	VV	? 6.40
5		6546	3.372		6546	VV	? 6.70
6	D-BHC	3605	3.483	0.003	3605	VV	? 3.20
7		22875	4.016		22875	VV	? 14.30
8		6760	4.174		6760	VV	?
9		36751	4.736		36751	VV	? 17.05
10	HEPT EPOX	62257	5.502	-0.118	62257	VV	? 14.30
11	G-CHLORDAN	55005	6.181	-0.039	55005	VV	? 28.60
12		51705	6.510		51705	VV	? 15.55
13	A-ENDOSULF	96839	7.162	0.142	96839	VV	? 27.90
	)DE	172143	8.157	0.217	172143	VV	? 27.25
.		190824	9.101		190824	VV	? 55.30
16		83346	9.537		83346	VV	? 12.10
17		80706	9.870		80706	VV	- ? 7.55
18		193441	10.775		193441	VV	? 58.30
19		161428	11.411		161428	VV	? 35.40
20	B-ENDOSULF	306948	12.206	-0.144	306948	VV	? 46.00
21		156097	13.342		156097	VV	? 52.70
22	DDT	521885	14.646	0.356	521885	VV	? 76.10
	ENDRIN ALD	124358	15.819	0.029	124358	VV	? 20.40
		188782	16.589		188782	VV	? 31.75
25		180361	18.139		180361	VV	? 87.60
26	ESS	207992	19.086	0.226	207992	VV	? 60.40
27		199551	19.937		199551	VV	? 40.90
28		337902	20.862		337902	VV	?104.25
29	DBC	256496	23.436	-0.674	256496	VV	59.30
30		180112	24.980		180112	VV	?100.20
31		139448	27.535		139448	VV	?114.30
32		82943	29.375		82943	VB	? 57.00
TOTALS:		4116620		-0.220	4116620		

DETECTED PKS: 34 REJECTED PKS: 2

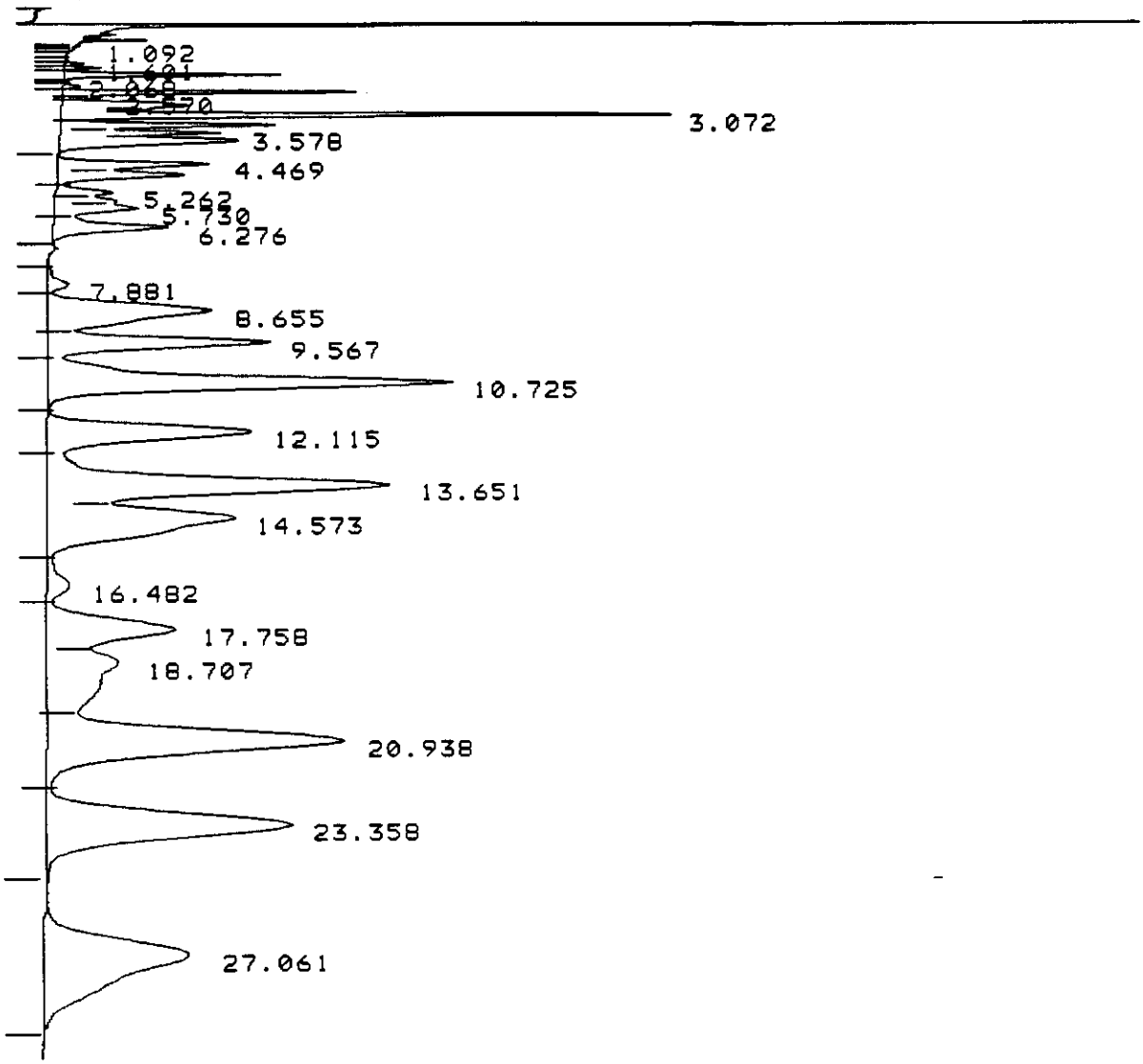
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -15

RACK: 1 VIAL: 10 INJ: 1

NO(.
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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 / 03 / 90 TIME 02
SAMPLE B699 AR1660

2.0ng

100170

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

TITLE: CLP PESTICIDES 0:02 3 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		1122	1.601		1122	BV		4.20
2		2146	1.724		2146	VV		3.85
		16059	1.931		16059	VV		4.65
4		1346	2.255		1346	VV		4.65
5		22596	2.422		22596	VV		5.25
6		2528	2.570		2528	VV	?	2.80
7		19346	2.805		19346	VV	?	5.30
8		4357	2.888		4357	VV	?	
9		58503	3.072		58503	VV		6.50
10		24356	3.349		24356	VV		7.85
11	D-BHC	17790	3.578	0.098	17790	VV	?	8.00
12	ALDRIN	34097	3.797	-0.063	34097	VV		14.00
		24002	4.469		24002	VV		11.65
		22950	4.776		22950	VV	?	13.50
15		9565	5.262		9565	VV	?	12.20
16	HEPT EPOX	8936	5.526	-0.094	8936	VV	?	16.40
17		17299	5.730		17299	VV-	?	18.55
18	G-CHLORDAN	26256	6.276	0.056	26256	VB		13.70
19	DDE	5894	7.881	-0.059	5894	BV		17.35
20	DIELDRIN	72699	8.655	0.155	72699	VV		32.90
21		65816	9.567		65816	VV		20.45
22		145946	10.725		145946	VV		22.70
	B-ENDOSULF	83553	12.115	-0.235	83553	VV		27.85
24		158853	13.651		158853	VV	?	30.40
25	DDT	120445	14.573	0.283	120445	VV		48.85
26		14003	16.482		14003	VV		32.55
27		73796	17.758		73796	VV		39.40
28	ESS	79453	18.707	-0.153	79453	VV	?	95.90
29		191359	20.938		191359	VV		43.00
30		169810	23.358		169810	VV		46.90
31	METHOXYCHL	155878	27.061	0.481	155878	VB	?	69.95
TOTALS:		1650760		0.469	1650760			

DETECTED PKS: 34 REJECTED PKS: 3

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -46

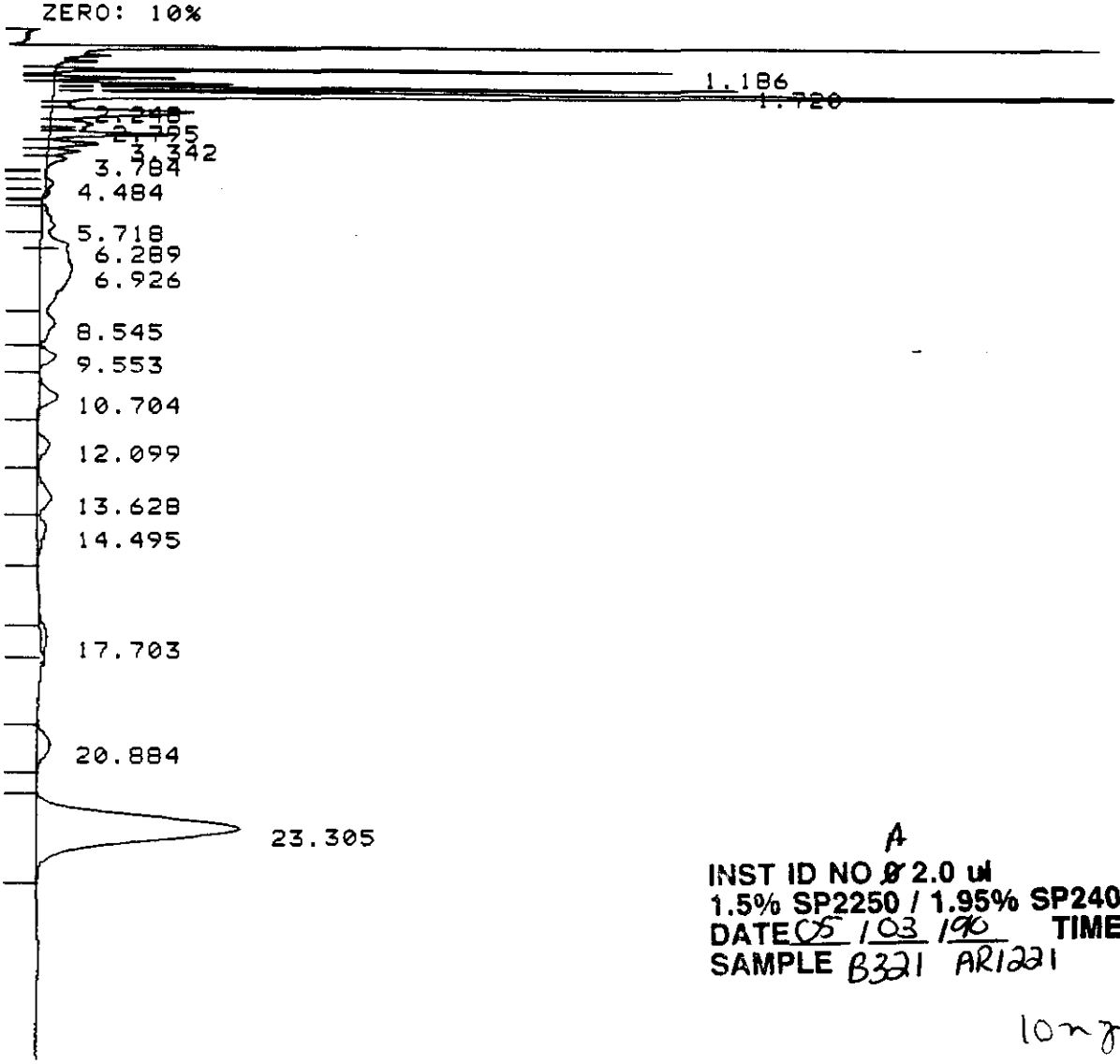
RACK: 1 VIAL: 11 INJ: 1

N 3:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT• OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

100171

varian / sur

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 / 03 / 90 TIME 36
SAMPLE B321 AR1221

10mg

100172

TI E: CLP PESTICIDES 0:36 3 MAY 90

CHANNEL NO: 3 SAMPLE: B321 AR1221 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		23892	1.186		23892	BV		2.60
2		5706	1.423		5706	VV		3.20
3		10295	1.596		10295	VV		4.05
4		37243	1.720		37243	VV		3.70
5		132668	1.928		132668	VV		4.90
		22191	2.412		22191	VV		10.60
		6712	2.795		6712	VV	?	6.60
8	B-BHC	2527	2.900	-0.080	2527	VV	?	1.60
9		12053	3.067		12053	VV		6.50
10		5781	3.342		5781	VV		7.15
11	D-BHC	3580	3.568	0.088	3580	VV		6.50
12	ALDRIN	3234	3.784	-0.076	3234	VB		8.05
13		1774	4.484		1774	BV	?	14.75
14		680	4.669		680	VB	?	22.60
15	HEPT EPOX	4991	5.718	0.098	4991	BV	?	28.60
	G-CHLORDAN	7177	6.289	0.069	7177	VV	?	20.70
17	A-ENDOSULF	33447	6.926	-0.094	33447	VV	?	28.80
18	DIELDRIN	7325	8.545	0.045	7325	VV	?	28.55
19		5027	9.553		5027	VV		18.50
20		7342	10.704		7342	VV		22.70
21	DDD	4368	12.099	0.209	4368	VV		27.55
22		7326	13.628		7326	VV		31.60
23	DDT	4961	14.495	0.205	4961	VB	?	38.90
24		2892	17.703		2892	BB	?	44.90
25		7500	20.884		7500	BB		42.80
26		139594	23.305		139594	BB		47.60
TOTALS:		500286		0.464	500286			

DETECTED PKS: 28 REJECTED PKS: 2

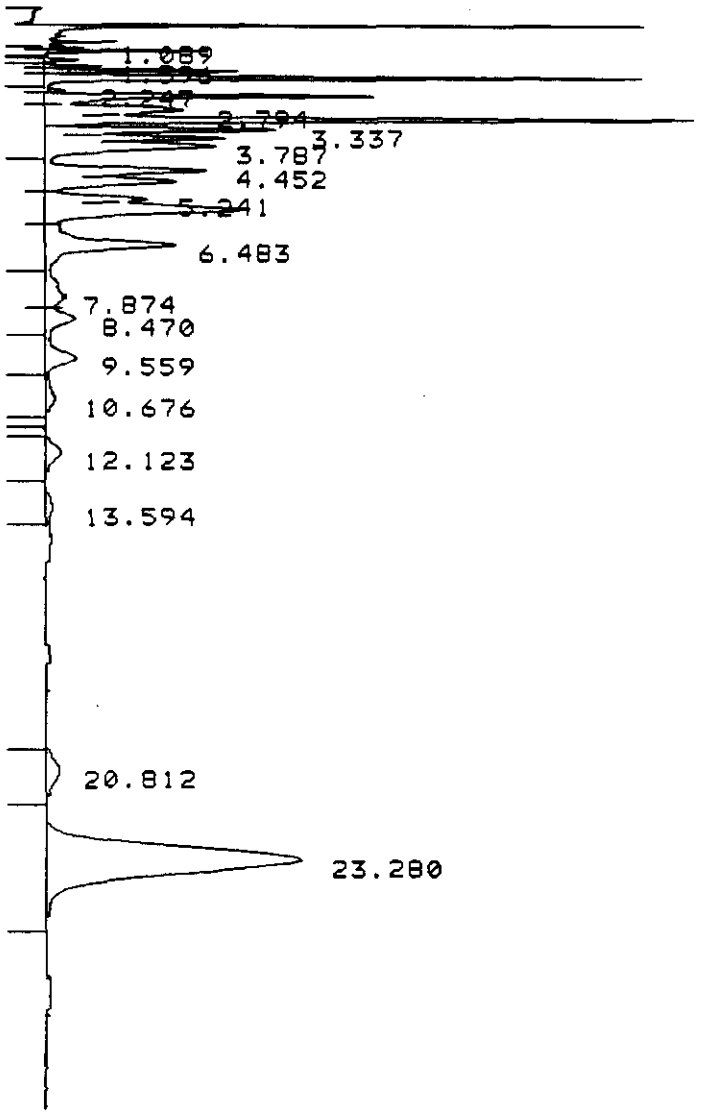
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -37

RA 1 VIAL: 13 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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



A
INJECTED NO 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 03 / 90 TIME 110
SAMPLE B684 AR1232

Song

1001174

TITLE: CLP PESTICIDES 1:10 3 MAY 90

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

P	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1144	1.089		1144	BV		2.35
2		5812	1.185		5812	VB		2.60
3		1590	1.422		1590	BV		3.25
4		3034	1.596		3034	VV		4.00
5		9768	1.718		9768	VV		3.75
6		43352	1.926		43352	VV		4.85
7		676	2.247		676	T		5.05
8		28353	2.414		28353	VV		5.45
9		24112	2.794		24112	VV	?	7.30
	B-BHC	59028	3.061	0.081	59028	VV	?	4.15
		24539	3.337		24539	VV	?	8.00
12	D-BHC	18775	3.566	0.086	18775	VV	?	9.65
13	ALDRIN	30920	3.787	-0.073	30920	VV-	?	15.25
14		26050	4.452		26050	VV		12.80
15		22751	4.759		22751	VV	?	14.90
16		15350	5.241		15350	VV	?	12.50
17	HEPT EPOX	43638	5.516	-0.104	43638	VV		17.25
18		34505	6.483		34505	VV		15.05
?	DDE	9281	7.874	-0.066	9281	VV	?	30.85
0	DIELDRIN	8983	8.470	-0.030	8983	VV		22.10
21		10558	9.559		10558	VV		23.05
22		3394	10.676		3394	VB	?	27.50
23	B-ENDOSULF	5944	12.123	-0.227	5944	BV		26.85
24		2254	13.594		2254	VB		32.55
25		7640	20.812		7640	BV		41.10
26		162482	23.280		162482	VB		46.90
TOTALS:		603933		-0.333	603933			

DETECTED PKS: 26 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -21

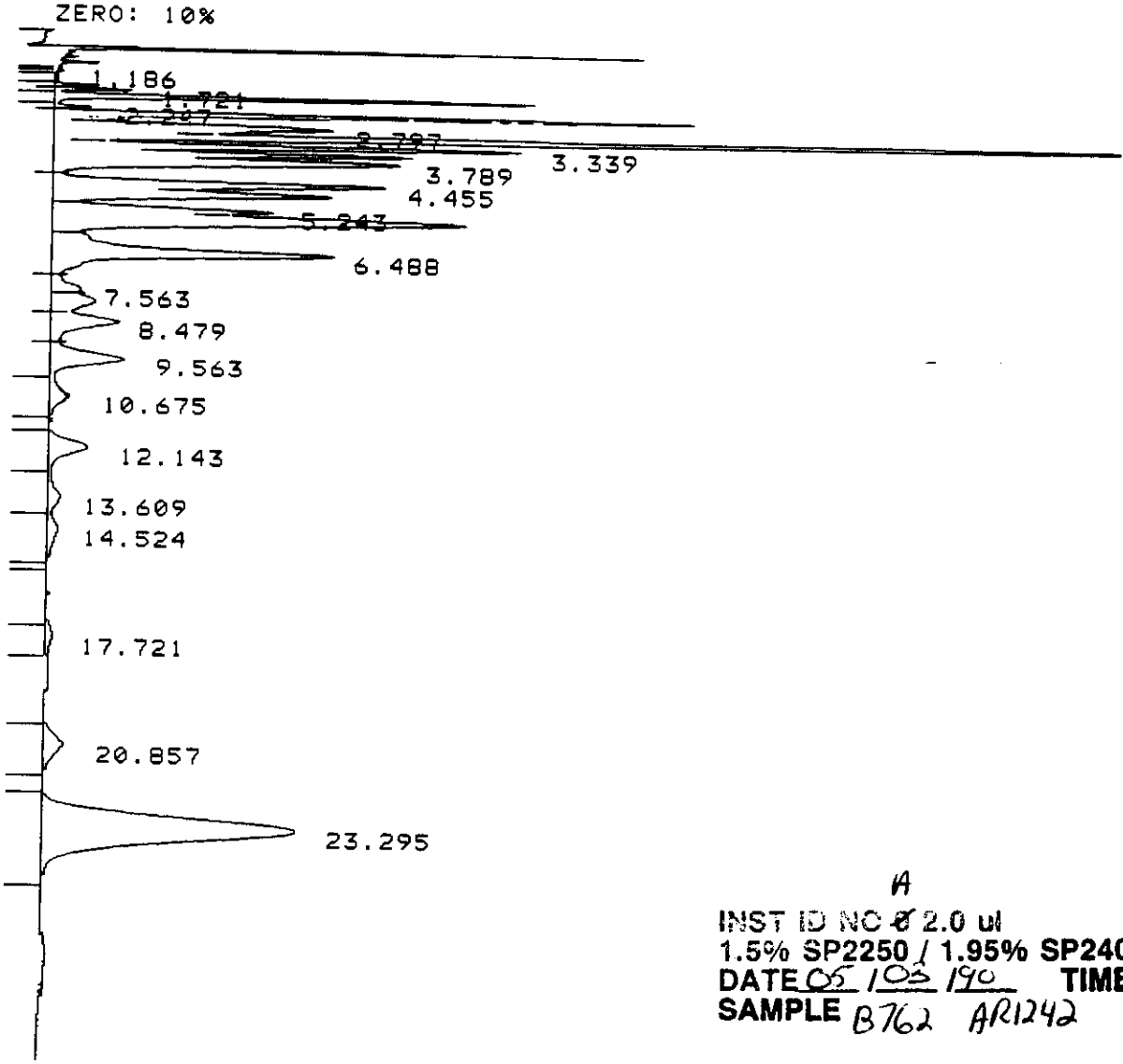
RACK: 1 VIAL: 14 INJ: 1

NOTES:
.: 1.5% SP2250/1.95% SP2401
[INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

100175

varian /sunnyvale calif p/n 03-

CHART SPEED 0.5 CM/MIN
AT 1: 16 ZERO: 10%



A
INST ID NO ~~0~~ 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 03 / 90 TIME 144
SAMPLE B762 AR1242

5.0ng

100170

TITLE: CLP PESTICIDES 1:44 3 MAY 90

CHANNEL 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		2331	1.602		2331	BV		4.00
2		4368	1.721		4368	VV		3.75
3		35232	1.927		35232	VV		4.60
4		2733	2.247		2733	VV		5.05
5		50222	2.417		50222	VV		5.20
6		5270	2.564		5270	VV	?	3.30
7		52253	2.797		52253	VV	?	5.65
8	B-BHC	131005	3.064	0.084	131005	VV		6.35
9		53437	3.339		53437	VV		7.95
10	D-BHC	40776	3.568	0.088	40776	VV		9.35
11	ALDRIN	68261	3.789	-0.071	68261	VV	?	15.20
12		57129	4.455		57129	VV		12.55
13		51837	4.763		51837	VV	?	15.00
14		35541	5.243		35541	VV	?	12.50
15	HEPT EPOX	99224	5.519	-0.101	99224	VV		17.25
16		80627	6.488		80627	VV		15.00
17		7961	7.563		7961	VV	?	22.80
	DDE	15216	7.890	-0.050	15216	VV	?	31.10
19	DIELDRIN	23016	8.479	-0.021	23016	VV		22.45
20		25802	9.563		25802	VV		23.20
21		7185	10.675		7185	VB	?	27.85
22	B-ENDOSULF	14491	12.143	-0.207	14491	BV		25.90
23		5712	13.609		5712	VV		30.30
24	DDT	6143	14.524	0.234	6143	VB		37.10
25		2921	17.721		2921	BB	?	40.55
26		10492	20.857		10492	BB		42.00
27		174957	23.295		174957	BB		47.20
TOTALS:		1064140		-0.044	1064140			

DETECTED PKS: 28 REJECTED PKS: 1

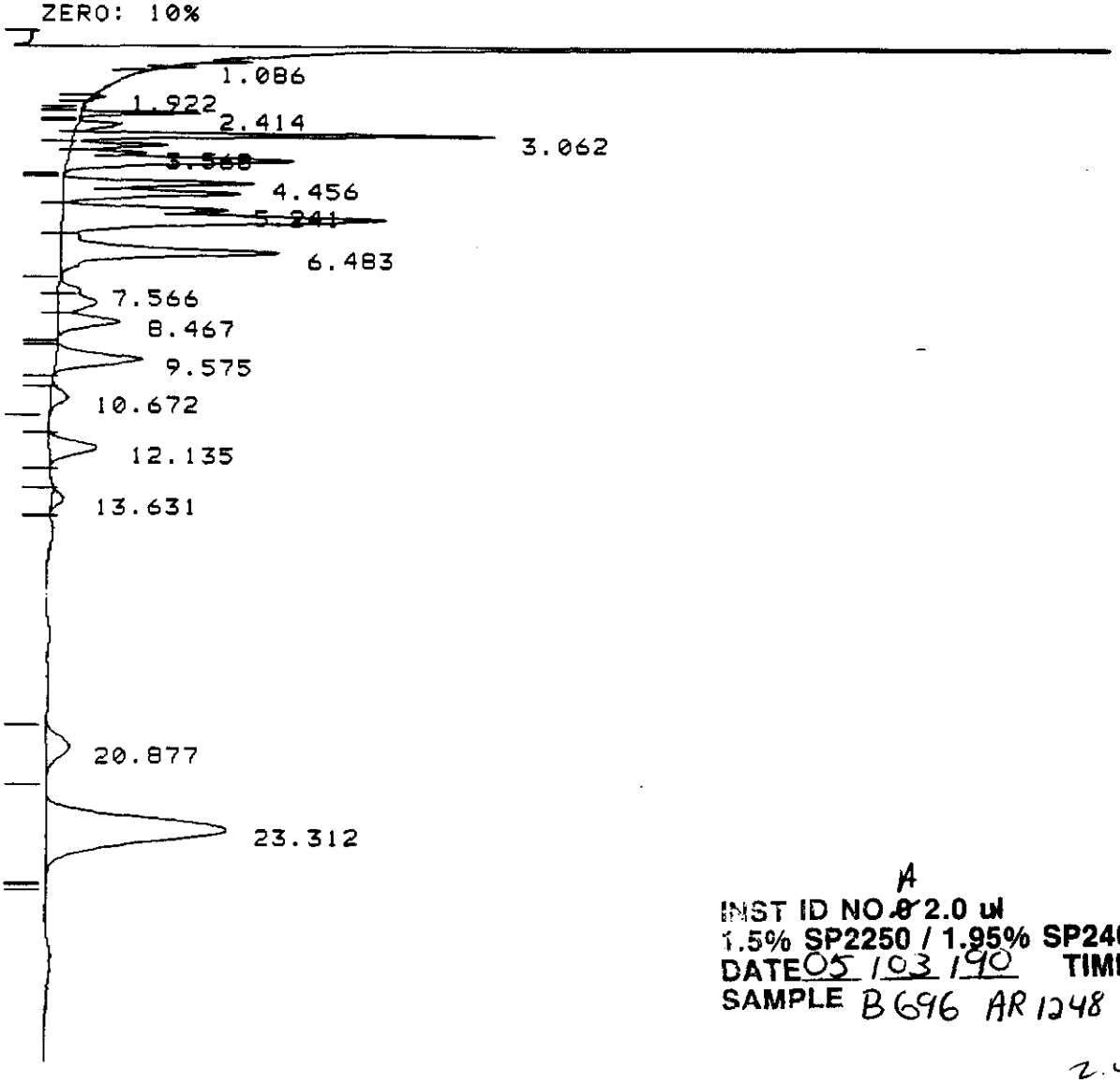
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -20

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
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

CHART SPEED 0.5 CM/MIN
AT 1: 16 ZERO: 10%



INST ID NO. ~~8~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 03 / 90 TIME 217
SAMPLE B696 AR1248

2.0ng

100178

TITLE: CLP PESTICIDES 2:17 3 MAY 90

C) .NEL NO: 3 SAMPLE: B696 AR1248 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		886	1.086		886	BB		1.95
2		870	1.922		870	BB		3.40
3		8762	2.414		8762	BV		4.95
4	G-BHC	6500	2.717	0.057	6500	VV		10.05
5	B-BHC	39319	3.062	0.082	39319	VV		6.35
6		10593	3.342		10593	VV		7.10
	D-BHC	7809	3.568	0.088	7809	VV	?	7.40
	ALDRIN	42745	3.796	-0.064	42745	VB		12.70
		29545	4.456		29545	BV		10.95
10		30446	4.759		30446	VV		12.40
11		25783	5.241		25783	VV	?	11.80
12	HEPT EPOX	76668	5.526	-0.094	76668	VV		16.70
13		58999	6.483		58999	VV		14.90
14		4550	7.566		4550	VV	?	16.00
15	DDE	12547	7.908	-0.032	12547	VV	?	26.15
	DIELDRIN	17205	8.467	-0.033	17205	VB		18.05
		26448	9.575		26448	BB		20.90
18		6081	10.672		6081	BB		23.20
19	B-ENDOSULF	17474	12.135	-0.215	17474	BB		25.60
20		3653	13.631		3653	BB		21.20
21		14559	20.877		14559	BV		41.80
22		124648	23.312		124648	VB		47.30
TOTALS:		566090		-0.211	566090			

DETECTED PKS: 23 REJECTED PKS: 1

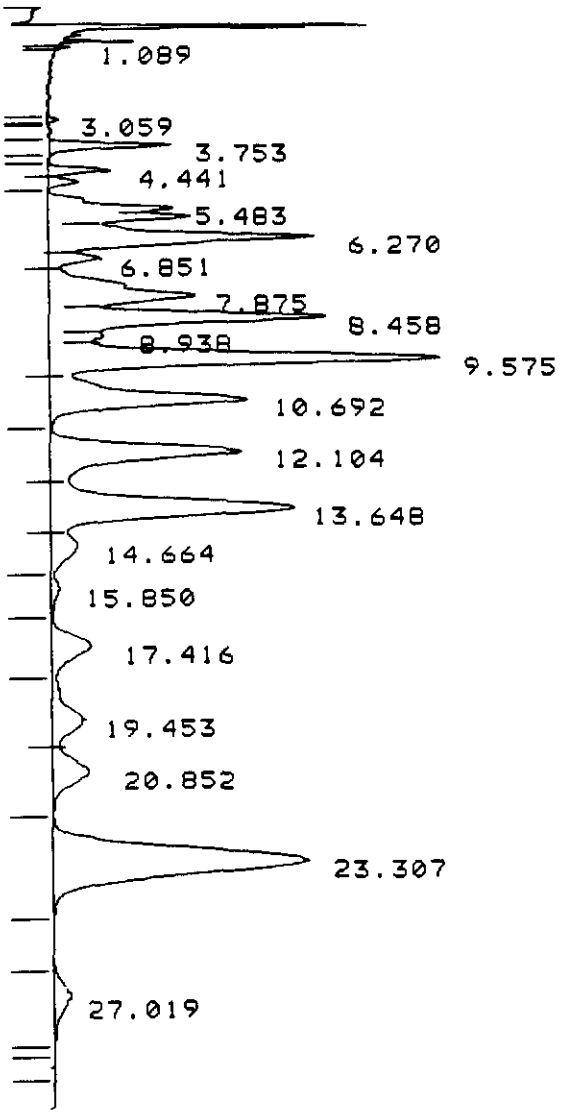
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -27

RACK: 2 VIAL: 2 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
INJ.2UL/INSTRUMENT LETTER A
= OUTSIDE RETENTION TIME WINDOW
AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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



A
INST ID NO ~~B~~ 2.0 uL
1.5% SP2250 / 1.95% SP2401
DATE 05 / 03 / 90 TIME 251
SAMPLE B761 AR1254

2.0ng

100100

TITLE: CLP PESTICIDES 2:51 3 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	B-BHC	958	3.059	0.079	958	BB		5.85
2	ALDRIN	15597	3.753	-0.107	15597	BB	?	9.45
3		8744	4.441		8744	BV		9.75
4		4642	4.757		4642	VV		10.80
5		25538	5.483		25538	VV	?	13.50
6	HEPT EPOX	25342	5.718	0.098	25342	VV	?	17.80
7	G-CHLORDAN	76999	6.270	0.050	76999	VV		19.40
8	A-CHLORDAN	11158	6.851	0.091	11158	VV	?	17.70
	DDE	59624	7.875	-0.065	59624	VV	?	27.20
	DIELDRIN	77139	8.458	-0.042	77139	VV		19.35
11		10781	8.938		10781	VV	?	5.40
12		120430	9.575		120430	VV -	?	19.70
13		75033	10.692		75033	VV		24.45
14	DDD	76498	12.104	0.214	76498	VV		26.60
15		106797	13.648		106797	VV		30.40
16	DDT	16161	14.664	0.374	16161	VV	?	50.85
17	ENDRIN ALD	4954	15.850	0.060	4954	VV	?	38.75
18		23356	17.416		23356	VV		43.05
19		23155	19.453		23155	VV		46.25
20		22832	20.852		22832	VV		46.70
21		164088	23.307		164088	VB		47.25
22	METHOXYCHL	13260	27.019	0.439	13260	BB	?	55.30
TOTALS:		963086		1.191	963086			

DETECTED PKS: 23 REJECTED PKS: 1

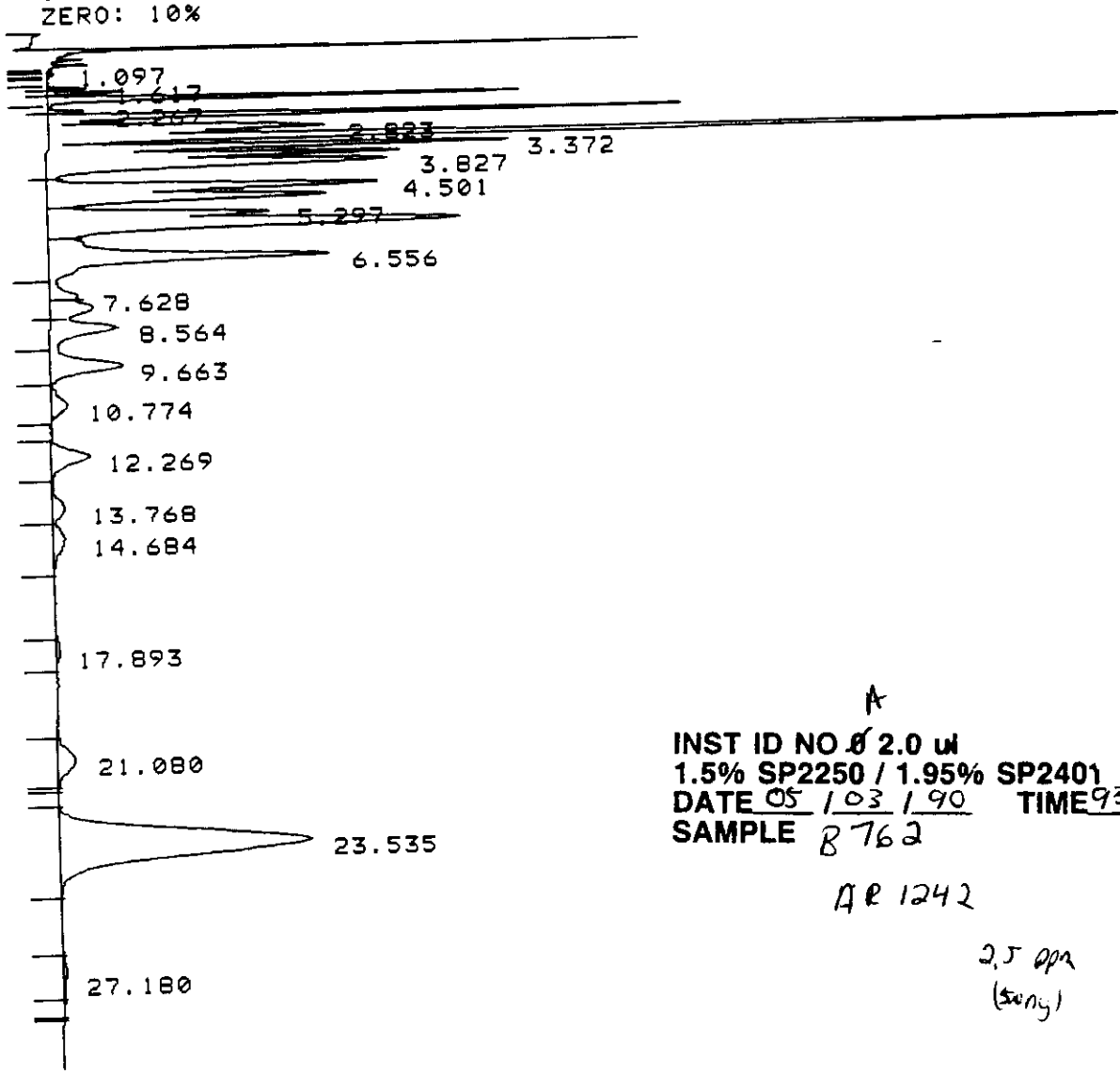
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -20

RACK: 2 VIAL: 4 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
AVTEX CTL 2592 AND 2655 PCB WATER
SCDM CTL 2536 PESTICIDE SOILS

CHF 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 / 03 / 90 TIME 938
SAMPLE B762

AR 1242

2.5 ppm
(spiking)

100132

TITLE: CLP PESTICIDES 9:38 3 MAY 90

CHANNEL 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		2245	1.617		2245	BV		3.80
2		4240	1.737		4240	VV		3.70
3		34414	1.945		34414	VV		4.60
4		2767	2.267		2767	VV		5.05
5		49792	2.440		49792	VV		5.25
6	G-BHC	5121	2.590	-0.070	5121	VV	?	3.20
		42242	2.823		42242	VV	?	5.75
	B-BHC	9329	2.909	-0.071	9329	VV	?	
9		130139	3.094		130139	VV		6.35
10		52772	3.372		52772	VV		7.95
11		40404	3.604		40404	VV		9.15
12	ALDRIN	67065	3.827	-0.033	67065	VV	?	15.15
13		56741	4.501		56741	VV		12.55
14		51249	4.812		51249	VV	?	14.90
15		35698	5.297		35698	VV	?	12.60
16	HEPT EPOX	98748	5.576	-0.044	98748	VV		17.25
		79247	6.556		79247	VV		15.10
18		7446	7.628		7446	VV	?	19.20
19	DDE	15121	7.973	0.033	15121	VV	?	27.95
20	DIELDRIN	22285	8.564	0.064	22285	VV		21.00
21		24815	9.663		24815	VV		22.10
22		6666	10.774		6666	VB		24.05
23	B-ENDOSULF	14611	12.269	-0.081	14611	BV		25.60
24		6070	13.768		6070	VV		32.20
25	DDT	6969	14.684	0.394	6969	VB		38.70
26		2658	17.893		2658	BB	?	34.35
27		11115	21.080		11115	BB		40.50
28	DBC	172702	23.535	-0.575	172702	BB		47.45
29	METHOXYCHL	3704	27.180	0.600	3704	BB	?	143.60
TOTALS:		1056370		0.217	1056370			

DETECTED PKS: 31 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

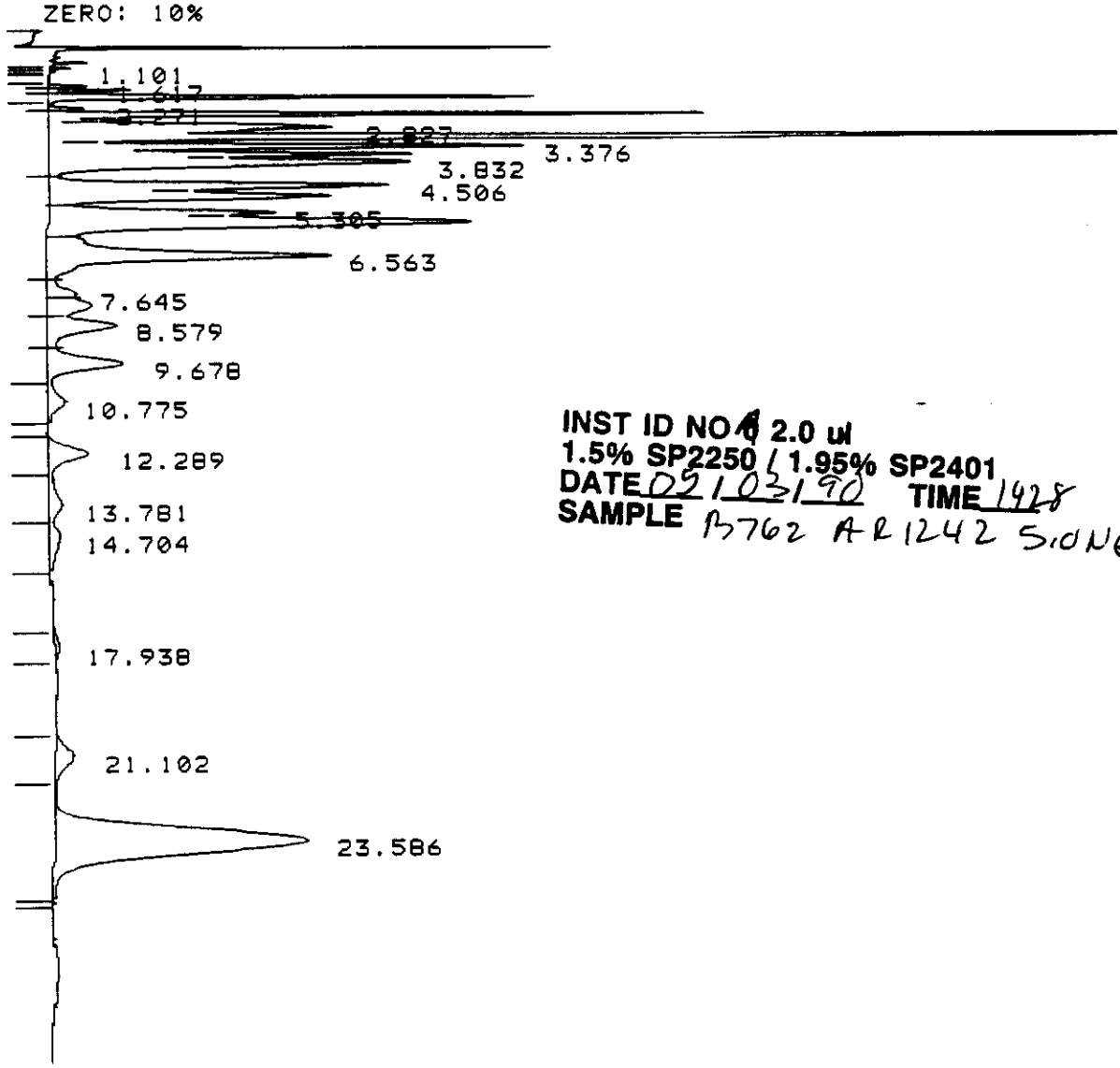
NOISE: 43.7 OFFSET: -19

RACK: 3 VIAL: 7 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER

100133

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



INST ID NO 4 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/03/90 TIME 1428
SAMPLE B762 AR1242 5.0NG

TITLE: CLP PESTICIDES 14:28 3 MAY 90

CHANNEL 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		696	1.101		696	BV		2.35
2		2420	1.617		2420	BV		4.00
3		4673	1.737		4673	VV		3.80
4		35920	1.947		35920	VV		4.70
5		2959	2.271		2959	VV		5.25
6		51953	2.442		51953	VV		5.30
7	G-BHC	5566	2.594	-0.066	5566	VV	?	3.70
[illegible]		53811	2.827		53811	VV	?	5.70
[illegible]		135242	3.097		135242	VV		6.45
10	D-BHC	54980	3.376	-0.104	54980	VV	?	8.05
11		41949	3.607		41949	VV		9.45
12	ALDRIN	72343	3.832	-0.028	72343	VV	?	15.05
13		58820	4.506		58820	VV		12.60
14		53136	4.818		53136	VV	?	14.35
15		36504	5.305		36504	VV	?	12.60
16	HEPT EPOX	101821	5.584	-0.036	101821	VV		17.35
17	A-CHLORDAN	81281	6.563	-0.197	81281	VV		15.25
[illegible]		7605	7.645		7605	VV	?	20.60
[illegible]	DDE	14949	7.986	0.046	14949	VV	?	29.80
20	DIELDRIN	22918	8.579	0.079	22918	VV		21.65
21		25982	9.678		25982	VV		23.15
22		7056	10.775		7056	VB		24.40
23	B-ENDOSULF	15268	12.289	-0.061	15268	BV		26.00
24		7720	13.781		7720	VV		37.20
25	DDT	6780	14.704	0.414	6780	VB		45.90
26		2406	17.938		2406	BB		46.40
27		11586	21.102		11586	BV		42.80
[illegible]	DBC	179096	23.586	-0.524	179096	VB		47.60
TOTALS:		1095440		-0.477	1095440			

ETECTED PKS: 29 REJECTED PKS: 1

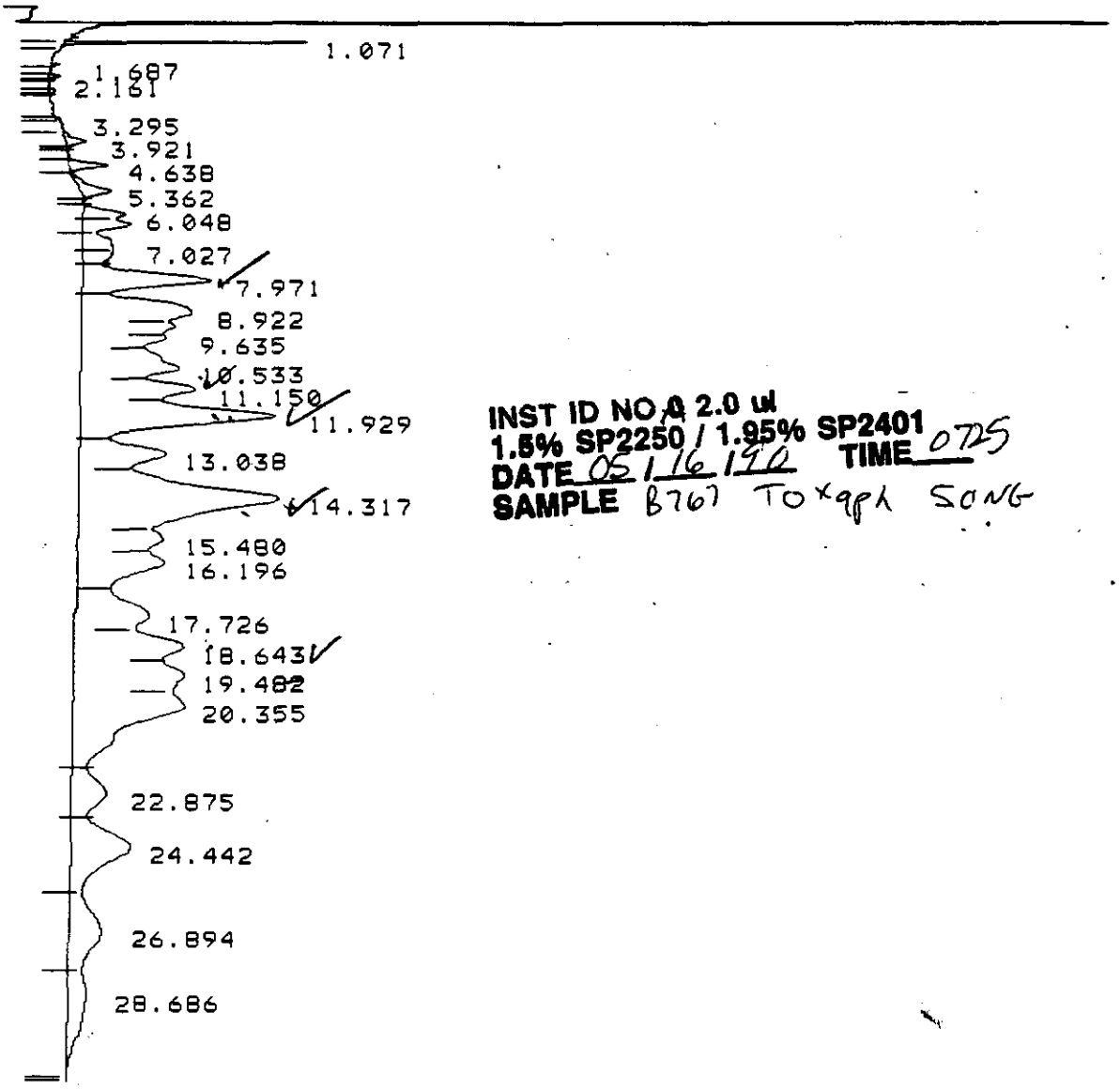
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -21

RACK: 4 VIAL: 1 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/90 TIME 0725
SAMPLE B767 Toxaph SONG

100133

TITLE: CLP PESTICIDES B767 Toxaph 7:25 16 MAY 90

CHANNEL NO: 3 SAMPLE: ~~18278~~ JKR 05/16/90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
		8773	1.071		8773	BB	2.40
	A-BHC	773	2.036	-0.044	773	BV	4.40
3		542	2.449		542	BV	7.00
4		3365	3.921		3365	BV	? 11.25
5		5554	4.638		5554	BV	? 11.85
6	HEPT EPOX	7060	5.362	-0.078	7060	VB	? 18.80
7	G-CHLORDAN	9034	6.048	0.028	9034	BV	? 13.80
8	A-CHLORDAN	11190	6.357	-0.183	11190	VV	? 19.20
9		10729	7.027		10729	VV	? 26.50
10		8320	7.099		8320	VV	?
11		49336	7.971		49336	VV	25.45
12		58417	8.922		58417	VV	? 28.30
13		25031	9.314		25031	VV	? 9.05
14		24970	9.635		24970	VV	? 6.70
15		58720	10.533		58720	VV	? 43.60
16		50089	11.150		50089	VV	? 34.80
17	B-ENDOSULF	101451	11.929	-0.021	101451	VV	36.10
18		45876	13.038		45876	VV	? 36.10
19		177496	14.317		177496	VV	60.00
20	ENDRIN ALD	40743	15.480	0.210	40743	VV	? 26.50
		57853	16.196		57853	VV	? 30.10
		54748	17.726		54748	VV	? 56.00
23	ESS	69246	18.643	0.393	69246	VV	? 57.20
24		74426	19.482		74426	VV	? 45.90
25		107443	20.355		107443	VV	? 78.10
26	DBC	29445	22.875	-0.465	29445	VV	43.40
27	ENDRIN KET	60561	24.442	-0.618	60561	VV	54.70
28		42244	26.894		42244	VV	65.65
29		27731	28.686		27731	VB	48.00
TOTALS:		1221170		-0.778	1221170		

DETECTED PKS: 34 REJECTED PKS: 5

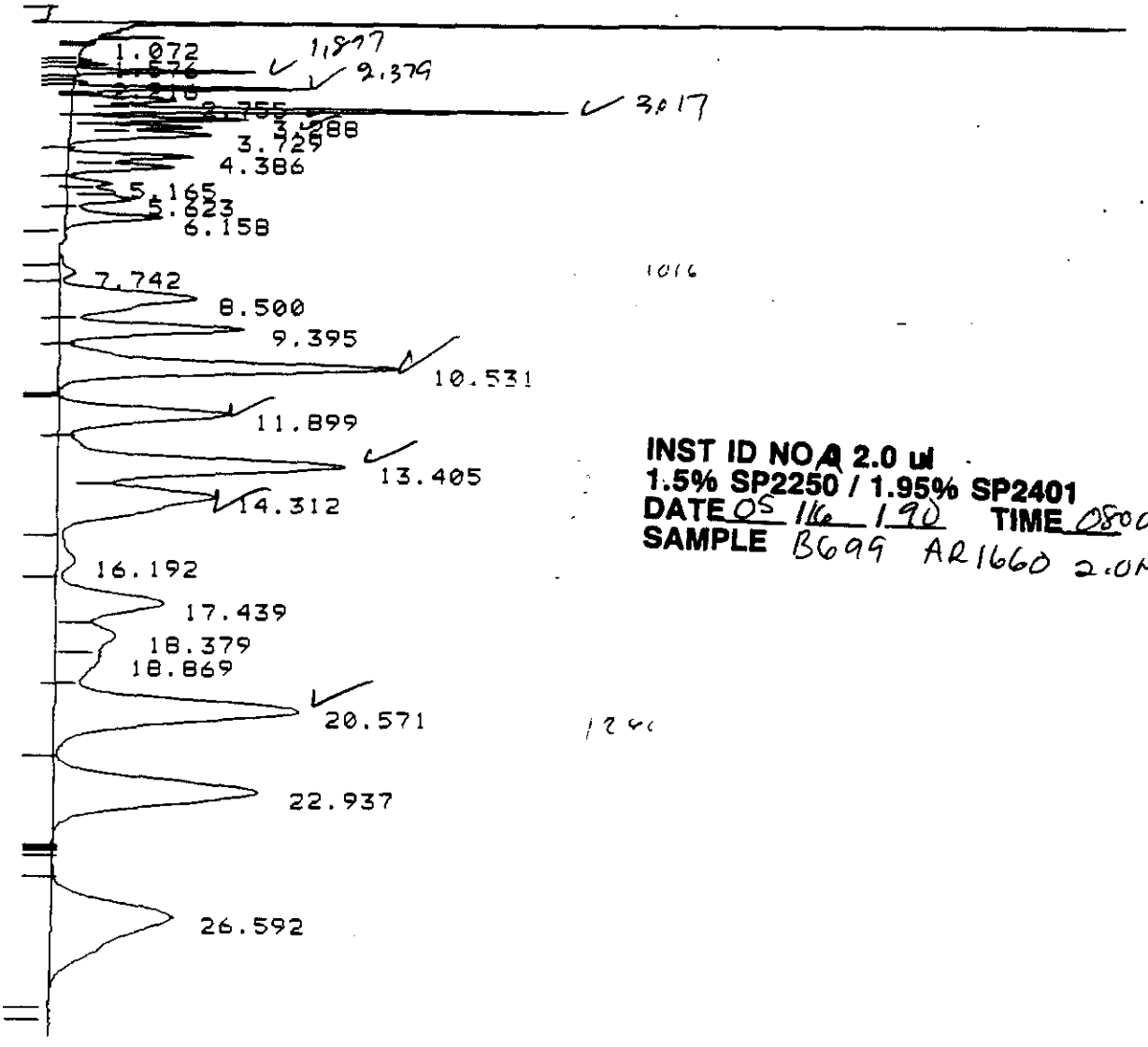
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -12

RACK: 1 VIAL: 10 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
OMC WAUK CTL2638 AND 2672 PCB WATERS

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



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 16 / 90 TIME 0800
SAMPLE B699 AR1660 2.0NG

100188

TITLE: CLP PESTICIDES 8:00 16 MAY 90

CHANNEL NO: 3 SAMPLE: BG99 AR1660 ~~18299~~ JKR 05/16/90 METHOD: CLP-3A

PEAK	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
		760	1.576		760	BV		3.55
2		1542	1.693		1542	VV		3.50
3		12223	1.897		12223	VB		4.50
4		826	2.216		826	BV		4.35
5		18152	2.379		18152	VV		5.10
6	G-BHC	1827	2.524	-0.056	1827	VV	?	2.50
7		15605	2.755		15605	VV	?	5.70
8	B-BHC	3249	2.839	-0.051	3249	VV	?	
9		47359	3.017		47359	VV		6.40
10	D-BHC	19676	3.288	-0.072	19676	VV		7.60
11		14790	3.513		14790	VV		8.85
12	ALDRIN	26802	3.729	-0.011	26802	VV		13.95
13		20060	4.386		20060	VV		11.55
14		18548	4.690		18548	VV		13.05
15		7301	5.165		7301	VV	?	11.50
16	HEPT EPOX	7217	5.413	-0.027	7217	VV	?	11.60
17		12981	5.623		12981	VV	?	17.50
18	G-CHLORDAN	21583	6.158	0.138	21583	VB		13.15
19	DDE	3611	7.742	0.062	3611	BV		15.20
20		59475	8.500		59475	VV		31.55
		54312	9.395		54312	VV		19.90
22		122878	10.531		122878	VB		22.35
23	B-ENDOSULF	68838	11.899	-0.051	68838	BV		27.60
24		132804	13.405		132804	VV	?	30.10
25		100187	14.312		100187	VV		48.25
26		10364	16.192		10364	VV		31.75
27		60768	17.439		60768	VV		38.45
28	ESS	36996	18.379	0.129	36996	VV	?	43.60
29		26915	18.869		26915	VV	?	104.00
30		158393	20.571		158393	VV		42.40
	DBC	141364	22.937	-0.403	141364	VB		46.75
		130999	26.592		130999	BB		68.20
TOTALS:		1358400		-0.342	1358400			

DETECTED PKS: 33 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -25

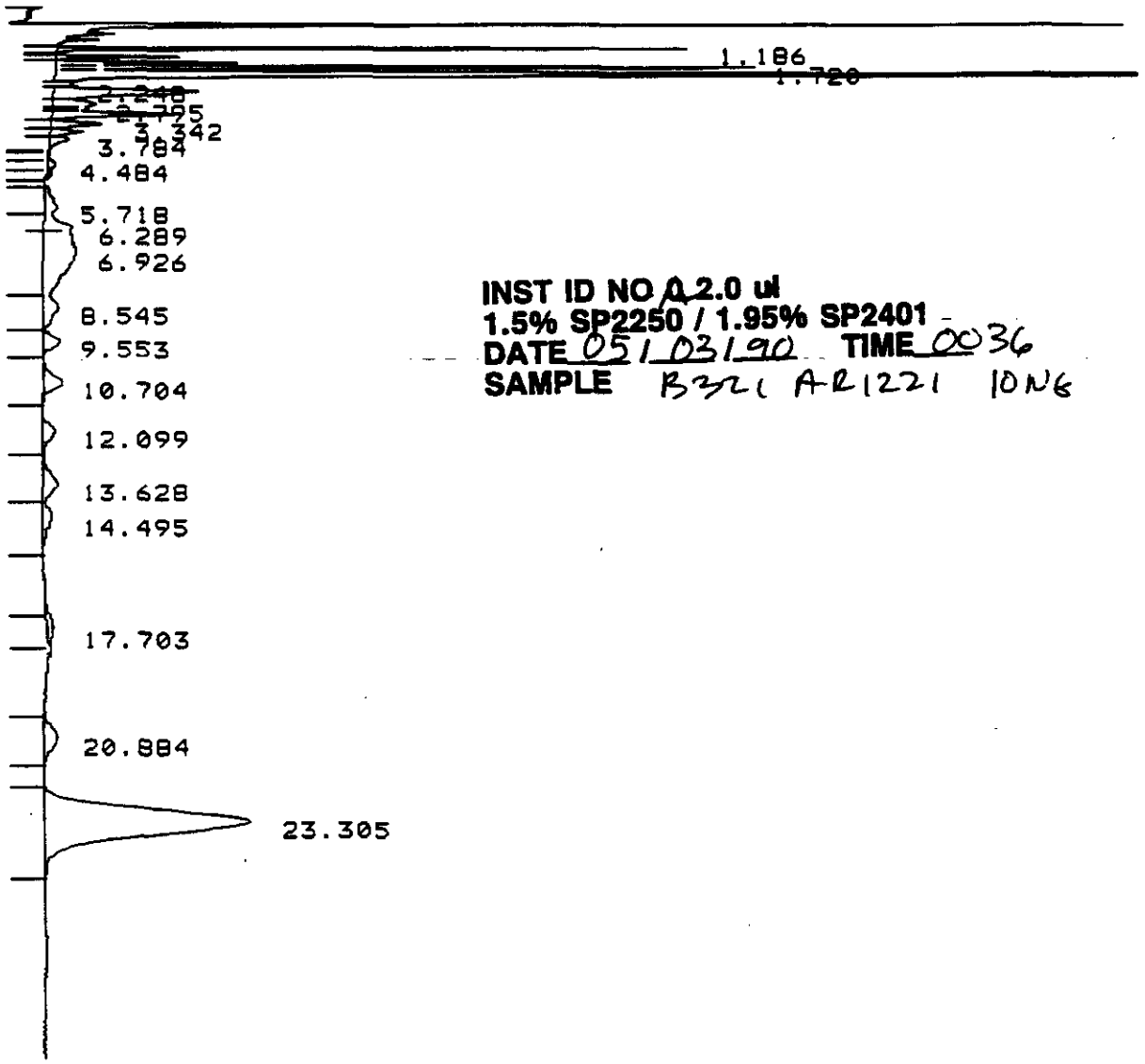
RACK: 1 VIAL: 11 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
OMC WAUK CTL2638 AND 2672 PCB WATERS

Sunnyvale, Calif p/n 03 906362 00

ORIGINAL (Red)

CHAF SPEED 0.5 CM/MIN
ATTL 16 ZERO: 10%



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/03/90 TIME 0036
SAMPLE B321 AR1221 10NG

100100

TITLE: CLP PESTICIDES 0:36 3 MAY 90

CHANNEL NO: 3 SAMPLE: B321 AR1221 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		23892	1.186		23892	BV		2.60
2		5706	1.423		5706	VV		3.20
3		10295	1.596		10295	VV		4.05
4		37243	1.720		37243	VV		3.70
5		132668	1.928		132668	VV		4.90
6		22191	2.412		22191	VV		10.60
7		6712	2.795		6712	VV	?	6.60
	-BHC	2527	2.900	-0.080	2527	VV	?	1.60
		12053	3.067		12053	VV		6.50
10		5781	3.342		5781	VV		7.15
11	D-BHC	3580	3.568	0.088	3580	VV		6.50
12	ALDRIN	3234	3.784	-0.076	3234	VB		8.05
13		1774	4.484		1774	BV	?	14.75
14		680	4.669		680	VB	?	22.60
15	HEPT EPOX	4991	5.718	0.098	4991	BV	?	28.60
16	G-CHLORDAN	7177	6.289	0.069	7177	VV	?	20.70
1	A-ENDOSULF	33447	6.926	-0.094	33447	VV	?	28.80
1	DIELDRIN	7325	8.545	0.045	7325	VV	?	28.55
19		5027	9.553		5027	VV		18.50
20		7342	10.704		7342	VV		22.70
21	DDD	4368	12.099	0.209	4368	VV		27.55
22		7326	13.628		7326	VV		31.60
23	DDT	4961	14.495	0.205	4961	VB	?	38.90
24		2892	17.703		2892	BB	?	44.90
25		7500	20.884		7500	BB		42.80
26		139594	23.305		139594	BB		47.60
TOTALS:		500286		0.464	500286			

DETECTED PKS: 28 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -37

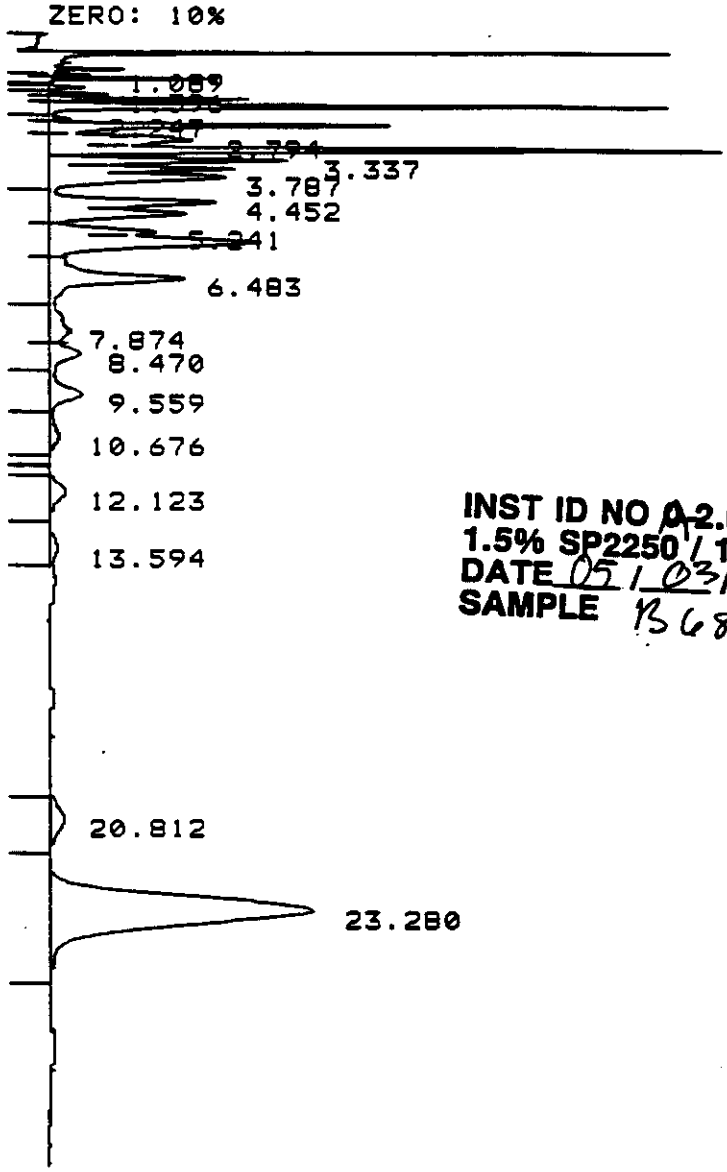
RAC 1 VIAL: 13 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
E$E AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

100131

ORIGINAL (Red)

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



INST ID NO A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/03/90 TIME 0110
SAMPLE B684 AR1232 SONG

TITLE: CLP PESTICIDES 1:10 3 MAY 90

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

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
		1144	1.089		1144	BV		2.35
2		5812	1.185		5812	VB		2.60
3		1590	1.422		1590	BV		3.25
4		3034	1.596		3034	VV		4.00
5		9768	1.718		9768	VV		3.75
6		43352	1.926		43352	VV		4.85
7		676	2.247		676	T		5.05
8		28353	2.414		28353	VV		5.45
9		24112	2.794		24112	VV	?	7.30
1[illegible]	-BHC	59028	3.061	0.081	59028	VV	?	4.15
		24539	3.337		24539	VV	?	8.00
1[illegible]	J-BHC	18775	3.566	0.086	18775	VV	?	9.65
13	ALDRIN	30920	3.787	-0.073	30920	VV	?	15.25
14		26050	4.452		26050	VV		12.80
15		22751	4.759		22751	VV	?	14.90
16		15350	5.241		15350	VV	?	12.50
17	HEPT EPOX	43638	5.516	-0.104	43638	VV		17.25
18		34505	6.483		34505	VV		15.05
19	DDE	9281	7.874	-0.066	9281	VV	?	30.85
2[illegible]	DIELDRIN	8983	8.470	-0.030	8983	VV		22.10
2[illegible]		10558	9.559		10558	VV		23.05
22		3394	10.676		3394	VB	?	27.50
23	B-ENDOSULF	5944	12.123	-0.227	5944	BV		26.85
24		2254	13.594		2254	VB		32.55
25		7640	20.812		7640	BV		41.10
26		162482	23.280		162482	VB		46.90
TOTALS:		603933		-0.333	603933			

DETECTED PKS: 26 REJECTED PKS: 0

DIVISOR: 1.00000 MULTIPLIER: 10000.0

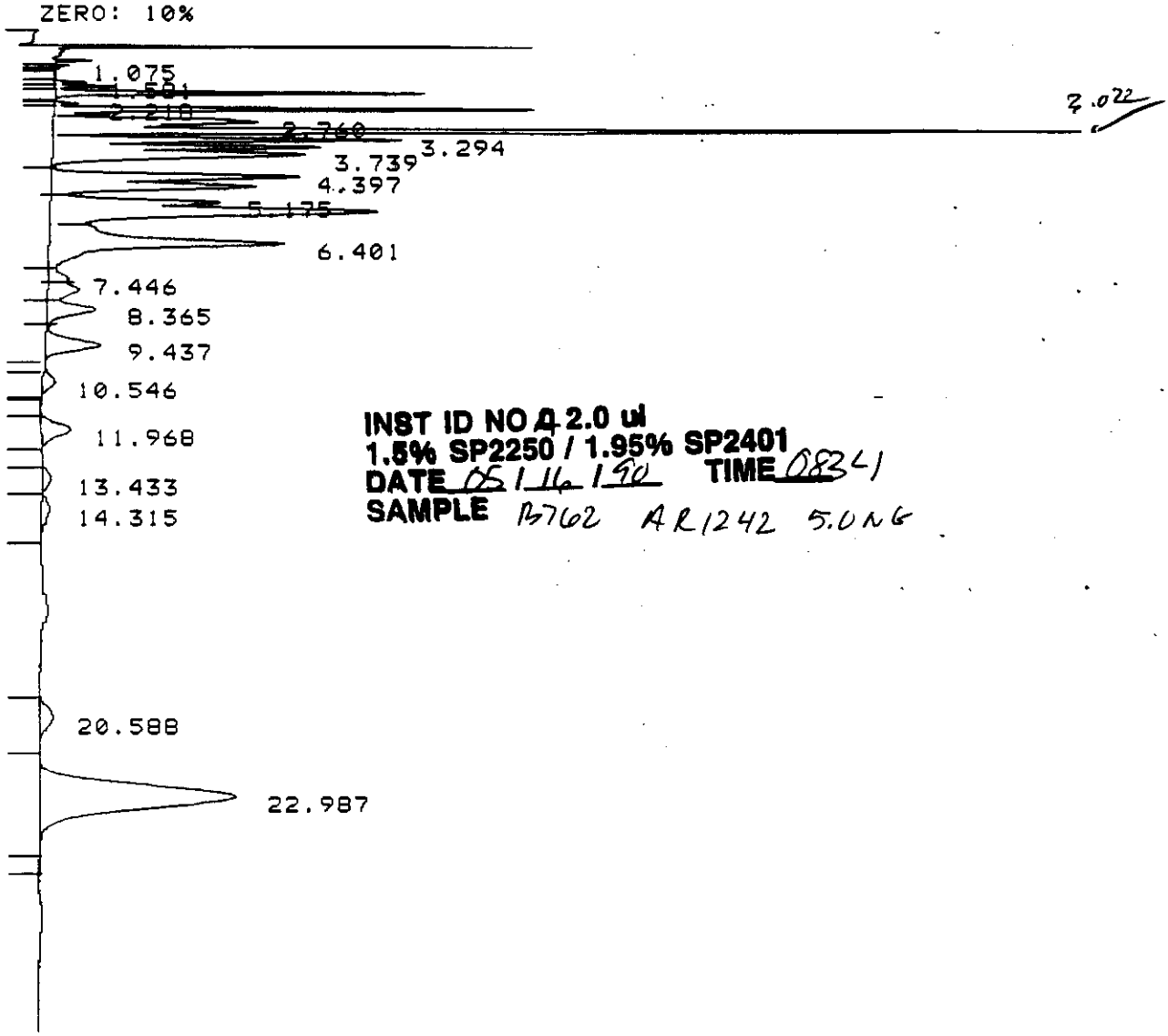
NOISE: 43.7 OFFSET: -21

RACK: 1 VIAL: 14 INJ: 1

NOTES:
[illegible] 1.5% SP2250/1.95% SP2401
[illegible] INJ.2UL/INSTRUMENT LETTER A
[illegible] OUTSIDE RETENTION TIME WINDOW
ESE AVTEX CTL 2592 AND 2655 PCB WATER
VERSCDM CTL 2536 PESTICIDE SOILS

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 05/16/90 TIME 0834
SAMPLE B762 AR1242 5.0NG

10019

TITLE: CLP PESTICIDES B762AR1242 ~~B762AR762~~ 8:34 16 MAY 90

CHANNEL NO: 3 SAMPLE: ~~RB0029~~ JKY 05/16/90 METHOD: CLP-3A

ORIGINAL (Red)

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		538	1.075		538	BV		2.30
2		1922	1.581		1922	BV		3.90
3		3446	1.697		3446	VV		3.70
4		26932	1.900		26932	VB		4.55
5		1539	2.218		1539	BV		4.50
6		37630	2.383		37630	VV		5.15
7	G-BHC	3632	2.530	-0.050	3632	VV	?	3.60
8		31758	2.760		31758	VV	?	5.50
9	B-BHC	6845	2.842	-0.048	6845	VV	?	
10		98909	3.022		98909	VV		6.25
11	D-BHC	40096	3.294	-0.066	40096	VV		7.65
12		30742	3.519		30742	VV		8.55
13	ALDRIN	49329	3.739	-0.001	49329	VV	?	14.40
14		41970	4.397		41970	VV		12.00
15		38237	4.701		38237	VV	?	14.30
16		27459	5.175		27459	VV	?	12.20
17	HEPT EPOX	82187	5.446	0.006	82187	VV		17.15
18	A-CHLORDAN	79381	6.401	-0.139	79381	VV		15.70
19		5836	7.446		5836	VV	?	18.20
20	DDE	10637	7.773	0.093	10637	VV	?	23.85
21	DIELDRIN	15564	8.365	0.145	15564	VV		18.85
22		19375	9.437		19375	VB		20.35
23		4241	10.546		4241	BB		21.70
24	B-ENDOSULF	11076	11.968	0.018	11076	BB		25.50
25	DDT	3017	13.433	-0.387	3017	BV		25.30
26		4069	14.315		4069	VB		28.30
27		8665	20.588		8665	BV		40.25
28	DBC	139175	22.987	-0.353	139175	VB		47.00
TOTALS:		824207		-0.782	824207			

INJECTED PKS: 29 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -13

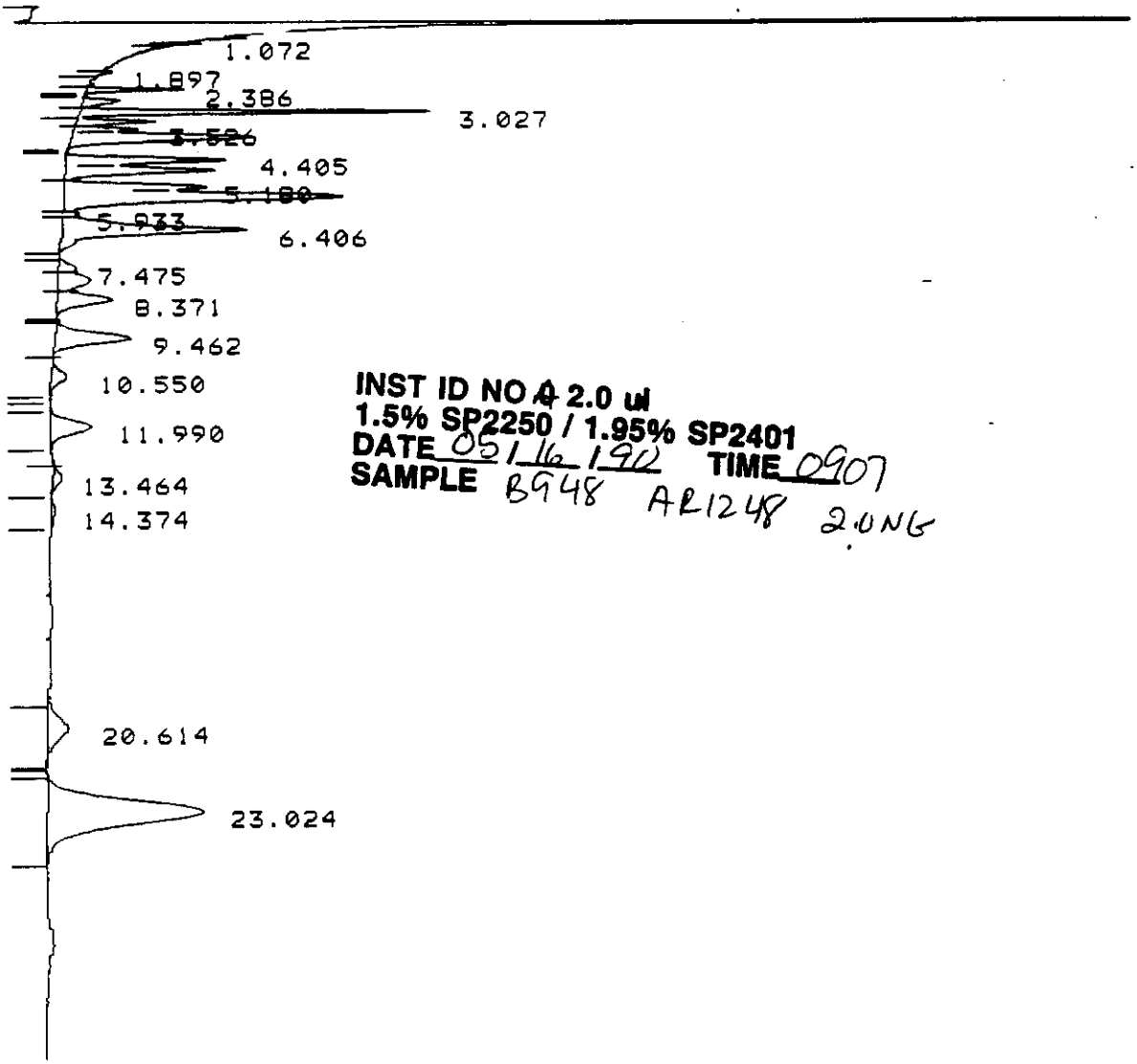
RACK: 1 VIAL: 13 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
4T INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
OMC WAUK CTL2638 AND 2672 PCB WATERS

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

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 05/16/90 TIME 0907
SAMPLE B948 AR1248 2.0NG

10013C

906362-00

TITLE: CLP PESTICIDES B948 AR1248 9:07 16 MAY 90

CHANNEL NO: 3 SAMPLE: ~~19116~~ JKR 05/16/90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		657	1.072		657	BB	1.80
2		582	1.897		582	BB	3.40
3		6830	2.386		6830	BB	4.90
4		5324	2.687		5324	BV	9.85
5	HEPTACHLOR	31646	3.027	-0.093	31646	VV	6.25
6	D-BHC	8417	3.302	-0.058	8417	VV	7.05
7		6389	3.526		6389	VV	? 6.90
8	ALDRIN	33732	3.753	0.013	33732	VB	12.55
9		23932	4.405		23932	BV	10.85
10		25018	4.704		25018	VV	12.30
11		21563	5.180		21563	VV	? 11.60
12	HEPT EPOX	65020	5.459	0.019	65020	VV	16.40
13	A-CHLORDAN	46409	6.406	-0.134	46409	VB	14.70
14		3465	7.475		3465	BV	? 17.50
15	DDE	10129	7.818	0.138	10129	VV	? 25.15
16	DIELDRIN	14704	8.371	0.151	14704	VB	18.05
17		22551	9.462		22551	BV	20.55
18		5803	10.550		5803	VB	22.85
19	B-ENDOSULF	15048	11.990	0.040	15048	BB	25.10
20	DDT	3341	13.464	-0.356	3341	BV	21.75
21		1264	14.374		1264	VB	25.10
22		11811	20.614		11811	BB	39.80
23	DBC	103164	23.024	-0.316	103164	BB	46.65
TOTALS:		466799		-0.596	466799		

DETECTED PKS: 24 REJECTED PKS: 1

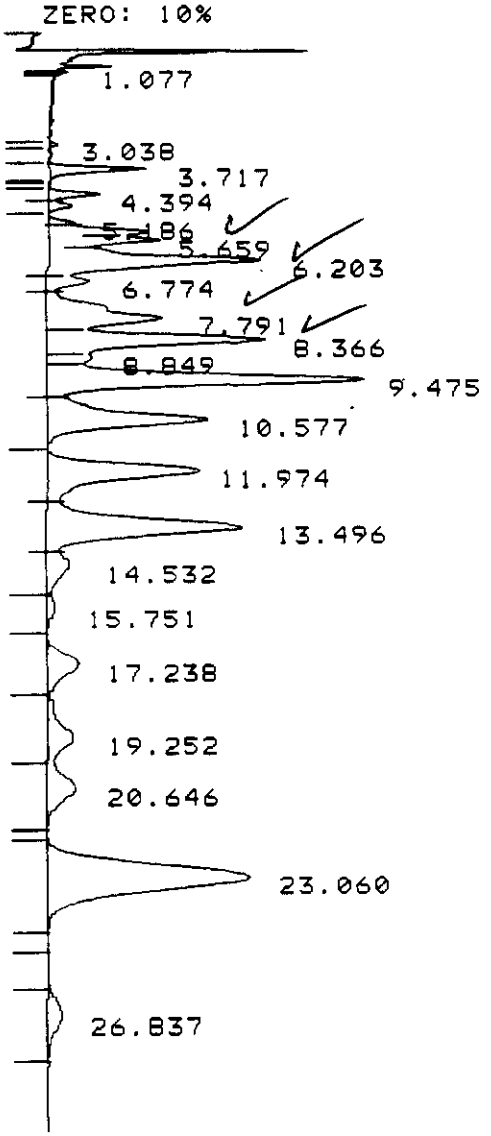
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -19

RACK: 1 VIAL: 14 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
SMT INJ.2UL/INSTRUMENT LETTER A
JRT= OUTSIDE RETENTION TIME WINDOW
OMC WAUK CTL2638 AND 2672 PCB WATERS

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



INST ID NO 4 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/90 TIME 0941
SAMPLE B761 AR1254 2.0PPM

TITLE: CLP PESTICIDES 9:41 16 MAY 90

CHANNEL NO: 3 SAMPLE: B761 AR1254 ~~19117JKR~~ 05/16/90 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1	HEPTACHLOR	787	3.038	-0.082	787	BB	?	6.10
2	ALDRIN	12483	3.717	-0.023	12483	BB		9.30
3		6659	4.394		6659	BV		9.35
4		3527	4.709		3527	VV		10.45
5		3234	5.186		3234	VV	?	12.00
6	HEPT EPOX	16984	5.425	-0.015	16984	VV	?	13.50
7		19517	5.659		19517	VV	?	17.45
8		61390	6.203		61390	VV		19.30
9	A-ENDOSULF	8482	6.774	-0.016	8482	VV	?	17.05
10	DDE	44261	7.791	0.111	44261	VV	?	26.60
11	DIELDRIN	59478	8.366	0.146	59478	VV		19.20
12		8688	8.849		8688	VV	?	6.70
3		95328	9.475		95328	VV	?	19.15
4		58555	10.577		58555	VV		23.90
15	B-ENDOSULF	59425	11.974	0.024	59425	VV		26.05
16	DDT	83652	13.496	-0.324	83652	VV		29.95
17		12074	14.532		12074	VV	?	46.55
18		3031	15.751		3031	VV		24.30
19		17386	17.238		17386	VV		39.90
20		17369	19.252		17369	VV		43.05
21		17255	20.646		17255	VB		43.45
22	DBC	129451	23.060	-0.280	129451	BB		46.65
3		10698	26.837		10698	BB	?	53.45
TOTALS:		749714		-0.459	749714			

DETECTED PKS: 24 REJECTED PKS: 1

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -25

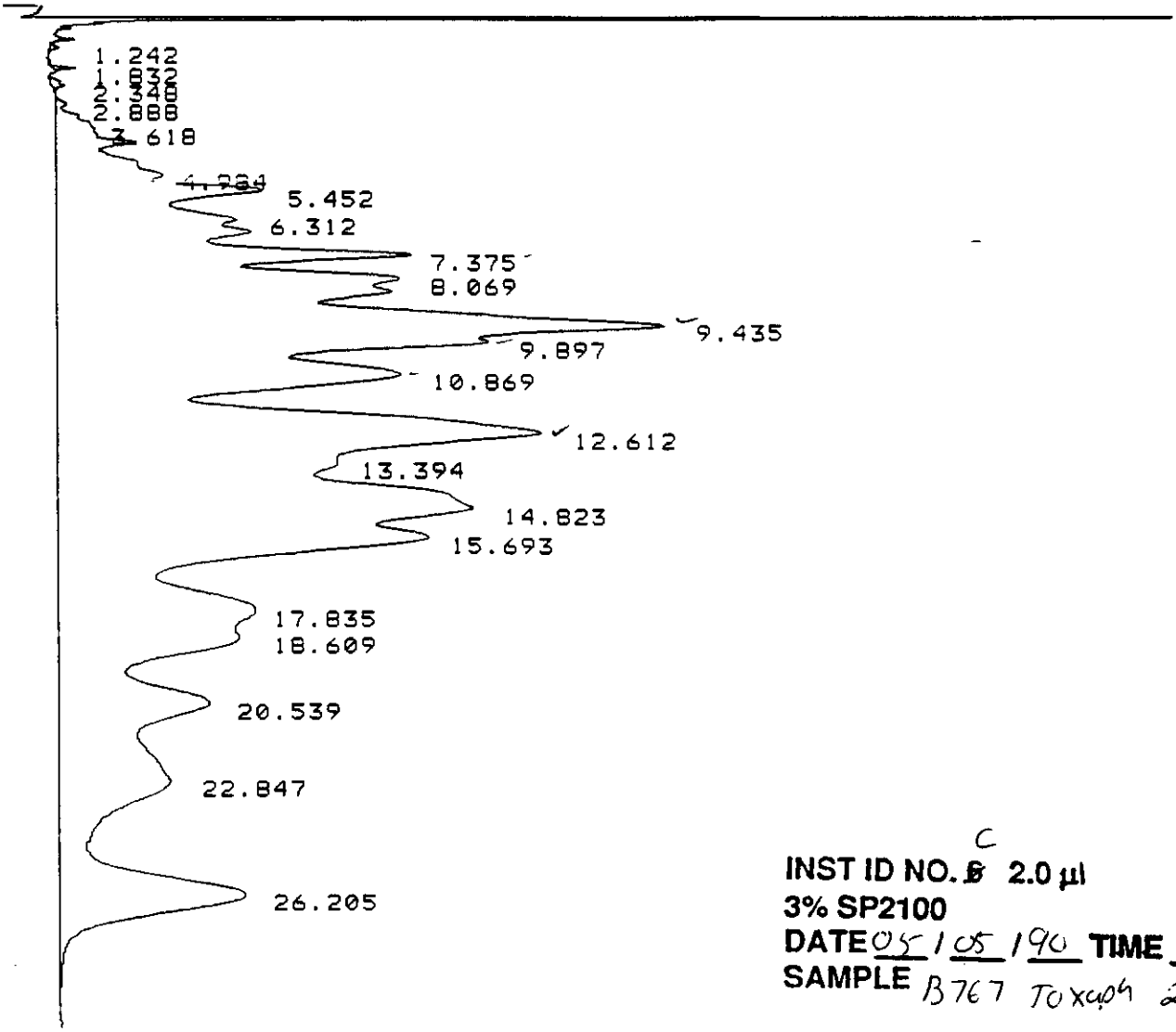
BLK: 2 VIAL: 1 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
OMC WAUK CTL2638 AND 2672 PCB WATERS

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

100133

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~B~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 624
SAMPLE B767 Toxaph 2.5 ppm
(5.90820

ORIGINAL (Red)

TITLE: CLP PESTICIDES 6:24 5 MAY 90

CHANNEL NO: 2 SAMPLE: B767 TOXAPH METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		959	3.251		959	VV	? 13.70
	HEPTACHLOR	2522	3.618	0.118	2522	VV	? 12.20
		6229	4.021		6229	VV	? 28.60
		14946	4.984		14946	VV	? 28.90
5	HEPT EPOX	22968	5.452	0.142	22968	VV	? 30.20
6	G-CHLORDAN	18340	6.312	0.222	18340	VV -	? 47.50
7	A-ENDOSULF	18250	6.667	0.037	18250	VV	? 19.70
8		37850	7.375		37850	VV	? 34.00
9	DDE/DIELD.	34224	8.069	0.299	34224	VV	? 40.70
10	ENDRIN	30751	8.435	-0.245	30751	VV	? 13.25
11	DDD	97902	9.435	-0.355	97902	VV	? 60.70
	ENDRIN ALD	37890	9.897	0.057	37890	VV	? 4.10
		68308	10.869		68308	VV	? 52.95
14	DDT	123752	12.612	-0.248	123752	VV	? 57.90
15		25522	13.394		25522	VV	?
16	END KETONE	109074	14.823	0.093	109074	VV	?108.80
17		74904	15.693		74904	VV	? 31.20
18		51669	17.835		51669	VV	?105.50
19	METHOXYCHL	34261	18.609	-0.681	34261	VV	? 87.20
20		41686	20.539		41686	VV	? 83.60
21		50087	22.847		50087	VV	?160.60
22	DBC	51417	26.205	-0.325	51417	VB	70.80
TOTALS:		953511		-0.886	953511		

DETECTED PKS: 27 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

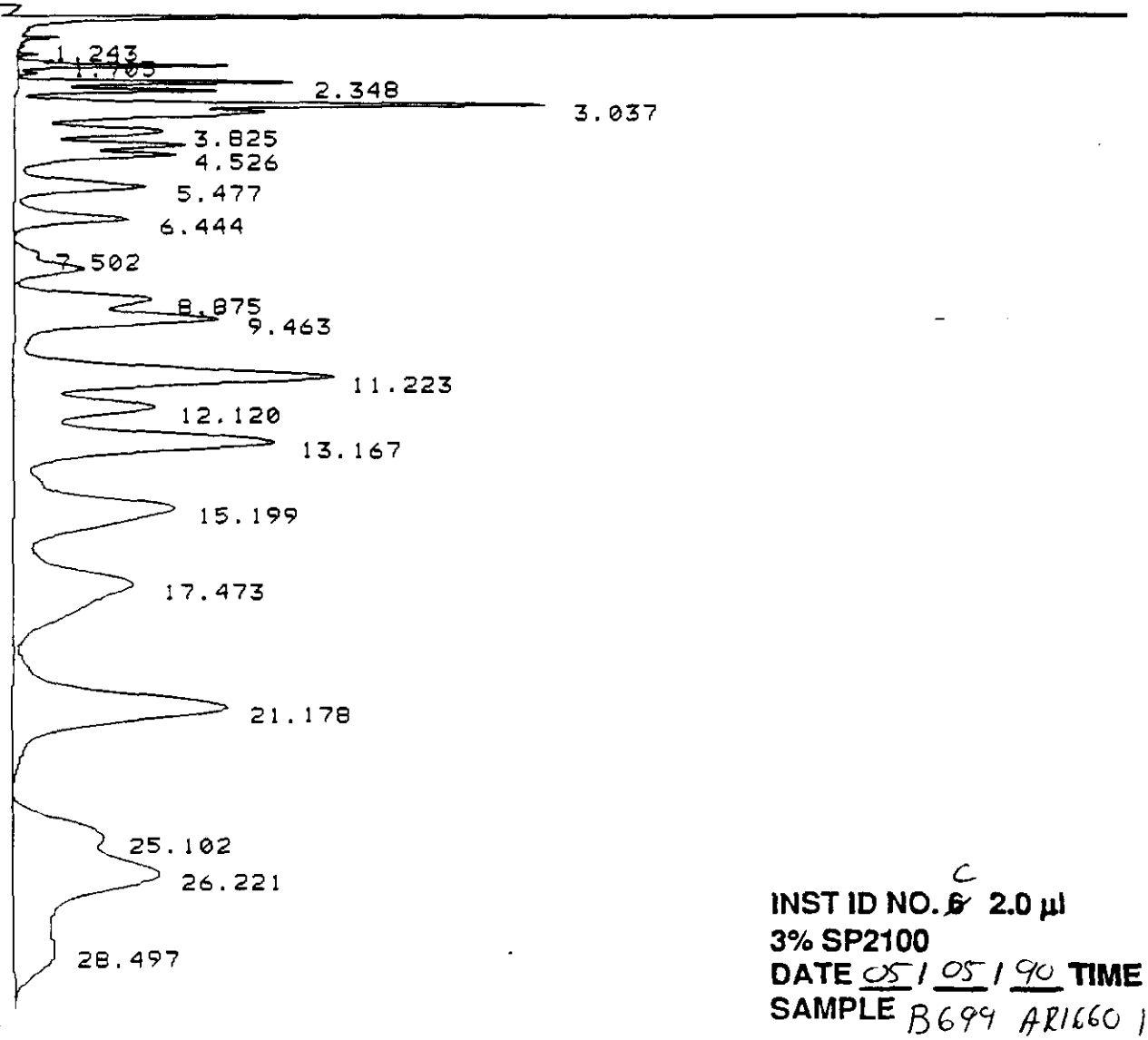
NOISE: 8.5 OFFSET: -12

R(1 VIAL: 10 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
CLP STANDARDS - QUANT

100231

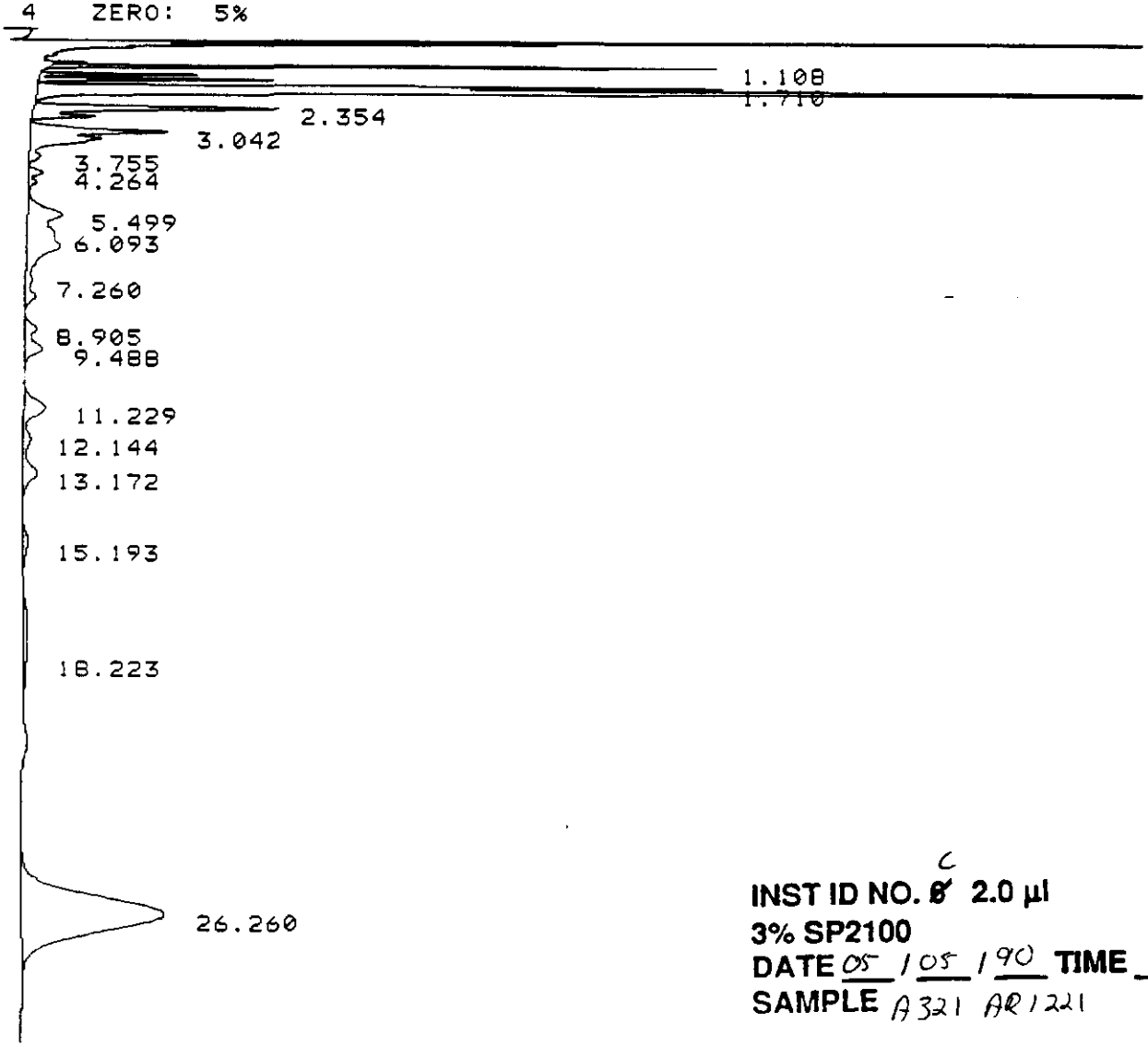
CHART SPEED 0.5 CM/MIN
AT 1: 4 ZERO: 5%



INST ID NO. ~~6~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 658
SAMPLE B699 AR1660 1.0 ppm

100202 (2.0 ng)

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~8~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 732
SAMPLE A321 AR1221

10 ng

000288

TI E: CLP PESTICIDES 7:32 5 MAY 90

CHANNEL NO: 2 SAMPLE: A321 AR1221 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		7152	1.108		7152	BB		2.85
2		1921	1.351		1921	BV		3.30
3		3361	1.496		3361	VV		3.85
4		11086	1.710		11086	VV	?	4.30
	A-BHC	34845	1.854	0.024	34845	VV		5.80
		6966	2.354		6966	VV	?	7.45
7		1585	2.596		1585	VV	?	6.90
8		4951	3.042		4951	VV		9.05
9		3616	3.236		3616	VV	?	15.90
10	HEPT EPOX	3425	5.499	0.189	3425	VV	?	24.70
11	G-CHLORDAN	2076	6.093	0.003	2076	VV	?	24.80
12	A-ENDOSULF	4120	6.441	-0.189	4120	VV	?	37.25
13	DDE/DIELD.	832	7.941	0.171	832	VV		16.00
	B-ENDOSULF	1073	8.905	0.015	1073	VV	?	26.30
	DDD	1668	9.488	-0.302	1668	VV		25.60
16	ESS	2653	11.229	-0.221	2653	VV		31.50
17		1019	12.144		1019	VV		31.20
18	DDT	1867	13.172	0.312	1867	VV		35.20
19	END KETONE	1105	15.193	0.463	1105	VV		46.40
20		1958	18.223		1958	VB	?	
21	DBC	36206	26.260	-0.270	36206	BB	?	58.35
TOTALS:		133485		0.195	133485			

DETECTED PKS: 25 REJECTED PKS: 4

DIVISOR: 1.00000 MULTIPLIER: 10000.0

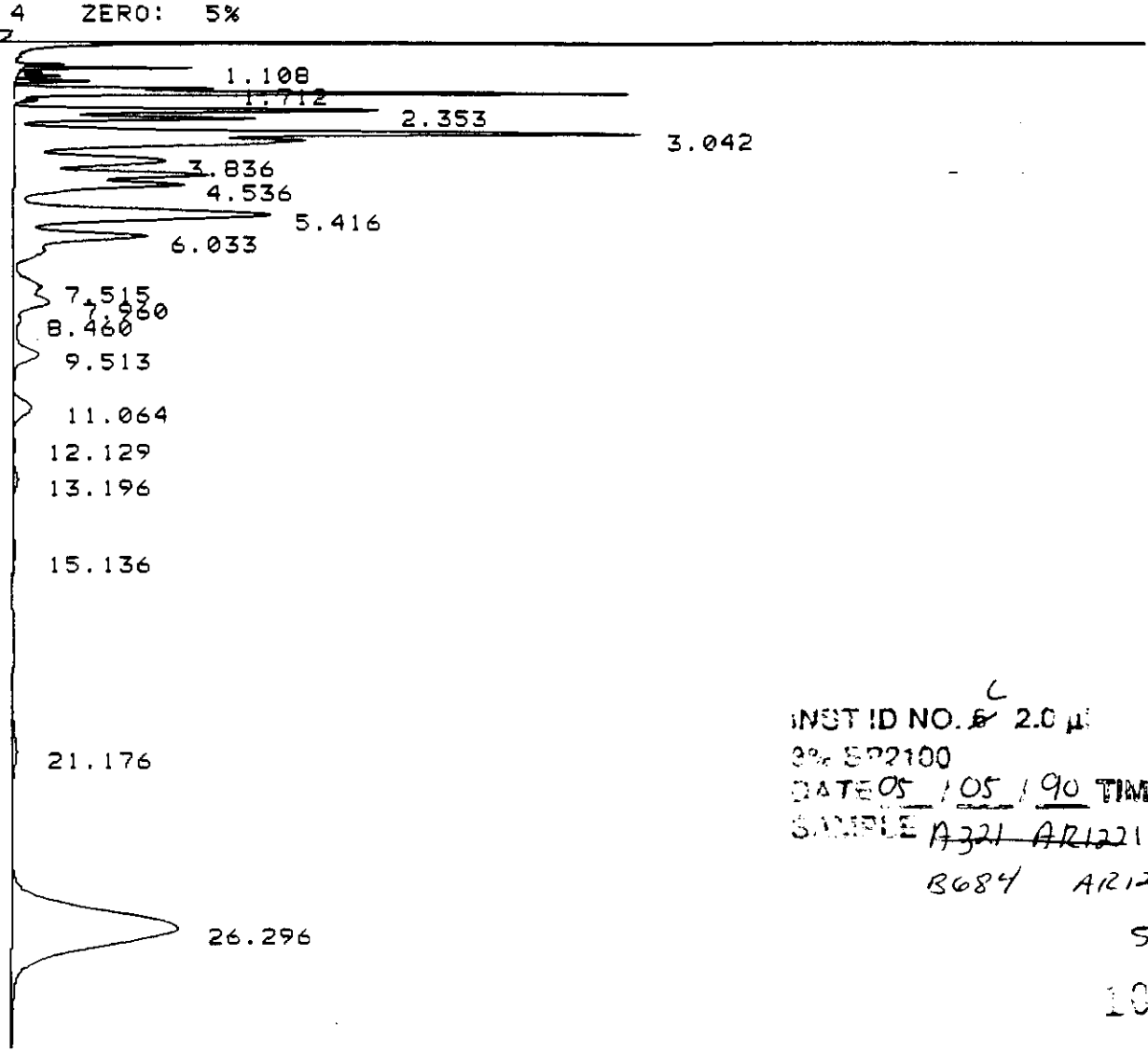
NOISE: 8.5 OFFSET: -1

RACK: 1 VIAL: 13 INJ: 1

NOTES:
`TRUMENT ID: C
.UMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT* OUTSIDE RETENTION TIME WINDOW
CLP STANDARDS - QUANT

100204

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~8~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 0856 ~~732~~
SAMPLE ~~A321 AR1221~~
B684 AR1232
5.0mg
100200

TITLE: CLP PESTICIDES 8:56 5 MAY 90

CHANNEL NO: 2 SAMPLE: B684 AR1232 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1735	1.108		1735	BV		2.80
2		1019	1.497		1019	VV		3.75
[illegible]		3139	1.712		3139	VV	?	4.40
[illegible]	A-BHC	13115	1.855	0.025	13115	VV		5.50
[illegible]		9573	2.353		9573	VV		7.00
6		6440	2.601		6440	VV		7.10
7		21582	3.042		21582	VV -		8.90
8		14939	3.242		14939	VV	?	16.35
9		9898	3.836		9898	VV	?	19.35
10	ALDRIN	9157	4.251	-0.089	9157	VV		14.55
11		8798	4.536		8798	VV	?	14.45
12	HEPT EPOX	18881	5.416	0.106	18881	VV		19.80
[illegible]	G-CHLORDAN	8482	6.033	-0.057	8482	VV		16.25
14	A-ENDOSULF	2228	6.441	-0.189	2228	VV	?	28.80
15		2623	7.515		2623	VV	?	27.80
16	DDE/DIELD.	3002	7.960	0.190	3002	VV	?	27.25
17	DDD	2957	9.513	-0.277	2957	VV		23.70
18	ESS	2175	11.064	-0.386	2175	VV		31.70
19	DDT	807	13.196	0.336	807	VB		33.60
20		1010	21.176		1010	BB		51.20
21	DBC	43309	26.296	-0.234	43309	BB		68.65
TOTALS:		184869		-0.575	184869			

DETECTED PKS: 27 REJECTED PKS: 6

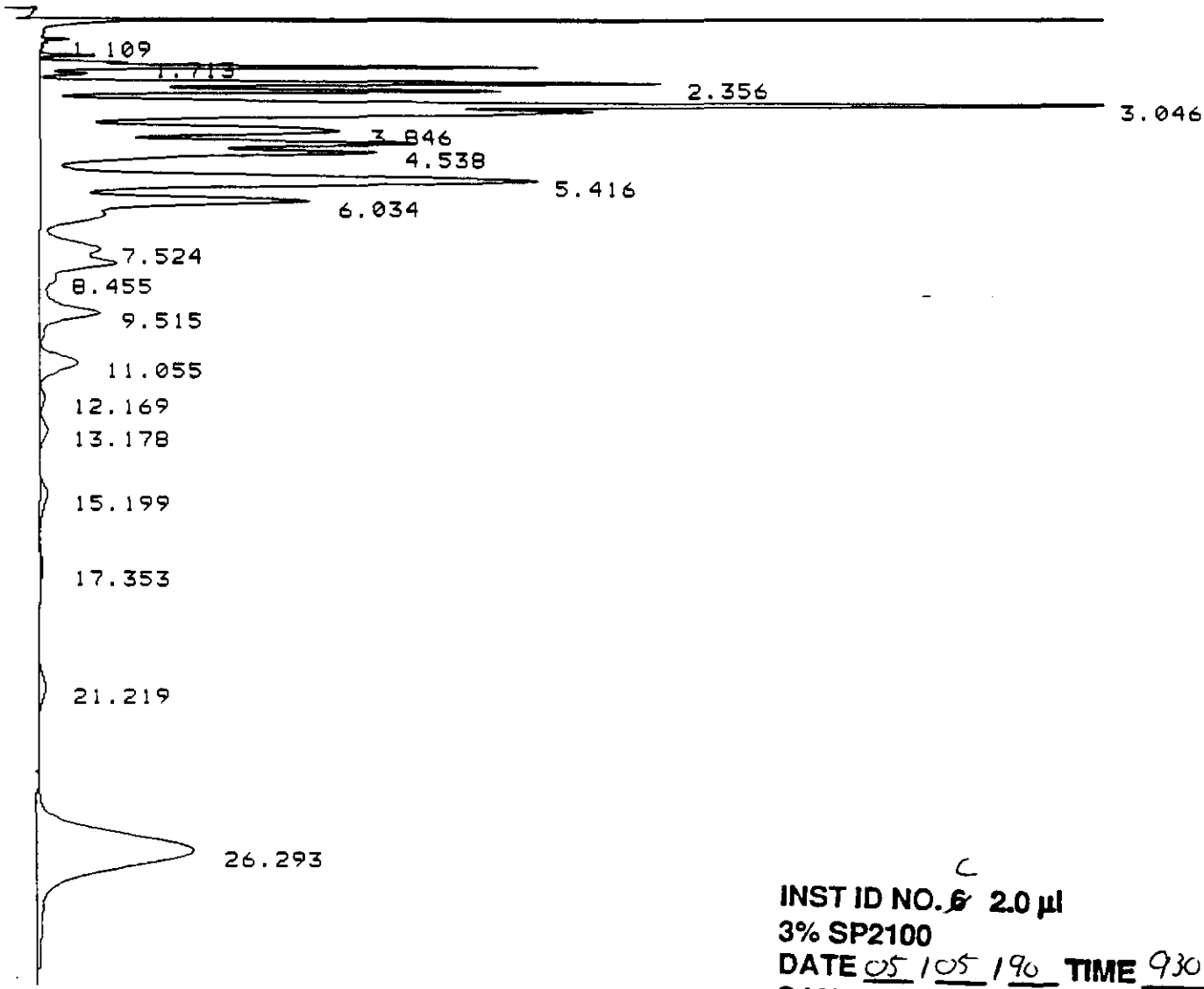
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -14

RACK: 1 VIAL: 14 INJ: 1

NO[illegible]:
[illegible]STRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

CH T SPEED 0.5 CM/MIN
AT N: 4 ZERO: 5%



INST ID NO. ~~6~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 930
SAMPLE B762 AR1242 2.5 ppm
(5.0 µg)

TITLE: CLP PESTICIDES 9:30 5 MAY 90

CHANNEL NO: 2 SAMPLE: B762 AR1242 METHOD: CLP-2A

PE N	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		808	1.497		808	VV		4.00
2		1348	1.713		1348	VV	?	4.40
3	A-BHC	11147	1.857	0.027	11147	VV		5.45
4	G-BHC	1070	2.067	-0.093	1070	VV		5.75
5		17746	2.356		17746	VV		7.20
6		13503	2.601		13503	VV		7.35
7		43760	3.046		43760	VV		9.20
8		30229	3.244		30229	VV	?	16.40
[illegible]		20891	3.846		20891	VV	?	19.90
[illegible]	ALDRIN	19172	4.256	-0.084	19172	VV	?	13.50
[illegible]		18869	4.538		18869	VV	?	14.95
12	HEPT EPOX	39913	5.416	0.106	39913	VV		20.30
13	G-CHLORDAN	18459	6.034	-0.056	18459	VV		16.80
14	A-ENDOSULF	5347	6.451	-0.179	5347	VV	?	35.75
15		6223	7.524		6223	VV	?	28.50
16	DDE/DIELD.	6925	7.961	0.191	6925	VV	?	27.95
17	ENDRIN	1260	8.455	-0.225	1260	VV		4.80
18	DDD	7210	9.515	-0.275	7210	VV		24.90
[illegible]	ESS	4979	11.055	-0.395	4979	VV		30.90
		765	12.169		765	VV		25.60
21	DDT	1429	13.178	0.318	1429	VV		30.40
22	END KETONE	1788	15.199	0.469	1788	VV		44.80
23		1832	21.219		1832	BV		56.00
24	DBC	44601	26.293	-0.237	44601	VB		69.10
TOTALS:		319274		-0.433	319274			

DETECTED PKS: 27 REJECTED PKS: 3

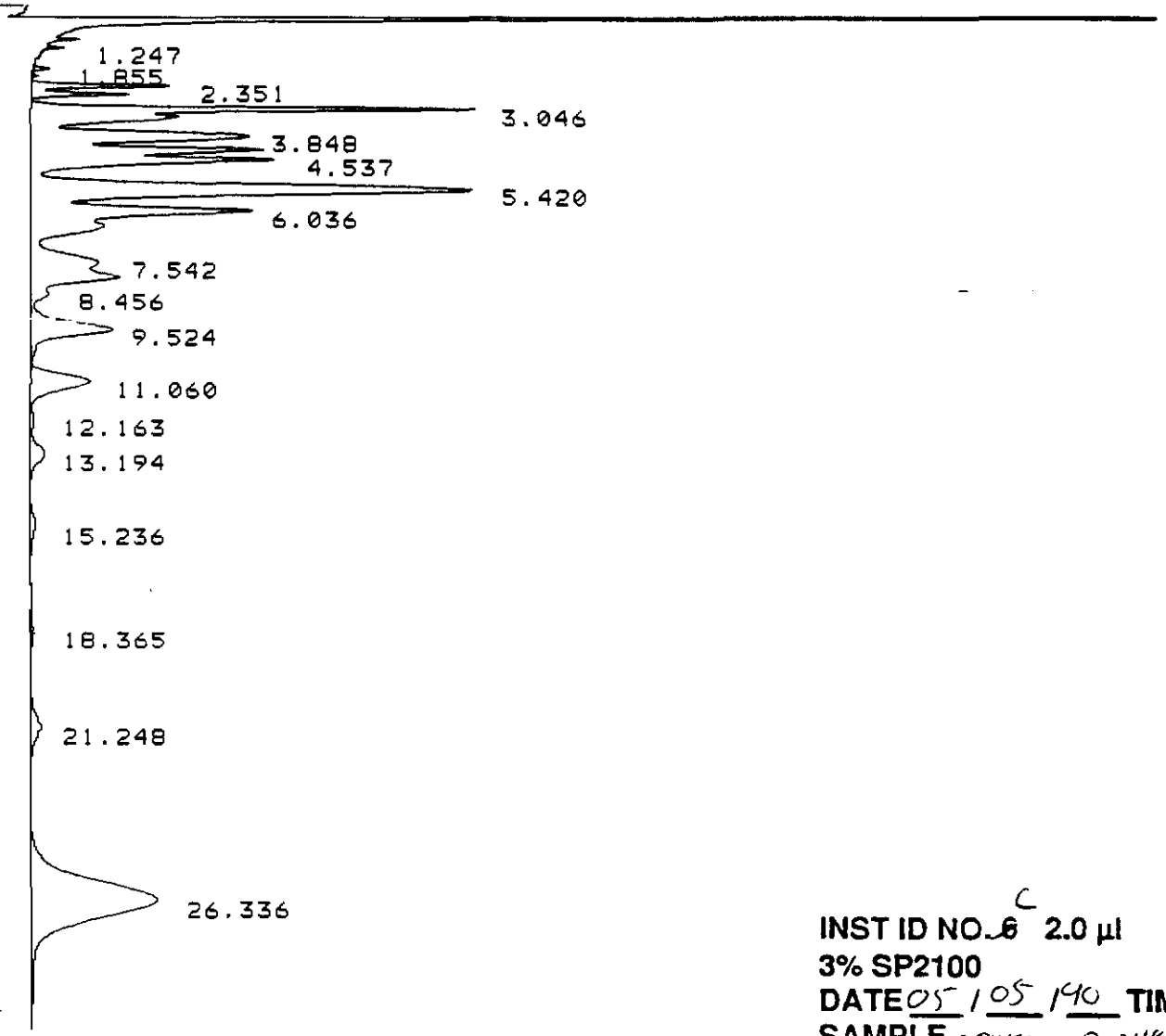
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -17

RACK: 2 VIAL: 1 INJ: 1

NOTES:
INSTRUMENT ID: C
[illegible]OLUMN: 3% SP2100
[illegible]JECTION VOLUME 2 UL
[illegible]T* OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

Ch T SPEED 0.5 CM/MIN
ATIEN: 4 ZERO: 5%



INST ID NO. 6 C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 1004
SAMPLE B948 AR1248 1.0 ppm
(2.0 ng)

TITLE: CLP PESTICIDES 10:04 5 MAY 90

CHANNEL NO: 2 SAMPLE: B948 AR124B METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		3506	2.351		3506	VV		6.75
2		2438	2.602		2438	VV		6.70
		14219	3.046		14219	VV		8.50
		7970	3.247		7970	VV	?	17.60
5		14227	3.848		14227	VV	?	19.55
6	ALDRIN	10651	4.244	-0.096	10651	VV		14.60
7		12701	4.537		12701	VV		14.20
8	HEPT EPOX	32871	5.420	0.110	32871	VV		20.45
9	G-CHLORDAN	14200	6.036	-0.054	14200	VV		16.80
10	A-ENDOSULF	5997	6.476	-0.154	5997	VV	?	32.30
11		6343	7.542		6343	VV	?	28.70
12	DDE/DIELD.	7251	7.968	0.198	7251	VV	?	27.80
	ENDRIN	1121	8.456	-0.224	1121	VV	?	20.60
[illegible]	DDD	8485	9.524	-0.266	8485	VV		24.30
15	ESS	6535	11.060	-0.390	6535	VV		30.30
16	DDT	1962	13.194	0.334	1962	VV		34.40
17	END KETONE	1145	15.236	0.506	1145	VB		49.60
18		2149	21.248		2149	BV		51.20
19	DBC	35076	26.336	-0.194	35076	VB		70.60
TOTALS:		188847		-0.230	188847			

DETECTED PKS: 24 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

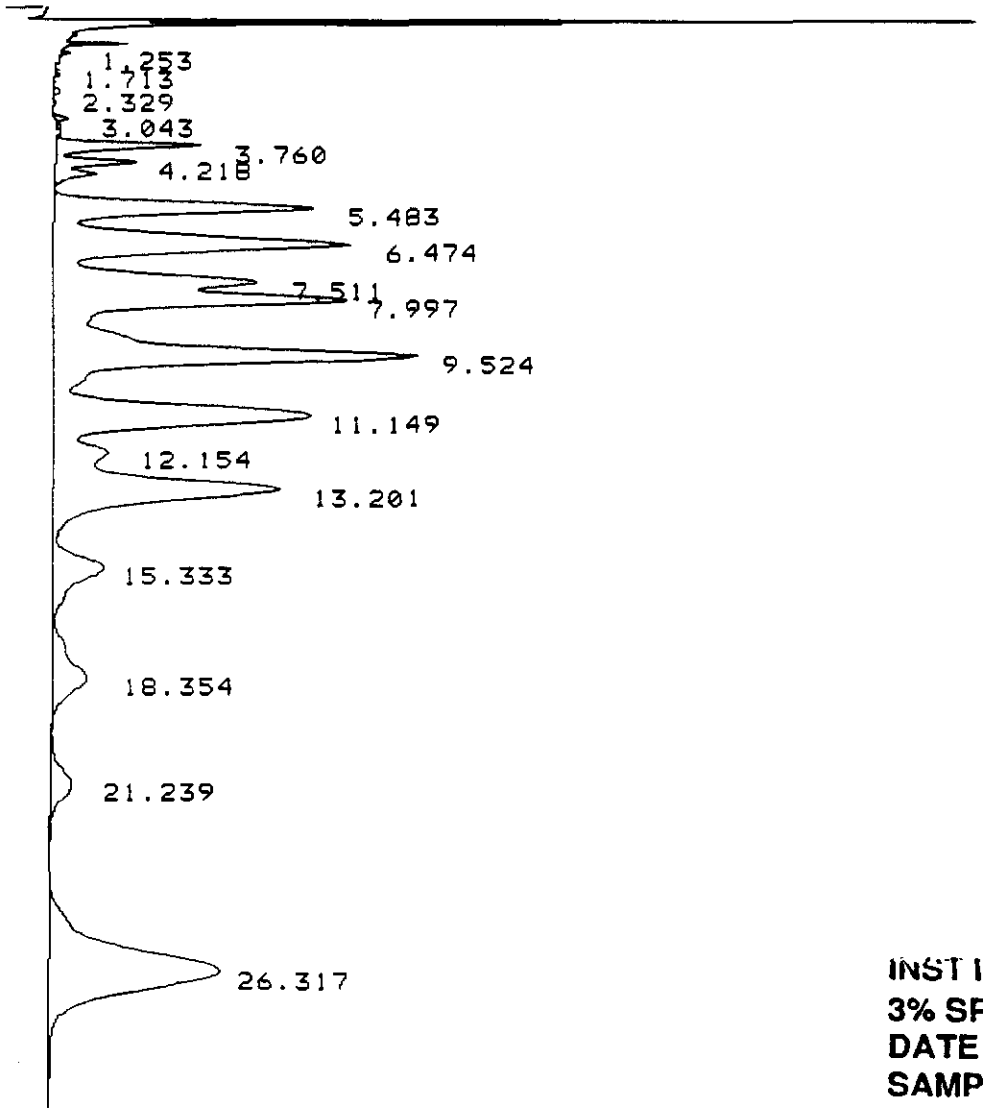
NOISE: 6.1 OFFSET: -12

RACK: 2 VIAL: 2 INJ: 1

NOTES:
[illegible]TRUMENT ID: C
[illegible]UMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

100210

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



100211

INST ID NO. ~~6~~ C 2.0 µl
3% SP2100
DATE 05 / 05 / 90 TIME 1038
SAMPLE B761 AR1254 1.0 ppm
(2.0 ng)

TITLE: CLP PESTICIDES 10:38 5 MAY 90

CHANNEL NO: 2 SAMPLE: B761 AR1254 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		5731	3.760		5731	BV	?	12.05
2	ALDRIN	2977	4.218	-0.122	2977	VV	?	10.90
		1770	4.539		1770	VV		12.00
	HEPT EPOX	18602	5.483	0.173	18602	VV	?	20.85
5	A-ENDOSULF	27680	6.474	-0.156	27680	VV		26.90
6		17261	7.511		17261	VV	?	27.80
7	DDE/DIELD.	23878	7.997	0.227	23878	VV	?	25.20
8	DDD	40690	9.524	-0.266	40690	VV		26.05
9	ESS	32205	11.149	-0.301	32205	VV		36.70
10		6052	12.154		6052	VV	?	35.30
11	DDT	32334	13.201	0.341	32334	VV		37.60
12	END KETONE	8689	15.333	0.603	8689	VV		41.30
	METHOXYCHL	7849	18.354	-0.936	7849	VB		53.35
14		4476	21.239		4476	BV		50.65
15	DBC	44525	26.317	-0.213	44525	VB		69.80
TOTALS:		274719		-0.650	274719			

DETECTED PKS: 20 REJECTED PKS: 5

DIVISOR: 1.00000 MULTIPLIER: 10000.0

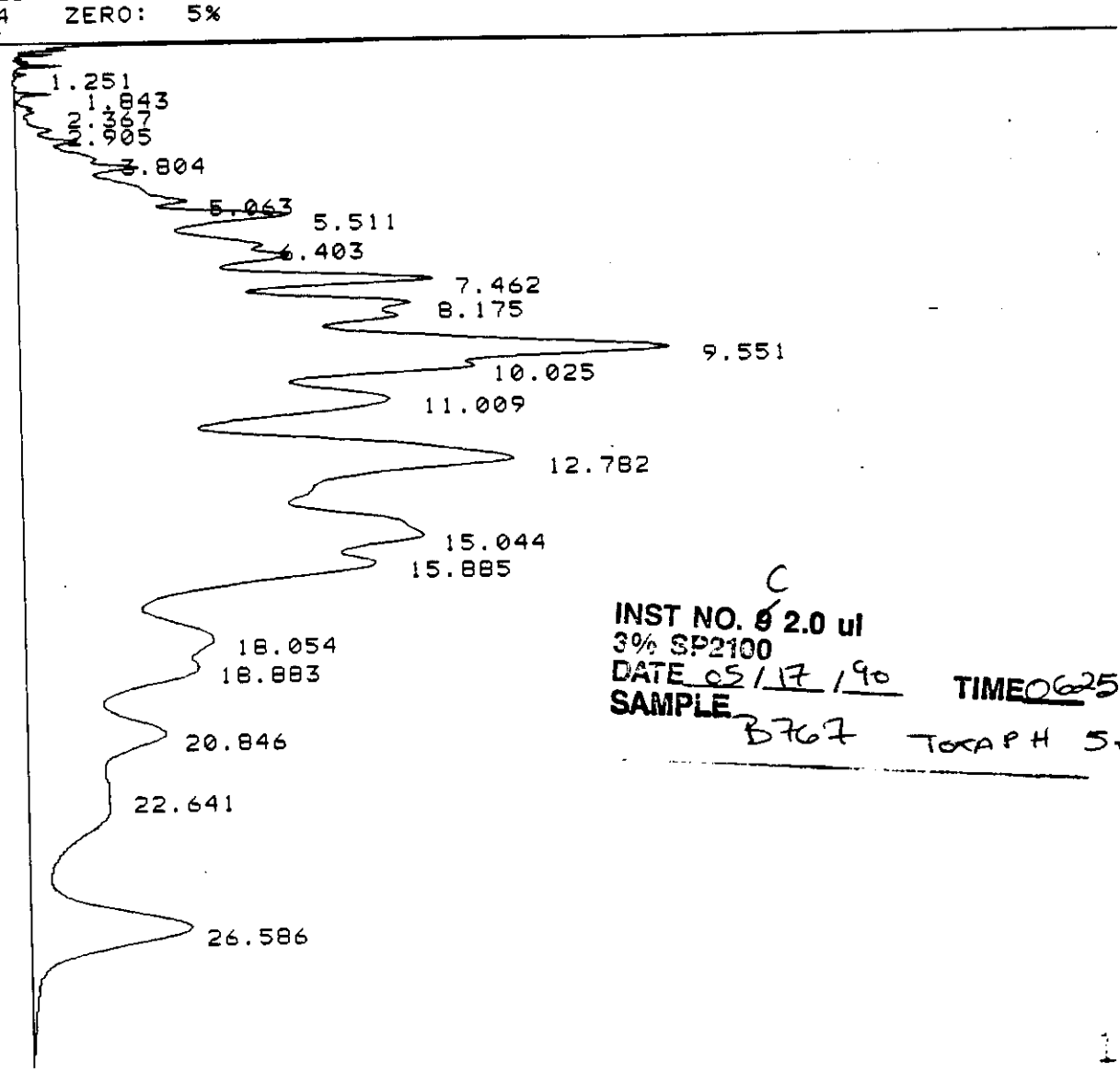
NOISE: 6.1 OFFSET: -11

RACK: 2 VIAL: 4 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
OPT= OUTSIDE RETENTION TIME WINDOW
IHARL 2542 LOW SOILS/PEST QUANT
IALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

100212

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~B~~ C 2.0 ul
3% SP2100
DATE 05/17/90 TIME 0625
SAMPLE B767 TOXAPH 50mg

100210

TITLE: CLP PESTICIDES 6:25 17 MAY 90

CHANNEL NO: 2 SAMPLE: B767 TOXAPH METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		2260	2.905		2260	VV	? 14.20
2		3148	3.261		3148	VV	? 14.50
3		6416	3.804		6416	VV	? 28.50
4		7705	4.061		7705	VV	? 17.80
5		25291	5.063		25291	VV	? 29.20
6	HEPT EPOX	30654	5.511	0.201	30654	VV	? 30.10
7	A-ENDOSULF	24893	6.403	-0.227	24893	VV	? 50.80
8	A-CHLORDAN	26591	6.728	-0.032	26591	VV	? 18.75
9	DDE/DIELD.	47081	7.462	-0.308	47081	VV	? 42.00
10		41001	8.175		41001	VV	? 39.50
11	ENDRIN	35142	8.538	-0.142	35142	VV	? 12.60
12	DDD	110906	9.551	-0.239	110906	VV	? 60.60
13	ENDRIN ALD	41101	10.025	0.185	41101	VV	? 6.40
14	ESS	80576	11.009	-0.441	80576	VV	? 89.45
15	DDT	162281	12.782	-0.078	162281	VV	? 57.90
16	END KETONE	110125	15.044	0.314	110125	VV	?108.50
17		77042	15.885		77042	VV	? 27.85
18		51157	18.054		51157	VV	? 98.60
19	METHOXYCHL	35309	18.883	-0.407	35309	VV	?100.00
20		42551	20.846		42551	VV	? 94.40
21		37634	22.641		37634	VV	? 75.20
22	DBC	46543	26.586	0.056	46543	VB	72.05
TOTALS:		1045410		-1.118	1045410		

DETECTED PKS: 28 REJECTED PKS: 6

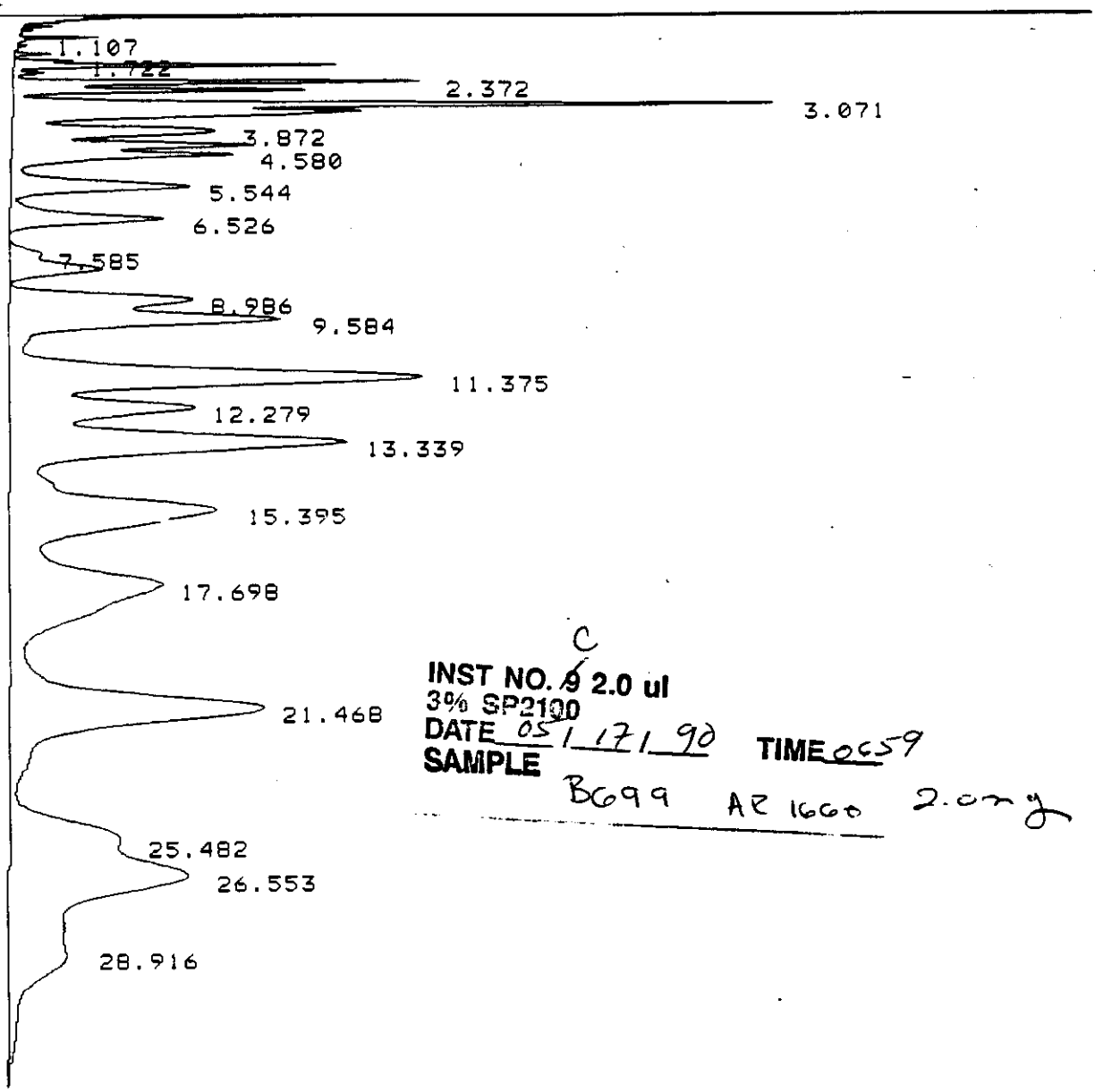
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 7.3 OFFSET: -10

RACK: 1 VIAL: 10 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~9~~ C 2.0 ul
3% SP2100
DATE 05/17/90 TIME 0659
SAMPLE B699 AR 1660 2.0mg

TITLE: CLP PESTICIDES 6:59 17 MAY 90

CHANNEL NO: 2 SAMPLE: B699 AR1660 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		890	1.722		890	VV	? 4.20
2	A-BHC	6566	1.869	0.039	6566	VV	5.05
3		10848	2.372		10848	VV	6.75
4		7931	2.621		7931	VV	6.80
5		26827	3.071		26827	VV	8.65
6		18086	3.272		18086	VV	? 15.60
7		14106	3.872		14106	VV	? 19.80
8	ALDRIN	11662	4.291	-0.049	11662	VV	14.05
9		11582	4.580		11582	VV	? 13.25
10	HEPT EPOX	14043	5.544	0.234	14043	VV	19.85
11	A-ENDOSULF	11722	6.526	-0.104	11722	VV	17.50
12	DDE/DIELD.	2136	7.585	-0.185	2136	VV	? 21.80
13		8016	8.040		8016	VV	23.45
14	B-ENDOSULF	17664	8.986	0.096	17664	VV	? 24.80
15	DDD	27809	9.584	-0.206	27809	VV	? 27.45
16	ESS	53221	11.375	-0.075	53221	VV	32.55
17		22447	12.279		22447	VV	33.45
18	DDT	49575	13.339	0.479	49575	VV	37.20
19	END KETONE	49170	15.395	0.665	49170	VV	57.40
20		49009	17.698		49009	VV	81.40
21		64309	21.468		64309	VV	55.30
22		21202	25.482		21202	VV	? 76.80
23	DBC	54759	26.553	0.023	54759	VV	? 95.00
24		25241	28.916		25241	VB	?108.95
TOTALS:		578821		0.917	578821		

D(ICTED PKS: 28 REJECTED PKS: 4

DIVISOR: 1.00000 MULTIPLIER: 10000.0

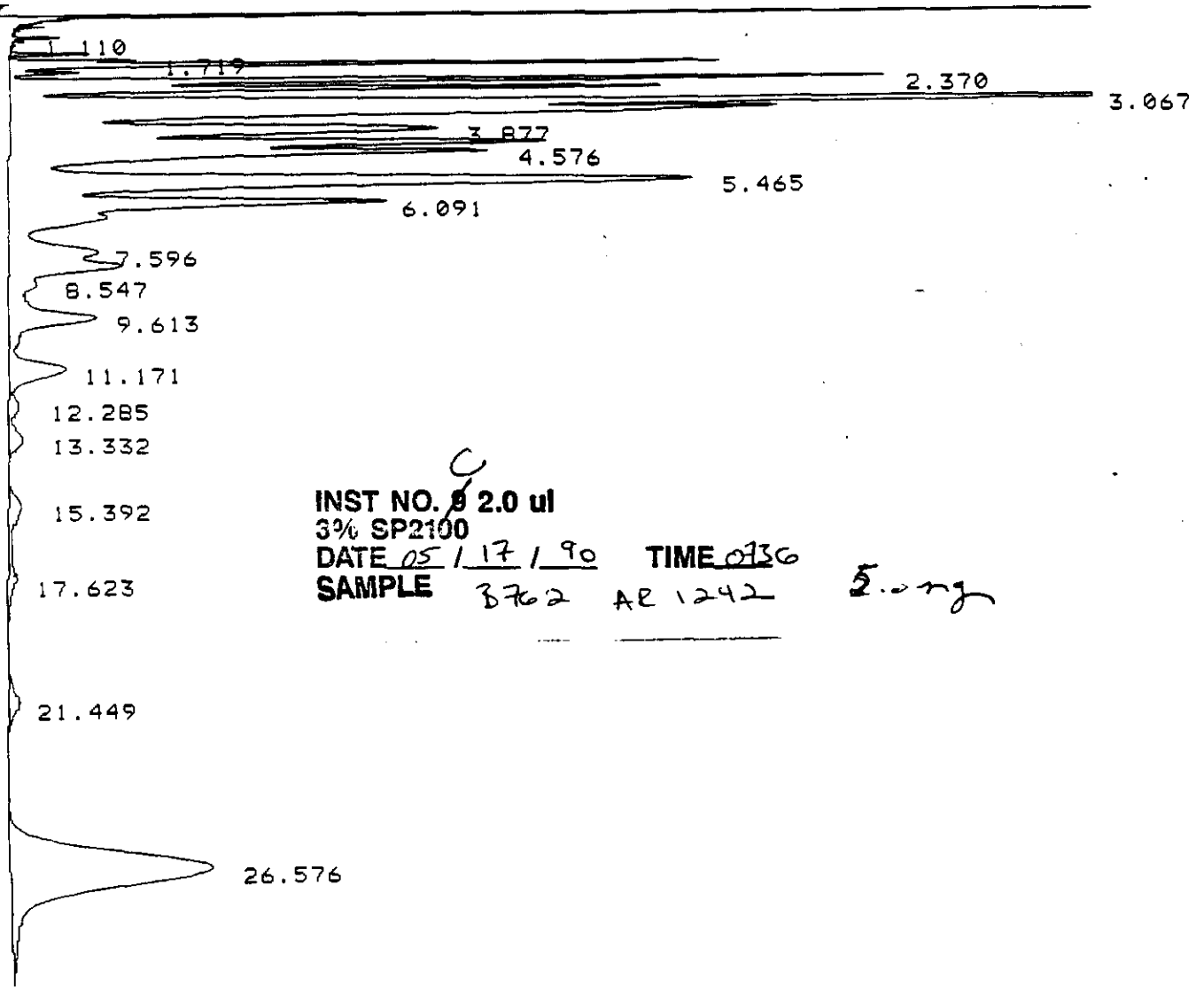
NOISE: 7.3 OFFSET: -19

RACK: 1 VIAL: 11 INJ: 1

NOTES:
'NSTRUMENT ID: C
OLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT* OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

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

CHF SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~0~~ C 2.0 ul
3% SP2100
DATE 05 / 17 / 90 TIME 0736
SAMPLE 3762 AR 1242 5.0 ng

100218

TITLE: CLP PESTICIDES 7:36 17 MAY 90

CHANNEL NO: 2 SAMPLE: B762 AR1242 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		1131	1.503		1131	BV		3.70
2		1930	1.719		1930	VV	?	4.10
3	A-BHC	14725	1.866	0.036	14725	VV		5.10
4	G-BHC	1460	2.077	-0.083	1460	VV		5.40
5		23636	2.370		23636	VV		6.65
6		18205	2.617		18205	VV		7.00
7		58832	3.067		58832	VV		8.90
8		41609	3.267		41609	VV	?	16.15
9		30456	3.877		30456	VV	?	20.75
10	ALDRIN	27190	4.289	-0.051	27190	VV		15.15
11		26824	4.576		26824	VV	?	14.90
12	HEPT EPOX	55037	5.465	0.155	55037	VV		20.50
13	G-CHLORDAN	25500	6.091	0.001	25500	VV		16.65
14	A-ENDOSULF	8387	6.521	-0.109	8387	VV	?	35.85
15	DDE/DIELD.	9547	7.596	-0.174	9547	VV	?	28.70
16		10025	8.039		10025	VV	?	28.45
17	ENDRIN	2199	8.547	-0.133	2199	VV		8.55
18	DDD	11029	9.613	-0.177	11029	VV		25.30
19	ESS	7354	11.171	-0.279	7354	VV		30.60
20		1255	12.285		1255	VV		23.20
21	DDT	1908	13.332	0.472	1908	VB		28.80
22	END KETONE	2792	15.392	0.662	2792	BV		49.60
23		2302	17.623		2302	VB	?	46.55
24		2260	21.449		2260	BB		49.60
25	DBC	57388	26.576	0.046	57388	BB		70.15
TOTALS:		442981		0.366	442981			

DETECTED PKS: 27 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 7.3 OFFSET: -25

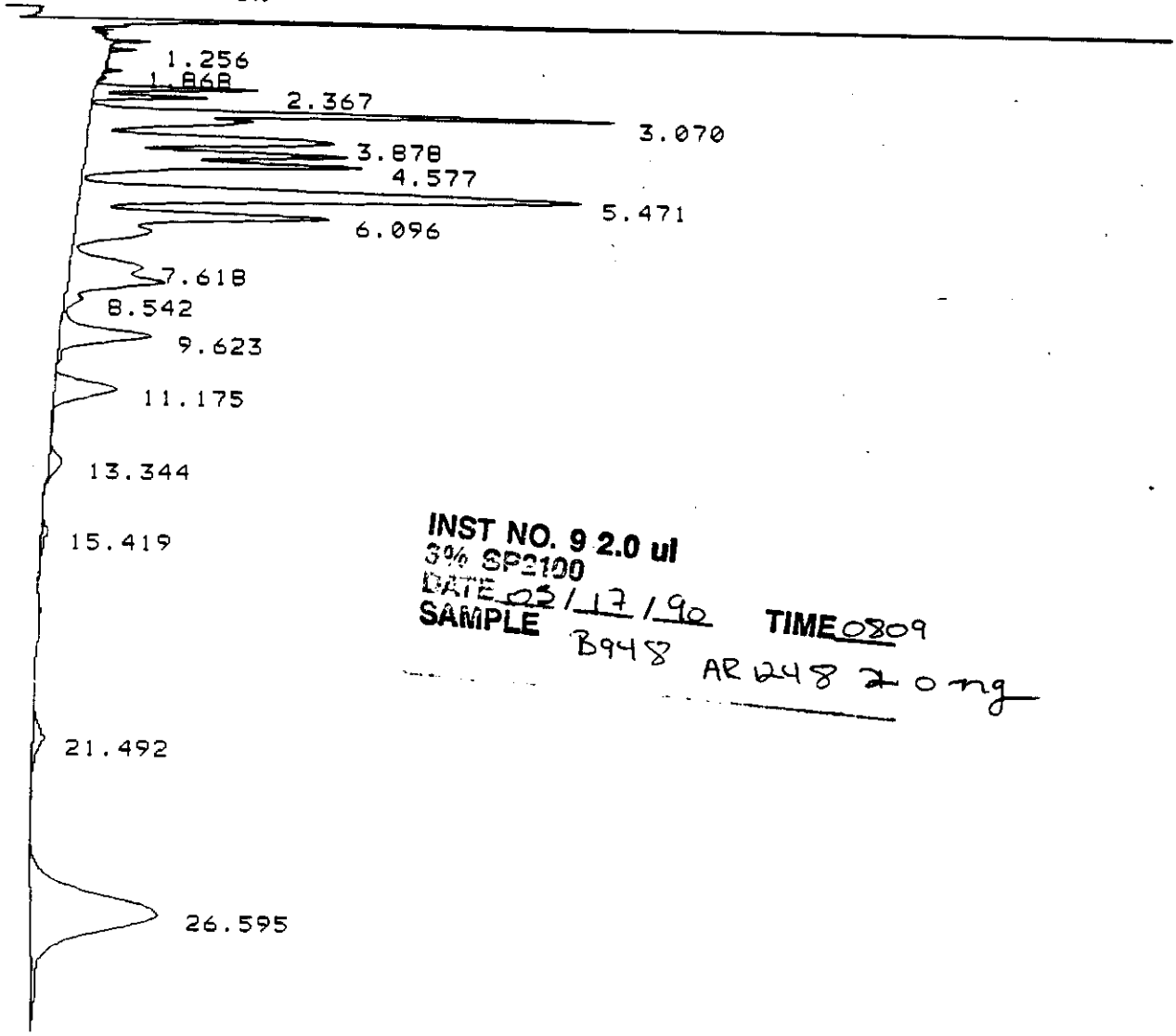
RACK: 1 VIAL: 13 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

varian sunnyvale, calif

f p/n 03-906362-00

ART SPEED 0.5 CM/MIN
TEN: 4 ZERO: 5%



INST NO. 9 2.0 ul
3% SP2100
DATE 03/17/90 TIME 0809
SAMPLE B948 AR 248 20 ng

TITLE: CLP PESTICIDES 8:09 17 MAY 90

CHANNEL NO: 2 SAMPLE: B948 AR124B METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		3980	2.367		3980	VV	6.45
2		2733	2.620		2733	VV	6.20
3		16172	3.070		16172	VV	8.15
4		8632	3.272		8632	VV	? 16.20
5		16129	3.878		16129	VV	? 19.10
6	ALDRIN	11983	4.280	-0.060	11983	VV	13.30
7		13487	4.577		13487	VV	12.60
8	HEPT EPOX	36731	5.471	0.161	36731	VV	20.15
9	G-CHLORDAN	15584	6.096	0.006	15584	VV	15.80
10	A-ENDOSULF	6483	6.541	-0.089	6483	VV	? 28.65
11	DDE/DIELD.	7007	7.618	-0.152	7007	VV	? 29.00
12		7755	8.050		7755	VV	? 25.10
13	ENDRIN	1022	8.542	-0.138	1022	VV	? 10.15
14	DDD	8793	9.623	-0.167	8793	VV	23.20
15	ESS	6848	11.175	-0.275	6848	VB	30.05
16	DDT	1726	13.344	0.484	1726	BB	30.40
17	END KETONE	1020	15.419	0.689	1020	BB	35.20
18		2050	21.492		2050	BB	51.20
	DBC	35563	26.595	0.065	35563	BB	71.45
TOTALS:		203698		0.524	203698		

DETECTED PKS: 22 REJECTED PKS: 3

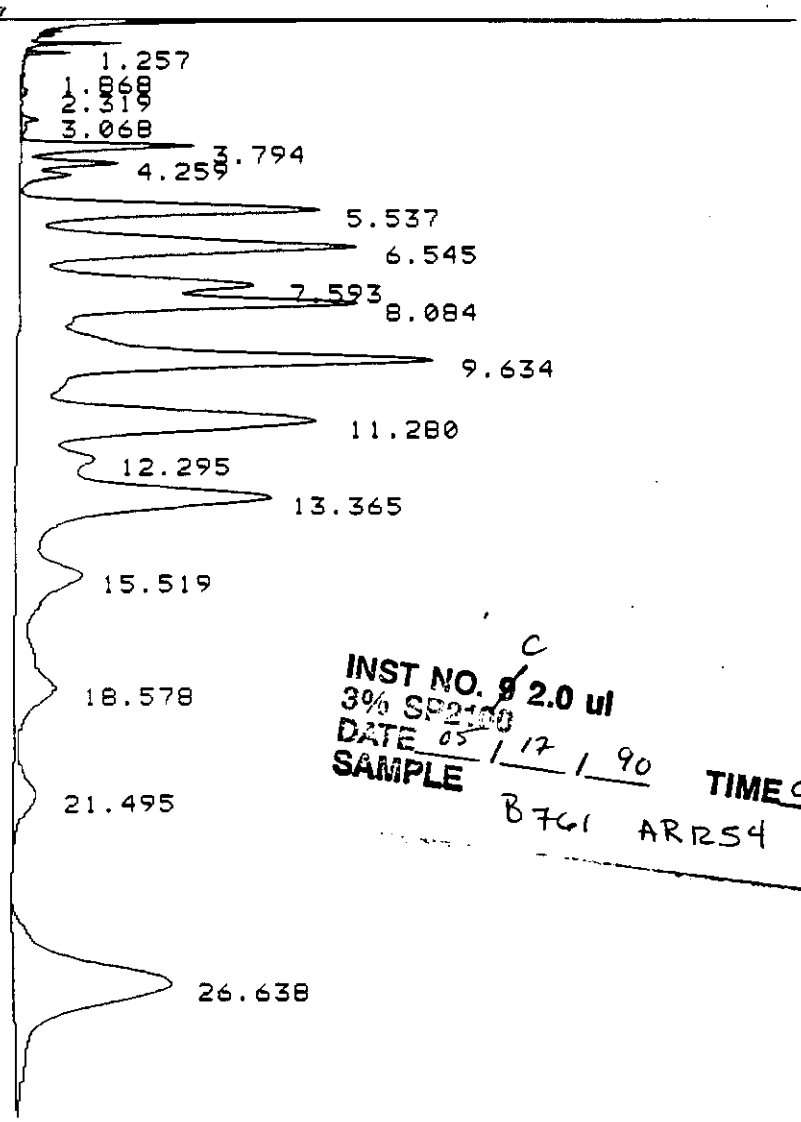
DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 7.3 OFFSET: -14

RAC... 1 VIAL: 14 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GCXMD CTL 2694 PESTICIDE WATER
ISCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

C 2T SPEED 0.5 CM/MIN
A ZN: 4 ZERO: 5%



INST NO. 9 C 2.0 ul
3% SP2100
DATE 05 / 17 / 90
SAMPLE B761 AR254 2.0mg
TIME 0843

100231

TITLE: CLP PESTICIDES 8:43 17 MAY 90

CHANNEL NO: 2 SAMPLE: B761 AR1254 METHOD: CLP-2A

PE NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		7277	3.794		7277	VV	11.70
2	ALDRIN	3837	4.259	-0.081	3837	VV	11.20
3		2337	4.581		2337	VV	12.50
4	HEPT EPOX	21451	5.537	0.227	21451	VV	? 20.80
5	A-ENDOSULF	32237	6.545	-0.085	32237	VV	27.20
6	DDE/DIELD.	20628	7.593	-0.177	20628	VV	? 28.30
7		28296	8.084		28296	VV	? 24.90
8	DDD	49363	9.634	-0.156	49363	VV	26.45
9	ESS	39165	11.280	-0.170	39165	VV	38.10
10		8926	12.295		8926	VV	? 40.30
11	DDT	41231	13.365	0.505	41231	VV	39.40
12		14629	15.519		14629	VV	49.20
13	METHOXYCHL	11520	18.578	-0.712	11520	VV	52.30
14		5471	21.495		5471	VB	48.00
15	DBC	43929	26.638	0.108	43929	BB	72.50
TOTALS:		330297		-0.541	330297		

L ECTED PKS: 21 REJECTED PKS: 6

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 7.3 OFFSET: -14

RACK: 2 VIAL: 1 INJ: 1

NOTES:
INSTRUMENT ID: C
(LUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

Versar INC.

REAGENT BLANK DATA

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK66

Lab Versar INC. VERSAR, INC. Contract:

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

Matrix: (soil/water)SOIL Lab Sample ID: RB7966

Sample wt/vol: 30.00 (g/ml) G Lab File ID:

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

% Moisture: not dec. 0.0 dec. Date Extracted: 04/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/16/90

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

1601.33

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	8.0	U
319-85-7	beta-BHC	8.0	U
319-86-8	delta-BHC	8.0	U
58-89-9	gamma-BHC (Lindane)	8.0	U
76-44-8	Heptachlor	8.0	U
309-00-2	Aldrin	8.0	U
1024-57-3	Heptachlor Epoxide	8.0	U
959-98-8	Endosulfan I	8.0	U
60-57-1	Dieldrin	16	U
72-55-9	4,4'-DDE	16	U
72-20-8	Endrin	16	U
33213-65-9	Endosulfan II	16	U
72-54-8	4,4'-DDD	16	U
1031-07-8	Endosulfan Sulfate	16	U
50-29-3	4,4'-DDT	16	U
72-43-5	Methoxychlor	80	U
53494-70-5	Endrin Ketone	16	U
5103-71-9	alpha-Chlordane	16	U
5103-74-2	gamma-Chlordane	16	U
8001-35-2	Toxaphene	160	U
12674-11-2	Aroclor-1016	80	U
11104-28-2	Aroclor-1221	80	U
11141-16-5	Aroclor-1232	80	U
53469-21-9	Aroclor-1242	80	U
12672-29-6	Aroclor-1248	80	U
11097-69-1	Aroclor-1254	160	U
11096-82-5	Aroclor-1260	160	U

D

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

PBLN66

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 03/16/90 EC Column ID: SP2250/SP2401

MATRIX IS: SOIL

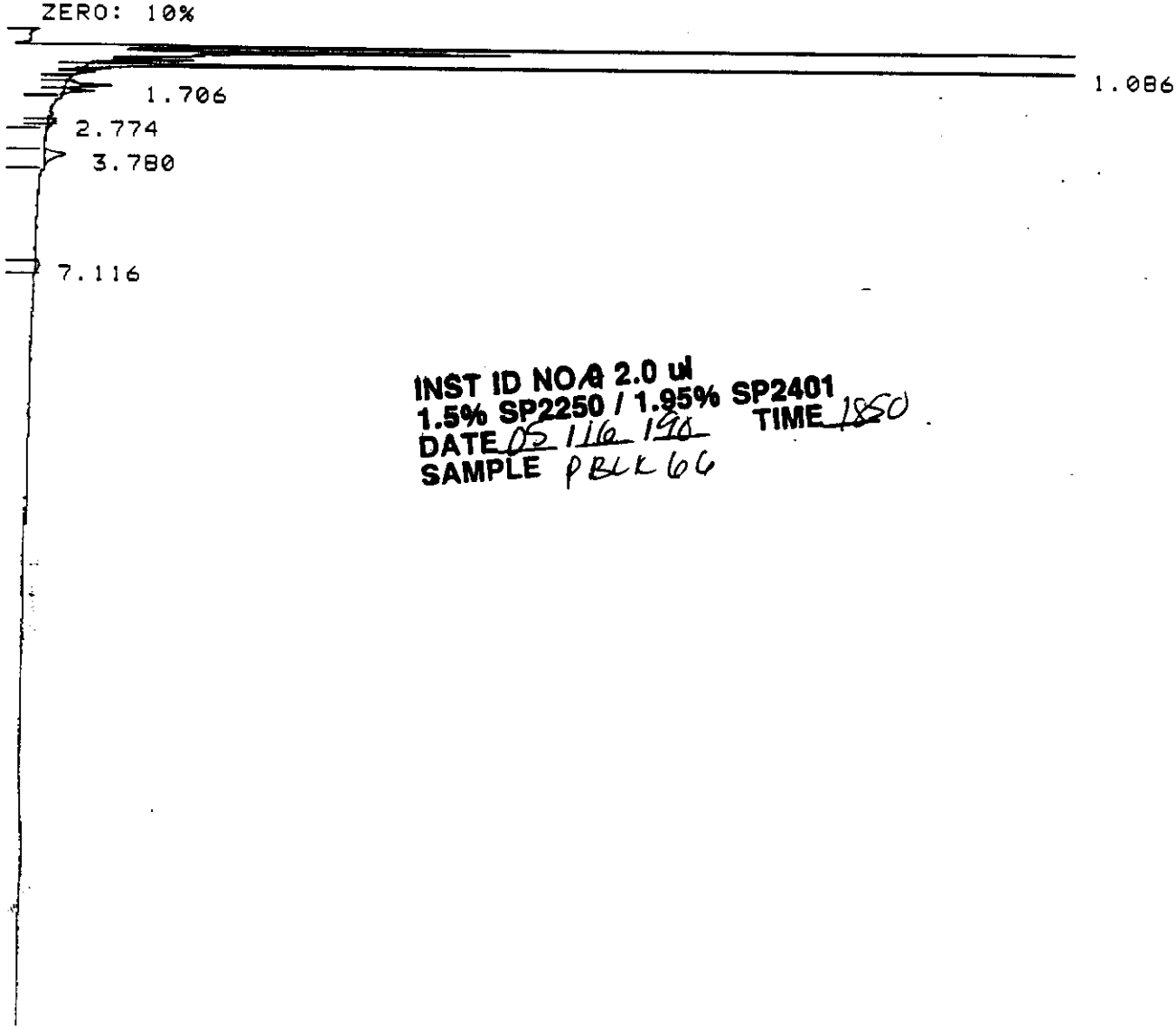
Inject Vol 2.00 (uL) Window Width: 1.0%

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/kg)	DETECTION LIMIT (ug/kg)
alpha-BHC	2.02	2.06	0.00	0	934825	0.000	2.00	0.000	800.67	0.00	4.00
beta-BHC	2.81	2.86	0.00	0	265290	0.000	2.00	0.000	800.67	0.00	4.00
delta-BHC	3.27	3.33	0.00	0	825980	0.000	2.00	0.000	800.67	0.00	4.00
gamma-BHC	2.51	2.56	0.00	0	817180	0.000	2.00	0.000	800.67	0.00	4.00
Heptachlor	3.03	3.09	0.00	0	784710	0.000	2.00	0.000	800.67	0.00	4.00
Aldrin	3.64	3.71	0.00	0	795263	0.000	2.00	0.000	800.67	0.00	4.00
Hept. epoxide	5.29	5.39	0.00	0	757790	0.000	2.00	0.000	800.67	0.00	4.00
Endosulfan I	6.60	6.73	0.00	0	698663	0.000	2.00	0.000	800.67	0.00	4.00
Dieldrin	7.99	8.15	0.00	0	764030	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDE	7.47	7.62	0.00	0	641293	0.000	2.00	0.000	800.67	0.00	8.01
Endrin	9.68	9.87	0.00	0	467110	0.000	2.00	0.000	800.67	0.00	8.01
Endosulfan II	11.61	11.84	0.00	0	687163	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDD	11.19	11.42	0.00	0	318890	0.000	2.00	0.000	800.67	0.00	8.01
Endo.sulfate	17.71	18.06	0.00	0	460163	0.000	2.00	0.000	800.67	0.00	8.01
4,4'DDT	13.43	13.70	0.00	0	317843	0.000	2.00	0.000	800.67	0.00	8.01
Methoxychlor	23.02	23.53	0.00	0	234220	0.000	2.00	0.000	800.67	0.00	40.03
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	800.67	0.00	8.01
a. Chlordane	6.36	6.49	0.00	0	679363	0.000	2.00	0.000	800.67	0.00	8.01
g. Chlordane	5.85	5.97	0.00	0	700305	0.000	2.00	0.000	800.67	0.00	8.01
Toxaphene	11.81	12.05	0.00	0	89524	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1016	2.73	2.79	0.00	0	48294	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1242	3.48	3.56	0.00	0	32203	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1248	4.65	4.75	0.00	0	84633	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1254	7.71	7.87	0.00	0	139387	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1260	13.28	13.54	0.00	0	291350	0.000	2.00	0.000	800.67	0.00	80.07
DBC	22.67	23.13	0.00	0	647313	0.000	2.00	0.000	800.67	0.00	8.01

D

CL 05/16/90

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



INST ID NO. 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/90 TIME 1850
SAMPLE PBLK66

TITLE: CLP PESTICIDES 18:50 16 MAY 90

CHANNEL NO: 3 SAMPLE: PBLK66 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		59704	1.086		59704	BV	2.45
2		538	1.293		538	T	2.20
3		3543	1.706		3543	BV	3.90
4		2106	1.876		2106	VB	3.65
5		926	2.774		926	BV	? 8.45
6	ALDRIN	4392	3.780	0.040	4392	BB	12.55
7		1134	7.116		1134	BB	15.70
TOTALS:		72343		0.040	72343		

DETECTED PKS: 9 REJECTED PKS: 2

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 41.3 OFFSET: -31

R : 2 VIAL: 7 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

PBLK66

VERSAR# RB7966

MATRIX IS: SOIL

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: C

Run Date: 05/17/90

Inject Vol 2.00 (uL)

Case No.: R3-7

Contract:

SAS No.:

GC Column ID: 3% SP2100

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/kg)	DETECTION LIMIT (ug/kg)
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	800.67	0.00	4.00
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	800.67	0.00	4.00
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	800.67	0.00	4.00
gamma-BHC	2.15	2.19	0.00	0	160115	0.000	2.00	0.000	800.67	0.00	4.00
Heptachlor	3.48	3.55	0.00	0	146420	0.000	2.00	0.000	800.67	0.00	4.00
Aldrin	4.32	4.41	0.00	0	174460	0.000	2.00	0.000	800.67	0.00	4.00
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	800.67	0.00	4.00
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	800.67	0.00	4.00
Dieldrin	7.72	7.88	0.00	0	171100	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDE	7.70	7.85	0.00	0	131805	0.000	2.00	0.000	800.67	0.00	8.01
Endrin	8.61	8.78	0.00	0	118720	0.000	2.00	0.000	800.67	0.00	8.01
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	800.67	0.00	8.01
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	800.67	0.00	8.01
Endo.sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	800.67	0.00	8.01
4,4'DDT	12.79	13.04	0.00	0	76645	0.000	2.00	0.000	800.67	0.00	8.01
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	800.67	0.00	40.03
Endrin ketone	14.62	14.91	0.00	0	116505	0.000	2.00	0.000	800.67	0.00	8.01
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	800.67	0.00	8.01
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	800.67	0.00	8.01
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	800.67	0.00	40.03
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	800.67	0.00	80.07
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	800.67	0.00	80.07
DBC	26.31	26.84	0.00	0	109830	0.000	2.00	0.000	800.67	0.00	8.01

ORIGINAL (Red)

CHART SPEED 0.5 CM/MIN
N: 4 ZERO: 5%

1.261

1.777
2.319
3.081
3.867
4.200
5.531
6.060

C

INST NO. 9 2.0 ul
3% SP2100
DATE 05 / 12 / 90 TIME 1406
SAMPLE
PBLK66

100233

varian /sunnyvale, calif. p/n 03-906362-01

ORIGINAL (Red)

TITLE: CLP PESTICIDES 14:06 17 MAY 90

CHANNEL NO: 2 SAMPLE: PBLK66 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		16262	1.261		16262	BV	3.50
2	G-BHC N/A	2667	2.075	-0.085	2667	VV	7.15
3		992	3.867		992	BV	? 25.55
TOTALS:		19921		-0.085	19921		

DETECTED PKS: 12 REJECTED PKS: 9

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -10

RACK: 2 VIAL: 7 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
RT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

N/A - Analyte not present in primary analysis.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK81

Lab Name: VERSAR, INC. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: RB7981

Sample wt/vol: 1 (g/ml) G Lab File ID:

Level: (low/med) MED Date Received: 4/19/90

% Moisture: not dec. 0 dec. Date Extracted: 04/29/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/03/90

GPC Cleanup: (Y/N) N pH: Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	60	U
319-85-7	beta-BHC	60	U
319-86-8	delta-BHC	60	U
58-89-9	gamma-BHC (Lindane)	60	U
76-44-8	Heptachlor	60	U
309-00-2	Aldrin	60	U
1024-57-3	Heptachlor Epoxide	60	U
959-98-8	Endosulfan I	60	U
60-57-1	Dieldrin	120	U
72-55-9	4,4'-DDE	120	U
72-20-8	Endrin	120	U
33213-65-9	Endosulfan II	120	U
72-54-8	4,4'-DDD	120	U
1031-07-8	Endosulfan Sulfate	120	U
50-29-3	4,4'-DDT	120	U
72-43-5	Methoxychlor	600	U
53494-70-5	Endrin Ketone	120	U
5103-71-9	alpha-Chlordane	120	U
5103-74-2	gamma-Chlordane	120	U
8001-35-2	Toxaphene	1200	U
12674-11-2	Aroclor-1016	600	U
11104-28-2	Aroclor-1221	600	U
11141-16-5	Aroclor-1232	600	U
53469-21-9	Aroclor-1242	600	U
12672-29-6	Aroclor-1248	600	U
11097-69-1	Aroclor-1254	1200	U
11096-82-5	Aroclor-1260	1200	U

KC 5-8-90

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

PBLK81

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/03/90 GC Column ID: SP2250/SP2401

MATRIX IS: SOIL

Inject Vol 2.00 (uL) Window Width: 1.0%

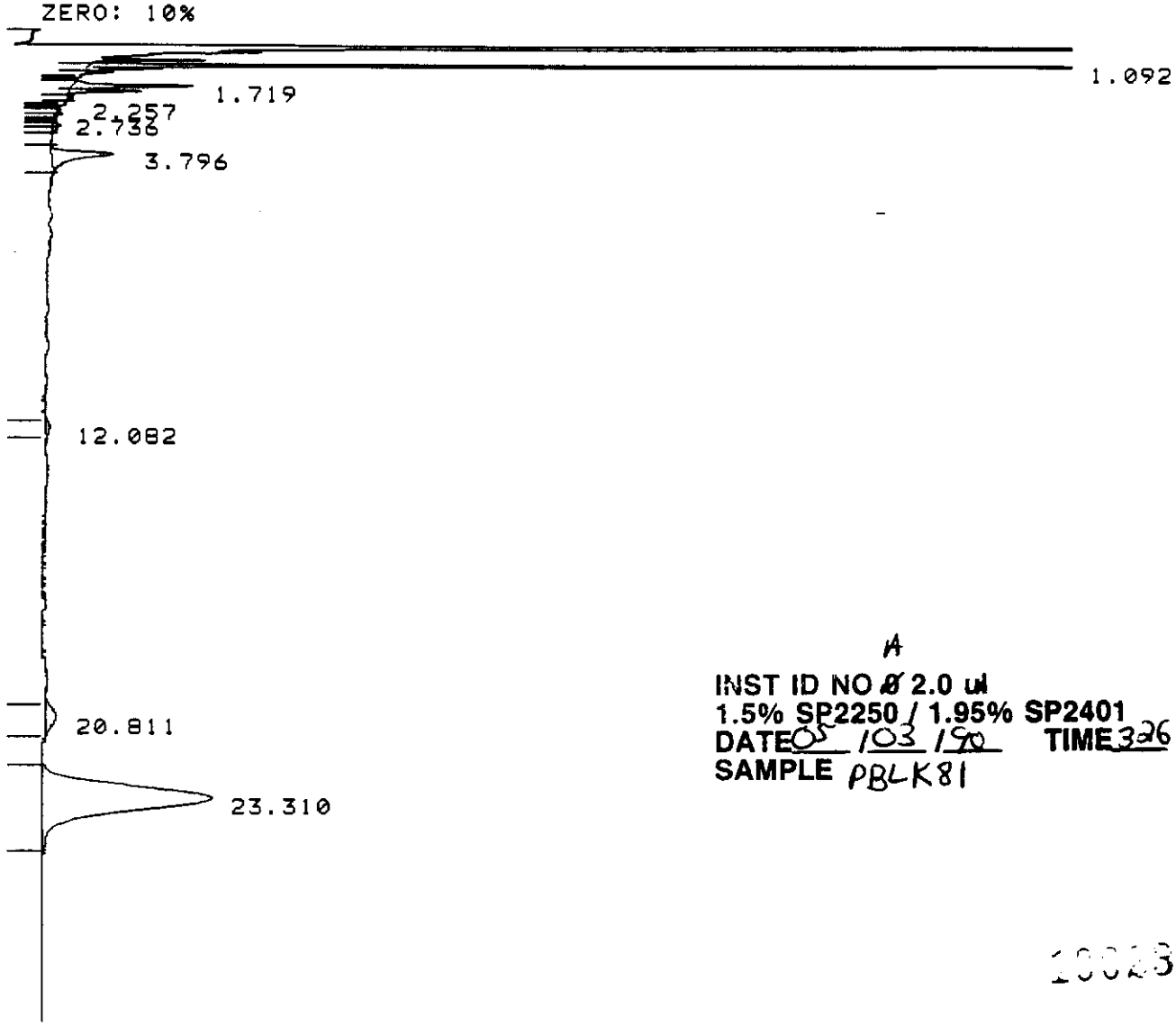
COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.87	2.11	2.08	503	1114930	0.000	2.00	0.000	12010.00	2.71	60.05	BDL
beta-BHC	2.87	2.93	2.92	516	317915	0.002	2.00	0.001	12010.00	9.75	60.05	BDL
delta-BHC	3.35	3.41	0.00	0	997120	0.000	2.00	0.000	12010.00	0.00	60.05	
gamma-BHC	2.56	2.61	0.00	0	935415	0.000	2.00	0.000	12010.00	0.00	60.05	
Heptachlor	3.10	3.17	0.00	0	957460	0.000	2.00	0.000	12010.00	0.00	60.05	
Aldrin	3.72	3.79	*3.80	13542	927280	0.015	2.00	0.007	12010.00	87.70	60.05	HIT
Hept. epoxide	5.41	5.52	0.00	0	866180	0.000	2.00	0.000	12010.00	0.00	60.05	
Endosulfan I	6.75	6.89	0.00	0	795955	0.000	2.00	0.000	12010.00	0.00	60.05	
Dieldrin	8.18	8.35	0.00	0	879365	0.000	2.00	0.000	12010.00	0.00	120.10	
4,4'-DDE	7.65	7.80	0.00	0	745515	0.000	2.00	0.000	12010.00	0.00	120.10	
Endrin	9.91	10.11	0.00	0	515005	0.000	2.00	0.000	12010.00	0.00	120.10	
Endosulfan II	11.90	12.14	12.08	1550	762190	0.002	2.00	0.001	12010.00	12.21	120.10	BDL
4,4'-DDD	11.47	11.70	0.00	0	615405	0.000	2.00	0.000	12010.00	0.00	120.10	
Endo.sulfate	18.16	18.53	0.00	0	527590	0.000	2.00	0.000	12010.00	0.00	120.10	
4,4'DDT	13.77	14.05	0.00	0	573385	0.000	2.00	0.000	12010.00	0.00	120.10	
Methoxychlor	25.64	26.15	0.00	0	268850	0.000	2.00	0.000	12010.00	0.00	600.50	
Endrin ketone	24.94	25.45	0.00	0	785310	0.000	2.00	0.000	12010.00	0.00	120.10	
a. Chlordane	6.51	6.64	0.00	0	793830	0.000	2.00	0.000	12010.00	0.00	120.10	
g. Chlordane	5.99	6.11	0.00	0	829210	0.000	2.00	0.000	12010.00	0.00	120.10	
Toxaphene	10.67	10.89	0.00	0	277048	0.000	2.00	0.000	12010.00	0.00	1201.00	
Aroclor-1016	2.86	2.92	0.00	0	64579	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1221	1.91	1.95	0.00	0	21445	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1242	3.53	3.61	0.00	0	70122	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1248	4.71	4.81	0.00	0	89358	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1254	8.38	8.54	0.00	0	204613	0.000	2.00	0.000	12010.00	0.00	1201.00	
Aroclor-1260	13.51	13.79	0.00	0	291297	0.000	2.00	0.000	12010.00	0.00	1201.00	
DBC	23.23	23.70	23.31	121358	738735	0.164	2.00	0.082	12010.00	986.49	120.10	HIT

CL 05/04/90

04-May-90

ORIGINAL (Red)

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 /03 /90 TIME 326
SAMPLE PBLK81

100230

ORIGINAL (Red)

TITLE: CLP PESTICIDES 3:26 3 MAY 90

CHANNEL NO: 3 SAMPLE: PBLK81 METHOD: CLP-3A

PE NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		120929	1.092		120929	BV		2.40
2		1564	1.200		1564	T -	?	3.80
3		1108	1.301		1108	T		3.50
4		9849	1.719		9849	BV		4.95
5		4408	1.883		4408	VV		3.80
6	A BHC	503	2.075		503	VB	?	4.75
7	B-BHC	516	2.917	-0.063	516	VV	?	4.30
8	ALDRIN	13542	3.796	-0.064	13542	BB		13.15
9	~~DDD~~ Endosulfan II	1550	12.082	0.192	1550	BB	?	21.50
10		6144	20.811		6144	BB	?	33.45
11	DBC	121358	23.310		121358	BB		47.40
TOTALS:		281471		0.065	281471			

DETECTED PKS: 19 REJECTED PKS: 8

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -17

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
`E AVTEX CTL 2592 AND 2655 PCB WATER
RSCDM CTL 2536 PESTICIDE SOILS

100234

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

PBLK81

VERSAR# RB7981

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/07/90 GC Column ID: 3% SP2100

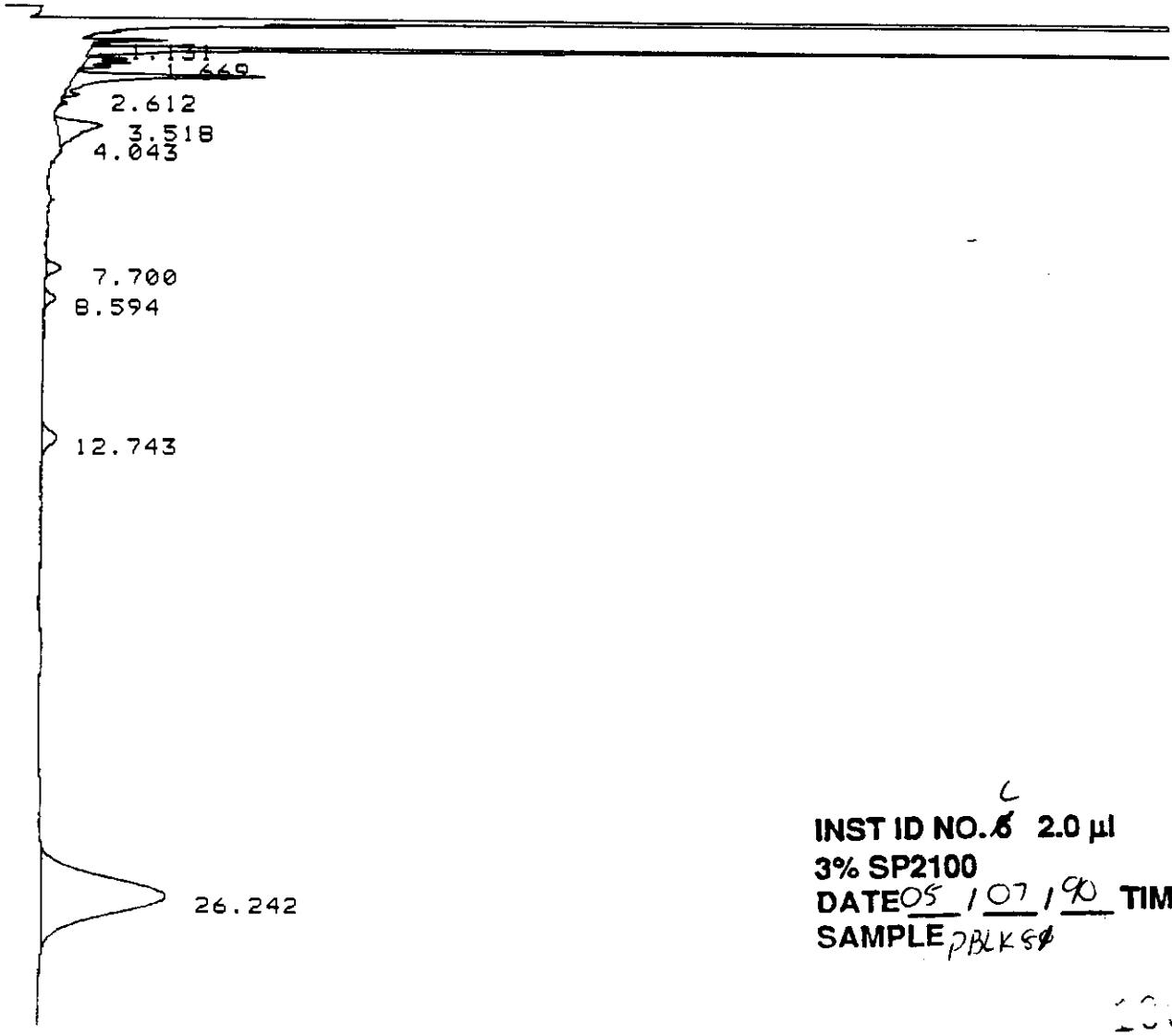
Inject Vol 2.00 (uL) Window Width: 1.0%

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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	1.81	1.85	0.00	0	189575	0.000	2.00	0.000	12010.00	0.00	60.05	
beta-BHC	1.94	1.98	0.00	0	78890	0.000	2.00	0.000	12010.00	0.00	60.05	
delta-BHC	2.19	2.24	0.00	0	175880	0.000	2.00	0.000	12010.00	0.00	60.05	
gamma-BHC	2.13	2.17	0.00	0	189055	0.000	2.00	0.000	12010.00	0.00	60.05	
Heptachlor	3.45	3.52	0.00	0	183170	0.000	2.00	0.000	12010.00	0.00	60.05	
Aldrin	4.27	4.36	0.00	0	207215	0.000	2.00	0.000	12010.00	0.00	60.05	
Hept. epoxide	5.23	5.33	0.00	0	202575	0.000	2.00	0.000	12010.00	0.00	60.05	
Endosulfan I	6.52	6.65	0.00	0	193720	0.000	2.00	0.000	12010.00	0.00	60.05	
Dieldrin	7.63	7.79	0.00	0	212085	0.000	2.00	0.000	12010.00	0.00	120.10	
4,4'-DDE	7.61	7.76	0.00	0	169325	0.000	2.00	0.000	12010.00	0.00	120.10	
Endrin	8.51	8.69	0.00	0	133405	0.000	2.00	0.000	12010.00	0.00	120.10	
Endosulfan II	8.72	8.90	0.00	0	184485	0.000	2.00	0.000	12010.00	0.00	120.10	
4,4'-DDD	9.60	9.80	0.00	0	136730	0.000	2.00	0.000	12010.00	0.00	120.10	
Endo.sulfate	11.21	11.44	0.00	0	110700	0.000	2.00	0.000	12010.00	0.00	120.10	
4,4'DDT	12.61	12.87	0.00	0	138335	0.000	2.00	0.000	12010.00	0.00	120.10	
Methoxychlor	18.89	19.27	0.00	0	59465	0.000	2.00	0.000	12010.00	0.00	600.50	
Endrin ketone	14.44	14.73	0.00	0	186290	0.000	2.00	0.000	12010.00	0.00	120.10	
a. Chlordane	6.64	6.77	0.00	0	178260	0.000	2.00	0.000	12010.00	0.00	120.10	
g. Chlordane	5.99	6.11	0.00	0	184460	0.000	2.00	0.000	12010.00	0.00	120.10	
Toxaphene	9.80	10.00	0.00	0	73140	0.000	2.00	0.000	12010.00	0.00	1201.00	
Aroclor-1016	3.79	3.87	0.00	0	20785	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1232	2.57	2.63	0.00	0	13130	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1242	3.21	3.27	0.00	0	30021	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1248	4.49	4.59	0.00	0	44109	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1254	9.42	9.62	0.00	0	73184	0.000	2.00	0.000	12010.00	0.00	1201.00	
Aroclor-1260	13.04	13.30	0.00	0	88941	0.000	2.00	0.000	12010.00	0.00	1201.00	
DBC	25.97	26.49	26.24	31010	187215	0.166	2.00	0.083	12010.00	994.66	120.10	HIT

KC

08-May-90

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. 6 2.0 µl
3% SP2100
DATE 05 / 07 / 90 TIME 915
SAMPLE PBLK 50

100230

ORIGINAL (Red)

TITLE: CLP PESTICIDES 9:15 7 MAY 90

CHANNEL NO: 2 SAMPLE: PBLK8~~0~~ METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		23079	1.252		23079	VV		3.70
		776	1.669		776	T		4.30
	~~3-BHC~~	6195	2.057	-0.103	6195	VV		6.75
4	~~HEPTACHLOR~~	3728	3.518	0.018	3728	BV	?	36.60
5	~~DDE/DIELD.~~	875	7.700	-0.070	875	BB	?	11.75
6	~~ENDRIN~~	772	8.594	-0.086	772	BB	-	10.00
7	~~DDT~~	1572	12.743	-0.117	1572	BB		8.80
8	~~DBC~~	31010	26.242	-0.288	31010	BB	?	69.60
TOTALS:		68007		-0.646	68007			

DETECTED PKS: 15 REJECTED PKS: 7

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -15

RACK: 2 VIAL: 14 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

Versar INC.

ORIGINAL (Red)

MATRIX SPIKE DATA

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1MSDL

Lab Name: VERSAR, INC. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: 16412MS

Sample wt/vol: 30.08 (g/ml) G Lab File ID:

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

% Moisture: not dec. 32.7 dec. Date Extracted: 04/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/17/90

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor Epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan Sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin Ketone	240	U
5103-71-9	alpha-Chlordane	240	U
5103-74-2	gamma-Chlordane	240	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

5/17/90

100239

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

IMSDL

VERSAR 1641ZMS 1/10

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/17/90 GC Column ID: SP2250/SP2401

Inject Vol 2.00 (uL) Window Width: 1.0%

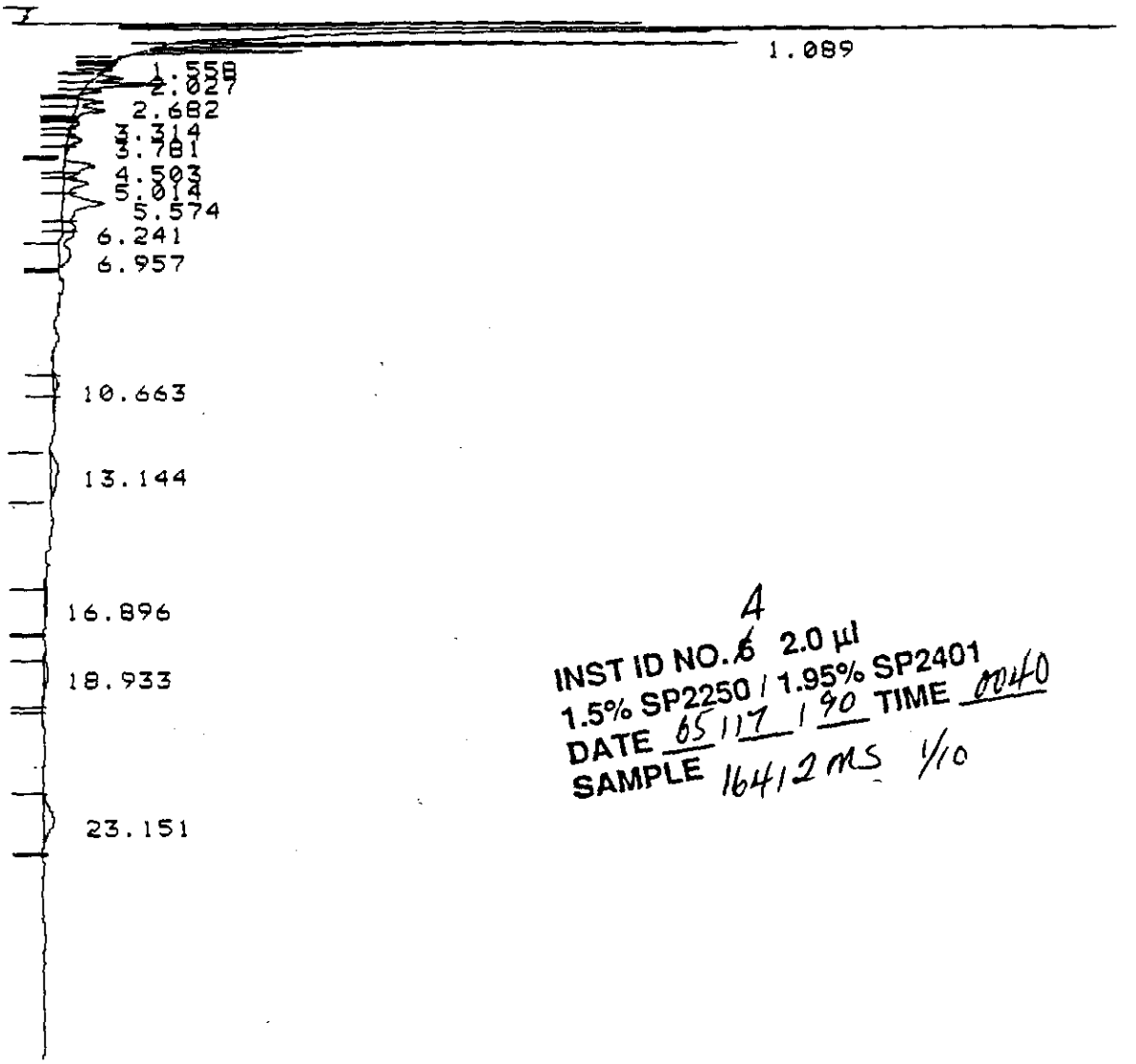
COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.02	2.06	2.03	2387	934825	0.003	2.00	0.001	23730.68	30.30	118.65	BDL
beta-BHC	2.81	2.86	0.00	0	265290	0.000	2.00	0.000	23730.68	0.00	118.65	
delta-BHC	3.27	3.33	3.31	632	825980	0.001	2.00	0.000	23730.68	9.08	118.65	BDL
gamma-BHC	2.51	2.56	0.00	2	817180	0.000	2.00	0.000	23730.68	0.03	118.65	BDL
Heptachlor	3.03	3.09	0.00	0	784710	0.000	2.00	0.000	23730.68	0.00	118.65	
Aldrin	3.64	3.71	3.78	2399	793265	0.003	2.00	0.002	23730.68	35.79	118.65	BDL
Hept. epoxide	5.29	5.39	0.00	0	757790	0.000	2.00	0.000	23730.68	0.00	118.65	
Endosulfan I	6.60	6.73	0.00	0	698663	0.000	2.00	0.000	23730.68	0.00	118.65	
Dieldrin	7.99	8.15	0.00	0	764030	0.000	2.00	0.000	23730.68	0.00	237.31	
4,4'-DDE	7.47	7.62	0.00	0	641295	0.000	2.00	0.000	23730.68	0.00	237.31	
Endrin	9.68	9.87	0.00	0	467110	0.000	2.00	0.000	23730.68	0.00	237.31	
Endosulfan II	11.61	11.84	0.00	0	687165	0.000	2.00	0.000	23730.68	0.00	237.31	
4,4'-DDD	11.19	11.42	0.00	0	518890	0.000	2.00	0.000	23730.68	0.00	237.31	
Endo.sulfate	17.71	18.06	0.00	0	460165	0.000	2.00	0.000	23730.68	0.00	237.31	
4,4'DDT	13.43	13.70	0.00	0	517845	0.000	2.00	0.000	23730.68	0.00	237.31	
Methoxychlor	25.02	25.53	0.00	0	234220	0.000	2.00	0.000	23730.68	0.00	1186.53	
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	23730.68	0.00	237.31	
a. Chlordane	6.36	6.49	6.36	2748	679365	0.004	2.00	0.002	23730.68	47.98	237.31	BDL
g. Chlordane	5.85	5.97	0.00	0	700305	0.000	2.00	0.000	23730.68	0.00	237.31	
Toxaphene	11.81	12.05	0.00	0	89524	0.000	2.00	0.000	23730.68	0.00	2373.07	
Aroclor-1016	2.73	2.79	0.00	0	48234	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1242	3.48	3.56	0.00	0	52209	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1248	4.65	4.75	0.00	0	84633	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1254	7.71	7.87	0.00	0	139387	0.000	2.00	0.000	23730.68	0.00	2373.07	
Aroclor-1260	13.28	13.54	0.00	0	291250	0.000	2.00	0.000	23730.68	0.00	2373.07	
DBC	22.67	23.13	23.13	6883	647315	0.011	2.00	0.005	23730.68	126.13	237.31	BDL

100240

JPH 27-May-90

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

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



INST ID NO. ~~6~~ 4 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05/17/90 TIME 0040
SAMPLE 16412 MS 1/10

TITLE: CLP PESTICIDES 0:40 17 MAY 90

CHANNEL NO: 3 SAMPLE: 16412MS 1/10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		27242	1.089		27242	BV		3.00
2		7701	1.288		7701	VB		2.60
3	A-BHC	2387	2.027	-0.053	2387	BV		4.75
4		5992	2.207		5992	VV		4.65
5		1430	2.386		1430	VB		3.30
6		2460	2.682		2460	BV		6.30
7	B-BHC	3407	2.933	0.043	3407	VV	?	6.95
8	D-BHC	632	3.314	-0.046	632	BV		5.65
9	ALDRIN	2399	3.781	0.041	2399	VB		9.55
10		5345	4.503		5345	BV		15.15
11		1403	4.675		1403	VV	?	14.30
12		4754	5.014		4754	VV		12.50
13	HEPT EPOX	12408	5.574	0.134	12408	VV		14.65
14		2879	6.241		2879	VV	?	15.00
15	A-CHLORDAN	2748	6.356	-0.184	2748	VV	?	27.60
6	A-ENDOSULF	3957	6.957	0.167	3957	VB	?	21.55
7		1557	10.663		1557	BB	?	25.75
18		5528	13.144		5528	BB		52.30
19		1819	16.896		1819	BB	?	34.95
20		2507	18.933		2507	BB	?	33.25
21	DBC	6883	23.151	-0.189	6883	BB		45.70
TOTALS:		105438		-0.087	105438			

DETECTED PKS: 26 REJECTED PKS: 5

ATTENUATOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -38

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
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

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

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

1MSDL

VERSAR# 16412MS

MATRIX IS: SOIL

Lab Name: VERSAR, INC.

Lab Code: VERSAR

Instrument ID: C

Run Date: 05/17/90

Inject Vol 2.00 (uL)

Case No.: GSXMD #2694

Contract:

SAS No.:

GC Column ID: 3% SP2100

Window Width: 1.0%

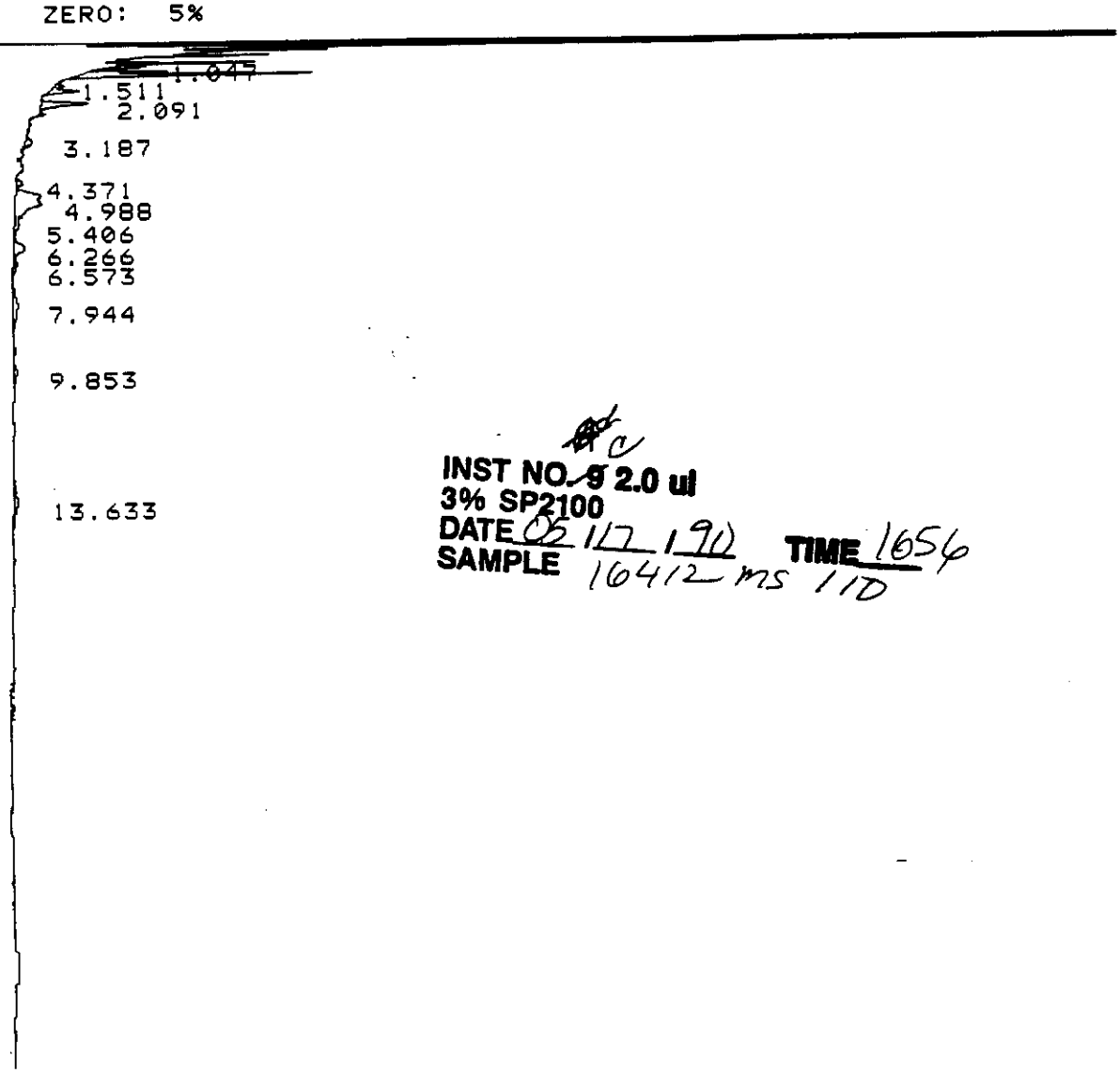
COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	23730.68	0.00	118.65
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	23730.68	0.00	118.65
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	23730.68	0.00	118.65
gamma-BHC	2.15	2.19	0.00	0	160115	0.000	2.00	0.000	23730.68	0.00	118.65
Heptachlor	3.48	3.55	0.00	0	146420	0.000	2.00	0.000	23730.68	0.00	118.65
Aldrin	4.32	4.41	0.00	0	174460	0.000	2.00	0.000	23730.68	0.00	118.65
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	23730.68	0.00	118.65
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	23730.68	0.00	118.65
Dieldrin	7.72	7.88	0.00	0	171100	0.000	2.00	0.000	23730.68	0.00	237.31
4,4'-DDE	7.70	7.85	0.00	0	131805	0.000	2.00	0.000	23730.68	0.00	237.31
Endrin	8.61	8.78	0.00	0	118720	0.000	2.00	0.000	23730.68	0.00	237.31
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	23730.68	0.00	237.31
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	23730.68	0.00	237.31
Endo.sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	23730.68	0.00	237.31
4,4'DDT	12.79	13.04	0.00	0	76645	0.000	2.00	0.000	23730.68	0.00	237.31
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	23730.68	0.00	1186.53
Endrin ketone	14.62	14.91	0.00	0	116505	0.000	2.00	0.000	23730.68	0.00	237.31
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	23730.68	0.00	237.31
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	23730.68	0.00	237.31
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	23730.68	0.00	2373.07
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	23730.68	0.00	2373.07
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	23730.68	0.00	2373.07
DBC	26.31	26.84	0.00	0	109830	0.000	2.00	0.000	23730.68	0.00	237.31

CF 05/17/90

100243

17-May-90

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. 9 2.0 ul
3% SP2100
DATE 05/17/90 TIME 1656
SAMPLE 16412 MS 1/D

varian /sunnyvale,calif.p/n 03-906362-01

TITLE: CLP PESTICIDES 16:56 17 MAY 90

CHANNEL NO: 2 SAMPLE: 16412MS/10 METHOD: CLP-2A

PK	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		802	1.197		802	VV	2.90
2		3006	1.287		3006	VB	3.35
3	G-BHC	1171	2.091	-0.069	1171	BB	5.80
4		1198	4.765		1198	VV	? 11.00
5		1556	4.988		1556	VV	? 20.40
6	DDE/DIELD.	866	7.944	0.174	866	BV	43.20
TOTALS:		8599		0.105	8599		

DETECTED PKS: 20 REJECTED PKS: 14

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -8

RACK: 2 VIAL: 11 INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

Versar INC.

MATRIX SPIKE DUPLICATE DATA

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1MSDDL

Lab Name: VERSAR, INC. Contract:

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

Matrix: (soil/water) SOIL Lab Sample ID: 16412MSD

Sample wt/vol: 30.08 (g/ml) G Lab File ID:

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

% Moisture: not dec. 32.7 dec. Date Extracted: 04/26/90

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 05/17/90

GPC Cleanup: (Y/N) Y pH: 6.4 Dilution Factor: 10.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
319-84-6	alpha-BHC	120	U
319-85-7	beta-BHC	120	U
319-86-8	delta-BHC	120	U
58-89-9	gamma-BHC (Lindane)	120	U
76-44-8	Heptachlor	120	U
309-00-2	Aldrin	120	U
1024-57-3	Heptachlor Epoxide	120	U
959-98-8	Endosulfan I	120	U
60-57-1	Dieldrin	240	U
72-55-9	4,4'-DDE	240	U
72-20-8	Endrin	240	U
33213-65-9	Endosulfan II	240	U
72-54-8	4,4'-DDD	240	U
1031-07-8	Endosulfan Sulfate	240	U
50-29-3	4,4'-DDT	240	U
72-43-5	Methoxychlor	1200	U
53494-70-5	Endrin Ketone	240	U
5103-71-9	alpha-Chlordane	240	U
5103-74-2	gamma-Chlordane	240	U
8001-35-2	Toxaphene	2400	U
12674-11-2	Aroclor-1016	1200	U
11104-28-2	Aroclor-1221	1200	U
11141-16-5	Aroclor-1232	1200	U
53469-21-9	Aroclor-1242	1200	U
12672-29-6	Aroclor-1248	1200	U
11097-69-1	Aroclor-1254	2400	U
11096-82-5	Aroclor-1260	2400	U

ga
5/17/90

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

MSD DL

VERSAR# 16412MSD 1/10

MATRIX IS: SOIL

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/17/90 SC 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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	2.02	2.06	2.02	678	934823	0.001	2.00	0.000	23730.68	8.61	118.65	BDL
beta-BHC	2.81	2.86	0.00	0	263230	0.000	2.00	0.000	23730.68	0.00	118.65	
delta-BHC	3.27	3.33	3.31	867	829980	0.001	2.00	0.001	23730.68	12.45	118.65	BDL
gamma-BHC	2.31	2.36	2.36	3523	817180	0.004	2.00	0.002	23730.68	51.15	118.65	BDL
Heptachlor	3.03	3.09	3.09	4229	784710	0.005	2.00	0.003	23730.68	63.95	118.65	BDL
Aldrin	3.64	3.71	3.71	5436	793263	0.007	2.00	0.003	23730.68	81.11	118.65	BDL
Hept. epoxide	5.29	5.39	0.00	0	757790	0.000	2.00	0.000	23730.68	0.00	118.65	
Endosulfan I	6.60	6.73	0.00	0	638663	0.000	2.00	0.000	23730.68	0.00	118.65	
Dieldrin	7.99	8.15	8.14	13210	764030	0.017	2.00	0.009	23730.68	205.15	237.31	BDL
4,4'-DDE	7.47	7.62	0.00	0	641293	0.000	2.00	0.000	23730.68	0.00	237.31	
Endrin	9.68	9.87	9.86	9405	467110	0.020	2.00	0.010	23730.68	238.90	237.31	HIT
Endosulfan II	11.61	11.84	0.00	0	687163	0.000	2.00	0.000	23730.68	0.00	237.31	
4,4'-DDD	11.19	11.42	0.00	0	518890	0.000	2.00	0.000	23730.68	0.00	237.31	
Endo.sulfate	17.71	18.06	0.00	0	460163	0.000	2.00	0.000	23730.68	0.00	237.31	
4,4'DDT	13.43	13.70	13.64	15331	517845	0.030	2.00	0.015	23730.68	351.28	237.31	HIT
Methoxychlor	25.02	25.53	0.00	0	234220	0.000	2.00	0.000	23730.68	0.00	1186.53	
Endrin ketone	24.34	24.83	0.00	0	697780	0.000	2.00	0.000	23730.68	0.00	237.31	
a. Chlordane	6.36	6.49	6.34	2849	679363	0.004	2.00	0.002	23730.68	49.74	237.31	BDL
g. Chlordane	5.85	5.97	0.00	0	700305	0.000	2.00	0.000	23730.68	0.00	237.31	
Toxaphene	11.81	12.05	0.00	0	89324	0.000	2.00	0.000	23730.68	0.00	2373.07	
Aroclor-1016	2.73	2.79	0.00	0	48294	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1221	1.70	1.74	0.00	0	22629	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1242	3.48	3.56	0.00	0	52209	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1248	4.65	4.75	0.00	0	84633	0.000	2.00	0.000	23730.68	0.00	1186.53	
Aroclor-1254	7.71	7.87	0.00	0	139387	0.000	2.00	0.000	23730.68	0.00	2373.07	
Aroclor-1260	13.28	13.54	0.00	0	291550	0.000	2.00	0.000	23730.68	0.00	2373.07	
DBC	22.67	23.13	23.06	7437	647313	0.011	2.00	0.006	23730.68	136.28	237.31	BDL

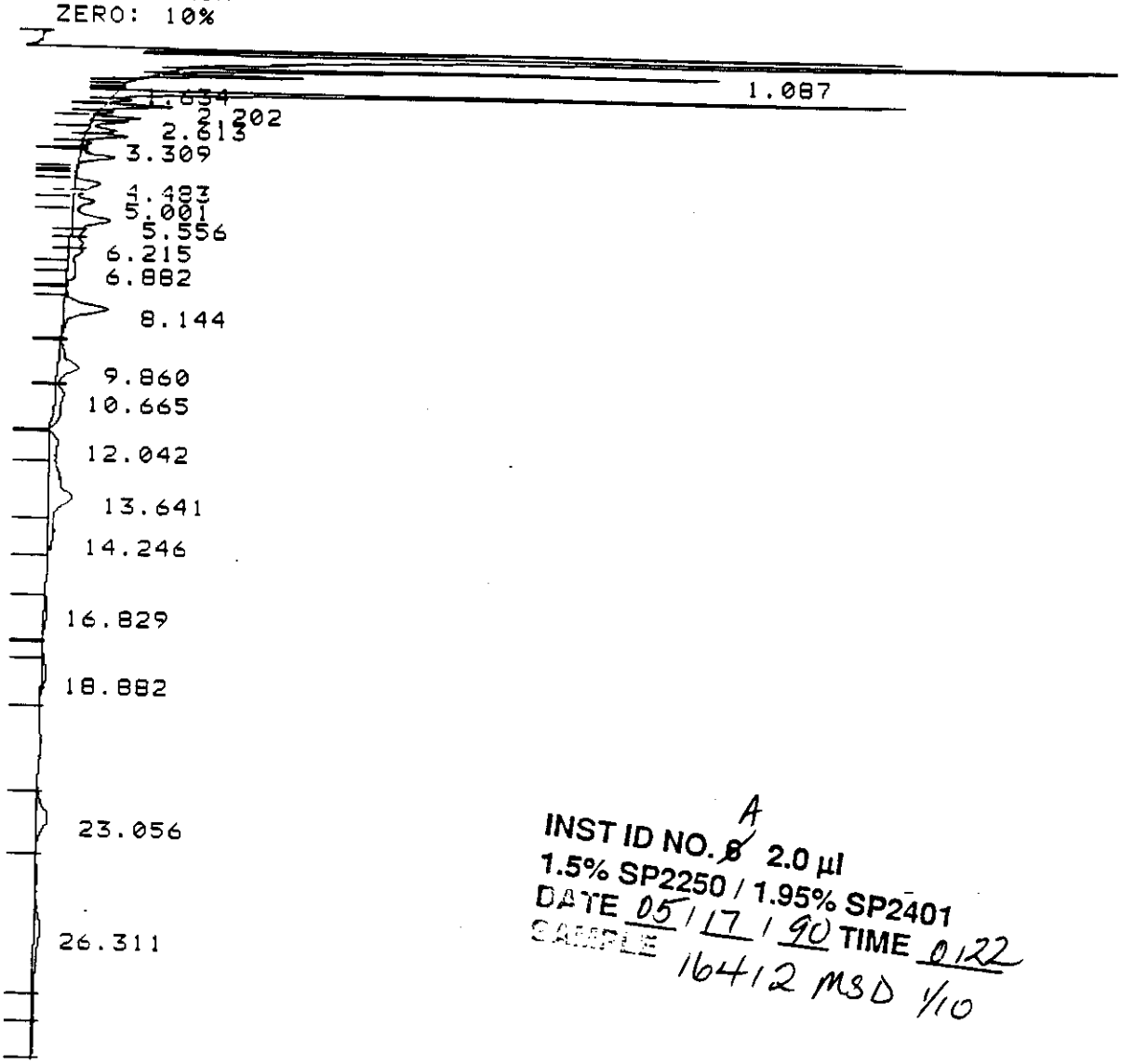
%Rec

121

178

17-May-90

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



INST ID NO. ~~B~~ A 2.0 µl
1.5% SP2250 / 1.95% SP2401
DATE 05 / 17 / 90 TIME 0122
SAMPLE 16412 MSD 1/10

100243

TITLE: CLP PESTICIDES 1:22 17 MAY 90

CHANNEL NO: 3 SAMPLE: 16412MSD/10 METHOD: CLP-3A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		26047	1.087		26047	BV		2.95
2		7073	1.287		7073	VB		2.55
		49936	1.797		49936	BV		4.10
	a BHC	678	2.017		678	T		4.00
5		5536	2.202		5536	VV		4.75
6		1051	2.372		1051	VV		2.70
7	G-BHC	3523	2.557	-0.023	3523	VV	?	5.00
8		3066	2.613		3066	VV	?	11.50
9	B-BHC	3232	2.930	0.040	3232	VV		6.70
10	HEPTACHLOR	4229	3.090	-0.030	4229	VV		6.15
11	D-BHC	867	3.309	-0.051	867	VB		4.85
12	ALDRIN	5436	3.714	-0.026	5436	BB		8.55
13		5062	4.483		5062	BV	?	11.50
14		1525	4.656		1525	VV	?	15.50
15		4037	5.001		4037	VV		12.00
16	HEPT EPOX	9815	5.556	0.116	9815	VV		14.55
17		2402	5.799		2402	VV	?	
18		2983	6.215		2983	VV	?	14.20
19	a chlord	2849	6.343		2849	VV	?	27.80
20	A-ENDOSULF ort	1649	6.882	0.092	1649	VV	?	12.70
21		1649	7.017		1649	VB	?	26.00
22	DIELDRIN	13210	8.144	-0.076	13210	BV		17.85
3	ENDRIN	9405	9.860	-0.100	9405	VV		21.80
4		7200	10.665		7200	VV		24.80
25	B-ENDOSULF	3639	12.042	0.092	3639	VV	?	22.00
26	DDT	15331	13.641	-0.179	15331	VV		41.35
27		2424	14.246		2424	VB	?	90.80
28		2204	16.829		2204	BB		38.40
29		3030	18.882		3030	BB		38.60
30	DBC	7437	23.056	-0.284	7437	BV		47.60
31	METHOXYCHL	11312	26.311	0.601	11312	VB		66.40
TOTALS:		217837		0.172	217837			

DETECTED PKS: 34 REJECTED PKS: 3

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 36.4 OFFSET: -36

RACK: 2 VIAL: 14 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM CTL 2565 PESTICIDE SOILS
GSXMD CTL2694 PESTICIDE WATERS

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

IMSD DL

Lab Name: VERSAR, INC. Case No.: GSXMD #2694

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/17/90 GC Column ID: 3% SP2100

MATRIX IS: SOIL

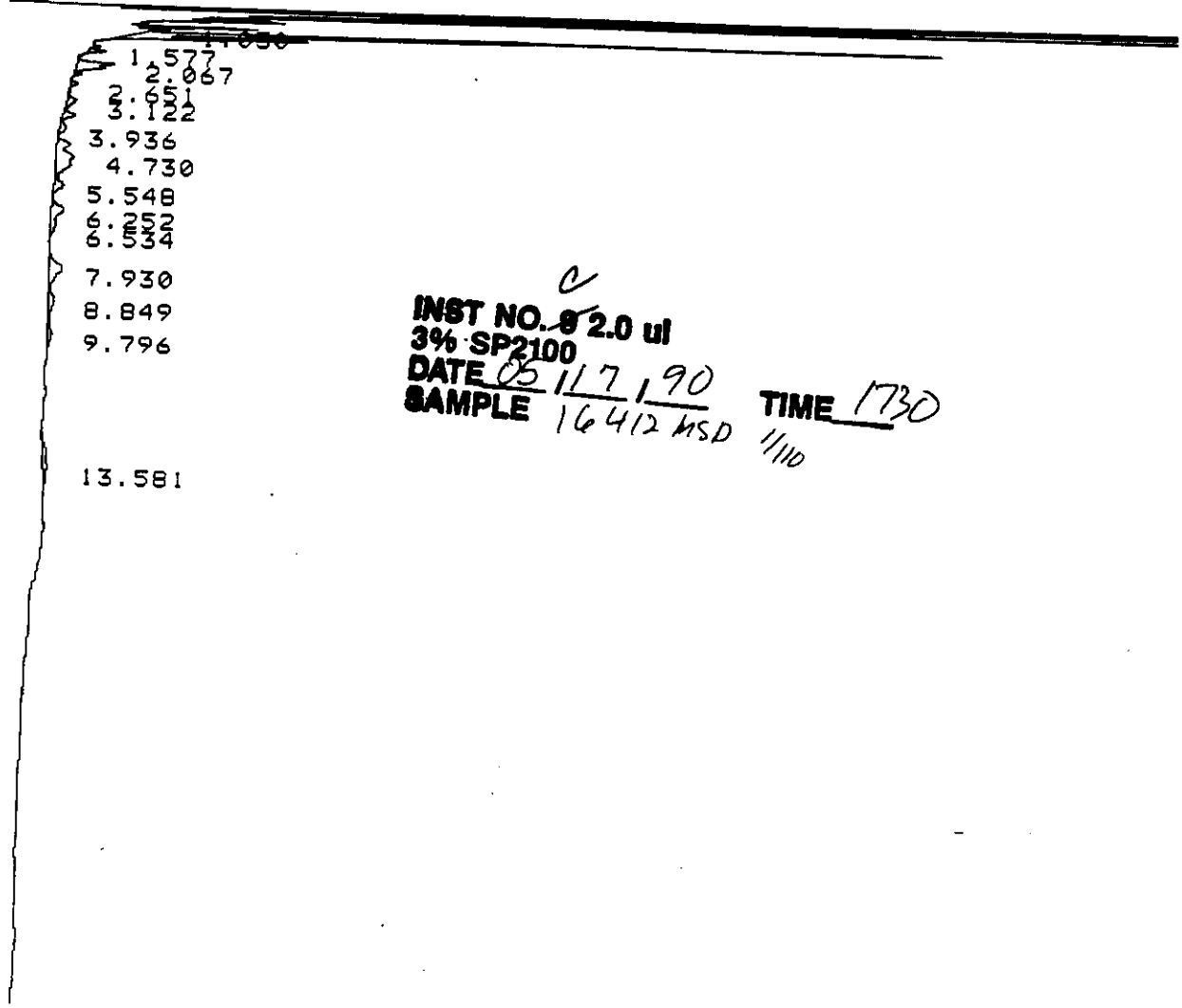
Inject Vol 2.00 (uL) Window Width: 1.0%

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/kg)	DETECTION LIMIT (ug/kg)
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	23730.68	0.00	118.65
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	23730.68	0.00	118.65
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	23730.68	0.00	118.65
gamma-BHC	2.15	2.19	0.00	0	160115	0.000	2.00	0.000	23730.68	0.00	118.65
Heptachlor	3.48	3.55	0.00	0	146420	0.000	2.00	0.000	23730.68	0.00	118.65
Aldrin	4.32	4.41	0.00	0	174460	0.000	2.00	0.000	23730.68	0.00	118.65
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	23730.68	0.00	118.65
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	23730.68	0.00	118.65
Dieldrin	7.72	7.88	0.00	0	171100	0.000	2.00	0.000	23730.68	0.00	237.31
4,4'-DDE	7.70	7.85	0.00	0	131805	0.000	2.00	0.000	23730.68	0.00	237.31
Endrin	8.61	8.78	0.00	0	118720	0.000	2.00	0.000	23730.68	0.00	237.31
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	23730.68	0.00	237.31
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	23730.68	0.00	237.31
Endo.sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	23730.68	0.00	237.31
4,4'DDT	12.79	13.04	0.00	0	76645	0.000	2.00	0.000	23730.68	0.00	237.31
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	23730.68	0.00	1186.53
Endrin ketone	14.62	14.91	0.00	0	116505	0.000	2.00	0.000	23730.68	0.00	237.31
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	23730.68	0.00	237.31
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	23730.68	0.00	237.31
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	23730.68	0.00	2373.07
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	23730.68	0.00	1186.53
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	23730.68	0.00	2373.07
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	23730.68	0.00	2373.07
DBC	26.31	26.84	0.00	0	109830	0.000	2.00	0.000	23730.68	0.00	237.31

CL 05/17/90

100251

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST NO. ~~8~~ C 2.0 ul
3% SP2100
DATE 05/17/90
SAMPLE 16412 MSD 1/110
TIME 1730

100252

TITLE: CLP PESTICIDES 17:30 17 MAY 90

CHANNEL NO: 2 SAMPLE: 16412MSD1/10 METHOD: CLP-2A

PEAK NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		8857	1.143		8857	VV	2.95
2		2340	1.271		2340	VB	3.05
3	G-BHC	754	2.067	-0.093	754	BV	? 5.20
4		923	4.730		923	VV	? 13.60
5		859	4.968		859	VV	? 36.45
6	G-CHLORDAN	820	6.252	0.162	820	VV	18.80
7	DDE/DIELD.	1550	7.930	0.160	1550	BV	31.20
8	B-ENDOSULF	835	8.849	-0.041	835	VV	33.60
9		915	13.581		915	BB	?117.30
TOTALS:		17853		0.188	17853		

DETECTED PKS: 24 REJECTED PKS: 15

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -11

RACK: 2 VIAL: 13 INJ: 1

NOTE:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
VERSCDM B.4 CTL2565 CLP PEST WATER
GSXMD CTL 2694 PESTICIDE WATER
VERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

Versar INC.

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 LIMS 04/23/90

VERSAR LABORATORY OPERATIONS
*** REVISED 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

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 ONTA MID SOILS	SLUDGE	C-82	XBNA		
	16420	A		2	SLUDGE	C-82	XBNA		
low ave	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 — LAB, IMSTD 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 ->

100230

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
XTCH - 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		

100230

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	TCLP VOA	TCLP BNA/Metals	VOA	BNA	Pest./PCB	REMARKS
1	4/18/90	1000		X	Location 1 (Sludge)	10	2	2	2	~~2~~ 1 SES 4/18/90	~~2~~ 1 SES 4/18/90	Tag #'s. 3-10683362, 53, 54, 55, 56, 57, 58, 60
					~~Location 2~~ 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)	Date / Time	Remarks	
		J. L. Monaco	4/19/90 0900	Shipped via Federal Express Airbill # 2294123705	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

3-18549

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. Schaeffer, Laurie B. Wyl

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. Morrison	4/19/90	Date / Time 0900	Remarks: Shipped via Federal Express Airbill # 2294123705

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

.ONMENTAL PROTECTION AGENCY
Office of Enforcement

REGION 3
Curtis Bldg., 6[illegible] Walnut Sts.,
Philadelphia, Pe[illegible]ylvania 19106

CHAIN OF CU[illegible]DY RECORD

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

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	SS 4/18/90 VOA	BNA	PCB/Pest.	TAL Metals	Cyanide		REMARKS Tag #'s
2	4/18/90	1135		X	Location 2	6	2	1	1	1	1		3-10683 59, 63, 64, 65, 66, 67
3	4/18/90	1145		X	Location 3	6	2	1	1	1	1		3-10683 68, 69, 70, 71, 72, 73
5	4/18/90	1430		X	Location 5	6	2	1	1	1	1		3-10683 74, 75, 76, 77, 78, 79
6	4/18/90	1455		X	Location 6	SS 4/18/90 10	2	~~1~~ 2	~~1~~ 2	~~1~~ 2	~~1~~ 2	SS 4/18/90	3-10683 80, 81, 82, 83, 84, 85, 86, 87, 88, 89
7	4/18/90	1505		X	Location 7	SS 4/18/90 10	2	~~1~~ 2	~~1~~ 2	~~1~~ 2	~~1~~ 2	SS 4/18/90	3-10683 90, 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. L. Morrison	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 # 4026936093	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

EXTRACTS READY FOR ANALYSIS

DATE 5-14-90

CODE VCASCDM BATCH 2 CONTROL # 2536

DATE RECEIVED 4-19-90 DATE EXTRACTED 4-26-90

OF EXTRACT 9 # OF SAMPLES 4

MATRIX Soil PARAMETER PEST LOCATION 5

IS THIS A RE-EXTRACTION? NO

COMMENTS 16412, 16412MS, 16412MSD, 16413, 16414, 16424, RB7966, MSTD 3049, GPC Blank

TECHNICIAN SIGNATURE [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
Are dry weights correct?	☑ YES	☐ NO

What clean-up procedure was used? GPC/Alumina

SUPERVISOR Kathy Jones SECTION CHIEF [signature]

100200

EXTRACTS READY FOR ANALYSIS

DATE 5/2/90

CODE VERSCDM BATCH 2 CONTROL # 2536

DATE RECEIVED 4/19/90 DATE EXTRACTED 4/29/90

OF EXTRACT 4 # OF SAMPLES 2

MATRIX M. Soil PARAMETER Pest LOCATION Fridge 5

IS THIS A RE-EXTRACTION? No

COMMENTS

TECHNICIAN SIGNATURE Padma Paravastu

==========

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
Are dry weights correct?	☑ YES	☐ NO

What clean-up procedure was used? 70% Alumina

SUPERVISOR Kathy Jones SECTION CHIEF

100231

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

1 OF 2

PROJECT VERSCAN BATCH 2 CASE 23-7 CONTROL 2536

MAT X SLUDGE PREPARATION PARAMETER BNA-PEST

VERSAR SAMPLE NUMBER 16419	Very Black Soil with No Rocks; Soil Sticks together but ~~are~~ is Dry MH 4-23-90
FIELD SAMPLE NUMBER 1	
SOIL SAMPLE pH 6.39	
VERSAR SAMPLE NUMBER 16420	Soil is Red/Brown in Colour with No Rocks But has a Large Amout of Very Fine Roots. Soil Sticks Together But is Dry MH 4-23-90
FIELD SAMPLE NUMBER 2	
SOIL SAMPLE pH 8.11	
VERSAR SAMPLE NUMBER 16421	Soil is Red/Brown in Color with No Rock. Soil Sticks together But is Dry MH 4-23-90
FIELD SAMPLE NUMBER 3	
SOIL SAMPLE 8.20	

ERSAR INC. SAMPLE PREPARATION COMMENT SHEET 2 OF 2

ROJECT Versar BATCH 2 CASE R3-7 CONTROL 2536

ATR(SLUDGE PREPARATION PARAMETER BNA-Pest

VERSAR SAMPLE NUMBER 16422	Very Black in color, with a large amount of small Black Rocks. Sample is Very wet, with standing water on top of sample MH 4-23-90
FIELD SAMPLE NUMBER 5	
SOIL MPLE pH 8.05	
ERSAR SAMPLE NUMBER 16423	Soil is more sandy than soil, it is Black in Color with a large amount of Rocks, Soil is Very wet with standing water above sample MH 4-23-
FIELD SAMPLE UMBER 6	
SOIL SAMPLE pH 7.75	
VERSAR SAMPLE NUMBER 16424	Soil is Grey and Black in color with a large amount of Both large and small Rocks. Soil is Dry MH 4-23-90
FIELD SAMPLE NUMBER 7	
SOIL pH	

100233

VERSAR INC.

SAMPLE PREPARATION COMMENT SHEET

1 OF 2

PROJECT Versar BATCH 2 CASE RB-7 CONTROL 2536

MATRIX SLUDGE PREPARATION PARAMETER BNA-PEST

VERSAR SAMPLE NUMBER 16419/12	Very Black Soil with no rocks; Soil sticks together but ~~Aff~~ is Dry MH 4-23-90
FIELD SAMPLE NUMBER 1	Pesticide extract oiled out at ≈ 5 ml. To GPC Clean the extract was diluted to 10 ml in
SOIL SAMPLE pH 6.39	CH_2Cl_2. 0.5 ml was diluted to 10 ml and the extract was GPC cleaned as normal (5ml injection) Post GPC extract should be concentrated to 0.5 ml aluminum cleaned, then vialed at 1 ml.
VERSAR SAMPLE NUMBER 16420	Soil is Red/Brown in color with no rocks but has a large amout of very fine roots. Soil sticks
FIELD SAMPLE NUMBER 2	together but is Dry MH 4-23-90
SOIL SAMPLE pH 8.11	
VERSAR SAMPLE NUMBER 16421	Soil is Red/Brown in color with no rock. Soil sticks together but is Dry MH 4-23-90
FIELD SAMPLE NUMBER 3	
SOIL SAMPLE 8.20	

Versar INC

SAMPLE COMMENTS (PESTICIDES)

CASE CL2694 & CB-7 Verocom

Quant Inst A.

EPA #	COMMENTS
	crunched 19 - check 1st cont std % RSD good thru final std. did maint on Inst A. crunched remaining samples & verified everything for both cases
	* GPC volumes notated incorrectly on sample prep forms, all samples except "1, 1MS, 1MSD" should be 5ml in, 10ml out. Corrected DF table and F1's. Did not change crunch sheets since there were no ~~xx~~ confirmed hits. CEB 5/21/90
	* Samples 3, 7 were >22 on their conf analysis. Adjusted windows for shift and determined that the samples were still unconfirmed. CEB 5/21/90

Signature

Date 100290

Versar INC.

SAMPLE COMMENTS (PESTICIDES)

CASE GSX MD #2694 H_2O Pest
VERSCOM #2536 Pest Soil

EPA #	COMMENTS CONFIRMATION INST#C 3%SD100
	Initially checked - 90RSD <10% for
	0.01 0.02 0.1 - Started F9 and F8
	crunched samples for GSXMD - Verscom
	samples still coming off. LBC shift
	<2%. KC 05-17-90
	Xeroxed the rest of the samples.
	Crunched Final Std. INDA & (F9) Out of
	criteria. Compounds %D > 20 and were
	outside their RT windows.
	Crunched MSTD's.
	Did Form-1's & QC for both cases. gas 5/17/90
VERSCOM	QC - PBLK & GPC BLK don't have surr. spike.
	All other straight samples' surr. rec. too low,
	26-36 %. Did not do matrix sp. / spike dup
	rec. because spike samples were diluted
	out. No straight sample surr. MSTD spike
	rec. is low.
GSX MD	QC - MSTD rec. is low. gas 5/17/90

Judy Amador 5-17-90
Signature Date

Versar INC.

SAMPLE COMMENTS (PESTICIDES)

CASE ENGIHARL 2542, ENGIALBA 2562 } Quant / VERSCOM 2556 CONF

Inst C, 5/4,

EFA #	COMMENTS
	Set-up CLP Standard - Quant w/ AR1221 & AR1232.
	Put on AM at 3 o'clock. JA 5/4/90
	Checked linearity - HP data - made it on
	0.02, 0.05 & 0.10 ppm combination only. Using
	VISTA data, made it on all combinations.
	Need 0.05 as mid-level, deg <20% for both
	HP & VISTA data.
	Set-up ENGIHARL 2542 & ENGIALBA 2562 -
	Quant and VERSCOM 2536 conf. sequence
	is typed-in in HP & VISTA. Started
	crunching FQA using VISTA DATA but PCB stds still need crunching. JA 5/5/90
	Had to reprepared samples from PB4B0
	F9 completed, F8 started, cresolyl Lab
	was out of criteria. Samples crunched and
	Form Ones completed for ENGIHARL #2542
	Samples crunched for ENGIALBA #2562
	and will need confirmation. KC 5-7-90
	Standards copied F8 and F9 printed
	out for ENGIHARL & ENGIALBA - Started
	QC for these two cases. Sample 16893 from
	ENGIALBA is being run for confirmation
	KC 5-8-90

Signature _____ Date _____

Versar INC.

SAMPLE COMMENTS (PESTICIDES)

CASE Versum 2556 CONF

INST C 05/05

EPA #	COMMENTS
	The wrong PBLK was added to the run. PBLK80 instead of PBLK81 - The extracts were reinjected from this point. The continuing IN&B was out of criteria and no more extracts were run KC 05-07-90
	F9 & F8 completed, Form one completed
	Hurtig QC KC 05-08-90

100230

Signature Date

DATE 05/21/90 SUBJECT DATA REVIEW PROJECT NO.

Cont 2536 Case R3-7
Code VERSCOM SDG 1
2
Job 420.1.0 Site CDM
Comp VERSAR DIV 31
Rcvd 4/19/90
Ext'd 04/29/90 MED
04/26/90 LOW

MED SOILS

Field ID	Sample ID	
* 1	16412*	LOW SOIL
2	16413	
3	16414	
5 ~~4~~	16415	MED SOIL
6 ~~5~~	16416	
7 ~~6~~	16417	LOW. SOIL
~~7~~		

PRIMARY INST A SPECSO/CPR401 5/02
Lin: 3 3 3 5
Deg: 0/0 0/0 0/0
DBC: ≤ 2% ALL

INIT: AB + PCB FULL
CCS1: A, 42
BD: ≤ 15% [ALDRIN @ 17%]
RT'S OK
CCSF: AB, 42
BD ≤ 15% ALL [d-BHC @ 21%]
[Methoxy @ 31%]

* Samples completed prior to calibration check INDA.

SECONDARY: INST C 3ESP2100 5/05
Lin: 2 3 7 3
Deg: 0 0
DBC: ≤ 2% ALL

INIT: AB + FULL PCB
CCSF: AB
BD ≤ 20% ALL [END @ 21]
[DDD @ 37]
[ESS @ 53]
RT'S OK

MED

ENVIRONMENTAL ID'S:
[ND ALL]

QC

SURR REC: 0 of 3 out
MS/MSD: NA
RB SUMM: NO RES ID OR SIG INT
MSTD: 0 of 7 out

PRIMARY: A SPECSO/CPR401 5/16
Lin: 5 4 9 5
Deg: 0/0 0/0 0/0
DBC: ≤ 2% ALL [ND]
COST DURING GPC

INIT: AB + PCB
CCS1: A BD ≤ 15% ALL RT'S OK
CCSF: AB BD ≤ 15% ALL
RT'S OK

WITNESSED AND UNDERSTOOD

SIGNED DATE SIGNED CJB

SIGNED DATE DATE 5/21/90

100239

DATE 5/21/90 SUBJECT CW7 PROJECT NO.

2536

Secondary: C 3285P2100 5/17 INZT: AB + PCB
LIH: 9 6 5 4 OCSF: AB
Dig: 0 0 ★ 8D: 19 of 19 > 20%
DBC: <2% ALL [ND - 1 not conf] R7's 19 of 19 out
→ ★ ['3' @ 2.12%]
Confirmed >2% DBC and [7 @ 2.22%] ← ADJUSTED WINDOWS TO ACCOUNT FOR OUR DBC SHIFT, DETERMINED RESULTS WERE NONCONF.

LOW ENVIRONMENTAL ID

[ND ALL]

QC
SURR REC: ~~1 of 8~~ 7 ND 1 of 7 out
3 of 7 D dilution
3 of 7 OK OSB
MS/MSD: 6 of 6 out RPD MS - 5 of 6 ⊘ & REC!
6 of 12 out REC MSD - 1 of 6 out.
TBSUMM. NO POS ID OR SIG INT.
MLTD: ~~32/35/18/16/20/20~~ OSB
32/35/18/16/20/20/32 REC?

WITNESSED AND UNDERSTOOD

SIGNED DATE SIGNED OSB
SIGNED DATE DATE 5/21/90

100270

VERSAR INC. LOW LEVEL SOIL SAMPLE PREPARATION SHEET -BY SONICATION

CONTROL 2536

PROJECT VERSCAM

BATCH 2

CASE ~~70~~ B37

DATE 04-26-90

SPIKING SOLUTIONS

M.S. BNA 22402 S.S.S. BNA 22599

M.S. PEST B931 S.S.S. PEST B928

PAGE 1 OF 1

EXTRACTION PARAMETER BNA-Pest

DATE EXTRACTION COMPLETED 4-26-90

ADSORBENT BATCH NUMBER ALUMINA

VERSAR SAMPLE NUMBER	FIELD SAMPLE NUMBER	SAMPLE WEIGHT IN GRAMS	SPIKE VOL. BNA MS	SPIKE VOL. BNA SSS	SPIKE VOL. PEST MS	SPIKE VOL. PEST SSS	INITIAL EXTRACT FINAL VOL	VOLUME TO GPC IN ML.	FINAL GPC VOLUME	VOLUME TO PEST CLEAN UP	VOLUME TO BNA	FINAL PEST VOLUME	FINAL BNA VOLUME	SAMPLE COMMENTS
16412	1	30.02	—	1ml	—	1ml	10 ml	0.25ml	~~9.5~~ 5 mL	0.5 mL	9.5 mL	1.0 mL	—	don't Vol BNA
16413	2	30.08	—	1ml	—	1ml		5 ml ~~10 mL~~	10 mL				1.0 mL	
16414	3	30.73	—	1ml	—	1ml		5 ml ~~10 mL~~	10 mL					
16424	7	30.29	—	1ml	—	1ml		5 ml ~~10 mL~~	10 mL					
RB 7966	BLK 66	—	—	1ml	—	1ml		5 ml ~~10 mL~~	10 mL					
MSTB 3049	—	—	2ml	1ml	1ml	1ml		5 ml ~~10 mL~~	10 mL		—		—	Don't Vol BNA ~~BNA Not~~
16412 MS	1	30.08	2ml	1ml	1ml	1ml		0.25 mL	0.5 mL		—		—	BNA Not needed for Low level
16412 MSD	1	30.08	2ml	1ml	1ml	1ml			0.5 mL		—		—	
			4-26-90				5-10-90	5-10-90	5-10-90	MH	5-14-90		MH 5-14-90	

See sample comment

See sample comment

VERSAR INC. MEDIUM LEVEL SOLID SAMPLE PREPARATION SHEET -BY SONICATION

PROJECT VERSDM

CASE R3-7

BATCH 2

DATE 4-29-90 CHL #2536

SPIKING SOLUTIONS

M.S. BNA —

M.S. PEST B169

S.S.S BNA —

S.S.S PEST B929

PAGE 1 OF 1

EXTRACTION PARAMETER PEST

DATE EXTRACTION COMPLETED 4-29-90

ADSORBENT BATCH NUMBER ALUMINA

VERSAR SAMPLE NUMBER	FIELD SAMPLE NUMBER	SAMPLE WEIGHT IN GRAMS	SPIKE VOL. BNA MS	SPIKE VOL. BNA SSS	SPIKE VOL. PEST MS	SPIKE VOL. PEST SSS	TOTAL EXTRACTION VOLUME	ALIQUOT OF EXTRACT TO BNA	BNA FINAL VOLUME	ALIQUOT OF EXTRACT TO PEST	COLUMN CLEAN UP YES/NO	PEST FINAL VOLUME	SAMPLE COMMENTS
16415	5	1.22	—	—	—	1ml	10mls	NA	NA	1ml	1ml	1 ml	
16416	6	1.03	—	—	—								
RB 7981	SBLK 81	—	—	—	—								
MSD 3096	—	—	—	—	1ml								
		END	END 4-29-90				END 4-29-90	END	END	END 5-1-90	END 5-1-90	5/2/90 RP	

VERSAR INC. Total Solids

Project :VERSCDM Case :N/A Batch :2

Date :04-24-1990 Analyst :MN

Versar Sample#	Field Sample#	Tray Weight	Tray + Wet Wt Sample	Net Wet Weight Sample	Tray + Dry Wt Sample	Net Dry Weight Sample	% Moisture	Dry Weight Factor
16419	1	1.00g	6.02g	5.02g	4.38g	3.38g	32.7%	1.49
16420	2	1.01g	6.21g	5.20g	4.64g	3.63g	30.2%	1.43
16421	3	0.99g	6.16g	5.17g	4.90g	3.91g	24.4%	1.32
16422	5	0.98g	6.02g	5.04g	3.48g	2.50g	50.4%	2.02
16423	6	0.99g	6.13g	5.14g	3.52g	2.53g	50.8%	2.03
16424	7	0.99g	6.08g	5.09g	5.84g	4.85g	4.7%	1.05

GPC SAMPLE IDENTIFICATION LOG PAGE 1 OF 1

2565 1400 ml

DUMP TIME 21 min

COLLECT TIME 21 min

WASH TIME 20 min

GPC CALIBRATION # 22502

CALIBRATION STD 3 ml

INJECT VOL 5ml

10-90

Ex. VOL 10 ml

*30 ml of dilution + 9.5 ml of undiluted extract.

REMAINING EXTRACT VOLUME 3 ml

No.	SAMPLE #	FIELD #	REMARKS
1	16412*	1	.5 ml of extract Diluted to 10ml
2	16412 ms*	1	See Sample Comment
3	16412 msD*	1	
4	16413	2	
5	16414	3	
6	16424	7	
7	RB 7966	—	
8	MSD 3049	—	
9	16912	10	
10	16914	12	
11	16915	13	
12A	16916	14	
12B	16917	15	
13	GPC BLANK	—	
14	RB 8000	—	
15	MSD 3063	—	
16	16910	8	
17	13693 msD	62SB107009 01XX	Re-extracted due to Bad
18	RB 8060		GPC Clean-up on the first RUN.
19			
20			
21			
22			
23			

Versicom B.2

Versicom B4

EC Suns B1

00284

GTC STD 1
05-07-90

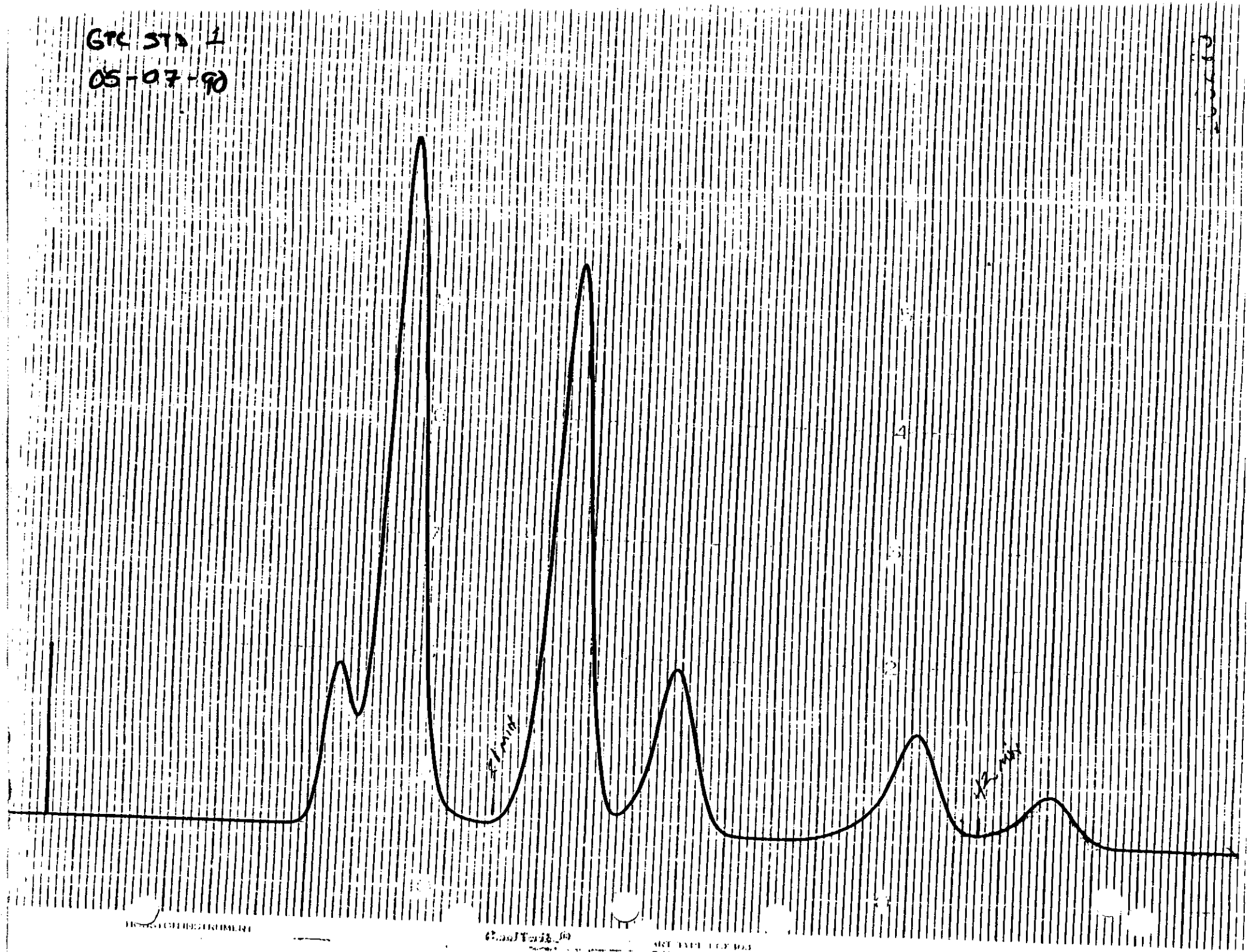


Fig. 25-7-5

PESTICIDES DILUTION FACTOR TABLE

ORIGINAL (Red)

Versar INC.

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/16/90 GC Column ID: SP2250/SP2401

Inject 2.00 (uL) Window Width: 1.0%

Extraction Date: 04/26/90 Extraction Chemist: MH

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

DF's CORRECTED FOR GPC MISTAKE IN NOTATION. CBB 5/21/90

	MATRIX	EPA SAMPLE #	LAB SAMPLE ID #	WT (g) OF SAMPLE	% MOISTURE	INITIAL EXT FINAL VOL (ML)	ALIQUOT TO PEST (ML)	FINAL PEST VOL (ML)	DILUTION AT INSTRUMENT	DILUTION FACTOR (ug/Kg)
1	SOIL	2	16413	30	30	20.00	0.50	1.00	1.0	2288.07
2	SOIL	3	16414	31	24	20.00	0.50	1.00	1.0	2067.85
3	SOIL	7	16424	30	5	20.00	0.50	1.00	1.0	1664.22
4	SOIL	PBLK66	RB7966	30	0	20.00	0.50	1.00	1.0	1601.33
5	SOIL	MSTD3049	MSTD3049	30	0	20.00	0.50	1.00	1.0	1601.33
6	SOIL	GPC BLK	GPC BLK	30	0	20.00	0.50	1.00	1.0	1601.33
7	SOIL	1	16412	30	33	20.00	0.50	1.00	10.0	23778.11
	SOIL	1MS	16412MS	30	33	20.00	0.50	1.00	10.0	23730.68
	SOIL	1MSD	16412MSD	30	33	20.00	0.50	1.00	10.0	23730.68
10	SOIL	X	X	X	X	10.00	0.50	1.00	1.0	ERR
11	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
12	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
13	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
14	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
5	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
16	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
17	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
18	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
19	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
20	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
21	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
22	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
23	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
24	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
25	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
26	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
27	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
28	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR
	SOIL	X	X	X	X	20.00	0.50	1.00	1.0	ERR

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

CBB 5/21/90

21-May-90

ORIGINAL (R-4)

PESTICIDES DILUTION FACTOR TABLE

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/02,03/90 GC Column ID: SP2250/SP2401

Inject 2.00 (uL) Window Width: 1.0%

Extraction Date: 04/29/90 Extraction Chemist: PR

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

	MATRIX	EPA SAMPLE #	LAB SAMPLE ID #	WT (g) OF SAMPLE	% MOISTURE	INITIAL EXT FINAL VOL (ML)	ALIQUOT TO PEST (ML)	FINAL PEST VOL (ML)	DILUTION AT INSTRUMENT	DILUTION FACTOR (ml/Kg)
1	SOIL	5	16415	1	50	10.00	1.00	1.00	1.0	19847.30
2	SOIL	6	16416	1	51	10.00	1.00	1.00	1.0	23699.58
3	SOIL	PBLK81	SBLK81 3056	1	0	10.00	1.00	1.00	1.0	12010.00
4	SOIL	MSTD3036 3056	MSTD3036	1	0	10.00	1.00	1.00	1.0	12010.00
5	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
6	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
7	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
8	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
9	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
10	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
11	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
12	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
13	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
14	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
15	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
16	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
17	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
18	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
19	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
20	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
21	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
22	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
23	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
24	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
25	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
26	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
27	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
28	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
29	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR
30	SOIL	X	X	X	X	10.00	1.00	1.00	1.0	ERR

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

Cf 05/04/90 100273

DATE 05/02/90 SUBJECT Injection log A PROJECT NO.

Oper. Cynthia Lowery Date 05/02/90
Detec. ECD Temp. 300 °C
Colum. 60 x 4m Type SP2250/2408
Carrier Gas N_2 at _____ ml/min
Oven 205 °C for 30 min to 150 °C
for _____ min at _____ °C/min
Inst. ID A Baseline _____
Project 624 AVTEK CTL# Parameter _____
2592 and 2485 Roland and Veracolor CT 42536

Changed Septa + Pur col 05/02/90

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID
1	1/ 1		B787 EVAL.01
2	1/ 2		B788 EVAL.02
3	1/ 4		B789 EVAL.05
4	1/ 5		B790 EVAL.10
5	1/ 7		B775 INDA.10
6	1/ 8		B776 INDB.10
7	1/10		B767 TOXAPH
8	1/11		B699 AR1660
9	1/13		B321 AR1221
10	1/14		B684 AR1232
11	2/ 1		B762 AR1242
12	2/ 2		B696 AR1248
13	2/ 4		B761 AR1254
14	2/ 5		PBLK81
15	2/ 7		16415
16	2/ 8		16416
17	2/10		MSTD3056
18	2/11		PBLK80
19	2/13		EVALB
20	2/14		17615
21	3/ 1		17615MS
22	3/ 2		17615MSD
23	3/ 4		17616
24	3/ 5		17755
25	3/ 7		B762 AR1242
26	3/ 8		B775 INDA.10
27	3/10		17755MS
28	3/11		17755MSD
29	3/13		MSTD3055
30	3/14		EVALB
31	4/ 1		B762 AR1242
32	4/ 2		B775 INDA.10
33	4/ 4		B776 INDB.10

Cynthia Lowery

WITNESSED AND UNDERSTOOD
SIGNED Karen Croghan DATE 05/10/90
SIGNED DATE

SIGNED Cynthia Lowery
DATE 05/02/90

DATE 05/16/90 SUBJECT Injection log A PROJECT NO.

ORIGINAL (Red)

Oper. Cynthia Lowery Date 05/16/90
Detec. ECD Temp. 300 °C
Column 6 x 4 mm Type SP2250/1240
Carrier Gas N2 at _____ ml/min
Oven 205 °C for 30 min to 150 °C
for _____ min at _____ °C/min
Inst. ID A Baseline _____
Project GSXMD CTL 2694 Parameter CLP Pest
VG RSC DM CTLM 2565

Changed injection CL 06/15/90

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID
1	1/ 1		B787 EVAL.01
2	1/ 2		B788 EVAL.02
3	1/ 4		B789 EVAL.05
4	1/ 5		B790 EVAL.10
5	1/ 7		B973 INDA.10
6	1/ 8		B974 INDB.10
7	1/10		B767 TOXAPH
8	1/11		B699 AR1660
9	1/13		B762 AR1242
10	1/14		B948 AR1248
11	2/ 1		B761 AR1254
12	2/ 2		PBLK77
13	2/ 4		19978 1/10
14	2/ 5		19979 1/10
15	2/ 7		PBLK66
16	2/ 8		GPCBLK
17	2/10		EVALB
18	2/11		16412 1/10
19	2/13		16412MS 1/10
20	2/14		16412MSD/10
21	3/ 1		16413
22	3/ 2		16414
23	3/ 4		B973 INDA.10
24	3/ 5		16424
25	3/ 7		19979 1/100
26	3/ 8		EVALB
27	3/10		B973 INDA.10
28	3/11		B974 INDB.10

Cynthia Lowery

WITNESSED AND UNDERSTOOD
SIGNED Laura Coughlin 05/17/90 SIGNED Cynthia Lowery

100200

42 DATE 05/05/90 SUBJECT Inj. log C

PROJECT NO.

Changed septum, Pure Gal & TFE
Baked septum
JA 5/4/90

Oper. Judy Amador Date 5/5/90
Detec. ECD Temp. 300 °C
Column 6' x 2mm Type 3% SP2100
Carrier Gas Ar/CH4 at — mL/min
Oven 190 °C for 30 min to Iso °C
for — min at — °C/min
Inst. ID C Baseline -0.61 mV
Project ~~ENG~~ HARL 2542 Parameter ~~Mtn~~ 2,4
ENG/ALBA 2542 low soils - Quant Plot
VERSCOM 2536 med soils / Plot Conf.

SAMP#	RACK/VIAL	TYPE	SAMPLE ID
1	1/ 1		B787 EVAL.01
2	1/ 2		B788 EVAL.02
3	1/ 4		B789 EVAL.05
4	1/ 5		B790 EVAL.10
5	1/ 7		B973 INDA.10
6	1/ 8		B776 INDB.10
7	1/10		B767 TOXAPH
8	1/11		B699 AR1660
9	1/13		A321 AR1221
10	1/14		B684 AR1232
11	2/ 1		B762 AR1242
12	2/ 2		B948 AR1248
13	2/ 4		B761 AR1254
14	2/ 5		PBLK91
15	2/ 7		16625
16	2/ 8		16626
17	2/10		PBLK99
18	2/11		16893
19	2/13		B789 EVALB
20	2/14		~~PBLK80~~ PBLK81
21	3/ 1		16415
22	3/ 2		16416
23	3/ 4		B973 INDA.10
24	3/ 5		B776 INDB.10
25	3/ 7		MSTD3059
26	3/ 8		MSTD3062
27	3/10		MSTD3056

Judy Amador

WITNESSED AND UNDERSTOOD
SIGNED Karen Croghan DATE 5-9-90 SIGNED Judy Amador
SIGNED DATE DATE 5-5-90

100281

DATE 05/17/90 SUBJECT Inj Log C PROJECT NO.

Oper. K. Crayton Date 05/17/90
Detec: ECD Temp. 300 °C
Column 6' x 2 mm Type 3% SP2100
Carrier Gas P/C at "
Oven 170 °C for 20 min to 250
for min at °C/min
Inst. ID C Baseline
Project GTS 2144 Parameter C/P Pest
VERSION 2505

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID
1	1/ 1		B787 EVAL.01
2	1/ 2		B788 EVAL.02
3	1/ 4		B789 EVAL.05
4	1/ 5		B790 EVAL.10
5	1/ 7		B973 INDA.10
6	1/ 8		B974 INDB.10
7	1/10		B767 TOXAPH
8	1/11		B699 AR1660
9	1/13		B762 AR1242
10	1/14		B948 AR1248
11	2/ 1		B761 AR1254
12	2/ 2		PBLK77
13	2/ 4		19979 1/10
14	2/ 5		19979 1/100
15	2/ 7		PBLK66
16	2/ 8		16412 1/10
17	2/10		EVALB
18	2/11		16412MS 1/10
19	2/13		16412MSD1/10
20	2/14		16413
21	3/ 1		16414
22	3/ 2		16424
23	3/ 4		B973 INDA.10
24	3/ 5		GPCBLK
25	3/ 7		EVALB
26	3/ 8		B973 INDA.10
27	3/10		B974 INDB.10
28	3/11		MSTD3098
29	3/13		MSTD3049

1/10 dilution => 10 ml of sample to 10 ml of hexane KC

modified sample table to include 1/100 dilution of 19979

1/100 dilution => 10 ml of sample to 10 ml of hexane KC

Mixed Chlorpyrifos

WITNESSED AND UNDERSTOOD
SIGNED DATE 05/17/90 SIGNED Kenneth Crayton

100282

 DATE 05/17/91 SUBJECT Injection log C PROJECT NO.

Medfyd Run Table
From Pg. 49

ORIGINAL (Red)

SAMP#	RACK/VIAL	TYPE SAMPLE ID
1	1/ 1	B787 EVAL.01
2	1/ 2	B788 EVAL.02
3	1/ 4	B789 EVAL.05
4	1/ 5	B790 EVAL.10
5	1/ 7	B973 INDA.10
6	1/ 8	B974 INDB.10
7	1/10	B767 TOXAPH
8	1/11	B699 AR1660
9	1/13	B762 AR1242
10	1/14	B948 AR1248
11	2/ 1	B761 AR1254
12	2/ 2	PBLK77
13	2/ 4	19979 1/10
14	2/ 5	19979 1/100
15	2/ 7	PBLK66
16	2/ 8	16412 1/10
17	2/10	EVALB
18	2/11	16412MS/10
19	2/13	16412MSD1/10
20	2/14	GPCBLK
21	3/ 1	16414
22	3/ 2	16424
23	3/ 4	B973 INDA.10
24	3/ 5	B974 INDB.10
25	3/ 7	MSTD3098
26	3/ 8	MSTD3049

Cynthia Lewis

WITNESSED AND UNDERSTOOD

SIGNED DATE SIGNED Cynthia Lewis

SIGNED DATE DATE 05/17/91

100233

ORIGINAL
(Red)

SINGLE CHANNEL METHOD: CLP-3A 16:33 16 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: 19117
DIVISOR: 1.000000
AMT STD: 1.000000
MLTPLR: 10000.00

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

INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05 / 16 / 90 TIME
SAMPLE
Method

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
2	0.00	SN	2
3	0.00	T%	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

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

REF
%: 10
MIN: 0.00
NON REF
%: 3
MIN: 0.00

ORIGINAL (Red)

PAGE 2

PK#	TIME	NAME	FACTOR	AMOUNT	REF	GR#	MUST LO	MUST HI
1	2.08	A-BHC	1.000000	1.000000			0.000000	0.000000
2	2.58	G-BHC	1.000000	1.000000			0.000000	0.000000
3	2.89	B-BHC	1.000000	1.000000			0.000000	0.000000
4	3.12	HEPTACHLOR	1.000000	1.000000			0.000000	0.000000
5	3.36	D-BHC	1.000000	1.000000			0.000000	0.000000
6	3.74	ALDRIN	1.000000	1.000000			0.000000	0.000000
7	5.44	HEPT EPOX	1.000000	1.000000			0.000000	0.000000
8	6.02	G-CHLORDAN	1.000000	1.000000			0.000000	0.000000
9	6.54	A-CHLORDAN	1.000000	1.000000			0.000000	0.000000
10	6.79	A-ENDOSULF	1.000000	1.000000			0.000000	0.000000
11	7.68	DDE	1.000000	1.000000			0.000000	0.000000
12	8.22	DIELDRIN	1.000000	1.000000			0.000000	0.000000
13	9.96	ENDRIN	1.000000	1.000000			0.000000	0.000000
14	11.52	DDD	1.000000	1.000000			0.000000	0.000000
15	11.95	B-ENDOSULF	1.000000	1.000000			0.000000	0.000000
16	13.82	DDT	1.000000	1.000000			0.000000	0.000000
17	15.27	ENDRIN ALD	1.000000	1.000000			0.000000	0.000000
18	18.25	ESS	1.000000	1.000000			0.000000	0.000000
19	23.34	DBC	1.000000	1.000000			0.000000	0.000000
20	25.06	ENDRIN KET	1.000000	1.000000			0.000000	0.000000
21	25.71	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

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

INST ID NO ~~0~~ A 2.0 ul
1.5% SP2250 / 1.95% SP2401
DATE 05/16/90 TIME —
SAMPLE
Method

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

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

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

ORIGINAL (Red)

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID	DIVISOR	AMT STD	MLTPLR
1	1/ 1		B787 EVAL.01			
2	1/ 2		B788 EVAL.02			
3	1/ 4		B789 EVAL.05			
4	1/ 5		B790 EVAL.10			
5	1/ 7		B973 INDA.10			
6	1/ 8		B974 INDB.10			
7	1/10		B767 TOXAPH			
8	1/11		B699 AR1660			
9	1/13		B762 AR1242			
10	1/14		B948 AR1248			
11	2/ 1		B761 AR1254			
12	2/ 2		PBLK77			
13	2/ 4		19978 1/10			
14	2/ 5		19979 1/10			
15	2/ 7		PBLK66			
16	2/ 8		GPCBLK			
17	2/10		EVALB			
18	2/11		16412 1/10			
19	2/13		16412MS 1/10			
20	2/14		16412MSD/10			
21	3/ 1		16413			
22	3/ 2		16414			
23	3/ 4		B973 INDA.10			
24	3/ 5		16424			
25	3/ 7		EVALB			
26	3/ 8		B973 INDA.10			
27	3/10		B974 INDB.10			
28	3/11		MSTD3063			
29	3/13		MSTD3098			
30	3/14		MSTD3049			
31	4/ 1		MSTD3091			

A
INST ID NO Ø 2.0 uL
1.5% SP2250 / 1.95% SP2401
DATE 05 / 16 /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	VERSCDM CTL 2565 PESTICIDE SOILS
5	GSXMD CTL2694 PESTICIDE WATERS

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

ORIGINAL
(Red)

SINGLE CHANNEL METHOD: CLP-3A 19:21 2 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: B776 INDB.10
DIVISOR: 1.000000
AMT STD: 1.000000
MLTPLR: 10000.00

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
2	0.00	SN	2
3	0.00	T%	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

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

RESOLUTION PK#: 0
RESOLUTION MINIMUM: 0.0
FACT%: 0.0
IDENTIFICATION TIME WINDOWS +/-
REF
%: 10
MIN: 0.00
NON REF
%: 3
MIN: 0.00

ORIGINAL (Red)

PAGE 2

PK#	TIME	NAME	FACTOR	AMOUNT	REF	GR#	MUST LO	MUST HI
1	2.14	A-BHC	1.000000	1.000000			0.000000	0.000000
2	2.66	G-BHC	1.000000	1.000000			0.000000	0.000000
3	2.98	B-BHC	1.000000	1.000000			0.000000	0.000000
4	3.22	HEPTACHLOR	1.000000	1.000000			0.000000	0.000000
5	3.48	D-BHC	1.000000	1.000000			0.000000	0.000000
6	3.86	ALDRIN	1.000000	1.000000			0.000000	0.000000
7	5.62	HEPT EPOX	1.000000	1.000000			0.000000	0.000000
8	6.22	G-CHLORDAN	1.000000	1.000000			0.000000	0.000000
9	6.76	A-CHLORDAN	1.000000	1.000000			0.000000	0.000000
10	7.02	A-ENDOSULF	1.000000	1.000000			0.000000	0.000000
11	7.94	DDE	1.000000	1.000000			0.000000	0.000000
12	8.50	DIELDRIN	1.000000	1.000000			0.000000	0.000000
13	10.28	ENDRIN	1.000000	1.000000			0.000000	0.000000
14	11.89	DDD	1.000000	1.000000			0.000000	0.000000
15	12.35	B-ENDOSULF	1.000000	1.000000			0.000000	0.000000
16	14.29	DDT	1.000000	1.000000			0.000000	0.000000
17	15.79	ENDRIN ALD	1.000000	1.000000			0.000000	0.000000
18	18.86	ESS	1.000000	1.000000			0.000000	0.000000
19	24.11	DBC	1.000000	1.000000			0.000000	0.000000
20	25.90	ENDRIN KET	1.000000	1.000000			0.000000	0.000000
21	26.58	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

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
TRANSMIT/REPLOT INSTRUCTIONS
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

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

PROGRAM EXECUTION
PROGRAM:
PARAMETERS:
RESERVE PRINTER: N

ORIGINAL (Red)

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		B787 EVAL.01			
2	1/ 2		B788 EVAL.02			
3	1/ 4		B789 EVAL.05			
4	1/ 5		B790 EVAL.10			
5	1/ 7		B775 INDA.10			
6	1/ 8		B776 INDB.10			
7	1/10		B767 TOXAPH			
8	1/11		B699 AR1660			
9	1/13		B321 AR1221			
10	1/14		B684 AR1232			
11	2/ 1		B762 AR1242			
12	2/ 2		B696 AR1248			
13	2/ 4		B761 AR1254			
14	2/ 5		PBLKBI			
15	2/ 7		16415			
16	2/ 8		16416			
17	2/10		MSTD3056			
18	2/11		PBLK80			
19	2/13		EVALB			
20	2/14		17615			
21	3/ 1		17615MS			
22	3/ 2		17615MSD			
23	3/ 4		17616			
24	3/ 5		17755			
25	3/ 7		B762 AR1242			
26	3/ 8		B775 INDA.10			
27	3/10		17755MS			
28	3/11		17755MSD			
29	3/13		MSTD3055			
30	3/14		EVALB			
31	4/ 1		B762 AR1242			
32	4/ 2		B775 INDA.10			
33	4/ 4		B776 INDB.10			

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	E$E AVTEX CTL 2592 AND 2655 PCB WATER
5	VERSCDM CTL 2536 PESTICIDE SOILS

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

SINGLE CHANNEL METHOD: CLP-2A 13:28 17 MAY 90

ORIGINAL (Red)

SECTION 1: BASIC
PAGE 1
ANALYSIS PARAMETERS
CHANNEL: 2
CALCULATION: ES
AREA/HT: A
STOP TIME: 30.00
NUMB EXPECTED PKS: 100
EQUILIBRATION TIME: 8
UNRETAINED PK TIME: 0.00
UNIDENT PK FACTOR: 1.000000
SLICE WIDTH: 10

PAGE 2
SAMPLE PARAMETERS
RUN TYPE: A
SAMPLE ID: PBLK66
DIVISOR: 1.000000
AMT STD: 1.000000
MLTPLR: 10000.00

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: 5
ANNOTATION
RETENTION TIME: Y
PLOT CONTROL: N
TIME TICKS: N
TIME EVENTS: N
PK START/END: N

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

PAGE 6
PLOT ATTEN
INIT PLOT ATTEN: 4

INST NO. C 2.0 ul
3% SP2100
DATE 05/17/90
SAMPLE
Method
TIME

SECTION 2: TIME EVENTS
PAGE 1

LINE#	TIME	EVENT	VALUE
1	0.00	PR	700
2	0.00	SN	2
3	0.00	T%	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%: 5.0

varian /sunnyvale,calif.p/n 03-906362-01

IDENTIFICATION TIME WINDOWS +/-
REF
%: 10
MIN: 0.00
NON REF
%: 5
MIN: 0.00

PAGE 2

PK#	TIME	NAME	FACTOR	AMOUNT	REF GR#	MUST LO	MUST HI
1	1.83	A-BHC	1.000000	1.000000		0.000000	0.000000
2	1.96	B-BHC	1.000000	1.000000		0.000000	0.000000
3	2.16	G-BHC	1.000000	1.000000		0.000000	0.000000
4	2.22	D-BHC	1.000000	1.000000		0.000000	0.000000
5	3.50	HEPTACHLOR	1.000000	1.000000		0.000000	0.000000
6	4.34	ALDRIN	1.000000	1.000000		0.000000	0.000000
7	5.31	HEPT EPOX	1.000000	1.000000		0.000000	0.000000
8	6.09	G-CHLORDAN	1.000000	1.000000		0.000000	0.000000
9	6.63	A-ENDOSULF	1.000000	1.000000		0.000000	0.000000
10	6.76	A-CHLORDAN	1.000000	1.000000		0.000000	0.000000
11	7.77	DDE/DIELD.	1.000000	1.000000		0.000000	0.000000
12	8.68	ENDRIN	1.000000	1.000000		0.000000	0.000000
13	8.89	B-ENDOSULF	1.000000	1.000000		0.000000	0.000000
14	9.79	DDD	1.000000	1.000000		0.000000	0.000000
15	9.84	ENDRIN ALD	1.000000	1.000000		0.000000	0.000000
16	11.45	ESS	1.000000	1.000000		0.000000	0.000000
17	12.86	DDT	1.000000	1.000000		0.000000	0.000000
18	14.73	END KETONE	1.000000	1.000000		0.000000	0.000000
19	19.29	METHOXYCHL	1.000000	1.000000		0.000000	0.000000
20	26.53	DBC	1.000000	1.000000		0.000000	0.000000

SECTION 4: GC INSTRUMENT CONTROL
PAGE 1
COL TEMP
ISO/INIT COL TEMP: 190
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	4	10	Y
2	0.00	B			Y

PAGE 3
TEMP/FLOW
INJ A TEMP: 245
INJ B TEMP: 245
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
TRANSMIT/REPLOT INSTRUCTIONS
TRANSMIT RAW DATA: N
REPLOT WITH BASELINES: Y
RAW DATA LOCATION: U
TRANSMIT REPORT: N

INST NO. C
3% SP2100 2.0 ul
DATE 05/17/90
SAMPLE Method TIME

varian /sunnyvale, calif. p/n 03-906362-01

24

SECTION 9: SAMPLE LIST+A/S CONTROL
PAGE 1

AUTOSAMPLER CONTROL
INJECT/CALIBRATION: 1
INJECT/ANALYSIS: 1
SAMP VOLUME: 1
VISTA AUTOSAMPLER ONLY
A/S MODE: MR
PURGE PULSES: 2
INJECT TIME: 0.03

ORIGINAL (Red)

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID	DIVISOR	AMT STD	MLTPLR
1	1/ 1		B787 EVAL.01			
2	1/ 2		B788 EVAL.02			
3	1/ 4		B789 EVAL.05			
4	1/ 5		B790 EVAL.10			
5	1/ 7		B973 INDA.10			
6	1/ 8		B974 INDB.10			
7	1/10		B767 TOXAPH			
8	1/11		B699 AR1660			
9	1/13		B762 AR1242			
10	1/14		B948 AR1248			
11	2/ 1		B761 AR1254			
12	2/ 2		PBLK77			
13	2/ 4		19979 1/10			
14	2/ 5		19979 1/100			
15	2/ 7		PBLK66			
16	2/ 8		16412 1/10			
17	2/10		EVALB			
18	2/11		16412MS/10			
19	2/13		16412MSD1/10			
20	2/14		GPCBLK			
21	3/ 1		16414			
22	3/ 2		16424			
23	3/ 4		B973 INDA.10			
24	3/ 5		B974 INDB.10			
25	3/ 7		MSTD3098			
26	3/ 8		MSTD3049			
27	3/10					
28	3/11					
29	3/13					

SECTION 10: NOTE PAD
PAGE 1

LINE#	VALUE
1	INSTRUMENT ID: C
2	COLUMN: 3% SP2100
3	INJECTION VOLUME 2 UL
4	ORT= OUTSIDE RETENTION TIME WINDOW
5	VERSCDM B.4 CTL2565 CLP PEST WATER
6	GSXMD CTL 2694 PESTICIDE WATER
7	VERSCDM CTL 2536 PEST SOILS
8	ENGIBLOM CTL 2660 PEST SOILS

varian /sunnyvale, calif. p/n 03-906362-01

SECTION 1: BASIC
PAGE 1
ANALYSIS PARAMETERS
CHANNEL: 2
CALCULATION: ES
AREA/HT: A
STOP TIME: 30.00
NUMB EXPECTED PKS: 100
EQUILIBRATION TIME: 8
UNRETAINED PK TIME: 0.00
UNIDENT PK FACTOR: 1.000000
SLICE WIDTH: 10

PAGE 2
SAMPLE PARAMETERS
RUN TYPE: A
SAMPLE ID: A321 AR1221
DIVISOR: 1.000000
AMT STD: 1.000000
MLTPLR: 10000.00

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: 5
ANNOTATION
RETENTION TIME: Y
PLOT CONTROL: N
TIME TICKS: N
TIME EVENTS: N
PK START/END: N

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

PAGE 6
PLOT ATTEN
INIT PLOT ATTEN: 4

SECTION 2: TIME EVENTS
PAGE 1

LINE#	TIME	EVENT	VALUE
1	0.00	PR	700
2	0.00	SN	2
3	0.00	T%	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%: 5.0
IDENTIFICATION TIME WINDOWS +/-
REF

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

REF
%: 10
MIN: 0.00
NON REF
%: 5
MIN: 0.00

ORIGINAL (Red)

PAGE 2

PK#	TIME	NAME	FACTOR	AMOUNT	REF GR#	MUST LO	MUST HI
1	1.83	A-BHC	1.000000	1.000000		0.000000	0.000000
2	1.96	B-BHC	1.000000	1.000000		0.000000	0.000000
3	2.16	G-BHC	1.000000	1.000000		0.000000	0.000000
4	2.22	D-BHC	1.000000	1.000000		0.000000	0.000000
5	3.50	HEPTACHLOR	1.000000	1.000000		0.000000	0.000000
6	4.34	ALDRIN	1.000000	1.000000		0.000000	0.000000
7	5.31	HEPT EPOX	1.000000	1.000000		0.000000	0.000000
8	6.09	G-CHLORDAN	1.000000	1.000000		0.000000	0.000000
9	6.63	A-ENDOSULF	1.000000	1.000000		0.000000	0.000000
10	6.76	A-CHLORDAN	1.000000	1.000000		0.000000	0.000000
11	7.77	DDE/DIELD.	1.000000	1.000000		0.000000	0.000000
12	8.68	ENDRIN	1.000000	1.000000		0.000000	0.000000
13	8.89	B-ENDOSULF	1.000000	1.000000		0.000000	0.000000
14	9.79	DDD	1.000000	1.000000		0.000000	0.000000
15	9.84	ENDRIN ALD	1.000000	1.000000		0.000000	0.000000
16	11.45	ESS	1.000000	1.000000		0.000000	0.000000
17	12.86	DDT	1.000000	1.000000		0.000000	0.000000
18	14.73	END KETONE	1.000000	1.000000		0.000000	0.000000
19	19.29	METHOXYCHL	1.000000	1.000000		0.000000	0.000000
20	26.53	DBC	1.000000	1.000000		0.000000	0.000000

SECTION 4: GC INSTRUMENT CONTROL
PAGE 1
COL TEMP
ISO/INIT COL TEMP: 190
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	4	10	Y
2	0.00	B			Y

PAGE 3
TEMP/FLOW
INJ A TEMP: 245
INJ B TEMP: 245
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
TRANSMIT/REPLOT INSTRUCTIONS
TRANSMIT RAW DATA: N
REPLOT WITH BASELINES: Y
RAW DATA LOCATION: U
TRANSMIT REPORT: N

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

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

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

ORIGINAL

PAGE 2

SAMP#	RACK/VIAL	TYPE	SAMPLE ID	DIVISOR	AMT STD	MLTPLR
1	1/ 1		B787 EVAL.01			
2	1/ 2		B788 EVAL.02			
3	1/ 4		B789 EVAL.05			
4	1/ 5		B790 EVAL.10			
5	1/ 7		B973 INDA.10			
6	1/ 8		B776 INDB.10			
7	1/10		B767 TOXAPH			
8	1/11		B699 AR1660			
9	1/13		A321 AR1221			
10	1/14		B684 AR1232			
11	2/ 1		B762 AR1242			
12	2/ 2		B948 AR1248			
13	2/ 4		B761 AR1254			
14	2/ 5		PBLK91			
15	2/ 7		16625			
16	2/ 8		16626			
17	2/10		PBLK99			
18	2/11		16893			
19	2/13		B789 EVALB			
20	2/14		~~PBLK80~~ ← PBLK 81			
21	3/ 1		16415			
22	3/ 2		16416			
23	3/ 4		B973 INDA.10			
24	3/ 5		B776 INDB.10			
25	3/ 7		MSTD3059			
26	3/ 8		MSTD3062			
27	3/10		MSTD3056			

RERUN

SECTION 10: NOTE PAD
PAGE 1

LINE#	VALUE
1	INSTRUMENT ID: C
2	COLUMN: 3% SP2100
3	INJECTION VOLUME 2 UL
4	ORT= OUTSIDE RETENTION TIME WINDOW
5	ENGIHARL 2542 LOW SOILS/PEST QUANT
6	ENGIALBA 2562 LOW SOILS/PEST QUANT
7	VERSCDM 2536 MED SOILS/PEST CONF

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

PESTICIDE SAMPLE TABLE

ORIGINAL (Red)

EPA SAMPLE NUMBER

MSTD3049

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/17/90 GC Column ID: 3% SP2100

MATRIX IS: SOIL

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/kg)	DETECTION LIMIT (ug/kg)		% Rec
alpha-BHC	1.82	1.86	0.00	0	158500	0.000	2.00	0.000	800.67	0.00	4.00		
beta-BHC	1.95	1.99	0.00	0	64840	0.000	2.00	0.000	800.67	0.00	4.00		
delta-BHC	2.21	2.26	0.00	0	140030	0.000	2.00	0.000	800.67	0.00	4.00		
gamma-BHC	2.15	2.19	*2.20	6864	160115	0.043	2.00	0.021	800.67	17.16	4.00	HIT	32
Heptachlor	3.48	3.55	*3.57	6820	146420	0.047	2.00	0.023	800.67	18.65	4.00	HIT	35
Aldrin	4.32	4.41	*4.42	4154	174460	0.024	2.00	0.012	800.67	9.53	4.00	HIT	18
Hept. epoxide	5.28	5.39	0.00	0	168905	0.000	2.00	0.000	800.67	0.00	4.00		
Endosulfan I	6.59	6.73	0.00	0	157210	0.000	2.00	0.000	800.67	0.00	4.00		
Dieldrin	7.72	7.88	**7.92	9258	171100	0.054	2.00	0.027	800.67	21.66	8.01	HIT	16
4,4'-DDE	7.70	7.85	**7.92	9258	131805	0.070	2.00	0.035	800.67	28.12	8.01	HIT	
Endrin	8.61	8.78	*8.83	7717	118720	0.065	2.00	0.033	800.67	26.02	8.01	HIT	20
Endosulfan II	8.82	9.00	0.00	0	141215	0.000	2.00	0.000	800.67	0.00	8.01		
4,4'-DDD	9.72	9.92	0.00	0	102240	0.000	2.00	0.000	800.67	0.00	8.01		
Endo.sulfate	11.35	11.57	0.00	0	90330	0.000	2.00	0.000	800.67	0.00	8.01		
4,4'DDT	12.79	13.04	13.11	5047	76645	0.066	2.00	0.033	800.67	26.36	8.01	HIT	20
Methoxychlor	19.13	19.52	0.00	0	37070	0.000	2.00	0.000	800.67	0.00	40.03		
Endrin ketone	14.62	14.91	0.00	0	116505	0.000	2.00	0.000	800.67	0.00	8.01		
a. Chlordane	6.71	6.85	0.00	0	139380	0.000	2.00	0.000	800.67	0.00	8.01		
g. Chlordane	6.05	6.17	0.00	0	146120	0.000	2.00	0.000	800.67	0.00	8.01		
Toxaphene	9.93	10.13	0.00	0	88389	0.000	2.00	0.000	800.67	0.00	80.07		
Aroclor-1016	3.83	3.91	0.00	0	38703	0.000	2.00	0.000	800.67	0.00	40.03		
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	800.67	0.00	40.03		
Aroclor-1232	2.57	2.63	0.00	0	11135	0.000	2.00	0.000	800.67	0.00	40.03		
Aroclor-1242	4.53	4.63	0.00	0	33001	0.000	2.00	0.000	800.67	0.00	40.03		
Aroclor-1248	3.84	3.92	0.00	0	45576	0.000	2.00	0.000	800.67	0.00	40.03		
Aroclor-1254	9.53	9.73	0.00	0	89342	0.000	2.00	0.000	800.67	0.00	80.07		
Aroclor-1260	13.21	13.47	0.00	0	119361	0.000	2.00	0.000	800.67	0.00	80.07		
DBC	26.31	26.84	*27.06	7011	109830	0.064	2.00	0.032	800.67	25.56	8.01	HIT	K 32

*. Outside RT Window

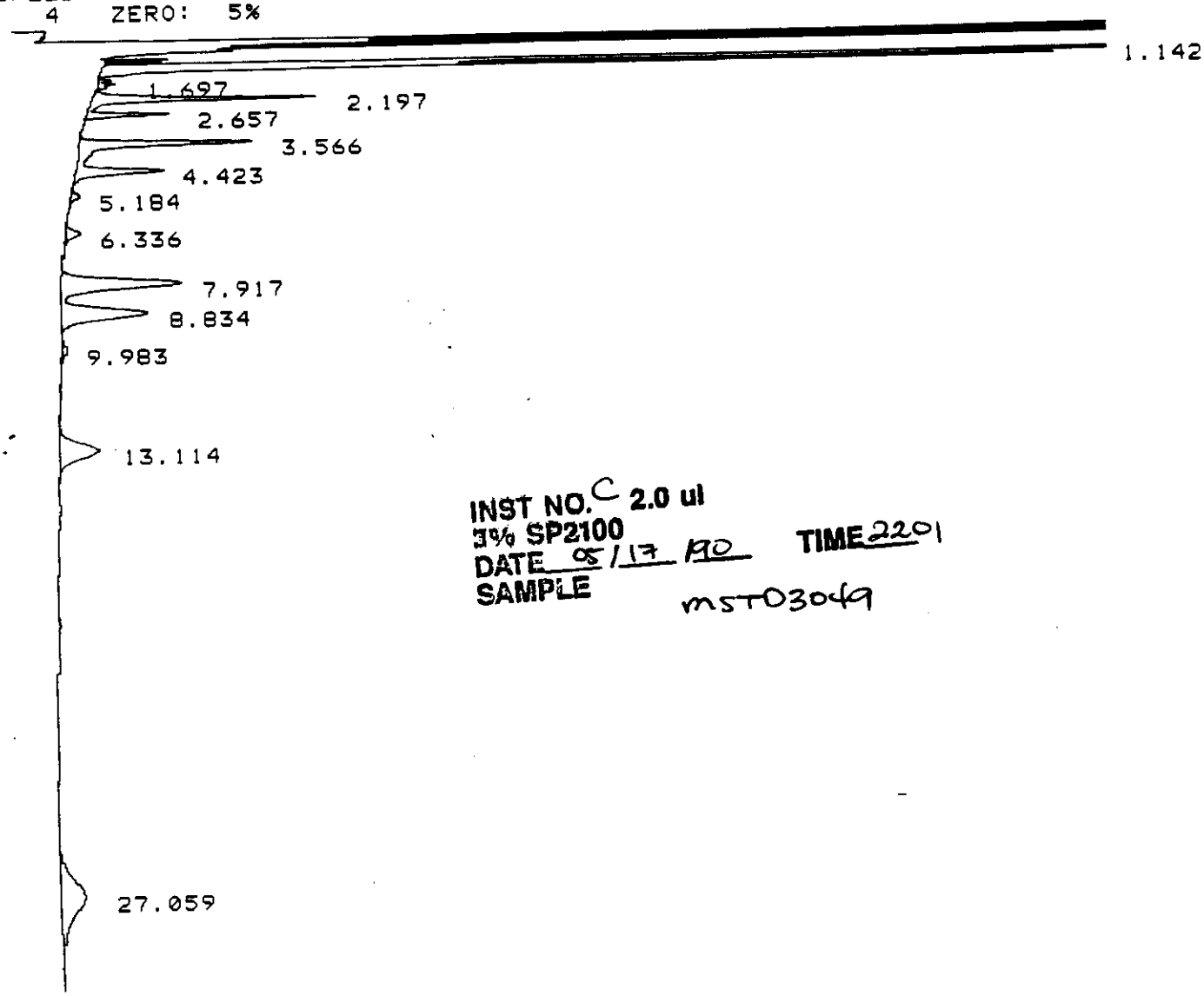
** - Dieldrin & DDE coelute on 3% SP2100 column.

qa 5/16/90

17-May-90

ORIGINAL (Red)

CHART SPEED 0.5 CM/MIN
ATTN: 4 ZERO: 5%



INST NO. C 2.0 ul
3% SP2100
DATE 05/17/90 TIME 2201
SAMPLE MST03049

varian /sunnyvale, calif. p/n 03-906362-01

TITLE: CLP PESTICIDES 22:01 17 MAY 90

CHANNEL NO: 2 SAMPLE: MSTD3049 METHOD: CLP-2A

PK	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		84436	1.142		84436	BV	3.05
2		14799	1.272		14799	VV	3.85
3	~~B-BHC~~ G-BHC	6864	2.197	-0.023	6864	VV	5.95
4		2123	2.657		2123	VB	6.35
5	HEPTACHLOR	6820	3.566	0.066	6820	BV	9.20
6	ALDRIN	4154	4.423	0.083	4154	VB	11.00
7	G-CHLORDANORT	944	6.336	0.246	944	BB	? 14.40
8	DDE/DIELD.	9258	7.917	0.147	9258	BV	19.55
9	~~B-ENDOSULF~~ Endrin	7717	8.834	-0.056	7717	VV	21.60
10	DDT	5047	13.114	0.254	5047	BB	? 31.60
11	DBC	7011	27.059	0.529	7011	BB	? 72.25
TOTALS:		149173		1.246	149173		

DETECTED PKS: 17 REJECTED PKS: 6

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 6.1 OFFSET: -16

RACK: 3 VIAL: B INJ: 1

NOTES:
INSTRUMENT ID: C
COLUMN: 3% SP2100
INJECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
RSCDM B.4 CTL2565 CLP PEST WATER
XMD CTL 2694 PESTICIDE WATER
ERSCDM CTL 2536 PEST SOILS
ENGIBLOM CTL 2660 PEST SOILS

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

MSTD3056

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

Lab Code: VERSAR Contract:

Instrument ID: A SAS No.:

Run Date: 05/03/90 GC Column ID: SP2250/SP2401

MATRIX IS: SOIL

Inject Vol 2.00 (uL) Window Width: 1.0%

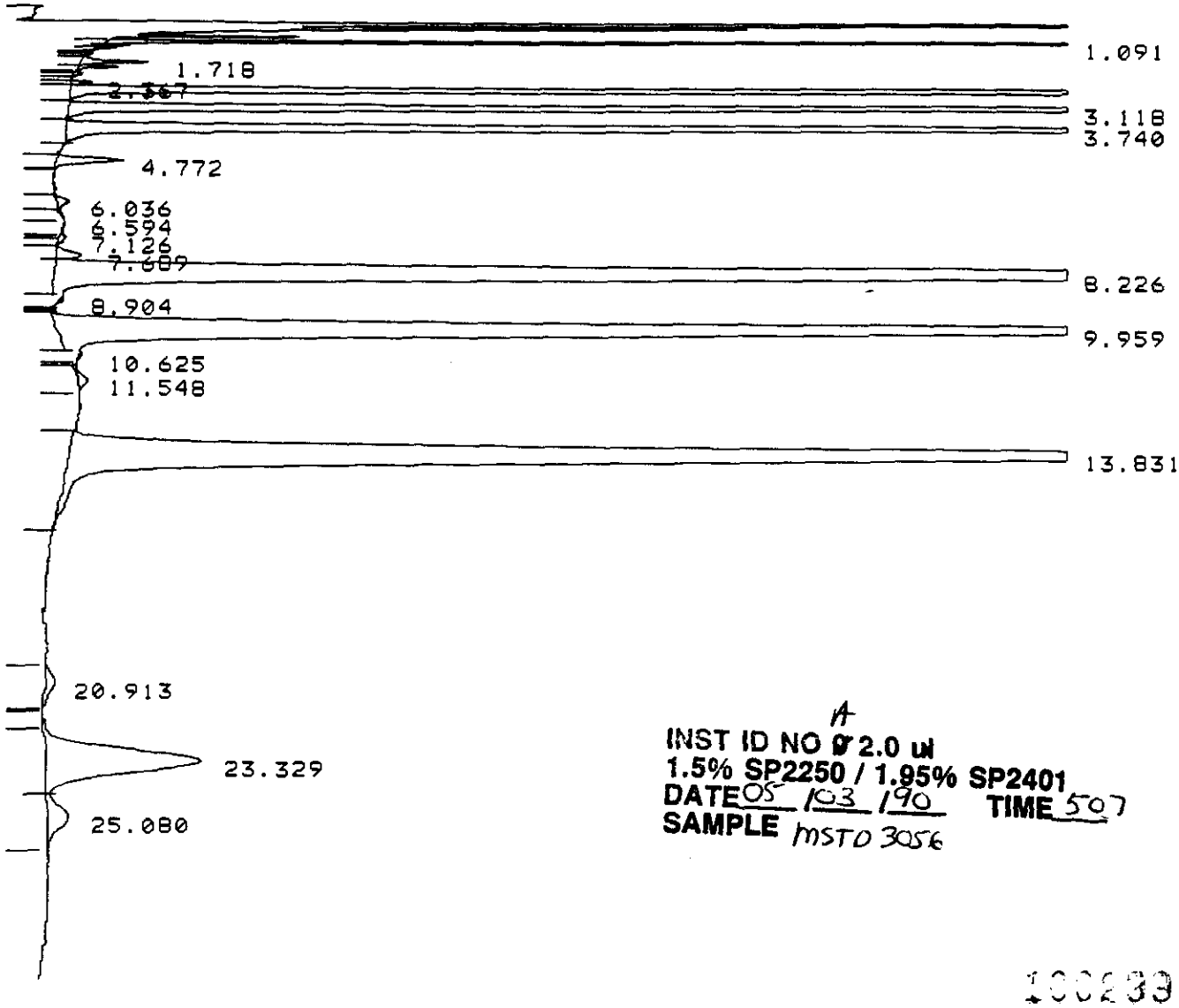
COMPOUND	RT WINDOW FROM	RT WINDOW TO	SAMPLE RT	SAMPLE AREA	/ CALIB FACTOR =	NG INJECTED	/ INJECT VOLUME (uL)	= INJECT CONC (ug/ml)	X DF	= SAMPLE CONC (ug/kg)	DETECTION LIMIT (ug/kg)		
alpha-BHC	2.07	2.11	2.07	583	1114930	0.001	2.00	0.000	12010.00	3.14	60.05	BDL	
beta-BHC	2.87	2.93	0.00	0	317915	0.000	2.00	0.000	12010.00	0.00	60.05		
delta-BHC	3.35	3.41	0.00	0	997120	0.000	2.00	0.000	12010.00	0.00	60.05		
gamma-BHC	2.56	2.61	2.58	376557	935415	0.403	2.00	0.201	12010.00	2417.35	60.05	HIT	100%
Heptachlor	3.10	3.17	3.12	350946	957460	0.367	2.00	0.183	12010.00	2201.06	60.05	HIT	92%
Aldrin	3.72	3.79	3.74	329281	927280	0.355	2.00	0.178	12010.00	2132.40	60.05	HIT	89%
Hept. epoxide	5.41	5.52	0.00	0	866180	0.000	2.00	0.000	12010.00	0.00	60.05		
Endosulfan I	6.75	6.89	0.00	0	795955	0.000	2.00	0.000	12010.00	0.00	60.05		
Dieldrin	8.18	8.35	8.23	776361	879365	0.883	2.00	0.441	12010.00	5301.61	120.10	HIT	88%
4,4'-DDE	7.65	7.80	7.69	5155	745515	0.007	2.00	0.003	12010.00	41.52	120.10	BDL	
Endrin	9.91	10.11	9.96	482711	515005	0.937	2.00	0.469	12010.00	5628.45	120.10	HIT	94%
Endosulfan II	11.90	12.14	0.00	0	762190	0.000	2.00	0.000	12010.00	0.00	120.10		
4,4'-DDD	11.47	11.70	11.55	3564	615485	0.006	2.00	0.003	12010.00	34.78	120.10	BDL	
Endo.sulfate	18.16	18.53	0.00	0	527590	0.000	2.00	0.000	12010.00	0.00	120.10		
4,4'DDT	13.77	14.05	13.83	587520	573385	1.025	2.00	0.512	12010.00	6153.03	120.10	HIT	102%
Methoxychlor	25.64	26.15	0.00	0	268850	0.000	2.00	0.000	12010.00	0.00	600.50		
Endrin ketone	24.94	25.45	0.00	0	785310	0.000	2.00	0.000	12010.00	0.00	120.10		
a. Chlordane	6.51	6.64	0.00	0	793830	0.000	2.00	0.000	12010.00	0.00	120.10		
g. Chlordane	5.99	6.11	6.04	2417	829210	0.003	2.00	0.001	12010.00	17.50	120.10	BDL	
Toxaphene	10.67	10.89	0.00	0	277048	0.000	2.00	0.000	12010.00	0.00	1201.00		
Aroclor-1016	2.86	2.92	0.00	0	64579	0.000	2.00	0.000	12010.00	0.00	600.50		
Aroclor-1221	1.91	1.95	0.00	0	21445	0.000	2.00	0.000	12010.00	0.00	600.50		
Aroclor-1232	2.76	2.82	0.00	0	24109	0.000	2.00	0.000	12010.00	0.00	600.50		
Aroclor-1242	3.53	3.61	0.00	0	70122	0.000	2.00	0.000	12010.00	0.00	600.50		
Aroclor-1248	4.71	4.81	0.00	0	89358	0.000	2.00	0.000	12010.00	0.00	600.50		
Aroclor-1254	8.38	8.54	0.00	0	204613	0.000	2.00	0.000	12010.00	0.00	1201.00		
Aroclor-1260	13.51	13.79	0.00	0	291297	0.000	2.00	0.000	12010.00	0.00	1201.00		
DBC	23.23	23.70	23.33	113524	738735	0.154	2.00	0.077	12010.00	922.81	120.10	HIT	77%

CF 05/04/90

ORIGINAL (Red)

13 906362 00

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



INST ID NO A 2.0 uL
1.5% SP2250 / 1.95% SP2401
DATE 05 / 03 / 90 TIME 507
SAMPLE MSTD 3056

100233

ORIGINAL (Red)

TITLE: CLP PESTICIDES 5:07 3 MAY 90

CHANNEL NO: 3 SAMPLE: MSTD3056 METHOD: CLP-3A

PE NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE	W1/2 (SEC)
1		85268	1.091		85268	BV	2.40
2		872	1.300		872	T	2.55
3		5309	1.718		5309	VV	4.50
4		2413	1.885		2413	VB	3.50
5		ABHC 583	2.073 ABHC		583	BB	4.40
6		1400	2.367		1400	BV	4.40
7		376557	2.577 GBHC		376557	VV	5.00
8		350946	3.118 heptachlor		350946	VV	6.10
[illegible]		329281	3.740 ALDRIN		329281	VB	7.40
[illegible]		10017	4.772		10017	BB	9.65
[illegible]	G-CHLORDAN	2417	6.036 Gchlor	-0.184	2417	BV	15.75
12	A-ENDOSULF	573	7.126	0.106	573	BV	? 6.30
13		522	7.177		522	VV	? 17.10
14		5155	7.689 DDE		5155	VV	? 13.90
15		776361	8.226 Dieldrin		776361	VV	15.80
16		700	8.904		700	T	? 28.50
17		482711	9.959 Endrin		482711	BV	19.70
[illegible]	DDD	3564	11.548 DDD	-0.342	3564	T	? 27.40
		587520	13.831 DDT		587520	BB	? 27.80
20		6478	20.913		6478	BB	37.80
21		113524	23.329		113524	BV	47.25
22		16150	25.080		16150	VB	? 55.45
TOTALS:		3158320		-0.420	3158320		

DETECTED PKS: 26 REJECTED PKS: 4

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 43.7 OFFSET: -80

RACK: 2 VIAL: 10 INJ: 1

NOTES:
COL: 1.5% SP2250/1.95% SP2401
AMT INJ.2UL/INSTRUMENT LETTER A
ORT= OUTSIDE RETENTION TIME WINDOW
F[illegible] AVTEX CTL 2592 AND 2655 PCB WATER
SCDM CTL 2536 PESTICIDE SOILS

100300

ORIGINAL (Red)

PESTICIDE SAMPLE TABLE

EPA SAMPLE NUMBER

MSTD3056

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

Lab Code: VERSAR Contract:

Instrument ID: C SAS No.:

Run Date: 05/07/90 GC Column ID: 3% SP2100

MATRIX IS: SOIL

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/kg)	DETECTION LIMIT (ug/kg)	
alpha-BHC	1.81	1.85	0.00	0	189575	0.000	2.00	0.000	12010.00	0.00	60.05	
beta-BHC	1.94	1.98	0.00	0	78890	0.000	2.00	0.000	12010.00	0.00	60.05	
delta-BHC	2.19	2.24	0.00	0	175880	0.000	2.00	0.000	12010.00	0.00	60.05	
gamma-BHC	2.13	2.17	2.15	80264	189055	0.425	2.00	0.212	12010.00	2549.44	60.05	HIT
Heptachlor	3.45	3.52	3.49	80575	183170	0.440	2.00	0.220	12010.00	2641.55	60.05	HIT
Aldrin	4.27	4.36	4.32	82933	207215	0.400	2.00	0.200	12010.00	2403.36	60.05	HIT
Hept. epoxide	5.23	5.33	0.00	0	202575	0.000	2.00	0.000	12010.00	0.00	60.05	
Endosulfan I	6.52	6.65	0.00	0	193720	0.000	2.00	0.000	12010.00	0.00	60.05	
Dieldrin	7.63	7.79	*7.73	177781	212085	0.838	2.00	0.419	12010.00	5033.71	120.10	HIT
4,4'-DDE	7.61	7.76	*7.73	177781	169925	1.046	2.00	0.523	12010.00	6282.62	120.10	HIT
Endrin	8.51	8.69	8.62	142229	133405	1.066	2.00	0.533	12010.00	6402.20	120.10	HIT
Endosulfan II	8.72	8.90	0.00	0	184485	0.000	2.00	0.000	12010.00	0.00	120.10	
4,4'-DDD	9.60	9.80	9.70	1371	136730	0.010	2.00	0.005	12010.00	60.21	120.10	BDL
Endo.sulfate	11.21	11.44	0.00	0	110700	0.000	2.00	0.000	12010.00	0.00	120.10	
4,4'DDT	12.61	12.87	12.77	146020	138335	1.056	2.00	0.528	12010.00	6338.60	120.10	HIT
Methoxychlor	18.83	19.27	0.00	0	53465	0.000	2.00	0.000	12010.00	0.00	600.50	
Endrin ketone	14.44	14.73	0.00	0	186290	0.000	2.00	0.000	12010.00	0.00	120.10	
a. Chlordane	6.64	6.77	0.00	0	178260	0.000	2.00	0.000	12010.00	0.00	120.10	
g. Chlordane	5.99	6.11	0.00	0	184460	0.000	2.00	0.000	12010.00	0.00	120.10	
Toxaphene	9.80	10.00	0.00	0	73140	0.000	2.00	0.000	12010.00	0.00	1201.00	
Aroclor-1016	3.79	3.87	0.00	0	20785	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1221	1.49	1.52	0.00	0	5837	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1232	2.57	2.63	0.00	0	13130	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1242	3.21	3.27	0.00	0	30021	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1248	4.49	4.59	0.00	0	44109	0.000	2.00	0.000	12010.00	0.00	600.50	
Aroclor-1254	9.42	9.62	0.00	0	73184	0.000	2.00	0.000	12010.00	0.00	1201.00	
Aroclor-1260	13.04	13.30	0.00	0	88941	0.000	2.00	0.000	12010.00	0.00	1201.00	
DBC	25.97	26.49	26.23	37774	187215	0.202	2.00	0.101	12010.00	1211.62	120.10	HIT

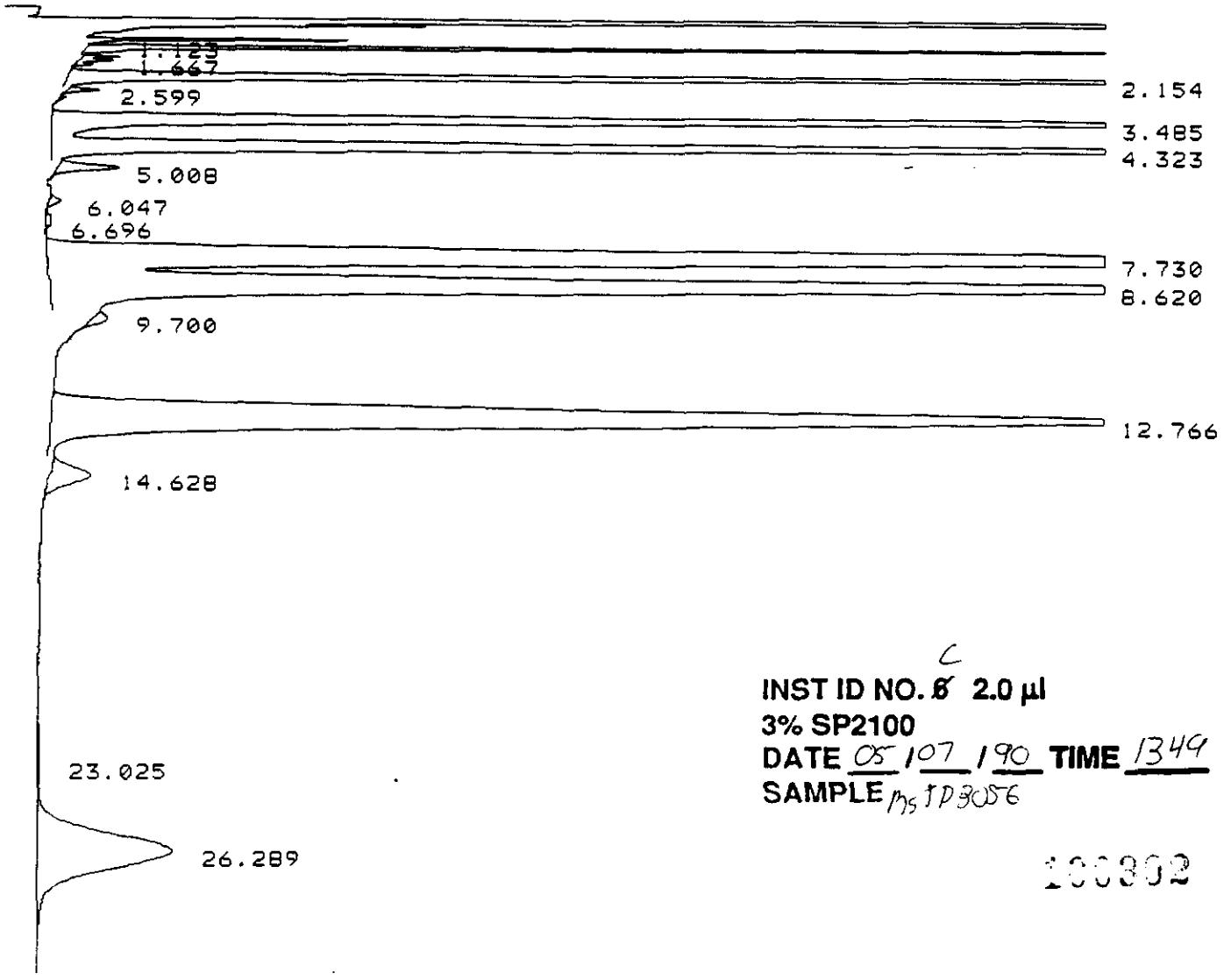
* DDE & Dieldrin coelute on 3% SP2100

100301

KC
08-May-90

ORIGINAL (Red)

CHART SPEED 0.5 CM/MIN
ATTEN: 4 ZERO: 5%



INST ID NO. ~~B~~ C 2.0 µl
3% SP2100
DATE 05 / 07 / 90 TIME 1349
SAMPLE ms TP3056

100302

ORIGINAL (Red)

TITLE: CLP PESTICIDES 13:49 7 MAY 90

CH/ 'EL NO: 2 SAMPLE: MSTD3056 METHOD: CLP-2A

PEA.. NO	PEAK NAME	RESULT AREA	TIME (MIN)	TIME OFFSET	AREA COUNTS	SEP CODE		W1/2 (SEC)
1		19924	1.251		19924	VV		3.80
2	G-BHC	80264	2.154	-0.006	80264	VV		5.95
3		795	2.599		795	T		6.00
4	HEPTACHLOR	80575	3.485	-0.015	80575	BV	?	9.90
5	ALDRIN	82933	4.323	-0.017	82933	VV	?	12.15
6		2898	5.008		2898	T		13.10
	~~DDE~~/DIELD.	177781	7.730	-0.040	177781	BV		21.25
8	ENDRIN	142229	8.620	-0.060	142229	VV		23.65
9	DDD	1371	9.700	-0.090	1371	T	?	67.35
10	DDT	146020	12.766	-0.094	146020	BV	?	32.70
11	~~END KETONE~~	5531	14.628	-0.102	5531	T		33.60
12	DBC	37774	26.289	-0.241	37774	VB	?	70.30
TOTALS:		778095		-0.665	778095			

DETECTED PKS: 21 REJECTED PKS: 9

DIVISOR: 1.00000 MULTIPLIER: 10000.0

NOISE: 4.9 OFFSET: -14

RACK: 3 VIAL: 10 INJ: 1

NOTES:
INSTRUMENT ID: C
.UMN: 3% SP2100
ECTION VOLUME 2 UL
ORT= OUTSIDE RETENTION TIME WINDOW
ENGIHARL 2542 LOW SOILS/PEST QUANT
ENGIALBA 2562 LOW SOILS/PEST QUANT
VERSCDM 2536 MED SOILS/PEST CONF

100303

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. Schaeffer, Laurie B. Wyl

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TAL Metals	Cyanide					REMARKS Tag #'s.
1	411890	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. F. Morrison	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

2556

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. Uzzi

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	SS 4/18/90 TCL	VOA	BNA	PCB/Pest.	TAL Metals	Cyanide		REMARKS Tag #'s
2	4/18/90	1135		X	Location 2	6	2	1	1	1	1			3-1068359, 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		SS 4/18/90	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		SS 4/18/90	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

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	TCLP VOA	TCLP BNA/Metals	VOA	BNA	Pest./PCB	REMARKS
1	4/18/90	1000		X	Location 1 (Sludge)	10	2	2	2	~~2~~ 1 SES 4/18/90	~~2~~ 1 SES 4/18/90	Tag #'S 3-10683352, 53, 54, 55, 56, 57, 58, 60
					~~Location 2~~ 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)	Date / Time	Remarks	
		J. L. Monson	4/19/90 0900	Shipped via Federal Express Airbill # 2294123705	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

3-18549