HARBOR ISLAND
053 0532

5. PESTICIDE/PCB DATA

A. QC SUMMARY

B. SAMPLE DATA

C. STANDARDS DATA

D. RAW QC DATA

USEPA SF
1547281

A. QC SUMMARY

(A) QC Summary

(1) Surrogate Percent Recovery Summary (Form II PEST)

(2) Matrix Spike/Matrix Spike Duplicate Summary (Form III PEST)

(3) Method Blank Summary (Form IV PEST)

(If more than a single form is necessary, forms must be arranged in chronological order by date of analysis of the blank.)

(1) Surrogate Percent Recovery Summary (Form II PEST)

2F
SOIL PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (DBC)#	OTHER
01	PBLK13	104	0
02	JD997	86	0
03	JD998	97	0
04	JD999	84	0
05	PBLK11	100	0
06	JD998MS	84	0
07	JD998MSD	95	0
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

(2) Matrix Spike/Matrix Spike Duplicate Summary (Form III PEST)

3F

SOIL PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix Spike - EPA Sample No.: JD998 Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
gamma-BHC (Lindane)	35.088	0.000	23.700	68	46-127
Heptachlor	35.088	0.000	24.000	68	35-130
Aldrin	35.088	0.000	25.400	72	34-132
Dieldrin	87.719	0.000	61.400	70	31-134
Endrin	87.719	0.000	66.500	76	42-139
4,4'-DDT	87.719	0.000	66.800	76	23-134

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
gamma-BHC (Lindane)	35.088	27.000	77	12	50	46-127
Heptachlor	35.088	28.400	81	17	31	35-130
Aldrin	35.088	29.800	85	17	43	34-132
Dieldrin	87.719	73.400	84	18	38	31-134
Endrin	87.719	79.000	90	17	45	42-139
4,4'-DDT	87.719	78.300	89	16	50	23-134

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

* Values outside of QC limits

RPD: 0 out of 6 outside limits
Spike Recovery: 0 out of 12 outside limits

COMMENTS: _____

FORM III PEST-2 8/87 Rev.

(3) Method Blank Summary (Form IV PEST)

(If more than a single form is necessary, forms must be arranged in chronological order by date of analysis of the blank.)

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Lab Sample ID: 242333 Lab File ID: _____

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

Date Extracted: 01/25/89 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 01/30/89 Date Analyzed (2): _____

Time Analyzed (1): 2200 Time Analyzed (2): _____

Instrument ID (1): 14 Instrument ID (2): _____

GC Column ID (1): 2250/2401 GC Column ID (2): _____

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JD998MS	242036	01/30/89	
02	JD998MSD	242037	01/30/89	
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: _____

4C
PESTICIDE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Lab Sample ID: 242322 Lab File ID: _____

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

Date Extracted: 01/25/89 Extraction: (SepF/Cont/Sonc) SONC

Date Analyzed (1): 01/31/89 Date Analyzed (2): _____

Time Analyzed (1): 0131 Time Analyzed (2): _____

Instrument ID (1): 14 Instrument ID (2): _____

GC Column ID (1): 2250/2401 GC Column ID (2): _____

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

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	JD997	242030	01/31/89	
02	JD998	242031	01/31/89	
03	JD999	242035	01/31/89	
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

B. SAMPLE DATA

Sample data shall be arranged in packets with the Traffic Report copy, the Organic Analysis Data Sheet (Form I PEST), followed by the raw data for pesticide samples. These sample packets should then be placed in increasing EPA number order, considering both letters and numbers in ordering samples.

. TCL Results - Organic Analysis Data Sheet (Form I PEST).

Tabulated results (identification and quantitation) of the specified target compounds (Exhibit C). The validation and release of these results is authorized by a specific, signed statement in the Case Narrative (reference C.1). In the event that the Laboratory Manager cannot validate all data reported for each sample, the Laboratory Manager shall provide a detailed description of the problems associated with the sample in the Case Narrative.

On Form I PEST, the appropriate concentration units shall be entered. For example, UG/L for water samples or UG/KG for soil/sediment samples. No other units ar acceptable. NOTE: Report analytical results to two significant figures for all pesticide/PCB samples.

. Copies of pesticide chromatograms.

All chromatograms must be labeled with the following information:

- Sample I.D. (EPA sample number from Traffic Report) or blank I.D.
- Volume injected (ul)
- Date and time of injection
- GC column identification (by stationary phase)
- GC instrument identification
- Postively identified compound must be labeled-with the names of compounds, either directly out from the peak, or on a print-out of retention times are printed over the peak.

. Copies of pesticide chromatograms for second GC column confirmation. Chromatograms to be labeled as in (2) above.

. GC Intergration report or data system printout and calibration plots (area vs concentration) for 4,4'-DDT, 4,4'-DDD, 4,4'-DDE or Toxaphene (when appropriate).

. Manual work sheets.

. GPC chromatograms (if GPC performed).

. If pesticide/PCBs are confirmed by GC/MS, the contractor shall submit copies of raw spectra and copies of background-substracted mass spectra of target compounds listed in Exhibit (C) (TCL) that are identified in the sample and corresponding background-substracted TCL standard mass spectra. Compound names must be clearly marked on all spectra. For mulitcomponent pesticides/PCBs confirmed GC/MS, the contractor shall submit mass spectra of 3 major peaks of multicomponent compounds from samples and standards.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JD997

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix: (soil/water) SOIL Lab Sample ID: 242030

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

Level: (low/med) LOW Date Received: 01/21/89

% Moisture: not dec. 27 dec. ____ Date Extracted: 01/25/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/31/89

GPC Cleanup: (Y/N) N pH: 6.9 Dilution Factor: 1.00

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	22.	U
72-55-9	4,4'-DDE	22.	U
72-20-8	Endrin	22.	U
33213-65-9	Endosulfan II	22.	U
72-54-8	4,4'-DDD	22.	U
1031-07-8	Endosulfan sulfate	22.	U
50-29-3	4,4'-DDT	22.	U
72-43-5	Methoxychlor	110	U
53494-70-5	Endrin ketone	22.	U
5103-71-9	alpha-Chlordane	110	U
5103-74-2	gamma-Chlordane	110	U
8001-35-2	Toxaphene	220	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	220	U
11096-82-5	Aroclor-1260	220	U

FORM I PEST 1/87 Rev.

Analysis Worksheet

By employee #1388 on Wed Feb 1, 1989 12:10 am using EPACA 1.51

CompuChem Number:242030 Case#:11271 SDG #:JD997 EPA#:JD997
Matrix = Soil Level = L Compound List = 177

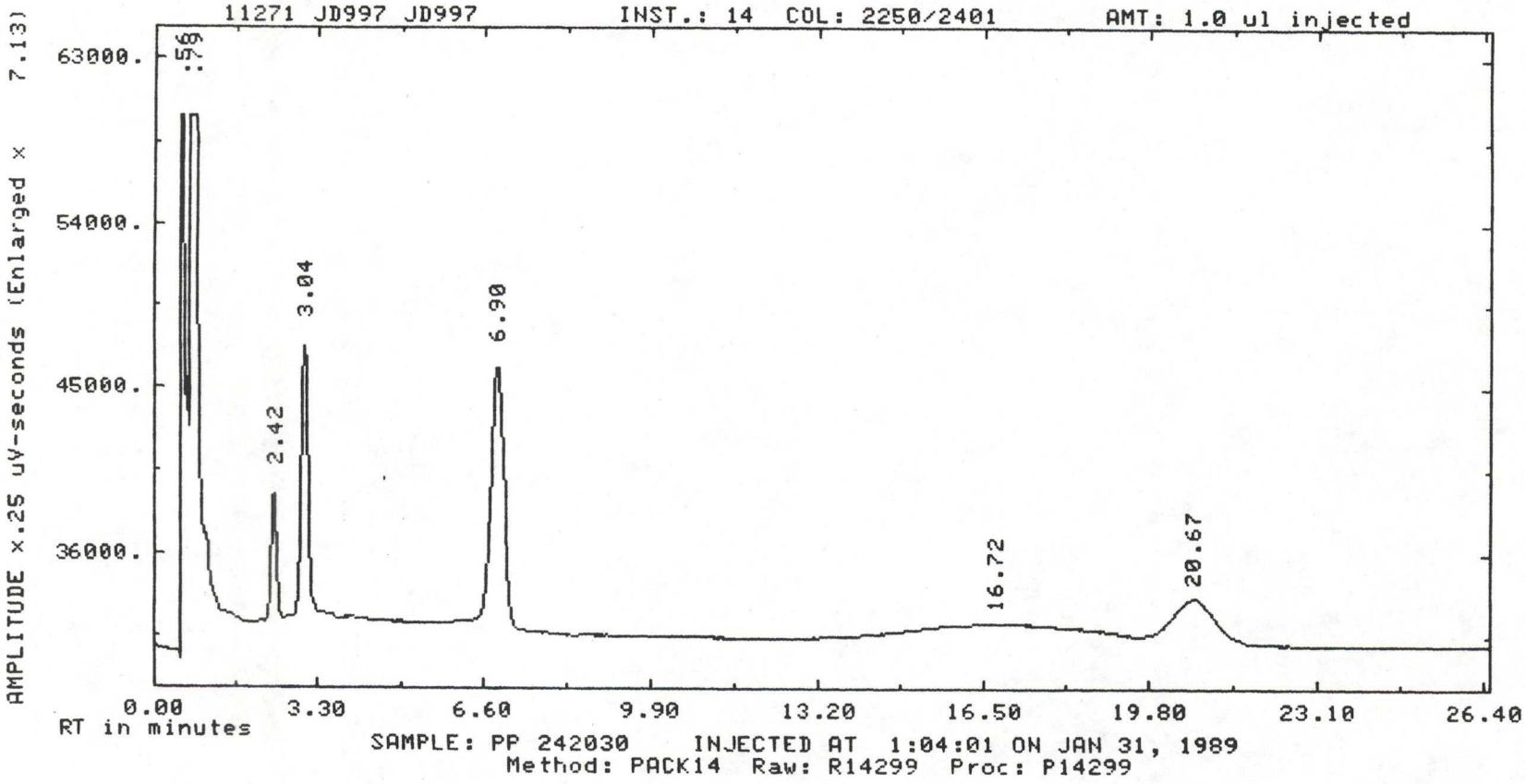
Volume/weight extracted = 30.00 G Final Extract Volume = 2.00 ml Split = 10.0 Dry Weight Factor = 1.37

Concentration = Sample Area * Standard Conc * Mulitplication Factor * Split * Final Volume * Dry Weight Factor / Standard Area * Volume or Weight of Sample

File : P14299 Column : OV-101 Multiplication Factor : 5.0 Detection Level Factor : 1.37

	Standard RT window -	20.30 - 21.12	Sample RT -	20.67	Primary/Reported OADS
DBC_____	Standard Area -	350329	Sample Area -	60498	
	Standard Conc(ug/ml) -	0.100	Sample Conc(ug/Kg) -	78.85	86.34 % Recovery
			Sample ng on col -	0.017269	

Analyst Comments:


11271 JD997 JD997
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 7.13)
63000.
54000.
45000.
36000.
.56
.78
2.42
3.04
6.90
16.72
20.67
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: PP 242030 INJECTED AT 1:04:01 ON JAN 31, 1989
Method: PACK14 Raw: R14299 Proc: P14299

Report: 2005.00 Channel: 14 11271 JD997 JD997

Sample: PP 242030 Injected at 1:04:01 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/99 Btl: 99

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	500.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	207030.	BS	119.720	
.79	0.00	.10000E+01	284564.	BB	164.556	
2.42	0.00	.10000E+01	25504.	BB	14.748	
3.04	0.00	.10000E+01	72584.	BB	41.973	
6.90	0.00	.10000E+01	136340.	BB	78.842	
16.72	0.00	.10000E+01	78122.	BB	45.176	
20.67	0.00	.10000E+01	60498.	BB	34.984	

Total Area = 864642. Total AREA % = 60498.000

Processed data file: P14299 Raw data file: R14299

LAB INSTRUCTIONS:
RECEIPT DATE
PESTICIDE
WORKSHEET

CASE# 11271 SAS# DUEDATE 2/10/89
COMPUCHEM # 242030

Sample Prep Code---716
Instrument Code----143
Compound List------430
Surrogate Std---541

LOW LEVEL SOLID, EPA SOW 1/87

==========

SDG: JD997 EPA#: JD997 Dry Wt. Factor 1.37 % Moisture 27
Blank Associated with Case _____ _____ _____ 69
Associated Blank _____

==========

EXTRACTION INFORMATION: CALC Used? yes |___|

Wt. of sample 30 g final volume of extract 2 mls

portion of wt. in pesticide _____.

==========

ANALYSIS INFORMATION: COMMENTS |___| Send to QA

Date	Inst. # / Sequence	Dil. Fact.
14	1/31 142	5

BTL

|___| QA Approved

|___| Need QC/MS Confirmation

Analyst 1388/819 Date 1/31

==========

SURROGATE INFORMATION DIBUTYL CHLORENDATE

AREA IN SAMPLE _____ X Dilution Factor _____ X 100 = 86 % Recovery
AREA IN STD
% Recovery X 0.1 ug/ml = _____ ug/ml

==========

+EA = re-extract acceptable
JA = reinject acceptable
QA = repeat confirmed original results
OK = original data acceptable (not for REPEATS)
NS = insufficient sample for repeat
DL = DBC low (<20% Recovery)
DA = Dilution Acceptable
BF = Blank Requires Florisil
CT = Contamination Suspected

IF DATA FAILS, INSERT CONDITION COD FROM REPEAT REQUEST FORM IN BOX.

FINAL STATUS CODE+= OK

IF MULTIPLE PACKAGES EXIST, REPORT THIS DATA: _____

|___| QANA |___| QAN3 QA notice included.

==========

SAMPLE DISPOSITION Code

|___| Complete.....

|___| Requires Re-extraction.. 716

|___| Requires reprep..... 930

|___| Requires cleanup..... 901

==========

Audited By _____ Date _____

46

ASSIGNED TO: ~~Anthony Rice~~ BD Bernard Dickens (1-25-89) 949

EXTRACTION WORKSHEET
Pesticide/Herbicide
CompuChem Laboratories Inc.

21 DAY TAT

Rec: 1-21 1-28
Due: 2-10 2-10

DATE ASSIGNED 1-25-89

PAGE ____ OF ____

68-01-7397

SAMPLE NUMBER	PREP CODE	CASE #	EPA #	QC SAMPLE TYPE	QC SAMPLE ORIG. NO.	SAMPLE WEIGHT (g) VOLUME (ml)	FINAL EXTRACT VOL. (MLS) SV/B/N	ACID	PEST	ALUMINA COLUMN START VOL	ALUMINA COLUMN FINAL VOL	DATE COMPT	COMMENTS
242032	-716	11271-JD997		SS	242030	30.0	0.9		1.0				544/752
242033				SS	242030	30.0	0.9		1.0				
242034				BS		30.0	0.9		1.0				
242030			JD997			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242031			JD998			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242035			JD999			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
241823		11271-JE200	JD958.			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
241824			JD959			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
242322			PBLK 13	B1		30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242328			PBLK 14	B2		30.0	0.9		1.0	2.0ml	2.0ml	1-25	

		S-Vol	Acid	B/N	Pest.	Other	Other
SURROGATE	NO.	393			395		
	AMT.	0.5 ml.			2.0 ml.		
	LOT	27913			27816		
SPIKE	NO.		3012	2021			
	AMT.		1.0 ml.	1.0 ml.			
	LOT		28098	27914			

Verified by JM 1-26-89

MANUAL COUNTER 555/923

FINAL VOLUME VARIFIED Bernard Dickens

SUPERVISOR REVIEWED Elen Armitage

EXTRACTS RECEIVED BY

949 POSTED 1046 № 17156

SAMPLE DATA PACKAGE 150

COMPOUND LIST NO. - 430

COMPUCHEM # DATE
IDENTIFIER PESTICIDES (LOW LEVEL SOLID) EPA SOW 1/87

DIL FACT_____DRY WT_____ _30__SPLIT_____FINAL VOL_____/5 = 1.57
AMT SAMPLE_____ CORRECTION FACTOR

COUNTER	COMPUCHEM COMPOUND NUMBER	COMPOUND NAME	RESULTS	DETECTION LIMIT (ug/kg
1.	0701	ALDRIN----------		8.0
2.	0702	ALPHA-BHC----------		8.0
3.	0703	BETA-BHC----------		8.0
4.	0704	GAMMA-BHC----------		8.0
5.	0705	DELTA-BHC----------		8.0
6.	0706	TECHNICAL CHLORDANE------		80.0
7.	0707	4,4'-DDT----------		16.0
8.	0708	4,4'-DDE----------		16.0
9.	0709	4,4'-DDD----------		16.0
10.	0710	DIELDRIN----------		16.0
11.	0711	ENDOSULFAN I ----------		8.0
12.	0712	ENDOSULFAN II ----------	ND	16.0
13.	0713	ENDOSULFAN SULFATE-------		16.0
14.	0714	ENDRIN----------		16.0
15.	0739	ENDRIN KETONE----------		16.0
16.	0716	HEPTACHLOR----------		8.0
17.	0717	HEPTACHLOR EPOXIDE-------		8.0
18.	0726	METHOXYCHLOR----------		80.0
19.	0724	AROCHLOR 1016----------		80.0
20.	0720	AROCHLOR 1221----------		80.0
21.	0721	AROCHLOR 1232----------		80.0
22.	0718	AROCHLOR 1242----------		80.0
23.	0722	AROCHLOR 1248----------		80.0
24.	0719	AROCHLOR 1254----------		160.0
25.	0723	AROCHLOR 1260----------		160.0
26.	0725	TOXAPHENE----------		160.0

ANALYST'S COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JD998

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix: (soil/water) SOIL Lab Sample ID: 242031

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

Level: (low/med) LOW Date Received: 01/21/89

% Moisture: not dec. 24 dec. ____ Date Extracted: 01/25/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/31/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.00

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	100	U
5103-74-2	gamma-Chlordane	100	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

FORM I PEST 1/87 Rev.

Analysis Worksheet

By employee #1388 on Wed Feb 1, 1989 12:11 am using EPACA 1.51

CompuChem Number:242031 Case#:11271 SDG #:JD997 EPA#:JD998
Matrix = Soil Level = L Compound List = 177

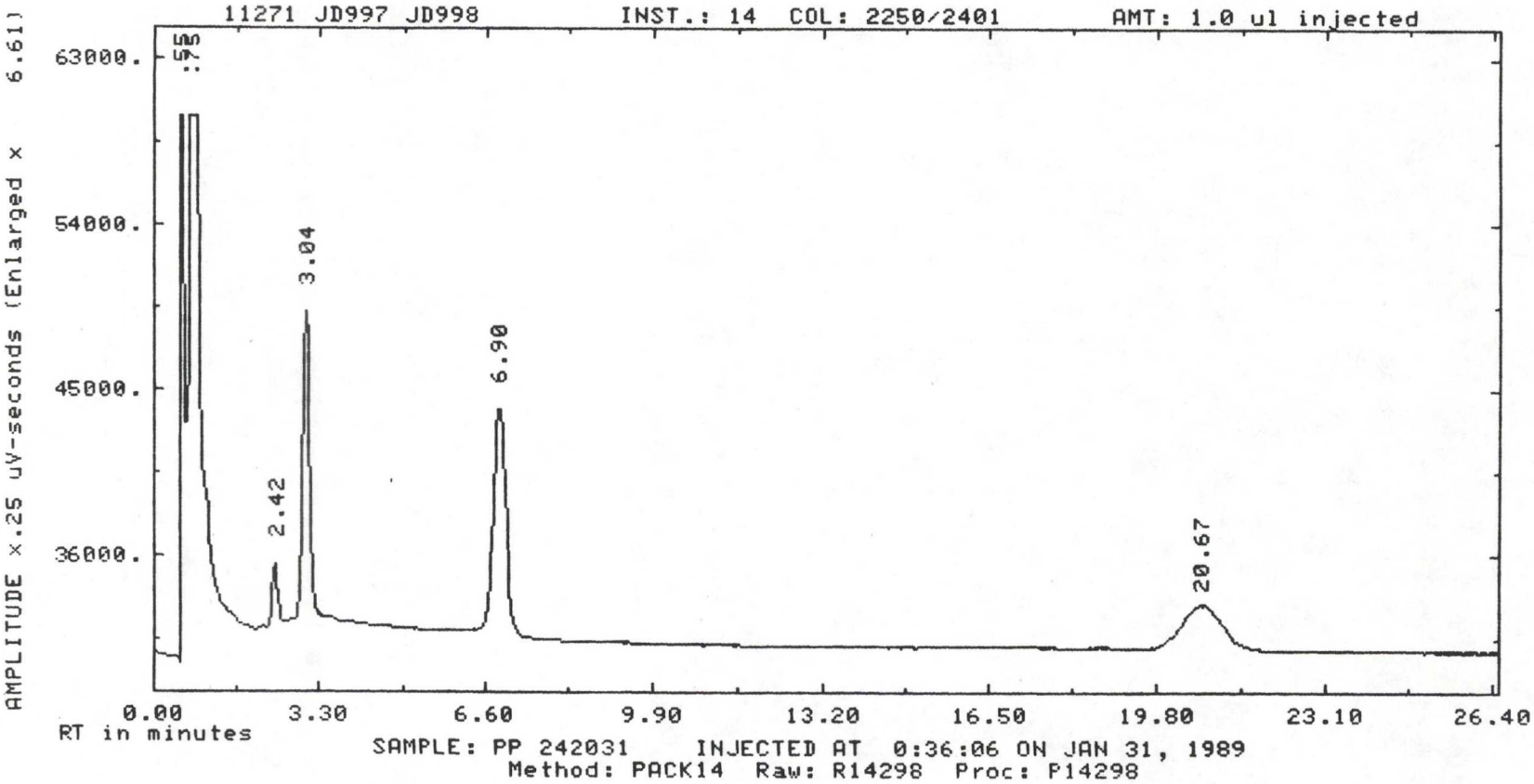
Volume/weight extracted = 30.00 G Final Extract Volume = 2.00 ml Split = 10.0 Dry Weight Factor = 1.32

Sample Area * Standard Conc * Mulitplication Factor * Split * Final Volume * Dry Weight Factor
Concentration = ----------
Standard Area * Volume or Weight of Sample

File : P14298 Column : OV-101 Multiplication Factor : 5.0 Detection Level Factor : 1.32

	Standard RT window -	20.30 - 21.12	Sample RT -	20.67	Primary/Reported OADS
DBC_____	Standard Area -	350329	Sample Area -	67925	
	Standard Conc(ug/ml) -	0.100	Sample Conc(ug/Kg) -	85.04	96.95 % Recovery
			Sample ng on col -	0.019389	

Analyst Comments:


11271 JD997 JD998
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 6.61)
63000.
54000.
45000.
36000.
.55
.75
2.42
3.04
6.90
20.67
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: PP 242031 INJECTED AT 0:36:06 ON JAN 31, 1989
Method: PACK14 Raw: R14298 Proc: P14298

Report: 2004.00 Channel: 14 11271 JD997 JD998

Sample: PP 242031 Injected at 0:36:06 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/98 Btl: 98

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	500.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	197961.	BS	102.631	
.75	0.00	.10000E+01	497154.	BB	257.745	
2.42	0.00	.10000E+01	11691.	BB	6.061	
3.04	0.00	.10000E+01	81988.	BB	42.506	
6.90	0.00	.10000E+01	107711.	BB	55.842	
20.67	0.00	.10000E+01	67925.	BB	35.215	

Total Area = 964431. Total AREA % = 67925.500

Processed data file: P14298 Raw data file: R14298

LAB INSTRUCTIONS:

CASE # 11271 SAS# DUEDATE: 2/10/89

PESTICIDE COMPUCHEM # 242031

WORKSHEET

RECEIPT DATE 1/21/89

LOW LEVEL SOLID, EPA SOW 1/87

Sample Prep Code---716
Instrument Code----143
Compound List------430
Surrogate Std---396

==========

SDG: JD997 EPA#: JD998 Dry Wt. Factor 1.32 % Moisture 24 / 7.3

Blank Associated with Case_____ _____ _____ _____

Associated Blank _____

==========

EXTRACTION INFORMATION: CALC Used? yes |___|

Wt. of sample 7 g final volume of extract 2 mls

portion of wt. in pesticide_____.

==========

ANALYSIS INFORMATION:

INSTRUMENT #	DATE	TIME	SEQUENCE	DILUTION FACTOR	REPORT
14	1/31/89	20:36	142	5	[X]
					[ ]
					[ ]
					[ ]

BDL

SEND TO QA [ ]
QA APPROVED [ ]
NEED GC/MS CONFIRMATION [ ]

_____ 1335/819 _____
ANALYST DATE

SURROGATE INFORMATION DIBUTYL CHLORENDATE

AREA IN SAMPLE_____ X Dilution Factor_____ X 100 = 97 % Recovery

AREA IN STD

% Recovery X 0.1 ug/ml = _____ug/ml

==========

+EA = re-extract acceptable
JA = reinject acceptable
QA = repeat confirmed original results
OK = original data acceptable (not for REPEATS)
NS = insufficient sample for repeat
DL = DBC low (<20% Recovery)
DA = Dilution Acceptable
BF = Blank Requires Florisil
CT = Contamination Suspected

IF DATA FAILS, INSERT CONDITION CODE FROM REPEAT REQUEST FORM IN BOX.

FINAL STATUS CODE+= | OK |

IF MULTIPLE PACKAGES EXIST, REPORT THIS DATA:_____

[ ] QANA [ ] QAN3 QA notice included.

==========

SAMPLE DISPOSITION Code

|___| Complete.....

|___| Requires Re-extraction.. 716

|___| Requires reprep..... 930

|___| Requires cleanup..... 901

==========

Audited By_____ Date_____ EPA532 007/87

46 BD

ASSIGNED TO: ~~Anthony Rice~~ Bernard Dickens (BD) 1-25-89

EXTRACTION WORKSHEET

Pesticide/Herbicide

CompuChem Laboratories Inc.

21 DAY TAT

Rec: 1-21 Due: 2-10

DATE ASSIGNED 1-25-89

PAGE ____ OF ____

68-01-7397

SAMPLE NUMBER	PREP CODE	CASE #	EPA #	QC SAMPLE TYPE	QC SAMPLE ORIG. NO.	SAMPLE WEIGHT (g) VOLUME (ml)	FINAL EXTRACT VOL. (MLS) SV/B/N	ACID	PEST	ALUMINA COLUMN START VOL	ALUMINA COLUMN FINAL VOL	DATE COMPT	COMMENTS
242032	-716	11271-JD997		SS	242030	30.0	0.9		1.0				544/752
242033				SS	242030	30.0	0.9		1.0				
242034				BS		30.0	0.9		1.0				
242030			JD997			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242031			JD998			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242035			JD999			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
241823		11271-JE200	JD958			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
241824			JD959			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
242322			POLK 13	B_1		30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242323			POLK 14	B_2		30.0	0.9		1.0	2.0ml	2.0ml	1-25	

		S-Vol	Acid	B/N	Pest.	Other	Other
SURROGATE	NO.	393			395		
	AMT.	0.5 ml.			2.0 ml.		
	LOT	27913			27816		
SPIKE	NO.		3012	2021			
	AMT.		1.0 ml.	1.0 ml.			
	LOT		28098	27914			

Verified by VM 1-26-89

MANUAL COUNTER 555/923

FINAL VOLUME VARIFIED Bernard Dickens

SUPERVISOR REVIEWED Elia Armata

EXTRACTS RECEIVED BY

949 POSTED INE 1046 № 17156

143

SAMPLE DATA PACKAGE

COMPOUND LIST NO. - 430

COMPUCHEM # 242031 DATE

IDENTIFIER PESTICIDES (LOW LEVEL SOLID) EPA 1/87

DIL FACT_____DRY WT_____ _30__SPLIT_____FINAL VOL_____/5 = |_____|

AMT SAMPLE_____ CORRECTION FACTOR

COUNTER	COMPUCHEM COMPOUND NUMBER	COMPOUND NAME	RESULTS	DETECTION LIMIT (ug/kg)
1.	0701	ALDRIN----------		8.0
2.	0702	ALPHA-BHC----------		8.0
3.	0703	BETA-BHC----------		8.0
4.	0704	GAMMA-BHC----------		8.0
5.	0705	DELTA-BHC----------		8.0
6.	0706	TECHNICAL CHLORDANE------		80.0
7.	0707	4,4'-DDT----------		16.0
8.	0708	4,4'-DDE----------		16.0
9.	0709	4,4'-DDD----------		16.0
10.	0710	DIELDRIN----------		16.0
11.	0711	ENDOSULFAN I ----------		8.0
12.	0712	ENDOSULFAN II ----------	BDL	16.0
13.	0713	ENDOSULFAN SULFATE-------		16.0
14.	0714	ENDRIN----------		16.0
15.	0739	ENDRIN KETONE----------		16.0
16.	0716	HEPTACHLOR----------		8.0
17.	0717	HEPTACHLOR EPOXIDE-------		8.0
18.	0726	METHOXYCHLOR----------		80.0
19.	0724	AROCHLOR 1016----------		80.0
20.	0720	AROCHLOR 1221----------		80.0
21.	0721	AROCHLOR 1232----------		80.0
22.	0718	AROCHLOR 1242----------		80.0
23.	0722	AROCHLOR 1248----------		80.0
24.	0719	AROCHLOR 1254----------		160.0
25.	0723	AROCHLOR 1260----------		160.0
26.	0725	TOXAPHENE----------		160.0

ANALYST'S COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JD999

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix: (soil/water) SOIL Lab Sample ID: 242035

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

Level: (low/med) LOW Date Received: 01/21/89

% Moisture: not dec. 24 dec. ____ Date Extracted: 01/25/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/31/89

GPC Cleanup: (Y/N) N pH: 7.6 Dilution Factor: 1.00

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	100	U
5103-74-2	gamma-Chlordane	100	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

FORM I PEST 1/87 Rev.

Analysis Worksheet

By employee #1388 on Wed Feb 1, 1989 12:13 am using EPACA 1.51

CompuChem Number:242035 Case#:11271 SDG #:JD997 EPA#:JD999
Matrix = Soil Level = L Compound List = 177

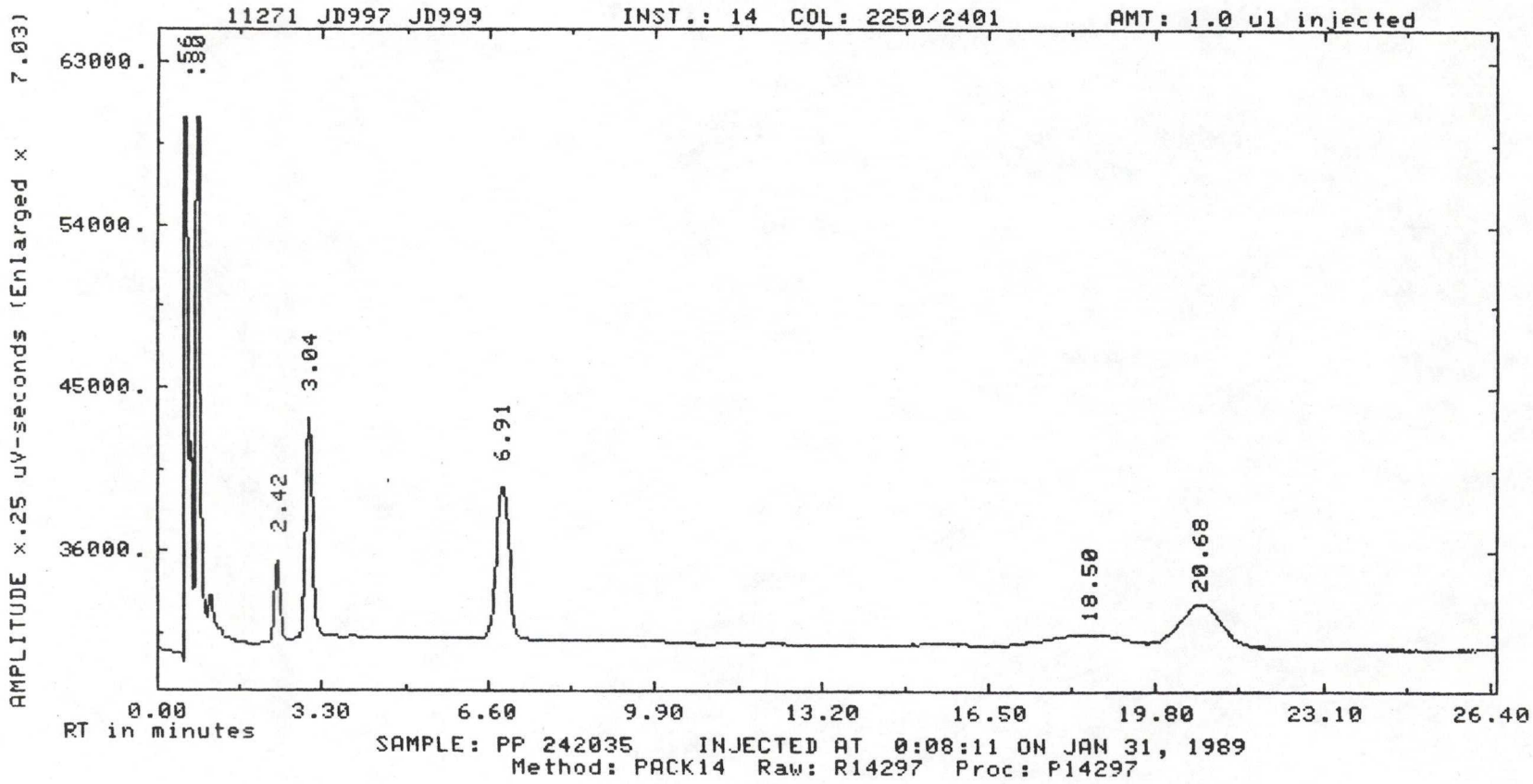
Volume/weight extracted = 30.00 G Final Extract Volume = 2.00 ml Split = 10.0 Dry Weight Factor = 1.32

Concentration = (Sample Area * Standard Conc * Mulitplication Factor * Split * Final Volume * Dry Weight Factor) / (Standard Area * Volume or Weight of Sample)

File : P14297 Column : OV-101 Multiplication Factor : 5.0 Detection Level Factor : 1.32

	Standard RT window -	20.30 - 21.12	Sample RT -	20.68	Primary/Reported OADS
DBC_____	Standard Area -	350329	Sample Area -	58622	
	Standard Conc(ug/ml) -	0.100	Sample Conc(ug/Kg) -	73.39	83.67 % Recovery
			Sample ng on col -	0.016733	

Analyst Comments:


11271 JD997 JD999
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 7.03)
63000.
54000.
45000.
36000.
.56
.58
2.42
3.04
6.91
18.50
20.68
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: PP 242035 INJECTED AT 0:08:11 ON JAN 31, 1989
Method: PACK14 Raw: R14297 Proc: P14297

Report: 2003.00 Channel: 14 11271 JD997 JD999

Sample: PP 242035 Injected at 0:08:11 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/97 Btl: 97

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	500.00	NO

Actual run time: 26.525 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	211893.	BS	195.559	
.80	0.00	.10000E+01	99962.	BB	92.256	
2.42	0.00	.10000E+01	16025.	BB	14.790	
3.04	0.00	.10000E+01	57820.	BB	53.363	
6.91	0.00	.10000E+01	73403.	BB	67.745	
18.50	0.00	.10000E+01	24038.	BB	22.185	
20.68	0.00	.10000E+01	58621.	BB	54.103	

Total Area = 541762. Total AREA % = 58621.500

Processed data file: P14297 Raw data file: R14297

LAB INSTRUCTIONS:

CASE # 11271 SAS# DUEDATE: 2/10/89

PESTICIDE WORKSHEET COMPUCHEM # 242035

RECEIPT DATE 1/21/89

LOW LEVEL SOLID, EPA SOW 1/87

Sample Prep Code---716
Instrument Code----143
Compound List------430
Surrogate Std---396

==========

SDG: JD997 EPA#: JD999 Dry Wt. Factor 1.32 % Moisture 24

Blank Associated with Case _____ _____ _____ 716

Associated Blank _____

==========

EXTRACTION INFORMATION: CALC Used? yes |___|

Wt. of sample 30 g final volume of extract 2 mls

portion of wt. in pesticide _____.

==========

ANALYSIS INFORMATION:

INSTRUMENT #	DATE	TIME	SEQUENCE	DILUTION FACTOR	REPORT
11	1/21/89	1006	14	5	[ ]
					[ ]
					[ ]
					[ ]

EM

SEND TO QA [ ]
QA APPROVED [ ]
NEED GC/MS CONFIRMATION [ ]

1300/819 1/31

ANALYST DATE

SURROGATE INFORMATION DIBUTYL CHLORENDATE

AREA IN SAMPLE_____ X Dilution Factor_____ X 100 = 84 % Recovery

AREA IN STD

% Recovery X 0.1 ug/ml = _____ug/ml

==========

+EA = re-extract acceptable
JA = reinject acceptable
QA = repeat confirmed original results
OK = original data acceptable (not for REPEATS)
NS = insufficient sample for repeat
DL = DBC low (<20% Recovery)
DA = Dilution Acceptable
BF = Blank Requires Florisil
CT = Contamination Suspected

IF DATA FAILS, INSERT CONDITION CODE FROM REPEAT REQUEST FORM IN BOX.

FINAL STATUS CODE+= | OK |

IF MULTIPLE PACKAGES EXIST, REPORT THIS DATA:_____

[ ] QANA [ ] QAN3 QA notice included.

==========

SAMPLE DISPOSITION Code

|___| Complete.....

|___| Requires Re-extraction.. 716

|___| Requires reprep..... 930

|___| Requires cleanup..... 901

==========

Audited By_____ Date_____ EPA532 007/87

46

BD

BERNARD DICKENS

ASSIGNED TO: ~~ANTHONY RICE~~

1-25-89

949

EXTRACTION WORKSHEET

Pesticide/Herbicide

CompuChem Laboratories Inc.

21 DAY TAT

Rec: 1-21 1-28

Due: 2-10 2-10

DATE ASSIGNED 1-25-89

PAGE _____ OF _____

68-01-7397

68-01-7397

SAMPLE NUMBER	PREP CODE	CASE #	EPA #	QC SAMPLE TYPE	QC SAMPLE ORIG. NO.	SAMPLE WEIGHT (g) VOLUME (ml)	FINAL EXTRACT VOL. (MLS) SV/B/N	ACID	PEST	ALUMINA COLUMN START VOL	ALUMINA COLUMN FINAL VOL	DATE COMPT	COMMENTS
242032	-716	11271-JD997		SS	242030	30.0	0.9		1.0				544/752
242033				SS	242030	30.0	0.9		1.0				
242034				BS		30.0	0.9		1.0				
242030			JD997			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242031			JD998			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242035			JD999			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
241823		11271-JE200	JD958.			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
241824			JD959			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
242322			PBLK 13	B_1		30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242328			PBLK 14	B_2		30.0	0.9		1.0	2.0ml	2.0ml	1-25	

		S-Vol	Acid	B/N	Pest.	Other	Other
SURROGATE	NO.	393			395		
	AMT.	0.5 ml.			2.0 ml.		
	LOT	27913			27816		
SPIKE	NO.		3012	2021			
	AMT.		1.0 ml.	1.0 ml.			
	LOT		28098	27914			

Verified by DM 1-26-89

Case #1287 1-26-89 555/923

MANUAL COUNTER

FINAL VOLUME VARIFIED Bernard Dickens

SUPERVISOR REVIEWED Elin Armstrong

EXTRACTS RECEIVED BY

949 POSTED 1046

№ 17156

136

SAMPLE DATA PACKAGE

COMPOUND LIST NO. - 430

COMPUCHEM # 242035 DATE

IDENTIFIER PESTICIDES (LOW LEVEL SOLID) EPA 1/87

DIL FACT_____DRY WT_____ _30__SPLIT_____FINAL VOL_____/5 = |_____|

AMT SAMPLE_____ CORRECTION FACTOR

COUNTER	COMPUCHEM COMPOUND NUMBER	COMPOUND NAME	RESULTS	DETECTION LIMIT (ug/kg
1.	0701	ALDRIN----------		8.0
2.	0702	ALPHA-BHC----------		8.0
3.	0703	BETA-BHC----------		8.0
4.	0704	GAMMA-BHC----------		8.0
5.	0705	DELTA-BHC----------		8.0
6.	0706	TECHNICAL CHLORDANE------		80.0
7.	0707	4,4'-DDT----------		16.0
8.	0708	4,4'-DDE----------		16.0
9.	0709	4,4'-DDD----------		16.0
10.	0710	DIELDRIN----------		16.0
11.	0711	ENDOSULFAN I ----------		8.0
12.	0712	ENDOSULFAN II ----------		16.0
13.	0713	ENDOSULFAN SULFATE-------	BR	16.0
14.	0714	ENDRIN----------		16.0
15.	0739	ENDRIN KETONE----------		16.0
16.	0716	HEPTACHLOR----------		8.0
17.	0717	HEPTACHLOR EPOXIDE-------		8.0
18.	0726	METHOXYCHLOR----------		80.0
19.	0724	AROCHLOR 1016----------		80.0
20.	0720	AROCHLOR 1221----------		80.0
21.	0721	AROCHLOR 1232----------		80.0
22.	0718	AROCHLOR 1242----------		80.0
23.	0722	AROCHLOR 1248----------		80.0
24.	0719	AROCHLOR 1254----------		160.0
25.	0723	AROCHLOR 1260----------		160.0
26.	0725	TOXAPHENE----------		160.0

ANALYST'S COMMENTS:

C. STANDARDS DATA

(1) Form VIII PEST - Pesticide Evaluation Standards Summary (all GC colums)

(2) Form IX PEST - Pesticide/PCB Standards Summary (all GC columns)

(3) Form X PEST - Pesticide/PCB identification (only required for postive results)

(4) Pesticide standard chromatograms and data system printouts for all standards to include:

- Evaluation Standard Mix A
- Evaluation Standard Mix B
- Evaluation Standard Mix C
- Individual Standard Mix A
- Individual Standard Mix B
- All multi-response Pesticide/PCBs
- All quantitation standards
- A copy of the computer reproduction or strip chart recorder output covering the 100 fold range.

(a) All chromatograms are required to have the following:

- Label all standard peaks for all individual compounds either directly out from the peak or on the printout of retention times if retention times are printed over the peak.
- Label the chromatogram for multicomponent standards. (i.e., Aroclor, 1242, Toxaphene)
- List total ng injected for each standard.
- A printout of retention times and corresponding peak areas must accompany each chromatogram.
- Date and time of injection.
- GC column identification (by secondary phase).
- GC instrument identification.

(1) Form VIII PEST - Pesticide Evaluation Standards Summary (all GC colums)

8D
PESTICIDE EVALUATION STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

Dates of Analyses: 01/28/89 to 01/31/89

Evaluation Check for Linearity

PESTICIDE	CALIBRATION FACTOR EVAL MIX A	CALIBRATION FACTOR EVAL MIX B	CALIBRATION FACTOR EVAL MIX C	%RSD (</= 10.0%)	
Aldrin	5955188	5836475	5408200	5.0	
Endrin	3602532	3537562	3088700	8.2	
4,4'-DDT	2381375	2443067	2273208	3.6	(1)
DBC	3775100	3845560	3253325	8.9	

(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	01/28/89	10:25	0.00	13.38	
02	EVAL MIX B	01/28/89	19:44	0.00	12.07	
03	EVAL MIX B	01/29/89	01:19	0.00	12.84	
04	EVAL MIX B	01/29/89	06:54	0.00	14.03	
05	EVAL MIX B	01/29/89	12:29	0.00	14.64	
06	EVAL MIX B	01/30/89	00:50	0.00	13.34	
07	EVAL MIX B	01/30/89	10:50	0.00	12.30	
08	EVAL MIX B	01/30/89	20:09	0.00	10.08	
09	EVAL MIX B	01/31/89	02:27	0.00	9.82	

(2) See Form instructions.

8E
PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

Dates of Analyses: 01/28/89 to 01/31/89

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	EVALA	EVALA	01/28/89	09:57	0.0	
02	EVALB	EVALB	01/28/89	10:25	-0.0	
03	EVALC	EVALC	01/28/89	10:53	0.0	
04	INDA	SD 4360	01/28/89	13:13	-0.1	
05	INDB	SD 4364	01/28/89	13:41	-0.0	
06	TOXAPH	SD TOXA	01/28/89	14:09	0.0	
07	AR1660	SD ARMX	01/28/89	14:37	0.0	
08	AR1221	SD 1221	01/28/89	15:05	-0.0	
09	AR1232	SD 1232	01/28/89	15:33	-0.0	
10	AR1242	SD 1242	01/28/89	16:01	-0.0	
11	AR1248	SD 1248	01/28/89	16:28	-0.0	
12	AR1254	SD 1254	01/28/89	16:56	0.0	
13	PBLK65	CP 240543 B1	01/28/89	17:24	-0.1	
14	E888049007	CP 240192	01/28/89	17:52	-0.0	
15	PBLK51	CP 241570 B1	01/28/89	18:20	-0.1	
16	00DI201XX	CP 240432R	01/28/89	18:48	-0.1	
17	PBLK23	PP 241303 B1	01/28/89	19:16	-0.0	
18	EVALB	EVALB	01/28/89	19:44	-0.1	
19	PBLK24	PP 241304 B2	01/28/89	20:12	0.0	
20	JD746	PP 240888 O	01/28/89	20:40	0.0	
21	JD775	PP 240895	01/28/89	21:08		*
22	JD776	PP 240896	01/28/89	21:36	0.5	
23	JD778	PP 240897	01/28/89	22:03		*
24	INDA	SD 4360	01/28/89	22:31	0.0	
25	JD779	PP 240898	01/28/89	22:59	0.6	
26	JD793	PP 240899	01/28/89	23:27	-0.0	
27	JD795	PP 240900	01/28/89	23:55	-0.2	
28	JE122	PP 240901	01/29/89	00:23	0.0	
29	JE142	PP 240902	01/29/89	00:51	-0.1	
30	EVALB	EVALB	01/29/89	01:19	-0.1	
31	JE144	PP 240903	01/29/89	01:47	-0.0	
32	PBLK25	PP 241313 B1	01/29/89	02:15	-0.1	
33	PBLK26	PP 241314 B2	01/29/89	02:43	-0.2	
34	JE147	PP 240905	01/29/89	03:11	-0.1	
35		HEXANE	01/29/89	03:38		*
36	INDB	SD 4364	01/29/89	04:06	-0.1	
37	JE146	PP 240904	01/29/89	04:34	-0.1	
38	JE148	PP 240908	01/29/89	05:02	-0.1	

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

8E
PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

Dates of Analyses: 01/28/89 to 01/31/89

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	JE150	PP 240919	01/29/89	05:30	-0.1	
02	JE149	PP 240915	01/29/89	05:58	-0.0	
03		HEXANE	01/29/89	06:26		*
04	EVALB	EVALB	01/29/89	06:54	-0.1	
05	JE151	PP 240920	01/29/89	07:22	-0.0	
06	JE178	PP 240921	01/29/89	07:50	-0.1	
07	JE179	PP 240922	01/29/89	08:18	-0.1	
08	JE186	PP 240923	01/29/89	08:46	-0.0	
09	JE187	PP 240924	01/29/89	09:14	-0.0	
10	INDA	SD 4360	01/29/89	09:41	0.0	
11	PBLK27	PP 241305 B1	01/29/89	10:09	-0.0	
12	PBLK28	PP 241306 B2	01/29/89	10:37	0.0	
13	JD746MS	PP 240889 SS	01/29/89	11:05	0.0	
14	JD746MSD	PP 240890 SS	01/29/89	11:33	0.0	
15	BS	PP 240891 BS	01/29/89	12:01	0.1	
16	EVALB	EVALB	01/29/89	12:29	0.0	
17	JD729	CP 239682	01/29/89	13:12	0.1	
18	JD730	CP 239685	01/29/89	13:40	0.1	
19	PBLK60	PP 240535 B2	01/29/89	19:19	0.1	
20	JD781MS	PP 239695 SS	01/29/89	19:47		*
21		HEXANE	01/29/89	20:14		*
22	INDB	SD 4364	01/29/89	20:42	0.1	
23	BS	PP 239697 BS	01/29/89	21:10	0.1	
24	JD781MSD	PP 239696 SS	01/29/89	21:38	0.7	
25		HEXANE	01/29/89	22:06		*
26	PBLK39	PP 241351 B1	01/29/89	23:54	0.0	
27	PBLK40	PP 241352 B2	01/30/89	00:22	-0.0	
28	EVALB	EVALB	01/30/89	00:50	0.1	
29	JE200MS	PP 241129 SS	01/30/89	01:18	0.1	
30	JE200MSD	PP 241130 SS	01/30/89	01:46	0.0	
31	BS	PP 241131 BS	01/30/89	02:13	0.1	
32	PBLK37	PP 241317 B	01/30/89	02:41	0.1	
33	PBLK38	PP 241318 B	01/30/89	03:09	0.0	
34	INDA	SD 4360	01/30/89	03:37	-0.0	
35	JE200	PP 241125	01/30/89	04:05	-0.0	
36	PBLK14	PP 242323 B	01/30/89	04:33	-0.0	
37	JD958	PP 241823	01/30/89	05:01	0.0	
38	JD959	PP 241824	01/30/89	05:29	-0.1	

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

8E

PESTICIDE EVALUATION STANDARDS SUMMARY

Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

Dates of Analyses: 01/28/89 to 01/31/89

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	PBLK42	CP 241299 B	01/30/89	10:09	0.2	
02	EVALB	EVALB	01/30/89	10:50	0.2	
03	BY641	CP 241150 O	01/30/89	11:18	0.6	
04	BY641MS	CP 241138 SS	01/30/89	11:46	0.4	
05	BY641MSD	CP 241139 SS	01/30/89	12:14	0.3	
06	JE174	PP 241405	01/30/89	13:12	0.2	
07	PBLK64	PP 241705 B1	01/30/89	13:39	0.3	
08	INDB	SD 4364	01/30/89	16:37	0.4	
09	JD954	PP 241419	01/30/89	17:14	0.4	
10	JD955	PP 241420	01/30/89	17:42	0.4	
11	JD956	PP 241421	01/30/89	18:10	0.3	
12		PP 241706 B2	01/30/89	19:13	0.3	
13	JE185	PP 241422	01/30/89	19:41	0.3	
14	EVALB	EVALB	01/30/89	20:09	0.3	
15	JD998MS	PP 242036 SS	01/30/89	20:37	0.3	
16	JD998MSD	PP 242037 SS	01/30/89	21:04	0.3	
17	PBLK95	PP 242038 BS	01/30/89	21:32	0.3	
18	PBLK11	PP 242333 B1	01/30/89	22:00	0.3	
19	PBLK12	PP 242334 B2	01/30/89	22:28	0.2	
20	INDA	SD 4360	01/30/89	23:40	0.1	
21	JD999	PP 242035	01/31/89	00:08	0.1	
22	JD998	PP 242031	01/31/89	00:36	0.1	
23	JD997	PP 242030	01/31/89	01:04	0.1	
24	PBLK13	PP 242322 B1	01/31/89	01:31	0.1	
25	PBLK61	PP 241738	01/31/89	01:59	0.0	
26	EVALB	EVALB	01/31/89	02:27	0.1	
27	PBLK62	PP 241739 B	01/31/89	02:55	0.1	
28	JD749	PP 241398	01/31/89	03:23	0.1	
29	JD751	PP 241399	01/31/89	03:51	0.1	
30	JD752	PP 241400	01/31/89	04:19	0.1	
31	JD753	PP 241401	01/31/89	04:47	-0.0	
32	INDB	SD 4364	01/31/89	05:15	-0.0	
33	JD940	PP 241402	01/31/89	05:43	0.0	
34	JD941	PP 241403	01/31/89	06:11	-0.0	
35	JD943	PP 241404	01/31/89	06:39	0.0	
36	JD944	PP 241406	01/31/89	07:07	-0.0	
37	JD946	PP 241408	01/31/89	07:34	-0.0	
38	INDA	SD 4360	01/31/89	08:02	-0.0	

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

8E
PESTICIDE EVALUATION STANDARDS SUMMARY
Evaluation of Retention Time Shift for Dibutylchlorendate

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

Dates of Analyses: 01/28/89 to 01/31/89

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	% D	*
01	INDB	SD 4364	01/31/89	08:30	0.0	

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

FORM VIII PEST-2 1/87 Rev.

(2) Form IX PEST - Pesticide/PCB Standards Summary (all GC columns)

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89		DATE OF ANALYSIS 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56		TIME OF ANALYSIS 22:31
		EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838				
beta-BHC	2.96	2.91	3.02	2195481				
delta-BHC	3.42	3.35	3.49	5798650				
gamma-BHC	2.70	2.65	2.75	5934813	2.70	5445038	Y	8.3
Heptachlor	3.24	3.17	3.30	5313350	3.24	5033063	Y	5.3
Aldrin	3.84	3.77	3.92	5969213	3.85	5887100	Y	1.4
Hept. epoxide	5.43	5.33	5.54	5424850				
Endosulfan I	6.72	6.58	6.85	10160976	6.73	8870138	Y	12.7
Dieldrin	8.03	7.87	8.19	5604063	8.03	5247450	Y	6.4
4,4'-DDE	7.31	7.17	7.46	5126625				
Endrin	9.61	9.41	9.80	3432850				
Endosulfan II	11.34	11.11	11.56	4944563	11.34	4504275	Y	8.9
4,4'-DDD	10.70	10.48	10.91	4058913				
Endo.sulfate	17.24	16.89	17.58	3240794				
4,4'-DDT	12.73	12.47	12.98	2508792	12.73	2548558	Y	1.6
Methoxychlor	22.44	21.99	22.89	1417400	22.43	1289980	Y	9.0
Endrin ketone	23.13	22.67	23.60	4157125				
a. Chlordane	6.42	6.29	6.55	5368194				
g. Chlordane	5.94	5.82	6.06	5341475	5.94	4944263	Y	7.4
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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

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

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

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56

DATE OF ANALYSIS 01/29/89
TIME OF ANALYSIS 04:06
EPA SAMPLE NO. (STANDARD) INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838	2.21	6283488	Y	5.4
beta-BHC	2.96	2.91	3.02	2195481	2.96	2061569	Y	6.1
delta-BHC	3.42	3.35	3.49	5798650	3.42	5532950	Y	4.6
gamma-BHC	2.70	2.65	2.75	5934813				
Heptachlor	3.24	3.17	3.30	5313350				
Aldrin	3.84	3.77	3.92	5969213				
Hept. epoxide	5.43	5.33	5.54	5424850	5.43	5167225	Y	4.7
Endosulfan I	6.72	6.58	6.85	10160976				
Dieldrin	8.03	7.87	8.19	5604063				
4,4'-DDE	7.31	7.17	7.46	5126625	7.31	4849463	Y	5.4
Endrin	9.61	9.41	9.80	3432850	9.61	3369531	Y	1.8
Endosulfan II	11.34	11.11	11.56	4944563				
4,4'-DDD	10.70	10.48	10.91	4058913	10.70	3790750	Y	6.6
Endo.sulfate	17.24	16.89	17.58	3240794	17.23	3147337	Y	2.9
4,4'-DDT	12.73	12.47	12.98	2508792				
Methoxychlor	22.44	21.99	22.89	1417400				
Endrin ketone	23.13	22.67	23.60	4157125	23.15	3954390	Y	4.9
a. Chlordane	6.42	6.29	6.55	5368194	6.42	5071713	Y	5.5
g. Chlordane	5.94	5.82	6.06	5341475				
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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

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

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

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56

DATE OF ANALYSIS 01/29/89
TIME OF ANALYSIS 09:41
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838				
beta-BHC	2.96	2.91	3.02	2195481				
delta-BHC	3.42	3.35	3.49	5798650				
gamma-BHC	2.70	2.65	2.75	5934813	2.68	5860838	Y	1.2
Heptachlor	3.24	3.17	3.30	5313350	3.22	5271763	Y	0.8
Aldrin	3.84	3.77	3.92	5969213	3.82	5893088	Y	1.3
Hept. epoxide	5.43	5.33	5.54	5424850				
Endosulfan I	6.72	6.58	6.85	10160976	6.69	10003776	Y	1.5
Dieldrin	8.03	7.87	8.19	5604063	8.00	5538763	Y	1.2
4,4'-DDE	7.31	7.17	7.46	5126625				
Endrin	9.61	9.41	9.80	3432850				
Endosulfan II	11.34	11.11	11.56	4944563	11.31	4798350	Y	3.0
4,4'-DDD	10.70	10.48	10.91	4058913				
Endo.sulfate	17.24	16.89	17.58	3240794				
4,4'-DDT	12.73	12.47	12.98	2508792	12.70	2422258	Y	3.4
Methoxychlor	22.44	21.99	22.89	1417400	22.43	1393610	Y	1.7
Endrin ketone	23.13	22.67	23.60	4157125				
a. Chlordane	6.42	6.29	6.55	5368194				
g. Chlordane	5.94	5.82	6.06	5341475	5.91	5272075	Y	1.3
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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

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

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

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS	FROM: 01/28/89	TO: 01/28/89	DATE OF ANALYSIS 01/29/89
TIME(S) OF ANALYSIS	FROM: 13:13	TO: 16:56	TIME OF ANALYSIS 20:42
			EPA SAMPLE NO. (STANDARD) INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838	2.19	6634494	Y	0.1
beta-BHC	2.96	2.91	3.02	2195481	2.93	2180206	Y	0.7
delta-BHC	3.42	3.35	3.49	5798650	3.39	5899075	Y	1.7
gamma-BHC	2.70	2.65	2.75	5934813				
Heptachlor	3.24	3.17	3.30	5313350				
Aldrin	3.84	3.77	3.92	5969213				
Hept. epoxide	5.43	5.33	5.54	5424850	5.40	5438150	Y	0.2
Endosulfan I	6.72	6.58	6.85	10160976				
Dieldrin	8.03	7.87	8.19	5604063				
4,4'-DDE	7.31	7.17	7.46	5126625	7.28	5108250	Y	0.4
Endrin	9.61	9.41	9.80	3432850	9.57	3461650	Y	0.8
Endosulfan II	11.34	11.11	11.56	4944563				
4,4'-DDD	10.70	10.48	10.91	4058913	10.66	4069288	Y	0.3
Endo.sulfate	17.24	16.89	17.58	3240794	17.19	3349162	Y	3.3
4,4'-DDT	12.73	12.47	12.98	2508792				
Methoxychlor	22.44	21.99	22.89	1417400				
Endrin ketone	23.13	22.67	23.60	4157125	23.09	4320730	Y	3.9
a. Chlordane	6.42	6.29	6.55	5368194	6.39	5392450	Y	0.5
g. Chlordane	5.94	5.82	6.06	5341475				
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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

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

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

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56

DATE OF ANALYSIS 01/30/89
TIME OF ANALYSIS 03:37
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838				
beta-BHC	2.96	2.91	3.02	2195481				
delta-BHC	3.42	3.35	3.49	5798650				
gamma-BHC	2.70	2.65	2.75	5934813	2.67	6065825	Y	2.2
Heptachlor	3.24	3.17	3.30	5313350	3.21	5364225	Y	1.0
Aldrin	3.84	3.77	3.92	5969213	3.81	6099800	Y	2.2
Hept. epoxide	5.43	5.33	5.54	5424850				
Endosulfan I	6.72	6.58	6.85	10160976	6.69	10325500	Y	1.6
Dieldrin	8.03	7.87	8.19	5604063	7.99	5730475	Y	2.3
4,4'-DDE	7.31	7.17	7.46	5126625				
Endrin	9.61	9.41	9.80	3432850				
Endosulfan II	11.34	11.11	11.56	4944563	11.30	5210550	Y	5.4
4,4'-DDD	10.70	10.48	10.91	4058913				
Endo.sulfate	17.24	16.89	17.58	3240794				
4,4'-DDT	12.73	12.47	12.98	2508792	12.70	2427233	Y	3.3
Methoxychlor	22.44	21.99	22.89	1417400	22.44	1329060	Y	6.2
Endrin ketone	23.13	22.67	23.60	4157125				
a. Chlordane	6.42	6.29	6.55	5368194				
g. Chlordane	5.94	5.82	6.06	5341475	5.91	5439425	Y	1.8
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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.

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FORM IX PEST 8/87 Rev.

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS	FROM: 01/28/89 TO: 01/28/89	DATE OF ANALYSIS 01/30/89
TIME(S) OF ANALYSIS	FROM: 13:13 TO: 16:56	TIME OF ANALYSIS 16:37
		EPA SAMPLE NO. (STANDARD) INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838	2.19	7285925	Y	9.7
beta-BHC	2.96	2.91	3.02	2195481	2.93	2325663	Y	5.9
delta-BHC	3.42	3.35	3.49	5798650	3.38	5854513	Y	1.0
gamma-BHC	2.70	2.65	2.75	5934813				
Heptachlor	3.24	3.17	3.30	5313350				
Aldrin	3.84	3.77	3.92	5969213				
Hept. epoxide	5.43	5.33	5.54	5424850	5.39	5885713	Y	8.5
Endosulfan I	6.72	6.58	6.85	10160976				
Dieldrin	8.03	7.87	8.19	5604063				
4,4'-DDE	7.31	7.17	7.46	5126625	7.26	5334738	Y	4.1
Endrin	9.61	9.41	9.80	3432850	9.54	3632075	Y	5.8
Endosulfan II	11.34	11.11	11.56	4944563				
4,4'-DDD	10.70	10.48	10.91	4058913	10.63	4197081	Y	3.4
Endo.sulfate	17.24	16.89	17.58	3240794	17.14	3503356	Y	8.1
4,4'-DDT	12.73	12.47	12.98	2508792				
Methoxychlor	22.44	21.99	22.89	1417400				
Endrin ketone	23.13	22.67	23.60	4157125	23.04	4523900	Y	8.8
a. Chlordane	6.42	6.29	6.55	5368194	6.37	5654850	Y	5.3
g. Chlordane	5.94	5.82	6.06	5341475				
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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

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

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

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56

DATE OF ANALYSIS 01/30/89
TIME OF ANALYSIS 23:40
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838				
beta-BHC	2.96	2.91	3.02	2195481				
delta-BHC	3.42	3.35	3.49	5798650				
gamma-BHC	2.70	2.65	2.75	5934813	2.68	6298025	Y	6.1
Heptachlor	3.24	3.17	3.30	5313350	3.22	5994731	Y	12.8
Aldrin	3.84	3.77	3.92	5969213	3.82	6736275	Y	12.9
Hept. epoxide	5.43	5.33	5.54	5424850				
Endosulfan I	6.72	6.58	6.85	10160976	6.68	11261600	Y	10.8
Dieldrin	8.03	7.87	8.19	5604063	7.99	6287900	Y	12.2
4,4'-DDE	7.31	7.17	7.46	5126625				
Endrin	9.61	9.41	9.80	3432850				
Endosulfan II	11.34	11.11	11.56	4944563	11.29	4605750	Y	6.9
4,4'-DDD	10.70	10.48	10.91	4058913				
Endo.sulfate	17.24	16.89	17.58	3240794				
4,4'-DDT	12.73	12.47	12.98	2508792	12.18	2637833	Y	5.1
Methoxychlor	22.44	21.99	22.89	1417400	22.40	1465880	Y	3.4
Endrin ketone	23.13	22.67	23.60	4157125				
a. Chlordane	6.42	6.29	6.55	5368194				
g. Chlordane	5.94	5.82	6.06	5341475	5.91	5966263	Y	11.7
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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

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

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

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56

DATE OF ANALYSIS 01/31/89
TIME OF ANALYSIS 05:15
EPA SAMPLE NO. (STANDARD) INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838	2.21	7499838	Y	12.9
beta-BHC	2.96	2.91	3.02	2195481	2.95	2504787	Y	14.1
delta-BHC	3.42	3.35	3.49	5798650	3.40	6631575	Y	14.4
gamma-BHC	2.70	2.65	2.75	5934813				
Heptachlor	3.24	3.17	3.30	5313350				
Aldrin	3.84	3.77	3.92	5969213				
Hept. epoxide	5.43	5.33	5.54	5424850	5.42	6226175	Y	14.8
Endosulfan I	6.72	6.58	6.85	10160976				
Dieldrin	8.03	7.87	8.19	5604063				
4,4'-DDE	7.31	7.17	7.46	5126625	7.29	5839750	Y	13.9
Endrin	9.61	9.41	9.80	3432850	9.59	3759663	Y	9.5
Endosulfan II	11.34	11.11	11.56	4944563				
4,4'-DDD	10.70	10.48	10.91	4058913	14.36	4031337	Y	0.7
Endo.sulfate	17.24	16.89	17.58	3240794	17.21	3622750	Y	11.8
4,4'-DDT	12.73	12.47	12.98	2508792				
Methoxychlor	22.44	21.99	22.89	1417400				
Endrin ketone	23.13	22.67	23.60	4157125	23.11	4750245	Y	14.3
a. Chlordane	6.42	6.29	6.55	5368194	6.40	6095775	Y	13.6
g. Chlordane	5.94	5.82	6.06	5341475				
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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.

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PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56

DATE OF ANALYSIS 01/31/89
TIME OF ANALYSIS 08:02
EPA SAMPLE NO. (STANDARD) INDA

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838				
beta-BHC	2.96	2.91	3.02	2195481				
delta-BHC	3.42	3.35	3.49	5798650				
gamma-BHC	2.70	2.65	2.75	5934813	2.69	6469500	Y	9.0
Heptachlor	3.24	3.17	3.30	5313350	3.23	5910100	Y	11.2
Aldrin	3.84	3.77	3.92	5969213	3.83	6531963	Y	9.4
Hept. epoxide	5.43	5.33	5.54	5424850				
Endosulfan I	6.72	6.58	6.85	10160976	6.70	11137276	Y	9.6
Dieldrin	8.03	7.87	8.19	5604063	8.01	6124925	Y	9.3
4,4'-DDE	7.31	7.17	7.46	5126625				
Endrin	9.61	9.41	9.80	3432850				
Endosulfan II	11.34	11.11	11.56	4944563	11.31	5241413	Y	6.0
4,4'-DDD	10.70	10.48	10.91	4058913				
Endo.sulfate	17.24	16.89	17.58	3240794				
4,4'-DDT	12.73	12.47	12.98	2508792	12.71	2973050	N	18.5
Methoxychlor	22.44	21.99	22.89	1417400	22.44	1652040	N	16.6
Endrin ketone	23.13	22.67	23.60	4157125				
a. Chlordane	6.42	6.29	6.55	5368194				
g. Chlordane	5.94	5.82	6.06	5341475	5.93	5924125	Y	10.9
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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

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

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

PESTICIDE/PCB STANDARDS SUMMARY

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Instrument ID: 14 GC Column ID: 2250/2401

DATE(S) OF ANALYSIS FROM: 01/28/89 TO: 01/28/89
TIME(S) OF ANALYSIS FROM: 13:13 TO: 16:56

DATE OF ANALYSIS 01/31/89
TIME OF ANALYSIS 08:30
EPA SAMPLE NO. (STANDARD) INDB

COMPOUND	RT	RT WINDOW FROM	RT WINDOW TO	CALIBRATION FACTOR	RT	CALIBRATION FACTOR	QNT Y/N	%D
alpha-BHC	2.22	2.17	2.26	6641838	2.21	7399475	Y	11.4
beta-BHC	2.96	2.91	3.02	2195481	2.95	2355844	Y	7.3
delta-BHC	3.42	3.35	3.49	5798650	3.41	5934369	Y	2.3
gamma-BHC	2.70	2.65	2.75	5934813				
Heptachlor	3.24	3.17	3.30	5313350				
Aldrin	3.84	3.77	3.92	5969213				
Hept. epoxide	5.43	5.33	5.54	5424850	5.42	5943450	Y	9.6
Endosulfan I	6.72	6.58	6.85	10160976				
Dieldrin	8.03	7.87	8.19	5604063				
4,4'-DDE	7.31	7.17	7.46	5126625	7.30	5374250	Y	4.8
Endrin	9.61	9.41	9.80	3432850	9.59	3609606	Y	5.1
Endosulfan II	11.34	11.11	11.56	4944563				
4,4'-DDD	10.70	10.48	10.91	4058913	10.69	4231275	Y	4.2
Endo.sulfate	17.24	16.89	17.58	3240794	17.20	3494156	Y	7.8
4,4'-DDT	12.73	12.47	12.98	2508792				
Methoxychlor	22.44	21.99	22.89	1417400				
Endrin ketone	23.13	22.67	23.60	4157125	23.11	4609560	Y	10.9
a. Chlordane	6.42	6.29	6.55	5368194	6.41	5721256	Y	6.6
g. Chlordane	5.94	5.82	6.06	5341475				
Toxaphene	13.65	13.38	13.93	257284				
Aroclor-1016	3.15	3.09	3.21	161151				
Aroclor-1221	2.06	2.02	2.10	67380				
Aroclor-1232	3.15	3.08	3.21	70554				
Aroclor-1242	3.15	3.09	3.22	151120				
Aroclor-1248	5.42	5.31	5.53	317946				
Aroclor-1254	9.05	8.87	9.23	297014				
Aroclor-1260	18.82	18.45	19.20	498394				

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.

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(3) Form X PEST - Pesticide/PCB identification (only required for postive results)

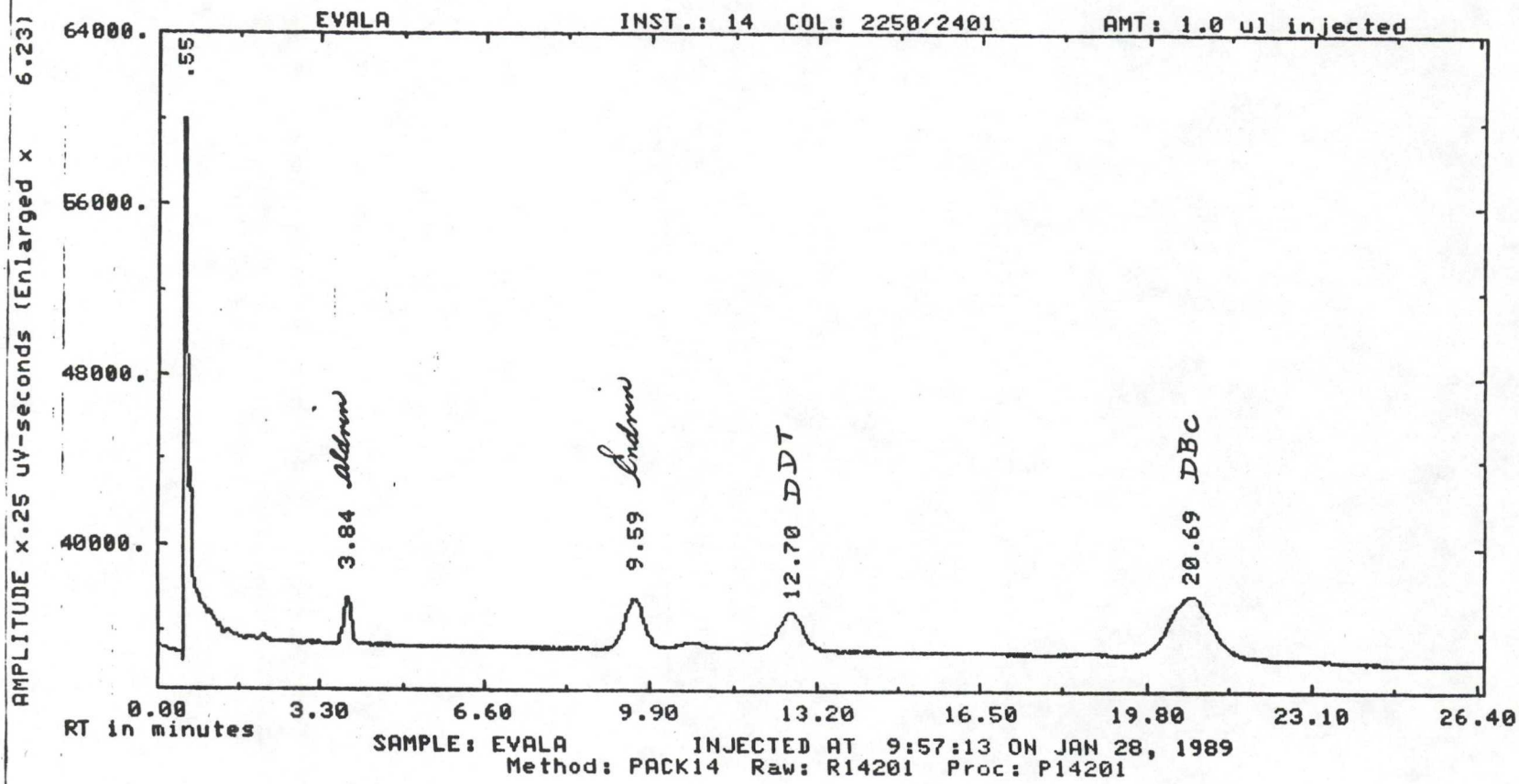
(4) Pesticide standard chromatograms and data system printouts for all standards to include:

- Evaluation Standard Mix A
- Evaluation Standard Mix B
- Evaluation Standard Mix C
- Individual Standard Mix A
- Individual Standard Mix B
- All multi-response Pesticide/PCBs
- All quantitation standards
- A copy of the computer reproduction or strip chart recorder output covering the 100 fold range.

(a) All chromatograms are required to have the following:

- Label all standard peaks for all individual compounds either directly out from the peak or on the printout of retention times if retention times are printed over the peak.
- Label the chromatogram for multicomponent standards. (i.e., Aroclor, 1242, Toxaphene)
- List total ng injected for each standard.
- A printout of retention times and corresponding peak areas must accompany each chromatogram.
- Date and time of injection.
- GC column identification (by secondary phase).
- GC instrument identification.

SAMPLE DATA PACKAGE



Report: 1902.00 Channel: 14 EVALA

Sample: EVALA Injected at 9:57:13 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 1 Btl: 1

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

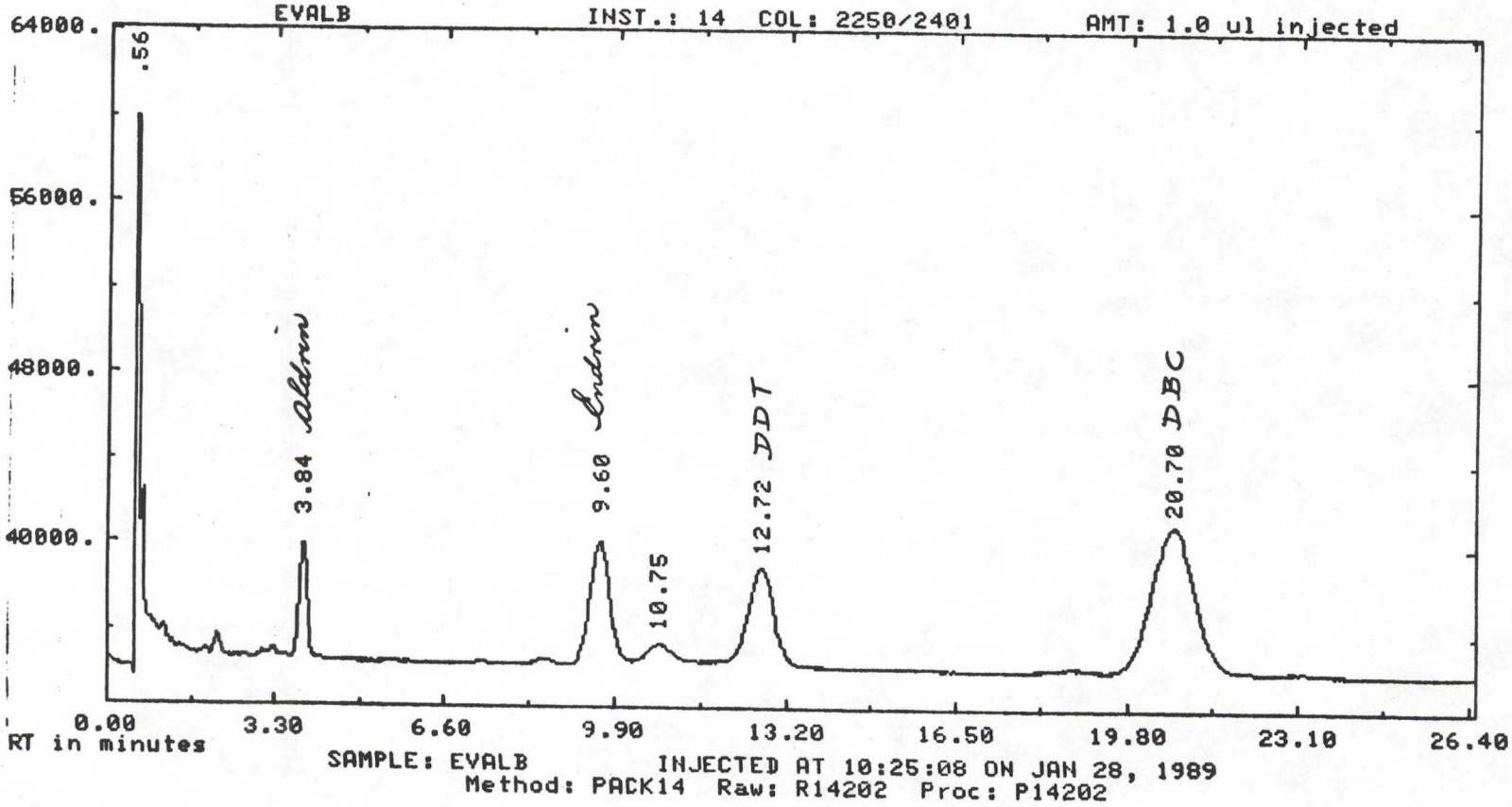
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.55	0.00	.10000E+01	153361. BS	50.290	
3.84	0.00	.10000E+01	11910. BB	3.906	
9.59	0.00	.10000E+01	28820. BB	9.451	
12.70	0.00	.10000E+01	28576. BB	9.371	
20.69	0.00	.10000E+01	82284. BB	26.983	

Total Area = 304952. Total AREA % = 82284.000

Processed data file: P14201 Raw data file: R14201


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
64000.
56000.
48000.
40000.
.56
3.84 Aldrin
9.60 Endrin
10.75
12.72 DDT
20.70 DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 10:25:08 ON JAN 28, 1989
Method: PACK14 Raw: R14202 Proc: P14202

Report: 1903.00 Channel: 14 EVALB

Sample: EVALB Injected at 10:25:08 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 2 Btl: 2

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

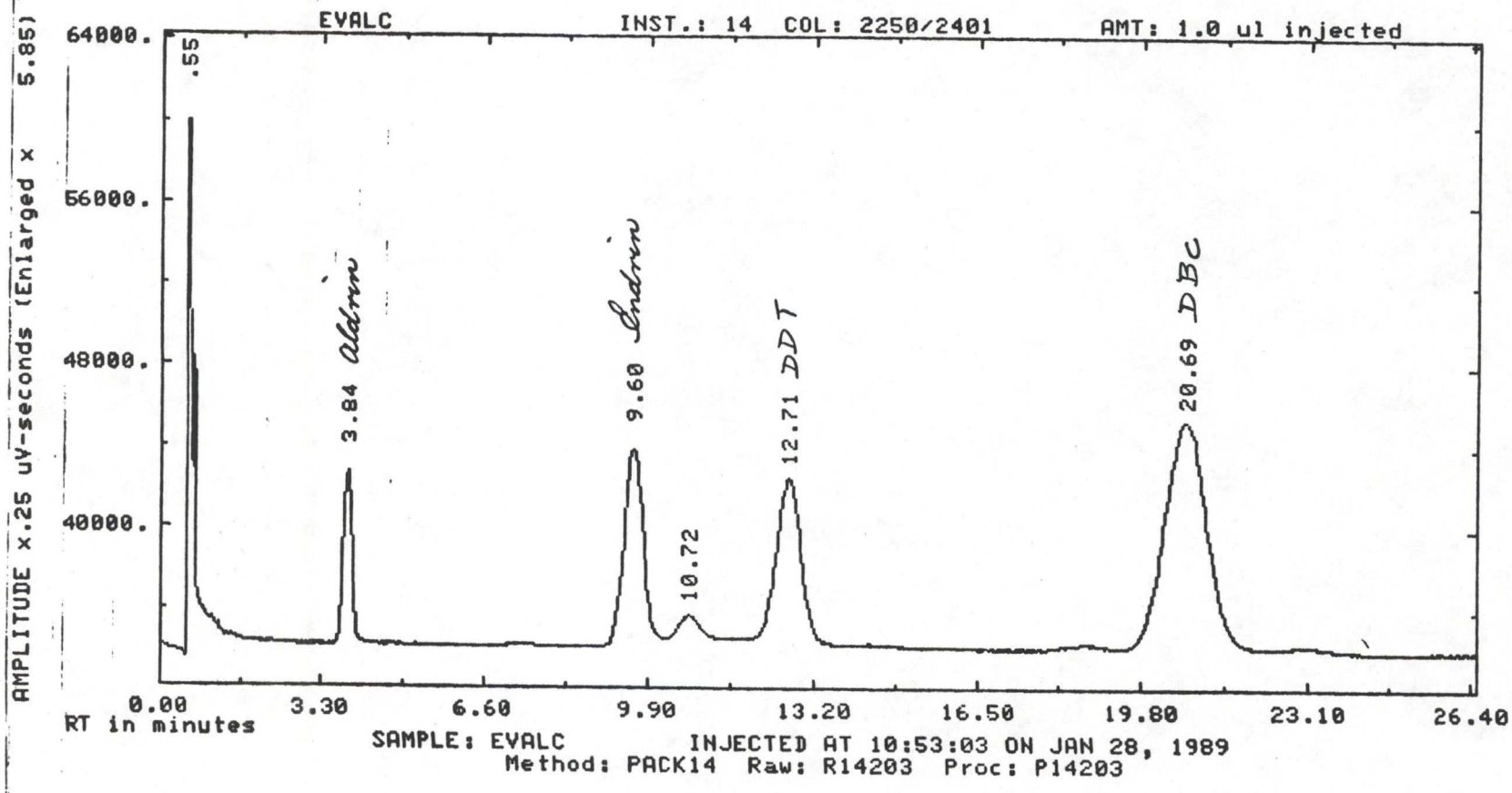
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.56	0.00	.10000E+01	161789. BS	30.038	
3.84	0.00	.10000E+01	29182. BB	5.418	
9.60	0.00	.10000E+01	70751. BB	13.136	
10.75	0.00	.10000E+01	11321. BB	2.102	
12.72	0.00	.10000E+01	73292. BB	13.608	
20.70	0.00	.10000E+01	192278. BB	35.699	

Total Area = 538613. Total AREA % = 192278.000

Processed data file: P14202 Raw data file: R14202


EVALC
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 5.85)
64000.
56000.
48000.
40000.
.55
3.84 Aldrin
9.60 Endrin
10.72
12.71 DDT
20.69 DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALC
INJECTED AT 10:53:03 ON JAN 28, 1989
Method: PACK14 Raw: R14203 Proc: P14203

Report: 1904.00 Channel: 14 EVALC

Sample: EVALC Injected at 10:53:03 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 3 Btl: 3

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

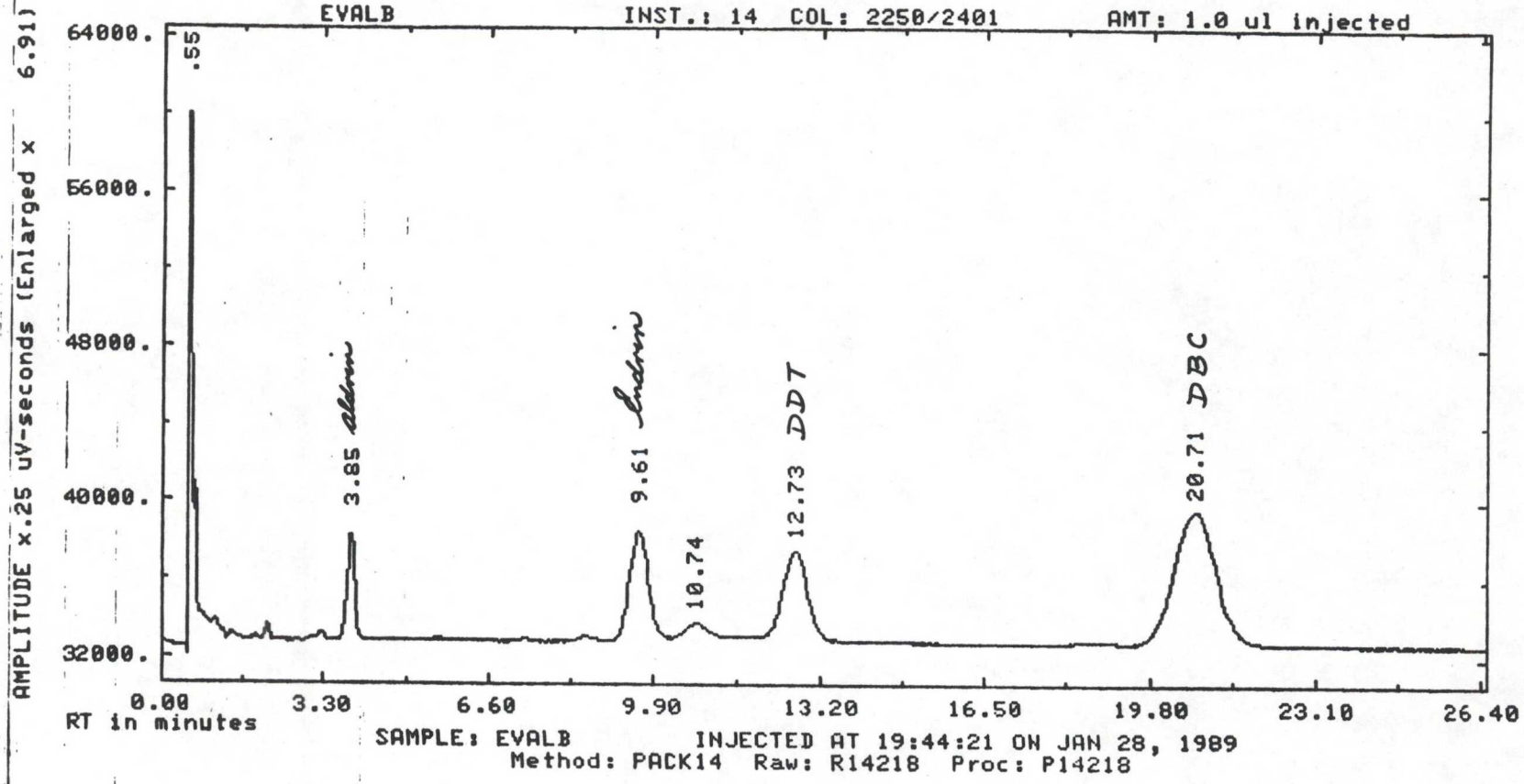
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	150658.	BS	18.699	
3.84	0.00	.10000E+01	54082.	BB	6.713	
9.60	0.00	.10000E+01	123548.	BB	15.334	
10.72	0.00	.10000E+01	15677.	BB	1.946	
12.71	0.00	.10000E+01	136392.	BB	16.929	
20.69	0.00	.10000E+01	325332.	BB	40.379	

Total Area = 805690. Total AREA % = 325332.500

Processed data file: P14203 Raw data file: R14203


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 6.91)
64000.
56000.
48000.
40000.
32000.
.55
3.85 Aldrin
9.61 Endrin
10.74
12.73 DDT
20.71 DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 19:44:21 ON JAN 28, 1989
Method: PACK14 Raw: R14218 Proc: P14218

Report: 1919.00 Channel: 14 EVALB

Sample: EVALB Injected at 19:44:21 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/18 Btl: 18

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

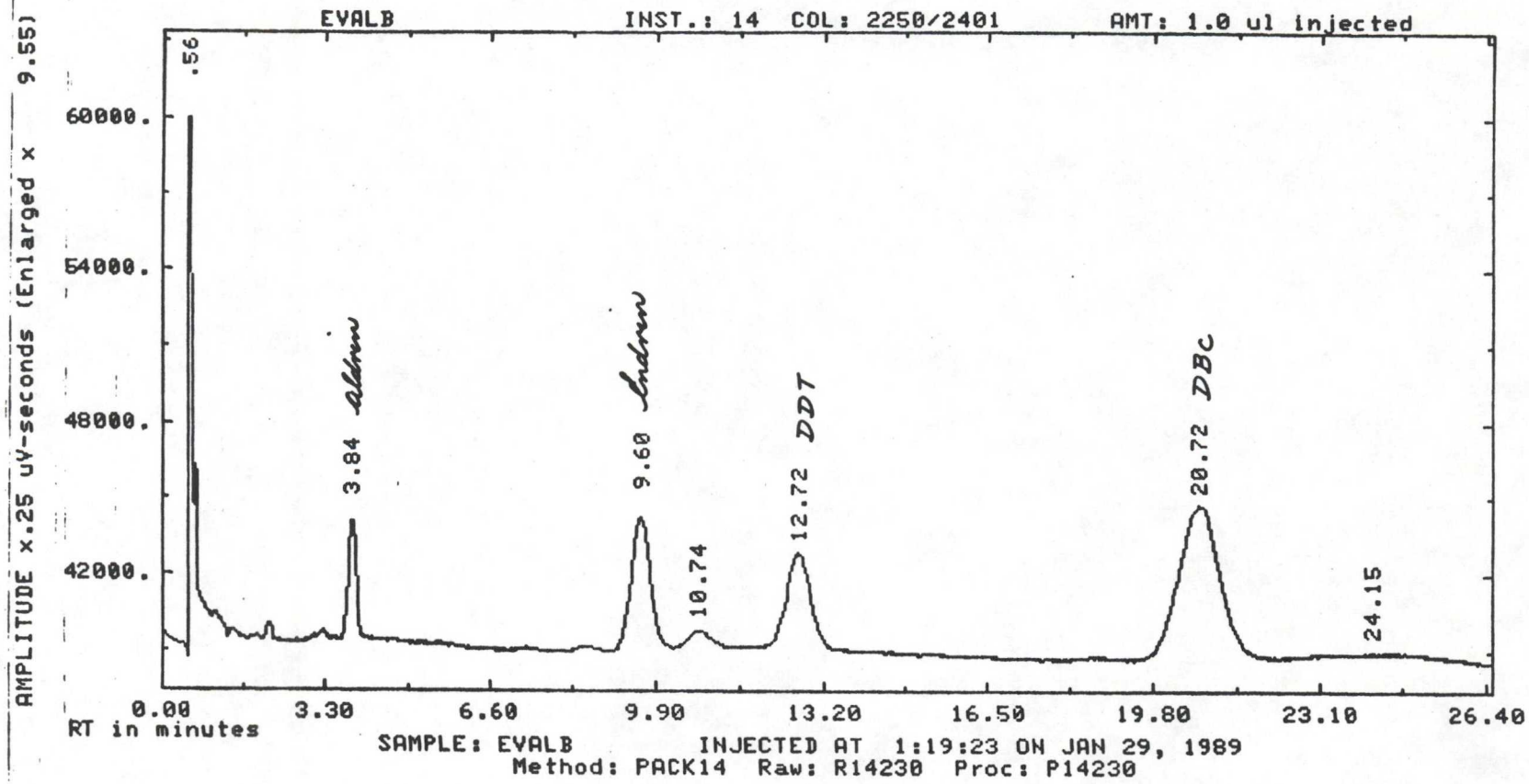
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	183901.	BS	32.598	
3.85	0.00	.10000E+01	30092.	BB	5.334	
9.61	0.00	.10000E+01	69645.	BB	12.345	
10.74	0.00	.10000E+01	10295.	BB	1.825	
12.73	0.00	.10000E+01	74968.	BB	13.289	
20.71	0.00	.10000E+01	195246.	BB	34.609	

Total Area = 564149. Total AREA % = 195246.500

Processed data file: P14218 Raw data file: R14218


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 9.55)
60000.
54000.
48000.
42000.
.56
3.84
9.60
10.74
12.72
DDT
20.72
DBC
24.15
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 1:19:23 ON JAN 29, 1989
Method: PACK14 Raw: R14230 Proc: P14230

Report: 1931.00 Channel: 14 EVALB

Sample: EVALB Injected at 1:19:23 ON JAN 29, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/30 Btl: 30

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

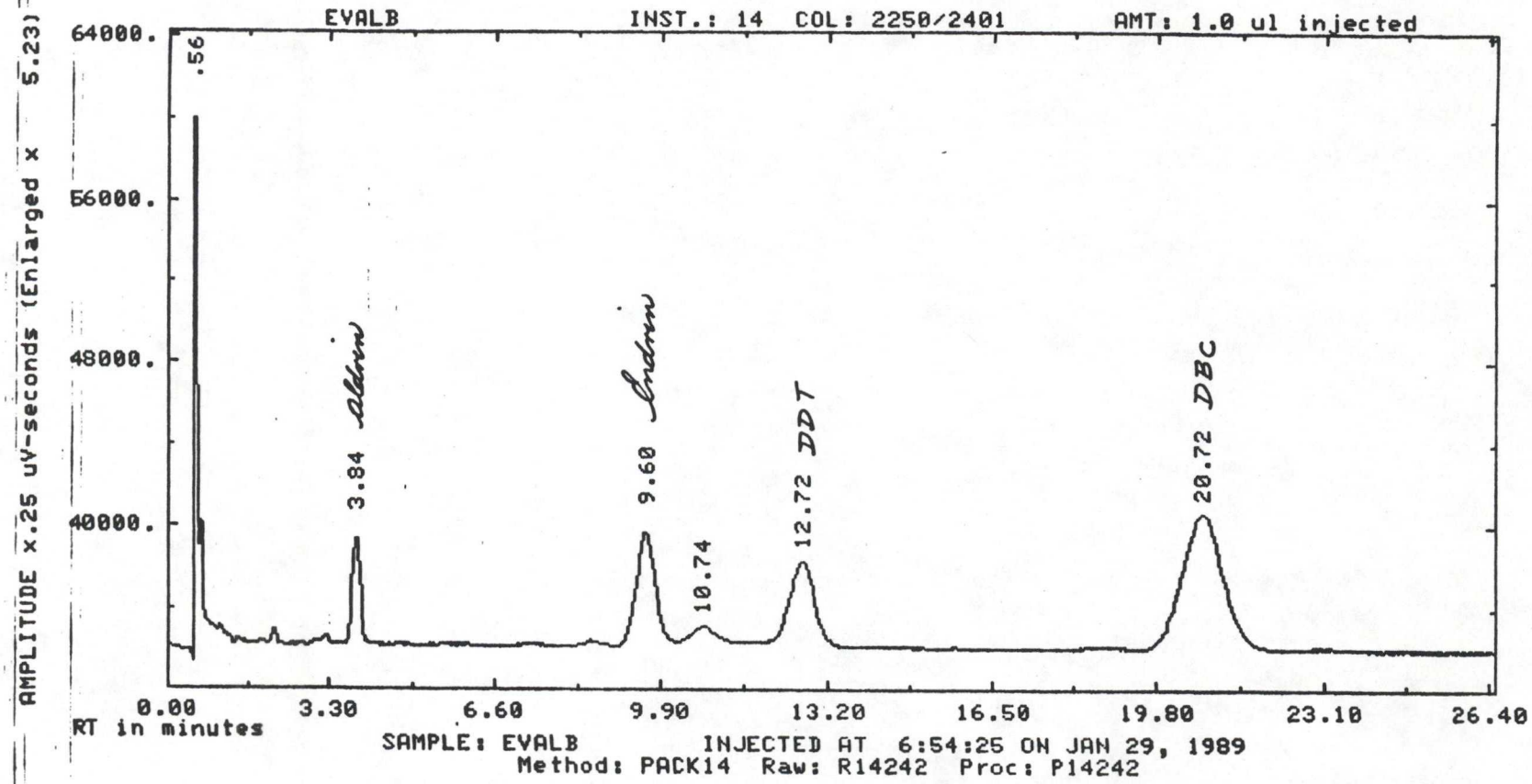
Actual run time: 26.517 minutes

Ended not on baseline

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	192900.	BS	35.091	
3.84	0.00	.10000E+01	26390.	BB	4.801	
9.60	0.00	.10000E+01	64757.	BB	11.780	
10.74	0.00	.10000E+01	9459.	BB	1.721	
12.72	0.00	.10000E+01	64219.	BB	11.682	
20.72	0.00	.10000E+01	170016.	BB	30.928	
24.15	0.00	.10000E+01	21972.	BF	3.997	

Total Area = 549714. Total AREA % = 21972.000

Processed data file: P14230 Raw data file: R14230


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 5.23)
64000.
56000.
48000.
40000.
.56
3.84 Aldrin
9.60 Endrin
10.74
12.72 DDT
20.72 DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB INJECTED AT 6:54:25 ON JAN 29, 1989
Method: PACK14 Raw: R14242 Proc: P14242

Report: 1943.00 Channel: 14 EVALB

Sample: EVALB Injected at 6:54:25 ON JAN 29, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/42 Btl: 42

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

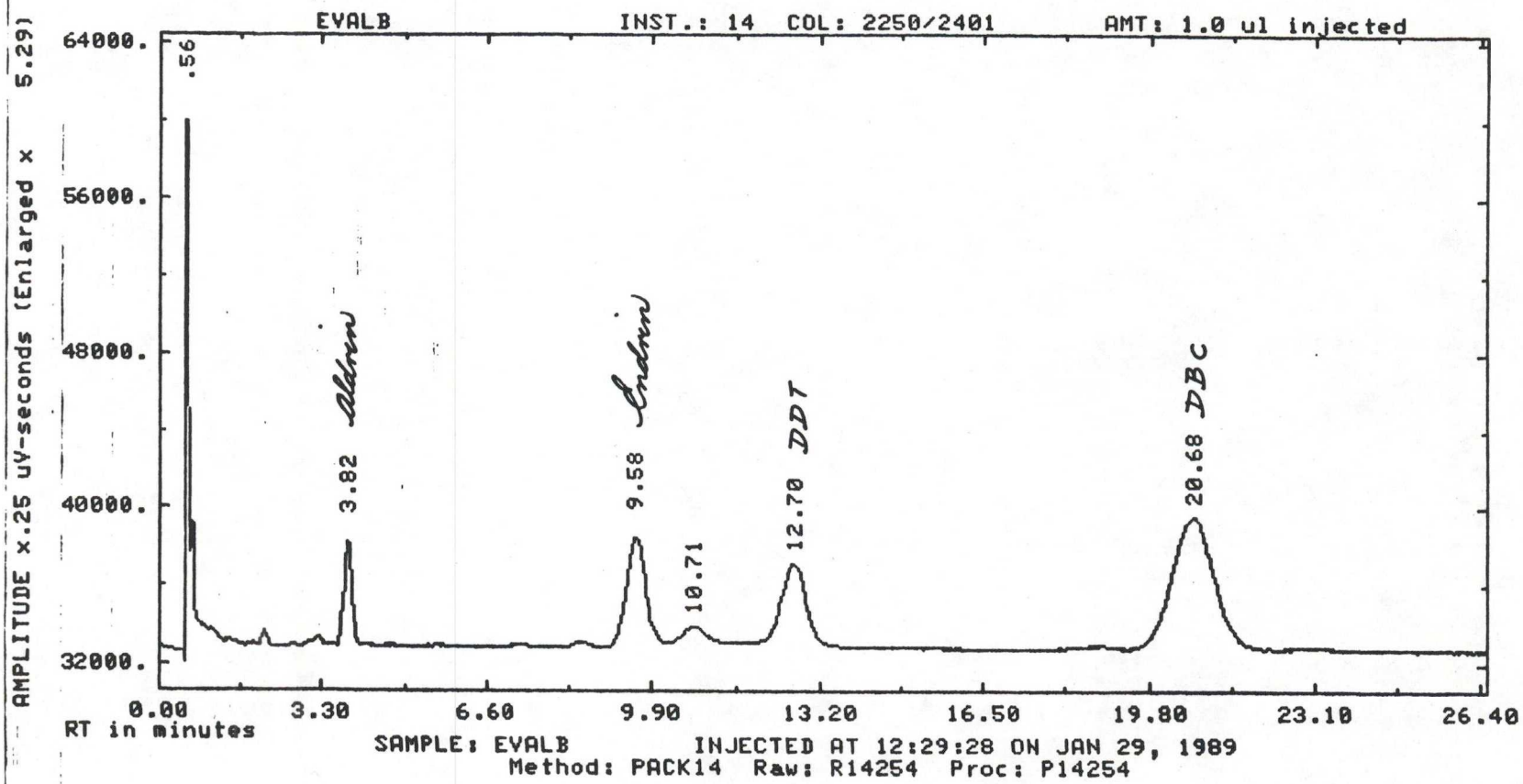
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area	AREA %	Name
.56	0.00	.10000E+01	136000. BB	27.273	
3.84	0.00	.10000E+01	28843. BB	5.784	
9.60	0.00	.10000E+01	68326. BB	13.702	
10.74	0.00	.10000E+01	10881. BB	2.182	
12.72	0.00	.10000E+01	66703. BB	13.377	
20.72	0.00	.10000E+01	187900. BB	37.682	

Total Area = 498654. Total AREA % = 187900.500

Processed data file: P14242 Raw data file: R14242


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 5.29)
64000.
56000.
48000.
40000.
32000.
.56
3.82 Aldrin
9.58 Endrin
10.71
12.70 DDT
20.68 DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 12:29:28 ON JAN 29, 1989
Method: PACK14 Raw: R14254 Proc: P14254

Report: 1955.00 Channel: 14 EVALB

Sample: EVALB Injected at 12:29:28 ON JAN 29, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/54 Btl: 54

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

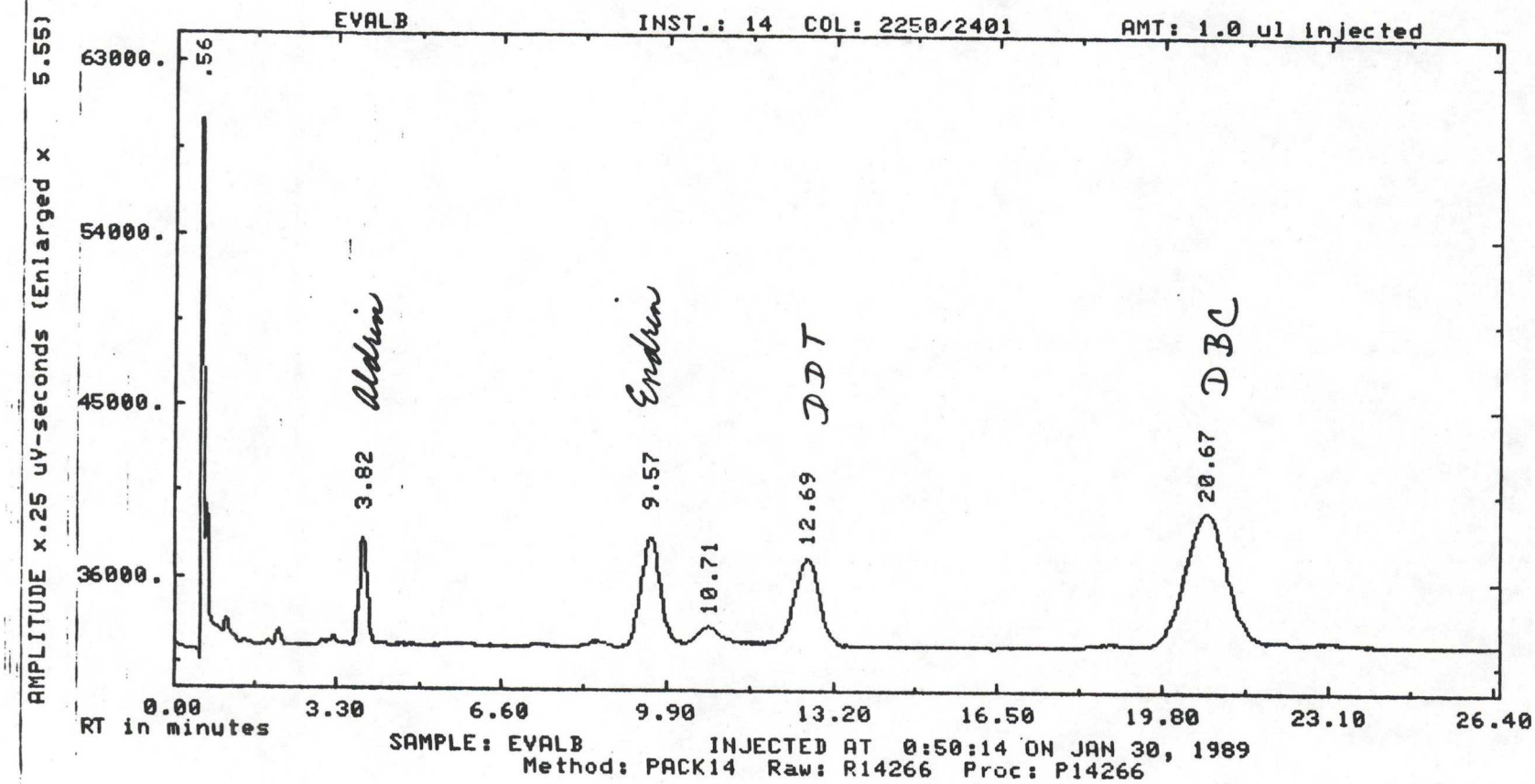
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.56	0.00	.10000E+01	143083. BB	27.660	
3.82	0.00	.10000E+01	29741. BB	5.749	
9.58	0.00	.10000E+01	69328. BB	13.402	
10.71	0.00	.10000E+01	11938. BB	2.308	
12.70	0.00	.10000E+01	69586. BB	13.452	
20.68	0.00	.10000E+01	193617. BB	37.429	

Total Area = 517294. Total AREA % = 193617.500

Processed data file: P14254 Raw data file: R14254


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 5.55)
63000.
54000.
45000.
36000.
.56
3.82
Aldrin
9.57
Endrin
10.71
12.69
DDT
20.67
DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 0:50:14 ON JAN 30, 1989
Method: PACK14 Raw: R14266 Proc: P14266

Report: 1967.00 Channel: 14 EVALB

Sample: EVALB Injected at 0:50:14 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/66 Btl: 66

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

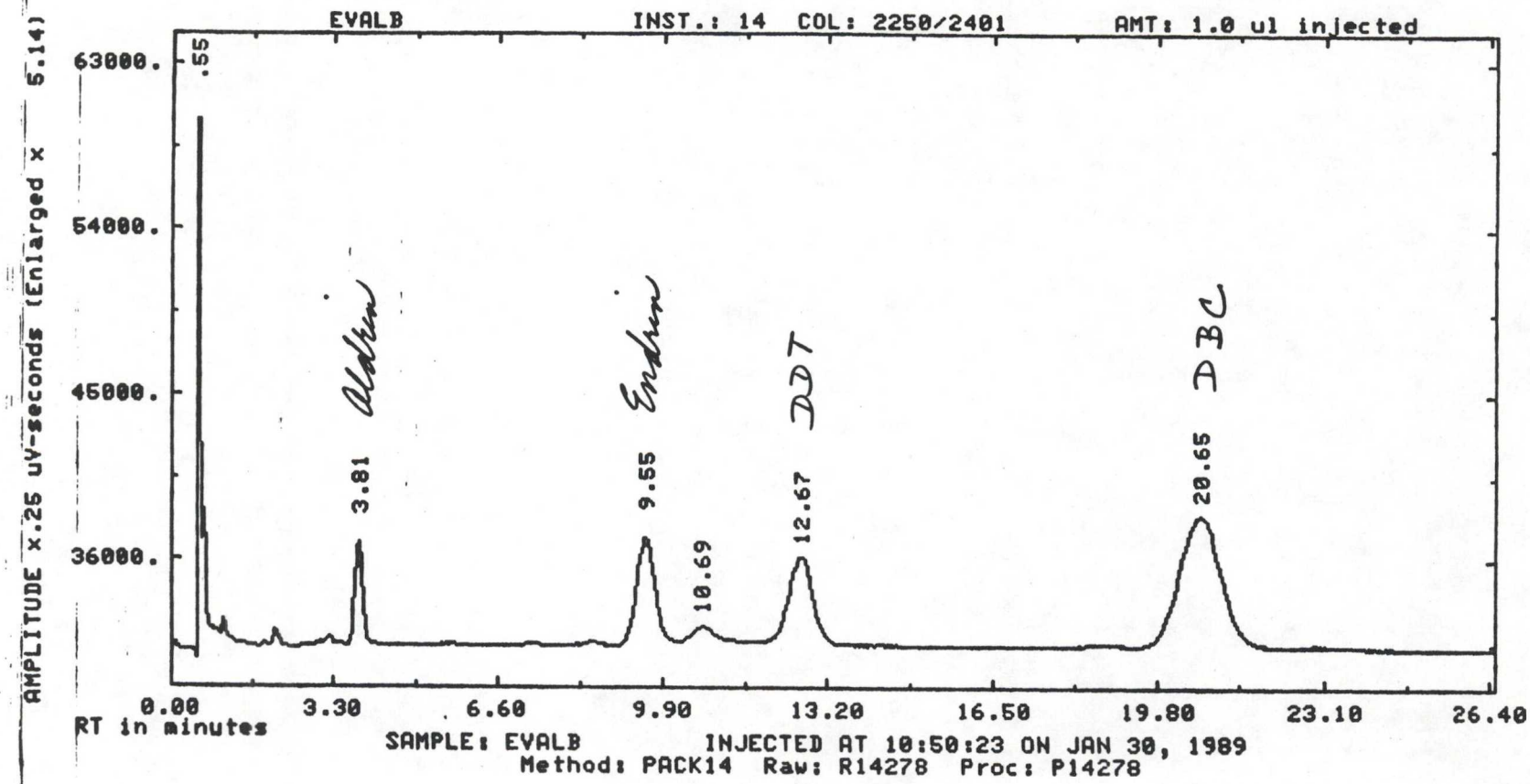
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area	AREA %	Name
.56	0.00	.10000E+01	158127. BB	29.042	
3.82	0.00	.10000E+01	30802. BB	5.657	
9.57	0.00	.10000E+01	70254. BB	12.903	
10.71	0.00	.10000E+01	11597. BB	2.130	
12.69	0.00	.10000E+01	75344. BB	13.838	
20.67	0.00	.10000E+01	198358. BB	36.431	

Total Area = 544483. Total AREA % = 198358.500

Processed data file: P14266 Raw data file: R14266


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 5.14)
63000.
54000.
45000.
36000.
.55
3.81
Aldrin
9.55
Endrin
10.69
12.67
DDT
20.65
DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 10:50:23 ON JAN 30, 1989
Method: PACK14 Raw: R14278 Proc: P14278

Report: 1979.00 Channel: 14 EVALB

Sample: EVALB Injected at 10:50:23 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/78 Btl: 78

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

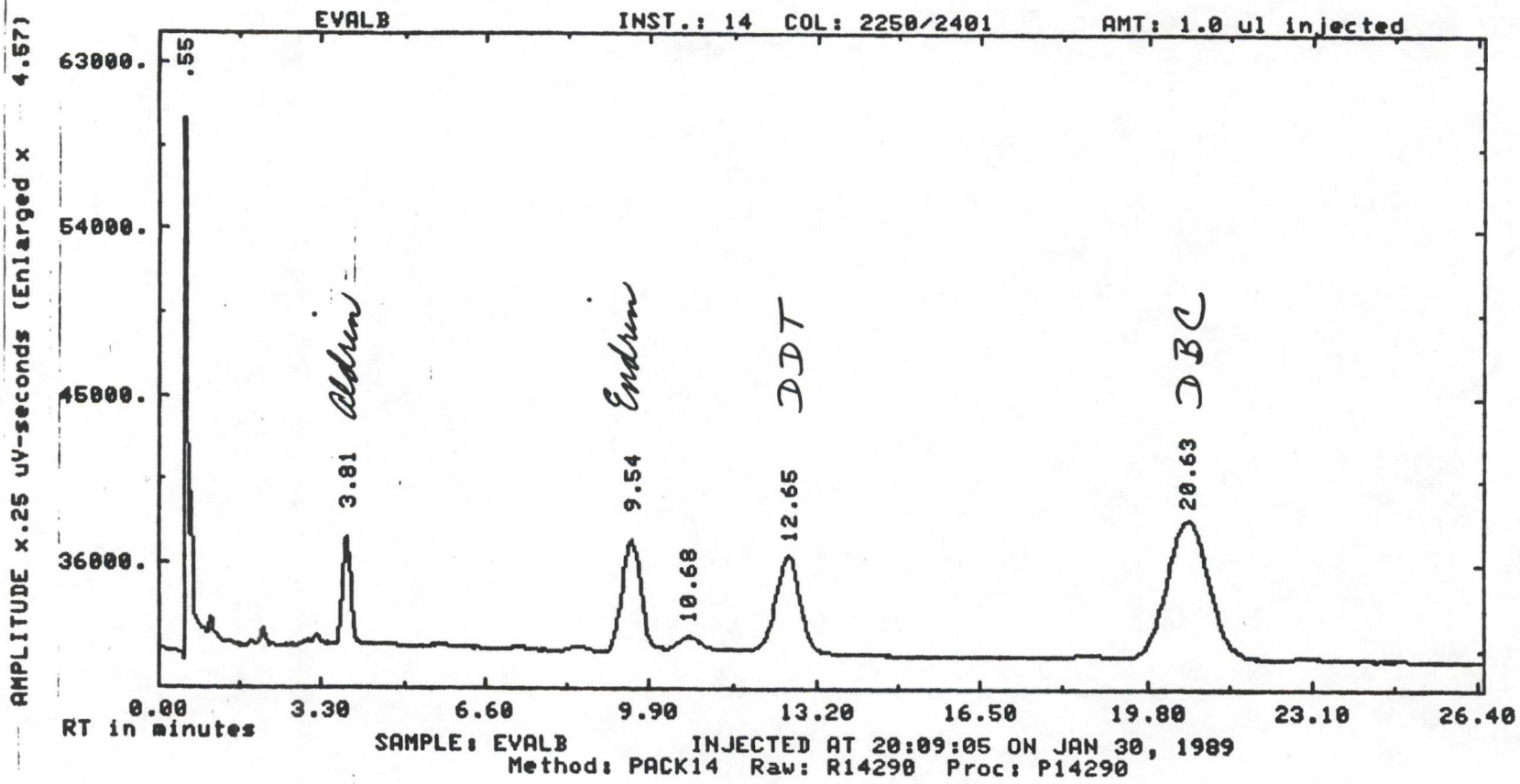
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.525 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	154006.	BS	27.893	
3.81	0.00	.10000E+01	31321.	BB	5.673	
9.55	0.00	.10000E+01	72662.	BB	13.160	
10.69	0.00	.10000E+01	11055.	BB	2.002	
12.67	0.00	.10000E+01	78801.	BB	14.272	
20.65	0.00	.10000E+01	204294.	BB	37.001	

Total Area = 552139. Total AREA % = 204294.500

Processed data file: P14278 Raw data file: R14278


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 4.57)
63000.
54000.
45000.
36000.
.55
3.81
Aldrin
9.54
Endrin
10.68
12.65
DDT
20.63
DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 20:09:05 ON JAN 30, 1989
Method: PACK14 Raw: R14290 Proc: P14290

Report: 1995.00 Channel: 14 EVALB

Sample: EVALB Injected at 20:09:05 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/90 Btl: 90

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

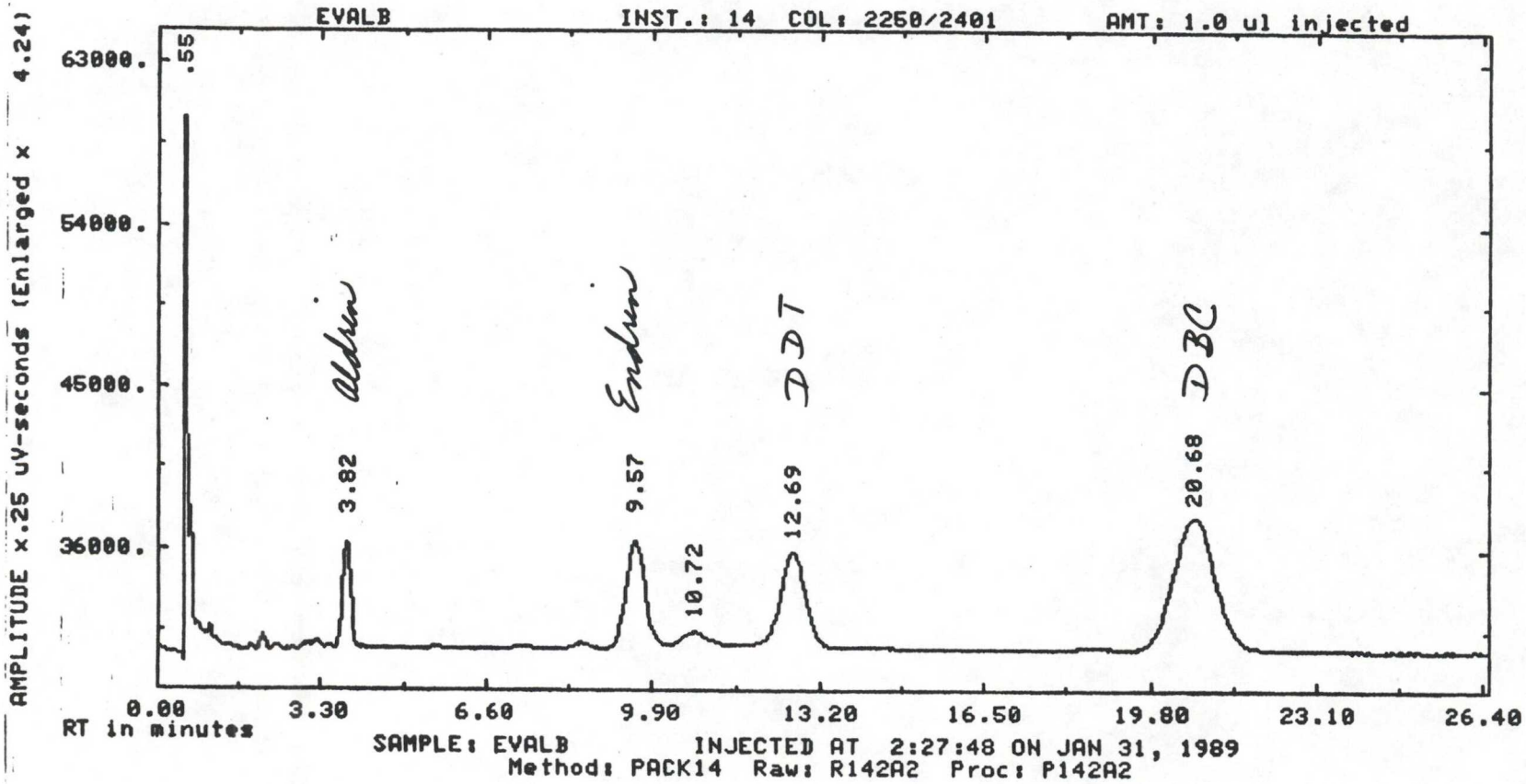
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.55	0.00	.10000E+01	139924. BB	25.276	
3.81	0.00	.10000E+01	32203. BB	5.817	
9.54	0.00	.10000E+01	74648. BB	13.484	
10.68	0.00	.10000E+01	9655. BB	1.744	
12.65	0.00	.10000E+01	86170. BB	15.566	
20.63	0.00	.10000E+01	210994. BB	38.114	

Total Area = 553594. Total AREA % = 210994.500

Processed data file: P14290 Raw data file: R14290


EVALB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 4.24)
63000.
54000.
45000.
36000.
.55
3.82
Aldrin
9.57
Endrin
10.72
12.69
DDT
20.68
DBC
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: EVALB
INJECTED AT 2:27:48 ON JAN 31, 1989
Method: PACK14 Raw: R142A2 Proc: P142A2

Report: 2008.00 Channel: 14 EVALB

Sample: EVALB Injected at 2:27:48 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/** Btl: 2

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.55	0.00	.10000E+01	134984. BB	24.740	
3.82	0.00	.10000E+01	32236. BB	5.908	
9.57	0.00	.10000E+01	73044. BB	13.387	
10.72	0.00	.10000E+01	9483. BB	1.738	
12.69	0.00	.10000E+01	87126. BB	15.968	
20.68	0.00	.10000E+01	208746. BB	38.259	

Total Area = 545620. Total AREA % = 208746.000

Processed data file: P142A2 Raw data file: R142A2

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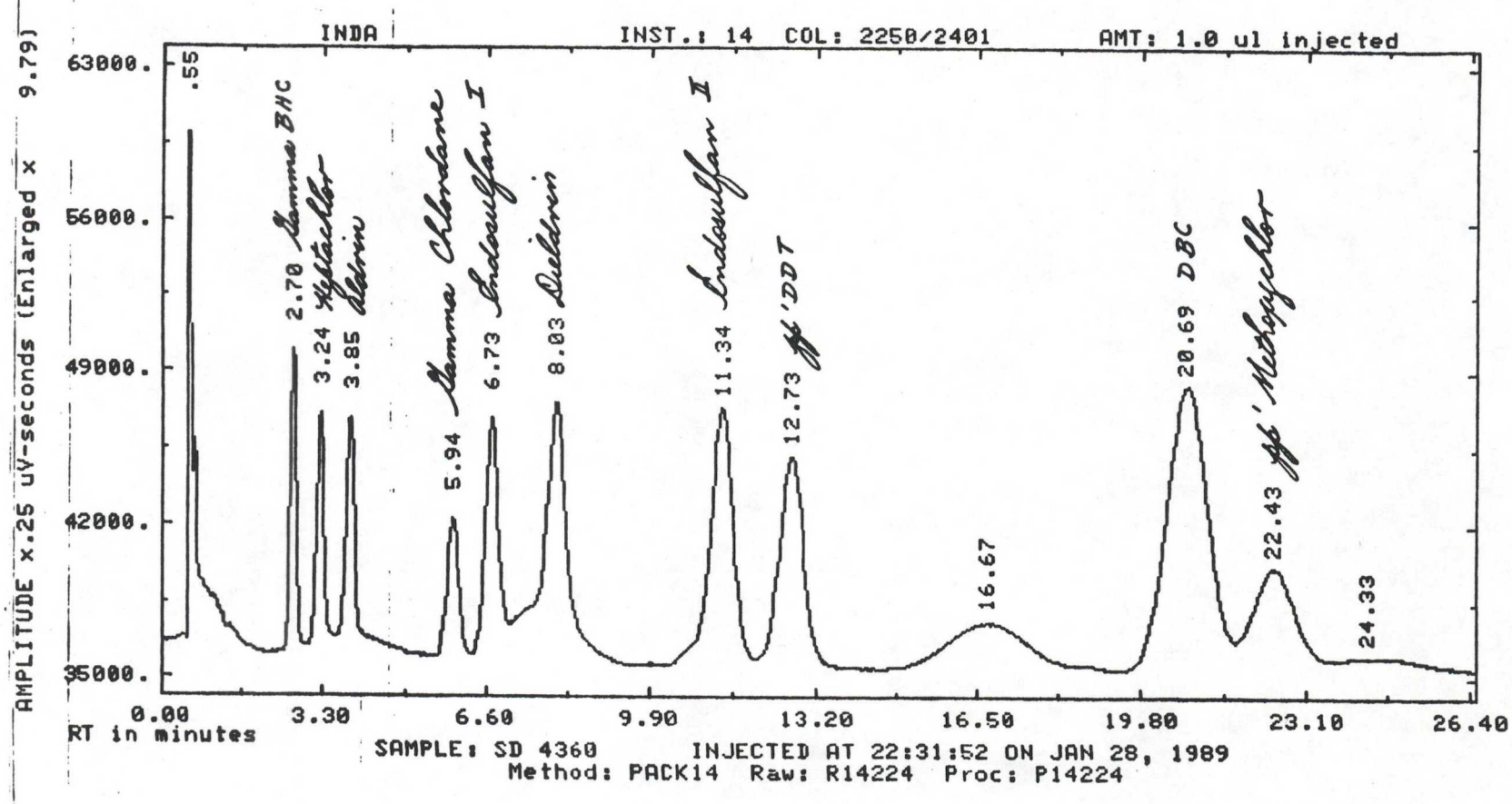
SAMPLE DATA PACKAGE



Report: 1925.00 Channel: 14 INDA

Sample: SD 4360 Injected at 22:31:52 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/24 Btl: 24

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

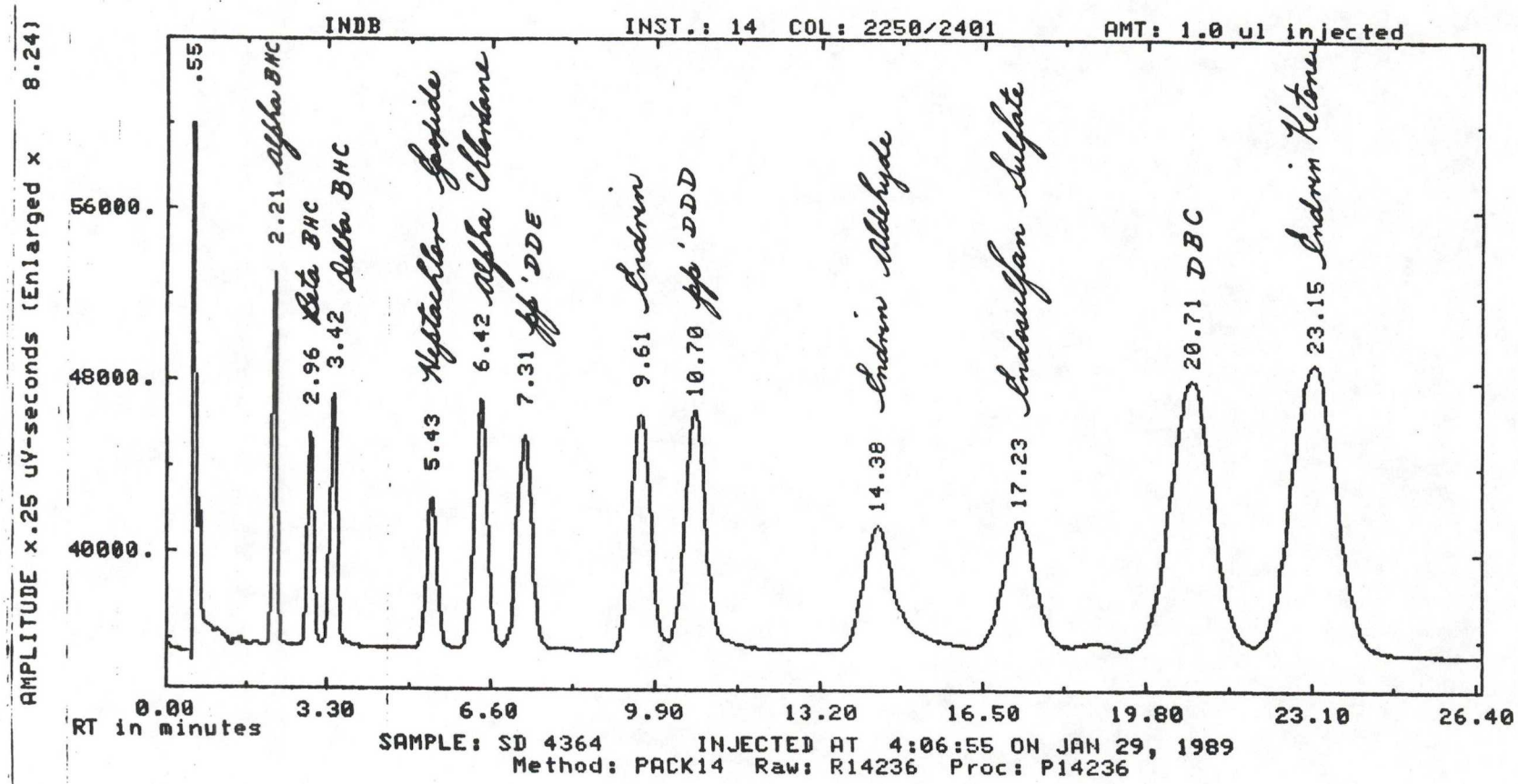
Ended not on baseline

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	224604.	BS	14.373	
2.70	0.00	.10000E+01	54450.	BB	3.484	
3.24	0.00	.10000E+01	50331.	BB	3.221	
3.85	0.00	.10000E+01	58871.	BB	3.767	
5.94	0.00	.10000E+01	49443.	BB	3.164	
6.73	0.00	.10000E+01	88701.	BB	5.676	
8.03	0.00	.10000E+01	146233.	BB	9.358	
11.34	0.00	.10000E+01	180171.	BB	11.529	
12.73	0.00	.10000E+01	152913.	BB	9.785	
16.67	0.00	.10000E+01	121627.	BB	7.783	
20.69	0.00	.10000E+01	332385.	BB	21.269	
22.43	0.00	.10000E+01	89600.	BB	5.734	
24.33	0.00	.10000E+01	13405.	BF	.858	

Total Area = 1562736. Total AREA % = 13405.000

Processed data file: P14224 Raw data file: R14224

SAMPLE DATA PACKAGE



Report: 1937.00 Channel: 14 INDB

Sample: SD 4364 Injected at 4:06:55 ON JAN 29, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/36 Btl: 36

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

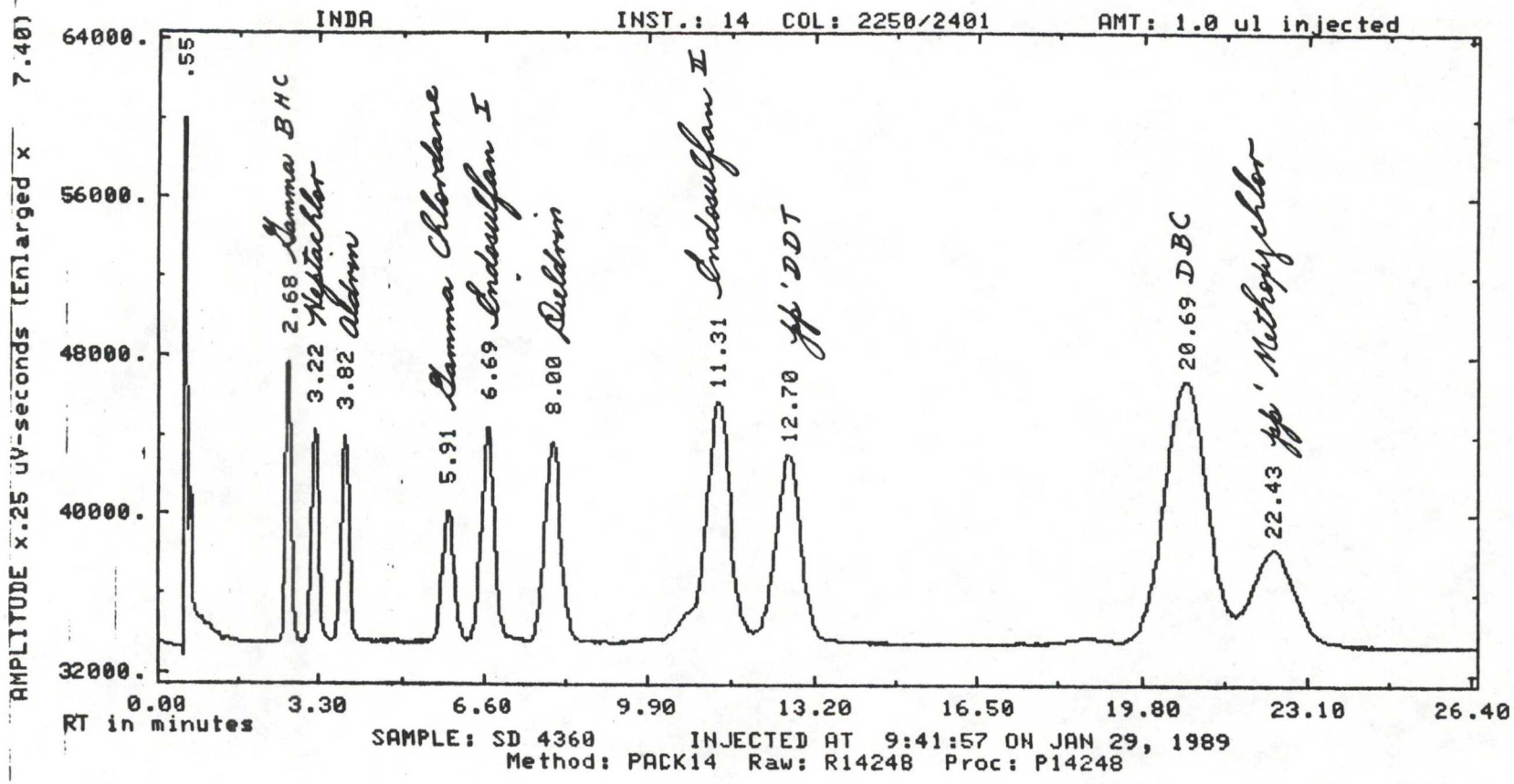
Ended not on baseline

RT	ITM	Factor	Area	AREA %	Name
.55	0.00	.10000E+01	193193. BS	10.189	
2.21	0.00	.10000E+01	62835. BB	3.314	
2.96	0.00	.10000E+01	41231. BB	2.175	
3.42	0.00	.10000E+01	55329. BB	2.918	
5.43	0.00	.10000E+01	51672. BB	2.725	
6.42	0.00	.10000E+01	101434. BB	5.350	
7.31	0.00	.10000E+01	96989. BB	5.115	
9.61	0.00	.10000E+01	134781. BB	7.108	
10.70	0.00	.10000E+01	151630. BB	7.997	
14.38	0.00	.10000E+01	130185. BB	6.866	
17.23	0.00	.10000E+01	125893. BB	6.640	
20.71	0.00	.10000E+01	355453. BB	18.747	
23.15	0.00	.10000E+01	395439. BF	20.856	

Total Area = 1896067. Total AREA % = 395439.000

Processed data file: P14236 Raw data file: R14236

SAMPLE DATA PACKAGE



Report: 1949.00 Channel: 14 INDA

Sample: SD 4360 Injected at 9:41:57 ON JAN 29, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/48 Btl: 48

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

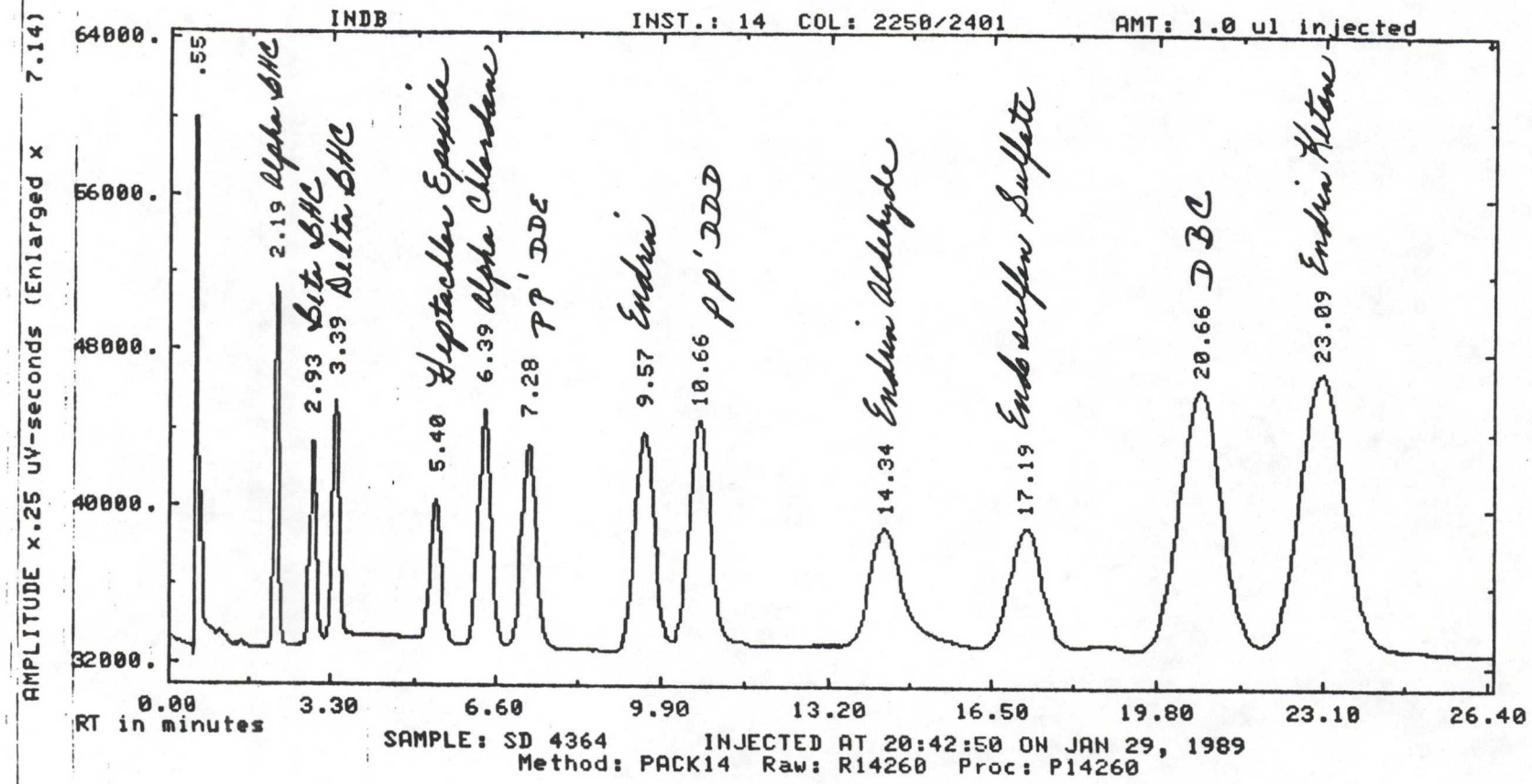
Actual run time: 26.508 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	193275.	BS	14.129	
2.68	0.00	.10000E+01	58608.	BB	4.284	
3.22	0.00	.10000E+01	52718.	BB	3.854	
3.82	0.00	.10000E+01	58931.	BB	4.308	
5.91	0.00	.10000E+01	52721.	BB	3.854	
6.69	0.00	.10000E+01	100038.	BB	7.313	
8.00	0.00	.10000E+01	110775.	BB	8.098	
11.31	0.00	.10000E+01	191934.	BB	14.031	
12.70	0.00	.10000E+01	145335.	BB	10.625	
20.69	0.00	.10000E+01	341009.	BB	24.929	
22.43	0.00	.10000E+01	62581.	BB	4.575	

Total Area = 1367925. Total AREA % = 62581.000

Processed data file: P14248 Raw data file: R14248

SAMPLE DATA PACKAGE



SAMPLE: SD 4364 INJECTED AT 20:42:50 ON JAN 29, 1989
Method: PACK14 Raw: R14260 Proc: P14260

Report: 1961.00 Channel: 14 INDB

Sample: SD 4364 Injected at 20:42:50 ON JAN 29, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/60 Btl: 60

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

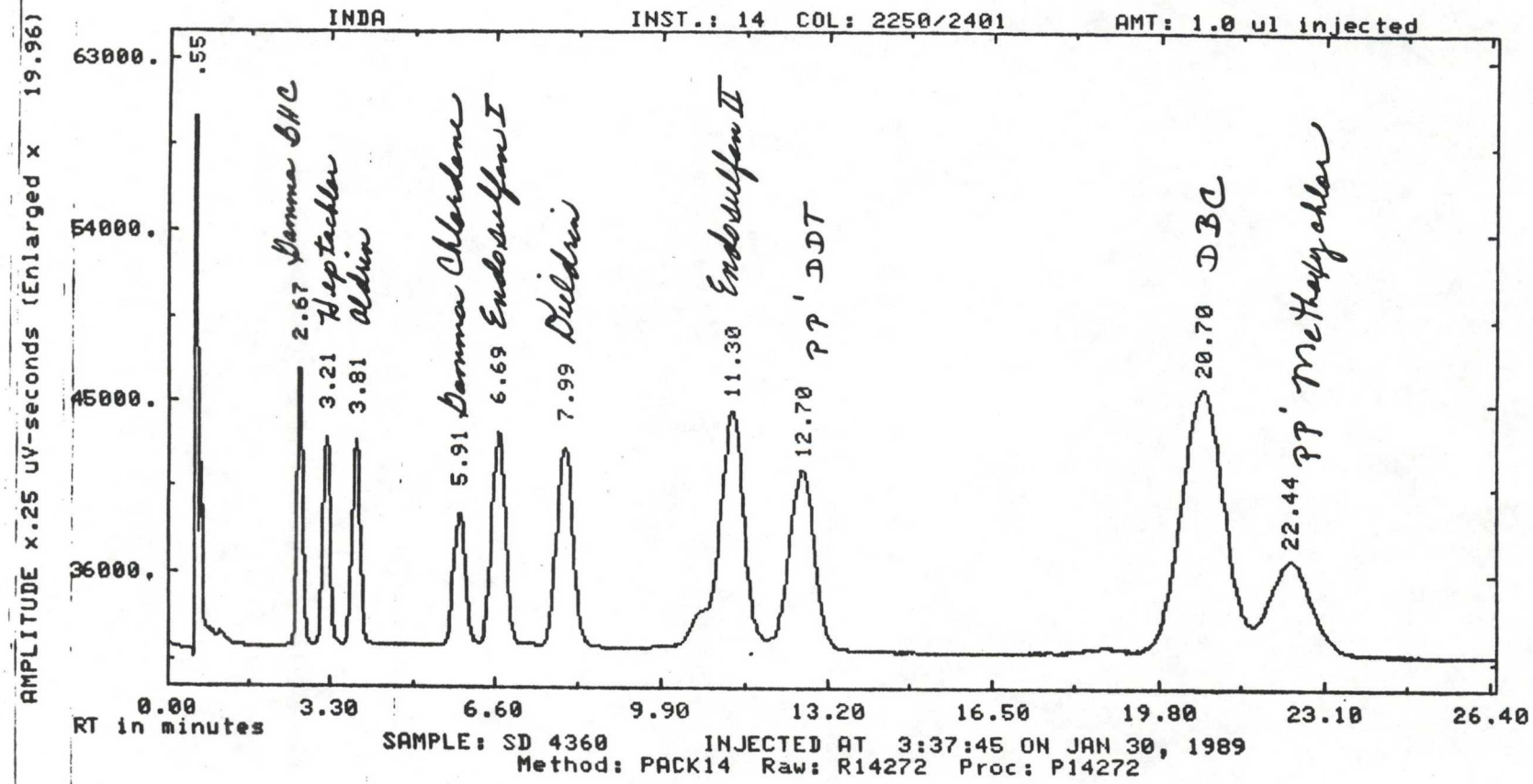
Actual run time: 26.517 minutes

Ended not on baseline

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	197146.	BS	9.745	
2.19	0.00	.10000E+01	66345.	BB	3.280	
2.93	0.00	.10000E+01	43604.	BB	2.155	
3.39	0.00	.10000E+01	58991.	BB	2.916	
5.40	0.00	.10000E+01	54381.	BB	2.688	
6.39	0.00	.10000E+01	107849.	BB	5.331	
7.28	0.00	.10000E+01	102165.	BB	5.050	
9.57	0.00	.10000E+01	138466.	BB	6.845	
10.66	0.00	.10000E+01	162771.	BB	8.046	
14.34	0.00	.10000E+01	145521.	BB	7.194	
17.19	0.00	.10000E+01	133966.	BB	6.622	
20.66	0.00	.10000E+01	379665.	BB	18.768	
23.09	0.00	.10000E+01	432073.	BF	21.359	

Total Area = 2022945. Total AREA % = 432073.000

Processed data file: P14260 Raw data file: R14260



SAMPLE DATA PACKAGE

Report: 1973.00 Channel: 14 INDA

Sample: SD 4360 Injected at 3:37:45 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/72 Btl: 72

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

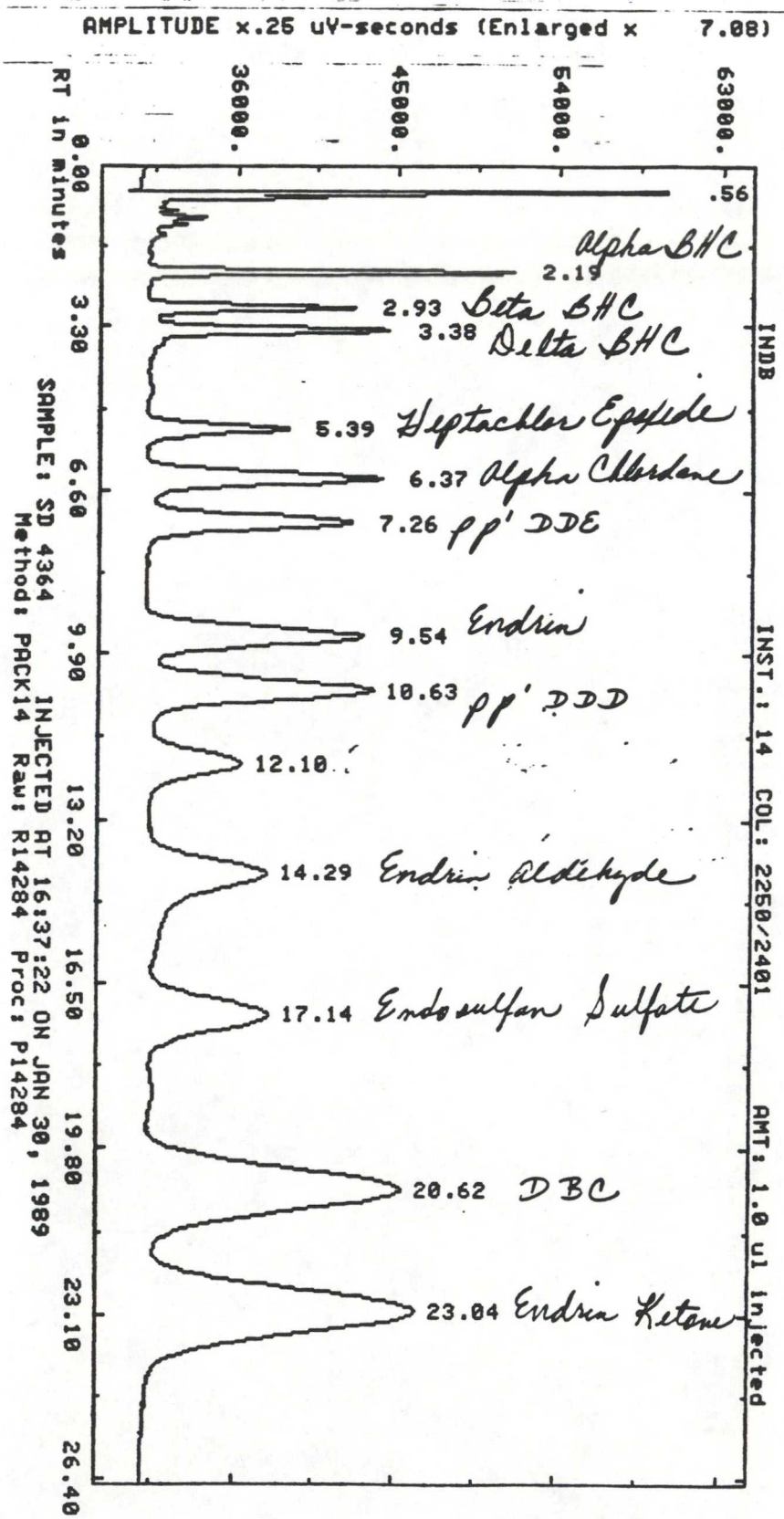
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.55	0.00	.10000E+01	473469. BS	27.815	
2.67	0.00	.10000E+01	60658. BB	3.563	
3.21	0.00	.10000E+01	53642. BB	3.151	
3.81	0.00	.10000E+01	60998. BB	3.583	
5.91	0.00	.10000E+01	54394. BB	3.195	
6.69	0.00	.10000E+01	103255. BB	6.066	
7.99	0.00	.10000E+01	114609. BB	6.733	
11.30	0.00	.10000E+01	208422. BB	12.244	
12.70	0.00	.10000E+01	145634. BB	8.555	
20.70	0.00	.10000E+01	356873. BB	20.965	
22.44	0.00	.10000E+01	70278. BB	4.129	

Total Area = 1702234. Total AREA % = 70278.500

Processed data file: P14272 Raw data file: R14272


AMPLITUDE x.25 uV-seconds (Enlarged x 7.08)
63000.
54000.
45000.
36000.
.56
Alpha BHC
2.19
2.93 Beta BHC
3.38 Delta BHC
5.39 Heptachlor Epoxide
6.37 Alpha Chlordane
7.26 pp' DDE
9.54 Endrin
10.63 pp' DDD
12.10
14.29 Endrin Aldehyde
17.14 Endosulfan Sulfate
20.62 DBC
23.04 Endrin Ketone
INDB
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
RT in minutes
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
SAMPLE: SD 4364
Method: PACK14 Raw: R14284 Proc: P14284
INJECTED AT 16:37:22 ON JAN 30, 1989

Report: 1989.11 Channel: 14 INDB

Sample: SD 4364 Injected at 16:37:22 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/84 Btl: 84

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

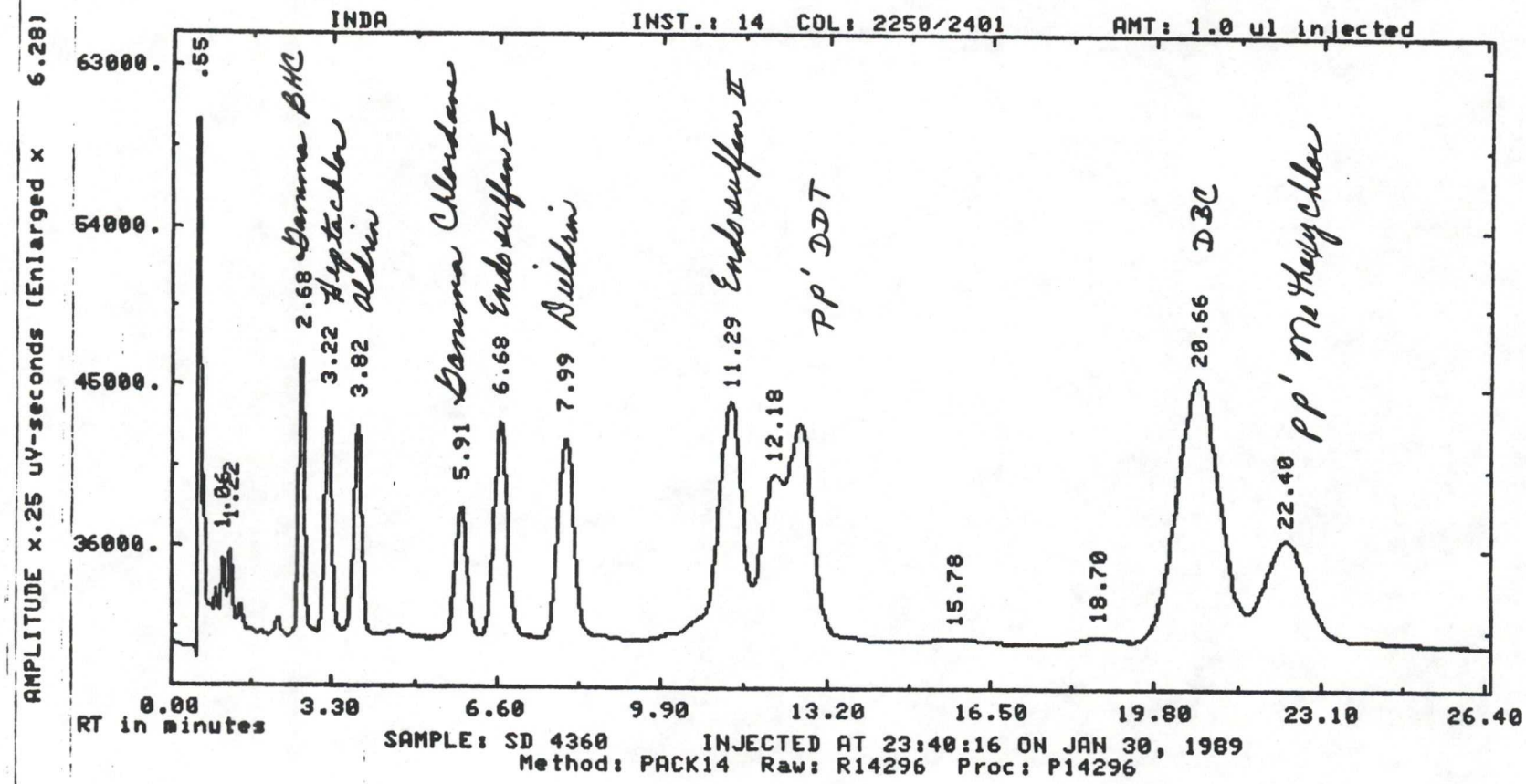
Actual run time: 26.517 minutes

Ended not on baseline

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	205213.	BS	9.327	
2.19	0.00	.10000E+01	72859.	BB	3.311	
2.93	0.00	.10000E+01	46513.	BB	2.114	
3.38	0.00	.10000E+01	58545.	BB	2.661	
5.39	0.00	.10000E+01	58857.	BB	2.675	
6.37	0.00	.10000E+01	113097.	BB	5.140	
7.26	0.00	.10000E+01	106695.	BB	4.849	
9.54	0.00	.10000E+01	145283.	BB	6.603	
10.63	0.00	.10000E+01	167883.	BB	7.630	
12.10	0.00	.10000E+01	76862.	BB	3.493	
14.29	0.00	.10000E+01	152463.	BB	6.929	
17.14	0.00	.10000E+01	140134.	BB	6.369	
20.62	0.00	.10000E+01	403416.	BB	18.335	
23.04	0.00	.10000E+01	452390.	BF	20.561	

Total Area = 2200211. Total AREA % = 452390.000

Processed data file: P14284 Raw data file: R14284



SAMPLE DATA PACKAGE

Report: 2002.00 Channel: 14 INDA

Sample: SD 4360 Injected at 23:40:16 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/96 Btl: 96

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

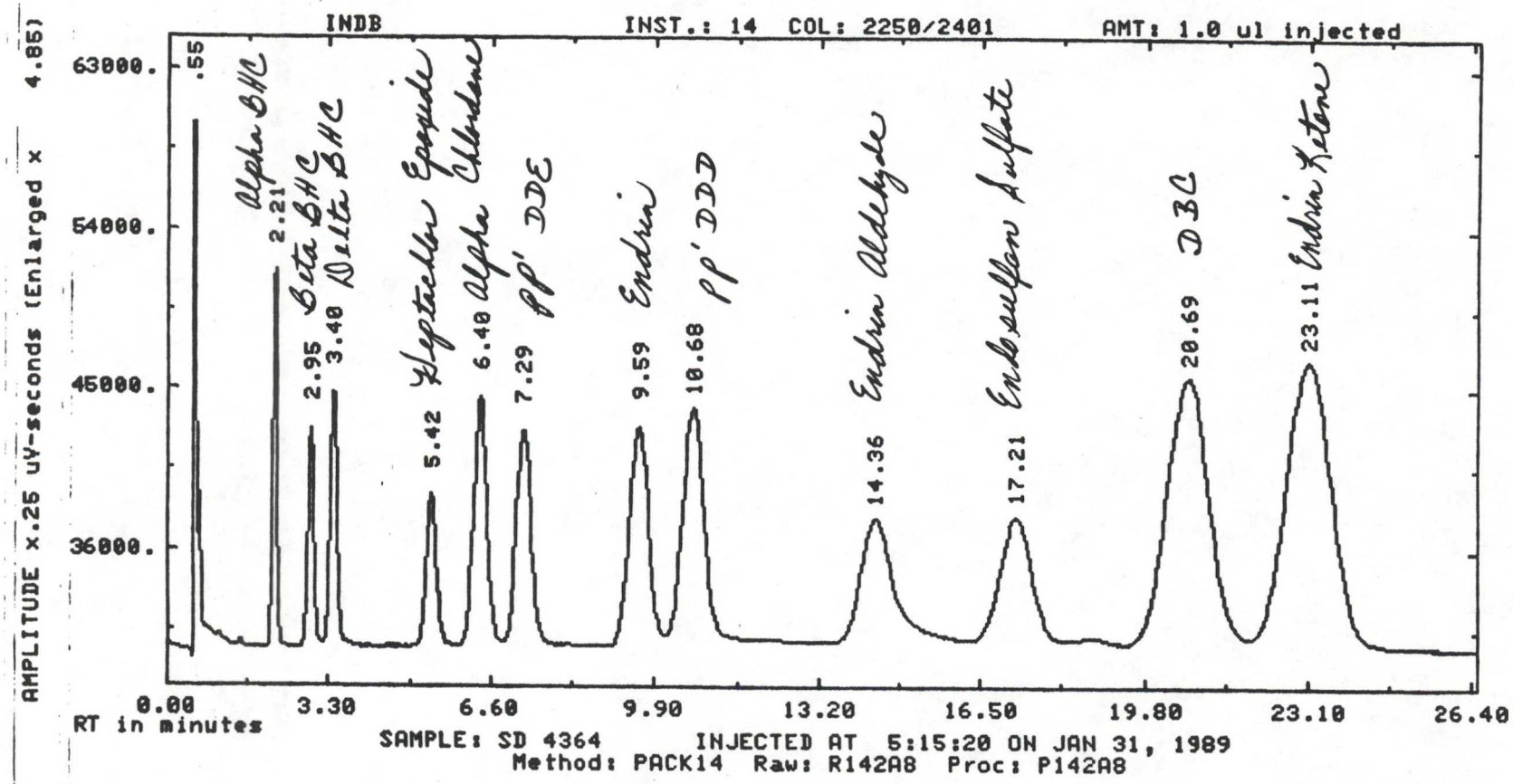
Reading(s) missed
Ended not on baseline

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	178845.	BS	14.017	
1.06	0.00	.10000E+01	5582.	BB	.438	
1.22	0.00	.10000E+01	7743.	BB	.607	
2.68	0.00	.10000E+01	62980.	BB	4.936	
3.22	0.00	.10000E+01	59947.	BB	4.699	
3.82	0.00	.10000E+01	67363.	BB	5.280	
5.91	0.00	.10000E+01	59663.	BB	4.676	
6.68	0.00	.10000E+01	112616.	BB	8.827	
7.99	0.00	.10000E+01	125758.	BB	9.857	
11.29	0.00	.10000E+01	120203.	BB	9.421	
12.18	0.00	.10000E+01	19495.	BB	1.528	
15.78	0.00	.10000E+01	8123.	BB	.637	
18.70	0.00	.10000E+01	5325.	BB	.417	
20.66	0.00	.10000E+01	378010.	BB	29.628	
22.40	0.00	.10000E+01	64215.	BF	5.033	

Total Area = 1275868. Total AREA % = 64215.000

Processed data file: P14296 Raw data file: R14296

SAMPLE DATA PACKAGE



Report: 2014.00 Channel: 14 INDB

Sample: SD 4364 Injected at 5:15:20 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/** Btl: 8

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

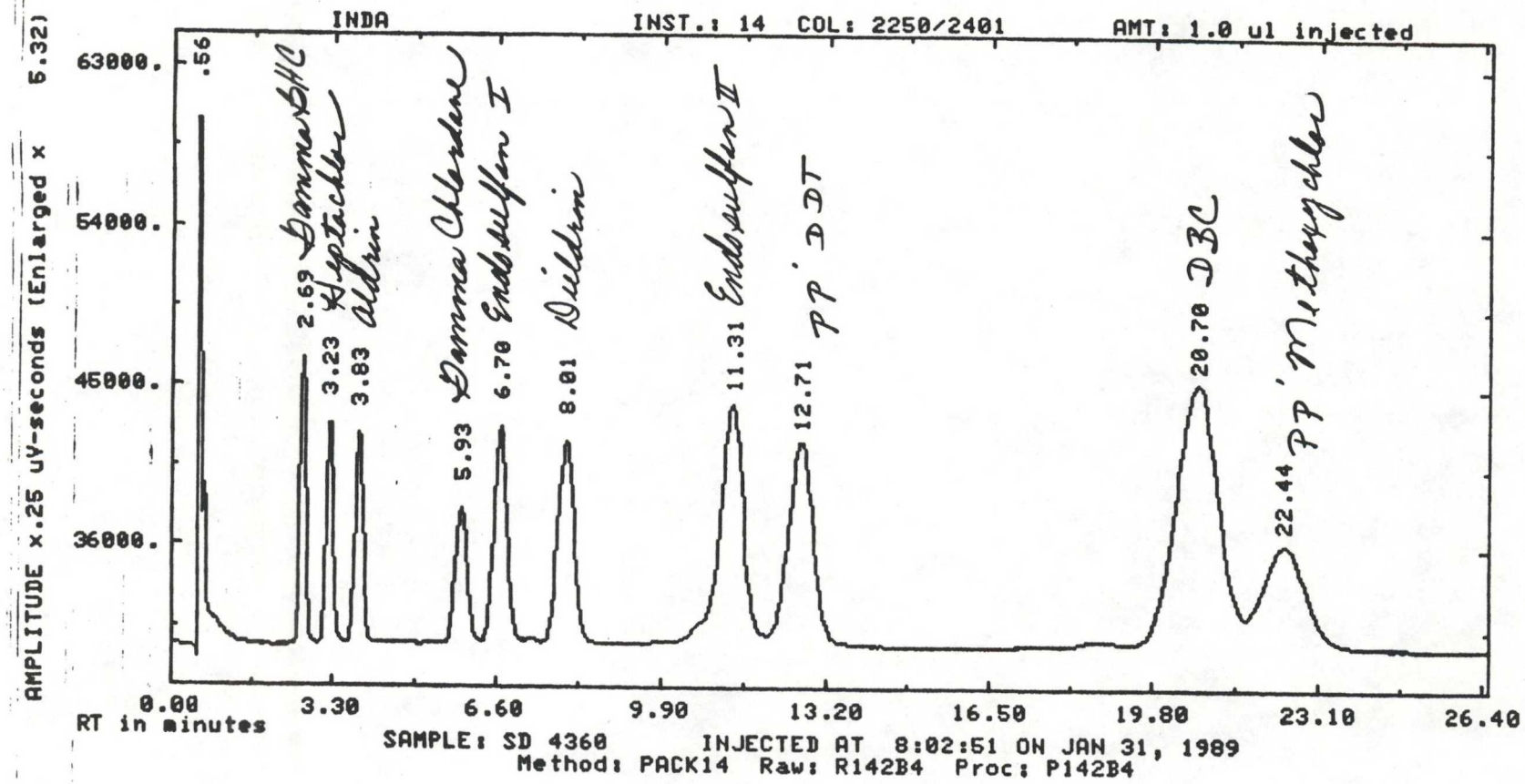
Actual run time: 26.508 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	154380.	BS	7.056	
2.21	0.00	.10000E+01	74998.	BB	3.428	
2.95	0.00	.10000E+01	50096.	BB	2.290	
3.40	0.00	.10000E+01	66316.	BB	3.031	
5.42	0.00	.10000E+01	62262.	BB	2.846	
6.40	0.00	.10000E+01	121915.	BB	5.572	
7.29	0.00	.10000E+01	116795.	BB	5.338	
9.59	0.00	.10000E+01	150386.	BB	6.873	
10.68	0.00	.10000E+01	181895.	BB	8.313	
14.36	0.00	.10000E+01	161253.	BB	7.370	
17.21	0.00	.10000E+01	149256.	BB	6.822	
20.69	0.00	.10000E+01	423371.	BB	19.350	
23.11	0.00	.10000E+01	475024.	BB	21.711	

Total Area = 2187949. Total AREA % = 475024.500

Processed data file: P142A8 Raw data file: R142A8

SAMPLE DATA PACKAGE



Report: 2020.00 Channel: 14 INDA

Sample: SD 4360 Injected at 8:02:51 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/** Btl: 14

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

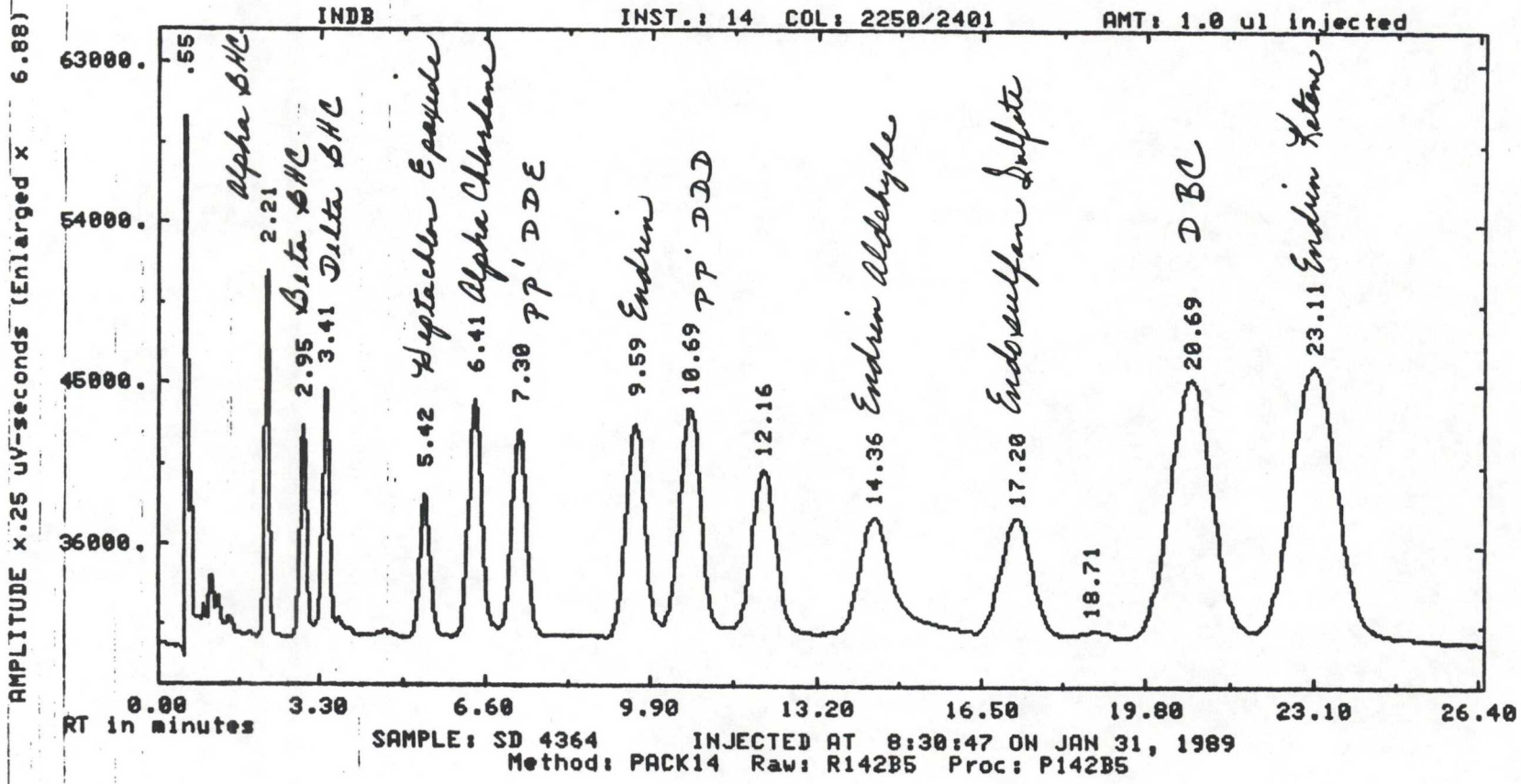
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	159776.	BS	10.717	
2.69	0.00	.10000E+01	64695.	BB	4.339	
3.23	0.00	.10000E+01	59101.	BB	3.964	
3.83	0.00	.10000E+01	65320.	BB	4.381	
5.93	0.00	.10000E+01	59241.	BB	3.974	
6.70	0.00	.10000E+01	111373.	BB	7.470	
8.01	0.00	.10000E+01	122498.	BB	8.217	
11.31	0.00	.10000E+01	209656.	BB	14.063	
12.71	0.00	.10000E+01	178383.	BB	11.965	
20.70	0.00	.10000E+01	377206.	BB	25.301	
22.44	0.00	.10000E+01	83615.	BB	5.609	

Total Area = 1490866. Total AREA % = 83615.500

Processed data file: P142B4 Raw data file: R142B4



SAMPLE DATA PACKAGE

Report: 2021.00 Channel: 14 INDB

Sample: SD 4364 Injected at 8:30:47 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/** Btl: 15

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

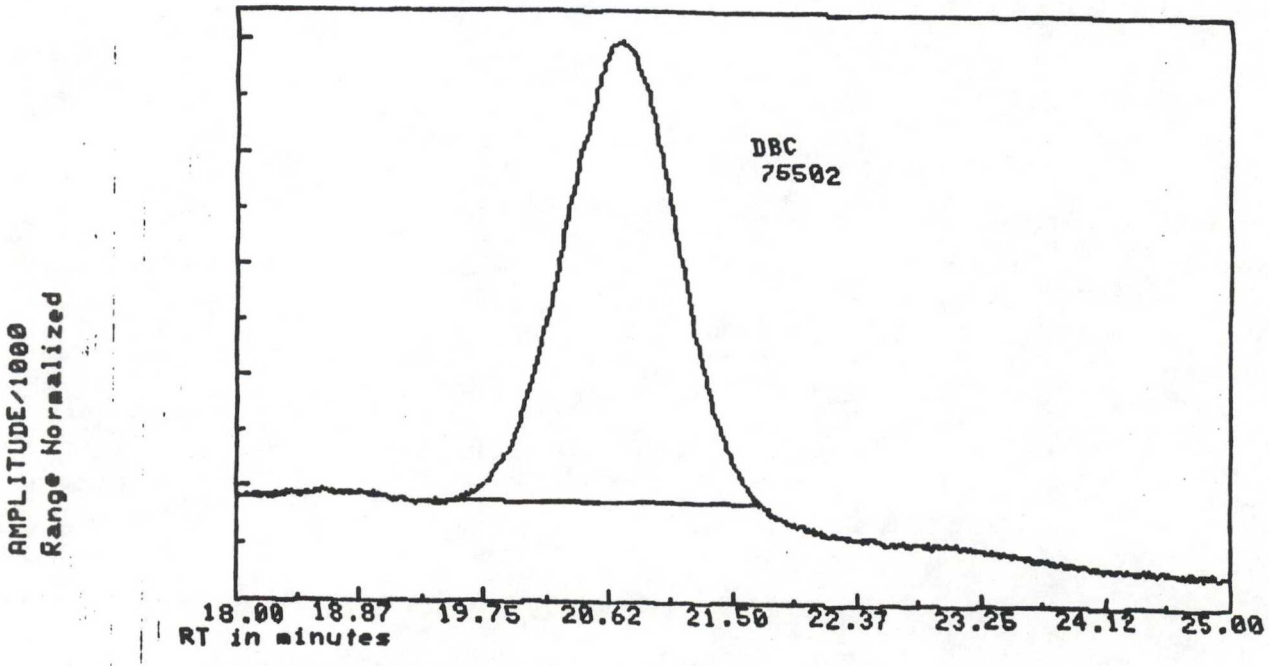
Actual run time: 26.517 minutes

Ended not on baseline

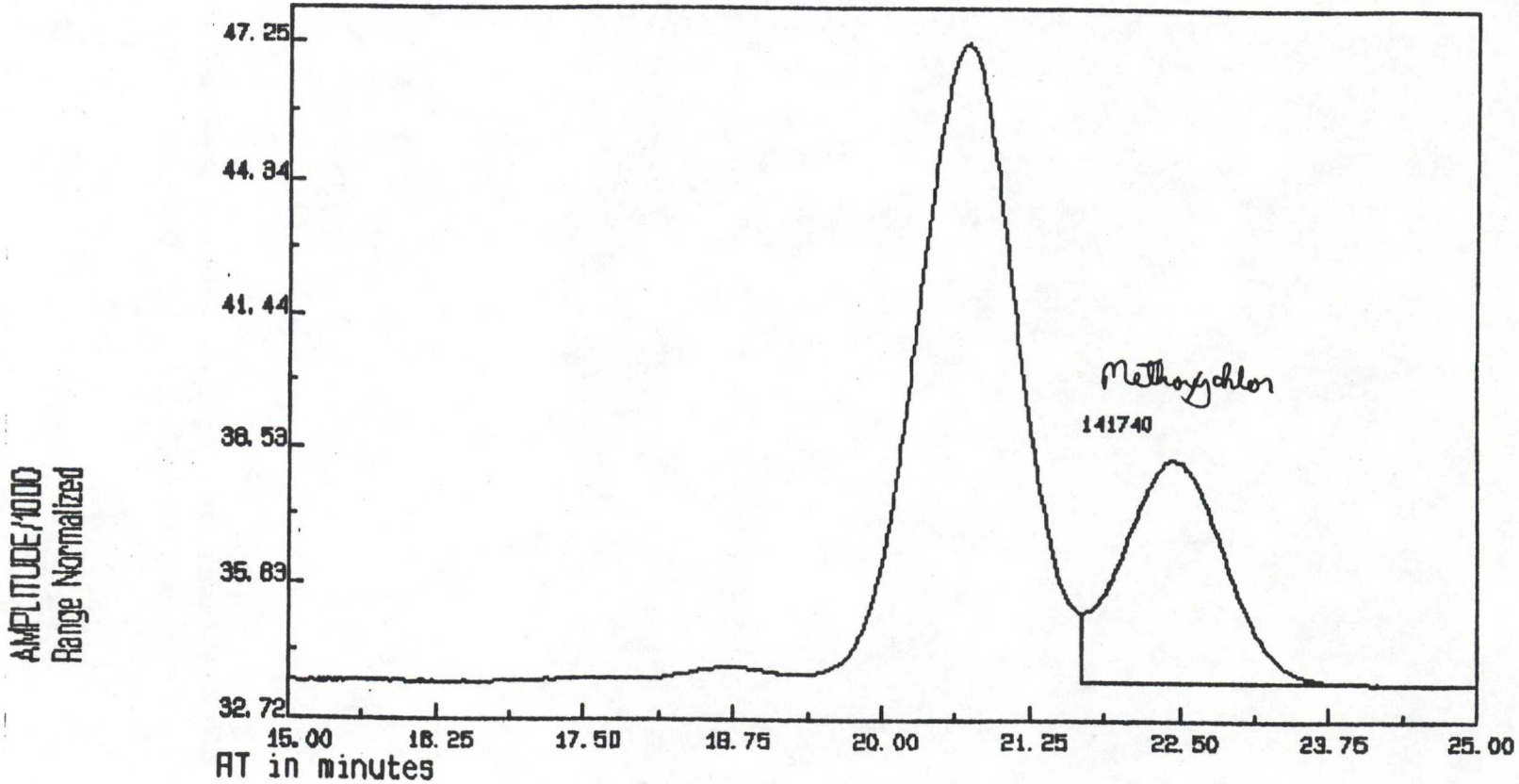
RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	202352.	BS	8.838	
2.21	0.00	.10000E+01	73995.	BB	3.232	
2.95	0.00	.10000E+01	47117.	BB	2.058	
3.41	0.00	.10000E+01	59344.	BB	2.592	
5.42	0.00	.10000E+01	59434.	BB	2.596	
6.41	0.00	.10000E+01	114425.	BB	4.998	
7.30	0.00	.10000E+01	107485.	BB	4.694	
9.59	0.00	.10000E+01	144384.	BB	6.306	
10.69	0.00	.10000E+01	169251.	BB	7.392	
12.16	0.00	.10000E+01	142965.	BB	6.244	
14.36	0.00	.10000E+01	154349.	BB	6.741	
17.20	0.00	.10000E+01	139766.	BB	6.104	
18.71	0.00	.10000E+01	5111.	BB	.223	
20.69	0.00	.10000E+01	408682.	BB	17.849	
23.11	0.00	.10000E+01	460956.	BF	20.132	

Total Area = 2289616. Total AREA % = 460956.000

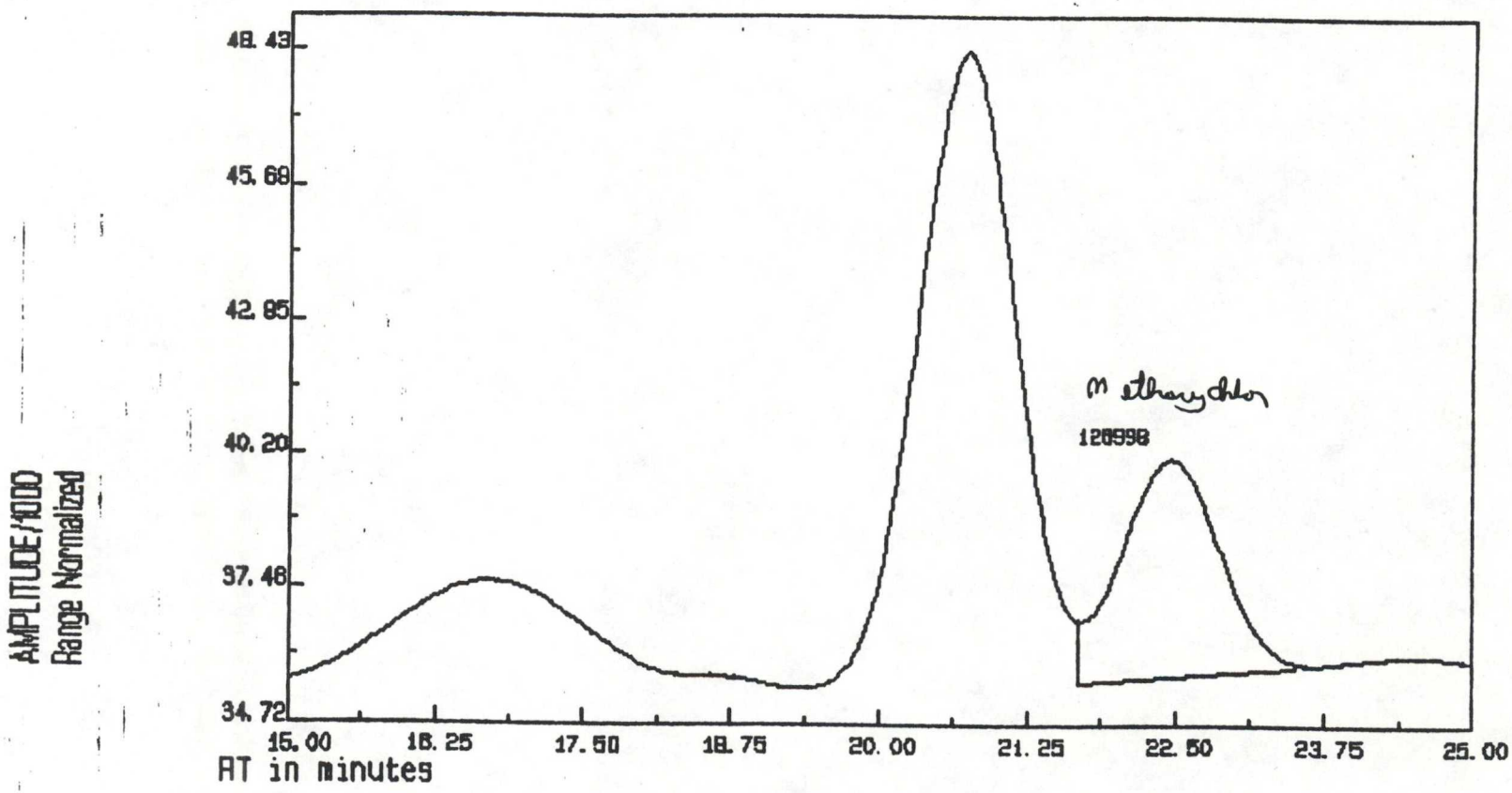
Processed data file: P142B5 Raw data file: R142B5



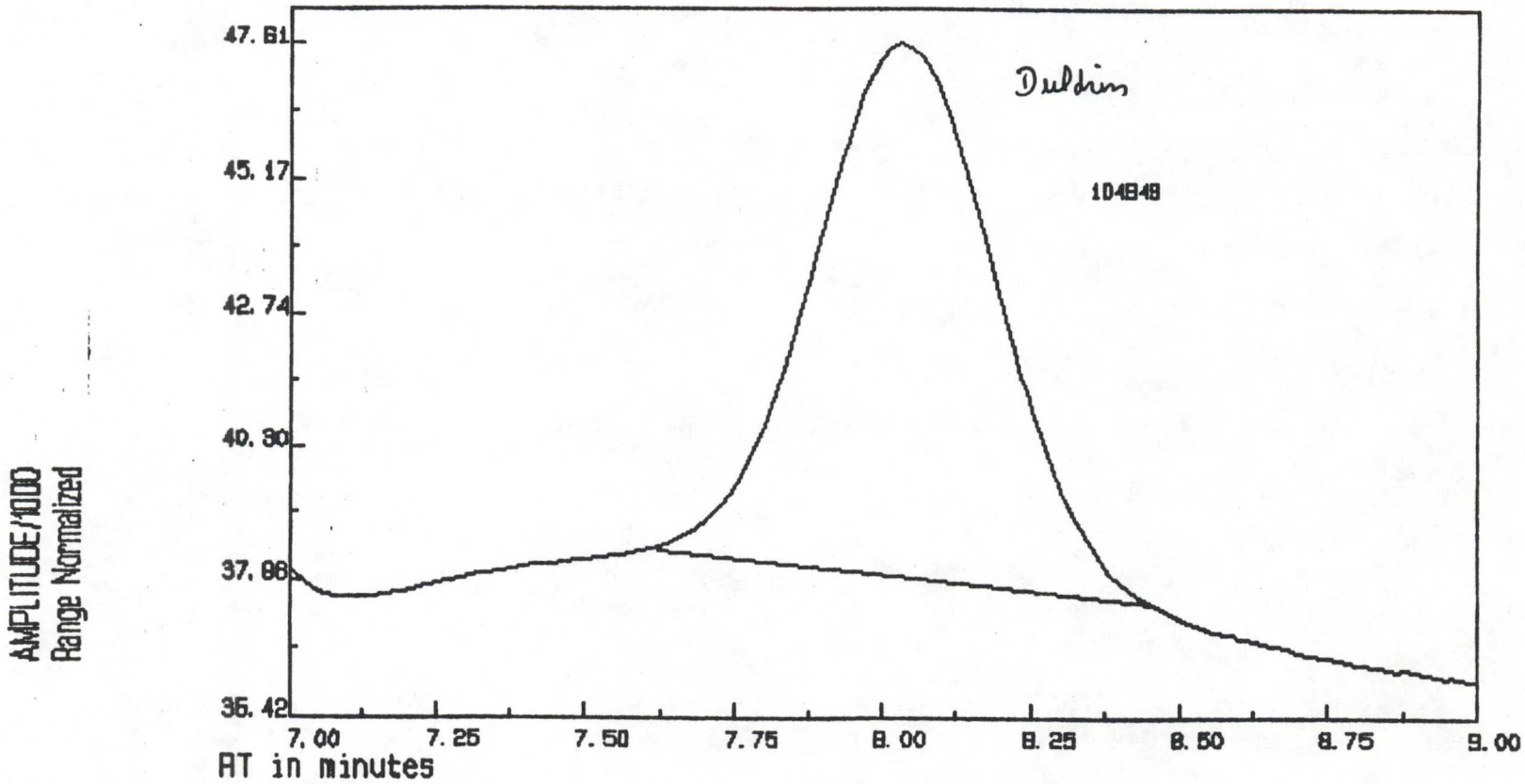
SAMPLE: EVALA INJECTED AT 9:57:13 ON JAN 28, 1989
Meth: PACK14 Raw: R14201 Proc: P14201



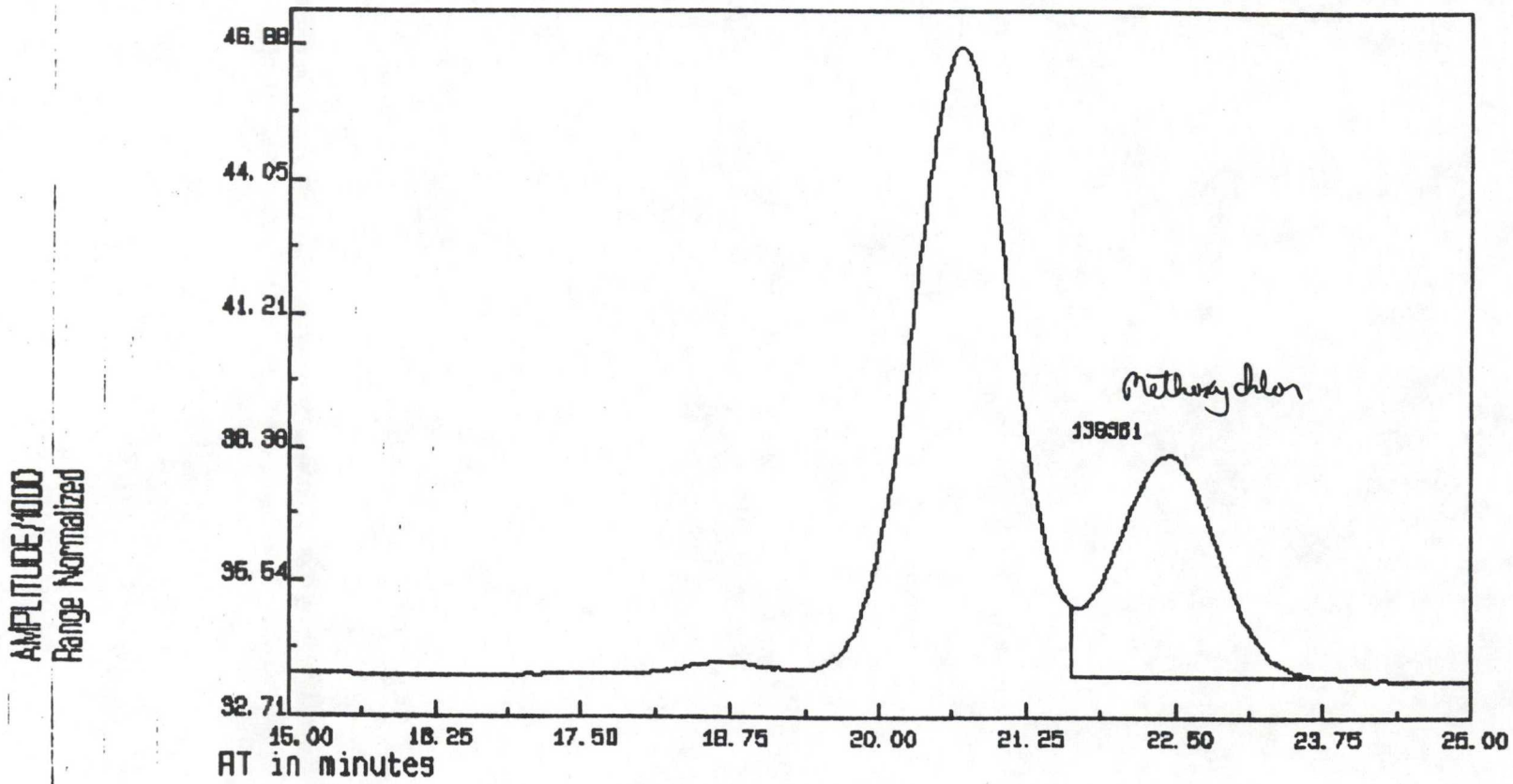
SAMPLE: SD 4360 INJECTED AT 13:13:28 ON JAN 26, 1989
Meth: PACK14 Raw: R14204 Proc: P14204



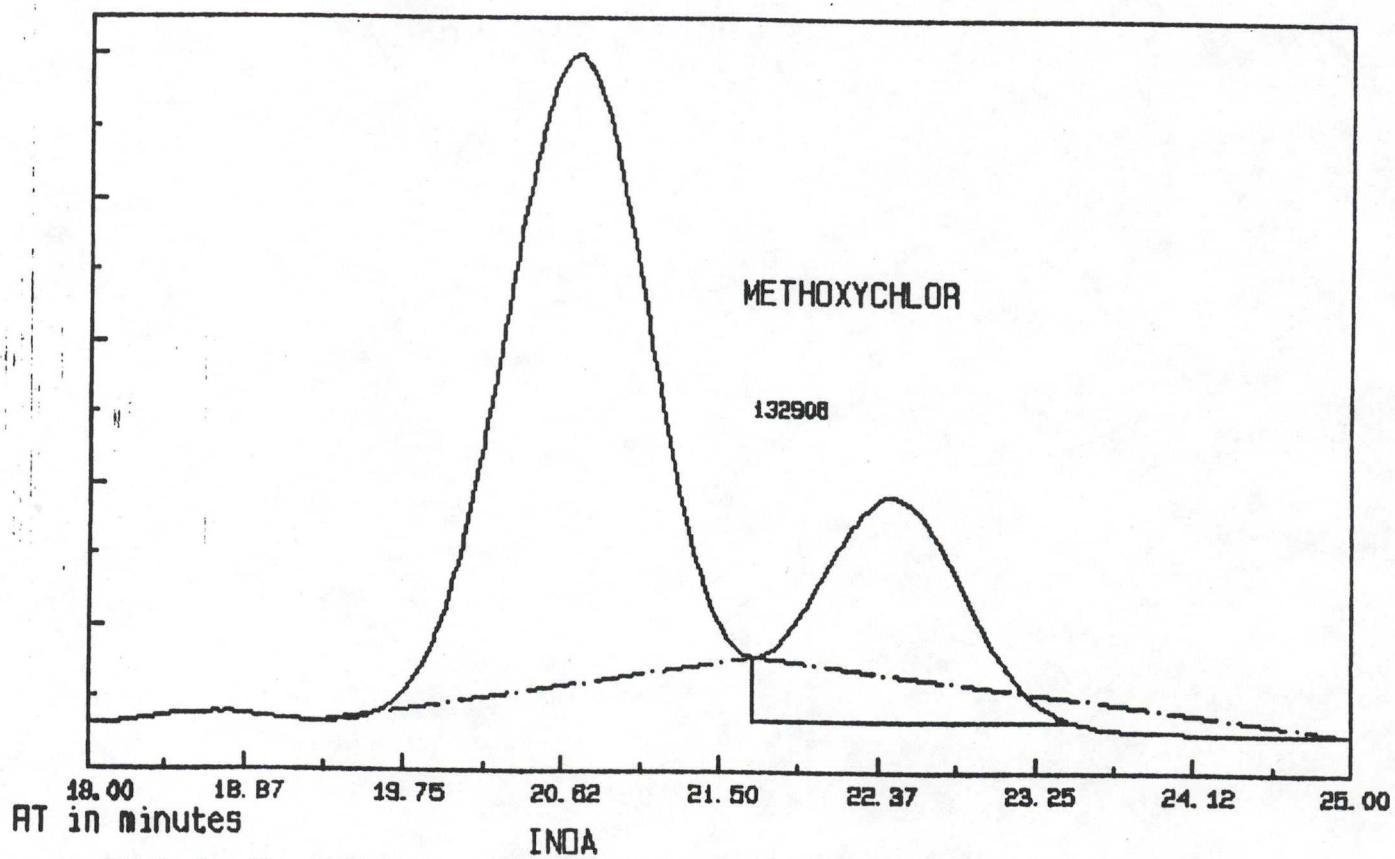
SAMPLE: SD 4360 INJECTED AT 22:31:52 ON JAN 26, 1989
Meth: PACK14 Raw: R14224 Proc: P14224



SAMPLE: SD 4360 INJECTED AT 22:31:52 ON JAN 28, 1989
Meth: PACK14 Raw: R14224 Proc: P14224



SAMPLE: SD 4360 INJECTED AT 9:41:57 ON JAN 29, 1989
Meth: PACK14 Raw: R14248 Proc: P14248



P14272

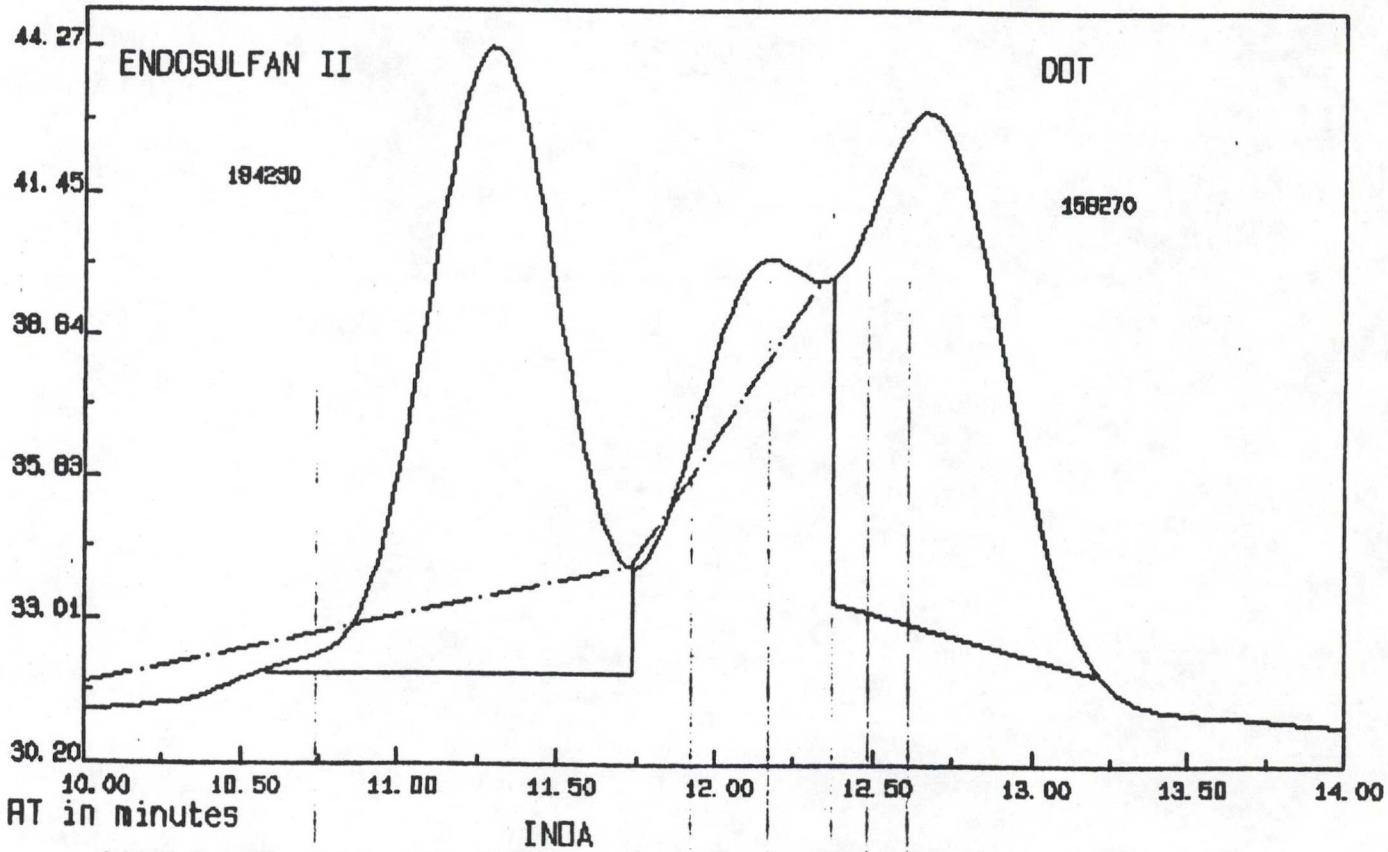
SAMPLE: SD 4360 INJECTED AT 3:37:45 ON JAN 30, 1989
Meth: PACK14 Raw: R14272 Proc: P14272

RESULTS OF MANUAL-INTEGRATION FROM CPLOT

RAW DATA FILE: R14272 INJECTED AT: 3:37:45 ON JAN 30, 1989

RESULTS ARE IN AREA PERCENT

AREA#	TIME1	TIME2	AREA	AREA%
1	21.68	23.46	132906	100.0



P14296

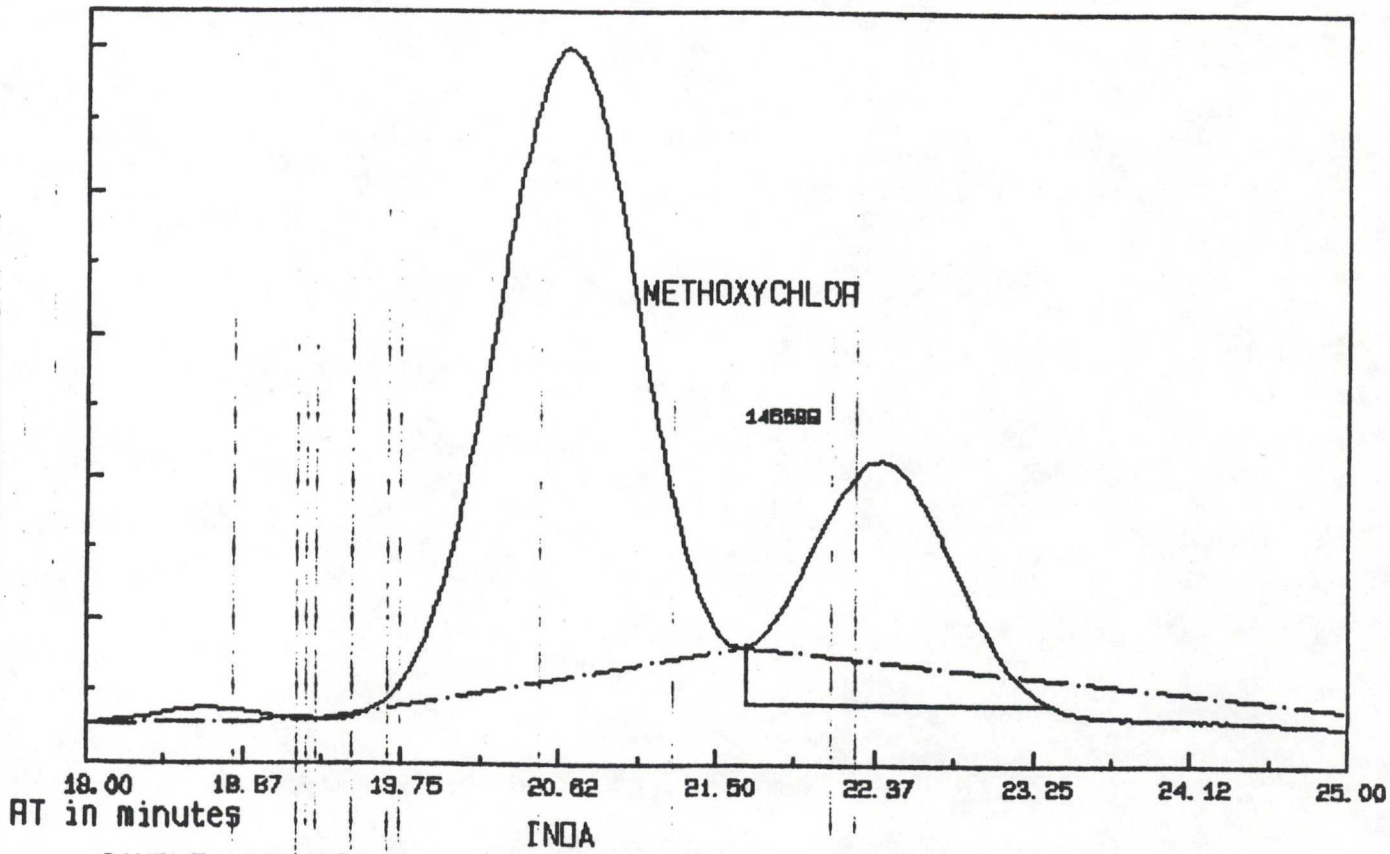
SAMPLE: SD 4360 INJECTED AT 23:40:16 ON JAN 30, 1989
Meth: PACK14 Raw: R14296 Proc: P14296

RESULTS OF MANUAL INTEGRATION FROM CPLOT

RAW DATA FILE: R14296 INJECTED AT: 23:40:16 ON JAN 30, 1989

RESULTS ARE IN AREA PERCENT

AREA#	TIME1	TIME2	AREA	AREA%
1	10.58	11.74	184230	53.8
2	12.37	13.20	158270	46.2



P14296

SAMPLE: SO 4360
Meth: PACK14

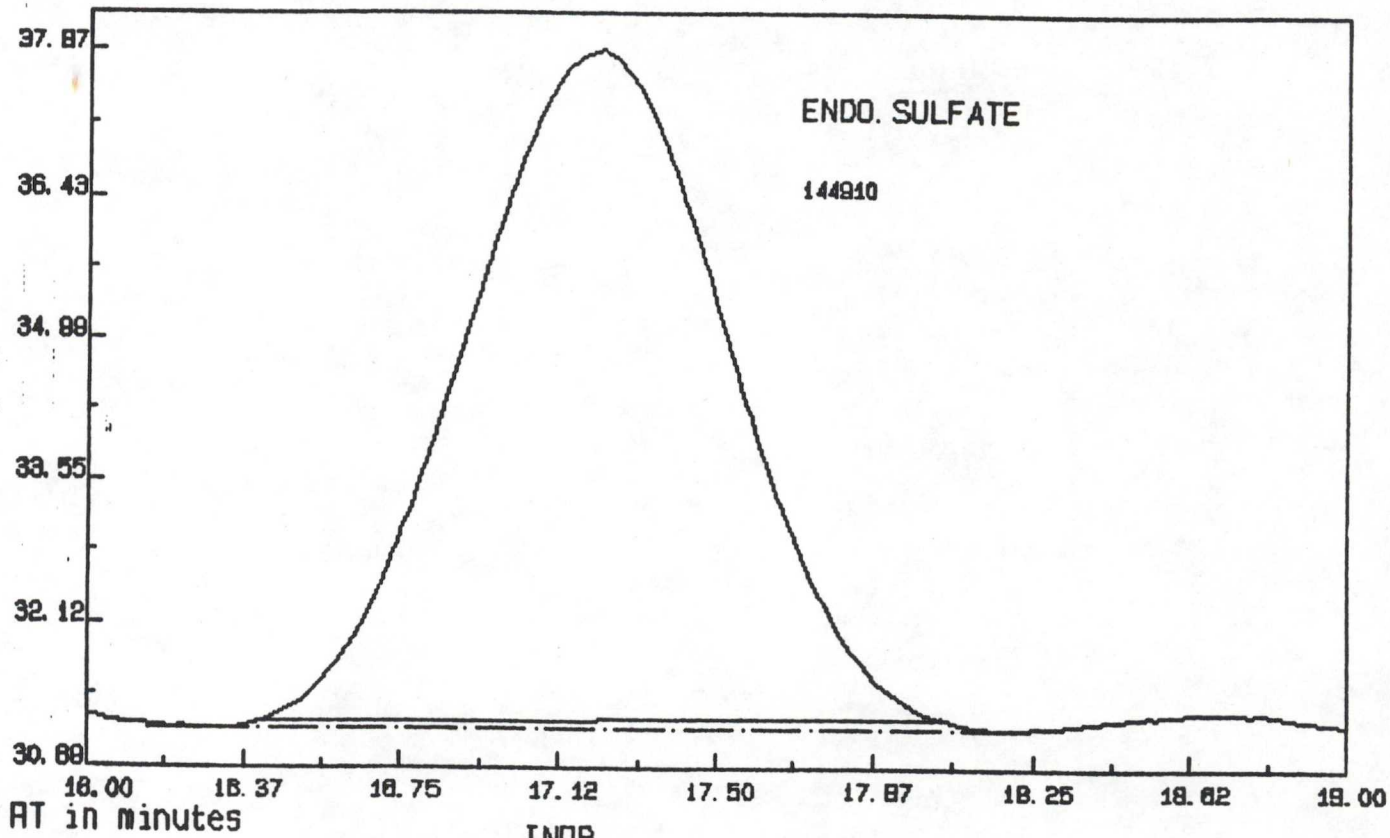
INJECTED AT 23: 40: 16 ON JAN 30, 1989
Raw: R14296 Proc: P14296

RESULTS OF MANUAL INTEGRATION FROM CPLOT

RAW DATA FILE: R14296 INJECTED AT: 23:40:16 ON JAN 30, 1989

RESULTS ARE IN AREA PERCENT

AREA#	TIME1	TIME2	AREA	AREA%
1	10.53	11.74	196634	41.0
2	11.74	12.40	136820	28.5
3	21.66	23.33	146588	30.5



P142A3

INDB

SAMPLE: SD 4364 INJECTED AT 5:15:20 ON JAN 31, 1989

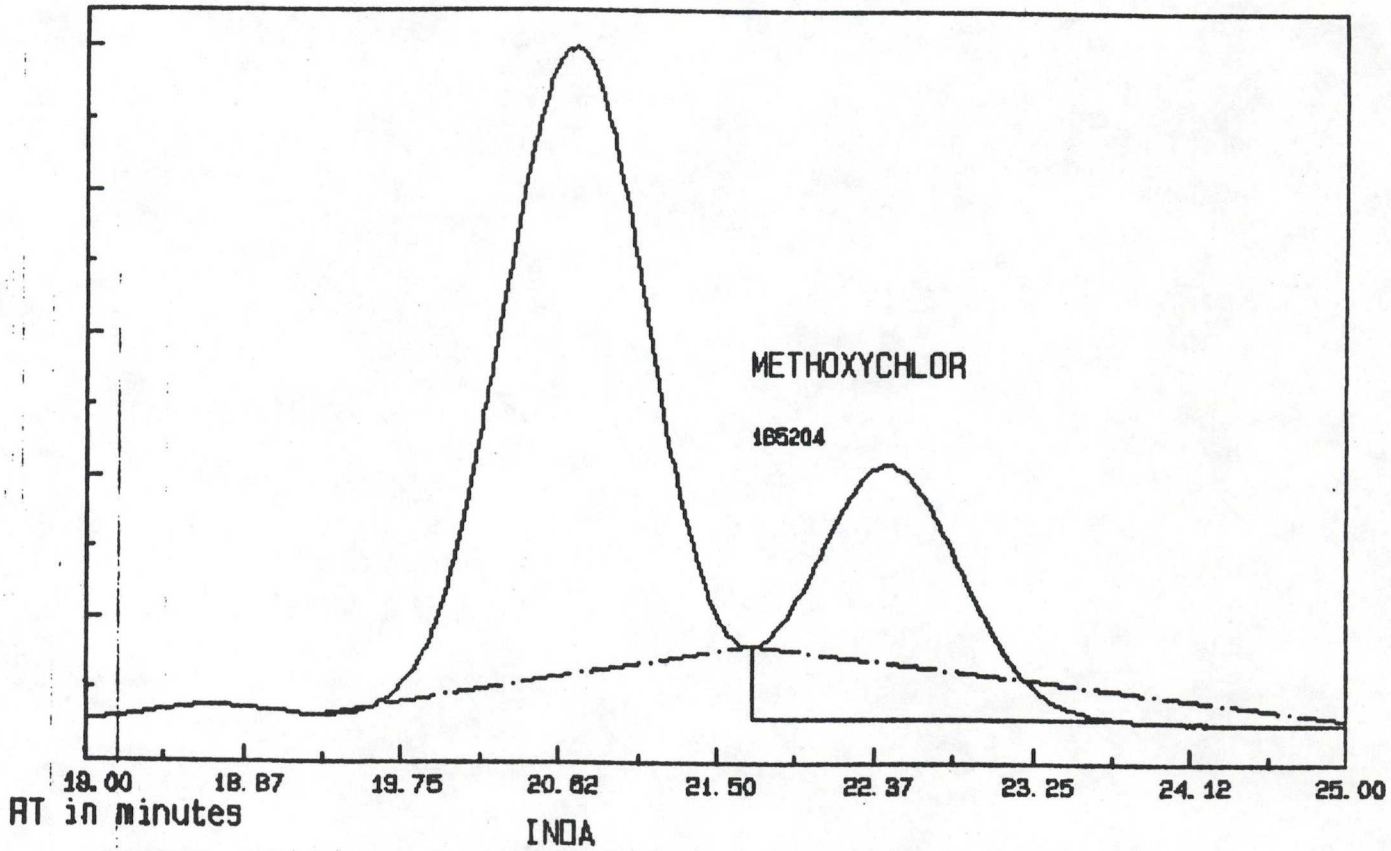
Meth: PACK14 Raw: R142A8 Proc: P142A8

RESULTS OF MANUAL INTEGRATION FROM CPLOT

RAW DATA FILE: R142A8 INJECTED AT: 5:15:20 ON JAN 31, 1989

RESULTS ARE IN AREA PERCENT

AREA#	TIME1	TIME2	AREA	AREA%
1	16.40	18.03	144910	100.0



P142B4

SAMPLE: SD 4360 INJECTED AT 8:02:51 ON JAN 31, 1989
Meth: PACK14 Raw: R142B4 Proc: P142B4

RESULTS OF MANUAL INTEGRATION FROM CPLOT

RAW DATA FILE: R142B4 INJECTED AT: 8:02:51 ON JAN 31, 1989

RESULTS ARE IN AREA PERCENT

AREA#	TIME1	TIME2	AREA	AREA%
1	21.69	23.71	165204	100.0

PESTICIDE DATA FOR SECTION I

STANDARD COMPOUND CONCENTRATIONS

STD INDA	CONC(ug/ml)
Gamma BHC	0.010
Heptachlor	0.010
Aldrin	0.010
Gamma Chlordane	0.010
Endosulfan I	0.010
Dieldrin	0.020
Endosulfan II	0.040
PP' DDT	0.060
PP' Methoxychlor	0.10

STD INDB	
Alpha BHC	0.010
Beta BHC	0.020
Delta BHC	0.010
Heptachlor Epoxide	0.010
Alpha Chlordane	0.020
PP' DDE	0.020
Endrin	0.040
PP' DDD	0.040
Endrin Aldehyde	0.040
Endosulfan Sulfate	0.040
Endrin Ketone	0.10

MULTICOMPONENT STANDARDS

AR1660	1016	0.30
	1260	0.30
AR1221		1.0
AR1232		0.70
AR1242		0.40
AR1248		0.40
AR1254		~~0.40~~ 0.30
TOXAPH		1.0

EVALUATION MIX STANDARDS

COMPOUND	EVALA	EVALB	EVALC
Aldrin	0.0020	0.0050	0.010
Endrin	0.0080	0.020	0.040
DDT	0.0125	0.030	0.060
DBC	0.020	0.050	0.10

SEQUENCE RUN LOG - QC/QA JAN 31, 1989 11:36 AM PAGE 1

SEQUENCE NAME - SEQ142
CHANNEL # 1
INSTRUMENT # 01
TYPE(S) OF ANALYSIS PEST

CALIB. STD LOT 2250/2401
DATE STARTED
DATE FINISHED

L.U. REF 15

SAMPLE NAME	B#	CASE NUMBER	EPA NUMBER	INJECTION TIME
EVALA	01	EVALA		9:57:13 ON JAN 28, 1989
EVALB	02	EVALB		10:25:08 ON JAN 28, 1989
EVALC	03	EVALC		10:53:03 ON JAN 28, 1989
SD 4360	04	INDA		13:13:28 ON JAN 28, 1989
SD 4364	05	INDB		13:41:24 ON JAN 28, 1989
SD TOXA	06	TOXAPH		14:09:19 ON JAN 28, 1989
SD ARMX	07	ARMX		14:37:14 ON JAN 28, 1989
SD 1221	08	AR1221		15:05:09 ON JAN 28, 1989
SD 1232	09	AR1232		15:33:04 ON JAN 28, 1989
SD 1242	10	AR1242		16:01:00 ON JAN 28, 1989
SD 1248	11	AR1248		16:28:55 ON JAN 28, 1989
SD 1254	12	AR1254		16:56:50 ON JAN 28, 1989
CP 270543 B1	13	15934 18	PBLK65	17:24:45 ON JAN 28, 1989
CP 240192	14	15934 18	E888049007	17:52:40 ON JAN 28, 1989
CP 241570 B1	15	15926 41	PBLK51	18:20:35 ON JAN 28, 1989
CP 240432R	16	15926 41	00DI201XX	18:48:30 ON JAN 28, 1989
PP 241303 B1	17	11271 JD746	PBLK23	19:16:26 ON JAN 28, 1989
EVALB	18	EVALB		19:44:21 ON JAN 28, 1989
PP 241304 B2	19	11271 JD746	PBLK24	20:12:16 ON JAN 28, 1989
PP 240888 O	20	11271 JD746	JD746	20:40:11 ON JAN 28, 1989
PP 240895	21	11271 JD746	JD775	21:08:06 ON JAN 28, 1989
PP 240896	22	11271 JD746	JD776	21:36:02 ON JAN 28, 1989
PP 240897	23	11271 JD746	JD778	22:03:57 ON JAN 28, 1989
SD 4360	24	INDA		22:31:52 ON JAN 28, 1989
PP 240898	25	11271 JD746	JD779	22:59:47 ON JAN 28, 1989
PP 240899	26	11271 JD746	JD793	23:27:42 ON JAN 28, 1989
PP 240900	27	11271 JD746	JD795	23:55:38 ON JAN 28, 1989
PP 240901	28	11271 JD746	JE122	0:23:33 ON JAN 29, 1989
PP 240902	29	11271 JD746	JE142	0:51:28 ON JAN 29, 1989
EVALB	30	EVALB		1:19:23 ON JAN 29, 1989
PP 240903	31	11271 JD746	JE144	1:47:19 ON JAN 29, 1989
PP 241313 B1	32	11271 JD746	PBLK25	2:15:14 ON JAN 29, 1989
PP 241314 B2	33	11271 JD746	PBLK26	2:43:09 ON JAN 29, 1989
PP 240905	34	11271 JD746	JE147	3:11:04 ON JAN 29, 1989

SEQUENCE NAME - SEQ142
CHANNEL # 1
INSTRUMENT # 01
TYPE(S) OF ANALYSIS PEST

CALIB. STD LOT 2250/2401
DATE STARTED
DATE FINISHED

L.U. REF 15

SAMPLE NAME	B#	CASE NUMBER	EPA NUMBER	INJECTION TIME
HEXANE	35			3:38:59 ON JAN 29, 1989
SD 4364	36	INDB		4:06:55 ON JAN 29, 1989
PP 240904	37	11271 JD746	JE146	4:34:50 ON JAN 29, 1989
PP 240908	38	11271 JD746	JE148	5:02:45 ON JAN 29, 1989
PP 240919	39	11271 JD746	JE150	5:30:40 ON JAN 29, 1989
PP 240915	40	11271 JD746	JE149	5:58:35 ON JAN 29, 1989
HEXINE	41			6:26:30 ON JAN 29, 1989
EVALB	42	EVALB		6:54:25 ON JAN 29, 1989
PP 240920	43	11271 JD746	JE151	7:22:21 ON JAN 29, 1989
PP 240921	44	11271 JD746	JE178	7:50:16 ON JAN 29, 1989
PP 240922	45	11271 JD746	JE179	8:18:11 ON JAN 29, 1989
PP 240923	46	11271 JD746	JE186	8:46:06 ON JAN 29, 1989
PP 240924	47	11271 JD746	JE187	9:14:01 ON JAN 29, 1989
SD 4360	48	INDA		9:41:57 ON JAN 29, 1989
PP 241305 B1	49	11271 JD746	PBLK27	10:09:52 ON JAN 29, 1989
PP 241306 B2	50	11271 JD746	PBLK28	10:37:47 ON JAN 29, 1989
PP 240889 SS	51	11271 JD746	JD746MS	11:05:42 ON JAN 29, 1989
PP 240890 SS	52	11271 JD746	JD746MSD	11:33:37 ON JAN 29, 1989
PP 240891 BS	53	11271 JD746	BS	12:01:33 ON JAN 29, 1989
EVALB	54	EVALB		12:29:28 ON JAN 29, 1989
CP 239682	55	11236 JD722	JD729	13:12:30 ON JAN 29, 1989
CP 239685	56	0000 BX856	JD730	13:40:25 ON JAN 29, 1989
PP 240535 B2	57	11236 JD781	PBLK60	19:19:04 ON JAN 29, 1989
PP 239695 SS	58	11236 JD781	JD781MS	19:47:00 ON JAN 29, 1989
HEXANE	59			20:14:55 ON JAN 29, 1989
SD 4364	60	INDB		20:42:50 ON JAN 29, 1989
PP 239697 BS	61	11236 JD781	BS	21:10:45 ON JAN 29, 1989
PP 239696 SS	62	11236 JD781	JD781MSD	21:38:40 ON JAN 29, 1989
HEXANE	63			22:06:36 ON JAN 29, 1989
PP 241351 B1	64	11271 JE200	PBLK39	23:54:23 ON JAN 29, 1989
PP 241352 B2	65	11271 JE200	PBLK40	0:22:19 ON JAN 30, 1989
EVALB	66	EVALB		0:50:14 ON JAN 30, 1989
PP 241129 SS	67	11271 JE200	JE200MS	1:18:09 ON JAN 30, 1989
PP 241130 SS	68	11271 JE200	JE200MSD	1:46:04 ON JAN 30, 1989

SEQUENCE NAME - SEQ142
CHANNEL # 1
INSTRUMENT # 01
TYPE(S) OF ANALYSIS PEST

CALIB. STD LOT 2250/2401
DATE STARTED
DATE FINISHED

L.U. REF 15

SAMPLE NAME	B#	CASE NUMBER	EPA NUMBER	INJECTION TIME
PP 242231 BS	69	11271 JE200	BS	2:13:59 ON JAN 30, 1989
PP 241317 B	70	11271 JE200	PBLK37	2:41:55 ON JAN 30, 1989
PP 241318 B	71	11271 JE200	PBLK38	3:09:49 ON JAN 30, 1989
SD 4360	72	INDA		3:37:45 ON JAN 30, 1989
PP 241125	73	11271 JE200	JE200	4:05:40 ON JAN 30, 1989
PP 242323 B	74	11271 JE200	PBLK14	4:33:35 ON JAN 30, 1989
PP 241823	75	11271 JE200	JD958	5:01:30 ON JAN 30, 1989
PP 241824	76	11271 JE200	JD959	5:29:25 ON JAN 30, 1989
CP 241299 B	77	0000 BY618	PBLK42	10:09:38 ON JAN 30, 1989
EVALB	78	EVALB		10:50:23 ON JAN 30, 1989
CP 241150 O	79	0000 BY618	BY641	11:18:18 ON JAN 30, 1989
CP 241138 SS	80	0000 BY618	BY641MS	11:46:14 ON JAN 30, 1989
CP 241139 SS	81	0000 BY618	BY641MSD	12:14:09 ON JAN 30, 1989
PP 241405	82	11236 JE157	JE174	13:12:00 ON JAN 30, 1989
PP 241705 B1	83	11271 JE200	PBLK64	13:39:55 ON JAN 30, 1989
SD 4364	84	INDB		16:37:22 ON JAN 30, 1989
PP 241419	85	11271 JE200	JD954	17:14:39 ON JAN 30, 1989
PP 241420	86	11271 JE200	JD955	17:42:34 ON JAN 30, 1989
PP 241421	87	11271 JE200	JD956	18:10:30 ON JAN 30, 1989
PP 241706 B2	88	11236 JE157	PBLK65	19:13:14 ON JAN 30, 1989
PP 241422	89	11236 JE157	JE185	19:41:09 ON JAN 30, 1989
EVALB	90	EVALB		20:09:05 ON JAN 30, 1989
PP 242036 SS	91	11271 JD997	JD998MS	20:37:00 ON JAN 30, 1989
PP 242037 SS	92	11271 JD997	JD998MSD	21:04:55 ON JAN 30, 1989
PP 242038 BS	93	11271 JD997	PBLK95	21:32:50 ON JAN 30, 1989
PP 242333 B1	94	11271 JD997	PBLK11	22:00:45 ON JAN 30, 1989
PP 242334 B2	95	11271 JD997	PBLK12	22:28:40 ON JAN 30, 1989
SD 4360	96	INDA		23:40:16 ON JAN 30, 1989
PP 242035	97	11271 JD997	JD999	0:08:11 ON JAN 31, 1989
PP 242031	98	11271 JD997	JD998	0:36:06 ON JAN 31, 1989
PP 242030	99	11271 JD997	JD997	1:04:01 ON JAN 31, 1989
PP 242322 B1	00	11271 JD997	PBLK13	1:31:57 ON JAN 31, 1989
PP 241738	01	11271 JE200	PBLK61	1:59:52 ON JAN 31, 1989
EVALB	02	EVALB		2:27:48 ON JAN 31, 1989

SEQUENCE RUN LOG - QC/QA JAN 31, 1989 11:36 AM PAGE 4

SEQUENCE NAME - SEQ142
CHANNEL # 1
INSTRUMENT # 01
TYPE(S) OF ANALYSIS PEST

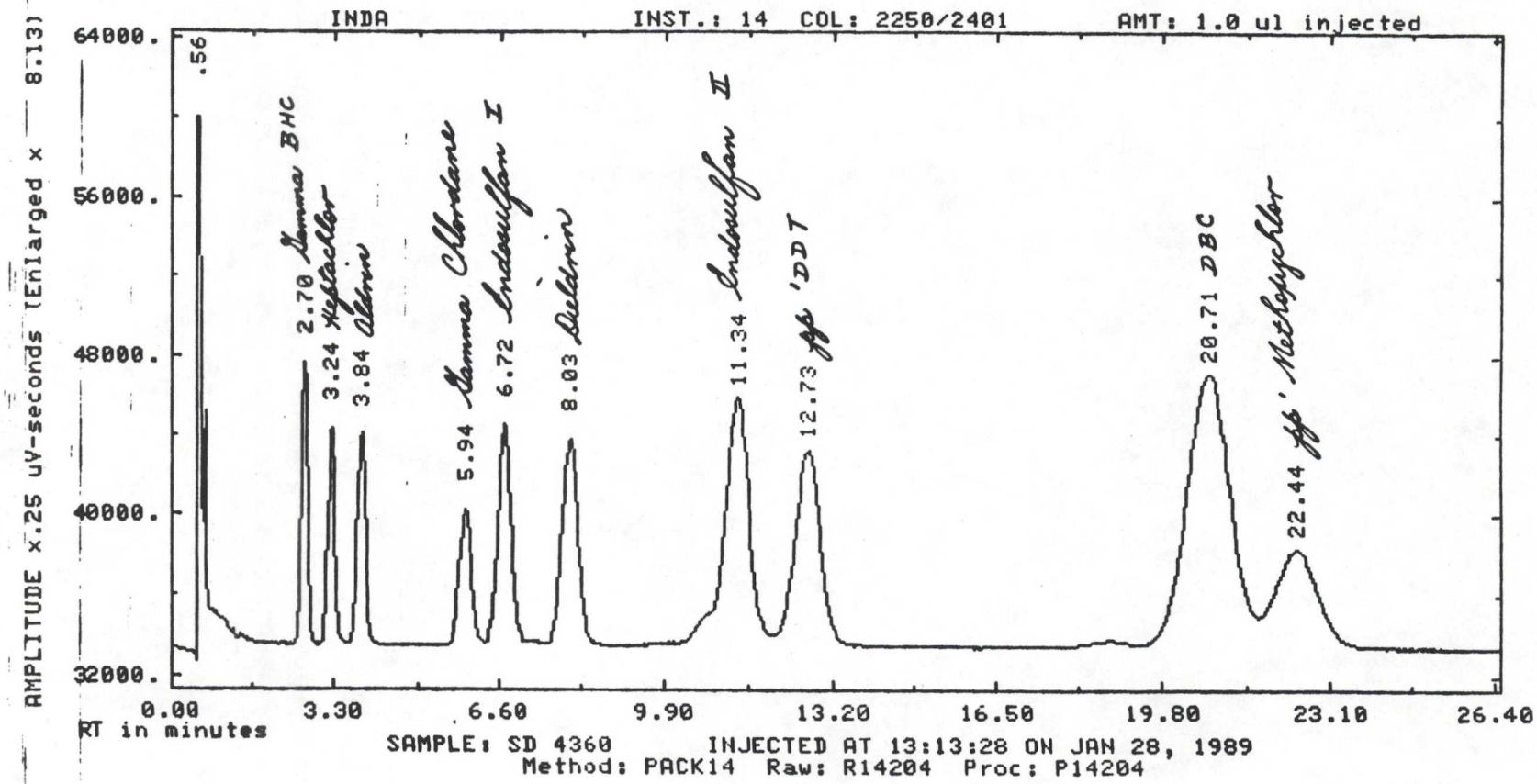
CALIB. STD LOT 2250/2401
DATE STARTED
DATE FINISHED

L.U. REF 15

SAMPLE NAME	B#	CASE NUMBER	EPA NUMBER	INJECTION TIME
PP 241739 B	03	11271 JE200	PBLK62	2:55:43 ON JAN 31, 1989
PP 241398	04	11271 JE200	JD749	3:23:38 ON JAN 31, 1989
PP 241399	05	11271 JE200	JD751	3:51:34 ON JAN 31, 1989
PP 241400	06	11271 JE200	JD752	4:19:29 ON JAN 31, 1989
PP 241401	07	11271 JE200	JD753	4:47:24 ON JAN 31, 1989
SD 4364	08	INDB		5:15:20 ON JAN 31, 1989
PP 241402	09	11271 JE200	JD940	5:43:15 ON JAN 31, 1989
PP 241403	10	11271 JE200	JD941	6:11:11 ON JAN 31, 1989
PP 241404	11	11271 JE200	JD943	6:39:06 ON JAN 31, 1989
PP 241406	12	11271 JE200	JD944	7:07:01 ON JAN 31, 1989
PP 241408	13	11271 JE200	JD946	7:34:56 ON JAN 31, 1989
SD 4360	14	INDA		8:02:51 ON JAN 31, 1989
SD 4364	15	INDB		8:30:47 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989
				10:19:49 ON JAN 31, 1989

2/7/89

SAMPLE DATA PACKAGE



Report: 1905.00 Channel: 14 INDA

Sample: SD 4360 Injected at 13:13:28 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 4 Btl: 4

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

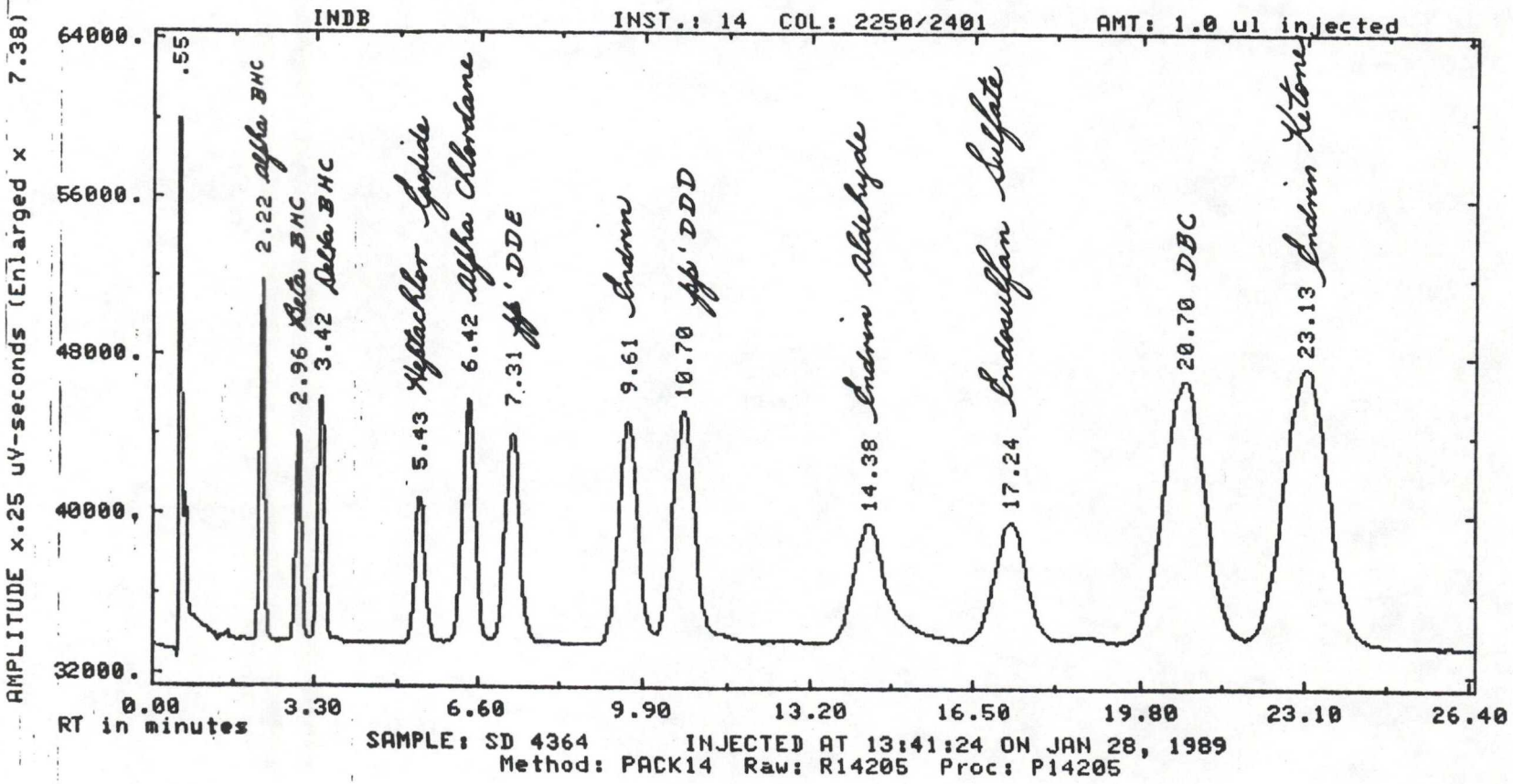
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	214341.	BS	15.021	
2.70	0.00	.10000E+01	59348.	BB	4.159	
3.24	0.00	.10000E+01	53133.	BB	3.723	
3.84	0.00	.10000E+01	59692.	BB	4.183	
5.94	0.00	.10000E+01	53415.	BB	3.743	
6.72	0.00	.10000E+01	101610.	BB	7.121	
8.03	0.00	.10000E+01	112081.	BB	7.854	
11.34	0.00	.10000E+01	197782.	BB	13.860	
12.73	0.00	.10000E+01	150527.	BB	10.549	
20.71	0.00	.10000E+01	350329.	BB	24.550	
22.44	0.00	.10000E+01	74720.	BB	5.236	

Total Area = 1426979. Total AREA % = 74720.000

Processed data file: P14204 Raw data file: R14204



SAMPLE DATA PACKAGE

Report: 1906.00 Channel: 14 INDB

Sample: SD 4364 Injected at 13:41:24 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 5 Btl: 5

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

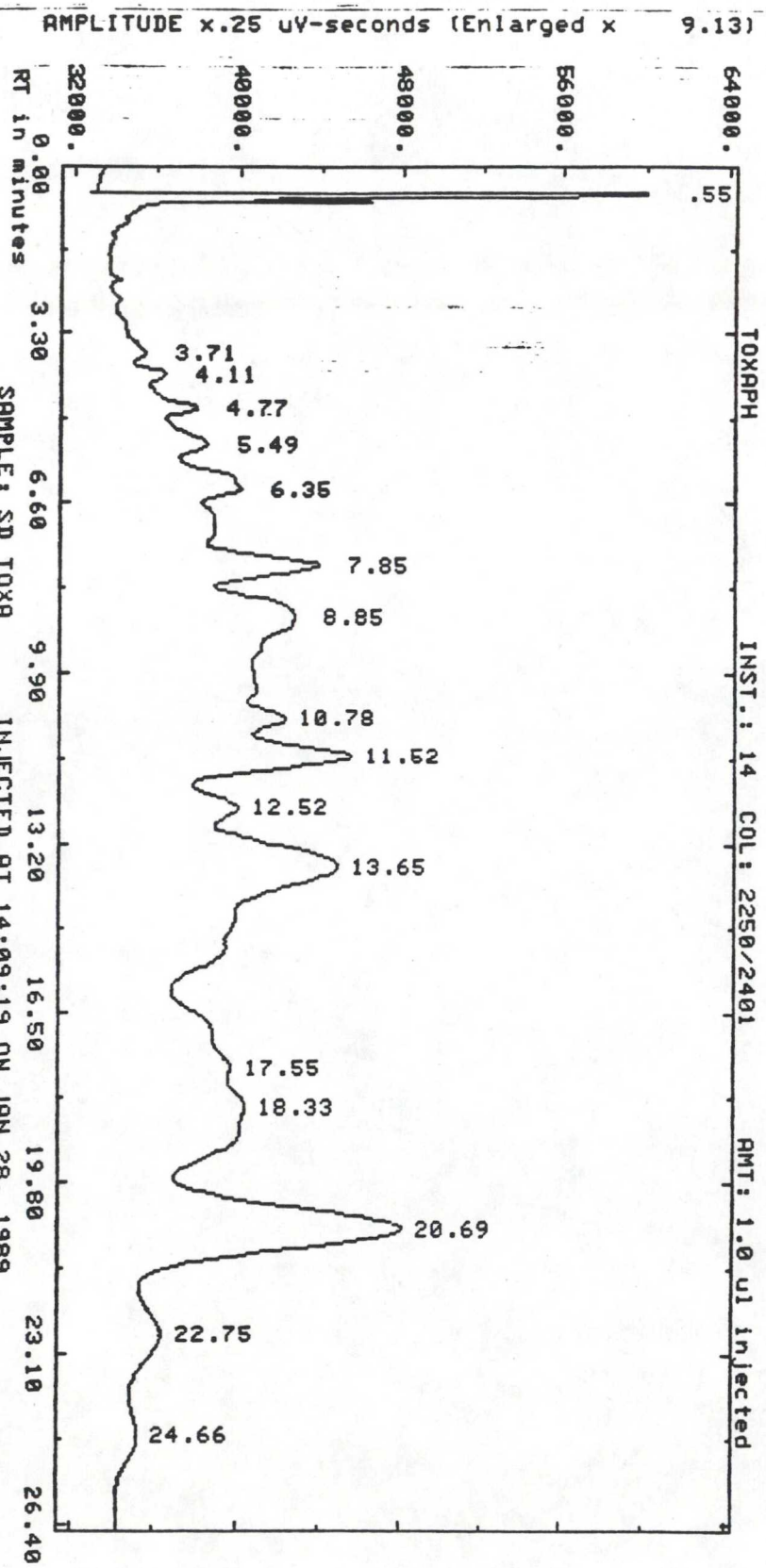
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	199852.	BS	10.033	
2.22	0.00	.10000E+01	66418.	BB	3.334	
2.96	0.00	.10000E+01	43910.	BB	2.204	
3.42	0.00	.10000E+01	57986.	BB	2.911	
5.43	0.00	.10000E+01	54248.	BB	2.723	
6.42	0.00	.10000E+01	107364.	BB	5.390	
7.31	0.00	.10000E+01	102532.	BB	5.147	
9.61	0.00	.10000E+01	137314.	BB	6.893	
10.70	0.00	.10000E+01	162356.	BB	8.150	
14.38	0.00	.10000E+01	139905.	BB	7.023	
17.24	0.00	.10000E+01	129632.	BB	6.508	
20.70	0.00	.10000E+01	374763.	BB	18.813	
23.13	0.00	.10000E+01	415713.	BB	20.869	

Total Area = 1991994. Total AREA % = 415712.500

Processed data file: P14205 Raw data file: R14205


AMPLITUDE x.25 uV-seconds (Enlarged x 9.13)
64000.
56000.
48000.
40000.
32000.
.55
TOXAPH
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
3.71
4.11
4.77
5.49
6.35
7.85
8.85
10.78
11.52
12.52
13.65
17.55
18.33
20.69
22.75
24.66
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: SD TOXA
INJECTED AT 14:09:19 ON JAN 28, 1989
Method: PACK14 Raw: R14206 Proc: P14206

Report: 1907.00 Channel: 14 TOXAPH

Sample: SD TOXA Injected at 14:09:19 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 6 Btl: 6

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.517 minutes

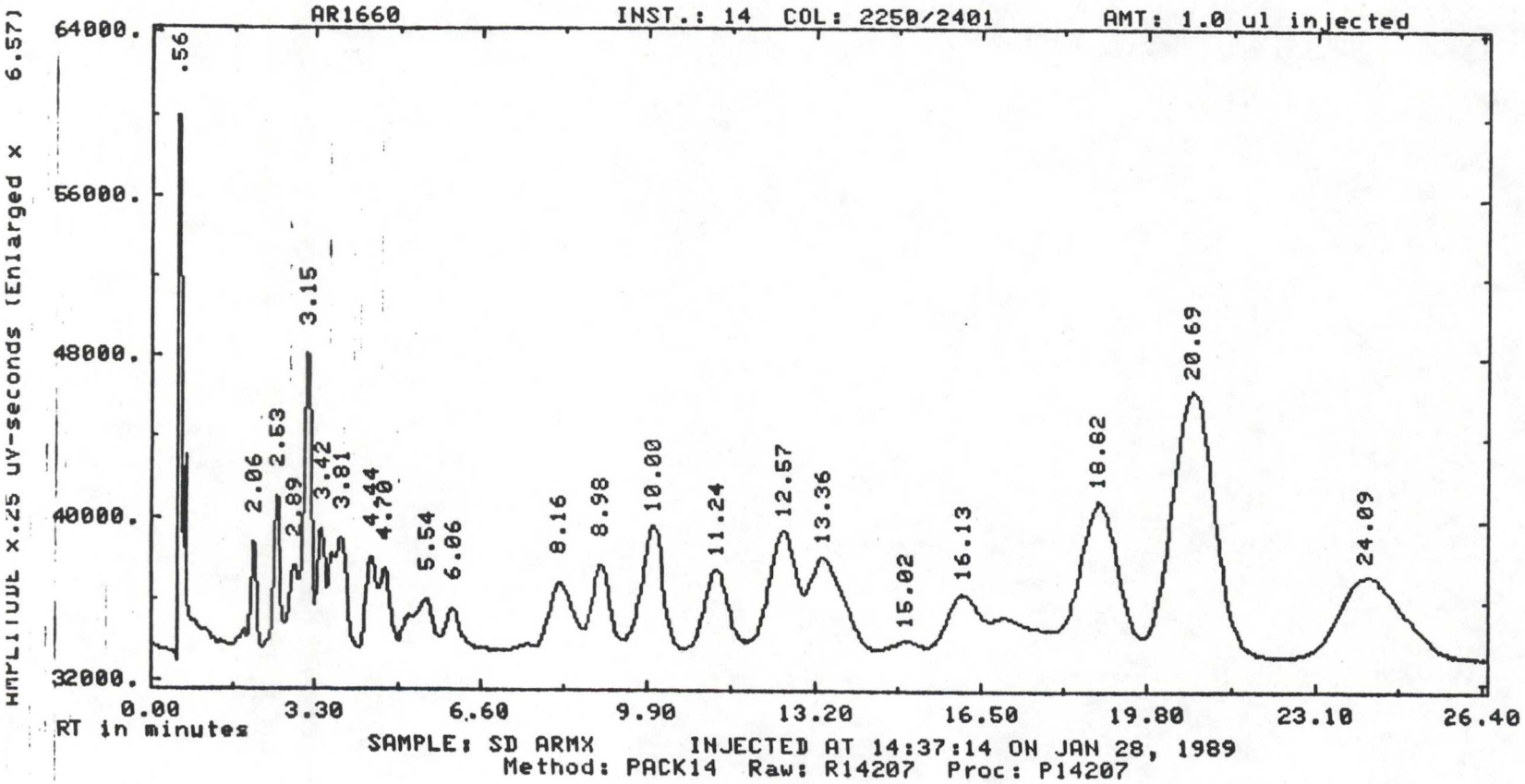
Ended not on baseline

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	239259.	BS	18.650	
3.71	0.00	.10000E+01	5507.	BB	.429	
4.11	0.00	.10000E+01	6781.	BB	.529	
4.77	0.00	.10000E+01	11907.	BB	.928	
5.49	0.00	.10000E+01	17585.	BB	1.371	
6.35	0.00	.10000E+01	32409.	BB	2.526	
7.85	0.00	.10000E+01	59611.	BB	4.647	
8.85	0.00	.10000E+01	76416.	BB	5.957	
10.78	0.00	.10000E+01	16158.	BB	1.259	
11.52	0.00	.10000E+01	84782.	BB	6.609	
12.52	0.00	.10000E+01	18751.	BB	1.462	
13.65	0.00	.10000E+01	257284.	BB	20.055	
17.55	0.00	.10000E+01	20320.	BB	1.584	
18.33	0.00	.10000E+01	66911.	BB	5.216	
20.69	0.00	.10000E+01	323196.	BB	25.193	
22.75	0.00	.10000E+01	35219.	BB	2.745	
24.66	0.00	.10000E+01	10794.	BF	.841	

Total Area = 1282891. Total AREA % = 10794.000

Processed data file: P14206 Raw data file: R14206

SAMPLE DATA PACKAGE



Report: 1908.00 Channel: 14 AR1660

Sample: SD ARMX Injected at 14:37:14 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 7 Btl: 7

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

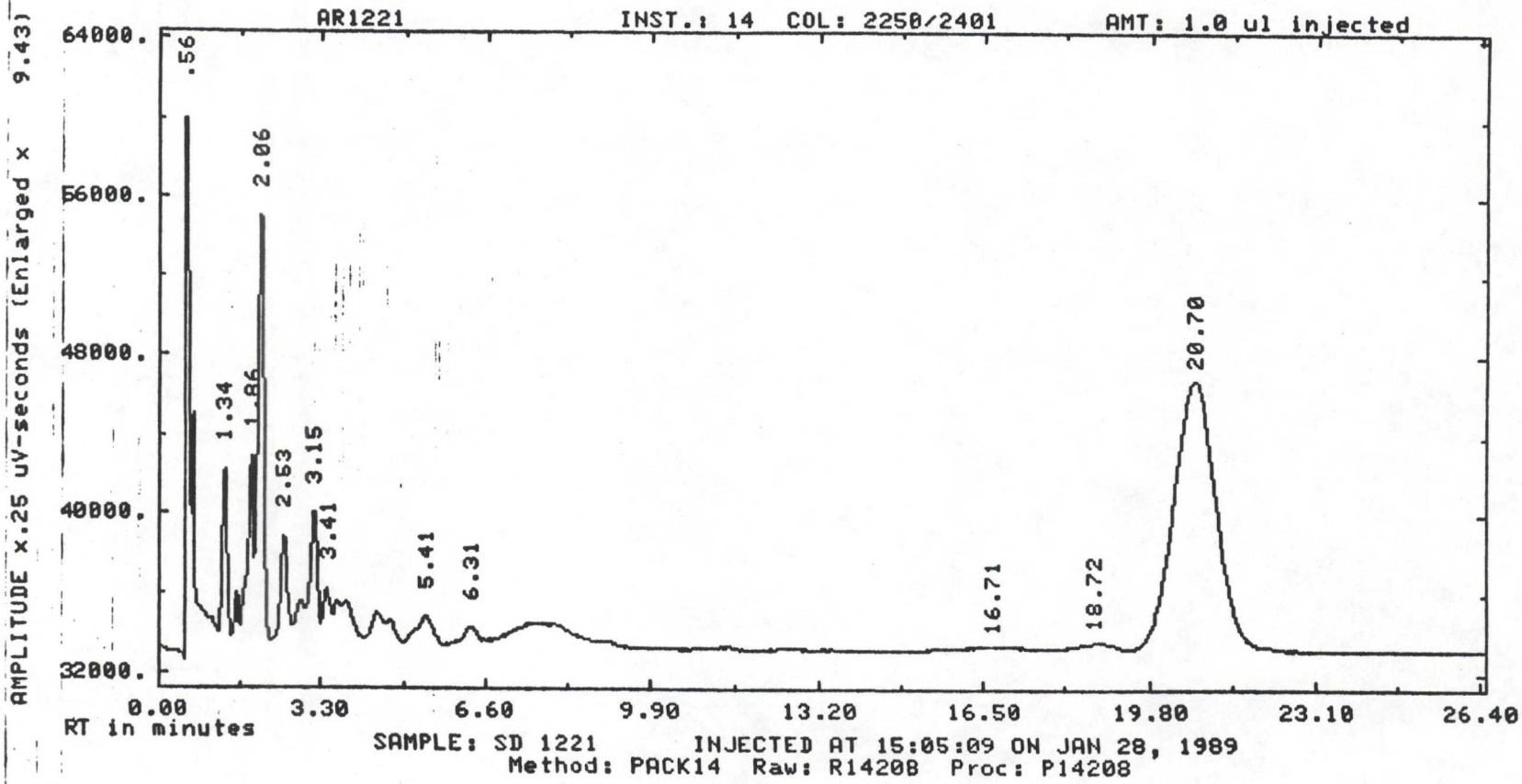
Actual run time: 26.517 minutes

Ended not on baseline

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	176304.	BS	13.054	
2.06	0.00	.10000E+01	17488.	BB	1.295	
2.53	0.00	.10000E+01	25398.	BB	1.880	
2.89	0.00	.10000E+01	6307.	BB	.467	
3.15	0.00	.10000E+01	48345.	BB	3.580	
3.42	0.00	.10000E+01	11153.	BB	.826	
3.81	0.00	.10000E+01	10054.	BB	.744	
4.44	0.00	.10000E+01	11828.	BB	.876	
4.70	0.00	.10000E+01	9092.	BB	.673	
5.54	0.00	.10000E+01	10918.	BB	.808	
6.06	0.00	.10000E+01	10992.	BB	.814	
8.16	0.00	.10000E+01	35557.	BB	2.633	
8.98	0.00	.10000E+01	34998.	BB	2.591	
10.00	0.00	.10000E+01	81211.	BB	6.013	
11.24	0.00	.10000E+01	55999.	BB	4.146	
12.57	0.00	.10000E+01	54128.	BB	4.008	
13.36	0.00	.10000E+01	44418.	BB	3.289	
15.02	0.00	.10000E+01	5056.	BB	.374	
16.13	0.00	.10000E+01	31778.	BB	2.353	
18.82	0.00	.10000E+01	149518.	BB	11.071	
20.69	0.00	.10000E+01	347125.	BB	25.702	
24.09	0.00	.10000E+01	172929.	BF	12.804	

Total Area = 1350597. Total AREA % = 172929.500

Processed data file: P14207 Raw data file: R14207



SAMPLE DATA PACKAGE

Report: 1909.00 Channel: 14 AR1221

Sample: SD 1221 Injected at 15:05:09 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 8 Btl: 8

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

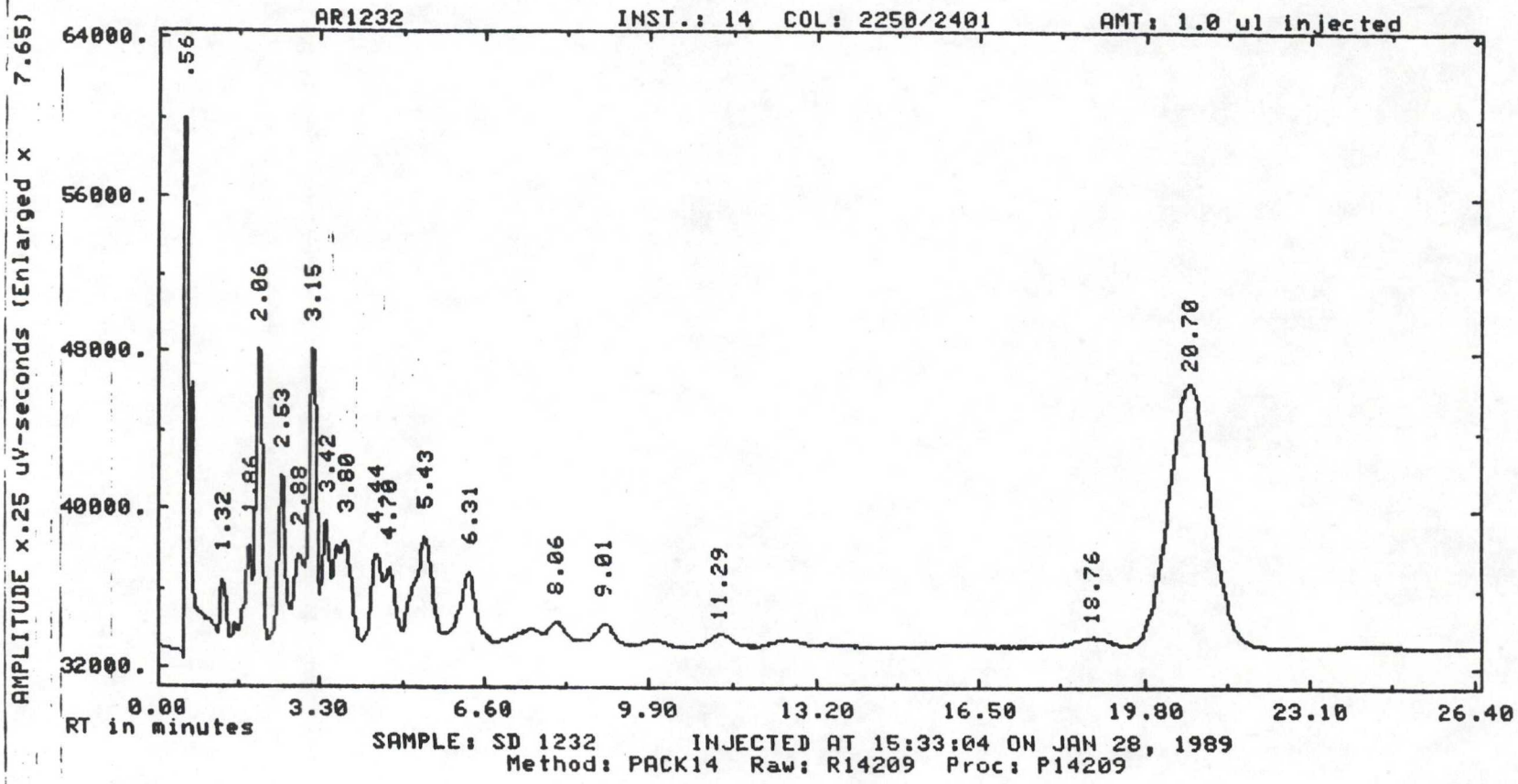
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	232256.	BS	28.372	
1.34	0.00	.10000E+01	24229.	BB	2.960	
1.86	0.00	.10000E+01	17961.	BB	2.194	
2.06	0.00	.10000E+01	67380.	BB	8.231	
2.53	0.00	.10000E+01	21608.	BB	2.640	
3.15	0.00	.10000E+01	20784.	BB	2.539	
3.41	0.00	.10000E+01	5185.	BB	.633	
5.41	0.00	.10000E+01	14894.	BB	1.819	
6.31	0.00	.10000E+01	6159.	BB	.752	
16.71	0.00	.10000E+01	5248.	BB	.641	
18.72	0.00	.10000E+01	6016.	BB	.735	
20.70	0.00	.10000E+01	396885.	BB	48.483	

Total Area = 818606. Total AREA % = 396885.500

Processed data file: P14208 Raw data file: R14208


AR1232
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 7.65)
64000.
56000.
48000.
40000.
32000.
.56
1.32
1.86
2.06
2.53
2.88
3.15
3.42
3.80
4.44
4.70
5.43
6.31
8.06
9.01
11.29
18.76
20.70
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: SD 1232 INJECTED AT 15:33:04 ON JAN 28, 1989
Method: PACK14 Raw: R14209 Proc: P14209

Report: 1910.00 Channel: 14 AR1232

Sample: SD 1232 Injected at 15:33:04 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/ 9 Btl: 9

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

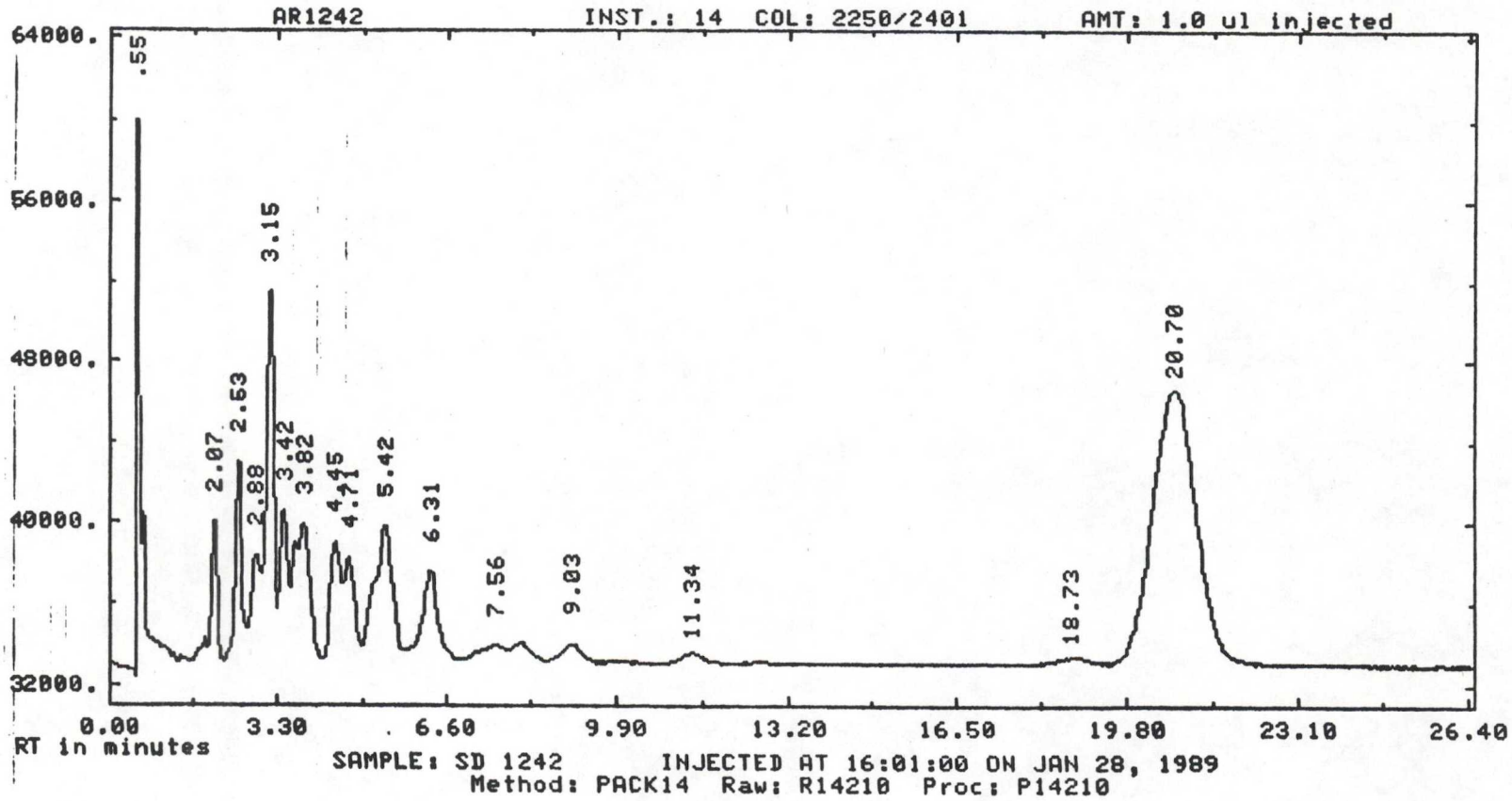
Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	213977.	BS	23.456	
1.32	0.00	.10000E+01	9538.	BB	1.046	
1.86	0.00	.10000E+01	7145.	BB	.783	
2.06	0.00	.10000E+01	48953.	BB	5.366	
2.53	0.00	.10000E+01	31214.	BB	3.422	
2.88	0.00	.10000E+01	5968.	BB	.654	
3.15	0.00	.10000E+01	49388.	BB	5.414	
3.42	0.00	.10000E+01	11387.	BB	1.248	
3.80	0.00	.10000E+01	6185.	BB	.678	
4.44	0.00	.10000E+01	11950.	BB	1.310	
4.70	0.00	.10000E+01	7108.	BB	.779	
5.43	0.00	.10000E+01	54516.	BB	5.976	
6.31	0.00	.10000E+01	32555.	BB	3.569	
8.06	0.00	.10000E+01	6579.	BB	.721	
9.01	0.00	.10000E+01	10514.	BB	1.153	
11.29	0.00	.10000E+01	8984.	BB	.985	
18.76	0.00	.10000E+01	8173.	BB	.896	
20.70	0.00	.10000E+01	388096.	BB	42.544	

Total Area = 912231. Total AREA % = 388096.500

Processed data file: P14209 Raw data file: R14209


AR1242
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 6.35)
64000.
56000.
48000.
40000.
32000.
.55
2.07
2.53
2.88
3.15
3.42
3.82
4.45
4.71
5.42
6.31
7.56
9.03
11.34
18.73
20.70
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: SD 1242 INJECTED AT 16:01:00 ON JAN 28, 1989
Method: PACK14 Raw: R14210 Proc: P14210

Report: 1911.00 Channel: 14 AR1242

Sample: SD 1242 Injected at 16:01:00 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/10 Btl: 10

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

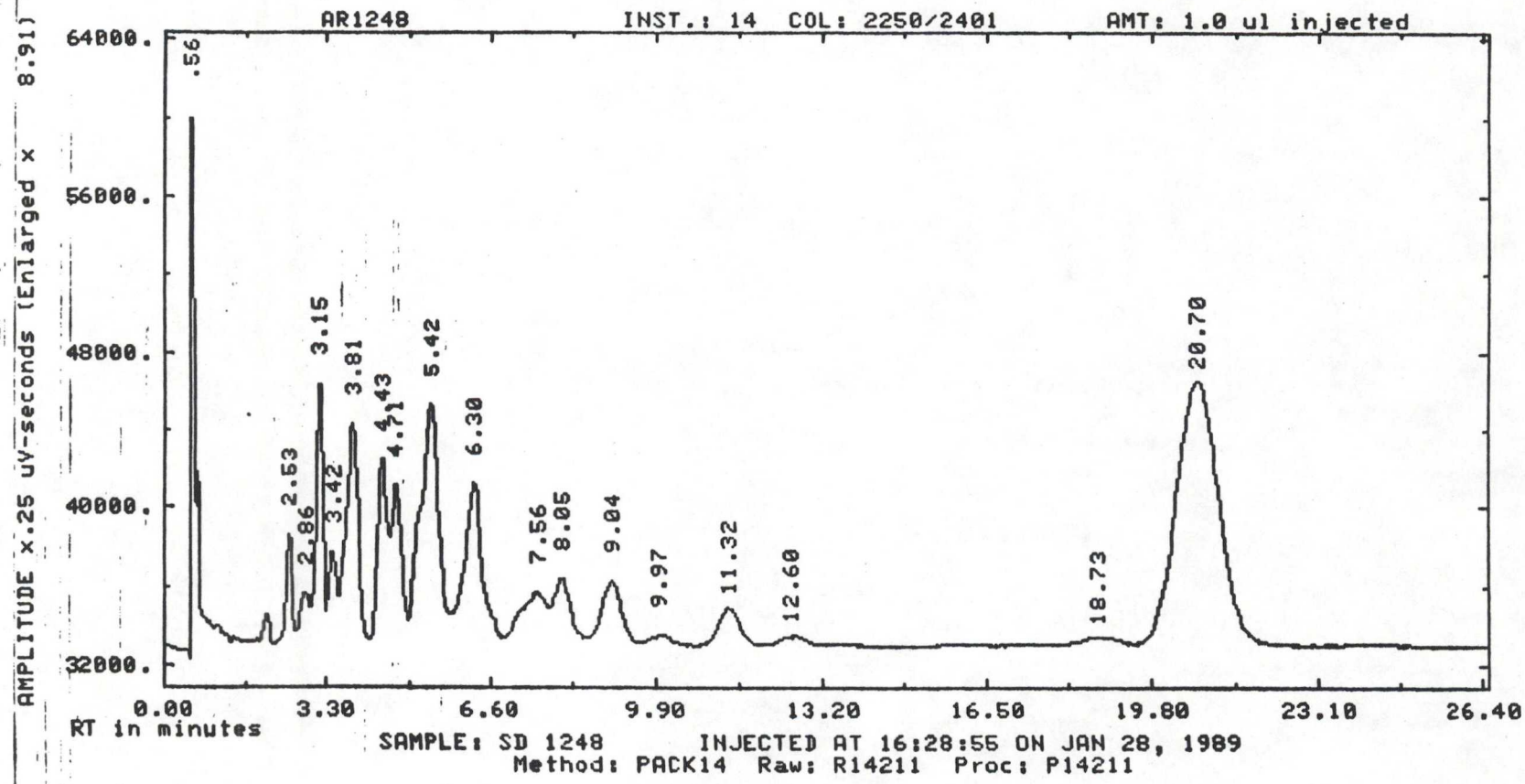
Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	164287.	BS	18.796	
2.07	0.00	.10000E+01	22476.	BB	2.571	
2.53	0.00	.10000E+01	32513.	BB	3.720	
2.88	0.00	.10000E+01	8449.	BB	.967	
3.15	0.00	.10000E+01	60448.	BB	6.916	
3.42	0.00	.10000E+01	14939.	BB	1.709	
3.82	0.00	.10000E+01	11257.	BB	1.288	
4.45	0.00	.10000E+01	15749.	BB	1.802	
4.71	0.00	.10000E+01	11215.	BB	1.283	
5.42	0.00	.10000E+01	68314.	BB	7.816	
6.31	0.00	.10000E+01	38614.	BB	4.418	
7.56	0.00	.10000E+01	5720.	BB	.654	
9.03	0.00	.10000E+01	10415.	BB	1.192	
11.34	0.00	.10000E+01	7494.	BB	.857	
18.73	0.00	.10000E+01	5240.	BB	.599	
20.70	0.00	.10000E+01	396947.	BB	45.413	

Total Area = 874078. Total AREA % = 396947.000

Processed data file: P14210 Raw data file: R14210

SAMPLE DATA PACKAGE



Report: 1912.00 Channel: 14 AR1248

Sample: SD 1248 Injected at 16:28:55 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/11 Btl: 11

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

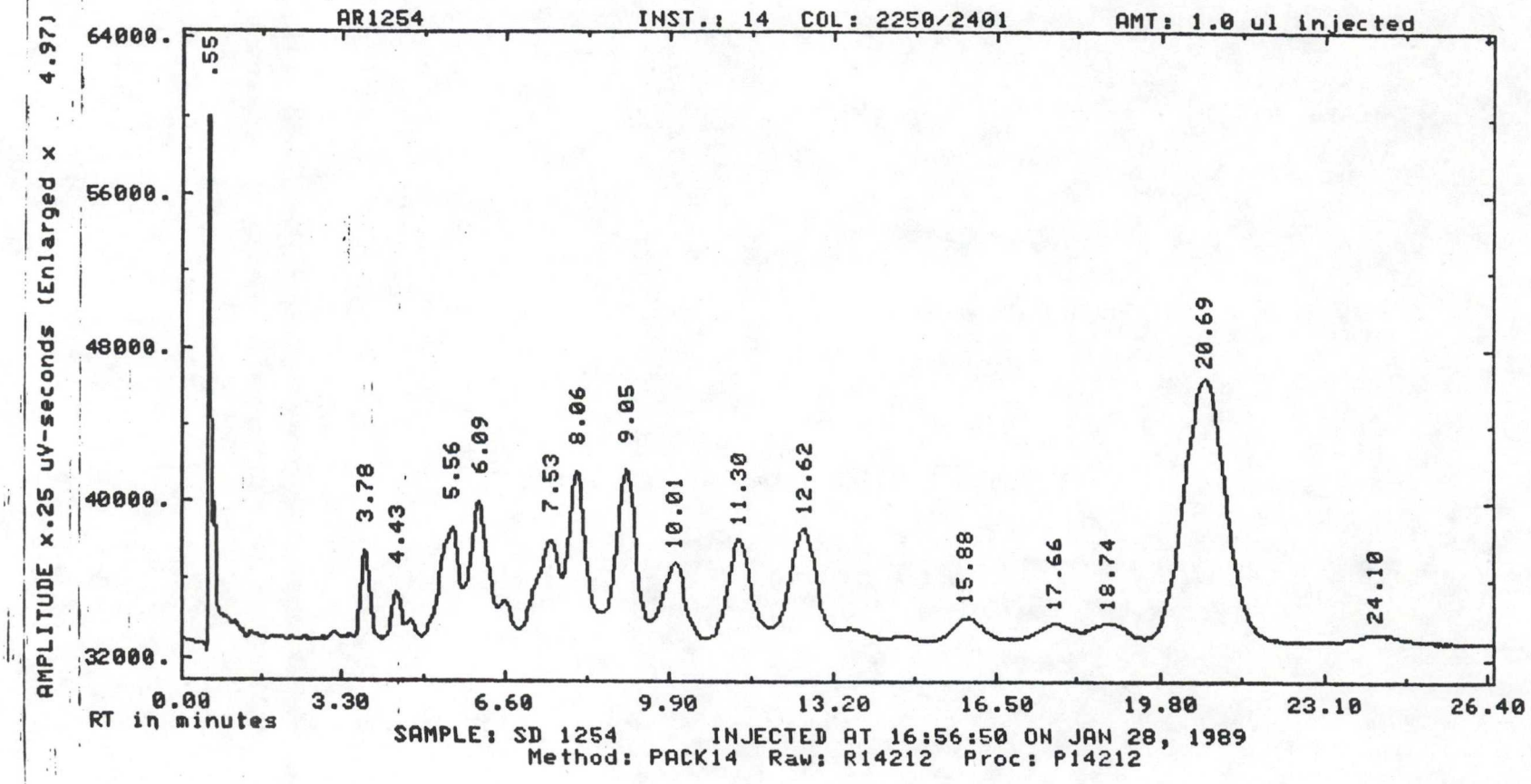
Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	234672.	BS	20.342	
2.53	0.00	.10000E+01	18702.	BB	1.621	
2.86	0.00	.10000E+01	5241.	BB	.454	
3.15	0.00	.10000E+01	47507.	BB	4.118	
3.42	0.00	.10000E+01	9165.	BB	.794	
3.81	0.00	.10000E+01	76021.	BB	6.590	
4.43	0.00	.10000E+01	28113.	BB	2.437	
4.71	0.00	.10000E+01	21000.	BB	1.820	
5.42	0.00	.10000E+01	127178.	BB	11.024	
6.30	0.00	.10000E+01	74165.	BB	6.429	
7.56	0.00	.10000E+01	16538.	BB	1.434	
8.05	0.00	.10000E+01	17224.	BB	1.493	
9.04	0.00	.10000E+01	37305.	BB	3.234	
9.97	0.00	.10000E+01	5180.	BB	.449	
11.32	0.00	.10000E+01	28228.	BB	2.447	
12.60	0.00	.10000E+01	6054.	BB	.525	
18.73	0.00	.10000E+01	8393.	BB	.728	
20.70	0.00	.10000E+01	392940.	BB	34.061	

Total Area = 1153627. Total AREA % = 392940.000

Processed data file: P14211 Raw data file: R14211

SAMPLE DATA PACKAGE



Report: 1913.00 Channel: 14 AR1254

Sample: SD 1254 Injected at 16:56:50 ON JAN 28, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/12 Btl: 12

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	100.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.55	0.00	.10000E+01	138253. BB	12.743	
3.78	0.00	.10000E+01	26300. BB	2.424	
4.43	0.00	.10000E+01	10013. BB	.923	
5.56	0.00	.10000E+01	42584. BB	3.925	
6.09	0.00	.10000E+01	44784. BB	4.128	
7.53	0.00	.10000E+01	29053. BB	2.678	
8.06	0.00	.10000E+01	55124. BB	5.081	
9.05	0.00	.10000E+01	89104. BB	8.213	
10.01	0.00	.10000E+01	44972. BB	4.145	
11.30	0.00	.10000E+01	72374. BB	6.671	
12.62	0.00	.10000E+01	85196. BB	7.853	
15.88	0.00	.10000E+01	22609. BB	2.084	
17.66	0.00	.10000E+01	9863. BB	.909	
18.74	0.00	.10000E+01	11412. BB	1.052	
20.69	0.00	.10000E+01	390866. BB	36.026	
24.10	0.00	.10000E+01	12444. BB	1.147	

Total Area = 1084952. Total AREA % = 12444.000

Processed data file: P14212 Raw data file: R14212

D. RAW QC DATA

(1) Blank Data - in chronological order. NOTE: This order is different from that used for samples.

(a) Tabulated results (Form I PEST)

(b) Chromatogram(s) and data system printout(s) (GC) for each GC column and instrument used for analysis.

(2) Matrix Spike Data

(a) Tabulated results (Form I PEST) of nonspike TCL compounds.

(b) Chromatogram(s) and data system printout(s) (GC).

(3) Matrix Spike Duplicate Data

(a) Tabulated results (Form I PEST) of nonspike TCL compounds.

(b) Chromatogram(s) and data system printout(s) (GC).

(1) Blank Data - in chronological order. NOTE: This order is different from that used for samples.

(a) Tabulated results (Form I PEST)

(b) Chromatogram(s) and data system printout(s) (GC) for each GC column and instrument used for analysis.

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK11

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix: (soil/water) SOIL Lab Sample ID: 242333

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

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 01/25/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/30/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

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	80.	U
5103-74-2	gamma-Chlordane	80.	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

FORM I PEST 1/87 Rev.

Analysis Worksheet

By employee # 819 on Wed Feb 1, 1989 8:37 am using EPACA 1.51

CompuChem Number:242333 Case#:11271 SDG #:JD997 EPA#:PBLK11
Matrix = Soil Level = L Compound List = 177

Volume/weight extracted = 30.00 G Final Extract Volume = 2.00 ml Split = 10.0 Dry Weight Factor = 1.00

Concentration = (Sample Area * Standard Conc * Mulitplication Factor * Split * Final Volume * Dry Weight Factor) / (Standard Area * Volume or Weight of Sample)

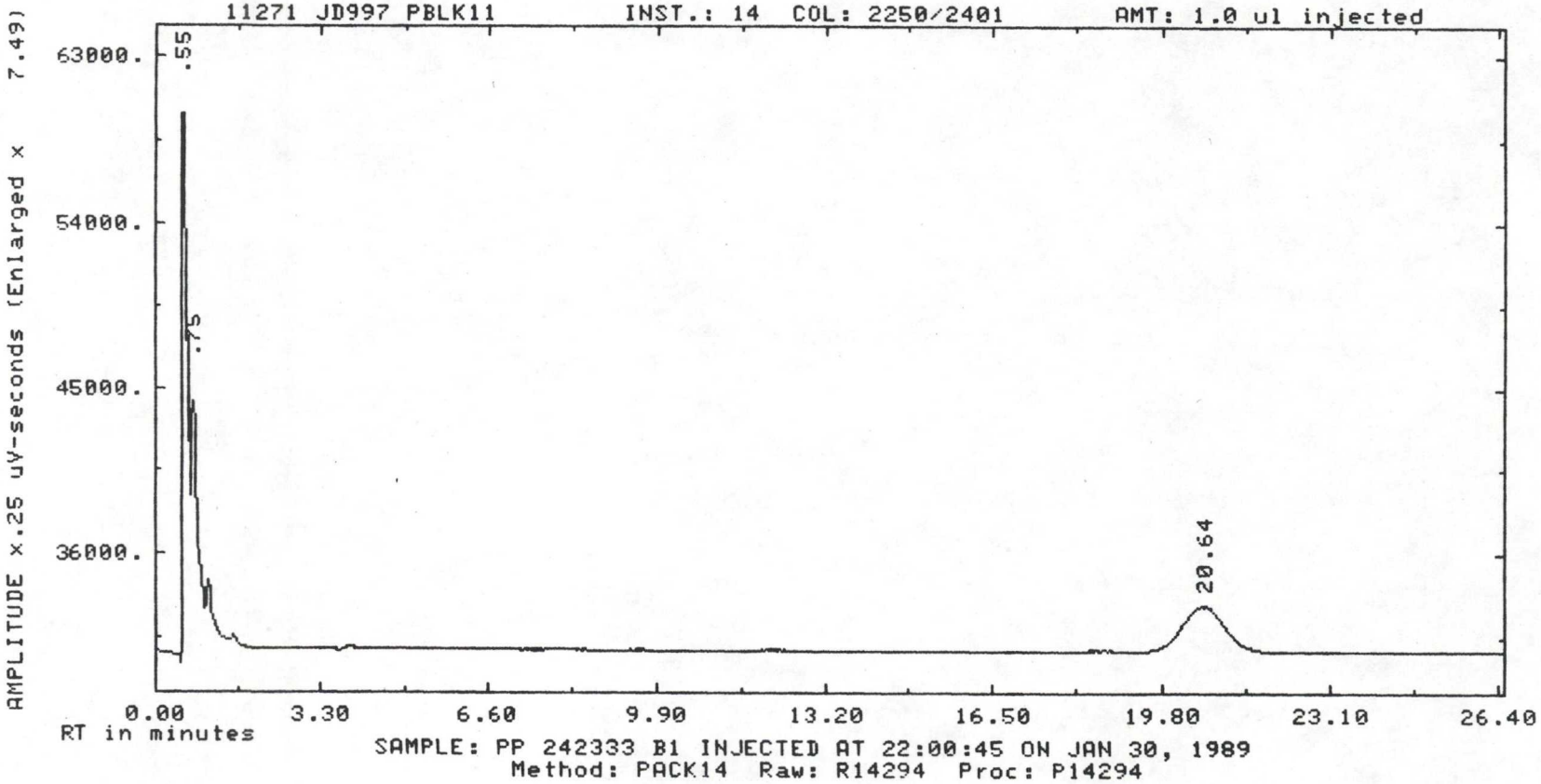
File : P14294 Column : 2250/2401 Multiplication Factor : 5.0 Detection Level Factor : 1.00

DBC_____

Standard RT window - 20.30 - 21.12	Sample RT -	20.64	Primary/Reported OADS
Standard Area - 350329	Sample Area -	69909	
Standard Conc(ug/ml) - 0.100	Sample Conc(ug/Kg) -	66.52	99.78 % Recovery
	Sample ng on col -	0.019955	

Analyst Comments:

SAMPLE DATA PACKAGE



Report: 1999.00 Channel: 14 11271 JD997 PBLK11

Sample: PP 242333 B1 Injected at 22:00:45 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/94 Btl: 94

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	500.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area	AREA %	Name
.55	0.00	.10000E+01	257317. BS	373.721	
.75	0.00	.10000E+01	17037. BB	24.744	
20.64	0.00	.10000E+01	69909. BB	101.535	

Total Area = 344263. Total AREA % = 69909.500

Processed data file: P14294 Raw data file: R14294

LAB INSTRUCTIONS:
RECEIPT DATE
PESTICIDE
WORKSHEET

CASE# 11271 SAS# DUEDATE 2/10/89
COMPUCHEM # 242333

Sample Prep Code---716
Instrument Code----143
Compound List------430
Surrogate Std---541

LOW LEVEL SOLID, EPA SOW 1/87

Blank

==========

SDG: SD997 EPA#: PBLK11 Dry Wt. Factor_____ % Moisture_____
Blank Associated with Case_____ _____ _____ _____
Associated Blank _____

==========

EXTRACTION INFORMATION: CALC Used? yes |___|

Wt. of sample 30 g final volume of extract 2 mls

portion of wt. in pesticide_____.

==========

ANALYSIS INFORMATION: COMMENTS |___| Send to QA

Date	Inst. # / Sequence	Dil. Fact.
1/30	14 142	5
___	___ ___	___
___	___ ___	___

BDL

|___| QA Approved

|___| Need QC/MS Confirmation

Analyst 819 Date 2.1.89

==========

SURROGATE INFORMATION DIBUTYL CHLORENDATE

AREA IN SAMPLE_____ X Dilution Factor_____ X 100 = 100 % Recovery
AREA IN STD
% Recovery X 0.1 ug/ml = _____ug/ml

==========

+EA = re-extract acceptable
JA = reinject acceptable
QA = repeat confirmed original results
OK = original data acceptable (not for REPEATS)
NS = insufficient sample for repeat
DL = DBC low (<20% Recovery)
DA = Dilution Acceptable
BF = Blank Requires Florisil
CT = Contamination Suspected

IF DATA FAILS, INSERT CONDITION CODE FROM REPEAT REQUEST FORM IN BOX.

FINAL STATUS CODE+= | OK |

IF MULTIPLE PACKAGES EXIST, REPORT THIS DATA:_____

|___| QANA |___| QAN3 QA notice included.

==========

SAMPLE DISPOSITION Code

|___| Complete.....

|___| Requires Re-extraction.. 716

|___| Requires reprep..... 930

|___| Requires cleanup..... 901

==========

Audited By_____ Date_____

1-28 (6) 1-25-89 ADDIE THOMPSON
ASSIGNED TO ~~Anthony Rios~~
EMPLOYEE ID # 985

COMPUCHEM LABORATORIES
EXTRACTION WORKSHEET
LOW LEVEL PESTICIDE S/S/S

Rec. Due: 2-10
DATE EXTRACTED/POSTED 1-25-89

CASE # 11271-JD997

-716
21 DAY TAT

QUEUE # 46

68-01-7397

	SAMPLE NUMBER	EPA ID #	QC TYPE	SAMPLE ORIG #	SAMPLE WEIGHT	SPLIT SV	VOLUME PEST.	ALUMINA START VOL.	FINAL VOL.	COMP. DATE	COMMENTS
1	242036	JD998 MS	SS	242031	30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	541/688 USE 242030, 031, 035
2	242037	JD998 MSD	SS	242031	30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	FOR QC
3	242038	BS	BS		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21	242333	PBLK 11	BLANK 1		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	
22	242334	PBLK 12	BLANK 2		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	

	#	AMOUNT	LOT #
SURROGATE	395	2.0 ML	27816
SPIKE	4016	400 UL	27852

CHECKED AND VERIFIED TM 1-26-89 (GC LAB)

CASE DONE 1287 1-26-89 (GC LAB)

AUTO. COUNTER 541/ 688

MANUAL COUNTER 554/ 667

-716 ALUMINA BATCH # 1-3-89

POSTED 985

SAMPLE DATA PACKAGE

25

COMPOUND LIST NO. - 430

COMPUCHEM # DATE
IDENTIFIER PESTICIDES (LOW LEVEL SOLID) EPA SOW 1/87

DIL FACT_____DRY WT_____ _30__SPLIT_____FINAL VOL_____/5 = 1.0
AMT SAMPLE_____ CORRECTION FACTOR

COUNTER	COMPUCHEM COMPOUND NUMBER	COMPOUND NAME	RESULTS	DETECTION LIMIT (ug/kg
1.	0701	ALDRIN----------		8.0
2.	0702	ALPHA-BHC----------		8.0
3.	0703	BETA-BHC----------		8.0
4.	0704	GAMMA-BHC----------		8.0
5.	0705	DELTA-BHC----------		8.0
6.	0706	TECHNICAL CHLORDANE------		80.0
7.	0707	4,4'-DDT----------		16.0
8.	0708	4,4'-DDE----------		16.0
9.	0709	4,4'-DDD----------		16.0
10.	0710	DIELDRIN----------		16.0
11.	0711	ENDOSULFAN I ----------		8.0
12.	0712	ENDOSULFAN II ----------		16.0
13.	0713	ENDOSULFAN SULFATE-------	BDL	16.0
14.	0714	ENDRIN----------		16.0
15.	0739	ENDRIN KETONE----------		16.0
16.	0716	HEPTACHLOR----------		8.0
17.	0717	HEPTACHLOR EPOXIDE-------		8.0
18.	0726	METHOXYCHLOR----------		80.0
19.	0724	AROCHLOR 1016----------		80.0
20.	0720	AROCHLOR 1221----------		80.0
21.	0721	AROCHLOR 1232----------		80.0
22.	0718	AROCHLOR 1242----------		80.0
23.	0722	AROCHLOR 1248----------		80.0
24.	0719	AROCHLOR 1254----------		160.0
25.	0723	AROCHLOR 1260----------		160.0
26.	0725	TOXAPHENE----------		160.0

ANALYST'S COMMENTS:

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLK13

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix: (soil/water) SOIL Lab Sample ID: 242322

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

Level: (low/med) LOW Date Received: / /

% Moisture: not dec. _____ dec. _____ Date Extracted: 01/25/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/31/89

GPC Cleanup: (Y/N) N pH: _____ Dilution Factor: 1.00

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	80.	U
5103-74-2	gamma-Chlordane	80.	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

FORM I PEST 1/87 Rev.

Analysis Worksheet

By employee #1388 on Wed Feb 1, 1989 12:06 am using EPACA 1.51

CompuChem Number:242322 Case#:11271 SDG #:JD997 EPA#:PBLK13
Matrix = Soil Level = L Compound List = 177

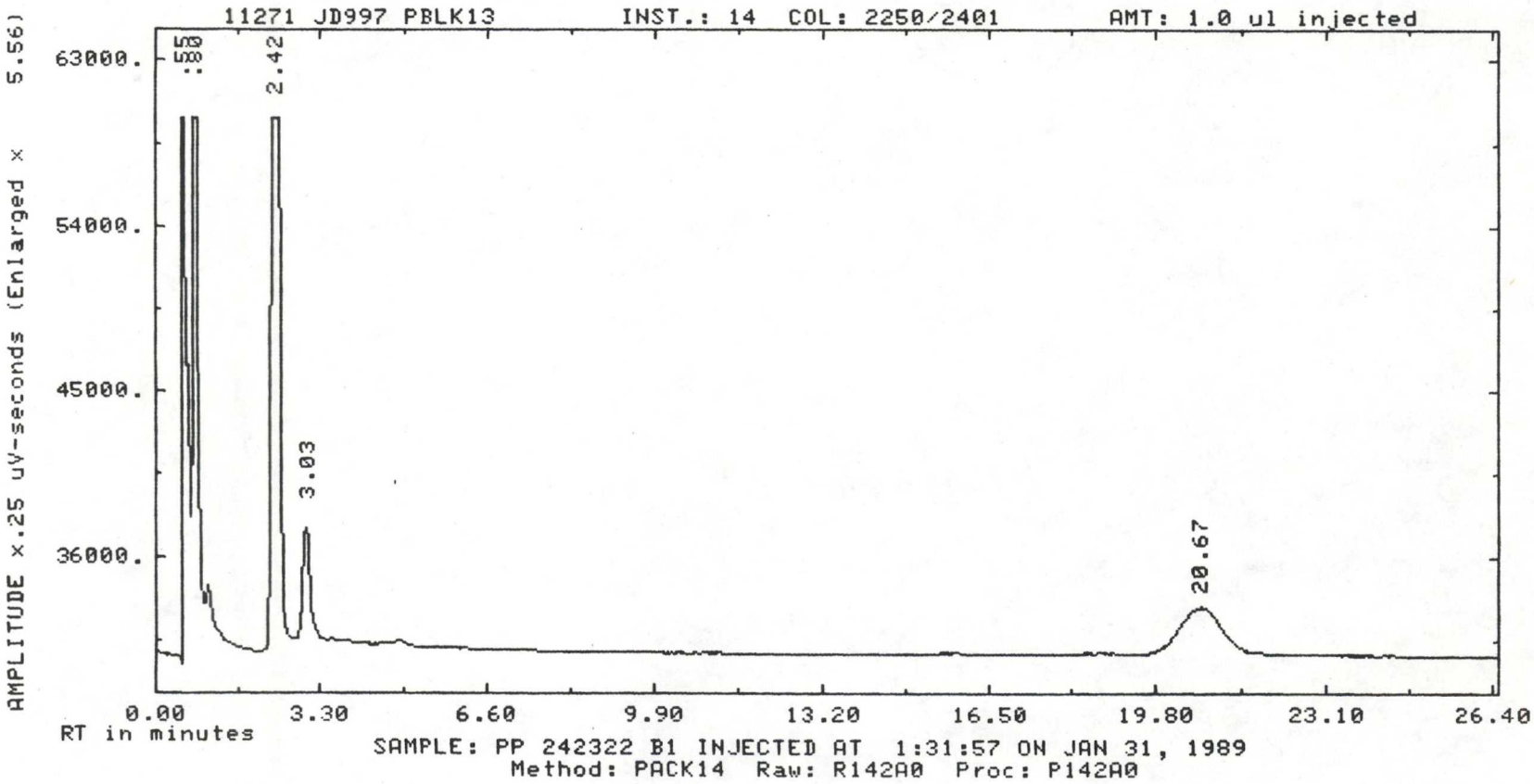
Volume/weight extracted = 30.00 G Final Extract Volume = 2.00 ml Split = 10.0 Dry Weight Factor = 1.00

Sample Area * Standard Conc * Mulitplication Factor * Split * Final Volume * Dry Weight Factor
Concentration = ----------
Standard Area * Volume or Weight of Sample

File : P142A0 Column : OV-101 Multiplication Factor : 5.0 Detection Level Factor : 1.00

	Standard RT window -	20.30 - 21.12	Sample RT -	20.67	Primary/Reported OADS
DBC_____	Standard Area -	350329	Sample Area -	73467	
	Standard Conc(ug/ml) -	0.100	Sample Conc(ug/Kg) -	69.90	104.85 % Recovery
			Sample ng on col -	0.020971	

Analyst Comments:


11271 JD997 PBLK13
INST.: 14 COL: 2250/2401
AMT: 1.0 ul injected
AMPLITUDE x.25 uV-seconds (Enlarged x 5.56)
63000.
54000.
45000.
36000.
2.42
3.03
20.67
0.00
3.30
6.60
9.90
13.20
16.50
19.80
23.10
26.40
RT in minutes
SAMPLE: PP 242322 B1 INJECTED AT 1:31:57 ON JAN 31, 1989
Method: PACK14 Raw: R142A0 Proc: P142A0

Report: 2006.00 Channel: 14 11271 JD997 PBLK13

Sample: PP 242322 B1 Injected at 1:31:57 ON JAN 31, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/** Btl: 0

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	500.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	168753.	BS	113.629	
.80	0.00	.10000E+01	122861.	BB	82.728	
2.42	0.00	.10000E+01	346454.	BB	233.284	
3.03	0.00	.10000E+01	31026.	BB	20.891	
20.67	0.00	.10000E+01	73466.	BB	49.468	

Total Area = 742560. Total AREA % = 73466.500

Processed data file: P142A0 Raw data file: R142A0

LAB INSTRUCTIONS:
RECEIPT DATE
PESTICIDE
WORKSHEET

CASE# 11271 SAS# DUEDATE 2/10/89
COMPUCHEM # 242322

Sample Prep Code---716
Instrument Code----143
Compound List------430
Surrogate Std---541

LOW LEVEL SOLID, EPA SOW 1/87

Blank

==========

SDG: SD997 EPA#: PBLK13 Dry Wt. Factor_____ % Moisture_____
Blank Associated with Case_____ _____ _____ _____
Associated Blank _____

==========

EXTRACTION INFORMATION: CALC Used? yes |___|

Wt. of sample_____g final volume of extract_____mls

portion of wt. in pesticide_____.

==========

ANALYSIS INFORMATION: COMMENTS |___| Send to QA

Inst. # /
Date Sequence Dil. Fact. |___| QA Approved

___ ___ ___ ___ BDL |___| Need QC/MS Confirmation

___ ___ ___ ___

___ ___ ___ ___ Analyst 1524/879 Date_____

==========

SURROGATE INFORMATION DIBUTYL CHLORENDATE

AREA IN SAMPLE_____ X Dilution Factor_____ X 100 = 104 % Recovery
AREA IN STD
% Recovery X 0.1 ug/ml = _____ug/ml

==========

+EA = re-extract acceptable
JA = reinject acceptable
QA = repeat confirmed original results
OK = original data acceptable (not for REPEATS)
NS = insufficient sample for repeat
DL = DBC low ((20% Recovery)
DA = Dilution Acceptable
BF = Blank Requires Florisil
CT = Contamination Suspected

IF DATA FAILS, INSERT CONDITION CODE FROM REPEAT REQUEST FORM IN BOX.

FINAL STATUS CODE+= |_____|

IF MULTIPLE PACKAGES EXIST, REPORT THIS DATA:_____

|___| QANA |___| QAN3 QA notice included.

==========

SAMPLE DISPOSITION Code

|___| Complete.....

|___| Requires Re-extraction.. 716

|___| Requires reprep..... 930

|___| Requires cleanup..... 901

==========

Audited By_____ Date_____

46

BD
BERNARD DICKENS
ASSIGNED TO: ~~ANTHONY RICE~~
(BD) 1-25-89 949

EXTRACTION WORKSHEET
Pesticide/Herbicide
CompuChem Laboratories Inc.

21 DAY TAT

Rec: 1-21 1-20
Due: 2-10 2-10

DATE ASSIGNED 1-25-89
PAGE _____ OF _____

68-01-7397
68-01-7397

SAMPLE NUMBER	PREP CODE	CASE #	EPA #	QC SAMPLE TYPE	QC SAMPLE ORIG. NO.	SAMPLE WEIGHT (g) VOLUME (ml)	FINAL EXTRACT VOL. (MLS) SV/B/N	ACID	PEST	ALUMINA COLUMN START VOL	ALUMINA COLUMN FINAL VOL	DATE COMPT	COMMENTS
242032	-716	11271-JD997		SS	242030	30.0	0.9		1.0				544/752
242033				SS	242030	30.0	0.9		1.0				
242034				BS		30.0	0.9		1.0				
242030			JD997			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242031			JD998			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242035			JD999			30.0	0.9		1.0	2.0ml	2.0ml	1-25	
241823		11271-JE200	JD958.			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
241824			JD959			30.0	0.9		1.0	2.0ml	2.0ml	1-25	DO NOT USE FOR QC
242322			PBLK 13	B_1		30.0	0.9		1.0	2.0ml	2.0ml	1-25	
242328			PBLK 14	B_2		30.0	0.9		1.0	2.0ml	2.0ml	1-25	

		S-Vol	Acid	B/N	Pest.	Other	Other
SURROGATE	NO.	393			395		
	AMT.	0.5 ml.			2.0 ml.		
	LOT	27913			27816		
SPIKE	NO.		3012	2021			
	AMT.		1.0 ml.	1.0 ml.			
	LOT		28048	27914			

verified by DM 1-26-89
Case Bn 1207 1-26-89 555/923

MANUAL COUNTER _____
FINAL VOLUME VARIFIED Bernard Dickens
SUPERVISOR REVIEWED Elan Arnette
EXTRACTS RECEIVED BY _____

949 POSTED 1046 № 17156

SAMPLE DATA PACKAGE

18

COMPOUND LIST NO. - 430

COMPUCHEM # DATE

IDENTIFIER PESTICIDES (LOW LEVEL SOLID) EPA SOW 1/87

DIL FACT_____DRY WT_____ _30__SPLIT_____FINAL VOL_____/5 = _____

AMT SAMPLE_____ CORRECTION FACTOR

COUNTER	COMPUCHEM COMPOUND NUMBER	COMPOUND NAME	RESULTS	DETECTION LIMIT (ug/kg
1.	0701	ALDRIN----------		8.0
2.	0702	ALPHA-BHC----------		8.0
3.	0703	BETA-BHC----------		8.0
4.	0704	GAMMA-BHC----------		8.0
5.	0705	DELTA-BHC----------		8.0
6.	0706	TECHNICAL CHLORDANE------		80.0
7.	0707	4,4'-DDT----------		16.0
8.	0708	4,4'-DDE----------		16.0
9.	0709	4,4'-DDD----------		16.0
10.	0710	DIELDRIN----------		16.0
11.	0711	ENDOSULFAN I ----------		8.0
12.	0712	ENDOSULFAN II ----------		16.0
13.	0713	ENDOSULFAN SULFATE-------		16.0
14.	0714	ENDRIN----------		16.0
15.	0739	ENDRIN KETONE----------		16.0
16.	0716	HEPTACHLOR----------		8.0
17.	0717	HEPTACHLOR EPOXIDE-------		8.0
18.	0726	METHOXYCHLOR----------		80.0
19.	0724	AROCHLOR 1016----------		80.0
20.	0720	AROCHLOR 1221----------		80.0
21.	0721	AROCHLOR 1232----------		80.0
22.	0718	AROCHLOR 1242----------		80.0
23.	0722	AROCHLOR 1248----------		80.0
24.	0719	AROCHLOR 1254----------		160 0
25.	0723	AROCHLOR 1260----------		160.0
26.	0725	TOXAPHENE----------		160.0

ANALYST'S COMMENTS:

(2) Matrix Spike Data

(a) Tabulated results (Form I PEST) of nonspike TCL compounds.

(b) Chromatogram(s) and data system printout(s) (GC).

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JD998MS

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix: (soil/water) SOIL Lab Sample ID: 242036

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

Level: (low/med) LOW Date Received: 01/21/89

% Moisture: not dec. 24 dec. ____ Date Extracted: 01/25/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/30/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.00

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	100	U
5103-74-2	gamma-Chlordane	100	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

FORM I PEST 1/87 Rev.

Analysis Worksheet

By employee # 819 on Wed Feb 1, 1989 8:40 am using EPACA 1.51

CompuChem Number:242036 Case#:11271 SDG #:JD997 EPA#:JD998MS
Matrix = Soil Level = L Compound List = 177

Volume/weight extracted = 30.00 G Final Extract Volume = 2.00 ml Split = 10.0 Dry Weight Factor = 1.32

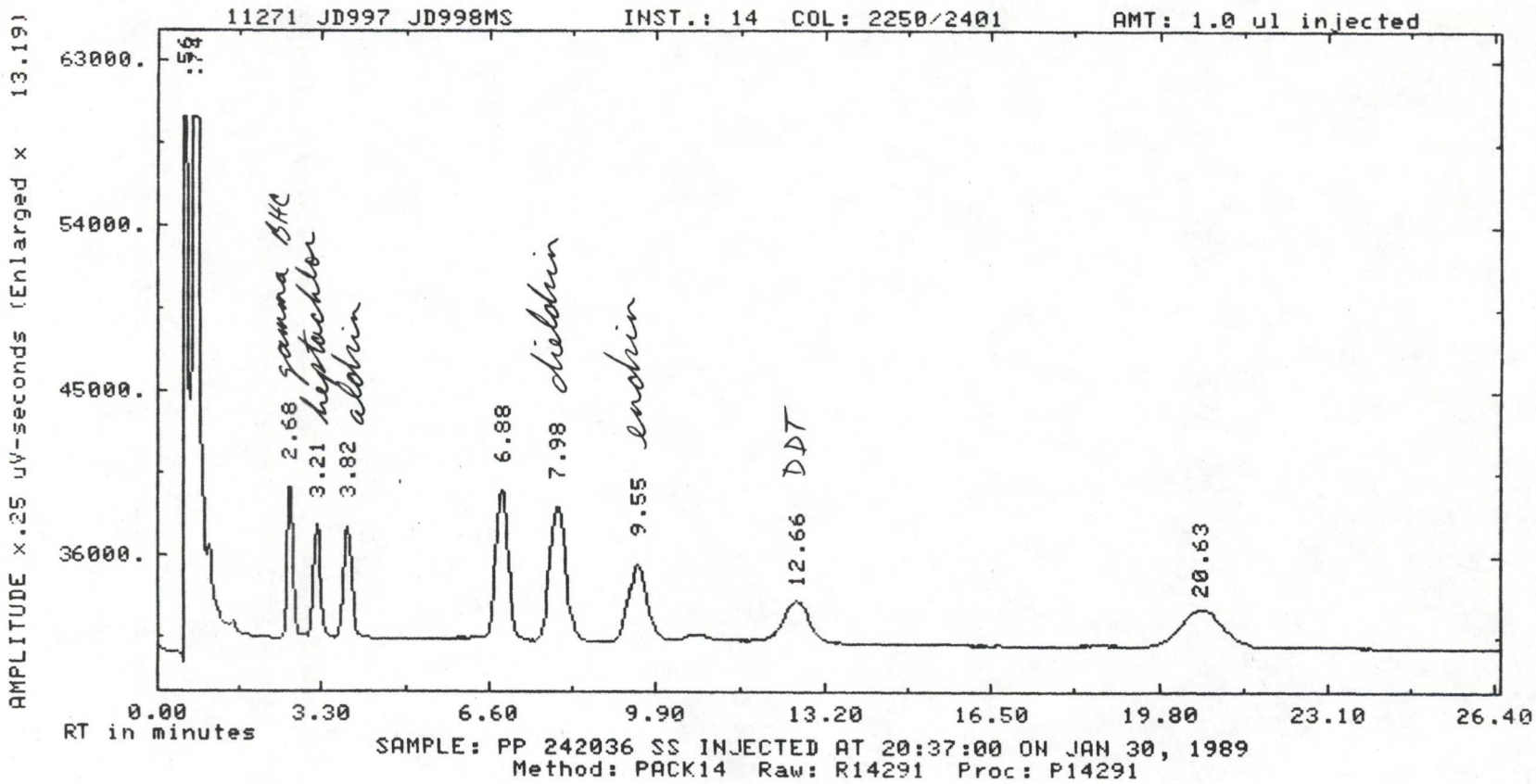
Concentration = (Sample Area * Standard Conc * Mulitplication Factor * Split * Final Volume * Dry Weight Factor) / (Standard Area * Volume or Weight of Sample)

File : P14291 Column : 2250/2401 Multiplication Factor : 5.0 Detection Level Factor : 1.32

gamma-BHC (Lindane)_	Standard RT window - 2.65 - 2.75 Standard Area - 59348 Standard Conc(ug/ml) - 0.010	Sample RT - 2.68 Sample Area - 32047 Sample Conc(ug/Kg) - 23.68 Sample ng on col - 0.005400	67.50 % Recovery	
Heptachlor_____	Standard RT window - 3.17 - 3.30 Standard Area - 53133 Standard Conc(ug/ml) - 0.010	Sample RT - 3.21 Sample Area - 29016 Sample Conc(ug/Kg) - 23.95 Sample ng on col - 0.005461	68.26 % Recovery	
Aldrin_____	Standard RT window - 3.77 - 3.92 Standard Area - 59692 Standard Conc(ug/ml) - 0.010	Sample RT - 3.82 Sample Area - 34496 Sample Conc(ug/Kg) - 25.35 Sample ng on col - 0.005779	72.24 % Recovery	
Dieldrin_____	Standard RT window - 7.87 - 8.19 Standard Area - 112081 Standard Conc(ug/ml) - 0.020	Sample RT - 7.98 Sample Area - 78467 Sample Conc(ug/Kg) - 61.41 Sample ng on col - 0.014002	70.01 % Recovery	
Endrin_____	Standard RT window - 9.41 - 9.80 Standard Area - 137314 Standard Conc(ug/ml) - 0.040	Sample RT - 9.55 Sample Area - 52016 Sample Conc(ug/Kg) - 66.46 Sample ng on col - 0.015152	75.76 % Recovery	
4,4'-DDT_____	Standard RT window - 12.47 - 12.98 Standard Area - 150528 Standard Conc(ug/ml) - 0.060	Sample RT - 12.66 Sample Area - 38209 Sample Conc(ug/Kg) - 66.80 Sample ng on col - 0.015230	76.15 % Recovery	
DBC_____	Standard RT window - 20.30 - 21.12 Standard Area - 350329 Standard Conc(ug/ml) - 0.100	Sample RT - 20.63 Sample Area - 58505 Sample Conc(ug/Kg) - 73.25 Sample ng on col - 0.016700	Primary/Reported OADS 83.50 % Recovery	

Analyst Comments:

SAMPLE DATA PACKAGE



Report: 1996.00 Channel: 14 11271 JD997 JD998MS

Sample: PP 242036 SS Injected at 20:37:00 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/91 Btl: 91

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	500.00	NO

Actual run time: 26.508 minutes

RT	ITM	Factor	Area		AREA %	Name
.56	0.00	.10000E+01	356876.	BS	189.401	
.74	0.00	.10000E+01	191129.	BB	101.436	
2.68	0.00	.10000E+01	32047.	BB	17.008	
3.21	0.00	.10000E+01	29016.	BB	15.399	
3.82	0.00	.10000E+01	34495.	BB	18.307	
6.88	0.00	.10000E+01	71354.	BB	37.869	
7.98	0.00	.10000E+01	78467.	BB	41.644	
9.55	0.00	.10000E+01	52016.	BB	27.606	
12.66	0.00	.10000E+01	38209.	BB	20.278	
20.63	0.00	.10000E+01	58505.	BB	31.050	

Total Area = 942117. Total AREA % = 58505.000

Processed data file: P14291 Raw data file: R14291

QC

INSTRUCTIONS:
REQUIRE
PESTICIDE
WORKSHEET

LOW LEVEL SOLID, EPA SOW 1/87

CASE# 11271 SAS# 55
COMPUCHEM # 242036

DUEDATE 2/10/89

Sample Prep Code---716
Instrument Code----143
Compound List------430
Surrogate Std---541

SDG: JD997 EPA#: JD998MS Dry Wt. Factor 1.32 % Moisture 24
Blank Associated with Case _____ _____ _____ _____
Associated Blank _____ 7.3

EXTRACTION INFORMATION: CALC Used? yes |___|

Wt. of sample 30 g final volume of extract 2 mls

portion of wt. in pesticide _____.

ANALYSIS INFORMATION:

Date	Inst. # / Sequence	Dil. Fact.
1/30	14 142	5

COMMENTS: Spike

|___| Send to QA
|___| QA Approved
|___| Need QC/MS Confirmation

Analyst 819 Date 2/1/89

SURROGATE INFORMATION DIBUTYL CHLORENDATE

AREA IN SAMPLE _____ X Dilution Factor _____ X 100 = 84% Recovery
AREA IN STD
% Recovery X 0.1 ug/ml = _____ug/ml

+EA = re-extract acceptable
JA = reinject acceptable
QA = repeat confirmed original results
OK = original data acceptable (not for REPEATS)
NS = insufficient sample for repeat
DL = DBC low (<20% Recovery)
DA = Dilution Acceptable
BF = Blank Requires Florisil
CT = Contamination Suspected

IF DATA FAILS, INSERT CONDITION CODE FROM REPEAT REQUEST FORM IN BOX.

FINAL STATUS CODE+= | OK |

IF MULTIPLE PACKAGES EXIST, REPORT THIS DATA: _____

|___| QANA |___| QAN3 QA notice included.

SAMPLE DISPOSITION Code

|___| Complete.....
|___| Requires Re-extraction.. 716
|___| Requires reprep..... 930
|___| Requires cleanup..... 901

Audited By _____ Date _____

1-28 @ 1-25-89 EDDIE THOMPSON
ASSIGNED TO ~~ANTHONY RIOS~~
EMPLOYEE ID # 985

COMPUCHEM LABORATORIES
EXTRACTION WORKSHEET
LOW LEVEL PESTICIDE S/S/S

Rec. Due: 2-10
DATE EXTRACTED/POSTED 1-25-89

CASE # 11271-JD997

-716
21 DAY TAT

QUEUE # 46 68-01-7397

	SAMPLE NUMBER	EPA ID #	QC TYPE	SAMPLE ORIG #	SAMPLE WEIGHT	SPLIT VOLUME SV	SPLIT VOLUME PEST.	ALUMINA START VOL.	FINAL VOL.	COMP. DATE	COMMENTS
1	242036	JD998 MS	SS	242031	30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	541/688 USE 242030, 031, 035
2	242037	JD998 MSD	SS	242031	30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	FOR QC
3	242038	BS	BS		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21	242333	PBLK 11	BLANK 1		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	
22	242334	PBLK 12	BLANK 2		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	

	#	AMOUNT	LOT #
SURROGATE	395	2.0 ML	27816
SPIKE	4016	400 UL	27852

CHECKED AND VERIFIED TM 1-26-89 (GC LAB)

CASE DONE 1287 1-26-89 (GC LAB)

AUTO. COUNTER 541/688

MANUAL COUNTER 554/667

-716 ALUMINA BATCH # 1-3-89

POSTED 985

SAMPLE DATA PACKAGE

10

COMPOUND LIST NO. - 430

COMPUCHEM # DATE

IDENTIFIER PESTICIDES (LOW LEVEL SOLID) EPA SOW 1/87

DIL FACT_____DRY WT_____ _30__SPLIT_____FINAL VOL_____/5 = 1.32

AMT SAMPLE_____ CORRECTION FACTOR

COUNTER	COMPUCHEM COMPOUND NUMBER	COMPOUND NAME	RESULTS	DETECTION LIMIT (ug/kg
1.	0701	ALDRIN----------	25	8.0
2.	0702	ALPHA-BHC----------		8.0
3.	0703	BETA-BHC----------		8.0
4.	0704	GAMMA-BHC----------	24	8.0
5.	0705	DELTA-BHC----------		8.0
6.	0706	TECHNICAL CHLORDANE------		80.0
7.	0707	4,4'-DDT----------	67	16.0
8.	0708	4,4'-DDE----------		16.0
9.	0709	4,4'-DDD----------		16.0
10.	0710	DIELDRIN----------	61	16.0
11.	0711	ENDOSULFAN I ----------		8.0
12.	0712	ENDOSULFAN II ----------		16.0
13.	0713	ENDOSULFAN SULFATE-------		16.0
14.	0714	ENDRIN----------	66	16.0
15.	0739	ENDRIN KETONE----------		16.0
16.	0716	HEPTACHLOR----------	24	8.0
17.	0717	HEPTACHLOR EPOXIDE-------		8.0
18.	0726	METHOXYCHLOR----------		80.0
19.	0724	AROCHLOR 1016----------		80.0
20.	0720	AROCHLOR 1221----------		80.0
21.	0721	AROCHLOR 1232----------		80.0
22.	0718	AROCHLOR 1242----------		80.0
23.	0722	AROCHLOR 1248----------		80.0
24.	0719	AROCHLOR 1254----------		160.0
25.	0723	AROCHLOR 1260----------		160.0
26.	0725	TOXAPHENE----------		160.0

ANALYST'S COMMENTS:

(3) Matrix Spike Duplicate Data

(a) Tabulated results (Form I PEST) of nonspike TCL compounds.

(b) Chromatogram(s) and data system printout(s) (GC).

1D
PESTICIDE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

JD998MSD

Lab Name: COMPUCHEM LABORATORIES Contract: 68-01-7397

Lab Code: COMPU Case No.: 11271 SAS No.: _____ SDG No.: JD997

Matrix: (soil/water) SOIL Lab Sample ID: 242037

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

Level: (low/med) LOW Date Received: 01/21/89

% Moisture: not dec. 24 dec. ____ Date Extracted: 01/25/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/30/89

GPC Cleanup: (Y/N) N pH: 7.3 Dilution Factor: 1.00

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	100	U
5103-74-2	gamma-Chlordane	100	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

Analysis Worksheet

By employee # 819 on Wed Feb 1, 1989 8:42 am using EPACA 1.51

CompuChem Number:242037 Case#:11271 SDG #:JD997 EPA#:JD998MSD
Matrix = Soil Level = L Compound List = 177

Volume/weight extracted = 30.00 G Final Extract Volume = 2.00 ml Split = 10.0 Dry Weight Factor = 1.32

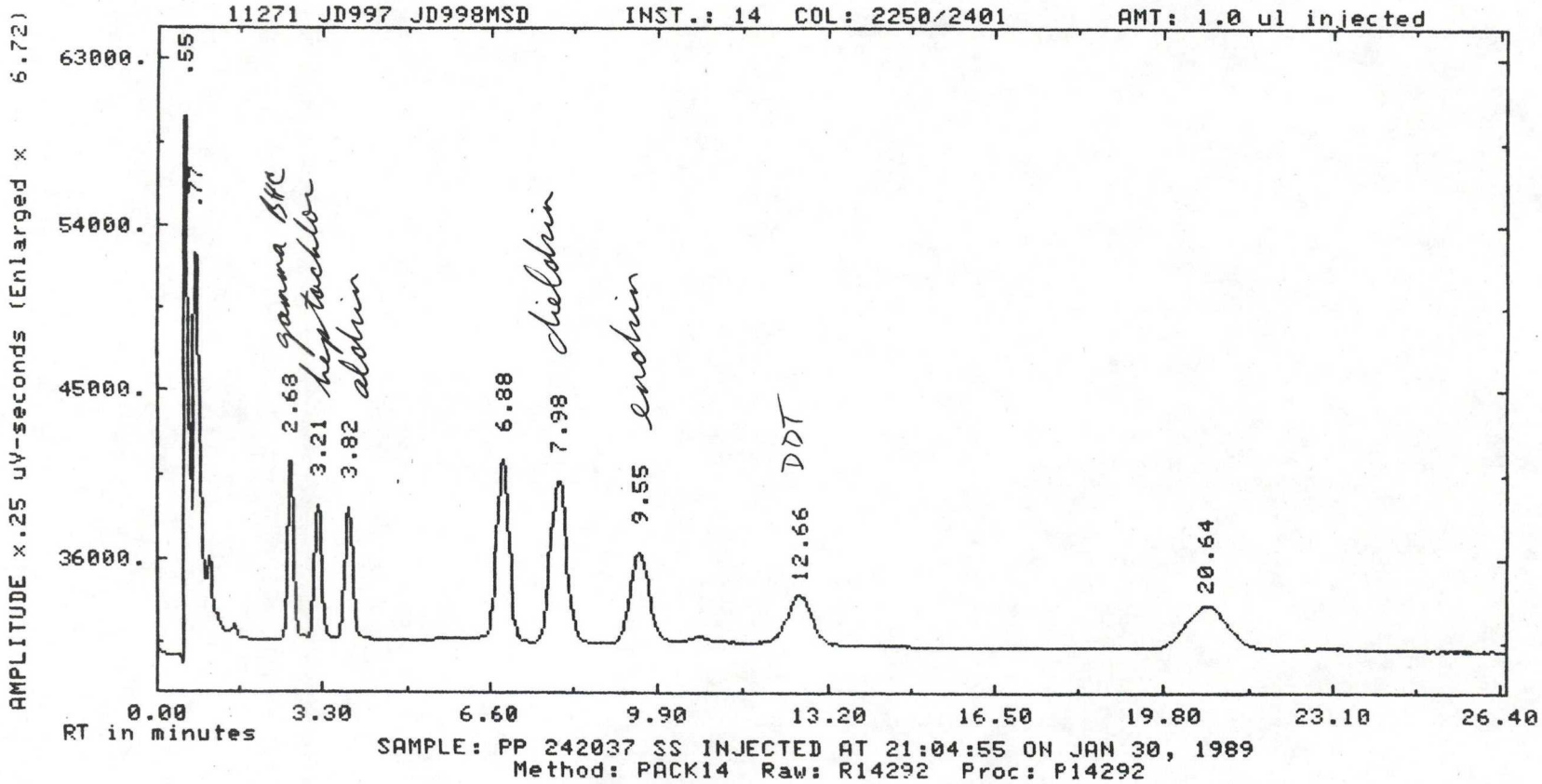
Concentration = Sample Area * Standard Conc * Mulitplication Factor * Split * Final Volume * Dry Weight Factor / Standard Area * Volume or Weight of Sample

File : P14292 Column : 2250/2401 Multiplication Factor : 5.0 Detection Level Factor : 1.32

gamma-BHC (Lindane)_	Standard RT window - 2.65 - 2.75 Standard Area - 59348 Standard Conc(ug/ml) - 0.010	Sample RT - 2.68 Sample Area - 36576 Sample Conc(ug/Kg) - 27.03 Sample ng on col - 0.006163	77.04 % Recovery	
Heptachlor_____	Standard RT window - 3.17 - 3.30 Standard Area - 53133 Standard Conc(ug/ml) - 0.010	Sample RT - 3.21 Sample Area - 34418 Sample Conc(ug/Kg) - 28.41 Sample ng on col - 0.006478	80.97 % Recovery	
Aldrin_____	Standard RT window - 3.77 - 3.92 Standard Area - 59692 Standard Conc(ug/ml) - 0.010	Sample RT - 3.82 Sample Area - 40525 Sample Conc(ug/Kg) - 29.78 Sample ng on col - 0.006789	84.86 % Recovery	
Dieldrin_____	Standard RT window - 7.87 - 8.19 Standard Area - 112081 Standard Conc(ug/ml) - 0.020	Sample RT - 7.98 Sample Area - 93738 Sample Conc(ug/Kg) - 73.36 Sample ng on col - 0.016727	83.63 % Recovery	
Endrin_____	Standard RT window - 9.41 - 9.80 Standard Area - 137314 Standard Conc(ug/ml) - 0.040	Sample RT - 9.55 Sample Area - 61793 Sample Conc(ug/Kg) - 78.95 Sample ng on col - 0.018001	90.00 % Recovery	
4,4'-DDT_____	Standard RT window - 12.47 - 12.98 Standard Area - 150528 Standard Conc(ug/ml) - 0.060	Sample RT - 12.66 Sample Area - 44792 Sample Conc(ug/Kg) - 78.31 Sample ng on col - 0.017854	89.27 % Recovery	
DBC_____	Standard RT window - 20.30 - 21.12 Standard Area - 350329 Standard Conc(ug/ml) - 0.100	Sample RT - 20.64 Sample Area - 66383 Sample Conc(ug/Kg) - 83.11 Sample ng on col - 0.018949	Primary/Reported OADS 94.74 % Recovery	

Analyst Comments:

SAMPLE DATA PACKAGE



Report: 1997.00 Channel: 14 11271 JD997 JD998MSD

Sample: PP 242037 SS Injected at 21:04:55 ON JAN 30, 1989

ZERO Method: PACK14 Seq: SEQ142 Subsq/Samp: 1/92 Btl: 92

Sl-width	MV/Min	Delay	Min-Ar	Bunch
.500	.300	0.00	5000	Auto

Sup-Unk	DvT	ID-Lvl	Ref-RTW	%RTW	%Dil-f	Iso
NO	0.00	0	.30	5.0	500.00	NO

Actual run time: 26.517 minutes

RT	ITM	Factor	Area		AREA %	Name
.55	0.00	.10000E+01	203347.	BS	139.632	
.77	0.00	.10000E+01	57186.	BB	39.268	
2.68	0.00	.10000E+01	36576.	BB	25.116	
3.21	0.00	.10000E+01	34418.	BB	23.634	
3.82	0.00	.10000E+01	40525.	BB	27.827	
6.88	0.00	.10000E+01	89393.	BB	61.384	
7.98	0.00	.10000E+01	93738.	BB	64.367	
9.55	0.00	.10000E+01	61793.	BB	42.432	
12.66	0.00	.10000E+01	44791.	BB	30.757	
20.64	0.00	.10000E+01	66383.	BB	45.584	

Total Area = 728152. Total AREA % = 66383.500

Processed data file: P14292 Raw data file: R14292

QC

L[illegible]NS[illegible]IONS:
CE[illegible]T[illegible]A[illegible]
S[illegible]CIDE
[illegible]HEET
L[illegible] SOLID, EPA SOW 1/87

CASE# 11271 SAS# DUEDATE 2/10/89
COMPUCHEM # 242037

Sample Prep Code---716
Instrument Code----143
Compound List------430
Surrogate Std---541

SS

SDG: JD997 EPA#: JD998MSD Dry Wt. Factor 1.32 % Moisture 24
Blank Associated with Case _____ _____ _____ 7.3
Associated Blank _____

EXTRACTION INFORMATION: CALC Used? yes |___|

Wt. of sample 30 g final volume of extract 2 mls

portion of wt. in pesticide _____.

ANALYSIS INFORMATION:

Date	Inst. # / Sequence	Dil. Fact.
1/30	14 142	5

COMMENTS: Spike

|___| Send to QA
|___| QA Approved
|___| Need QC/MS Confirmation

Analyst 819 Date 2/1/89

SURROGATE INFORMATION DIBUTYL CHLORENDATE

AREA IN SAMPLE _____ X Dilution Factor _____ X 100 = 95 % Recovery
AREA IN STD
% Recovery X 0.1 ug/ml = _____ ug/ml

+EA = re-extract acceptable
JA = reinject acceptable
QA = repeat confirmed original results
OK = original data acceptable (not for REPEATS)
NS = insufficient sample for repeat
DL = DBC low (<20% Recovery)
DA = Dilution Acceptable
BF = Blank Requires Florisil
CT = Contamination Suspected

IF DATA FAILS, INSERT CONDITION CODE FROM REPEAT REQUEST FORM IN BOX.

FINAL STATUS CODE+= | OK |

IF MULTIPLE PACKAGES EXIST, REPORT THIS DATA: _____

|___| QANA |___| QAN3 QA notice included.

SAMPLE DISPOSITION Code

|___| Complete.....

|___| Requires Re-extraction.. 716

|___| Requires reprep..... 930

|___| Requires cleanup..... 901

Audited By _____ Date _____

1-28 (1-25-89) ADDIE THOMPSON
ASSIGNED TO ~~Anthony Rios~~
EMPLOYEE ID # 985

COMPUCHEM LABORATORIES
EXTRACTION WORKSHEET
LOW LEVEL PESTICIDE S/S/S

Due: 2-10
DATE EXTRACTED/POSTED 1-25-89

CASE # 11271-JD997

21 DAY TAT -716

QUEUE # 46

68-01-7397

	SAMPLE NUMBER	EPA ID #	QC TYPE	SAMPLE ORIG #	SAMPLE WEIGHT	SPLIT VOLUME SV	PEST.	ALUMINA START VOL.	FINAL VOL.	COMP. DATE	COMMENTS
1	242036	JD998 MS	SS	242031	30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	541/688 USE 242030, 031, 035
2	242037	JD998 MSD	SS	242031	30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	FOR QC
3	242038	BS	BS		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21	242333	PBLK 11	BLANK 1		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	
22	242334	PBLK 12	BLANK 2		30.0	9.0ml	1.0ml	2.0ml	2.0ml	1-25	

	#	AMOUNT	LOT #
SURROGATE	395	2.0 ML	27816
SPIKE	4016	400 UL	27852

CHECKED AND VERIFIED TM 1-26-89 (QC LAB)

CASE DONE 1287 1-26-89 (QC LAB)

AUTO. COUNTER 541/688

MANUAL COUNTER 554/667

-716 ALUMINA BATCH # 1-3-89

POSTED 985

SAMPLE DATA PACKAGE

COMPOUND LIST NO. - 430

COMPUCHEM # DATE
IDENTIFIER PESTICIDES (LOW LEVEL SOLID) EPA SOW 1/87

DIL FACT_____DRY WT_____ _30__SPLIT_____FINAL VOL_____/5 = 1.32
AMT SAMPLE_____ CORRECTION FACTOR

COUNTER	COMPUCHEM COMPOUND NUMBER	COMPOUND NAME	RESULTS	DETECTION LIMIT (ug/kg
1.	0701	ALDRIN----------	30	8.0
2.	0702	ALPHA-BHC----------		8.0
3.	0703	BETA-BHC----------		8.0
4.	0704	GAMMA-BHC----------	27	8.0
5.	0705	DELTA-BHC----------		8.0
6.	0706	TECHNICAL CHLORDANE------		80.0
7.	0707	4,4'-DDT----------	78	16.0
8.	0708	4,4'-DDE----------		16.0
9.	0709	4,4'-DDD----------		16.0
10.	0710	DIELDRIN----------	73	16.0
11.	0711	ENDOSULFAN I ----------		8.0
12.	0712	ENDOSULFAN II ----------		16.0
13.	0713	ENDOSULFAN SULFATE-------		16.0
14.	0714	ENDRIN----------	79	16.0
15.	0739	ENDRIN KETONE----------		16.0
16.	0716	HEPTACHLOR----------	28	8.0
17.	0717	HEPTACHLOR EPOXIDE-------		8.0
18.	0726	METHOXYCHLOR----------		80.0
19.	0724	AROCHLOR 1016----------		80.0
20.	0720	AROCHLOR 1221----------		80.0
21.	0721	AROCHLOR 1232----------		80.0
22.	0718	AROCHLOR 1242----------		80.0
23.	0722	AROCHLOR 1248----------		80.0
24.	0719	AROCHLOR 1254----------		160.0
25.	0723	AROCHLOR 1260----------		160.0
26.	0725	TOXAPHENE----------		160.0

ANALYST'S COMMENTS: