U.S. Environmental Protection Agency Region V

Superfund Document Management System (SDMS)

Lab Data Reference Sheet

Please contact the Superfund Records Manager for further information.

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UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 5
CHICAGO, ILLINOIS

DATE: 6-5-87

SUBJECT: **Review of Region 5 data for** Systech Liquid

FROM: **Curtis Ross, Director**
Region 5 Central Regional Laboratory

TRANSMITTED BY

JUN 5 1987

U.S. EPA CENTRAL REGIONAL LAB

To: **Data User:** FIT

Attached are the results for:

CRL Data Set Numbers: SF 3960
Sample Numbers: 87FS06R02S12
Parameter(s): PCB/Pest
Laboratory: CRL

Results Status:

(✓) **DATA ACCEPTABLE FOR USE***
( ) **DATA QUALIFIED AS TO USE**
( ) **DATA UNACCEPTABLE FOR USE**

* For data acceptability requirements, refer to the method capability statement for the methods referenced.

Comments by the Quality Control Coordinator:

If there are any questions regarding the data, refer them to Steve Parker, the Quality Control Coordinator, at 353-3805.

Please sign and date this form below and return it with any comments to:

Sylvia Griffin
Data Management Coordinator
Region 5 Central Regional Laboratory
(5SCRL)

RECEIVED BY/DATE: .....
Comments:

cc: **Contractor's Representative**

Filed by/date:

DATA SET	SITE	DU/ACT.
SF3960	Systech Liquid	Y905/C76106

SAMPLES	PARAMETER(S)
87FS06R02; S12	PCB/Pest

SAMPLED	RECEIVED	DUE	LAB
5/13/87	5/14/87	6/4/87	CRC

SHIPPED	DATA RECEIVED	CONTRACT

TEAM LEADER	SECTION CHIEF	QC COORD.	DATA COORD.
		6/5/87	6/5/87

Comments By Reviewer:

DATA MANAGEMENT COORDINATOR

RECEIVED **TRANSMITTED**

CLERICAL SUPPORT

RECEIVED **COMPLETED**

(X) REVIEWED ( ) UNREVIEWED TEAM LEADER/DATE G.FRYE/6-4-87

( ) REVIEWED ( ) UNREVIEWED SECTION CHIEF/DATE

(X) REVIEWED 6/5/87 ( ) UNREVIEWED QC COORDINATOR/DATE

REVIEWED BY CONTRACT COORDINATOR/DATE

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM: Form #1:

DIVISION/BRANCH: ESD Sampling Date: 5/13/87 (Month Day Year) Arrival Date: 5/14/87 (Month Day Year) Analysis Due Date: 6/4/87 (Month Day Y)

D.U. Number: Y905 Group #: 3960 Activity #: C76100 Study: Systech Liquid

All units are micrograms per liter, milligram per kilograms or micrograms Sample Type: Water, Sediment, Oil, Sludge, Wipe

#	Sample #	Aroclor 1242	Aroclor 1248	Aroclor 1254	Aroclor 1260	Aroclor	Aroclor	Aroclor	Dibuthyl phthalate	Diethyl Hexyl phthalate	
1	87FS06R02	<.1	<.1	<.1	<.1						
2	9/12	<.1	<.1	<.1	<.1						
3											
4											
5			AL	6/3/87							
6			M.F.	6-4-87							
7				4/5/87							
8											
9											
10											
11											
12											
13											
14											
15											
16											

ENVIRONMENTAL PROTECTION AGENCY, REGION V BASIC DATA FORM:

DIVISION/BRANCH: ESD Sampling Date: 5/13/87 (Month Day Year) Arrival Date: 5/14/87 (Month Day Year) Analysis Due Date: 6/4/87 (Month Day Year)

Sample #\ D.U. Number: Y905 Group # : 3960 Activity # : C7600 Study: Systech liquid

ALL UNITS ARE MICROGRAMS PER LITER OR MILLIGRAMS PER KILOGRAM.

Pesticide / Sample #	Y-BHC Lindane	Heptachlor	Aldrin	Heptachlor epoxide	Endosulfan I	Dieldrin	Endrin	Endosulfan II	pp-DDE	Beta-BHC	Delta-BHC	α-BHC	pp-DDD	pp-DDT	Methoxy Chlor	Endosulfan sulfate	Endrin aldehyde	Endrin ketone	T-Chlordane	T-Oxaphene
1 87FS06R02	<.005	<.03	<.005	<.01	<.01	<.01	<.01	<.01	<.005	<.005	<.005	<.01	<.02	<.02	<.02	<.1	<.03	<.03	<.02	<1.0
2 $12	<.005	<.03	<.005	<.01	<.01	<.01	<.01	<.01	<.005	<.005	<.005	<.01	<.02	<.02	<.02	<.1	<.03	<.03	<.02	<1.0
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

AIC 6/3/87

4/5/87

ENVIRONMENTAL PROTECTION AGENCY
FOR THE TEAM: PESTICIDES AND PCB'S

DIVISION/BRANCH SUPERFUND FIT SAMPLE DATE 5/13/87 LAB ARRIVAL DATE 5/14/87 DUE DATE 6/4/87

DU NUMBER 4905 C76105 DATA SET NUMBER 3960 STUDY Systech Liquid PRIORITY N CONTRACTOR CRL

CRL LOG NUMBER	SAMPLE DESCRIPTION (Sample # / TAG #)	WATER TRIHALOMETHANES UG/L PES17414	WATER POLYCHLORINATED BIPHENYLS UG/L PES 17144	WATER CHLORINATED PESTICIDES UG/L PES 17134	WATER HERBICIDES UG/L PES 17424	WATER OIL AND GREASE MG/L PES 17439
87FS06B02	Blank 5-36610 5-36609		✓	✓		
87FS06S12	B101 5-36606 5-36605		✓	✓		
	5-36603 5-36638					

Sep. funnel extraction - PCB/PEST

Form# 4

Group #: _____ Data Set: SF 3958 SF 3960 SF 3962

Sample Type: Water

ISTD-Conc.:

Sample #	Sample Amount ml	Final Volume	Solvent Extract. CH_2Cl_2	Dilution with Hexane 1 st.	2 nd.	3 rd.	Vol. Conc. Extr.	Volume to Pest.	Toxic	Ph
Method Blank	1000	~~3~~ 10	X60X3					5		7
87FH06R03	995	10								
87FH06S13	933	10								
87FH06S14	1040	10								
87FH06D13	1040	10								
87FS06R02	1020	10								
87FS06S12	950	10								
87FS06S12- Pest. Spk.	1035	750								
87FS06S12- Pest Spk. Dup.	1037	750								
87FK06R01	2340	10								
87FK06S11	2310	10								
87FK06S11- PCB Spk.	1,000ml	10								
* 87FK06S11- PCB Spk. Dup.	1,000ml	10								

Date Extracted: 5/18/87 Chemist: JFP Toxic Ext. Received by Gen. Org. Ext. " "

Analytical Condition:

GC Conditions:

Column 1) 3%-2100 on Supercoport 10 x 1/8"
2) 1.5% SP-2250% SP-2401 "

T1 _____ Hold _____ Min.

T2 _____ _____ Min.

Rate: _____ C

Carrier Gas: _____; Flow rate: _____

GC Operator & Date: _____

MS Conditions:

Mass Range: _____ to _____

Scan Cycle: _____

High Voltage: _____

Confirmation: _____

Operator & Date: _____

Sample Clean-up and Remarks: 1ml DIB Spk Sol .65ug/ml added
(ml PCB Spk 1242. 2.83ug/ml (ml Pest Spk S2 Added)

* NOTE: May have been spiked twice with Dibutyl Chlorendate (surrogate).

SUBSEQUENCE 1

METHOD
PESTJ0

DIALG-PRG PARAM-FILE
/N

#WSHS	#PMPS	STOP
5,	5,	1

ISO	POST-BTL#	POST-#WSHS
YES,	0,	1

/NISTD Mirex 7.26 ng/ml
10 ml added to each vial

/NISTD AREA DIB RECOVER

SAMPLES

	SAMPLE-NAME	BTL#	PROC-FILE	RAW-FILE	%DIL-F	STD-AMT	SMP-AMT	CH0	CH14	AMT ADDED	AMT RECOVERED	% Recov
10	QC-1X	10,	C0N10	*RAW00	100.00,	1.0000,	1.0000	725126	473470			
11	QC-2.5X	11,	C0N11	*RAW00	100.00,	1.0000,	1.0000	752942	471874			
12	QC-5X	12,	C0N12	*RAW00	100.00,	1.0000,	1.0000	740433	483935			
13	PEST STD A	13,	C0N13	*RAW00	100.00,	1.0000,	1.0000	807416	500424			
14	PEST STD B	14,	C0N14	*RAW00	100.00,	1.0000,	1.0000	775838	482795			
15	ENDRIN	15,	C0N15	*RAW00	100.00,	1.0000,	1.0000	702032	468778			
16	PP DDT	16,	C0N16	*RAW00	100.00,	1.0000,	1.0000	691476	452309			
17	PEST SPK	17,	C0N17	*RAW00	7500.0,	1.0000,	1.0350	728782	440731	6.5	5.064	78
18	PEST SPK DUP	18,	C0N18	*RAW00	7500.0,	1.0000,	1.0370	727416	429470	6.5	5.33	82
19	FS06 S12	19,	C0N19	*RAW00	1000.0,	1.0000,	.9500	668763	465536	.65	1.341	206
20	FH06 S14	20,	C0N20	*RAW00	1000.0,	1.0000,	1.0400	685578	462715	.65	1.33	204
21	FH06 D13	21,	C0N21	*RAW00	1000.0,	1.0000,	1.0400	740693	486269	.65	1.232	189
22	FH06 S13	22,	C0N22	*RAW00	1000.0,	1.0000,	.9330	665441	448835	.65	1.5	230
23	STD 1242	23,	C0N23	*RAW00	100.00,	1.0000,	1.0000	871524	417132			
24	STD 1242	24,	C0N24	*RAW00	10000.,	1.0000,	1.0000					
25	PCB SPK	25,	C0N25	*RAW00	1000.0,	1.0000,	1.0000	715335	470338			
26	PCB SPK DUP	26,	C0N26	*RAW00	1000.0,	1.0000,	1.0000	734177	492321			
27	FK06 S11	27,	C0N27	*RAW00	1000.0,	1.0000,	2.3100	714499	438875	.65	.526	81
28	FS06 R02	28,	C0N28	*RAW00	1000.0,	1.0000,	1.0200	700160	500241	.65	1.170	180
29	MB	29,	C0N29	*RAW00	1000.0,	1.0000,	1.0000	690332	494959	.65	1.2	185
30	FK06 R01	30,	C0N30	*RAW00	1000.0,	1.0000,	2.3400	748955	586870	.65	.516	79
31	FH06 R03	31,	C0N31	*RAW00	1000.0,	1.0000,	.9950	828609	551860	.65	1.18	181
32	STD 1248	32,	C0N32	*RAW00	100.00,	1.0000,	1.0000	740228	476852			
33	STD 1254	33,	C0N33	*RAW00	100.00,	1.0000,	1.0000	647048	545198			
34	STD 1260	34,	C0N34	*RAW00	100.00,	1.0000,	1.0000	617146	365065			
35	TOXA-1660	35,	C0N35	*RAW00	100.00,	1.0000,	1.0000	816684	570944			
36	CHLOR-500	36,	C0N36	*RAW00	100.00,	1.0000,	1.0000	573244	570190			
37	PCB SPK	37,	C0N37	*RAW00	1000.0,	1.0000,	.9500	794108	583574			
38	PEST SPK DUP	38,	C0N38	*RAW00	7500.0,	1.0000,	1.0000					
39	MB	39,	C0N39	*RAW00	1000.0,	1.0000,	1.0000	720056	482524	.65	.642	99
40	PEST SPK	40,	C0N40	*RAW00	5000.0,	1.0000,	.9450	691452	499184	.65	3.965	61
41	CS08 S04	41,	C0N41	*RAW00	1000.0,	1.0000,	.9450	761970	562346	.65	.616	95
42	CS08 R03	42,	C0N42	*RAW00	1000.0,	1.0000,	.8900	715998	535327	.65	.654	100
43	PCB SPKD	43,	C0N43	*RAW00	1000.0,	1.0000,	.9800					
44	PCB SPK	44,	C0N44	*RAW00	1000.0,	1.0000,	[illegible]					

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: 6/3/87

SUBJECT: SF 3958, SF 3960, SF 3962 CDO 3987

FROM: Amberina Khan

TO: Gilbert Frye.

The QC is within range. The samples were negative for the PCB's & pesticides. The linearity check and callumn degradation were fine. The original chromatograms are in the folder of data set no. 3958

EPA Form 1320-6 (Rev. 3-76)

U.S. Environmental Protection Agency Region V

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X Graph

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REPORT: 501.01 CHANNEL: 0

SAMPLE: FS06 R02 INJECTED AT 13:53:40 ON JUN 2, 1987

ISTD METHOD: PESTA0 BTL: 28

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 9.804 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0200

BL > 10 MV
ENDED NOT ON BL

RT	AREA		NG/L	NAME
1.37	2023456	BV	28.309	
1.63	697265	VV	9.755	
2.07	132021	VV	1.847	
2.95	185	VV	.003	
3.82	1763	VV	.025	
4.67	1464	VV	3.307	LINDANE
5.16	1658	VV	.023	
6.62	7687	VV	.108	
7.61	17878	VV	.250	
9.16	14149	VB	.198	
10.47	725	BB	.010	
12.48	505	BB	.007	
18.19	2875	BB	5.941	DIELDRIN
27.72	5109	BB	13.213	ENDOSULFAN 2
43.40	39104	BV	.547	
47.59	700760	VV		&MIREX
53.11	66871	VV	.936	
59.02	551262	VF	1170.95	DIB

TOTAL AREA = 4264742 TOTAL NG/L = 1235.426

PROCESSED DATA FILE: C0N28 RAW DATA FILE: *RAW00

REPORT: 501.01 CHANNEL: 14

SAMPLE: FS06 R02 INJECTED AT 13:53:40 ON JUN 2, 1987

ISTD METHOD: PESTAB BTL: 28

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 9.804 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0200

BL > 10 MV

RT	AREA		NG/L	NAME
1.25	2540115	BV	49.782	
2.17	26631	VV	.522	
2.54	3729	VV	.073	
2.72	2699	VV	6.257	LINDANE
2.87	2767	VV	.054	
3.15	3618	VV	.071	
4.26	14500	VV	.284	
5.07	13297	VB	.261	
14.94	2882	BB	.056	
17.52	23579	BB	85.707	PP DDT
31.95	500241	BV		&MIREX
36.21	459164	VB	1404.06	DIB

TOTAL AREA = 3593223 TOTAL NG/L = 1547.127

PROCESSED DATA FILE: C14N28 RAW DATA FILE: *RAW14

U.S. Environmental Protection Agency Region V

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I. Unscannable item due to format

X Graph

___ Mail receipts

___ Sample tags

II. Image Quality (Pages follow / No. of pages ____)

___ Resolution / Contrast

REPORT: 492.02 CHANNEL: 0

SAMPLE: FS06 S12 INJECTED AT 2:26:36 ON JUN 2, 1987

ISTD METHOD: PESTA0 BTL: 19

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 10.526 NG/L STD-AMT: 1.0000 SAMP-AMT: .9500

BL > 10 MV
ENDED NOT ON BL

RT	AREA	NG/L	NAME
6.60	8914 VV	.140	
7.60	7656 VV	.121	
9.16	10718 VB	.169	
21.55	1395 BB	4.875	ENDRIN
43.48	39866 BV	.627	
47.64	668763 VV		&MIREX
53.14	66067 VV	1.040	
59.08	561320 VF	1341.42	DIB

TOTAL AREA = 1364699 TOTAL NG/L = 1348.389

PROCESSED DATA FILE: C0N19 RAW DATA FILE: *RAW00

REPORT: 492.02 CHANNEL: 14

SAMPLE: FS06 S12 INJECTED AT 2:26:36 ON JUN 2, 1987

ISTD METHOD: PESTAB BTL: 19

ACTUAL RUN TIME: 70.025 MINUTES

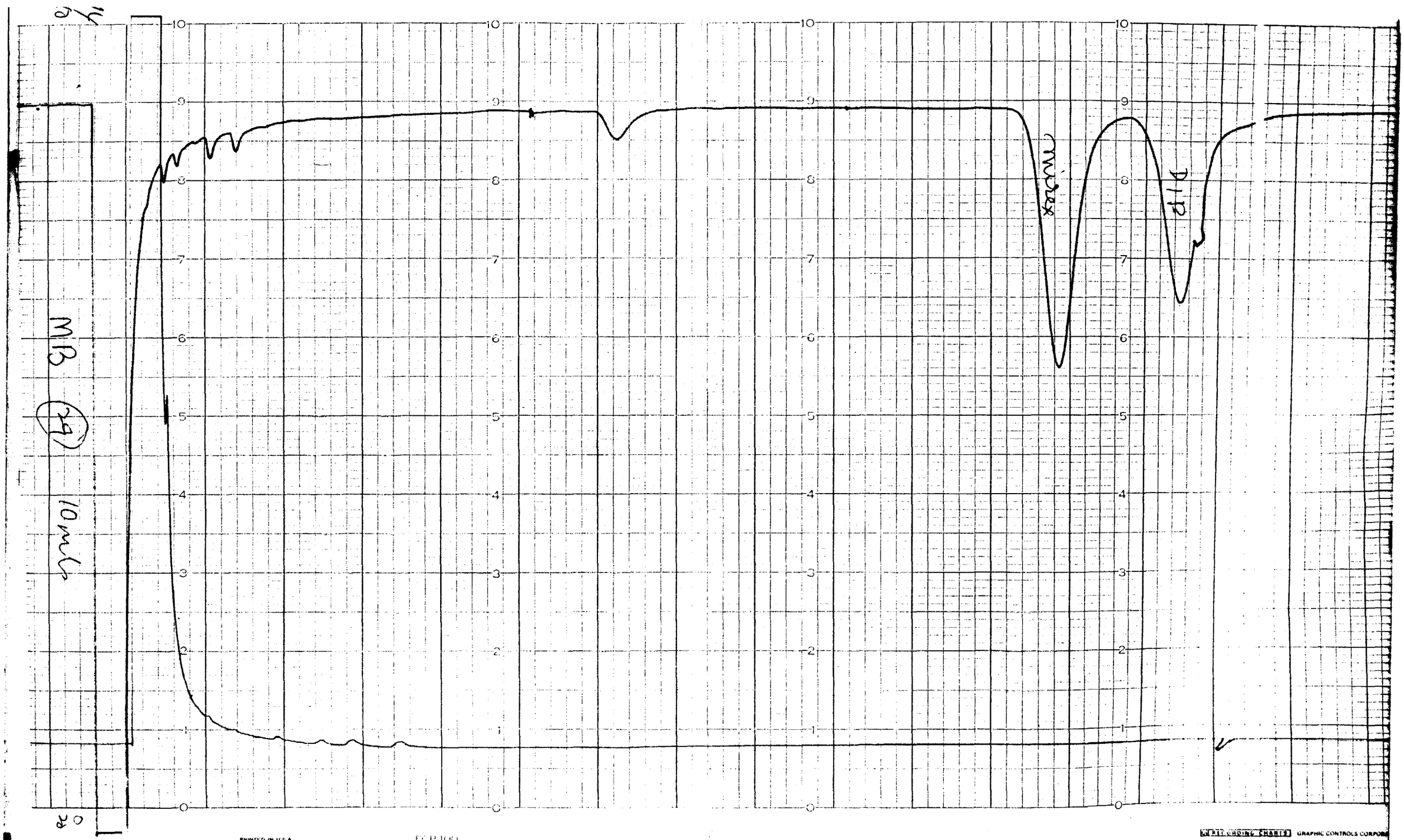
ISTD-RATIO: 1.053 NG/L STD-AMT: 1.0000 SAMP-AMT: .9500

BL > 10 MV

RT	AREA	NG/L	NAME
1.24	2947516 BV	6.665	
2.73	3294 VV	.881	LINDANE
3.16	4186 VV	.009	
3.76	1891 VV	.004	
4.26	7784 VV	.018	
5.09	8777 VB	.020	
17.54	22716 BB	9.526	PP DDT
31.97	465536 BV		&MIREX
36.23	448188 VB	158.118	DIB

TOTAL AREA = 3909890 TOTAL NG/L = 175.241

PROCESSED DATA FILE: C14N19 RAW DATA FILE: *RAW14



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ECP-100
GRAPHIC CONTROLS CORPORATION

REPORT: 502.03 CHANNEL: 0

SAMPLE: MB INJECTED AT 15:10:00 ON JUN 2, 1987

ISTD METHOD: PESTA0 BTL: 29

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 10.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

BL > 10 MV

RT	AREA		NG/L	NAME
1.37	013072	BV	11.778	
1.62	105947	VV	1.535	
5.17	3276	BV	.047	
6.59	6161	VV	.089	
7.57	8995	VV	.130	
9.11	9818	VB	.142	
13.60	1275	BB	1.809	ENDOSULFAN 1
43.07	59057	BV	.855	
47.29	690332	VV		&MIREX
52.74	69661	VV	1.009	
58.56	548694	VB	1206.76	DIB

TOTAL AREA = 2316289 TOTAL NG/L = 1224.156

PROCESSED DATA FILE: C0N29 RAW DATA FILE: *RAW00

REPORT: 502.02 CHANNEL: 14

SAMPLE: MB INJECTED AT 15:10:00 ON JUN 2, 1987

ISTD METHOD: PESTAB BTL: 29

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 10.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

BL > 10 MV

RT	AREA		NG/L	NAME
1.25	1026185	BV	20.733	
2.72	4752	VV	11.357	LINDANE
3.15	3458	VV	.070	
3.72	839	VV	.017	
4.23	7682	VV	.155	
5.06	7778	VB	.157	
16.12	1566	BV	.032	
17.41	38373	VB	143.791	PP DDT
31.75	494959	BV		&MIREX
35.94	461680	VB	1455.36	DIB

TOTAL AREA = 2047274 TOTAL NG/L = 1631.667

PROCESSED DATA FILE: C14N29 RAW DATA FILE: *RAW14

ECP-100

REPORT: 509.02 CHANNEL: 0

SAMPLE: CHLOR-500 INJECTED AT 0:04:15 ON JUN 3, 1987

ISTD METHOD: CHLOR0 BTL: 36

ACTUAL RUN TIME: 70.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA	UG/L	NAME
1.02	1064 BV	.002	
1.21	342 VV	6.0E- 4	
1.31	2947 VV	.005	
1.57	1373 VV	.002	
2.17	286 VV	5.0E- 4	
2.35	16247 VB	.028	
2.95	386 BV	6.7E- 4	
3.34	7548 VV	.013	
3.56	6379 VV	.011	
4.43	12041 VV	.021	
4.83	6470 VV	.011	
5.33	138788 VV	.500	CHLORDANE A
5.85	165911 VV	.500	CHLORDANE B
6.48	20088 VV	.035	
6.99	14403 VV	.025	
7.77	9728 VV	.017	
8.37	116108 VV	.500	CHLORDANE C
9.17	40644 VB	.071	
10.56	7388 BV	.013	
11.10	43299 VV	.076	
11.61	55165 VV	.500	CHLORDANE D
12.40	428160 VV	.500	CHLORDANE F
12.91	182923 VV	.500	CHLORDANE E
13.64	456945 VV	.500	CHLORDANE G
14.77	7047 VB	.012	
16.17	10465 BV	.018	
17.97	8299 VV	.014	
19.10	4787 VV	.008	
20.87	8294 VV	.014	
23.05	38354 VV	.500	CHLORDANE H
25.06	58360 VB	.500	CHLORDANE I
30.50	7003 BB	.012	
47.30	573244 BB		&MIREX

TOTAL AREA = 2450486 TOTAL UG/L = 4.913

PROCESSED DATA FILE: C0N36 RAW DATA FILE: *RAW00

REPORT: 509.02 CHANNEL: 14

SAMPLE: CHLOR-500 INJECTED AT 0:04:15 ON JUN 3, 1987

ISTD METHOD: CHLORB BTL: 36

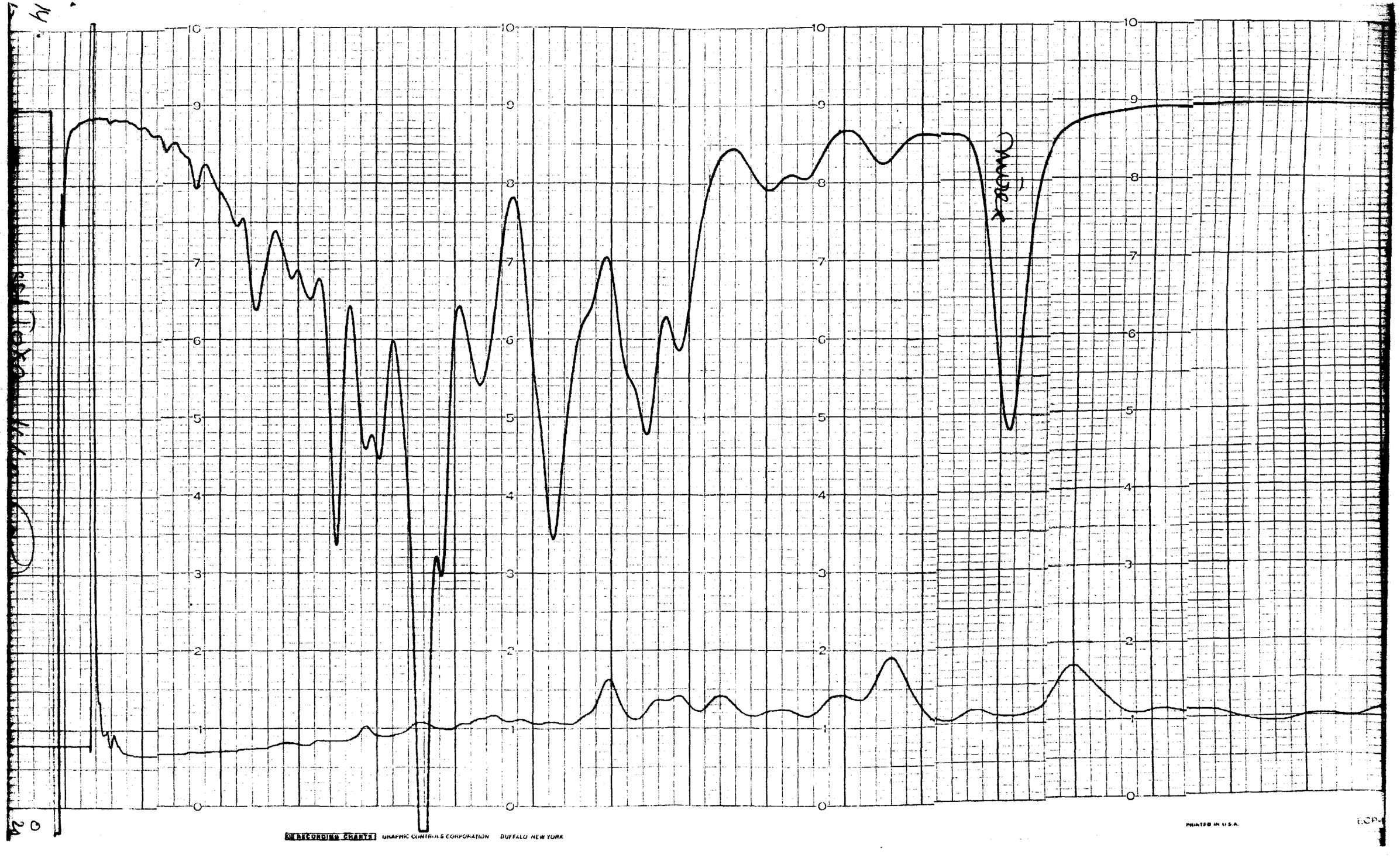
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA	UG/L	NAME
1.41	2249 BB	.004	
1.91	425 BV	7.5E- 4	
2.10	17308 VB	.030	
2.65	12466 BV	.022	
2.95	9885 VV	.017	
3.50	18437 VV	.032	
3.98	161802 VV	.500	CHLORDANE A
4.49	230132 VV	.500	CHLORDANE B
5.34	206148 VV	.500	CHLORDANE C
6.33	123722 VV	.500	CHLORDANE D
7.42	80190 VV	.500	CHLORDANE E
7.91	607164 VV	.500	CHLORDANE F
8.80	404337 VV	.500	CHLORDANE F
9.30	316906 VV	.500	CHLORDANE G
11.00	4157 VB	.007	
12.08	2141 BV	.004	
13.78	91008 VB	.500	CHLORDANE H
17.39	9356 BB	.016	
25.06	1458 BB	.003	
31.75	570190 BB		&MIREX

TOTAL AREA = 2869484 TOTAL UG/L = 4.637

PROCESSED DATA FILE: C14N36 RAW DATA FILE: *RAW14



RECORDING CHARTS GRAPHIC CONTROLS CORPORATION BUFFALO NEW YORK
PRINTED IN U.S.A.

REPORT: 508.02 CHANNEL: 0

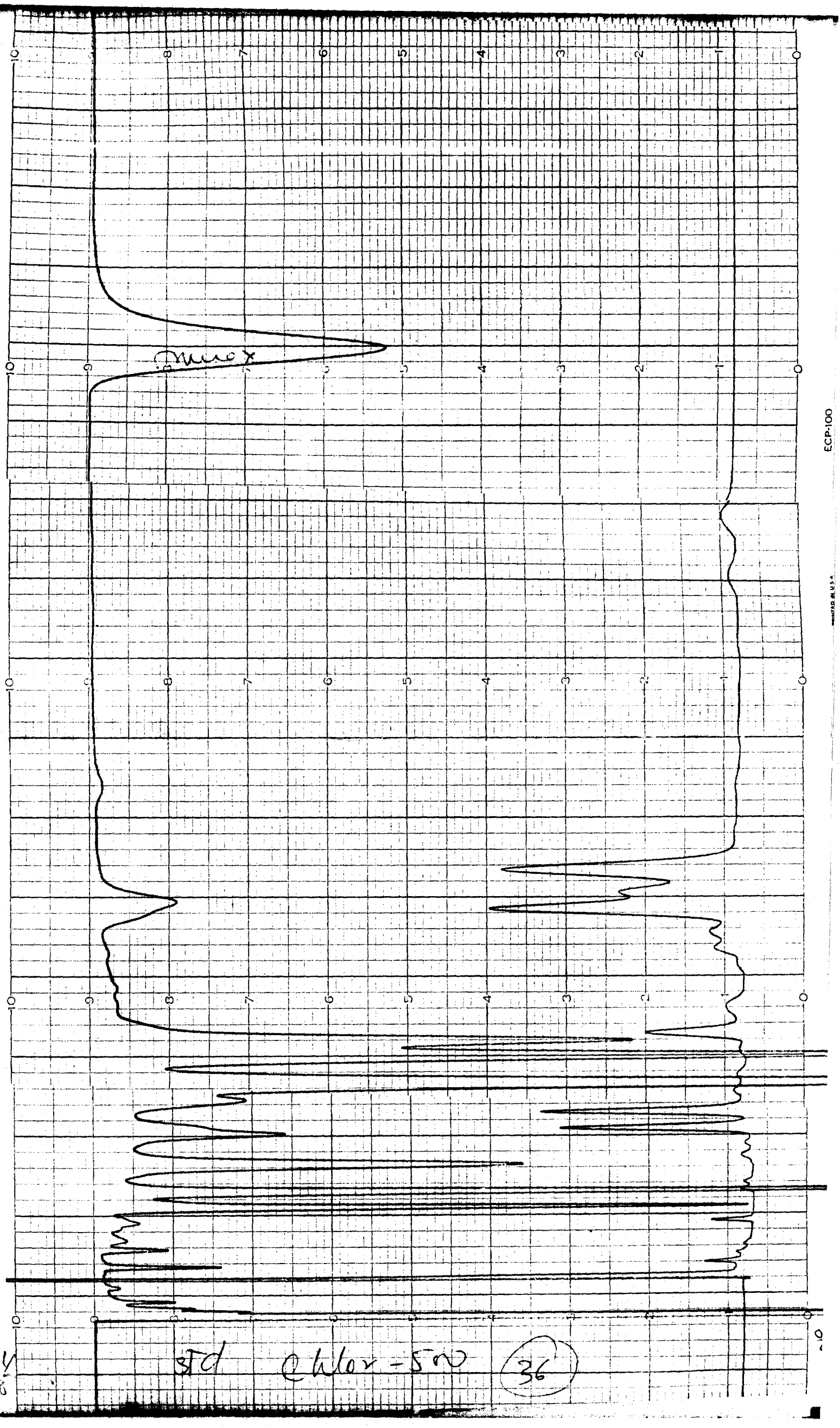
SAMPLE: TOXA-1660 INJECTED AT 22:47:56 ON JUN 2, 1987

ISTD METHOD: TOX/0 BTL: 35

ACTUAL RUN TIME: 70.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL


Mic X
std Chlor - 5%
36
ECP-100

REPORT: 509.02 CHANNEL: 0

SAMPLE: CHLOR-500 INJECTED AT 0:04:15 ON JUN 3, 1987

ISTD METHOD: CHLOR0 BTL: 36

ACTUAL RUN TIME: 70.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA	UG/L	NAME
1.02	1064 BV	.002	
1.21	342 VV	6.0E- 4	
1.31	2947 VV	.005	
1.57	1373 VV	.002	
2.17	286 VV	5.0E- 4	
2.35	16247 VB	.028	
2.95	386 BV	6.7E- 4	
3.34	7548 VV	.013	
3.56	6379 VV	.011	
4.43	12041 VV	.021	
4.83	6470 VV	.011	
5.33	138788 VV	.500	CHLORDANE A
5.85	165911 VV	.500	CHLORDANE B
6.48	20088 VV	.035	
6.99	14403 VV	.025	
7.77	9728 VV	.017	
8.37	116108 VV	.500	CHLORDANE C
9.17	40644 VB	.071	
10.56	7388 BV	.013	
11.10	43299 VV	.076	
11.61	55165 VV	.500	CHLORDANE D
12.40	428160 VV	.500	CHLORDANE F
12.91	182923 VV	.500	CHLORDANE E
13.64	456945 VV	.500	CHLORDANE G
14.77	7047 VB	.012	
16.17	10465 BV	.018	
17.97	8299 VV	.014	
19.10	4787 VV	.008	
20.87	8294 VV	.014	
23.05	38354 VV	.500	CHLORDANE H
25.06	58360 VB	.500	CHLORDANE I
30.50	7003 BB	.012	
47.30	573244 BB		&MIREX

TOTAL AREA = 2450486 TOTAL UG/L = 4.913

PROCESSED DATA FILE: C0N36 RAW DATA FILE: *RAW00

REPORT: 509.02 CHANNEL: 14

SAMPLE: CHLOR-500 INJECTED AT 0:04:15 ON JUN 3, 1987

ISTD METHOD: CHLORB BTL: 36

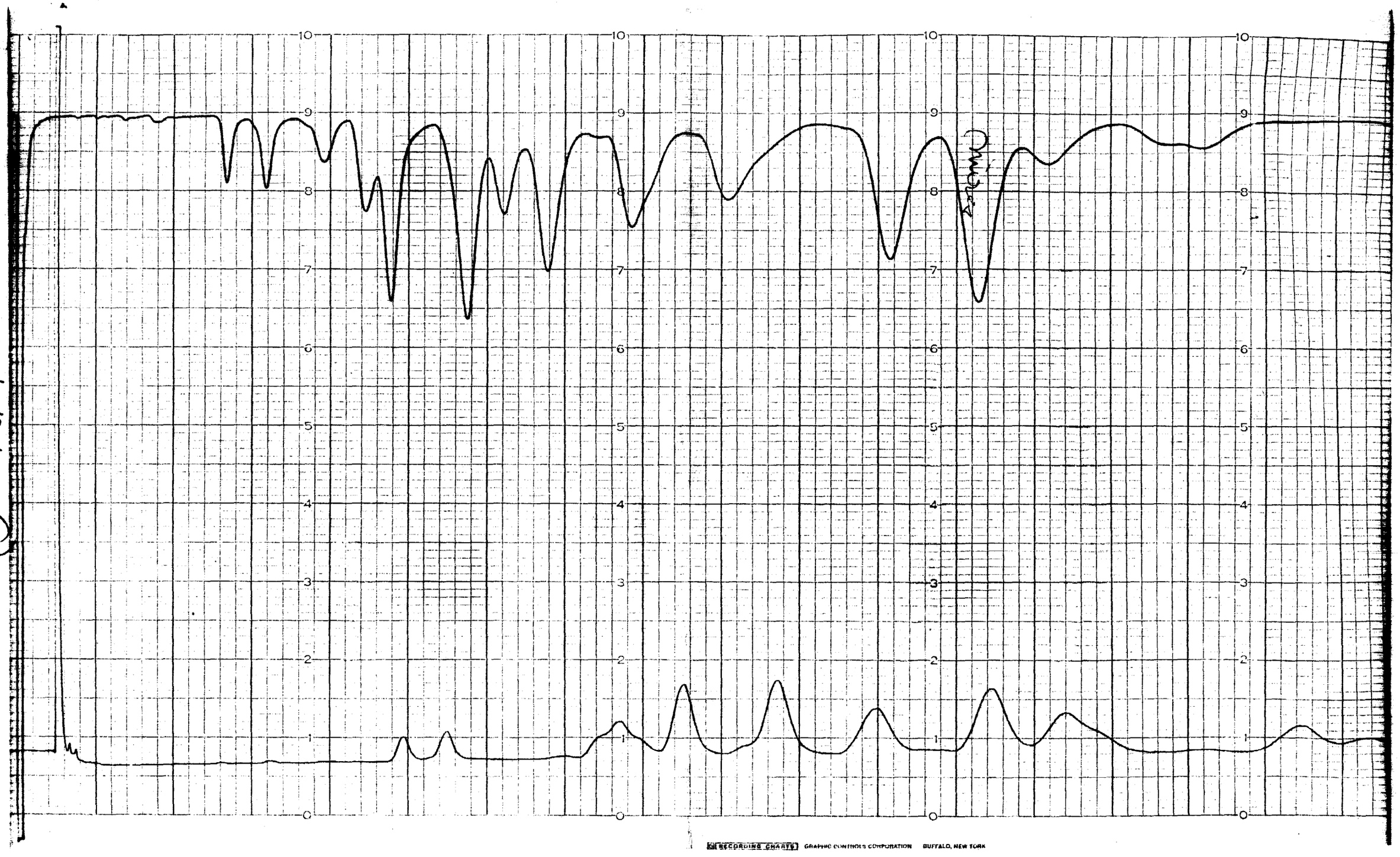
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA	UG/L	NAME
1.41	2249 BB	.004	
1.91	425 BV	7.5E- 4	
2.10	17308 VB	.030	
2.65	12466 BV	.022	
2.95	9885 VV	.017	
3.50	18437 VV	.032	
3.98	161802 VV	.500	CHLORDANE A
4.49	230132 VV	.500	CHLORDANE B
5.34	206148 VV	.500	CHLORDANE C
6.33	123722 VV	.500	CHLORDANE D
7.42	80190 VV	.500	CHLORDANE E
7.91	607164 VV	.500	CHLORDANE F
8.80	404337 VV	.500	CHLORDANE F
9.30	316906 VV	.500	CHLORDANE G
11.00	4157 VB	.007	
12.08	2141 BV	.004	
13.78	91008 VB	.500	CHLORDANE H
17.39	9356 BB	.016	
25.06	1458 BB	.003	
31.75	570190 BB		&MIREX

TOTAL AREA = 2869484 TOTAL UG/L = 4.637

PROCESSED DATA FILE: C14N36 RAW DATA FILE: *RAW14



Std 1760 (34)

RECORDING CHARTS GRAPHIC CONTROLS CORPORATION BUFFALO, NEW YORK

REPORT: 507.02 CHANNEL: 0

SAMPLE: STD 1260 INJECTED AT 21:31:38 ON JUN 2, 1987

ISTD METHOD: TC/600 BTL: 34

ACTUAL RUN TIME: 70.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL

RT	AREA		UG/L	NAME
1.15	1857	BV	.003	
1.57	487	VB	7.9E- 4	
1.87	385	BB	6.2E- 4	
2.94	216	BB	3.5E- 4	
3.34	428	BB	6.9E- 4	
4.39	716	BB	.001	
5.82	1678	BB	.003	
6.43	685	BV	.001	
7.40	3776	VB	.006	
9.11	1883	BB	.003	
11.86	44591	BV	.072	
13.25	64397	VV	.104	
14.37	2704	VB	.004	
16.93	10326	BV	.017	
18.87	203655	VV	.500	A60
20.99	240613	VV	.500	B60
24.07	332903	VV	.500	C60
27.25	243427	VV	.500	D60
29.03	31310	VV	.051	
31.06	339212	VV	.500	E60
33.47	337049	VV	.500	F60
37.98	56745	VV	.092	
41.27	207619	VV	.500	G60
43.46	147022	VV	.500	H60
47.39	617146	VV		&MIREX
49.83	484859	VB	.500	I60
65.20	316976	BF	.514	

TOTAL AREA = 3692669 TOTAL UG/L = 5.374

PROCESSED DATA FILE: C0N34 RAW DATA FILE: *RAW00

REPORT: 507.02 CHANNEL: 14

SAMPLE: STD 1260 INJECTED AT 21:31:38 ON JUN 2, 1987

ISTD METHOD: TC/60B BTL: 34

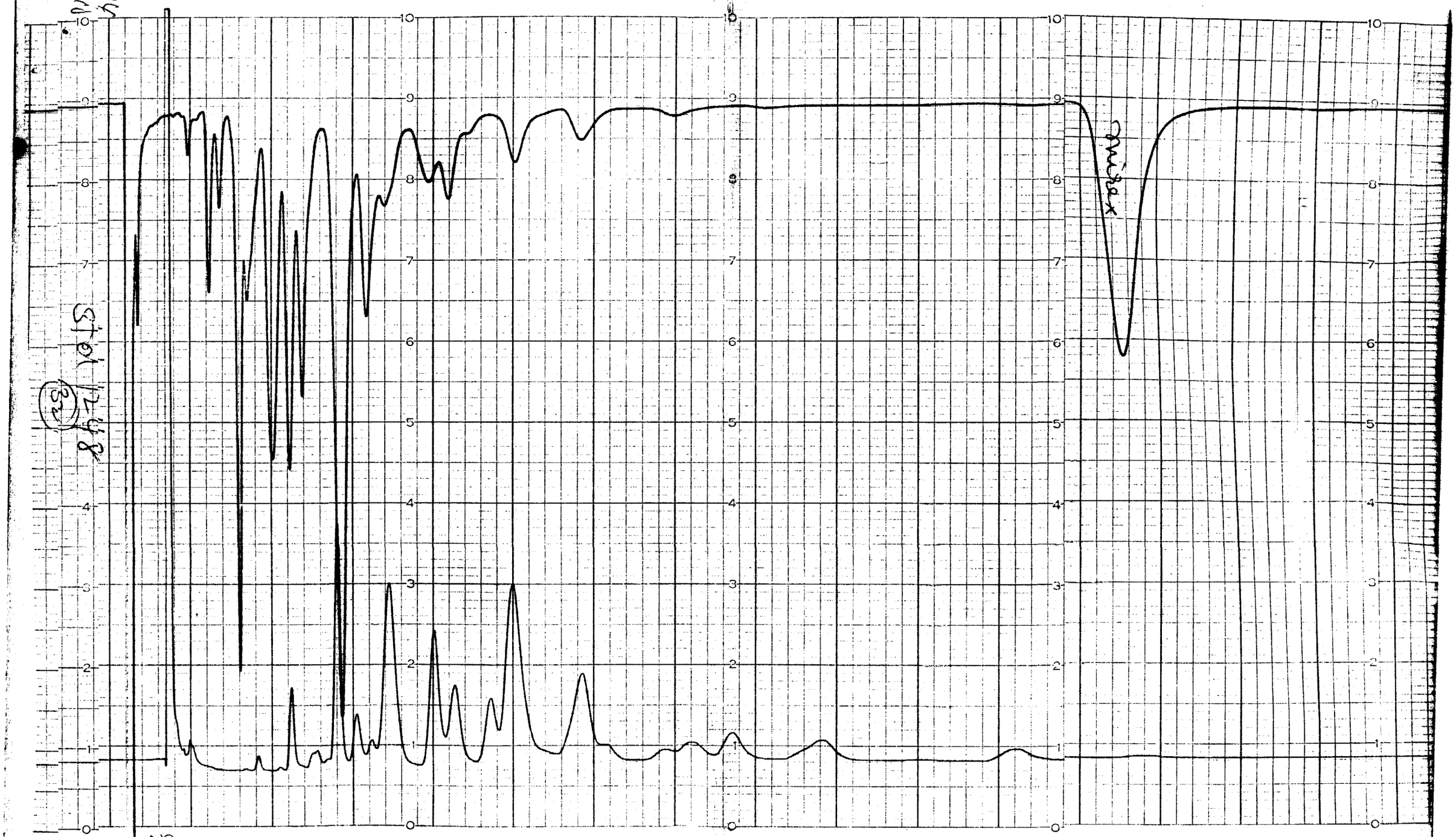
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
2.37	452	BB	.001	
3.02	662	BV	.002	
3.34	360	VB	9.9E- 4	
3.94	902	BB	.002	
4.90	195	BB	5.3E- 4	
7.25	33077	BV	.091	
8.54	48686	VV	.133	
10.45	47805	VV	.131	
11.83	81022	VV	.500	A1260
12.63	173289	VV	.500	B1260
15.10	237477	VV	.500	C1260
16.28	109466	VV	.500	D1260
17.73	208523	VV	.500	E1260
19.36	20648	VV	.057	
20.51	214327	VV	.500	F1260
23.64	228498	VV	.500	G1260
28.90	288992	VV	.500	H1260
31.83	365065	VV		&MIREX
34.12	117087	VV	.500	I1260
39.16	125143	VB	.343	
46.49	20021	BB	.055	
55.10	55992	BB	.500	J1260

TOTAL AREA = 2377692 TOTAL UG/L = 5.816

PROCESSED DATA FILE: C14N34 RAW DATA FILE: *RAW14



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REPORT: 505.02 CHANNEL: 0

SAMPLE: STD 1248 INJECTED AT 18:58:59 ON JUN 2, 1987

ISTD METHOD: TC/480 BTL: 32

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.22	6712	BV	.009	
2.65	549	BV	7.4E- 4	
2.92	1378	VV	.002	
3.34	9325	VB	.013	
4.00	2355	BV	.003	
4.39	54933	VV	.074	
5.18	24413	VV	.033	
5.49	6874	VV	.009	
5.83	192019	VV	.500	A48
6.43	58482	VV	.079	
6.91	27878	VV	.038	
7.47	300254	VV	.500	B48
8.93	183265	VV	.500	C48
9.59	127420	VV	.500	D48
10.74	102498	VV	.500	E48
11.44	432836	VV	.500	F48
13.60	230489	VV	.500	G48
14.31	36415	VV	.500	H48
16.15	40885	VV	.055	
16.99	67228	VV	.500	I48
18.33	89276	VV	.500	J48
21.19	94434	VB	.128	
24.02	9344	BB	.013	
27.19	50933	BB	.069	
31.09	12864	BV	.017	
33.55	2448	VB	.003	
43.31	4446	BV	.006	
47.36	740228	VB		&MIREX

TOTAL AREA = 2910184 TOTAL UG/L = 5.552

PROCESSED DATA FILE: C0N32 RAW DATA FILE: *RAW00

REPORT: 505.02 CHANNEL: 14

SAMPLE: STD 1248 INJECTED AT 18:58:59 ON JUN 2, 1987

ISTD METHOD: TC/48B BTL: 32

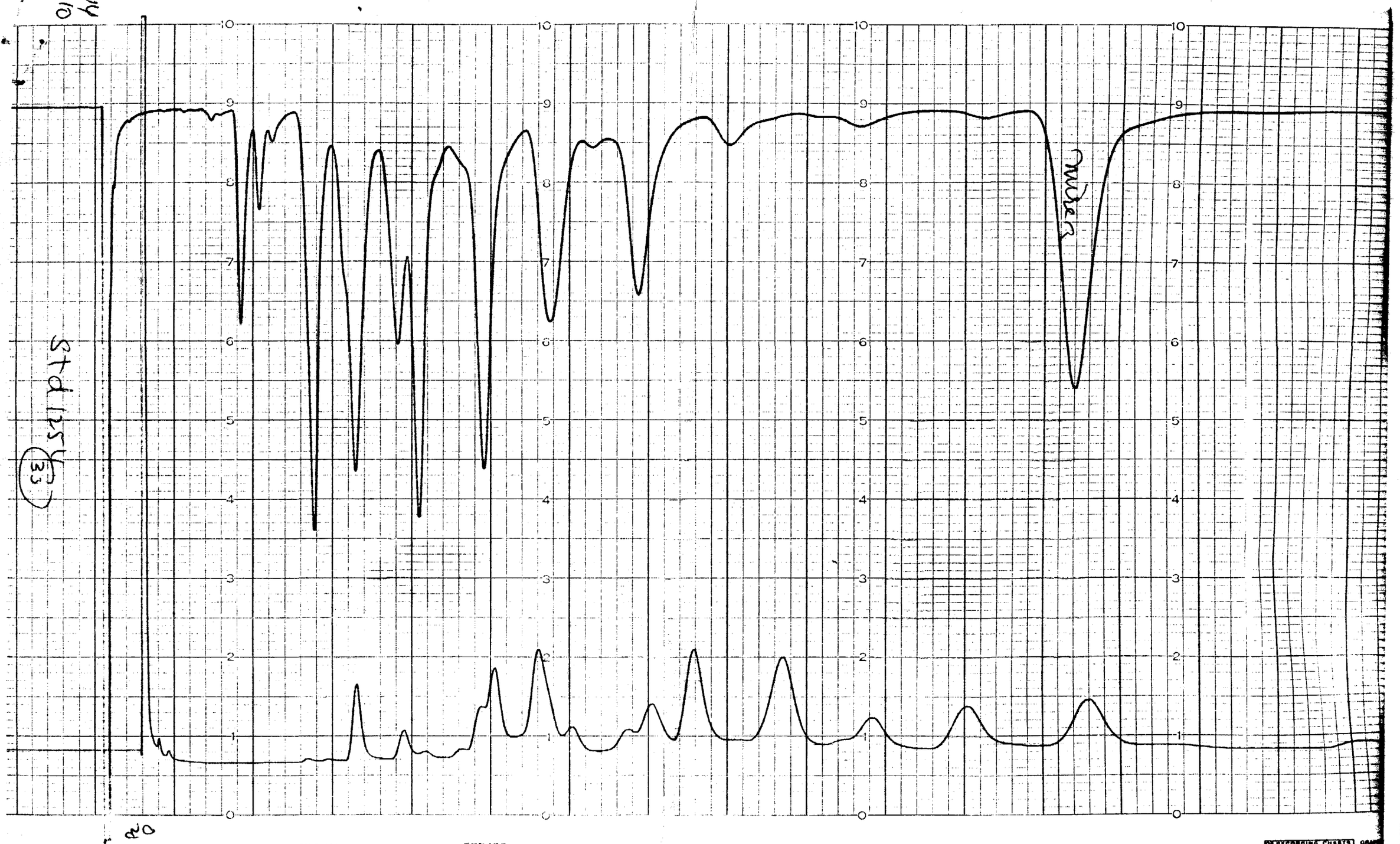
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.23	196	BV	4.1E- 4	
1.88	464	BV	9.7E- 4	
2.16	715	VV	.002	
2.36	8842	VV	.019	
2.61	1609	VV	.003	
3.01	39708	VV	.083	
3.33	22277	VV	.047	
3.93	145525	VV	.500	A48
4.18	92323	VV	.500	B48
4.97	193869	VV	.500	C48
5.51	139002	VV	.500	D48
5.91	129120	VV	.271	
7.14	376384	VV	.500	F48
7.94	126177	VV	.500	G48
8.51	74001	VV	.500	H48
9.93	62083	VV	.130	
10.57	70067	VB	.500	I48
12.67	44175	BV	.500	J48
14.72	30606	VB	.500	K48
17.63	9695	BB	.020	
20.55	3060	BB	.006	
31.81	476892	BV		&MIREX
37.99	7513	VB	.016	

TOTAL AREA = 2054305 TOTAL UG/L = 5.598

PROCESSED DATA FILE: C14N32 RAW DATA FILE: *RAW14



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RICO-FUNA CHARTS

REPORT: 506.03 CHANNEL: 0

SAMPLE: STD 1254 INJECTED AT 20:15:18 ON JUN 2, 1987

ISTD METHOD: TC/540 BTL: 33

ACTUAL RUN TIME: 70.008 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

ENDED NOT ON BL

RT	AREA		UG/L	NAME
1.31	956	VB	.001	
2.96	396	BB	6.1E- 4	
3.34	191	BB	2.9E- 4	
4.39	629	BB	9.7E- 4	
5.82	2855	BV	.004	
6.44	2000	VB	.003	
7.40	95415	BV	.500	A54
8.91	42894	VV	.066	
9.58	14668	VV	.023	
10.75	15695	VV	.024	
11.40	70352	VV	.109	
11.84	185397	VV	.500	B54
13.27	320810	VV	.500	C54
14.35	73758	VV	.114	
16.16	77488	VV	.120	
16.95	159084	VV	.500	D54
18.31	317227	VV	.500	E54
19.63	38307	VV	.059	
21.14	385415	VV	.500	F54
24.04	202987	VV	.500	G54
27.13	240131	VV	.500	H54
31.09	267513	VV	.500	I54
33.53	33911	VB	.052	
36.92	4476	BV	.007	
40.00	46245	VV	.071	
43.23	9603	VV	.015	
47.27	647068	VB		&MIREX
65.03	20096	BF	.031	

TOTAL AREA = 3275570 TOTAL UG/L = 5.202

PROCESSED DATA FILE: C0N33 RAW DATA FILE: *RAW00

EPORT: 506.03 CHANNEL: 14

AMPLE: STD 1254 INJECTED AT 20:15:18 ON JUN 2, 1987

STD METHOD: TC/54B BTL: 33

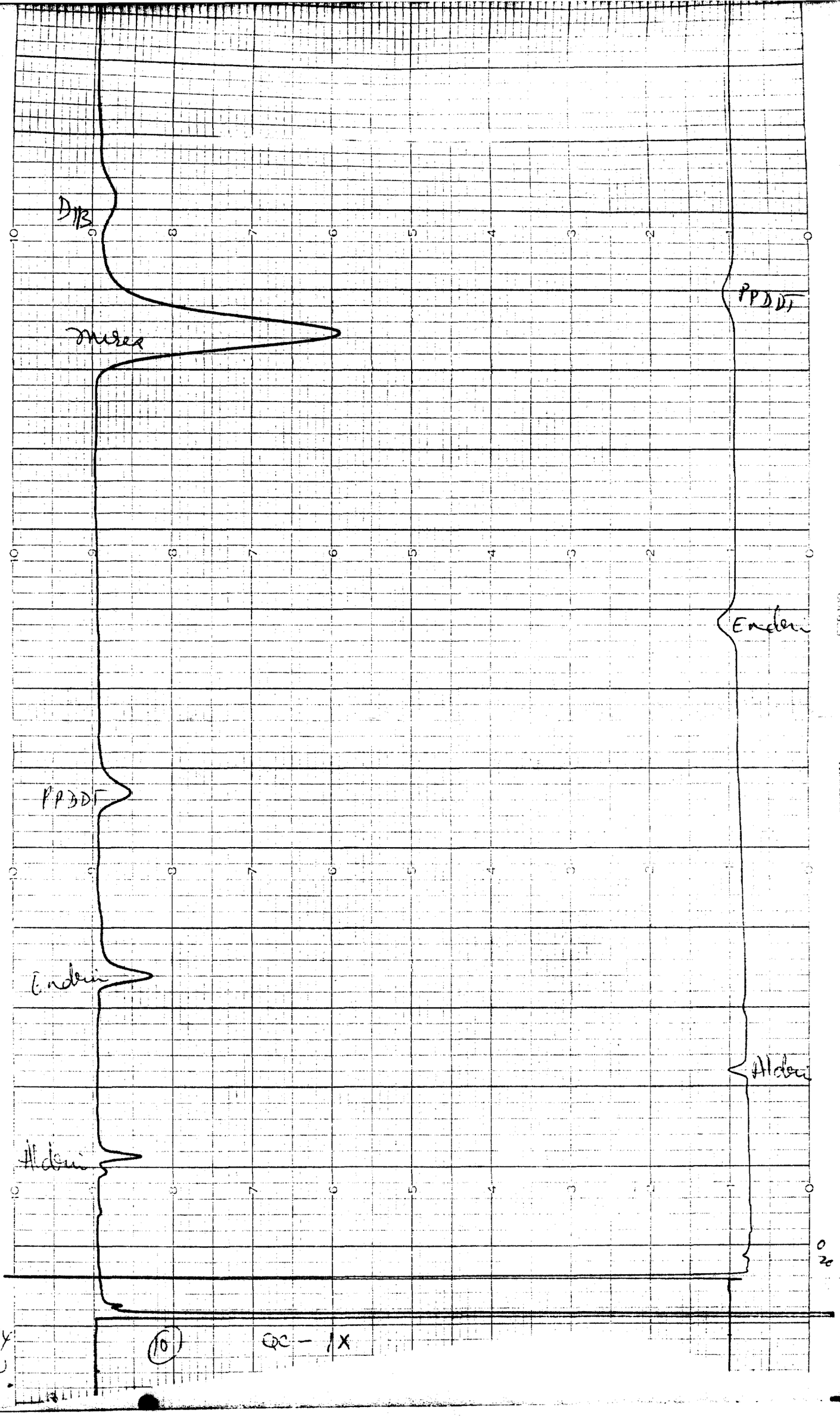
CTUAL RUN TIME: 70.017 MINUTES

STD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.24	245	BB	4.5E- 4	
2.36	250	BB	4.6E- 4	
3.00	616	BV	.001	
3.33	387	VB	7.1E- 4	
3.92	3944	BV	.007	
4.18	2668	VV	.005	
4.88	86130	VV	.158	
5.48	38720	VV	.071	
5.90	17241	VV	.032	
7.21	259660	VV	.500	A54
8.53	342806	VV	.500	B54
9.91	193290	VV	.500	C54
0.57	318898	VV	.500	D54
2.67	385695	VV	.500	E54
4.87	280553	VV	.500	F54
6.21	37579	VV	.069	
7.70	268076	VV	.500	G54
3.61	53955	VB	.099	
4.82	30578	BB	.056	
3.80	12420	BV	.023	
1.76	545198	VB		&MIREX

TAL AREA = 2878913 TOTAL UG/L = 4.022

OCESSED DATA FILE: C14N33 RAW DATA FILE: *RAW14


DIB
Mirex
PPDDT
Endrin
Aldrin
PPDDT
Endrin
Aldrin
10
9
8
7
6
5
4
3
2
1
0
14
0
(10)
QC - 1X
0
20

PORT: 483.01 CHANNEL: 0

MPLE: QC-1X INJECTED AT 14:59:40 ON JUN 1, 1987

TD METHOD: PESTA0 BTL: 10

TUAL RUN TIME: 70.017 MINUTES

TD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
1.22	4072	BB	.006	
1.84	1065	BB	.001	
2.97	2566	BB	.004	
6.47	627	BV	8.7E- 4	
7.20	21341	VB	4.673	ALDRIN
9.19	3470	BB	.005	
1.51	54672	BB	16.734	ENDRIN
2.07	54562	BB	16.776	PP DDT
7.76	725126	BB		&MIREX
9.21	66021	BB	13.823	DIB

TAL AREA = 933522 TOTAL NG/L = 52.023

OCESSED DATA FILE: C0N10 RAW DATA FILE: *RAW00

EPORT: 483.01 CHANNEL: 14

MPLE: QC-1X INJECTED AT 14:59:40 ON JUN 1, 1987

TD METHOD: PESTAB BTL: 10

TUAL RUN TIME: 70.025 MINUTES

TD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
1.22	110	BB	2.3E- 4	
3.76	822	BB	.002	
5.08	3223	BV	.007	
5.61	15615	VB	4.216	ALDRIN
11.38	36205	BB	9.883	ENDRIN+ENDOSULFAN 2
15.15	1164	BB	.002	
17.25	35675	BB	13.975	PP DDT
31.99	473470	BV		&MIREX
36.23	64677	VB	21.314	DIB

OTAL AREA = 630961 TOTAL NG/L = 49.399

ROCESSED DATA FILE: C14N10 RAW DATA FILE: *RAW14

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REPORT: 484.01 CHANNEL: 0

SAMPLE: QC-2.5X INJECTED AT 16:16:00 ON JUN 1, 1987

ISTD METHOD: PESTA0 BTL: 11

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
1.01	82	BV	1.1E- 4	
1.12	235	VV	3.1E- 4	
1.23	1091	VV	.001	
1.32	1401	VB	.002	
2.97	621	BB	8.2E- 4	
6.48	794	BV	.001	
7.21	68572	VB	14.460	ALDRIN
9.20	4056	BB	.005	
16.97	3246	BB	.637	DIELDRIN
21.51	155196	BB	45.748	ENDRIN
26.68	15965	BB	3.920	ENDOSULFAN 2
32.05	159322	BV	47.177	PP DDT
35.35	5163	VB	.007	
43.57	3678	BV	.005	
47.73	752942	VV		&MIREX
53.16	39337	VV	.052	
59.15	220946	VB	44.553	DIB

TOTAL AREA = 1432647 TOTAL NG/L = 156.568

PROCESSED DATA FILE: C0N11 RAW DATA FILE: *RAW00

REPORT: 484.01 CHANNEL: 14

SAMPLE: QC-2.5X INJECTED AT 16:16:00 ON JUN 1, 1987

ISTD METHOD: PESTAB BTL: 11

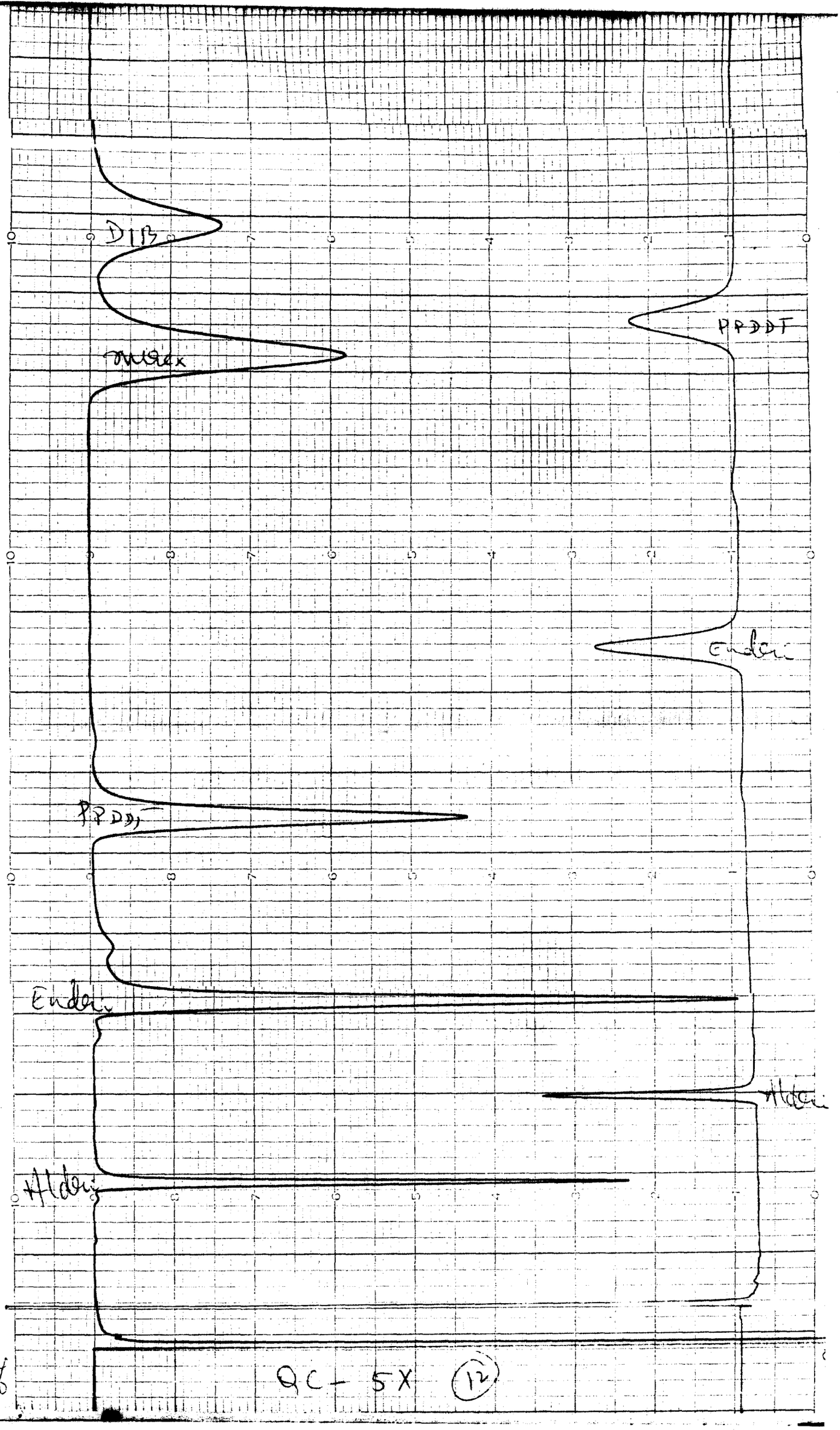
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
1.69	95	BB	2.0E- 4	
3.78	998	BB	.002	
5.10	2725	BV	.006	
5.62	48628	VB	13.174	ALDRIN
10.33	2230	BV	.577	DIELDRIN
11.40	125260	VV	34.308	ENDRIN+ENDOSULFAN 2
13.13	13026	VB	.028	
17.26	99479	BV	39.100	PP DDT
19.67	2359	VB	.005	
32.02	471874	BV		&MIREX
36.27	138885	VB	45.923	DIB

TOTAL AREA = 905559 TOTAL NG/L = 133.122

PROCESSED DATA FILE: C14N11 RAW DATA FILE: *RAW14


DIB
Mirex
PPDDT
Endrin
PPDDT
Endrin
Aldrin
Aldrin
QC - 5X
12

REPORT: 485.01 CHANNEL: 0

SAMPLE: QC-5X INJECTED AT 17:32:19 ON JUN 1, 1987

ISTD METHOD: PESTA0 BTL: 12

ACTUAL RUN TIME: 70.000 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
1.23	2404	BB	.003	
1.86	1089	BB	.001	
2.97	2244	BB	.003	
6.48	256	BV	3.5E- 4	
7.20	191276	VB	41.016	ALDRIN
9.23	2322	BB	.003	
16.92	7380	BB	1.472	DIELDRIN
21.49	383287	BB	114.892	ENDRIN
26.62	25752	BB	6.429	ENDOSULFAN 2
32.03	417929	BV	125.843	PP DDT
35.20	12261	VB	.017	
43.57	6589	BV	.009	
47.68	740433	VV		&MIREX
53.24	57952	VV	.078	
59.12	448826	VB	92.033	DIB

TOTAL AREA = 2300002 TOTAL NG/L = 381.800

PROCESSED DATA FILE: C0N12 RAW DATA FILE: *RAW00

REPORT: 485.01 CHANNEL: 14

SAMPLE: QC-5X INJECTED AT 17:32:19 ON JUN 1, 1987

ISTD METHOD: PESTAB BTL: 12

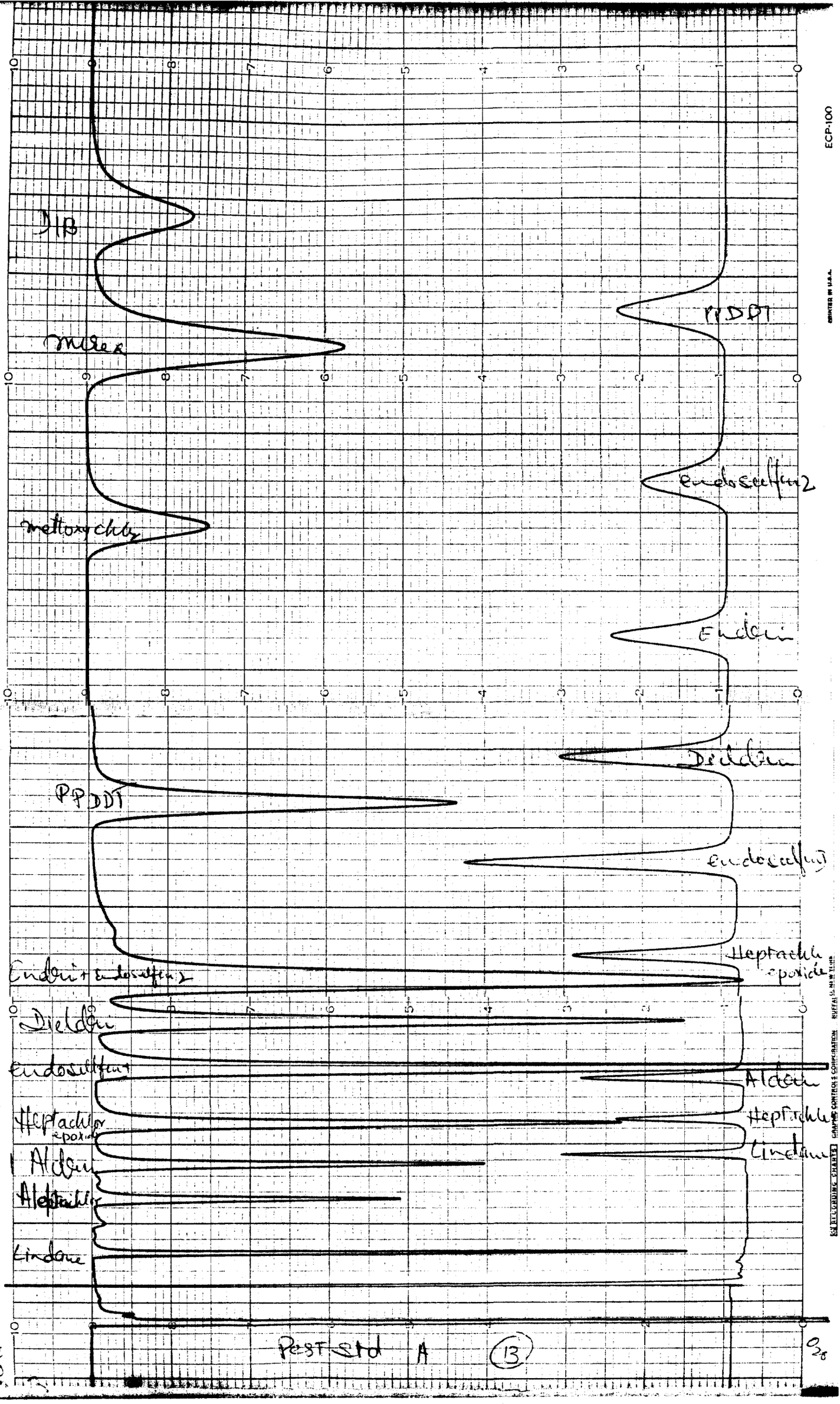
ACTUAL RUN TIME: 70.000 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
3.79	765	BB	.002	
5.10	1575	BV	.003	
5.62	154701	VB	40.866	ALDRIN
10.33	4295	BV	1.084	DIELDRIN
11.40	390431	VV	104.272	ENDRIN+ENDOSULFAN 2
13.10	29422	VB	.061	
17.26	323548	BV	124.000	PP DDT
19.67	6083	VB	.013	
32.01	483935	BV		&MIREX
36.26	302826	VB	97.635	DIB

TOTAL AREA = 1697583 TOTAL NG/L = 367.934

PROCESSED DATA FILE: C14N12 RAW DATA FILE: *RAW14


DIB
Mirex
Methoxychlor
PP DDT
Endrin + Endosulfan I
Dieldrin
Endosulfan II
Heptachlor epoxide
Aldrin
Heptachlor
Lindane
PP DDT
Endosulfan II
Endrin
Dieldrin
Endosulfan I
Heptachlor epoxide
Aldrin
Heptachlor
Lindane
Pest Std A
13
ECP-100
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EPORT: 486.02 CHANNEL: 0

AMPLE: PEST STD A INJECTED AT 18:48:38 ON JUN 1, 1987

STD METHOD: PESTA0 BTL: 13

CTUAL RUN TIME: 70.017 MINUTES

STD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

NDED NOT ON BL

RT	AREA		NG/L	NAME
1.22	5084	BV	.007	
1.62	1293	VV	.002	
1.86	998	VB	.001	
2.97	2255	BB	.003	
4.22	817	BV	.001	
4.75	106043	VV	21.200	LINDANE
5.89	100535	VB	20.000	HEPTACHLOR
7.20	152561	BV	30.000	ALDRIN
9.25	6688	VB	.000	
11.18	245900	BV	40.000	HEPTACHLOR EPOXIDE
14.21	494664	VV	60.000	ENDOSULFAN 1
17.59	409975	VB	75.000	DIELDRIN
21.51	323769	BV	89.000	ENDRIN
23.96	5933	VB	.007	
26.47	327581	BV	75.000	ENDOSULFAN 2
32.05	434576	VV	120.000	PP DDT
35.42	2448	VB	.003	
43.57	4924	BV	.006	
47.71	807416	VV		&MIREX
59.13	398850	VV	75.000	DIB
64.17	277748	VF	120.000	METHOXYCHLOR

OTAL AREA = 4110862 TOTAL NG/L = 725.239

ROCESSED DATA FILE: C0N13 RAW DATA FILE: *RAW00

EPORT: 486.02 CHANNEL: 14

AMPLE: PEST STD A INJECTED AT 18:48:38 ON JUN 1, 1987

STD METHOD: PESTAB BTL: 13

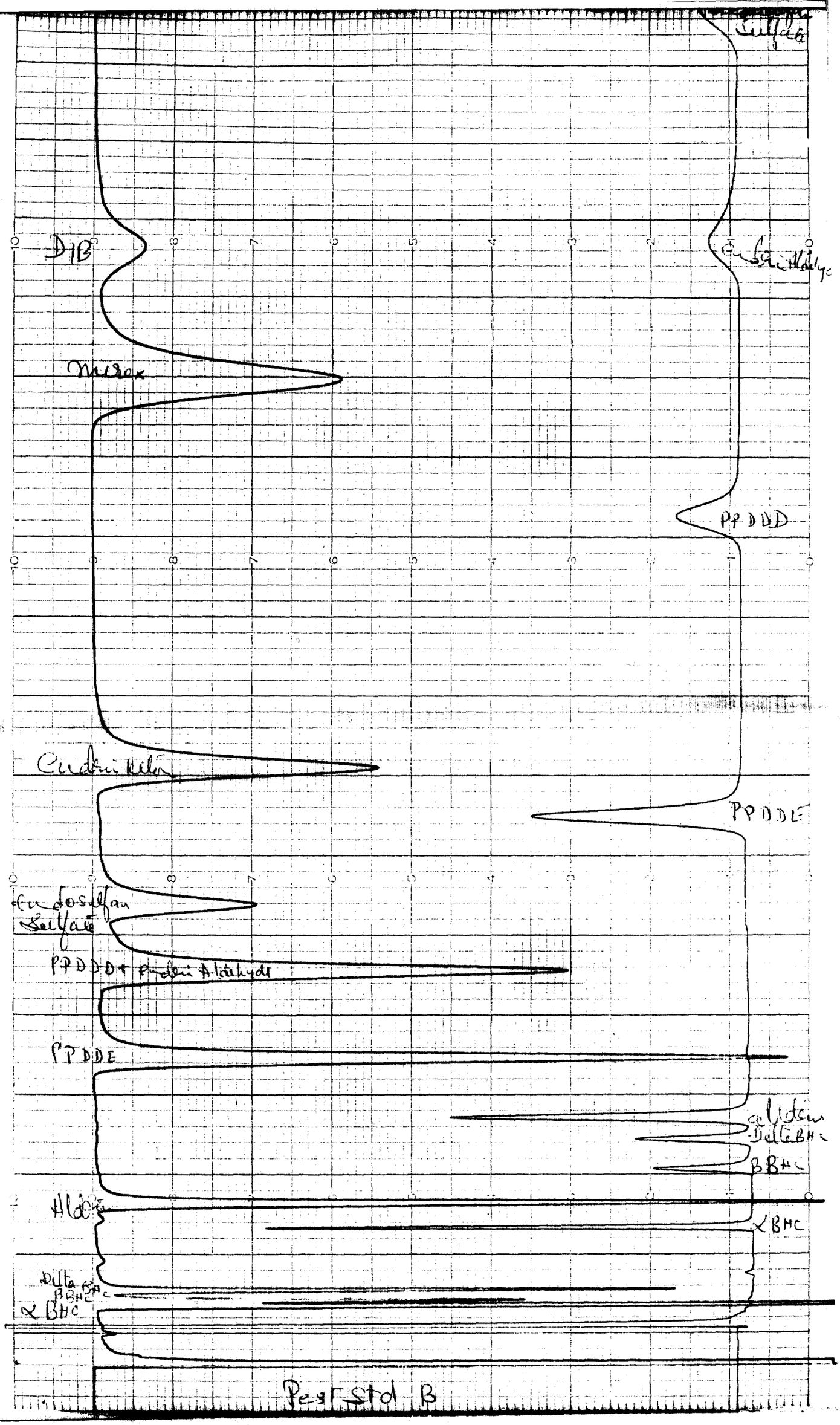
CTUAL RUN TIME: 70.025 MINUTES

STD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
1.27	338	BB	6.8E- 4	
2.76	89693	BV	21.200	LINDANE
3.31	737	VV	.001	
3.73	4571	VV	.009	
4.51	79998	VV	20.000	HEPTACHLOR
5.10	2322	VV	.005	
5.63	117436	VV	30.000	ALDRIN
6.92	199661	VV	40.000	HEPTACHLOR EPOXIDE
8.68	416799	VV	60.000	ENDOSULFAN 1
10.21	307375	VV	75.000	DIELDRIN
11.52	634999	VV	164.000	ENDRIN+ENDOSULFAN 2
13.09	31111	VB	.062	
17.24	323781	BV	120.000	PP DDT
18.62	6542	VB	.013	
26.22	182449	BB	120.000	METHOXYCHLOR
32.01	500424	BV		&MIREX
36.30	240548	VB	75.000	DIB

TOTAL AREA = 3138756 TOTAL NG/L = 725.291

PROCESSED DATA FILE: C14N13 RAW DATA FILE: *RAW14


Sulfate
DIB
Endrin Aldehyde
Mirex
PPDDD
Endrin Ketone
PPDDE
Endosulfan Sulfate
PPDDD + Endrin Aldehyde
PPDDE
Aldrin
Delta BHC
BBHC
Aldrin
αBHC
Delta BHC
BBHC
αBHC
Pest Std B

REPORT: 487.02 CHANNEL: 0

SAMPLE: PEST STD B INJECTED AT 20:04:58 ON JUN 1, 1987

ISTD METHOD: PESTB0 BTL: 14

ACTUAL RUN TIME: 70.000 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.02	172	BV	2.2E- 4	
1.32	1505	VB	.002	
1.87	560	BV	7.2E- 4	
2.19	3541	VB	.005	
2.73	722	BV	9.3E- 4	
2.97	539	VB	6.9E- 4	
3.67	201296	BB	.029	ALPHA BHC
4.74	368	BB	4.7E- 4	
5.54	77330	BV	.029	BETA BHC
6.49	90597	VV	.028	DELTA BHC
7.21	271500	VB	.043	ALDRIN
9.21	4369	BB	.006	
14.41	2033	BB	.003	
16.85	451009	BB	.080	PP DDE
26.45	231577	BB	.073	PP DDD
35.24	218591	BV	.067	ENDRIN ALDEHYDE
39.24	16433	VV	.021	
43.03	237746	VV	.072	ENDOSULFAN SULFATE
47.70	775838	VV		&MIREX
53.14	39711	VV	.051	
58.85	774106	VB	.150	DIB+ENDRIN KETONE

TOTAL AREA = 3399544 TOTAL UG/L = .661

PROCESSED DATA FILE: C0N14 RAW DATA FILE: *RAW00

REPORT: 487.02 CHANNEL: 14

SAMPLE: PEST STD B INJECTED AT 20:04:58 ON JUN 1, 1987

ISTD METHOD: PESTBB BTL: 14

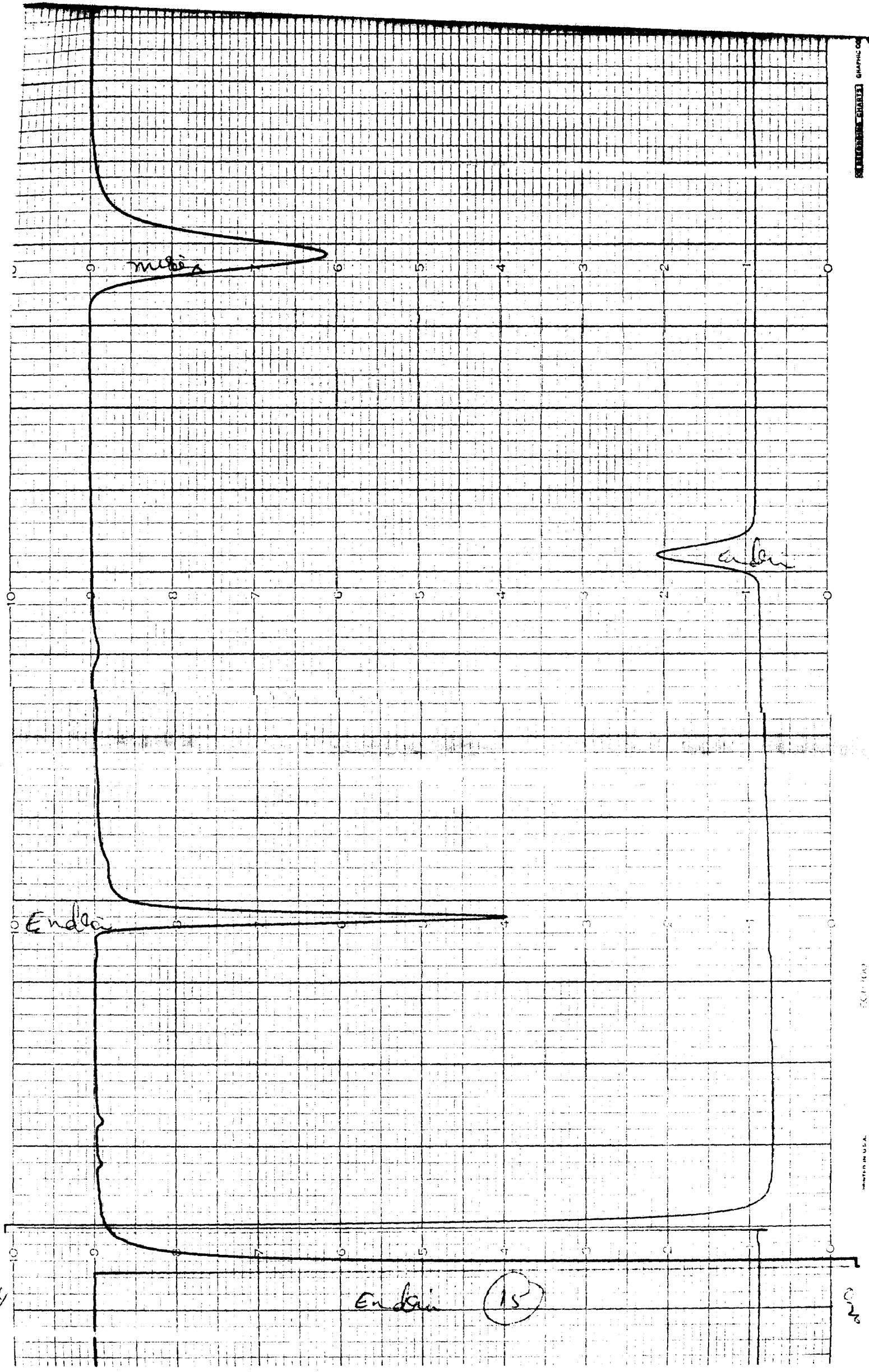
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.46	2156	BV	.004	
1.67	637	VB	.001	
2.33	180452	BV	.029	ALPHA BHC
2.50	73063	VV	.028	BETA BHC
2.84	95827	VV	.028	DELTA BHC
3.78	2974	VB	.006	
5.10	2567	BV	.005	
5.63	212121	VB	.043	ALDRIN
7.66	612	BV	.001	
8.09	870	VB	.002	
10.29	369369	BV	.080	PP DDE
13.06	387221	VV	.140	PP DDD+ENDRIN ALDEHYDE
15.19	162660	VB	.072	ENDOSULFAN SULFATE
19.61	310152	BB	.100	ENDRIN KETONE
32.03	482795	BV		&MIREX
36.29	138732	VB	.050	DIBUCH

OTAL AREA = 2422210 TOTAL UG/L = .590

ROCESSED DATA FILE: C14N14 RAW DATA FILE: *RAW14



Endian
Endian
15

EPORT: 488.03 CHANNEL: 0

AMPLE: ENDRIN INJECTED AT 21:21:18 ON JUN 1, 1987

STD METHOD: PESTB0 BTL: 15

CTUAL RUN TIME: 70.017 MINUTES

STD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
2.54	385	BB	5.5E- 4	
2.98	367	BB	5.2E- 4	
5.55	242	BB	1.0E- 4	BETA BHC
6.48	1742	BB	5.9E- 4	DELTA BHC
9.21	1656	BB	.002	
21.53	279190	BB	.398	
35.48	20378	BB	.007	ENDRIN ALDEHYDE
43.61	3718	BB	.001	ENDOSULFAN SULFATE
47.76	702032	BV		&MIREX
59.00	27363	VB	.006	DIB+ENDRIN KETONE

TOTAL AREA = 1037081 TOTAL UG/L = .416

PROCESSED DATA FILE: C0N15 RAW DATA FILE: *RAW00

REPORT: 488.03 CHANNEL: 14

SAMPLE: ENDRIN INJECTED AT 21:21:18 ON JUN 1, 1987

ISTD METHOD: PESTBB BTL: 15

326939

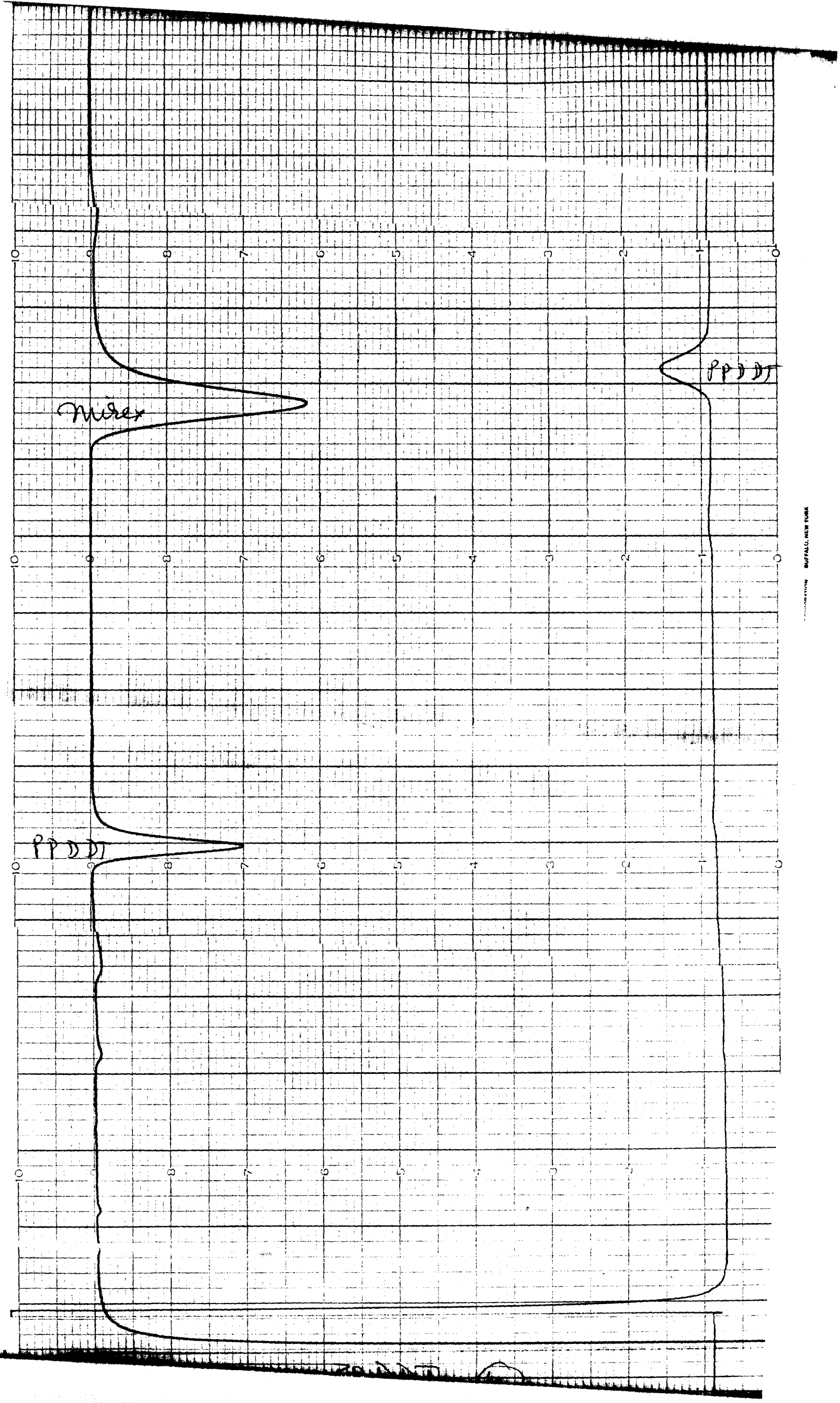
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
2.05	208	BB	4.4E- 4	
2.46	123	BB	4.9E- 5	BETA BHC
3.78	1224	BB	.003	
5.11	1919	BB	.004	
11.41	258009	BV	.550	
12.95	13474	VB	.005	PP DDD+ENDRIN ALDEHYDE
17.71	2068	BB	.004	
19.68	9400	BB	.003	ENDRIN KETONE
32.07	468778	BB		&MIREX

TOTAL AREA = 755204 TOTAL UG/L = .570

PROCESSED DATA FILE: C14N15 RAW DATA FILE: *RAW14 -


Mirex
PPDDT
PPDDT
10
9
8
7
6
5
4
3
2
1
0

REPORT: 489.01 CHANNEL: 0

SAMPLE: PP DDT INJECTED AT 22:37:39 ON JUN 1, 1987

ISTD METHOD: PESTA0 BTL: 16

ACTUAL RUN TIME: 70.008 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
2.97	381	BB	5.5E- 4	
6.46	315	BB	4.6E- 4	
9.20	1172	BB	.002	
16.89	6461	BB	1.[illegible]	DIELDRIN
24.03	1731	BB	.003	
26.62	17865	BB	4.776	ENDOSULFAN 2
32.01	216949	BB	69.951	PP DDT
43.64	4590	BV	.007	
47.67	691476	VB		&MIREX
62.18	16372	BB	8.259	METHOXYCHLOR

TOTAL AREA = 957314 TOTAL NG/L = 84.378

PROCESSED DATA FILE: C0N16 RAW DATA FILE: *RAW00

REPORT: 489.01 CHANNEL: 14

SAMPLE: PP DDT INJECTED AT 22:37:39 ON JUN 1, 1987

ISTD METHOD: PESTAB BTL: 16

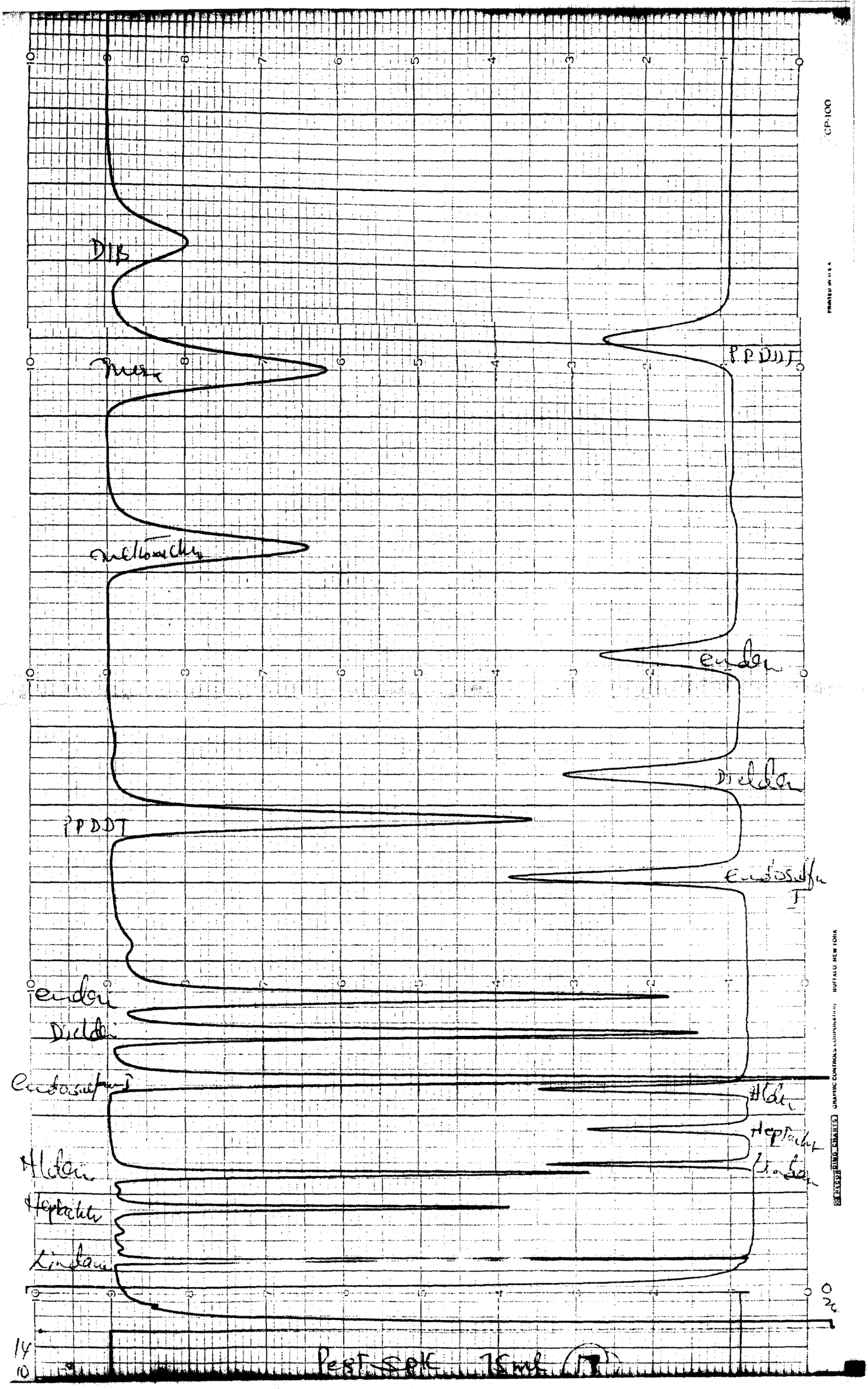
ACTUAL RUN TIME: 70.008 MINUTES

ISTD-RATIO: 1.000 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		NG/L	NAME
3.78	410	BB	9.1E- 4	
5.09	1123	BB	.002	
10.33	3644	BB	.984	DIELDRIN
13.23	7970	BB	.018	
17.25	147379	BB	60.432	PP DDT
32.01	452309	BV		&MIREX
38.28	16977	VB	.038	

OTAL AREA = 629813 TOTAL NG/L = 61.475

ROCESSED DATA FILE: C14N16 RAW DATA FILE: *RAW14


DIB
PPDDT
endrin
Dieldrin
PPDDT
endrin
Dieldrin
Endosulfan I
Aldrin
Heptachlor
Lindane
Aldrin
Heptachlor
Lindane
Pest Spk 75ml
CP-100
PRINTED IN U.S.A.
BUFFALO, NEW YORK
GRAPHIC CONTROLS CORPORATION
RECORDING CHARTS

REPORT: 490.03 CHANNEL: 0

SAMPLE: PEST SPK INJECTED AT 23:53:57 ON JUN 1, 1987

ISTD METHOD: PESTA0 BTL: 17

ACTUAL RUN TIME: 70.000 MINUTES

ISTD-RATIO: 72.464 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0350

READING(S) MISSED
ENDED NOT ON BL

RT	AREA		NG/L	NAME
1.63	530	VB	.053	
2.98	559	BB	.056	
4.22	292	BB	.029	
4.75	117347	BV	1883.41	LINDANE
5.90	131617	VV	1947.12	HEPTACHLOR
6.62	3760	VV	.374	
7.20	202238	VB	3192.71	ALDRIN
9.20	3729	BB	.371	
14.19	436023	BV	4245.91	ENDOSULFAN 1
17.57	429947	VB	6314.51	DIELDRIN
21.48	386102	BB	8520.74	ENDRIN
26.63	34640	BB	636.709	ENDOSULFAN 2
32.02	524053	BV	11617.5	PP DDT
35.37	16239	VB	1.615	
43.50	4430	BV	.440	
47.67	728782	VV		&MIREX
53.22	55751	VV	5.543	
59.09	336806	VV	5084.54	DIB
64.12	443714	VF	15390.5	METHOXYCHLOR

TOTAL AREA = 3856561 TOTAL NG/L = 58042.148

PROCESSED DATA FILE: C0N17 RAW DATA FILE: *RAW00

REPORT: 490.02 CHANNEL: 14

SAMPLE: PEST SPK INJECTED AT 23:53:57 ON JUN 1, 1987

ISTD METHOD: PESTAB BTL: 17

ACTUAL RUN TIME: 70.008 MINUTES

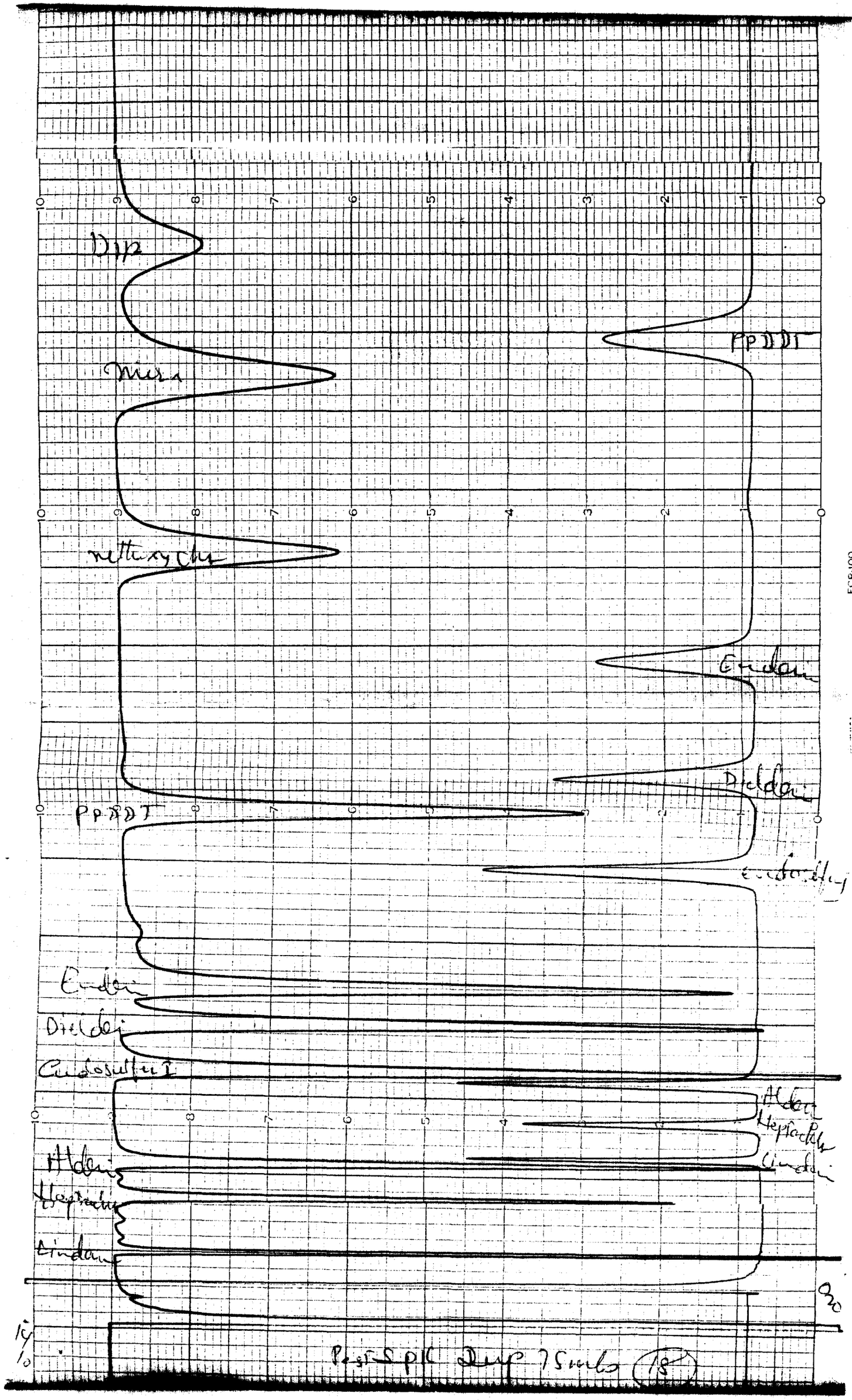
ISTD-RATIO: 72.464 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0350

READING(S) MISSED

RT	AREA		NG/L	NAME
2.76	96150	BV	1869.87	LINDANE
3.18	2901	VV	.477	
3.74	3549	VV	.583	
4.51	105163	VV	2163.21	HEPTACHLOR
5.09	2651	VV	.436	
5.62	146930	VB	3088.28	ALDRIN
8.67	342017	BV	4050.96	ENDOSULFAN 1
10.20	317635	VV	6376.84	DIELDRIN
11.39	372225	VV	7909.74	ENDRIN+ENDOSULFAN 2
13.11	36626	VB	6.022	
17.25	383817	BV	11704.2	PP DDT
19.63	8834	VB	1.453	
26.21	299109	BB	16186.6	METHOXYCHLOR
32.01	440731	BV		&MIREX
36.26	211038	VB	5413.84	DIB

TOTAL AREA = 2769378 TOTAL NG/L = 58772.429

PROCESSED DATA FILE: C14N17 RAW DATA FILE: *RAW14



Dip
Mirex
PPDDT
Endrin
Dieldrin
PPDDT
Endrin
Dieldrin
Endosulfan I
Aldrin
Heptachlor
Lindane
Aldrin
Heptachlor
Lindane
Pest Spk Dup 75mls (18)

REPORT: 491.03 CHANNEL: 0

SAMPLE: PEST SPK DUP INJECTED AT 1:10:16 ON JUN 2, 1987

ISTD METHOD: PESTA0 BTL: 18

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 72.464 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0350

ENDED NOT ON BL

RT	AREA		NG/L	NAME
1.37	515	BV	.051	
1.63	2114	VB	.211	
2.98	559	BB	.056	
4.21	232	BB	.023	
4.75	163732	BV	2632.02	LINDANE
5.90	185115	VV	2743.69	HEPTACHLOR
6.63	3763	VV	.375	
7.21	275664	VB	4360.06	ALDRIN
9.20	5098	BB	.508	
14.20	491820	BV	4798.24	ENDOSULFAN 1
17.57	471096	VB	6931.85	DIELDRIN
21.48	428818	BB	9481.20	ENDRIN
26.57	30895	BB	568.940	ENDOSULFAN 2
32.01	584995	BV	12992.8	PP DDT
35.23	16299	VB	1.624	
43.56	3656	BV	.364	
47.65	727416	VV		&MIREX
53.13	55807	VV	5.559	
59.06	352613	VV	5333.17	DIB
64.08	487615	VF	16945.0	METHOXYCHLOR

TOTAL AREA = 4287824 TOTAL NG/L = 66796.593

PROCESSED DATA FILE: C0N18 RAW DATA FILE: *RAW00

REPORT: 491.02 CHANNEL: 14

SAMPLE: PEST SPK DUP INJECTED AT 1:10:16 ON JUN 2, 1987

ISTD METHOD: PESTAB BTL: 18

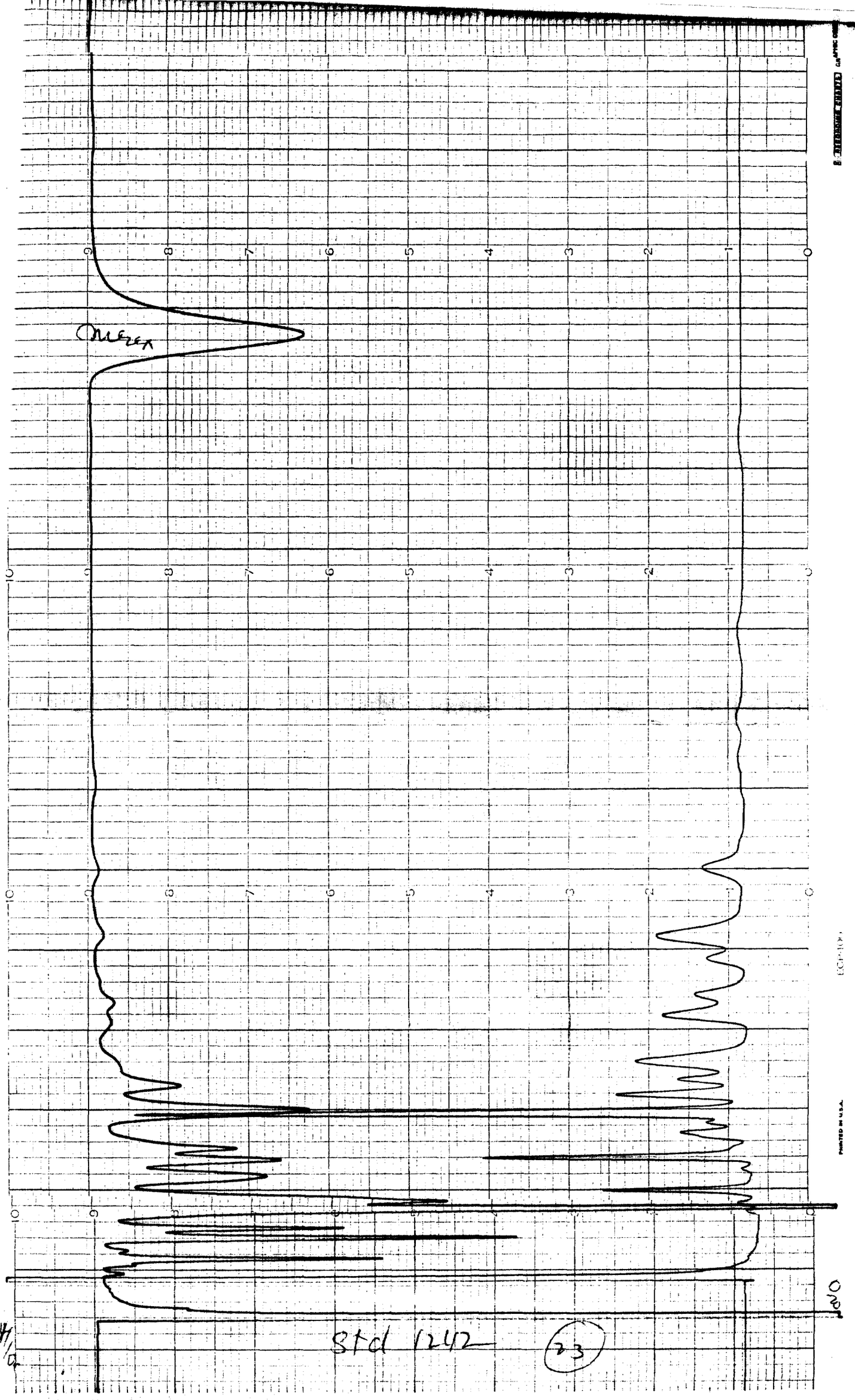
ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 96.618 NG/L STD-AMT: 1.0000 SAMP-AMT: 1.0350

RT	AREA		NG/L	NAME
1.26	33	BB	.008	
2.76	130639	BV	3476.28	LINDANE
3.18	3150	VV	.709	
3.74	3592	VV	.808	
4.51	142692	VV	4016.17	HEPTACHLOR
5.10	3567	VV	.802	
5.63	196050	VB	5638.35	ALDRIN
8.68	374306	BV	6066.19	ENDOSULFAN 1
10.21	342334	VV	9403.87	DIELDRIN
11.40	401363	VV	11670.1	ENDRIN+ENDOSULFAN 2
13.10	34617	VB	7.788	
17.26	413545	BV	17255.1	PP DDT
19.64	8295	VB	1.866	
26.22	324258	BB	24010.2	METHOXYCHLOR
32.01	429470	BV		&MIREX
36.26	214928	VB	7544.27	DIB

TOTAL AREA = 3022840 TOTAL NG/L = 89092.484

PROCESSED DATA FILE: C14N18 RAW DATA FILE: *RAW14


Mezex
Std 1242
23

REPORT: 496.02 CHANNEL: 0

SAMPLE: STD 1242 INJECTED AT 7:31:56 ON JUN 2, 1987

ISTD METHOD: TC/420 BTL: 23

ACTUAL RUN TIME: 70.000 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.81	665	VB	7.6E- 4	
2.65	5175	BV	.006	
2.91	9396	VV	.011	
3.34	80706	VV	.500	A42
3.99	7078	VV	.008	
4.39	183101	VV	.500	B42
5.18	82363	VV	.500	C42
5.50	31004	VV	.036	
5.83	467083	VV	.500	D42
6.42	130962	VV	.500	E42
6.90	76662	VV	.088	
7.48	207457	VV	.500	F42
8.93	136365	VV	.500	G42
9.59	90515	VV	.500	H42
10.73	63862	VV	.073	
11.46	213038	VV	.500	I42
13.61	112221	VV	.500	J42
16.19	1419	VB	.002	
16.98	7963	BV	.009	
18.31	17030	VV	.020	
21.14	24295	VB	.028	
27.26	9304	BB	.011	
31.20	2964	BB	.003	
43.24	12875	BV	.015	
47.54	871524	VB		&MIREX
62.27	6314	BB	.007	

TOTAL AREA = 2867803 TOTAL UG/L = 5.317

PROCESSED DATA FILE: C0N23 RAW DATA FILE: *RAW00

REPORT: 496.02 CHANNEL: 14

SAMPLE: STD 1242 INJECTED AT 7:31:56 ON JUN 2, 1987

ISTD METHOD: TC/42B BTL: 23

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 1.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

RT	AREA		UG/L	NAME
1.24	149	BV	3.6E- 4	
1.39	123	VB	3.0E- 4	
1.69	114	BB	2.7E- 4	
1.89	3066	BV	.007	
2.17	4324	VV	.010	
2.37	52487	VV	.500	A42
2.63	5231	VV	.013	
3.02	91942	VV	.500	B42
3.34	55845	VV	.500	C42
3.94	251602	VV	.500	D42
4.18	156754	VV	.500	E42
5.01	100664	VV	.500	F42
5.54	77697	VV	.500	G42
5.91	67300	VV	.500	H42
7.13	140413	VV	.500	I42
7.94	65031	VB	.500	J42
9.91	10015	BV	.024	
10.54	14151	VB	.034	
12.68	9252	BB	.022	
14.72	6064	BB	.015	
17.48	5419	BB	.013	
31.84	417132	BV		&MIREX
38.08	4574	VB	.011	

TOTAL AREA = 1539352 TOTAL UG/L = 5.150

PROCESSED DATA FILE: C14N23 RAW DATA FILE: *RAW14

GRAPHIC CONTROLS CORPORATION
PRINTED IN U.S.A.

REPORT: 490.02 CHANNEL: 0

SAMPLE: PCB SPK INJECTED AT 10:04:39 ON JUN 2, 1987

ISTD METHOD: TC/420 BTL: 25

ACTUAL RUN TIME: 70.000 MINUTES

ISTD-RATIO: 10.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

BL > 10 MV

RT	AREA		UG/L	NAME
2.93	4246	BV	.059	
3.36	27100	VV	1.065	A42
4.00	1644	VV	.023	
4.42	55426	VV	1.844	B42
5.22	23157	VV	1.713	C42
5.54	7792	VV	.109	
5.88	124966	VV	1.630	D42
6.48	42924	VV	1.982	E42
6.96	21777	VV	.304	
7.56	68954	VV	2.025	F42
9.07	62709	VV	2.001	G42
9.67	29405	VV	1.979	H42
10.83	19887	VV	.278	
11.55	71078	VV	2.032	I42
13.74	39030	VB	2.119	J42
16.28	2946	BV	.041	
17.18	6664	VV	.093	
18.51	8704	VB	.122	
21.39	9790	BB	.137	
27.41	6192	BB	.087	
43.67	15356	BV	.215	
47.82	715335	VV		&MIREX
53.32	37815	VV	.529	
59.32	259768	VB	3.631	

TOTAL AREA = 1662744 TOTAL UG/L = 25.517

PROCESSED DATA FILE: C0N25 RAW DATA FILE: *RAW00

REPORT: 490.01 CHANNEL: 14

SAMPLE: PCB SPK INJECTED AT 10:04:39 ON JUN 2, 1987

ISTD METHOD: TC/42B BTL: 25

ACTUAL RUN TIME: 70.017 MINUTES

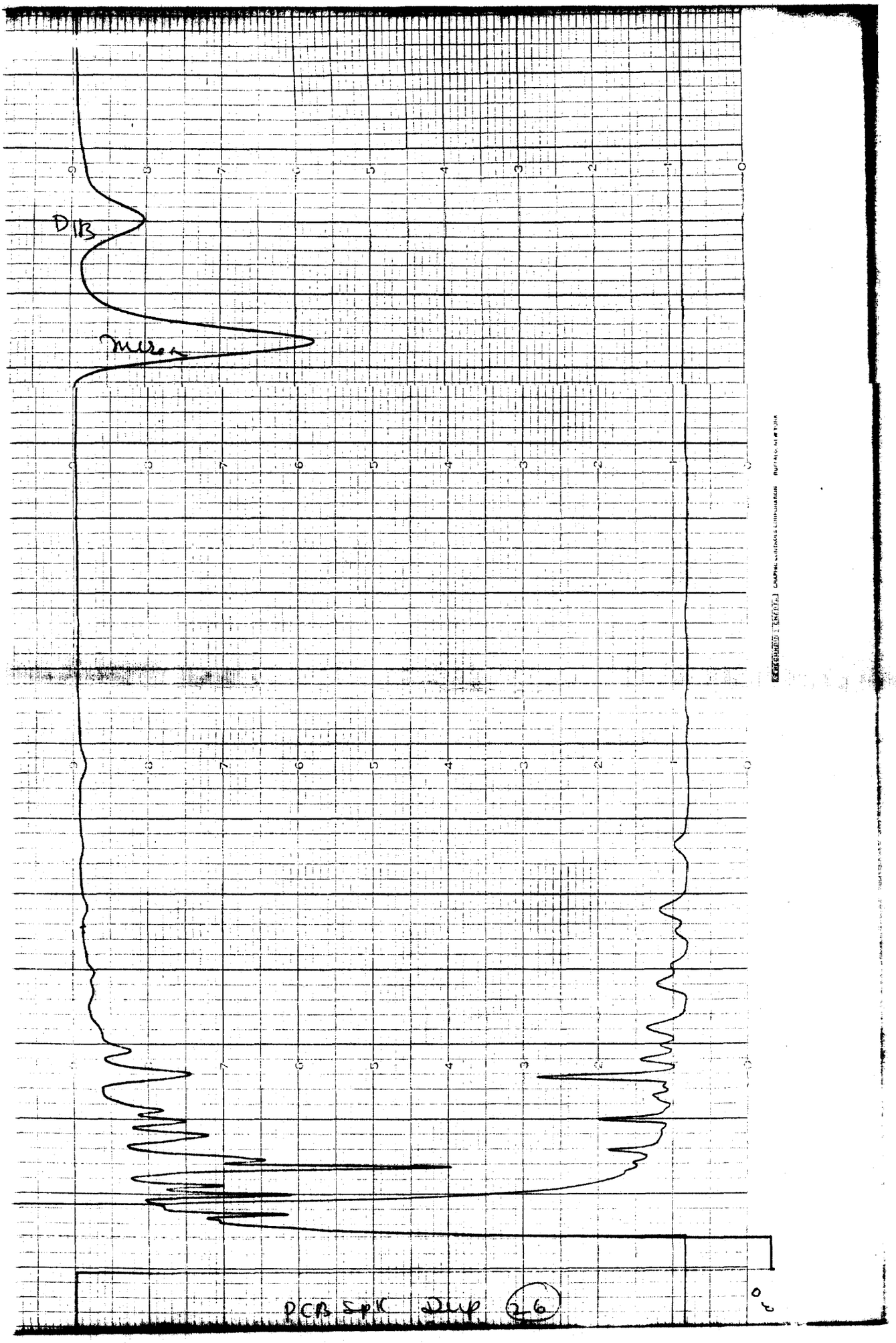
ISTD-RATIO: 10.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

BL > 10 MV

RT	AREA		UG/L	NAME
2.16	744	BV	.016	
2.38	16672	VV	1.409	A42
2.63	645	VV	.014	
3.04	38049	VV	1.835	B42
3.36	21092	VV	1.675	C42
3.96	95936	VV	1.691	D42
4.22	66324	VV	1.876	E42
5.09	50413	VV	2.221	F42
5.57	32704	VV	1.867	G42
5.95	25143	VV	1.657	H42
7.19	62662	VV	1.979	I42
8.00	28016	VV	1.910	J42
9.96	4941	VV	.105	
10.63	5069	VB	.108	
12.80	4697	BB	.100	
14.86	3246	BB	.069	
17.67	8811	BB	.187	
32.12	470338	BV		&MIREX
36.41	197390	VB	4.197	

TOTAL AREA = 1132894 TOTAL UG/L = 22.914

PROCESSED DATA FILE: C14N25 RAW DATA FILE: *RAW14


DIB
Meson
PCB Spk Dup 26

REPORT: 499.01 CHANNEL: 0

SAMPLE: PCB SPK DUP INJECTED AT 11:21:00 ON JUN 2, 1987

ISTD METHOD: TC/420 BTL: 26

ACTUAL RUN TIME: 70.017 MINUTES

ISTD-RATIO: 10.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

BL > 10 MV

RT	AREA		UG/L	NAME
2.93	4102	BV	.056	
3.36	25776	VV	1.723	A42
4.00	1525	VV	.021	
4.42	52360	VV	1.697	B42
5.22	21789	VV	1.570	C42
5.53	7478	VV	.102	
5.87	117304	VV	1.491	D42
6.47	41476	VV	1.772	E42
6.95	20637	VV	.281	
7.56	65200	VV	1.866	F42
9.05	57276	VV	2.493	G42
9.65	28128	VV	1.844	H42
10.81	18745	VV	.255	
11.54	66434	VB	1.851	I42
13.73	36169	BB	1.913	J42
16.29	287	BB	.004	
17.16	3291	BV	.045	
18.51	6717	VB	.091	
21.38	9224	BB	.126	
27.47	5697	BB	.078	
43.61	15226	BV	.207	
47.78	734177	VV		&MIREX
53.28	41809	VV	.569	
59.26	264842	VB	3.607	

TOTAL AREA = 1645679 TOTAL UG/L = 23.662

PROCESSED DATA FILE: C0N26 RAW DATA FILE: *RAW00

REPORT: 499.01 CHANNEL: 14

SAMPLE: PCB SPK DUP INJECTED AT 11:21:00 ON JUN 2, 1987

ISTD METHOD: TC/42B BTL: 26

ACTUAL RUN TIME: 70.025 MINUTES

ISTD-RATIO: 10.000 UG/L STD-AMT: 1.0000 SAMP-AMT: 1.0000

BL > 10 MV

RT	AREA		UG/L	NAME
2.16	693	BV	.014	
2.37	16955	VV	1.368	A42
2.63	756	VV	.015	
3.03	38673	VV	1.782	B42
3.35	21343	VV	1.619	C42
3.95	97211	VV	1.637	D42
4.21	67440	VV	1.823	E42
5.07	49534	VV	2.085	F42
5.56	32955	VV	1.797	G42
5.94	25457	VV	1.602	H42
7.18	62739	VV	1.893	I42
7.98	27971	VV	1.822	J42
9.99	5373	VV	.109	
10.62	6908	VB	.140	
12.75	4473	BB	.091	
14.83	3160	BB	.064	
17.64	9111	BB	.185	
32.07	492321	BV		&MIREX
36.34	198428	VB	4.030	

TOTAL AREA = 1161503 TOTAL UG/L = 22.077

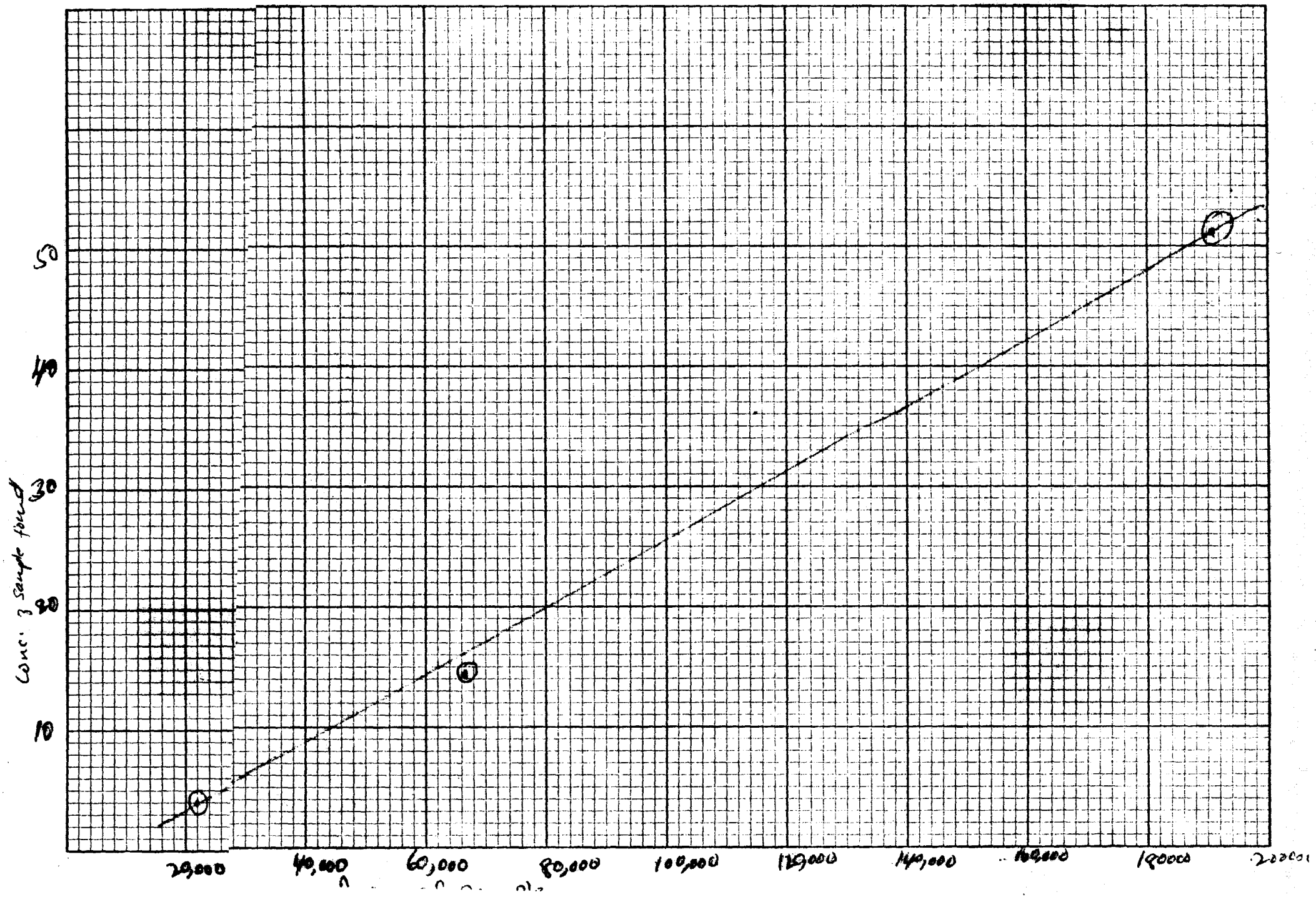
PROCESSED DATA FILE: C14N26 RAW DATA FILE: *RAW14

6/2/87

K+E 10 X 10 TO THE INCH 46 0707
7 X 10 IN. • ALBANENE
KEUFFEL & ESSER CO.

Aldrin Linearity Check

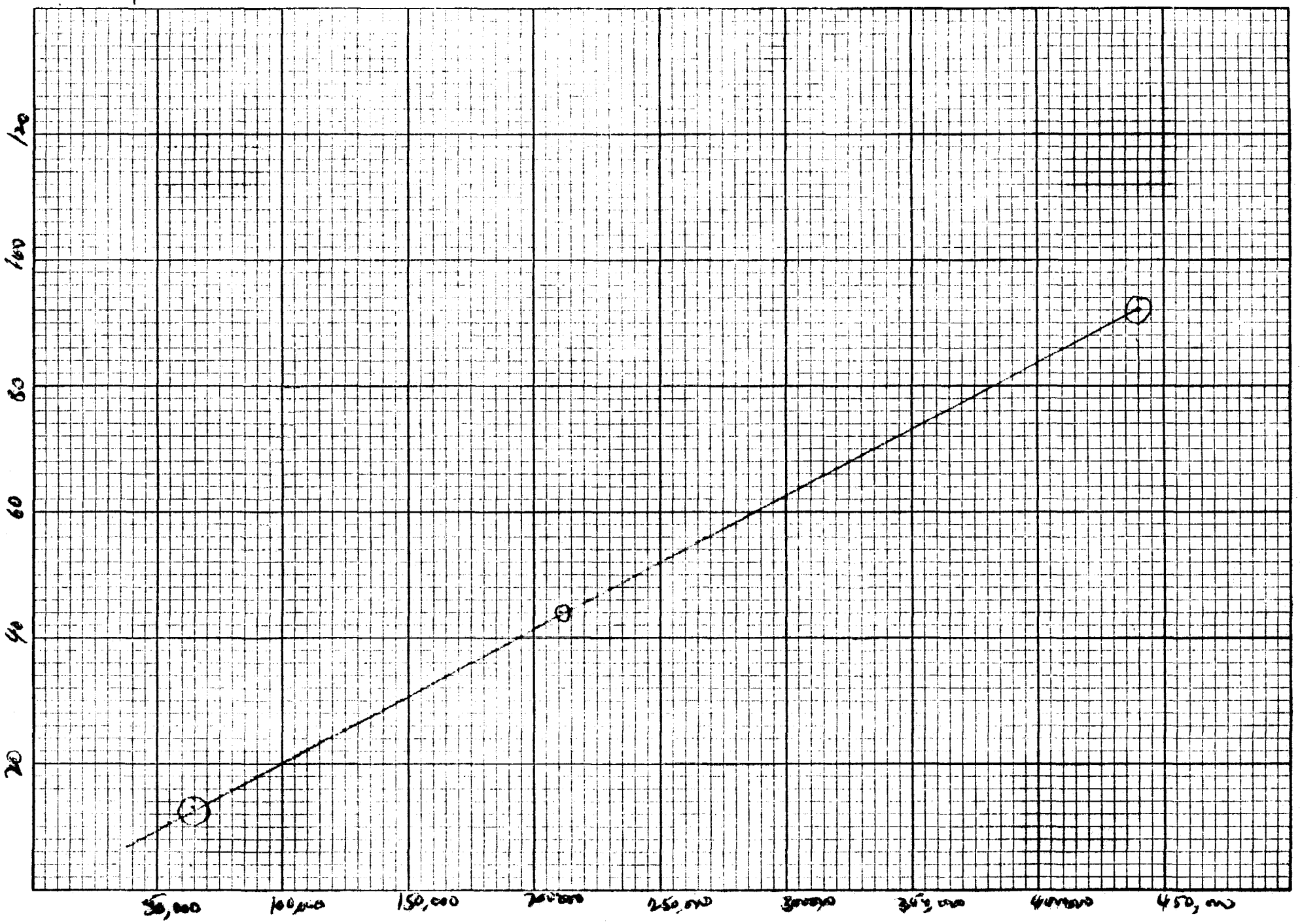
QC-1X 21341 4.7
QC-2.5X 68572 14.5
QC-5X 191276 41.0



K&E 10 X 10 TO THE INCH 46 0707
KEUFFEL & ESSER CO.

6/2/87 Linearity check DIB

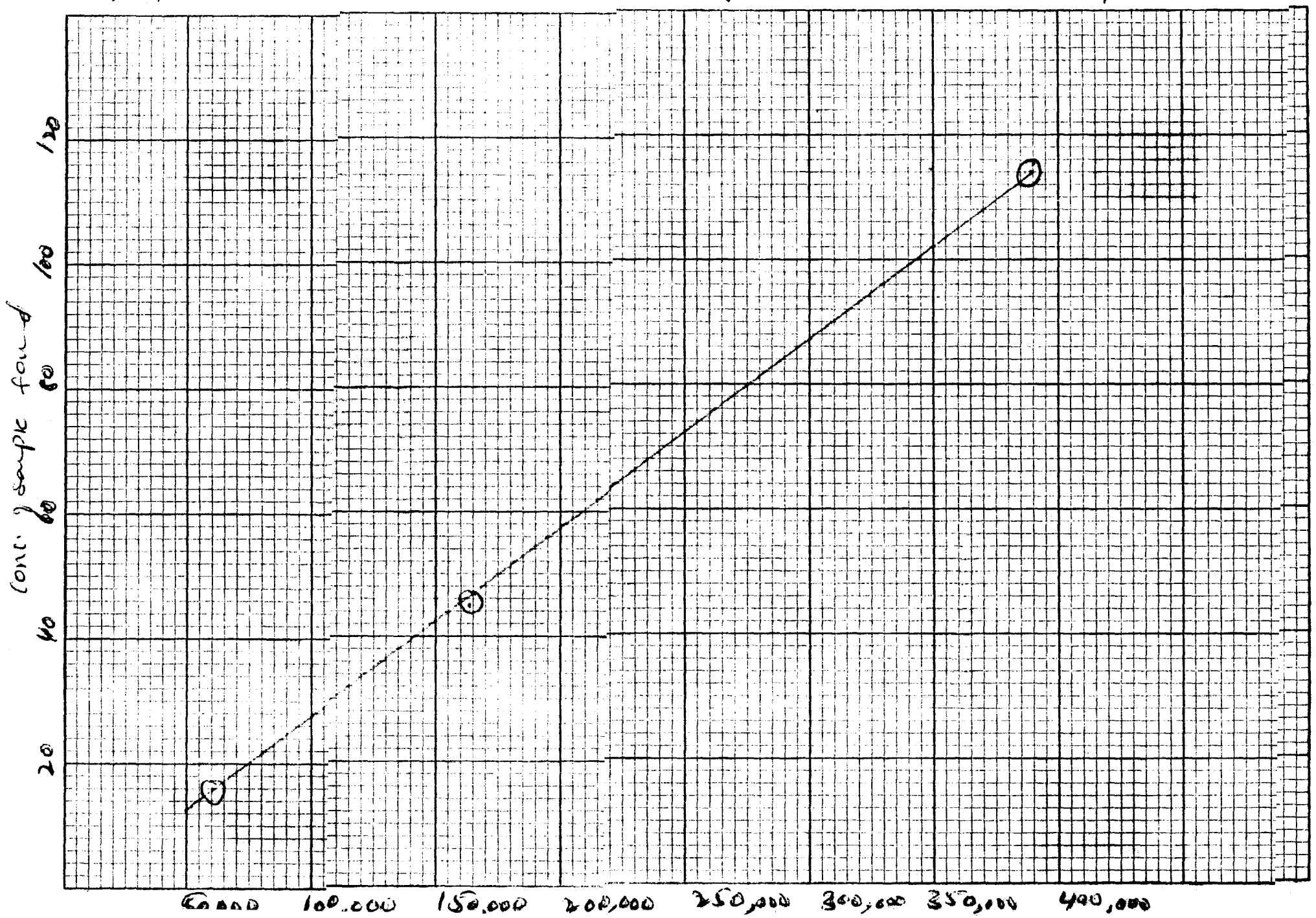
QC-1X	conc.	Area of sample
QC-2.5X	13.8	66 0^{27}
QC-5X	44.5	220,946
	92	448 826



10 X 10 TO THE INCH 46 0707
KEUFFEL & ESSER CO.

QC-1X 4.7 21341 -
QC-2.5X 45.7 155196
QC 5x 115 383287

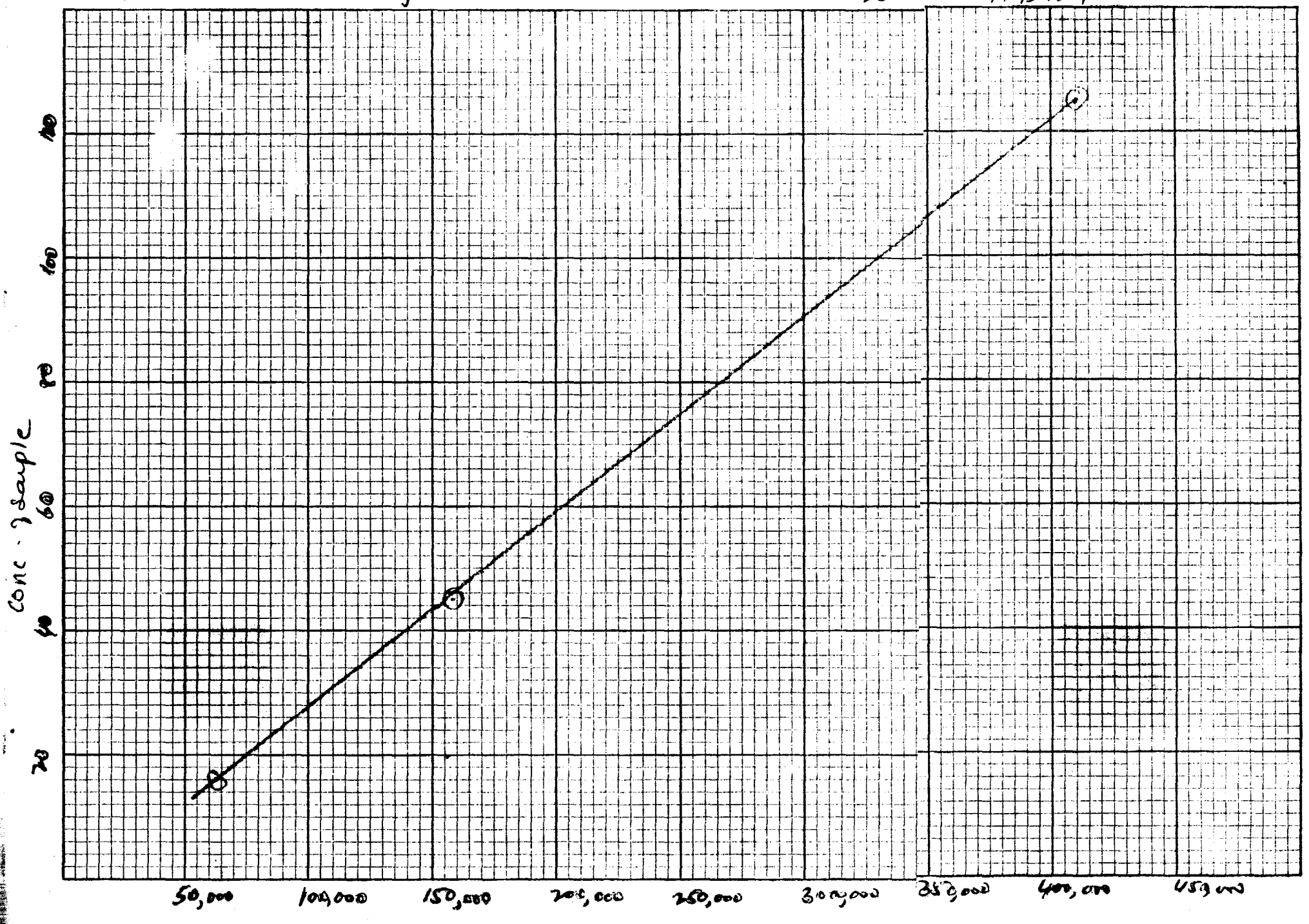
6/2/87 · Endrin linearity check



K+E 10 X 10 TO THE INCH 46 0707
7 X 10 IN. • ALBANENE
KEUFFEL & ESSER CO.

6/2/87 Linearity check PPDDT

	Conc.	Area sample
QC-1X	47	21341
QC-2.5X	47	159322
QC 5X	126	417,929



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION V

DATE: 6/2/87

SUBJECT: SF 3960, 3985, 3962

FROM: AMBERINA KHAN

TO: GILBERT FRYE

COLLUMN DEGRADATION ENDRIN AND PP DDT

% Break down Endrin :- $\frac{\text{Total Area of Endrin Aldehyde + Endrin Ketone}}{\text{Total Area of Endrin + Endrin Aldehyde + endrin Ketone}} \times 100$

$$\frac{20378 + 27363}{279198 + 47741} \times 100 = 14.6\%$$

%Break down PP DDT:- $\frac{\text{Total Area of PPDDD+ PPDDE}}{\text{Total Area Of PPDDT+PPDDD+PPDDE}} \times 100$

$$\frac{17865 + 6461}{216949 + 24326} \times 100 = 10\%$$

AQC DATA

DATE: 6/2/87
DATA SET: SF 3960, 3985, 3962

BLANK DATA:

	CONC. OF AROCLOR (PPB)				CONC. OF PEST (PPB)
	1242	1248	1254	1260	
MB	<.1	<.1	<.1	<.1	<.1

SPIKE DATA:

	COMPOUND:	CONC. (ug) of PEST/PCB				% RECOVERY	
		SPIKE ADDED	SPIKE RESULT	SPIKE DUP. RESULT		SPIKE RECOVERY	SPIKE DUPLICATE RECOVERY
PESTICIDES:	LINDANE	2.262	1.883	2.63		83	116
	HEPTACHLOR	2.193	1.947	2.74		89	125
	ALDRIN	3.428	3.192	4.3		93	128
	ENDOSULFAN-1	6.21	4.245	4.798		68	77
	DIELDRIN	6.00	6.314	6.93		105	115
	ENDRIN	8.90	8.5	9.4		95	106
	P,P'-DDT	11.74	11.617	12.9		99	110
	P,P'-METHOXYCHLOR	17.40	15.390	16.94		88	97
	DIBUTYL CHLORENDATE	6.50	5.084	5.33		78	82
PCB:	AROCLOR 1242	2.83	1.989	1.822		70	64

COMMENTS: