15812

WESTON MANAGERS DESIGNERS/CONSULTANTS 5 Underwood Ct., Delran, NJ 08075 609-461-4003

TECHNICAL ASSISTANCE TEAM FOR EMERGENCY RESPONSE REMOVAL AND PREVENTION
EPA CONTRACT 68-WO-0036

MEMORANDUM

TO: Jamie Fenske, OSC, EPA, Region III — TDD #9111-26
Western Response Section — PCS #2035

THRU: Mike Zickler, TATL, Region III MZ

FROM: Marian Murphy, TAT Region III MM

SUBJECT: Big John's Samples Analytical Review

DATE: January 10, 1992

This report covers the review of the analytical data package for five (5) drum samples and one (1) solid sample collected at the Big John's Site on December 10, 1991. The samples were received at Princeton Testing on December 12, 1991. Three drums were analyzed for volatile organics (VOA) and flashpoint. One drum was analyzed for PCBs, and one drum was analyzed for sulfites. The solid sample was analyzed for asbestos.

ANALYTICAL METHODOLOGY

The VOA samples were analyzed in accordance with EPA Method 8240. The PCB sample was analyzed in accordance with EPA Method 8080. The flashpoint samples were analyzed in accordance with EPA Method 1020. The sulfite analysis was performed in accordance with EPA Method 377.1. The solid was analyzed for asbestos by PLM.

- Signed chain-of-custody records were received.

- The GC/MS tune data for the VOAs and the internal standard data were acceptable. The initial and continuing calibration data had some compounds out of QC criteria, however, only 2-butanone was qualified approximate, for sample D01. The matrix spike/matrix spike duplicate recoveries, surrogate spike recoveries and relative percent difference (RPD) values were acceptable for the most part. The method blank contained methylene chloride and acetone. Samples D01, D05 and D06 should be considered not detected for methylene chloride, and sample D06 should be considered not detected for acetone.

- The PCB calibration data was acceptable. The method blank was free of contamination. The surrogate spike recovery for sample D04 was lower than the QC limits, but no PCBs were found, therefore no data was qualified. As no PCBs were found, no second column confirmations were performed.

CONCLUSION

Accept the data as presented except for methylene chloride, acetone and 2-butanone. The methylene chloride should be considered not detected for samples D01, D05 and D06 due to blank contamination. The acetone should be considered not detected for sample D06 due to blank contamination. The 2-butanone should be considered approximate for sample D01 due to calibration outliers. It should be noted that any volatile analysis marked "E" should be considered approximate since it is an estimated concentration.

MM/mr

ENVIRONM[illegible]L PROTECTION AGENCY
[illegible] of Enforcement

CHAIN OF CUSTODY RECORD

A10(3[illegible]

R[illegible]
Curtis Bldg., [illegible] Walnut Sts.
Philadelphia, Pennsylvania 19106

PROJ. NO.:

PROJECT NAME: Big John's Salvage

SAMPLERS: (Signature) [signature], Michael R. Tordella

NO. OF CONTAINERS

Voa Glass

REMARKS: Three Week 2 NW [illegible]

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	Voa Glass						REMARKS
DØ1	12/10	1142		X	Inside Garage	1	X						Test for Flash Point and VOAs
~~[illegible]~~	~~[illegible]~~	~~[illegible]~~		~~X~~	~~[illegible]~~	~~1~~	~~X~~						~~Test for Flash Point [illegible]~~
DØ3	12/10	1200		X	" " "	1	X						Test for Sulfites
DØ4	12/10	1237		X	Inside Creek Hot Up	1	X						Test for PCBs.
DØ5	12/10			X	" " " "	1	X						Test for Flash Point and VOAs
DØ6	12/10			X	" " " "	1	X						Test for Flash Point and VOAs.
AØ7	12/10			X	" " " "	1	X						Test for Asbestos

Please send one copy of Results To:
PAT Bishop % Roy F. Weston, Inc.
141 Waddles Run Rd. Wheeling, W.V.
26003

One copy to Marian Murphy c/o Weston, Inc.
5 Underwood Court
Delran, NJ 08075

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
[signature]	12/11/91 1600	[signature]			

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
				[mark]

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

AR100[illegible]3

T3-04121

Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attn: Marian Murphy

JOB # 9108360-001/2GMWH

princeton testing laboratory inc.

Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attn: Marian Murphy

January 3, 1992
Job #: 9108360-001/2GMWH

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APPROVED SAMPLE ANALYSIS REQUEST

Project No.: 9108360-001GMWH

Weston TAT
5 Underwood Court
Delran, New Jersey 08075

Date Received: 12/13/91
Analysis Due : 12/25/91

Attention: Marian Murphy
Phone: (609) 461-4003

Number Of Samples : 6
Number Of Containers: 6

Customer Number: T1342
Credit By: Heather Menzel
Approved By: Susan Sharples

Reports: Standard Report Format

Sample I.D.'s P.T.L.--Client	Requested Analytical Services
001 - Sample D01 ----------	Flashpoint
	Purgeable Volatile Organics By Method 8240 Page 1
	Purgeable Volatile Organics By Method 8240 Page 2
002 - Sample D03 ----------	Sulfite (As SO3) In Solid Phase
003 - Sample D04 ----------	Polychlorinated Biphenyls In Oil
004 - Sample D05 ----------	Flashpoint
	Volatile Organics By GCMS - Method 624 Page 1
	Volatile Organics By GCMS - Method 624 Page 2
005 - Sample D06 ----------	Flashpoint
	Volatile Organics By GCMS - Method 624 Page 1
	Volatile Organics By GCMS - Method 624 Page 2
006 - Sample A07 ----------	Asbestos In Bulk/Non-Aqueous Sample By PLM

Notes:

1. Samples originated from Weston, Wheeling, WV 26003.
2. Extra copy of report to: Roy F. Weston, Inc.
   141 Waddles Run Rd., Wheeling WV 26003.
   Attn: Pat Bishop
3. Samples came in after 11:00 a.m. 12/11/91.
4. Per Client's instructions to H Menzel, for Sample D04, run only the oil portion for PCB. Flashpoint to All Service.
5. Please see attached list for Detection limit.
6. NOTE THAT FOR RESULTS EXCEEDING THE PRESCRIBED TURNAROUND TIME (IN CALENDAR DAYS), A REDUCTION IN THE TOTAL CHARGE WILL BE THREE PERCENT FOR THE FIRST DAY, TWO PERCENT FOR THE SECOND DAY, AND AN ADDITIONAL ONE PERCENT FOR EACH ADDITIONAL DAY.

Job Type: Standard/PLM

	Initials/Date
Received By Lab:	
Reviewed By:	
Q.A. Approved:	

Printed By: Chris Jamieson
Date: 01/07/92
16:57:12

AR108834

CHAIN OF CUST[illegible] RECORD

CLIENT Mistral
CONTACT [illegible]
PHONE NO.
SAMPLING SITE

SAMPLERS
FIELD SUPERVISOR
COMPANY
PHONE NO.

PTL JOB NO. [illegible]
CLIENT PROJECT NO.
Page ___ of ___

SAMPLE IDENTIFICATION	MATRIX	COLLECTION COMP.	GRAB	DATE	TIME	CONTAINER TYPE	NO.	ANALYSES REQUIRED (Specify Method If Known)	REMARKS (Specify QA/QC, preservation required, due date, etc.)
D01 /	Soil					G	1	Flashpt, 624/8240	
D03	Soil					G	1	Sulfide	
D05 /						G	1	Flashpoint, 624	
D06 /						G	1	Flashpoint, 624	
A07 /						G	1	Asbestos by PLM	

AR100665

LABORATORY SEAL NO.
SEALED ON ______ (Date) AT ______ (Military Time)
PREPARED BY
MEANS OF TRANSPORT

LABORATORY SEAL NO.
UNSEALED ON ______ (Date) AT ______ (Military Time)
SAMPLING COMPLETED ON ______ (Date) AT ______ (Military Time)
FIELD SEAL NO.

FIELD SEAL BROKEN BY
DATE ______ MILITARY TIME
REMARKS

RELINQUISHED BY (Print and Sign Name)	RECEIVED BY (Print and Sign Name)	DATE	TIME	REASON FOR CHANGE OF CUSTODY
Fed Ex	[signature]	12/12/91	11:16	[illegible]
[signature]	[signature]	12/12/91		[illegible]
[signature]	[signature]	12/12/91	1730	GC/MS Lab
	[signature]	12/13/91	10:30	
	[signature]	12/16/91	14:00	Sulfite

ORIGINAL - Lab Copy 5/89
PINK - Transfer Copy
YELLOW - Transfer Copy

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princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9
FAX (609) 452-

Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attention: Marian Murphy

Report Date: 01/02/92
Job Number: 9108360-001GMWH
Date Received: 12/13/91

Analyses	Sample I.D.:	Sample D01	Sample D03	Sample D05
Flashpoint in degress fahrenheit		<50° F Flam.	N/R	<50° F
Sulfite in mg/kg		N/R	67,800 4.7%	N/R

Analysis	Sample I.D.:	Sample D06
Flashpoint in degress fahrenheit		139° F Combust

N/R = Not Requested

Edna A. Almea

Edna A. Almea, V.P., Manager
Water, Wastewater, and Microbiology

AR100636

princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
FAX (609) 452-0347

Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attention: Marian Murphy

Report Date: 01/07/92
Job Number: 9108360-001GMWH
Date Received: 12/13/91

Analysis: Polychlorinated Biphenyls In Oil
Units: mg/kg

Parameters	Sample I.D.:	Sample D04	Blank 12/23/91
Aroclor 1221		<5	<5
Aroclor 1232		<5	<5
Aroclor 1242		<5	<5
Aroclor 1248		<5	<5
Aroclor 1254		<5	<5
Aroclor 1260		<5	<5
Aroclor 1016		<5	<5
RECOVERY DATA			
% Aldrin (Surr.)	(55-145%)	47%	159%

NOTE: Low recovery due to extensive sulfuric acid cleanup.

Jane Dennison, Supervisor
Gas Chromatography Laboratory

Software Version: [illegible]
Date: [illegible] 10:57
Sample Name : [illegible]
Data File : [illegible] Date: [illegible]
Sequence File: (none) Cycle: 29 Channel : A
Instrument : VARIAN 3400 Rack/Vial: [illegible] Operator: [illegible]
Sample Amount : 1.0000 Dilution Factor : 1.00

Princeton Testing Laboratory Analysis Report

PESTICIDES AND PCB'S BY CAPILLARY CHROMATOGRAPHY

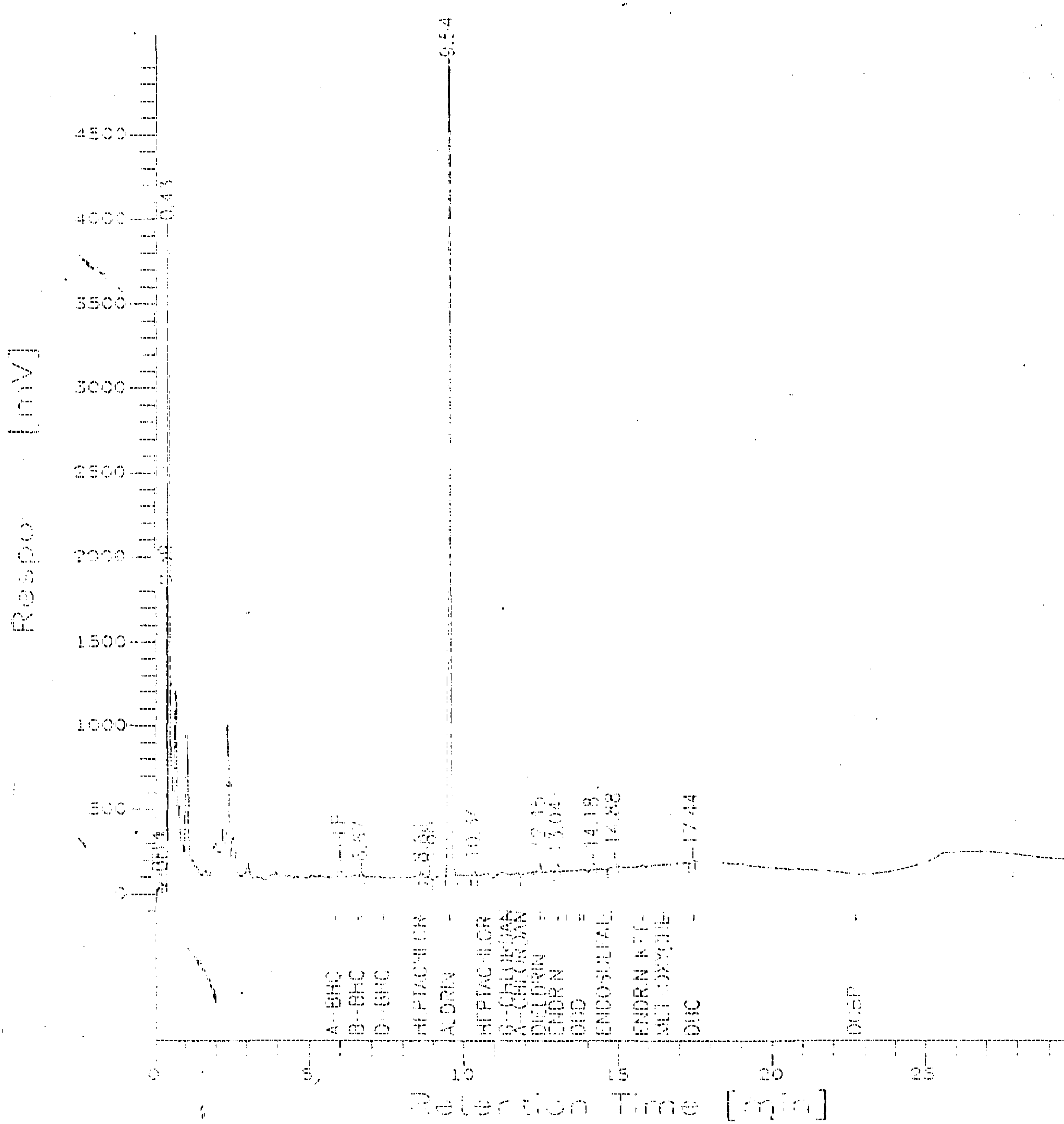
Peak #	Ret Time [min]	Component Name	Raw Amount [ug/ml]	Concentration [ug/L]	Area [uV-sec]	Height [uV]	Sep. Code	Delta RT [%]	Reference Component	Cal. Range	Calibrated Factor
1	0.340		-0.3022	-0.3022	185697.64	13651.45	BB	-------			-0.7632
2	0.357		1.4590	1.4585	2550628.03	1.4766	B1	-------			1.5726e4
3	0.427		5.7316	5.7316	7350005.20	1.3785	VB	-------			1.3947e4
4	6.657	G-BHC	0.1252	0.1252	102701.72	13012.42	BB	-0.0118	DBC	-	5.5625e5
5	8.618	HEPTACHLOR	-0.1563	-0.1560	110552.15	22510.48	BB	1.1143	DBC	-	-1.7491
6	8.884		-0.5439	-0.5439	155442.14	28570.42	BB	-------			-1.4501
7	9.340	ALDRIN	36.5477	36.5477	43743568.00	4.1165	BB	1.0840	DBC		1.0018
8	10.344	HEPTACHLOR EPOX	0.5905	0.5905	186046.11	33835.95	BB	-1.4015	DBC	-	1.1458e5
9	12.445	DIELDRIN	1.1158	1.1185	831130.15	73921.41	BB	-0.1791	DBC	-	1.7025e5
10	13.040	ENDRIN	-4.2345	-4.2345	229155.72	41713.97	BB	-0.0037	DBC	-	-4.2315
11	14.181	ENDRIN ALDE	-1.7456	-1.7456	317089.81	35119.73	BB	1.0942	DBC	-	-1.8165
[illegible]	[illegible]	DDT	1.1011	1.1012	12444.72	[illegible]	BB	0.1577	DBC	-	4.1545e5
13	17.438	DBC	0.4163	0.4150	185518.77	34119.45	BB	-0.2902	DBC	-	4.4578e5
			41.0379	41.0379	56757641.06	1.4767					

Varian 3400 Capillary Column GC: DB-1701 30M X 0.53mm I.D. Detector: [illegible]
Injector: 250 C

Page 1 of 1

Start Time : 0.00 min   End Time : 30.00 min   Low Point : -100.00 mV   High Point : 4560.30 mV

Scale Factor: 0.   Plot Offset: -100 mV   Plot Scale: 5000 mV



Software Version: 5.1 <2A25>
Date: 12/24/91 19:46
Sample Name : 8260-3 XS Acid Cl
Data File : d:\2700\data3\1224017.raw Date: 12 24 91 19:[illegible]
Sequence File: D:\2700\DATA3\1224J0.seq Cycle: 7 Channel : A
Instrument : VARIAN 3400 Rack/Vial: 0/0 Operator: JT
Sample Amount : 1.0000 Dilution Factor : 1.00

Princeton Testing Laboratory Analysis Report

PESTICIDES AND PCB'S BY CAPILLARY CHROMATOGRAPHY

Peak #	Ret Time [min]	Component Name	Raw Amount [ug/L]	Concentration [ug/L]	Area [uV-sec]	Height [uV]	BC	Delta RT [%]	Reference Component	Cal. Range	Calibration Factor
1	0.128		-0.3454	-0.3454	157172.42	[illegible]	BB	-------			[illegible]
2	6.251		17.5903	17.9903	6251910.50	1.19e[illegible]	BV	-------			[illegible]
3	6.364	A-BHC	29.1764	29.1764	11154537.00	1.30e5	VB	-3.1292	DBC		[illegible]
4	6.672	G-BHC	5.5479	5.5479	6693207.50	1.01e5	BV	0.0384	DBC		[illegible]
5	6.787		1.5890	1.5890	3215177.75	708508.31	VB	-------			[illegible]
6	6.972		5.5379	5.5379	6630542.50	807491.51	VB	-------			[illegible]
7	7.275		5.5946	5.5946	4512527.29	778148.25	BB	-------			[illegible]
8	7.475	D-BHC	15.9763	15.9760	65747585.00	[illegible]	BB	1.4175	DBC		[illegible]
9	7.538		2.5878	2.5878	1289429.00	262437.34	BV	-------			[illegible]
10	7.746		0.6954	0.6954	1095092.00	258707.77	VV	-------			[illegible]
11	7.909		9.0611	9.0611	7509597.50	1.70e6	VV	-------			[illegible]
12	8.118		2.5566	2.5566	3632359.00	603726.15	VV	-------			[illegible]
13	8.238		0.8587	0.8587	1727671.38	330695.66	VV	-------			[illegible]
14	8.406		0.9580	0.9580	1517901.82	213273.00	VV	-------			[illegible]
15	8.586	HEPTACHLOR	0.5670	0.5670	1595540.25	278352.31	VB	-0.1651	DBC		[illegible]
16	8.736		-0.2764	-0.2764	455589.75	116133.23	BB	-------			[illegible]
17	8.991		2.4522	2.4522	5505493.50	668153.67	BV	-------			[illegible]
18	9.214		1.9072	1.9072	2022565.75	305692.41	VV	-------			[illegible]
19	9.417		4.1164	4.1164	4705707.00	784365.31	VV	-------			[illegible]
20	9.526	ALDRIN	2.1591	2.1591	2338203.50	547258.19	VB	-0.1503	DBC		[illegible]
21	9.696		1.3758	1.3758	1390511.50	255459.14	BV	-------			[illegible]
22	9.910		10.1389	10.1389	11992594.00	1.10e6	VV	-------			[illegible]
23	10.143		5.3921	5.3921	5237570.50	1.02e6	VV	-------			[illegible]
24	10.355		4.0225	4.0225	3360362.00	458435.34	VV	-------			[illegible]
25	10.505		13.9111	13.9111	13727175.00	1.10e6	VV	-------			[illegible]
26	10.770	HEPTACHLOR EPOX	9.3636	9.3636	8953820.00	1.15e6	VV	0.5019	DBC		[illegible]
27	11.395		2.1925	2.1925	1429447.63	305617.36	VV	-------			[illegible]
28	11.362		23.6348	23.6348	24167570.00	3.17e6	VB	-------			1.4595
29	11.378	G-CHLORDANE	5.3033	5.3033	1427481.13	278519.34	BV	-0.2194	DBC	-	4.3207e5
30	11.520		4.2742	4.2742	2293627.50	381703.47	VV	-------			5.3780e5
31	11.644		2.1567	2.1567	1758436.13	292873.59	VV	-------			8.1532e5
32	11.806	ENDO 1	0.9705	0.9705	635801.25	106892.57	VV	0.7298	DBC	-	6.5512e5
33	11.972	A-CHLORDANE	5.0855	5.0855	998366.19	130140.06	VV	1.0310	METHOXYCHLOR		1.9632e5
34	12.080		4.3365	4.3365	344171.72	52142.27	VB	-------			79354.9922
35	12.280		5.9838	5.9838	4434984.50	500035.81	BV	-------			7.4116e5
36	12.465	DIELDRIN	4.2284	4.2284	2798173.50	367898.47	VV	-0.0413	DBC	-	6.6175e5
37	12.787	DDE	11.3552	11.3552	7953934.50	727717.13	VV	1.5646	DBC		7.0134
38	13.016	ENDRIN	11.5275	11.5275	9262067.00	666334.95	VV	-0.1855	DBC		8.0347
39	13.276	ENDO 2	-1.6745	-1.6745	1182958.63	233455.52	VV	-0.3432	DBC	-	-7.0644

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40	13.535		13.7873	13.7873	6503654.50	564632.25	VV	-------			4.7873
41	13.723	DDD	7.1999	7.1999	2916711.00	412252.66	VV	-0.2457	DBC	-	4.0510e5
	13.954	ENDRIN ALDE	6.0354	6.0354	3391245.50	334358.47	VV	0.4536	DBC	-	5.5727e5
	14.150		5.3626	5.3626	3025992.75	475013.55	VB	-------			5.3672e5
44	14.427	ENDOSULFATE	37.6477	37.6477	17418638.00	1.27e6	BV	-0.7907	DBC		4.0167
45	14.715	DDT	19.2114	19.2114	9771951.00	1.11e6	VV	-0.4312	DBC		5.0370
46	14.950		21.5594	21.5594	11132227.00	954377.44	VV	-------			5.0962
47	15.193		14.4072	14.4072	7315071.00	574269.44	VV	-------			5.0730
48	15.340		3.4247	3.4247	1699611.75	196399.94	VB	-------			4.7627e5
49	15.496		0.1398	0.1398	335831.59	60159.62	BV	-------			2.4201e5
50	15.597		0.7595	0.7595	707150.00	127989.15	VV	-------			8.8403e5
51	15.758		3.2702	3.2702	2095601.10	228626.97	VV	-------			[illegible]
52	15.970	ENDRIN KETONE	0.5326	0.5326	585237.19	112754.52	VB	0.1544	DBC	-	1.1046e5
53	16.251		9.1272	9.1272	5524240.75	273471.00	BV	-------			2.8813e5
54	16.320		-0.5249	-0.5249	[illegible]	223189.44	VV	-------			[illegible]
55	16.416		0.6480	0.6480	651551.11	127111.19	VB	-------			1.0910e5
56	16.574	METHOXYCHLOR	15.6178	15.6178	4215457.50	484015.59	VV	1.4021	DBC	-	2.3964
57	16.758		5.0361	5.0361	1774494.81	253111.50	VB	-------			1.4583e5
58	17.051		1.8411	1.8411	820915.88	200391.53	BB	-------			4.4079e5
59	17.218		0.5193	0.5193	231809.71	50962.11	BB	-------			4.4591e5
60	17.411		0.2254	0.2254	100493.00	44695.93	BV	-------			4.4591e5
61	17.559	DBC	6.6571	6.6571	2968320.75	474482.25	VB	0.0000	DBC	-	4.4591e5
62	17.936		2.0708	2.0708	923452.44	141301.56	BV	-------			4.4591e5
63	18.107		4.0087	4.0087	1787547.00	139515.37	VB	-------			4.4591e5
64	18.323		0.3386	0.3386	150970.00	45737.06	BB	-------			4.4591e5
65	18.420		0.1229	0.1229	54801.31	39105.21	BB	-------			4.4591e5
66	18.604		0.5733	0.5733	324955.44	78772.92	BB	-------			4.4591e5
67	18.791		0.6961	0.6961	310304.09	85645.13	BB	-------			4.4591e5
	19.023		6.5207	6.5207	2907660.75	444801.20	BB	-------			4.4591e5
69	19.215		0.0607	0.0607	27051.57	15439.56	BB	-------			4.4591e5
70	19.349		0.1652	0.1652	73701.13	25740.33	BV	-------			4.4591e5
71	19.491		1.0077	1.0077	449352.05	77297.29	VV	-------			4.4591e5
72	19.563		0.9819	0.9819	437838.19	79294.23	VB	-------			4.4591e5
73	19.801		0.4079	0.4079	181879.13	39068.93	BV	-------			4.4591e5
74	20.157		13.7726	13.7726	6141565.50	527455.39	VV	-------			4.4591
75	20.603		-0.5725	-0.5725	911294.94	105829.12	VB	-------			-1.1717
76	23.351	DCBP	-2.2302	-2.2302	140722.53	21252.40	BB	1.9368	DBC	-	-6.1095
77	23.703		-0.5688	-0.5688	775577.63	57941.73	BB	-------			[illegible]
78	24.336		-2.2229	-2.2229	144133.51	26741.47	BB	-------			[illegible]
79	25.035		-0.9093	-0.9093	754775.63	9179.77	BB	-------			[illegible]
80	25.292		-2.3332	-2.3332	91823.11	14227.59	BB	-------			[illegible]
81	27.132		2.0318	2.0318	2121575.13	150781.48	BB	-------			1.0441e5
			483.1718	483.1718	1.4469	4.7467					

Varian 3400 Capillary Column GC: DB-1701 30M x 0.53mm I.D. Detector: 300C.
Injector: 250 C

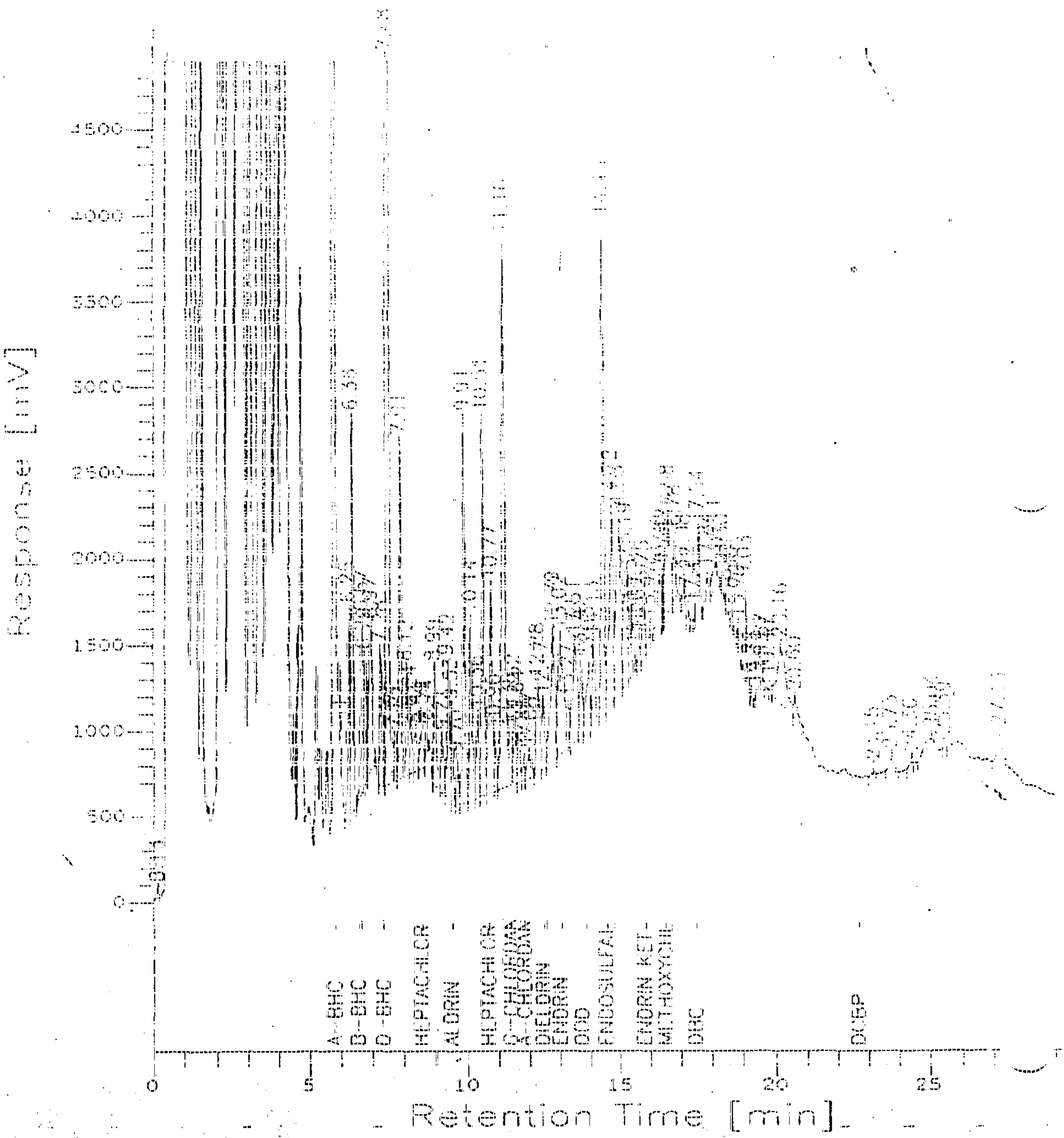
Pesticide/PCB Chromatogram

Sample Name : [illegible] Sample #: [illegible] Page 1 of 1

Filename : [illegible] Date : [illegible]

Start Time : [illegible] min End Time : [illegible] min Low Point : [illegible] mV High Point : [illegible] mV

Scale Factor: [illegible] Plot Offset: [illegible] mV Plot Scale: [illegible] mV



Software Version: 3.1 2435
Date: 11/21/91 8:51
Sample Name : 1221 500UG/L
Data File : c:\2700\data5\1121020.raw Date: 11/21/91 8:21
Sequence File: C:\2700\DATA5\1121.seq Cycle: 21 Channel: A
Instrument : VARIAN 3400 Rack/Vial: 0/0 Operator: [illegible]
Sample Amount : 1.0000 Dilution Factor : 1.00

Princeton Testing Laboratory Analysis Report

PESTICIDES AND PCB'S BY CAPILLARY CHROMATOGRAPHY

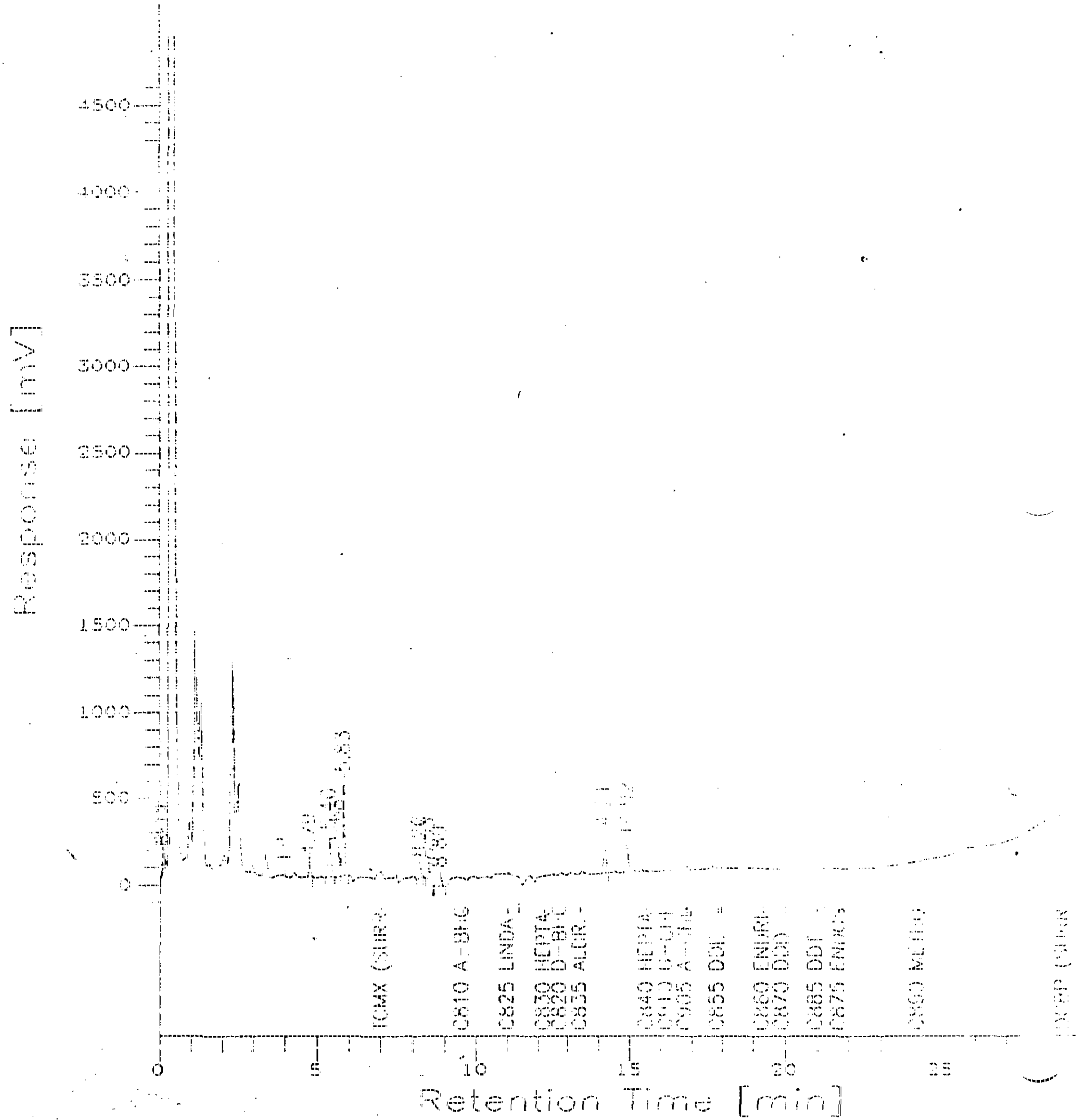
Peak #	Ret Time [min]	Component Name	Raw Amount [ug/L]	Concentration [ug/L]	Area [uV-sec]	Height [uV]	BL	Delta RT [%]	Reference Component	Cal. Range	Calibrat. Factor
1	3.113		0.3430	0.0000	340013.44	80615.72	BB	-------			1.0000e6
2	4.765		0.3005	0.0000	300431.75	61526.40	BB	-------			1.0000e6
3	5.403		1.0959	0.0000	1095877.35	207143.31	BB	-------			1.0000e6
4	5.675		0.7276	0.0000	727564.59	145561.42	BV	-------			1.0000e6
5	5.831		2.9053	0.0000	2905058.30	535253.69	VB	-------			1.0000e6
6	8.257		0.3097	0.0000	309744.28	54796.16	BB	-------			1.0000e6
7	8.550		0.4264	0.0000	426370.86	64298.50	BB	-------			1.0000e6
8	8.970		0.5162	0.0000	515994.81	43475.24	BB	-------			1.0000e6
9	14.109		0.8662	0.0000	865964.50	155971.42	BB	-------			1.0000e6
10	14.713		0.5072	0.0000	507157.74	107499.72	BB	-------			1.0000e6
			8.1365	0.0000	8136297.50	1.46e6					

Varian 3400 Capillary Column GC: DB-608 30M X 0.53mm I.D. Detector: ECD.
Injector: 250 C

AR100643

Pesticide/PCB Chromatogram

Sample Name : [illegible] Sample #: [illegible] Page 1 of 1
FileName : [illegible] Date : [illegible]
Start Time : [illegible] min End Time : [illegible] min Low Point : [illegible] mV High Point : [illegible] mV
Scale Factor: [illegible] Plot Offset: [illegible] mV Plot Scale: [illegible] mV



AR100644

[illegible]

Princeton Testing Laboratory Analysis Report

PESTICIDES AND PCBS BY CAPILLARY CHROMATOGRAPHY

Peak #	Ret Time (min)	Component Name	Raw Amount	Concentration	Area	Height	BL	Delta RT	Reference Component	Cal. Range	Calibrat. Factor
1	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
2	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
3	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
4	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
5	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
6	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
7	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
8	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
9	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
10	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
11	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
12	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
13	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
14	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
15	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
16	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
17	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
18	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
19	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
20	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
21	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
22	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
23	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
24	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
25	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
26	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
27	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
28	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
29	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
			[illegible]	[illegible]	[illegible]	[illegible]					

Varian 3400 Capillary Column 61: DB-608 30M X 0.53mm I.D. Detector: [illegible]
Injector: 250 C

18680

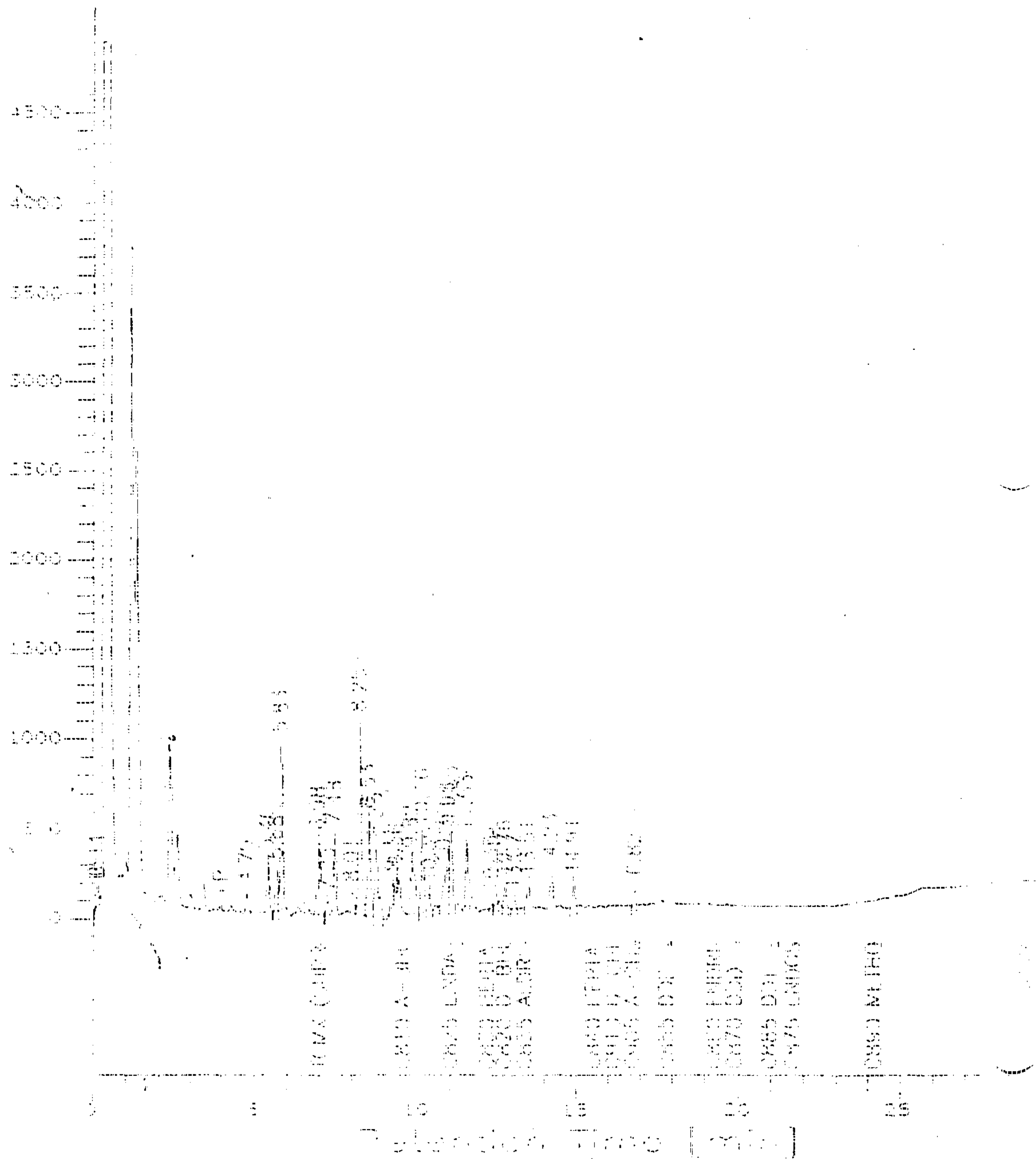
AR100645

Sample Name : 1232 5000G/1 Sample #: 21 Page 1 of 1

FileName : d:\3700\data3\1121071.raw Date : 11/21/91 6:27

Start Time : 0.00 min End Time : 30.00 min Low Point : -100.00 mV High Point : 4900.00 mV

Scale Factor: 0 Plot Offset: -100 mV Plot Scale: 5000 mV



AR100646

Software Version: 3.1 (2A03)
Date: 11/21/91 7:02
Sample Name : 1015 300UG/L
Data File : d:\2700\data3\1121022.raw Date: 11/21/91 8:21
Sequence File: C:\2700\DATA3\1121AR.seq Cycle: 22 Channel : 4
Instrument : VARIAN 3400 Rack/Vial: 0/0 Operator: AK
Sample Amount : 1.0000 Dilution Factor : 1.00

Princeton Testing Laboratory Analysis Report

PESTICIDES AND PCB'S BY CAPILLARY CHROMATOGRAPHY

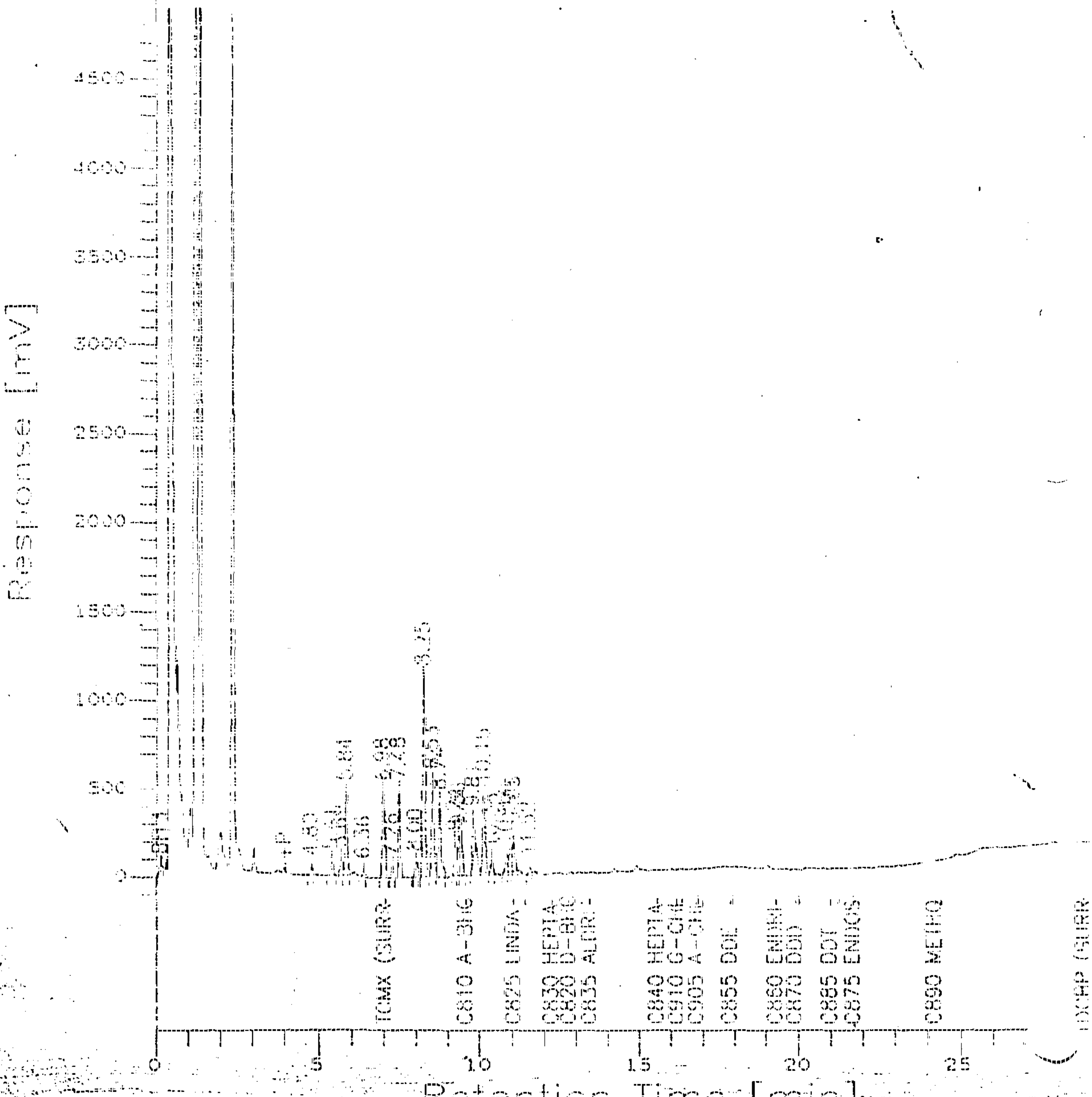
Peak #	Ret Time (min)	Component Name	Raw Amount (ug/L)	Concentration (ug/L)	Area (uV-sec)	Height (uV)	BL	Delta RT (%)	Reference Component	Cal. Range	Calibrat Factor
1	0.133		0.2147	0.0000	214717.34	33265.36	BB	-------			1.0000e6
2	4.803		0.2113	0.0000	211827.02	47213.28	BB	-------			1.0000e6
3	5.414		0.3875	0.0000	387479.28	82412.96	BB	-------			1.0000e6
4	5.586		0.5230	0.0000	523028.30	132751.33	BV	-------			9.9999e5
5	5.839		2.3373	0.0006	2337330.50	475513.35	VB	-------			9.9999e5
6	6.361		0.1954	0.0000	195394.75	42611.65	BB	-------			9.9999e5
7	6.979	TCMX (SURR)	5.3030	5.8035	3240557.25	491132.36	BB	+1.6733	TCMX (SURR)		5.5811e5
8	7.258		0.2017	0.0000	201641.32	55658.11	BB	-------			1.0000e6
9	7.481		2.2452	0.0000	2245167.25	491940.63	BB	-------			1.0000e6
10	8.002		0.5759	0.0000	575915.58	86654.25	BB	-------			9.9999e5
11	8.247		6.4112	0.0000	6412582.00	1.13e6	BB	-------			1.0000e6
12	8.523		2.9731	0.0000	2970263.25	549110.35	BV	-------			1.0000e6
13	8.738		2.6004	0.0000	2600383.13	404431.91	VB	-------			1.0000e6
14	9.235		0.9963	0.0000	996181.23	198831.13	BV	-------			1.0000e6
15	9.356		1.0842	0.0000	1084223.00	224124.00	VV	-------			1.0000e6
16	9.459	C313 A-BHC	1.2301	1.2301	3037224.06	1033[illegible]	VB	+1.4771	TCMX (SURR)	-	4.4017e5
17	9.811		1.0351	0.0000	1035119.44	221[illegible]	BB	-------			1.0000e6
18	10.147		2.4790	0.0000	2478956.50	443[illegible]	BV	-------			1.0000e6
19	10.379		0.3972	0.0000	397180.44	83502.46	VB	-------			1.0000e6
20	10.529		0.5360	0.0000	585977.50	97903.51	BV	-------			1.0000e6
21	10.948	C325 LINDANE	1.5527	1.5527	755830.44	140[illegible]	VV	+0.9118	TCMX (SURR)	-	4.8727e5
22	11.045		0.5782	0.0000	578038.44	111114.41	VB	-------			1.0000e6
23	11.522		0.1690	0.0000	168978.59	33[illegible].81	BB	-------			1.0000e6
			35.0349	8.5886	31480305.60	5.54e6					

Varian 3400 Capillary Column GC; DB-608 30m X 0.53mm I.D. Detector: ECD
Injector: 250 C

AR100647

Pesticide/[illegible] Chromatogram

Sample Name : [illegible] | Sample #: [illegible] | Page 1 of 1
FileName : [illegible] | Date : [illegible]
Start Time : 0.00 min | End Time : [illegible] min | Low Point : [illegible] mV | High Point : [illegible] mV
Scale Factor: 0 | Plot Offset: [illegible] mV | Plot Scale: [illegible] mV



Software Version: 3.1 [illegible]
Date: 11/21/91 [illegible]
Sample Name : 1241 400UG L
[illegible]ta File : d:\2700\data[illegible]\11010[illegible].raw Date: [illegible]
[illegible]uence File: D:\[illegible]\DATA[illegible]\[illegible].seq Cycle: [illegible] Channel : A
[illegible]strument : VARIAN 3400 Rack Vial: 0/0 Operator: [illegible]
Sample Amount : 1.0000 Dilution Factor : 1.00

Princeton Testing Laboratory Analysis Report

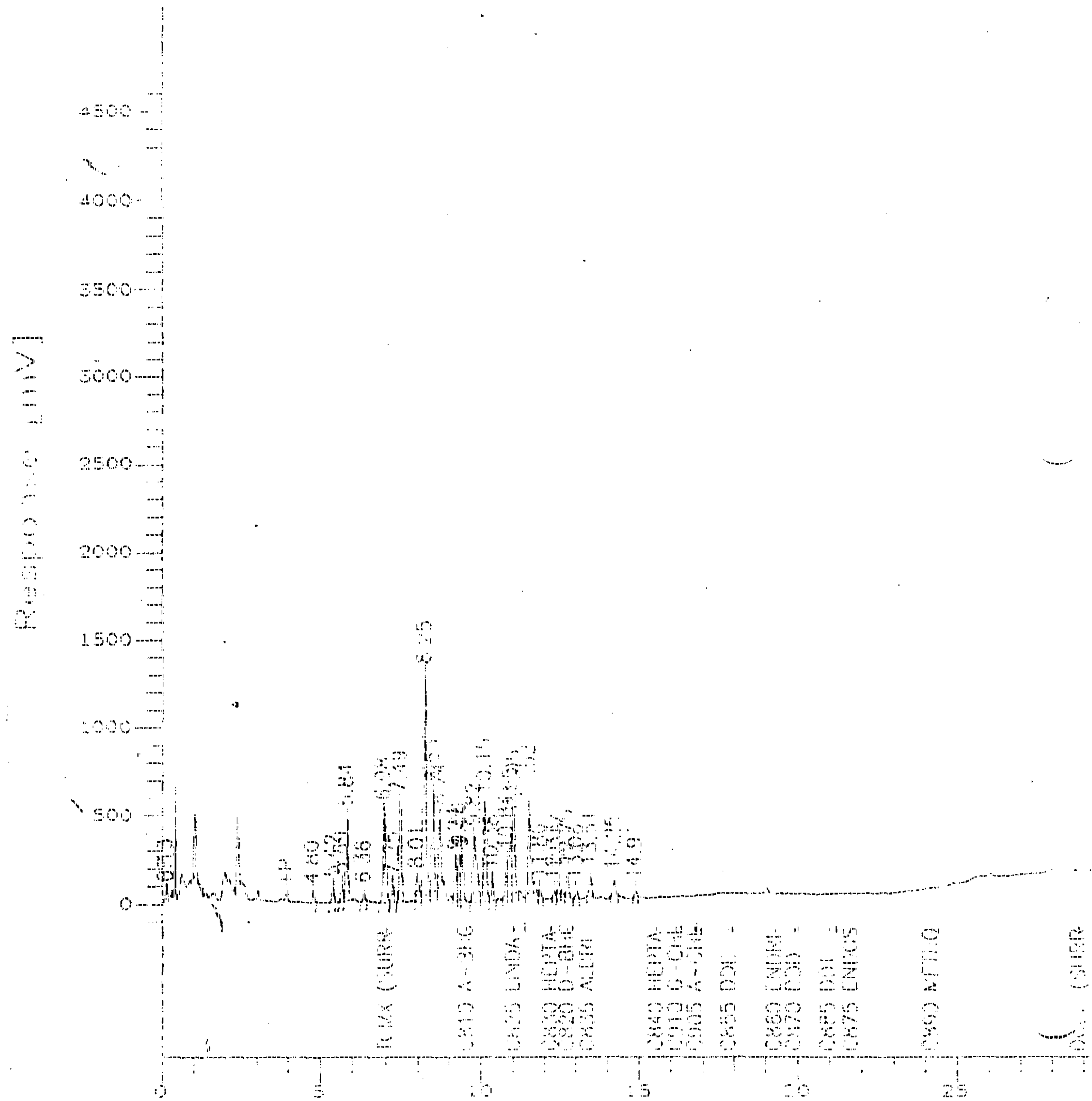
PESTICIDES AND PCB'S [illegible] CAPILLARY CHROMATOGRAPHY

Peak #	Ret Time (min)	Component Name	Raw Amount (ug/L)	Concentration (ug/L)	Area (uV-sec)	Height (uV)	BL	Delta RT (%)	Reference Component	Cal. Range	Calibrat. Factor
1	6.108		0.2141	0.0000	214116.47	32593.72	BB	-------			1.0000e6
2	4.304		0.1926	0.0000	151633.36	44596.55	BB	-------			1.0000e6
3	5.418		0.3754	0.0000	373440.47	82551.55	BB	-------			1.0000e6
4	5.689		0.4376	0.0000	437579.69	85531.23	BV	-------			1.0000e6
5	5.944		2.2912	0.0000	2291153.75	470643.54	VB	-------			1.0000e6
6	6.363		0.1733	0.0000	173399.33	43550.64	BB	-------			1.0000e6
7	6.979	TCMX (SURR)	6.2413	1.2413	3335148.00	512638.34	BV	+0.5531	TCMX (SURR)		5.5600e5
8	7.253		0.4447	0.0000	444633.37	75624.71	VB	-------			1.0000e6
9	7.455		2.7183	0.0000	2718183.73	564377.44	BB	-------			1.0000e6
	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			[illegible]
	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			1.0000e6
	[illegible]		2.8970	0.0000	2897043.00	561295.44	BB	-------			1.0000e6
13	8.140		1.9035	0.0000	1903515.83	379561.44	BB	-------			1.0000e6
14	9.233		1.0840	0.0000	1083924.75	220237.34	BV	-------			1.0000e6
15	9.359		1.2876	0.0000	1287631.23	243616.11	VV	-------			1.0000e6
16	9.441	CS10 A-BHC	1.2574	1.2574	1037483.00	215904.98	VB	+1.4334	TCMX (SURR)	-	8.2514e5
17	9.816		3.2396	0.0000	3239572.13	572220.78	BV	-------			1.0000e6
18	10.132		3.2066	0.0000	3206594.73	543533.38	VV	-------			1.0000e6
19	10.381		0.5803	0.0000	580435.83	112952.61	VB	-------			1.0000e6
20	10.836		1.0332	0.0000	1033133.63	200933.15	BV	-------			[illegible]
21	10.952	CS25 LINDANE	2.2646	2.2646	1822436.13	343050.57	VV	+0.5791	TCMX (SURR)	-	8.0476e5
22	11.044		2.4341	0.0000	2434063.50	438076.97	VB	-------			1.0000e6
23	11.524		2.6078	0.0000	2607815.00	456095.53	BB	-------			1.0000e6
24	11.962		0.1711	0.0000	171107.91	41011.33	BB	-------			1.0000e6
25	12.378		0.1639	0.0000	163847.03	31520.38	BV	-------			1.0000e6
26	12.467		0.3351	0.0000	335102.31	73438.13	VB	-------			1.0000e6
27	12.756	CS20 D-BHC	2.4331	1.4291	675131.19	124544.11	BB	+0.0359	TCMX (SURR)	-	4.7580e5
28	13.332		0.2273	0.0000	227291.05	49518.47	BB	-------			1.0000e6
29	13.512	CS35 ALDRIN	1.2583	1.2583	659335.31	111191.32	BB	0.2029	TCMX (SURR)	-	5.0810e5
30	14.249		0.3097	0.0000	503685.91	80175.19	BB	-------			1.0000e6
31	14.907		0.1643	0.0000	164210.86	32188.64	BB	-------			1.0000e6
			49.9359	13.4620	44319424.00	7.95e6					

[illegible]rian 3400 Capillary Column GC: DB-608 30m X 0.53mm I.D. Detector: 300C
Injector: 250 C

Pesticide/PCB Chromatogram

Sample Name : 1242 4C003/1		Sample #: 22	Page 1 of 1
FileName : d:\2100\data3\1121C23.raw		Date : 11/21/91 7:37	
Start Time : 0.00 min	End Time : 30.00 min	Low Point : -100.00 mV	High Point : 4900.00 mV
Scale Factor: 0	Plot Offset: -100 mV	Plot Scale: 5000 mV	



Software Version: 3.1 <2A23>
Date: 11/21/91 8:11
Sample Name : 1248 300UG/L
Data File : d:\2700\data3\1121024.raw Date: 11/21/91 7:41
Sequence File: D:\2700\DATA3\11214.seq Cycle: 24 Channel : A
Instrument : VARIAN 3400 Rack/Vial: 0/0 Operator: AK
Sample Amount : 1.0000 Dilution Factor : 1.00

Princeton Testing Laboratory Analysis Report

PESTICIDES AND PCB'S BY CAPILLARY CHROMATOGRAPHY

Peak #	Ret Time [min]	Component Name	Raw Amount [ug/L]	Concentration [ug/L]	Area [uV-sec]	Height [uV]	BL	Delta RT [%]	Reference Component	Cal. Range	Calibration Factor
1	0.115		0.3416	0.0000	341559.06	82954.07	BB	-------			1.0000e6
2	6.560	TCMX (SURR)	2.6195	2.6195	1097385.50	172561.84	BB	-1.1378	TCMX (SURR)	-	4.1791e5
3	7.466		0.7686	0.0000	767686.81	161850.97	BB	-------			1.0000e6
4	8.256		3.5593	0.0000	3559307.75	504616.69	BV	-------			1.0000e6
5	8.517		1.5857	0.0000	1585711.75	251779.41	VV	-------			1.0000e6
6	8.759		0.7602	0.0000	760204.06	155537.17	VV	-------			1.0000e6
7	8.858		0.7787	0.0000	778675.56	115044.31	VB	-------			1.0000e6
8	9.223		0.8569	0.0000	856937.44	214130.25	BB	-------			1.0000e6
9	9.349	0310 A-BHC	0.7619	0.7619	345375.44	93830.77	BB	-2.3762	TCMX (SURR)	-	4.5334e5
10	9.805		1.6554	0.0000	1655326.38	240132.50	BB	-------			1.0000e6
11	10.144		2.4695	0.0000	2469315.00	390802.25	BV	-------			1.0000e6
12	10.372		0.6912	0.0000	691197.75	126342.25	VB	-------			1.0000e6
13	10.623		1.5775	0.0000	1577492.75	216740.56	BV	-------			1.0000e6
14	10.949	0335 LINDANE	2.8282	2.8282	2274815.00	313111.31	VV	-0.7910	TCMX (SURR)	-	8.0434e5
15	11.037		3.6475	0.0000	3647240.25	660186.88	VB	-------			1.0000e6
16	11.515		3.6790	0.0000	3678980.50	597003.75	BV	-------			1.0000e6
17	11.738		1.6120	0.0000	1612044.25	227225.84	VV	-------			1.0000e6
18	11.856		0.4755	0.0000	475255.41	95759.84	VB	-------			1.0000e6
19	12.315		0.6018	0.0000	601747.69	117607.41	BV	-------			1.0000e6
20	12.461		1.4456	0.0000	1445765.55	255265.31	VV	-------			1.0000e6
21	12.576	0320 B-BHC	2.4707	2.4707	710345.63	147155.41	VV	-1.4754	TCMX (SURR)	-	2.8750e5
22	12.744		2.1555	0.0000	2155518.50	378426.16	VB	-------			1.0000e6
23	13.050	0325 ALDRIN	1.2648	1.2648	648220.25	119789.31	BB	-0.7027	TCMX (SURR)	-	5.1251e5
24	13.499		2.2672	0.0000	2267227.75	371694.38	BB	-------			1.0000e6
25	14.225		2.2656	0.0000	2265575.50	353776.59	BB	-------			1.0000e6
26	14.378		1.2452	0.0000	1245173.13	221582.50	BB	-------			1.0000e6
			45.5959	9.9531	41519716.00	7.1366					

Varian 3400 Capillary Column GC: DB-608 30M X 0.53mm I.D. Detector: 300C.
Injector: 250 C

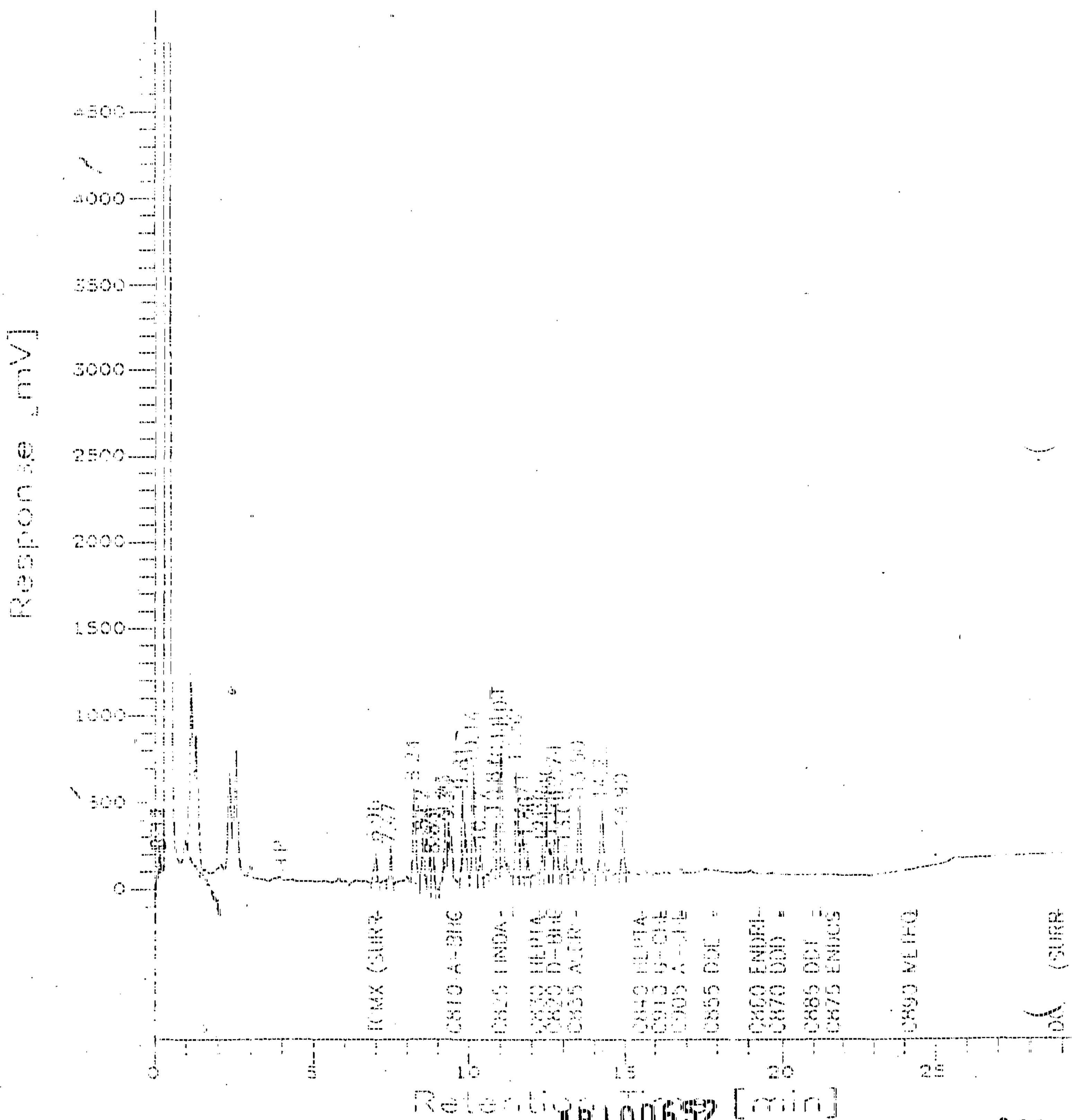
Pesticide/PCB Chromatogram

Sample Name : 1248 ICC0G/L | Sample #: 24 | Page 1 of 1

FileName : d:\2700\data3\1121024.raw | Date : 11/21/91 9:11

Start Time : 0.00 min | End Time : 30.00 min | Low Point : -100.00 mV | High Point : 4900.00 mV

Scale Factor: 0 | Plot Offset: -100 mV | Plot Scale: 5000 mV



AR100652

Software Version: 3.1 (2A23)
Date: 11/21/91 9:56
Sample Name : CHLORDANE 150UG/L
Data File : c:\2700\data3\1121027.raw Date: 11/21/91 9:23
Sequence File: D:\2700\DATA3\1121AK.seq Cycle: 27 Channel : A
Instrument : VARIAN 3400 Rack/Vial: 0/0 Operator: A
Sample Amount : 1.0000 Dilution Factor : 1.00

Princeton Testing Laboratory Analysis Report

PESTICIDES AND PCB'S BY CAPILLARY CHROMATOGRAPHY

Peak #	Ret. Time [min]	Component Name	Raw Amount [ug/L]	Concentration [ug/L]	Area [uV-sec]	Height [uV]	BL	Delta RT [%]	Reference Component	Cal. Range	Calibratn Factor
1	0.132		0.2286	0.0000	228617.40	73347.63	BB	-------			1.0000e6
2	5.015		0.9507	0.0000	950651.06	272550.00	BB	-------			1.0000e6
3	6.150		0.2365	0.0000	236514.73	64597.75	BB	-------			1.0000e6
4	6.897		0.2143	0.0000	214283.08	51051.14	BB	-------			1.0000e6
5	7.165	TCMX (SURR)	1.2756	1.2756	190142.41	45754.34	BB	1.7746	TCMX (SURR)	-	1.3454e5
6	7.536		0.2506	0.0000	255778.61	51193.14	BB	-------			1.0000e6
7	7.803		0.2827	0.0000	282591.38	57586.26	BB	-------			9.9999e5
8	8.192		4.4564	0.0000	4456372.00	942375.73	BB	-------			1.0000e6
9	8.658		5.0002	0.0000	5000197.00	794269.06	BV	-------			1.0000e6
10	8.844		0.5453	0.0000	545305.62	111327.09	VB	-------			9.9999e5
11	9.233		0.5631	0.0000	563139.59	70855.39	BB	-------			1.0000e6
12	9.526		0.5514	0.0000	551373.54	56345.31	BV	-------			9.9999e5
13	9.718	CS10 A-BHC	2.4785	2.4785	2891990.00	371385.59	VV	1.4713	TCMX (SURR)	-	1.1668e6
14	9.854		0.5983	0.0000	598311.00	81575.10	VB	-------			9.9999e5
15	10.172		0.2158	0.0000	215772.46	47371.92	BB	-------			1.0000e6
16	10.528		3.1106	0.0000	3110592.75	465537.75	BB	-------			1.0000e6
17	10.978		0.0952	0.0000	95187.65	25677.04	BB	-------			1.0000e6
18	11.139	CS11 LINDANE	1.5107	1.5107	697275.81	126598.59	BV	[illegible]	TCMX (SURR)	-	4.6157e5
19	11.305		1.4234	0.0000	1423417.13	274632.25	VV	-------			1.0000e6
20	11.426		10.1466	0.0000	10146547.00	2.0198e6	VB	-------			9.9999e5
21	11.652	CS15 B-BHC	7.8191	7.8191	2150282.50	418663.75	BV	[illegible]	TCMX (SURR)		2.7500e5
22	11.866		9.5384	0.0000	9538397.00	1.73e6	VV	-------			9.9999e5
23	12.009		5.6717	0.0000	5671577.50	1.13e6	VB	-------			1.0000e6
24	12.429	CS20 HEPTACHLOR	1.3236	1.3236	712992.88	128142.51	BV	[illegible]	TCMX (SURR)	-	5.3867e5
25	12.613		0.4462	0.0000	446195.58	83663.78	VB	-------			1.0000e6
26	12.842	CS20 D-BHC	2.1661	2.1661	351951.63	66022.09	VB	[illegible]	TCMX (SURR)	-	1.6249e5
27	13.774	CS11 ALDRIN	2.1428	2.1428	1340644.55	210549.41	BV	[illegible]	TCMX (SURR)	-	6.2563e5
28	13.981		2.0439	0.0000	2040861.25	380442.13	VB	-------			9.9999e5
29	14.732		0.4155	0.0000	415522.47	77922.37	BB	-------			1.0000e6
			66.4959	19.7163	55619880.00	1.05e7					

Varian 3400 Capillary Column GC: DB-608 30M X 0.53mm I.D. Detector: 300C.
Injector: 250 C

AR100653

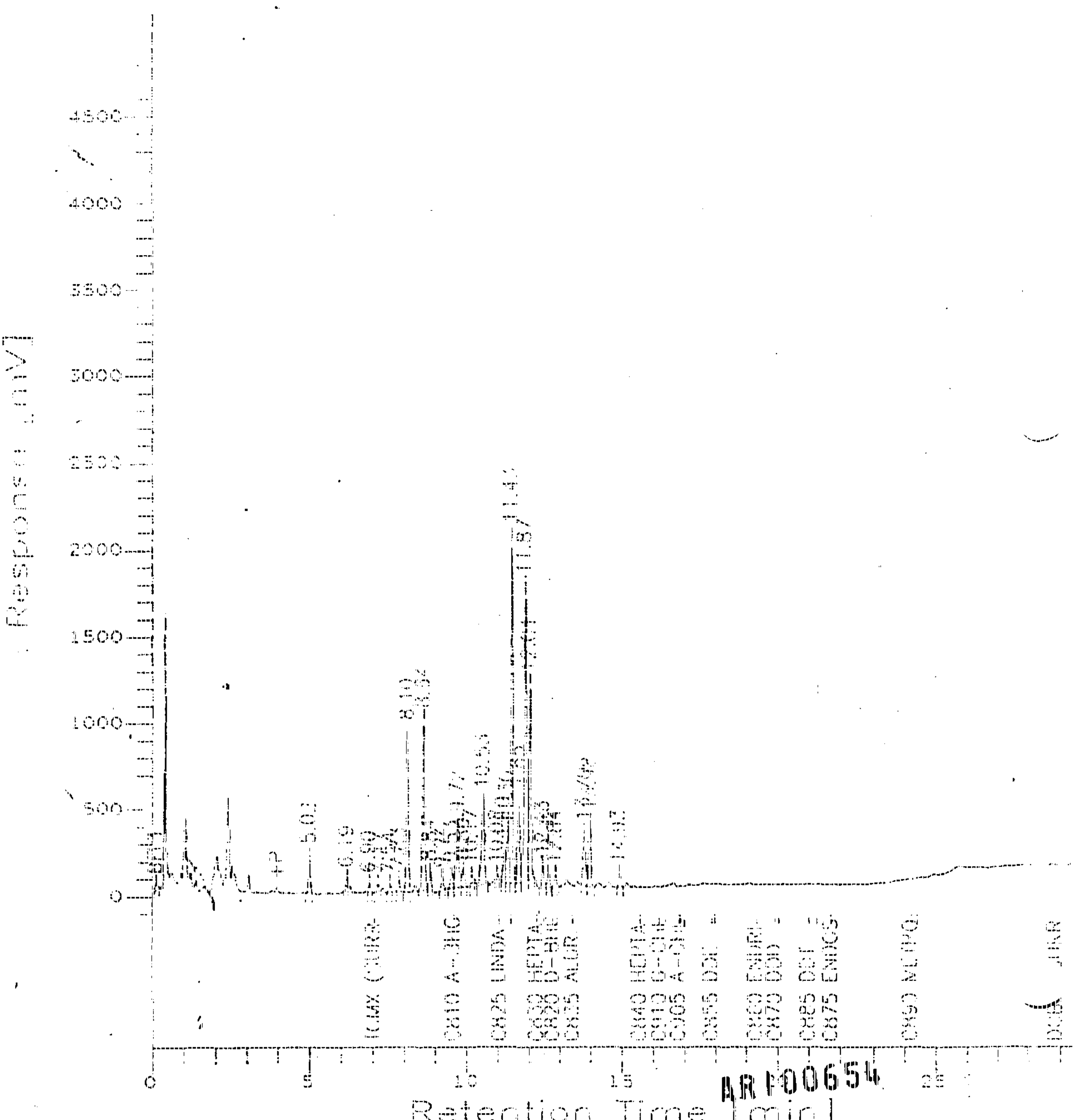
Pesticide/PCB Chromatogram

Sample Name : CHLORDANE 150UG/L
Filename : d:\2700\data3\1121027.raw
Start Time : 0.00 min
Scale Factor: 0

End Time : 30.00 min
Plot Offset: -100 mV

Sample #: 27
Date : 11/21/93 9:56
Low Point : -100.00 mV
Plot Scale: 5000 mV

Page 1 of 1
High Point : 4900.00 mV



AR F00654

00021

Software Version : [illegible]
Date : [illegible]
Sample Name : [illegible]
Data File : [illegible]
Sequence File : [illegible]
Instrument : VARIAN 3400 Rack/Vial : [illegible] Operator : [illegible]
Sample Amount : 1.0000 Dilution Factor : [illegible]

Princeton Testing Laboratory Analysis Report

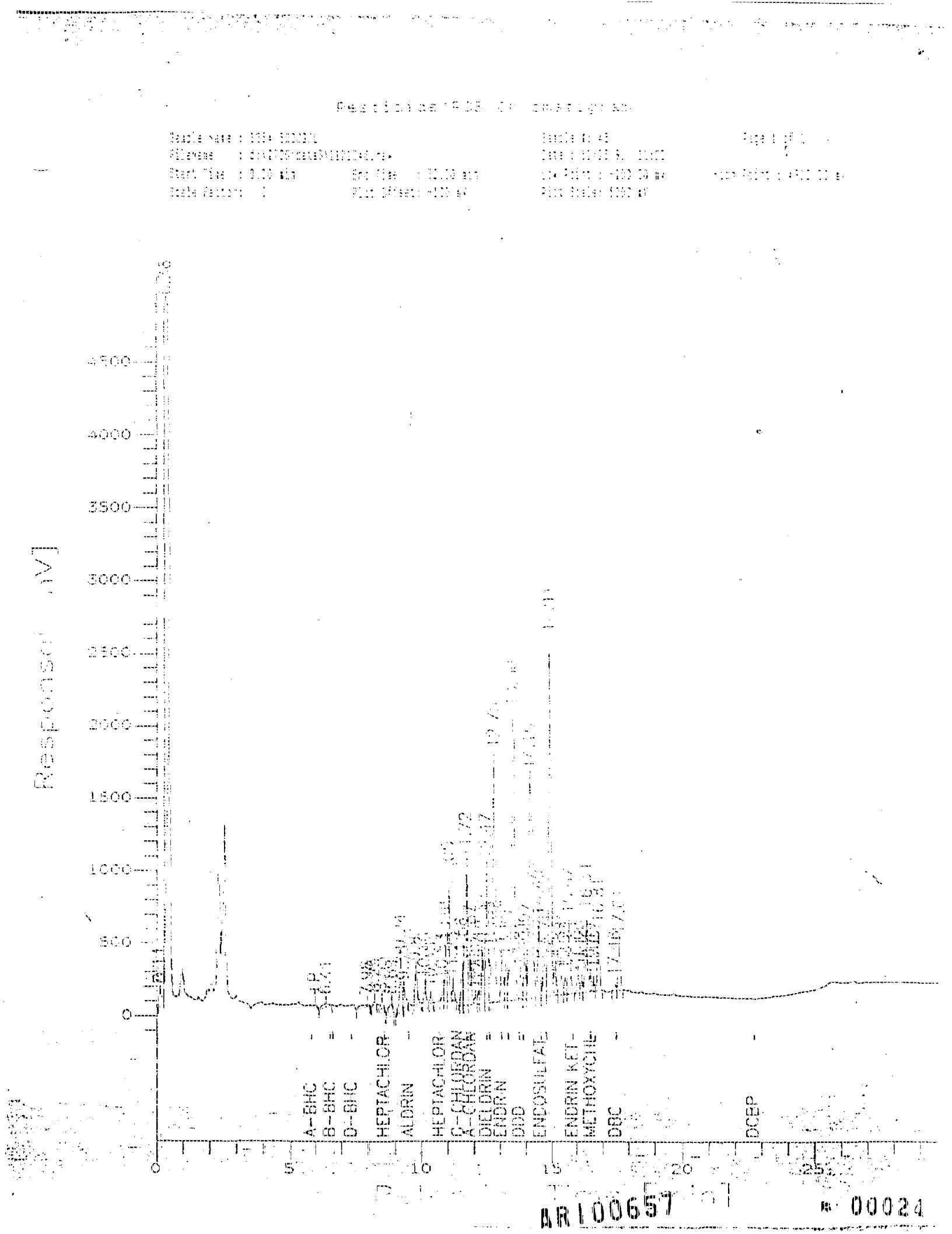
PESTICIDES AND PCB'S [illegible]

Peak #	Ret Time [min]	Component Name	Raw Amount [ug/L]	Concentration [ug/L]	Area [uV-sec]	Height [uV]		Delta RT [%]	Reference Component	Cal. Range	Calibrated Factor
1	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			[illegible]
2	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			[illegible]
3	[illegible]	B-BHC	4.7451	4.7451	[illegible]	[illegible]	BB	[illegible]	DCBP		[illegible]
4	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			[illegible]
5	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			[illegible]
6	[illegible]	HEPTACHLOR	[illegible]	[illegible]	[illegible]	[illegible]	BB	[illegible]	DCBP		[illegible]
7	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			[illegible]
[illegible]	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
9	[illegible]	ALDRIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP		[illegible]
10	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
11	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
12	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
13	[illegible]	HEPTACHLOR EPOX	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP	-	[illegible]
14	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
15	[illegible]		4.7581	4.7581	[illegible]	[illegible]	[illegible]	-------			[illegible]
16	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	BB	-------			[illegible]
17	[illegible]	G-CHLORDANE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP	-	[illegible]
18	[illegible]	ENDO I	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP		[illegible]
19	[illegible]	A-CHLORDANE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP		[illegible]
20	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
21	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
22	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
23	[illegible]	DIELDRIN	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP		[illegible]
24	[illegible]	DDE	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP	-	[illegible]
25	[illegible]		[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	-------			[illegible]
26	[illegible]	ENDRIN	[illegible]	[illegible]	[illegible]	[illegible]	VV	[illegible]	DCBP	-	[illegible]
27	[illegible]	ENDO II	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	DCBP	-	[illegible]
28	13.457		[illegible]	[illegible]	[illegible]	1.7e06	[illegible]	-------			[illegible]
29	13.805	DDD	5.1964	5.1964	1825771.25	149256.28	[illegible]	0.4092	DCBP	-	[illegible]
30	13.971	ENDRIN ALDE	1.7352	1.7352	1683519.50	190865.28	VV	0.5839	DCBP	-	9.7022e5
31	14.151		37.3677	37.3677	15671551.00	1.53e06	VV	-------			4.1938
32	14.439	ENDOSULFATE	9.4441	9.4441	3053410.25	507456.91	VV	-0.5582	DCBP	-	3.2331e5
[illegible]	14.676	DDT	3.9817	3.9817	1984464.25	279831.50	VV	-0.5694	DCBP	-	4.9839e5
[illegible]	14.907		31.2673	31.2673	15918554.00	2.45e06	VE	-------			5.0934
35	15.132		2.4405	2.4405	1196155.75	208953.83	EV	-------			4.9017e5
36	15.181		1.2168	1.2168	941559.38	129927.44	VV	-------			7.7380e5
37	15.522		0.5865	0.5865	587475.38	108515.27	VV	-------			1.0016e6
38	15.669	ENDRIN KETONE	5.6067	5.6067	3408625.00	[illegible]	VV	[illegible]	DCBP	-	5.0795e5
39	[illegible]		0.8070	0.8070	[illegible]	[illegible]	[illegible]				8.8131e5

AR100655

	16.1[illegible]		-1.4555	-1.4555	[illegible]	[illegible]	--------	[illegible]
	16.240		11.9991	11.9991	[illegible]	[illegible]	--------	1.4517
42	16.4[illegible]	[illegible]	-1.1669	-1.1665	465129	123504.20	-1.1[illegible] 000?	-1.334[illegible]
43	16.[illegible]		-3.3190	-3.3190	[illegible]	49924.51	--------	-1.1394
44	16.[illegible]		7.4024	7.4024	[illegible]	[illegible] VB	--------	7.[illegible]
45	17.45[illegible]	[illegible]	0.5298	0.5298	286221.31	41[illegible] BV	-0.1386 000?	4.459[illegible]
46	17.[illegible]		4.3060	4.3060	[illegible]	[illegible] VB	--------	4.4591[illegible]
			268.5119	268.5119	1.87e8	5.71e7		

Varian 3400 Capillary Column GC: DB-1701 30M X 0.53mm I.D. Detector: 300C, Injector: 250 C


Response (nV)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
A-BHC
B-BHC
D-BHC
HEPTACHLOR
ALDRIN
HEPTACHLOR
G-CHLORDAN
A-CHLORDAN
DIELDRIN
ENDRIN
DDD
ENDOSULFAT
ENDRIN KET
METHOXYCHL
DDC
DCBP
5
10
15
20
25

Software Version: 3.1 <2A23>
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Data File : d:\2700\data3\1224005.raw Date: 12/24/91 [illegible]
Sequence File: D:\2700\DATA3\12241.seq Cycle: [illegible] Channel : [illegible]
Instrument : VARIAN 3400 Rack/Vial: 0/0 Operator: [illegible]
Sample Amount : 1.0000 Dilution Factor : 1.00
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Princeton Testing Laboratory Analysis Report

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PESTICIDES AND PCB'S BY CAPILLARY CHROMATOGRAPHY
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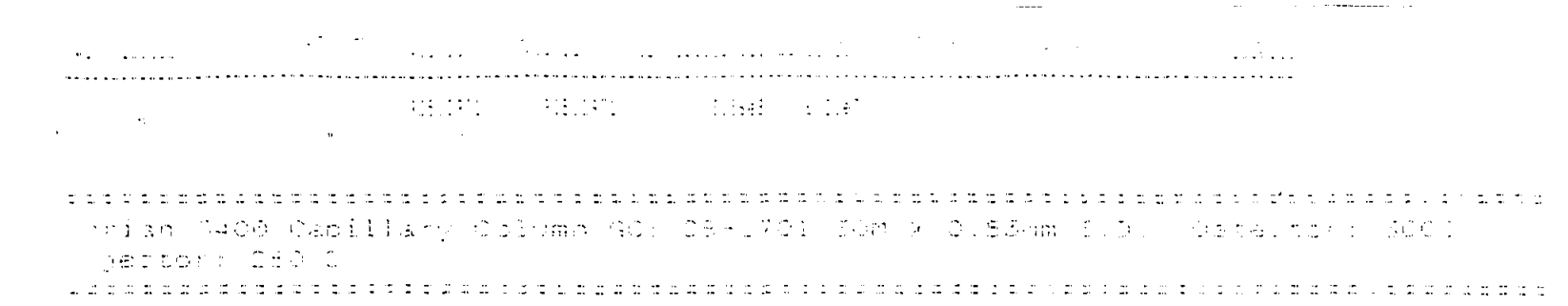
Peak #	Ret Time [min]	Component Name	Raw Amount [ug/L]	Concentration [ug/L]	Area [uV-sec]	Height [uV]	BL	Delta RT [%]	Reference Component	Cal. Range	Calibration Factor
1	0.114		0.0746	0.0745	473371.33	[illegible]	BB	-------			[illegible]
2	0.316		7.4659	7.4659	9329590.00	[illegible]	BB	-------			[illegible]
3	8.246		-0.6028	-0.6028	68561.07	[illegible]	BB	-------			[illegible]
4	9.217		3.5365	3.5368	448020.66	[illegible]	BB	-------			[illegible]
5	11.055	HEPTACHLOR EPOX	2.8644	2.8644	2134506.36	418322.13	BB	[illegible]	DBC	-	[illegible]
6	11.545	G-CHLORDANE	0.3143	0.3143	339403.17	[illegible]	BV	[illegible]	DBC	-	[illegible]
7	11.702	ENDO 1	4.3151	4.3151	3790146.50	[illegible]	VB	-0.1544	DBC		[illegible]
8	12.301		1.3062	1.3062	75456.63	16659.13	BV	-------			[illegible]
9	12.451	DIELDRIN	2.0777	2.0777	792822.88	145975.95	VV	-0.1518	DBC	-	[illegible]
10	12.633	DDE	3.1299	3.1299	985324.31	112240.00	[illegible]	0.3052	DBC	-	[illegible]
11	12.734		4.3314	4.3314	3430105.71	420933.00	VB	-------			[illegible]
12	13.074	ENDRIN	6.5032	6.5032	6179557.38	1.13e6	BV	[illegible]	DBC	-	[illegible]
13	13.190		0.6576	0.6576	3079978.00	613613.31	VB	-------			[illegible]
14	13.417	ENDO 2	15.3323	15.3323	10808132.00	1.33e6	BB	0.7305	DBC		[illegible]
15	13.703	DDD	3.0551	3.0551	659774.50	78933.82	BB	-0.3277	DBC	-	[illegible]
16	13.952	ENDRIN ALDE	5.4640	5.4640	5539673.00	639564.31	BV	0.4455	DBC	-	[illegible]
17	14.123		95.1129	95.1529	38333913.00	[illegible]	VB	-------			[illegible]
18	14.475		31.1267	31.1267	14657492.00	1.61e6	BV	-------			[illegible]
19	14.708	ENDOSULFATE	6.8937	6.8937	1754391.88	302183.78	VV	[illegible]	DBC	-	[illegible]
20	14.887	DDT	68.7982	68.7982	35131704.00	[illegible]	VV	0.7225	DBC		[illegible]
21	15.127		3.2015	3.2015	4143442.25	[illegible]	VV	-------			[illegible]
22	15.361		48.0831	48.0831	24947954.00	4.70e6	VV	-------			[illegible]
23	15.497		20.0165	20.0165	11506261.00	[illegible]	VB	-------			[illegible]
24	15.655		1.1534	1.1534	[illegible]	[illegible]	BV	-------			[illegible]
25	15.779		6.6464	6.6464	[illegible]	[illegible]	VV	-------			[illegible]
26	16.002	ENDRIN KETONE	27.3590	27.3590	15315436.00	[illegible]	VV	[illegible]	DBC		[illegible]
27	16.153		17.0246	17.0246	[illegible]	[illegible]	VV	-------			[illegible]
28	16.274		12.3334	12.3334	[illegible]	[illegible]	VV	-------			[illegible]
29	16.446	METHOXYCHLOR	5.0400	5.0400	[illegible]	[illegible]	VV	-0.3530	DBC	-	[illegible]
30	16.612		16.1152	16.1152	[illegible]	713082.13	VV	-------			[illegible]
31	16.731		306.7693	306.7693	64281376.00	9.65e6	VB	-------			[illegible]
32	17.091		4.1420	4.1420	1846975.38	305959.89	BB	-------			[illegible]
33	17.594	DBC	58.4092	58.4092	26045428.00	4.65e6	BV	0.5959	DBC	+	4.4591
34	17.829		23.9770	23.9770	10691670.00	1.78e6	VV	-------			4.4591
35	17.981		26.8559	26.8559	11975425.00	1.98e6	VB	-------			4.4591
36	18.452		1.2178	1.2178	543046.25	83904.13	BB	-------			4.4591e5
37	18.895		11.8979	11.8979	5305415.00	705013.13	BB	-------			4.4591
38	19.126		0.7406	0.7406	330244.25	49817.77	BB	-------			4.4591e5
39	19.638		25.5981	25.5981	11414534.00	1.36e6	BB	-------			4.4591

AR100658



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Date : [illegible]
Start Time : 0.00 min | End Time : 30.00 min | Low Point : [illegible] | High Point : [illegible]
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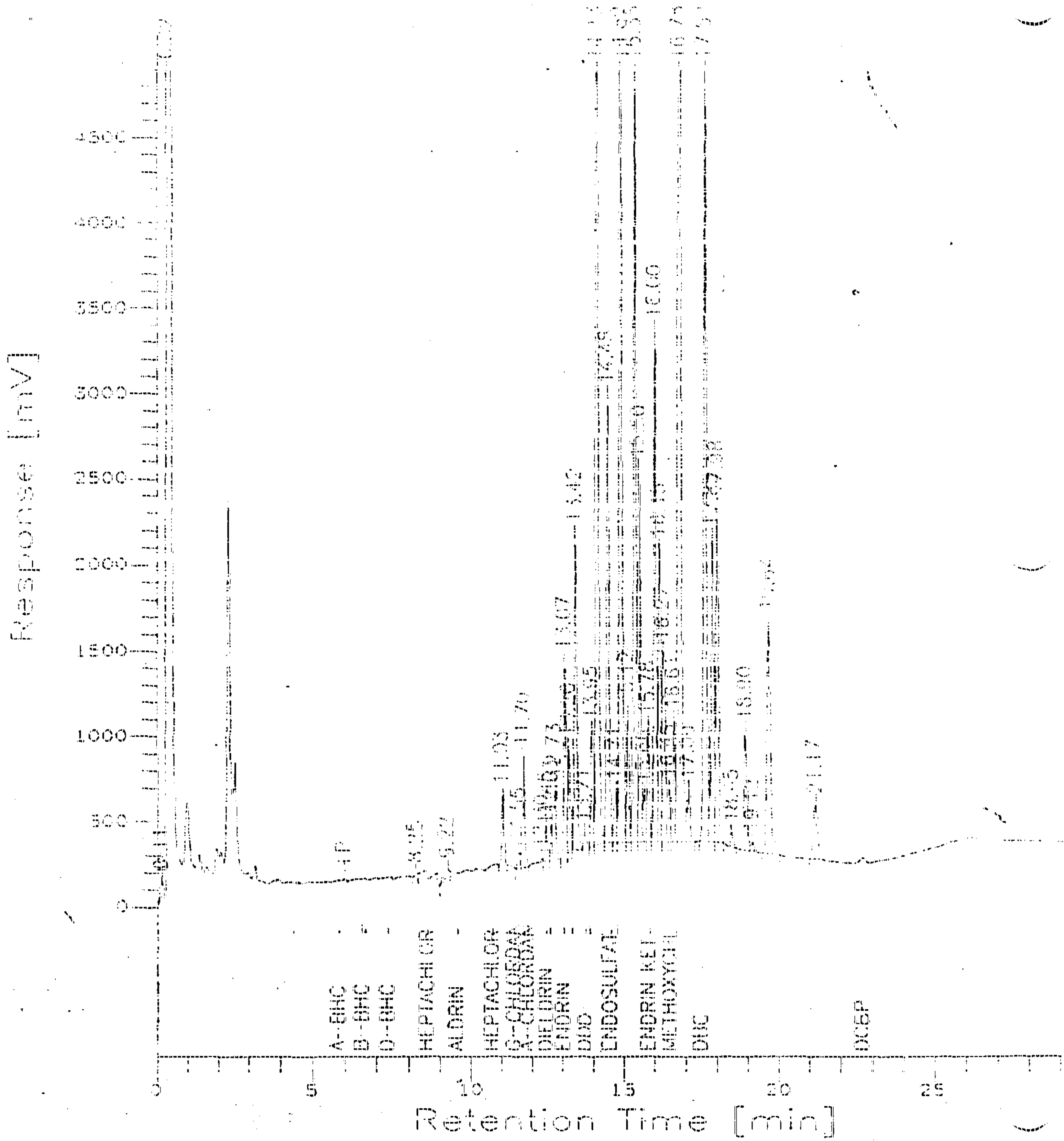

princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9050
FAX (609) 452-0347

Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attention: Marian Murphy

Report Date: 01/06/92
Job Number: 9108360-001GMWH
Date Received: 12/13/91

Analysis: Purgeable Volatile Organics By Method 8240 Page 1
Units: mg/kg

DF = 100,000 Dry Wgt. = 36.5%

Parameters	Sample I.D.: Sample D01	
Chloromethane	350J	
Bromomethane	<2,740	
Vinyl Chloride	<2,740	
Chloroethane	<2,740	
Methylene Chloride	1,620	
Acrolein	<13,700	
Acetone	<1,370	
Acrylonitrile	<13,700	
Carbon Disulfide	<1,370	
1,1-Dichloroethene	<1,370	
1,1-Dichloroethane	<1,370	
1,2-Dichloroethene (Total)	<1,370	
Trichlorofluoromethane	<1,370	
Chloroform	<1,370	
1,2-Dichloroethane	<1,370	
2-Butanone	384,000E	38%
1,1,1-Trichloroethane	<1,370	
Carbon Tetrachloride	<1,370	
Vinyl Acetate	<1,370	
Bromodichloromethane	<1,370	
1,1,2,2-Tetrachloroethane	<1,370	
1,2-Dichloropropane	<1,370	
Trans-1,3-Dichloropropene	<1,370	
Trichloroethene	<1,370	
Dibromochloromethane	<1,370	
1,1,2-Trichloroethane	<1,370	
Benzene	<1,370	
Cis-1,3-Dichloropropene	<1,370	
2-Chloroethylvinylether	<1,370	
Bromoform	<1,370	
2-Hexanone	<1,370	
4-Methyl-2-Pentanone	<1,370	
Tetrachloroethene	<1,370	
Toluene	160,600E	16 %
Chlorobenzene	<1,370	
Ethylbenzene	25,500	
Styrene	<1,370	
Total Xylenes	61,600	
1,3-Dichlorobenzene	<1,370	

princeton testing laboratory inc.

P.O. Box 3108
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FAX (609) 452-0

Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attention: Marian Murphy

Report Date: 01/06/92
Job Number: 9108360-001GMWH
Date Received: 12/13/91

Analysis: Purgeable Volatile Organics By Method 8240 Page 2
Units: ug/kg DF = 100,000 Dry Wgt. = 36.5%

Parameters	*Sample I.D.:*	*Sample D01*
1,4-Dichlorobenzene		<1,370
1,2-Dichlorobenzene		<1,370

RECOVERY DATA	QC LIMITS	
1,2-Dichloroethane-d4 (Surr.)	76-114	106
Toluene-d8 (Surr.)	88-110	95
4-Bromofluorobenzene (Surr.)	86-115	97

princeton testing laboratory inc.

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Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attention: Marian Murphy

Report Date: 01/06/92
Job Number: 9108360-001GMWH
Date Received: 12/13/91

Analysis: Volatile Organics By GCMS – Method 624 Page 1
Units: ug/ml

Parameters	Sample I.D.:	DF = 10,000 Sample D05	DF = 10,000 Sample D06	Blank 12/20/91
Chloromethane		<100	12J	<10
Bromomethane		<100	<100	<10
Vinyl Chloride		<100	<100	<10
Chloroethane		<100	<100	<10
Methylene Chloride		88J	32J	2.6J
Acrolein		<500	<500	<50
Acetone		580	330	4.4J
Acrylonitrile		<500	<500	<50
Carbon Disulfide		<50	<50	<5
1,1-Dichloroethene		<50	<50	<5
1,1-Dichloroethane		<50	<50	<5
1,2-Dichloroethene (Total)		<50	<50	<5
Trichlorofluoromethane		<50	<50	<5
Chloroform		<50	<50	<5
1,2-Dichloroethane		<50	<50	<5
2-Butanone		<50	<50	<5
1,1,1-Trichloroethane		<50	<50	<5
Carbon Tetrachloride		<50	<50	<5
Vinyl Acetate		<50	<50	<5
Bromodichloromethane		<50	<50	<5
1,1,2,2-Tetrachloroethane		<50	<50	<5
1,2-Dichloropropane		<50	<50	<5
Trans-1,3-Dichloropropene		<50	<50	<5
Trichloroethene		<50	170	<5
Dibromochloromethane		<50	<50	<5
1,1,2-Trichloroethane		<50	<50	<5
Benzene		<50	210	<5
Cis-1,3-Dichloropropene		<50	<50	<5
2-Chloroethylvinylether		<50	<50	<5
Bromoform		<50	<50	<5
2-Hexanone		<50	<50	<5
4-Methyl-2-Pentanone		<50	<50	<5
Tetrachloroethene		<50	23,700E	<5
Toluene		560	<50	<5
Chlorobenzene		<50	<50	<5
Ethylbenzene		7050	<50	<5
Styrene		<50	<50	<5
Total Xylenes		13,300E	460	<5
1,3-Dichlorobenzene		<100	<100	<10

AR100663

princeton testing laboratory inc.

P.O. Box 3108
3490 U.S. Route 1
Princeton, NJ 08543-3108
(609) 452-9
FAX (609) 452-8

Weston TAT
5 Underwood Court
Delran, New Jersey 08075
Attention: Marian Murphy

Report Date: 01/06/92
Job Number: 9108360-001GMWH
Date Received: 12/13/91

Analysis: Volatile Organics By GCMS - Method 624 Page 2
Units: ug/l

Parameters	*Sample I.D.:*	DF = 10,000 *Sample D05*	DF = 10,000 *Sample D06*	*Blank 12/20/91*
1,4-Dichlorobenzene		<100	<100	<10
1,2-Dichlorobenzene		<100	<100	<10
RECOVERY DATA	QC LIMITS			
1,2-Dichloroethane-d4 (Surr.)	76-114	118**	114	87
Toluene-d8 (Surr.)	88-110	105	105	103
4-Bromofluorobenzene (Surr.)	86-115	98	NR	103

E = Estimated value above linear range.
NR= No recovery data due to matrix interfer.

J = Estimated Value Detected Below MDL
** = Outside Of QC Limits

Bipin Patel, Ph.D.
Organic Laboratory Manager

LABORATORY CHRONICLE
ORGANIC ANALYSIS

Company: Weston TAT Job #: 9112260

Date Received & Refrigerated: 12/13/91

EXTRACTION INFORMATION

Base-Neutral Extractables
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____

Acid Extractables
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____

Pesticides/ PCBs
_____ ____/____/____
_____ ____/____/____

PCBs only
_____ ____/____/____
_____ ____/____/____

Herbicides
_____ ____/____/____
_____ ____/____/____

Pesticides (EPTOX)
_____ ____/____/____

Other: __________
_____ ____/____/____

ANALYSIS INFORMATION

Base-Neutral Extractables
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____

Acid Extractables
_____ ____/____/____
_____ ____/____/____
_____ ____/____/____

Pesticides/ PCBs
_____ ____/____/____
_____ ____/____/____

PCBs only
_____ ____/____/____
_____ ____/____/____

Herbicides
_____ ____/____/____
_____ ____/____/____

Pesticides (EPTOX)
_____ ____/____/____

Volatiles - 601/602
_____ ____/____/____
_____ ____/____/____

Volatiles - 624/8240
CC 12/22/91
CC 1/02/92 - ms/msd
_____ ____/____/____

not used

Other: __________
_____ ____/____/____

Dept. Manager Review and Approval: __________

QC Supervisor Review and Approval: [signature] 1/7/92

AR100665

BROMOFLUOROBENZENE

[illegible] Report | Data: 8F31220 # 285 | [illegible] 95
[illegible] 9 03 03 [illegible] 04 | Cal: CALTAS # 3 | [illegible] 144354
[illegible] ment: FINN | Analyst: CC | [illegible] No.: 8363
[illegible] to 8037 [illegible]
[illegible] number: | Laboratory | Contract:

Ion Abundance Criteria

m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	5032.	17.8	15.0	40.0	95	17.8	PASS
75	12160.	43.1	30.0	60.0	95	43.1	PASS
95	28224.	100.0	100.0	----	----	100.0	PASS
96	2140.	7.6	5.0	9.0	95	7.6	PASS
173	15.	0.1	----	2.0	174	0.1	PASS
174	21536.	76.3	50.0	----	95	76.3	PASS
175	1526.	5.4	5.0	9.0	174	7.1	PASS
176	21120.	74.8	95.0	101.0	174	98.1	PASS
177	1374.	4.9	5.0	9.0	176	6.5	PASS

[illegible] List Data DFB1220 # 255 [illegible]
[illegible] Cali TALTAO # 3 TIC 144234.
[illegible] MASS SPECTROMETER TUNE CHECK
[illegible] GLASS PACKED COLUMN METHOD 624/I.C 10/15/91
[illegible]

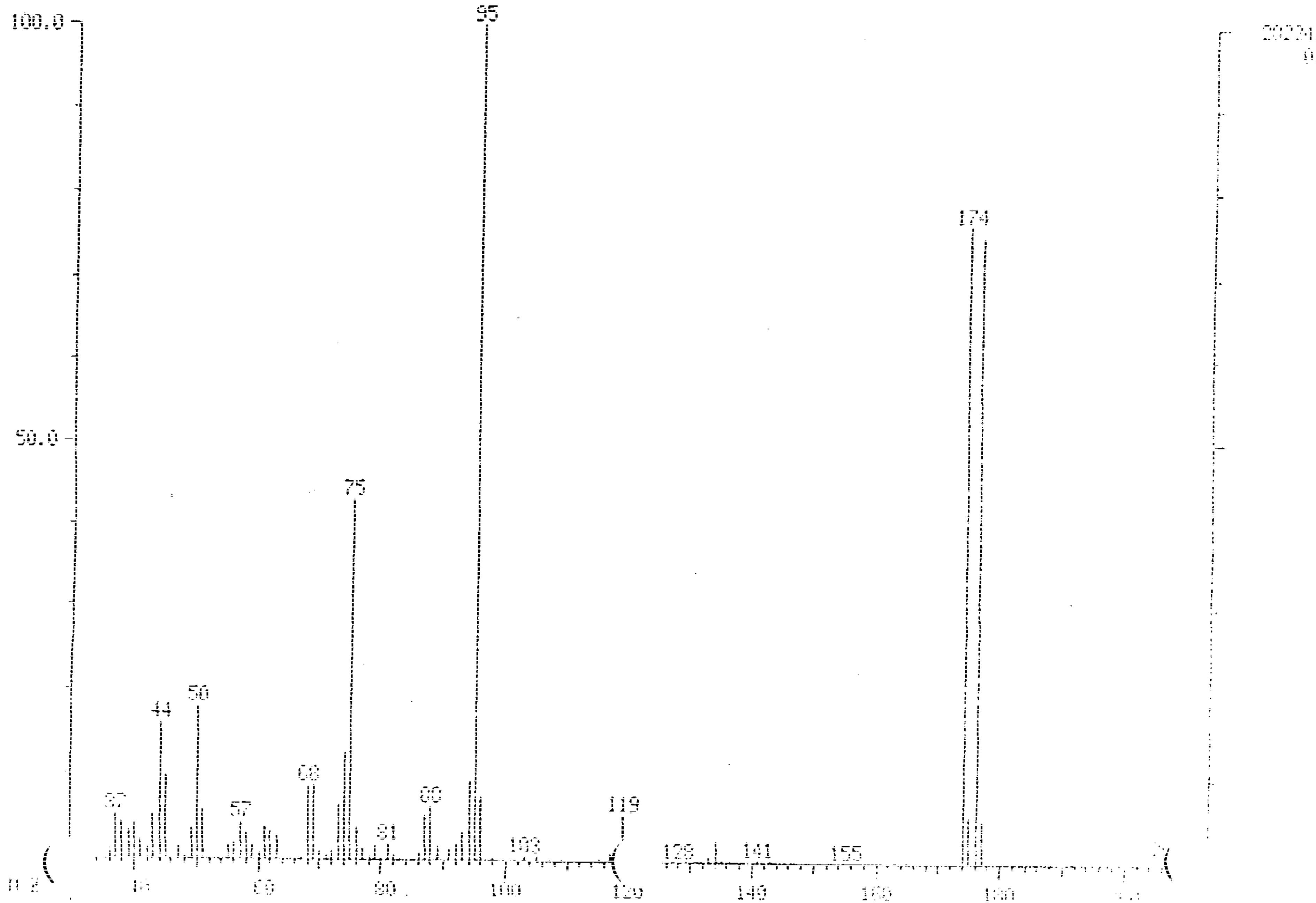
Mass	% RA	Inten.	Minima / Maxima Mass	% RA	Inten.
36?	1.11	313.	93	3.25	917.
37?	5.26	1484.	94	9.30	2624.
38?	4.54	1280.	95	100.00	28224.
39?	3.18	898.	96	7.53	2143.
40?	4.13	1166.	97	0.05	15.
41?	2.22	626.	98	0.23	65.
42?	1.45	410.	103	0.47	132.
43?	5.16	1456.	104	0.07	20.
44?	16.10	4544.	105	0.46	131.
45?	10.08	2844.	115	0.24	68.
46?	0.06	17.	117	0.90	254.
47?	1.47	414.	119	5.66	1598.
48?	0.19	53.	120	0.53	149.
49?	3.60	1017.	128	0.11	31.
50?	17.83	5032.	133	0.60	169.
51?	5.92	1672.	134	2.50	705.
52?	0.09	24.	135	0.15	43.
53?	0.07	21.	141	0.22	63.
55?	1.58	447.	143	0.16	44.
56?	1.99	561.	155	0.05	15.
57?	4.39	1238.	173	0.05	15.
58?	3.02	853.	174	76.30	21536.
59?	1.59	449.	175	5.41	1526.
60?	0.93	263.	176	74.83	21120.
61?	3.76	1062.	177	4.87	1374.
62?	3.42	966.	207	0.86	244.
63?	2.70	763.			
65?	0.07	21.			
67?	0.44	125.			
68?	8.87	2504.			
69	8.80	2484.			
70	1.24	350.			
71	0.64	182.			
72	1.19	336.			
73	6.74	1902.			
74	12.64	3568.			
75	43.08	12160.			
76	3.78	1066.			
77	1.36	384.			
78	0.54	151.			
79	1.63	459.			
80	0.19	55.			
81	1.84	520.			
82	0.61	172.			
86	0.78	219.			
87	5.18	1462.			
88	6.39	1804.			
89	1.74	492.			
91	1.47	416.			
92	2.07	584.			

AR100667

MASS SPECTRUM
12/20/91 9:35:00 + 6:24
SAMPLE: 50NG BFB   MASS SPECTROMETER TUNE CHECK
CONDS.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91
TEMP: 220 DEG. C
#255 TO #257 SUMMED

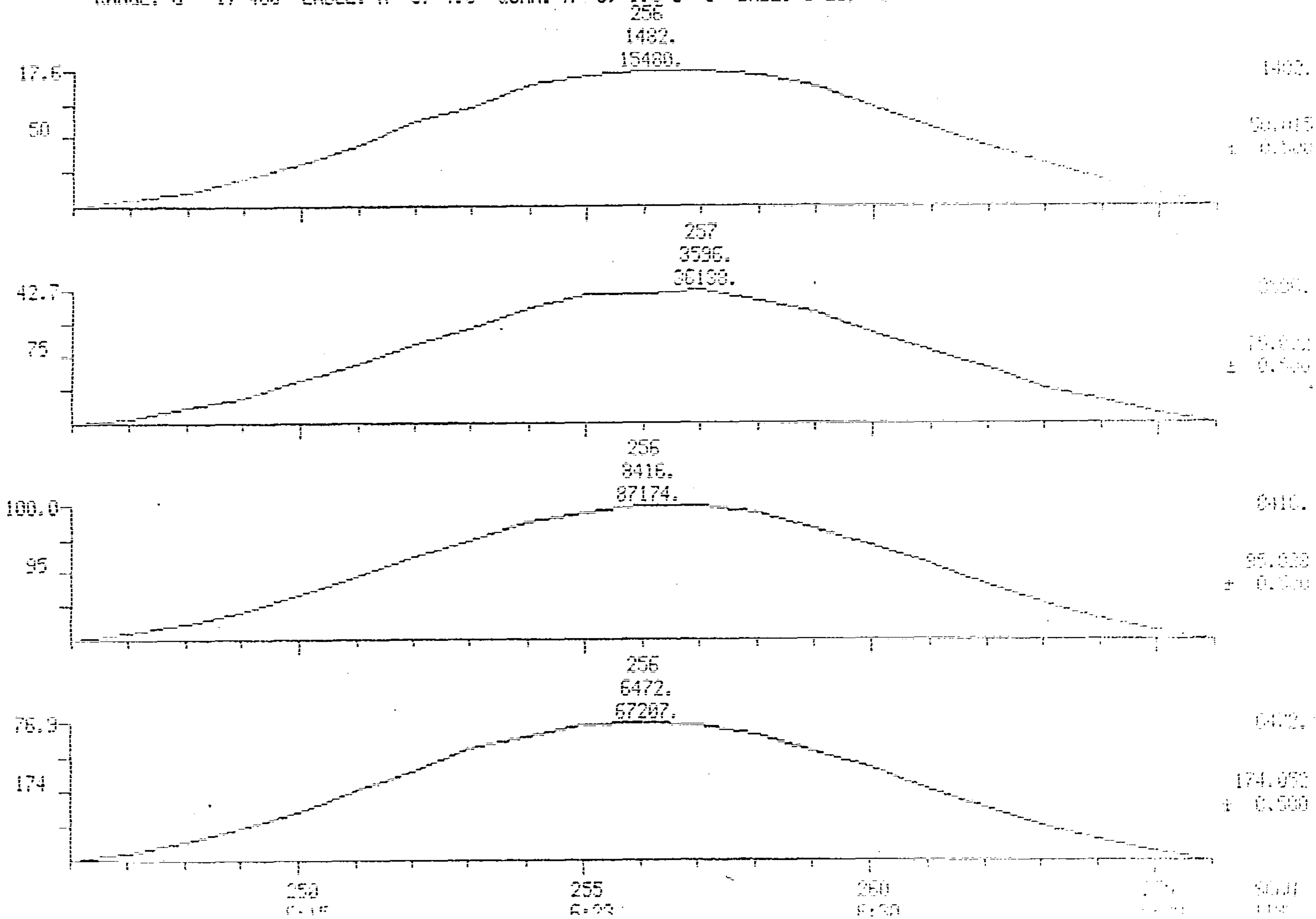
DATA: BFB1220 #256
CALI: CALTAB #3

BASE M/Z: 95
RIC: 144384.



AR100668

MASS CHROMATOGRAMS　　DATA: BFB1220 #255　　SCANS 246 TO 266
12/20/91 9:35:00　　CALI: CALTAB #3
SAMPLE: 50NG BFB　MASS SPECTROMETER TUNE CHECK
CONDS.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91
RANGE: G 1, 400 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3



AR100669

00036

BROMOFLUOROBENZENE

Tuning Report
01/02/92 8:32:00 + 5:23
Instrument: FINN
#214 to #220 summed
Case Number:

Data: BF312 # 255
Cali: CALTAB # 3
Analyst: CC
Laboratory:

Base m/z: 95
RIC: 211200.
Acct No.: 8477
Contract:

Ion Abundance Criteria

m/z	Intensity	% RA	Min %	Max %	Mass	Actual	Status
50	6176.	15.7	15.0	40.0	95	15.7	PASS
75	14736.	37.6	30.0	60.0	95	37.6	PASS
95	39232.	100.0	100.0	----	----	100.0	PASS
96	2868.	7.3	5.0	9.0	95	7.3	PASS
173	174.	0.4	----	2.0	174	0.6	PASS
174	27072.	69.0	50.0	----	95	69.0	PASS
175	1934.	4.9	5.0	9.0	174	7.1	PASS
176	25952.	66.2	95.0	101.0	174	95.9	PASS
177	1754.	4.5	5.0	9.0	176	6.8	PASS

AR100670

Mass Lab
01/02/92 8:32.00 + 6:23
Sample: SOND BF3
Conds.: GLASS PACKED COLUMN/METHOD 624
#254 to #256 summed

Data: 2FB12 # 255
Cal: CALTAB # 3
MASS SPECTROMETER TUNE CHECK

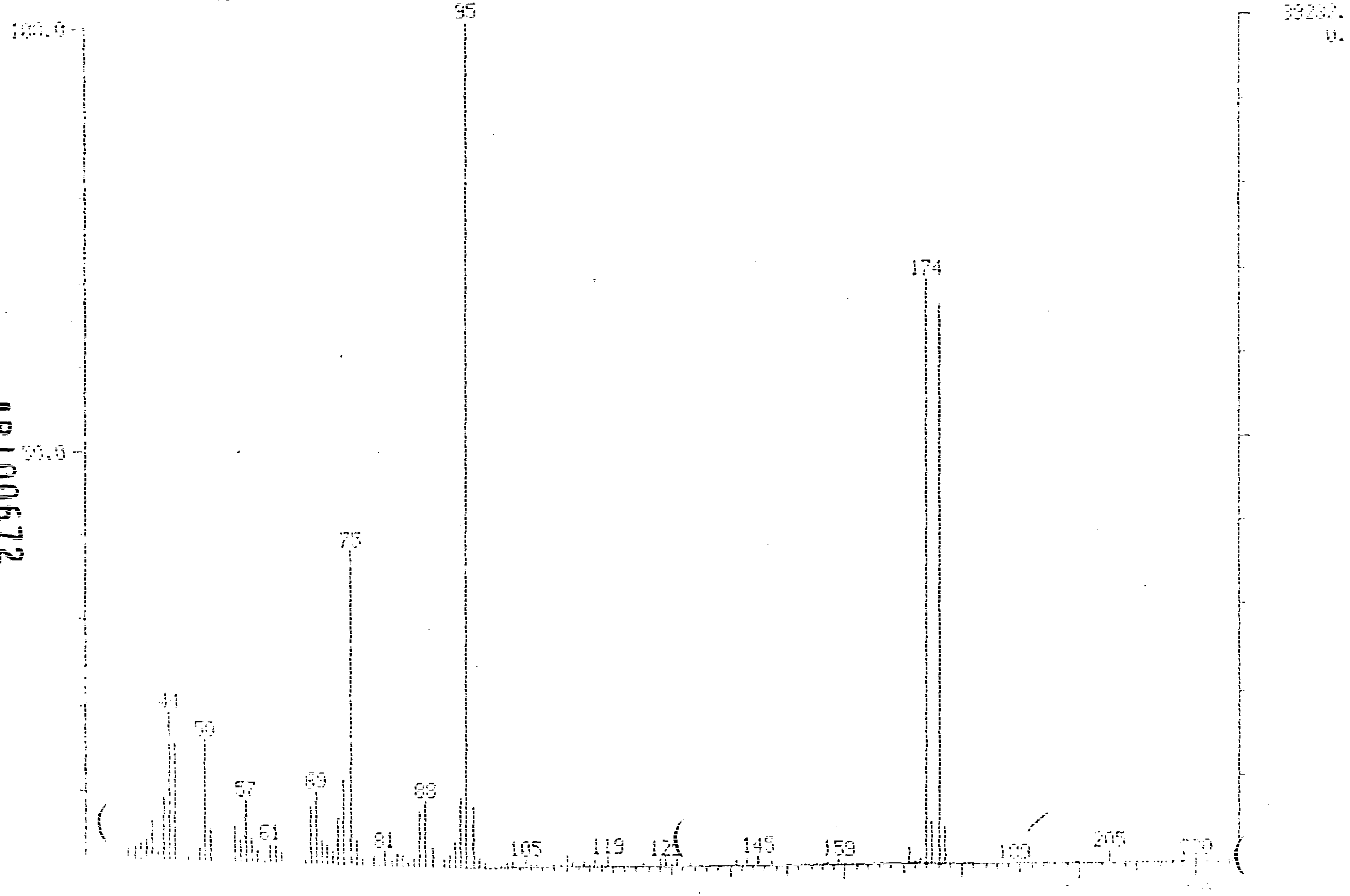
Base m/z: 99
Bpi 211200.

34 250 Mass	0.00 % RA	0 Intem.	Minima Maxima # Mass	Min Intem # 0 % RA	31 Intem
36?	0.92	361.	88	7.96	3123.
37?	4.89	1920.	89	2.48	971.
38?	4.45	1744.	91	1.05	413.
39?	4.14	1626.	92	1.78	700.
40?	4.06	1592.	93	2.99	1172.
41?	6.28	2464.	94	8.42	3304
42?	2.89	1134.	95	100.00	39232
43?	9.24	3624.	96	7.31	2868.
44?	19.17	7520.	97	1.03	404.
45?	15.52	6088.	98	0.49	194.
46?	0.44	174.	101	0.34	134.
47?	1.95	764.	102	0.42	163.
48?	0.43	169.	103	0.66	258.
49?	3.15	1236.	104	0.09	34.
50?	15.74	6176.	105	0.79	311.
51?	5.12	2009.	106	0.20	77.
52?	0.29	113.	107	0.15	60.
53?	0.76	297.	109	0.11	45.
54?	0.51	202.	110	0.32	124.
55?	5.44	2136.	111	0.41	160.
56?	3.84	1508.	112	1.51	593.
57?	8.64	3388.	113	0.50	196.
58?	4.03	1580.	115	0.65	255.
59?	2.38	933.	116	0.24	93.
60?	1.36	532.	117	0.95	374.
61?	3.34	1312.	118	0.30	117.
62?	2.99	1174.	119	1.05	413.
63?	2.29	897.	125	0.19	74.
65?	0.27	106.	128	0.72	282.
67?	1.29	507.	129	0.80	312.
68?	7.71	3024.	130	0.39	152.
69	9.42	3696.	131	0.75	293.
70	3.59	1410.	133	0.99	390
71	2.92	1146.	141	0.51	202.
72	2.09	820.	143	0.92	361.
73	6.27	2460.	145	0.98	383.
74	10.87	4264.	147	0.43	167.
75	37.56	14736.	152	0.12	46.
76	3.63	1426.	157	0.40	155.
77	1.33	523.	159	0.52	204.
78	0.59	233.	171	1.88	739.
79	1.76	692.	172	0.16	63.
80	0.56	218.	173	0.44	174.
81	2.12	830.	174	69.00	27072.
82	1.01	398.	175	4.93	1934.
83	1.87	732.	176	66.15	25952.
84	1.67	655.	177	4.47	1754.
85	0.75	295.	205	1.42	556.
86	1.26	493.	207	0.36	143.
87	6.87	2696.	220	0.22	85.

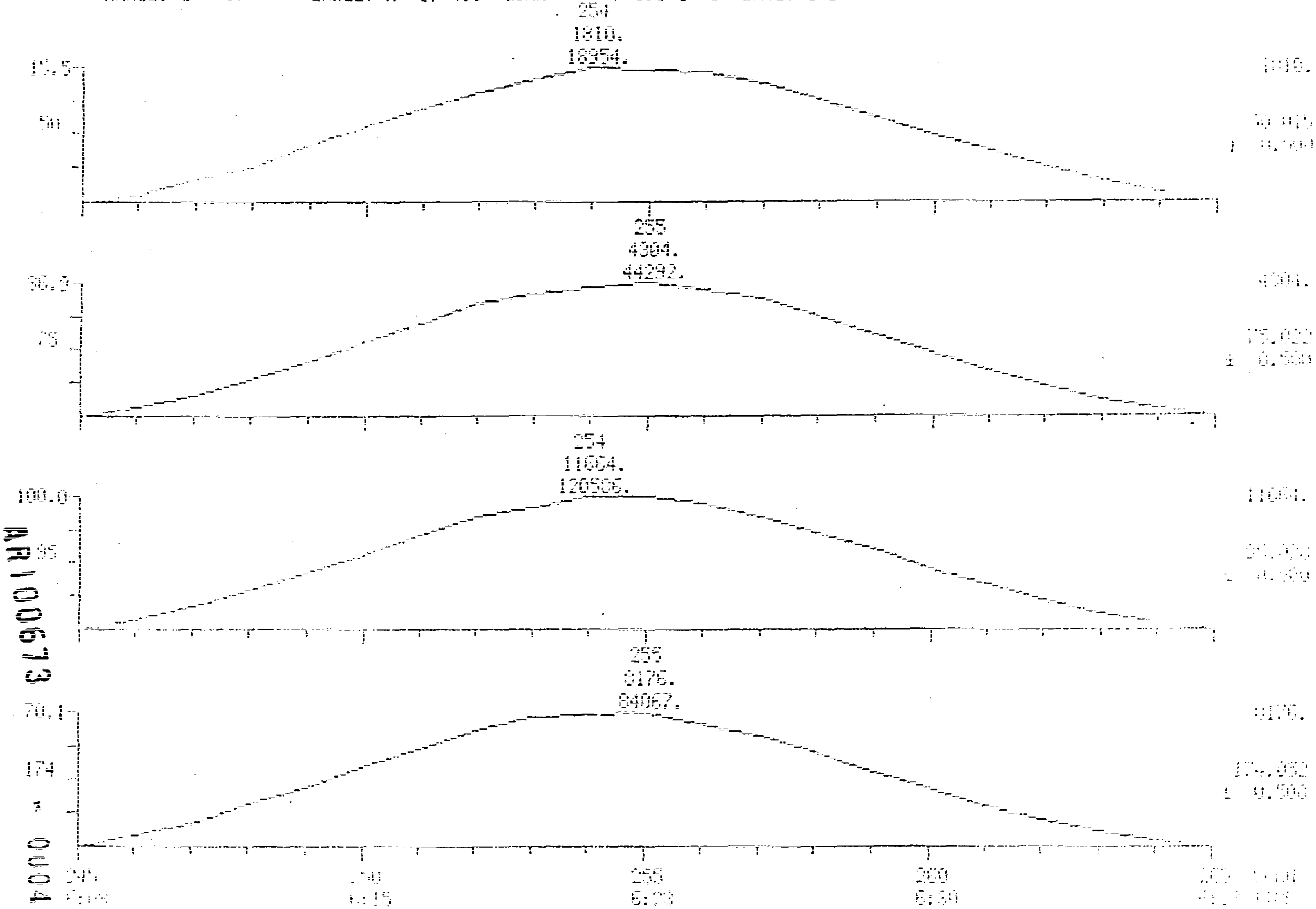
MASS SPECTRUM
01/02/92 8:32:00 + 6:23
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: GLASS PACKED COLUMN/METHOD 624
TEMP: 220 DEG. C
#254 TO #256 SUMMED

DATA: BFB12 #255
CALI: CALTAB #3

BASE M/Z: 95
RIC: 211200.



MASS CHROMATOGRAMS DATA: BFB12 #254 SCANS 245 TO 265
01/02/92 8:32:00 CALI: CALTAB #3
SAMPLE: 50NG BFB MASS SPECTROMETER TUNE CHECK
CONDS.: GLASS PACKED COLUMN/METHOD 624
RANGE: G 1, 400 LABEL: N 3, 4.0 QUAN: A 3, 1.0 J 0 BASE: U 20, 3



Initial Calibration Data

Instrument Identification: FIN1
Calibration Date 12-15-91
MAX AVG %RSD FOR CCC = 30
MIN AVG RF FOR SPCC 0.300

	Compound	RF 10 NG	RF 20 NG	RF 50 NG	RF 100NG	RF 200NG	Mean RF	%RS
C010	CHLOROMETHANE **	0.947	0.857	0.949	0.812	0.903	0.894	6.6
C015	BROMOMETHANE	0.764	0.651	0.484	0.238	0.191	0.464	54.6
C020	VINYL CHLORIDE *	0.607	0.573	0.620	0.545	0.301	0.529	24.7
C025	CHLOROETHANE	0.296	0.295	0.276	0.221	0.265	0.270	11.3
C030	METHYLENE CHLORIDE	1.036	1.003	0.921	0.736	0.710	0.881	17.1
C051	ACROLIN	0.227	0.271	0.274	0.268	0.324	0.273	12.5
C035	ACETONE	0.177	0.185	0.133	0.127	0.138	0.152	17.6
C252	ACRYLONITRILE	0.550	0.660	0.635	0.664	0.823	0.666	14.8
C040	CARBON DISULFIDE *	1.612	1.631	1.893	1.717	1.756	1.722	6.5
C045	1,1-DICHLOROETHENE *	0.614	0.612	0.759	0.701	0.775	0.692	11.1
C050	1,1-DICHLOROETHANE **	1.331	1.398	1.593	1.542	1.720	1.517	10.2
C055	TRANS-1,2-DICHLOROETHEN	0.974	1.025	1.183	1.170	1.321	1.134	12.1
C000	TRICHLOROFLUOROMETHA	1.328	1.304	1.280	1.286	0.869	1.213	15.9
C060	CHLOROFORM *	1.668	1.607	1.782	1.709	1.936	1.740	7.2
C065	1,2-DICHLOROETHANE	0.876	0.839	0.964	0.954	1.052	0.938	9.0
C110	2-BUTANONE	0.035	0.057	0.053	0.053	0.058	0.051	17.9
C115	1,1,1-TRICHLOROETHANE	0.541	0.553	0.591	0.556	0.575	0.563	4
C120	CARBON TETRACHLORIDE	0.436	0.440	0.528	0.486	0.517	0.481	7
C125	VINYL ACETATE	0.179	0.192	0.258	0.194	0.264	0.217	5
C130	BROMO DICHLOROMETHANE	0.543	0.561	0.584	0.587	0.606	0.576	4.2
C140	1,2-DICHLOROPROPANE	0.321	0.345	0.353	0.371	0.359	0.350	5.2
C145	TRANS-1,3 DICHLOROPROPE	0.695	0.828	0.798	0.844	0.860	0.805	8.1
C150	TRICHLOROETHENE	0.382	0.417	0.436	0.422	0.425	0.416	4.9
C155	DIBROMOCHLOROMETHANE	0.478	0.508	0.545	0.552	0.565	0.529	6.7
C160	1,1,2-TRICHLOROETHANE	0.281	0.303	0.302	0.318	0.320	0.305	5.1
C165	BENZENE	0.862	0.873	0.897	0.905	0.912	0.890	2.4
C143	CIS-1,3-DICHLOROPROPENE	0.695	0.828	0.798	0.844	0.860	0.805	8.1
C175	2-CHLOROETHYL VINYL ETH	0.146	0.099	0.164	0.183	0.193	0.157	23.6
C180	BROMOFORM **	0.348	0.390	0.379	0.406	0.415	0.388	6.7
C220	TETRACHLOROETHENE	0.582	0.621	0.620	0.596	0.628	0.610	3.2
C210	2-HEXANONE	0.120	0.167	0.124	0.114	0.130	0.131	15.9
C205	4-METHYL 2-PENTANONE	0.192	0.288	0.231	0.254	0.251	0.243	14.4
C225	1,1,2,2-TETRACHLOROETHA	0.370	0.493	0.422	0.474	0.467	0.445	11.1
C230	TOLUENE *	1.126	1.174	1.174	1.150	1.160	1.157	1.7
C235	CHLOROBENZENE **	0.947	0.998	0.958	0.944	0.959	0.961	2.2
C240	ETHYL BENZENE *	0.441	0.450	0.444	0.443	0.454	0.446	1.1
C245	STYRENE	0.844	0.878	0.864	0.867	0.891	0.869	2.0
C250	M-XYLENE	0.506	0.543	0.500	0.499	0.540	0.517	4.2
C253	1,3-DICHLOROBENZENE	0.506	0.605	0.520	0.557	0.555	0.548	7.0
C254	1,4-DICHLOROBENZENE	0.497	0.591	0.455	0.522	0.515	0.516	9.5
C255	1,2-DICHLOROBENZENE	0.615	0.720	0.681	0.652	0.696	0.673	6.0
C250	O&P XYLENE	0.974	1.063	0.990	0.974	1.024	1.005	3.7

SV01220RDATAFILE: SV01220R Calibration Check

Instrument Identifier: FINN
Calibration Date. 12-19-91
Standard File: SV01220R
Date. 12/20/91 Time: 12:00:00
MAX RPD FOR CCC (*) = 25 %
MIN RF FOR SPCC (**) = 0.300

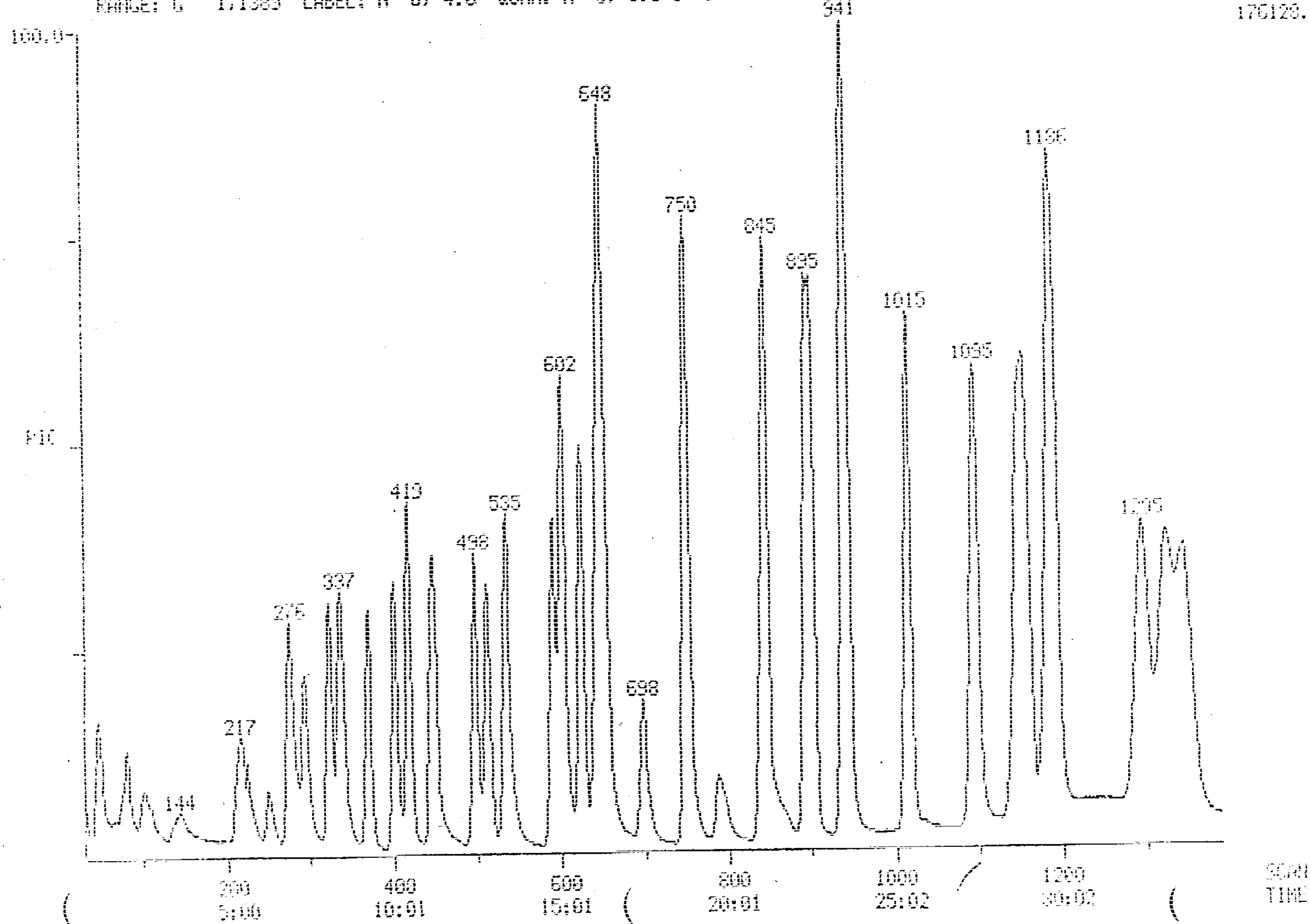
Compound	Mean RF(I)	RF(O)	% D
C010 CHLOROMETHANE **	0.894	0.946	5.869
C015 BROMOMETHANE	0.464	0.448	3.433
C020 VINYL CHLORIDE *	0.529	0.562	6.110
C025 CHLOROETHANE	0.270	0.325	20.490
C030 METHYLENE CHLORIDE	0.881	0.670	24.006
C251 ACROLIN	0.273	0.269	1.174
C035 ACETONE	0.152	0.136	10.180
C252 ACRYLONITRILE	0.666	0.706	6.005
C040 CARBON DISULFIDE	1.722	1.620	5.906
C045 1,1-DICHLOROETHENE *	0.692	0.652	5.824
C050 1,1-DICHLOROETHANE **	1.517	1.464	3.458
C055 TRANS-1,2-DICHLOROETHEN	1.134	1.053	7.146
C000 TRICHLOROFLUOROMETHA	1.213	0.914	24.686
C060 CHLOROFORM *	1.740	1.725	0.902
C065 1,2-DICHLOROETHANE	0.938	0.900	4.085
C110 2-BUTANONE	0.051	0.049	3.195
C115 1,1,1-TRICHLOROETHANE	0.563	0.504	10.536
C120 CARBON TETRACHLORIDE	0.481	0.417	13.289
C125 VINYL ACETATE	0.217	0.293	34.755
C130 BROMO DICHLOROMETHANE	0.576	0.573	0.530
C140 1,2-DICHLOROPROPANE	0.350	0.335	4.334
C145 TRANS-1,3 DICHLOROPROPE	0.805	0.831	3.193
C150 TRICHLOROETHENE	0.416	0.374	10.205
C155 DIBROMOCHLOROMETHANE	0.529	0.533	0.691
C160 1,1,2-TRICHLOROETHANE	0.305	0.320	4.969
C165 BENZENE	0.890	0.908	2.005
C143 CIS-1,3-DICHLOROPROPENE	0.805	0.831	3.193
C175 2-CHLOROETHYL VINYL ETH	0.157	0.188	19.540
C180 BROMOFORM **	0.388	0.402	3.856
C220 TETRACHLOROETHENE	0.610	0.564	7.486
C210 2-HEXANONE	0.131	0.111	15.711
C205 4-METHYL 2-PENTANONE	0.243	0.224	7.751
C225 1,1,2,2-TETRACHLOROETHA	0.445	0.464	4.177
C230 TOLUENE *	1.157	1.156	0.036
C235 CHLOROBENZENE **	0.961	0.961	0.004
C240 ETHYL BENZENE *	0.446	0.430	3.668
C245 STYRENE	0.869	0.852	1.929
C250 M-XYLENE	0.517	0.501	3.104
C253 1,3-DICHLOROBENZENE	0.548	0.508	7.370
C254 1,4-DICHLOROBENZENE	0.516	0.478	7.369
C255 1,2-DICHLOROBENZENE	0.673	0.630	6.447
C250 O&P XYLENE	1.005	0.974	3.082

AR100675

RIC
12/20/91 12:00:00
SAMPLE: 50 PPB STANSARD
CONDS.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91
RANGE: G 1,1383 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: SVO1220R #48
CALI: SVO1220R #3

SCANS 30 TO 1389



AR100676

excell

Quantitation Report File: SV012SCR

Data: SV012SCR.11
12-JUL-91 12:00:00
Sample: 50 PPB STANDARD
Comment: GLASS PACKED COLUMN/METHOD 624/1.0 10/18/91
Formula: SML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: CC Acct No.: PTL

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. Fac. From Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT. STD. **
2	C110 1,4-DIFLUOROBENZENE **INT. STD. **
3	C120 CHLOROBENZENE-D5 **INT. STD. **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD. **
5	CS05 TOLUENE-D8 **S. STD. **
6	CS10 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M-XYLENE
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

AR100677

DATAFILE: SV012R Calibration Check

Instrument Identifier: FINN
Calibration Date: 12-13-91
Standard File: SV012R
Date: 01/02/92 Time: 11:08:00
MAX RPD FOR CCC (*) = 25 %
MIN RF FOR SPCC (**) = 0.300

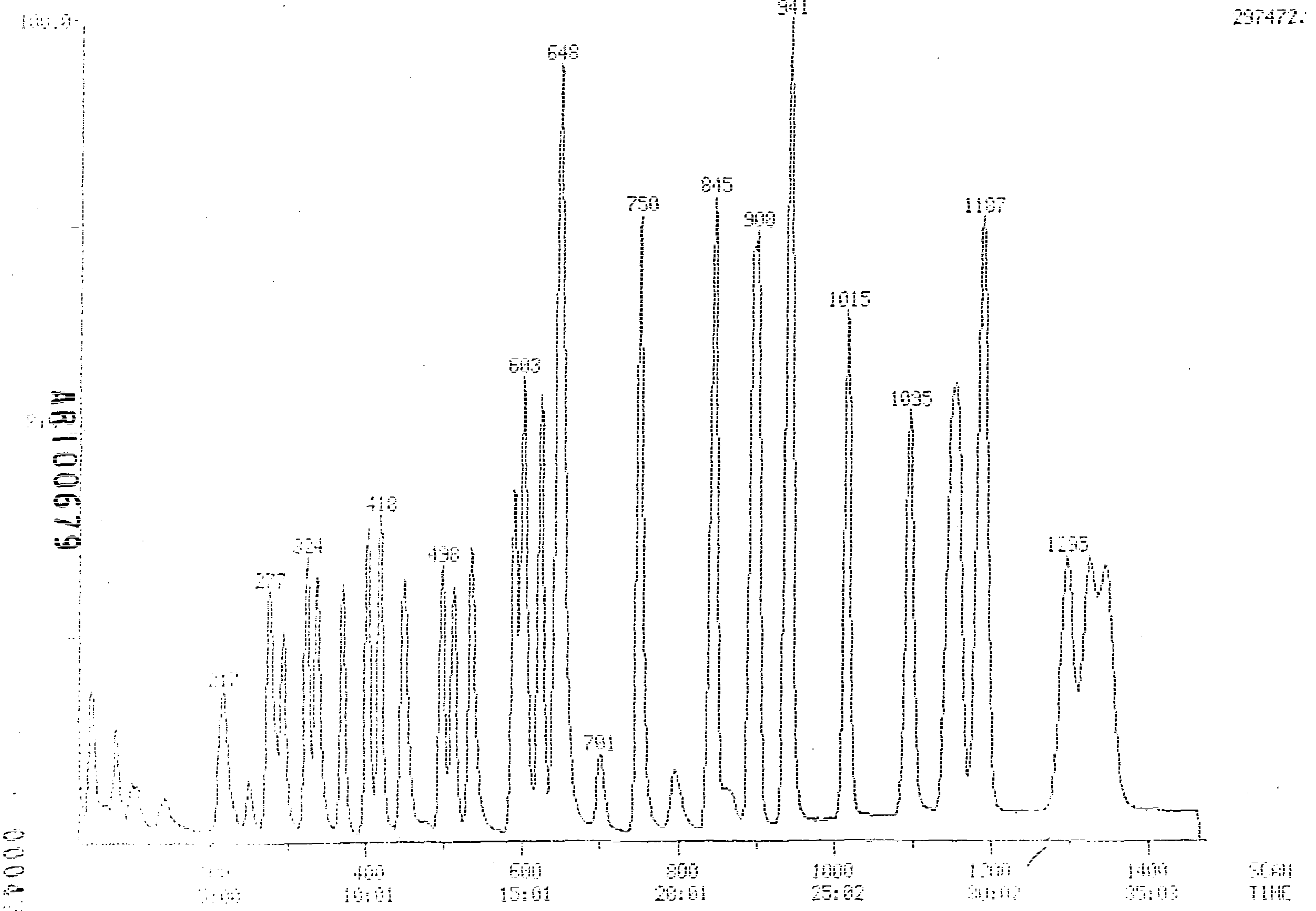
	Compound	Mean RF(I)	RF(D)	% D
C010	CHLOROMETHANE **	0.894	1.046	16.990
C015	BROMOMETHANE	0.464	0.467	0.711
C020	VINYL CHLORIDE *	0.529	0.574	8.469
C025	CHLOROETHANE	0.270	0.327	21.180
C030	METHYLENE CHLORIDE	0.881	0.800	9.185
C251	ACROLIN	0.273	0.234	14.021
C035	ACETONE	0.152	0.161	5.706
C252	ACRYLONITRILE	0.666	0.671	0.745
C040	CARBON DISULFIDE	1.722	1.926	11.869
C045	1,1-DICHLOROETHENE *	0.692	0.777	12.299
C050	1,1-DICHLOROETHANE **	1.517	1.521	0.313
C055	TRANS-1,2-DICHLOROETHEN	1.134	1.145	0.927
C000	TRICHLOROFLUOROMETHA	1.213	0.961	20.742
C060	CHLOROFORM *	1.740	1.543	11.336
C065	1,2-DICHLOROETHANE	0.938	0.671	28.530
C110	2-BUTANONE	0.051	0.047	8.865
C115	1,1,1-TRICHLOROETHANE	0.563	0.411	27.128
C120	CARBON TETRACHLORIDE	0.481	0.348	27.727
125	VINYL ACETATE	0.217	0.220	1.176
130	BROMO DICHLOROMETHANE	0.576	0.476	17.335
C140	1,2-DICHLOROPROPANE	0.350	0.370	5.616
C145	TRANS-1,3 DICHLOROPROPE	0.805	0.785	2.459
C150	TRICHLOROETHENE	0.416	0.380	8.824
C155	DIBROMOCHLOROMETHANE	0.529	0.452	14.621
C160	1,1,2-TRICHLOROETHANE	0.305	0.302	0.877
C165	BENZENE	0.890	1.005	12.975
C143	CIS-1,3-DICHLOROPROPENE	0.805	0.785	2.459
C175	2-CHLOROETHYL VINYL ETH	0.157	0.090	42.440
C180	BROMOFORM **	0.388	0.304	21.639
C220	TETRACHLOROETHENE	0.610	0.598	1.881
C210	2-HEXANONE	0.131	0.099	24.713
C205	4-METHYL 2-PENTANONE	0.243	0.219	9.805
C225	1,1,2,2-TETRACHLOROETHA	0.445	0.468	5.246
C230	TOLUENE *	1.157	1.247	7.750
C235	CHLOROBENZENE **	0.961	1.000	4.035
C240	ETHYL BENZENE *	0.446	0.443	0.685
C245	STYRENE	0.867	0.834	3.991
C250	M-XYLENE	0.517	0.486	6.143
C253	1,3-DICHLOROBENZENE	0.546	0.472	13.560
C254	1,4-DICHLOROBENZENE	0.516	0.431	16.470
C255	1,2-DICHLOROBENZENE	0.670	0.529	21.003
C260	O-P XYLENE	1.005	0.960	4.433

AR100678

RIC
01/02/92 11:08:00
SAMPLE: 50 PPB STD
CONDS.: GLASS PACKED COLUMN/METHOD 624
RANGE: G 1,1474 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: SV012R #48
CALI: SV012R #3

SCANS 30 TO 1474



AR100679

Quantitation Report File: SV012R

Data: SV012R.TI
01/02/92 11:09:00
File: 50 PPB STD
Type: GLASS PACKED COLUMN/METHOD 624
Formula: 5ML Instrument: FINN Weight: 0.000
Submitted by: PTL Analyst: CC Acct No.: PTL

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. fac. from Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT. STD. **
2	C110 1,4-DIFLUOROBENZENE **INT. STD. **
3	C120 CHLOROBENZENE-D5 **INT. STD. **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD. **
5	CS05 TOLUENE-D8 **S. STD. **
6	CS10 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
3	C245 STYRENE
4	C250 M-XYLENE
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

No	Name
48	C250 O&P XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	49	337	6:26	1	1.000	A BB	225355.	50.000	NG	1.85
2	114	749	18:45	2	1.000	A BB	599206.	50.000	NG	1.85
3	117	938	23:29	3	1.000	A BB	511161.	50.000	NG	1.85
4	65	447	11:11	1	1.326	A BB	141310.	52.811	NG	1.93
5	98	894	22:23	3	0.953	A BB	561311.	50.983	NG	1.89
6	95	1095	27:24	3	1.167	A BB	372868.	50.423	NG	1.86
7	50	47	1:11	1	0.139	A BB	235527.	91.219	NG	3.37
8	94	79	1:59	1	0.234	A BB	105171.	53.599	NG	1.98
9	62	101	2:32	1	0.300	M XX	129264.	57.901	NG	2.14
10	64	142	3:33	1	0.421	A BB	73538.	50.731	NG	1.88
11	49	217	5:26	1	0.644	A BB	190237.	48.754	NG	1.80
12	56	251	6:17	1	0.745	A BB	52721.	40.208	NG	1.49
13	43	250	6:15	1	0.742	A BB	36073.	42.738	NG	1.58
14	53	275	6:53	1	0.816	A BB	151170.	47.740	NG	1.77
15	76	277	6:56	1	0.822	A BB	434019.	50.138	NG	1.85
16	96	324	8:07	1	0.961	A BB	175096.	60.788	NG	2.25
17	63	370	9:16	1	1.098	A BB	342756.	65.085	NG	2.41
18	61	402	10:04	1	1.193	A BB	257916.	51.925	NG	1.92
19	101	294	7:22	1	0.872	A BB	216566.	109.529	NG	4.05
20	83	418	10:28	1	1.240	A BB	347598.	59.696	NG	2.21
21	62	452	11:19	1	1.341	A BB	151009.	55.395	NG	2.05
22	43	477	11:56	2	0.637	A BB	27610.	63.000	NG	2.33
23	97	498	12:28	2	0.665	A BB	245678.	74.901	NG	2.77
24	117	512	12:49	2	0.684	A VB	208205.	76.520	NG	2.83
25	43	537	13:26	2	0.717	A BB	131453.	75.525	NG	2.79
26	83	536	13:25	2	0.716	A BB	285142.	55.116	NG	2.04
27	63	591	14:49	2	0.789	A BB	221113.	56.151	NG	2.08
28	75	602	15:04	2	0.804	A BB	470242.	56.905	NG	2.10
29	95	624	15:37	2	0.833	A BB	227220.	54.594	NG	2.02
30	129	644	16:07	2	0.860	A BB	270578.	52.871	NG	1.96
31	97	652	16:19	2	0.870	A BB	180713.	53.567	NG	1.98
32	78	648	16:13	2	0.865	A BB	602085.	53.014	NG	1.96
33	75	602	15:04	2	0.804	A BB	470242.	56.905	NG	2.10
34	63	700	17:31	2	0.935	A BB	53892.	52.719	NG	1.95
35	173	751	18:48	2	1.003	A BB	181654.	52.023	NG	1.92
36	166	845	21:09	3	0.901	A BB	305593.	51.808	NG	1.92
37	43	862	21:35	3	0.919	A BB	50269.	52.573	NG	1.94
38	43	796	19:55	3	0.849	A BB	111875.	58.251	NG	2.15
39	83	840	21:02	3	0.896	A BB	239198.	55.363	NG	2.05
40	91	901	22:33	3	0.961	A BB	636909.	52.285	NG	1.93
41	112	943	23:36	3	1.005	A BB	510973.	51.545	NG	1.91
42	106	1015	25:24	3	1.082	A BB	225937.	51.113	NG	1.89
43	104	1147	28:43	3	1.223	A BB	426180.	52.087	NG	1.93
44	106	1155	28:55	3	1.231	A BB	247987.	50.600	NG	1.87
45	146	1294	32:23	3	1.380	A BB	240953.	54.335	NG	2.01
46	146	1324	33:09	3	1.412	M XX	220048.	54.061	NG	2.00
47	146	1342	33:35	3	1.431	M XX	269648.	45.613	NG	1.69
48	106	1137	28:43	3	1.265	A BB	490632.	51.970	NG	1.92

3A

Water Volatile Matrix Spike/Matrix Spike Duplicate Recovery

Lab Name: Princeton Testing Lab Contract: WESTON, TAT

Lab Code: PTL Case No.: 9108360 SAS No.: _____ SDG No.: _____

Matrix Spike - EPA Sample No.: 8360-5 (X100,000)

S4962 S4963

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC
1,1-Dichloroethene	50	ND	30.1	60*	61-145
Trichloroethene	50	ND	61	122*	71-120
Benzene	50	#	# U	U	76-127
Toluene	50	3.8	54.6	102	76-125
Chlorobenzene	50	ND	48.7	97	75-130

S 4964

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC
1,1-Dichloroethene	50	30.6	61	2	14	61-145
Trichloroethene	50	61.4	123*	1	14	71-120
Benzene	50	#	U	U	11	76-127
Toluene	50	54.3	101	1	13	76-125
Chlorobenzene	50	48.8	98	1	13	75-130

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

* Values outside of QC limits

RPD: 0 out of 4 outside limits
Spike Recovery: 3 out of 8 outside limits

COMMENTS: U = Unable to quantitate due to non-homogeneous matrix
= Reproduceability of Benzene was unattainable due to non-homogeneous nature of the sample matrix.

FORM III VOA-1

1/87 Rev.

AR100682

Quantitation Report   File SOLA1220

Data: SOL91220 T1
12/20/91 12:37:00
Sample METHOD BLANK
Conds.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91

Formula: 5ML   Instrument: FINN   Weight 0.000
Submitted by: PTL   Analyst: CC   Acct. No.: PTL

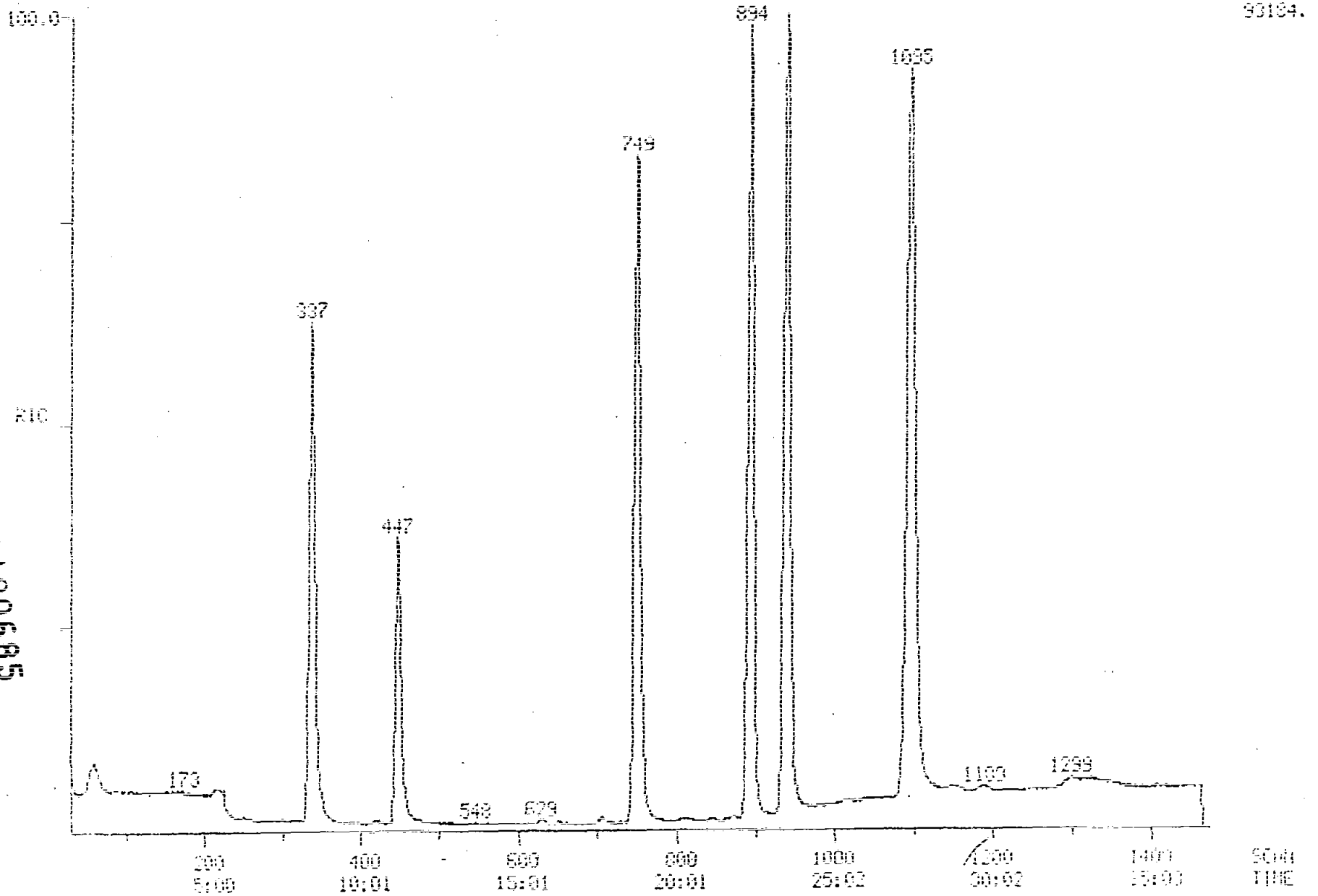
AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. Fac. from Library Entry

No	Name
1	CI01 BROMOCHLOROMETHANE **INT. STD.**
2	CI10 1,4-DIFLUOROBENZENE **INT. STD.**
3	CI20 CHLOROBENZENE-D5 **INT. STD.**
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD.**
5	CS05 TOLUENE-D8 **S. STD.**
6	CS10 4-BROMOFLUOROBENZENE **S. STD.**
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLORODETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLORDETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLORDETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M-XYLENE
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

AR100683

No Name
43 C230 D[illegible] XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	337	8:26	1	1.000	A BB	122097.	50.000 NG	16.37
2	114	749	13:45	2	1.000	A BB	257685.	50.000 NG	16.37
3	117	939	23:30	3	1.000	A BB	251449.	50.000 NG	16.37
4	65	447	11:11	1	1.326	A BB	85906.	43.544 NG	14.26
5	98	874	22:23	3	0.952	A BB	275915.	51.482 NG	16.85
6	95	1096	27:26	3	1.167	A BB	203939.	51.662 NG	16.91
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	217	5:26	1	0.644	A BB	4179.	2.558 NG ✓	0.84
12	NOT FOUND								
13	43	251	6:17	1	0.745	A BB	1454.	4.379 NG ✓	1.43
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	43	536	13:25	2	0.716	A BB	79.	0.080 NG	0.02
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	95	630	15:46	2	0.841	A BB	1075.	0.538 NG	0.18
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	43	810	20:16	3	0.863	A BB	905.	0.804 NG	0.26
39	NOT FOUND								
40	91	901	22:33	3	0.960	A BB	1490.	0.256 NG	0.08
41	NOT FOUND								
42	106	1016	25:26	3	1.082	A BB	419.	0.194 NG	0.06
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	NOT FOUND								


RIC
12/20/91 12:37:00
SAMPLE: METHOD BLANK
CONDS.: GLASS PACKED COLUMN/METHOD 624/1.0 10/18/91
RANGE: G 1,1474 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: SBLK1220 #48
CALI: SBLK1220 #3
SCANS 30 TO 1474
100.0
93184.
RIC
337
447
749
894
1085
173
548
629
1103
1299
200
5:00
400
10:01
600
15:01
800
20:01
1000
25:02
1200
30:02
1400
35:03
SCAN
TIME

FINNIGAN FILTERATIC DIAGNOSTIC REPORT 12-21-91 8:47:02

DATA FILE: SOLA1223

FILTER SCAN PARAMETERS

MAX NUMBER TICS:	15
ID-TABLE ENTRIES:	528
SCAN TOLERANCE :	2
MIN. RIC HT. [%]:	10
FIRST SCAN :	1
LAST SCAN :	1600
TIC THRESHOLD :	600

METHOD LIBRARY & LISTS

TIC I S LIBRARY:	LIBRARYLS
NBS SEARCH PROC :	SERLIB
PEAK FINDER PROC:	VOME
TCA I S LL :	LS
FILE NAME LIST :	TCARSF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
10	3	13

FILTER PROCESSING:

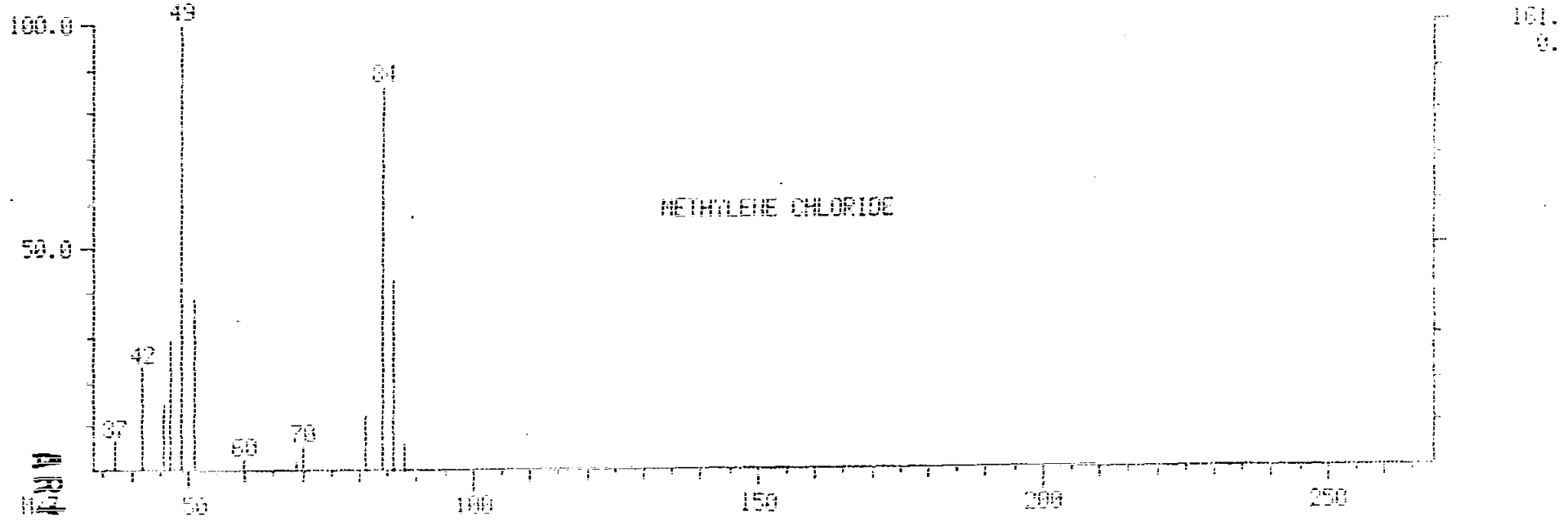
	<-----REJECT PEAKS-----						
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
6	0	0	0	6	0	6	0

NO UNKNOWN PEAKS TO BE IDENTIFIED.

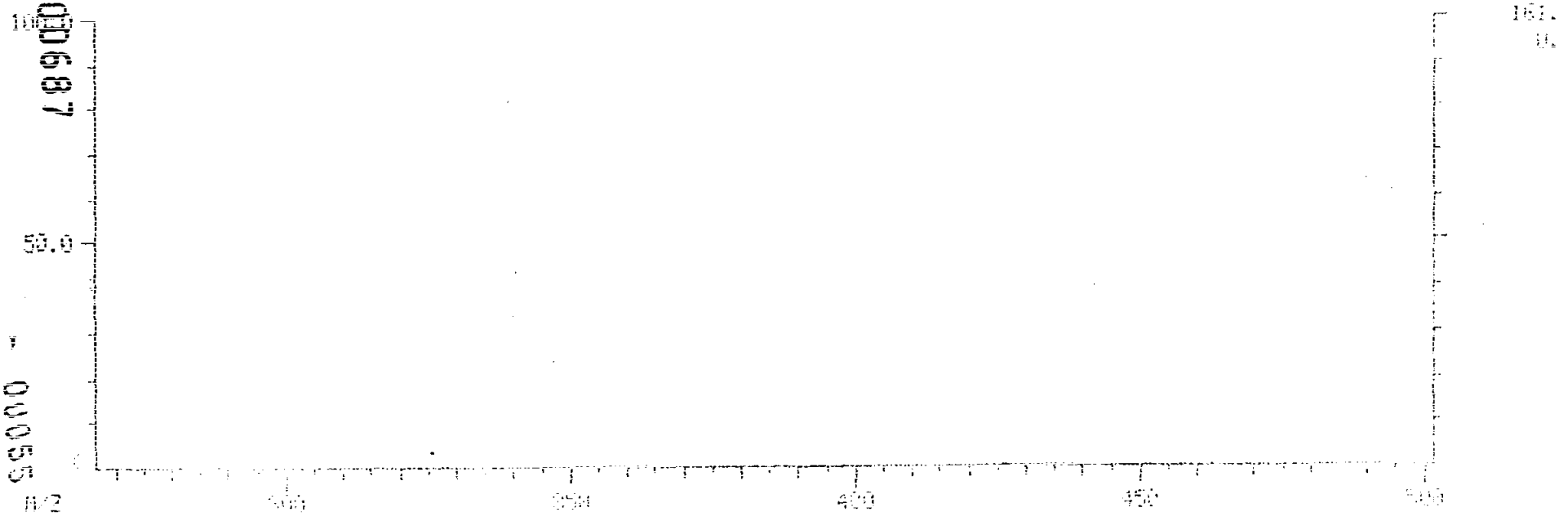
MASS SPECTRUM
12/20/91 12:37:00 + 5:26
SAMPLE: METHOD BLANK
CONDS.: GLASS PACKED COLUMN/METHOD 624/1.C 10/16/91
TEMP: 64 DEG. C
ENHANCED (S 150 2H 0T)

DATA: SBLK1220 #217
CALI: SBLK1220 #3

BASE M/Z: 49
RIC: 588.



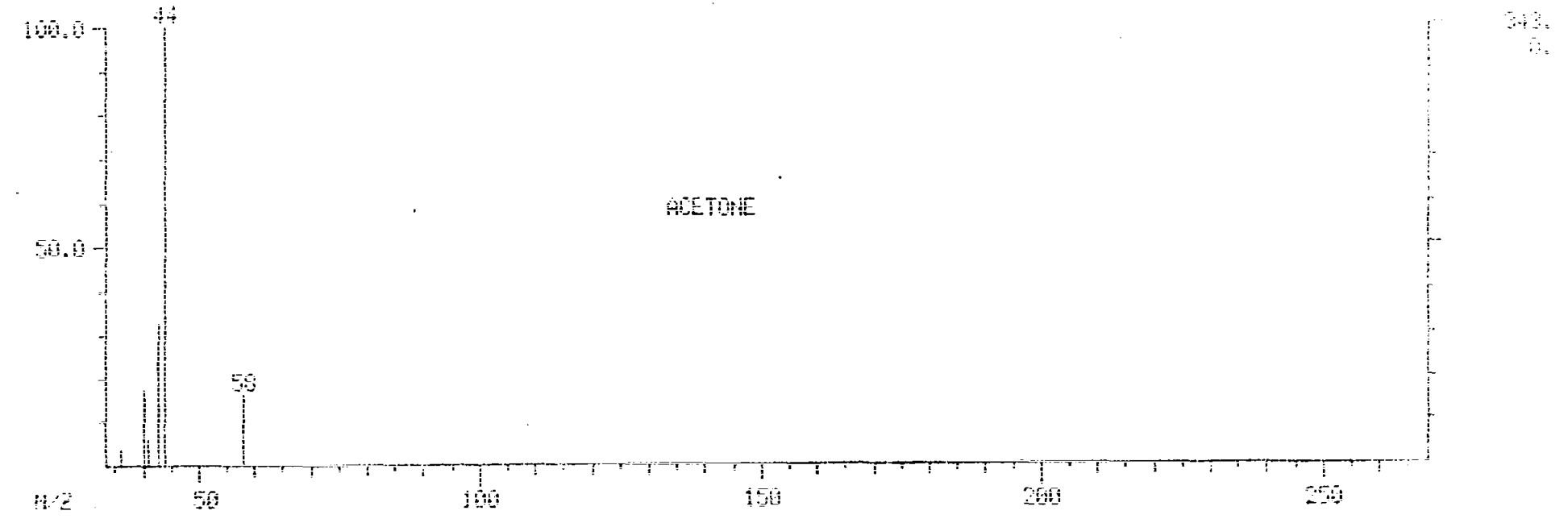
ABUNDANCE

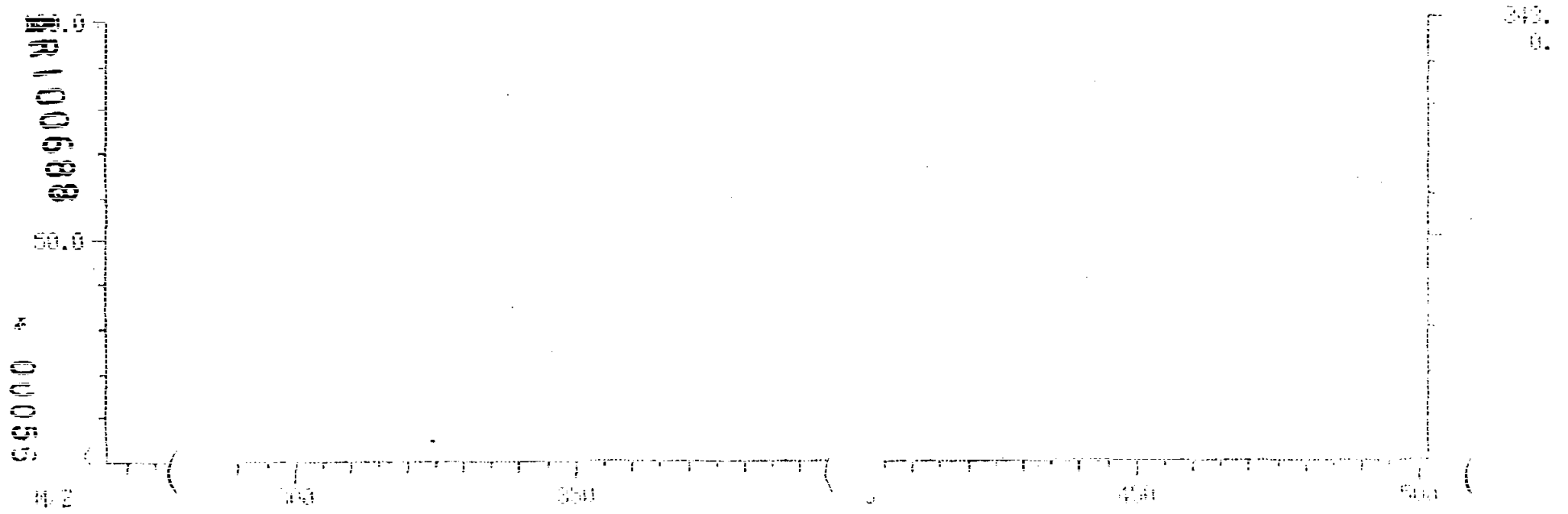


MASS SPECTRUM
12/20/91 12:37:00 + 5:17
SAMPLE: METHOD BLANK
CONDS.: GLASS PACKED COLUMN/METHOD 624/1.C 10/18/91
TEMP: 71 DEG. C
ENHANCED (S 150 20 0T)

DATA: SBLK1220 #251
CALI: SBLK1220 #3

BASE M/Z: 44
RIC: 6M.





Quantitation Report   File: 30LK12

Data: 30LK12.TI
[illegible] 12 13:00
Sample: METHOD BLANK
Cond.: [illegible] PACKED COLUMN METHOD 624
Formula: 100UL/5ML   Instrument: FINN   Weight: 0.000
Submitted by: PTL   Analyst: CC   Acct. No.: PTL

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. Fac. from Library Entry

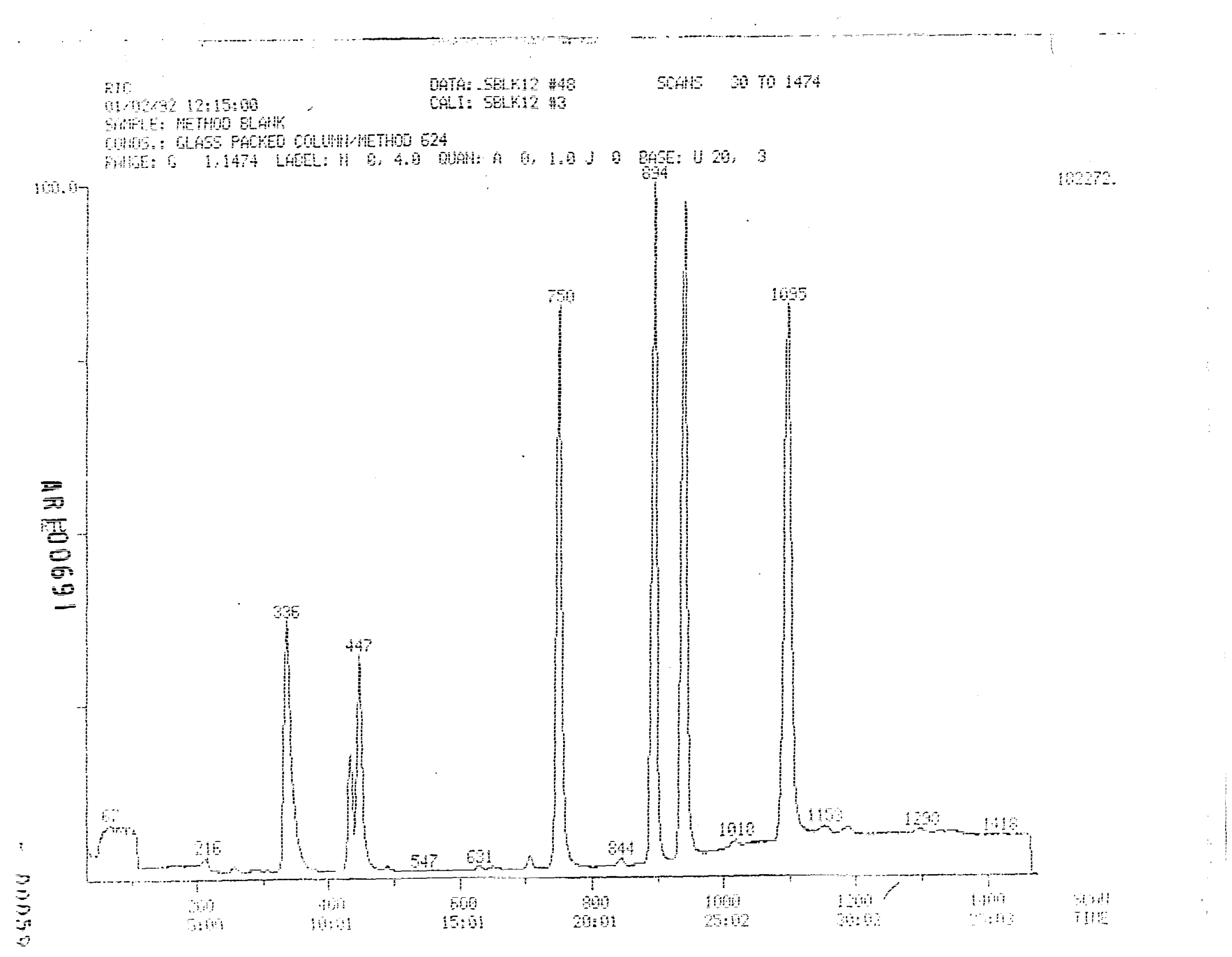
No	Name
1	CI01 BROMOCHLOROMETHANE **INT. STD **
2	CI10 1,4-DIFLUOROBENZENE **INT. STD. **
3	CI20 CHLOROBENZENE-D5 **INT. STD **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD **
5	CS05 TOLUENE-D8 **S. STD. **
6	CS10 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
23	C115 1,1,1-TRICHLOROETHANE
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C170 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	C250 M-XYLENE
45	C253 1,3-DICHLOROBENZENE
46	C254 1,4-DICHLOROBENZENE
47	C255 1,2-DICHLOROBENZENE

AR100689

No Name
12 [illegible] XYLENE

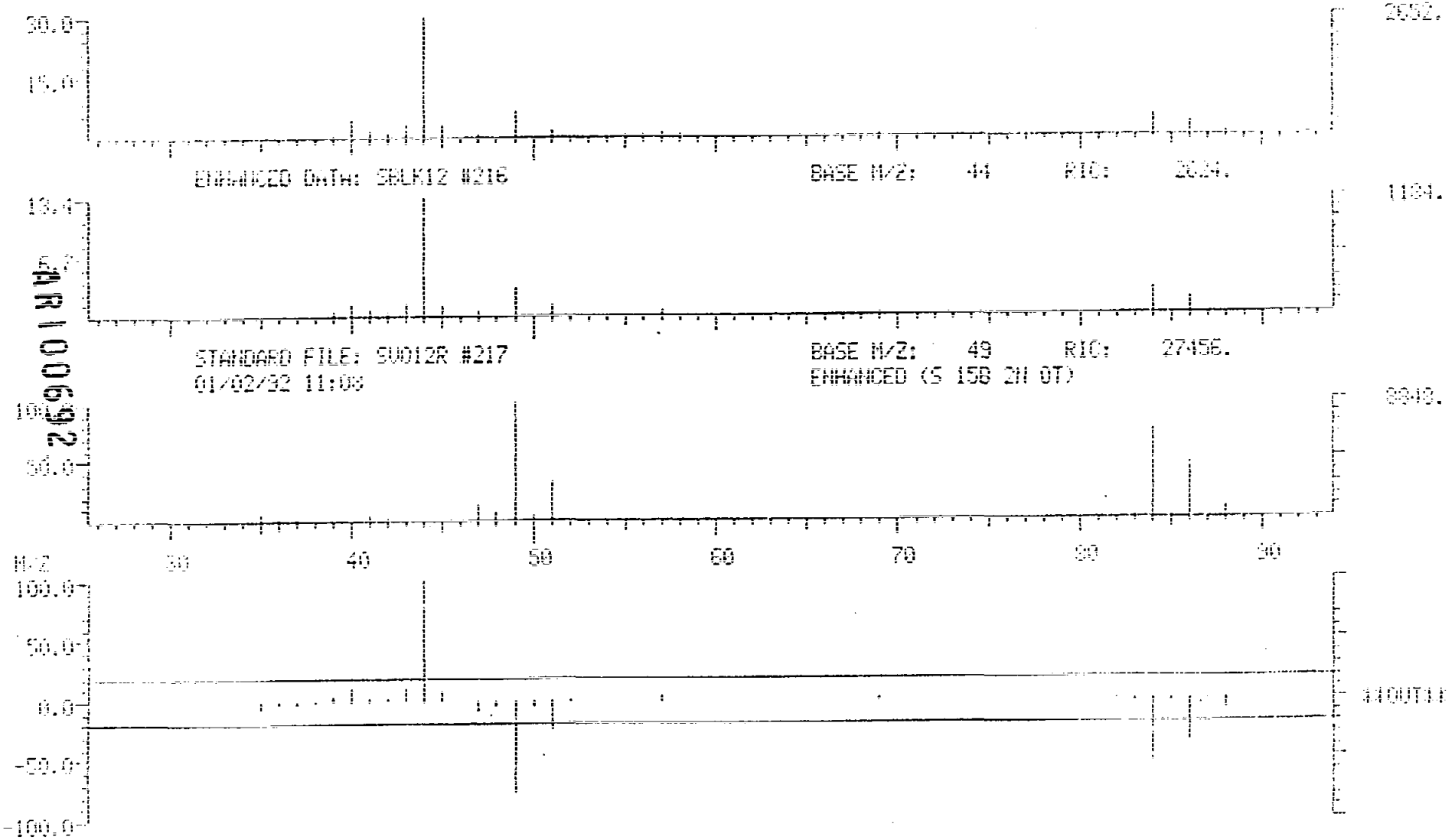
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	377	8:21	1	1.000	A BB	195427.	50.000 NG	15.42
2	114	749	13:45	2	1.000	A BB	550967.	50.000 NG	15.42
3	117	909	20:30	3	1.000	A BB	501347.	50.000 NG	15.42
4	65	447	11:11	1	1.325	A BB	122198	52.572 NG	16.22
5	93	894	22:23	3	0.952	A BB	547897.	49.820 NG	15.38
6	95	1075	27:26	3	1.157	A BB	380830.	52.171 NG	16.09
7	50	49	1:14	1	0.145	A BB	2179.	0.533 NG	0.16
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	216	5:24	1	0.641	A BB	4747.	1.519 NG	0.47
12	NOT FOUND								
13	43	257	6:26	1	0.763	A BB	7797.	12.463 NG	3.84
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	97	498	12:28	2	0.665	A BB	449.	0.099 NG	0.03
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	95	631	15:48	2	0.842	A BB	2137.	0.509 NG	0.16
30	NOT FOUND								
31	NOT FOUND								
32	78	652	16:19	2	0.870	A BB	3259.	0.293 NG	0.09
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	166	844	21:08	3	0.899	A BB	2261.	0.395 NG	0.12
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	901	22:33	3	0.960	A BB	5239.	0.420 NG	0.13
41	112	943	23:36	3	1.004	A BB	4375.	0.427 NG	0.13
42	126	1016	25:26	3	1.082	A BB	2256.	0.510 NG	0.16
43	104	1147	28:44	3	1.223	A BB	4077.	0.489 NG	0.15
44	106	1156	28:56	3	1.231	A BB	2918.	0.601 NG	0.19
45	146	1295	32:29	3	1.382	A BB	2305.	0.489 NG	0.15
46	146	1326	33:11	3	1.412	A VV	349	0.081 NG	0.02
47	146	1343	33:44	3	1.426	A BB	1586.	0.300 NG	0.09
48	106	1186	29:41	3	1.263	A BB	4507.	0.459 NG	0.14

AR100690


RIC
01/02/92 12:15:00
SAMPLE: METHOD BLANK
CONDS.: GLASS PACKED COLUMN/METHOD 624
RANGE: 0 1,1474 LABEL: H 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3
DATA: SBLK12 #48
CALI: SBLK12 #3
SCANS 30 TO 1474
100.0
102272.
894
750
1085
335
447
216
547
631
844
1010
1153
1290
1418
300
5:00
600
10:01
800
15:01
1000
20:01
1200
25:02
1400
30:02
1600
35:03
SCAN
TIME
HP 5970

DATA FILE: SBLK12 #216 STANDARD FILE: SV012R #217
TARGET COMPOUND COMPARISON CALI: SBLK12 #3
COMPOUND: 0030 METHYLENE CHLORIDE

RAW DATA: SBLK12 #216 BASE M/Z: 44 RIC: 5020.
01/02/92 12:15

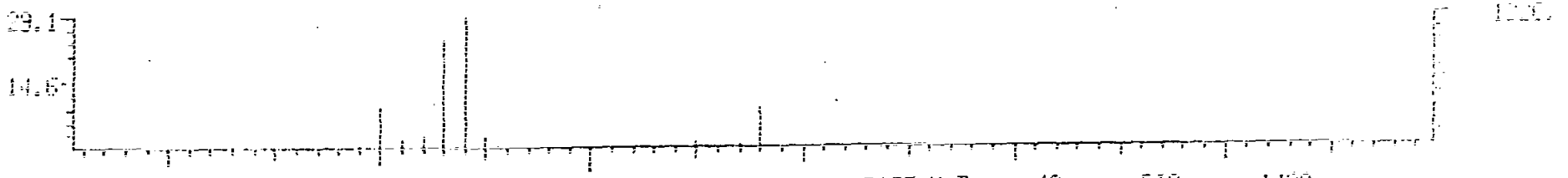


2690

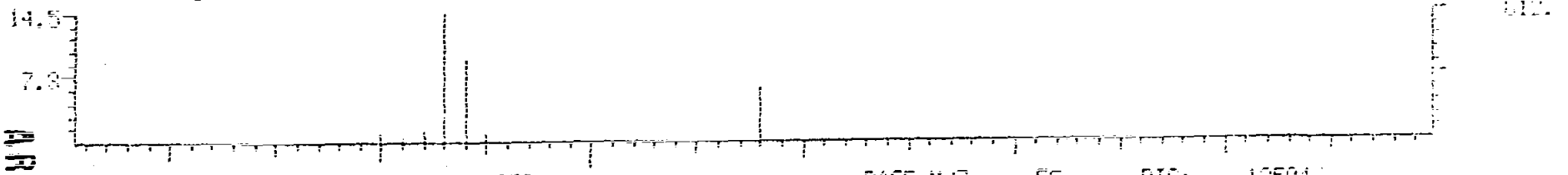
000

DATA FILE: SBLK12 #257 STANDARD FILE: SV012R #250
TARGET COMPOUND COMPARISON CALI: SBLK12 #3
COMPOUND: C035 ACETONE

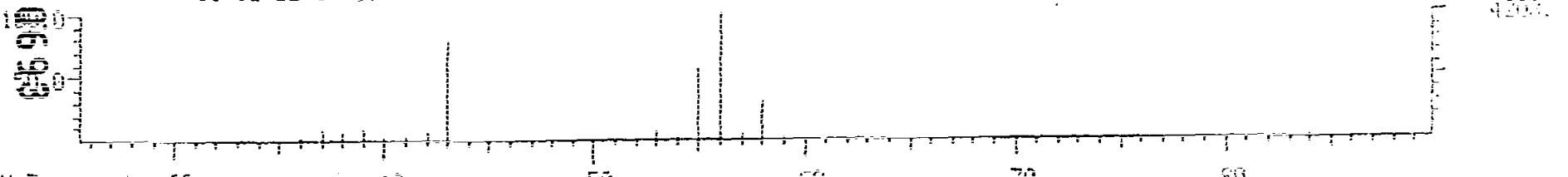
RAW DATA: SBLK12 #257 BASE M/Z: 44 RIC: 3395.
01/02/92 12:15

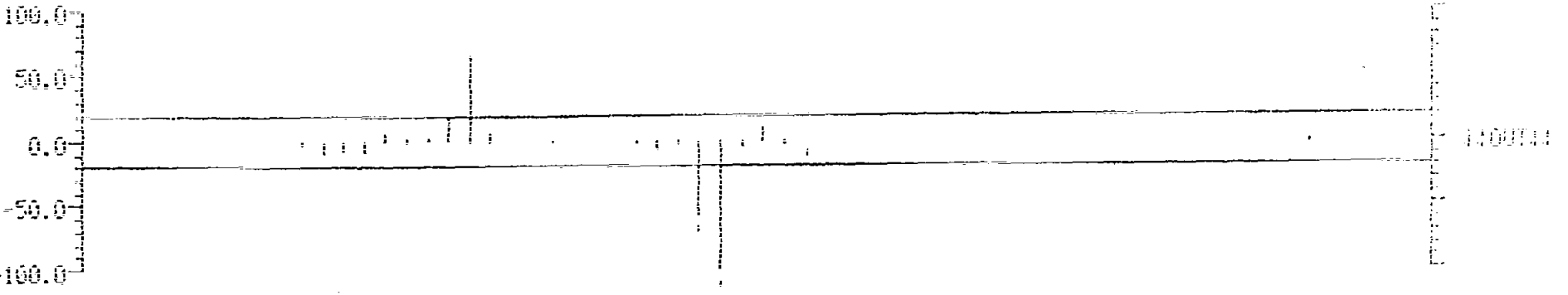


ENHANCED DATA: SBLK12 #257 BASE M/Z: 43 RIC: 1420.



STANDARD FILE: SV012R #250 BASE M/Z: 56 RIC: 10504.
01/02/92 11:08 ENHANCED (S 15D 2N 0T)





Quantitation Report File 24PIC

Data: 24PLC TI
12/10/91 15:07:00
Sample: 8060-1
Conds. GLASS PACKED COLUMN/METHOD 624/I C 10/18/91
Formula: 200UL OF 4000X/5ML Instrument: FINN Weight 0.000
Submitted by: WESTON Analyst: CC Acct. No.: 8060

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. Fac. from Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT STD.**
2	C110 1,4-DIFLUOROBENZENE **INT. STD.**
3	C120 CHLOROBENZENE-D5 **INT. STD.**
4	C815 1,2-DICHLOROETHANE-D4 **S. STD.**
5	C805 TOLUENE-D8 **S. STD.**
6	C810 4-BROMOFLUOROBENZENE **S. STD.**
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C031 ACROLIN
13	C035 ACETONE
14	[illegible]
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
25	C125 VINYL ACETATE
26	C130 BROMODICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3-DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C140 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
43	C245 STYRENE
44	[illegible] XYLENE
[illegible]	[illegible]

AR100694

[illegible]
[illegible]

No	Pk	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	242	8:34	1	1.000	A BB	118028.	50.000 NG	1.82
2	114	751	18:48	2	1.000	A BB	368986.	50.000 NG	1.82
3	117	738	20:29	3	1.000	A BB	377857.	50.000 NG	1.82
4	65	443	11:08	1	1.301	A BB	124956.	50.172 NG	1.94
5	95	892	22:20	2	0.951	A BB	351841.	47.415 NG	1.73
6	95	1094	27:20	3	1.16?	A BB	290521.	48.497 NG	1.77
7	50	[illegible]	[illegible]	1	0.149	[illegible]	2298	1.800 NG	0.05
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	47	[illegible]	5:30	1	0.643	A B?	5896	5.816 NG	0.21
12	NOT FOUND								
13	NOT FOUND								
14	[illegible]	[illegible]	4:48	1	0.814	A BB	[illegible]	[illegible]	4.42
15	NOT FOUND								
[illegible]	[illegible]								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	40	451	17:08	2	0.814	A BB	512112	[illegible] NG	51.44
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	78	650	16:16	2	0.866	A BB	2797	[illegible] NG	0.08
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	41	897	22:22	3	0.958	A BB	5181260	154.412 NG	21.36
41	NOT FOUND								
42	106	1015	25:34	3	1.082	A BB	301497	81.971 NG	3.38
43	NOT FOUND								
44	108	1150	28:56	3	1.232	A BB	616600.	152.971 NG	5.94
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	162	1180	29:41	3	1.264	A BB	460048	62.701 NG	2.29

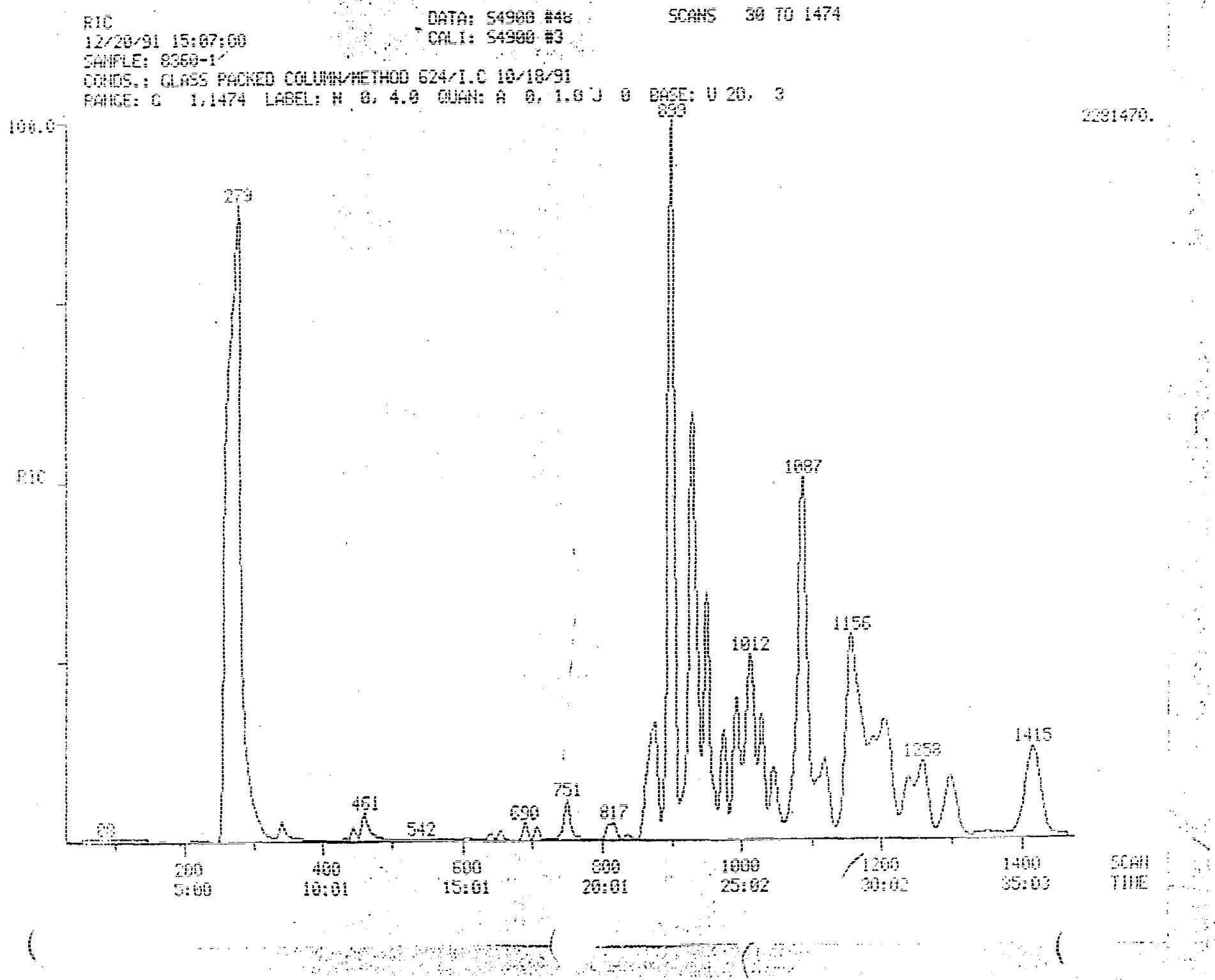
x 10?

[illegible] FH

#1400000

AR100695

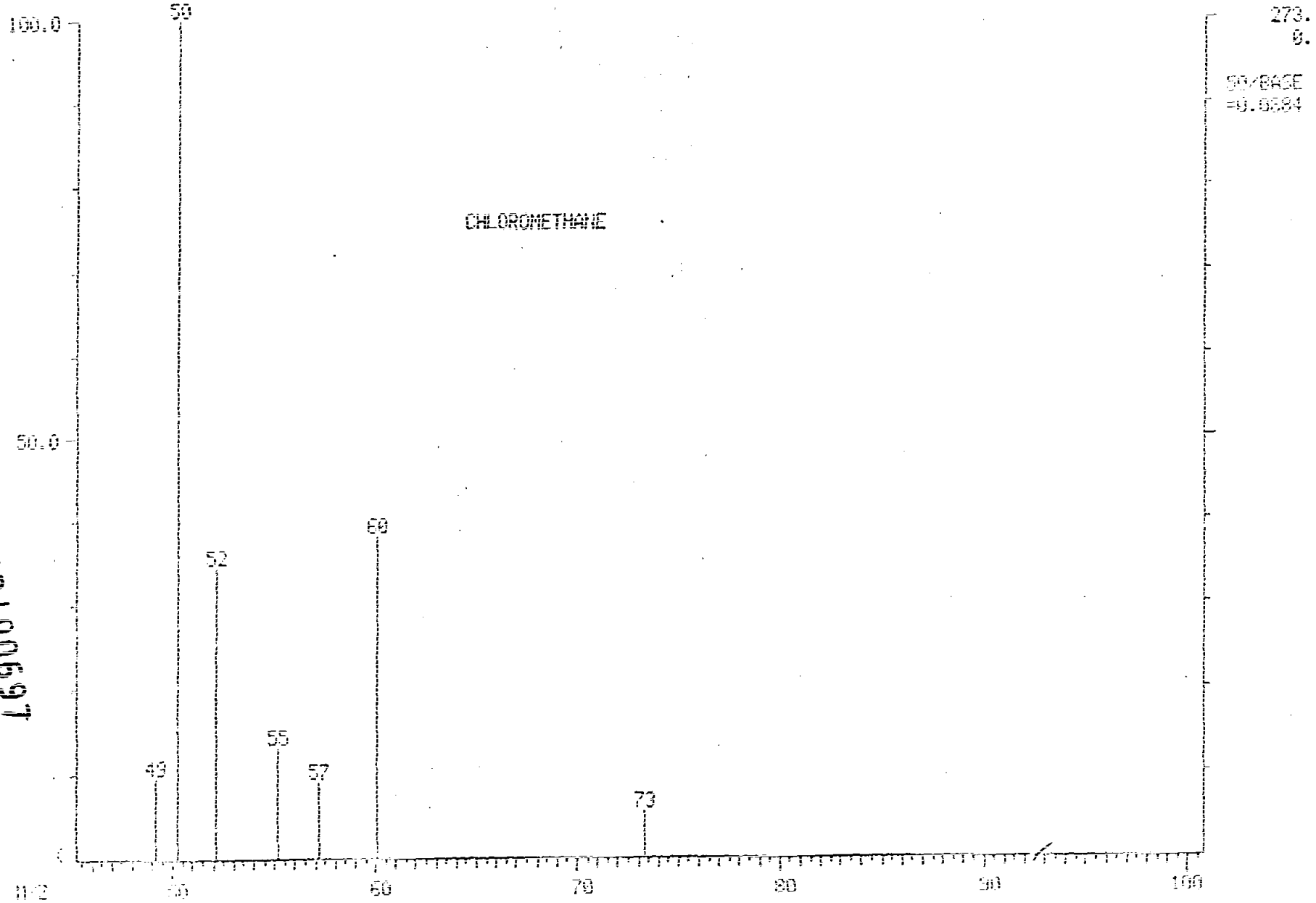
00063


RIC
12/20/91 15:07:00
SAMPLE: 8360-1
COMDS.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91
RANGE: G 1,1474 LABEL: N 0, 4.0 QUAN: A 0, 1.0 U 0 BASE: U 20, 3
DATA: S4900 #46
CALI: S4900 #3
SCANS 30 TO 1474
2291470.
100.0
RIC
279
690
1087
1012
1156
1258
1415
751
451
542
817
200
5:00
400
10:01
600
15:01
800
20:01
1000
25:02
1200
30:02
1400
35:03
SCAN
TIME

MASS SPECTRUM
12/20/91 15:07:00 + 1:15
SAMPLE: 8360-1
CONDS.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91
TEMP: 45 DEG. C

DATA: 54900 #50
CALI: 54900 #3

BASE M/Z: 44
RIC: 4944.



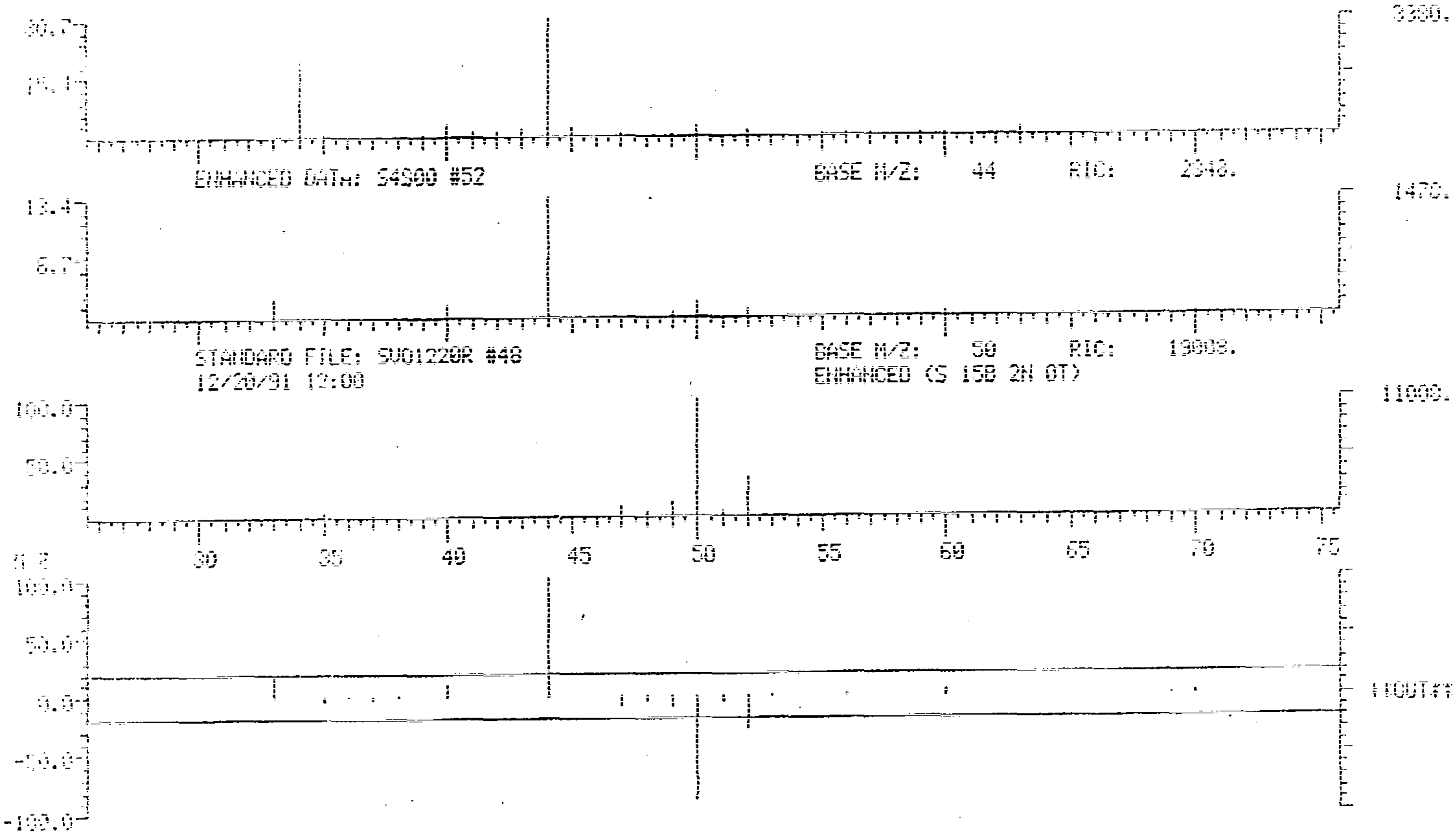
AR100697

DATA FILE: S4900 #52 STANDARD FILE: SU01220R #48
TARGET COMPOUND COMPARISON CALI: S4900 #3
COMPOUND: C010 CHLOROMETHANE **

RAW DATA: S4900 #52 BASE M/Z: 44 RIC: 8672.
12/20/91 15:07

ENHANCED DATA: S4900 #52 BASE M/Z: 44 RIC: 2348.

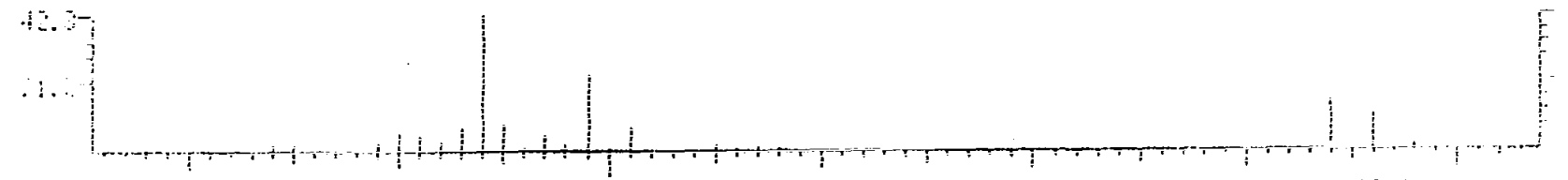
STANDARD FILE: SU01220R #48 BASE M/Z: 50 RIC: 19008.
12/20/91 12:00 ENHANCED (S 15B 2N 0T)



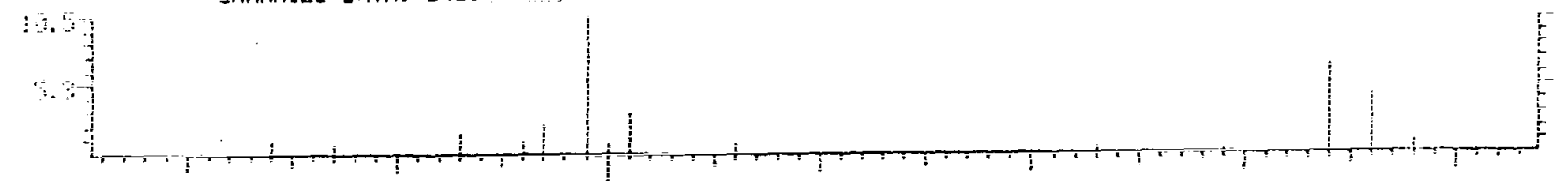
AR100698

DATA FILE: S4900 #220 STANDARD FILE: SVQ1220R #217
TARGET COMPOUND COMPARISON CAL: S4900 #3
COMPOUND: 0030 METHYLENE CHLORIDE

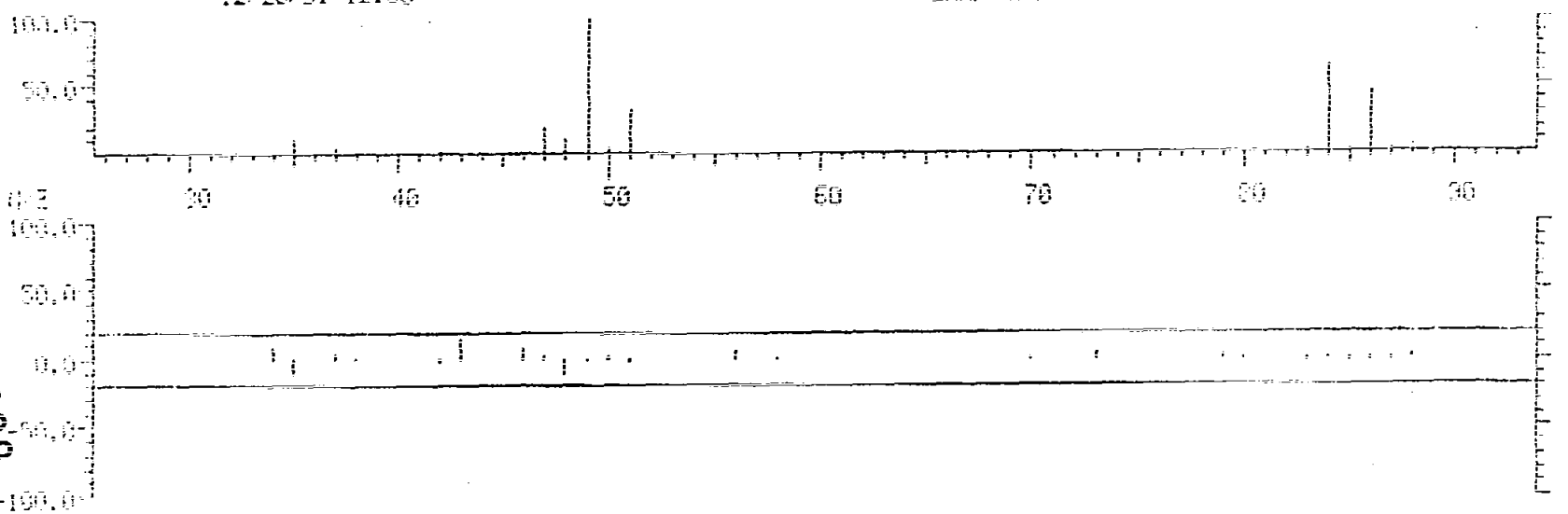
RAW DATA: S4900 #220 BASE M/Z: 44 RIC: 5704.
12/20/91 15:07



ENHANCED DATA: S4900 #220 BASE M/Z: 43 RIC: 1314.



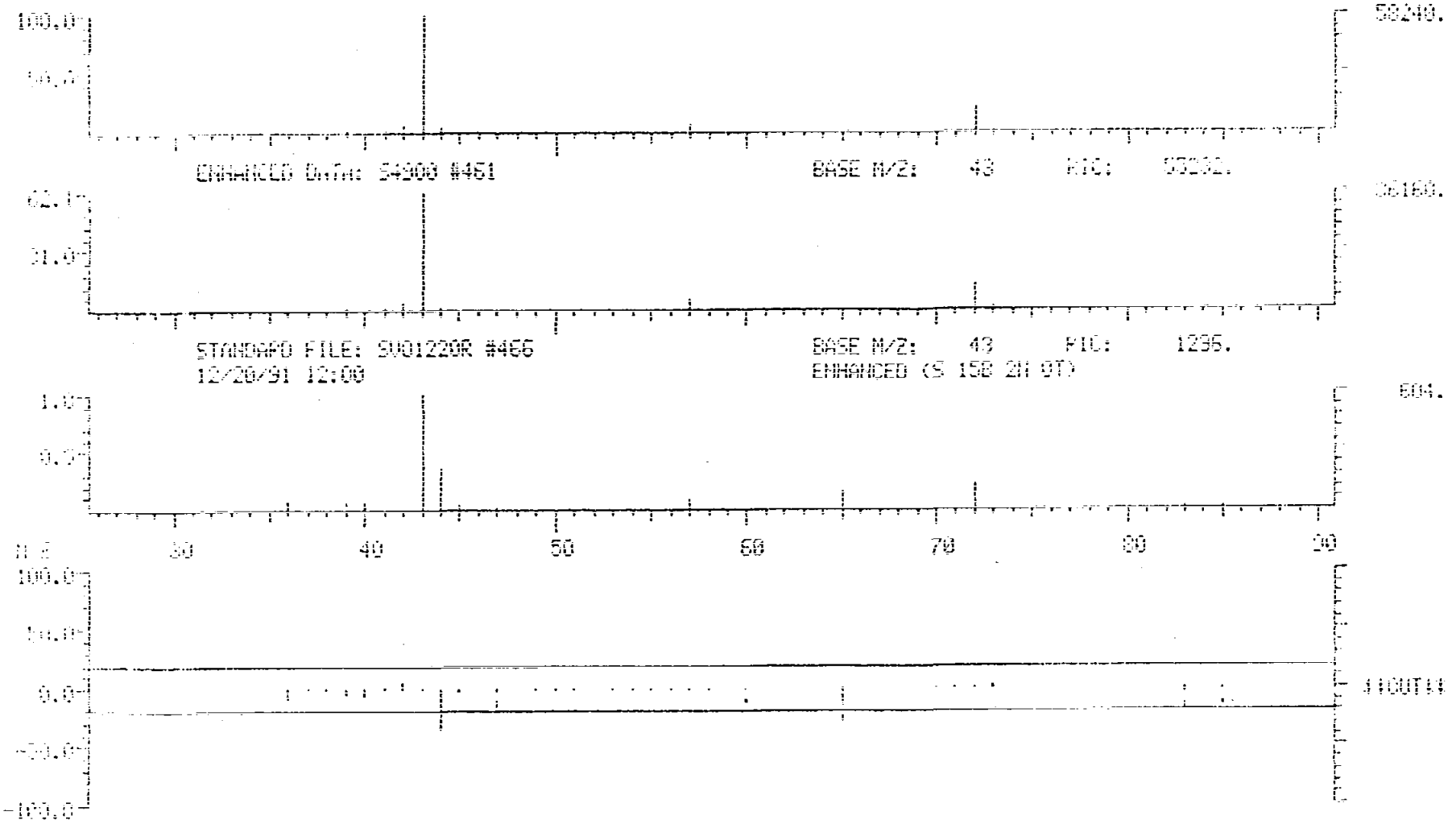
STANDARD FILE: SVQ1220R #217 BASE M/Z: 43 RIC: 11776.
12/20/91 12:00 ENHANCED (S 150 2N 0T)



66900 RR

DATA FILE: S4900 #461 STANDARD FILE: SV01220R #466
TARGET COMPOUND COMPARISON CALI: S4900 #3
COMPOUND: C110 2-BUTANONE

RAW DATA: S4900 #461 BASE M/Z: 43 RIC: 89690.
12/20/91 15:07



ARI00700

DATA FILE: 54900 #899
TARGET COMPOUND COMPARISON
COMPOUND: C230 TOLUENE *

STANDARD FILE: SU01220R #901
CALI: 54900 #3

RAW DATA: 54900 #899
12/20/91 15:07

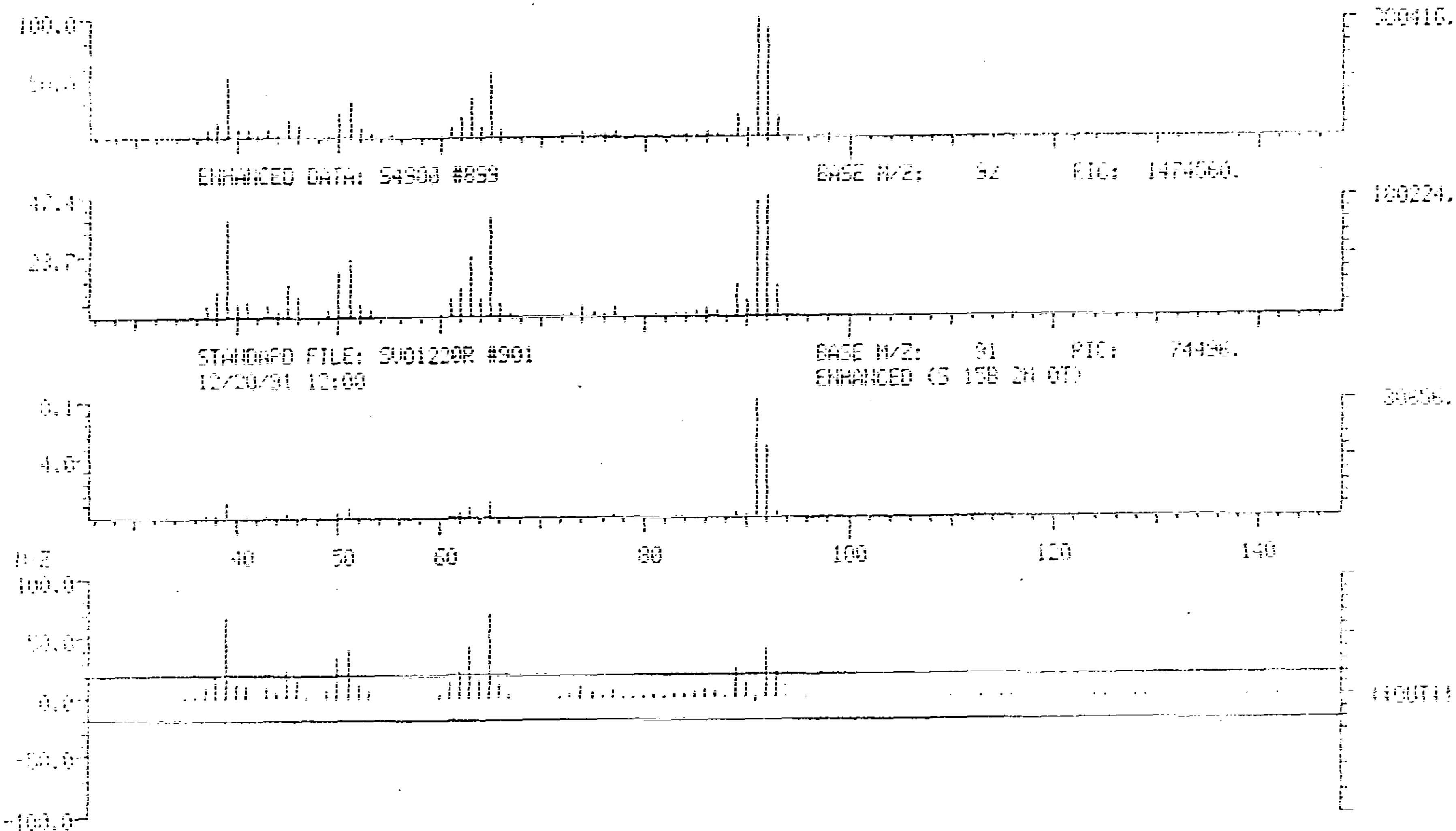
BASE M/Z: 91 RIC: 2285570.

ENHANCED DATA: 54900 #899

BASE M/Z: 92 RIC: 1474560.

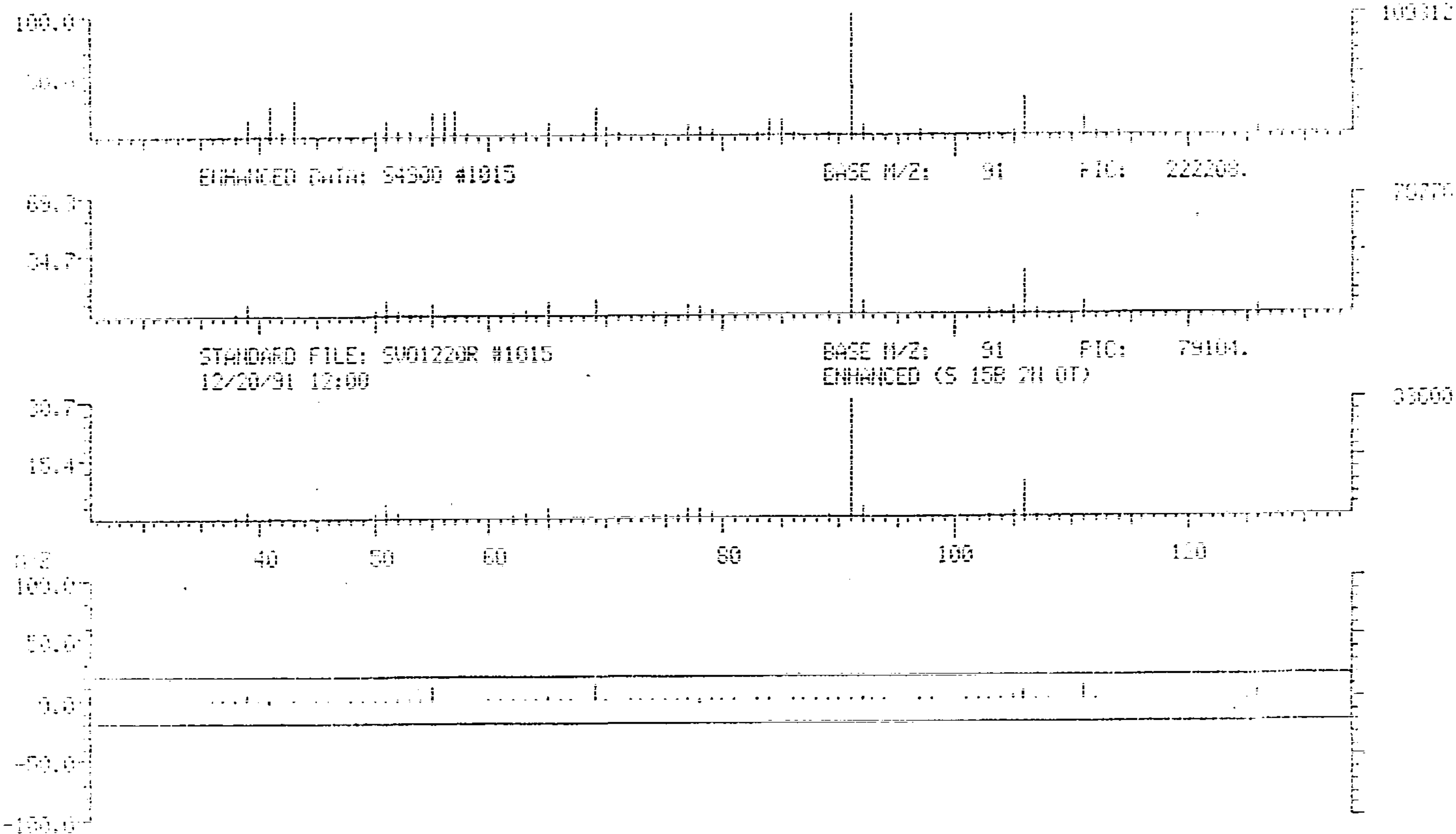
STANDARD FILE: SU01220R #901
12/20/91 12:00

BASE M/Z: 91 RIC: 74496.
ENHANCED (S 15B 2N 0T)



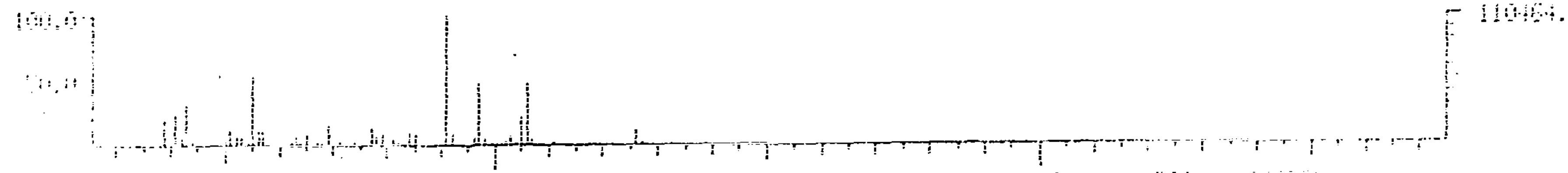
DATA FILE: 54900 #1015 STANDARD FILE: SV01220R #1015
TARGET COMPOUND COMPARISON CALI: 54900 #3
COMPOUND: C240 ETHYL BENZENE *

RAW DATA: 54900 #1015 BASE M/Z: 91 RIC: 510464.
12/20/91 15:07

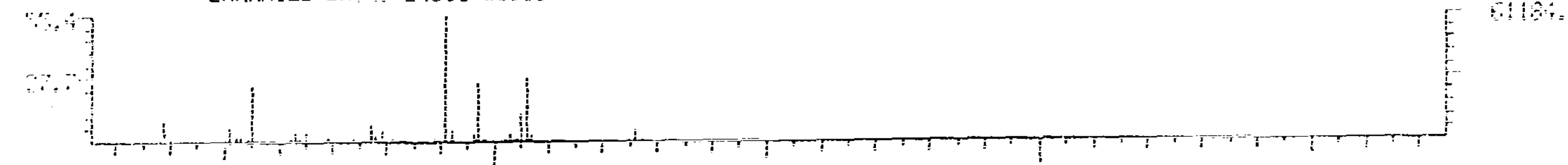


DATA FILE: 54900 #1156 STANDARD FILE: SV01220R #1156
TARGET COMPOUND COMPARISON CALI: 54900 #3
COMPOUND: C250 M-XYLENE

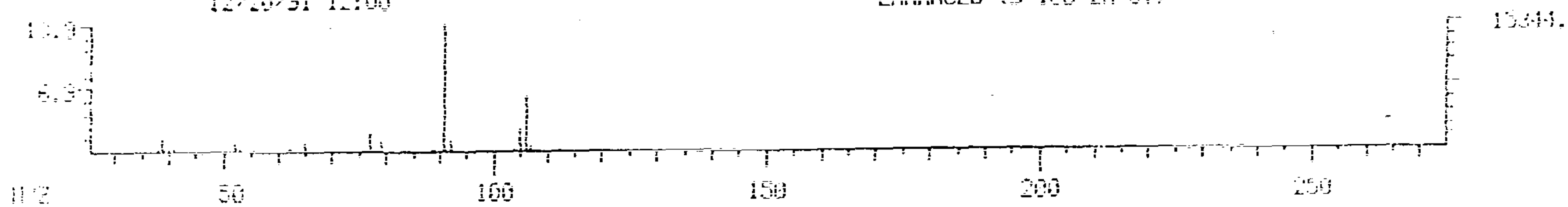
RAW DATA: 54900 #1156 BASE M/Z: 91 RIC: 645120.
12/20/91 15:07

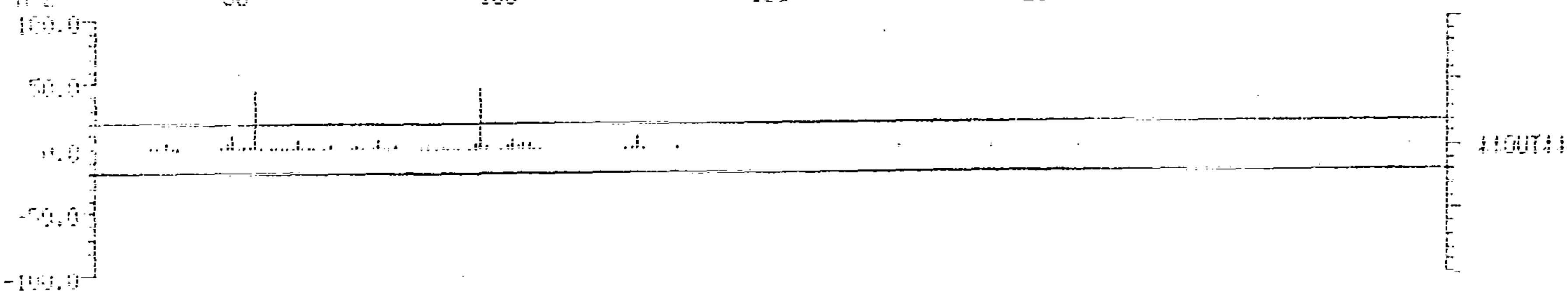


ENHANCED DATA: 54900 #1156 BASE M/Z: 91 RIC: 248832.



STANDARD FILE: SV01220R #1156 BASE M/Z: 91 RIC: 36608.
12/20/91 12:00 ENHANCED (S 15B 2N 0T)



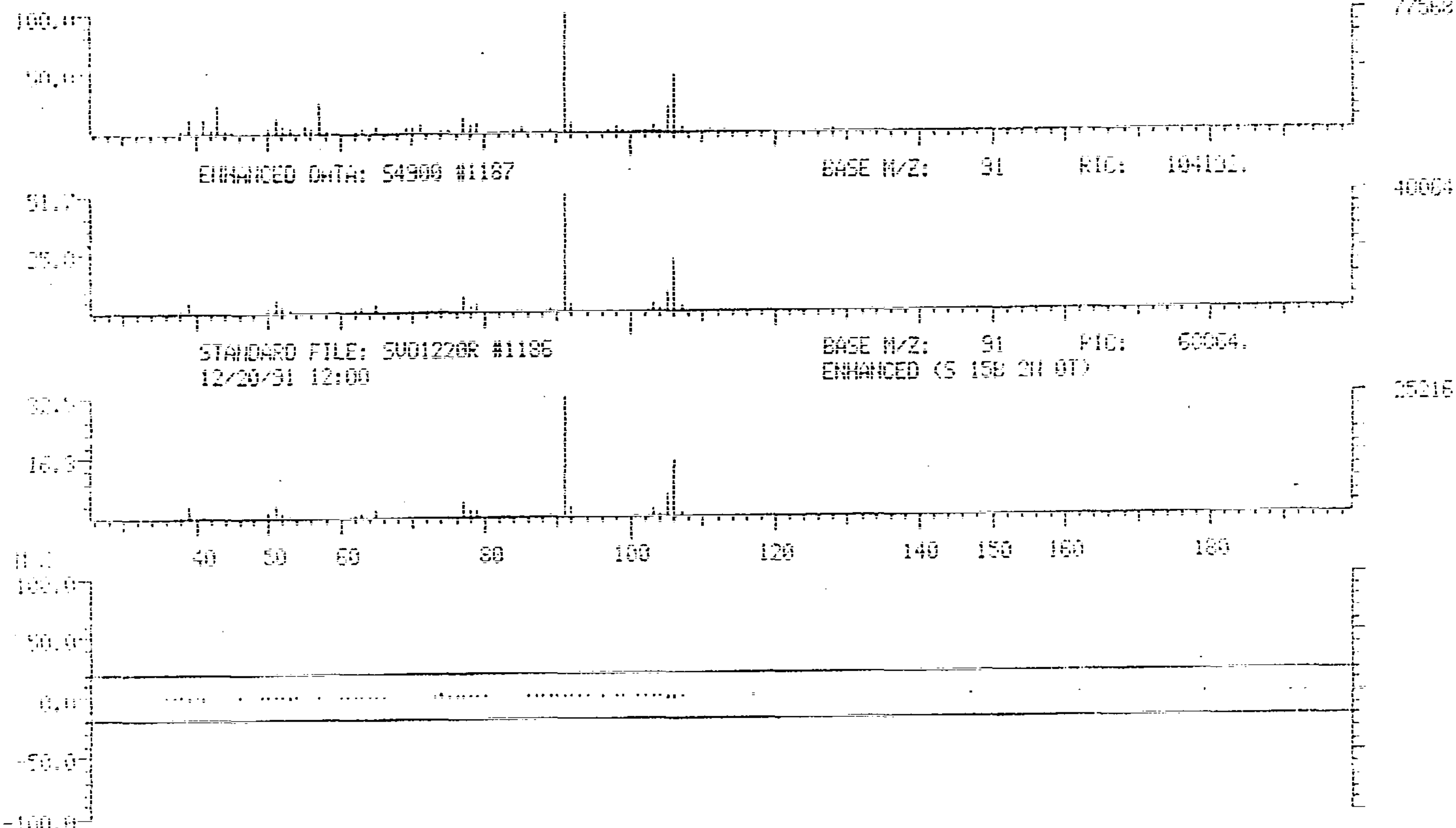


DATA FILE: S4900 #1187
TARGET COMPOUND COMPARISON
COMPOUND: C250 O&P XYLENE

STANDARD FILE: SV01220R #1186
CALI: S4900 #3

RAW DATA: S4900 #1187
12/20/91 15:07

BASE M/Z: 91 RIC: 317952.



Quantitation Report   File S4702

Data: S4902.TI
12/00/91 15:36:00   #04 02
Sample: S360-2
Conds : GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91
Formula: 100UL OF200X/5ML   Instrument: FINN   Weight   0.000
Submitted by: WESTON   Analyst: CC   Acct. No. 8360

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)
Resp. Fac. from Library Entry

No	Name
1	C101 BROMOCHLOROMETHANE **INT. STD. **
2	C110 1,4-DIFLUOROBENZENE **INT. STD. **
3	C120 CHLOROBENZENE-D5 **INT. STD. **
4	CS15 1,2-DICHLOROETHANE-D4 **S. STD. **
5	CS05 TOLUENE-D8 **S. STD. **
6	CS10 4-BROMOFLUOROBENZENE **S. STD. **
7	C010 CHLOROMETHANE **
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE *
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C251 ACROLIN
13	C035 ACETONE
14	C252 ACRYLONITRILE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C055 TRANS-1,2-DICHLOROETHENE
19	C000 TRICHLOROFLUOROMETHANE
20	C060 CHLOROFORM *
21	C065 1,2-DICHLOROETHANE
22	C110 2-BUTANONE
[illegible]	[illegible]
24	C120 CARBON TETRACHLORIDE
25	C125 VINYL ACETATE
26	C130 BROMO DICHLOROMETHANE
27	C140 1,2-DICHLOROPROPANE *
28	C145 TRANS-1,3 DICHLOROPROPENE
29	C150 TRICHLOROETHENE
30	C155 DIBROMOCHLOROMETHANE
31	C160 1,1,2-TRICHLOROETHANE
32	C165 BENZENE
33	C143 CIS-1,3-DICHLOROPROPENE
34	C175 2-CHLOROETHYL VINYL ETHER
35	C180 BROMOFORM **
36	C220 TETRACHLOROETHENE
37	C210 2-HEXANONE
38	C205 4-METHYL 2-PENTANONE
39	C225 1,1,2,2-TETRACHLOROETHANE **
40	C230 TOLUENE *
41	C235 CHLOROBENZENE **
42	C240 ETHYL BENZENE *
[illegible]	C245 STYRENE
[illegible]	C250 XYLENE
	[illegible]
	[illegible]

AR100705

00073

[illegible] O&P XYLENE

#	Ion	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	49	337	8:25	1	1.000	A BB	103564.	50.000 NG	2.03
2	114	749	18:43	2	1.000	A BB	369524.	50.000 NG	2.03
3	117	938	23:29	3	1.000	A BB	353425.	50.000 NG	2.03
4	65	444	11:07	1	1.318	A BB	102508	59.192 NG	2.40
5	98	893	22:21	3	0.952	A BB	396724.	52.466 NG	2.13
6	95	1094	27:23	3	1.166	A BB	275531.	49.176 NG	1.99
7	NOT FOUND								
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	49	216	5:24	1	0.641	A BB	12214	8.812 NG ✓	0.36
12	NOT FOUND								
13	43	258	6:27	1	0.766	A BB	16186	57.486 NG ✓	2.33
14	NOT FOUND								
[illegible]	NOT FOUND								
[illegible]	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	NOT FOUND								
36	166	846	21:11	3	0.902	A BB	1302.	~~[illegible] NG~~	0.01
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	91	901	22:33	3	0.961	A BB	453233.	55.470 NG ✓	2.25
41	NOT FOUND								
42	106	1014	25:23	3	1.081	A BB	2141500.	705.250 NG ✓	28.59
43	NOT FOUND								
44	106	1154	28:53	3	1.230	A BB	3531540.	997.302 NG ✓	40.44
45	NOT FOUND								
46	NOT FOUND								
47	NOT FOUND								
48	106	1185	29:40	3	1.263	A BB	2277840.	331.055 NG ✓	13.42

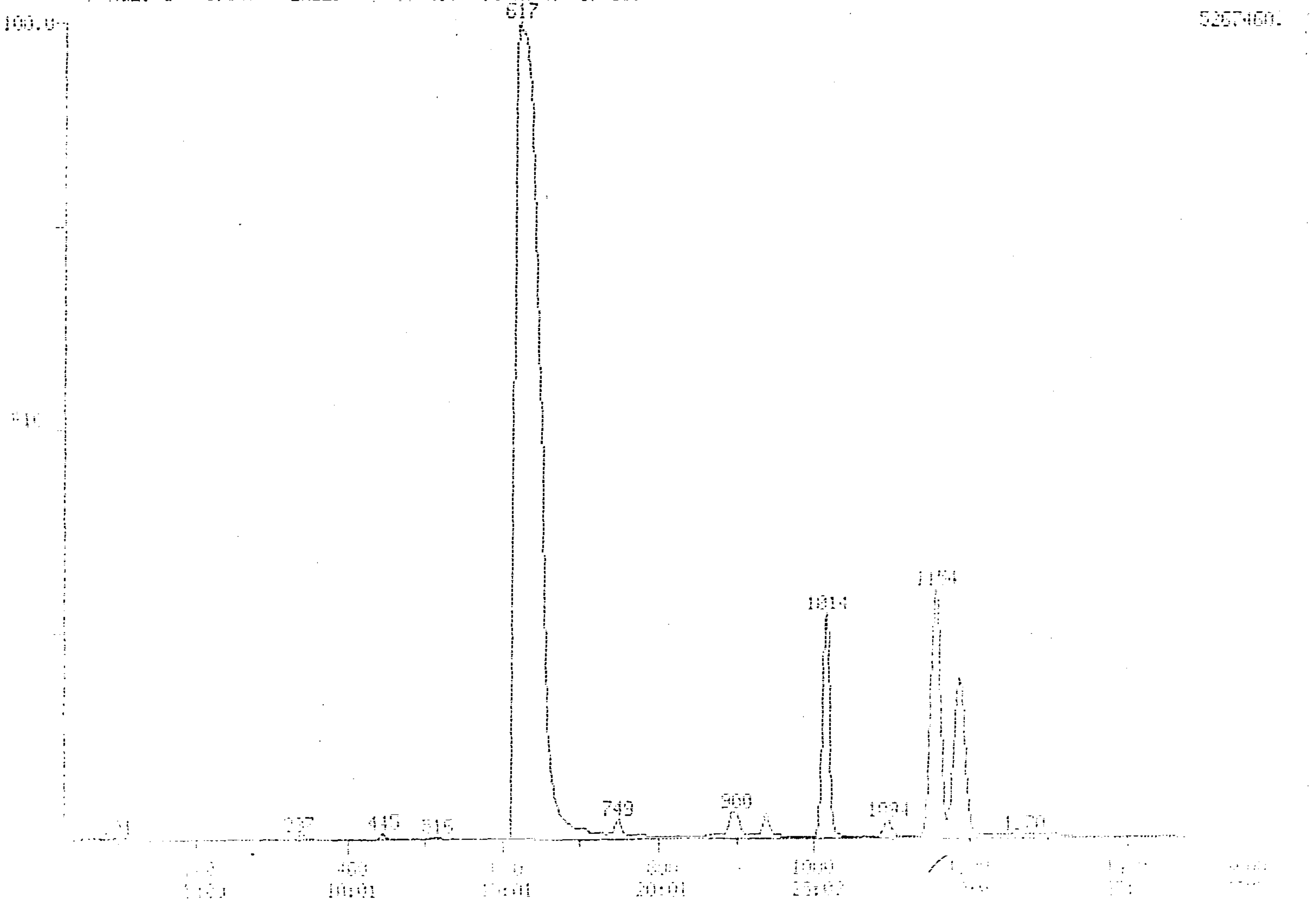
X 10,000

RIC
12/20/91 16:36:00
SAMPLE: 8360-2 ~~4~~ ~~dil.~~

DATA: 54902 #48
CALI: 54902 #3

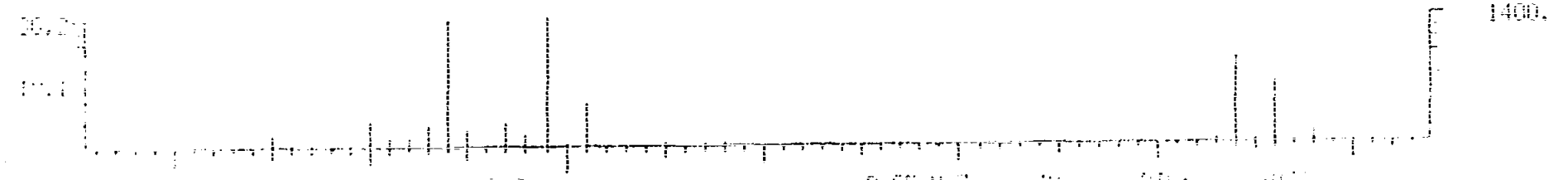
SCANS 20 TO 1474

CONDS.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91
RANGE: G 1,1474 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

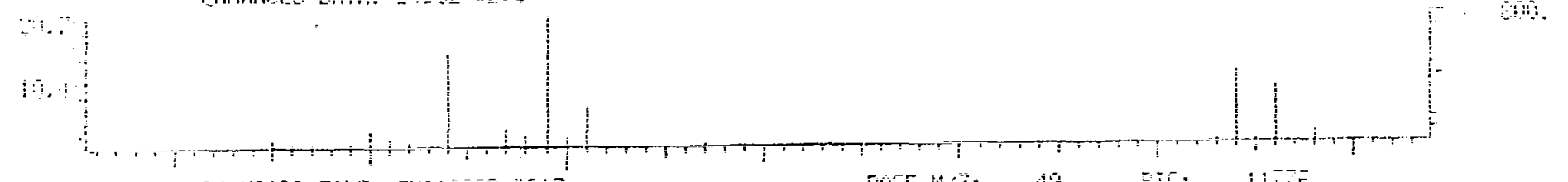


DATA FILE: 54902 #216 STANDARD FILE: SV01220R #217
TARGET COMPOUND COMPARISON CAL: 54902 #3
COMPOUND: 0030 METHYLENE CHLORIDE

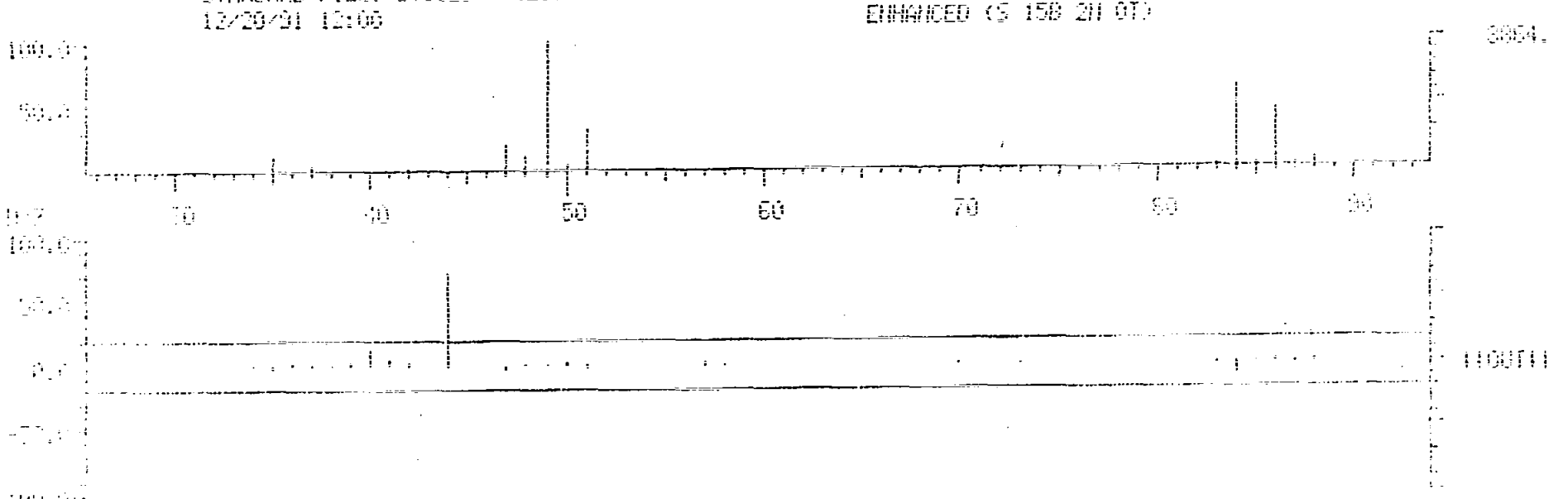
RAW DATA: 54902 #216 BASE M/Z: 49 RIC: 6408.
12/20/91 15:36



ENHANCED DATA: 54902 #216 BASE M/Z: 49 RIC: 6408.

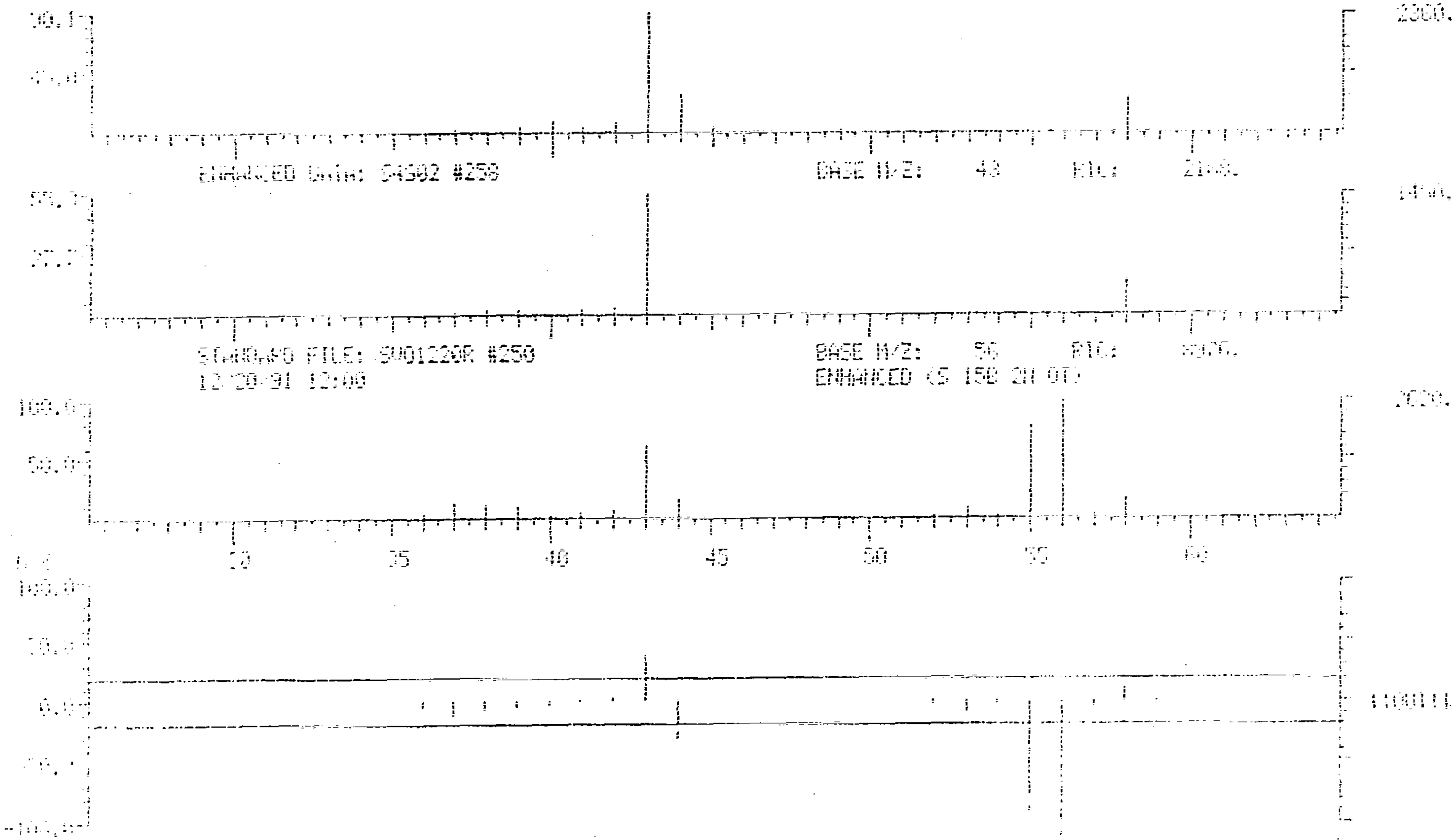


STANDARD FILE: SV01220R #217 BASE M/Z: 49 RIC: 11775.
12/20/91 12:06 ENHANCED (S 150 2H 0T)



DATA FILE: S4902 #258 STANDARD FILE: SU01220R #250
TARGET COMPOUND COMPARISON CALI: S4902 #3
COMPOUND: C035 ACETONE

RAW DATA: S4902 #258 BASE M/Z: 43 RIC: 4712.
12/20/91 16:36

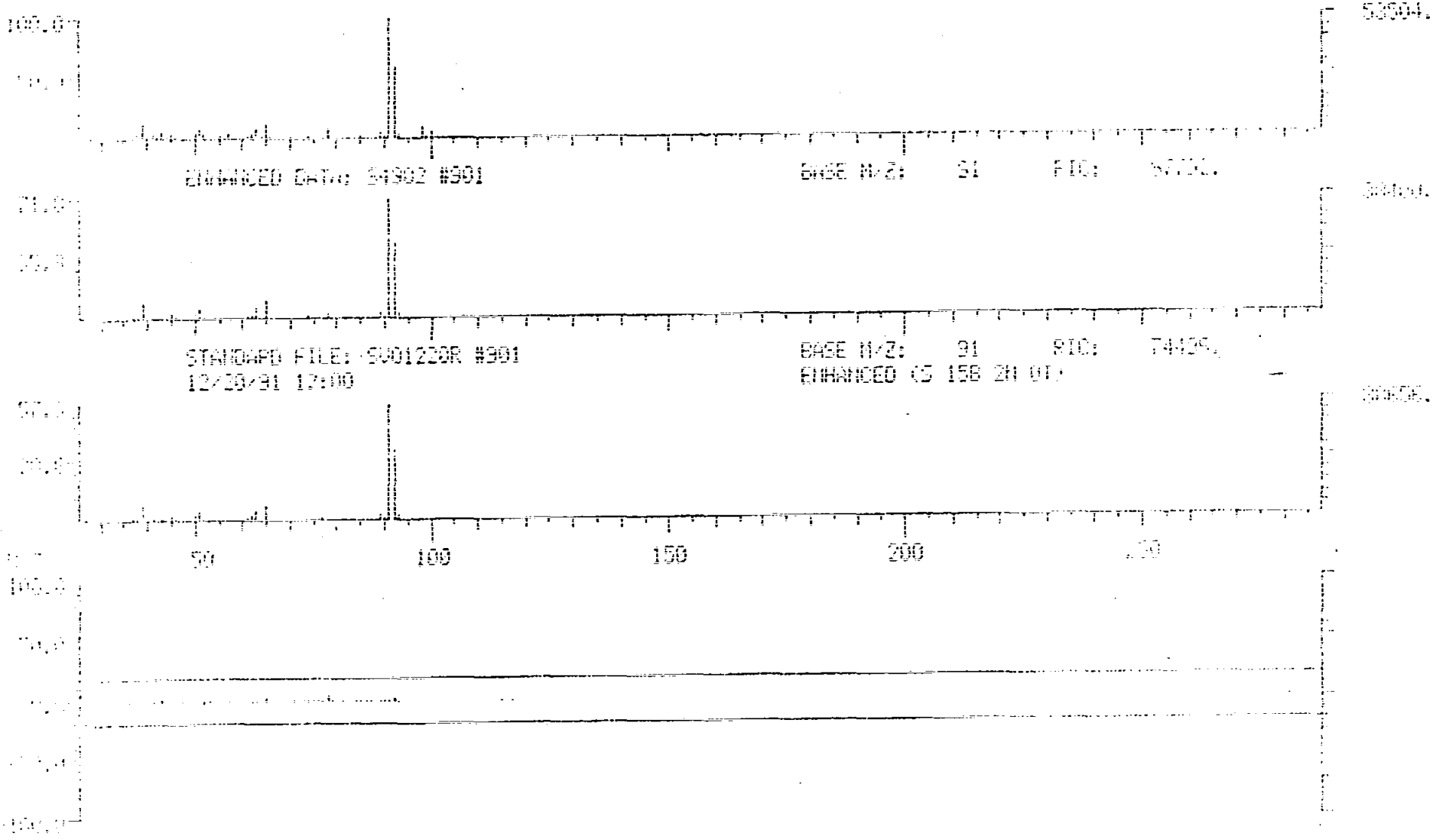


DATA FILE: 54902 #301
TARGET COMPOUND COMPARISON
COMPOUND: C230 TOLUENE *

STANDARD FILE: SV01220R #301
CAL1: 54902 #3

R&W DATA: 54902 #301
12/20/91 16:35

BASE M/Z: 91 RIC: 172032.

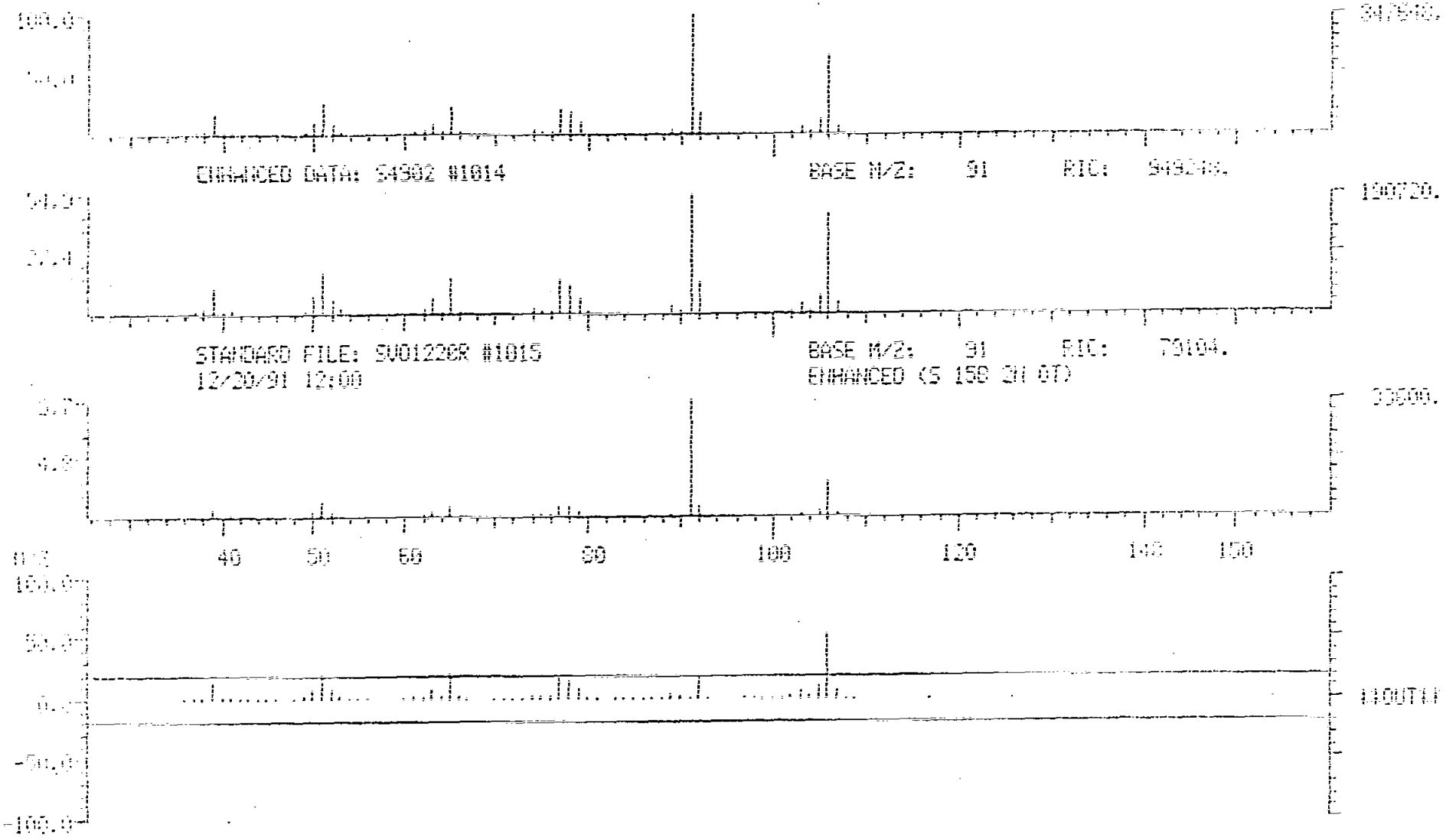


DATA FILE: S4902 #1014
TARGET COMPOUND COMPARISON
COMPOUND: C240 ETHYL BENZENE *

STANDARD FILE: SV01220R #1015
CALI: S4902 #3

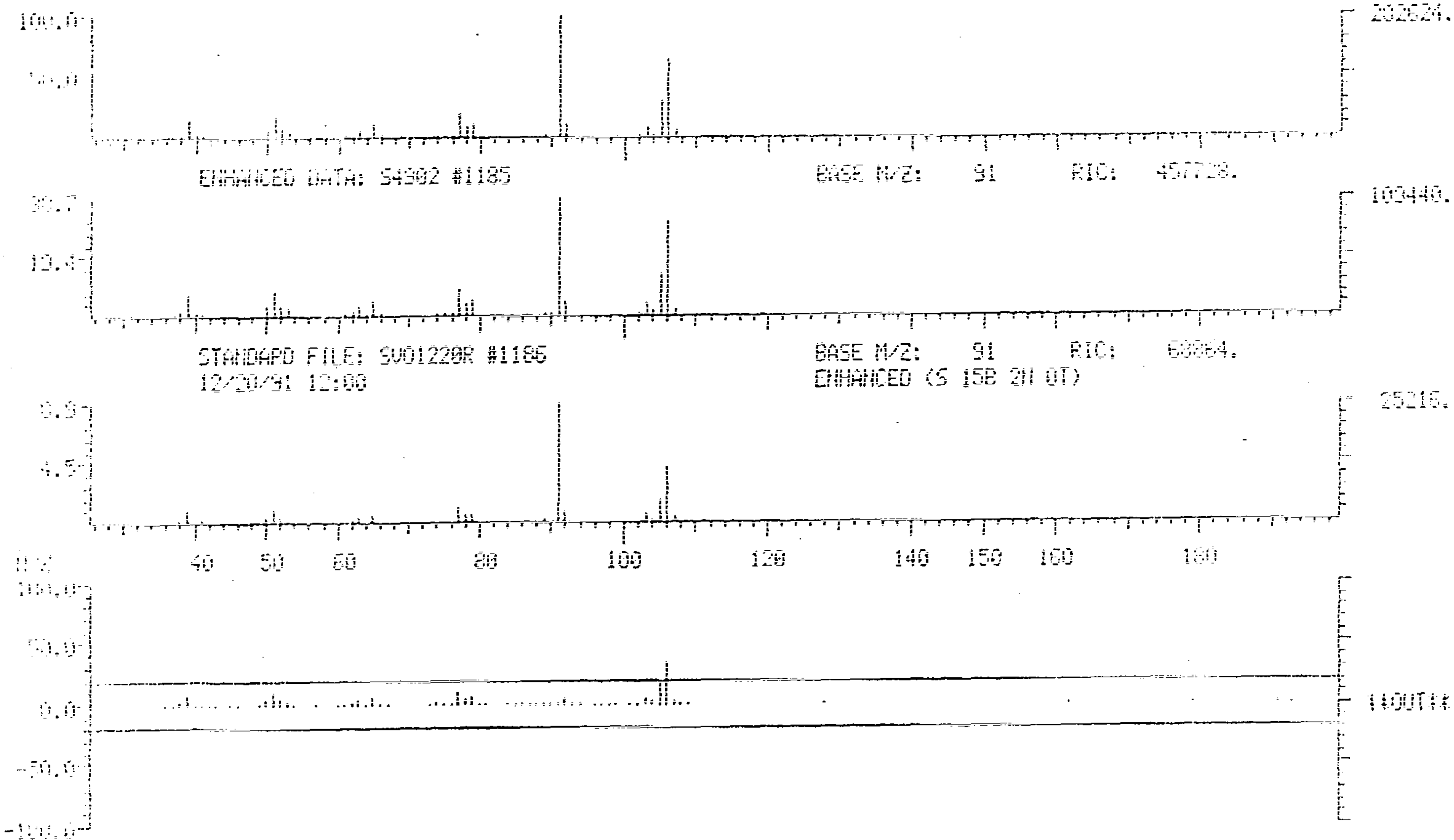
RAW DATA: S4902 #1014
12/20/91 16:36

BASE M/Z: 91 RIC: 1425410.



DATA FILE: S4902 #1185 STANDARD FILE: SV01220R #1186
TARGET COMPOUND COMPARISON CALI: S4902 #3
COMPOUND: C250 O&P XYLENE

RAW DATA: S4902 #1185 BASE M/Z: 91 RIC: 1016830.
12/20/91 16:36



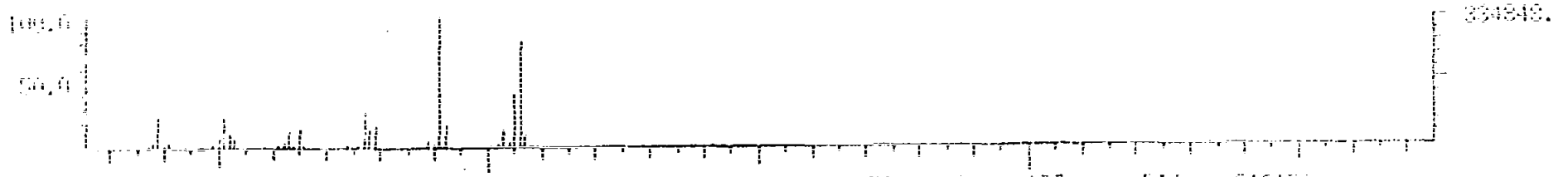
000

DATA FILE: S4902 #1154
TARGET COMPOUND COMPARISON
COMPOUND: 0250 M-XYLENE

STANDARD FILE: SV01220R #1156
CALI: S4902 #3

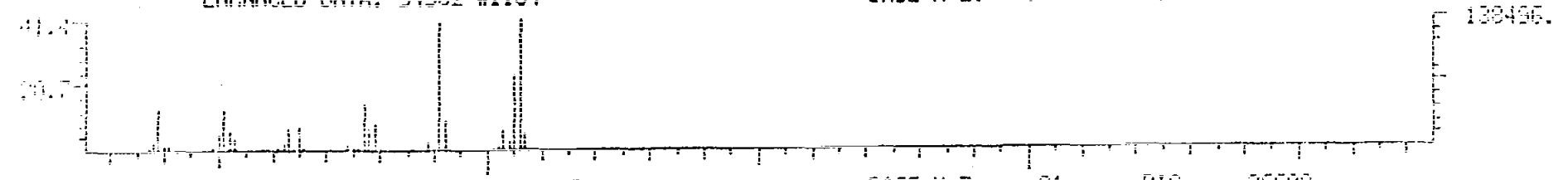
RAW DATA: S4902 #1154
12/20/91 10:36

BASE M/Z: 91 RIC: 1580250.



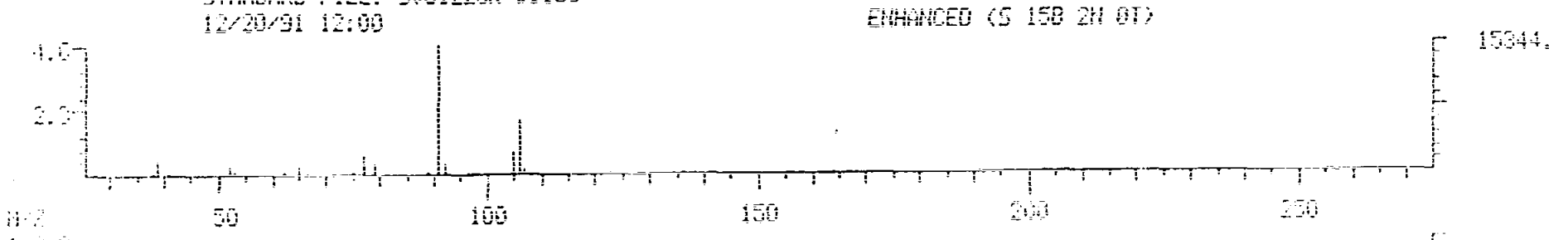
ENHANCED DATA: S4902 #1154

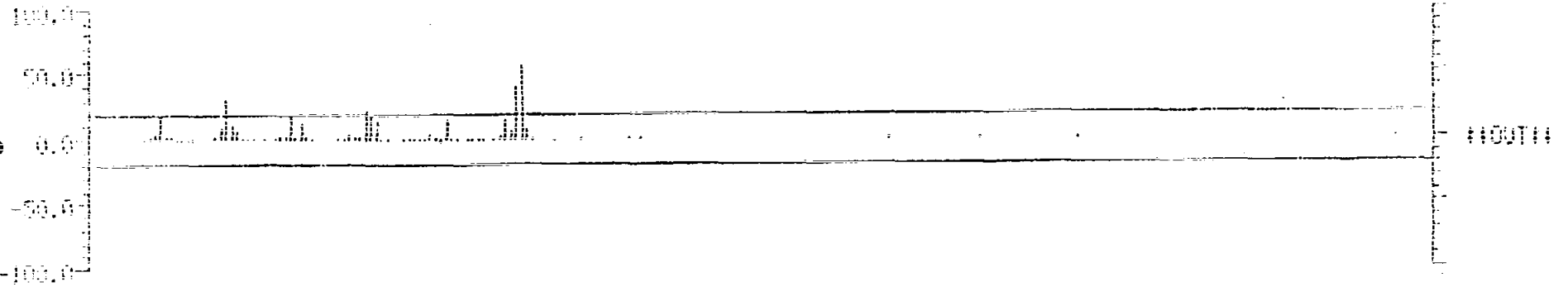
BASE M/Z: 106 RIC: 618176.



STANDARD FILE: SV01220R #1156
12/20/91 12:00

BASE M/Z: 91 RIC: 36608.
ENHANCED (S 150 2W 0T)





AR100713

Quantitation Report   File: 8A905

Data: 8A905.TI
12/07/91 19:02:00 #05 CC
Sample: 8560
Conds.: GLASS PACKED COLUMN/METHOD 624/I.C [illegible]
Formula: 100UL OF 200X /5ML Instrument: FIN   Weight: 0.000
Submitted by: WESTON   Analyst: CC   [illegible]

AMOUNT=AREA * REF AMT/(REF AREA * RESP FACT
Resp. Fac. From Library Entry

No. Name
1 C101 BROMOCHLOROMETHANE **INT. STD.**
2 C110 1,4-DIFLUOROBENZENE **INT. STD.**
3 C120 CHLOROBENZENE-D5 **INT. STD.**
4 C515 1,2-DICHLOROETHANE-D4 **S. STD.**
5 C805 TOLUENE-D8 **S. STD.**
6 C810 4-BROMOFLUOROBENZENE **S. STD.**
7 C010 CHLOROMETHANE **
8 C015 BROMOMETHANE
9 C020 VINYL CHLORIDE *
10 C025 CHLOROETHANE
11 C030 METHYLENE CHLORIDE
12 C031 ACROLEIN
13 C035 ACETONE
[illegible]
15 C040 CARBON DISULFIDE
16 C045 1,1-DICHLOROETHENE *
17 C050 1,1-DICHLOROETHANE **
18 C055 TRANS-1,2-DICHLOROETHENE
19 C060 TRICHLOROFLUOROMETHANE
20 C060 CHLOROFORM *
21 C065 1,2-DICHLOROETHANE
[illegible]
24 C120 CARBON TETRACHLORIDE
25 C125 VINYL ACETATE
26 C130 BROMODICHLOROMETHANE
27 C140 1,2-DICHLOROPROPANE *
28 C145 TRANS-1,3-DICHLOROPROPENE
29 C150 TRICHLOROETHENE
30 C155 DIBROMOCHLOROMETHANE
31 C160 1,1,2-TRICHLOROETHANE
32 C165 BENZENE
33 C170 CIS-1,3-DICHLOROPROPENE
34 C175 2-CHLOROETHYL VINYL ETHER
35 C180 BROMOFORM **
36 C220 TETRACHLOROETHENE
37 C210 2-HEXANONE
38 C205 4-METHYL-2-PENTANONE
39 C225 1,1,2,2-TETRACHLOROETHANE **
40 C230 TOLUENE *
41 C235 CHLOROBENZENE **
42 C240 ETHYLBENZENE *
43 C245 STYRENE
[illegible]

AR100714

Name
1260 [illegible] XYLENE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	49	337	8:26	1	1.000	A BB	114353.	50.000	NG	1.81
2	114	749	18:45	2	1.000	A BB	361966.	50.000	NG	1.81
3	117	939	23:30	3	1.000	A BB	288893.	50.000	NG	1.81
4	65	447	11:11	1	1.326	A BB	101240.	57.127	NG	2.07
5	98	891	22:18	3	0.949	A BB	323215.	52.[illegible]	NG	1.91
6	NOT FOUND	1094 matrix Interference — cannot integrate								
7	[illegible]	51	1:17	1	0.151	A BB	2815	1.2[illegible]	NG	0.04
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	49	225	5:38	1	0.668	A VB	4931.	3.222	NG	0.12
12	NOT FOUND									
13	42	261	6:32	1	0.774	A BB	10234.	32.910	NG	1.19
14	NOT FOUND									
[illegible]	[illegible]									
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	NOT FOUND									
20	NOT FOUND									
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	NOT FOUND									
25	NOT FOUND									
26	NOT FOUND									
27	NOT FOUND									
28	NOT FOUND									
29	95	627	15:42	2	0.837	A BB	46176	17.[illegible]	NG	0.62
30	NOT FOUND									
31	NOT FOUND									
32	78	649	16:15	2	0.866	A BB	109594.	51.2[illegible]	NG	0.77
33	NOT FOUND									
34	NOT FOUND									
35	NOT FOUND									
36	168	[illegible]43	21:06	3	0.898	A BB	7703460	2210.[illegible]	NG	25.85
37	NOT FOUND									
38	NOT FOUND									
39	NOT FOUND									
40	91	891	22:20	3	0.957	A BB	33748.	~~[illegible]~~ FH		0.18
41	NOT FOUND									
42	106	1015	25:24	3	1.081	A BB	8510.	~~[illegible]~~	NG FH	0.12
43	NOT FOUND									
44	NOT FOUND									
45	NOT FOUND									
46	NOT FOUND									
47	NOT FOUND									
48	106	1103	29:37	3	1.260	A BB	258582.	45.[illegible]	NG	1.67

x10,0K

RIC

12/20/91 19:02:00

SAMPLE: 8360-3 5cc.

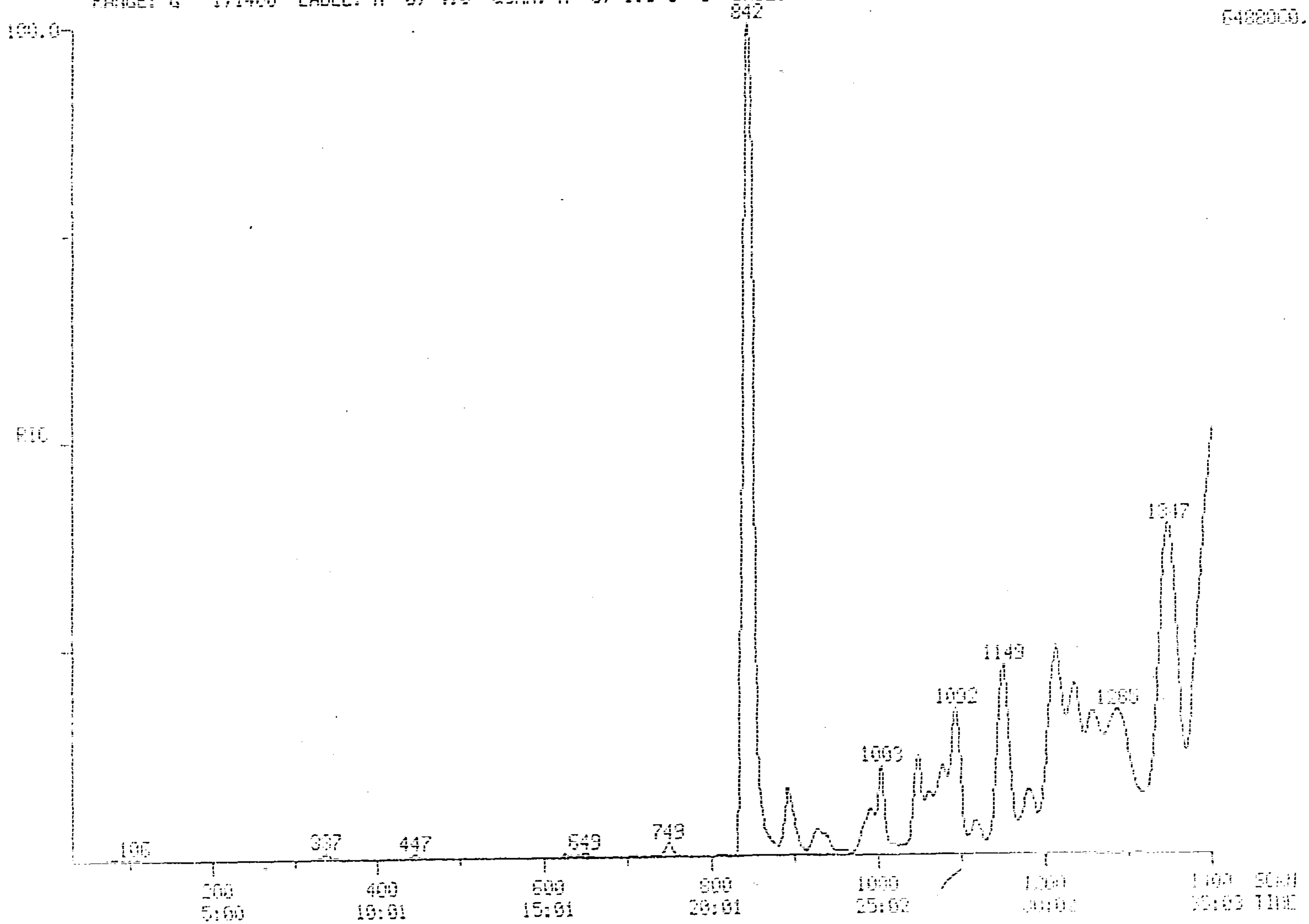
CONDS.: GLASS PACKED COLUMN/METHOD 624/I.C 10/18/91

RANGE: G 1,1400 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 54905 #48

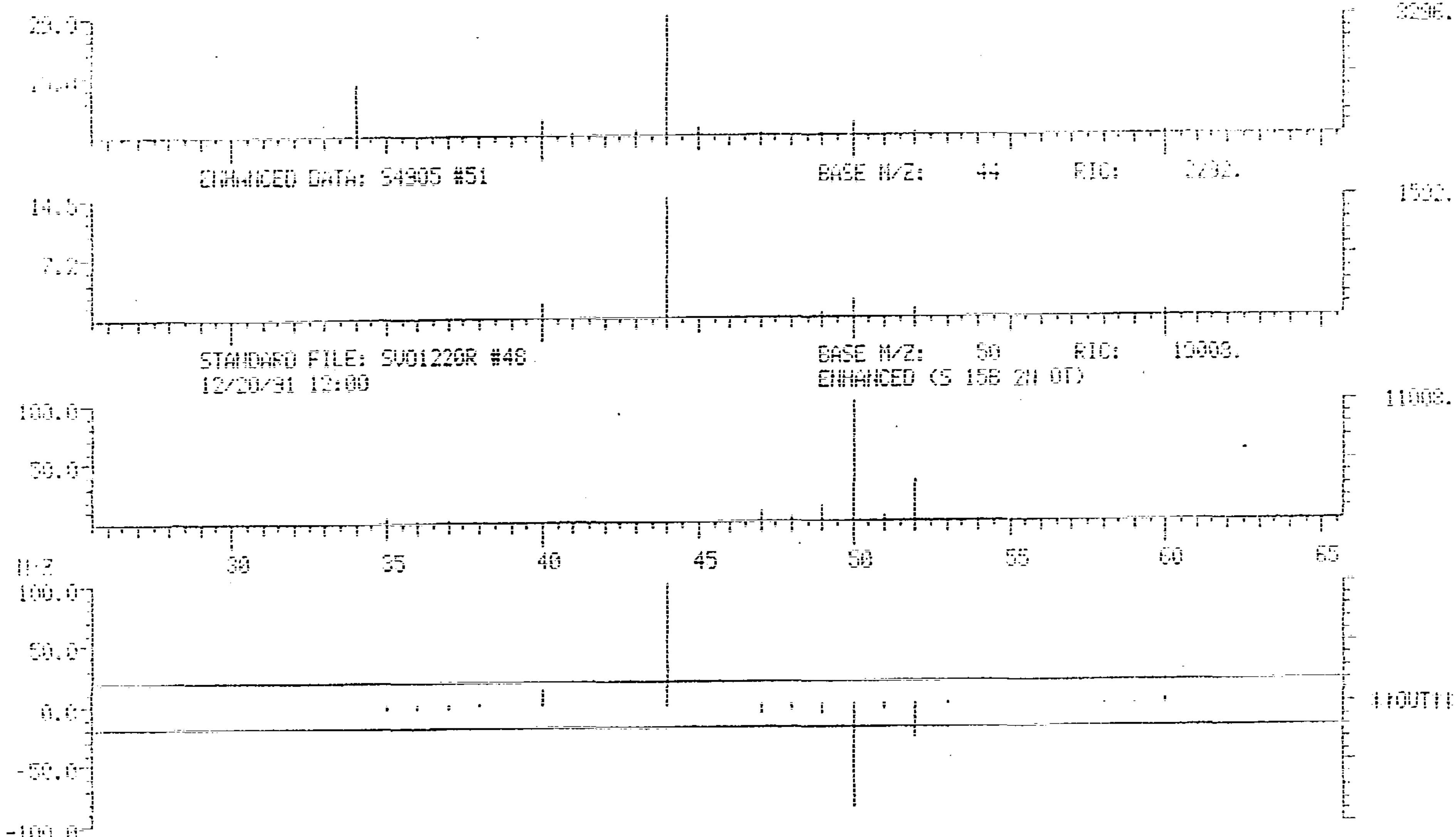
CALI: 54905 #3

SCANS 30 TO 1400



DATA FILE: 54905 #51 STANDARD FILE: SVO1220R #48
TARGET COMPOUND COMPARISON CALI: 54905 #3
COMPOUND: C010 CHLOROMETHANE **

RAW DATA: 54905 #51 BASE M/Z: 44 RIC: 7008.
12/20/91 19:02

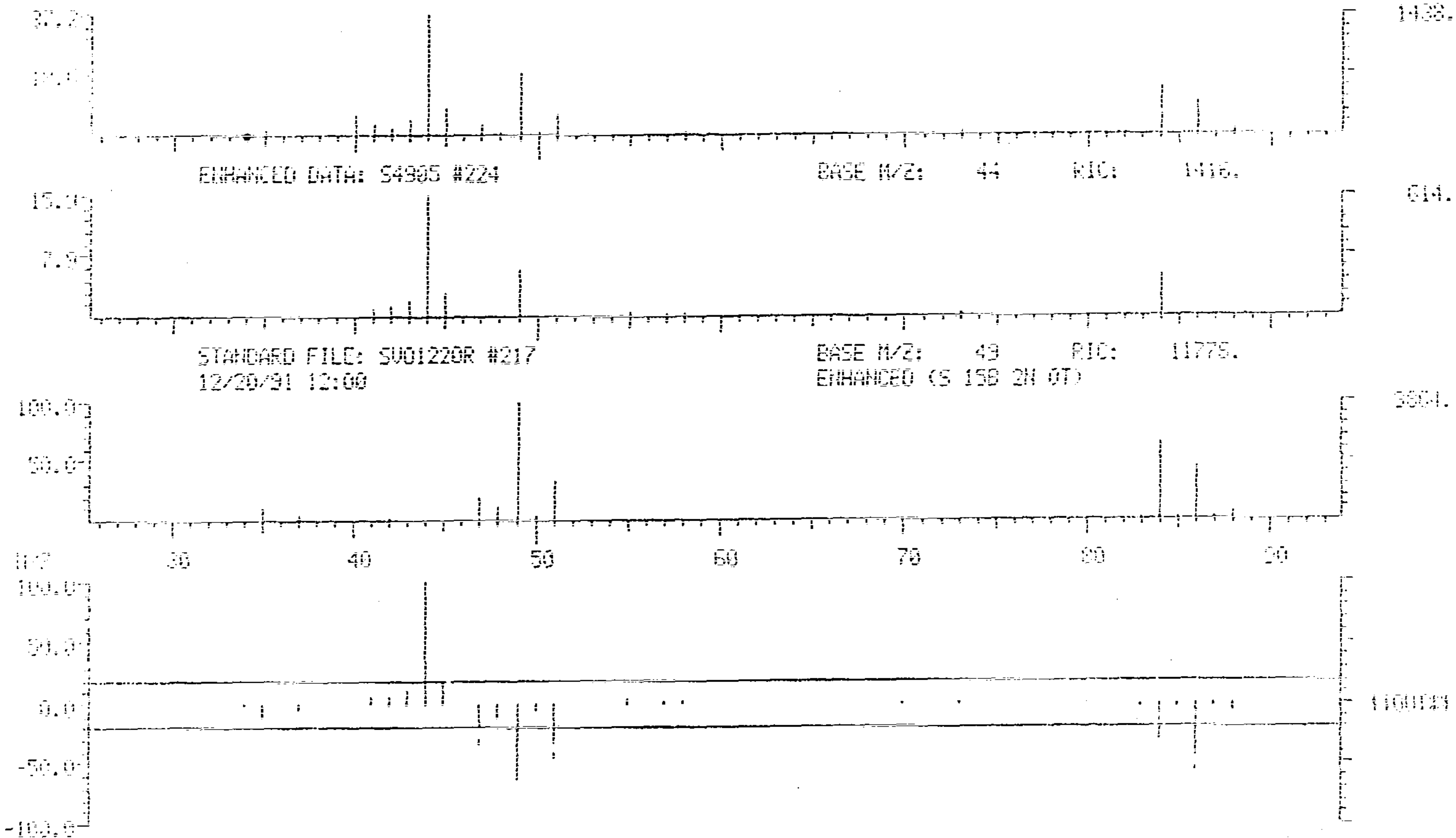


AR100717

00085

DATA FILE: 54905 #224 STANDARD FILE: SV01220R #217
TARGET COMPOUND COMPARISON CALI: 54905 #3
COMPOUND: C030 METHYLENE CHLORIDE

RAW DATA: 54905 #224 BASE M/Z: 44 RIC: 4056.
12/20/91 19:02



DATA FILE: 54905 #261
TARGET COMPOUND COMPARISON
COMPOUND: C035 ACETONE

STANDARD FILE: SV01220R #250
CALI: 54905 #3

RAW DATA: 54905 #261
12/20/91 19:02

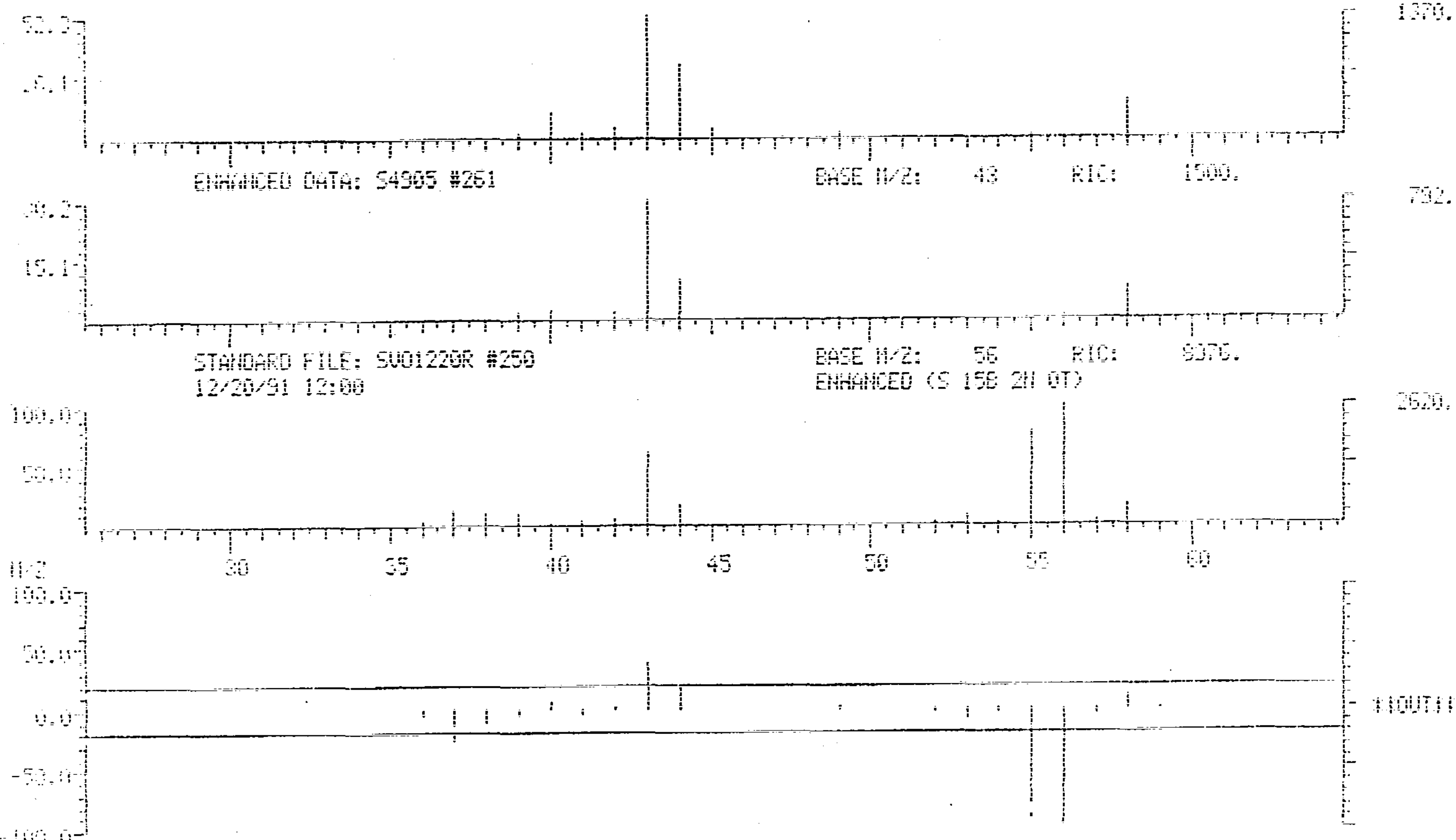
BASE M/Z: 43 RIC: 3432.

ENHANCED DATA: 54905 #261

BASE M/Z: 43 RIC: 1500.

STANDARD FILE: SV01220R #250
12/20/91 12:00

BASE M/Z: 56 RIC: 9376.
ENHANCED (S 15B 2N 0T)



AR100719

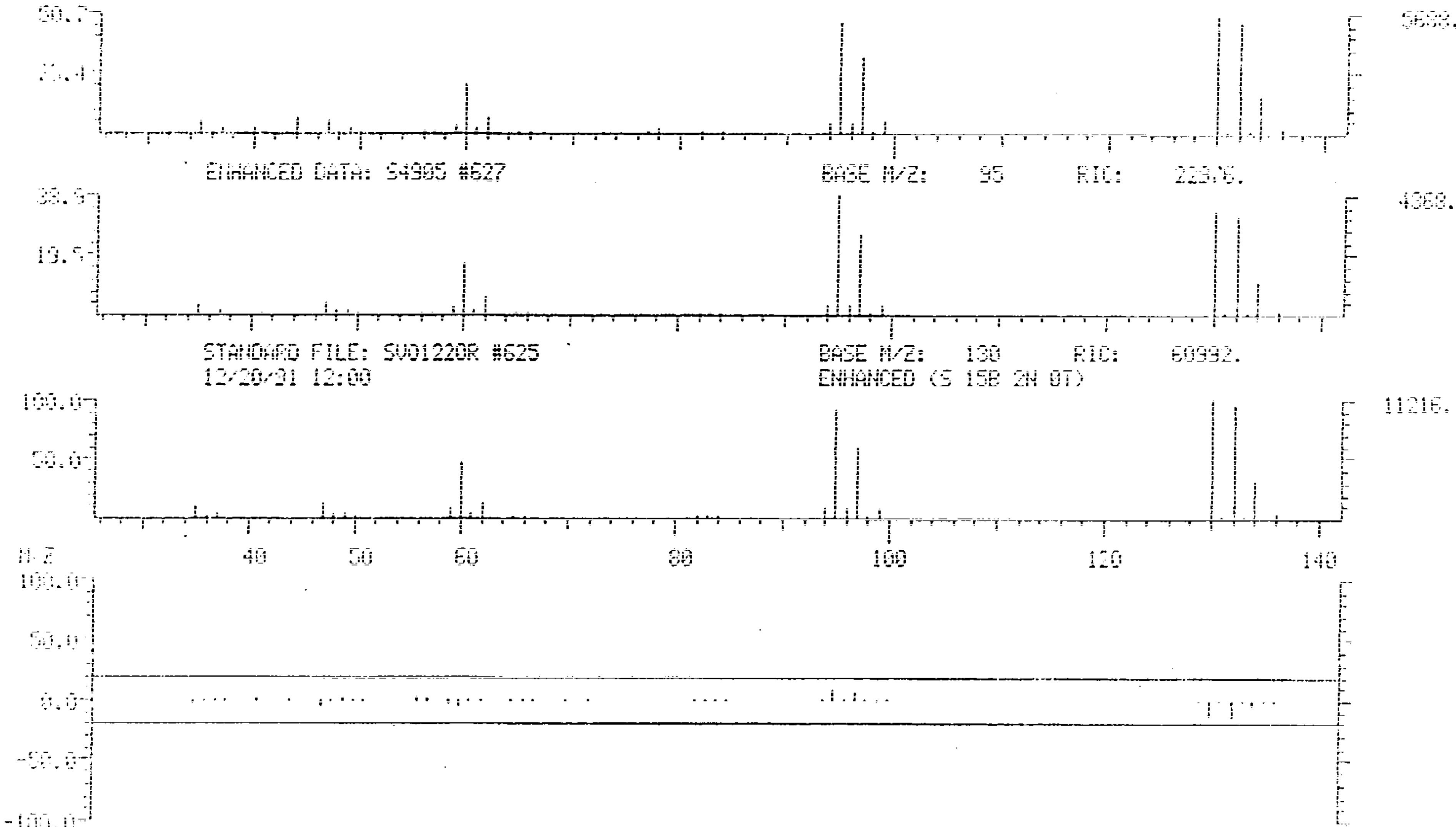
00087

DATA FILE: 54905 #627
TARGET COMPOUND COMPARISON
COMPOUND: C150 TRICHLOROETHENE

STANDARD FILE: SV01220R #625
CALI: 54905 #3

RAW DATA: 54905 #627
12/20/91 19:02

BASE M/Z: 130 RIC: 31904.



AR100720

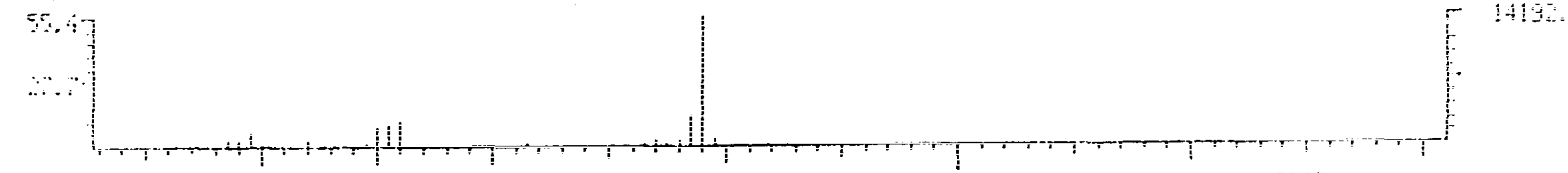
00083

DATA FILE: 54905 #649
TARGET COMPOUND COMPARISON
COMPOUND: C165 BENZENE

STANDARD FILE: SV01220R #648
CALI: 54905 #3

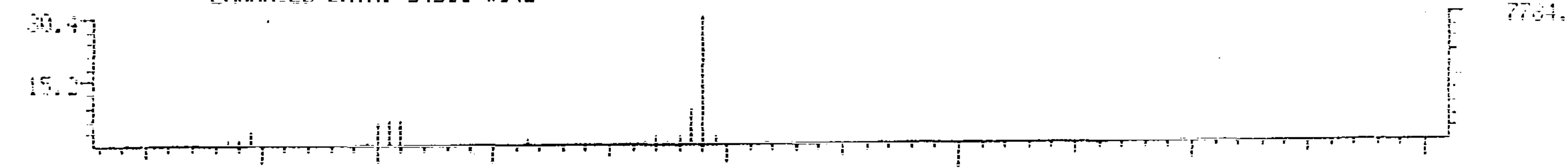
RAW DATA: 54905 #649
12/20/91 19:02

BASE M/Z: 78 RIC: 33472.



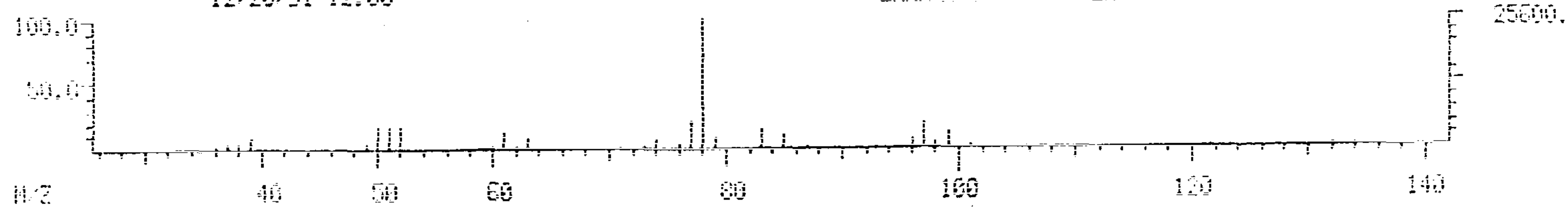
ENHANCED DATA: 54905 #649

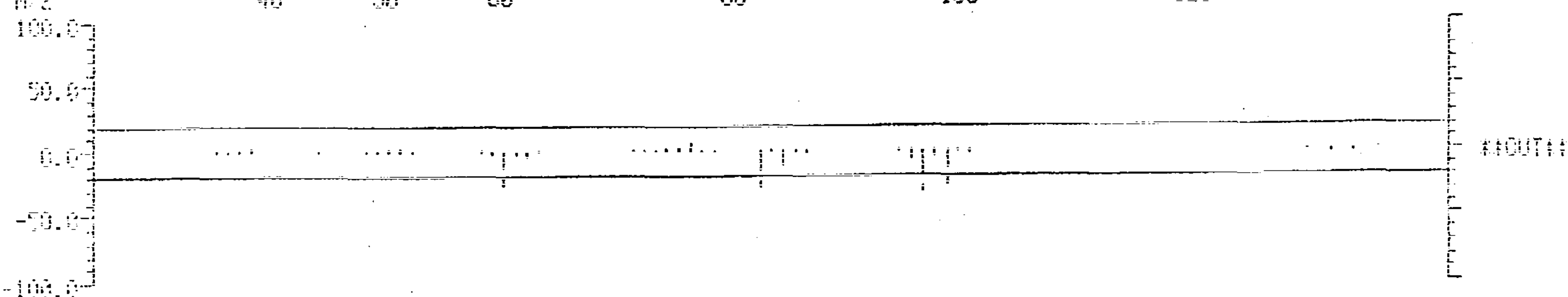
BASE M/Z: 78 RIC: 16363.



STANDARD FILE: SV01220R #648
12/20/91 12:00

BASE M/Z: 78 RIC: 82304.
ENHANCED (S 15B 2N 0T)

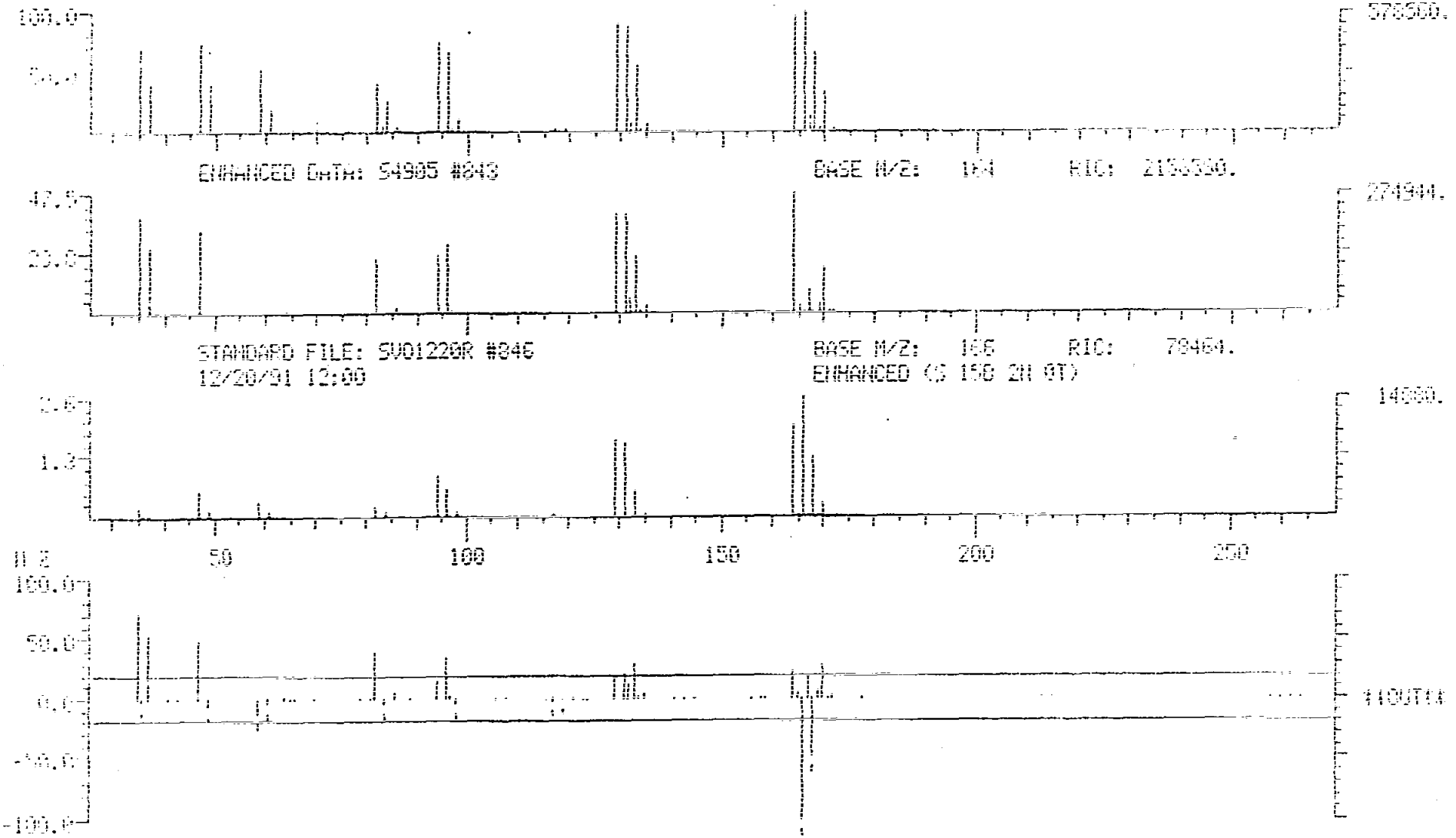




AR100721

DATA FILE: S4905 #843 STANDARD FILE: SV01220R #846
TARGET COMPOUND COMPARISON CALI: S4905 #3
COMPOUND: 0220 TETRACHLOROETHENE

RAW DATA: S4905 #843 BASE M/Z: 166 RIC: 6422530.
12/20/91 19:02

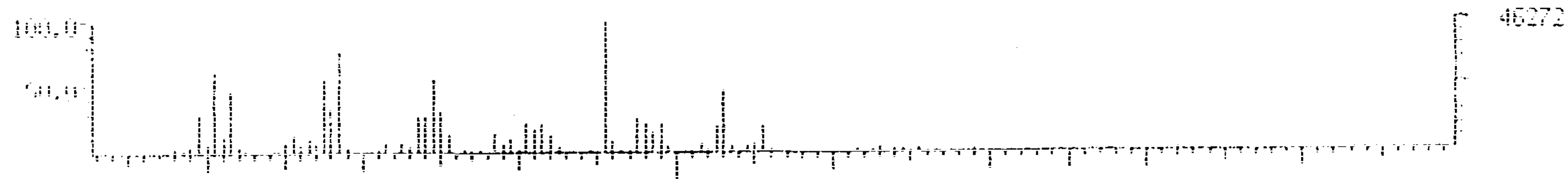


DATA FILE: 54905 #1183
TARGET COMPOUND COMPARISON
COMPOUND: C250 O&P XYLENE

STANDARD FILE: SV01220R #1186
CALI: 54905 #3

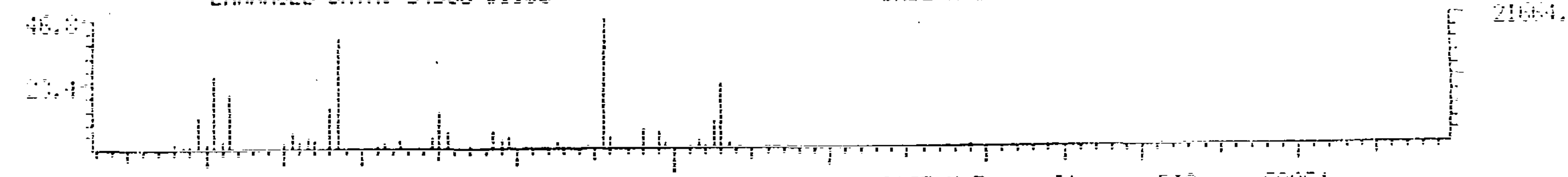
RAW DATA: 54905 #1183
12/20/91 19:02

BASE M/Z: 91 RIC: 474624.



ENHANCED DATA: 54905 #1183

BASE M/Z: 91 RIC: 135036.



STANDARD FILE: SV01220R #1186
12/20/91 12:00

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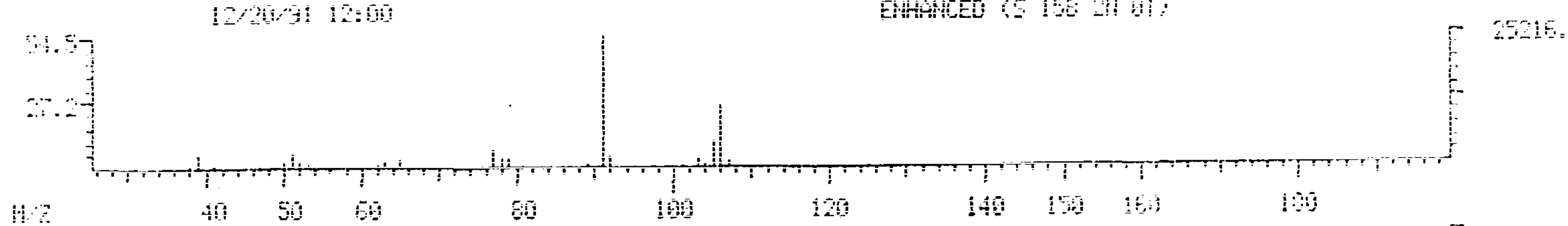
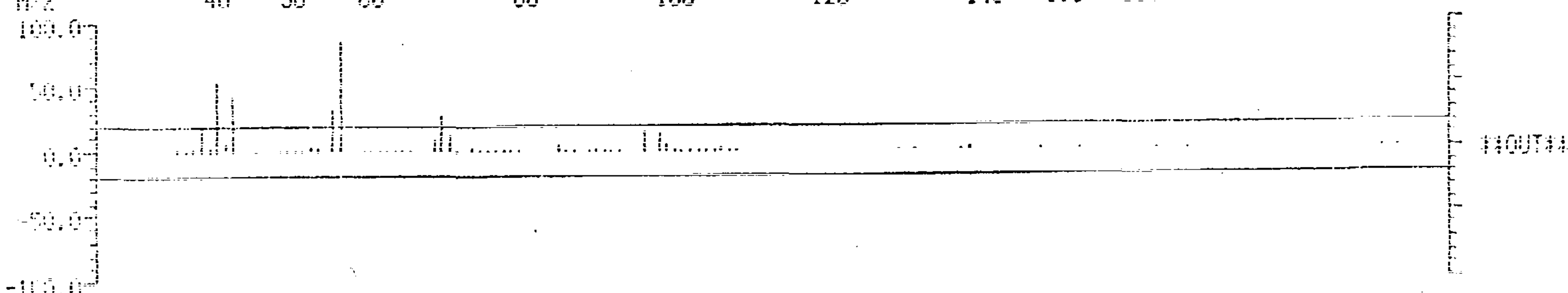
ENHANCED (S 15B 2N 0T)





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PRINCETON TESTING LABORATORY

Weston TAT
5 Underwood Court
Delran, New Jersey 08075

Job Number: 91-08360-002GMWH
Report Date: 12/16/91

BULK ASBESTOS ANALYSIS REPORT - METHOD: EPA-600/M4-82-020

SAMPLE IDENTIFICATION:	001 A07	
ANALYTICAL METHOD:	Polarized Light Microscopy With Dispersion Staining	
GROSS SAMPLE APPEARANCE:	Homogeneous Fibrous Gray	
SAMPLE TREATMENT:	Homogenized	
ASBESTOS FIBERS PRESENT?:	Yes	
ASBESTOS CONCENTRATION: AMOSITE CHRYSOTILE CROCIDOLITE OTHER TOTAL	 45% 0% 0% 0% 45%	
OTHER FIBROUS MATERIAL: FIBROUS GLASS CELLULOSE OTHER		
NONFIBROUS MATERIAL PRESENT:	Silicates Binders Others	
ANALYST:	Susan Sharples	

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