32501.032
03.02.32.0001
N00204.AR.000238
NAS PENSACOLA
5090.3a

VOLUME 1 OF 2

APPENDIX IX REPORT FOR MONITORING WELLS GM-66 AND UG-1 WASTEWATER TREATMENT FACILITY NAVAL AIR STATION, PENSACOLA, FLORIDA

July 1991

Prepared for:

DEPARTMENT OF THE NAW
Southern Division
Naval Facilities Engineering Command
2155 Eagle Drive, P.O. Box 10068
Charleston, South Carolina 29411-0068

Contract Number N62467-88-C-0200

ecology and environment, inc.
316 SOUTH BAYLEN STREET, PENSACOLA, FLORIDA 32501, EL. (904)
International Specialists in the Environment

recycled paper

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL REGULATION

NORTHWEST DISTRICT
160 GOVERNMENTAL CENTER
PENSACOLA, FLORIDA 32501-5794

BOB MARTINEZ
GOVERNOR
DALE TWACHTMANN
SECRETARY
ROBERT V. KRIEGEL
DISTRICT MANAGER

QUARTERLY REPORT ON GROUND WATER MONITORING
Rule 17-4.245(6)(k)2.

GMS # 1017F00625 DATE _____

DER PERMIT # HF17-148989

U.S. Navy Public Works - Storage Surface Impoundment Closure
Installation Name

NAS Pensacola	Pensacola	Florida	Escambia
Address	City	State Zip	County

Owner or Authorized Representative's Name Title

Method of Discharge N/A

Type of Industry Military

Report for Period 1-1-91 to 3-31-91
date date

Attach monitoring data as approved in monitoring plan using parameter monitoring report forms. When applicable, attach additional sheets describing any changes in the background water Quality and the discharge plume since the last reported description. Include any changes in size, direction of movement, rate of movement, and concentration changes of plume constituents in violation of the applicable standards.

NOTE: Pursuant to Rule 17-4.245(6)(k)3., at any time there is a change in the permitted volume, location or chemical, physical or microbiological composition of the discharge plume, the permittee shall notify the department and, if required by the department, submit a new report stating the volume and chemical, physical and microbiological compositions of the discharge at the point of release or contact with the ground water at the site boundary.

CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Owner or Authorized Representative's Signature _____ Date _____

CONTENTS

VOLUME I

Attachment A Appendix IX Groundwater Monitoring List

Attachment B Locations of Monitoring and Recovery Wells at NAS Pensacola Wastewater Treatment Plant

Attachment C Monitoring Wells GM-66 and UG-1, Groundwater Sampling Analytical Results; Field and Laboratory QA/QC Sample Analytical Results

Attachment D Appendix IX Raw Laboratory Data - Metals, Inorganics, Organophosphorus Pesticides, Berbicidcs, and Pesticides/PCBs

Attachment B Appendix IX Raw Laboratory Data - Dioxin and Furan

VOLUME II

Attachment F Appendix IX Raw Laboratory Data - Volatile Organic Compounds

Attachment G Appendix IX Raw Laboratory Data - Semivolatile Organic Compounds

Attachment E Data Validation Summary

Doc. Num. 46

ATTACHMENT A

APPENDIX IX GROUNDWATER MONITORING LIST

(SOURCE: 40 CFR PART 264)

GROUND-WATER MONITORING LIST [1]

Common name [2]	CAS RN [3]	Chemical abstracts service index name [4]	Suggested methods [5]	POL (µg/L) [6]
Acenaphthene	83-32-9	Acenaphthylene, 1,2-dihydro-	8100	200
			8270	10
Acenaphthylene	208-96-8	Acenaphthylene	8100	200
			8270	10
Acetone	67-64-1	2-Propanone	8240	100
Acetophenone	98-86-2	Ethanone, 1-phenyl-	8270	10
Acetonitrile; Methyl cyanide	75-05-8	Acetonitrile	8015	100
2-Acetylaminofluorene, 2-AAF	53-96-3	Acetamide, N-9H-fluoren-2-yl-	8270	10
Acrolein	107-02-8	2-Propenal	8030	5
			8240	5
Acrylonitrile	107-13-1	2-Propenenitrile	8030	5
			8240	5
Aldrin	309-00-2	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro- 1,4,4a,5,8,8a-hexahydro-(1α,4α,4aβ,5α,8α,8aβ)-	8080	0.05
			8270	10
Allyl chloride	107-05-1	1-Propene, 3-chloro-	8010	5
			8240	100
4-Aminobiphenyl	92-67-1	[1,1'-Biphenyl]-4-amine	8270	10
Aniline	62-53-3	Benzenamine	8270	10
Anthracene	120-12-7	Anthracene	8100	200
			8270	10
Antimony	(Total)	Antimony	6010	300
			7040	*2,000*
			7041	30
Aramite	140-57-8	Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester.	8270	10
Arsenic	(Total)	Arsenic	6010	500
			7060	10
			7061	*20*
Barium	(Total)	Barium	6010	20
			7080	1,000
Benzene	71-43-2	Benzene	8020	2
			8240	5
Benzo[a]anthracene, Benzanthracene.	56-55-3	Benz[a]anthracene	8100	200
			8270	10
Benzo[b]fluoranthene	205-99-2	Benz[e]acephenanthrylene	8100	200
			8270	10
Benzo[k]fluoranthene	207-08-9	Benzo[k]fluoranthene	8100	200
			8270	10
Benzo[ghi]perylene	191-24-2	Benzo[ghi]perylene	8100	200
			8270	10
Benzo[a]pyrene	50-32-8	Benzo[a]pyrene	8100	200
			8270	10
Benzyl alcohol	100-51-6	Benzenemethanol	8270	20
Beryllium	(Total)	Beryllium	6010	3
			7090	50
			7091	2
alpha-BHC	319-84-6	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3β,4α,5β,6β)-	8080	0.05
			8250	10
beta-BHC	319-85-7	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2β,3α,4β,5α,6β)-	8080	0.05
			8250	40
delta-BHC	319-86-8	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3α,4β,5α,6β)-	8080	0.1
			8250	30
gamma-BHC; Lindane	58-89-9	Cyclohexane, 1,2,3,4,5,6-hexachloro-,(1α,2α,3β,4α,5α,6β)-	8080	0.05
			8250	10
Bis(2-chloroethoxy)methane	111-91-1	Ethane, 1,1'-[methylenebis (oxy)]bis[2-chloro-	8270	10
Bis(2-chloroethyl)ether	111-44-4	Ethane, 1,1'-oxybis[2-chloro-	8270	10
Bis(2-chloro-1-methylethyl) ether; 2,2'-Dichlorodiisopropyl ether.	108-60-1	Propane, 2,2'-oxybis[1-chloro-	8010	100
			8270	10

Common name [2]	CAS RN [3]	Chemical abstracts service index name [4]	Suggested methods [5]	PQL (µg/L) [6]
Bis(2-ethylhexyl) phthalate	117-81-7	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl)ester.	8060	20
			8270	
Bromodichloromethane	75-27-4	Methane, bromodichloro-	8010	[illegible]
			8240	[illegible]
Bromoform; Tribromomethane	75-25-2	Methane, tribromo-	8010	2
			8240	5
4-Bromophenyl phenyl ether	101-55-3	Benzene, 1-bromo-4-phenoxy-	8270	10
Butyl benzyl phthalate; Benzyl butyl phthalate	85-68-7	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester.	8060	5
			8270	10
Cadmium	(Total)	Cadmium	6010	40
			7130	50
			7131	1
Carbon disulfide	75-15-0	Carbon disulfide	8240	5
Carbon tetrachloride	56-23-5	Methane, tetrachloro-	8010	1
			8240	5
Chlordane	57-74-9	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-.	8080	0
			8250	10
p-Chloroaniline	106-47-8	Benzenamine, 4-chloro-	8270	20
Chlorobenzene	108-90-7	Benzene, chloro-	8010	2
			8020	2
			8240	5
Chlorobenzilate	510-15-6	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester.	8270	10
p-Chloro-m-cresol	59-50-7	Phenol, 4-chloro-3-methyl-	8040	5
			8270	20
Chloroethane; Ethyl chloride	75-00-3	Ethane, chloro-	8010	5
			8240	10
Chloroform	67-66-3	Methane, trichloro-	8010	0.5
			8240	5
2-Chloronaphthalene	91-58-7	Naphthalene, 2-chloro-	8120	10
			8270	10
2-Chlorophenol	95-57-8	Phenol, 2-chloro-	8040	10
			8270	10
4-Chlorophenyl phenyl ether	7005-72-3	Benzene, 1-chloro-4-phenoxy-	8270	[illegible]
Chloroprene	126-99-8	1,3-Butadiene, 2-chloro-	8010	[illegible]
			8240	5
Chromium	(Total)	Chromium	6010	10
			7190	500
			7191	10
Chrysene	218-01-9	Chrysene	8100	200
			8270	10
Cobalt	(Total)	Cobalt	6010	10
			7200	500
			7201	10
Copper	(Total)	Copper	6010	50
			7210	200
m-Cresol	108-39-4	Phenol, 3-methyl-	8270	10
o-Cresol	95-48-7	Phenol, 2-methyl-	8270	10
p-Cresol	106-44-5	Phenol, 4-methyl-	8270	10
Cyanide	57-12-5	Cyanide	9010	40
2,4-D; 2,4-Dichlorophenoxyacetic acid.	94-75-7	Acetic acid, (2,4-dichlorophenoxy)-	8150	10
4,4'-DDD	72-54-8	Benzene 1,1'-(2,2-dichloroethylidene)bis(4-chloro-	8080	0
			8270	10
4,4'-DDE	72-55-9	Benzene, 1,1'-(dichloroethenylidene)bis(4-chloro-	8080	0
			8270	10
4,4'-DDT	50-29-3	Benzene, 1,1'-(2,2,2-trichloroethylidene)bis(4-chloro-.	8080	0
			8270	10
Diallate	2303-16-4	Carbamothioic acid, bis(1-methylethyl)-, S-(2,3-dichloro-2-propenyl) ester.	8270	10
Dibenz(a,h)anthracene	53-70-3	Dibenz(a,h)anthracene	8100	200
			8270	10
Dibenzofuran	132-64-9	Dibenzofuran	8270	10
Dibromochloromethane; Chlorodibromomethane	124-48-1	Methane, dibromochloro-	8010	[illegible]
			8240	[illegible]
1,2-Dibromo-3-chloropropane; DBCP.	96-12-8	Propane, 1,2-dibromo-3-chloro-	8010	[illegible]
			8240	[illegible]
			8270	10

3200032

Common name [2]	CAS RN [3]	Chemical abstracts service index name [4]	Suggested methods [5]	PQL (µg/L) [6]
1,2-Dibromoethane; Ethylene dibromide.	106-93-4	Ethane, 1,2-dibromo-	8010	10
			8240	5
Di-n-butyl phthalate	84-74-2	1,2-Benzenedicarboxylic acid, dibutyl ester	8060	5
			8270	10
o-Dichlorobenzene	95-50-1	Benzene, 1,2-dichloro-	8010	2
			8020	5
			8120	10
			8270	10
m-Dichlorobenzene	541-73-1	Benzene, 1,3-dichloro-	8010	5
			8020	5
			8120	10
			8270	10
p-Dichlorobenzene	106-46-7	Benzene, 1,4-dichloro-	8010	2
			8020	5
			8120	15
			8270	10
3,3'-Dichlorobenzidine	91-94-1	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dichloro-	8270	20
trans-1,4-Dichloro-2-butene	110-57-6	2-Butene, 1,4-dichloro-, (E)-	8240	5
Dichlorodifluoromethane	75-71-8	Methane, dichlorodifluoro-	8010	10
			8240	5
1,1-Dichloroethane	75-34-3	Ethane, 1,1-dichloro-	8010	1
			8240	5
1,2-Dichloroethane; Ethylene dichloride.	107-06-2	Ethane, 1,2-dichloro-	8010	0.5
			8240	5
1,1-Dichloroethylene; Vinylidene chloride.	75-35-4	Ethene, 1,1-dichloro-	8010	1
			8240	5
trans-1,2-Dichloroethylene	156-60-5	Ethene, 1,2-dichloro-, (E)-	8010	1
			8240	5
2,4-Dichlorophenol	120-83-2	Phenol, 2,4-dichloro-	8040	5
			8270	10
2,6-Dichlorophenol	87-65-0	Phenol, 2,6-dichloro-	8270	10
1,2-Dichloropropane	78-87-5		8010	0.5
			8240	5
cis-1,3-Dichloropropene	10061-01-5	1-Propene, 1,3-dichloro-, (Z)-	8010	20
			8240	5
trans-1,3-Dichloropropene	10061-02-6	1-Propene, 1,3-dichloro-, (E)-	8010	5
			8240	5
Dieldrin	60-57-1	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-	8080	0.05
			8270	10
Diethyl phthalate	84-66-2	1,2-Benzenedicarboxylic acid, diethyl ester	8060	5
			8270	10
O,O-Diethyl O-2-pyrazinyl phosphorothioate; Thionazin	297-97-2	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester.	8270	10
Dimethoate	60-51-5	Phosphorodithioic acid, O,O-dimethyl S-[2-(methylamino)-2-oxoethyl] ester.	8270	10
p-(Dimethylamino)azobenzene	60-11-7	Benzenamine, N,N-dimethyl-4-(phenylazo)-	8270	10
7,12-Dimethylbenz[a]anthracene	57-97-6	Benz[a]anthracene, 7,12-dimethyl-	8270	10
3,3'-Dimethylbenzidine	119-93-7	[1,1'-Biphenyl]-4,4'-diamine, 3,3'-dimethyl-	8270	10
alpha, alpha-Dimethylphenethylamine.	122-09-8	Benzeneethanamine, α,α-dimethyl-	8270	10
2,4-Dimethylphenol	105-67-9	Phenol, 2,4-dimethyl-	8040	5
			8270	10
Dimethyl phthalate	131-11-3	1,2-Benzenedicarboxylic acid, dimethyl ester	8060	5
			8270	10
m-Dinitrobenzene	99-65-0	Benzene, 1,3-dinitro-	8270	10
4,6-Dinitro-o-cresol	534-52-1	Phenol, 2-methyl-4,6-dinitro-	8040	150
			8270	50
2,4-Dinitrophenol	51-28-5	Phenol, 2,4-dinitro-		150
			8270	50
2,4-Dinitrotoluene	121-14-2	Benzene, 1-methyl-2,4-dinitro-	8090	0.2
			8270	10
2,6-Dinitrotoluene	606-20-2	Benzene, 2-methyl-1,3-dinitro-	8090	0.1
			8270	10
Dinoseb; DNBP; 2-sec-Butyl-4,6-dinitrophenol	88-85-7	Phenol, 2-(1-methylpropyl)-4,6-dinitro-	8150	1
			UP	10
Di-n-octyl phthalate	117-84-0	1,2-Benzenedicarboxylic acid, dioctyl ester	8060	30
			8270	10

Common name [2]	CAS RN [1]	Chemical abstracts service index name [4]	Suggested methods [5]	PQL (µg/l)
1,4-Dioxane	123-91-1	1,4-Dioxane	8015	150
Diphenylamine	122-39-4	Benzenamine, N-phenyl-	8270	[illegible]
Disulfoton	298-04-4	Phosphorodithioic acid, O,O-diethyl S-[2-(ethylthio)ethyl]ester	8140 8270	[illegible]
Endosulfan I	959-98-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aβ,6α,9α,9aβ)-	8080 8250	[illegible] 10
Endosulfan II	33213-65-9	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a,6,9,9a-hexahydro-, 3-oxide, (3α,5aα,6β,9β,9aα)-	8080	[illegible]
Endosulfan sulfate	1031-07-8	6,9-Methano-2,4,3-benzodioxathiepin, 6,7,8,9,10,10-hexachloro- 1,5,5a,6,9,9a-hexahydro-, 3,3-dioxide.	8080 8270	[illegible] 10
Endrin	72-20-8	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα, 2β,2aβ,3a,6a, 6aβ,7β,7aα)-	8080 8250	[illegible] 10
Endrin aldehyde	7421-93-4	1,2,4-Methenocyclopenta[cd]pentalene-5-carboxaldehyde, 2,2a,3,3,4,7-hexachlorodecahydro-, (1α,2β,2aβ,4β,4aβ,5β,6aβ,6bβ,7R*)-	8080 8270	[illegible] 10
Ethylbe[redacted]	100-41-4	Benzene, ethyl-	8020 8240	2 5
Ethyl	97-63-2	2-Propenoic acid, 2-methyl-, ethyl ester	8015 8240 8270	10 5 10
Ethyl methanesulfonate	62-50-0	Methanesulfonic acid, ethyl ester	8270	10
Famphur	52-85-7	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl]phenyl]-O,O-dimethyl ester.	8270	10
Fluoranthene	206-44-0	Fluoranthene	8100 8270	200 10
Fluorene	86-73-7	9H-Fluorene	8100 8270	200 10
Heptachlor	76-44-8	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	8080 8270	[illegible]
Heptachlor		2,5-Methano-2H-indeno[1,2-b]oxirene, 2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a, hexahydro-, (1aα,1bβ,2a,5a,5aβ,6β,6aα)	8080 8270	[illegible] [illegible]
Hexachlorobenzene	118-74-1	Benzene, hexachloro-	8120 8270	[illegible] 10
Hexachlorobutadiene	87-68-3	1,3-Butadiene, 1,1,2,3,4,4-hexachloro-	8120 8270	5 10
Hexachlorocyclopentadiene	77-47-4	1,3-Cyclopentadiene, 1,2,3,4,5,5-hexachloro-	8120 8270	5 10
Hexachloroethane	67-72-1	Ethane, hexachloro-	8120 8270	[illegible] 10
Hexachlorophene	70-30-4	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	8270	10
Hexachloropropene	1888-71-7	1-Propene, 1,1,2,3,3,3-hexachloro-	8270	10
2-Hexanone	591-78-6	2-Hexanone	8240	50
Indeno[1,2,3-cd]pyrene	193-39-5	Indeno[1,2,3-cd]pyrene	8100 8270	200 10
Isobutyl alcohol	78-83-1	1-Propanol, 2-methyl-	8015	50
Isodrin	465-73-6	1,4,5,8-Dimethanonaphthalene,1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a hexahydro-(1α,4α,4aβ,5β,8β,8aβ)-	8270	10
Isophorone	78-59-1	2-Cyclohexen-1-one, 3,5,5-trimethyl-	8090 8270	60 10
Isosafrole	120-58-1	1,3-Benzodioxole, 5-(1-propenyl)-	8270	10
Kepone	143-50-0	1,3,4-Metheno-2H-cyclobuta- [cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	8270	10
Lead	(Total)	Lead	6010 7420 7421	40 1,000 10
Mercury	(Total)	Mercury	7470	2
Methacrylonitrile	126-98-7	2-Propenenitrile, 2-methyl-	8015 8240	[illegible]
Methapyrilene	91-80-5	1,2,Ethanediamine, N,N-dimethyl-N'-2-pyridinyl-N'-(2-thienylmethyl)-.	8270	[illegible]

3200033

GROUND-WATER MONITORING LIST [1]—Continued

Common name [2]	CAS RN [3]	Chemical abstracts service index name [4]	Suggested methods [5]	PQL (µg/L) [6]
Methoxychlor	72-43-5	Benzene, 1,1'-(2,2,2,trichloroethylidene)bis[4-methoxy-.	8080	2
			8270	10
Methyl bromide; Bromomethane	74-83-9	Methane, bromo-	8010	20
			8240	10
Methyl chloride; Chloromethane	74-87-3	Methane, chloro-	8010	1
			8240	10
3-Methylcholanthrene	56-49-5	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	8270	10
Methylene bromide; Dibromomethane.	74-95-3	Methane, dibromo-	8010	15
			8240	5
Methylene chloride; Dichloromethane.	75-09-2	Methane, dichloro-	8010	5
			8240	5
Methyl ethyl ketone; MEK	78-93-3	2-Butanone	8015	10
			8240	100
Methyl iodide; Iodomethane	74-88-4	Methane, iodo-	8010	40
			8240	5
Methyl methacrylate	80-62-6	2-Propenoic acid, 2-methyl-, methyl ester	8015	2
			8240	5
Methyl methanesulfonate	66-27-3	Methanesulfonic acid, methyl ester	8270	10
2-Methylnaphthalene	91-57-6	Naphthalene, 2-methyl-	8270	10
Methyl parathion; Parathion methyl	298-00-0	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester.	8140	0.5
			8270	10
4-Methyl-2-pentanone; Methyl isobutyl ketone.	108-10-1	2-Pentanone, 4-methyl-	8015	5
			8240	90
Naphthalene	91-20-3	Naphthalene	8100	200
			8270	10
1,4-Naphthoquinone	130-15-4	1,4-Naphthalenedione	8270	10
1-Naphthylamine	134-32-7	1-Naphthalenamine	8270	10
2-Naphthylamine	91-59-8	2-Naphthalenamine	8270	10
Nickel	(Total)	Nickel	6010	50
			7520	400
o-Nitroaniline	88-74-4	Benzenamine, 2-nitro-	0270	50
m-Nitroaniline	99-09-2	Benzenamine, 3-nitro-	8270	50
p-Nitroaniline	100-01-6	Benzenamine, 4-nitro-	a270	50
Nitrobenzene	98-95-3	Benzene, nitro-	8090	40
			8270	10
o-Nitrophenol	88-75-5	Phenol, 2-nitro-	8040	5
			8270	10
p-Nitrophenol	100-02-7	Phenol, 4-nitro-	8040	10
			8270	50
4-Nitroquinoline 1-oxide	56-57-5	Quinoline, 4-nitro-, 1-oxide	8270	10
N-Nitrosodi-n-butylamine	924-16-3	1-Butanamine, N-butyl-N-nitroso-	8270	10
N-Nitrosodiethylamine	55-18-5	Ethanamine, N-ethyl-N-nitroso-	8270	10
N-Nitrosodimethylamine	62-75-9	Methanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosodiphenylamine	86-30-6	Benzenamine, N-nitroso-N-phenyl-	8270	10
N-Nitrosodipropylamine; Di-n-propylnitrosamine	621-64-7	1-Propanamine, N-nitroso-N-propyl-	8270	10
N-Nitrosomethylethylamine	10595-95-6	Ethanamine, N-methyl-N-nitroso-	8270	10
N-Nitrosomorpholine	59-89-2	Morpholine, 4-nitroso-	8270	10
N-Nitrosopiperidine	100-75-4	Piperidine, 1-nitroso-	8270	10
N-Nitrosopyrrolidine	930-55-2	Pyrrolidine, 1-nitroso-	8270	10
5-Nitro-o-toluidine	99-55-8	Benzenamine, 2-methyl-5-nitro-	8270	10
Parathion	56-38-2	Phosphorothioic acid, O,O-diethyl-O-(4-nitrophenyl) ester	8270	10
Polychlorinated biphenyls; PCBs	See Note 7	1,1'-Biphenyl, chloro derivatives	8080	50
			8250	100
Polychlorinated dibenzo-p-dioxins; PCDDs.	See Note 8	Dibenzo[b,e][1,4]dioxin, chloro derivatives	8280	0.01
Polychlorinated dibenzofurans; PCDFs.	See Note 9	Dibenzofuran, chloro derivatives	8280	0.01
Pentachlorobenzene	608-93-5	Benzene, pentachloro-	a270	10
Pentachloroethane	76-01-7	Ethane, pentachloro-	8240	5
			8270	10
Pentachloronitrobenzene	82-68-8	Benzene, pentachloronitro-	8270	10
Pentachlorophenol	87-86-5	Phenol, pentachloro-	8040	5
			8270	50
Phenacetin	62-44-2	Acetamide, N-(4-ethoxyphenyl)	8270	10
Phenanthrene	85-01-8	Phenanthrene	8100	200
			8270	10

Common name [2]	CAS RN [3]	Chemical abstracts service index name [4]	Suggested methods [5]	PQL (µg/L) [6]
Phenol	108-95-2	Phenol	8040	
			8270	
p-Phenylenediamine	106-50-3	1,4-Benzenediamine	8270	
Phorate	298-02-2	Phosphorodithioic acid, O,O-diethyl S [(ethylthio)methyl] ester	8140	
			8270	
2-Picoline	109-06-8	Pyridine, 2-methyl-	8240	5
			8270	10
Pronamide	23950-58-5	Benzamide, 3,5-dichloro-N-(1,1-dimethyl-2-propynyl)-	8270	10
Propionitrile; Ethyl cyanide	107-12-0	Propanenitrile	8015	60
			8240	5
Pyrene	129-00-0	Pyrene	8100	200
			8270	10
Pyridine	110-86-1	Pyridine	8240	5
			8270	10
Safrole	94-59-7	1,3-Benzodioxole, 5-(2-propenyl)-	8270	10
Selenium	(Total)	Selenium	6010	750
			7740	20
			7741	20
Silver	(Total)	Silver	6010	70
			7760	100
Silvex; 2,4,5-TP	93-72-1	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	8150	2
Styrene	100-42-5	Benzene, ethenyl-	8020	1
			8240	5
Sulfide	18496-25-8	Sulfide	9030	10,000
2,4,5-T; 2,4,5-Trichlorophenoxyacetic acid.	93-76-5	Acetic acid, (2,4,5-trichlorophenoxy)-	8150	2
2,3,7,8-TCDD; 2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746-01-6	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	8280	0.00
1,2,4,5-Tetrachlorobenzene	95-94-3	Benzene, 1,2,4,5-tetrachloro-	8270	10
1,1,1,2-Tetrachloroethane	630-20-6	Ethane, 1,1,1,2-tetrachloro-	8010	5
			8240	5
1,1,2,2-Tetrachloroethane	79-34-5	Ethane, 1,1,2,2-tetrachloro-	8010	[illegible]
			8240	[illegible]
Tetrachloroethylene; Perchloroethylene; Tetrachloroethene.	127-18-4	Ethene, tetrachloro-	8010	[illegible]
			8240	
2,3,4,6-Tetrachlorophenol	58-90-2	Phenol, 2,3,4,6-tetrachloro-	8270	10
Tetraethyl dithiopyrophosphate; Sulfotepp.	3689-24-5	Thiodiphosphonic acid (((HO)$_2$P(S)]$_2$O), tetraethyl ester	8270	10
Thallium	(Total)	Thallium	6010	400
			7840	1,000
			7841	10
Tin	(Total)	Tin	7870	8,000
Toluene	108-88-3	Benzene, methyl-	8020	2
			8240	5
o-Toluidine	95-53-4	Benzenamine, 2-methyl-	8270	10
Toxaphene	8001-35-2	Toxaphene	8080	2
			8250	10
1,2,4-Trichlorobenzene	120-82-1	Benzene, 1,2,4-trichloro-	8270	10
1,1,1-Trichloroethane; Methylchloroform.	71-55-6	Ethane, 1,1,1-trichloro-	8240	5
1,1,2-Trichloroethane	79-00-5	Ethane, 1,1,2-trichloro-	8010	0.2
			8240	5
Trichloroethylene; Trichloroethene	79-01-6	Ethene, trichloro-	8010	1
			8240	5
Trichlorofluoromethane	75-69-4	Methane, trichlorofluoro-	8010	10
			8240	5
2,4,5-Trichlorophenol	95-95-4	Phenol, 2,4,5-trichloro-	8270	10
2,4,6-Trichlorophenol	88-06-2	Phenol, 2,4,6-trichloro-	8040	5
			8270	10
1,2,3-Trichloropropane	96-18-4	Propane, 1,2,3-trichloro-	8010	10
			8240	5
O,O,O-Triethyl phosphorothioate	126-68-1	Phosphorothioic acid, O,O,O-triethyl ester	8270	10
sym-Trinitrobenzene	99-35-4	Benzene, 1,3,5-trinitro-	8270	10
Vanadium	(Total)	Vanadium	6010	[illegible]
			7910	2 [illegible]
			7911	
Vinyl acetate	108-05-4	Acetic acid, ethenyl ester	8240	5

GROUND-WATER MONITORING LIST [1]—Continued

Common name [2]	CAS RN [3]	Chemical abstracts service index name [4]	Suggested methods [5]	PQL (µg/L) [6]
Vinyl chloride	75-01-4	Ethene, chloro-	8010	2
			8240	10
Xylene (total)	1330-20-7	Benzene, dimethyl-	8020	5
			8240	5
Zinc	(Total)	Zinc	8010	20
			7950	50

[1] The regulatory requirements pertain only to the list of substances; the right hand columns (Methods and PQL) are given for informational purposes only. See also footnotes 5 and 6.

[2] Common names are those widely used in government regulations, scientific publications, and commerce; synonyms exist for many chemicals.

[3] Chemical Abstracts Service registry number. Where "Total" is entered, all species in the ground water that contain this element are included.

[4] CAS index names are those used in the 9th Cumulative Index.

[5] Suggested Methods refer to analytical procedure numbers used in EPA Report SW-846 "Test Methods for Evaluating Solid Waste", third edition, November 1986. Analytical details can be found in SW-846 and in documentation on file at the agency. CAUTION: The methods listed are representative SW-846 procedures and may not always be the most suitable method(s) for monitoring an analyte under the regulations.

[6] Practical Quantitation Limits (PQLs) are the lowest concentrations of analytes in ground waters that can be reliably determined within specified limits of precision and accuracy by the indicated methods under routine laboratory operating conditions. The PQLs listed are generally stated to one significant figure. CAUTION: The PQL values in many cases are based only on a general estimate for the method and not on a determination for individual compounds; PQLs are not a part of the regulation.

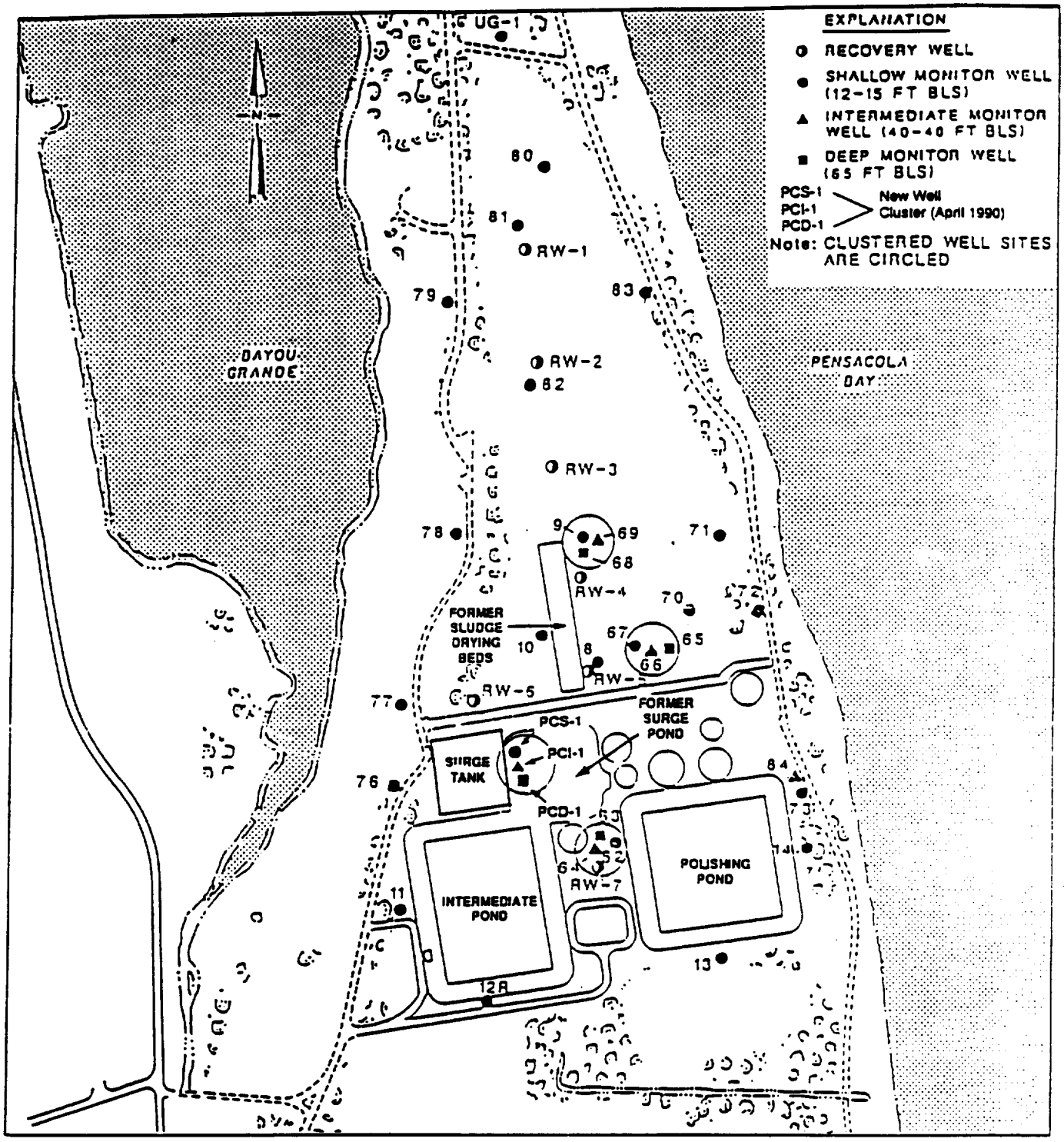
[7] Polychlorinated biphenyls (CAS RN 1336-36-3); this category contains congener chemicals, including constituents of Aroclor-1016 (CAS RN 12674-11-2), Aroclor-1221 (CAS RN 11104-28-2), Aroclor-1232 (CAS RN 11141-16-5), Aroclor-1242 (CAS RN 53469-21-9), Aroclor-1248 (CAS RN 12672-29-6), Aroclor-1254 (CAS RN 11097-69-1), and Aroclor-1260 (CAS RN 11096-82-5). The PQL shown is an average value for PCB congeners.

[8] This category contains congener chemicals, including tetrachlorodibenzo-p-dioxins (see also 2,3,7,8-TCDD), pentachlorodibenzo-p-dioxins, and hexachlorodibenzo-p-dioxins. The PQL shown is an average value for PCDD congeners.

[9] This category contains congener chemicals, including tetrachlorodibenzofurans, pentachlorodibenzofurans, and hexachlorodibenzofurans. The PQL shown is an average value for PCDF congeners.

ATTACHMENT B

LOCATIONS OF MONITORING AND RECOVERY WELLS AT NAS PENSACOLA WASTEWATER TREATMENT PLANT



SOURCE: Geraghty & Miller, Inc. 1988; E & E, 1990

SCALE

0 300 600 FEET

ATTACHMENT B
LOCATIONS OF MONITORING AND RECOVERY WELLS AT NAS PENSACOLA WASTEWATER TREATMENT PLANT

ATTACHMENT C

MONITORING WELLS GM-66 AND UG-1,

GROUNDWATER SAMPLING ANALYTICAL RESULTS;

FIELD AND LABORATORY QA/QC SAMPLE ANALYTICAL RESULTS

CASE NARRATIVE

E&E, INC. JOB NO.: 9100.699

PROJECT NO.: UH-7000 NASP MARCH SAMPLING

Attached is the laboratory report of the Appendix IX analysis conducted on three samples received at the Analytical Services Center on March 27, 1991. Samples were received in good condition. Analysis was performed according to the procedures set forth in "Test Hethods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, U.S. EPA, 1986.

A separate review of the sampling/field procedures documentation (field log books, chain-of-custody forms, etc.) showed no procedural problems or deficiencies.

The data for these cases are acceptable for use with the noted qualifications.

All samples on which this report is based will be retained by E 6 E for a period of 30 days from the date of this report, unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of $1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH/kr
Enclosure

CASE NARRATIVE

E&E, INC. JOB NO.: 9100.825

PROJECT NO.: UH-7000 NASP MARCH SAMPLING (IWTP)

Attached is the laboratory report of the analysis conducted on four samples received at the Analytical Services Center on April 10, 1991. Samples vere received in good condition. Analysis was performed according to the procedures set forth in "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March 1983; "Methods for Organic Chemical Analysis of Municipal and Industrial Wastewater," EPA-600/4-82-057, July 1982; and "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, U.S. EPA, 1986.

The cyanide sample GU-66 was received at a pH of 4.

A separate review of the sampling/field procedures documentation (field log books, chain-of-custody forms, etc.) showed no procedural problem or deficiencies.

The data for these cases are acceptable for use vith the noted qualifications.

All samples on which this report is based will be retained by E & E for a period of 30 days from the date of this report, unless otherwise instructed by the client. If additional storage of samples is requested by the client, a storage fee of $1.00 per sample container per month will be charged for each sample, with such charges accruing until destruction of the samples is authorized by the client.

GH/tjb
Enclosure

APPENDIX IX ANALYTICAL REFERENCE SUMMARY

PARAMETER	METHOD
Appendix IX Metals (exceptions are listed below)	Method 6010 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SV-846, U.S. EPA, 1986.
Arsenic	Method 7060 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SV-846, U.S. EPA, 1986.
Lead	Method 7421 - "Test Hethods for Evaluating Solid Waste, Physical/Chemical Methods," SV-846, U.S. EPA, 1986.
Mercury	Method 7470 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SV-846, U.S. EPA, 1986.
Selenium	Method 7740 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, U.S. EPA, 1986.
Thallium	Method 7841 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," SW-846, U.S. EPA, 1986.
Chloride	Method 325.3 - "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, Harch 1983.
Cyanide	Method 335.2 - "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March 1983.
Sulfate	Method 375.4 - "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March 1983
Sulfide	Method 376.1 - "Methods for the Chemical Analysis of Water and Wastes," EPA-600/4-79-020, March 1983.
Appendix IX VOCs	Method 8240 - "Methods for the Chemical Analysis of Water and Wastes," SW-846, U.S. EPA, 1986.
Appendix IX BNAs	Method 8270 - "Methods for the Chemical Analysis of Water and Wastes," SW-846, U.S. EPA, 1986

APPE IX ICAL 1 ? 1 SUMMARY (CONTINUED)

PARAMETER	METHOD
Appendix IX	Method 8080 - "Methods for tbe Chemical Pesticides/PCBs Analysis of Water and Wastes," SW-846, U.S. EPA, 1986.
Appendix IX Organophosphorus Pesticides	Method 8140 - "Methods for the Chemical Analysis of Water and Wastes," SW-846, U.S. EPA, 1986.
Appendix IX Eerbicidcs	Method 8150 - "Methods for the Chemical Analysis of Water and Wastes," SW-846, U.S. EPA, 1986.
Appendix IX Dioxin/Furan Homologs	Method 8280 - "Methods for the Chemical Analysis of Water and Wastes," SW-846, U.S. EPA, 1986.

Doc. Num. 57

Table C-1

GROUNDWATER SAMPLE DESIGNATIONS

Sample Location	Sample Designation
Well GM-66[a]	P32W066
Well UG-1[a]	P32W001

FIELD QA/QC SAMPLE DESIGNATIONS

Sample Type	Sample Designation
Trip bottle blank[b]	P32WTB03
Field blank[a]	P32WFB02

[a]Analyzed for all Appendix IX constituents.

[b]Prepared in laboratory, shipped to field, and back to laboratory with volatile organic compound (VOC) samples. Analyzed for Appendix IX VOCs only.

Doc. Num. 45

Table C-2

SUMMARY ANALYTICAL RESULTS FOR
MONITORING WELLS GM-66 AND UG-1 AND FIELD QA/QC SAMPLES
(All results in ug/L unless noted)

Compound	Sample No. (Location)		Field QA/QC Samples	
	P32N066 (GM-66)	P32N001 (UG-1)	P32NFB02	P32NFB03
Barium	38	—	—	N/A
Beryllium	79	—	—	N/A
Cadmium	57	—	5.4	N/A
Chromium (Total)	360	—	—	N/A
Iron	420 ,OW	2,100	78	N/A
Manganese	1,700	—	—	N/A
Sodium(mg/L)	670	8	—	N/A
Nickel	140	—	—	N/A
Lead	400	8.5	—	N/A
Vanadium	410	—	—	N/A
Zinc	460	15	12	N/A
Chloride (mg/L)	—	8.8	—	N/A
Sulfate[a] (mg/L)	N/A	19	N/A	N/A
Sulfide (mg/L)	4.9	—	—	N/A
Methylene chloride	—	(L,B)	(L,B)	(L,B)
Acetone	890(B)	(L,B)	12(B)	19(B)
1,1-Dichloroethene	(L)	—	—	—
1,2-Dichloroethene (Total)	1,000	—	—	—
Trichloroethene	8,200	—	—	—
Chlorobenzene	(L)	—	—	—
Xylene (m+p)	(L)	—	—	—
1,3-Dichlorobenzene	16	—	—	N/A
1,4-Dichlorobenzene	34	—	—	N/A
1,2-Dichlorobenzene	49	—	—	N/A
2,4-Dimethylphenol	91	—	—	N/A
Naphthalene	56	—	—	N/A

[a] Sulfate is not an Appendix IX parameter, but is normally analyzed for this well during quarterly sampling events.

B-Compound also present in method blank

L-Present below stated detection limit

N/A-Analysis not performed

Dash(—)indicates compound not detected

Doc. Num. 475

3200041

PARAMETER MONITORING REPORT
(Rule 17-3.402, 17-3.404 - 17-3.406)

GHS # 1017F00625

Monitoring Well # GM-66

Well Name: Intermediate

Classification of Groundvater G-1

Well Developed Prior to Sample Collection* (Yes/No) ES

Sample Date: 03-25-91, 04-09-91

Well Type:

[X] Corrective Action

[ ] Point-of-Compliance

Groundwater Elevation (above HSL) 1.05 ft

STORET Code	Parameter Monitored	Sampling Method	BPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	4.0		Unfiltered	
	Specific Conductanc(	Teflon bailer	120.1	7,000	umhos/ cm	Unfiltered	
	Appendix I: Inorganics:	Teflon bailer		See attachcd		Unfiltered	
	Uetals		6010				HNO_3
			7060				HNO_3
			7421				HNO_3
			7470				HNO_3
			7740				HNO_3
			7841				HNO_3
	Chloride		325.3				
	Cyanide		335.2				NaOE
	Sulfate		375.4				
	Sulfide		376.1				NaOE
	Appendix IX VOCs	Teflon bailer	8240	See attached		Unfiltered	HCl
	Appendix IX BNAs	Teflon bailer	8270	See attached		Unfiltered	
	Appendix IX Pest/PCB	Teflon bailer	8080	See attached		Unfiltered	
	Appendix IX Organo-phosphorus Pesticides	Teflon bailer	8140	See attached		Unfiltered	
	Appendix IX Herbicides	Teflon bailer	8150	See attached		Unfiltered	
	Appendix IX Dioxin\ Puran Eomologs	Teflon bailer	8280	See attached		Unfiltered	

*Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DBR Porm 17-1.216(2)
Effective January 1, 1983

Doc Num. 59

PARAMETER MONITORING REPORT
(Rule 17-3.402, 17-3.404 - 17-3.406)

GMS # 1017F00625

Sample Date: 03-25-91, 04-09-91

Ionitoring Well # UG-1

Well Type:

[ ] Corrective Action

[X] Point-of-Compliance

Well Name: Shallow Background

Classification of Groundwater G-1

Uell Developed* Prior to Sample Collection (Yes/No) YES

Groundwater Elevation (above ISL) 1.28 ft

STORET Code	Parameter Monitored	Sampling Method	EPA Analysis Method	Analysis Result	Units	Sample Filtered/ Unfiltered	Preser-vatives Added
	pH	Teflon bailer	150.1	5.6		Unfiltered	
	Specific Conductance	Teflon bailer	120.1	110	umhos/ cm	Unfiltered	
	Appendix IX Inorganics:	Tcflon bailer		See attached		Unfiltered	
	Metals		6010				HNO_3
			7060				HNO_3
			7421				HNO_3
			7470				HNO_3
			7740				HNO_3
			7041				HNO_3
	Chloride		325.3				
	Cyanide		335.2				NaOH
	Sulfate		375.4				
	Sulfide		376.1				NaOH
	IX	Teflon bailer	8240	See attached		Unfiltered	HCl
	Appendix IX BNAs	Teflon bailer	8270	See attached		Unfiltered	
	Appendix IX Pest/PCB	Teflon bailer	8080	See attached		Unfiltered	
	Appendix IX Organo-phosphorus Pesticides	Teflon bailer	8140	See attached		Unfiltered	
	Appendix IX Herbicides	Teflon bailer	8150	See attached		Unfiltered	
	Appendix Dioxin/ Furan Homologs	Teflon bailer	8280	See attached		Unfiltered	

*Well development is the process of pumping the well prior to sampling in order to obtain a representative groundwater sample.

DER Form 17-1.216(2)
Effective January 1, 1983

Doc. Num. 58

3200042

JOB NUMBER :9100.699

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
SAMPLE ID LAB :EE-91-06318 MATRIX: WATER
SAMPLE ID CLIENT: P32W066 /GRAB/GM-66

PARAMETER		RESULTS	Q	QNT. LIMIT	UNITS
Silver	(ICP)	ND		10	UG/L
Arsenic	(FU)	ND		50	UG/L
Barium	(ICP)	38		20	UG/L
Beryllium	(ICP)	79		5.0	UG/L
Cadmium	(ICP)	57		5.0	UG/L
Cobalt	(ICP)	ND		20	UG/L
Chromium Total	(ICP)	360		10	UG/L
Copper	(ICP)	ND		20	UG/L
Iron	(ICP)	420000		50	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Manganese	(ICP)	1700		10	UG/L
Sodium	(ICP)	670000		500	UG/L
Nickel	(ICP)	140		20	UG/L
Lead	(ICP)	400		50	UG/L
Antimony	(ICP)	ND		60	UG/L
Selenium	(FU)	ND		10	UG/L
Tin	(ICP)	ND		50	UG/L
Thallium	(FU)	ND		5.0	UG/L
Vanadium	(ICP)	410		20	UG/L
Zinc	(ICP)	460		10	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOV STATED DETECTION LIMIT
NA = NOT APPLICABLE

JOB NUMBER :9100.699

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
SAMPLE ID LAB :EE-91-06317 MATRIX: WATER
SAMPLE ID CLIENT: P32W001 /GRAB/UG-01

PARAMETER		RESULTS	Q	QNT. LIMIT	UNITS
Silver	(ICP)	ND		10	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	ND		20	UG/L
Beryllium	(ICP)	ND		5.0	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Cobalt	(ICP)	ND		20	UG/L
Chromium Total	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		20	UG/L
Iron	(ICP)	2100		50	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Manganese	(ICP)	ND		10	UG/L
Sodium	(ICP)	8000		500	UG/L
Nickel	(ICP)	ND		20	UG/L
Lead	(FU)	8.5		5.0	UG/L
Antimony	(ICP)	ND		60	UG/L
selenium	(FU)	ND		5.0	UG/L
Tin	(ICP)	ND		50	UG/L
Thallium	(FU)	ND		5.0	UG/L
Vanadium	(ICP)	ND		20	UG/L
Zinc	(ICP)	15		10	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

JOB NUMBER :9100.699

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAHPLING (IWTP)
SAMPLE ID LAB :EE-91-06319 MATRIX: WATER
SAMPLE ID CLIENT: **P32WFB002/GRAB/FB-02**

PARAMETER		RESULTS	Q	QNT. LIMIT	UNITS
Silver	(ICP)	ND		lo	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	ND		20	UGIL
Beryllium	(ICP)	ND		5.0	UG/L
Cadmium	(ICP)	5.4		5.0	UG/L
Cobalt	(ICP)	ND		20	UG/L
Chromium Total	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		20	UG/L
Iron	(ICP)	78		50	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Manganese	(ICP)	ND		10	UG/L
Sodium	(ICP)	ND		500	UG/L
Nickel	(ICP)	ND		20	UG/L
Lead	(FU)	ND		5.0	UG/L
Antimony	(ICP)	ND		60	UG/L
Selenium	(FU)	ND		5.0	UG/L
Tin	(ICP)	ND		SO	UG/L
Thallium	(FU)	ND		5.0	UG/L
Vanadium	(ICP)	ND		20	UG/L
Zinc	(ICP)	12		10	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIHATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

JOB NUMBER :9100.699

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
SAMPLE ID LAB : METHOD BLANK MATRIX: WATER

PARAMETER		RESULTS	Q	QNT. LIMIT	UNITS
Silver	(ICP)	ND		10	UG/L
Arsenic	(FU)	ND		5.0	UG/L
Barium	(ICP)	ND		20	UG/L
Beryllium	(ICP)	ND		5.0	UG/L
Cadmium	(ICP)	ND		5.0	UG/L
Cobalt	(ICP)	ND		20	UG/L
Chromium Total	(ICP)	ND		10	UG/L
Copper	(ICP)	ND		20	UG/L
Iron	(ICP)	ND		50	UG/L
Mercury	(Vap)	ND		0.20	UG/L
Manganese	(ICP)	ND		10	UG/L
Sodium	(ICP)	ND		500	UG/L
Nickel	(ICP)	ND		20	UG/L
Lead	(FU)	ND		5.0	UG/L
Lead	(ICP)	ND		50	UG/L
Antimony	(ICP)	ND		60	UG/L
Selenium	(FU)	ND		5.0	UG/L
Tin	(ICP)	ND		50	UG/L
Thallium	(FU)	ND		5.0	UG/L
Vanadium	(ICP)	ND		20	UG/L
Zinc	(ICP)	ND		10	UG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UB-7000 NASP MARCH SAMPLING (IWTP)
SAMPLE ID LAB :EE-91-08080 MATRIX: WATER
SAMPLE ID CLIENT: GM-66
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIHIT	UNITS
Cyanide	ND		0.010	MG/L
Sulfide	4.9		2.0	MG/L

QUALIFIERS: C = COHHENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
SAMPLE ID LAB :EE-91-08081 **MATRIX: WATER**
SAMPLE ID CLIENT: UG-1
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Chloride	8.8		1.0	MG/L
Cyanide	ND		0.010	MG/L
Sulfatt	19		2.0	MG/L
Sulfide	ND		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
SAMPLE ID LAB :EE-91-08082 MATRIX: WATER
SAMPLE ID CLIENT: FIELD BLANK 02
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Cyanide	ND		0.010	MG/L
Sulfide	ND		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
SAMPLE ID LAB :METHOD BLANK MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT	UNITS
Chloride	ND		1.0	MG/L
Cyanide	ND		0.010	MG/L
Sulfate	ND		2.0	MG/L
Sulfidc	ND		1.0	MG/L

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT
NA = NOT APPLICABLE

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IVTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : EE-91-08080 MATRIX: WATER
SAMPLE ID CLIENT: GM-66
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
Dichlorodifluoromethane	ND		250
Chloromethane	ND		500
Bromomethane	ND		500
Vinyl Chloride	ND		500
Chloroethane	ND		500
Trichlorofluoromethane	ND		250
Acrolein	ND		5000
Methylene Chloride	ND		250
Acetone	890	B	500
Methyl Iodide	ND		250
Carbon Disulfide	ND		250
Allyl Chloride	ND		500
Acetonitrile	ND		50000
1,1-Dichloroethene	PRESENT	L	250
1,1-Dichloroethane	ND		250
1,2-Dichloroethene (total)	1000		250
Acrylonitrile	ND		5000
Chloroprene	ND		250
Propionitrile	ND		500
Chloroform	ND		250
Methacrylonitrile	ND		250
Isobutanol	ND		5000
1,2-Dichloroethane	ND		250
2-Butanone	ND		500
1,1,1-Trichloroethane	ND		250
Carbon Tetrachloride	ND		250
Vinyl Acetate	ND		500
Bromodichloromethane	ND		250
Methylene Bromide	ND		250
1,2-Dichloropropane	ND		250
Methyl Methacrylate	ND		250
1,4-Dioxane	ND		7500
cis-1,3-Dichloropropene	ND		250
Trichloroethene	8200		250
Dibromochloromethane	ND		250
1,1,2-Trichloroethane	ND		250
Benzene	ND		250
trans-1,3-Dichloropropene	ND		250

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : EE-91-08080 MATRIX: WATER
SAHPLE ID CLIENT: GM-66
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
Pyridine	ND		50000
Bromofo m	ND		250
4-Methyl-2-pentanone	ND		500
Ethyl Methacrylate	ND		250
2-Hexanone	ND		500
1,2-Dibromoethane	ND		250
Tetrachloroethene	ND		250
1,1,2,2-Tetrachloroethane	ND		250
Toluene	ND		250
Chlorobenzene	PRESENT	L	250
2-Picoline	ND		50000
1,1,1,2-Tetrachloroethane	ND		250
Ethylbenzene	ND		250
Xylene (m + p)	PRESENT	L	250
Styrene	ND		250
Xylene (o)	ND		2150
1,2,3-Trichloropropane	ND		250
Trans-1,4-Dichloro-2-butene	ND		2150
Pentachloroethane	ND		250
1,2-Dibromo-3-Chloropropane	ND		500

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : EE-91-08081 MATRIX: WATER
SAHPLE ID CLIENT: UG-1
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
Dichlorodifluoromethane	ND		5.0
Chloromethane	ND		10
Bromomethane	ND		10
Vinyl Chloride	ND		10
Chloroethane	ND		10
Trichlorofluoromethane	ND		5.0
Acrolein	ND		100
Methylene Chloride	PRESENT	LB	5.0
Acetone	PRESENT	LB	10
Methyl Iodide	ND		5.0
Carbon Disulfide	ND		5.0
Allyl Chloride	ND		10
Acetonitrile	ND		1000
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
1,2-Dichloroethene (total)	ND		5.0
Acrylonitrile	ND		100
Chloroprene	ND		5.0
Propionitrile	ND		10
Chloroform	ND		5.0
Methacrylonitrile	ND		5.0
Isobutanol	ND		100
1,2-Dichloroethane	ND		5.0
2-Butanone	ND		10
1,1,1-Trichloroethane	ND		5.0
Carbon Tetrachloride	ND		5.0
Vinyl Acetate	ND		10
Bromodichloromethane	ND		5.0
Methylene Bromide	ND		5.0
1,2-Dichloropropane	ND		5.0
Methyl Methacrylate	ND		5.0
1,4-Dioxane	ND		150
cis-1,3-Dichloropropene	ND		5.0
Trichloroethene	ND		5.0
Dibromochloromethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Benzene	ND		5.0
trans-1,3-Dichloropropene	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : EE-91-08081 MATRIX: WATER
SAMPLE ID CLIENT: UG-1
SMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
Pyridine	ND		1000
Bromoform	ND		5.0
4-Methyl-2-pentanone	ND		10
Ethyl Methacrylate	ND		5.0
2-Hexanone	ND		10
1,2-Dibromoethane	ND		5.0
Tetrachloroethene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Toluene	ND		5.0
Chlorobenzene	ND		5.0
2-Picoline	ND		1000
1,1,1,2-Tetrachloroethane	ND		5.0
Ethylbenzene	ND		5.0
Xylene (m + p)	ND		5.0
Styrane	ND		5.0
Xylene (o)	ND		5.0
1,2,3-Trichloropropane	ND		5.0
Trans-1,4-Dichloro-2-butene	ND		5.0
Pentachloroethane	ND		5.0
1,2-Dibromo-3-Chloropropane	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : EE-91-08082 MATRIX: VATER
SAMPLE ID CLIENT: FIELD BLANK 02
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
Dichlorodifluoromethane	ND		5.0
Chloromethane	ND		10
Bromomethane	ND		10
Vinyl Chloride	ND		10
Chloroethane	ND		10
Trichlorofluoromethane	ND		5.0
Acrolein	ND		100
Methylene Chloride	PRESENT	LB	5.0
Acetone	12	B	10
Hethyl Iodide	ND		5.0
Carbon Disulfide	ND		5.0
Allyl Chloride	ND		10
Acetonitrile	ND		1000
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
1,2-Dichloroethene (total)	ND		5.0
Acrylonitrile	ND		100
Chloroprene	ND		5.0
Propionitrile	ND		10
Chloroform	ND		5.0
Hethacrylonitrile	ND		5.0
Isobutanol	ND		100
1,2-Dichloroethane	ND		5.0
2-Butanone	ND		10
1,1,1-Trichloroethane	ND		5.0
Carbon Tetrachloride	ND		5.0
Vinyl Acetate	ND		10
Bromodichloromethane	ND		5.0
Methylene Bromide	ND		5.0
1,2-Dichloropropane	ND		5.0
Methyl Methacrylate	ND		5.0
1,4-Dioxane	ND		150
cis-1,3-Dichloropropene	ND		5.0
Trichloroethene	ND		5.0
Dibromochloromethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Benzene	ND		5.0
trans-1,3-Dichloropropene	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :VV0AIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : EE-91-08082 MATRIX: WATER
SAMPLE ID CLIENT: FIELD BLANK 02
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
Pyridine	ND		1000
Bromoform	ND		5.0
4-Methyl-2-pentanone	ND		10
Ethyl Methacrylate	ND		5.0
2-Hexanone	ND		10
1,2-Dibromoethane	ND		5.0
Tetrachloroethene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Toluene	ND		5.0
Chlorobenzene	ND		5.0
2-Picoline	ND		1000
1,1,1,2-Tetrachloroethane	ND		5.0
Ethylbenzene	ND		5.0
Xylene (m + p)	ND		5.0
Styrenc	ND		5.0
Xylene (o)	ND		5.0
1,2,3-Trichloropropane	ND		5.0
Trans-1,4-Dichloro-2-butene	ND		5.0
Pentachloroethane	ND		5.0
1,2-Dibromo-3-Chloropropane	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

3200049

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAHPLE ID LAB : EE-91-08083 MATRIX: WATER
SAMPLE ID CLIENT: TRIP BLANK 03
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIHIT
Dichlorodifluoromethane	ND		5.0
Chloromethane	ND		10
Bronomethane	ND		10
Vinyl Chloride	ND		10
Chloroethane	ND		10
Trichlorofluoroaethane	ND		5.0
Acrolein	ND		100
Methylene Chloride	PRESENT	LB	5.0
Acetone	19	B	10
Methyl Iodide	ND		5.0
Carbon Disulfide	ND		5.0
Allyl Chloride	ND		10
Acetonitrile	ND		1000
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
1,2-Dichloroethene (total)	ND		5.0
Acrylonitrile	ND		100
Chloroprene	ND		5.0
Propionitrile	ND		10
Chloroform	ND		5.0
Methacrylonitrile	ND		5.0
Isobutanol	ND		100
1,2-Dichloroethane	ND		5.0
2-Butanone	ND		10
1,1,1-Trichloroethane	ND		5.0
Carbon Tetrachloride	ND		5.0
Vinyl Acetate	ND		10
Bromodichloromethane	ND		5.0
Methylene Bromide	ND		5.0
1,2-Dichloropropane	ND		5.0
Methyl Methacrylate	ND		5.0
1,4-Dioxane	ND		150
cis-1,3-Dichloropropene	ND		5.0
Trichlorocthene	ND		5.0
Dibromochloromethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Benzene	ND		5.0
trans-1,3-Dichloropropene	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : EE-91-08083 MATRIX: WATER
SAMPLE ID CLIENT: TRIP BLANK 03
SAMPLE LOCATION :

PARAMETER	RESULTS	Q	QNT. LIMIT
Pyridine	ND		1000
Bromoform	ND		5.0
4-Hethyl-2-pentanone	ND		10
Ethyl Methacrylate	ND		5.0
2-flexanone	ND		10
1,2-Dibromoethane	ND		5.0
Tetrachloroethene	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Toluene	ND		5.0
Chlorobenzene	ND		5.0
2-Picoline	ND		1000
1,1,1,2-Tetrachloroethane	ND		5.0
Ethylbenzenc	ND		5.0
Xylene (m + p)	ND		5.0
Styrene	ND		5.0
Xylene (o)	ND		5.0
1,2,3-Trichloropropane	ND		5.0
Trans-1,4-Dichloro-2-butene	ND		5.0
Pentachlorocthane	ND		5.0
1,2-Dibromo-3-Chloropropane	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

3200050

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UB-7000 NASP MARCH SAMPLING (IWTP)
TEST NAHE : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : HETBOD BLANK MATRIX : WATER

PARAMETER	RESULTS	Q	QNT. LIHIT
Dichlorodifluoromethane	ND		5.0
Chloromethane	ND		10
Bromomethane	ND		10
Vinyl Chloride	ND		10
Chloroethane	ND		10
Trichlorofluoromethae	ND		10
Acrolein	ND		100
Methylene Chloride	PRESENT	L	5.0
Acetone	15		10
Methyl Iodide	ND		5.0
Carbon Disulfide	ND		5.0
Allyl Chloride	ND		10
Acetonitrile	ND		1000
1,1-Dichloroethene	ND		5.0
1,1-Dichloroethane	ND		5.0
1,2-Dichloroethene (total)	ND		5.0
Acrylonitrile	ND		100
Chloroprene	ND		5.0
Propionitrile	ND		10
Chloroform	ND		5.0
Methacrylonitrile	ND		5.0
Isobutanol	ND		100
1,2-Dichloroethane	ND		5.0
2-Butanone	ND		10
1,1,1-Trichloroethane	ND		5.0
Carbon Tetrachloride	ND		5.0
Vinyl Acetate	ND		10
Bromodichloromcthane	ND		5.0
Methylene Bromide	ND		5.0
1,2-Dichloropropane	ND		5.0
Methyl Methacrylate	ND		5.0
1,4-Dioxane	ND		150
cis-1,3-Dichloropropene	ND		5.0
Trichloroethcne	ND		5.0
Dibromochloromethane	ND		5.0
1,1,2-Trichloroethane	ND		5.0
Benzene	ND		5.0
trans-1,3-Dichloropropene	ND		5.0

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

TEST CODE :WVOAIX1 JOB NUMBER :9100.825

Ecology and Environment, Inc.
Analytical Services Center

CLIENT : UH-7000 NASP MARCH SAMPLING (IWTP)
TEST NAME : VOA APPENDIX IX UNITS : UG/L
SAMPLE ID LAB : METHOD BLANK MATRIX: WATER

PARAMETER	RESULTS	Q	QNT. LIMIT
Pyridine	ND		1000
Bromoform	ND		5.0
4-Methyl-2-pentanone	ND		10
Ethyl Methacrylate	ND		5.0
2-Hexanone	ND		10
1,2-Dibromoethane	ND		5.0
Tetrachloroethane	ND		5.0
1,1,2,2-Tetrachloroethane	ND		5.0
Toluene	ND		5.0
Chlorobenzene	ND		5.0
2-Picoline	ND		1000
1,1,1,2-Tetrachloroethane	ND		5.0
Ethylbenzene	ND		5.0
Xylene (m + p)	ND		5.0
Styrene	ND		5.0
Xylene (o)	ND		5.0
1,2,3-Trichloropropane	ND		5.0
Trans-1,4-Dichloro-2-butene	ND		5.0
Pentachloroethane	ND		5.0
1,2-Dibromo-3-Chloropropane	ND		10

QUALIFIERS: C = COMMENT ND = NOT DETECTED
J = ESTIMATED VALUE B = ALSO PRESENT IN BLANK
L = PRESENT BELOW STATED DETECTION LIMIT

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

Ecology and Environment, Inc.
316 S. Baylen Street
Pensacola, FL 32501
Attn: John Barksdale

April 23, 1991

Job Number: Q103165

The Certificate of Analysis is for the following:

Client Project ID: 965020
Date Received by Lab: 3/27/91
Number of Samples: Three
Sample Type: Water

I. Introduction

On March 27, 1991, three water samples were received at ITAS Pittsburgh, labeled as follows:

P32 W001
P32 W066
P32 WFB02

Results for the organophosphorous pesticides (analyzed at ITAS San Jose) and dioxin/furans (analyzed at ITAS Knoxville) will be submitted shortly under separate cover.

II. Analytical Results/Methodology

Results of the Appendix analysis are presented in the enclosed tables and were determined in accordance with Methods 8270, 8080 and 8150, referenced in Test Methods for Evaluating Solid Waste, USEPA SW-846, 3rd Ed., 1986. Also copies of the raw data are enclosed.

Results are based on sample concentration and expressed in micrograms per liter or parts per billion.

III. Quality Control

QA/QC information can be found immediately following the analytical data.

Reviewed and Approved:

Steven H. Cochenour, Project Manager

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Appendix IX Semivolatile Compounds

Client Sample ID: P32 W066
Sample Date: 3/25/91
Lab Sample ID: 410316502
Extraction Date: 4/01/91
Analysis Date: 4/09/91

Compound	Concentration µg/L	Compound	Concentration µg/L
N-Nitrosodimethylamine	ND10	2-Nitroaniline	ND50
N-Nitrosomethylethylamine	ND20	Dimethyl Phthalate	ND10
2-Picoline	ND20	Acenaphthylene	ND10
Phenol	ND10	2,6-Dinitrotoluene	ND10
Aniline	ND10	3-Nitroaniline	ND50
bis(2-Chloroethyl)Ether	ND10	Acenaphthene	ND10
2-Chlorophenol	ND10	2,4-Dinitrophenol	ND50
1,3-Dichlorobenzene	16	4-Nitrophenol	ND50
1,4-Dichlorobenzene	34	Dibenzofuran	ND10
Benzyl Alcohol	ND10	2,4-Dinitrotoluene	ND10
1,2-Dichlorobenzene	49	Diethylphthalate	ND10
bis(2-Chloroisopropyl)Ether	ND10	4-Chlorophenyl-Phenylether	ND10
N-Nitroso-Di-n-Propylamine	ND10	Fluorene	ND10
Hexachloroethane	ND10	4-Nitroaniline	ND50
Nitrobenzene	ND10	4,6-Dinitro-2-Methylphenol	ND50
Isophorone	ND10	N-Nitrosodiphenylamine	ND10
2-Nitrophenol	ND10	4-Bromophenyl-phenylether	ND10
2,4-Dimethylphenol	91	Hexachlorobenzene	ND10
bis(2-Chloroethoxy)Methane	ND10	Pentachlorophenol	ND50
2,4-Dichlorophenol	ND10	Phenanthrene	ND10
1,2,4-Trichlorobenzene	ND10	Anthracene	ND10
Naphthalene	56	Di-n-Butylphthalate	ND10
4-Chloroaniline	ND10	Fluoranthene	ND10
Hexachlorobutadiene	ND10	Pyrene	ND10
4-Chloro-3-Methylphenol	ND10	Butylbenzylphthalate	ND10
2-Methylnaphthalene	ND10	3,3'-Dichlorobenzidine	ND20
Hexachlorocyclopentadiene	ND10	Benzo(a)Anthracene	ND10
2,4,6-Trichlorophenol	ND10	Chrysene	ND10
2,4,5-Trichlorophenol	ND50	bis(2-Ethylhexyl)Phthalate	ND10
2-Chloronaphthalene	ND10	Di-n-Octyl Phthalate	ND10

3200052

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: 4103165

Appendix IX Semivolatile Compounds (Continued)

Client Sample ID: P32 W066
Sample Date: 3/25/91
Lab Sample ID: 410316502
Extraction Date: 4/01/91
Analysis Date: 4/09/91

Compound	Concentration µg/L	Compound	Concentration µg/L
Benzo(b)Fluoranthene	ND10	Isosafrole	ND10
Benzo(k)Fluoranthene	ND10	M-Dinitrobenzene	ND10
Benzo(a)Pyrene	ND10	Pentachlorobenzene	ND10
Indeno(1,2,3-cd)Pyrene	ND10	1-Naphthylamine	ND50
Dibenz(a,h)Anthracene	ND10	2-Naphthylamine	ND50
Benzo(g,h,i)Perylene	ND10	5-Nitro-0-Toluidine	ND10
Total Methylphenol	ND10	Diphenylamine	ND10
Pyridine	ND50	Sym-Trinitrobenzene	ND10
2,3,4,6-Tetrachlorophenol	ND50	Phenacetin	ND10
Methyl Methanesulfonate	ND20	4-Aminobiphenyl	ND50
N-Nitrosodiethylamine	ND10	Pronamide	ND10
Ethylmethanesulfonate	ND10	Pentachloronitrobenzene	ND50
Pentachloroethane	ND10	4-Nitroquinoline-1-Oxide	ND50
N-Nitrosopyrrolidine	ND10	Methapyrilene	ND10
Acetophenone	ND10	Isodrin	ND10
N-Nitrosomorpholine	ND10	Aramite	ND20
P-Phenylenediamine	ND10	P-Dimethlaminoazobenzene	ND10
0-Toluidine	ND10	3,3-Dimethylbenzidine	ND20
N-Nitrosopiperidine	ND10	Kepone	ND300
Alpha,Alpha-Dimethyl-phenethylamine	ND20	7,12-Dimethylbenz(a) anthracene	ND10
2,6-Dichlorophenol	ND10	2-Acetylaminofluorene	ND10
Hexachloropropene	ND10	3-Methylcholanthrene	ND10
N-Nitrosodi-n-Butylamine	ND10	Dinoseb	ND50
Safrole	ND10	1,4-Naphthoquinone	ND50
1,2,4,5-Tetrachlorobenzene	ND10	Hexachloropehene	ND300

Surrogate Spike Percent Recovery:

Nitrobenzene-d_5	24% *	Phenol-d_6	48%
2-Fluorobiphenyl	61%	2-Fluorophenol	53%
Terphenyl	55%	2,4,6-Tribromophenol	55%

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Appendix IX Semivolatile Compounds

Client Sample ID: P32 W001
Sample Date: 3/25/91
Lab Sample ID: 410316501
Extraction Date: 4/01/91
Analysis Date: 4/09/91

compound	Concentration µg/L	compound	Concentration µg/L
N-Nitrosodimethylamine	ND10	2-Nitroaniline	ND50
N-Nitrosomethylethylamine	ND20	Dimethyl Phthalate	ND10
2-Picoline	ND20	Acenaphthylene	ND10
Phenol	ND10	2,6-Dinitrotoluene	ND10
Aniline	ND10	3-Nitroaniline	ND50
bis(2-Chloroethyl)Ether	ND10	Acenaphthene	ND10
2-Chlorophenol	ND10	2,4-Dinitrophenol	ND50
1,3-Dichlorobenzene	ND10	4-Nitrophenol	ND50
1,4-Dichlorobenzene	ND10	Dibenzofuran	ND10
Benzyl Alcohol	ND10	2,4-Dinitrotoluene	ND10
1,2-Dichlorobenzene	ND10	Diethylphthalate	ND10
bis(2-Chloroisopropyl)Ether	ND10	4-Chlorophenyl-Phenylether	ND10
N-Nitroso-Di-n-Propylamine	ND10	Fluorene	ND10
Hexachloroethane	ND10	4-Nitroaniline	ND50
Nitrobenzene	ND10	4,6-Dinitro-2-Methylphenol	ND50
Isophorone	ND10	N-Nitrosodiphenylamine	ND10
2-Nitrophenol	ND10	4-Bromophenyl-phenylether	ND10
2,4-Dimethylphenol	ND10	Hexachlorobentene	ND10
bis(2-Chloroethoxy)Methane	ND10	Pentachlorophenol	ND50
2,4-Dichlorophenol	ND10	Phenanthrene	ND10
1,2,4-Trichlorobenzene	ND10	Anthracene	ND10
Naphthalene	ND10	Di-n-Butylphthalate	ND10
4-Chloroaniline	ND10	Fluoranthene	ND10
Hexachlorobutadiene	ND10		ND10
4-Chloro-3-Wethylphuol	ND10	Butylbenzylphthalate	ND10
2-Methylnaphthalene	ND10	3,3'-Dichlorobenzidine	ND20
Hexachlorocyclopentadiene	ND10	Benzo(a)Anthracene	ND10
2,4,6-Trichlorophenol	ND10	Chrysene	ND10
2,4,5-Trichlorophenol	ND50	bis(2-Ethylhexyl)Phthalate	ND10
2-Chloronaphthalene	ND10	Di-n-Octyl Phthalate	ND10

3200053

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Appendix IX Semivolatile Compounds (Continued)

Client Sample ID: P32 W001
Sample Date: 3/25/91
Lab Sample ID: Q10316501
Extraction Date: 4/01/91
Analysis Date: 4/09/91

Compound	Concentration µg/L	Compound	Concentration µg/L
Benzo(b)Fluoranthene	ND10	Isosafrole	ND10
Benzo(k)Fluoranthene	ND10	M-Dinitrobenzene	ND10
Benzo(a)Pyrene	ND10	Pentachlorobenzene	ND10
Indeno(1,2,3-cd)Pyrene	ND10	1-Naphthylamine	ND50
Dibenz(a,h)Anthracene	ND10	2-Naphthylamine	ND50
Benzo(g,h,i)Perylene	ND10	5-Nitro-0-Toluidine	ND10
Total Methylphenol	ND10	Diphenylamine	ND10
Pyridine	ND50	Sym-Trinitrobenzene	ND10
2,3,4,6-Tetrachlorophenol	ND50	Phenacetin	ND10
Methyl Methanesulfonate	ND20	4-Aminobiphenyl	ND50
N-Nitrosodiethylamine	ND10	Pronamide	ND10
Ethylmethanesulfonate	ND10	Pentachloronitrobenzene	ND50
Pentachloroethane	ND10	4-Nitroquinoline-1-Oxide	ND50
N-Nitrosopyrrolidine	ND10	Methapyrilene	ND10
Acetophenone	ND10	Isodrin	ND10
N-Nitrosomorpholine	ND10	Aramite	ND20
P-Phenylenediamine	ND10	P-Dimethlaminoazobenzene	ND10
0-Toluidine	ND10	3,3-Dimethylbenzidine	ND20
N-Nitrosopiperidine	ND10	Kepone	ND300
Alpha,Alpha-Dimethyl-phenethylamine	ND20	7,12-Dimethylbenz(a) anthracene	ND10
2,6-Dichlorophenol	ND10	2-Acetylaminofluorene	ND10
Hexachloropropene	ND10	3-Methylcholanthrene	ND10
N-Nitrosodi-n-Butylamine	ND10	Dinoseb	ND50
Safrole	ND10	1,4-Naphthoquinone	ND50
1,2,4,5-Tetrachlorobenzene	ND10	Hexachloropehene	ND300

Surrogate Spike Percent Recovery:

Nitrobenzene-d_5	32% *	Phenol-d_6	40%
2-Fluorobiphenyl	679	2-Fluorophenol	549
Terphenyl	71%	2,4,6-Tribromophenol	56%

*Outside QC limits.

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Appendix IX Semivolatile Compounds

Client Sample ID: P32 WFB02
Sample Date: 3/25/91
Lab Sample ID: 010316503
Extraction Date: 4/01/91
Analysis Date: 4/09/91

Compound	Concentration µg/L	Compound	Concentration µg/L
N-Nitrosodimethylamine	ND10	2-Nitroaniline	ND50
N-Nitrosomethylethylamine	ND20	Dimethyl Phthalate	ND10
2-Picoline	ND20	Acenaphthylene	ND10
Phenol	ND10	2,6-Dinitrotoluene	ND10
Aniline	ND10	3-Nitroaniline	ND50
bis(2-Chloroethyl)Ether	ND10	Acenaphthene	ND10
2-Chlorophenol	ND10	2,4-Dinitrophenol	ND50
1,3-Dichlorobenzene	ND10	4-Nitrophenol	ND50
1,4-Dichlorobenzene	ND10	Dibenzofuran	ND10
Benzyl Alcohol	ND10	2,4-Dinitrotoluene	ND10
1,2-Dichlorobenzene	ND10	Diethylphthalate	ND10
bis(2-Chloroisopropyl)Ether	ND10	4-Chlorophenyl-Phenylether	ND10
N-Nitroso-Di-n-Propylamine	ND10	Fluorene	ND10
Hexachloroethane	ND10	4-Nitroaniline	ND50
Nitrobenzene	ND10	4,6-Dinitro-2-Methylphenol	ND50
Isophorone	ND10	N-Nitrosodiphenylamine	ND10
2-Nitrophenol	ND10	4-Bromophenyl-phenylether	ND10
2,4-Dimethylphenol	ND10	Hexachlorobenzene	ND10
bis(2-Chloroethoxy)Methane	ND10	Pentachlorophenol	ND50
2,4-Dichlorophenol	ND10	Phenanthrene	ND10
1,2,4-Trichlorobenzene	ND10	Anthracene	ND10
Naphthalene	ND10	Di-n-Butylphthalate	ND10
4-Chloroaniline	ND10	Fluoranthene	ND10
Hexachlorobutadiene	ND10	Pyrene	ND10
4-Chloro-3-Methylphenol	ND10	Butylbenzylphthalate	ND10
2-Methylnaphthalene	ND10	3,3'-Dichlorobenzidine	ND20
Hexachlorocyclopentadiene	ND10	Benzo(a)Anthracene	ND10
2,4,6-Trichlorophenol	ND10	Chrysene	ND10
2,4,5-Trichlorophenol	ND50	bis(2-Ethylhexyl)Phthalate	ND10
2-Chloronaphthalene	ND10	Di-n-Octyl Phthalate	ND10

682-1-89

3200054

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Appendix IX Semivolatile Compounds (Continued)

Client Sample ID: P32 WFB02
Sample Date: 3/25/91
Lab Sample ID: 410316503
Extraction Date: 4/01/91
Analysis Date: 4/09/91

Compound	Concentration µg/L	Compound	Concentration µg/L
Benzo(b)Fluoranthene	ND10	Isosafrole	ND10
Benzo(k)Fluoranthene	ND10	M-Dinitrobenzene	ND10
Benzo(a)Pyrene	ND10	Pentachlorobenzene	ND10
Indeno(1,2,3-cd)Pyrene	ND10	1-Naphthylamine	ND50
Dibenz(a,h)Anthracene	ND10	2-Naphthylamine	ND50
Benzo(g,h,i)Perylene	ND10	5-Nitro-0-Toluidine	ND10
Total Methylphenol	ND10	Diphenylamine	ND10
Pyridine	ND50	Sym-Trinitrobenzene	ND10
2,3,4,6-Tetrachlorophenol	ND50	Phenacetin	ND10
Methyl Methanesulfonate	ND20	4-Aminobiphenyl	ND50
N-Nitrosodiethylamine	ND10	Pronamide	ND10
Ethylmethanesulfonate	ND10	Pentachloronitrobenzene	ND50
Pentachloroethane	ND10	4-Nitroquinoline-1-Oxide	ND50
N-Nitrosopyrrolidine	ND10	Methapyrilene	ND10
Acetophenone	ND10	Isodrin	ND10
N-Nitrosomorpholine	ND10	Aramite	ND20
P-Phenylenediamine	ND10	P-Dimethlaminoazobenzene	ND10
0-Toluidine	ND10	3,3-Dimethylbenzidine	ND20
N-Nitrosopiperidine	ND10	Kepone	ND300
Alpha,Alpha-Dimethyl-phenethylamine	ND20	7,12-Dimethylbenz(a) anthracene	ND10
2,6-Dichlorophenol	ND10	2-Acetylaminofluorene	ND10
Hexachloropropene	ND10	3-Methylcholanthrene	ND10
N-Nitrosodi-n-Butylamine	ND10	Dinoseb	ND50
Safrole	ND10	1,4-Naphthoquinone	ND50
1,2,4,5-Tetrachlorobenzene	ND10	Hexachloropehene	ND300

Surrogate Spike Percent Recovery:

Nitrobenzene-d_5	262 *	Phenol-d_6	43%
2-Fluorobiphenyl	59%	2-Fluorophenol	48%
Terphenyl	74%	2,4,6-Tribromophenol	49%

*Outside QC limits.

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Appendix IX Semivolatile Compounds

Lab Sample ID: Method Blank
Extraction Date: 4/01/91
Analysis Date: 4/09/91

Compound	Concentration µg/L	Compound	Concentration µg/L
N-Nitrosodimethylamine	ND10	2-Nitroaniline	ND50
N-Nitrosomethylethylamine	ND20	Dimethyl Phthalate	ND10
2-Picoline	ND20	Acenaphthylene	ND10
Phenol	ND10	2,6-Dinitrotoluene	ND10
Aniline	ND10	3-Nitroaniline	ND50
bis(2-Chloroethyl)Ether	ND10	Acenaphthene	ND10
2-Chlorophenol	ND10	2,4-Dinitrophenol	ND50
1,3-Dichlorobenzene	ND10	4-Nitrophenol	ND50
1,4-Dichlorobenzene	ND10	Dibenzofuran	ND10
Benzyl Alcohol	ND10	2,4-Dinitrotoluene	ND10
1,2-Dichlorobenzene	ND10	Diethylphthalate	ND10
bis(2-Chloroisopropyl)Ether	ND10	4-Chlorophenyl-Phenylether	ND10
N-Nitroso-Di-n-Propylamine	ND10	Fluorene	ND10
Hexachloroethane	ND10	4-Nitroaniline	ND50
Nitrobenzene	ND10	4,6-Dinitro-2-Methylphenol	ND50
Isophorone	ND10	N-Nitrosodiphenylamine	ND10
2-Nitrophenol	ND10	4-Bromophenyl-phenylether	ND10
2,4-Dimethylphenol	ND10	Hexachlorobenzene	ND10
bis(2-Chloroethoxy)Methane	ND10	Pentachlorophenol	ND50
2,4-Dichlorophenol	ND10	Phenanthrene	ND10
1,2,4-Trichlorobenzene	ND10	Anthracene	ND10
Naphthalene	ND10	Di-n-Butylphthalate	ND10
4-Chloroaniline	ND10	Fluoranthene	ND10
Hexachlorobutadiene	ND10	Pyrene	ND10
4-Chloro-3-Methylphenol	ND10	Butylbenzylphthalate	ND10
2-Methylnaphthalene	ND10	3,3'-Dichlorobenzidine	ND20
Hexachlorocyclopentadiene	ND10	Benzo(a)Anthracene	ND10
2,4,6-Trichlorophenol	ND10	Chrysene	ND10
2,4,5-Trichlorophenol	ND50	bis(2-Ethylhexyl)Phthalate	ND10
2-Chloronaphthalene	ND10	Di-n-Octyl Phthalate	ND10

3200055

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Appendix IX Semivolatile Compounds (Continued)

Lab Sample ID: Method Blank
Extraction Date: 4/01/91
Analysis Date: 4/09/91

Compound	Concentration µg/L	Compound	Concentration µg/L
Benzo(b)Fluoranthene	NDlO	Isosafrole	NDlO
Benzo(k)Fluoranthene	NDlO	M-Dinitrobenzene	NDlO
Benzo(a)Pyrene	NDlO	Pentachlorobenzene	NDlO
Indeno(1,2,3-cd)Pyrene	NDlO	1-Naphthylamine	ND50
Dibenz(a,h)Anthracene	NDlO	2-Naphthylamine	ND50
Benzo(g,h,i)Perylene	NDlO	5-Nitro-0-Toluidine	NDlO
Total Methylphenol	NDlO	Diphenylamine	NDlO
Pyridine	ND50	Sym-Trinitrobenzene	NDlO
2,3,4,6-Tetrachlorophenol	ND50	Phenacetin	NDlO
Methyl Methanesulfonate	ND20	4-Antinobiphenyl	ND50
N-Nitrosodiethylamine	NDlO	Pronamide	NDlO
Ethylmethanesulfonate	NDlO	Pentachloronitrobenzene	ND50
Pentachloroethane	NDlO	4-Nitroquinoline-1-Oxide	ND50
N-Nitrosopyrrolidine	NDlO	Methapyrilene	NDlO
Acetophenone	NDlO	Isodrin	NDlO
N-Nitrosomorpholine	NDlO	Aramite	ND20
P-Phenylenediamine	NDlO	P-Dimethlaminoazobenzene	NDlO
0-Toluidine	NDlO	3,3-Dimethylbenzidine	ND20
N-Nitrosopiperidine	NDlO	Kepone	ND300
Alpha,Alpha-Dimethyl-phenethylamine	ND20	7,12-Dimethylbenz(a) anthracene	NDlO
2,6-Dichlorophenol	NDlO	2-Acetylaminofluorene	NDlO
Hexachloropropene	NDlO	3-Methylcholanthrene	NDlO
N-Nitrosodi-n-Butylamine	NDlO	Dinoseb	ND50
Safrole	NDlO	1,4-Naphthoquinone	ND50
1,2,4,5-Tetrachlorobenzene	NDlO	Hexachloropahene	ND300

Surrogate Spike Percent Recovery:

Nitrobenzene-d_5	74%	Phenol-d_6	52%
2-Fluorobiphenyl	64%	2-Fluorophenol	54%
Terphenyl	68%	2,4,6-Tribromophenol	48%

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Pesticide/PCB Analysis

Client Sample ID: P32 W001
Sample Date: 3/25/91
Lab Sample ID: Q10316501
Extraction Date: 4/1/91
Analysis Date: 4/9,10/91

Compound	Concentration µg/L
alpha-BHC	ND0.03
beta-BHC	ND0.06
delta-BHC	ND0.09
gamma-BHC (Lindane)	ND0.04
Heptachlor	ND0.03
Aldrin	ND0.04
Heptachlor Epoxide	ND0.83
Endosulfan I	ND0.14
Dieldrin	NDo.02
4,4'-DDE	ND0.04
Endrin	ND0.06
Endosulfan 11	ND0.04
4,4'-DDD	ND0.11
Endosulfan Sulfate	ND0 .66
4,4'-DDT	NDo.12
Endrin Aldehyde	ND0.23
Methoxychlor	ND1.8
Chlordane (Technical)	ND0 .14
Toxaphene	ND2.4
Aroclor-1016	ND0 .50
Aroclor-1221	ND0 .50
Aroclor-1232	ND0.50
Aroclor-1242	ND0.50
Aroclor-1248	ND0.50
Aroclor-1254	ND1.0
Aroclor-1260	ND1.0

	Surrogate Spike Percent Recovery
Dibutylchlorendate	87%

3200056

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: 4103165

Pesticide/PCB Analysis

Client Sample ID: P32 W066
Sample Date: 3/25/91
Lab Sample ID: 410316502
Extraction Date: 4/1/91
Analysis Date: 4/9,10/91

Compound	Concentration µg/L
alpha-BHC	ND0.03
beta-BHC	ND0.06
delta-BHC	ND0.09
gamma-BHC (Lindane)	ND0.04
Heptachlor	ND0.03
Aldrin	ND0.04
Heptachlor Epoxide	ND0.83
Endosulfan I	ND0.14
Dieldrin	ND0.02
4,4'-DDE	ND0.04
Endrin	ND0.06
Endosulfan II	ND0.04
4,4'-DDD	ND0.11
Endosulfan Sulfate	ND0.66
4,4'-DDT	ND0.12
Endrin Aldehyde	ND0.23
Methoxychlor	ND1.8
Chlordane (Technical)	ND0.14
Toxaphene	ND2.4
Aroclor-1016	ND0.50
Aroclor-1221	ND0.50
Aroclor-1232	ND0.50
Aroclor-1242	ND0.50
Aroclor-1248	ND0.50
Aroclor-1254	ND1.0
Aroclor-1260	ND1.0

	Surrogate Spike Percent Recovery
Dibutylchlorendate	107%

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: 4103165

Pesticide/PCB Analysis

Client Sample ID: P32 WFB02
Sample Date: 3/25/91
Lab Sample ID: 410316503
Extraction Date: 4/1/91
Analysis Date: 4/9,10/91

Compound	Concentration µg/L
alpha-BHC	ND0.03
beta-BHC	ND0.06
delta-BHC	ND0.09
gamma-BHC (Lindane)	ND0.04
Heptachlor	ND0.03
Aldrin	ND0.04
Heptachlor Epoxide	ND0.83
Endosulfan I	ND0.14
Dieldrin	NDo.02
4,4'-DDE	ND0.04
Endrin	ND0.06
Endosulfan II	ND0.04
4,4'-DDD	ND0.11
Endosulfan Sulfate	ND0.66
4,4'-DDT	ND0.12
Endrin Aldehyde	ND0.23
Methoxychlor	ND1.8
Chlordane (Technical)	ND0.14
Toxaphene	ND2.4
Aroclor-1016	ND0.50
Aroclor-1221	ND0.50
Aroclor-1232	ND0.50
Aroclor-1242	ND0.50
Aroclor-1248	ND0.50
Aroclor-1254	ND1.0
Aroclor-1260	ND1.0

	Surrogate Spike Percent Recovery
Dibutylchlorendate	99%

3200057

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Pesticide/PCB Analysis

Lab Sample ID: Method Blank
Extraction Date: 4/1/91
Analysis Date: 4/9,10/91

Compound	Concentration µg/L
alpha-BHC	ND0.03
beta-BHC	ND0.06
delta-BHC	ND0.09
gamma-BHC (Lindane)	ND0.04
Heptachlor	ND0.03
Aldrin	ND0.04
Heptachlor Epoxide	ND0.83
Endosulfan I	ND0.14
Dieldrin	ND0.02
4,4'-DDE	ND0.04
Endrin	ND0.06
Endosulfan II	ND0.04
4,4'-DDD	ND0.11
Endosulfan Sulfate	ND0.66
4,4'-DDT	ND0.12
Endrin Aldehyde	ND0.23
Methoxychlor	ND1.8
Chlordane (Technical)	ND0.14
Toxaphene	ND2.4
Aroclor-1016	ND0.50
Aroclor-1221	ND0.50
Aroclor-1232	ND0.50
Aroclor-1242	ND0.50
Aroclor-1248	ND0.50
Aroclor-1254	ND1.0
Aroclor-1260	ND1.0

	Surrogate Spike Percent Recovery
Dibutylchlorendate	96%

682-1-89

Ecology and Environment, Inc.
Date: 4/23/91

IT ANALYTICAL SERVICES
PITTSBURGH, PA

Client Project ID: 965020

Job Number: Q103165

Herbicide Analysis

Client Sample ID: See Below
Sample Date: 3/25/91
Extraction Date: 4/02/91
Analysis Date: 4/16/91

Client Sample ID:	Lab Sample ID:	2,4-D	2,4,5-TP (Silvex)	2,4,5-T-ME
		Concentration µg/L		
P32 W001	Q10316501	ND12	ND1.7	ND2.0
P32 W066	Q10316502	ND12	ND1.7	ND2.0
P32 WFB02	Q10316503	ND12	ND1.7	ND2.0
--	Method Blank	ND12	ND1.7	ND2.0

3200058

682-1-89

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

Steve Cochenour
IT Export

April 24, 1991

TDL PROJECT NUMBER: 482998 **CLIENT PO NUMBER:** P91057/P103165

This is the Certificate of Analysis for the following samples:

Client Project ID:	**UH7 (Ecology & Ecology)**
Date Received by Lab:	March **27,** 1991
Number of Samples:	Three **(3)**
Sample Type:	Water

I. Introduction/Case Narrative

Three **(3)** water samples were received March 27, 1991, for the analysis of Appendix IX dioxins and furans. This includes isomer specific **2,3,7,8-TCDD** and total tetra through hexa **(Cl_4-Cl_6)** dioxin and furan homologs (See Appendix A, Cross Reference List and Appendix G, Chain-of-Custody and Purchase Order records). The samples and blank were spiked with an internal standard mixture containing **50 ng** each of **^{13}C-2,3,7,8-TCDD, ^{13}C-PeCDD, ^{13}C-PeCDF, ^{13}C-HxCDD,** and ^{13}C-HxCDF. The samples and blank were extracted and cleaned up using a modified version of the EPA reference method described in **"RCRA** SW-846, Method **8280,"** revised September, 1986. Extracts were analyzed by **GC/MS** operating in the selected ion monitoring mode for enhanced sensitivity.

The samples were labeled with the following:

W001
W066
FB02

Reviewed and Approved:

Duane K. Root
Analytical Operations Manager

ac-s/DIT009

Steve Cochonour
Ecology & Environmental
Date: April 24, 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

II. Analytical Results/Methodology

SAMPLE PREPARATION

Approximately 1000 ml of each sample and 1000 ml distilled water (for the blank) were transferred into individual separatory funnels. The samples and blank were spiked with the internal standard mixture, and then triple-extracted with CH_2Cl_2. The resulting extracts were filtered into a KD flask and the volume reduced to approximately 1 ml.

SAMPLE CLEANUP

The samples and blank were cleaned up using dual column chromatography consisting of an acid-modified silica gel column followed by a neutral alumina column to aid in the removal of chemical interferences. Detailed descriptions of these cleanup techniques can be found in Option A of the U.S. Environmental Protection Agency, Region VII Protocol for The Determination Of 2,3,7,8-TCDD In Soil And Sediment", revised September, 1983. Final extracts were concentrated to near dryness and raised to 50 µl with 25 ng ^{13}C-1,2,3,4-TCDD and 25 ng ^{13}C-1,2,3,7,8,9-HxCDD which were used as recovery standards.

GC/MS ANALYSIS

Isomer Specific TCDD - The sample extracts were analyzed using HRGC/LRMS scanning in the selected ion monitoring mode for enhanced sensitivity. The column used for this isomer specific analysis was a 60 m SP-2331 fused silica capillary column. Before acquisition of the sample data, a seven isomer performance mixture containing the six most closely eluting TCDD isomers was analyzed.

A five-point calibration plot was analyzed in triplicate. The mean response factors obtained from this fifteen-point calibration were used for all subsequent calculations. Please see Appendix B. The shift standard, analyzed on the same day as the sample, produced a response factor within 10% of the fifteen-point curve for TCDD. See Appendix C.

Total Dioxin and Furan - The samples and blank were analyzed for total dioxin and furan homologs from Cl_4-Cl_8. The analytical approach employed by ITAS for the determination of total dioxins and furans is considered semi-quantitative due to the lack of availability of all dioxin and furan isomer standards. The standard analyzed each shift consisted of:

Steve Cochenour
Ecology & Environmental

Date: April 24, 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

II. Analytical Results/Methodology (continued)

GC/MS ANALYSIS (continued)

Dioxins	Dibenzofurans
^{13}C-2,3,7,8-TCDD	^{13}C-2,3,7,8-TCDF
^{13}C-1,2,3,4-TCDD	^{13}C-1,2,3,7,8-PeCDF
^{13}C-1,2,3,7,8-PeCDD	^{13}C-1,2,3,4,7,8-HxCDF
^{13}C-1,2,3,6,7,8-HxCDD	^{13}C-1,2,3,4,6,7,8-HpCDF
^{13}C-1,2,3,7,8,9-HxCDD	2,3,7,8-TCDF
^{13}C-1,2,3,4,6,7,8-HpCDD	1,2,3,7,8-PeCDF
^{13}C-OCDD	2,3,4,7,8-PeCDF
2,3,7,8-TCDD	1,2,3,4,7,8-HxCDF
1,2,3,7,8-PeCDD	1,2,3,6,7,8-HxCDF
1,2,3,4,7,8-HxCDD	2,3,4,6,7,8-HxCDF
1,2,3,6,7,8-HxCDD	1,2,3,7,8,9-HxCDF
1,2,3,7,8,9-HxCDD	1,2,3,4,6,7,8-HpCDF
1,2,3,4,6,7,8-HpCDD	1,2,3,4,7,8,9-HpCDF
OCDD	OCDF

Response factors were calculated for each compound in the standard relative to its 13C labeled homolog; the same response was assumed applicable to all isomers in each homologous group. A five-point calibration plot was analyzed in triplicate. The mean response factors obtained from this fifteen-point calibration were used for all subsequent calculations. See Appendix D. The shift standard, analyzed on the same day as the samples, produced a response factor within 30% of the multipoint. See Appendix E.

The extracts were analyzed using HRGC/LRMS scanning in the selected ion monitoring mode for enhanced sensitivity. The column used for the analysis was a 60 m DB-5 type fused silica capillary column.

GC/MS RESULTS

Isomer Specific TCDD - The results for the isomer specific analysis, shown in Appendix F, are reported in ng/L. A detection limit is calculated from 2.5 times the signal in the area of the elution of ^{13}C-TCDD whenever a sample contains no detectable 2,3,7,8-TCDD.

Totals - The results for the totals analysis, shown in Appendix F, are reported in ng/L with the total amount of each homologous group calculated. When more than one isomer in a homologous group of dioxin or furan is found, all of the isomers are added together to produce a total homolog result. Detection limits are calculated from 2.5 times signal to noise when a "Not Detected" (ND) is reported. The detection limits are listed in parenthesis.

Steve Cochonour
Ecology & Environmental
Date: April 24,1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

III. Quality Control

Routine laboratory QA/QC was followed. Recoveries for the internal standards for each sample are presented with the sample analysis data.

Steve Cochenour
Ecology & Environmental

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

Date: April 24, 1991
Client Project ID: UH7 TDL Project No.: 482998

CROSS REFERENCE LIST

TDL SAMPLE NO.	CLIENT SAMPLE NO.	MATRIX
883461	woo1	Water
883462	W066	Water
883463	FB02	Water

Steve Cochenour
Ecology & Environmental
Date: April 24, 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

LOW RESOLUTION MASS SPECTROMETRY

INITIAL CALIBRATION SUMMARY

3-28-91

RESPONSE FACTORS

	I	II	III	IV	V	MEAN	%RSD
TCDD	1.13	1.07	1.12	1.06	1.06	1.09	3.1
TCDF	1.30	1.32	1.38	1.24	1.26	1.30	4.2
TCDD (Rec.)	0.876	0.881	0.934	0.840	0.843	0.875	4.3
TCDF (Rec.)	1.42	1.38	1.50	1.34	1.36	1.40	4.5

CONCENTRATION (pg/µl)

ANALYTE	I	II	III	IV	V
Natives	200	350	500	1000	3000
I.S.	1000	1000	1000	1000	1000
RS.	500	500	500	500	500

I.S. Denotes Internal standard.
R.S. Denotes Recovery Standard.

Steve Cochenour
Ecology & Environmental
Date: April 24, 1991
Client Project ID: UH7

TDL Project No.: 482998

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

qbc-sADIT009

ISOMER SPECIFIC

CONTINUING CALIBRATION SUMMARY

Project Name: Ecology & Environment

Date	Instr. ID	Sol. D	Measured RF: ^{13}C-TCDD Recovery	Measured RF: Native TCDD	Measured RF: ^{13}C-TCDF Recovery	Measured RF: Native TCDF	Ratio (Measured/Mean): ^{13}C-TCDD Recovery	Ratio (Measured/Mean): Native TCDD	Ratio (Measured/Mean): ^{13}C-TCDF Recovery	Ratio (Measured/Mean): Native TCDF	TCDD Isomer Resolution %Valley (*Applies* for PC Only)
4-8-91	4500	PC									24
4-8-91	4500	CC1	0.956	1.03	1.46	1.19	1.09	0.942	1.05	0.919	
4-8-91	4500	PC									24

Solution ID Codes:

PC = Performance check solution

CC1 = Concentration calibration solution #1 = 200 pg/µl

Steve Cochenour
Ecology & Environmental
Date: April 24, 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

LOW RESOLUTION MASS SPECTROMETRY
TOTALS INITIAL CALIBRATION SUMMARY
3-27-91
Response Factors
(Triplicate Analyses)

	Average RF I	II	III	IV	V	MEAN RF	%RSD	MEAN TOTAL RF
2,3,7,8-TCDD	1.27	1.27	1.31	1.25	1.26	1.27	1.8	1.27
^{13}C-2,3,7,8-TCDD (IS)	1.03	1.04	1.10	1.12	1.10	1.08	3.7	—
2,3,7,8-TCDF	1.49	1.47	1.48	1.46	1.40	1.46	2.4	1.46
^{13}C-2,3,7,8-TCDF (IS)	1.63	1.61	1.62	1.59	1.47	1.58	4.1	
1,2,3,7,8-PeCDD	1.13	1.14	1.19	1.20	1.29	1.19	5.3	1.19
^{13}C-1,2,3,7,8-PeCDD (IS)	0.826	0.777	0.731	am	0.702	0.763	6.3	
1,2,3,7,8-PeCDF	1.45	1.54	1.66	1.61	1.63	1.58	5.3	1.58
2,3,4,7,8-PeCDF	1.45	1.54	1.65	1.62	1.66	1.58	5.6	
^{13}C-1,2,3,7,8-PeCDF (IS)	1.13	1.06	1.05	1.12	1.11	1.09	3.9	—
1,2,3,4,7,8-HxCDD	0.822	0.843	0.865	0.839	0.865	0.851	2.9	0.933
1,2,3,6,7,8-HxCDD	0.963	0.980	0.975	0.964	0.964	0.969	0.80	—
1,2,3,7,8,9-HxCDD	0.944	0.987	1.00	0.968	0 m	0.978	2.4	—
^{13}C-1,2,3,6,7,8-HxCDD (IS)	0.902	0.899	0.933	0.924	0.887	0.909	2.1	—
1,2,3,4,7,8-HxCDF	1.15	1.18	1.20	1.10	1.21	1.10	1.9	1.16
1,2,3,6,7,8-HxCDF	1.24	1.24	1.30	1.29	1.32	1.28	2.8	—
2,3,4,6,7,8-HxCDF	1.06	1.10	1.1s	1.14	1.15	1.12	3.5	—
1,2,3,7,8,9-HxCDF	1.01	1.05	1.08	1.06	1.08	1.05	3.0	
^{13}C-1,2,3,4,7,8-HxCDF (IS)	1.28	1.26	1.27	1.23	1.10	1.25	2.9	—
1,2,3,4,6,7,8-HpCDD	0.948	0.928	0.938	0.888	0.917	0.924	2.5	0.924
^{13}C-1,2,3,4,6,7,8-HpCDD (IS)	0.702	0.685	0.685	0.697	0.646	0.683	3.2	
1,2,3,4,6,7,8-HpCDF	1.05	1.02	1.04	0.984	1.01	1.02	2.5	0.938
1,2,3,4,7,8,9-HpCDF	0.854	0.825	0.868	0.841	0.891	0.856	3.0	
^{13}C-1,2,3,4,6,7,8-HpCDF (IS)	1.08	1.01	0.975	0.961	0.875	0.980	7.6	—
1,2,3,4,6,7,8,9-OCDD	1.38	1.31	1.28	1.21	1.21	1.28	5.6	1.28
^{13}C-1,2,3,4,6,7,8,9-OCDD (IS)	0.371	0.434	0.468	0.503	0.493	0.454	11.6	
1,2,3,4,6,7,8,9-OCDF	1.68	1.48	1.44	1.34	1.32	1.45	0.9	1.45

CONCENTRATION (pg/µl)

Analyte	I	II	III	IV	V
Natives	200	350	500	1000	3000
I.S.	1000	1000	1000	1000	1000
R.S	500	500	500	500	500

I.S. Denotes Internal Standard.
R.S. Denotes Recovery Standard.

qhc-s\DIT009

Steve Cochenour
Ecology & Environmental

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

Date: April 24, 1991
Client Project ID: UH7 TDL Project No.: 482998

TOTALS CONTINUING CALIBRATION SUMMARY

PROJECT: Ecology & Environmental

ANALYTE	MEAN RF USED	4-8-91	4-17-91
2,3,7,8-TCDD	1.27	1.10	1.22
^{13}C-2,3,7,8-TCDD(IS)	1.08	1.10	1.06
2,3,7,8-TCDF	1.46	1.41	1.49
^{13}C-2,3,7,8-TCDF(IS)	1.58	1.68	1.77
1,2,3,7,8-PeCDD	1.19	1.08	1.11
^{13}C-1,2,3,7,8-PeCDD(IS)	0.763	0.818	0.705
1,2,3,7,8-PeCDF	1.58	1.39	1.78
2,3,4,7,8-PeCDF	1.58	1.41	1.39
^{13}C-1,2,3,7,8-PeCDF(IS)	1.09	1.19	1.05
1,2,3,4,7,8-HxCDD	0.851	0.718	0.761
1,2,3,6,7,8-HxCDD	0.969	1.01	0.946
1,2,3,7,8,9-HxCDD	0.978	1.02	0.955
^{13}C-1,2,3,6,7,8-HxCDD(IS)	0.909	0.894	0.849
1,2,3,4,7,8-HxCDF	1.19	1.15	1.06
1,2,3,6,7,8-HxCDF	1.28	1.28	1.18
2,3,4,6,7,8-HxCDF	1.12	1.10	1.02
1,2,3,7,8,9-HxCDF	1.05	1.05	0.978
^{13}C-1,2,3,4,7,8-HxCDF(IS)	1.25	1.42	1.24
1,2,3,4,6,7,8-HpCDD	0.924	0.959	0.935
^{13}C-1,2,3,4,6,7,8-HpCDD(IS)	0.683	0.576	0.532
1,2,3,4,6,7,8-HpCDF	1.02	1.18	1.10
1,2,3,4,7,8,9-HpCDF	0.856	1.02	0.900
^{13}C-1,2,3,4,6,7,8-HpCDF(IS)	0.980	1.03	0.801
1,2,3,4,6,7,8,9-OCDD	1.28	1.20	1.17
^{13}C-1,2,3,4,6,7,8,9-OCDD(IS)	0.454	0.288.	0.314
1,2,3,4,6,7,8,9-OCDF	1.45	1.60	1.42

Stove Coohenour
Ecology & Environmental
Date: April 24, 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

Dioxin/Furan Analysis - Modified Method 8280

Client Sample ID: W066 (Water)
Sample Date: March 25,1991
TDL Sample ID: 883462
Extraction Date: April 3, 1991

Analyte	Conc. (ng/L)	Internal Standard	% Recovery
Isomer Specific Analysis Date: April 8, 1991			
2,3,7,8-TCDD	ND(0.42)	^{13}C-2,3,7,8-TCDD	97
Totals Analysis Date: April 17,1991			
Dioxins			
Total TCDD	ND(0.65)	^{13}C-2,3,7,8-TCDD	85
Total PeCDD	ND(1.3)	^{13}C-1,2,3,7,8-PeCDD	104
Total HxCDD	ND(1.0)	^{13}C-1,2,3,6,7,8-HxCDD	102
Furans			
Total TCDF	ND(0.55)	^{13}C-2,3,7,8-TCDF	85
Total PeCDF	ND(0.69)	^{13}C-1,2,3,7,8-PeCDF	80
Total HxCDF	ND(1.3)	^{13}C-1,2,3,4,7,8-HxCDF	100

qhc-s\DIT009

Steve Cochenour
Ecology & Environmental
Date: April 24, 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

Dioxin/Furan Analysis - Modified Method 8280

Client Sample ID: WC01 (Water)
Sample Date: March 25,1991
TDL Sample ID: 883461
Extraction Date: April 3, 1991

Analyte	Conc. (ng/L)	Internal Standard	% Recovery
Isomer Specific Analysis Date: April 8, 1991			
2,3,7,8-TCDD	ND(0.38)	^{13}C-2,3,7,8-TCDD	119
Totals Analysis Date: April 17, 1991			
Dioxins			
Total TCDD	ND(0.61)	^{13}C-2,3,7,8-TCDD	105
Total PeCDD	ND(1.5)	^{13}C-1,2,3,7,8-PeCDD	118
Total HxCDD	ND(0.97)	^{13}C-1,2,3,6,7,8-HxCDD	103
Furans			
Total TCDF	ND(0.38)	^{13}C-2,3,7,8-TCDF	107
Total PeCDF	ND(0.60)	^{13}C-1,2,3,7,8-PeCDF	93
Total HxCDF	ND(I.I)	^{13}C-1,2,3,4,7,8-HxCDF	110

Steve Cochenour
Ecology & Environmental
Date: April 24, 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

Dioxin/Furan Analysis - Modified Method 8280

Client Sample ID: FB02 (Water)
Sample Date: March 25,1991
TDL Sample ID: BB3463
Extraction Date: April 3, 1991

Analyte	Conc. (ng/L)	Internal Standard	% Recovery
Isomer Specific Analysis Date: April 8, 1991			
2,3,7,8-TCDD	ND(0.28)	^{13}C-2,3,7,8-TCDD	88
Totals Analysis Date: April 17, 1991			
Dioxins			
Total TCDD	ND(0.99)	^{13}C-2,3,7,8-TCDD	76
Total PeCDD	ND(1.9)	^{13}C-1,2,3,7,8-PeCDD	100
Total HxCDD	ND(1.3)	^{13}C-1,2,3,6,7,8-HxCDD	102
Furans			
Total TCDF	ND(0.48)	^{13}C-2,3,7,8-TCDF	80
Total PeCDF	ND(0.47)	^{13}C-1,2,3,7,8-PeCDF	78
Total HxCDF	ND(1.1)	^{13}C-1,2,3,4,7,8-HxCDF	100

Steve Cochenour
Ecology & Environmental
Date: April 24. 1991
Client Project ID: UH7

IT ANALYTICAL SERVICES
304 DIRECTORS DRIVE
KNOXVILLE, TENNESSEE

TDL Project No.: 482998

Dioxin/Furan Analysis - Modified Method 8280

Client Sample ID: Method Blank
Sample Date: NA
TDL Sample ID: BLK1989
Extraction Date: April 3,1991

Analyte	Conc. (ng/L)	Internal Standard	% Recovery
Isomer Specific Analysis Date:	Aprill 8, 1991		
2,3,7,8-TCDD	ND(1.6)	^{13}C-2,3,7,8-TCDD	139
Totals Analysis Date:	April 8, 1991		
Dioxins			
Total TCDD	ND(0.50)	^{13}C-2,3,7,8-TCDD	80
Total PeCDD	ND(I.I)	^{13}C-1,2,3,7,8-PeCDD	82
Total HxCDD	ND(1.3)	^{13}C-1,2,3,6,7,8-HxCDD	106
Furans			
Total TCDF	ND(0.69)	^{13}C-2,3,7,8-TCDF	83
Total PeCDF	ND(0.47)	^{13}C-1,2,3,7,8-PeCDF	78
Total HxCDF	ND(1.0)	^{13}C-1,2,3,4,7,8-HxCDF	115

SAMPLE TRACKING SHEET

Extraction Page 1989 482998

Client ECOLOGY + ENVIRONMENT, INC. (Code) _____ Project Manager DEBI McCLURE

Date In 3-27-91 Date Due 4-24-91 Storage _____

Relinquished to Extractions by MLW Date 3-27-91 Received By DB Date 4-3-91

Relinquished to GC/MS By ~~4-4-91~~ DB Date 4-4-91 Received By DT Date _____

Sample ID#	Matrix	Method	Vol/ Weight	Spiking Solution Book:Page	Spiking Solution Volume	Extraction Date	Acid Pretreat	Filter/ KD	One Column	Dual Column	Acid/Caustic Wash	Activated Carbon	Blow Down	Take-Up Solution Book:Page	Take-Up Solution Volume	2,3,7,8-TCDD/2,3,7,8-TCDF Operator	Date	Status Code	Total Elim/Total Surr* Operator	Date	Status Code
1. BB3461	WATER	8280	1000 ml	685:07	100 µl	4-3-91		4-3		4-4			4-4	109:94	50 µl	DT	4-8-91	OK	DT	4-17-91	OK
2. BB3462	↓	↓	↓		↓	↓		↓		↓			↓	↓	↓	DT	4-8-91	OK	DT	4-17-91	OK
3. BB3463																MM	4-8-91	OK	DT	4-17-91	OK
4. BLK 1989	MB															DT	4-9-91	OK	4-[illegible]	4-[illegible]	JS
5. Rerun																					
6. BLK1989																—	—	—	MM	4-5-91	L**
7. BLK1989																—	—	—	MM	4-8-91	OK
8.																					
9.																					
10.																					
11.																					
12.																					
13.																					
14.																					
15.																					
16.																					
17.																					
18.																					

Comments:

1 x ½ gal each

collected 3-25-91 / extract by 4-24 / analyze by 5-9-91

*Appendix IX

CLP

[1]Run for 2,3,7,8-TCDD/TCDF if positive results are found in tetra of Totals Run.
[2]Estimate of 2,3,7,8 congeners for penta thru octa is requested.

dhc\word5\forms\SAMP
Revised 12/

** Ls due to instrument Failure

3200065

INTERNATIONAL TECHNOLOGY CORPORATION

ANALYTICAL SERVICES

CERTIFICATE OF ANALYSIS

Date: 04/15/91

IT Analytical Services
5103 Old William Penn Hwy
Export,PA 15632
Steve Cochenour

Work Order: T1-03-341 P.O. Number: 314610.01

This is the Certificate of Analysis for the following samples:

Client Work ID: U47 NASP IWTP March sampling
Date Received: 03/27/91
Number of Samples: 3
Sample Type: aqueous

TABLE OF CONTENTS FOR ANALYTICAL RESULTS

PAGES	LABORATORY #	SAMPLE IDENTIFICATION
2	T1-03-341-01	FB02
3	Tl-03-341-02	P32W001 UG-1
4	T1-03-341-03	P32W066 GM66
5	Tl-03-341-04	Quality Control
6	Tl-03-341-04	Quality Control–ME

Reviewed and Approved:

Suzanne Veaudry
Project Manager

American Council of Independent Laboratories
International Association of Environmental Testing Laboratories
American Association for Laboratory Accreditation

IT ANALYTICAL SERVICES
SAN JOSE, CA

Company: IT Analytical Services
Date: 04/15/91
Client Work ID: U47 [illegible] IWTP March sampling

Work Order: Tl-03-341

TEST CODE 614 TEST NAME EPA 614/8140

Tho method of analysis for organophosphorus pesticides is taken from E.P.A. Method 614. The samples are extracted with solvent and concentrated. Final detection is by gam chromatography using a flameless alkali malt nitrogen-phosphorus detector.

IT ANALYTICAL SERVICES
SAN JOSE, CA

Company: IT Analytical Services
Date: 04/15/91
Client Work ID: U47 NASP IWTP March sampling

Work Order: T1-03-341

TEST NAME: EPA 614/8140

SAMPLE ID: P32W066 GM66
SAMPLE DATE: 03/25/91
LAB SAMPLE ID: T103341-03
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool
EXTRACTION DATE: 04/03/91
ANALYSIS DATE: 04/11/91

RESULTS in Micrograms per Liter

PARAMETER	DETECTION LIMIT	DETECTED
Dimethoate	2.	None
Disulfoton	1.	None
Parathion ethyl	2.	None
Parathion methyl	2.	None
Phorate	1.	None
Sulfotepp	1.	None
Famphur	3.	None
Thfonazin	1.	None
0,0,0-Triethylphos phorothioate	0.5	None

SURROGATE	% RECOVERY
Methidathion	110.

IT ANALYTICAL SERVICES
SAN JOSE, CA

Company: IT Analytical Services
Date: 04/15/91
Client Work ID: U47 NASP IWTP March sampling

Work Order: Tl-03-341

TEST NAME: EPA 614/8140

SAMPLE ID: P32W001 DG-1
SAMPLE DATE: 03/25/91
LAB SAMPLE ID: T103341-02
SAMPLE MATRIX: aqueous
RECEIPT CONDITIO#: Cool
EXTRACTION DATE: 04/03/91
ANALYSIS DATE: 04/11/91

RESULTS in Micrograms per Liter

PARAMETER	DETECTION LIMIT	DETECTED
Dimethoate	2.	None
Disulfoton	1.	None
Parathion ethyl	2.	None
Parathion methyl	2.	None
Phorate	1.	None
Famphur	3.0	None
Thionazin	1.	None
0,0,0-Triethylphos phorothioate	0.5	None

SURROGATE	% RECOVERY
Methidathion	112.

3200067

IT ANALYTICAL SERVICES
SAN JOSE, CA

Company: IT Analytical Services
Date: 04/15/91
Client Work ID: U47 NASP IWTP March sampling

Wok Order: T1-03-341

TEST NAME: EPA 614/8140

SAMPLE ID: FB02
SAMPLE DATE: 03/25/91
LAB SAMPLE ID: T103341-01
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool
EXTRACTION DATE: 04/03/91
ANALYSIS DATE: 04/11/91

RESULTS in Micrograms per Liter

PARAMETER	DETECTION LIMIT	DETECTED
Dimethoate	2.	None
Disulfoton	1.	None
Parathion ethyl	2.	None
Parathion methyl	2.	None
Phorate	1.	None
Sulfotepp	1.	None
Famphur	3.	None
Thionazin	1.	None
0,0,0-Triethylphos phorothioate	0.5	None

SURROGATE	% RECOVERY
Methidathion	107.

IT ANALYTICAL SERVICES
SAN JOSE, CA

Company: IT Analytical Services
Date: 04/15/91
Client Work ID: U47 NASP IWTP March sampling

Work Order: T1-03-341

TEST NAME: EPA 614/8140

SAMPLE ID: Quality Control-MB
SAMPLE DATE: not spec
LAB SAMPLE ID: T103341-04
SAMPLE MATRIX: aqueous
RECEIPT CONDITION: Cool
EXTRACTION DATE: 04/03/91
ANALYSIS DATE: 04/10/91

RESULTS in Micrograms per Liter

PARAMETER	DETECTION LIMIT	DETECTED
Dimethoate	2.	None
Disulfoton	1.	None
Parathion ethyl	2.	None
Parathion methyl	2.	None
Phorate	1.	None
Sulfotepp	1.	None
Famphur	3.	None
Thionazin	1.	None
0,0,0-Triethylphos phorothioate	0.5	None

SURROGATE	% RECOVERY
Methidathion	94.

3200063

IT ANALYTICAL SERVICES
SAN JOSE, CA

Company: IT Analytical Services
Date: 04/16/91
Client Work ID: U47 NASP IWTP March sampling

Work Order: T1-03-341

TEST NAME: Spike and Spike Duplicates

SAMPLE ID: Quality Control
SAMPLE DATE: not spec
LAB SAMPLE ID: T103341-04A
EXTRACTION DATE: 04/03/91
ANALYSIS DATE: 04/11/91
ANALYSIS METHOD: 614

QUALITY CONTROL REPORT

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Analyses

RESULTS in Micrograms per Liter

PARAMETER	Sample Amt	Spike Amt	MS Result	MSD Result	MS %Rec	MSD %Rec	RPD
Dimethoate	None	10.	11.2	13.8	112.	138.	20.8
Methyl Puathion	None	10.	12.2	11.2	122.	112.	8.5

SURROGATES	MS %Rec	MSD %Rec
Methidathion	136.	122.

9100 825 1780

Analysis [illegible] according to Site Specific QAP and Appendix IX protocol (see B. Krajewski)

ecology and environment, inc.
389 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060
International Specialists in the Environment

320006 3

CHAIN-OF-CUSTODY RECORD

Page 1 of 1

Project No.: WN7
Project Name: NASP RCRA Sampling [March]
Project Manager: B. Caldwell
Samplers (Signatures): B. Caldwell
Field Team Leader: B. Caldwell

STATION NUMBER	DATE 1990	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	Appendix IX VOCs	Appendix IX Metals	Appendix IX Cyanide	Appendix IX Sulfide	Cyanide + Sulfide	REMARKS
P32 W066	4/9	1200		X		Low Level	G4-66	5	X	X	X	X		VOCs preserved w/ HCL
P32 W001	4/9	1230		X		" "	UG-1	6	X	X	X	X	X	
P32 WFB02	4/9	1200		X		" "	Field Blank 02	5	X	X	X	X		Metals preserved w/ HNO_3
P32 WTB03	4/9	1200		X		" "	Trip Blank 03	2	X					
														Cyanide preserved w/ NaOH
														Sulfide preserved w/ Zinc Acetate in soln. of NaOH.

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By (Signature)	Ship Via
B. Caldwell	4/9 1700	Fed Ex				Federal Express
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By (Signature)	BL/Airbill Number: 9548746126
Relinquished By: (Signature)	Date/Time: 0900 4-11-91	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By (Signature)	Date: 4-9-91

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files
*See CONCENTRATION RANGE on back of form.

234055

analyze All parameters according to Site Specific QAPP for this project (see B. Krajewski)

ecology and environment, inc.
300 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL 716/684-8060
International Specialists in the Environment

CHAIN-OF-CUSTWY RECORD

Project No.: UH7
Project Name: NASP March Sampling (INTP)
Project Manager: B Caldwell
Samplers: (Signatures) AWebber J Edwards
Field Team Leader: A Webbers

	STATION NUMBER	DATE 1991	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	Chloride	Alkalinity Metric	Chlorine	Alkalinity	Sulfate	Sulfide	Cyanide	Benz + Vol	REMARKS
P32	W078	26Mar	8:14		X		Low Level	GM78	1	X								
P32W	001	25Mar	15:00		X		" "	UG-1	4		X	X	X	X				
P32W	011	26Mar	8:50		X		" "	GM11	2			X			X			
P32W	012R	26Mar	9:00		X		" "	GM12R	1						X			
P32W	077	26Mar	8:14		X		" "	GM77	1	X								
P32W	076	26Mar	8:39		X		" "	GM76	1	X								
P32W	079	26Mar	7:20		X		" "	GM79	1	X								
P32W	012R	26Mar	9:06		X		" "	GM12R	1			X						
P32W	083	25Mar	15:42		X		" "	GM83	1	X								
P32W	066	25Mar	12:30		X		" "	GM66	1	X								
P32W	RB01	25Mar	11:30		X		" "	RB01	2			X			X			
P32W	FB01	25Mar	11:45		X		" "	FB01	2			X			X			
P32W	013	26Mar	12:30		X		" "	GM13	1			X						
P32W	071	26Mar	8:30		X		" "	GM71	1	X								

Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By (Signature)	Ship Via
AWebber	26Mar91/17:00	FED. EXP.				FEDERAL EXPRESS
Relinquished By: (Signature)	Date/Time	Received By: (Signature)	Relinquished By: (Signature)	Date/Time	Received By (Signature)	BL/Airbill Number 9659244500
Relinquished By: (Signature) FED. EXP	Date/Time: 900 3/27/91	Received For Laboratory By: (Signature) R. Mark	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By (Signature)	Date 26Mar91

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files
*See CONCENTRATION RANGE on back of form.

234061

ANALYZE All parameters according to SITE SPECIFIC QAPP for this project
SEE B. Krajewski

ecology and environment, inc.
350 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060
International Specialists in the Environment

CHAIN-OF-CUSTODY RECORD

Project No.: ULH7
Project Name: NASP IWTP March Sampling
Project Manager: B CALDWELL
Samplers: (Signatures) A Webbers, F Edwards
Field Team Leader: A Webbers

STATION NUMBER	DATE 1991	TIME	COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	8240 + TICS	Appendix IX VOCs					REMARKS
P32 WTB01	25Mar	11:00		X		LOW LEVEL	TB01	2	X						① 8240 + tics pres w/ HCL
P32 WO12R	26Mar	9:00		X		" "	GM12R	2	X						② Appendix IX VOCs pres w/HCL
P32 WO11	26Mar	8:30		X		" "	GM11	2	X						
P32 WRB02	26Mar	10:56		X		" "	RB02	2	X						
P32 WO13	26Mar	12:30		X		" "	GM13	2	X						
P32 WO14	26Mar	12:50		X		" "	GM14	2	X						
P32 WO01	25Mar	1500		X		" "	UG-1	2		X					

Relinquished By: (Signature)	Date/Time	Received By (Signature)	Relinquished By: (Signature)	Date/Time	Received By (Signature)	Ship Via
A Webbers	26Mar91/1700	F.E.				FEDERAL EXPRESS
Relinquished By: (Signature)	Date/Time	Received By (Signature)	Relinquished By: (Signature)	Date/Time	Received By (Signature)	BL/Airbill Number: 9659244571
Relinquished By: (Signature) F.E.	Date/Time 3/27/91	Received For Laboratory By (Signature) R. Mand	Relinquished By: (Signature)	Date/Time	Received For Laboratory By (Signature)	Date 26Mar91

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files
*See CONCENTRATION RANGE on back of form.

238055

ANALYZE All parameters according to site specific QAPp for this project see B. Krajewski

ecology and environment, inc.
388 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. 716/684-8060
International Specialists in the Environment

CHAIN-OF-CUSTODY RECORD

Project No.: WH7
Project Name: NASP IWTP March Sampling
Project Manager: B CALDWELL
Samplers: (Signature) A. Edwards, A Webbers
Field Team Leader: A Webbers

	STATION NUMBER	DATE 1991	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	LIST III Metals	Appendix II Metals - Sn/Ci - TAS	Appendix II CYANIDE	CYANIDE	CHLORIDE/SULFATE	Chloride	Sulfate	REMARKS
P32	FB01	25 Mar	11:00		X		Low Level	FB01	2	X			X				List III Metals pres. w/ HNO_3
P32	RB02	26 Mar	10:56		X		" "	RB02	4	X			X	X		X	CYANIDE pres. w/ NAOH
P32	W011	26 Mar	8:50		X		" "	GM11	2	X			X				Appendix II Cyanide pres. w/ NAOH
P32	W PB01	25 Mar	11:00		X		" "	PB01 (Pres. Blk)	2	X			X				Appendix II Metals pres w/ HNO_3
P32	W RB01	25 Mar	11:00		X		" "	RB01	2	X			X				
P32	W012R	26 Mar	9:00		X		" "	GM12R	2	X			X				
P32	W FB02	25 Mar	11:00		X		" "	FB02	2		X	X					
P32	W066	25 Mar	13:00		X		" "	GM66	2		X	X					
P32	W014	26 Mar	12:50		X		" "	GM14	4	X			X	X		X	
P32	W013	26 Mar	12:30		X		" "	GM13	3	X			X			X	
P32	W072	26 Mar	8:30		X		" "	GM72	1						X		

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Ank Webber	26 Mar 91 11:00	F.E.			
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By (Signature)
F.E	3/27/91	R. Marsh			

Ship Via: FEDERAL EXPRESS
BL/Airbill Number: 9659244571
Date: 26 Mar 91

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files
*See CONCENTRATION RANGE on back of form.

234066

ANALYZE All parameters according to site specific QAPP for this project
See B. Krajewski

Page 2 of 3

ecology and environment, inc.
388 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL. [illegible]
International Specialists in the Environment

32000711

CHAIN-OF-CUSTODY RECORD

Project No.: WH7
Project Name: NASP IWTP Mar. Sampling
Project Manager: B Caldwell
Samplers: (Signatures) A. Edwards, A Webber
Field Team Leader: A Webbers

STATION NUMBER	DATE 1991	TIME	SAMPLE TYPE COMP	SAMPLE TYPE GRAB	SAMPLE TYPE AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	Appendix IX Sulfide	(Na) Sodium	8240 + tics	Appendix IX VOCs	REMARKS
P32WFB02	25Mar	11:20		X		Low Level	FB02	1	X				① Appendix IX sulfide pres. w/ Zn Acetate
P32WGM76	26Mar	8:20		X		" "	GM76	1		X			② Sodium pres. w/ HNO_3
P32WG77	26Mar	8:15		X		" "	GM77	1		X			③ 8240 + tics pres w/ HCL
P32WG71	26Mar	8:30		X		" "	GM71	1		X			
P32WG83	25Mar	15:45		X		" "	GM83	1		X			
P32WG72	26Mar	8:30		X		" "	GM72	1		X			
P32WG79	26Mar	7:20		X		" "	GM79	1		X			
P32WG78	26Mar	8:00		X		" "	GM78	1		X			
P32WFB01	25Mar	11:00		X		" "	FB01	2			X		
P32WRB01	25Mar	11:00		X		" "	RB01	2			X		
P32WFB02	25Mar	11:00		X		" "	FB02	2			X	X	FB02 for Appendix 9 VOA [illegible] 3/27/91
P32WPB01	25Mar	11:00		X		" "	PB01	2			X		
P32WG66	25Mar	15:00		X		" "	GM66	3	X			X	* Appendix IX sulfide only @ pH=5. UNABLE to increase pH (GM66)
P32WTB03	25Mar	15:45		X		" "	TB03	2				X	

Relinquished By: (Signature)	Date/Time	Received By (Signature)	Relinquished By (Signature)	Date/Time	Received By (Signature)
A Webber	26Mar 91 11:00	F.E.			
Relinquished By (Signature)	Date/Time	Received By (Signature)	Relinquished By (Signature)	Date/Time	Received By (Signature)
Relinquished By: (Signature)	Date/Time	Received For Laboratory By (Signature)	Relinquished By (Signature)	Date/Time	Received For Laboratory By (Signature)
F.E.	3/27/91	R. Marel			

Ship Via: FEDERAL EXPRESS
BL/Airbill Number: 9659244571
Date: 26Mar91

[illegible]on: Original Accompanies Shipment, Copy to Coordinator Field Files
[illegible]CENTRATION RANGE on back of form.

234065

ecology and environment, inc.
388 PLEASANTVIEW DRIVE, LANCASTER, NEW YORK 14086, TEL 716/684 8060
International Specialists in the Environment

CHAIN-OF-CUSTODY RECORD

Project No.: UH7
Project Name: NASP IWTP March Sampling
Project Manager: B CALDWELL
Samplers: (Signatures) A Webbers A Edwards
Field Team Leader: A Webbers

	STATION NUMBER	DATE 1991	TIME	SAMPLE TYPE COMP	GRAB	AIR	SAMPLE INFORMATION / EXPECTED COMPOUNDS (Concentration)*	STATION LOCATION	NUMBER OF CONTAINERS	APPENDIX IX DIOXINS						REMARKS
P32	W001	25 Mar	15:00		X		Low Level BB 3461	~~[illegible]~~ UG-1	1	X						Custody seals on cooler + samples intact. Cooler temp at 7°C.
P32	W066	25 Mar	14:00		X		" " BB 3462	GM66	1	X						Samples OK. MLW 3-27-91
1	FB02	"	12:00		X		" " BB 3463 JB 3/27/91	FB02	1	X						

Received from FEDEX 3-27-91, 0930. MLW

Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
A Webber	26 Mar 91/12:00	Mark Wlosek, TOL			
Relinquished By: (Signature)	Date/Time:	Received By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received By: (Signature)
Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)	Relinquished By: (Signature)	Date/Time:	Received For Laboratory By: (Signature)

Ship Via: FEDERAL EXPRESS
BL/Airbill Number: ~~510~~ 5150154011
Date: 26 Mar 91

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files
*See CONCENTRATION RANGE on back of form.

23405

482998

T1-A

ATTACHMENT D

APPENDIX IX RAW LABORATORY DATA:

METALS, INORGANICS, ORGANOPHOSPHORUS PESTICIDES,

HERBICIDES, AND PESTICIDES/PCBS

QUALITY CONTROL FOR PRECISION
RESULTS OF ANALYSIS OF REPLICATE
ANALYSES OF WATER SAMPLES

9100.699

(ug/L)

Parameter	E & E Laboratory No. 91-6319	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
Antimony		ND	ND	NC
Barium		ND	ND	NC
Beryllium		ND	ND	NC
Cadmium		5.4	ND	NC
Chromium		ND	ND	NC
Cobalt		ND	ND	NC
Copper		ND	ND	NC
Iron		78	ND	NC
Hanganese		ND	ND	NC
Nickel		ND	ND	NC
Silver		ND	ND	NC
Sodium		ND	ND	NC
Vanadium		ND	ND	NC
Zinc		12	13	8.0
Tin		ND	ND	NC

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTEOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, RPD's ARE CALCULATED DIRECTLY FROM TEE RAW DATA.

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY
FOR SPIKED WATER SAMPLES

9100.699

(ug/L)

Parameter	E & E Laboratory No. 91-6319	Original Value	Amount Added	Amount Determined	Pcrctnt Recovery
Antimony		ND	500	540	107
Barium		ND	2000	2200	108
Beryllium		ND	50	45	91
Cadmium		5.4	50	54	108
Chromium		ND	200	210	108
Cobalt		ND	500	480	95
Copper		ND	250	270	107
Iron		70	1000	1100	100
Manganese		ND	500	540	109
Nickel		ND	500	520	104
Silver		ND	50	48	97
Vanadium		ND	500	470	93
Zinc		12	500	560	109

ND = NOT DETECTED

NC = NOT CALCULABLE

** = RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, PERCENT RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.

QUALITY CONTROL
CONTINUATION CALIBRATION VERIFICATION (CCV)
ACCEPTABLE CONCENTRATION RANGES

(ug/L)

Parameter	ICP	FURNACE
Aluminum	450-550	
Antimony	900-1100	
Arsenic		45.0-55.0
Barium	450-550	
Beryllium	450-550	
Cadmium	450-550	
Calcium	18000-22000	
Chromium	450-550	
Cobalt	450-550	
Copper	450-550	
Iron	450-550	
Lead	900-1100	45.0-55.0
Magnesium	18000-22000	
Manganese	450-550	
Mercury		0.8-1.2 *
Nickel	450-550	
Potassium	18000-22000	
Selenium		45.0-55.0
Silver	450-550	
Sodium	18000-22000	
Thallium		45.0-55.0
Vanadium	450-550	
Zinc	450-550	

* This element run by cold vapor atomic absorption.

QUALITY CONTROL SAMPLE (LCSW)
ACCEPTABLE RANGES

(ug/L)

Parameter	
Aluminum	800-1200
Antirony	800-1200
Arsenic	800-1200
Barium	800-1200
Beryllium	800-1200
Cadmium	800-1200
calcium	800-1200
Chromium	800-1200
Cobalt	800-1200
Copper	800-1200
Iron	800-1200
Lead	800-1200
Magnesium	800-1200
Manganese	800-1200
Mercury	800-1200
Nickel	800-1200
Potassium	8000-12000
Selenium	800-1200
Silver	800-1200
Sodium	800-1200
Thallium	800-1200
Vanadium	800-1200
Zinc	800-1200

QUALITY CONTROL
INTERFERENCE CHECK SAMPLE (ICS)
ACCEPTABLE RANGES

(ug/L)

Parameter	SOLN. AB	RANGE
Aluminum	469700	375760-563640
Barium	456	365-547
Beryllium	472	378-566
Cadmium	958	766-1150
Calcium	445800	356640-534960
Chromium	525	420-630
Cobalt	494	395-593
Copper	523	418-628
Iron	178650	142920-214380
&ad	4700	3760-5640
Magnesium	445200	356160-534240
Manganese	530	424-636
Nickel	940	752-1128
Silver	990	792-1188
Vanadium	471	377-565
Zinc	1026	821-1231

ANALYZE > MANUAL MODE

90/04/
10:57

Method Name: 9004011057

Comments:

Replicates: 2

Read Delay: 30

Format Name: stdcond

Dilution:

Weight/Volume:

Entered
JK 4-3-91

Raw Data
4/1/91
gp CRH

9100.707 - Ag, Ba, Al, Cd, Cr, Cu, Na, Ni, Pb, Zr
o 9100.714 - Al, Cr, Cu, Fe, Mn, Mo, Ni, Zn, ~~Pb~~
Δ 9100.686 - Cd TCLP
Δ 9100.698 - Cd
Δ 9100.699 - Ag, Ba, Cd, Cr, Cu, Fe, Mn, Na, Ni, Sb
Zn
Δ 9100.701 - Cd
Δ 9100.702 - P.P. metals
* 9100.708 - Zn (Pb)
* 9100.710 - Cd
* 9100.706 - Al

Command?

* 51K959
Δ 51K957
o 51K962
51K964

3200076

04/01/90 10 58

blank	rep	I	SB	en	44 4
	rep	I	PB	em	84 5
	rep	I	ZN	en	23 8
	rep	I	CD	em	-21 0
	rep	I	CO	en	40 4
	rep	I	NI	em	24 7
	rep	I	MN	em	-5 8
	rep	I	FE	en	2 9
	rep	I	CR	en	16 4
	rep	I	VZ	em	-5 8
	rep	I	BE	em	28 0
	rep	I	CA	em	0 3
	rep	I	CU	em	60 2
	rep	I	AG	em	28 0
	rep	I	nc	em	1.1
	rep	I	AL	em	3 6
	rep	I	BA	em	12 3
	rep	I	NA	em	IS 1
	rep	I	KZ	ea	as 9
	rep	2	SB	em	47 9
	rep	2	PB	en	11 7
	rep	2	ZN	em	19 9
	rep	2	CD	em	10 0
	rep	2	CO	em	81 2
	rep	2	NI	em	31 9
	rep	2	MN	om	8.0
	rep	2	FE	em	7.7
	rep	2	CR	em	29 3
	rep	2	VZ	em	27 6
	rep	2	BE	em	26 0
	rep	2	CA	em	0 6
	rep	2	CU	en	88 5
	rep	2	AG	on	24 9
	rep	2	nc	em	0 6
	rep	2	AL	om	3 8
	rep	2	BA	em	13 0
	rep	2	NA	om	11 8
	rep	2	KZ	en	29 0

blank

04/01/90 11:04

SB	av	46 15	sd	2.525	%cv	5.47
PB	av	48 11	sd	51.529	%cv	107 11
ZN	av	21 82	sd	2.743	%cv	12.57
CD	av	-5 50	sd	21.877	%cv	398.01
CO	av	60 77	sd	28.876	%cv	47.52
NI	av	28 26	sd	5.083	%cv	17.99
MN	av	I 09	sd	9.750	%cv	897.65
FE	av	5 29	sd	3.454	%cv	65.26
CR	av	22 87	sd	9.138	%cv	39.9s
VZ	av	10 90	sd	23 613	%cv	216.69
BE	av	27 00	sd	1.386	%cv	5.13
CA	av	0 45	sd	0 145	%cv	32.31
CU	av	74 32	sd	20 022	%cv	26.94
AG	av	26 45	sd	2 199	%cv	8.31
MG	av	0 85	sd	0.286	%cv	33.67
AL	av	3 71	sd	0 177	%cv	4.76
BA	av	12 63	sd	0.460	%cv	3.64
NA	av	13 43	sd	2 311	%cv	17.20
KZ	av	27 46	sd	2.205	%cv	8.03

04/01/90 11 11

standard	rep	I	SB	en	1377 0	eonc	2000.00
	rep	I	PB	em	3031 3	cone	2000.00
	rep	I	ZN	em	7836 8	conc	1000.00
	rep	I	CD	em	7946 0	conc	1000.00
	rep	1	CO	ea	9215 5	conc	1000.00
	rep	1	NI	em	6638 6	conc	1000.00
	rep	I	MN	en	22187 6	cone	1000 00
	rep	1	FE	en	1003 5	cone	1000.00
	rep	I	CR	en	9854 0	conc	1000.00
	rep	1	VZ	en	12734 6	conc	1000.00
	rep	1	BE	en	13811 8	cone	1000.00
	rep	1	CU	en	12718 2	cone	1000.00
	rep	1	AG	en	17501 9	cone	1000.00
	rep	I	AL	en	147 8	conc	1000.00
	rep	I	BA	ea	23781 2	conc	1000.00
	rep	2	SB	en	1405 6	conc	1000.00
	rep	2	PB	en	3112 0	conc	2000.00
	rep	2	ZN	en	7840 4	eonc	1000.00
	rep	2	CD	en	7878 0	conc	1000.00
	rep	2	CO	en	9167 6	conc	1000.00
	rep	2	NI	en	6655 0	cone	1000.00
	rep	2	MN	em	23298 5	conc	1000.00
	rep	2	FE	en	1015 3	conc	1000.00
	rep	2	CR	em	9927 3	conc	1000.00
	rep	2	VZ	em	12850 9	conc	1000.00
	rep	2	BE	en	13977 6	cone	1000.00
	rep	2	CU	en	12717 7	conc	1000.00
	rep	2	AG	en	17728 3	cone	1000.00
	rep	2	AL	em	149 8	conc	1000.00
	rep	2	BA	en	23777 6	cone	1000.00

standard
04/01/90 11:15

SB	av	1391.30	sd	20.174	%cv	1.45	cone 2000 00
PB	av	3071.65	sd	57.058	%cv	1.86	conc 2000.00
ZN	av	7838.61	sd	2.530	%cv	0.03	eonc 1000.00
CD	av	7912.04	sd	48.066	%cv	0 61	conc 1000.00
CO	av	9191.53	sd	33.893	%cv	0.37	cone 1000 00
NI	av	6647.23	sd	12.157	%cv	0.10	conc 1000.00
UN	av	23093.01	sd	290.545	%cv	1.26	eonc 1000.00
FE	av	1009.39	sd	8.373	%cv	0.83	conc 1000 00
CR	av	9890 68	sd	51.836	%cv	0.52	conc 1000 00
VZ	av	12792 73	sd	82.254	%cv	0.64	conc 1000 00
BE	av	13894 69	sd	117.281	%cv	0 84	cone 1000 00
CU	av	12717 97	sd	0.326	%cv	0 00	cone 1000.00
AG	av	17615.08	sd	160.067	%cv	0.91	cone 1000 00
AL	av	148.81	sd	1.369	%cv	0.92	conc 1000 00
BA	av	23779 40	sd	2.533	%cv	0.01	conc 1000 00

04/01/90 11:20

I & 2 PPM	rep	I	SB	eonc	2064.55 ug/L
	rep	1	PB	conc	2014.80 ug/L
	rep	1	ZN	conc	990.14 ug/L
	rep	1	CD	conc	1016 58 ug/L
	rep	I	CO	conc	1003 04 ug/L
	rep	1	NI	conc	1000.78 ug/L
	rep	I	UN	conc	1015.20 ug/L
	rep	1	FE	conc	1010.94 ug/L
	rep	I	CR	conc	998 25 ug/L

rep	1	VZ	conc	998.74	ug/L	
rep	I	BE	conc	994.22	ug/L	
rep	1	CA	em	0.1		
rep	I	CU	conc	1010.98	ug/L	
rep	1	AG	conc	991.97	ug/L	
rep	1	MG	em	0.5		
rep	1	AL	conc	1023.35	ug/L	
rep	1	EA	conc	1000.53	ug/L	
rep	1	NA	em	9.4		
rep	1	KZ	em	41.1		
rep	2	SB	conc	2018.37	ug/L	
rep	a	PB	conc	1973.84	ugIL	
rep	2	ZN	conc	1004.30	ugIL	
rep	2	CD	conc	995.23	ug/L	
rep	2	CO	conc	1009.11	ugIL	
rep	2	NI	conc	1004.48	ug/L	
rep	2	MN	conc	1005.36	ugIL	
rep	a	FE	conc	998.28	ug/L	
rep	2	CR	eonc	1007.70	ugIL	
rep	2	VZ	conc	1014.00	ug/L	
rep	2	BE	conc	997.76	ug/L	
rep	2	CA	em	0.5		
rep	2	CU	conc	1019.62	ug/L	
rep	2	AG	conc	995.81	ug/L	
rep	2	MG	em	0.8		
rep	2	AL	eonc	1019.01	ugIL	
rep	2	EA	conc	992.00	ugIL	
rep	2	NA	sa	10.2		
rep	2	KZ	em	13.4		

1 6 2 PPM
04/01/90 11:26

SB	av	2041.46	ug/L	sd	32.456	lbcv	1.60
PB	av	1994.32	ugIL	sd	28.963	%cv	1.45
ZN	av	997.22	ug/L	sd	10.010	lbcv	1.00
CD	av	1005.91	ug/L	sd	15.101	%cv	I.SO
CO	av	1004.08	ug/L	sd	4.291	%cv	0.43
NI	av	1003.43	ug/L	sd	4.032	%cv	0.40
MN	av	1010.28	ug/L	sd	4.962	%cv	0.49
FE	av	004.41	ug/L	sd	8.950	%cv	0.89
CR	av	002.97	ug/L	sd	4.487	scv	0.47
VZ	av	006 37	ug/L	sd	10.794	%cv	1.07
BE	av	995.99	ugIL	sd	2.508	%cv	0.25
CA	av	0.27		sd	0.277	%cv	101.67
CU	av	015.30	ug/L	sd	4.112	%cv	0.60
AG	av	993.89	ugIL	sd	2.71s	lbcv	0.27
MG	av	0 43		sd	0.228	lbcv	34.13
AL	av	1021.18	ug/L	sd	3.047	%cv	0.30
BA	av	994.27	ugIL	sd	4.033	lbcv	0.61
NA	av	9 79		sd	0.617	%cv	4.31
KZ	av	27 32		sd	19.428	%cv	71.12

04/01/90 11:33

standard	rep	1	FE	em	10001.4	conc	10000.0
	rep	1	AL	em	1474.2	conc	10000.0
	rep	2	FE	em	10122.9	conc	10000.0
	rep	a	AL	om	1463.8	conc	10000.0

standard
04/01/90 11:33

FE	av	10062.2	sd	85.82	%cv	0.85	conc 10000.0
AL	av	1469.0	sd	7.33	%cv	0.50	co 10000.0

04/0 /90 11 34

10.0 PPM

r p	1	PB	conc	9544.38	ug/L
r p	1	ZN	conc	9918.63	ug/L
r p	1	CD	conc	9677.03	ug/L
r p	1	CO	conc	10146.22	ug/L
r p	1	NI	conc	9866.96	ug/L
r p	1	MN	conc	10365.73	ug/L
r p	1	FE	conc	10009.1	ug/L
r p	1	CR	conc	10062.85	ug/L
r p	1	VZ	conc	10151.76	ug/L
r p	1	BE	conc	10201.08	ug/L
r p	1	CU	conc	10017.47	ug/L
r p	1	AL	conc	9817.4	ug/L
r p	1	BA	conc	10374.11	ug/L
r p	2	PB	conc	9885.80	ug/L
r p	2	ZN	conc	10035.07	ug/L
r p	2	CD	conc	9671.27	ug/L
r p	2	CO	conc	10114.42	ug/L
r p	2	NI	conc	9906.79	ug/L
r p	2	MN	conc	10367.58	ug/L
r p	2	FE	conc	9907.2	ug/L
r p	2	CR	conc	10073.29	ug/L
r p	2	VZ	conc	10301.04	ug/L
r p	2	BE	conc	10195.11	ug/L
r p	2	CU	conc	10151.32	ug/L
r p	2	AL	conc	9905.8	ug/L
r p	2	BA	conc	10444.56	ug/L

10.0 PPM

04/01/90 11:38

PB	av	9715.09 ug/L	sd	241.415	%cv	2.48
ZN	av	9976.85 ug/L	sd	82.333	%cv	0.83
CD	av	9674.15 ug/L	sd	4.073	%cv	0.04
CO	av	10130.32 ug/L	sd	22.493	%cv	0.22
NI	av	9886.87 ug/L	sd	28.144	%cv	0.28
MN	av	10366.66 ug/L	sd	1.305	%cv	0.01
FE	av	9958.1 ug/L	sd	72.10	%cv	0.72
CR	av	10068.07 ug/L	sd	7.382	%cv	0.07
VZ	av	10226.40 ug/L	sd	105.562	%cv	1.03
BE	av	10198.10 ug/L	sd	4.219	%cv	0.04
CU	av	10084.40 ug/L	sd	94.644	%cv	0.94
AL	av	9861.6 ug/L	sd	62.49	%cv	0.63
BA	av	10409.33 ug/L	sd	49.814	%cv	0.48

04/01/90 11:47

standard	rep	1	CA	1108.3	conc	100000
	rep	1	MG	2082.3	conc	100000
	rep	1	NA	35655.7	conc	100000
	rep	1	KZ	10105.6	conc	100000
	rep	2	CA	1082.8	conc	100000
	rep	2	MG	2075.3	conc	100000
	rep	2	NA	34813.1	conc	100000
	rep	2	KZ	10041.8	conc	100000

standard

04/01/90 11:49

CA	av	1096	sd	18 1	%cv	1	6	no o	100 00
MG	av	2079	sd	4 9	%cv	0	2	no o	100 00
NA	av	35234	sd	595 8	%cv	1	6	no o	100 00
KZ	av	10074	sd	45 1	%cv	0	4	no o	100 00

2200076

```
04/01/90 11:50
100 PPM          rep   1  CA          conc      97607 ug/L
                 rep   1  MG          conc      99144 ug/L
                 rep   1  NA          conc      97604 ug/L
                 rep   1  KZ          conc      99331 ug/L
                 rep   2  CA          conc      99659 ug/L
                 rep   2  MG          conc      90063 ug/L
                 rep   2  NA          conc      99077 ug/L
                 rep   2  KZ          conc      99840 ug/L
100 PPM                                                        1.47
04/01/90 11:52                                                 0.78
    CA           av      90633 ug/L        sd     1451.6 %cv   1.06
    MG           av      98603 ug/L        sd      764.2 lbcv  0.36
    NA           av      90340 ug/L        sd     1041.6 %cv
    KZ           av      99585 ug/L        sd      359.8 %cv

04/01/90 I1:56
blank            rop   1  TL          om        41.1
                 rop   1  AS          em        24.9
                 rop   I  SE          em        38.0
                 rop   2  TL          em        -3.9
                 rop   2  AS          om        26.0
                 rop   2  SE          em        42.5
blank
04101190 11:57
    TL           av      10.43             sd     31.849 lbcv 170.98
    AS           av      25.03             sd      1.392 %cv   5.39
    SE           av      40.25             sd      3.139 lbcv   7.00

04/01/90 11:59
standard         rop   1  AS          OD      1333.7 conc 10000.0
                 rop   1  SE          om      2154.5 conc 10000.0
                 rop   2  AS          em      1260.0 conc 10000.0
                 rop   2  SE          om      210S.O conc 10000.0
standard
04/01/90 12 00
    AS           av    1300.9              sd      44.43 %cv   3.57 conc 10000.0
    SE           av    2169.7              sd      21.60 lbcv   1.00 conc 10000.0

04/01/90 12:01
10.0 PPM         rep   1  TL          em        00.7
                 rep   1  AS          conc   10162.3 ug/L
                 rop   1  SE          conc    9554.2 ug/L
                 rop   2  TL          em       116.0
                 rop   2  AS          conc   10054.3 ug/L
                 rep   1  SE          conc    9846.2 ug/L
10.0 PPM
04/01/90 12:02
    TL           av    101.35              sd     19.242 lbcv  18.80
    AS           av   10099.3 ug/L         sd      89.09 %cv   0.88
    SE           av    9700.2 ug/L         sd     206.40 lbcv   2.13

04/01/90 12:04
standard         rop   1  TL          om      2712.1 conc 10000.0
                 rop   2  TL          em      2573.9 conc 10000.0
standard
04101190 12:05
    TL           av    2643.0              sd      97.70 lbcv   3.70 conc 10000.0
```

10 0 PPM	rep	1	TL	conc	10184.3	ug/L	
	rep	2	TL	conc	10473.0	ugIL	
10.0 PPM							
04/01/90 12:06							
TL	av	10328 7	ug/L	sd	204.14	%cv	1.98
04/01/90 12:07							
CAL BLK	rep	1	TL	conc	80.8	ug/L	
	rep	1	SB	conc	12.89	ugIL	
	rep	1	PE	conc	-29.40	ug/L	
	rep	1	AS	conc	-37.5	ug/L	
	rep	I	SE	conc	-122.9	ug/L	
	rep	1	ZN	conc	-0.83	ug/L	
	rep	1	CD	conc	0.66	ug/L	window edge
	rep	1	CO	conc	-6.05	ug/L	
	rep	1	NI	conc	4.33	ug/L	
	rep	1	MN	cone	1.41	ug/L	
	rep	1	FE	conc	4.7	ugIL	
	rep	1	CR	cone	-0.35	ug/L	
	rep	1	VZ	conc	-0.42	ug/L	
	rep	1	BE	conc	-0.07	ugIL	
	rep	1	CA	conc	-25	ug/L	
	rep	1	CU	conc	0.30	ug/L	
	rep	1	AC	conc	-1.36	ug/L	
	rep	1	ΠC	conc	-15	ug/L	
	rep	I	AL	conc	- 4.4	ug/L	
	rep	I	EA	conc	-0.01	ug/L	
	rep	1	NA	conc	-4	ug/L	
	rep	1	KZ	conc	-46	ug/L	
	rep	2	TL	conc	-105.2	ug/L	
	rep	2	SB	conc	8.97	ug/L	
	rep	2	PB	conc	-49.90	ug/L	window edge
	rep	2	AS	cone	-160.7	ug/L	
	rep	2	SE	conc	-212.4	ug/L	
	rep	2	ZN	conc	-1.61	ug/L	
	rep	2	CD	conc	-0.33	ug/L	
	rep	2	CO	conc	-4.37	ug/L	
	rep	2	NI	conc	-2.80	ug/L	
	rep	2	MN	conc	0.92	ug/L	
	rep	2	FE	conc	-4.b	ug/L	
	rep	2	CR	conc	0.29	ug/L	
	rep	2	VZ	conc	- 1.37	ugIL	
	rep	2	BE	conc	- 0.03	ug/L	
	rep	2	CA	conc	-14	ug/L	
	rep	2	CU	conc	- 0.83	ug/L	
	rep	2	AG	conc	0.60	ug/L	
	rep	2	MG	conc	-3	ugIL	
	rep	2	AL	conc	1.5	ugIL	
	rep	2	BA	conc	-0.16	ug/L	
	rep	2	NA	conc	25	ug/L	
	rep	2	KZ	conc	-1	ug/L	
CAL BLK							
04/01/90 12:14							
TL	av	-12.2	ug/L	sd	131.52	%cv	1074.8
SB	av	10.93	ug/L	sd	2.775	Scv	25.3
PB	av	-39.65	ug/L	sd	14.497	%cv	36.5
AS	av	-99.1	ug/L	sd	87.12	%cv	87.9
SE	av	- 167.7	ug/L	sd	63.30	%cv	37.7
ZN	av	-1 22	ugIL	sd	0.550	%cv	45.0
CD	av	0 17	ug/L	sd	0.700	%cv	419.4

22000

CO	av	-5 21	ug/L	sd	1.190	%cv	22.8
NI	av	0.77	ug/L	sd	5.045	%cv	658.6
MN	av	1 17	ug/L	sd	0.351	%cv	30.1
FE	av	0.1	ug/L	sd	4.42	%cv	12174
CR	av	-0.03	ug/L	sd	0.457	%cv	1530.7
VZ	av	-0.90	ug/L	sd	0.673	%cv	74.9
BE	av	-0.05	ug/L	sd	0.029	%cv	56.0
CA		-20	ug/L	sd	7.5	%cv	38.5
CU	av	-0.27	ug/L	sd	0.799	%cv	297.05
AG	av	-0.38	ug/L	rd	1.384	%cv	340.01
MG	av	-9	uglL	sd	0.7	%cv	90.4
AL	av	-1.4	ug/L	rd	4.21	%cv	293.35
BA	av	-0.09	ug/L	sd	0.110	%cv	127.73
NA	av	10	ug/L	sd	21.1	%cv	201.43
KZ	av	-23	uglL	sd	31.5	%cv	134.53

04/01/90 12:21
CCVS

rep	1	TL	conc	4901.7	ug/L
rep	I	SB	conc	1052.04	uglL
rep	1	PB	conc	880.65	ug/L
rep	1	AI)	cone	1930.5	ug/L
rep	1	SE	cone	701.4	ug/L
rep	1	ZN	conc	487.57	ug/L
rep	1	CD	conc	400.92	ug/L
rep	1	CO	cone	473.70	ug/L
rep	1	NI	conc	476.85	ug/L
rep	1	MN	conc	501.58	ug/L
rep	I	FP	conc	s35.9	uglL
rep	1	CR	conc	497.52	ug/L
rep	1	VZ	conc	500.35	ug/L
rep	1	BE	cone	491.11	ug/L
rep	1	CA	conc	19082	ug/L
rep	1	CU	conc	407.14	ug/L
rep	1	AG	conc	484.49	ug/L
rep	1	MG	conc	19470	ug/L
rep	1	AL	conc	404.7	ug/L
rep	1	BA	cone	491.13	ug/L
rep	1	NA	conc	19510	ug/L
rep	1	KZ	conc	19500	ug/L
rep	2	TL	conc	4838.2	ug/L
rep	2	SB	conc	944.94	ug/L
rep	2	PB	conc	070.17	ug/L
rep	2	AS	conc	1725.7	ug/L
rep	2	SE	conc	925.4	ug/L
rep	2	ZN	conc	417.31	ug/L
rep	2	CD	conc	480.33	ug/L
rep	2	CO	cone	500.95	ug/L
rep	2	Nl	conc	403.49	ug/L
rep	2	MN	conc	500.11	ug/L
rep	2	FE	conc	526.2	ug/L
rep	2	CR	cone	487.24	ug/L
rep	2	VZ	conc	491.58	uglL
rep	2	BE	cone	493.97	ug/L
rep	2	CA	conc	19047	ug/L
rep	2	CU	conc	492.24	ug/L
rep	2	AG	conc	483.51	ug/L
rep	2	MG	cone	19785	ug/L
rep	2	AL	conc	504.4	ug/L
rep	2	BA	conc	485.67	ug/L
rep	2	NA	cone	19399	ug/L

```
                rep   2  KZ          conc      18891 ug/L
CCVS
04/01/90 12:28
    TL          av     4869.9 ug/L        sd      44.92 %cv    0.92
    SB          av     998.90 ug/L        sd     76.282 %cv    7.64
    PB          av     879.74 ug/L        sd      1.258 %cv    0.14
    AS          av     1832.1 ug/L        sd     150.50 %cv    8.21
    SE          av      853.5 ug/L        sd     101.69 %cv   11.91
    ZN          av     487.44 ug/L        sd      0.186 %cv    0.04
    CD          av     484.62 ug/L        sd      5.238 %cv    1.08
    CO          av     487.32 ug/L        sd     19.265 %cv    3.95
    NI          av     480.27 ug/L        sd      4.836 %cv    1.01
    MN          av     501.20 ug/L        sd      0.546 %cv    0.11
    FE          av      531.0 ug/L        sd       6.89 %cv    1.30
    CR          av     492.38 ug/L        sd      7.266 %cv    1.48
    VZ          av     495.97 ug/L        sd      6.203 %cv    1.25
    BE          av     492.54 ug/L        sd      2.019 %cv    0.41
    CA          av      19064 ug/L        sd       24.7 %cv    0.13
    CU          av     489.69 ug/L        sd      3.605 %cv    0.74
    AG          av     484.10 ug/L        sd      0.840 %cv    0.17
    MG          av      19728 ug/L        sd       81.5 %cv    0.41
    AL          av      494.4 ug/L        sd      13.93 %cv    2.81
    BA          av     488.40 ug/L        sd      3.860 %cv    0.79
    NA          av      19454 ug/L        sd       78.2 %cv    0.40
    KZ          av      19195 ug/L        sd      430.4 %cv    2.24

04/01/90 12 38
blank           rep   1  AS          em        21.6
                rep   2  AS          em        14 8
blank
04/01/90 12 39
    AS          av       19.2             sd       3.44 %cv   17 91

04/01/90 12 40
standard        rep   1  AS          em       49.2 conc  1000.00
                rep   2  AS          em       78.9 conc  1000.00
standard
04/01/90 02 41
    AS          av     244 05             sd     20 052 %cv   17 97 conc 1000 00

04/01/90 12:42
CCVS            rep   1  PB          conc    987.94 ug/L
                rep   1  AS          conc   1576.76 ug/L
                rep   1  SE          conc     829.0 ug/L
                rep   2  PB          conc    888.38 ug/L
                rep   2  AS          conc   1602.74 ug/L
                rep   2  SE          conc     772.1 ug/L
CCVS
04/01/90 1  45
    PB          av     938.17 ug/L        sd     70.117 %cv    7.51
    AS          av   1589.76 ug/L        sd     18.216 %cv    1.16
    SE          av      800.5 ug/L        sd      40.29 %cv    5.02

04/01/90 12 47
blank           rep   1  AS          em        15 9              window edge
                rep   1  SE          em         5 1
                rep   2  AS          em        20 4
                rep   2  SE          em        27 0
blank
04/01/90 12:48
```

220000030

04101190 13 45

LCEV

rep	1	TL	conc	965.2	ug/L
rep	1	SI	conc	1100.08	ug/L
rep	1	PB	cone	1111.39	ug/L
rep	1	AS	conc	758.71	ug/L
rep	1	se	conc	819.40	ug/L
rep	1	ZN	conc	1013.24	uglt
rep	1	CD	conc	v45.77	ug/L
rep	1	CO	conc	1013.15	uglt
rep	1	NI	conc	943.81	ug/L
rep	1	MN	conc	1040.95	ug/L
rep	1	FE	conc	971.7	ug/L
rep	1	CR	conc	952.34	ug/L
rep	1	VZ	conc	1000.48	ug/L
rep	1	BE	conc	996.60	ug/L
rep	1	CA	cone	978	ug/L
rep	1	CU	cone	1012.04	*oglt*
rep	1	AG	conc	990.08	uglt
rep	1	MG	conc	1007	ug/L
rep	1	At	conc	1000.7	ug/L
rep	1	BA	cone	965.88	ug/L
rep	1	NA	conc	*1098*	ug/L
rep	1	KZ	conc	9343	ug/L
rep	2	TL	conc	804.9	uglt
rep	2	SB	conc	1021.74	uglt
rep	2	PB	conc	1074.48	ug/L
rep	2	AS	conc	*900.20*	uglt
rep	2	SE	cone	904.09	ug/L
rep	2	ZN	conc	1007.29	ugrt
rep	2	CD	conc	V44.04	ug/L
rep	a	CO	conc	993.55	uglt
rep	2	NI	cone	963.31	ug/L
rep	2	MN	conc	1034.40	ug/L
rep	2	FE	conc	971.5	ugrt
rep	2	CR	cone	938.26	ug/L
rep	2	VZ	conc	986.64	uglt
rep	2	BE	conc	*983.33*	ug/L
rep	2	CA	conc	*958*	ug/L
rep	2	CU	conc	994.46	ug/L
rep	2	AG	conc	*973.99*	ug/L
rep	2	nc	cone	*930*	ug/L
rep	2	AL	conc	*994.9*	uglt
rep	2	BA	conc	957.71	ug/L
rep	2	NA	conc	1042	ug/L
rep	2	KZ	conc	9102	ug/L

LCSW

04/01/90 13:51

TL	av	884.1	ug/L	s	111.94	lbcv	12.64
SB	av	060 92	ug/L	sd	*55.379*	%cv	5.22
PB	av	093.94	ug/L	sd	24.682	%cv	2.26
AS	av	829.46	ug/L	sd	100.052	lbcr	12.06
SE	av	842 74	ug/L	sd	61.300	lbcv	7.11
ZN	av	010.27	ug/L	sd	4.223	lbcv	0.42
CD	av	V44.90	ug/L	sd	1.225	%cv	0.13
CO	av	003.35	ug/L	sd	13.858	lbcv	1.38
NI	av	963.56	uglt	sd	0.356	%cv	0.04
MN	av	1038.77	uglt	sd	*3.079*	%cv	0.30
FE	av	V71.4	uglt	sd	0.14	lbcr	0.01
CR	av	945.30	ug/L	sd	9.959	lbcv	1.05
VZ	av	993 66	ug/L	sd	9.932	lbcv	1.00

BE	av	989.96	ug/L	sd	9.385	%cv	0.95
CA	av	968	ug/L	sd	13.8	%cv	1.43
CU	av	1003.25	ug/L	sd	12.427	%cv	1.24
AG	av	982.03	ug/L	sd	11.377	%cv	1.16
MG	av	969	ug/L	sd	54.6	%cv	5.64
AL	av	998.8	ug/L	sd	3.67	%cv	0.37
BA	av	61.81	ug/L	sd	5.757	%cv	0.60
NA	av	1080	ug/L	ad	28.7	%cv	3.38
KZ	av	9223	ug/L	sd	170.0	%cv	1.84

04/01/90 14:00

ICSAB	rep		TL	cone	261.5	ug/L	
	rep		SB	cone	-50.27	ug/L	
	rep		PB	conc	1095.35	ug/L	
	rep	I	AS	conc	-4032.89	ug/L	wlndow odgo
	rep	I	SE	cone	-58.59	ug/L	wlndow edge
	rep	I	ZN	cone	938.30	ug/L	
	rep	1	CD	cone	876.69	ug/L	
	rep	I	CO	cone	454.78	ug/L	
	rep	1	NI	conc	858.75	ug/L	
	rep	1	MN	conc	486.83	ug/L	
	rep	I	FE	conc	178321.6	ug/L	
	rep	1	CR	eonc	447.86	ug/L	
	rep	1	VZ	cone	477.42	ug/L	
	rep	1	BE	cone	452.89	ug/L	
	rep	1	CA	eonc	447662	ug/L	
	rep	1	CU	cone	457.52	ug/L	
	rep	1	AG	cone	933.10	ug/L	
	rep	I	MG	cone	470544	ug/L	
	rep	1	AL	oone	480011.7	ug/L	
	rep	1	BA	cone	462.84	ug/L	
	rep	1	NA	cone	152	ug/L	
	rep	1	KZ	conc	41	ug/L	
	rep	2	TL	cone	-5J.8	ug/L	
	rep	2	SB	cone	-55.91	ug/L	
	rep	2	PB	aone	1042.74	ug/L	
	rep	2	AS	cone	-4133.50	ug/L	window odgo
	rep	2	SE	conc	-38.46	ug/L	window odgo
	rep	2	ZN	conc	926.34	ug/L	
	rep	a	CD	conc	885.33	ug/L	
	rep	2	CO	conc	424.11	ug/L	
	rep	a	NI	conc	865.46	ug/L	
	rep	2	MN	cone	482.05	ug/L	
	rep	2	FE	cone	174955.6	ug/L	
	rep	2	CR	cone	439.09	ug/L	
	rep	2	VZ	eonc	476.34	ug/L	
	rep	a	BE	cone	452.32	ug/L	
	rep	2	CA	eonc	447219	ug/L	
	rep	2	CU	cone	460.72	ug/L	
	rep	2	AG	cone	926.04	ug/L	
	rep	2	MG	eonc	466693	ug/L	
	rep	2	AL	cone	470477.8	ug/L	
	rep	a	BA	conc	460.46	ug/L	
	rep	2	NA	cone	205	ug/L	
	rep	2	KZ	cone	82	ug/L	

ICSAB
04/01/90 14:07

TL	av	103.8	ug/L	sd	222.93	%cv	214.69
SB	av	-53.09	ug/L	sd	3.989	%cv	7.51
PB	av	1069 OS	ug/L	sd	37.182	%cv	3.48

3200081

AS	av	-4083.ZO	ug/L	sd	71.142	Scv	1.74
SE	av	-48 55	ug/L	sd	14.234	%cv	2T.33
ZN	av	933.32	ug/L	sd	7.048	%cv	0.76
CD	av	181.01	ug/L	sd	6.114	%cv	0.69
CO	av	439.44	ug/L	sd	21.688	%cv	4.94
NI	av	662.10	ug/L	sd	4.744	%cv	0.55
MN	av	414.44	ug/L	sd	3.313	%cv	0.70
FE	av	177638.4	ug/L	sd	965.92	%cv	0.54
CR	av	443 47	ug/L	sd	4.198	%cv	1.40
VZ	av	474.18	ug/L	sd	0.765	%cv	0.16
BE	av	452.60	ug/L	sd	0.407	%cv	0.09
CA	av	447441	ug/L	sd	313.2	%cv	0.07
CU	av	459.12	ug/L	sd	2.264	%cv	0.41
AG	av	929.57	ug/L	sd	4.112	lbcr	0.54
MG	av	468418	ug/L	sd	2722.5	%cv	0.58
At	av	475244.7	ug/L	sd	6741.42	%cv	1.42
BA	av	461.65	ug/L	sd	1.689	%cv	0.37
NA	av	17T	ug/L	sd	37.1	%cv	20.74
KZ	av	62	ug/L	sd	29.0	%cv	47.11

04/01/90 14:15

700 PPM	rep	1	CA	conc	611881	uglt
	rep	1	MC	cone	624994	ug/L
	rep	J	NA	conc	678693	ug/L
	rep	1	KZ	conc	650422	ug/L
	rep	2	CA	cone	598569	ug/L
	rep	2	MC	conc	625952	ug/L
	rep	a	HA	conc	672350	ug/L
		2	KZ	cone	638616	ug/L

700 PPM
04/01/90 14:16

CA	av	605225	ug/L	sd	9413.5	Scv	1.56
MG	av	625473	ug/L	sd	b77.3	%cv	0.11
NA	av	675522	ug/L	8d	4485.4	%cv	0.66
KZ	av	644519	ug/L	sd	8341.5	%cv	1.30

04/01/90 14:20

blank	rep	1	MO	em	26.4	
	rep	2	MO	em	-11.1	window edge

blank
04/01/90 14:21

no	av	7.64	8d	26.477	%cv	346.77

04/01/90 14:22

etandard	rop	1	MO	em	2379.0	eonc 1000.00
	rep	2	MO	em	2340.4	cone 1000.00

standard
04/01/90 14:22

MO	sv	2359.70	sd	27.349	%cv	1.16	cone 1000.00

04/01/90 14:23

1000 PPB	r8p	1	no	conc	992.36	ug/L
	rep	2	MO	conc	1001.41	uglt

1000 PPB
04/01/90 14:23 av 996.89 ug/L sd 6.400 %cv 0.64
MO
01101190 14:28

LCSW	rep	1	no	conc	1013.56	ug/L
	rep	2	MO	conc	1016.67	ug/L

LCSW
04/01/90 14:28
MO ev 1005.02 ug/L sd 2.200 %cv 0.22

04/01/90 1 58
BLK 959

rep	1	TL	conc	-22.7	ug/L	
rep	1	SB	conc	29.41	ug/L	
rep	1	PB	conc	40.64	ug/L	
rep	1	AS	conc	-450.74	ug/L	
rep	1	SE	conc	32.84	ug/L	
rep	1	MO	conc	3.17	ug/L	
rep	1	ZN	conc	46.79	ug/L	
rep	1	CD	conc	2.64	ug/L	
rep	1	CO	conc	2.07	ug/L	
rep	1	NI	conc	6.49	ug/L	
rep	1	MN	conc	1.54	ug/L	
rep	1	FE	conc	22.1	ug/L	
rep	1	CR	conc	2.61	ug/L	
rep	1	VZ	conc	1.06	ug/L	
rep	1	BE	conc	0.03	ug/L	
rep	1	CA	conc	40	ug/L	
rep	1	CU	conc	-0.45	ug/L	
rep	1	AG	conc	-5.98	ug/L	window edge
rep	1	MG	conc	11	ug/L	
rep	1	AL	conc	-8.0	ug/L	
rep	1	BA	conc	1.02	ug/L	
rep	1	NA	conc	210	ug/L	
rep	1	KZ	conc	-44	ug/L	
rep	2	TL	conc	18.5	ug/L	
rep	2	SB	conc	30.46	ug/L	
rep	2	PB	conc	-2.46	ug/L	
rep	2	AS	conc	-479.53	ug/L	
rep	2	SE	conc	-110.05	ug/L	win sw edge
rep	2	MO	conc	3.60	ug/L	
rep	2	ZN	conc	47.58	ug/L	
rep	2	CD	conc	-3.11	ug/L	win sw edge
rep	2	CO	conc	-1.72	ug/L	
rep	2	NI	conc	18.64	ug/L	
rep	2	MN	conc	0.77	ug/L	
rep	2	FE	conc	23.6	ug/L	
rep	2	CR	conc	3.22	ug/L	
rep	2	VZ	conc	1.63	ug/L	
rep	2	BE	conc	-0.08	ug/L	
rep	2	CA	conc	40	ug/L	
rep	2	CU	conc	3.40	ug/L	
rep	2	AG	conc	-0.21	ug/L	
rep	2	MG	conc	-11	ug/L	
rep	2	AL	conc	12.1	ug/L	
rep	2	BA	conc	1.10	ug/L	
rep	2	NA	conc	198	ug/L	
rep	2	KZ	conc	40	ug/L	

BLK 959
04/01/90 1 4

TL	v	-2.1	ug/L<10.0	sd	29.09	cv	1375.7
SB	v	29.93	ug/L<60.0	sd	0.741	cv	2.48
PB	v	19.08	ug/L<50.0	sd	30.494	cv	159.81
AS	v	~~-465.14~~	ug/L<75.0	sd	20.360	cv	4.38
SE	v	-38.61	ug/L<200	sd	101.041	cv	261.72
MO	v	3.38	ug/L<10.0	sd	.303	cv	8.94
ZN	v	47.19	ug/L	sd	0.557	cv	1.18

3200082

CD	av	-0.24	ug/L<5.00	sd	4.069	Wcr	1739.5
CO	av	0.18	ug/L<20.0	sd	2.481	%cv	1530.5
NI	av	8.57	ug/L<20.0	sd	2.934	Wcr	34.24
MN	av	1.16	ug/L<10.0	sd	0.543	Wcr	44.93
FE	av	22.9	ug/L<50.0	sd	1.05	%cv	4.57
CR	av	2.91	ug/L<10.0	sd	0.435	%cv	14.93
VZ	av	1.35	ug/L<20.0	sd	0.398	%cv	29.59
BE	av	-0.03	ug/L<5.00	sd	0.077	%cv	275.07
CA	av	40	ug/L<500	od	0.5	Wcr	1.24
CU	av	1.47	ug/L<20.0	sd	2.753	Wcr	184.81
AG	av	-3.10	ug/L<10.0	sd	4.081	%cv	131.83
MG	av	-0	ug/L<500	sd	15.0	%cv	12443.
AL	av	2.1	ug/L<100	sd	14.24	%cv	489.70
BA	av	1.06	ug/L<20.0	sd	0.058	%cv	5.47
NA	av	204	ug/L<500	sd	8.5	%cv	4.18
KZ	av	-2	ug/L<700	sd	59.2	We.	3193.4

04/01/90 14:53

BLK 957	rep	1	TL	conc	112.7	ug/L
	rep	1	SB	conc	-59.78	ug/L
	rep	1	PB	conc	-17.57	ug/L
	rep	1	A5	conc	-482.75	ug/L
	rep	1	SE	conc	110.79	ug/L
	rep	1	MO	conc	10.76	ug/L
	rep	1	ZN	conc	2.90	ug/L
	rep	1	CD	conc	6.04	ug/L
	rep	1	CO	conc	-0.14	ug/L
	rep	1	NI	conc	1.40	ug/L
	rep	1	MN	conc	0.07	ug/L
	rep	1	FE	conc	1.4	ug/L
	rep	1	CR	conc	2.77	ug/L
	rep	1	VZ	conc	0.05	ug/L
	rep	1	BE	conc	-0.20	ug/L
	rep	1	CA	conc	-6	ug/L
	rep	1	CU	conc	-1.49	ug/L
	rep	1	AG	conc	0.07	ug/L
	rep	1	MC	conc	-22	ug/L
	rep	1	AL	conc	27.1	ug/L
	rep	1	BA	conc	0.23	ug/L
	rep	1	NA	conc	84	ug/L
	rep	1	KZ	conc	13	ug/L
	rep	2	TL	conc	s.4	ug/L
	rep	2	SB	conc	19.04	ug/L
	rep	2	PB	conc	-44.11	ug/L
	rep	2	AS	conc	-418.34	ug/L
	rep	2	SE	conc	29.48	ug/L
	rep	2	MO	conc	5.83	ug/L
	rep	2	ZN	conc	4.74	ug/L
	rep	2	CD	conc	2.99	ug/L
	rep	2	CO	cone	-4.49	ug/L
	rep	2	NI	conc	3.17	ug/L
	rep	2	MN	conc	-0.08	ug/L
	rep	2	FE	conc	16.6	ug/L
	rep	2	CR	conc	0.59	ug/L
	rep	2	VZ	conc	1.14	ug/L
	rep	2	BE	conc	0.02	ug/L
	rep	2	CA	conc	-4	ug/L
	rep	2	CU	cone	1.51	ug/L
	rep	2	AC	conc	1.21	ug/L
	rep	2	MC	conc	2	ug/L

04/01/9[illegible]3

BLK 9S7

rep	1	TL	conc	111.7	ug/L
rep	1	SB	conc	-59.78	ug/L
rep	1	PB	conc	-17.57	ug/L
rep	1	AS	conc	-482.75	ug/L
rep	1	SE	conc	110.79	ug/L
rep	1	no	conc	10.76	ug/L
rep	1	ZN	conc	2.90	ug/L
rep	1	CD	conc	6.84	ug/L
rep	1	CO	conc	-0.74	ug/L
rep	1	Nl	conc	1.40	ug/L
rep	1	MN	cone	0.07	ug/L
rep	1	FE	conc	1.4	ug/L
rep	1	CR	conc	2.77	ug/L
rep	1	VZ	cone	0.0s	ug/L
rep	1	BE	conc	-0.10	ug/L
rep	1	CA	conc	-6	ug/L
rep	1	CU	conc	-1.49	ug/L
rep	1	AC	cone	0.07	ug/L
rep	1	MC	conc	-11	ug/L
rep	1	AL	conc	17.1	ug/L
rep	1	BA	cone	0.11	ug/L
rep	1	NA	conc	06	ug/L
rep	1	KZ	conc	11	ug/L
rep	2	TL	conc	5.6	ug/L
rep	2	SI	cmnc	19.04	ug/L
rep	1	PB	conc	-46.11	ug/L
rep	2	AS	conc	-410.34	ug/L
rep	2	SE	conc	29.48	ug/L
rep	2	no	conc	5.83	ug/L
rep	2	LN	conc	4.76	ug/L
rep	2	CD	conc	2.99	ug/L
rep	2	CO	conc	-6.49	ug/L
rep	2	NI	cone	3.17	ug/L
rep	2	MN	cone	-0.08	ug/L
rep	2	FE	conc	16.6	ug/L
rep	2	CR	conc	0.59	ug/L
rep	2	VZ	cone	1.14	ug/L
rep	2	BE	cone	0.02	ug/L
rep	2	CA	conc	-4	ug/L
rep	2	CU	conc	1.51	ug/L
rep	2	AG	conc	1.21	ug/L
rep	2	nC	cone	1	ug/L

rep	2	AL	conc	16.1	ug/L	
rep	2	BA	conc	0.22	ug/L	
	2	NA	cone	77	ug/L	
rep	2	KZ	conc	-452	ug/L	window edge

BLK 9S7

04101190 15:00

TL	av	59.1	ug/L<100	sd	7s.74	%cv	110.11
SI	av	-20.37	ug/L<60.0	rd	55.735	%cv	173.47
PB	av	-31.84	ug/L<50.0	rd	10.177	%cv	63.37
AS	av	~~-414~~.56	ug/L<75.0	sd	45.528	%cv	10.10
SE	av	~~70.13~~	ug/L<100	sd	57.493	%cv	81.98
MO	av	8 29	ug/L<10.0	sd	3 482	%cv	41.98
ZN	av	3 03	ug/L<10.0	rd	1.316	%cv	14.38
CD	av	4 52	ug/L<5.00	sd	2 153	%cv	47 68

3200083

MN	av	-0 00	ug/L<10.0	sd	0.110	%cv	2443.4
FE	av	9.0	ug/L<50.0	sd	10.73	%cv	118.97
CR	av	1 68	ug/L<10.0	sd	1.545	%cv	92.10
VZ	av	0.60	ug/L<20.0	sd	0.775	%cv	129.94
BE	av	-0.09	ug/L<5.00	sd	0.158	%cv	175.70
CA	av	-6	ug/L<500	sd	0.3	(Lo.	4.91
CU	av	0 01	ug/L<20.0	sd	a.120	%cv	15438.
AC	av	0.64	ug/L<10.0	sd	0.810	%cv	126.70
NC	av	-10	ug/L<500	sd	16.9	%cv	168.18
AL	av	ai 6	ug/L<100	sd	7.80	%cv	36.11
BA	av	0 22	ug/L<20.0	sd	0.005	(Lev	2.37
NA	av	81	ug/L<500	sd	5.9	%cv	7.29
KZ	av	-220	ug/L<700	sd	328.7	%cv	149.72

04/01/90 15:11

BLK 962	rep	1	TL	cone	54.6	ug/L
	rep	1	PB	conc	32.02	ug/L
	rep	1	NO	conc	9.51	ug/L
	rep	1	ZN	conc	2.34	ug/L
	rep	1	NI	conc	7.21	ug/L
	rep	1	MN	cone	0.14	ug/L
	rep	1	FE	conc	6.4	ug/L
	rep	1	CR	conc	1.14	ug/L
	rep	1	CU	cone	0.22	ug/L
	rep	1	AL	conc	13.1	ug/L
	rep	a	PB	conc	2.93	ug/L
	rep	a	NO	cone	0.65	ug/L
	rep	a	ZN	conc	1.43	ug/L
	rep	a	NI	conc	-2.12	ug/L
	rep	2	MN	conc	-1.08	ug/L
	rep	2	FE	conc	7.8	ug/L
	rep	2	CR	conc	2.91	ug/L
	rep	a	CU	cone	0.92	ug/L
	rep	2	AL	cone	28.3	ug/L

BLK 962
04/01190 15:14

PB	av	17.48	ug/L<50.0	sd	20.569	%cv	117 69
NO	av	5.08	ug/L<10.0	sd	6.268	%cv	123.40
ZN	av	1.88	ug/L<10.0	sd	0.643	%cv	34.11
NI	av	2.55	ug/L<20.0	sd	6.601	%cv	259.24
MN	av	-0.47	ug/L<10.0	sd	0.863	%cv	182.91
FE	av	7.1	ug/L<20.0	sd	1.00	%cv	14.09
CR	av	2.03	ug/L<10.0	sd	1.257	%cv	62.02
CU	av	0.57	ug/L<20.0	sd	0.495	%cv	87.45

AL	av	10.7	ug/L<100	sd	10.73	%cv	51.88

04/01/90 15:18

BLK 964	rep	1	SB	cone	-24.37	ug/L
	rep	1	PB	cone	23.22	ug/L
	rep	1	AS	cone	-377.09	ug/L
	rep	1	SE	cone	63.37	ug/L
	rep	1	NO	cone	10.48	ug/L
	rep	1	ZN	conc	-1.08	ug/L
	rep	1	CO	cone	1.64	ug/L
	rep	1	CO	conc	0.27	ug/L
	rep	1	NI	cone	-5.99	ug/L
	rep	1	MN	cone	0.25	ug/L
	rep	1	FE	cone	11.0	ug/L
	rep	1	CR	conc	2.16	ug/L

rep	1	BE	conc	-0.09	ug/L	
rep	1	CA	cone	-3	ug/L	
rep	I	CU	cone	-4.12	ug/L	
rep	I	AC	conc	0.15	ug/L	
rep	1	MG	cone	-13	ug/L	
rep	1	AL	cone	19.5	ug/L	
rep	1	BA	cone	0.43	ug/L	
rep	I	NA	conc	93	ug/L	
rep	1	KZ	cone	50	ug/L	
rep	1	TL	conc	-71.3	ug/L	
rep	2	SB	conc	-92.39	ug/L	window edge
rep	2	PB	cone	25.76	ug/L	
rep	2	AS	cone	-511.08	ug/L	
rep	2	SE	conc	-31.88	ug/L	
rep	2	nO	conc	-2.45	ug/L	window edge
rep	2	ZN	cone	-0.79	ug/L	
rep	2	CD	conc	2.41	ug/L	
rep	a	CO	cone	-5.31	ug/L	
rep	2	NI	eonc	s.44	ug/L	
rep	2	MN	eonc	1.09	ug/L	
rep	a	FE	cone	14.6	ug/L	
rep	2	CR	cone	3.54	ug/L	
rep	2	VZ	conc	1.01	ug/L	
rep	2	BE	eonc	-0.28	ug/L	
rep	a	CA	cone	-17	ug/L	
rep	2	CU	eonc	-2.21	ug/L	
rep	a	AC	cone	1.54	ug/L	
rep	a	MG	eonc	-22	ug/L	
rep	2	AL	cone	29.4	ug/L	
rep	2	BA	conc	0.04	ug/L	
rep	2	NA	eonc	94	ug/L	
rep	2	KZ	conc	72	ug/L	

BLK 964

04101190 15:35

SB	av	-59.38	ug/L<60.0	sd	46.679	%cv	78.61
PB	av	24.49	ug/L<50.0	sd	t.793	%cv	7.32
AS	av	~~-444.08~~	ug/L<75.0	sd	94.745	%cv	21.34
SE	av	15.74	µg/L<200	sd	47.351	%cv	427.83
MO	av	4.02	ug/L<10.0	sd	9.t40	%cv	227.63
ZN	av	-0.93	ug/L<10.0	ad	O.a67	%cv	22.19
CD	av	2.13	ug/L<5.00	sd	Q.412	%cv	32.48
CO	av	-1.52	ug/L<20.0	sd	3.946	%cv	156.29
NI	av	-0.14	ug/L<20.0	sd	8.208	%cv	5083.5
MN	av	0.47	ug/L<10.0	sd	0.511	%cv	88.03
FE	av	12.8	ug/L<50.0	sd	2.55	%cv	19.88
CR	av	2.85	ug/L<10.0	sd	0.981	%cv	34.43
VZ	av	0.12	ug/L<20.0	sd	1.278	%cv	1071.3
BE	av	-0.18	ug/L<5.00	ad	0.132	%cv	71.31
CA	av	-10	ug/L<500	sd	9.3	%cv	92.42
CU	av	-3.17	ug/L<10.0	sd	1.348	%cv	42.58
AC	av	0.85	ug/L<10.0	sd	0.982	%cv	114.10
nC	av	-18	ug/L<500	sd	4.2	%cv	35.55
AL	av	24.4	ug/L<100	ad	7.01	%cv	28.73
BA	av	0.24	ug/L<10.0	sd	0.200	%cv	118.82
NA	av	95	ug/L<500	sd	2.4	%cv	2.49
KZ	av	61	ug/L<700	sd	15.8	%cv	26.08

04/01/90 15 35

3200084

rep	1	CY	conc	101.37	ug/L	
rep	1	NI	conc	707.74	ug/L	
rep	1	CR	conc	72.07	ug/L	
rep	1	CU	conc	508.67	ug/L	
rep	1	AG	conc	-8.57	ugIL	
rep	1	At	conc	19200.0	uglt	
rep	1	BA	conc	6091.27	ug/L	
rep	1	NA	conc	20097	ug/L	
rep	2	PB	cone	829.58	ugIL	
rep	2	ZN	conc	5101.81	ug/L	
rep	2	CD	conc	109.15	ug/L	
rep	1	NI	conc	497.71	ug/L	
rep	2	CR	conc	49.31	ugIL	
rep	2	CU	conc	510.87	uglt	
rep	2	AG	conc	-13.97	ug/L	window edge
rep	2	AL	conc	19291.6	ug/L	
rep	1	BA	conc	6010.49	ug/L	
rep	1	NA	conc	19974	uglt	

(9100.707)

4400.011100
04101190 15:38

PB	av	856.24 ug/L 83.6 mg/kg	sd	9.414	%cv	1.13
ZN	av	5146.79 ug/L 515	sd	63.613	%cv	1.24
CD	av	105.26 ug/L 10.5	sd	5.502	%cv	5.23
NI	av	702.77 ug/L 70.3	sd	7.049	%cv	1.00
CR	av	70.69 ug/L 7.07	sd	1.946	%cv	2.75
CU	av	509.77 ug/L 51.0	sd	1.556	%cv	0.31
AG	av	-11.27 ug/L<1.00	sd	3.819	%cv	33.88
At	av	19250.2 ug/L 1925	sd	58.56	%cv	0.30
BA	av	6050.88 ug/L 605	sd	57.122	%cv	0.94
NA	av	20036 ug/L 2004	sd	87.0	%cv	0.43

04/01/90 15:48
6489.012100

rep	1	PB	cone	232.80	ug/L	
rep	1	ZN	conc	229.26	ug/L	
rep	1	CD	conc	0.03	ug/L	
rep	1	NI	conc	11.0S	ug/L	
rep	1	CR	conc	4.49	uglt	
rep	1	CU	cone	13.51	uglL	
rep	1	AC	cone	-0.95	ug/L	
rep	I	AL	conc	31444.7	uglt	
rep	1	BA	conc	1520.00	ug/L	
rep	I	NA	conc	111097	ug/L	
rep	2	PB	conc	202.02	ug/L	
rep	2	ZN	cone	227.04	ug/L	
rep	2	CD	conc	7.06	ug/L	
rep	2	NI	conc	2.89	ug/L	
rep	2	CR	conc	4.40	ug/L	
rep	2	CU	conc	11.70	uglt	
rep	2	AG	conc	-9.43	ug/L	window edge
rep	2	AL	conc	3179S.3	uglL	
rep	1	BA	conc	1515.48	ug/L	
rep	1	NA	cone	110568	ug/L	

6489.012100
04/01/90 15:51

PB	av	217.41 ug/L 21.7 mg/kg	sd	21.765	%cv	10.01
ZN	av	228.15 ug/L 22.8	sd	1.569	%cv	0.69
CD	av	7.94 ug/L 0.794	sd	1.247	%cv	15.69
NI	av	6.97 ug/L<2.00	sd	5.769	%cv	82.78
CR	av	[illegible]	sd	[illegible]	%cv	77.15

AG	av	-5.17 ug/L<1.00	sd	5.997	%cv	115.51	
AL	av	31630.0 ug/L 3163	sd	233.77	%cv	0.74	
BA	av	1517.79 ug/L 152	sd	3.196	%cv	0.21	
NA	av	110833 ug/L 11083	sd	373.6	%cv	0.34	

04/01/90 15:57

6489.012110	rep	1	PB	conc	238.53 ug/L	
	rep	1	ZN	conc	214.13 ug/L	
	rep	1	CD	cone	5.80 ug/L	
	rep	1	NI	conc	13.02 ug/L	
	rep	I	CR	cone	7.10 ug/L	
	rep	1	CU	conc	14.14 ug/L	
	rep	1	AC	conc	-8.49 ug/L	window edge
	rep	1	AL	conc	31563.0 ug/L	
	rep	1	BA	conc	1589.22 ug/L	
	rep	1	NA	conc	110241 ug/L	
	rep	a	PB	conc	205.47 uglt	
	rep	2	ZN	conc	210.41 uglt	
	rep	a	CD	conc	0.19 ug/L	
	rep	a	NI	conc	7.93 ug/L	
	rep	2	CR	conc	4.40 ug/L	
	rep	2	CU	conc	16.75 uglt	
	rep	2	AC	conc	-1.86 ug/L	
	rep	2	At	cone	31836.1 ug/L	
	rep	2	BA	conc	1587.25 ug/L	
	rep	1	NA	cone	110180 ug/L	

6489.012110
04/01/90 16:00

PB	av	222.00 ug/L 22.2mg/kg	sd	23.382	%cv	10.53
ZN	av	216.37 ug/L 21.6	sd	3.168	%cv	1.46
CD	av	6.99 ug/L 0.699	sd	1.687	%cv	24.12
NI	av	10.87 ug/L<2.00	sd	4.164	%cv	38.30
CR	av	6.75 ug/L<1.00	sd	0.498	%cv	7.30
CU	av	16.44 ug/L<2.00	sd	0.426	%cv	2.59
AG	av	-5.18 ug/L<1.00	sd	4.687	%cv	90.52
AL	av	31699.5 ug/L 3170	sd	193.17	%cv	0.41
BA	av	1588.23 ug/L 159	sd	1.392	%cv	0.09
NA	av	110215 ug/L 11022	sd	38.0	%cv	0.03

04/01/90 16:04

6409.012120	rop	I	PB	conc	265.18 ug/L	
	rep	1	ZN	conc	212.99 uglt	
	rep	1	CD	conc	10.14 ug/L	
	rop	1	NI	conc	6.17 ug/L	
	rep	I	CR	conc	4.27 ug/L	
	rop	1	CU	cone	16.10 uglt	
	rop	1	AC	conc	-12.03 ug/L	window edge
	rop	1	AL	cone	J1607.9 uglt	
	rep	1	BA	conc	1566.86 uglt	
	rop	1	NA	conc	107842 uglt	
	rop	2	PB	conc	174.48 uglt	
	rop	a	ZN	conc	211.41 ug/L	
	rep	a	CD	eonc	9.94 ug/L	
	rep	2	Nl	conc	0.15 ug/L	
	rop	2	CR	eonc	8.51 ug/L	
	rep	2	CU	eonc	16.35 ug/L	
	rep	a	AC	conc	0.28 ug/L	
	rop	2	AL	conc	31293.7 ug/L	

3200085

6489.012120
84101190 16 07

no added

?I	av	220.93	ug/L 22.1mg/kg	sd	62.577	lbcv	28.32
ZN	av	212.20	ug/L 21.2	sd	1.115	%cv	0.53
CD	av	10.05	ug/L 1.01	sd	0.127	lbcv	1.26
NI	av	3.16	ug/L <2.00	sd	4.255	%cv	134.54
CR	av	7.39	ug/L <1.00	sd	1.581	%cv	21.40
CU	av	16.27	ug/L <2.00	sd	0.102	%cv	0.63
AC	av	-5.87	ug/L <1.00	sd	8.703	%cv	148.14
AL	av	31450.8	ug/L 3145	sd	222.20	lbcv	0.71
BA	av	1567.96	ug/L 157	sd	1.553	%cv	0.10
NA	av	108770	ug/L 10877	sd	1313.3	lbcv	1.21

04/01/90 16:13
6489 A

rop	1	PI	conc	1967.54	ug/L
rop	1	ZN	conc	2012.55	ug/L
rop	1	CD	conc	1812.57	ug/L
top	1	NI	conc	1813.88	ug/L
rep	1	CR	conc	1859.60	ug/L
rop	1	CU	conc	1891.84	ug/L
rop	1	AG	conc	71.03	ug/L
rop	1	AL	conc	32968.7	ug/L
rep	1	BA	conc	3382.02	ug/L
rep	1	NA	conc	110077	ug/L
rop	2	PB	conc	2042.91	ug/L
rop	2	ZN	conc	2036.81	ug/L
rop	2	CD	conc	1834.29	ug/L
top	2	NI	conc	1017.20	ug/L
rep	2	CR	conc	1837.07	ug/L
rop	2	CU	conc	1891.16	ug/L
rop	2	AC	conc	66.43	ug/L
rep	2	AL	conc	33272.7	ug/L
rep	2	BA	conc	3402.72	ug/L
rep	2	NA	conc	111038	ug/L

6489 A
04/01/90 16:16

PB	av	2005.23	ug/L 80%L	sd	53.296	%cv	2.66
ZN	av	2024.68	ug/L 90%	sd	17.151	%cv	0.85
CD	av	1823.43	ug/L 91%	sd	15.356	lbcv	0.84
NI	av	1821.54	ug/L 91%	sd	3.300	%cv	0.10
CR	av	1848.38	ug/L 92%	sd	15.987	lbcv	0.86
CU	av	1891.50	ug/L 95%	sd	0.400	%cv	0.03
AG	av	48.73	ug/L	sd	3.252	%cv	4.73
AL	av	33120.7	ug/L 4x	sd	114.97	%cv	0.65

BA	av	3392.37	ug/L 90%	sd	14.639	%cv	0.43
NA	av	111457	ug/L NA	sd	021.3	%cv	0.74

04101190 16:21
ILK 962

rep	1	PB	cone	-2.75	ug/L
rep	1	MO	conc	5.47	ug/L

04/01/90 16:21
BLK 962

rop	1	ZN	conc	1.45	ug/L

04101190 16:23
CCVS

rep	1	TL	conc	4621.4	ug/L
rep	1	88	conc	1054.00	ug/L
rep	1	PB	conc	950.77	ug/L
rep	1	AS	conc	1259.05	ug/L
rep	1	SE	conc	1044.06	ug/L
rep	1	MO	conc	509.07	ug/L

rep	1	CD	conc	484.45	ug/L
rep	1	CO	conc	469.21	ug/L
rep	1	NI	conc	473.41	ug/L
rep	1	MN	conc	503.93	ug/L
rep	1	FE	conc	496.3	ug/L
rep	1	CR	conc	470.20	ug/L
rep	1	VZ	conc	495.81	ug/L
rep	1	BE	conc	479.47	ug/L
rep	1	CA	conc	19306	ug/L
rep	1	CU	conc	476.84	ug/L
rep	1	AG	conc	484.51	ug/L
rep	1	MG	conc	19664	ug/L
rep	1	AL	conc	484.6	ug/L
rep	1	BA	conc	475.85	ug/L
rep	1	NA	conc	19219	ug/L
rep	1	KZ	conc	18944	ug/L
rep	2	SB	conc	946.19	ug/L
rep	2	PB	conc	1012.51	ug/L
rep	2	MO	conc	505.80	ug/L
rep	2	ZN	conc	475.94	ug/L
rep	2	CD	conc	472.77	ug/L
rep	2	CO	conc	482.94	ug/L
rep	2	NI	conc	467.68	ug/L
rep	2	MN	conc	501.28	ug/L
rep	2	FE	conc	494.0	ug/L
rep	2	CR	conc	480.40	ug/L
rep	2	VZ	conc	484.34	ug/L
rep	2	BE	conc	475.97	ug/L
rep	2	CA	conc	18925	ug/L
rep	2	CU	conc	479.31	ug/L
rep	2	AG	conc	491.99	ug/L
rep	2	MO	conc	19540	ug/L
rep	2	AL	conc	494.5	ug/L
rep	2	BA	conc	476.68	ug/L
rep	2	NA	conc	19172	ug/L
rep	2	KZ	conc	18865	ug/L

CCVS
04/01/90 14:30

SB	av	1000.50	ug/L	sd	76.794	%cv	7.68
PB	av	981.64	ug/L	sd	43.662	%cv	4.45
MO	av	507.44	ug/L	sd	2.311	%cv	0.46
ZN	av	477.92	ug/L	sd	2.791	%cv	0.58
CD	av	479.61	ug/L	sd	9.671	%cv	2.02
CO	av	476.07	ug/L	sd	9.705	%cv	2.04
NI	av	470.55	ug/L	sd	4.051	%cv	0.86
MN	av	502.61	ug/L	sd	1.879	%cv	0.37
FE	av	495.2	ug/L	sd	1.64	%cv	0.33
CR	av	475.30	ug/L	sd	7.209	%cv	1.52
VZ	av	490.07	ug/L	sd	8.113	%cv	1.66
BE	av	477.72	ug/L	sd	2.473	%cv	0.52
CA	av	19116	ug/L	sd	269.5	%cv	1.41
CU	av	478.08	ug/L	sd	1.751	%cv	0.37
AG	av	489.25	ug/L	sd	3.873	%cv	0.79
MG	av	19602	ug/L	sd	87.4	%cv	0.45
AL	av	489.5	ug/L	sd	7.00	%cv	1.43
BA	av	476.26	ug/L	sd	0.589	%cv	0.12
NA	av	19195	ug/L	sd	32.7	%cv	0.17
KZ	av	18904	ug/L	sd	55.7	%cv	0.29

2200086

CCB	rep	1	SB	conc	9.33	ug/L	
	rep	1	PI	cone	-12.29	ug/L	
	rep	1	no	conc	16.42	ug/L	
	rep	1	ZN	conc	-1.41	ug/L	
	rep	1	CD	conc	1.21	ug/L	
	rep	1	CO	cone	-5.58	ug/L	
	rep	1	NI	cone	-1.47	ug/L	
	rep	1	nu	cone	0.39	ug/L	
	rep	1	FE	conc	-11.7	ug/L	
	rep	1	CR	conc	-0.57	ug/L	
	rep	1	VZ	cone	5.28	ug/L	
	rep	1	BE	conc	-0.29	ug/L	
	rep	1	CA	cone	-19	ug/L	
	rep	1	CU	conc	-0.57	ug/L	
	rep	1	AC	conc	0.62	ug/L	
	rep	1	MG	conc	15	ug/L	
	rep	1	AL	cone	-8.8	ug/L	
	rep	1	EA	conc	-0.10	ug/L	
	rep	1	NA	conc	4	ug/L	
	rep	1	KZ	cone	-43	ug/L	
	rep	a	SB	conc	-35.94	ug/L	
	rep	2	PI	cone	24.77	ug/L	
	rep	2	MO	cone	2.59	ug/L	window edge
	rep	a	ZN	cone	-0.46	ug/L	
	rep	a	CD	conc	1.19	ug/L	
	rep	2	CO	conc	0.7s	ug/L	
	rep	2	NI	conc		ug/L	
	rep	1	MN	conc	0.16	ug/L	
	rep	2	FE	conc	-3.9	ug/L	
	rep	2	CR	conc	0.77	ug/L	
	rep	a	VZ	conc	1.98	ug/L	
	rep	a	BE	cone	0.00	ug/L	
	rep	1	CA	conc	-0	ug/L	
	rep	a	CU	conc	-0.41	ug/L	
	rep	2	AC	cone	1.82	ug/L	
	rep	2	MG	cone	23	ug/L	
	rep	2	AL	cone	-17.4	ug/L	
	rep	2	BA	conc	-a.04	ug/L	
	rep	a	NA	conc	-1	ug/L	
	rep	a	ut	conc	-274	ug/L	window edge

CCB
04/01/90 14:54

SB	av	-15.01	ug/L	sd	28.492	%cv	180.17
PB	av	7.24	ug/L	ad	27.621	%cv	381.34
MO	av	9.50	uglt	sd	T.783	%cv	102.93
ZN	av	-0.94	ug/L	sd	0.674	%cv	72.06
CD	av	1.20	uglt	sd	0.010	%cv	0.80
CO	av	-2.43	ug/L	sd	4.462	%cv	184.23
Nl	av	1.18	ug/L	md	3.749	%cv	318.12
MN	av	0.17	ug/L	sd	0.143	%cv	59.53
FE	av	-8.8	ug/L	sd	.It	%cv	46.72
CR	av	0.10	ug/L	sd	0 94s	uc.	948.71
VZ	av	3.63	uglt	sd	2 333	%cv	64.21
BE	av	-0.15	uglt	sd	0 207	%cv	141.62
CA	av	-10	ug/L	sd	3.8	%cv	141.11
CU	av	-0.49	ug/L	sd	D 118	%cv	23.96
AC	av	1.22	ug/L	sd	0 851	%cv	49.4s
nc	av	I9	ug/L	sd	5 2	%cv	27.75
Af	av	13.2	ug/L	sd	22	%cv	47.14

it

NA	av	a	ug/L	ad	3.4	%cv	190.37
KZ	av	-168	ug/L	sd	149.6	Ocv	88.83

04101190 17:00

BLK 962	rep	I	?I	conc	40.67	ug/L	
	rep	1	no	cone	38.84	ug/L	
	rep	I	ZN	cone	-0.15	ug/L	
	rep	1	NI	cone	-4.82	ug/L	
	rep	1	MN	conc	-0.47	ug/L	
	rep	I	FE	cone	3.3	ug/L	
	rep	I	CR	cone	-1.47	ug/L	
	rep	I	cu	conc	-0.60	ug/L	
	rep	1	AL	cone	32.9	ug/L	
	rep	a	PB	conc	-24.03	ug/L	
	rep	2	no	conc	- 9.44	ug/L	
	rep	a	ZN	conc	3.32	ug/L	
	rep	2	NI	conc	5.35	ug/L	
	rep	2	MN	conc	-0.41	ug/L	
	rep	a	FE	cone	4.s	ug/L	
	rep	2	CR	conc	1.65	ug/L	
	rep	2	cu	cone	1.23	ug/L	
	rep	a	AL	conc	- 4.s	ug/L	window edge

BLK 962
04101190 17:03

PB	av	0.Sa	ug/L<50.0	ad	45.749	%cv	549.94
MO	av	~~18.71~~	ug/L<10.0	sd	34.154	Ocv	232.24
ZN	av	1.59	ug/L<10.0	sd	2.451	%cv	154.56
NI	av	0.27	ug/L<20.0	sd	7.191	(Lev	2687.8
MN	av	-0.44	ug/L<10.0	ad	0.044	%cv	10.02
re	av	3.9	ug/L<50.0	sd	0.83	%cv	21.35
CR	av	0.09	ug/L<10.0	ad	2.208	%cv	2469.1
CU	av	0.31	ug/L<20.0	sd	1.295	%cv	414.46
AL	av	14.3	ug/L<100	sd	26.32	%cv	184.54

04/01/90 17:06

ILK 962	rep	1	no	conc	11.66 ug/L
	rep	a	no	conc	6.07 ug/L

BLK 962
04101190 17:07

no	av	9.26	ug/L<10.0	ad	3.388	lbcv	36.57

04/01/90 17:08

5918 scan	rep	1	AS	cone	-404.20 ug/L
	rep	2	AS	conc	-340.84 ug/L

5918 scan
84101190 17:08

AS	av	-372.53	ug/L	sd	44.788	%cv	12.02

01101190 17:10

5516 scan	rep	1	AS	cone	133373.25 ug/L
	rep	2	AS	conc	126508.21 ug/L

5516 scan
04101190 17:10

AS	av	129940.73	ug/L	sd	4854.311	lbcv	3.74

04101190 17.11

6559.032100	rep	I	PB	cone	6464.53 ug/L
	rep	I	MO	conc	227.37 ug/L

3200087

```
                rep   1  MN          conc     631.80 ug/L
                rep   1  FE          cone  148728.7 ug/L
                rep   1  CR          conc  33856.09 uglt
                rep   1  CU          cone    448.01 ug/t
                rep   1  AL          cone   2621.2 ug/L
                rep   2  PB          cone   6755.73 ug/L
                rep   a  no          conc    130.48 ug/L
                rep   a  ZN          cone    807.28 ug/L
                rep   a  NI          cone   1097.34 uglt
                rep   a  m           conc    629.25 ug/L
                rep   a  FE          cone  14S880.1 ug/L
(9100.714)      rep   a  CR          cone  3451s.15 ug/L
                rep   a  CU          cone    651.83 uglt
                rep   a  AL          cone    2493.4 uglt
6559.032100
04101190 17:14
    PB          av   6610.13 ug/L        sd   205.904 %cv   3.12
    MO          av   229.02 ug/L         sd     a.342 %cv   1.02
    ZN          av   814.79 ug/L         sd    i0.620 %cv   1.30
    NI          av   1089.92 ug/L        sd    10.319 %cv   0.97
    MN          av   630.52 ug/L         sd     1.805 %cv   0.29
    FE          av   147304.4 ug/L       sd   2014.29 %cv   1.37
    CR          av   24185.42 ug/L       sd   466.025 %cv   1.34
    CU          av   650.32 ug/L         sd     a.134 %cv   0.33
    AL          av   2657.3 ug/L         sd     S1.03 %cv   1.92

04101190 17:19
6560.012100     rep   1  CR          cone  10759.59 oglt
                rep   2  CR          cone  10912.37 ug/L
6560.012100
04101190 17:19
    CR          av   10759.98 ug/L       sd   129.245 %cv   1.19

04/01/90 17:20
4540.01~110     rep   1  CR          cone  10794.95 ug/L
                rop   a  CR          cone  10733.71 uglt
6560.012110
04/01/90 17:21
    CR          av   10764.33 ug/L       sd    43.300 %cv   0.40

04/01/90 17:22
6560.012120     rap   1  CR          cone  11101.33 uglt
                rep   2  CR          cone  11170.98 ug/L
6560.012120


04101190 17:22
    CR          av   11180.15 uglt       sd     1.654 %cv   0.01

04/01/90 17:25
6559 1:10       rep   1  CR          conc   3320.80 uglt
                rop   2  CR          cone   3308.41 ug/L
6559 1:10
04101190 17:25
    CR          av   3314.61 ug/L 33.1mg/L sd    8.763 %cv   0.26

04/01/90 17:27
6560 1:10       rep   1  CR                 1027.09 ug/L
                rep   2  CR                 1030.23 ug/L
6560 1
04/01/9 .  27
```

04/01/ :29
6560D 1 rep 1 CR con 1010.01 ug/L
rep 1 CR con 1038.59 ug/L
6560D 1:10
04/01/90 17:29
CR av 1028.31 ug/L 10.3 sd 14.535 %cv 1.41

04/01/90 17:30
6560S 1:10 rep I CR con 1055.10 ug/L
rep 2 CR con 1040.01 ug/L
6560S 1:10
04/01/90 17:31
CR av 1051.94 ug/L 10.5 sd 100%e 4.441 %cv 0.42

04/01/90 17:33
CCVS rep SB cone 1010.11 ug/L
rep PB conc 910.01 uglt
rep AS conc 1459.68 ug/L
rep MO cone 455.63 ug/L
rep ZN conc 483.82 ug/L
rep CD conc 482.84 ug/L
rep CO eonc 494.52 ug/L
rep NI conc 477.51 ug/L
rep MN conc 503.72 ug/L
rep FE cone 522.2 ug/L
rep CR conc 479.63 ug/L
rep VZ conc 505.69 ug/L
rep BE cone 494.14 ug/L
rep CA conc 19374 ug/L
rep CU conc 194.06 ug/L
rep AG cone 494.12 ug/L
rep I MG conc 20031 ug/L
rep 1 At cone 521.4 uglt
rep 1 BA conc 404.11 ug/L
rep 1 NA conc 20011 ug/L
rep 1 KZ conc 18988 ug/L
rep 2 SB eonc 959.49 uglt
rep 2 PB conc 970.00 ug/L
rep 2 AS conc 1648.82 uglt
rep I SE cone 932.47 ug/L
rep a MO conc 474.88 ug/L
rep 2 ZN conc 401.79 ug/L
rep 2 CD conc 493.58 ug/L

rep 2 CO cone 401.14 ug/L
rop 2 NI cone 400.10 ug/L
rep 2 MN conc 511.97 ug/L
rop 2 FE eonc 506.8 ug/L
rop 1 CR conc 488.04 ug/L
rop 2 VZ conc 505.80 ug/L
rop 1 BE conc 491.41 ug/L
rep 2 CA eonc 19345 ug/L
rop 1 CU conc 497.74 ug/L
rop 2 AG conc 501.90 ug/L
rep 2 MG conc 20170 ug/L
rop 1 AL conc 508.0 ug/L
rop a BA cone 400.00 ug/L
rep 2 NA cone 19857 ug/L

2200088

04101190' 17 39

SB	av	900.00	uglt	sd	41.449	%cv	4.19
PB	av	949.03	ug/L	sd	29.649	%cv	3.12
AS	av	[illegible]	ug/L	sd	133.741	%cv	0.60
MO	av	465.26	ug/L	sd	13.610	%cv	2.93
ZN	av	485.80	ug/L	sd	2.009	%cv	0.SO
CD	av	488.21	ug/L	sd	7.591	%cv	1.55
CO	av	490.93	ug/L	sd	5.077	%cv	1.03
NI	av	479.16	ug/L	sd	2.326	lbcr	0.49
MN	av	507.84	ug/L	sd	5.832	%cv	1.15
FE	av	514.5	ug/L	sd	10.07	%cv	2.1:
CR	av	483.84	ug/L	sd	s.949	%cv	1.23
VZ	av	505.74	ug/L	sd	0.079	%cv	0.02
BE	e.	494.13	uglt	sd	3.832	%cv	0.78
CA	av	19360	ug/L	sd	20.1	%cv	0.10
CU	av	496.30	ug/L	sd	2.035	%cv	0.41
AG	av	490.01	ug/L	sd	5.505	%cv	1.1
MG	av	20105	ug/L	sd	103.0	%cv	0.52
AL	av	514.7	ug/L	sd	9.50	%cv	1.85
BA	av	407.21	ug/L	sd	1.236	%cv	0.23
NA	av	19934	ug/L	sd	100.4	%cv	0.54
KZ	av	19055	ug/L	sd	9s.4	lbc.	0.50

04/01/90 17:47

CCVS	rep	1	AS	cone	1910.77	ug/L
	rep	2	AS	cone	2102.19	uglt

CCVS
04101190 17:47

AS	av	[illegible]	ug/L	sd	191.921	%cv	9.30

04/01/90 17:48

CCVS	rep	1	SE	cone	895.03	ug/L
	rep	2	SE	conc	940.24	ug/L

CCVS
04/01/90 17:49

SE	e.	917.63	ug/L	sd	31.967	%cv	3.48

04/01/90 17:50

CCB	rep	1	SB	cone	14.50	ug/L	
	rep	I	PB	cone	41.64	ug/L	
	rep	1	AS	conc	-6.93	ug/L	
	rep	1	SE	conc	- 44.03	ug/L	wlndow odgo
	rep	1	MO	cone	1.51	ug/L	
	rep	1	ZN	cone	-1.50	ug/L	
	rop	1	CD	cone	0.13	ug/L	wlndow odgo
	rep	I	CO	cone	-1.54	ug/L	
	rep	1	NI	cone	4.54	ug/L	
	rep	1	MN	conc	-0.30	ug/L	
	rep	1	CE	cone	9.0	ug/L	
	rep	I	CR	cone	2.68	ug/L	
	rep	1	VZ	conc	2.61	ug/L	
	rop	1	BE	conc	-0.08	ug/L	
	rop	1	CA	conc	15	ug/L	
	cop	1	CU	cone	0.45	ug/L	
	rep	1	AG	cone	-3.93	ug/L	wlndow odgo
	rep	1	MG	cone	-41	ug/L	
	rep	1	AL	conc	-10.0	ug/L	
	rep	1	EA	cone	-0.20	ug/L	
	rep	1	NA	conc	-1	ug/L	

rep	2	SB	conc	-57.45	ug/L	window edge
rep	2	PB	conc	-14.30	ug/L	
rep	2	AS	conc	73.38	ug/L	
rep	2	SE	conc	-6.45	ug/L	
rep	2	MO	conc	9.47	ug/L	
rep	2	ZN	conc	1.76	ug/L	
rep	2	CD	conc	3.80	ug/L	
rep	2	CO	conc	3.68	ug/L	
rep	2	NI	conc	1.27	ug/L	
rep	2	MN	conc	1.10	ug/L	
rep	2	FE	conc	-3.2	ug/L	window edge
rep	2	CR	conc	0.07	ug/L	
rep	2	VZ	conc	1.93	ug/L	
rep	2	BE	conc	-0.07	ug/L	
rep	2	CA	conc	3	ug/L	
rep	2	CU	conc	-0.89	ug/L	
rep	2	AG	conc	-0.84	ug/L	
rep	2	MG	conc	-18	ug/L	
rep	2	AL	conc	1.7	ug/L	
rep	2	BA	conc	-0.40	ug/L	window edge
rep	2	NA	conc	22	ug/L	
rep	2	KZ	conc	-2	ug/L	

CCB
04/01/90 17:57

SB	av	-22.37	ug/L	sd	52.154	%cv	233.09
PB	av	13.67	ug/L	sd	39.554	%cv	289.36
AS	av	33.23	ug/L	sd	56.790	%cv	170.92
SE	av	-24.24	ug/L	sd	27.986	%cv	106.65
MO	av	5.49	ug/L	sd	5.628	%cv	102.51
ZN	av	0.13	ug/L	sd	2.305	%cv	1740.8
CD	av	1.97	ug/L	sd	2.592	%cv	131.89
CO	av	1.07	ug/L	sd	3.688	%cv	345.36
NI	av	2.98	ug/L	sd	2.319	%cv	79.82
MN	av	0.40	ug/L	sd	0.991	%cv	247.73
FE	av	2.9	ug/L	sd	8.58	%cv	296.81
CR	av	1.37	ug/L	sd	1.848	%cv	134.62
VZ	av	2.27	ug/L	sd	0.482	%cv	21.25
BE	av	-0.08	µg/L	sd	0.006	%cv	7.21
CA	av	9	ug/L	sd	8.2	%cv	92.28
CU	av	-0.22	ug/L	sd	0.946	%cv	433.26
AG	av	-2.39	ug/L	sd	2.185	%cv	91.45
MG	av	-30	ug/L	sd	15.8	%cv	53.47
AL	av	-8.2	ug/L	sd	13.96	%cv	171.17
BA	av	-0.30	ug/L	sd	0.145	%cv	48.18
NA	av	10	ug/L	sd	17.2	%cv	168.56
KZ	av	39	ug/L	sd	57.8	%cv	150.00

04/11/90 18:08
5516.052100 rep 1 AS conc 12[illegible]30[illegible]. 6 ug/L
rep 2 AS conc 1309[illegible]0. 8 ug/L
5516.052100
04/01/90 18:08
AS ee 130144.04 ug/L sd 1186.114 %cv 0.91

04/01/90 18:09
5918.052100 rep 1 AS conc 85.81 ug/L
rep 2 AS conc 10.95 ug/L
5918.052 00

Re Run As
corrected

6800023

```
04 01/90 18 11
39 1.042100      rep   1  AS          conc   2709.46 ug/L
                 rep   2  AS          conc   2691.98 ug/L
5021.042100
0 */01/90 18 12
   AS            ov  27003.72 ug/L        sd     26 905 %cv   0 47

04/0 /:0 18 13
3516 1:100       rep   1  AS          conc   1322.56 ug/L
                 rep   2  AS          conc   1314.51 ug/L
3516 1:100
04/01/ 0 18 13
   AS            ov  1318.54 ug/L         sd      5 694 %cv   0 43

04/01/ 0 18 14
3921 1:10        rep   1  AS          conc   2758.01 ug/L
                 rep   2  AS          conc   2709.66 ug/L
3021 1:10
0 */01/ 0 18 15
   AS            oe    233.84 ug/L        sd     34.183 %cv   1 05

04/01/90 18:16
6234.010800      rep   1  CD          conc    952.73 ug/L
(9100.686)       rep   2  CD          conc    956.70 ug/L
6234.010800
04/01/90 18:16
   CD            oe    954.71 ug/L        sd      1.803 %cv   0 29

04/01/90 18:17
6234.010810      rep   1  CD          conc    945.82 ug/L
                 rep   2  CD          conc    939.43 ug/L
6234.010810
04/01/90 18:18
   CD            ov    942.63 ug/L              4.514 %cv   0 48

04/01/90 18 19
6204.010820      rep   0  CD          conc    991.64 ug/L
                 rep   2  CD          conc    984.88 ug/L
6234.010820
04/01/90 18 19
   CD            ov    988.26 ug/L 67%R  sd     4.775 %cv   0 48

04/01/90 18 32
```

r=.99932
y=.911x+990
y=991 µg/l

r=.99872
y=.919x+932
~~y=932 µg/l~~
y=1014

```
6234 +1pp■       rep   1  CD          conc   1843.88 ug/L
                 rep   2  CD          conc   1848.92 ug/L
6234 +1pp■
04/01/90 18 23
   CD            av  1846.40 ug/L         sd      3 163 %cv   0 19

04/01/90 18 24
6234 +2pp■       rep   1  CD          conc   2632.90 ug/L
                 rep   2  CD          conc   2620.82 ug/L
6234 +2p■
04/01/90 18:24
   CD            av  2631.36 ug/L         sd      2 179 %cv   08

04/01/ 25
```

6234+3p
04/01/9 25

CD	av	3394.70	ug/L		sd	19.291	%cv	.57

04/01/90 18:28

6234D +1ppm	rep	1	CD	conc	1796.76	ug/L
	rep	2	CD	conc	1794.01	ug/L

6234D +1ppm
04/01/90 18:28

CD	av	1795.39	ug/L		sd	1.943	%cv	.11

04/01/90 18:29

6234D+2ppm	rep	1	CD	conc	2825.82	ug/L
	rep	2	CD	conc	2873.72	ug/L

6234D+2ppm
04/01/90 18:30

CD	av	2849.77	ug/L		sd	33.870	%cv	1.19

04/01/90 18:31

6234D +3ppm	rep	1	CD	conc	3648.68	ug/L
	rep	2	CD	conc	3669.29	ug/L

6234D +3ppm
04/01/90 18:31

CD	av	3656.99	ug/L		sd	20	%cv	.55

04/01/90 18:32

6234S +1ppm	rep	1	CD	conc	1812.20	ug/L
	rep	2	CD	conc	1781.18	ug/L

6234S +1ppm
04/01/90 18:32

CD	av	1796.69	ug/L		sd	21.936	%cv	1.22

04/01/90 18:34

6234S +2ppm	rep	1	CD	conc	2767.37	ug/L
	rep	2	CD	conc	2719.77	ug/L

6234S +2ppm
04/01/90 18:34

CD	av	2743.57	µg/L		sd	33.463	%cv	1.23

04/01/90 18:35

6234S +3ppm	rep	1	CD	conc	3444.46	ug/L
	rep	2	CD	conc	3390.41	ug/L

6234S +3ppm
04/01/90 18:35

CD	av	3417.43	ug/L		sd	38.220	%cv	1.12

04/01/90 18:38

CCVS	rep	1	SB	conc	996.13	ug/L
	rep	1	PB	conc	894.01	ug/L
	rep	1	AS	conc	1926.13	ug/L
	rep	1	ZN	conc	500.94	ug/L
	rep	1	CD	conc	485.38	ug/L
	rep	1	NI	conc	487.02	ug/L
	rep	1	MN	conc	502.51	ug/L
	rep	1	FE	conc	517.0	ug/L
	rep	1	CR	conc	500.45	ug/L
	rep	1	CU	conc	490.37	ug/L
	rep	1	AG	conc	484.86	ug/L

3200060

	rep	2	SB	cone	1024.46	ug/L
	rep	2	PB	conc	901.96	ug/L
	rep	2	AS	conc	2038.40	ug/L
	rep	2	ZN	conc	503.53	ug/L
	rep	2	CD	conc	485.42	ug/L
	rep	2	NI	conc	488.40	ug/L
	rep	2	MN	conc	499.51	ugIL
	rep	2	FE	conc	530.3	ug/L
	rep	2	CR	conc	505.00	ug/L
	rep	2	CU	conc	488.57	ugIL
	rep	2	AC	conc	486.95	ug/L
	rep	2	BA	conc	498.13	ug/L
	rep	2	NA	conc	20154	ug/L
CCVS						
04/01/90 18:42						
SB	av	1010.30	ugIL	sd	20.033	lbcv 1.98
PB	av	897.99	ug/L	md	5.625	lbcv 0.63
AS	av	1982.27	ug/L	md	79.384	lbcv 4.00
ZN	av	502.23	ug/L	md	1.831	lbcv 0.36
CD	av	485.50	ugIL	md	0.149	lbcv 0.03
NI	av	487.71	ugIL	sd	0.974	lbcv 0.20
MN	av	501.01	ug/L	md	2.122	%cv 0.42
FE	av	523.6	ug/L	md	9.43	lbcv 1.80
CR	av	502.72	ug/L	sd	3.213	lbcv 0.64
CU	av	489.47	ug/L	sd	1.276	lbcv 0.26
AC	av	485.91	ug/L	sd	1.478	lbcv 0.30
BA	av	502.18	ug/L	sd	5.721	%cv 1.14
NA	av	20154	ug/L	sd	1.1	lbcv 0.01
04/01/90 18:46						
CCVS	rep	I	PI	conc	932.71	ug/L
	rep	2	PI	cone	963.10	ugIL
CCVS						
04/01/90 18:47						
PB	av	947.91	ug/L	sd	21.486	lbcv 2.27
04/01/90 18:48						
CCB	rep	1	SB	conc	43.38	ug/L
	rep	1	PB	conc	40.88	ug/L
	rep	1	AS	conc	-74.84	ug/L
	rep	1	SE	conc	-40.13	ug/L
	rep	1	ZN	conc	0.53	ug/L
	rep	1	CD	conc	2.56	ug/L
	rep	I	NI	conc	-5.88	ug/L
	rop	1	MN	conc	1.31	ug/L
	rop	I	FE	conc	-6.6	ug/L
	rop	1	CR	conc	-1.02	ug/L
	rop	1	CU	conc	-3.47	ug/L
	rop	1	AC	conc	-2.04	ug/L window edge
	rop	1	NA	conc	114	ug/L
	rop	2	SB	conc	4.07	ug/L
	rop	2	PB	conc	4.18	ug/L
	rop	2	AB	conc	20.18	ug/L
	rop	2	SE	cone	10.80	ug/L
	rop	2	ZN	conc	0.95	ug/L
	rop	2	CD	conc	4.09	ug/L
	rop	2	NI	cone	1.43	ugIL
	rep	2	MN	conc	-1.27	ug/L edge

```
CCB
04/01/                rep   2  CU          conc      1.10 ug/L
    SB                rep   2  AC          conc      0.47 ug/L
    PB                rep   2  NA          conc        96 ug/L
    AS
04/0SE90 18:52
    ZN                av     23.73 ug/L        sd    27.792 %cv 117.14
    CD                av     22.53 ug/L        8d    25.952 %cv 115.19
    NI                av    -28.33 ug/L        sd    68.603 %cv 242.10
    MN                av    -14.64 ug/L        sd    34.013 lbcv 245.65
    FE                av      0.74 ug/L        sd     0.297 %cv  40.13
    CR                av      3.32 ug/L        sd     1.003 lbcr  32.60
    CU                av     -2.22 ug/L        sd     5.171 lbcr 232.73
    AG                av      0.02 ug/L        sd     1.827 %cv 10545.
    NA                av      - 4.4 ug/L       sd      2.74 %cv  59.12
    CR                av     -0.47 ug/L        sd     0.782 %cv 165.87
    CU                av     -1 19 ug/L        sd     3.229 %cv 272.18
    AG                av     -0.79 ug/L        sd     1.773 lbcv 225.04
                      av       105 ug/L        sd      13.2 lbcr  12.58

04/01/90 18:57
6308.012100           rep   1  CD          conc      1.57 ug/L
(9100.698)            rep   a  CD          conc      2.52 ug/L
6308.012100
04/01/90 18:58
    CD                av      2.04 ug/L <5.00   sd     0.471 lbcr  32.88

04/01/90 18:59
6309.012100           rep   1  CD          conc      S.70 ug/L
                      rep   a  CD          conc      1.28 ug/L
6309.012100
04/01/90 18:59
    CD                av      3.49 ug/L <5.00   sd     3.125 %cv  89.54

04/01/90 19:01
CCB                   rep   1  BA          conc     -0.12 ug/L
                      rep   a  BA          conc      0.03 ug/L
CCB
04/01/90 19:01
    BA                av     - 0.0s ug/L        sd     0.105 lbcr 222.59

04/01/90 19:02
6310.062100           rep   1  SB          conc    -11.19 ug/L
                      rep   1  QB          conc      5.96 ug/L
                      rep   1  ZN          conc     14.03 ug/L


                      rep   1  CD          conc     -3.32 ug/L          wlndow edge
                      rep   1  NI          conc     11.59 ug/L
                      rep   1  MN          conc     34.00 ug/L
                      rep   1  FE          conc     119.3 ug/L
                      rep   1  CR          conc      3.aS ug/L
                      rep   1  CU          conc      0.43 ug/L
                      rep   1  AC          conc      0.90 ug/L
                      rep   1  BA          conc      4.43 ug/L
                      rep   1  NA          conc     21624 ug/L
                      rep   2  SB          conc    -12.96 ug/L
                      rep   a  PB          conc     26.94 ug/L
                      rep   2  ZN          conc     13.42 ug/L
                      rap   2  CD          conc      2.93 ug/L
                      rep   2  NI          conc      6.74 ug/L
```

3200091

(9100.699)

rep	a	CR	conc	-6 31	ug/L	window edge
rep	2	CU	conc	0.75	ug/L	
rep	2	AC	conc	-1.63	ug/L	window adga
rep	2	BA	conc	4.70	ug/L	
rep	1	NA	conc	21729	ug/L	

6310.062100
04/01/90 19:06

SB	av	-12.07 ug/L<60.0	md	1.252	%cv	10.37
PB	av	~~10.45~~ ug/L	ad	14.037	%cv	90.21
ZN	av	13.72 ug/L	ad	0.433	%cv	3.16
CD	av	-0.19 ug/L<5.00	md	4.420	%cv	2292.1
NI	av	9.17 ug/L<20.0	md	3.430	%cv	37.41
MN	av	34.11 ug/L	md	0.973	%cv	2.85
FE	av	119.1 ug/L	sd	0.14	%cv	0.20
CR	av	-1.53 ug/L<10.0	md	6.763	%cv	441.16
CU	av	0 59 ug/L<20.0	sd	0.231	%cv	39.16
AC	av	-0.37 ug/L< 10.0	md	1.786	%cv	486.35
BA	av	6.67 ug/L<20.0	md	0.04s	Scv	0.67
NA	av	21676 ug/L	sd	74.8	%cv	0.34

04/01/90 19:11
6311.062100

rep	1	SB	cone	22.86	ug/L
rep	1	PB	cone	-14.94	ug/L
rep	1	ZN	conc	19.23	ug/L
rep	1	CD	cone	0.00	ug/L
rep	1	NI	conc	-0.68	ug/L
rep	1	MN	cone	800.90	ug/L
rep	1	FE	cone	1560.0	ug/L
rep	1	CR	cone	-0.40	ug/L
rep	1	CU	conc	1.04	ug/L
rep	1	AC	cone	-6.97	ug/L window adga
rep	1	BA	conc	42.09	ug/L
rep	1	NA	conc	3495	ug/L
rep	a	SB	cone	27.38	ug/L
rep	2	PB	conc	36.14	ug/L
rep	a	ZN	conc	19.03	ug/L
rep	a	CD	conc	8.41	ug/L
rep	a	NI	conc	-0.79	ug/L window adga
rep	a	MN	conc	801.93	ug/L
rep	2	FE	cone	1566.0	ug/L
rep	a	CR	conc	-3.41	ug/L
rep	2	CU	cone	-0.9s	ug/L
rep	2	AC	conc	0.97	ug/L
rep	2	BA	conc	42.54	ug/L
rep	a	NA	conc	3508	ug/L

6311.062100
04/01/90 19:15

SB	av	25.12 ug/L<60.0	md	3.197	%cv	12.73
PB	av	~~10.60~~ ug/L	md	36.116	Scv	340.74
ZN	av	19.13 ug/L	ad	0.139	Scv	0.73
CD	av	8.61 ug/L	md	0.273	%cv	3.17
NI	av	-0.73 ug/L<20.0	sd	0.072	%cv	9.79
MN	av	801.42 ug/L	sd	0.731	%cv	0.09
FE	av	1563.0 ug/L	md	4.28	%cv	0.27
CR	av	-1.91 ug/L<10.0	sd	1.117	%cv	111.53
CU	av	0.95 ug/L<20.0	ad	1.681	%cv	103.47
BG	av	-3.00 ug/L<10.0	sd	5.609	%cv	107.00
	av	42.33 ug/L	sd	0.331	%cv	0.78
NA		3503 ug/L	sd	9.7	%cv	0.26

04/01/9[illegible]19
6312.04[illegible]

rep	1	SB	conc	-74.86	ug/L	
rep	1	PB	conc	33.42	ug/L	
rep	1	ZN	conc	24.69	ug/L	
rep	1	CD	conc	0.72	ug/L	
rep	1	NI	conc	2.93	ug/L	
rep	1	MN	conc	96.46	ug/L	
rep	1	FE	conc	392.5	ug/L	
rep	1	CR	conc	1.34	ug/L	
rep	1	CU	conc	1.77	ug/L	
rep	1	AG	conc	-4.76	ug/L	window edge
rep	1	BA	conc	8.18	ug/L	
rep	1	NA	conc	2598	ug/L	
rep	2	SB	conc	22.60	ug/L	
rep	2	PB	conc	30.73	ug/L	
rep	2	ZN	conc	24.72	ug/L	
rep	2	CD	conc	1.08	ug/L	
rep	2	NI	conc	10.56	ug/L	
rep	2	MN	conc	95.44	ug/L	
rep	2	FE	conc	391.4	ug/L	
rep	2	CR	conc	1.40	ug/L	
rep	2	CU	conc	1.21	ug/L	
rep	2	AG	conc	-0.38	ug/L	
rep	2	BA	conc	8.19	ug/L	
rep	2	NA	conc	2630	ug/L	

6312.062100
04/01/90 19 23

SB	v	-26.13	ug/L<60.0	sd	68.917	%cv 263.72
PB	v	~~[illegible]~~	ug/L	sd	1.900	%cv 5.92
ZN	v	24.71	ug/L	sd	0.024	%cv 0.10
CD	v	0.98	ug/L<5.00	sd	0.251	%cv a7.91
NI	v	6.75	ug/L<20.0	sd	5.399	%cv m0.03
MN	v	95.95	ug/L	sd	0.721	%cv 0.75
FE	v	392.0	ug/L	sd	0.80	%cv 0.20
CR	v	1.37	ug/L<10.0	sd	0.044	%cv 3.20
CU	v	1.49	ug/L<20.0	sd	0.400	%cv p6.88
AG	v	-2.57	ug/L<10.0	sd	3.098	%cv 150.54
BA	v	8.18	µg/L<200	sd	0.010	%cv 0.12
NA	v	2614	ug/L	sd	22.8	%cv 0.87

04/01/90 1[illegible] 28
6313.06[illegible]100

rep	1	SB	conc	-45.24	ug/L
rep	1	PB	conc	33.45	ug/L
rep	1	ZN	conc	17.02	ug/L
rep	1	CD	conc	3.05	ug/L
rep	1	NI	conc	-1.58	ug/L
rep	1	MN	conc	175.06	ug/L
rep	1	FE	conc	174.1	ug/L
rep	1	CR	conc	0.41	ug/L
rep	1	CU	conc	-0.62	ug/L
rep	1	AG	conc	-0.78	ug/L
rep	1	BA	conc	17.25	ug/L
rep	1	NA	conc	55387	ug/L
rep	2	SB	conc	-9.82	ug/L
rep	2	PB	conc	8.25	ug/L
rep	2	ZN	conc	16.04	ug/L
rep	2	CD	conc	4.32	ug/L
rep	2	NI	conc	-1.67	ug/L

3200092

	rep	2	CR	conc	2.14	ug/L	
	rep	2	CU	conc	1.90	ug/L	
	rep	2	AC	cone	-0.37	ug/L	
	rep	2	BA	conc	17.62	ug/L	
	rep	2	NA	conc	56592	ug/L	

6313.062100
04/01/90 19 32

SB	av	-27.53	ug/L<60.0	sd	23.046	%cv	90.99
PB	av	~~30.85~~	ug/L	sd	17.018	%cv	85.47
ZN	av	16.53	ug/L	sd	0.693	%cv	4.20
CD	av	3.68	ug/L<5.00	sd	0.898	%cv	24.41
NI	av	-1.42	ug/L<20.0	ad	0.064	%cv	3.95
MN	av	175.37	ug/L	md	0.447	lbcv	0.25
FE	av	172.1	ug/L	ad	2.84	%cv	1.65
CR	av	1.27	ug/L<10.0	sd	1.225	%cv	96.33
CU	av	0.64	ug/L<20.0	sd	1.785	%cv	277.85
AC	av	-0.57	ug/L<10.0	sd	0.291	%cv	50.69
EA	av	17.43	ug/L<20.0	sd	0.263	lbcv	1.51
NA	av	55990	ug/L	sd	052.4	%cv	1.52

04/01/90 19:37

6314.062100	rep	1	SB	conc	-4.67	ug/L	
	rep	1	PB	conc	-9.09	ug/L	
	rep	1	ZN	cone	7.90	ug/L	
	rep	1	CD	conc	1.00	ug/L	
	rep	I	NI	cone	6.14	ug/L	
	rep	1	MN	cone	-0.41	ug/L	wlndow edge
	rep	1	FE	conc	12.0	uglt	
	rep	I	CR	cone	3.7s	uglt	
	rep	I	CU	cone	-0.78	ug/L	
	rep	1	AC	cone	2.02	ug/L	
	rep	1	EA	cone	0.34	ug/L	
	rep	1	NA	cone	04	ug/L	
	rep	2	SB	conc	33.21	ug/L	
	rep	2	PB	cone	19.44	uglt	
	rep	2	ZN	conc	7.81	ug/L	
	rep	2	CD	cone	s.47	ug/L	
	rep	2	NI	cone	6.02	ug/L	
	rep	2	MN	conc	-0.40	ug/L	
	rep	2	FE	cone	9.9	ug/L	
	rep	2	CR	cone	0.89	ug/L	
	rep	2	CU	conc	-1.06	ug/L	
	rep	2	AC	cone	1.69	ug/L	
	rep	2	BA	conc	0.53	ug/L	
	rep	2	NA	conc	83	ug/L	

6314.062100
04101190 19:41

SB	av	14.27	ug/L<60.0	ad	14.792	lbcv	187.75
PB	av	~~5.17~~	ug/L	sd	20.177	%cv	390.05
ZN	av	7.86	ug/L<10.0	sd	0.064	%cv	0.81
CD	av	3.23	ug/L<5.00	ad	3.167	%cv	97.89
NI	av	6.09	ug/L<20.0	sd	0.100	lbcv	1.64
MN	av	-0.41	ug/L<10.0	sd	0.011	%cv	2.62
FE	av	11.4	ug/L<50.0	sd	2.06	%cv	18.09
CR	av	a.32	ug/L<10.0	sd	2.019	%cv	86.95
CU	av	-0 92	ug/L<20.0	md	0.197	%cv	21.42
AC	av	1.as	up/L<10.0	sd	0.228	%cv	12.27
BA	av	0 43	ug/L<20.0	sd	0.132	%cv	30 38
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

04/01/ 45
6315.0

rep	1	ID	cone	-37.75	ug/L	
rep	1	PB	conc	40.99	ug/L	
rep	1	ZN	conc	18.45	ug/L	
rep	1	CD	cone	0.44	ug/L	
rep	1	Nl	cone	-1.32	ug/L	
rep	1	MN	cone	1.10	ug/L	
rep	I	FE	cone	16.4	uglL	
rep	1	CR	cone	-1.84	ug/L	
rep	1	CU	conc	-2.62	ug/L	
rep	1	AC	conc	1.25	ug/L	
rep	1	BA	conc	0.13	ug/L	
rep	1	NA	cone	147	ug/L	
rep	2	SB	cone	11.37	uglL	
rep	2	re	cone	-0.78	ug/L	
rep	2	ZN	cone	19.10	ug/L	
rep	2	CD	conc	1.41	uglL	
rep	2	NI	cane	-0.79	ug/L	
rep	2	MN	cone	-0.40	ug/L	
rep	2	re	cone	4.6	ug/L	
rep	2	CR	cone	-0.78	ug/L	
rep	2	CU	cone	-2.95	ug/L	
rep	2	AC	conc	1.60	ug/L	
rep	2	BA	conc	0.32	ug/L	
rep	2	NA	cone	153	ug/L	

6315.062100
04/01/90 19:49

SB	av	-13.19	ug/L<60.0	sd	34.735	%cv	263.34
PB	av	24.11	ug/L	sd	35.189	%cv	145.97
ZN	av	18.98	ug/L	ad	0.746	%cv	3.93
CD	av	1.04	ug/L<5.00	sd	0.526	%cv	50.74
NI	av	-1.06	ug/L<20.0	ad	0.378	%cv	35.81
MN	av	0.35	ug/L<10.0	sd	1.059	%cv	303.48
FE	av	10.5	ug/L<50.0	sd	8.32	%cv	79.43
CR	av	-1.31	ug/L<10.0	sd	0.752	%cv	57.25
CU	av	-2.78	ug/L<20.0	sd	0.237	%cv	8.52
AG	av	1.43	ug/L<10.0	sd	0.245	%cv	17.14
BA	av	0.23	µg/L<20.0	sd	0.135	%cv	59.14
NA	av	140	ug/L<500	sd	10.0	%cv	6.25

04/01/90 20:10
6315.062110

rep	I	SB	cone	17.10	ug/L		
rep	1	PB	cone	-11.43	uglL		
rep	1	ZN	cone	9.98	ug/L		
rep	I	CD	cone	2.48	ug/L		
rep	1	Nl	conc	-6.35	ug/L	window edge	
rep	1	MN	cone	1.13	ug/L		
rep	1	re	cone	S8.4	ug/L		
rep	1	CR	conc	3.19	ug/L		
rep	1	CU	conc	-1.47	ug/L		
rep	1	AC	cone	-3.94	ug/L	window edge	
rep	1	BA	cone	0.92	ug/L		
rep	I	NA	cone	72	ug/L		
rep	2	SB	cone	30.91	ug/L		
rep	2	PB	cone	2.45	ug/L		
rep	2	ZN	cone	10.94	ug/L		
rep	2	CD	cone	0.37	ug/L		
rep	2	NI	conc	1 43	ug/L		

3200053

	rep	a	CR	conc	-4 92	ug/L	window edge
	rep	2	CU	cone	-0.35	ug/L	
	rep	2	AC	cone	-4.09	ug/L	window edge
		2	BA	cone	0.00	ug/L	
	rep	2	NA	cone	04	ug/L	

6315.062110
04101190 20:14

SB	av	33.05	ug/L<60.0	sd	8.280	%cv	25.05
PB	a	-1.49	ug/L	sd	9.011	%cv	218.56
ZN		10.43	ug/L	sd	0.715	%cv	6.85
CD	av	1.43	ug/L<5.00	sd	1.496	%cv	104.09
NI	av	-2.46	ug/L<20.0	sd	5.499	%cv	223.45
MN	av	1.12	ug/L<10.0	sd	0.014	%cv	1.28
FE	av	57.2	ug/L	sd	1.66	%cv	2.90
CR	av	-0.86	ug/L<10.0	sd	5.729	%cv	663.31
CU	av	-0.91	ug/L<20.0	sd	0.792	%cv	Ob.88
AC	av	-4.02	ug/L<10.0	sd	0.108	%cv	2.69
BA	av	0.86	ug/L<20.0	sd	0.00s	%cv	9.02
NA	av	78	ug/L<500	sd	8.4	%cv	10.03

04/01/90 20:22

6315.062120	rep	1	SB	conc	491.39	ug/L
	rep	1	PB	cone	490.40	ug/L
	rep	1	ZN	cone	525.56	ug/L
	rep	1	CD	cone	52.49	ug/L
	rep	1	NI	cone	512.41	ug/L
	rep	1	MN	cone	536.47	ug/L
	rep	1	FE	cone	1029.9	ug/L
	rep	1	CR	cone	207.42	ug/L
	rep	1	CU	cone	256.82	ug/L
	rep	1	AC	cone	40.03	ug/L
	rep	1	BA	cone	2089.51	ug/L
	rep	1	NA	cone	62	ug/L
	rep	2	SB	conc	561.57	uglL
	rep	2	PB	conc	484.55	ug/L
	rep	2	ZN	conc	521.12	ug/L
	rep	2	CD	cone	50.0	ug/L
	rep	2	NI	cone	520.41	ug/L
	rep	2	MN	cone	536.12	ug/L
	rep	2	FE	cone	1044.3	ug/L
	rep	2	CR	cone	206.48	ug/L
	rep	2	CU	cone	265.20	uglL
	rep	2	AG	cone	51.12	uglL
	rep	2	BA	conc	2098.64	uglL
	rep	2	NA	conc	74	uglL

6315.062120
04101190 20:26

SB	av	526.48	ug/L	ad	49.424	%cv	9.43
PB	av	491.48	ug/L	sd	9.797	%cv	1.99
ZN	av	523.34	ug/L	ad	3.141	%cv	0.60
CD	av	51.58	ug/L	sd	1.290	%cv	2.50
NI	a	516.41	ug/L	md	5.655	%cv	1.10
MN	av	536.30	ug/L	sd	0.248	%cv	0.0S
FE	av	1037.1	ug/L	md	10.23	%cv	0 . 0
CR	a	206.95	ug/L	ad	0.668	%cv	0.32
CU	av	261.01	ug/L	sd	5.931	%cv	2.27
AC	av	49.57	ug/L	sd	2.181	%cv	4.40
BA	av	2094.07	ug/L	sd	6.457	%cv	0.31
NA	av	68	ug/L<500	sd	8.6	%cv	12.59

04/01/9[illegible]31
6316.0[illegible]

rep	1	SB	conc	-53.88	ug/L	[illegible]ow edge
rep	1	PB	conc	-5.01	ug/L	
rep	1	ZN	conc	6.11	ug/L	
rep	1	CD	conc	5.44	ug/L	
rep	1	NI	conc	3.10	ug/L	
rep	1	MN	conc	1.00	ug/L	
rep	1	FE	conc	1.0	ug/L	
rep	1	CR	conc	5.93	ug/L	
rep	1	CU	conc	-1.74	ug/L	
rep	1	AG	conc	-5.04	ug/L	window edge
rep	1	BA	conc	0.32	ug/L	
rep	1	NA	conc	63	ug/L	
rep	a	SB	conc	-24.96	ug/L	
rep	2	PB	conc	-9.44	ug/L	
rep	2	ZN	conc	7.23	ug/L	
rep	2	CD	conc	3.50	ug/L	
rep	2	NI	conc	-1.11	ug/L	
rep	2	MN	conc	-0.80	ug/L	
rep	2	FE	conc	7.0	ug/L	
rep	2	CR	cona	3.42	ug/L	
rep	2	CU	conc	-0.16	ug/L	
rep	1	AG	conc	-2.49	ug/L	window edge
rep	a	BA	conc	0.59	ug/L	
rep	2	NA	conc	77	ug/L	

6316.062100
04/01/90 20:34

SB	av	-39.42	ug/L<60.0	sd	20.452	%cv	51.89
PB	av	~~-2.04~~	ug/L	sd	8.278	%cv	44.74
ZN	av	b.71	ug/L<10.0	sd	0.713	%cv	10.76
CD	av	4.47	ug/L<5.00	sd	1.848	%cv	38.62
NI	av	0.49	ug/L<20.0	sd	8.49s	%cv	755.17
MN	av	0.56	ug/L<10.0	sd	2.031	%cv	362.95
FE	av	4.5	ug/L<50.0	sd	3.51	%cv	77.85
CR	av	4.40	ug/L<10.0	sd	1.775	%cv	87.94
CU	av	-0.95	ug/L<20.0	sd	1.116	%cv	117.76
AG	av	-3.77	ug/L<10.0	sd	1.817	%cv	48.17
BA	av	0.45	µg/L<20.0	sd	0.184	%cv	40.94
NA	av	70	ug/L<500	sd	10.1	%cv	14.45

04/01/90 20:39

CCVS	rep	1	SB	conc	1011.70	ug/L
	rep	1	PB	conc	974.87	ug/L
	rep	1	ZN	conc	499.55	ug/L
	rep	1	CD	conc	482.46	ug/L
	rep	1	NI	conc	486.59	ug/L
	rep	1	MN	conc	508.as	ug/L
	rep	1	FE	conc	532.0	ug/L
	rep	1	CR	conc	506.18	ug/L
	rep	1	CU	conc	504.64	ug/L
	rep	1	AG	conc	491.85	ug/L
	rep	1	BA	conc	504.55	ug/L
	rep	1	NA	conc	19941	ug/L
	rep	2	SB	conc	1080.99	ug/L
	rep	a	PB	conc	991.52	ug/L
	rep	1	ZN	conc	504.66	ug/L
	rep	2	CD	conc	506.91	ug/L
	rep	2	NI	conc	500.09	ug/L

3200054

	rep	2	CR	conc	509.23	ug/L		
	rep	2	CU	conc	503.24	ug/L		
	rep	2	AG	conc	492.58	ug/L		
	rep	2	BA	conc	511.41	ug/L		
CCVS	rep	2	NA	conc	20113	ug/L		
04/0								
04/01/90 20:43								
SB	av	1056.38	ug/L	sd	34.000	%cv	3.29	
PI)	av	984.20	ug/L	sd	10.340	%cv	1.05	
ZN	av	502 10	ug/L	sd	3.614	%cv	0.72	
CD	av	494.48	ug/L	sd	17.290	%cv	3.50	
NI	av	493.34	ug/L	sd	9.546	%cv	1.94	
MN	av	510.81	ug/L	sd	3.470	%cv	0.68	
FE	av	536.1	ug/L	sd	5.07	%cv	1.09	
CR	av	507.71	ug/L	sd	2.153	%cv	0.42	
CU	av	503.95	uglL	sd	0.982	%cv	0.19	
AG	av	492.22	ug/L	sd	0.515	%cv	0.10	
BA	av	500.08	ug/L	sd	4.991	%cv	0.98	
0410NA90	av	20047	uglL	sd	170.5	%cv	0.89	
20:48								
CCB	rep	1	SB	conc	22.19	ug/L		
	rep	1	PB	conc	13.20	ug/L		
	rep		ZN	conc	0.95	ug/L		
	rep		CD	conc	0.08	ug/L		
	rep		Nl	conc	10.94	ug/L		
	rep		MN	conc	0.97	ug/L		
	rep		PE	conc	-1.1	uglL		
	rep		CR	conc	1.44	ug/L		
	rep		CU	conc	0.04	ug/L		
	rep		AG	conc	-4.40	ug/L	window edge	
	rep		BA	conc	-0.44	ug/L		
	rep	1	NA	cone	28	uglL		
	rep	a	SB	conc	-30.49	ug/L		
	rep	2	PB	conc	13.40	ug/L		
	rep	2	ZN	conc	0.07	ug/L		
	rep	2	CD	conc	4.13	ug/L		
	rep	a	NI	conc	7.17	uglL	wlndow edge	
	rep	2	MN	conc	-0.72	ug/L		
	rep	2	FE	conc	6.8	ug/L		
	rep	2	CR	conc	-2.32	ug/L		
	rep	2	CU	conc	-7.47	ug/L	wlndow edge	
	rep	2	AG	conc	0.50	ug/L		
	rep	2	BA	conc	-0.22	ug/L		
	rep	2	NA	conc	17	ug/L		
CCB								
04101190 20:52								
SB	av	-4.25	ug/L	sd	37.394	%cv	079.44	
PB	av	13.30	uglL	sd	0.142	%cv	I.04	
ZN	av	0.91	ug/L	sd	0.059	%cv	6.43	
CD	av	3.50	ug/L	sd	3.710	%cv	105.90	
NI	av	9.06	ug/L	sd	2.644	%cv	29.41	
MN	av	0.13	ug/L	sd	1.197	%cv	945.44	
FE	av	2.8	ug/L	sd	S.40	%cv	$99.20	
CR	av	-0.44	ug/L	sd	2.445	%cv	404.35	
CU	av	-3.01	ug/L	sd	5.453	%cv	142.95	
AG	av	-2.05	ug/L	sd	3.409	%cv	174.17	
BA	av	-0 33	uglL	sd	0.152	%cv	45.97	
NA	av	22	ug/L	sd	7.4	%cv	32.64	

it

04/01/ 19
6317.0

rep	1	SI	cone	-27.37	ug/L	
rep	1	PB	conc	-5.13	ug/L	
rep	I	ZN	cone	14.78	ug/L	
rep	1	CD	conc	4.13	ug/L	
rep	I	NI	cone	-5.64	ug/L	window edge
rep	1	MN	cone	5.39	ug/L	
rep	1	FE	cone	2099.0	ug/L	
rep	I	CR	cone	8.46	ug/L	
rep	1	CU	cone	1.00	ug/L	
rep	I	AG	conc	0.99	ug/L	
rep	I	BA	cone	4.07	ug/L	
rep	1	NA	conc	8055	ug/L	
rep	2	SB	conc	41.0S	ug/L	
rep	2	PB	aonc	63.31	ug/L	
rep	2	ZN	cone	15.14	ug/L	
rep	2	CD	conc	4.12	ug/L	
rep	2	NI	cone	5.83	ug/L	
rep	2	MN	cone	5.96	ug/L	
rep	2	FE	cone	2113.5	ug/L	
rep	2	CR	cone	4.91	ug/L	
rep	2	CU	cone	1.85	ug/L	
rep	2	AG	cone	1.91	ug/L	
rep	2	BA	cone	3.65	ug/L	
rep	2	NA	cone	7933	ug/L	

6317.062100
04/01/90 21:23

SI	av	6.84	ug/L<60.0	sd	0.377	%cv	707.23
PB	av	~~29.97~~	ug/L	sd	48.395	%cv	166.39
ZN	av	14.96	ug/L	sd	0.254	%cv	1.70
CD	av	4.12	ug/L<5.00	sd	0.010	%cv	0.23
Nt	av	0.10	ug/L<20.0	sd	0.110	%cv	8382.1
MN	av	5.48	ug/L<10.0	sd	0.405	%cv	7.14
FE	av	2106.3	ug/L	sd	10.23	%cv	0.49
CR	av	6.68	ug/L<10.0	sd	2.513	%cv	37.19
CU	av	1.92	ug/L<20.0	sd	0.106	%cv	5.53
AG	av	1.45	ug/L<10.0	sd	0.651	%cv	44.98
BA	av	3.86	ug/L<20.0	ad	0.295	lbc.	7.65
NA	av	7994	ug/L	sd	86.5	%cv	1.08

ANALYZE MANUAL MODE 90104101

21:32

Method Name: 9004011057 Format Name: etdcond

Comments:

Replicates: 2 Dilut Lon:

Read Delay: 30 Weight/Volume:

ZN	I	14.96	ug/L	sd	0.254	%cv	1.70
CD	av	4.11	ug/L	ad	0.010	lbc.	0.23
NI	av	0.10	ug/L	sd	8.110	%cv	8382.1
....							

2200055

FE	av	2106.3	ug/L	sd	10 23	%cv	0.49
CR	4v	6.68	ug/L	sd	2.513	%cv	37.59
CU	av	1.92	ug/L	sd	0.106	%cv	5.53
AG	av	1.45	ug/L	sd	0.451	%cv	44.98
BA	av	3.04	ug/L	sd	0.295	%cv	7.45
NA	av	7994	ug/L	sd	16.5	%cv	1.08

Sample Road Delay - 9 seconds remaining.

Command? 431

04101190 21:33

6318.062100	rep	I	SB	conc	-47.47	ug/L	
	rep	1	PB	cone	348.90	ug/L	window edge
	rep	1	ZN	conc	459.50	ug/L	
	rep	1	CD	cone	58.56	ug/L	
	rep	1	NI	conc	131.67	ug/L	
	rep	1	MN	cone	1733.41	ug/L	
	rep	I	FE	cone	419167.8	ug/L	
	rep	1	CR	conc	359.30	ug/L	
	rep	1	CU	cone	3.94	ug/L	window edge
	rep	1	AC	cone	-17.04	ug/L	
	rep	1	BA	cone	31.13	ug/L	
	rep	1	NA	cone	669817	ug/L	
	rep	2	SB	cone	-136.63	ug/L	

	rep	a	CD	conc	54.86	ug/L	
	rep	a	NI	conc	141.95	ug/L	
	rep	2	MN	conc	1743.40	ug/L	
	rep	a	FE	conc	410499.8	ug/L	
	rep	2	CR	conc	368.02	ug/L	
	rep	a	CU	conc	6.07	ug/L	rlndor odgo
	rep	a	AG	conc	-48.20	ug/L	window odgo
	rep	a	BA	conc	38.97	ug/L	
	rep	2	NA	conc	675666	ug/L	
4310.041100							
04/01/90 21:37							
SB	av	-142.15 ug/L<60.0		sd	133.615	%cv	93.99
PB	av	397.44 ug/L		rd	40.340	%cv	10.14
ZN	av	455.27 ug/L		sd	5.994	%cv	1.32
CD	av	56.71 ug/L		sd	2.614	%cv	4.61
NI	av	137.31 ug/L		rd	7.974	%cv	5.81
MN	av	1748.58 ug/L		sd	11.340	%cv	1.22
It	av	418833.8 ug/L		sd	472.36	%cv	0.11
CR	av	363.80 ug/L		sd	5.964	%cv	1.44
CU	av	5.01 ug/L<20.0		sd	1.511	%cv	30.21
AG	av	-32.42 ug/L<10.0		sd	22.033	sa.	47.54
BA	av	38.55 ug/L		sd	0.597	%cv	1.55
NA	av	672741 ug/L		sd	4135.6	%cv	0.41
04/01/90 21:42							
6319.052100	rep	I	SI	conc	-6.15	ug/L	
	rep	1	PB	cone	32.22	ug/L	
	rep	1	ZN	cone	14.13	ug/L	
	rep	1	CD	conc	5.98	ug/L	
	rep	I	NI	conc	-7.84	ug/L	rlndor odgo
	rep	1	MN	cone	0.41	ug/L	
	rep	1	FE	cone	74.7	ug/L	
	rep	1	CR	cone	-0.81	ug/L	
	rep	I	CU	conc	-4.17	ug/L	
	rep	1	AG	conc	-5.45	ug/L	window odgo
	rep	1	BA	cone	0.74	ug/L	
	rep	1	NA	conc	245	ug/L	
	rep	a	SB	conc	-4.98	ug/L	
	rep	2	PB	conc	25.31	ug/L	
	rep	2	ZN	conc	9.47	ug/L	
	rep	2	CD	cone	4.71	ug/L	
	rep	2	NI	cone	-14.34	ug/L	window odgo
	rep	2	MN	conc	0.26	ug/L	
	rep	a	re	conc	80.6	ug/L	
	rep	a	CR	conc	-0.07	ug/L	
	rep	a	CU	conc	1.93	ug/L	
	rep	2	AG	conc	-5.31	ug/L	window odgo
	rep	a	BA	conc	1.09	ug/L	
	rep	2	NA	conc	239	ug/L	
6319.052100							
04/01/90 21:46							
SB	av	-5.57 ug/L<60.0		sd	0.828	%cv	14.07
PB	av	28.27 ug/L		sd	4.887	%cv	14.99
ZN	av	11.80 ug/L		sd	3.295	%cv	17.93
CD	av	5.35 ug/L		sd	0.892	%cv	14.49
NI	av	-12.10 ug/L<20.0		sd	5.994	%cv	49.54
MN	av	0.33 ug/L<10.0		sd	0.111	%cv	33.11
FE	av	77.7 ug/L		sd	4.13	%cv	5.31

3200056

AG	av	-5.38	ug/L<10.0	sd	0.098	%cv	1.03
EA	av	0.92	ug/L<20.0	sd	0.231	%cv	2S.01
NA	av	242	ug/L<500	sd	4.4	%cv	1.83

04/01/90 21:50

6319.052110	rep	1	SB	cone	-42.52	ug/L
	rep	1	PB	conc	-50.62	uglt
	rep	1	ZN	cone	14.78	ug/L
	rep	1	CD	conc	2.82	ug/L
	rep	1	NI	cone	-4.89	ug/L
	rep	1	MN	cone	1.03	uglt
	rep	1	FE	conc	16.5	uglt
	rep	1	CR	cone	1.10	ug/L
	rep	1	CU	cone	-1.28	ug/L
	rep	1	AG	conc	1.33	ug/L
	rep	1	BA	cone	2.37	ug/L
	rep	1	NA	conc	134	ug/L
	rep	a	SB	conc	2.52	ug/L
	rep	2	PB	conc	73.07	uglt
	rep	1	ZN	conc	11.71	ug/L
	rep	1	CD	conc	3.03	ug/L
	rep	a	NI	conc	2.25	ug/L
	rep	a	m	conc	1.04	ug/L
	rep	1	FE	conc	15.2	uglt
	rep	a	CR	conc	-0.49	ug/L
	rep	a	CU	conc	1.40	ug/L
	rep	2	AG	conc	1.21	uglt
	rep	a	BA	conc	2.35	ug/L
	rep	a	NA	conc	118	ug/L

6319.052110
04/01/90 21:54

SB	av	-20.00	ug/L<60.0	sd	31.849	%cv	159.aS
PB	av	11.43	ug/L	sd	88.033	%cv	757.a2
ZN	av	13.28	ug/L	sd	2.127	%cv	16 02
CD	av	2.92	ug/L<5.00	sd	0.149	%cv	5 09
NI	av	-1.32	ug/L<20.0	sd	5.052	%cv	381 94
MN	av	1.04	ug/L<10.0	sd	0.026	%cv	2 40
FE	av	15.8	ug/L<50.0	sd	0.94	%cv	5 96
CR	av	0.35	ug/L<10.0	sd	1.191	%cv	334 66
CU	av	0.06	ug/L<20.0	sd	1.097	%cv	307 .9
AG	av	1.77	ug/L<10.0	sd	0.792	%cv	44.68
BA	av	2.36	ug/L<20.0	sd	0.008	%cv	0.33
NA	av	126	ug/L<500	sd	11.3	%cv	0.97

04/01/90 22:00

6319.052120	rep	1	SB	cone	578.41	ug/L
	rep	1	PE	cone	507.0S	ug/L
	rep	1	ZN	conc	554.33	ug/L
	rep	1	CD	cone	53.73	ug/L
	rep	1	Nl	cone	511.98	ug/L
	rep	1	MN	conc	543.92	ug/L
	rep	1	FE	conc	1074.4	ug/L
	rep	1	CR	cone	216.34	uglt
	rep	1	CU	conc	268.68	ug/L
	rep	1	AG	cone	51.37	ug/L
	rep	1	BA	conc	1161.46	ug/L
	rep	1	NA	cone	136	ug/L
	rep	2	SB	cone	492.19	ug/L
			PE		518.20	ug/L

	rep	2	ZN	conc	561.52	ug/L	
	rop	2	CD	conc	54.74	ug/L	
	rep	2	NI	conc	537.81	ug/L	
	rep	2	MN	eonc	541.47	ug/L	
	rop	2	FE	conc	1082.S	ug/L	
	rep	2	CR	conc	213.56	ug/L	
	rep	2	CU	eonc	265.61	ug/L	
	rep	2	AC	conc	45.36	ug/L	
	rep	2	IA	conc	2149.74	ug/L	
	rep	2	NA	cone	134	ug/L	
6319.052120							
04/01/90 22:04							
SB	av	535.30	ug/L	107% K	sd	60.968	%ev 1.39
PI	av	513.11	ug/L	103%	ad	7.444	%ev 1.4s
ZN	av	557.92	ug/L	109%	sd	S.009	%ev 0.91
CD	av	54.23	ug/L	108%	sd	0.714	Sav 1.32
NI	av	519.90	ug/L	104%	sd	11.198	%ev 2.15
MN	av	543.20	ug/L	109%	ad	1.024	Sav 0.19
FE	av	1078.5	ug/L	100%	sd	5.74	%ev 0.53
CR	av	214.95	ug/L	108%	sd	1.964	%ev 0.91
CU	av	267.15	ug/L	107%	sd	2.171	%ev 0.81
AG	av	48.37	ug/L	97%	ad	4.253	%ev 0.79
BA	av	2166.11	ug/L	108%	sd	5.166	%ev 0.24
NA	av	135	ug/L	<500	sd	1.7	%ev 1.23
04/01/90 22:09							
6320.042100	rep	I	SI	eonc	7.93	ug/L	
	rep	1	PI	conc	11.50	ug/L	
	rep	1	ZN	conc	14.41	ug/L	
	rep	1	CD	conc	3.03	ug/L	
	rep	1	NI	conc	64.84	ug/L	
	rep	1	MN	conc	8.92	ug/L	
	rep	1	FE	cone	401.9	ug/L	
	rep	1	CR	cone	129.48	ug/L	
	rep	1	CU	conc	-3.12	ug/L	
	rep	1	AC	conc	-4.37	ug/L	window edge
	rep	1	IA	cone	0.63	ug/L	
	rep	1	NA	aonc	148	ug/L	
	rep	2	SI	cone	-17.93	ug/L	
	rep	2	PI	cone	-15.18	ug/L	
	rep	2	ZN	aonc	18.00	ug/L	
	rep	2	CD	conc	s.44	ug/L	
	rep	1	NI	conc	44.84	ug/L	
	rep	2	MN	cone	10.34	ug/L	
	rep	2	FE	aonc	592.1	ug/L	
	rep	2	CR	cone	135.47	ug/L	
	rep	2	CU	eonc	-2.62	ug/L	
	rep	2	AC	conc	-4.34	ug/L	window edge
		2	BA	conc	0.40	ug/L	
	rep	a	NA	conc	171	ug/L	
4310.042100							
04/01/90 22:13							
SI	av	-5.00	ug/L	<60.0	sd	18.286	%ev 365.57
PB	av	-1.67	ug/L		sd	18.847	%ev 1024.3
ZN	av				sd	2.393	%ev 14.67
CD	av	16.31	g/L			1.134	%ev 24.46
NI	av	4.63	ug/L	<5.00	ad	1.414	%ev 2 1S
MN	av	65.84	ug/L	<10.0	sd	1.004	%ev 10.45
FE	av	597.0	ug/L		sd	6 92	%ev 1 16
		597.0					

320009

AG	av	-4.35	ug/L<10.0	sd	0.025	%cv	0.57
BA	av	0.62	ug/L<20.0	sd	0.012	%cv	3.51
NA	av	149	ug/L<500	sd	2.1	%cv	1.23

04/01/90 22:17
6323.022100

rep	1	NA	conc	4191	ug/L	
rep	a	NA	conc	6223	ug/L	

6323.022100
04/01/90 22:18

NA	av	6208	ug/L	sd	21.6	%cv	0.35

04/01/90 22:27
6324.022100

rep	1	NA	conc	82654	ug/L	
rep	a	NA	conc	82994	ug/L	

6324.022100
04/01/90 22:27

NA	av	82824	ug/L	sd	240.6	%cv	0.29

04/01/90 22:28
6325.022100

rep	1	NA	conc	109274	ug/L	
rep	a	NA	conc	109365	ug/L	

6325.022100
04/01/90 22:28

NA	av	109321	ug/L	sd	63.2	%cv	0.06

04/01/90 22:31
6326.022100

rep	1	NA	conc	203665	ug/L	
rep	a	NA	conc	103711	ug/L	

6326.022100
04/01/90 22:31

NA	av	203688	ug/L	sd	32.2	%cv	0.02

04/01/90 22:33
CCVS

rep	1	SB	conc	1096.58	ug/L
rep	1	PB	conc	1012.09	ug/L
rep	1	AS	conc	2090.64	ug/L
rep	1	ZN	conc	521.17	ug/L
rep	1	CD	conc	523.20	ug/L
rep	I	NI	conc	502.20	ug/L
rep	1	MN	conc	533.57	ug/L
rep	1	FE	conc	564.2	ug/L
rep	1	CR	conc	528.61	ug/L
rep	1	BE	conc	531.02	ug/L
rep	1	CU	conc	516.33	ug/L

rep	1	AC	conc	524.43	ug/L
rep	1	EA	conc	532.01	ug/L
rop	1	NA	conc	20938	ug/L
rep	a	SB	conc	1049.OS	ug/L
rep	2	PB	conc	1002.74	ug/L
rep	2	AS	conc	2109.41	ug/L
rep	2	ZN	conc	534.04	ug/L
rop	2	CD	conc	538.66	ug/L
rep	2	NI	conc	527.47	ug/L
rep	2	MN	conc	543.02	ug/L
rep	a	FE	conc	569.a	ug/L
rep	a	CR	conc	539.43	ug/L
rop	2	BE	conc	542.26	ug/L
rop	2	CU	conc	524.56	ug/L
rep	7	AG	conc	521.74	ug/L

	rep	2	NA	conc	2122s	ug/L		

CCVS
04/01/9. 22:37

SB	av	1073.22	ug/L	ad	33.043	%cv	3.08
PB	av	1007.42	ug/L	sd	4.413	%cv	0.66
AS	av	2100.02	ug/L	sd	13.273	%cv	0.63
ZN	av	527.60	ug/L	ad	9.100	%cv	1.72
CD	av	S80.98	ug/L	sd	10.930	%cv	2.06
NI	av	514.83	ug/L	ad	17.044	%cv	3.47
MN	av	538.29	ug/L	ad	4.404	%cv	1.24
FE	av	[illegible]	ug/L	sd	3.57	%cv	0.63
CR	av	S34.02	ug/L	ad	7.652	%cv	1.43
BE	av	536.64	ug/L	sd	7.954	%cv	1.40
CU	av	520.45	ug/L	sd	5.120	UC.	1.18
AG	av	523.09	ug/L	sd	1.902	%cv	0.84
BA	av	S34.07	ug L	sd	S.740	%cv	1.07
NA	av	21001	ug L	ad	202.0	(Le.	0.96

04/01/90 22:42

CCVS	rep	1	FE	conc	537.9	ug/L
	rep	2	re	conc	555.3	ug/L

CCVS
04/01/90 22:42

FE	av	546.6	ug L	ad	12.35	%cv	2.26

04/01/90 22:43

CCB	rep	1	SI	eenc	-38.12	ug/L
	rep	1	PB	cona	80.07	ug/L
	rep	1	AS	cone	101.41	ug/L
	rep	1	ZN	conc	-0.23	ug/L
	rep	1	CD	aonc	4.10	ug/L
	rep	1	NI	cona	8.94	ug/L
	rep	1	MN	conc	0.20	ug/L
	rep	I	FE	conc	-8.8	ug/L
	rep	1	CR	cone	-1.56	ug/L
	rep	1	BE	conc	0.0S	ug/L
	rep	1	CU	aona	-2.20	ug/L
	rep	1	AG	conc	-0.84	ug/L
	rep	I	BA	eonc	-0.24	ug/L
	rep	1	NA	conc	35	ug/L
	rep	2	SB	cone	-1.29	ug/L
	rep	2	PB	conc	16.58	ug/L
	rep	2	AS	cona	71.38	ug/L
	rep	2	ZN	conc	-0.73	ug/L
	rep	2	CD	conc	1.06	ug/L
	rep	2	NI	cona	-1.32	ug/L
	rep	2	MN	conc	-0.80	ug/L
	rep	2	FE	cone	-6.4	ug/L window edge
	rep	2	CR	cone	-0.65	ug/L
	rep	2	BE	cone	-0.04	ug/L
	rep	2	CU	cone	-3.40	ug/L
	rep	2	AG	cone	-4.20	ug/L window edge
	rep	2	BA	conc	-0.13	ug/L
	rep	2	NA	cone	20	ug/L

CCB
04/01/90 22:48

SB	av	-19.71	ug/L	ad	24.039	%cv	132.1[illegible]
PB	av	27.33	ug/L	sd	IS.194	%cv	55.6[illegible]

7

22 0098

```
CU          av      3.42 ug/L        sd      3.615 %cv   99.87
NI          av      1.32 ug/L        sd      3.734 %cv  282.54
MN          av     -0.09 ug/L        sd      0.412 %cv  452.21
FE          av      -4.8 ug/L        sd       2.20 %cv   45.45
CR          av     -1.10 ug/L        sd      0.642 %cv   58.15
BE          v      -0.01 ug/L        sd      0.080 %cv 1363.0
CU          v      -2.98 ug/L        sd      0.995 %cv   33.40
AG          v      -2.32 ug/L        sd      2.777 %cv  119.71
BA          v      -0.19 ug/L        sd      0.089 %cv   46.24
NA          av        28 ug/L        sd       10.5 %cv   36.02

04/01/90 22:53
6327.022100     rep   1  NA          conc      7226 ug/L
                rep   2  NA          conc      7194 ug/L
6327.022100
04/01/90 22:53
    NA          av      7211 ug/L        sd       24.2 %cv    0.34

04/01/90 22:55
6328.022100     rep   1  NA          conc      5153 ug/L
                rep   2  NA          conc      5195 ug/L
6328.022100
04/01/90 22:55
    NA          av      5174 ug/L        sd       29.9 %cv    0.58

04/01/90 22:56
6329.022100     rep   1  NA          conc      7263 ug/L
                rep   2  NA          conc      7313 ug/L
6329.022100
04/01/90 22:57
    NA          av      7288 ug/L        sd       35.3 %cv    0.48

04/01/90 22:58
6334.042100     rep   1  NA          conc      4672 ug/L
                rep   2  NA          conc      4673 ug/L
6334.042100
04/01/90 22:58
    NA          av      4673 ug/L        sd        0.7 %cv    0.02

04/01/90 23:00
6334.012100     rep   1  CD          conc     -0.81 ug/L
(9100.701)      rep   2  CD          conc      5.57 ug/L
6334.012100
04/01/90 23:00


    CD          av      2.38 ug/L <5.00  sd      4.511 %cv  189.28

04/01/90 23:01
6335.042100     rep   1  CD          conc      2.77 ug/L
                rep   2  CD          conc     -1.35 ug/L          window edge
6335.042100
04/01/90 23:02
    CD          av      0.71 ug/L<5.00   sd      2.914 %cv  409.20

04/01/90 23:03
6336.012100     rep   1  SB          conc    -24.23 ug/L
                rep   1  PB          conc     42.91 ug/L
                rep   1  ZN          conc    575.84 ug/L
                rep   1  CD          conc      2.90 ug/L
                rep   1  NI          conc     25.59 ug/L
```

rep	1	CR	conc	39.20	ug/L
rep	1	BE	conc	0.49	ug/L
rep	1	CU	conc	274.87	ug/L
rep	1	AG	conc	3.85	ug/L
rep	2	SB	conc	-12.84	ug/L
rep	2	PB	conc	44.73	ug/L
rep	2	ZN	conc	579.79	ug/L
rep	2	CD	conc	6.70	ug/L
rep	2	NI	conc	29.84	ug/L
rep	2	CR	conc	37.61	ug/L
rep	2	BE	conc	0.61	ug/L
rep	2	CU	conc	274.44	ug/L
rep	2	AG	conc	1.33	ug/L

(9100.702)

6336.012100
04/01/90 23:06

SB	av	-18.54	ug/L <60.0	d	8.055	%cv 43.45
PB	av	43.82	ug/L	d	1.287	%cv 2.94
ZN	av	577.81	ug/L	d	2.799	%cv 0.48
CD	av	4.80	ug/L <5.00	d	2.691	%cv 56.06
NI	av	27.71	ug/L	d	3.009	%cv 10.86
CR	av	38.46	ug/L	d	1.127	%cv 2.93
BE	av	0.55	ug/L <1.00	d	0.089	%cv 16.17
CU	av	274.63	ug/L	d	0.300	%cv 0.11
AG	av	2.59	ug/L <10.0	d	1.786	%cv 68.93

04/01/90 09
CCV3

rep	1	SB	conc	1104.49	ug/L
rep	1	PB	conc	1017.36	ug/L
rep	1	ZN	conc	547.91	ug/L
rep	1	CD	conc	558.49	ug/L
rep	1	NI	conc	549.59	ug/L
rep	1	CR	conc	555.28	ug/L
rep	1	BE	conc	558.33	ug/L
rep	1	CU	conc	571.11	ug/L
rep	1	AG	conc	541.52	ug/L
rep	1	AL	conc	577.2	ug/L
rep	1	NA	conc	22187	ug/L
rep	2	SB	conc	1094.84	ug/L
rep	2	PB	conc	986.83	ug/L
rep	2	ZN	conc	521.30	ug/L
rep	2	CD	conc	499.93	ug/L
rep	2	NI	conc	495.39	ug/L
rep	2	CR	conc	524.66	ug/L
rep	2	BE	conc	517.56	ug/L
rep	2	CU	conc	546.85	ug/L
rep	2	AG	conc	534.67	ug/L
rep	2	AL	conc	572.5	ug/L
rep	2	NA	conc	22120	ug/L

CCV8
04/01/90 23 13

SB	av	1099.24	ug/L	d	7.386	%cv 0.67
PB	av	1002.09	ug/L	d	21.585	%cv 2.15
ZN	av	534.60	ug/L	d	18.811	%cv 3.52
CD	av	529.21	ug/L	d	41.409	%cv 7.82
NI	av	522.49	ug/L	d	38.331	%cv 7.34
CR	av	539.97	ug/L	d	21.652	%cv 4.01
BE	av	537.95	ug/L	d	28.835	%cv 5.36
CU	av	558.58	ug/L	d	17.718	%cv 3.17
AG	av	538.10	ug/L	d	4.840	%cv 0.90

2200099

04/01/90 23:16

CCVS	rep	1	AL	conc	556.9	ug/L	
	rep	1	NA	conc	22049	ug/L	
	rep	a	AL	conc	536.3	ugtL	
	rep	a	NA	conc	22116	ug/L	

CCVS
04/01/90 23:17

AL	av	544.6	ugtL	sd	14.58	%cv	2.67
NA	av	22013	ugtL	sd	47.5	%cv	0.22

04/01/90 23:19

CCB	rep	1	SB	conc	-33.86	ug/L	
	rep	1	PB	conc	10.93	ugtt	
	rep	1	ZN	conc	0.99	ugtL	
	rep	1	CD	conc	3.15	ugtt	
	rep	1	NI	conc	-8.47	ug/L	wlndow edge
	rep	1	CR	conc	-1.98	ug/L	wlndow edge
	rep	1	BE	conc	-0.01	ug/L	
	rep	1	CU	conc	-1.33	ug/L	
	rep	1	AG	conc	-3.as	ug/L	wlndow edge
	rep	1	At	conc	2.s	ug/L	
	rep	1	NA	conc	28	ug/L	
	rep	2	SB	conc	-21.70	ug/L	
	rep	a	PB	conc	-22.90	ug/L	
	rep	2	ZN	conc	-1.15	ug/L	
	rep	a	CD	conc	3.03	ug/L	
	rep	a	NI	conc	-3.87	ug/L	
	rep	a	CR	conc	1.12	ug/L	
	rep	2	BE	conc	-0.03	ugtL	
	rep	2	CU	conc	-0.49	ug/L	
	rep	a	AG	conc	0.51	ug/L	
	rep	2	AL	conc	7.9	ugtL	
	rep	2	NA	conc	9	ugtL	

CCB
04/01/90 23:22

SB	av	-27.78	ug/L	sd	1.600	%cv	30.94
PB	av	-5.98	ug/L	sd	23.918	%cv	399.70
ZN	av	-0.08	ugtL	sd	1.513	%cv	2006.4
CD	av	3.09	ugtL	sd	0.081	%cv	2.41
NI	av	-4.17	ug/L	sd	3.246	%cv	52.61
CR	av	-0.43	ug/L	sd	2.193	%cv	507.51
BE	av	-0.02	ugtL	sd	0.014	%cv	59.74
CU	av	-1.51	ug/L	sd	1.165	%cv	77.07
AG	av	-1.37	ug/L	sd	2.657	%cv	193.93
AL	av	s.2	ug/L	sd	3.78	%cv	72.41
NA	av	18	ug/L	sd	13.6	%cv	73.86

04/01/90 23:27

CCVS	rep	1	NA	conc	21914 ug/L
	rep	2	NA	conc	21880 ugtL

CCVS
04/01/90 23:27

NA	av	21897	ug/L	sd	23.7	%cv	0.11

04/01/90 23:28

6486.019	rep	1	AL	cone	135115.6 ug/L
(9100.	rep	2	AL	conc	140147.7 ug/L

AL	[illegible]	107631.4	ug/L		sd	35	1.21	%cv 2 59

04/01/90 23:30

6487.012100	rep	1	AL	conc	981.3	ug/L
	rep	2	AL	conc	939.7	ug/L

6487.012100
04/01/90 23 30

AL	av	960.5	ug/L	sd	30.40	%cv 3 06

04/01/90 23 31

6490.012100	rep	1	PB	conc	43.21	ug/L
	rep	1	ZN	conc	42.77	ug/L
	rep	2	PB	conc	43.25	ug/L
(9100.708)	rep	2	ZN	conc	44.00	ug/L

6490.012100
04/01/90 23:35

PB	av	43.23	ug/L	sd	14.116	%cv 32.52
ZN	av	43.38	ug/L	sd	0.872	%cv 1.18

04/01/90 23:34

6491.012100	rep	1	PB	conc	-17.17	ug/L
	rep	1	ZN	conc	-0.18	ug/L
	rep	2	PB	conc	-8.14	ug/L
	rep	2	ZN	conc	-0.84	ug/L

Re run tubing separate

6491.012100
04/01/90 23:35

PB	av	-12.66	ug/L	sd	6.374	%cv 50.34
ZN	av	-0.51	ug/L	sd	0.466	%cv 91.42

04/01/90 23:36

6491.012110	rep	1	PB	conc	-9.93	ug/L
	rep	1	ZN	conc	-0.33	ug/L
	rep	2	PB	conc	6.27	ug/L
	rep	2	ZN	conc	-0.68	ug/L

6491.012110
04/01/90 23:36

PB	av	-1.82	ug/L	sd	11 441	%cv 626.89
ZN	av	-0.50	µg/L	sd	0 248	%cv 49.24

04/01/90 23 38

6491.012120 (10)	rep	1	PB	conc	-43.82	ug/L	window dg
	rep	1	ZN	conc	1.41	ug/L	
	rep	2	PB	conc	-8.85	ug/L	
	rep	2	ZN	conc	-0.82	ug/L	

6491.012120
04/01/90 23:38

PB	av	-23.57	ug/L	sd	24.731	%cv 96.05
ZN	av	0.30	ug/L	sd	1.577	%cv 530.57

04/01/90 23:41

6491 A	rep	1	PB	conc	-24.28	ug/L
	rep	1	ZN	conc	-0.70	ug/L
	rep	2	PB	conc	19.42	ug/L
	rep	2	ZN	conc	-1.35	ug/L

6491 A
04/01/90 23:41

PB	av	-2.03	ug/L	sd	30.898	%cv 1271.1
ZN	av	-1.02	ug/L	sd	0.459	%cv 44.81

3200.00

spectrum	rep	1	PI	conc	34.12	ug/L
		1	ZN	cone	0.26	uglf
04/01/90 23:43						
spectrum	rep	2	PB	cone	31.32	ug/L
04/01/90 23:44						
6528.012100	rop	1	[illegible]	cone	7.58	ug/L
	rep	1	CD	conc	0.45	uglf
	rep	2	CD	eonc	2.14	uglf
6528.012100						
04/01/90 23:45						
CD	BV		1.29 ug/L	sd	1.192	%cv 92.17
04/01/90 a3:46						
6529.012100	rep	1	CD	cone	3.74	uglf
	rep	2	CD	cone	5.10	ug/L
6529.012100						
04/01/90 23:47						
CD	av		4.43 uglf	sd	0.947	%cv 21.37
04/01/90 23:49						
CCVS	rep	1	PO	conc	1041.03	ug/L
	rep	1	ZN	conc	558.51	ug/L
	rep	1	CD	cone	535.27	ug/L
	rep	2	PI	cone	1008.74	ug/L
	rep	2	ZN	cone	513.19	ug/L
	rep	2	CD	cone	S03.05	uglt
CCVS						
04/01/90 23:49						
PB	av		1025.43 ug/L	sd	23.097	%cv 2.33
ZN	av		554.20 ug/L	sd	3.267	%cv 0.28
CD	av		519.56 ug/L	sd	22.221	%cv 4.28
04/01/90 23:51						
CCVS	rep	1	ZN	cone	490.13	ug/L
	rep	2	ZN	cone	407.40	ug/L
CCVS						
04/01/90 23:51						
ZN	av		408.77 µg/L	sd	1.934	%cv 0.40
04/01/90 23:52						
CCB	rep	1	ZN	cone	0.97	ug/L
	rep	2	ZN	conc	1.23	ug/L
CCB						
04/01/90 23:53						
ZN	av		1.10 ug/L	sd	0.178	%cv 16.23
04/01/90 23:54						
CCB	rap	1	PB	cone	13.71	ug/L window edge
	rep	1	ZN	cone	1.68	ug/L
	rep	1	CD	eonc	2.54	uglf
	rop	2	PB	cone	-2.33	ug/L
	top	2	ZN	cone	2.01	ug/L
	rrp	2	CD	cone	3.7s	uglf
CCB						
04/01/90 23:55						
PB	av		4.71 uglf	sd	12.780	%cv 190.48
ZN	av		2.25 uglt.	sd	0.794	%cv 35.34
CD	av		3.15 ug/L	sd	0.860	%cv 27.33

	rep	1	ZN	cone	170.71 ~ OIL	
	rep	a	PB	cone	271.63 ug/L	
9100.7	rep	2	ZN	cone	161.98 ug/L	
491.012100						
7/01/90 23:57						
PB	av	246.35 ug/L		sd	35.748 %cv	14.5
ZN	av	166.35 ug/L		sd	6.167 %cv	8.7
04/01/90 23:59						
491.012110	rep	1	PB	cone	-21.83 ug/L	
	rep	1	ZN	cone	13.43 ug/L	
4/01/90 23:59						
4491.012110	rep	I	PB	cone	259.28 ug/L	
	rep	2	PB	conc	270.34 ug/L	
	rep	I	ZN	cone	162.44 ug/L	
	rep	3	PB	cone	318.76 ug/L	
	rep	a	ZN	conc	158.49 ug/L	
6491.012110						
04/02/90 00:00						
PB	av	[illegible] ug/L		sd	7.822 %cv	2.95
PB	av	282.77 ug/L		sd	31.631 %cv	11.19
ZN	av	160.47 ug/L		sd	2.795 %cv	1.74
4/02/90 00:02						
491.012120	rep	1	PB	conc	621.35 ug/L	
	rep	1	ZN	conc	606.42 ug/L	
	rep	2	PB	cone	637.72 ug/L	
	rep	2	ZN	conc	604.59 ug/L	
691.012120						
4/02/90 00:02						
PB	av	629.53 ug/L 77%R		sd	11.575 %cv	1.04
ZN	av	604.50 ug/L 88%		sd	0.124 %cv	0.02
4/02/90 00:03						
528.012100	rep	I	PB	conc	180.14 ug/L	
	rep	1	ZN	conc	244.49 ug/L	
	rep	2	PB	cone	133.34 ug/L	
	rep	I	CD	cone	8.88 ug/L	
528.012100						
04/02/90 00:04						
PB	av	133.74 ug/L		sd	3.396 %cv	2.SO
4/02/90 00:05						
528	rep	1	CD	conc	0.81 ug/L	
(9100.710)	rep	2	CD	eone	6.24 ug/L	
528						
4/02/90 00:05						
CD	av	7.27 ug/L		sd	1.463 %cv	20.11
4/02/90 00:06						
529.012100	rep	1	CD	conc	1.73 ug/L	
	rep	2	CD	cone	-0.52 ug/L	window edge
6529.012100						
04/02/90 00:06						
CD	av	0.61 ug/L <5.00		sd	1.594 %cv	161.04
04/02/90 00:07						
CCV5	rep	1	CD	cone	431.10 ug/L	

3200101

CD	av	435.63 ug/L		ad	4.987 %cv	1.14		
04/02/90 00:08								
CCVS	rep	1	PI	conc	010.43 uglt			
	rep	1	ZN	eonc	476.66 uglt			
	rep	1	CD	conc	463.90 ug/L			
	rep	1	PI	cone	819.19 ug/L			
	rep	2	ZN	conc	476.99 uglt			
	rep	2	CD	conc	463.70 ug/L			
CCVS								
04/02/90 00:09								
PB	av	~~944.01~~ ug/L		ad	22.036 %cv	2.61		
ZN	av	476.03 ug/L		ad	0.231 %cv	0.05		
CD	av	40.04 ug/L		ad	0.090 %cv	0.02		
04/02/90 00:11								
CCVS	rep	1	PI	conc	937.41 uglt			
	rep	2	PB	conc	963.42 ug/L			
CCVS								
04/02/90 00:11								
PB	av	950.41 ug/L		ad	18.392 %cv	1.94		
04/02/90 00:12								
CCB	rep	1	PO	cone	5.33 ug/L			
	rep	1	ZN	conc	0.89 ug/L			
	rep	1	CD	cone	3.02 uglt		window edge	
	rep	1	PB	cone	-17.82 ug/L			
	rep	2	ZN	conc	-1.03 ug/L			
	rep	2	CD	conc	3.79 ug/L			
CCB								
04/02/90 00:13								
PB	av	-6.25 ug L		ad	16.371 %cv	262.19		
ZN	av	-0.07 ug L		ad	1.360 %cv	1955.9		
CD	av	3.41 ug L		ad	0.542 %cv	15.91		

ANALYZE MANUAL MODE

91/04/11

06:28

Method Name 9104110628

Format Name stdcond

Comments:

Replicates: 2

Dilution:

Read Delay: 30

Weight/Volume

Entered - Copied
JK 4-15-91

Raw Data
4/11/91
go QH

o 9100.699 - Co, Be, V, Sn
* 9100.808 - Ba, Cd, Cr, Ag, ~~Pb~~
* 9100.781 - Cd, ~~Pb~~ Zn
Δ 9100.826 - Cu
9100.807 - EPTox

Command?

o BIK 957
* BIK 001
Δ BIK 003
BIK 004

IN CONTROL

3200102

04/11/91 07:20

blank	rep	1	SB	ea	50.2	
	rep	1	PB	ea	86.7	wlndow edge
	rep	I	AS	ea	1.4	
	rep	1	SE	em	33.1	
	rep	I	ZN	em	25.9	
	rep	1	CD	ea	19.6	
	rep	I	CO	em	61.2	
	rep	1	NI	em	20.4	
	rep	I	MN	em	-5.7	
	rep	1	FE	en	1.0	
	rep	I	CR	em	46.6	
	rep	1	VZ	ea	32.9	
	rep	1	BE	ea	24.5	
	rep	1	CA	em	0.3	
	rep	I	CU	em	52.0	
	rep	I	AC	ea	13.6	
	rep	1	MC	en	0.0	
	rep	1	Ai.	ea	4.5	
	rep	1	BA	ea	-0.3	
	rep	I	NA	ea	11.2	
	rep	I	KZ	ea	35.7	
	rep	2	SE	ea	34.3	
	rep	2	PB	em	36.7	wlndow edge
	rep	2	AS	ea	-12.4	wlndow edge
	rep	2	SE	ea	18.8	
	rep	2	ZN	em	30.0	
	rep	2	CD	ea	17.4	
	rep	2	CO	em	- 4.4	wlndow edge
	rep	2	NI	ea	-41.7	wlndow edge
	rep	2	MN	ea	17.7	
	rep	2	FE	em	11.9	
	rep	2	CR	ea	47.7	
	rep	2	VZ	ea	16.9	
	rep	2	BE	en	11.9	
	rep	2	CA	ea	0.2	
	rep	2	CU	en	47.4	
	rep	2	AG	em	40.1	
	rep	2	MC	ea	0.8	
	rep	2	AL	ea	2.8	
	rep	2	EA	ea	2.5	
	rep	2	NA	em	17.6	
	rep	2	KZ	ea	29.4	

blank
04/11/91 07:27

SB	av	42.28	sd	11.230	%cv	26.56	
PB	av	61 69	sd	35.312	lbcr	57.24	
AS	av	-10.52	sd	16.064	lbcr	160.32	
SE	av	25.95	sd	10.103	lbcr	38.93	
ZN	av	27.97	sd	2.936	%cv	10.50	
CD	av	18.50	sd	1.519	%cv	8.21	
CO	av	28.41	sd	46.409	lbcr	163.37	
NI	av	-10.68	sd	43.916	%cv	411.06	
MN	av	6.01	sd	16.587	lbcr	276.01	
FE	av	6 46	sd	7.718	lbcr	119.43	
CR	av	47 18	sd	0.799	%cv	1.69	
VZ	av	24.88	sd	11.328	%cv	45.54	
BE	av	23 68	sd	1.089	lbcr	4.60	
CA	av	0 26	sd	0 081	%cv	31.24	
CU	av	59.77	sd	11.055	lbcr	18.49	

AG	av	24.84	d	18.709	%cv	69.70
MG	av	0.42	d	0.597	%cv	140.60
AL	av	3.68	d	1.189	%cv	32.29
BA	av	1.06	d	1.964	%cv	185.02
NA	av	14.38	d	4.522	%cv	31.45
KZ	av	32.57	d	4.465	%cv	13.71

04/11/91 07:46

standard	rep	1	SB	em	1218.9	conc	2000.00
	rep	1	PB	em	2372.5	conc	2000.00
	rep	1	AS	em	231.6	conc	1000.00
	rep	1	SE	em	172.9	conc	1000.00
	rep	1	ZN	em	6246.8	conc	1000.00
	rep	1	CD	em	5968.3	conc	1000.00
	rep	1	CO	em	6835.3	conc	1000.00
	rep	1	NI	em	4862.2	conc	1000.00
	rep	1	MN	em	17405.0	conc	1000.00
	rep	1	FE	em	757.1	conc	1000.00
	rep	1	CR	em	7475.0	conc	1000.00
	rep	1	VZ	em	9668.4	conc	1000.00
	rep	1	BE	em	10714.4	conc	1000.00
	rep	1	CU	em	9821.7	conc	1000.00
	rep	1	AG	em	3792.3	conc	1000.00
	rep	1	AL	em	117.8	conc	1000.00
	rep	1	BA	em	6737.6	conc	1000.00
	rep	2	SB	em	1202.4	conc	2000.00
	rep	2	PB	em	2262.3	conc	2000.00
	rep	2	AS	em	213.4	conc	1000.00
	rep	2	SE	em	182.8	conc	1000.00
	rep	2	ZN	em	6292.3	conc	1000.00
	rep	2	CD	em	5784.0	conc	1000.00
	rep	2	CO	em	7058.7	conc	1000.00
	rep	2	NI	em	4887.5	conc	1000.00
	rep	2	MN	em	17425.3	conc	1000.00
	rep	2	FE	em	752.3	conc	1000.00
	rep	2	CR	em	7378.7	conc	1000.00
	rep	2	VZ	em	9558.4	conc	1000.00
	rep	2	BE	em	10641.0	conc	1000.00
	rep	2	CU	em	9735.6	conc	1000.00
	rep	2	AG	em	13658.8	conc	1000.00
	rep	2	AL	em	120.9	conc	1000.00
	rep	2	BA	em	16875.0	conc	1000.00

standard
04/11/91 07:51

SB	av	1210.64	d	11.663	%cv	0.96	conc 2000.00
PB	av	2317.38	d	77.892	%cv	3.36	conc 2000.00
AS	av	222.50	d	12.820	%cv	5.76	conc 1000.00
SE	av	177.81	d	6.992	%cv	3.93	conc 1000.00
ZN	av	6269.55	d	32.162	%cv	0.51	conc 1000.00
CD	av	5876.15	d	130.285	%cv	2.22	conc 1000.00
CO	av	6946.99	d	157.993	%cv	2.27	conc 1000.00
NI	av	4874.86	d	17.878	%cv	0.37	conc 1000.00
MN	av	17415.16	d	14.335	%cv	0.08	conc 1000.00
FE	av	754.74	d	3.390	%cv	0.45	conc 1000.00
CR	av	7426.85	d	68.130	%cv	0.92	conc 1000.00
VZ	av	9613.38	d	77.777	%cv	0.81	conc 1000.00
BE	av	10677.70	d	51.869	%cv	0.49	conc 1000.00
CU	av	9778.64	d	60.921	%cv	0.62	conc 1000.00
AG	av	13725.56	d	94.399	%cv	0.69	conc 1000.00
AL	av	119.34	d	2.190	%cv	1.83	conc 1000.00

3200103

BA	av	16806	30	sd	97.115	lbcv	0.58	conc 1000.00

04/11/91 07 58
1 & 2 PPM

rep	I	88	conc	1867.42	ug/L		
rep	1	PB	conc	2058.46	uglL		
rep	1	AS	conc	851.65	ug/L		
rep	1	SE	conc	982.00	ug/L		
rep	1	ZN	conc	1008.05	ug/L		
rep	1	CD	conc	990.17	ug/L		
rep	1	CO	conc	1003.24	ug/L		
rep	1	NI	conc	998.76	ug/L		
rep	I	MN	conc	988.40	ug/L		
rep	1	FE	conc	989.50	ug/L		
rep	I	CR	conc	975.72	ug/L		
rep	1	VZ	conc	987.47	ug/L		
rep	1	BE	conc	979.62	ug/L		
rep	I	CU	conc	993.57	uglL		
rep	I	AC	conc	996.24	ug/L		
rep	1	AL	conc	1009.58	ug/L		
rep	I	BA	conc	980.81	ug/L		
rep	2	SB	conc	1955.70	ug/L		
rep	2	PB	conc	2066.41	ug/L		
rep	2	AS	conc	910.24	ug/L		
rep	2	SE	eonc	963.67	ug/L		
rep	2	ZN	conc	1005.22	ug/L		
rep	2	CD	conc	971.43	ug/L		
rep	2	CO	conc	978.42	ug/L		
rep	2	NI	conc	978.55	ug/L		
rep	2	WN	conc	978.97	uglL		
rep	2	FE	conc	972.01	ug/L		
rep	2	CR	conc	935.26	ug/L		
rep	2	VZ	conc	970.29	ug/L		
rep	2	BE	conc	955.28	ug/L		
rep	2	CU	conc	985.38	ug/L		
rep	2	AC	conc	985.30	uglL		
rep	2	AL	conc	983.72	uglL		3.27
rep	2	EA	conc	979.49	ug/L		0.27
							4.70
							1.33
av	1911.56	ug/L	sd	62.425	%cv		0.34
av	2062.44	ug/L	sd	5.620	lbcv		0.13
av	800.95	ug/L	sd	41.435	lbcv		1.77
av	972.83	uglL	sd	12.960	lbcv		1.45
av	1005 64	ug/L	sd	3.414	lbcv		0.68
av	982.30	uglL	sd	11.131	%cv		1.26
av	990 83	ug/L	sd	17.551	lbcv		2.85
av	988.66	ug/L	sd	14.297	lbcv		1.24
av	983.68	ug/L	sd	6.664	%cv		1.78
av	980.75	ug/L	sd	12.372	%cv		1.26
av	954.49	uglL	sd	27.198	lbcv		2.85
VZ av	978 88	uglL	sd	12.144	lbcv		1.84
BE av	967 45	ug/L	sd	17.213	%cv		1.78
CU av	989 47	uglL	sd	5.791	%cv		0.59
AC av	990 77	ug/L	sd	7.733	%cv		0.78
AL av	996 65	ug/L	sd	18.289	%cv		1.84
BA av	980 15	ug/L	sd	0.931	%cv		0.09

rep	1	AS	em	1941.5	conc	10000.0
rep	1	SE	em	1672.2	conc	10000.0

```
                rep   a  AS        en      1942 9 cone 10000 0
                rep   a  SE        em      1724.5 conc 10000 0
standard
04111191 00 10
    AS          av    1942 a            rd      1.03 %cv   0.05 eonc 10000.0
    SE          av    1698.4            rd     34.90 %cv   2.18 conc 10000.0

04/11/91 08:12
10.0 PPM        rep   1  AS        conc    0198.3 ug/L
                rep   1  SE        cone    9862.9 ug/L
                rep   a  AS        cone    0172.9 ugIt
                rep   a  SE        conc    0041.0 ug/L
10.0 PPM
04/11/91 08:13                                          0.18
    AS          av   10185.6 ug/L       sd    117.92 %cv   1.27
    SE          av    9952.3 ug/L       ad

04/11/91 08:15
standard        rep   I  FE        em      7617.0 conc 10000.0
                rep   1  AL        an      1214.2 conc 10000.0
                rep   2  FE        an      7510.8 conu 10000.0
                rep   a  AL        en      1174.1 cone 10000.0
standard
04/11/91 08:16
    FE          av    7563.9            sd     75.10 %cv   0.99 conc 10000.0
    AL          av    1194.1            ad     28.33 %cv   2.37 cone 10000.0

04/11/91 08.19
10.0 PPM        rep   1  PB        cone  10261.47 ug/L
                rep   1  ZN        conc  10222.35 ug/L
                rep   1  CD        conc   0059.43 ug/L
                rep   1  CO        conc   0158.05 ug/L
                rep   I  NI        conc   9978.46 ug/L
                rep   1  MN        cone   0206.36 ug/L
                rep   1  FE        conc    9800.6 ug/L
                rep   1  CR        conc   9672.19 ug/L
                rep   1  VZ        eonc   9983.76 ug/L
                rep   1  BE        cone   0057.65 ug/L
                rep   1  CU        conc   9970.30 ug/L
                rep   1  AL        cone    9813.7 ug/L
                rep   1  BA        eonc  10140.40 ug/L
                rep   a  PB        cone  10522.19 ug/L
                rep   2  ZN        conc  10314.63 ug/L
                rep   a  CD        conc  10099.J7 ug/L
                rep   a  CO        conc  10127.53 ug/L
                rep   a  NI        conc  10053.82 ug/L
                rep   a  MN        conc  10266.28 ug/L
                rep   a  PE        conc    9759.4 ug/L
                rep   a  CR        conc   9631.49 ug/L
                rep   a  VZ        conc   9047.76 ugIt
                rep   a  BE        conc   9968.91 ug/L
                rep   a  CU        conc   9941.48 ug/L
                rep   a  AL        conc    9885.9 ug/L
                rep   a  BA        cone  10102.62 ug/L
10.0 PPM
04/11/91 08:23
    PB          av  10391 03 ugIt       ad    184.356 %cv   1.77
    ZN          av  10268.49 ug/L       sd     65.255 %cv   0.64
    CD          av  10079 40 ugIt       ad     28.241 %cv   0.28
                    10142.79 ugIt       sd     21.577 %cv   0.21
```

I

3200104

NI	av	10016.14	ug/L	sd	53.291	%cv	0.53
MN	av	10236 32	ug/L	sd	42.372	%cv	0.41
FE	av	T824.0	ugrt	sd	91.37	%cv	0.93
CR	av	9651.84	ug/L	sd	28.779	%cv	0.30
VZ	av	9915 76	ug/L	sd	94.167	%cv	0.97
BE	av	0013.28	ug/L	sd	41.752	%cv	0.63
CU	av	9955.a9	ug/L	sd	20.375	%cv	0.20
AL	av	9849.a	ug/L	sd	51.07	%cv	0.52
BA	av	0171 61	ug/L	8d	97.568	%cv	0.94

04/11/91 08.36

standard	rep	1	CA	em	712.0	cone	100000
	rep	1	MG		1437.5	cone	100000
	rep	1	NA	sa	25022.4	cone	00000.
	rep	1	KZ	ea	6826.3	cone	00000
	rep	2	CA	oD	730.0	conc	00000
	rep	2	MG	em	1460.4	conc	00000
	rep	2	NA	em	14771.1	conc	00000.
	rep	2	KZ	om	6757.4	conc	00000

standard
04/1I/91 08 39

CA	av	721	sd	12.7 %	1.76	conc	100000
MG	av	1449	sd	16.1 %cv	1.11	cone	100000
NA	av	24898	sd	175.5 %cv	0.71	conc	100000
KZ	av	6792	sd	48.7 %cv	0.72	conc	100000

04/11/91 08:43

standard	rep	1	MG	em	1487.2	conc	100000

04/11/91 08 44

standard	rep	1	KZ	ea	7230.3	conc	100000
			ПC	em	1511.8	conc	100000
			KZ	en	7142.1	conc	100000

04/11/91 08:47

standard			KZ	em	7444.0	conc	100000

04/11/91 08:48

standard	rep	1	MG	ea	1536.0	conc	100000
	rep	1	KZ	ea	7345.9	conc	100000
	rep	2	ПC	em	1532.2	conc	100000
		2	KZ	ea	7247.1	conc	100000

standard
04/11/91 08.49

MG	av	1534	sd	2.7 %cv	0.17	conc	100000
KZ	av	7317	sd	6V.4 %cv	0.95	conc	100000

04/II/91 08:50

100 PPM	rep	1	CA	conc	105293	ug/L
	rep	1	MG	conc	99836	ug/L
	rep	1	NA	conc	102592	ug/L
	rep	1	K2	conc	98558	ug/L
	rep	a	CA	conc	105938	ug/L
	rep	2	MG	conc	100379	ug/L
	rep	2	NA	conc	103358	ug/L
	rep	2	KZ	conc	97676	ug/L

100 PPM
04/1II91 08 52

CA	av	105625	ug/L	sd	470.1	%cv	0.45
MG	av	100108	ug/L	sd	383.8	%cv	0.38
NA	av	102975	ug/L	sd	512.2	%cv	0.53
KZ	av	98117	ug/L	rd	623.8	%cv	0.64

04/11/91 54

LCSW

rep	1	SB	conc	1006.87	ug/L
rep	1	PB	conc	1121.91	ug/L
rep	1	AS	conc	692.6	ug/L
rep	1	SE	conc	1002.9	ug/L
rep	1	ZN	conc	1091.93	ug/L
rep	1	CD	conc	999.40	ug/L
rep	1	CO	conc	1035.17	ug/L
rep	1	NI	conc	1039.48	ug/L
rep	1	MN	conc	1052.79	ug/L
rep	1	FE	conc	993.0	ug/L
rep	1	CR	conc	940.18	ug/L
rep	1	VZ	conc	924.15	ug/L
rep	1	BE	conc	1044.82	ug/L
rep	1	CA	conc	1269	ug/L
rep	1	CU	conc	1057.45	ug/L
rep	1	AG	conc	951.99	ug/L
rep	1	MG	conc	1098	ug/L
rep	1	AL	conc	973.5	ug/L
rep	1	BA	conc	989.34	ug/L
rep	1	NA	conc	1387	ug/L
rep	1	KZ	conc	10716	ug/L
rep	2	SB	conc	974.95	ug/L
rep	2	PB	conc	1114.91	ug/L
rep	2	AS	conc	719.6	ug/L
rep	2	SE	conc	638.8	ug/L
rep	2	ZN	conc	1099.35	ug/L
rep	2	CD	conc	992.87	ug/L
rep	2	CO	conc	1037.68	ug/L
rep	2	NI	conc	1049.87	ug/L
rep	2	MN	conc	1058.31	ug/L
rep	2	FE	conc	978.3	ug/L
rep	2	CR	conc	950.75	ug/L
rep	2	VZ	conc	940.72	ug/L
rep	2	BE	conc	1033.08	ug/L
rep	2	CA	conc	1247	ug/L
rep	2	CU	conc	1054.57	ug/L
rep	2	AG	conc	948.31	ug/L
rep	2	MG	conc	1146	ug/L
rep	2	AL	conc	955.3	ug/L
rep	2	BA	conc	979.14	ug/L
rep	2	NA	conc	1357	ug/L
rep	2	KZ	conc	10242	ug/L

LCSW

04/11/91 09:01

SB	av	991.91	ug/L	sd	21.161	%cv	2.13
PB	av	1118.41	ug/L	sd	4.944	%cv	0.44
AS	av	706.1	ug/L	sd	19.10	%cv	2.70
SE	av	820.9	ug/L	sd	257.51	%cv	31.37
ZN	av	1095.44	ug/L	sd	5.247	%cv	0.48
CD	av	996.14	ug/L	sd	4.616	%cv	0.46
CO	av	1036.38	ug/L	sd	1.720	%cv	0.17
NI	av	1044.68	ug/L	sd	21.490	%cv	2.04
MN	av	1055.55	ug/L	sd	3.904	%cv	0.37
FE	av	985.7	ug/L	sd	10.40	%cv	1.05
CR	av	955.47	ug/L	sd	6.664	%cv	0.70
VZ	av	933.43	ug/L	sd	10.303	%cv	1.10
BE	av	1038.95	ug/L	sd	8.301	%cv	0.80
CA	av	1258	ug/L	sd	15.7	%cv	1.25
CU	av	1056.01	ug/L	sd	2.039	%cv	0.19

3200165

							0.27
AG	av	950.15	uglt	sd	2.601	%cv	3.01
MG	av	1122	ug/L	sd	33.8	%cv	1.34
AL	av	964.4	ug/L	sd	12.90	%cv	0.73
BA	av	984.24	ug/L	sd	7.212	%cv	0.75
NA	av	1372	uglt	sd	20.6	%cv	1.50
KZ	av	10479	ug/L	sd	335.0	%cv	3.20

04/11/91 09:12

CAL BLK

rep	I	SB	conc	34.48	uglt	
rep	I	PB	conc	-30.72	ug/L	
rep	1	AS	conc	197.6	ug/L	
rep	1	SE	conc	60.0	uglt	
rep	1	ZN	conc	-2.06	ug/L	
rep	1	CD	conc	-0.63	ug/L	
rep	I	CO	conc	8.25	ug/L	
rep	1	NI	conc	5.56	ug/L	
rep	1	MN	conc	1.71	ug/L	
rep	1	PE	conc	10.5	uglt	
rep	1	CR	cone	-4.63	ug/L	
rep	1	VZ	conc	-0.25	ug/L	
rep	1	BE	conc	0.10	ug/L	
rep	1	CA	conc	-19	ug/L	
rep	I	CU	conc	3.75	ug/L	
rep	1	AC	conc	-3.67	ug/L	wlndow edge
rep	I	ΠC	conc	17	uglt	
rep	1	AL	conc	-21.5	ugrt	wlndow edge
rep	1	BA	conc	0.37	ug/L	
rep	1	NA	conc	-7	ug/L	
rep	1	KZ	conc	4	ug/L	
rep	2	SB	conc	S1.13	uglt	
rep	2	PB	conc	-56.27	ug/L	
rep	2	AS	conc	73.9	ug/L	
rep	2	SE	conc	120.1	uglt	
rep	2	ZN	cone	-0.64	ug/L	
rep	2	CD	conc	-0.27	ug/L	
rep	2	CO	conc	1.10	ug/L	
rep	a	NI	conc	0.89	ug/L	wlndow edge
rep	2	MN	conc	-2.21	ug/L	
rep	2	FE	conc	7.3	ug/L	
rep	2	CR	conc	-0.01	ug/L	
rep	2	VZ	conc	I.62	ug/L	
rep	2	BE	conc	-0.09	ug/L	
rep	2	CA	conc	-35	ug/L	wtndow edge
rep	2	CU	conc	2.59	ug/L	
rep	2	AG	conc	-4.28	ug/L	wlndow edge
rep	2	MG	conc	63	*uglt*	
rep	2	AL	conc	20.1	ug/L	
rep	2	BA	conc	0.10	ug/L	wlndow edge
rep	2	NA	conc	-5	ug/L	
rep	2	KZ	conc	362	ug/L	

CAL BLK

04/11/91 09:19

SB	av	42 80	ug/L	sd	11.776	%cv 27.51
PB	av	-43.49	ug/L	sd	18.061	%cv 41.52
AS	av	135 8	ug/L	sd	87.47	%cv 64.41
SE	av	140 1	ug/L	sd	113.27	%cv 80.87
ZN	av	-1 35	ug/L	sd	1.003	%cv 74.27
CD	av	-0 45	uglt	sd	*0.259*	%cv 57.58
CO	av	4 68	ug/L	sd	5.053	%cv 108.02
Nl	av	3 23	ug/L	sd	3.305	%cv 102.43

1

MN	av	-0.27	ug/L	sd	2.606	%cv	1022.9
FE	av	8 9	ugIt	sd	2.33	%cv	26.17
CR	av	-2 32	ug/L	sd	3.268	%cv	140.82
VZ	av	0 48	ug/L	sd	1.324	lbcv	173.75
BE	av	0 00	ug/L	sd	0.137	%cv	3166.4
CA	av	-27	ug/L	sd	11.4	%cv	42.44
CU	av	3 17	ug/L	sd	0.820	%cv	25.86
AG	av	-3.98	ug/L	sd	0.432	%cv	10.87
MG	4v	45	ug/L	sd	25.4	%cv	56.11
AL	av	-0 7	ug/L	sd	29.37	%cv	4181.7
BA	av	0 23	ug/L	sd	0.193	lbcv	82.20
NA	av	-4	ug/L	sd	1.2	%cv	20.93
XZ	av	183	ug/L	sd	253.1	%cv	138.55

04/11/91 09:27

CCVS	rep	1	SB	conc	978.90	ug/L
	rep	1	PB	cone	960.93	ug/L
	rep	1	A8	cone	984.5	ug/L
	rep	1	SE	conc	941.0	ug/L
	rep	1	ZN	eonc	454.36	ug/L
	rep	1	CD	cone	438.58	ug/L
	rep	1	CO	cone	439.04	
	rep	1	NI	cone	456.74	ugIt
	rep	1	MN	conc	451.82	ug/L
	rep	1	re	cone	443.7	ug/L
	rep	1	CR	cone	438.03	ug/L
	rep	1	VZ	conc	444.42	ug/L
	rep	1	BE	conc	445.36	ug/L
	rep	I	CA	cone	20165	ug/L
	rep	I	CV	conc	450.53	ug/L
	rep	1	AG	cone	460.54	ug/L
	rep	1	MG	conc	18955	ugIt
	rep	1	At	conc	44t.7	ug/L
	rep	1	BA	cone	447.60	ug/L
	rep	1	NA	cone	20235	ug/L
	rep	1	KZ	eonc	19113	ug/L
	rep	a	ID	conc	888.04	ug/L
	rep	2	PB	cone	907.81	ug/L
	rep	2	AS	conc	998.5	ug/L
	rep	2	SE	cone	1021.4	ug/L
	rep	2	ZN	cone	505.58	ug/L
	rep	2	CD	conc	511.29	ug/L
	rep	2	CO	conc	484.74	ug/L
	rep	a	NI	conc	499.44	ug/L
	rep	a	MN	conc	477.01	ug/L
	rep	a	FE	eonc	464.3	ug/L
	rep	2	CR	conc	449.97	ug/L
	rep	a	VZ	cone	464.38	ug/L
	rep	2	BE	cone	501.39	ug/L
	rep	2	CA	cone	22339	ug/L
	rep	a	CU	conc	443.60	ug/L
	rep	2	AG	cone	453.48	ug/L
	rep	2	MG	conc	18701	ug/L
	rep	2	AL	eonc	444.4	ug/L
	rep	a	BA	conc	437.01	ug/L
	rep	2	MA	conc	19622	ug/L
	rep	a	KZ	eonc	18309	ug/L

CCVS
04/11/91 09:34

SB	av	933.47	ug/L	sd	44.248	%cv	4.88

3200168

PB	av	934 37	ug/L	sd	37.561	%cv	4.02
AS	av	991.5	ug/L	sd	9.89	%cv	1.00
SE	av	991.7	uglt	sd	42.01	%cv	4.24
ZN	av	480.97	ug/L	sd	34.802	%cv	7.24
CD	av	474 93	ug/L	sd	51.413	%cv	10.03
CO	av	462 90	ug/L	ad	33.717	%cv	7.28
NI	av	478.10	ug/L	sd	30.182	%cv	6.31
MN	av	464 42	ug/L	sd	17.825	%cv	3.84
FE	av	454.0	ug/L	sd	14.52	%cv	3.20
	av	454 00	ug/L	sd	22.583	%cv	4.97
	av	455 40	ug/L	sd	15.532	%cv	3.41
	av	473.31	ug/L	sd	39.544	%cv	8.35
	av	21252	ug/L	sd	1537.2	Ycv	7.13
	av	~~447.07~~	ug/L	sd	4.896	%cv	1.10
	av	4Sb.97	ug/L	sd	5.048	%cv	1.10
	av	18829	ug/L	sd	178.9	Ycr	0.95
	av	453.2	ug/L	sd	16.19	%cv	3.57
	av	~~442.34~~	ug/L	sd	7.487	%cv	1.69
	av	19928	ug/L	sd	433.5	%cv	2.18
KZ	av	10711	ug/L	sd	568.6	%cv	3.04

04/11/91 10:19

CCVS	rep	1	CU	conc	456.03	ug/L
	rep	1	BA	conc	457.57	ug/L
	rep	2	CU	cone	451.08	ug/L
	rep	2	BA	cone	4S8.07	uglt

CCVS
04/11/91 10.20

CU	av	453.55	ug/L	sd	3.494	%cv	0.77
BA	av	457.02	ug/L	sd	0.355	%cv	0.08

04/11/91 10:23

ICSAB	rep	I	sa	conc	-9.26	ug/L	
	rep	1	PB	cone	1111.60	ug/L	
	rep	1	AS	conc	-1241.4	ug/L	wlndow edge
	rep	1	SE	conc	-319.9	ug/L	window edge
	rep	1	ZN	conc	893.94	ug/L	
	rep	1	CD	cone	868.97	ug/L	
	rep	1	CO	conc	432.27	ug/L	
	rep	1	NI	conc	845.60	ug/L	
	rep	I	MN	conc	430.55	ug/L	
	rep	1	FE	conc	148705.5	ug/L	
	rep	1	CR	conc	404.10	ug/L	
	rep	1	VZ	cone	432.46	ug/L	
	rep	1	BE	conc	423.88	ug/L	
	rep	1	CA	conc	488278	ug/L	
	rep	I	CU	conc	401.34	ug/L	
	rep	1	AG	conc	830.17	ug/L	
	rep	1	MG	conc	451051	ug/L	
	rep	1	AL	cone	433930.6	ug/L	
	rep	1	BA	conc	421.80	ug/L	
	rep	1	NA	cone	82	ug/L	
	rep	1	KZ	conc	423	ug/L	
	rep	2	SB	conc	23.57	ug/L	
	rep	2	PB	conc	1036.52	ug/L	
	rep	2	AS	cone	-1176.8	ug/L	window edge
	rep	2	SE	conc	1710.4	ug/L	
	rep	2	ZN	conc	890.70	ug/L	
	rep	2	CD	eonc	848.31	ug/L	
	rep	2	CO	cone	398.90	ug/L	

rep	2	NI	conc	826.09	ug/L	
rep	2	MN	conc	431.81	ug/L	
rep	2	FE	conc	172072.6	ug/L	
rep	2	CR	conc	422.34	ug/L	
rep	2	VZ	conc	426.94	ug/L	
rep	2	BE	conc	420.06	ug/L	
rep	2	CA	conc	489570	ug/L	
rep	2	CU	conc	414.14	ug/L	
rep	2	AG	conc	867.17	ug/L	
rep	2	nC	conc	446449	ug/L	
rep	2	AL	conc	411675.2	ug/L	
rep	2	EA	conc	428.03	ug/L	
rep	2	NA	conc	41	ug/L	
rep	2	KZ	conc	417	ug/L	

ICSAB
04111191 10.29

SB	av	7.16	ug/L	md	23.215	%cv	324.32
PB	av	1124.06	ug/L	sd	123.795	%cv	11.01
AS	av	-1219.2	ug/L	md	59.96	%cv	4.92
SE	av	730.3	ugIL	sd	1485.15	%cv	203.37
ZN	av	892.32	ug/L	sd	2.291	%cv	0.26
CD	av	858.64	ug/L	sd	14.414	%cv	1.70
CO	av	415.58	ug/L	sd	23.597	%cv	5.68
NI	av	835.85	ug/L	sd	13.800	%cv	1.65
MN	av	431.18	ug/L	sd	0.809	%cv	0.21
FE	av	170389.1	ugIL	md	2380.92	%cv	1.40
CR	av	413.22	ugIL	sd	12.897	%cv	3.12
VZ	av	429.70	ug/L	sd	3.906	%cv	0.91
BE	av	421.97	ug/L	md	2.699	%cv	0.64
CA	av	488924	ug/L	sd	913.5	%cv	0.19
CU	av	408.74	ug/L	sd	10.466	%cv	2.56
AG	av	858.67	ugIL	md	12.028	%cv	1.40
nC	av	448750	ugIL	sd	3254.3	%cv	0.73
AL	av	137806.9	ug/L	sd	5470.66	%cv	I.25
EA	av	424 91	ug/L	sd	4.400	%cv	1.04
NA	av	21	ugIL	sd	15.3	%cv	21.38
KZ	av	420	ug/L	sd	4.4	%cv	1.10

04/11/91 10:53

ELK 001	rep	1	SB	conc	-51.51 ug/L	wlndow edge
	rep	1	PB	conc	89.31 ug/L	
	rep	1	AS	conc	25.8 ug/L	window edge
	rep	1	SE	conc	31.3 ug/L	
	rep	1	ZN	conc	-1.22 ug/L	
	rep	1	CD	conc	1.45 ug/L	
	rep	1	CO	conc	8.81 ug/L	
	rep	1	NI	conc	10.81 ug/L	
		1	MN	conc	-1.20 ug/L	
	rep	1	FE	conc	-0.8 ug/L	
	rep	1	CR	conc	- 2.64 ug/L	
	rep	1	VZ	conc	0.17 ug/L	
	rep	1	BE	conc	-0.21 ug/L	
	rep	1	CA	conc	19 ug/L	
	rep	1	CU	conc	4.82 ug/L	
	rep	1	AG	conc	-2.67 ug/L	
	rep	1	MG	conc	28 ug/L	no peak
	rep	1	AL	conc	17.7 ug/L	
	rep	1	EA	cone	0.17 ug/L	
	rep	1	NA	conc	41 ug/L	
	rep	1	KZ	cone	505 ug/L	

00

rep	a	SB	conc	-96.22	ug/L		wlndow edge
rep	2	PB	conc	-04.14	ug/L		
rep	a	AS	conc	-71.6	ug/L		wlndow odgo
rep	a	SE	conc	150.4	ug/L		
rep	2	ZN	eonc	-0.94	ug/L		
rep	a	CD	eonc	-2.08	ug/L		
rep	2	CO	conc	4.65	ug/L		
rep	a	NI	eonc	-5.73	ug/L		
rep	a	MN	conc	-0.33	ug/L		
rep	a	FE	conc	10.9	ug/L		
rep	2	CR	conc	-1.72	ug/L		
rep	a	VZ	conc	-2.45	ug/L		wlndow odgo
rep	2	BE	conc	0.13	ug/L		
rep	a	CA	conc	17	ug/L		
rep	a	CU	conc	-0.97	ug/L		no peak
rep	a	AG	conc	-3.30	ug/L		
rep	2	MG	conc	24	ug/L		
rep	a	AL	conc	13.7	ug/L		
rep	2	BA	conc	0.14	ug/L		wlndow edge
rep	a	NA	conc	33	ug/L		
rep	a	KZ	cone	194	ug/L		

BLK 001
04/11/91 11:00

SB	av	-73.86	ug/L<60.0	sd	31.417	%cv	42.81
PB	av	1.53	ug/L<50.0	sd	124.129	%cv	8091.5
AS	av	-22.9	ug/L<75.0	sd	68.90	%cv	300.60
SE	av	94.9	ug/L<200	sd	90.04	%cv	94.04
ZN	av	-1.08	ug/L<10.0	sd	0.194	%cv	10.14
CD	av	-0.31	ug/L<5.00	sd	1.497	%cv	799.07
CO	av	7.73	ug/L<20.0	sd	1.529	%cv	19.78
NI	av	2.54	ug/L<20.0	sd	11.694	%cv	440.55
MN	av	-0.76	ug/L<10.0	sd	0.618	%cv	00.09
FE	av	5.1	ug/L<50.0	sd	0.20	%cv	163.04
CR	av	-2.18	ug/L<10.0	sd	0.651	%cv	29.81
VZ	av	-1.24	ug/L<20.0	sd	1.994	%cv	141.41
BE	av	-0.04	µg/L<5.00	sd	0.241	%cv	628.32
CA	av	18	ug/L<500	md	1.5	%cv	8.31
CU	av	1.92	ug/L<20.0	sd	4.009	%cv	212.44
AG	av	-2.98	ug/L<10.0	sd	0.443	%cv	14.04
MC	av	26	ug/L<500	sd	2.9	%cv	11.08
AL	av	15.7	ug/L<100	sd	2.79	%cv	17.76
BA	av	0.20	ug/L<20.0	sd	0.093	%cv	45.83
NA	av	37	ug/L<500	sd	5.1	%cv	13.65
KZ	av	349	ug/L<700	sd	220.0	%cv	62.96

04111191 11:07
BLK 003

rep	1	SB	eonc	1.14	ug/L		
rep	1	PB	conc	9.14	ug/L		
rep	I	AS	conc	19.0	ug/L		
rep	1	SE	conc	-23.4	ug/L		
rep	1	ZN	conc	2.05	ug/L		
rep	1	CD	conc	-1.10	ug/L		wlndow edge
rep	1	CO	conc	-2.93	ug/L		
rep	1	NI	conc	9.32	ug/L		
rep	1	MN	eonc	-0.18	ug/L		
rep	1	FE	conc	10.5	ug/L		
rep	1	CR	conc	-3.04	ug/L		
rep	1	VZ	conc	-3.05	ug/L		
rep	1	BE	conc	0.07	ug/L		
rep	1	CA	conc	a4	ug/L		

rep	I	CU	cone	1.64	ug/L		
rep	I	AG	cone	-4.J0	ug/L		wlndow edge
rep	1	MG	cone	40	ug/L		
rep	I	AL	cone	39.9	ug/L		
rep	I	BA	cone	0.57	ug/L		
rep	1	NA	cone	-9	ug/L		
rep	1	KZ	cone	528	ug/L		
rep	a	SB	cone	9.07	ug/L		
rep	a	PB	conc	-62.94	ug/L		
rep	a	AS	cone	-138.5	ug/L		wlndow edge
rep	a	SE	cone	81.3	ug/L		
rep	a	ZN	cone	1.47	ug/L		
rep	2	CD	cone	0.50	ug/L		
rep	2	CO	cone	-9.72	ug/L		wlndow edge
rep	2	NI	cone	3.62	ug/L		
rep	2	MN	cone	1.at	ug/L		
rep	2	FE	cone	0.4	ug/L		
rep	2	CR	conc	-0.07	ug/L		wlndow edge
rep	a	VZ	cone	-5.65	ug/L		
rep	2	BE	conc	0.01	ug/L		
rep	2	CA	cone	-4	ug/L		
rep	a	CU	cone	-1.06	ug/L		
rep	a	AG	cone	2.21	ug/L		
rep	a	MG	cone	a7	ug/L		
rep	a	AL	cone	25.0	ug/L		
rep	a	BA	cone	0.63	ug/L		
rep	a	NA	conc	34	ug/L		
rep	2	KZ	conc	SO	ug/L		

BLK 003
04/11/91 11:14

SB	av	5.10	ug/L<60.0	sd	5.611	(Lev	109.96
PB	av	-24.90	ug/L<50.0	sd	50.970	%cv	189.50
AI	av	-59.7	ug/L<75.0	sd	111.38	%cv	186.53
SE	av	29.0	ug/L<200	sd	74.00	%cv	255.52
ZN	av	1.86	ug/L<10.0	sd	0.270	%cv	14.53
CD	av	-0.30	µg/L<5.00	sd	1.127	%cv	376.53
CO	av	-6.33	ug/L<20.0	sd	4.00s	%cv	71.94
Nl	av	6.47	ug/L<20.0	sd	4.032	(Lev	62.38
MN	av	0.59	ug/L<10.0	sd	1.092	%cv	183.95
FE	av	9.4	ug/L<50.0	ad	1.48	%cv	15.67
CR	av	-5.55	ug/L<10.0	sd	3.558	(Lev	64.07
VZ	av	-4.75	ug/L<20.0	sd	1.268	%cv	26.69
BE	av	0.04	ug/L<5.00	sd	0.044	%cv	105.96
CA	av	11	ug/L<500	sd	21.6	%cv	192.68
CU	av	0.29	ug/L<20.0	sd	1.910	%cv	656.23
AG	av	-1.04	ug/L<10.0	sd	4.601	%cv	40.00
MG	av	44	ug/L<500	sd	23.8	%cv	54.49
AL	av	aa.4	ug/L<100	sd	10.54	%cv	32.50
BA	av	0.60	ug/L<20.0	sd	0.041	%cv	6.87
NA	av	13	ug/L<500	sd	30.5	%cv	243.27
KZ	av	293	ug/L<700	sd	332.1	%cv	113.45

04/11/91 11:23

blank	rep	1	IN	em	34.a
	rep	a	SN	OD	17.6

blank
04/11/91 11.24

SN	av	25.87	sd	11.723	%cv	45.32

04/11/91 11:25

2300103

etandard	rep	1	SN	em	3134.4	cone	10000.0	
	rep	2	SN	em	3279.2	cone	10000.0	
etandard								
04111191 11:25								
SN	av	3256.9		sd	31.57	%cv	0.97	conc 10000.0
04/11/91 11:26								
10.0 PPM	rep	I	SN	cone	9877.9	ug/L		
	rep	2	SN	conc	101S4.8	ug/L		
10.0 PPM								
04/11/91 11:26								
SN	av	10014.3	ug/L	sd	195.84	%cv	1.96	
04111191 11:27								
CAL BLK	rep	1	IN	cone	981.2	ug/L		
	rep	2	SN	cone	-46.7	ug/L		wlndow edge
	rep	3	SN	cone	34.4	ug/L		
CAL BLK								
04/11/91 11:27								
SN	av	467.7	ug/L	sd	727.55	%cv	155.55	
SN	av	323.3	ug/L	sd	572.07	%cv	176.96	
04/11/91 11:28								
CAL BLk	rep	1	SN	conc	-50.0	ug/L		
	rep	2	SN	conc	11.4	ug/L		
CAL BLk								
04/11/91 11:29								
SN	av	-19.3	ug/L	sd	43.44	%cv	225.40	
01111191 11:30								
CCVE	rep	1	IN	cone	970.4	ug/L		
	rep	2	SN	conc	988.4	ug/L		
CCVS								
04/11/91 11:30								
SN	av	979.5	ug/L	sd	12.87	%cv	1.31	
04111191 11:33								
BLK 9S7	rep	1	SN	conc	56.8	ug/L		
	rep	1	CO	cone	2.17	ug/L		
	rep	1	VI	conc	2.93	ug/L		
	rep	1	BE	cone	-0.08	ug/L		
	rep	2	SN	conc	-189.5	ug/L		wlndow edge
	rep	2	CO	cone	7.03	ug/L		
	rep	2	VZ	cone	1.20	ug/L		
	rep	2	BE	conc	0.03	ug/L		
BLK 9S7								
04111191 11 34								
SN	av	-64.4	ug/L<50.0	sd	174.18	%cv	262.50	
CO	av	4.60	ug/L<20.0	sd	3.434	lbcv	74.48	
VZ	av	2.07	ug/L<20.0	sd	1.121	%cv	ST.11	
BE	av	-0.03	ug/L<5.00	sd	0.079	lbev	284.63	
04/11/91 11:36								
4317.042100	rep	1	EN	conc	-0.8	ug/L		
	rep	1	CO	conc	-3.16	ug/L		
	rep	1	VZ	conc	-0.44	ug/L		
	rep	1	BE	conc	0.12	ug/L		
	rep	2	EN	cone	56.5	ug/L		
	rep	2	CO	conc	7.40	ug/L		
	rep	2	VZ	cone	0.35	ug/L		

(9100.6

	rep	1	BE	conc	0.05	ug/L			
6317.062100									
04/11/91 11:37									
IN	av	17.9	ug/L<50.0	sd	40.55	lbcr	145.50		
CO	av	2.11	ug/L<20.0	sd	7.468	%cv	352.75		
VZ	av	-0.15	ug/L<20.0	sd	0.711	%cv	467.64		
BE	av	0.08	ug/L<5.00	sd	0.043	lbcr	51.04		
04/11/91 11:50									
6318.062100	rep	1	IN	conc	-137.0	ug/L			
	rep	I	CO	conc	-5.03	ug/L			
	rep	1	VZ	conc	415.09	ug/L			
	rep	1	BE	conc	78.34	ug/L			
	rep	2	SN	conc	-94.2	ug/L			
	rep	2	CO	conc	12.94	ug/L			
	rep	2	VZ	conc	413.93	ug/L			
	rep	2	BE	conc	79.80	ug/L			
6318.062100									
04/11/91 11:51									
IN	av	-114.4	ug/L<50.0	sd	28.82	%cv	24.71		
CO	a	3.95	ug/L<20.0	sd	12.708	%cv	321.34		
VZ	4v	414.93	ug/L	sd	1.384	SA	0.88		
BE	av	78.86	ug/L	sd	0.740	%cv	0.94		
04/11/91 11:53									
4J19.052100	rop	I	IN	conc	3.3	ug/L			
	rep	1	CO	aonc	-7.16	ug/L			
	rep	1	VZ	conc	0.25	ug/L			
	rep	1	BE	aonc	0.07	ug/L			
	rep	2	SN	cona	-18.5	ug/L			
	rep	2	CO	conc	-2.59	ug/L			
	rep	2	VZ	conc	-1.48	ug/L			
	rep	2	BE	conc	-0.17	ug/L			
6319.052100									
04111191 11:54									
SN	av	-7.6	ug/L<50.0	sd	15.44	%cv	203.10		
CO	av	-4.87	ug/L<20.0	sd	3.238	%cv	66.26		
VZ	a	-1.19	ug/L<20.0	sd	2.039	%cv	171.03		
BE	4v	-0.05	ug/L<5.00	sd	0.174	%cv	330.83		
04/11/91 11:57									
6319.052110	rep	1	SN	conc	-41.6	ug/L			
	rep	1	CO	aonc	1.19	ug/L			
	rep	I	VZ	aonc	0.41	ug/L			
	rep	1	BE	conc	-0.04	ug/L			
	rep	2	SN	conc	-10.4	ug/L			
	rep	2	CO	eonc	-11.23	ug/L		window edge	
		2	VZ	conc	-1.94	ug L			
	rep	2	BE	conc	0.19	oq L			
6319.052110									
04111191 11:58									
IN	av	-35.0	ug/L<50.0	sd	9.88	lbcr	26.63		
CO	av	-5.02	ug/L<20.0	sd	8.780	%cv	174.81		
VZ	av	-0.77	ug/L<20.0	sd	1.675	%cv	217.06		
BE	av	0.08	ug/L<5.00	sd	0.169	%cv	224.60		
04/11/91 12.00									
6319.052120	rep	1	IN	conc	9.6	ug/L			
	rep	1	CO	cane	473.75	ug/L			
	rep	I	VZ	conc	449.40	ug/L			

3200109

```
                rep   1  BE          conc      45.38 ug/L
                rep   2  SN          conc       31.8 ug/L
                rep   2  CO          conc     479.13 ug/L
                rep   2  VZ          conc     464.90 ug/L
                rep   2  BE          conc      45.31 ug/L
6319.052120
04/11/91 12 01
    SN          av      20.7 ug/L UA     sd      15.68 %cv  75.
    CO          av    476.49 ug/L 95% K  sd       3.807 %cv   0.
    VZ          av    467.29 ug/L 93%    sd       3.376 %cv   0.
    BE          av     45.34 ug/L 91%    sd       0.049 %cv   0.11

04/11/91 12 03
7932.022100     rep   1  PB          conc     -17.34 ug/L
                rep   1  CD          conc      -3.87 ug/L
                rep   1  CR          conc       2.56 ug/L
                rep   1  AG          conc      -0.40 ug/L
                rep   1  BA          conc      19.08 ug/L
                rep   2  PB          conc     -35.73 ug/L
                rep   2  CD          conc       7.34 ug/L
                rep   2  CR          conc       1.53 ug/L
(9100.808)      rep   2  AG          conc       0.25 ug/L
                rep   2  BA          conc      18.25 ug/L
7932.022100
04/11/91 12 07
    PB          av    -26.34 ug/L        sd    13.002 %cv  48.99
    CD          av      1.74 ug/L<5.00   sd     7.929 %cv -456.84
    CR          av      2.04 ug/L<10.0   sd     0.727 %cv  35.58
    AG          av     -0.08 ug/L<10.0   sd     0.461 %cv 591.75
    BA          av     18.67 ug/L<20.0   sd     0.593 %cv   3.18

04/11/91 12 10
7933.022100     rep   1  PB          conc      25.83 ug/L
                rep   1  CD          conc      -0.57 ug/L
                rep   1  CR          conc      -4.01 ug/L
                rep   1  AG          conc      -4.37 ug/L          window edge
                rep   1  BA          conc      18.11 ug/L
                rep   2  PB          conc      53.84 ug/L
                rep   2  CD          conc      -5.66 ug/L
                rep   2  CR          conc      -4.69 ug/L
                rep   2  AG          conc      -1.29 ug/L
                rep   2  BA          conc      18.01 ug/L
7933.022100
04/11/91 12:11
    PB          av     39.68 ug/L        sd    19.801 %cv  49.71
    CD          av     -3.12 ug/L<5.00   sd     3.601 %cv 115.55
    CR          av     -4.35 ug/L<10.0   sd     0.482 %cv  11.08
    AG          av     -2.83 ug/L<10.0   sd     2.181 %cv  77.05
    BA          av     18.06 ug/L<20.0   sd     0.068 %cv   0.38

04/11/91 12:15
CCVS            rep   1  SN          conc     972.3 ug/L
                rep   2  SN          conc     958.4 ug/L
CCVS
04/11/91 12:16
    SN          av     965.4 ug/L        sd      9.79 %cv   H 01

04/11/91 12:17
CCVS            rep   1  PB          conc     987.14 ug/L
                rep   1  CD          conc     461.68 ug/L
```

	rep	I	CO	conc	462.39	ug/L
	rep	I	CR	conc	429.11	ug/L
	rep	1	VZ	conc	448.54	ug/L
	rep	I	DE	conc	450.17	ug/L
	rep	I	AC	conc	468.45	ug/L
	rep	I	BA	conc	454.03	ug/L
	rep	a	PB	conc	945.79	ug/L
	rep	2	CD	conc	439.10	ug/L
	rep	a	CO	conc	458.44	ug/L
	rep	a	CR	conc	443.09	ug/L
	rep	1	VZ	conc	449.43	ug/L
	rep	1	BE	conc	455.03	ug/L
	rep	2	AG	conc	460.85	ug/L
	rep	a	BA	conc	453.56	ug/L

CCVS
04/11/91 12:19

PB	av	966.47	ug/L	ad	29.237	%cv 3.03
CD	av	430.39	ug/L	sd	15.941	%cv 3.54
CO	av	460.42	ug/L	ad	8.701	%cv 0.60
CR	av	444.50	ug/L	ad	10.449	%cv a.39
VZ	av	448.79	ug/L	sd	0.628	%cv 0.14
BE	av	452.60	ug/L	sd	3.437	%cv 0.76
AG	av	464.65	ug/L	ad	5.368	%cv 1.16
BA	av	433.79	ug/L	sd	0.337	%cv 0.07

04/11/91 12:24

CAL BLK	rep	1	PB	conc	-40.84	ug/L
	rep	I	CD	conc	-2.93	ug/L
	rep	I	CO	conc	-8.11	ug/L
	rep	I	CR	conc	-4.81	ug/L
	rep	1	VZ	conc	-2.59	ug/L
	rep	1	BE	conc	-a.24	ug/L window edge
	rep	1	AG	conc	-1.77	ug/L
	rep	1	BA	conc	-0.04	ug/L
	rep	a	PB	conc	-49.90	ug/L
	rep	2	CD	conc	-2.77	ug/L
	rep	a	CO	conc	-2.61	ug/L
	rep	2	CR	conc	-6.40	ug/L
	rep	2	VZ	conc	-a.33	ug/L
	rep	a	BE	conc	-a.22	ug/L
	rep	a	AG	conc	-1.06	ug/L
	rep	2	BA	conc	-0.00	ug/L window edge

CAL BLK
04111/9 12:26

PB	av	-49.26	ug/L	ad	1.014	(La.
CD	av	-2.85	ug/L	ad	0.113	%cv
CO	av	-2.86	ug/L	ad	0.354	%cv 11.30
CR	av	-6.36	ug/L	sd	0.062	%cv
VZ	av	-2.46	ug/L	ad	0.188	%cv 7.64
DE	av	-2.23	ug/L	ad	0.016	%cv 0.72
AG	av	-1.81	ug/L	sd	0.064	%cv 3.52
BA	av	-0.06	ug/L	ad	0.081	%cv 51.86

04111191 12:51

CCVS	rep	I	CR	conc	528.06	ug/L
	rep	1	VZ	conc	531.73	ug/L
	rep	a	Cr	conc	520.40	ug/L
	rep	a	VZ	conc	525.24	ug/L

CCVS
04/11/91 12:51

3200110

CR	av	524.23	ug/L	sd	5.414	%cv	1.03
VZ	av	528.49	ug/L	sd	4.588	%cv	0.87

04/11/91 12:56
7593.012800

rep	1	PB	conc	1261.33	ug/L	
rep	1	ZN	conc	3234.05	ug/L	
rep	1	CD	conc	338.57	ug/L	
rep	2	PB	conc	1159.20	ug/L	
rep	2	ZN	conc	3198.72	ug/L	
rep	2	CD	conc	325.99	ug/L	

(9100.781)

7593.012800
04/11/91 12:56

PB	av	1210.26	~~ug/L~~ 60.5mg/filter	sd	72.215	%cv	5.97
ZN	av	3216.33	~~ug/L~~ 161	sd	24.987	%cv	0.78
CD	av	332.28	~~ug/L~~ 16.6	sd	8.893	%cv	2.68

04/11/91 12:58
7594.012800

rep	1	PB	conc	1200.53	ug/L	
rop	1	ZN	conc	1423.21	ug/L	
rep	1	CD	conc	125.69	ug/L	
rep	2	PB	conc	1104.51	ug/L	
rep	2	ZN	conc	1410.80	ug/L	
rep	2	CD	conc	123.93	ug/L	

7594.012800
04/11/91 12:59

pE	av	1152.52	~~ug/L~~ 57.6 mg/filter	sd	67.896	%cv	5.89
ZN	av	1417.0	~~ug/L~~ 70.9	sd	8.771	%cv	0.62
CD	av	124.81	~~ug/L~~ 6.24	sd	1.246	%cv	1.00

04/11/91 13:01
7595.012800

rep	1	PB	conc	521.90	ug/L	
rep	1	ZN	conc	4094.73	ug/L	
rep	1	CD	conc	389.15	ug/L	
rep	2	PB	conc	428.81	ug/L	
rep	2	ZN	conc	4155.11	ug/L	
rop	2	CD	conc	395.09	ug/L	

7595.012800
04/11/91 13:02

pE	av	475.33	~~ug/L~~ 23.8 mg/filter	sd	65.822	%cv	13.85
ZN	av	4124.[illegible]	~~ug/L~~ 206	sd	42.696	%cv	1.04
CD	av	392.[illegible]	~~ug/L~~ 19.6	sd	4.199	%cv	1.07

04/11/91 13:04
7596.012800

rep	1	PB	conc	531.16	ug/L	
rep	1	ZN	conc	3181.38	ug/L	
rep	1	CD	conc	203.75	ug/L	
rep	2	PB	conc	719.85	ug/L	
rep	2	ZN	conc	3142.52	ug/L	
rep	2	CD	conc	211.19	ug/L	

7596.012800
04/11/91 13:05

PB	av	625.50	~~ug/L~~ 31.3 mg/filter	sd	133.424	%cv	21.33
ZN	av	3161.95	~~ug/L~~ 158	sd	27.484	%cv	0.87
CD	av	207.47	~~ug/L~~ 10.4	sd	5.258	%cv	2.53

04/11/91 13:19
7597.012800

rep	1	PB	conc	29.52	ug/L
rep	1	ZN	conc	4.37	ug/L
rep	1	CD	conc	-5.44	ug/L
rep	2	PB	conc	-42.71	ug/L

	rep	2	ZN	conc	7.36	ug/L			
	rep	2	CD	conc	0.11	ug/L			
7597.012800									
04/11/91 13:20									
PB	av	-6.59	ug/L	sd	51.072	%cv	774.61	<2.50 mg/filter	
ZN	av	5.86	ug/L	sd	2.118	%cv	36.12	<0.50	
CD	av	-2.67	ug/L	sd	3.929	%cv	147.40	<0.25	
04111191 13:22									
CCVS	rep	1	PB	cone	849.24	ug/L			
	rep	1	ZN	cone	430.79	ug/L			
	rep	1	CD	conc	428.51	ug/L			
04/11/91 13:23									
CCVS	rep	a	PB	cone	-2002.43	ug/L			
04111191 13:24									
CAL BLK	rep	1	PB	aonc	-39.68	ug/L			
	rep	1	ZW	aonc	-4.35	ug/L		window edge	
	rep	1	CD	conc	-1.40	ug/L			
	rep	a	PB	cone	-44.07	ug/L			
	rep	2	ZN	conc	-4.4s	ug/L		window edge	
	rep	a	CD	aonc	-2.93	ug/L			
CAL BLK									
04/11/91 13:25									
PB	av	-42.07	ug/L	sd	4.523	%cv	10.55		
ZN	av	-4.50	ug/L	sd	0.212	%cv	4.71		
CD	av	-2.47	ug/L	sd	0.374	%cv	14.02		
04/11/91 13:55									
CCVS	rep	1	PB	conc	1145.39	ug/L			
	rep	1	ZN	aonc	570.99	ug/L			
	rep	1	CD	conc	579.81	ug/L			
	rep	2	PB	conc	1231.67	ug/L			
	rep	2	ZN	conc	560.22	ug/L			
	rep	2	CD	aonc	571.92	ug/L			
CCVS									
04/11/91 13:56									
PB	av	1183.53	ug/L	sd	53.938	%cv	4.56		
ZN	av	565.61	ug/L	sd	7.410	%cv	1.as		
CD	av	575.57	ug/L	sd	5.171	%cv	0.90		
04/11/91 13:58									
CCVS	rep	1	PB	conc	1140.84	ug/L			
	rep	1	ZN	cone	840.04	ug/L			
	rep	1	CD	conc	551.01	ug/L			
	rep	a	PB	cone	1015.86	ug/L			
	rep	2	ZN	conc	523.47	ug/L			
	rep	a	CD	conc	551.27	ug/L			
CCVS									
04/11/91 13:59									
PB	av	1078.35	ug/L	sd	88.379	%cv	8.20		
ZN	av	535.77	ug/L	sd	17.386	%cv	3.29		
CD	av	551.14	ug/L	sd	0.181	%cv	.03		
04/11/91 14:00									
CCVS	rep	1	PB	conc	1116.84	ug/L			
	rep	1	ZN	conc	saa.41	ug/L			
	rep	I	CD	conc	542.53	ug/L			
	rep	2	PB	cone	1070.49	ug/L			
	rep	2	ZN	conc	537.21	ug/L			
	rep	2	CD	conc	528.38	ug/L			

GOOD

3200111

CCVS
04/11/91 14.01

PB	av	1093.76	ug/L	sd	32.635	%cv	2.98
ZN	av	535.32	ug/L	sd	2.675	%cv	0.80
CD	av	535.45	ug/L	sd	10.007	lbcv	1.87

04/11/91 14.03
7596.012800

rep	1	PB	cone	1067.22	uglt	
rep	1	PB	conc	830.84	uglf	
rep	1	ZN	conc	3752.87	ug/L	
rep	1	CD	cone	248.26	uglf	
rep	2	P8	conc	849.84	ug/L	
rep	2	ZN	cone	3751.25	ug/L	
rep	2	CD	cone	248.44	uglf	

(9100.781)

7596.012800
04/11/91 14:05

PB	av	840.34	ug/L 42.0 mg/filter		13.430	%cv	1.60
ZN	av	3752.06	ug/L 188	sd	1.142	%cv	0.03
CD	av	248.35	ug/L 12.4	sd	0.128	%cv	0.0s

04111191 14:07
7595.012800

rep	1	PB	conc	516.72	ug/L	
rep	1	ZN	cone	4730 53	ug/L	
rep	1	CD	conc	446 78	uglf	
rep	2	PB	conc	495 26	ug/L	
rep	2	ZN	conc	4729 54	ug/L	
rep	2	CD	cone	454 64	uglf	

7595.012800
04111191 14:08

PB	av	505.99	ug/L 25.3 mg/filter	sd	5.176	%cv	3.00
ZN	av	4730.04	ug/L 237	sd	0.700	%cv	0.01
CD	av	450.71	ug/L 22.5	sd	5.563	%cv	1.23

04111191 14:09
1594.012800

rep	I	PB	cone	1278.76	uglt	
rep	1	ZN	conc	1621.53	ug/L	
rep	1	CD	conc	143.99	ug/L	
rep	2	PB	conc	1243.37	uglf	
rep	2	ZN	conc	1621.22	ug/L	
rep	2	CD	conc	147.74	uglt	

7S94.012800
04111191 14:10

PB	av	1261.07	ug/L 63.1 mg/filter	sd	25.021	%cv	1.98
ZN	av	1621.38	ug/L 81.1	sd	0.224	lbcv	0.01
CD	av	145.87	ug/L 7.29	sd	2.655	%cv	1.82

04111191 14:14
7593.012800

rep	I	PB	cone	1166.87	uglf	
rep	1	ZN	conc	3217.34	uglt	
rep	1	CD	conc	321.35	ug/L	
rep	2	PB	cone	1122.87	ug/L	
rep	2	ZN	cone	3183.86	ug/L	
rep	a	CD	conc	317.46	uglt	

7593.012800
04111191 14:15

PB	av	1144.87	ug/L 57.2 mg/filter		31.114	lbcv	2.72
ZN	av	3200.61	ug/L 160	sd	23.684	%cv	0.74
CD	av	319.40	ug/L 16.0	sd	2.749	%cv	0.86

04/11/91 14:16

CCVS	rep	1	PB	conc	1076.65 ug/L		
	rep	1	ZN	conc	509.81 ug/L		
	rep	1	CD	conc	496.57 ug/L		
	rep	2	PB	conc	1068.61 ug/L		
	rep	2	ZN	conc	511.81 ug/L		
	rep	2	CD	conc	502.70 ug/L		
CCVS							
04/11/91 14:17							
PB	av	1072 63 ug/L		sd	5.687 %cv	0.53	
ZN	av	510 41 ug/L		sd	1.978 %cv	0.39	
CD	av	499 63 ug/L		sd	4.330 %cv	0.87	
04/11/91 1 19							
CAL BLK	rep	1	PB	conc	-15.07 ug/L		
	rep	1	ZN	conc	-1.53 ug/L		
	rep	1	CD	conc	-1.53 ug/L		
	rep	2	PB	conc	-02.54 ug/L		window edge
	rep	2	ZN	conc	-7.79 ug/L		window ed
	rep	2	CD	conc	0.22 ug/L		
CAL BLK							
04/11/91 14 20							
PB	av	-43.80 ug/L		sd	40.640 %cv	92.78	
ZN	av	-4.66 ug/L		sd	4.422 %cv	94.98	
CD	av	-0.65 ug/L		sd	1.235 %cv	189.41	
04/11/91 16:19							
CCVS	rep	1	<U	conc	501.37 ug/L		
	rep	2	<U	conc	494.38 ug/L		
CCVS							
04/11/91 16 19							
CU	av	97 88 ug/L		sd	9 90 %cv	0 99	
04/11/91 16:21							
CCB	rep	1	CU	conc	-4.02 ug/L		
	rep	2	CU	conc	-1.83 ug/L		
CCB							
04/11/91 16:21							
CU	av	-2.93 ug/L		sd	1.548 %cv	5 87	
04/11/91 16:22							
8084.012100	rep	1	CU	conc	715.64 ug/L		
(9100.826)	rep	2	CU	conc	713.43 ug/L		
8084.012100							
04/11/91 16:22							
CU	av	714.54 ug/L		sd	1.564 %cv	0 3	
04/11/91 16:23							
8084.012110	rep	1	CU	conc	686.14 ug/L		
	rep	2	CU	conc	695.14 ug/L		
8084.012110							
04/11/91 16:20							
CU	av	690.64 ug/L		sd	6 361 %cv	0 92	
04/11/91 16:24							
8084.012120	rep	1	<U	conc	992.87 ug/L		
	rep	2	<U	conc	984.97 ug/L		
8084.012120							
04/11/91 16 25							
CU	av	988.92 ug/L	110%R	sd	5 590 %cv	0 57	

3200112

```
04/11/91 16:26
CCVS            rep   1  CU          cone     494.41 ug/L
                rep   2  CU          conc     480.51 ug/L
CCVS
04/1CU91 16:26
   CU           av    491.46 ug/L        sd      4.148 %cv   0.85

04/11/91 16:27
CCB             rep   1  CU          cone       1.59 ug/L
                rep   2  CU          cone       0.45 ug/L
CCB
04/11/91 16:27
   CU           av      1.02 ug/L        sd      0.806 %cv  79.15

04/11/91 16:45
CCVS            rep   1  PE          cone     949.17 ug/L
                rep   1  AS          cone     1036.4 ug/L
                rep   1  SE          conc     1132.7 ug/L
                rep   1  CD          cone     500.89 ug/L
                rep   1  CR          conc     479.75 ug/L
                rep   I  AC          conc     510.78 ug/L
                rep   1  EA          conc     492.78 ug/L
                rep   a  PB          cone     950.29 ug/L
                rep   2  AS          conc     1085.0 ug/L
                rep   2  BE          cone     1068.5 ug/L
                rep   2  CD          cone     483.SO ug/L
                rep   2  CR          conc     462.34 ug/L
                rep   1  AC          conc     501.71 ug/L
                rep   2  BA          cone     497.10 ug/L
CCVS
04/11/91 16:48
   PE           av    949.73 ug/L        sd      0.788 %cv   0.08
   AS           av    1040.7 ug/L        sd      34.36 %cv   3.24
   SE           av    1100.4 ug/L        sd      45.39 %cv   4.12
   CD           av    492.19 ug/L        sd     12.294 %cv   2.50
   CR           av    471.04 µg/L        sd     12.313 %cv   2.61
   AC           av    506.24 ug/L        sd      6.415 %cv   1.27
   BA           av    495.09 ug/L        sd      3.269 %cv   0.66

04/11/91 16:53
CCB             rep   I  PB          cone     -42.17 ug/L
                rep   1  AS          cone      -85.2 ug/L          wlndow edge
                rep   I  SE          conc      -23.0 ug/L
                rep   1  CD          conc      -3.19 ug/L
                rep   1  CR          conc      -3.59 ug/L
                rep   1  AC          conc      -2.33 ug/L
                rep   1  BA          cone       0.26 ug/L
                rep   2  PE          conc       1.00 ug/L
                rep   1  AB          conc       63.7 ug/L
                rep   2  SE          cone     -244.9 ug/L          window edge
                rep   2  CD          conc       I.a4 ug/L
                rep   2  CR          conc      -2.7s ug/L
                rep   2  AC          conc       0.84 ug/L
                rep   2  BA          conc       0.22 ug/L
CCB
04/11/91 16.55
   PB           av    -30.59 ug/L        sd     44.473 %cv 146.04
   AS           av     -10.8 ug/L        md     105.28 %cv 978.83
   SE           av    -134.0 ug/L        md     156.96 %cv 117.18
                       -0.98 ug/L                3.135 %cv 320.48
                                          sd                  .47
```

3

CR	av	-3.17	ug/L	sd	0.593	%cv	18.72
AG	av	-0.74	ug/L	sd	2.240	%cv	301.93
BA	av	0.24	ug/L	sd	0.026	%cv	10.85

04/11/91 16:58

BLK 004	rep	1	PB	conc	-105.79	ug/L	w nd ω edge
	rep	1	AS	conc	63.5	ug/L	
	rep	1	SE	conc	-110.7	ug/L	
	rep	1	CD	conc	4.22	ug/L	
	rep	1	CR	conc	-3.79	ug/L	
	rep	1	AG	conc	-4.09	ug/L	wind w edge
	rep	1	BA	conc	0.56	ug/L	
	rep	2	PB	conc	55.18	ug/L	
	rep	2	AS	conc	55.6	ug/L	
	rep	2	SE	conc	21.3	ug/L	
	rep	2	CD	conc	-1.08	ug/L	
	rep	2	CR	conc	-0.61	ug/L	
	rep	2	AG	conc	-6.57	ug/L	window edge
	rep	2	BA	conc	0.46	ug/L	

BLK 004
04/11/91 17 01

PB	av	-05.30	ug/L <500	sd	113.824	%cv	449.07
AS	av	5:.4	ug/L ⊥	sd	5.40	%cv	9.40
SE	av	-4:.7	ug/L	sd	93.37	%cv	288.01
CD	av	1:57	ug/L <100	sd	3.744	%cv	238.43
CR	av	-2:20	ug/L <500	sd	2.249	%cv	102.28
AG	av	-5 33	ug/L ⊥	sd	1.783	%cv	32.87
BA	av	0 51	ug/L <5000	sd	0.067	%cv	13.15

04/11/91 17 07

B+1ppm	rep	1	PB	conc	1075.38	ug/L	
	rep	1	AS	conc	1123.0	ug/L	
	rep	1	SE	conc	1050.5	ug/L	
	rep	1	CD	conc	1003.48	ug/L	
	rep	1	CR	conc	963.07	ug/L	
	rep	1	AG	conc	65.10	ug/L	
	rep	1	BA	conc	1009.57	ug/L	
	rep	2	PB	conc	1179.42	ug/L	
	rep	2	AS	conc	1180.2	ug/L	
	rep	2	SE	conc	1005.5	ug/L	
	rep	2	CD	conc	983.75	ug/L	
	rep	2	CR	conc	981.41	ug/L	
	rep	2	AG	conc	66.04	ug/L	
	rep	2	BA	conc	1001.39	ug/L	

B+1ppm
04/11/91 7 10

PB	av	1127.40	ug/L	sd	73.570	%cv	6.53
AS	av	1151.6	ug/L	sd	40.42	%cv	3.51
SE	av	1028.0	ug/L	sd	31.84	%cv	3.10
CD	av	993.72	ug/L	sd	14.092	%cv	1.42
CR	av	972.24	ug/L	sd	12.964	%cv	1.33
AG	av	65.57	ug/L	sd	0.669	%cv	1.02
BA	av	1005.48	ug/L	sd	5.784	%cv	0.58

04/11/91 17:13

B+2ppm	rep	1	PB	conc	2246.71	ug/L
	rep	1	AS	conc	2352.0	ug/L
	rep	1	SE	conc	2289.8	ug/L
	rep	1	CD	conc	2019.65	ug/L
	rep	1	CR	conc	1924.06	ug/L

3200113

rep	1	AC	conc	124.23	ug/L
rep	1	BA	cone	2022.19	ug/L
rep	2	PB	conc	2100.46	ug/L
rep	2	A8	cone	2083.8	ug/L
rep	2	SE	cone	2363.9	ug/L
rep	2	CD	conc	1973.65	uglt
rep	2	CR	conc	1936.71	ug/L
rep	2	AG	cone	122.08	ug/L
rep	2	EA	conc	1973.21	uglt

B+2ppm
04/11/91 17:15

PB	av	2217.59 ug/L	sd	41.104	%cv	1.86
A8	av	2217.1 ug/L	8d	189.47	%cv	8.55
SE	av	2326.8 ug/L	sd	51.37	%cv	2.25
CD	av	1996.65 ug/L	8d	32.530	%cv	1.63
CR	av	1930.30 uglt	sd	8.943	%cv	0.46
AG	av	124.56 uglf	sd	2.371	%cv	1.90
BA	av	1997.70 ug/L	8d	34.631	%cv	1.73

04111191 17:18

B+3ppm rep	1	PB	conc	3106.34	ug/L
	1	AS	conc	3304.1	uglt
rep	1	SE	conc	3171.3	ug/L
rep	1	CD	conc	2994.03	ug/L
rep	1	CR	cone	2892.77	ug/L
rep	1	AG	cone	192.55	ug/L
rep	1	BA	conc	2992.34	ug/L
rep	2	PB	conc	3177.13	ug/L
rep	2	AS	conc	3307.3	uglt
rep	2	SE	conc	3345.3	ug/L
rep	2	CD	conc	2976.80	ug/L
rep	2	CR	conc	2904.01	ug/L
rep	2	AC	conc	191.30	ug/L
rep	2	EA	conc	2985.39	uglt

B+3ppm
04/11/91 17:21

PB	av	3141.74 ug/L	sd	50.046	%cv	1.59
AS	av	3305.7 uglt	sd	2.25	%cv	0.07
SE	av	3258.3 ug/L	sd	123.07	%cv	3.70
CD	av	2985.42 ug/L	8d	12.178	%cv	0.41
CR	av	2898.79 uglt	md	8.510	%cv	0.29
AG	av	191.93 uglf	md	0.116	%cv	0.46
EA	av	2988.86 ug/L	md	4.911	%cv	0.14

04111191 17:24

7926.040400	rmp	1	PB	cone	31.OS	ug/L
	rep	1	AS	conc	39.4	ug/L
	rep	1	SE	cone	187.2	ug/L
	rep	1	CD	conc	4.93	ug/L
	rep	1	CR	conc	- 1.02	ug/L
	rep	1	AG	cone	0.01	uglt
		1	EA	conc	848.68	ug/L
	rep	2	PB	cone	32.71	uglt
	rep	2	AS	conc	111.7	ug/L
	rep	2	SE	conc	11.0	uglf
	rep	2	CD	conc	-0.02	ug/L
	rep	2	CR	conc	0.40	ug/L
	rep	2	AG	conc	-2.08	uglt
	rep	2	EA	conc	852.55	ug/L

wlndow ...

(9100.807)
7926.040400

04/11/91 :26

PB	av	31.92	ug/L<500	sd	1.226	%cv	3.84
AS	av	75.5	ug/L ⊥	sd	51.14	%cv	67.70
SE	av	99.1	ug/L	sd	124.58	%cv	125.68
CD	av	2.46	ug/L<100	sd	3.504	%cv	142.71
CR	av	-0.27	ug/L<500	sd	1.057	%cv	389.33
AG	av	-1.03	ug/L ⊥	sd	1.475	%cv	142.59
BA	av	850.62	ug/L<5000	sd	2.734	%cv	0.32

04/11/91 17 29

7926+1ppm

rep	1	PB	conc	985.53	ug/L
rep	1	AS	conc	1196.3	ug/L
rep	1	SE	conc	1027.3	ug/L
rep	1	CD	conc	957.80	ug/L
rep	1	CR	conc	920.75	ug/L
rep	1	AG	conc	64.74	ug/L
rep	1	BA	conc	1810.38	ug/L
rep	2	PB	conc	966.76	ug/L
rep	2	AS	conc	1123.5	ug/L
rep	2	SE	conc	1088.6	ug/L
rep	2	CD	conc	945.78	ug/L
rep	2	CR	conc	912.47	ug/L
rep	2	AG	conc	64.92	ug/L
rep	2	BA	conc	1806.98	ug/L

7926+1ppm
04/11/91 17:32

PB	av	974.15	ug/L	sd	13.270	%cv	1.36
AS	av	1159.9	ug/L	sd	51.47	%cv	4.44
SE	av	1058.0	ug/L	sd	43.34	%cv	4.10
CD	av	951.79	ug/L	sd	8.496	%cv	0.89
CR	av	916.61	ug/L	sd	5.855	%cv	0.64
AG	av	64.83	ug/L	sd	0.128	%cv	0.20
BA	av	1808.68	ug/L	sd	2.401	%cv	0.13

04/11/91 17 05

7926+2ppm

rep	1	PB	conc	1871.83	ug/L
rep	1	AS	conc	2009.9	ug/L
rep	1	SE	conc	1925.3	ug/L
rep	1	CD	conc	1859.29	ug/L
rep	1	CR	conc	1856.49	ug/L
rep	1	AG	conc	125.03	ug/L
rep	1	BA	conc	2764.33	ug/L
rep	2	PB	conc	1949.96	ug/L
rep	2	AS	conc	2333.3	ug/L
rep	2	SE	conc	2166.3	ug/L
rep	2	CD	conc	1870.89	ug/L
rep	2	CR	conc	1892.16	ug/L
rep	2	AG	conc	125.90	ug/L
rep	2	BA	conc	2767.73	ug/L

7926+2ppm
04/11/91 17:37

PB	av	1910.90	ug/L	sd	55.243	%cv	2.89
AS	av	2171.6	ug/L	sd	228.68	%cv	10.53
SE	av	2045.8	ug/L	sd	170.43	%cv	1.33
CD	av	1865.09	ug/L	sd	8.203	%cv	0.44
CR	av	1844.33	ug/L	sd	17.206	%cv	0.93
AG	av	125.46	ug/L	sd	0.616	%cv	0.49
BA	av	2766.03	ug/L	sd	2.405	%cv	0.09

04/11/91 17:41

3200114

7926+3ppm	rep	1	PB	conc	2097.70	ug/L
	rep	1	AS	conc	3135.8	ug/L
	rep	1	SE	conc	3333.0	ug/L
	rep	1	CD	cone	2769.50	ug/L
	rep	I	CR	conc	2735.67	ug/L
	rep	1	AC	conc	189.70	ug/L
	rep	1	BA	cone	3715.86	ug/L
	rep	2	PB	cone	3028.57	ug/L
	rep	a	AS	conc	3116.1	ug/L
	rep	a	SE	conc	3130.7	ug/L
	rep	a	CD	conc	2783.55	ug/L
	rep	2	CR	cone	2725.60	ug/L
	rep	2	AG	cone	192.29	ug/L
	rep	2	BA	conc	3668.24	ug/L

7926+3ppm
04/11/91 17:43

PB	av	2963.14	ug/L	sd	92.539	%cv	a.12
AS	av	3176.0	ug/L	sd	56.75	%cv	1.79
SE	av	3231.8	ug/L	sd	143.03	%cv	4.43
CD	av	2776.53	ug/L	sd	9.934	%cv	0.36
CR	av	2730.64	ug/L	sd	7.121	%cv	0.26
AG	av	191.00	ug/L	sd	1.830	%cv	0.96
BA	av	3692.05	ug/L	sd	33.674	%cv	0.91

04/11/91 17:47

CCVB	rep	1	PB	conc	894.45	ug/L
	rep	1	AS	conc,	985.0	ug/L
	rep	1	SE	conc	1042.1	ug/L
	rep	1	CD	conc	479.03	ug/L
	rep	1	CR	conc	461.89	ug/L
	rep	1	AC	conc	481.42	ug/L
	rep	1	BA	cone	477.01	ug/L
	rep	2	PB	conc	871.76	ug/L
	rep	2	AB	conc	986.1	ug/L
	rep	2	BE	cone	1082.6	ug/L
	rep	2	CD ,	conc	484.65	ug/L
	rep	2	CR	cone	463.17	ug/L
	rep	2	AC	cone	488.26	ug/L
	rep	2	BA	conc	477.64	ug/L

CCVS
04/11/91 17:49

PB	av	~~903.70~~	ug/L	od	16.041	%cv	1.82
AS	av	985.3	ug/L	sd	0.76	%cv	0.08
SE	av	10b2.4	ug/L	sd	28.61	%cv	2.69
CD	av	481.84	ug/L	sd	3.973	%cv	0.82
CR	av	442.53	ug/L	sd	0.912	%cv	0.20
AG	av	484.84	ug/L	sd	4.837	%cv	1.00
BA	av	477.33	ug/L	sd	0.450	%cv	0.09

04/11191 17:52

CCVS	rep	1	PB	conc	983.19	ug/L
	rep	2	PB	conc	973.93	ug/L

CCVS
04/11/91 17:52

PB	av	978.16	ug/L	sd	6.548	%cv	0.67

04111191 17:55

CCB	rep	1	PB	conc	16.63	ug/L
	rep	1	AB	conc	35.0	ug/L
	rep	1	SE	conc	21.5	ug/L

rep	1	CD	cone	-2.89	ug/L	
rep	1	CR	conc	-6.35	ug/L	window edge
	1	AG	cone	-7.96	ug/L	wlndow edge
rep	1	DA	conc	0.15	ug/L	
rep	2	PB	cone	21.49	ug/L	
rep	2	AS	cone	193.7	ug/L	
	a	SE	conc	62.1	ug/L	
	a	CD	conc	-7.46	ug/L	window edge
rep	a	CR	cone	2.56	ug/L	
rep	2	AG	conc	1.15	ug/L	
rep	a	BA	cone	0.45	ug/L	

CCB
04/11/91 17:57

PB	av	19.16	ug/L	rd	3.573 %cv	18.65
AS	a.	~~119.2~~	ug/L	ad	112.23 %cv	98.17
SE	4.	41.8	ug/L	rd	28.70 %cv	68.71
CD	av	-5.17	ug/L	sd	3.235 %cv	62.53
CR	av	-1.90	ug/L	sd	6.298 %cv	332.03
AG	av	-3.48	ug/L	sd	6.442 %cv	189.39
BA	4.	0.30	ug/L	sd	0.210 %cv	70.52

04/11/91 18:00

CCB	rep	1	A8	cone	100.0	ug/L
	rep	2	AS	cone	183.3	ug/L

CCD
04/11/91 18:00

AS	av	~~181.9~~	ug/L	sd	58.87 %cv	41.56

04/I1/91 18:01

CCB	rep	1	A8	conc	-18.5	ug/L
	rep	a	AS	aona	86.3	ug/L

CCB
04/11/91 18:02

AS	av	a7.9	ug/L	ad	68.35 %cv	188.47

04111191 18:53

CCVS	rep	I	PB	conc	1007.68	ug/L
	rep	1	AS	conc	1107.4	ug/L
	rep	1	SE	conc	1177.2	ug/L
	rep	1	CD	aona	479.68	ug/L
	rep	I	CR	conc	470.10	ug/L
	rep	1	AG	aona	499.82	ug/L
	rep	1	BA	conc	487.15	ug/L
	rep	2	PB	conc	1006.81	ug/L
	rep	2	A8	conc	993.9	ug/L
	rep	2	SE	omnc	973.1	ug/L
	rep	a	CD	cone	478.04	ug/L
	rep	2	CR	conc	474.03	ug/L
	rep	2	AG	conc	4t3.05	ug/L
	rep	2	BA	cone	483.60	ug/L

CCVS
04/11/91 18:55

PB	av	1007.10	ug/L	sd	0.828 %cv	0.08
AS	av	10S0.b	ug/L	sd	80.20 %cv	7.43
SE	av	107S.1	ug/L	sd	44.27 %cv	13.42
CD	av	478.86	ug/L	sd	1.157 %cv	0.24
CR	av	472.06	ug/L	sd	2.776 %cv	0.59
AG	av	496.43	ug/L	sd	4.788 %cv	0.96
BA	av	486.37	ug/L	sd	3.924 %cv	0.81

5110022

04/11/91 18:58

7927.040400	rep	1	PB	cone	1.06	ug/L	
	rep	1	AS	conc	106.6	uglt	
	rep	1	SE	cone	113.3	ug/L	
	rep	1	CD	conc	-1.91	ug/L	
	rep	1	CR	conc	-11.77	uglt	window edge
	rep	1	AC	conc	0.31	ug/L	
	rep	1	BA	conc	830.35	ug/L	
	rep	2	PB	cone	09.44	uglt	
	rep	2	AS	cone	74.4	ug/L	
	rep	2	SE	eonc	107.3	ug/L	
	rep	a	CD	conc	0.91	ug/L	
	rep	1	CR	conc	-1.06	uglt	
	rep	a	AG	conc	0.15	ug/L	
	rep	a	BA	conc	833.62	uglt	

7927.040400
04/11/91 19:01

PB	av	11.31	ug/L<500	ad	42.437	%cv 138.11
AS	av	90.6	ug/L ⊥	sd	22.41	%cv 24.95
SE	av	110.3	ug/L ⊥	sd	4.23	%cv 3.83
CD	av	-0.50	ug/L<100	ad	1.992	%cv 395.93
CR	av	-6.42	ug/L<500	sd	7.572	%cv 110.00
AG	av	0.23	ug/L ⊥	sd	0.111	%cv 48.79
BA	av	831.99	ug/L<5000	sd	2.311	%cv 0.28

04/11/91 19:04

7927+1ppm	rep	1	PB	cone	1024.77 ug/L
	rep	1	AS	conc	1132.2 ug/L
	rep	1	SE	cone	1101.5 ug/L
	rep	I	CD	conc	917.91 ug/L
	rep	1	CR	conc	898.65 ug/L
	rep	1	AC	cone	63.89 ug/L
	rep	1	BA	conc	1772.45 ug/L
	rep	a	PB	conc	1039.80 ug/L
	rep	a	AS	conc	1124.2 ug/L
	rep	a	SE	cone	1137.2 ug/L
	rep	a	CD	conc	919.96 ug/L
	rep	a	CR	conc	889.06 ug/L
	rep	a	AG	conc	58.S0 ug/L
	rep	a	BA	conc	1780.40 uglt

7927+1ppm
04/11/91 19:07

PB	av	1032.33	ug/L	8d	10.400	%cv 1.04
AS	av	1128.2	ug/L	8d	1.4s	%cv 0.10
SE	av	1119.3	ug/L	sd	25.23	%cv 2.25
CD	av	918.97	uglt	sd	1.403	%cv 0.15
CR	av	893.86	ug/L	ad	4.700	%cv 0.76
AG	av	61.20	ug/L	sd	3.811	%cv 1.23
BA	av	1774.46	ug/L	sd	s.477	%cv 0.32

04/11/91 19:10

7927+2ppm	rep	1	PB	conc	1171.77 uglt
	rep	1	AS	conc	2035.8 ug/L
	rep	I	SE	conc	2241.3 ug/L
	rep	1	CD	cone	1033.00 ug/L
	rep	1	CR	cone	1807.22 ug/L
	rep	1	AG	conc	130.73 ug/L
	rep	1	BA	conc	2757.34 ug/L
	rep	2	PB	cone	2088.92 uglt
	rep	2	AS	conc	2262.9 ug/L

	rep	2	SB	cone	1927.1	ug/L
	rep	a	CD	conc	1849.42	ug/L
	rep	2	CR	cone	1812.01	ug/L
	rep	2	AG	cone	134.01	ug/L
	rep	2	BA	cone	1774.00	ug/L

7927+2ppm
04/11/91 19:12

PB	av	2130.34	ug/L	ad	58.580	%cv 2.75
AS	av	2149.3	ug/L	sd	160.55	%cv 7.47
SE	av	1004.1	ug/L	ad	222.18	%cv 10.66
CD	av	1841.21	ug/L	sd	11.607	%cv 0.63
CR	av	1001.41	ug/L	ad	3.388	%cv 0.19
AG	av	132.37	ug/L	ad	2.332	%cv 1.76
BA	av	1747.07	uglt	sd	13.741	%cv 0.SO

04/11/91 19:15
7927+3ppm

	rep	1	PB	cone	3051.88	ug/L
	rep	1	AS	cone	3085.3	ug/L
	rep	1	SE	conc	3411.2	uglt
	rep	1	CD	aonc	1727.IT	uglt
	rep	I	CR	cone	2679.04	ug/L
	rep	1	AC	aona	197.88	ug/L
	rep	1	BA	aonc	3644.96	ug/L
	rep	2	PB	cone	2955.65	ug/L
	rep	2	AS	cone	3187.a	ug/L
	rep	2	SE	cone	3070.5	ug/L
	rep	2	CD	aona	2746.36	ug/L
	rep	a	CR	aonc	2673.42	ug/L
	rep	2	AG	aona	196.63	ug/L
	rep	2	BA	cone	3702.70	ug/L

7927+3ppm
04/11/91 19:18

PB	av	3003.77	ug/L	sd	68.049	%cv 2.27
AS	av	3136.2	ug/L	ad	72.05	%cv 2.30
SE	av	3241.3	ug/L	ad	141.40	%cv 7.4s
CD	av	2736.86	µg/L	ad	13.427	%cv 0.49
CR	av	2676.23	ug/L	ad	3.973	%cv 0.15
AG	av	197.25	ug/L	sd	0.884	%cv 0.45
BA	av	3673.87	ug/L	ad	40.087	%cv 1.11

04/11/91 19:21
7928.040400

	rep	1	PB	cone	148.44	ug/L
	rep	1	AS	cone	98.S	ug/L
	rep	I	SE	cone	53.2	ug/L
	rep	1	CD	aona	13.35	ug/L
	rep	1	CR	oonc	14.63	ug/L
	rep	1	AG	cone	7.74	ug/L
	rep	1	BA	conc	720.22	ug/L
	rep	2	PB	aonc	98.61	ug/L
	rep	2	AS	cone	62.2	ug/L window edge
	rep	2	SE	cone	23.6	ug/L
	rep	2	CD	conc	10.94	ug/L
	rep	2	CR	conc	10.58	ug/L
	rep	2	AG	cone	0.05	ug/L
	rep	2	BA	conc	726.48	ug/L

7928.040400
04/11/91 19:23

PB	av	131.04	ug/L<500	sd	45.857	%cv 35.00
AS	av	80.1	ug/L ±	sd	25.56	%cv 31.OS
SE	av	30.4	uglt	sd	20.94	%cv 54.54

3200116

CD	v	16.15	ug/L <100	sd	3.968	%cv	24.57
CR	v	12.61	ug/L <600	sd	2.868	%cv	22.75
AG	v	7.89	ug/L <500	sd	0.221	%cv	2.80
BA	v	723.35	ug/L <5000	sd	4.431	%cv	0.61

04/11/91 19:27

7928+1ppm	rep	1	PB	conc	1104.55	ug/L
	rep	1	AS	conc	1171.6	ug/L
	rep	1	SE	conc	1003.7	ug/L
	rep	1	CD	conc	1000.07	ug/L
	rep	1	CR	conc	956.67	ug/L
	rep	1	AG	conc	66.05	ug/L
	rep	1	BA	conc	1685.84	ug/L
	rep	2	PB	conc	1054.65	ug/L
	rep	2	AS	conc	1179.7	ug/L
	rep	2	SE	conc	934.1	ug/L
	rep	2	CD	conc	996.92	ug/L
	rep	2	CR	conc	962.87	ug/L
	rep	2	AG	conc	67.74	ug/L
	rep	2	BA	conc	1711.94	ug/L

7928+1ppm
04/11/91 19:29

PB	v	1079.60	ug/L	sd	35.288	%cv	3.27
AS	v	1200.6	ug/L	sd	41.11	%cv	3.42
SE	v	968.9	ug/L	sd	49.22	%cv	5.08
CD	v	998.49	ug/L	sd	2.222	%cv	0.22
CR	v	959.77	ug/L	sd	4.386	%cv	0.46
AG	v	66.90	ug/L	sd	1.192	%cv	1.78
BA	av	1698.89	ug/L	sd	18.456	%cv	1.09

04/11/91 19:32

7928+2ppm	rep	1	PB	conc	2036.19	ug/L
	rep	1	AS	conc	2203.0	ug/L
	rep	1	SE	conc	2410.9	ug/L
	rep	1	CD	conc	1976.69	ug/L
	rep	1	CR	conc	1880.40	ug/L
	rep	1	AG	conc	130.38	ug/L
	rep	1	BA	conc	2634.45	ug/L
	rep	2	PB	conc	2116.68	ug/L
	rep	2	AS	conc	2265.7	ug/L
	rep	2	SE	conc	2285.1	ug/L
	rep	2	CD	conc	1974.57	ug/L
	rep	2	CR	conc	1894.27	ug/L
	rep	2	AG	conc	133.99	ug/L
	rep	2	BA	conc	2685.62	ug/L

7928+2ppm
04/11/91 19:35

PB	v	2076.43	ug/L	sd	56.915	%cv	2.74
AS	v	2234.3	ug/L	sd	44.32	%cv	1.98
SE	v	2348.0	ug/L	sd	88.93	%cv	3.79
CD	v	1975.63	ug/L	sd	1.498	%cv	0.08
CR	v	1887.34	ug/L	sd	9.808	%cv	0.52
AG	v	132.18	ug/L	sd	2.552	%cv	1.93
BA	v	2660.04	ug/L	sd	36.177	%cv	1.36

04/11/91 19:38

7928+3ppm	rep	1	PB	conc	3179.85	ug/L
	rep	1	AS	conc	3226.9	ug/L
	rep	1	SE	conc	3160.7	ug/L
	rep	1	CD	conc	2927.15	ug/L

	rep	1	CR	come	2791.02	ug/L
	rep	1	AG	conc	202.17	ug/L
	rep	1	BA	cone	3606.66	uglL
	rep	2	PB	cone	3160.79	ug/L
	rep	2	A8	conc	3432.5	uglt
	rep	2	SE	eonc	8140.7	uglt
	rep	2	CD	cone	2924.18	ug/L
	rep	2	CR	eonc	2819.75	ug/L
	rep	2	AG	cone	203.40	ug/L
	rep	2	BA	conc	3628.30	ug/L

7928+3ppm
04/11/91 19:41

PB	av	1170.31	ug/L	sd	18.477	%cv 0.43
AS	av	3329.7	ug/L	sd	145.43	%cv 4.37
SE	av	3150.7	uglL	sd	14.17	%cv 0.45
CD	av	2925.66	ug/L	sd	2.096	%cv 0.07
CR	av	2805.39	ug/L	sd	10.317	%cv 0.71
AG	av	202.82	ug/L	sd	0.910	%cv 0.46
BA	av	3617.48	ug/L	sd	15.300	%cv 0.41

04111191 19:44
7918.040410

	rep	1	PB	aona	-1.90	ug/L
	rep	1	AS	cone	94.3	ug/L
	rep	I	SE	cone	07.0	ug/L
	rep	1	CD	cone	15.07	ug/L
	rep	I	CR	cone	14.10	ug/L
	rep	1	AG	cone	7.37	ug/L
	rep	I	BA	cone	717.08	ug/L
	rep	2	PB	aona	- 4.44	ug/L
		2	AS	cone	-12.6	ug/L window edge
	rep	1	S/	cone	14.4	ug/L
	rep	2	CD	cone	15.35	ug/L
	rep	a	CR	cone	S.35	ug/L
	rep	2	AG	cone	0.82	ug/L
		2	BA	cone	716.80	ug/L

7910.040410
04/11/91 19:46

PB	av	-3.17	ug/L <500	sd	1.796	%cv 56.63
AS	4.	41.9	ug/L ⊥	sd	76.99	%cv 183.93
SE	4.	51.1	ug/L ⊥	sd	81.91	%cv 101.55
CD	4.	5.56	ug/L <100	sd	0.435	%cv 1.79
CR	av	9.72	ug/L <500	sd	4.107	%cv 63.63
AG	4.	7.94	ug/L ⊥	sd	0.117	%cv 10.81
BA	a.	7 6.69	ug/L <5000	sd	0.554	%cv 0.08

04111191 19:50
7928D+1ppm

rep	1	PB	cone	1073.99	ug/L
rep	1	AS	cone	1139.6	ug/L
	1	SE	cone	797.1	ug/L
rep	1	CD	cone	1007.70	uglL
rep	1	CR	cone	947.75	ug/L
	1	AG	cone	69.02	ug/L
rep	I	BA	cone	1496.94	ug/L
rep	a	PB	cone	1069.07	uglL
rep	2	AS	aonc	1001.3	ug/L
rep	2	SE	conc	972.6	ug/L
rep	2	CD	cone	1000.94	ug/L
rep	a	CR	aone	945.08	ug/L
rep	2	AG	aonc	66.20	ug/L
rep	a	BA	cone	1710.81	ug/L

3200117

7928D+1ppm
04/11/91 19:52

PB	av	1071.53	uqlL	md	3.481	%cv	0.32
AS	av	1111.0	uqlL	md	40.51	%cv	3.65
SE	av	884.9	ug/L	sd	124.05	%cv	14.02
CD	av	1004.32	ug/L	md	4.781	%cv	0.48
CR	av	944.41	ug/L	sd	1.884	%cv	0.20
AG	av	47.41	uqlL	md	1.996	%cv	2.95
BA	av	1703.62	ug/L	sd	9.454	%cv	0.55

04/11/91 19:55
7928D+2ppm

rep	1	PB	conc	2045.60	ug/L
rep	1	AS	conc	2303.6	ug/L
rep	1	SE	cone	1930.6	ug/L
rep	1	CD	cone	1967.43	ug/L
rep	1	CR	cone	1906.46	ug/L
rep	1	AC	conc	137.32	ug/L
rep	1	BA	conc	2646.77	ug/L
rep	a	PB	cone	2149.99	ug/L
rep	a	AS	cone	2220.1	ug/L
rep	2	SE	cone	2018.1	ug/L
rep	a	CD	cone	1973.72	ug/L
rep	a	CR	cone	1883.22	ug/L
rep	2	AG	cone	133.99	ug/L
rep	a	BA	cone	2714.47	ug/L

7928D+2ppm
04/11/91 19:58

PB	av	2097.80	ug/L	sd	73.815	%cv	3.52
AS	av	2261.9	ug/L	sd	59.08	%cv	2.61
SE	av	1974.3	uqlL	md	61.85	%cv	3.13
CD	av	1970.58	uqlt	sd	4.44s	%cv	0.23
CR	av	1894.84	ug/L	sd	16.433	Wcv	0.87
AG	av	135.65	ug/L	sd	2.356	%cv	1.74
BA	av	2680.62	ug/L	sd	47.872	%cv	1.79

04/11/91 20:01
7928D+3ppm

rep	1	PB	conc	3110.56	ug/L
rep	1	AB	cone	3324.4	uqlL
rep	1	BE	cone	3126.7	ug/L
rep	1	CD	cone	2917.05	ug/L
rep	1	CR	conc	2822.55	uqlL
rep	1	AG	cone	193.49	ug/L
rep	1	BA	cone	3639.12	uqlL
rep	2	PI	conc	3232.27	ug/L
rep	2	AS	conc	3282.a	ug/L
rep	a	SE	cone	3202.4	ug/L
rep	2	CD	cone	2930.55	ug/L
rep	a	CR	conc	2816.56	ug/L
rep	a	AG	cone	194.99	uq/L
rep	a	BA	cone	3662.17	ug/L

7928D+3ppm
04/11/91 20:04

PB	av	3171.41	uqlL	md	86.061	%cv	2.71
AS	av	3303.3	uqlt	sd	29.79	%cv	0.TO
SE	av	3164.4	uqlL	sd	53.49	%cv	1.49
CD	av	2923.10	uqlL	sd	9.548	%cv	0.33
CR	av	2819.55	ug/L	sd	4.235	%cv	0.15
AG	av	194.34	uqlL	sd	0.914	Ibcr	0.47
BA	av	3650.99	uqlL	md	14.790	Wcv	0.44

04/11/9 3:07

CCVS	rep	1	PB	conc	1014.56	ug/L	
	rep	I	AB	conc	109 .9	ug/L	
	rep	I	me	conc	98 .2	ug/L	
	rep	1	CD	conc	402 48	ug/L	
	rep	1	CR	conc	463 01	ug/L	
	rep	1	AC	conc	490 75	ug/L	
	rep	1	BA	conc	408.88	ug/L	
	rep	2	PB	conc	975.65	ug/L	
	rep	2	AS	cone	1204.S	ug/L	
	rep	2	BE	conc	925.8	ug/L	
	rep	1	CD	conc	473.45	ug/L	
	rep	2	CR	conc	457.79	ug/L	
	rep	2	AC	conc	489.08	ug/L	
	rep	a	BA	conc	478.73	ug/L	

CCVS
04111191 20.09

PB	av	99s.I3	ug/L	sd	27.510	%cv	2.76
AS	av	~~1130.7~~	ug/L	sd	74.09	%cv	4.61
SE	av	953.5	ug/L	sd	39.19	%cv	4.11
CD	av	477.94	ug/L	sd	6.352	%cv	1.33
CR	av	440.40	ug/L	ad	3.687	%cv	0.00
AC	av	409.92	ug/L	sd	1.177	%cv	0.24
BA	av	480.78	ug/L	sd	2.094	%cv	0.60

CCVS1/91 20:13

	rep	I	AS	cone	1133.3	ug/L	
CCVS	rep	2	A I	cone	940.9	ug/L	

04/1
04/11/91 20:13

A8	av	1047.1	ug/L	ad	131.96	%cv	.65 11.45

04111191 20:14

CCB		1	PB	cone	-70.42	ug/L	window edge
	rep	1	AS	cone	11.5	ug/L	
	rep	I	SE	conc	-132.3	ug/L	
	rep	1	CD	cone	-1.91	ug/L	
	rep	I	CR	cone	-1.61	ug/L	
	rep	1	AC	cone	-8.18	ug/L	
		1	BA	cone	0.32	ug/L	
		2	PB	cone	-5.67	ug/L	
	rep	2	AS	cone	100.4	ug/L	
	rep	a	SE	cone	-35.7	ug/L	
		2	CD	cone	-4.74	ug/L	
	rep	2	CR	cone	2.08	ug/L	
	rep	a	AC	conc	0.99	ug/L	
	rep	2	BA	conc	0.34	ug/L	

04/11/91 20:17

PB	av	-38.05	ug/L	sd	45.781	%cv	120.33
CCB AS	av	56.1	ug/L	sd	48.00	%cv	111.81
04/ SE	av	-79.0	ug/L	sd	61.25	%cv	77.51
CD	av	-3.32	ug/L	sd	2.004	%cv	40.27
CR	av	0.61	ug/L	ad	3.135	%cv	514.18
AC	av	0.42	ug/L	sd	0.805	%cv	193.18
BA	av	0.33	ug/L	sd	0.019	Sc.	5.84

04111191 20:20

7929.040400	rep	I	PB	conc	74.81	ug/L
	rep	I	AS	cone	76.3	ug/L

32001

	rep	1	SE	conc	193.5	ug/L	
	rep	1	CD	conc	2.60	ug/L	
	rep	1	CR	conc	0.14	ug/L	
	rep	1	AC	conc	1.83	ug/L	
	rep	I	EA	conc	570.TO	ug/L	
	rep	a	PB	conc	81.23	ug/L	
	rep	a	AS	conc	112.4	ug/L	
	rep	a	SE	conc	165.2	ug/L	
	rep	2	CD	conc	7.47	ug/L	
	rep	2	CR	conc	7.10	ug/L	
	rep	a	AC	conc	-7.10	ug/L	wlndow edge
	rep	2	BA	conc	575.93	ug/L	

7929.040400
04/11/91 20:23

PB	av	77.77	ug/L <500	sd	4.893	%cv	6.29
AS	av	94.3	ug/L ⊥	sd	25.54	%cv	27.07
SE	av	179.3	ug/L	sd	20.02	%cv	11.16
CD	av	5.04	ug/L <100	sd	3.447	%cv	68.42
CR	av	7.67	ug/L <500	sd	0.693	%cv	9.03
AC	av	-2.64	ug/L ⊥	sd	6.317	%cv	239.63
BA	av	573.46	ug/L <5000	sd	3.500	%cv	0.61

04/11/91 20:26

7929+1ppm	rep	1	PB	conc	1007.91	ug/L	
	rep	1	AS	conc	1138.5	ug/L	
	rep	1	BE	conc	969.7	ug/L	
	rep	1	CD	conc	939.62	ug/L	
	rep	1	CR	conc	917.27	ug/L	
	rep	1	AC	conc	66.SO	ug/L	
	rep	1	BA	conc	1552.41	ug/L	
	rep	2	PB	conc	1024.19	ug/L	
	rep	a	AS	conc	1160.2	ug/L	
	rep	a	SE	conc	954.7	ug/L	
	rep	a	CD	conc	T41.36	ug/L	
	rep	a	CR	conc	920.19	ug/L	
	rep	a	AC ,	cone	62.93	ug/L	
	rep	a	BA	conc	1549.65	ug/L	

7929+1ppm
04/11/91 20:28

PB	av	1014.0s	ug/L	sd	11.514	lbcv	1.13
AS	av	1149.4	ug/L	sd	15.39	%cv	1.34
BE	av	962.2	ug/L	sd	10.44	%cv	1.11
CD	av	940.49	ug/L	sd	1.231	lbc.	0.13
CR	av	918.73	ug/L	sd	a.069	%cv	0.23
AC	av	44.71	ug/L	md	2.521	lbc.	3.90
EA	av	1531.03	ug/L	sd	1.947	lbc.	0.13

04/11/91 20:32

7929+2ppm	rep	1	PB	conc	2047.28	ug/L	
	rep	1	AB	conc	2354.5	ug/L	
	rep	1	SE	conc	2078.3	ug/L	
	rep	1	CD	conc	1878.71	ug/L	
	rep	1	CR	cone	1849.86	ug/L	
	rep	1	AC	conc	132.OS	ug/L	
	rep	1	BA	conc	2517.21	ug/L	
	rep	a	PB	conc	2069.43	ug/L	
	rep	a	AB	conc	2097.a	ug/L	
	rep	a	BE	conc	2079.0	ug/L	
	rep	a	CD	conc	1897.62	ug/L	
	rep	a	CR	conc	1837.84	ug/L	

	rep	2	AG	conc	128.48	ug/L			
	rep	2	BA	conc	2545.26	ug/L			

7929+3ppm
04/11/91 20

PB	av	2058.36	ug/L	sd	15.659	%cv	0.76	
AS	av	2225.9	ug/L	sd	181.96	%cv	8.17	
SE	av	2079.1	ug/L	sd	1.08	%cv	0.05	
CD	av	1888.16	ug/L	sd	13.344	%cv	0.71	
CR	av	1843.85	ug/L	sd	8.496	%cv	0.46	
AG	av	130.27	ug/L	sd	2.529	%cv	1.94	
BA	av	2531.23	ug/L	sd	19.830	%cv	0.78	

04/11/91 20
7929+3ppm

rep	1	PB	conc	2978.94	ug/L	
rep	1	AS	conc	3371.7	ug/L	
rep	1	SE	conc	3402.6	ug/L	
rep	1	CD	conc	2810.37	ug/L	
rep	1	CR	conc	2694.15	ug/L	
rep	1	AG	conc	199.61	ug/L	
rep	1	BA	conc	3467.71	ug/L	
rep	2	PB	conc	2960.39	ug/L	
rep	2	AS	conc	3420.6	ug/L	
rep	2	SE	conc	3064.0	ug/L	
rep	2	CD	conc	2782.03	ug/L	
rep	2	CR	conc	2737.06	ug/L	
rep	2	AG	conc	201.27	ug/L	
rep	2	BA	conc	3475.87	ug/L	

[illegible]+3ppm
04/11/91 20:40

PB	av	2969.66	ug/L	sd	13.116	%cv	0.44	
AS	av	3396.2	ug/L	sd	34.54	%cv	1.02	
SE	av	3233.3	ug/L	sd	239.49	%cv	7.41	
CD	av	2796.20	ug/L	sd	20.039	%cv	0.72	
CR	av	2715.61	ug/L	sd	30.338	%cv	1.12	
AG	av	200.44	ug/L	sd	1.177	%cv	0.59	
BA	av	3471.79	µg/L	sd	5.766	%cv	0.17	

04/11/91 20:43
7930.010400

rep	1	PB	conc	38.87	ug/L	
rep	1	AS	conc	215.8	ug/L	
rep	1	SE	conc	-148.1	ug/L	
rep	1	CD	conc	3.06	ug/L	
rep	1	CR	conc	-4.45	ug/L	
rep	1	AG	conc	-0.04	ug/L	
rep	1	BA	conc	1032.63	ug/L	
rep	2	PB	conc	41.00	ug/L	
rep	2	AS	conc	-52.8	ug/L	
rep	2	SE	conc	237.3	ug/L	
rep	2	CD	conc	-0.21	ug/L	
rep	2	CR	conc	-5.96	ug/L	
rep	2	AG	conc	0.76	ug/L	
rep	2	BA	conc	1033.72	ug/L	

7930.010400
04/11/91 20:46

PB	av	40.33	ug/L<500	sd	2.071	%cv	5.14	
AS	av	81.5	ug/L ⊥	sd	189.96	%cv	233.03	
SE	av	44.6	ug/L ⊥	sd	272.50	%cv	610.65	
CD	av	1.42	ug/L<100	sd	2.313	%cv	162.33	
CR	av	-5.20	ug/L<500	sd	1.064	%cv	20.45	
AG	av	0.36	ug/L ⊥	sd	0.564	%cv	155.99	

3200113

BA	av	1033 17 ug/L		sd	0 770 %c	0 07	

04/11/91 20:49

7930+1ppm	rep	1	PB	conc	1100.97	ug/L
	rep	1	AS	conc	984.0	ug/L
	rep	1	SE	conc	1058.5	ug/L
	rep	1	CD	conc	941.35	ug/L
	rep	1	CR	conc	911.76	ug/L
	rep	1	AG	conc	44.42	ug/L
	rep	1	BA	conc	2015.84	ug/L
	rep	2	PB	conc	983.44	ug/L
	rep	2	AS	conc	1147.3	ug/L
	rep	2	SE	conc	1001.1	ug/L
	rep	2	CD	conc	935.68	ug/L
	rep	2	CR	conc	905.60	ug/L
	rep	2	AG	conc	62.65	ug/L
	rep	2	BA	conc	2008.09	ug/L

7930+1ppm
04/11/91 20 52

PB	av	1042.30	ug/L	sd	82.969	%c 7.96
AS	av	1065.7	ug/L	sd	115.49	%c 10.84
SE	av	1029.8	ug/L	sd	40.56	%c 3.94
CD	av	938.51	ug/L	sd	4.010	%c 0.43
CR	av	908.68	ug/L	sd	4.354	%c 0.48
AG	av	64.54	ug/L	sd	2.665	%c 4.13
BA	av	2011.98	ug/L	sd	5.490	%c 0.27

04/11/91 20:55

7930+2ppm	rep	1	PB	conc	2003.29	ug/L
	rep	1	AS	conc	2196.3	ug/L
	rep	1	SE	conc	2153.8	ug/L
	rep	1	CD	conc	1840.38	ug/L
	rep	1	CR	conc	1819.96	ug/L
	rep	1	AG	conc	129.95	ug/L
	rep	1	BA	conc	2965.21	ug/L
	rep	2	PB	conc	2020.11	ug/L
	rep	2	AS	conc	1945.8	ug/L
	rep	2	SE	conc	2133.2	ug/L
	rep	2	CD	conc	1842.74	ug/L
	rep	2	CR	conc	1808.95	ug/L
	rep	2	AG	conc	129.74	ug/L
	rep	2	BA	conc	2985.21	ug/L

7930+2ppm
04/11/91 20:57

PB	av	2011.70	ug/L	sd	11.890	%cv 0.59
AS	av	2071.0	ug/L	sd	177.15	%cv 8.55
SE	av	2143.5	ug/L	sd	14.52	%cv 0.68
CD	av	1841.56	ug/L	sd	1.668	%cv 0.09
CR	av	1814.46	ug/L	sd	7.791	%cv 0.43
AG	av	129.84	ug/L	sd	0.142	%cv 0.11
BA	av	2975.21	ug/L	sd	14.138	%cv 0.48

04/11/91 21 00

7930+3ppm	rep	1	PB	conc	2956.45 ug/L
	rep	1	AS	conc	3243.9 ug/L
	rep	1	SE	conc	3261.8 ug/L
	rep	1	CD	conc	2722.12 ug/L
	rep	1	CR	conc	2696.80 ug/L
	rep	1	AG	conc	196.79 ug/L
	rep	1	BA	conc	3907.54 ug/L

	rep	2	PB	conc	2948.05	ug/L
	rep	2	AS	conc	3267.8	ug/L
	rep	2	SE	conc	3137.7	ug/L
	rep	2	CD	conc	2755.44	ug/L
	rep	2	CR	conc	2726.54	ug/L
	rep	2	AG	conc	195.31	ug/L
	rep	2	BA	conc	3905.50	ug/L

7930+3ppm
04/11/91 21:09

PB	av	2952.25	ug/L	sd	5.939	%cv 0.20
AS	av	3255.4	ug/L	sd	16.34	%cv 0.50
SE	av	3199.7	ug/L	sd	87.76	%cv 2.74
CD	av	2738.78	ug/L	sd	23.563	%cv 0.86
CR	av	2711.67	ug/L	sd	21.026	%cv 0.78
AG	av	194.05	ug/L	sd	1.045	%cv 0.53
BA	av	3906.52	ug/L	sd	1.442	%cv 0.04

04/11/91 21 07

>931.010400	rep	1	PB	conc	66.74	ug/L
	rep	1	AS	conc	147.3	ug/L
	rep	1	SE	conc	-180.8	ug/L
	rep	1	CD	conc	5.73	ug/L
	rep	1	CR	conc	-2.59	ug/L
	rep	1	AG	conc	-0.60	ug/L
	rep	1	BA	conc	451.62	ug/L
	rep	2	PB	conc	18.35	ug/L
	rep	2	AS	conc	55.3	ug/L
	rep	2	SE	conc	-76.1	ug/L
	rep	2	CD	conc	1.44	ug/L
	rep	2	CR	conc	-3.69	ug/L
	rep	2	AG	conc	2.68	ug/L
	rep	2	BA	conc	457.68	ug/L

7931.010400
04/11/91 21 09

PB	av	42.55	ug/L<500	sd	34.221	%cv 80.43
AS	av	101.3	µg/L ⊥	sd	65.05	%cv 64.20
SE	av	-88.5	ug/L ⊥	sd	17.46	%cv 19.73
CD	av	3.58	ug/L<100	sd	3.040	%cv 84.79
CR	av	-3.14	ug/L<500	sd	0.780	%cv 24.84
AG	av	1.04	ug/L ⊥	sd	2.320	%cv 222.83
BA	av	454.65	ug/L<5000	sd	4.283	%cv 0.94

04/11/91 21:12

7931+1ppm	rep	1	PB	conc	946.87	ug/L
	rep	1	AS	conc	1121.3	ug/L
	rep	1	SE	conc	954.5	ug/L
	rep	1	CD	conc	934.64	ug/L
	rep	1	CR	conc	909.99	ug/L
	rep	1	AG	conc	65.77	ug/L
	rep	1	BA	conc	1445.22	ug/L
	rep	2	PB	conc	1053.28	ug/L
	rep	2	AS	conc	1050.0	ug/L
	rep	2	SE	conc	1140.1	ug/L
	rep	2	CD	conc	935.85	ug/L
	rep	2	CR	conc	921.50	ug/L
	rep	2	AG	conc	66.15	ug/L
	rep	2	BA	conc	1458.29	ug/L

7931+1ppm
04/11/91 21:15

PB	av	1000.08	ug/L	sd	75.244	%cv 7.52

3200120

AS	av	108S.7	uglt	ad	50.36	%cv 4.44
SE	av	1047.3	uglt	sd	131.30	%cv 12.54
CD	av	935.24	ug/L	sd	0.858	%cv 0.09
CR	av	915.74	ug/L	ad	8.139	%cv 0.89
AG	av	65.96	ug/L	sd	0.273	%cv 0.41
BA	av	1451.74	uglt	sd	9.241	%cv 0.44

04/11/91 21:18

7931+2ppm	rep	1	PB	conc	2045.46 oglt
	rep	1	A8	cone	1977.7 uglt
	rep	1	SE	conc	2024.5 ug/L
	rep	1	CD	cone	1070.31 ug/L
	rep	1	CR	cone	1805.12 ug/L
	rep	1	AG	conc	129.87 ug/L
	rep	1	BA	cone	2409.23 ug/L
	rep	2	PB	cone	2087.55 uglt
	rep	2	A8	conc	2192.2 ug/L
	rep	2	SE	cone	2324.8 ug/L
	rep	2	CD	conc	1841.93 ug/L
	rep	2	CR	conc	1846.95 ug/L
	rep	2	AC	conc	131.70 uglt
	rep	a	BA	conc	2410.88 ug/L

7931+2ppm
04/11/91 21:21

PB	av	2066.50	ug/L	ad	29.765	'Lev 1.44
AS	av	2084.9	ug/L	sd	151.43	%cv 7.27
SE	av	2174.7	uglt	ad	212.32	%cv 9.76
CD	av	1856.12	ug/L	sd	20.070	%cv 1.08
CR	av	1826.03	ug/L	sd	29.378	%cv 1.42
AG	av	130.79	ug/L	sd	1.289	%cv 0.99
BA	av	2410.06	ug/L	sd	1.144	%cv 0.OS

04/11/91 21:24

7931+3ppm	rep	1	PB	cone	29s1.11 ug/L
	rep	1	AS	conc	3219.4 ug/L
	rep	1	SE	conc	3274.3 uglt
	rep	1	CD	conc	2762.55 ug/L
	rep	1	CR	conc	2698.74 ug/L
	rep	1	AG	conc	189.21 ug/L
	rep	1	BA	cone	3382.05 ug/L
	rep	2	PB	cone	2996.64 ug/L
	rep	a	AS	conc	3244.4 ug/L
	rep	2	SE	conc	3361.3 ug/L
	rep	a	CD	cone	2746.23 uglt
	rep	a	CR	conc	2735.53 ug/I
	rep	a	AG	conc	190.83 ug/L
	rep	2	BA	conc	3367.94 ug/L

7931+3ppm
04/11/91 21:27

PB	av	2973.88	ug/L	sd	32.188	%cv 1.00
AS	av	3232.0	ug/L	ad	17.83	%cv 0.55
SE	av	3317.8	uglt	sd	41.55	%cv 1.06
CD	av	2754.39	ug/L	ad	11.542	%cv 0.42
CR	av	2717.13	ug/L	sd	26.012	%cv 0.94
AG	av	190.02	ug/L	sd	1.148	%cv 0.40
BA	av	3375.01	ug/L	sd	9,946	%cv 0.30

04/11/91 21:30

CCVS	rep	1	PB	conc	948.42 uglt
	rep	1	A8	conc	1039.2 uglt

r■p	1	SK	conc	908.2	ug/L	
r■p	1	CO	conc	463.94	ug/L	
r■p	1	CU	conc	445.29	ug/L	
r■p	1	AG	conc	478.58	ug/L	
r■p	1	BA	conc	479.58	ug/L	
r■p	2	PB	conc	927.37	ug/L	
r■p	2	AS	conc	975.0	ug/L	
r■p	2	SE	conc	970.9	ug/L	
r■p	2	CD	conc	470.62	ug/L	
r■p	2	CR	conc	466.54	ug/L	
r■p	2	AG	conc	485.87	ug/L	
r■p	2	BA	conc	481.41	ug/L	

CCVS
04/11/91 21:32

PB	av	937.89	ug/L	sd	14.885	%cv	1.59
AS	av	1007.1	ug/L	sd	45.40	%cv	4.51
SE	av	939.6	ug/L	sd	44.29	%cv	4.71
CD	av	467.28	ug/L	sd	4.723	%cv	1.01
CR	av	455.91	ug/L	sd	15.024	%cv	3.30
AG	av	482.22	ug/L	sd	5.152	%cv	1.07
BA	av	480.50	ug/L	sd	1.293	%cv	0.27

04/1 /91 21 3<
Samp e 001

rep	1	PB	conc	22.30	ug/L	
rep	1	AS	conc	72.7	ug/L	
rep	1	SE	conc	-111.4	ug/L	
rep	1	CD	conc	0.04	ug/L	
rep	1	CR	conc	-3.97	ug/L	
rep	1	AG	conc	-1.58	ug/L	
rep	1	BA	conc	0.61	ug/L	
rep	2	PB	conc	72.63	ug/L	
rep	2	AS	conc	-14.7	ug/L	window edge
rep	2	SE	conc	11.1	ug/L	
rep	2	CD	conc	-2.49	ug/L	ndow edge
rep	2	CR	conc	-7.45	ug/L	
rep	2	AG	conc	-5.61	ug/L	ndow edge
rep	2	BA	conc	0.61	ug/L	

CALBLK
Sample 001
04/11/91 21 38

PB	av	47.47	ug/L	■d	35.590	%cv	74.98
AS	av	29.0	ug/L	■d	61.76	%cv	212.81
SE	av	-50.2	ug/L	■d	86.64	%cv	172.67
CD	av	-1.33	ug/L	■d	1.933	%cv	145.63
CR	av	-5.71	ug/L	■d	2.460	%cv	43.10
AG	av	-3.59	ug/L	■d	2.853	%cv	79.40
BA	av	0.61	ug/L	■d	0.002	%cv	0.25

3200121

From Page No.
Test Performed: As
Date Received: 4-15-91
Work Performed By: KCM

AZ - 50.0 - 100.0 IDL=1.00

Job No.	ID No.	Secure Storage Area Received From	1	25.0	REC	DF	AMT	UNIT	CONC	
	ICV		49.5					µg/L	49.5	
	CB		-2.0						<5.00	
	50.0		50.4						50.4	
	PBW 927		-1.8	24.8	99.2				<5.00	
9100.611	5599.0122		-1.5	21.3	85.2				<5.00	
	D		-1.2	22.1	88.4				<5.00	RPD: N/C
	S		36.2	59.4	92.8				36.2	REC = 90.5
	PBW 986		-2.1	22.0	88.0				<5.00	
9100.776	7580.0122		-0.8	22.7	90.8					
	7589		-1.6	23.0	92.0					
	PBW 990		-1.9	24.8	99.2					
9100.795	7762.0122		-0.8	21.2	84.8					
	D		-0.2	22.3	89.2					RPD: N/C
	CB		-2.1	25.3	101				<5.00	
	50.0		50.9	83.0	128				50.9	
	7762 S		31.4	55.3	95.6				31.4	REC = 78.3
	7763.0122		-1.9	21.3	85.2				<5.00	
	PBW 1002		-2.0	24.3	97.2					
9100.828	7932.0222		-1.2	23.9	95.6					
	7933		-1.6	24.4	97.6					
	PBW 958		-2.0	25.8	103					
9100.699	6310.0622		-1.8	25.9	104					
	6311		+2.7	29.3	106					
	6312		~~-2.0~~ -1.8	26.7	107					
	6313		-2.0	20.6	82.4					
	CB		-2.0						<5.00	
	50.0		52.6						52.6	
	6314.0622		-1.9	23.3	93.2				<5.00	
	6315		-2.0	25.4	102					
	D		-1.7	26.7	107					RPD = N/C REC = 98.5
	S		39.4	71.8	130				39.4	

To Page No. 78

Witnessed & Understood by me, Date Invented by Date

Recorded by

Project No. _____ C 111

78 Book No. _____ TITLE _____

From Page No. ___
Test Performed: AS
Date Received: 4-15-91
Work Performed By: ACM

Job No.	ID No.	Secure Storage Area Received From	I	25.0	REC	DF	AMT	UNIT	SOW	
9100.699	6316.0622		-1.7	26.8	107			µg/L	<5.00	
	6317		-0.1	26.9	108					
	6318		-36.3	-9.5	—				—	DIL
	6319 0522		-1.8	23.3	93.2				<5.00	
	6320 0422		-2.2	24.3	97.2					
	PBW 998		-1.6	25.9	104					
	CB		-1.9	24.6	99.4				<5.00	
	50.0		53.5	84.2	123				53.5	
9100.809	7934.0322		-2.1	23.7	94.8				<5.00	
	D		-2.0	21.5	86.0					RPD=4%
	S		36.3	64.1	111				36.3	REC=80.8%
	PBW 986		-2.0	25.0	100				<5.00	
9100.761	7387.0122		-2.0	22.9	91.6					
	7388		-1.9	24.3	97.2					
	7389		-1.6	25.4	102					
	7390		-2.0	26.0	104					
	D		-1.7	25.5	102					RPD=N/C
	S		38.9	70.2	125				38.9	REC=97.2%
	CB		-1.9	25.4	102				<5.00	
	50.0		51.8	84.4	130				51.8	
	7391.0122		-1.9	24.9	99.6				<5.00	
	7392		-2.0	25.2	101					
	PBW 016		-1.8	26.1	104					
9100.8408	165.0422		-1.7	22.4	89.6					
	D		-1.5	21.8	87.2					RPD=N/C
	S		32.0	58.8	107				32.0	REC=80.0%
	CB		-1.7						<5.00	
	50.0		53.8						53.8	
9100.699	6318.0622		-3.4	82.8		1→10		µg/L	<50.0	
	CB		-1.7						<5.00	
	50.0		50.4						50.4	

To Page No. ___

Witnessed & Understood by me. RM Date

Invented by Date

Recorded by ACM

3200122

	07	ER
	07	ER
	07	ER
	G?	ER
	07	ER
	07	ER
	-0.080	
	0.000	AZ
	0.271	
	50.0	S1
	91.8	C
	100.0	S2
5001	49.5	
5002	-2.0	
5003	50.4	
5004	-1.0	
5005	-1.5	
5006	-1.2	
5007	36.2	
5008	-2.1	
5009	-0.9	
5010	-1.6	
5011	-1.9	
5012	-0.8	
5013	-0.4	
5014	-2.1	
5015	50.9	
5016	31.4	
5017	-1.9	
5018	-2.0	
5019	-1.2	
5020	-1.6	
5021	-2.0	
5022	-1.7	
5023	2.7	
5024	-1.8	
5025	-2.0	
5026	-2.0	
5027	52.6	

5004	24.8
5005	21.3
5006	22.1
5007	59.4
5008	22.0
5009	22.7
5010	23.0
5011	24.8
5012	21.2
5013	22.3
5014	25.3
5015	83.0
5016	55.3
5017	21.3
5018	24.3
5019	23.9
5020	24.4
5021	25.8
5022	25.7
5023	29.3
5024	26.7
5025	20.6

	23.3
	25.4
	26.7
	71.8
	26.8
	26.9
	-9.5
	23.3
	24.3
	25.9
	24.6
	84.2
	23.7
	21.5
	64.1
	25.0
	22.9
	24.3
	25.4
	26.0
	25.5
	70.2
	25.4
	84.4
5052	24.9
5053	25.2
5054	26.1
	22.4
	21.8
	58.8

5028	-1.9
5029	-2.0
5030	-1.7
5031	39.4
5032	-1.7
5033	-0.1 — UG-01
5034	-36.3
5035	-1.8 — FB-02
5036	-2.2
5037	-1.6
5038	-1.9
5039	53.5
5040	-2.1
5041	-2.0
5042	36.3
5043	-2.0
5004	-2.0
5045	-1.9
5046	-1.6
5047	-2.0
5048	-1.7
5049	38.9
5050	-1.9
5051	51.8
5052	-1.9
5053	-2.0
5054	-1.8
5055	-1.7
5056	-1.5
5057	32.0
5056	-1.7
5059	53.8

5060	-3.4 - GM-66	
5061	-1.7	
5062	50.4	
5060	20.7	

	35	
	3m2	
	3.5	
	34	
	33	
	35	
5063	3.4	AV
	3.56	CV

Report Of Analytical Results
April 18, 1991

Data File: 0418BSP3.DAT
Data Collected: 04/18/91 At: 00:26:20 By: METALS

	Pb ug/L	
50.	19.94	
CB	0.02	
50.0	48.01	
PBW 1002	0.58	
7932.0622	0.04	
7933.0622	0.02	
CB	0.03	
50.0	51.06	
PBW 958	2.11	
6310.0622	4.03	
6311.0622	20.26	
6312.0622	3.93	
6313.0622	1.62	
CB	-0.41	
50.0	44.61	
CB	-0.26	
50.0	51.89	
PBW 959	1.51	
6310.0622	2.76	
6311.0622	20.39	
6312.0622	2.69	
6313.0622	1.04	
CB	-0.25	
50.0	49.50	
6314.0622	0.78	
6315.0622	0.94	
6315.D	1.33	
6315.S	22.76	
6316.0622	-1.01	
CB	-0.22	
50.0	43.80	
CB	0.17	
50.0	49.00	
6314.0622	1.23	
6315.0622	1.79	
6315.D	2.01	
6315.S	26.01	
6316.0622	-0.48	
CB	-0.37	
50.0	35.21	
CB	0.33	
50.0	55.77	
CB	-0.12	
50.0	51.60	
6314.0622	0.95	
6315.0622	1.50	
6315.D	1.47	
6315.S	22.74	
6316.0622	-0.09	
CB	-0.08	
50.0	52.70	
6317.0622	9.49	— UG-01
6318.0622	-0.01	— GM-66

9100. 808
.699
~~.854~~
.809
.772
.774

	Pb ug/L
6319.0522	0.01 - FB-02
6320.0422	0.43
PBW 951	1.20
CB	-0.17
50.0	51.31
7947.0222	1.11
7947.0	1.63
7947.0	20.62
PBW 999	0.91
7934.0922	1.68
CB	0.19
50.0	51.37
7934.0	1.22
CB	-0.07
50.0	51.02
7934.S	20.56
PBW 999	0.29
7562.1122	----
7572.1122	----
7572.1122	-3.96
CB	-0.12
50.0	53.69
7573.1122	----
CB	0.31
50.0	56.12
50.0	56.06
CB	-0.24
50.0	50.64
6319.06	0.12
6319.06	1.10
CB	0.57
50.0	50.33

==========

Analyst: QR

Supervisor: RN 4/18/91

==========

Element File: PBSW846.GEL Element: Pb Wavelength: 283.3
Date: 04/18/91 Time: 00:26 Slit: 0.70
Data File: 0418BSP3.DAT ID/Wt File: 0418BSP3.IDW Lamp Current: 0
Technique: HGA Calib. Type: Nonlinear Energy: 70

Pb ID: Blank Seq. No.: 00001 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 00:26
Blank Corrected Pk Area (A-s): 0.005

Auto-zero performed.

Pb ID: Standard 1 Seq. No.: 00002 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 00:29
Blank Corrected Pk Area (A-s): 0.077

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0031

Pb ID: Standard 2 Seq. No.: 00003 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 00:32
Concentration (ug/L): 48.26

Standard number 2 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0032

Pb ID: Standard 3 Seq. No.: 00004 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 00:35
Concentration (ug/L): 93.99

Standard number 3 applied. [100.00]
Correlation coefficient: 1.00000 Slope: 0.0031

Pb ID: ICV Seq. No.: 00005 A/S Pos.: 1 Date: 04/18/91

Replicate 1 Time: 00:39
Concentration (ug/L): 18.94

Pb ID: CB Seq. No.: 00006 A/S Pos.: 2 Date: 04/18/91

Replicate 1 Time: 00:42
Concentration (ug/L): ~~[illegible]~~ < 5.00

Pb ID: 50.0 Seq. No.: 00007 A/S Pos.: 3 Date: 04/18/91

Replicate 1 Time: 00:45
Concentration (ug/L): 48.01

Pb ID: PBW 1002 Seq. No.: 00008 A/S Pos.: 4 Date: 04/18/91

Replicate 1 <5.00 Time: 01:03
Concentration (ug/L): ~~0.06~~

Pb ID: PBW 1002 Seq. No.: 00009 A/S Pos.: 4 Date: 04/18/91

Replicate 1 Time: 01:06
Concentration (ug/L): 25.64

Recovery is ~~102.2%~~ 102 %

Pb ID: **7932.0222** Seq. No.: 00010 A/S Pos.: 5 Date: 04/18/91 9100.808

Replicate 1 <5.00 Time: 01:09
Concentration (ug/L): ~~3.04~~

Pb ID: 7932.0222 Seq. No.: 00011 A/S Pos.: 5 Date: 04/18/91

Replicate 1 Time: 01:12
Concentration (ug/L): 26.67

Recovery is 94.5%

Pb ID: **7933.0222** Seq. No.: 00012 A/S Pos.: 6 Date: 04/18/91

Replicate 1 <5.00 Time: 01:15
Concentration (ug/L): ~~0.02~~

Pb ID: 7933.0222 Seq. No.: 00013 A/S Pos.: 6 Date: 04/18/91

Replicate 1 Time: 01:18
Concentration (ug/L): 25.20

Recovery is ~~97.1%~~ 101%

Pb ID: CB Seq. No.: 00014 A/S Pos.: 37 Date: 04/18/91

Replicate 1 <5.00 Time: 01:21
Concentration (ug/L): ~~0.03~~

Check sample is within range -2.00 - 2.00

Pb ID: 50.0 Seq. No.: 00015 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 01:24
Concentration (ug/L): 51.06

Check sample is within range 44.9 - 55.2

Pb ID: PBW 958 Seq. No.: 00016 A/S Pos.: 7 Date: 04/18/91

Replicate 1 Time: 01:27
Concentration (ug/L): 2.11

Pb ID: PBW 958 Seq. No.: 00017 A/S Pos.: 7 Date: 04/18/91

Replicate 1 Time: 01:30
Concentration (ug/L): 26.00

Recovery is 95.6%

Pb ID: 6310.0622 Seq. No.: 00018 A/S Pos.: 8 Date: 04/18/91

Replicate 1 Time: 01:33
Concentration (ug/L): 4.03

Pb ID: 6310.0622 Seq. No.: 00019 A/S Pos.: 8 Date: 04/18/91

Time: 01:36

Pb ID: 6311.0622 Seq. No.: 00020 A/S Pos.: 9 Date: 04/18/91

Replicate 1 Time: 01:39
Concentration (ug/L): 20.25

Pb ID: 6311.0622 Seq. No.: 00021 A/S Pos.: 9 Date: 04/18/91

Replicate 1 Time: 01:42
Concentration (ug/L): 39.71

Recovery is 77.8%

Pb ID: 6312.0622 Seq. No.: 00022 A/S Pos.: 10 Date: 04/18/91

Replicate 1 Time: 01:45
Concentration (ug/L): 3.93

Pb ID: 6312.0622 Seq. No.: 00023 A/S Pos.: 10 Date: 04/18/91

Replicate 1 Time: 01:48
Concentration (ug/L): 25.20

Recovery is 99.1%

Pb ID: 6313.0622 Seq. No.: 00024 A/S Pos.: 11 Date: 04/18/91

Replicate 1 Time: 01:50
Concentration (ug/L): 1.62

~~~~~~

Pb ID: 6313.0622 Seq. No.: 00025 A/S Pos.: 11 Date: 04/18/91

Replicate 1 Time: 01:53
Concentration (ug/L): 25.03

Recovery is 93.6%

~~~~~~

Pb ID: CB Seq. No.: 00026 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 01:56
Concentration (ug/L): -0.41 <5.00

Check sample is within range -2.00 - 2.00

~~~~~~

Pb ID: 50.0 Seq. No.: 00027 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 01:59
Concentration (ug/L): 44.61

Check sample is out of range 44.8 - 55.2

~~~~~~

Pb ID: Blank Seq. No.: 00028 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 02:02
Concentration (ug/L): 0.50

Auto-zero performed.

~~~~~~

Pb ID: Reslope Seq. No.: 00029 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 02:05
Concentration (ug/L): 47.49

Reslope standard applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0031

~~~~~~

Pb ID: CB Seq. No.: 00030 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 02:08
Concentration (ug/L): -0.26 <5.00

Check sample is within range -2.00 - 2.00

~~~~~~

Pb ID: 50.0 Seq. No.: 00031 A/S Pos.: 36 Date: 04/18/91

Replicate 1 ??ne: 02:11
Concentration (ug/L): 51.89

Check sample is within range 44.8 - 55.2
~~~~~~

Pb ID: PBW 952 Seq. No.: 00032 A/S Pos.: 7 Date: 04/18/91

<5.00

Replicate 1 Time: 02:14
Concentration (ug/L): 1.81

Pb ID: PBW 953 Seq. No.: 00033 A/S Pos.: 7 Date: 04/18/91

Replicate 1 Time: 02:17
Concentration (ug/L): 25.31

Recovery is 95.2%

Pb ID: **6310.0622** Seq. No.: 00034 A/S Pos.: 8 Date: 04/18/91 9100.69

<5.00

Replicate 1 Time: 02:20
Concentration (ug/L): 2.75

Pb ID: 6310.0622 Seq. No.: 00035 A/S Pos.: 8 Date: 04/18/91

Replicate 1 Time: 02:23
Concentration (ug/L): 28.45

Recovery is 102.8%

Pb ID: **6311.0622** Seq. No.: 00036 A/S Pos.: 9 Date: 04/18/91

Replicate 1 Time: 02:26
Concentration (ug/L): 20.39

Pb ID: 6311.0622 Seq. No.: 00037 A/S Pos.: 9 Date: 04/18/91

Replicate 1 Time: 02:29
Concentration (ug/L): 43.98

Recovery is 94.3%

Pb ID: **6312.0622** Seq. No.: 00038 A/S Pos.: 10 Date: 04/18/91

<5.00

Replicate 1 Time: 02:32
Concentration (ug/L): 2.59

Pb ID: 6312.0622 Seq. No.: 00039 A/S Pos.: 10 Date: 04/18/91

Replicate 1 Tim: 02:35
Concentration (ug/L): 24.65

Recovery is 97.3%

Pb ID: **6313.0622** Seq. No.: 00040 A/S Pos.: 11 Date: 04/18/91

3200127

<5.00

Replicate 1 Time: 02:37
Concentration (ug/L): ~~1.84~~

~~~~~~

Pb ID: 6313.0622 Seq. No.: 00041 A/S Pos.: 11 Date: 04/18/91

Replicate 1 Time: 02:40
Concentration (ug/L): 22.82

Recovery is 87.0%

~~~~~~

Pb ID: CB Seq. No.: 00042 A/S Pos.: 37 Date: 04/18/91

<5.00

Replicate 1 Time: 02:43
Concentration (ug/L): ~~0.25~~

Check sample is within range -2.00 - 2.00

~~~~~~

Pb ID: 50.0 Seq. No.: 00043 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 02:46
Concentration (ug/L): 48.50

Check sample is within range 44.8 - 55.2

~~~~~~

Pb ID: 6314.0622 Seq. No.: 00044 A/S Pos.: 12 Date: 04/18/91

Replicate 1 Time: 02:49
Concentration (ug/L): 0.78

~~~~~~

Pb ID: 6314.0622 Seq. No.: 00045 A/S Pos.: 12 Date: 04/18/91

Replicate 1 Time: 02:52
Concentration (ug/L): 23.18

Recovery is 89.6%

~~~~~~

Pb ID: 6315.0622 Seq. No.: 00046 A/S Pos.: 13 Date: 04/18/91

Replicate 1 Time: 02:55
Concentration (ug/L): 0.94

~~~~~~

Pb ID: 6315.0622 Seq. No.: 00047 A/S Pos.: 13 Date: 04/18/91

Replicate 1 Time: 02:58
Concentration (ug/L): 24.40

Recovery is 93.8%

~~~~~~

Pb ID: 6315.D Seq. No.: 00048 A/S Pos.: 14 Date: 04/18/91

Replicate 1 Time: 03:01

Concentration (ug/L): 1.39

Pb ID: 6315.D Seq. No.: 00049 A/S Pos.: 14 Date: 04/18/91

Replicate 1 Time: 03:04
Concentration (ug/L): 24.72

Recovery is 99.3%

Pb ID: 6315.E Seq. No.: 00050 A/S Pos.: 15 Date: 04/18/91

Replicate 1 Time: 03:07
Concentration (ug/L): 22.76

Pb ID: 6315.E Seq. No.: 00051 A/S Pos.: 15 Date: 04/18/91

Replicate 1 Time: 03:10
Concentration (ug/L): 43.63

Recovery is 83.5%

Pb ID: 6316.0622 Seq. No.: 00052 A/S Pos.: 16 Date: 04/18/91

Replicate 1 Time: 03:13
Concentration (ug/L): -1.01

Pb ID: 6316.0622 Seq. No.: 00053 A/S Pos.: 16 Date: 04/18/91

Replicate 1 Time: 03:16
Concentration (ug/L): 21.61

Recovery is 90.5%

Pb ID: CB Seq. No.: 00054 A/S Pos.: 37 Date: 04/18/91 CCV 01

Replicate 1 Time: 03:19
Concentration (ug/L): -0.22

Check sample is within range -2.00 - 2.00

Pb ID: 50.0 Seq. No.: 00055 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 03:21
Concentration (ug/L): 43.90

Check sample is out of range 44.9 - 55.2

Pb ID: Blank Seq. No.: 00056 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 03:24
Concentration (ug/L): -0.14

3200128

Auto-zero performed.

~~~~~~

Pb ID: Reslope Seq. No.: 00057 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 03:27
Concentration (ug/L): 44.66

Reslope standard applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0031

~~~~~~

Pb ID: CB Seq. No.: 00058 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 03:30
Concentration (ug/L): 0.17

Check sample is within range -2.00 - 2.00

~~~~~~

Pb ID: 50.0 Seq. No.: 00059 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 03:33
Concentration (ug/L): 49.00

Check sample is within range 44.9 - 55.2

~~~~~~

Pb ID: 6314.0622 Seq. No.: 00060 A/S Pos.: 12 Date: 04/18/91

Replicate 1 Time: 03:36
Concentration (ug/L): 1.23

~~~~~~

Pb ID: 6314.0622 Seq. No.: 00061 A/S Pos.: 12 Date: 04/18/91

Replicate 1 Time: 04:05
Concentration (ug/L): 25.96

Recovery is 99.5%

~~~~~~

Pb ID: 6315.0622 Seq. No.: 00062 A/S Pos.: 13 Date: 04/18/91

Replicate 1 Time: 04:08
Concentration (ug/L): 1.79

~~~~~~

Pb ID: 6315.0622 Seq. No.: 00063 A/S Pos.: 13 Date: 04/18/91

Replicate 1 Time: 04:11
Concentration (ug/L): 27.02

Recovery is 100.3%

~~~~~~

Pb ID: 6315.0 Seq. No.: 00064 A/S Pos.: 14 Date: 04/18/91

Replicate 1 Time: 04:14

Concentration (ug/L): 2.01

Pb ID: 6315.D Seq. No.: 00065 A/S Pos.: 14 Date: 04/18/91

Replicate 1 Time: 04:17
Concentration (ug/L): 27.37

Recovery is 101.4%

Pb ID: 6315.E Seq. No.: 00066 A/S Pos.: 15 Date: 04/18/91

Replicate 1 Time: 04:20
Concentration (ug/L): 26.01

Pb ID: 6315.S Seq. No.: 00067 A/S Pos.: 15 Date: 04/18/91

Replicate 1 Time: 04:23
Concentration (ug/L): 48.36

Recovery is 89.4%

Pb ID: 6316.0622 Seq. No.: 00068 A/S Pos.: 16 Date: 04/18/91

Replicate 1 Time: 04:26
Concentration (ug/L): -0.48

Pb ID: 6316.0622 Seq. No.: 00069 A/S Pos.: 16 Date: 04/18/91

Replicate 1 Time: 04:29
Concentration (ug/L): 22.54

Recovery is 92.0%

Pb ID: CB Seq. No.: 00070 A/S Pos.: 37 Date: 04/18/91 CCV c

Replicate 1 Time: 04:34
Concentration (ug/L): -0.37

Check sample is within range -2.00 - 2.00

Pb ID: 50.0 Seq. No.: 00071 A/S Pos.: 36 Date: 04/18/91

Replicate 1 fine: 05:06
Concentration (ug/L): 35.21

Check sample is out of range 44.8 - 55.2

Pb ID: Blank Seq. No.: 00072 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 05:09
Concentration (ug/L): -0.85

Standard number 1 applied. [100.00]
Correlation coefficient: 1.00000 Slope: 0.0039

Pb ID: CB Seq. No.: 00080 A/S Pos.: 37 Date: 04/18/91

The background signal is changing during BCC measurement.
Replicate 1 <5.00 Time: 05:03
Concentration (ug/L): [illegible]

Check sample [illegible] is -1.00 - 1.00

Pb ID: 60.0 Seq. No.: 00081 A/S Pos.: 38 Date: 04/18/91

Replicate 1 Time: 06:02
Concentration (ug/L): 51.60

Check sample is within range 44.8 - 55.2

Pb ID: 6314.0622 Seq. No.: 00082 A/S Pos.: 12 Date: 04/18/91

The background signal is changing during BCC measurement.
Replicate 1 <5.00 Time: 06:05
Concentration (ug/L): [illegible]

Data is valid
D.S.

Pb ID: 6314.0622 Seq. No.: 00083 A/S Pos.: 12 Date: 04/18/91

Replicate 1 Time: 06:09
Concentration (ug/L): 22.90

Recovery is [illegible] 91.6%

Pb ID: 6315.0622 Seq. No.: 00084 A/S Pos.: 13 Date: 04/18/91

The background signal is changing during BCC measurement.
Replicate 1 <5.00 Time: 06:11
Concentration (ug/L): [illegible]

Pb ID: 6315.0622 Seq. No.: 00085 A/S Pos.: 13 Date: 04/18/91

The background signal is changing during BCC measurement.
Replicate 1 Time: 06:14
Concentration (ug/L): 20.29

Recovery is 82.7%

Pb ID: 6315.0 Seq. No.: 00086 A/S Pos.: 14 Date: 04/18/91

Replicate 1 <5.00 Time: 06:16
Concentration (ug/L): [illegible]

RPD

Pb ID: 6315.0 Seq. No.: 00087 A/S Pos.: 14 Date: 04/18/91

N/C

Auto-zero performed.

Pb ID: Reslope Seq. No.: 00073 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 05:12
Concentration (ug/L): 49.13

Reslope standard applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0031

Pb ID: CB Seq. No.: 00074 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 05:15
Concentration (ug/L): 0.33

Check sample is within range -2.00 - 2.00

Pb ID: 50.0 Seq. No.: 00075 A/S Pos.: 38 Date: 04/18/91

Replicate 1 Time: 05:18
Concentration (ug/L): 55.77

Check sample is out of range 44.0 - 55.0

Pb ID: Blank Seq. No.: 00076 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 05:38
Concentration (ug/L): 0.50

Auto-zero performed.

Pb ID: Standard 1 Seq. No.: 00077 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 05:41
Concentration (ug/L): 33.12

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0033

Pb ID: Standard 2 Seq. No.: 00078 A/S Pos.: 40 Date: 04/18/91

The background signal is changing during BCC measurement.
Replicate 1 Time: 05:51
Concentration (ug/L): 46.83

Standard number 2 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0035

Pb ID: Standard 3 Seq. No.: 00079 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 05:53
Concentration (ug/L): 107.01

Replicate 1 Time: 06:19
Concentration (ug/L): 24.37

Recovery is 3'.6%

~~~~~~

ID: 6315.S Seq. No.: 00088 A/S Pos.: 15 Date: 04/18/91

Replicate 1 Time: 06:22
Concentration (ug/L): 23.74

REC 118.7

~~~~~~

Pb ID: 6315.S Seq. No.: 00089 A/S Pos.: 15 Date: 04/18/91

Replicate 1 Time: 06:25
Concentration (ug/L): 45.80

Recovery is 89.3%

~~~~~~

Pb ID: 6316.0622 Seq. No.: 00090 A/S Pos.: 16 Date: 04/18/91

Replicate 1 <5.00 Time: 06:28
Concentration (ug/L): ~~-0.09~~

~~~~~~

Pb ID: 6316.0622 Seq. No.: 00091 A/S Pos.: 16 Date: 04/18/91

Replicate 2 Time: 06:31
Concentration (ug/L): 24.05

Recovery is 96.6%

~~~~~~

Pb ID: CB Seq. No.: 00092 A/S Pos.: 37 Date: 04/18/91

Replicate 2 <5.00 Time: 06:34
Concentration (ug/L): ~~-0.08~~

Check sample is within range -2.00 - 2.00

~~~~~~

Pb ID: 50.0 Seq. No.: 00093 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 06:37
Concentration (ug/L): 52.70

Check sample is within range 44.8 - 55.2

~~~~~~

Pb ID: 6317.0622 UG-01 Seq. No.: 00094 A/S Pos.: 17 Date: 04/18/91

Replicate 1 Time: 06:40
Concentration (ug/L): 8.49

~~~~~~

Pb ID: 6317.0622 Seq. No.: 00095 A/S Pos.: 17 Date: 04/18/91

Replicate 1 Time: 06:43

Concentration (ug/L): 32.15

Recovery is 94.6%

Pb ID: 6318.0522 GM 4L Seq. No.: 00096 A/S Pos.: 18 Date: 04/18/91 Lee

<5.00

Replicate 1 Time: 06:46
Concentration (ug/L): ~~-0.91~~

Dil LOW

Pb ID: 6319.0522 Seq. No.: 00097 A/S Pos.: 18 Date: 04/18/91

Replicate 1 Time: 06:49
Concentration (ug/L): 8.79

Recovery is 38.93 35.2%

Pb ID: 63W.0522 FB02 Seq. No.: 00098 A/S Pos.: 19 Date: 04/18/91

<5.00

Replicate 1 Time: 06:52
Concentration (ug/L): ~~0.01~~

Pb ID: 6319.0522 Seq. No.: 00099 A/S Pos.: 19 Date: 04/18/91

Replicate 1 Time: 06:55
Concentration (ug/L): 24.23

Recovery is 96.9%

Pb ID: 6320.0422 Seq. No.: 00100 A/S Pos.: 20 Date: 04/18/91

<5.00

Replicate 1 Time: 06:58
Concentration (ug/L): ~~2.40~~

Pb ID: 6320.0422 Seq. No.: 00101 A/S Pos.: 20 Date: 04/18/91

Replicate 1 Time: 07:01
Concentration (ug/L): 22.00

Recovery is ~~86.3%~~ 88 %

Pb ID: PBW 981 Seq. No.: 00102 A/S Pos.: 21 Date: 04/18/91

<5.00

Reolicate 1 Time: 07:04
Concentration (ug/L): ~~1.20~~

Pb ID: PBW 981 Seq. No.: 00103 A/S Pos.: 21 Date: 04/18/91

Reolicate 1 Tine: 07:07
Concentration (ug/L): 22.61

Recovery is 85.6%

320013.:

Pb ID: CB Seq. No.: 00104 A/S Pos.: 37 Date: 04/18/91

Replicate 1 <5.00 Time: 07:10
Concentration (ug/L): ~~-0.17~~

Check sample is within range -2.00 - 2.00

Pb ID: 50.0 Seq. No.: 00105 A/S Pos.: 35 Date: 04/18/91

Replicate 1 Time: 07:13
Concentration (ug/L): 51.31

Check sample is within range 44.8 - 55.2

Pb ID: 7347.0222 Seq. No.: 00106 A/S Pos.: 22 Date: 04/18/91 9100.754

<5.00

Replicate 1 Time: 07:16
Concentration (ug/L): ~~1.11~~

Pb ID: 7347.0222 Seq. No.: 00107 A/S Pos.: 22 Date: 04/18/91

Replicate 1 Time: 07:19
Concentration (ug/L): 21.93

Recovery is 83.3%

ID: 7347.D Seq. No.: 00108 A/S Pos.: 23 Date: 04/18/91

<5.00

Replicate 1 Time: 07:22
Concentration (ug/L): ~~1.93~~

NC
RPD ~~38.0~~
pm

Pb ID: 7347.D Seq. No.: 00109 A/S Pos.: 23 Date: 04/18/91

Replicate 1 Time: 07:25
Concentration (ug/L): 22.30

Recovery is 82.7%

Pb ID: 7347.S Seq. No.: 00110 A/S Pos.: 24 Date: 04/18/91

Replicate 1 Time: 07:28
Concentration (ug/L): 20.63

REC
97.6

Pb ID: 7347.S Seq. No.: 00111 A/S Pos.: 24 Date: 04/18/91

Replicate 1 Time: 07:31
Carcentration (ug/L): 41.96

Recovery is 85.3%

Pb 13: PBW 998 Seq. No.: 00112 A/S Pos.: 25 Date: 04/18/91

<5.00

Replicate 1 Time: 07:34
Concentration (ug/L): ~~3.91~~

Pb ID: PBW 998 Seq. No.: 00113 A/S Pos.: 25 Date: 04/18/91

Replicate 1 Time: 07:37
Concentration (ug/L): 27.66

Recovery is 95.0%

Pb ID: 7934.0322 Seq. No.: 00114 A/S Pos.: 26 Date: 04/18/91 9100.80

<5.00

Replicate 1 Time: 07:40
Concentration (ug/L): ~~1.68~~

Pb ID: 7934.0322 Seq. No.: 00115 A/S Pos.: 26 Date: 04/18/91

Replicate 1 Time: 07:43
Concentration (ug/L): 23.53

Recovery is 87.4%

Pb ID: CB Seq. No.: 00116 A/S Pos.: 37 Date: 04/18/91

<5.00

Replicate 1 Time: 07:45
Concentration (ug/L): ~~0.16~~

Check sample is within range -2.00 - 2.00

Pb ID: 50.0 Seq. No.: 00117 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 07:48
Concentration (ug/L): 51.37

Check sample is within range 44.8 - 55.2

Pb ID: 7934.0 Seq. No.: 00118 A/S Pos.: 27 Date: 04/18/91

<5.00

Replicate 1 Time: 07:51
Concentration (ug/L): ~~1.23~~

N/C
RPD ~~30.1~~
LOW

Pb ID: 7934.0 Seq. No.: 00119 A/S Pos.: 27 Date: 04/18/91

Replicate 1 Time: 07:54
Concentration (ug/L): 22.46

Recovery is 84.3%

3200132

~~~~~~

Pb   ID: CB   Seq. No.: 00120   A/S Pos.: 37   Date: 04/18/91

Replicate 1 <5.00   Time: 07:57

Concentration (ug/L): ~~-0.07~~

Check sample is within range -2.00 - 2.00

~~~~~~

Pb   ID: 50.0   Seq. No.: 00121   A/S Pos.: 36   Date: 04/18/91

Replicate 1   Time: 08:00

Concentration (ug/L): 51.02

Check sample is within range 44.8 - 55.2

Pb ID 7934.S

Replicate 1 Time: 08:06
Concentration (ug/L): 20.56

REC 94.4%

Pb ID: 7934.S Seq. No.: 00123 A/S Pos.: 28 Date: 04/18/91

Replicate 1 Time: 08:10
Concentration (ug/L): 40.52

Recovery is 79.8%

Pb ID: PBW 986 Seq. No.: 00124 A/S Pos.: 29 Date: 04/18/91

Replicate 1 Time: 08:13
Concentration (ug/L): ~~0.29~~ <5.00

Pb ID: PBW 986 Seq. No.: 00125 A/S Pos.: 29 Date: 04/18/91

Replicate 1 Time: 08:16
Concentration (ug/L): 22.74

Recovery ~~is 89.9%~~ 90.8

Pb ID: 7562.1122 Seq. No.: 00126 A/S Pos.: 30 Date: 04/18/91 9100.77

The signal is too large for the range of the electronics.
Replicate 1 Time: 08:19
Concentration (ug/L): --------

ICP ~~audit~~ EDR

Pb ID: 7562.1122 Seq. No.: 00127 A/S Pos.: 30 Date: 04/18/91

The signal is too large for the range of the electronics.
Replicate 1 Time: 08:32
Concentration (ug/L): --------

Recovery is 71.3%

Pb ID: 7572.1122 Seq. No.: 00128 A/S Pos.: 31 Date: 04/18/91

ICP

The signal is too large for the range of the electronics.
Sample abs. exceeds the range of the calibration function.
Replicate 1 Time: 08:34
Concentration (ug/L): --------

~~~~~~

Pb ID: 7572.1122 Seq. No.: 00129 A/S Pos.: 31 Date: 04/18/91

Replicate 1 Time: 08:37
Concentration (ug/L): -3.96 Corrected Conc (ug/L): -19.8

5.00

9100.77

~~~~~~

Pb ID: 7572.1122 Seq. No.: 00130 A/S Pos.: 31 Date: 04/18/91

Replicate 1 Time: 08:40
Concentration (ug/L): 3.34 Corrected Conc (ug/L): 16.7

Recovery is 29.2%

~~~~~~

Pb ID: CB Seq. No.: 00131 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 08:43
Concentration (ug/L): -0.12

Check sample is within range -2.00 - 2.00

~~~~~~

Pb ID: 50.0 Seq. No.: 00132 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 08:46
Concentration (ug/L): 53.69

Check sample is within range 44.8 - 55.2

~~~~~~

Pb ID: 7573.1122 Seq. No.: 00133 A/S Pos.: 32 Date: 04/18/91

The signal is too large for the range of the elettronics.
Replicate 1 Time: 08:49
Concentration (ug/L): --------

ICP

~~~~~~

Pb ID: 7573.1122 Seq. No.: 00134 A/S Pas.: 32 Date: 04/18/91

The signal is too large for the range of the electronics.
Repliccte 1 Tine: 08:52
Concentration (ug/L): --------

Recovery is 9.5%

~~~~~~

Pb ID: CB Seq. No.: 00135 A/S Pos.: 37 Cate: 04/18/91

Replicate 1 Time: 08:55
Concentration (ug/L): 0.31

Check sample is within range -2.00 - 2.00
~~~~~~

Pb ID: 50.0 Seq. No.: 00136 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 08:58
Concentration (ug/L): 56.12

Check sample is out of range 44.8 - 55.2

Pb ID: 50.0 Seq. No.: 00138 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 09:01
Concentration (ug/L): 55.06

Pb ID: Blank Seq. No.: 00139 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 09:08
Concentration (ug/L): -0.05

Autc-zero performed.

Pb ID: Reslope Seq. No.: 00140 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Tine: 09:11
Concentration (ug/L !: 54.07

Reslope standard applied. [50.00]
Correlation coefficient: 1.00090 Slope: 0.0038

Pb ID: CB Seq. No.: 00141 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 09:17
Concentration (ug/L): -0.24

Check sample is within range -2.00 - 2.00

Pb ID: 50.0 Seq. No.: 00142 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 09:20
Concentration (ug/L): 50.64

Check sample is within range 44.74 - 55.28

Pb ID: 6318.06 Seq. No.: 00144 A/S Pos.: 34 Date: 04/18/91

Replicate 1 Time: 10:48
Concentration (ug/L): 0.12 Corrected Conc (ug/L): 1.2

Pb ID: 6318.06 Seq. No.: 00145 A/S Pos.: 34 Date: 04/18/91

Replicate 1 Time: 10:51
Concentration (ug/L): 19.77 Corrected Conc (ug/L): 197.7

Recovery is 79.6%

~~~~~~

Pb ID: Blank Seq. No.: 00146 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 10:54
Concentration (ug/L): -0.32

Auto-zero performed.

~~~~~~

Pb ID: Reslope Seq. No.: 00147 A/S Pos.: 36 Date: 04/18/91

The background signal is changing during SOC measurement.
Replicate 1 Time: 10:57
Concentrction (ug/L ?: 51.60

Reslope standard applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0338

,2200135

1 → 10

Replicate 1 Time: 11:04
Concentration (ug/L): ~~1.10~~ 25.00 Corrected Conc (ug/L): ~~11.0~~ 250.0

Replicate 1 Time: 11:07
Concentration (ug/L): 20.10 Corrected Conc (ug/L): 201.0

Recovery is 76.0%

~~~~~~

Pb ID: CB Seq. No.: 00150 A/S Pos.: 37 Date: 04/19/91

Replicate 1 25.00 Time: 11:11
Concentration (ug/L): 0.57

Check sample is within range -2.00 - 2.00

~~~~~~

Pb ID: 50.0 Seq. No.: 00151 A/S Pos.: 36 Date: 04/19/91

The background signal is changing during BOC measurement.
Replicate 1 Time: 11:14
Concentration (ug/L): 50.33

Check sample is within range 44.74 - 55.29

Report Of Analytical Results
April 18, 1991

Data File: 0418ASS3.DAT
Data Collected: 04/18/91 At: 03:41:08 By: METALS

	Se ug/L	
ICV	17.30	
CB	0.86	
50.0	34.29	
ICV	18.25	
CB	1.10	
50.0	41.28	
ICV	18.19	
CB	0.64	
50.0	48.80	
PB 1002	0.11	
7932.0222	-0.20	
7933.0222	-0.41	
CB	-0.40	
50.0	50.10	
PB 958	0.27	
6310.0622	0.34	
6311.0622	0.72	
6312.0622	0.38	
6313.0622	-0.41	
CB	-0.25	
50.0	51.09	
6314.0622	-0.04	
6315.0622	-0.04	
6315.062210	0.45	
6315.062220	8.81	
6316.0622	0.27	
CB	-0.13	
50.0	50.87	
6317.0622	0.43	UG-01
6318.0622	----	
6319.0522	-0.04	FB02
6320.0422	0.20	
PB 998	0.37	
CB	0.48	
50.0	51.30	
7934.0322	0.08	
7934.032210	0.10	
7934.032220	6.57	
PB 986	0.10	
7387.01 22	0.23	
CB	-0.22	
50.0	53.59	
7388.0122	0.51	
CB	0.24	
50.0	52.32	
7389.0122	0.35	
7390.0122	0.25	
7390.012210	-0.02	
7390.012220	7.37	
CB	0.11	
50.0	50.80	
7391.0122	-0.04	
7392.0122	0.35	

Entered JK 4-18-91

1200136

	Se ug/L	
CB	0.00	
50.0	50.16	
6318.0622	-0.58	-GMLV
CB	0.04	
50.0	53.81	

==========

Analyst: A.K. Supervisor: RGV 4-18-91

==========

Element File: SE_SW846.GEL Element: Se Wavelength: 196.0
Date: 04/18/91 Time: 03:41 Slit: 2.0
Data File: 0418ASS3.DAT ID/Wt File: 0418ASS3.IDW Lamp Current: 0
Technique: HGA Calib. Type: Nonlinear Energy: 56

Se ID: Blank Seq. No.: 00001 A/S Pos.: 37 Date: 04/18/91

Replicate 1 lime: 03:41
Blank Corrected Pk Area (A-s): 0.002

Auto-zero performed.

Se ID: Standard 1 Seq. No.: 00002 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 03:44
Blank Corrected Pk Area (A-s): 0.063

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0025

Se ID: Standard 2 Seq. No.: 00003 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 03:46
Concentration (ug/L): 44.04

Standard number 2 apolied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0029

Se ID: Standard 3 Seq. No.: 00004 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 03:49
Concentration (ug/L): 150.32

S-shaped calibration curve detected. 2-coef. equation used.
Standard number 3 applied. [100.00]
Correlation coefficient: 0.99138 Slope: 0.0025

Se ID: Blank Seq. No.: 00005 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 04:08
Concentration (ug/L): -0.57

Auto-zero performed.

Se ID: Standard 1 Seq. No.: 00006 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 04:10
Concentration (ug/L): 23.44

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slop.: 0.0023

~~~~~~

Se ID: Standard 2 Seq. No.: 00007 A/S Pos.: 40 Date: 04/18/91

Reolicate 1 lime: 04:13
Concentration (ug/L): 45.91

Standard number 2 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0025

~~~~~~

Se ID: Standard 3 Seq. No.: 00008 A/S Pos.: 40 Date: 04/18/91

Replicate 1 lime: 04:16
Concentration (ug/L): 127.73

S-shaped calibration curve detected. 2-coef. equation used.
Standard number 3 applied. [100.001
Correlation coefficient: 0.99880 Slope: 0.0023

~~~~~~

Se ID: Blank Seq. No.: 00009 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 05:10
Concentration (ug/L 1: 0.09

Auto-zero performed.

~~~~~~

Se ID: Standard 1 Seq. No.: 00010 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 05:13
Concentration (ug/L ?: 28.19

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0025

~~~~~~

Se ID: Standard 2 Seq. No.: 00011 A/S Pos.: 40 Date: 04/18/91

Replicate 1 lime: 05:15
Concentration (ug/L): 46.99

Standard number 2 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0027

~~~~~~

Se ID: Standard 3 Seq. No.: 00012 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 05:18
Concentration (ug/L): 107.49

Standard number 3 applied. [100.00]
Correlation coefficient: 1.00000 Slope: 0.0030

~~~~~~

Se ID: ICV Seq. No.: 00013 A/S Pos.: 1 Date: 04/18/91

Replicate 1 Time: 05:25
Concentration (ug/L): 17.30
~~~~~~

Se ID: CB Seq. No.: 00014 A/S Pos.: 2 Date: 04/18/91

Replicate 1 Time: 05:28
Concentration (ug/L): 0.86

Se ID: 50.0 Seq. No.: 0C015 A/S Pos.: 3 Date: 04/18/91

Replicate 1 Time: 05:31
Concentration (ug/L): 34.29

Se ID: Blank Seq. No.: 00016 A/S Pos.: 37 Date: 04/18/91

The signal is too large for the range of the electronics.
Replicate 1 Time: 05:41
Concentration (ug/L): --------

Se ID: Standard 1 Seq. No.: 00017 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 05:49
Concentration (ug/L): 15.81

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0017

Se ID: Blank Seq. No.: 00018 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 05:55
Concentration (ug/L): -0.73

Auto-zero performed.

Se ID: Standard 1 Seq. No.: 00019 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 05:58
Concentration (ug/L): 26.54

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0018

Se ID: Standard 2 Seq. No.: 00020 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:01
Concentration (ug/L): 46.86

Standard number 2 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0019

Se ID: Standard 3 Seq. No.: 00021 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:03
Concentration (ug/L): 104.91

3200138

Standard number 3 applied. [100.00]
Correlation coefficient: 1.00000 Slope: 0.0020

~~~~~~

Se ID: ICV Seq. No.: 00022 A/S Pos.: 1 Date: 04/18/91

Replicate 1 Time: 06:06
Concentration (ug/L): 18.25

~~~~~~

Se ID: CB Seq. No.: 00023 A/S Pos.: 2 Date: 04/18/91

~~Replicate 1~~ Time: 06:09
Concentration (ug/L): ~~1.10~~ 25.00

~~~~~~

Se ID: 50.0 Seq. No.: 00024 A/S Pos.: 3 Date: 04/18/91

Replicate 1 Time: 06:12
Concentration (ug/L): 41.28

~~~~~~

Se ID: Blank Seq. No.: 00025 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 06:18
Concentration (ug/L): -0.31

Auto-zero performed.

~~~~~~

Se ID: Reslope Seq. No.: 00026 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 06:21
Concentration (ug/L): 39.95

Measured resloped conc. differs (>20%) from entered value.

~~~~~~

Se IC: Blank Seq. No.: 00027 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 06:33
Concentration (ug/L): 1.03

Auto-zero performed.

~~~~~~

Se ID: Standard 1 Seq. No.: 00028 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:36
concentration (ug/L): 45.64

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0030

~~~~~~

Se ID: Standard 2 Seq. No.: 00029 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:39
Concentration (ug/L): 45.57

Standard number 2 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0034

Se ID: Standard 3 Seq. No.: 00030 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:42
concentration (ug/L): 109.45

Standard number 3 applied. [100.00]
Correlation coefficient: 1.00000 Slope: 0.0037

Se ID: Blank Seq. No.: 00031 A/S Pos.: 37 Date: 04/18/91

START

Replicate 1 Time: 06:45
Concentration (ug/L): 0.03

Auto-zero performed.

Se ID: Standard 1 Seq. No.: 00032 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:48
Concentration (ug/L): 24.28

Standard number 1 applied. [25.00]
Correlation coefficient: 1.00000 Slope: 0.0030

Se ID: Standard 2 Seq. No.: 00033 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:51
Concentration (ug/L): 46.36

Standard number 2 applied. [50.00]
Correlation coefficient: 1.00000 Slope: 0.0032

[illegible] Seq. No.: 00034 A/S Pos.: 40 Date: 04/18/91

Replicate 1 Time: 06:53
Concentration (ug/L): 108.25

Standard number 3 applied. [100.00]
Correlation coefficient: 1.00000 Slope: 0.0035

Se ID: ICV Seq. No.: 00035 A/S Pot.: 1 Date: 04/18/91

Replicate 1 Time: 06:56
Concentration (ug/L): 18.19

Se ID: CB Seq. No.: 00036 A/S Pos.: 2 Date: 04/18/91

Replicate 1 Time: 06:59
Concentration (ug/L): ~~0.04~~ <5.00

3200139

Se ID: 50.0 Seq. No.: 00037 A/S Pos.: 3 Date: 04/18/91

Replicate 1 Time: 07:02
Concentration (ug/L): 48.80

Se ID: PB 1002 Seq. No.: 00039 A/S Pos.: 4 Date: 04/18/91

Replicate 1 Time: 07:10
Concentration (ug/L): ~~0.11~~ <5.00

Se ID: PB 1002 Seq. No.: 00040 A/S Pos.: 4 Date: 04/18/91

Replicate 1 Time: 07:13
Concentration (ug/L): 27.52

Recovery is ~~100.6%~~ 110

Se ID: 7932.0222 Seq. No.: 00041 A/S Pos.: 5 Date: 04/18/91

Replicate 1 <5.00 Time: 07:16 9100.808
Concentration (ug/L): ~~-0.20~~

Se ID: 7932.0222 Seq. No.: 00042 A/S Pos.: 5 Date: 04/18/91

Replicate 1 Time: 07:19
Concentration (ug/L): 24.60

Recovery is ~~99.2%~~ 98.4

Se ID: 7933.0222 Seq. No.: 00043 A/S Pos.: 6 Date: 04/18/91

Replicate 1 Time: 07:22
Concentration (ug/L): ~~-0.41~~ <5.00

Se IO: 7933.0222 Seq. No.: 00044 A/S Pos.: 6 Date: 04/18/91

Replicate 1 lime: 07:25
Concentration (ug/L): 25.45

Recovery is ~~103.4%~~ 101.8

Seq. No.: 00045 A/S Pos.: 37 Date: 04/18/91

Replicate 1 <5.00 lime: 07:28
Concentration (ug/L): ~~0.40~~

Check sample is within range -2.00 - 2.00

Se ID: 50.0 Seq. No.: 00046 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 07:31
Concentration (ug/L): 50.10

Check sample is within range 44.8 - 55.2

Se ID: PB 958 Seq. No.: 00047 A/S Pos.: 7 Date: 04/18/91

Replicate 1 Time: 07:34
Concentration (ug/L): ~~0.27~~ <5.00

Se ID: PB 958 Seq. No.: 00048 A/S Pos.: 7 Date: 04/18/91

Replicate 1 Time: 07:37
Concentration (ug/L): 26.81

Recovery is ~~100.2%~~ 107.2

Se ID: 6310.0622 Seq. No.: 00049 A/S Pos.: 8 Date: 04/18/91

The ~~background signal is changing~~ during BOC measurement.
Replicate 1 <5.00 Time: 07:40
<Concentration (ug/L): ~~0.34~~

9100699

Se ID: 6310.0622 Seq. No.: 00050 A/S Pos.: 8 Date: 04/18/91

Replicate 1 Time: 07:43
Concentration (ug/L): 18.86

Recovery is ~~74.1%~~ 75.4

Se ID: 6311.0622 Seq. No.: 00051 A/S Pos.: 9 Date: 04/18/91

Replicate 1 Time: 07:46
Concentration (ug/L): ~~0.72~~ <5.00

Se ID: 6311.0622 Seq. No.: 00052 A/S Pos.: 9 Date: 04/18/91

Replicate 1 Time: 07:49
Concentration (ug/L): 15.64

Recovery is ~~59.7%~~ 62.6

Se ID: 6312.0622 Seq. No.: 00053 A/S Pos.: 10 Date: 04/18/91

Replicate 1 <5.00 Time: 07:51
Concentration (ug/L): ~~0.38~~

Se ID: 6312.0622 Seq. No.: 00054 A/S Pos.: 10 Date: 04/18/91

Replicate 1 Time: 07:54
Concentration (ug/L): 17.96

Recovery is ~~70.3%~~ 71.8

~~~~~~

Se ID: 6313.0622 ✓ Seq. No.: 00055 A/S Pos.: 11 Date: 04/18/91

Replicate 1 Time: 07:57
Concentration (ug/L): ~~-0.44~~ <5.00

~~~~~~

Se ID: 6313.0622 Seq. No.: 00056 A/S Pos.: 11 Date: 04/18/31

Replicate 1 Time: 08:00
Concentration (ug/L): 21.70

Recovery is ~~88.4%~~ 86.8

~~~~~~

Se ID: CB Seq. No.: 00057 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 08:03
Concentration (ug/L): ~~0.25~~ <5.00

Check sample is within range -2.00 - 2.00

~~~~~~

Se ID: 50.0 Seq. No.: 00058 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 08:06
Concentration (ug/L): 51.09

Check sample is within range 44.8 - 55.2

~~~~~~

Se ID: 6314.0622 ✓ Seq. No.: 00059 A/S Pos.: 12 Date: 04/18/91

Replicate 1 Time: 08:09
Concentration (ug/L): ~~0.04~~ <5.00

~~~~~~

Se ID: 6314.0622 Seq. No.: 00060 A/S Pos.: 12 Date: 04/18/91

Replicate 1 Time: 08:12
Concentration (ug/L): 25.99

Recovery is 104.1%

~~~~~~

Se ID: 6315.0622 ✓ Seq. No.: 00061 A/S Pos.: 13 Date: 04/18/91

Replicate 1 Time: 08:15
Concentration (ug/L): ~~0.04~~ <5.00

~~~~~~

Se ID: 6315.0622 Seq. No.: 00062 A/S Pos.: 13 Date: 04/18/91

Replicate 1 Time: 08:18
Concentration (ug/L): 27.79

Recovery is 111.3%

Se ID: 6315.062210 Seq. No.: 00063 A/S Pos.: 14 Date: 04/18/91

Replicate 1 <5.00 Time: 08:20
Concentration (ug/L): ~~0.45~~

Se ID: 6315.062210 Seq. No.: 00064 A/S Pos.: 14 Date: 04/18/91

Replicate 1 Time: 08:23
concentration (ug/L): 26.51

Recovery is 104.3% 106

RPD N/C

Se ID: 6315.062220 Seq. No.: 00065 A/S Pos.: 15 Date: 04/18/91 88.1%

Replicate 1 Time: 08:26
Concentration (ug/L): 8.81

REC ~~44.1~~ 44.1 all

Se ID: 6315.062220 Seq. No.: 00066 A/S Pos.: 15 Date: 04/18/91

Replicate 1 Time: 08:29
Concentration (ug/L): 35.74

Recovery is 107.7%

Se ID: 6316.0622 Seq. No.: 00067 A/S Pos.: 16 Date: 04/18/91

Replicate 1 <5.00 lime: 08:32
Concentration (ug/L): ~~0.27~~

Se ID: 6316.0622 Seq. No.: 00068 A/S Pos.: 16 Date: 04/18/91

Replicate 1 lima: 08:35
Concentration (ug/L): 27.86

Recovery is 110.4% 111.4

Se ID: CB Seq. No.: 00069 A/S Pos.: 37 Date: 04/18/91

~~Replicate 1~~ lime: 08:38
Concentration (ug/L): ~~-0.18~~ <5.00

~~Check sample is within~~ range -2.00 - 2.00

Se ID: 50.0 Seq. No.: 00070 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 08:41
Concentration (ug/L): 50.87

~~Check sample is within~~ range 44.8 - 55.2

3200141

Se ID: 6317.0622 Seq. No.: 00071 A/S Pos.: 17 Date: 04/18/91

Replicate 1 Time: 08:44
Concentration (ug/L): 0.43
<5.00

Se ID: 6317.0622 Seq. No.: 00072 A/S Pos.: 17 Date: 04/18/91

Replicate 1 Time: 08:47
Concentration (ug/L): 19.78

Recovery is ~~77.4%~~ 79.1

Se ID: 6318.0622 Seq. No.: 00073 A/S Pos.: 18 Date: 04/18/91

The signal is too large for the range of the electronics.
Replicate 1 Time: 08:50
Concentration (ug/L): --------

See dil 1->10

Se ID: 6318.0622 Seq. No.: 00074 A/S Pos.: 18 Date: 04/18/91

The signal is too large for the range of the electronics.
Replicate 1 Time: 08:53
Concentration (ug/L): --------

Recovery is 97.7%

Se ID: 6319.0529, Seq. No.: 00075 A/S Pos.: 19 Date: 04/18/91

Replicate 1 Time: 08:55
<5.00
Concentration(ug/L): ~~-0.04~~

Se ID: 6319.0522 Seq. No.: 00076 A/S Pos.: 19 Date: 04/18/91

Replicate 1 Time: 08:59
Concentration (ug/L): 27.49

Recovery is 110.1%

Se ID: 6320.0422 Seq. No.: 00077 A/S Pos.: 20 Date: 04/18/91

Replicate 1 Time: 09:01
<5.00
Concentration (ug/L): ~~0.20~~

Se ID: 6320.0422 Seq. No.: 00078 A/S Pos.: 20 Date: 04/18/91

Replicate 1 Time: 09:05
Concentration (ug/L): 30.47

Recovery is 121.1%

Se ID: PB 998 Seq. No.: 00079 A/S Pos.: 21 Date: 04/18/91

Replicate 1 Time: 09:07
Concentration (ug/L): ~~0.37~~ <5.00

Se ID: PB 998 Seq. No.: 00080 A/S Pos.: 21 Date: 04/18/91

Replicate 1 Time: 09:10
Concentration (ug/L): 31.20

Recovery is ~~123.3%~~ 124.8

Seq. No.: 00081 A/S Pos.: 37 Date: 04/18/91

Se ID: CB Seq.

Time: 09:13

Replicate
Concentration (ug/L): ~~0.46~~
Concentration (ug/L): ~~0.46~~
n range -2.00 - 2.00
Check sample is within range -2.00

Se ID: 50.0 Seq. No.: 00082 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 09:16
Concentration (ug/L): 51.30

Check sample is within range 44.8 - 55.2

Se ID: 7934.0322 Seq. No.: 00083 A/S Pos.: 22 Date: 04/18/91

The background signal is changing during BOC measurement.
Replicate 1 Time: 09:19
Concentration (ug/L): ~~0.08~~ <5.00

9100.809

Se ID: 7934.0322 Seq. No.: 00084 A/S Pos.: 22 Date: 04/18/91

The background signal is changing during BOC measurement.
Replicate 1 Time: 09:22
Concentration (ug/L): 20.89

Recovery is ~~83.3%~~ 83.6

Se ID: 7934.032210 Seq. No.: 00085 A/S Pos.: 23 Date: 04/18/91

The background signal is changing during BOC measurement.
Replicate 1 Time: 09:25
Concentration (ug/L): ~~0.10~~ <5.00

RPD N/C

Se ID: 7934.032210 Seq. No.: 00086 A/S Pos.: 23 Date: 04/18/91

The background signal is changing during BOC measurement.
Replicate 1 Time: 09:28
concentration (ug/L): 18.89

Recovery is 75.2%

~~~~~~

Se ID: 7934.032220 Seq. No.: 00087 A/S Pos.: 24 Date: 04/18/91

The background signal is changing during BOC measurement.
Replicate 1 Time: 09:31
Concentration (ug/L): 6.57

REC 65.7

~~~~~~

Se ID: 7934.032220 Seq. No.: 00088 A/S Pos.: 24 Date: 04/18/91

The background signal is changing during BOC measurement.
Replicate 1 Time: 09:34
Concentration (ug/L): 27.39

Recovery is 83.3%

~~~~~~

Se ID: PB 986 Seq. No.: 00089 A/S Pos.: 25 Date: 04/18/91

Replicate 1 <5.00 Time: 09:37
Concentration (ug/L): ~~0.10~~

~~~~~~

Se ID: PB 986 Seq. No.: 00090 A/S Pos.: 25 Date: 04/18/91

Replicate 1 Time: 09:40
Concentration (ug/L): 27.06

Recovery is ~~107.9%~~ 108.2

~~~~~~

Se ID: 7387.0122 Seq. No.: 00091 A/S Pos.: 26 Date: 04/18/91

Replicate 1 Time: 09:43
Concentration (ug/L): ~~0.23~~ <5.00

9100.761

~~~~~~

Se ID: 7387.0122 Seq. No.: 00092 A/S Pos.: 26 Date: 04/18/91

Replicate 1 Time: 09:46
Concentration (ug/L): 20.09

Recovery is ~~79.5%~~ 80.4

~~~~~~

Se ID: CB Seq. No.: 00093 A/S Pos.: 37 Date: 04/18/91

Replicate 1 <5.00 Time: 09:49
Concentration (ug/L): ~~-0.22~~

Check sample is within range -2.00 - 2.00

~~~~~~

S ID: 50.0 Seq. No.: 00094 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 09:52
Concentration (ug/L): 53.59

Check sample is within range 44.8 - 55.2

Se ID: 7388.0122 Seq. No.: 00095 A/S Pos.: 27 Date: 04/18/91

Replicate 1 Time: 09:55
Concentration (ug/L): ~~0.51~~ <5.00

Se ID: 7388.0122 Seq. No.: 00096 A/S Pos.: 27 Date: 04/18/91

Replicate 1 Time: 09:58
Concentration (ug/L): 21.31

Recovery is ~~83.2%~~ 85.2

Se ID: CB Seq. No.: 00097 A/S Pos.: 37 Date: 04/18/91

Replicate 1 <5.00 Time: 10:00
Concentration (ug/L): ~~0.24~~

Check sample is within range -2.00 - 2.00

Se ID: 50.0 Seq. No.: 00098 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 10:03
Concentration (ug/L): 52.32

Check sample is within range 44.8 - 55.2

Se ID: 7389.0122 Seq. No.: 00100 A/S Pos.: 28 Date: 04/18/91

Replicate 1 Time: 10:12
Concentration (ug/L): ~~0.35~~ <5.00

Se ID: 7389.0122 Seq. No.: 00101 A/S Pos.: 28 Date: 04/18/91

Replicate 1 Time: 10:15
Concentration (ug/L): 21.39

Recovery is ~~84.2%~~ 85.6

Se ID: 7390.0122 Seq. No.: 00102 A/S Pos.: 29 Date: 04/18/91

Replicate 1 <5.00 Tim: 10:18
Concentration (ug/L): ~~0.25~~

Se ID: 7390.0122 Seq. No.: 00103 A/S Pos.: 29 Date: 04/18/91

Replicate 1 Time: 10:21
Concentration (ug/L): 22.32

Recovery is ~~89.3%~~ 89.3

Se ID: 7390.012210 Seq. No.: 00104 A/S Pos.: 30 Date: 04/18/91

Replicate 1 <5.00 Time: 10:23
Concentration (ug/L): ~~-0.02~~

RPD NC

Se ID: 7393.012210 Seq. No.: 00105 A/S Pos.: 30 Date: 04/18/91

Replicate 1 Time: 10:26
Concentration (ug/L): 22.86

Recovery is 91.5%

Se ID: 7390.012220 Seq. No.: 00106 A/S Pos.: 31 Date: 04/18/91

Replicate 1 Time: 10:29
Concentration (ug/L): 7.37

REC 73.7%

Se ID: 7390.012220 Seq. No.: 00107 A/S Pos.: 31 Date: 04/18/91

Replicate 1 Time: 10:32
Concentration (ug/L): 29.00

Recovery is 86.5%

Se ID: CB Seq. No.: 00108 A/S Pos.: 37 Date: 04/18/91

Replicate 1 <5.00 Time: 10:35
Concentration (ug/L): ~~0.11~~

Check sample is within range -2.00 - 2.00

Se ID: 50.0 Seq. No.: 00109 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 10:38
Concentration (ug/L): 50.80

Check sample is within range 44.74 - 55.28

Se ID: 7391.0122 Seq. No.: 00110 A/S Pos.: 32 Date: 04/18/91

Replicate 1 <5.00 Time: 10:41
Concentration (ug/L): -0.04

Se ID: 7391.0122 Seq. No.: 00111 A/S Pos.: 32 Date: 04/18/91

Replicate 1 Time: 10:44
Concentration (ug/L): 21.01

Recovery is 84.2%

Se ID: 7392.0122 Seq. No.: 00112 A/S Pos.: 33 Date: 04/18/91

Replicate 1 <5.00 Time: 10:47
Concentration (ug/L): ~~2.35~~

Se ID: 7392.0122 Seq. No.: 00113 A/S Pos.: 33 Date: 04/18/91

Reolicate 1 Time: 10:50
Concentration (ug/L): 20.20

Recovery is ~~79.4%~~ 80.8

Se ID: CB Sea. No.: 00114 A/S Pos.: 37 Date: 04/18/91

Replicate 1 <5.00 Time: 10:53
Concentration (ug/L): ~~0.00~~

Check sample is within range -2.00 - 2.00

Se ID: 50.0 Seq. No.: 00115 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 10:55
Concentration (ug/L): 50.16

Check sample is within range 44.74 - 55.28

3200144

Se ID: 8318.0622 • Seq. No.: '00116 A/S Pos.: 18 Date: 04/18/91

Replicate 1 (25.00) fime: 12:48
Concentration (ug/L): -0.58 Corrected Conc (ug/L): -5.8

Se ID: 6318.0622 Seq. No.: 00117 A/S Pos.: 18 Date: 04/18/91

Replicate 1 Time: 12:51
Concentration (ug/L): -0.24 Corrected Conc (ug/L): -2.4

Recovery is 1.4%

Se ID: CB Seq. No.: 00119 A/S Pos.: 37 Date: 04/18/91

Replicate 1 Time: 12:55
Concentration (ug/L): 0.04

Check sample is within range -2.00 - 2.00

Se ID: 50.0 Seq. No.: 00120 A/S Pos.: 36 Date: 04/18/91

Replicate 1 Time: 12:58
Concentration (ug/L): 53.81

Check sample is within range 44.74 - 55.28

Project No.
Book No.
TITLE C

111

From Page No.
Test Performed: TI
Date Received: 4-7-91
Work Performed By: Berry

AE 50.0 100 IDL=2.00

Job No.	ID No.	I	25.0	REC	DF	DMT	UNIT	CONC	
	ICV	52.6					µg/L	52.6	
	ICB	0.8						<5.00	
	50.0	52.1						52.1	
9100.519	4633.0222	1.2	24.9	99.6				<5.00	
	PBW927	0.0	25.4	102					
9100.611	5599.0122	0.5	17.2	68.8					
	D	0.2	17.7	70.8					RPD=N/C
	S	30.5	51.0	82.0				30.5	REC=61.0
	PBW 986	0.8	27.1	108				<5.00	
9100.776	7580.0122	0.6	18.5	74.0					
	7581	0.6	21.1	84.4					
	PBW 990	0.2	29.1	116					
9100.795	7762.0122	0.5	18.1	72.4					
	CB	0.1	29.1	116				<5.00	
	50.0	51.8	78.8	108				51.8	
	7762 D	-0.1	18.1	72.4				<5.00	RPD N/C
	S	29.2	51.2	88.0				29.2	REC=102
	7763.0122	-0.0	21.4	85.6				<5.00	
	PBW 958	-0.0	28.5	114					
9100.899	6310.0622	0.2	23.4	93.6					
	6311	-0.5	27.4	110					
	6312	0.5	26.9	108					
	6313	-0.5	19.7	78.8					
	6314	-0.0	27.5	110					
	6315	-0.1	27.6	110					
	CB	~~52.8~~						<5.00	
	50.0	53.0						530	
	6316.0622	0.6	23.6	94.4				<5.00	
	6317	0.2	20.1	80.4					
	6318	0.2	15.6	62.4					
	6319.0522	-0.1	22.2	88.8					
	6320.0422	-0.1	24.3	97.2					

To Page No.

Witnessed & Understood by me. | Date | Invented by | Date
Recorded by

3200145

From Page No.—

Test Performed: TL
Date Received: 4/18/91
Work Performed By: BV

Job No.	ID No.	Secure Storage Area Received From	1	25.0	REC	D.F.	AMT	UNIT	CONC.	
9100.699	6315. R		0.0	21.3	~~81.3~~ 85.2 BV		UG/L	UG/L	<5.00	RAD: N/C
	6315. S		53.2	71.4	~~71.4~~ BV	12.8			53.2	REC=106
	CD		0.1						<5.00	
	50.0		54.0						54.0	

To Page No.

Witnessed & Understood by me, CN | Date | Invented by | Date

Recorded by D.S.

	-0.104	
	0.000	AZ
	0.208	
	50.0	S1
	93.2	C
	100.0	S2
4001	52.6	
4002	0.8	
4003	52.1	
4004	1.9	
4005	0.1	
4006	0.6	
4007	-0.2	
4008	37.4	
4009	0.2	
4010	0.4	
4011	0.2	
4012	-0.4	
4013	0.1	
4014	-0.2	
4015	55.8	
4015	55.6	
	50.0	RS
4015	51.0	
4004	1.2	
4005	0.0	
4006	0.5	
4007	0.2	
4008	30.5	
4009	0.8	
4010	0.6	
4011	0.6	
4012	0.2	
4013	0.5	
4014	0.4	
4015	51.8	
4016	-0.1	
4017	29.2	
4018	-0.0	
4019	0.2	
4020	-0.0	
4021	0.2	
4022	0.5	
4023	0.5	
4024	-0.0	
4025	-0.1	
4026	0.5	
4027	53.0	

4000	27.2
4004	24.9
4005	25.4
4006	17.2
4007	17.7
4008	51.0
4009	27.1
4010	18.5
4011	21.1
4012	29.1
4013	18.1
4014	29.1
4015	78.8
4016	18.1
4017	51.2
4018	21.4
4019	28.5
4020	23.4
4021	27.4
4022	26.9
4023	19.7
4024	27.5
4025	27.6

4028	0.6
4029	0.2
4030	0.2
4031	-0.1
4032	-0.1
4033	0.0
4034	53.2
4035	0.1
4036	54.0
4035	29.7
4000	27.7
4035	21.9
4028	23.6
4029	20.1
4030	15.6
4031	22.2
4032	24.3
4033	21.3
4034	71.4

UC01
GM66
FE02

Book No. _____ TITLE _____

Page No.
Performed: Hg
Reviewed: 4/1/91 + 4/2/91
Performed By: SAL

Sample No.	ID No.	Secure Storage Area Received From	Read	Conc.	DF	Unit	Fin. Conc.	
	Blank		7					
	0.2		13					r=0.9935
	0.4		16		OUT OF	ROL		
	0.8		22					
	2.0		38		see	for stds.	used	x=
	4.0		70		for	run.		
	8.0		108					
	ICV		104	4.94		µg/L	4.94	ok
	ICB		2	<0.20			<0.20	
	LCSS		166	7.93		mg/kg	15.86	ok
								Avg fin. conc.
	6336.01		20	0.88		µg/L	0.88	0.88
	6336.01 Rep		20	0.88			0.88	
	6336.01+1.0		30	1.37			1.37	49% rec.
99	6310.06		1	<0.20			<0.20	
	6311.06		2	<0.20			<0.20	
	6312.06		3	<0.20			<0.20	
	6313.06		2	<0.20			<0.20	
	CCV		23	1.03		µg/L	1.03	
	CCB		2	<0.20			<0.20	
99	6314.06		2	<0.20		µg/L	<0.20	
	6315.06		2	<0.20			<0.20	
	6316.06		5	<0.20			<0.20	
	6317.06		1	<0.20			<0.20	
	6318.06		3.	<0.20			<0.20	

To Page No. 43

Understood by me. | Date | Invented by | Date 1 Apr. 1991 + 2 Apr. 1991

Recorded by SA Lewandowski

Project No._____

TITLE_____ Book No._____

From Page No. 43 42

Test Performed: Hg

Date Received: 4/1/91 + 4/2/91

Work Performed By: SAL

Job No.	ID No.	Secure Storage Area Received From	Read	Conc.	DF	Amt.	Unit	Fin. Conc.	
9100.699	6319.05		3	<0.20		100mL	µg/L	<0.20	
⊥	6320.04	46	2	<0.20		⊥	⊥	<0.20	
9100.696	6304.10		2	<0.20				<0.20	
⊥	6305.10		1	<0.20				<0.20	
	CCV		23	1.03			µg/L	1.03	
	CCB		1	<0.20			⊥	<0.20	
9100.696	6306.10	48	1	<0.20		100mL	µg/L	<0.20	
⊥	6307.10		13	0.55		⊥	⊥	0.55	Avg. fin. co
9100.672	6187.03		58	2.72		0.21	mg/kg	1.30	
⊥	⊥		36	1.66		0.29	⊥	0.57	1.05
			60	2.81		0.22		1.28	
	6188.03	31	21	0.93		0.30		0.31	
	⊥		28	1.27		0.22		0.57	0.38
	⊥		13	0.55		0.21		0.26	
	CCV	32	21	0.93			µg/L	0.93	
	CCB		1	<0.20			⊥	<0.20	
9100.672	6189.03	34	32	1.46		0.26	mg/kg	0.56	
⊥	⊥		10	0.40		0.21	⊥	0.19	0.36
			21	0.93		0.27		0.34	
	6190.03	35	35	1.61		0.22		0.73	
	⊥		49	2.28		0.22		1.04	0.88
			54	2.52		0.29		0.87	
	6191.03	36	43	1.99		0.24		0.83	
	⊥		41	1.90		0.25		0.76	0.92
			52	2.43		0.21	⊥	1.16	

Witnessed & Understood by me, [signature]

3200147

Date

Invented by

Recorded by [signature]

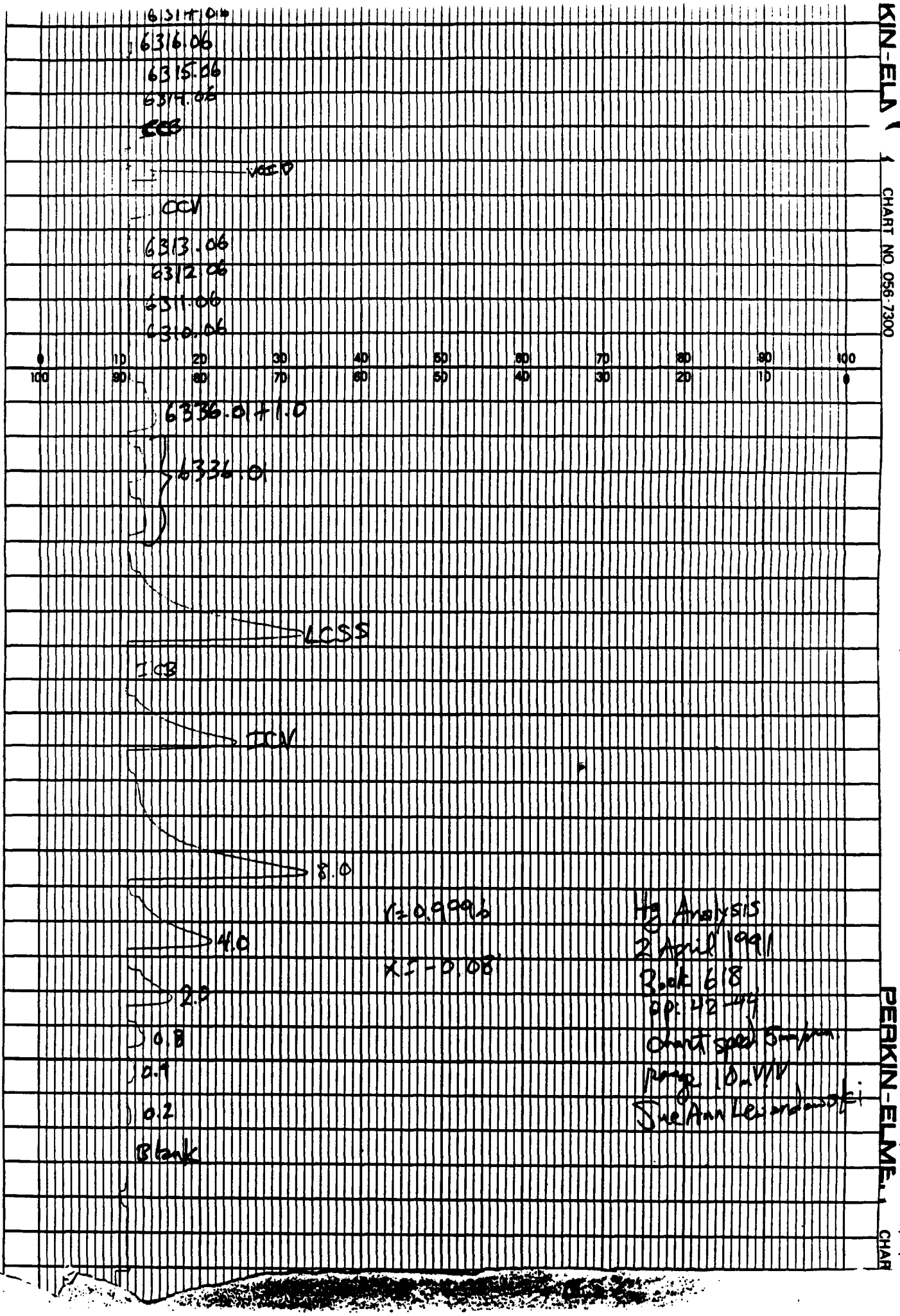
Date 1 Apr. 1991

From Page No. 43
Test Period: 49 4/1/91 + 4/2/91
Results:
Performed by: SAL

Job No.	ID No.	Secure Storage Area Received From	Read	Conc.	DF	Amt.	Unit	Fin. Conc.	
	CCV	37	22	0.98			µg/L	0.98	
	CCB		1	<0.20				<0.20	
									Avg. fin. conc.
9100.641	5941.01		6	0.21		0.23	mg/kg	<0.10	
		38	6	0.21		0.26		<0.10	<0.10
			6	0.21		0.26		<0.10	
	5941.01 +1.0		24	1.08		0.21		1.08	108% rec. didn't hold 30 mL KMnO4 (>%)
9100.675	6201.010900	"	2	<0.20		100 mL	µg/L	<0.20	
1100.682	6229.010500	"	3	<0.20				<0.20	
	CCV		24	1.08			µg/L	1.08	
	CCB		1	<0.20				<0.20	
	Blank		1						
	0.2		6						r = 0.9996
	0.4		11						
	0.8		19						
	2.0		44						x = -0.081
	4.0		81						
	8.0		169						

To Page No. 45

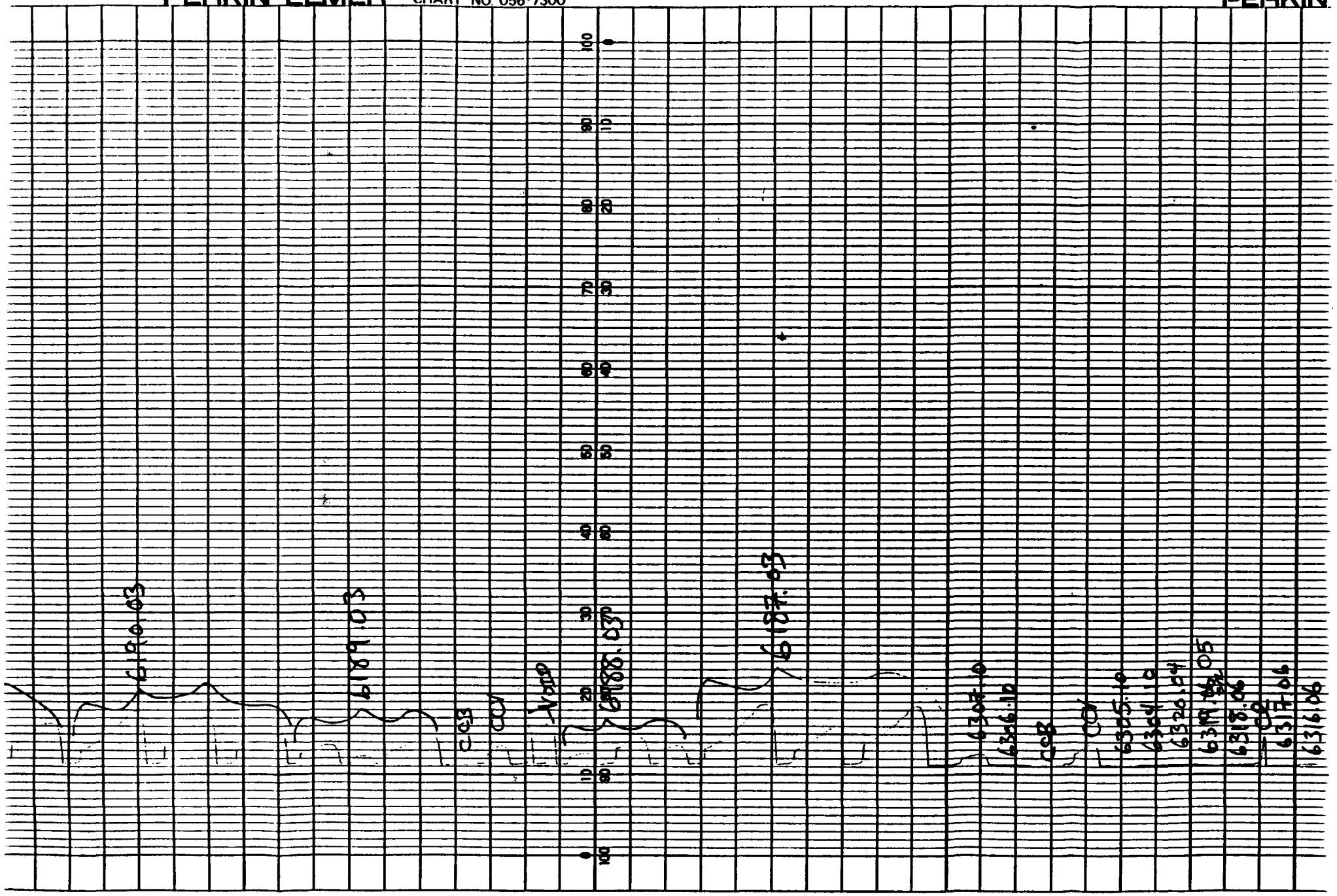
Read & Understood by me. RW | Date | Invented by | Date 1 Apr. 1991
Recorded by SA Lewandowski | +2 Apr. 1991

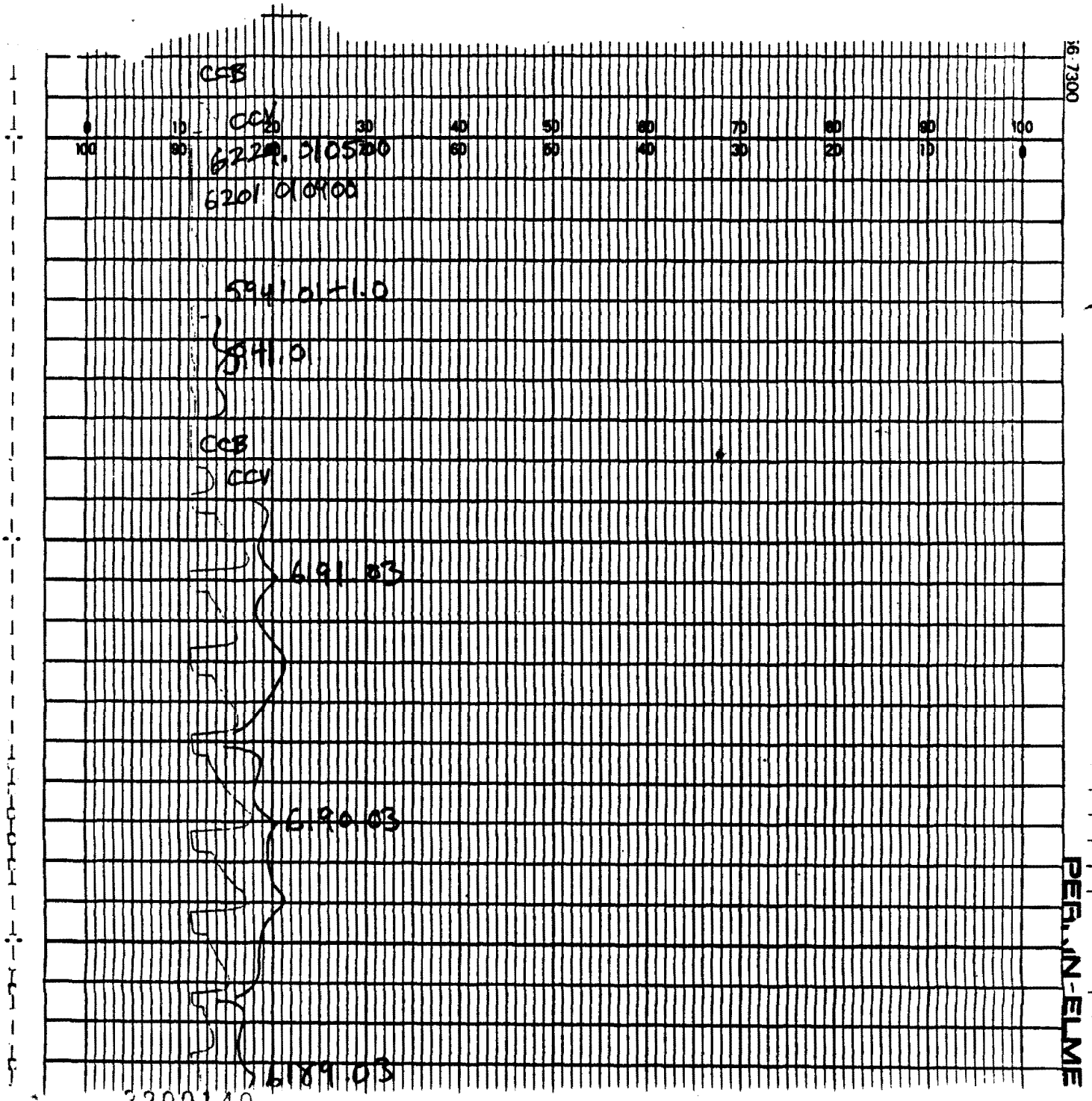

6317.06
6316.06
6315.06
6314.06
CCB
VOID
CCV
6313.06
6312.06
6311.06
6310.06
10 20 30 40 50 60 70 80 90 100
100 90 80 70 60 50 40 30 20 10 0
6336.0 +1.0
6336.0
LCSS
ICB
ICV
8.0
4.0
2.0
0.8
0.4
0.2
Blank
r=0.9996
x̄=-0.08
Hg Analysis
2 April 1991
Book 618
pp. 42-44
Chart speed 5 mm/min
Range 10 mV
Sue Ann Levandowski
KIN-ELA
CHART NO 056-7300
PERKIN-ELMER
CHAR

3200148

PERKIN-ELMER CHART NO. 056-7300

PERKIN




CSB
CCV
0 10 20 30 40 50 60 70 80 90 100
100 90 80 70 60 50 40 30 20 10 0
6220.0105200
6201 010900
5941.0 ±1.0
5941.0
CCB
CCV
6191.03
6190.03
6189.03
16-7300
PERKIN-ELME

3200149

Test Performed: METALS DIGESTION

Date: 3/29/91

Work Performed by: BV

Job Number	ID Number	Secure Storage Area Received from	Custody Seal Intact-Y/N	pH (1-14)	Color	Clarity	Texture	Artifacts	Extraction Code	Digestion Code (ICP)	Digestion Code (HGA)	Initial Weight or Volume	Final Weight or Volume	Color (Final)	Clarity (Final)
9100.646	6234.01		Y	5.8	CL	CL				08		100 ml	100 ml		
	6234.01	REP		5.5	CL	CL									
	6234.01	SPIKE		5.5	CL	CL									
9100.701	6334.04			2	CL	C				21					
	6335.04				CL	C									
9100.702	6336.01				BR	CL									
9100.698	6308.01				BR	CL									
	6309.01				CL	CL									
9100.699	6310.06				CL	C					22				
	6311.06														
	6312.06														
	6313.06														
	6314.06														
	6315.06														
	6315.06	REP													
	6315.06	SPIKE													
9100.699	6316.06														
	6317.06				CL	CL									
	6318.06				CL	C									
	6319.06 ~~05~~														
	6319.05	REP													
	6319.05	SPIKE													
	6320.04										22				
	6323.02				CL	CL									
	6324.02														
	6325.02														
	6326.02														
	6327.02														

Comments:

Approved by: RAW Date: 4-2-91

recycled paper

ecology and environment

Test Performed: METALS DIGESTION

Date: 3/29/91

Work Performed by: BV

Job Number	ID Number	Secure Storage Area Received from	Custody Seal Intact-Y/N	pH (1-14)	Color	Clarity	Texture	Artifacts	Extraction Code	Digestion Code (ICP)	Digestion Code (HGA)	Initial Weight or Volume	Final Weight or Volume	Color (Final)	Clarity (Fi
9106.149	6328.02			2	CL	CL				21		100 ml	100 ml		
↓	6329.02			2	~~BL~~ BV	CL				21		↓	↓		
	BK957									21					
	BK958										22	↓	↓		

Comments:

Approved by: RW Date: 4-2-91

recycled paper

ecology and environment

711100 sheet 1 of 2

3200150

QUALITY CONTROL FOR PRECISION
RESULTS OF ANALYSIS OF REPLICATE
ANALYSES OF WATER SAMPLES

9100.825

(mg/L)

Parameter	E & E Laboratory No. 91-	Original Analysis	Replicate Analysis	Relative Percent Difference (RPD)
Chloride	8081	8.8	10	13
Sulfate	8081	19	20	6.1
Sulfide	8082	ND	ND	NC

ND = NOT DETECTED

NC = NOT CALCULABLE

NOTE: ALTHOUGH RESULTS ARE REPORTED AS ROUNDED VALUES, RPD's ARE CALCULATED DIRECTLY FROM THE RAW DATA.

QUALITY CONTROL FOR ACCURACY: PERCENT RECOVERY
FOR SPIKED WATER SAMPLES

9100.825

(mg/L)

Parameter	E & E Laboratory No. 91-	Original Value	Amount Added	Amount Determined	Percent Recovery
Sulfate	8081	19	5.0	24	101
	Ref. Std.	ND	5.0	5.0	100
Cyanide					
	Batch QC	ND	0.183	0.200	109
	Batch QC	N D '	0.183	0.182	100

ND = NOT DETECTED

** = RECOVERY NOT DETERMINED BECAUSE SAMPLE AMOUNT IS FOUR OR MORE TIMES GREATER THAN SPIKE AMOUNT.

NOTE: ALTHOUGH RESULTS *ARE* REPORTED AS ROUNDED VALUES, PERCENT RECOVERIES ARE CALCULATED DIRECTLY FROM THE RAW DATA.

Method EPA 325.3
Instrument
Stock 0.0242 Hg(NO3)2
Prepared 4-15-91 Book, Page
Standard. 4-15-91 Book, Page 303 128
Curve Date Expires
Other: 0.0250 N NaCl
894050

Test Performed: Chloride
Date Analyzed: 4-23-91 4-24-91
Work Performed by: F. Nagy C. Conlen

Job Number	ID Number	Secure Storage Area Received from	pH	Volume of Sample (ml)	V_{T_1}	V_{T_2}	ΔV_T	ΔV_T - Blk	Res.
	Blank			50	0.00	0.10	0.10		
	Std	58.65		50/50	0.10	5.10	5.00	4.90	[illegible]
	Ref.	58.65		50/50	5.10	10.4	5.3	5.2	914
00.832	8110.01	7	B7	50	10.4	14.1	3.7	3.6	63.
	8111.01	7		20/50	14.1	16.9	2.8	2.7	118
	8112.01	7		2.0/50	16.9	19.8	2.9	2.8	123
00.825	8081.03	7	A26	50	19.8	20.4	0.6	0.5	8.7
00.864	8329.01		H2		20.4	2			
	8330.01						Skip		
	8330.01	Rep.							
	8329.01	Rep.	H2						
00.825	8081.03	Rep.	A26	50	20.40	21.1		0.6	10.5
00.832	8110.01	Rep	B7	50	21.1	24.7	3.6	3.5	61.5
								rpd:	17.
								rpd =	2.8

TNB 4-29-91

To Page No.

Witnessed & Understood by me,	Date	Invented by	Date	
		Recorded by		TM

om Page No.

Method: EPA 335.2
Instrument: LACHAT-AE
Stock: c.917 mg/ml CN
Prepared: 3-4-91 Book Page: 462,110
Std. 3-4-91 Book Page: 303,1
Curve Date: Expires:
Other: Ref Stock c.954 mg/ml
Source:

74080
Test Performed: CN⁻
Date Analyzed: 4-27-91
Work Performed by: TODD SEARE

Job Number	ID	Secure Storage Area Received from	pH	KI	Sample Vol	
	Blank				500	
	Refstd				5/500	For results see Lachat report 91050107.RS
100.825	8080.04	A-26	4	N	425	
	8081.05		>10	N	435	
	8082.04		>10	N	425	
100.835	8130.05	C-54	>10	N	250	
	8130.05	Spike	>10	N	5/212	
	8131.11	C 54	>10	N	250	
	8131.11	Spike	>10	N	5/250	
100.836	8146.03	C-57	-	-	6.43g	

To Page No.

Witnessed & Understood by me,	Date	Invented by	Date
3200152		Recorded by	

Chem AE Postrun Report for Tray 91050107.RS
d : Cyanide 10-204-00-1-1 *

This report prepared on 05/02/91 08:09 am
This tray was run on 05/01/91 06:31 pm
Operator: Tray Template: Default

— Calibration now in effect (91050101) was done on 05/01/91 05:08 pm

— Page 1 of report for tray 91050107.RS

Cup#	Sample ID	1 Cyanide mg/L	mg/Kg	
101	ICV 4/26 SW	0.099	103.7%	book 572 page 164
102	ICB	-0.004 mg/L		
103	PB	-0.003 mg/L		
104	8525	-0.002 mg/L		
105	8526	-0.004 mg/L		
[illegible]	8526 SPK	0.101	110%	
[illegible]	8487	-0.003 mg/L		
[illegible]	8488	-0.002 mg/L		
109	8490	-0.002 mg/L		
110	8491	-0.001 mg/L		
111	!E	-0.003 mg/L		
112	CCB	-0.004 mg/L		
113	ICV 4/27 TS	-0.003	0.0%	book 572 page 165
114	ICB	-0.004 mg/L		
115	PB	-0.003 mg/L		
116	8080	-0.003 mg/L		
117	8081	-0.003 mg/L		
118	8082	-0.003 mg/L		
119	8130	-0.006 mg/L		
120	8130 SPK	0.200	109%	
121	8131	-0.005 mg/L		
122	8131 SPK	0.102	100%	
123	8146	-0.009 mg/Kg		
124	!E	0.108	109%	
125	CCB	-0.004		
126	ICV 4/29 PN	0.094	94.5%	book 572 page 166
127	ICB	-0.004		
128	PB	-0.003		

) Concentration was significantly greater than the high standard's concentration.
Concentration was significantly less than the lowest non-zero standard's concentration.
the sample was diluted, its diluted concentration is less than the lowest non-zero standard's.

Report for tray 91050107.RS continued on next page . . .

Cup#	Sample ID	1 Cyanide ug/L ug/Kg	
129	8635	-0.002	mg/L
130	8636	-0.002	mg/L
131	8637	-0.003	mg/L
132	8638	-0.003	mg/L
133	139	-0.002	mg/L
134	8639 DUP	-0.003	mg/L
135	8680	-0.003	mg/L
136	8681	-0.003	mg/L
137	8682	-0.002	mg/L
138	8683	-0.003	mg/L
139	!E	0.120	120%
140	CCB	-0.004	mg/L
141	8683 SPK	0.062	67%
142	8489	-0.003	mg/L
143	8492	-0.002	mg/L
144	8705	-0.002	mg/L
145	8706	-0.003	mg/L
146	8632	-0.003	mg/L
147	8633	-0.002	mg/L
148	8634	-0.003	mg/L
[illegible]	8759	525.842	amenable
[illegible]	8760	2386.826)	
151	8634 SPK	-0.042(	0% rec.
152	!E	0.119	119%
153	CCB	-0.004	
154	8759 PN	1810.723	Total
155	8760	4402.666)	
156	ICV 4/30 PN	-0.624(	0.0%
157	ICB	-0.675(	
158	PB	-0.630(	
159	8776	-0.754(	
160	8777	-0.889(	
161	8778	-0.366(	
162	8761	-0.171(	
163	8762	-0.217(	
164	8763	-0.006	
165	8764	-0.003	
166	8765	0.015	
167	8766	0.004	
168	8767	0.095	
169	8778 spk	0.128	140%
170	!E	0.120	120%

book 572
page 166

Book 572
page 168
P. Najm

) Concentration was significantly greater than the high standard's concentration.
(Concentration was significantly less than the lowest non-zero standard's concentration.
/ If the sample was diluted, its diluted concentration is less than the lowest non-zero standard's.

Report for tray 91050107.RS continued on next page . . .

Cup8	Sample ID	1 Cyanide mg/L mg/Kg
171	CCB	-0.003

) Concentration was significantly greater than the hiph standard's concentration.
(Concentration was significantly less than the lowest non-zero standard's concentration,
(If the sample was diluted, its diluted concentration is less than the lowest non-zero standard's.

-------- End of Report for Tray 91050107.RS --------

178 Boon NO. _____ TITLE _____

rom Page No. _____

Method Lachat 10-116-10-2-E
Instrument Lachat AE
Stock 1000 ppm Na2SO4
Prepared _____ Book Page _____
Stand. _____ Book Page _____
Curve Date _____ Expires _____
Other: _____

974050
Test Performed: Sulfate
Date Analyzed: 4-30-91
Work Performed by: SN Iverson

Job Number	ID Number	Secure Storage Area Received from	#	De-	ppm	Results ppm
	Blk		101	1	1.561	<2.0
	chk std	(5)	102	1	5.029	100.5%
	8081.03		103	1	18.98	19.0
	8223.01		101	100	21.58	2160
	8224.01		102	100	25.05	2500
	8225.01		103	100	24.60	2460
	8226.01		104	100	22.99	2300
	8227.01		105	100	22.68	2270
	8228.01		106	100	23.57	2360
	8229.01		107	100	23.78	2380
	8230.01		108	100	22.51	2250
	9220.01		109	100	4.75	475
	Blk		113	1	-0.152	<2.0
	chk std	(5)	114	1	5.380	108%
	8081.03 dup		115	1	20.207	20.2 Rpd 6.1%
	8081.03 spk		116	1	24.046	101% Recovery

For recorded results see Lachat Sulfate book calibration tray 91043003
Sample trays 91043002
91043005

Invented by | Date | To Page No

Witnessed & Understood by me, | Date | Invented by / Recorded by

3200154

Recorded by

..

[illegible] AE Postrun Report for Tray 91043002.RS
[illegible] : Sulfate 10-116-10-2-C#

This report prepared on 04/30/91 01:49 pm
This tray was run on 04/30/91 12:24 pm
Operator: Tray Template: Default

— Calibration now in effect (91043003) was done on 04/30/91 12:06 pm

— Page 1 of report for tray 91043002.RS

Cup#	Sample ID	1 Sulfate mg/L
101	BLK	1.561(
102	!D	5.029
103	8081.03	18.978
104	8223.01	178.141)
105	8224.01	149.427)
[illegible]	8225.01	150.643)
[illegible]	8226.01	150.679)
108	8227.01	150.553)
109	8228.01	151.250)
110	8229.01	151.769)
111	8230.01	150.709)
112	9220.01	107.184)
113	BLK	-0.152(
114	!D	5.300
115	8081.03 DIP	20.207
116	8081.03 SPK	24.046

repeat at 1/100
see Lachat report # 91093005
(next page)

) Concentration was significantly greater than the high standard's concentration.
(concentration was significantly less than the lowest non-zero standard's concentration.
(If the sample was diluted, its diluted concentration is less than the lowest non-zero standard's.

——— End of Report for Tray 91043002.RS ———

From Page No.,

Method EPA 376.1
Instrument
Stock $Na_2S_2O_3$ (0.025
Prepared 4-4-91 Book, Page
Stand. 4-4-91 Book, Page
Curve Date Expires
Other: N_{S_2} = 0.0241 N

Test Performed: Sulfide
Date Analyzed: 4-15-91
Work Performed by: Todd Skare

Job Number	ID Number	Secure Storage Area Received from	mls Sample	mls I_2	V_{T_1}	V_{T_2}	~~ΔVi~~	Results (mg/L)
	Blank		200	20.0	0.00	19.55	19.55	<1
9102.825	8080.03	A-26	100	20.00	19.55	37.60	18.05	4.92
	8081.04		200	20.00	0.60	20.30	19.70	<1
	8082.03		200	20.0	20.30	39.85	19.55	<1
	8082.03	Rep	200	20.0	16.80	36.80	19.70	<1

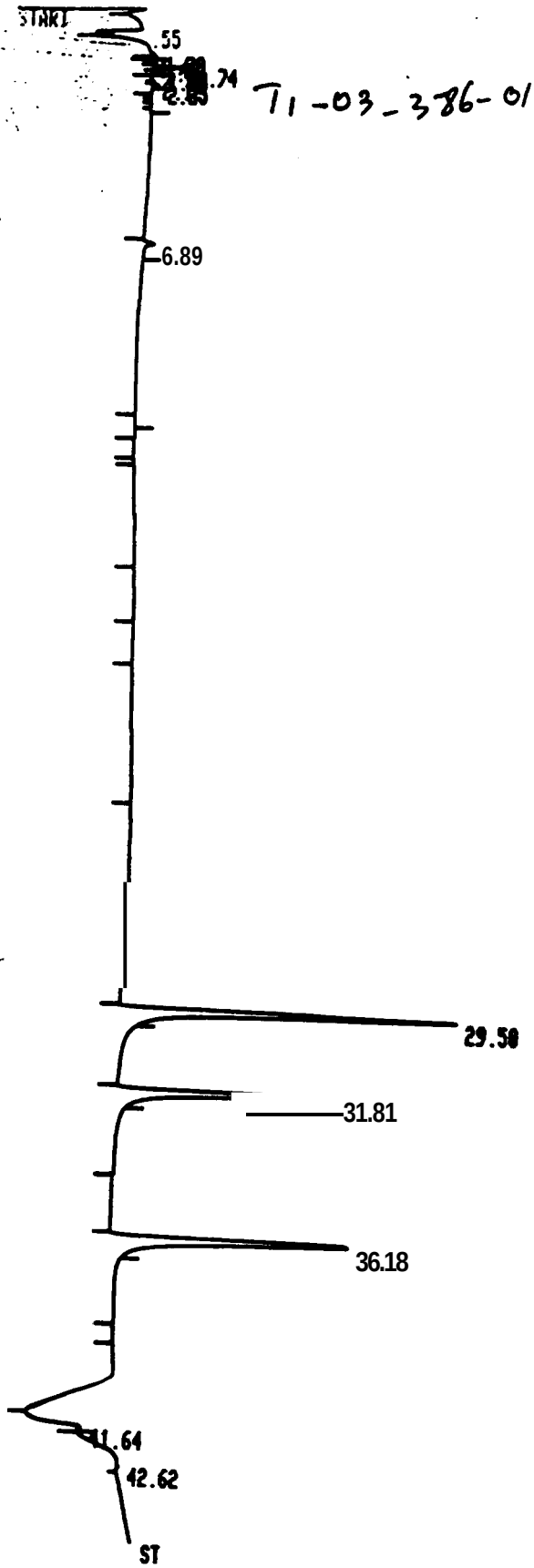
4-15-91

A

To Page No.

Witnessed & Understood by me, Date Invented by Date

2200155



Series: 057-10400-61
Analyst: T. Nguyen
Date: 4/9/91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

KLawlord 4-11-91

4/9/91

LIST: METH e

RUN PRMTRS
ZERO = 20
ATT 2↑ = 4
CHT SP = 0.5
PK WD = 8.04
THRSH = 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR: 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1
OF PUMPS 1

RUN # 98
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 41

APR/10/91 07:41:46

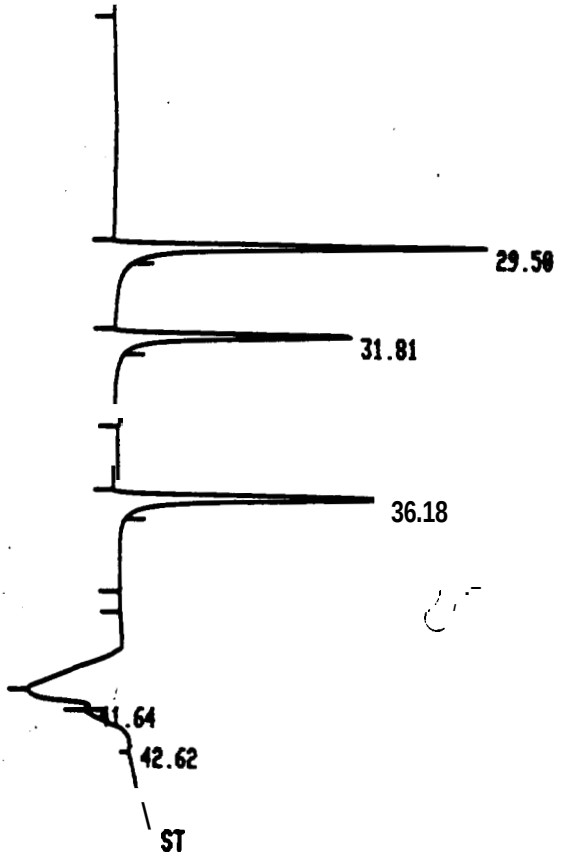
AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.55	183900	BB	0.374	[illegible]

series: 057-10408-01
Analyst: T. Newman
Date: 4/9/91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial —— 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
carrier: Helium
carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Pawlow 4-11-91

4/9/91



RUN # 98 APR/10/91 07:41:46
WORKFILE ID: C
SAMPLE # 41

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.55	183900	BB	8.a	6.518
1.38	214178	PP	0.742	7.591
1.46	2118	PB	0.032	0.075
1.57	8517	BV	0.083	0.302
1.74	34756	VV	0.058	1.232
1.84	6092	VB	0.047	8.216
2.12	1524	PV	0.045	0.054
2.25	5979	VB	0.054	8.212
6.89	23418	PB	0.143	0.830
29.50	738200	PB	0.142	26.160
31.81	501260	PB	0.152	17.766
36.18	651690	PB	0.178	23.098
41.64	6247	PB	8.823	8.221
42.62	443520	BV	0.680	15.720

TOTAL AREA= 2821400
MUL FACTOR= 1.0000E+00

3200156

LIST: METH @

RUN PRNTRS
ZERO = 20
an 2t. = 4
CHT SP = 0.5
PK WD = 0.04
THRSH. = 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR.: 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

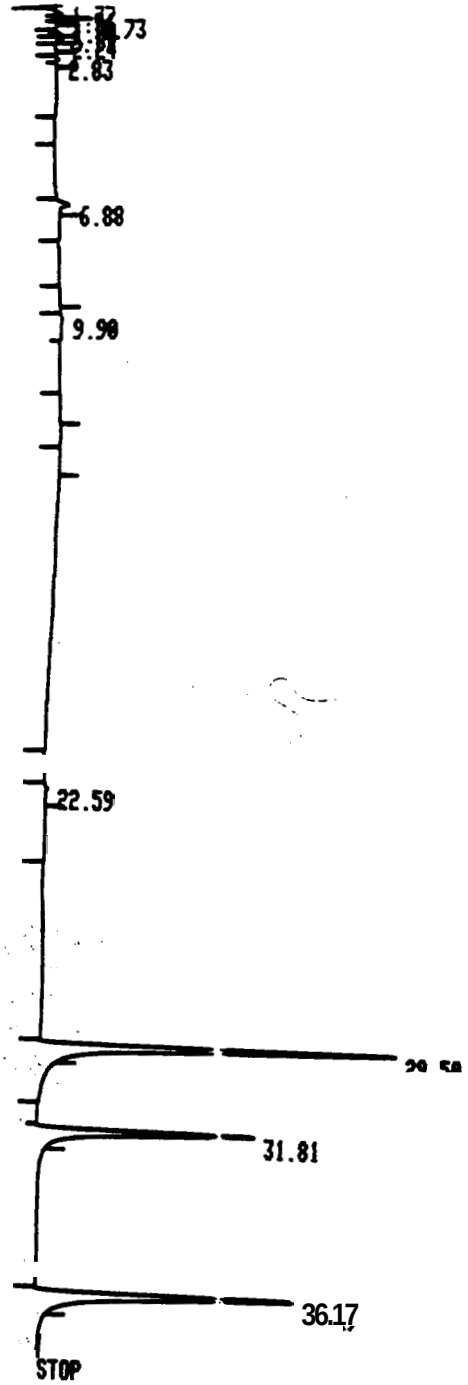
TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 @

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1



series: AS7-10U08 31
Analyst: T. Newman
Date: 4/9/91
157 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/9

RUN # 99 APR/10/9 08:32:07
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 42

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.53	179590	BB	0.333	2.193
1.37	316470	PP	0.521	12.676
1.56	72671	PV	0.166	2.911
1.73	57339	VV	0.083	2.297
1.84	10519	VB	0.059	8.421
2.11	1661	PV	0.838	0.067
2.24	2764	BB	0.039	8.111
2.83	2418	BP	0.072	0.897
6.88	20536	PB	0.138	0.023
9.90	6689	BB	0.183	0.268
22.59	5993	PB	0.181	8.240
29.50	721568	PB	0.143	28.982
31.81	470720	PB	0.153	18.855

LIST: METH e

RUN PRMTRS
ZERO . = 28
ATT 2↑ = 4
CHT SP = 0.5
PK WD = 0.04
THRSH-= 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

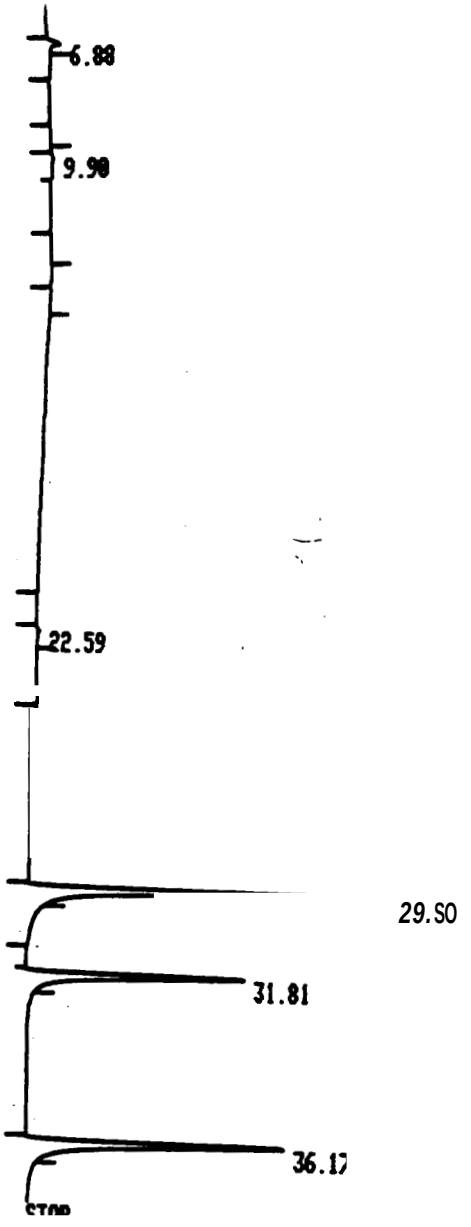
TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES



Series: 057-10400-01
Analyst: T. Nguyen
Date: 4.9.91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 0 ml/minute
4 ul injected

K Pawlowski 4-11-91

4/9/91

RUN # 99 APR/10/91 08:32:07
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 42

AREA%

RT	AREA	TYPE	AR/H	AREA%
0.53	179590	BB	0.33	7.193
1.37	316470	PP	0.52	12.676
1.56	72671	PV	0.166	2.911
1.73	57339	VV	0.083	2.297
1.84	10519	VB	0.959	0.421
2.11	1661	PV	0.838	0.067
2.24	2764	BB	0.839	0.111
2.83	2418	BP	0.072	8.097
6.83	20536	PB	0.130	0.823
9.90	6689	BB	0.183	8.268
22.59	5993	PB	0.181	0.240
29.50	721560	PB	0.143	28.902
31.81	470720	PB	8.153	18.855
36.17	627660	PB	0.173	25.141

TOTAL AREA= 2496600
MUL FACTOR= 1.0000E+00

3200157

LIST: NETH @

RUN PRNTRS
ZERO. = 20
ATT 2t. = 4
CHT SP = 0.5
PK WD = 0.04
THRSH. = 2
AR REJ = 8

RPRT OPTMS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 @

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES [illegible]

7673A SAMPLER:
LOOP ADDRESS: 2

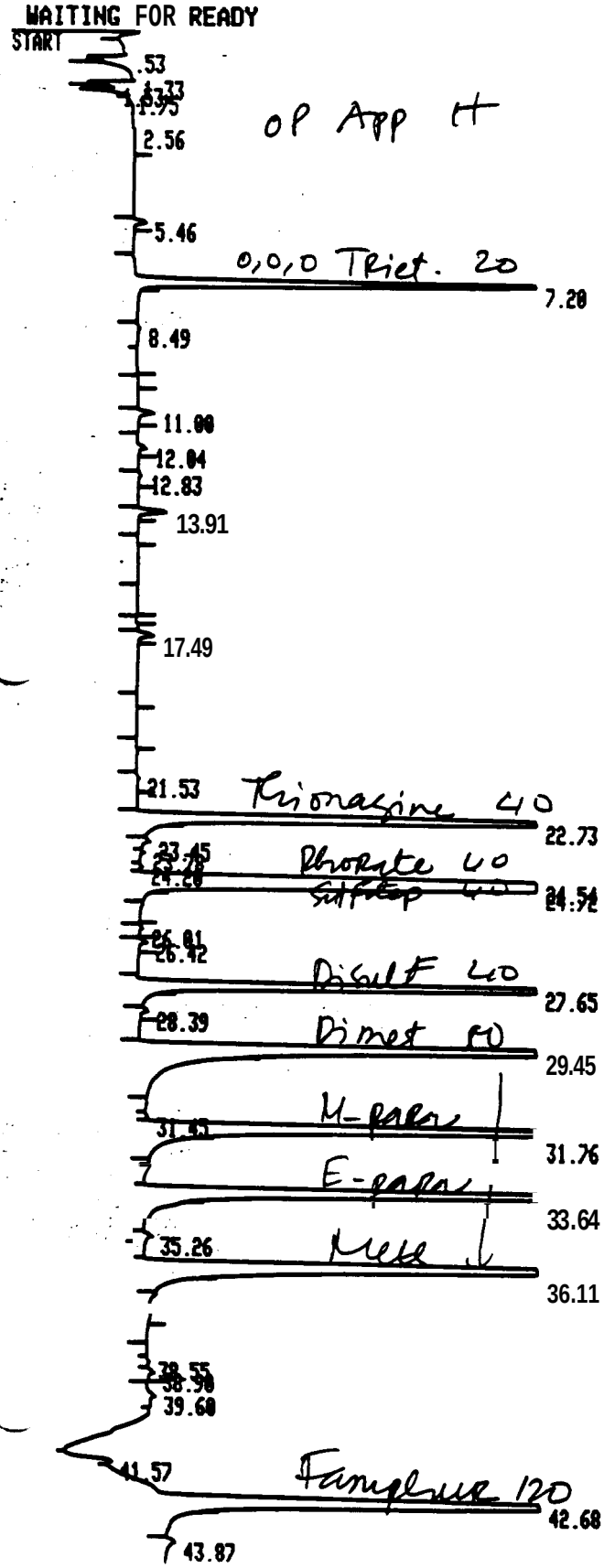
FRONT INJECTOR
INJ/BOTTLE 1 --> e
FIRST BOTTLE 35 --> 3 7 e
LAST BOTTLE 100 --> e
OF SAMPLE WASHES 1 -->
ESCAPE

WAITING FOR READY

Series: 057-10409-31
Analyst: T. Nguyen
Date: 4/9/91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Pawlowski 4-11-91

4/9/91



LIST: METH e

RUN PRMTRS
ZERO = 20
ATT 2t. = 4
CHT SP = 0.5
PK WD = 0.04
THRSH. = 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

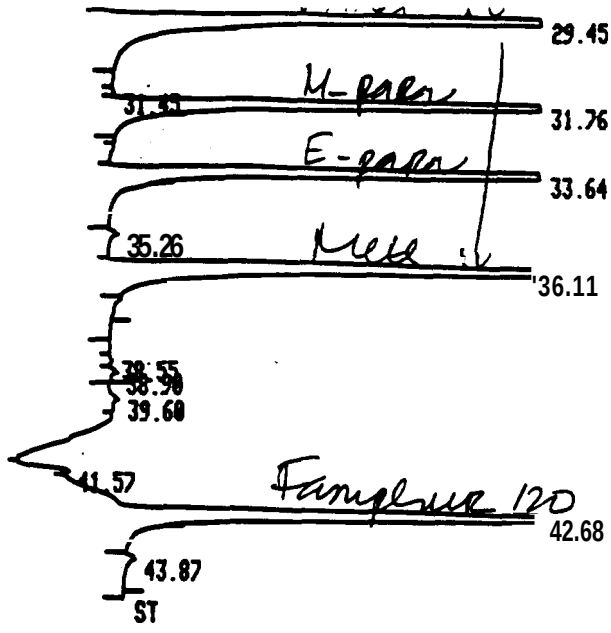
TIME TBL
55.00 SMP

CALIB TBL
EMPTY

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1



Series: 057-10409-01
Analyst: T. Nguyen
Date: 4/9/91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Pawlowski 4-11-91

4/9/91

RUN # 108 APR/10/91 15:49:18
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 37

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.53	133990	BB	0.323	0.309
1.33	318590	BB	8.428	0.734
1.53	22819	PP	0.856	0.053
1.75	67520	PV	8.117	0.156
2.56	549580	VB	1.499	1.266
5.46	20645	BB	0.106	0.048
8.20	1389400	BB	0.116	3.202
8.49	10283	PP	0.225	0.024
11.00	30387	PB	8.125	0.070
12.04	14481	BB	0.122	0.033
12.83	6807	BB	8.126	0.016
13.91	50319	BB	8.115	0.116
17.49	27100	BB	0.116	0.063
21.53	5643	PB	0.183	0.013
22.73	4006300	PB	0.117	9.232
23.45	10810	BP	0.127	0.025
23.78	4319	PP	0.099	0.010
24.20	5809	PP	0.113	0.013
24.54	2343900	PV	0.115	5.481
24.72	3890000	VB	0.123	8.964
26.01	7539	BB	0.115	0.017
26.42	16498	BB	0.125	0.038
V.65	3634100	PB	0.123	8.375
28.39	11005	BB	9.105	0.025
29.45	5867900	PB	0.120	13.522
31.45	3989	PP	0.118	0.009
31.76	4634500	PB	0.127	10.680
33.64	5391400	PB	0.131	12.424
35.26	25891	BP	0.204	0.060
36.11	5117600	PB	0.140	11.793
38.55	5139	PV	8.145	8.012
38.90	13377	VB	0.139	0.031
39.68	200590	BV	0.500	0.462
41.57	28271	PV	0.084	0.065
42.68	5503200	VB	0.139	12.682
43.87	25630	BB	0.189	0.059

TOTAL AREA= 4.3395E+07
MUL FACTOR= 1.0000E+00

3200158

LIST: METH e

RUN PRNTRS
ZERO = 20
ITT 2t. = 4
CHT SP = 0.5
PK YD = 9.04
THRSH = 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

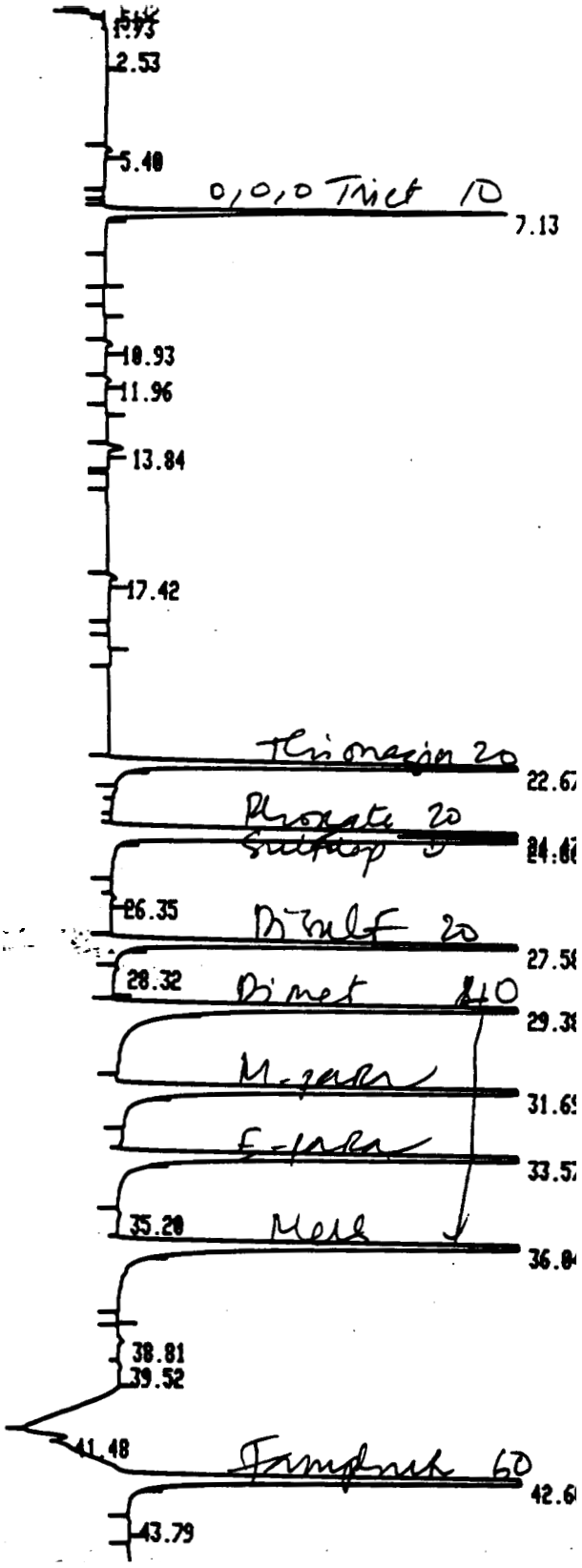
TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
[redacted] OF SAMPLE WASHES 1



Series: 057-10400-01
Analyst: T. Nguyen
Date: 4/9/91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/91

LIST: METH e

RUN PRRTRS
ZERO.. = 20
an 2t. = 4
CHT SP = 0.5
PK WD = 0.04
THRSH. = 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT RODE NO
5. EXTEND RT NO
6. RPRT UNC PKS No

TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 ,e

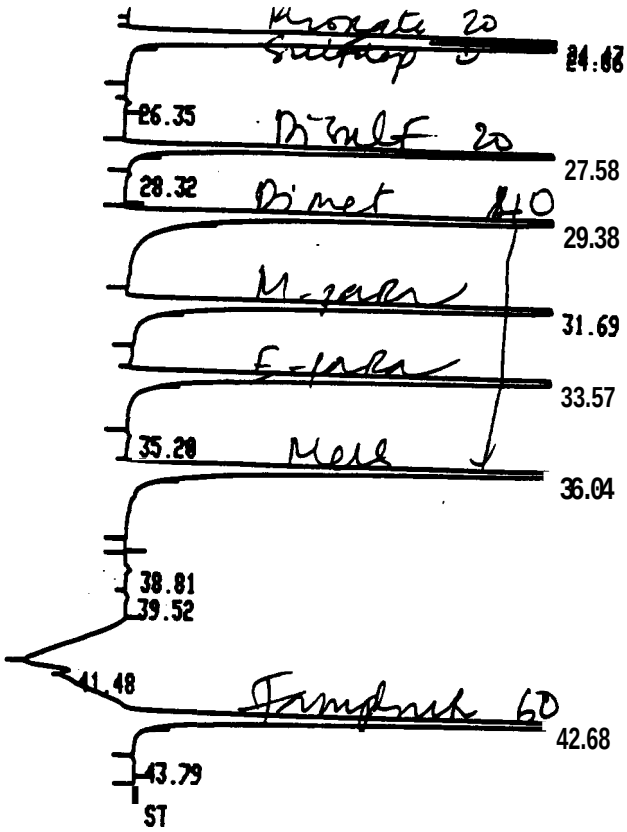
7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE
FIRST BOTTLE
LAST BOTTLE 1
OF SAMPLE WASHES

RUN # 109 APR/10/91 16:39:35
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 38

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.52	122920	BB	0.325	0.539
1.32	294750	BP	0.430	1.291
1.51	26299	BB	0.065	0.115



series: 057-10468-31
Analyst: T. Newman
Date: 4/9/91
157 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial — 100 degrees C
Initial —— 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

Rlawlow 4-11-91

4/9/91

RUN # 109 APR/10/91 16:39:35
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 38

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.52	122920	BB	0.325	0.539
1.32	294750	BP	0.430	1.291
1.51	26280	PP	0.065	0.115
1.73	67831	PV	0.126	0.297
2.53	420930	VB	1.478	1.844
5.40	10138	PB	0.103	0.044
7.13	699220	PB	0.116	3.063
10.93	13651	BB	0.126	0.060
11.96	6385	PB	0.113	0.028
13.84	25839	PB	0.116	0.113
17.42	14132	PB	0.120	0.062
22.67	2084900	PB	0.117	9.133
24.47	1244800	PV	0.116	5.453
24.66	2129200	VB	0.123	9.327
26.35	8133	PB	0.129	0.036
27.58	1954800	PB	0.125	8.563
28.32	0	BB	0.000	0.000
29.38	3012900	PB	0.121	13.198
31.69	2327500	PB	0.127	10.196
33.57	2812200	PB	0.135	12.319
35.20	11240	PP	0.233	0.049
36.04	2643100	PB	0.147	11.578
38.81	15897	BP	0.239	0.070
39.52	8793	PB	0.208	0.039
41.48	52821	PV	0.138	0.231
42.60	2812900	VB	0.152	12.322
43.79	7181	PB	0.1%	0.032

TOTAL AREA= 2.2829E+07
MUL FACTOR= 1.0000E+00

LIST: METH e

RUN PRMTRS
ZERO = 20
ATT 2t. = 4
CHT SP = 0.5
PK WD = 8.04
THRSH. = 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

TIME TBL
55.00 STOP

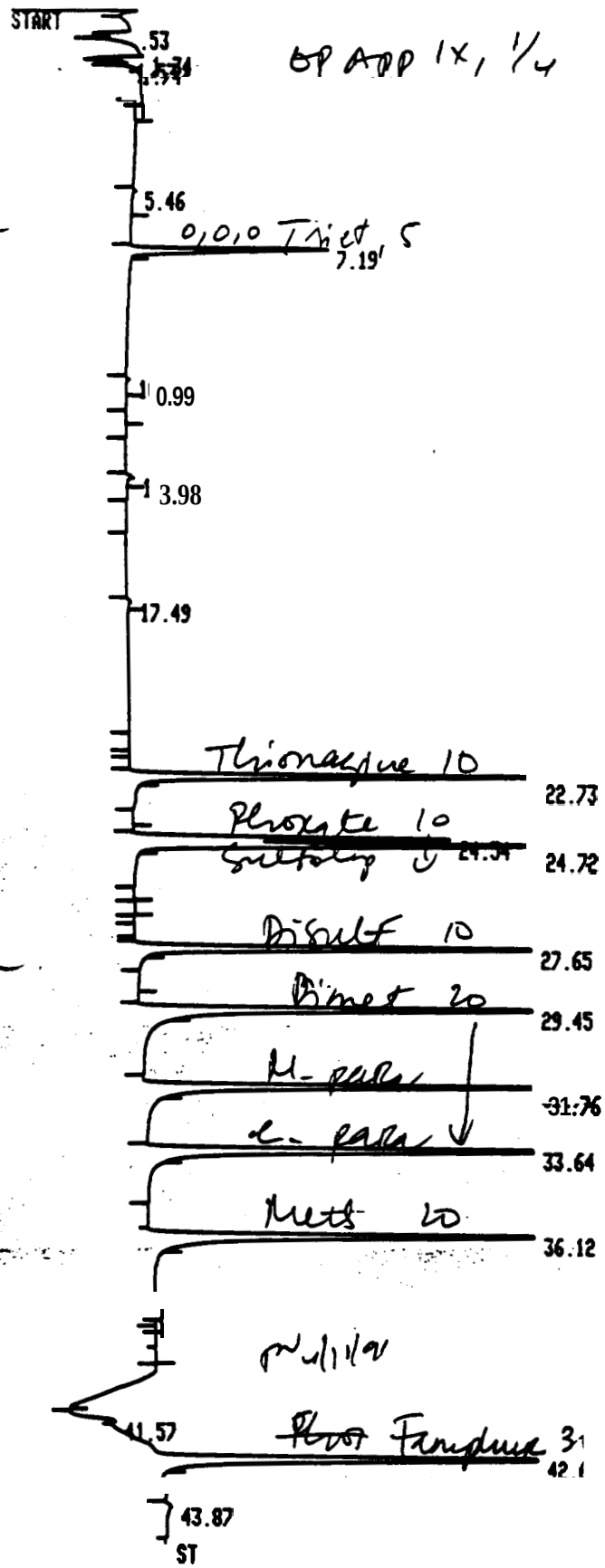
CALIB TBL
EMPTY

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1

3200159



Series: 057-10409-01
Analyst: T. Nguyen
Date: 4/9/91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/91

LIST: METH e

RUN PRHTRS
ZERO. = 20
CTT 2t. = 4
CHT SP = 0.5
PK WD = 0.84
THRSH- = 2
CR REJ = 0

RPRT OPTNS
2. RF UNC PKS= e.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

T I E TBL
55.00 STOP

CALIB TB
EMPTY

LIST: OP # 1 1 e

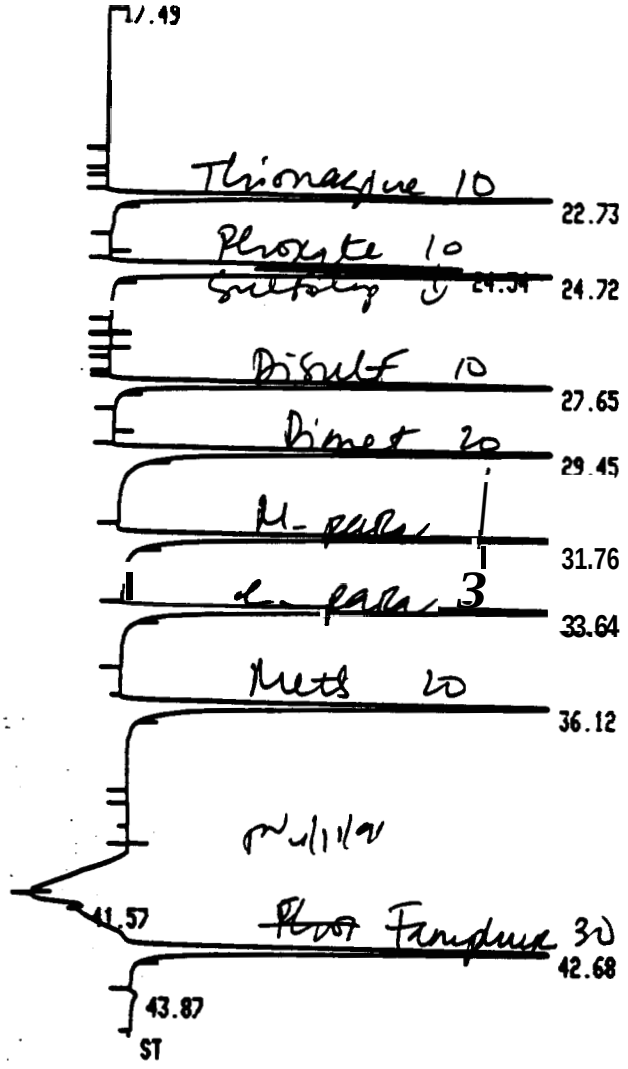
7673A SAMPLER/
LOOP ADDRESS:

FROM INJECTOR
INJ/BOTTLE
FIRST BOTTLE
LAST BOTTLE 16
OF SAMPLE WASHES

RUN # 110 APR/10/91 17:29:5
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 39

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.53	143850	BB	0.329	1.388



Series: 057-10408-01
Analyst: T. Nguyen
Date: 4/9/91
#57 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/91

RUN # 110 APR/10/91 17:29:56
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 39

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.53	143850	BB	0.329	1.308
1.34	340380	BP	8.426	3.094
1.53	34195	PP	0.076	0.311
1.74	29608	PB	8.212	8.269
5.46	5882	BB	8.114	0.054
7.19	358130	PB	8.115	3.256
10.99	6379	BB	0.135	0.058
13.90	12049	PB	8.117	0.110
17.49	6154	PB	0.117	0.056
22.73	880320	PB	0.119	8.883
24.54	568260	PV	8.114	5.166
24.72	001100	VB	0.124	9.101
27.65	919210	PB	8.125	8.357
29.45	1334900	PB	8.129	12.13s
31.76	1060000	PB	0.132	9.637
33.64	366300	PB	8.138	12.421
36.12	1263400	PB	0.156	11.486
41.57	1 6417	PV	0.142	0.584
42.68.	[illegible]	VB	0.186	14.343
43.87	27760	BV	8.271	0.252

TOTAL AREA= 1.1000E+07
MUL FACTOR= 1.0000E+00

3200100

LIST: METH e

RUN PRMTRS
ZERO.. = 20
ATT 2t. = 4
CHT SP = 0.5
PK YO = 0.04
THRSH. = 2
AR REJ = 8

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

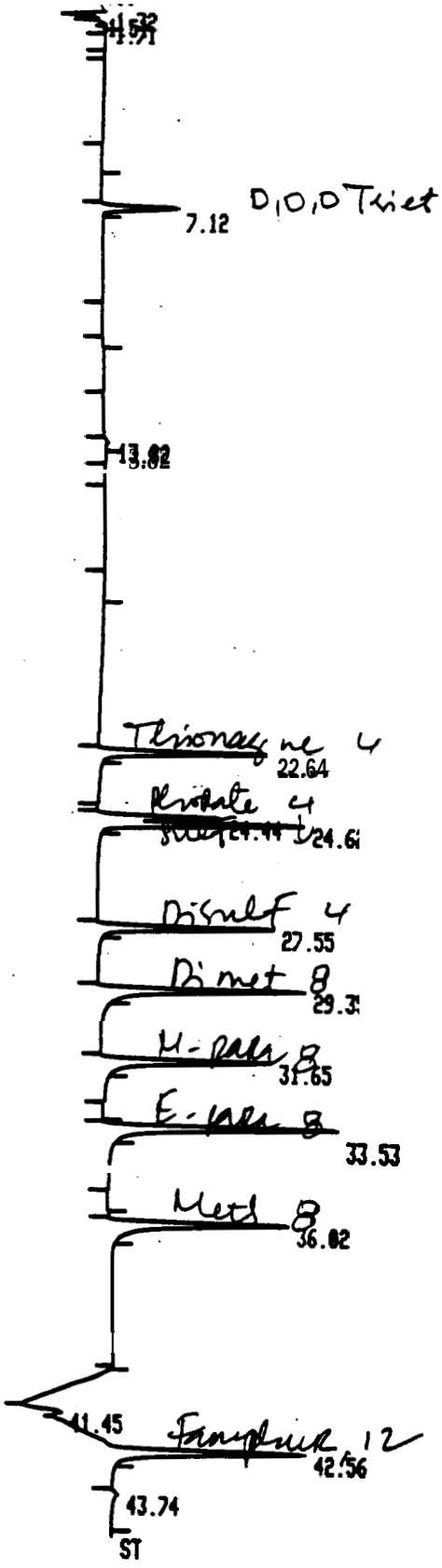
TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1



series: 057-10408-01
Analyst: T. Newman
Date: 4/9/91
157 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/91

LIST: METH 0

RUN PRMTRS
ZERO = 20
ATT 2↑ = 4
CHT SP = 0.5
PK WD = 0.04
THRSH-= 2
AR REJ = 0

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

TIME TBL
55.00 S M P

CALIB TBL
EMPTY

RUN # 111 APR/10/91 18:20:16
WORKFILE ID: C
WORKFILE NAME:
MPLE # 40

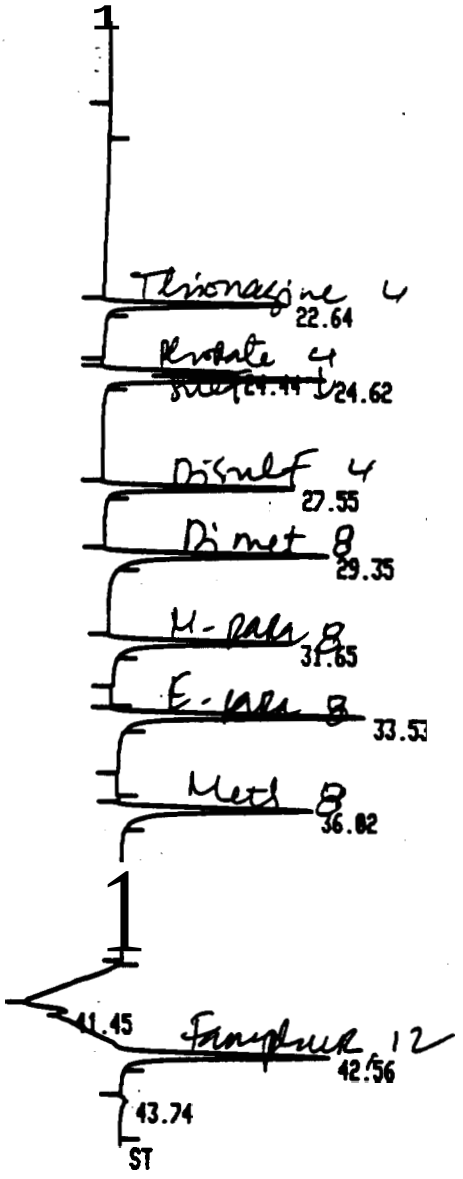
AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.51	102670	BP	0.336	2.245
1.32	244260	PP	0.433	5.340
1.51	29632	PV	0.094	0.648

LIST: OP # 1 1 0

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1



series: 057-101409-31
Analyst: T. Nguyen
Date: 4/9/91
157 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/91

RUN # 111 APR/10/91 18:20:16
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 40

AREA%

RT	AREA	TYPE	AR/HT	AREA%
8.51	102670	BP	0.336	2.245
1.32	244260	PP	0.433	5.340
1.51	29632	PV	0.094	0.648
1.71	35309	W	0.181	0.772
7.12	136738	PB	0.118	2.989
13.82	5105	PB	0.119	0.112
22.64	320830	PB	0.125	7.014
24.44	215140	PV	0.116	4.704
24.62	393990	VB	0.126	8.614
27.55	347180	PB	0.131	7.590
29.35	444650	PB	8.144	9.721
31.65	381640	PB	0.150	8.344
33.53	532170	PB	0.152	11.635
36.02	478300	PB	0.176	10.457
41.45	62223	PV	8.159	1.360
42.56	822720	VB	0.255	17.987
43.74	21396	PB	0.253	0.468

TOTAL AREA= 4574000
MUL FACTOR= 1.0000E+00

3200161

LIST: METH e

RUN PRMTRS
ZERO = 20
ATT 2t. = 4
CHT SP = 0.5
PK WD = 0.04
THRSH = 2
OR REJ = 8

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

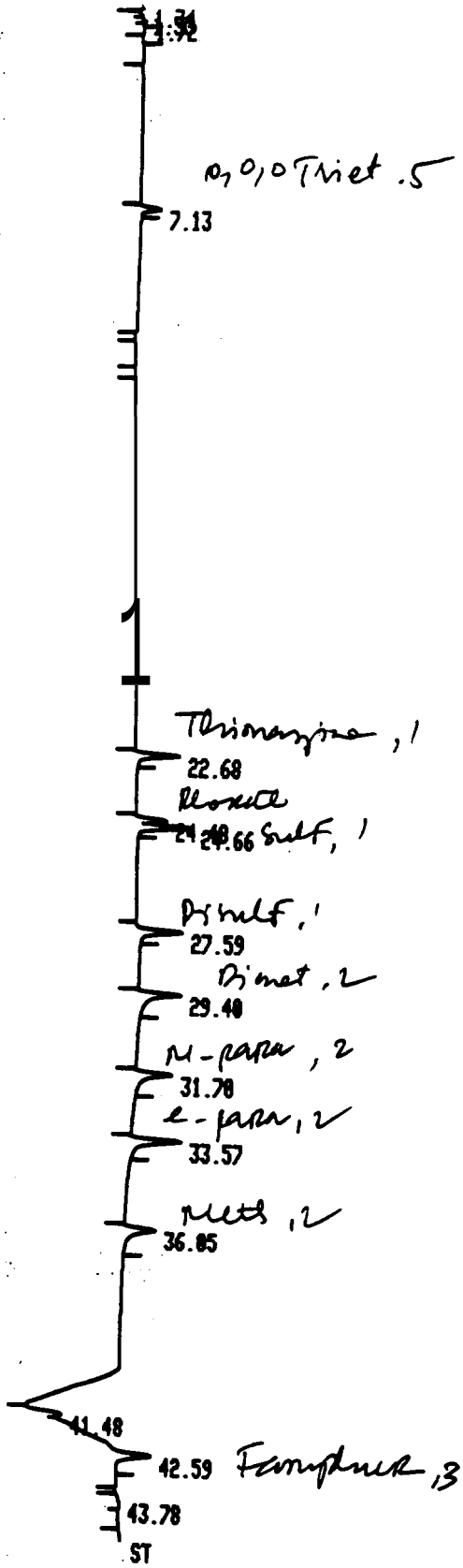
TIME TBL
55.00 STOP

CALIB TBL
EMPTY

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1



series: 057-104408-01
Analyst: T. Newman
Date: 4/9/91
157 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/91

LIST: METH e

RUN PRMTRS
ZERO = 20
ATT 2↑ = 4
CHT SP = 0.5
PK WD = 8.84
THRSH = 2
AR REJ = 0

RPRT OPTNS
2. RF UHC PKS= 0.0000E+00
3. MUL FACTOR= 1.0000E+00
4. PK HEIGHT MODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

T I E TBL
55.00 STOP

CALIB TBL
EMPTY

RUN # 112 APR/10/91 19:10:37
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 41

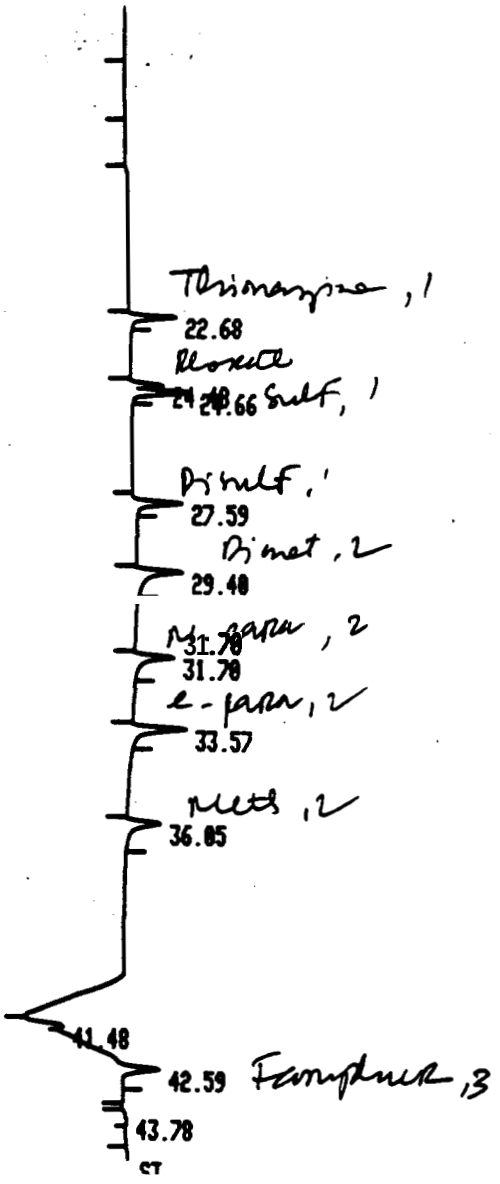
AREA%

RT	AREA	TYPE	AR/HT	AREA%
8.52	106020	BB	0.329	5.922
1.34	180510	PP	8.564	10.083

LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES 1



series: 057-10408-01
Analyst: T. Newman
Date: 4/9/91
157 HP5890A Dual NPD
Column: Rtx-1701
30 m X 0.53 mm ID
0.5 micron film
Injector T= 250 C
Detector T= 300 C
Temperature Program:
Initial T= 100 degrees C
Initial Time= 6 minutes
Rate= 6 C/minute
Final T= 280 degrees C
Final Time= 4 minutes
Carrier: Helium
Carrier Flow + Make-up= 30 ml/minute
4 ul injected

K Lawlor 4-11-91

4/9/91

RUN # 112 APR/10/91 19:10:37
WORKFILE ID: C
WORKFILE NAME:
SAMPLE # 41

AREA%

RT	AREA	TYPE	AR/HT	AREA%
0.52	106020	BB	0.329	5.922
1.34	180510	PP	0.564	10.083
1.53	26502	PV	0.138	1.480
1.72	25477	VV	0.196	1.423
7.13	34940	BB	0.116	1.952
22.68	84847	PB	0.130	4.739
24.48	52628	PV	0.116	2.948
24.66	107740	VB	0.129	6.018
27.59	87253	PB	0.135	4.874
29.40	127720	PB	0.199	7.134
31.70	103010	BB	0.186	5.754
33.57	129560	BB	0.170	7.237
36.85	101460	BB	0.210	5.668
41.48	57889	PV	0.156	3.234
42.59	559870	VB	0.618	31.274
43.78	4820	PB	0.177	9.269

TOTAL AREA= 1790200
MUL FACTOR= 1.0000E+00

LIST: METH e

RUN PRMTRS
ZERO = 28
ITT 2t. = 4
CHT SP = 0.5
PK WD = 0.0
THRSH- = 2
AR REJ = e

RPRT OPTNS
2. RF UNC PKS= 0.0000E+00
3. MUL FACTOR.: 1.0000E+00
4. PK HEIGHT RODE NO
5. EXTEND RT NO
6. RPRT UNC PKS NO

TIME TBL
55.00 STOP

CALIB TBL
EMPTY

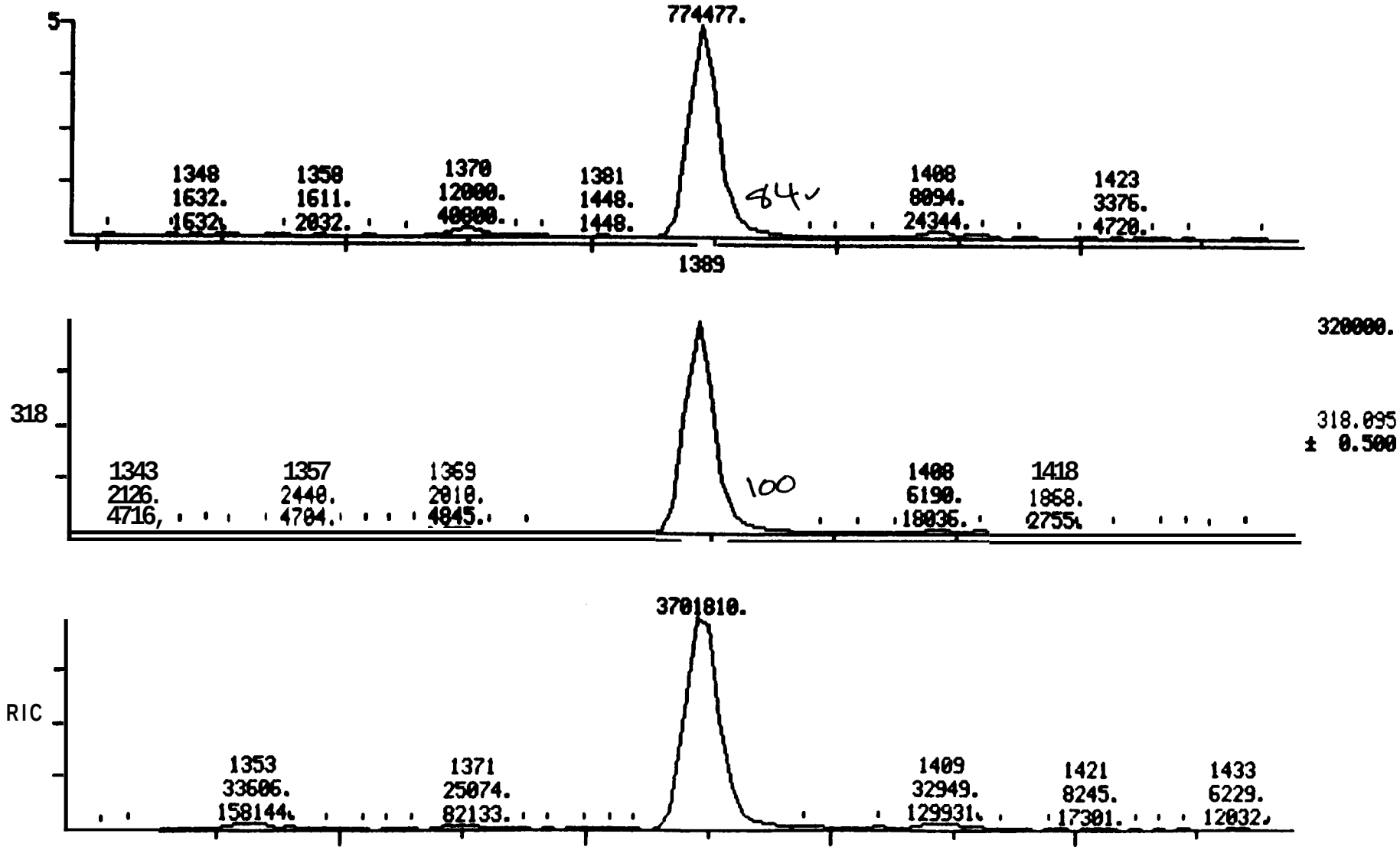
LIST: OP # 1 1 e

7673A SAMPLER/
LOOP ADDRESS: 2

FRONT INJECTOR
INJ/BOTTLE 1
FIRST BOTTLE 1
LAST BOTTLE 100
OF SAMPLE WASHES

3200162

1.50✓


5
774477.
1348
1632.
1632.
1358
1611.
2032.
1370
12000.
40000.
1381
1448.
1448.
84✓
1408
8094.
24344.
1423
3376.
4720.
1389
320000.
318
318.095
± 0.500
1343
2126.
4716.
1357
2440.
4704.
1369
2010.
4845.
100
1408
6190.
18036.
1418
1868.
2755.
3701810.
RIC
1353
33606.
158144.
1371
25074.
82133.
1409
32949.
129931.
1421
8245.
17301.
1433
6229.
12032.

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1388 SCANS 1338 TO 1438

03/27/91 16:07:00 CALI: CAL022291 #3

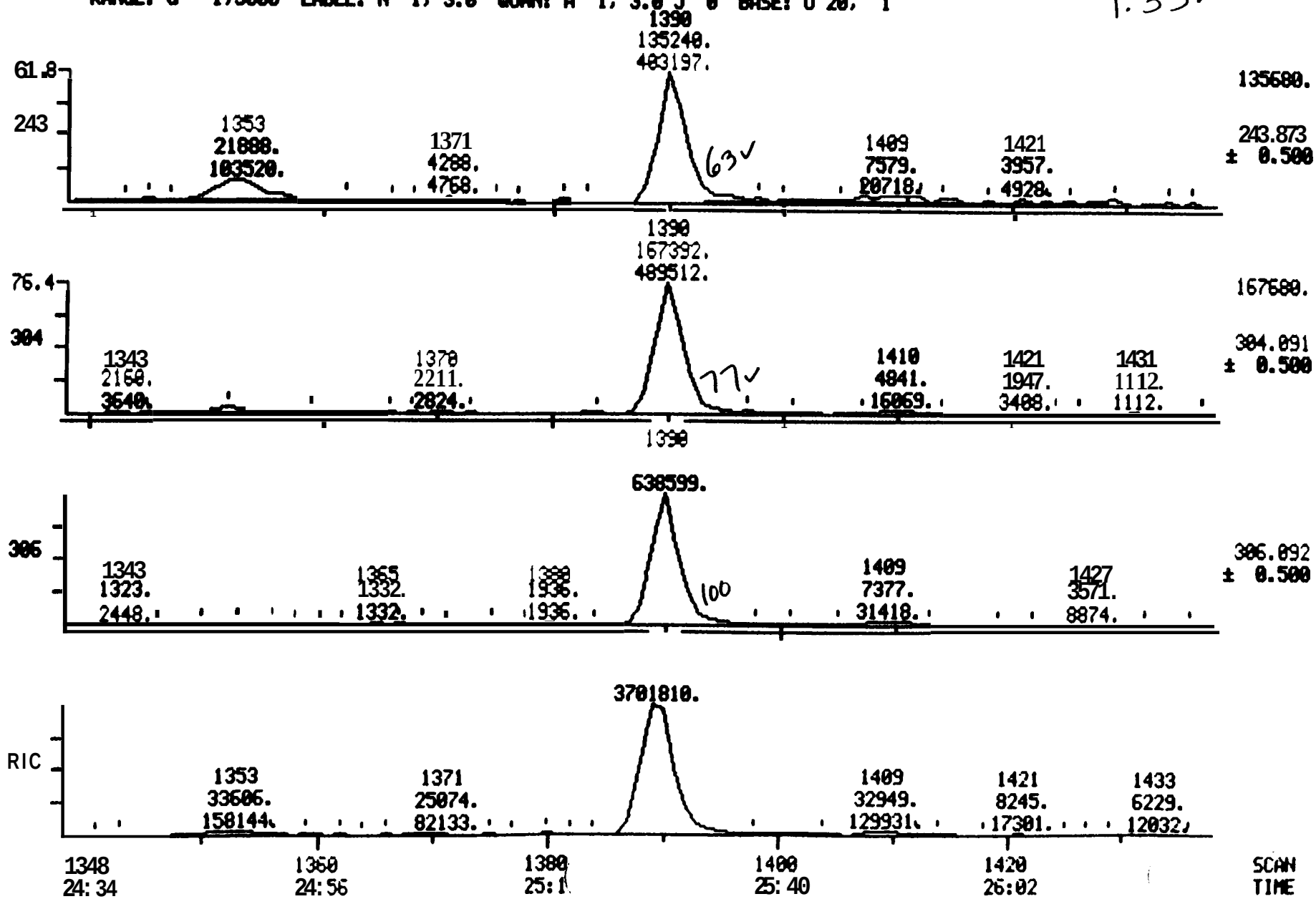
SAMPLE: 2UL OF 685:06-III STD @ 500 PPB FOR MULTIPOINT RUN 3

CONDS.: ISOMER SPECIFIC

RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

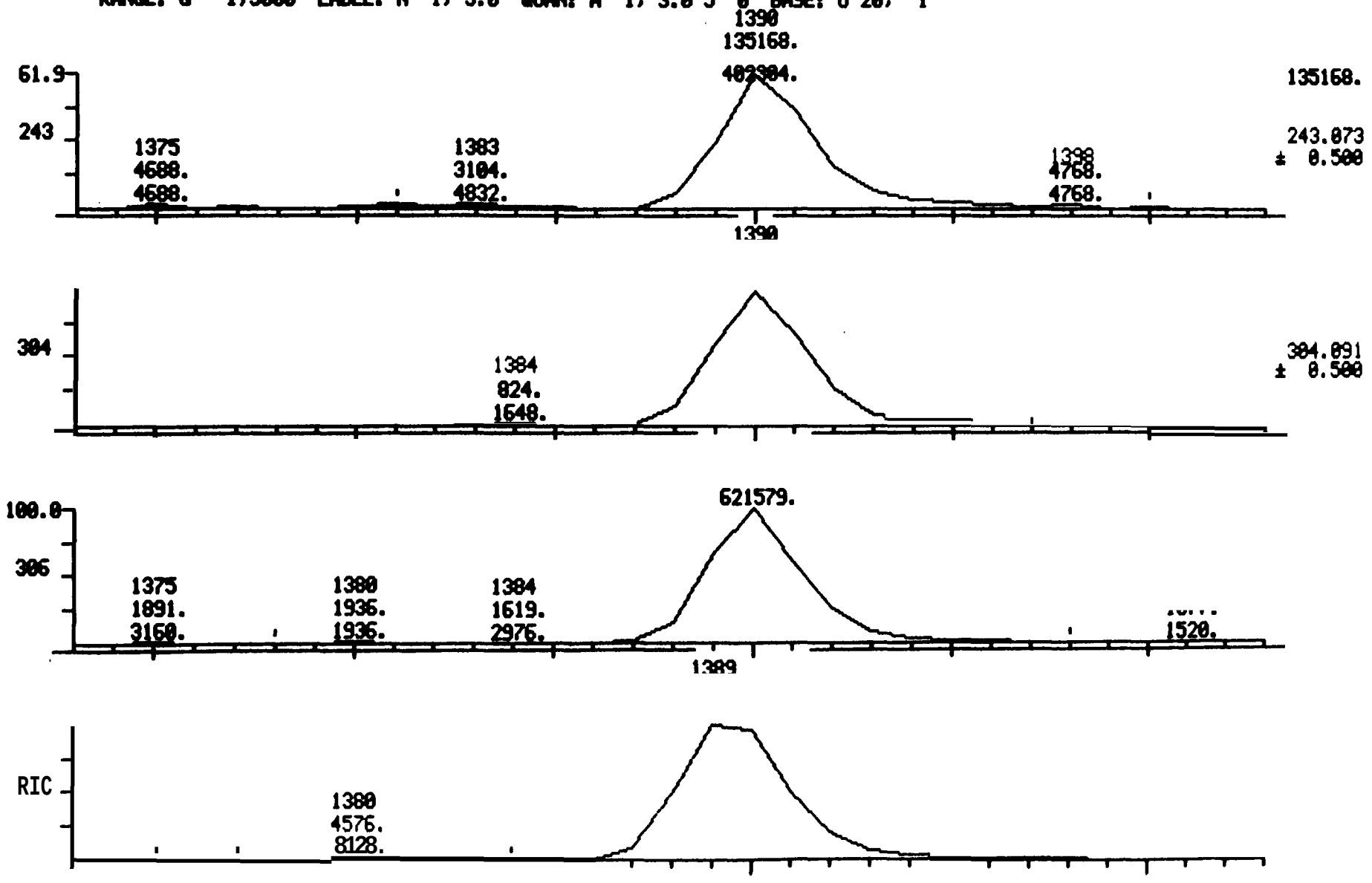
TCDF

1.33



3200103

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1388 SCANS 1373 TO 1403
03/27/91 16:07:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-III STD @ 500 PPB FOR MULTIPOINT RUN 3
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



3/27/91 16:07:33 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:68506III3 Acquiring
03/27/91 16:07:00 + 0:03 Free sectors: 6806 Scan: 3 of 2000
Sample: 2UL OF 685:06-III STD @ 500 PPB FOR MULTIPOINT RUN 3
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: DM Analyst: DT Acct. No:

********** GC PARAMETERS **********
Loaded GC Desc:TD Current GC oven trp: 312 DegC Injector : 260 DegC
Current GC Desc:TD GC elapsed tire : 3:15 rin Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 30	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70		20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Tire	MPW	MFW	MA	TH	EL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Po.
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Po.
5	315.648	316.148	0.105	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Po.
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Por

Interface number	0	
Sub-interface number	0	
# of rcqu buffers	16	
Instrument typo	a	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	amu
Offset at low mass	0	amu
Offset at high mass	0	amu
Voltrgo settling time(MS)	4	

3/27/91 16:07:59 SCAN 6 OF 2000
Mode changed to suspended centroid positive ion

3/27/91 16:09:52 SCAN 106 OF 2000
Mode changed to centroid positive ion

3/27/91 16:36:16 SCAN 1505
Acqu sition stopped

3/27/91 16:36:19
ACQUISITION COMPLETED

3200164

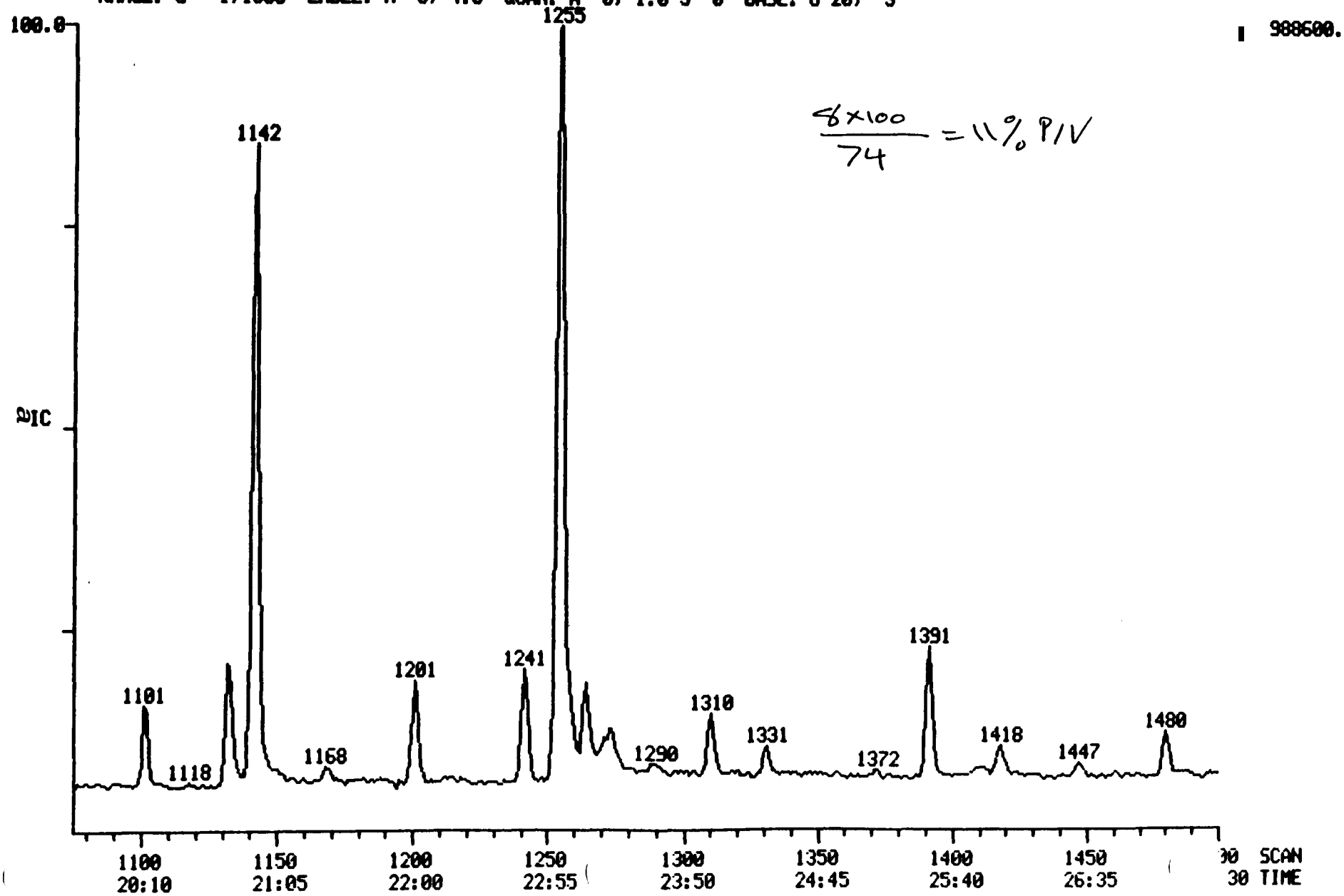
SCANS 1 TO 3 CENTROID
SCANS 6 TO 103 SUSPENDED
SCANS 106 TO 1303 CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1405	208.3	1545.5	13.5	401475.	286.	260.

MIDRIC
03/27/91 18:04:00
SAMPLE: 2UL OF 685:05 7- ISOMER MI XURE
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1505 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

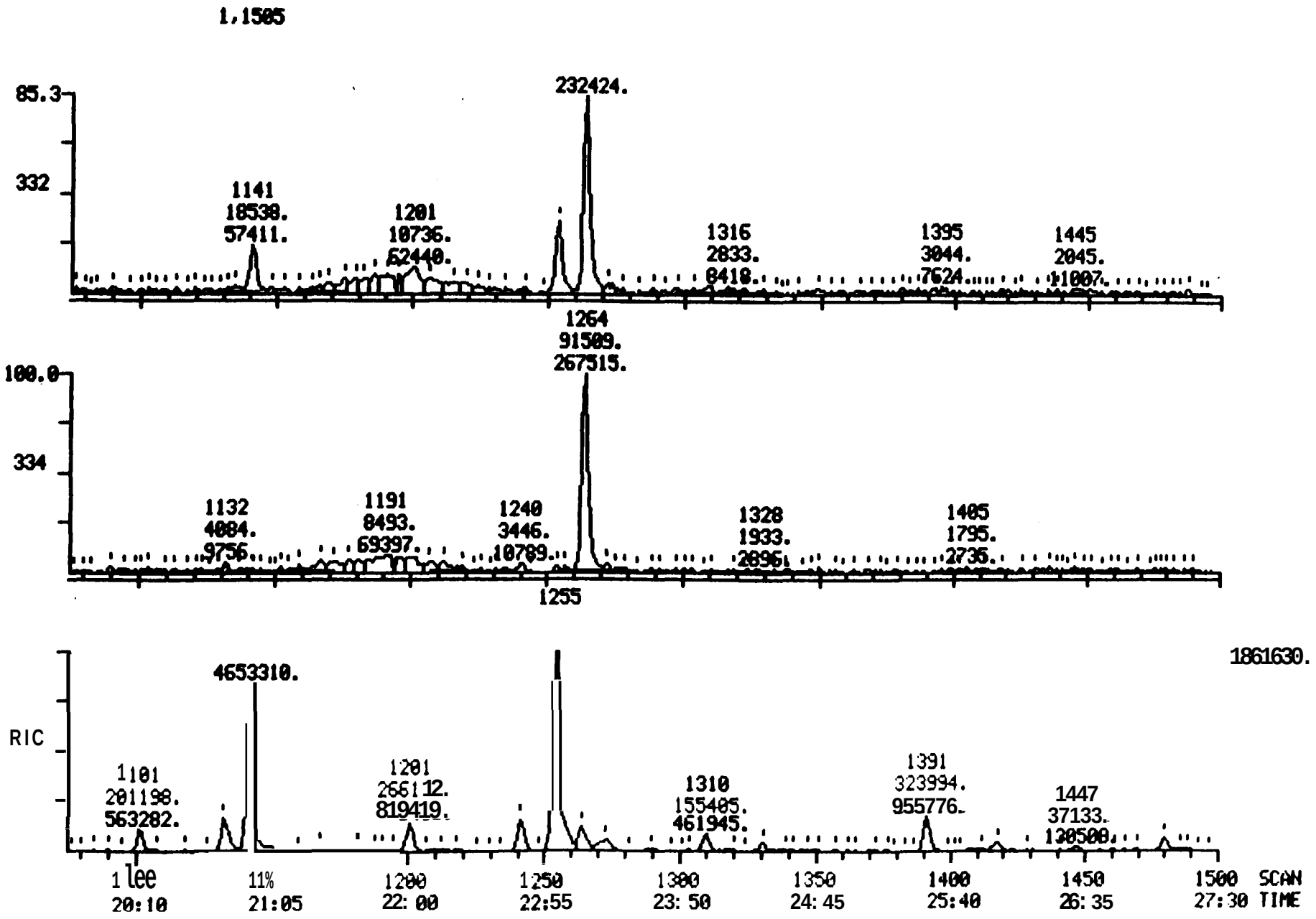
DATA: I910327PEFD #1 SCANS 1075 TO 1500
CALI: CAL022291 #3

calc. nm 3-2[illegible]-91
QC DT 3-29-91



$\frac{8 \times 100}{74} = 11\%$ P/V

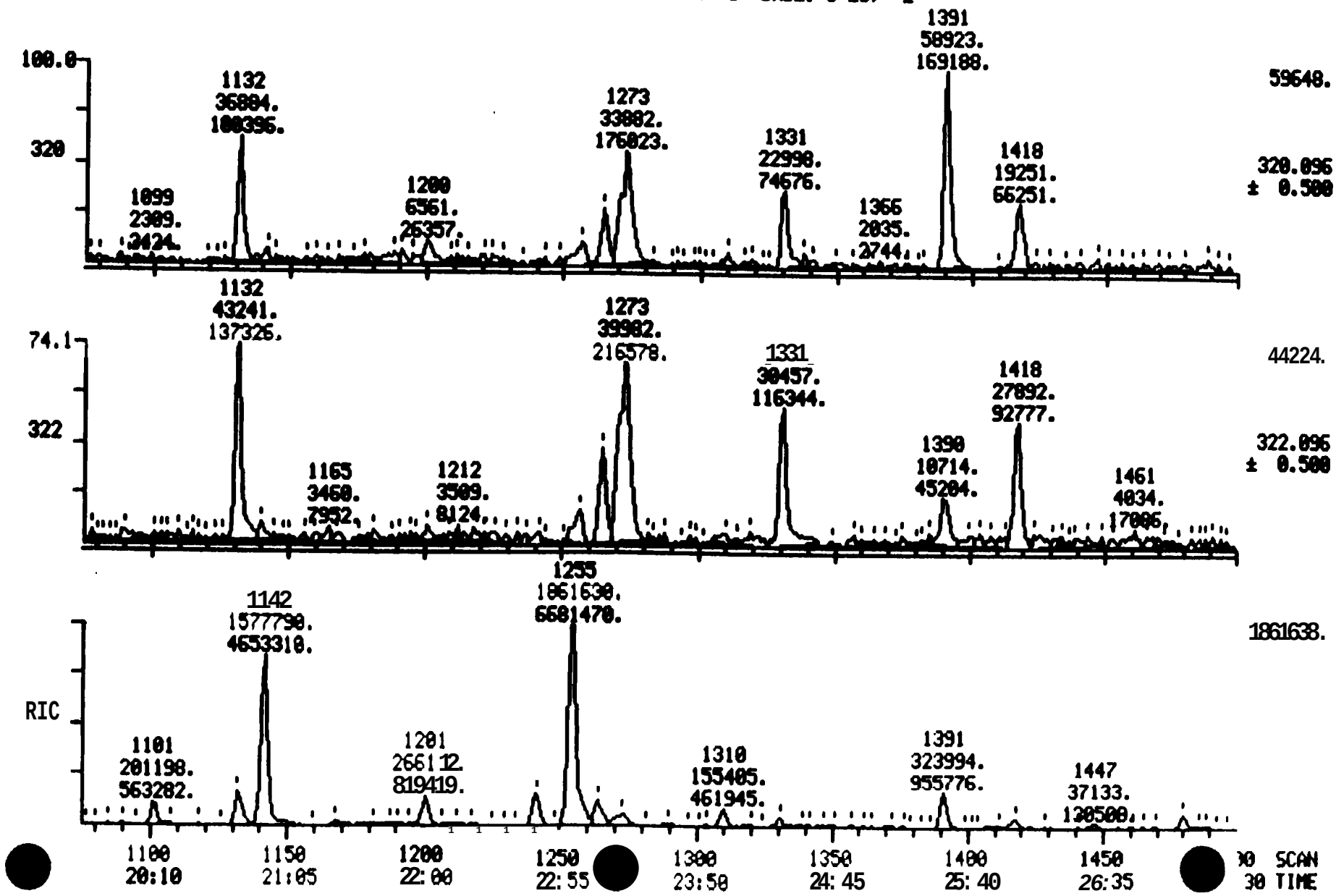
3200165


1.1505
85.3
332
232424.
1141
18538.
57411.
1201
10736.
62440.
1316
2833.
8418.
1395
3044.
7624.
1445
2045.
11007.
100.0
334
1264
91509.
267515.
1132
4084.
9756.
1191
8493.
69397.
1240
3446.
10789.
1328
1933.
2896.
1405
1795.
2735.
1255
1861630.
RIC
4653310.
1101
201198.
563282.
1201
266112.
819419.
1310
155405.
461945.
1391
323994.
955776.
1447
37133.
130500.
1 lee
20:10
11%
21:05
1200
22: 00
1250
22:55
1300
23: 50
1350
24: 45
1400
25:40
1450
26: 35
1500
27:30
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS
03/27/91 18:04:00
SAMPLE: 2UL OF 685:05 7-ISOMER MIXTURE
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1505 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2

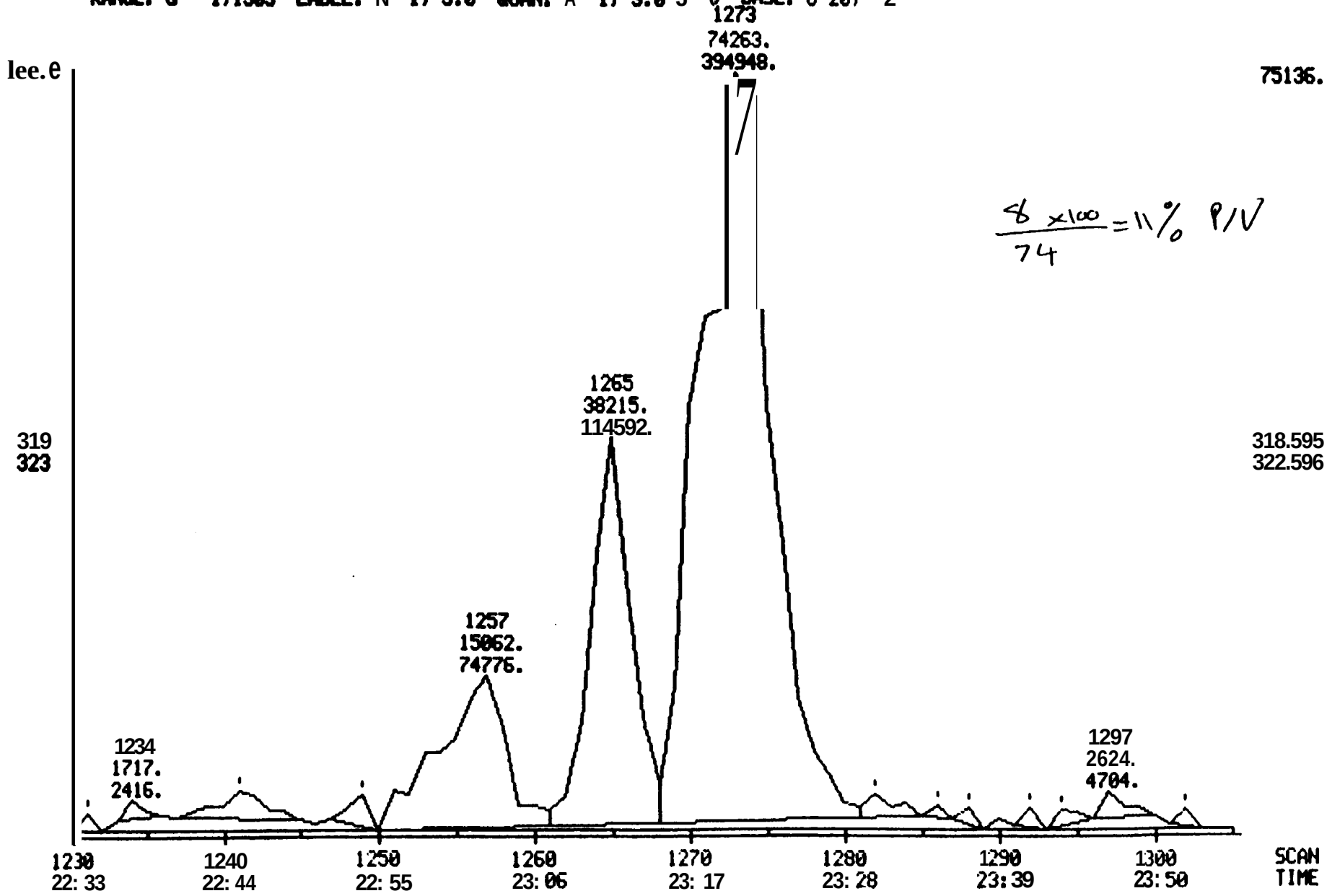
DATA: I910327PEFD #1
CALI: CAL022291 #3

SCANS 1075 TO 1500



2200166

MIDMASS CHROMATOGRAM DATA: I910327PEFD #1 SCANS 1239 TO 1305
03/27/91 18:04:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 7-ISOMER MIXTURE
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1505 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



$\frac{8 \times 100}{74} = 11\%$ P/V

3/27/91 18:04:23 SCAN 1 OF 2200
Acquisition started

Acquire Run 0:I910327PEFD Acquiting
03/27/91 18:04:00 + 0:03 Free sectors: 3599 Scan: 3 of 2200
Sample: 2UL OF 685:05 7-ISOMER MIXTURE
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: NM Acct. No:

********** QC PARAMETERS **********
Loaded QC Desc: TD Current QC oven tmp: 512 DegC Injector : 260 DegC
Current QC Desc: TD QC elapsed time : 1:15 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan tine: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Po.
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.103	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Po.
5	315.648	316.148	0.105	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Po.
7	319.649	320.149	0.105	1	100	40	2	0	Po.
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Po.
10	333.649	334.150	0.105	1	100	40	2	0	Po.

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/27/91 18:04:28 SCAN 6 OF 2200
Mode changed to suspended centroid positive ion

3/27/91 10:06:22 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/27/91 18:32:47 SCAN 1505
Acquisition stopped

3/27/91 18:32:4v
ACQUISITION COMPLETED

3200167

SCANS 1 TO 5 CENTROID
SCANS 6 TO 105 SUSPENDED
SCAN 1194 TRUNCATED: DATA RATE TOO HIGH
SCANS 106 TO 1505 CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1405	170.5	1545.5	11.0	314026.	231.	210.

MIDRIC
03/28/91 11:38:00
SAMPLE: 2UL OF 685:05 ISOMER WINDOW SOLUTION
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1453 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

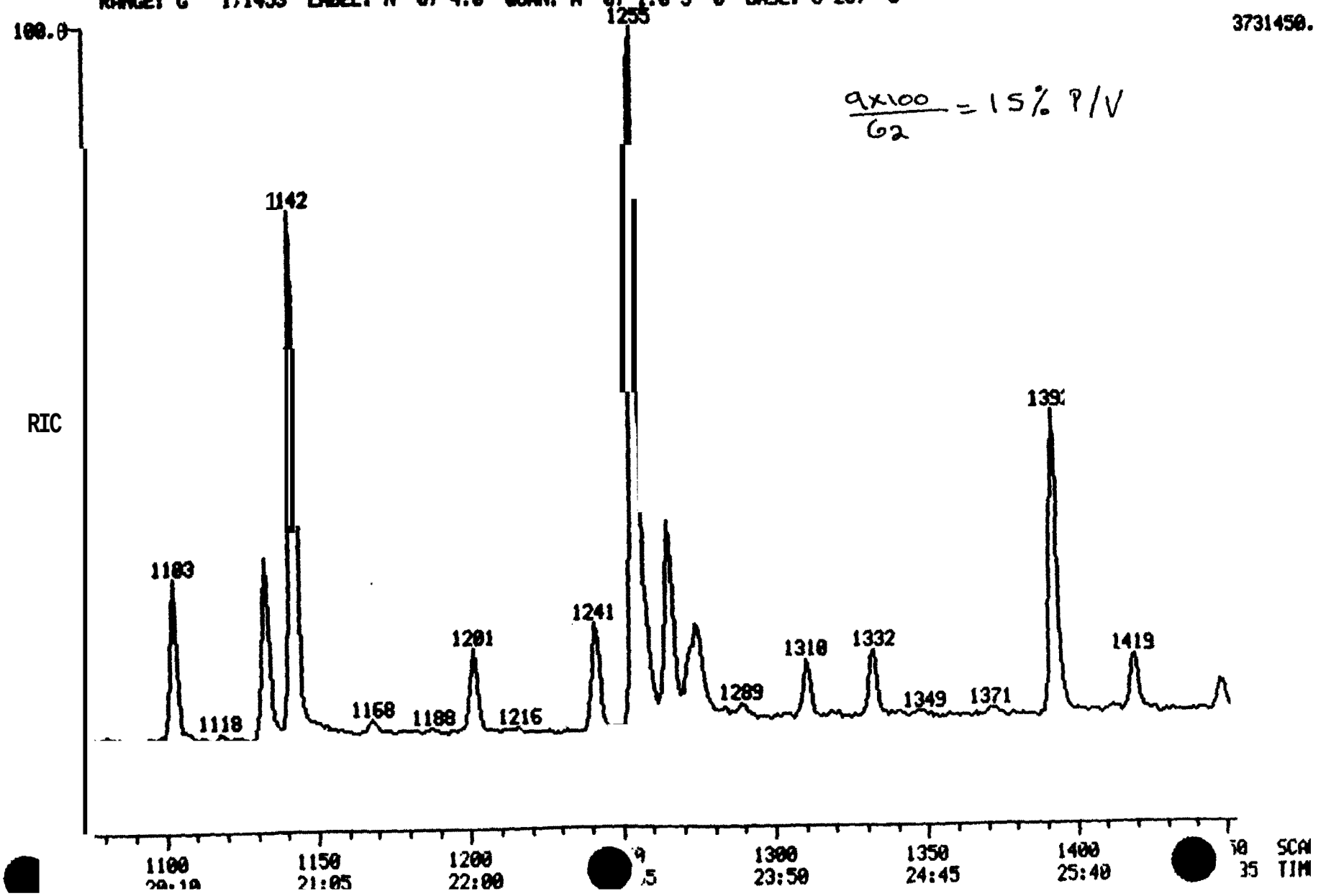
DATA: I910328PEF #1
CALI: CAL022291 #3

SCANS 1075 TO 1453

alc. nm 3-29-91
QC DT 3-29-91

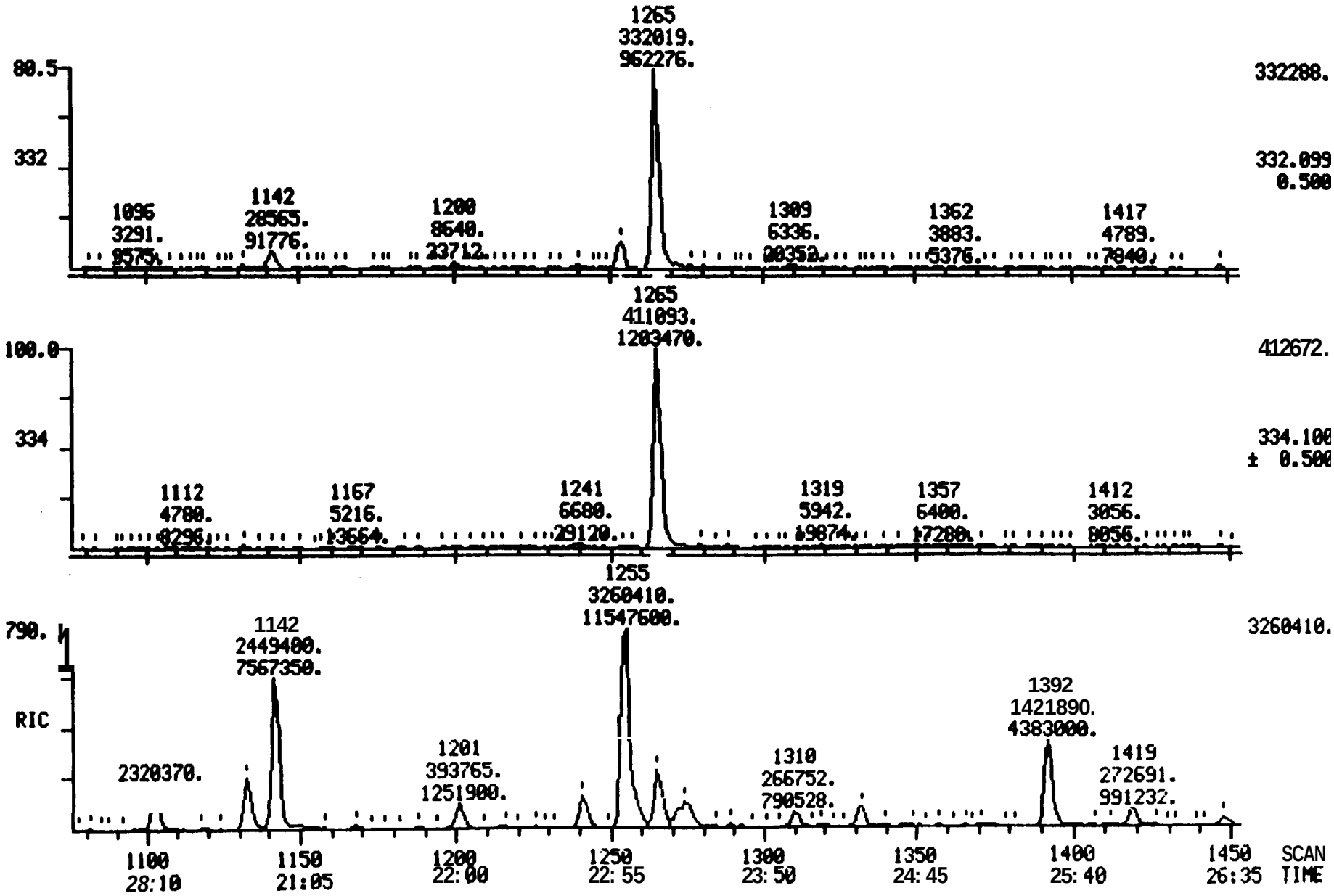
3731450.

$\frac{9 \times 100}{62} = 15\%$ P/V



89100168

MIDRIC+MASS CHROMATOGRAMS DATA: I910328PEF #1 SCANS 1075 TO 1453
03/28/91 11:38:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 ISOMER WINDOW SOLUTION
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1453 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 2

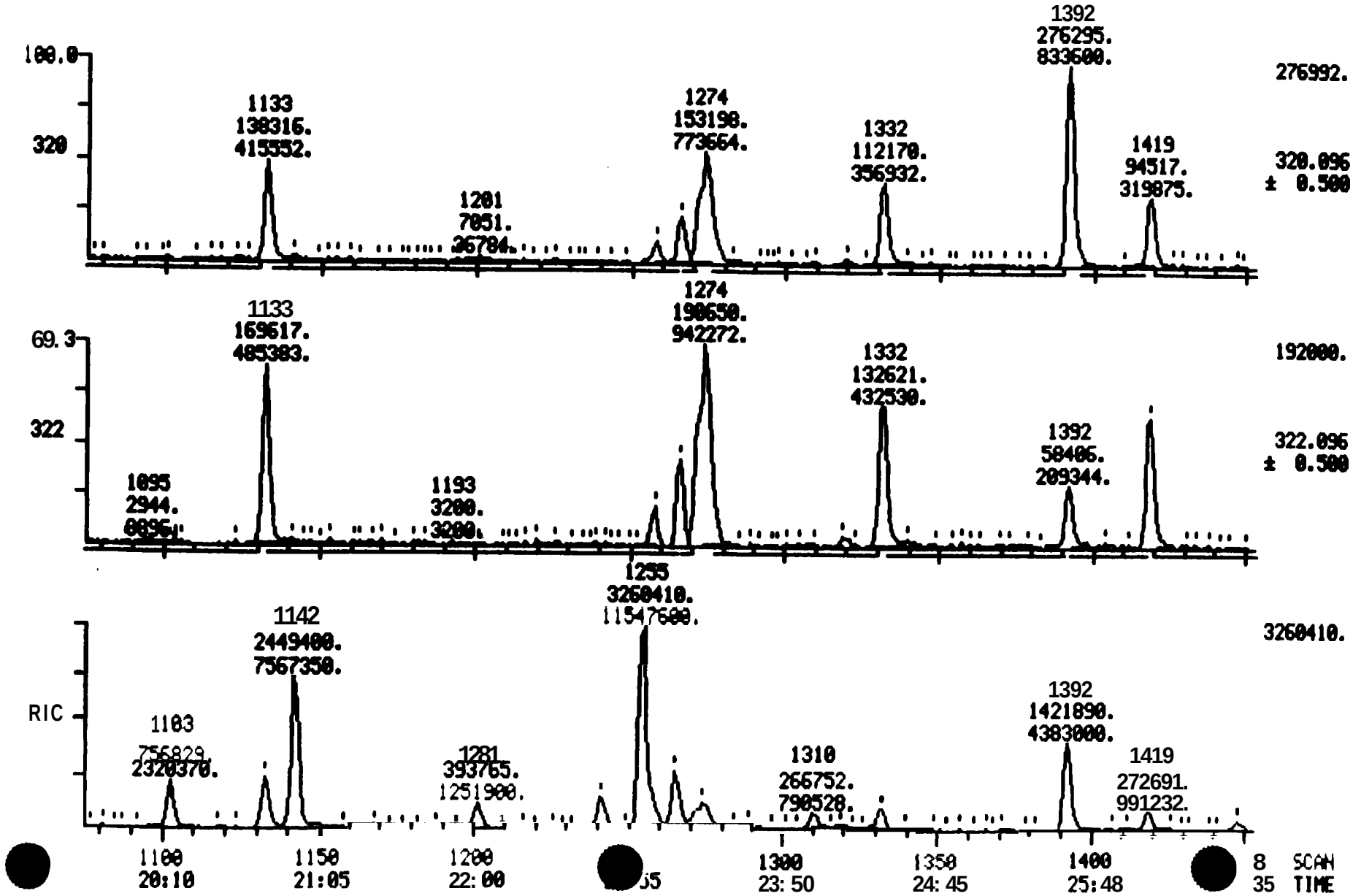


3200169

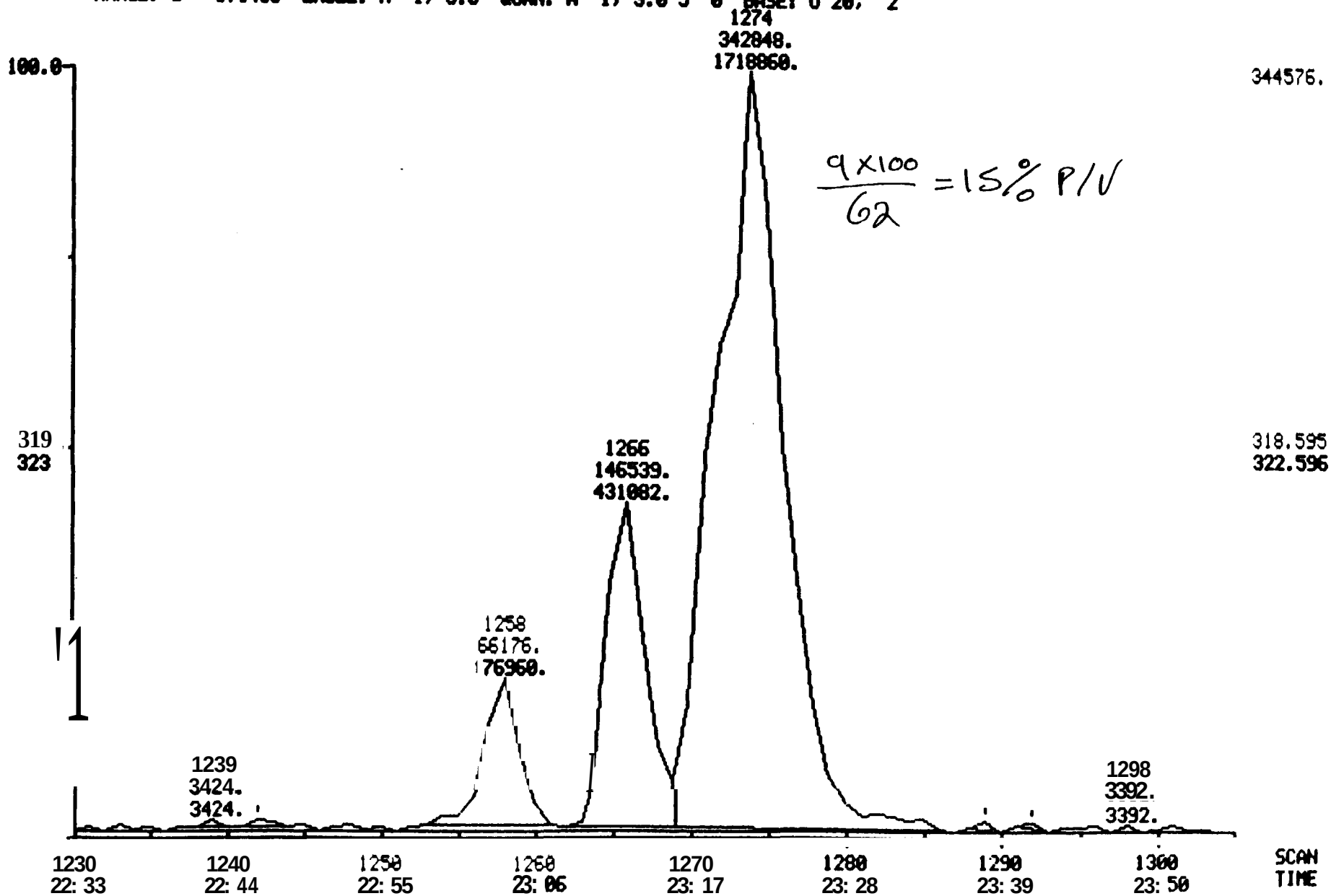
MIDRIC+MASS CHROMATOGRAMS
03/28/91 11:38:00
SAMPLE: 2UL OF 685:05 ISOMER WINDOW SOLUTION
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1453 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2

DATA: I910328PEF #1
CALI: CAL022291 #3

SCANS 1075 TO 1453



MIDMASS CHROMATOGRAM DATA: I910328PEF #1 SCANS 1230 TO 1305
03/28/91 11:38:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 ISOMER WINDOW SOLUTION
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1453 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



$\frac{9 \times 100}{62} = 15\%$ P/V

3/28/91 11:38:41 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:I910328PEF Acquiring
03/28/91 11:38:00 + 0:03 Free sectors: 28683 Scan: 3 of 2000
Sample: 2UL OF 685:05 ISOMER WINDOW SOLUTION
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: SAM Acct. No:

********** QC PARAMETERS **********
Loaded QC Desc:TD Current QC oven tmp: 512 DegC Injector : 260 DegC
Current QC Desc:TD QC elapsed tire : 2:11 min Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 30		0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	_	20.0	21.1			
4	70 - 70	_	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

HID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL_	ION
1	242.650	243.150	0.105	1	100	40	2	0	Po.
2	258.649	239.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.103	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Pos
3	315.648	316.148	0.105	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Po.
7	319.649	320.149	0.105	1	100	40	2	0	Po.
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Po.
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument typo	0	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/28/91 11:38:47 SCAN 5 OF 2000
Mode changed to suspended centroid positive ion

3/28/91 11:40:41 SCAN 106 OF 2000
Mode changed to centroid positive ion

3/28/91 12:06:07 SCAN 1433
Acquisition stoppod

3/28/91 12:06:09
ACQUISITION COMPLETED

3200170

SCANS 1 TO 5 CENTROID
SCANS 6 TO 103 SUSPENDED
SCANS 106 TO 1453 CENTROID

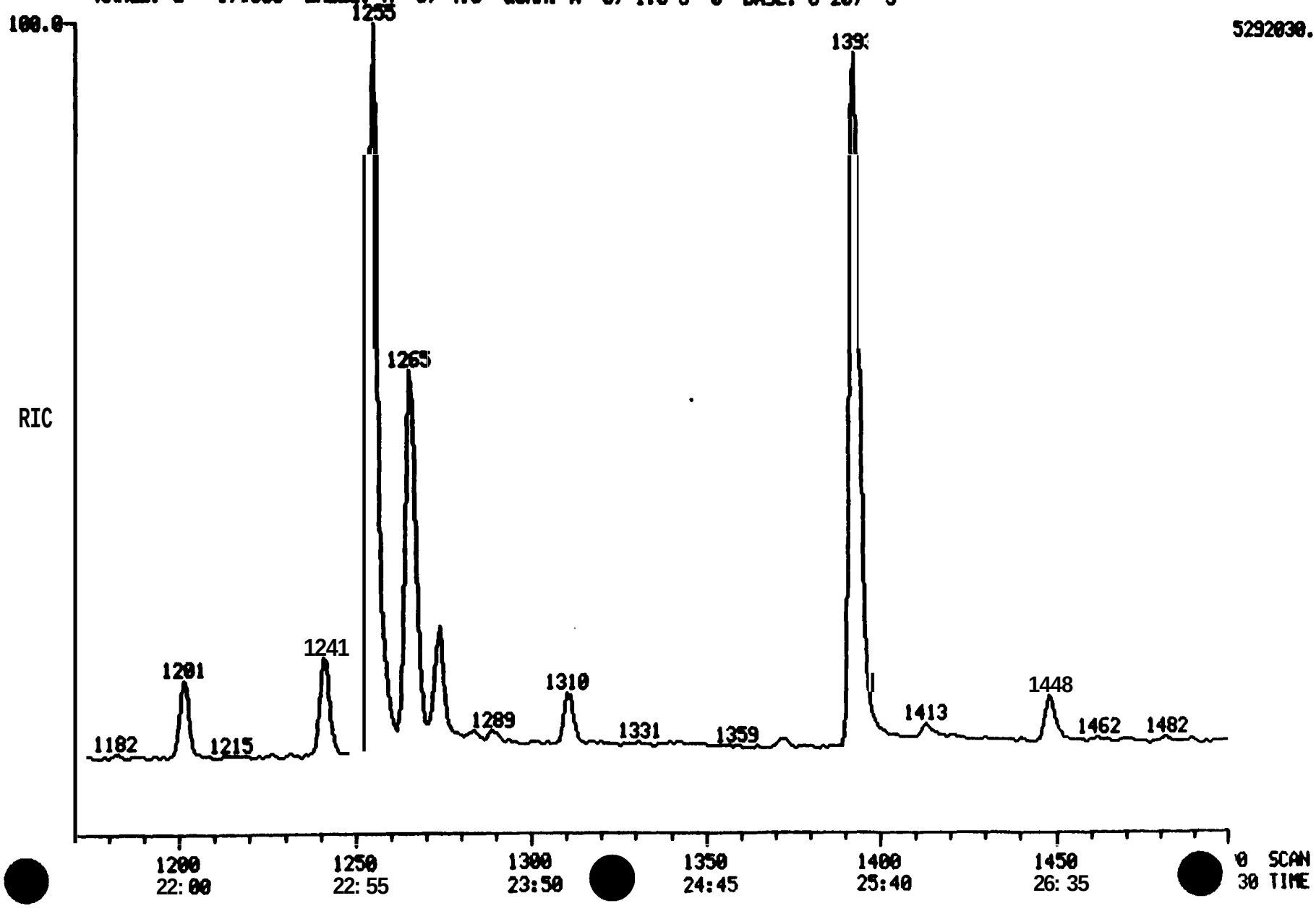
MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1353	183.3	1488.3	12.3	53953. 40.	36.

3200171

MIDRIC
03/28/91 12:15:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

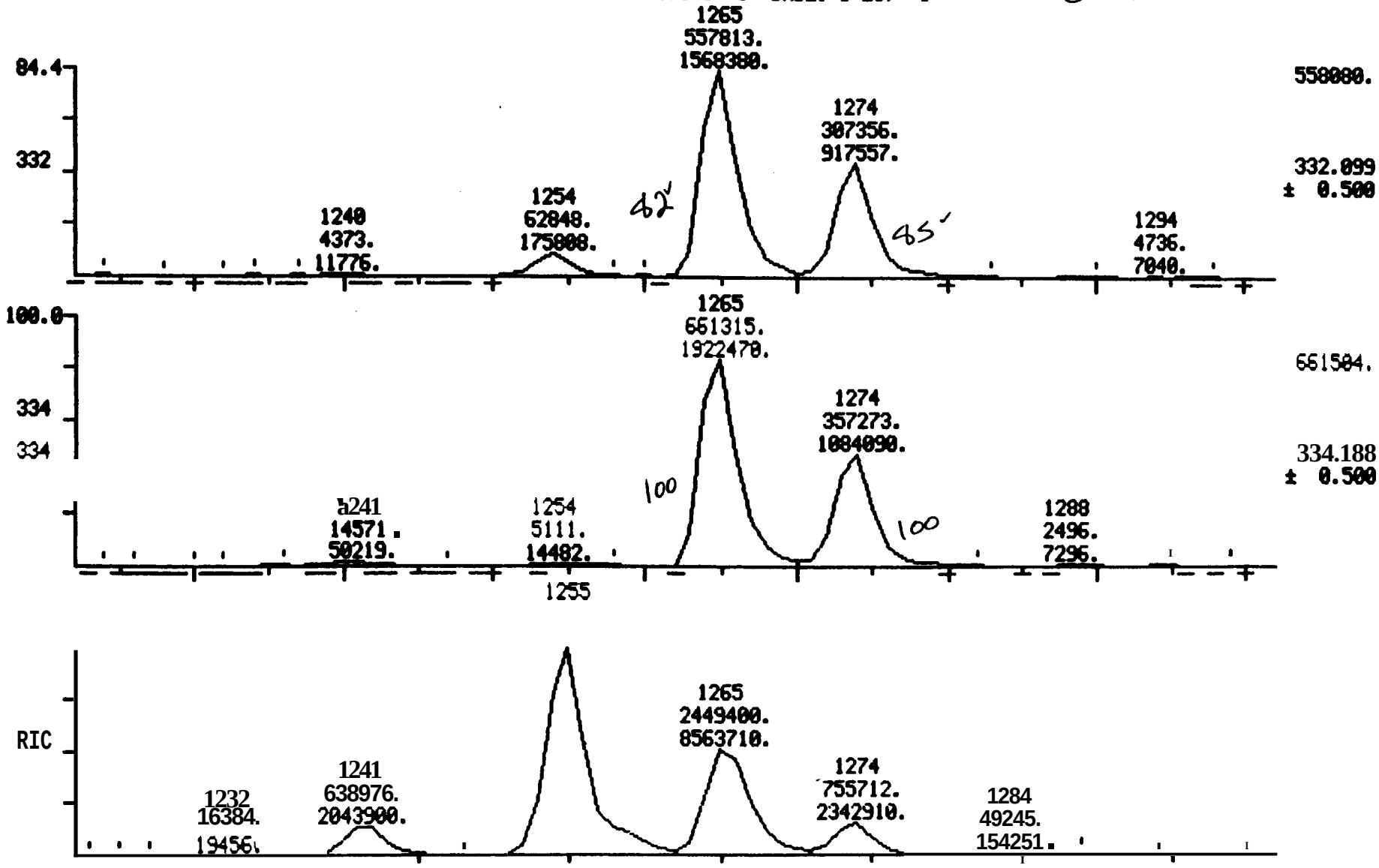
DATA: 68506IV1 #1262 SCANS 1170 TO 1500
CALI: CAL022291 #3

Calc. nm 3-28-91
QC DT 3-29-91



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1262 SCANS 1222 TO 1302
03/28/91 12:15:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

0.872 ✓



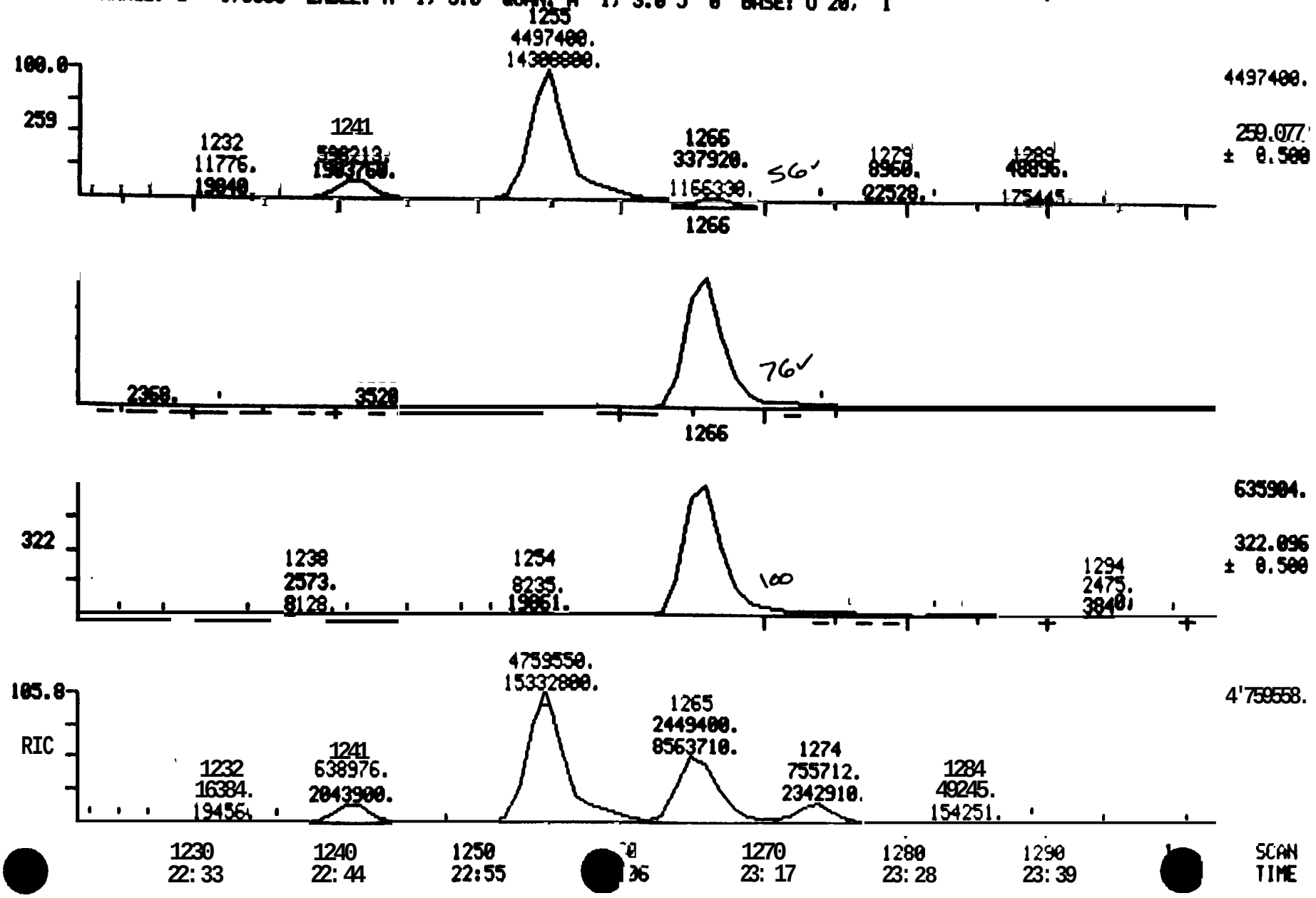
MIDRIC+MASS CHROMATOGRAMS
03/28/91 12:15:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: 68506IV1 #1262
CALI: CAL022291 #3

SCANS 1222 TO 1302

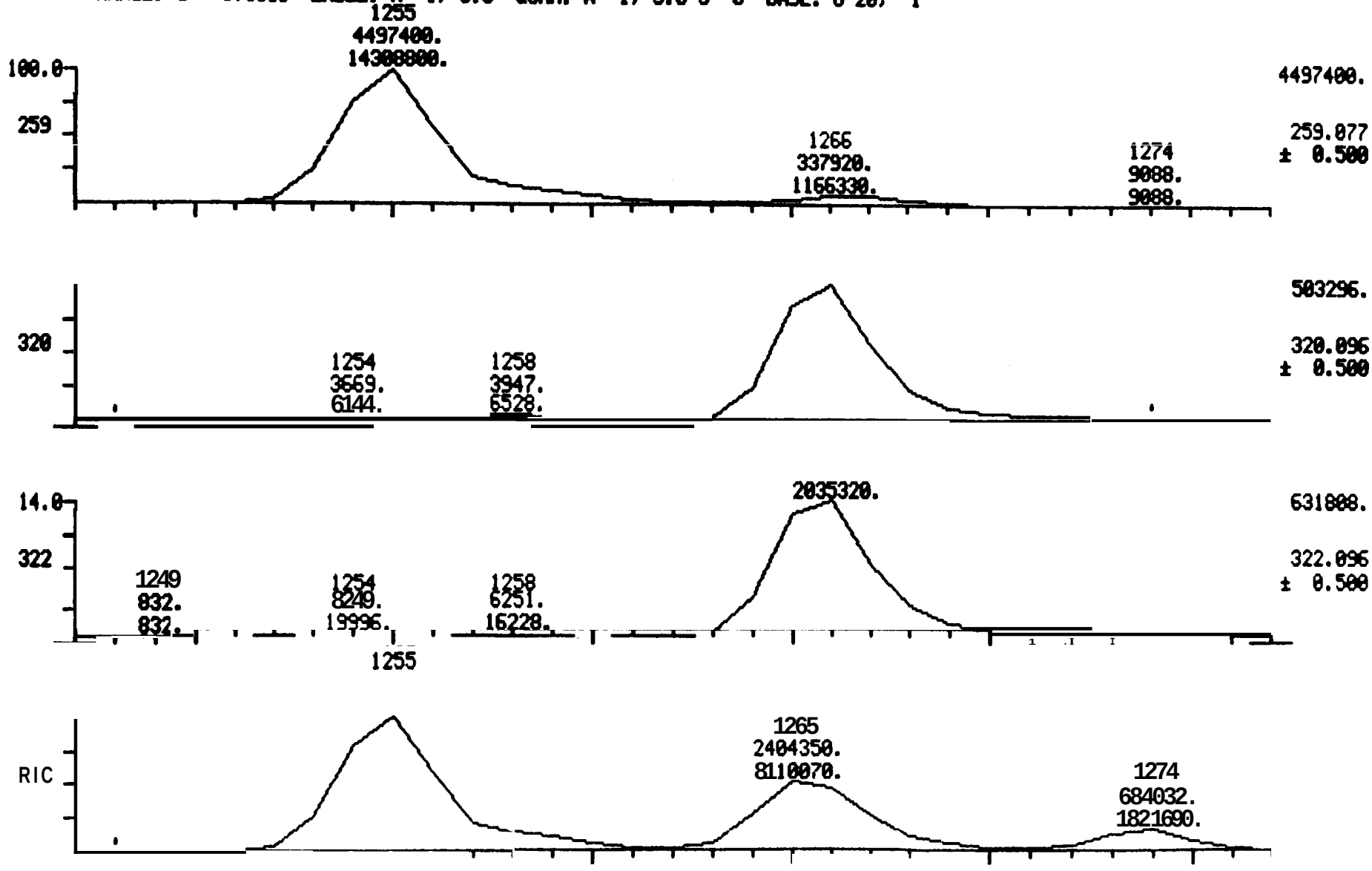
TCDD

1.05



2200172

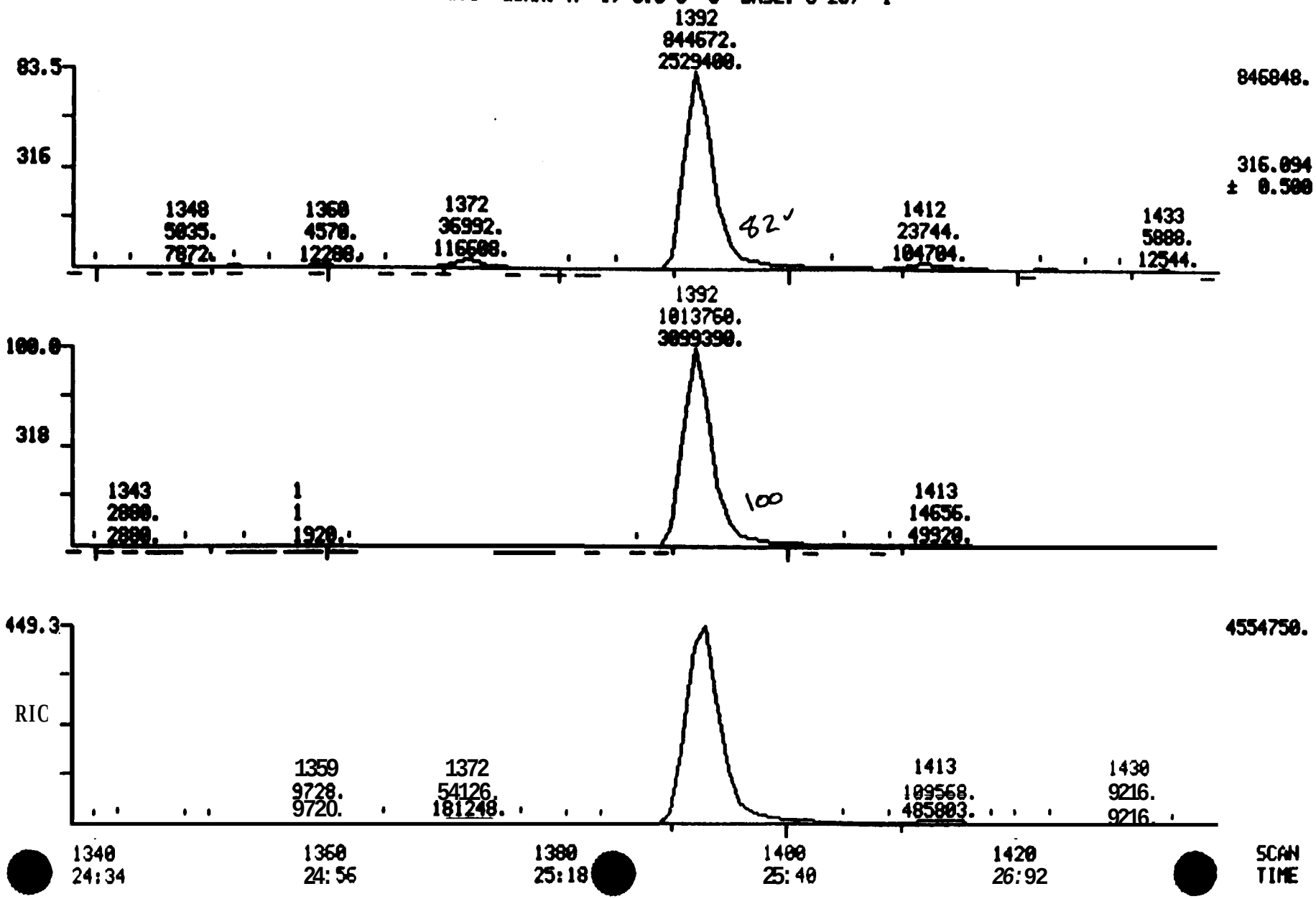
MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1262 SCANS 1247 TO 1277
03/28/91 12:15:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



MIDRIC+MASS CHROMATOGRAMS
03/20/91 12:15:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: 68506IV1 #1388 SCANS 1338 TO 1438
CALI: CAL022291 #3

1.41



3200173

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1388 SCANS 1338 TO 1438

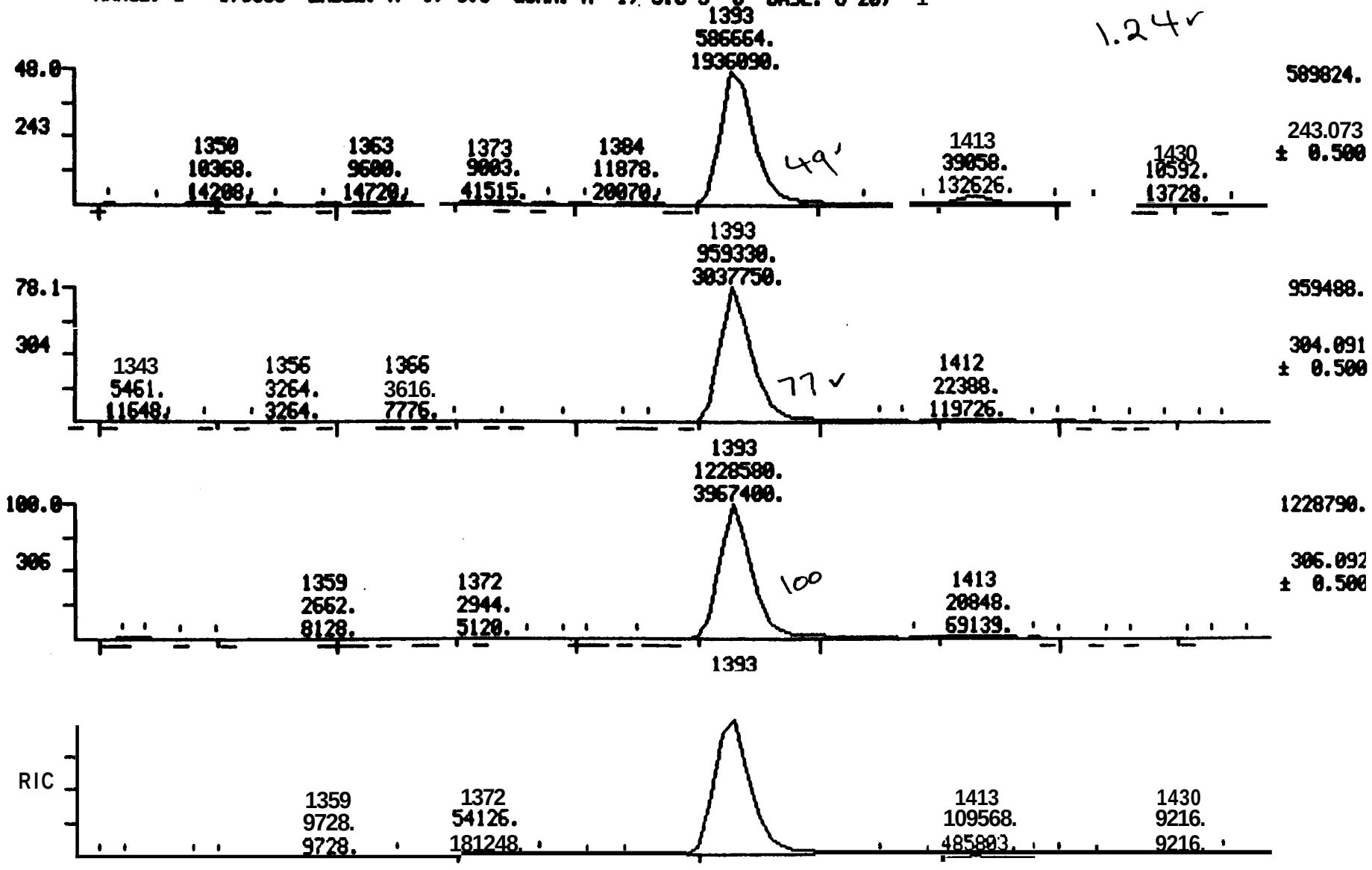
03/28/91 12:15:00 CALI: CAL022291 #3

SAMPLE: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT

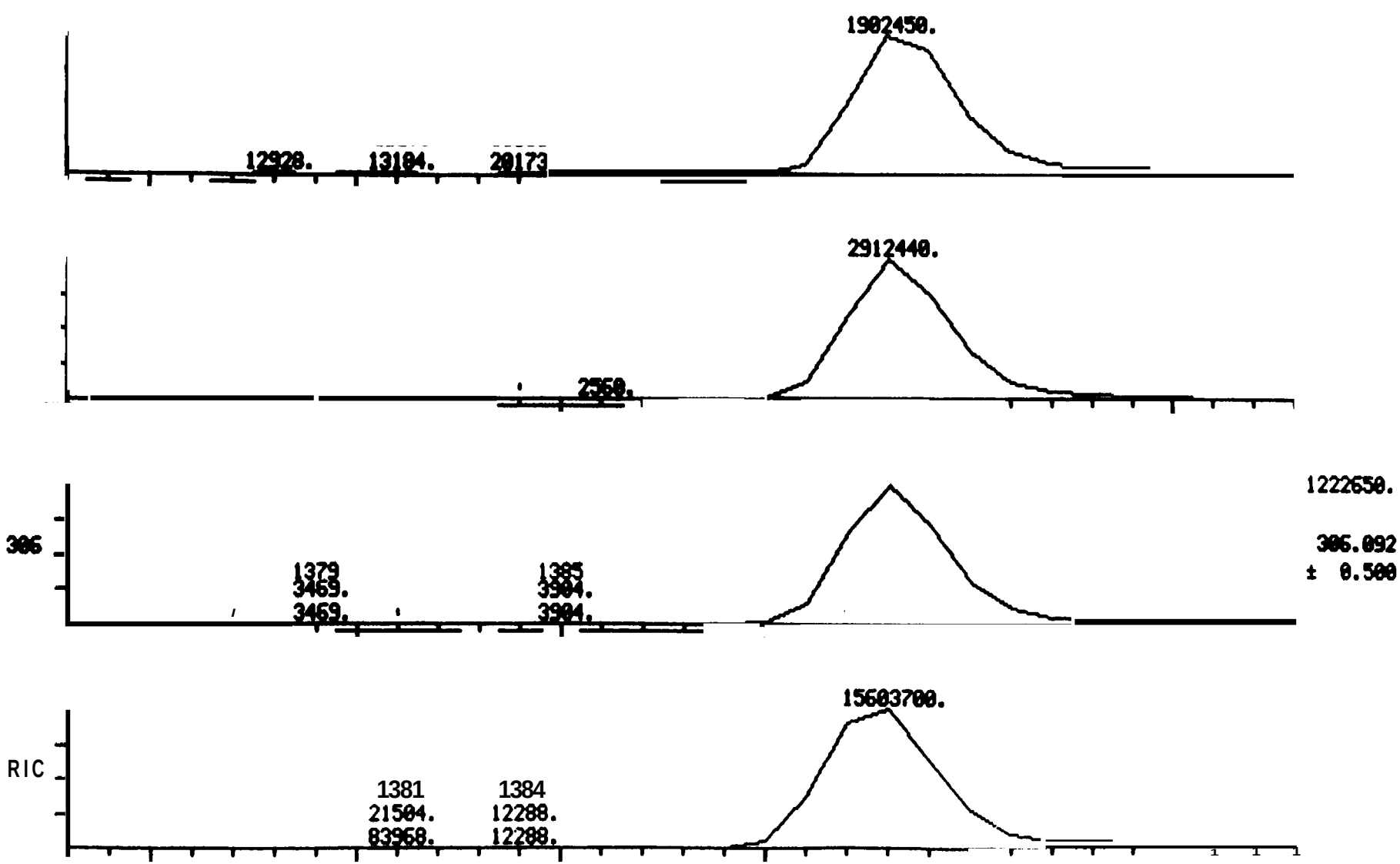
CONDS.: ISOMER SPECIFIC

RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

TCDF



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1300 SCANS 1373 TO 1403
03/28/91 12:15:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



3200174

3/28/91 12:13:32 SCAN 1 OF 2200
Acquisition started

Acquire Run 0:68506IV1 Acquiring
03/28/91 12:15:00 + 0:04 Free sectors: 28203 Scan: 4 of 2200
Sample: 2UL OF 685:06-IV @ 1000 PPB FOR MULTIPOINT
Conds. : ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: NM Acct. No:

********** QC PARAMETERS **********
Loaded QC Desc: TD Current QC oven tmp: 512 DegC Injector : 260 DegC
Current QC Desc: TD QC elapsed time 1:33 min Int.oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Sanp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.630	243.130	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Por
4	305.648	306.148	0.108	1	100	40	2	0	Pos
5	315.648	316.148	0.105	1	100	40	2	0	Por
6	317.648	318.148	0.105	1	100	40	2	0	Por
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/28/91 12:15:39 SCAN 7 OF 2200
Mode changed to suspended centroid positive ion

3/28/91 12:17:32 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/28/91 12:43:33 SCAN 1503
Acquisition stopped

3/28/91 12:43:57
ACQUISITION COMPLETED

SCANS	1 TO	6	CENTROID	
SCANS	7 TO	106	SUSPENDED	
SCANS	107 TO	1503	CENTROID	

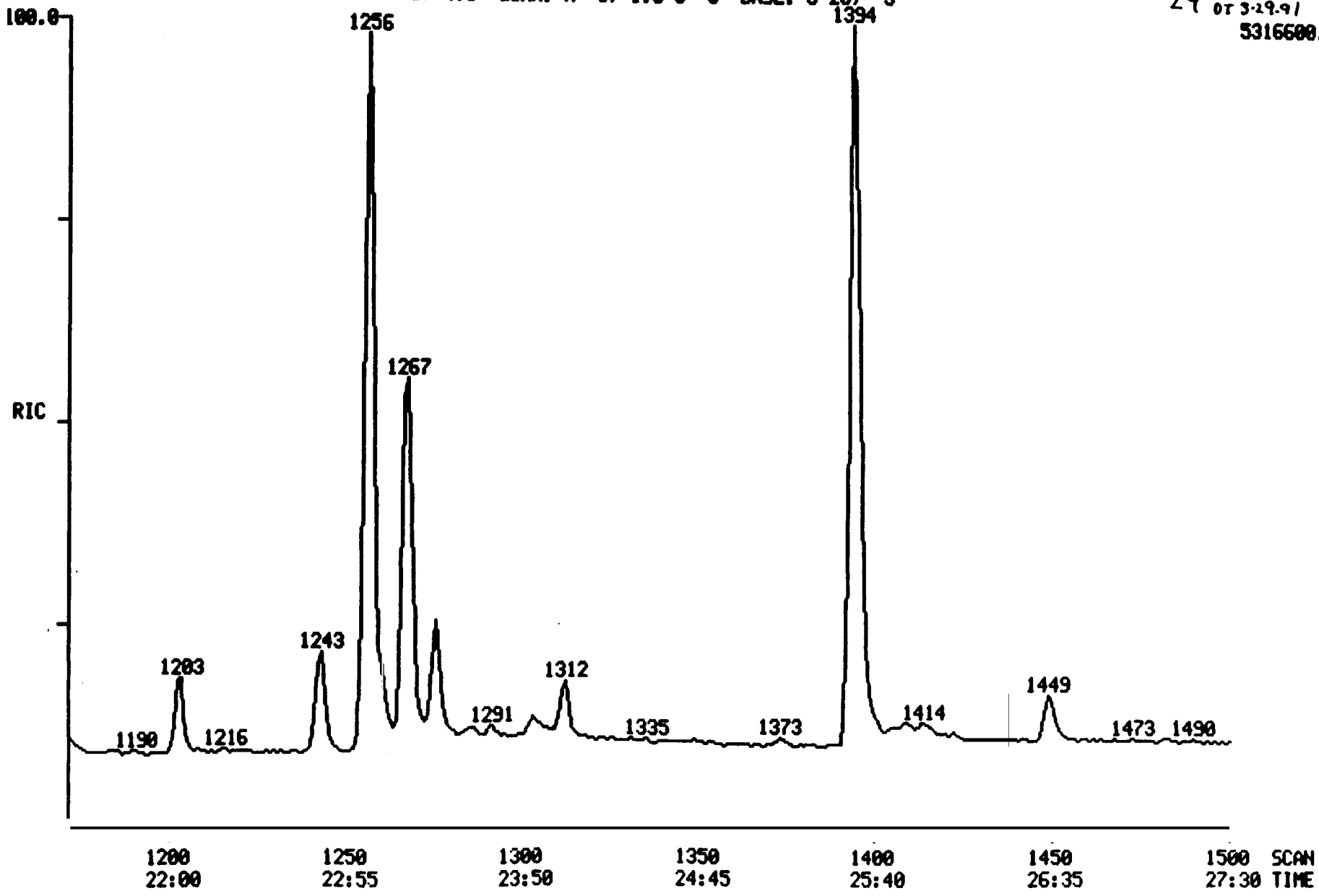
MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1403	296.4	1343.3	19.2	142979.	102.	93.

3200175

MIDRIC
03/28/91 12:51:00
SAMPLE: 2UL OF 685:06-IV @ 10 PPB RUN #2 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

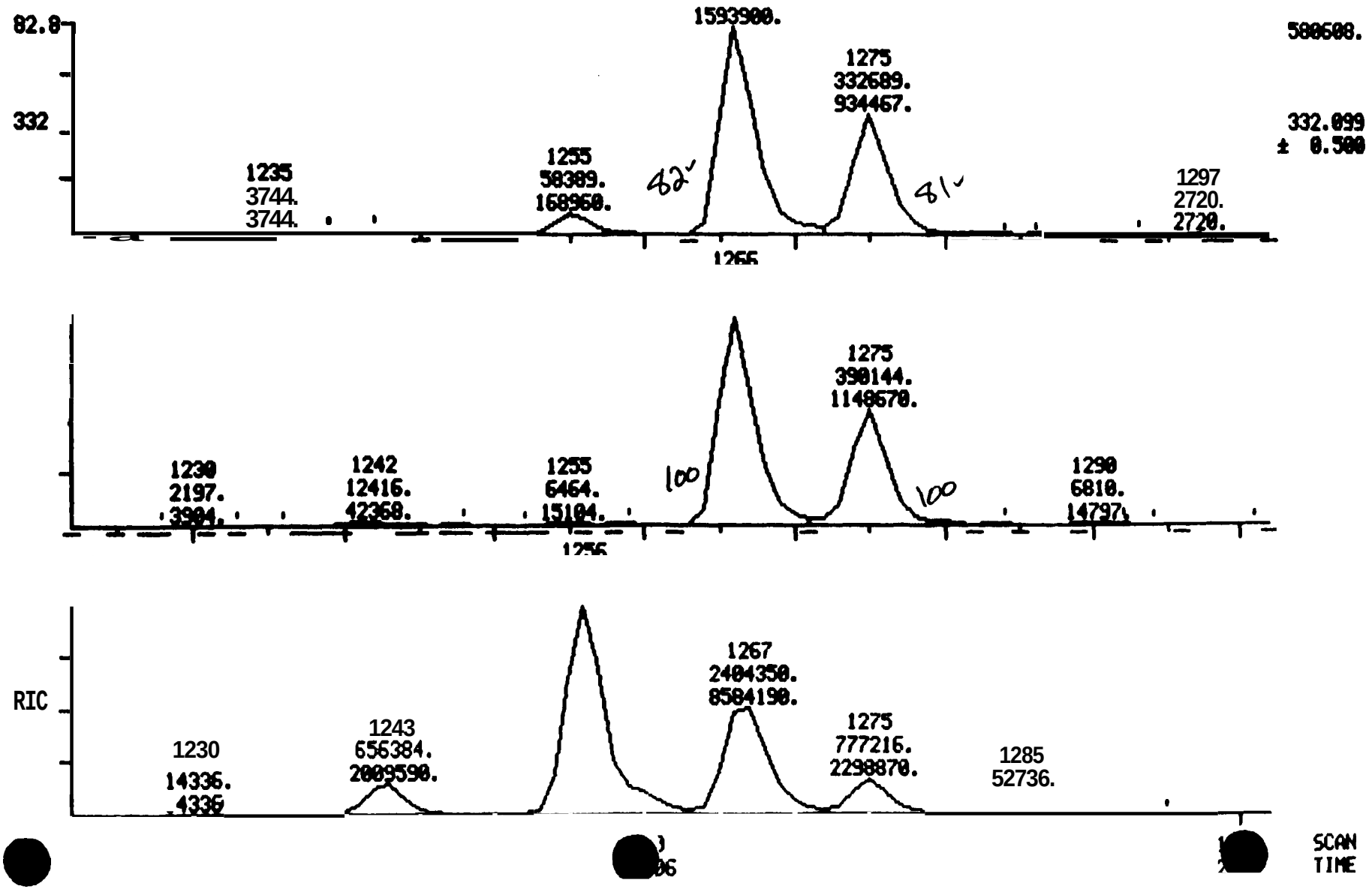
DATA: 68506IV2 #1262 SCANS 1170 TO 1500
CALI: CAL022291 #3

Calc. MM 3-28-91
QC DT 3-~~28~~-91
29 DT 3-29-91



5316600.

3200176


82.8
332
1235
3744.
3744.
1255
58389.
168960.
1593900.
82
1275
332689.
934467.
81
1297
2720.
2720.
580600.
332.099
± 0.500
1266
1230
2197.
3904.
1242
12416.
42368.
1255
6464.
15104.
100
1275
390144.
1148670.
100
1290
6810.
14797.
1256
RIC
1230
14336.
4336
1243
656384.
2009590.
1267
2404350.
8584190.
1275
777216.
2298870.
1285
52736.
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1262 SCANS 1222 TO 1302

03/28/91 12:51:00 CALI: CAL022291 #3

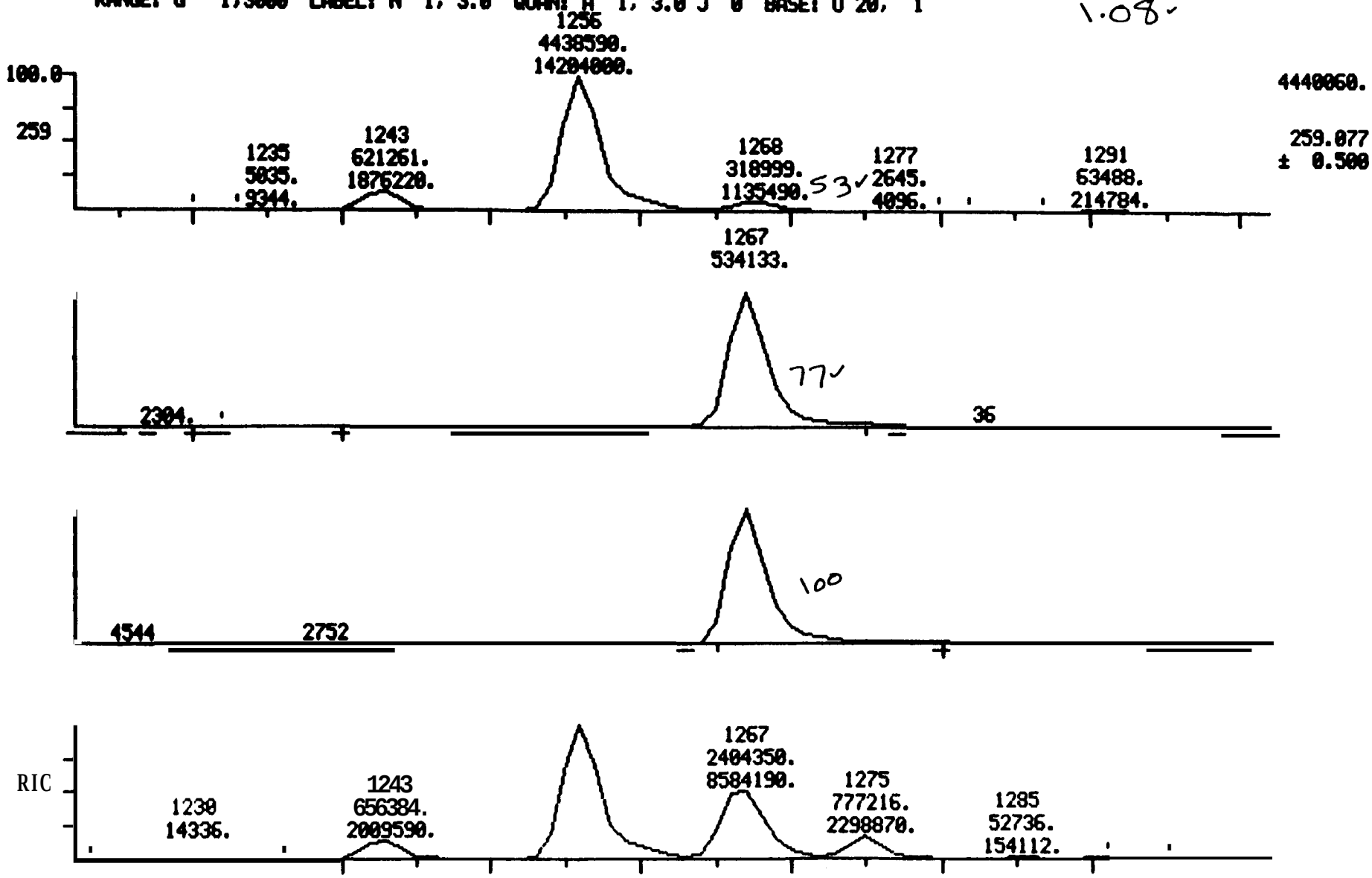
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT

CONDS.: ISOMER SPECIFIC

RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

TCDD

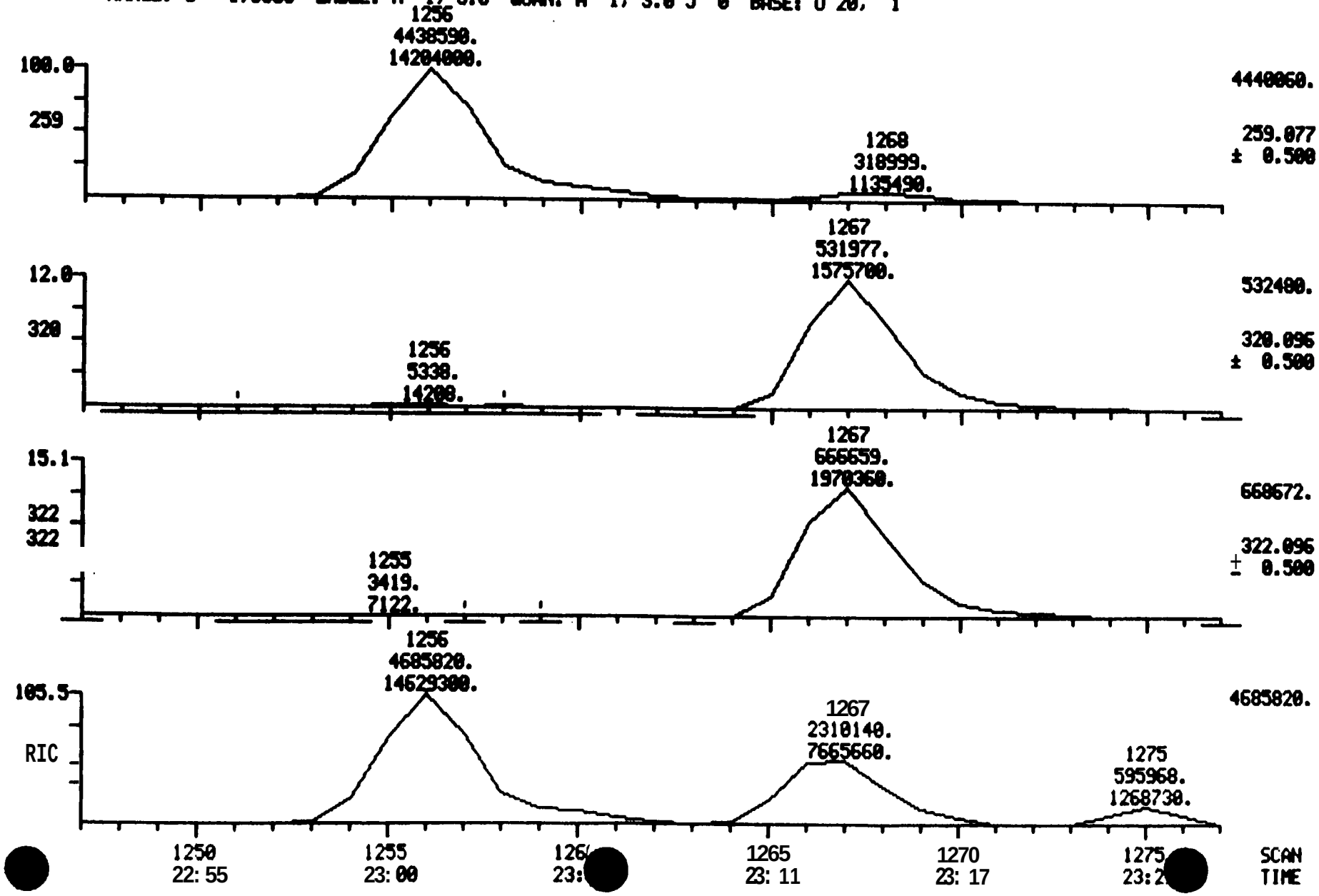
1.08



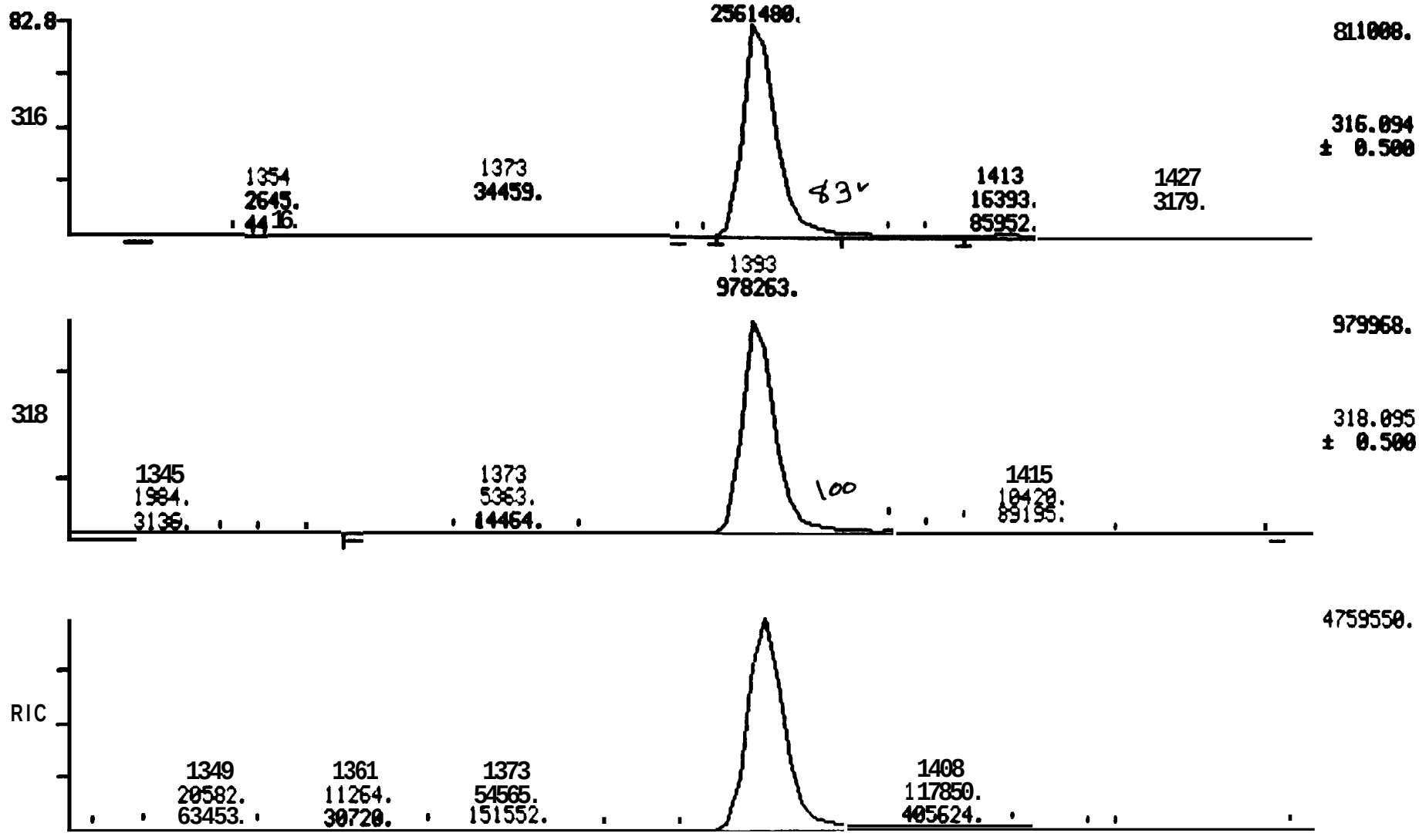
3200177

MIDRIC+MASS CHROMATOGRAMS
03/28/91 12:51:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: 68506IV2 #1262 SCANS 1247 TO 1277
CALI: CAL022291 #3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1388 SCANS 1338 TO 1438
03/28/91 12:51:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1 1.35✓



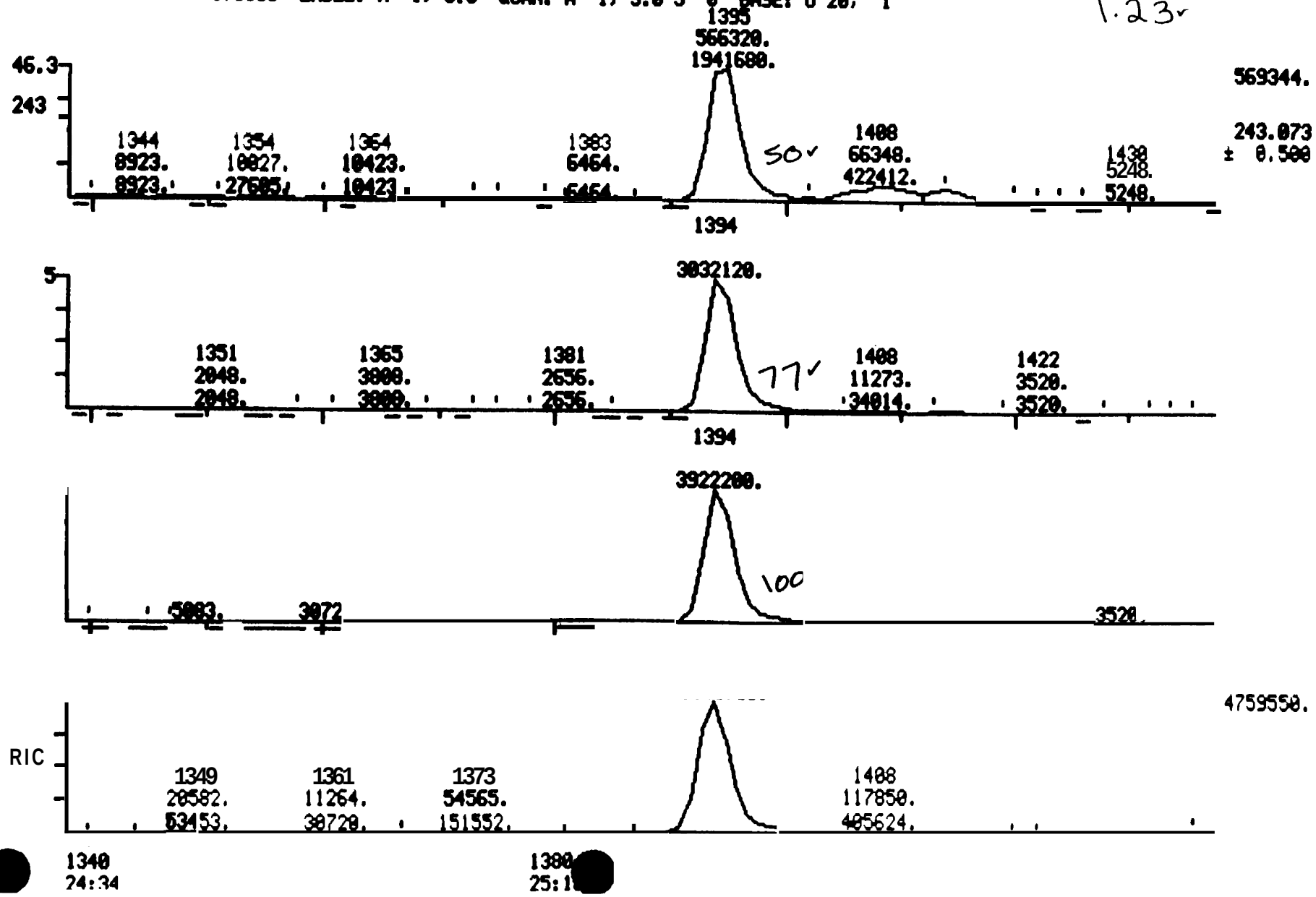
MIDRIC+MASS CHROMATOGRAMS
03/20/91 12:51:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: 68506IV2 #1308
CALI: CAL022291 #3

SCANS 1338 TO 1438

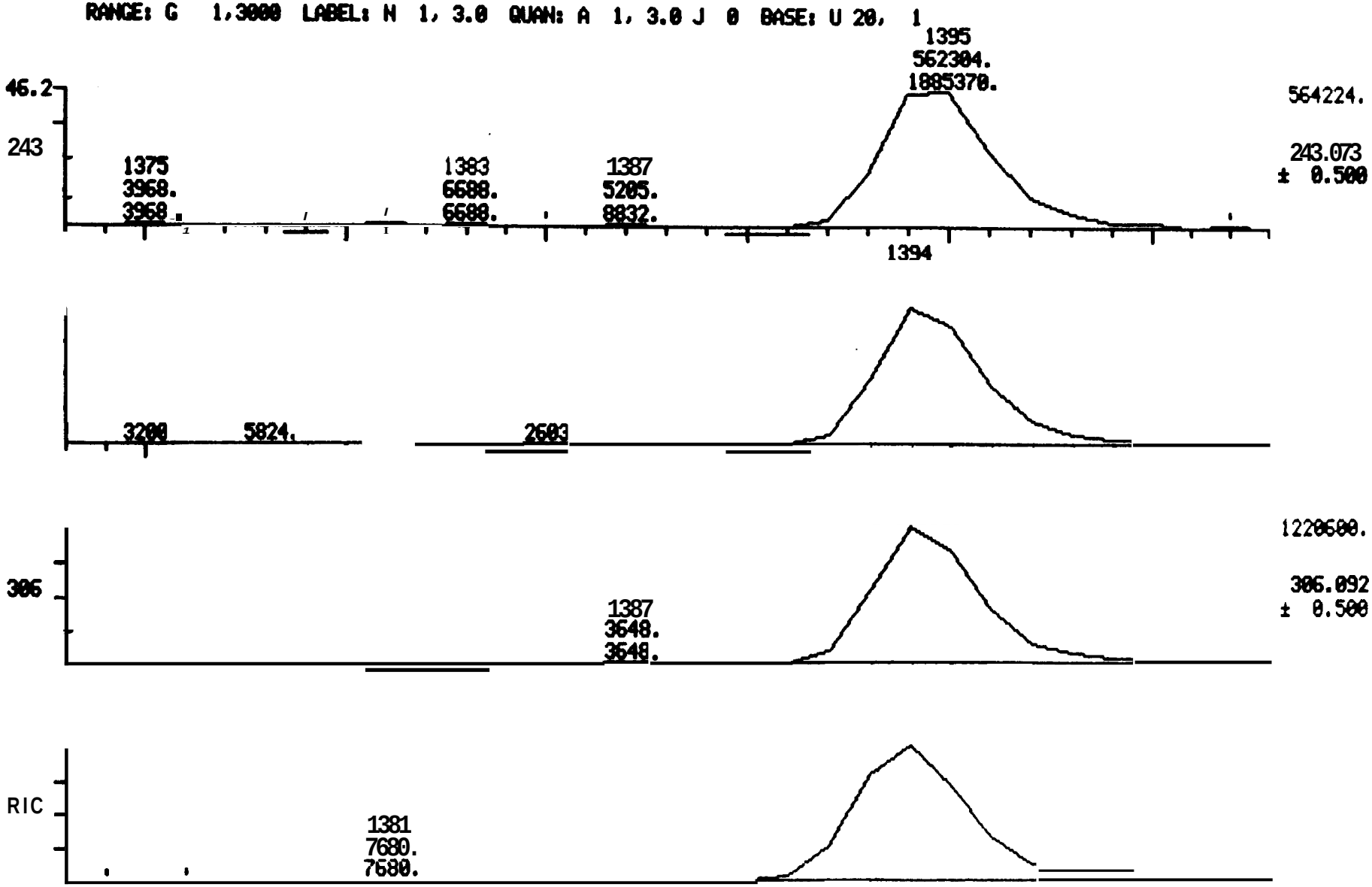
TCDF

1.23



3200178

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1388 SCANS 1373 TO 1403
03/28/91 12:51:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



3/28/91 12:51:06 SCAN 1 OF 2200
Acquisition started

Acquire Run 0:68506IV2 Acquiring
03/28/91 12:51:00 + 0:04 Free rectors: 27023 Scan: 4 of 2200
Sample: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: 38 Analyst: NM Acct. No:

********** GC PARAMETERS **********
Loaded GC Desc:TD Current GC oven tmp: 312 DegC Injector : 260 DegC
Current GC Desc:TD GC elapsed tire : 1:45 min Int.oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Node: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	a	0	Po.
3	303.649	304.149	0.103	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Ro.
5	313.648	316.148	0.105	1	100	40	2	0	Po.
6	317.648	318.148	0.105	1	100	40	2	0	Por
7	319.649	320.149	0.105	1	100	40	2	0	Po.
e	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.103	1	100	40	2	0	Po.
10	333.649	334.150	0.105	1	100	40	2	0	Po.

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at lor mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/28/91 12:31:13 SCAN 7 OF 2200
Mode changed to suspended centroid positive ion

3/28/91 12:53:03 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/28/91 13:19:28 SCAN 1503
Acquisition stopped

3/28/91 13:19:30
ACQUISITION COMPLETED

3200179

SCANS 1 TO 7 CENTROID
SCANS e TO 106 SUSPENDED
SCANS 107 TO 1503 CENTROID

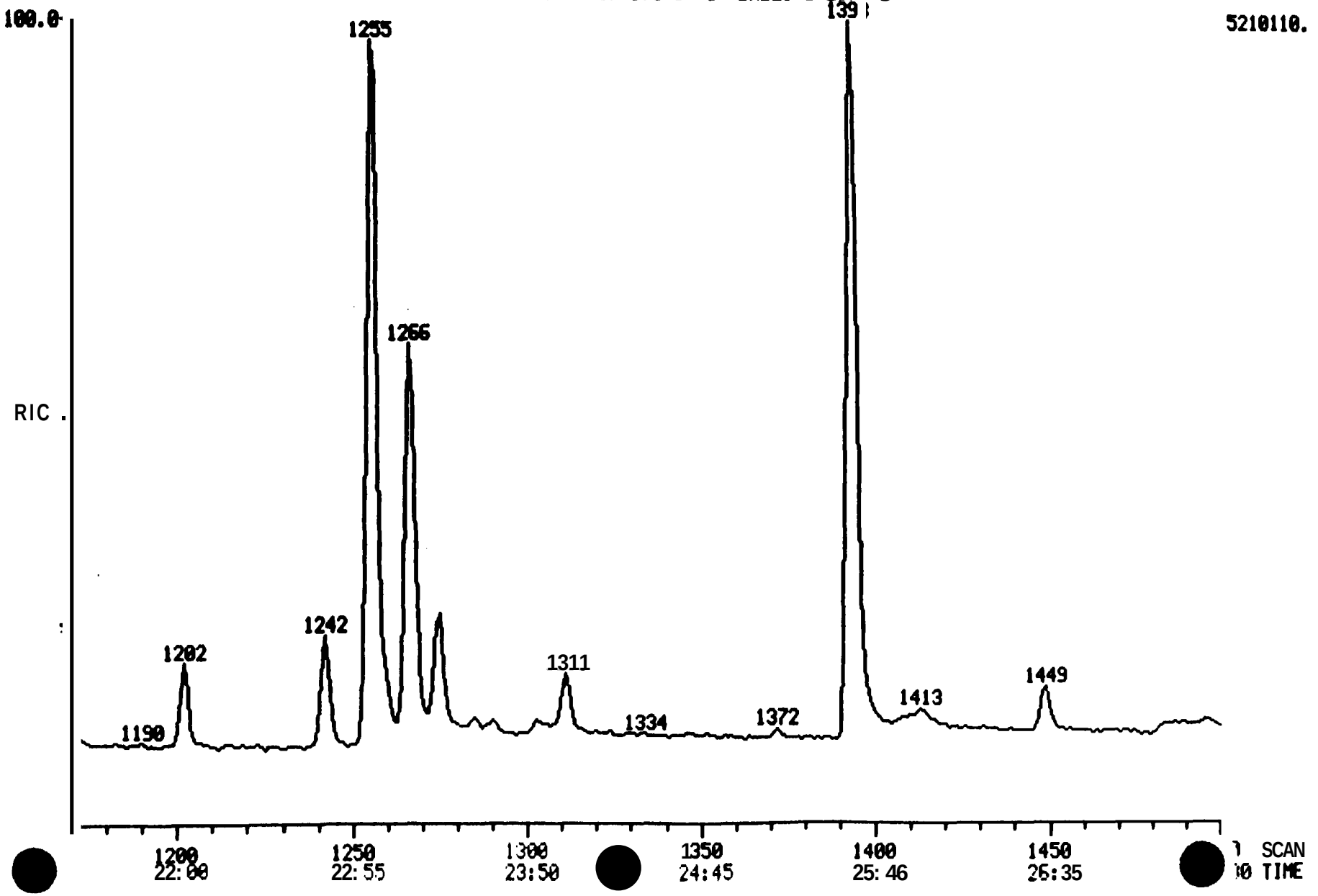
MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1404	293.9	1344.4	19.2	124118. 88.	80.

MIDRIC
03/28/91 13:26:00
SAMPLE: 2UL OF 685:05-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1504 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506IV3 #1262
CALI: CAL022291 #3

SCANS 1170 TO 1500

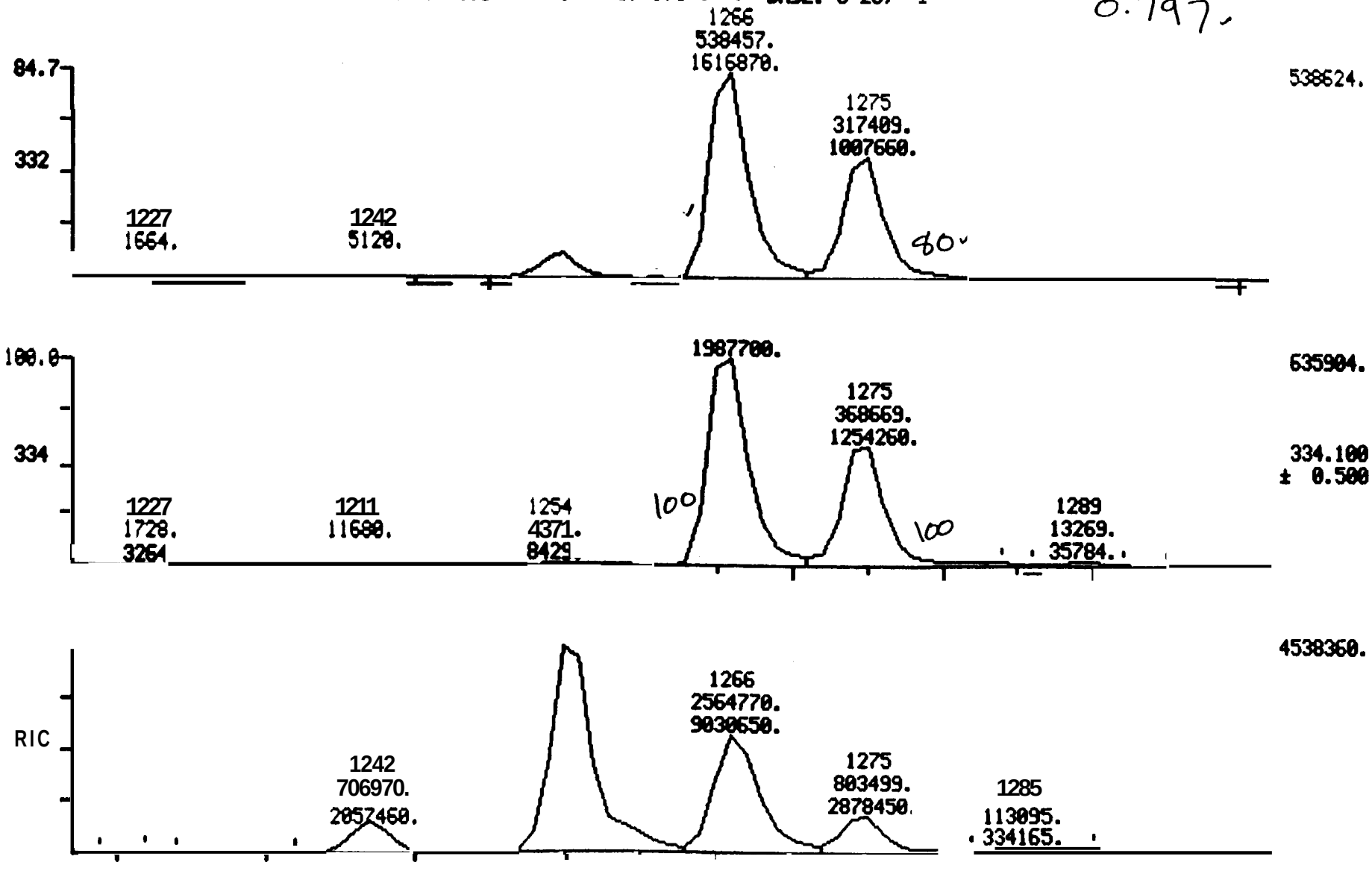
Calc. nm 3-28-91
QC DT 3-29-91



3200130

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1262 SCANS 1222 TO 1302
03/28/91 13:26:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

0.797.



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1262 SCANS 1222 TO 1302

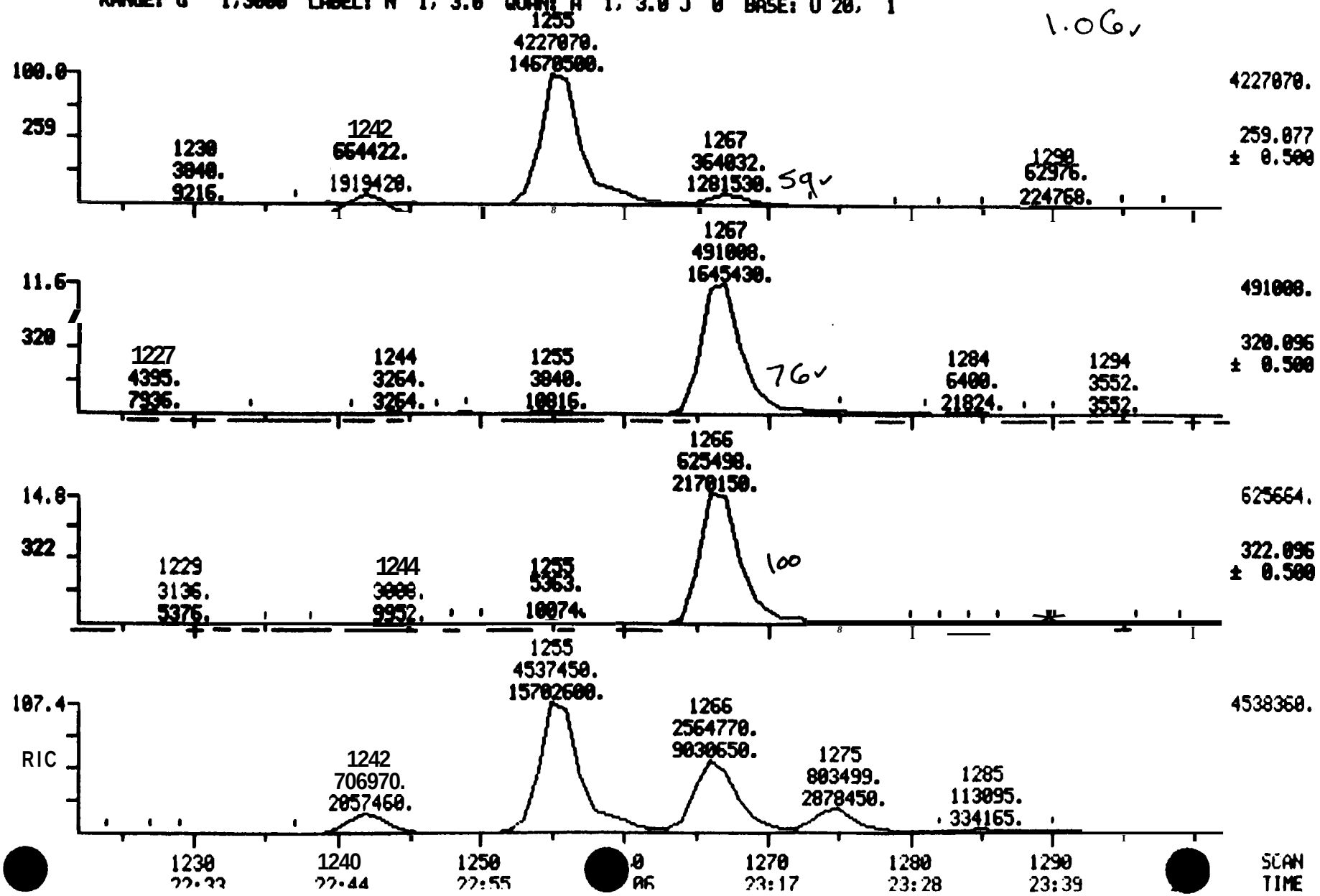
03/28/91 13:26:00 CALI: CAL022291 #3

SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT

CONDS.: ISOMER SPECIFIC

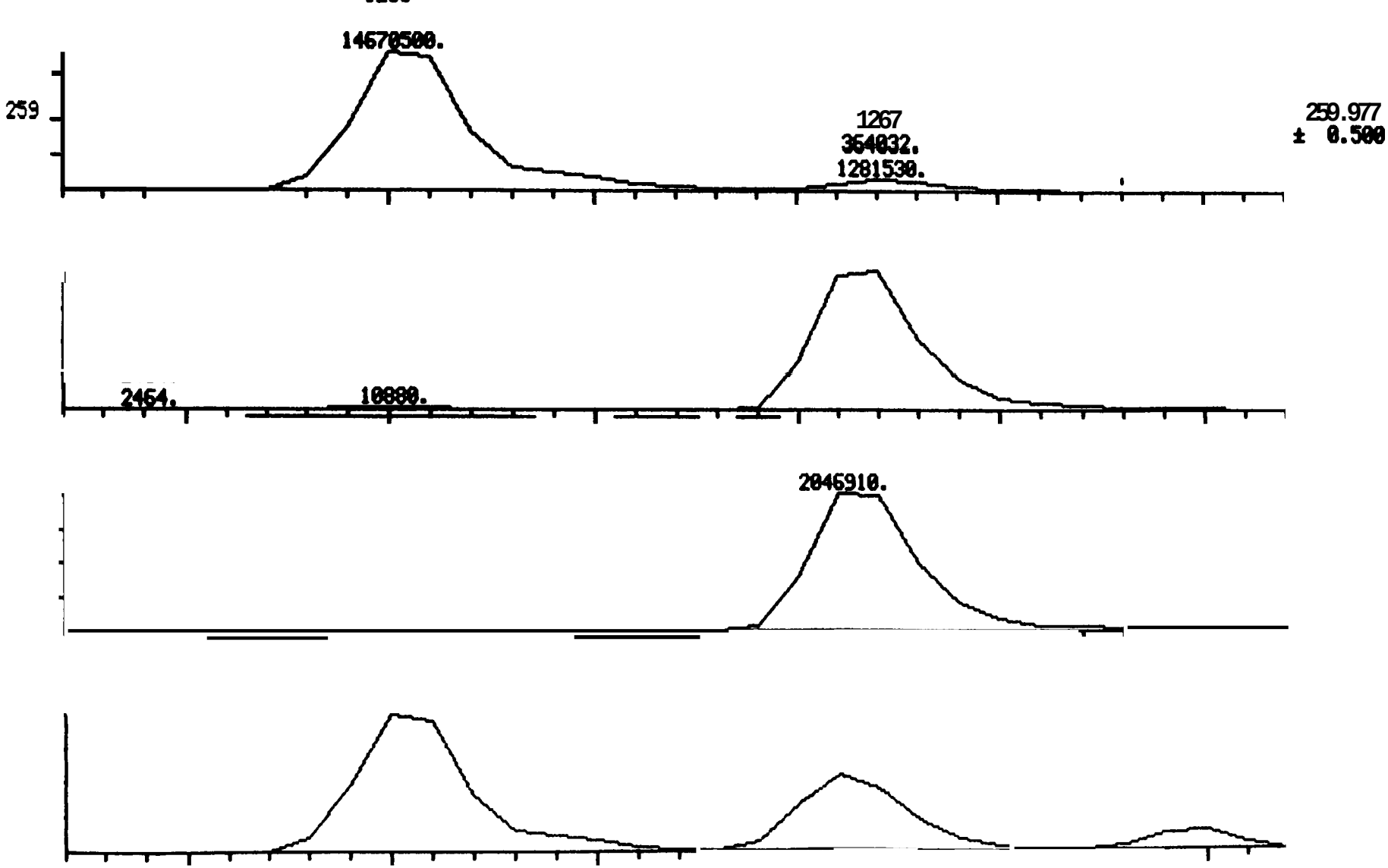
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

TCDD

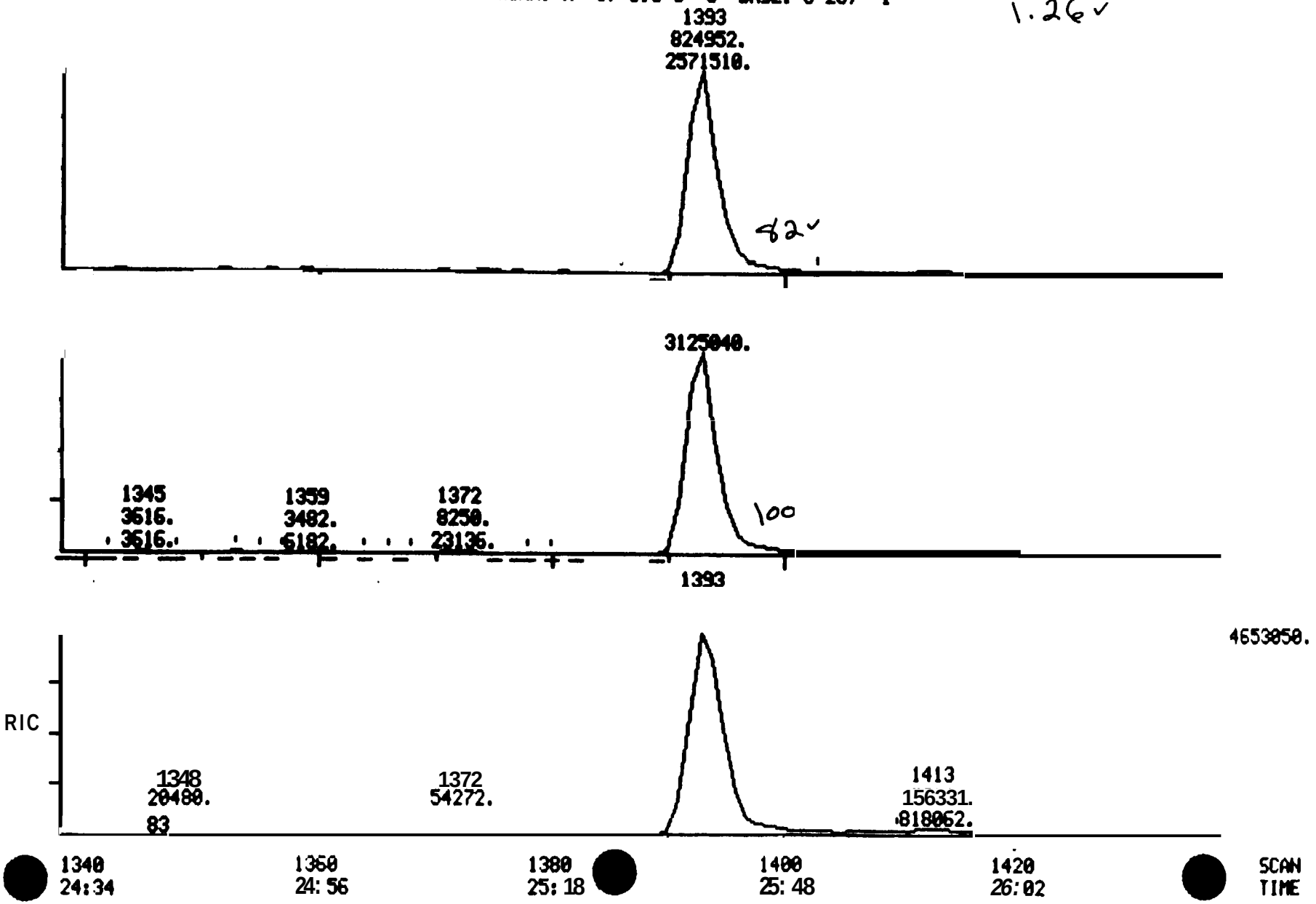


8200181

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 11262 SCANS 1247 TO 1277
03/28/91 13:26:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN 13 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1388 SCANS 1338 TO 1438
03/28/91 13:26:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

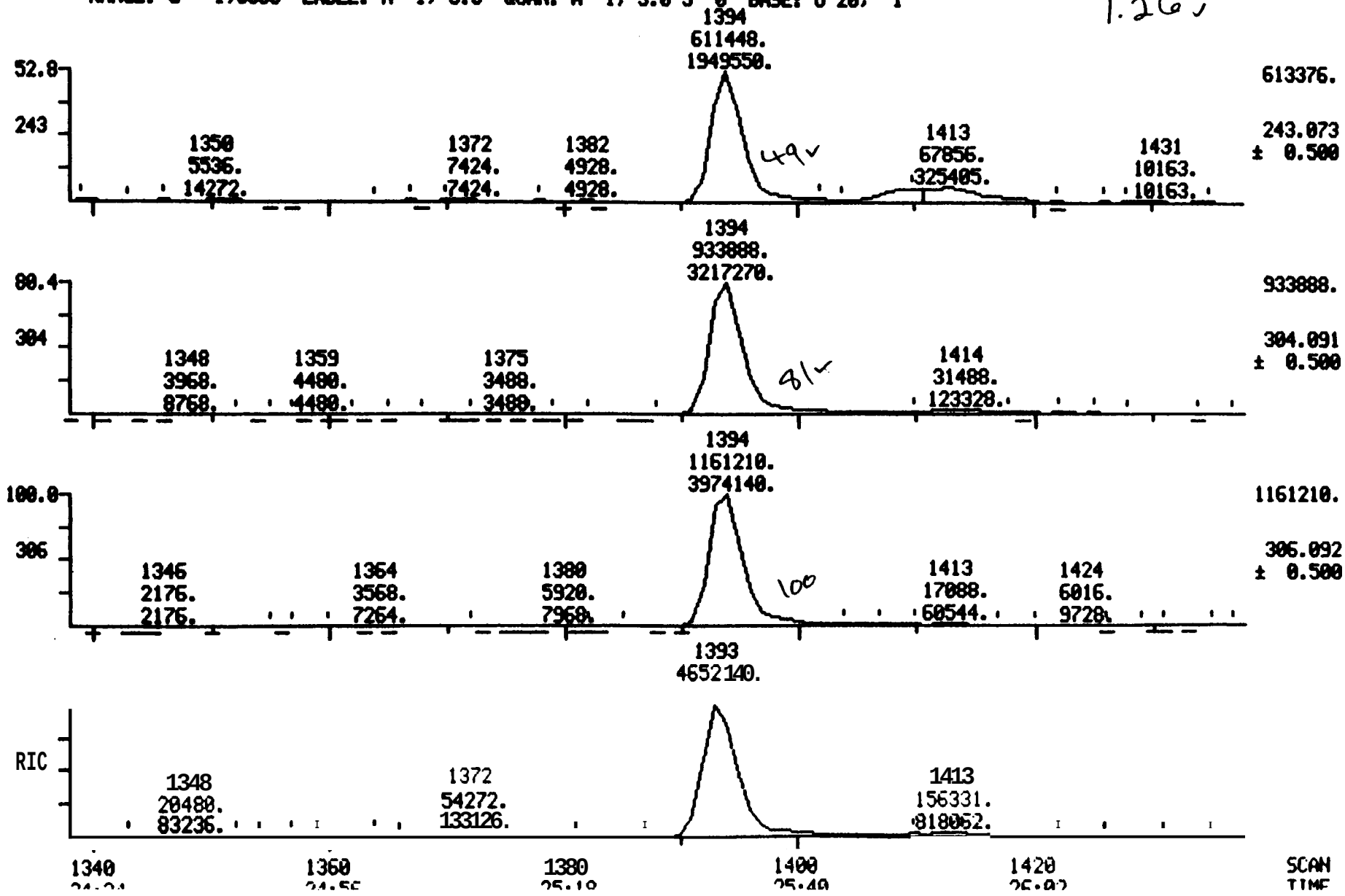


3200182

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1388 SCANS 1338 TO 1438
03/28/91 13:26:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

TCDF

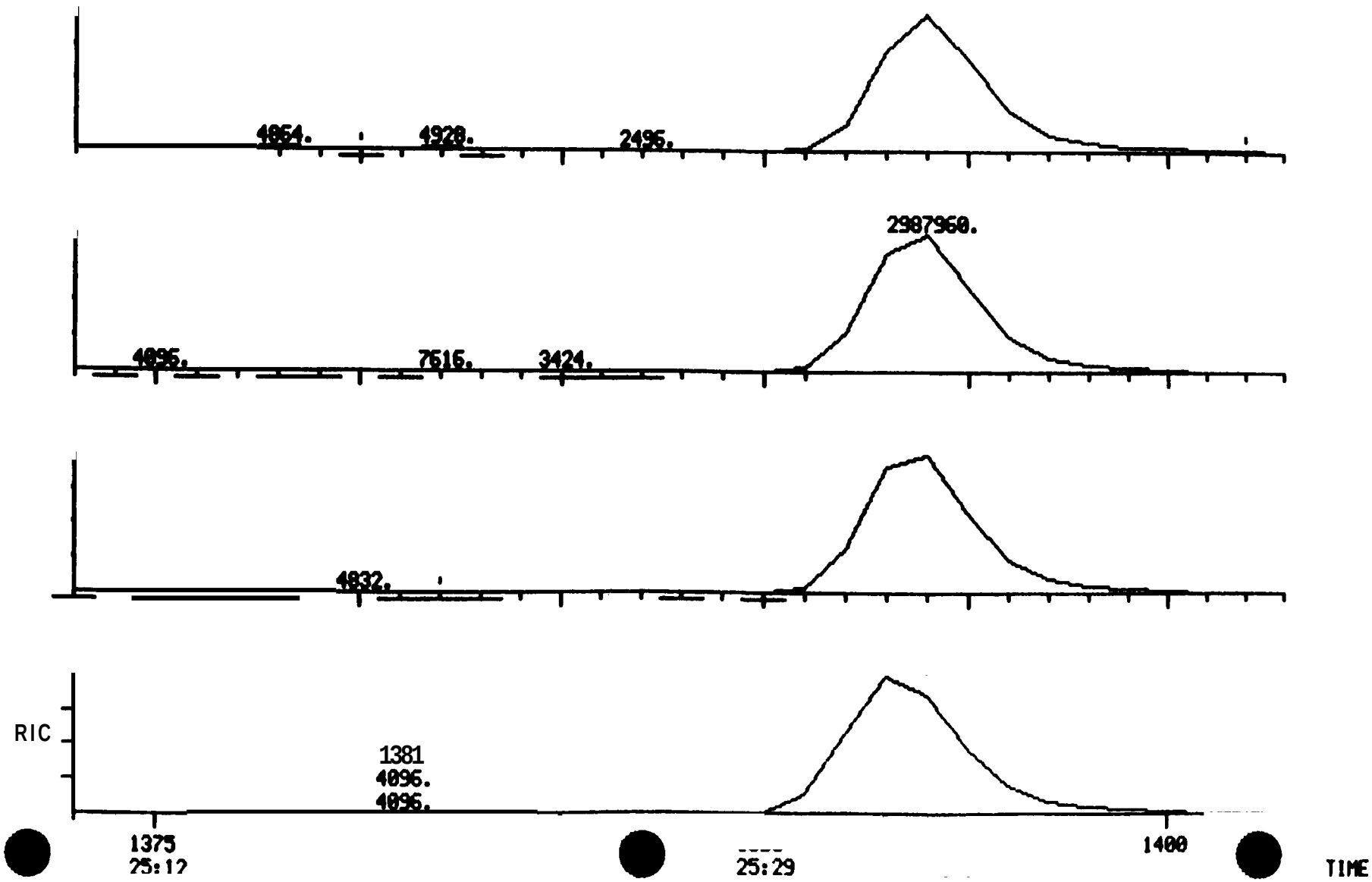
1.26 ✓



MIDRIC+MASS CHROMATOGRAMS
03/28/91 13:26:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC

DATA: 68506IV3 #1388
CALI: CAL022291 #3

SCANS 1373 TO 1403



3200183

3/28/91 13:26:32 SCAN 1 OF 2200
Acquisition started

Acquire Run 0:68506IV3 Acquiring
03/28/91 13:26:00 + 0:04 Free rectors: 25993 Scan: 4 of 2200
Sample: 2uL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
Condr.: ISOMER SPECIFIC
Formu1a: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: NM Acct. No:

********** CC PARAMETERS **********
Loaded GC Desc: TD Current GC oven tmp: 512 DegC Injector : 260 DegC
Current CC Desc: TD GC elapsed time 1:41 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.630	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Pos
5	315.648	316.148	0.105	1	100	40	2	0	Pos
6	317.640	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pus
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.103	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument typo	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/28/91 13:26:39 SCAN 6 OF 2200
Mode changed to suspended centroid positive ion

3/28/91 13:28:32 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/28/91 13:34:34 SCAN 1304
Acquisition stopped

3/28/91 13:34:57
ACQUISITION COMPLETED

SCANS	1 TO	6	CENTROID
SCANS	7 T 0	106	SUSPENDED
SCANS	107 TO	1504	CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS	PER SCAN	PER SEC
CENTROID	1404	303.6	1344.4	19.7	157728.	112.	102.

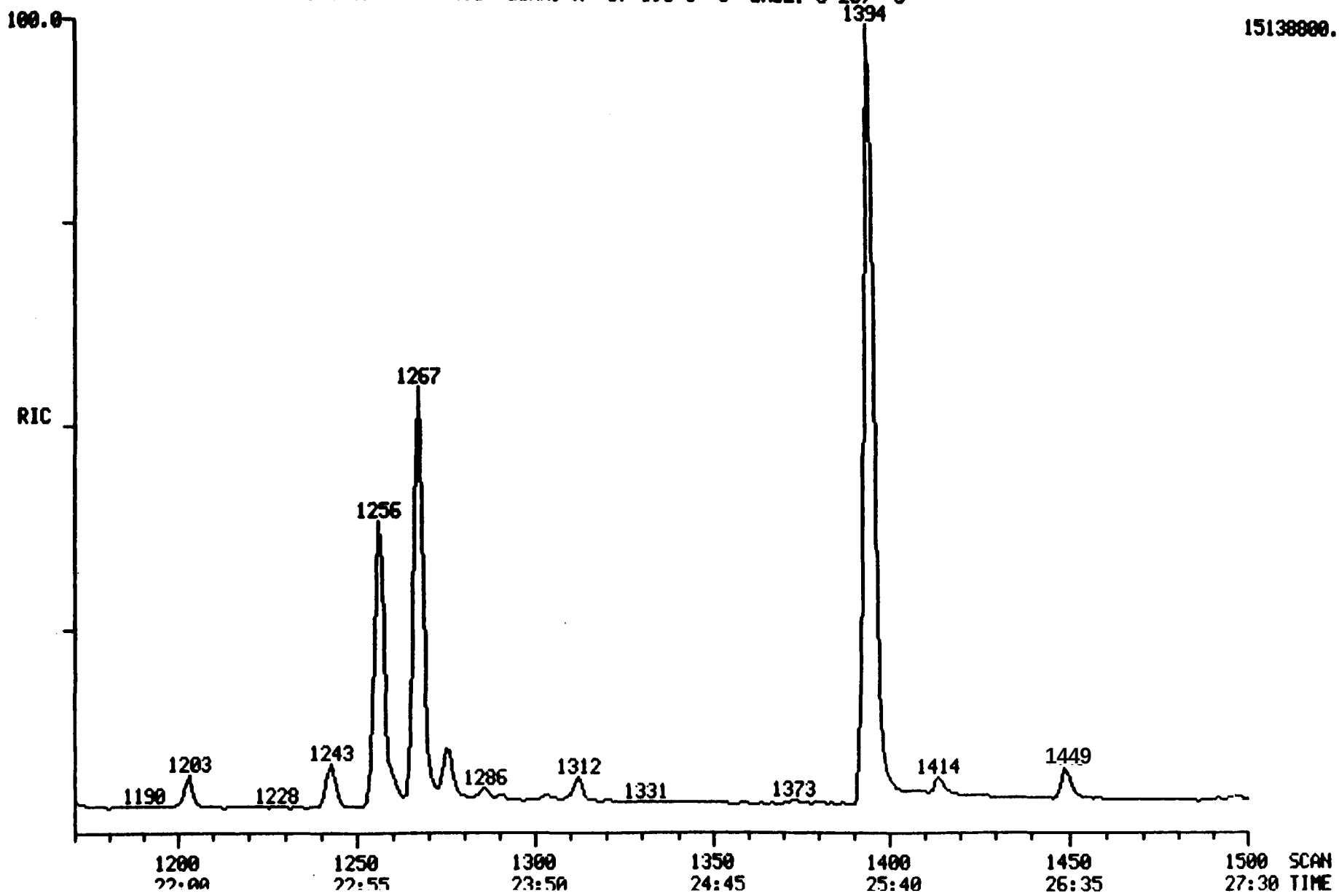
3200184

MIDRIC
03/28/91 14:02:00
SAMPLE: 2UL OF 68506-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506V1 #1262
CALI: CAL022291 #3

SCANS 1170 TO 1500

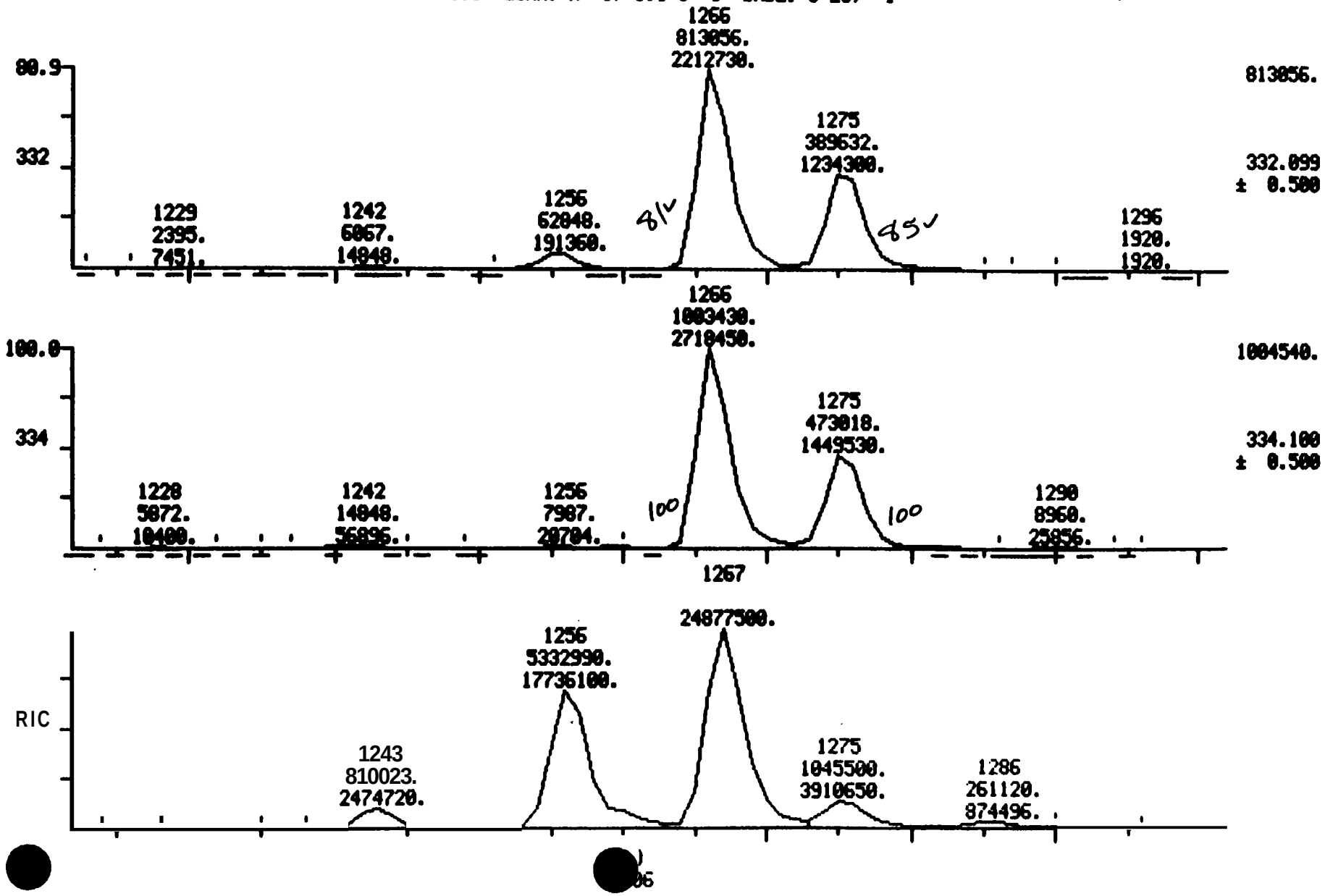
Calc. nm 3-28-91
QC DT 3-29-91



3200185

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1262 SCANS 1222 TO 1302
03/28/91 14:02:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 68506-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

0.919✓



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1262 SCANS 1222 TO 1382

03/28/91 14:02:00 CALI: CAL022291 #3

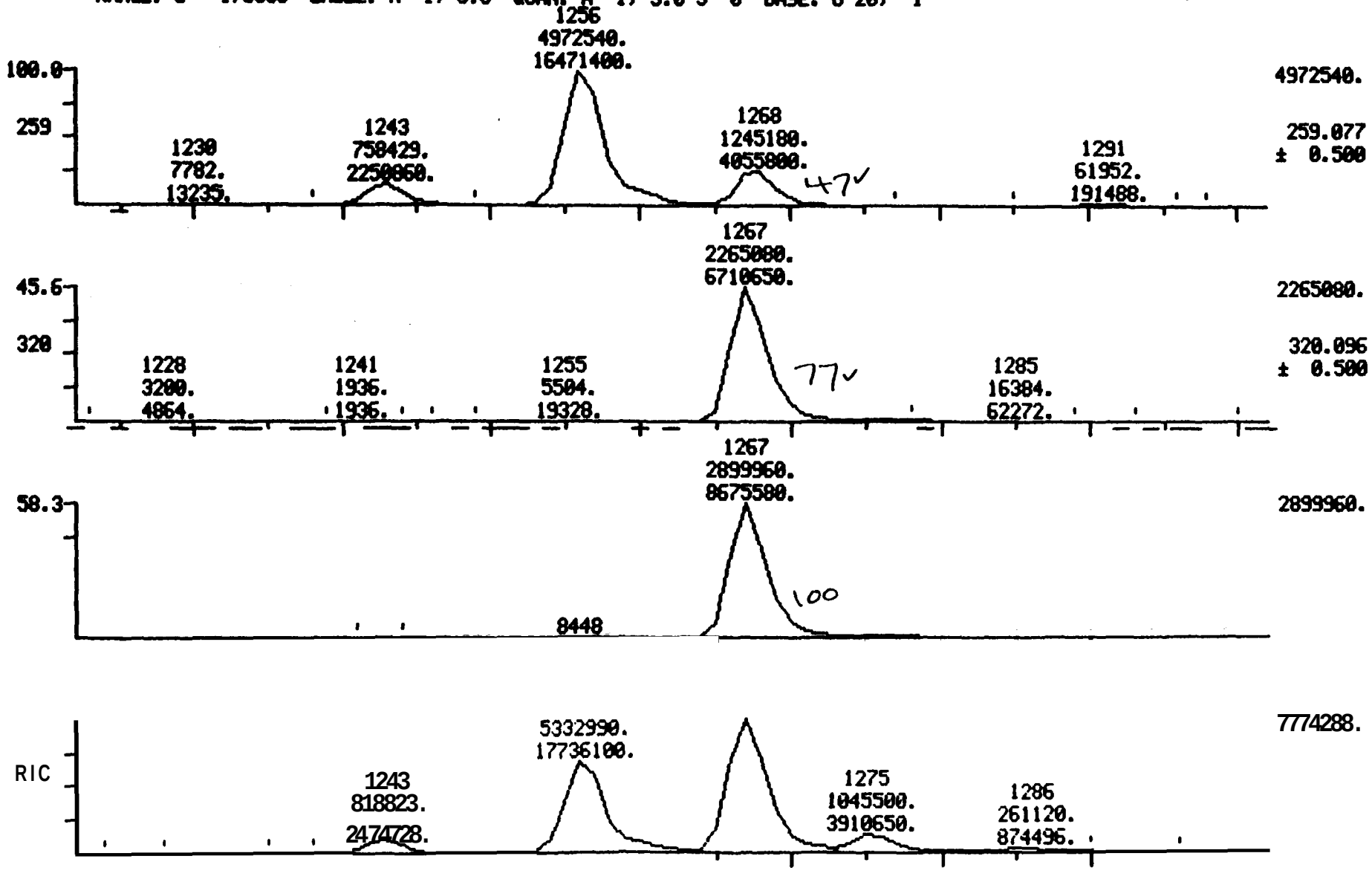
SAMPLE: 2UL OF 68506-U @ 3000 PPB RUN #1 FOR MULTIPOINT

CONDS.: ISOMER SPECIFIC

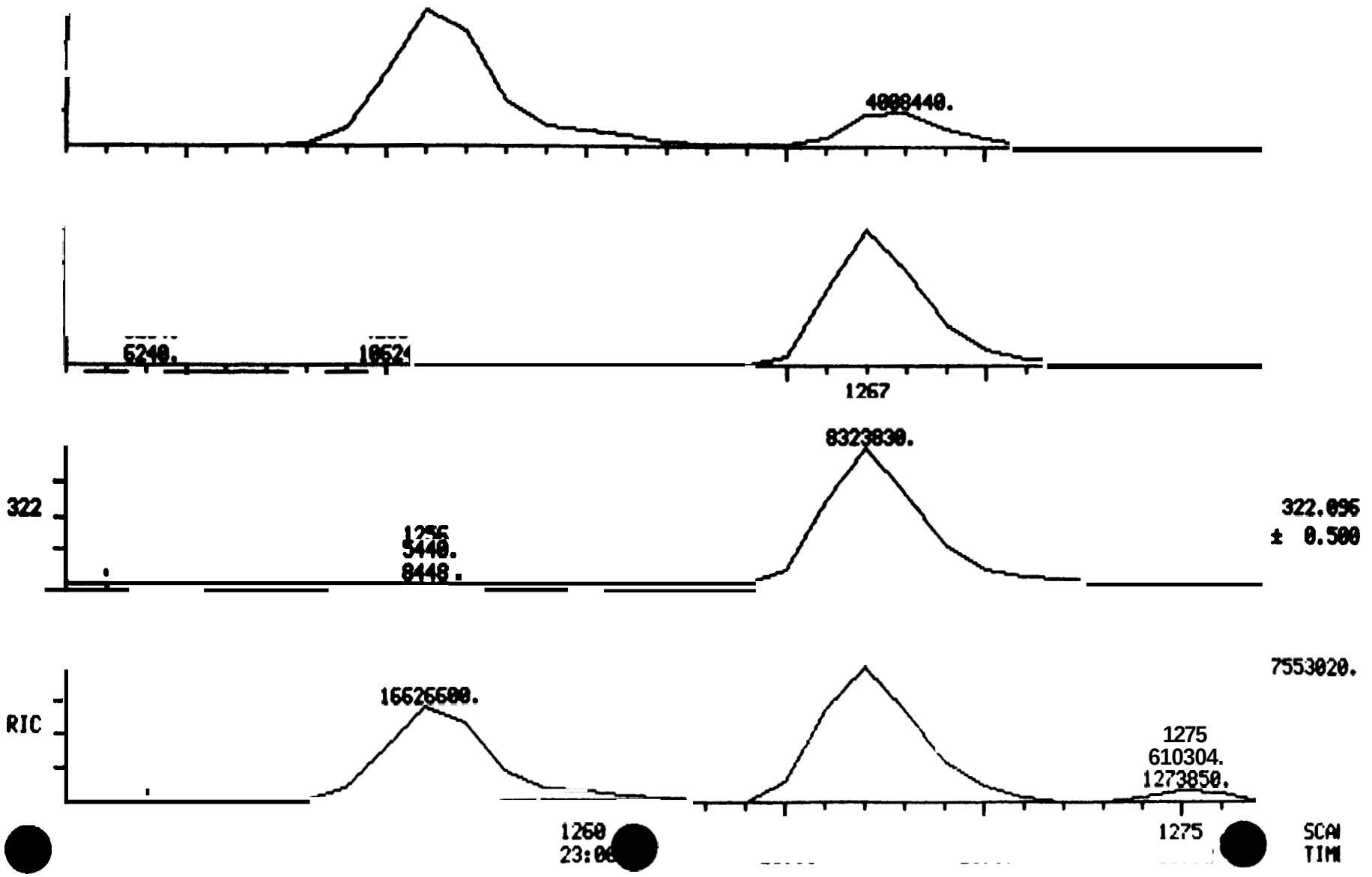
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

TCDD

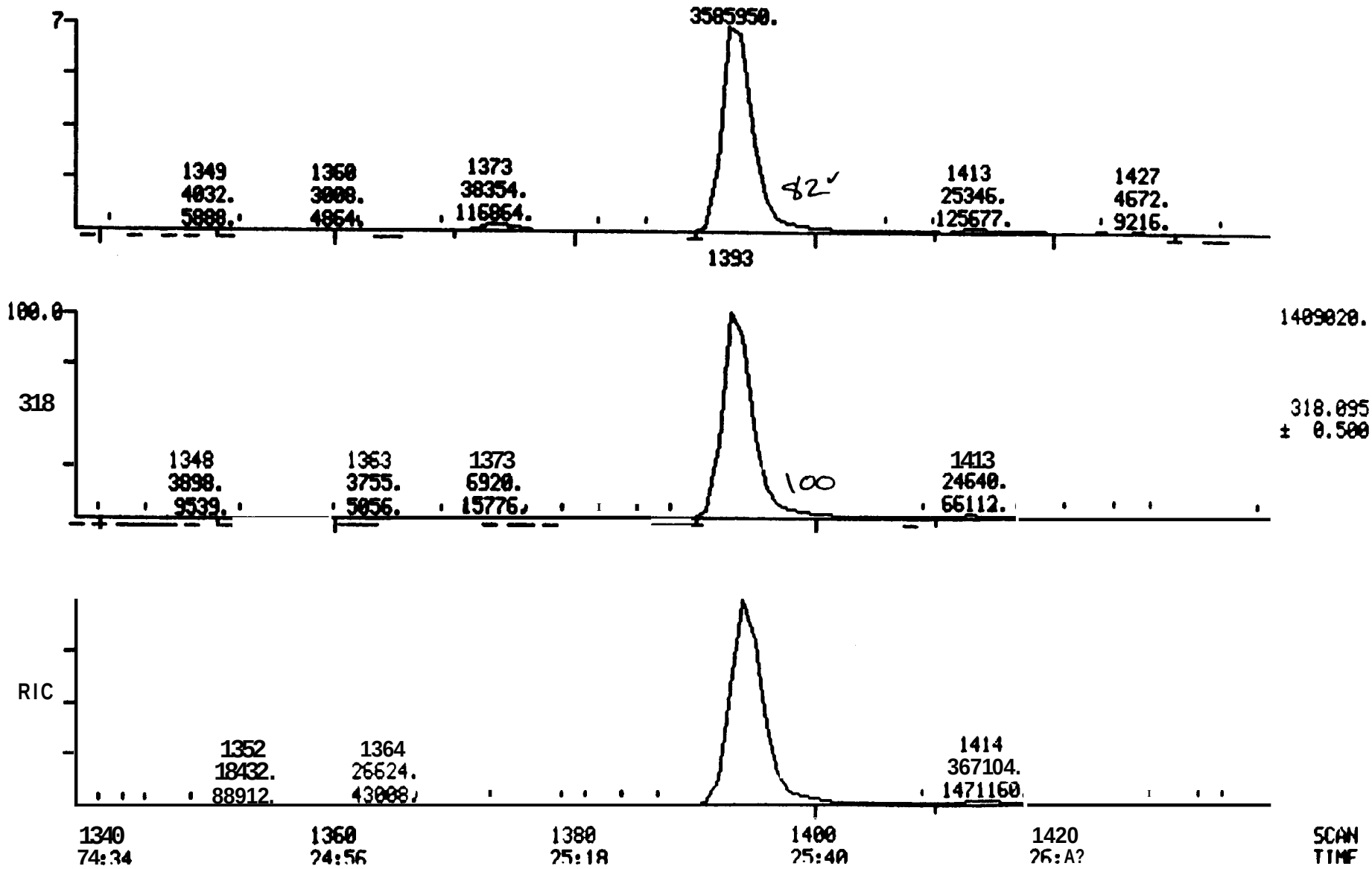
1.04✓



3200185


4000440.
5240.
1267
322
8323830.
1255
5440.
8440.
322.096
± 0.500
RIC
16626600.
7553020.
1275
610304.
1273850.
1260
23:06
1275
SCAN
TIME

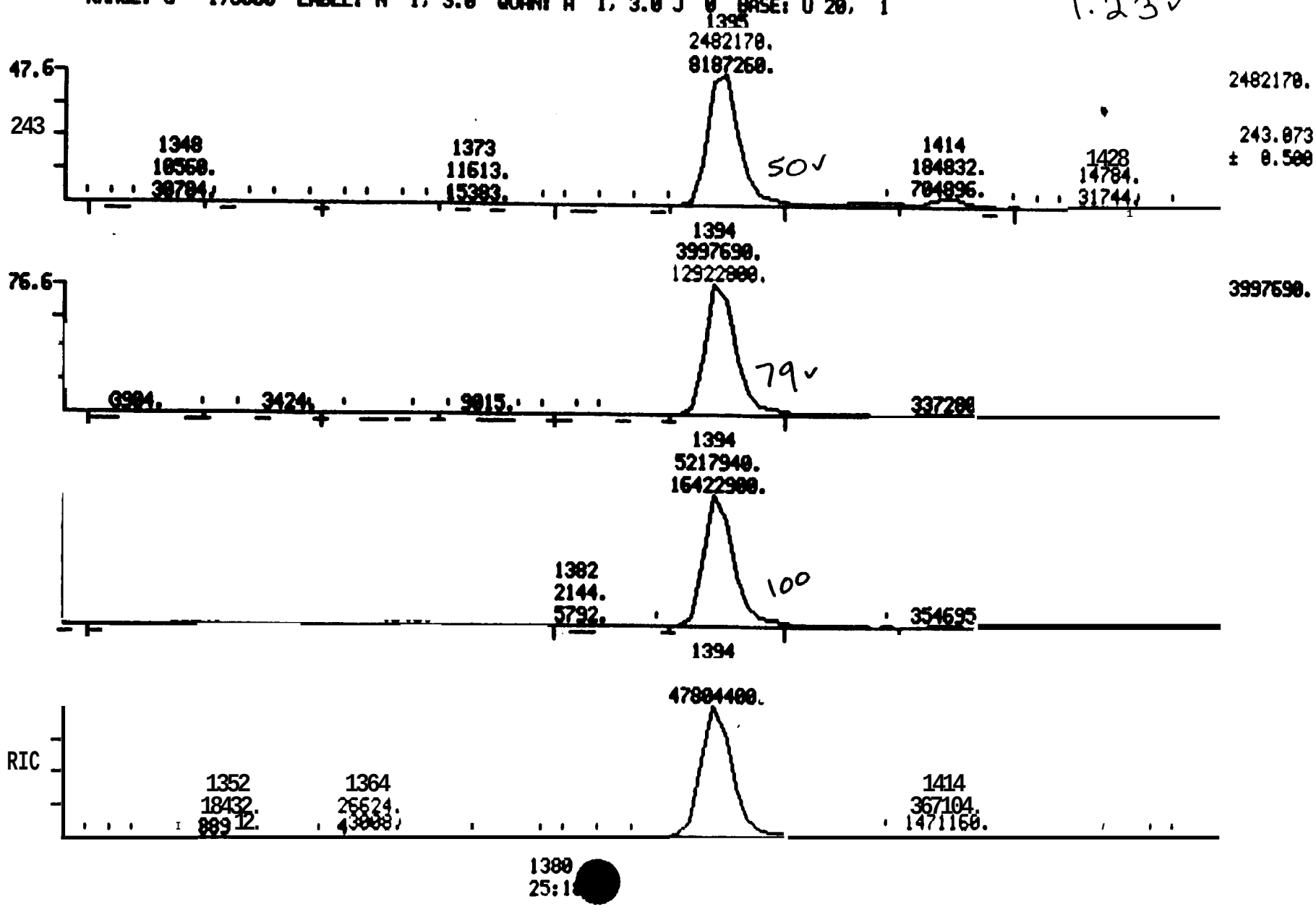
1.48


7
3585950.
1349
4032.
5888.
1360
3008.
4864.
1373
38354.
116864.
82
1413
25346.
125677.
1427
4672.
9216.
1393
100.0
1409020.
318
318.095
± 0.500
1348
3898.
9539.
1363
3755.
5056.
1373
6920.
15776.
100
1413
24640.
66112.
RIC
1352
18432.
88912.
1364
26624.
43008.
1414
367104.
1471160.
1340
74:34
1360
24:56
1380
25:18
1400
25:40
1420
26:A?
SCAN
TIME

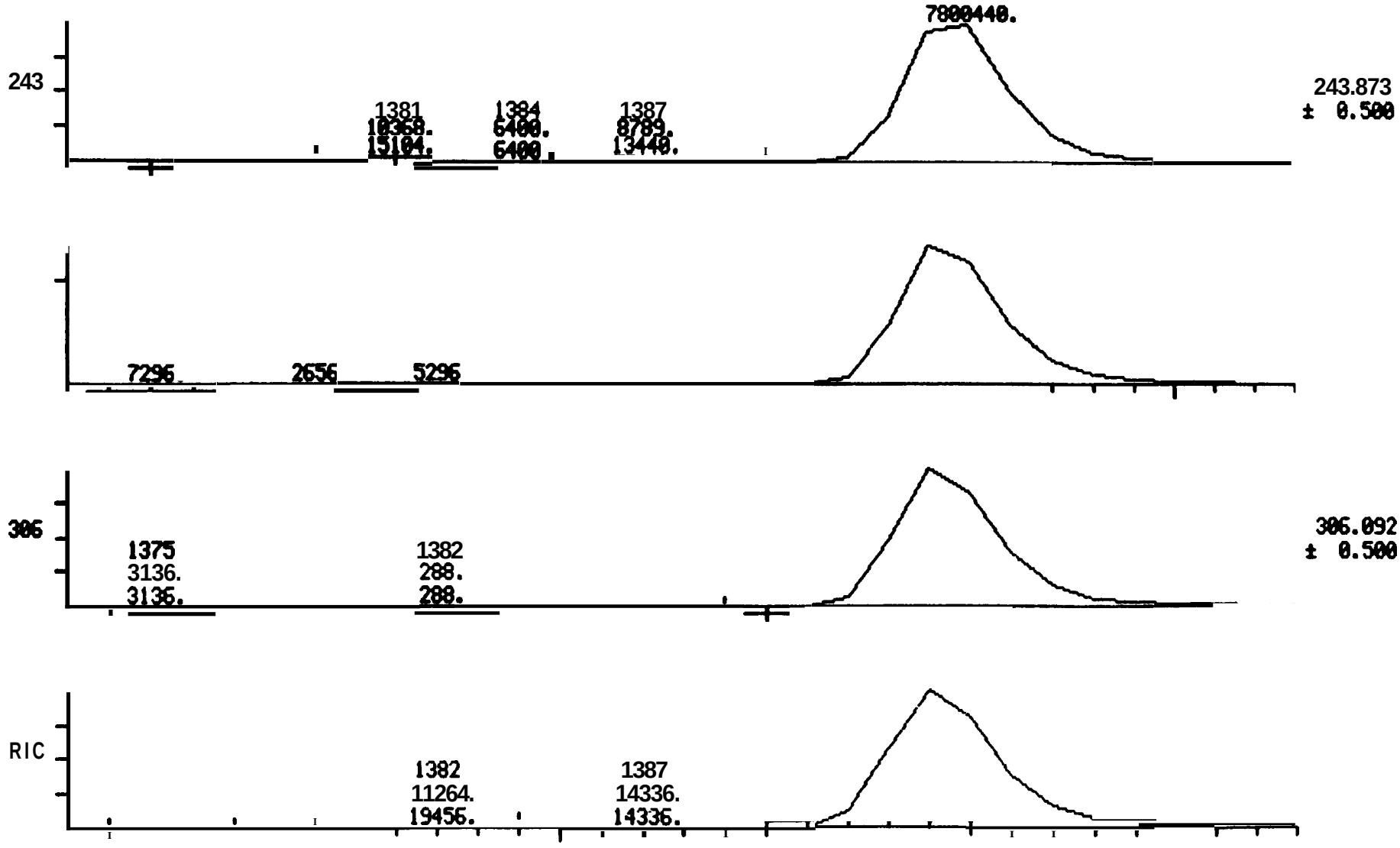
TCDF

MIDRIC:MASS CHROMATOGRAMS DATA: 68506V1 #1388 SCANS 1338 TO 1438
03/28/91 14:02:00 CALI: [redacted] #3
SAMPLE: 2UL OF 68506-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

1.23✓



2200187


7800440.
243
243.873
± 0.500
1381
10368.
15104.
1384
6400.
6400.
1387
8789.
13440.
7296.
2656
5296
306
306.092
± 0.500
1375
3136.
3136.
1382
288.
288.
RIC
1382
11264.
19456.
1387
14336.
14336.

3/28/91 14:02:19 SCAN 1 OF 2200
Acquisition started

Acquire Run 0:68506V1 Acquiring
03/28/91 14:02:00 + 0:04 Free sectors: 24697 Scan: 4 of 2200
Sample: 2UL OF 68306-V @ 3000 PPB RUN #1 FOR MULTIPOINT
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: NM Acct. No:

********** QC PARAMETERS **********
Lorded QC Desc:TD Current QC oven trp: 512 DegC Injector : 260 DegC
Current QC Desc:TD QC elapsed tine : 2: 3 min Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mars intervals: 10
Scan tire: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Tire	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Po.
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Po.
4	305.648	306.148	0.108	1	100	40	2	0	Pos
5	315.648	316.148	0.105	1	100	40	3	0	Po.
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	6	
Instrument type	G	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/28/91 14:02:26 SCAN 7 OF 2200
Mode changed to suspended centroid positive ion

3/28/91 14:04:18 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/28/91 14:30:41 SCAN 1503
Acquisition stopped

3/28/91 14:30:43
ACQUISITION COMPLETED

3200188

SCANS	1	TO	7	CENTROID
SCANS	8	TO	106	SUSPENDED
SCANS	107	TO	1303	CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1404	310.1	1544.4	20.1	149294.	106.	97.

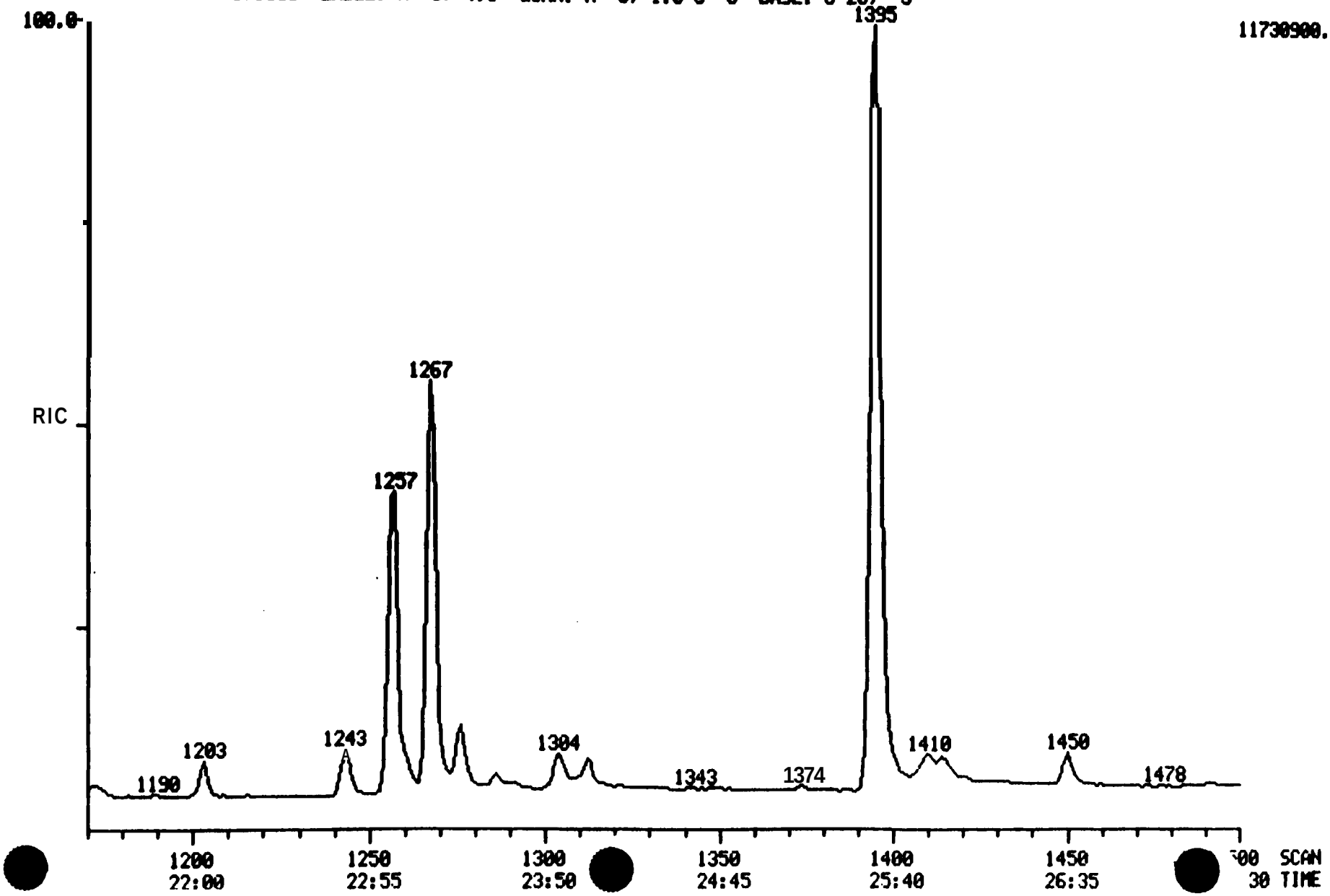
3200189

MIDRIC
03/28/91 14:37:00
SAMPLE: 2UL OF 685
CONDS.: 06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506V2 #1262
CALI: CAL022291 #3

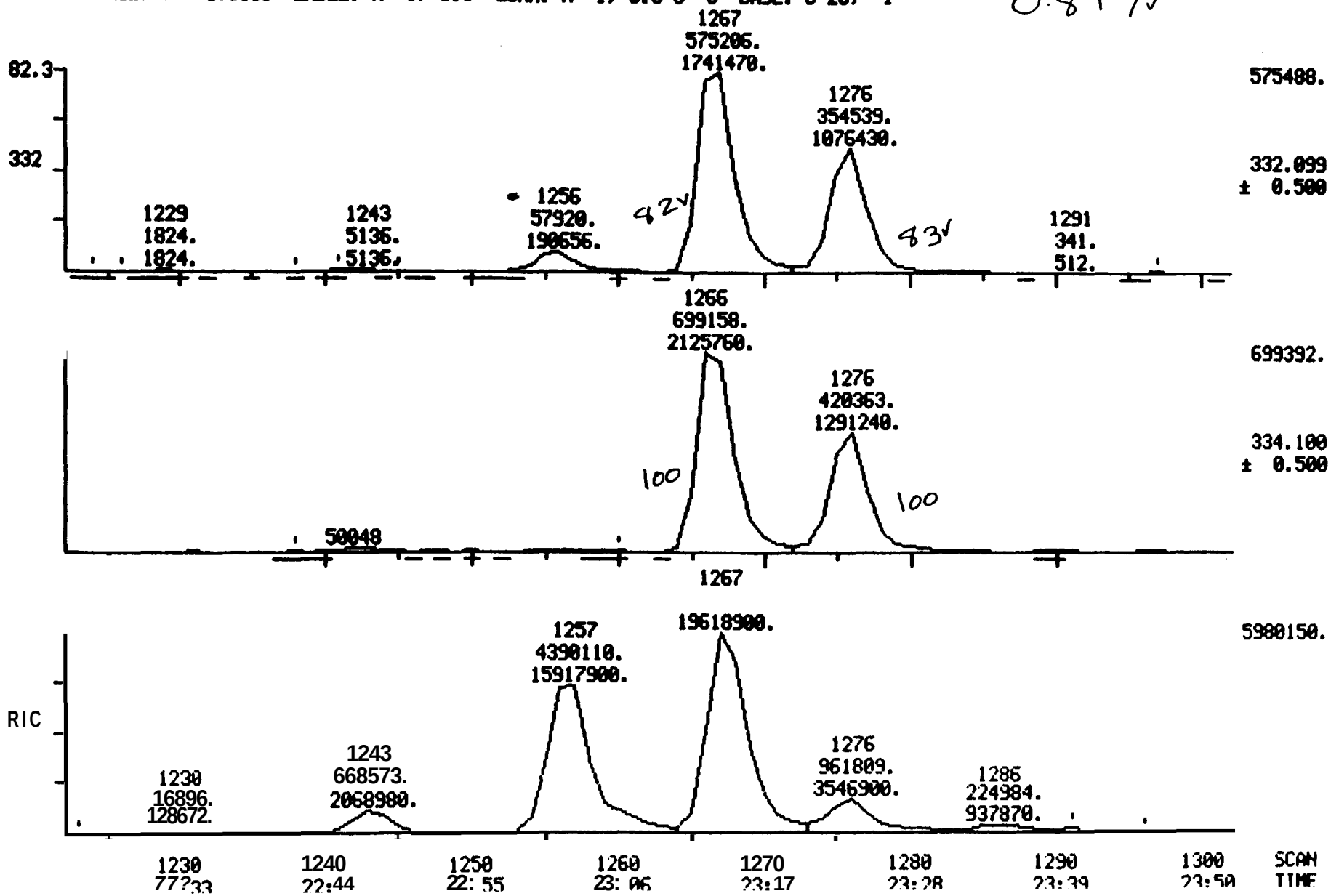
SCANS 1170 TO 1500

Calc. nm 3-28-91
QC DT 3-29-91



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1262 SCANS 1222 TO 1302
03/28/91 14:37:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685
CONDS.: 06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

0.817✓



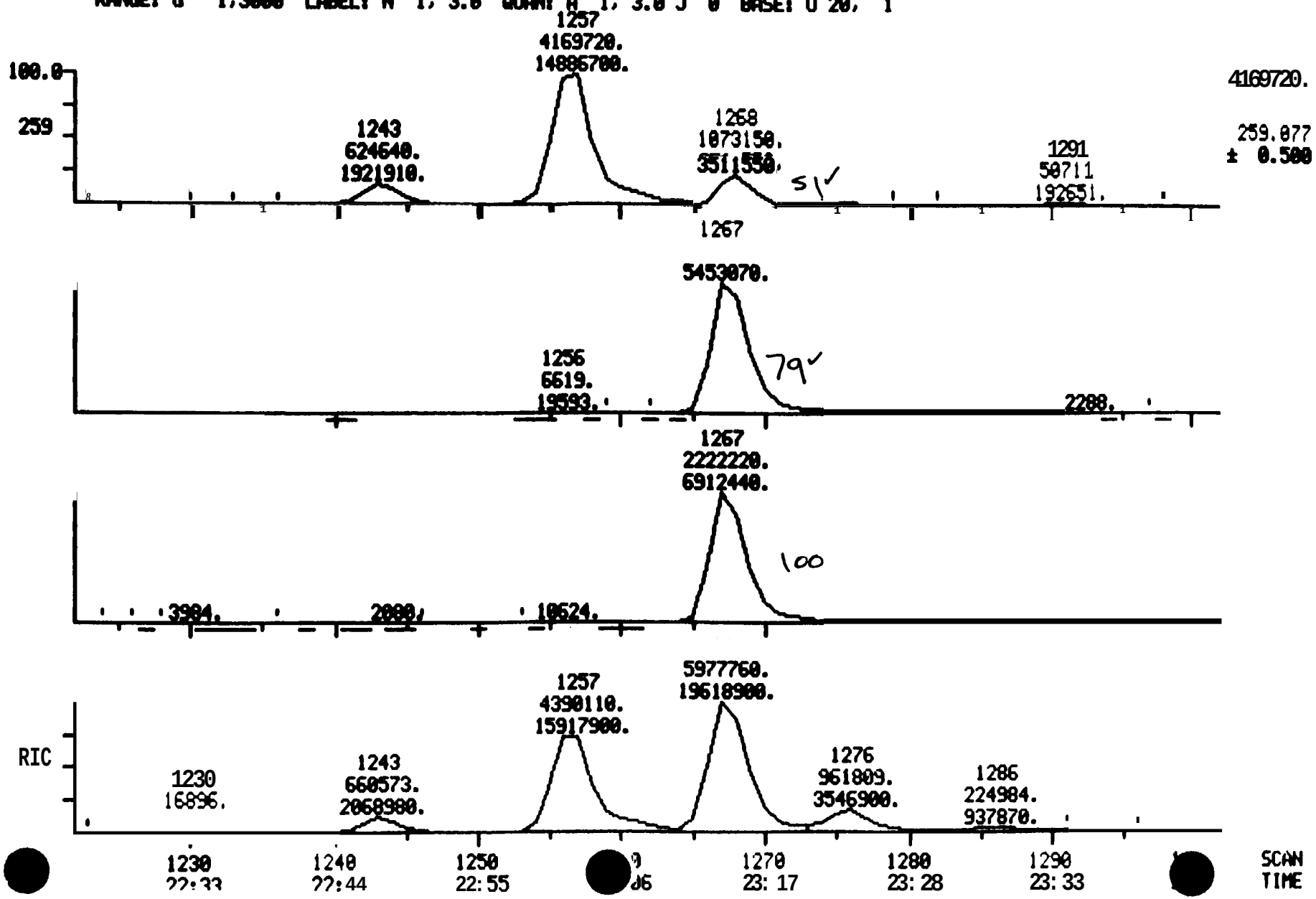
MIDRIC+MASS CHROMATOGRAMS
03/28/91 14:37:00
SAMPLE: 2UL OF 685
CONDS.: 06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: 68506V2 #1262
CALI: CAL022291 #3

SCANS 1222 TO 1382

TCDD

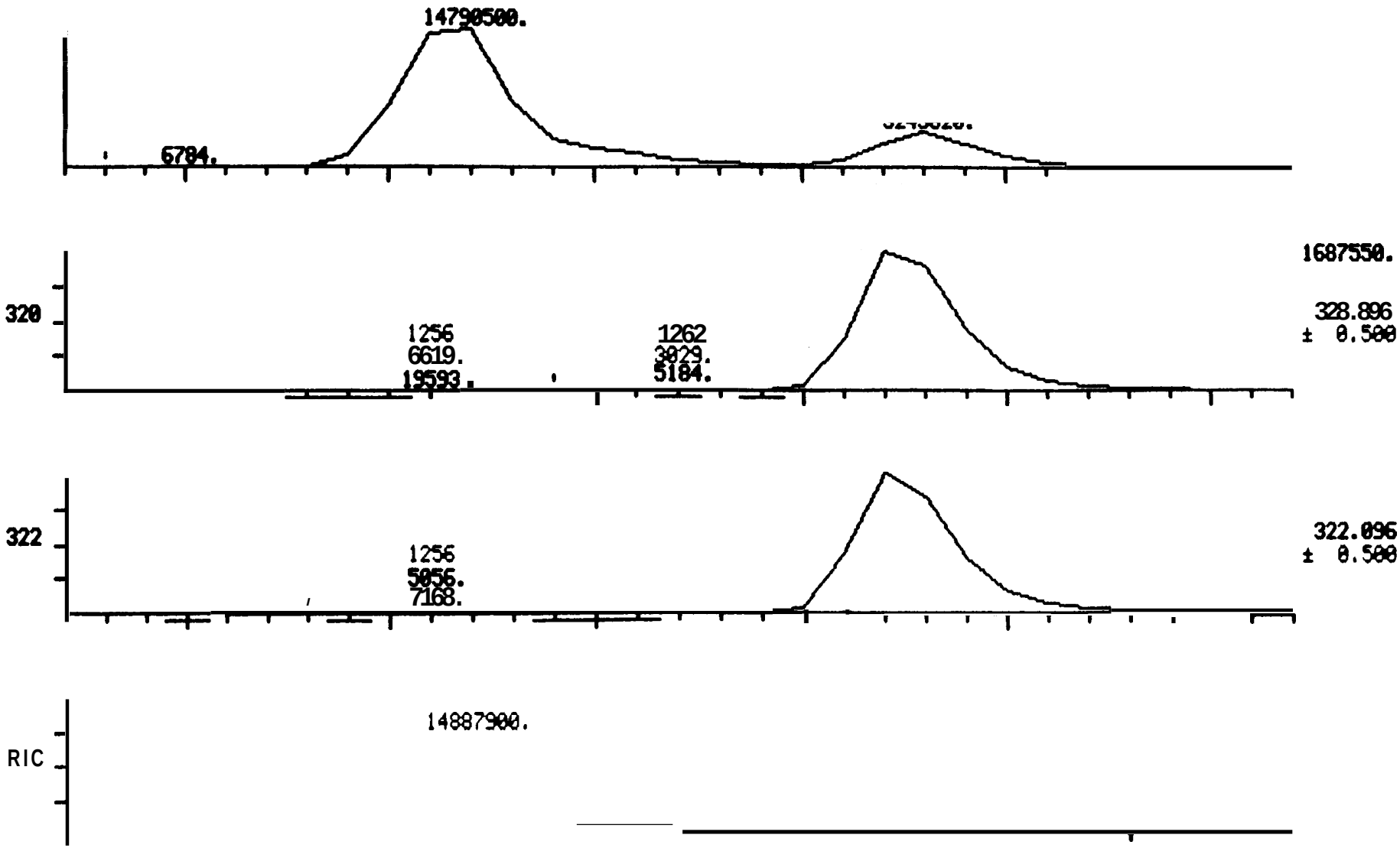
1.07✓



3200150

03/28/91

RANGE:

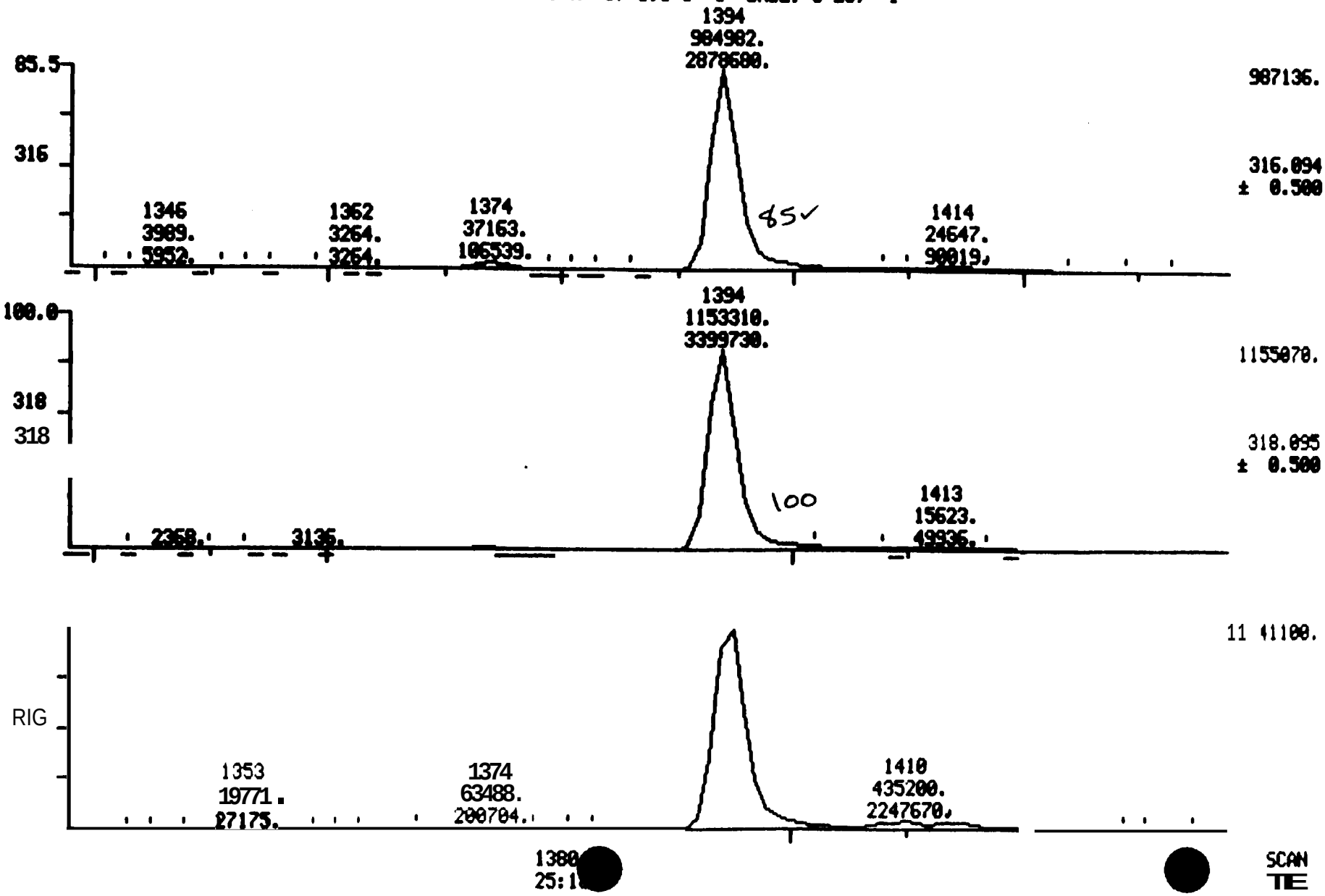


MIDRIC+MASS CHROMATOGRAMS
03/28/91 14:37:00
SAMPLE: 2UL OF 685
CONDS.: 06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: 68506V2 #1388
CALI: CAL022291 03

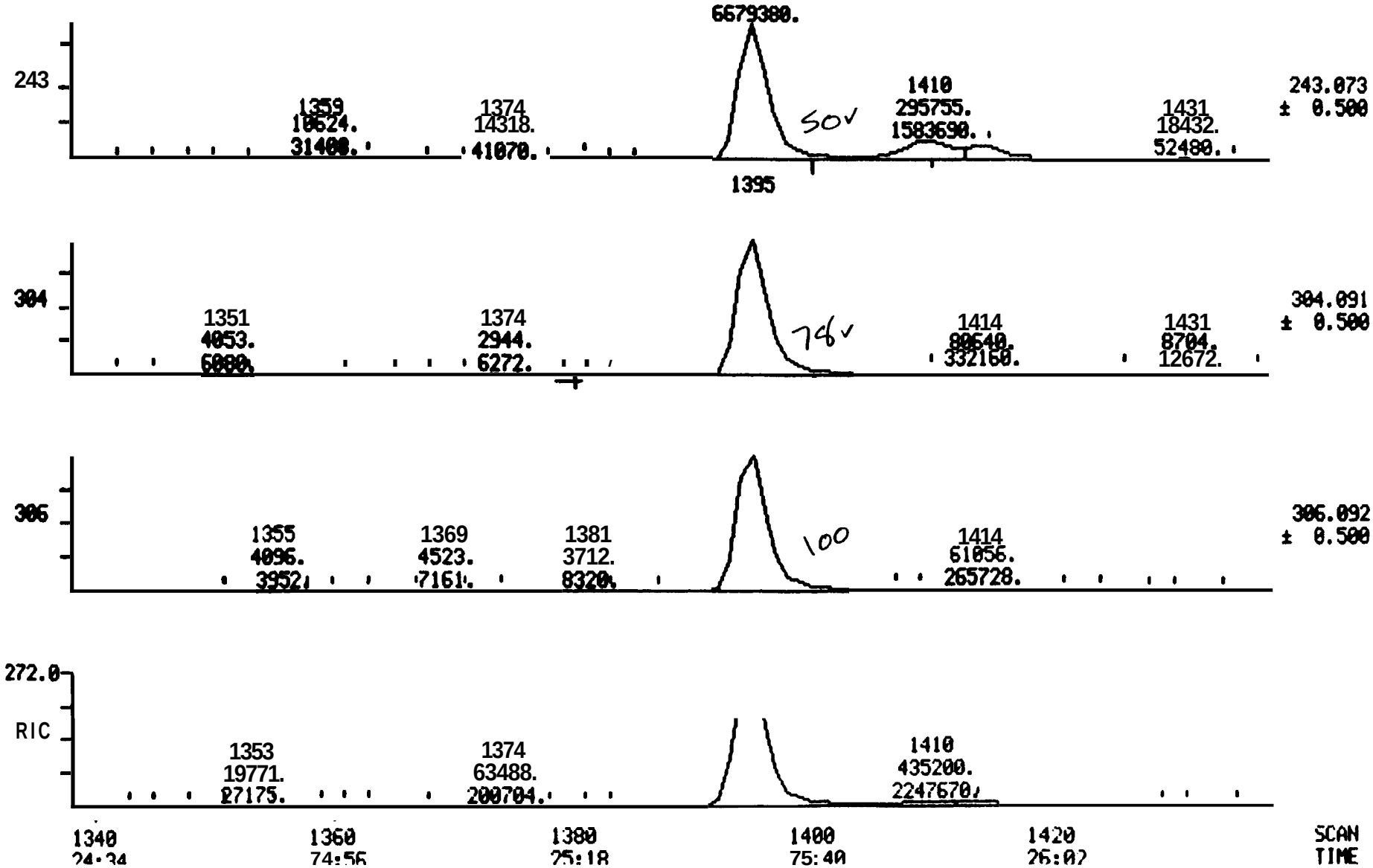
SCANS 1338 TO 1438

1.33✓

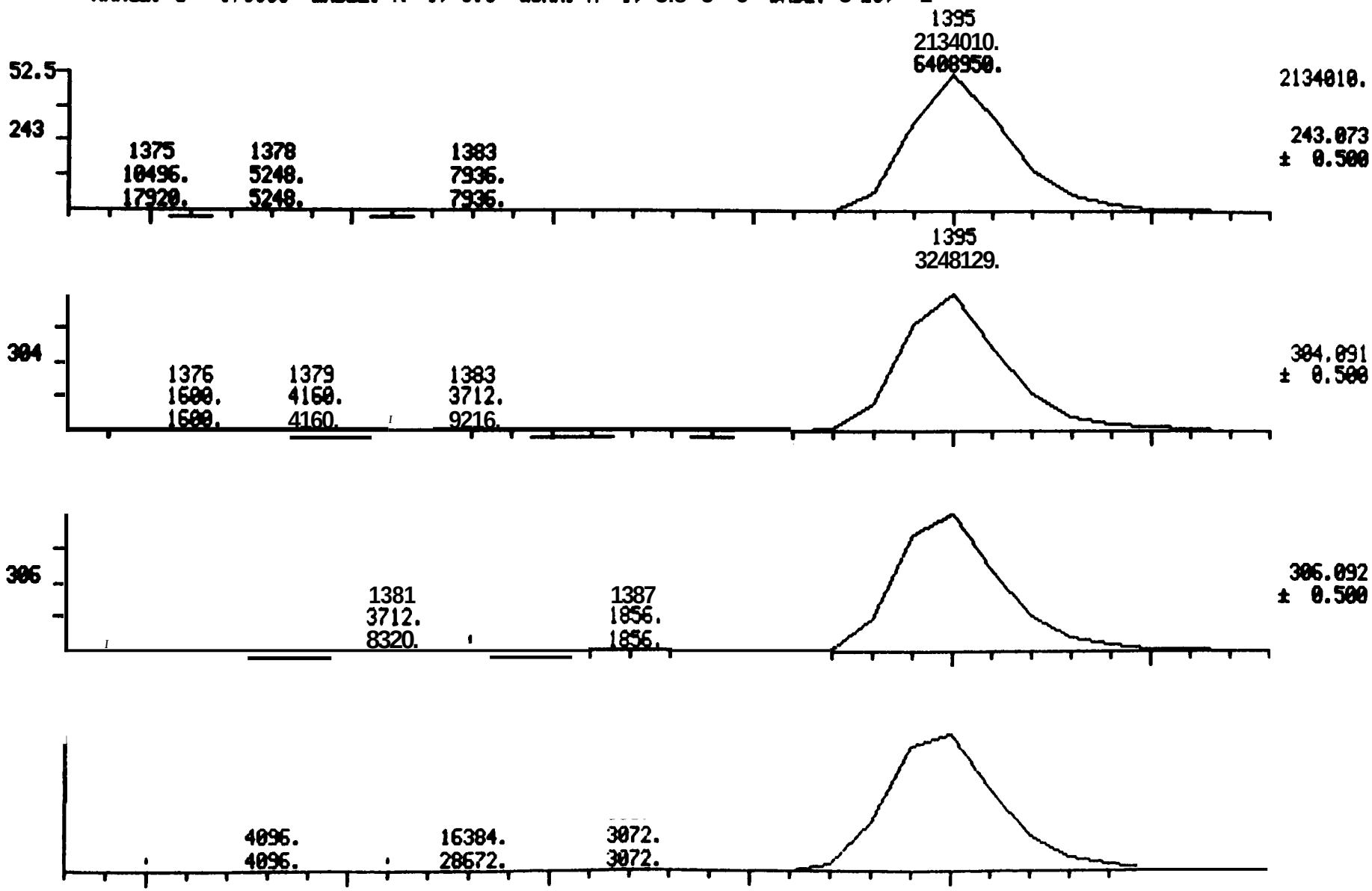


3200191

TCDF


243
6679380.
1359
10624.
31400.
1374
14318.
41070.
50✓
1410
295755.
1583690.
1431
18432.
52480.
243.073
± 0.500
1395
304
1351
4053.
6080.
1374
2944.
6272.
76✓
1414
80540.
332160.
1431
8704.
12672.
304.091
± 0.500
306
1355
4096.
3952.
1369
4523.
7161.
1381
3712.
8320.
100
1414
61056.
265728.
306.092
± 0.500
272.0
RIC
1353
19771.
27175.
1374
63488.
200704.
1410
435200.
2247670.
1340
24:34
1360
74:56
1380
25:18
1400
75:40
1420
26:02
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1388 SCANS 1373 TO 1403
03/28/91 14:37:00 CALI: CAL022291 13
SAMPLE: 2UL OF 685
CONDS.: 06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.8 J 0 BASE: U 20, 1



3200152

3/28/91 14:37:28 SCAN 1 OF 2200
Acquisition started

Acquire
03/28/91 14:37:00 + 0:04
Run 0: 68506V2
Free sectors: 23469
Acquiring
Scan: 4 of 2200

Sample: 2UL OF 685
Conds.: 06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
Formula:
Instrument: FINN
Weight: 0.000
Submitted by: JB
Analyst: NM
Acct. No:

********** GC PARAMETERS **********

Loaded GC Desc: TD
Current GC oven tmp: 512 DegC
Injector : 260 DegC
Current GC Desc: TD
GC elapsed time : 1:22 min
Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion + R1 (Temp)

MID scan
Desc: TC
Mass intervals: 10
Scan time: 1.100 s
Samp. int.: 0.200 ms
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	HPW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.140	0.108	1	100	40	2	0	Pos
3	315.640	316.148	0.105	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.130	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/28/91 14:37:33 SCAN 6 OF 2200
Mode changed to suspended centroid positive ion

3/28/91 14:39:20 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/28/91 15:03:31 SCAN 1303
Acquisition stopped

3/28/91 15:05:53
ACQUISITION COMPLETED

SCANS 1 TO 6 CENTROID
SCANS 7 TO 106 SUSPENDED
SCANS 107 TO 1503 CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1403	309.9	1343.3	20.1	137234. 98.	89.

3200193

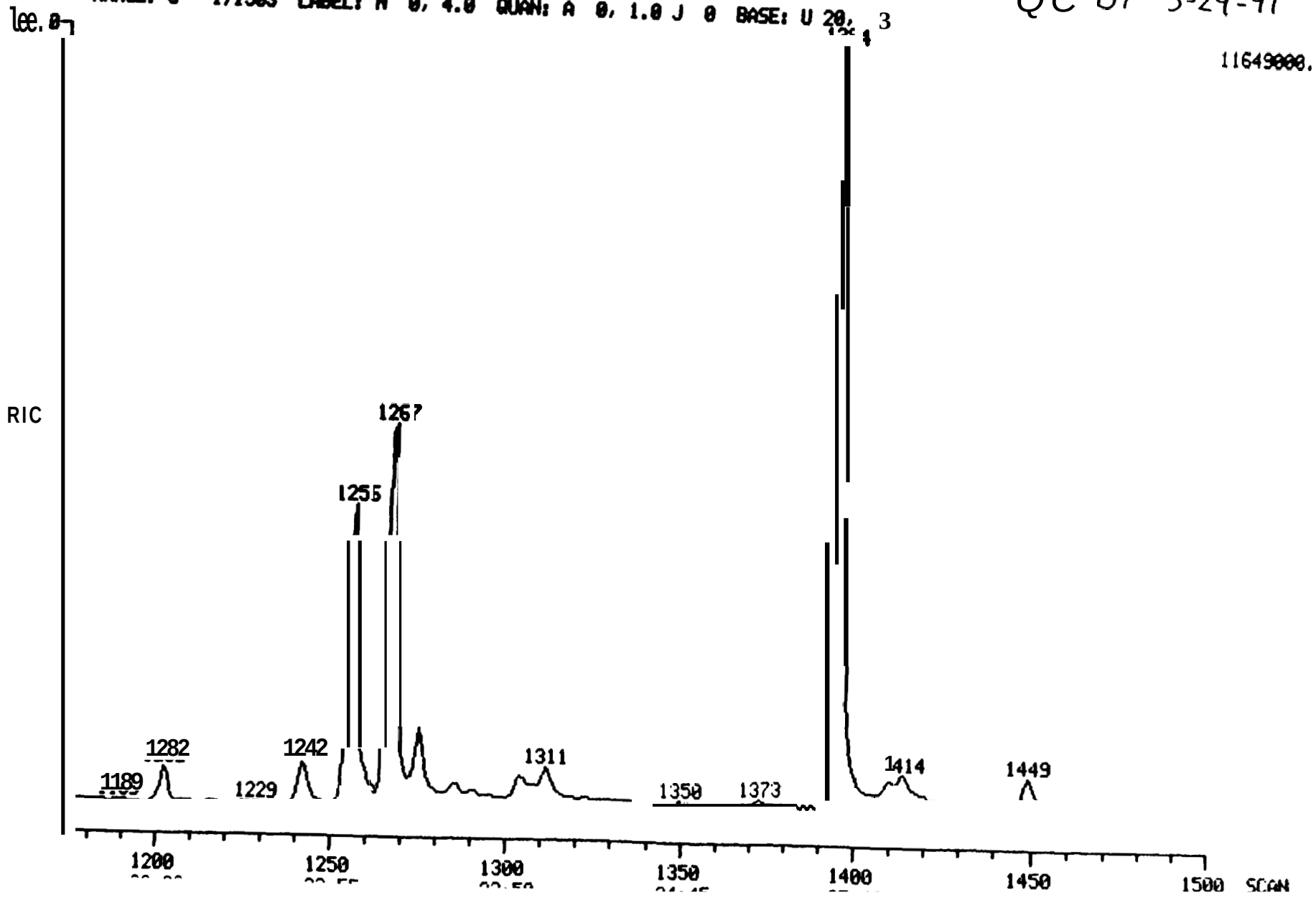
MIDRIC
03/28/91 15:14:00
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20,

DATA: 68506V3 #1262
CALI: CAL022291 #3

SCANS 1179 TO 1500

calc. nm 3-28-91

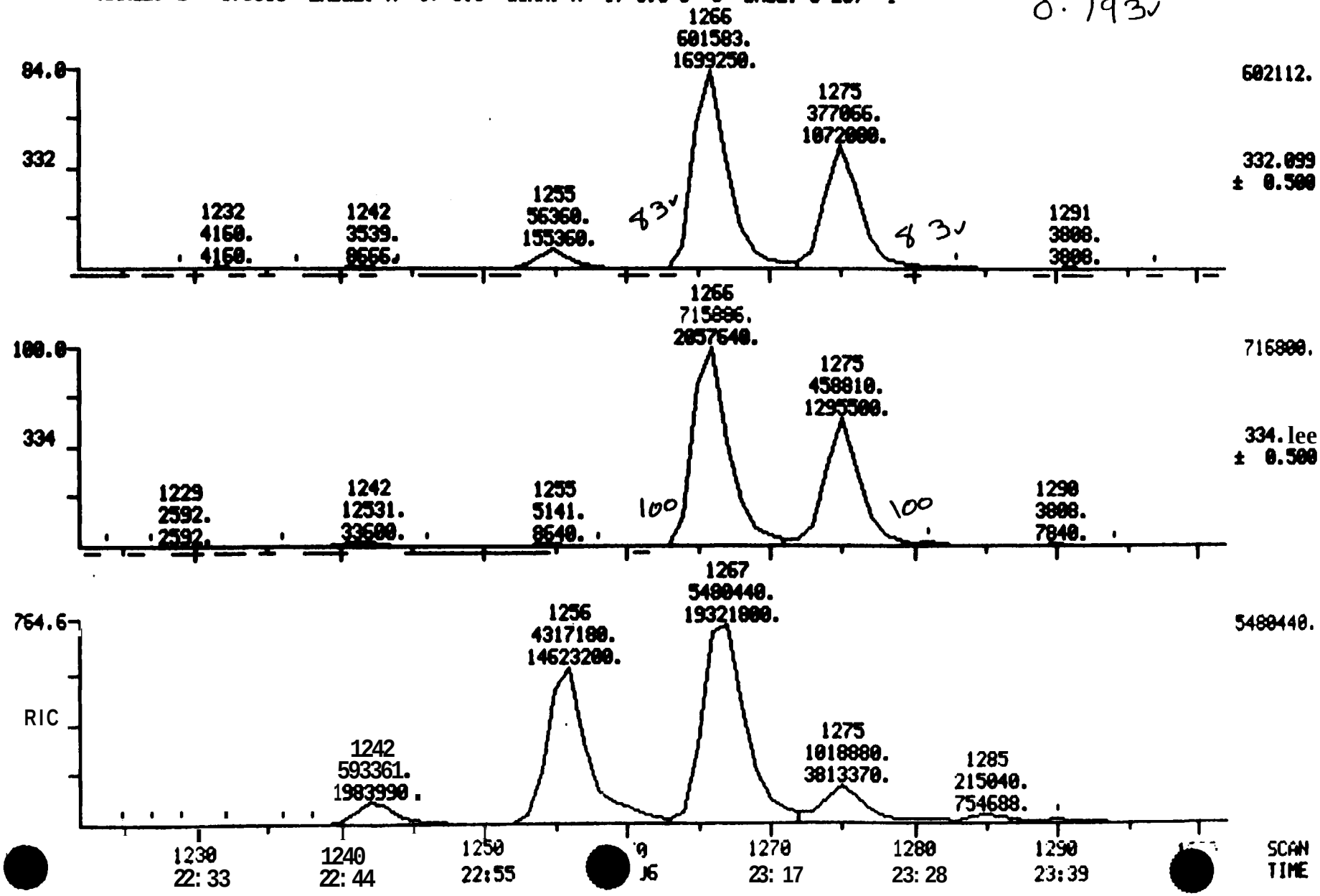
QC DT 3-29-91



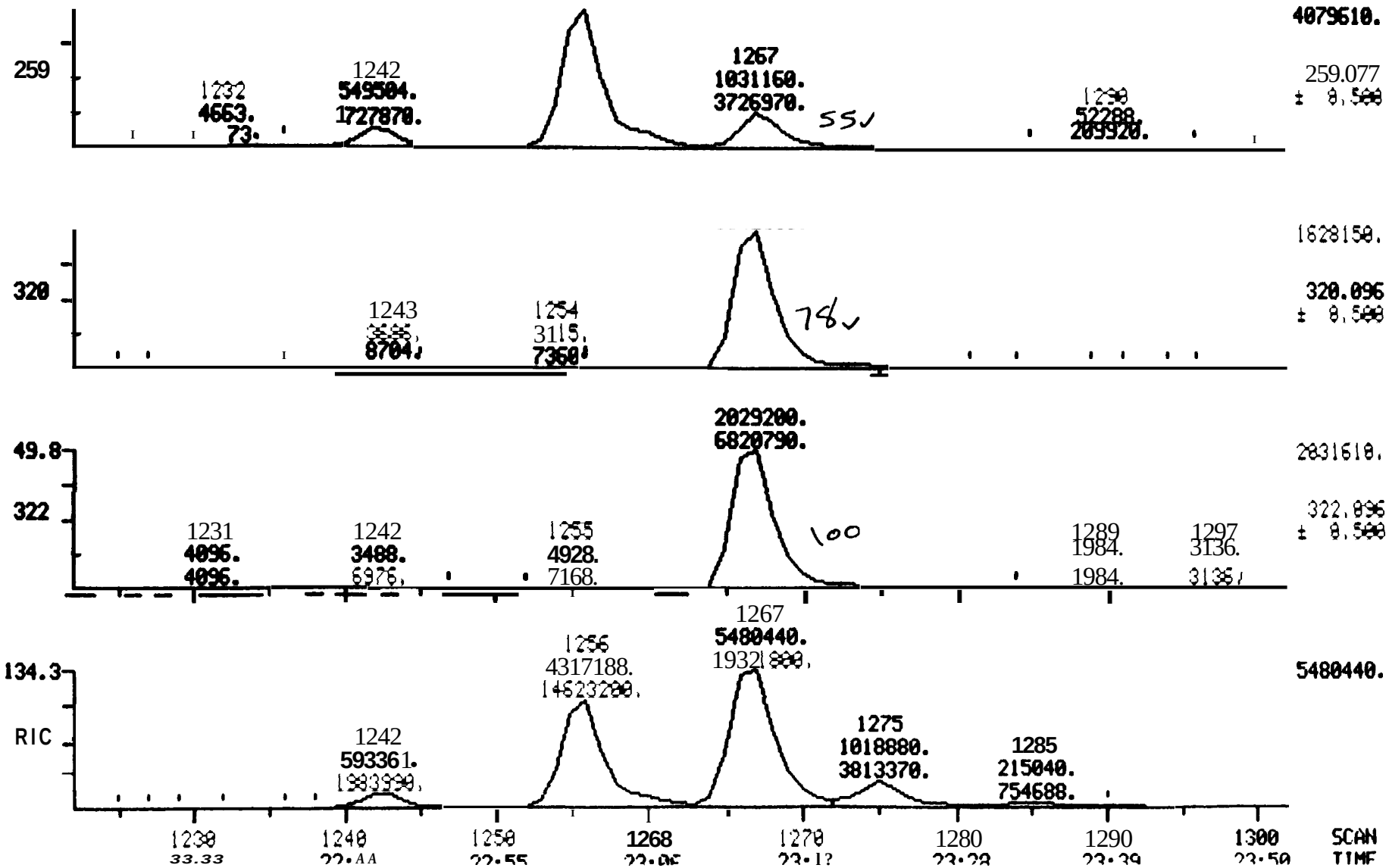
3200194

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1262 SCANS 1222 TO 1302
03/28/91 15:14:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

0.793v

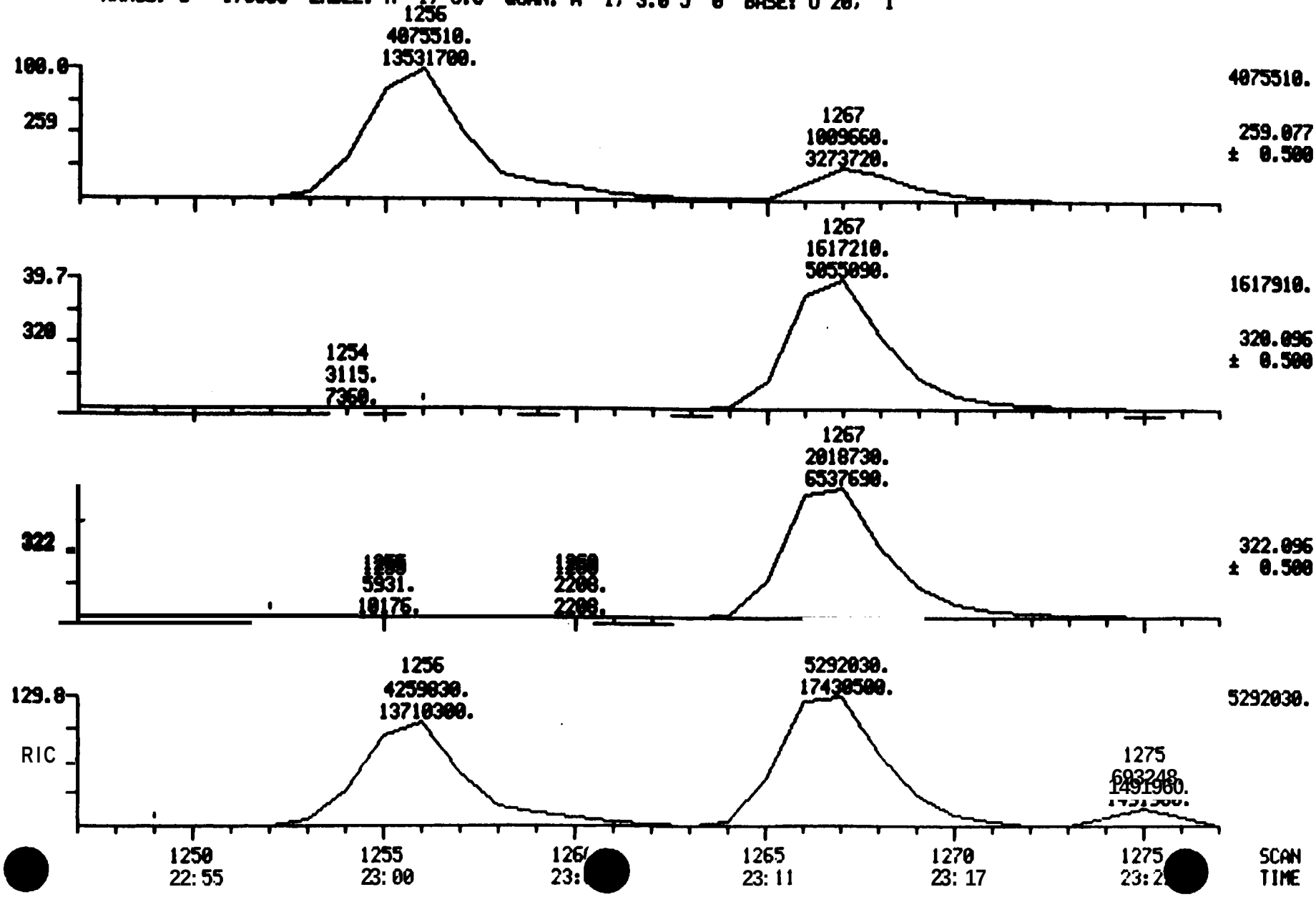


MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1262 SCANS 1222 TO 1302 TCDD
03/28/91 15:14:00 CAL: CAL022291 #3
SAMPLE: 2UL OF 685:06-V e 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC 1.08✓

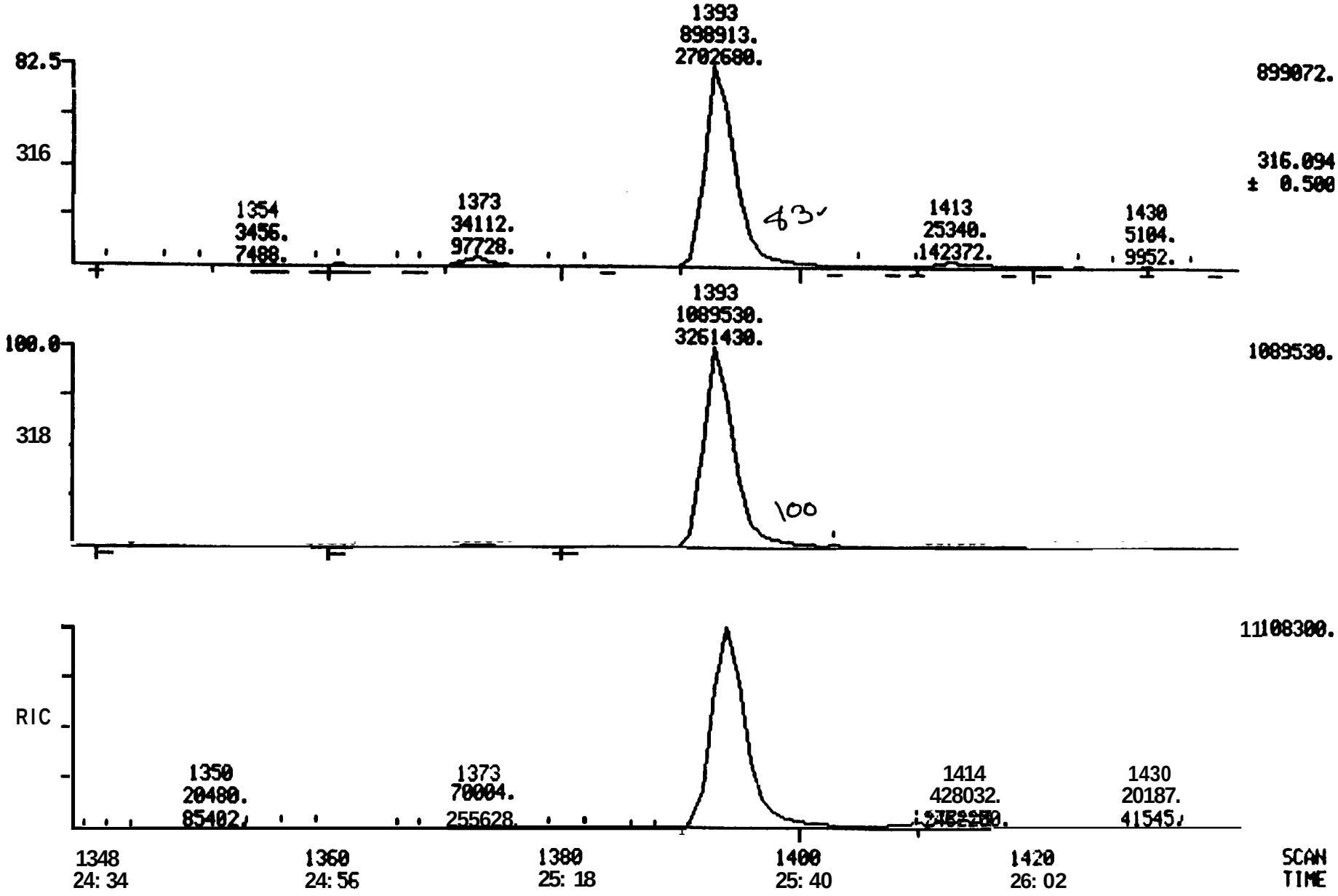


32001195

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1262 SCANS 1247 TO 1277
03/28/91 15:14:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1388 SCANS 1338 TO 1438
03/28/91 15:14:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 1 1.26ov.



2200196

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1388 SCANS 1338 TO 1438

03/28/91 15:14:00 CALI: CAL022291 #3

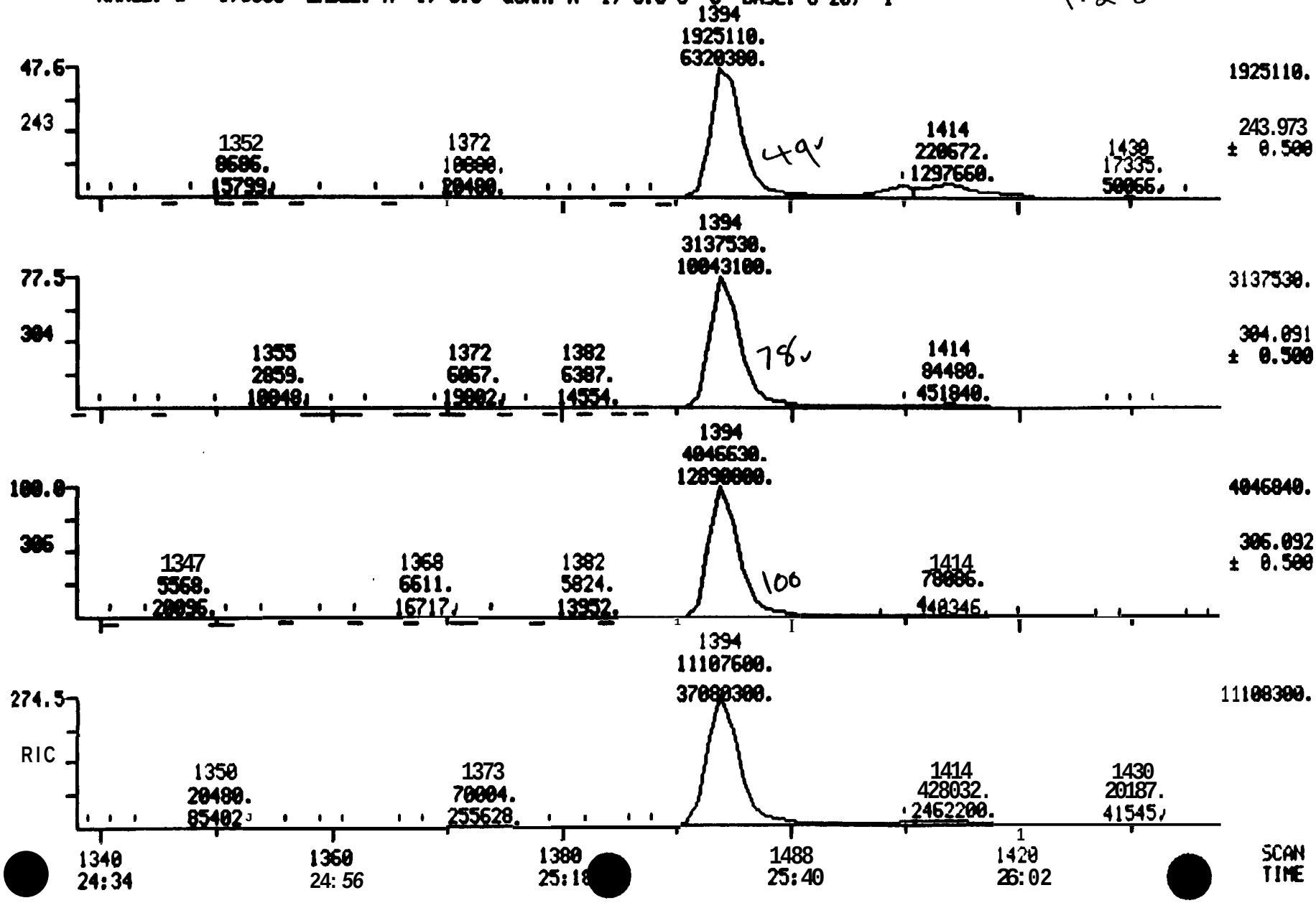
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT

CONDS.: ISOMER SPECIFIC

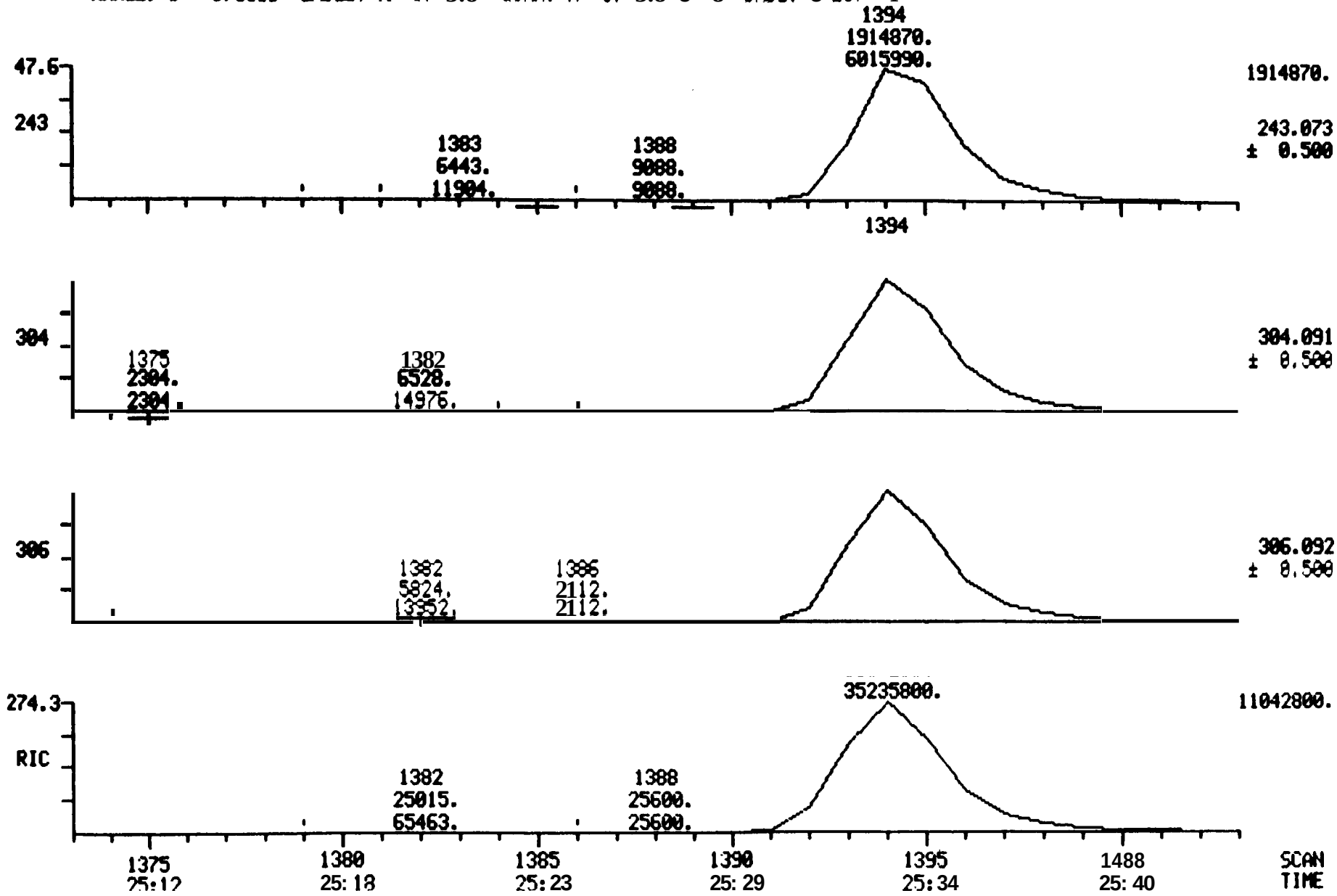
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

TCDF

1.28



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1388 SCANS 1373 TO 1403
03/28/91 15:14:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.8 QUAN: A 1, 3.8 J 8 BASE: U 20, 1



3/28/91 13:14:01 SCAN 1 OF 2200
Acquisition started

Acquire Run 0:68506V3 Acquiring
03/28/91 13:14:00 + 0:04 Free sectors: 22334 Scan: 4 of 2200
Sample: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: NM Acct. No:

********** GC PARAMETERS **********
Loaded GC Desc: TD Current GC oven tmp: 312 DegC Injector : 260 DegC
Current GC Desc: TD GC elapsed time : 1:45 min Int.oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positivm ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

In't #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	a	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Po.
3	303.649	304.149	0.105	1	100	40	2	0	Po.
4	305.648	306.148	0.108	1	100	40	2	0	Po.
5	315.648	316.148	0.103	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Po.
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.103	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	amu
Offset at lou mas.	0	amu
Offset at high mass	0	amu
Voltage settling time(MS)	4	

3/28/91 15:14:08 SCAN 7 OF 2200
Modo changed to suspended centroid positive ion

3/28/91 15:16:00 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/28/91 15:42:23 SCAN 1503
Acquisition stopped

3/28/91 15:42:25
ACQUISITION COMPLETED

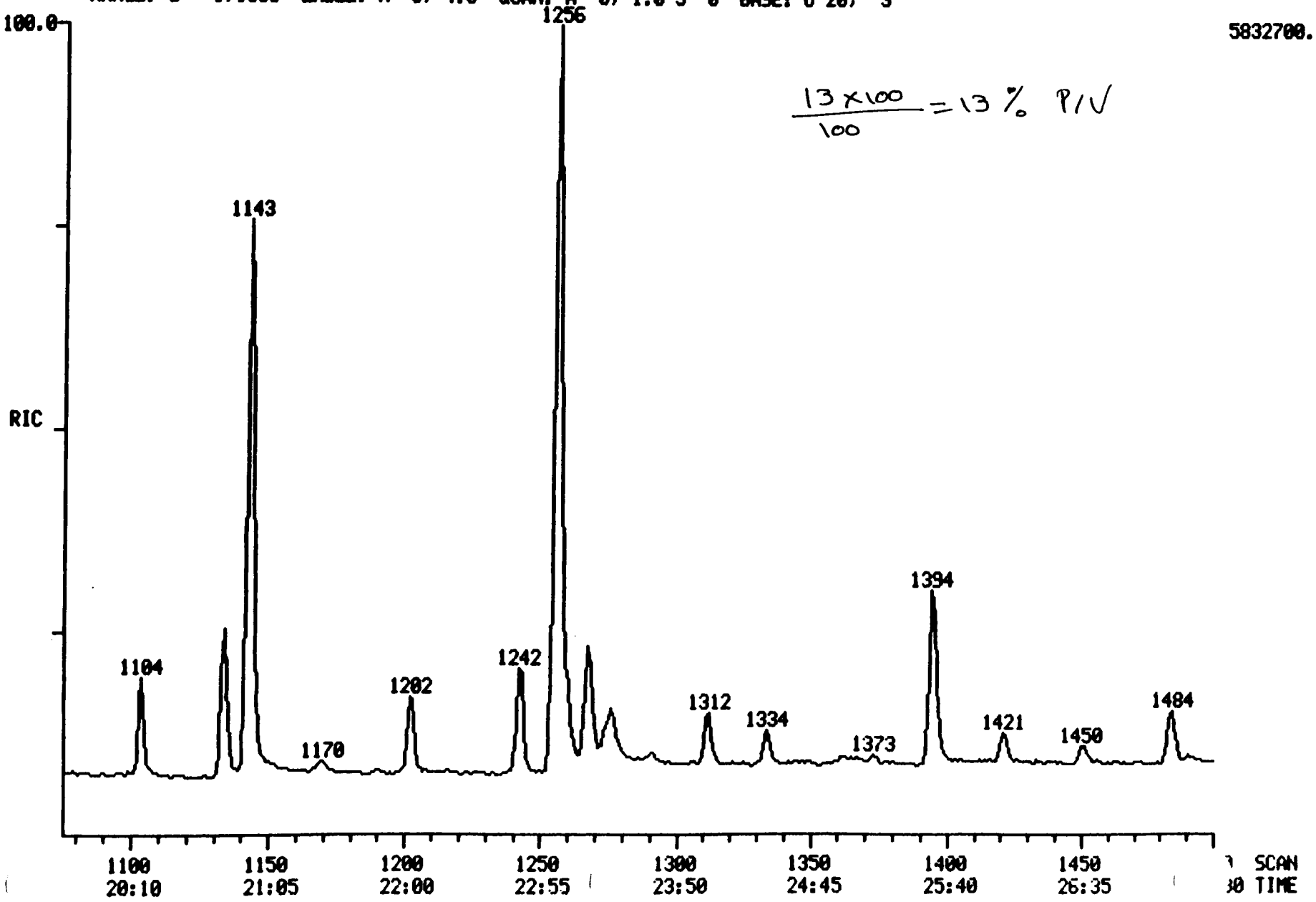
SCANS	1	TO	6	CENTROID
SCANS	7	TO	106	SUSPENDED
SCANS	107	TO	1503	CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1403	306.9	1543.3	19.9	105636.	75.	68.

MIDRIC
03/28/91 16:38:00
SAMPLE: 2UL OF 685:05 ENDING 7-ISOMER SOLUTION FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: I910328PEFB #1 SCANS 1075 TO 1500
CALI: CAL022291 #3

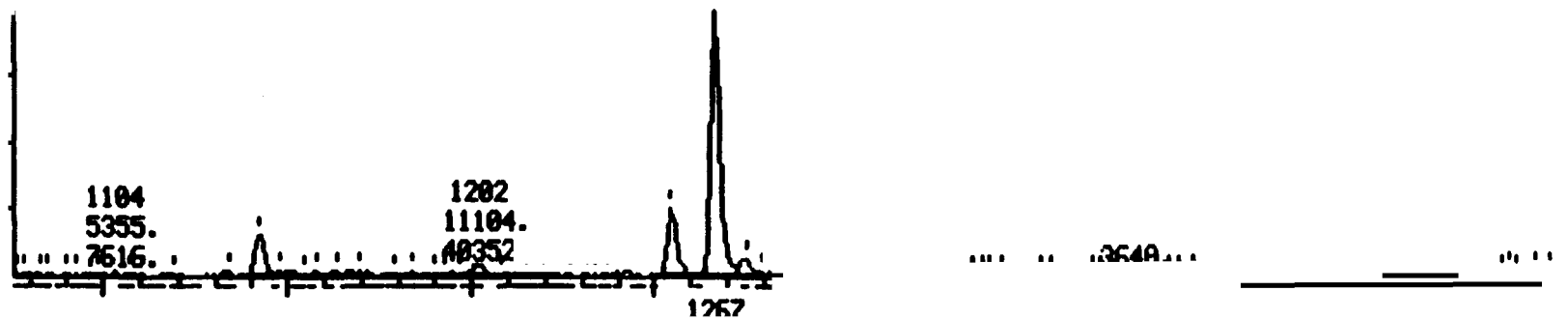
alc. nm 3-28-91
QC DT 3-29-91

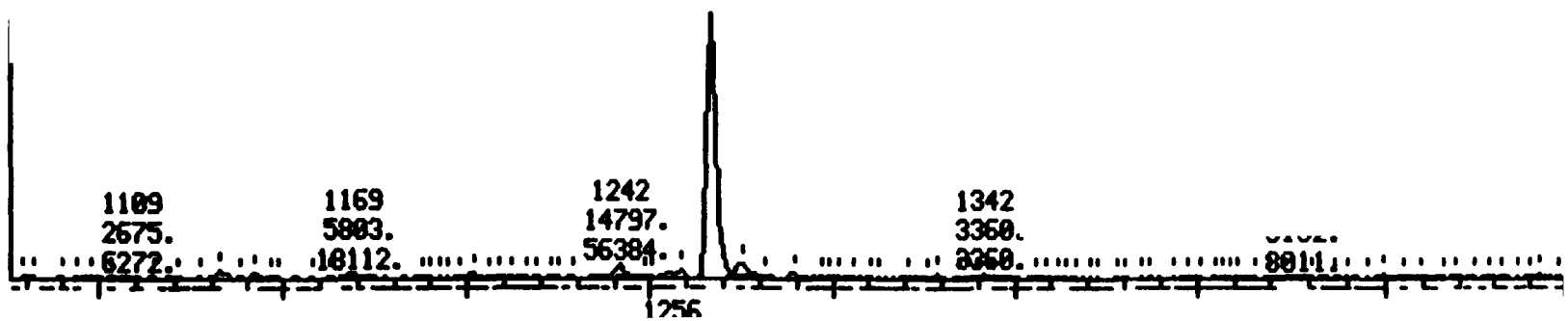


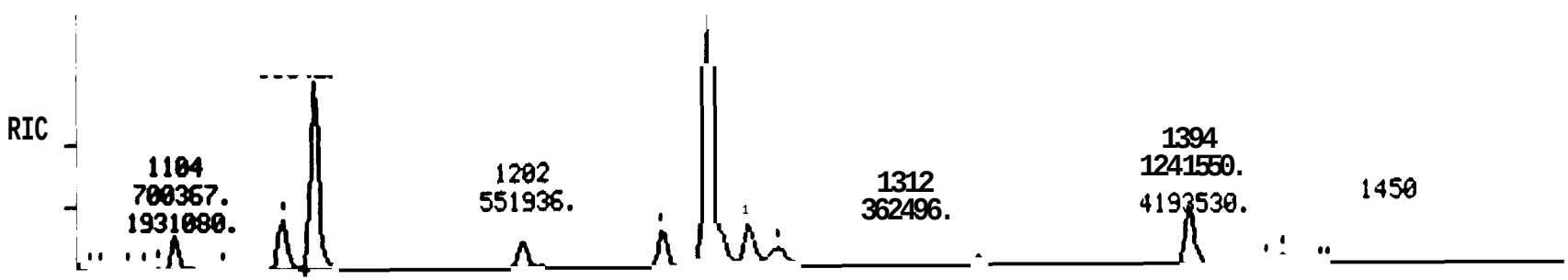
$\frac{13 \times 100}{100} = 13\%$ P/V

2200198

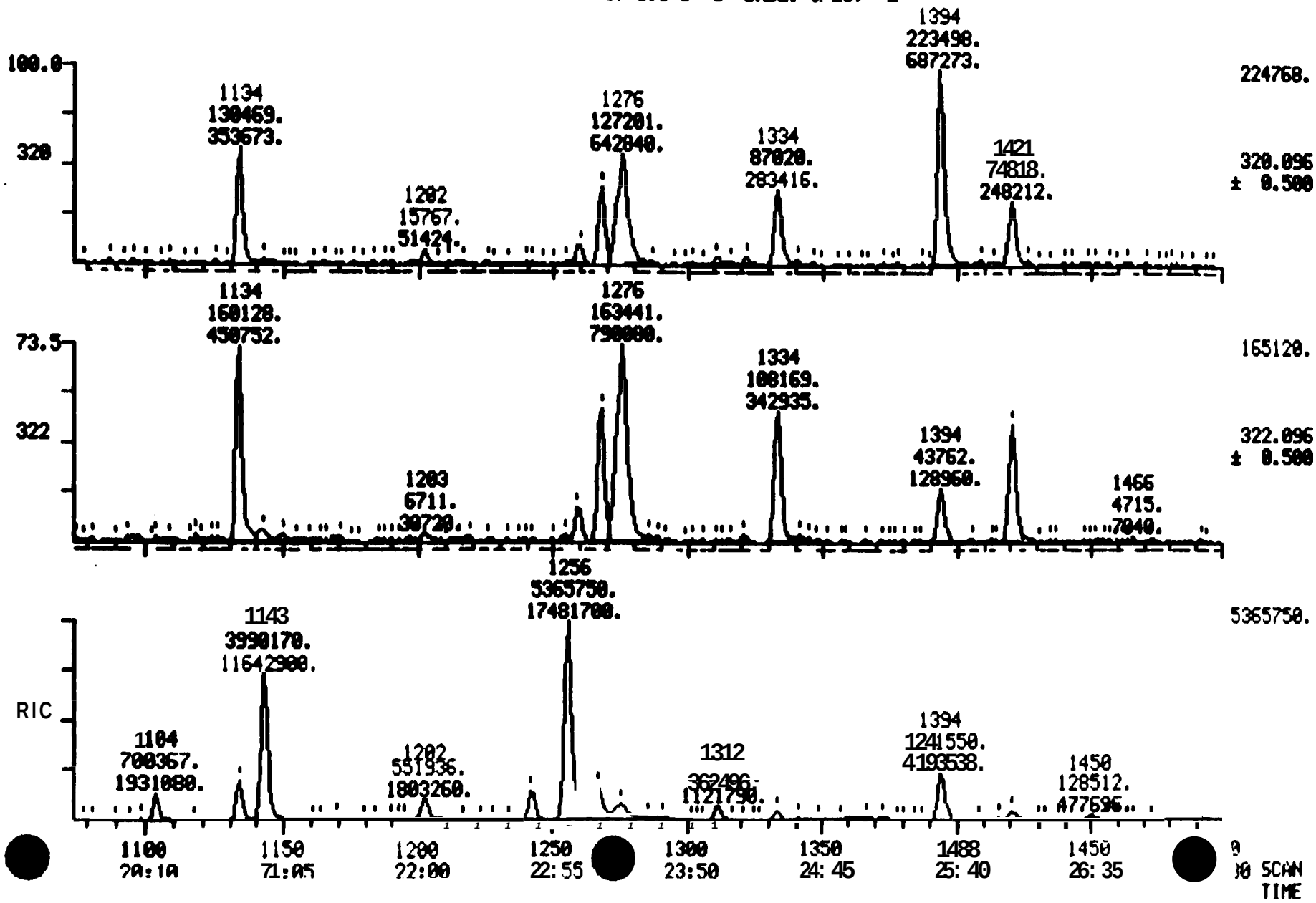
MIDRIC+MASS CHROMATOGRAMS DATA: I910328PEFB (11 SCANS [redacted] TO [redacted]
03/28/91 16:38:00 CAL: CAL022291 (13
SAMPLE: 20L OF 685:05 ENDING 7-ISOMER SOLUTION FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC





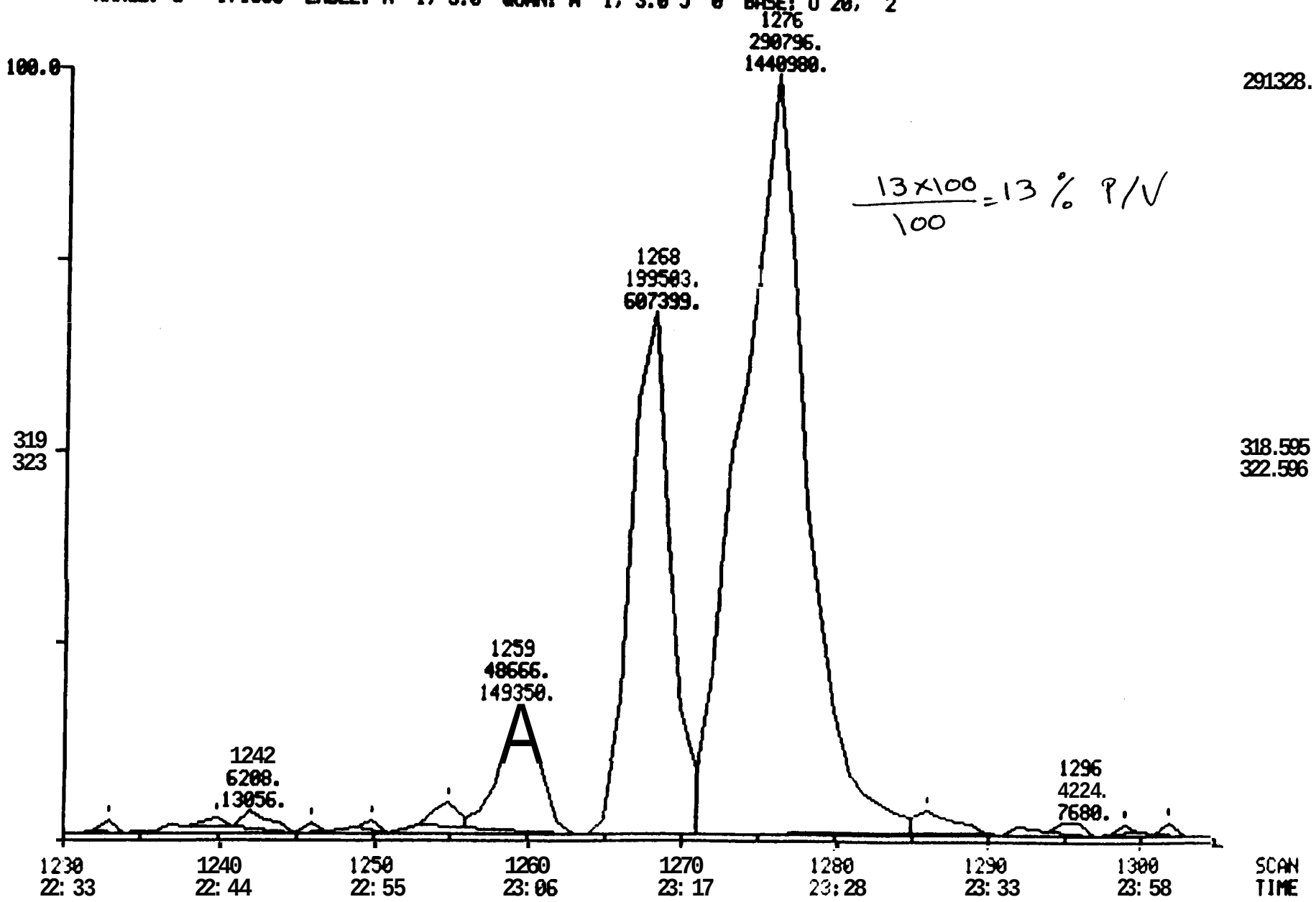


MIDRIC+MASS CHROMATOGRAMS DATA: I910320PEFB 01 SCANS 1075 TO 1500
03/20/91 16:38:00 CALI: CAL022291 03
SAMPLE: 2UL OF 685:05 ENDING 7-ISOMER SOLUTION FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



3200193

MIDMASS CHROMATOGRAM
03/28/91 16:38:00
DATA: I910328PEFB #1
CALI: CAL022291 #3
SCANS 1230 TO 1305
SAMPLE: 2UL OF 685:05 ENDING 7-ISOMER SOLUTION FOR MULTIPOINT
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



$\frac{13 \times 100}{100} = 13\ \%\ P/V$

3/28/91 16:38:33 SCAN 1 OF 2200
Acquisition started

Acquire Run O: I910328PEFB Acquiring
03/28/91 16:38:00 + 0:04 Free sectors: 20791 Scan: 4 of 2200
Sample: 2UL OF 685:05 ENDING 7-ISOMER SOLUTION FOR MULTIPOINT
Conds. : ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: NM Acct. No:

********** GC PARAMETERS **********
Lorded GC Desc: TD Current GC oven tmp: 312 DegC Injector : 260 DegC
Current GC Desc: TD GC elapsed time : 3:56 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan tire: 1.100 s Samp. int. : 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Pos
3	315.648	316.148	0.105	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.143	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# o? acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/28/91 16:38:40 SCAN 7 OF 2200
Modo changed to suspended centroid positive ion

3/28/91 16:40:32 SCAN 106 OF 2200
Mode changed to centroid positive ion

3/28/91 17:06:53 SCAN 1503
Acquisition stopped

3/28/91 17:06:37
ACQUISITION COMPLETED

3200200

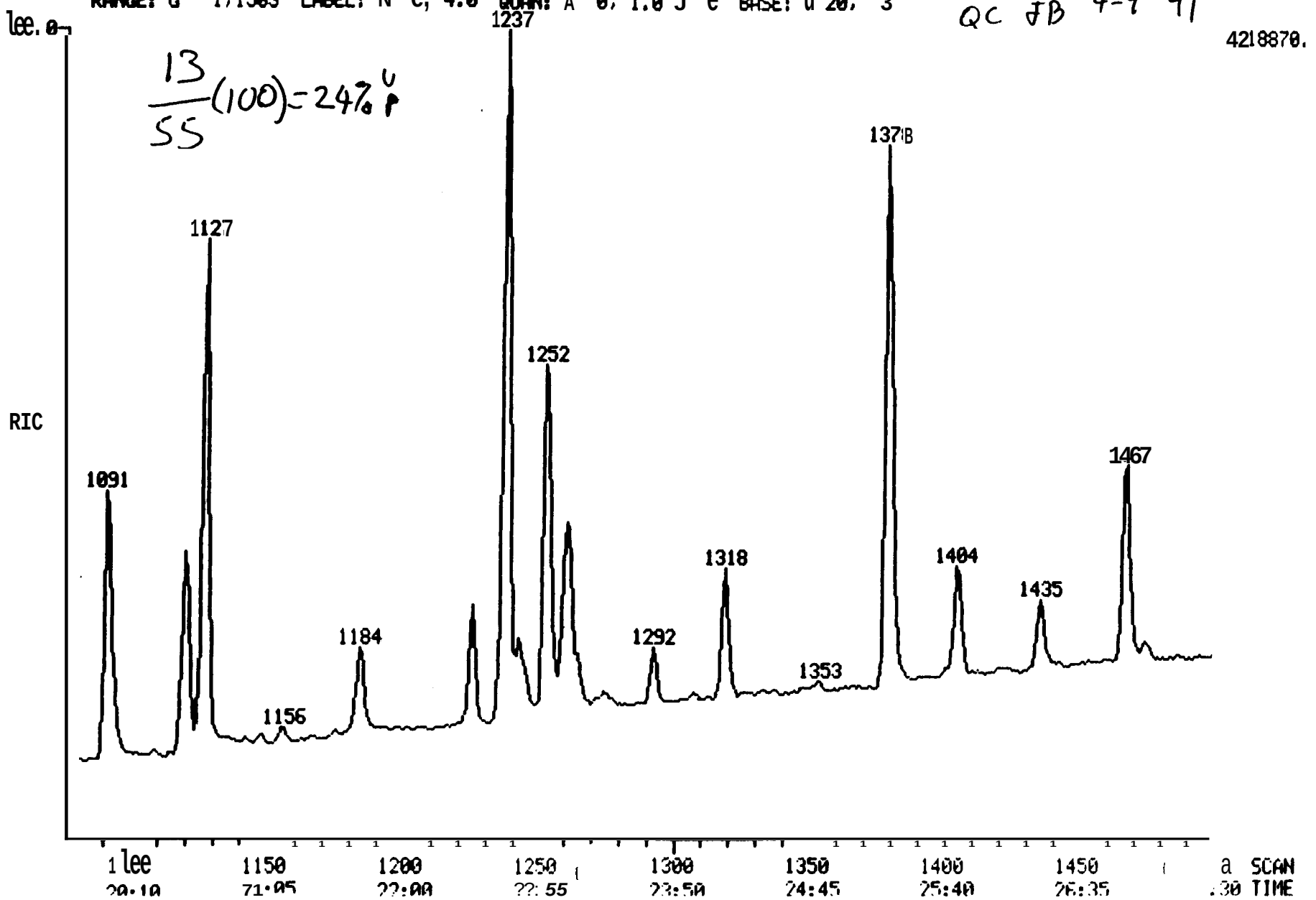
SCANS 2 TO 6 CENTROID
SCANS 7 TO 106 SUSPENDED
SCANS 107 TO 1303 CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1403	310.3	1543.3	20.1	125140.	89.	81.

MIDRIC
04/08/91 8:40:00
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N e, 4.0 QUAN: A 0, 1.0 J e BASE: U 20, 3

DATA: I910408PEF #1 SCANS 1075 TO 1500
CALI: CAL022291 #3

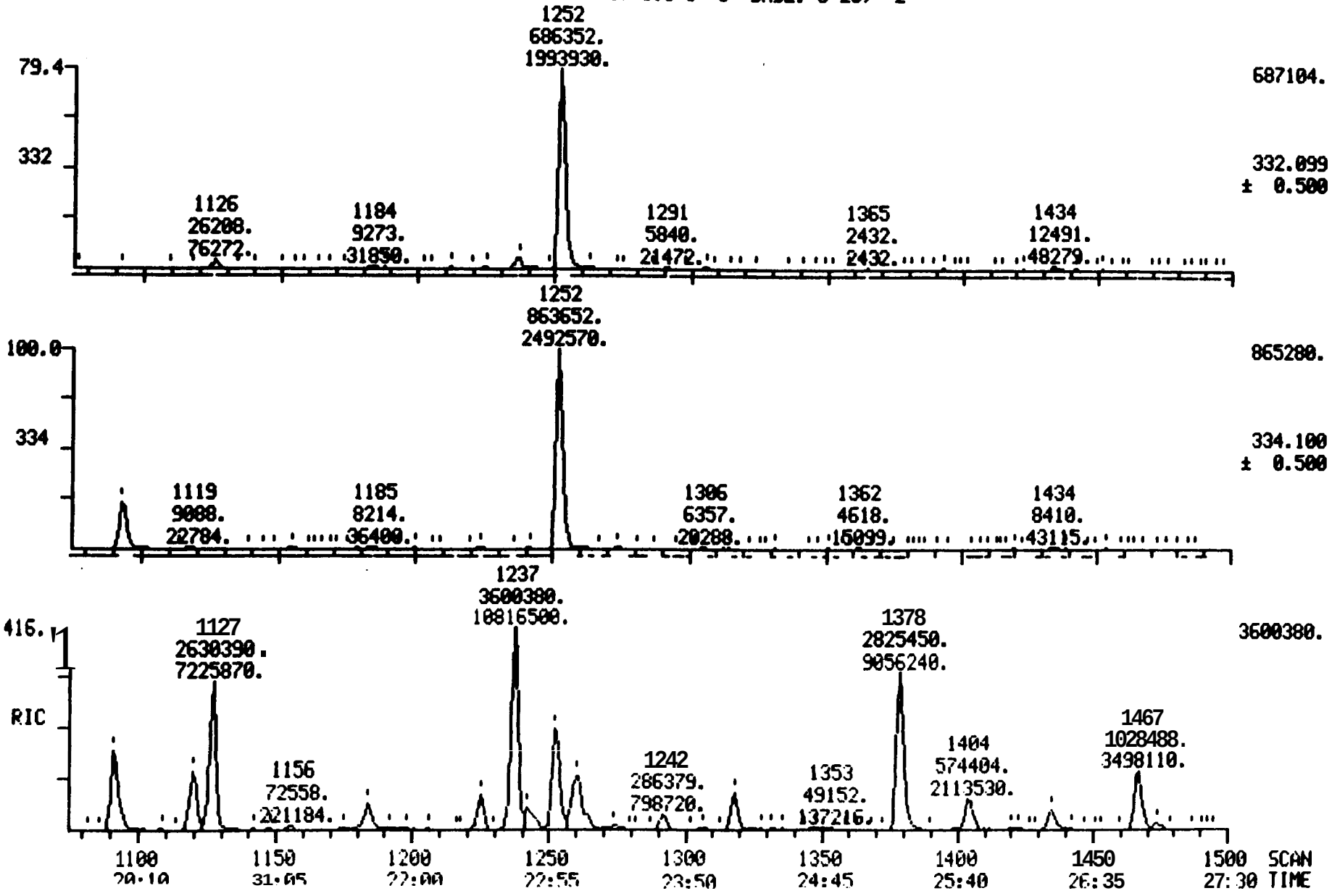
Calc DT 4-8-91
QC JB 4-9-91



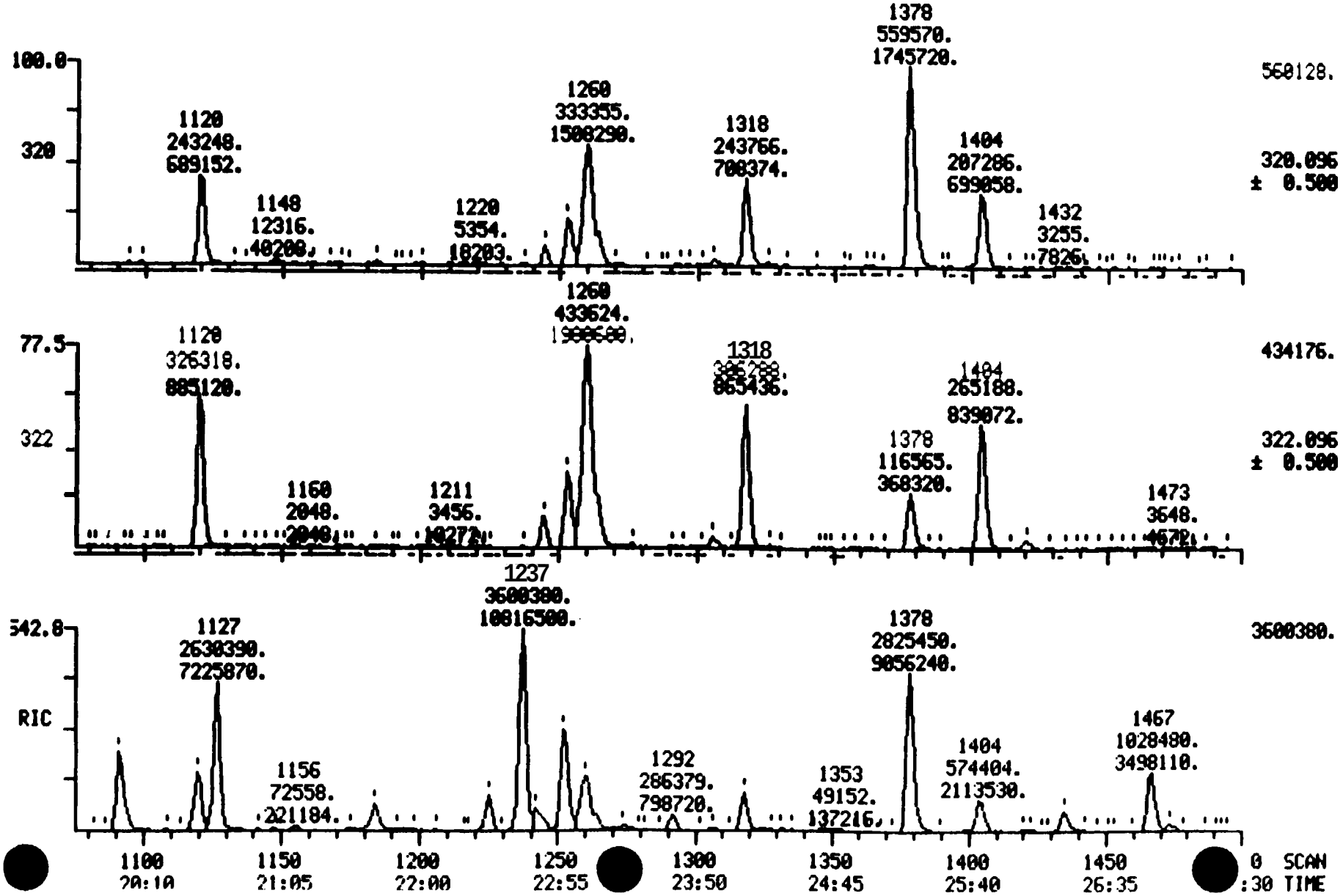
$\frac{13}{55}(100) = 24\%$

3200201

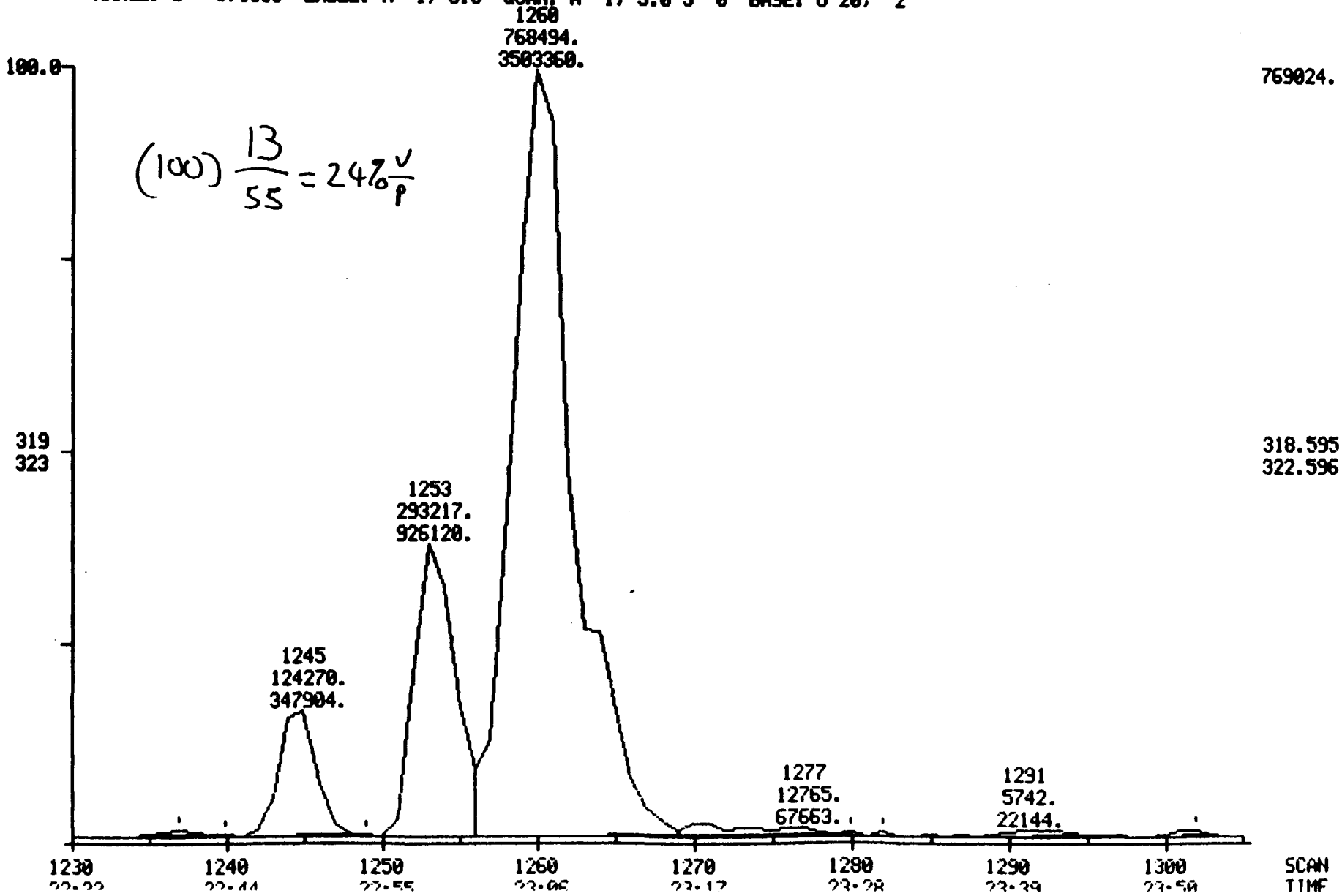
MIDRIC+MASS CHROMATOGRAMS DATA: I910408PEF #1 SCANS 1075 TO 1500
04/08/91 8:40:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



MIDRIC+MASS CHROMATOGRAMS DATA: I910408PEF #1 SCANS 1075 TO 1500
04/08/91 8:40:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



MIDMASS CHROMATOGRAM DATA: I910408PEF #1 SCANS 1230 TO 1305
04/08/91 8:40:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



4/8/91 8:40:26 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:I910408PEF Acquiring
04/08/91 8:40:00 + 0:04 Free sectors: 18408 Scan: 4 of 2000
Sample: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: DM Analyst: DT Acct. No:

********** GC PARAMETERS **********
Lorded GC Desc:TD Current GC oven tnp: 512 DegC Injector : 260 DegC
Current GC Desc:TD GC elapsed time : 4: 7 nin Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

WID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Pos
5	315.648	316.148	0.105	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
0	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.6—	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	14	
Instrument type	G	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	M U
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/8/91 8:40:32 SCAN 6 OF 2000
Mode changed to suspended centroid positive ion

4/8/91 8:42:23 SCAN 106 OF 2000
Wode changed to centroid positive ion

4/8/91 9:08:47 SCAN 1503
Acquisition stopped

4/8/91 9:08:49
ACQUISITION COMPLETED

3200203

SCANS	1	TO	5	CENTROID
SCANS	6	TO	106	SUSPENDED
SCANS	107	TO	1503	CENTROID

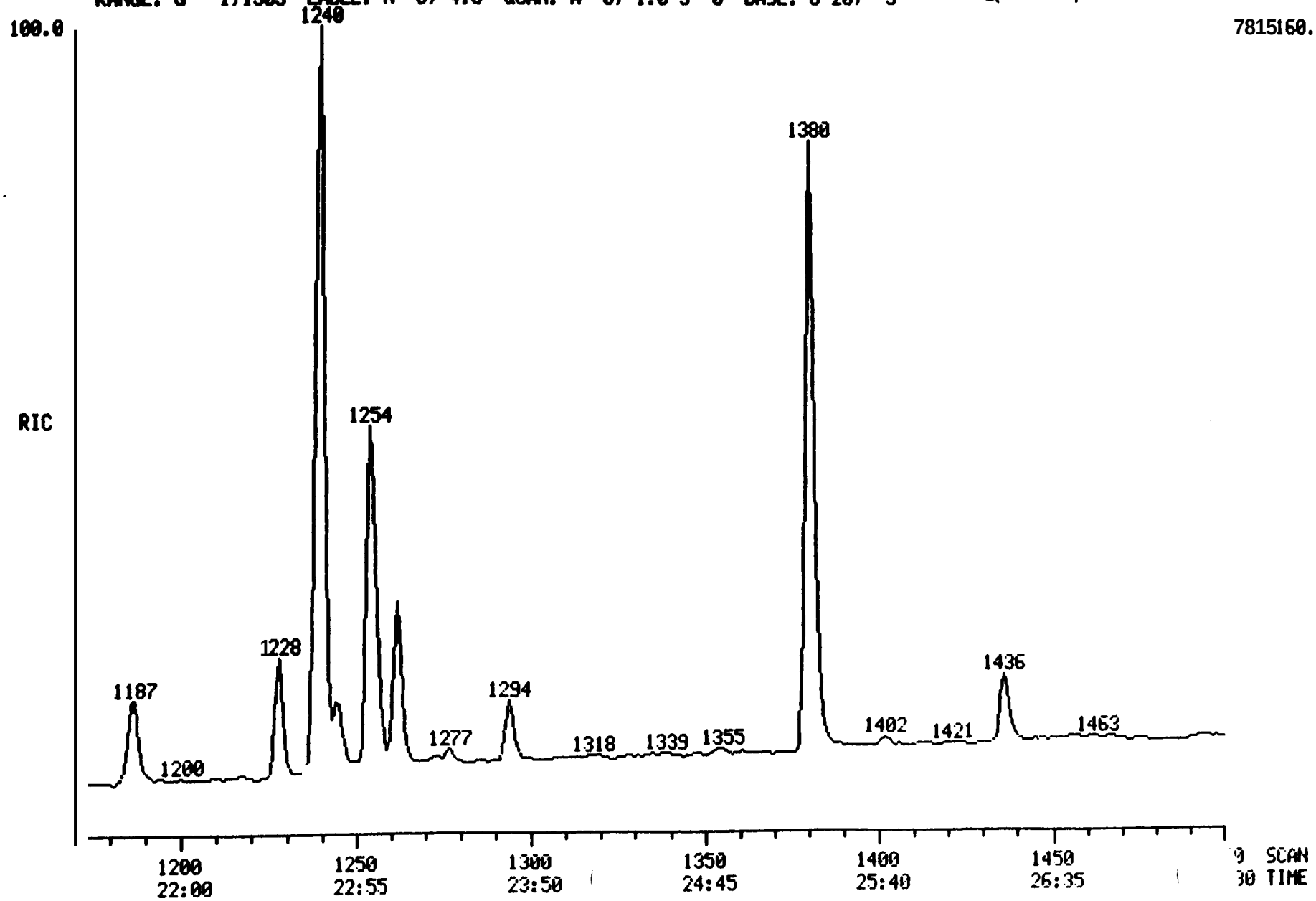
MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1402	150.2	1542.2	9.7	27381. 20.	18.

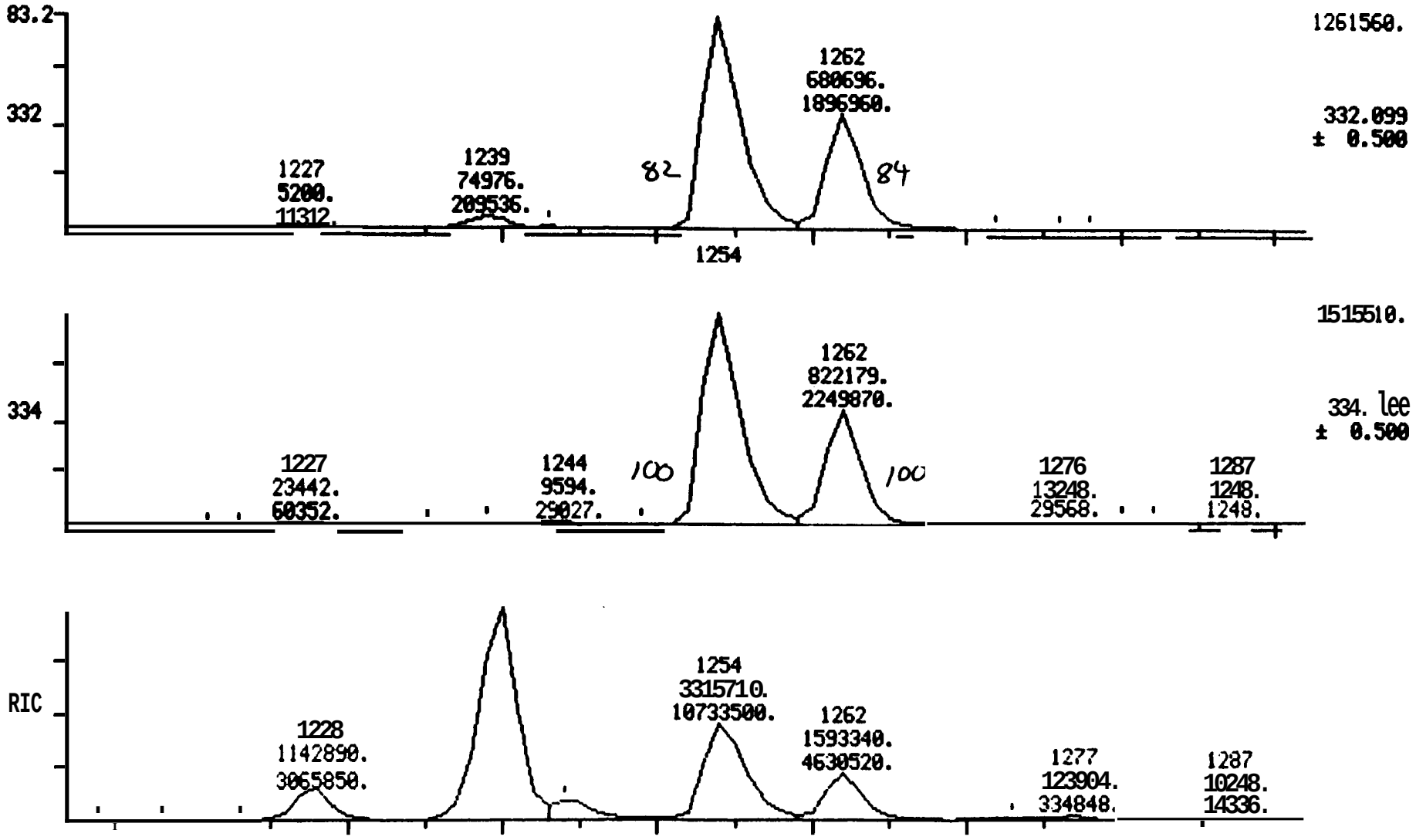
3200204

MIDRIC
04/08/91 9:24:00
SAMPLE: 2UL OF 685:06-I DAILY STANDARD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: I910408PEI #1252 SCANS 1170 TO 1500
CALI: CAL022291 #3

Calc DT 4-8-91
QC JB 4-9-91

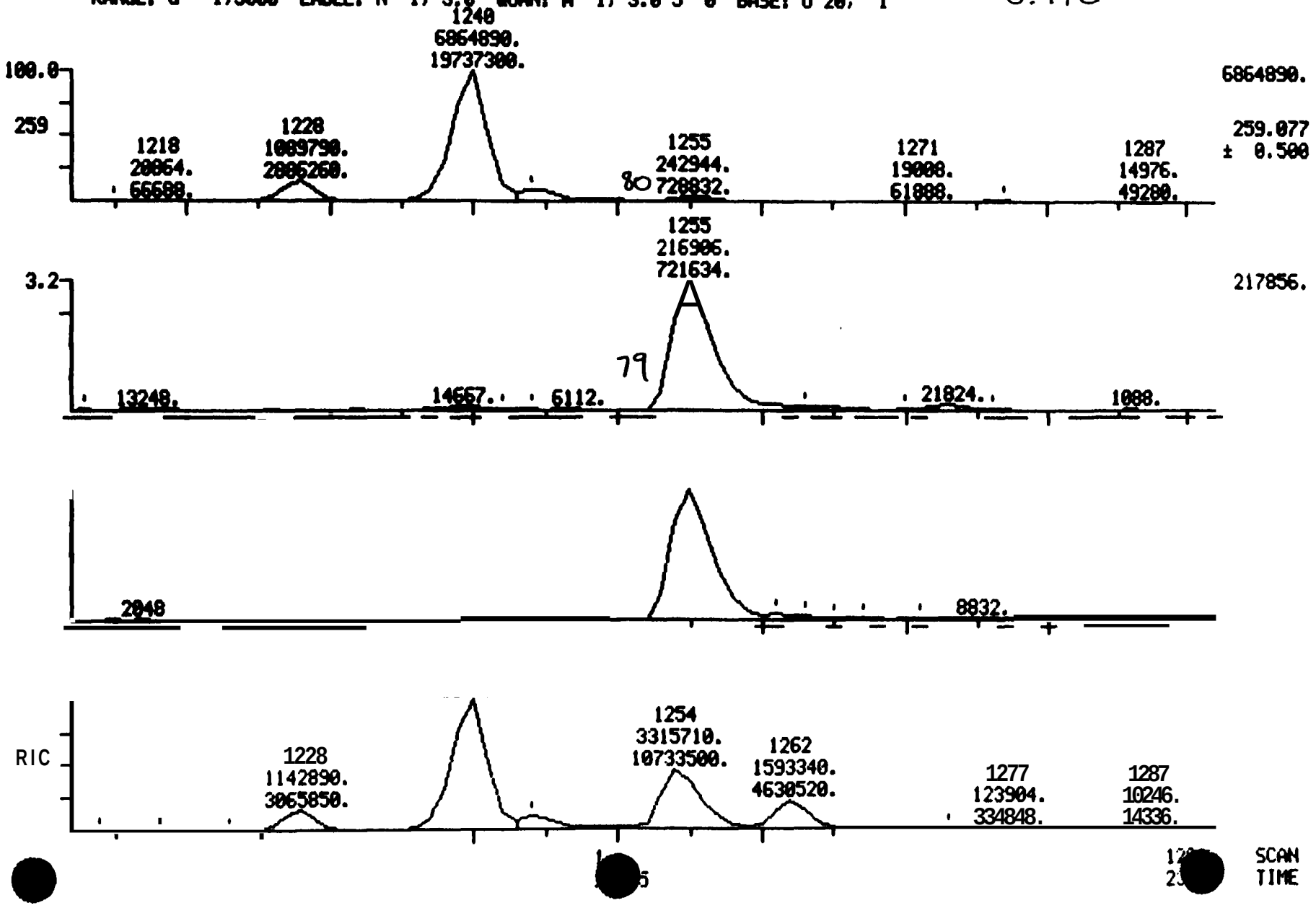


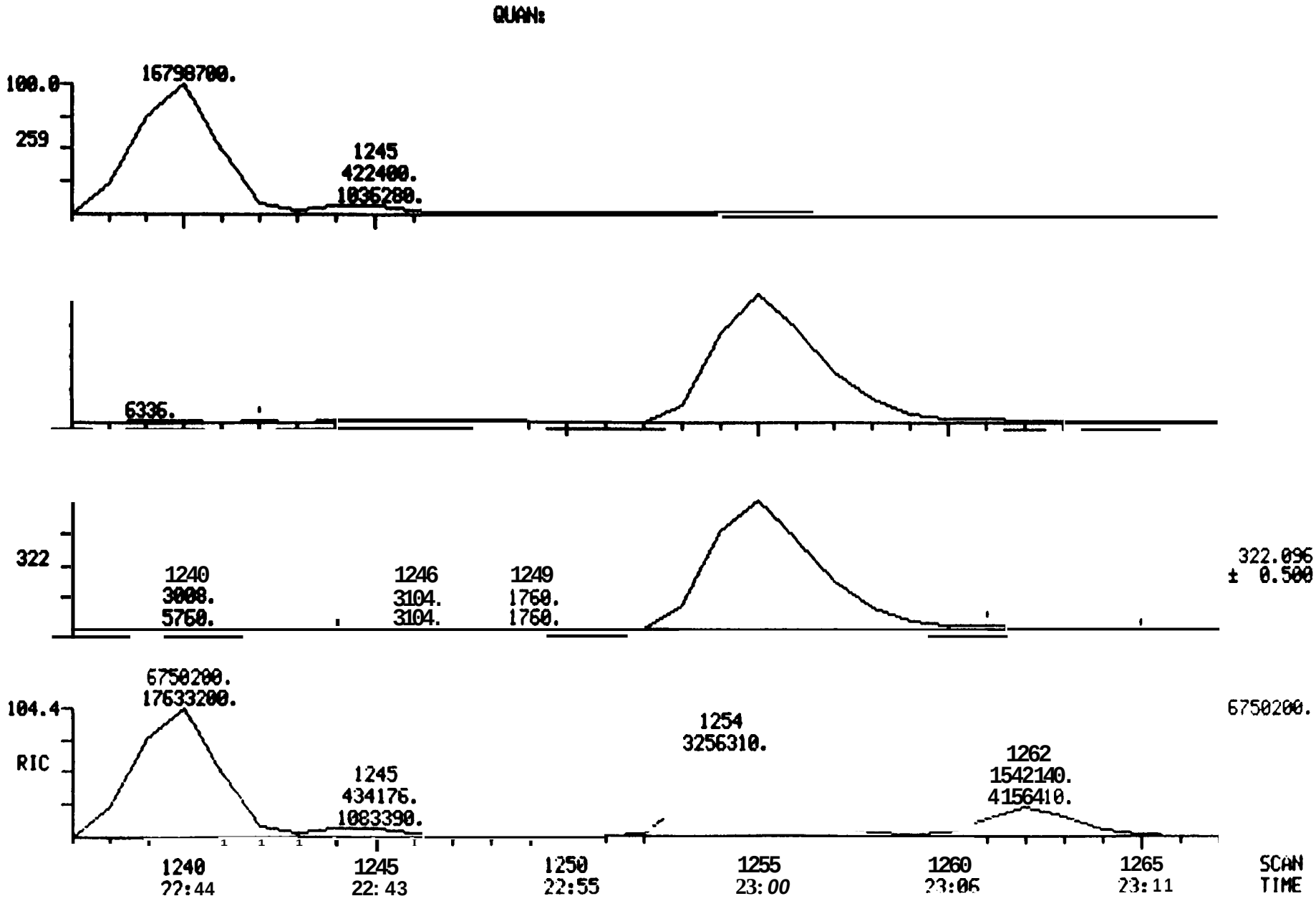

83.2
332
1227
5200.
11312.
1239
74976.
209536.
82
1262
680696.
1896960.
84
1254
1261560.
332.099
± 0.500
334
1227
23442.
60352.
1244
9594.
29027.
100
1262
822179.
2249870.
100
1276
13248.
29568.
1287
1248.
1248.
1515510.
334. lee
± 0.500
RIC
1228
1142890.
3065850.
1254
3315710.
10733500.
1262
1593340.
4630520.
1277
123904.
334848.
1287
10248.
14336.

3200205

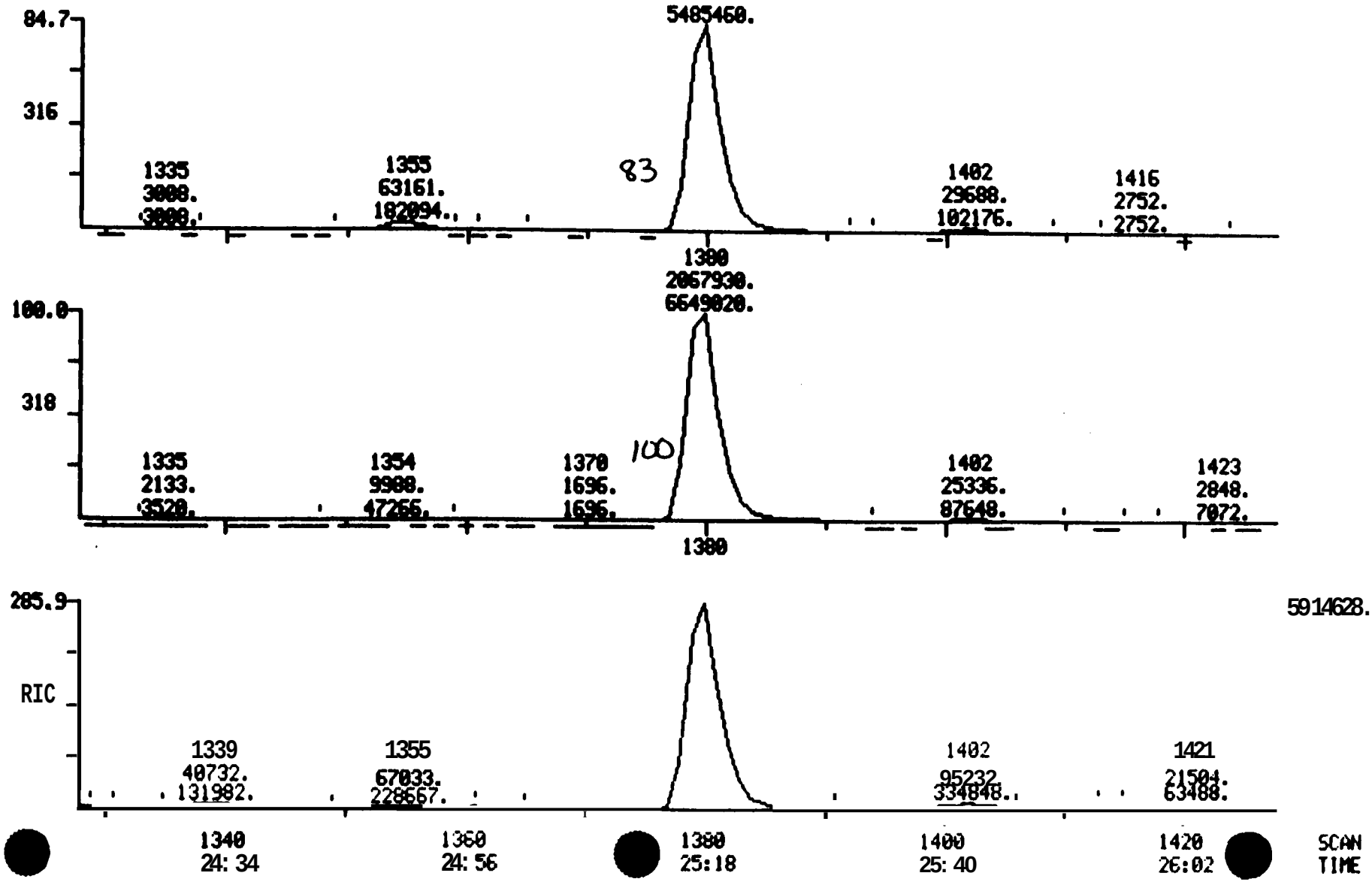
MIDRIC+MASS CHROMATOGRAMS DATA: I910408PEI #1252 SCANS 1212 TO 292
04/08/91 9:24:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-I DAILY STANDARD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

1.03
0.942



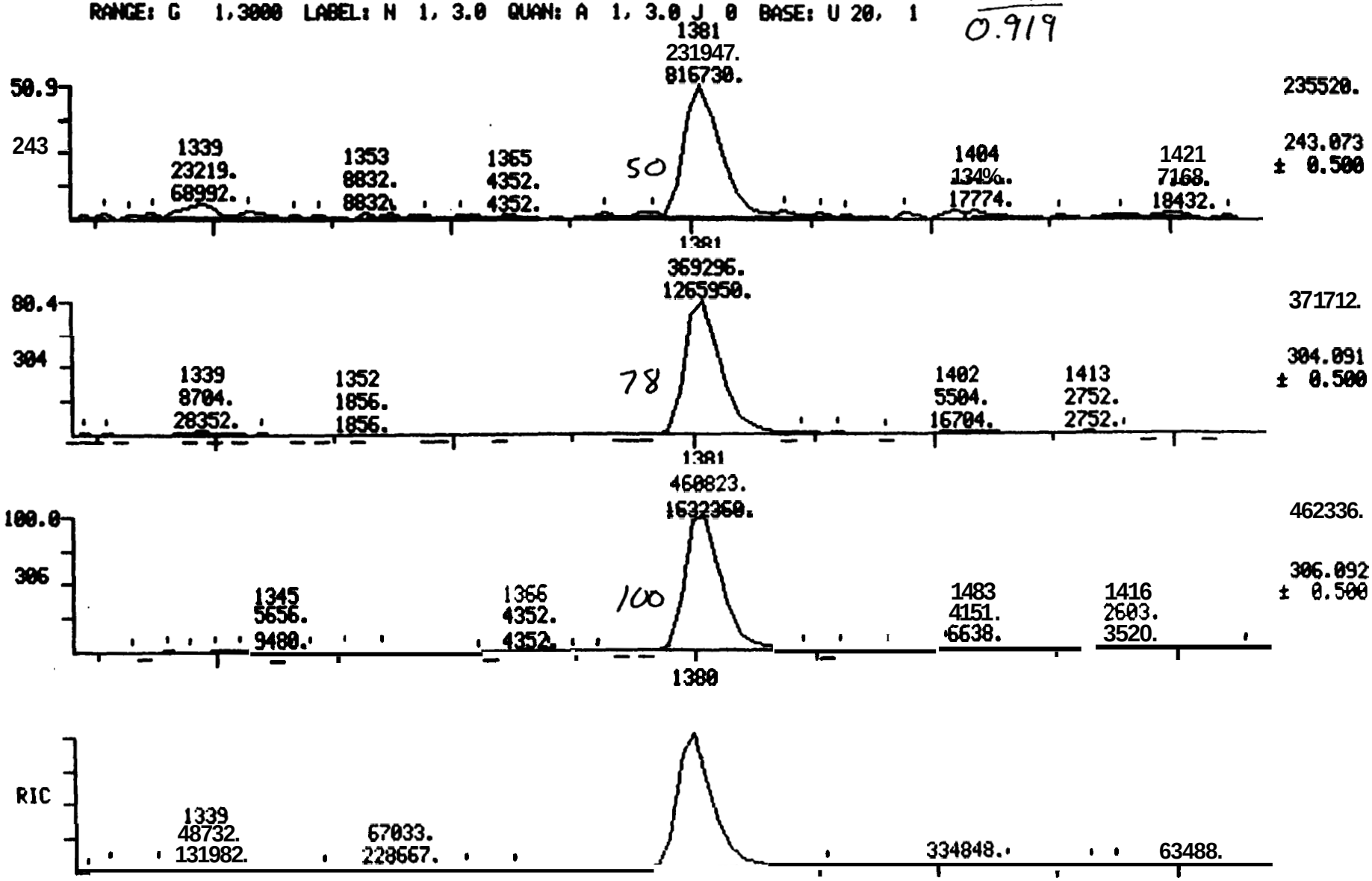

QUAN:
100.0
259
16798700.
1245
422400.
1036280.
6336.
322
1240
3008.
5760.
1246
3104.
3104.
1249
1760.
1760.
322.096
± 0.500
104.4
RIC
6750200.
17633200.
1245
434176.
1083390.
1254
3256310.
1262
1542140.
4156410.
6750200.
1240
22:44
1245
22:43
1250
22:55
1255
23:00
1260
23:06
1265
23:11
SCAN
TIME

1.46


84.7
316
5485460.
83
1335
3000.
3000.
1355
63161.
182094.
1402
29688.
102176.
1416
2752.
2752.
1380
2057930.
6649020.
100.0
318
100
1335
2133.
3520.
1354
9900.
47265.
1370
1696.
1696.
1402
25336.
87648.
1423
2848.
7072.
1380
285.9
5914628.
RIC
1339
40732.
131982.
1355
67033.
228667.
1402
95232.
334848.
1421
21504.
63488.
1340
24:34
1360
24:56
1380
25:18
1400
25:40
1420
26:02
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS DATA: I910408PEI #1378 SCANS 1328 TO 1428
04/08/91 9:24:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:06-1 DAILY STANDARD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

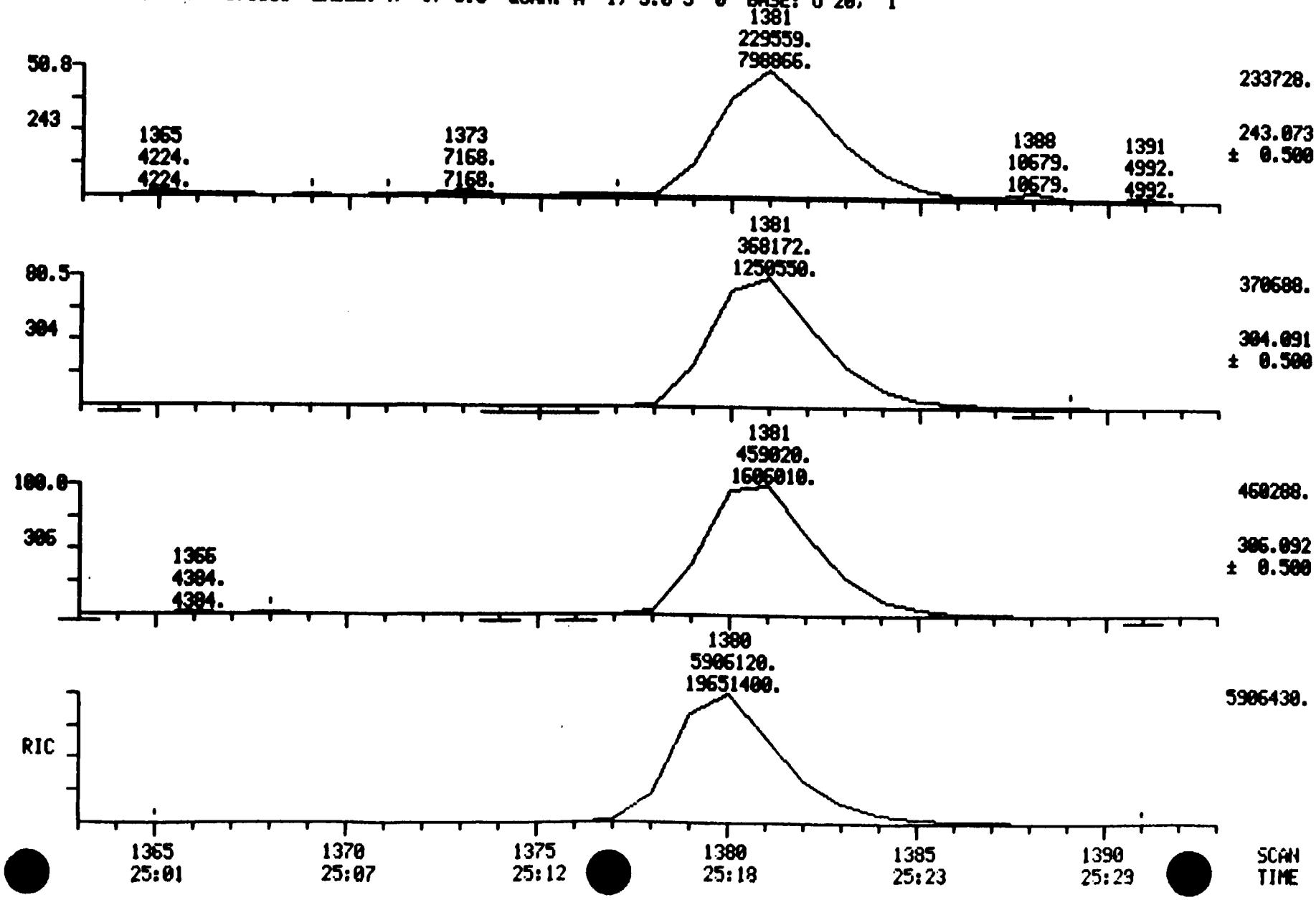
1.19
0.919



3200207

MIDRIC+MASS CHROMATOGRAMS
04/08/91 9:24:00
SAMPLE: 2UL OF 685:86-I DAILY STANDARD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: I910408PEI #1378 SCANS 1363 TO 1393
CALI: CAL022291 #3



4/8/91 9:24:43 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:I910408PEI Acquiring
04/08/91 9:24:00 + 0:03 Free sectors: 18136 Scan: 3 of 2000
Sample: 2UL OF 685:06-I DAILY STANDARD
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: DM Analyst: DT Acct. No:

********** GC PARAMETERS **********
Loaded OC Desc: TD Current OC oven tmp: 512 DegC Injector : 260 DegC
Current OC Desc: TD GC elapsed time : 2:11 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - SO	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

In't #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	238.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	303.648	306.148	0.108	1	100	40	2	0	Pos
5	313.648	316.148	0.105	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
0	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.448	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.130	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	t	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/8/91 9:24:49 SCAN 5 OF 2000
Mode changed to suspended centroid positive ion

4/8/91 9:26:42 SCAN 106 OF 2000
Mode changed to centroid positive ion

4/8/91 9:53:05 SCAN 1503
Acquisition stopped

4/8/91 9:53:06
ACQUISITION COMPLETED

SCANS 1 TO 5 CENTROID
SCANS 6 TO 105 SUSPENDED
SCANS 106 TO 1503 CENTROID

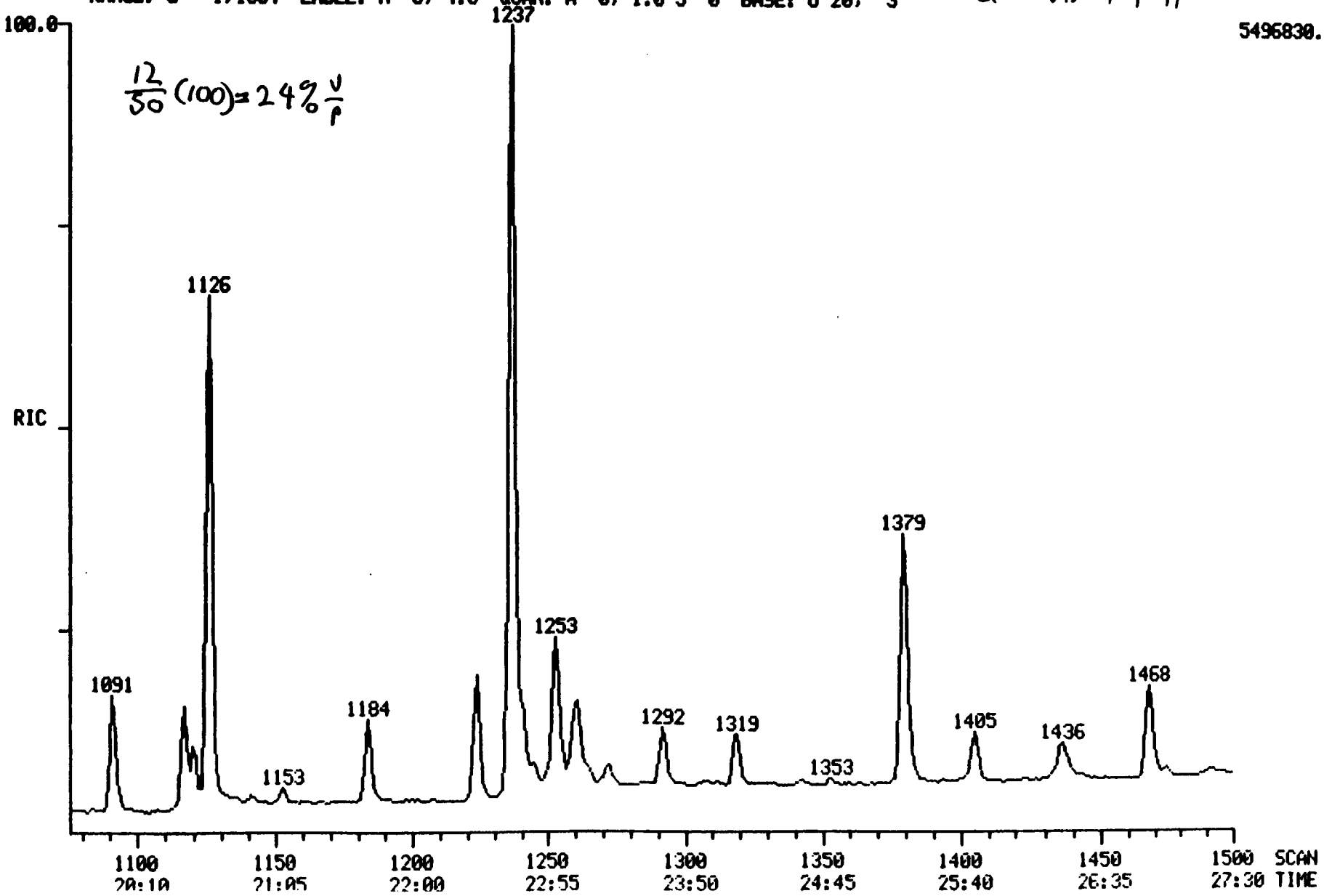
MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1403	124.7	1343.3	0.1	19640.	14.	13.

3200208

MIDRIC
04/08/91 16:28:00
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1504 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: I910408PEFB #1 SCANS 1075 TO 1500
CALI: CAL022291 #3

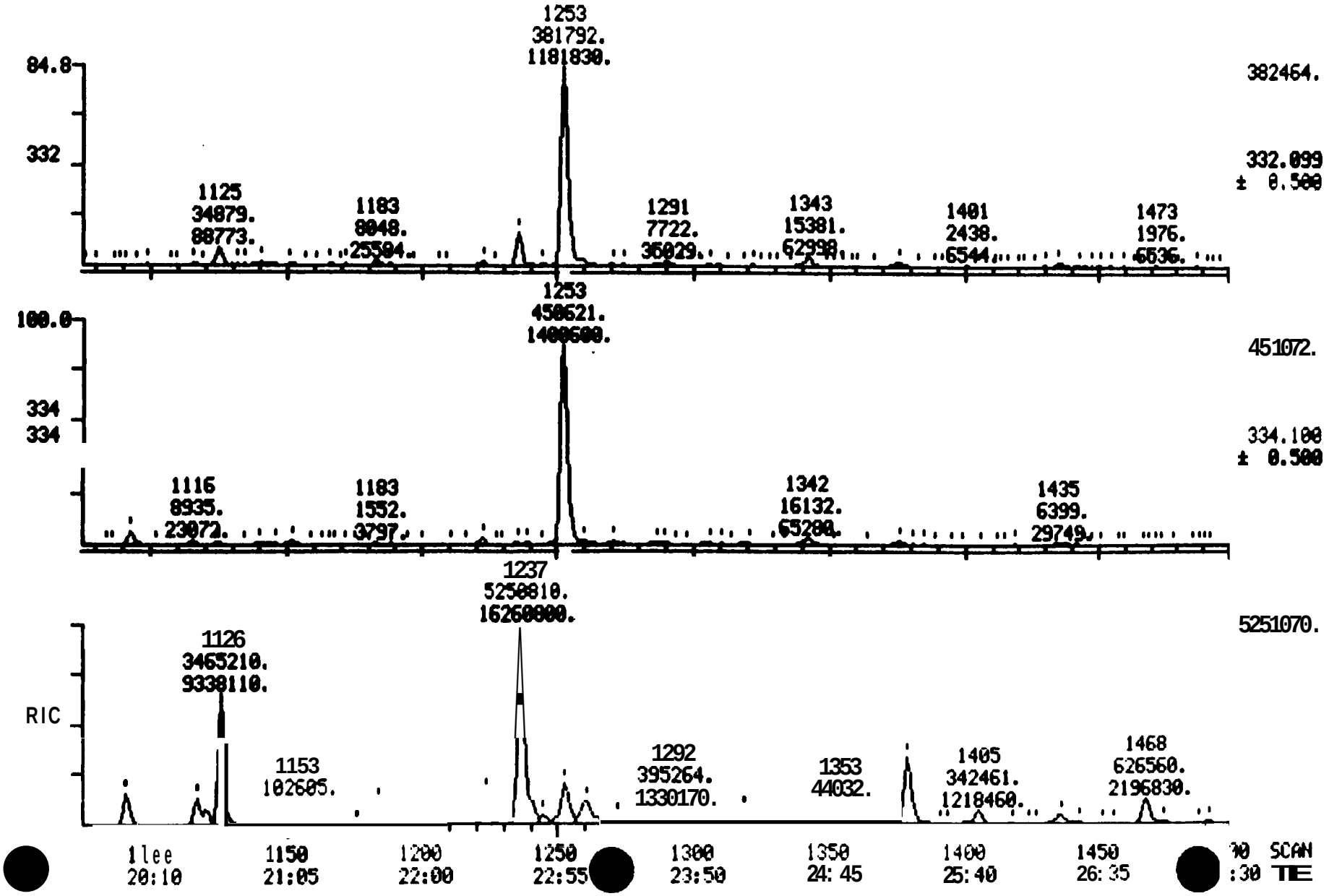
Calc DT 4.8.91
QC JB 4-9-91



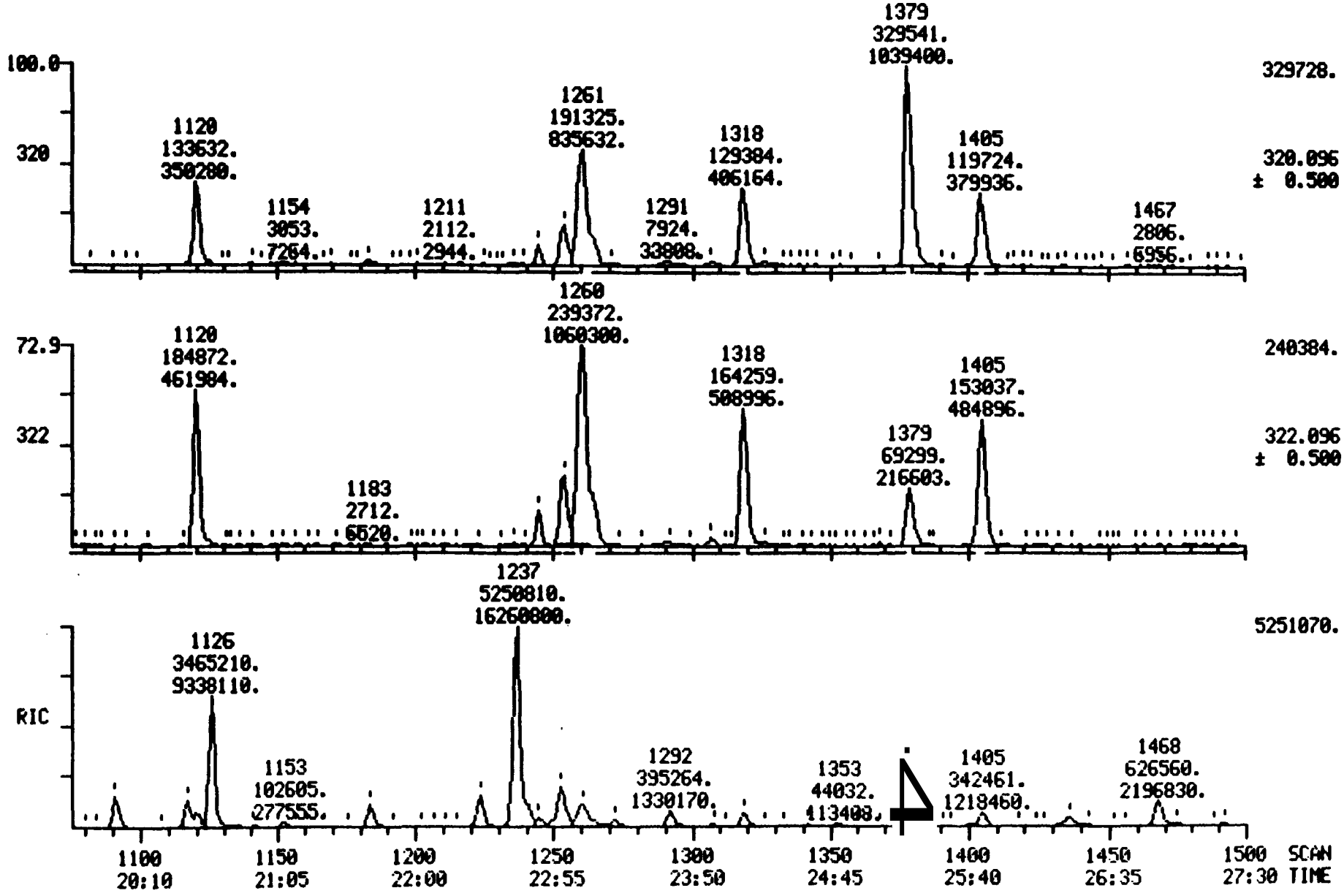
$\frac{12}{50}(100) = 24\% \frac{v}{p}$

3200209

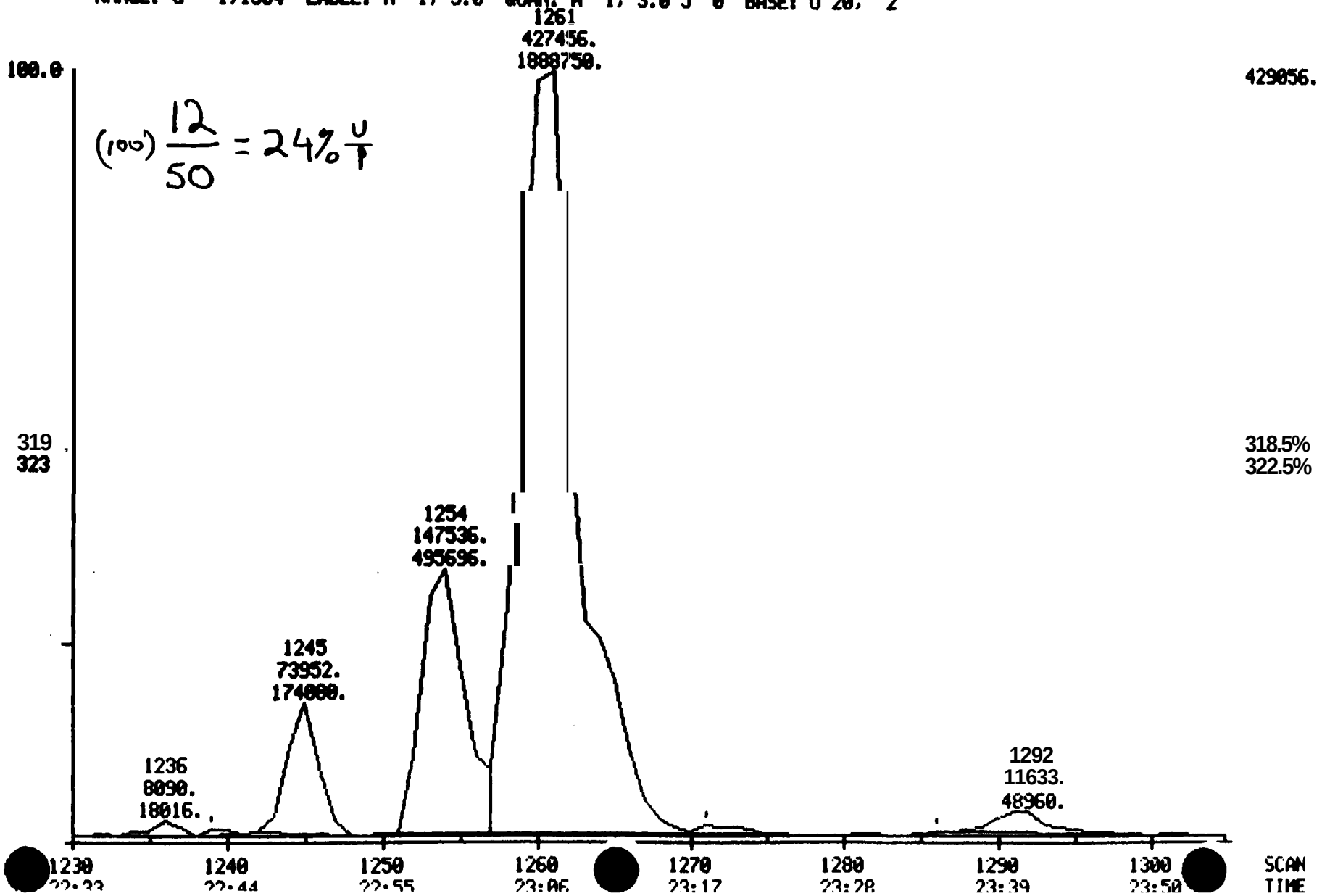
MIDRIC+MASS CHROMATOGRAMS DATA: I910408PEFB #1 SCANS 1075 TO 1500
04/08/91 16:28:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1504 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



MIDRIC+MASS CHROMATOGRAMS DATA: I910408PEFB #1 SCANS 1075 TO 1500
04/08/91 16:28:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1504 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



MIDMASS CHROMATOGRAM DATA: I910408PEFB #1 SCANS 1239 TO 1305
04/08/91 16:28:00 CALI: CAL022291 #3
SAMPLE: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1504 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 2



320C210

4/8/91 16:28:48 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:I910408PEFB Acquiring
04/08/91 16:28:00 + 0:04 Free rectors: 14152 Scan: 4 of 2000
Sample: 2UL OF 685:05 7 ISOMER SOLUTION FOR PERFORMANCE CHECK
Condr.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: DM Analyst: DT Acct. No:

********** GC PARAMETERS **********
Loaded CC Desc: TD Current GC oven tmp: 312 DegC Injector : 260 DegC
Current GC Desc: TD CC elapsed time : 0:45 min Int.oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

HID scan Desc: TC Mass intervals: 10
Scan time: 1.100 r Samp. int.: 0.200 mr Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.103	1	100	40	2	0	Por
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Por
5	315.640	316.148	0.105	1	100	40	2	0	Por
6	317.640	318.148	0.105	1	100	40	2	0	Por
	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Por
10	333.649	334.150	0.103	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at lou mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/8/91 16:28:53 SCAN 6 OF 2000
Mode changed to suspended centroid positive ion

4/8/91 16:30:46 SCAN 106 OF 2000
Mode changed to centroid positive ion

4/8/91 16:57:09 SCAN 1504
Acquisition stopped

4/8/91 16:57:11
ACWISITION COMPLETED

SCANS 1 TO 5 CENTROID
SCANS 6 TO 105 SUSPENDED
SCANS 106 TO 1504 CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1404	195.2	1544.4	12.6	215918.	154.	140.

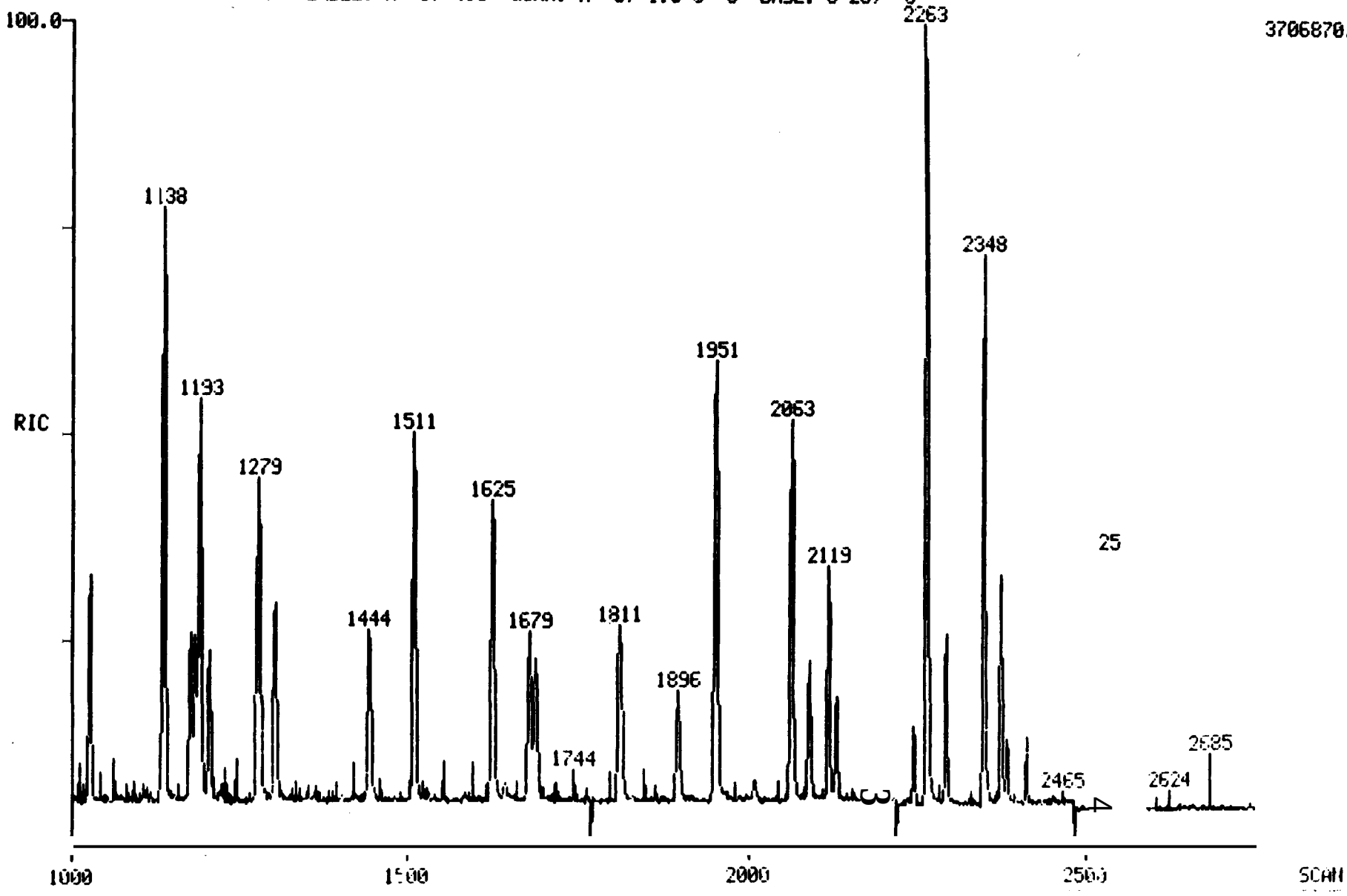
3200211

MIDRIC
03/26/91 7:47:00
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68505WINDOW #1
CALI: CAL910306A #2

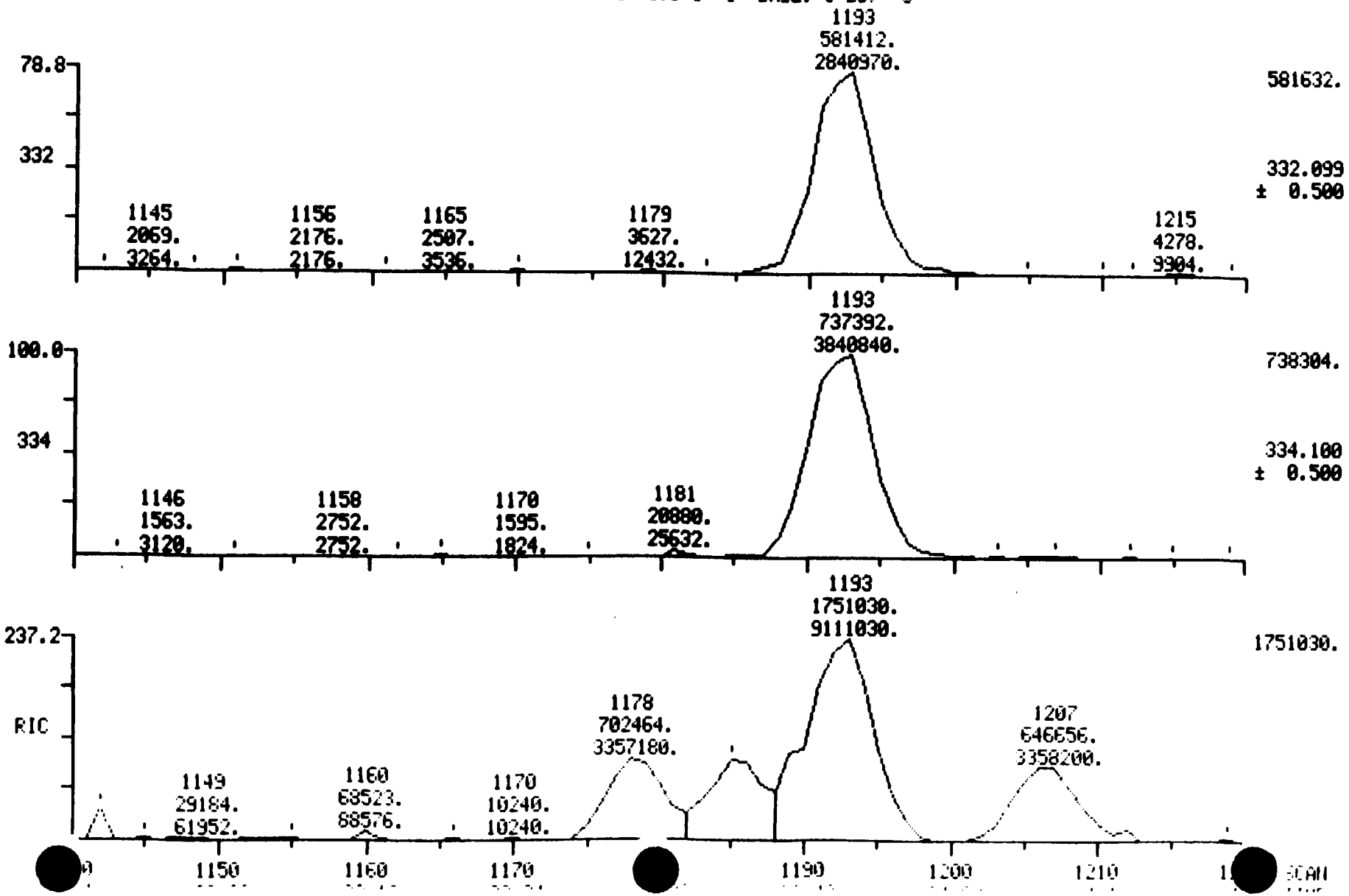
SCANS 1000 TO 2750

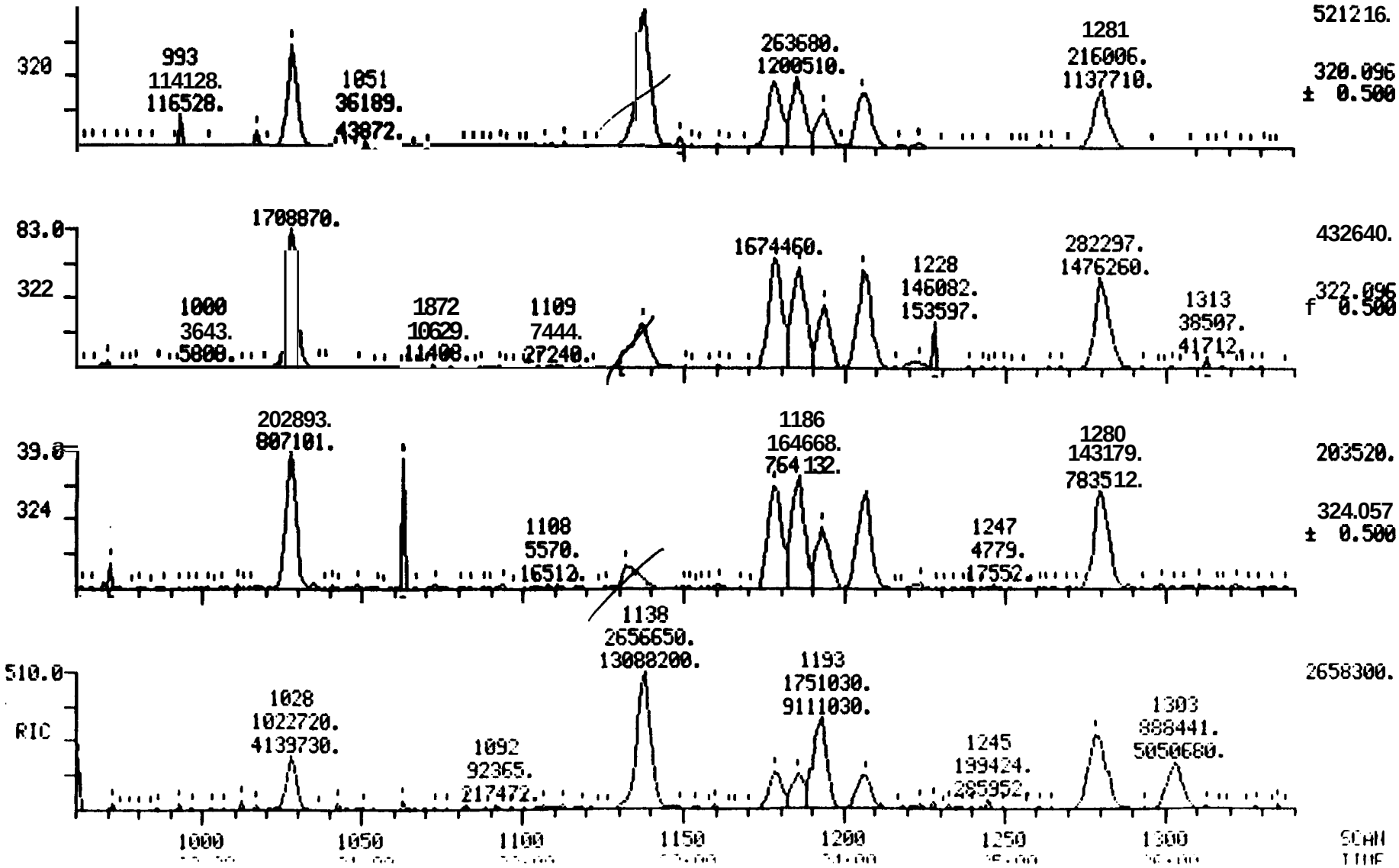
nm ✓ 3-28-91



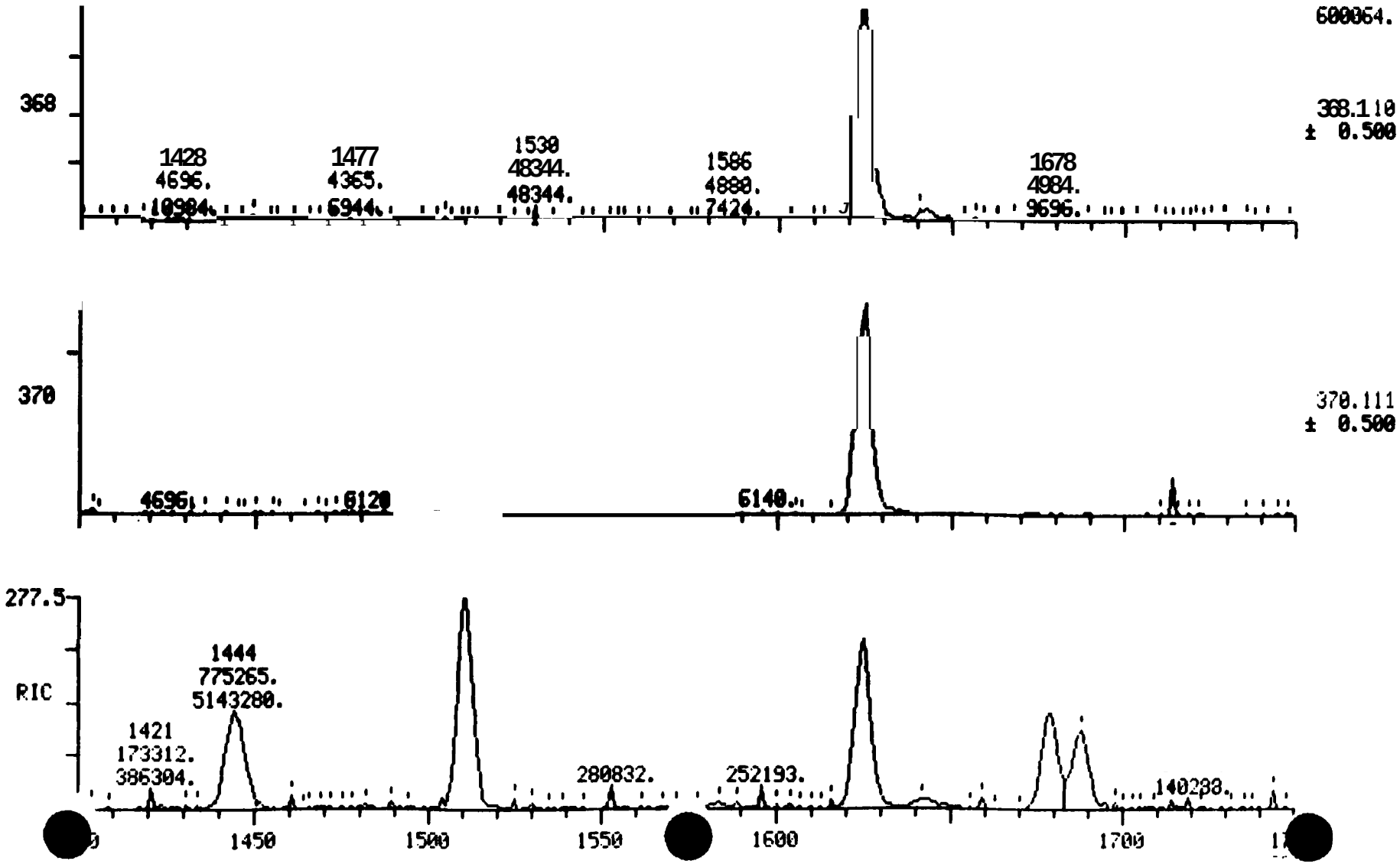
3200212

MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

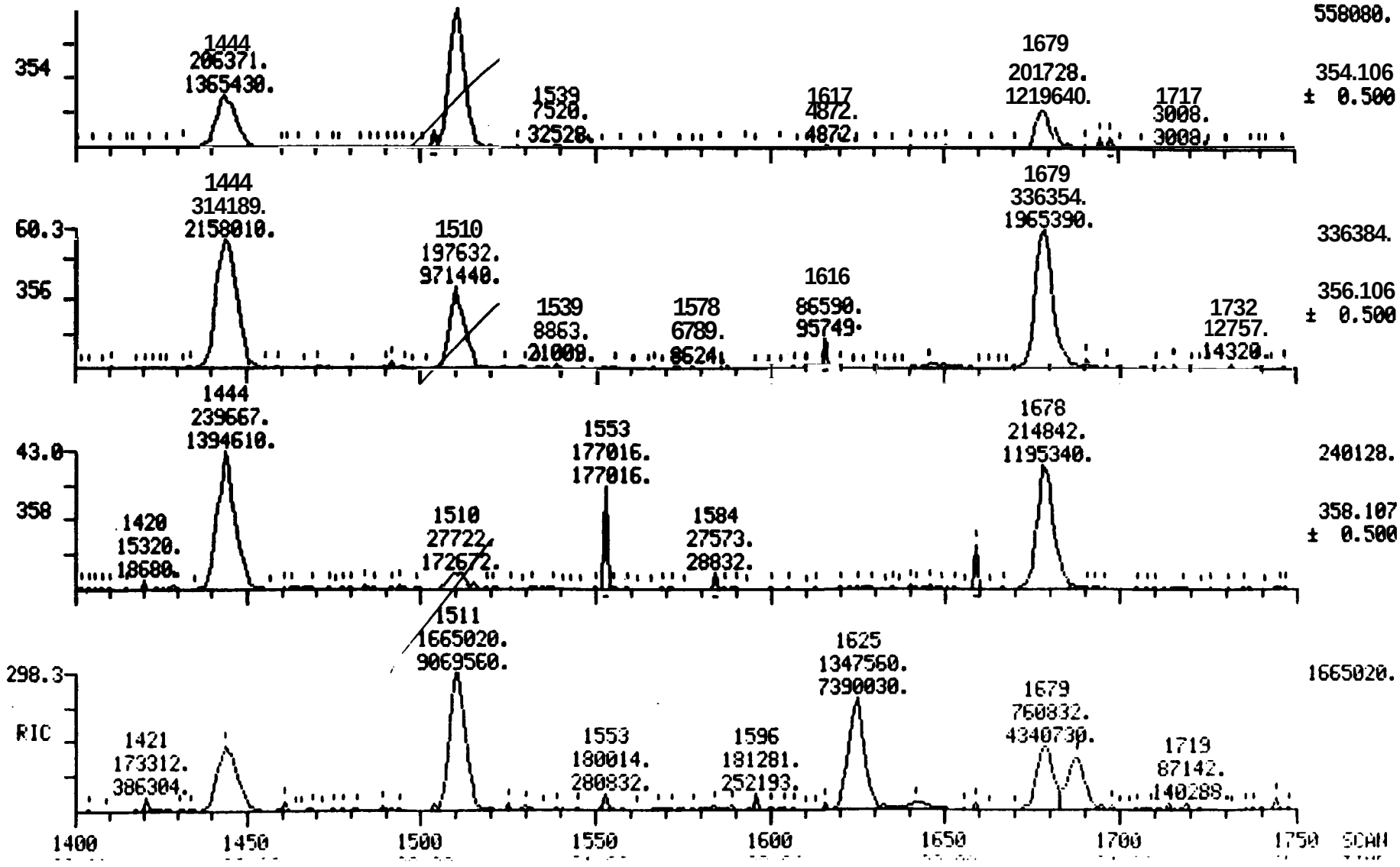



521216.
320
993
114128.
116528.
1051
36189.
43872.
263680.
1200510.
1281
216006.
1137710.
320.096
± 0.500
83.0
322
1708870.
1000
3643.
5800.
1872
10629.
11408.
1109
7444.
27240.
1674460.
1228
146082.
153597.
282297.
1476260.
1313
38507.
41712.
432640.
322.096
f 0.500
39.0
324
202893.
807101.
1108
5570.
16512.
1186
164668.
764132.
1247
4779.
17552.
1280
143179.
783512.
203520.
324.057
± 0.500
510.0
RIC
1028
1022720.
4139730.
1092
92365.
217472.
1138
2656650.
13088200.
1193
1751030.
9111030.
1245
199424.
285952.
1303
888441.
5050680.
2658300.
1000
1050
1100
1150
1200
1250
1300
SCAN
TIME

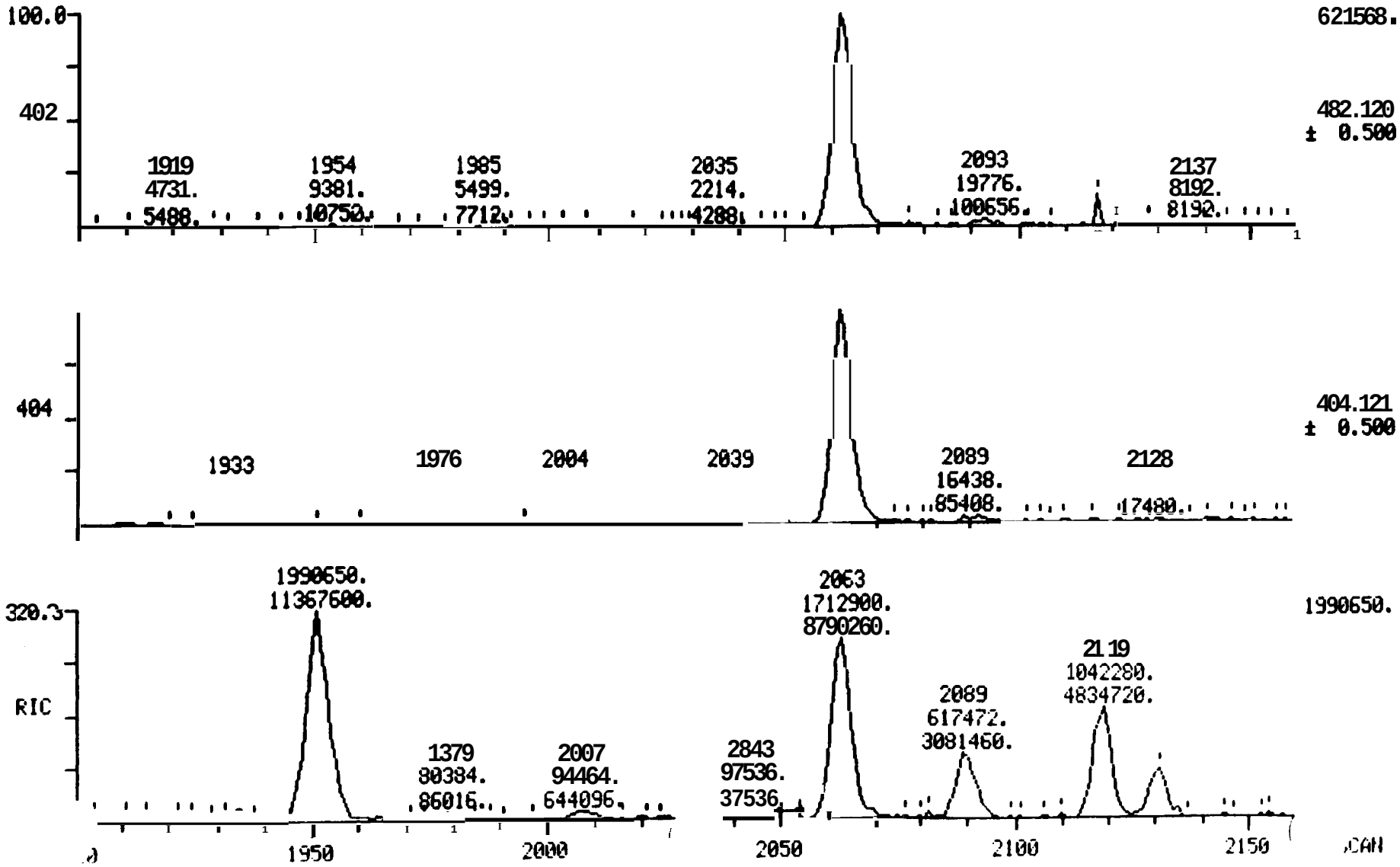
LABEL:


600064.
368
368.110
± 0.500
1428
4696.
10984.
1477
4365.
6944.
1530
48344.
48344.
1586
4880.
7424.
1678
4984.
9696.
370
370.111
± 0.500
4696.
6120
6140.
277.5
RIC
1444
775265.
5143280.
1421
173312.
386304.
280832.
252193.
140288.
1450
1500
1550
1600
1700

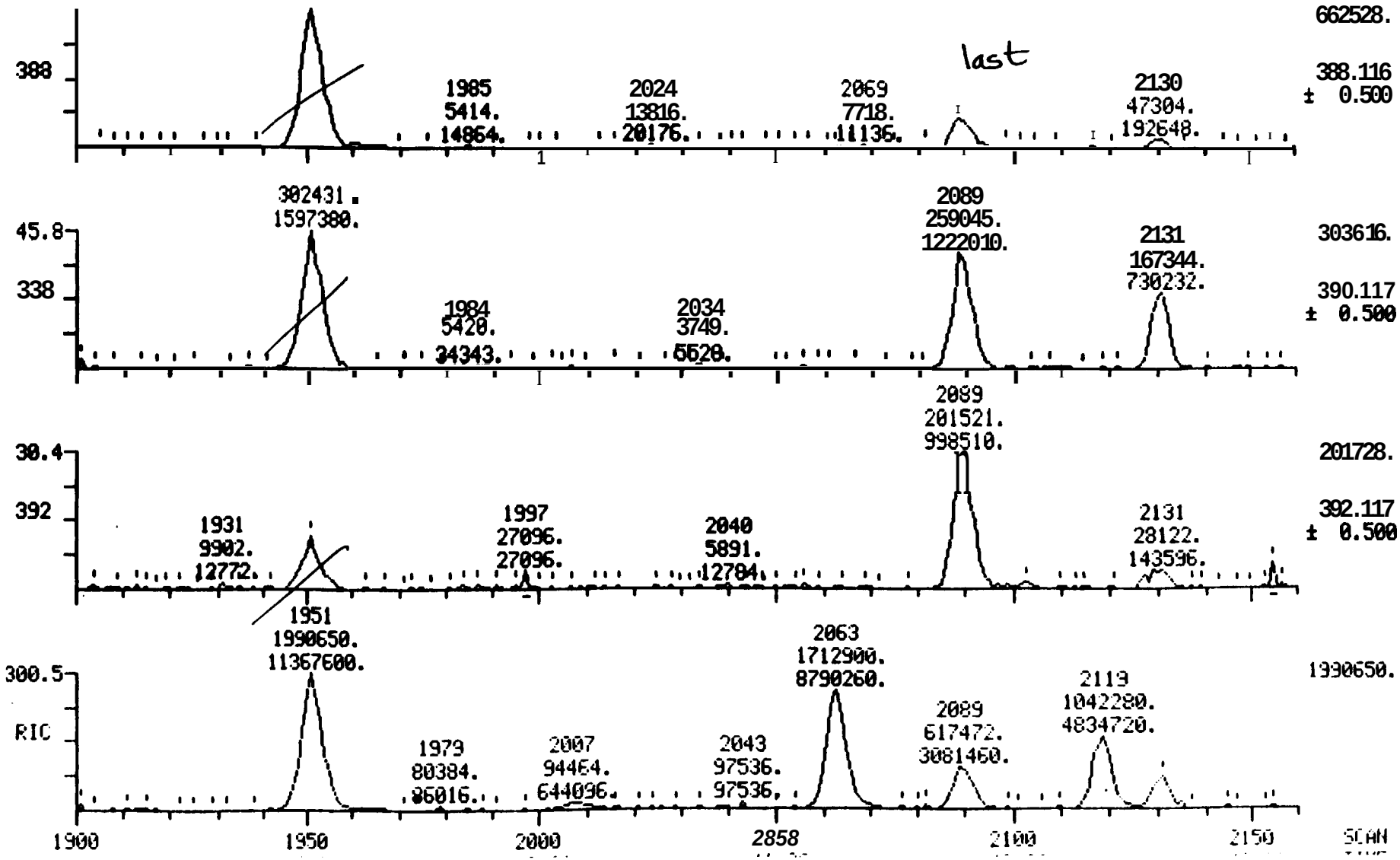
PeCDD


354
1444
206371.
1365430.
1539
7520.
32520.
1617
4872.
4872.
1679
201728.
1219640.
1717
3008.
3008.
558080.
354.106
± 0.500
60.3
356
1444
314189.
2158010.
1510
197632.
971440.
1539
8863.
21009.
1578
6789.
8624.
1616
86590.
95749.
1679
336354.
1965390.
1732
12757.
14320.
336384.
356.106
± 0.500
43.0
358
1444
239667.
1394610.
1420
15320.
18680.
1510
27722.
172672.
1553
177016.
177016.
1584
27573.
28832.
1678
214842.
1195340.
240128.
358.107
± 0.500
298.3
RIC
1421
173312.
386304.
1511
1665020.
9069560.
1553
180014.
280832.
1596
181281.
252193.
1625
1347560.
7390030.
1679
760832.
4340730.
1719
87142.
140288.
1665020.
1400
1450
1500
1550
1600
1650
1700
1750
SCAN

3200214

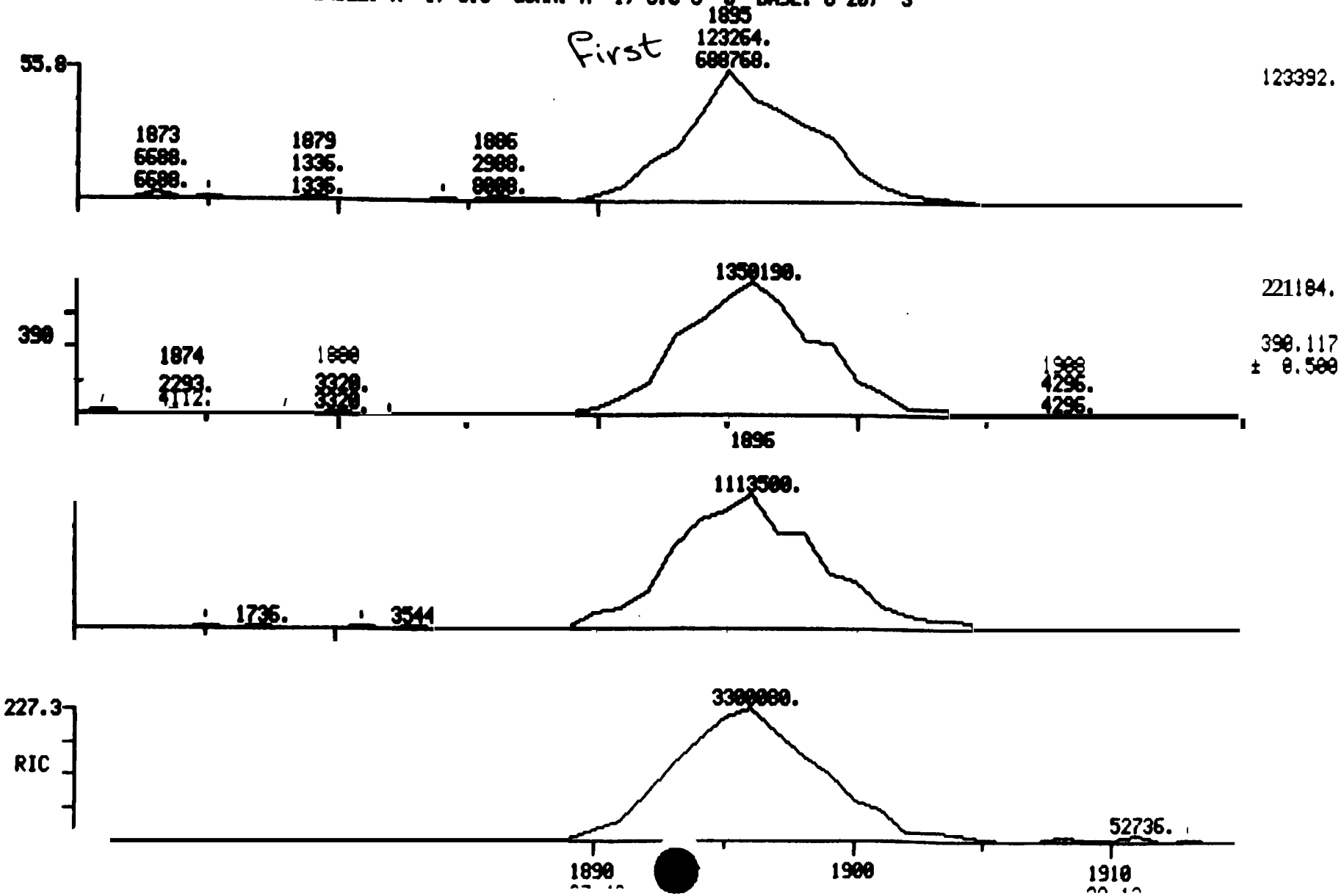

100.0
402
1919
4731.
5488.
1954
9381.
10750.
1985
5499.
7712.
2035
2214.
4288.
2093
19776.
100656.
2137
8192.
8190.
621568.
482.120
± 0.500
404
1933
1976
2004
2039
2089
16438.
85408.
2128
17480.
404.121
± 0.500
320.3
RIC
1990650.
11367600.
1379
80384.
86016.
2007
94464.
644096.
2843
97536.
37536.
2063
1712900.
8790260.
2089
617472.
3081460.
2119
1042280.
4834720.
1990650.
1950
2000
2050
2100
2150
SCAN

HxCDD

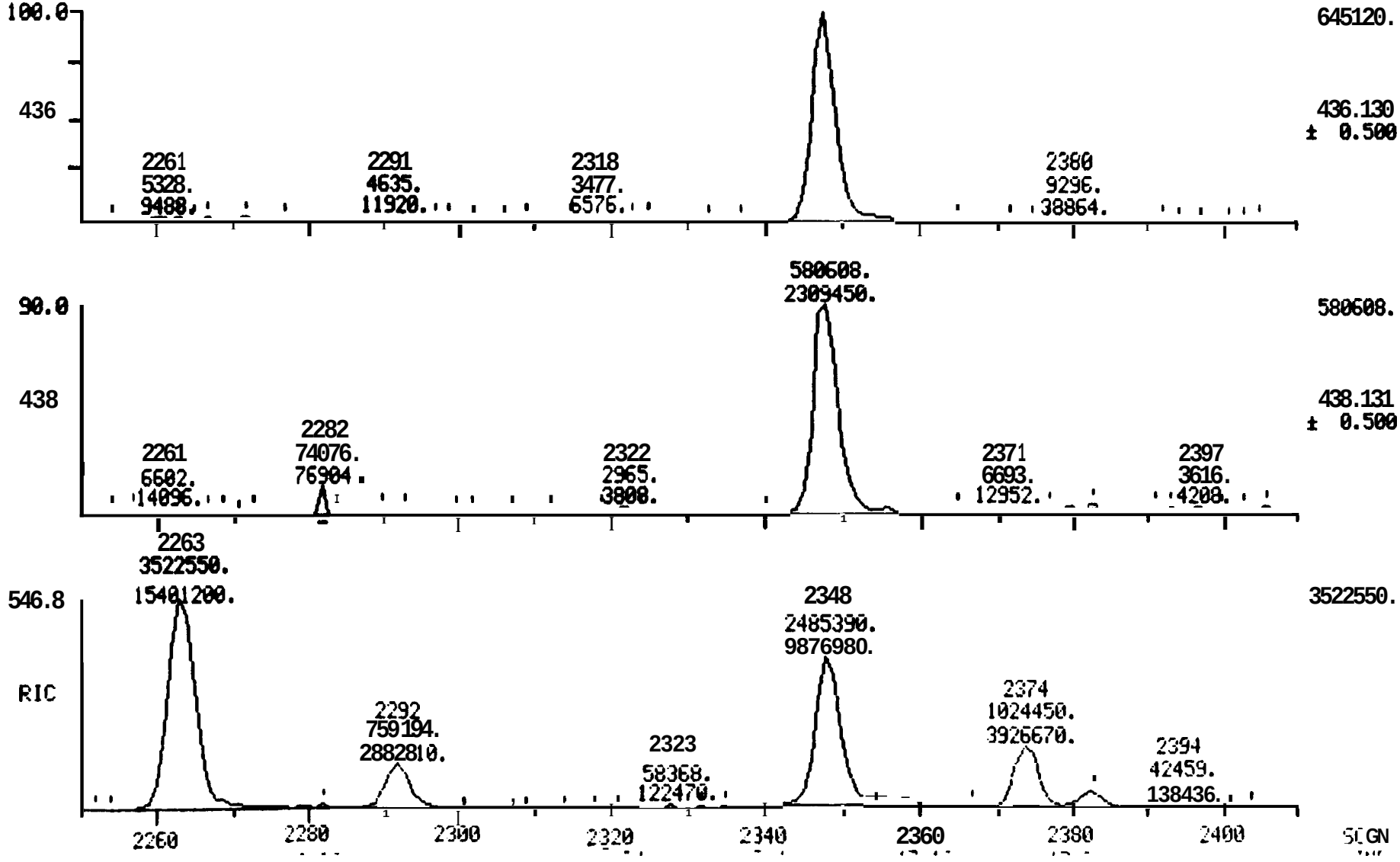

662528.
388
1985
5414.
14864.
2024
13816.
20176.
2069
7718.
11136.
last
2130
47304.
192648.
388.116
± 0.500
303616.
45.8
338
302431.
1597380.
1984
5420.
34343.
2034
3749.
5520.
2089
259045.
1222010.
2131
167344.
730232.
390.117
± 0.500
201728.
30.4
392
1931
9902.
12772.
1997
27096.
27096.
2040
5891.
12784.
2089
201521.
998510.
2131
28122.
143596.
392.117
± 0.500
1990650.
300.5
RIC
1951
1990650.
11367600.
1979
80384.
86016.
2007
94464.
644096.
2043
97536.
97536.
2063
1712900.
8790260.
2089
617472.
3081460.
2119
1042280.
4834720.
1900
1950
2000
2858
2100
2150
SCAN

H^2xCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 1870 TO 1915
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



200215


100.0
436
645120.
436.130
± 0.500
2261
5328.
9488.
2291
4635.
11920.
2318
3477.
6576.
2380
9296.
38864.
90.0
438
580608.
580608.
438.131
± 0.500
580608.
2309450.
2261
6602.
14096.
2282
74076.
76904.
2322
2965.
3808.
2371
6693.
12952.
2397
3616.
4208.
546.8
RIC
3522550.
2263
3522550.
15401200.
2292
759194.
2882810.
2323
58368.
122470.
2348
2485390.
9876980.
2374
1024450.
3926670.
2394
42459.
138436.
2260
2280
2300
2320
2340
2360
2380
2400
SCGN

MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 2250 TO 2410

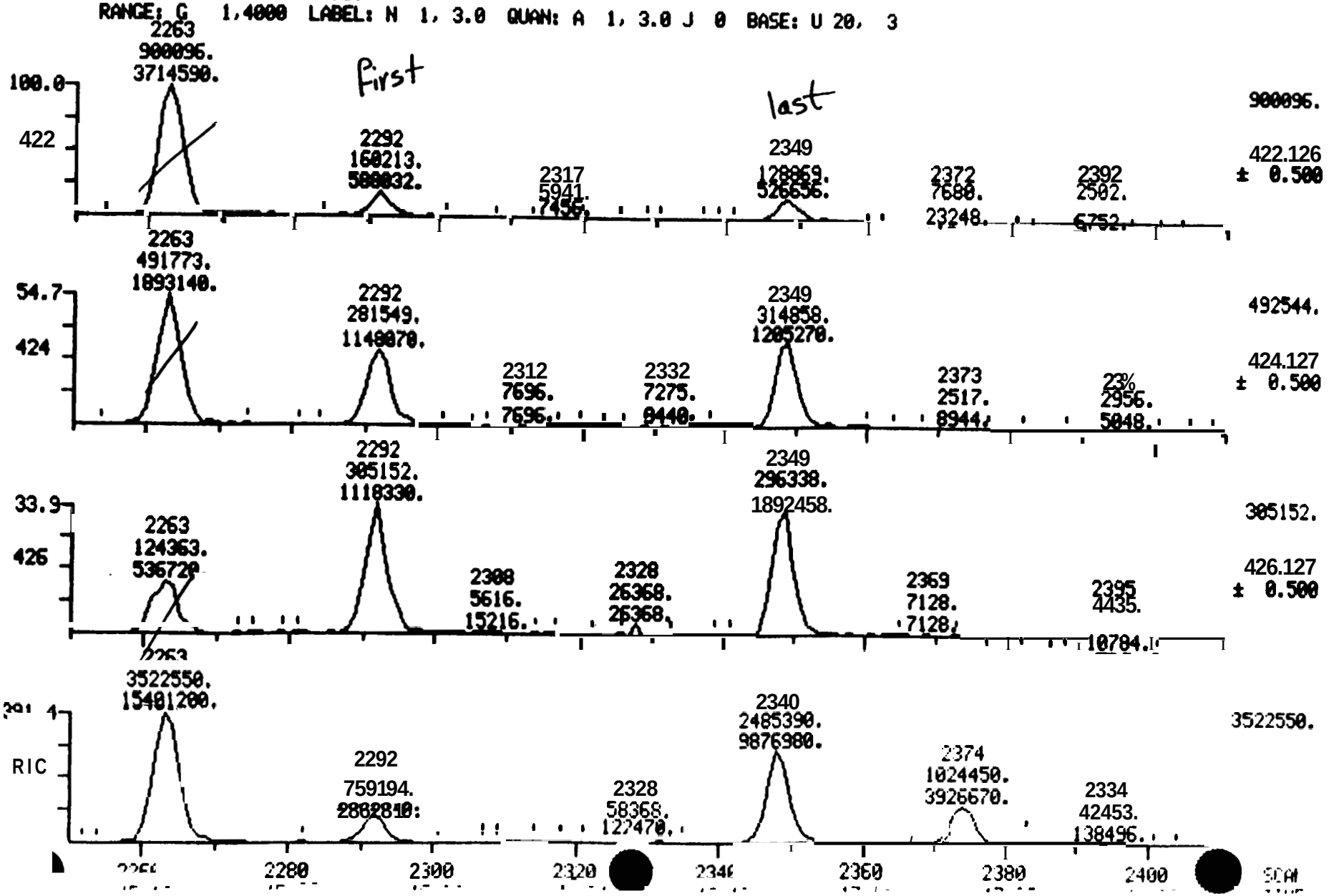
03/26/91 7:47:00 CALI: CAL910306A #2

SAMPLE: 2UL OF WINDOW SOLUTION 685-05

CONDS.: 60M DB-5/TOTALS.

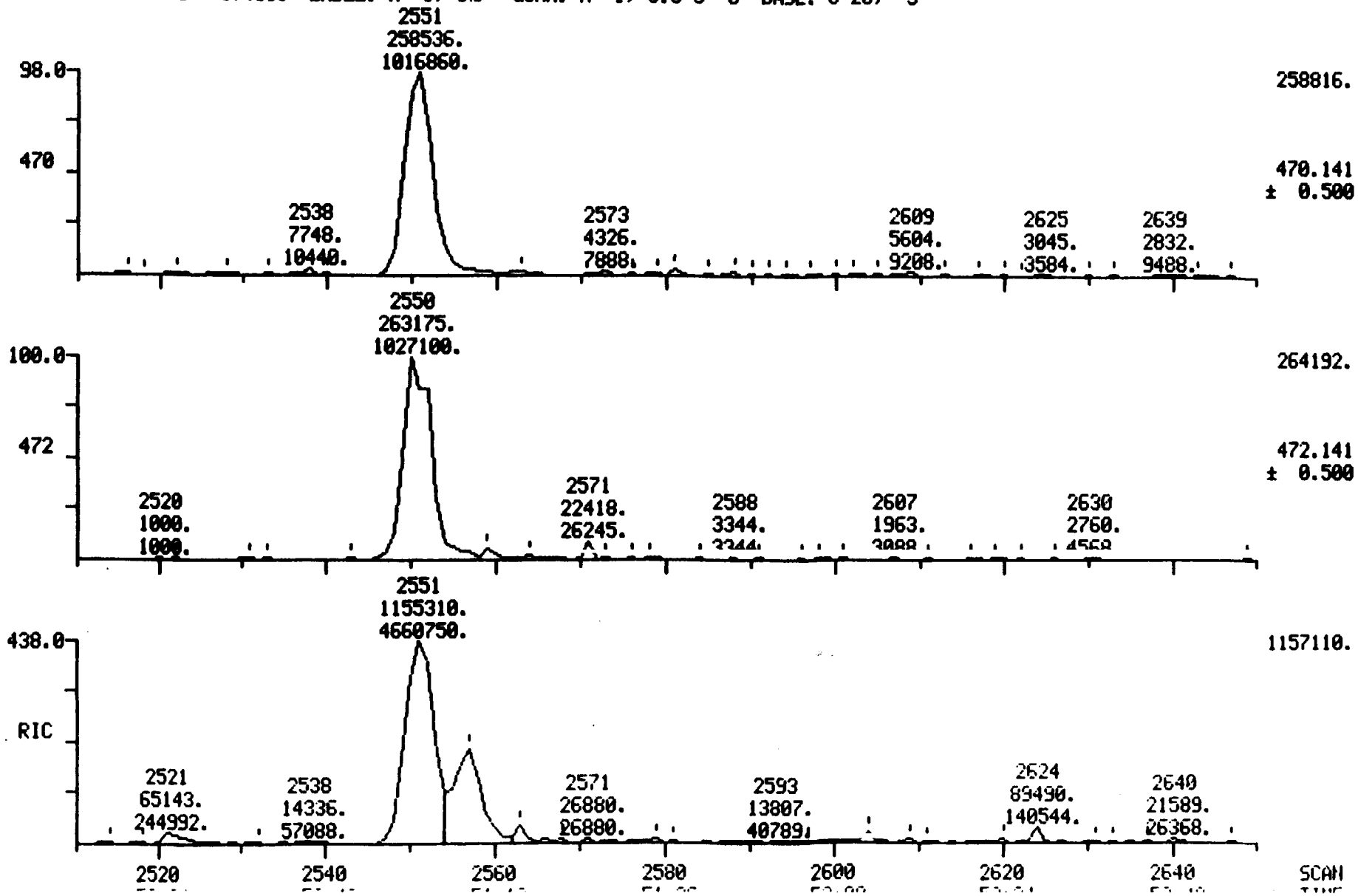
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HpCDD

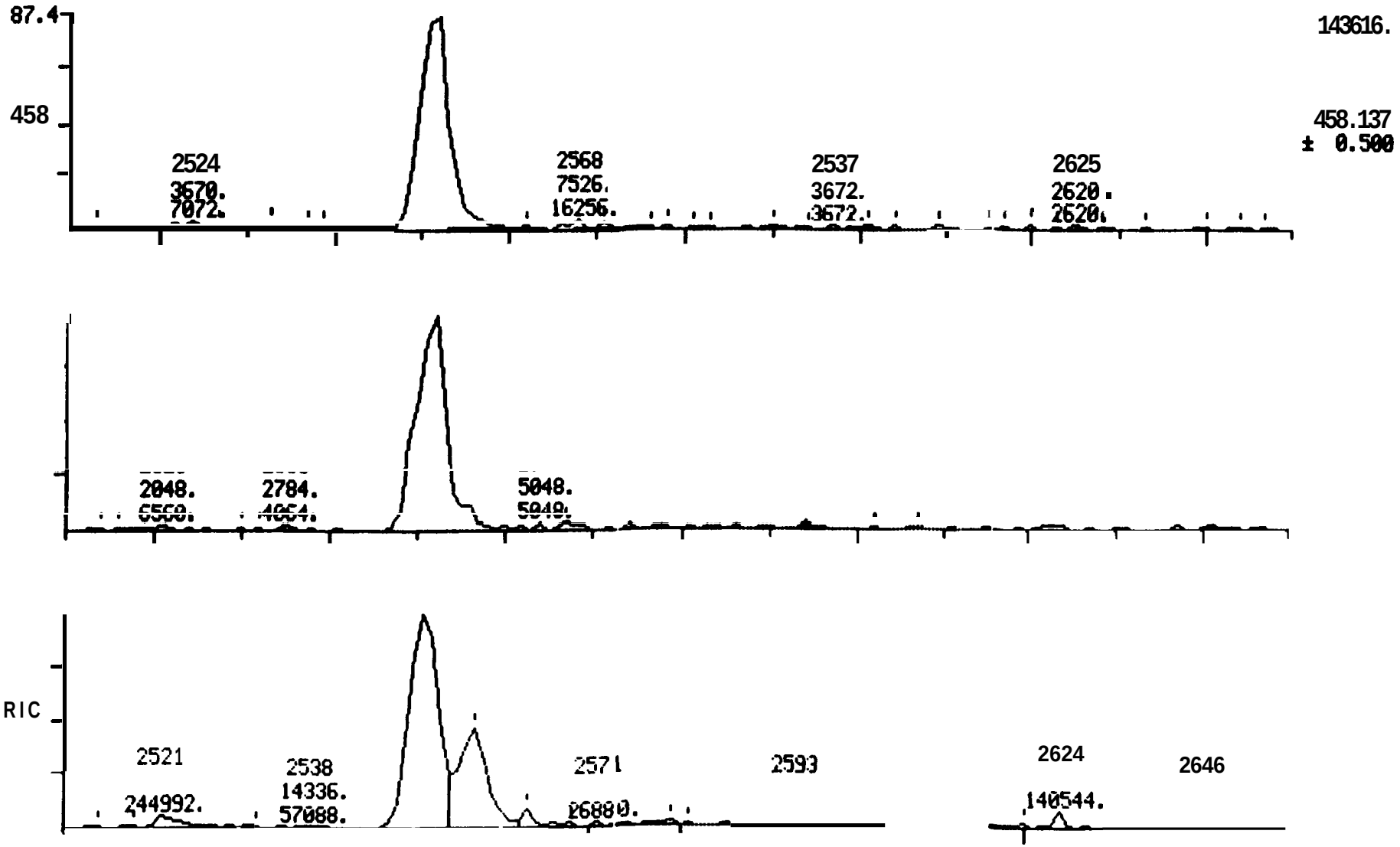


2200216

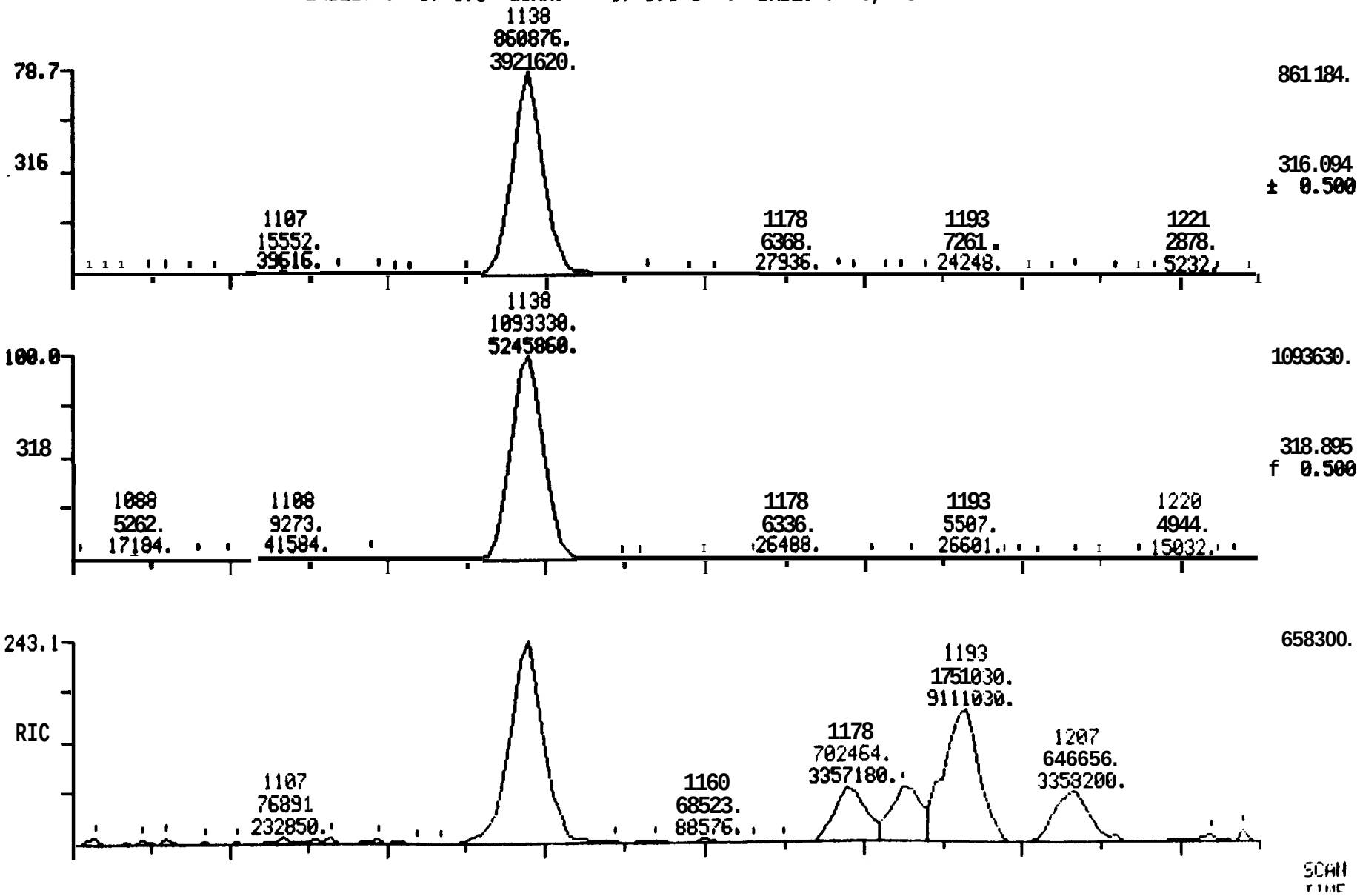
MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 2510 TO 2650
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



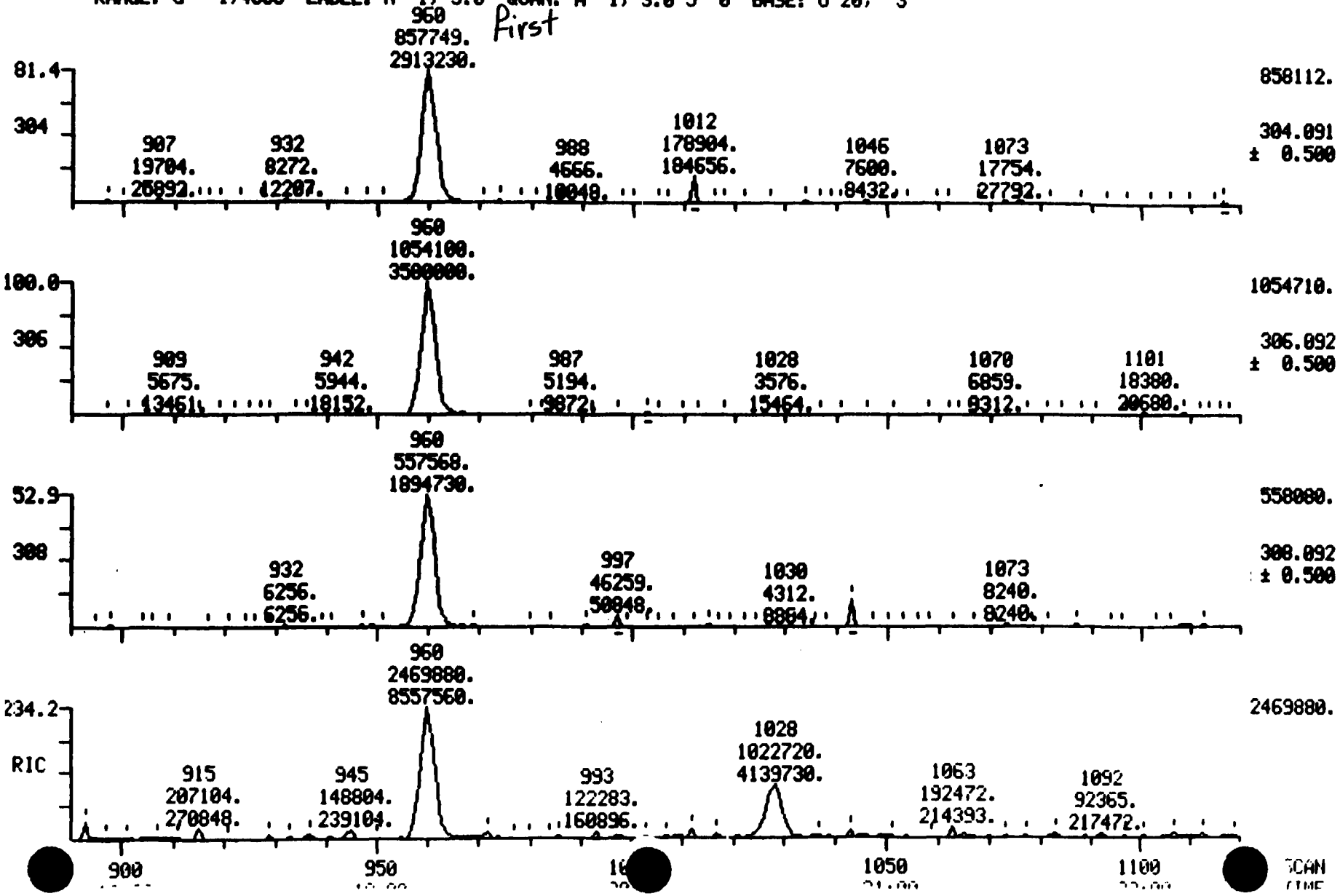
3200217


87.4
458
143616.
458.137
± 0.500
2524
3670.
7072.
2568
7526.
16256.
2537
3672.
3672.
2625
2620.
2620.
2048.
2784.
5048.
RIC
2521
244992.
2538
14336.
57088.
2571
26880.
2593
2624
140544.
2646

M DRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 1080 TO 1230
03/26/91 7:47;00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M OB-%TOTALS
RANGE: G 1,4000 LABEL: ti 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

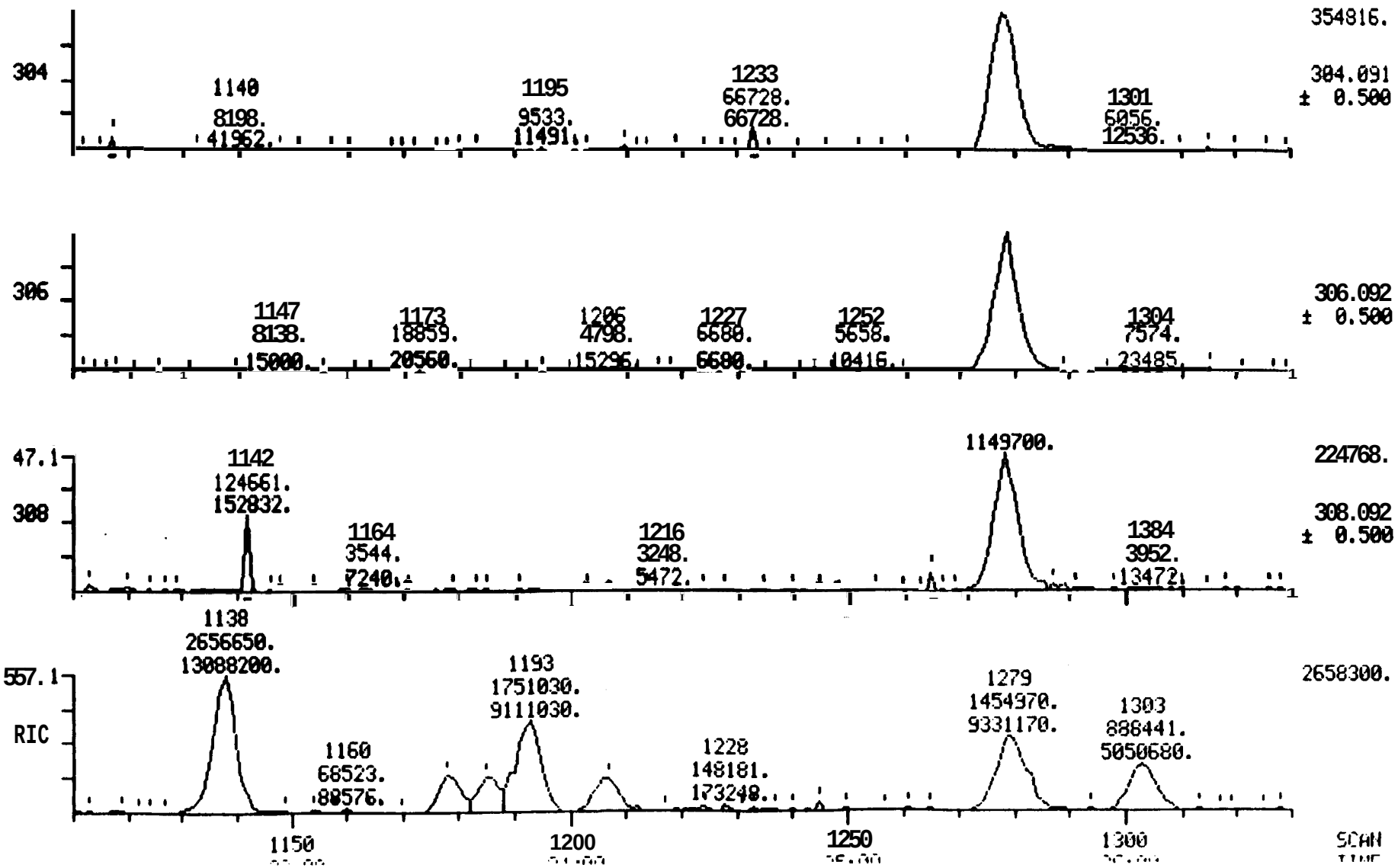


MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 890 TO 1120 TCDF
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



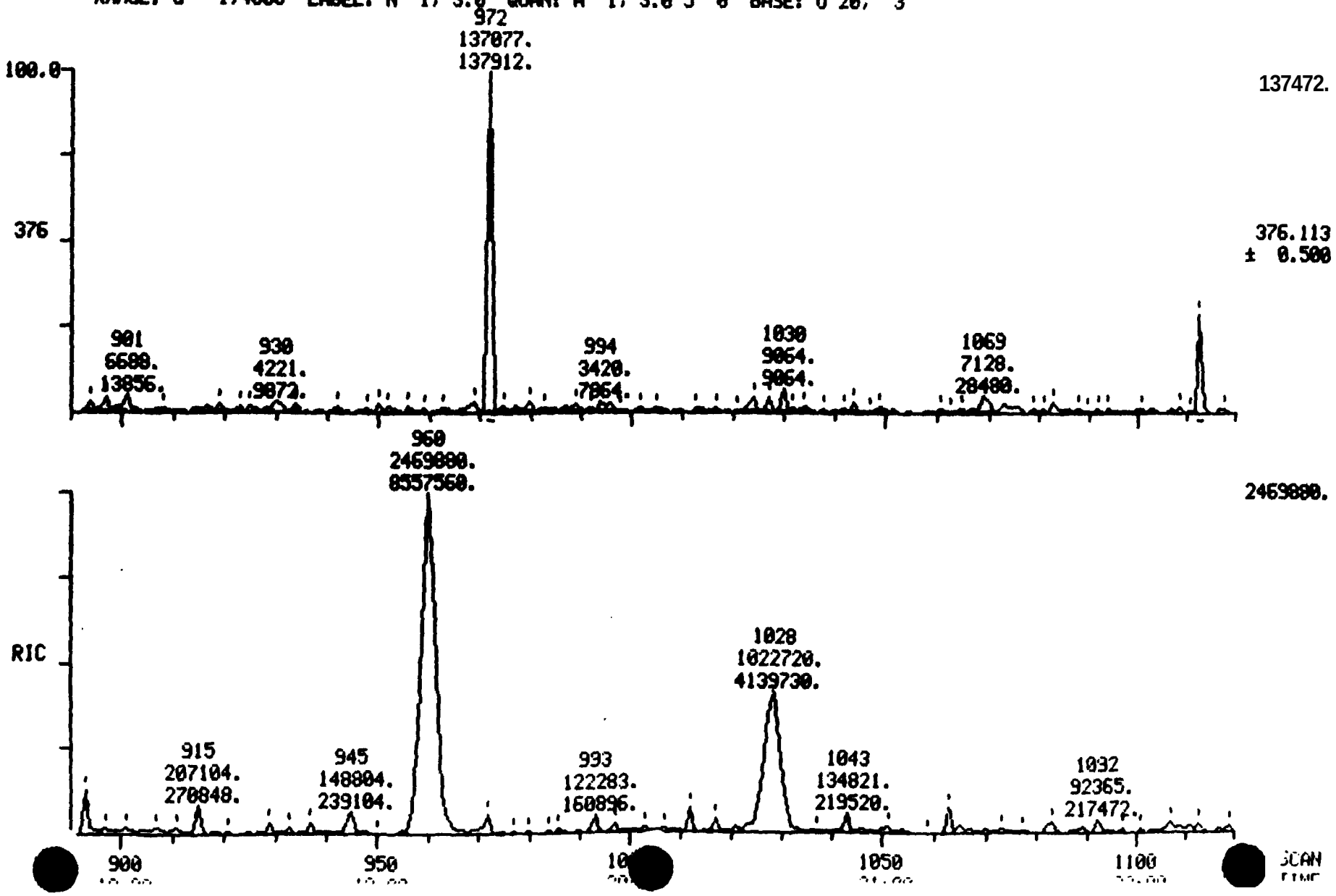
8200218

last


304
1140
8198.
41962.
1195
9533.
11491.
1233
66728.
66728.
1301
6056.
12536.
354816.
304.091
± 0.500
306
1147
8138.
15000.
1173
18859.
20560.
1206
4798.
15296.
1227
6680.
6680.
1252
5658.
10416.
1304
7574.
23485.
306.092
± 0.500
47.1
308
1142
124661.
152832.
1164
3544.
7240.
1216
3248.
5472.
1149700.
1384
3952.
13472.
224768.
308.092
± 0.500
557.1
RIC
1138
2656650.
13088200.
1160
68523.
88576.
1193
1751030.
9111030.
1228
148181.
173248.
1279
1454970.
9331170.
1303
888441.
5050680.
2658300.
1150
1200
1250
1300
SCAN

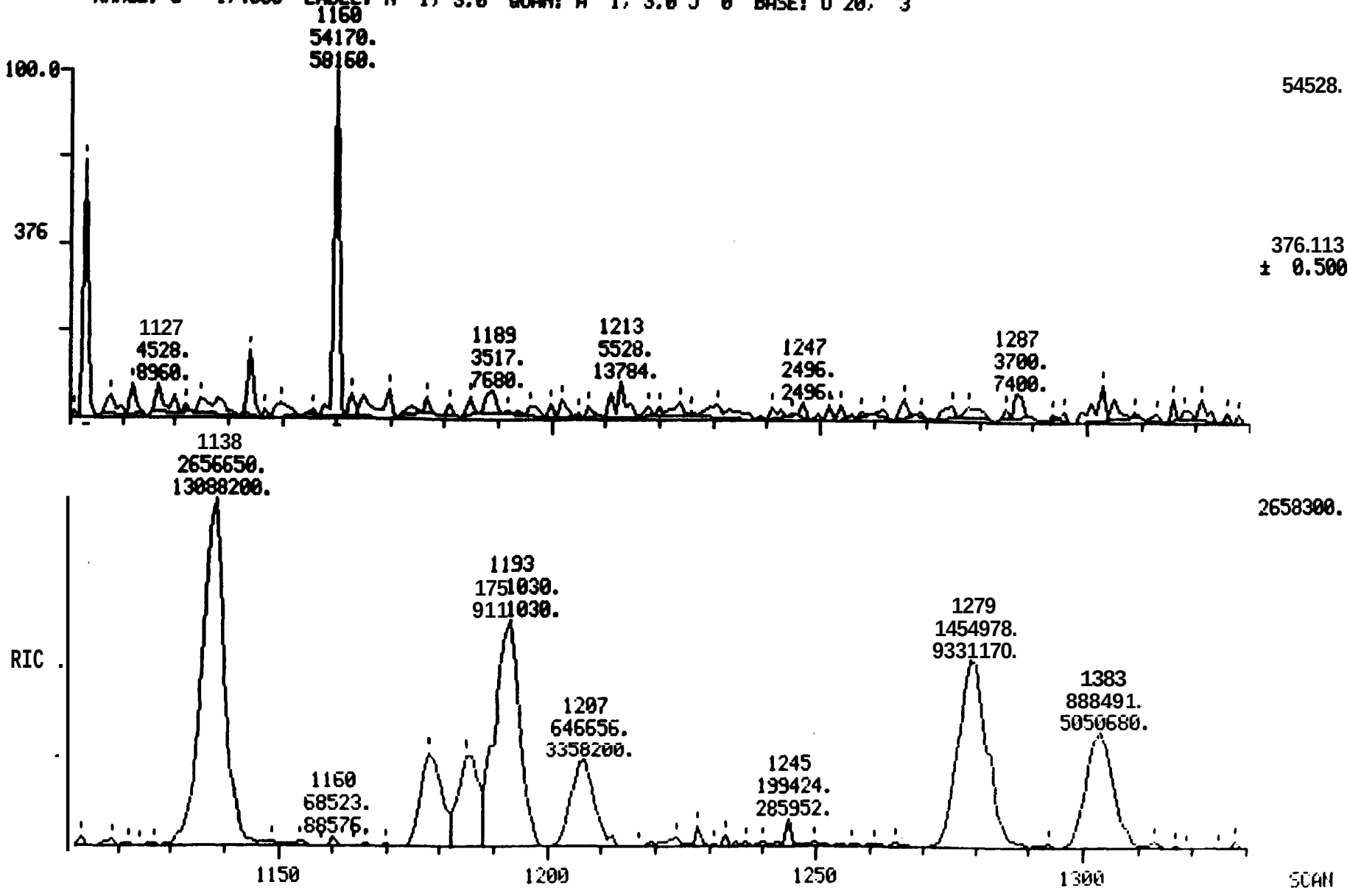
220021 9

MIDRIC+MASS CHROMATOGRAM DATA: 68505WINDOW #1 SCANS 890 TO 1120
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



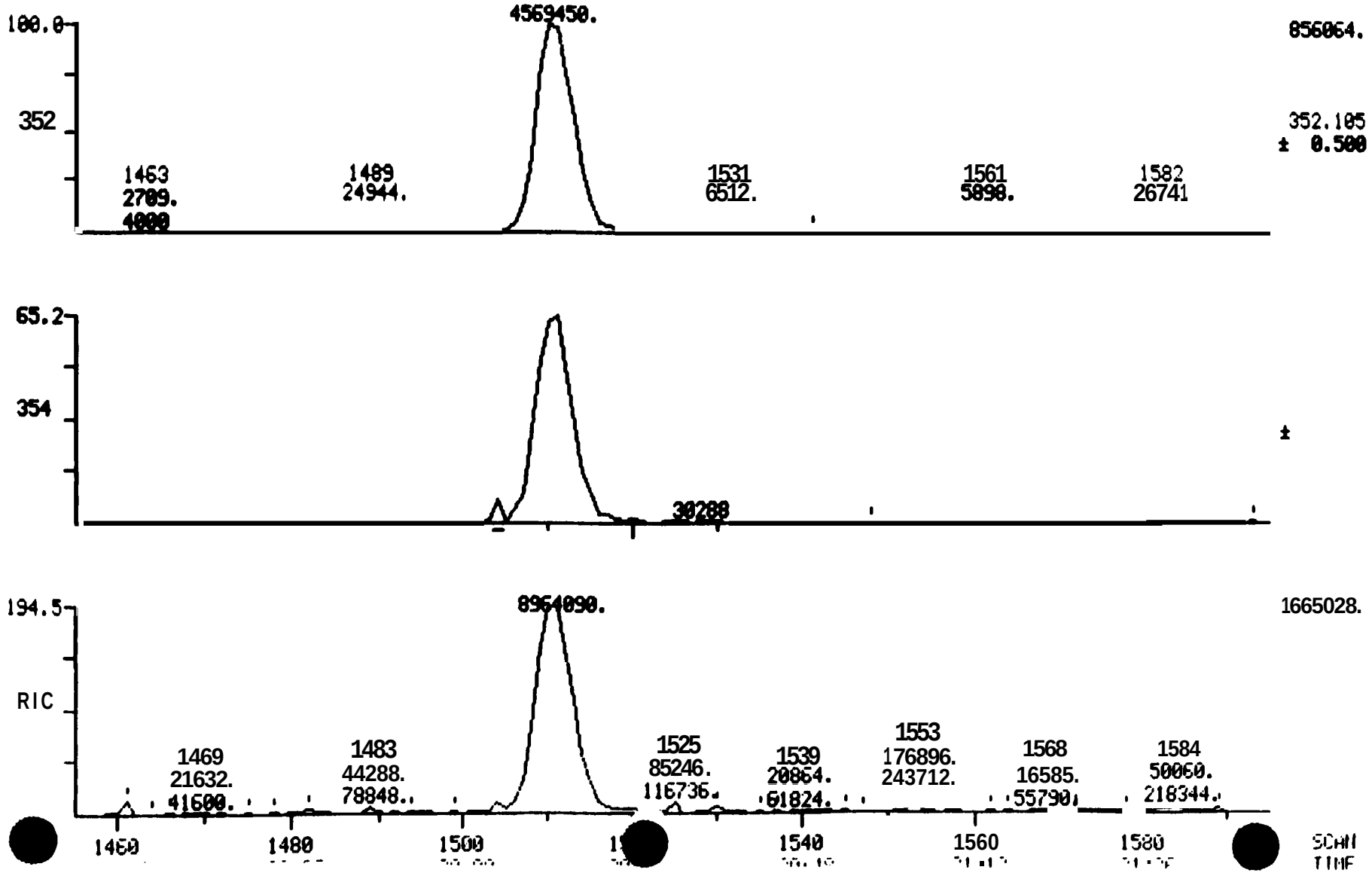
MIDRIC+MASS CHROMATOGRAM
83/26/91 7:47:00
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68505WINDOW #1 SCANS 1110 TO 1330
MI: CAL910306A #2

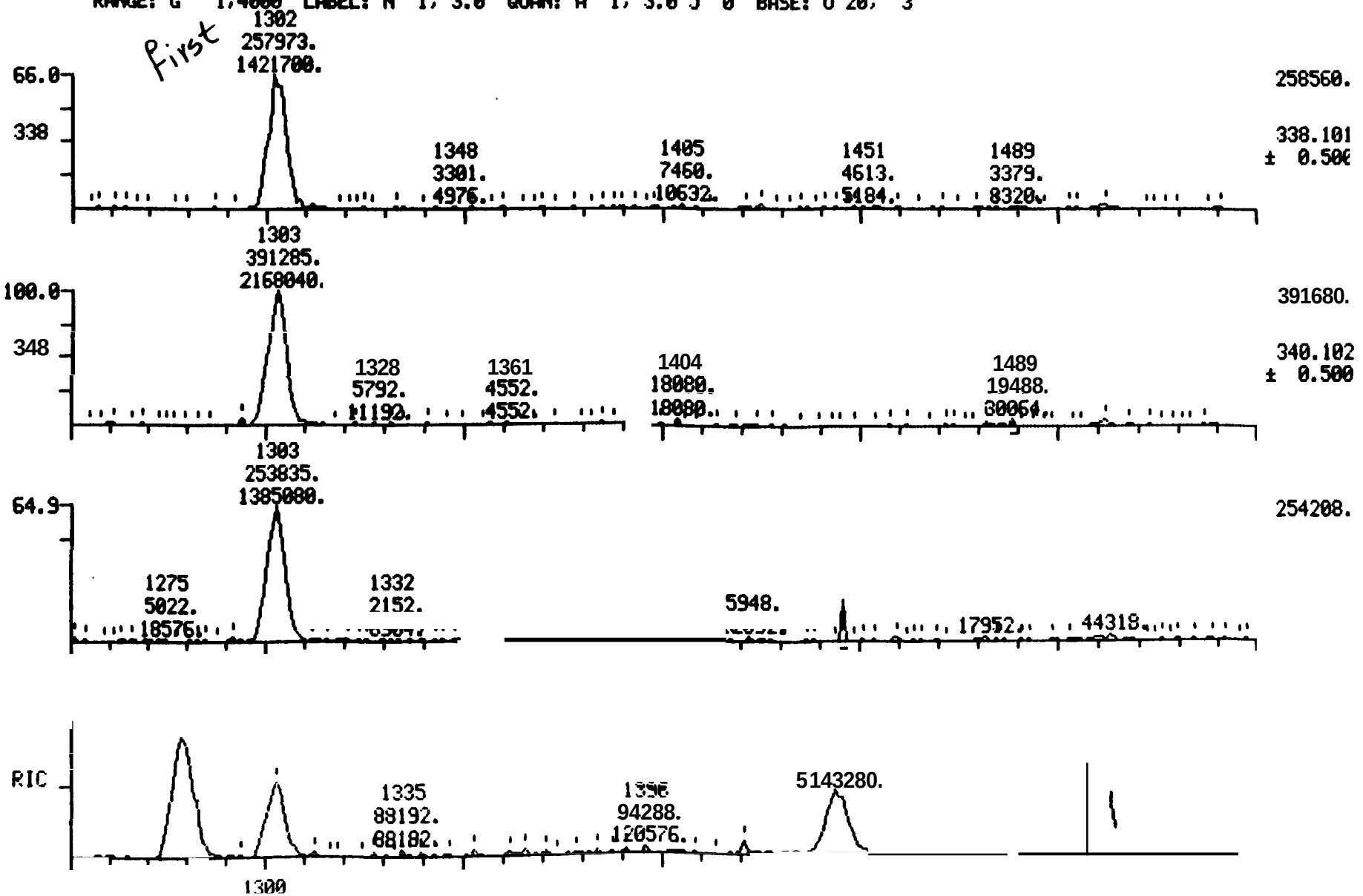


220022.0

CAL910306A



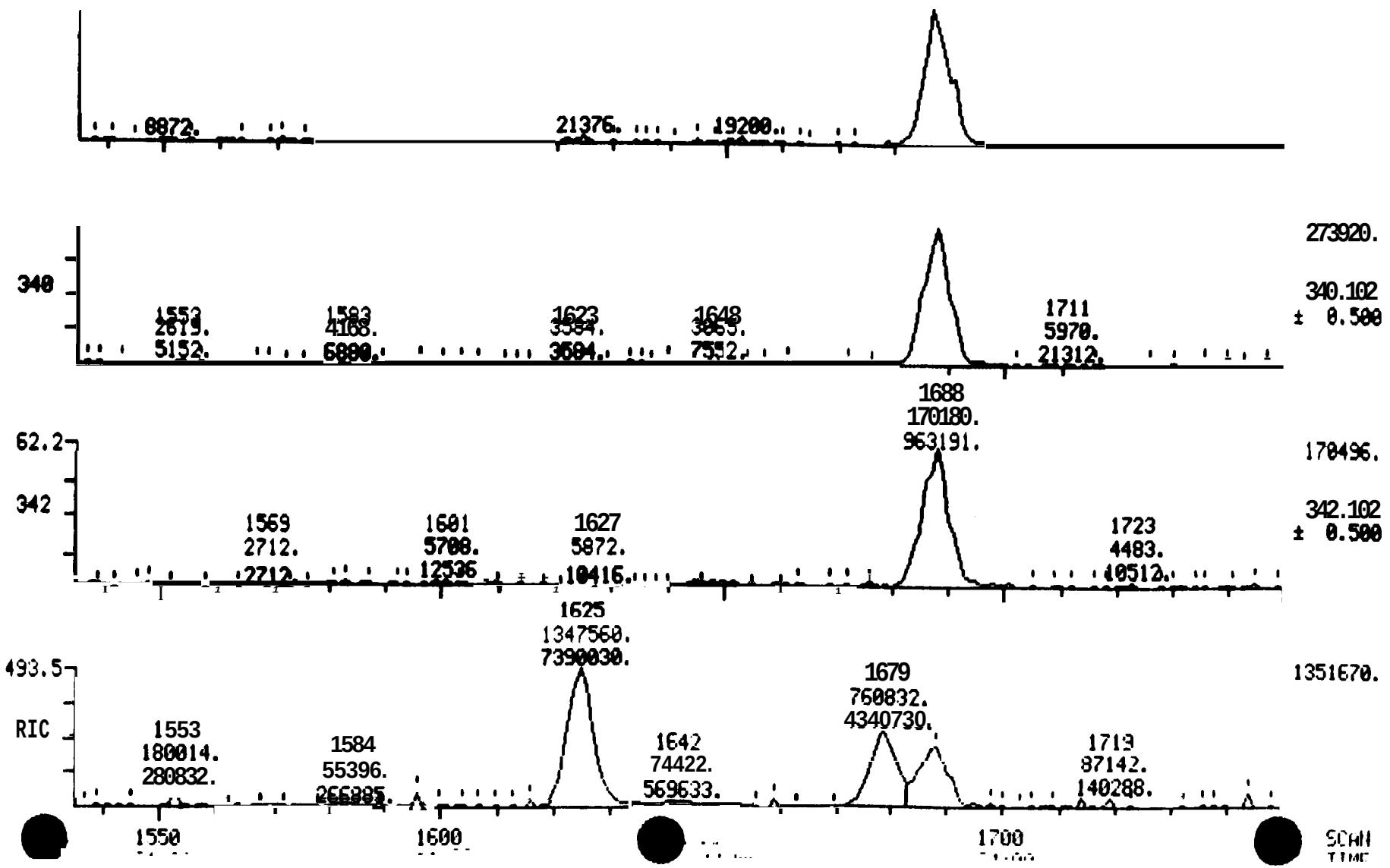
MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 1250 TO 1550
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



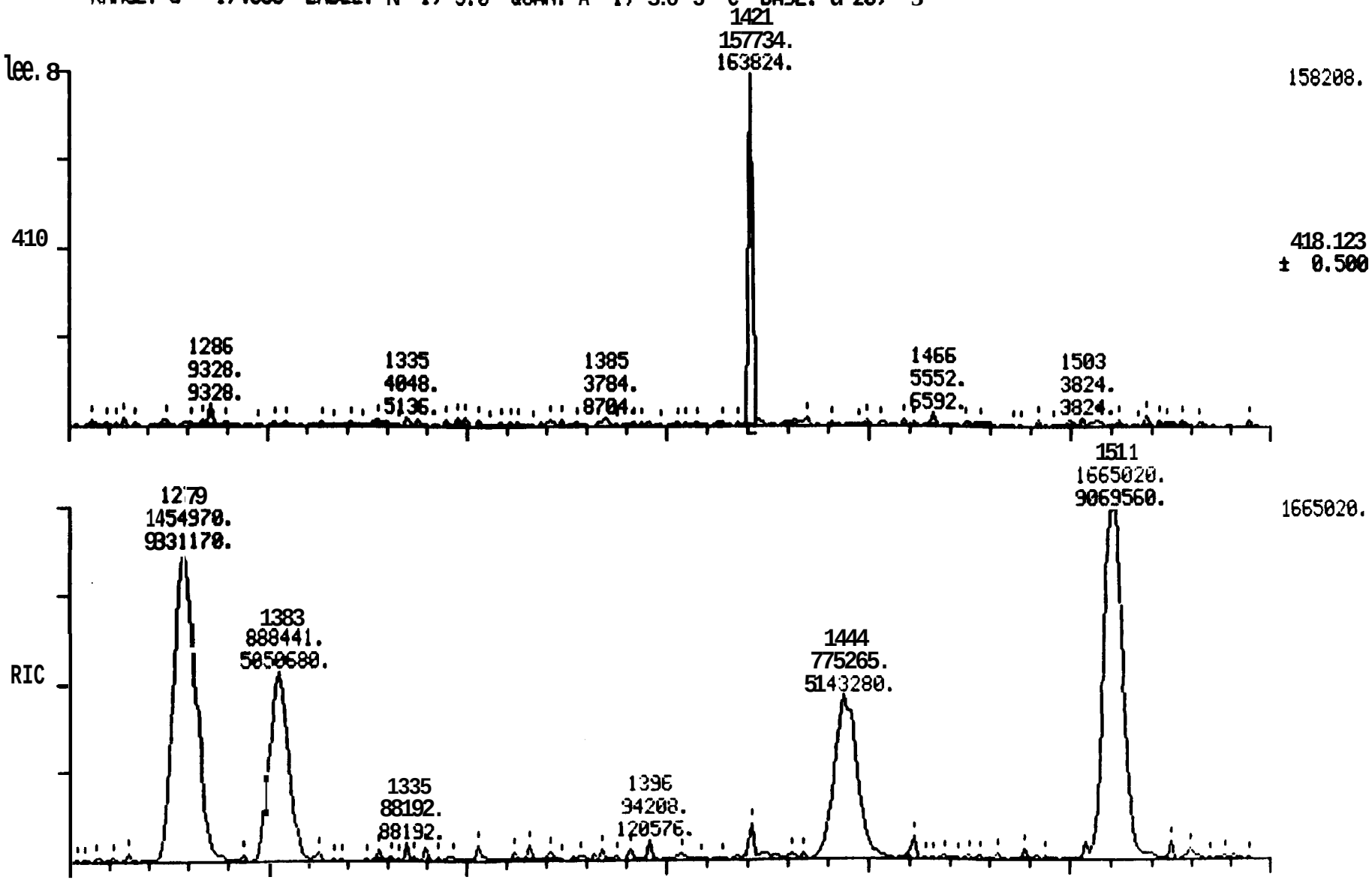
PeCDF

2UL

RANGE:

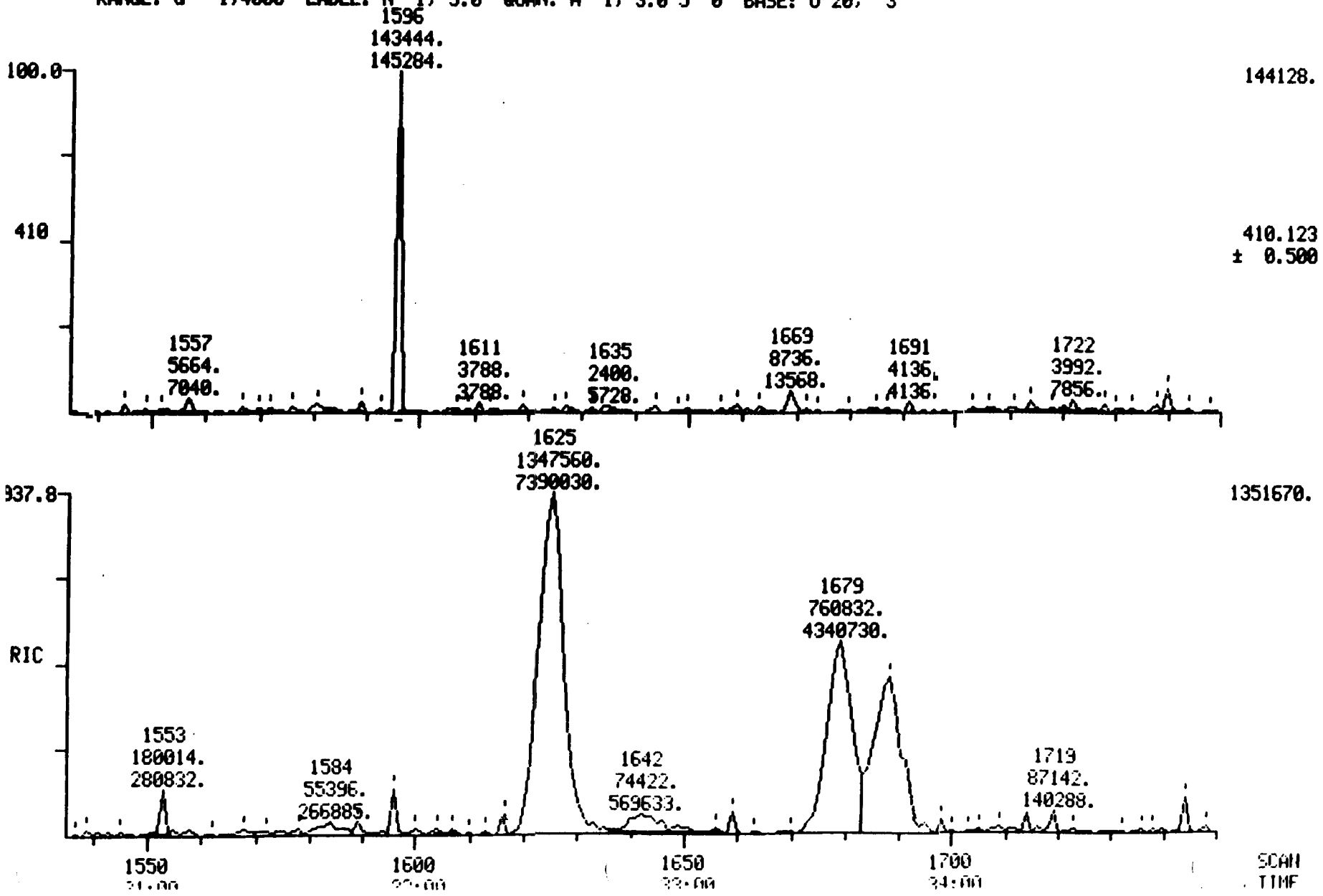


MIDRIC+MASS CHROMATOGRAM DATA: 68505WINDOW #1 SCANS 1250 TO 1550
83/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3



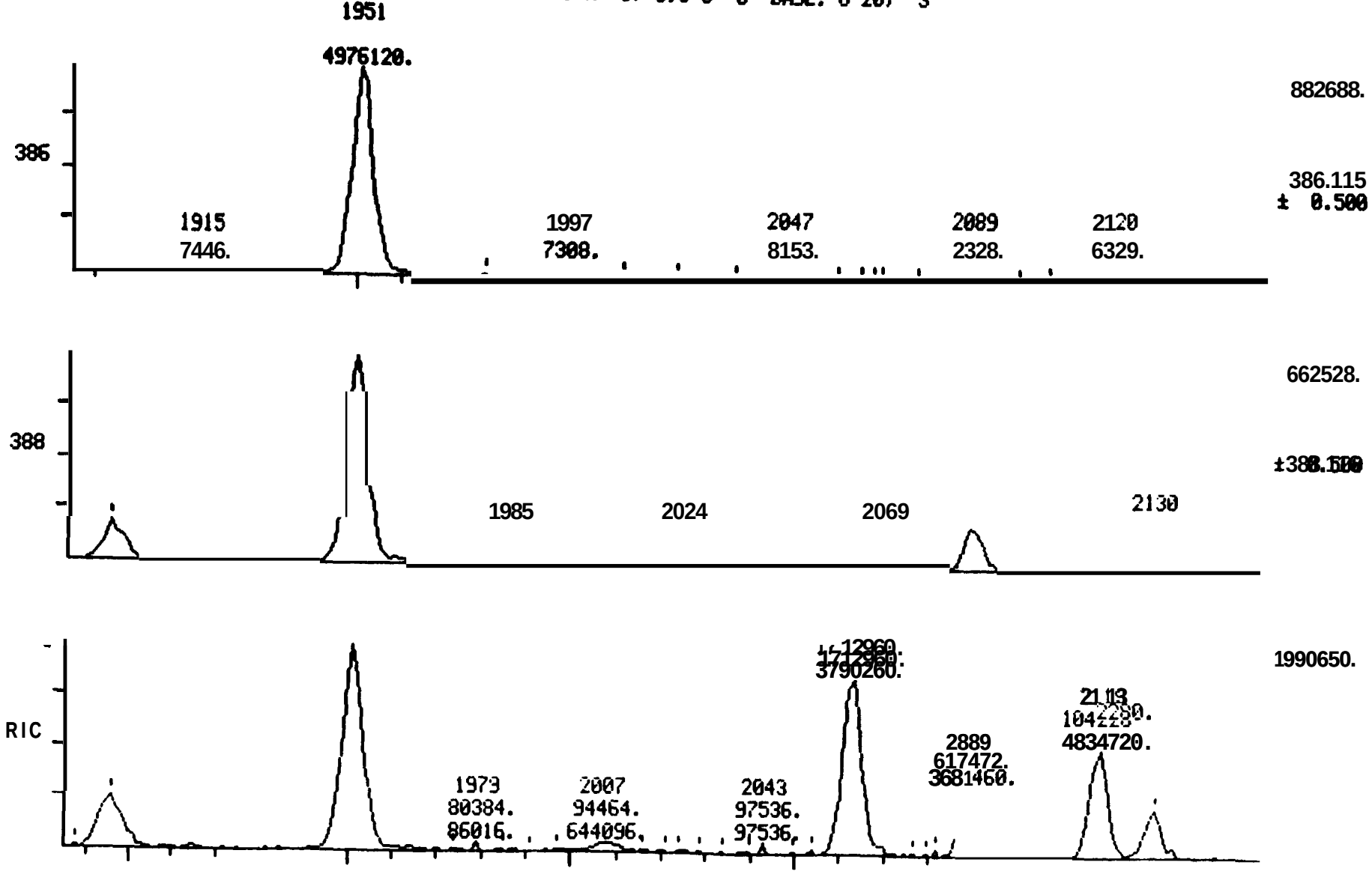
3200222

MIDRIC+MASS CHROMATOGRAM DATA: 68505WINDOW #1 SCANS 1535 TO 1750
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS
03/26/91 7:47:00
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

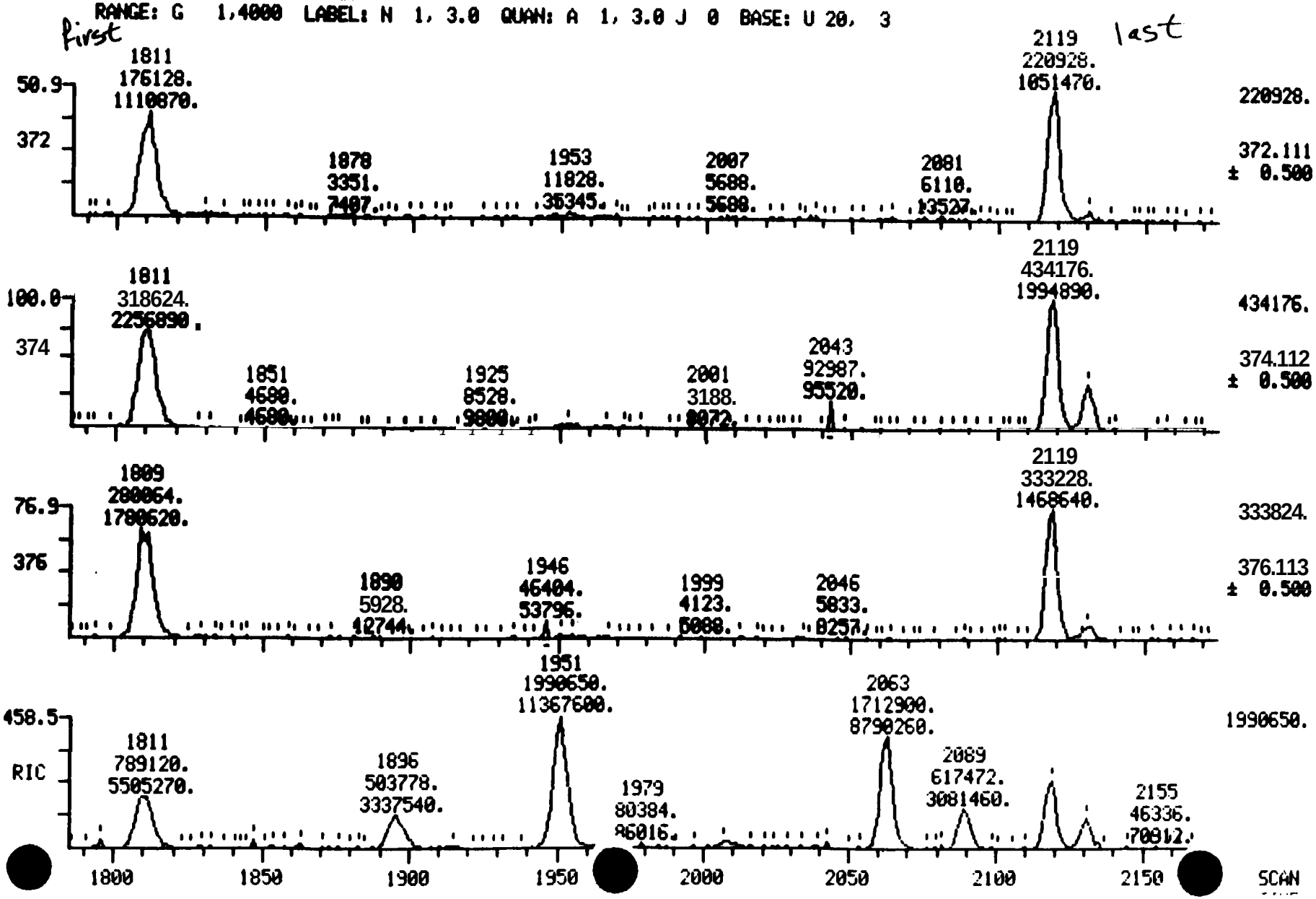
DATA: 68505WINDOW #1 SCANS 1885 TO 2155
CALI: CAL910306A #2



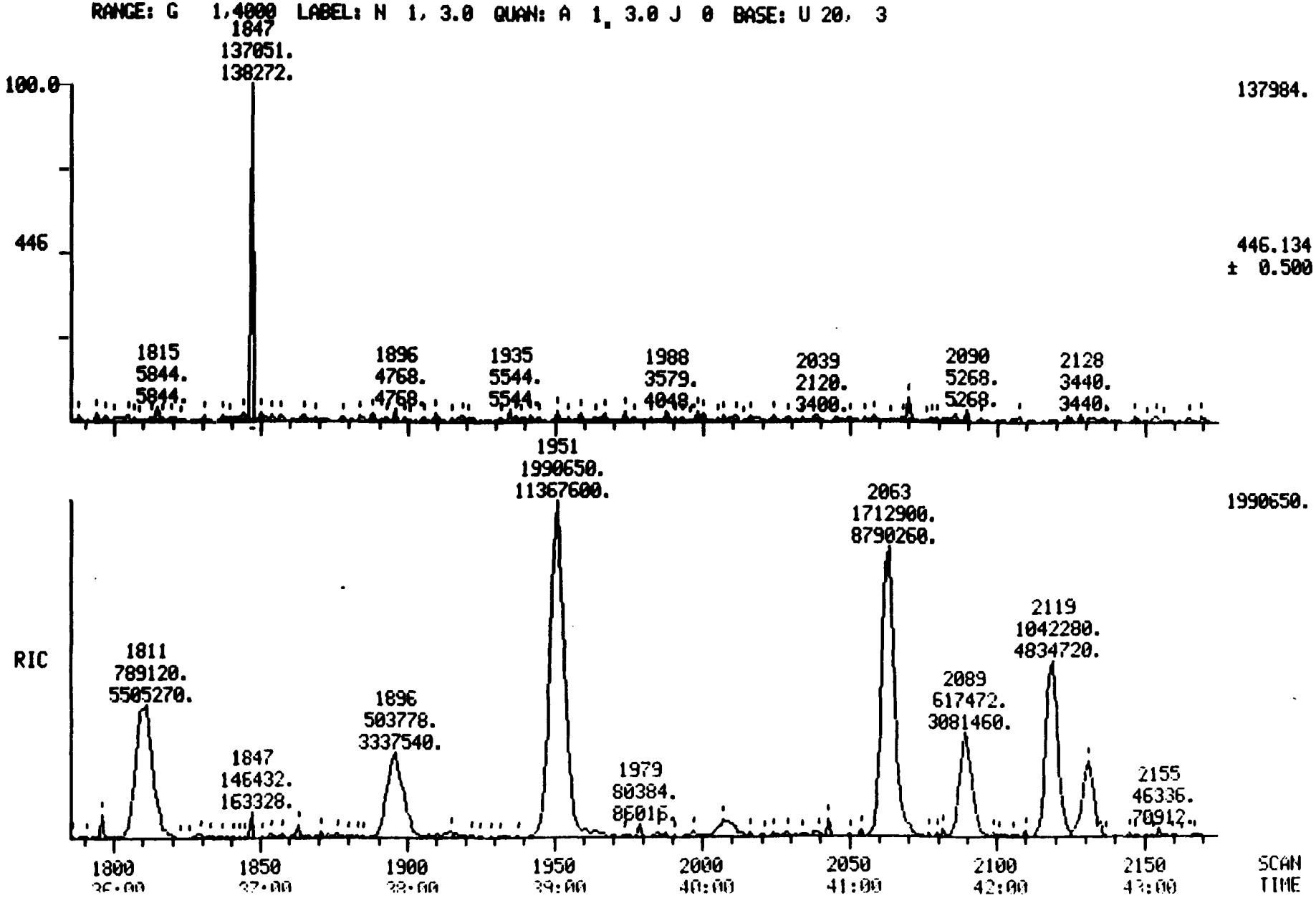
3200243

HxCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 1785 TO 2175
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

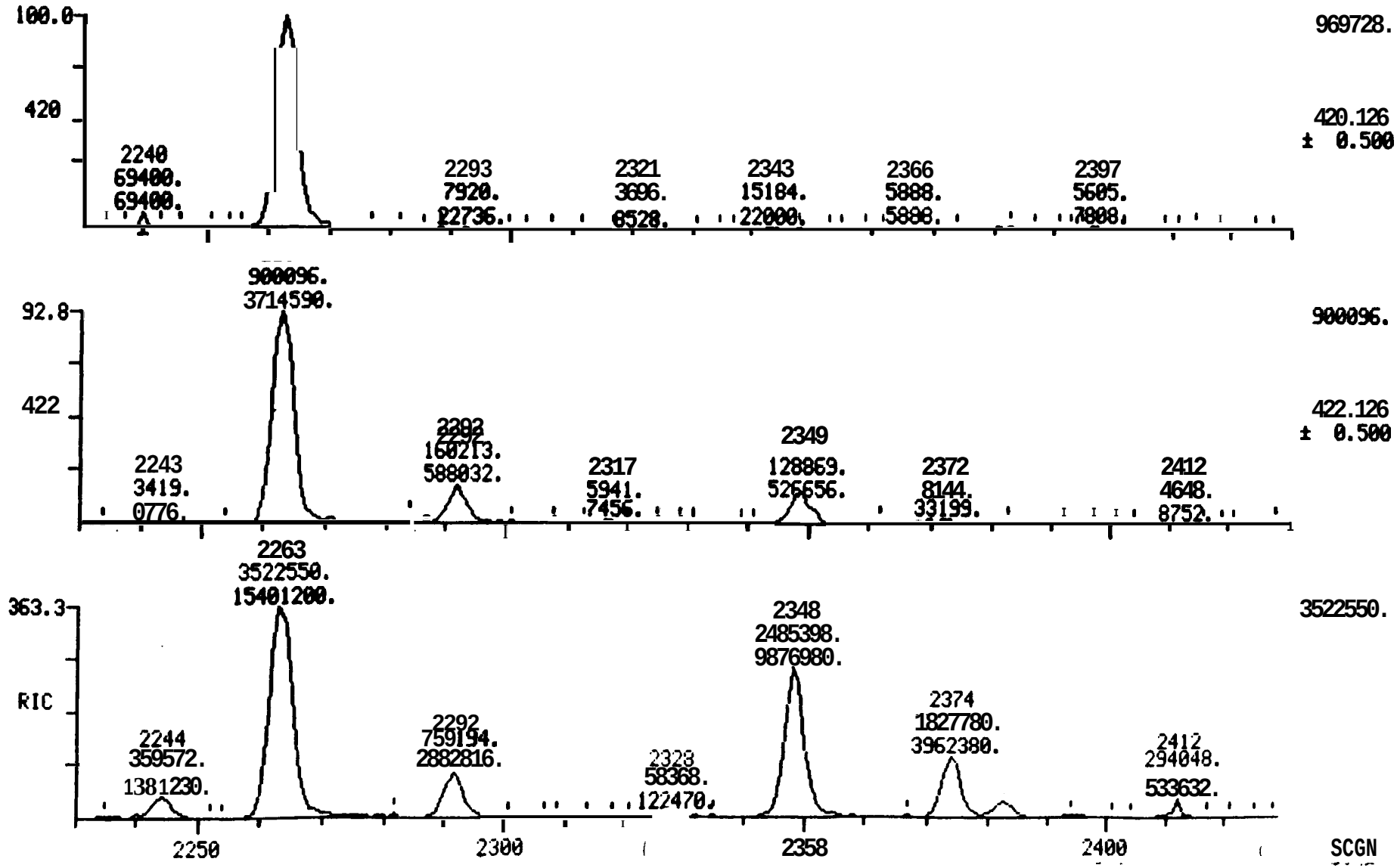


MIDRIC+MASS CHROMATOGRAM DATA: 68505WINDOW #1 SCANS 1785 TO 2175
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



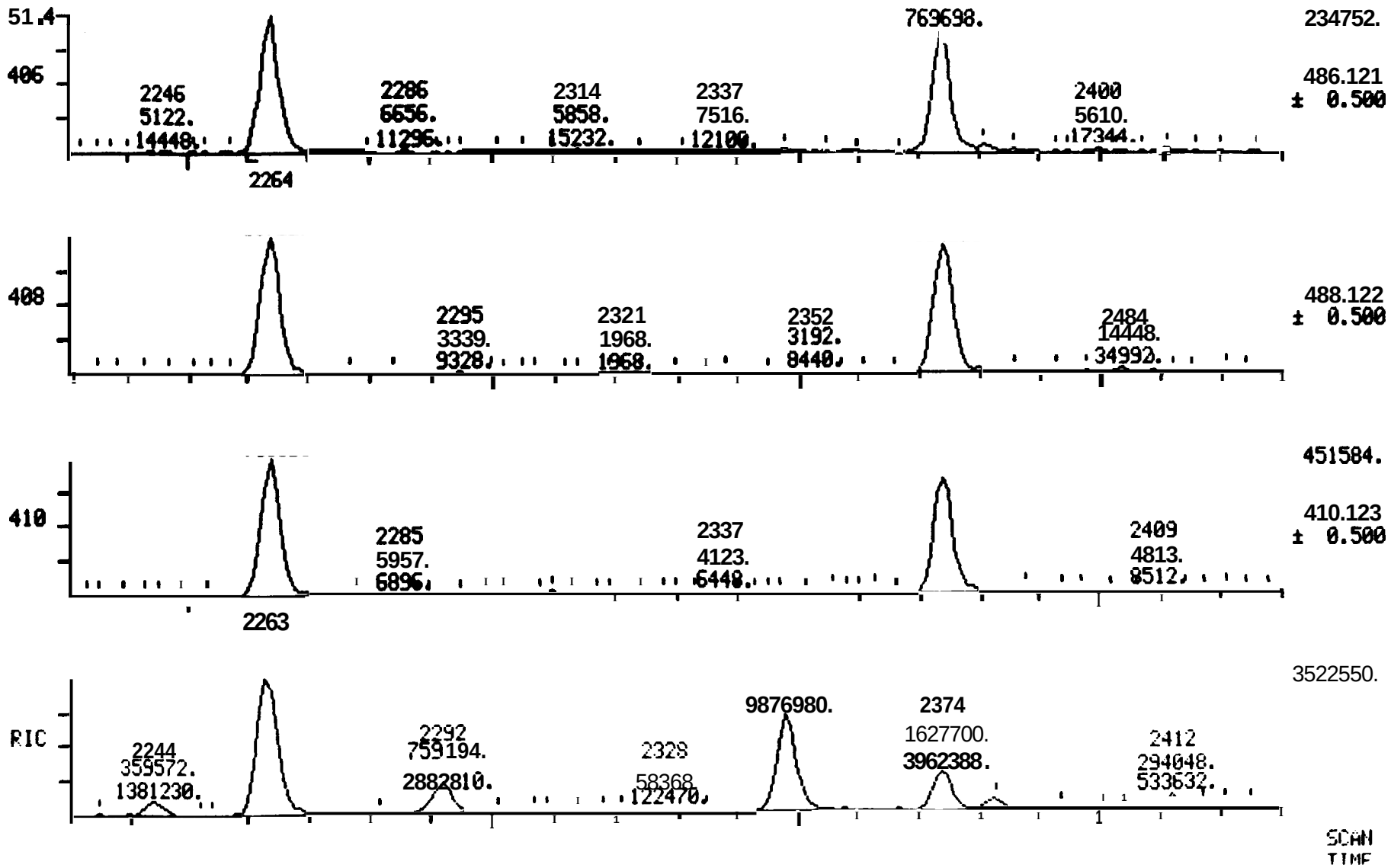
3200224

MIDRIC+MASS CHROMATOGRAMS DATA: 685685WINDOW #1 SCANS 2230 TO 2430
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05



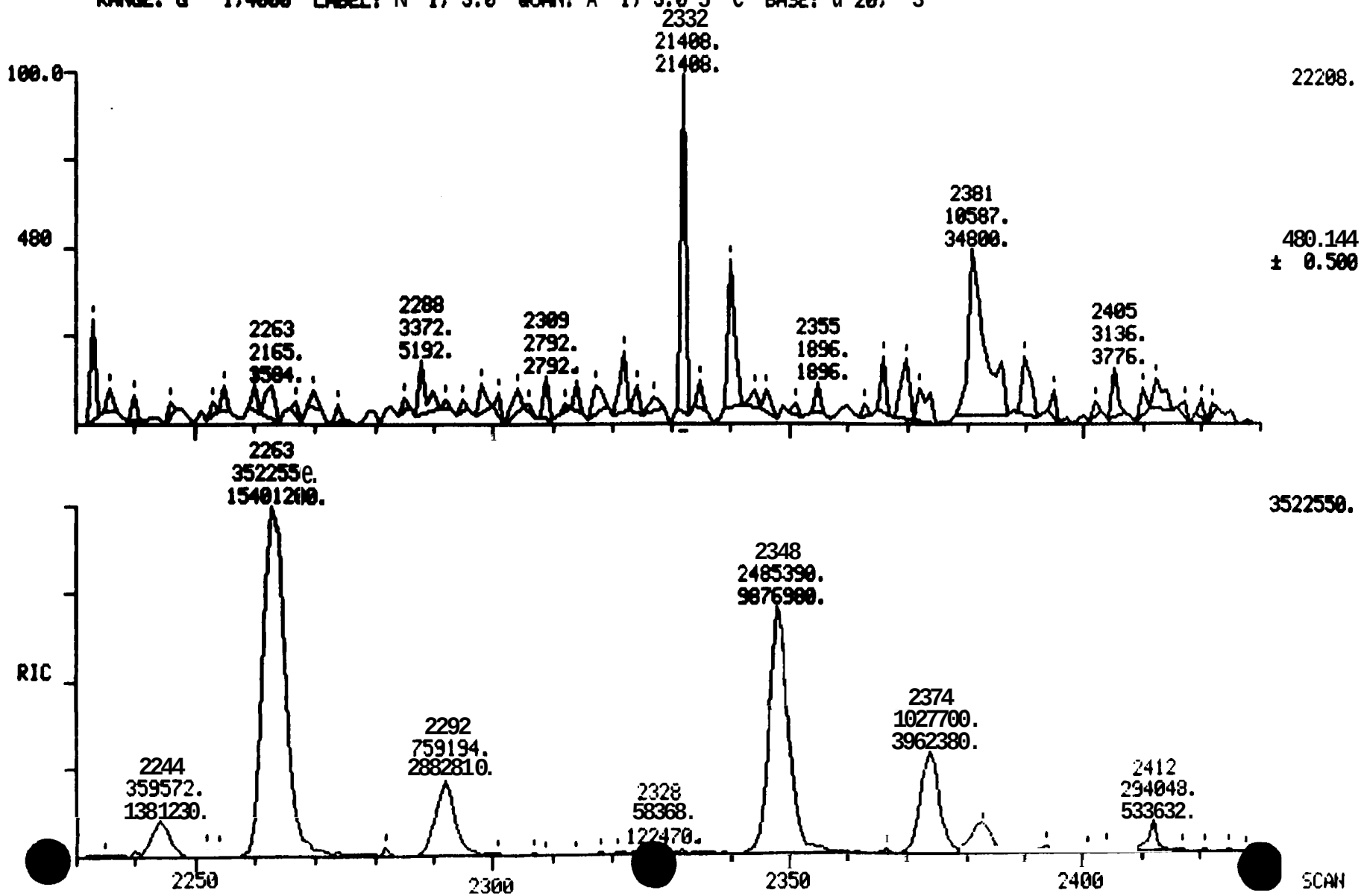
HpCDF

G

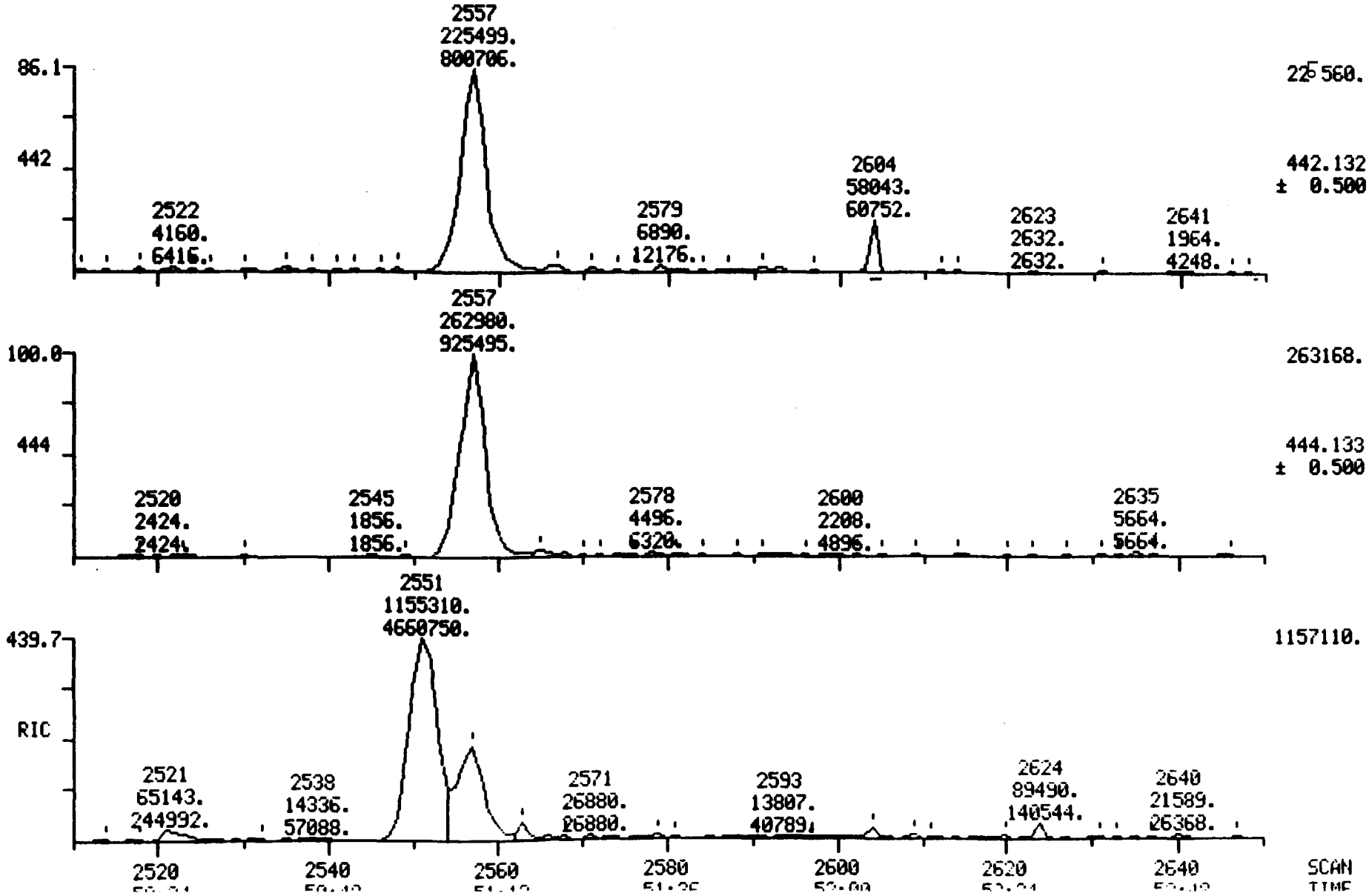

51.4
406
2246
5122.
14448.
2264
2286
6656.
11296.
2314
5858.
15232.
2337
7516.
12100.
769698.
2400
5610.
17344.
234752.
486.121
± 0.500
408
2295
3339.
9328.
2321
1968.
1968.
2352
3192.
8440.
2484
14448.
34992.
488.122
± 0.500
410
2285
5957.
6896.
2337
4123.
6448.
2409
4813.
8512.
2263
451584.
410.123
± 0.500
RIC
2244
359572.
1381230.
2292
759194.
2882810.
2328
58368.
122470.
9876980.
2374
1627700.
3962388.
2412
294048.
533632.
3522550.
SCAN
TIME

3300225

MIDRIC+MASS CHROMATOGRAM DATA: 68505WINDOW #1 SCANS 2230 TO 2430
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68505WINDOW #1 SCANS 2510 TO 2650
03/26/91 7:47:00 CALI: CAL910306A #2
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

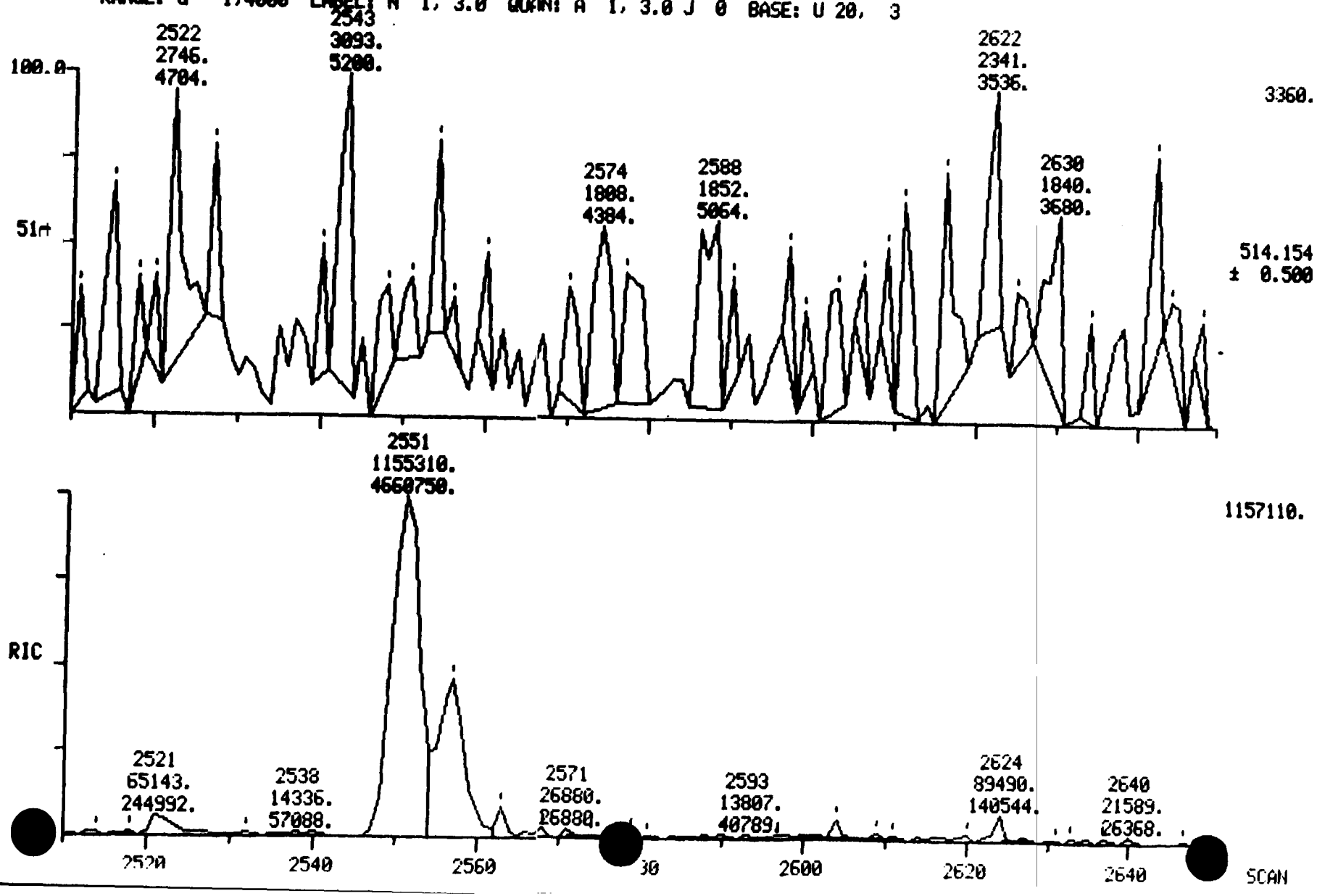


32002226

MIDRIC+MASS CHROMATOGRAM
03/26/91 7:47:00
SAMPLE: 2UL OF WINDOW SOLUTION 685-05
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68505WINDOW #1
CALI: CAL910306A #2

SCANS 2510 TO 2650



3/26/91 7:47:16 SCAN 1 OF 4000
Acquisition started

Acquire | Run 0:68505WINDOW | ACQUIRING
03/26/91 7:47:00 + 0:04 | Free sectors: 28715 | Scan: 3 of 4000
Sample: 2UL OF WINDOW SOLUTION 685-05
Condr.: 60M DB-5/TOTALS.
Formula: | Instrument: G3 | Weight: 0.000
Submitted by: DM | Analyst: DT | Acct. No: PC4622

********** GC PARAMETERS **********

Lorded GC Desc: BW Current CC oven tmp: 69 DegC Injector : 300 DegC
Current GC Desc: BW GC elapsed time : 2:48 min Int. oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan | Desc: B1 | Mars intervals: 21
Scan time: 1.200 s | Samp. int.: 0.200 ms | Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFU	MA	TH	BL	ION
1	303.650	304.150	0.032	3	100	40	1	0	Por
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Por
5	317.650	318.150	0.054	3	100	40	1	0	Por
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.130	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.034	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.130	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Por
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	355.630	356.150	0.054	3	100	40	1	0	Pos
17	337.630	358.150	0.052	3	100	40	1	0	Pos
18	367.450	368.130	0.054	3	100	40	1	0	Pos
19	369.630	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Por
21	409.550	410.030	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrumont typo	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Perk Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/26/91 8:23:47 SCAN 1769 OF 4000

MID scan
Scan time: 1.200 s

Desc: G2
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
2	339.650	340.150	0.052	3	100	40	1	0	Por
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.os2	3	100	40	1	0	Pos
5	333.650	354.150	0.054	3	100	40	1	0	Pos
6	355.690	356.150	0.052	3	100	40	1	0	POS
7	337.650	358.150	0.054	3	100	40	1	0	Pos
8	367.650	368.150	0.032	3	100	40	1	0	Pos
9	369.650	370.130	0.032	3	100	40	1	0	Pos
10	371.650	372.150	0.032	3	100	40	1	0	POS
11	373.630	374.130	0.032	3	100	40	1	0	Pos
12	375.650	376.130	0.032	3	100	40	1	0	Pos
13	379.650	380.150	0.032	3	100	40	1	0	POS
14	381.650	382.150	0.032	3	100	40	1	0	Pos
13	383.650	386.150	0.052	3	100	40	1	0	Por
16	387.650	388.150	0.052	3	100	40	1	0	Pos
17	309.650	390.150	0.052	3	100	40	1	0	Pos
18	391.650	392.130	0.032	3	100	40	1	0	Pos
19	401.630	402.130	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.034	3	100	40	1	0	Por
21	445.550	446.050	0.052	3	100	40	1	0	Po.

3/26/91 8:33:01 SCAN 2219 OF 4000

HID scan
Scan time: 1.200 s

Desc: G3
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rete: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.032	3	100	40	1	0	Por
2	373.630	374.150	0.032	3	100	40	1	0	Pos
3	375.630	376.150	0.052	3	100	40	1	0	Pos
4	385.650	306.150	0.032	3	100	40	1	0	Po.
3	387.630	388.130	0.032	3	100	40	1	0	Pos
6	389.630	390.150	0.052	3	100	40	1	0	Pos
7	391.650	392.150	0.032	3	100	40	1	0	Por
8	401.650	402.150	0.032	3	100	40	1	0	Pos
9	403.650	404.150	0.034	3	100	40	1	0	Pos
10	403.550	406.050	0.034	3	100	40	1	0	Pos
11	407.550	408.050	0.032	3	100	40	1	0	Po,
12	409.550	410.050	0.034	3	100	40	1	0	Po,
13	419.550	420.050	0.034	3	100	40	1	0	Pos
14	421.550	422.050	0.034	3	100	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Po,
16	423.550	426.050	0.032	3	100	40	1	0	Po.
17	435.330	436.050	0.052	3	100	40	1	0	Pos
18	437.550	438.050	0.032	3	100	40	1	0	Pos
19	479.550	480.050	0.034	3	100	40	1	0	Pos

3/26/91 8:38:2e SCAN a484 OF 4000

MID scan
Scan time: 1.200 s

Desc: C4
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.034	3	100	40	1	0	Pos
2	407.330	408.050	0.032	3	100	40	1	0	Pos
3	409.550	410.050	0.034	3	100	40	1	0	Pos

3200227

4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
8	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.550	438.050	0.052	3	100	40	1	0	Pos
10	441.950	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.032	3	100	40	1	0	Pos
16	479.550	480.050	0.054	3	100	40	1	0	Pos
17	513.550	314.050	0.054	3	100	40	1	0	Pos

3/26/91 8:44:01 SCAN 2753
Acquisition stopped

3/26/91 8:44:03
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2483 TO 2753 Centroid

Modi	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	632.1	3300.0	19.2	84100.	31.	25.

3200228

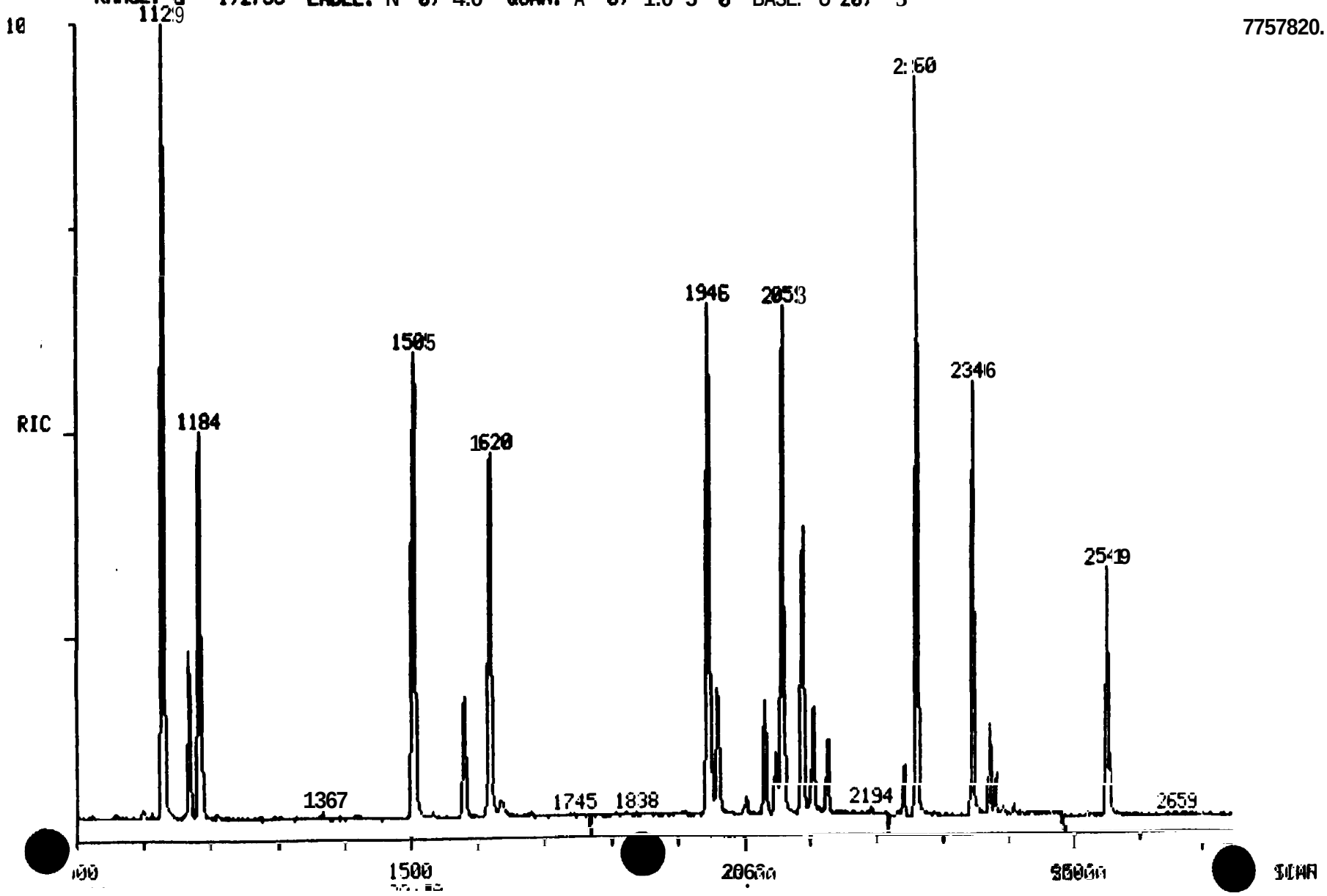
MIDRIC
03/26/91 8:51:00
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 6850611 #1
CALI: CAL910306A #2

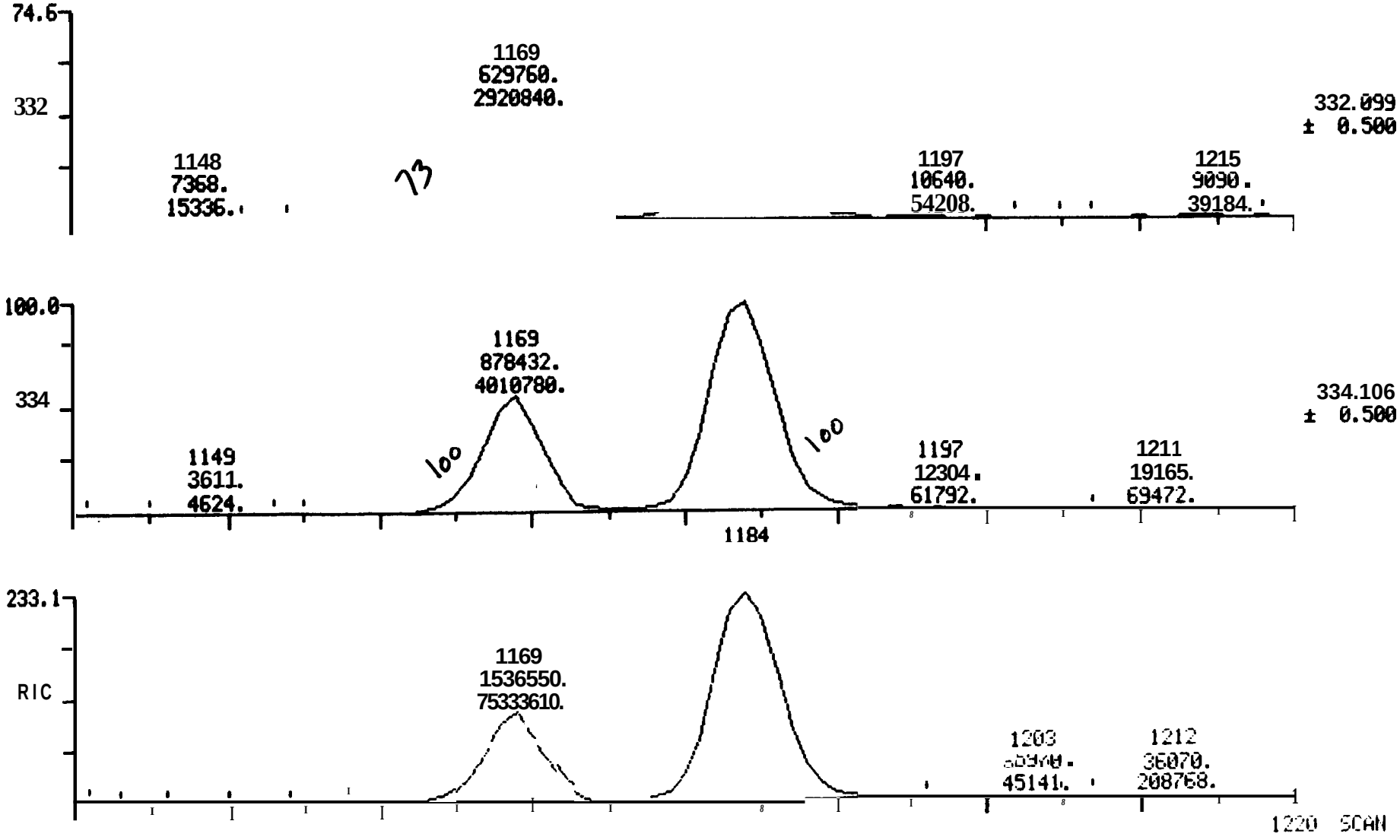
SCANS 1000 TO 2750

Calc. nm 3-27-91
QC DM 3-17-91

7757820.



1.01


74.6
332
1169
629760.
2920840.
332.099
± 0.500
1148
7368.
15336.
73
1197
10640.
54208.
1215
9090.
39184.
100.0
334
1169
878432.
4010780.
334.106
± 0.500
100
100
1149
3611.
4624.
1197
12304.
61792.
1211
19165.
69472.
1184
233.1
RIC
1169
1536550.
75333610.
1203
45141.
1212
36070.
208768.
1220 SCAN

220023

MIDRIC+MASS CHROMATOGRAMS DATA: 6850611 #1 SCANS 960 TO 1340

03/26/91 8:51:00 CALI: CAL910306A #2

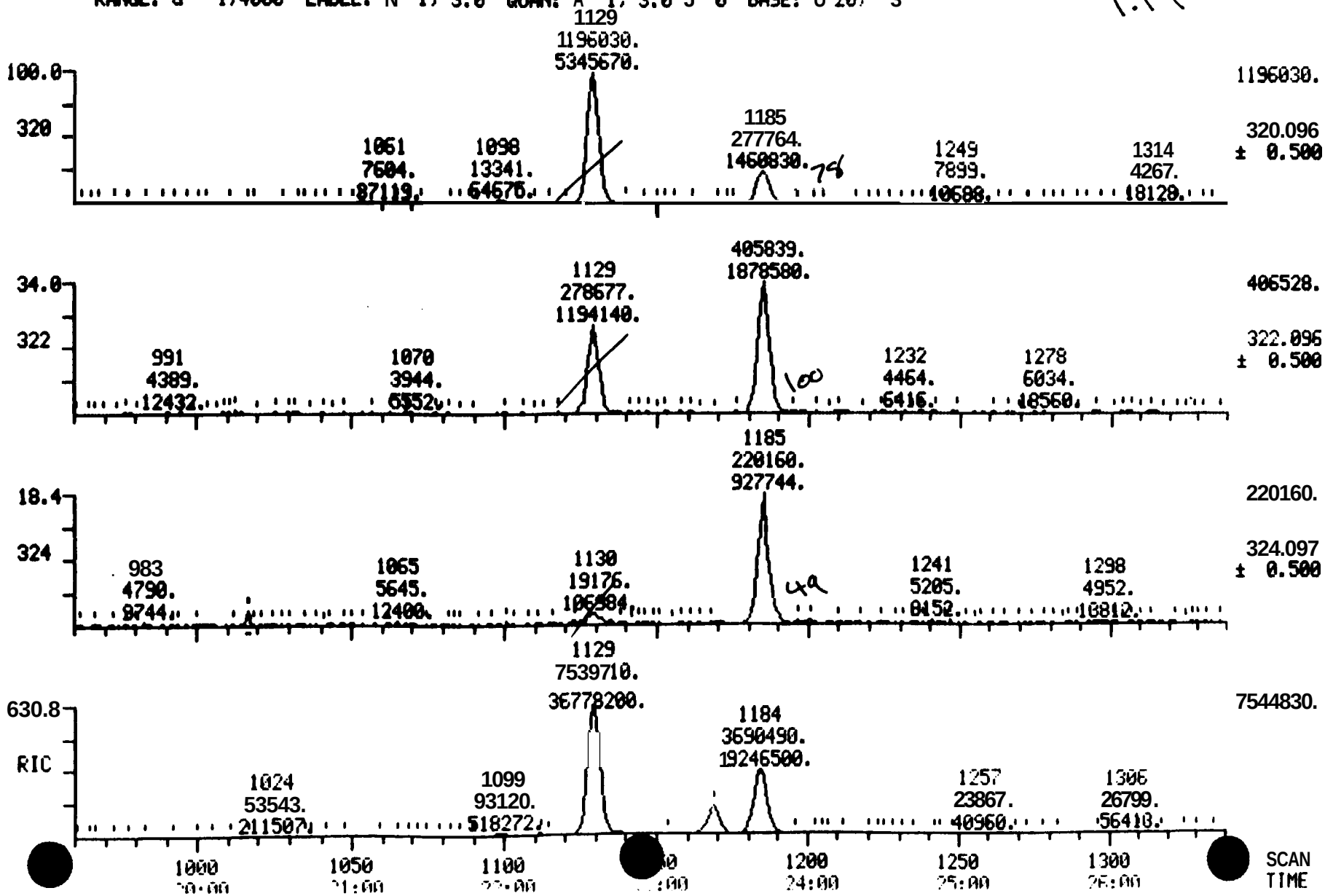
SAMPLE: 2UL OF 685:06 STD ▮ NATIVES @ 200PPB

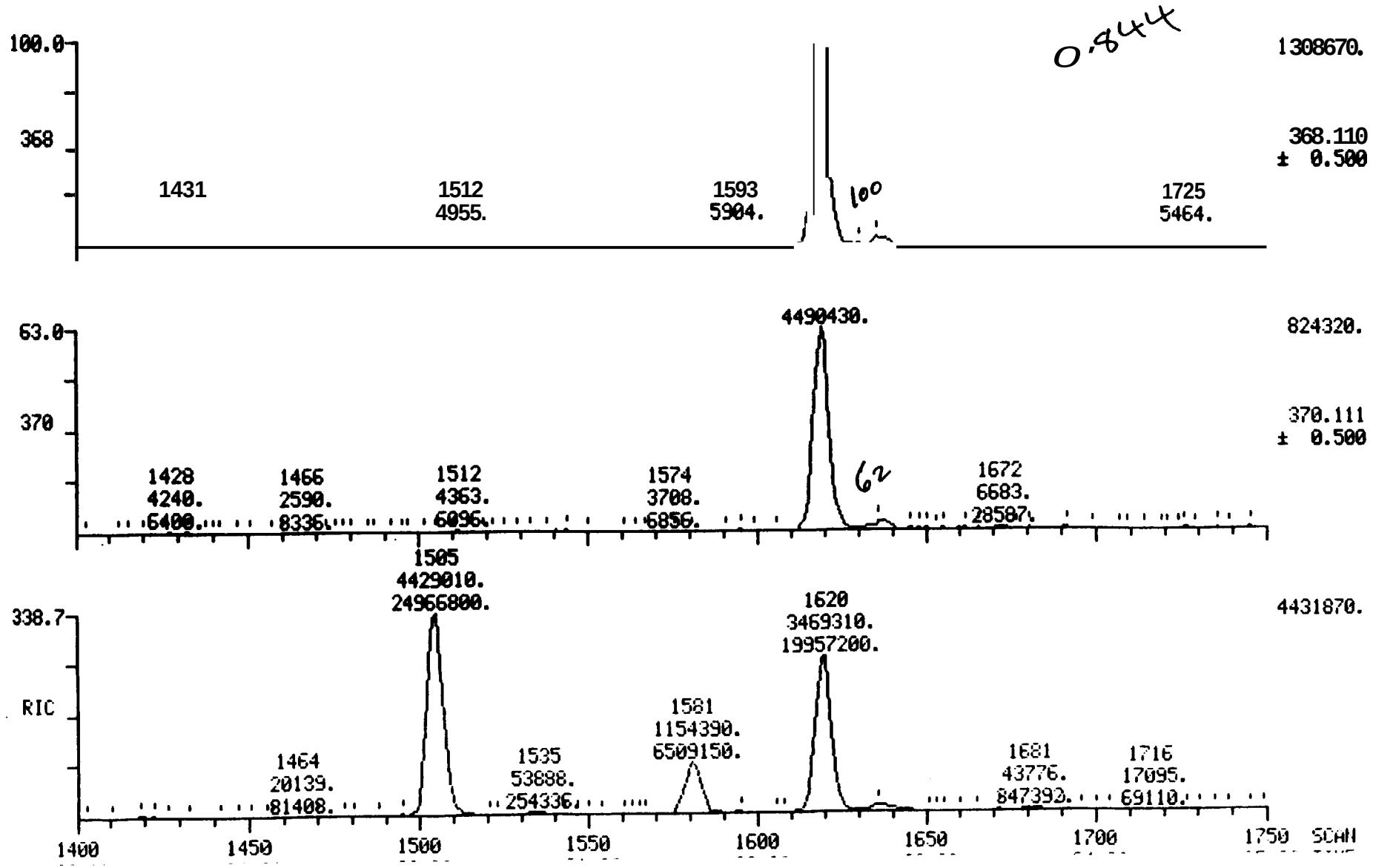
CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDD

1.19

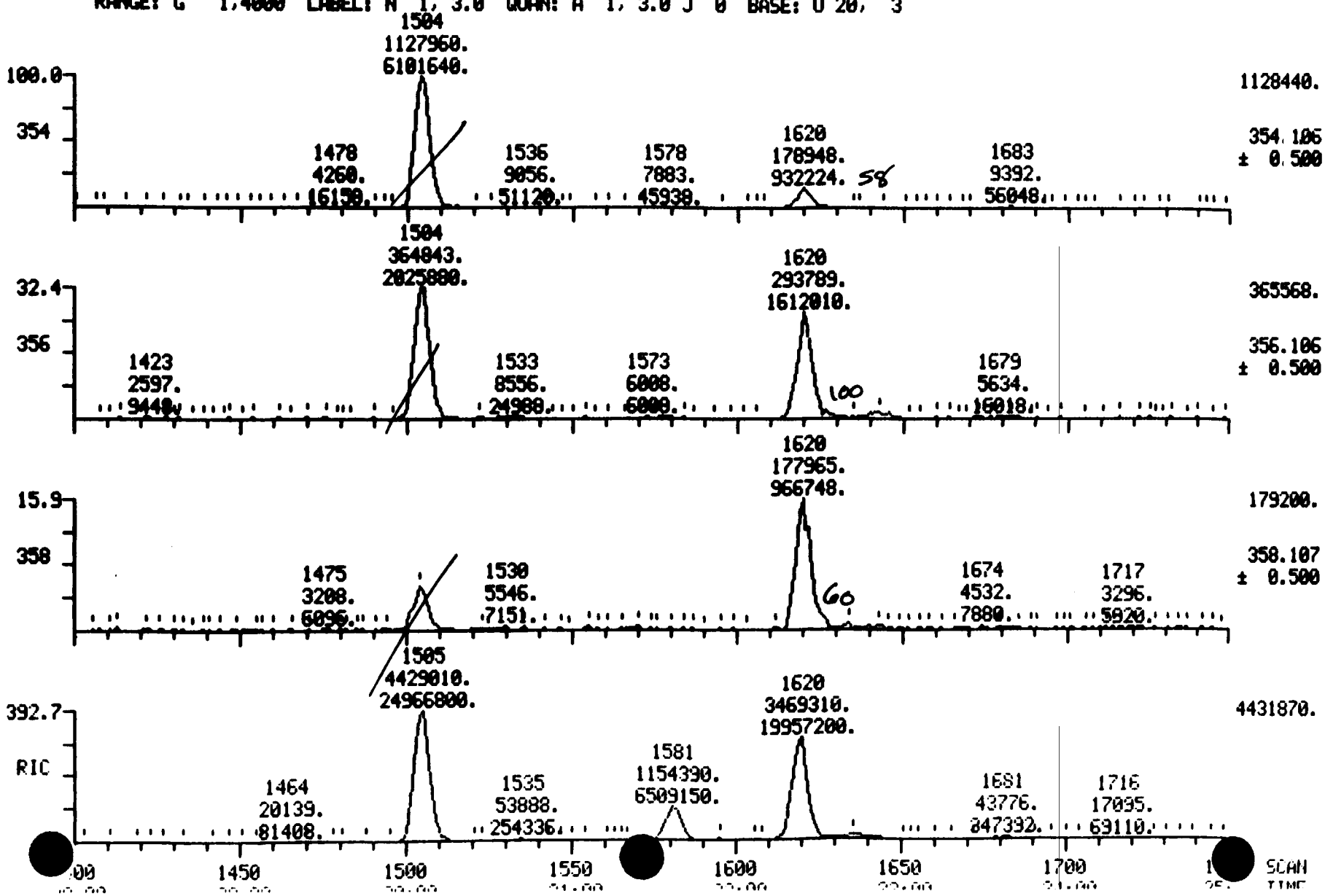



100.0
368
1308670.
368.110
± 0.500
0.844
1431
1512
4955.
1593
5904.
100
1725
5464.
63.0
370
824320.
370.111
± 0.500
4490430.
62
1428
4240.
6400.
1466
2590.
8336.
1512
4363.
6096.
1574
3708.
6856.
1672
6683.
28587.
338.7
RIC
4431870.
1505
4429010.
24966800.
1620
3469310.
19957200.
1464
20139.
81408.
1535
53888.
254336.
1581
1154390.
6509150.
1681
43776.
847392.
1716
17095.
69110.
1400
1450
1500
1550
1600
1650
1700
1750
SCAN

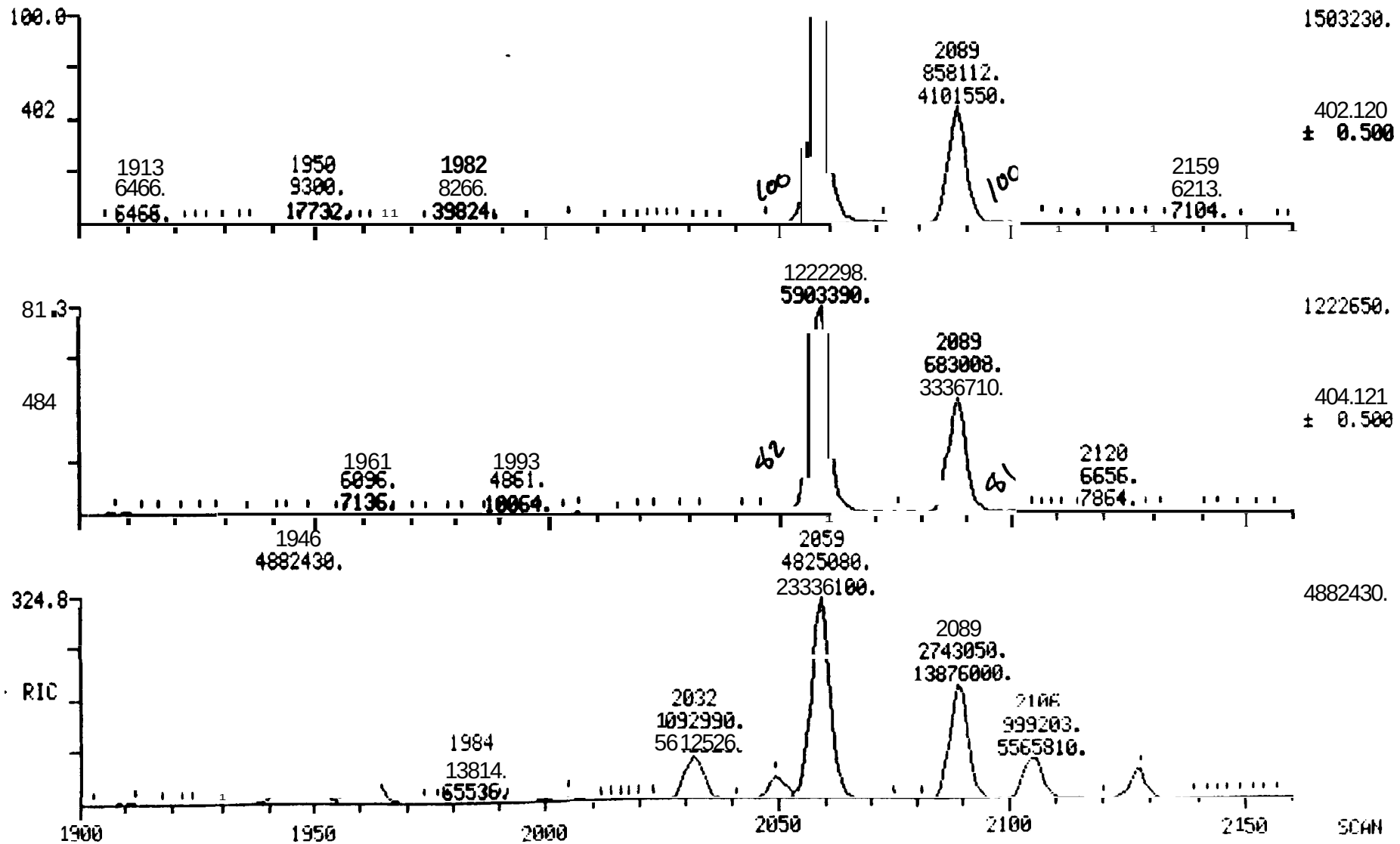
0020230

MIDRIC+MASS CHROMATOGRAMS DATA: 685061I #1 SCANS 1400 TO 1750
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.10



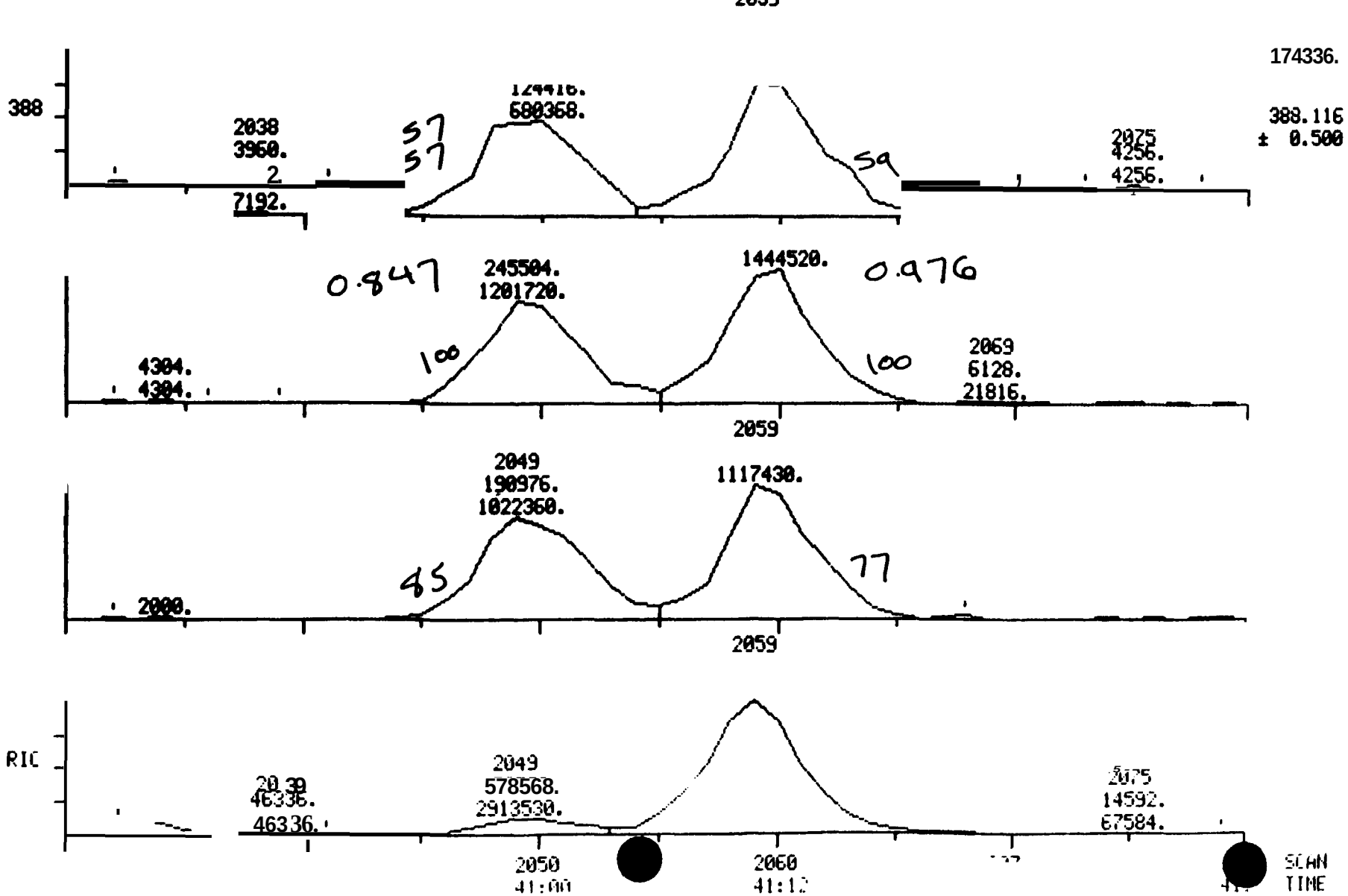
0483


100.0
402
1503230.
402.120
± 0.500
1913
6466.
6466.
1950
9300.
17732.
1982
8266.
39824.
100
2089
858112.
4101550.
100
2159
6213.
7104.
81.3
484
1222650.
404.121
± 0.500
1222298.
5903390.
2089
683008.
3336710.
62
61
1961
6096.
7136.
1993
4861.
10064.
2120
6656.
7864.
1946
4882430.
2059
4825080.
23336100.
324.8
RIC
4882430.
2089
2743050.
13876000.
2032
1092990.
5612526.
1984
13814.
65536.
2106
999203.
5565810.
1900
1950
2000
2050
2100
2150
SCAN

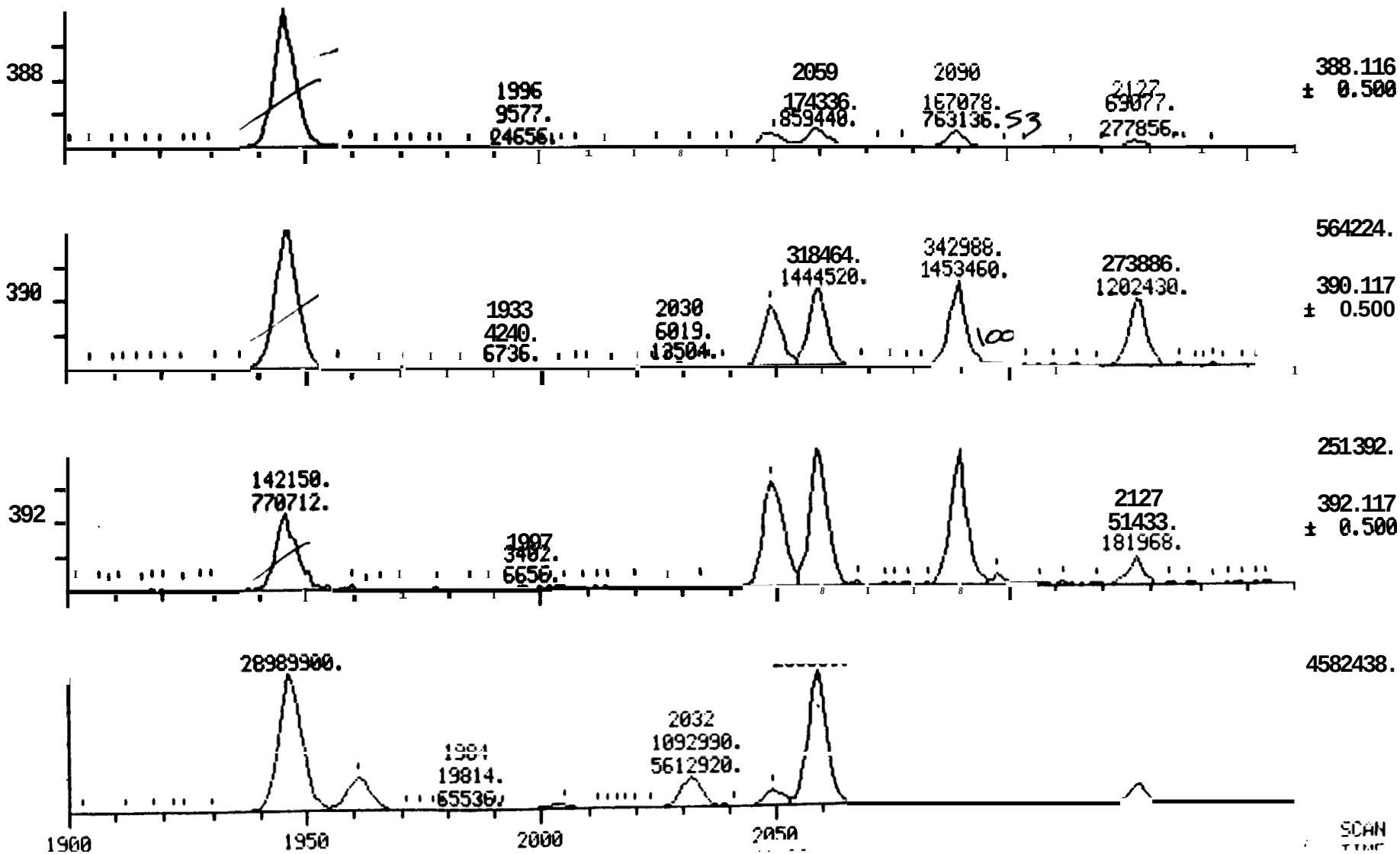
1/1

HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 685061I #1 SCANS 2030 TO 2080
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

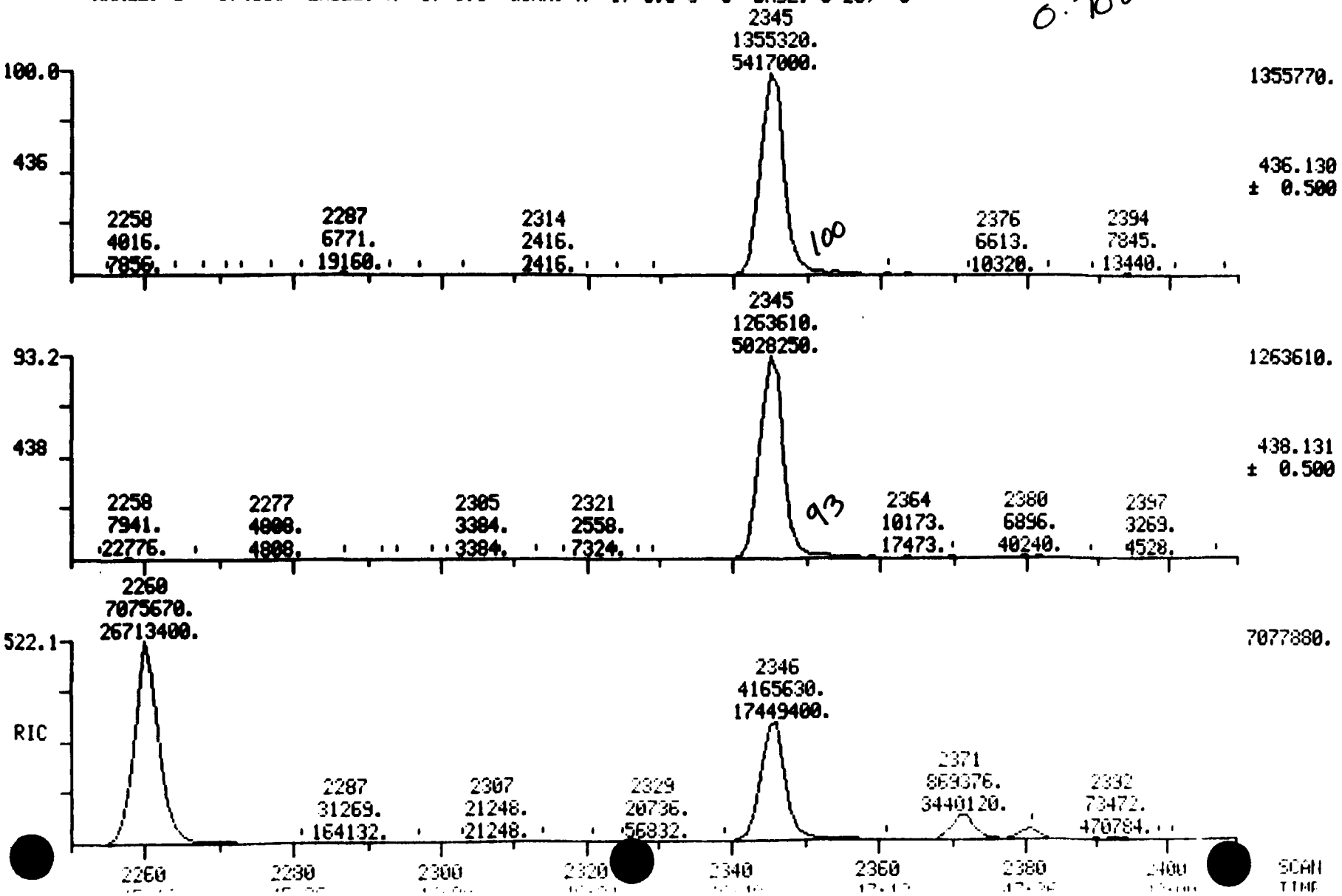


HxCDD


388
1996
9577.
24656.
2059
174336.
859440.
2090
167078.
763136.
53
2127
63077.
277856.
388.116
± 0.500
564224.
390
1933
4240.
6736.
2030
6019.
13504.
318464.
1444520.
342988.
1453460.
100
273886.
1202430.
390.117
± 0.500
251392.
392
142150.
770712.
1997
3402.
6656.
2127
51433.
181968.
392.117
± 0.500
28989900.
1984
19814.
65536.
2032
1092990.
5612920.
4582438.
1900
1950
2000
2050
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 #1 SCANS 2250 TO 2410
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

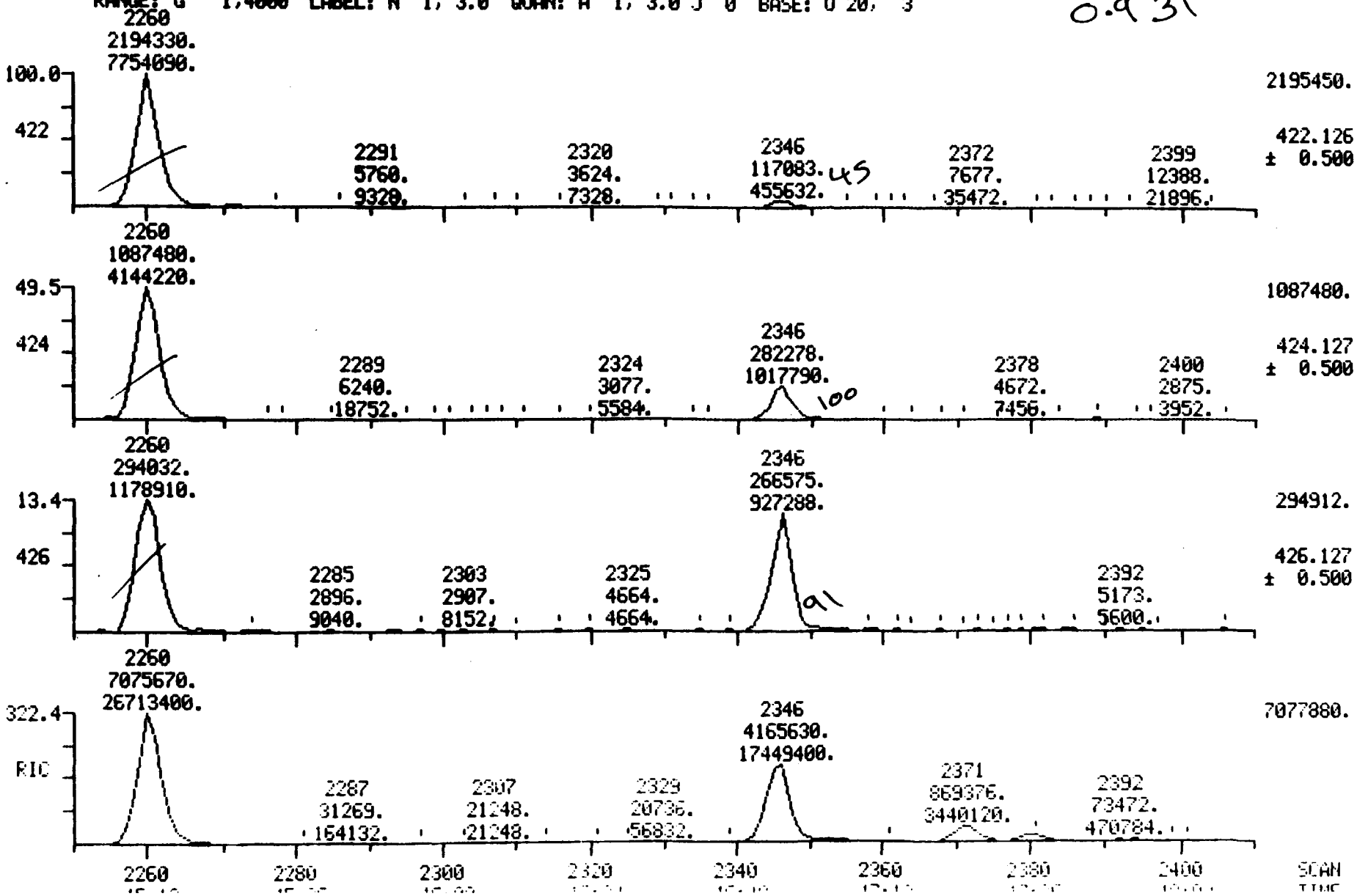
0.702



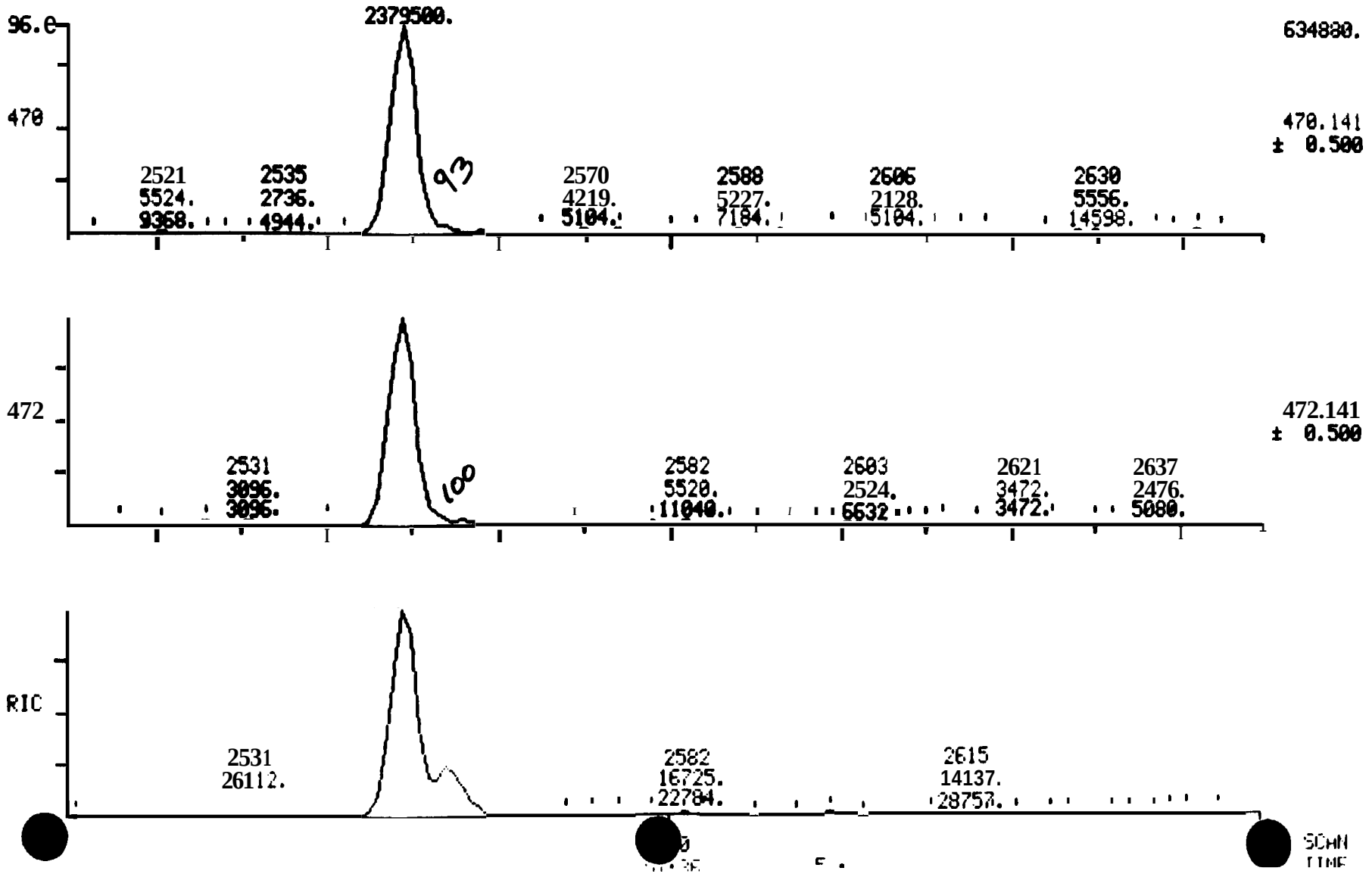
HpCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 #1 SCANS 2250 TO 2410
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.931



0.332


96.0
470
2379500.
634880.
470.141
± 0.500
2521
5524.
9368.
2535
2736.
4944.
93
2570
4219.
5104.
2588
5227.
7184.
2606
2128.
5104.
2630
5556.
14598.
472
472.141
± 0.500
2531
3096.
3096.
100
2582
5520.
11040.
2603
2524.
6632.
2621
3472.
3472.
2637
2476.
5080.
RIC
2531
26112.
2582
16725.
22784.
2615
14137.
28757.
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 11 SCANS 2510 TO 2650

03/26/91 8:51:00 CALI: CAL910306A 12

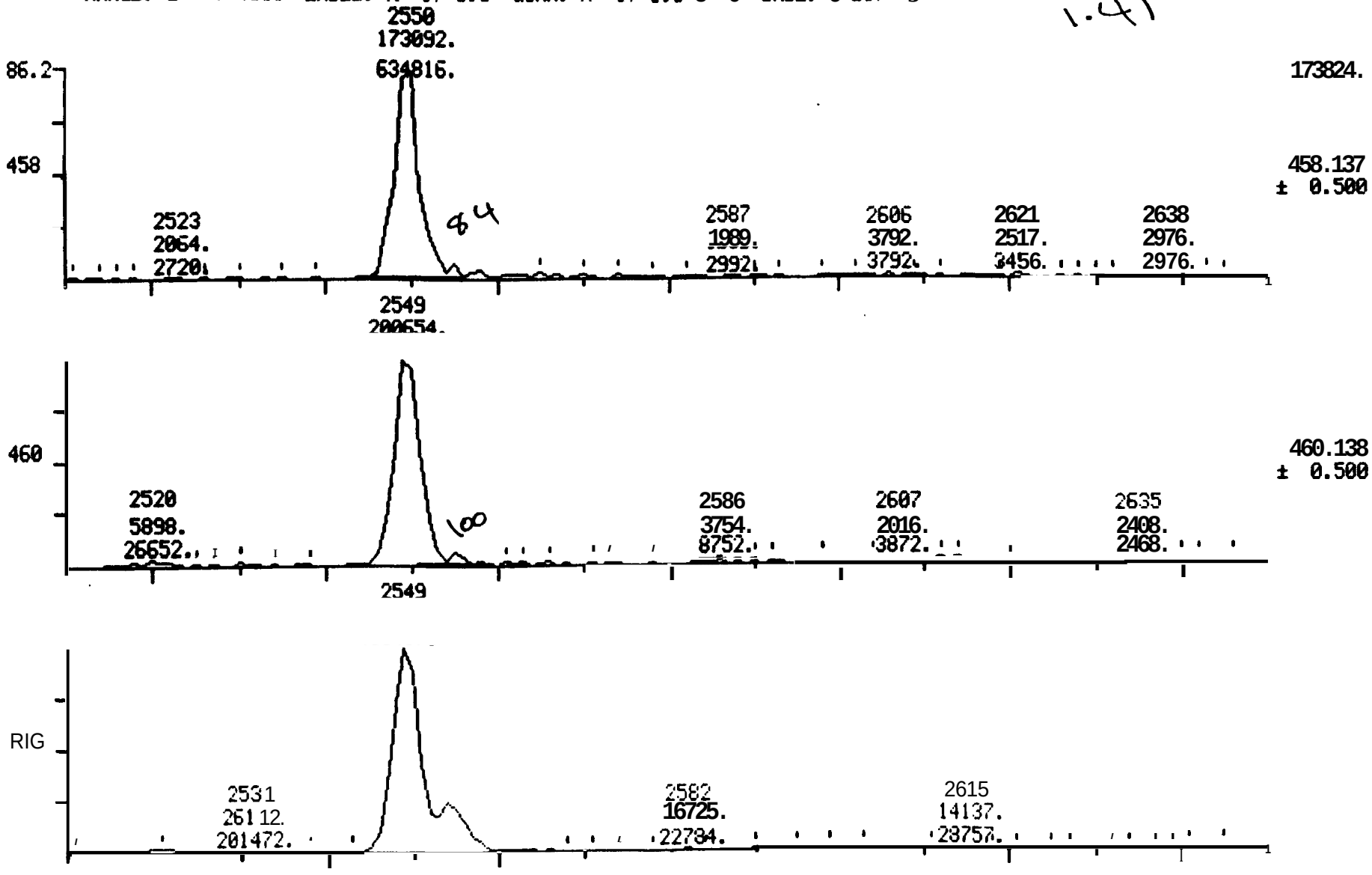
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDD

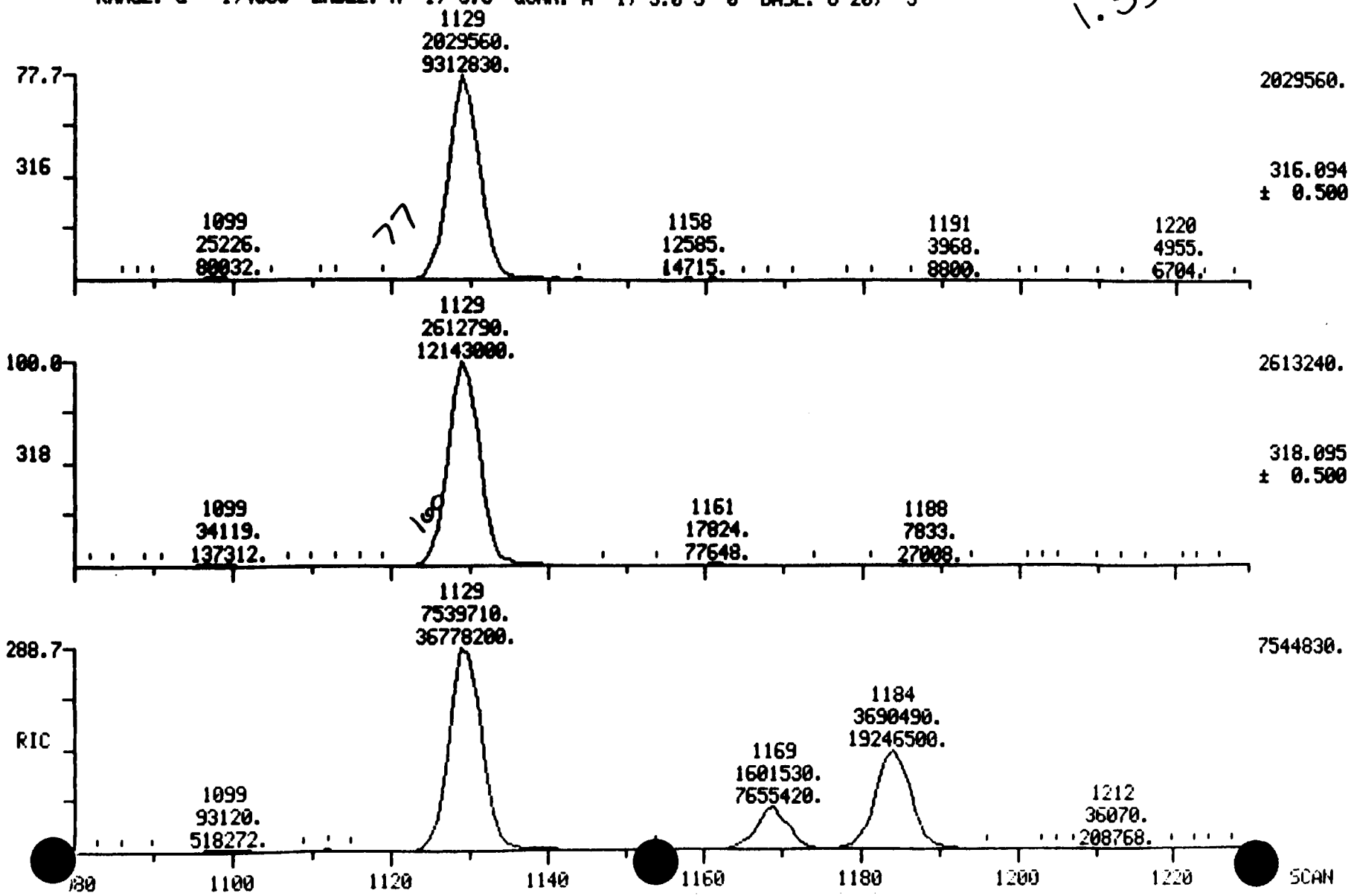
1.41



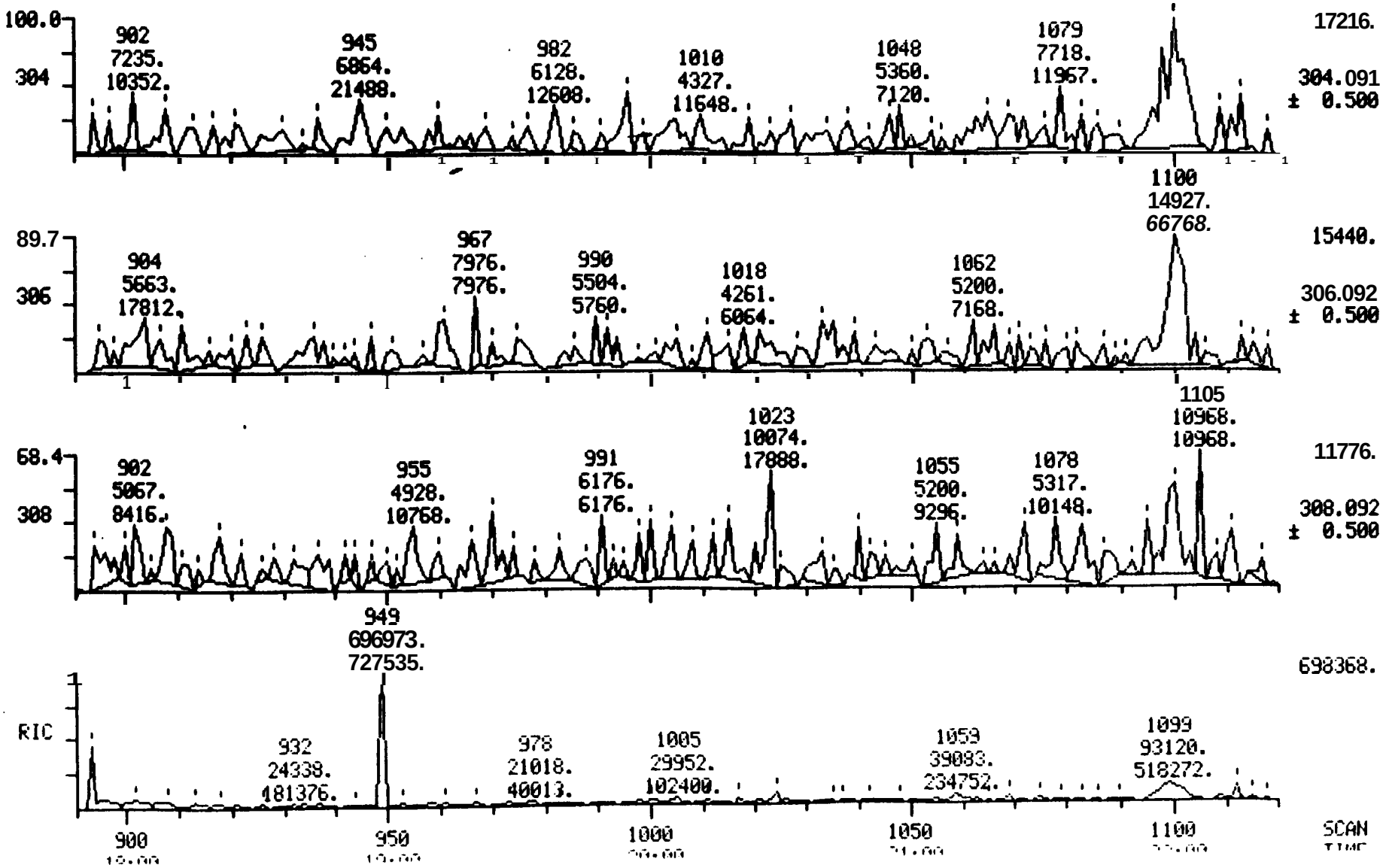
3200234

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 #1 SCANS 1080 TO 1230
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NAT DES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.55



MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 #1 SCANS 890 TO 1120
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

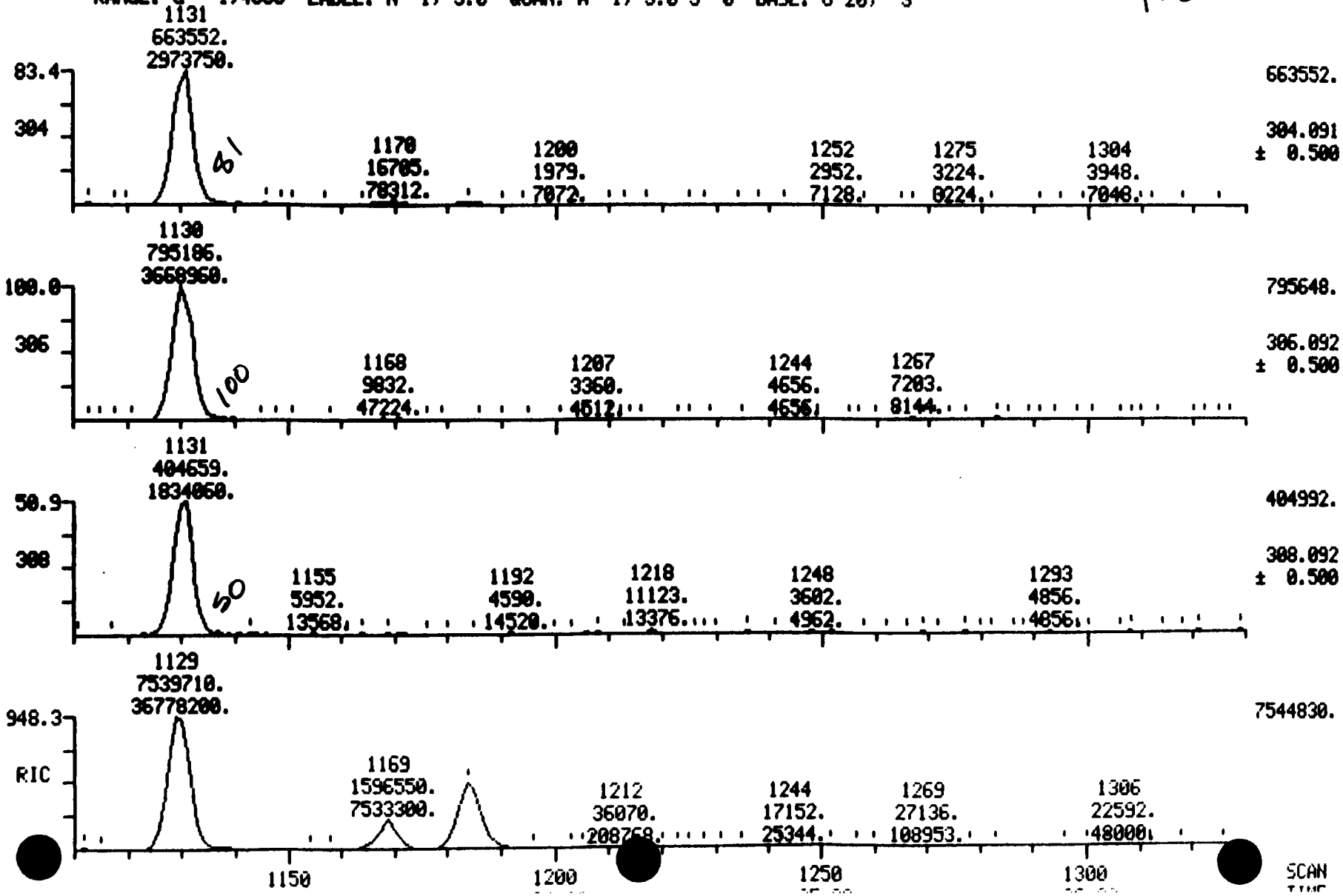


3200235

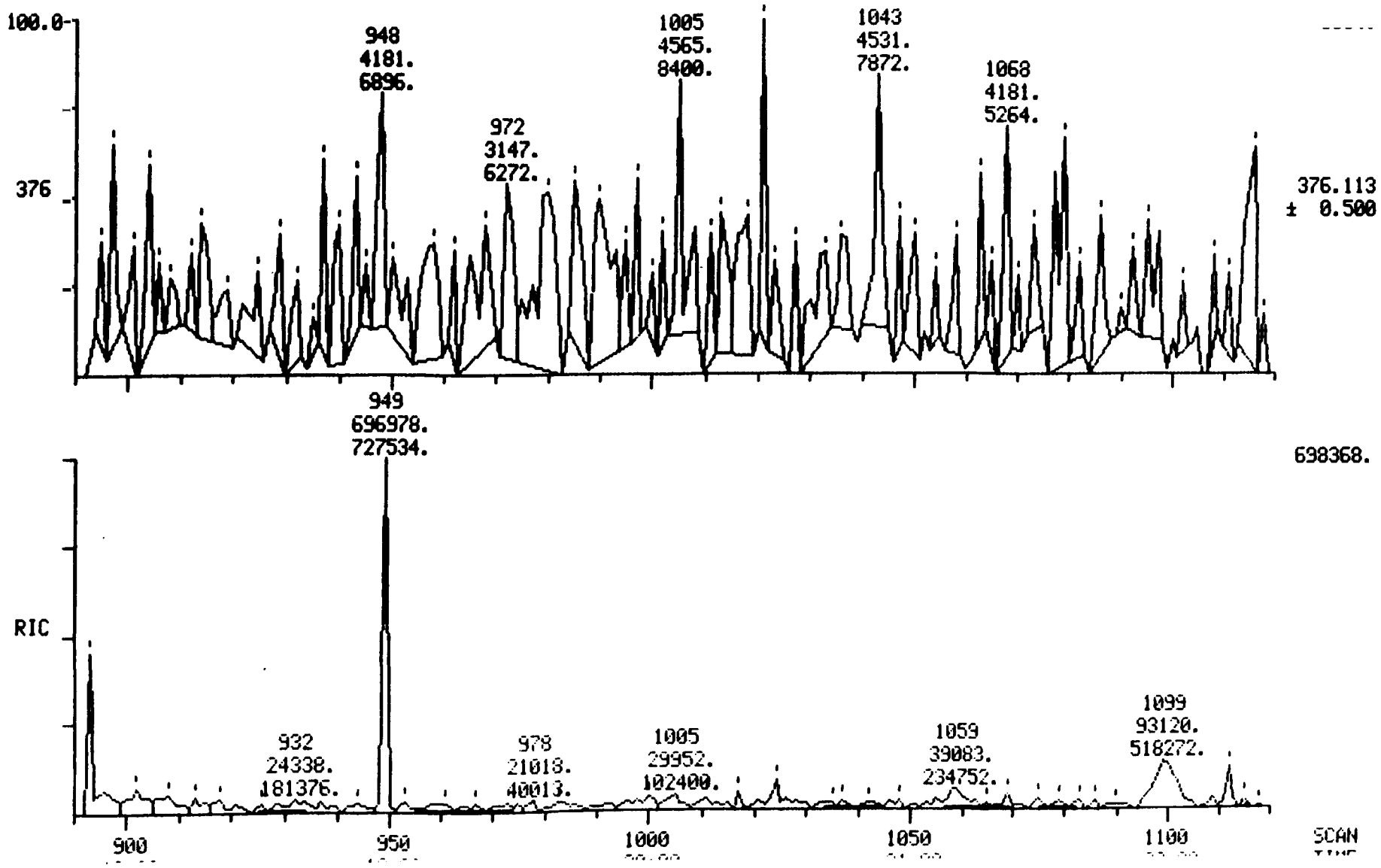
MIDRIC+MASS CHROMATOGRAMS DATA: 685061I1 #1 SCANS 1110 TO 1330
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDF

1.55

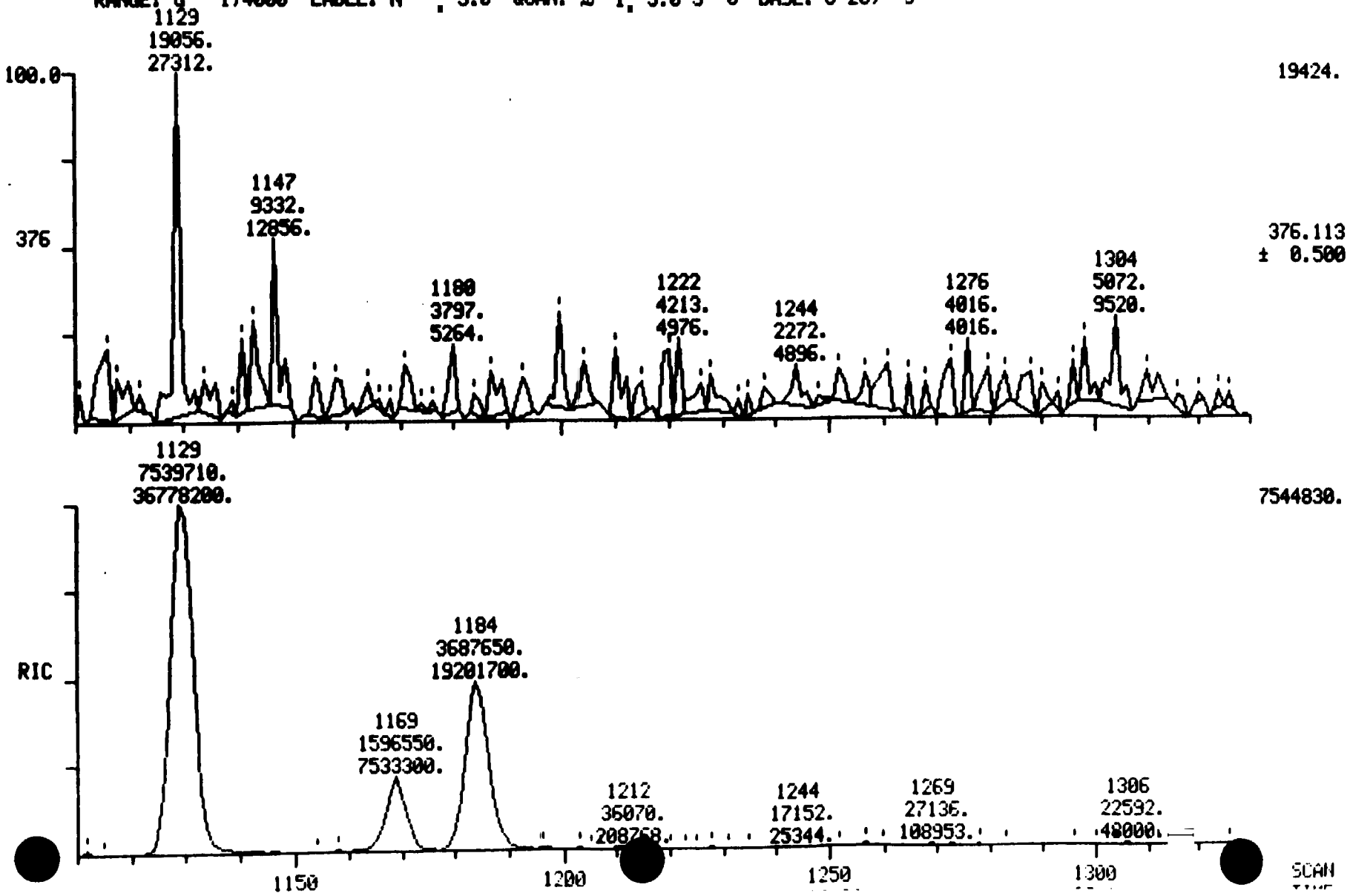


MIDRIC+MASS CHROMATOGRAM DATA: 68506I1 #1 SCANS 890 TO 1120
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



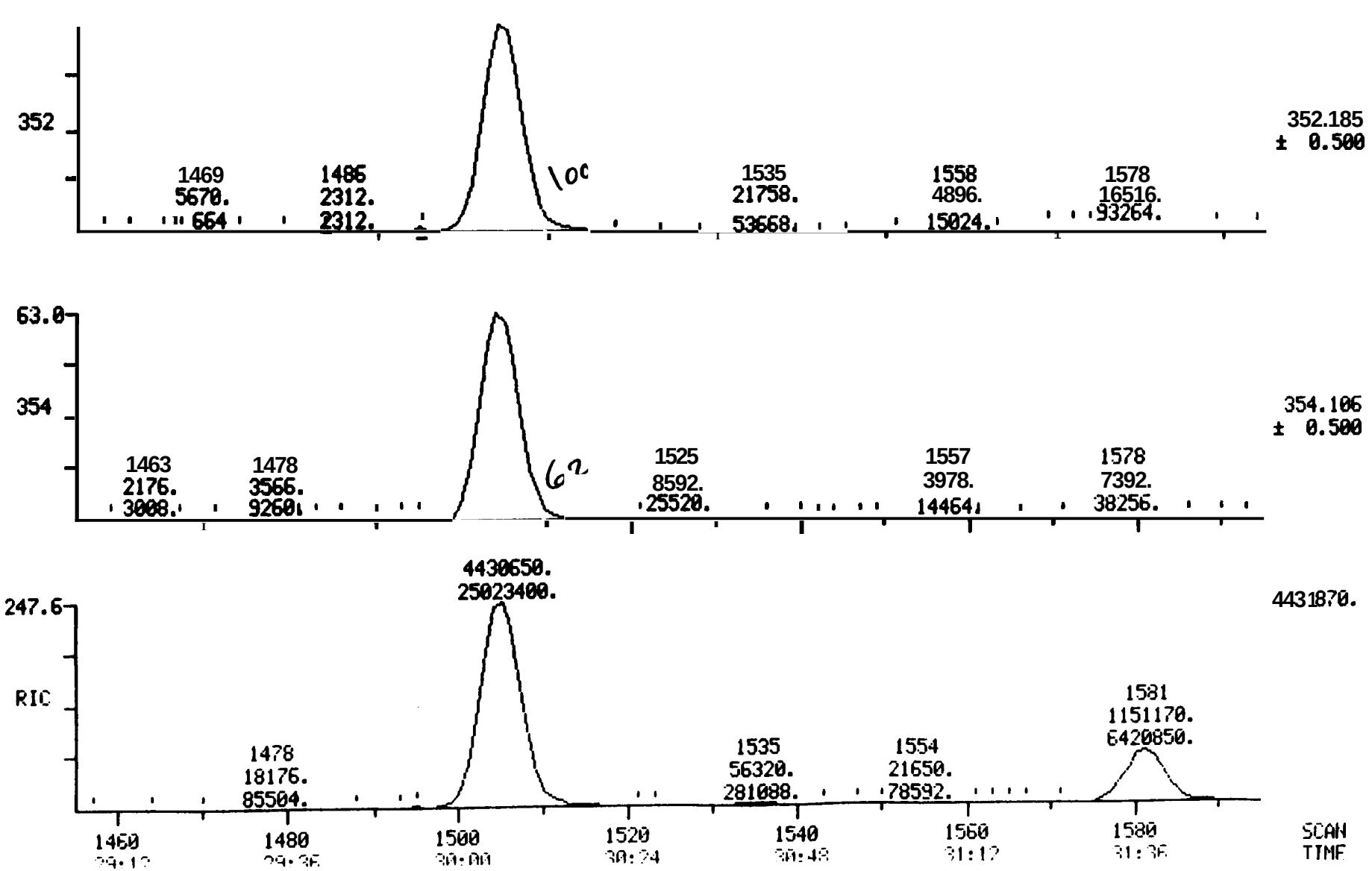
3200236

MIDRIC+MASS CHROMATOGRAM DATA: 685061I #1 SCANS 1110 TO 1330
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 3.0 QUAN: ω 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 #1 SCANS 1455 TO 1535
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD ▮ NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

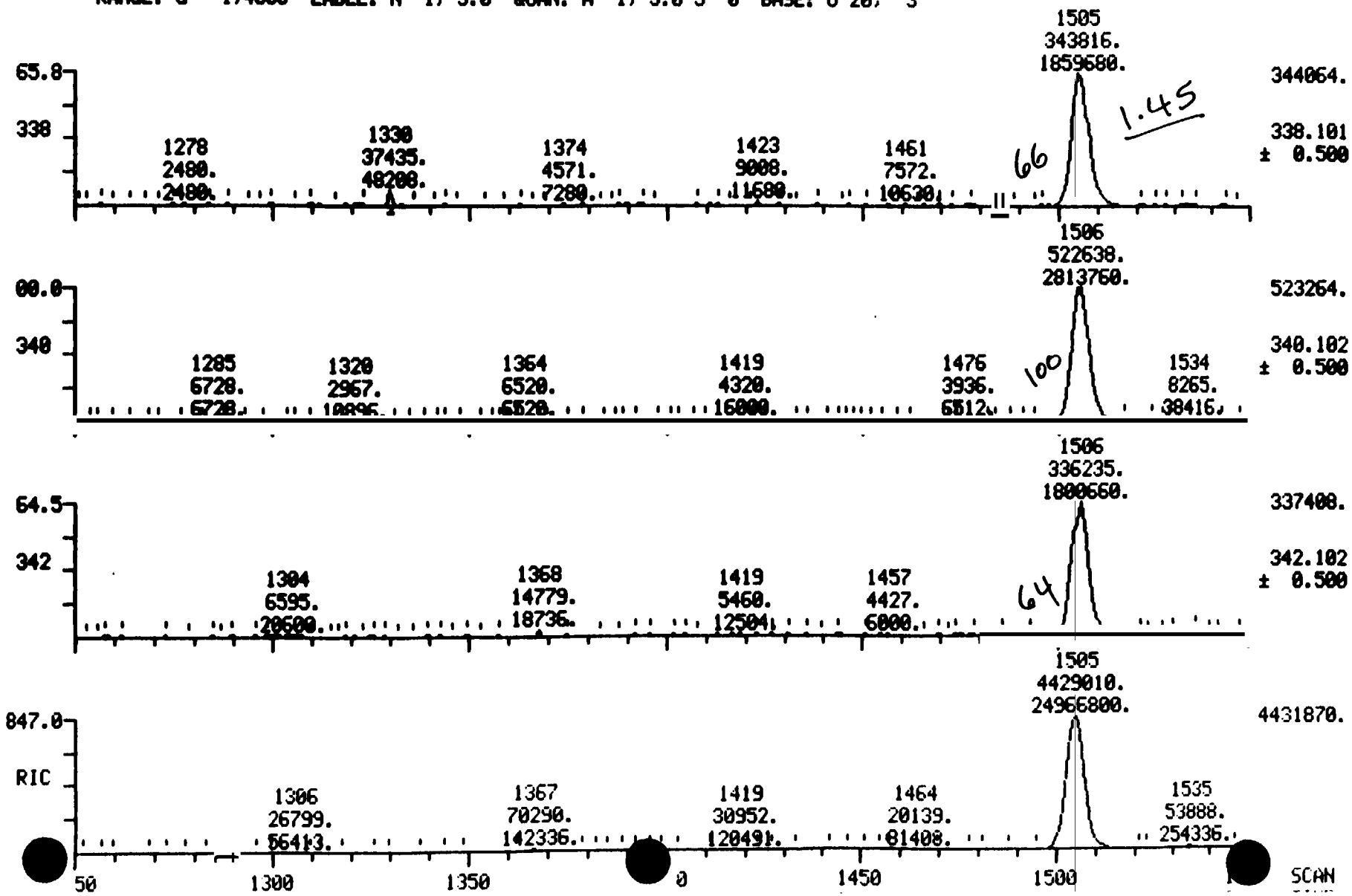
1.15

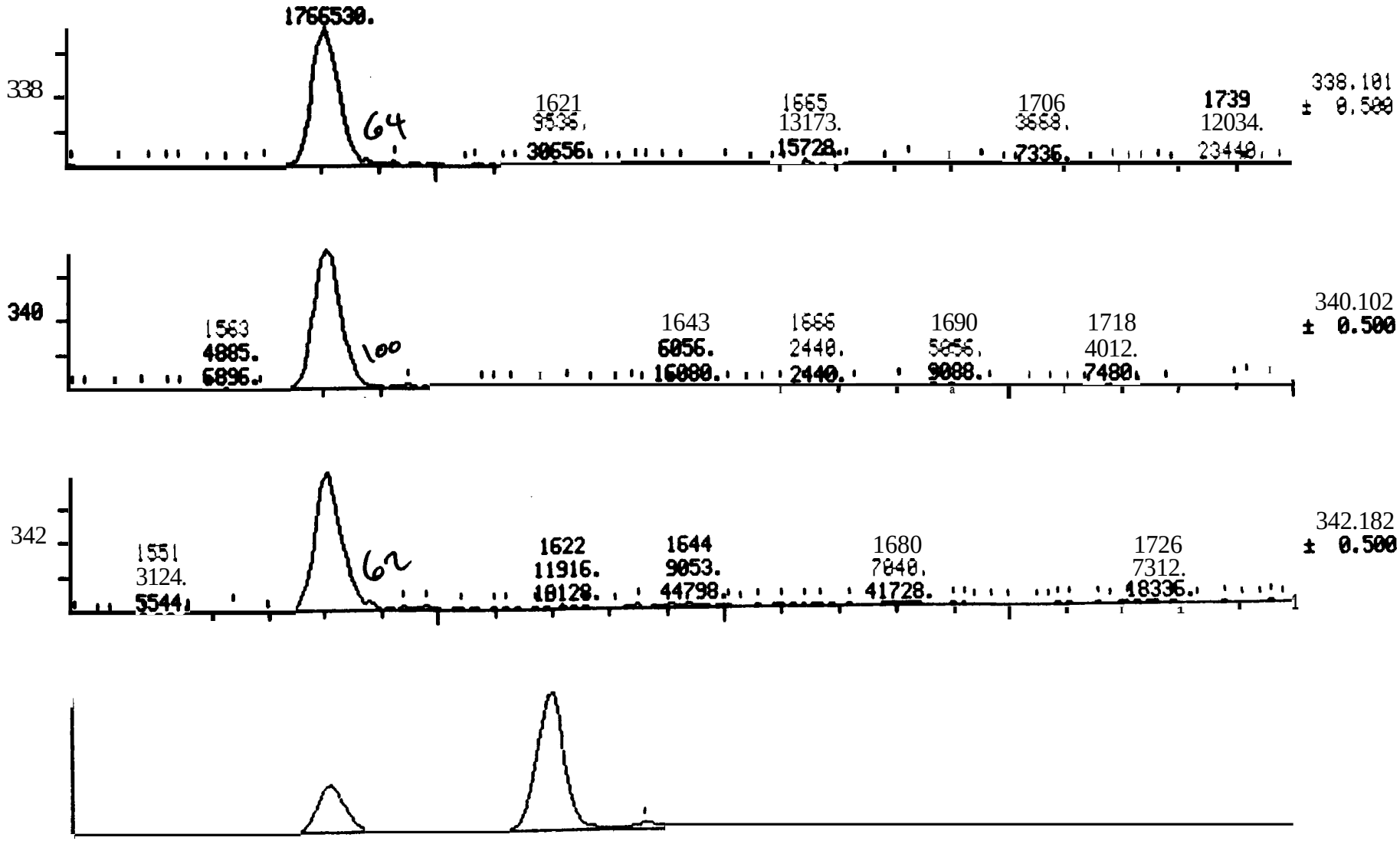


3200237

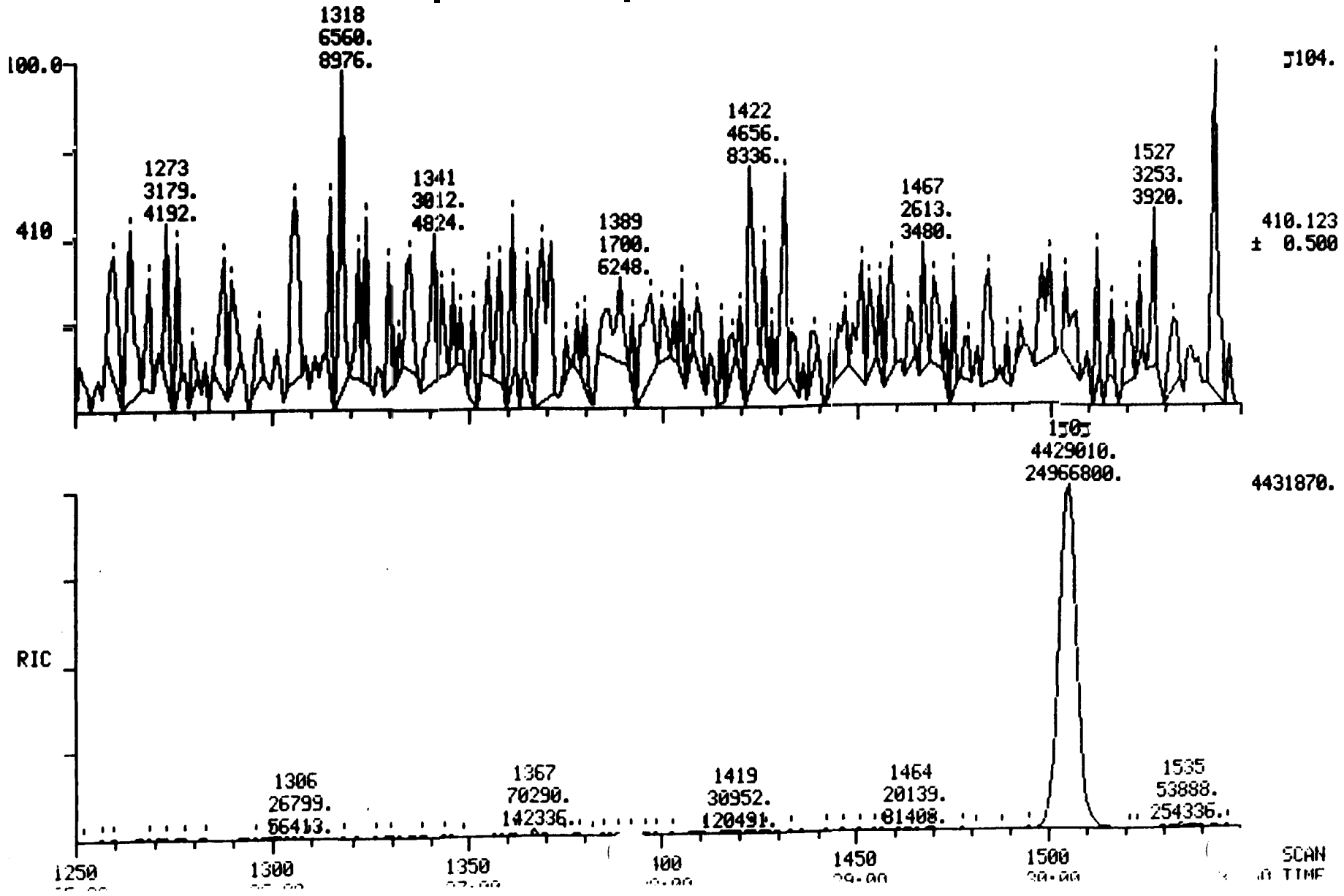
PeCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 #1 SCANS 1250 TO 1550
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



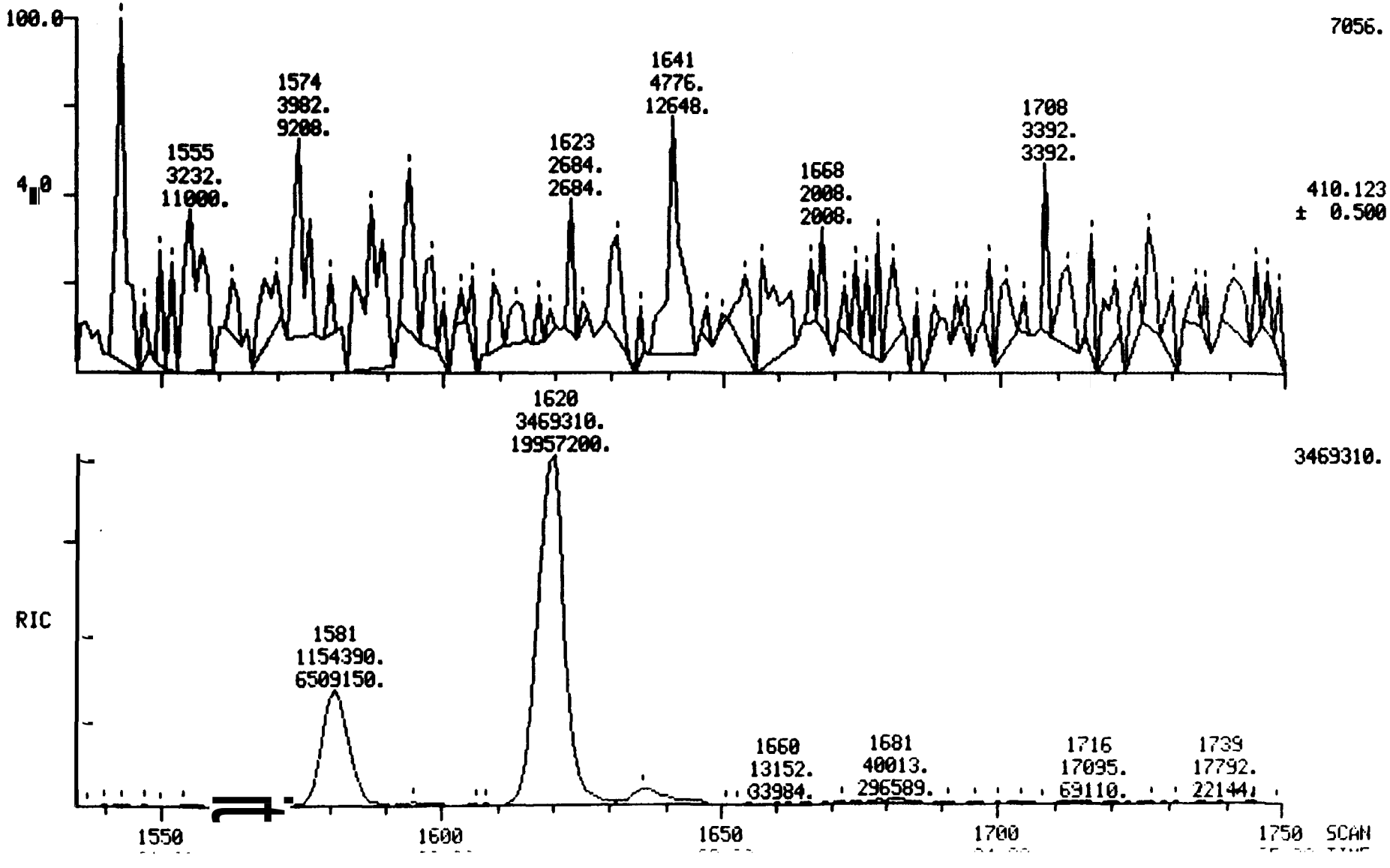

338
1766530.
64
1621
9536.
30656.
1665
13173.
15728.
1706
3668.
7336.
1739
12034.
23448.
338.101
± 0.500
340
1563
4885.
6896.
100
1643
6056.
16080.
1665
2440.
2440.
1690
5056.
9088.
1718
4012.
7480.
340.102
± 0.500
342
1551
3124.
5544.
62
1622
11916.
18128.
1644
9053.
44798.
1680
7840.
41728.
1726
7312.
18336.
342.182
± 0.500

MIDRIC+MASS CHROMATOGRAM DATA: 6850611 #1 SCANS 1250 TO 1550
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 2.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



32002238

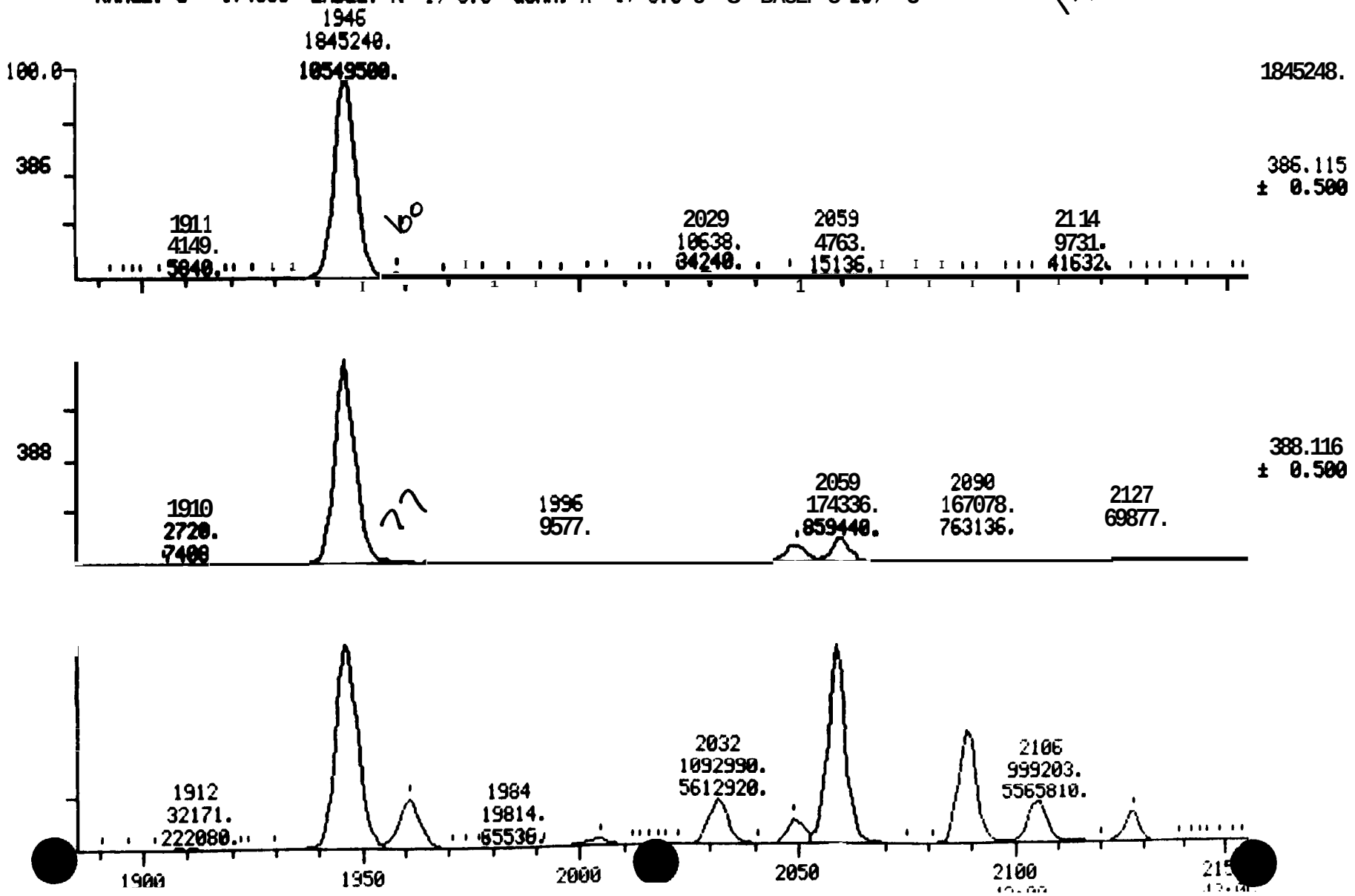
MIDRIC+MASS CHROMATOGRAM DATA: 685061I #1 SCANS 1535 TO 1750
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200239

MIDRIC+MASS CHROMATOGRAMS DATA: 6850611 #1 SCANS 1885 TO 2155
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 SM I NATIVES a 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

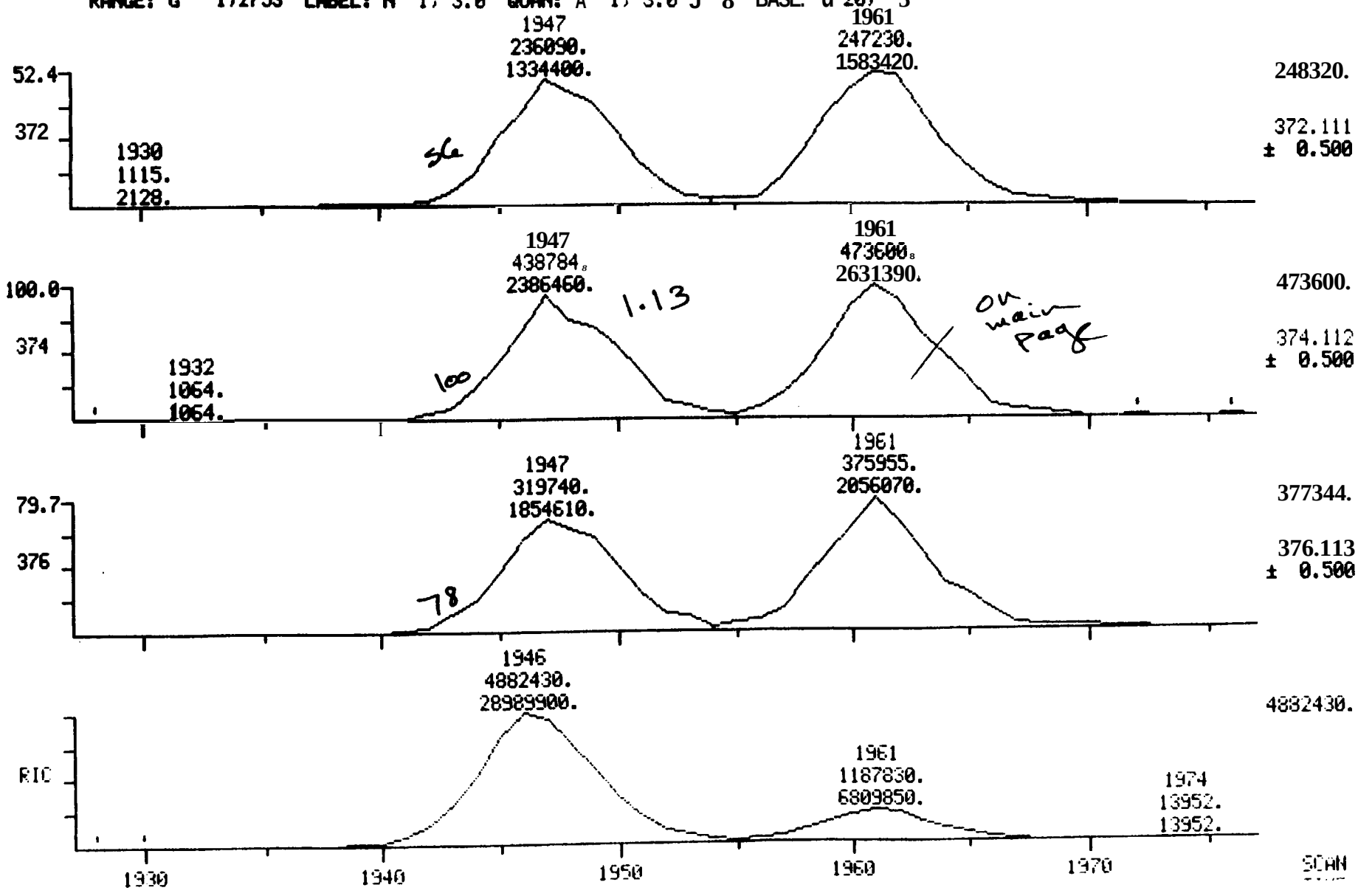
1.26



1/1

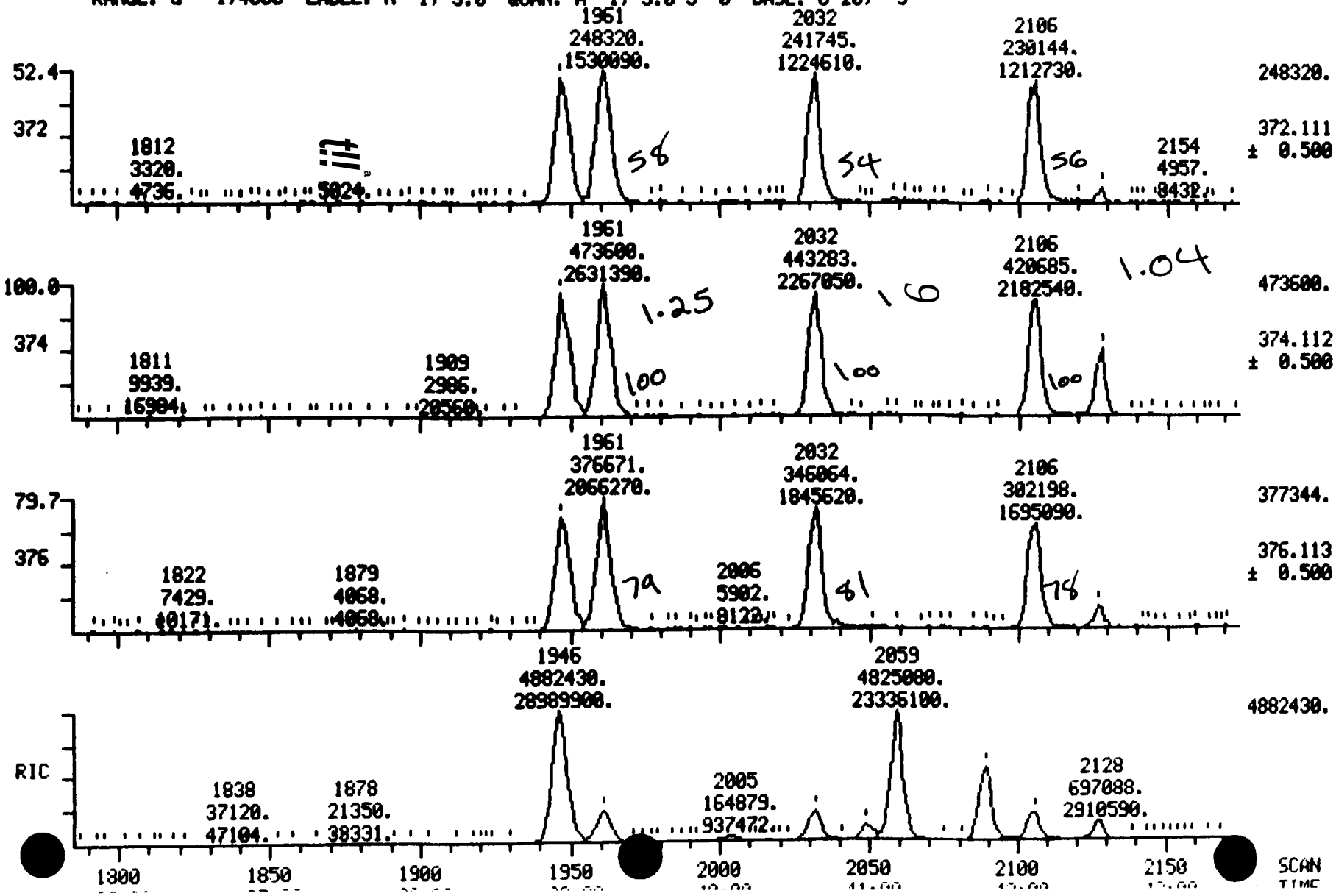
HxCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 6850611 #1 SCANS 1927 TO 1977
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

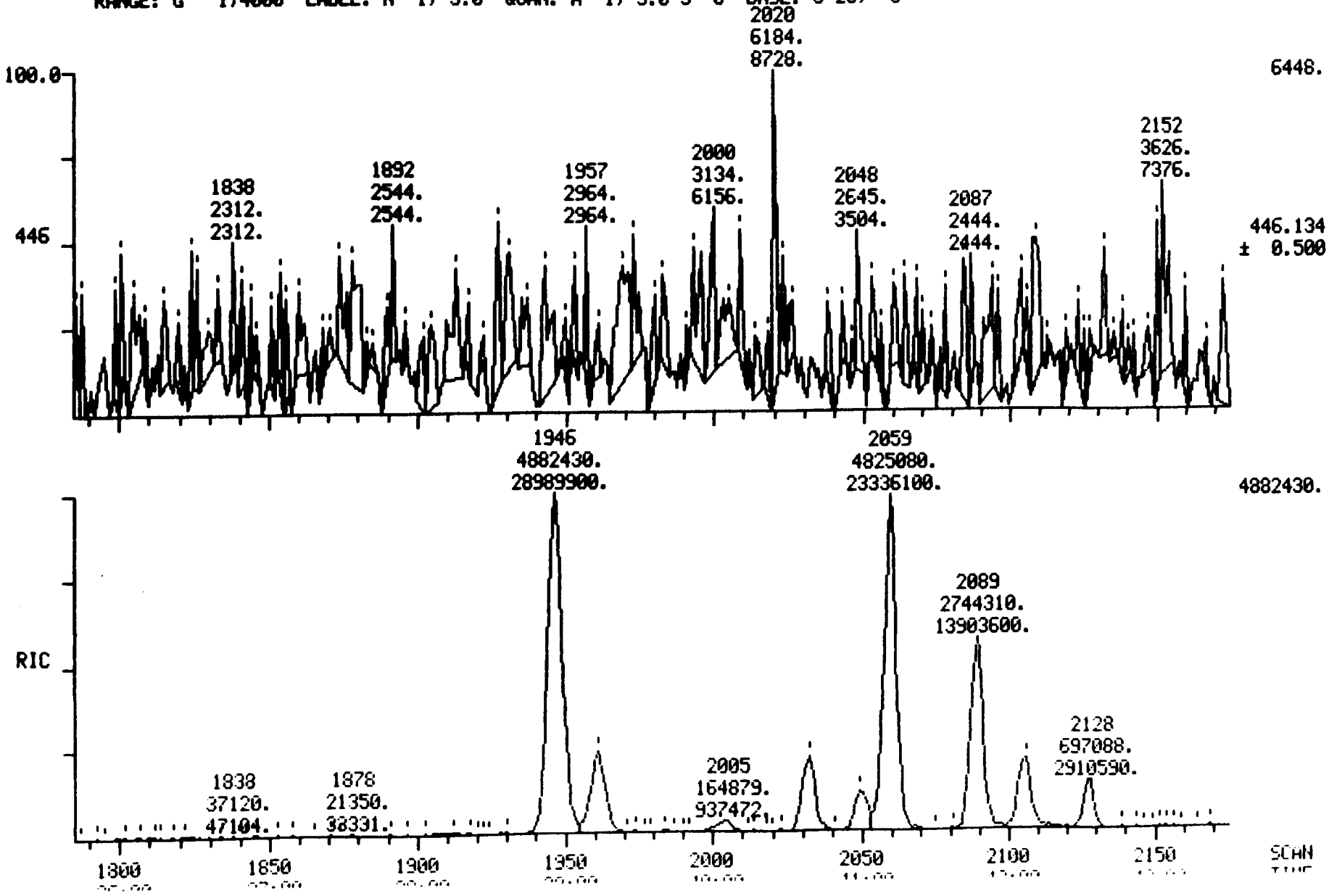


3200240

MIDRIC+MASS CHROMATOGRAMS DATA: 6850611 #1 SCANS 1785 TO 2175
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

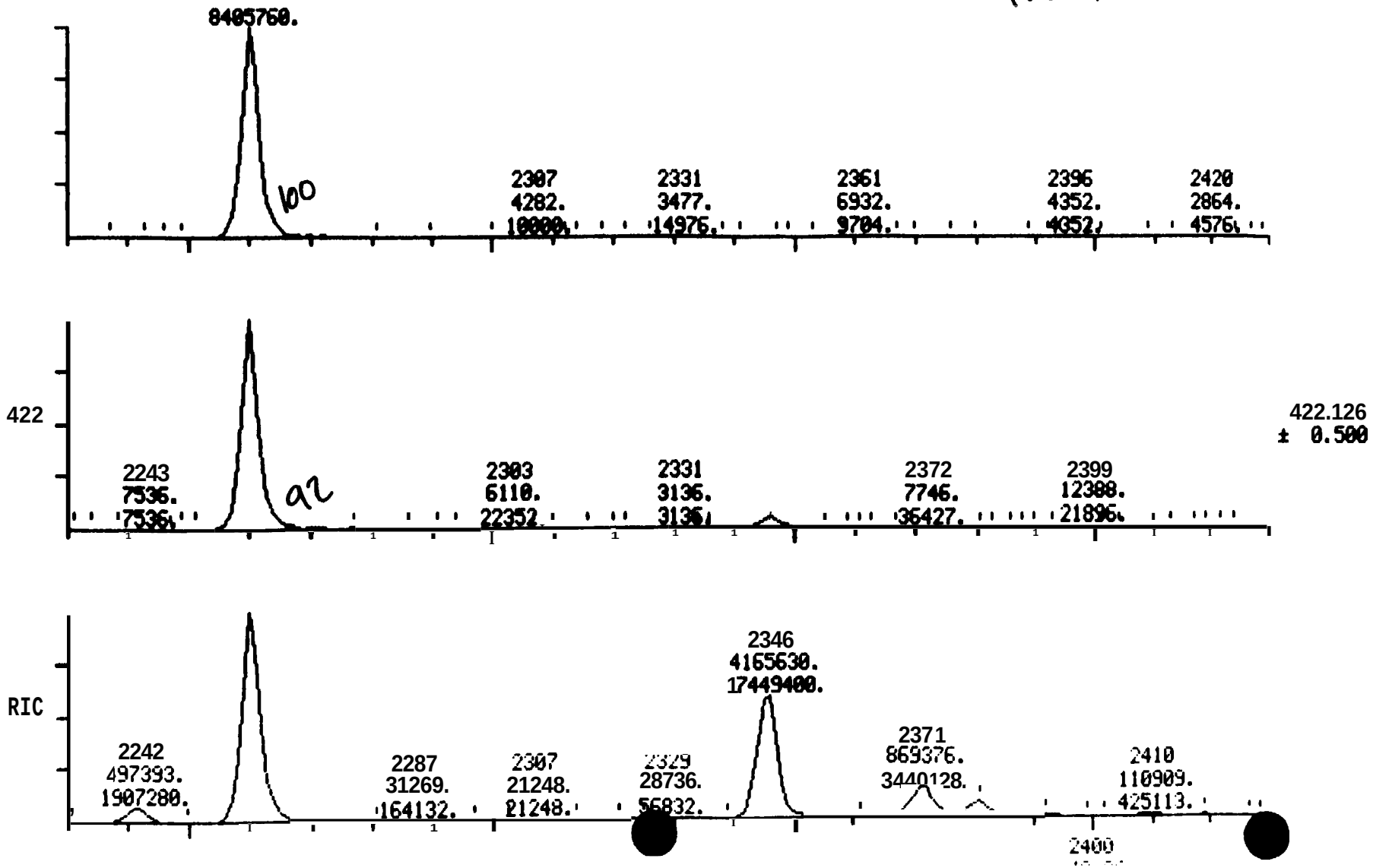


MIDRIC+MASS CHROMATOGRAM DATA: 68506I1 #1 SCANS 1785 TO 2175
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



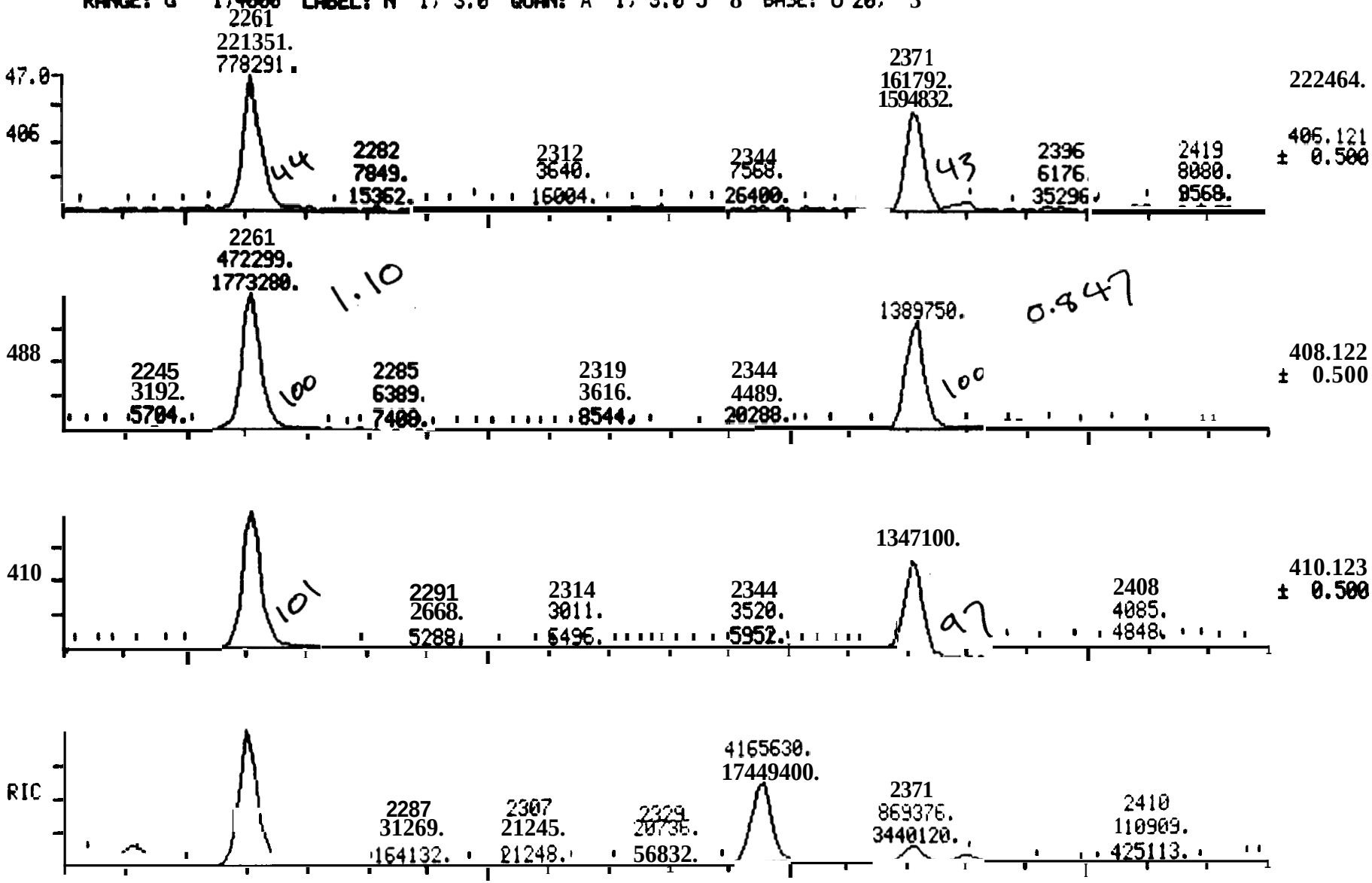
3200241

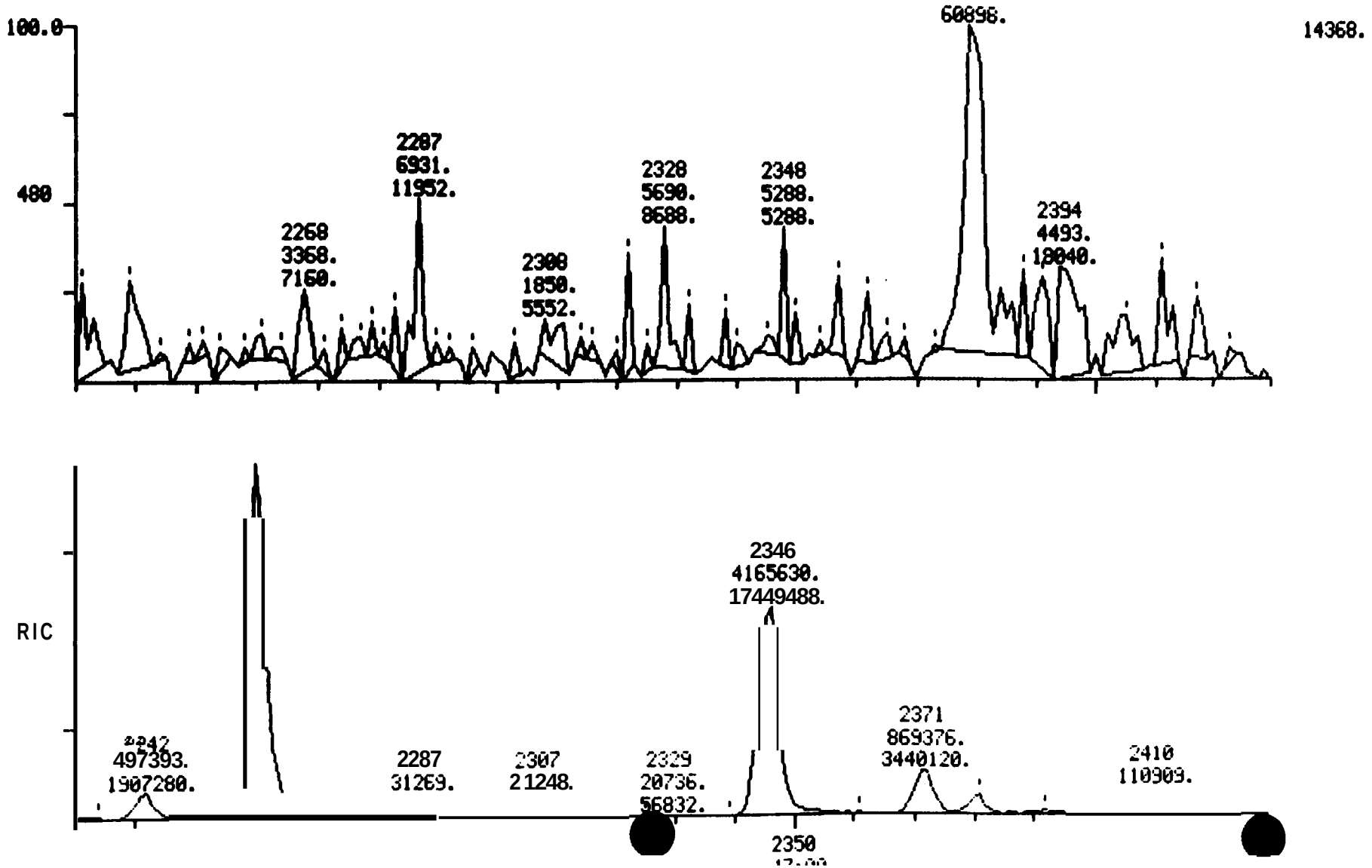
1.09


8405760.
100
2307
4282.
10000.
2331
3477.
14976.
2361
6932.
9704.
2396
4352.
4352.
2420
2864.
4576.
422
2243
7536.
7536.
92
2303
6110.
22352.
2331
3136.
3136.
2372
7746.
36427.
2399
12388.
21896.
422.126
± 0.500
RIC
2242
497393.
1907280.
2287
31269.
164132.
2307
21248.
21248.
2329
28736.
56832.
2346
4165630.
17449400.
2371
869376.
3440128.
2410
110909.
425113.
2400

HpCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 6850611 #1 SCANS 2230 TO 2430
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

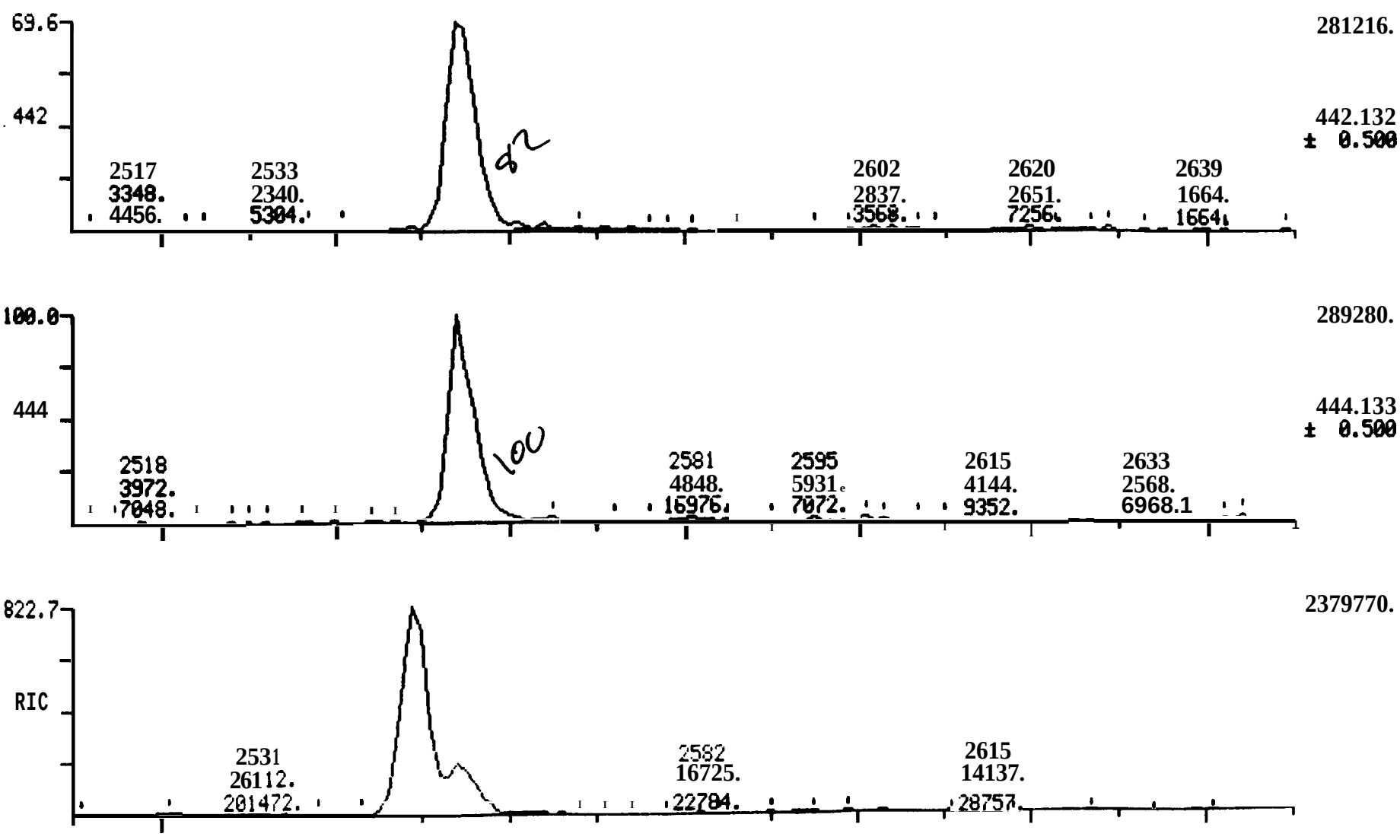



100.0
480
RIC
60898.
14368.
2268
3368.
7160.
2287
6931.
11952.
2308
1850.
5552.
2328
5690.
8688.
2348
5288.
5288.
2394
4493.
10040.
2242
497393.
1907280.
2287
31269.
2307
21248.
2329
20736.
56832.
2346
4165630.
17449488.
2371
869376.
3440120.
2410
110909.
2350

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I1 #1 SCANS 2510 TO 2650
03/26/91 8:51:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDF

1.83

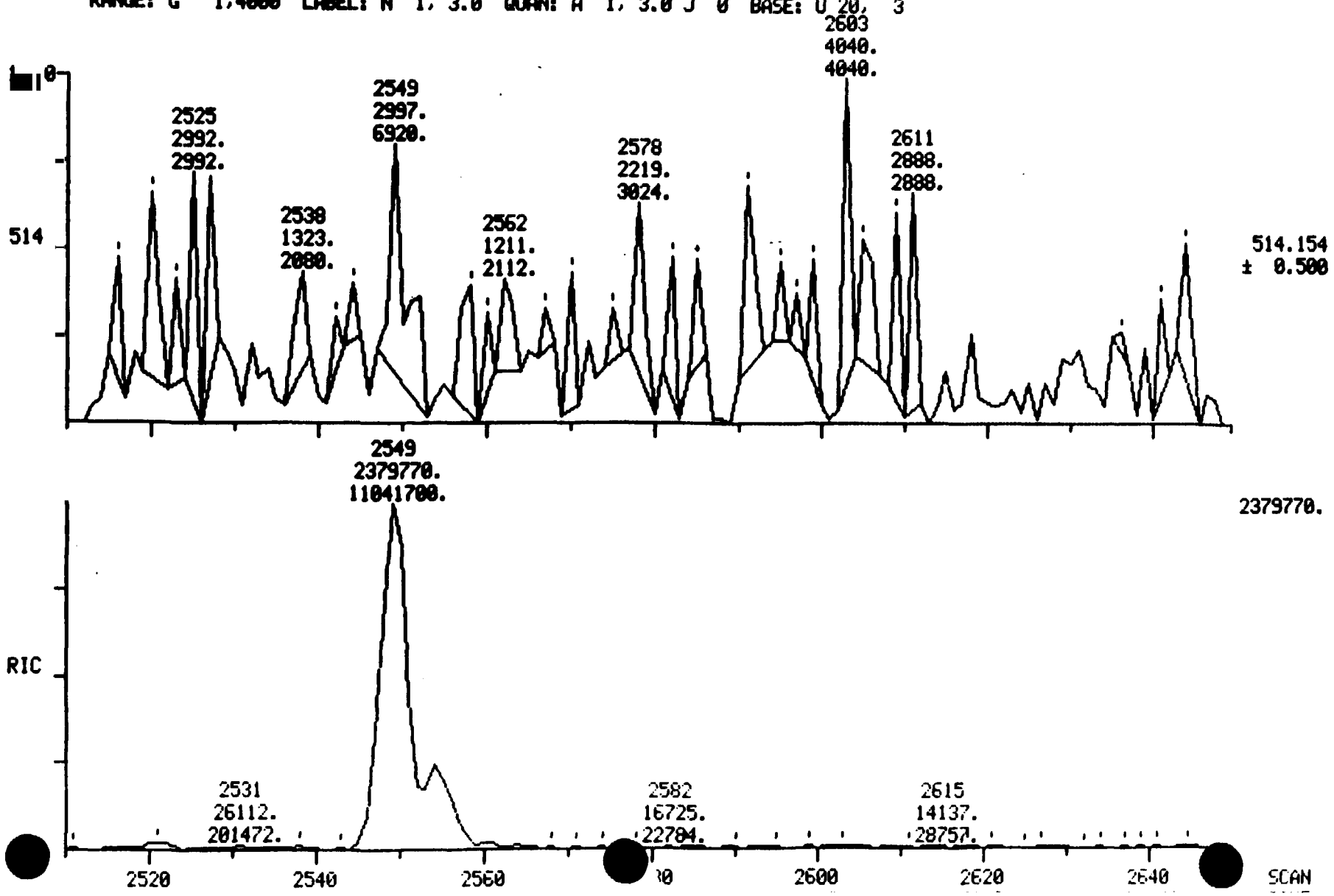


3200243

MIDRIC+MASS CHROMATOGRAM
03/26/91 8:51:00
SAMPLE: 2UL OF 685:06 STD I NAT DES @ 200PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506I1 #1
CALI: CAL910306A #2

SCANS 2510 TO 2650



3/26/91 a:51:56 SCAN 1 OF 3000
Acquisition started

Acquire Run 0:6850611 ACQUIRING
03/26/91 8:51:00 + 0:04 Free sectors: 27953 Scan: 3 of 3000
Sample: 2UL OF 685:06 STD I NATIVES @ 200PPB
Conds. : 60M DB-5/TOTALS.
Formula: Instrument: G3 Weight: 0.000
Submitted by: DM Analyst: PMP Acct. No: PC4622

********** GC PARAMETERS **********
Loaded CC Desc:BW Current CC oven tmp: 71 DegC Injector : 300 DegC
Current CC Desc:BW GC elapsed time : 1:30 min Int.oven : 275 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid poritive ion

MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo marc	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.450	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.130	0.052	3	100	40	1	0	Pos
9	331.630	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.630	342.150	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Por
16	355.650	336.150	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.430	370.150	0.052	3	100	40	1	0'	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of rcqu buffers	16	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	l	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	rnmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/26/91 9:28:27 SCAN 1769 OF 3000

HID scan
Scan time: 1.200 s

Desc: 92
Samp. Int.: 0.200ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	HPW	MFW	HA	TH	BL	ION
1	337.650	338.130	0.054	3	100	40	1	0	Pos
a	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.130	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353.650	334.150	0.034	3	100	40	1	0	Pos
6	355.650	336.150	0.052	3	100	40	1	0	Pos
7	357.650	358.130	0.034	3	100	40	1	0	Pos
8	367.650	368.130	0.052	3	100	40	1	0	Pos
9	369.450	370.150	0.052	3	100	40	1	0	Pos
10	371.650	372.150	0.052	3	100	40	1	0	Pos
11	373.450	374.130	0.052	3	100	40	1	0	Pos
12	375.650	376.130	0.052	3	100	40	1	0	Pos
13	379.630	380.150	0.032	3	100	40	1	0	Pos
14	381.650	382.150	0.032	3	100	40	1	0	Pos
13	385.630	386.130	0.052	3	100	40	1	0	Pos
16	387.630	388.130	0.052	3	100	40	1	0	Pos
17	389.650	390.150	0.052	3	100	40	1	0	Pos
18	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.650	402.150	0.052	3	100	40	1	0	Pos
20	403.630	404.130	0.034	3	100	40	1	0	Pos
21	443.550	446.050	0.052	3	100	40	1	0	Po.

3/26/91 9:37:42 SCAN 2219 OF 3000

MID scan
Scan time: 1.200 s

Desc: 93
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	371.630	372.150	0.052	3	100	40	1	0	Po.
2	373.630	374.150	0.052	3	100	40	1	0	Po.
3	373.650	376.150	0.032	3	100	40	1	0	Po.
4	385.630	386.150	0.032	3	100	40	1	0	Po.
5	387.630	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	60.
7	391.650	392.150	0.052	3	100	40	1	0	Por
8	401.650	402.150	0.052	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	405.330	406.050	0.054	3	100	40	1	0	Pos
11	407.330	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.034	3	100	40	1	0	Por
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.550	422.050	0.054	3	100	40	1	0	Pos
15	423.550	424.050	0.034	3	100	40	1	0	Pos
16	423.550	426.050	0.032	3	100	40	1	0	Po.
17	435.550	436.050	0.052	3	100	40	1	0	Po.
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	Por

3/26/91 9:43:09 SCAN 2484 OF 3000

MID scan
Sean time: 1.200 s

Desc: 94
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Por
3	409.550	410.050	0.054	3	100	40	1	0	Po.

3300244

4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
8	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.330	430.030	0.052	3	100	40	1	0	Pos
10	441.530	442.050	0.034	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	400.050	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3/26/91 9:48:42 SCAN 2753
Acquisition stopped

3/26/91 9:48:44
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2753 Centroid

Mode	Scans	Secs	Out of	%	Perks per scan	per sec	
Centroid	2750	635.9	3300.0	19.3	84023.	31.	25.

3200245

MIDRIC
03/26/91 9:53:00
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

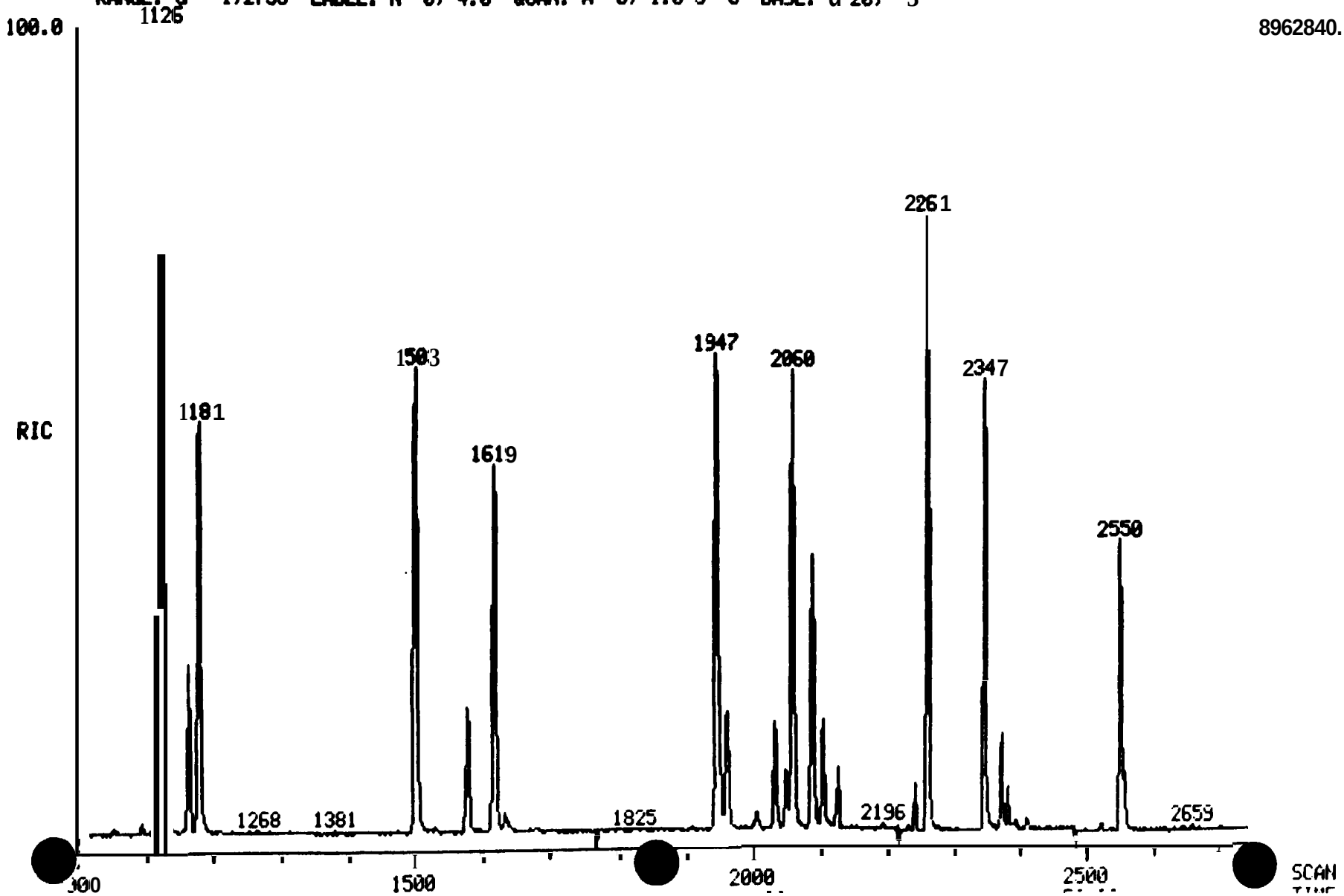
DATA: 68506I2 #1
CALI: CAL910306A #2

SCANS 1000 TO 2750

calc. nm
QC FB

3-27-91
3-27-91

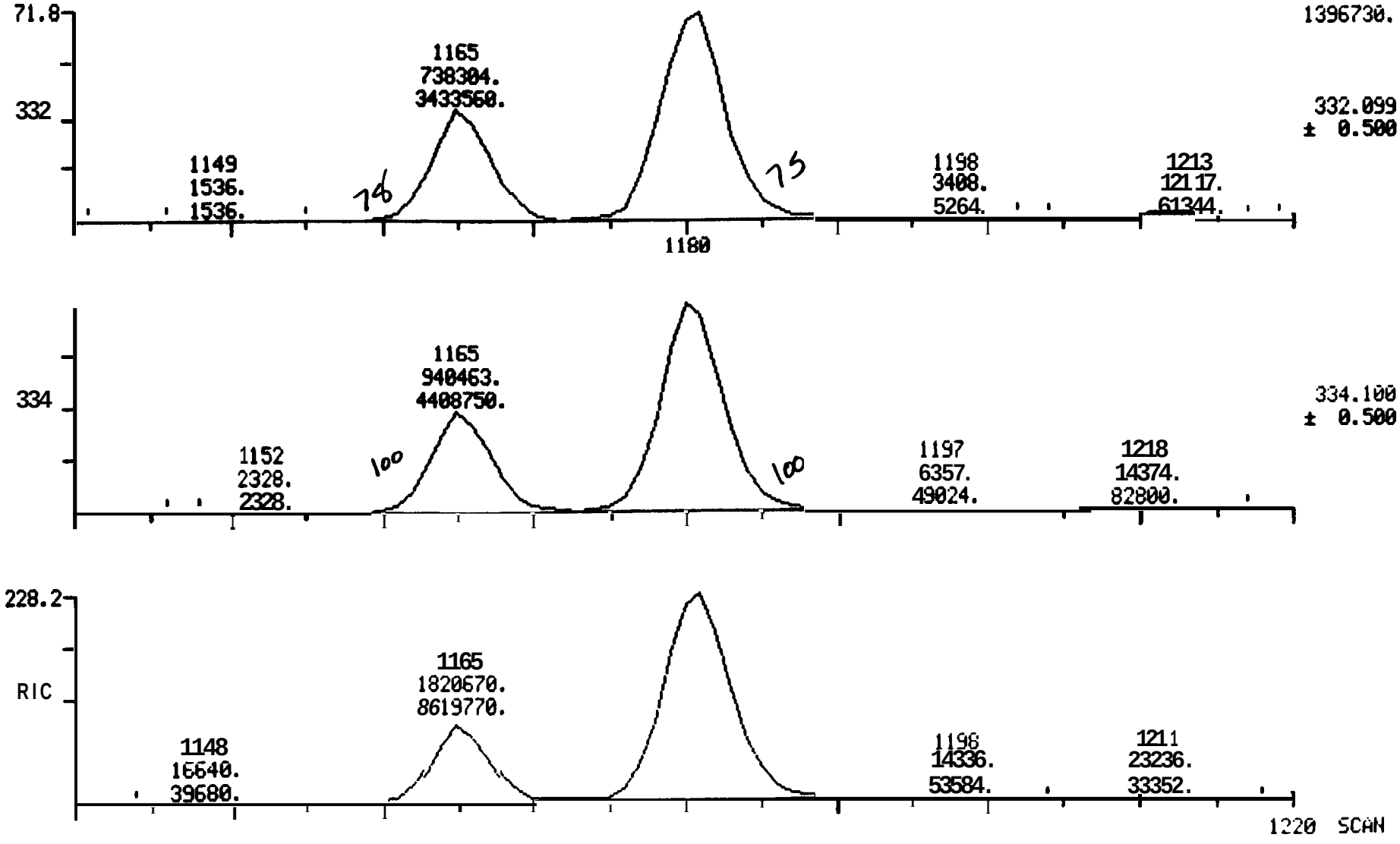
8962840.



685:06

1.06

RANGE:

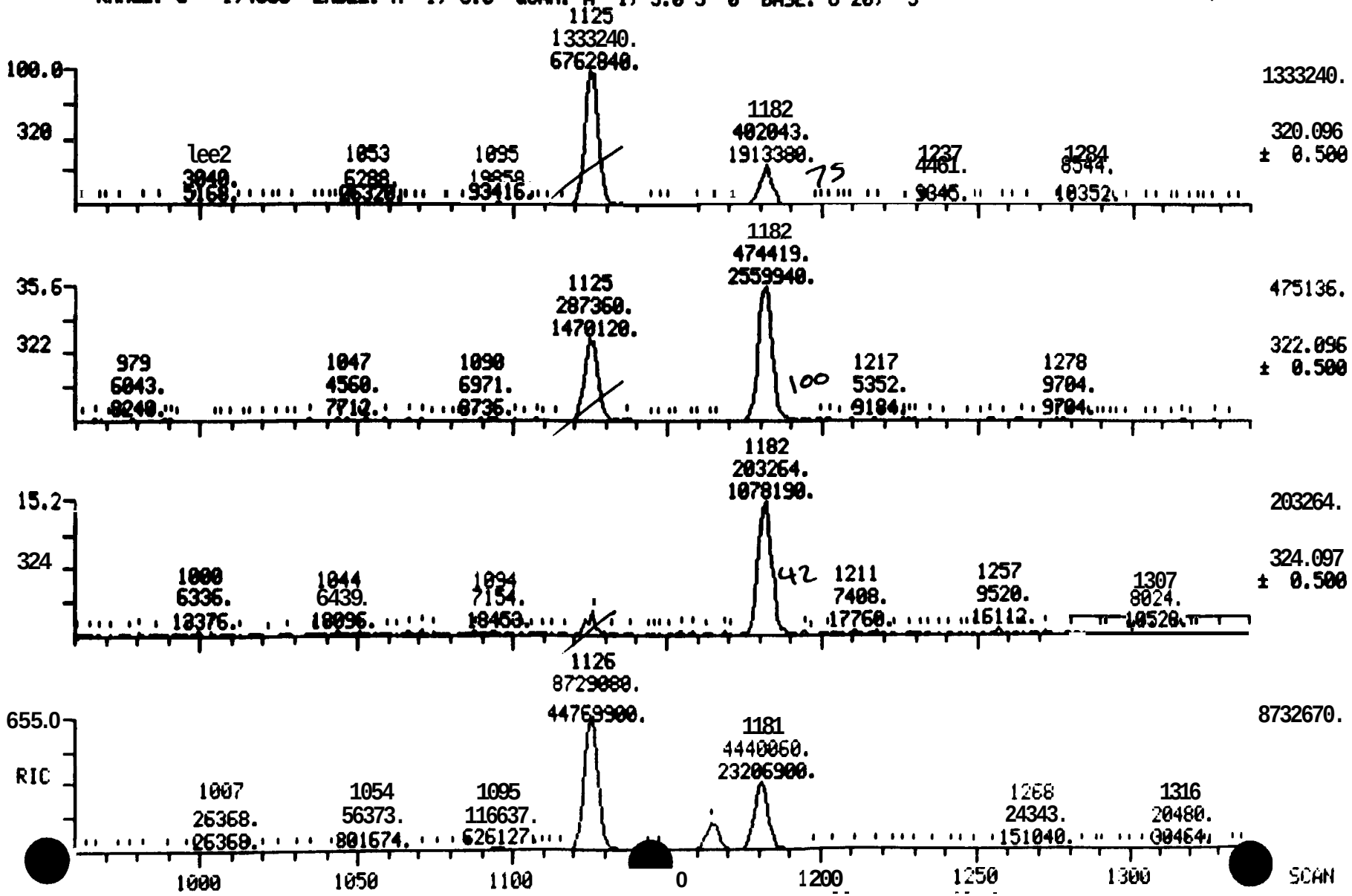


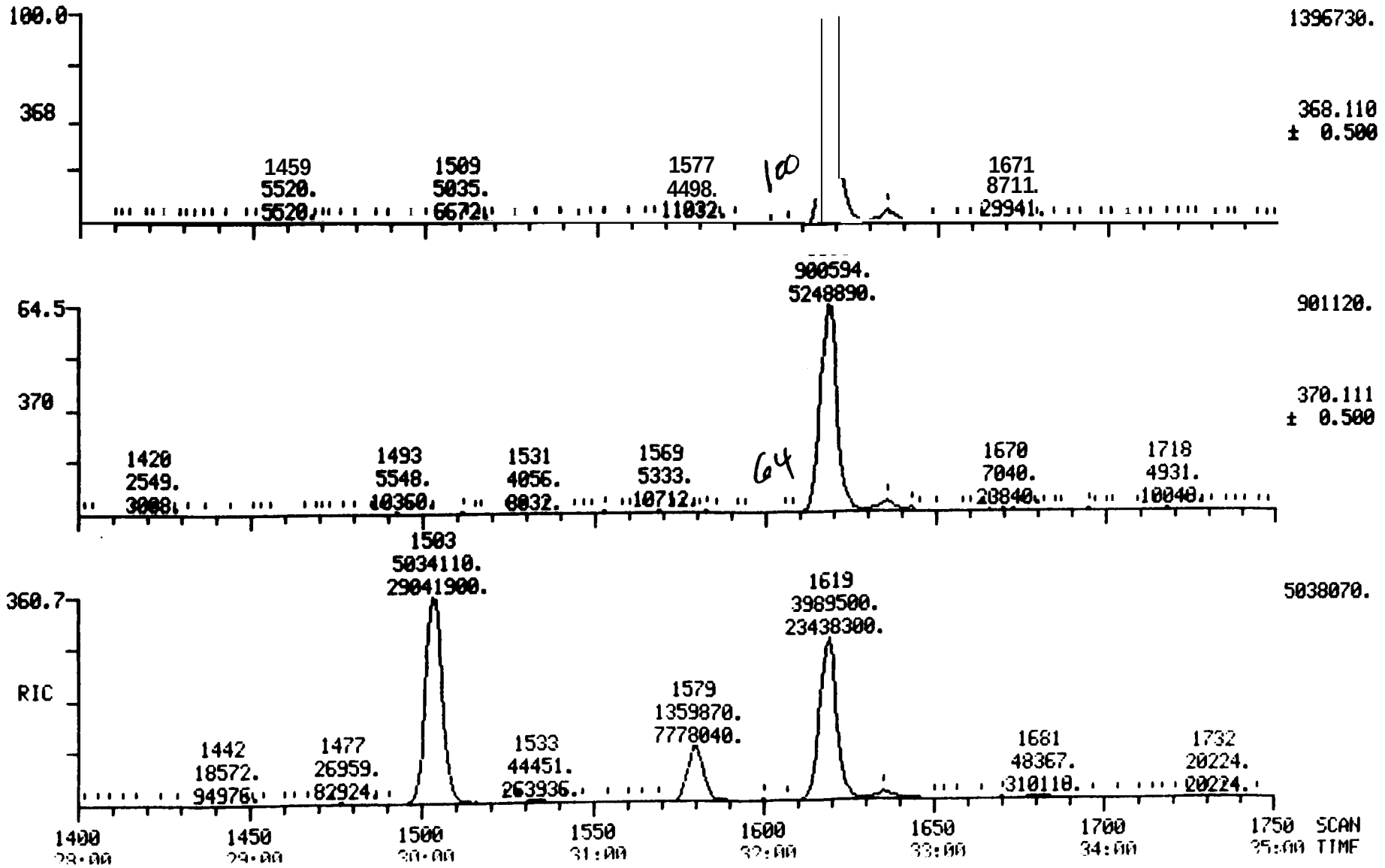
3200240

TCDD

1.34

MIDRIC+MASS CHROMATOGRAMS DATA: 6850612 #1 SCANS 960 TO 1340
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



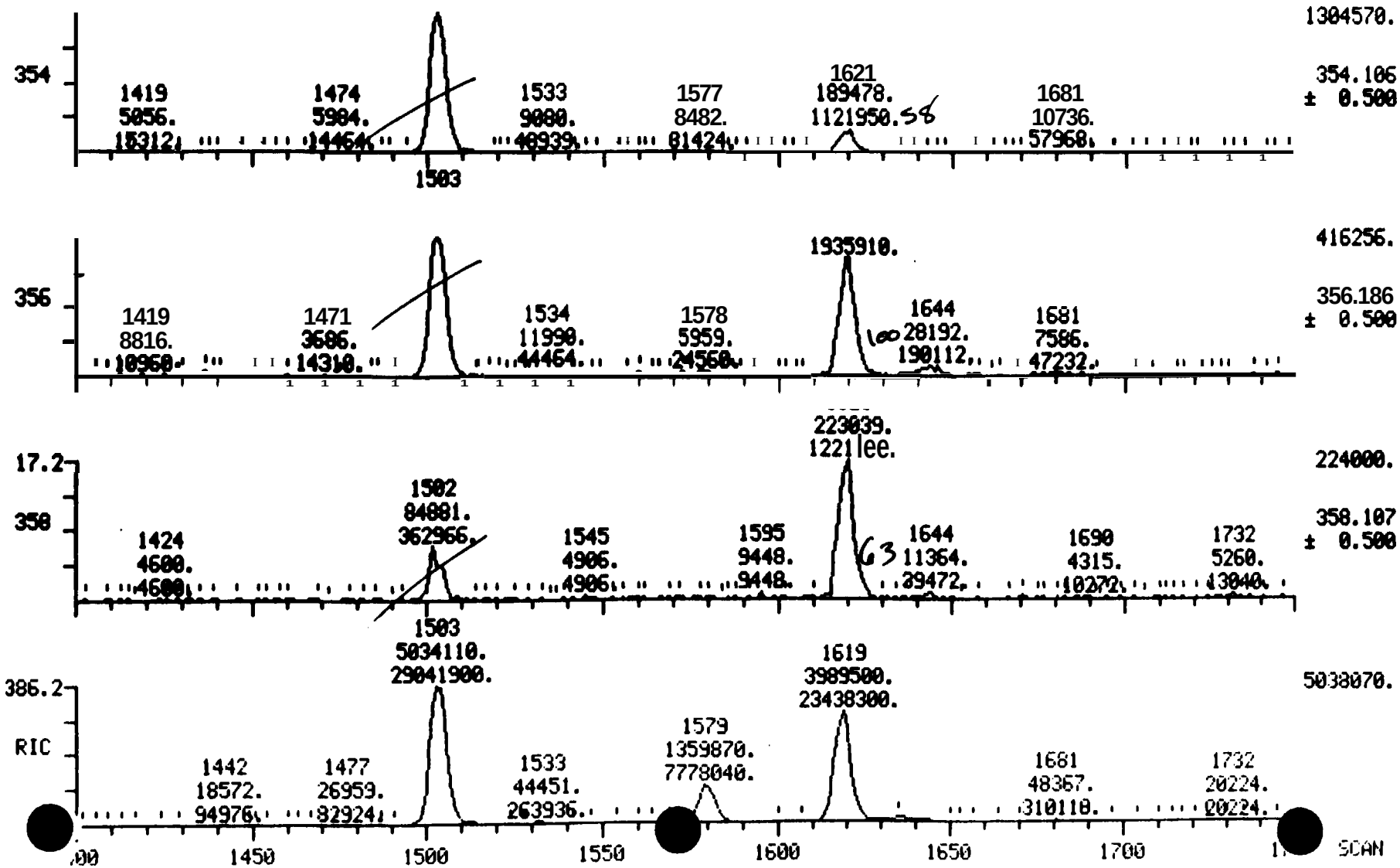

100.0
368
1396730.
368.110
± 0.500
1459
5520.
5520.
1509
5035.
6672.
1577
4498.
11032.
100
1671
8711.
29941.
64.5
370
901120.
370.111
± 0.500
900594.
5248890.
1420
2549.
3008.
1493
5548.
10360.
1531
4056.
8032.
1569
5333.
10712.
64
1670
7040.
20840.
1718
4931.
10040.
360.7
RIC
5038070.
1503
5034110.
29041900.
1619
3989500.
23438300.
1579
1359870.
7778040.
1442
18572.
94976.
1477
26959.
82924.
1533
44451.
263936.
1681
48367.
310110.
1732
20224.
20224.
1400
28:00
1450
29:00
1500
30:00
1550
31:00
1600
32:00
1650
33:00
1700
34:00
1750
35:00
SCAN
TIME

3200247

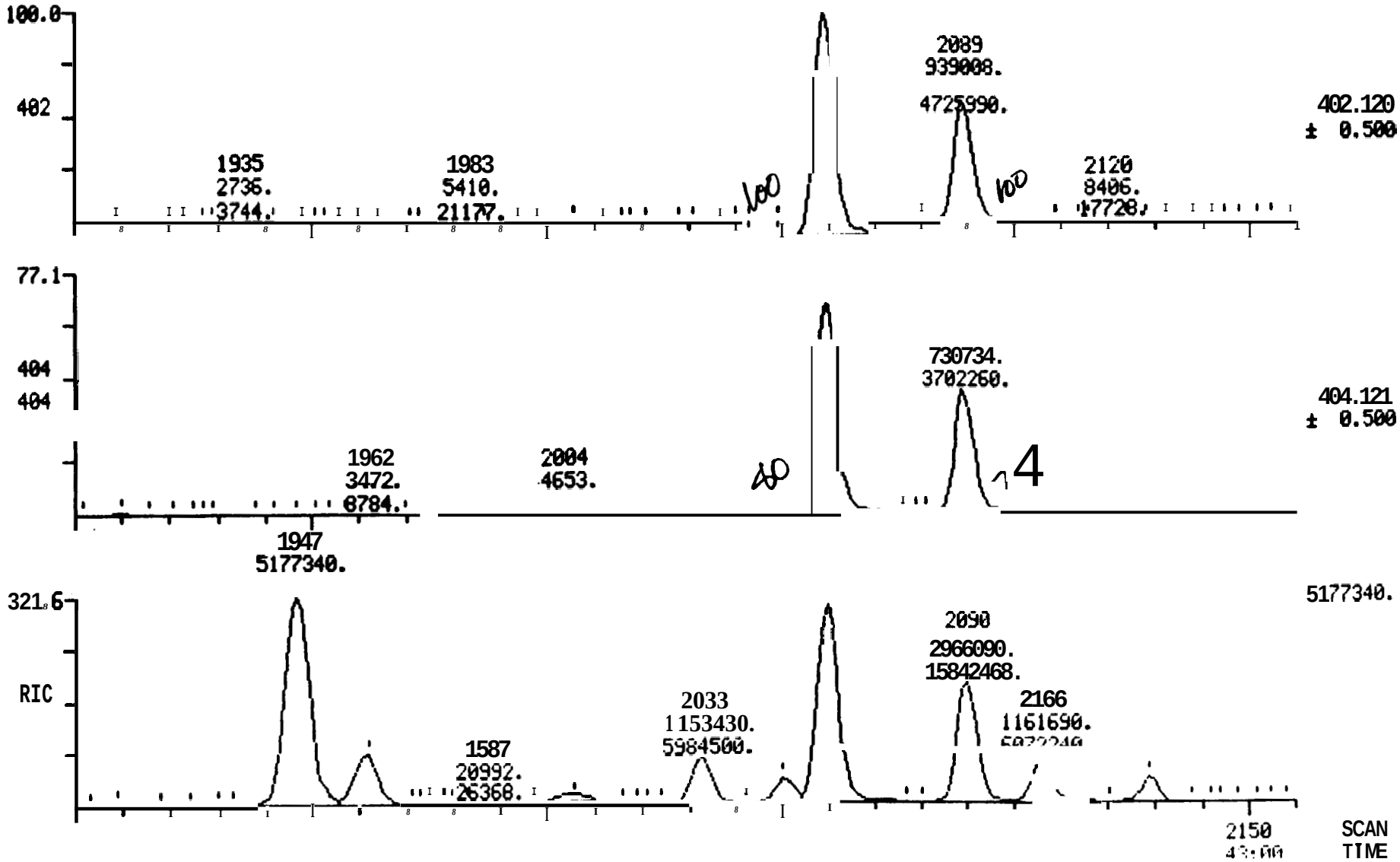
PeCDD

1.17

MIDRIC+MASS CHROMATOGRAMS DATA: 685061 2 #1 SCANS 1400 TO 1750
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



0.899

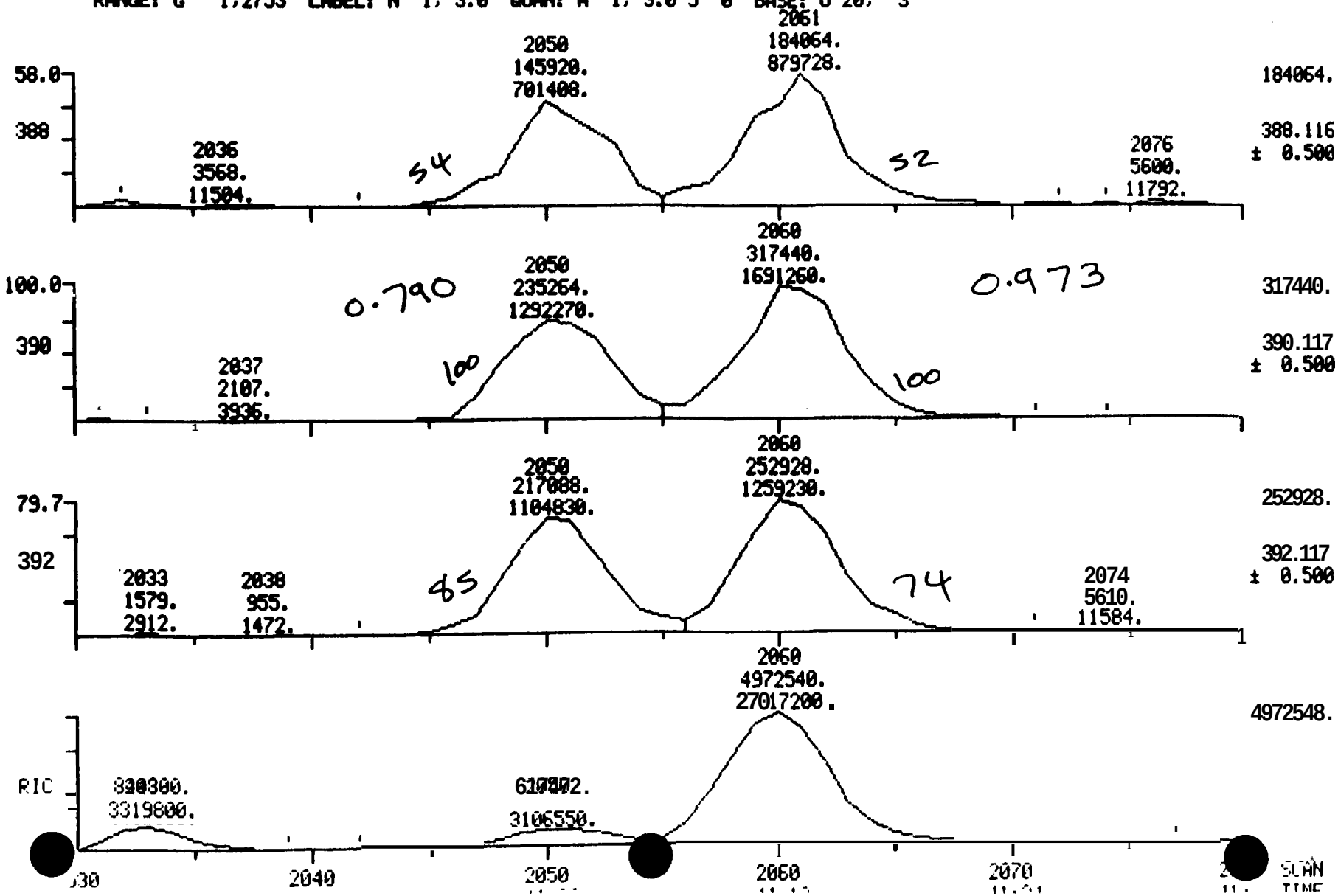

100.0
402
1935
2736.
3744.
1983
5410.
21177.
100
2089
939008.
4725990.
100
2120
8406.
17728.
402.120
± 0.500
77.1
404
404
1962
3472.
6784.
2004
4653.
80
730734.
3702260.
4
404.121
± 0.500
1947
5177340.
321.6
RIC
1587
20992.
26368.
2033
1153430.
5984500.
2090
2966090.
15842468.
2166
1161690.
5177340.
2150
SCAN
TIME

3200243

1/1

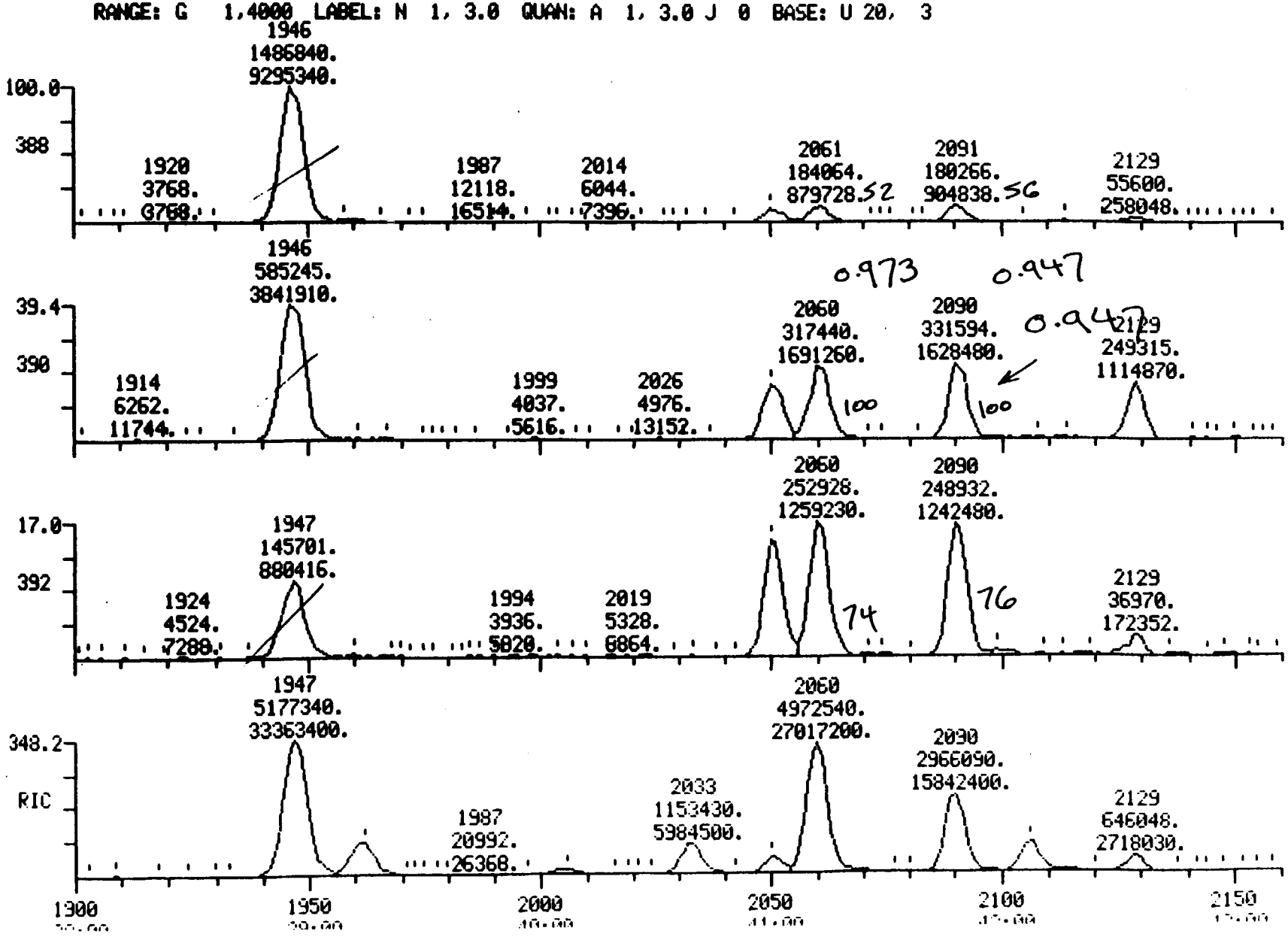
HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 685061 2 #1 SCANS 2030 TO 2080
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



HXCDD

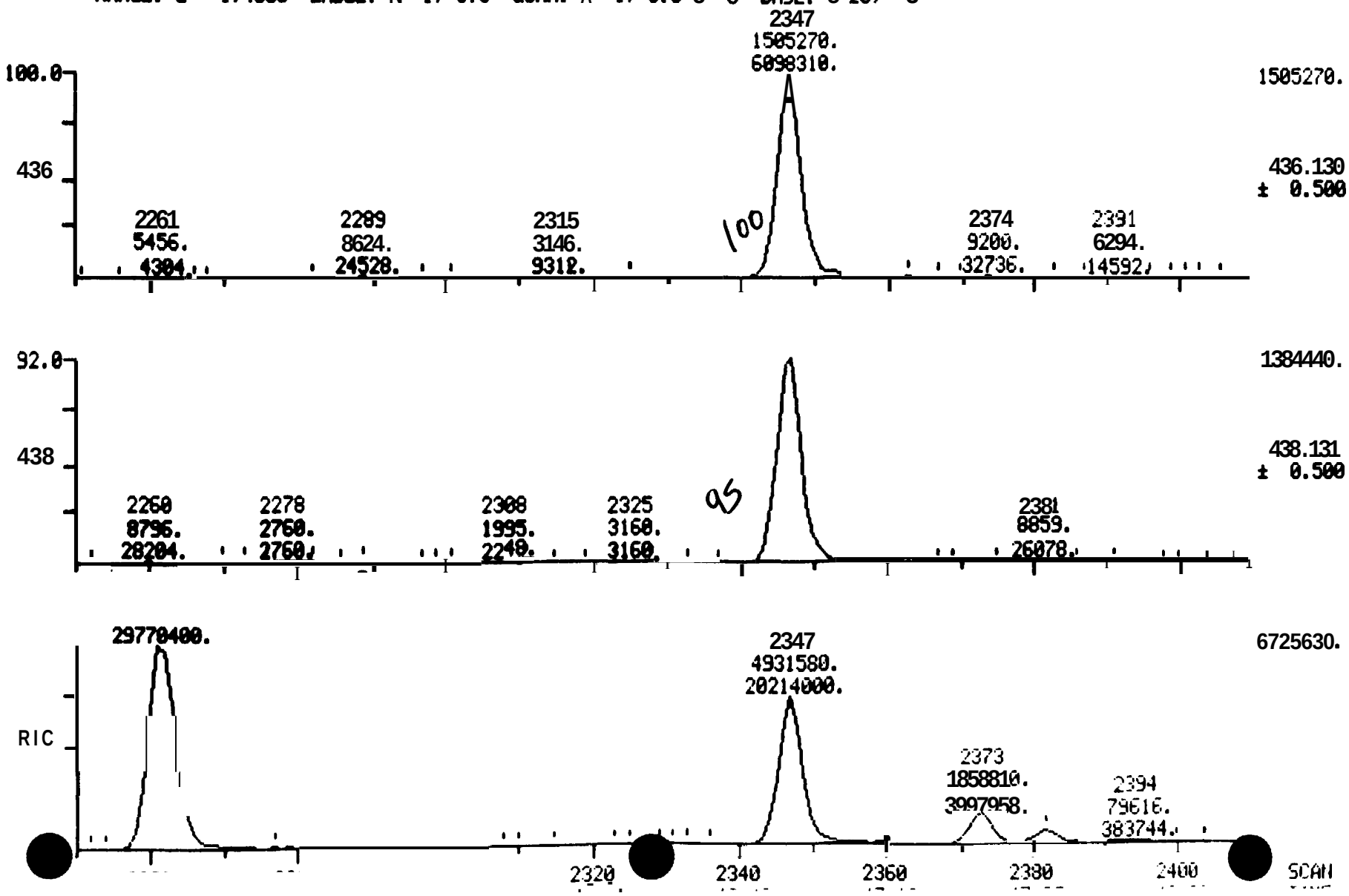
MIDRIC+MASS CHROMATOGRAMS DATA: 685061 2 #1 SCANS 1900 TO 2160
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200243

MIDRIC+MASS CHROMATOGRAMS DATA: 685061 2 #1 SCANS 2250 TO 2410
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

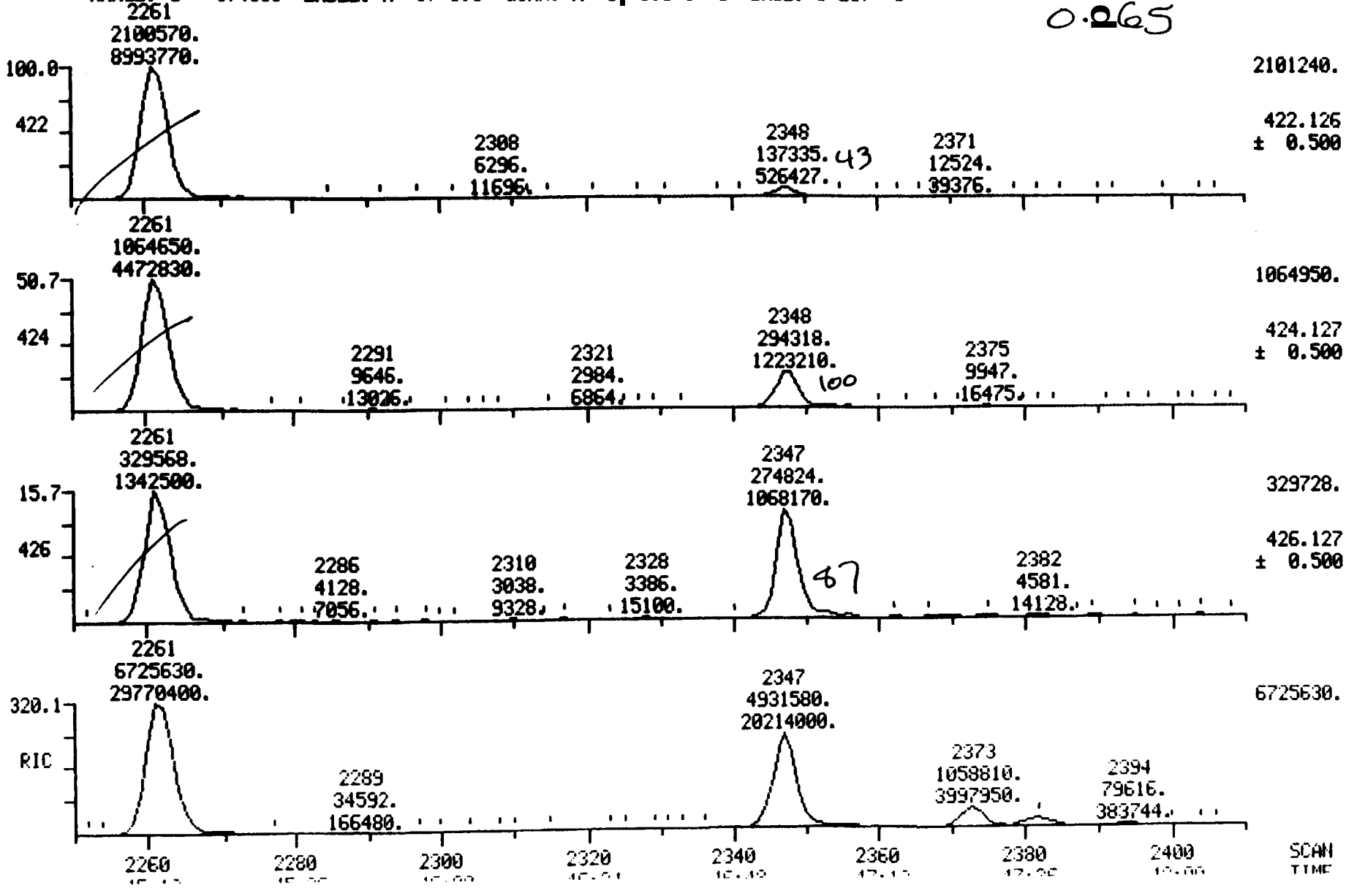
0.704



HpCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 6850612 #1 SCANS 2250 TO 2410
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI [illegible]IVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

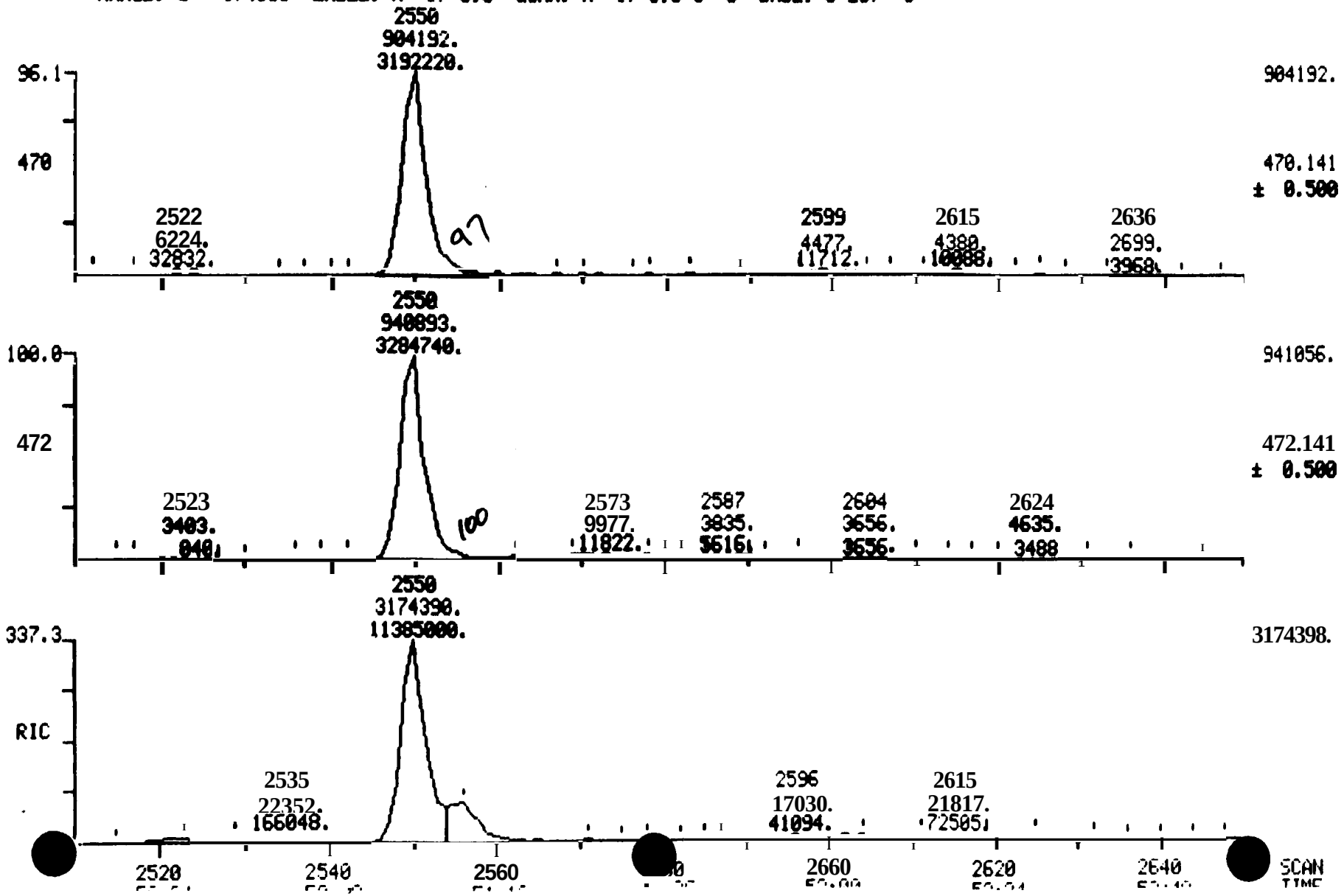
0.265



3200250

MIDRIC+MASS CHROMATOGRAMS DATA: 6850612 #1 SCANS 2510 TO 2650
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.384



MIDRIC+MASS CHROMATOGRAMS DATA: 6850612 #1 SCANS 2510 TO 2658

03/26/91 9:53:00 CALI: CAL910306A #2

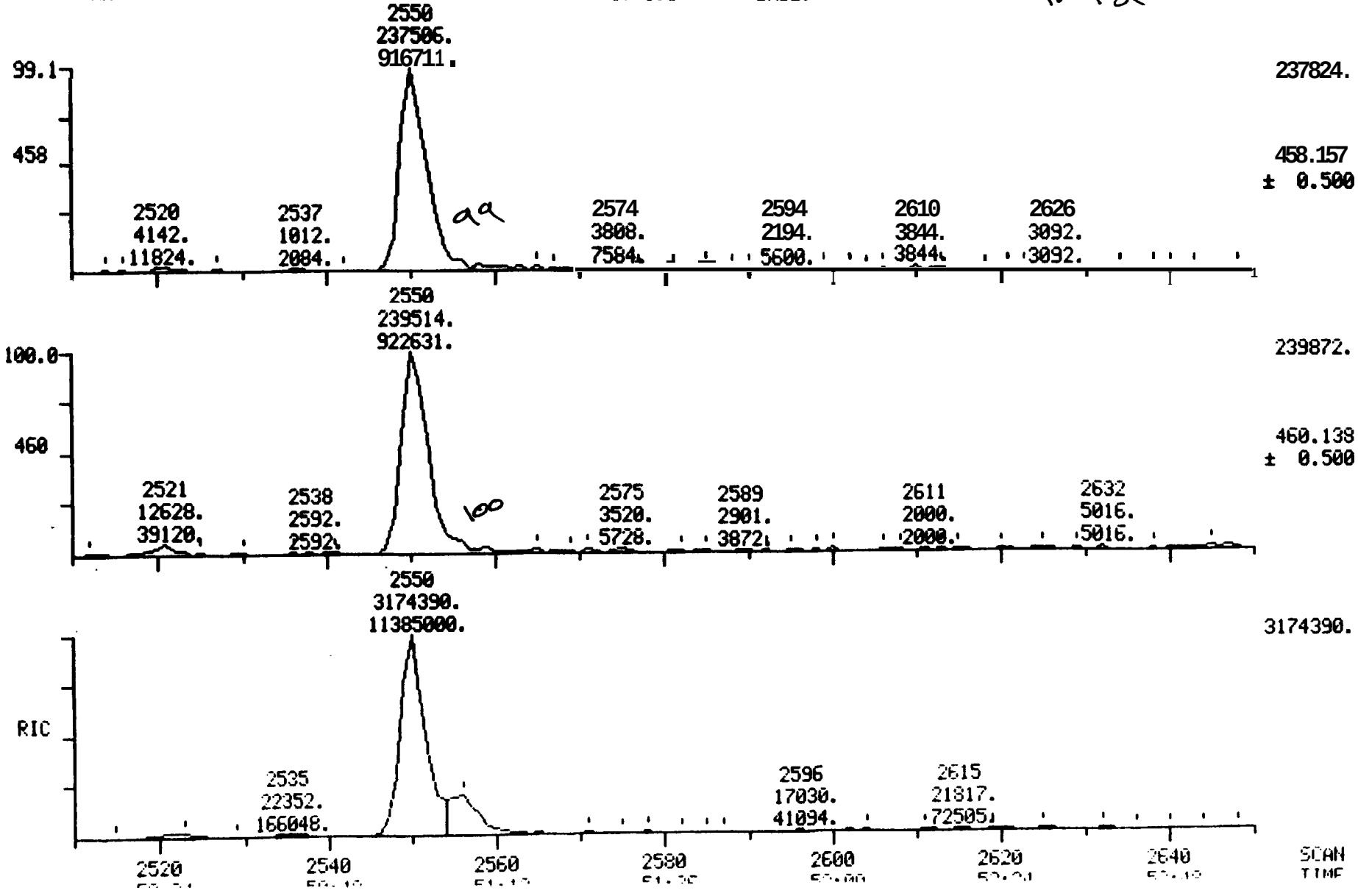
SAMPLE: 2UL OF685:06 STOI NATIVES e 200PPB RUN2

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

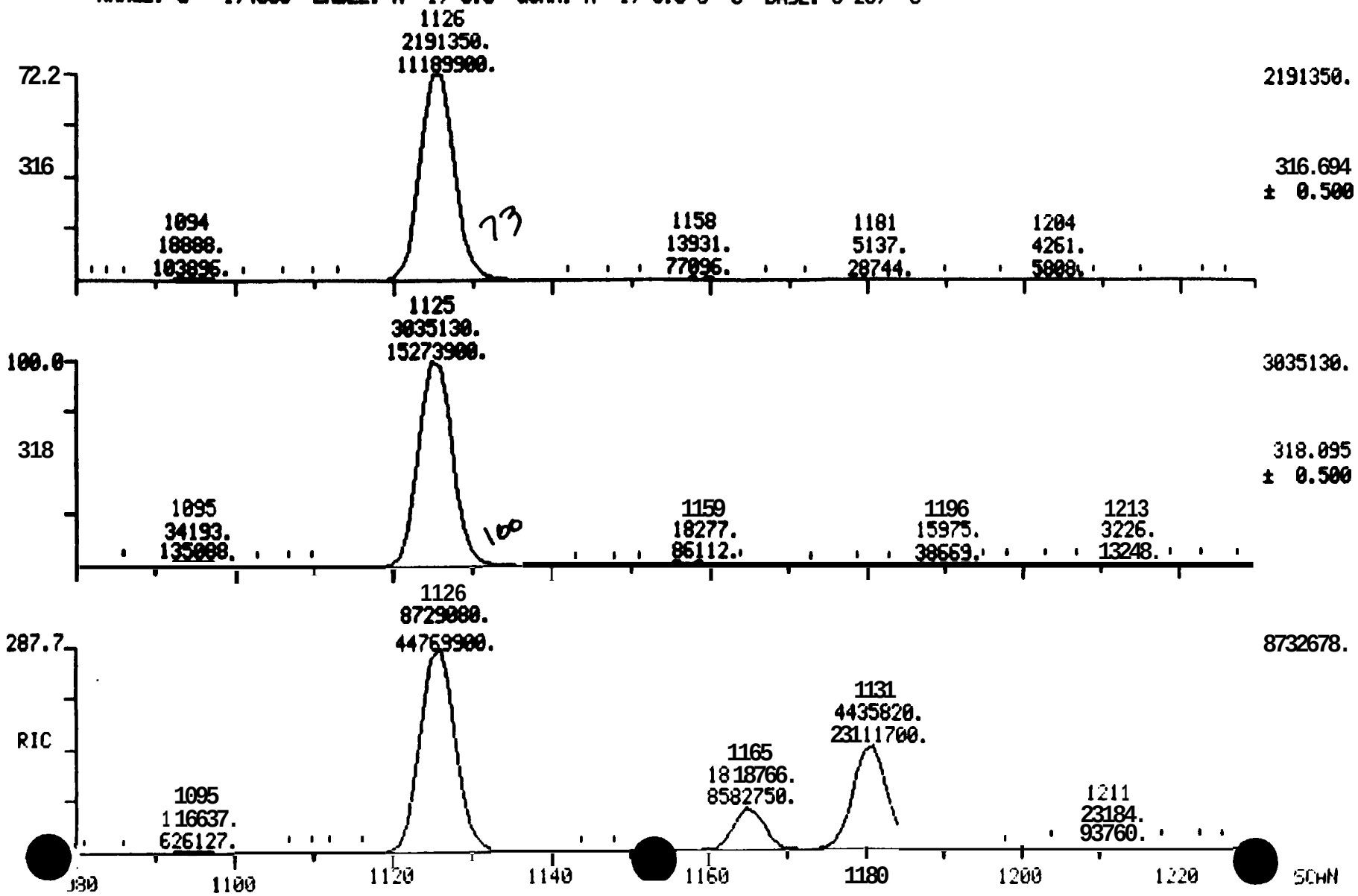
OCDD

1.42

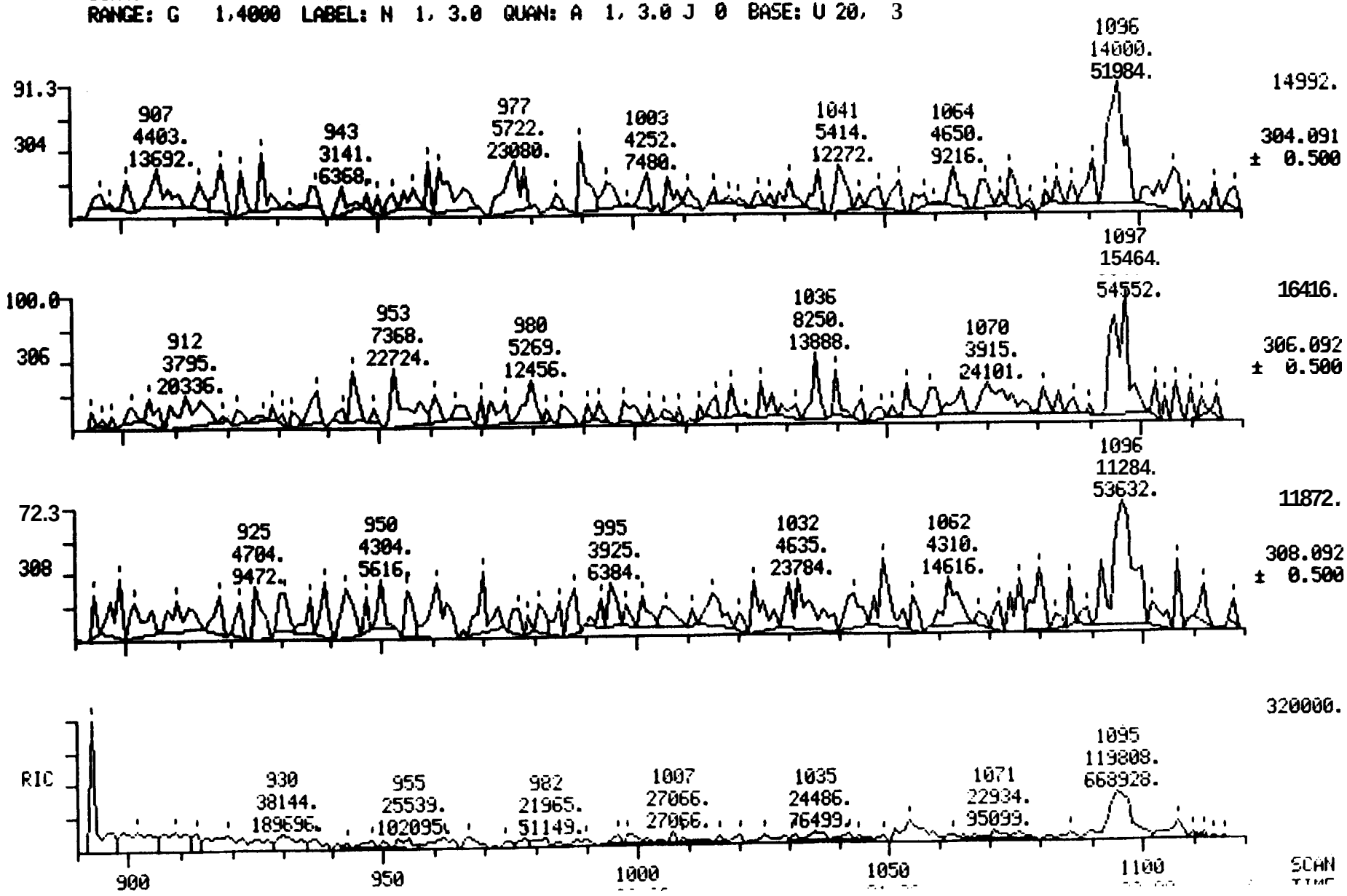


MIDRIC+MASS CHROMATOGRAMS DATA: 6850612 #1 SCANS 1080 TO 1230
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.69



MIDRIC+MASS CHROMATOGRAMS DATA: 6850612 #1 SCANS 890 TO 1128
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

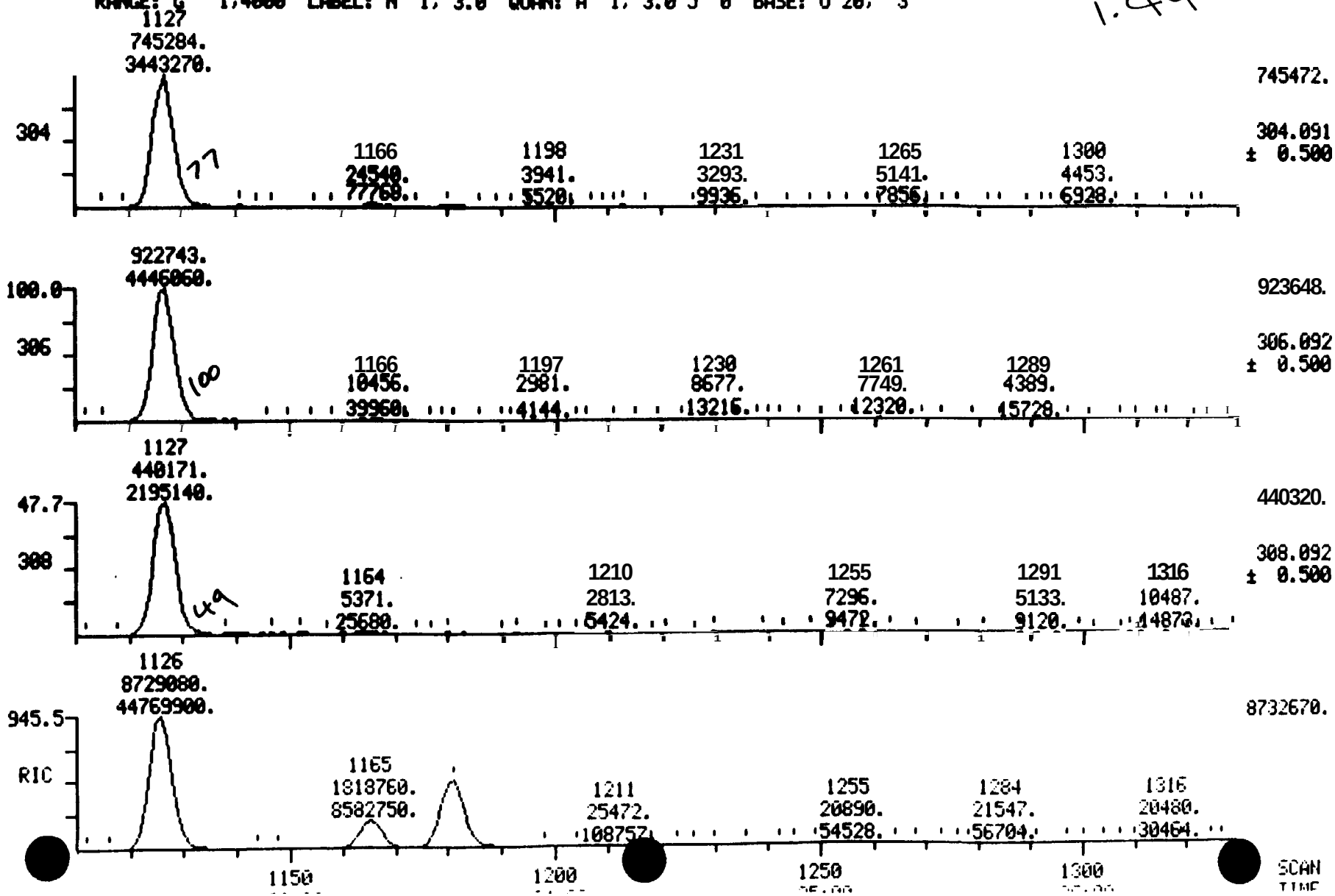


2520252

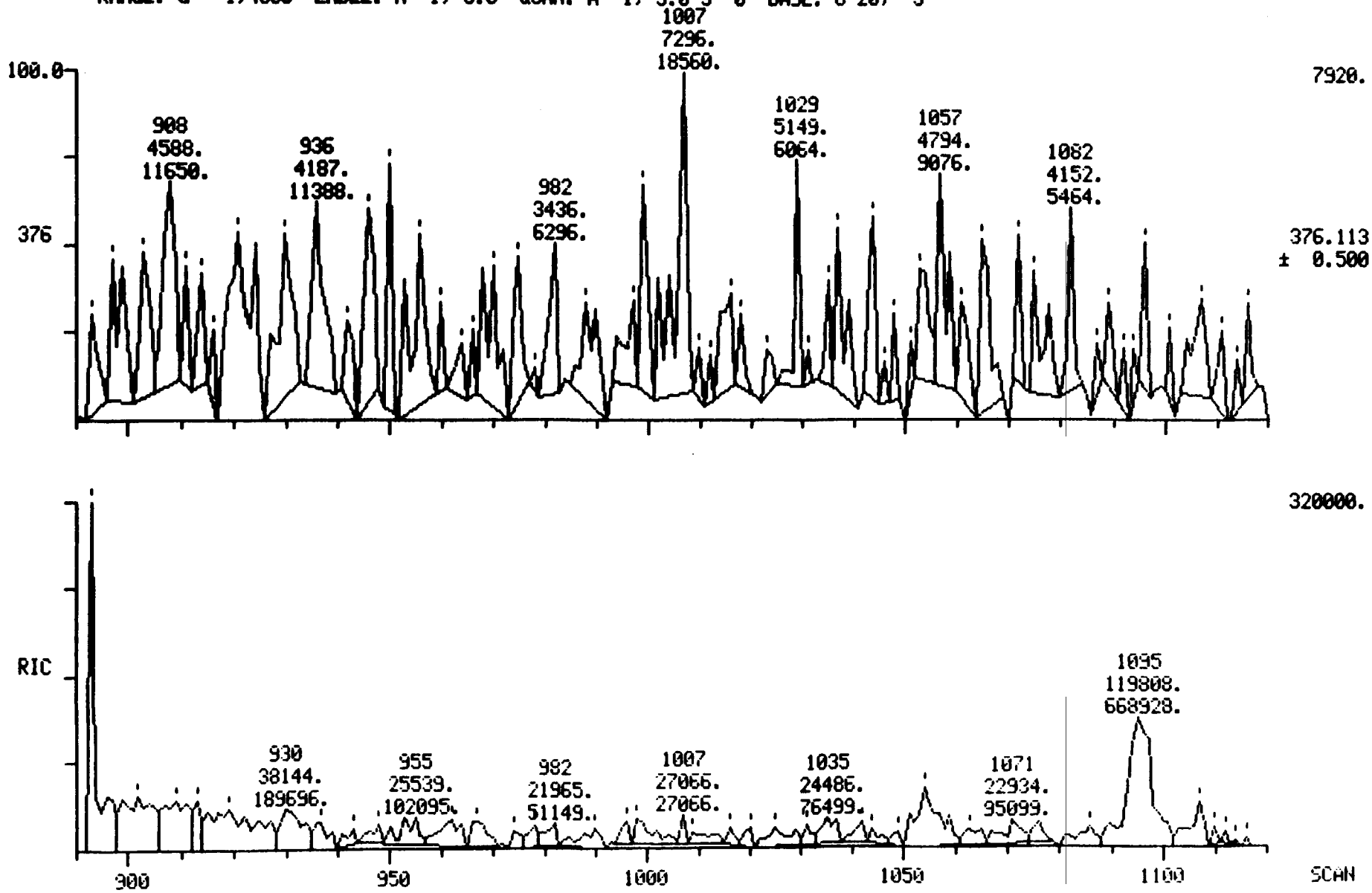
TCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 685061I2 #1 SCANS 1110 TO 1330
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.49

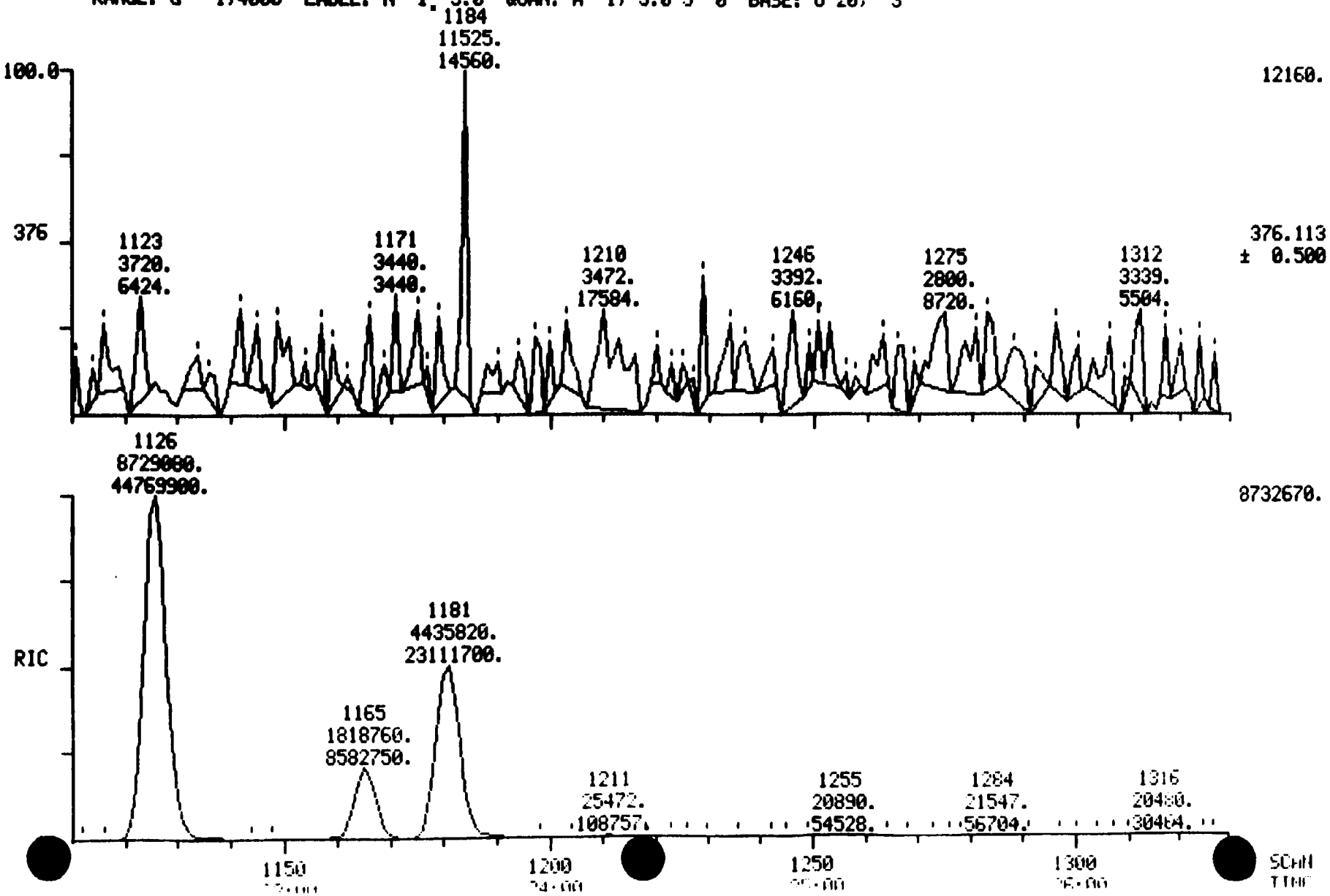


MIDRIC+MASS CHROMATOGRAM DATA: 6850612 #1 SCANS ∞ TO 1120
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI ▭ VES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

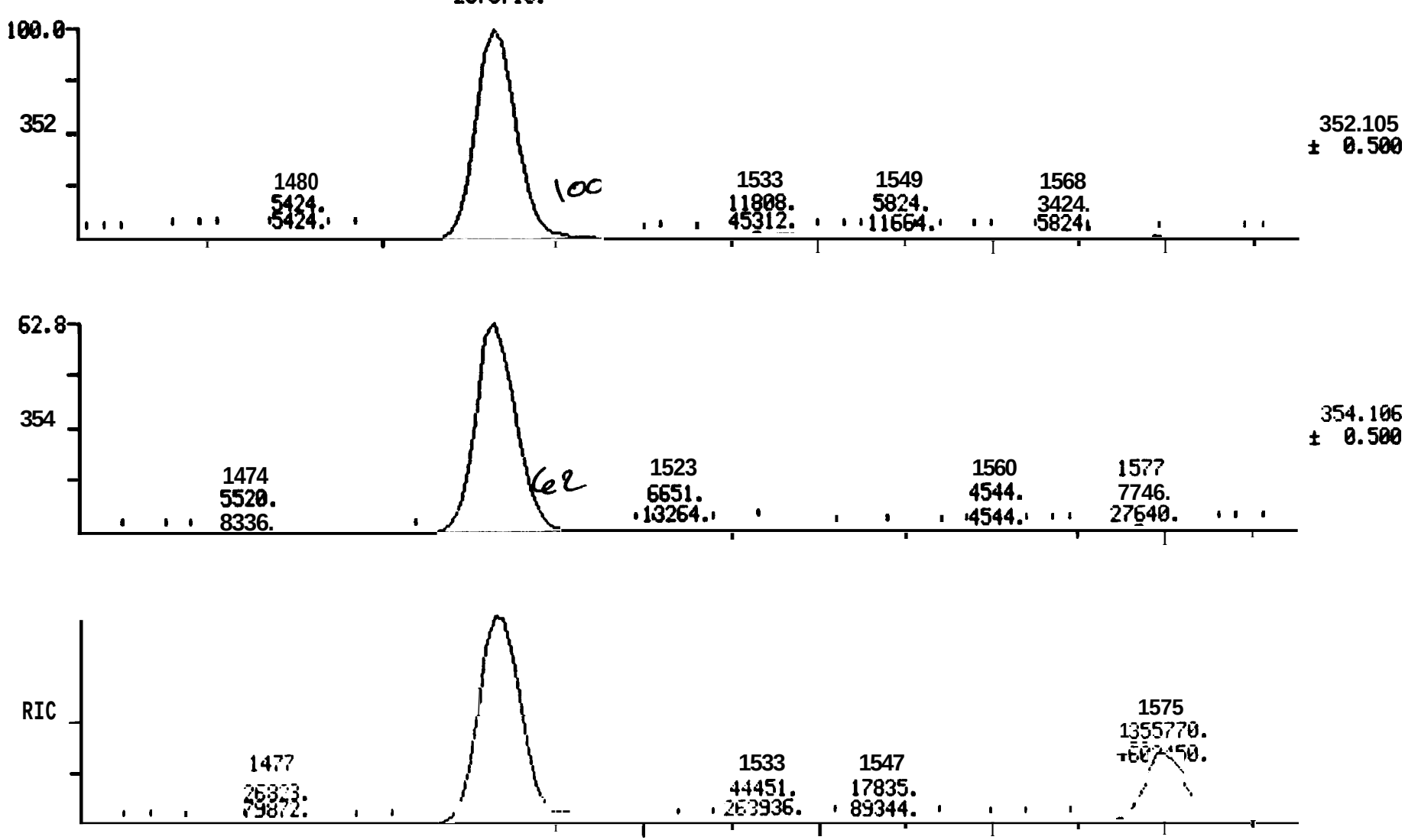


320025C

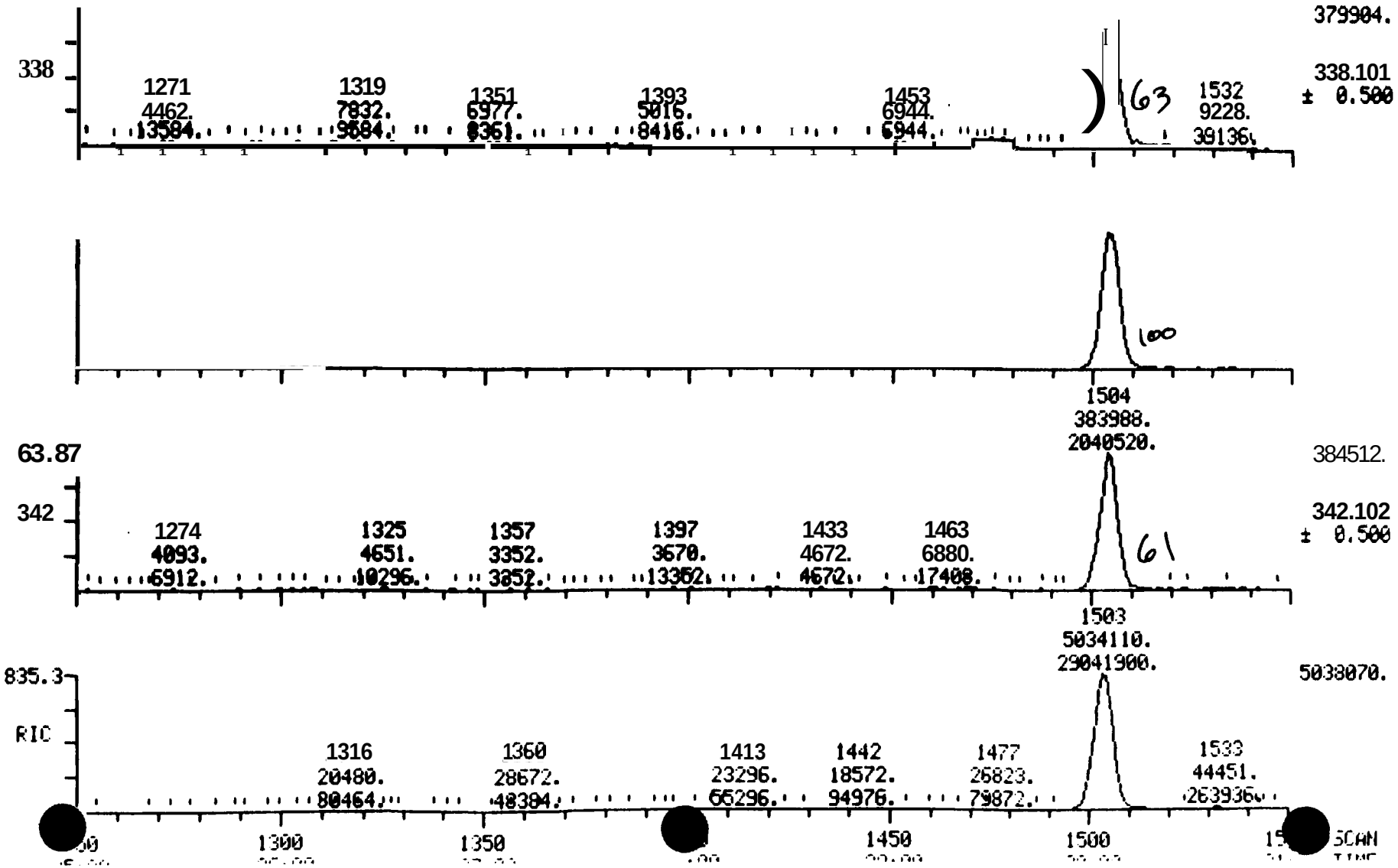
MIDRIC+MASS CHROMATOGRAM DATA: 68506I2 #1 SCANS 1110 TO 1330
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



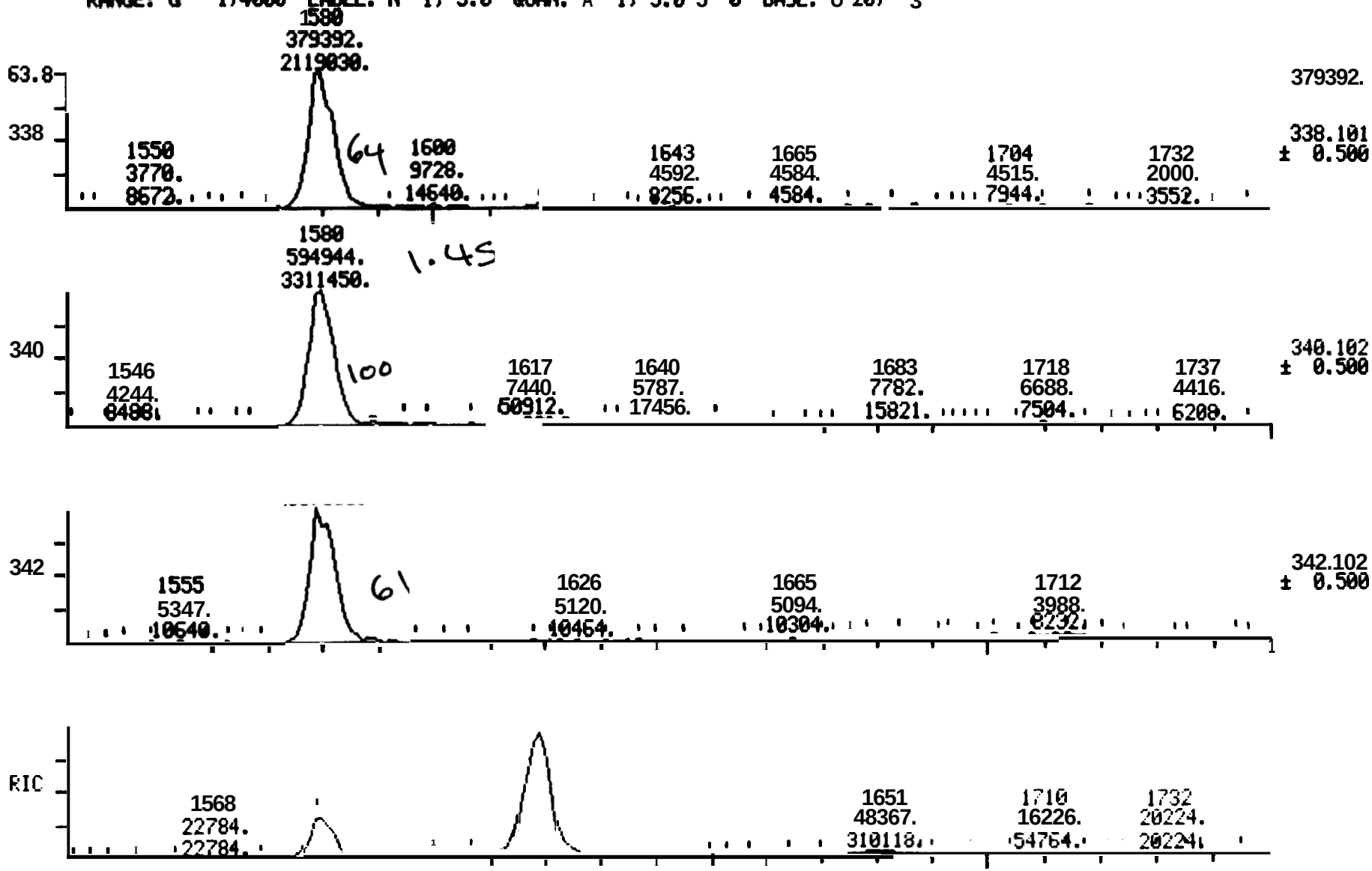
MIDRIC+MASS CHROMATOGRAMS DATU: 6850612 #1 SCANS 1455 TO 1595 1.17
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



PecDF

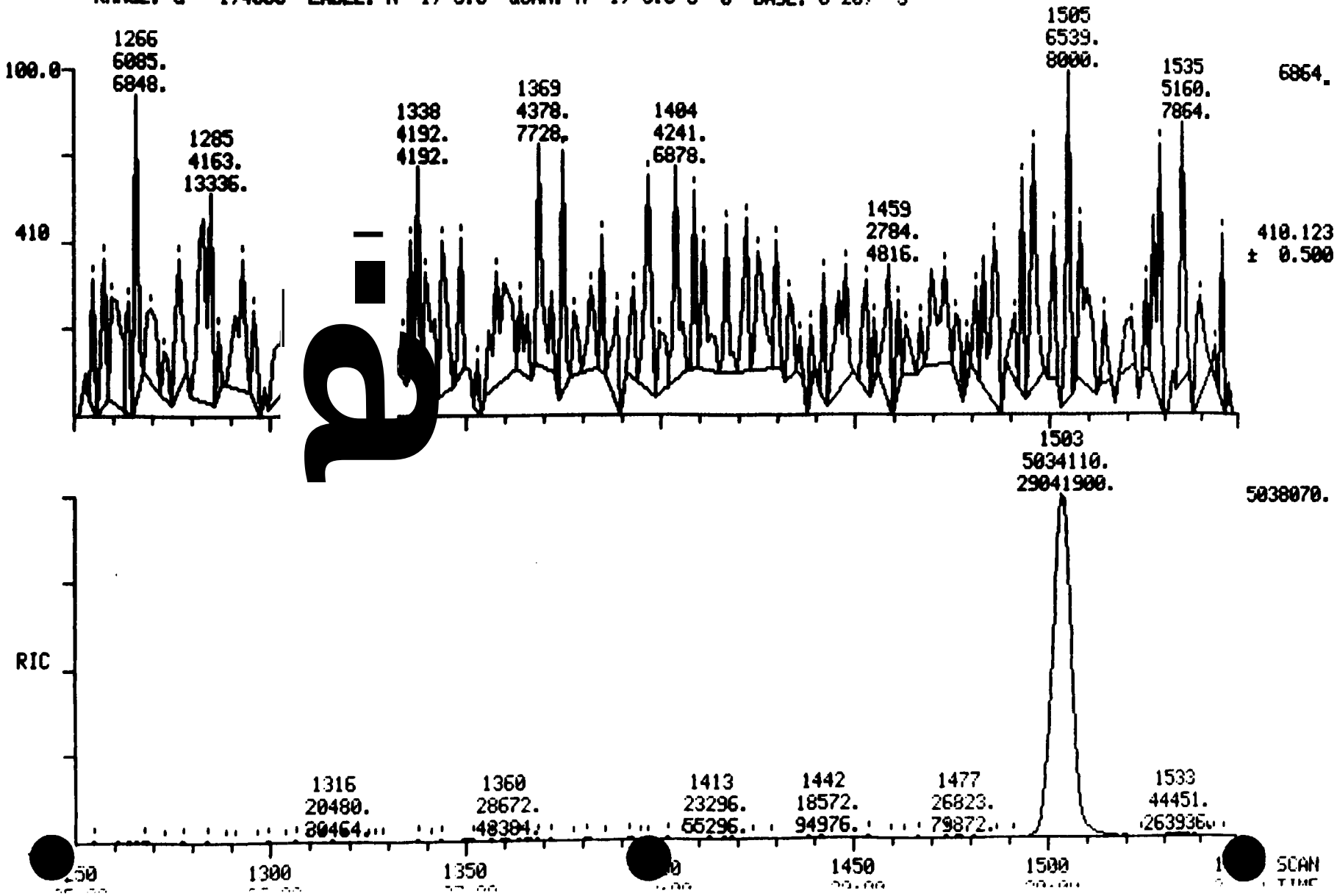

379904.
338
338.101
± 0.500
1271
4462.
13584.
1319
7832.
9684.
1351
6977.
8361.
1393
5016.
8416.
1453
6944.
6944.
63
1532
9228.
39136.
100
1504
383988.
2040520.
63.87
384512.
342
342.102
± 0.500
1274
4093.
6912.
1325
4651.
10296.
1357
3352.
3352.
1397
3670.
13362.
1433
4672.
4672.
1463
6880.
17408.
61
1503
5034110.
29041900.
835.3
5038070.
RIC
1316
20480.
80464.
1360
28672.
48384.
1413
23296.
66296.
1442
18572.
94976.
1477
26823.
79872.
1533
44451.
263936.
1300
1350
1450
1500
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I2 #1 SCANS 1535 TO 1750
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

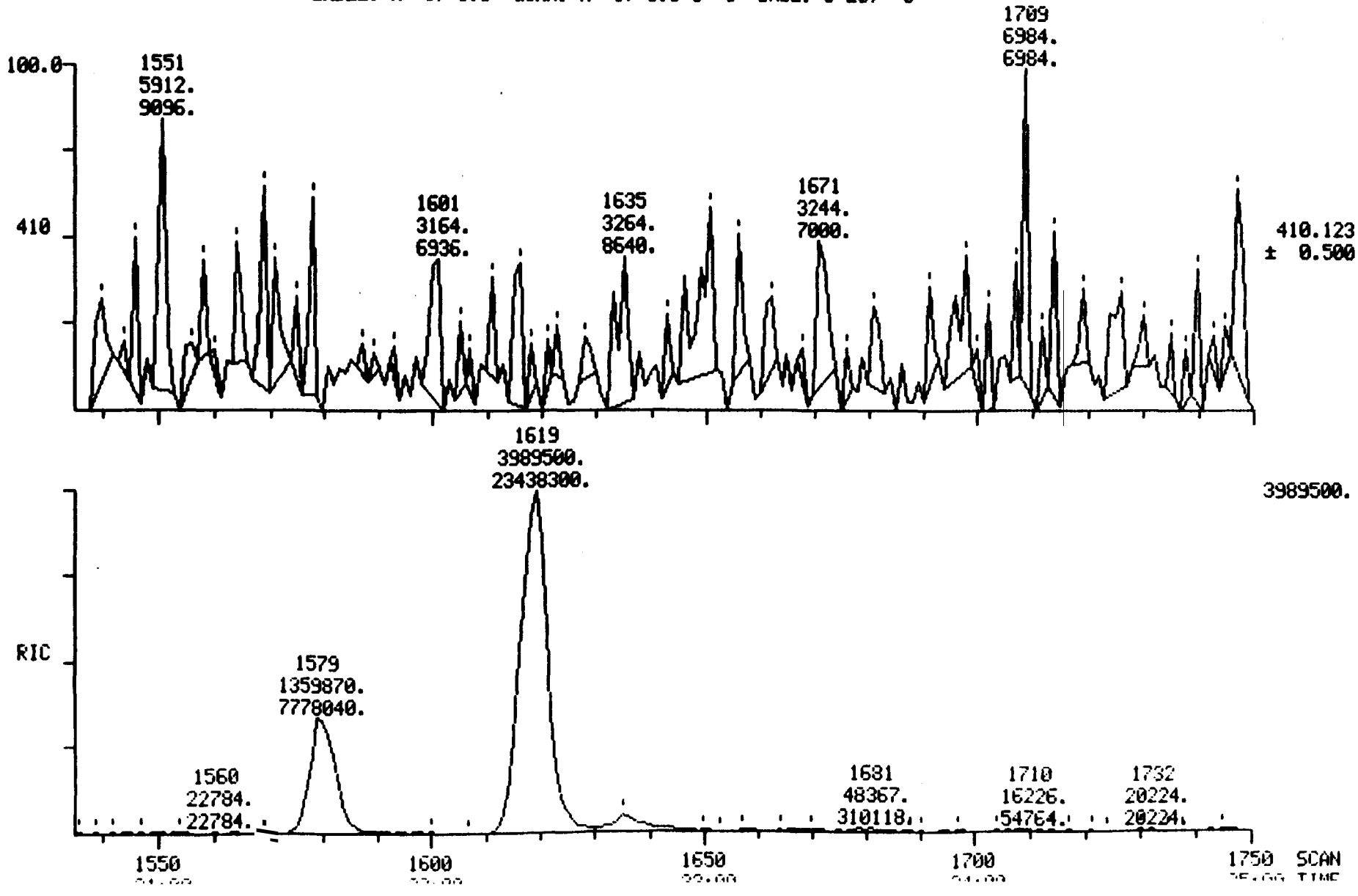


3200255

MIDRIC+MASS CHROMATOGRAM DATA: 6850612 #1 SCANS 1250 TO 1550
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI [redacted] DES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



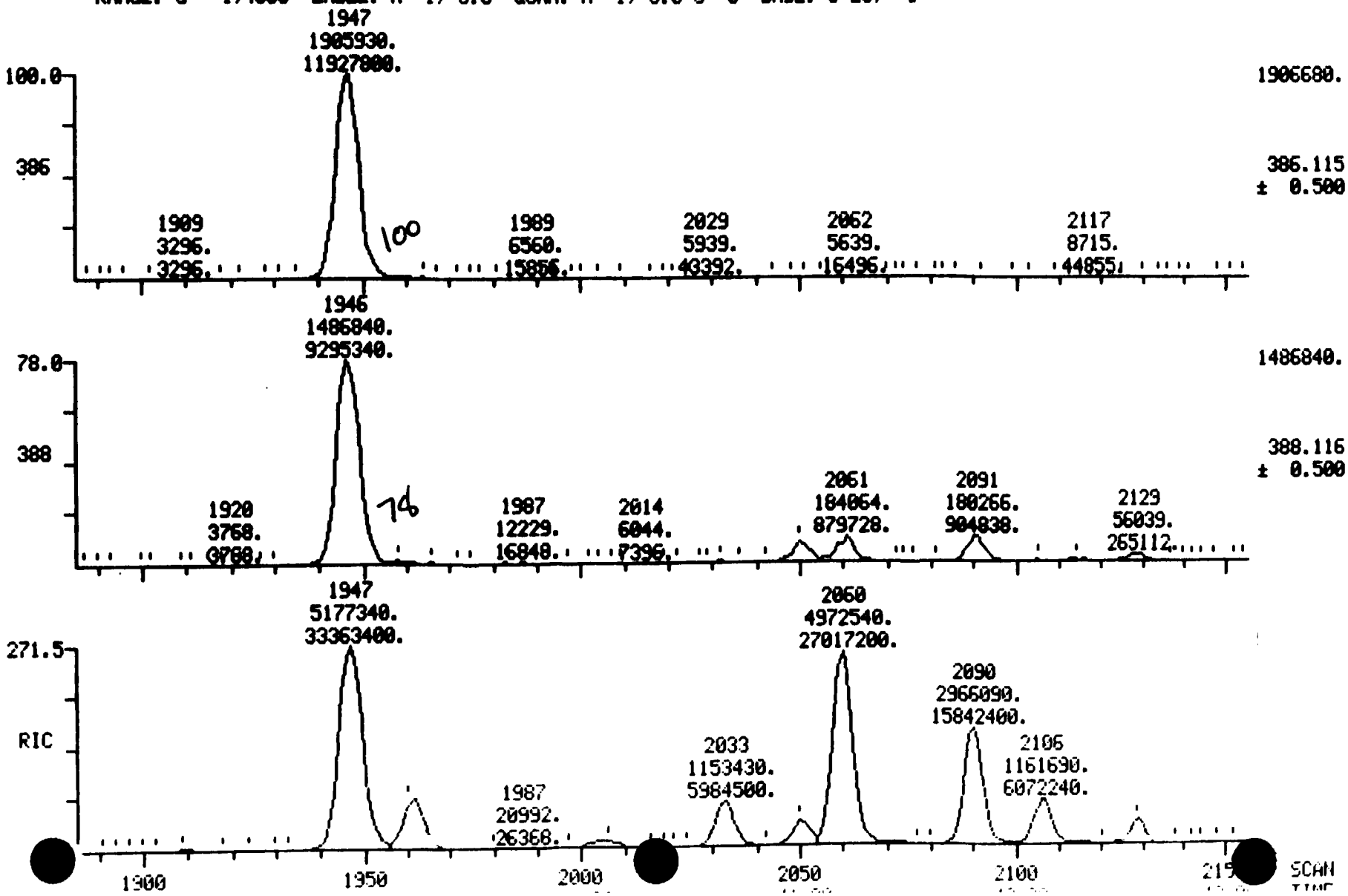
MIDRIC+MASS CHROMATOGRAM DATA: 6850612 #1 SCANS 1535 TO 1750
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200259

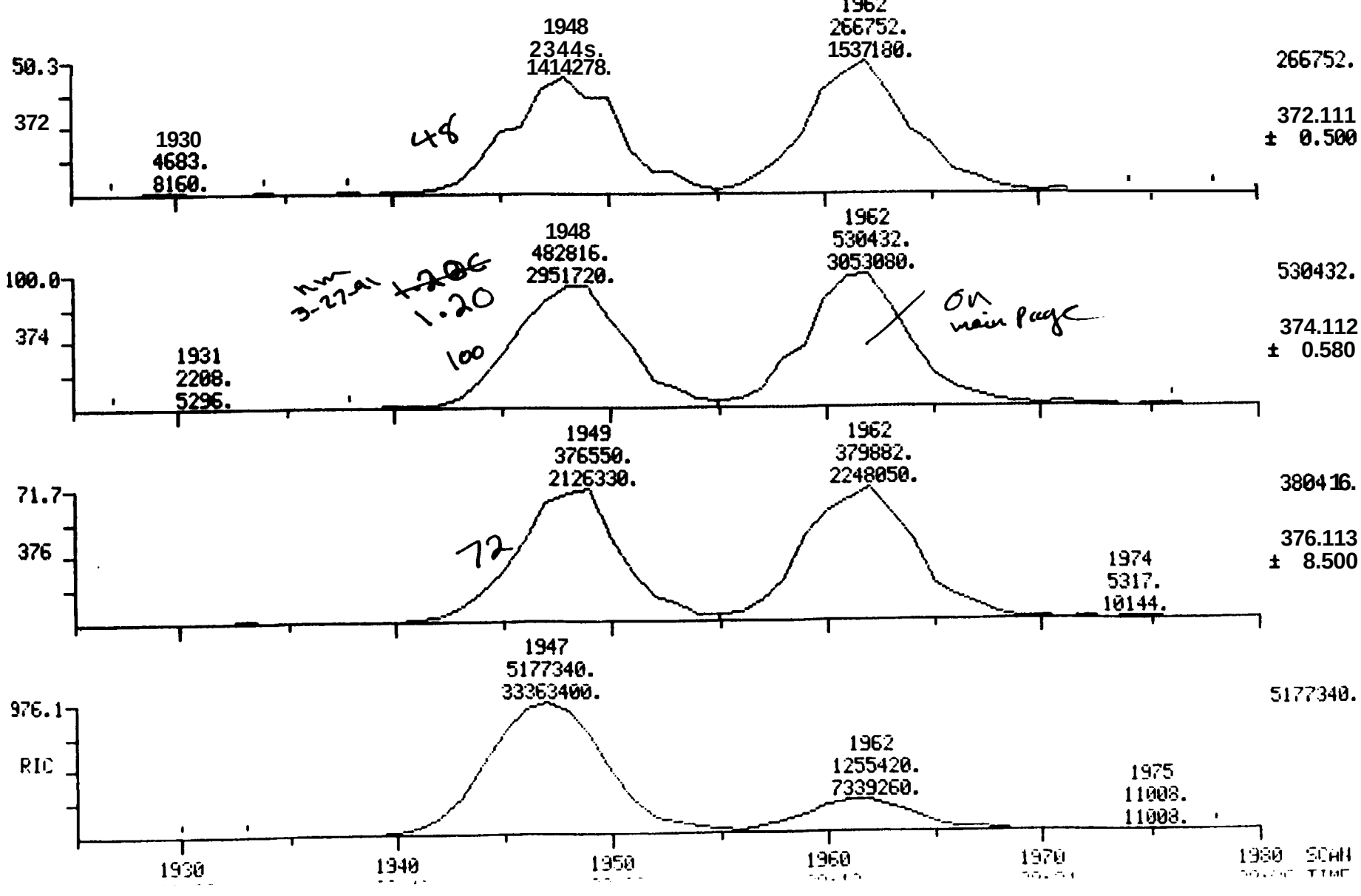
MIDRIC+MASS CHROMATOGRAMS DATA: 68506I2 #1 SCANS 1885 TO 2155
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.26



HxCDF

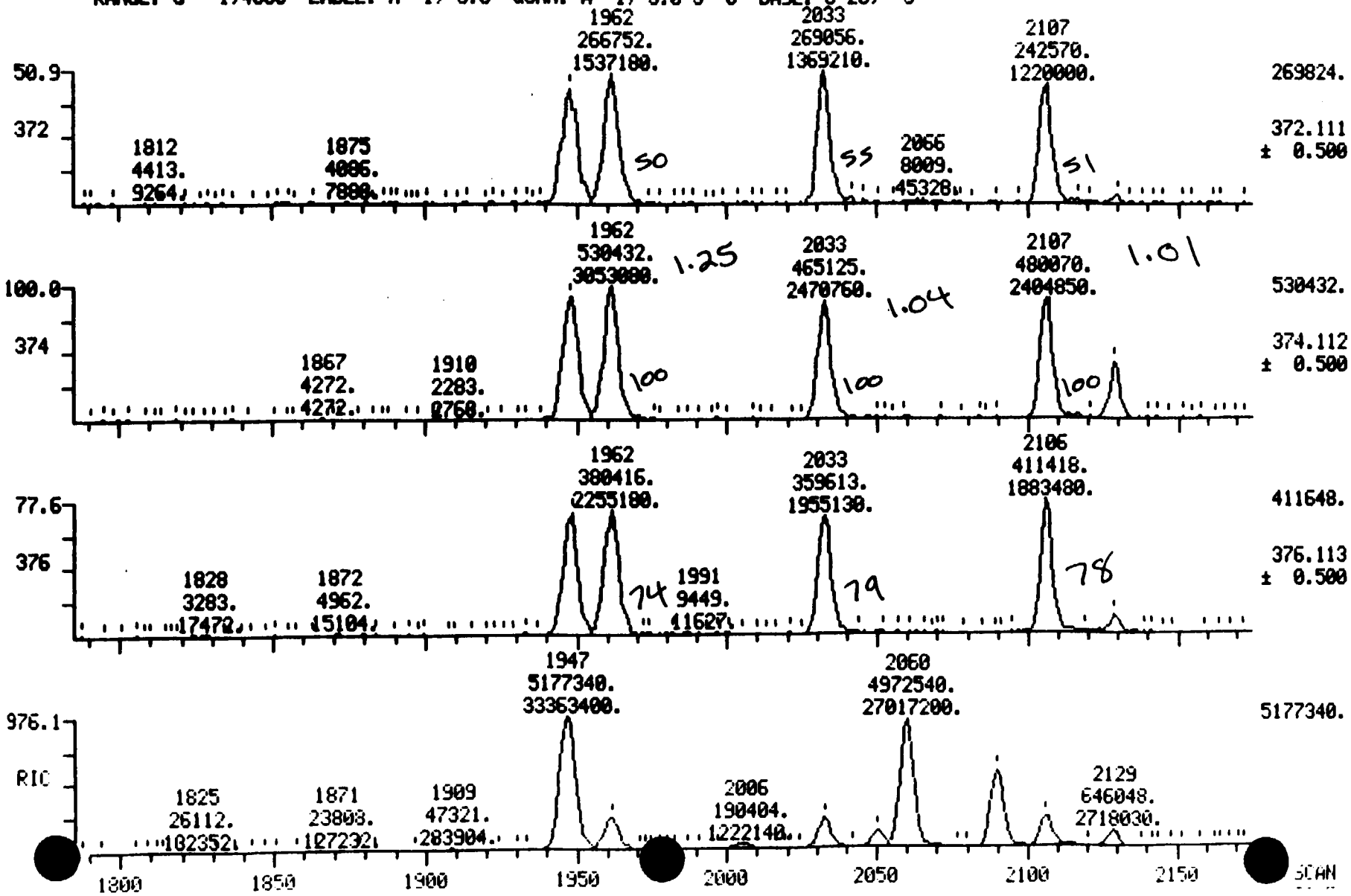
MIDRIC+MASS CHROMATOGRAMS DATA: 68506I2 #1 SCANS 1925 TO 1980
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 EASE: U 20, 3



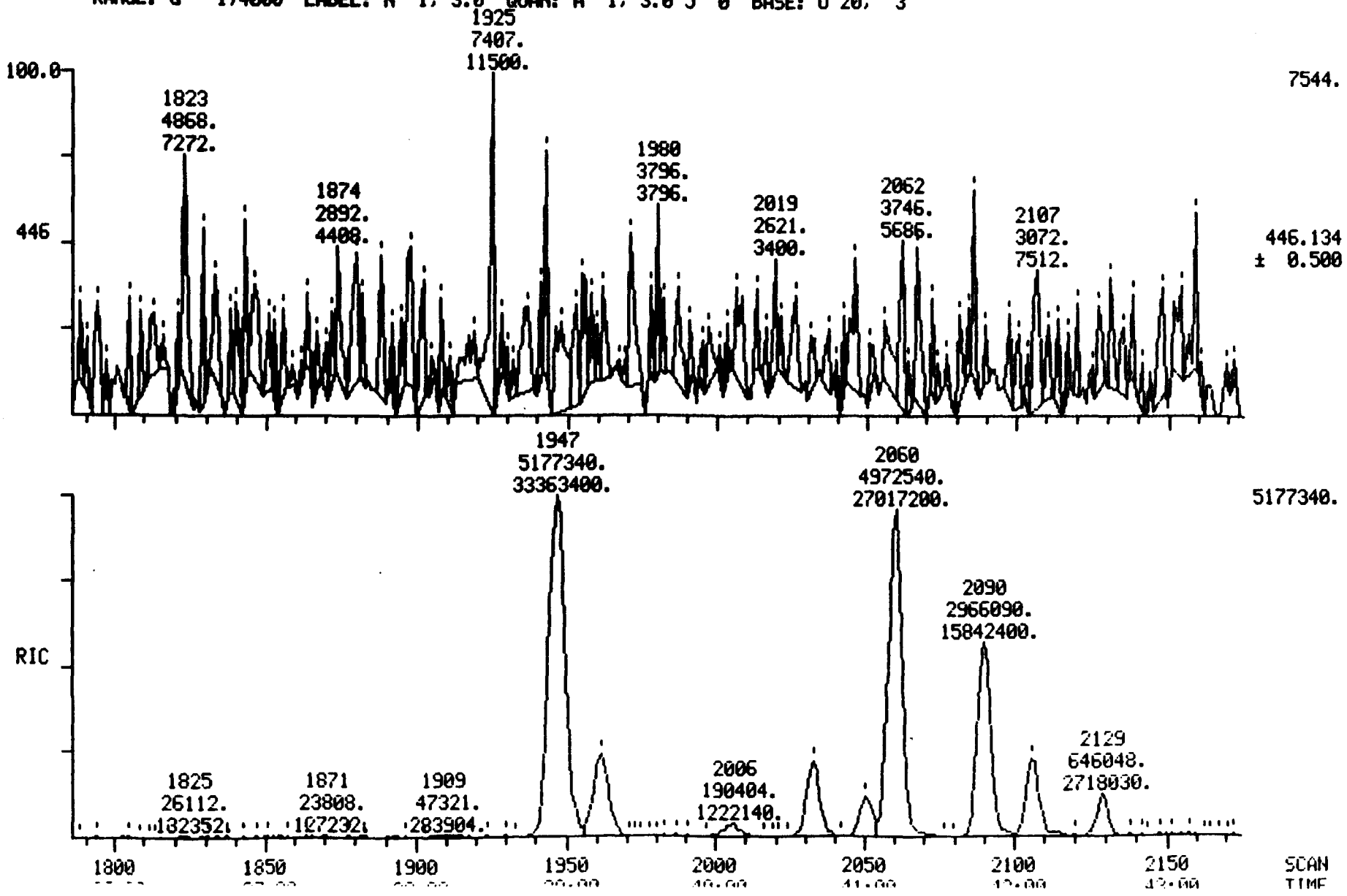
3200257

HxCDF

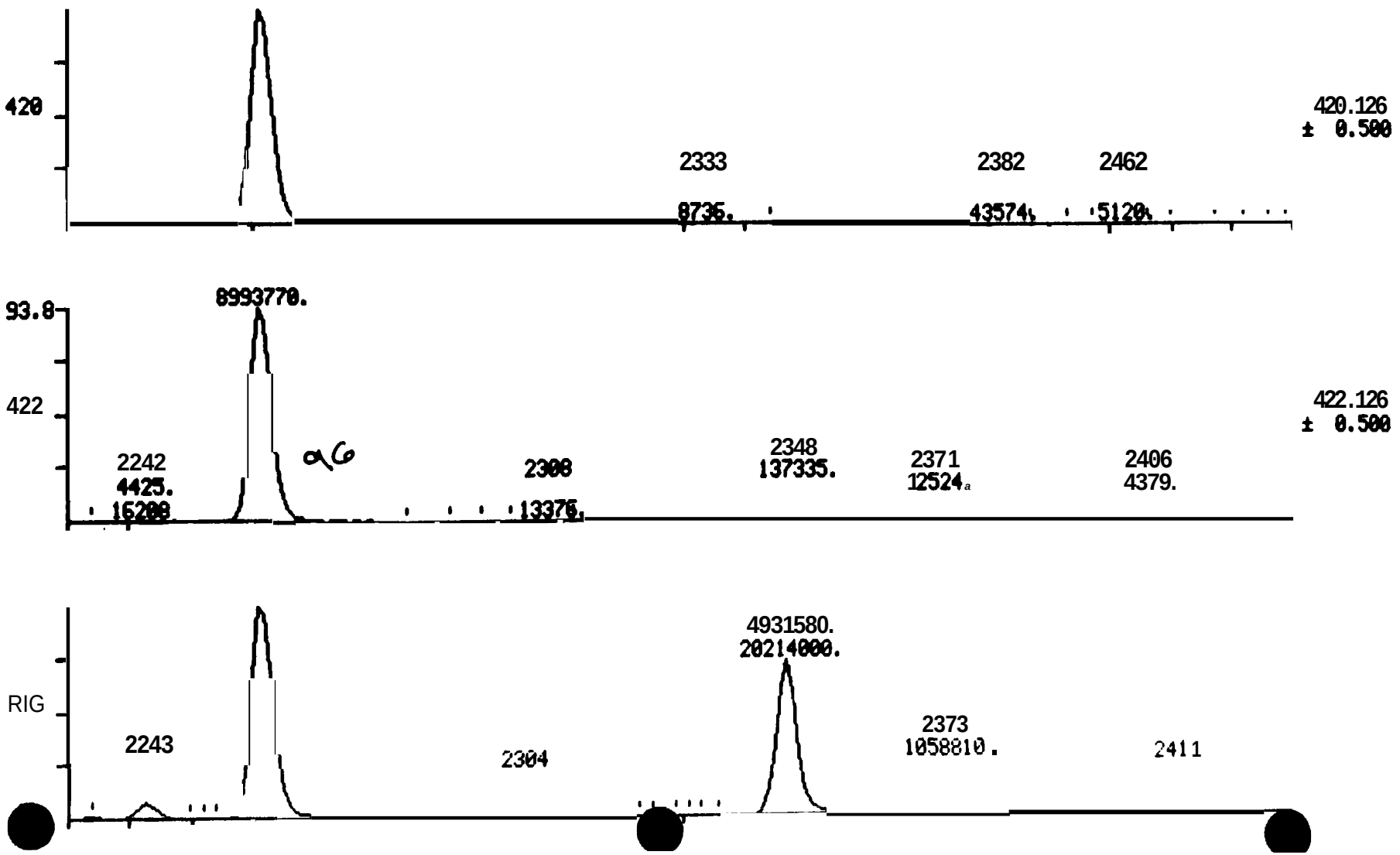
MIDRIC+MASS CHROMATOGRAMS DATA: 68506I2 #1 SCANS 1785 TO 2175
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



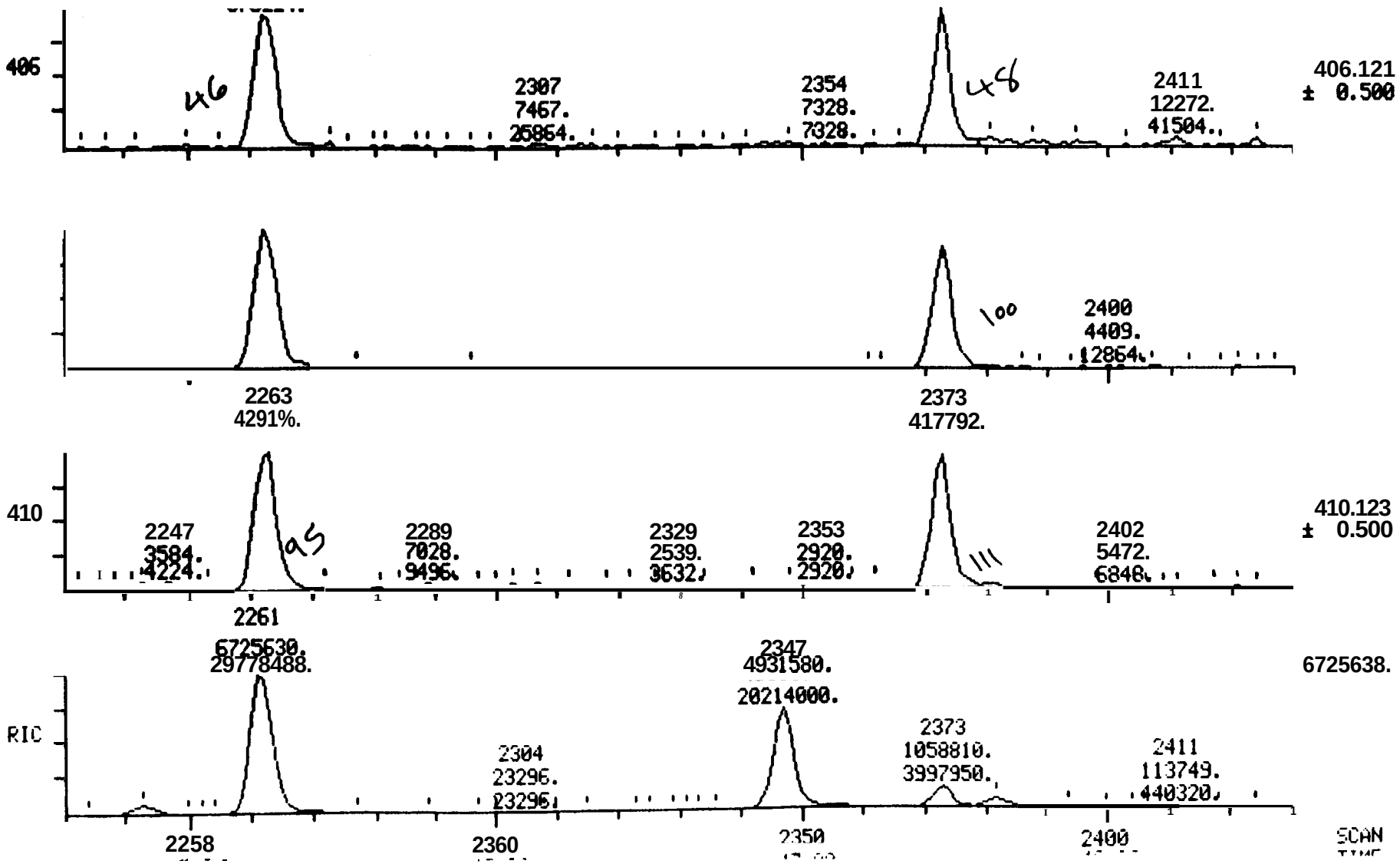
MIDRIC+MASS CHROMATOGRAM DATA: 6850612 #1 SCANS 1785 TO 2175
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



1.09

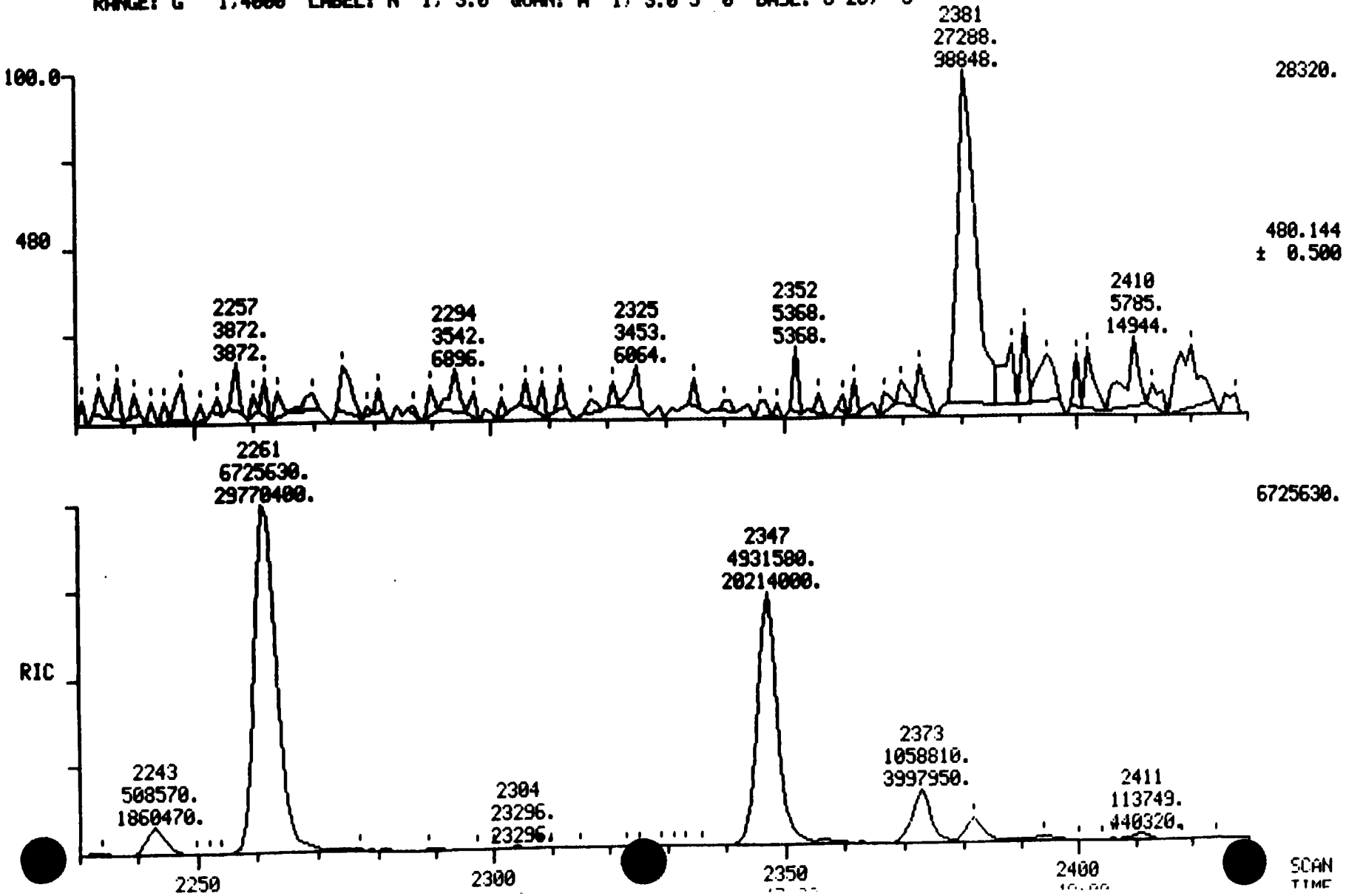

420
2333
8735.
2382
43574.
2462
5120.
420.126
± 0.500
93.8
8993770.
422
2242
4425.
15208
96
2308
13376.
2348
137335.
2371
12524.
2406
4379.
422.126
± 0.500
RIG
2243
2304
4931580.
20214000.
2373
1058810.
2411

4'PCDF


406
x6
2307
7467.
25864.
2354
7328.
7328.
x6
2411
12272.
41504.
406.121
± 0.500
2263
4291%.
100
2400
4409.
12864.
2373
417792.
410
2247
3584.
4224.
a5
2289
7028.
9496.
2329
2539.
3632.
2353
2920.
2920.
111
2402
5472.
6848.
410.123
± 0.500
2261
6725630.
29778488.
2347
4931580.
20214000.
6725638.
RIC
2304
23296.
23296.
2373
1058810.
3997950.
2411
113749.
440320.
2258
2360
2350
2400
SCAN

2200253

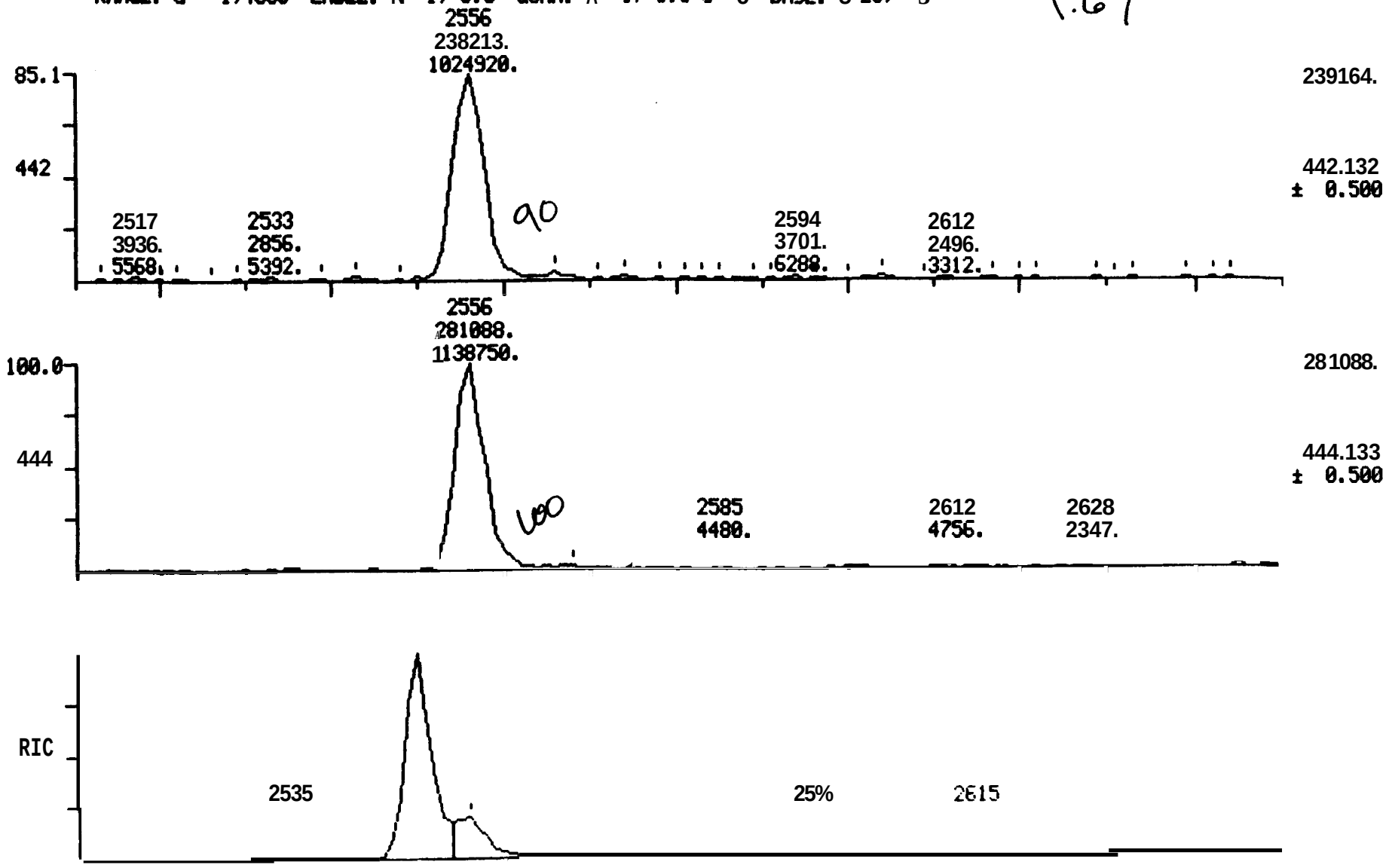
MIDRIC+MASS CHROMATOGRAM DATA: 685061 2 #1 SCANS 2230 TO 2430
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



OCDF

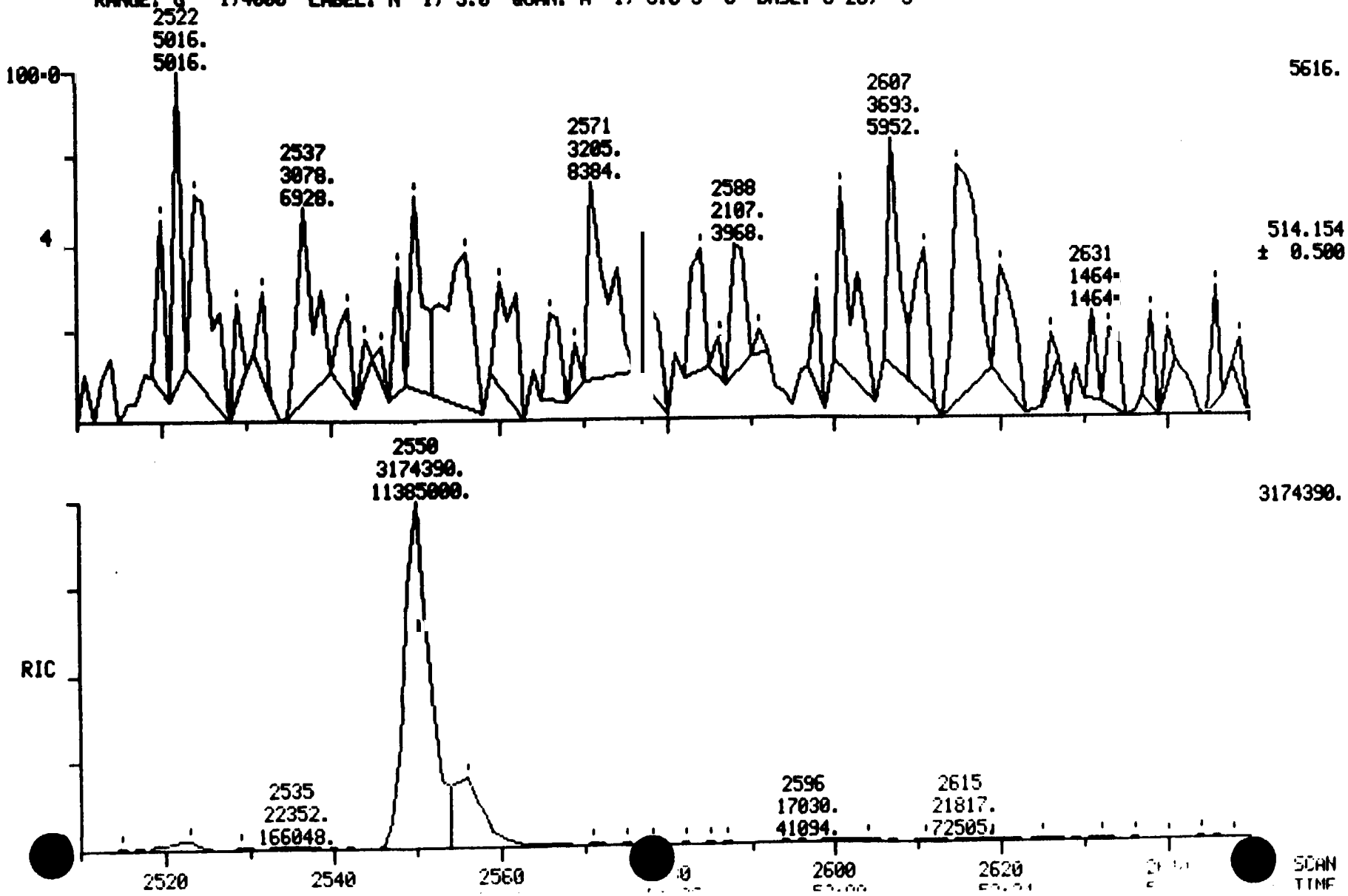
MIDRIC+MASS CHROMATOGRAMS DATA: 6850612 91 SCANS 2510 TO 2650
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.67



0020200

MIDRIC+MASS CHROMATOGRAM DATA: 6850612 #1 SCANS 2510 TO 2650
03/26/91 9:53:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3/26/91 9:53:49 SCAN 1 OF 3000
Acquisition started

Acquire Run 0:6850612 ACQUIRING
03/26/91 9:53:00 + 0:04 Free sectors: 27188 Scan: 3 of 3000
Sample: 2UL OF 685:06 STDI NATIVES @ 200PPB RUN2
Condr. : 60M DB-5/TOTALS.
Formula: Instrument: Q3 Weight: 0.000
Submitted by: DM Analyst: PMP Acct. No: PC4622

********** GC PARAMETERS **********
Loaded GC Desc:BW Current GC oven tmp: 71 DegC Injector : 300 DegC
Current GC Desc:BW CC elapsed time 1: 7 min Int.oven : 275 DcgC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	SO - SO	-	0.1	0.1	Sweep/Split	10.8	0.0
2	SO - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

MID scan Dcsc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPU	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	306.150	0.054	3	100	40	1	0	Po,
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Po,
6	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.630	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Por
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	355.650	356.150	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.330	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of rcqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/26/91 10:30:20 SCAN 1769 OF 3000

MID scan
Scan time: 1.200 s

Desc: 62
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	HPW	MFW	HA	TH	BL	ION
1	337.4SO	338.150	0.054	3	100	40	1	0	Pos
2	339.450	340.130	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.450	332.150	0.052	3	100	40	1	0	Por
5	353.450	354.150	0.054	3	100	40	1	0	Pos
4	355.650	354.130	0.052	3	100	40	1	0	Pos
7	357.650	358.150	0.054	3	100	40	1	0	Pos
8	347.650	348.130	0.032	3	100	40	1	0	Pos
9	349.650	370.130	0.052	3	100	40	1	0	Pos
10	371.430	372.150	0.052	3	100	40	1	0	Pos
11	373.450	374.150	0.032	3	100	40	1	0	Pos
12	375.450	374.150	0.032	3	100	40	1	0	Pos
13	379.430	300.130	0.032	3	100	40	1	0	Pos
14	381.430	302.130	0.032	3	100	40	1	0	Pos
15	385.450	306.150	0.052	3	100	40	1	0	Pos
14	307.450	388.150	0.052	3	100	40	1	0	Pos
17	389.450	390.150	0.052	3	100	40	1	0	Pos
18	391.450	392.150	0.052	3	100	40	1	0	Pos
19	401.450	402.150	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.034	3	100	40	1	0	Po.
21	443.550	446.050	0.032	3	100	40	1	0	Pos

3/26/91 10:39:34 SCAN 2219 OF 3000

HID scan
Scan tine: 1.200 s

Desc: 93
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4094

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
2	373.650	374.150	0.052	3	100	40	1	0	Pos
3	375.450	376.150	0.052	3	100	40	1	0	Pos
4	385.650	386.150	0.032	3	100	40	1	0	Pos
5	307.630	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Pos
7	391.650	392.150	0.052	3	100	40	1	0	Pos
8	401.650	402.150	0.052	3	100	40	1	0	Pos
9	403.650	404.150	0.054	3	100	40	1	0	Pos
10	405.550	406.050	0.054	3	100	40	1	0	Pos
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.550	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.050	0.034	3	100	40	1	0	Po.
15	423.550	424.050	0.054	3	100	40	1	0	Pos
16	425.550	426.050	0.052	3	100	40	1	0	Po.
17	433.550	436.050	0.032	3	100	40	1	0	Pos
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	Pos

3/26/91 10:45:01 SCAN 2484 OF 3000

HID scan
Scan time: 1.200 s

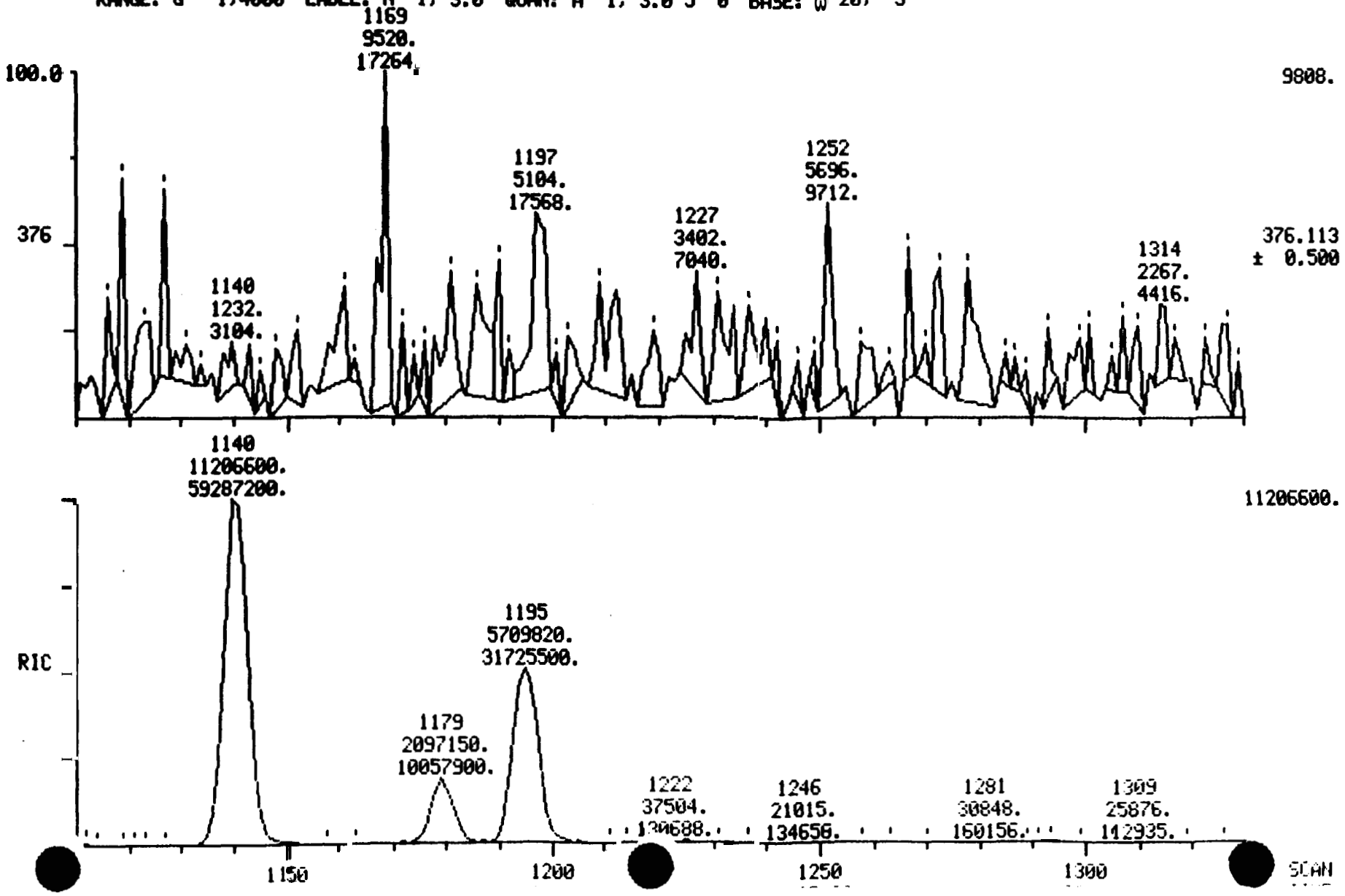
Desc: 94
Sanp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

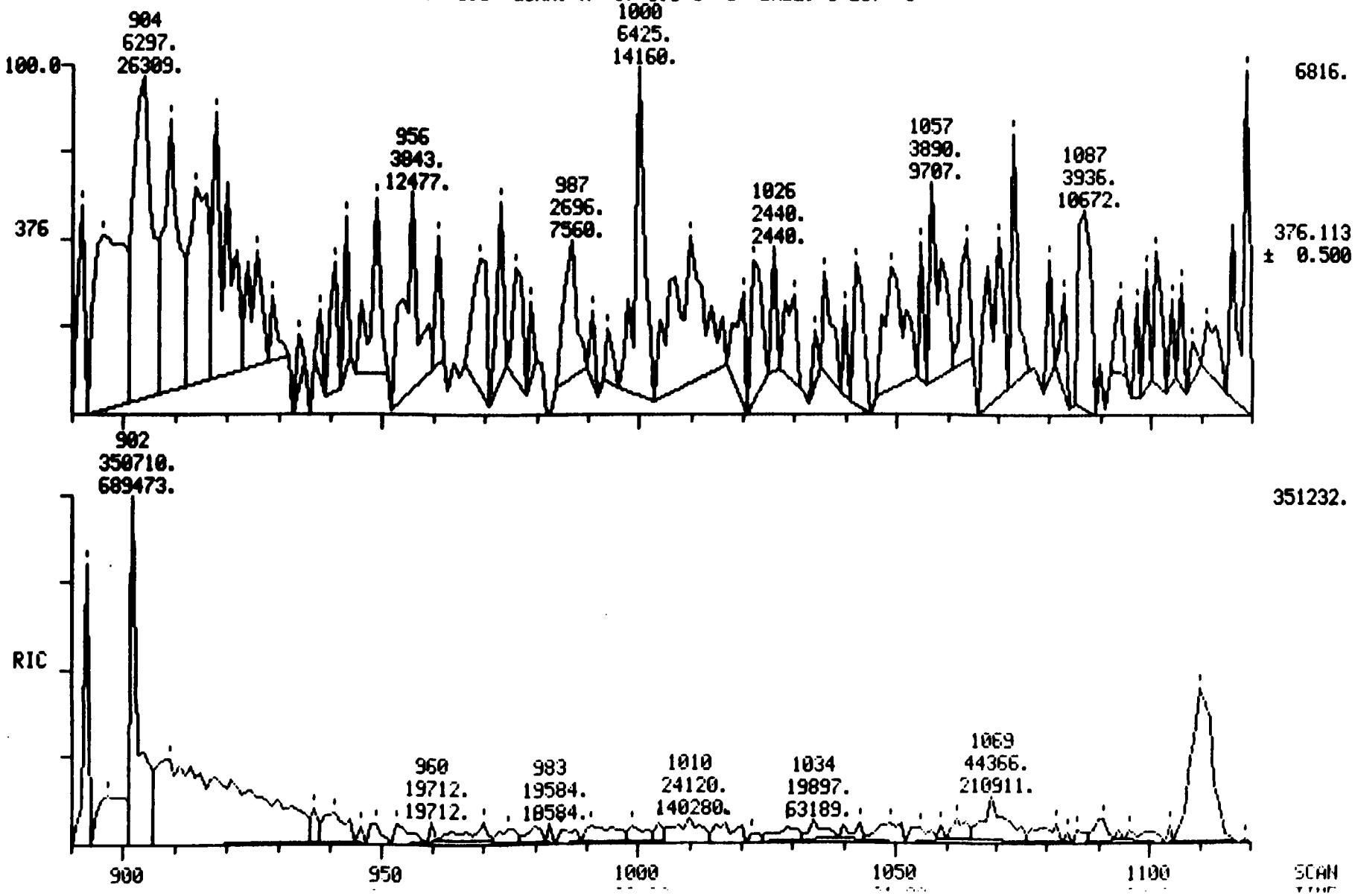
Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	405.550	406.050	0.034	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	PO%
3	409.550	410.050	0.054	3	100	40	1	0	Pos

3200261

MIDRIC+MASS CHROMATOGRAM DATA: 68506II2 #1 SCANS 1110 TO 1330
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: ω 20, 3



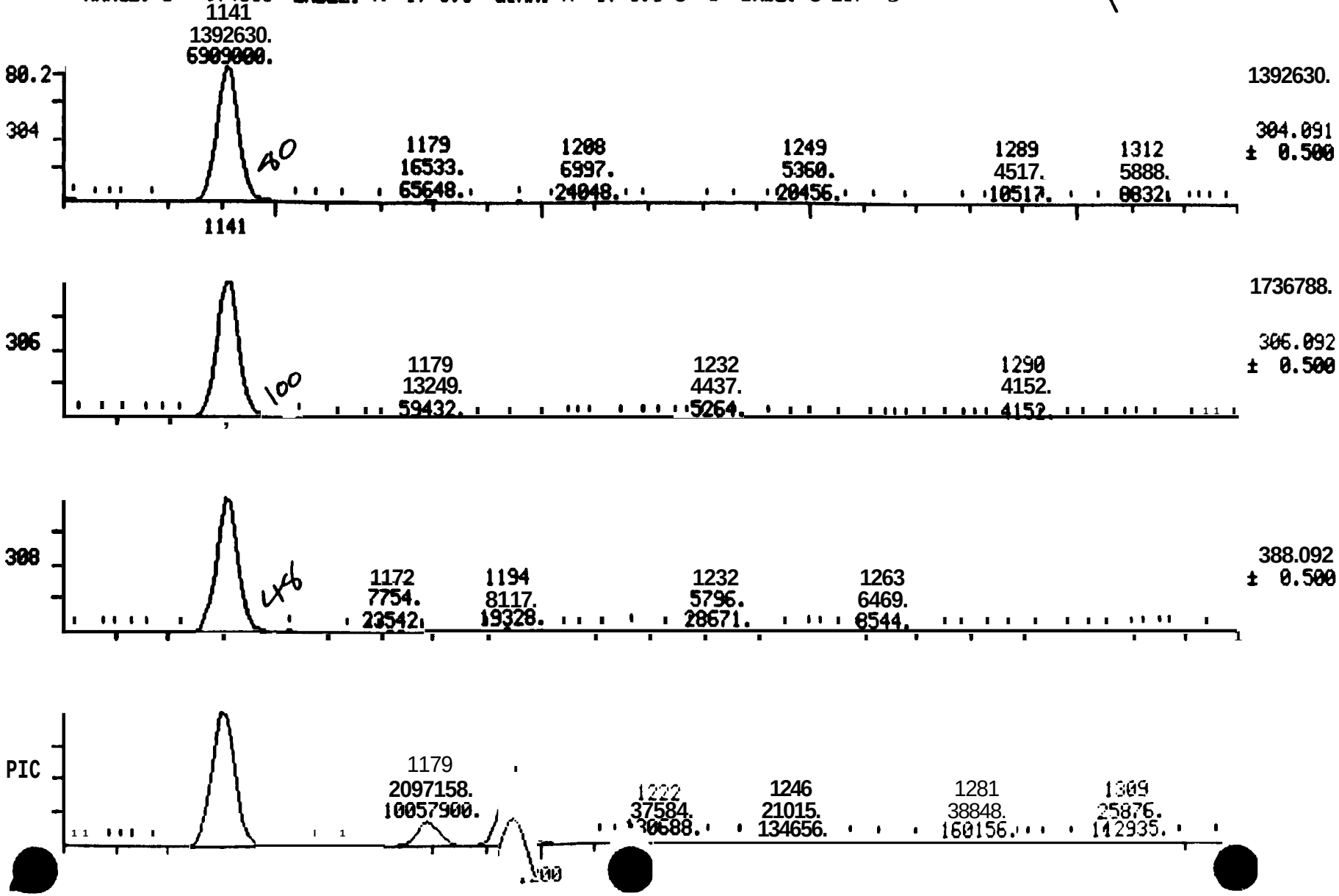
MIDRIC+MASS CHROMATOGRAM DATA: 68506II2 #1 SCANS 890 TO 1120
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



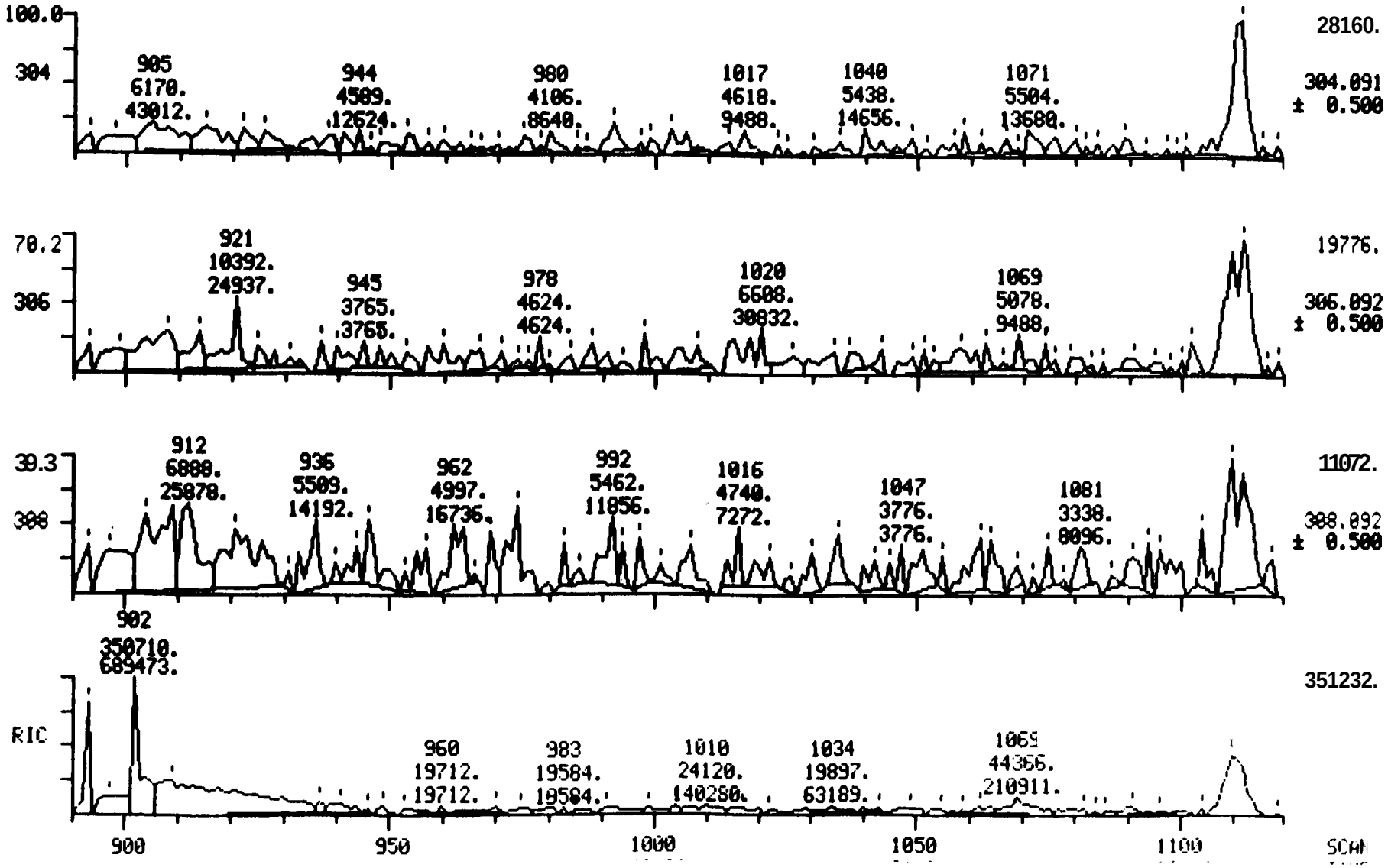
3920023

MIDRIC+MASS CHROMATOGRAMS DATA: 68506II2 #1 SCANS 1110 TO 1330
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 11 NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.47



MIDRIC+MASS CHROMATOGRAMS DATA: 68506I12 #1 SCANS 890 TO 1120
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



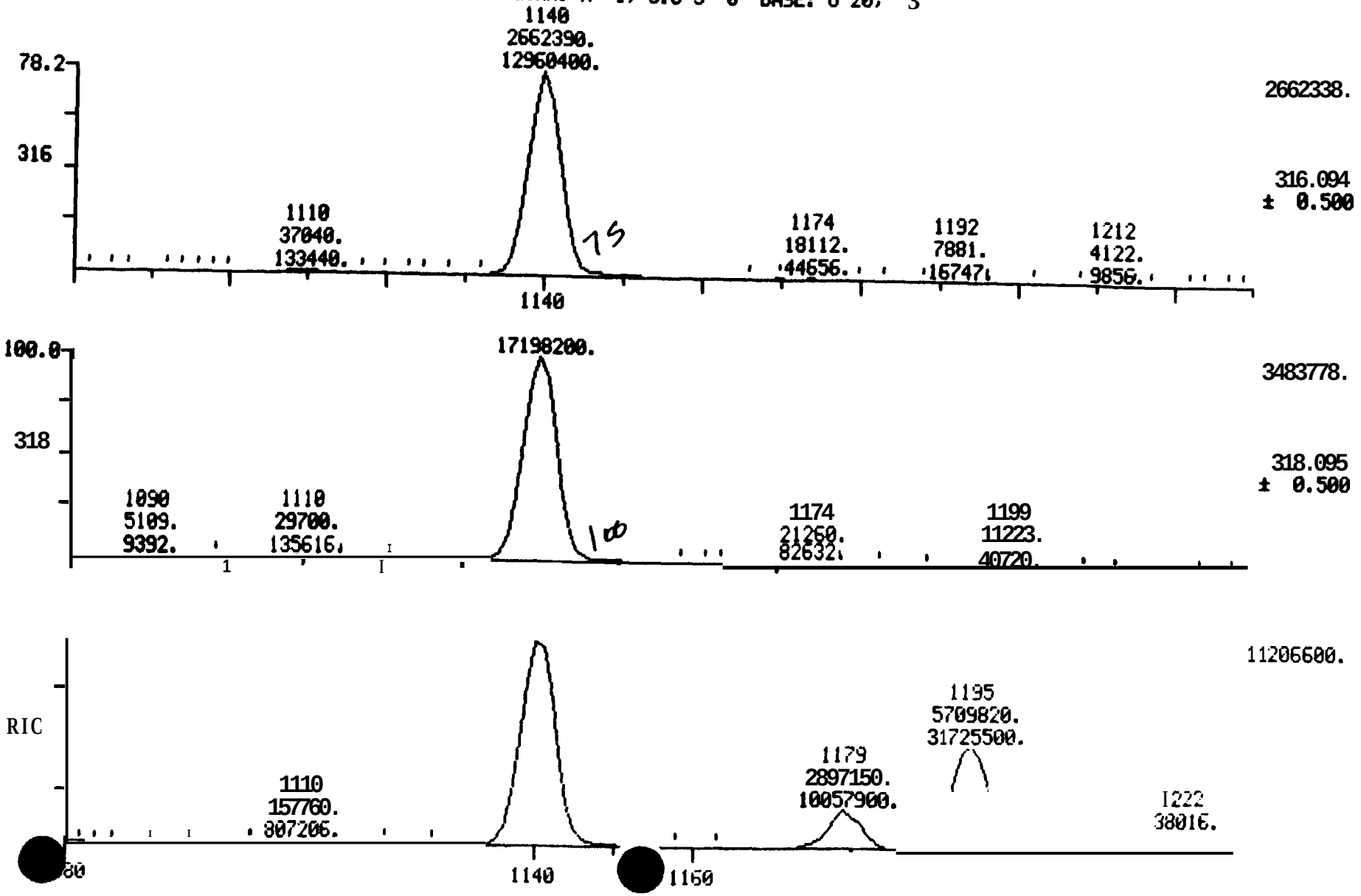
3200263

MIDRIC+MASS CHROMATOGRAMS
03/26/91 13:20:00
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506II2 #1
CALI: CAL910306A #2

SCANS 1080 TO 1230

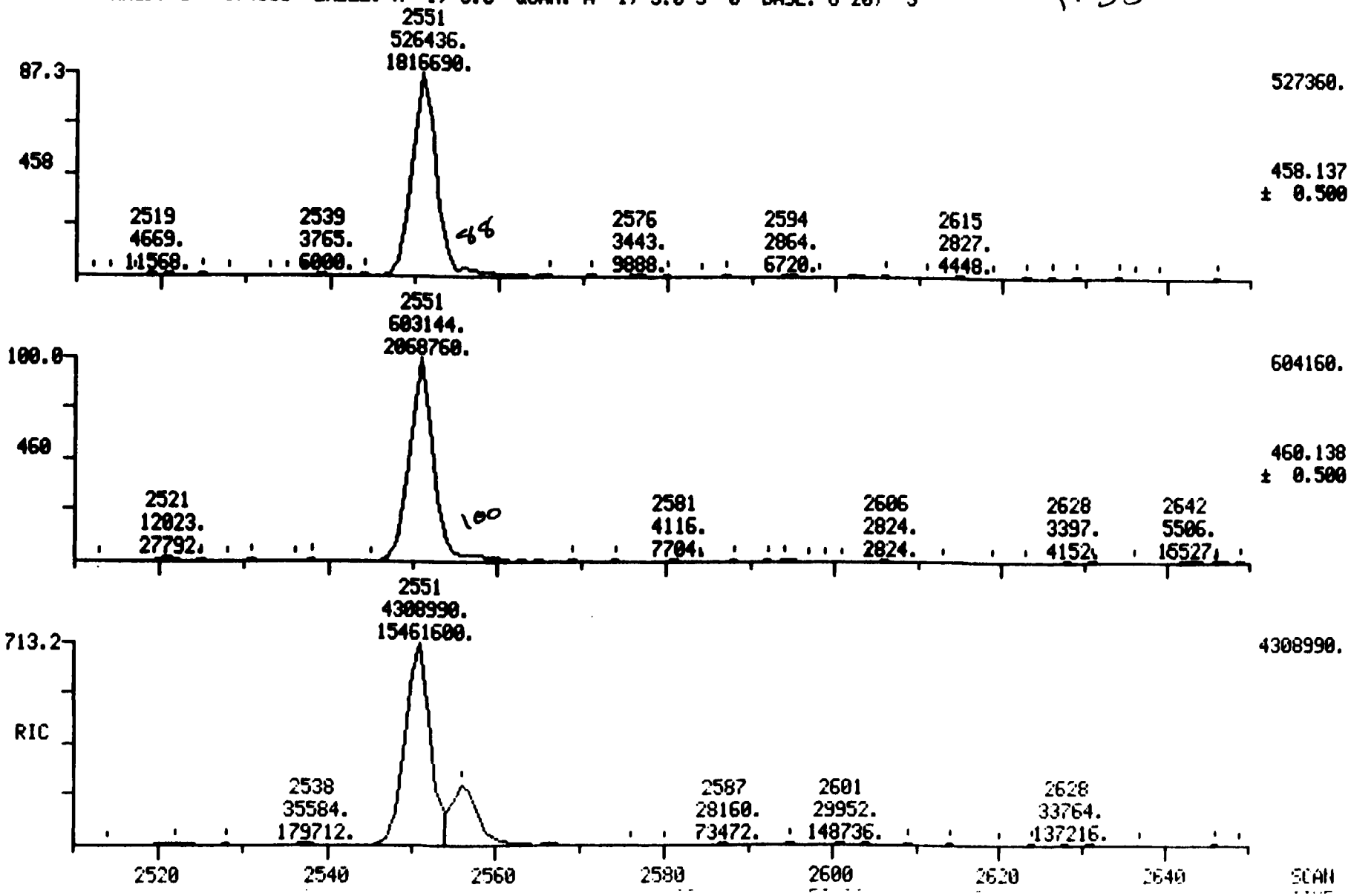
1.61



MIDRIC+MASS CHROMATOGRAMS DATA: 68506II2 #1 SCANS 2510 TO 2650
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

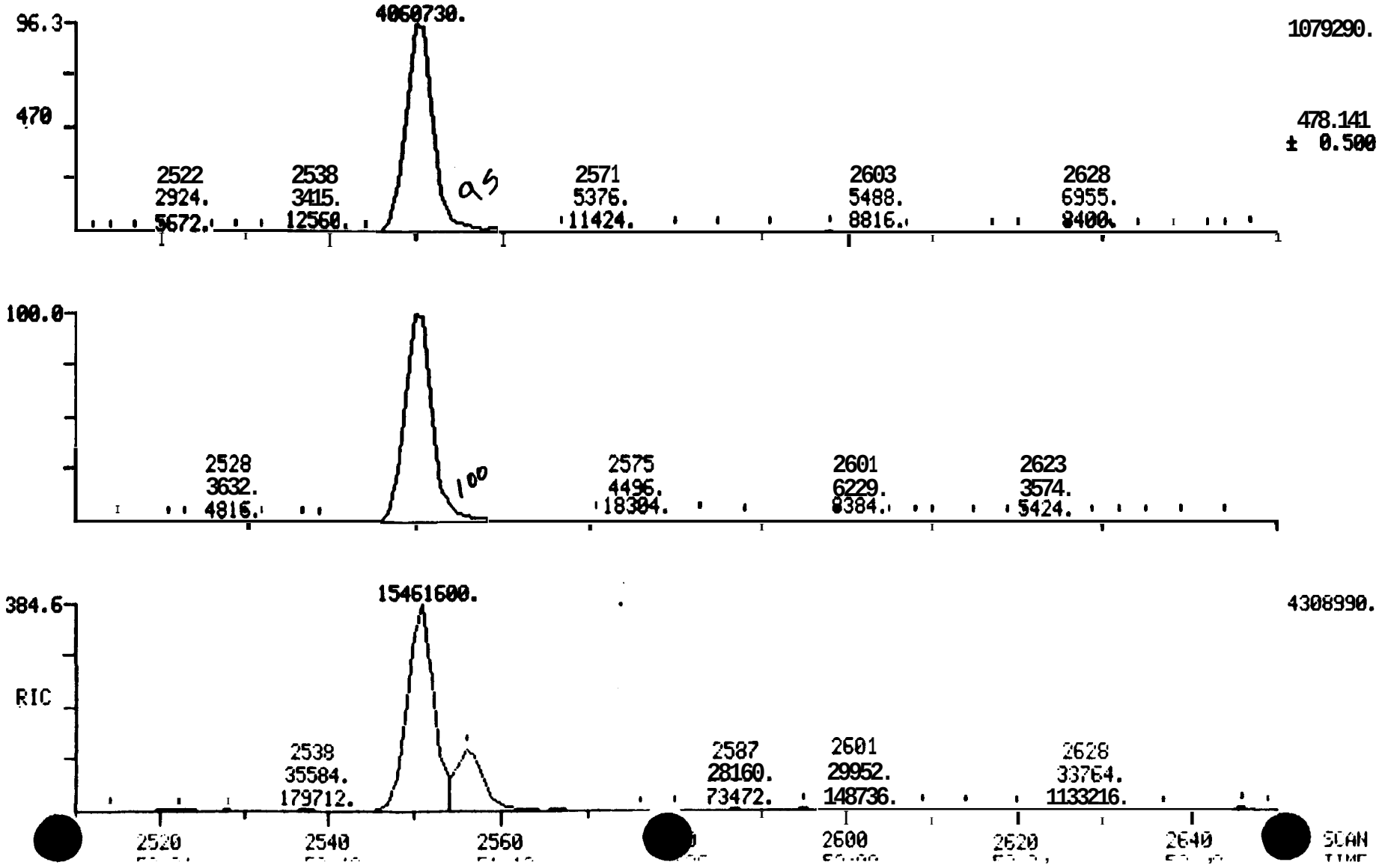
OCDD

1.33



3200264

0.425

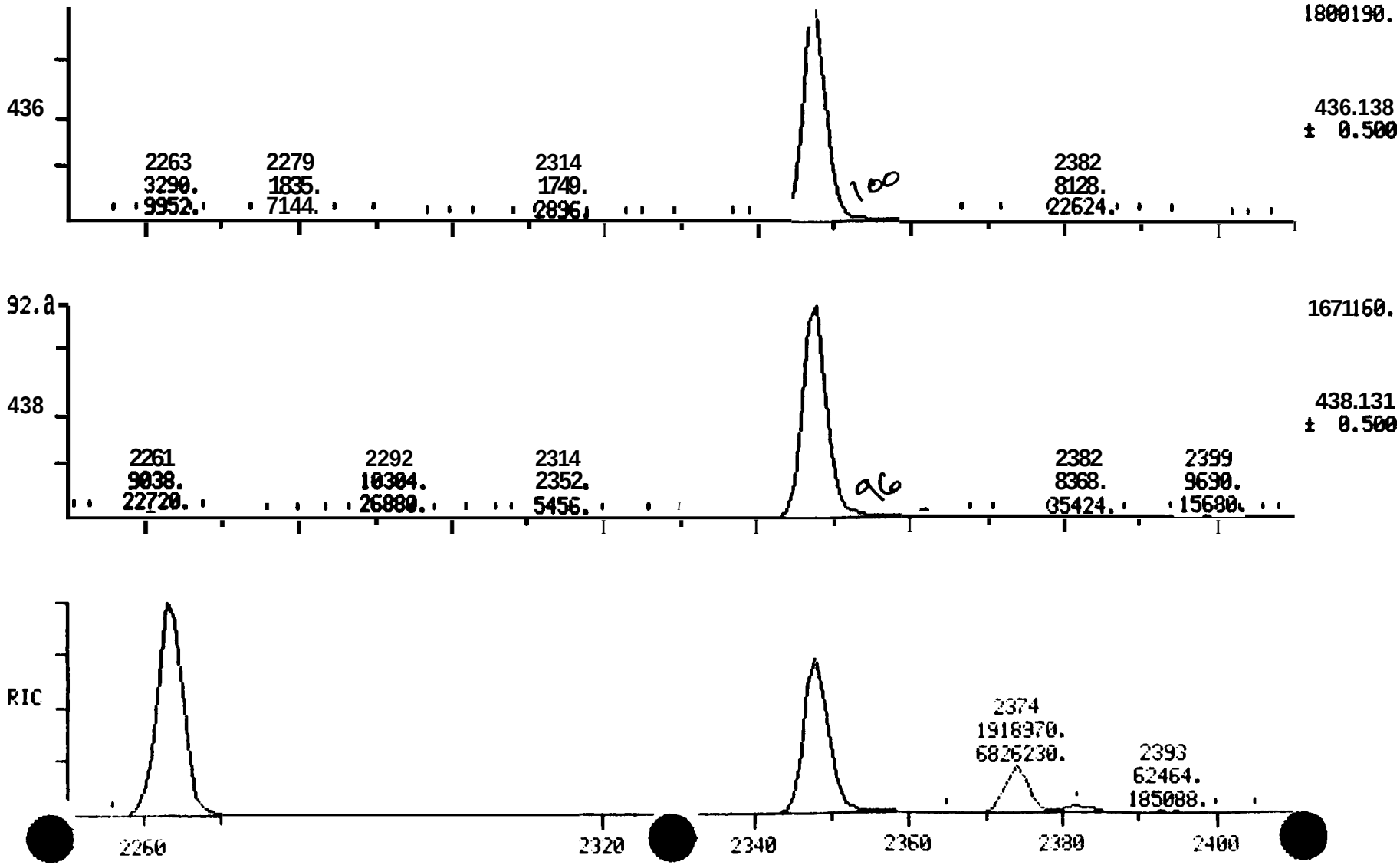

96.3
470
4060730.
1079290.
478.141
± 0.500
2522
2924.
5672.
2538
3415.
12560.
95
2571
5376.
11424.
2603
5488.
8816.
2628
6955.
8400.
100.0
2528
3632.
4816.
100
2575
4496.
18304.
2601
6229.
8384.
2623
3574.
5424.
384.6
RIC
15461600.
4308990.
2538
35584.
179712.
2587
28160.
73472.
2601
29952.
148736.
2628
33764.
1133216.
2520
2540
2560
2600
2620
2640
SCAN
TIME

HpCDD

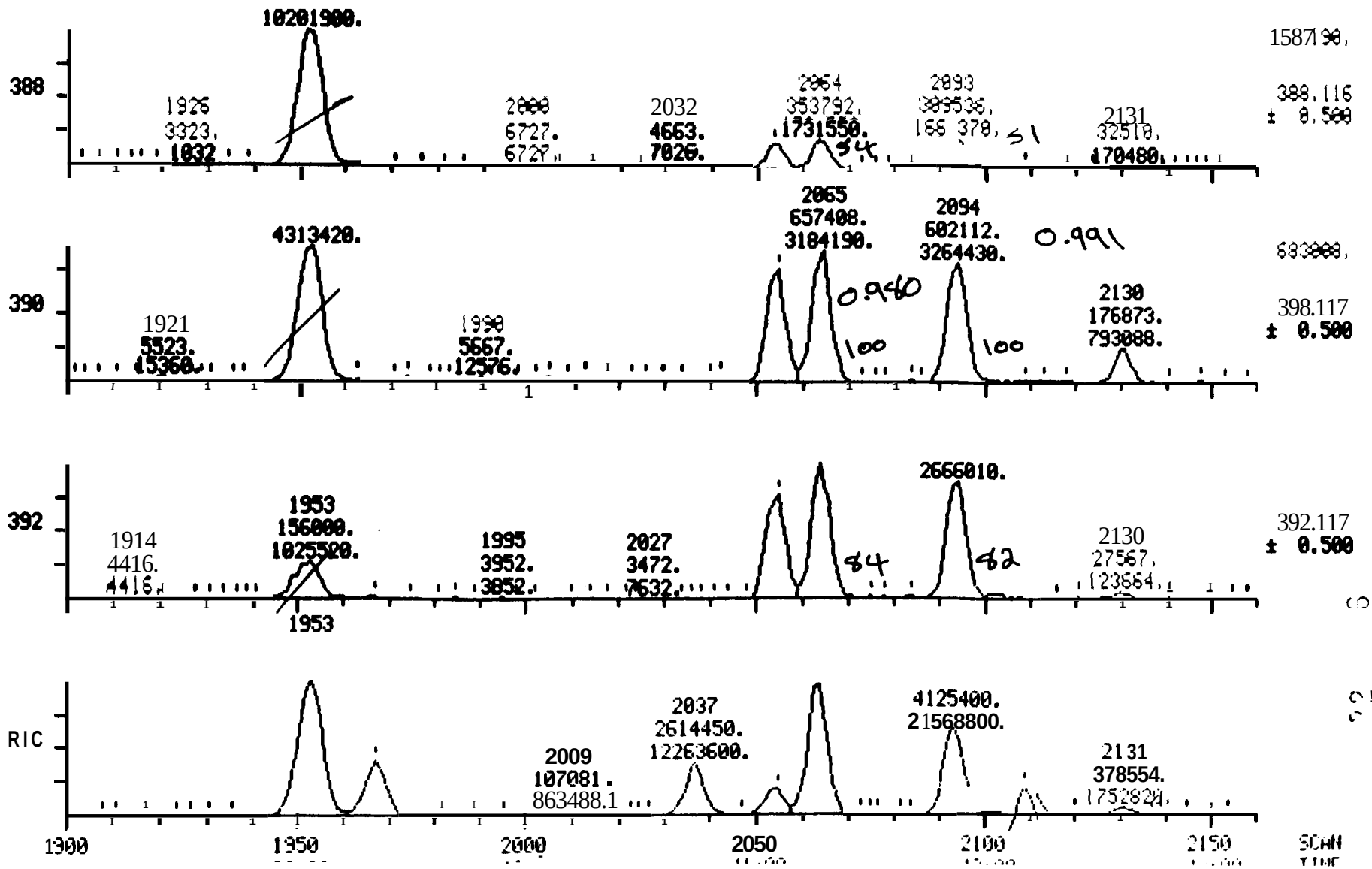
0.915

3200265

0.679


1800190.
436
436.138
± 0.500
2263
3290.
9952.
2279
1835.
7144.
2314
1749.
2836.
100
2382
8128.
22624.
92.a
1671160.
438
438.131
± 0.500
2261
9038.
22720.
2292
10304.
26880.
2314
2352.
5456.
96
2382
8368.
35424.
2399
9690.
15680.
RIC
2374
1918370.
6826230.
2393
62464.
185088.
2260
2320
2340
2360
2380
2400

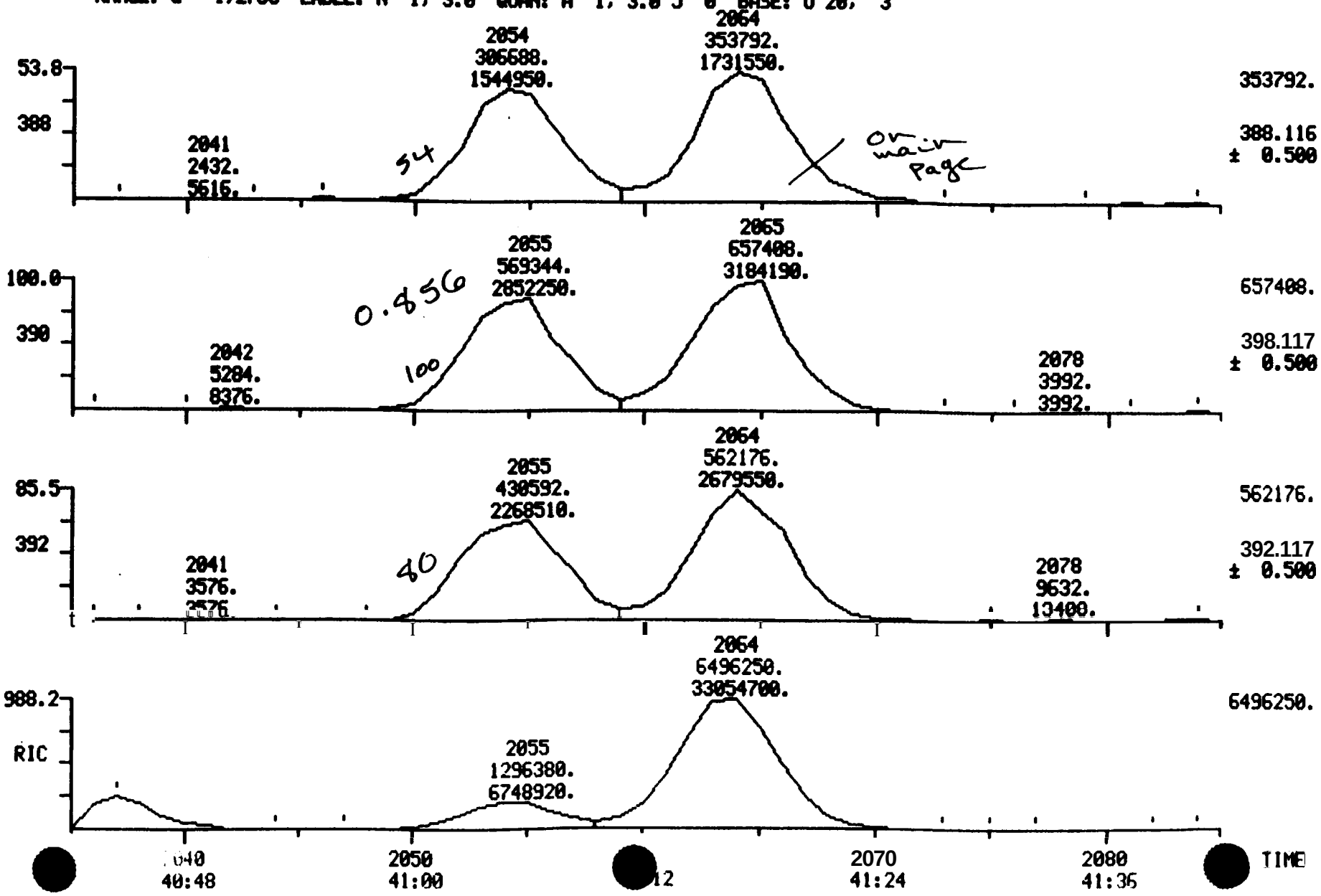
HxCDD


388
10201900.
1926
3323.
1032
2000
6727.
6727.
2032
4663.
7026.
2064
353792.
1731550.
54
2093
383536.
166 378.
51
2131
32510.
170480.
1587190.
388.116
± 0.500
390
4313420.
1921
5523.
15360.
1990
5667.
12576.
2065
657408.
3184190.
0.960
100
2094
602112.
3264430.
0.991
100
2130
176873.
793088.
683088.
398.117
± 0.500
392
1914
4416.
4416.
1953
156000.
1025520.
1953
1995
3952.
3952.
2027
3472.
7632.
84
2666010.
82
2130
27567.
123664.
392.117
± 0.500
RIC
2009
107081.
863488.1
2037
2614450.
12263600.
4125400.
21568800.
2131
378554.
1752824.
1900
1950
2000
2050
2100
2150
SCAN
TIME

1/1

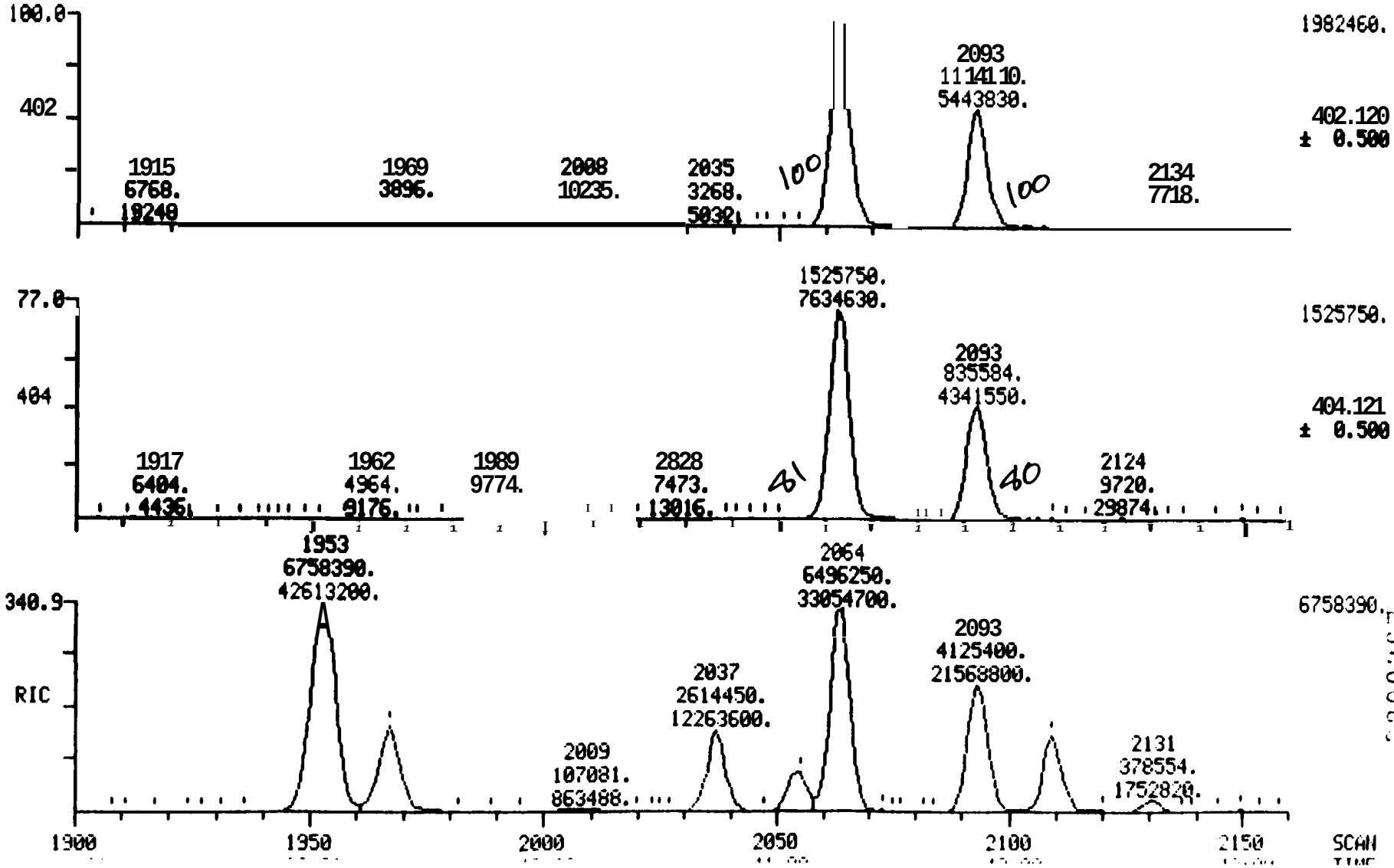
HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506II2 #1 SCANS 2035 TO 2085
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



1.

3

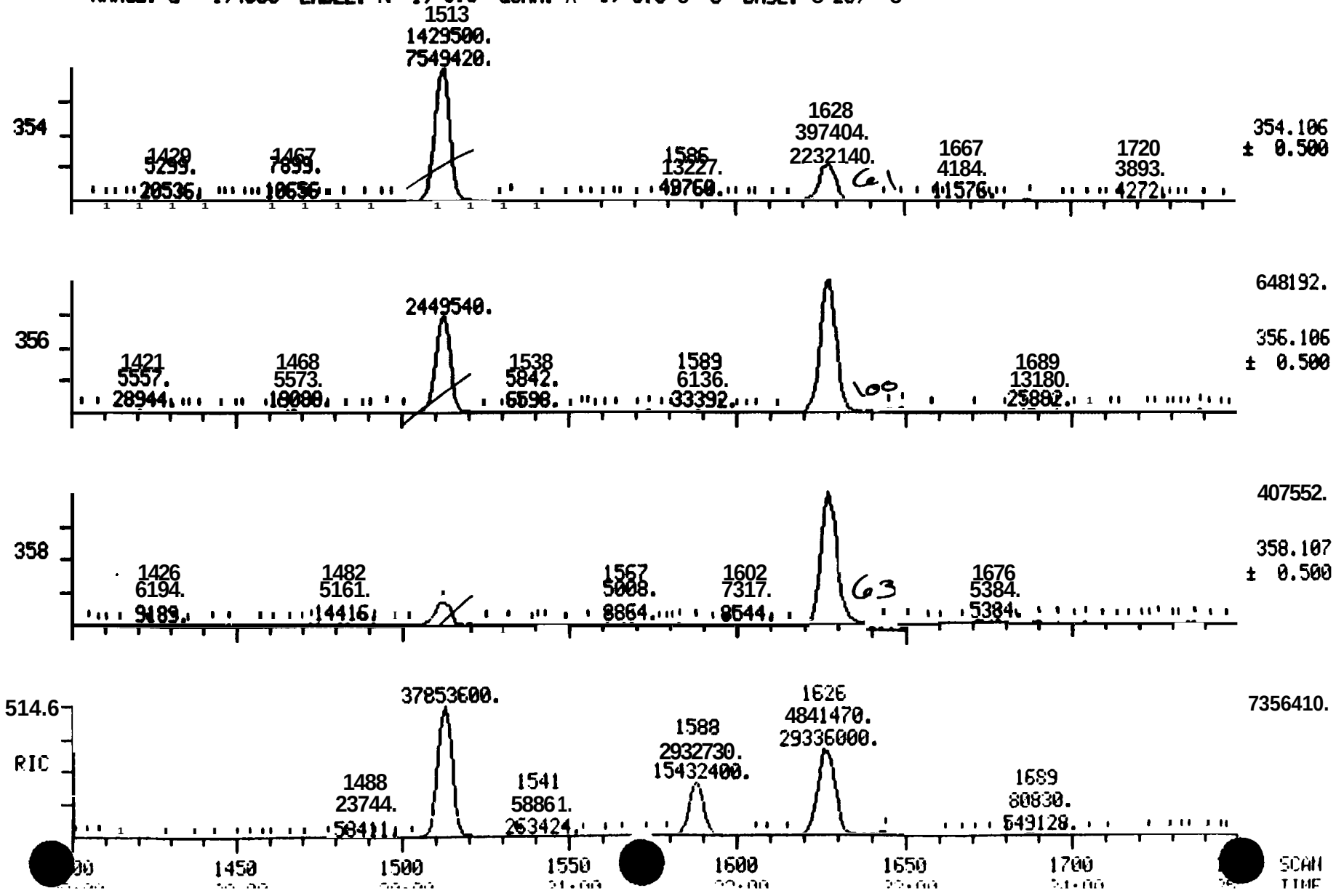

100.0
402
1915
6768.
19240
1969
3896.
2008
10235.
2035
3268.
5032
100
2093
1114110.
5443830.
100
2134
7718.
1982460.
402.120
± 0.500
77.0
404
1917
6404.
4436
1962
4964.
9176.
1989
9774.
2828
7473.
13016.
80
1525750.
7634630.
2093
835584.
4341550.
40
2124
9720.
29874.
1525750.
404.121
± 0.500
340.9
RIC
1953
6758390.
42613200.
2009
107081.
863488.
2037
2614450.
12263600.
2064
6496250.
33054700.
2093
4125400.
21568800.
2131
378554.
1752820.
6758390.
1900
1950
2000
2050
2100
2150
SCAN
TIME

3200207

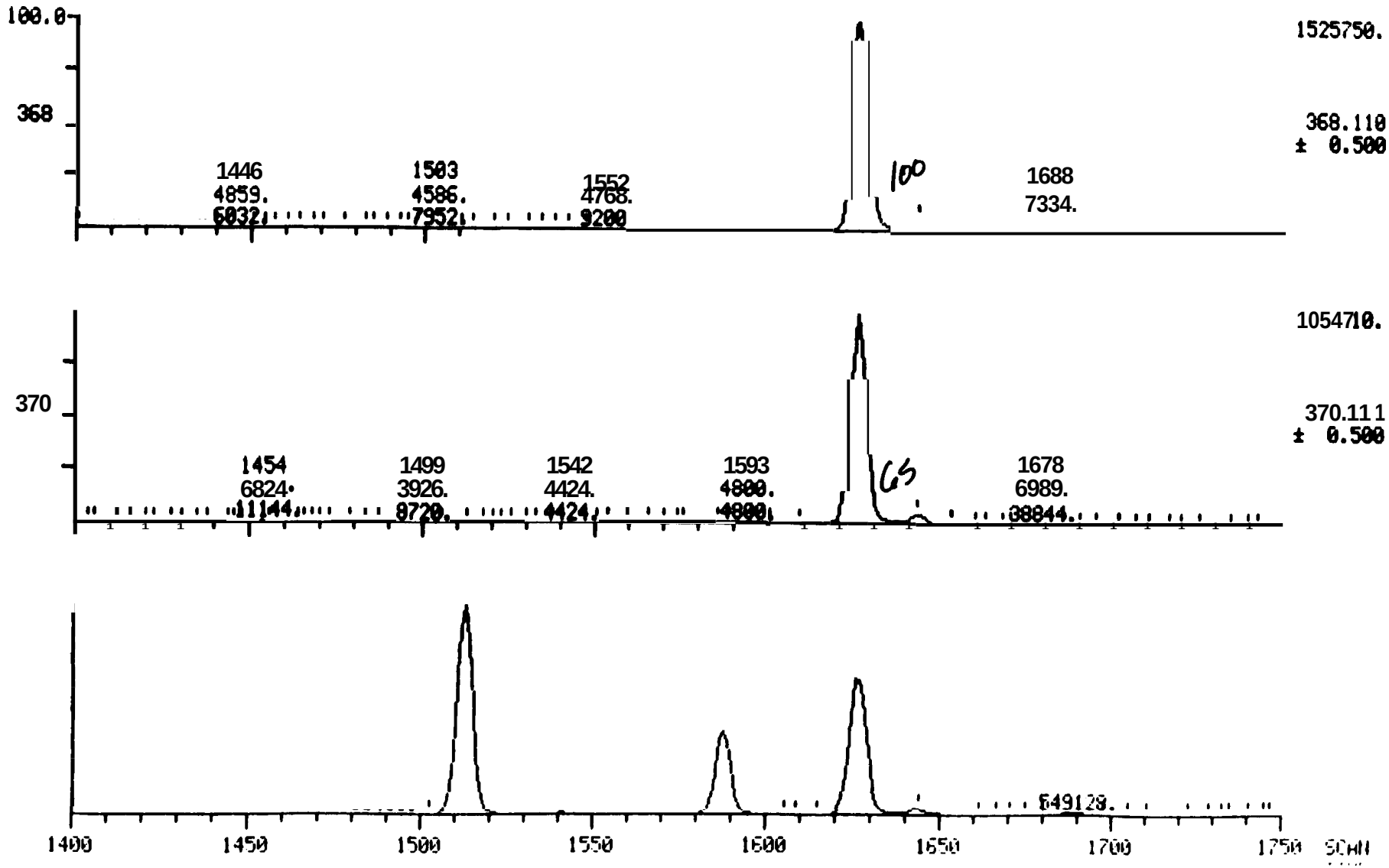
PecDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506II2 #1 SCANS 1400 TO 1750
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.15

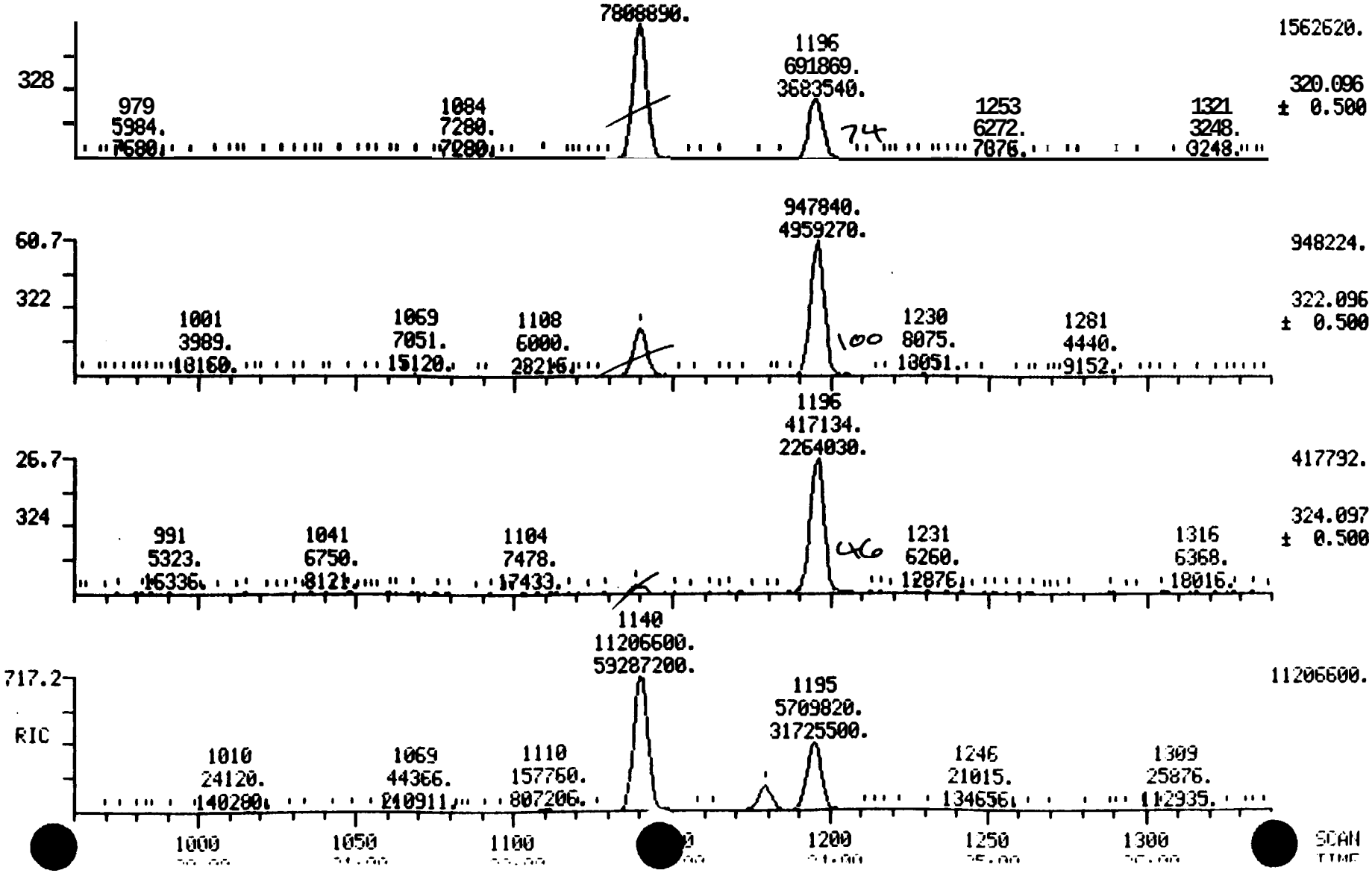


C·786

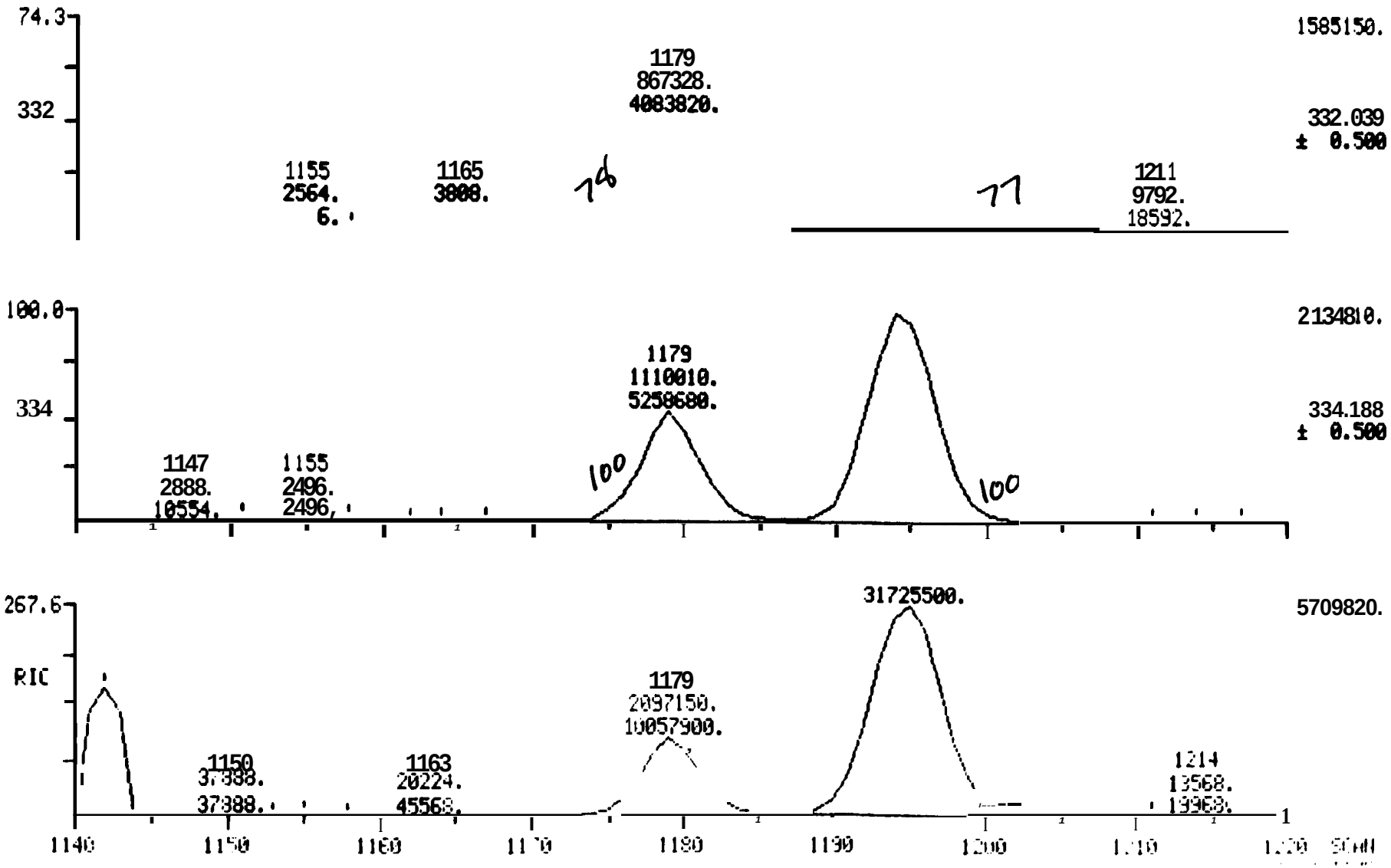

100.0
368
1525750.
368.110
± 0.500
1446
4859.
6032.
1503
4586.
7952.
1552
4768.
9200
100
1688
7334.
370
1054710.
370.111
± 0.500
1454
6824.
11144.
1499
3926.
8720.
1542
4424.
4424.
1593
4800.
4800.
65
1678
6989.
38844.
649128.
1400
1450
1500
1550
1600
1650
1700
1750
SCAN

TCDD

1.25


7808890.
1196
691869.
3683540.
74
979
5984.
7680.
1084
7280.
7280.
1253
6272.
7876.
1321
3248.
3248.
328
1562620.
320.096
± 0.500
947840.
4959270.
100
1001
3989.
10160.
1069
7051.
15120.
1108
6000.
28216.
1230
8075.
13051.
1281
4440.
9152.
60.7
322
948224.
322.096
± 0.500
1196
417134.
2264030.
46
991
5323.
16336.
1041
6750.
8121.
1104
7478.
17433.
1231
6260.
12876.
1316
6368.
18016.
26.7
324
417792.
324.097
± 0.500
1140
11206600.
59287200.
1195
5709820.
31725500.
1010
24120.
140280.
1069
44366.
210911.
1110
157760.
807206.
1246
21015.
134656.
1309
25876.
112935.
717.2
RIC
11206600.
1000
1050
1100
1200
1250
1300
SCAN
TIME

1.06

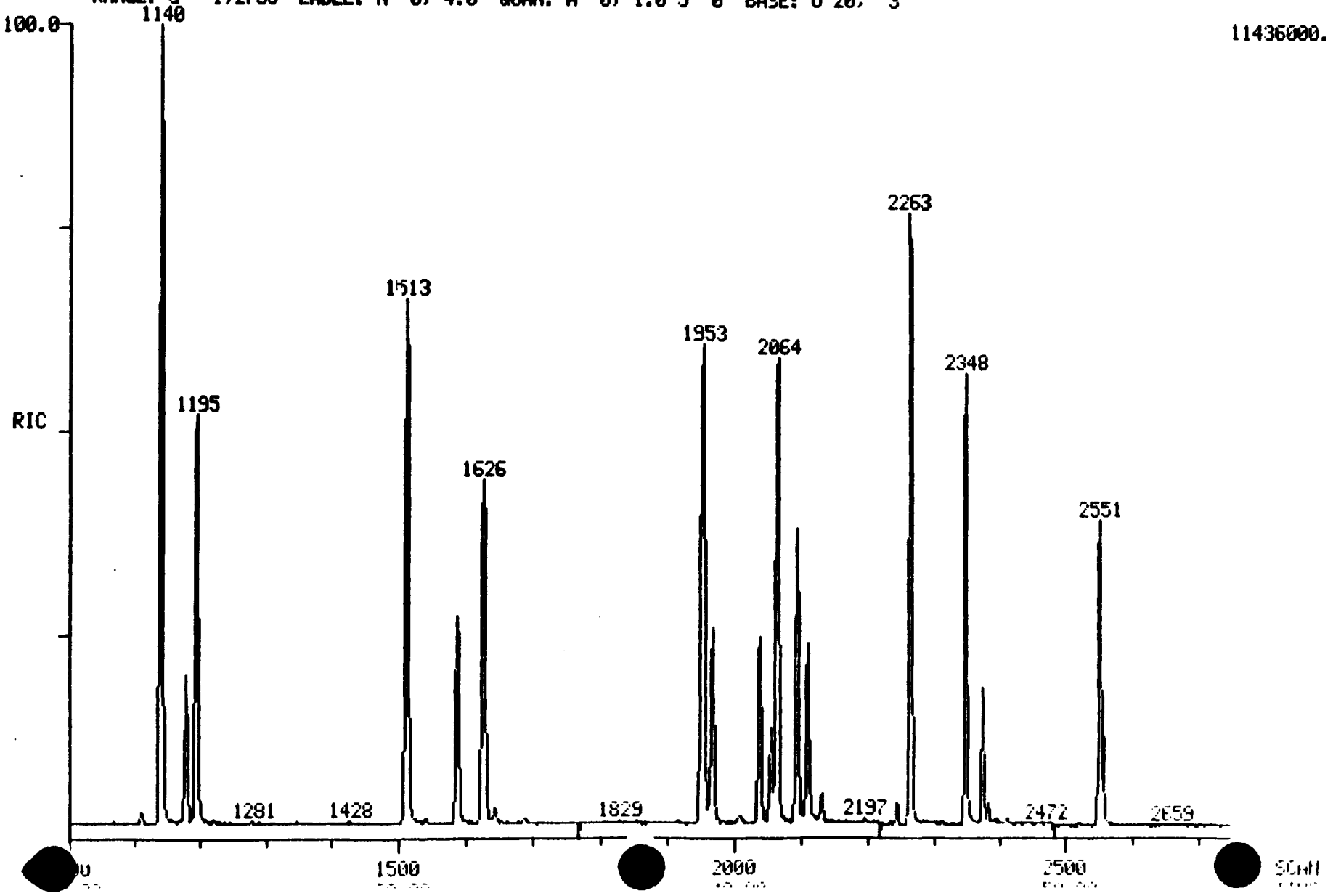

74.3
332
1585150.
332.039
± 0.500
1179
867328.
4083820.
1155
2564.
6.
1165
3808.
1211
9792.
18592.
100.0
334
2134810.
334.188
± 0.500
1179
1110010.
5258680.
1147
2888.
10554.
1155
2496.
2496.
100
100
267.6
RIC
5709820.
31725500.
1179
2097150.
10057900.
1150
37888.
37888.
1163
20224.
45568.
1214
13568.
13968.
1140
1150
1160
1170
1180
1190
1200
1210
1220

MIDRIC
03/26/91 13:20:00
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506II2 #1
CALI: CAL910306A #2

SCANS 1000 TO 2750

alc. 3-27-91
QW DA 3-27-91



4	419.530	410.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.034	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Por
7	425.550	426.050	0.052	3	100	40	1	0	Pos
8	435.550	436.030	0.052	3	100	40	1	0	Por
9	437.550	438.050	0.052	3	100	40	1	0	Pos
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.030	0.054	3	100	40	1	0	Pos
12	457.550	438.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Por
14	469.550	470.030	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	400.050	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3/26/91 12:53:59 SCAN 2753
Acquisition stopped

3/26/91 12:34:01
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2753 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2730	636.7	3300.0	19.3	84007.	31.	25.

MID scan
Scan time: 1.200 s

Desc: C2
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate 4096

Int #	Lo mass	Hi mass	Time	MPU	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
a	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	333.650	354.150	0.054	3	100	40	1	0	Pos
6	355.650	356.150	0.052	3	100	40	1	0	Pos
7	357.650	358.150	0.054	3	100	40	1	0	Pos
8	367.650	368.150	0.052	3	100	40	1	0	Pos
9	369.650	370.150	0.052	3	100	40	1	0	Pos
10	371.650	372.150	0.052	3	100	40	1	0	Pos
11	373.650	374.150	0.052	3	100	40	1	0	Pos
12	375.650	376.150	0.052	3	100	40	1	0	Pos
13	379.650	380.150	0.052	3	100	40	1	0	Pos
14	381.650	382.150	0.052	3	100	40	1	0	Pos
15	385.650	386.150	0.052	3	100	40	1	0	Pos
16	387.650	388.150	0.052	3	100	40	1	0	Pos
17	389.650	390.150	0.052	3	100	40	1	0	Pos
18	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.650	402.150	0.052	3	100	40	1	0	Pos
20	403.630	404.150	0.034	3	100	40	1	0	Pos
21	445.550	446.050	0.032	3	100	40	1	0	Pos

3/26/91 12:42:59 SCAN 2219 OF 3000

MID scan
Scan time: 1.200 s

Desc: G3
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mars	Hi mars	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
2	373.650	374.150	0.052	3	100	40	1	0	Pos
3	375.650	376.150	0.052	3	100	40	1	0	Pos
4	385.650	386.150	0.032	3	100	40	1	0	Pos
5	387.650	388.150	0.052	3	100	40	1	0	Pos
6	309.650	390.150	0.052	3	100	40	1	0	Pos
7	391.650	392.150	0.052	3	100	40	1	0	Pos
8	401.650	402.150	0.052	3	100	40	1	0	Pos
9	403.650	404.150	0.054	3	100	40	1	0	Pos
10	405.550	406.050	0.054	3	100	40	1	0	Pos
11	407.550	408.050	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.350	420.050	0.054	3	100	40	1	0	Por
14	421.550	422.050	0.054	3	100	40	1	0	Por
15	423.550	424.050	0.054	3	100	40	1	0	Por
16	425.550	426.050	0.052	3	100	40	1	0	Pos
17	435.550	436.050	0.052	3	100	40	1	0	Pos
18	437.350	438.050	0.052	3	100	40	1	0	Pos
19	479.550	400.050	0.054	3	100	40	1	0	Pos

3/26/91 12:48:26 SCAN 2484 OF 3000

MID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 mr

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Pos
2	407.550	400.050	0.052	3	100	40	1	0	Pos
3	409.550	410.050	0.054	3	100	40	1	0	Pos

3/26/91 11:57:14 SCAN 1 OF 3000
Acquisition started

Acquire
03/26/91 11:57:00 + 0:04
Sample: 2UL OF 685:06 STD II
Condr.: 60M DB-5/TOTALS.
Formula:
Submitted by: DM

Run 0:68506II1
Free sectors: 25662
NATIVES ● 350PPB RUN1
Instrument: Q3
Analyst: PMP

ACQUIRING
Scan: 3 of 3000
Weight: 0.000
Acct. No: PC4622

********** GC PARAMETERS **********

Loaded CC Desc: BW Current CC oven tmp: 74 DegC Injector : 300 DegC
Current CC Desc: BW CC elapsed time : 1: 3 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	_	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	_	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan
Scan time: 1.200s

Desc: Bl
Samp. int.: 0.200ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Tire	MPW	MFW	HA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.630	334.150	0.054	3	100	40	1	0	Pos
11	337.630	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.630	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	355.650	356.150	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Po.
19	369.650	370.150	0.057	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.057	3	100	40	1	0	Pos

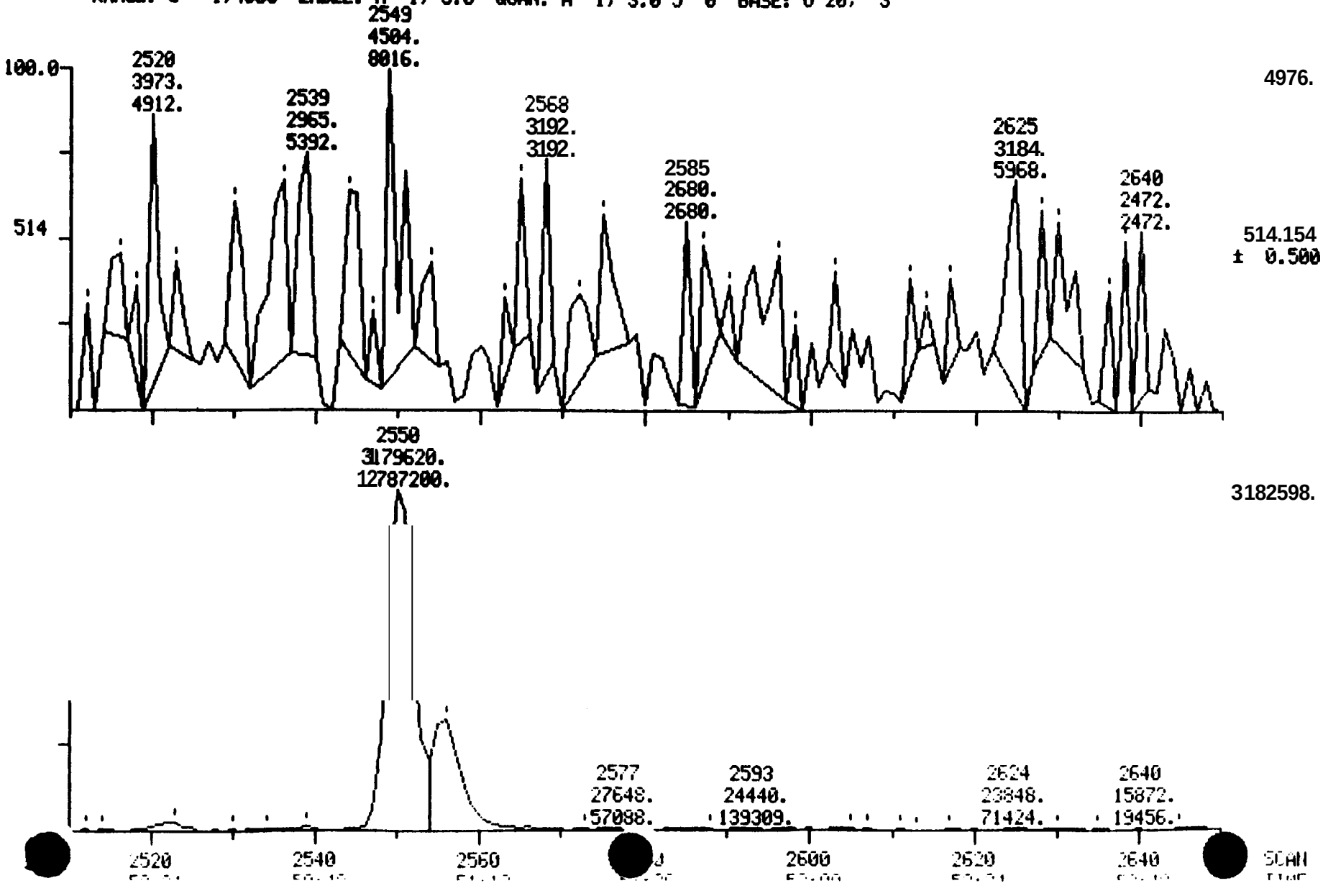
Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/26/91 12:33:45 SCAN 1769 OF 3000

MIDRIC+MASS CHROMATOGRAM
93/26/91 11:57:00
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506III #1
CALI: CAL910306A #2

SCANS 2510 TO 2650



MIDRIC+MASS CHROMATOGRAMS DATA: 68506II1 #1 SCANS 2510 TO 2650

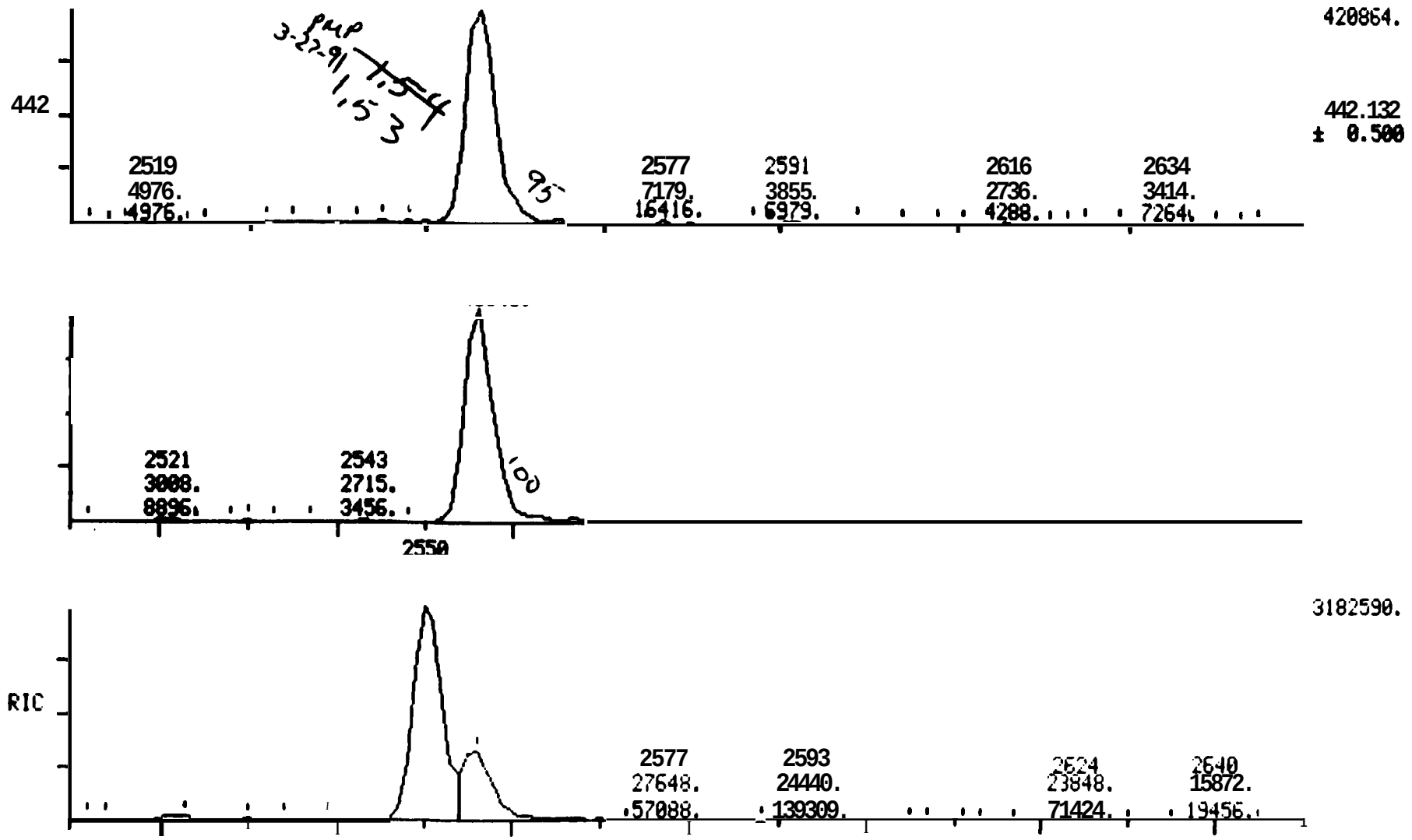
03/26/91 11:57:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1

CONDS.: 60M DB-5/TOTALS.

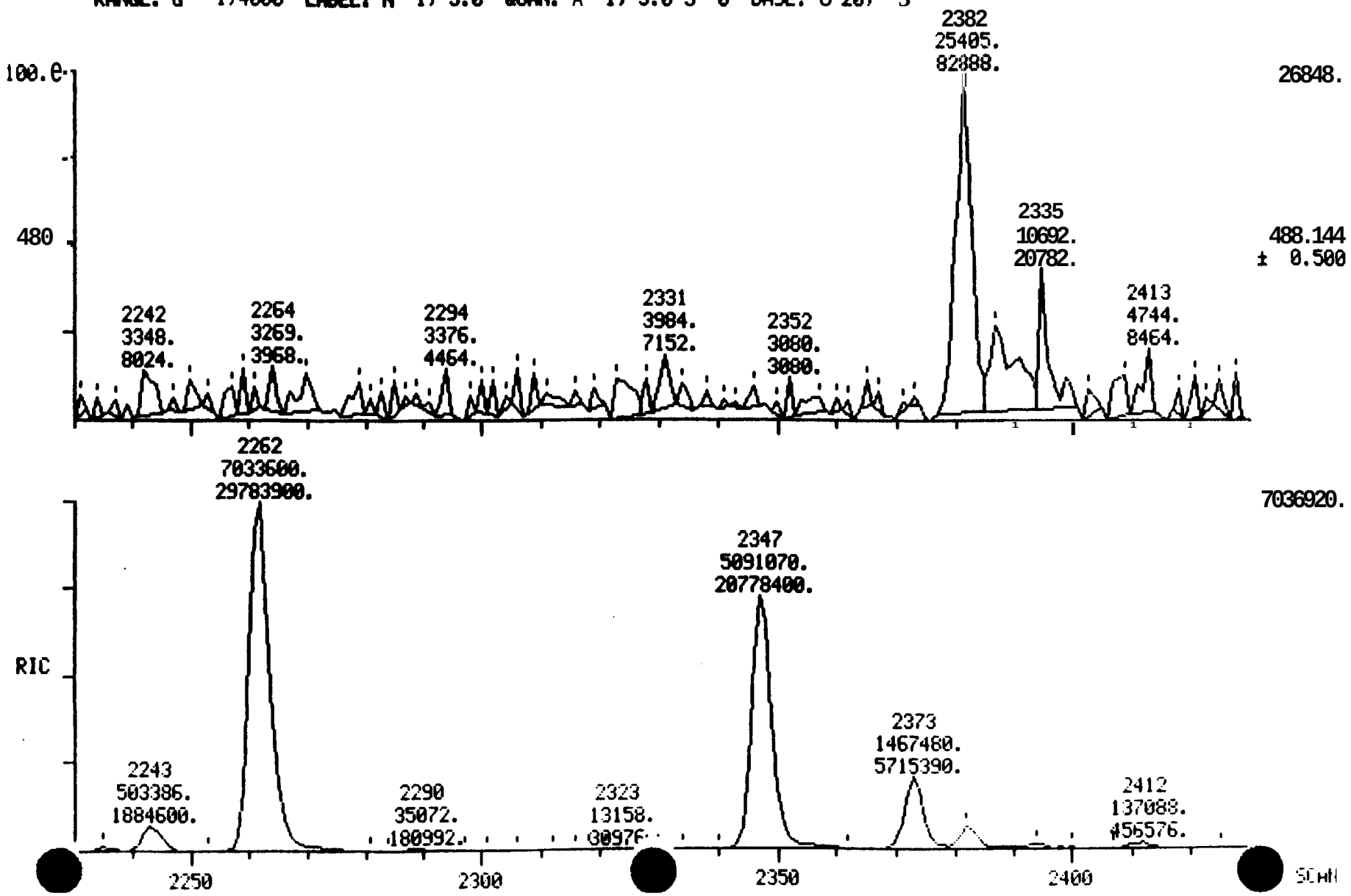
1.4000

OCDF

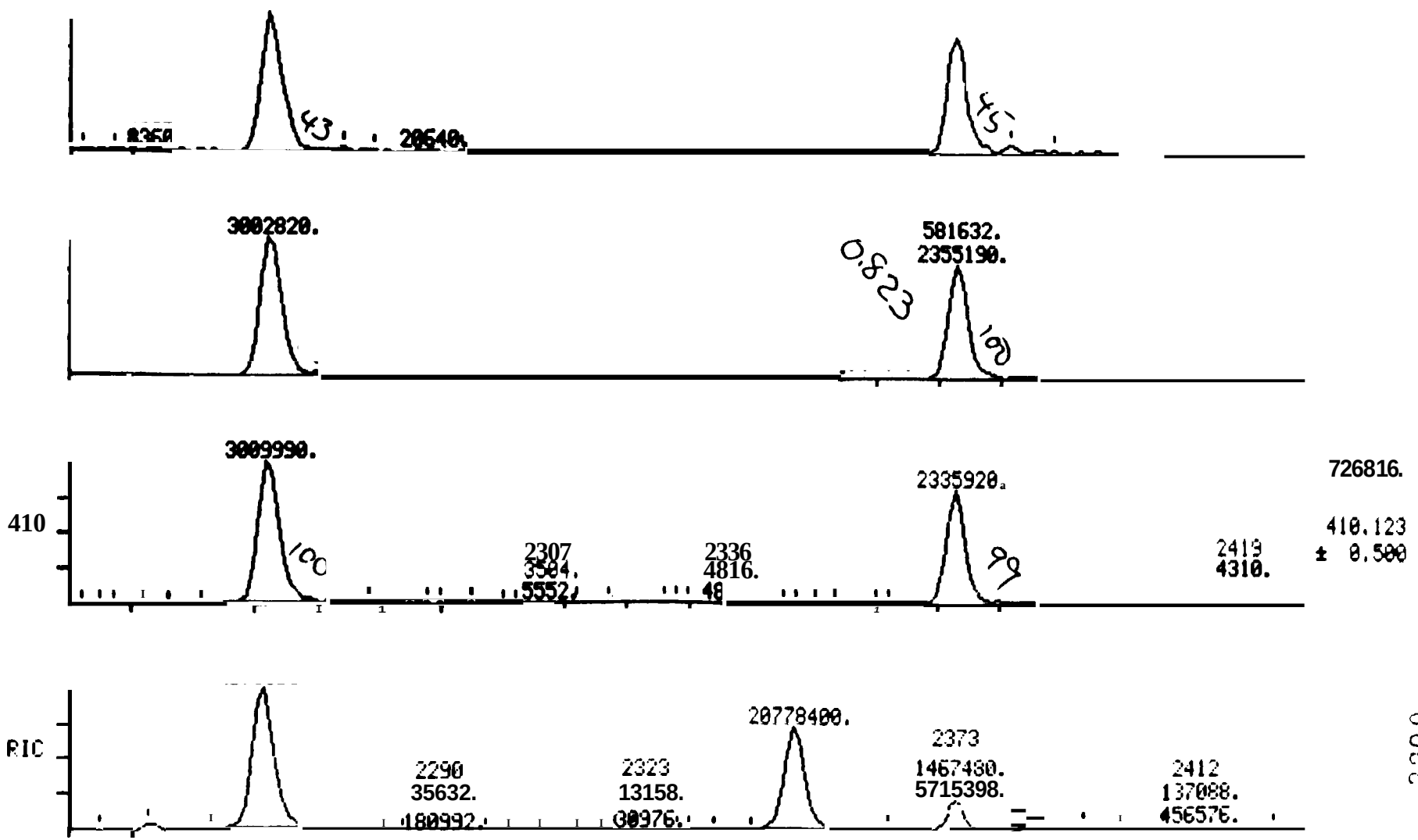


220022

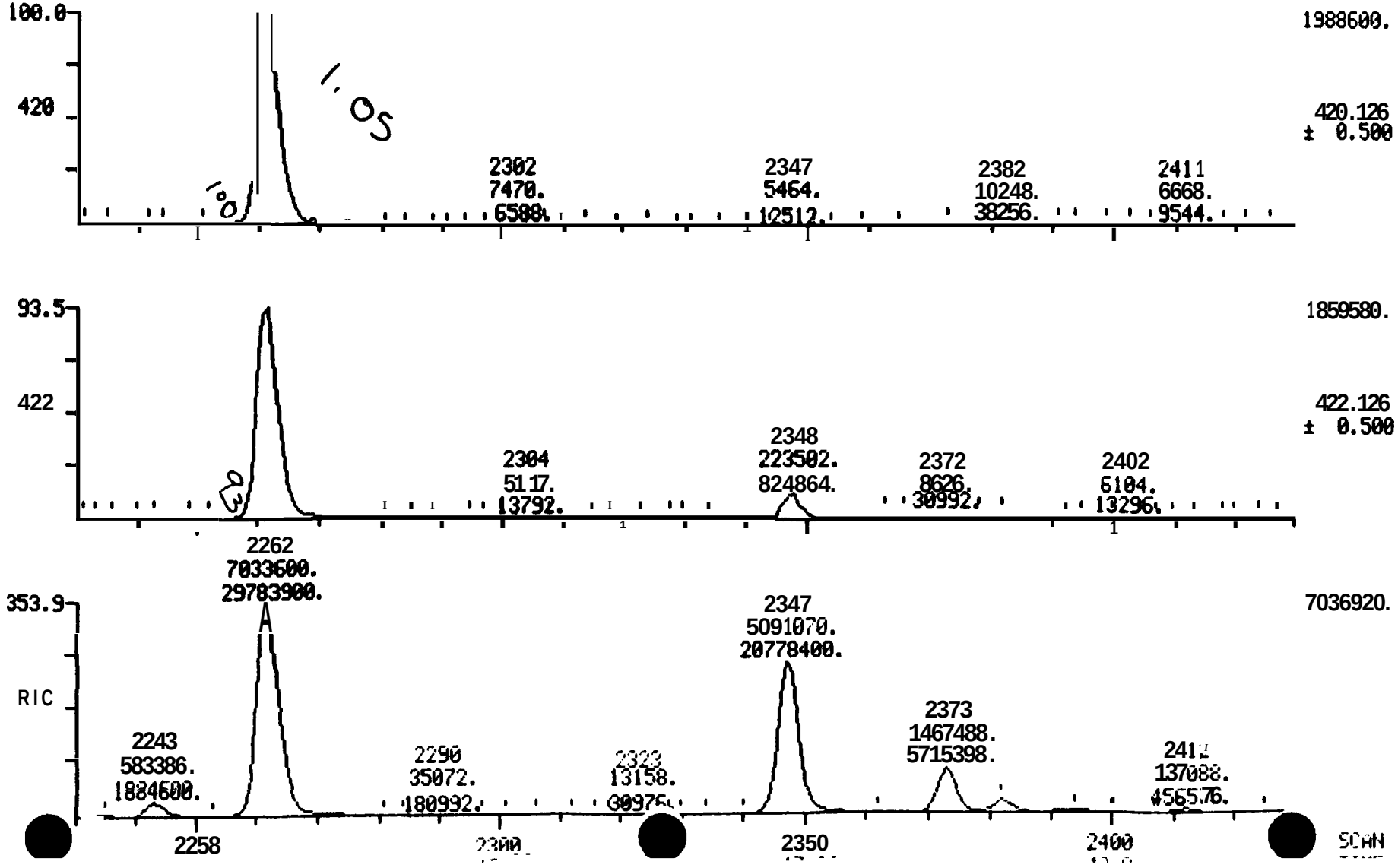
MIDRIC+MASS CHROMATOGRAM DATA: 68506III #1 SCANS 2238 TO 2430
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



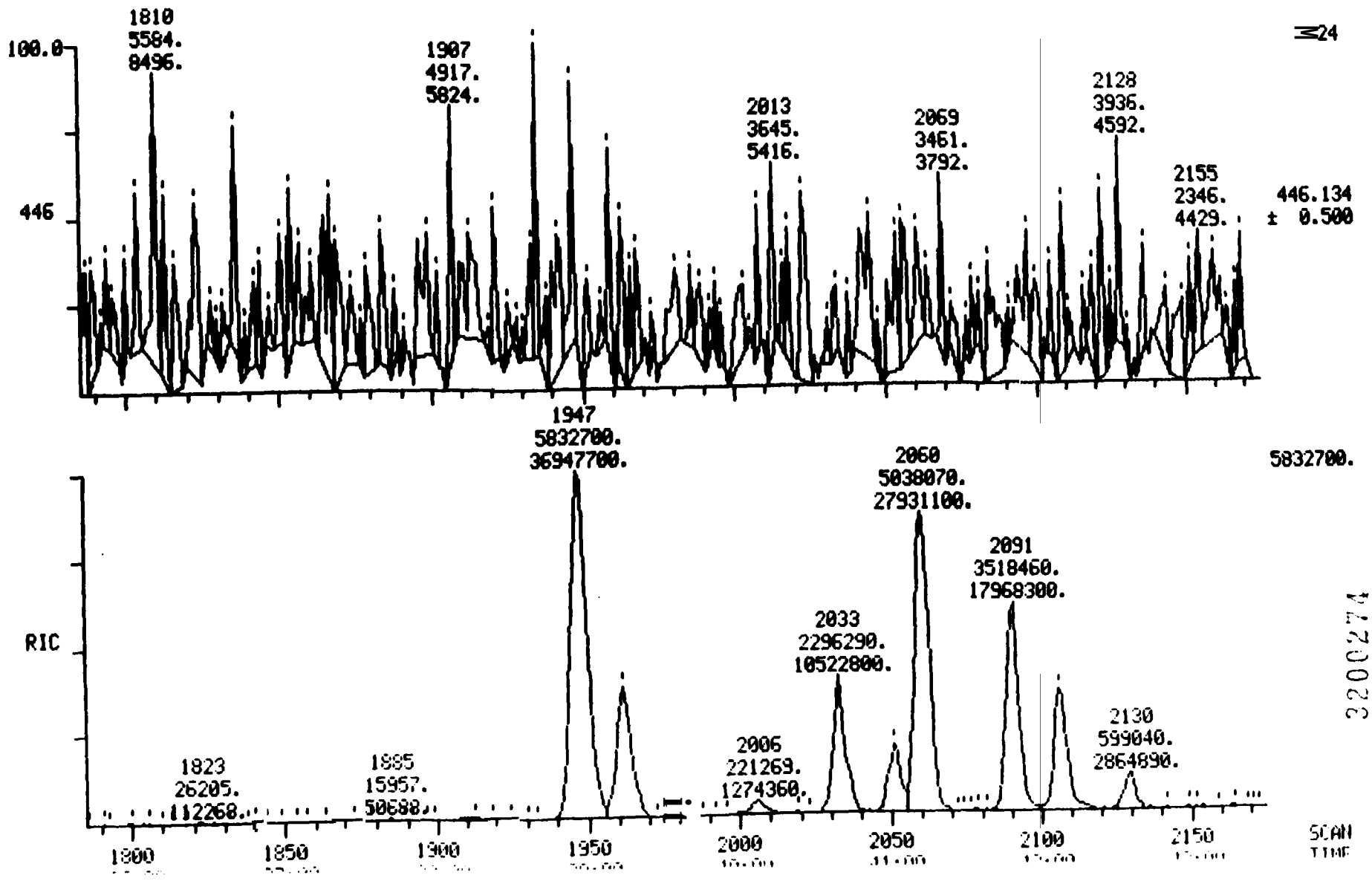
HpCDF


43
20540.
45
3002820.
581632.
2355190.
0.823
100
3009990.
100
2307
3584.
5552.
2336
4816.
48
2335920.
99
2419
4310.
726816.
410.123
± 0.500
410
RIC
2290
35632.
180992.
2323
13158.
60976.
20778400.
2373
1467480.
5715398.
2412
137088.
456576.

0022


100.0
420
1988600.
420.126
± 0.500
1.05
1.00
2302
7470.
6588.
2347
5464.
10512.
2382
10248.
38256.
2411
6668.
9544.
93.5
422
1859580.
422.126
± 0.500
0.93
2304
5117.
13792.
2348
223502.
824864.
2372
8626.
30992.
2402
6104.
13296.
353.9
RIC
7036920.
2262
7033600.
29783900.
2347
5091070.
20778400.
2243
583386.
1884600.
2290
35072.
180992.
2373
1467488.
5715398.
2412
137088.
456576.
2258
2300
2350
2400
SCAN

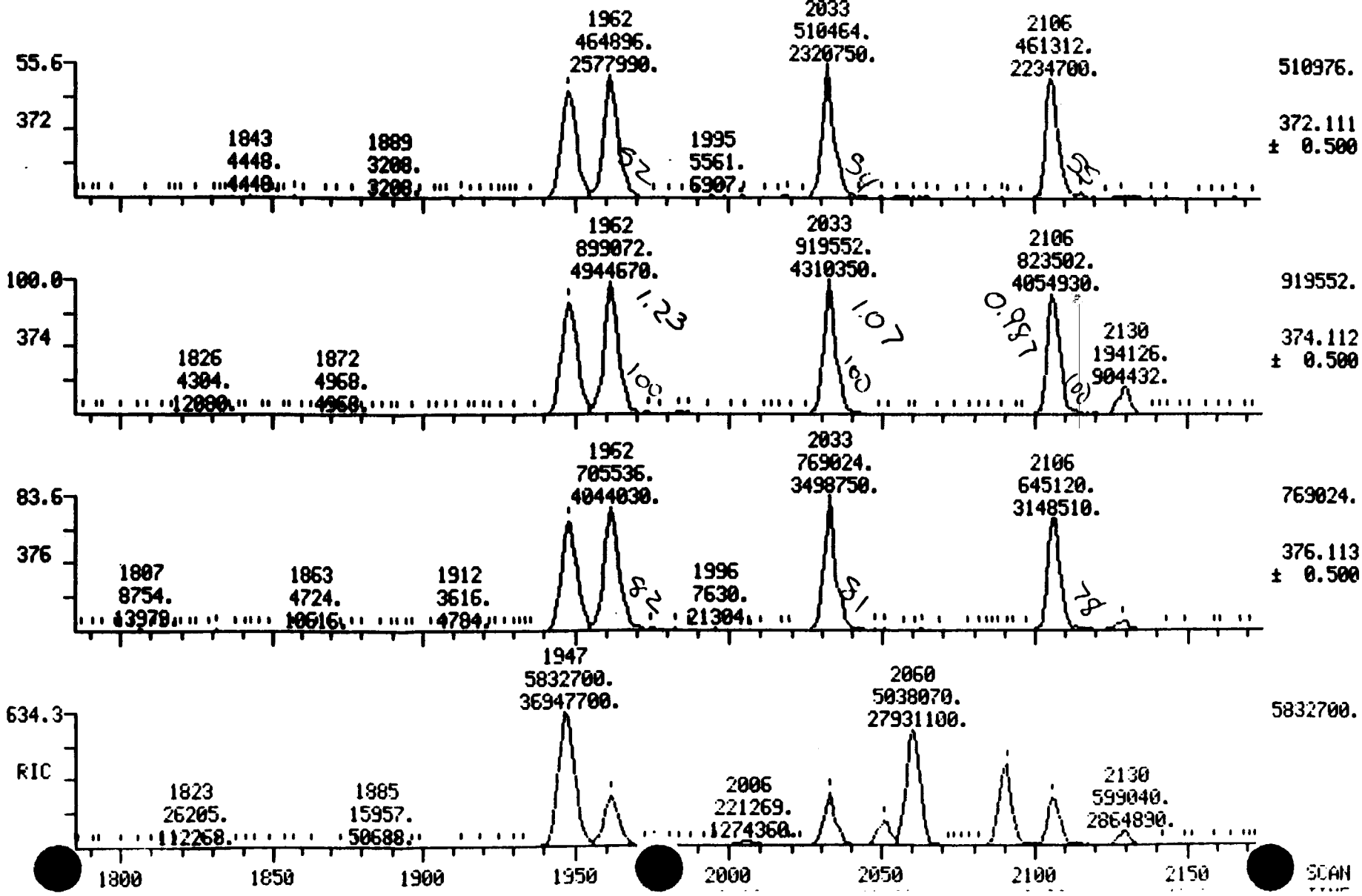
MIDRIC+MASS CHROMATOGRAM DATA: 68506III #1 SCANS 1785 TO 2175
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200274

HxCDF

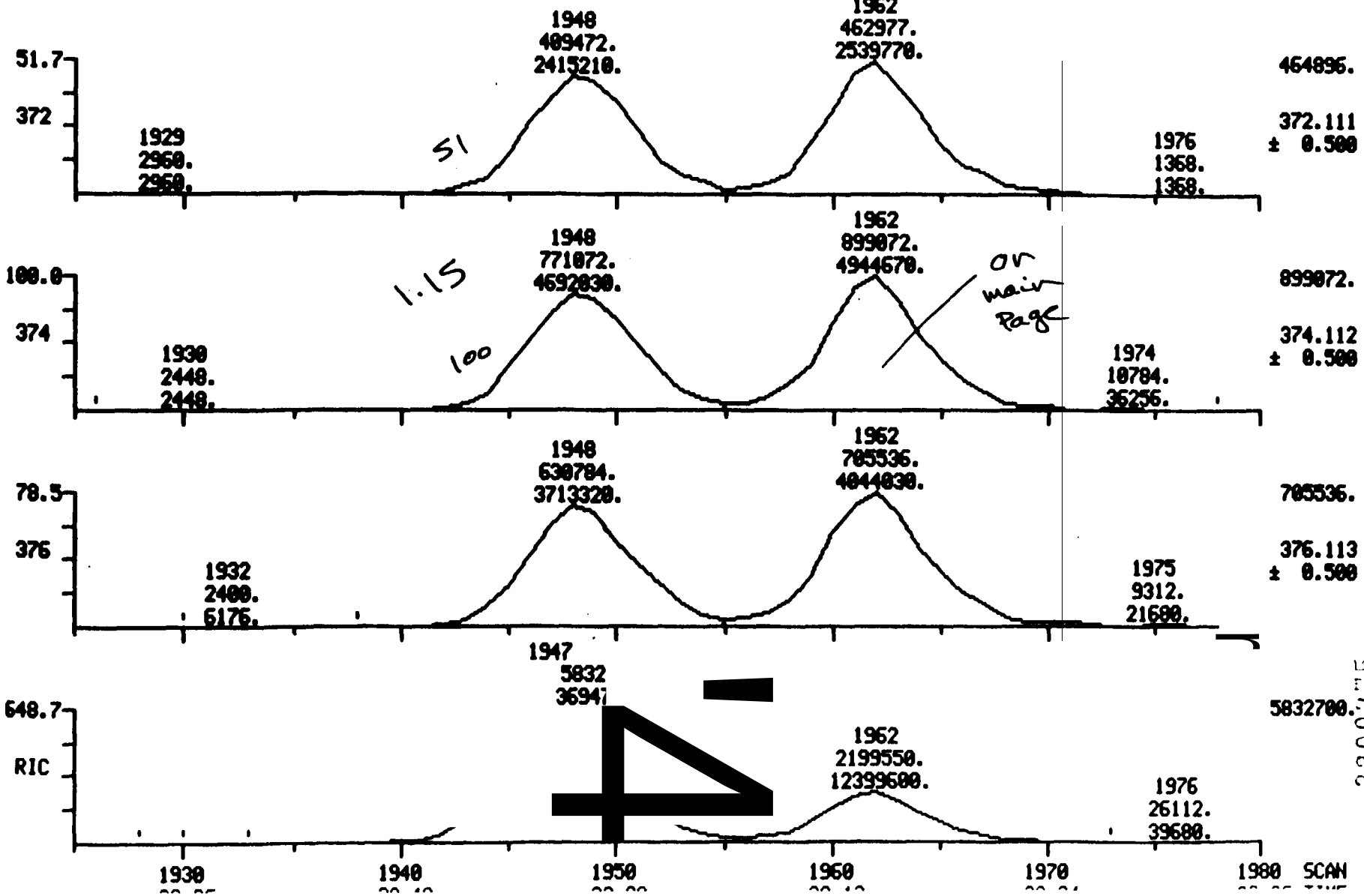
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



1/1

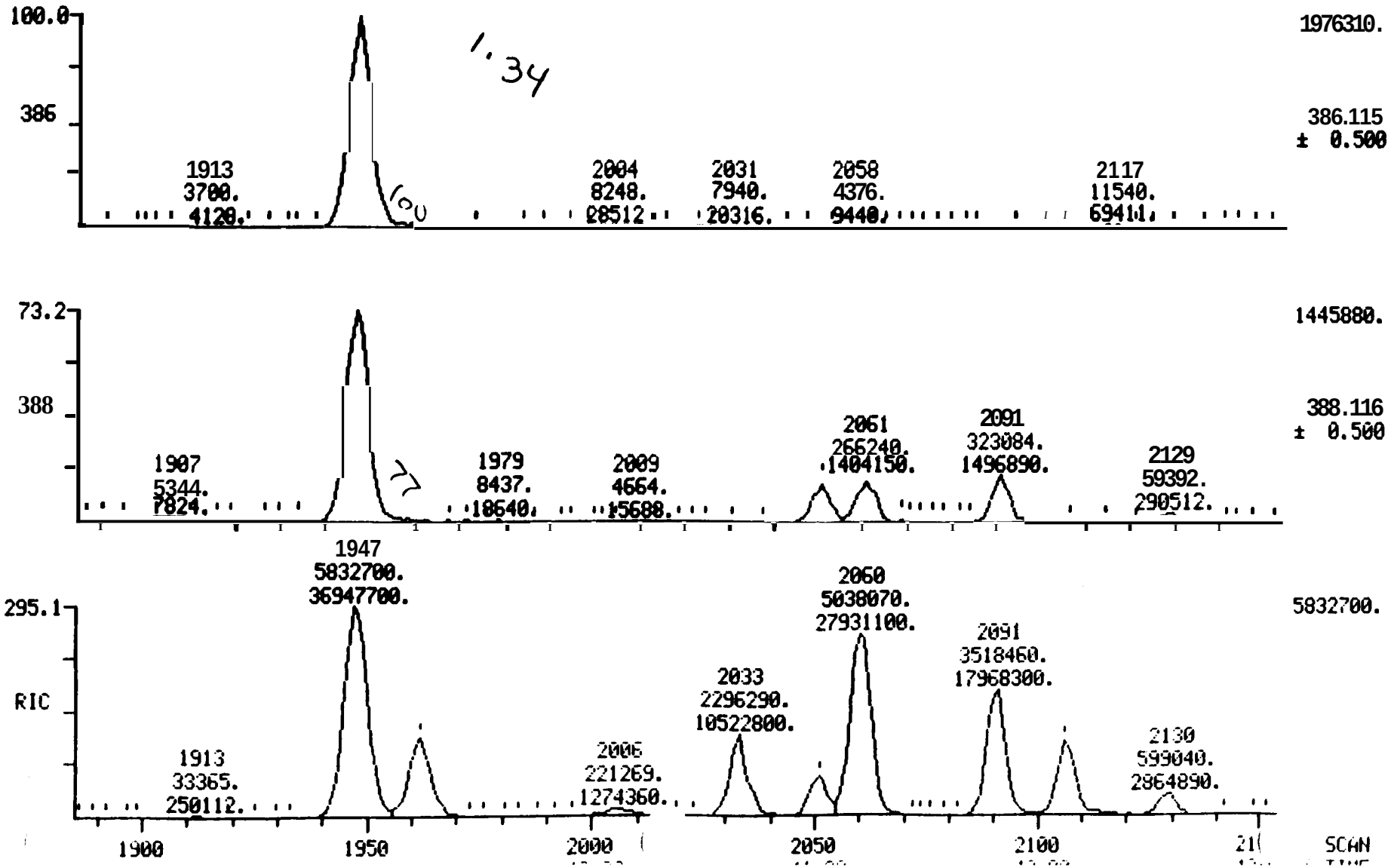
HxC [redacted]

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 1925 TO 1980
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

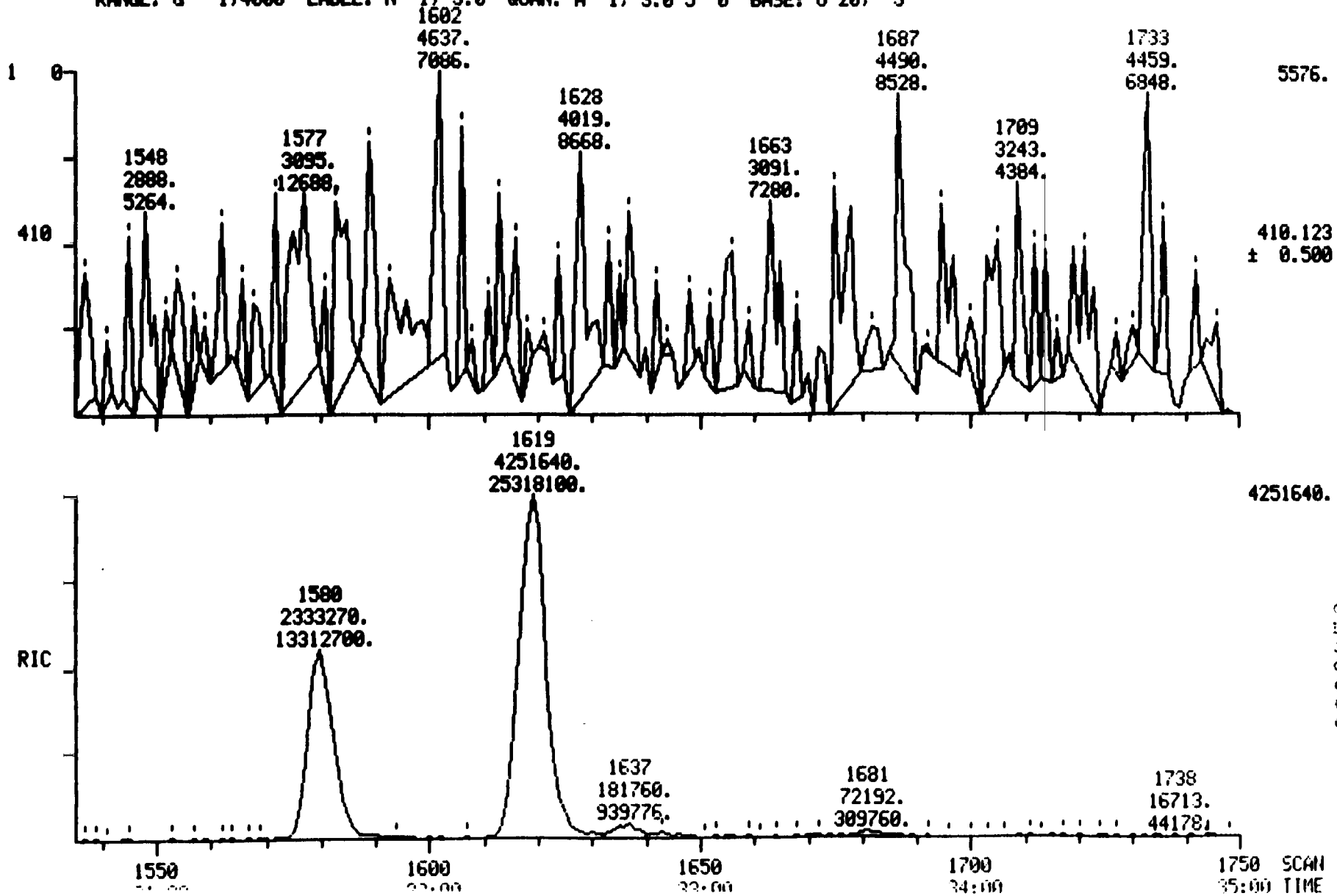


4

220023

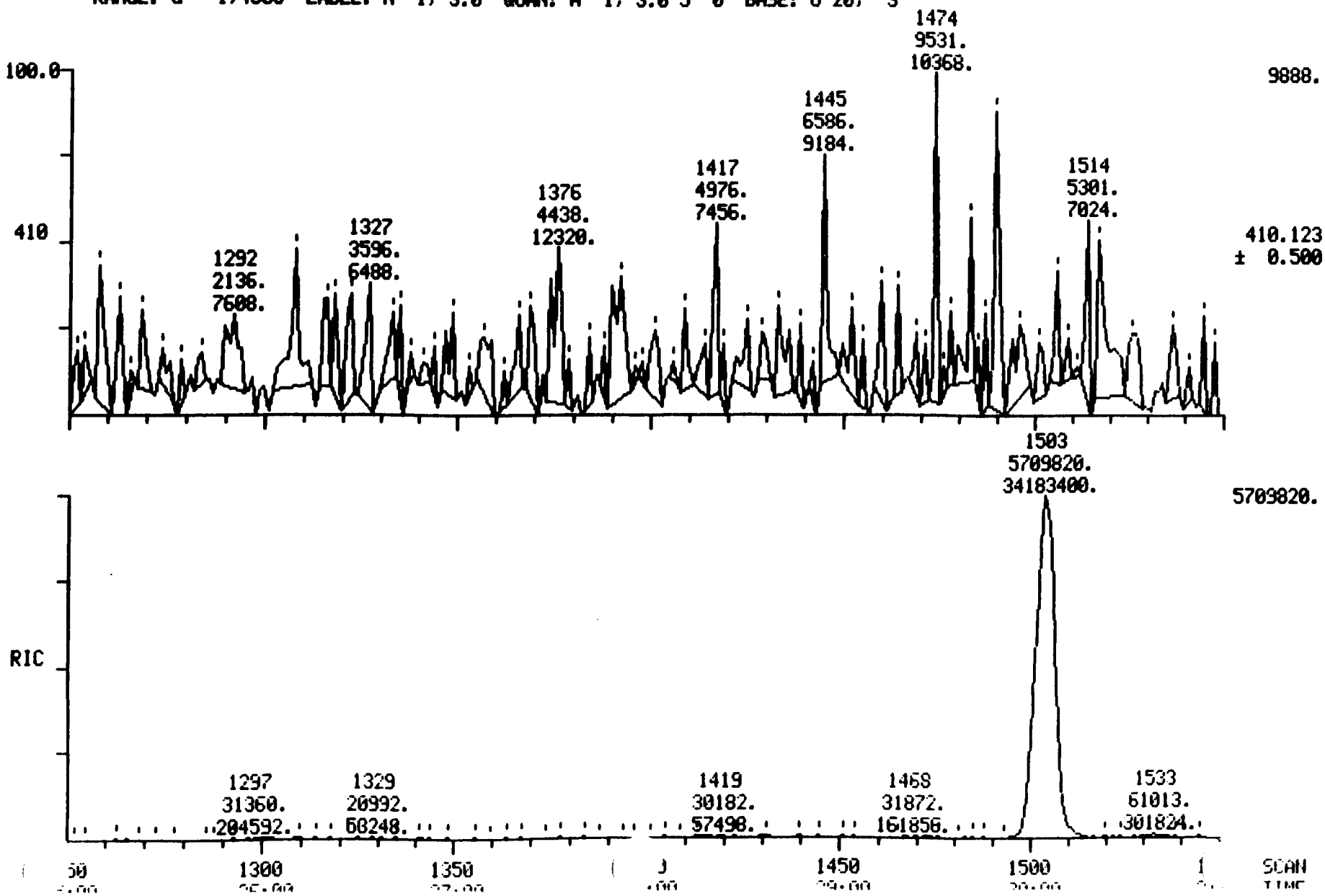

100.0
386
1976310.
386.115
± 0.500
1.34
1913
3700.
4120.
100
2004
8248.
28512
2031
7940.
20316.
2058
4376.
9440.
2117
11540.
69411.
73.2
388
1445880.
388.116
± 0.500
1907
5344.
7824.
77
1979
8437.
18640.
2009
4664.
15688.
2061
266240.
1404150.
2091
323084.
1496890.
2129
59392.
290512.
295.1
RIC
5832700.
1947
5832700.
36947700.
1913
33365.
250112.
2006
221269.
1274360.
2033
2296290.
10522800.
2060
5038070.
27931100.
2091
3518460.
17968300.
2130
599040.
2864890.
1900
1950
2000
2050
2100
SCAN

MIDRIC+MASS CHROMATOGRAM DATA: 68506III #1 SCANS 1535 TO 1750
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

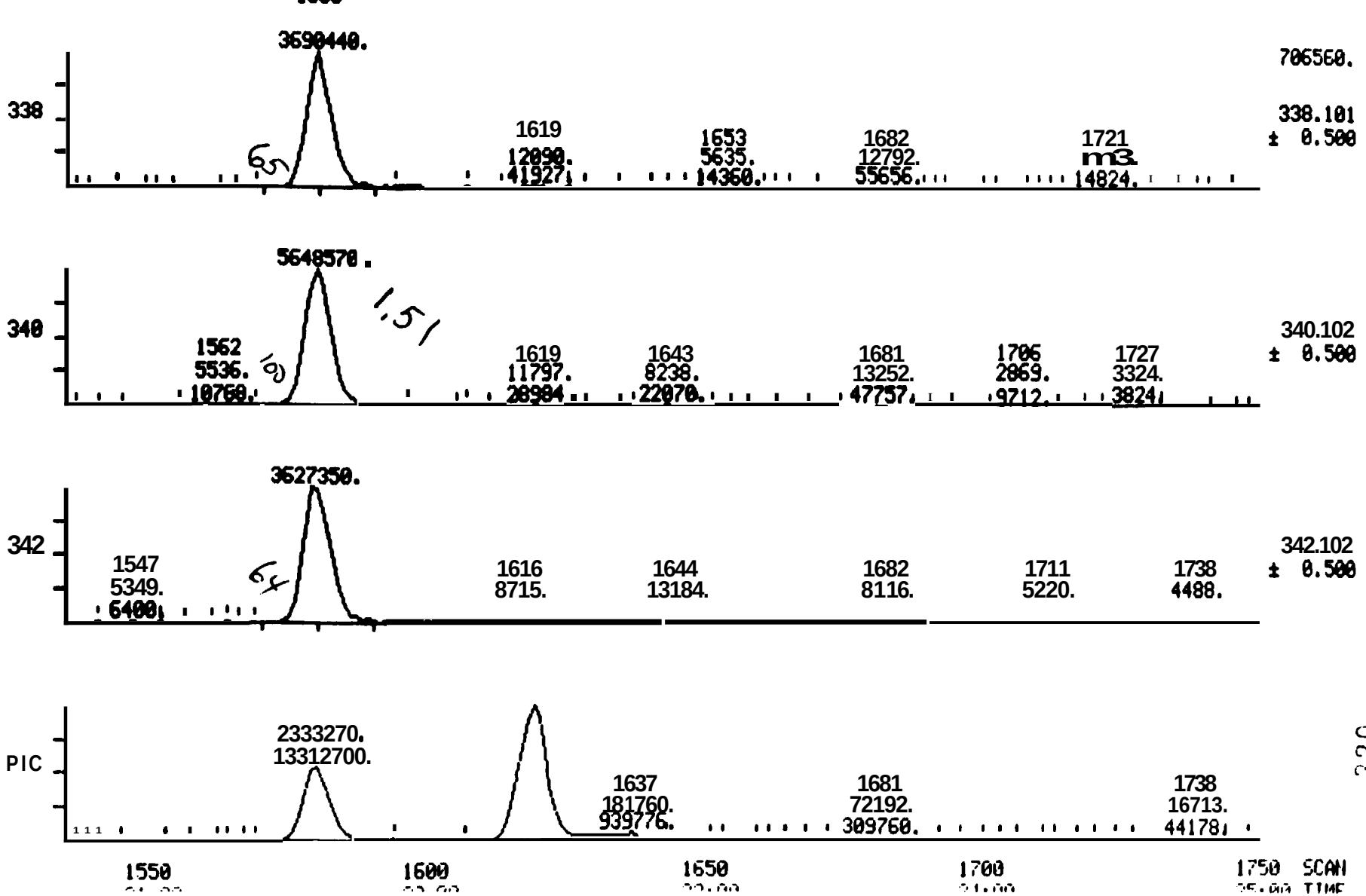


3200279

MIDRIC+MASS CHROMATOGRAM DATA: 68506III #1 SCANS 1250 TO 1550
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



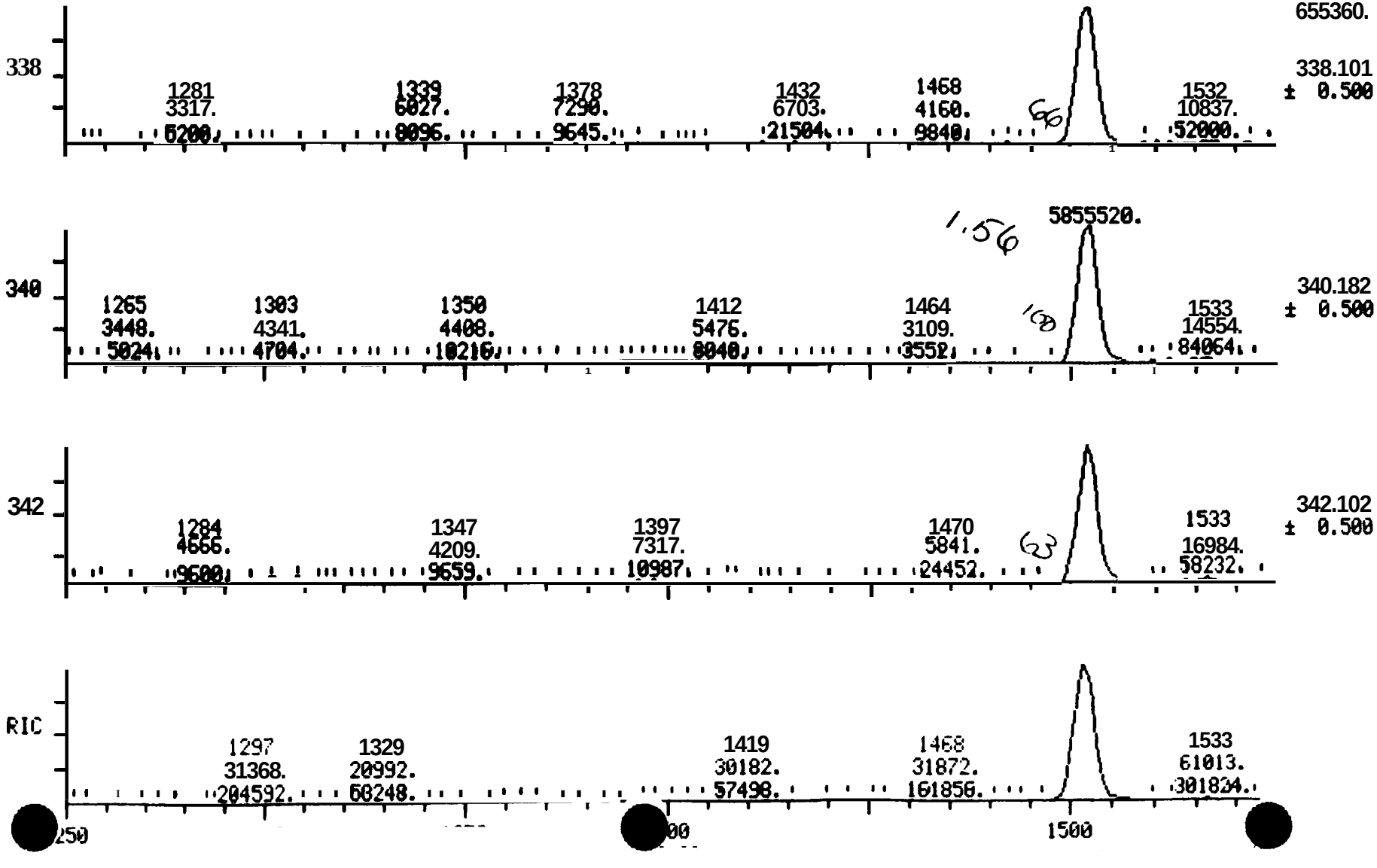
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 1535 TO 1750
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.8 J 0 BASE: U 20, 3



320

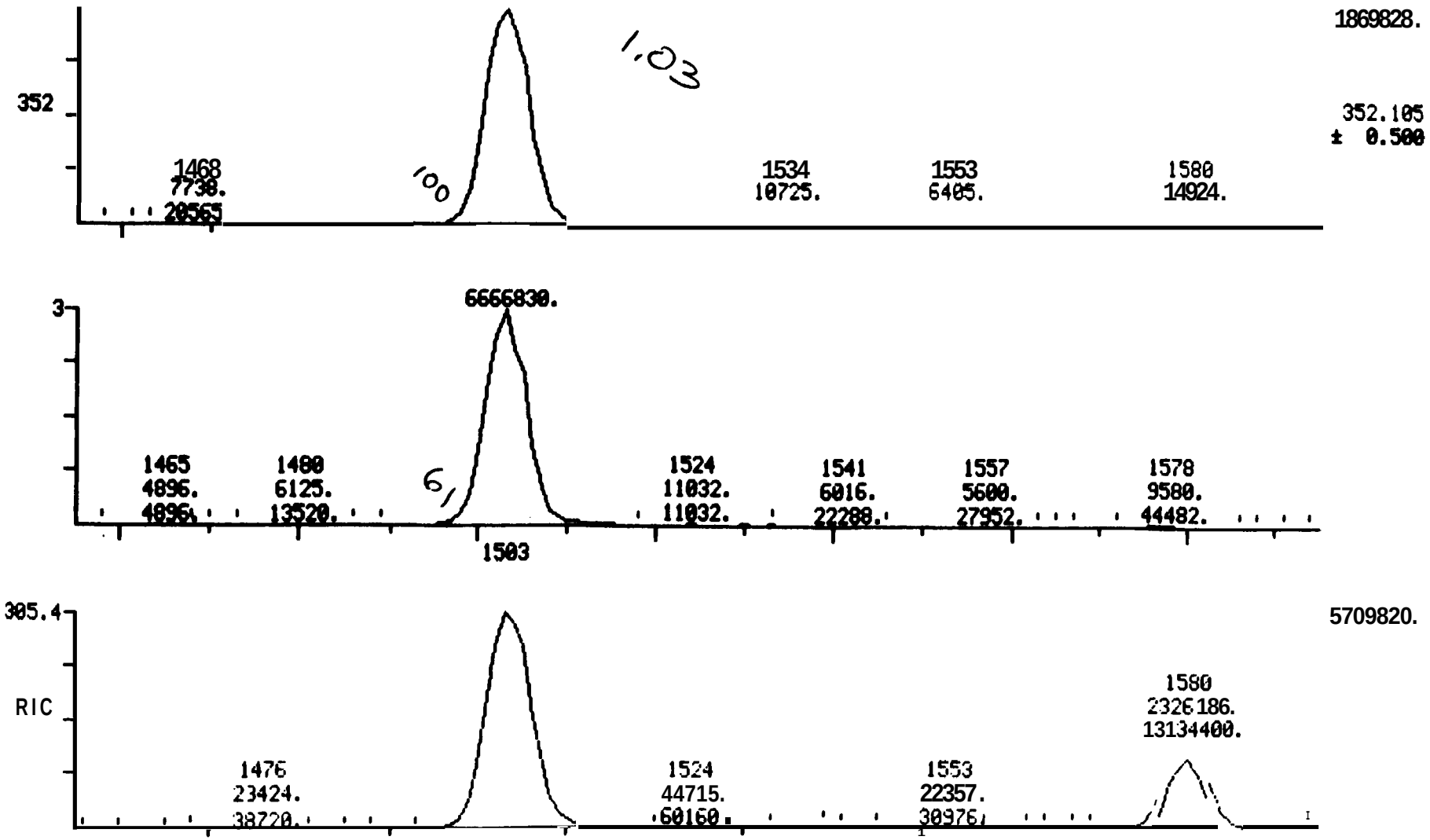
PeCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 1258 TO 1550
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



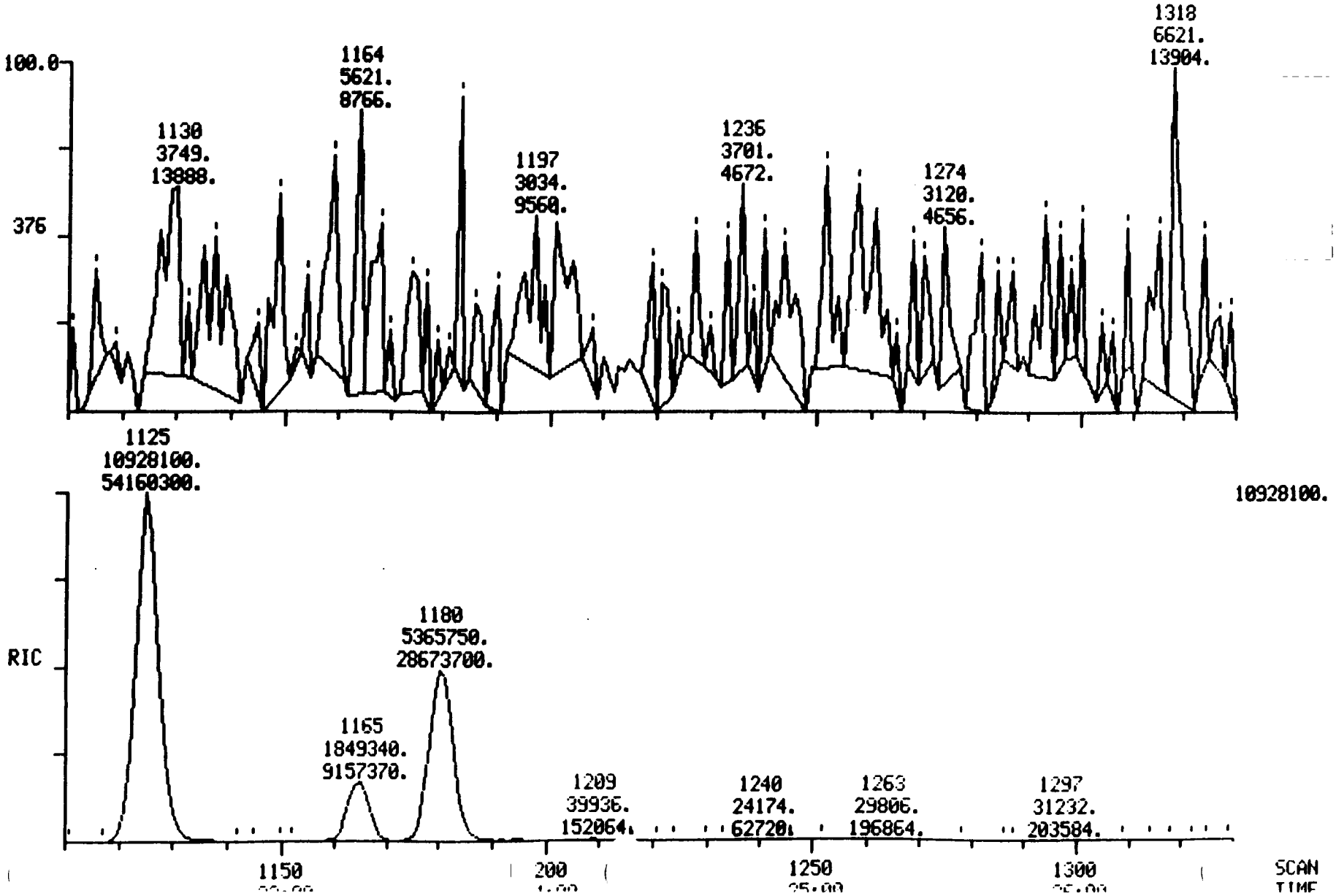
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 1455 TO 1595
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 20L OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.

QUAN:

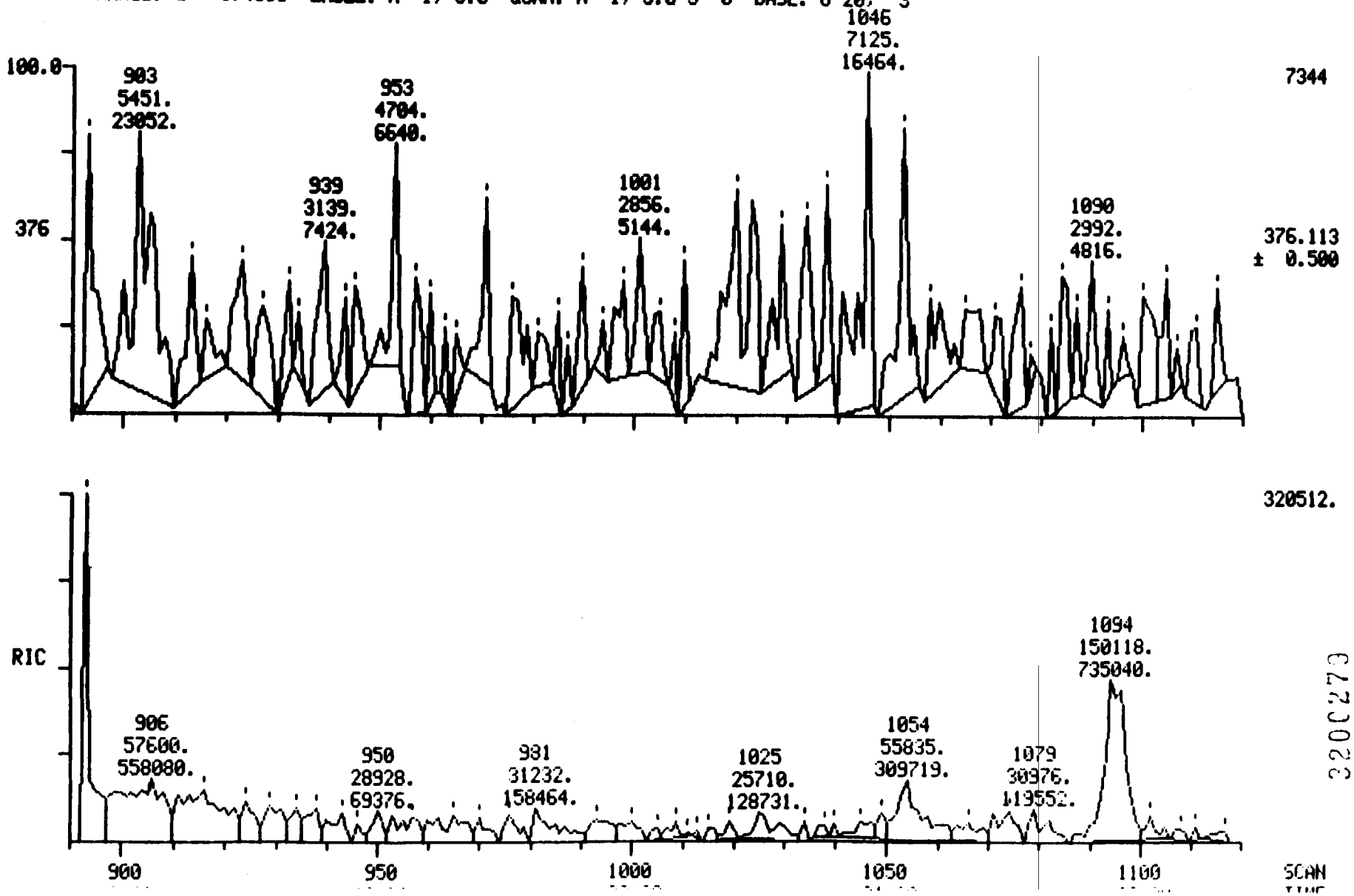


3200273

MIDRIC+MASS CHROMATOGRAM DATA: 68506II1 #1 SCANS 1110 TO 1330
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

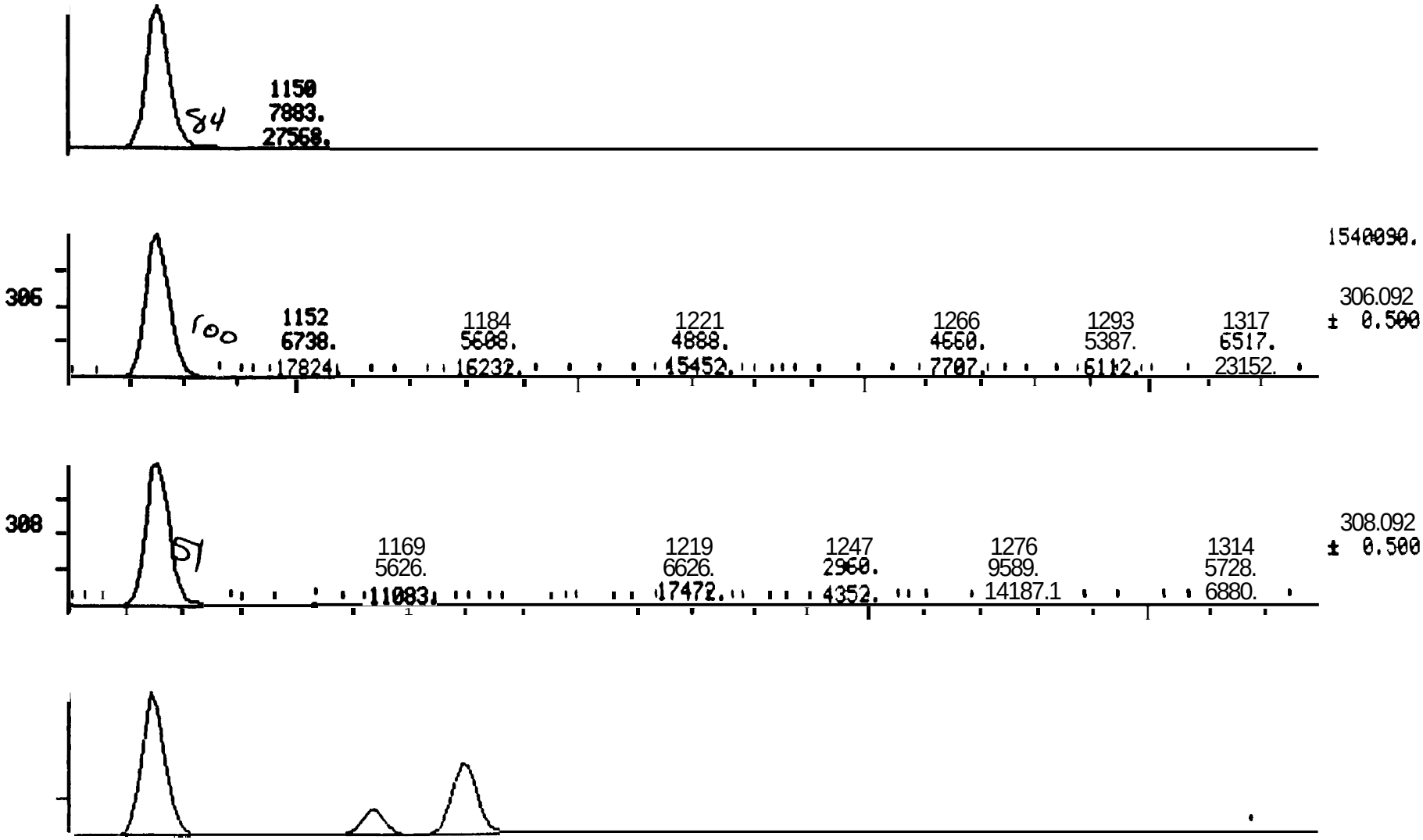


MIDRIC+MASS CHROMATOGRAM DATA: 68506III #1 SCANS 890 TO 1120
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II ⊓IVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

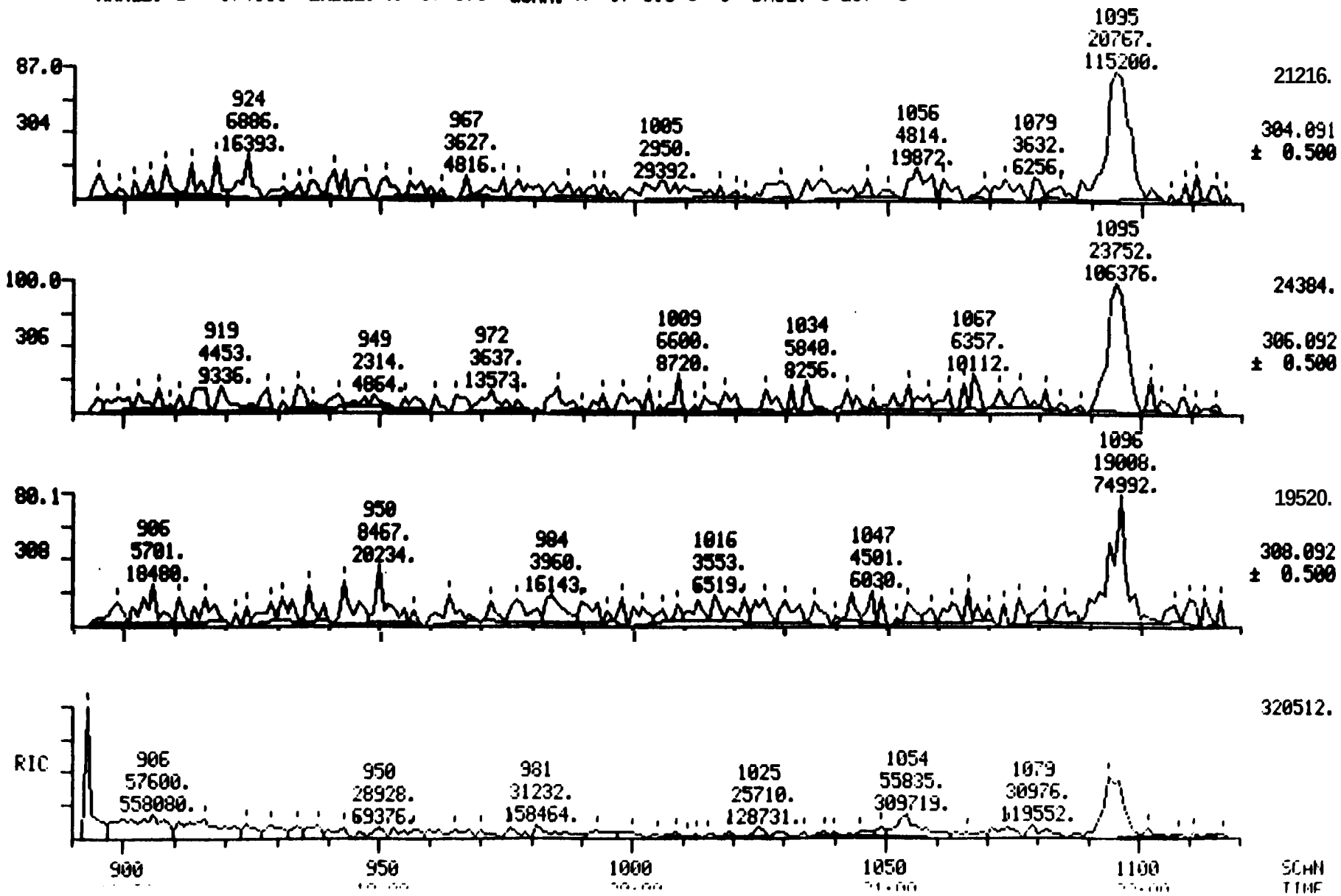


320C273

TCDF

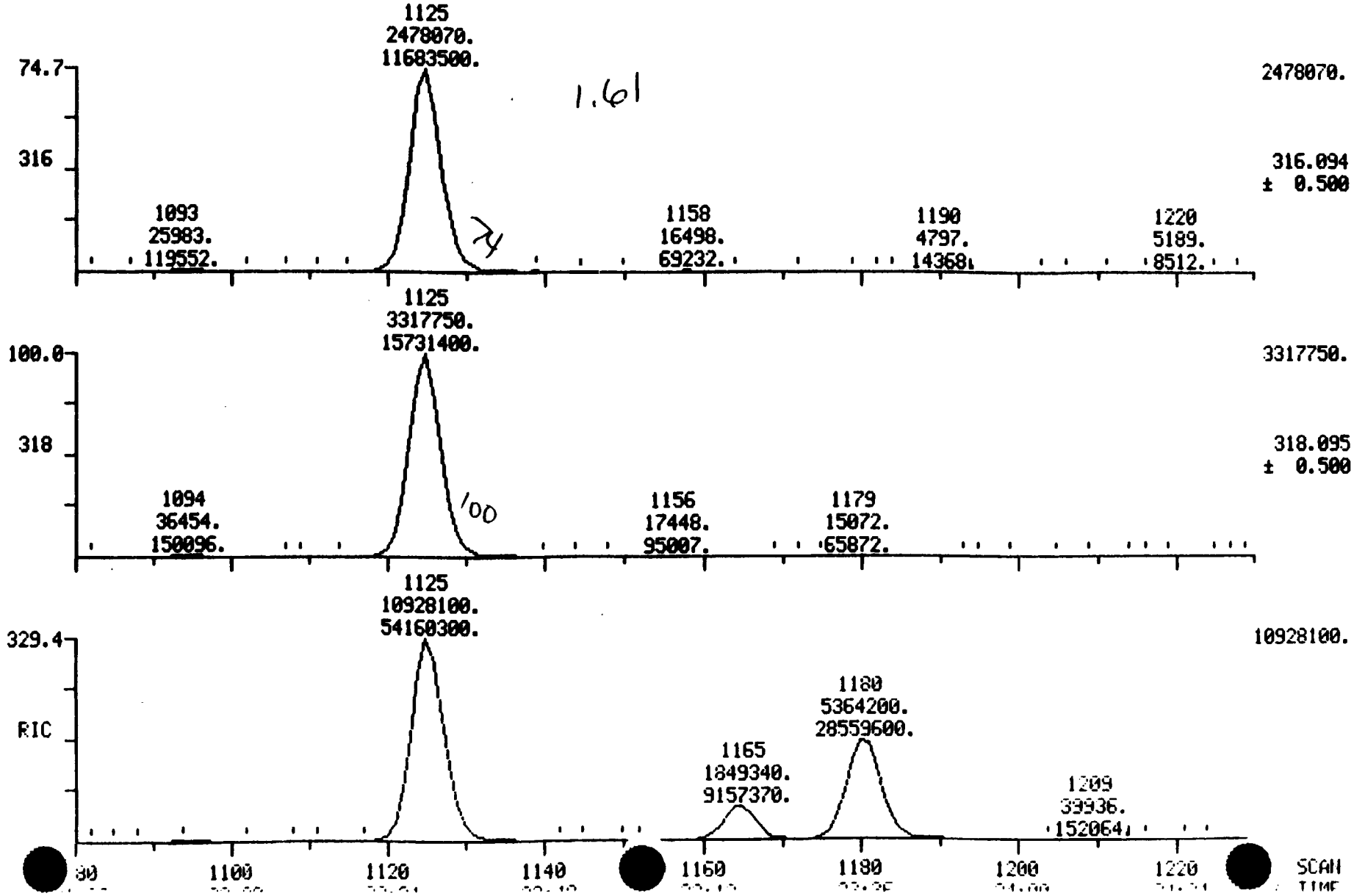

84
1150
7883.
27568.
306
100
1152
6738.
17824.
1184
5608.
16232.
1221
4888.
15452.
1266
4660.
7707.
1293
5387.
6112.
1317
6517.
23152.
1540090.
306.092
± 0.500
308
51
1169
5626.
11083.
1219
6626.
17472.
1247
2960.
4352.
1276
9589.
14187.1
1314
5728.
6880.
308.092
± 0.500

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 898 TO 1120
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



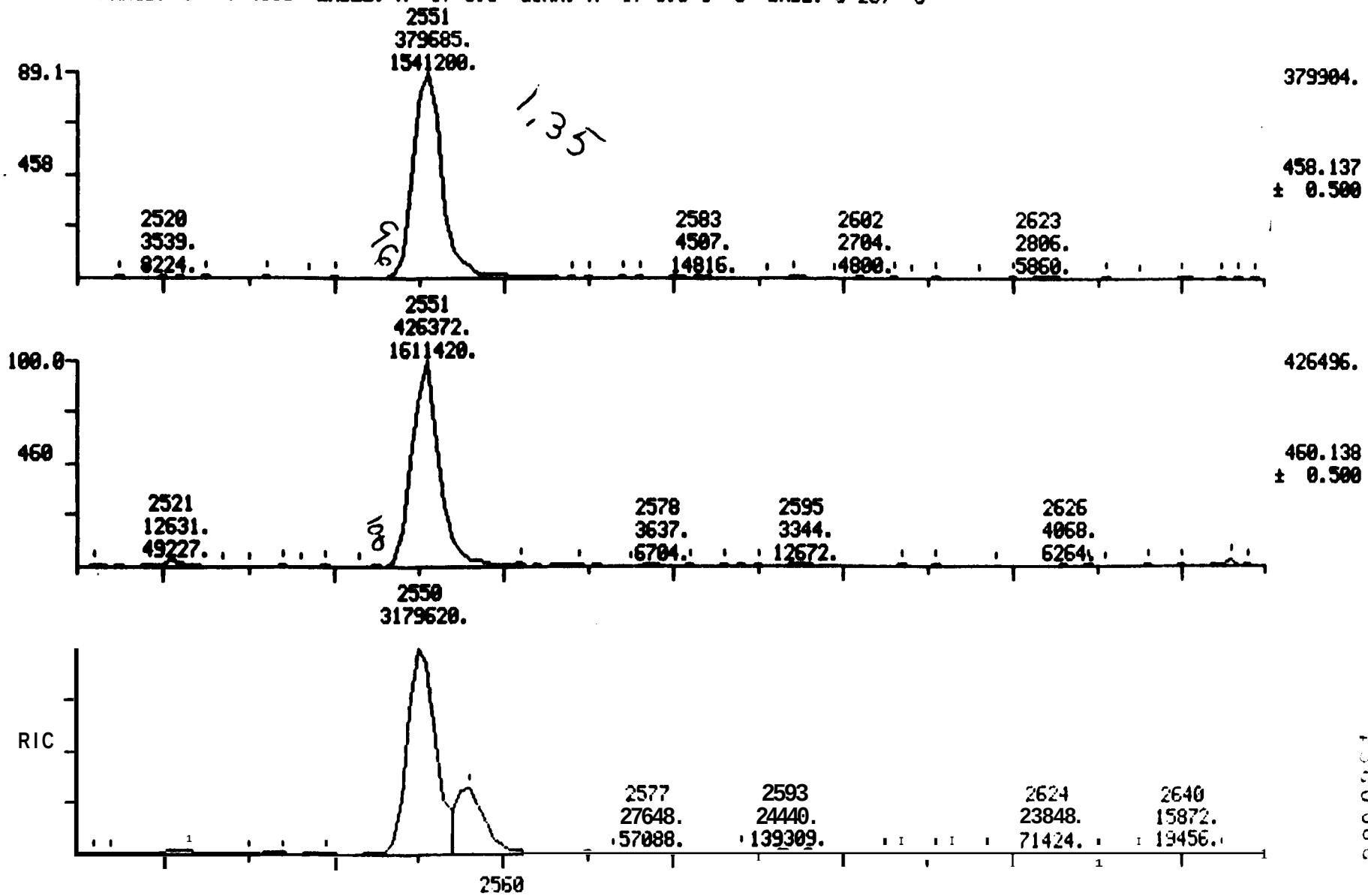
0020023

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 1080 TO 1230
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 8

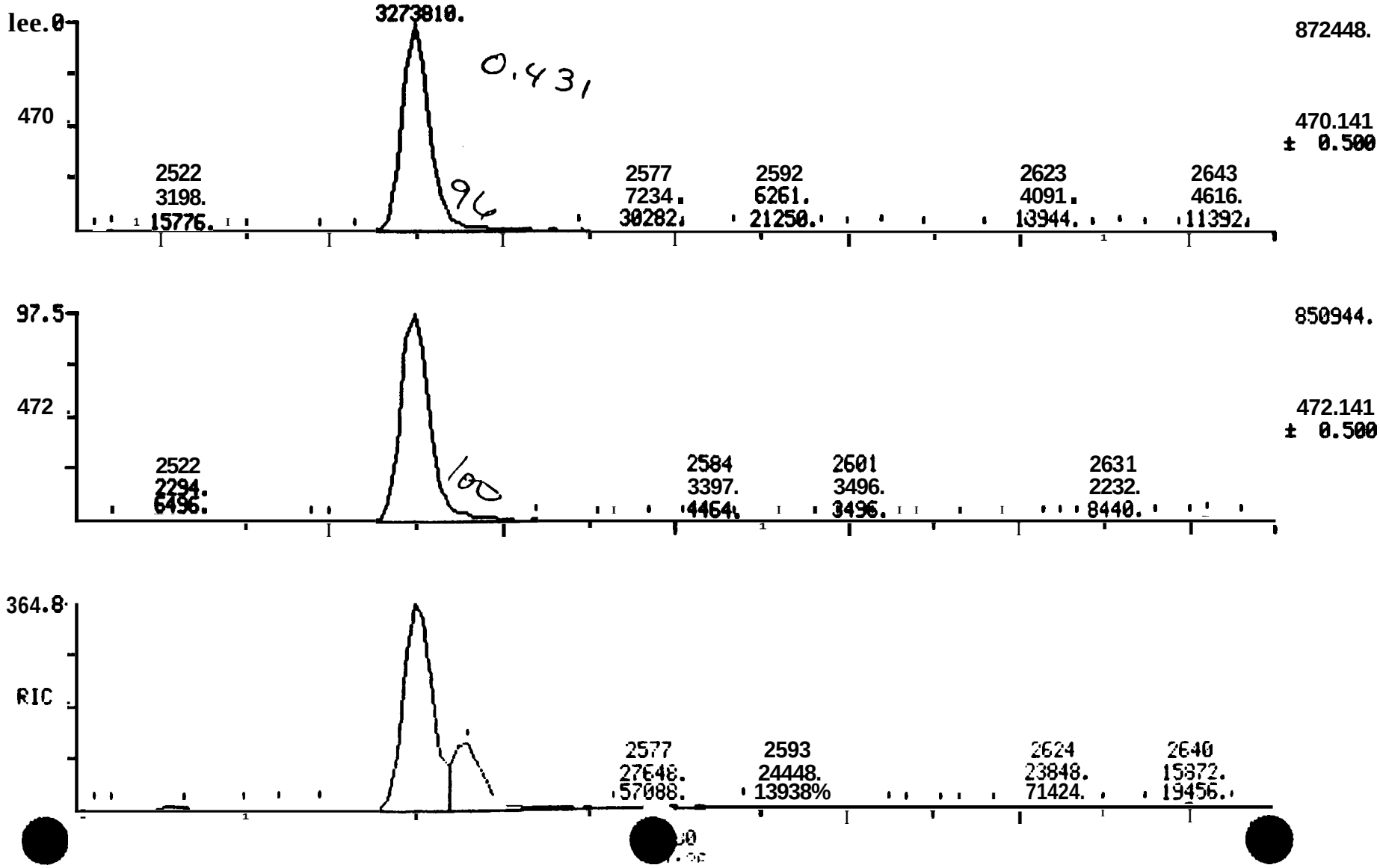


OCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 2510 TO 2650
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200261


lee.0
3273810.
0.431
872448.
470
470.141
± 0.500
2522
3198.
15776.
96
2577
7234.
30282.
2592
6261.
21250.
2623
4091.
13944.
2643
4616.
11392.
97.5
850944.
472
472.141
± 0.500
2522
2294.
6496.
100
2584
3397.
4464.
2601
3496.
3496.
2631
2232.
8440.
364.8
RIC
2577
27648.
57088.
2593
24448.
13938%
2624
23848.
71424.
2640
15872.
19456.

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 2250 TO 2410

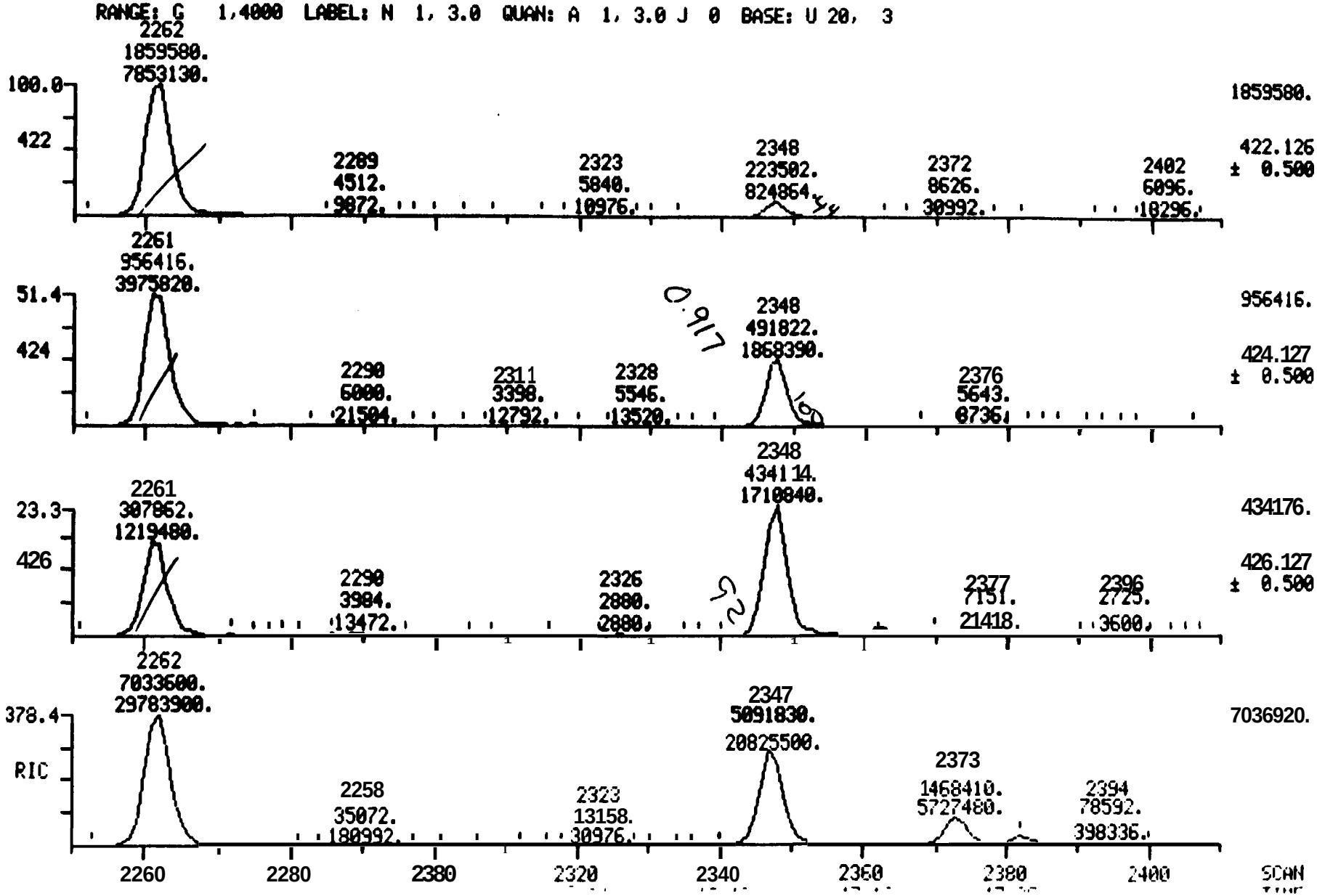
03/26/91 11:57:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1

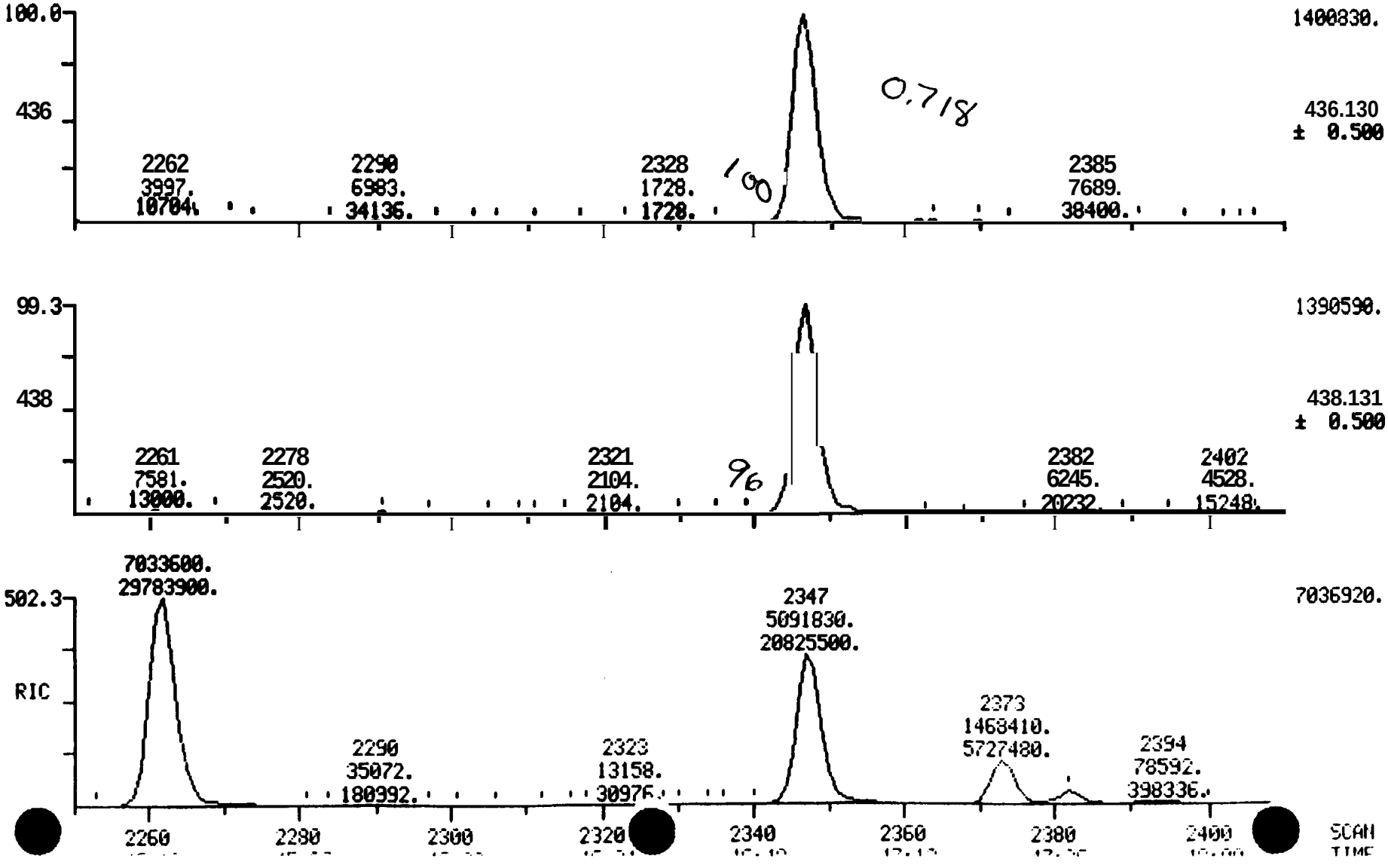
CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HpCDD



2370022


100.0
436
1400830.
436.130
± 0.500
0.718
100
2262
3997.
10704.
2290
6983.
34136.
2328
1728.
1728.
2385
7689.
38400.
99.3
438
1390590.
438.131
± 0.500
96
2261
7581.
13000.
2278
2520.
2520.
2321
2104.
2104.
2382
6245.
20232.
2402
4528.
15248.
502.3
RIC
7036920.
7033600.
29783900.
2290
35072.
180992.
2323
13158.
30976.
2347
5091830.
20825500.
2373
1468410.
5727480.
2394
78592.
398336.
2260
2280
2300
2320
2340
2360
2380
2400
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 1900 TO 2160

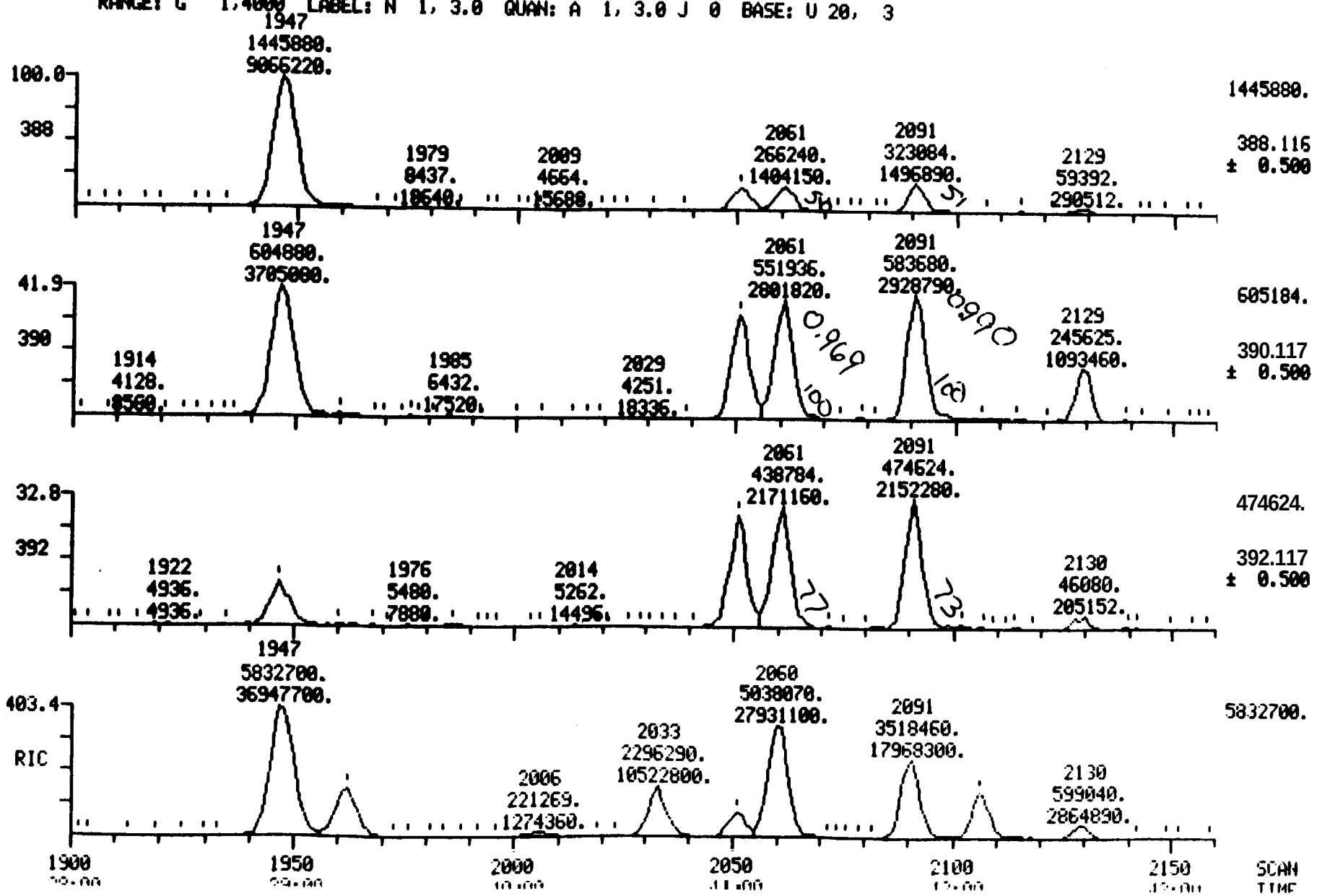
03/26/91 11:57:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HxCDD



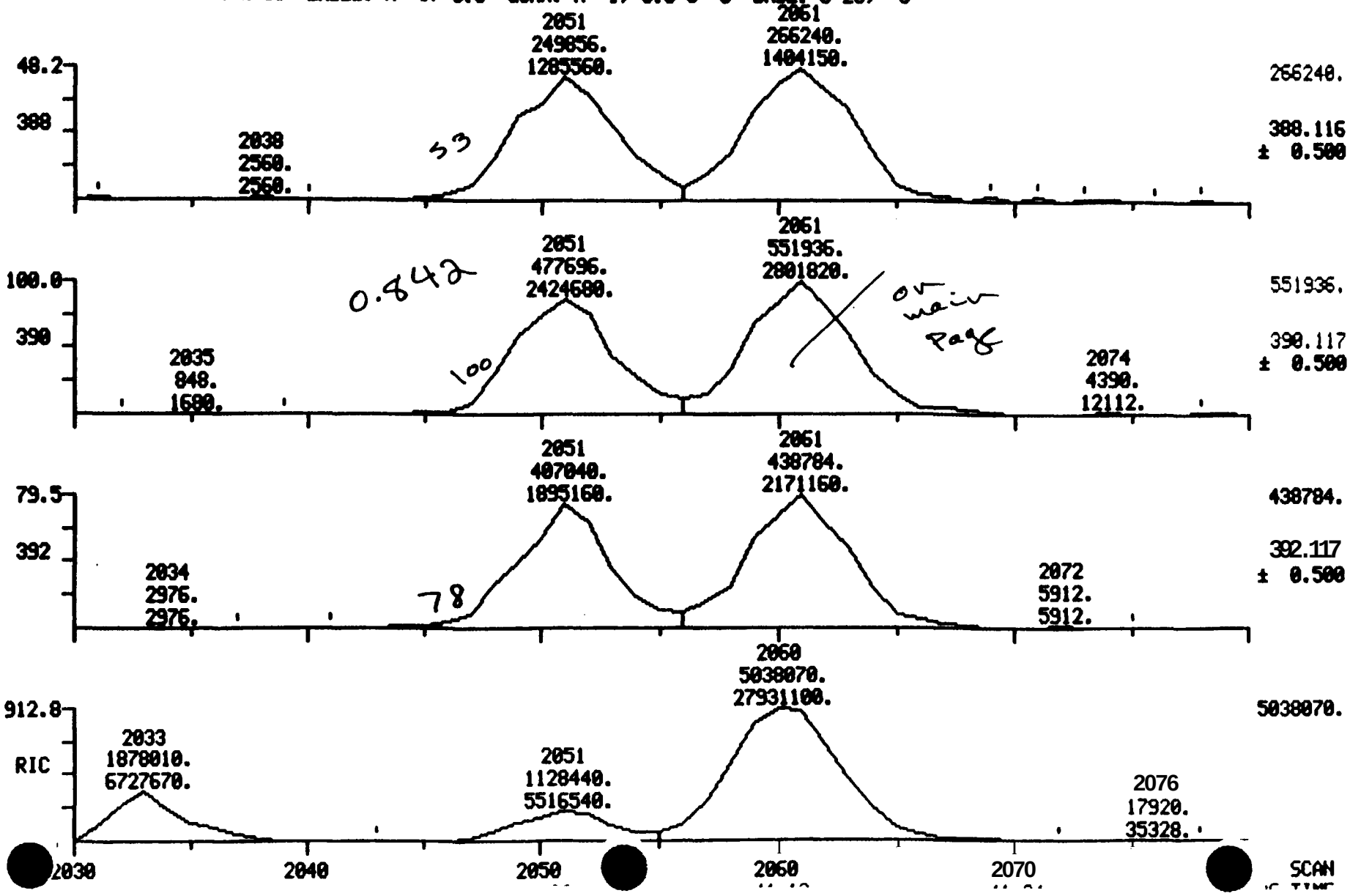
0.969

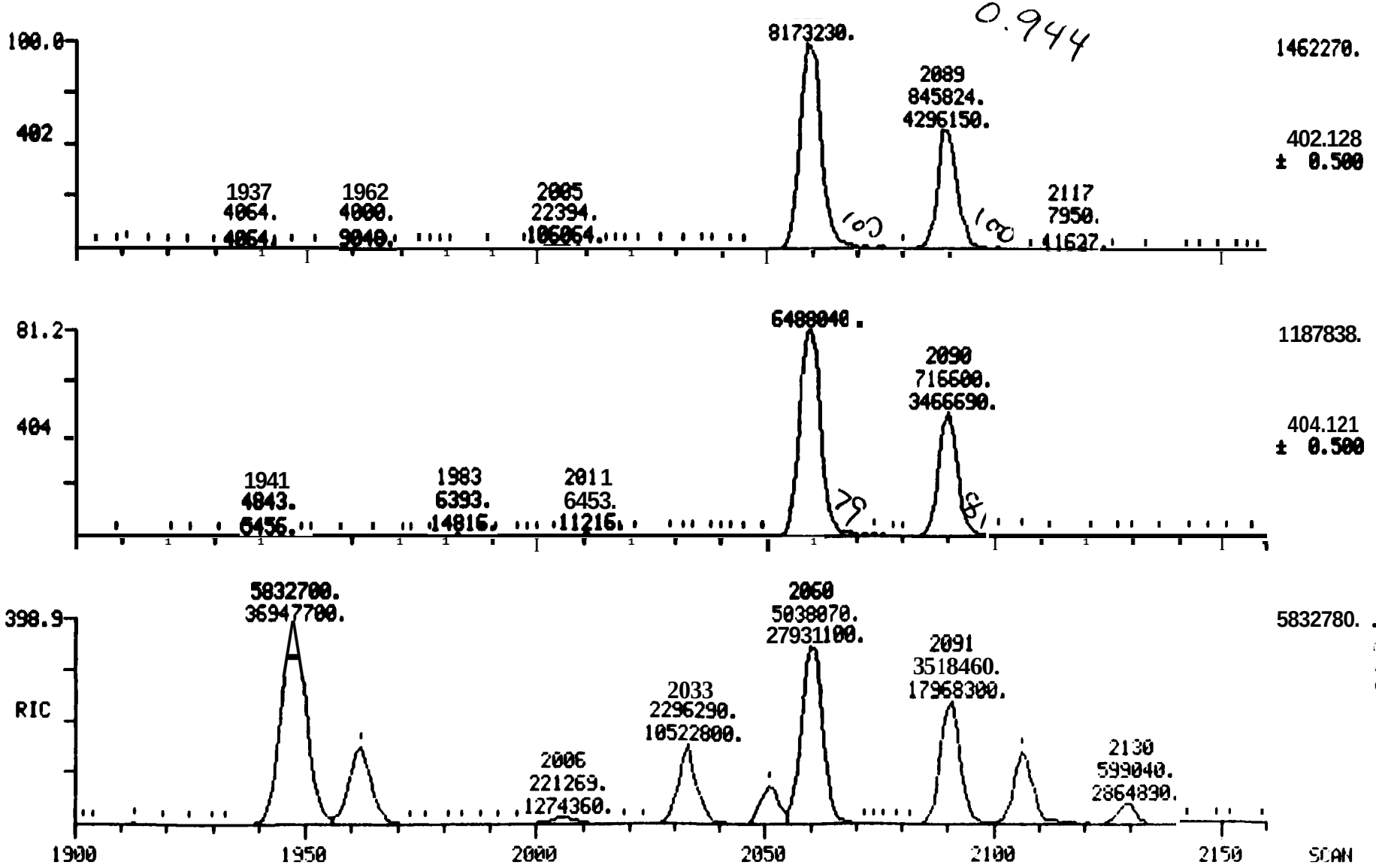
0.990

3200263

MIDRIC+MASS CHROMATOGRAMS DATA: 68506II1 #1 SCANS 2030 TO 2080
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

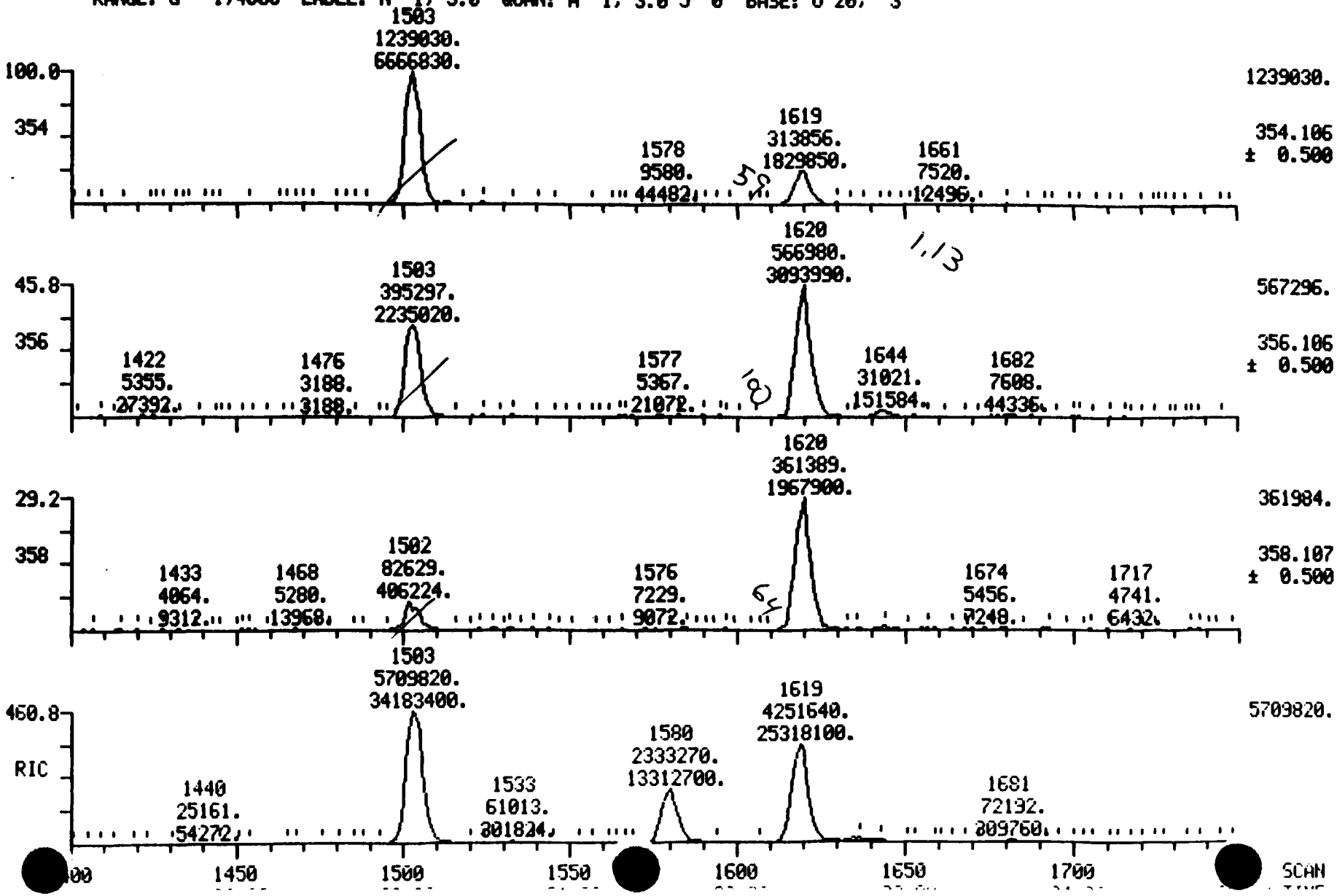
HxCDD



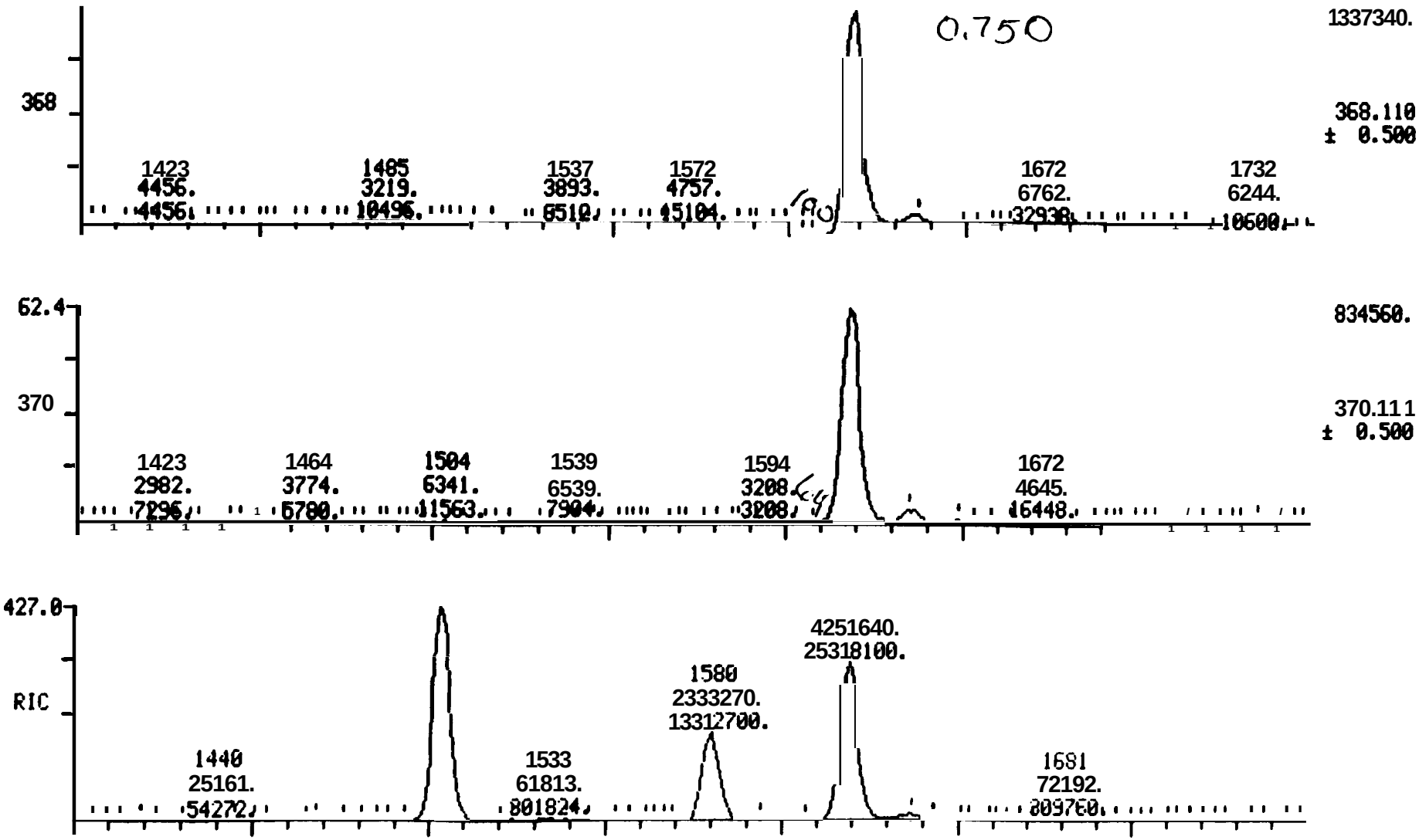

0.944
100.0
402
1937
4064.
4064.
1962
4000.
9040.
2005
22394.
106064.
8173230.
100
2089
845824.
4296150.
100
2117
7950.
41627.
1462270.
402.128
± 0.500
81.2
404
1941
4843.
6456.
1983
6393.
14816.
2011
6453.
11216.
6488040.
79
2090
716600.
3466690.
81
1187838.
404.121
± 0.500
398.9
RIC
5832700.
36947700.
2006
221269.
1274360.
2033
2296290.
10522800.
2060
5038070.
27931100.
2091
3518460.
17968300.
2130
599040.
2864890.
5832780.
1900
1950
2000
2050
2100
2150
SCAN

PeCDD

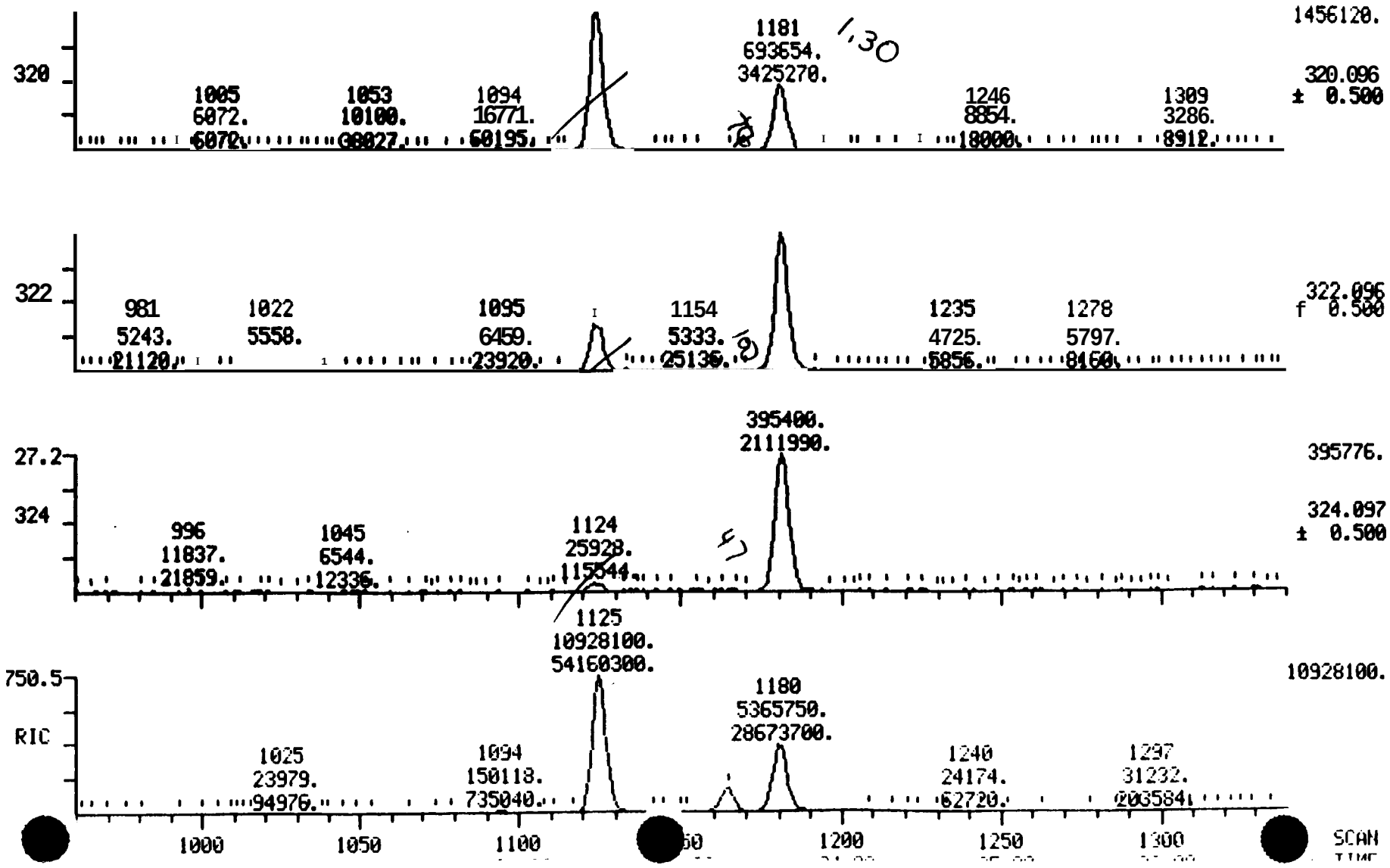
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III #1 SCANS 1400 TO 1750
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



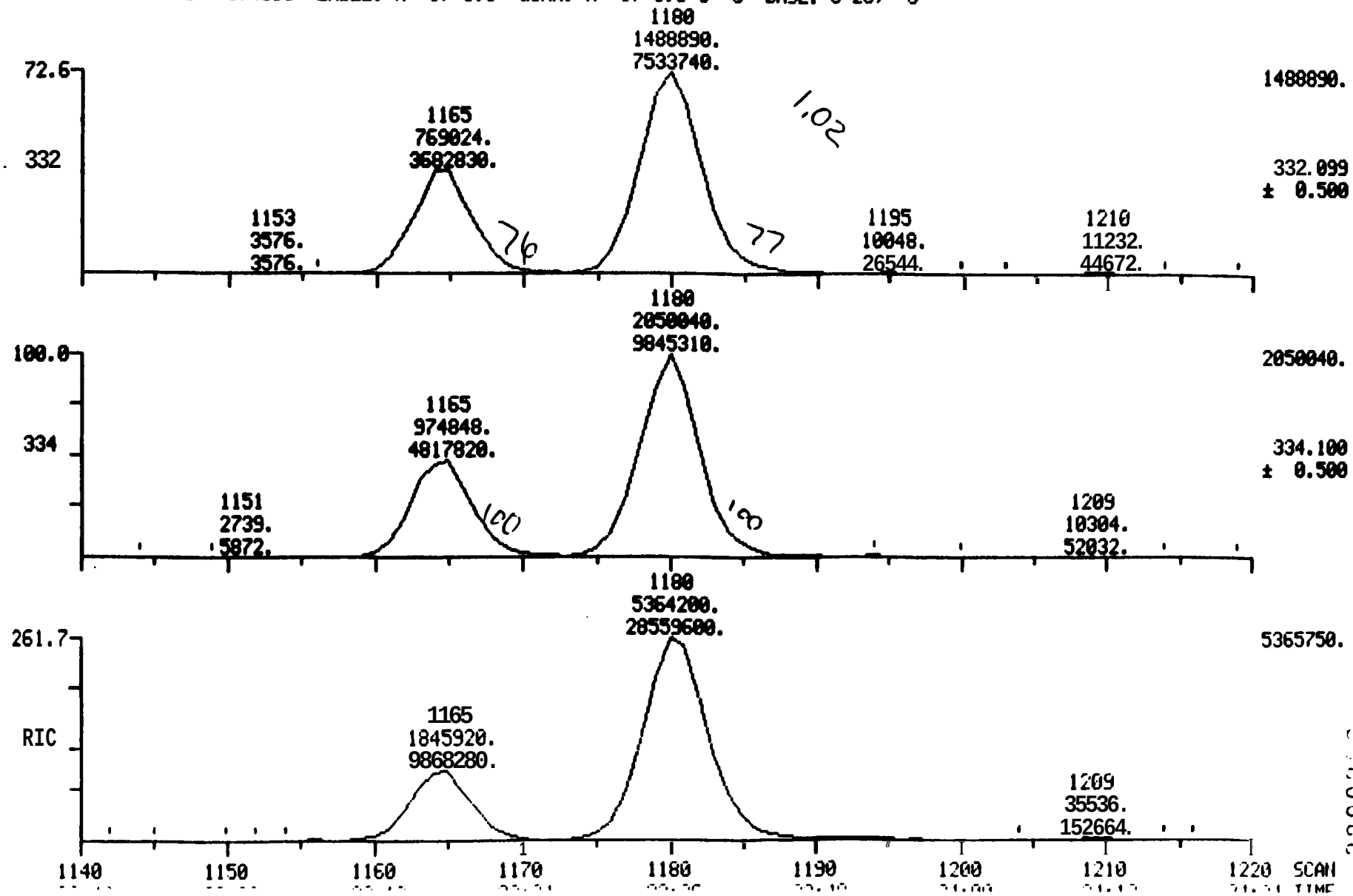
1.4000 QUAN:


0.750
1337340.
368
368.110
± 0.500
1423
4456.
4456.
1485
3219.
10496.
1537
3893.
6510.
1572
4757.
15104.
1672
6762.
32938.
1732
6244.
10600.
62.4
834560.
370
370.111
± 0.500
1423
2982.
7296.
1464
3774.
5780.
1504
6341.
11563.
1539
6539.
7904.
1594
3208.
3208.
1672
4645.
16448.
427.0
RIC
1440
25161.
54272.
1533
61813.
801824.
1580
2333270.
13312700.
4251640.
25318100.
1681
72192.
309760.

TCDD


320
1005
6072.
1053
10100.
1094
16771.
1181
693654.
3425270.
1246
8854.
1309
3286.
1456120.
320.096
± 0.500
322
981
5243.
1022
5558.
1095
6459.
1154
5333.
1235
4725.
1278
5797.
322.096
± 0.500
27.2
324
996
11837.
1045
6544.
1124
25928.
395400.
2111990.
395776.
324.097
± 0.500
1125
10928100.
54160300.
750.5
RIC
1025
23979.
1094
150118.
1180
5365750.
28673700.
1240
24174.
1297
31232.
10928100.
1000
1050
1100
1200
1250
1300
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 6850611I #1 SCANS 1140 TO 1220
03/26/91 11:57:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



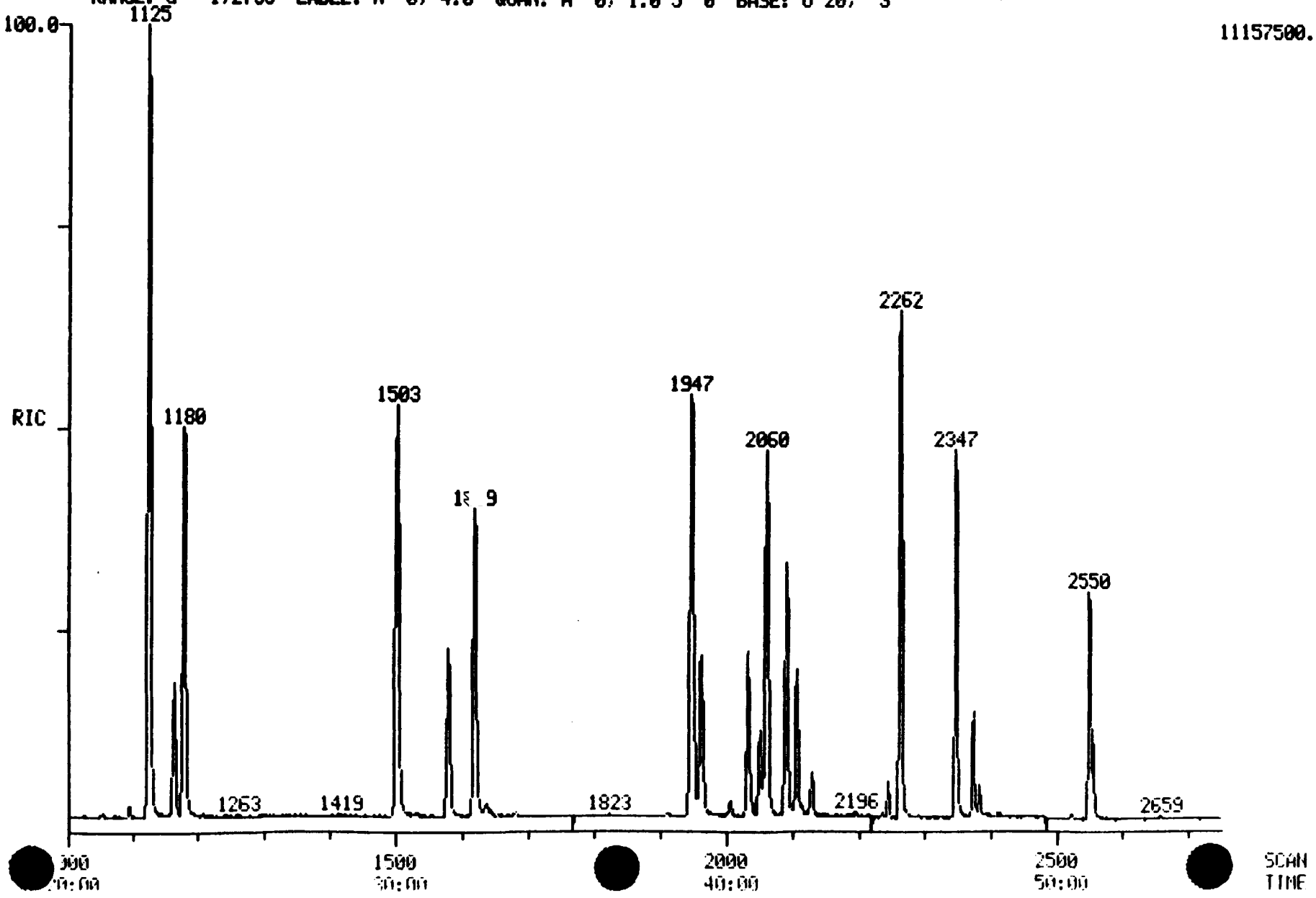
MIDRIC
03/26/91 11:57:00
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506II1 #1
CALI: CAL910306A #2

SCANS 1000 TO 2750

Calc PMP 3-27-91

3-27-91



4	419.550	420.050	0.054	3	100	40	1	0	Por
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.530	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
8	435.550	436.050	0.052	3	100	40	1	0	PO%
9	437.530	438.050	0.052	3	100	40	1	0	Por
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	PO%
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
14	479.550	480.050	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3/26/91 11:52:23 SCAN 2733
Acquisition stopped

3/24/91 11:52:25
ACQWISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1749 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2753 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	636.9	3300.0	19.3	84015. 31.	25.

MID scan
Scan time: 1.200 s

Desc: C2
Simp. Int.: 0.200 ms

Mors intervals. 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Po.
a	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353 650	354.150	0.054	3	100	40	1	0	Pos
6	355.650	356.150	0.092	3	100	40	1	0	Pos
7	357 650	358.150	0.054	3	100	40	1	0	Pos
8	367.450	360.150	0.052	3	100	40	1	0	Por
9	369.650	370.150	0.052	3	100	40	1	0	Pos
10	371.650	372.150	0.052	3	100	40	1	0	Pos
11	373.650	374.150	0.052	3	100	40	1	0	Pos
12	375.650	376.150	0.052	3	100	40	1	0	Pos
13	379.650	380.150	0.052	3	100	40	1	0	Pos
14	301.650	382.150	0.052	3	100	40	1	0	Pos
15	385.650	386.150	0.052	3	100	40	1	0	Pos
16	307.650	388.150	0.052	3	100	40	1	0	Pos
17	389.650	390.150	0.052	3	100	40	1	0	Por
18	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.650	402.150	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.054	3	100	40	1	0	Pos
21	445.550	446.050	0.052	3	100	40	1	0	Pos

3/26/91 11:41:23 SCAN 2219 OF 3000

MID scan
Scan time: 1.200 s

Desc: 03
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
2	373.630	374.150	0.052	3	100	40	1	0	Po.
3	375.650	376.150	0.052	3	100	40	1	0	Po.
4	385.650	386.130	0.052	3	100	40	1	0	Pos
5	387.650	388.130	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Pos
7	391.650	392.130	0.052	3	100	40	1	0	Pos
8	401.650	402.150	0.052	3	100	40	1	0	Pos
9	403.650	404.150	0.054	3	100	40	1	0	Pos
10	405.550	406.050	0.054	3	100	40	1	0	Pos
11	407.550	408.050	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.054	3	100	40	1	0	Po,
13	419.550	420.050	0.054	3	100	40	1	0	Pos
14	421,550	422.050	0.054	3	100	40	1	0	Po.
15	423.330	424.030	0.054	3	100	40	1	0	Pos
16	423.550	426.030	0.052	3	100	40	1	0	Po.
17	435.550	436.030	0.052	3	100	40	1	0	Pos
18	437.550	438.030	0.052	3	100	40	1	0	Po.
19	479.550	480.050	0.054	3	100	40	1	0	Pos

3/26/91 11:46:30 SCAN 2484 OF 3000

MID scan
Scan time: 1.200 s

Desc: 64
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPU	MFW	MA	TH	BL	ION
1	405.550	406.030	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.032	3	100	40	1	0	Po.
3	409.550	410.050	0.054	3	100	40	1	0	Po.

3/26/91 10:53:38 SCAN 1 OF 3000
Acquisition started

Acquire | Run 0:6850613 | ACQUIRING
03/26/91 10:55:00 + 0:04 | Free sectors: 26425 | Scrn: 3 of 3000
Sample: 2UL OF 685:06 STD I NATIVES Q 200PPB RUN3
Conds.: 60H DB-5/TOTALS.
Formula: | Instrument: Q8 | Weight: 0.000
Submitted by: DH | Analyst: PHP | Acct. No: PC4622

********** GC PARAMETERS **********

Lorded GC Desc: BW | Current GC oven tmp: 73 DegC | Injector : 300 DcgC
Current GC Desc: BW | GC elapsed time 1:11 min | Int. oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Sp1it	10.8	0.0
2	30 - 70	25.0	0.7	0.e	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAHETERS **********

***** Hode: Centroid positive ion

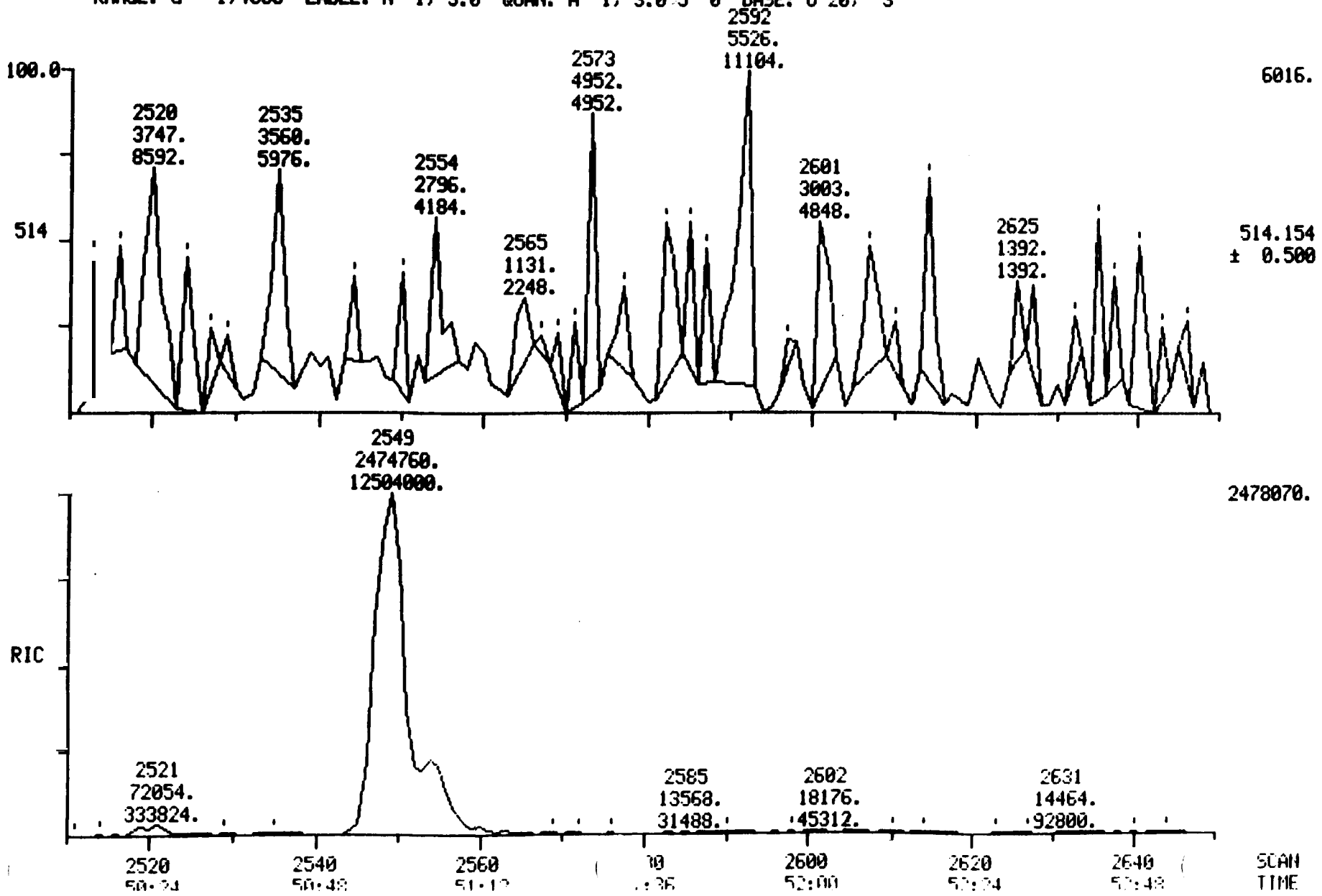
HID scan | Dasc: B1 | Mass intervals: 21
Scan time: 1.200 s | Samp. int.: 0.200 ms | Raster rate: 4096

Int #	Lo mars	Hi mars	Time	MPW	MFW	HA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Por
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	355.630	356.150	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

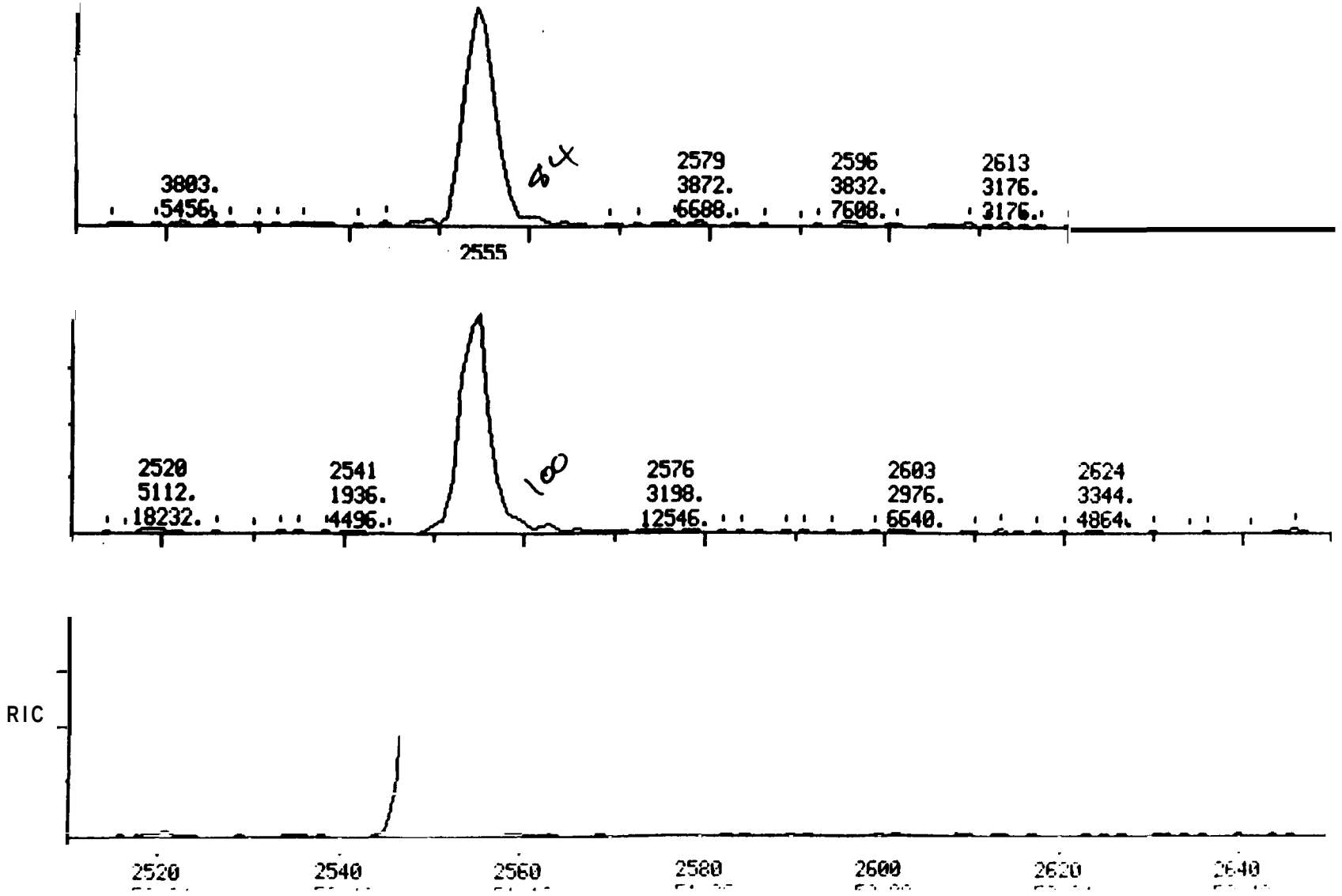
Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Perk Width	1000.	mu
Offset at low mass	0	mu
Offset at high mass	0	mu
Voltage settling time(MS)	4	

3/26/91 11:32:09 SCAN 1769 OF 3000

MIDRIC+MASS CHROMATOGRAM DATA: 6850613 #1
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

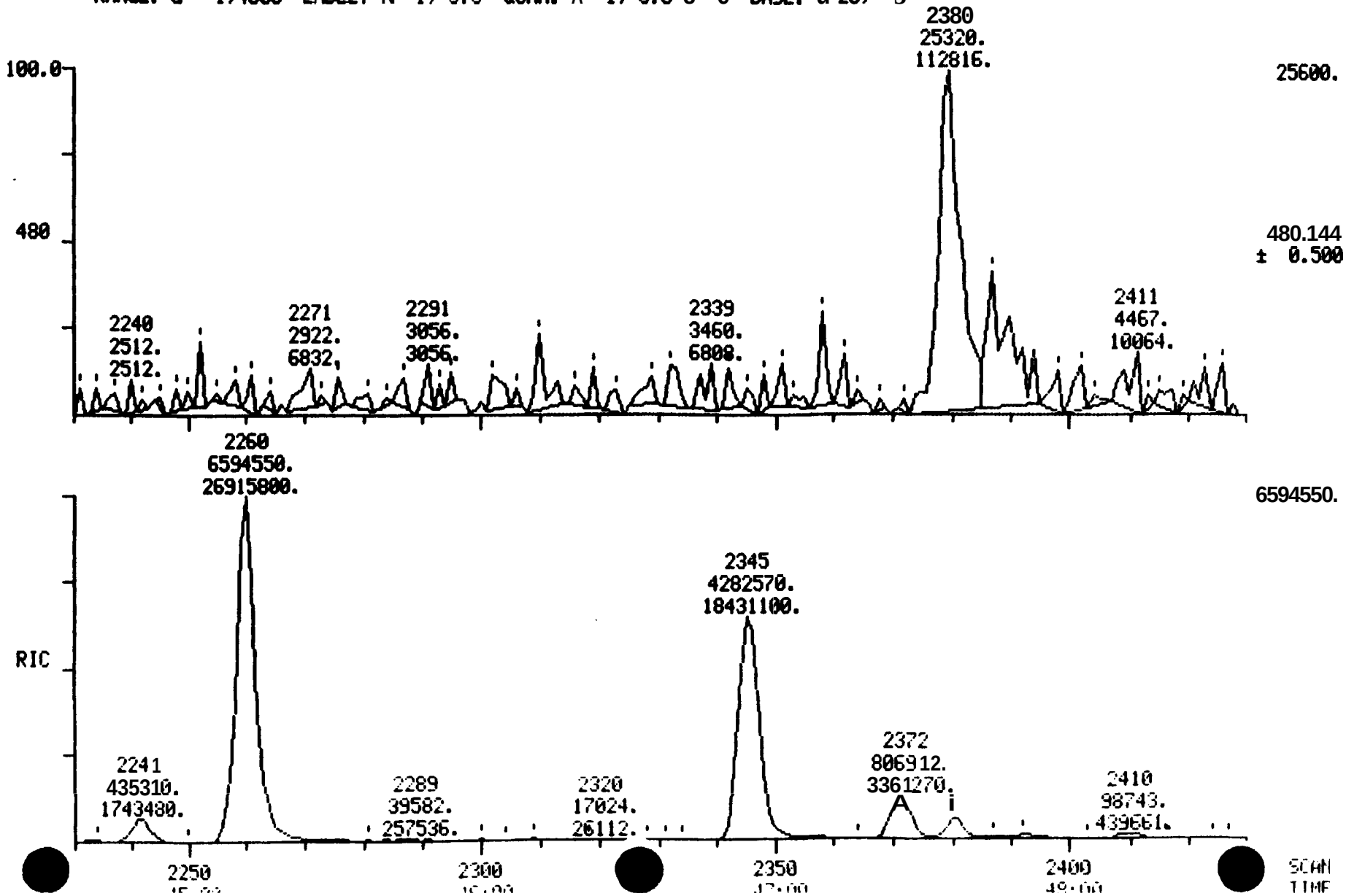


685:06

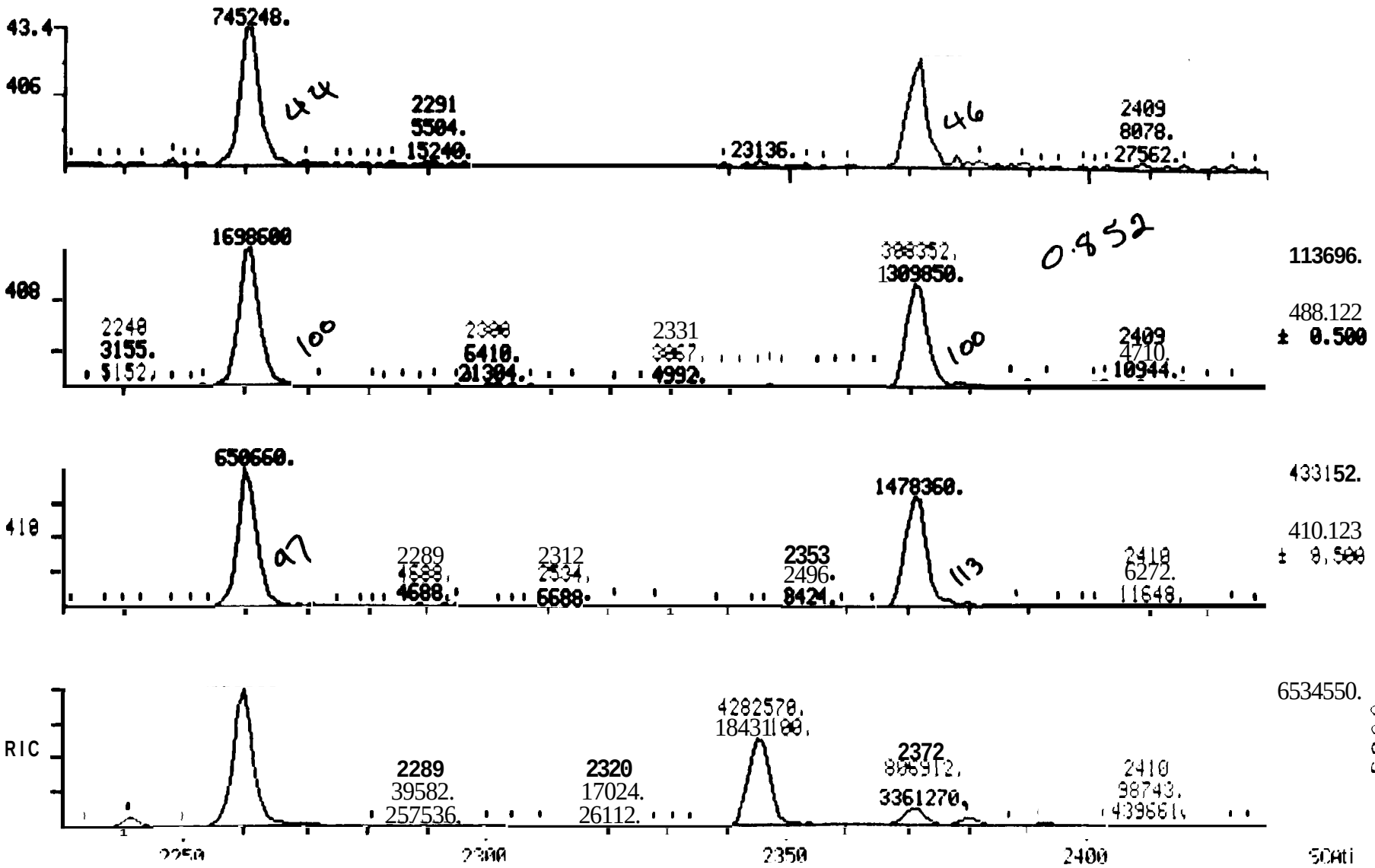

3803.
5456.
2555
80%
2579
3872.
6688.
2596
3832.
7608.
2613
3176.
3176.
2520
5112.
18232.
2541
1936.
4496.
100
2576
3198.
12546.
2603
2976.
6640.
2624
3344.
4864.
RIC
2520
2540
2560
2580
2600
2620
2640
SCAN

0220

MIDRIC+MASS CHROMATOGRAM DATA: 68506I3 #1 SCANS 2230 TO 2430
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

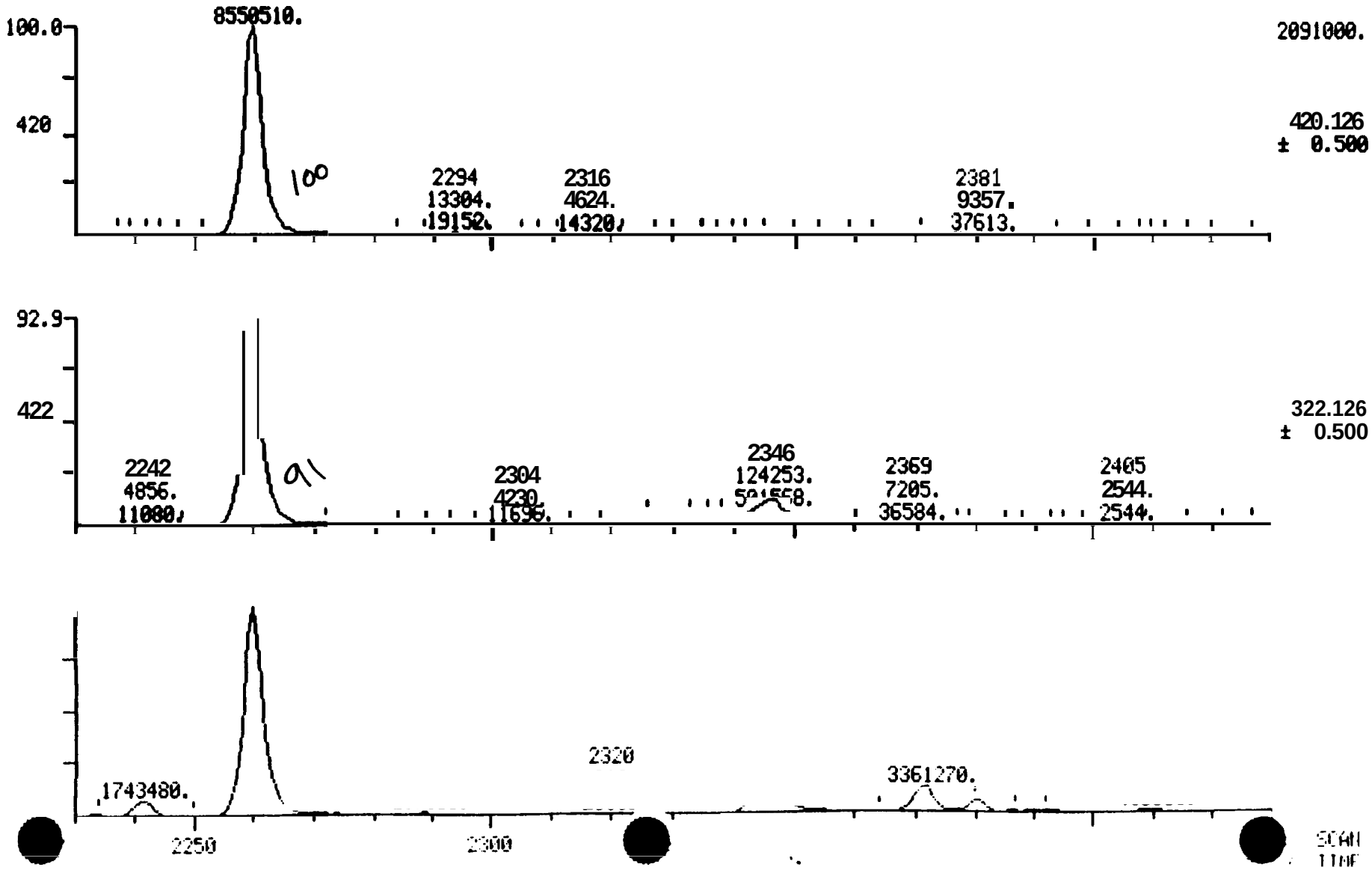


HpCDF

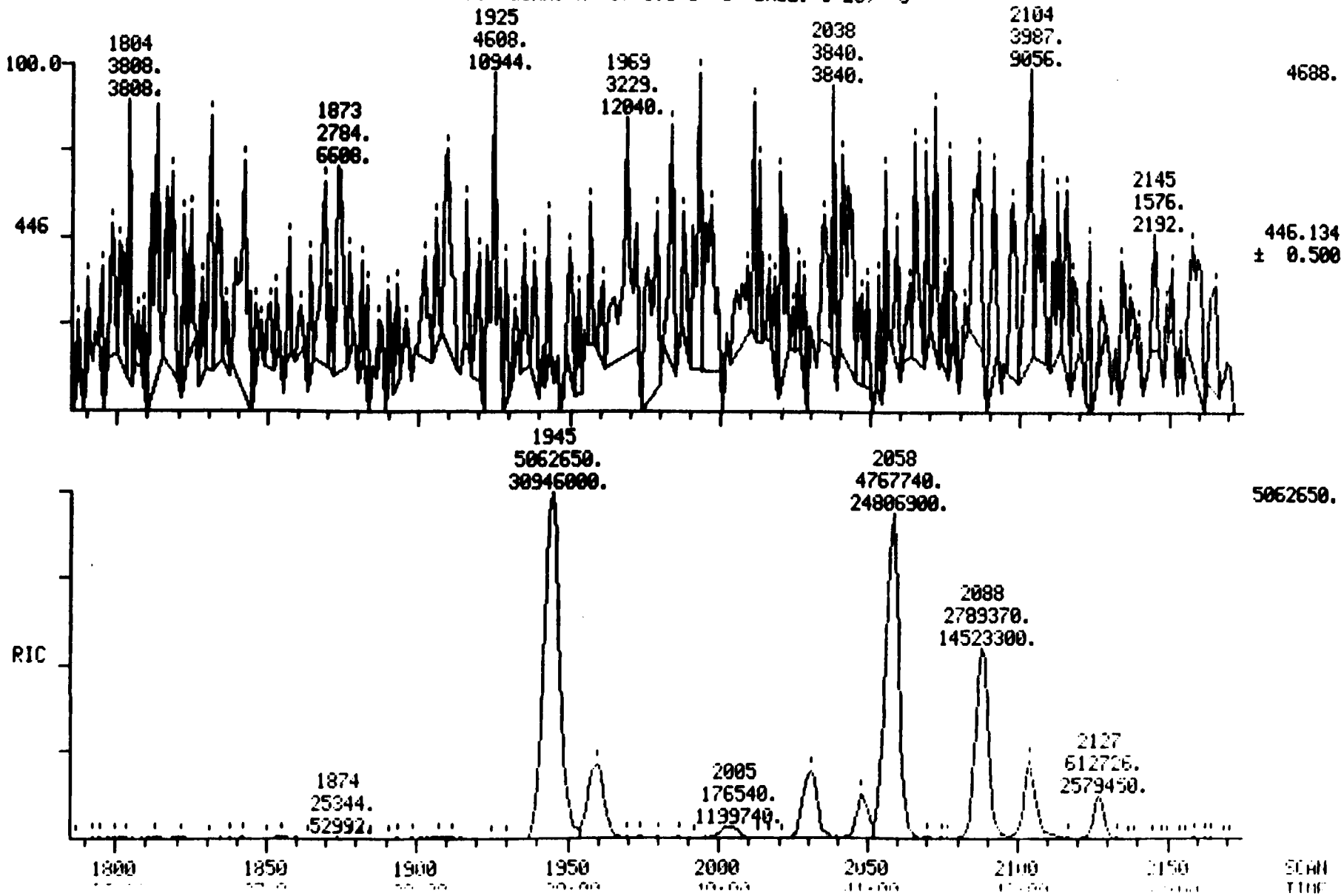

43.4
406
745248.
44
2291
5504.
15240.
23136.
46
2409
8078.
27562.
408
1698600
100
2248
3155.
5152.
2330
6410.
21304.
2331
3367.
4992.
388352.
1309850.
100
0.852
2409
4710.
10944.
113696.
488.122
± 0.500
410
650660.
97
2289
4588.
2312
2534.
6688.
2353
2496.
8424.
1478360.
113
2410
6272.
11648.
433152.
410.123
± 0.500
RIC
2289
39582.
257536.
2320
17024.
26112.
4282570.
18431100.
2372
806912.
3361270.
2410
98743.
439861.
6534550.
2250
2300
2350
2400
SCAN

LABEL:

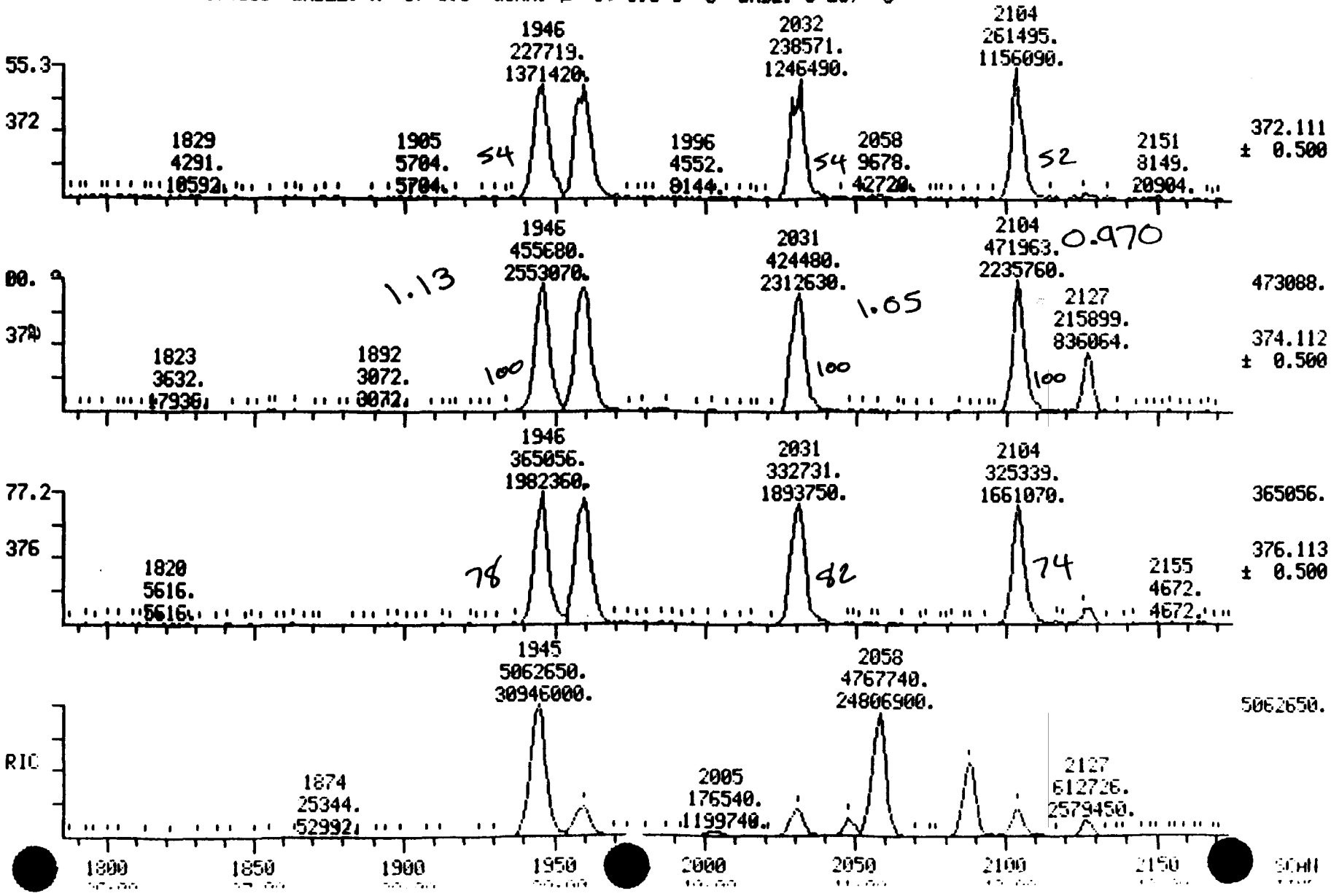
1.07


100.0
8550510.
2091000.
420
420.126
± 0.500
100
2294
13304.
19152.
2316
4624.
14320.
2381
9357.
37613.
92.9
422
322.126
± 0.500
91
2242
4856.
11080.
2304
4230.
11696.
2346
124253.
2369
7205.
36584.
2405
2544.
2544.
1743480.
2320
3361270.
2250
2300
SCAN
TIME

MIDRIC+MASS CHROMATOGRAM DATA: 6850613 #1 SCANS 1785 TO 2175
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



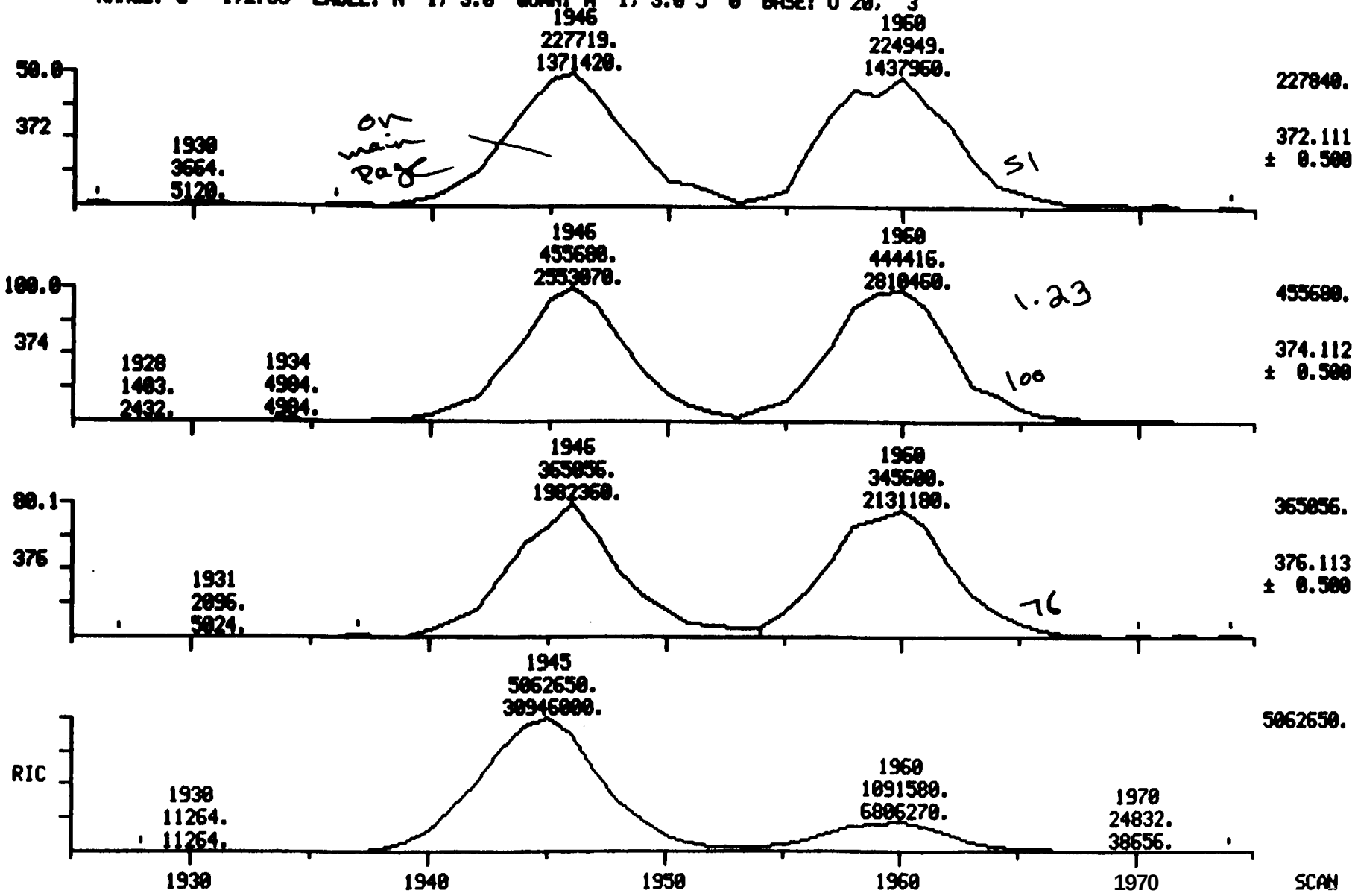
MIDRIC+MASS CHROMATOGRAMS DATA: 685061 3 #1 SCANS 1785 TO 2175
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: ω 1, 3.0 J 0 BASE: U 20, 3



1/1

HxCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 1925 TO 1975
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

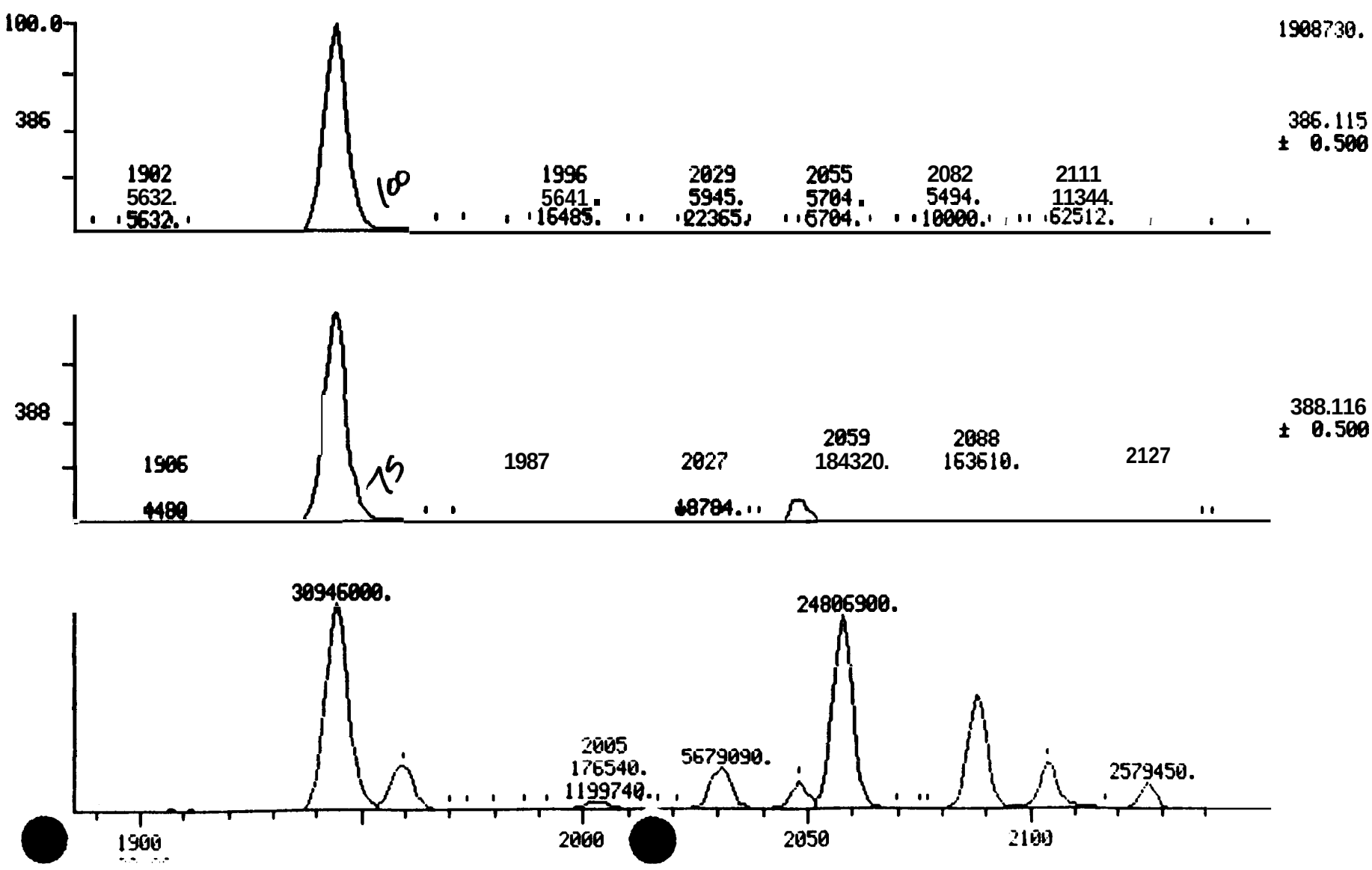


on main peak

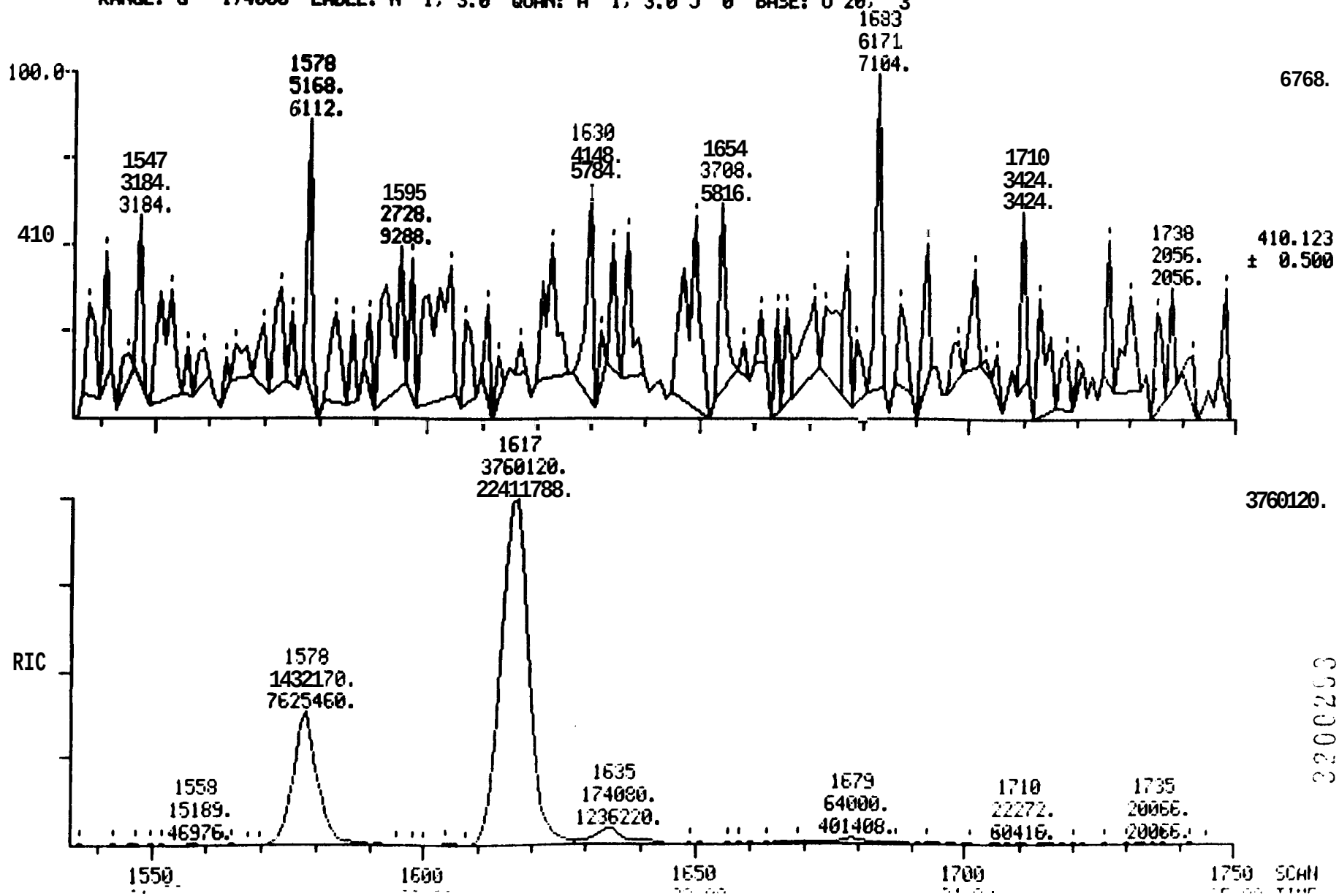
3200252

MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 1885 TO 2155
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.32

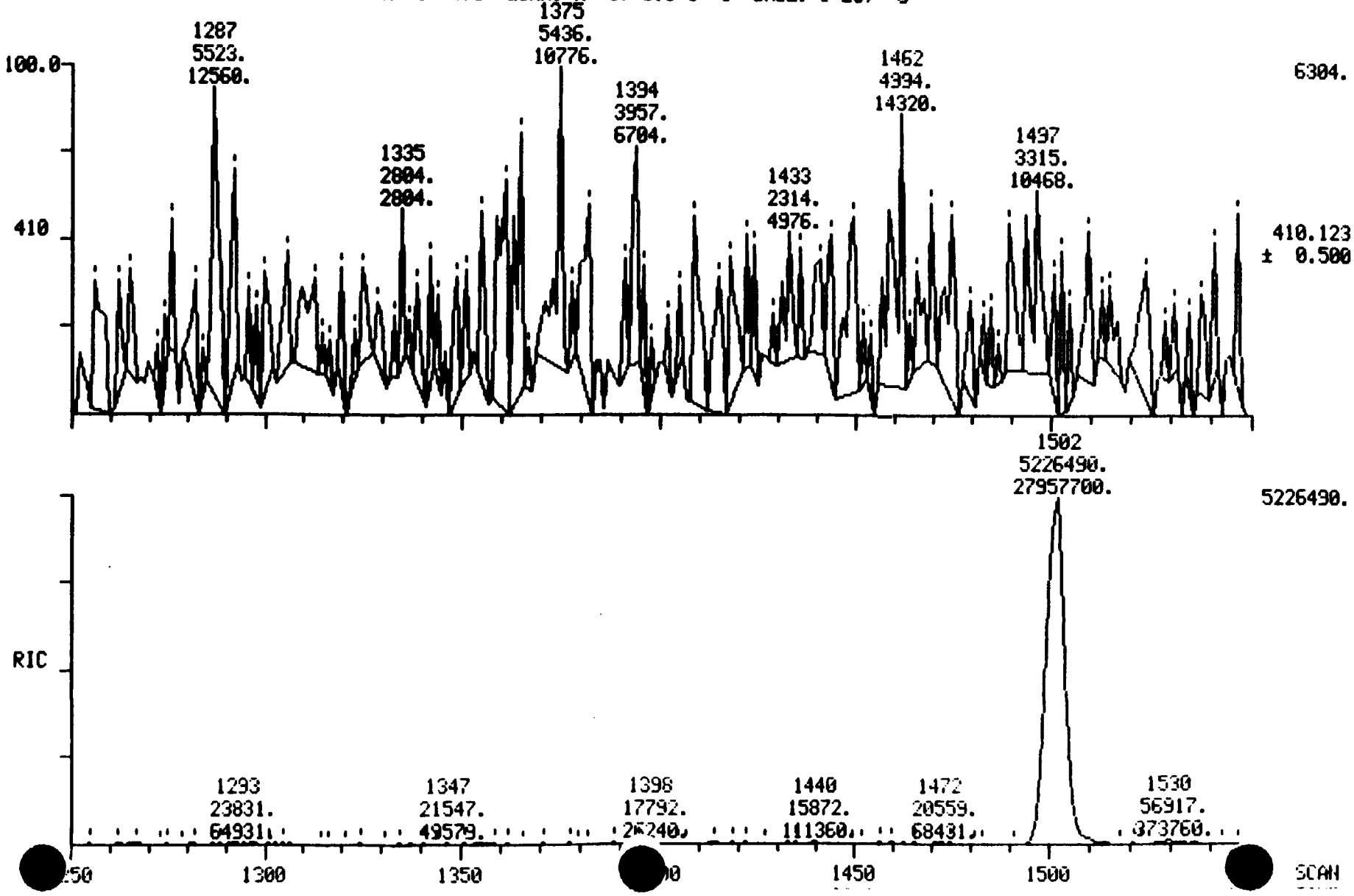


MIDRIC+MASS CHROMATOGRAM DATA: 6850613 #1 SCANS 1535 TO 1750
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS. : 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

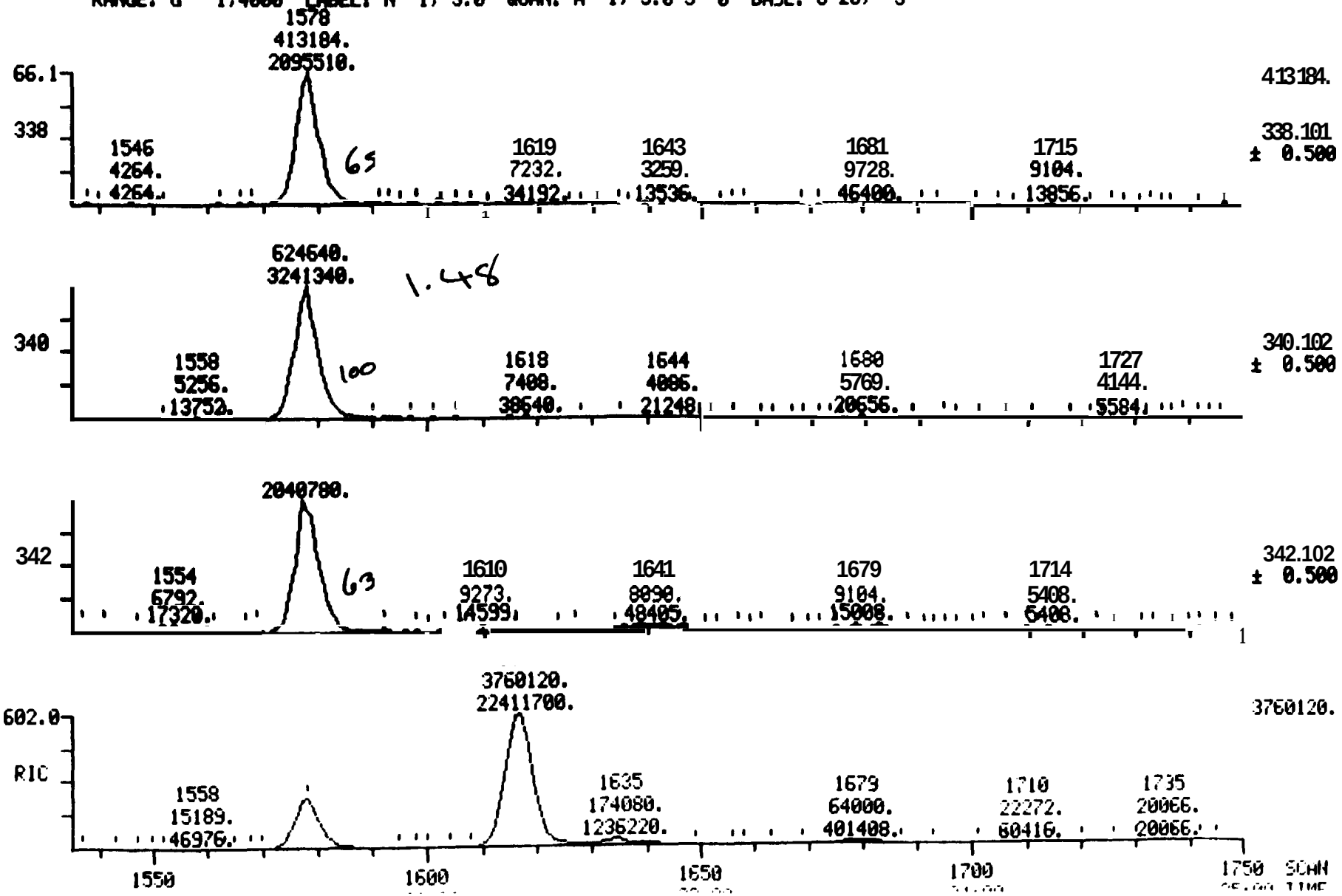


3200253

MIDRIC+MASS CHROMATOGRAM DATA: 6850613 #1 SCANS 1250 TO 1550
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I ITI VES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



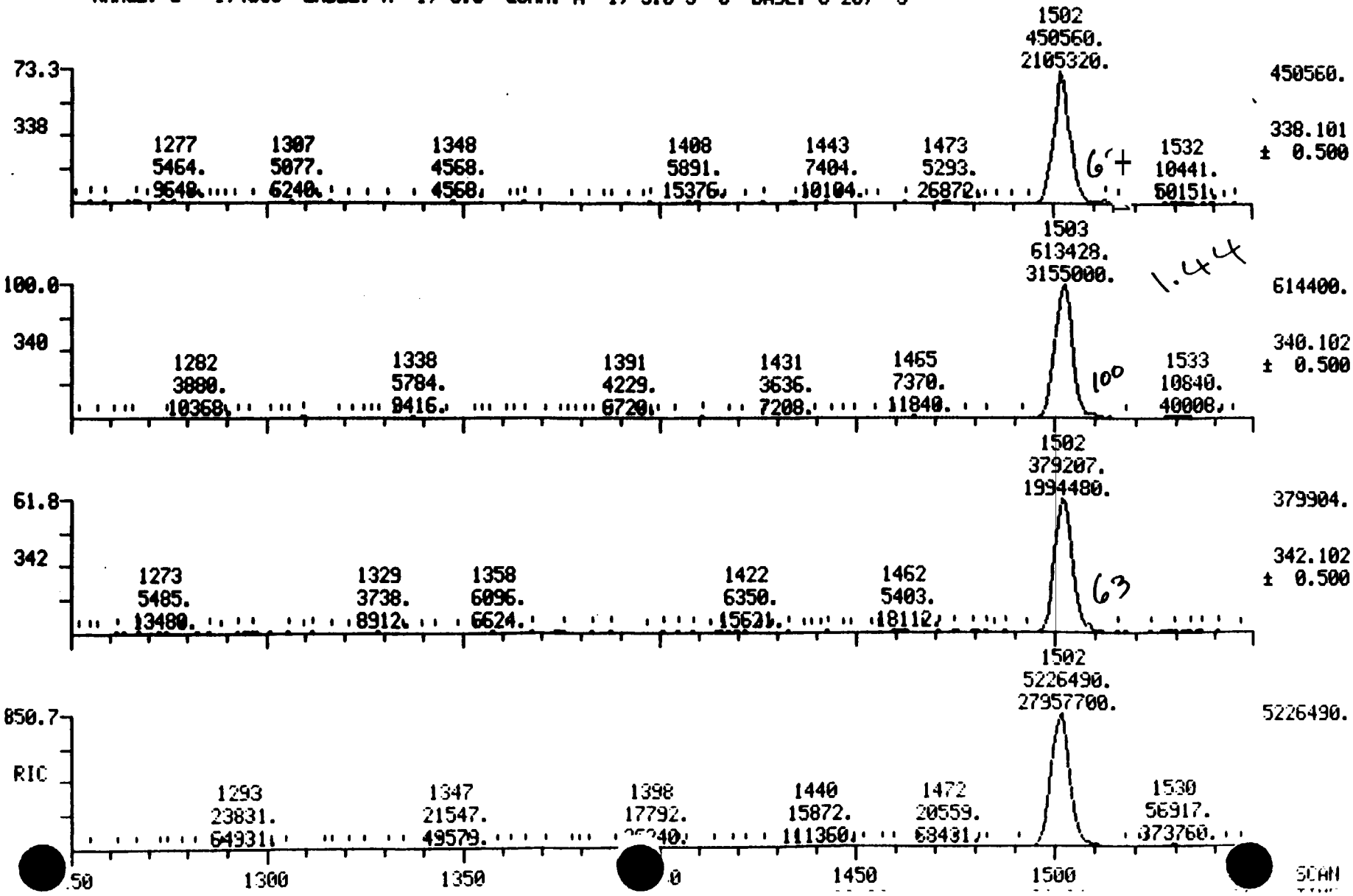
MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 1535 TO 1750
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



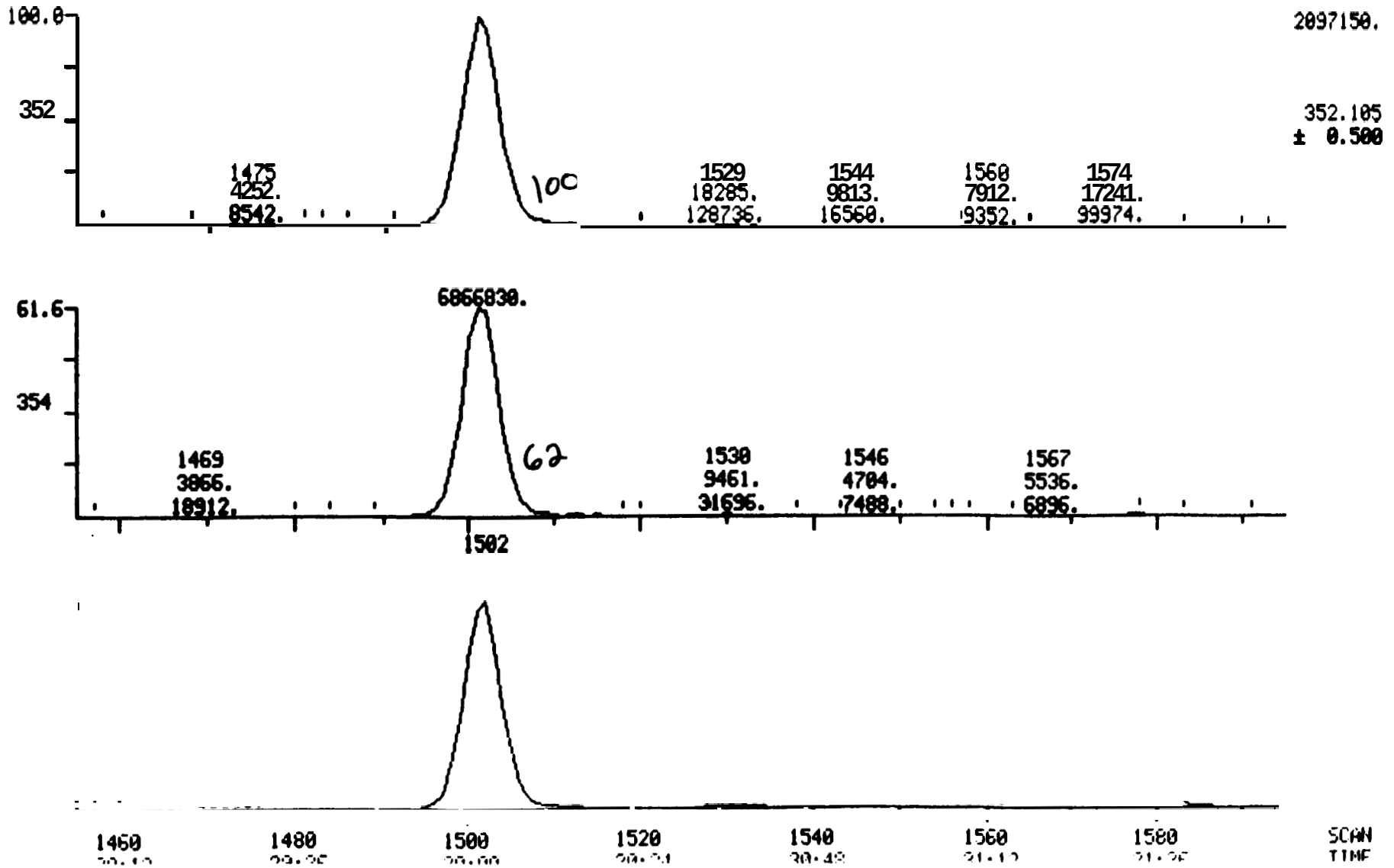
3200294

PeCDF

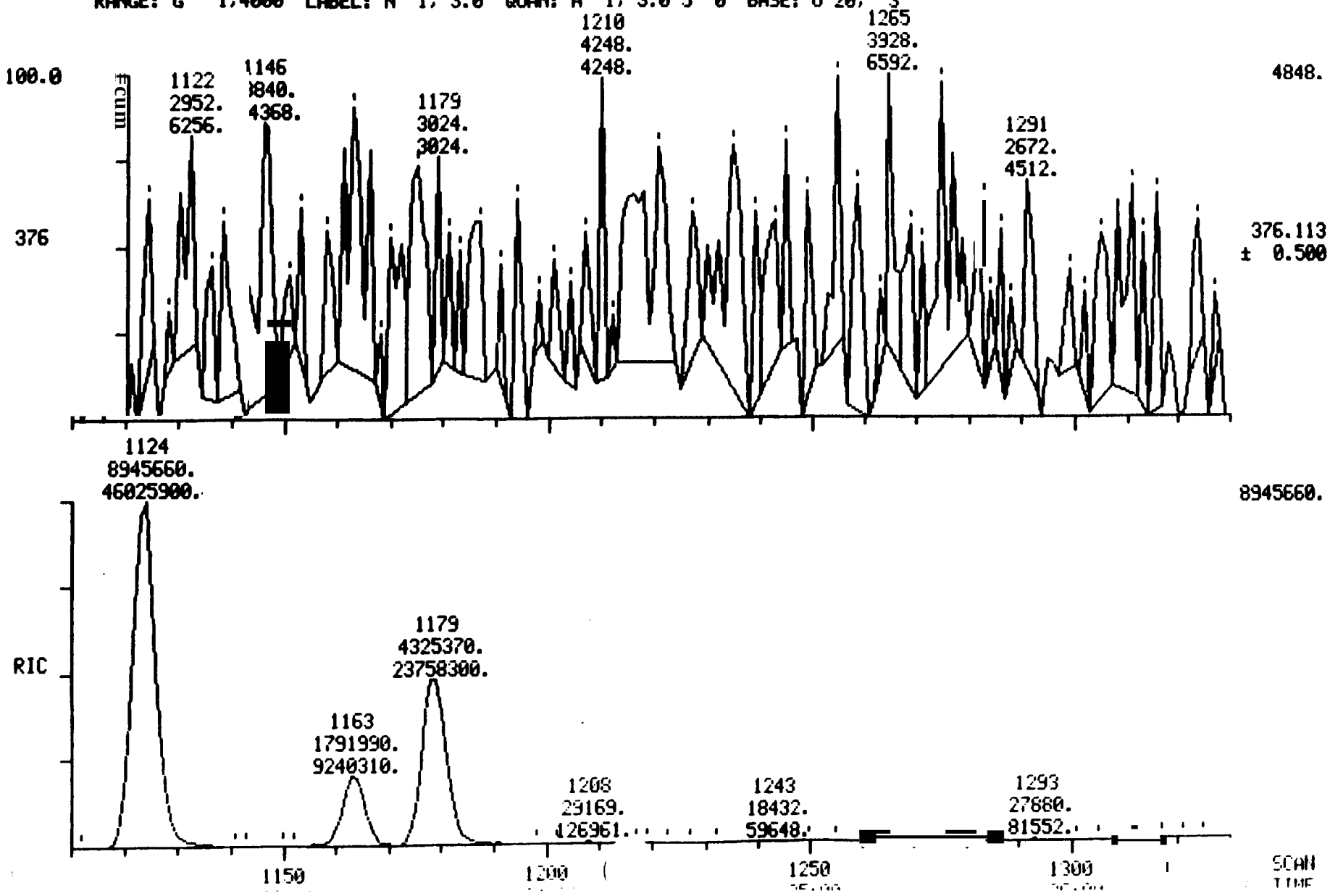
MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 1250 TO 1550
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



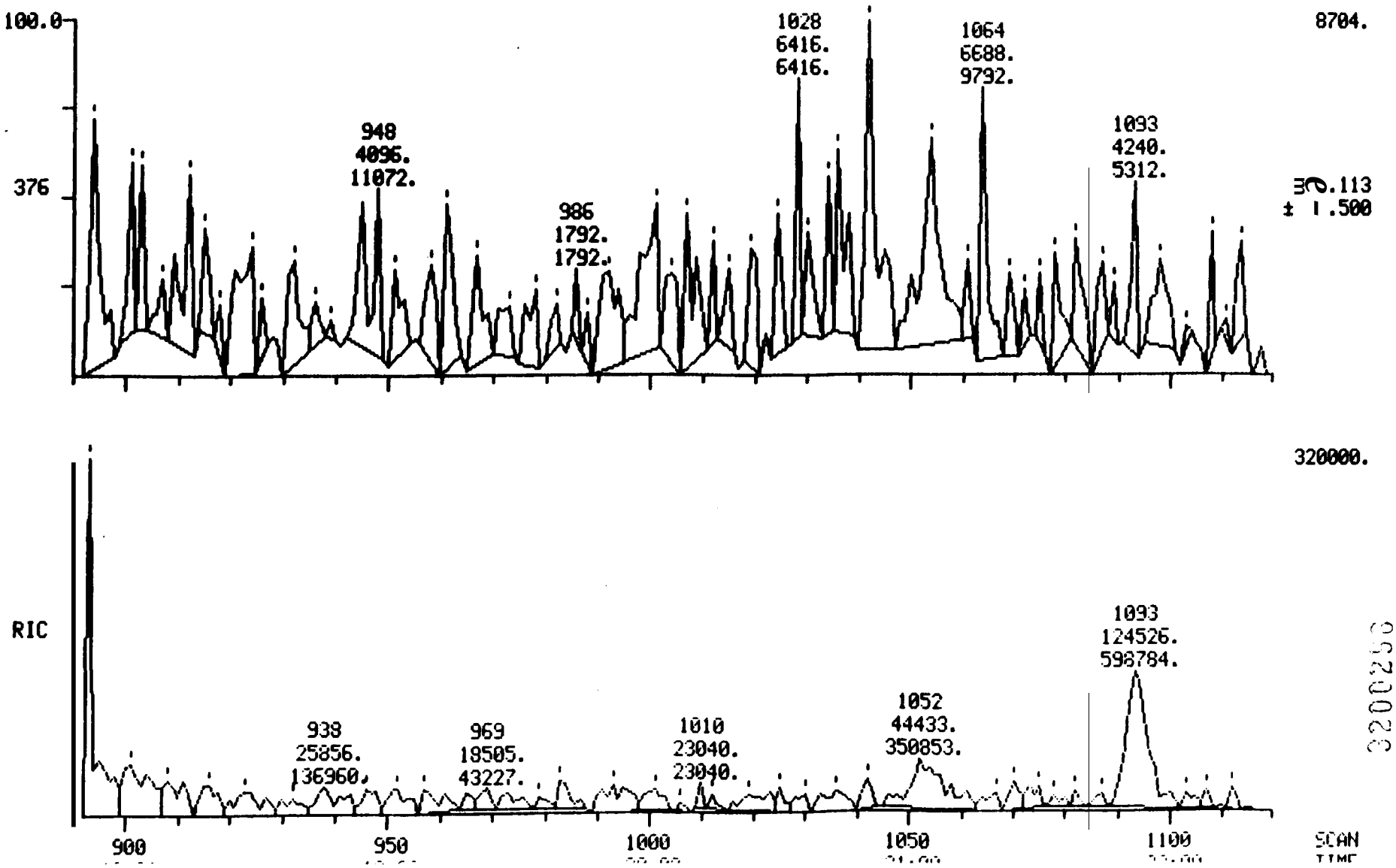
MIDRIC+MASS CHROMATOGRAMS DATA: 685061 3 #1 SCANS 1455 TO 1595
83/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: 1.4000



MIDRIC+MASS CHROMATOGRAM DATA: 6850613 #1 SCANS 1110 TO 1330
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAM DATA: 68506I3 #1 SCANS 890 TO 1120
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200250

MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 1110 TO 1330

03/26/91 10:55:00 CALI: CAL910306A #2

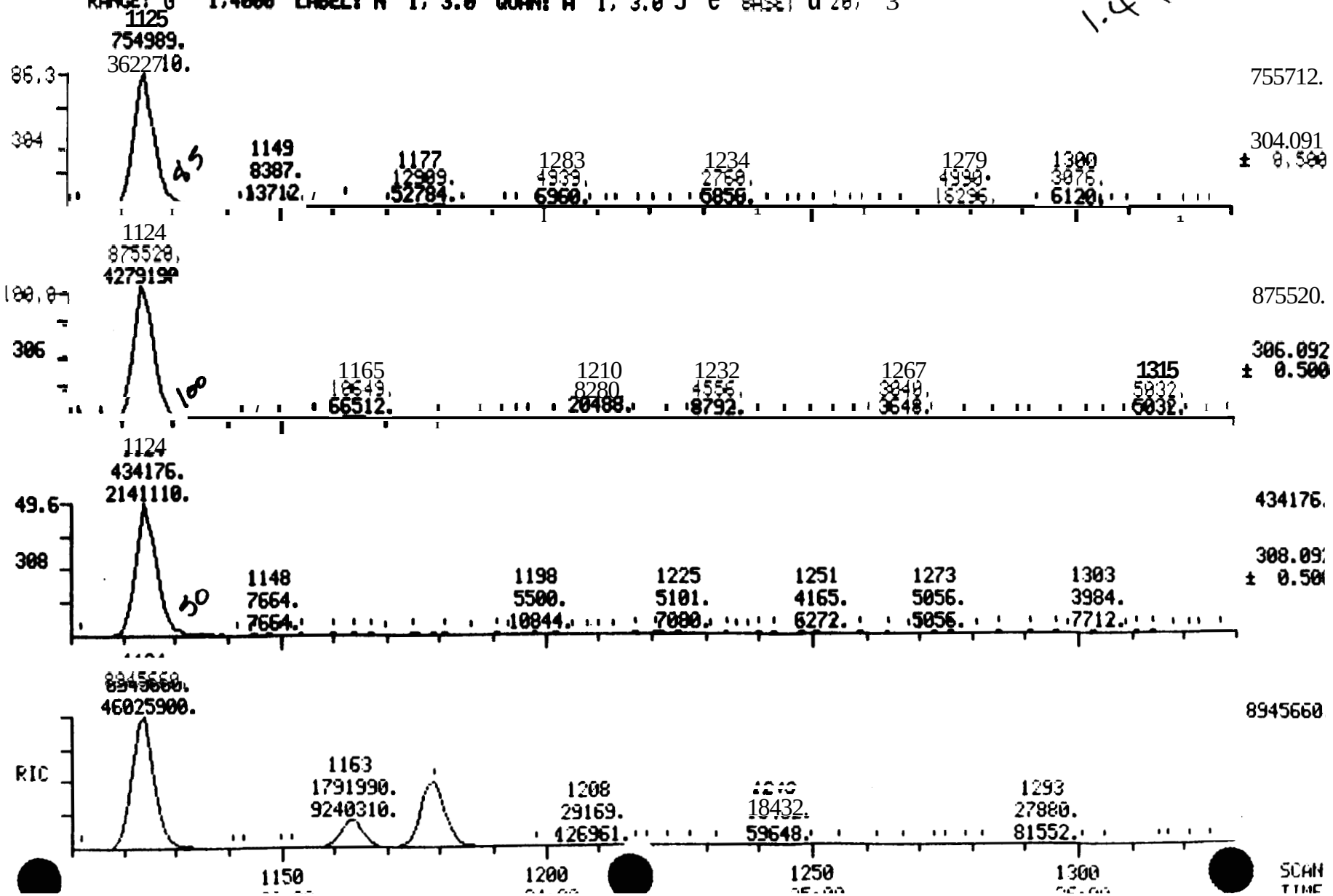
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3

CONDS.: 60M DB-5/TOTALS.

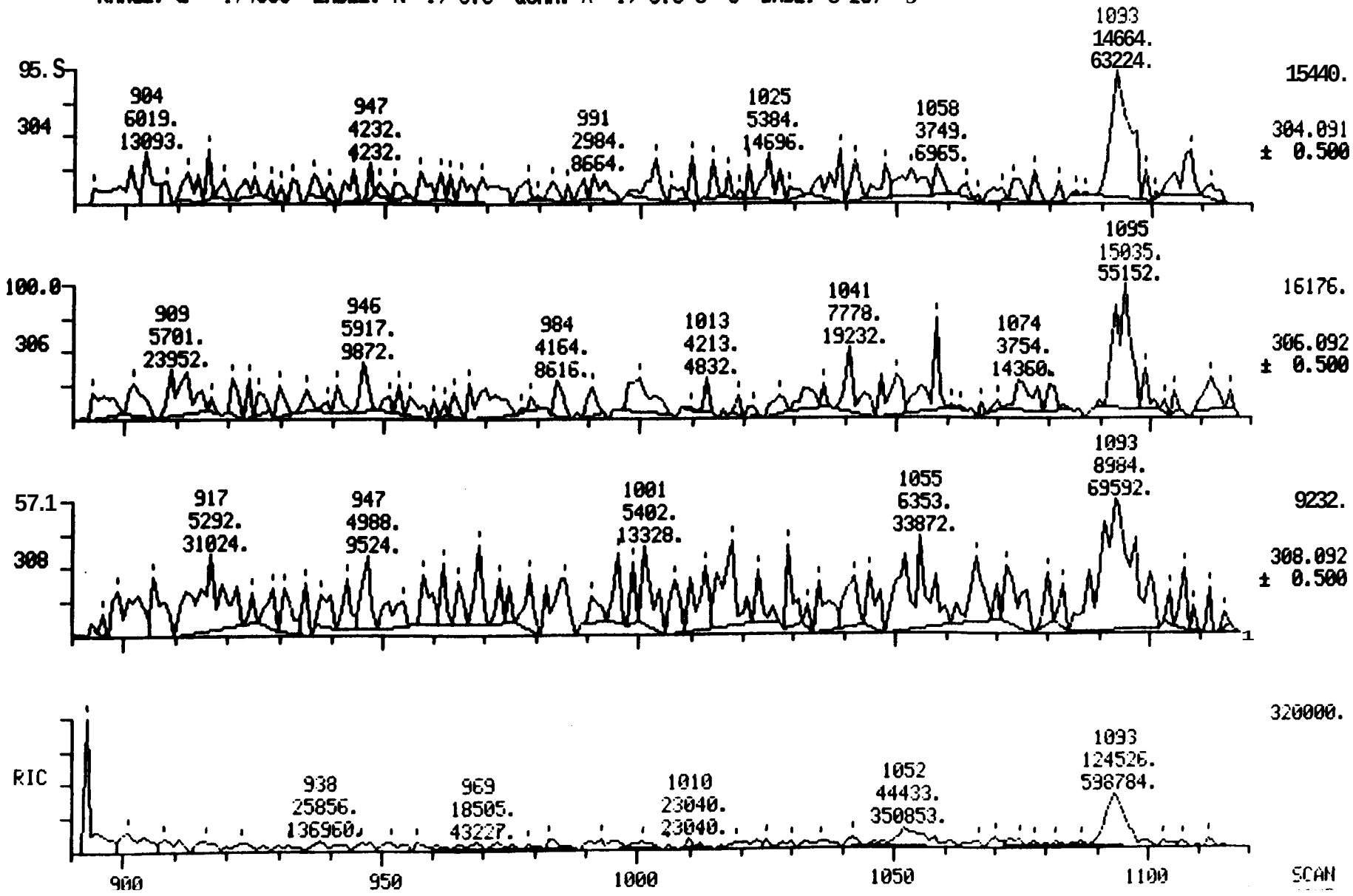
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J @ BASE: U 20, 3

TCDF

1.44



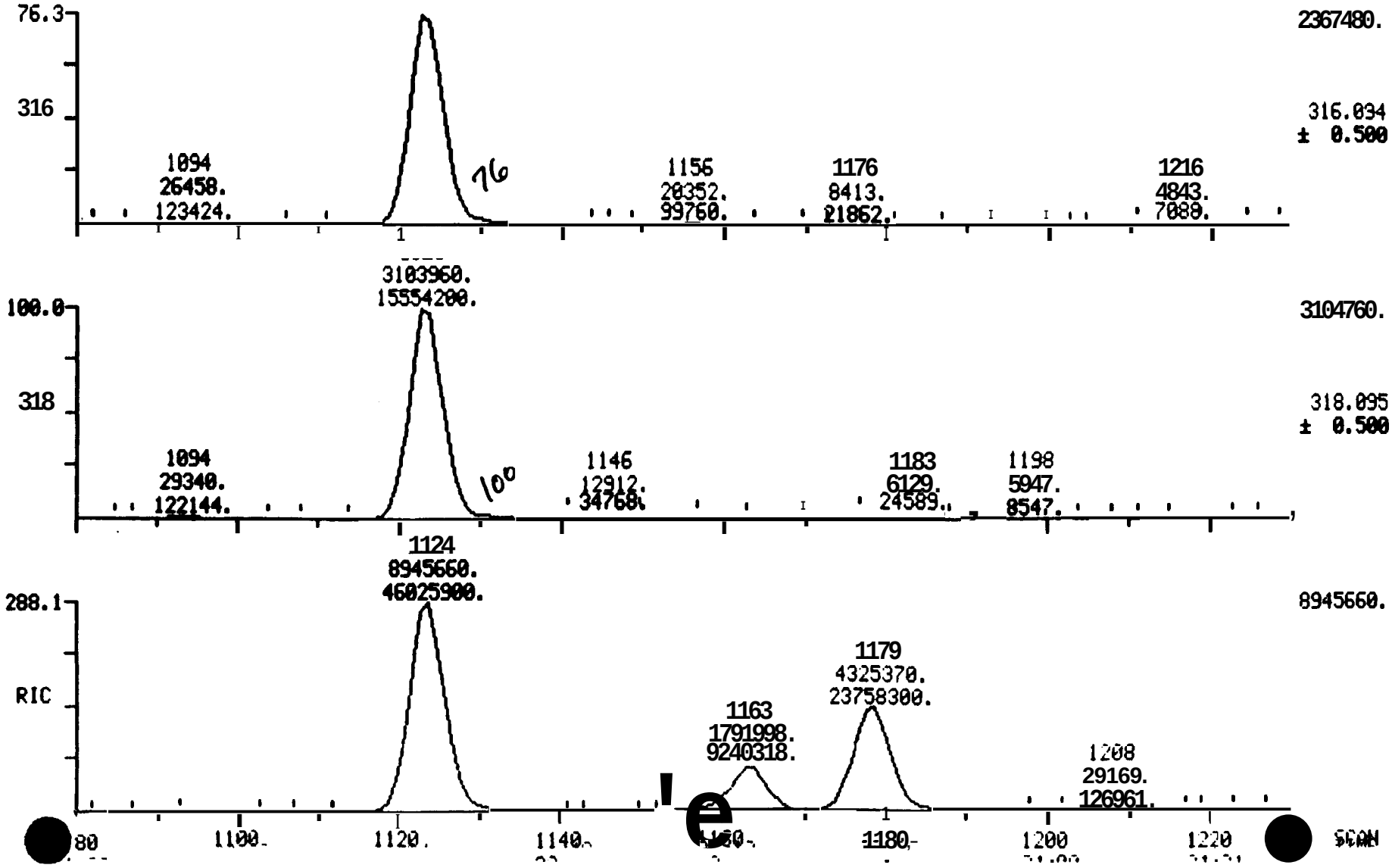
MIDRIC+MASS CHROMATOGRAMS DATA: 68506I3 #1 SCANS 890 TO 1120
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STO I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



320023

QUAN:

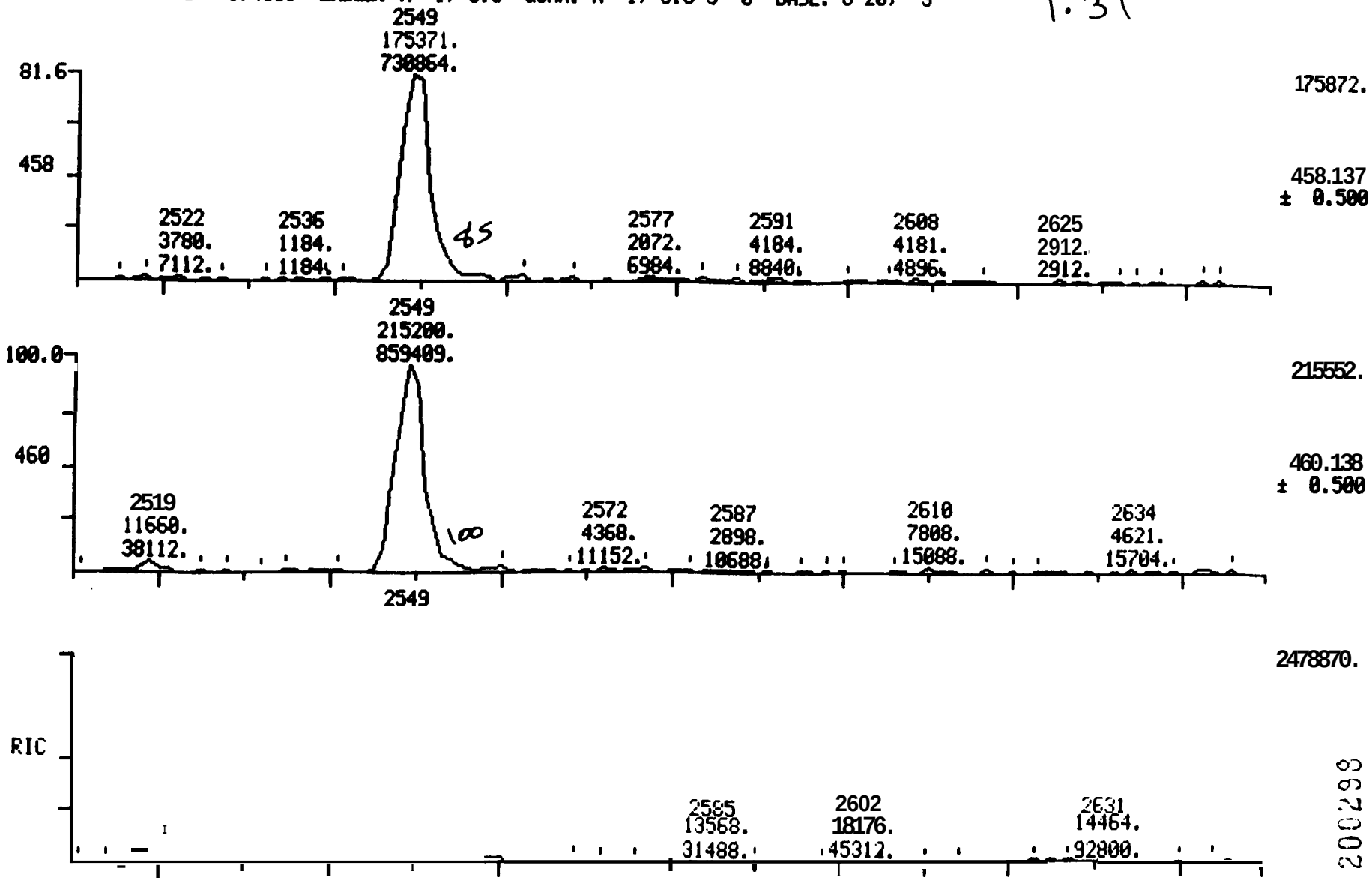
1.64


76.3
316
1094
26458.
123424.
76
1156
20352.
99760.
1176
8413.
21862.
1216
4843.
7089.
2367480.
316.034
± 0.500
100.0
318
3103960.
15554200.
1094
29340.
122144.
100
1146
12912.
34768.
1183
6129.
24589.
1198
5947.
8547.
3104760.
318.095
± 0.500
288.1
RIC
1124
8945660.
46025900.
1163
1791998.
9240318.
1179
4325370.
23758300.
1208
29169.
126961.
8945660.
1100.
1120.
1140.
1180.
1200
1220
SCAN

OCDD

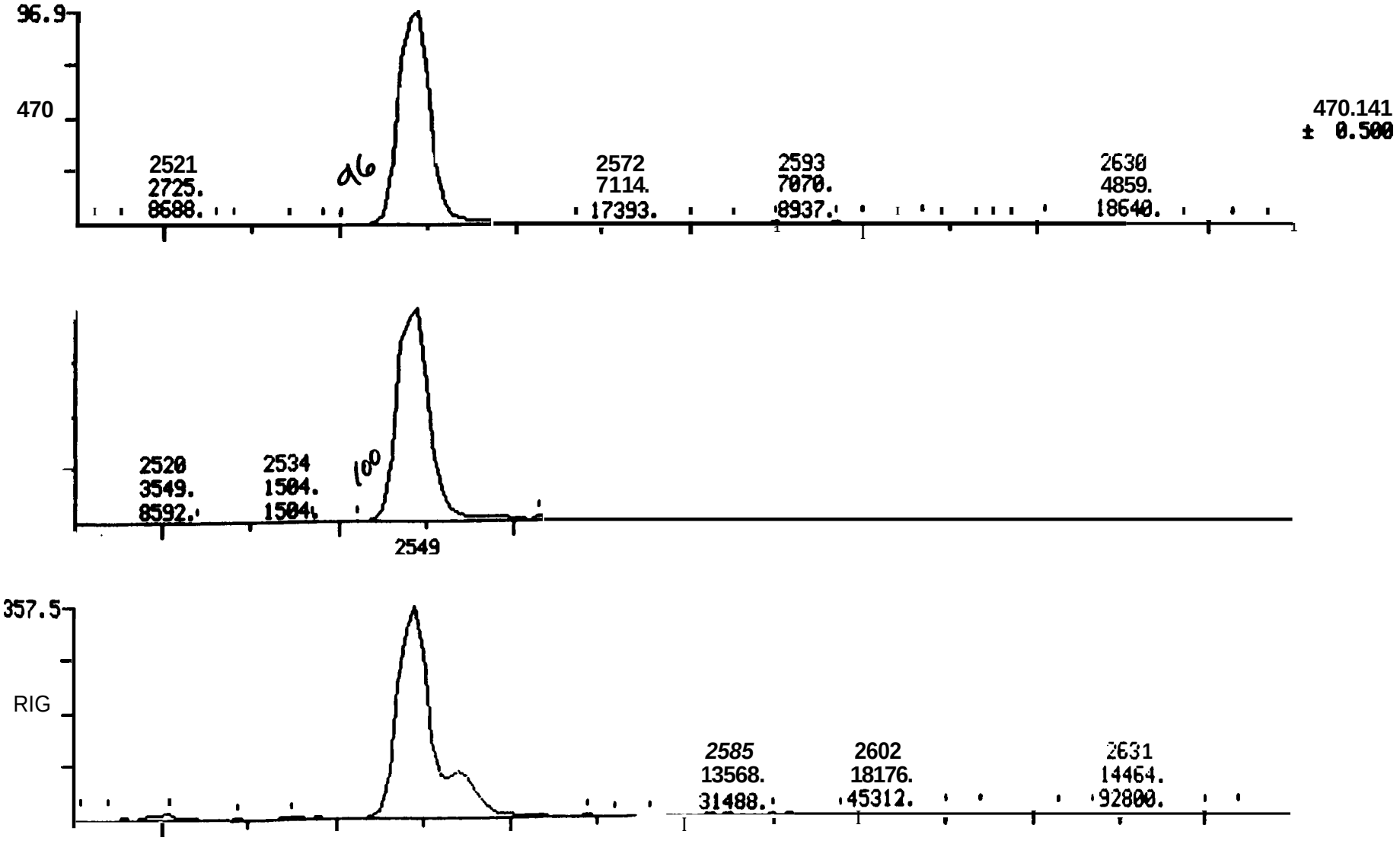
MIDRIC+MASS CHROMATOGRAMS DATA: 68506I3 #1 SCANS 2510 TO 2650
03/26/91 10:55:00 CALI: CAL910306A 02
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.31



200298

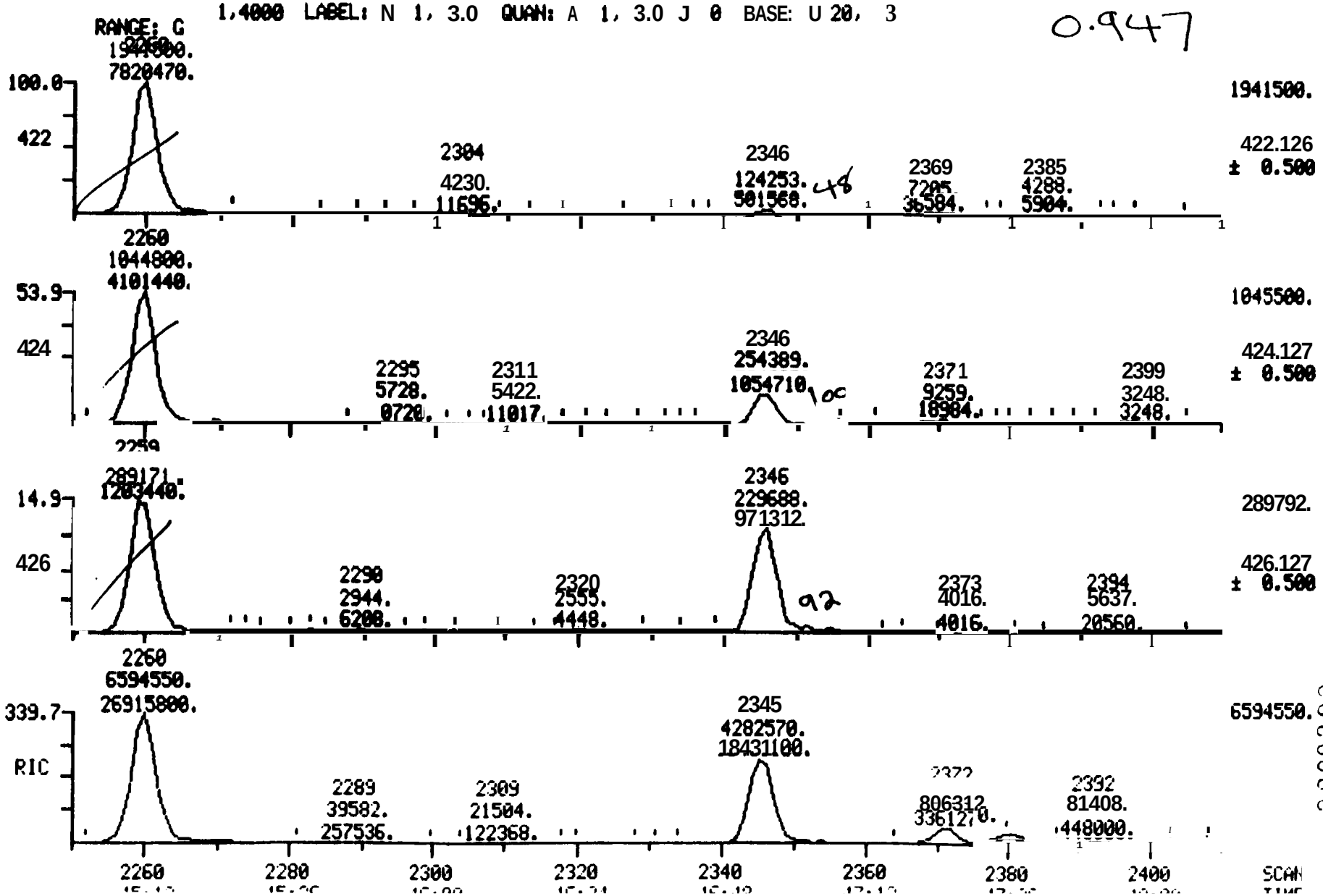
0.398


96.9
470
470.141
± 0.500
2521
2725.
8688.
96
2572
7114.
17393.
2593
7070.
8937.
2630
4859.
18640.
2520
3549.
8592.
2534
1504.
1504.
100
2549
357.5
RIG
2585
13568.
31488.
2602
18176.
45312.
2631
14464.
92800.

HpCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 2250 TO 2410
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

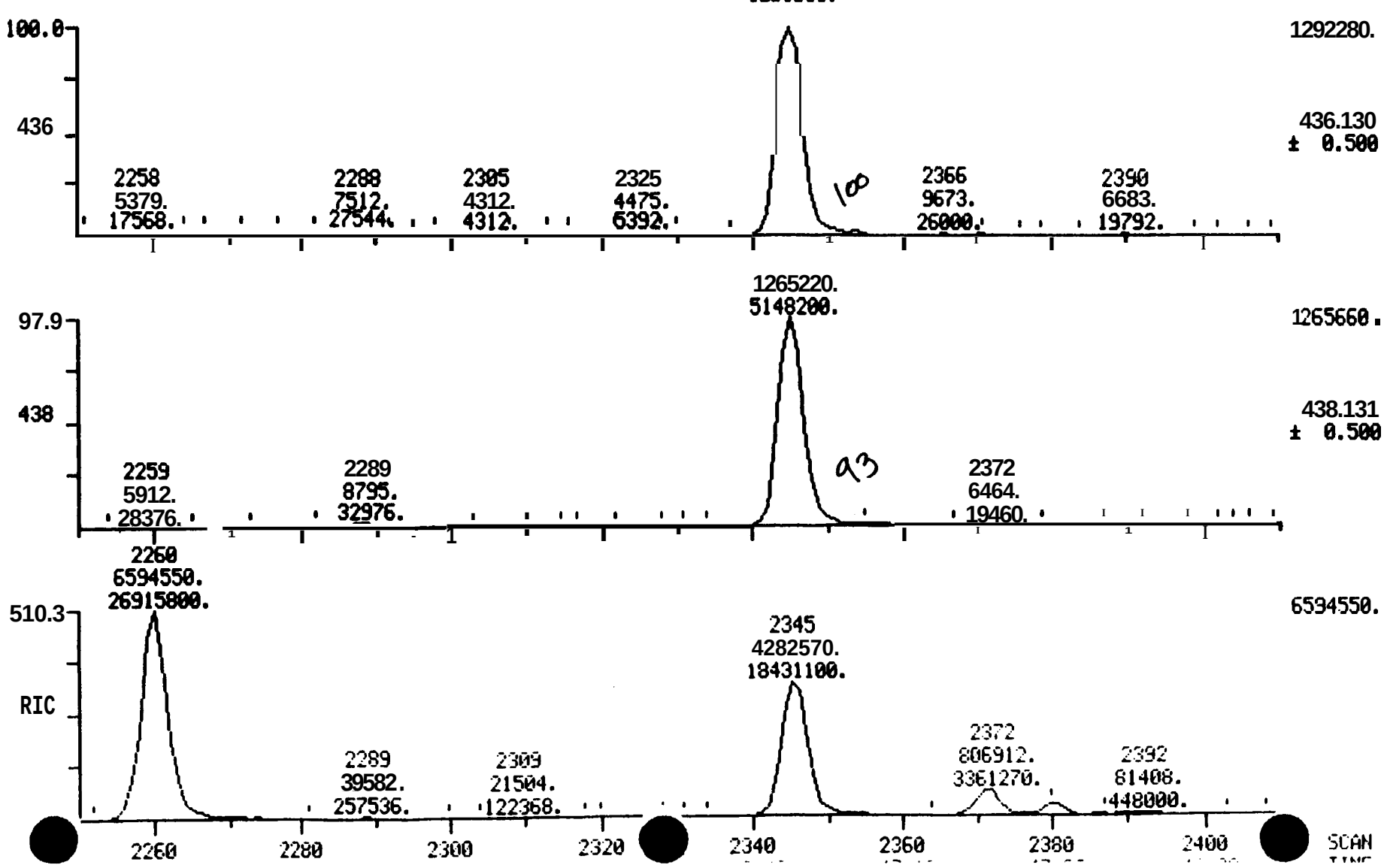
0.947



C0200293

MIDRIC+MASS CHROMATOGRAMS DATA: 685061 3 #1 SCANS 2250 TO 2410
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.701

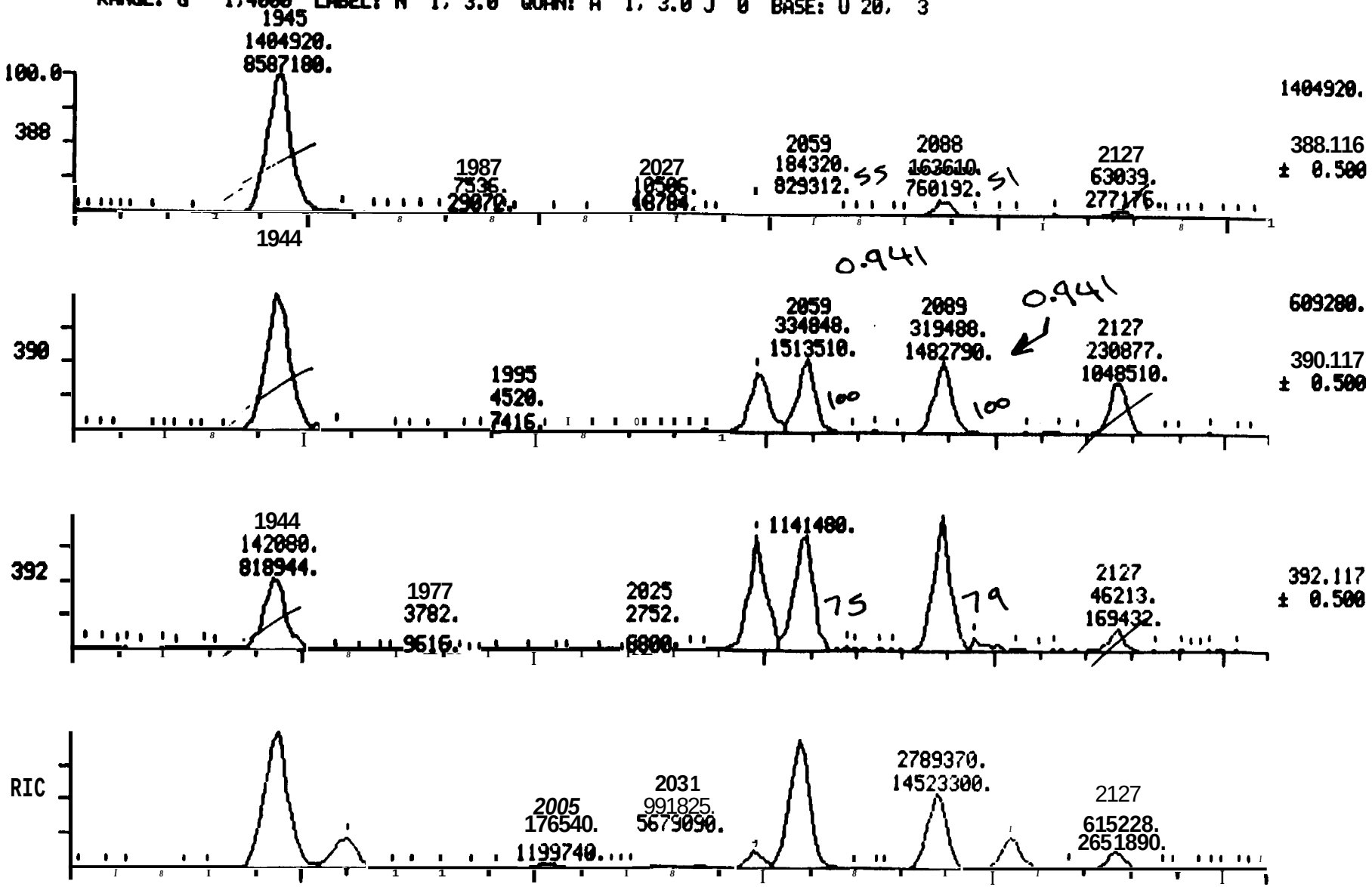


HxCDD

MIDRIC+MASS CHROMATOGRAMS
03/26/91 10:55:00
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 6850613 #1
CALI: CAL910306A #2

SCANS 1900 TO 2160

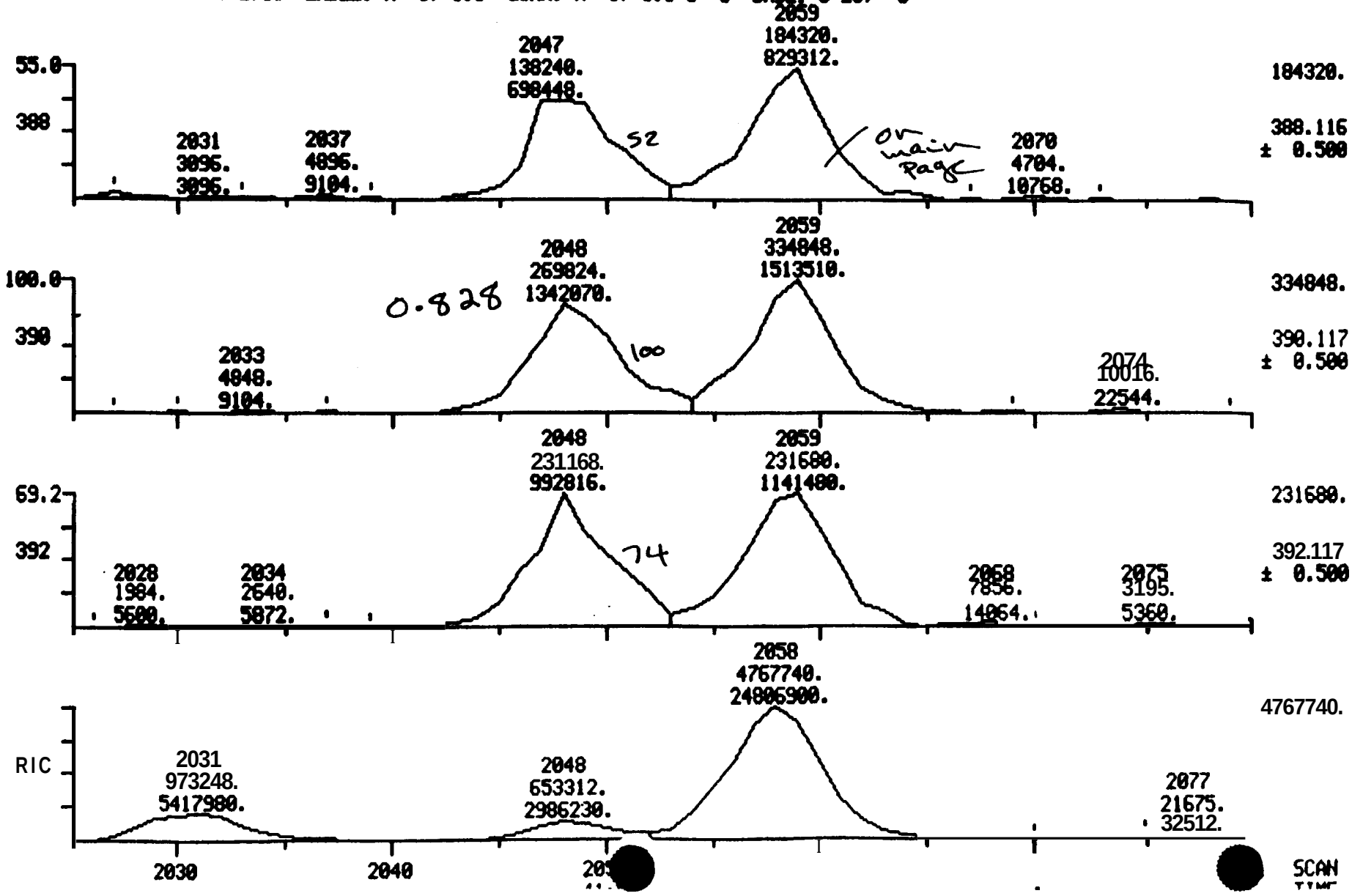


3200

1/1

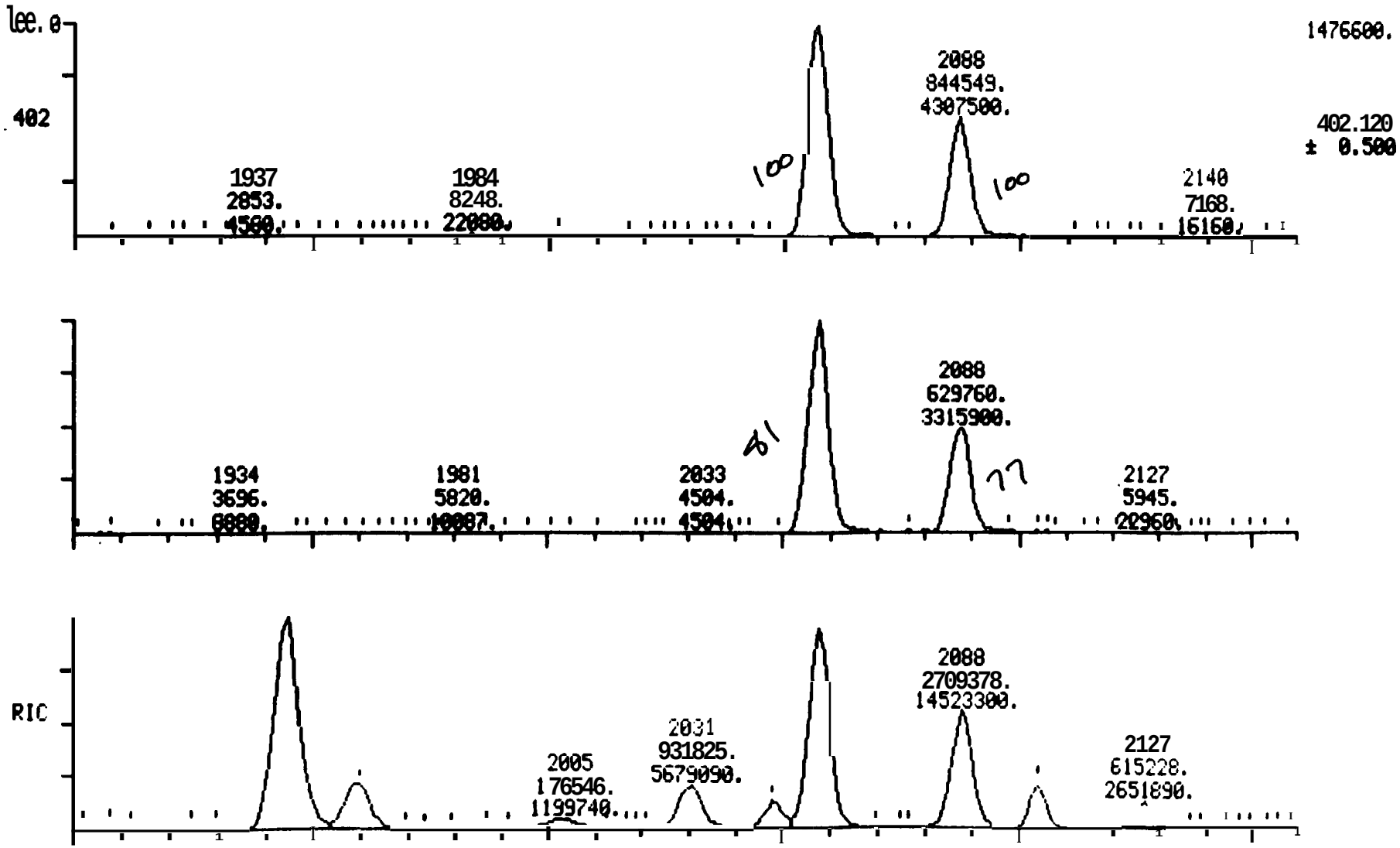
HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 2025 TO 2080
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



LABEL:

0.925

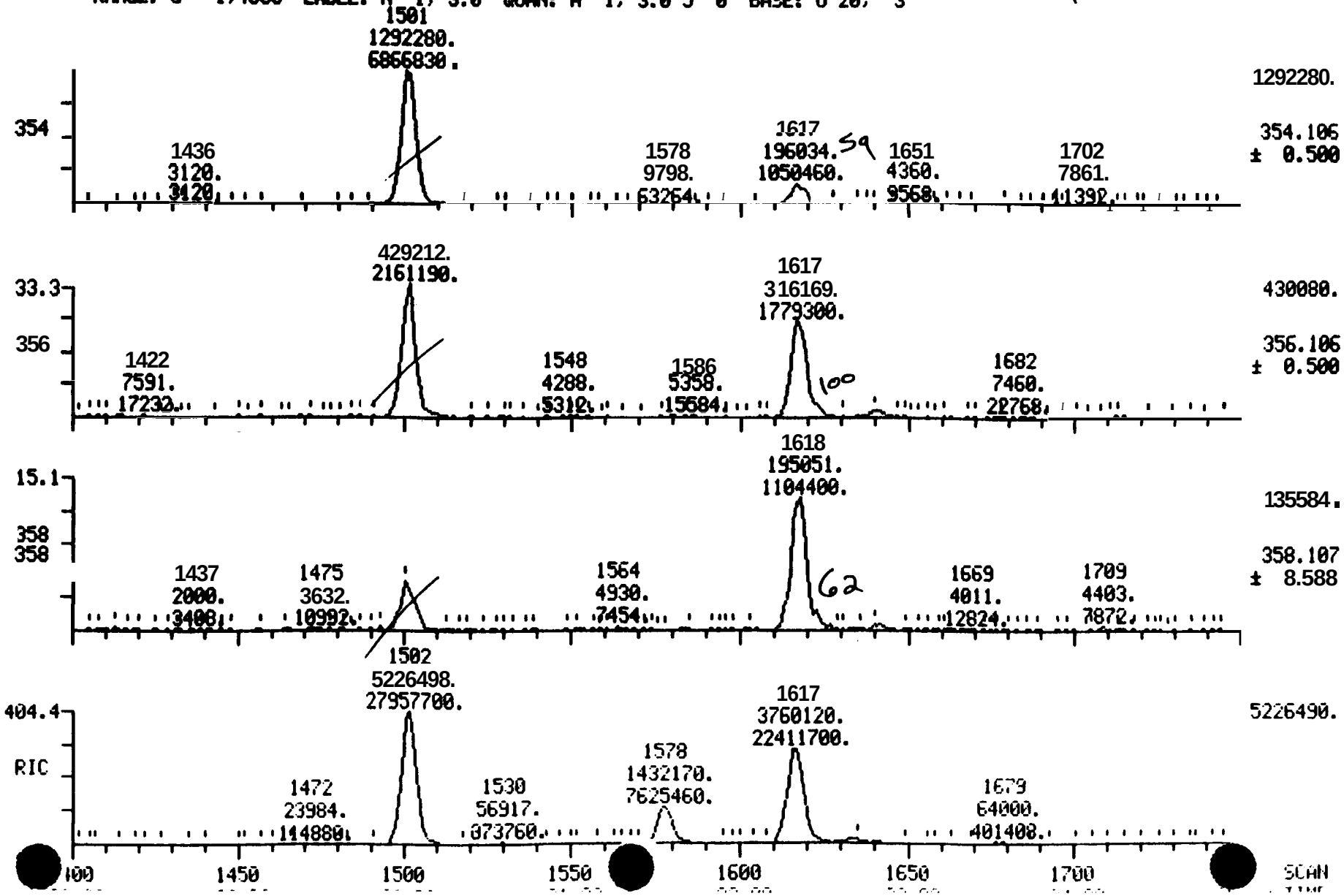


3200361

PeCDD

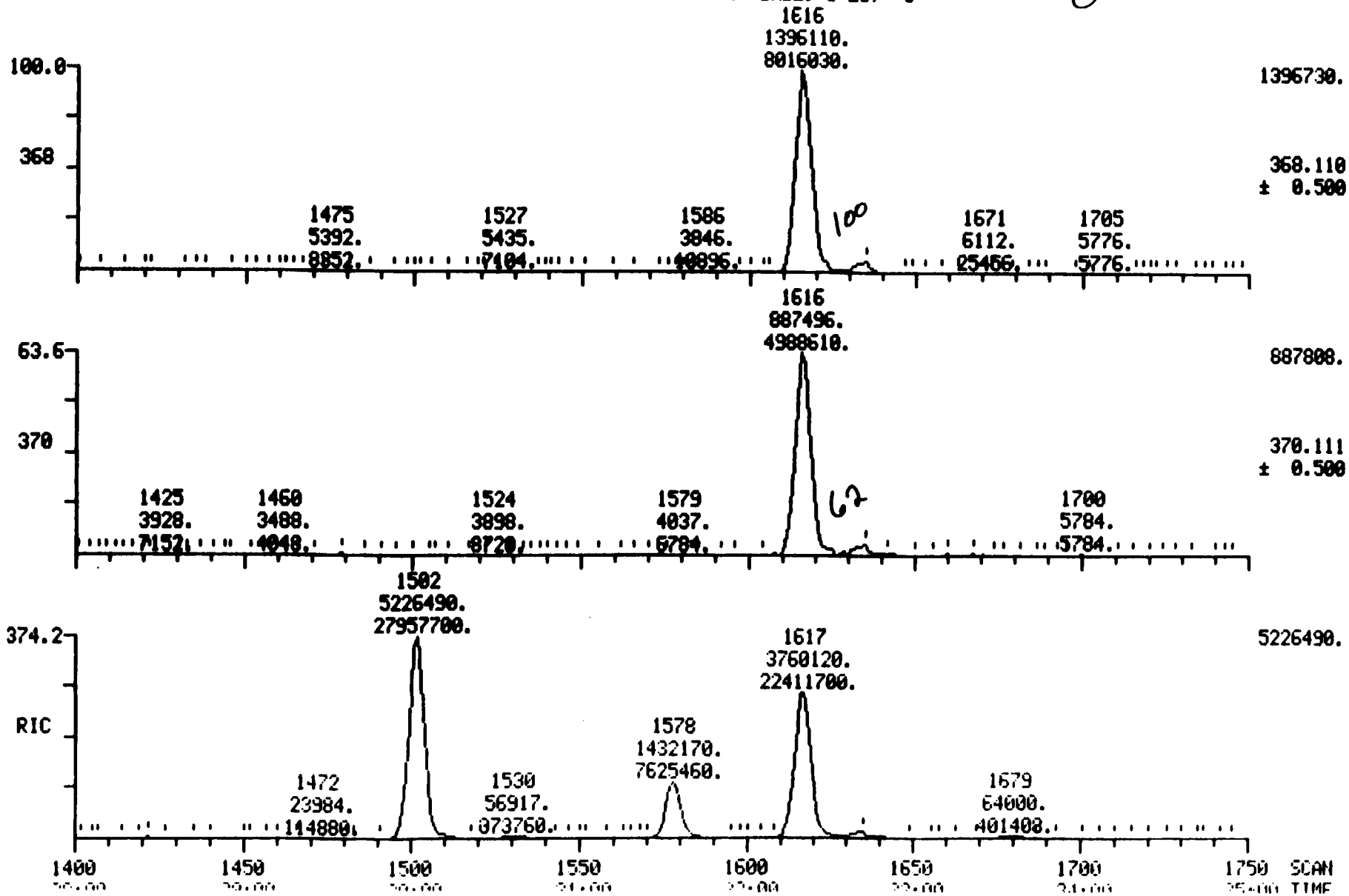
MIDRIC+MASS CHROMATOGRAMS DATA: 68506I3 #1 SCANS 1400 TO 1750
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.11



MIDRIC+MASS CHROMATOGRAMS DATA: 6850613 #1 SCANS 1400 TO 1750
03/26/91 10:55:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0777



3200302

MIDRIC+MASS CHROMATOGRAMS DATA: 68506I3 #1 SCANS 960 TO 1340

03/26/91 10:55:00 CALI: CAL910306A #2

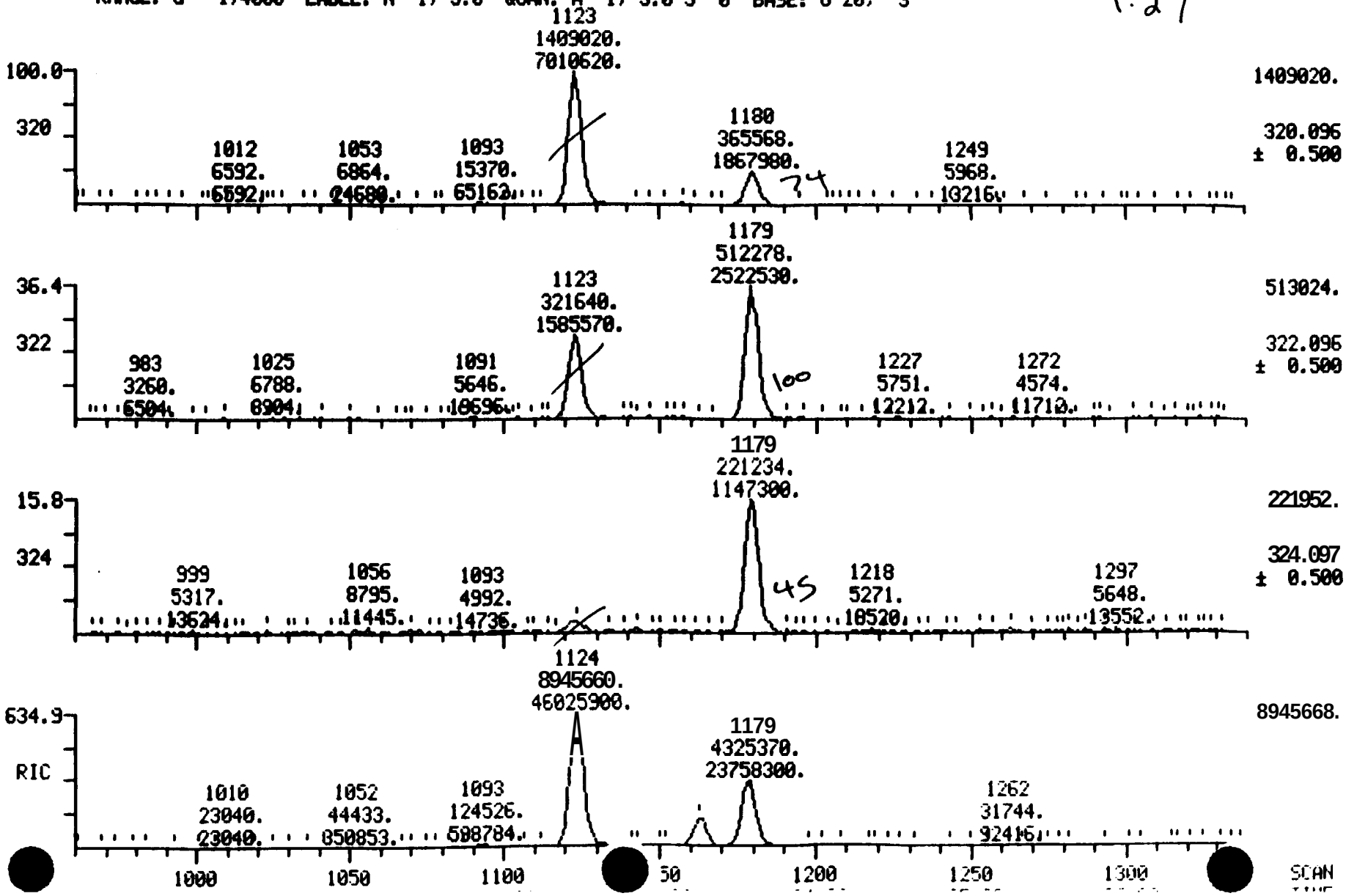
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3

CONDS.: 60M DB-5/TOTALS.

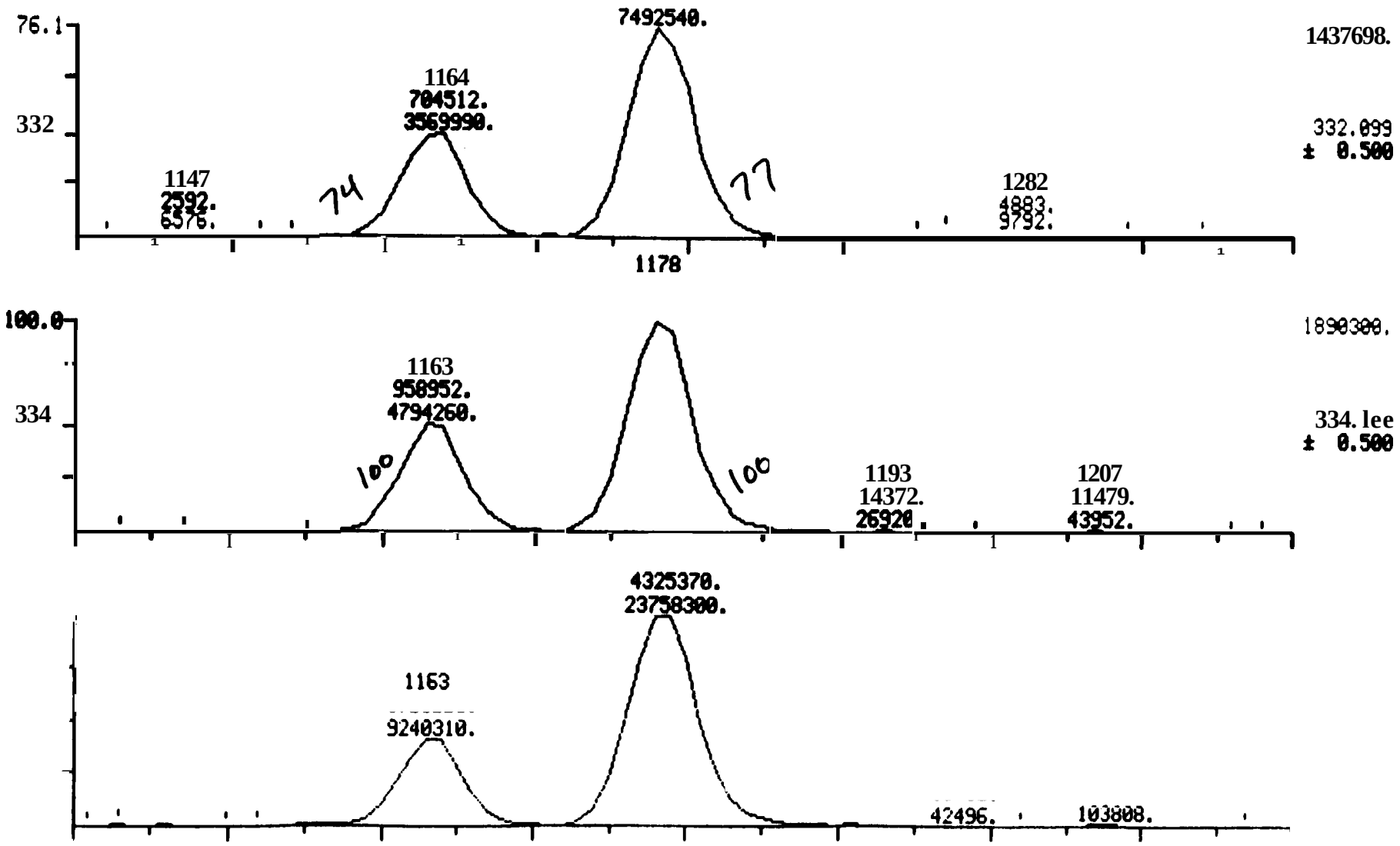
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDD

1.27



1.03

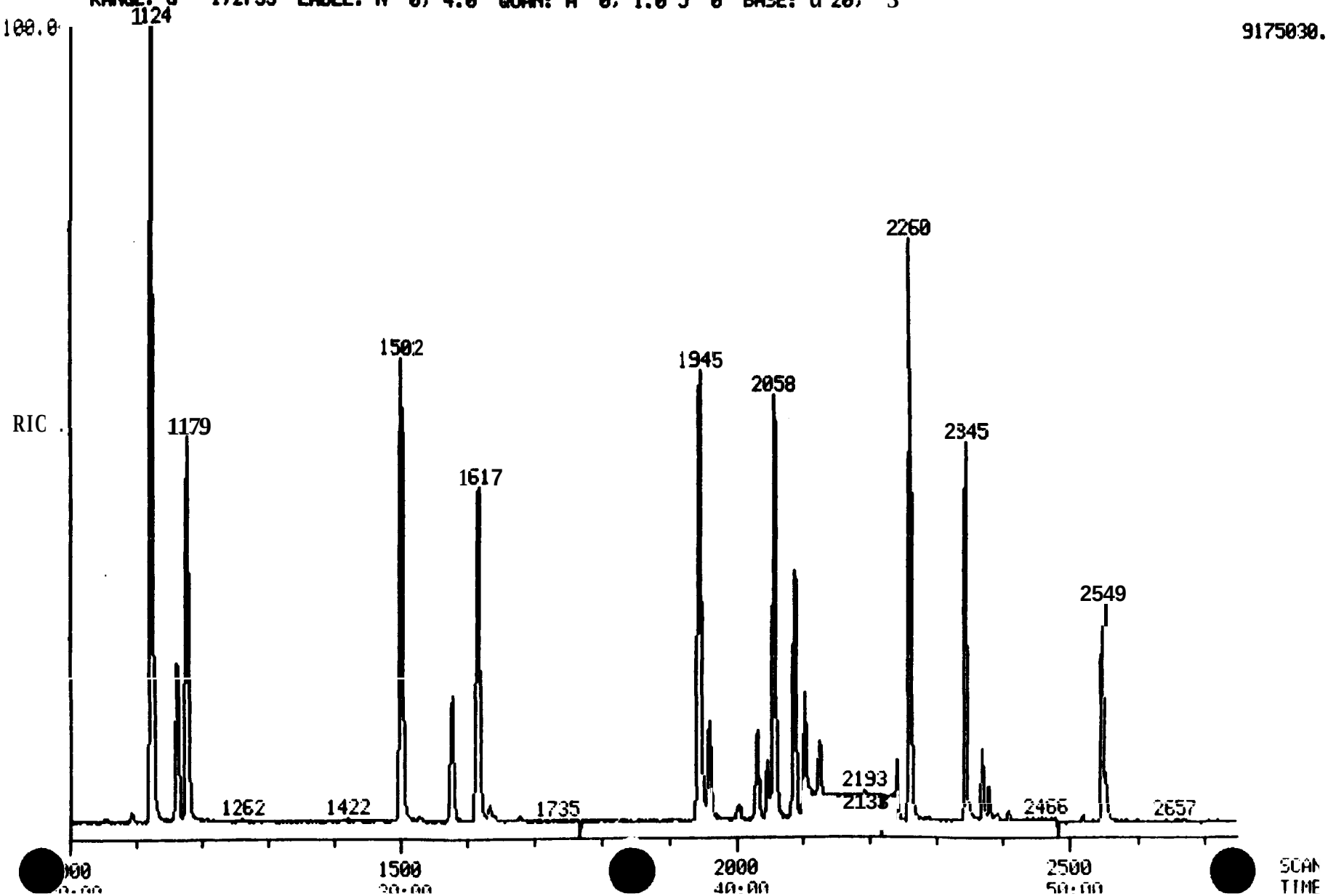

76.1
332
1147
2592.
6576.
1164
704512.
3569990.
74
7492540.
77
1282
4883.
9792.
1178
1437698.
332.099
± 0.500
100.0
334
1163
958952.
4794260.
100
100
1193
14372.
26920.
1207
11479.
43952.
1890300.
334.lee
± 0.500
4325370.
23758300.
1163
9240310.
42496.
103808.

MIDRIC
03/26/91 10:55:00
SAMPLE: 2UL OF 685:06 STD I NATIVES @ 200PPB RUN3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 6850613 #1
CALI: CAL910306A #2

SCANS 1000 TO 2750

ak.nm 3-27-91
QC D.H 3-27-91



4	419.550	420.050	0.034	3	100	40	1	0	Pos
5	421.550	422.030	0.034	3	100	40	1	0	Por
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
8	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.550	438.050	0.052	3	100	40	1	0	Por
10	441.550	442.050	0.054	3	100	40	1	0	Por
11	443.550	444.050	0.054	3	100	40	1	0	Por
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.950	460.030	0.052	3	100	40	1	0	Por
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.030	0.052	3	100	40	1	0	Pos
16	479.550	480.050	0.054	3	100	40	1	0	Por
17	513.550	514.050	0.054	3	100	40	1	0	Por

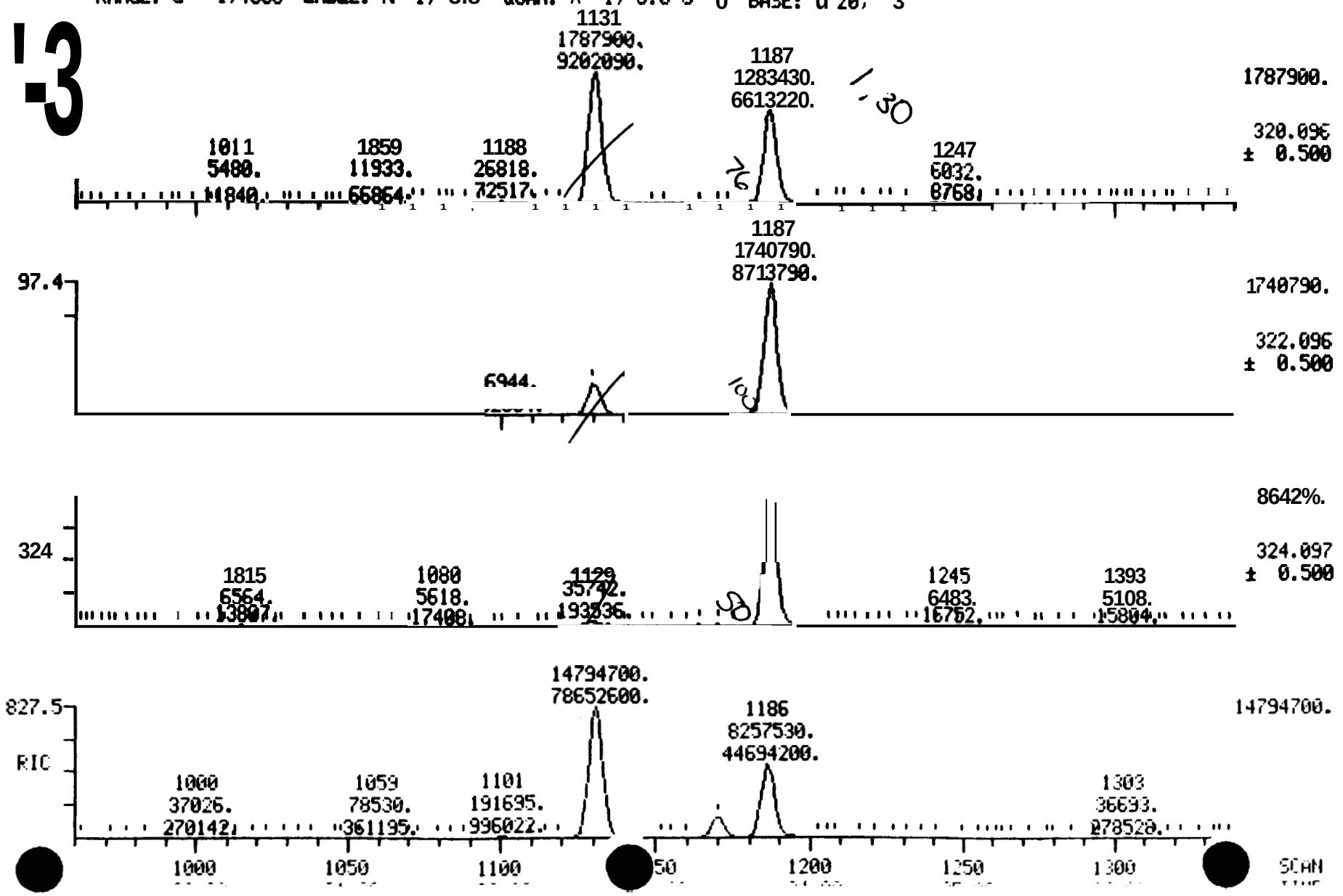
3/26/91 10:50:35 SCAN 2753
Acquisition stopped

3/26/91 10:30:37
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2753 Centroid

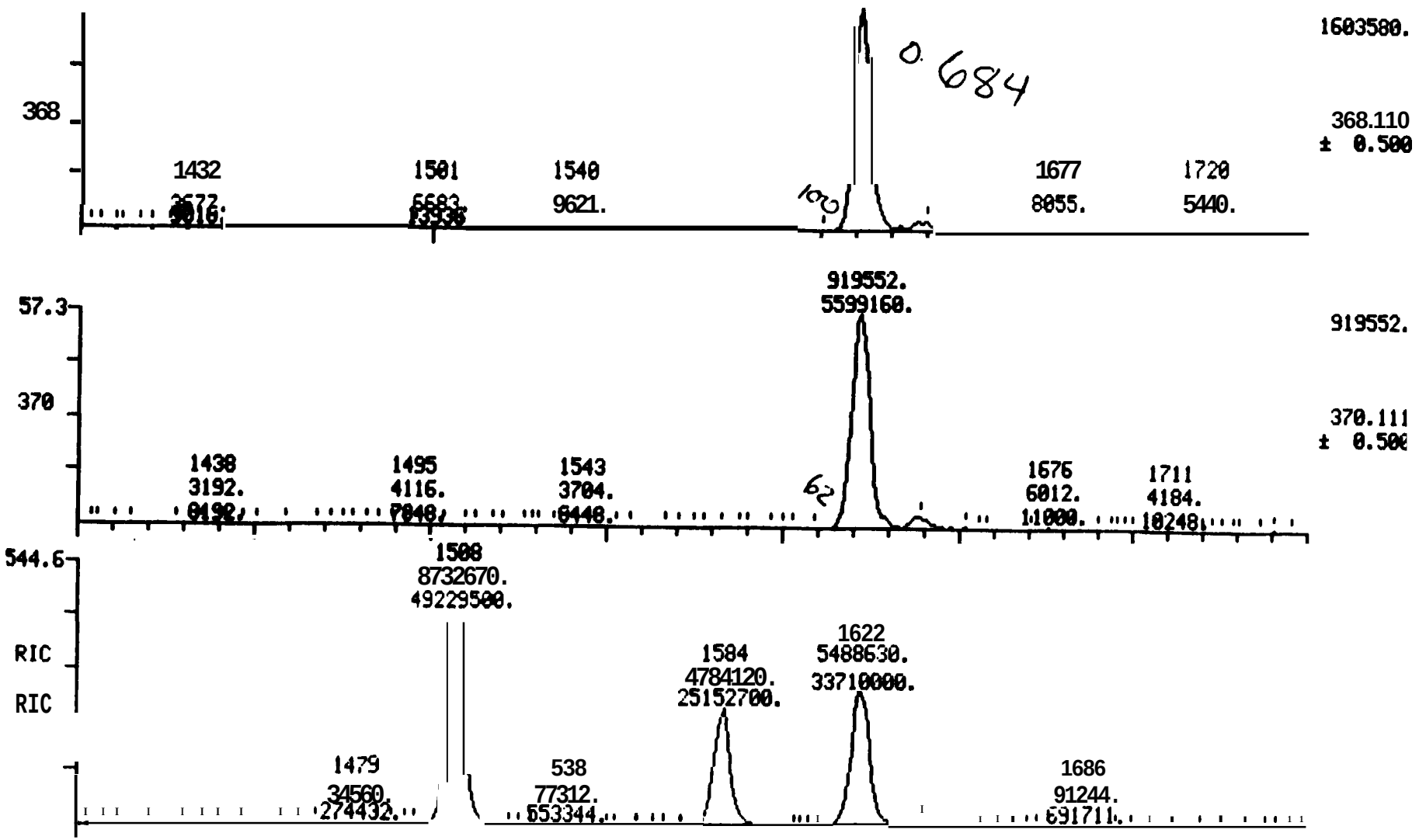
Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	633.5	3300.0	19.2	84017. 31.	25.

TCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 960 TO 1340
03/26/91 18:37:00 MI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.8 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



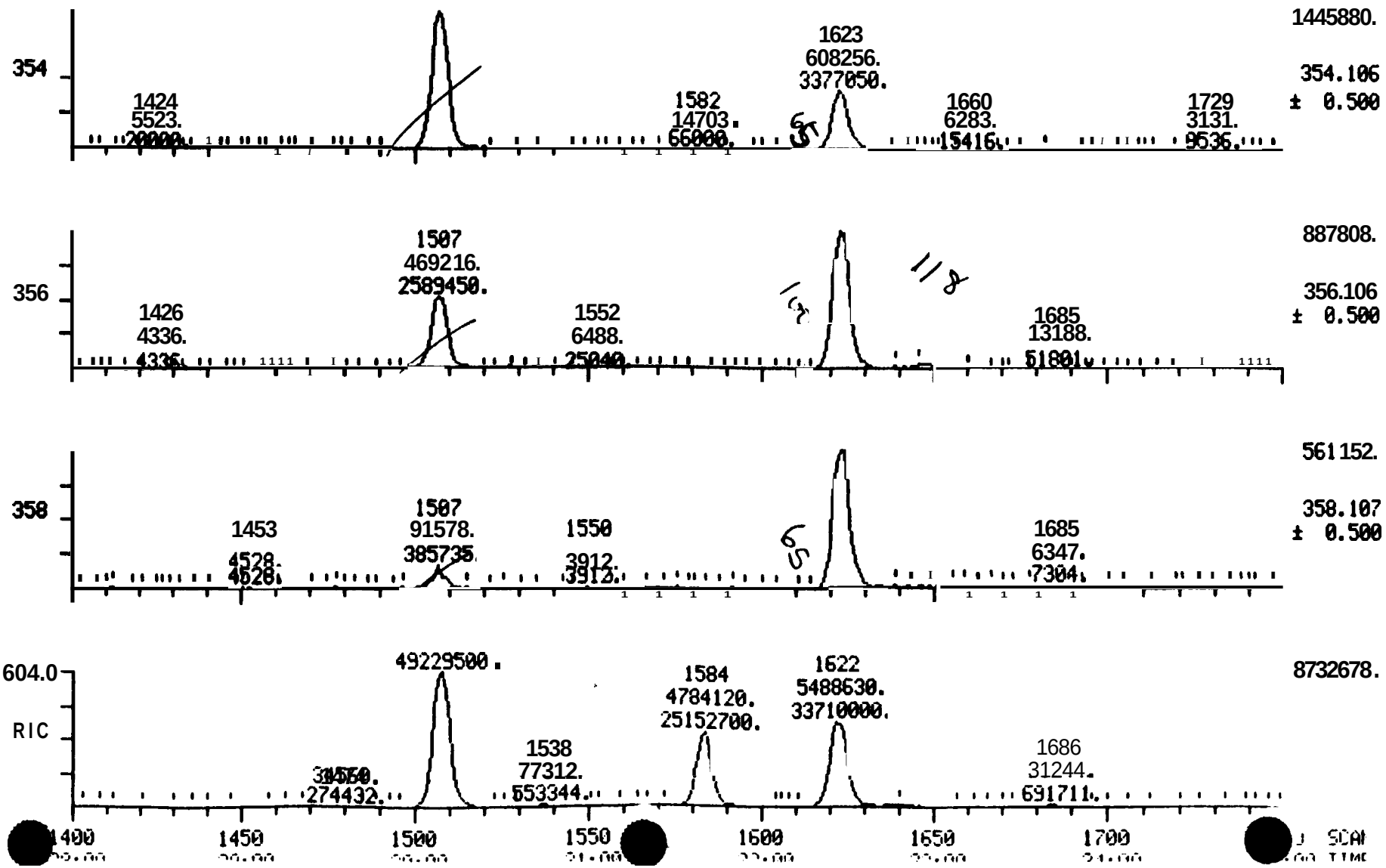
SAMPLE:

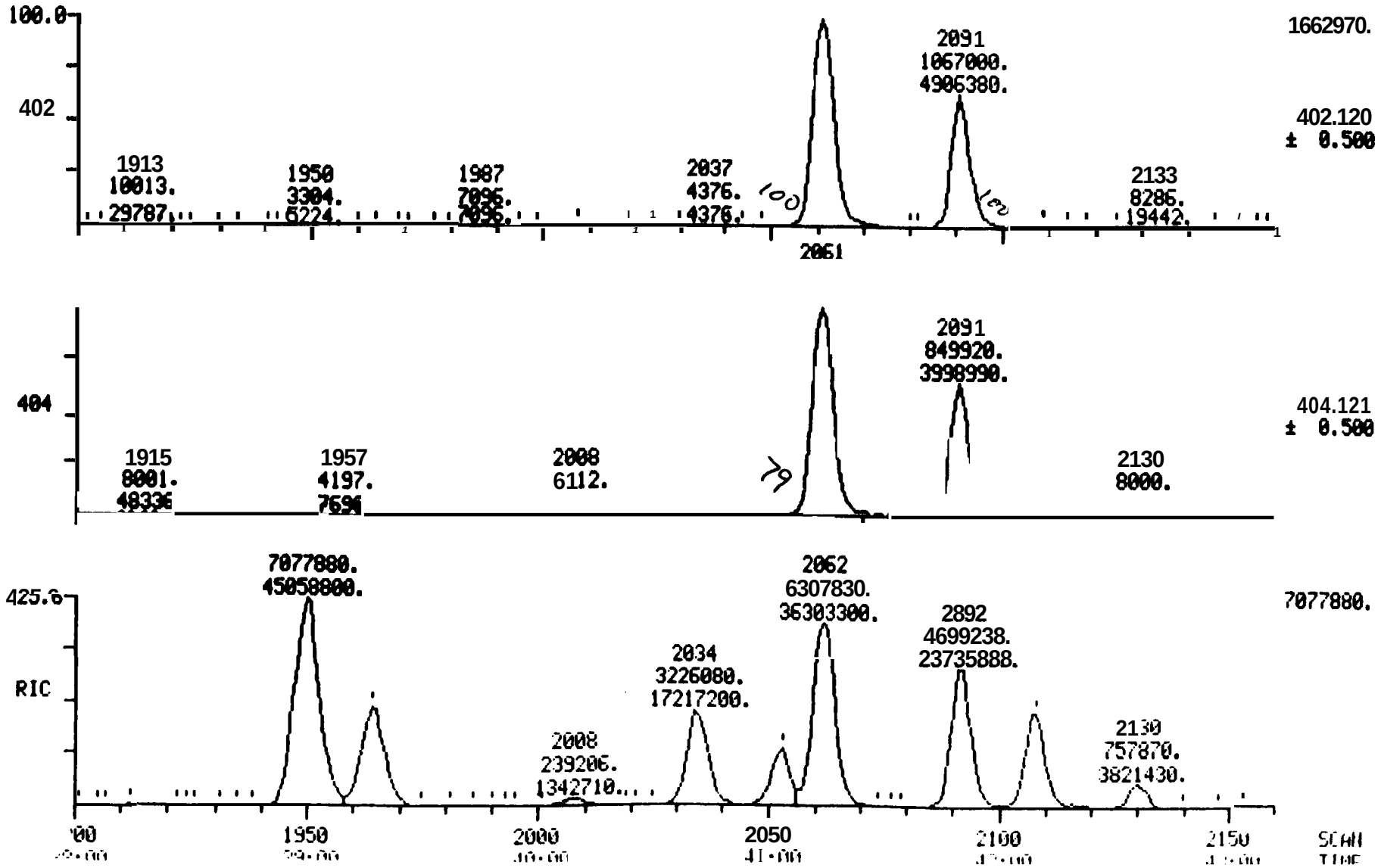


320C365

PeCDD

QUAN:


354
1445880.
354.106
± 0.500
1424
5523.
1582
14703.
1623
608256.
3377050.
1660
6283.
1729
3131.
356
887808.
356.106
± 0.500
1426
4336.
1507
469216.
2589450.
1552
6488.
1685
13188.
358
561152.
358.107
± 0.500
1453
4528.
1507
91578.
385735.
1550
3912.
1685
6347.
7304.
604.0
RIC
8732678.
49229500.
1538
77312.
553344.
1584
4784120.
25152700.
1622
5488630.
33710000.
1686
31244.
691711.
1400
1450
1500
1550
1600
1650
1700

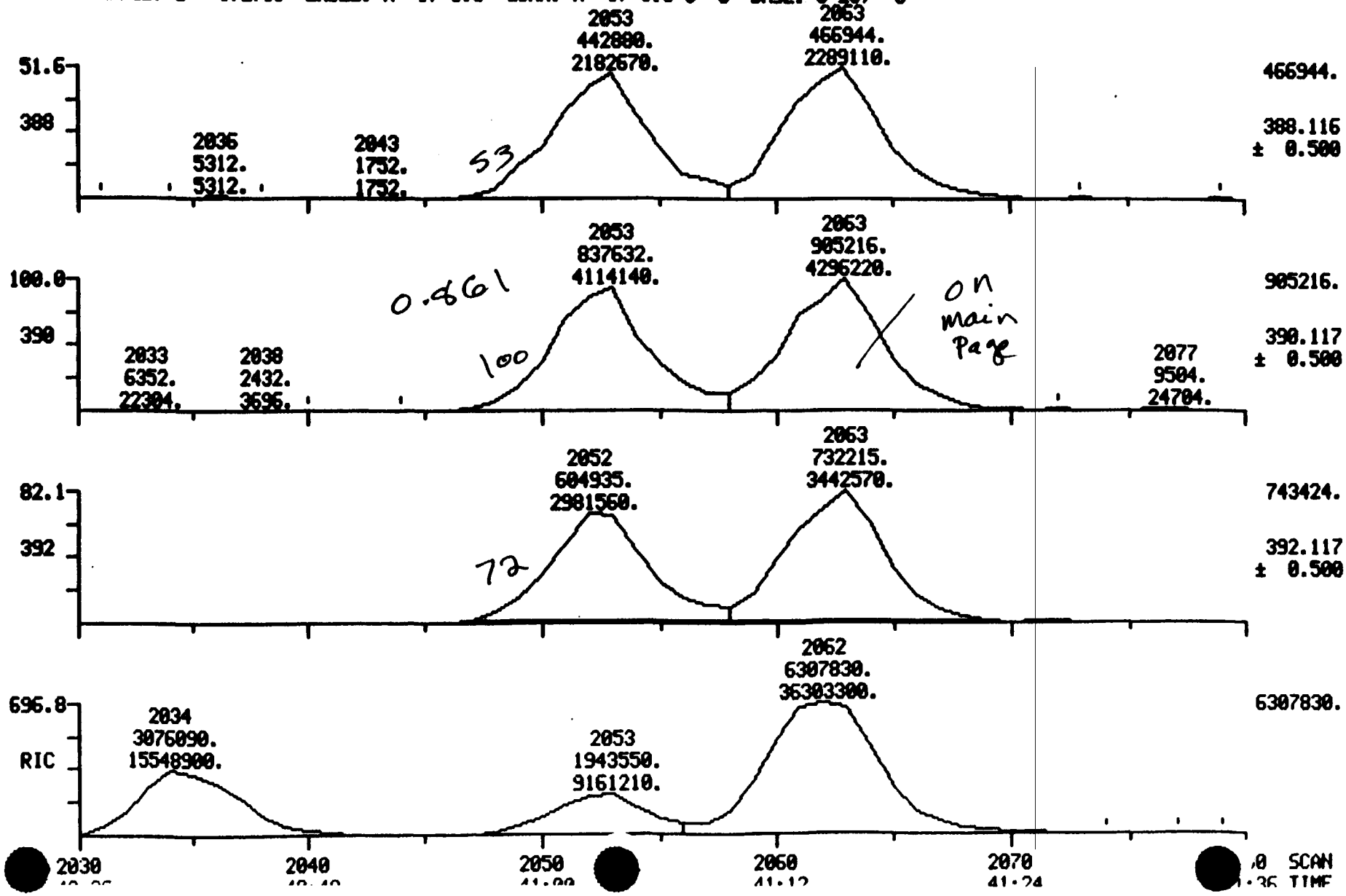

100.0
402
1913
10013.
29787.
1950
3304.
6224.
1987
7096.
7096.
2037
4376.
4376.
100
2061
2091
1067000.
4906380.
100
2133
8286.
19442.
1662970.
402.120
± 0.500
404
1915
8001.
48336
1957
4197.
7696
2008
6112.
79
2091
849920.
3998990.
2130
8000.
404.121
± 0.500
425.6
RIC
7077880.
45058800.
2008
239206.
1342710.
2034
3226080.
17217200.
2062
6307830.
36303300.
2892
4699238.
23735888.
2130
757870.
3821430.
7077880.
1950
2000
2050
2100
2150
SCAN
TIME

3200306

11

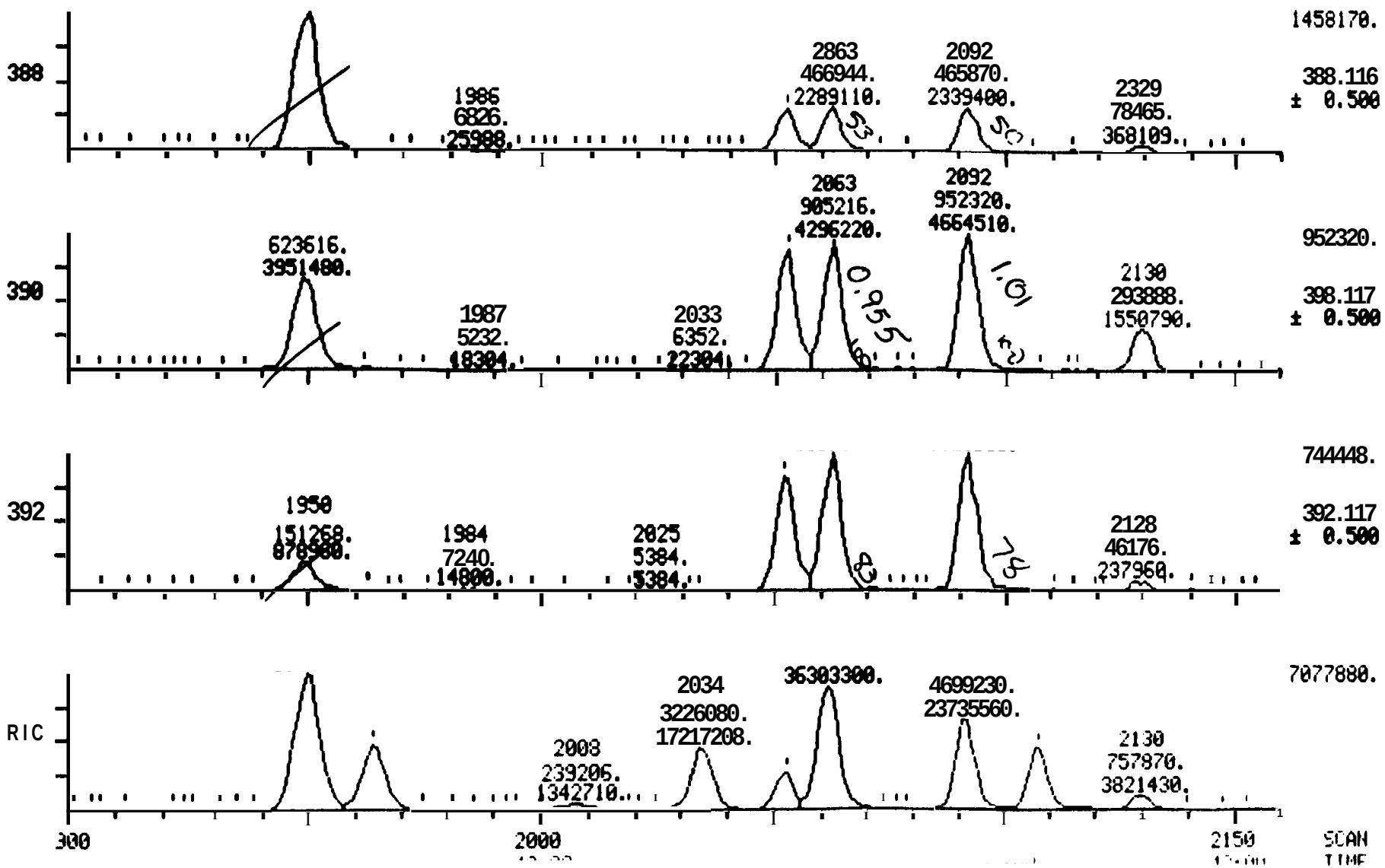
HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 2030 TO 2080
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



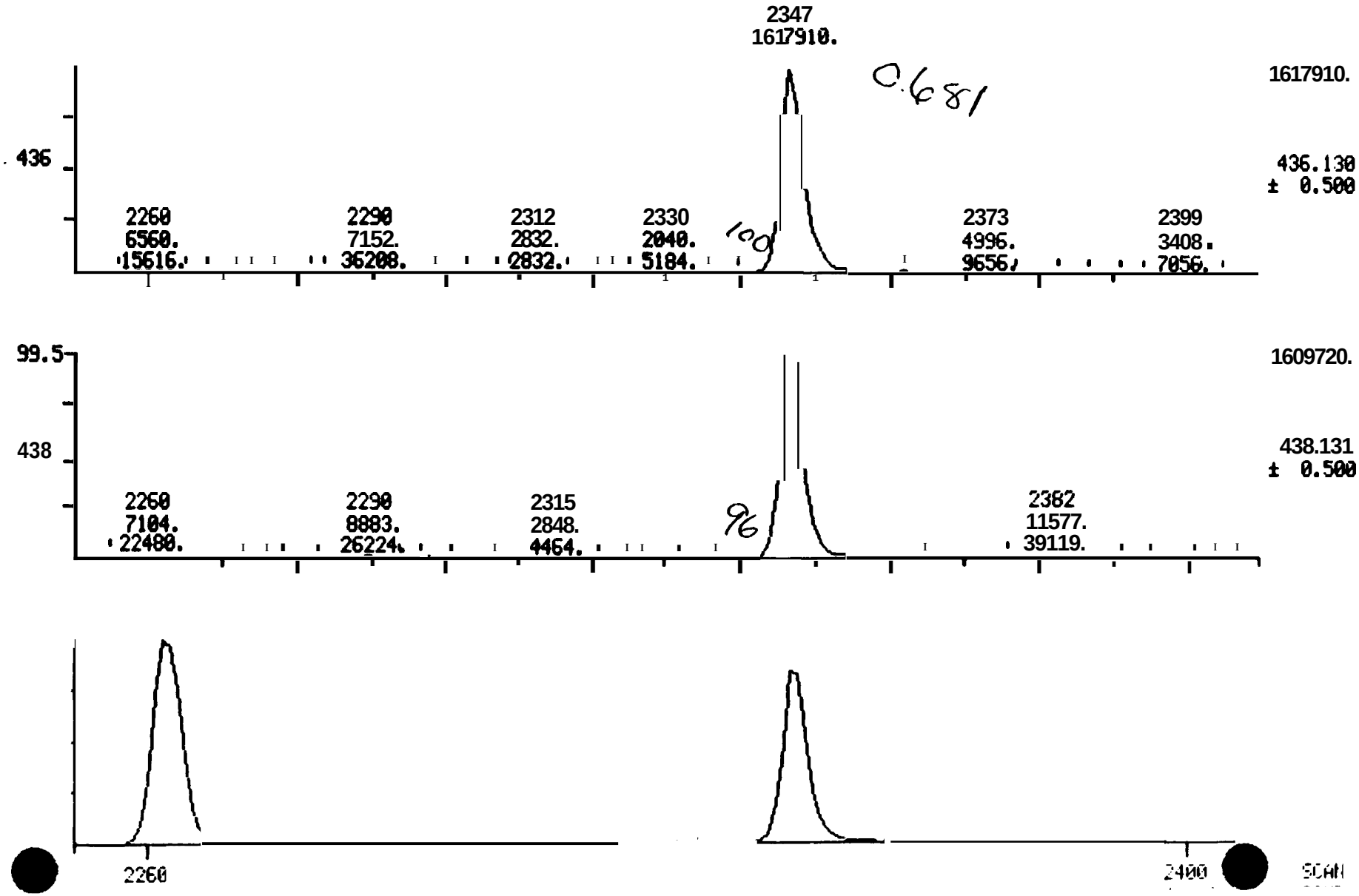
HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 1900 TO 2168
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3



220030C7

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 2250 TO 2410
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 2250 TO 2410

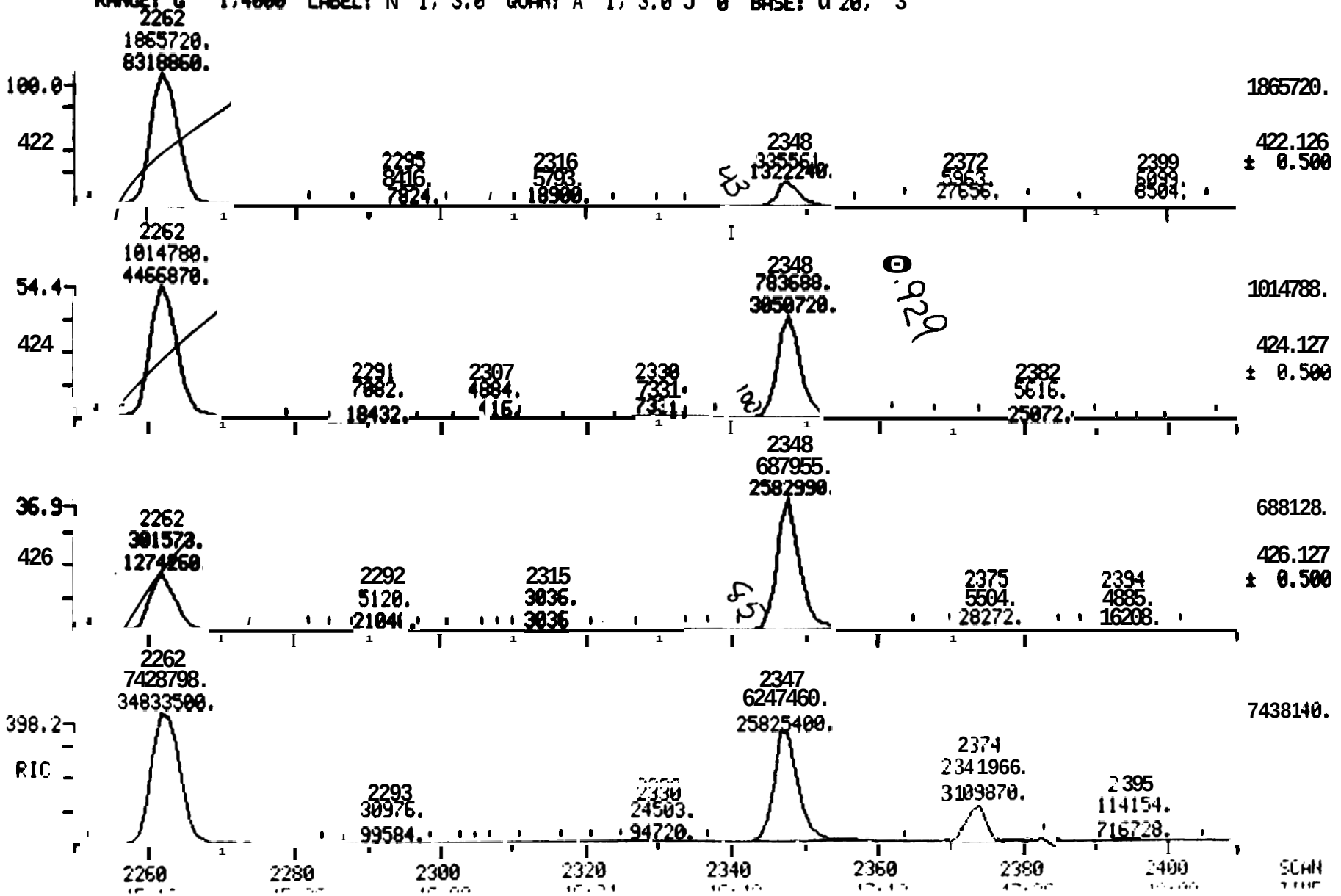
03/26/91 18:37:00 CALI: CAL910306A 02

SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3

CONDS.: 60M DB-5/TOTALS.

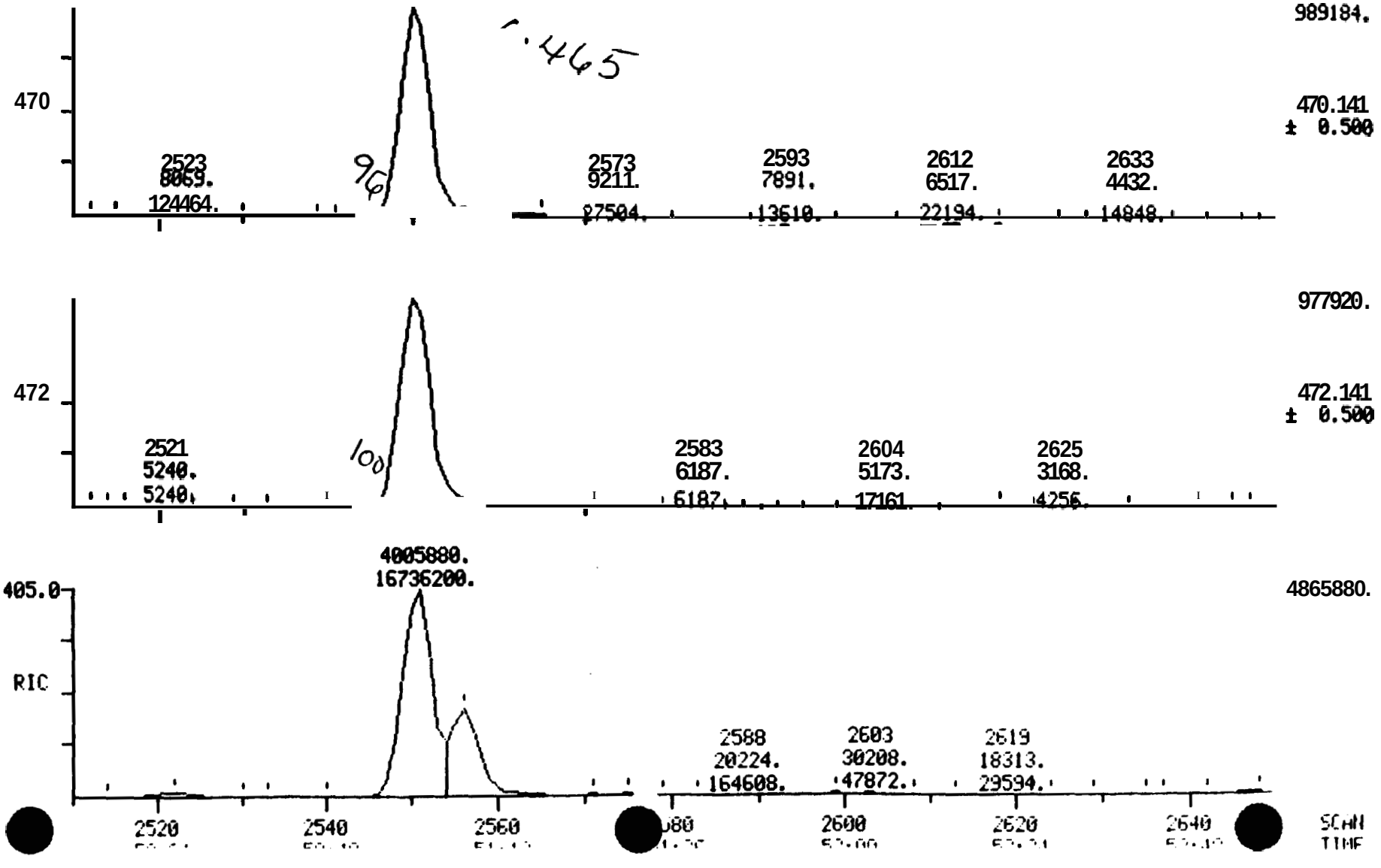
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HpCDD



3200368

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 2510 TO 2650
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 3
CONDS. : 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.8 QUAN: A 1, 3.0 J 0 BASE: U 20, 3
2550



MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 2510 TO 2650

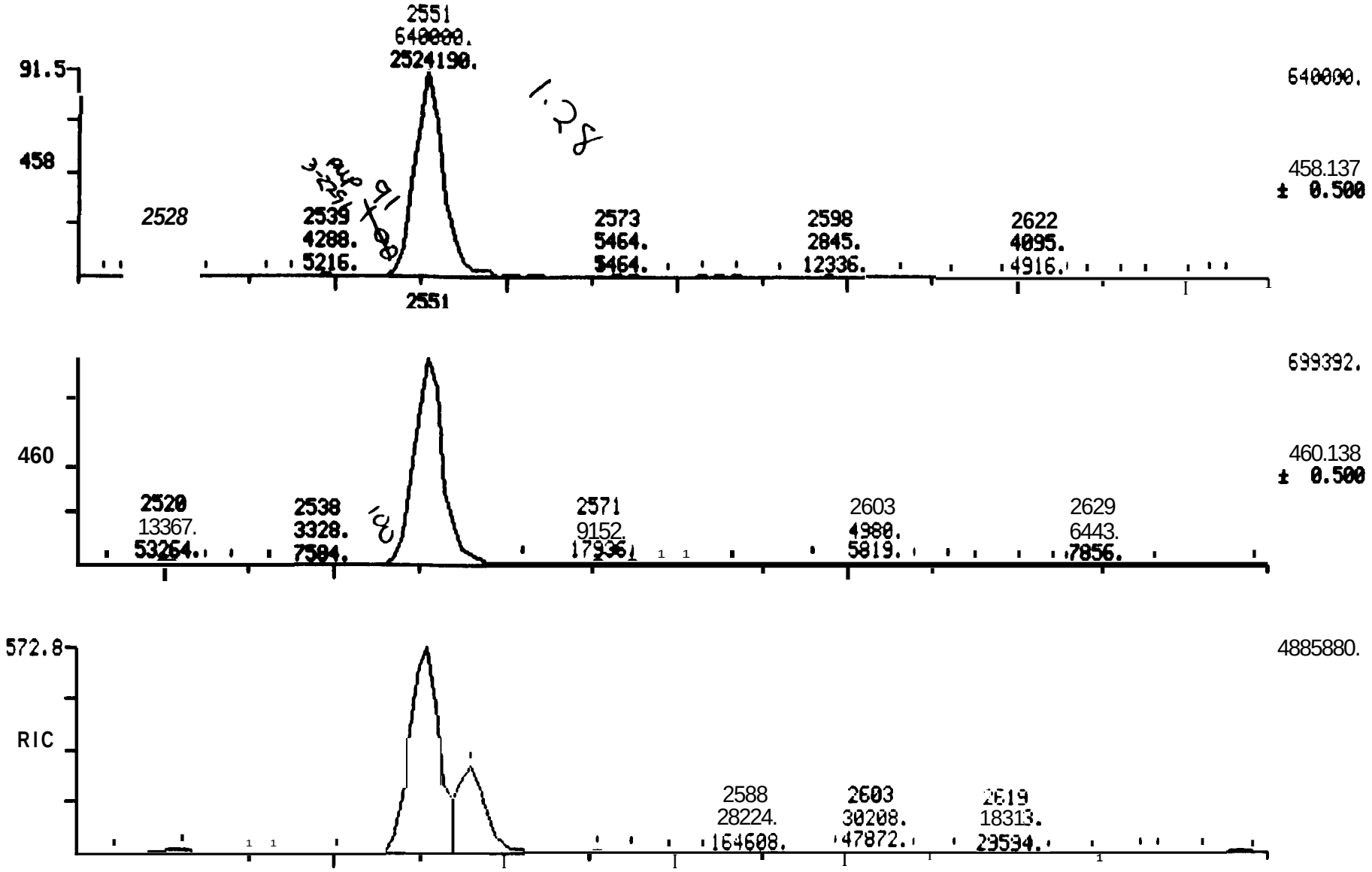
03/26/91 18:37:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3

CONDS.: 60M DB-5/TOTALS.

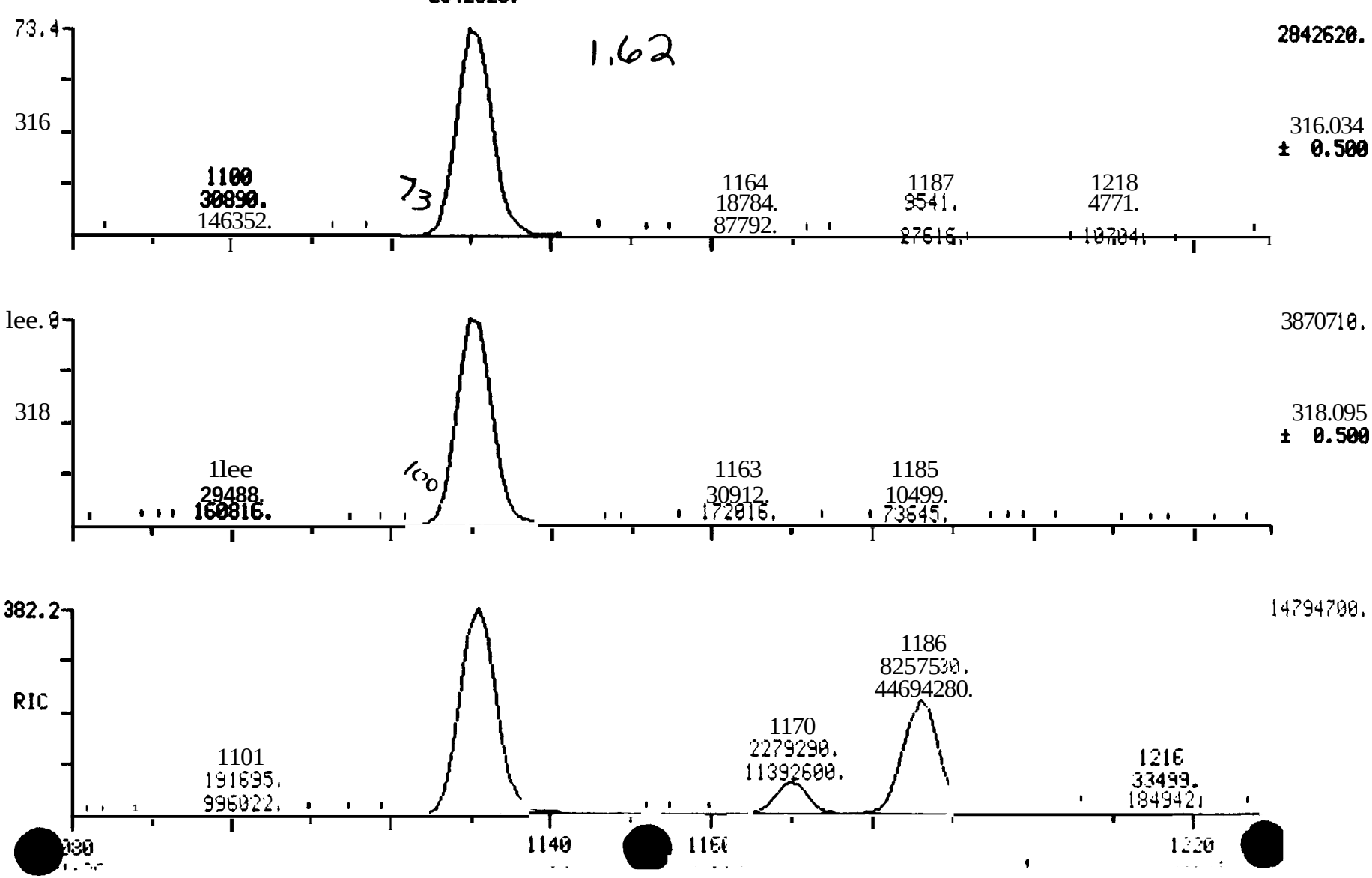
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDD

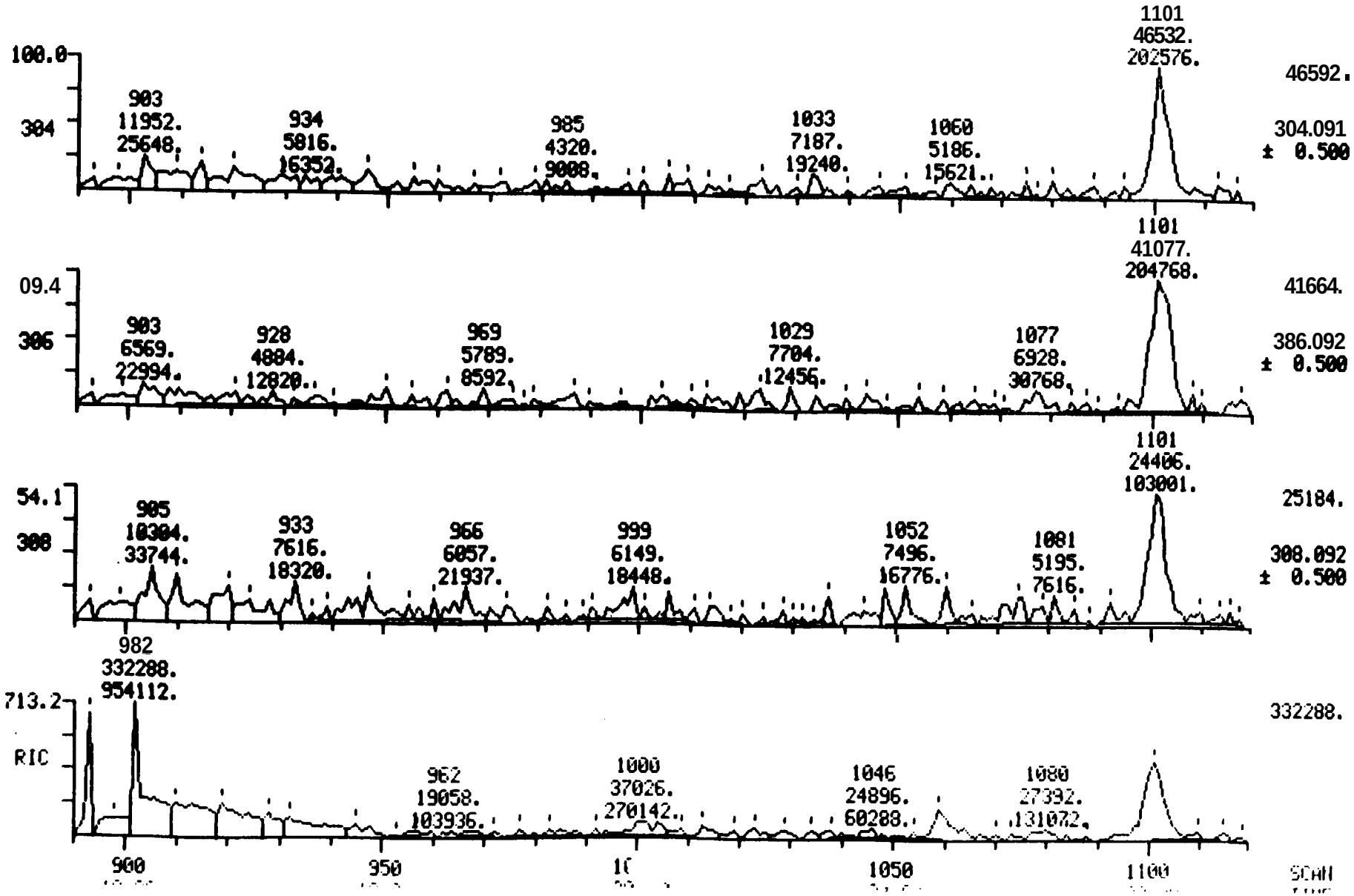


3200363

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 1080 TO 1238
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STO III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

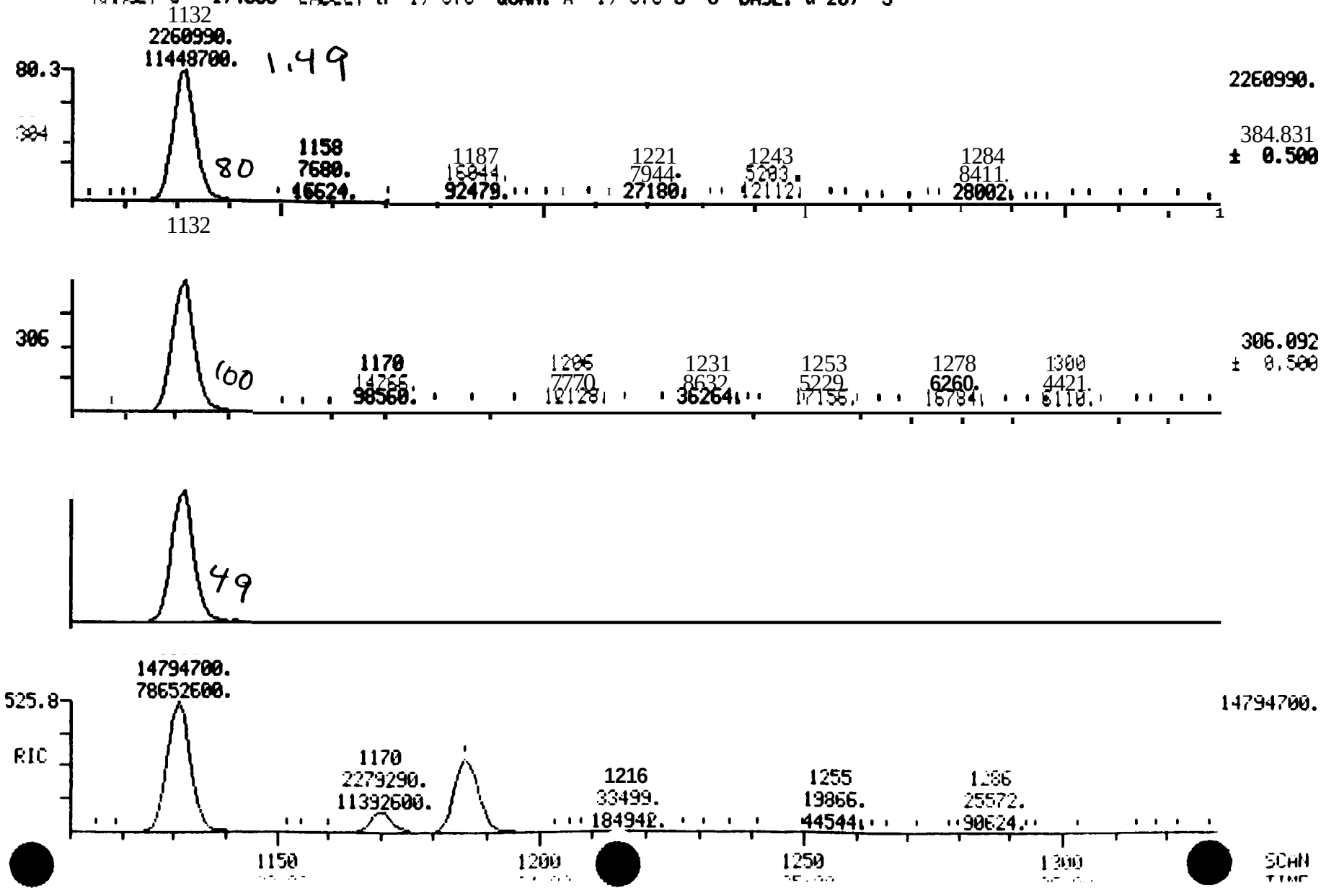


MIDRIC:MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 890 TO 1120
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

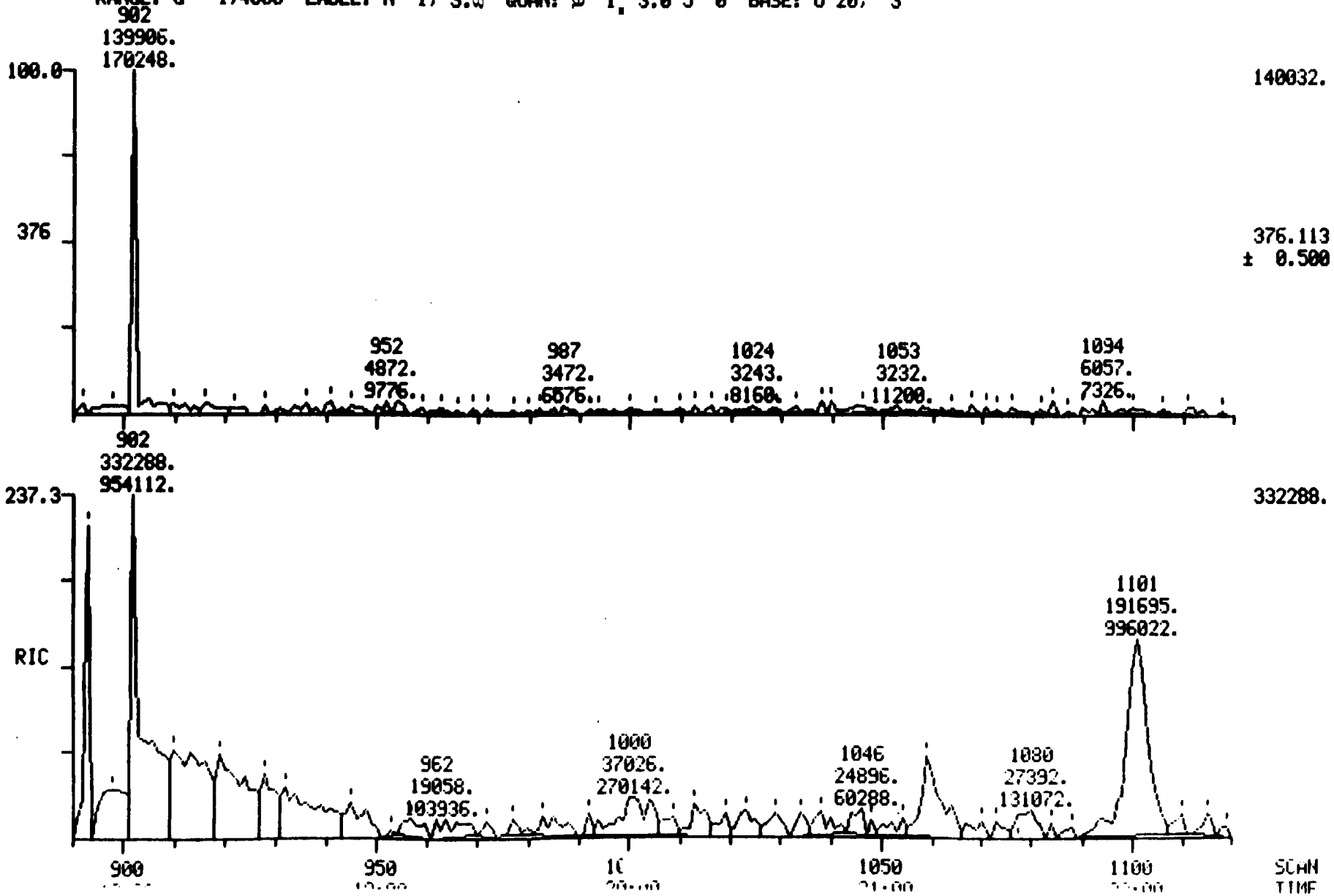


MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 1110 TO 1338
03/26/91 18:3?:00 CALI: CAL910306A #2
SAMPLE: 2UL OF685:06 STD 111 NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: ti 1, 3.0 QUAN: A 1, 3.0 J O BASE: U 20, 3

TCDF

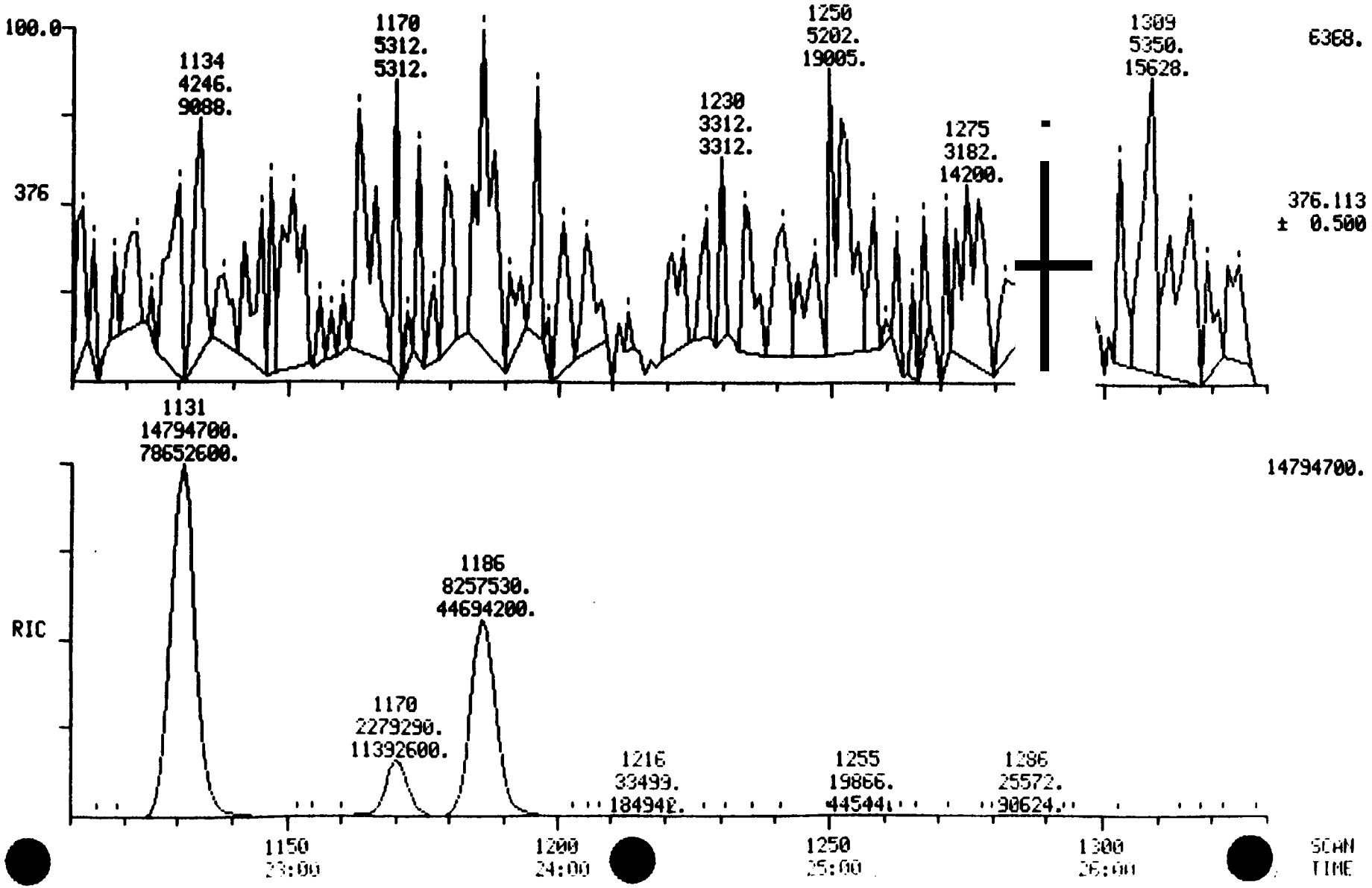


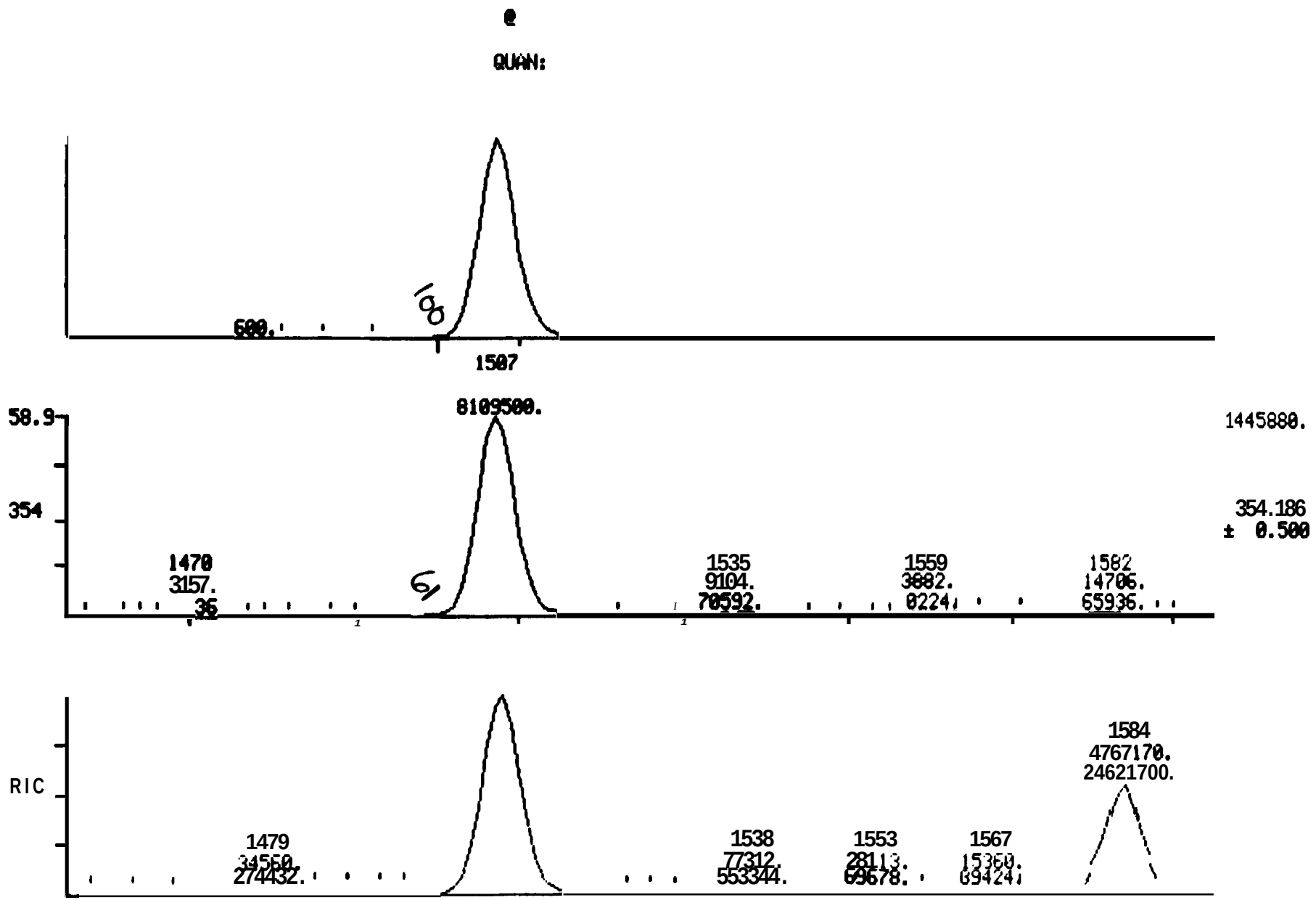
MIDRIC+MASS CHROMATOGRAM DATA: 68506III3 #1 SCANS 890 TO 1120
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: P 1, 3.0 J 0 BASE: U 20, 3



3200311

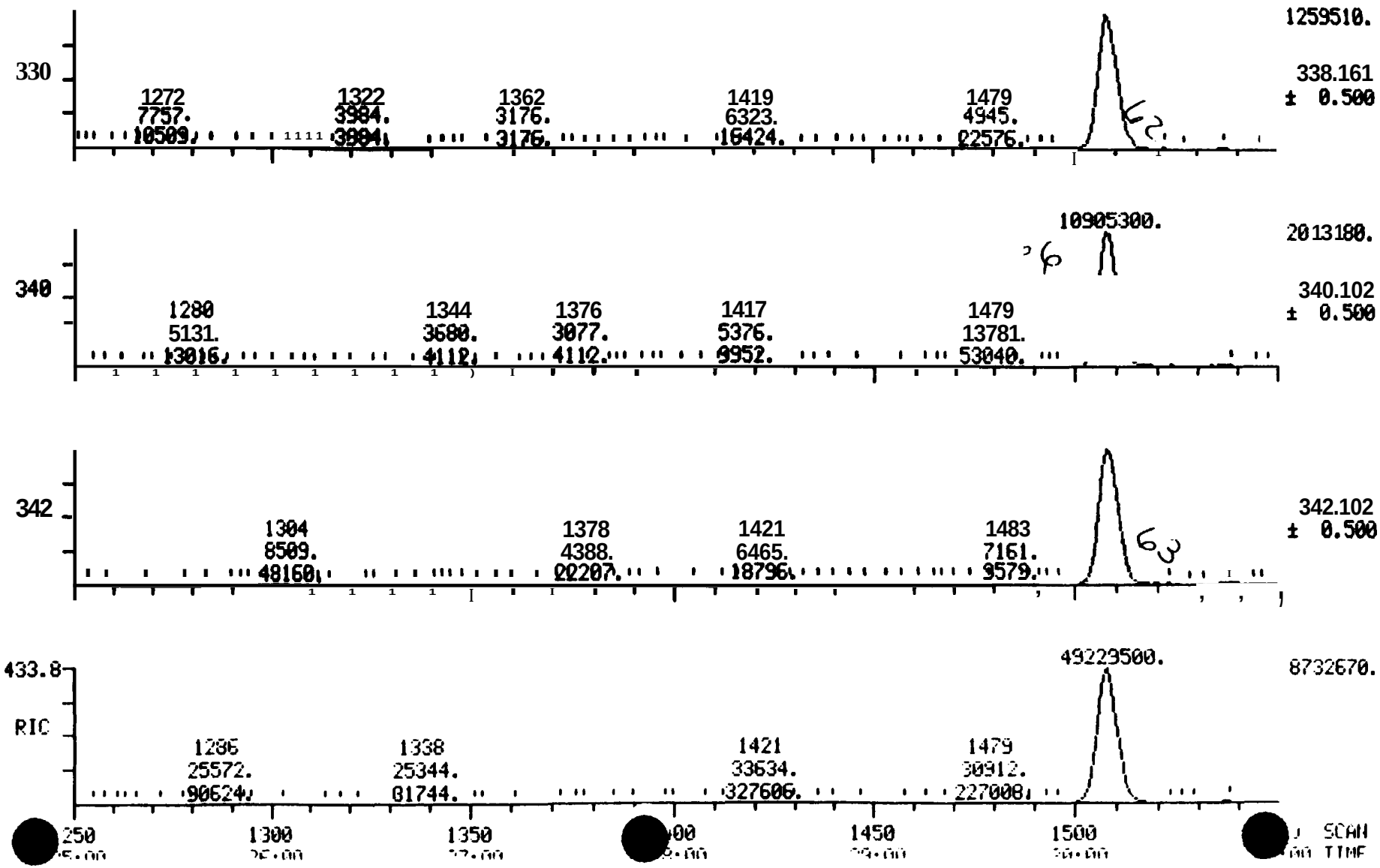
MIDRIC+MASS CHROMATOGRAM DATA: 68506III3 #1 SCANS 1110 TO 1330
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



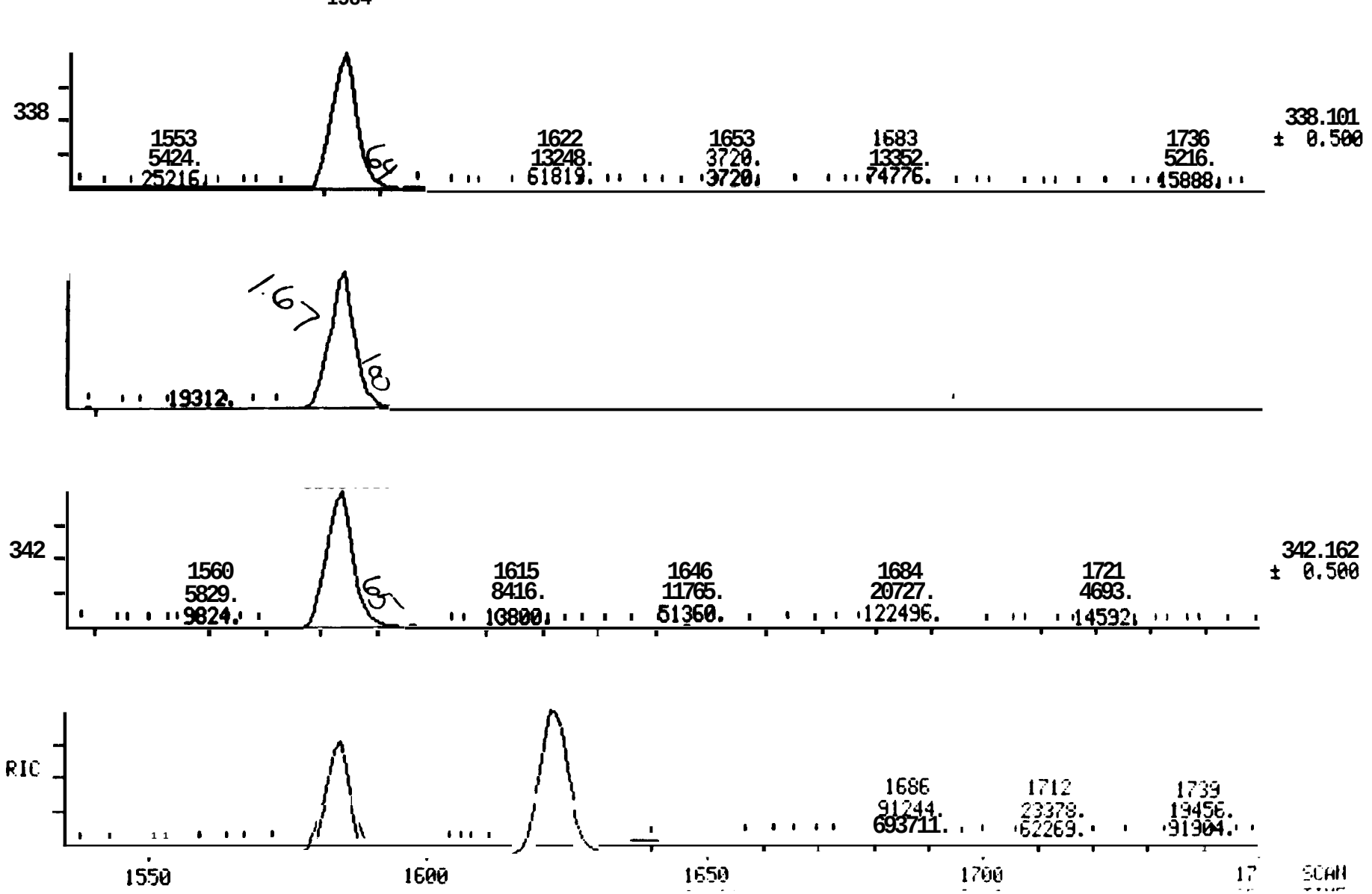

e
QUAN:
600.
1507
58.9
8109500.
1445880.
354
354.186
± 0.500
1470
3157.
36
1535
9104.
70592.
1559
3882.
0224
1582
14706.
65936.
RIC
1479
34560.
274432.
1538
77312.
553344.
1553
28113.
69678.
1567
15360.
69424
1584
4767170.
24621700.

3200

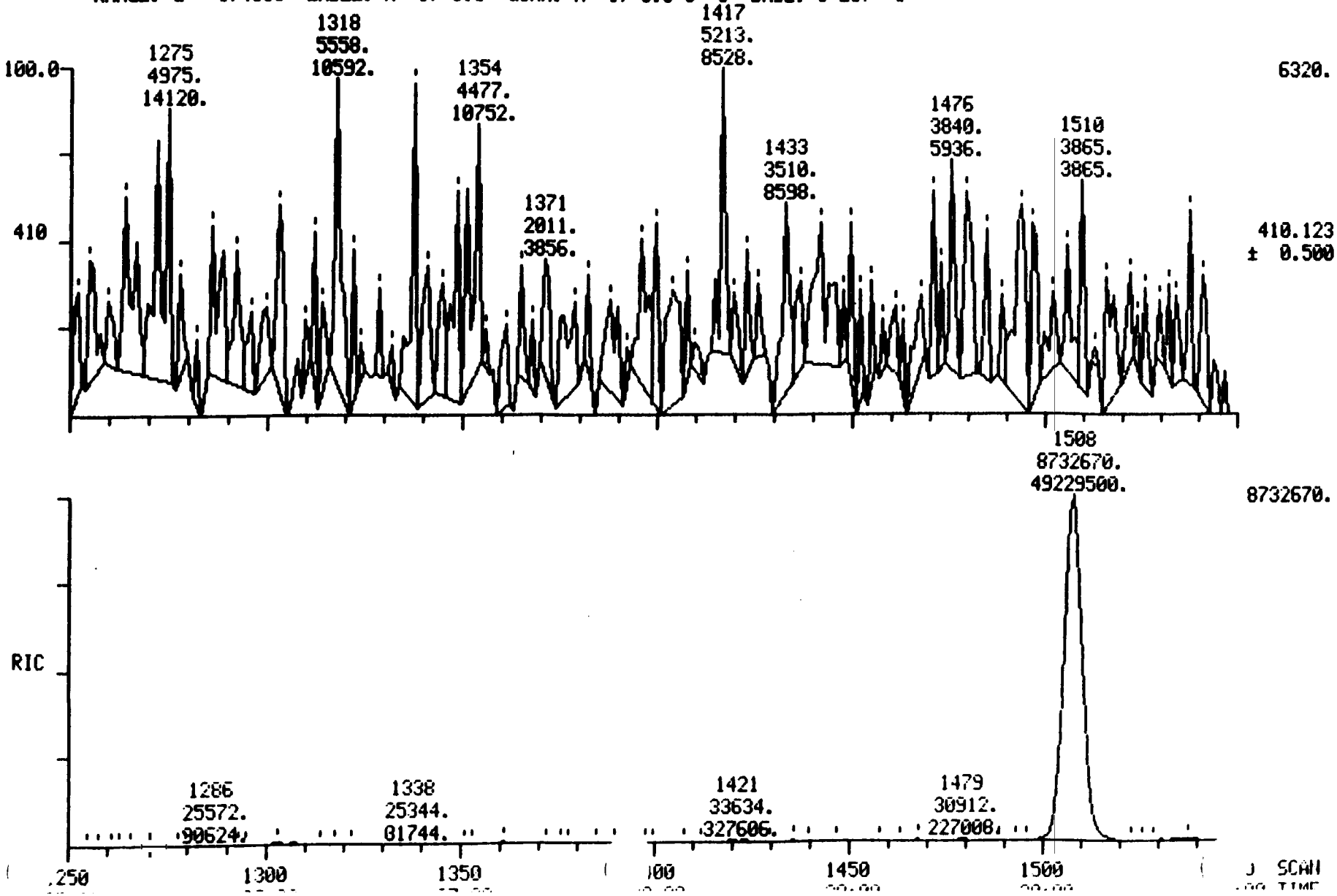
PeCDF


330
1272
7757.
10509.
1322
3984.
3984.
1362
3176.
3176.
1419
6323.
16424.
1479
4945.
22576.
1259510.
338.161
± 0.500
340
1280
5131.
13016.
1344
3680.
4112.
1376
3077.
4112.
1417
5376.
9952.
1479
13781.
53040.
10905300.
2013180.
340.102
± 0.500
342
1304
8509.
48160.
1378
4388.
22207.
1421
6465.
18796.
1483
7161.
9579.
342.102
± 0.500
433.8
RIC
1286
25572.
90624.
1338
25344.
81744.
1421
33634.
327606.
1479
30912.
227008.
49223500.
8732670.
1250
1300
1350
1450
1500
SCAN
TIME

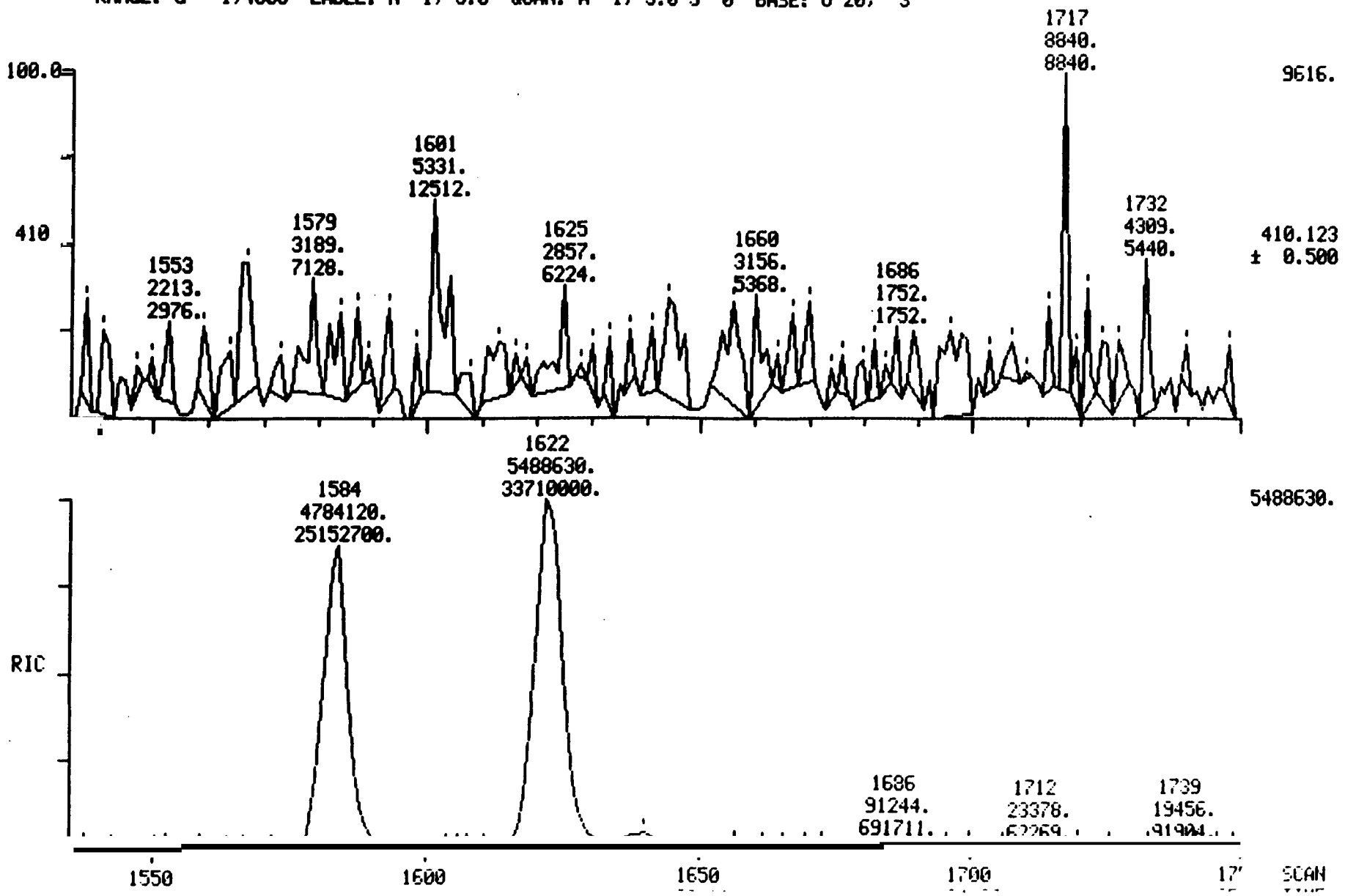
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 1535 TO 1758
03/26/91 18:37:00 CALI: CAL910306A I2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.8 J 0 BASE: U 20, 3



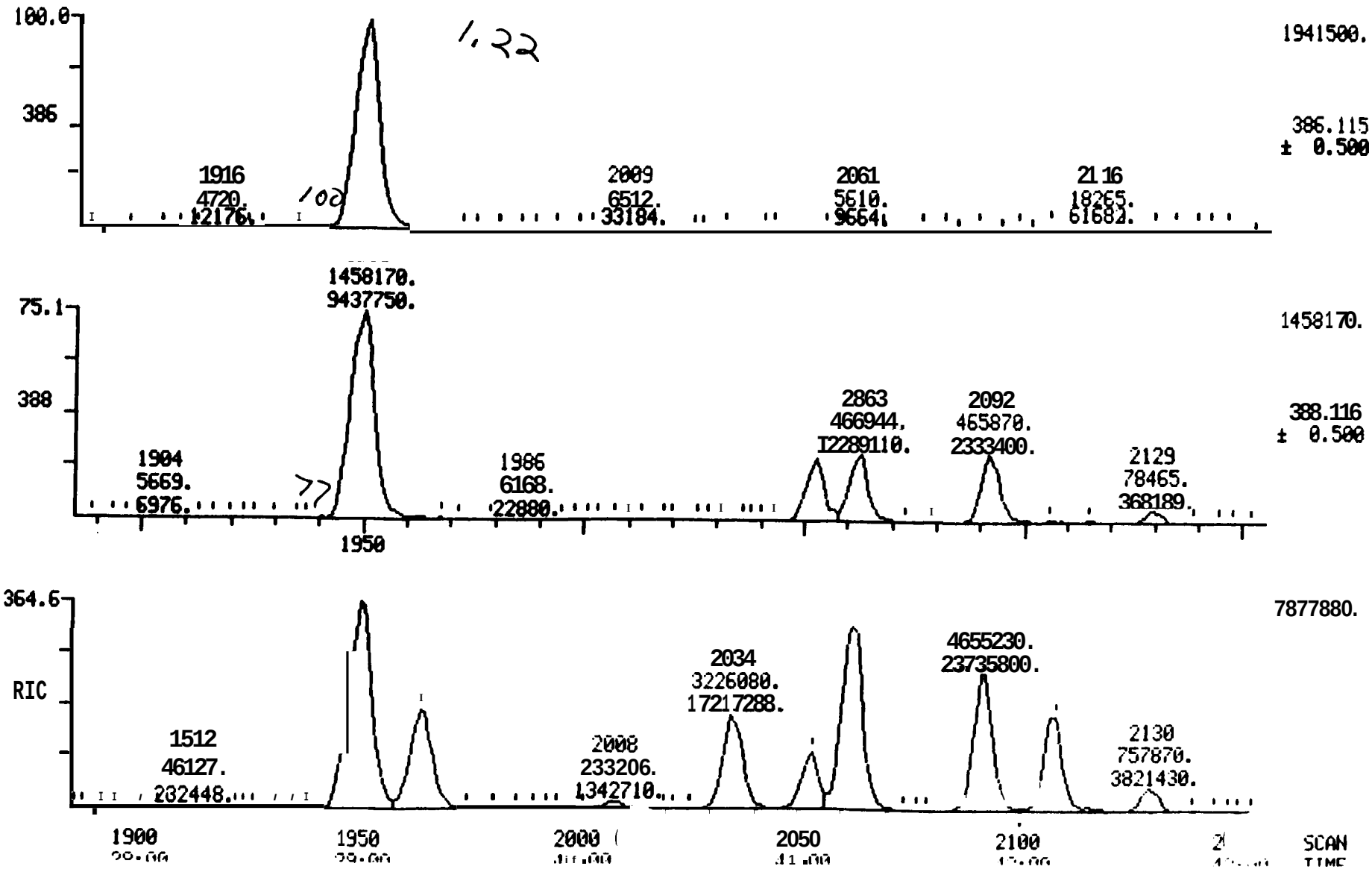
MIDRIC+MASS CHROMATOGRAM DATA: 68506III3 #1
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAM DATA: 68506III3 #1 SCANS 1535 TO 1750
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III ITIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

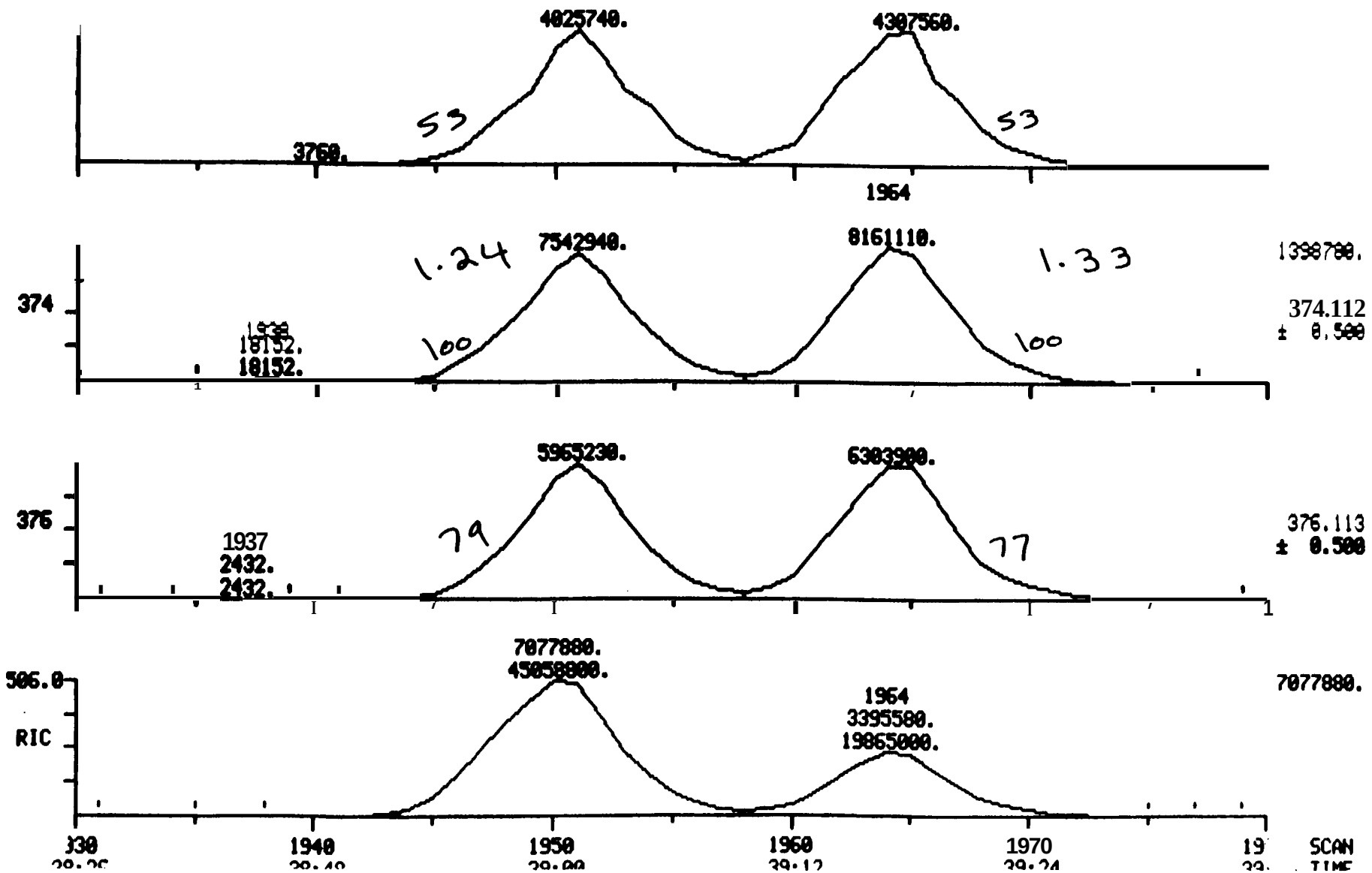


3200314

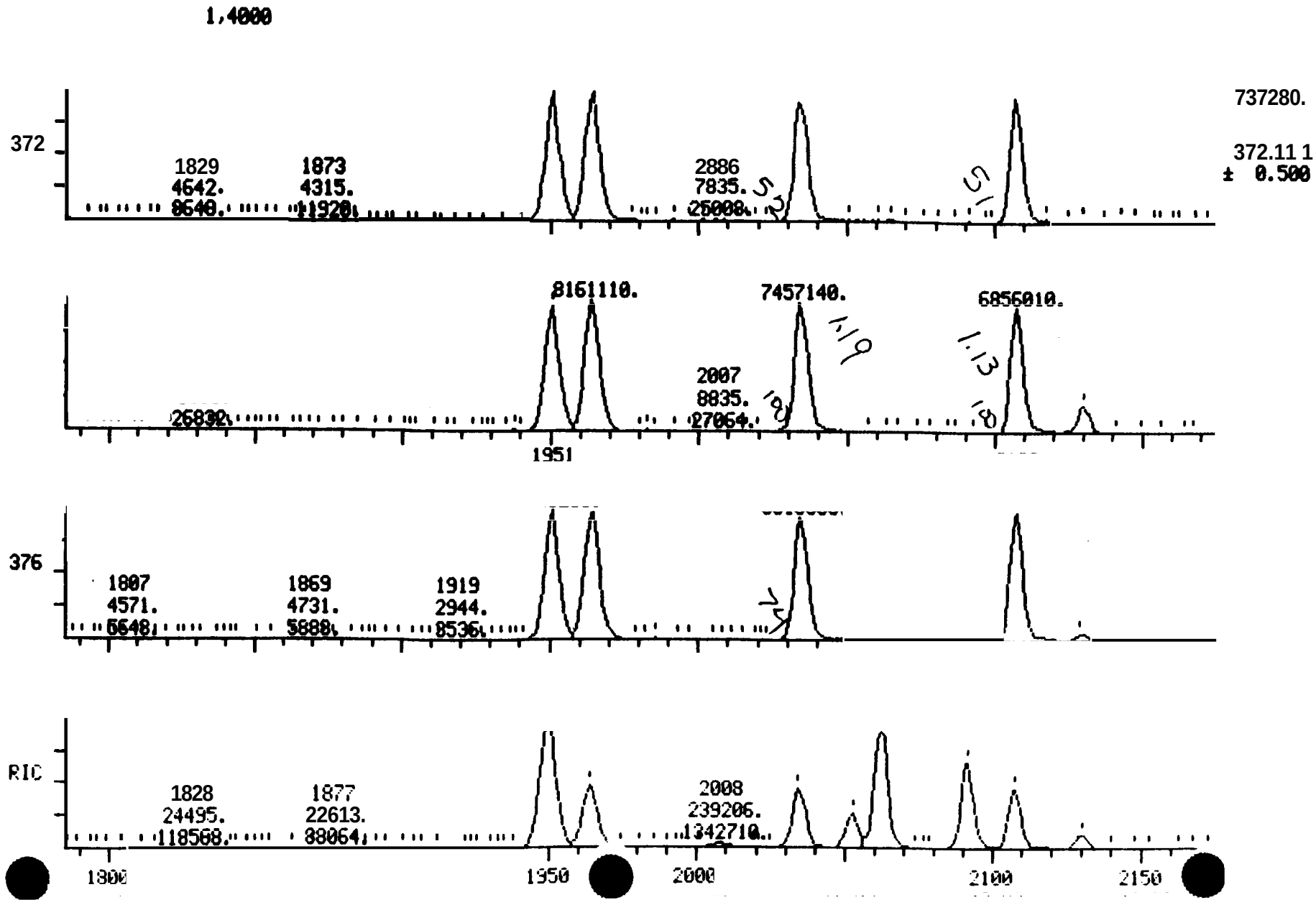

100.0
386
1.22
1941500.
386.115
± 0.500
1916
4720.
12176.
100
2009
6512.
33184.
2061
5610.
9664.
2116
18265.
61682.
75.1
388
1458170.
9437750.
1458170.
388.116
± 0.500
1904
5669.
6976.
77
1986
6168.
22880.
2863
466944.
12289110.
2092
465870.
2333400.
2129
78465.
368189.
1950
364.6
RIC
7877880.
1512
46127.
232448.
2008
233206.
1342710.
2034
3226080.
17217288.
4655230.
23735800.
2130
757870.
3821430.
1900
1950
2000
2050
2100
SCAN
TIME

1/1

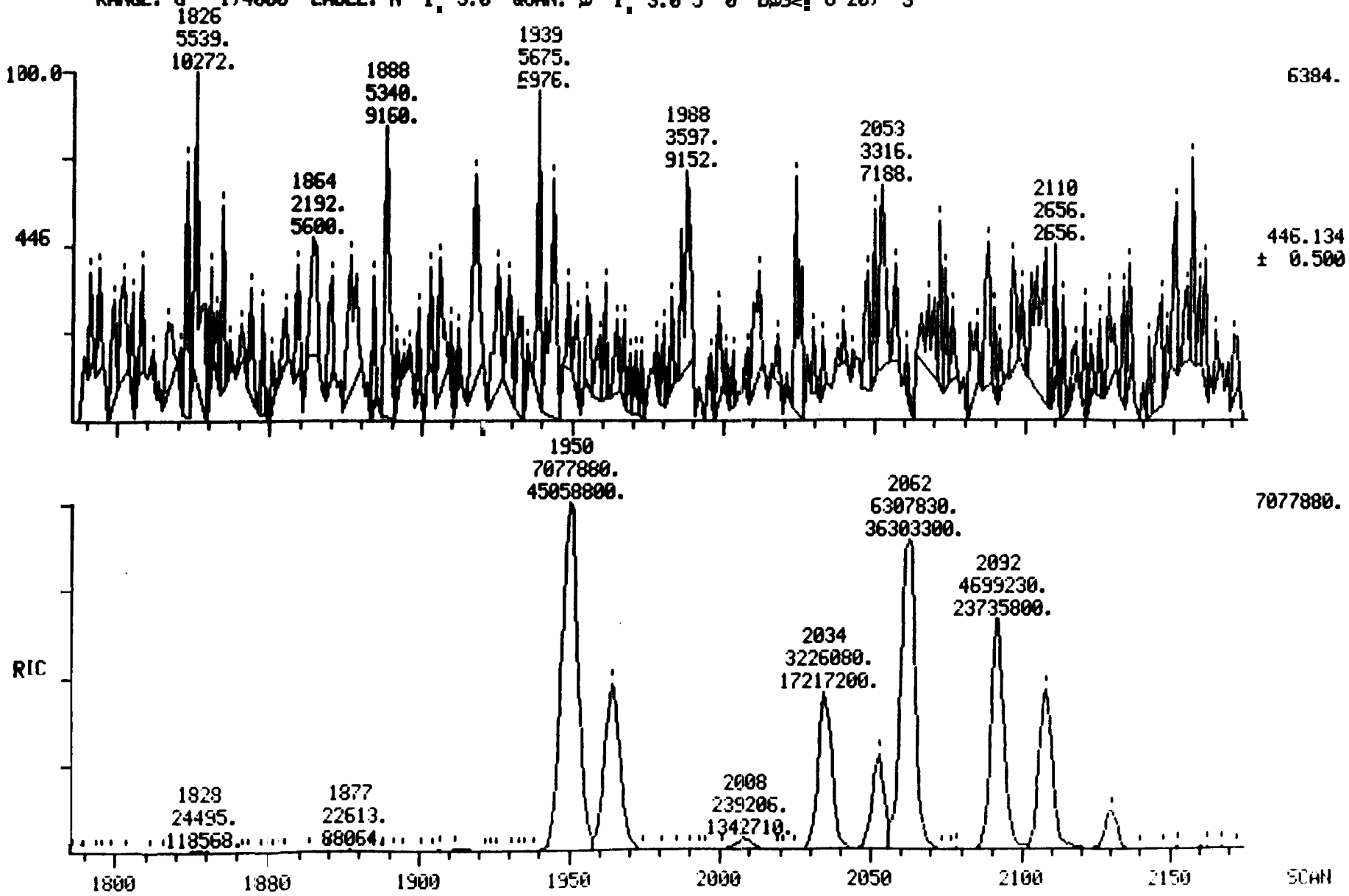
HxCDF


4025740.
4307560.
53
53
3760.
1964
374
1.24
7542940.
8161110.
1.33
1398780.
374.112
± 0.500
18152.
18152.
100
100
376
5965230.
6303900.
376.113
± 0.500
1937
2432.
2432.
79
77
506.0
RIC
7077880.
45058800.
1964
3395580.
19865000.
7077880.
1930
1940
1950
1960
1970
SCAN
TIME

HxCDF

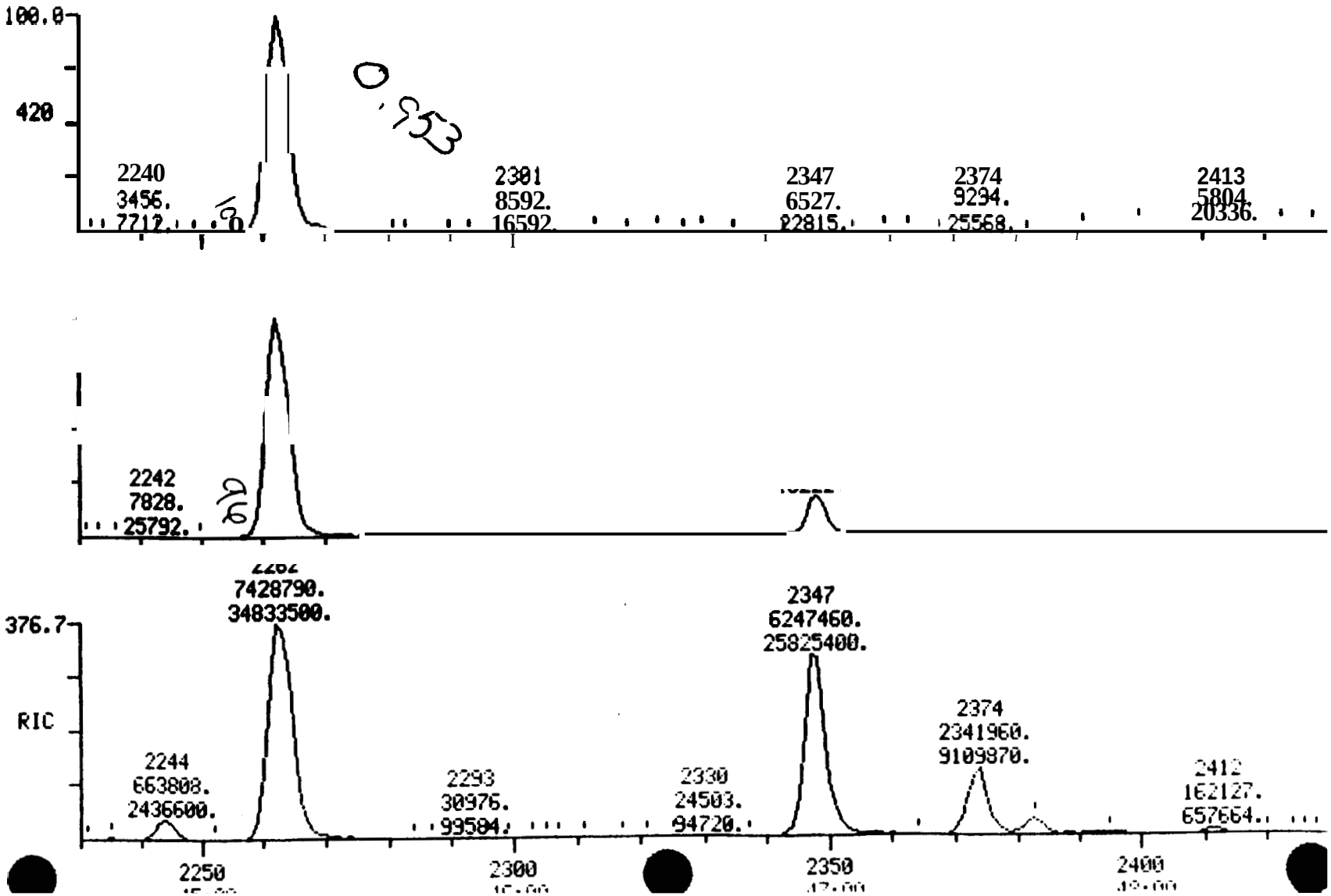

1.4000
737280.
372
372.11 1
± 0.500
1829
4642.
8640.
1873
4315.
11920.
2886
7835.
25008.
5.2
5.1
8161110.
7457140.
6856010.
1.19
1.13
2007
8835.
27064.
26832.
1951
376
1807
4571.
5648.
1869
4731.
5888.
1919
2944.
8536.
RIC
1828
24495.
118568.
1877
22613.
88064.
2008
239206.
1342710.
1800
1950
2000
2100
2150

MIDRIC+MASS CHROMATOGRAM DATA: 68506III3 #1 SCANS 1785 TO 2175
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III [illegible]VES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: Ø 1, 3.0 J 0 BØS≤, U 20, 3

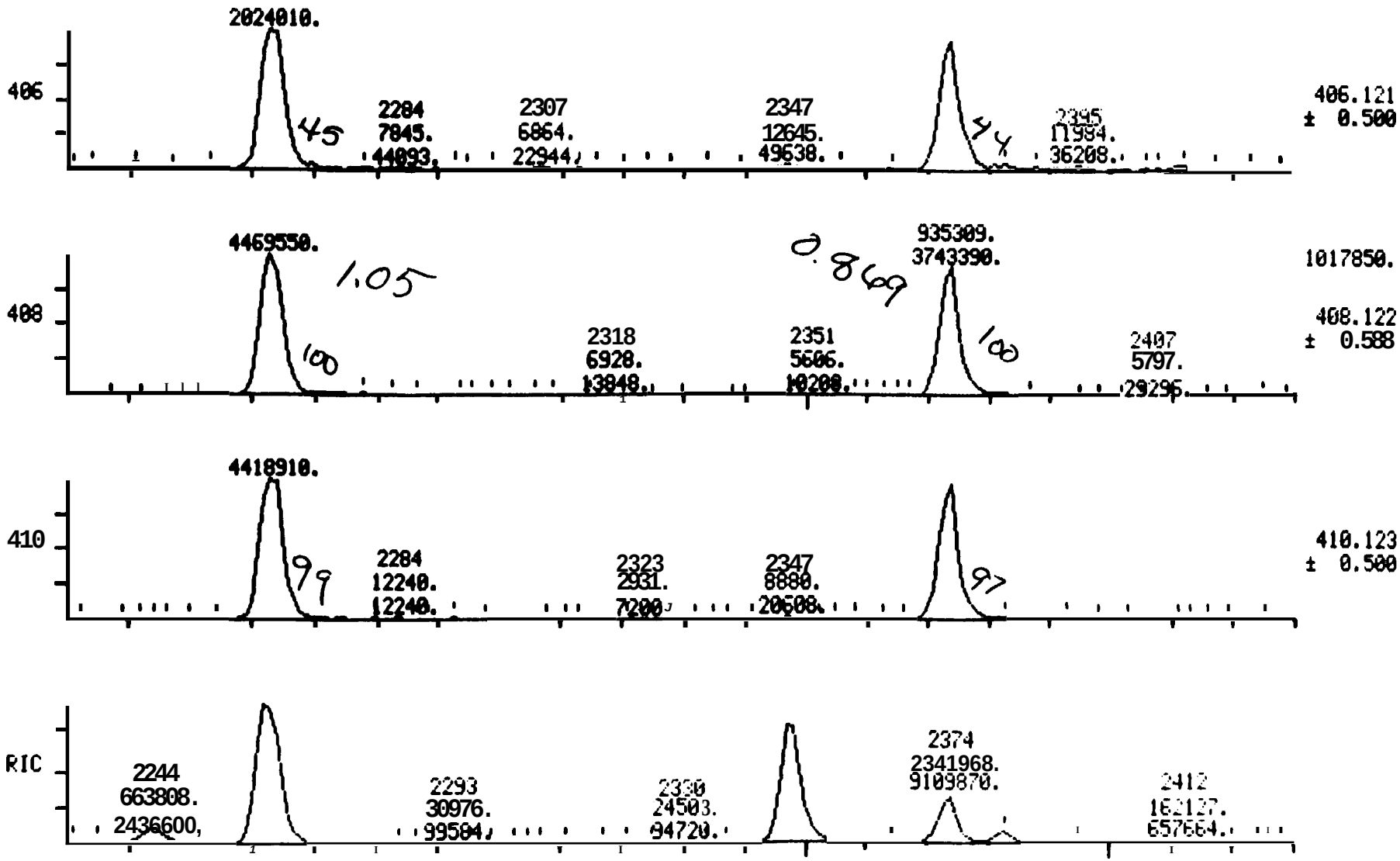


3200316

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 2230 TO 2430
83/26/91 18:37:00 CALI: CAL910306A I2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.

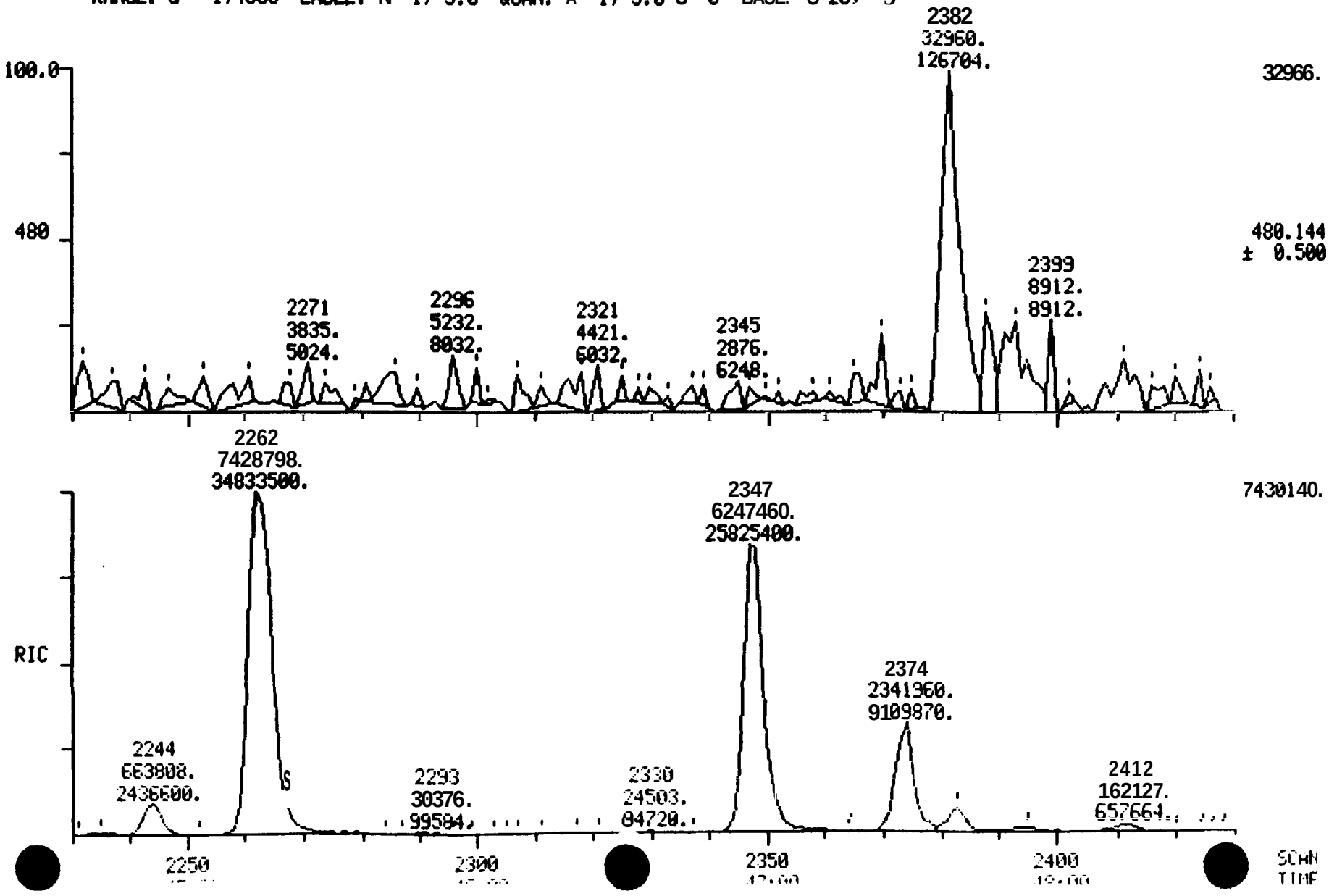


HpCDF



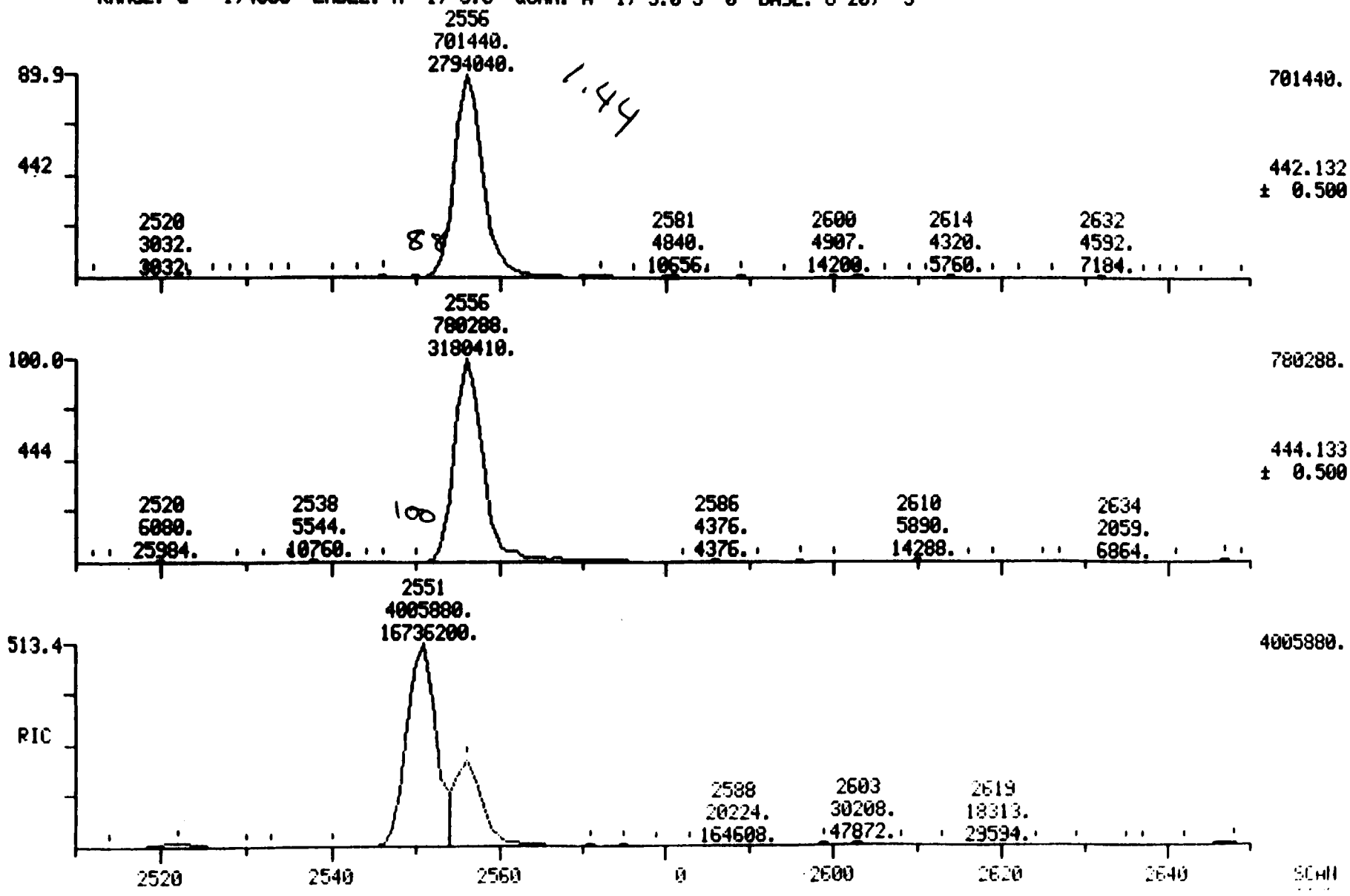
2200317

MIDRIC+MASS CHROMATOGRAM DATA: 68506III3 #1 SCANS 2230 TO 2430
93/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

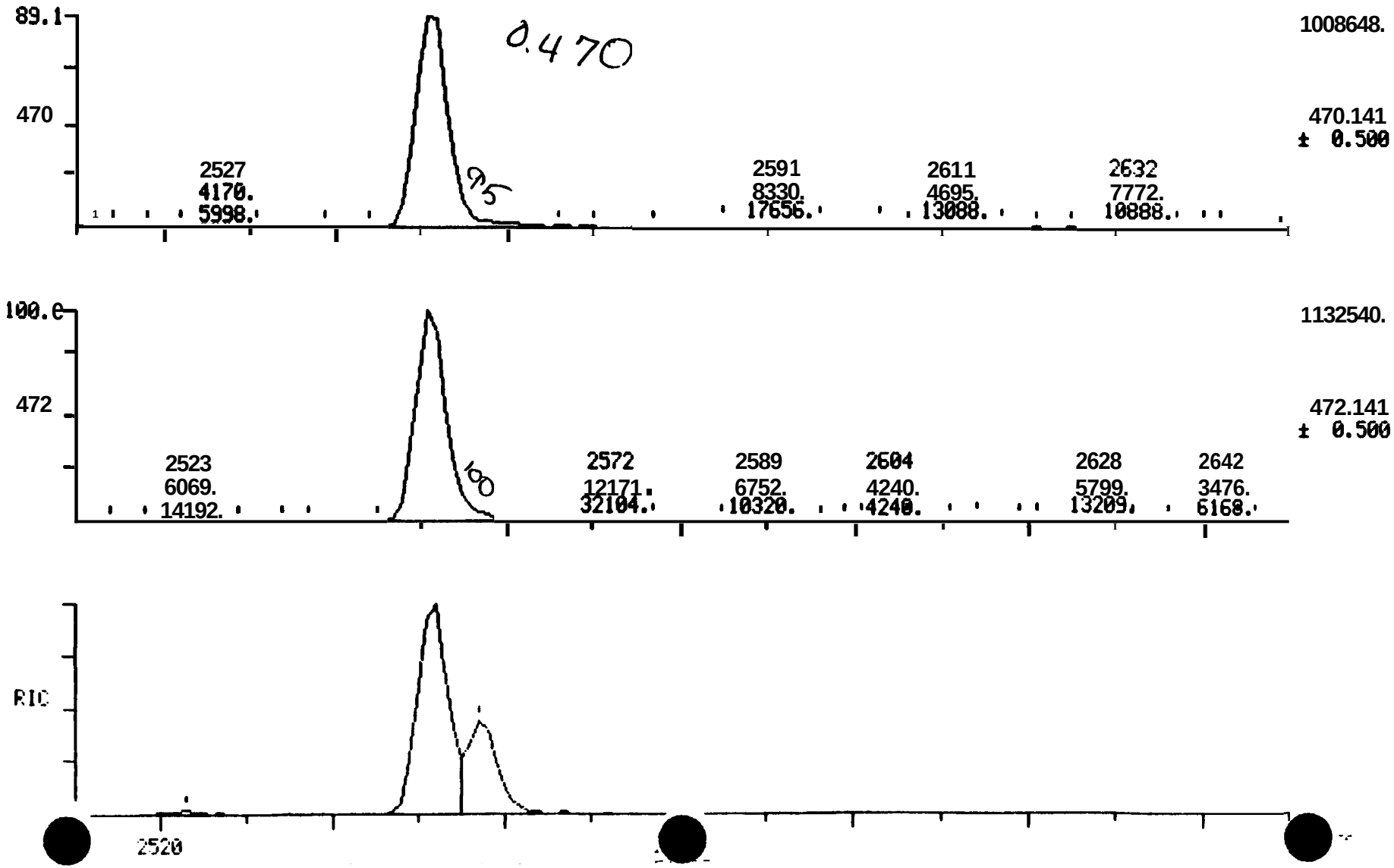


MIDRIC+MASS CHROMATOGRAMS DATA: 68506III3 #1 SCANS 2510 TO 2650
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

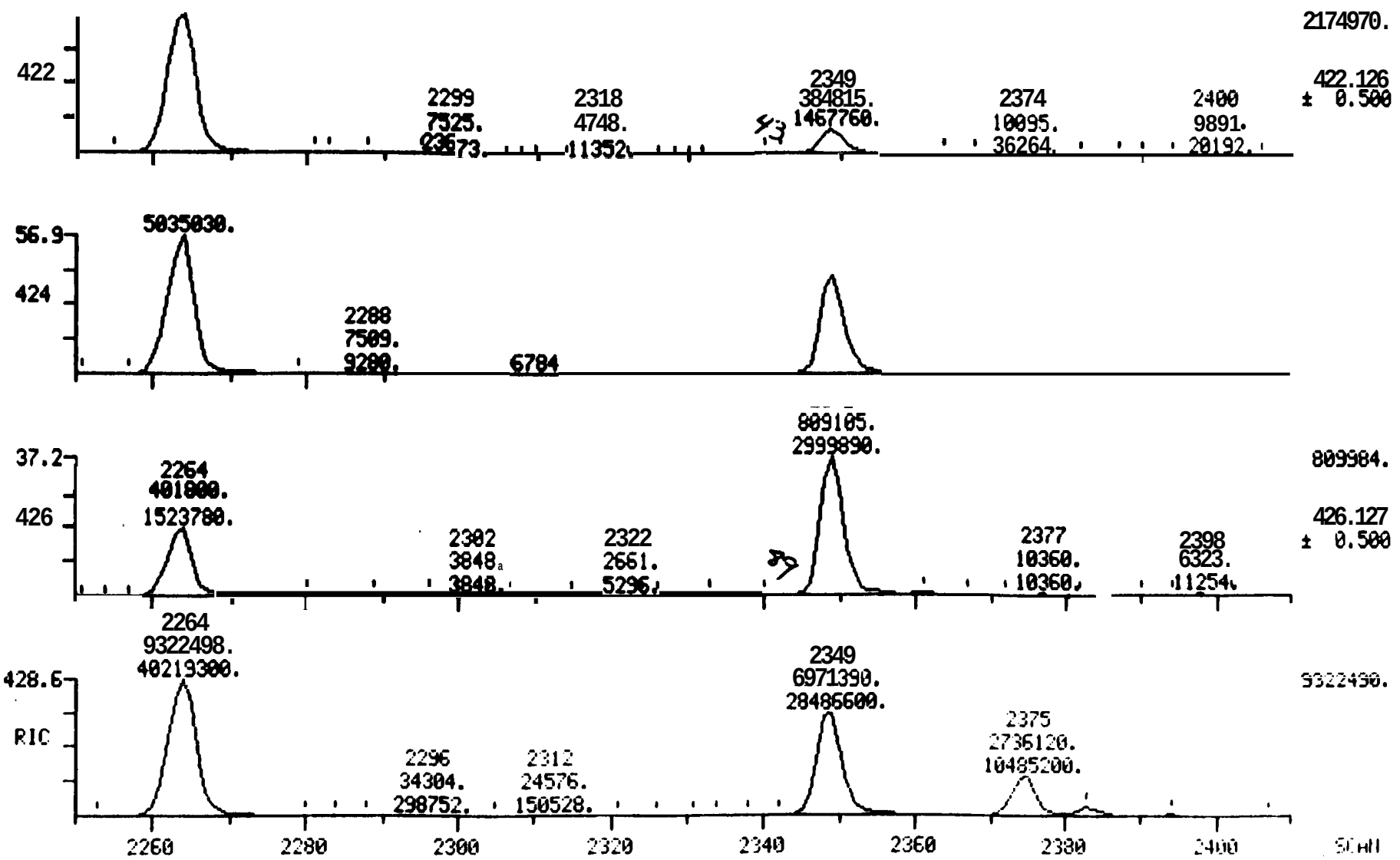
OCDF



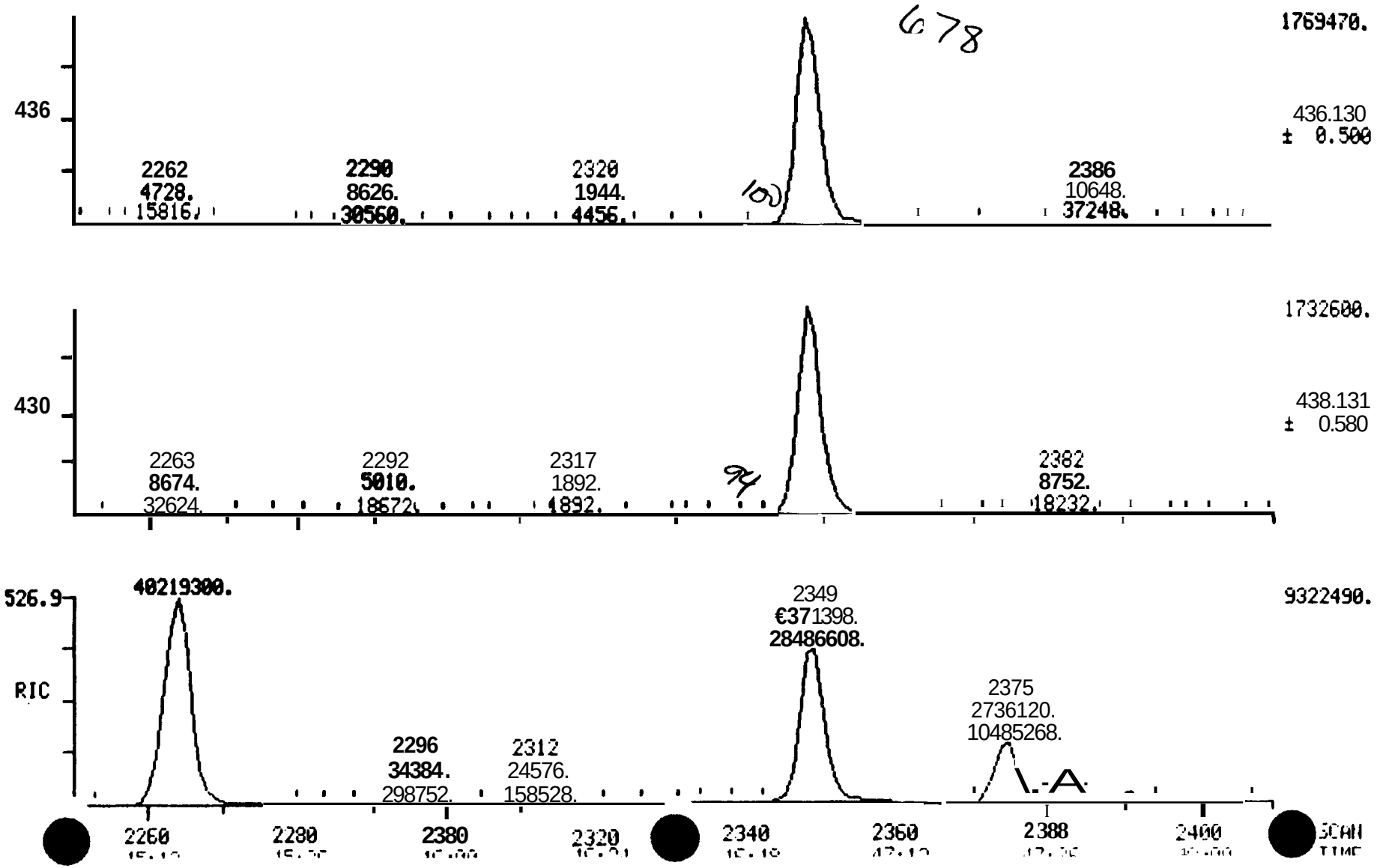
2200318


89.1
470
1008648.
470.141
± 0.500
0.470
95
2527
4170.
5998.
2591
8330.
17656.
2611
4695.
13088.
2632
7772.
10888.
100.0
472
1132540.
472.141
± 0.500
100
2523
6069.
14192.
2572
12171.
32104.
2589
6752.
10320.
2604
4240.
4240.
2628
5799.
13209.
2642
3476.
6168.
RIC
2520

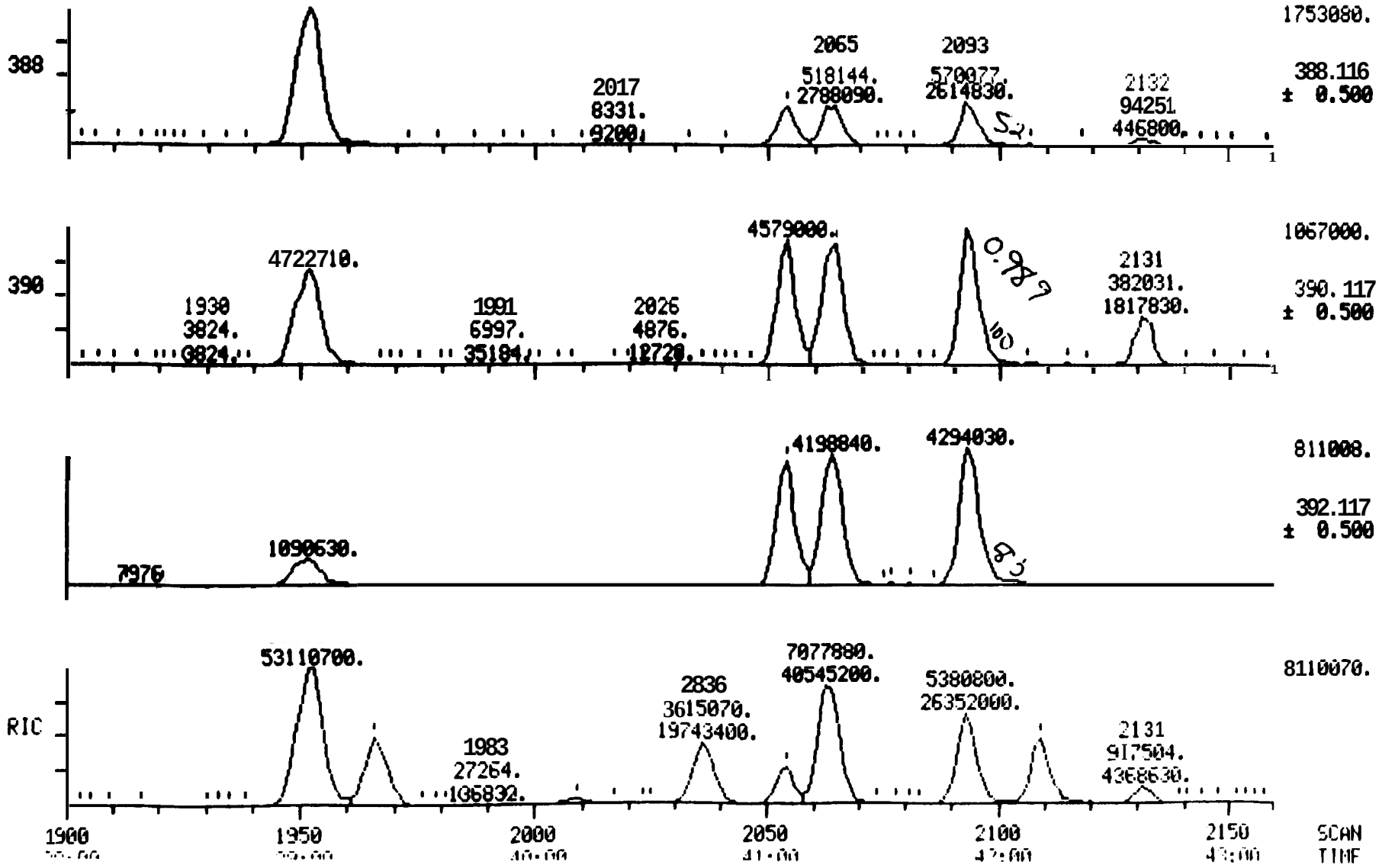
MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 2250 TO 2410
93/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 SM III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



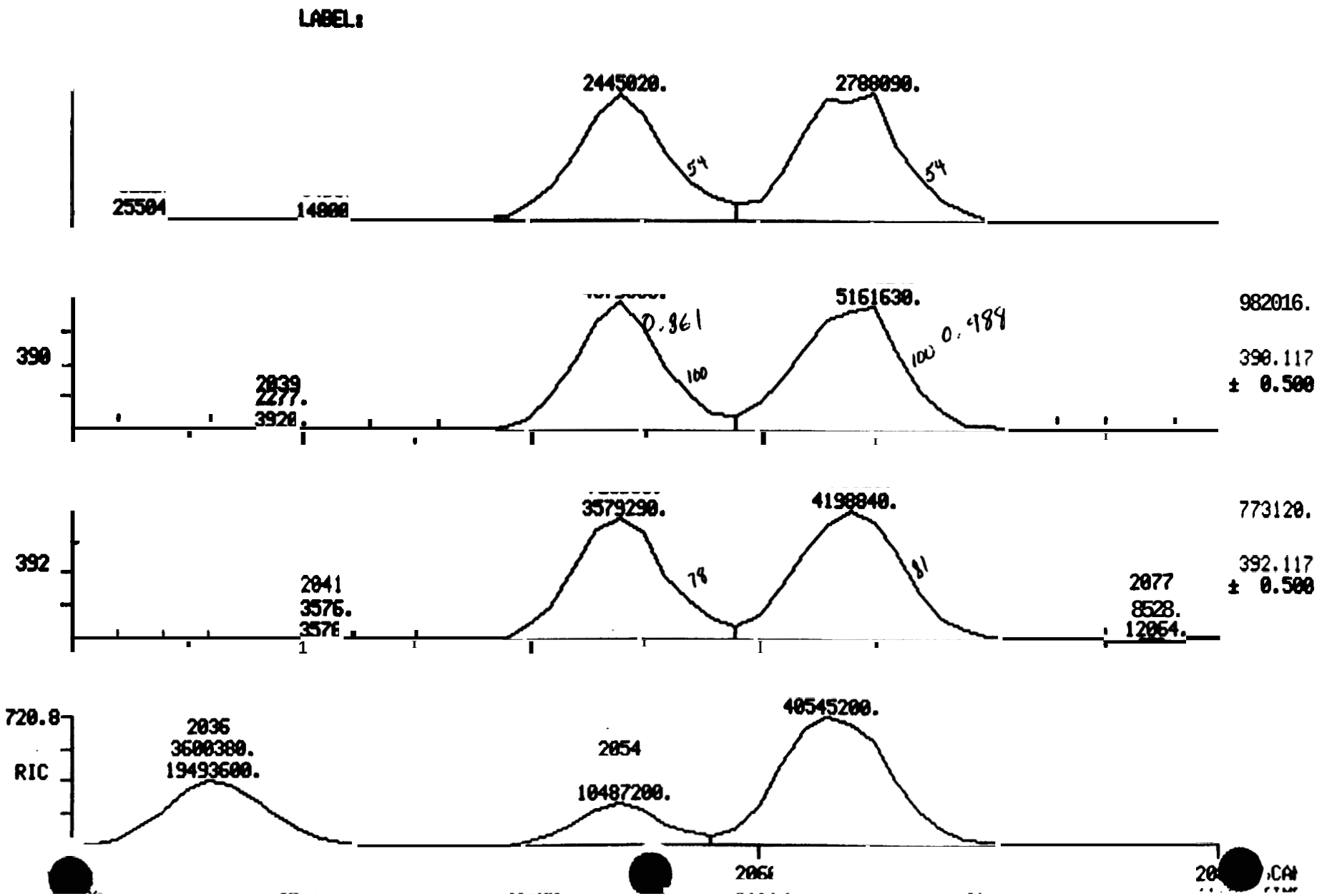
MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 2250 TO 2410
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.

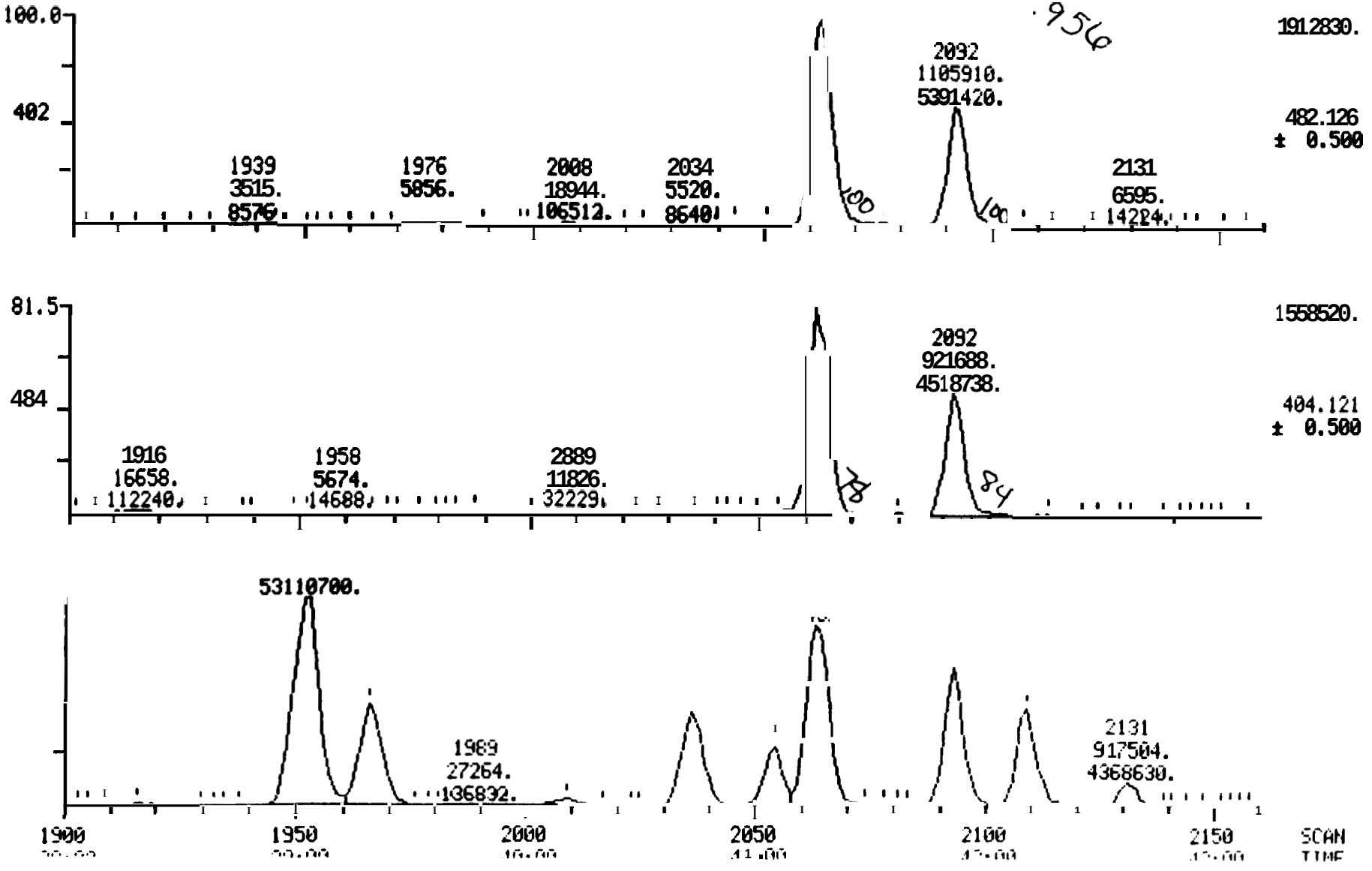


2UL 685:06



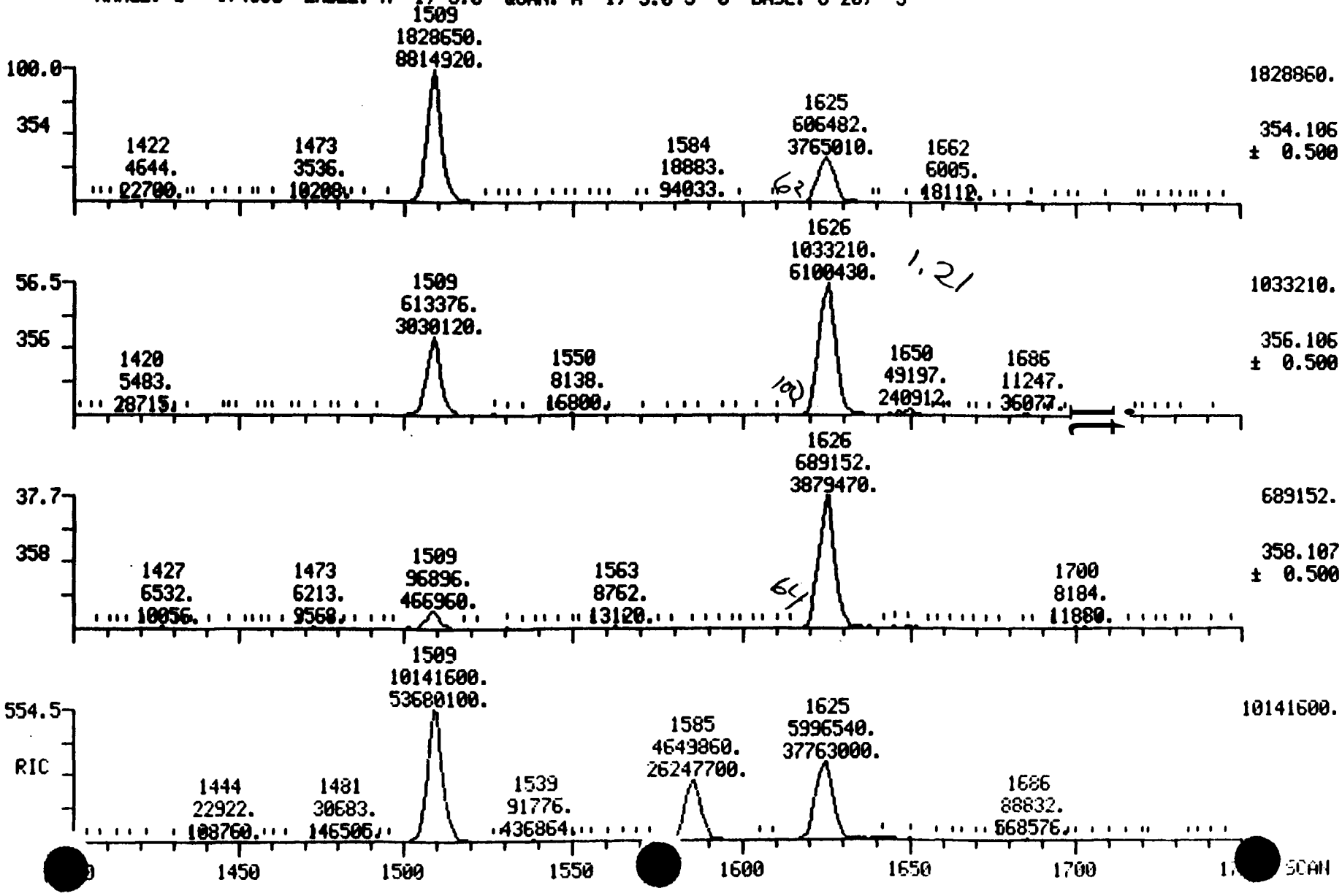
3200320

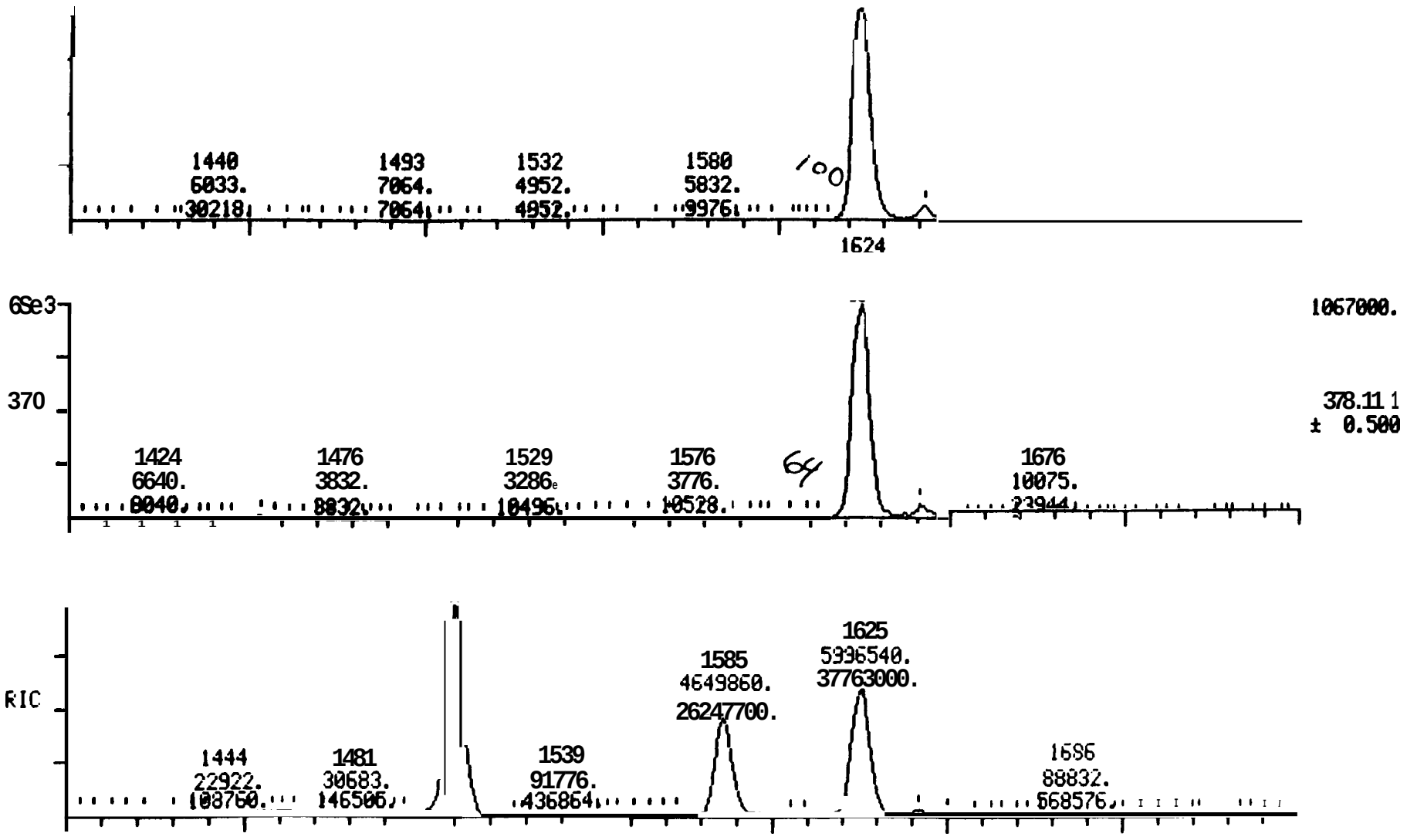

LABEL:
2445020.
2788090.
54
54
25504
14000
390
2039
2277.
3920.
0.961
100
5161630.
100
0.988
982016.
390.117
± 0.500
392
2041
3576.
3576
3579290.
78
4198840.
81
2077
8528.
12064.
773120.
392.117
± 0.500
720.8
RIC
2036
3600380.
19493600.
2054
10487200.
40545200.
2066

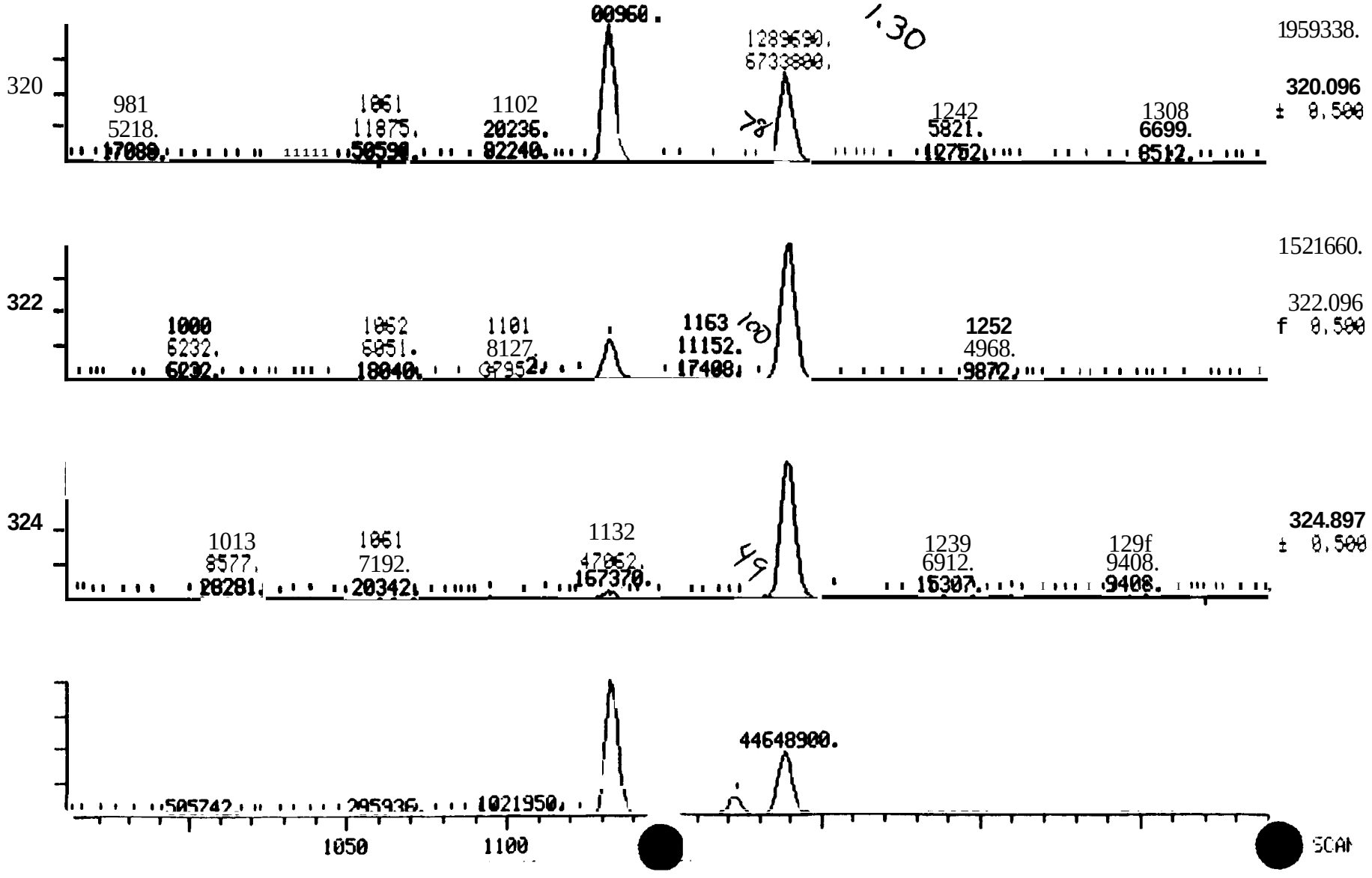

100.0
402
1939
3515.
8576.
1976
5856.
2008
18944.
106512.
2034
5520.
8640.
2032
1105910.
5391420.
2131
6595.
14224.
1912830.
482.126
± 0.500
81.5
484
1916
16658.
112240.
1958
5674.
14688.
2889
11826.
32229.
2092
921688.
4518738.
1558520.
404.121
± 0.500
53110700.
1989
27264.
136832.
2131
917504.
4368630.
1900
1950
2000
2050
2100
2150
SCAN
TIME

3200321

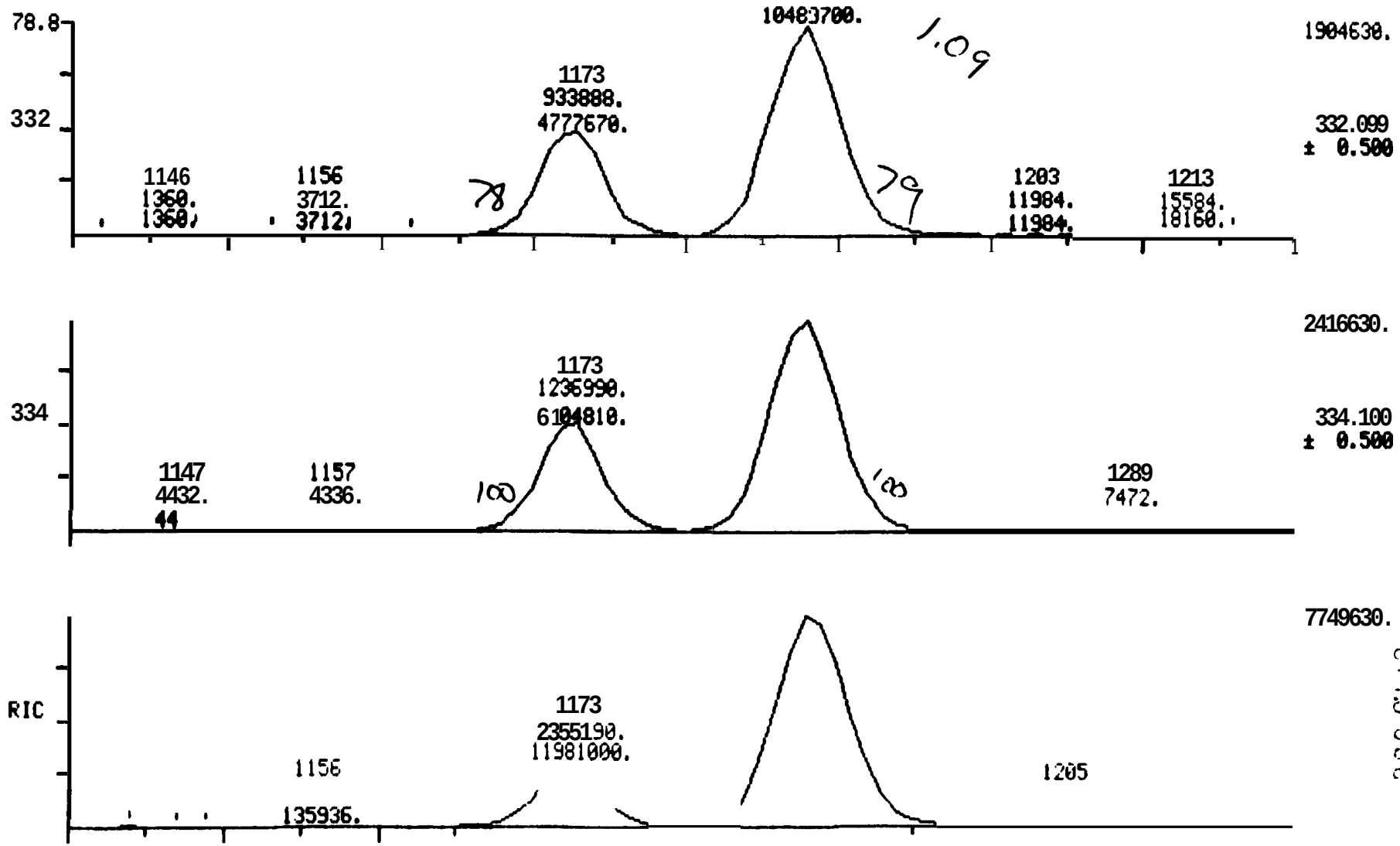
MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 1400 TO 1750
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3




1440
6033.
30218.
1493
7064.
7064.
1532
4952.
4952.
1580
5832.
9976.
100
1624
6Se3
370
1424
6640.
8040.
1476
3832.
8832.
1529
3286.
10496.
1576
3776.
10528.
64
1676
10075.
23944.
1067000.
378.11 1
± 0.500
RIC
1444
22922.
108760.
1481
30683.
146506.
1539
91776.
436864.
1585
4649860.
26247700.
1625
5936540.
37763000.
1686
88832.
568576.


320
981
5218.
1061
11875.
1102
20236.
00960.
1289690.
6733800.
1.30
1242
5821.
1308
6699.
1959338.
320.096
± 0.500
322
1000
6232.
1062
6851.
1101
8127.
1163
11152.
1.00
1252
4968.
1521660.
322.096
f 0.500
324
1013
8577.
1061
7192.
1132
47062.
167370.
1.9
1239
6912.
129f
9408.
324.897
± 0.500
505742.
295936.
1021950.
44648900.
1050
1100
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 1140 TO 1220
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
COND5.: 60M DB-5/TOTALS.

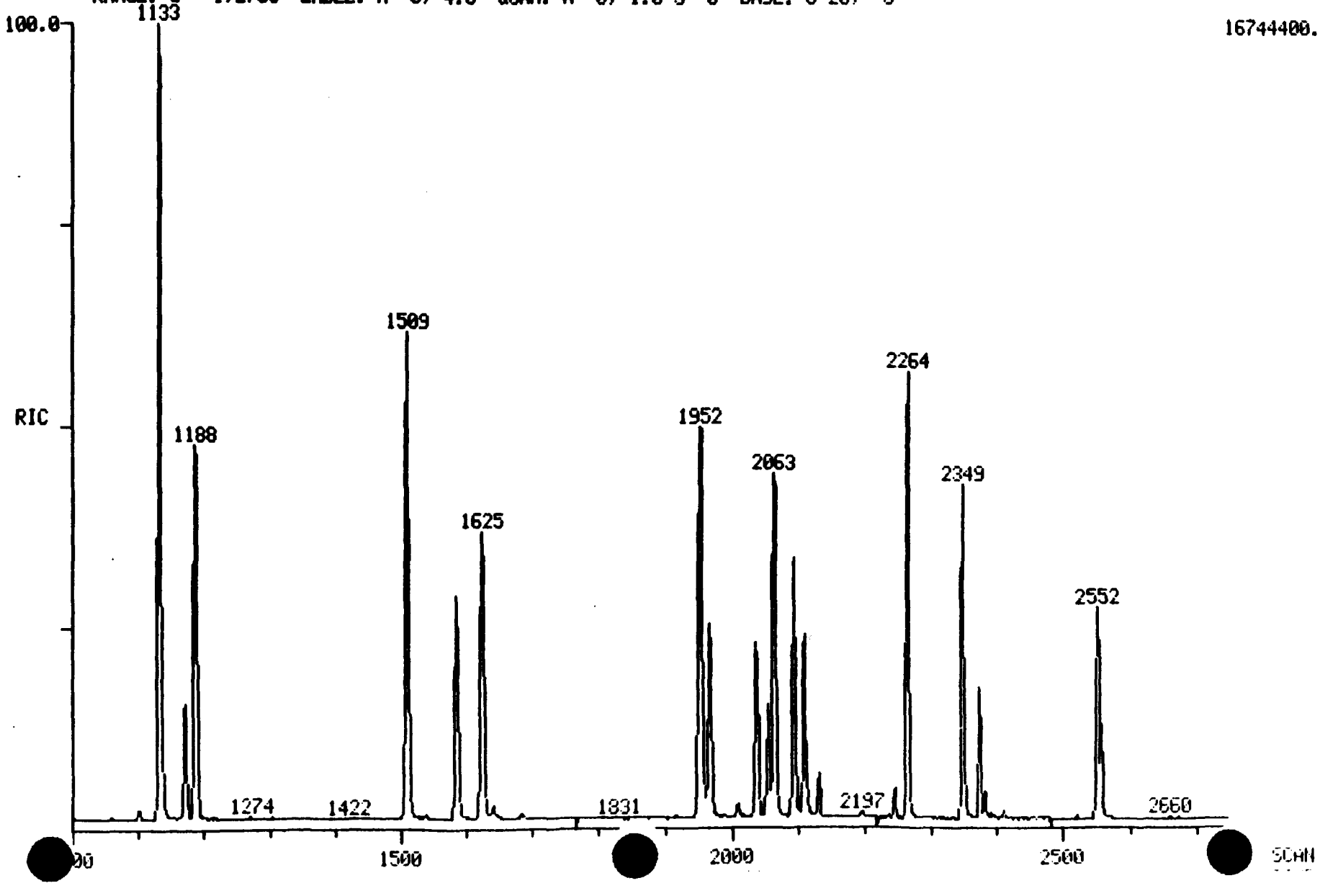


MIDRIC
03/26/91 16:30:00
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 668506IIII #1
CALI: CAL910306A #2

SCANS 1000 TO 2750

Calc PMP 3-27-91
QC JB 3-27-91



3200324

4	419.530	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
e	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.550	430.050	0.052	3	100	40	1	0	Por
10	441.550	442.050	0.054	3	100	40	1	0	Por
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	400.050	0.054	3	100	40	1	0	Por
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3/26/91 16:23:41 SCAN 2753
Acquisition stopped

3/26/91 16:23:43
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2404 Suspended
SCANS 2485 TO 2753 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	635.6	3300.0	19.3	83998.	31.	25.

MID scan
Scan time: 1.200 s

Dcrc: G2
Samp. Int.: 0.200ms

Mass intervals 21
Master rate 4096

Int #	Lo mass	Hi mass	Time	MPU	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
a	339.650	340.1SO	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353.650	334.150	0.054	3	100	40	1	0	Pos
6	355.650	356.150	0.052	3	100	40	1	0	Pos
7	357.650	358.150	0.054	3	100	40	1	0	Pos
8	367.630	368.150	0.052	3	100	40	1	0	Pos
9	369.650	370.150	0.052	3	100	40	1	0	POS
10	371.450	372.150	0.052	3	100	40	1	0	Pos
11	373.650	374.150	0.052	3	100	40	1	0	Pos
12	375.650	376.150	0.052	3	100	40	1	0	Pos
13	379.650	380.150	0.052	3	100	40	1	0	Pos
14	301.650	382.150	0.052	3	100	40	1	0	Pos
15	385.650	386.150	0.032	3	100	40	1	0	Pos
16	387.650	388.150	0.052	3	100	40	1	0	Pos
17	389.650	390.150	0.052	3	100	40	1	0	Pos
18	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.450	402.130	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.054	3	100	40	1	0	Pos
21	445.550	446.050	0.032	3	100	40	1	0	Pos

3/26/91 16:12:41 SCAN 2219 OF 4000

MID scan
Scan time: 1.200 s

Desc: C3
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFU	MA	TH	BL	ION
1	371.650	372.150	0.032	3	100	40	1	0	Pos
2	373.650	374.150	0.052	3	100	40	1	0	Pos
3	375.650	376.150	0.052	3	100	40	1	0	Pos
4	383.630	386.150	0.052	3	100	40	1	0	Por
5	387.630	388.150	0.052	3	100	40	1	0	Pos
6	389.630	390.150	0.052	3	100	40	1	0	Por
7	391.630	392.150	0.052	3	100	40	1	0	Pos
e	401.650	402.150	0.052	3	100	40	1	0	Por
9	403.630	404.150	0.054	3	100	40	1	0	Por
10	403.550	406.030	0.054	3	100	40	1	0	Pos
11	407.530	400.050	0.052	3	100	40	1	0	Por
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.530	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.050	0.054	3	100	40	1	0	Pos
15	423.550	424.050	0.054	3	100	40	1	0	Por
16	425.550	426.050	0,052	3	100	40	1	0	Pos
17	435.550	436.050	0.052	3	100	40	1	0	Pos
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.034	3	100	40	1	0	Pos

3/26/91 16:18:08 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Derc: 64
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPU	MFU	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Pos
2	407.350	408.050	0.052	3	100	40	1	0	Pos
3	409.550	410.030	0.054	3	100	40	1	0	Pos

3/26/91 15:26:55 SCAN 1 OF 4000

Acquisition started

Acquire Run 0:68506I I3 ACQUIRING
03/26/91 15:26:00 + 0:04 Free sectors: 24135 Scan: 3 of 4000
Sample: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
Conds.: 60M DB-5/TOTALS.
Formula: Instrument: G3 Weight: 0.000
Submitted by: DM Analyst: DT Acct. No PC4622

********** GC PARAMETERS **********

Loaded CC Desc: BW Current CC oven tmp: 69 DegC Injector 300 DegC
Current GC Desc: BW GC elapsed time : 1:33 min Int. oven 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	2s.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

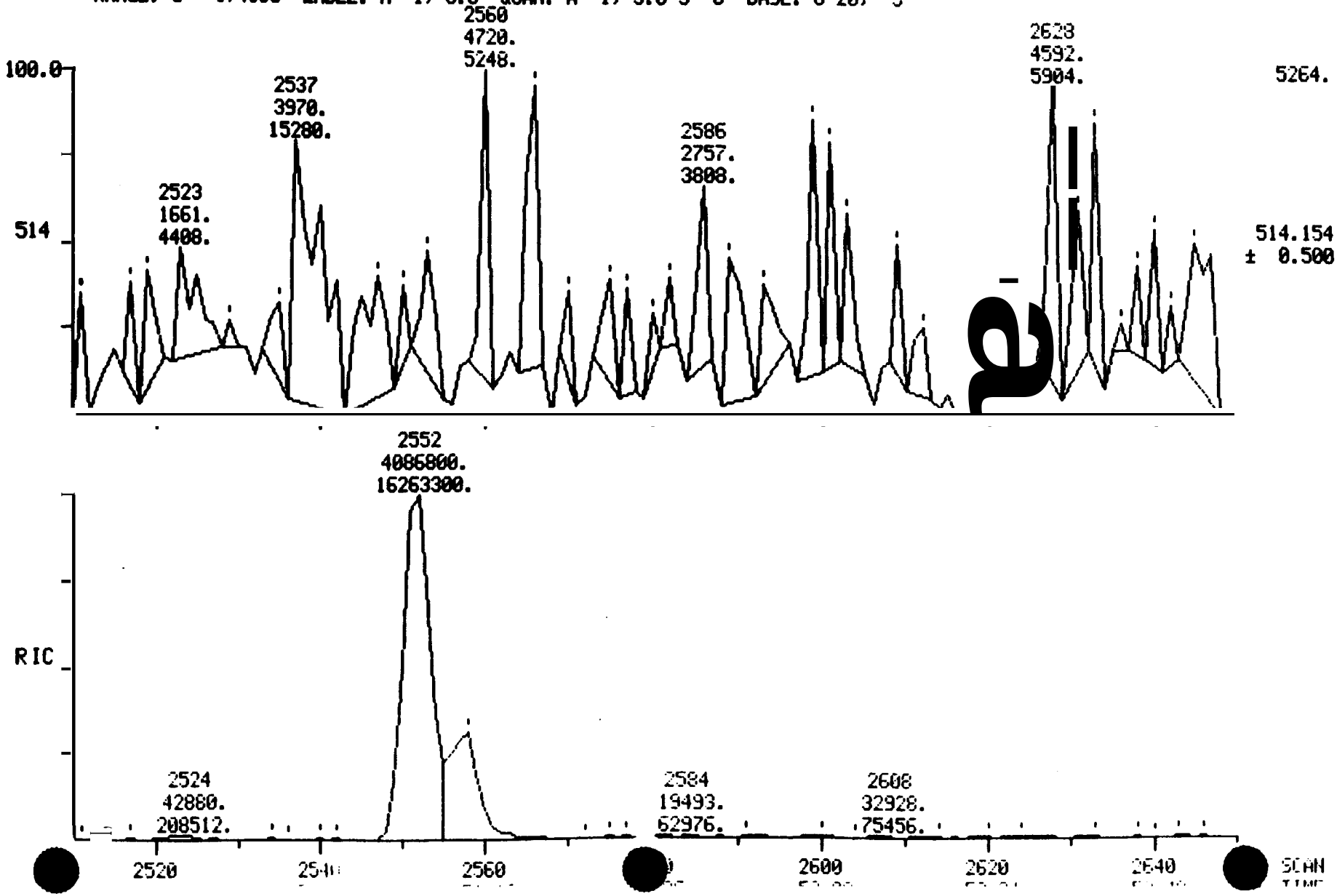
MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200s Samp. int.: 0.200ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Por
7	323.650	324.150	0.052	3	100	40	1	0	Por
8 9	331.650	332.150	0.052	3	100	40	1	0	Pas
10	333.650	334.150	0.054	3	100	40	1	0	Por
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	333.650	334.150	0.052	3	100	40	1	0	Por
16	355.650	356.130	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.032	3	100	40	1	0	Pos
18	367.650	368.150	0.034	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.630	376.150	0.052	3	100	40	1	0	Pos
21	409.330	410.050	0.032	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/26/91 16:03:26 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAM DATA: 68506II3 #1 SCANS 2510 TO 2650
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506II3 #1 SCANS 2510 TO 2650

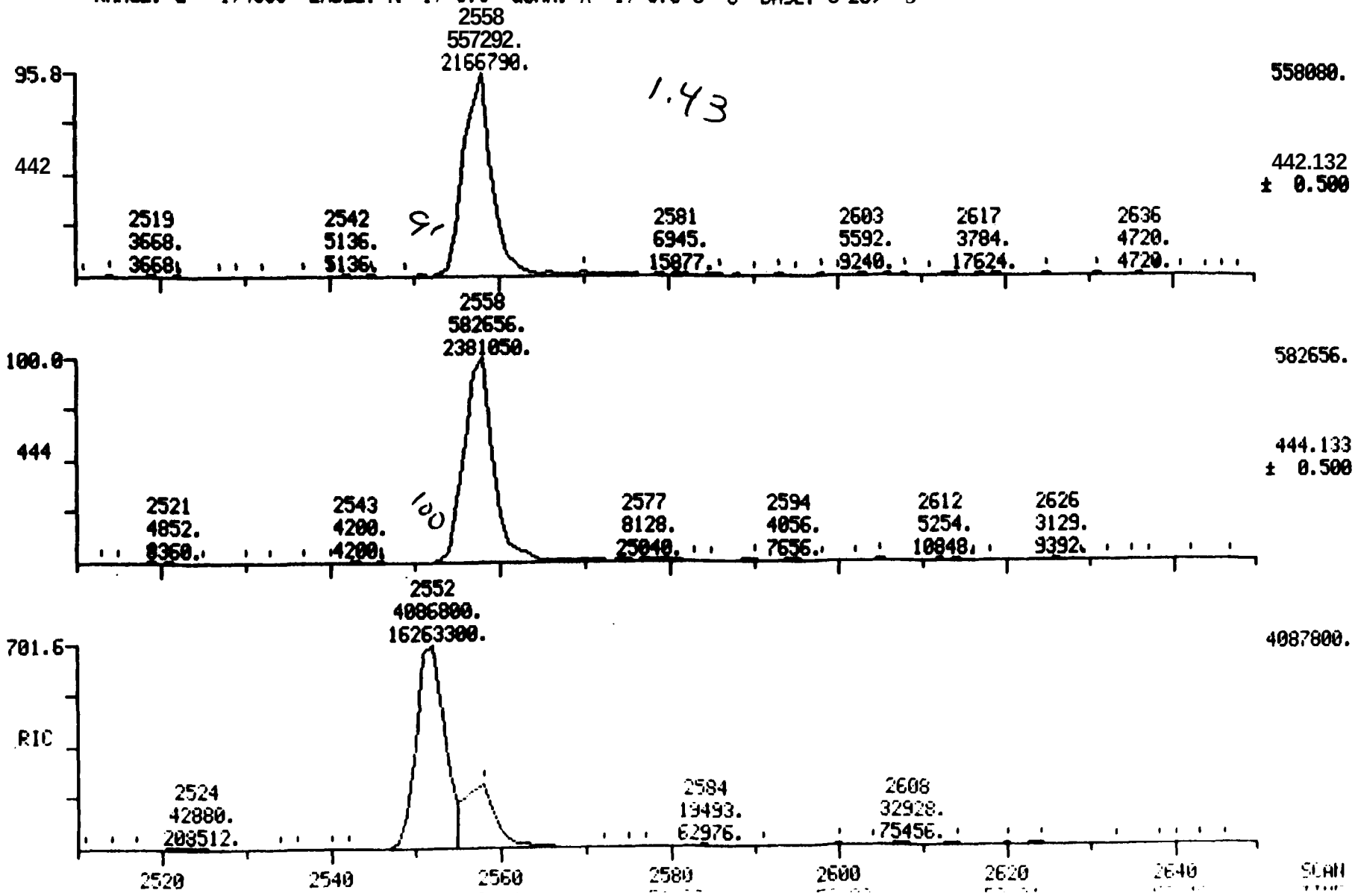
03/26/91 15:26:00 CALI: CAL910306A #2

SAMPLE: 21L OF 685:06 STD II NATIVES @ 350 PPB RUN 3

CONDS.: 60M DB-5/TOTALS.

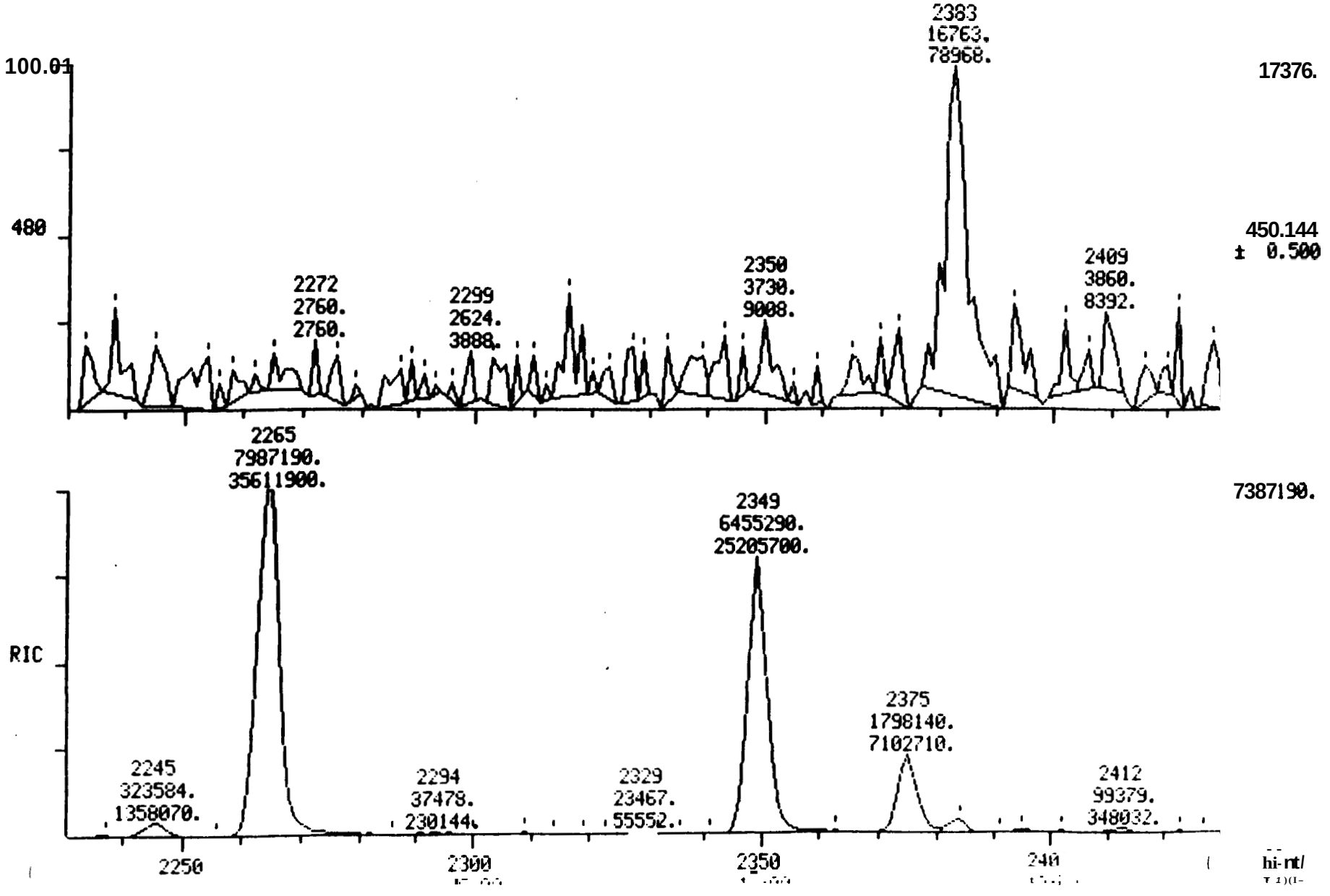
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDF



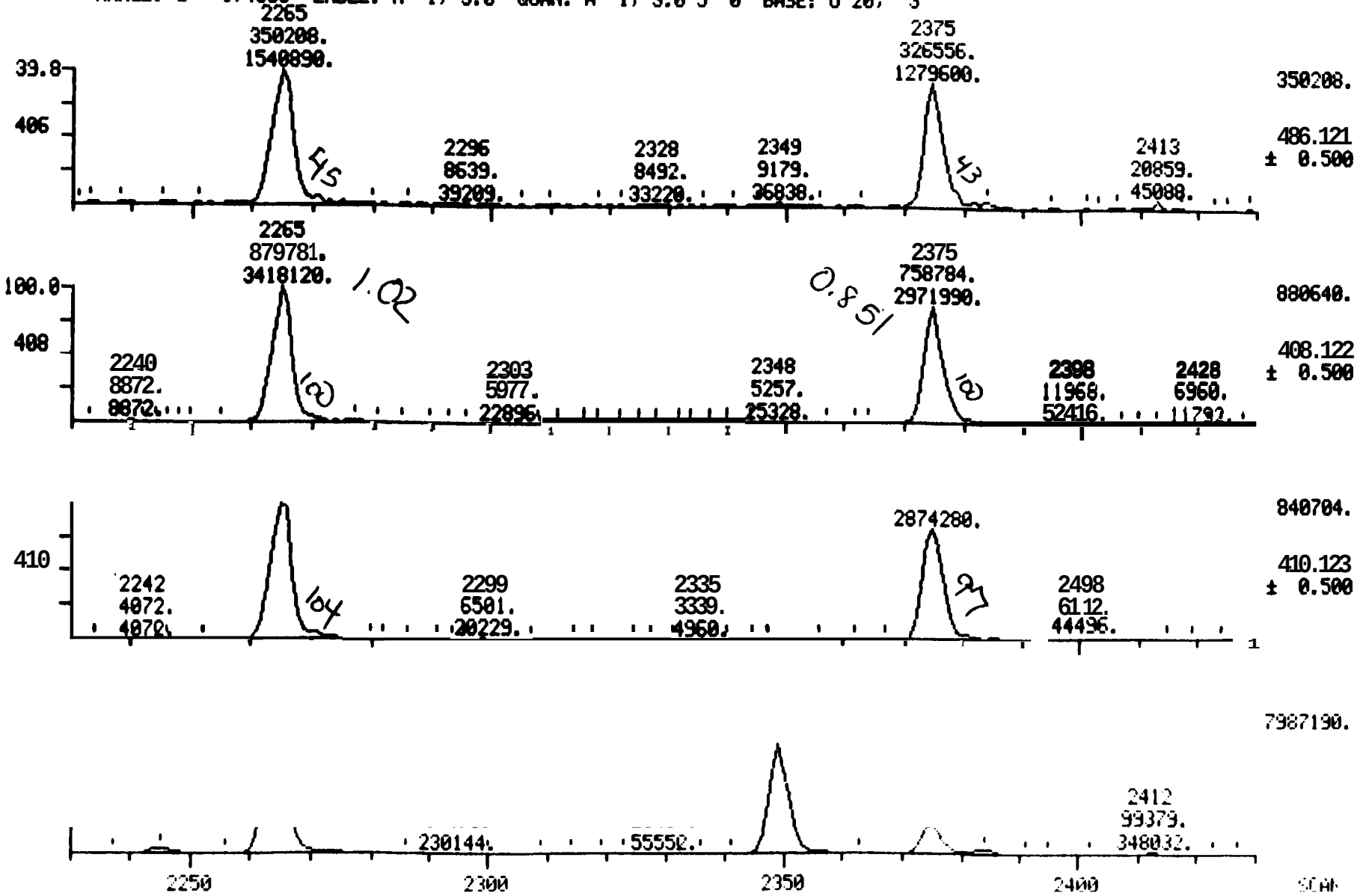
32003

MIDRIC+MASS CHROMATOGRAM DATA: 6850611 3 #1 SCANS 2230 TO 2430
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS. : 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

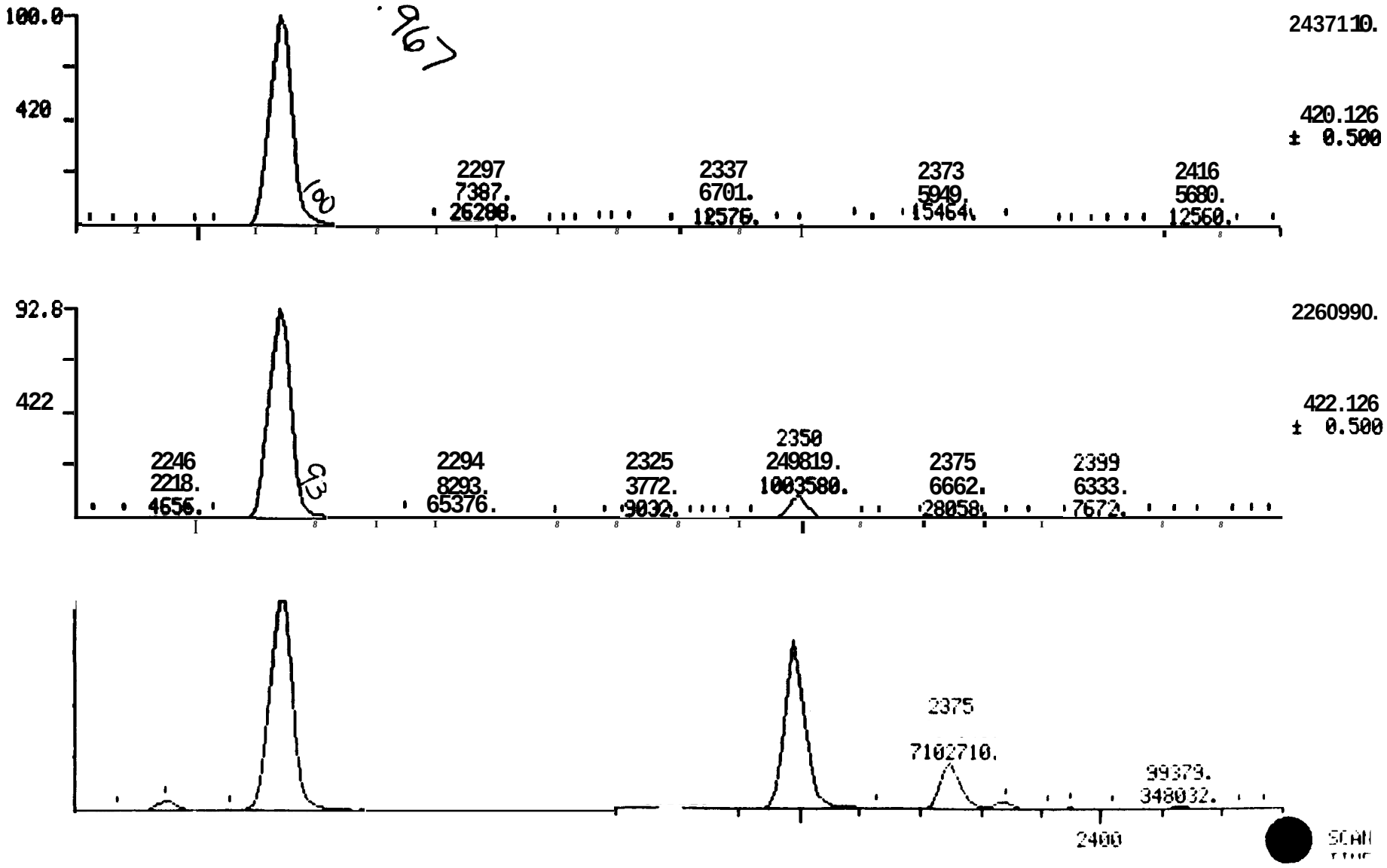


HpCDF

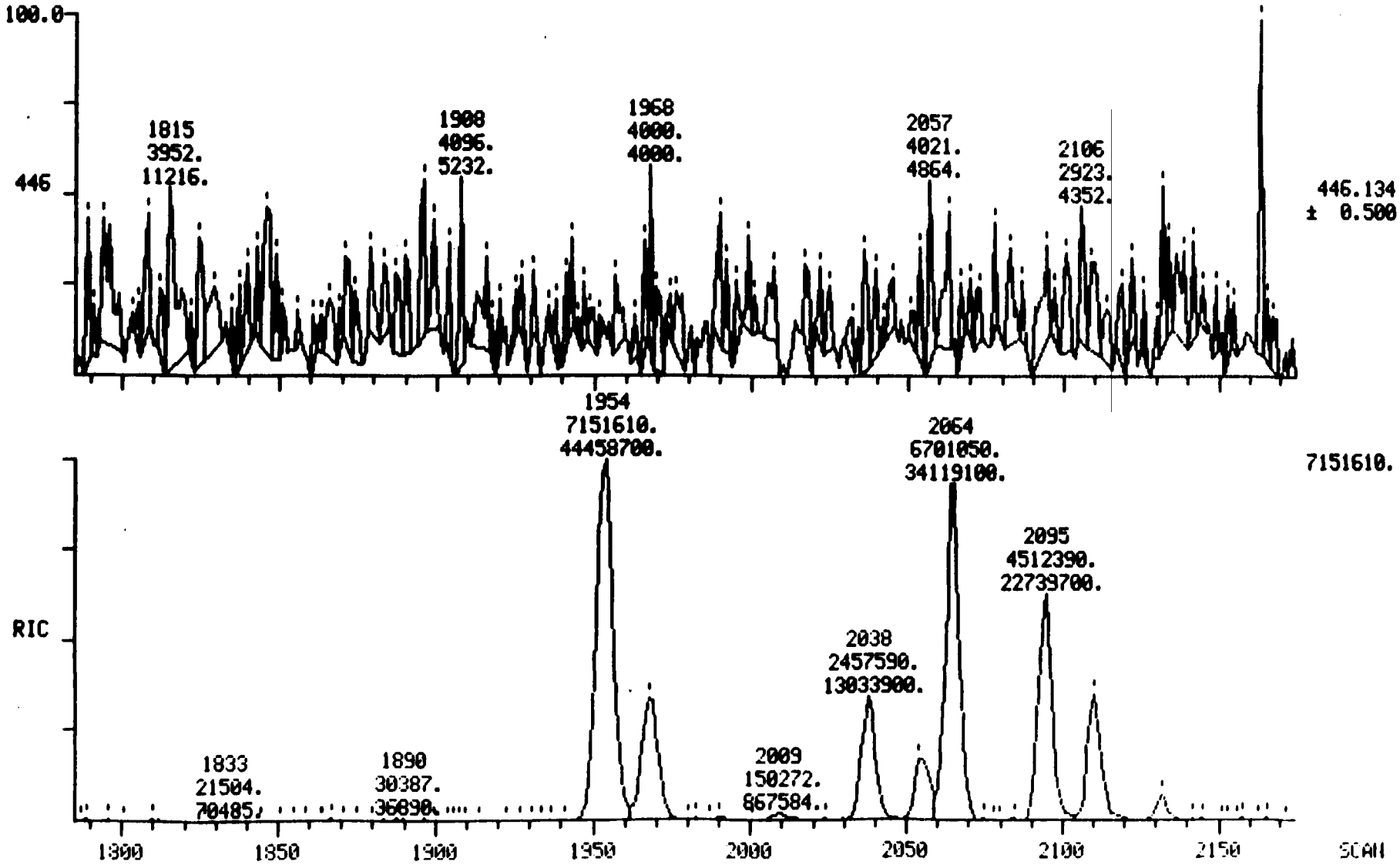
MIDRIC+MASS CHROMATOGRAMS DATA: 68506II3 #1 SCANS 2230 TO 2430
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200327


100.0
420
2437110.
420.126
± 0.500
2297
7387.
26288.
2337
6701.
12576.
2373
5949.
15464.
2416
5680.
12560.
92.8
422
2260990.
422.126
± 0.500
2246
2218.
4656.
2294
8293.
65376.
2325
3772.
9032.
2350
249819.
1003580.
2375
6662.
28058.
2399
6333.
7672.
2375
7102710.
99373.
348032.
2400

MIDRIC+MASS CHROMATOGRAM DATA: 68506II3 #1 SCANS 1785 TO 2150
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J BASE: U 20, 3

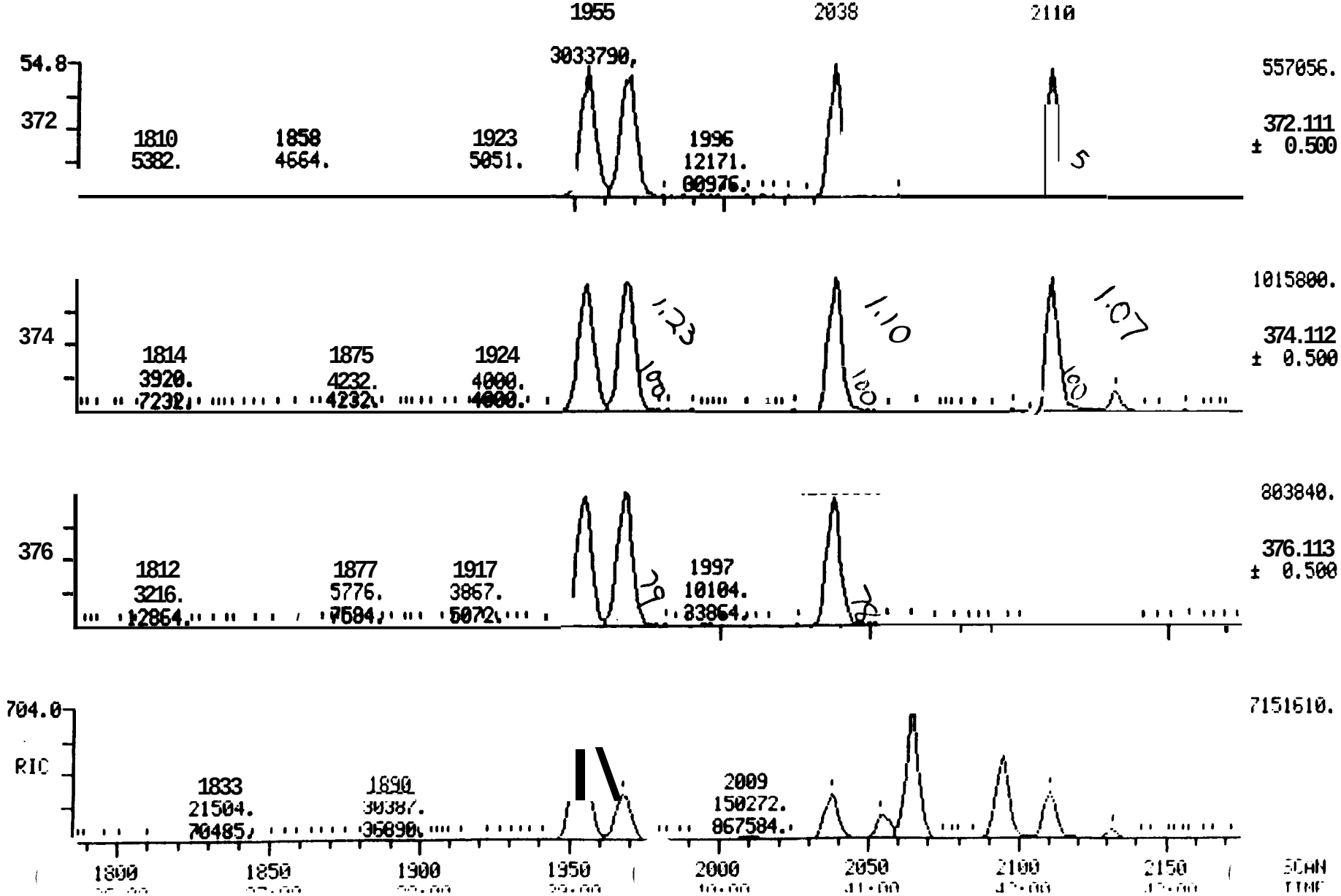


3200342

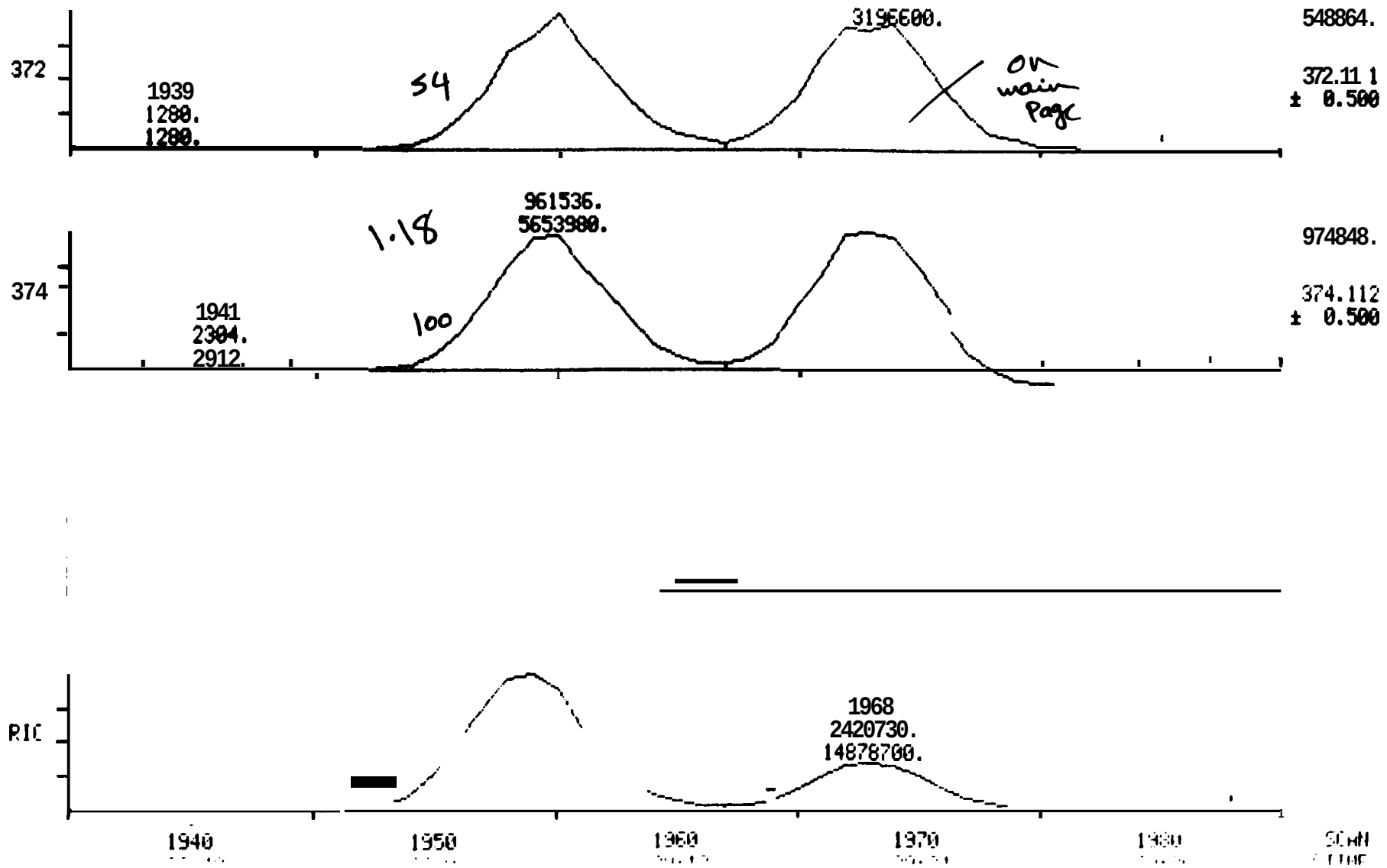
MIDRIC+MASS CHROMATOGRAMS DATA: 685061I3 #1 SCANS 1785 TO 2175

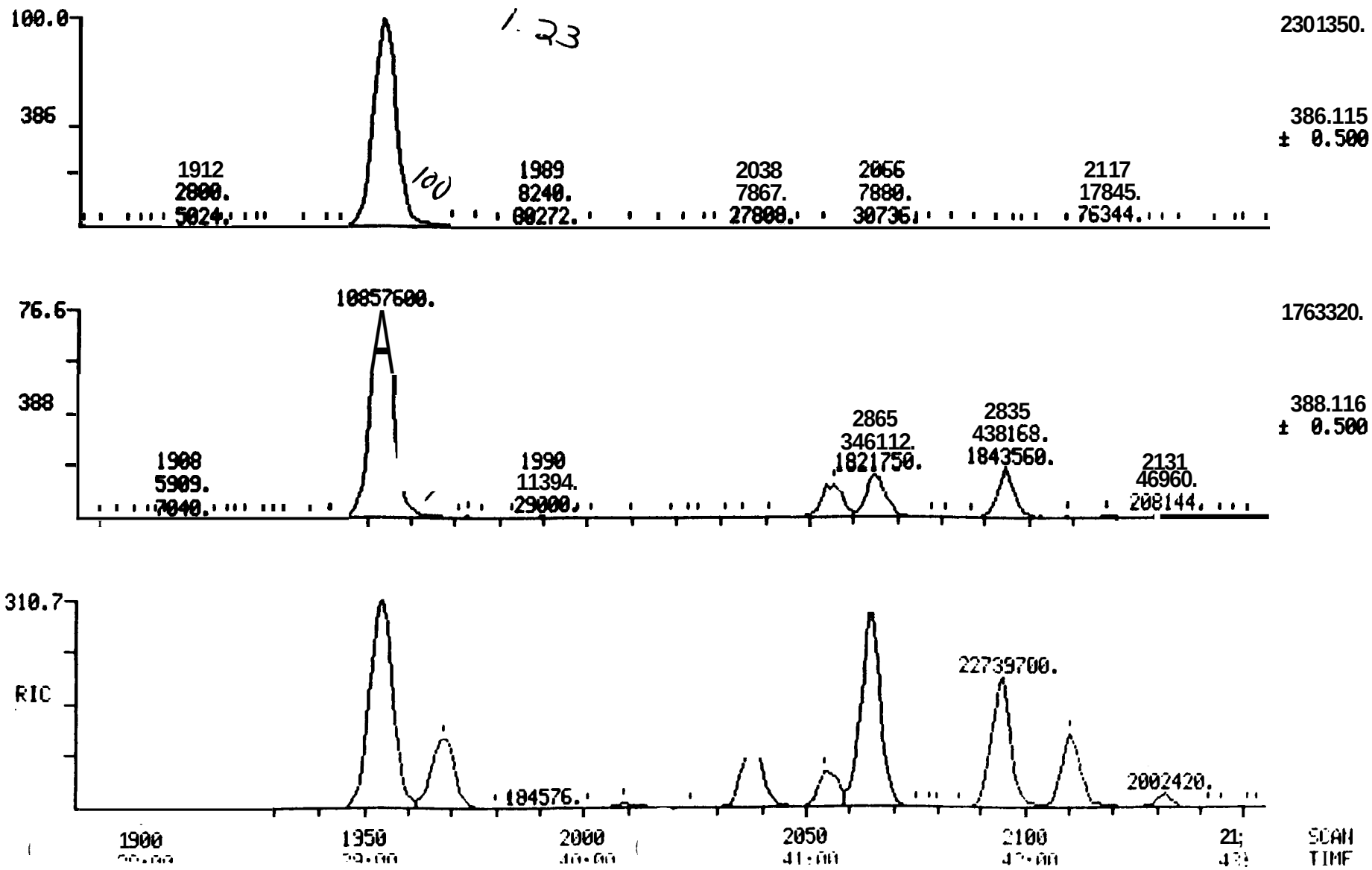
HxCDF

03/26/91 15:26:00 CAL: CAL910306A #2
SAMPLE: 20L OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

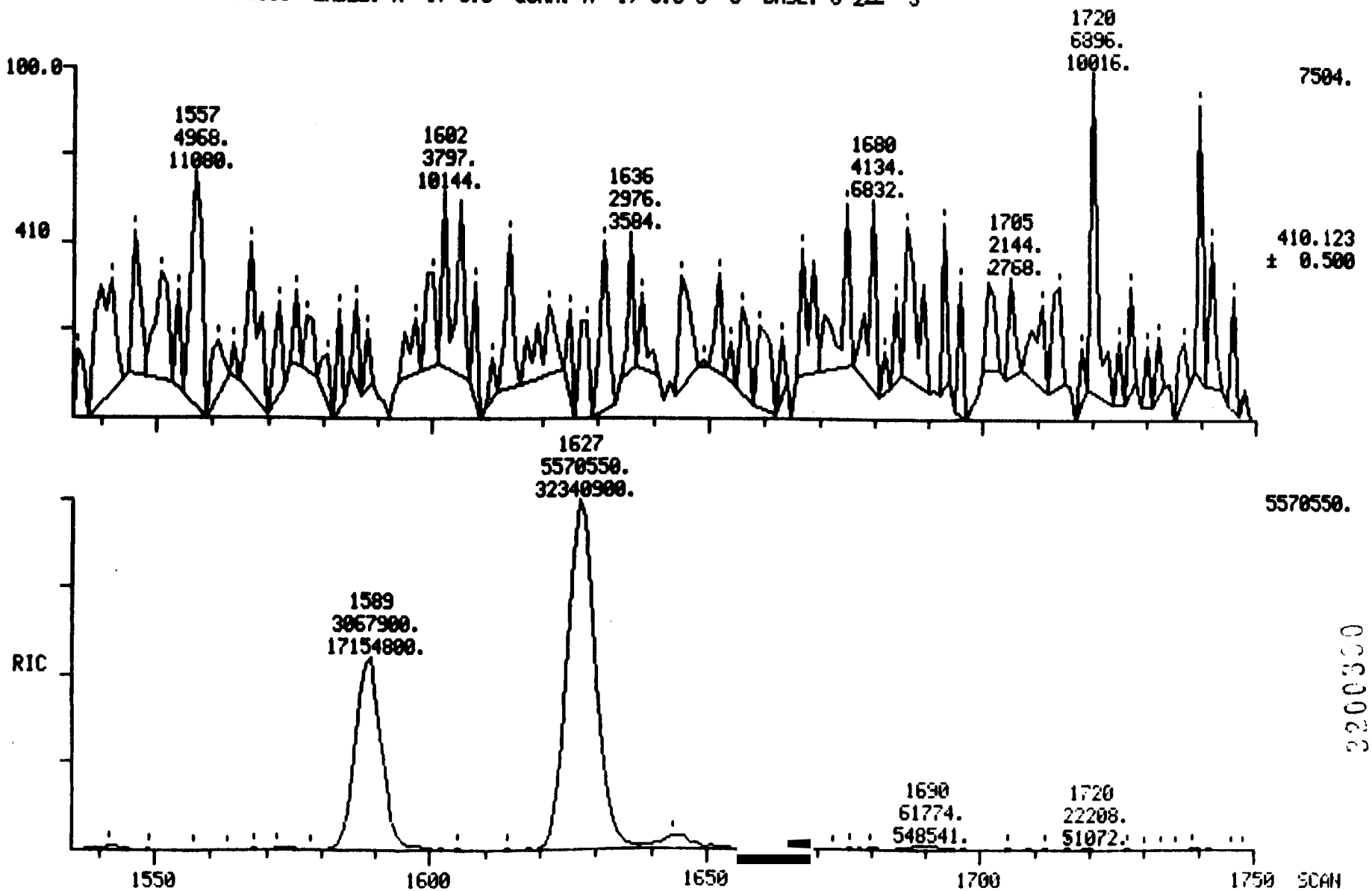


HxCDF


372
1939
1280.
1280.
54
3196600.
548864.
372.11 1
± 0.500
on main Page
374
1941
2304.
2912.
1.18
100
961536.
5653980.
974848.
374.112
± 0.500
RIC
1968
2420730.
14878700.
1940
1950
1960
1970
1980
SCAN
TIME

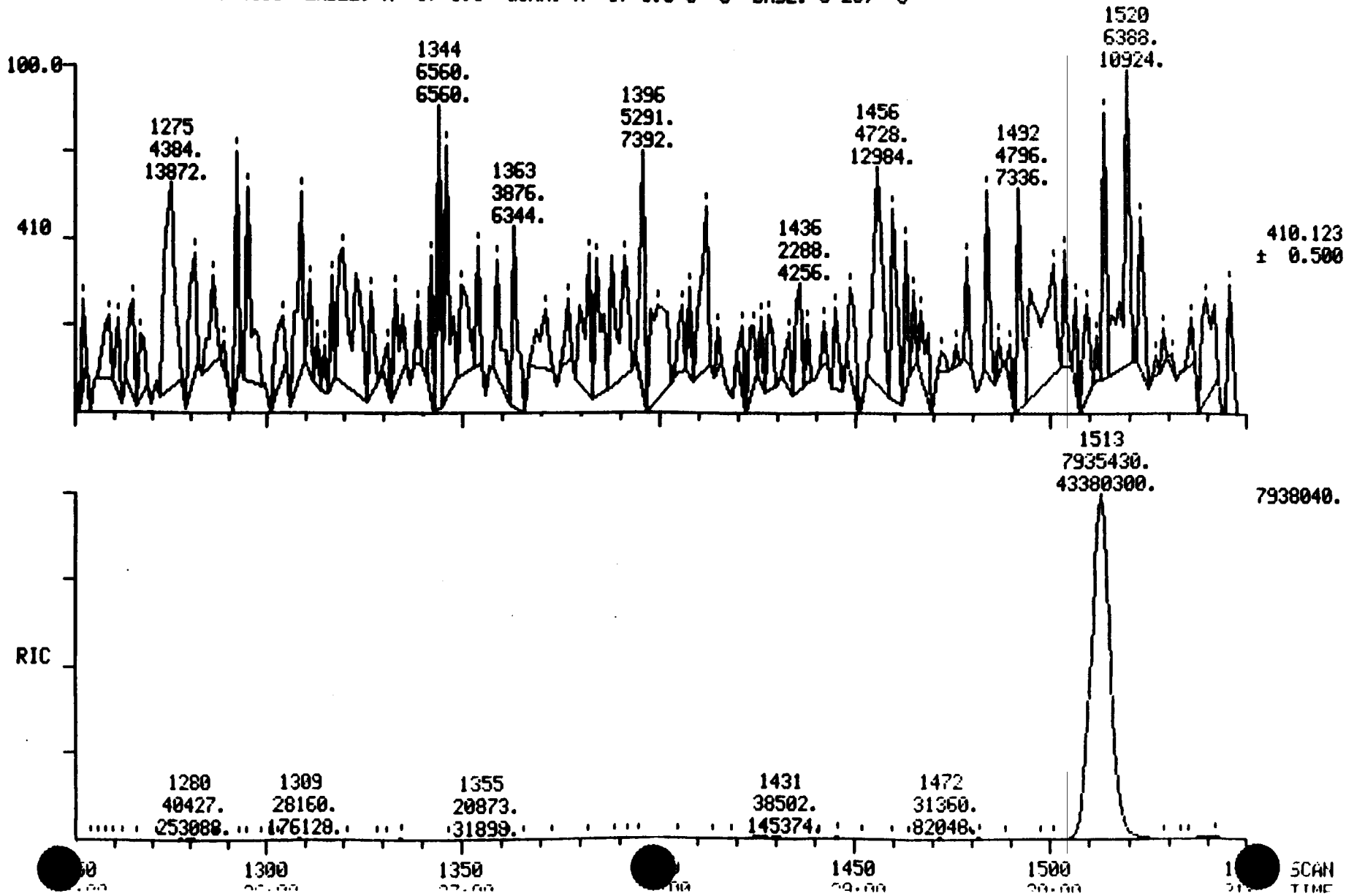

100.0
386
1912
2800.
5024.
1989
8240.
60272.
2038
7867.
27800.
2066
7880.
30736.
2117
17845.
76344.
2301350.
386.115
± 0.500
76.6
388
10857600.
1908
5909.
7040.
1990
11394.
29000.
2865
346112.
1821750.
2835
438168.
1843560.
2131
46960.
208144.
1763320.
388.116
± 0.500
310.7
RIC
184576.
22739700.
2002420.
1900
1950
2000
2050
2100
SCAN
TIME

MIDRIC+MASS CHROMATOGRAM DATA: 68506II3 #1 SCANS 1535 TO 1750
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 2Ω 3

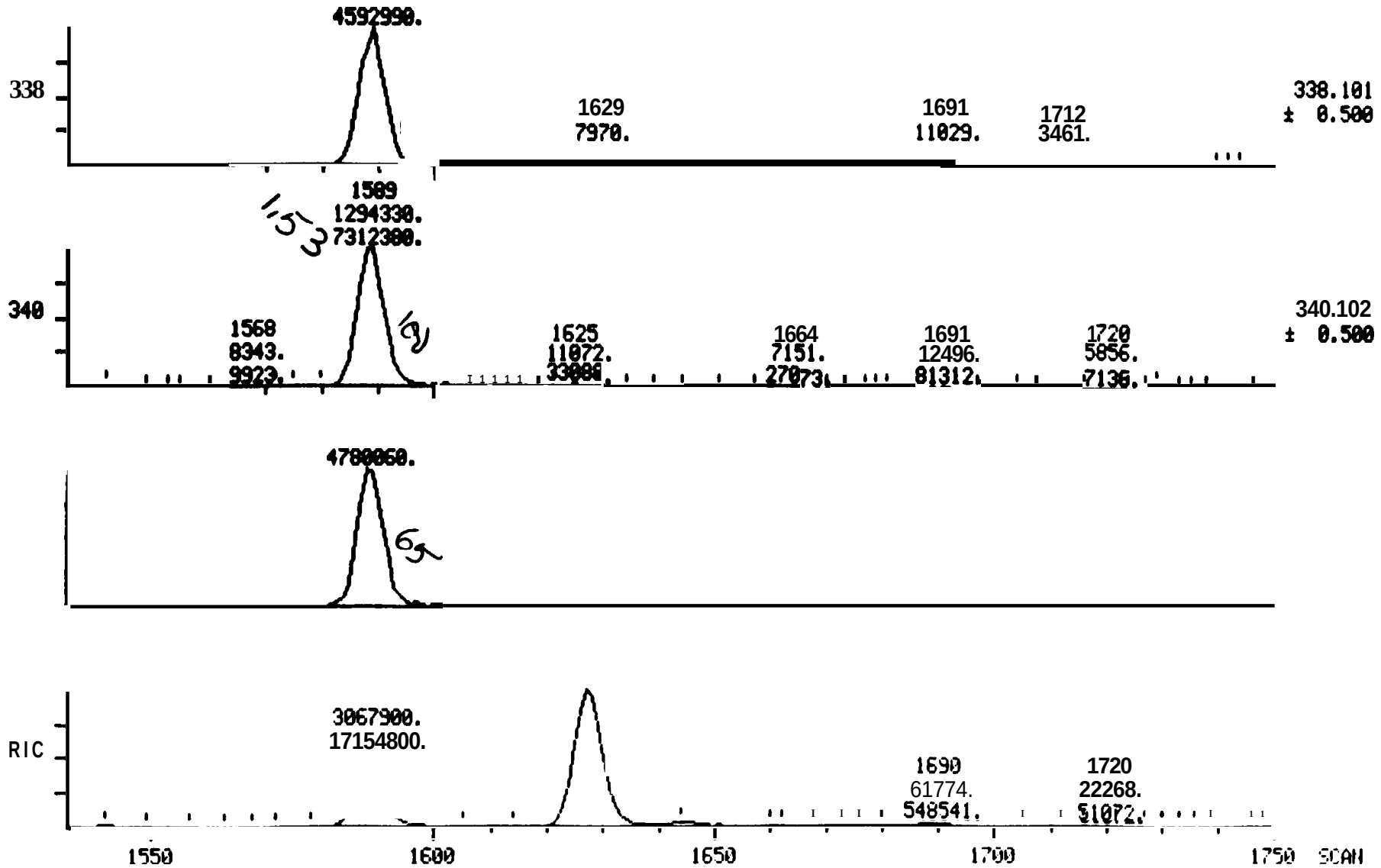


220930

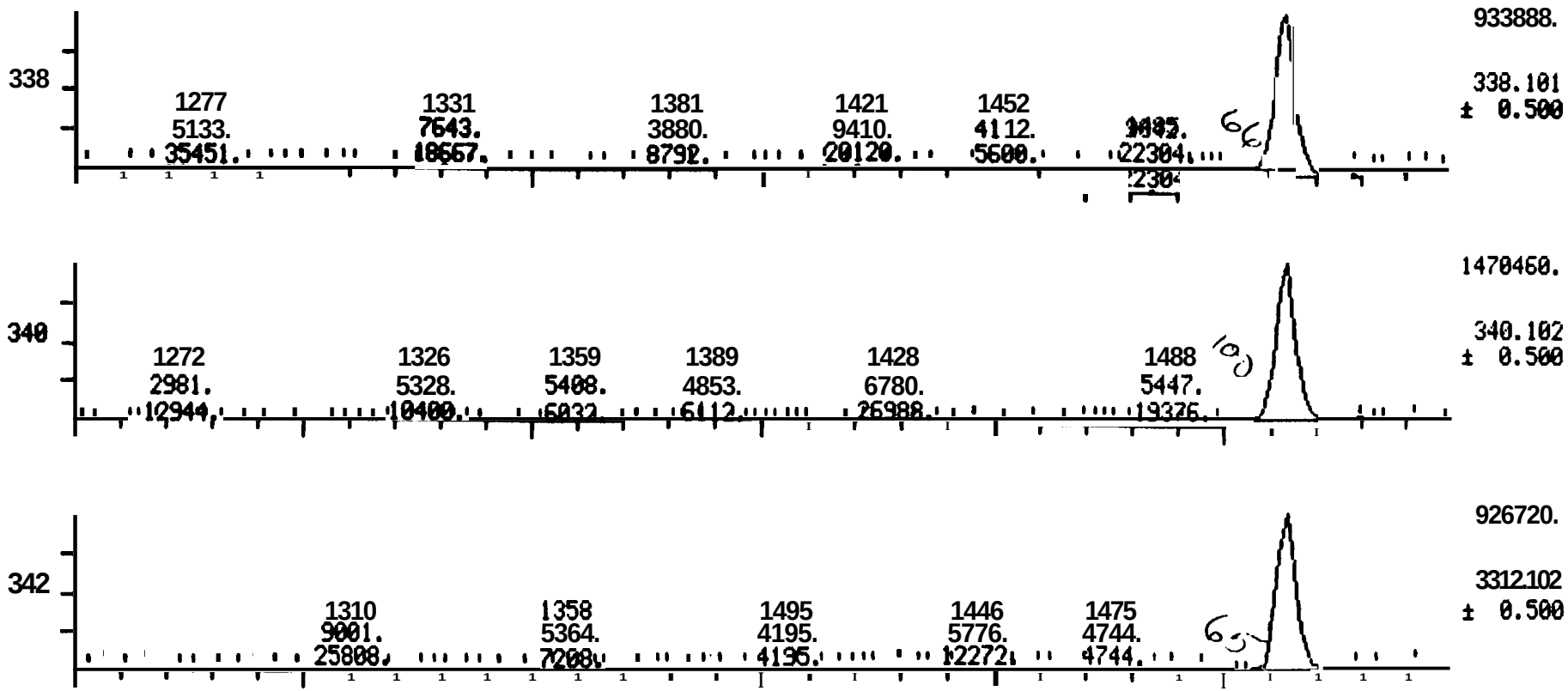
MIDRIC+MASS CHROMATOGRAM DATA: 68506II3 #1 SCANS 1250 TO 1550
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506I13 #1 SCANS 1535 TO 1750
03/26/91 15:26:00 CALI: CAL910306A 02
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.



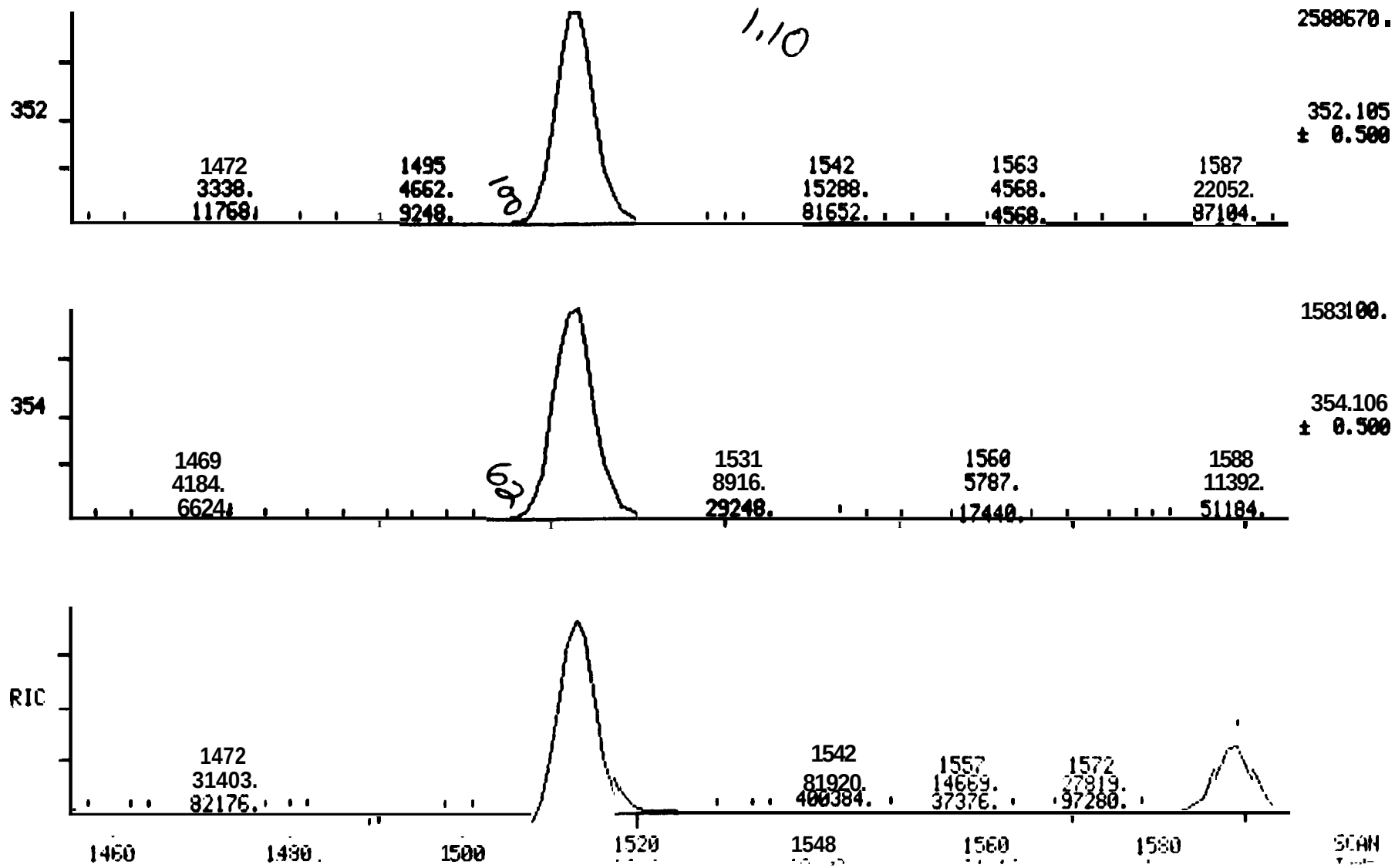
3200331


338
1277
5133.
35451.
1331
7643.
18667.
1381
3880.
8792.
1421
9410.
20120.
1452
4112.
5600.
1485.
22304.
933888.
338.101
± 0.500
340
1272
2981.
10944.
1326
5328.
10400.
1359
5408.
6032.
1389
4853.
6112.
1428
6780.
26988.
1488
5447.
19376.
1470460.
340.102
± 0.500
342
1310
9001.
25808.
1358
5364.
7208.
1495
4195.
4195.
1446
5776.
12272.
1475
4744.
4744.
926720.
3312.102
± 0.500

MIDRIC+MASS CHROMATOGRAMS
03/26/91 15:26:00

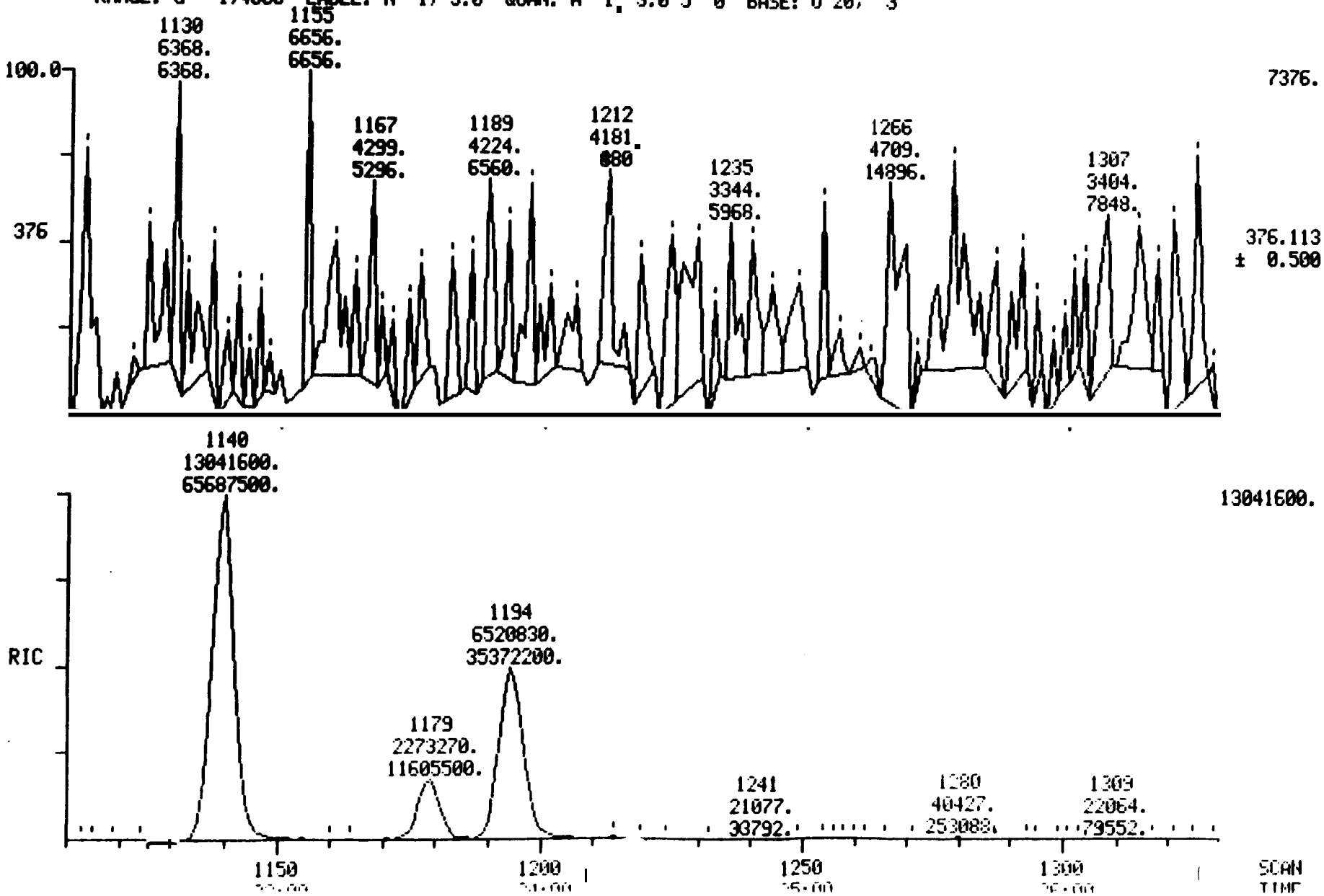
DATA: 68506I13 #1
CALI: CAL910306A #2

SCANS 1455 TO 1595

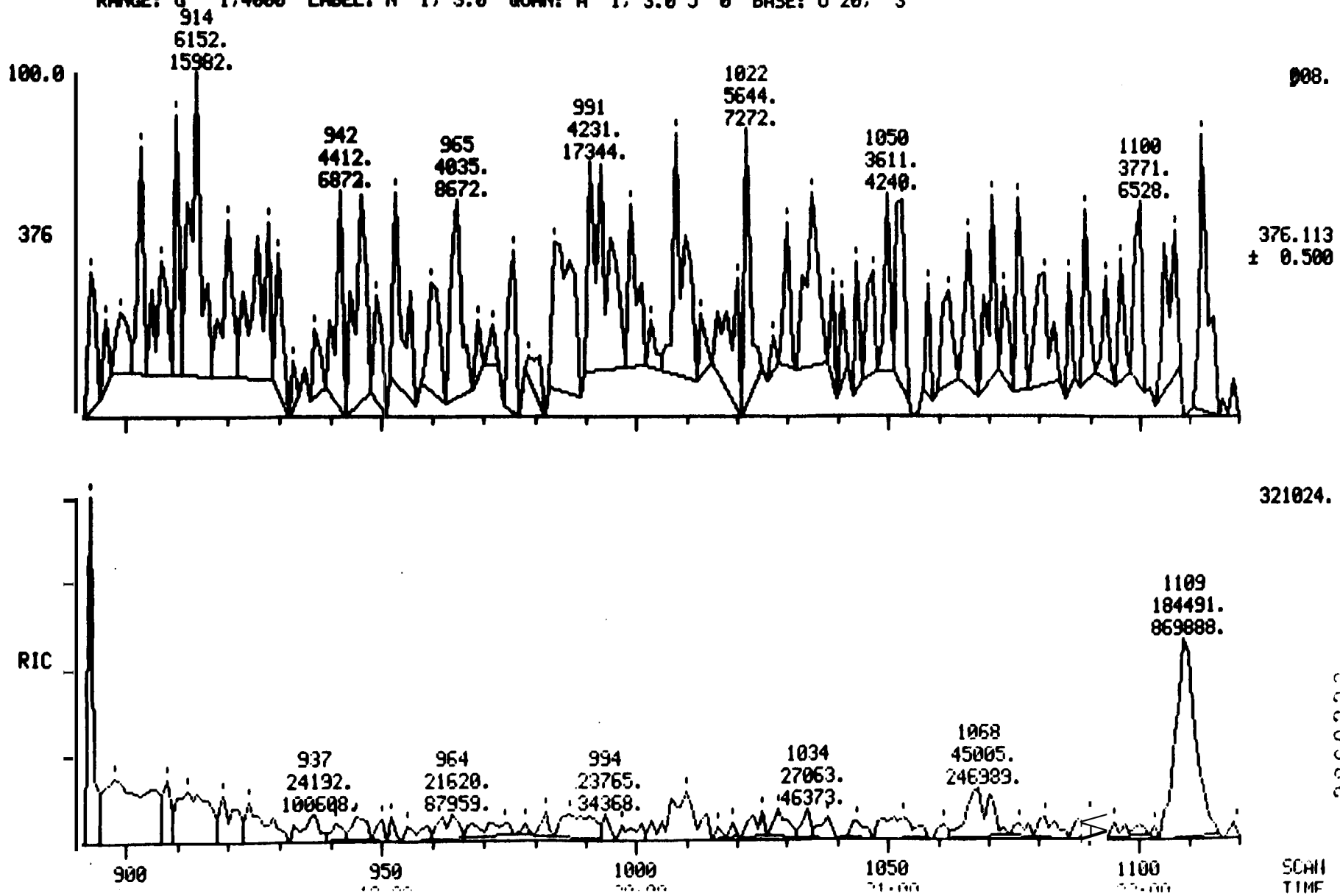


3200332

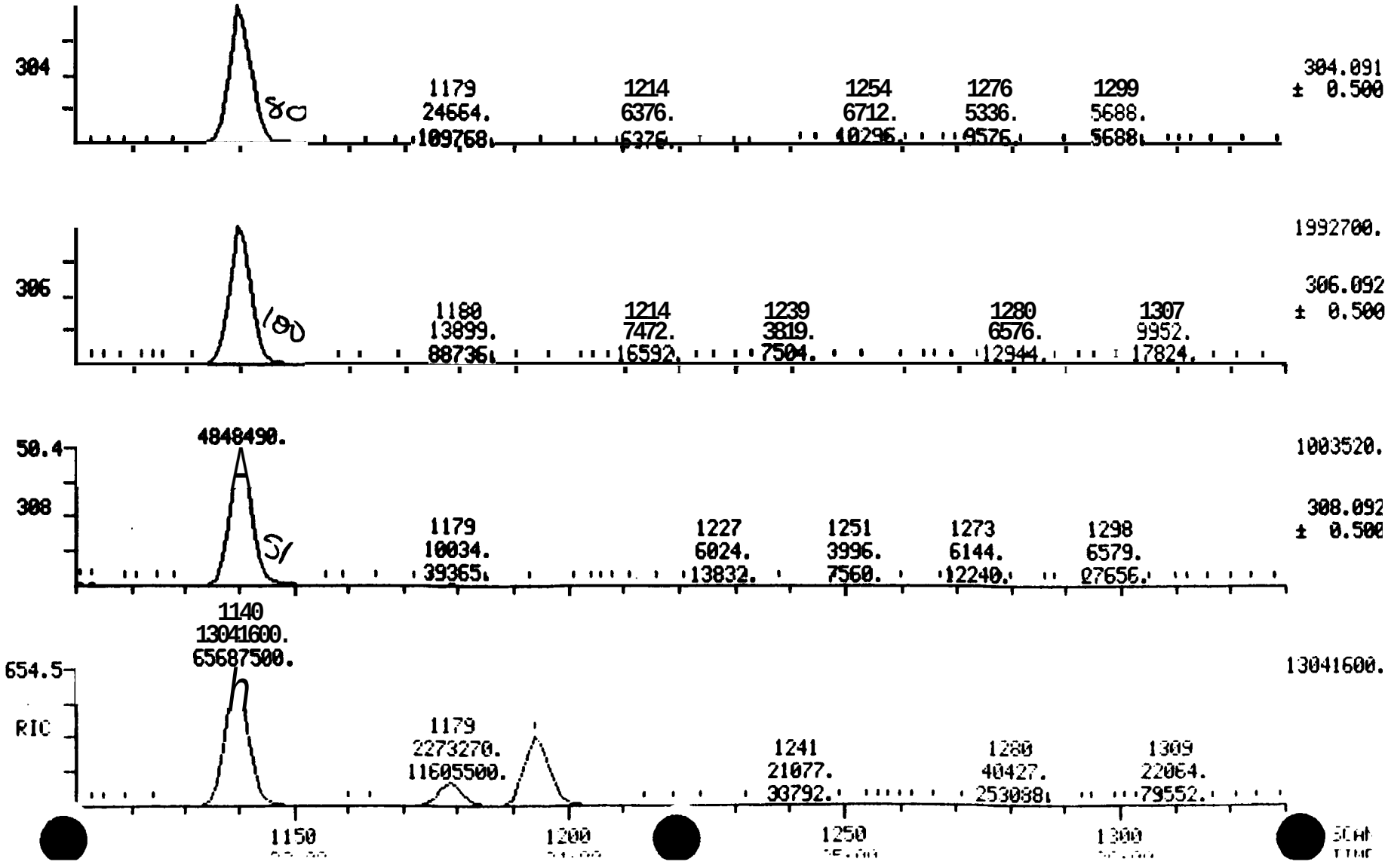
MIDRIC+MASS CHROMATOGRAM DATA: 68506II3 #1 SCANS 1110 TO 1330
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



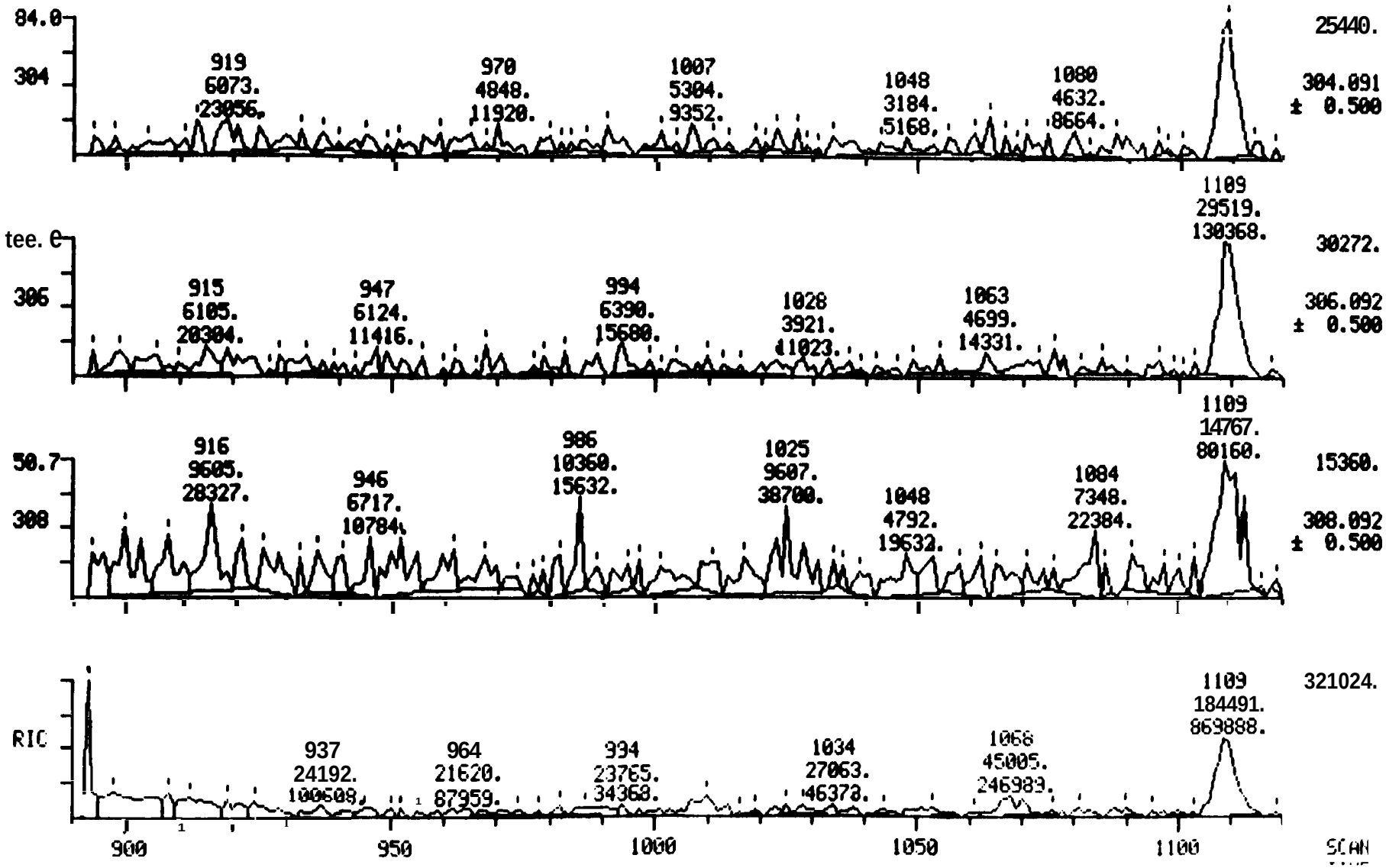
MIDRIC+MASS CHROMATOGRAM DATA: 68506II3 #1 SCANS 890 TO 1120
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II ITIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



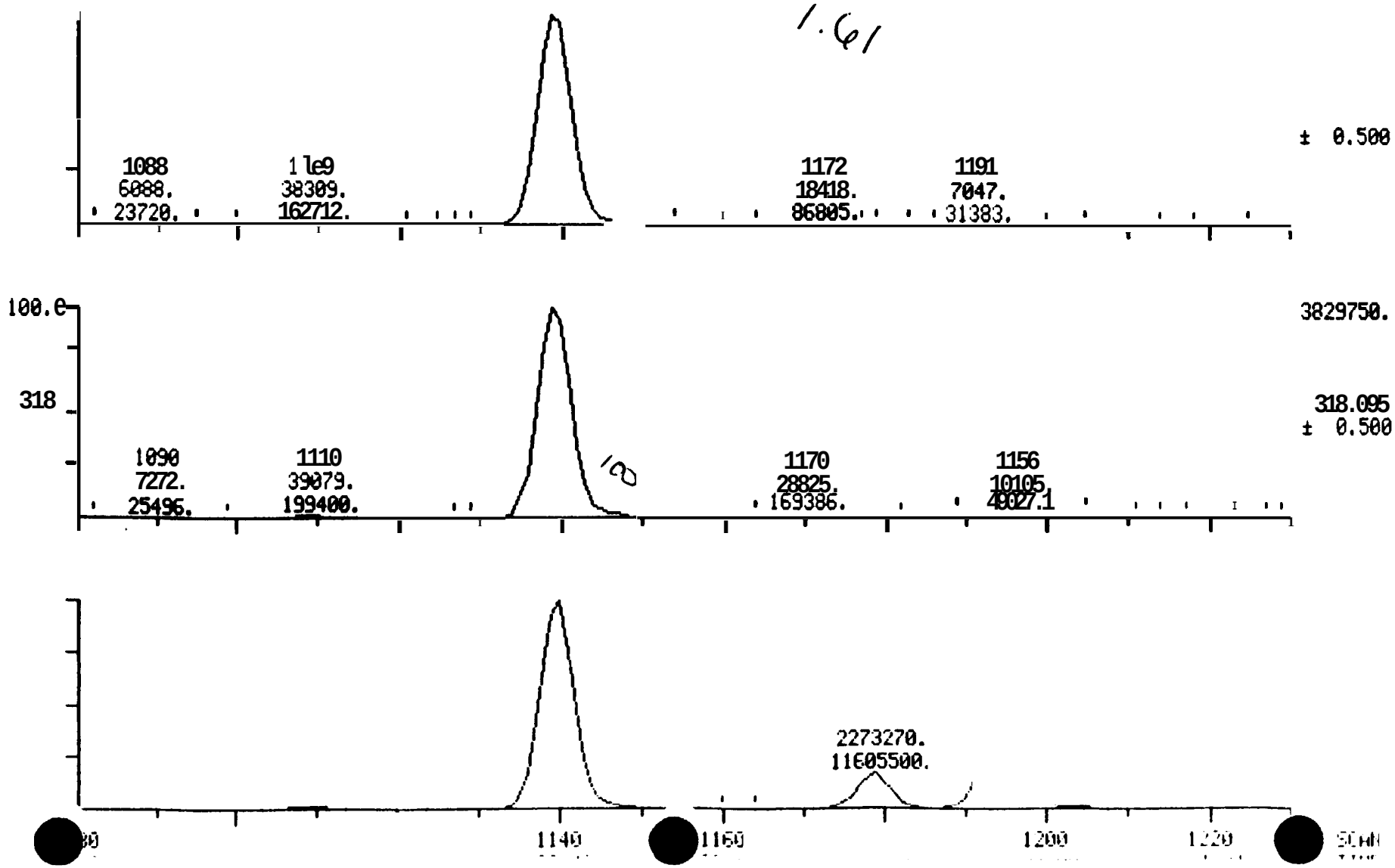
3200333

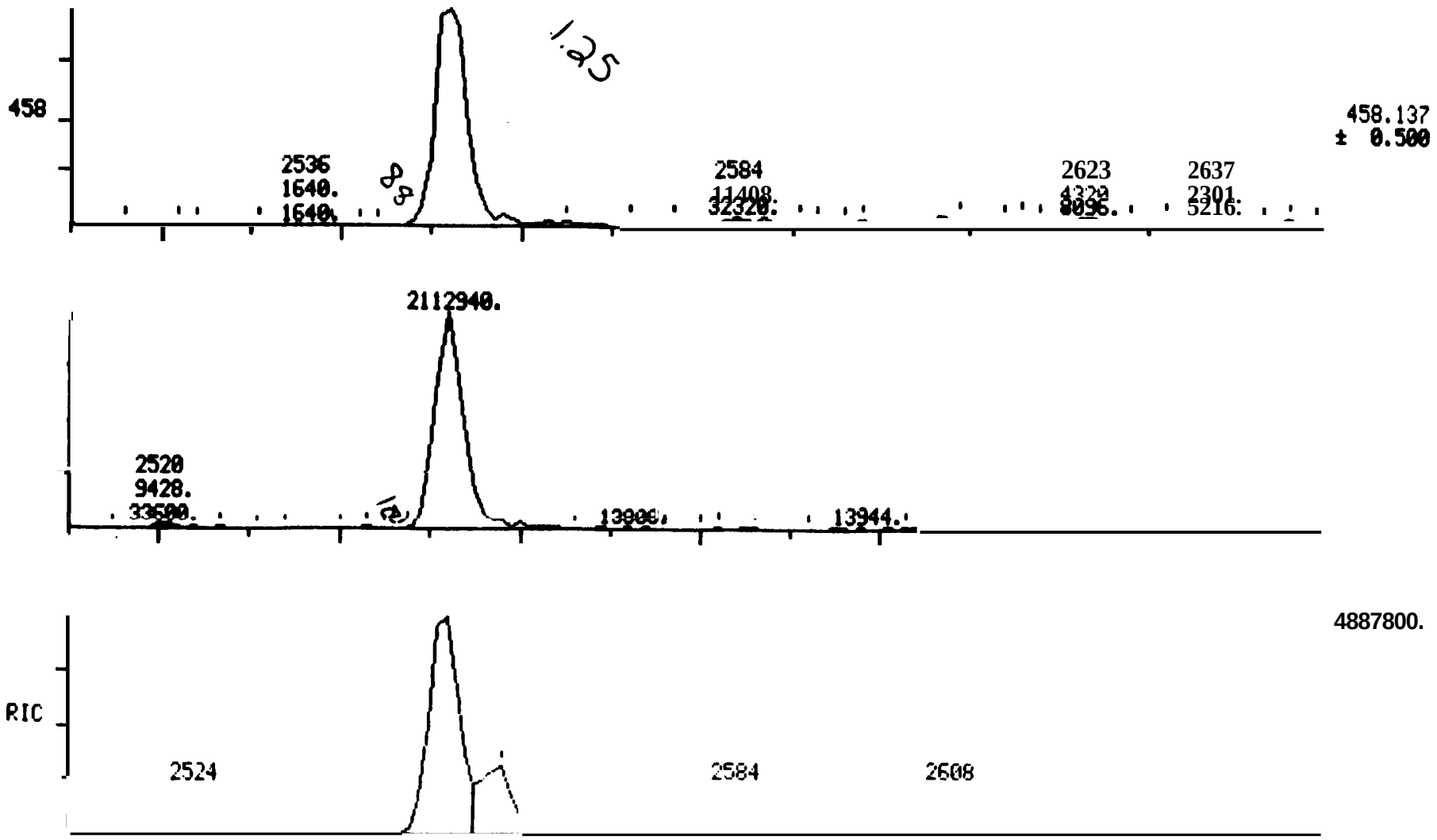

304
1179
24654.
109768.
1214
6376.
6376.
1254
6712.
10296.
1276
5336.
9576.
1299
5688.
5688.
304.091
± 0.500
1992700.
306
1180
13899.
88736.
1214
7472.
16592.
1239
3819.
7504.
1280
6576.
12944.
1307
9952.
17824.
306.092
± 0.500
50.4
4848490.
308
1179
10034.
39365.
1227
6024.
13832.
1251
3996.
7560.
1273
6144.
12240.
1298
6579.
27656.
1003520.
308.092
± 0.500
654.5
RIC
1140
13041600.
65687500.
1179
2273270.
11605500.
1241
21077.
30792.
1280
40427.
253088.
1309
22064.
79552.
13041600.
1150
1200
1250
1300

MIDRIC+MASS CHROMATOGRAMS DATA: 68506II3 #1 SCANS 890 TO 1120
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

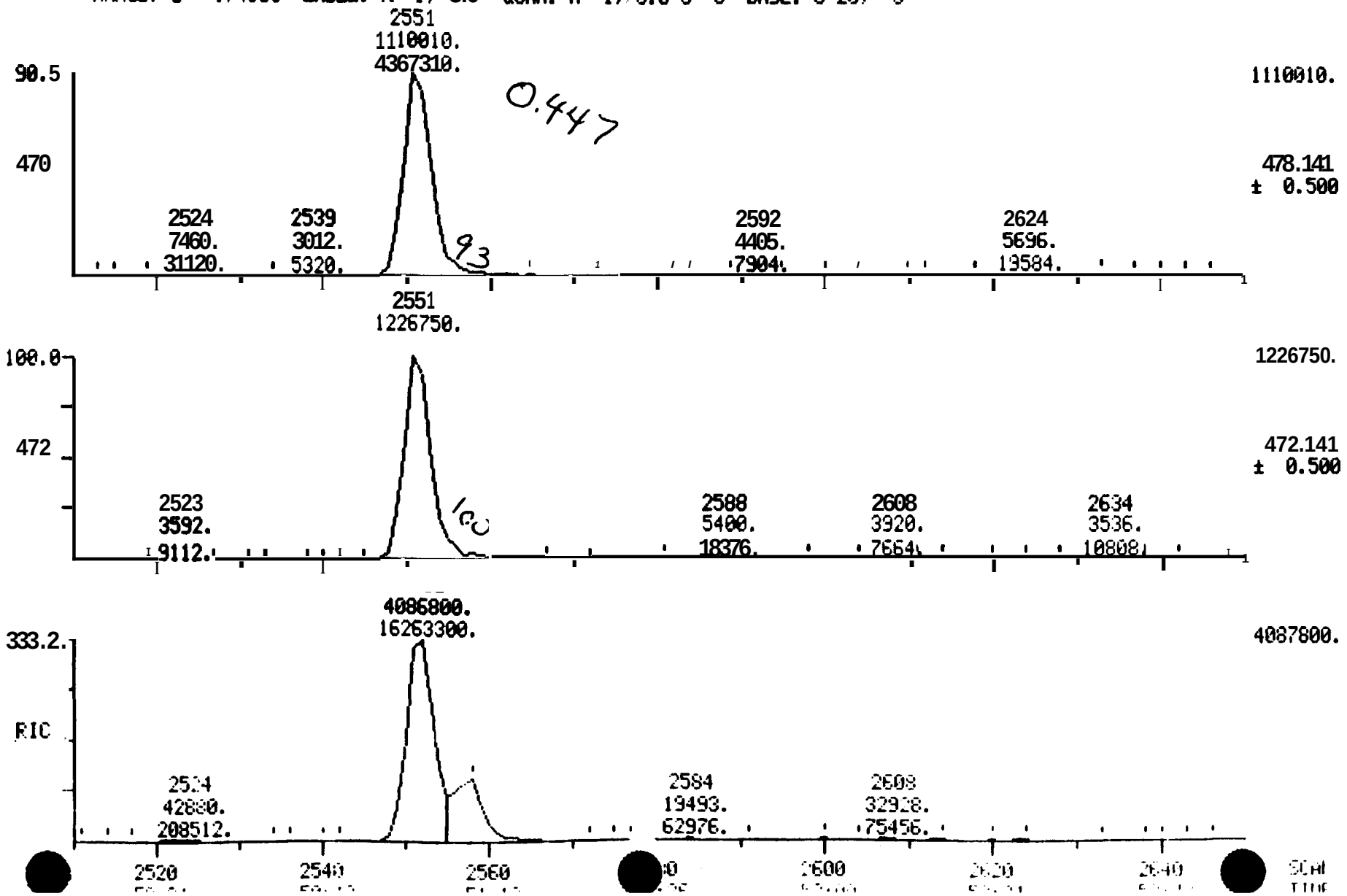


MIDRIC+MASS CHROMATOGRAMS DATA: 68506II3 #1 SCANS 1080 TO 1230
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.




458
458.137
± 0.500
2536
1640.
1640.
2584
11408.
32320.
2623
4329
8096.
2637
2301.
5216.
1.25
2112940.
2520
9428.
33500.
13900.
13944.
RIC
4887800.
2524
2584
2608

MIDRIC+MASS CHROMATOGRAMS DATA: 68506II3 #1 SCANS 2510 TO 2650
83/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 11 NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506II3 #1 SCANS 2250 TO 2410

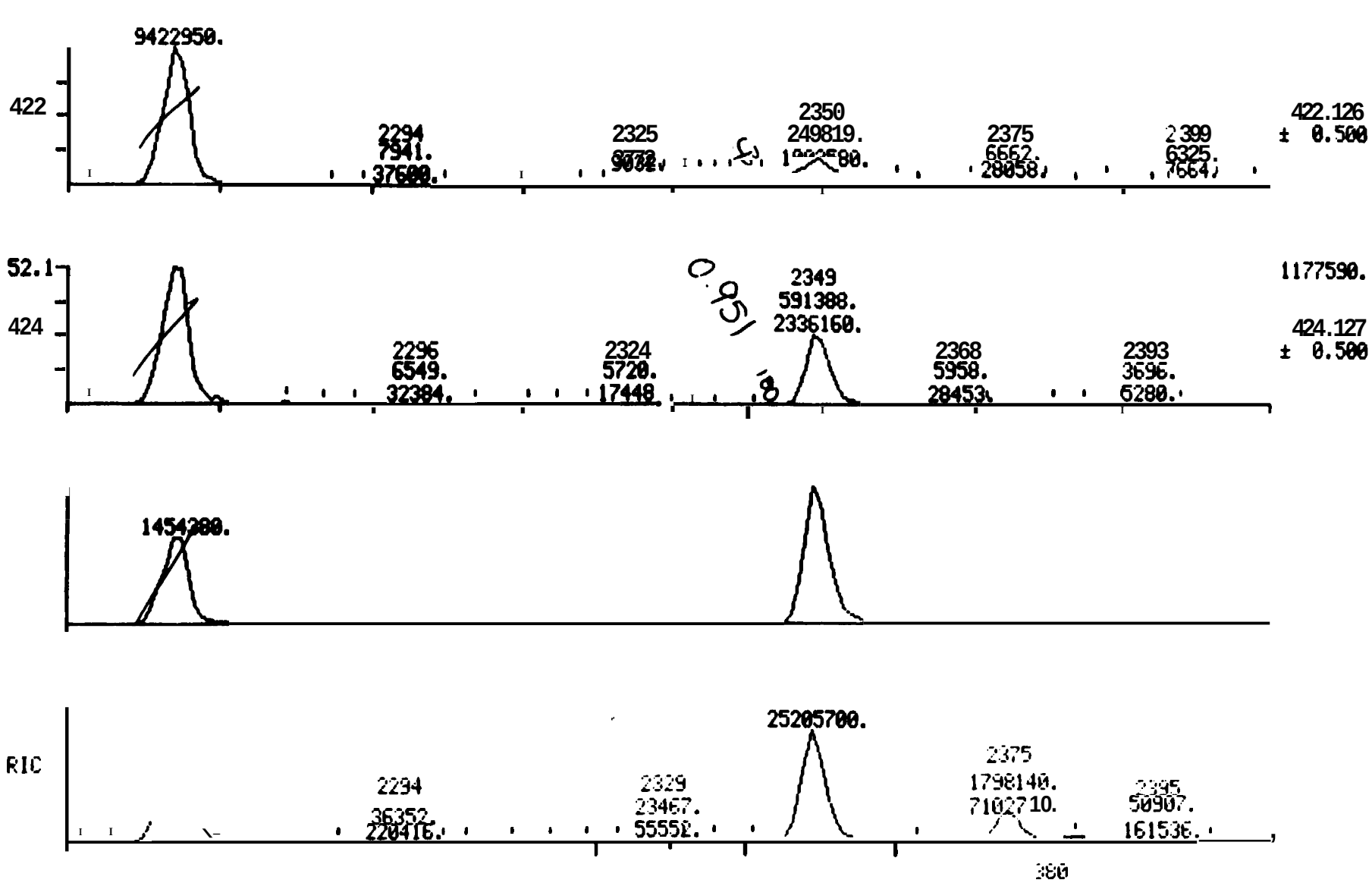
03/26/91 15:26:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3

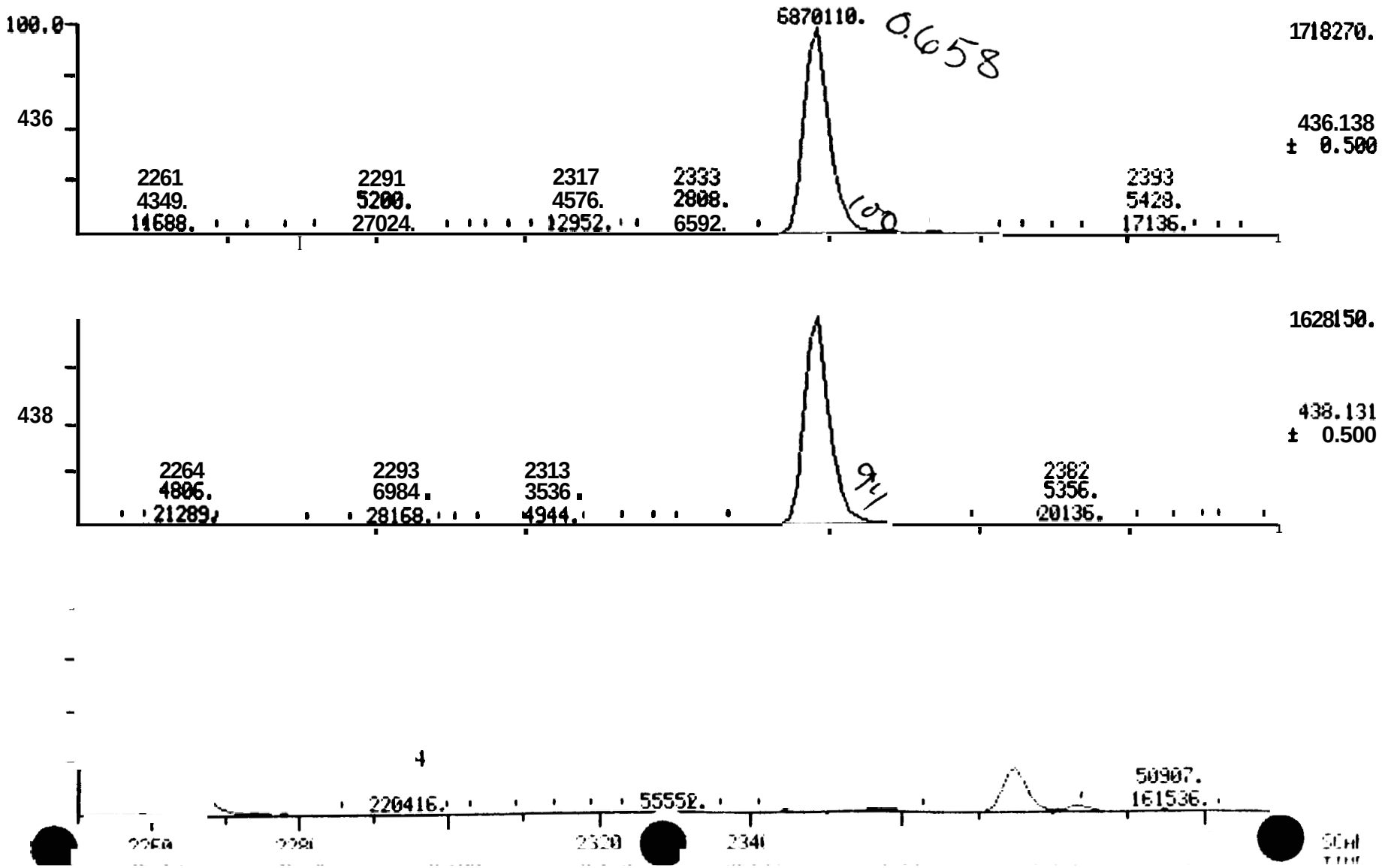
CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

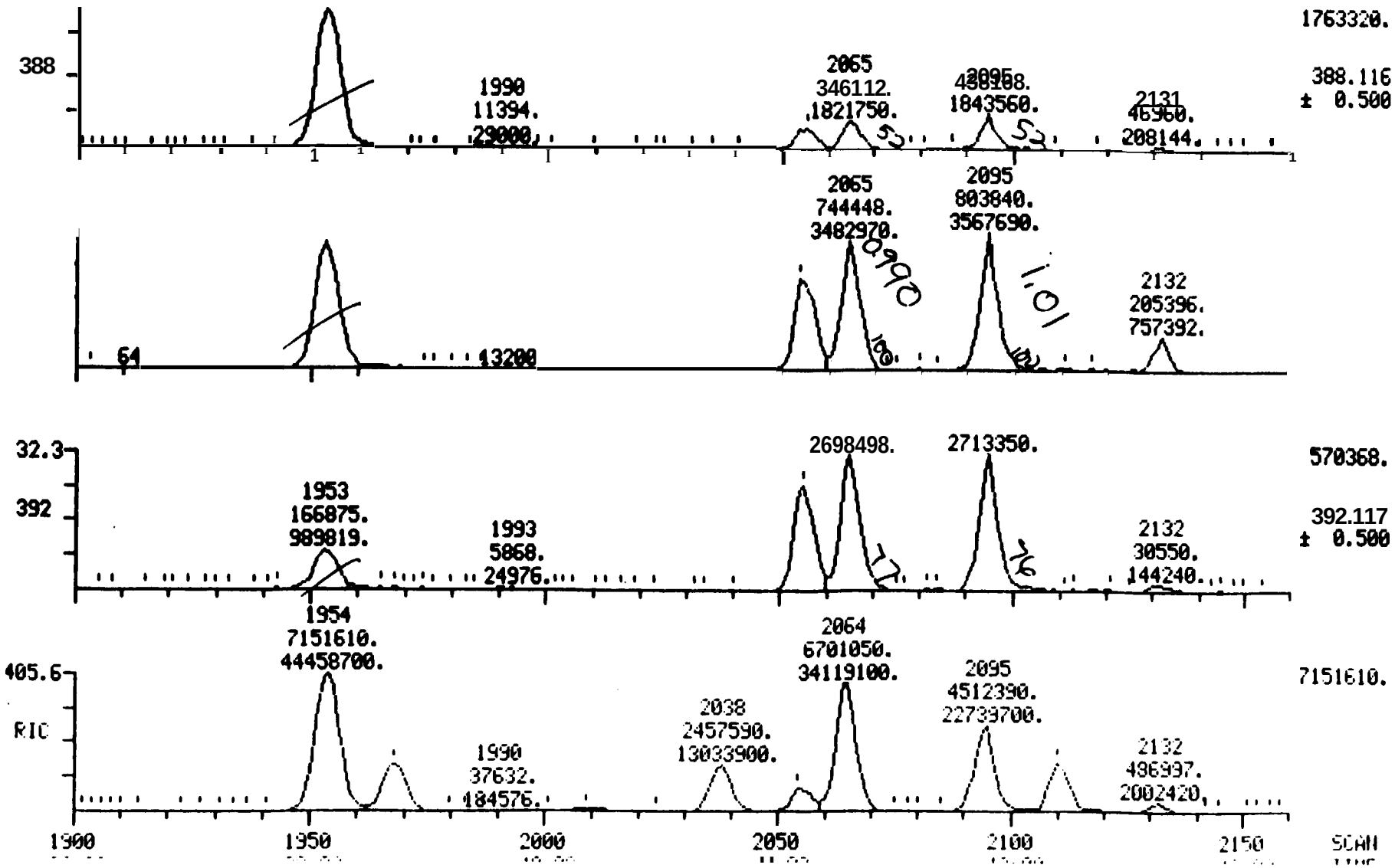
H_pCDD



22003


100.0
436
6870110.
0.658
1718270.
436.138
± 0.500
2261
4349.
11688.
2291
5200.
27024.
2317
4576.
12952.
2333
2808.
6592.
100
2393
5428.
17136.
438
1628150.
438.131
± 0.500
2264
4806.
21289.
2293
6984.
28168.
2313
3536.
4944.
94
2382
5356.
20136.
4
220416.
55552.
50907.
161536.
2320
2340

HxCDD

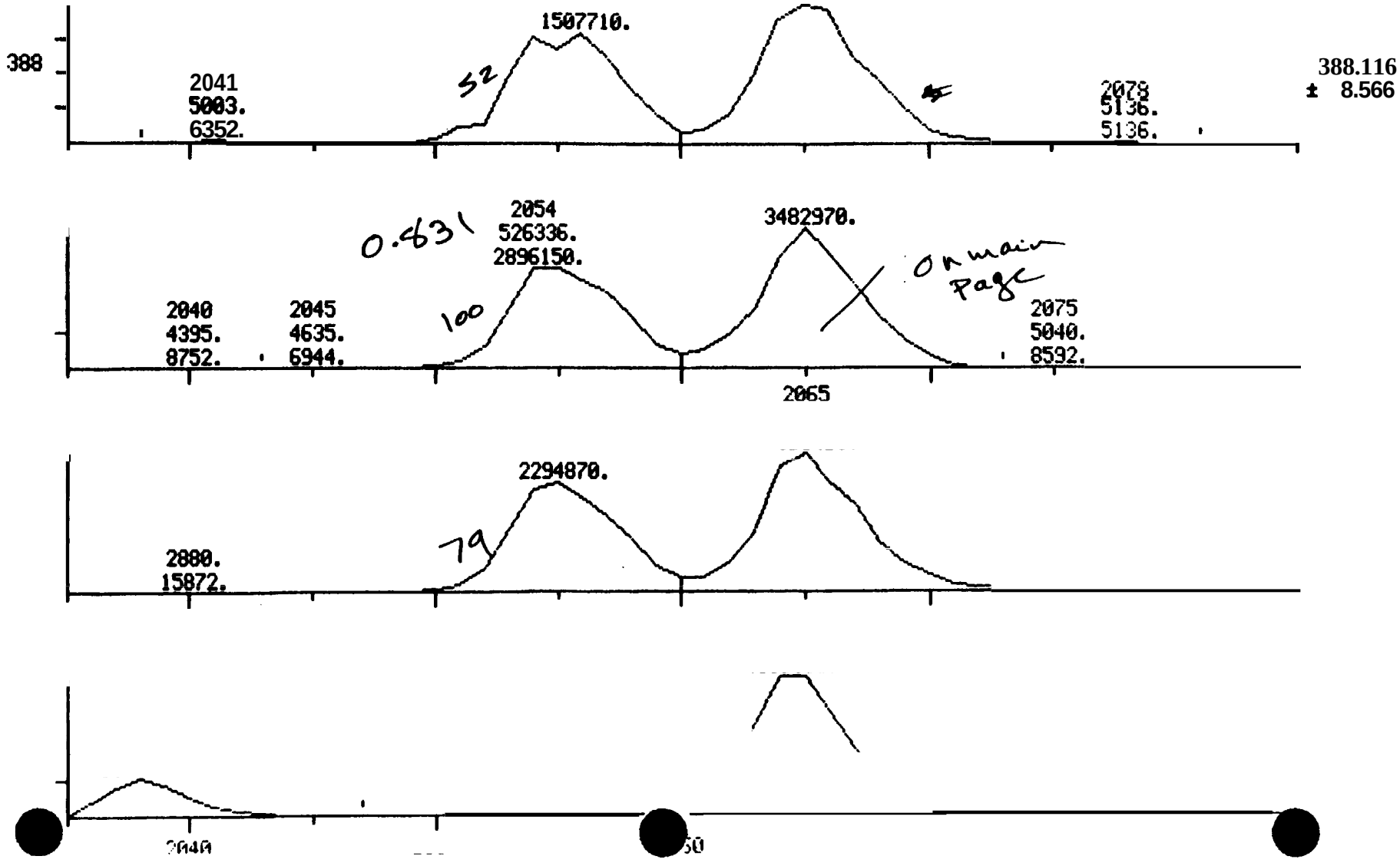


3200337

HxCDD

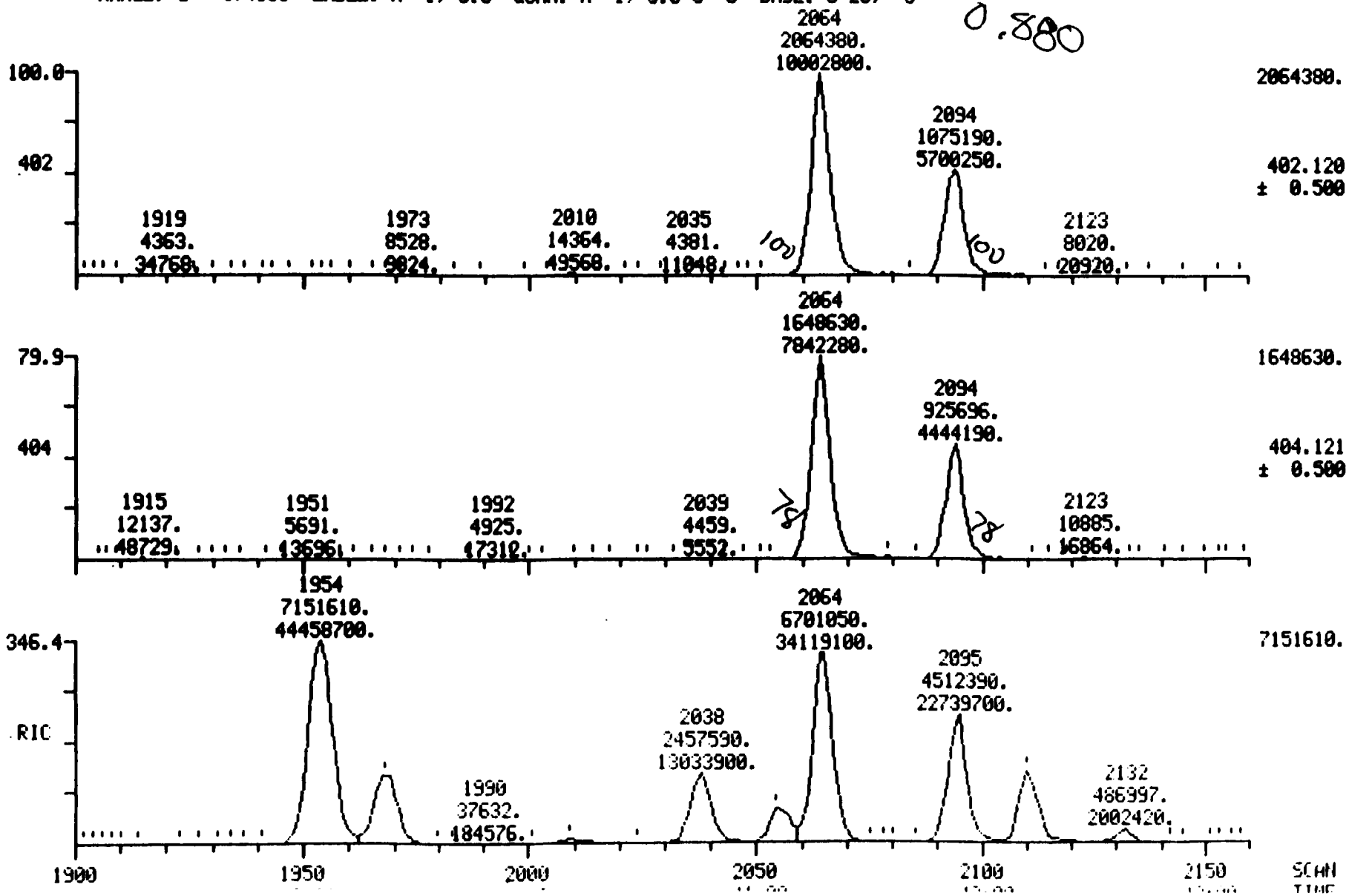
1/1

SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506II3 #1 SCANS 800 TO 2160
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.880

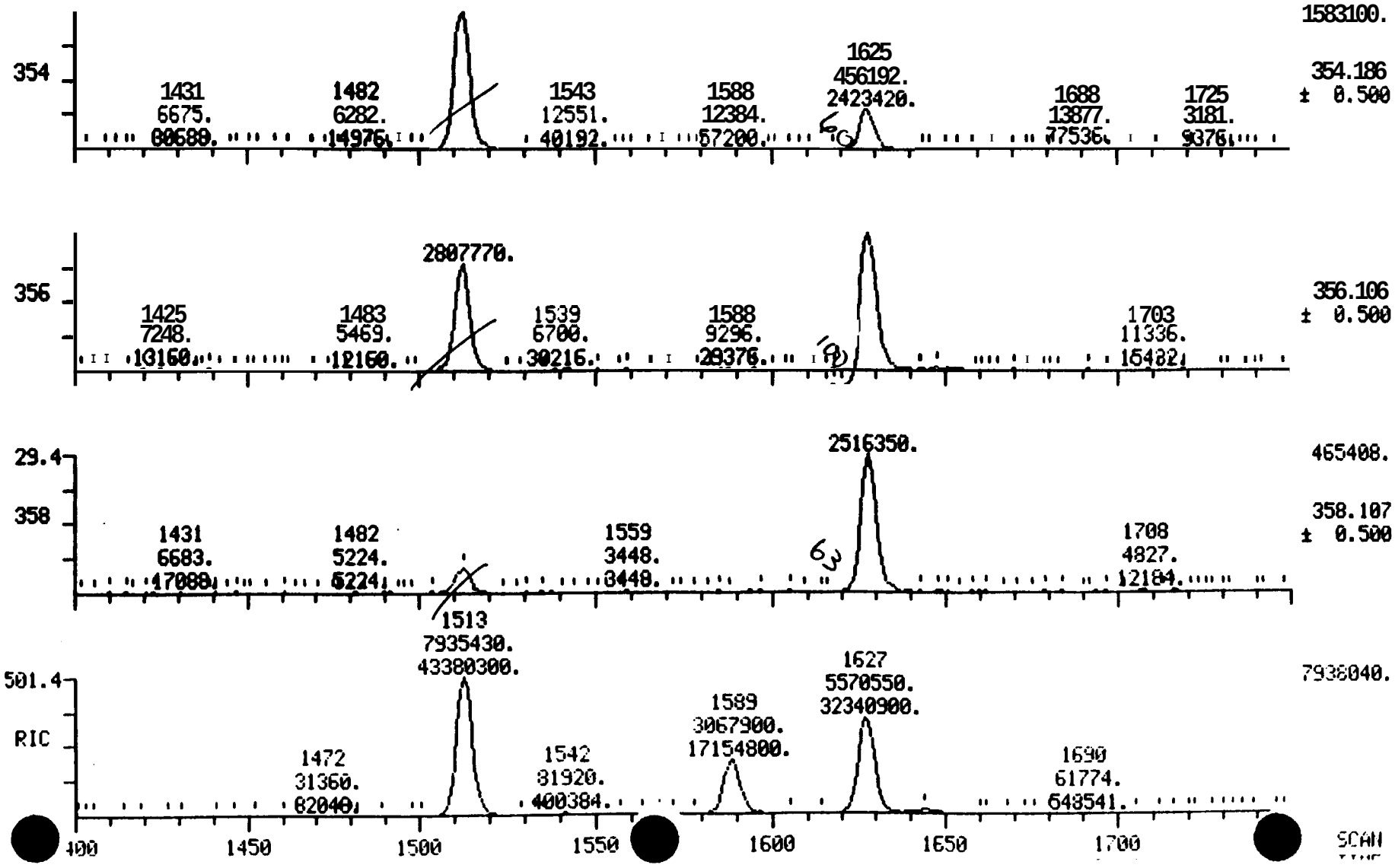


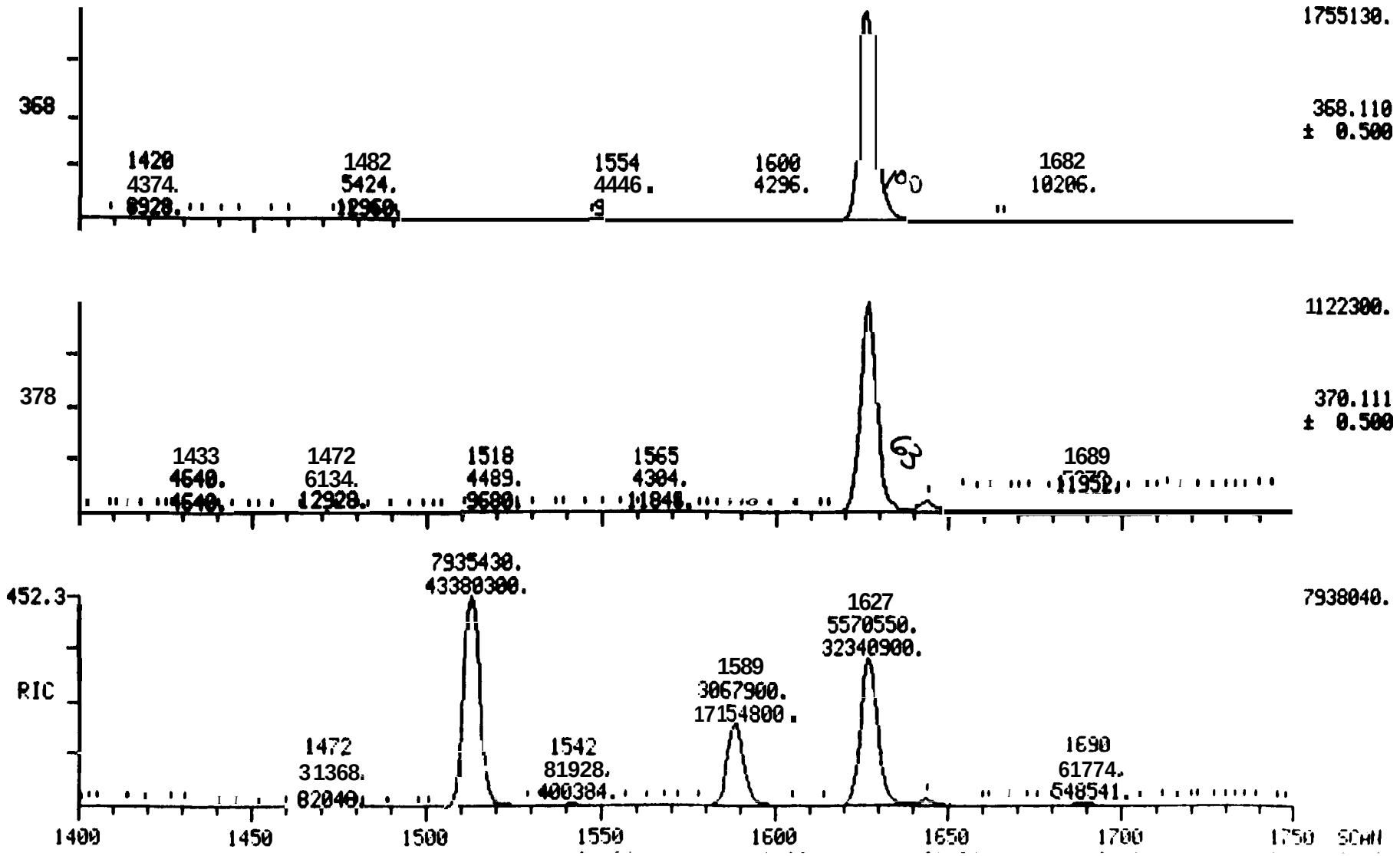
3200333

PeCDD

20.

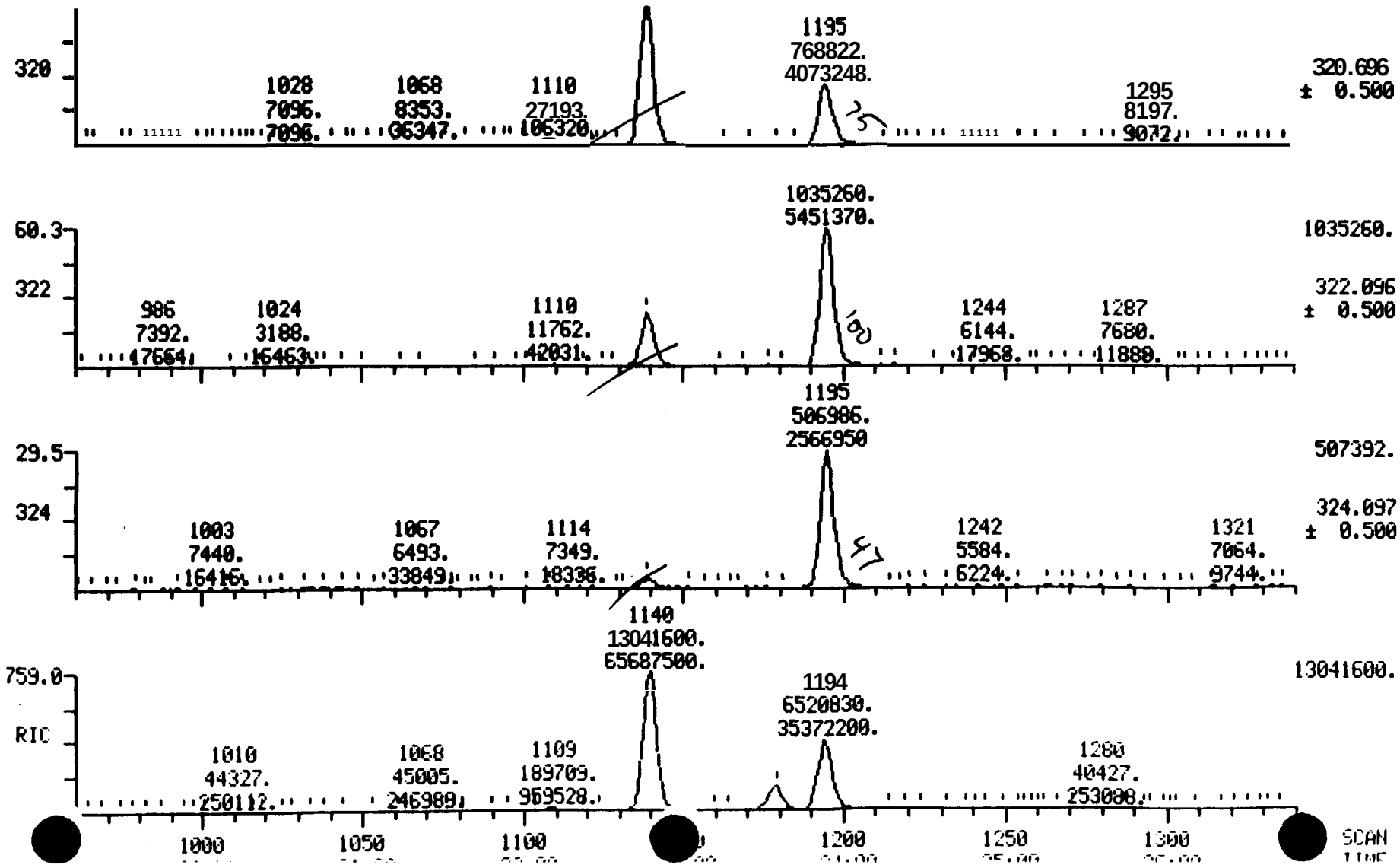
1.15


1583100.
354
354.186
± 0.500
1431
6675.
1482
6282.
1543
12551.
40192.
1588
12384.
57200.
1625
456192.
2423420.
1688
13877.
77536.
1725
3181.
9376.
356
356.106
± 0.500
2807770.
1425
7248.
10160.
1483
5469.
12160.
1539
6700.
30216.
1588
9296.
29376.
1703
11336.
15482.
29.4
465408.
358
358.107
± 0.500
2516350.
1431
6683.
17088.
1482
5224.
5224.
1559
3448.
3448.
1708
4827.
12184.
501.4
RIC
7936040.
1513
7935430.
43380300.
1472
31360.
82040.
1542
81920.
400384.
1589
3067900.
17154800.
1627
5570550.
32340900.
1690
61774.
648541.
1400
1450
1500
1550
1600
1650
1700
SCAN

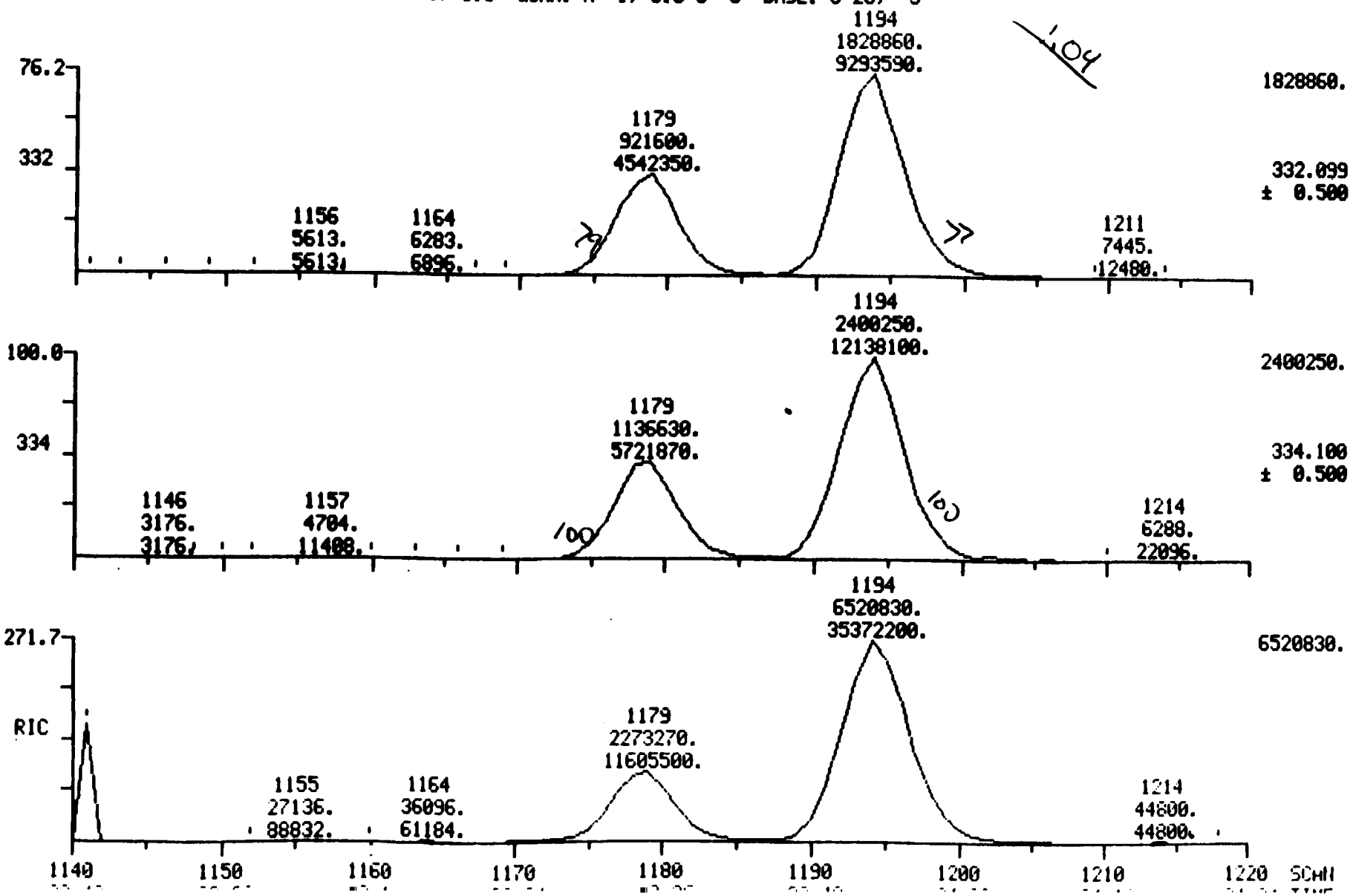

368
1755130.
368.110
± 0.500
1420
4374.
1482
5424.
1554
4446.
1600
4296.
1682
10206.
378
1122300.
370.111
± 0.500
1433
4640.
1472
6134.
1518
4489.
1565
4304.
1689
452.3
RIC
7938040.
7935430.
43380300.
1627
5570550.
32340900.
1589
3067900.
17154800.
1472
31368.
1542
81928.
400384.
1690
61774.
548541.
1400
1450
1500
1550
1600
1650
1700
1750
SCAN

3200359

TCDD


320
1028
7096.
7096.
1068
8353.
06347.
1110
27193.
106320.
1195
768822.
4073248.
1295
8197.
9072.
320.696
± 0.500
60.3
322
986
7392.
17664.
1024
3188.
16463.
1110
11762.
42031.
1035260.
5451370.
1244
6144.
17968.
1287
7680.
11889.
1035260.
322.096
± 0.500
29.5
324
1003
7440.
16416.
1067
6493.
33849.
1114
7349.
18336.
1195
506986.
2566950
1242
5584.
6224.
1321
7064.
9744.
507392.
324.097
± 0.500
759.0
RIC
1010
44327.
250112.
1068
45005.
246989.
1109
189709.
969528.
1140
13041600.
65687500.
1194
6520830.
35372200.
1280
40427.
253088.
13041600.
1000
1050
1100
1200
1250
1300
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 6850611I3 #1 SCANS 1140 TO 1220
03/26/91 15:26:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD I< NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



1.04

100

100

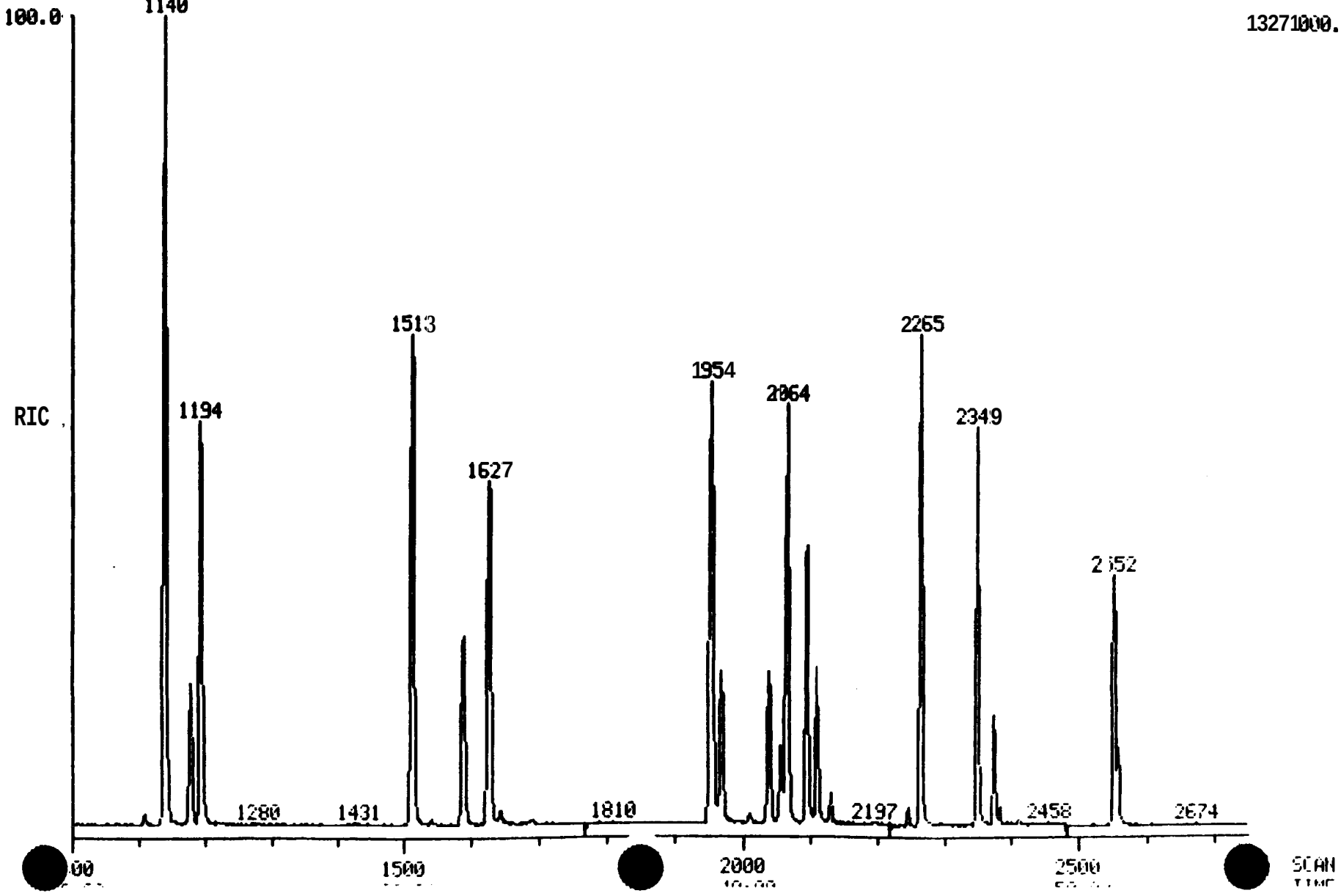
2200340

MIDRIC
03/26/91 15:26:00
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506II3 #1
CALI: CAL910306A #2

SCANS 1000 TO 2750

Calc AMP 3-27-91
3-28-91



4	419.550	420.050	0.034	3	100	40	1	0	Por
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Por
7	425.550	426.050	0.032	3	100	40	1	0	Pos
8	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.550	430.050	0.052	3	100	40	1	0	Por
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	400.050	0.054	3	100	40	1	0	Por
17	513.550	514.050	0.034	3	100	40	1	0	Pos

3/26/91 14:17:15 SCAN 2753
Acquisition stopped

3/26/91 14:17:17
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2733 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	633.7	3300.0	19.3	84095.	31.	25.

3/26/91 13:20:30 SCAN 1 OF 3000
Acquisition started

Acquire
03/26/91 13:20:00 + 0:04
Sample: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
Conds.: 60M DB-5/TOTALS.
Formula:
Submitted by: DM

Run 0:68506112
Free sectors: 24899
Instrument: Q3
Analyst: PMP

ACQUIRING
Scan: 3 of 3000
Weight: 0 000
Acct. No: PC4622

********** GC PARAMETERS **********

Loaded GC Derc:BW Current GC oven tmp: 69 DegC Injector . 300 DegC
Current GC Desc:BW GC elapsed time 1:15 min Int. oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - SO	_	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	108	0 0
3	70 - 70	_	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan
Scan time: 1.200 s

Desc: B1.
Samp. int.: 0.200ms

Mars intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
' 2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Por
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Por
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Por
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Por
16	353.650	356.130	0.054	3	100	40	1	0	Pos
17	357.450	338.130	0.052	3	100	40	1	0	Pos
18	367.650	368.130	0.054	3	100	40	1	0	Pos
19	349.450	370.130	0.052	3	100	40	1	O	Pos
20	375.430	376.130	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	l	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/26/91 13:57:01 SCAN 1769 OF 3000

MID scan
Scan time: 1.200 s

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
2	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.130	0.054	3	100	40	1	0	Po.
4	351.650	332.150	0.052	3	100	40	1	0	Pos
3	333.650	334.150	0.054	3	100	40	1	0	Pos
6	355.650	356.150	0.052	3	100	40	1	0	Pos
7	357.&SO	358.150	0.054	3	100	40	1	0	Po.
8	367.650	368.150	0.052	3	100	40	1	0	Pos
9	369.630	370.130	0.052	3	100	40	1	0	Pos
10	371.650	372.150	0.052	3	100	40	1	0	Po.
11	373.650	374.150	0.052	3	100	40	1	0	Por
12	375.650	376.150	0.052	3	100	40	1	0	Por
13	379.630	380.150	0.052	3	100	40	1	0	Po.
14	381.650	382.130	0.032	3	100	40	1	0	Por
15	385.450	306.130	0.052	3	100	40	1	0	for
16	307.650	308.150	0.032	3	100	40	1	0	Po.
17	309.630	390.150	0.052	3	100	40	1	0	PO%
18	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.650	402.150	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.054	3	100	40	1	0	Pos
21	445.550	446.030	0.052	3	100	40	1	0	Pos

3/26/91 14:06:15 SCAN 2219 OF 3000

MID scan
Scan time: 1.200 s

Derc: 03
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	311.430	372.130	0.032	3	100	40	1	0	Pos
2	373.630	374.150	0.032	3	100	40	1	0	Pos
3	373.630	376.150	0.032	3	100	40	1	0	Pos
4	305.630	386.150	0.052	3	100	40	1	0	Po.
5	387.650	388.150	0.032	3	100	40	1	0	Pos
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.630	392.150	0.032	3	100	40	1	0	Po.
8	401.650	402.150	0.032	3	100	40	1	0	Pos
9	403.630	404.150	0.054	3	100	40	1	0	Pos
10	403.550	406.050	0.054	3	100	40	1	0	Pos
11	407.550	408.050	0.032	3	100	40	1	0	Po.
12	409.530	410.050	0.034	3	100	40	1	0	Pos
13	419.550	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.050	0.054	3	100	40	1	0	Pos
15	423.550	424.050	0.054	3	100	40	1	0	Pos
16	425.530	426.050	0.032	3	100	40	1	0	Po.
17	433.550	436.050	0.032	3	100	40	1	0	Pos
18	437.550	438.050	0.032	3	100	40	1	0	Pos
19	479.550	480.050	0.034	3	100	40	1	0	PO%

3/26/91 14:11:42 SCAN 2484 OF 3000

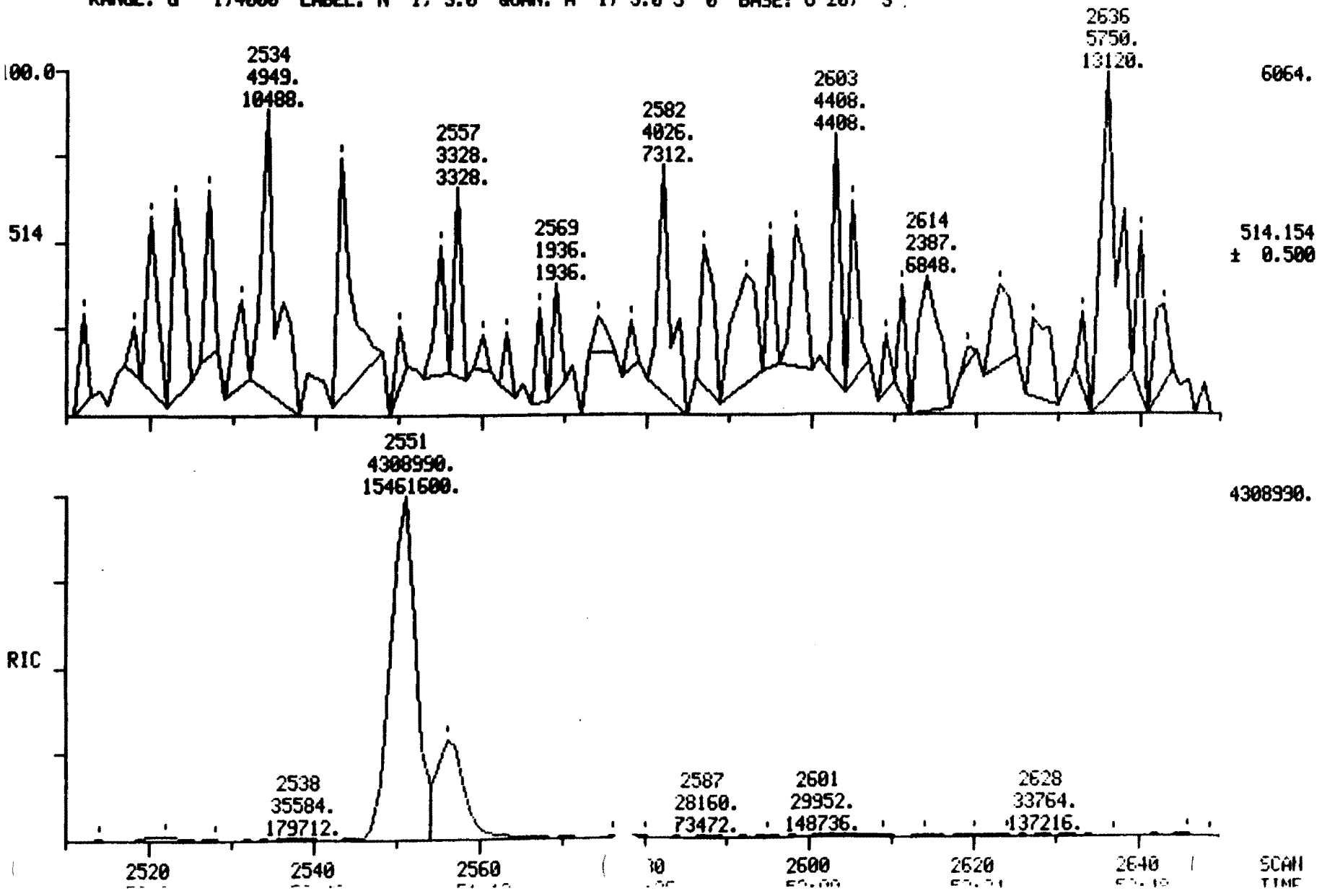
MID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

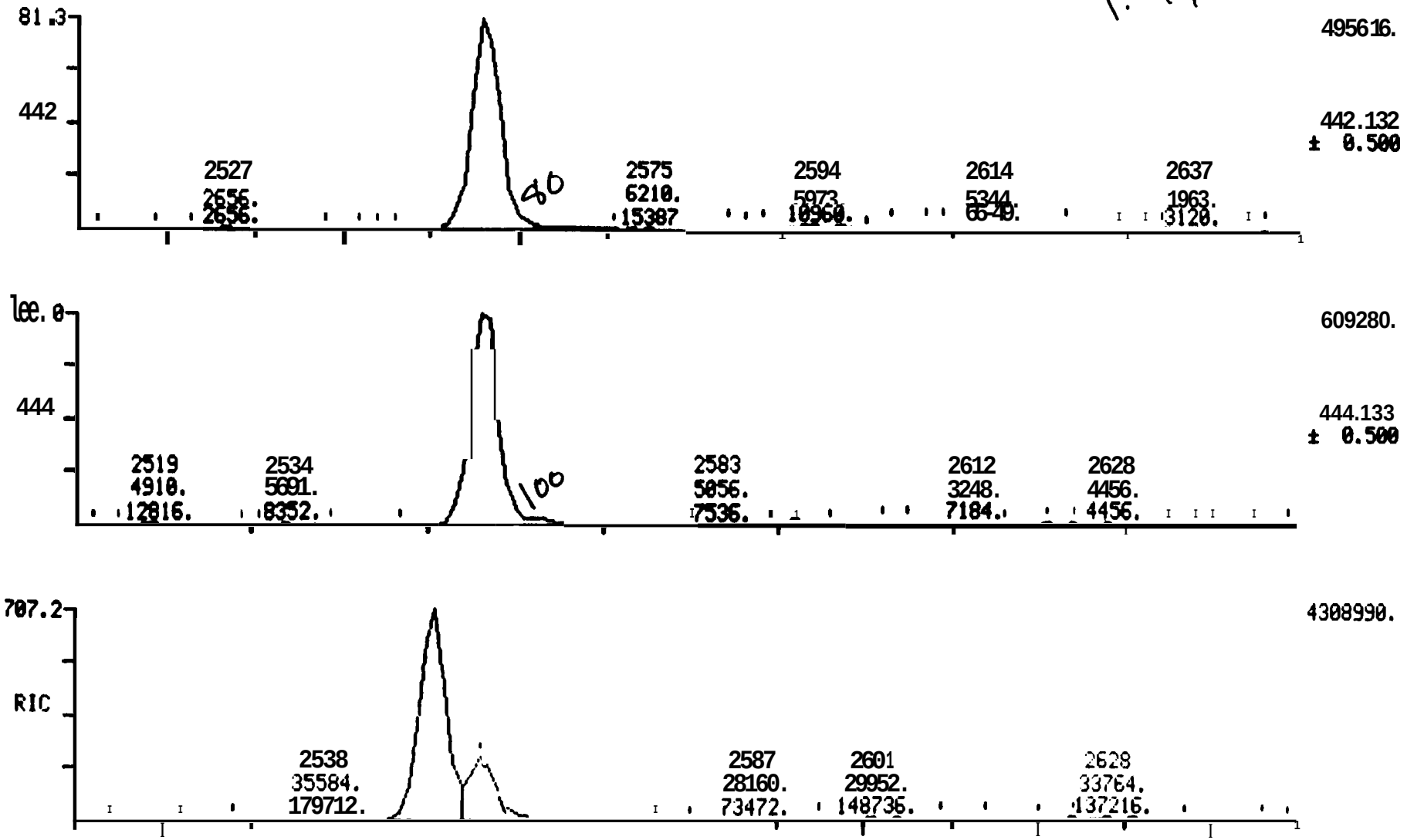
Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.030	0.052	3	100	40	1	0	Por
3	409.550	410.050	0.054	3	100	40	1	0	Por

MIDRIC+MASS CHROMATOGRAM DATA: 68506II2 #1 SCANS 2510 TO 2650
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



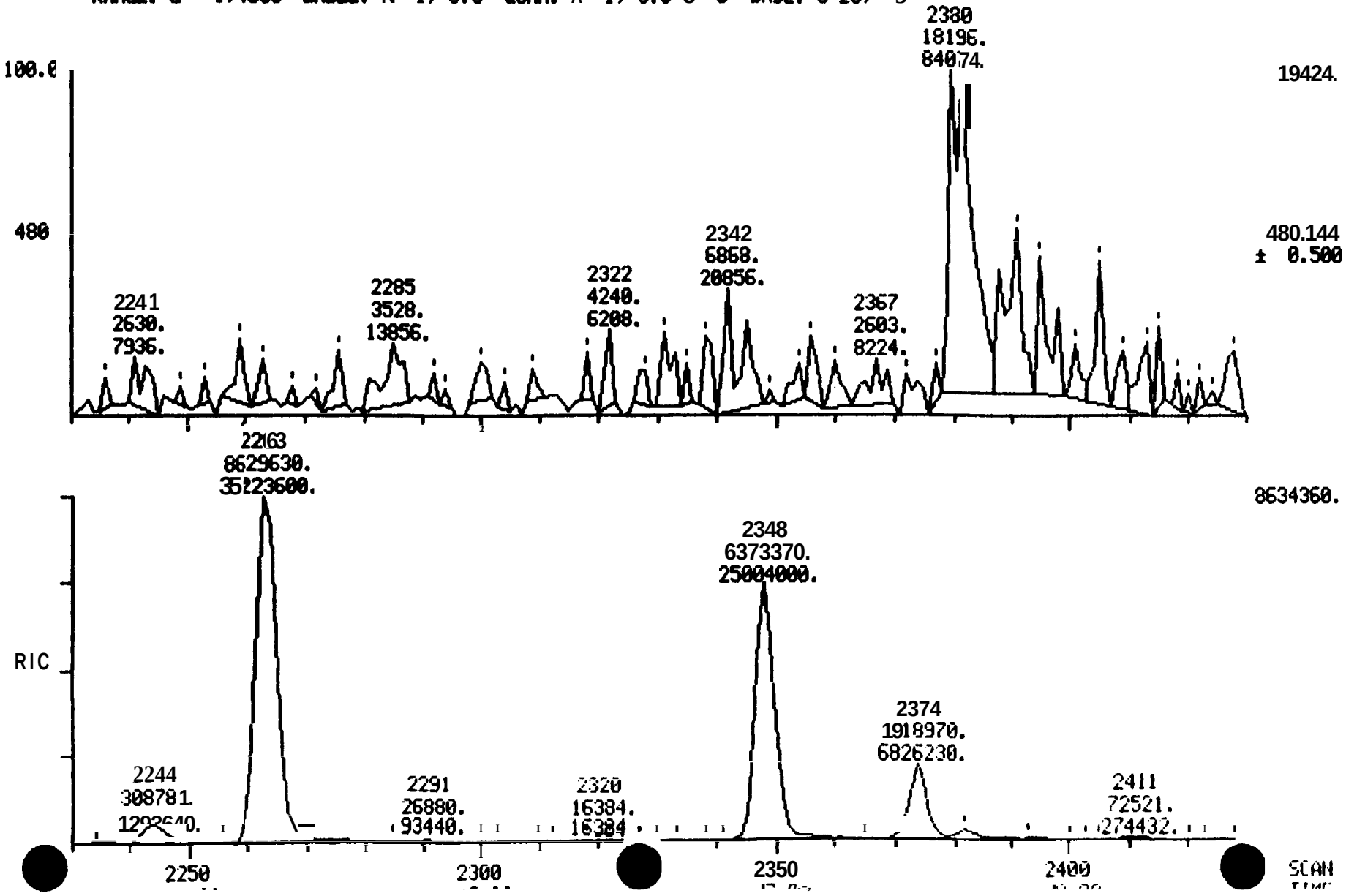
OCDF

1.47



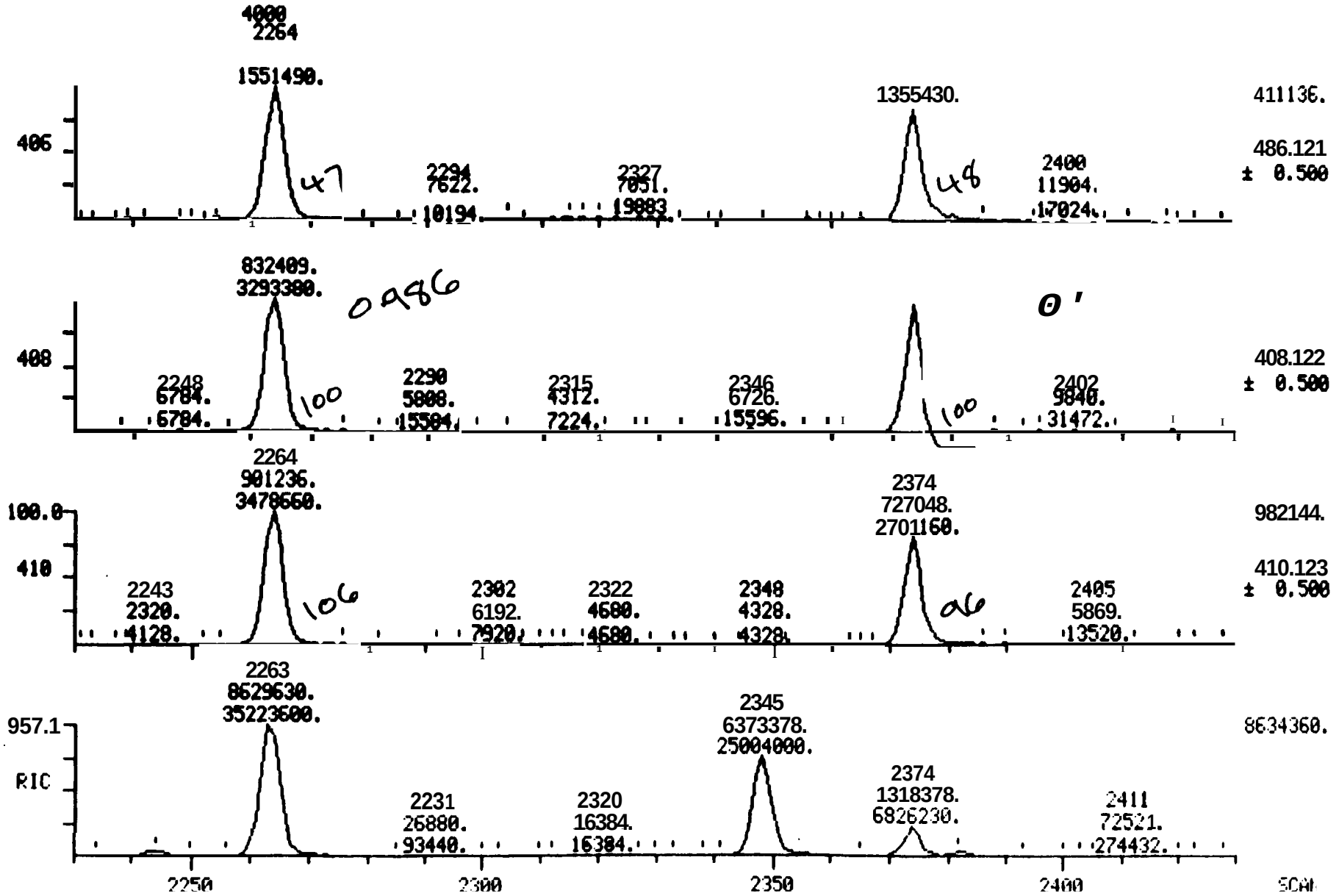
3200343

MIDRIC+MASS CHROMATOGRAM DATA: 68506II2 #1 SCANS 2230 TO 2430
03/26/91 13:29:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 11 NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

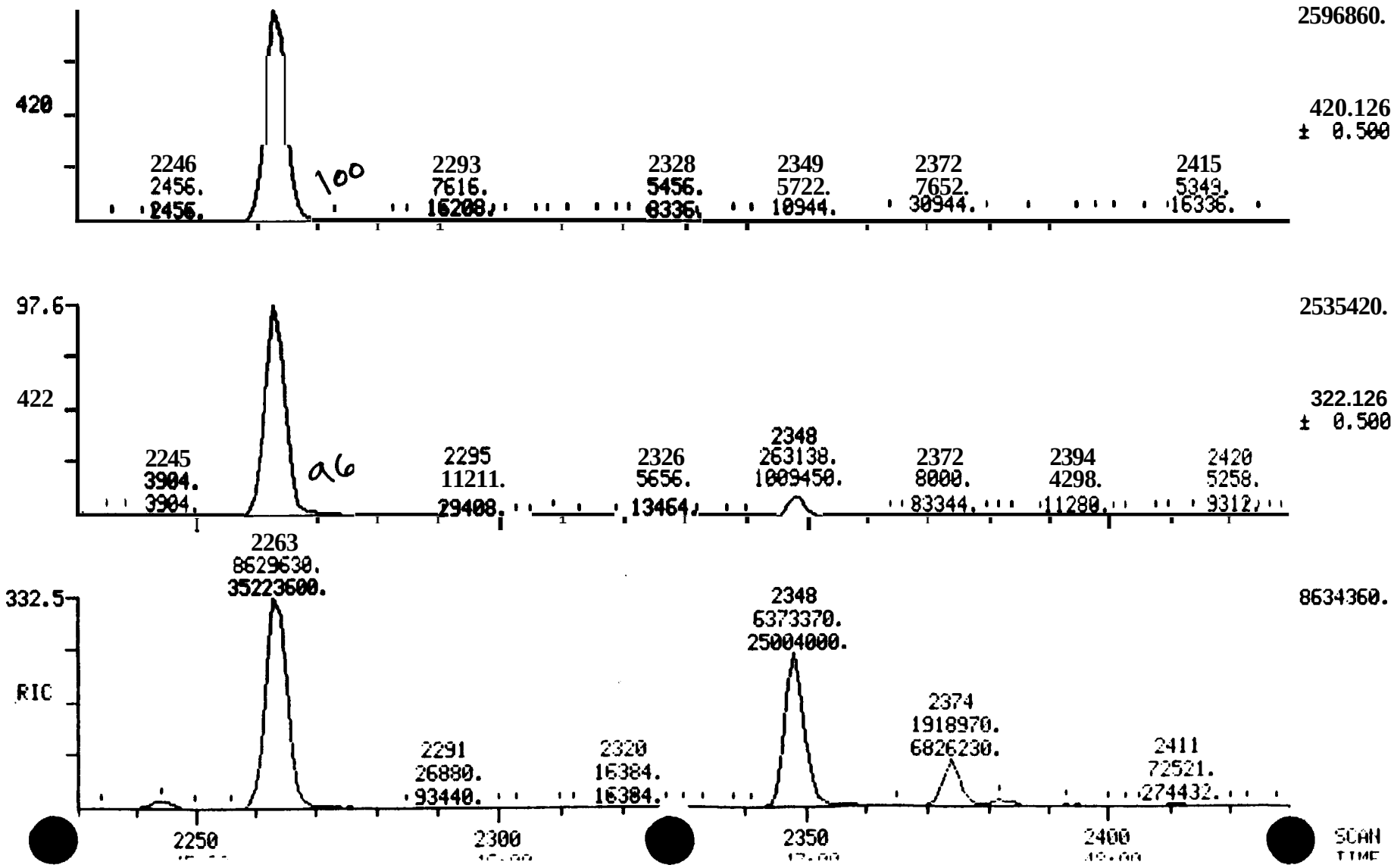


HpCDF

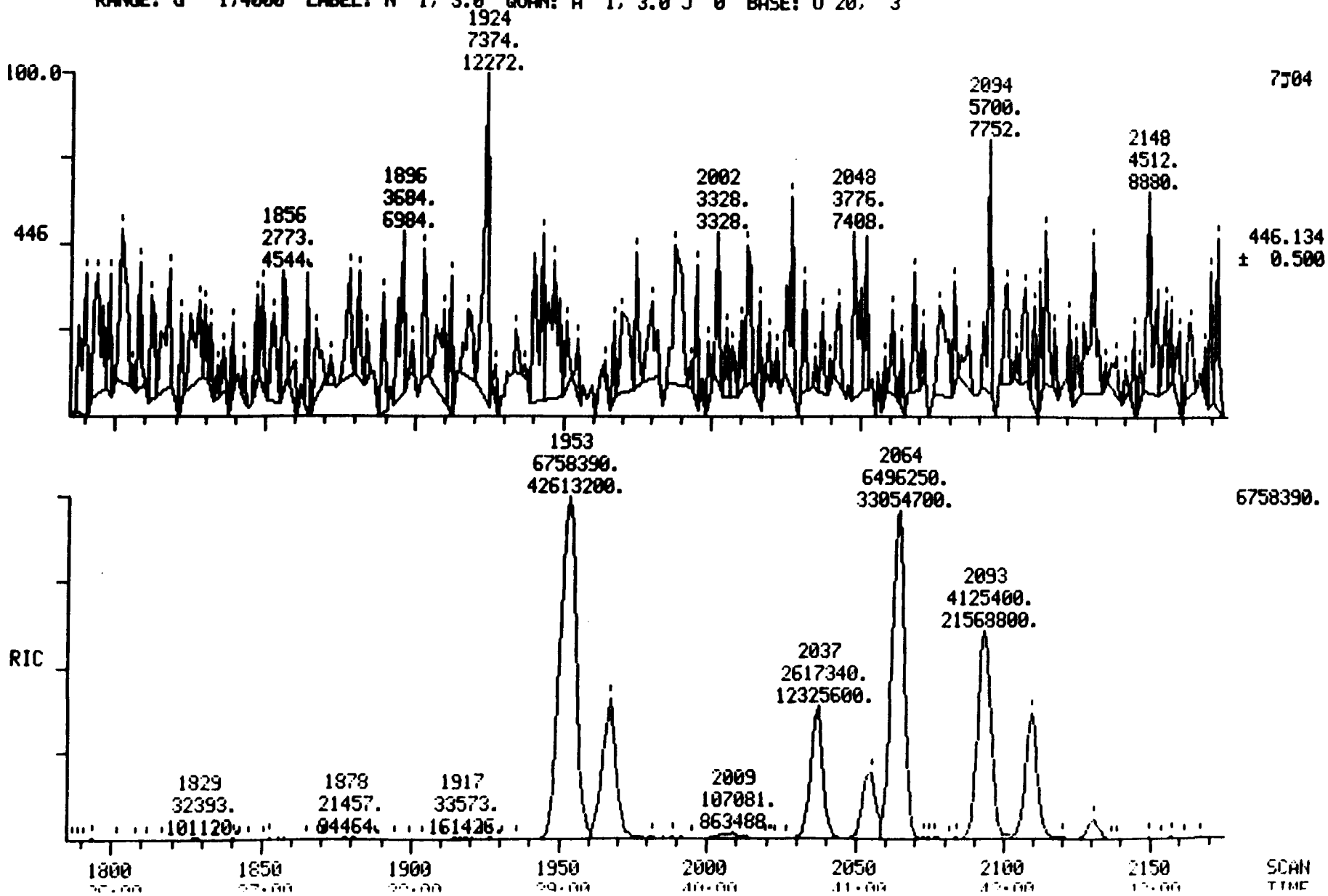
MIDRIC+MASS CHROMATOGRAMS DATA: 68506II2 #1 SCANS 2230 TO 2430
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.



320 0344

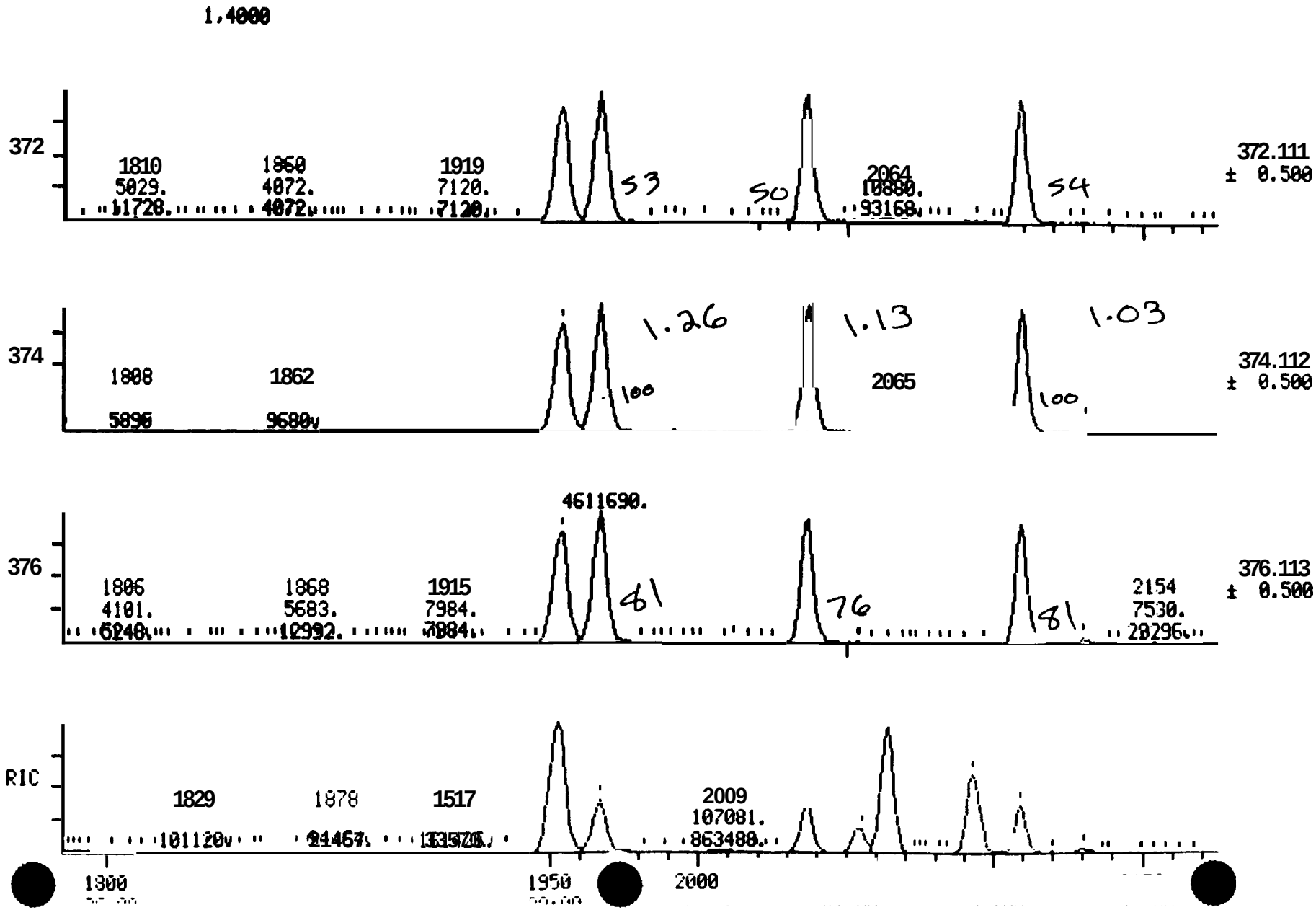

2596860.
420
420.126
± 0.500
2246
2456.
2456.
100
2293
7616.
16208.
2328
5456.
8336.
2349
5722.
10944.
2372
7652.
30944.
2415
5349.
16336.
97.6
2535420.
422
322.126
± 0.500
2245
3904.
3904.
a6
2295
11211.
29408.
2326
5656.
13464.
2348
263138.
1009450.
2372
8000.
83344.
2394
4298.
11280.
2420
5258.
9312.
332.5
8634360.
RIC
2263
8629630.
35223600.
2291
26880.
93440.
2320
16384.
16384.
2348
6373370.
25004000.
2374
1918970.
6826230.
2411
72521.
274432.
2250
2300
2350
2400
SCAN
TIME

MIDRIC+MASS CHROMATOGRAM DATA: 68506II2 #1 SCANS 1785 TO 2175
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200345

HpxCDF


1.4000
372
1810
5029.
1860
4072.
1919
7120.
53
50
2064
10880.
93168.
54
372.111
± 0.500
374
1808
5896
1862
9680v
1.26
100
1.13
2065
1.03
100
374.112
± 0.500
376
1806
4101.
1868
5683.
1915
7984.
4611690.
81
76
81
2154
7530.
376.113
± 0.500
RIC
1829
101120v
1878
1517
2009
107081.
863488.
1800
1950
2000

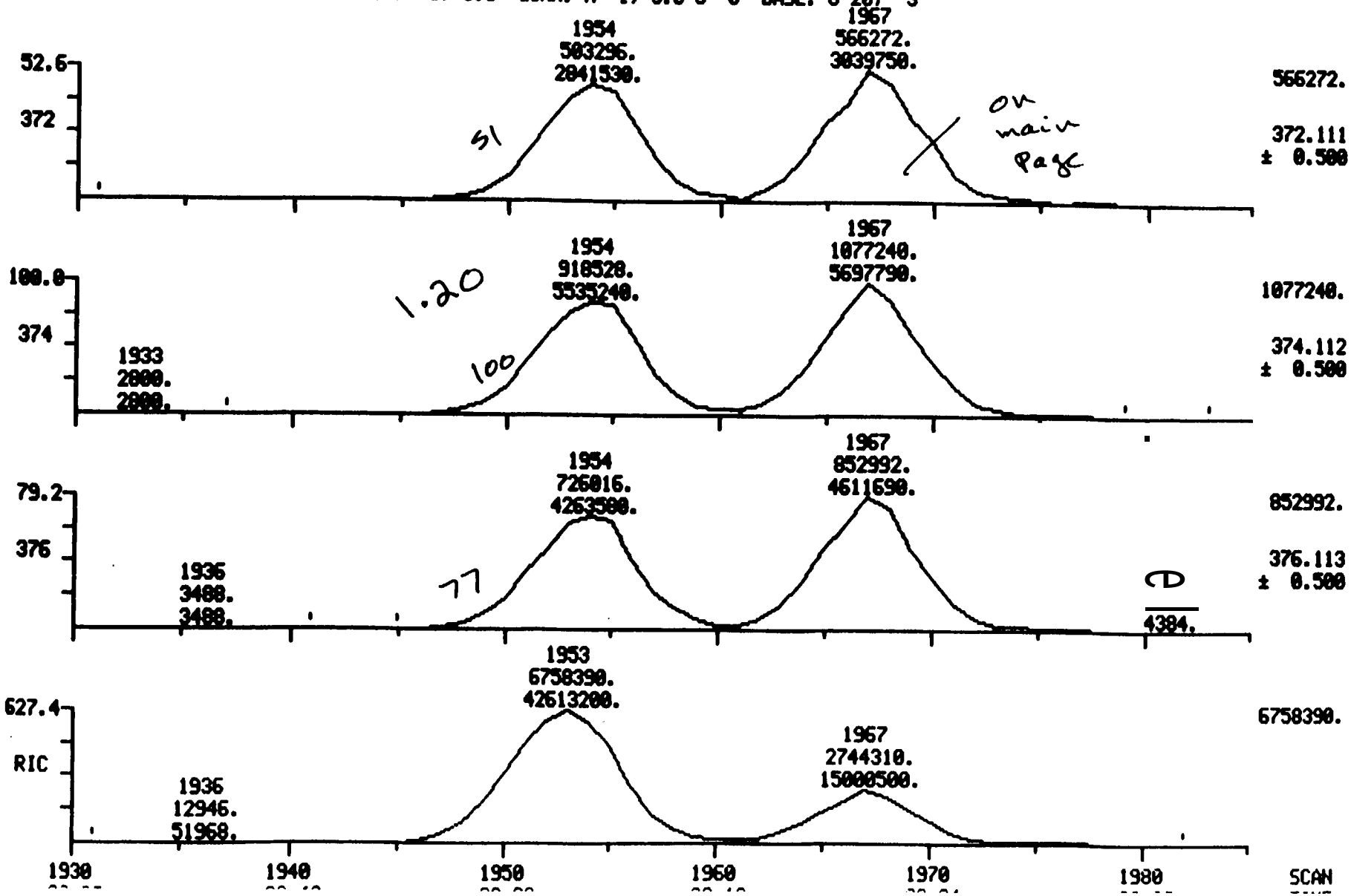
1/1

HxCDF

MIDRIC+MASS CHROMATOGRAMS
03/26/91 13:20:00
SAMPLE: 2UL OF 685:06 STD II [illegible]IVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

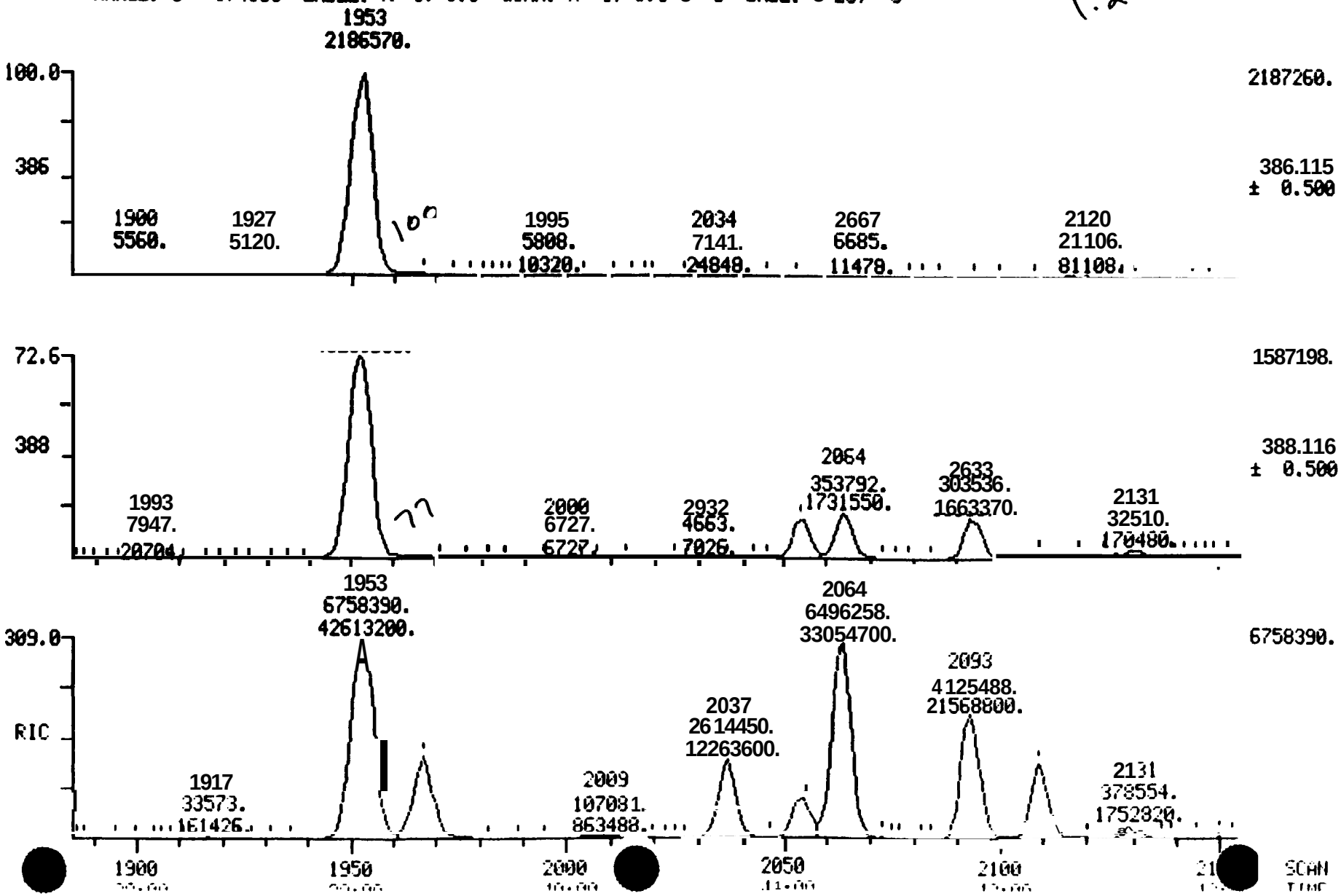
DATA: 68506112 #1
CALI: CAL910306A #2

SCANS 1930 TO 1985

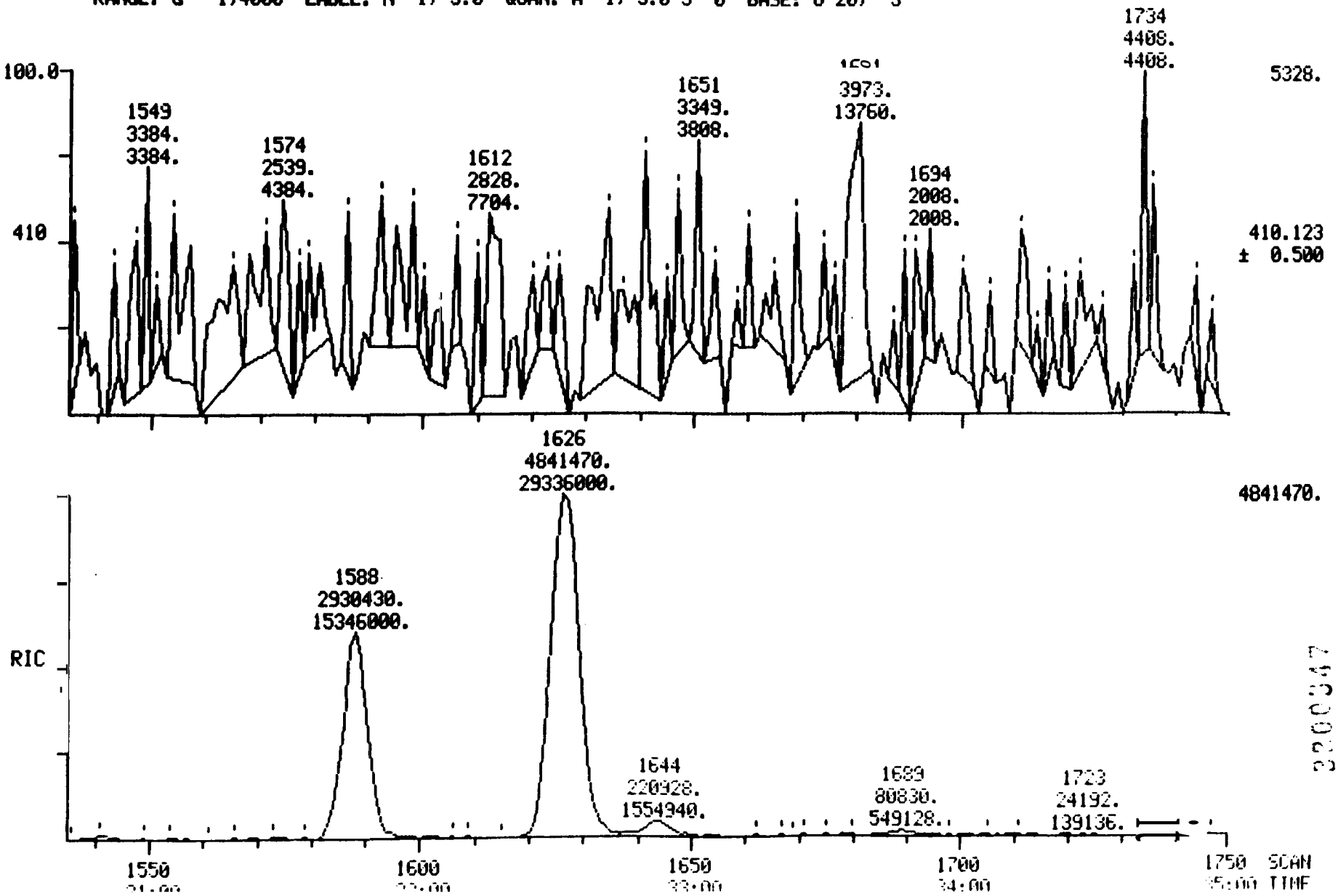


MIDRIC+MASS CHROMATOGRAMS DATA: 6850GII2 #1 SCANS 1885 TO 2155
83/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

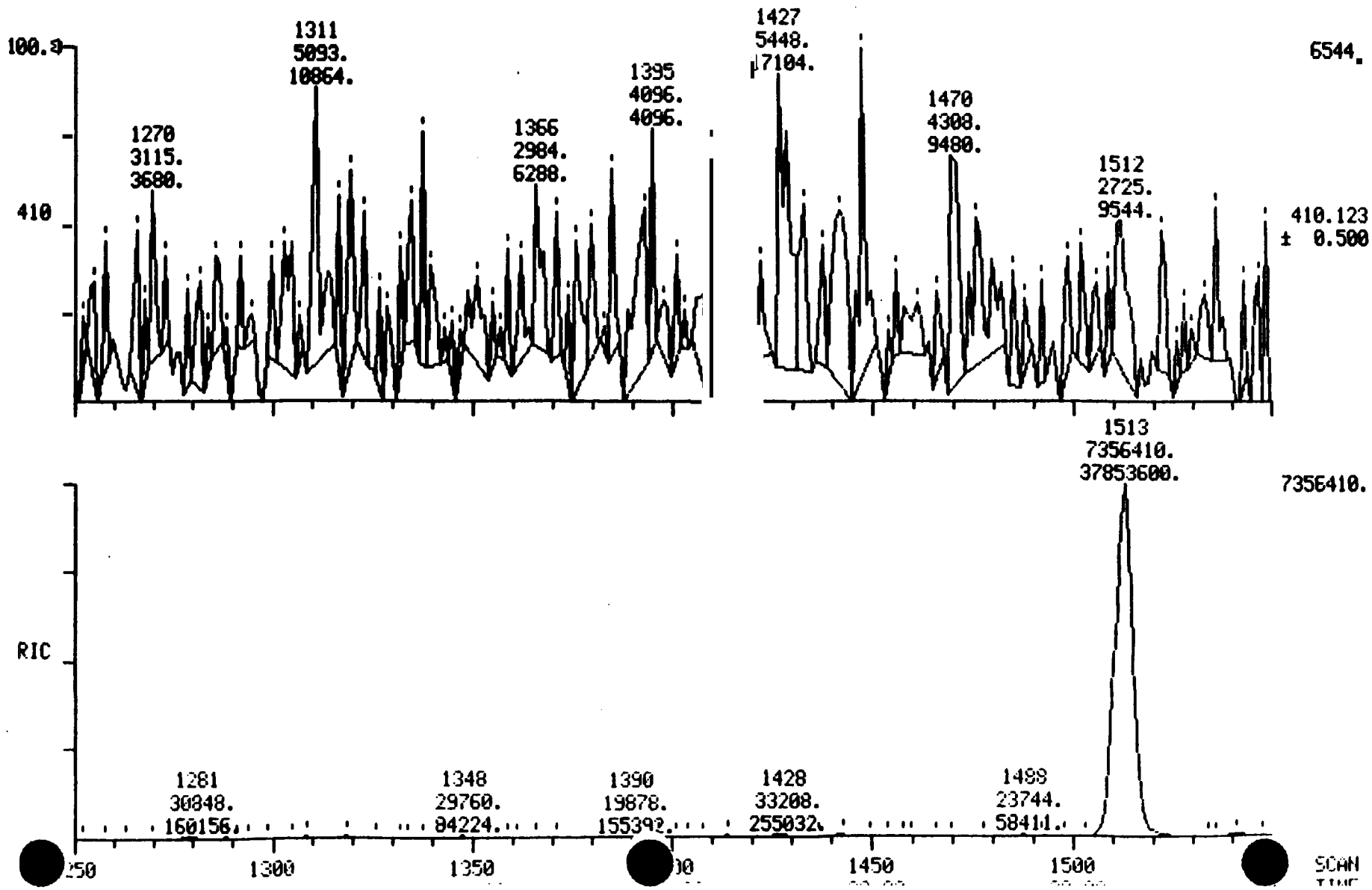
1.20

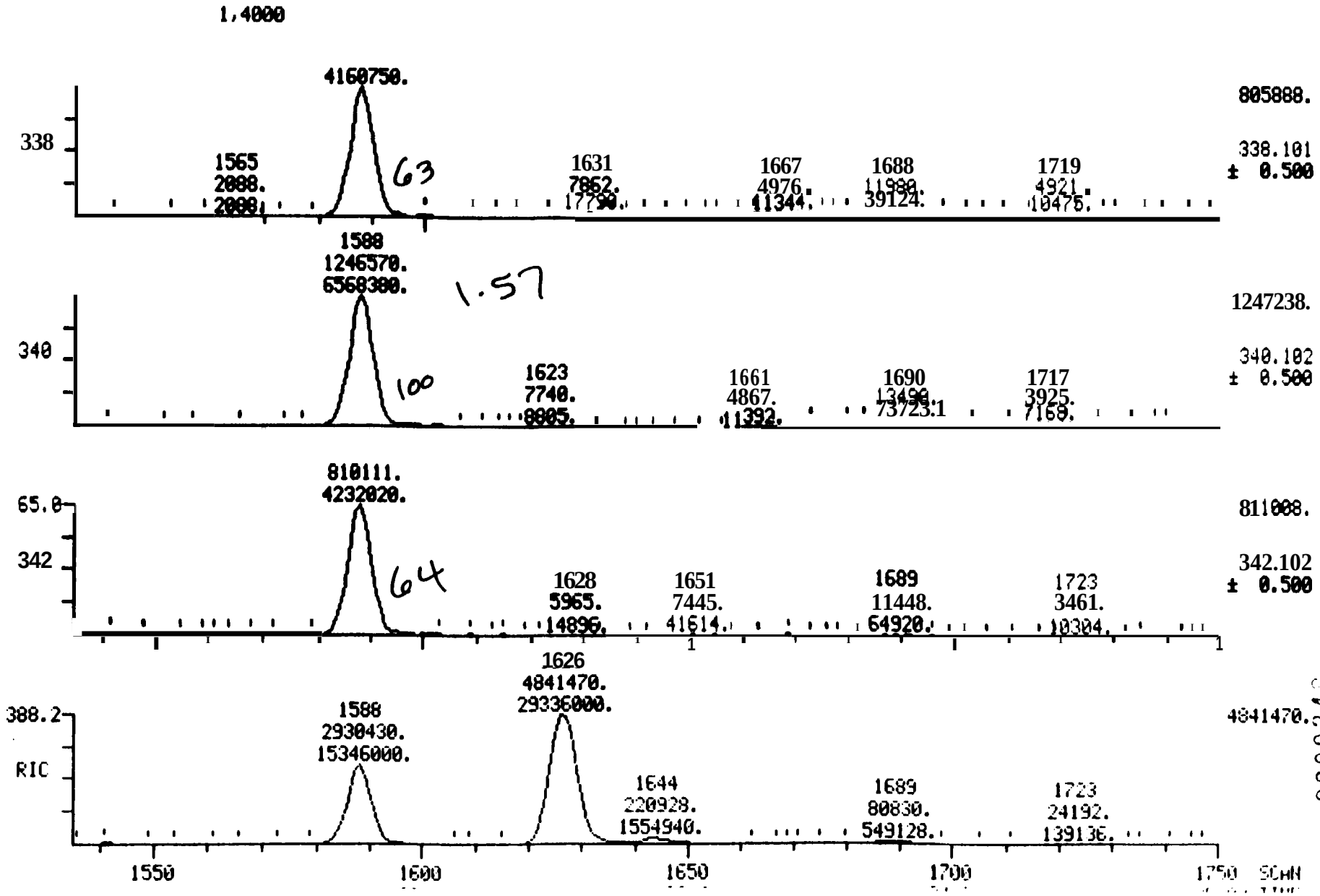


MIDRIC+MASS CHROMATOGRAM DATA: 68506II2 #1 SCANS 1535 TO 1750
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



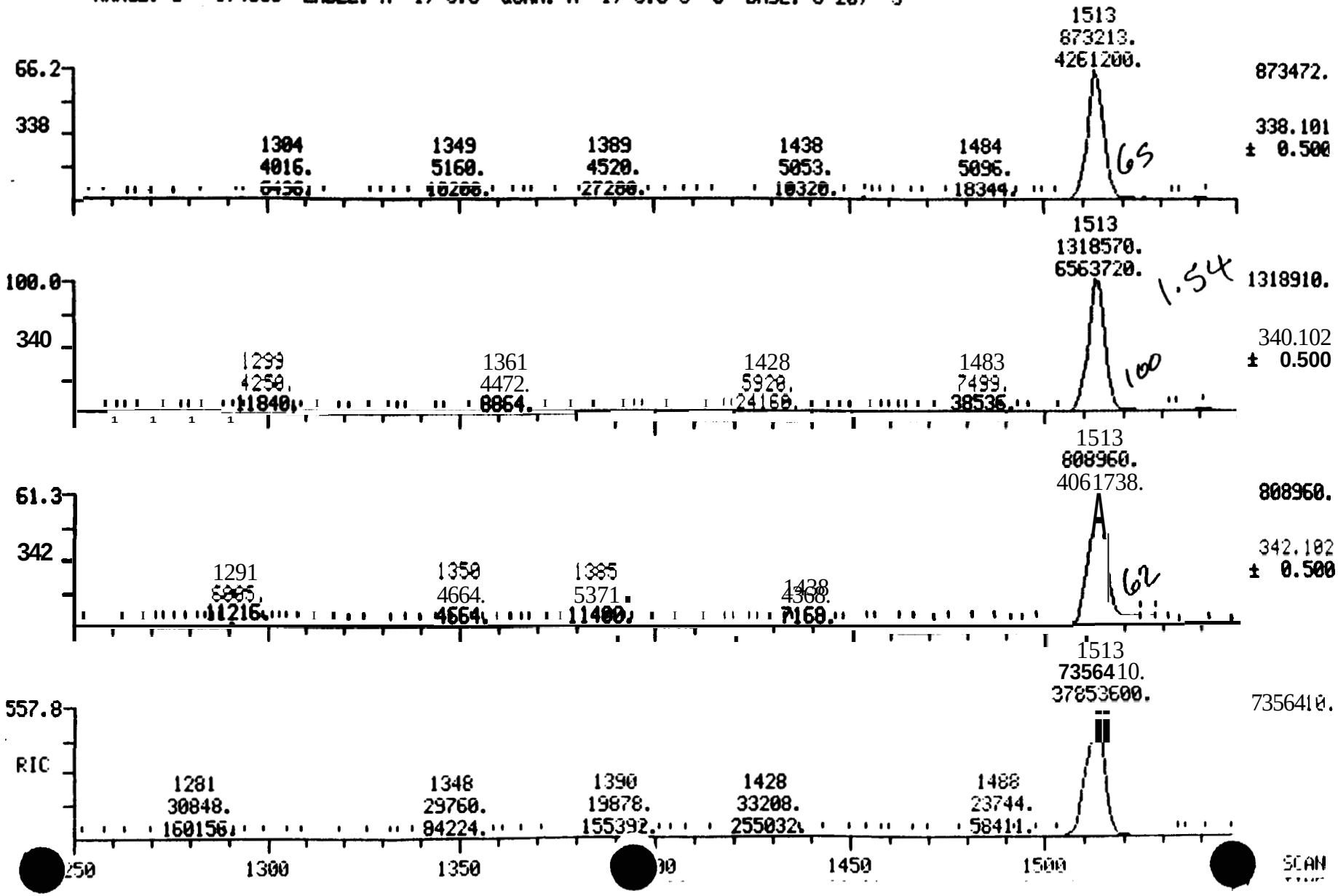
MIDRIC+MASS CHROMATOGRAM DATA: 68506II2 #1 SCANS 1250 TO 1550
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD II NATIVES @ 350PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



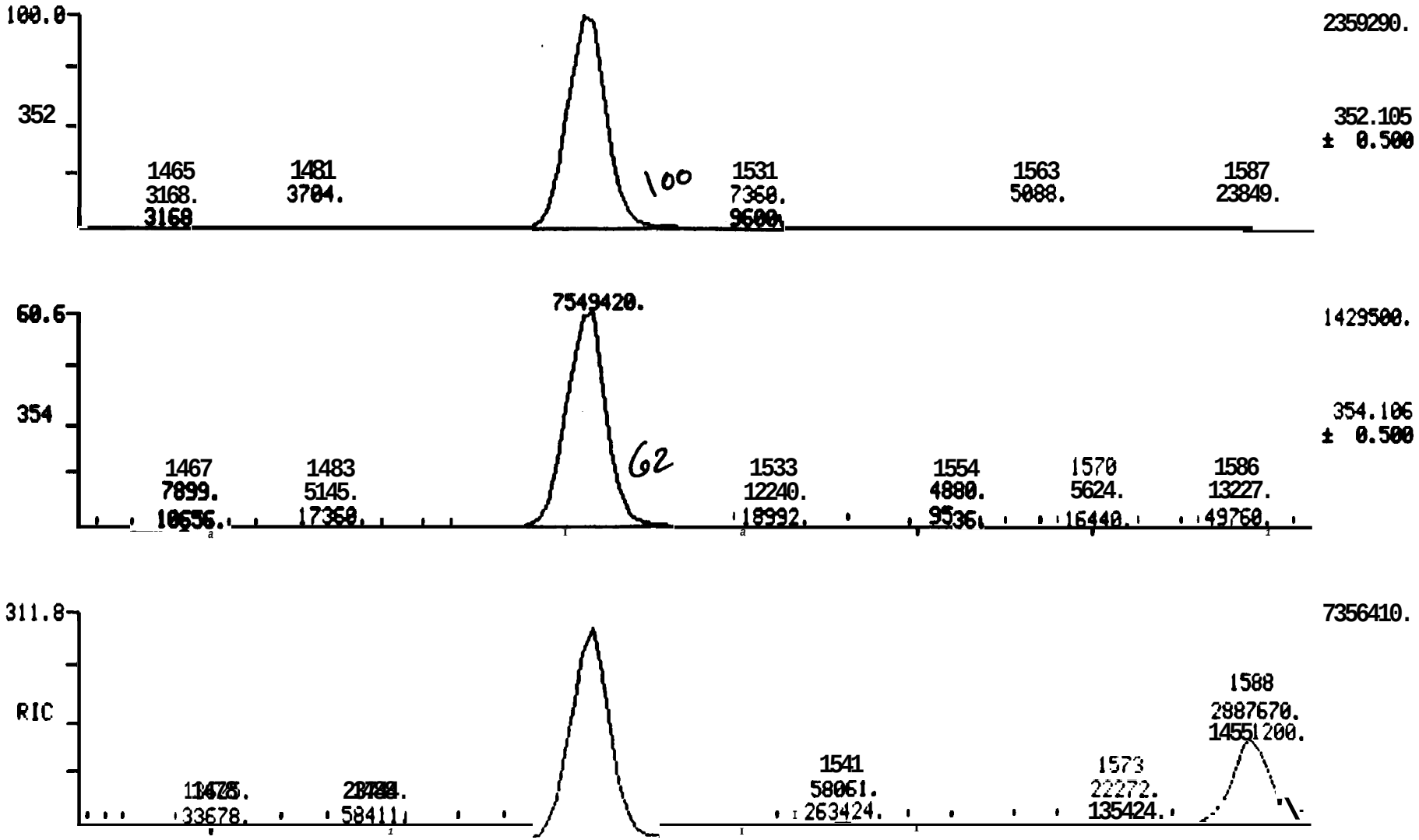

1.4000
4160750.
338
1565
2088.
2088.
63
1631
7852.
17790.
1667
4976.
11344.
1688
11980.
39124.
1719
4921.
10475.
805888.
338.101
± 0.500
1588
1246570.
6568300.
1.57
340
100
1623
7740.
8805.
1661
4867.
11392.
1690
13490.
73723.1
1717
3925.
7168.
1247238.
340.102
± 0.500
810111.
4232020.
65.0
342
64
1628
5965.
14896.
1651
7445.
41614.
1689
11448.
64920.
1723
3461.
10304.
811008.
342.102
± 0.500
1626
4841470.
29336000.
388.2
RIC
1588
2930430.
15346000.
1644
220928.
1554940.
1689
80830.
549128.
1723
24192.
139136.
4841470.
1550
1600
1650
1700
1750
SCAN

3200343

MIDRIC+MASS CHROMATOGRAMS DATA: 68506112 #1 SCANS 1250 TO 1550
03/26/91 13:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STO II NATIVES @ 350PPB RUN 2
CONDS. : 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



SAMPLE:



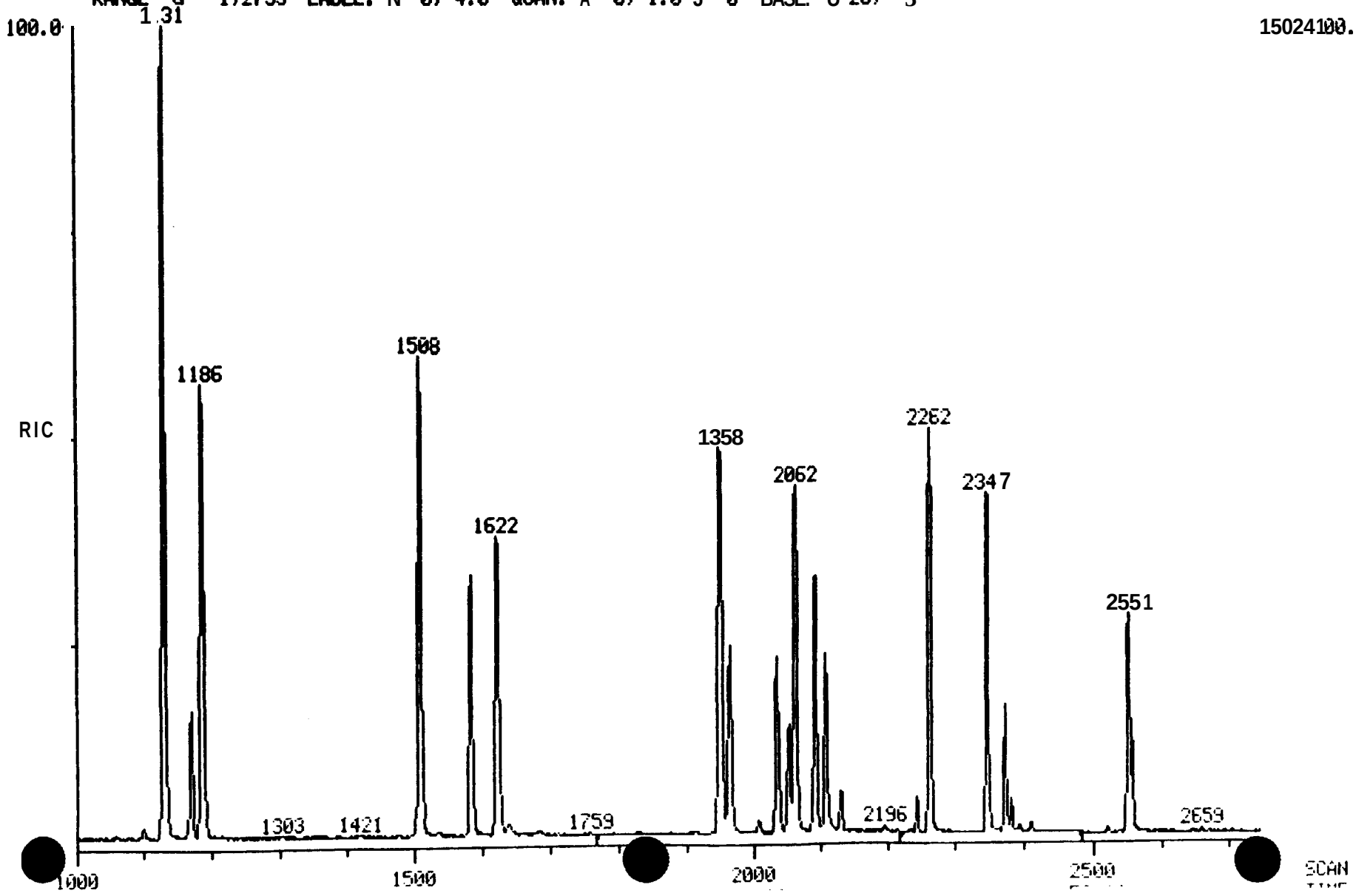
3200034

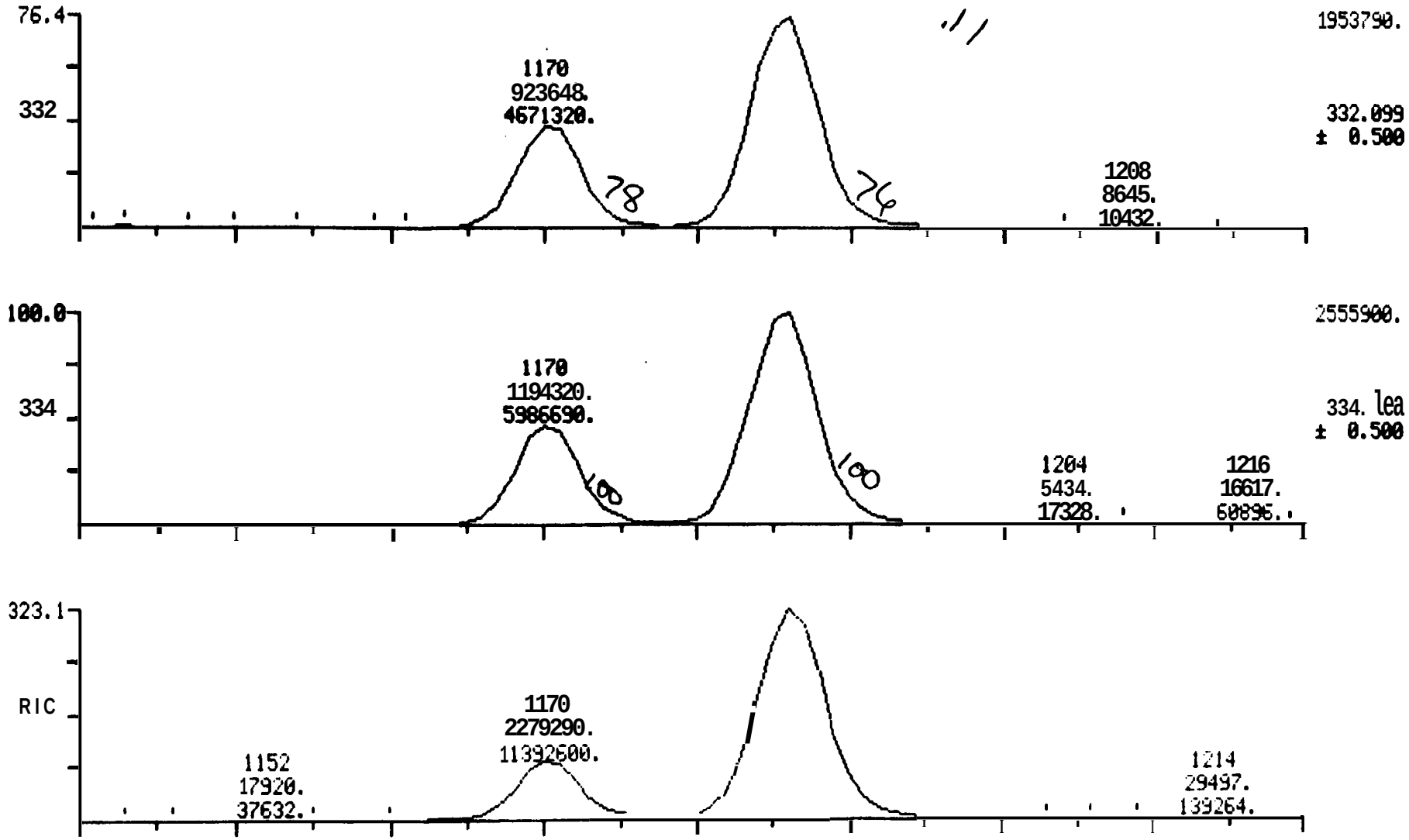
3200350

MIDRIC
03/26/91 18:37:00
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506III3 #1
CALI: CAL910306A #2

SCANS 1000 TO 2750 Cole PMP 3-27-91
3-27-91




76.4
332
1170
923648.
4671320.
78
76
1208
8645.
10432.
1953790.
332.099
± 0.500
100.0
334
1170
1194320.
5986690.
100
100
1204
5434.
17328.
1216
16617.
60896.
2555900.
334.
± 0.500
323.1
RIC
1152
17920.
37632.
1170
2279290.
11392600.
1214
29497.
139264.

4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.350	424.050	0.054	3	100	40	1	0	Pos
7	423.550	426.050	0.052	3	100	40	1	0	Pos
8	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.550	430.050	0.052	3	100	40	1	0	Pos
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	480.050	0,054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3/26/91 18:30:38 SCAN 2793
Acquisition stopped

3/26/91 18:30:41
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2753 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	636.0	3300.0	19.3	84068.	31.	25.

MID scan
Scan time: 1.200 s

Desc: G2
Samp. Int.: 0.200 ms

Mass intervals. 21
Master rate. 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
2	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353.650	354.150	0.054	3	100	40	1	0	Pos
6	355.650	356.150	0.052	3	100	40	1	0	Pos
7	357.650	358.150	0.054	3	100	40	1	0	Pos
8	367.650	368.150	0.052	3	100	40	1	0	Pos
9	369.630	370.150	0.052	3	100	40	1	0	Pos
10	371.650	372.150	0.052	3	100	40	1	0	Pos
11	373.650	374.150	0.052	3	100	40	1	0	Pos
12	375.650	376.150	0.052	3	100	40	1	0	Pos
13	379.650	380.150	0.052	3	100	40	1	0	Pos
14	381.650	382.150	0.052	3	100	40	1	0	Pos
15	385.650	386.150	0.052	3	100	40	1	0	Pos
16	387.650	388.150	0.052	3	100	40	1	0	Pos
17	389.650	390.150	0.052	3	100	40	1	0	Pos
18	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.630	402.150	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.054	3	100	40	1	0	Pos
21	445.550	446.050	0.052	3	100	40	1	0	Pos

3/26/91 18:19:38 SCAN 2219 OF 4000

HID scan
Scan time: 1.200 s

Desc: 03
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
2	373.650	374.150	0.052	3	100	40	1	0	Pos
3	375.650	376.150	0.052	3	100	40	1	0	Por
4	385.650	386.150	0.052	3	100	40	1	0	?os
5	397.650	380.150	0.032	3	100	40	1	0	Pos
6	389.630	390.150	0.032	3	100	40	1	0	Por
7	391.650	392.150	0.052	3	100	40	1	0	Pos
8	401.650	402.150	0.052	3	100	40	1	0	Por
9	403.650	404.150	0.054	3	100	40	1	0	Pos
10	405.550	406.050	0.034	3	100	40	1	0	Pos
11	407.550	408.050	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.034	3	100	40	1	0	Pos
13	419.550	420.050	0.054	3	100	40	1	0	Por
14	421.530	422.050	0.054	3	100	40	1	0	Por
15	423.550	424.050	0.034	3	100	40	1	0	Pos
16	425.550	426.050	0.052	3	100	40	1	0	Pos
17	435.550	436.050	0.052	3	100	40	1	0	Pos
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	Pos

3/26/91 18:25:05 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Tine	MPW	MFW	HA	TH	BL	ION
1	405.550	406.030	0.054	3	100	40	1	0	Pos
2	407.550	408.030	0.032	3	100	40	1	0	Pos
3	409.550	410.050	0.054	3	100	40	1	0	Pos

3/26/91 17:33:53 SCAN 1 OF 4000
Acquisition started

Acquire Run 0:6850611I2 ACQUIRING
03/26/91 17:33:00 + 0:04 Free sectors: 22609 Scan: 3 of 4000
Sample: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
Conds.: 60M DB-5/TOTALS.
Formula: Instrument: G3 Weight: 0.000
Submitted by: DM Analyst: ST Acct. No. PC4622

********** GC PARAMETERS **********
Loaded CC Desc:BW Current GC oven tmp: 84 DegC Injector : 300 DegC
Current GC Desc:BW GC elapsed time : 2:30 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0 0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

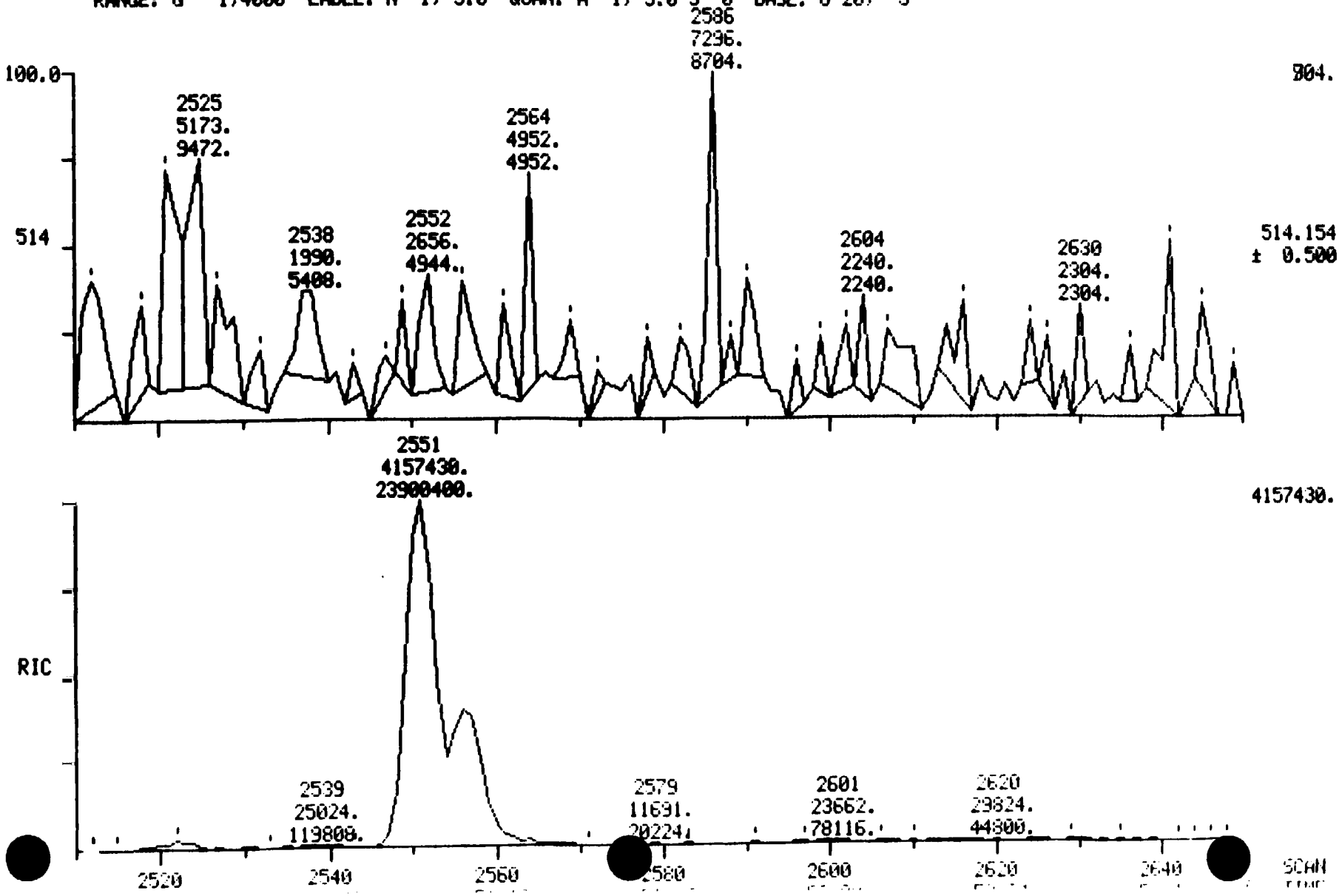
MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPU	MFU	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.690	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.130	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Poo
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	355.650	356.130	0.054	3	100	40	1	0	Pos
17	337.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	373.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of rcqu buffers	16	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

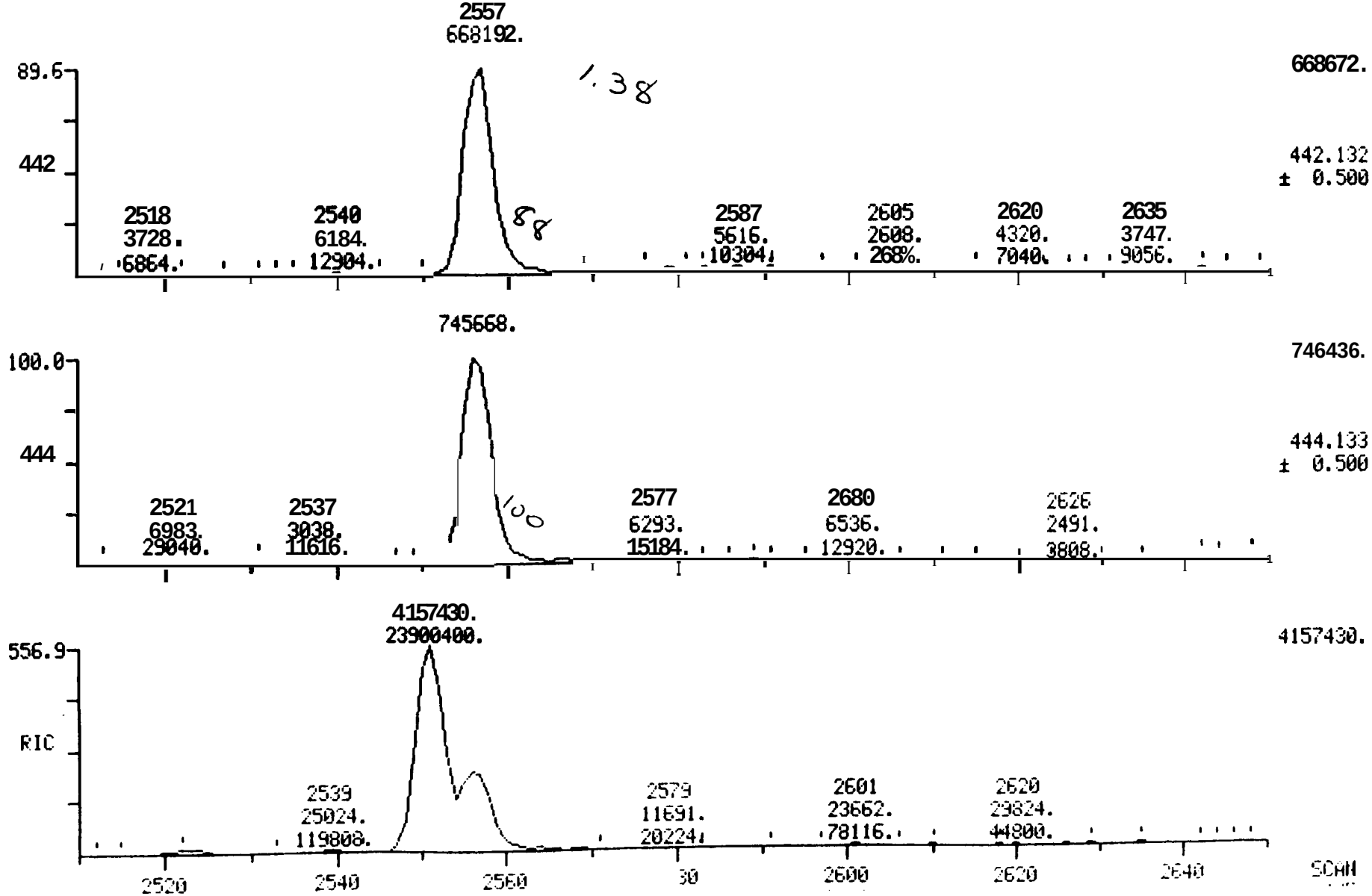
3/26/91 18:10:24 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAM DATA: 68506III2 #1 SCANS 2510 TO 2650
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III [illegible]IVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



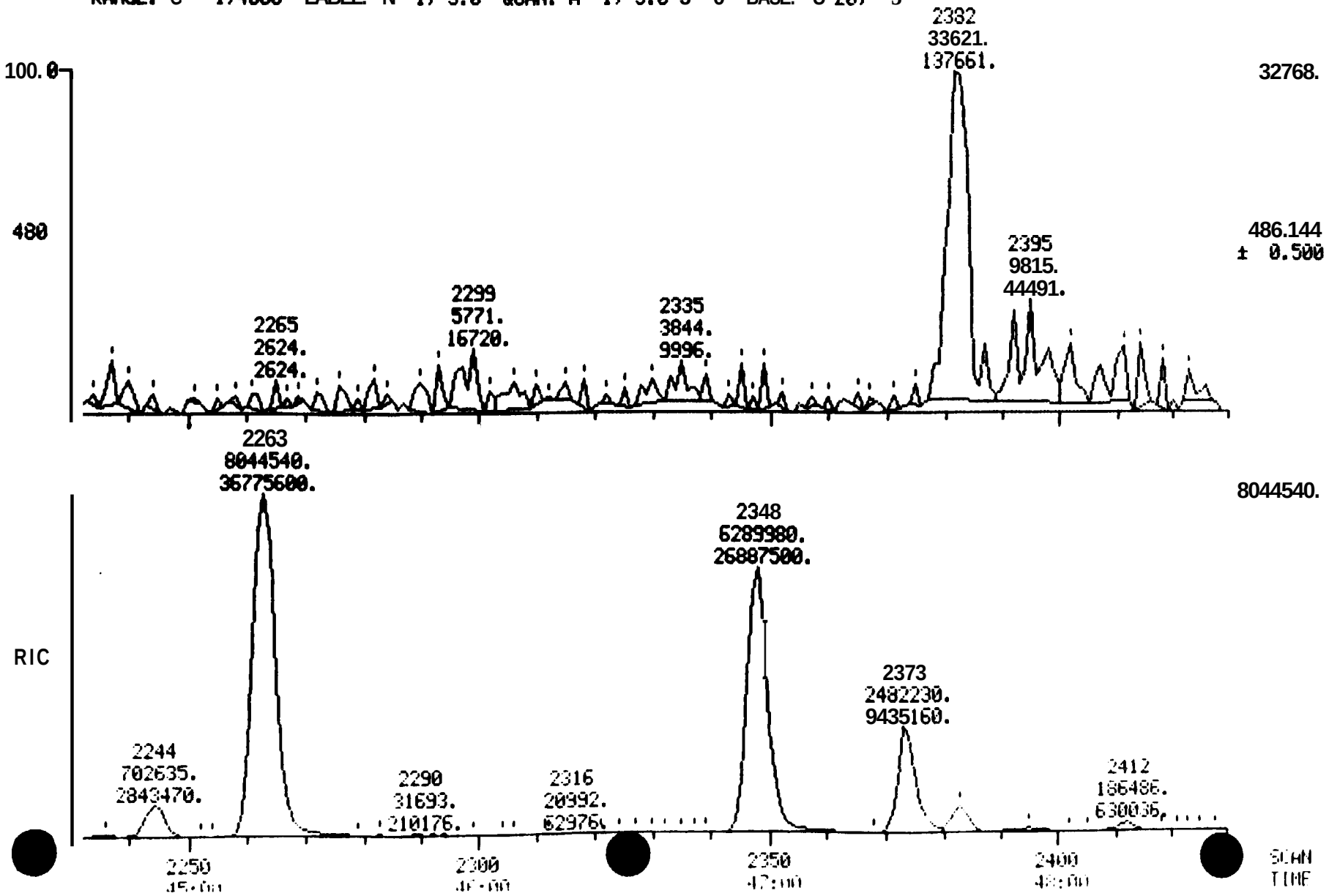
3200352

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 2510 TO 2650
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 588 PPB RUN 2
CONDS. : 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

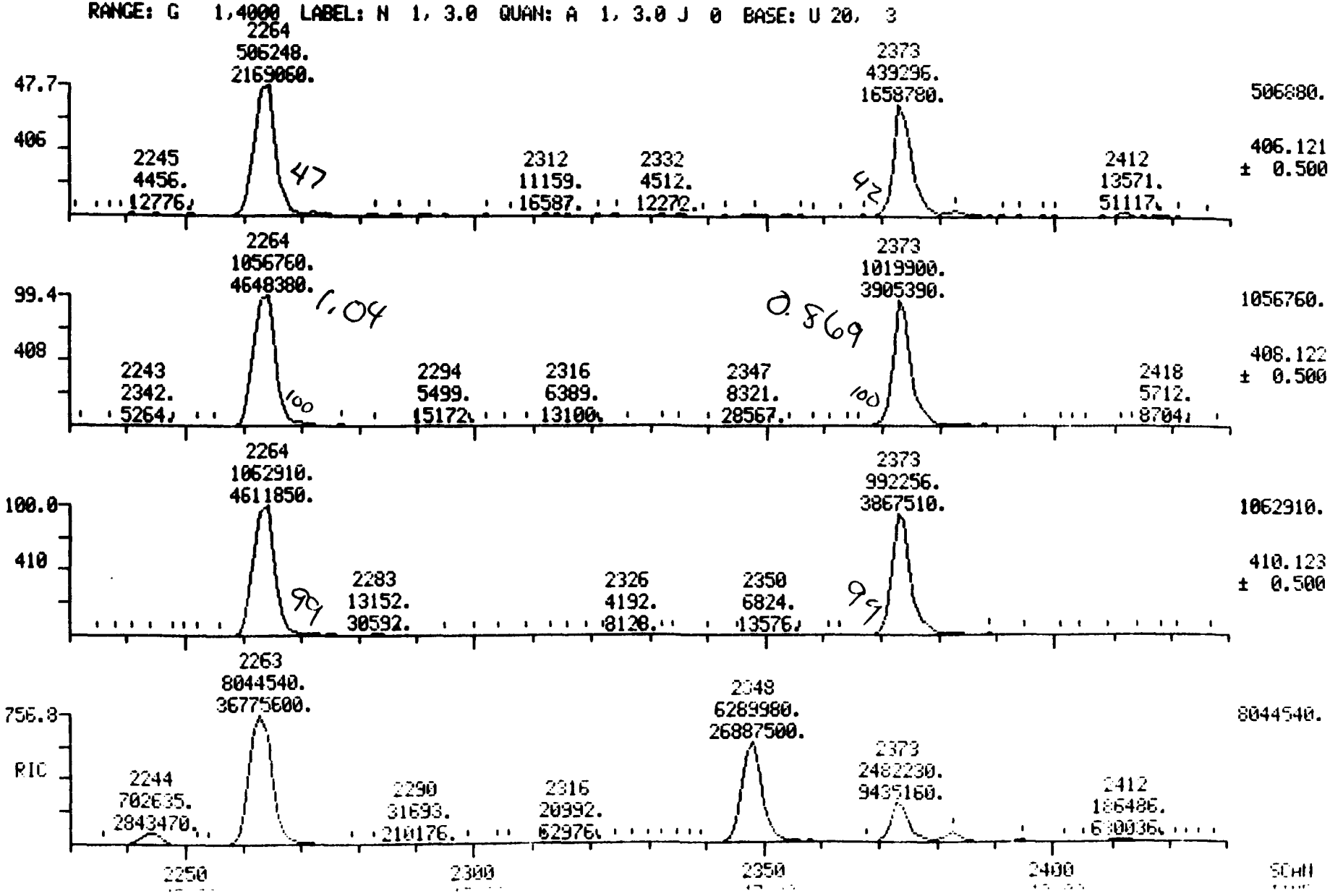


3200353

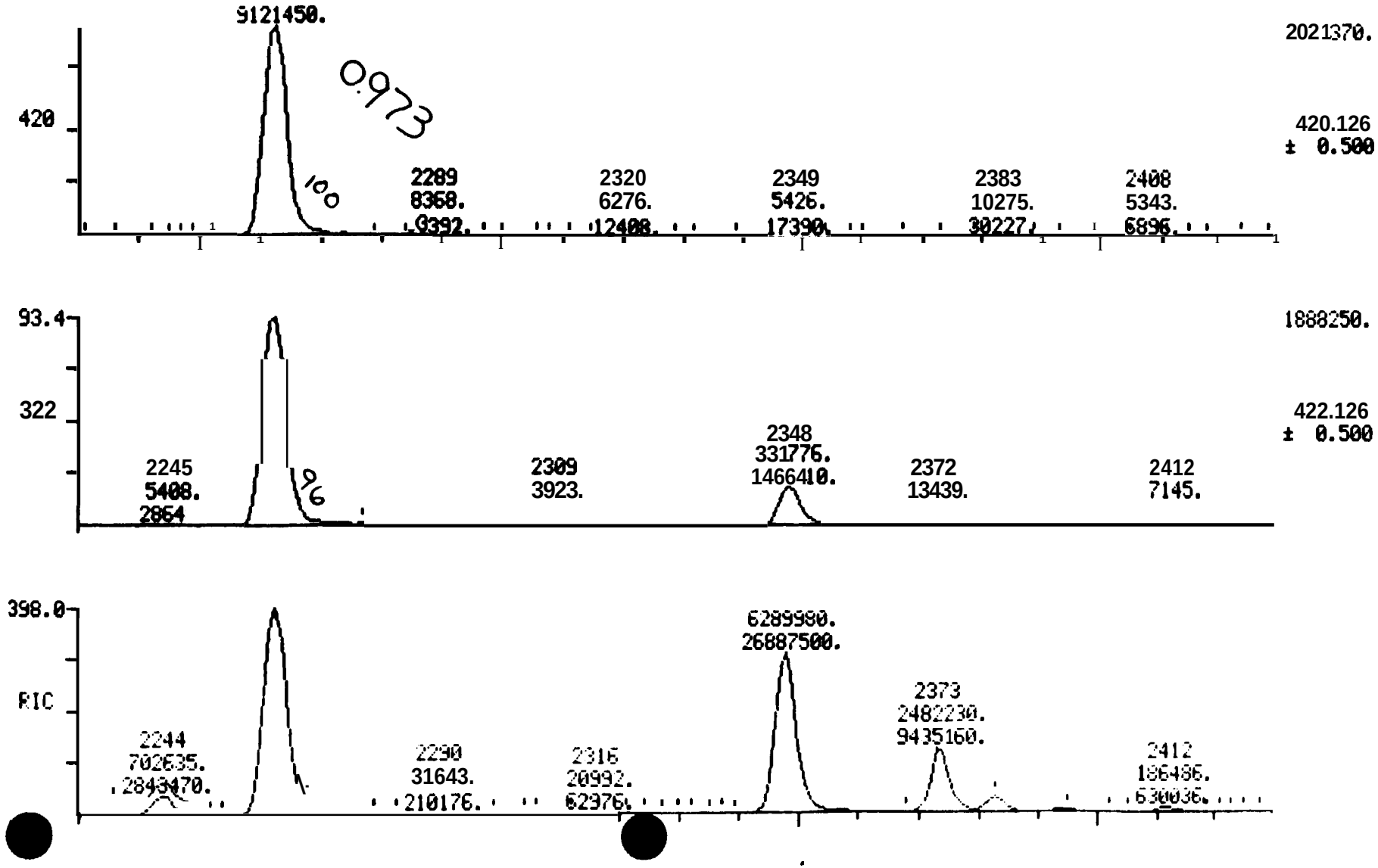
MIDRIC+MASS CHROMATOGRAM DATA: 68506III2 #1 SCANS 2230 TO 2430
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



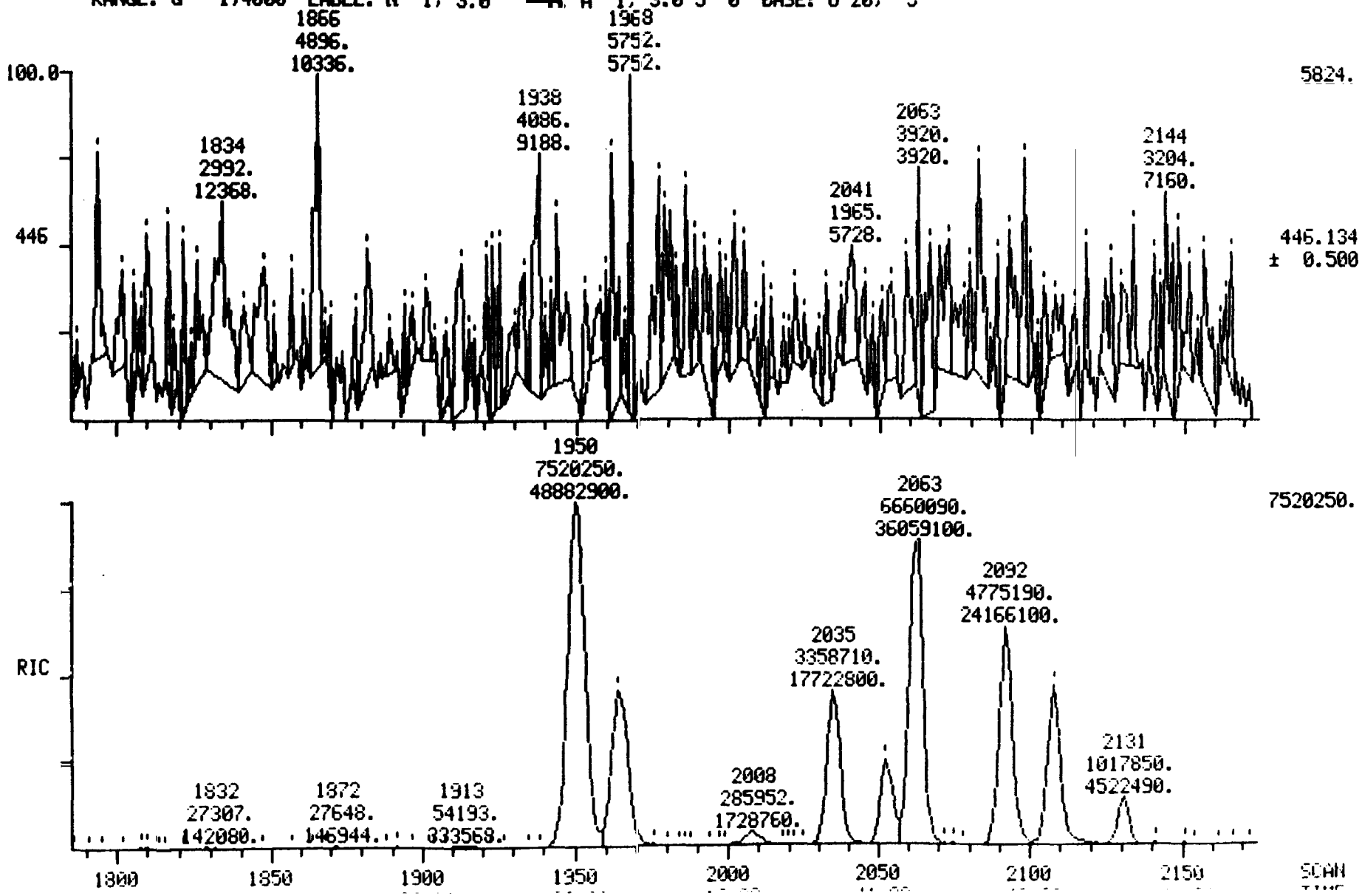
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 2230 TO 2430
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200364

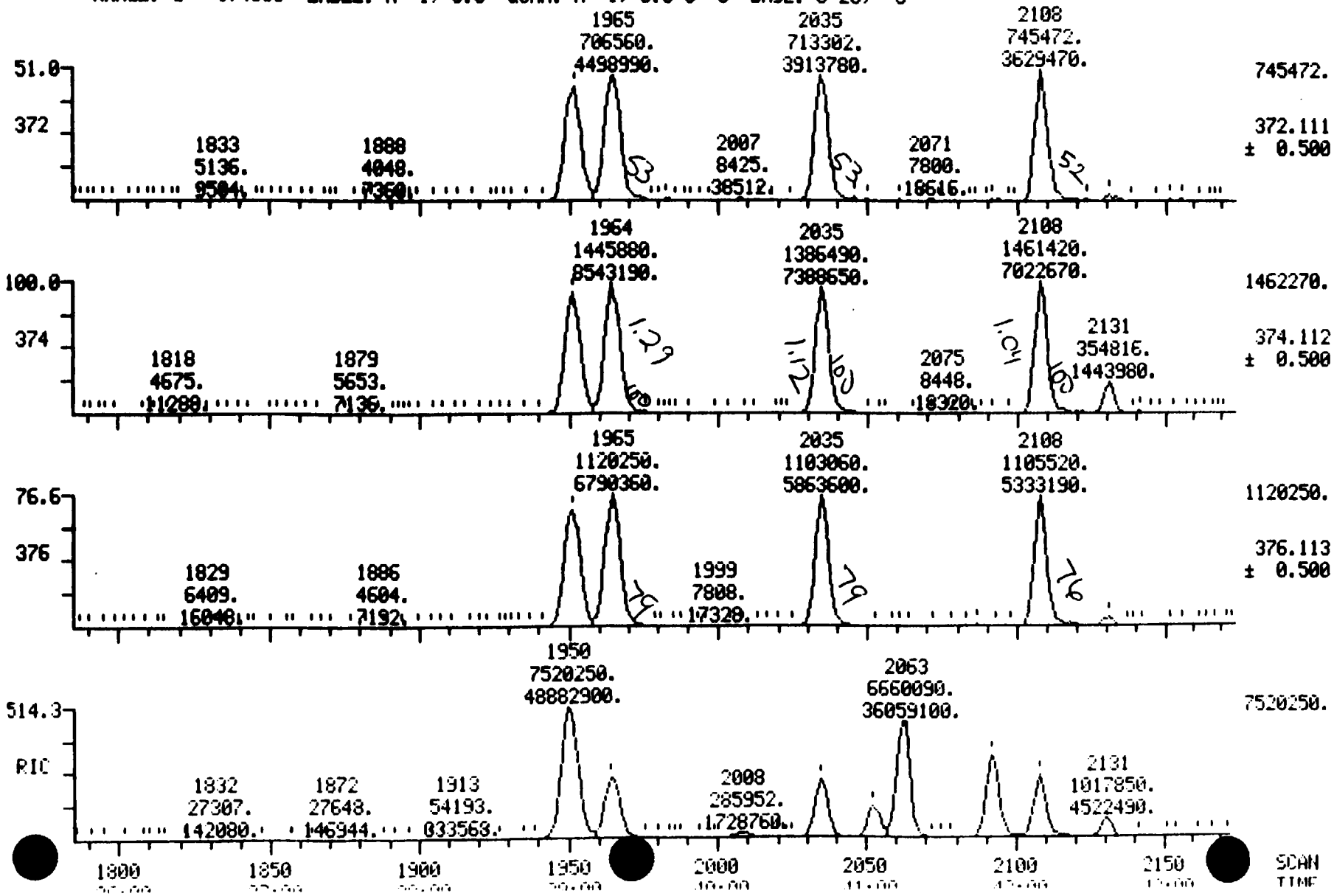

9121450.
0.973
100
2021370.
420
420.126
± 0.500
2289
8368.
9392.
2320
6276.
12408.
2349
5426.
17390.
2383
10275.
30227.
2408
5343.
6896.
93.4
1888250.
322
422.126
± 0.500
2245
5408.
2864
96
2309
3923.
2348
331776.
1466410.
2372
13439.
2412
7145.
398.0
6289980.
26887500.
RIC
2244
702635.
2843470.
2290
31643.
210176.
2316
20992.
62976.
2373
2482230.
9435160.
2412
186486.
630036.

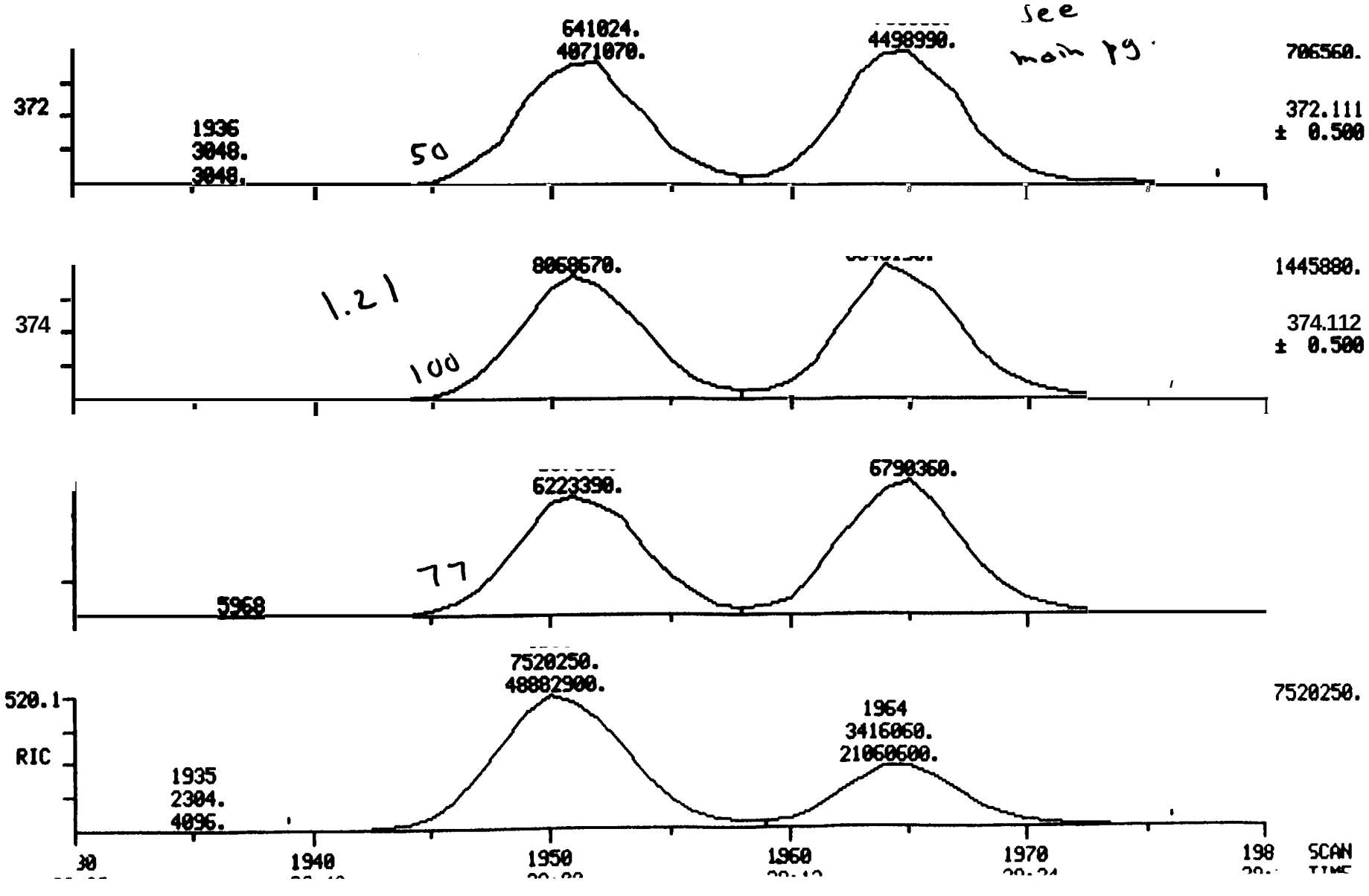
MIDRIC+MASS CHROMATOGRAM DATA: 68506II 1 SCANS 1785 TO 2175
03/26/91 17:33:00 CALI: CAL910 2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 A 1, 3.0 J 0 BASE: U 20, 3

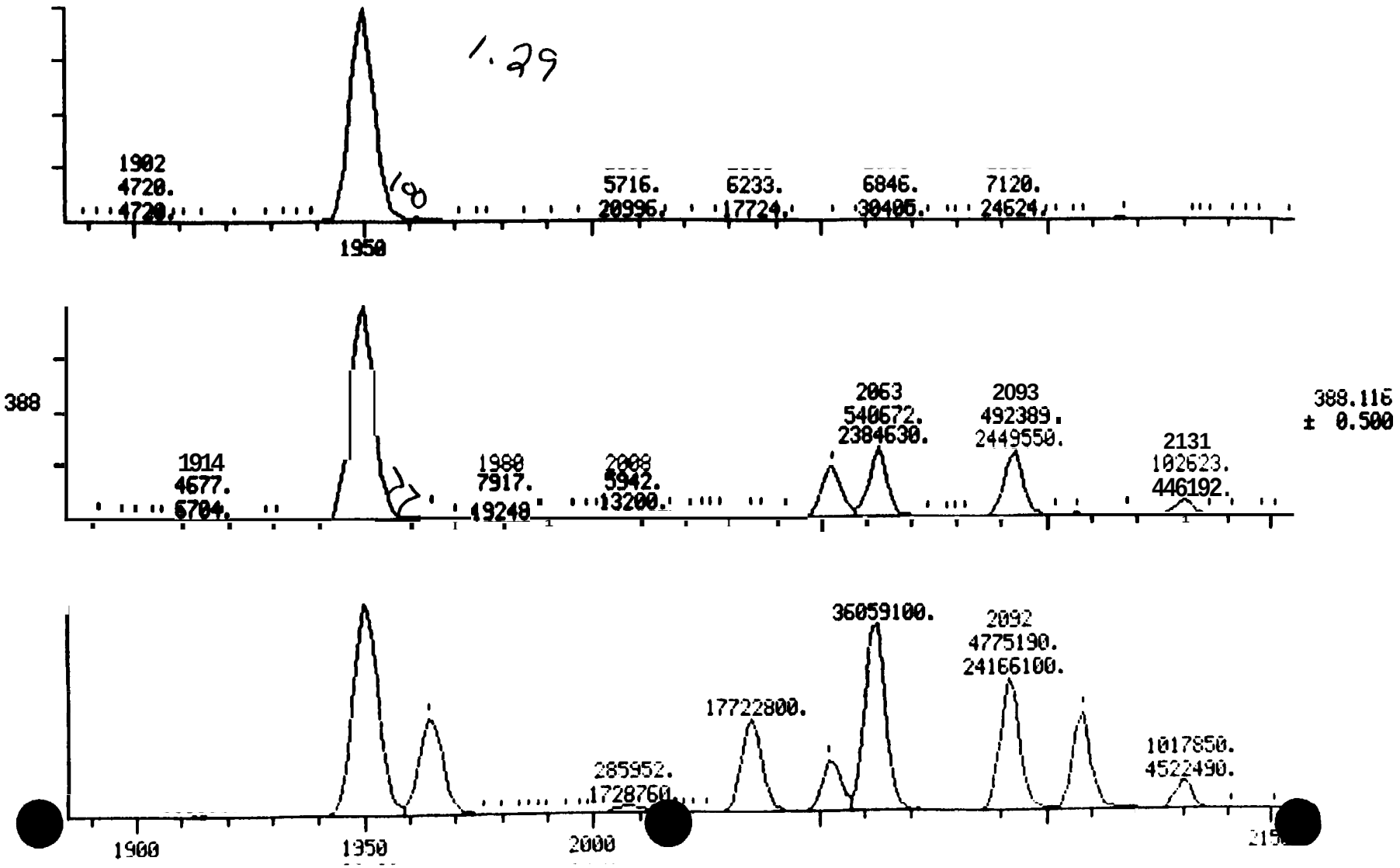


3200355

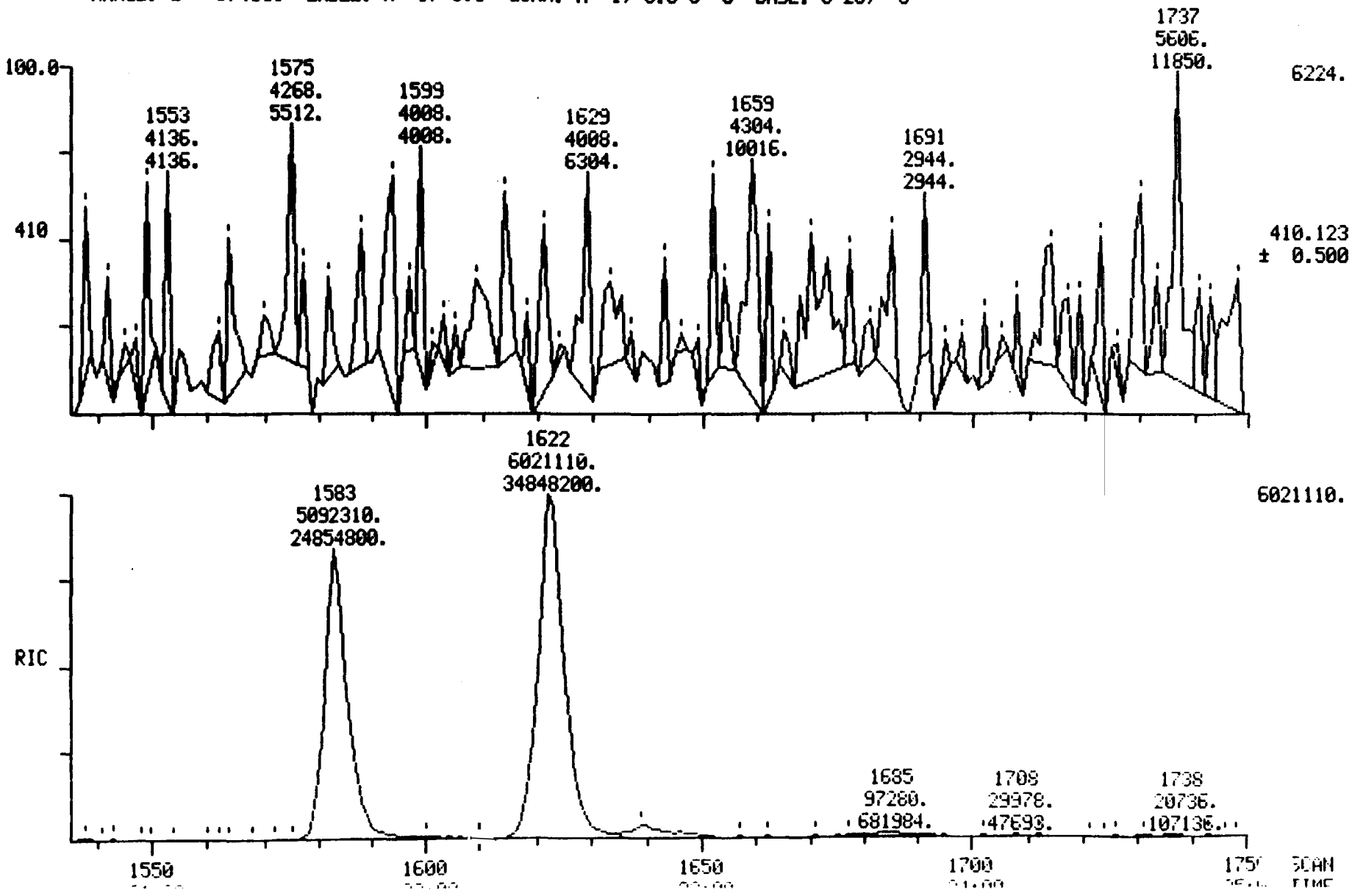
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 1785 TO 2175
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3




641024.
4071070.
4498990.
see
main pg.
706560.
372
372.111
± 0.500
1936
3048.
3048.
50
8068670.
1445880.
1.21
374
374.112
± 0.500
100
6223390.
6790360.
77
5968
7520250.
48882900.
520.1
RIC
7520250.
1964
3416060.
21060600.
1935
2304.
4096.
1940
1950
1960
1970
SCAN

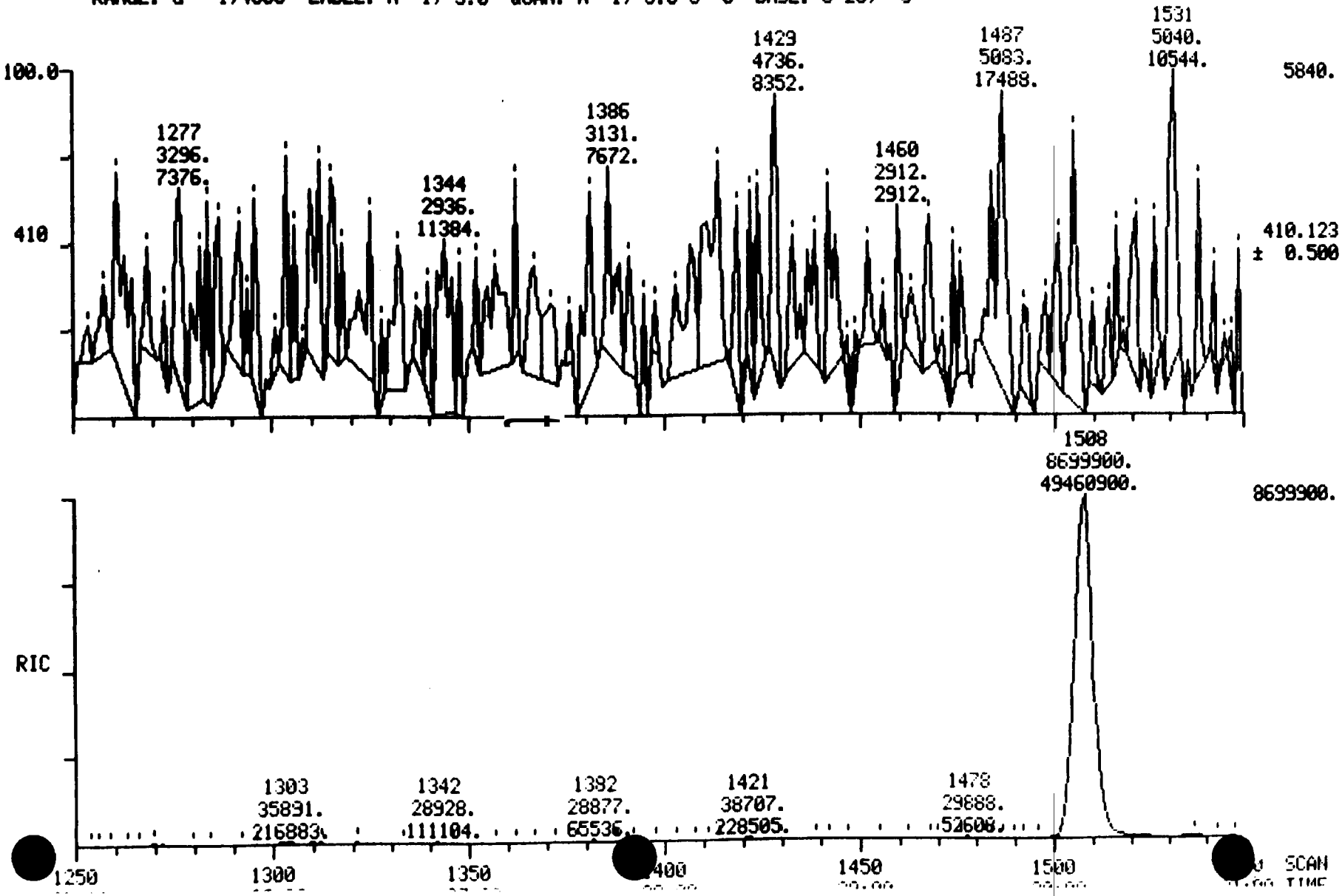

1.29
1902
4720.
4720.
1950
5716.
20996.
6233.
17724.
6846.
30405.
7120.
24624.
388
1914
4677.
5704.
1980
7917.
19248
2008
5942.
13200.
2063
540672.
2384630.
2093
492389.
2449550.
2131
102623.
446192.
388.116
± 0.500
36059100.
2092
4775190.
24166100.
17722800.
285952.
1728760.
1017850.
4522490.
1900
1950
2000

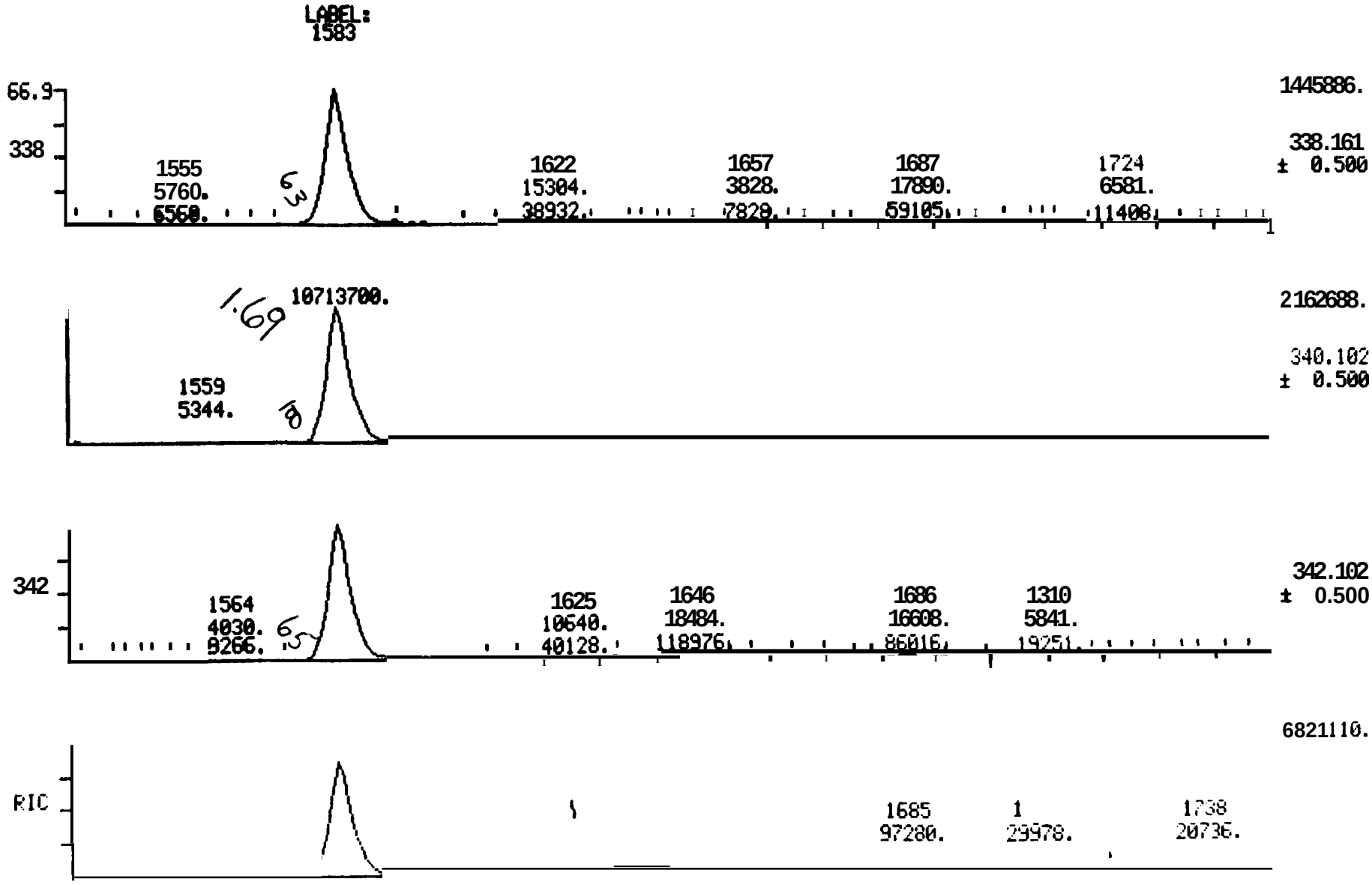
MIDRIC+MASS CHROMATOGRAM DATA: 68506III2 #1) 1750
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



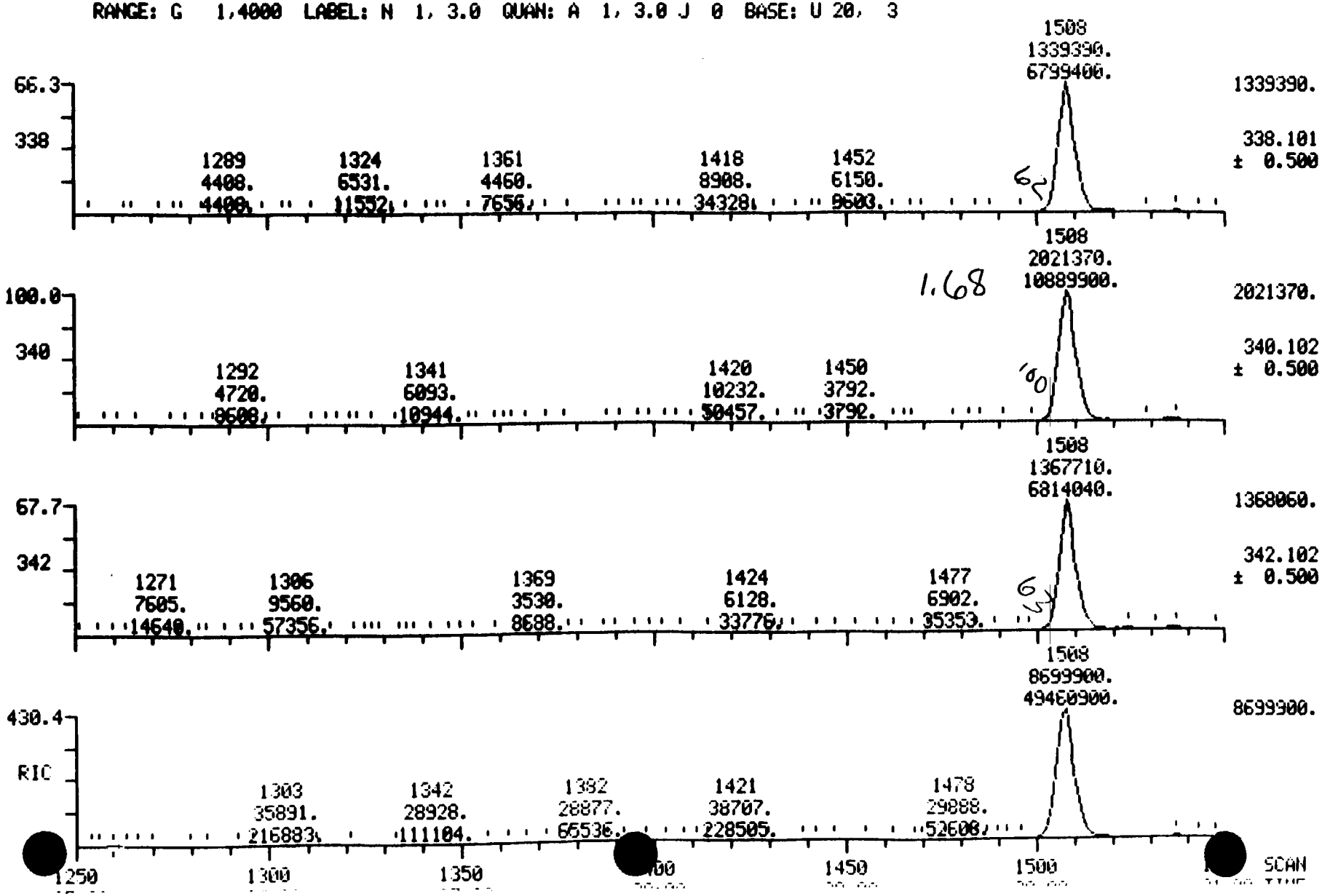
2200357

MIDRIC+MASS CHROMATOGRAM DATA: 68506III2 #1 SCANS 1250 TO 1550
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

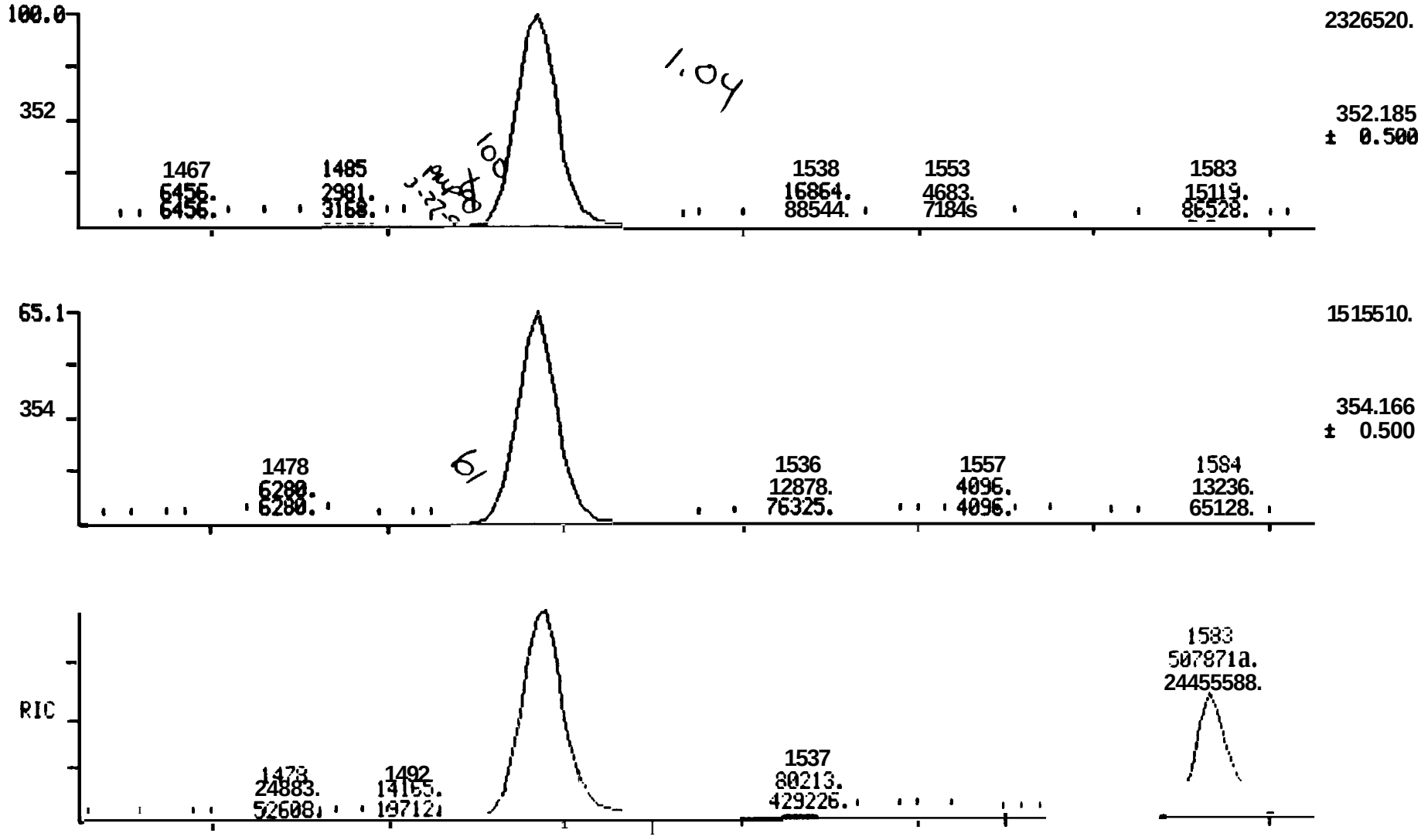



LABEL:
1583
66.9
338
1555
5760.
6560.
63
1622
15304.
38932.
1657
3828.
7829.
1687
17890.
59105.
1724
6581.
11408.
1445886.
338.161
± 0.500
1.69
10713700.
1559
5344.
10
2162688.
340.102
± 0.500
342
1564
4030.
9266.
65
1625
10640.
40128.
1646
18484.
118976.
1686
16608.
86016.
1310
5841.
19251.
342.102
± 0.500
6821110.
RIC
1685
97280.
1
29978.
1738
20736.

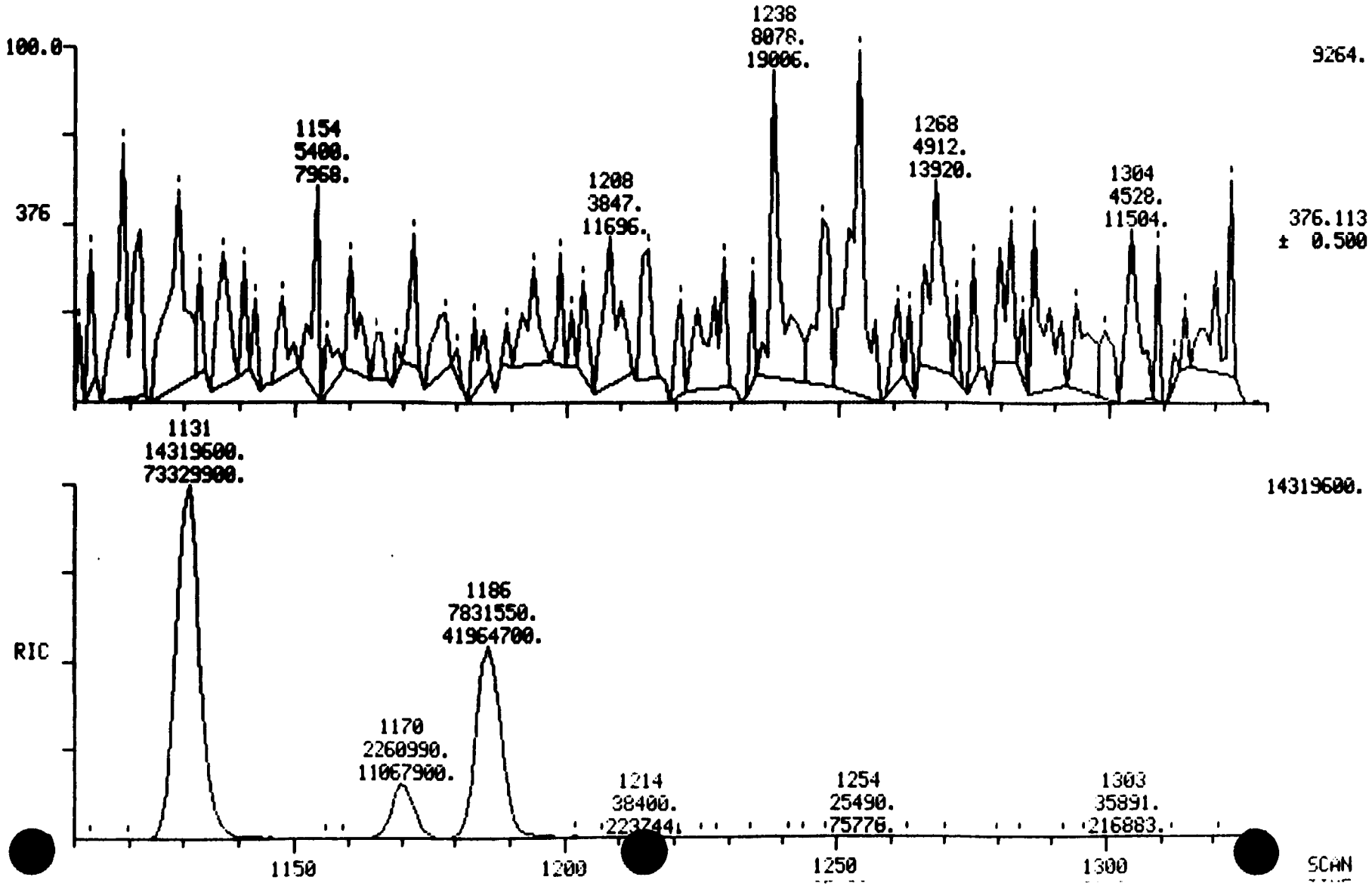
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 1250 TO 1550
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



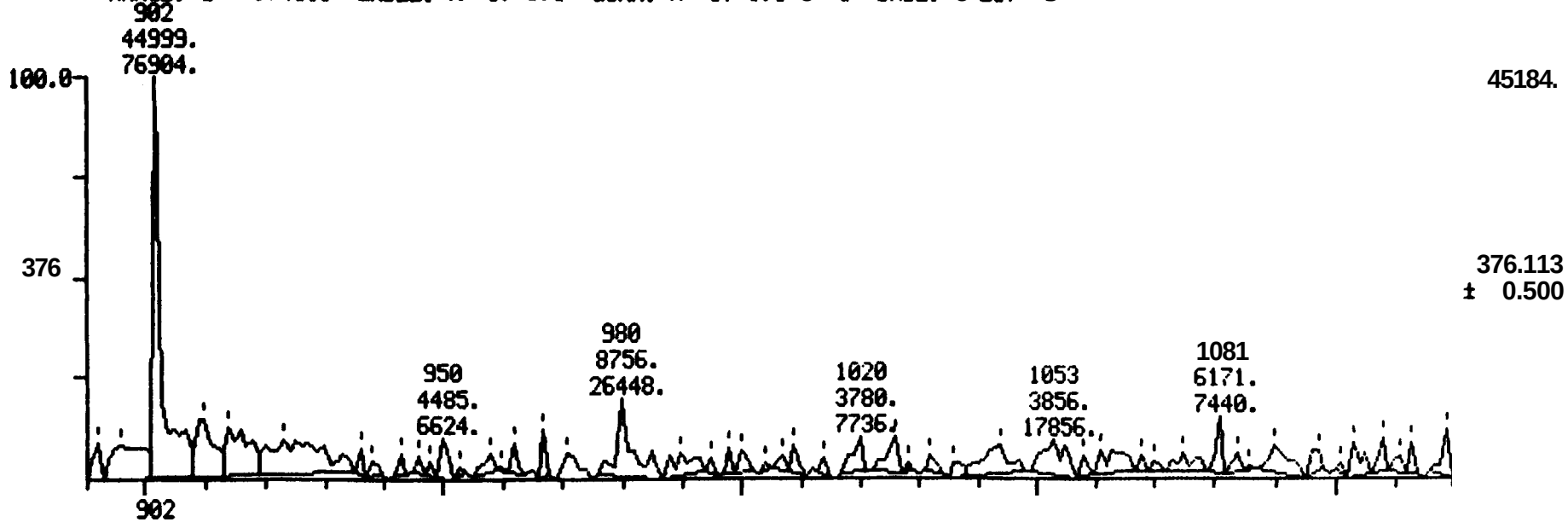
2200353

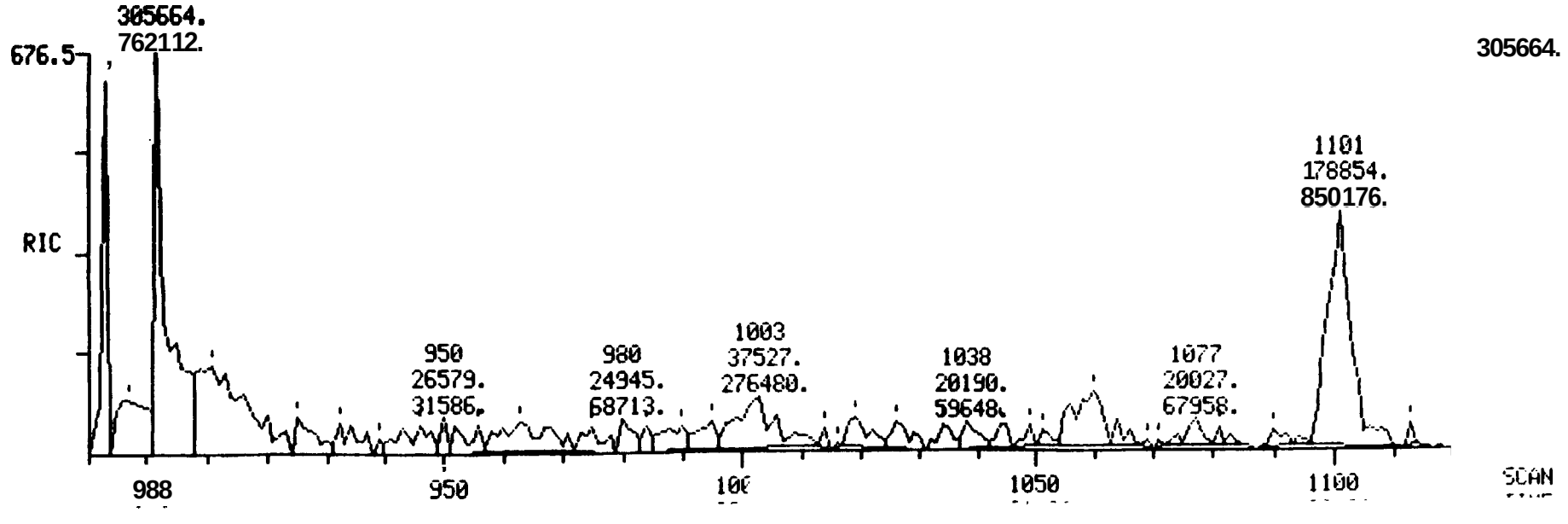

100.0
352
2326520.
352.185
± 0.500
1467
6456.
6456.
1485
2981.
3168.
1538
16864.
88544.
1553
4683.
7184s
1583
15119.
86528.
65.1
354
1515510.
354.166
± 0.500
1478
6280.
6280.
1536
12878.
76325.
1557
4096.
4096.
1584
13236.
65128.
RIC
1478
24883.
52608.
1492
14165.
19712.
1537
80213.
429226.
1583
507871a.
24455588.

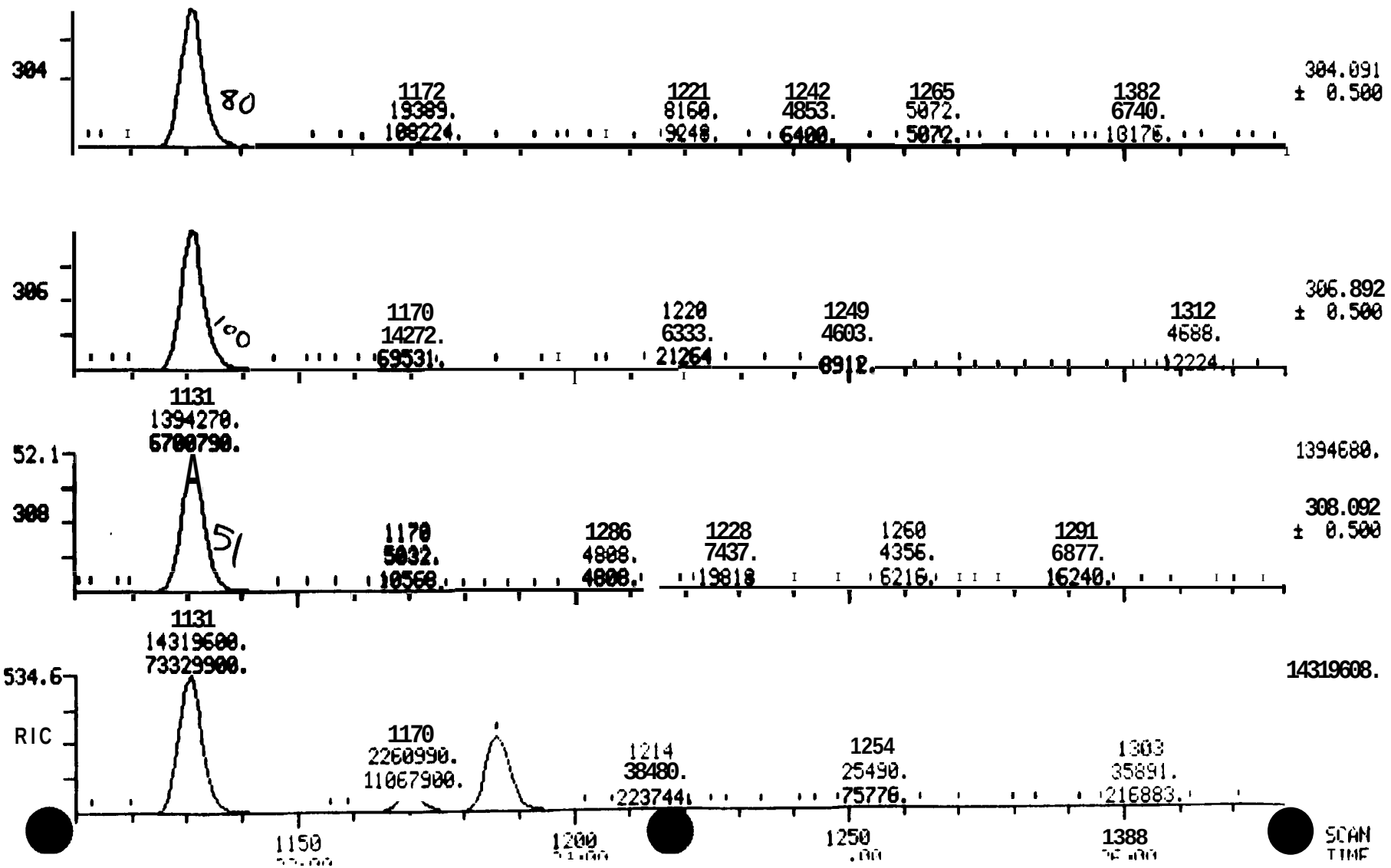
MIDRIC+MASS CHROMATOGRAM DATA: 68506III2 #1 SCANS 1110 TO 1330
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III ITIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 ⟶ P 1, 3 0 J 0 BASE: U 20, 3



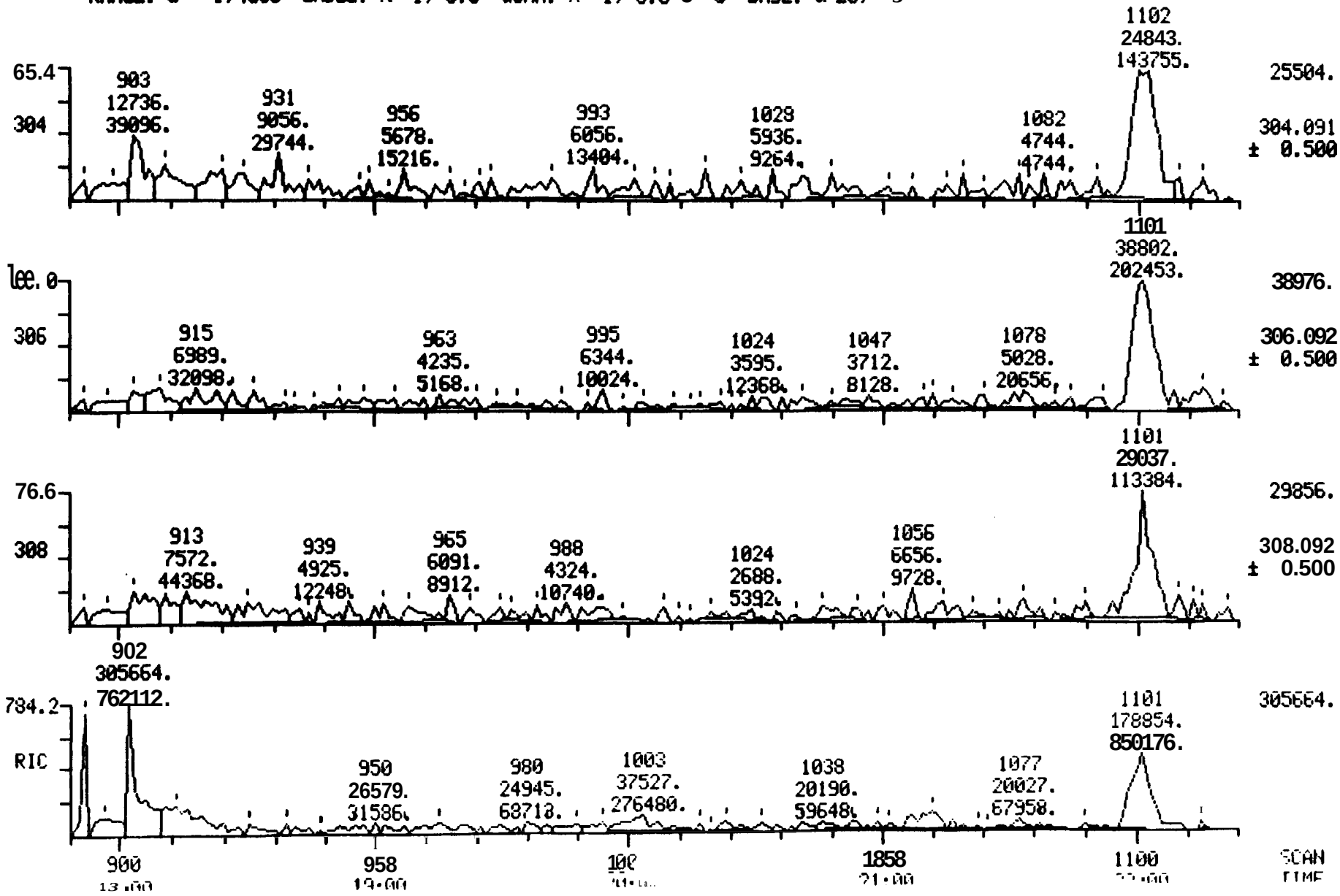
MIDRIC+MASS CHROMATOGRAM DATA: 685061112 #1 SCANS 890 TO 1120
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



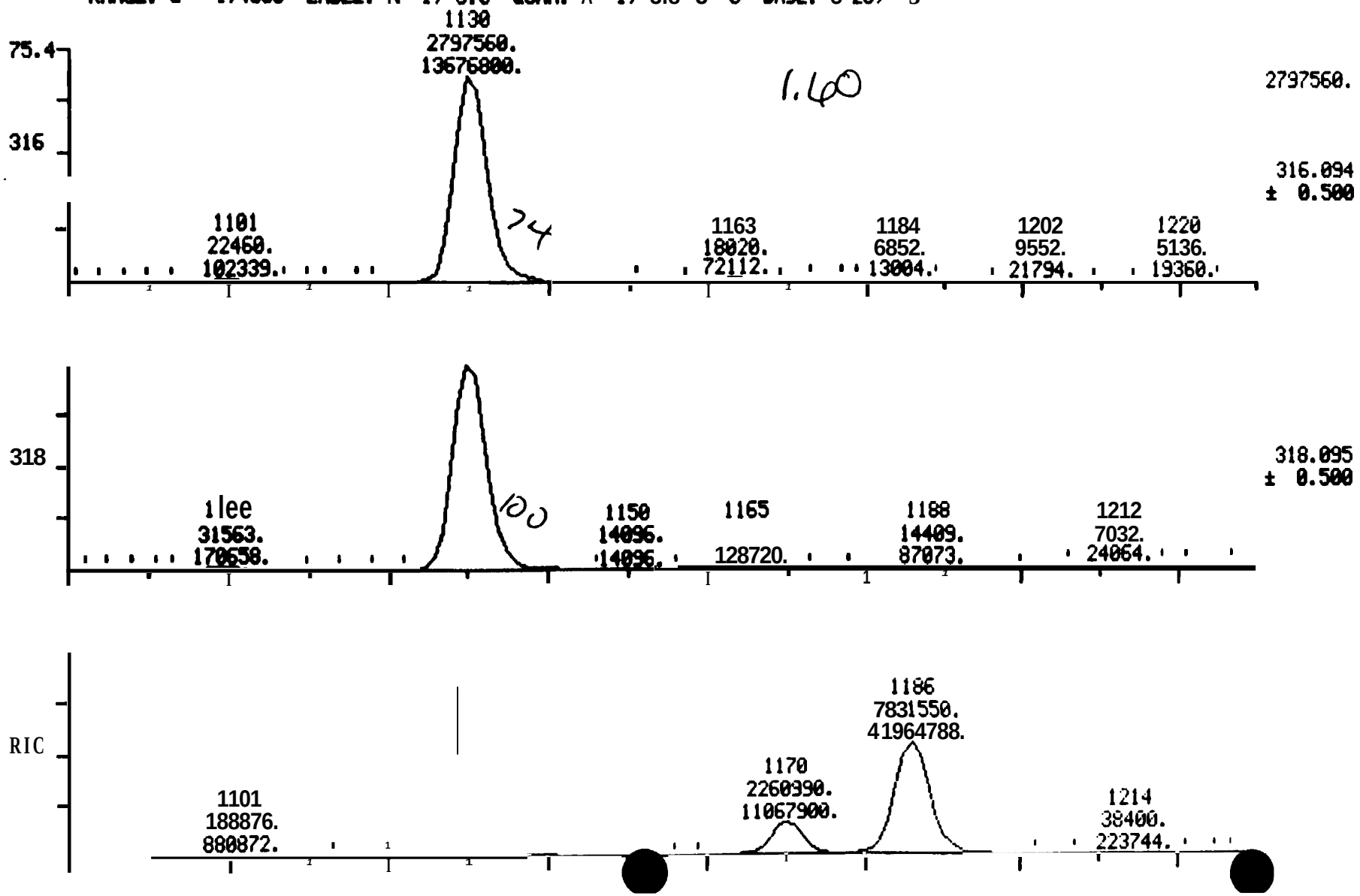



304
80
1172
19389.
108224.
1221
8160.
9248.
1242
4853.
6400.
1265
5072.
5072.
1382
6740.
10175.
304.091
± 0.500
306
100
1170
14272.
69531.
1220
6333.
21264
1249
4603.
8912.
1312
4688.
12224.
306.892
± 0.500
52.1
308
51
1131
1394270.
6700790.
1170
5032.
10568.
1286
4808.
4808.
1228
7437.
19818
1260
4356.
6216.
1291
6877.
16240.
1394680.
308.092
± 0.500
534.6
RIC
1131
14319600.
73329900.
1170
2260990.
11067900.
1214
38480.
223744.
1254
25490.
75776.
1303
35891.
216883.
14319608.
1150
1200
1250
1300
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 898 TO 1120
83/26/91 17:33:00 CALI: CAL910306A 12
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

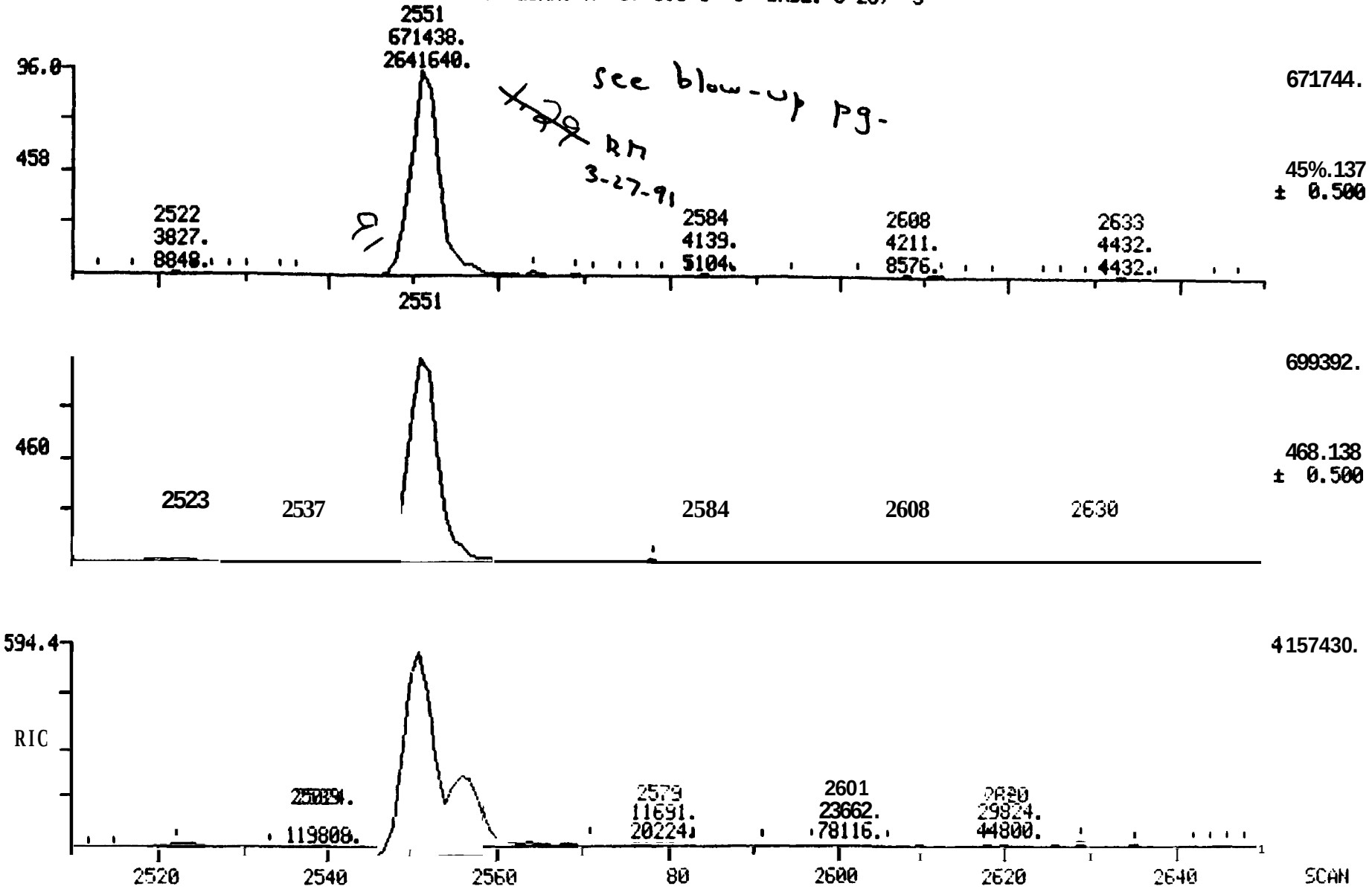


MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 1000 TO 1230
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STO 111 NATIVES e See PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.8 J 0 BASE: U 20, 3



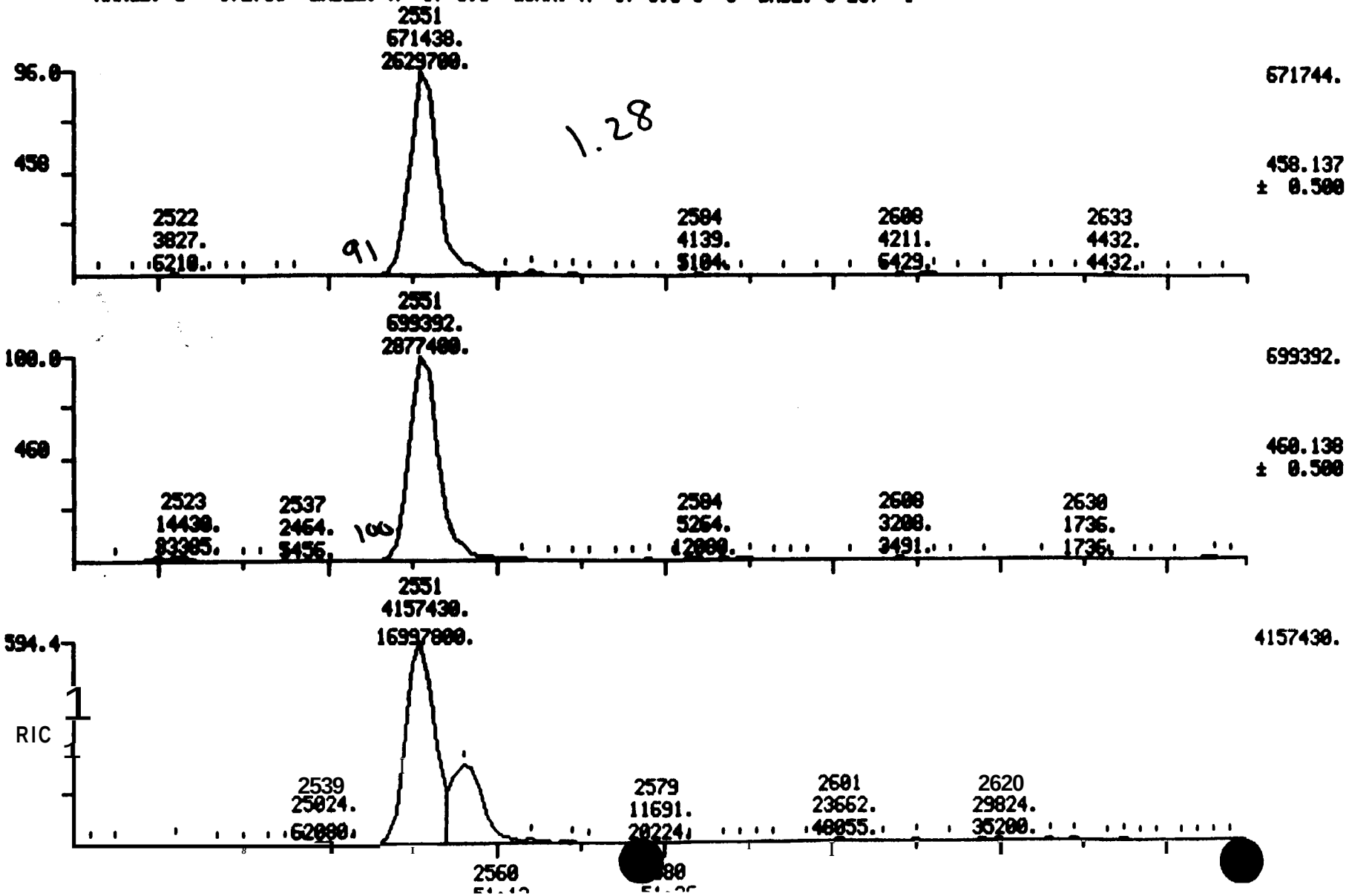
3 20036 1

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 2510 TO 2650
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

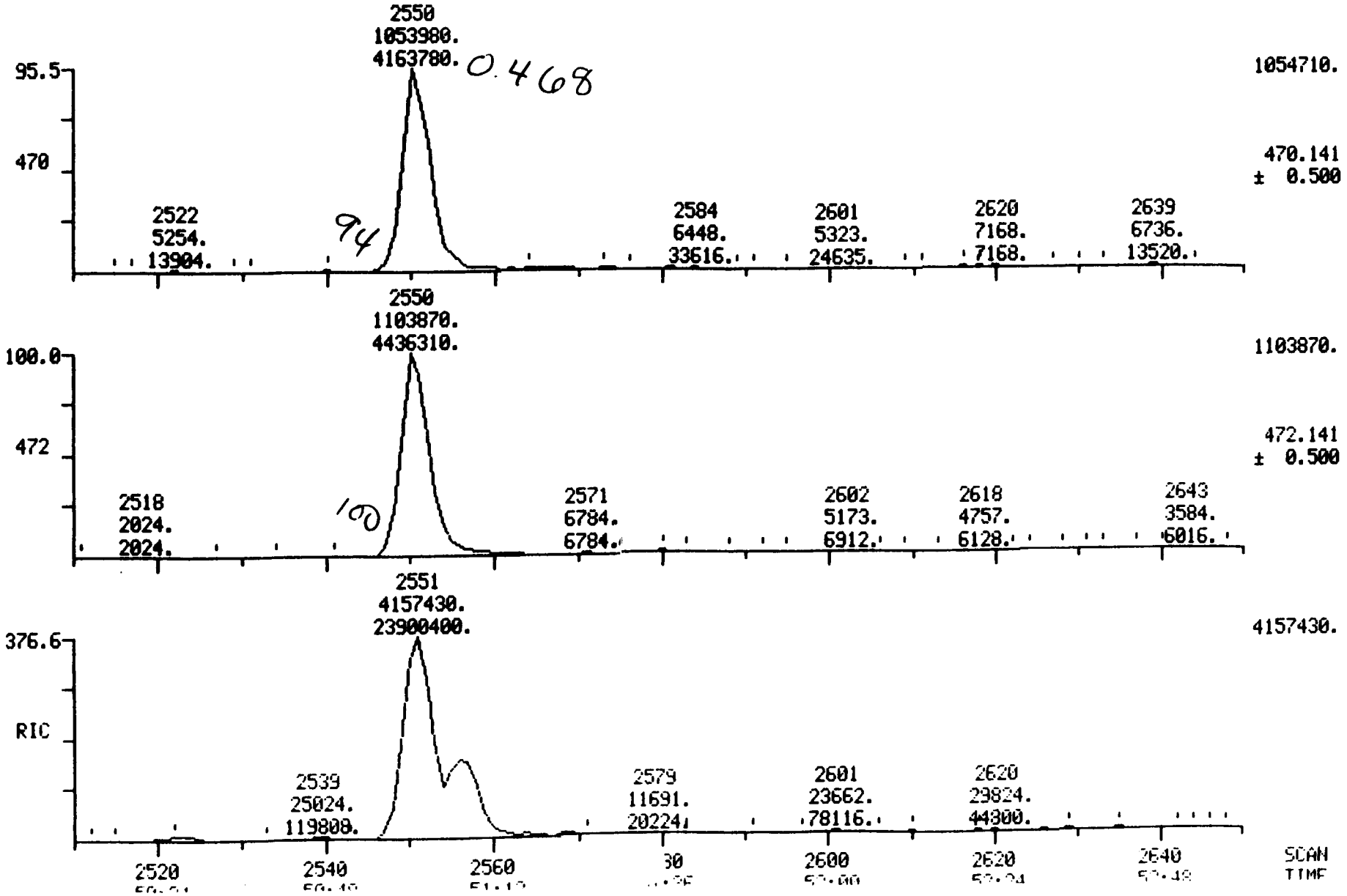


3200362

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 2510 TO 2650
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

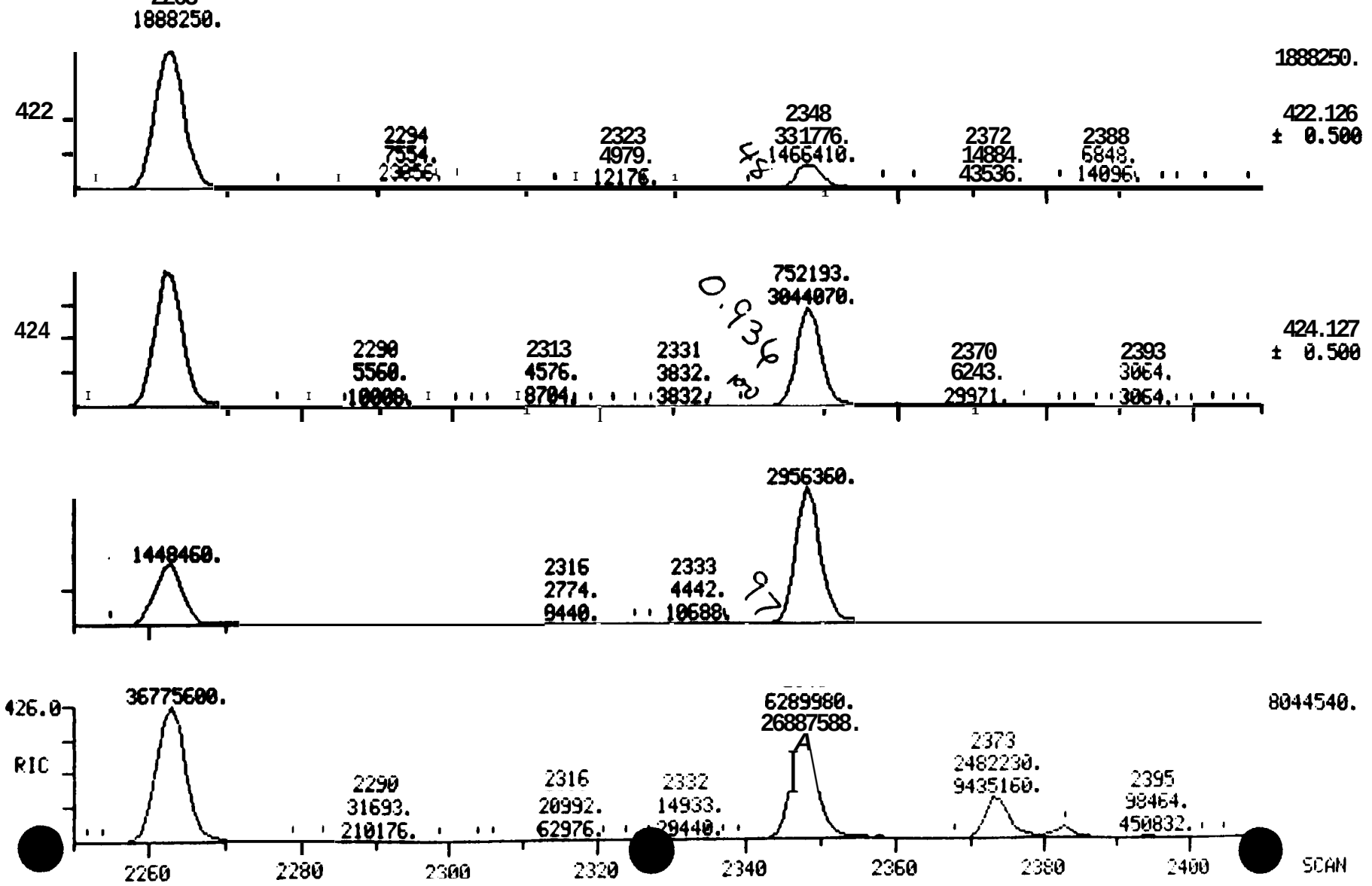


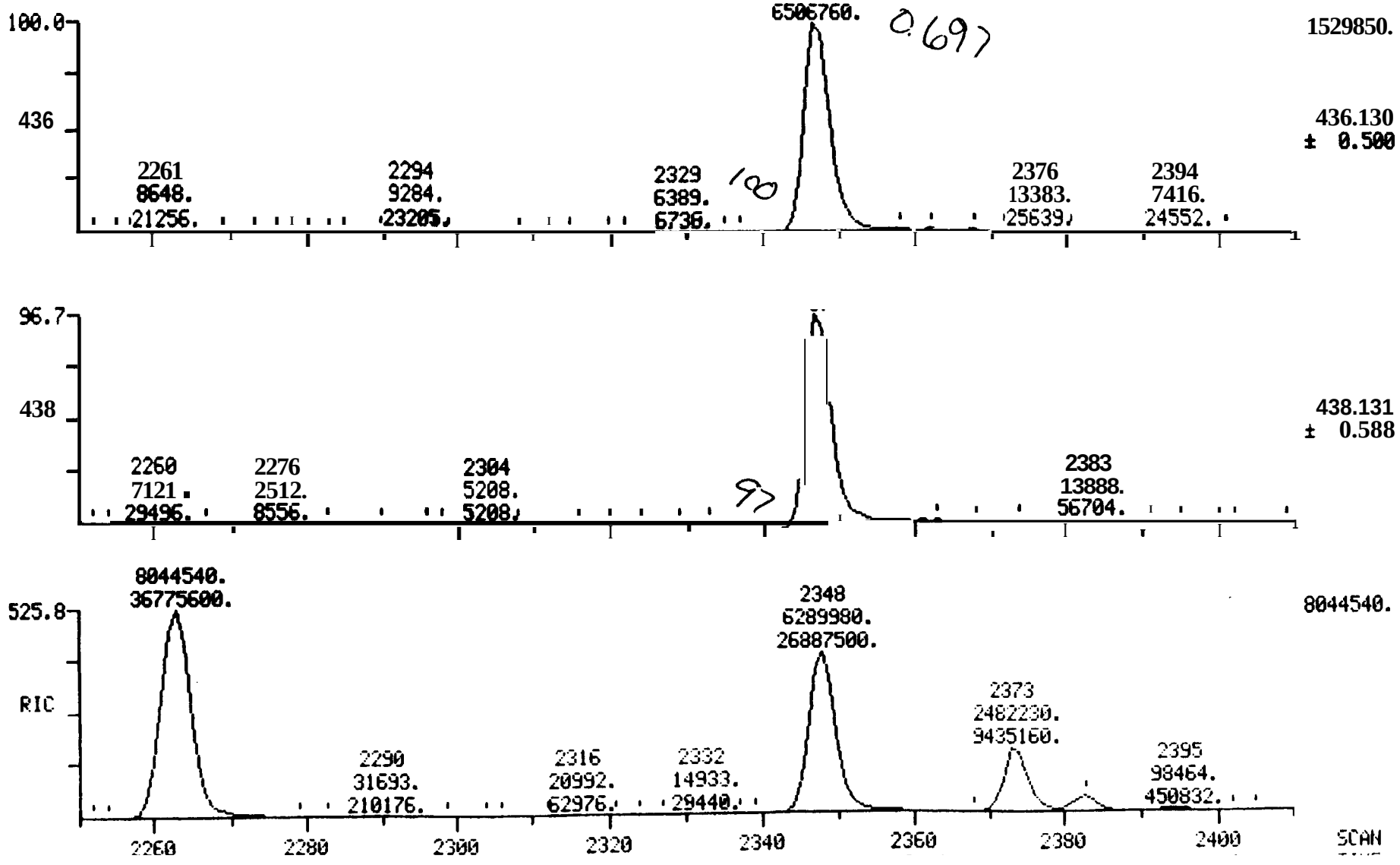
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 2510 TO 2650
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200363

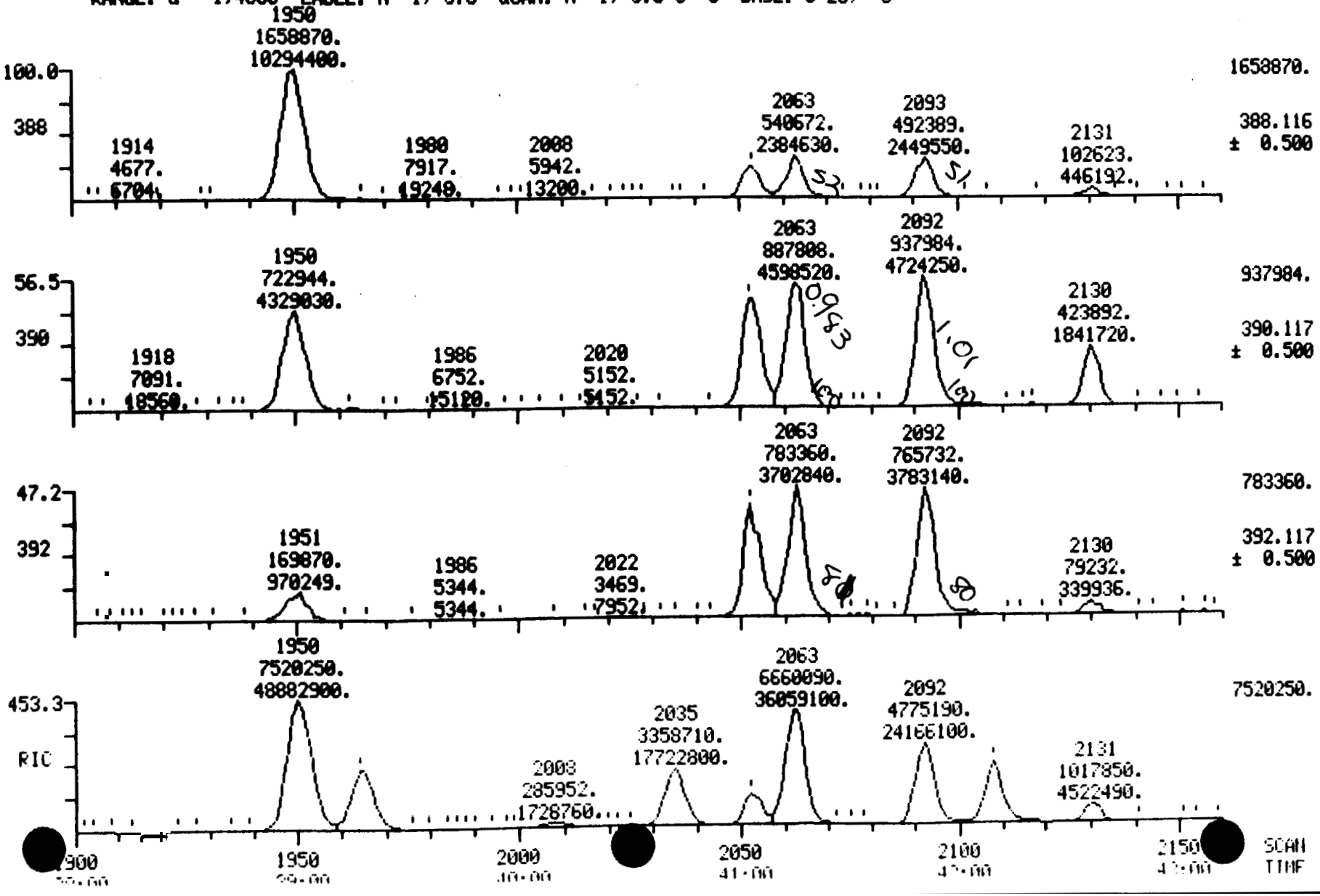
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 2250 TO 2410
83/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



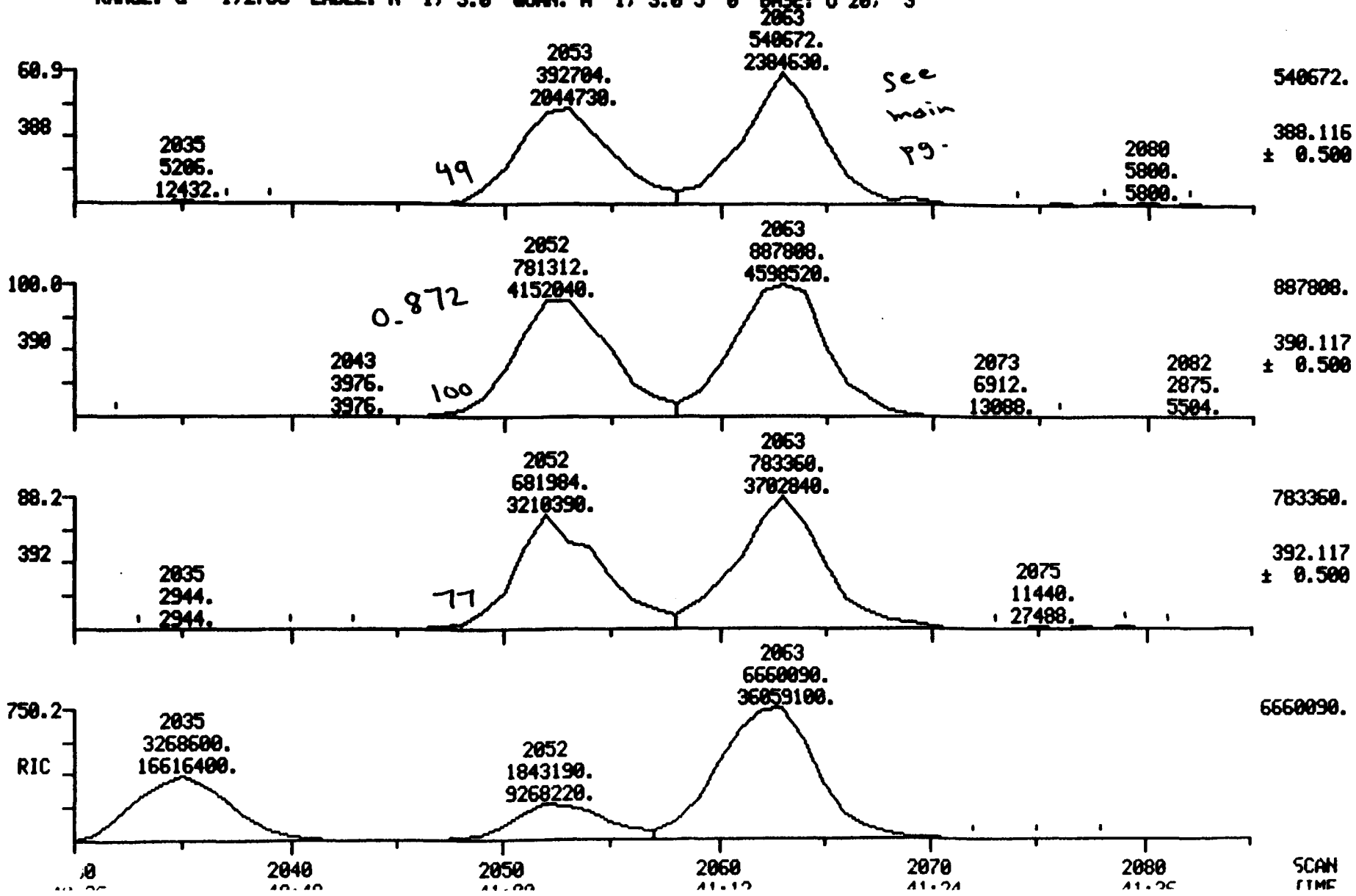

100.0
436
6506760.
0.697
1529850.
436.130
± 0.500
2261
8648.
21256.
2294
9284.
23205.
2329
6389.
6736.
100
2376
13383.
25639.
2394
7416.
24552.
96.7
438
438.131
± 0.588
2260
7121.
29496.
2276
2512.
8556.
2304
5208.
5208.
97
2383
13888.
56704.
525.8
RIC
8044540.
36775600.
8044540.
2290
31693.
210176.
2316
20992.
62976.
2332
14933.
29440.
2348
6289980.
26887500.
2373
2482230.
9435160.
2395
98464.
450832.
2260
2280
2300
2320
2340
2360
2380
2400
SCAN

3200'36.1

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 1900 TO 2160
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III [illegible]IVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

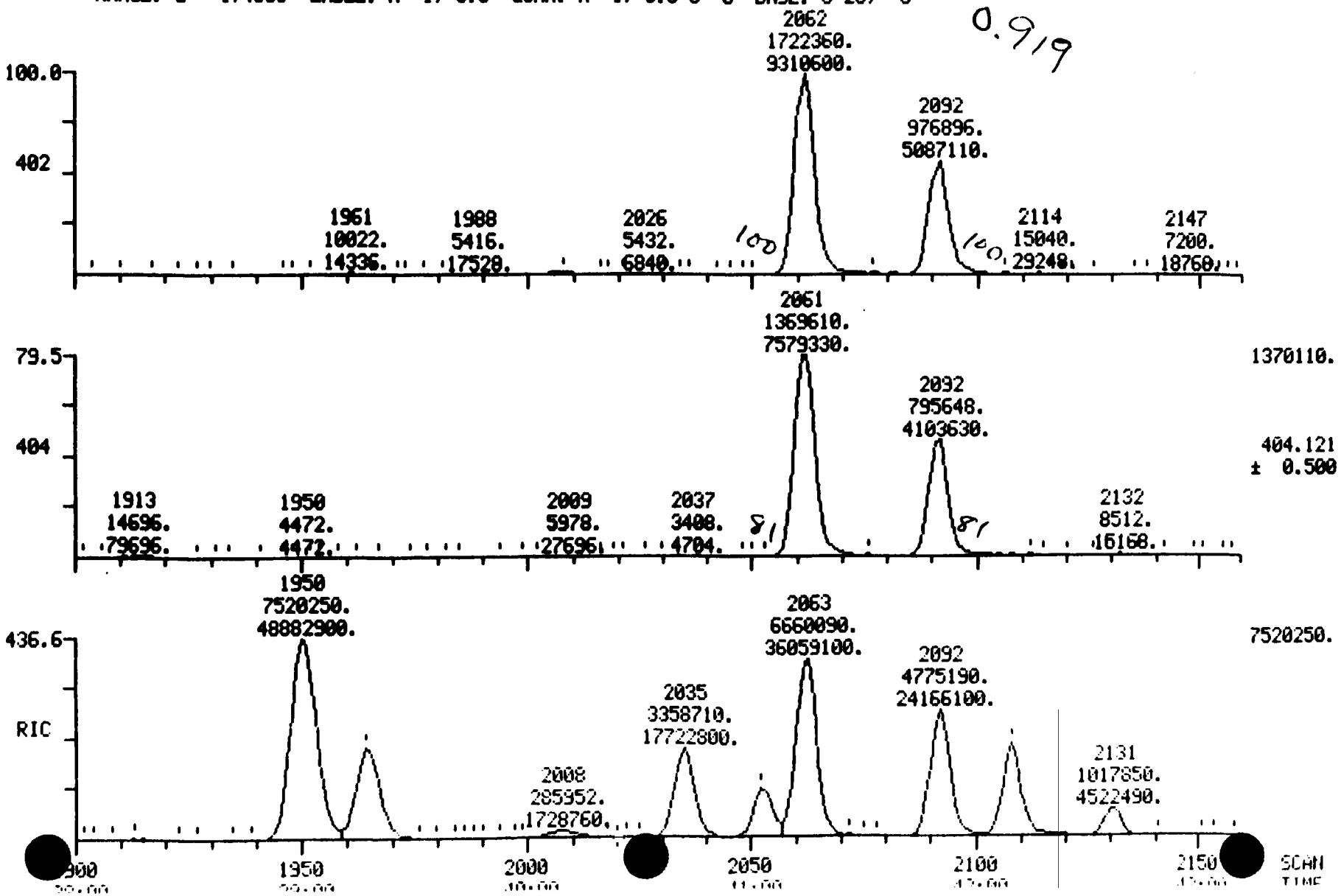


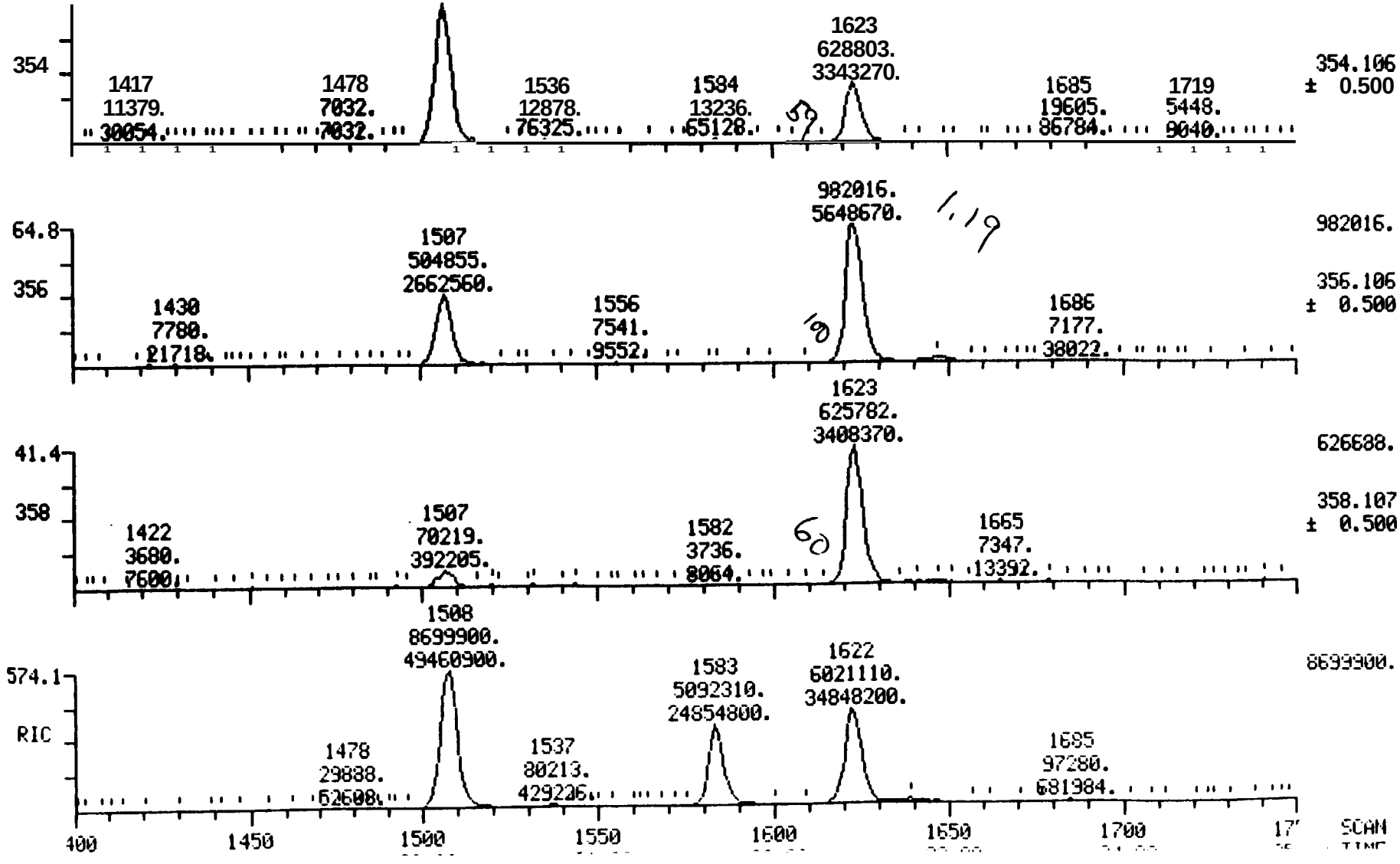
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 2030 TO 2085
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200365

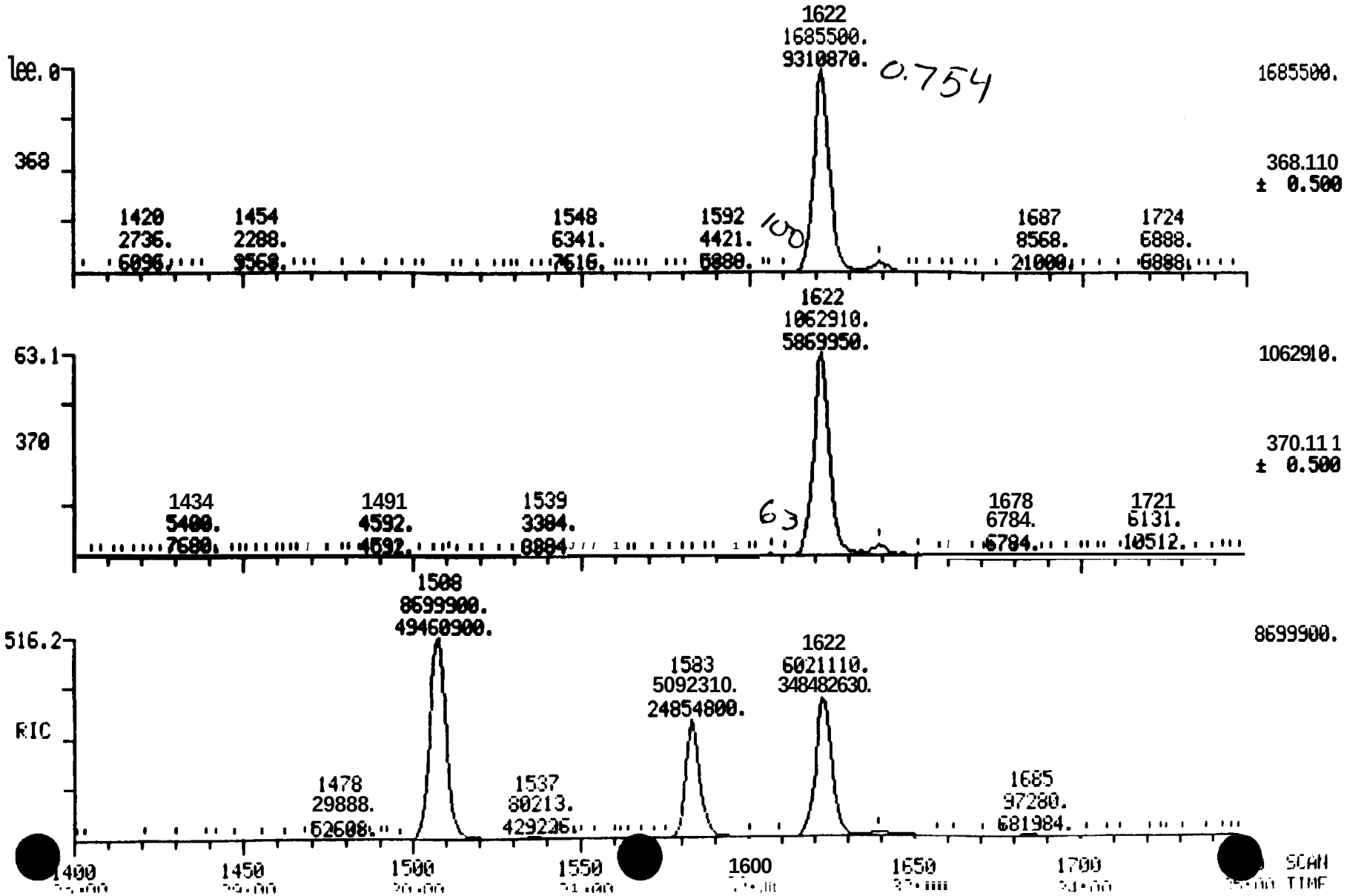
MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



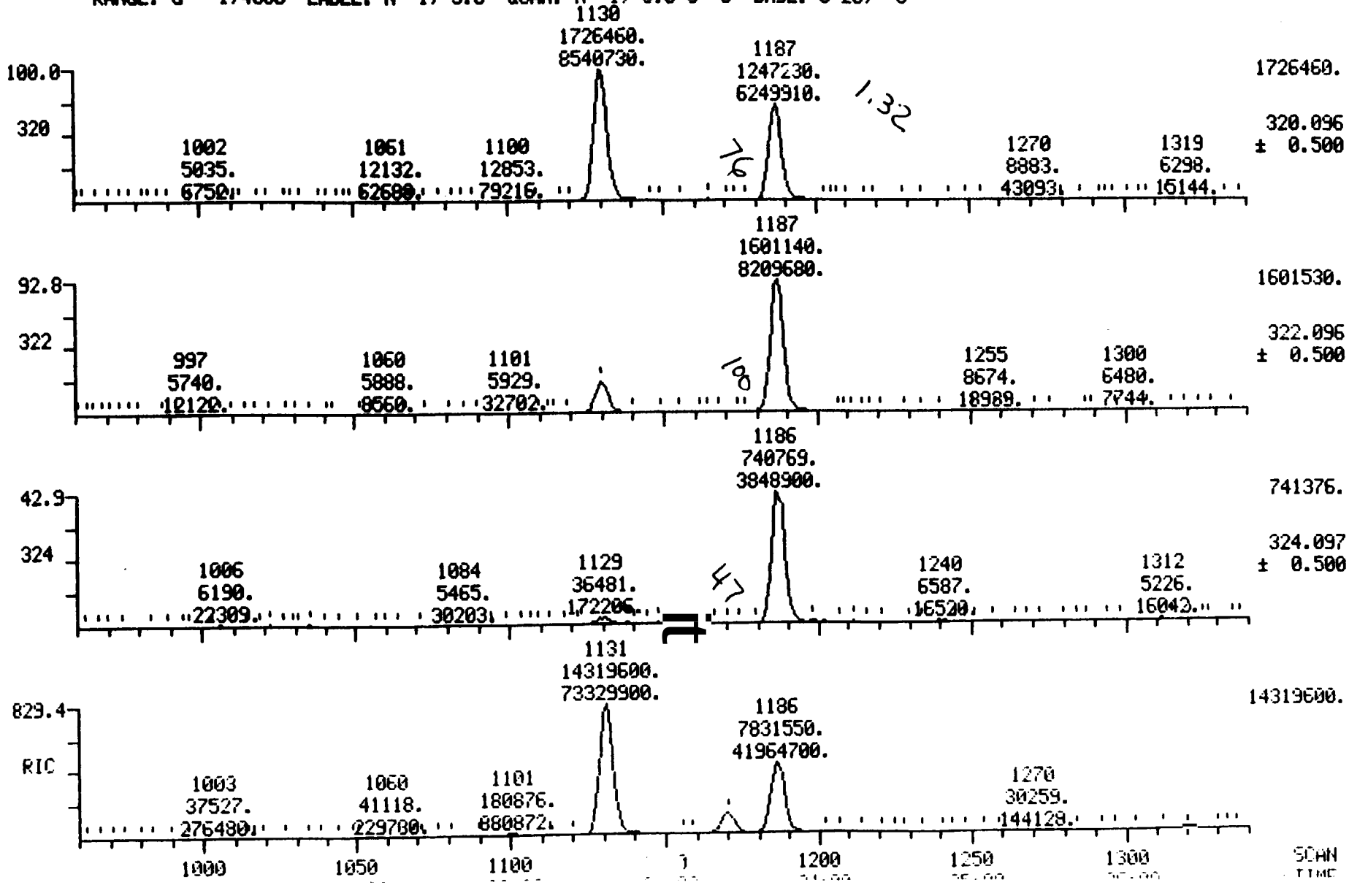

354
1417
11379.
30054.
1478
7032.
7032.
1536
12878.
76325.
1584
13236.
65128.
1623
628803.
3343270.
1685
19605.
86784.
1719
5448.
9040.
354.106
± 0.500
64.8
356
1430
7780.
21718.
1507
504855.
2662560.
1556
7541.
9552.
982016.
5648670.
1686
7177.
38022.
982016.
356.106
± 0.500
41.4
358
1422
3680.
7600.
1507
70219.
392205.
1582
3736.
8064.
1623
625782.
3408370.
1665
7347.
13392.
626688.
358.107
± 0.500
574.1
RIC
1478
29888.
62608.
1508
8699900.
49460900.
1537
80213.
429226.
1583
5092310.
24854800.
1622
6021110.
34848200.
1685
97280.
681984.
8699900.
400
1450
1500
1550
1600
1650
1700
SCAN

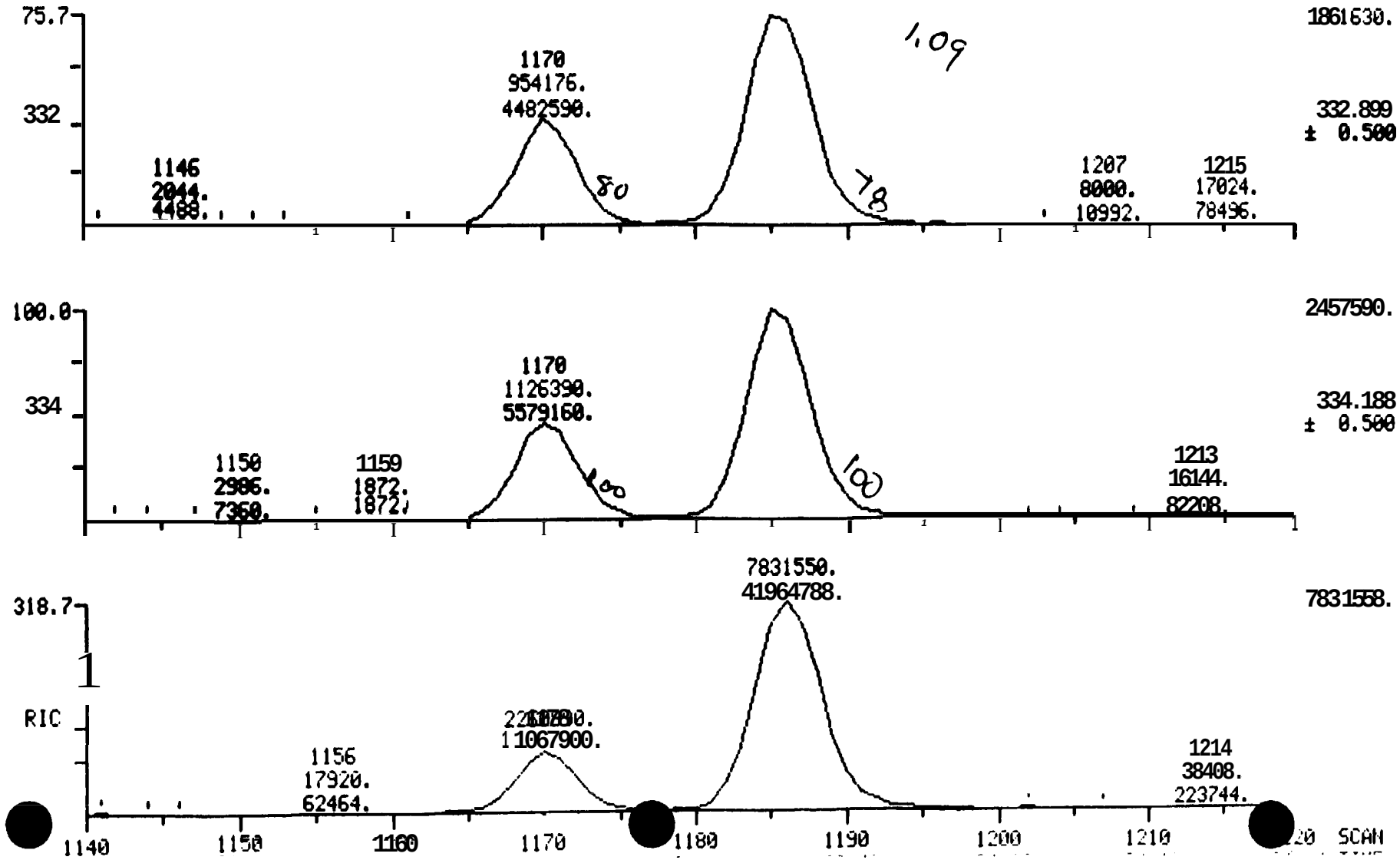
3200366

MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 1400 TO 1750
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STO III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

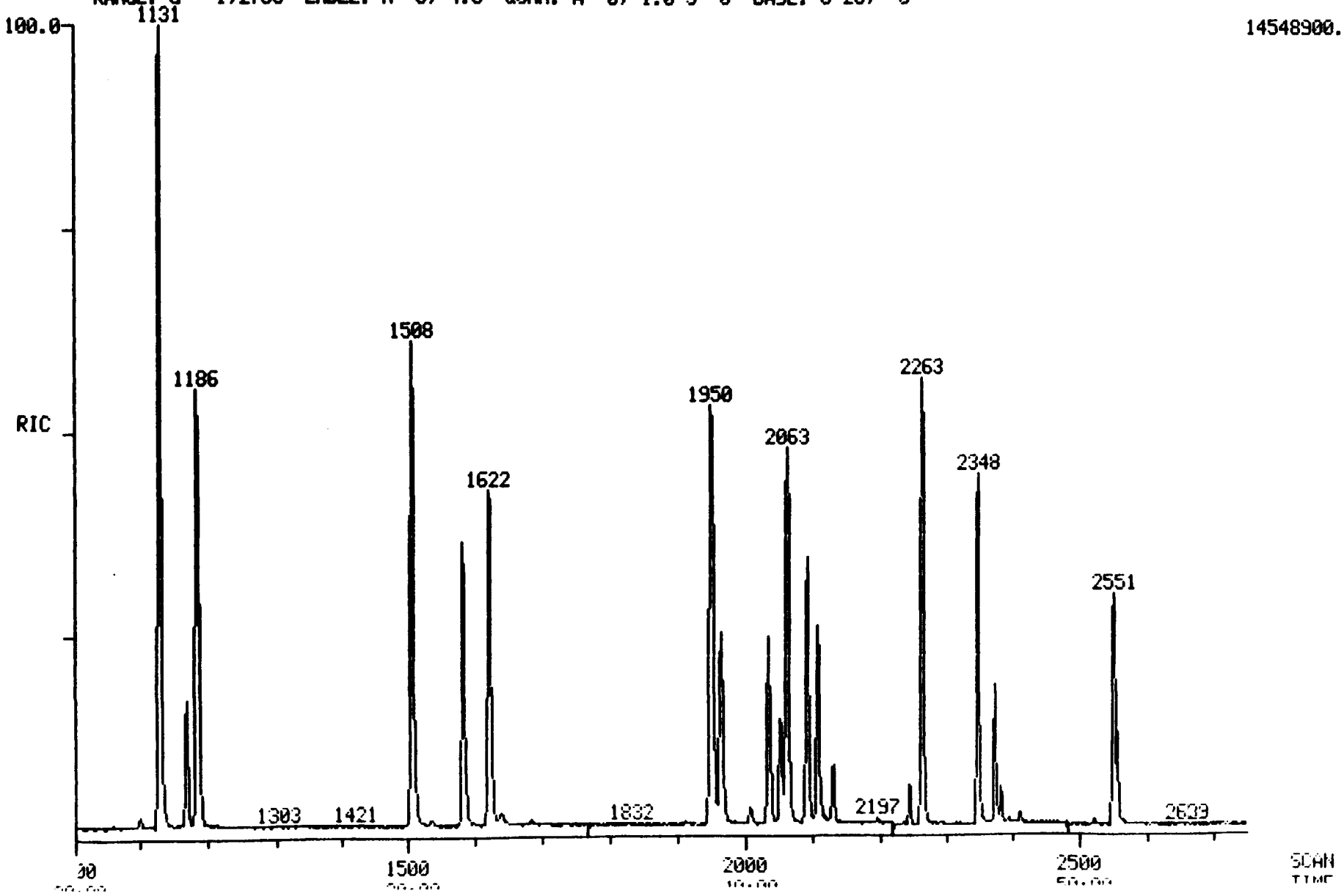


MIDRIC+MASS CHROMATOGRAMS DATA: 68506III2 #1 SCANS 960 TO 1340
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3




75.7
332
1861630.
332.899
± 0.500
1170
954176.
4482590.
1.09
80
78
1146
2044.
4488.
1207
8000.
10992.
1215
17024.
78496.
100.0
334
2457590.
334.188
± 0.500
1170
1126390.
5579160.
100
100
1150
2986.
7360.
1159
1872.
1872.
1213
16144.
82208.
318.7
RIC
7831550.
41964788.
7831558.
1156
17920.
62464.
11067900.
1214
38408.
223744.
1140
1150
1160
1170
1180
1190
1200
1210
SCAN

MIDRIC DATA: 68506III2 #1 SCANS 1000 TO 2750 Cale PRCP 3 27-91
03/26/91 17:33:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 2 QC RM 3-27-91
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
e	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.550	438.050	0.052	3	100	40	1	0	Pos
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.030	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	400.050	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3/26/91 17:27:36 SCAN 2753
Acquisition stopped

3/26/91 17:27:38
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2404 Suspended
SCANS 2485 TO 2753 Centroid

Mode	Scans	Secs	out of	%	Perks per scan	per sec
Centroid	2730	635.8	3300.0	19.3	84051.	31.	25.

3200368

MID scan
Scan time: 1.200 s

Desc: G2
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
2	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353.650	354.150	0.054	3	100	40	1	0	Pos
6	355.650	396.150	0.052	3	100	40	1	0	Pos
7	357.430	358.150	0.054	3	100	40	1	0	Pos
8	347.650	368.150	0.052	3	100	40	1	0	Pos
9	369.450	370.150	0.052	3	100	40	1	0	Pos
10	371.650	372.150	0.052	3	100	40	1	0	Pos
11	373.650	374.130	0.052	3	100	40	1	0	Pos
12	375.650	376.150	0.052	3	100	40	1	0	Pos
13	379.650	380.150	0.052	3	100	40	1	0	Pos
14	381.650	302.150	0.052	3	100	40	1	0	Pos
15	385.650	386.150	0.052	3	100	40	1	0	Pos
16	387.650	388.150	0.052	3	100	40	1	0	Por
17	389.650	390.150	0.052	3	100	40	1	0	Pos
18	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.650	402.150	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.054	3	100	40	1	0	Pos
21	445.550	446.050	0.052	3	100	40	1	0	Por

3/26/91 17:16:36 SCAN 2219 OF 4000

MID scan
Scan time: 1.200 s

Desc: G3
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
2	373.630	374.150	0.052	3	100	40	1	0	Pos
3	375.630	376.150	0.052	3	100	40	1	0	Pos
4	385.650	386.150	0.052	3	100	40	1	0	Pos
5	387.650	388.150	0.052	3	100	40	1	0	Por
6	389.650	390.150	0.052	3	100	40	1	0	Pos
7	391.650	392.150	0.052	3	100	40	1	0	Pos
8	401.650	402.150	0.052	3	100	40	1	0	Por
9	403.650	404.150	0.054	3	100	40	1	0	Por
10	405.550	406.050	0.054	3	100	40	1	0	Pos
11	407.550	408.050	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.530	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.030	0.054	3	100	40	1	0	Po.
13	423.350	424.050	0.054	3	100	40	1	0	Po.
16	425.550	426.050	0.052	3	100	40	1	0	Po.
17	435.550	436.030	0.052	3	100	40	1	0	Pos
18	437.530	438.030	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	Pos

3/26/91 17:22:03 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: C4
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Pos
2	407.550	400.050	0.052	3	100	40	1	0	Pos
3	409.550	410.050	0.054	3	100	40	1	0	Pos

3/26/91 16:30:50 SCAN 1 OF 4000
Acquisition started

Acquire Run 0:6683061II1 ACQUIRIN6
03/26/91 16:30:00 + 0:04 Free sectors: 23372 Scan: 3 of 4000
Sample: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
Conds.: 60M DB-5/TOTALS.
Formula: Instrument: G3 Weight: 0.000
Submitted by: DM Analyst: DT Acct. No: PC4622

********** GC PARAMETERS **********
Lorded GC Desc:BW Current 6C oven tmp: 84 DegC Injector : 300 DegC
Current GC Desc:BW GC elapsed time : 3:15 min Int.oven : 275 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	SO - 50	_	0.1	0.1	Sweep/Sp1it	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	_	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

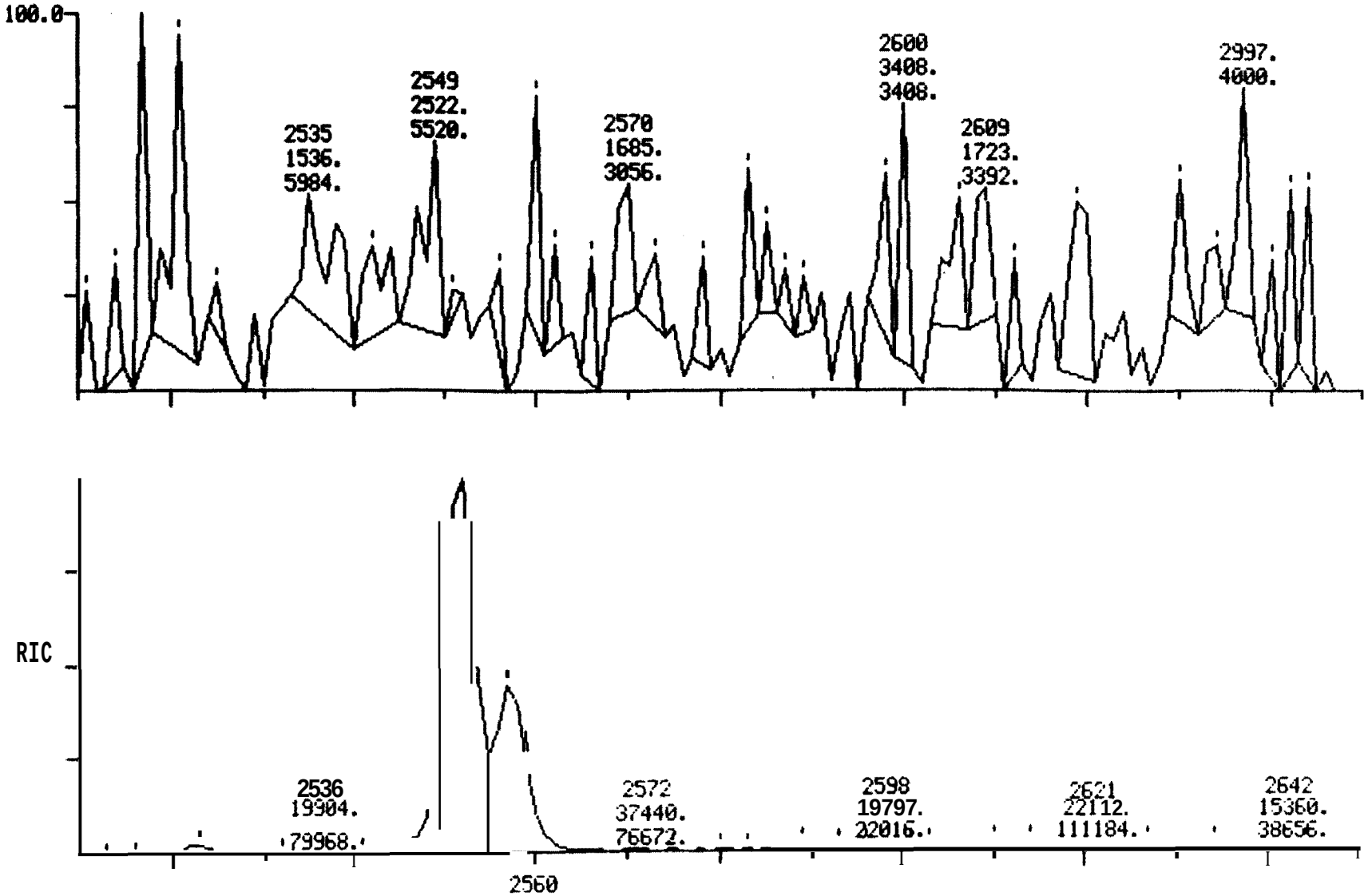
MID scan Desc: El Mass intervals: 21
Scan time: 1.200s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	303.650	304.150	0.032	3	100	40	1	0	Pos
2	305.630	306.150	0.032	3	100	40	1	0	Pos
3	307.630	308.150	0.034	3	100	40	1	0	Pos
4	315.630	316.130	0.052	3	100	40	1	0	Pos
3	317.650	318.130	0.034	3	100	40	1	0	Po.
6	319.630	320.130	0.032	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.032	3	100	40	1	0	Pos
9	331.650	332.150	0.032	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.630	338.150	0.034	3	100	40	1	0	Pos
12	339.630	340.150	0.032	3	100	40	1	0	Pos
13	341.630	342.150	0.052	3	100	40	1	0	Pos
14	351.630	352.150	0.034	3	100	40	1	0	Pos
13	353.630	334.150	0.032	3	100	40	1	0	Pos
16	353.630	336.150	0.054	3	100	40	1	0	Pos
17	357.630	358.150	0.032	3	100	40	1	0	Pos
18	367.650	368.150	0.034	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Perk Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

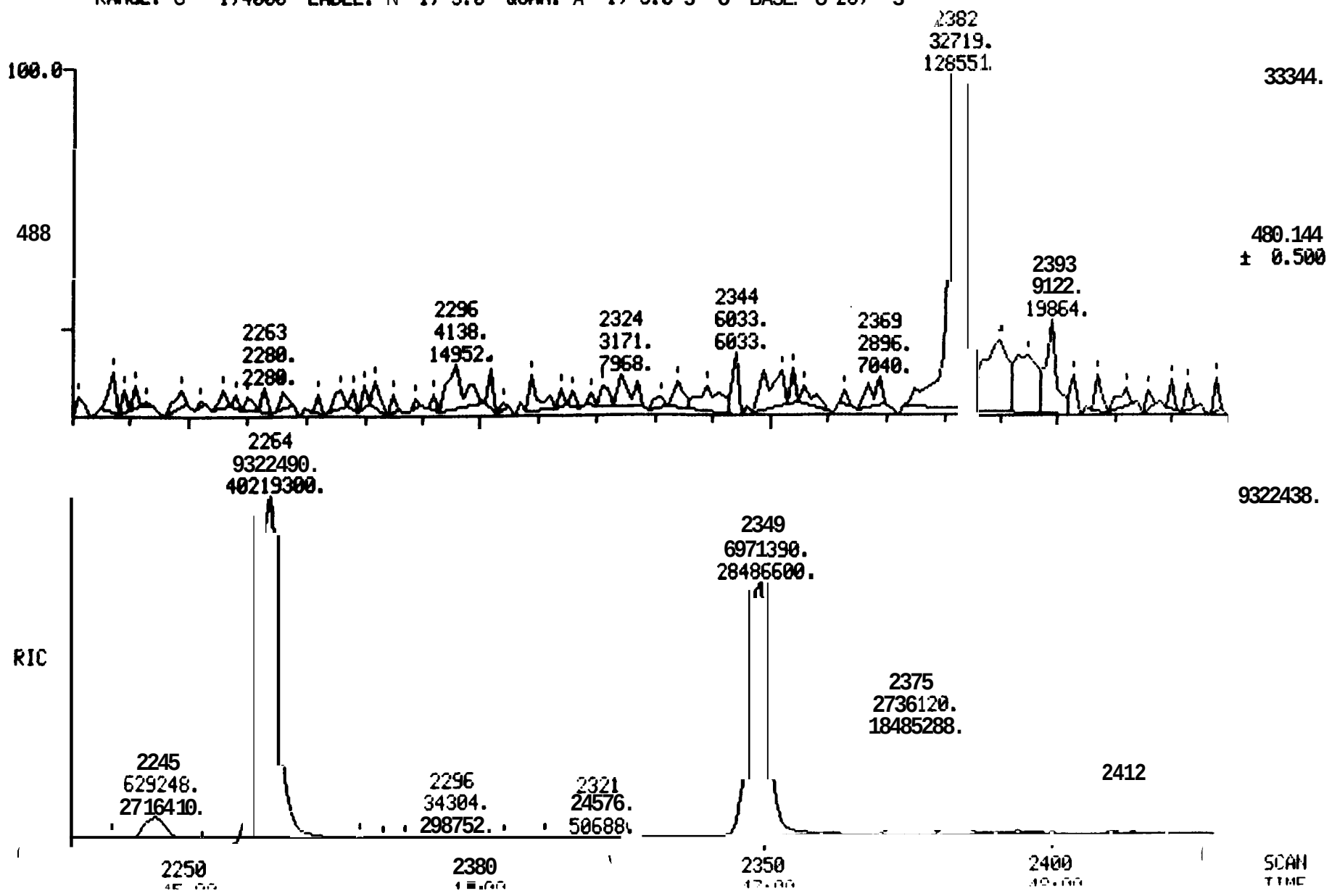
3/26/91 17:07:21 SCAN 1769 OF 4000

3200360

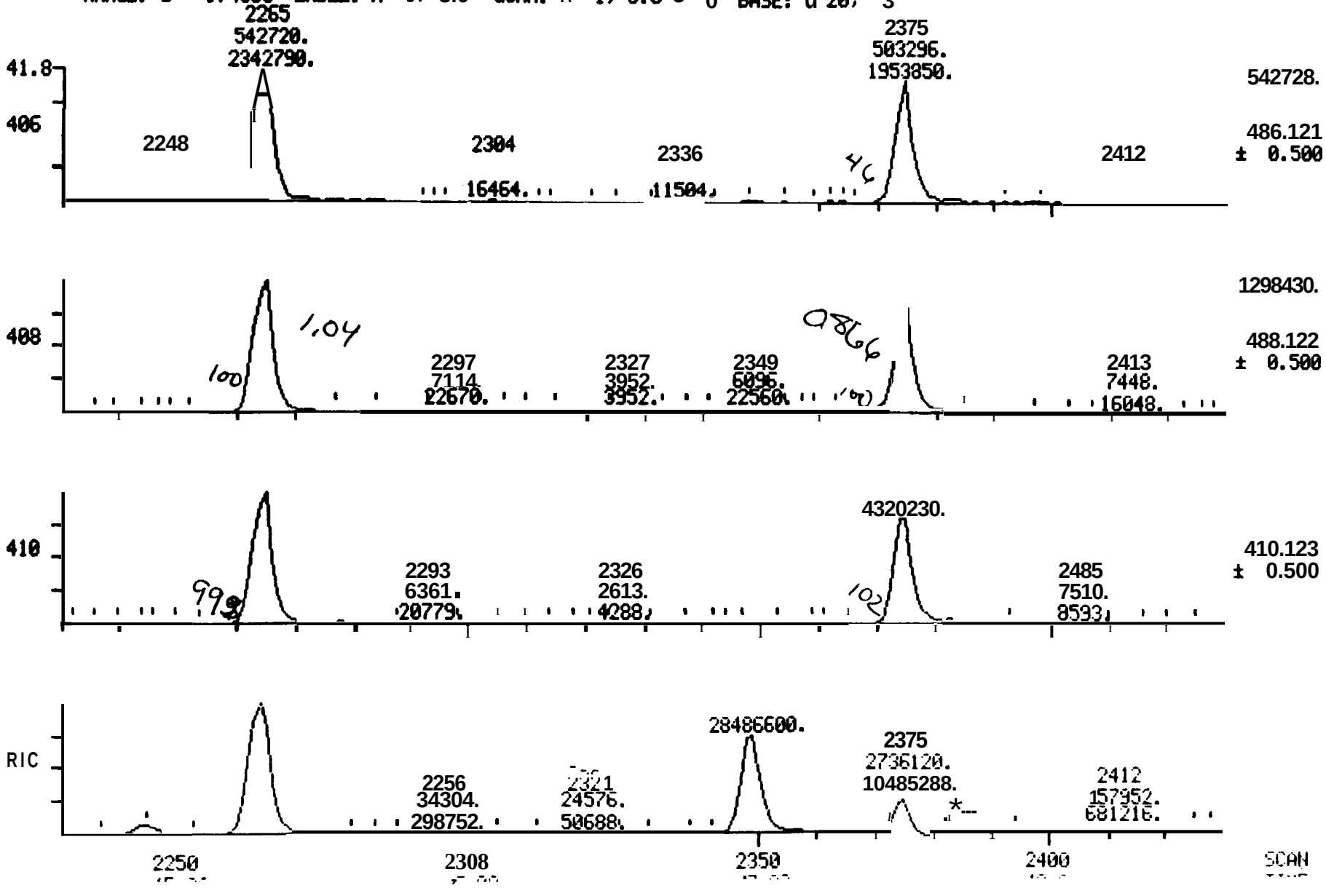

100.0
2535
1536.
5984.
2549
2522.
5520.
2570
1685.
3056.
2600
3408.
3408.
2609
1723.
3392.
2997.
4000.
RIC
2536
19904.
79968.
2572
37440.
76672.
2598
19797.
22016.
2621
22112.
111184.
2642
15360.
38656.
2560

32 00370

MIDRIC+MASS CHROMATOGRAM DATA: 668506IIII #1 SCANS 2230 TO 2430
83/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

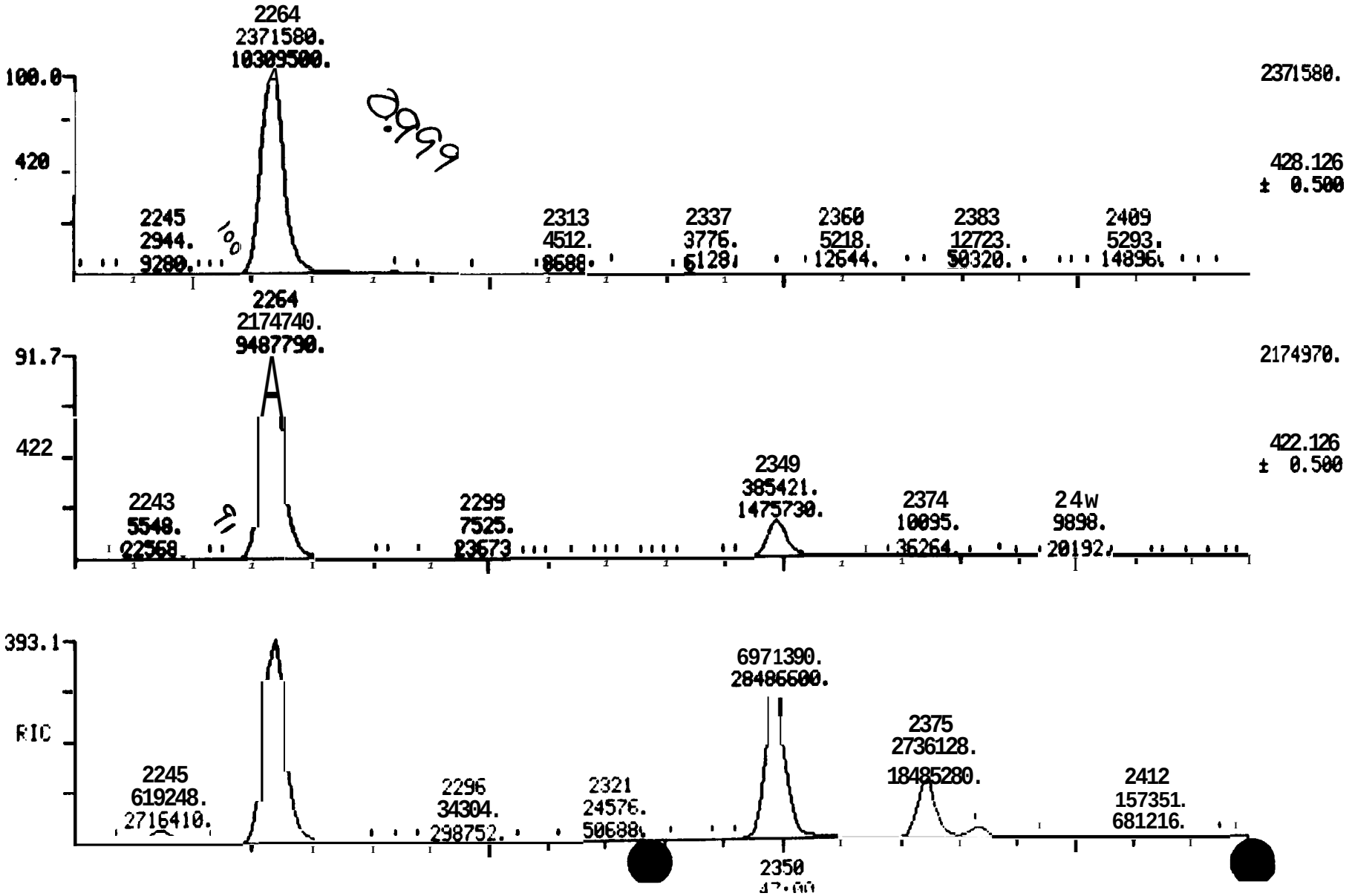


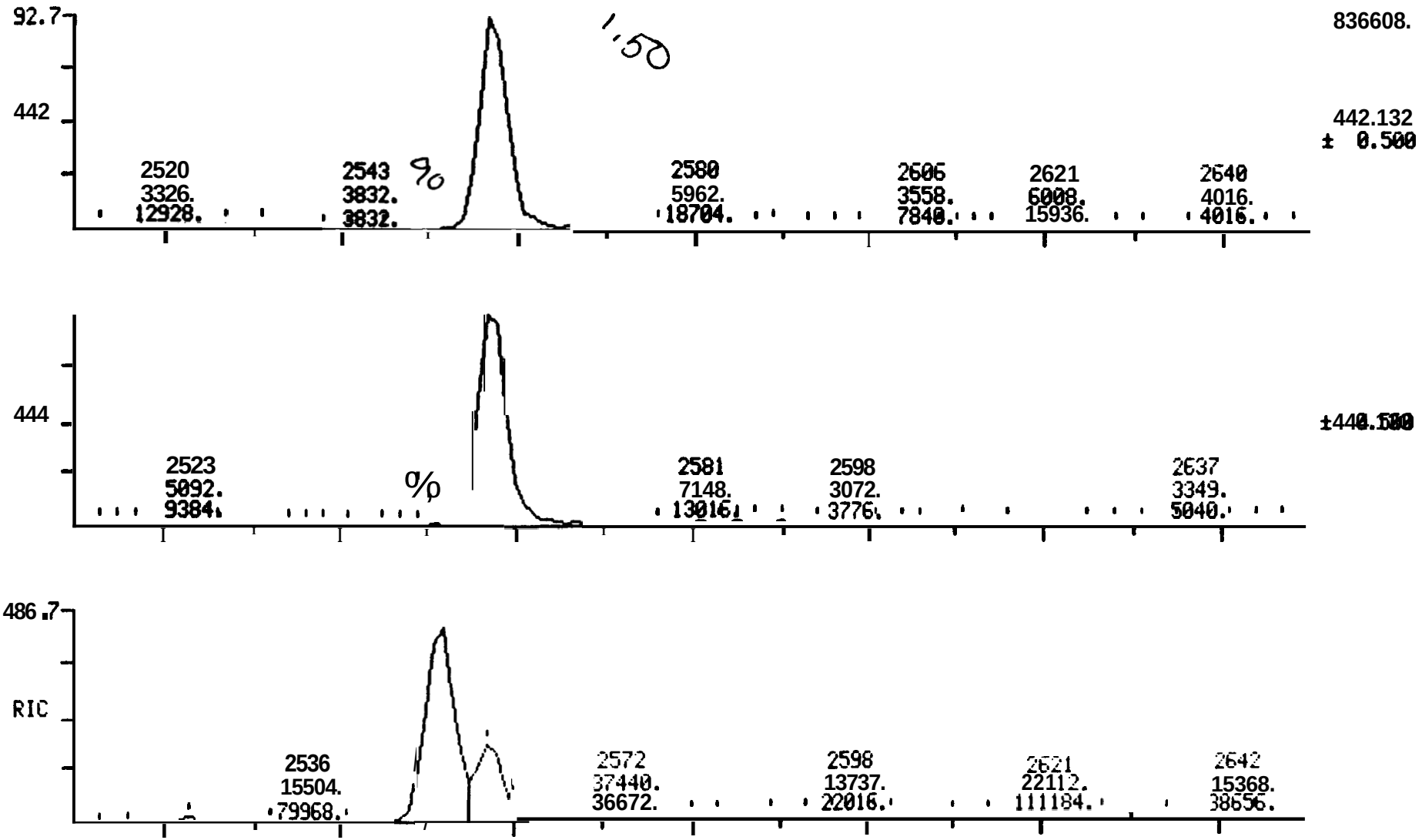
MIDRIC+MASS CHROMATOGRAMS DATA: 668506III1 #1 SCANS 2230 TO 2430
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200371

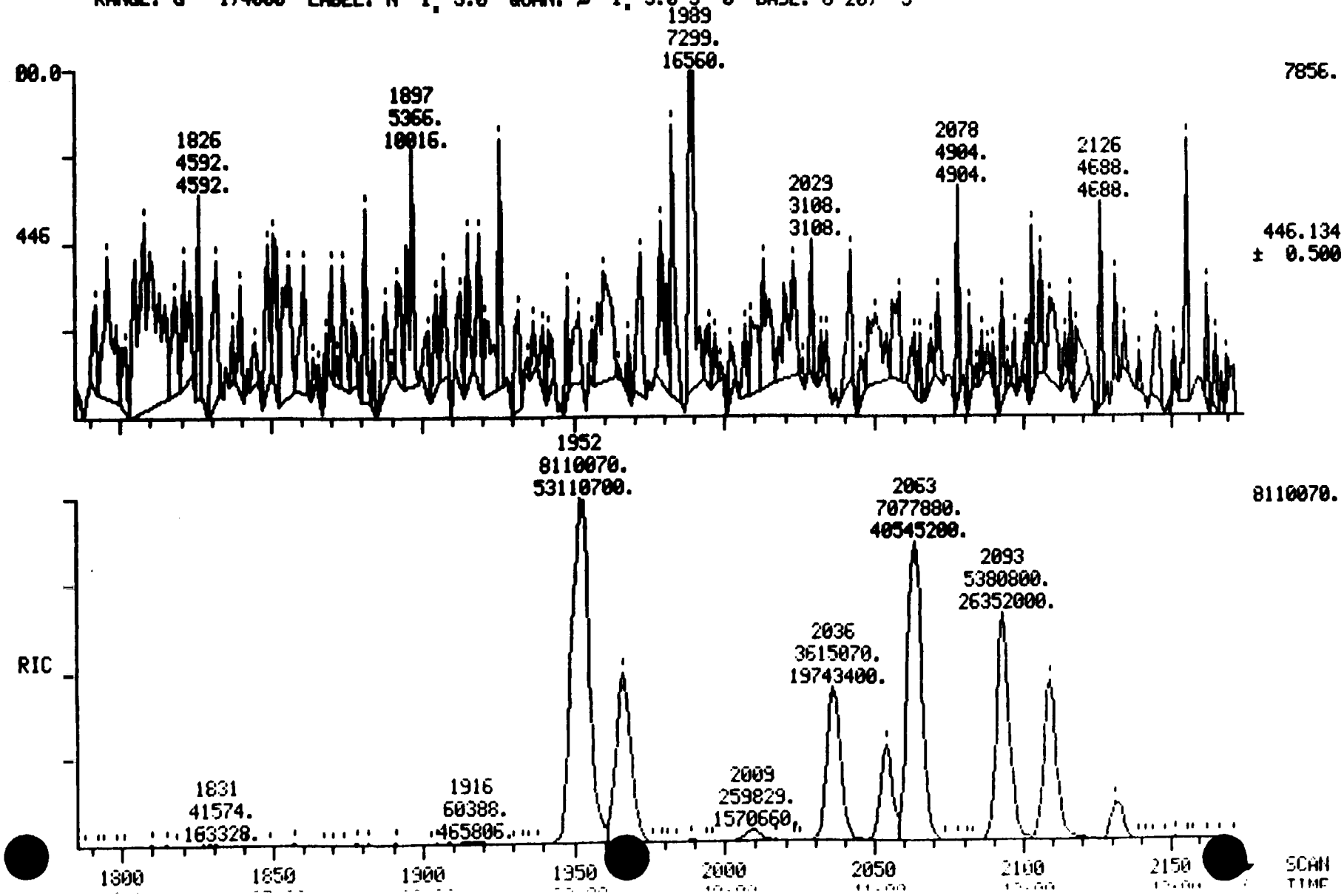
MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 2230 TO 2430
03/26/91 16:30:00 CALI: CAL910306A 02
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



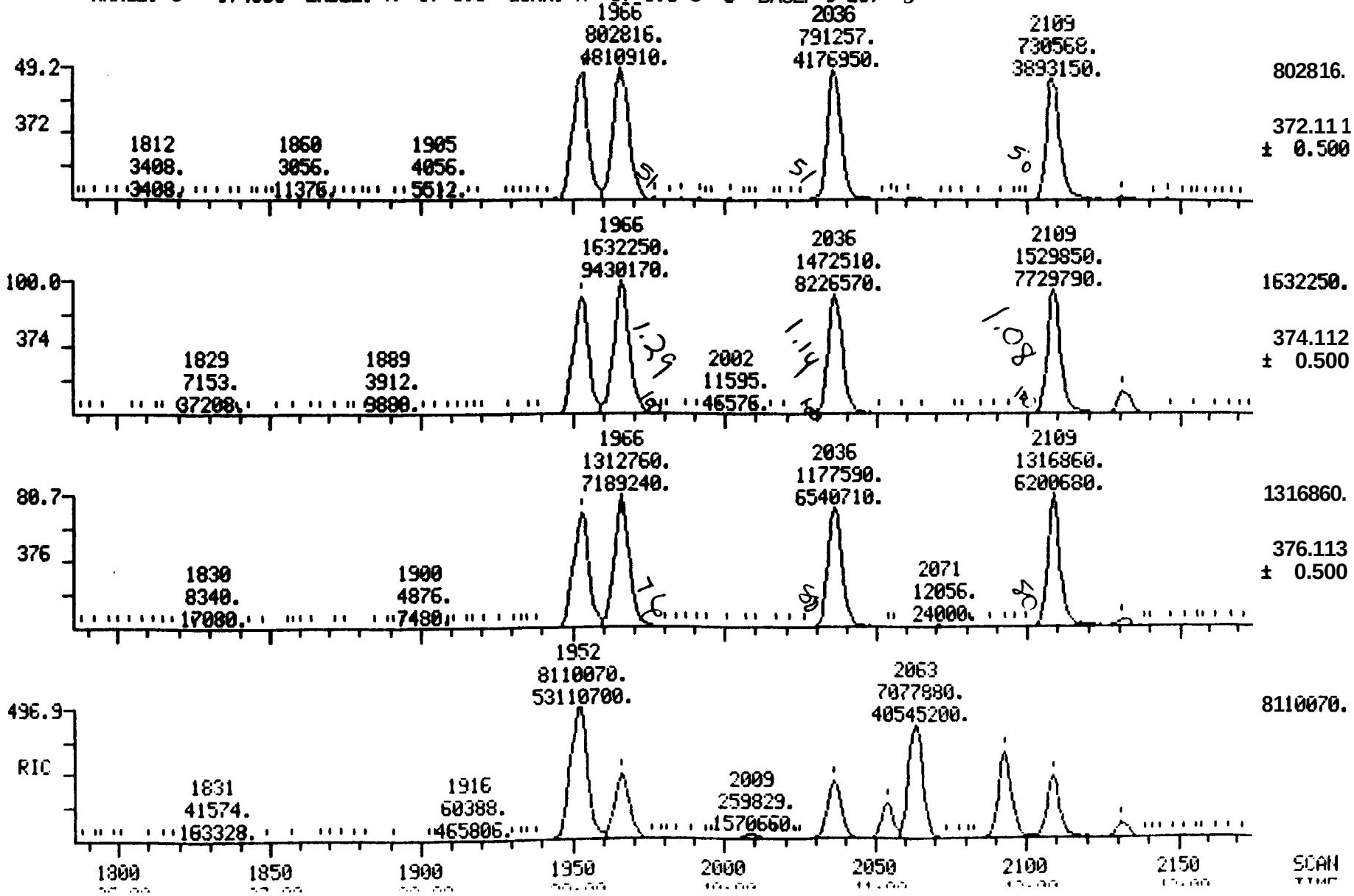

92.7
442
836608.
442.132
± 0.500
1.50
2520
3326.
12928.
2543
3832.
3832.
%
2580
5962.
18704.
2606
3558.
7840.
2621
6008.
15936.
2640
4016.
4016.
444
2523
5092.
9384.
%
2581
7148.
13016.
2598
3072.
3776.
2637
3349.
5040.
486.7
RIC
2536
15504.
79968.
2572
37440.
36672.
2598
13737.
22016.
2621
22112.
111184.
2642
15368.
38656.

3200372

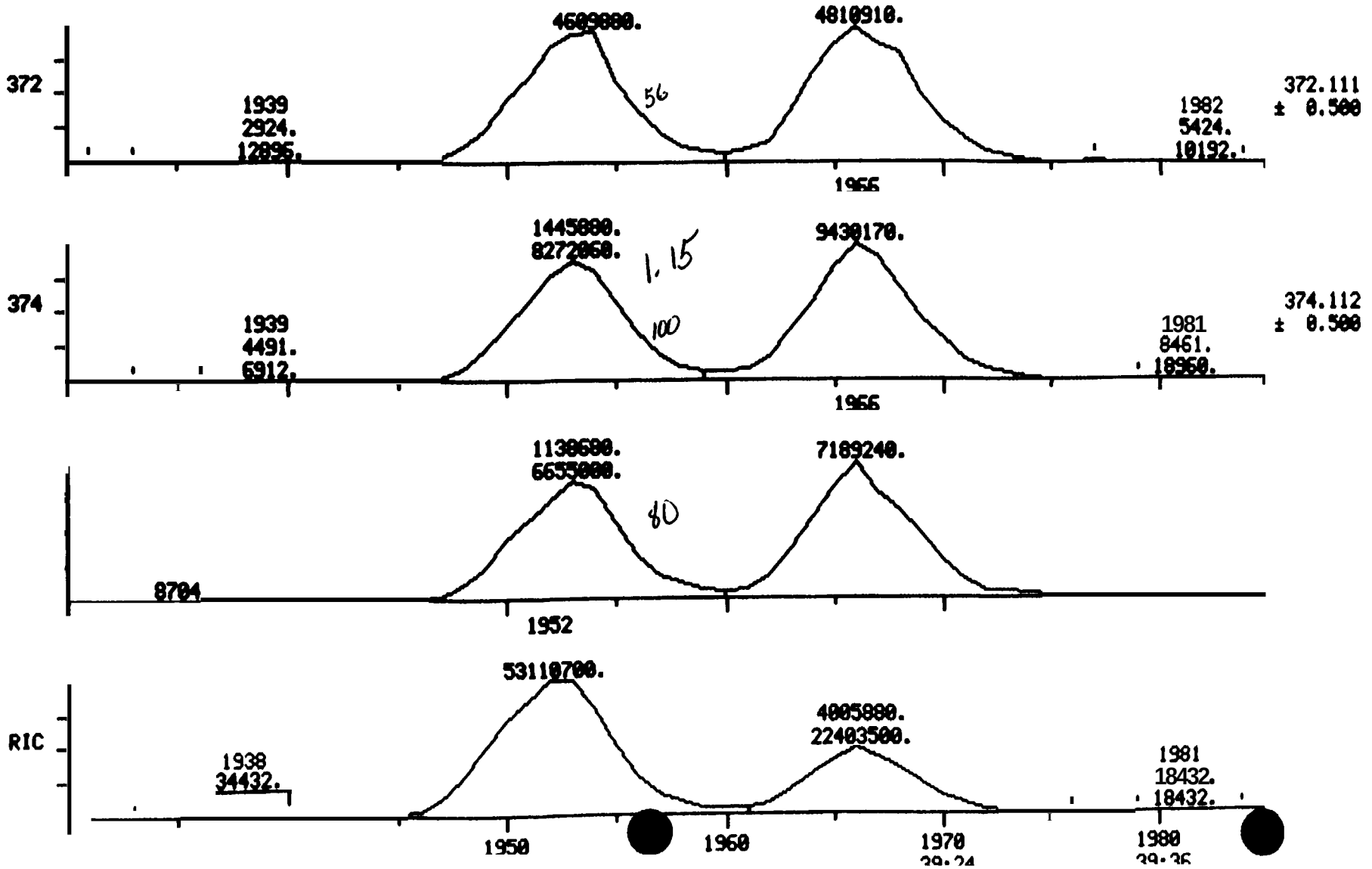
MIDRIC+MASS CHROMATOGRAM DATA: 668506III1 #1 SCANS 1785 TO 2175
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: Ø 1, 3.0 J 0 BASE: U 20, 3

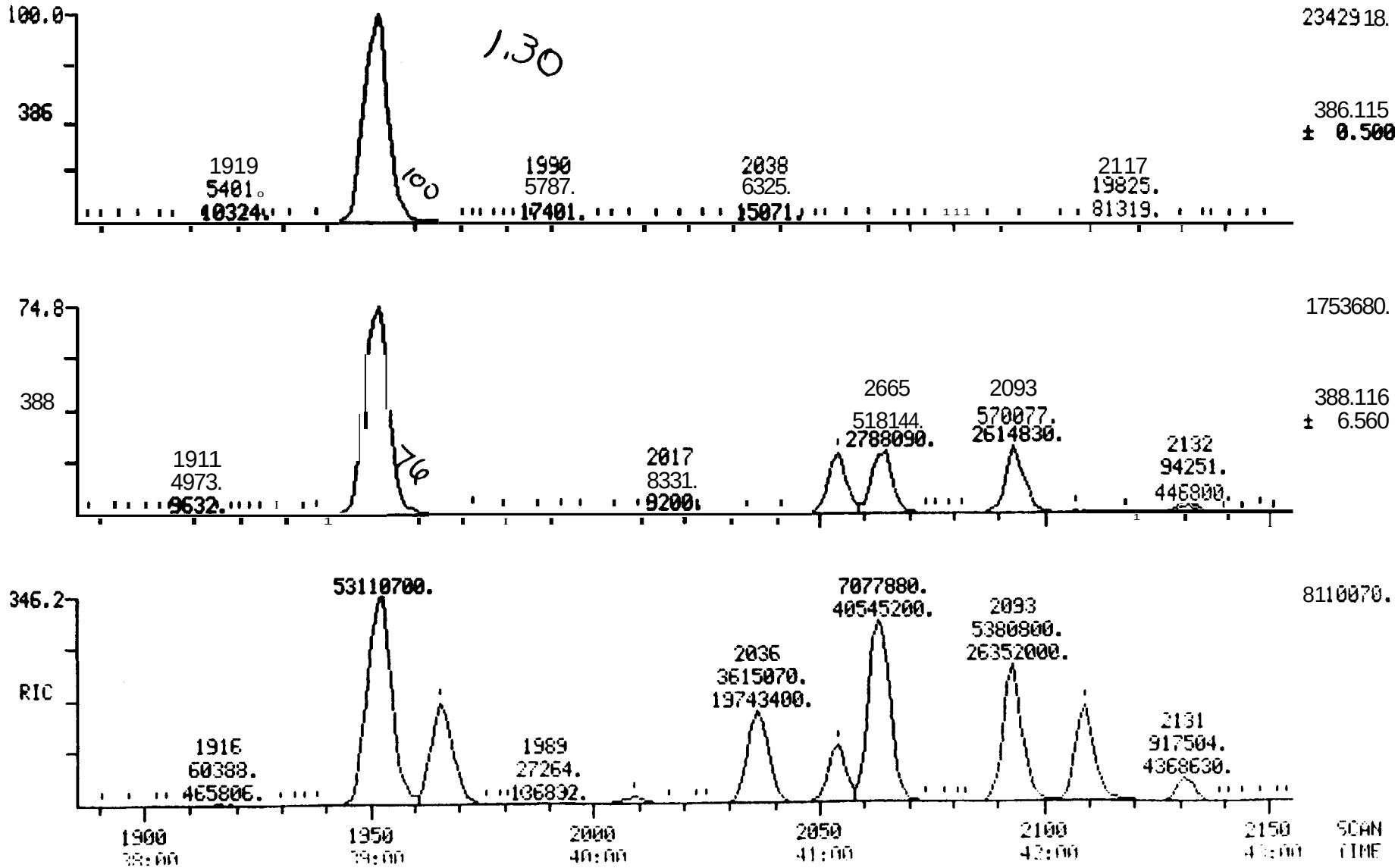


MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 1785 TO 2175
03/26/91 16:30:00 CALI: CAL910306A t2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



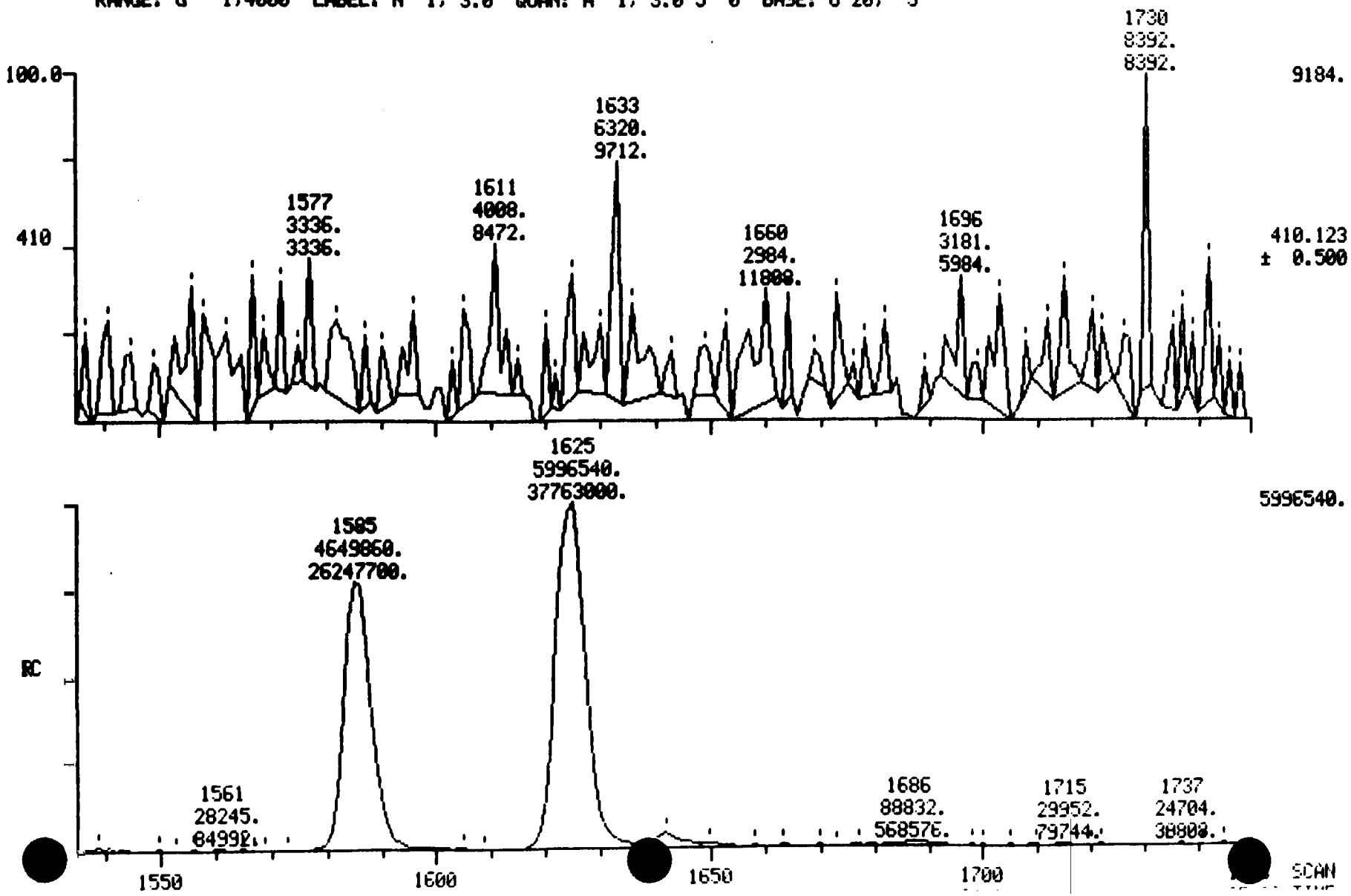
3200373


372
4609000.
4810910.
56
1939
2924.
12095.
1982
5424.
10192.
372.111
± 0.500
1956
374
1445000.
8272060.
1.15
9430170.
100
1939
4491.
6912.
1981
8461.
18960.
374.112
± 0.500
1956
1130600.
6655000.
7189240.
80
8704
1952
RIC
53110700.
4005000.
22403500.
1938
34432.
1981
18432.
18432.
1950
1960
1970
1980

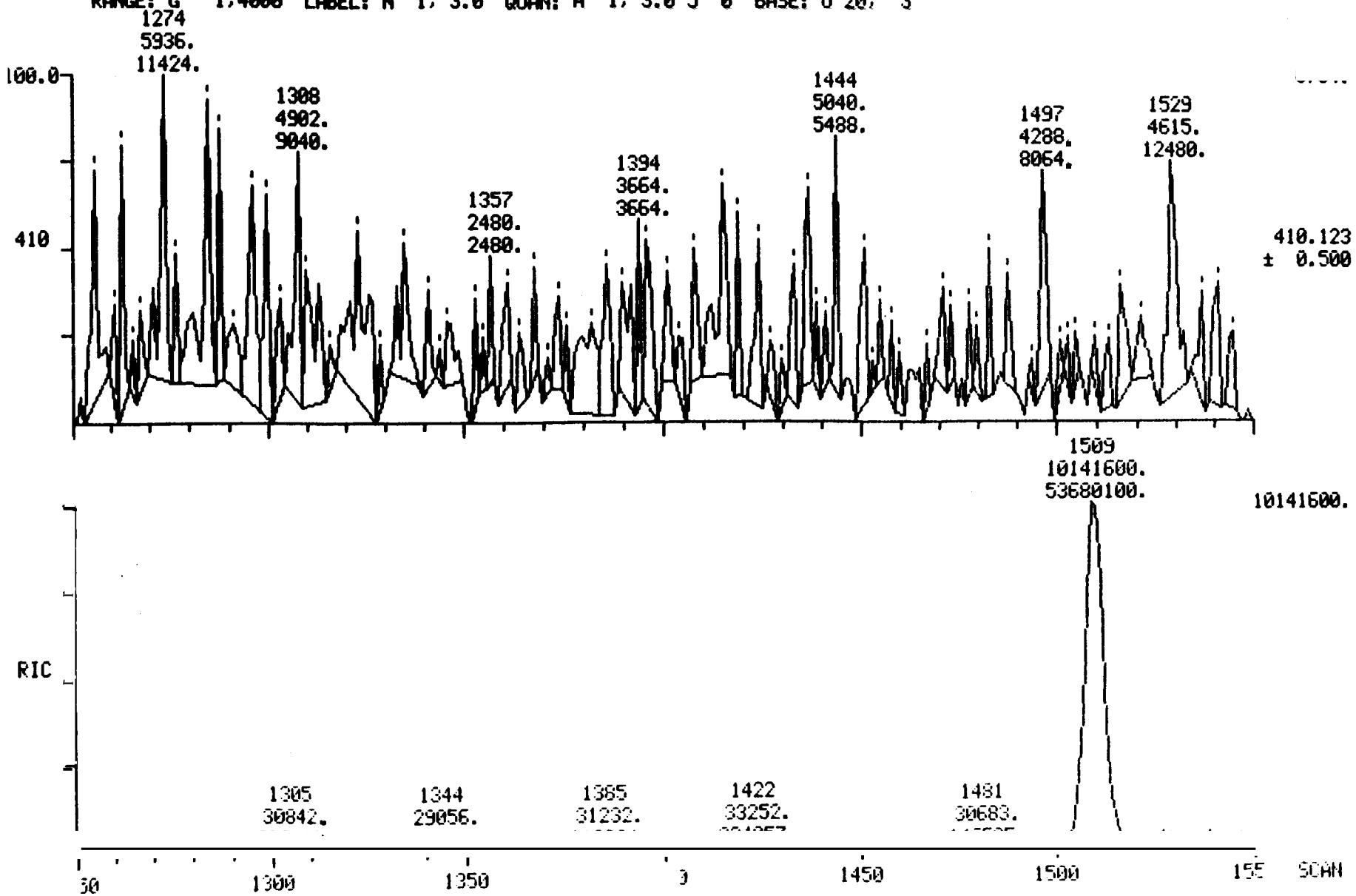

100.0
386
1919
5401.
10324.
1,30
100
1990
5787.
17401.
2038
6325.
15071.
2117
19825.
81319.
2342918.
386.115
± 0.500
74.8
388
1911
4973.
9632.
76
2017
8331.
9200.
2665
518144.
2788090.
2093
570077.
2614830.
2132
94251.
446800.
1753680.
388.116
± 6.560
346.2
RIC
1916
60388.
465806.
53110700.
1989
27264.
106832.
2036
3615070.
19743400.
7077880.
40545200.
2093
5380800.
26352000.
2131
917504.
4368630.
8110070.
1900
1950
2000
2050
2100
2150
SCAN
TIME

3200374

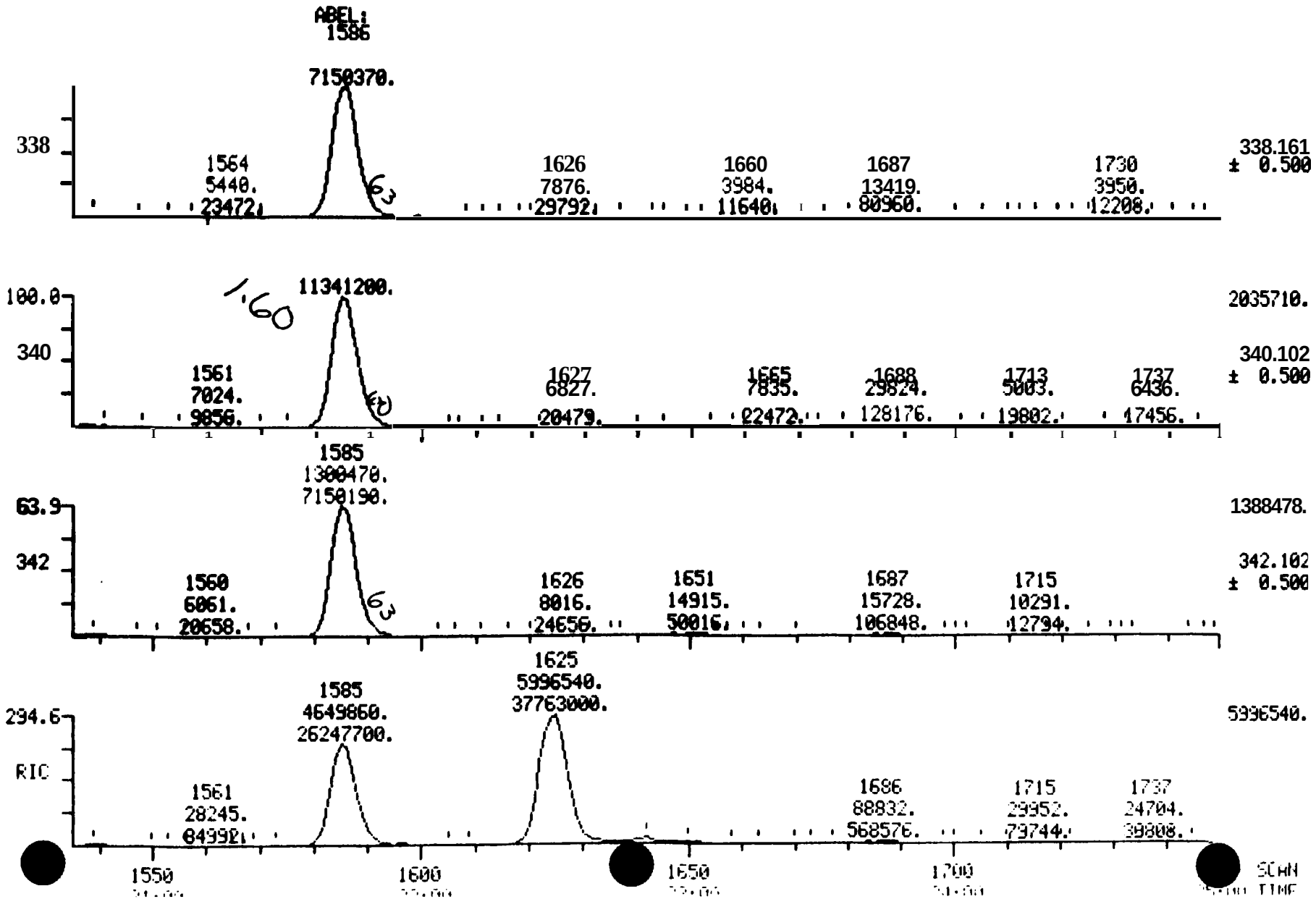
MIDRIC+MASS CHROMATOGRAM DATA: 668506IIII #1 SCANS 1535 TO 1750
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



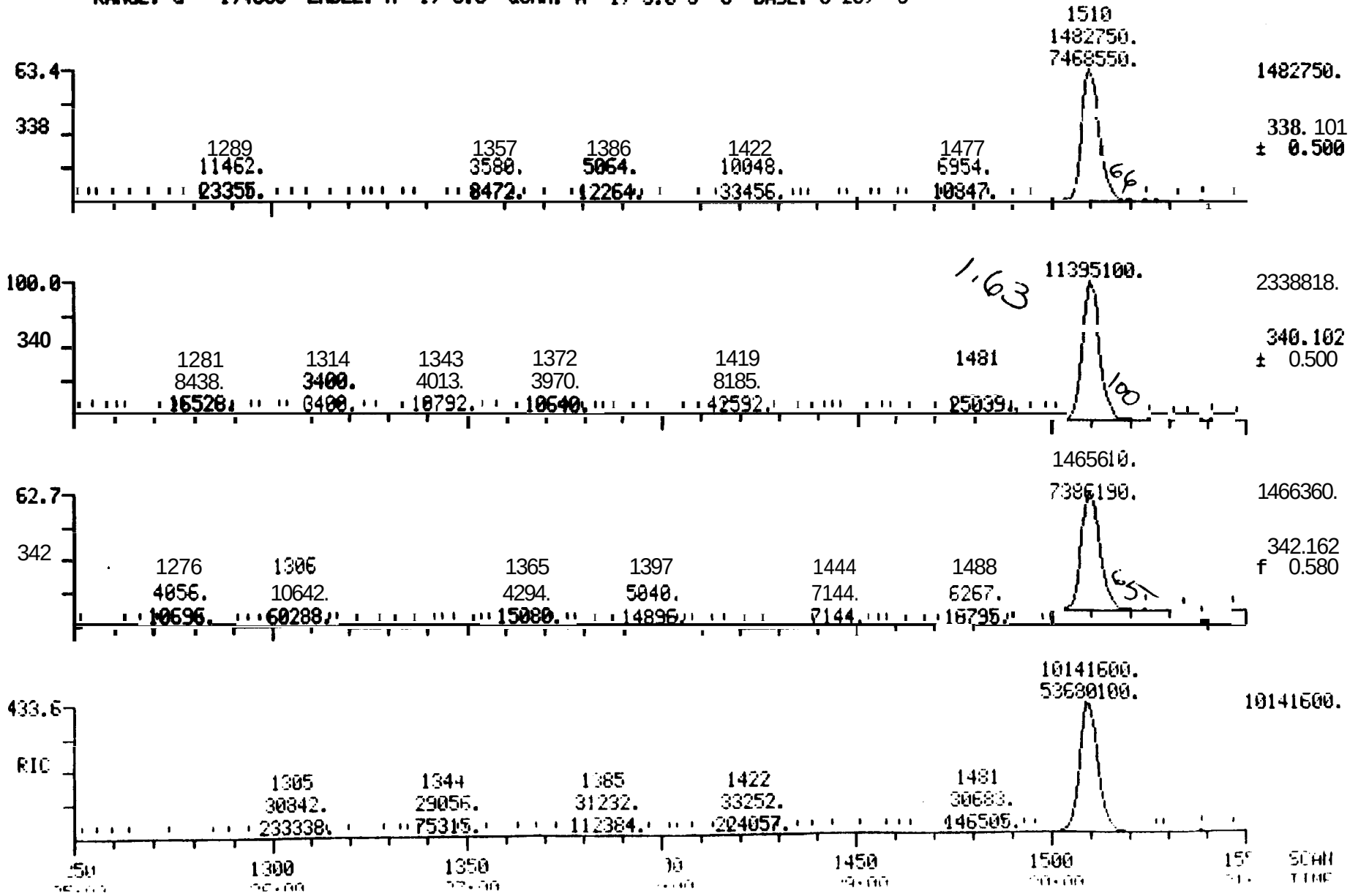
MIDRIC+MASS CHROMATOGRAM DATA: 668506IIII #1 SCANS 1250 TO 1550
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

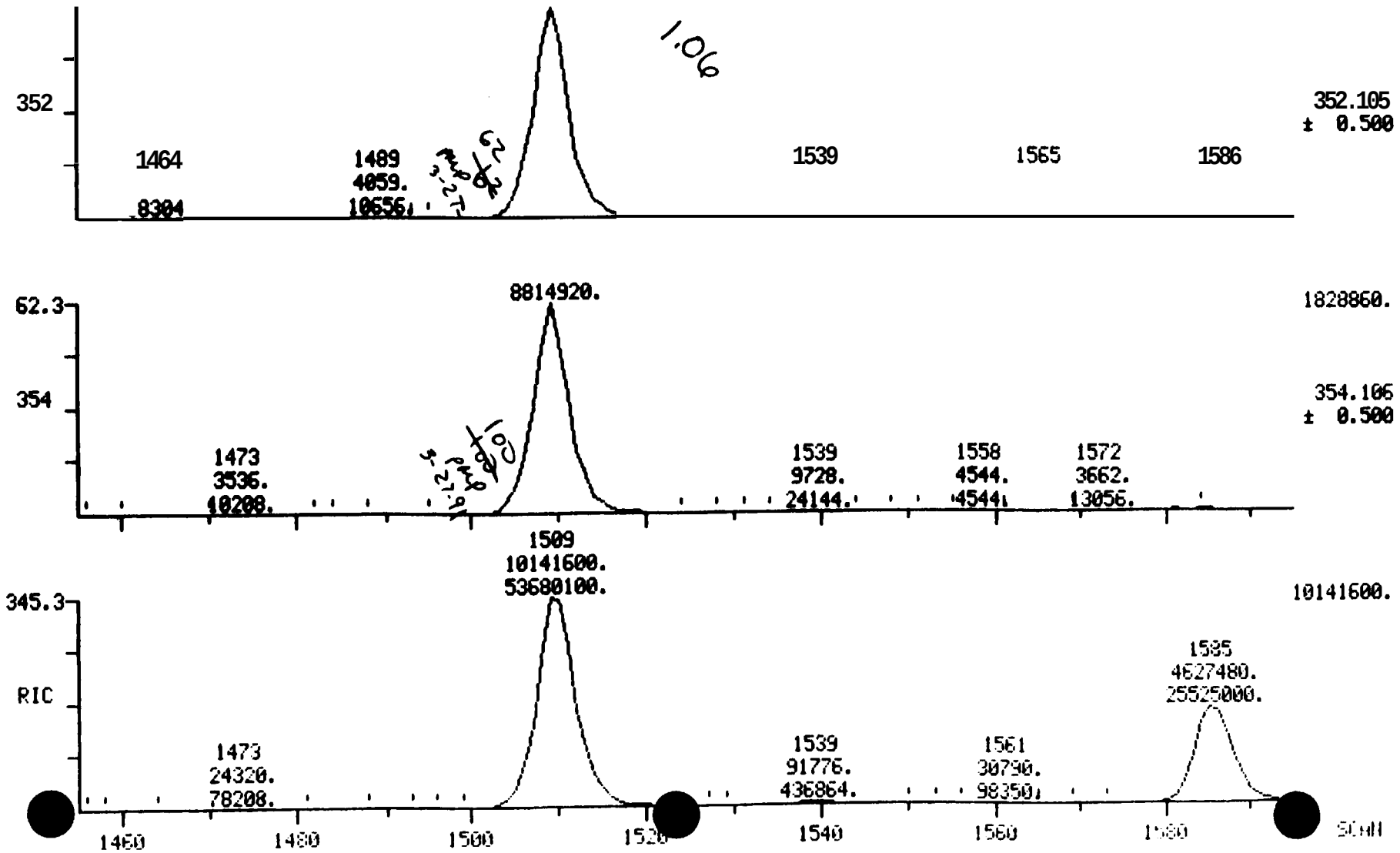


3200375

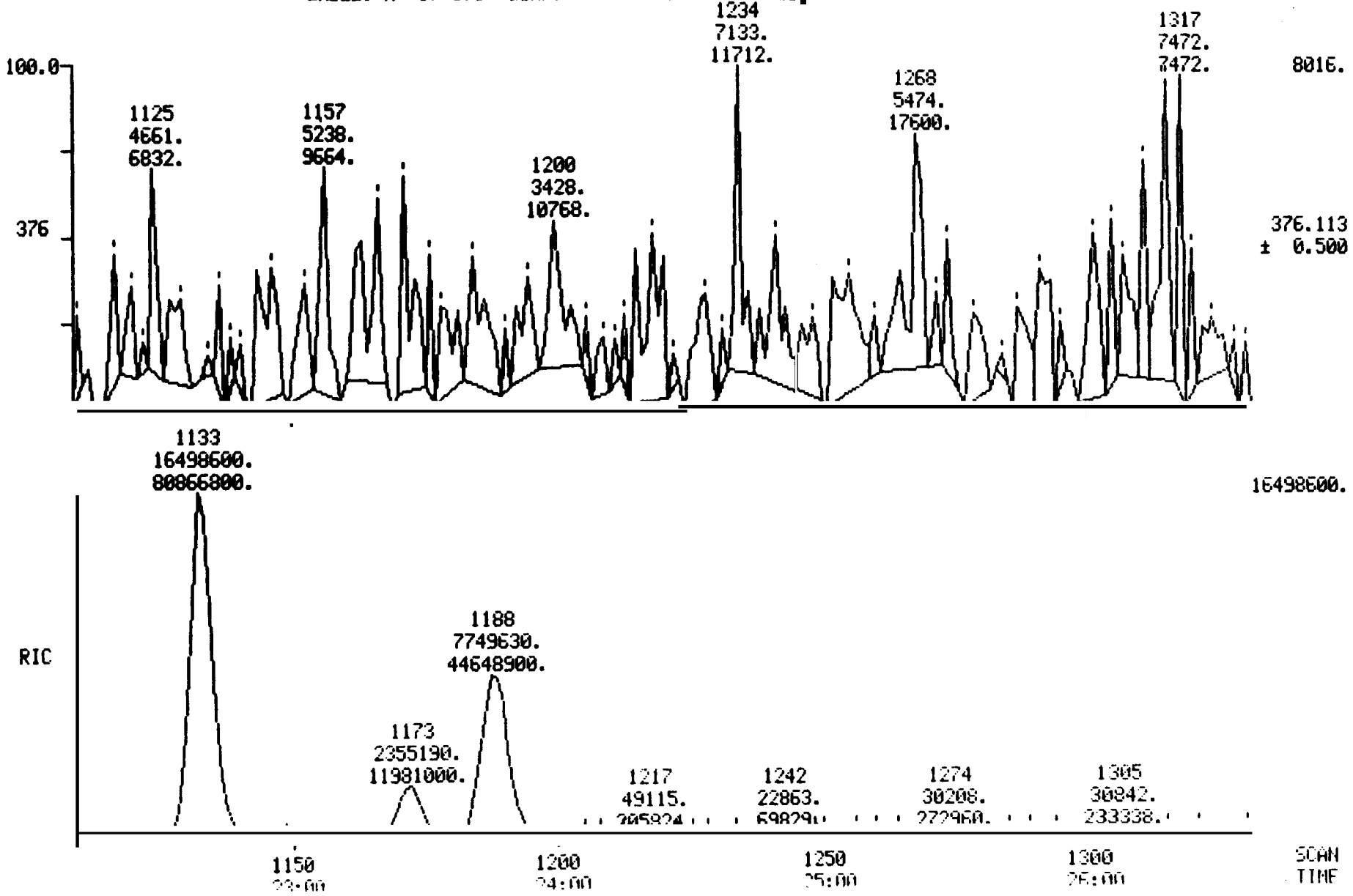

ABEL:
1586
7150370.
338
1564
5440.
23472.
63
1626
7876.
29792.
1660
3984.
11640.
1687
13419.
80960.
1730
3950.
12208.
338.161
± 0.500
100.0
340
1561
7024.
9856.
160
11341200.
1627
6827.
20479.
1665
7835.
22472.
1688
29824.
128176.
1713
5003.
19802.
1737
6436.
17456.
2035710.
340.102
± 0.500
63.9
342
1585
1300470.
7150190.
1560
6061.
20658.
63
1626
8016.
24656.
1651
14915.
50016.
1687
15728.
106848.
1715
10291.
12794.
1388478.
342.102
± 0.500
294.6
RIC
1585
4649860.
26247700.
1625
5996540.
37763000.
1561
28245.
84990.
1686
88832.
568576.
1715
29952.
79744.
1737
24704.
38808.
5996540.
1550
1600
1650
1700
SCAN TIME

MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 1250 TO 1550
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



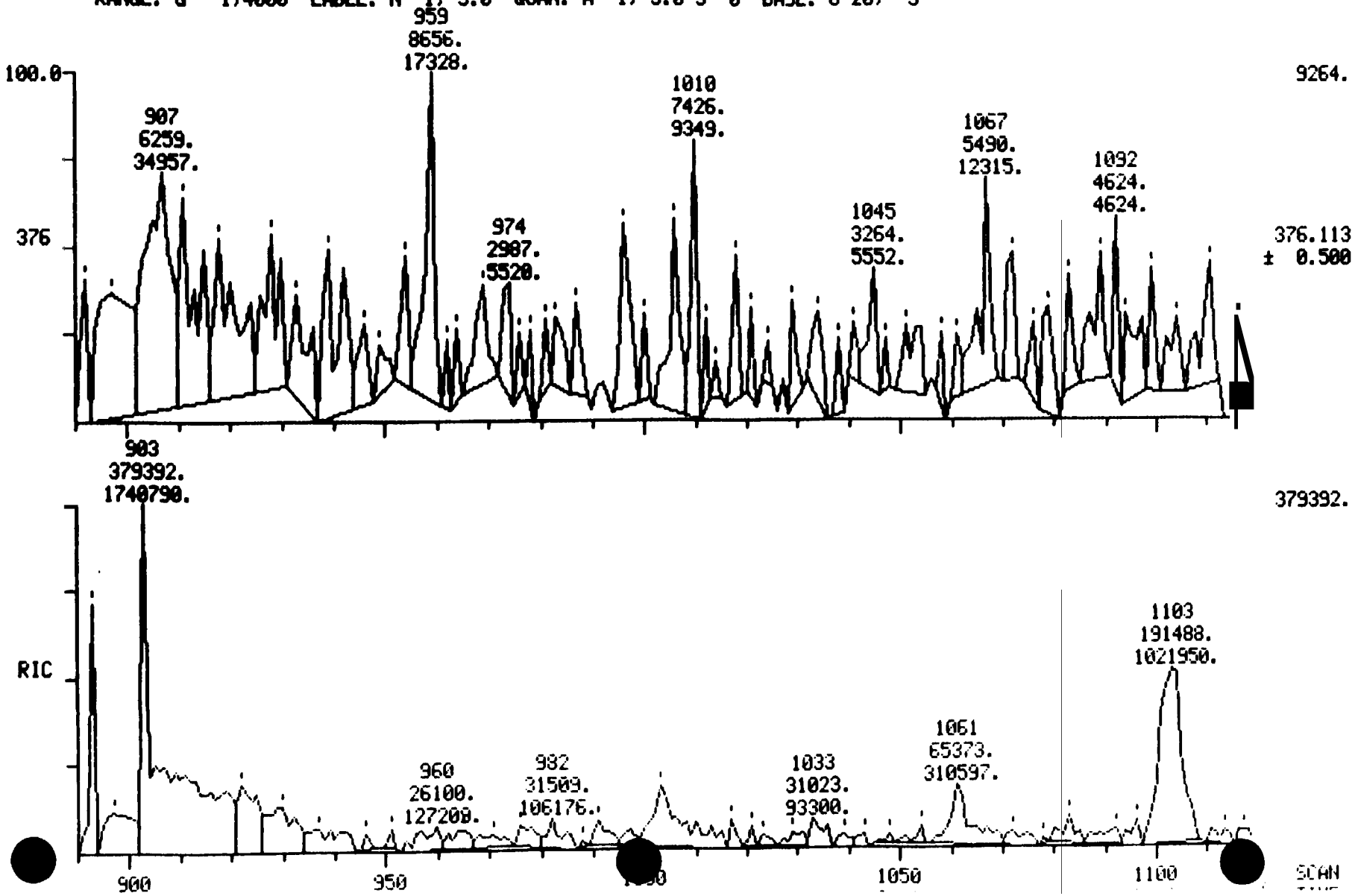

352
1.06
352.105
± 0.500
1464
8304
1489
4059.
10656.
1539
1565
1586
62.3
8814920.
1828860.
354
354.106
± 0.500
1473
3536.
10208.
1539
9728.
24144.
1558
4544.
4544.
1572
3662.
13056.
345.3
1509
10141600.
53680100.
10141600.
RIC
1473
24320.
78208.
1539
91776.
436864.
1561
30790.
98350.
1585
4627480.
25525000.
1460
1480
1500
1520
1540
1560
1580
SCAN

MIDRIC+MASS CHROMATOGRAM DATA: 668506III1 #1 SCANS 1110 TO 1330
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

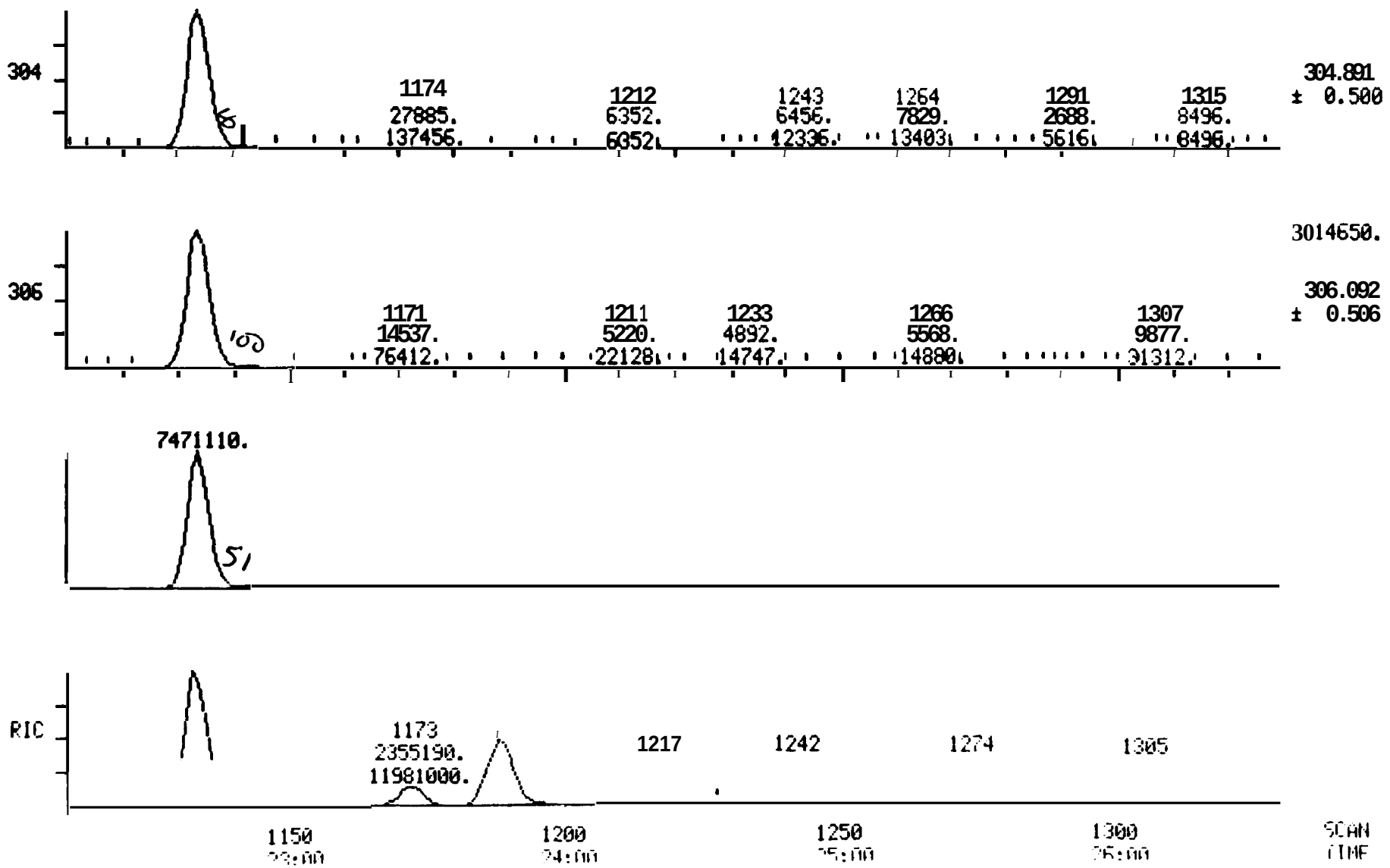


3200377

MIDRIC+MASS CHROMATOGRAM DATA: 668506IIII #1 SCANS 890 TO 1120
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

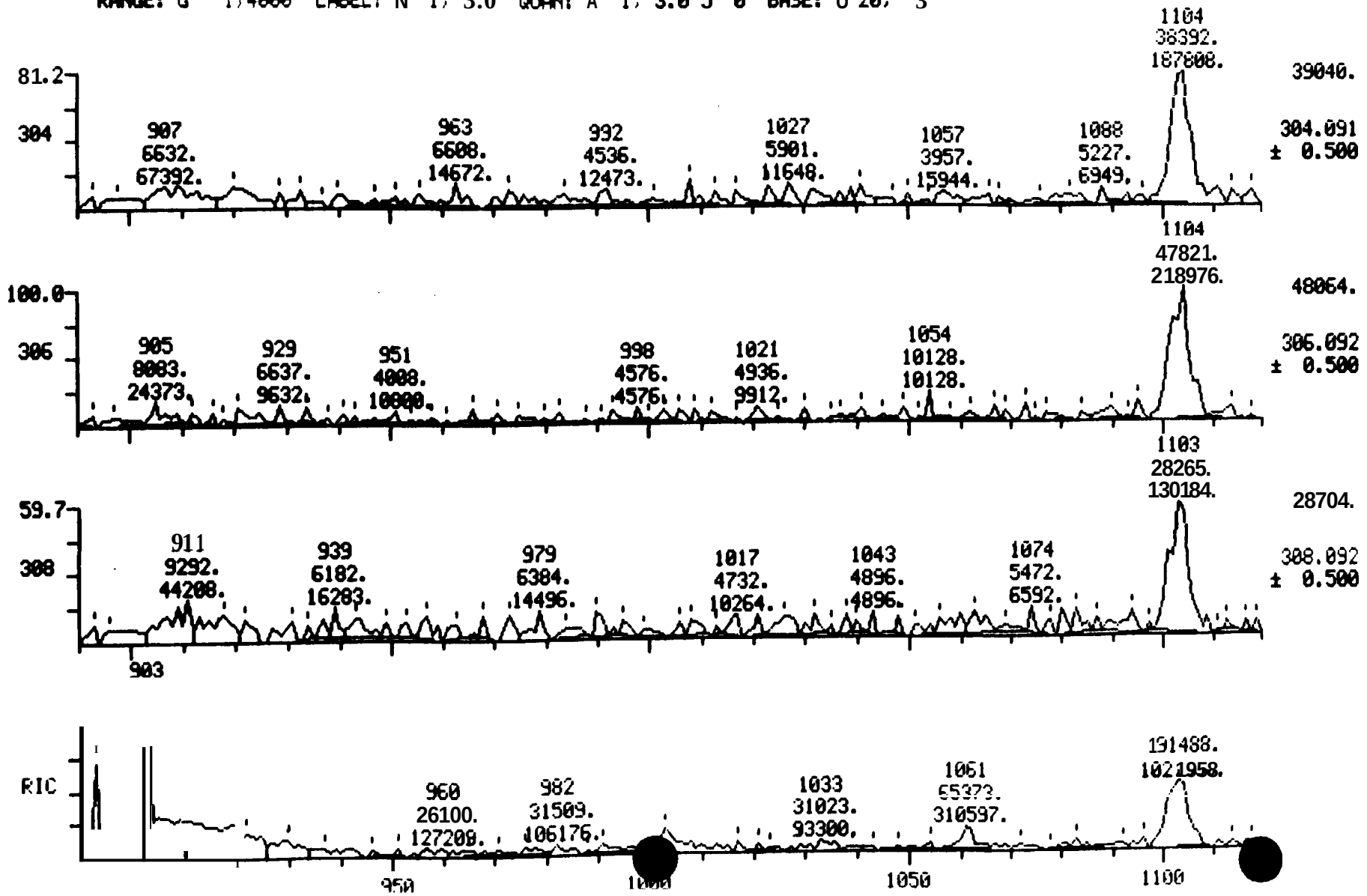


500

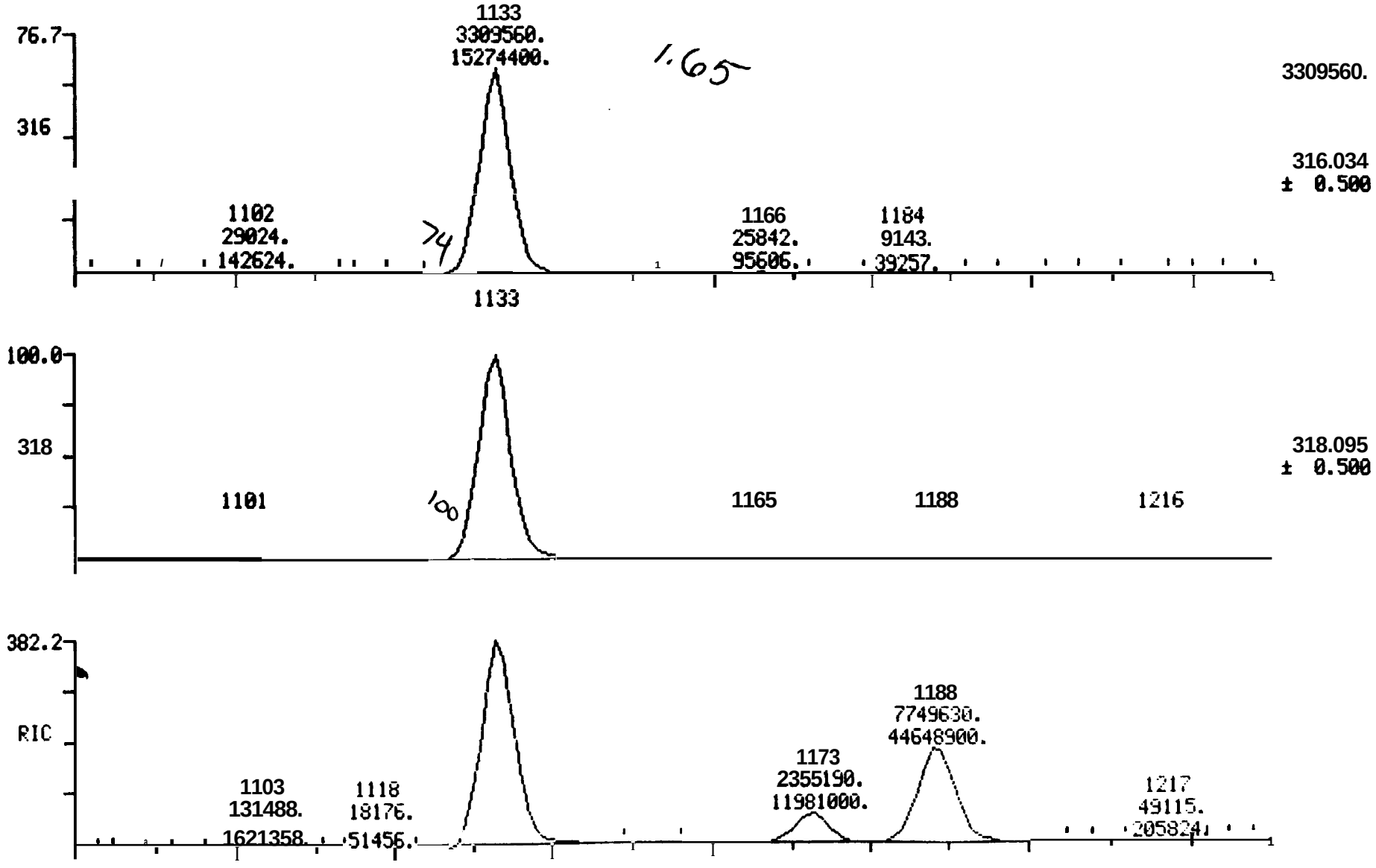

304
1174
27885.
137456.
1212
6352.
6352
1243
6456.
12336.
1264
7829.
13403
1291
2688.
5616
1315
8496.
8496.
304.891
± 0.500
306
1171
14537.
76412.
1211
5220.
22128
1233
4892.
14747.
1266
5568.
14880
1307
9877.
31312.
3014650.
306.092
± 0.506
7471110.
RIC
1173
2355190.
11981000.
1217
1242
1274
1305
1150
1200
1250
1300
SCAN
TIME

W 200373

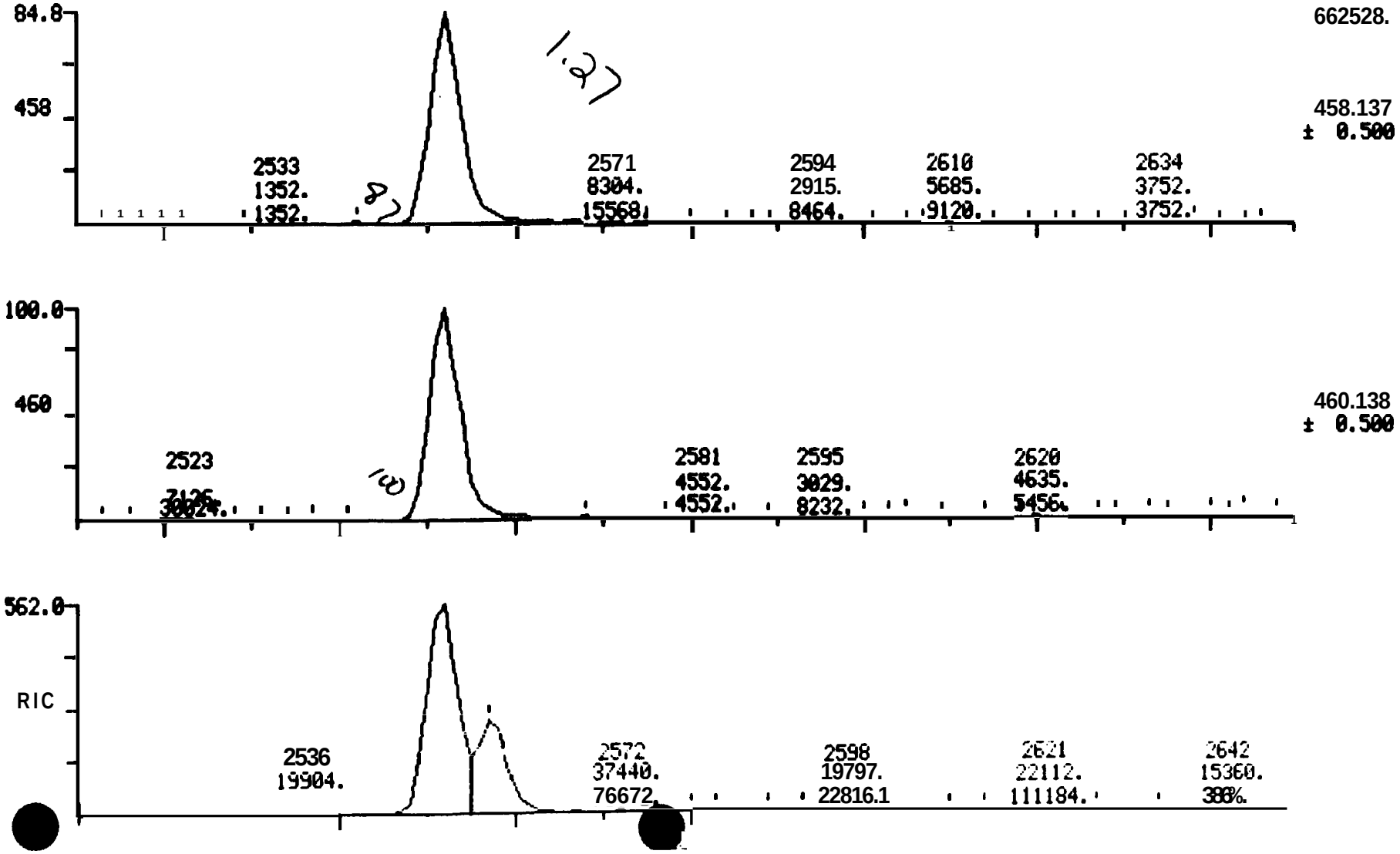
MIDRIC+MASS CHROMATOGRAMS DATA: 685506III1 #1 SCANS 890 TO 1120
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



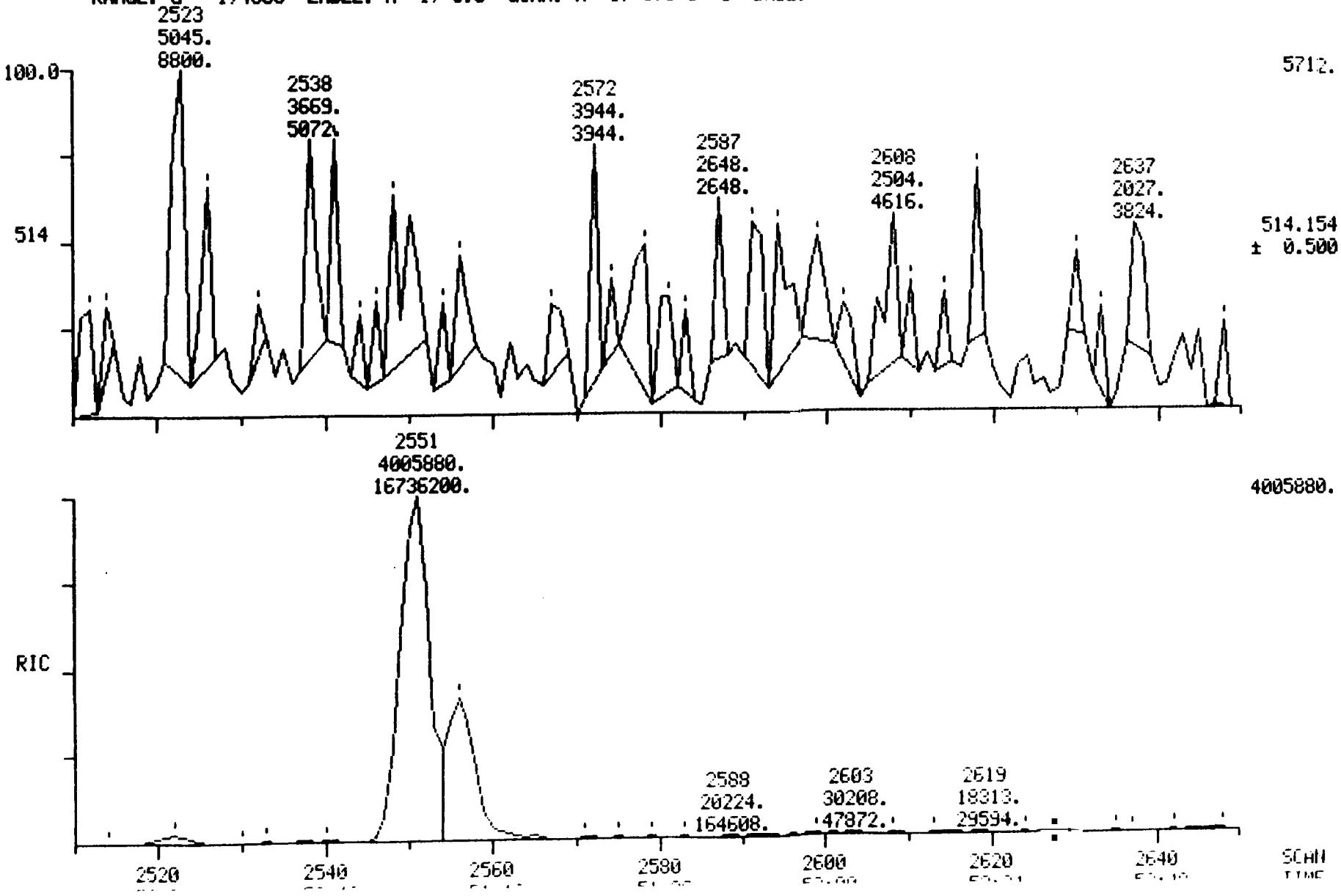
MIDRIC+MASS CHROMATOGRAMS DATA: 668506IIII #1 SCANS 1080 TO 1230
03/26/91 16:30:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD 111 NATIVES @ 500 PPB RUN1
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3 003


84.8
458
662528.
458.137
± 0.500
2533
1352.
1352.
2571
8304.
15568.
2594
2915.
8464.
2610
5685.
9120.
2634
3752.
3752.
100.0
460
460.138
± 0.500
2523
2581
4552.
4552.
2595
3029.
8232.
2620
4635.
5456.
562.0
RIC
2536
19904.
2572
37440.
76672.
2598
19797.
22816.1
2621
22112.
111184.
2642
15360.
388%.

MIDRIC+MASS CHROMATOGRAM DATA: 68506III3 #1 SCANS 2510 TO 2650
03/26/91 18:37:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3/26/91 18:37:00 SCAN 1 OF 4000
Acquisition started

Acquire Run 0:685061113 ACQUIRING
03/26/91 18:37:00 + 0:04 Free sectors: 21846 Scan 3 of 4000
Sample: 2UL OF 685:06 STD III NATIVES @ 500 PPB RUN 3
Conds.: 60M DB-5/TOTALS.
Formula: Instrument: Q3 Weight 0.000
Submitted by. DM Analyst: DT Acct No PC4622

********** GC PARAMETERS **********
Lorded GC Desc: BW Current GC oven tmp: 74 DegC Injector 300 DegC
Current GC Desc: BW GC elapsed time 1:48 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	2s.0	0.7	0.8	Divert	10.8	0 0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mars	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.630	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.130	0.054	3	100	40	1	0	Pos
12	339.630	340.150	0.052	3	100	40	1	0	Pos
13	341.630	342.150	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	335.650	356.150	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0.	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interfacc number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	a	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/26/91 19:13:31 SCAN 1769 OF 4000

3200380

MID scan
Scan time: 1.200 s

Desc: G2
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
2	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353.650	354.150	0.054	3	100	40	1	0	Pos
6	355.650	356.150	0.052	3	100	40	1	0	Pos
7	357.650	358.150	0.054	3	100	40	1	0	Pos
e	367.650	368.150	0.052	3	100	40	1	0	Pos
9	369.650	370.150	0.052	3	100	40	1	0	Pos
10	371.650	372.150	0.052	3	100	40	1	0	Pos
11	373.650	374.150	0.052	3	100	40	1	0	Pos
12	375.650	376.130	0.052	3	100	40	1	0	Pos
13	379.650	380.130	0.052	3	100	40	1	0	Pos
14	381.650	382.150	0.052	3	100	40	1	0	Pos
15	383.650	306.150	0.052	3	100	40	1	0	Pos
16	387.650	308.150	0.052	3	100	40	1	0	Pos
17	389.650	390.150	0.052	3	100	40	1	0	Pos
10	391.650	392.150	0.052	3	100	40	1	0	Pos
19	401.650	402.150	0.052	3	100	40	1	0	Pos
20	403.650	404.150	0.054	3	100	40	1	0	Pos
21	443.550	446.050	0.052	3	100	40	1	0	Pos

3/26/91 19:22:46 SCAN 2219 OF 4000

MID scan
Scan time: 1.200 s

Desc: C3
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4094

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
2	373.650	374.150	0.052	3	100	40	1	0	Pos
3	375.650	376.150	0.032	3	100	40	1	0	Pos
4	385.650	306.150	0.052	3	100	40	1	0	Pos
S	307.650	308.150	0.052	3	100	40	1	0	Pos
6	309.650	390.150	0.052	3	100	40	1	0	Pos
7	391.650	392.150	0.052	3	100	40	1	0	Pos
0	401.650	402.150	0.052	3	100	40	1	0	Pos
9	403.650	404.150	0.054	3	100	40	1	0	Pos
10	405.550	406.050	0.054	3	100	40	1	0	Por
11	407.550	408.030	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.530	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.050	0.054	3	100	40	1	0	Pos
15	423.530	424.050	0.054	3	100	40	1	0	Pos
16	425.550	426.050	0.052	3	100	40	1	0	Pos
17	435.550	436.050	0.052	3	100	40	1	0	Pos
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	400.050	0.054	3	100	40	1	0	Pos

3/26/91 19:28:13 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: 64
Samp. Int.: 0.200 mr

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Pos
2	407.550	400.050	0.052	3	100	40	1	0	Pos
	409.550	410.050	0.054	3	100	40	1	0	Pos

4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
4	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	424.050	0.031	3	100	40	1	0	Pos
8	433.530	436.050	0.052	3	100	40	1	0	Pos
9	437.550	438.050	0.052	3	100	40	1	0	Por
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.094	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	480.050	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	'100	40	1	0	Pos

3/26/91 19:33:46 SCAN 2753
Acquisition stopped

3/24/91 19:33:48
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2403 Centroid
SCAN 2404 Suspended
SCANS 2485 TO 2733 Centroid

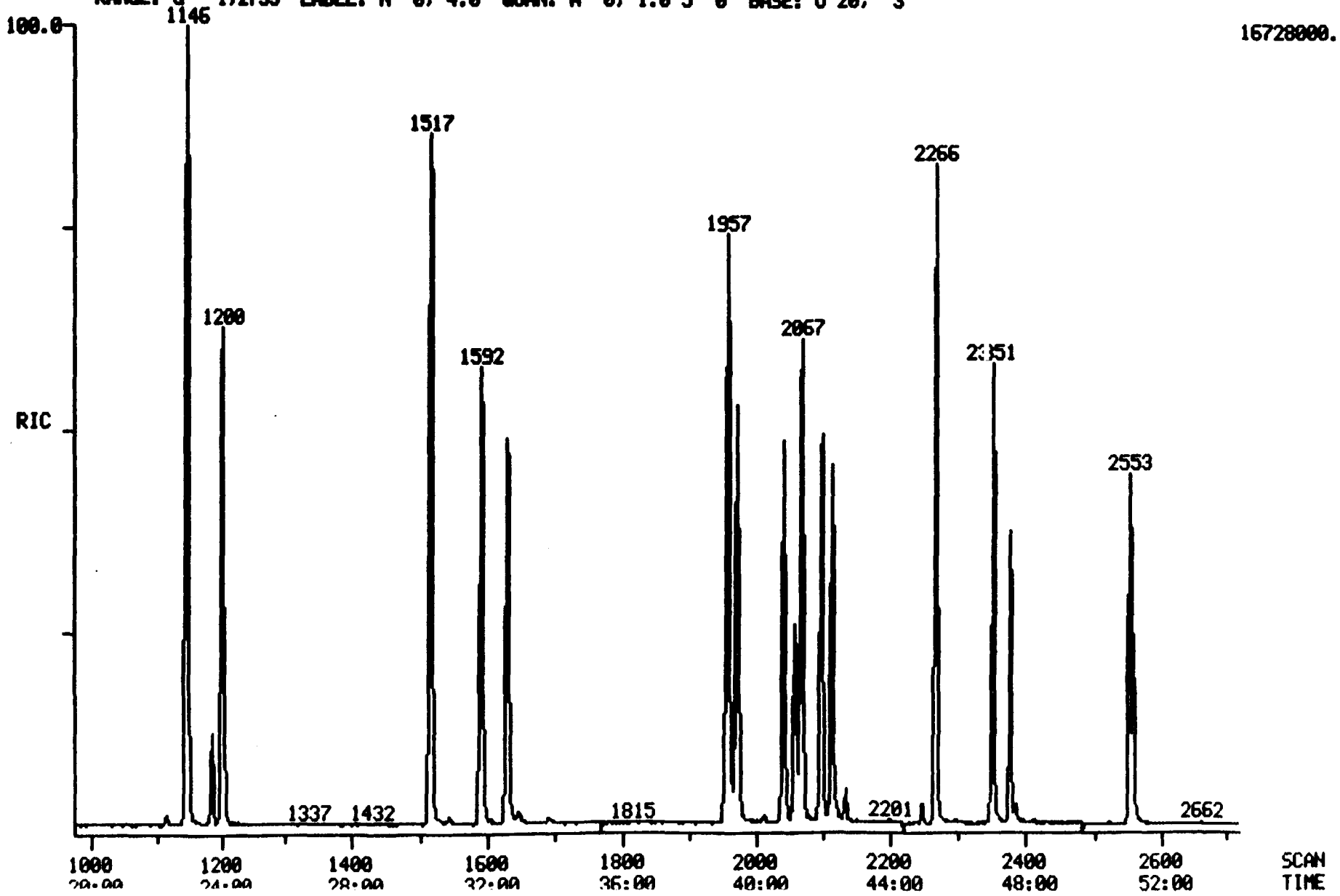
Mode	Scans	Secs	Out of	%	Perks	per scan	per sec
Centroid	2750	636.2	3300.0	19.3	84055.	31.	25.

MIDRIC
03/27/91 8:40:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506IV1 #1
CALI: CAL910306A #2

SCANS 975 TO 2720

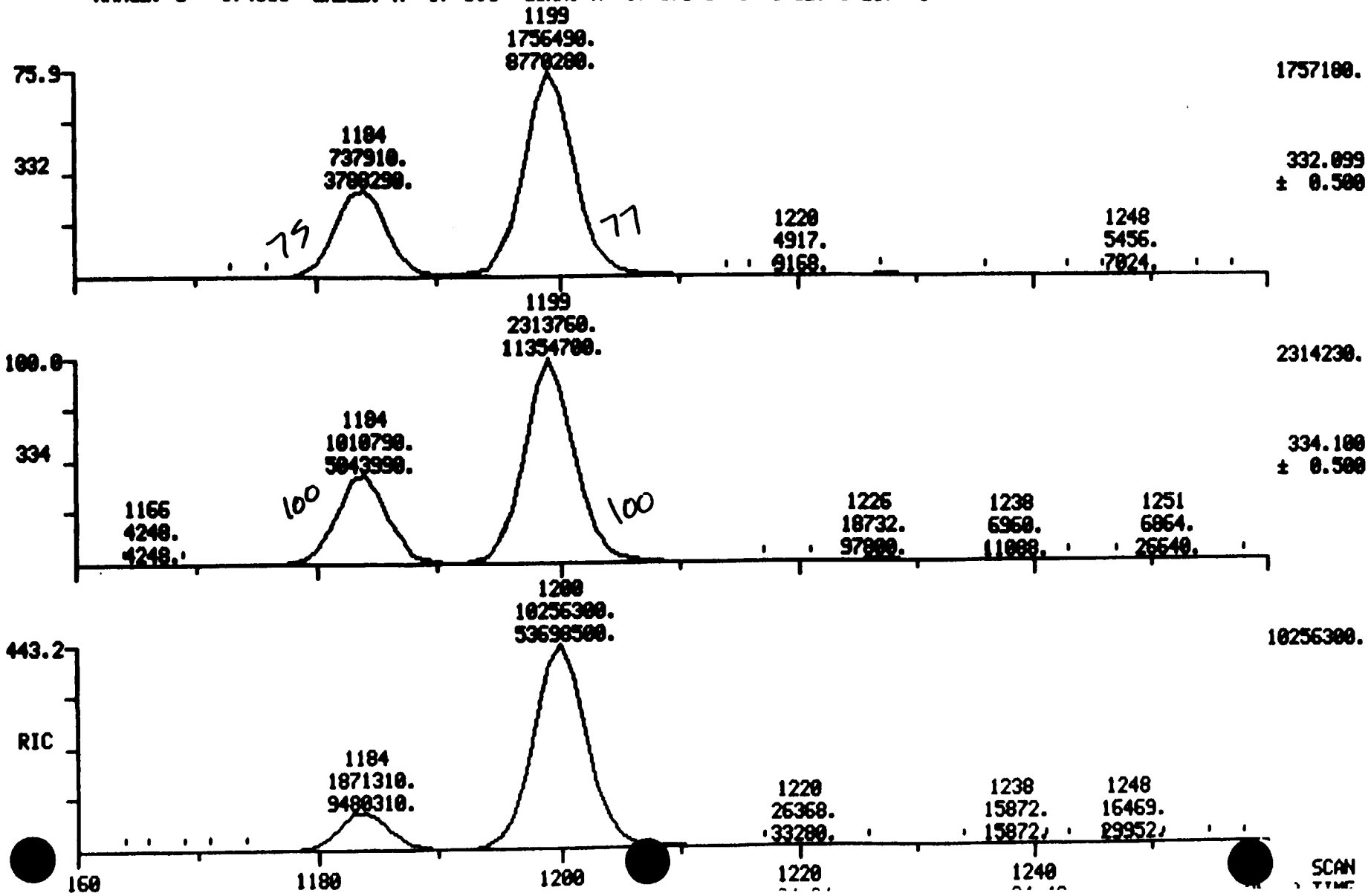
Calc. nm 3-28-91
QC RM 3-28-91



3200382

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 1160 TO 1260
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.14



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1 SCANS 2510 TO 2620

03/27/91 11:00:00 CALI: CAL910306A #2

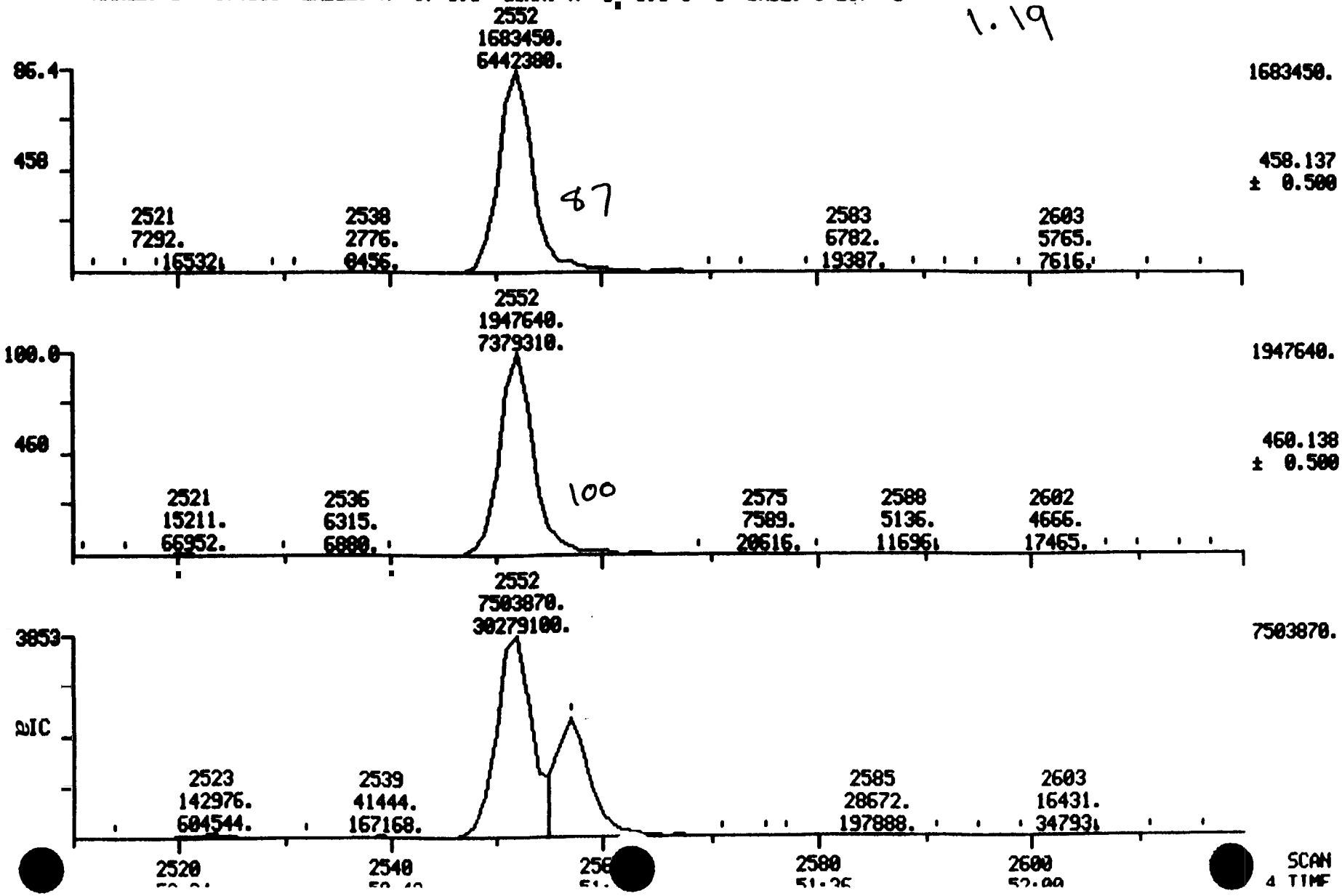
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

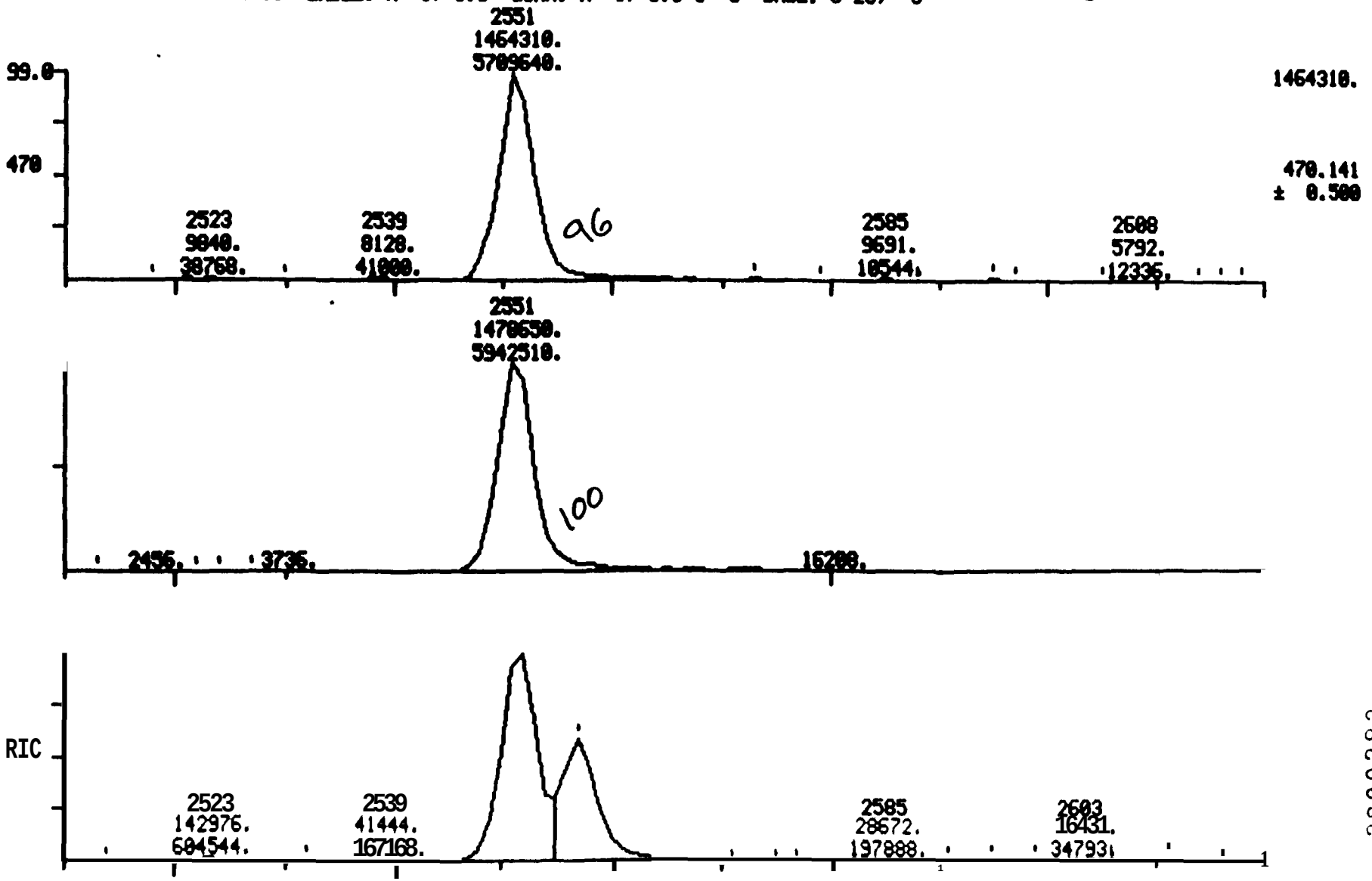
OOOD

1.19



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1 SCANS 2510 TO 2620
03/27/91 11:00:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.520

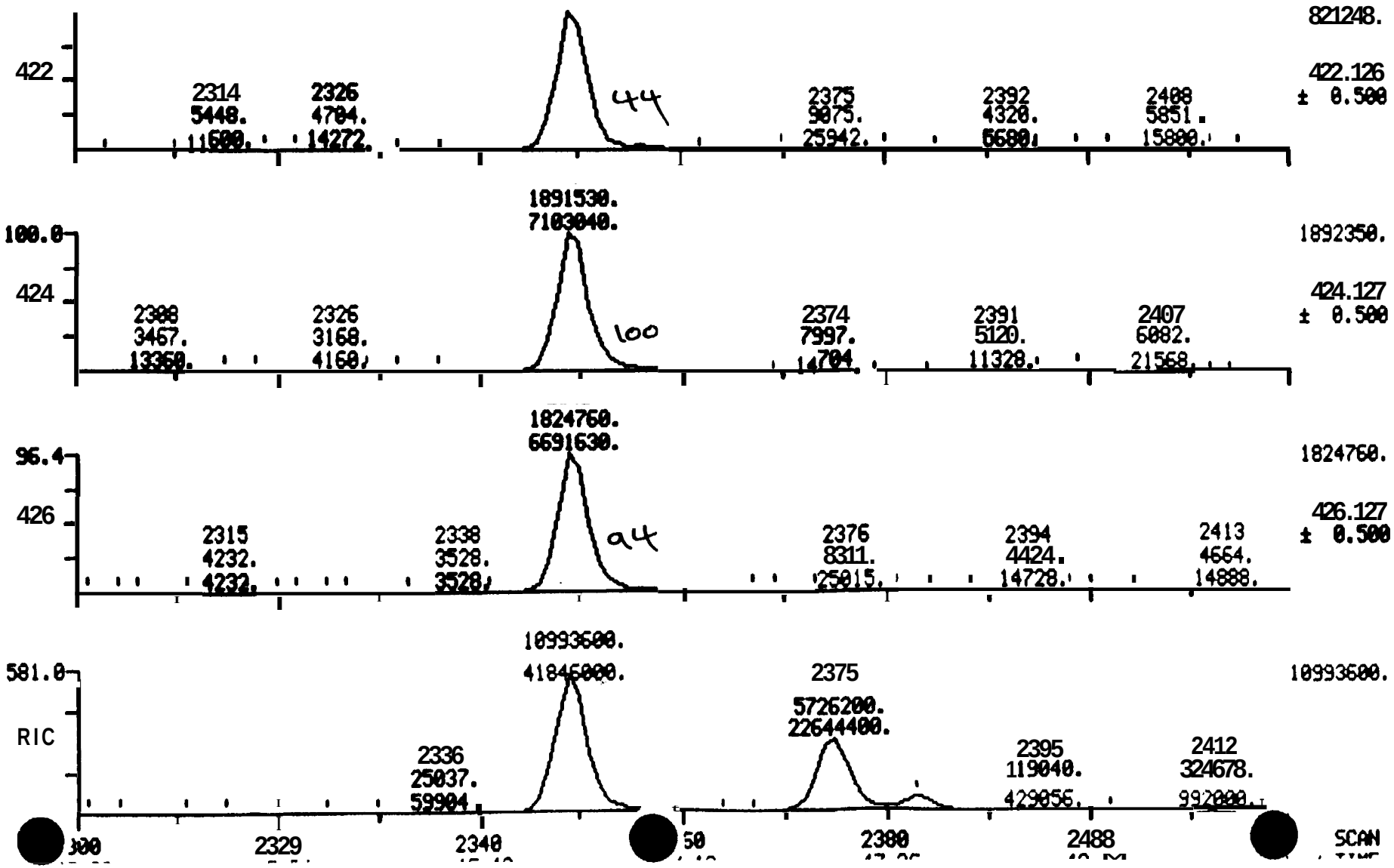


3200383

HPCDD

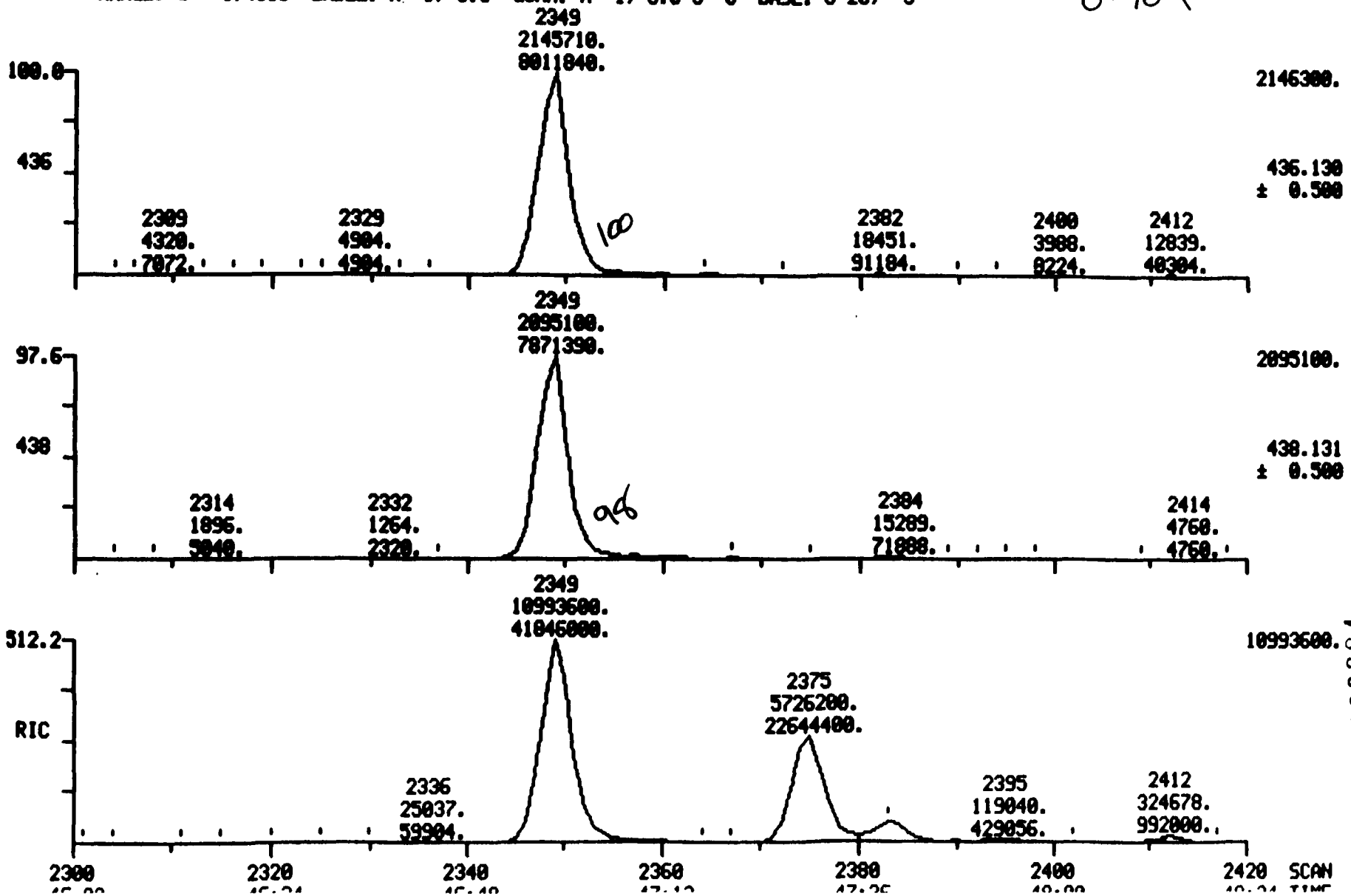
MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1 SCANS 2300 TO 2420
03/27/91 11:00:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0869



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1 SCANS 2300 TO 2420
03/27/91 11:00:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.709



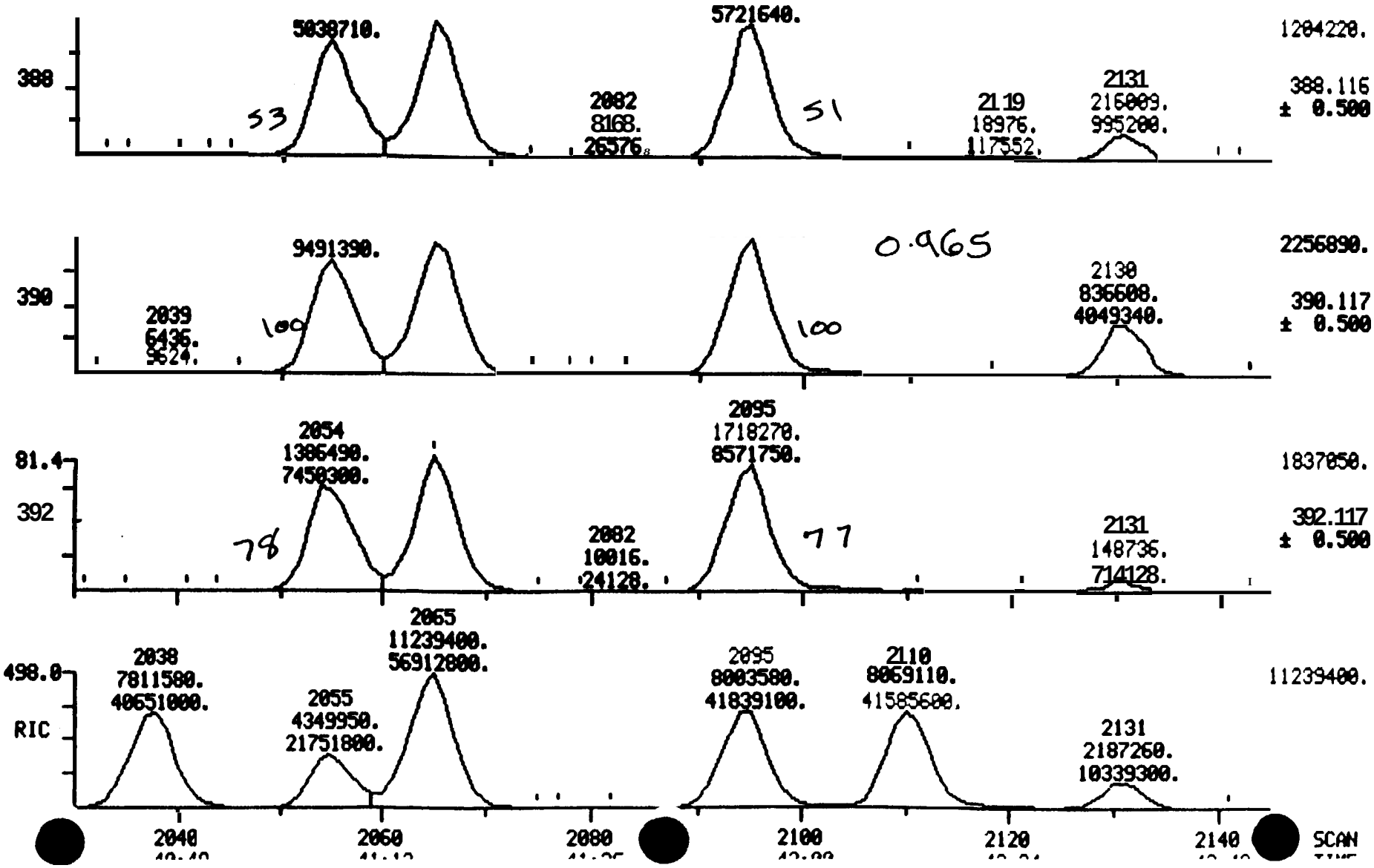
32000384

HxCDD

MIDRIC+MASS CHROMATOGRAMS
03/27/91 11:00:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.

DATA: 68506IV3 #1
CALI: CAL910306A #2

SCANS 2030 TO 2145



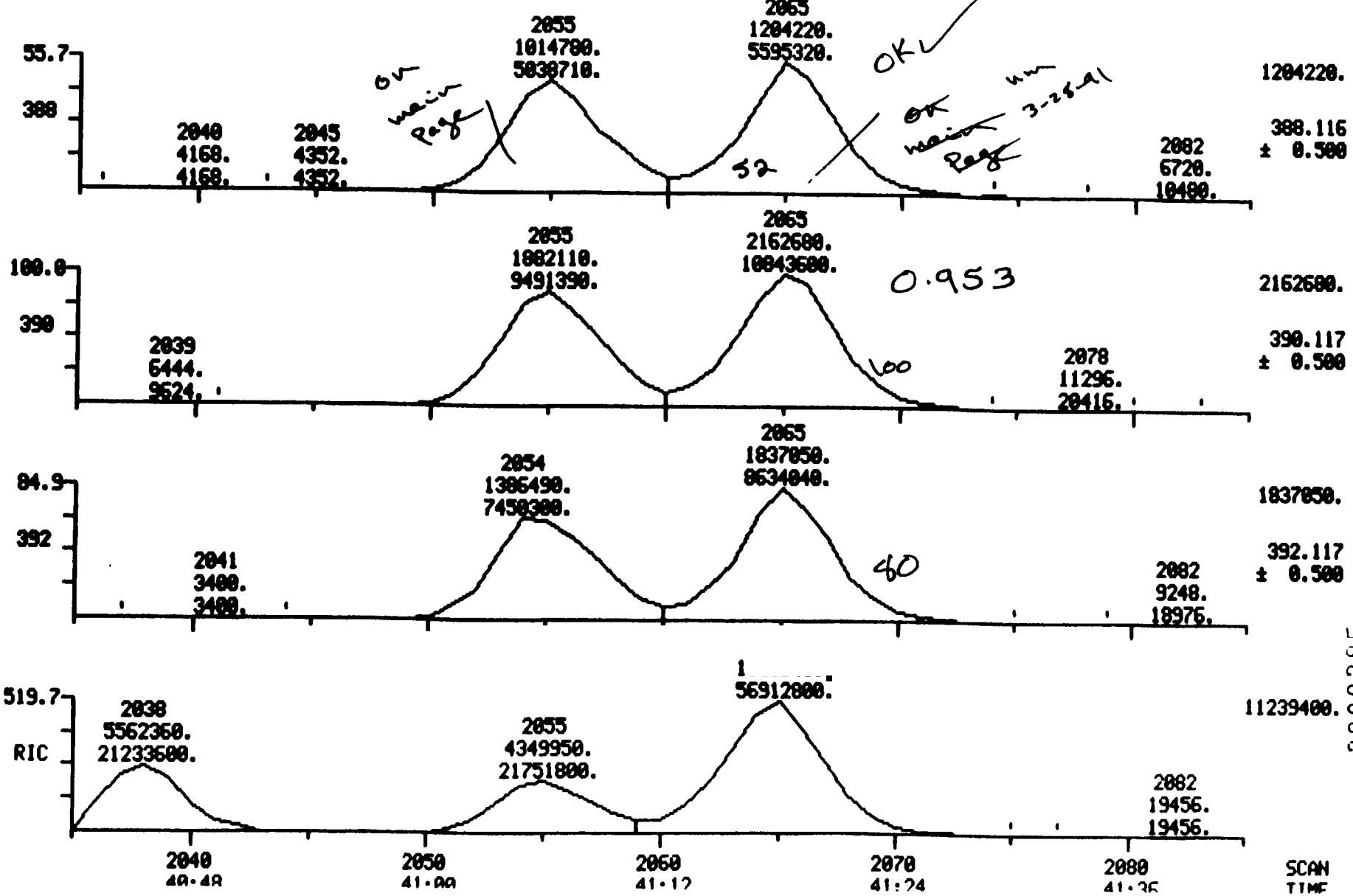
1/1

HxCDD

MIDRIC+MASS CHROMATOGRAMS
03/27/91 11:00:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2631 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

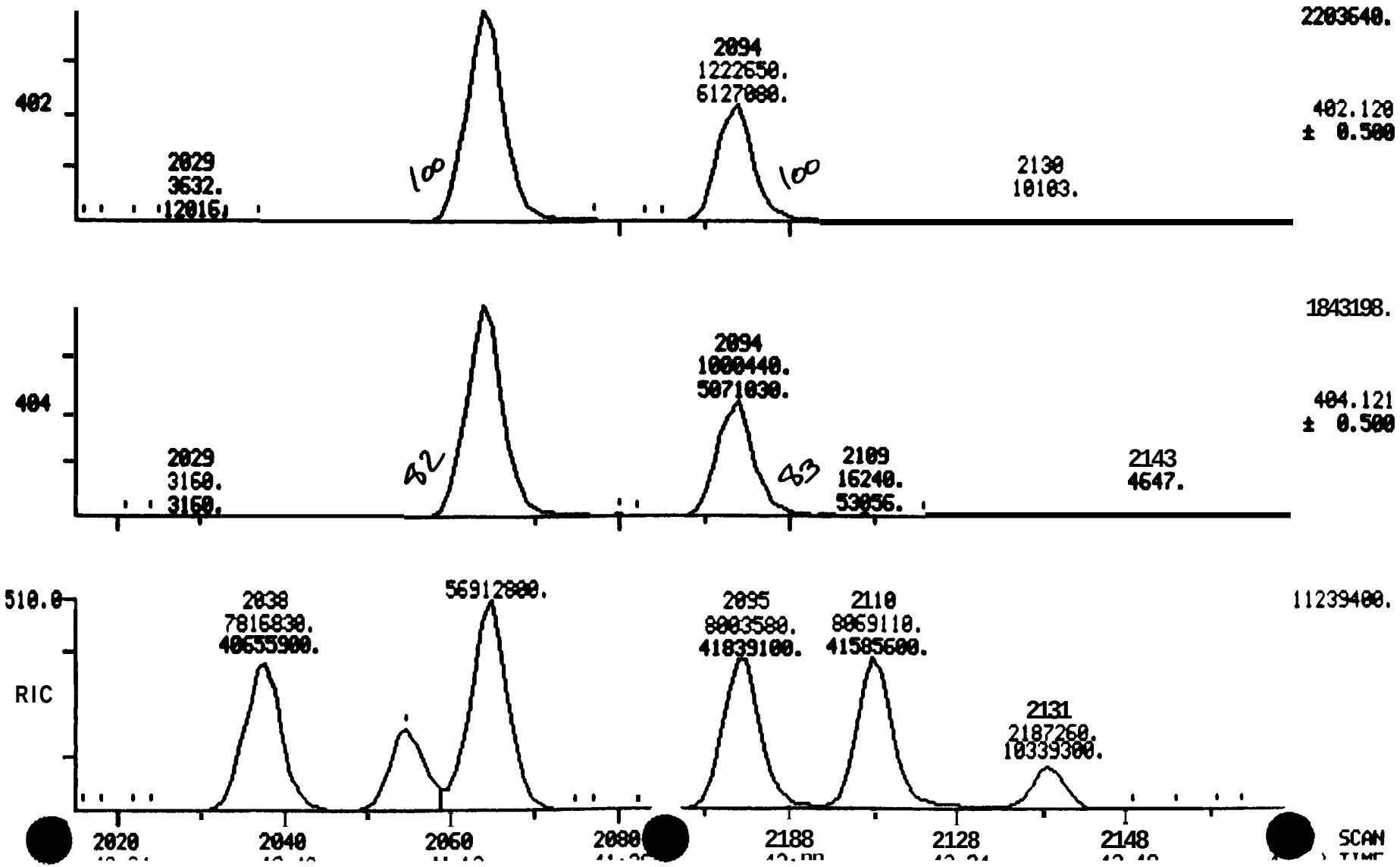
DATA: 68506IV3 #1
CALI: CAL910306A #2

SCANS 2035 TO 2085



3200385

0.913


2203640.
402
2094
1222650.
6127000.
402.120
± 0.500
2029
3632.
12016.
100
100
2130
10103.
1843198.
404
2094
1000440.
5071030.
404.121
± 0.500
2029
3160.
3160.
82
83
2109
16240.
53056.
2143
4647.
510.0
RIC
2038
7816830.
40655900.
56912000.
2095
8003580.
41839100.
2110
8069110.
41585600.
11239400.
2131
2187260.
10339300.
2020
2040
2060
2080
2188
2128
2148
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1 SCANS 1580 TO 1750

03/27/91 11:00:00 CALI: CAL910306A I2

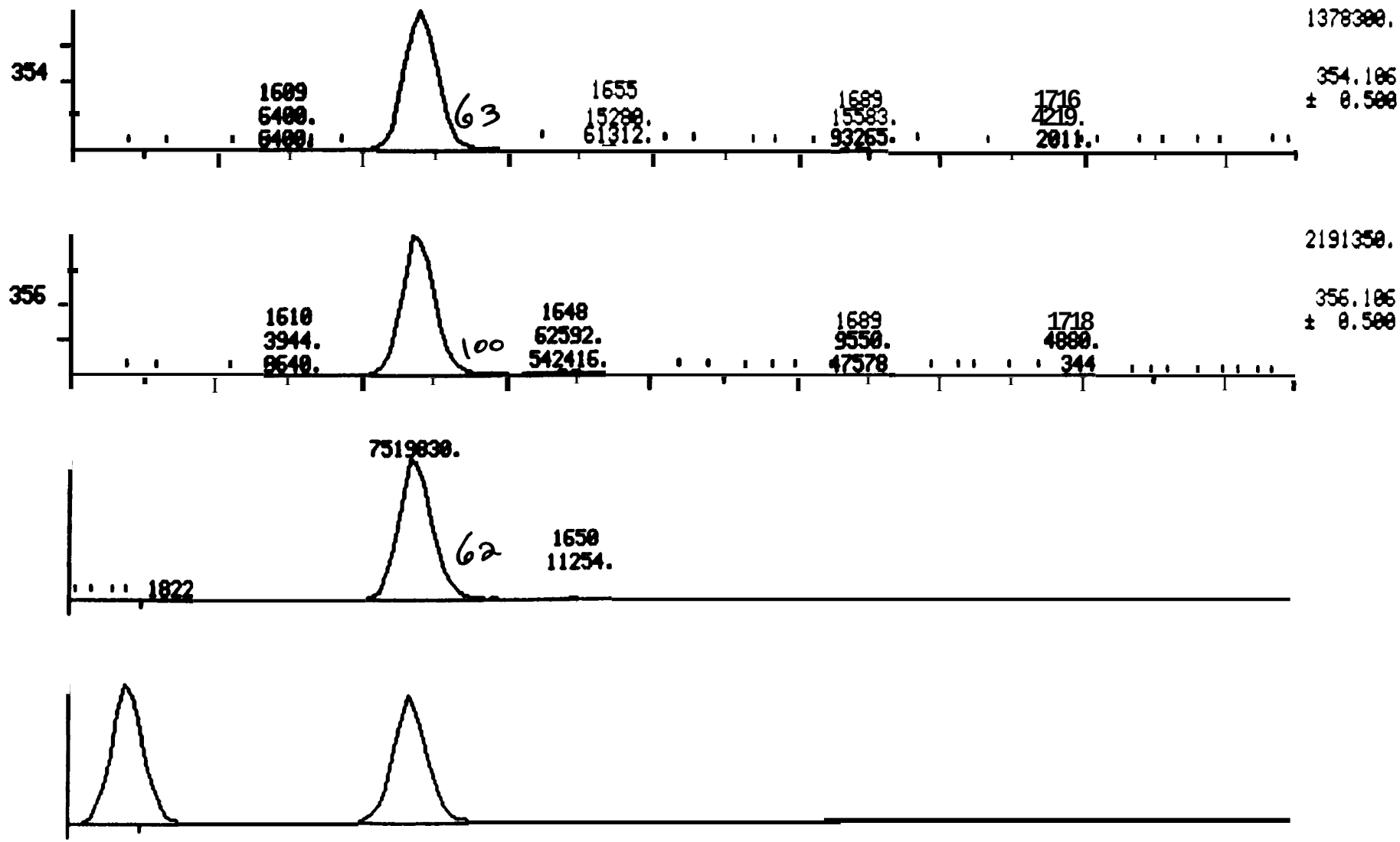
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J @ BASE: U 20, 3

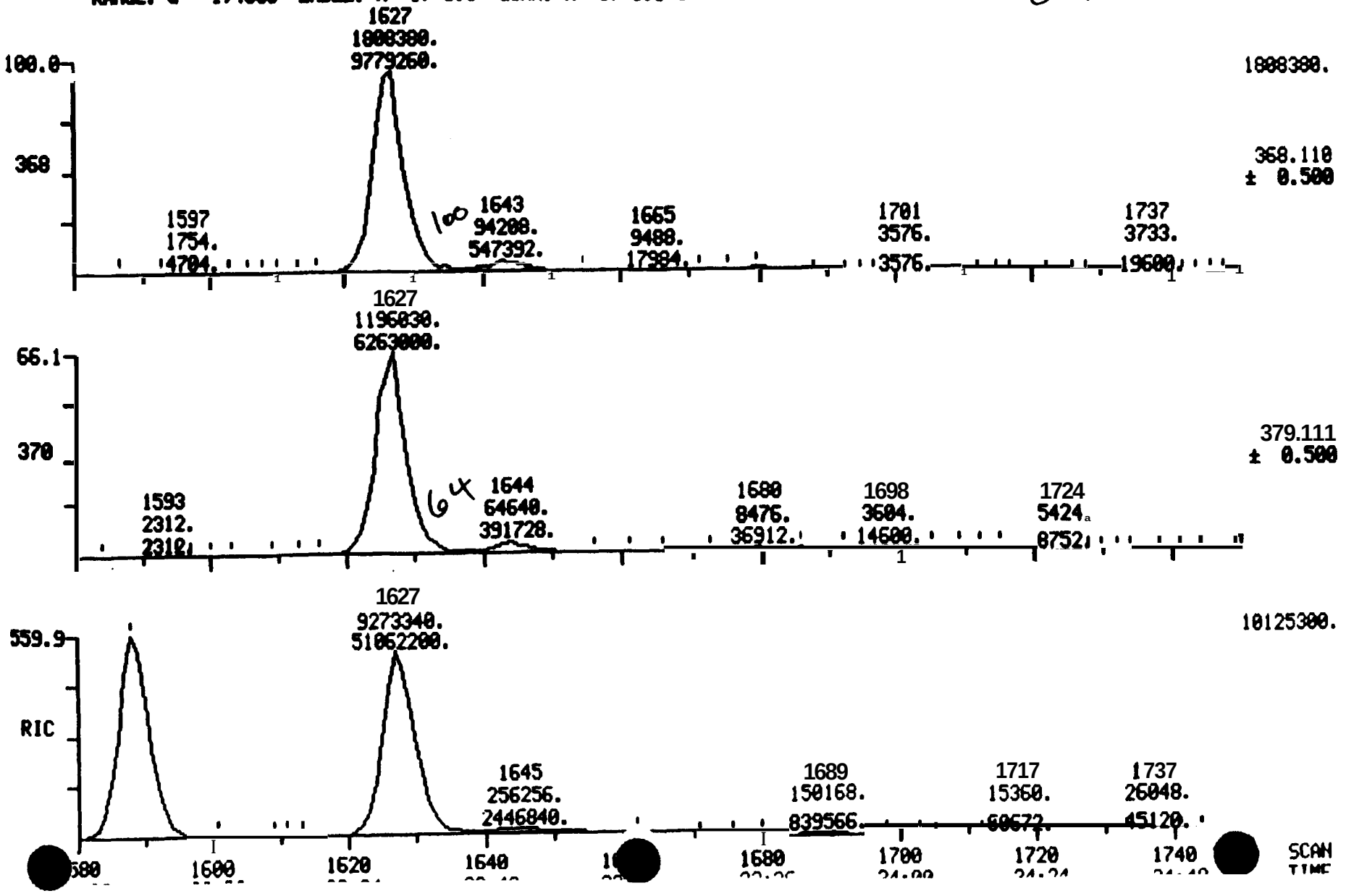
PeCDD

1.22



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1 SCANS 1500 TO 1750
03/27/91 11:00:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.734

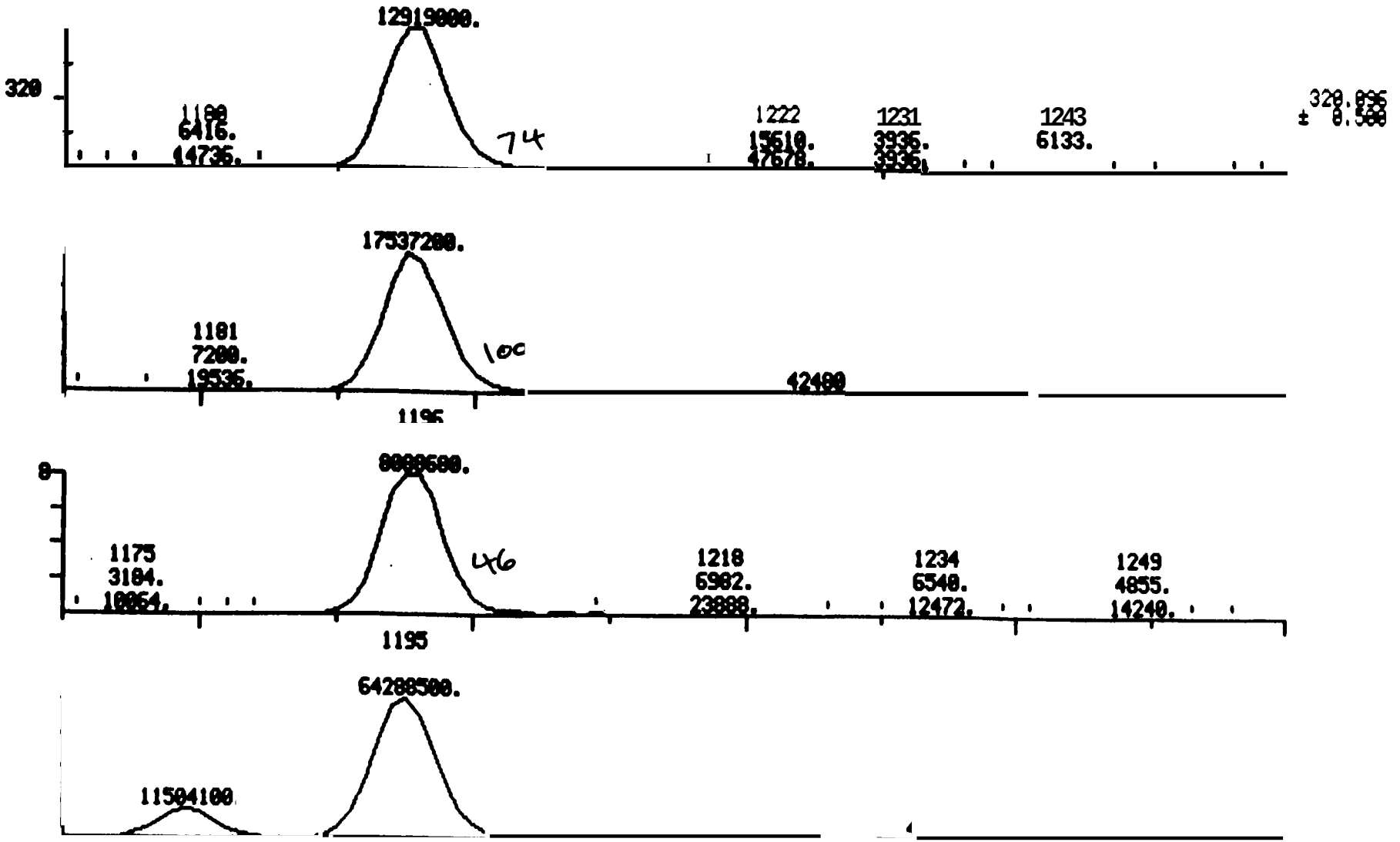


TCDD

2UL

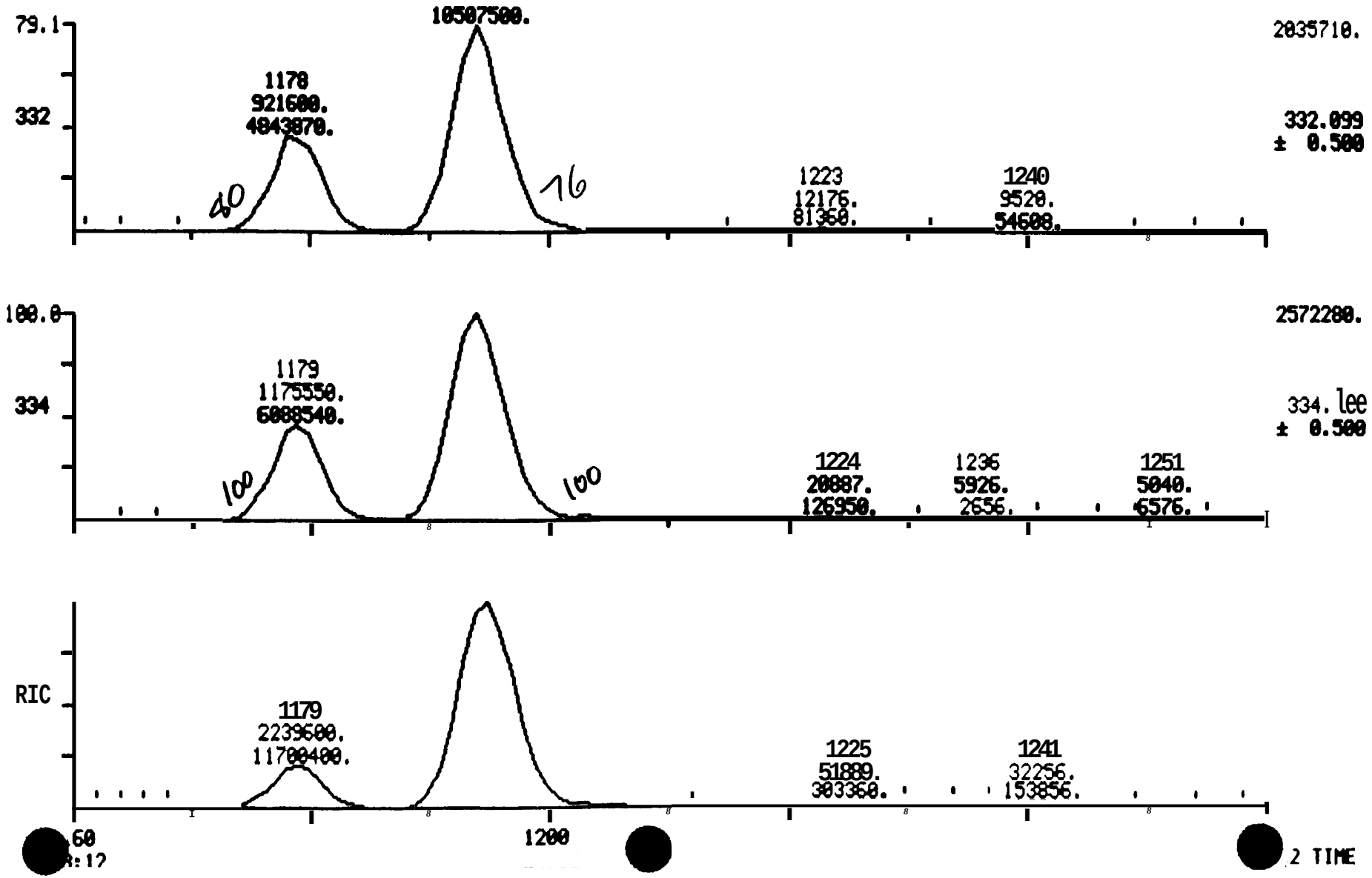
#3

1.25



60M

\.\a-

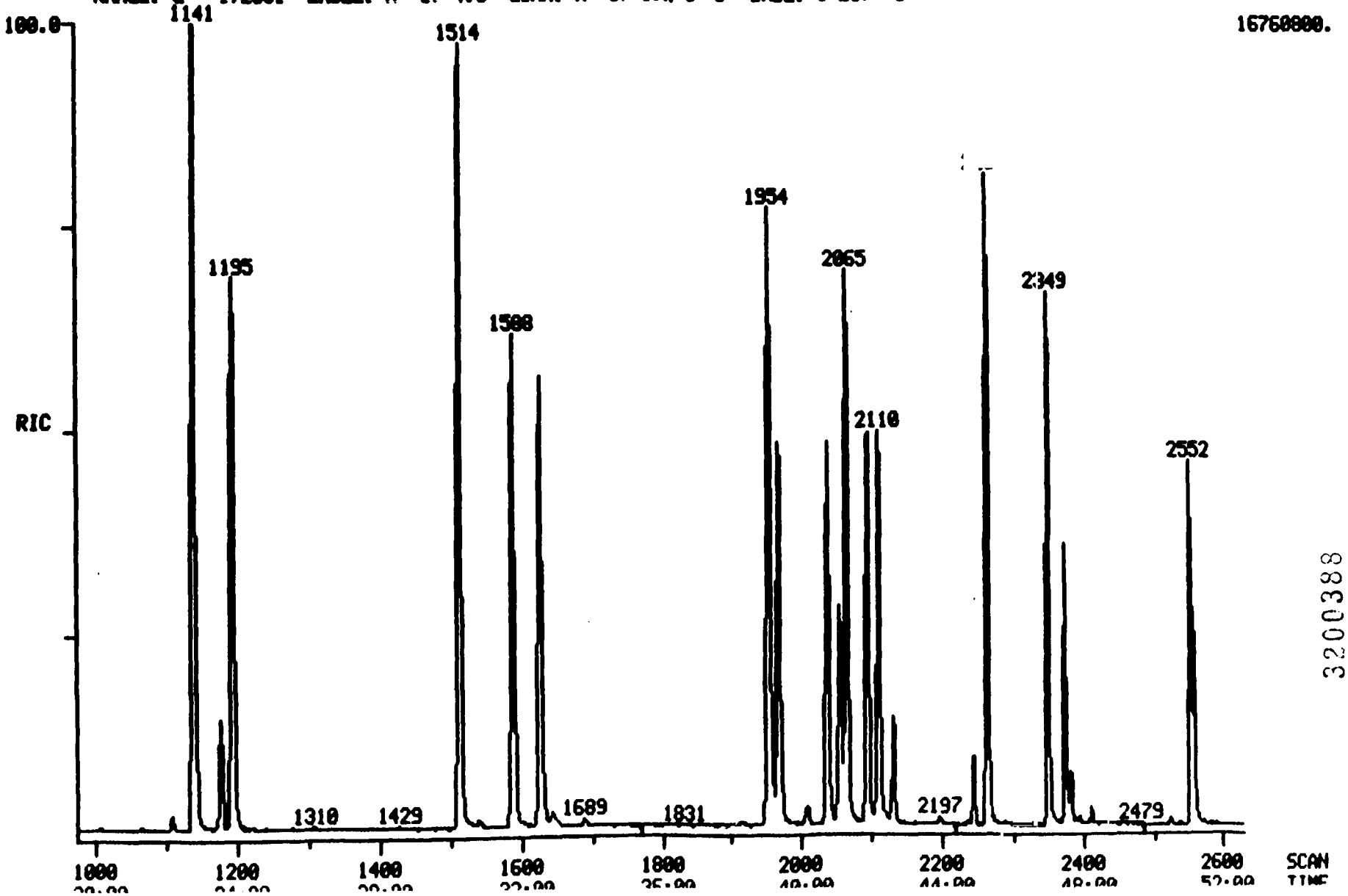

79.1
332
1178
921600.
4843870.
10507500.
40
16
1223
12176.
81360.
1240
9520.
54608.
2035710.
332.099
± 0.500
100.0
334
1179
1175550.
6088540.
100
100
1224
20887.
126950.
1236
5926.
2656.
1251
5040.
6576.
2572280.
334.lee
± 0.500
RIC
1179
2239600.
11700400.
1225
51889.
303360.
1241
32256.
153856.
60
1200
2 TIME

MIDRIC
03/27/91 11:00:00
SAMPLE: 2UL OF 685:06-IV ≡ .000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2631 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506IV3 #1
CALI: CAL910306A #2

SCANS 975 TO 2631

alc. nm
QC D.M.



3200388

4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Por
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Por
8	435.550	436.050	0.032	3	100	40	1	0	Pos
9	437.550	438.050	0.052	3	100	40	1	0	Pos
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Por
13	439.530	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.030	0.054	3	100	40	1	0	Por
15	471.550	472.030	0.052	3	100	40	1	0	Por
16	479.550	480.050	0.054	3	100	40	1	0	Pos
17	513.550	514.030	0.054	3	100	40	1	0	Pos

3/27/91 10:43:44 SCAN 2733
Acquisition stopped

3/27/91 10:45:46
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2733 Centroid

Mode	Scans	Secs	out of	%	Peaks	per scan	per sec
Centroid	2750	637.1	3300.0	19.3	84042.	31.	25.

MID scan
Scan time: 1.200 s

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
2	339.650	340.150	0.052	3	100	40	1	0	Po.
3	341.650	342.150	0.054	3	100	40	1	0	Po.
4	351.650	352.150	0.032	3	100	40	1	0	Po.
5	333.650	354.150	0.034	3	100	40	1	0	Pos
6	355.650	356.150	0.052	3	100	40	1	0	Pos
7	357.650	338.150	0.054	3	100	40	1	0	Po.
8	367.650	368.150	0.032	3	100	40	1	0	Po.
9	369.650	370.150	0.052	3	100	40	1	0	Po.
10	371.650	372.150	0.032	3	100	40	1	0	Pos
11	373.650	374.150	0.032	3	100	40	1	0	Po.
12	375.650	376.150	0.052	3	100	40	1	0	Pos
13	379.650	380.150	0.032	3	100	40	1	0	Po.
14	381.650	382.150	0.052	3	100	40	1	0	Po.
13	385.650	386.150	0.032	3	100	40	1	0	Po.
16	387.650	388.150	0.052	3	100	40	1	0	Po.
17	389.650	390.150	0.032	3	100	40	1	0	Po.
18	391.650	392.150	0.052	3	100	40	1	0	Po.
19	401.650	402.150	0.032	3	100	40	1	0	Po.
20	403.650	404.150	0.034	3	100	40	1	0	Po.
21	445.550	446.050	0.032	3	100	40	1	0	Po.

3/27/91 10:34:43 SCAN 2219 OF 4000

MID scan
Scan time: 1.200 s

Desc: 93
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo ma	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Po.
2	373.650	374.150	0.052	3	100	40	1	0	Po.
3	375.650	376.150	0.052	3	100	40	1	0	Po.
4	385.650	386.150	0.031	3	100	40	1	0	Po.
3	387.650	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.650	392.150	0.052	3	100	40	1	0	Po.
a	401.650	402.150	0.031	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	405.550	406.050	0.054	3	100	40	1	0	Po.
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.550	422.050	0.054	3	100	40	1	0	Pos
15	423.550	424.050	0.054	3	100	40	1	0	Po.
16	425.550	426.050	0.052	3	100	40	1	0	Po*
17	435.550	436.050	0.052	3	100	40	1	0	Po*
18	437.550	438.050	0.032	3	100	40	1	0	Po.
19	479.550	480.050	0.054	3	100	40	1	0	Por

3/27/91 10:40:10 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Pos
2	407.550	408.050	0.031	3	100	40	1	0	Po*
3	409.550	410.050	0.054	3	100	40	1	0	Pos

3/27/91 9:48:38 SCAN 1 OF 4000

Acquisition started

Acquire
03/27/91 9:48:00 + 0:04

Run 0: 68506IV2
Free sectors: 20320

ACQUIRING
Scan: 3 of 4000

Sample: 2UL OF 685:06-IV ● 500 PPB RUN #2 MULTIPOINT
Conds. : 60M DB-5/TOTALS.
Formula:
Submitted by: DM

Instrument: G3
Analyst: NM

Weight: 0.000
Acct. No: PC4622

********** QC PARAMETERS **********

Lorded QC Desc: BW Current OC oven tmp: 69 DegC Injector : 300 DegC
Current OC Desc: BW QC elapsed time : 2:56 min Int. oven : 273 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 50	-	0.1	0.1	Sweep/Split	10.0	0.0
2	30 - 70	23.0	0.7	0.e	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

HID scan
Scan time: 1.200 s

Desc: B1
Samp. int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	303.630	304.130	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.630	308.150	0.054	3	100	40	1	0	Pos
4	313.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.032	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.032	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.630	354.150	0.052	3	100	40	1	0	Pos
16	355.630	356.150	0.034	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.950	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	MU
Offset at low mass	0	MU
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

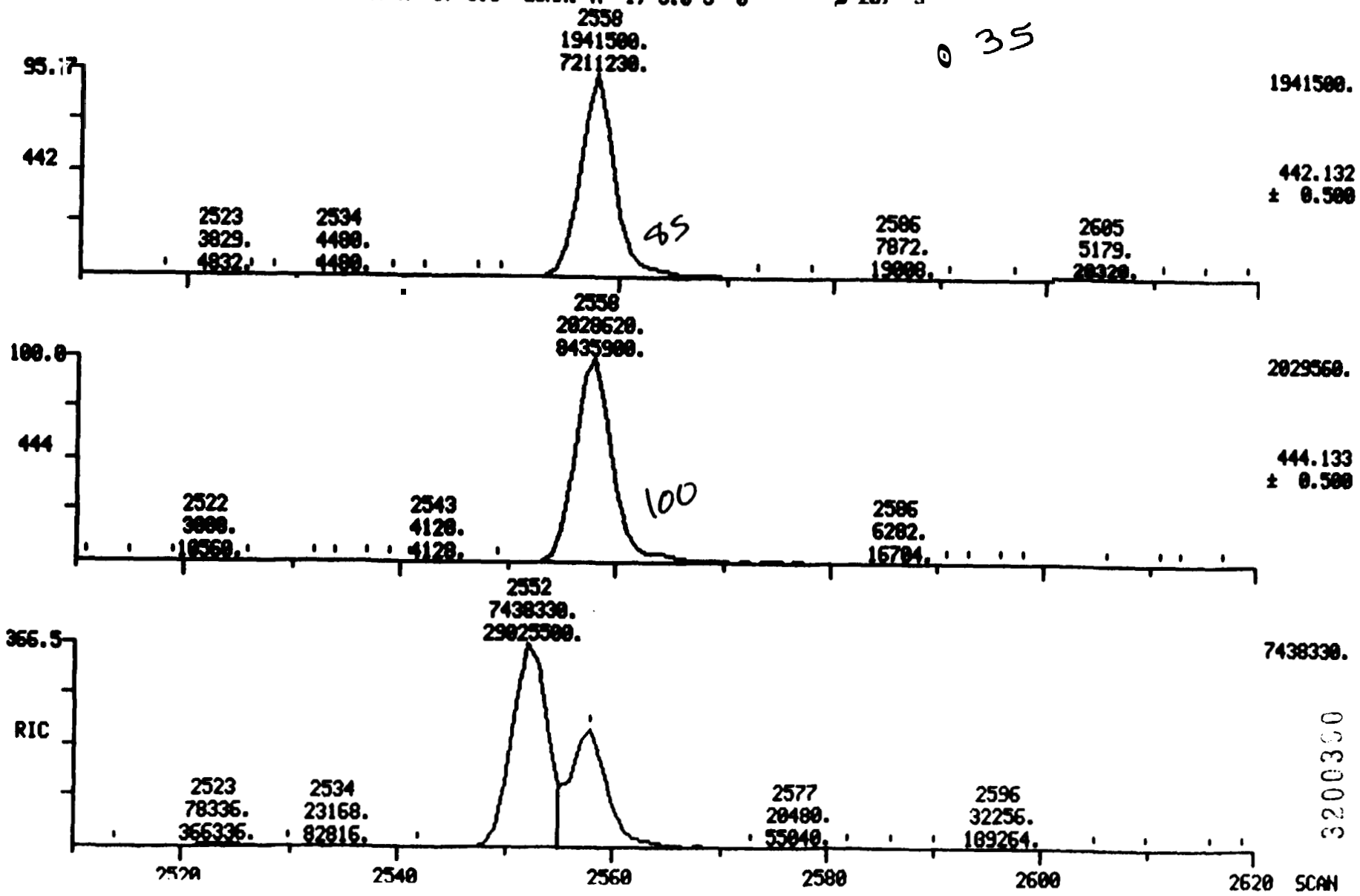
3/27/91 10:25:29 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAMS
03/27/91 9:48:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0

DATA: 68506IV2 #1
CALI: CAL910306A #2
RUN #2 FOR MULTIPOINT

2510 TD 26 20

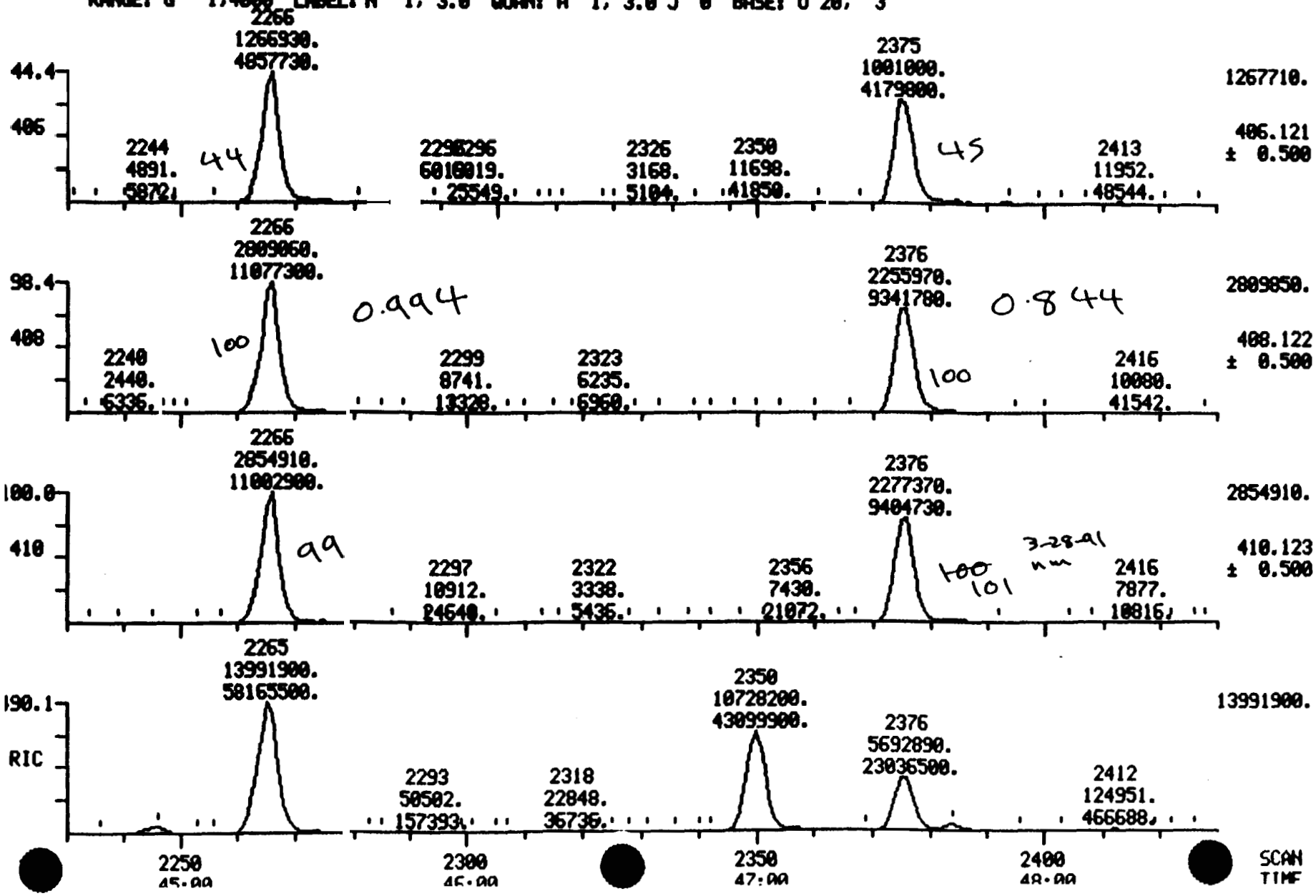
OCDF



3200350

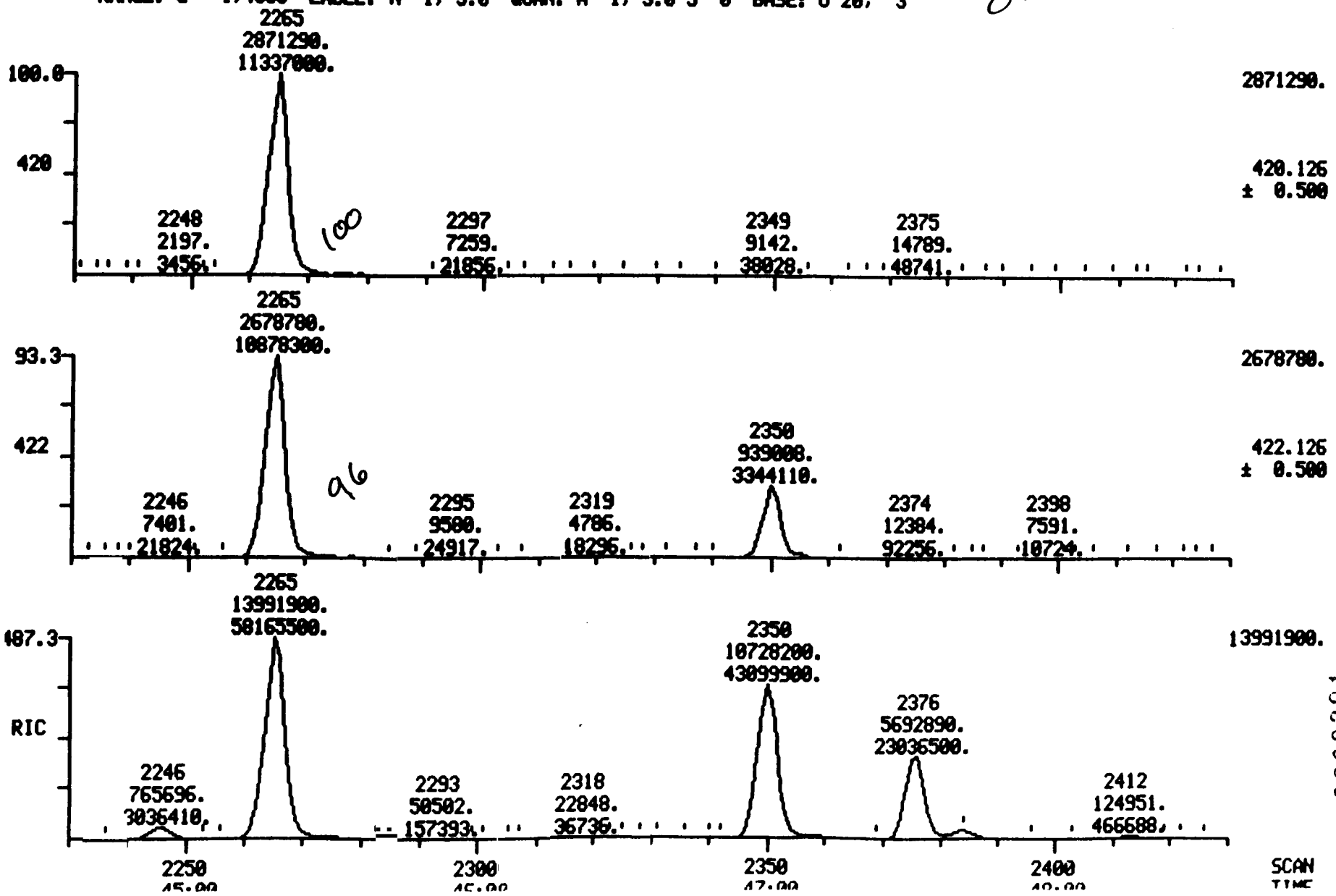
HpCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 2230 TO 2430
03/27/91 9:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 2230 TO 2430
03/27/91 9:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

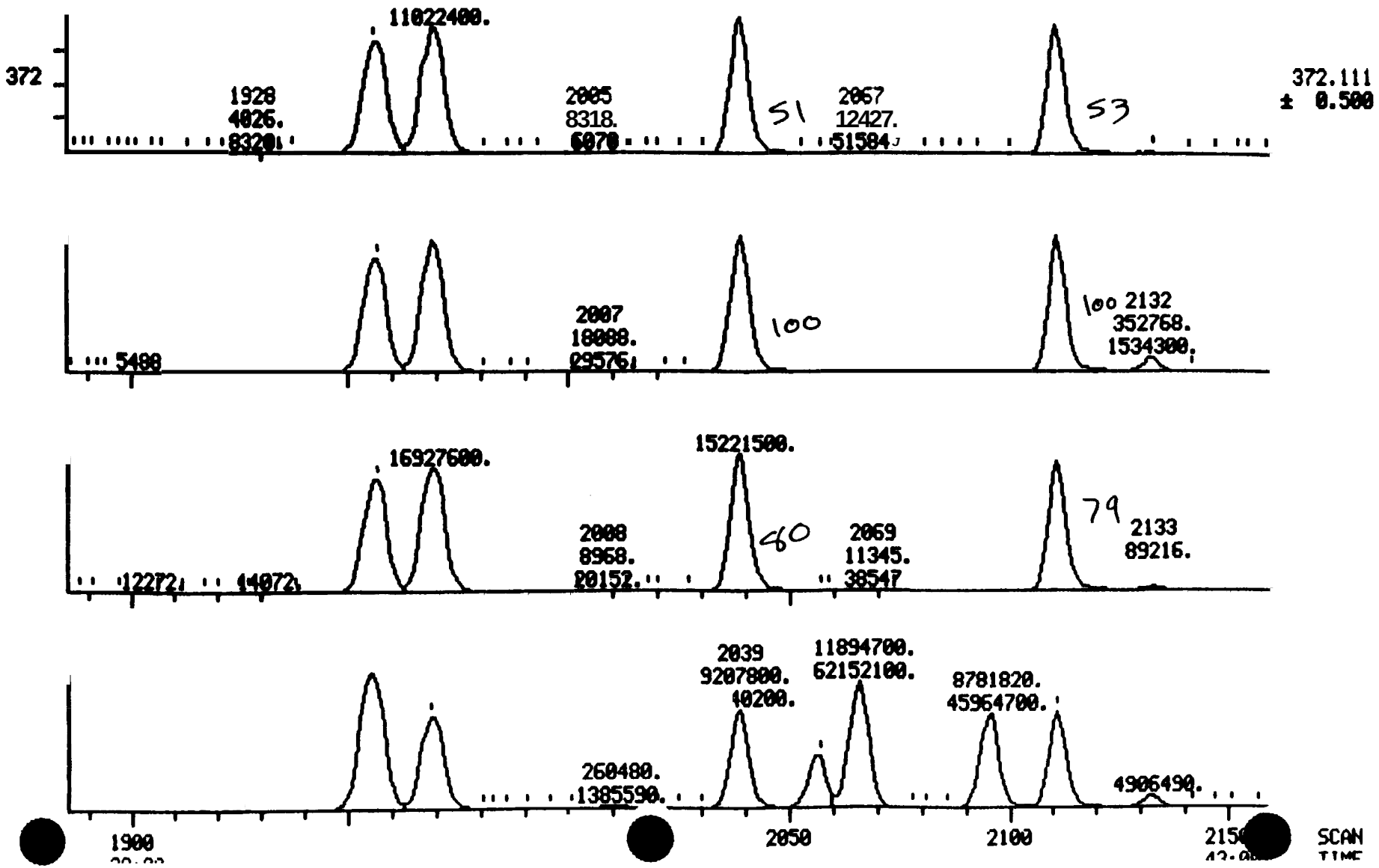
0.935



3200391

HxCDF

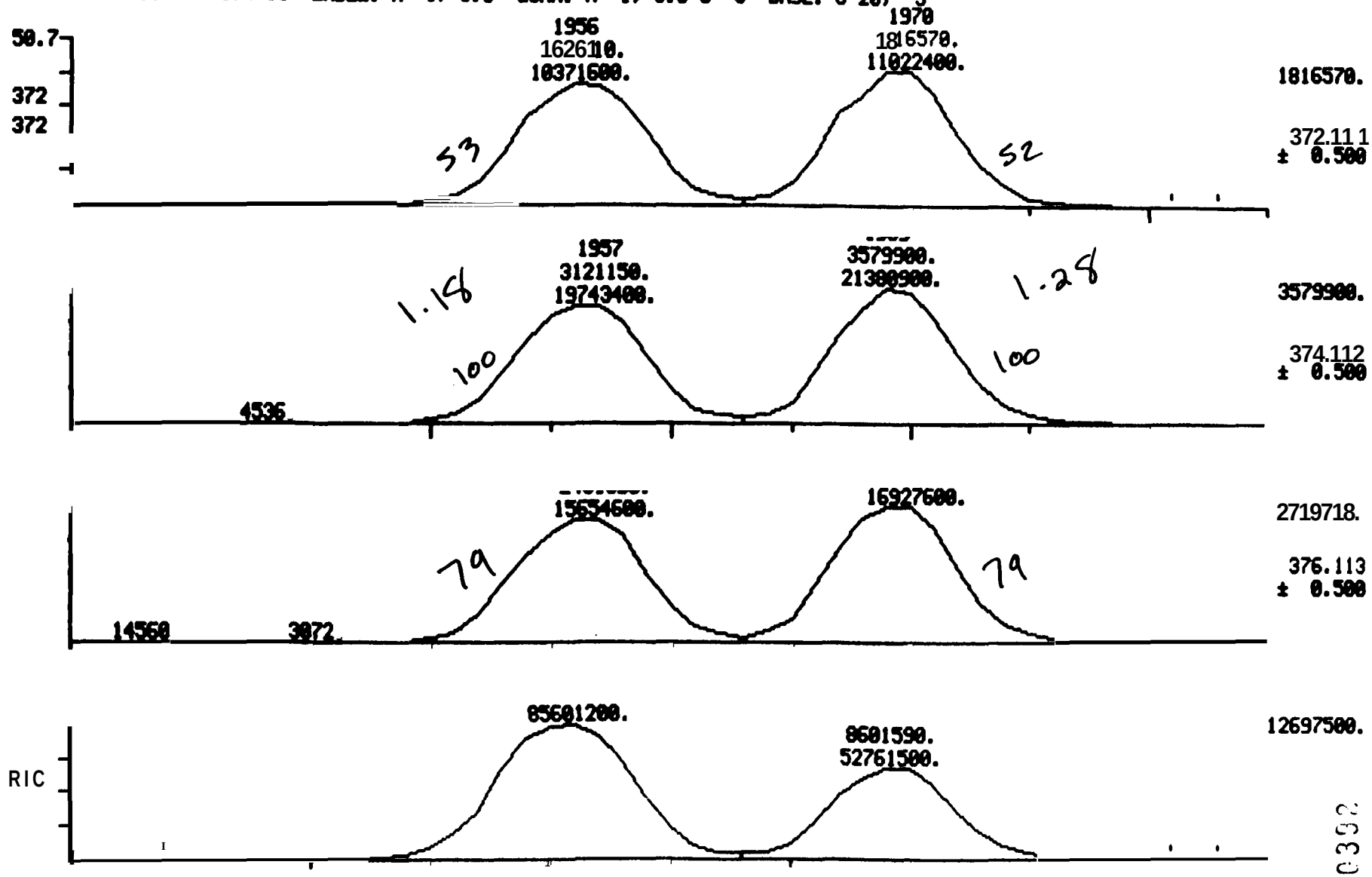
QUAN:


372
11022400.
1928
4026.
8320.
2005
8318.
6070.
51
2067
12427.
51584.
53
372.111
± 0.500
5480
2007
18008.
29576.
100
100 2132
352768.
1534300.
16927600.
15221500.
12272.
14072.
2008
8968.
20152.
60
2069
11345.
38547
79
2133
89216.
2039
9207800.
40200.
11894700.
62152100.
8781820.
45964700.
260480.
1385590.
4906490.
1900
2050
2100
2150
SCAN
TIME

1/1

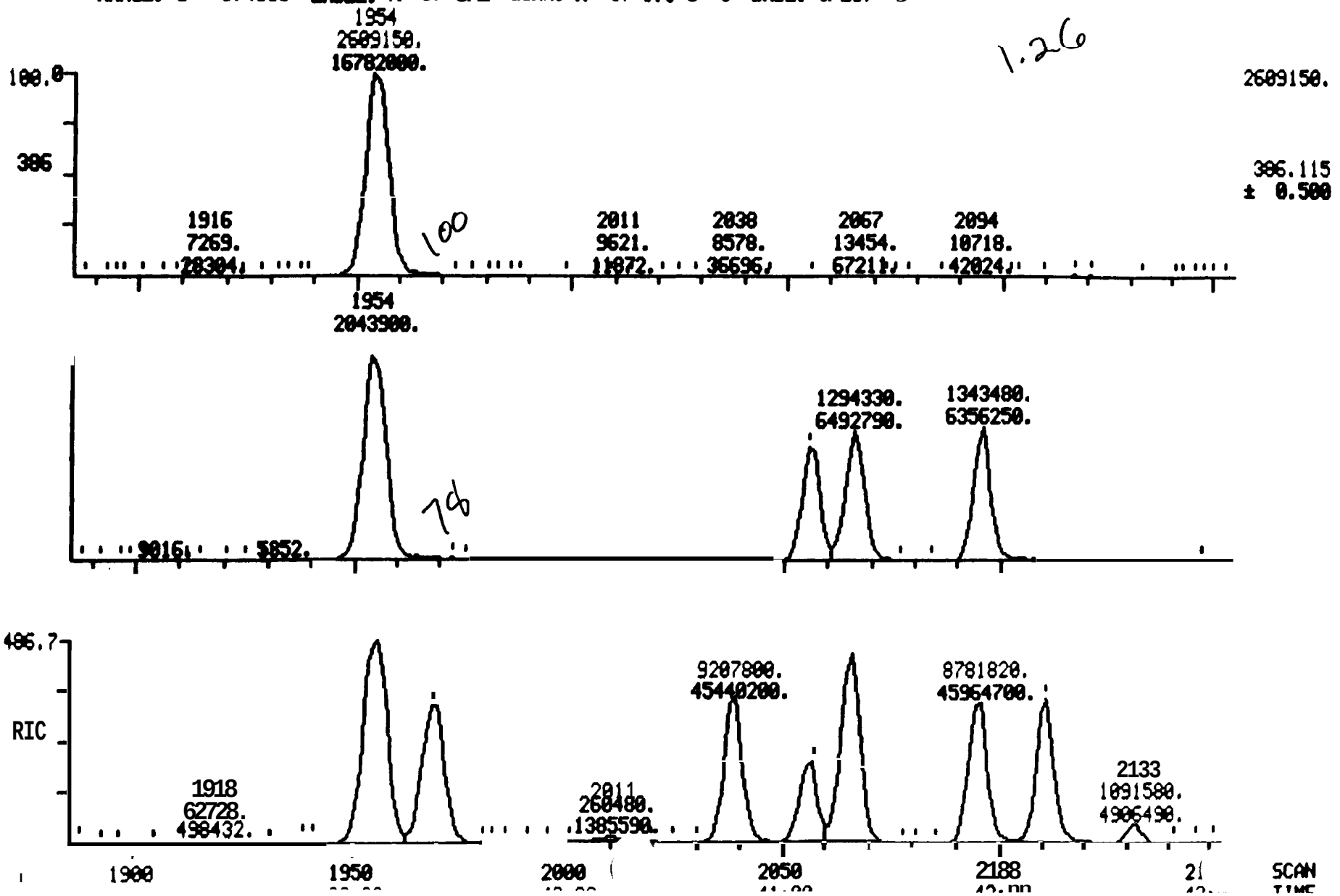
HxCDF

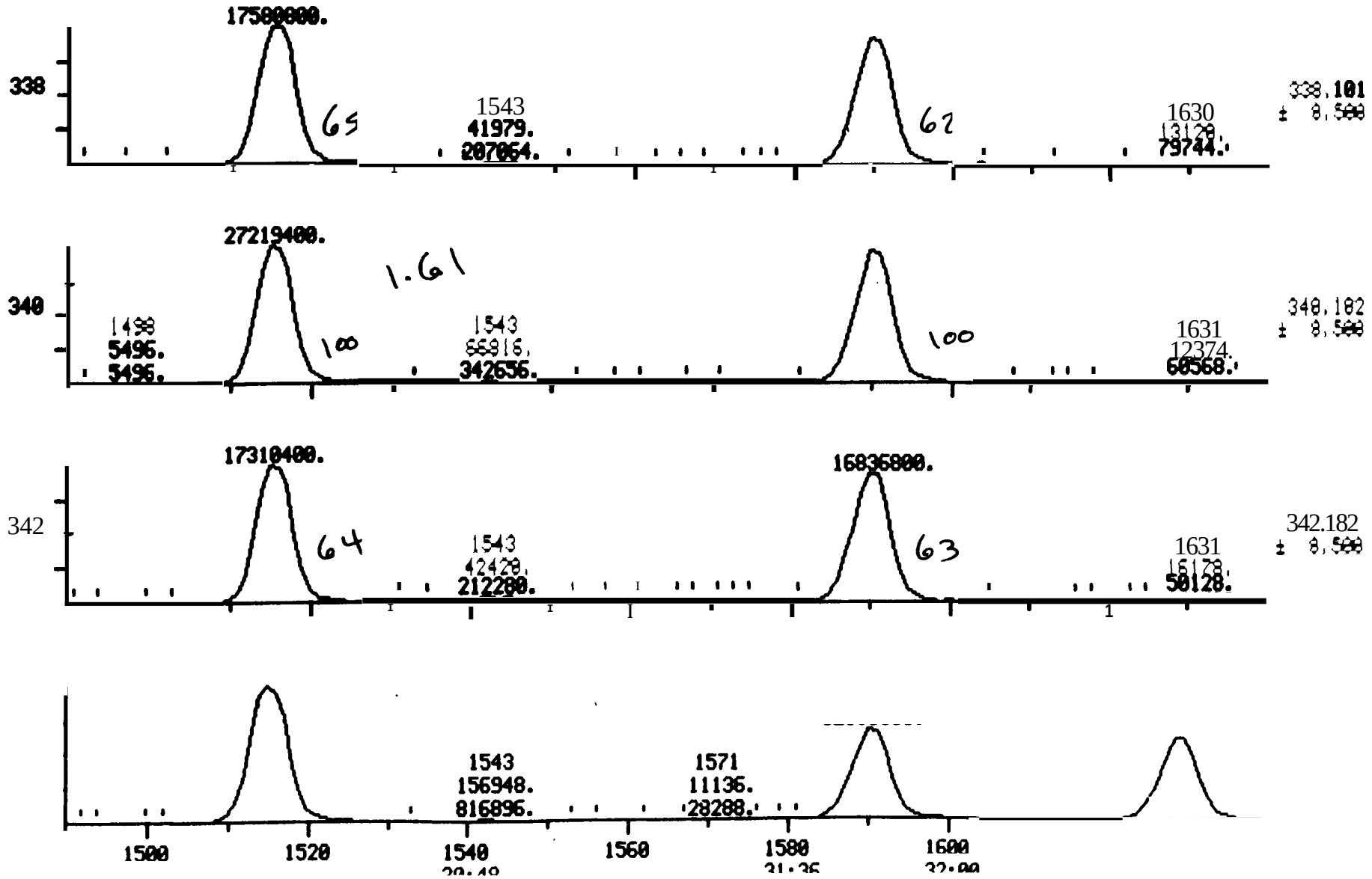
MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 1935 TO 1985
03/27/91 9:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



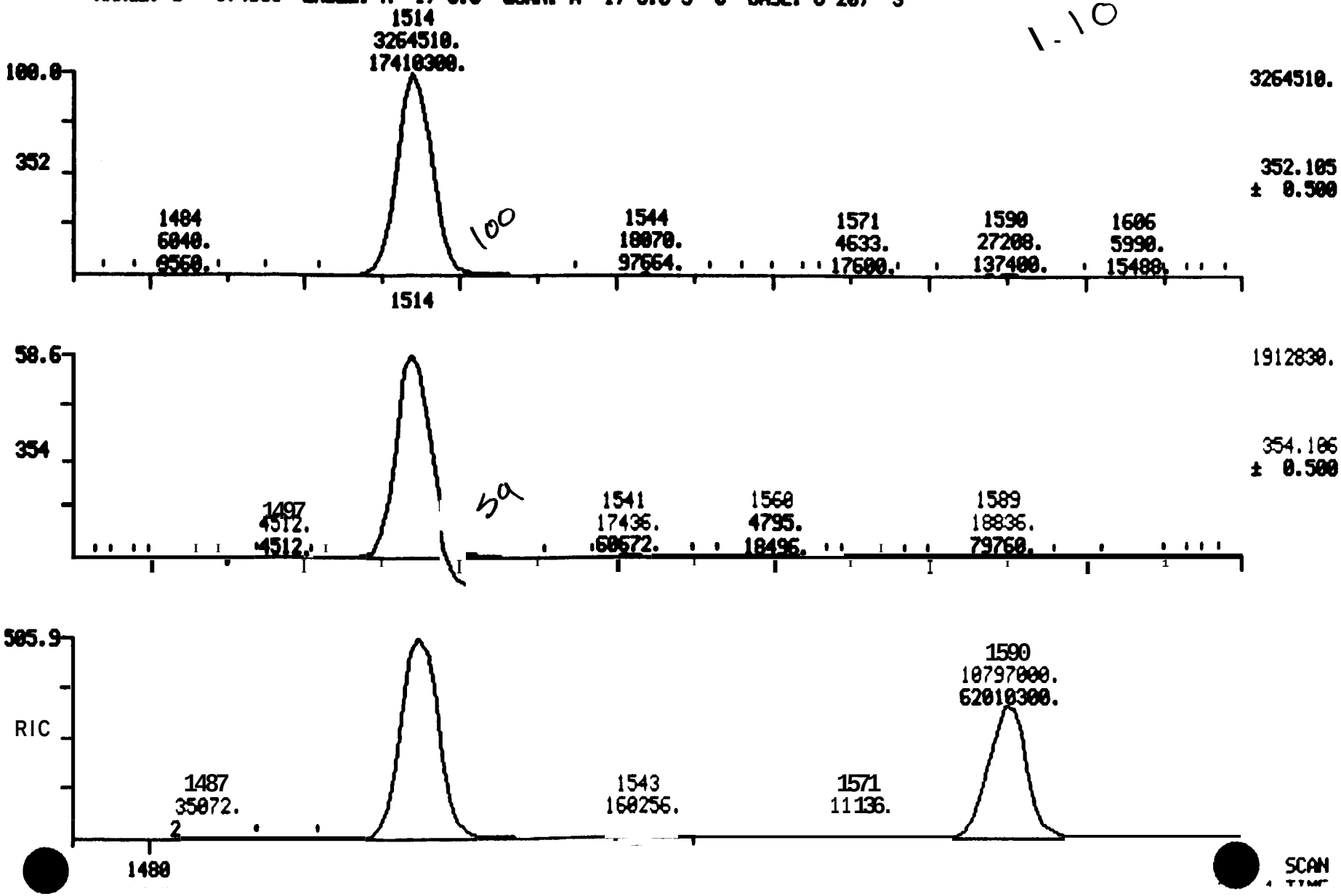
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 1885 TO 2155
03/27/91 9:48:00 CALI: CAL910306A 02
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN 02 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.41 QUAN: A 1, 3.0 J @ BASE: U 20, 3

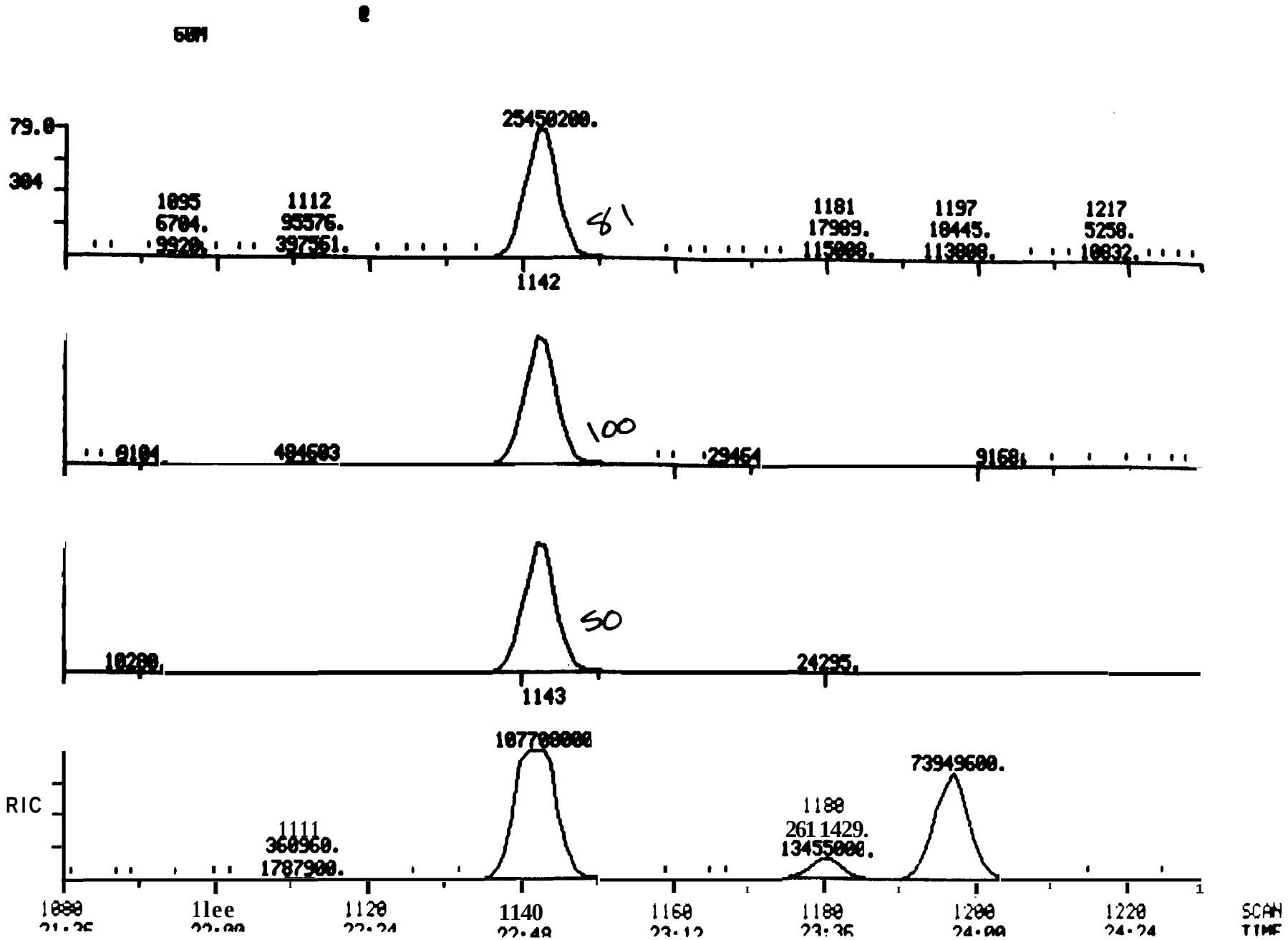



338
17580000.
65
1543
41979.
207064.
62
1630
13128.
79744.
338.101
± 8.500
340
27219400.
1.61
1498
5496.
5496.
100
1543
65816.
342656.
100
1631
12374.
60568.
340.102
± 8.500
342
17310400.
64
1543
42428.
212280.
16836800.
63
1631
16178.
50128.
342.182
± 8.500
1543
156948.
816896.
1571
11136.
28288.
1500
1520
1540
1560
1580
1600

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 1470 TO 1620
03/27/91 9:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

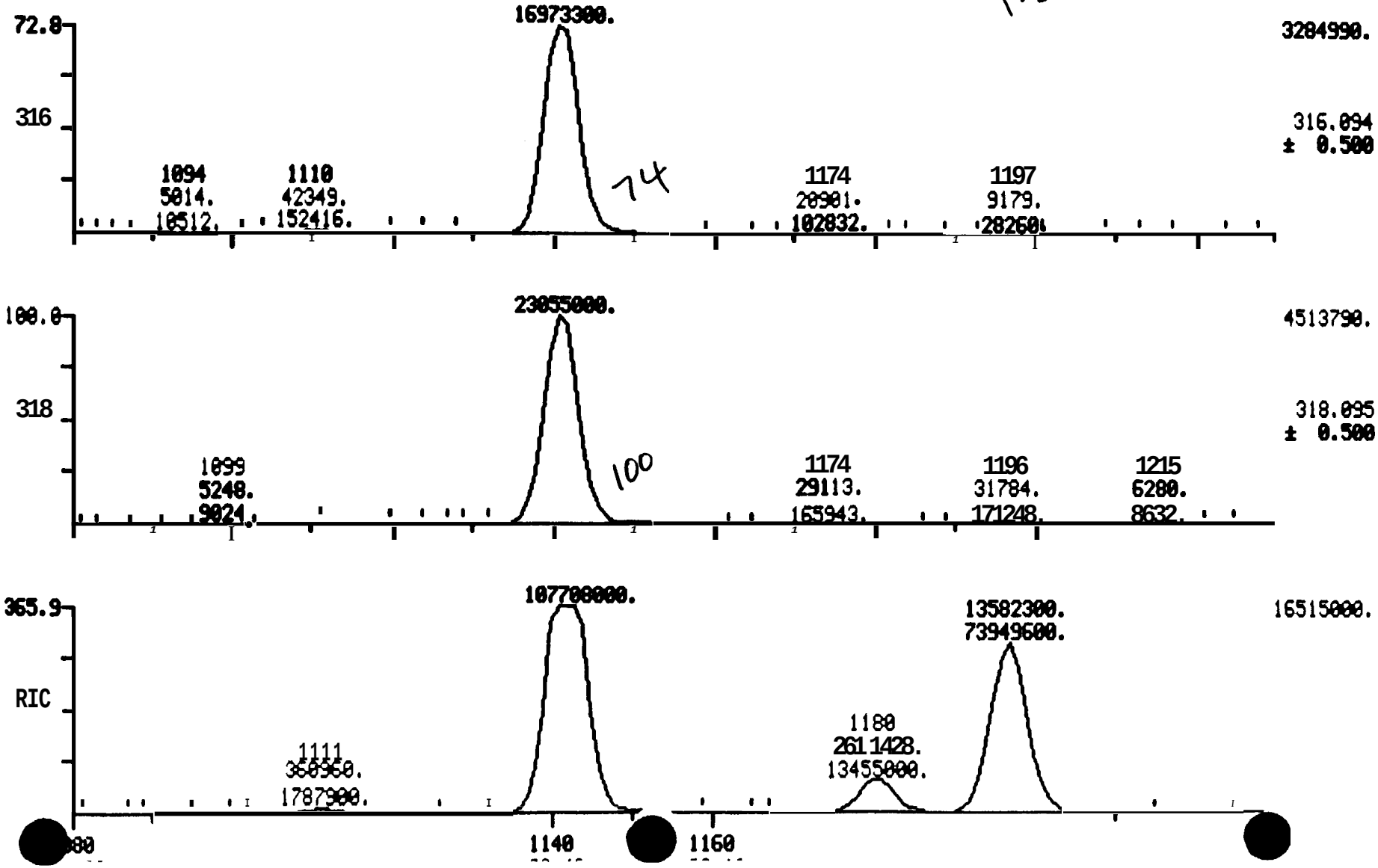


TCDF



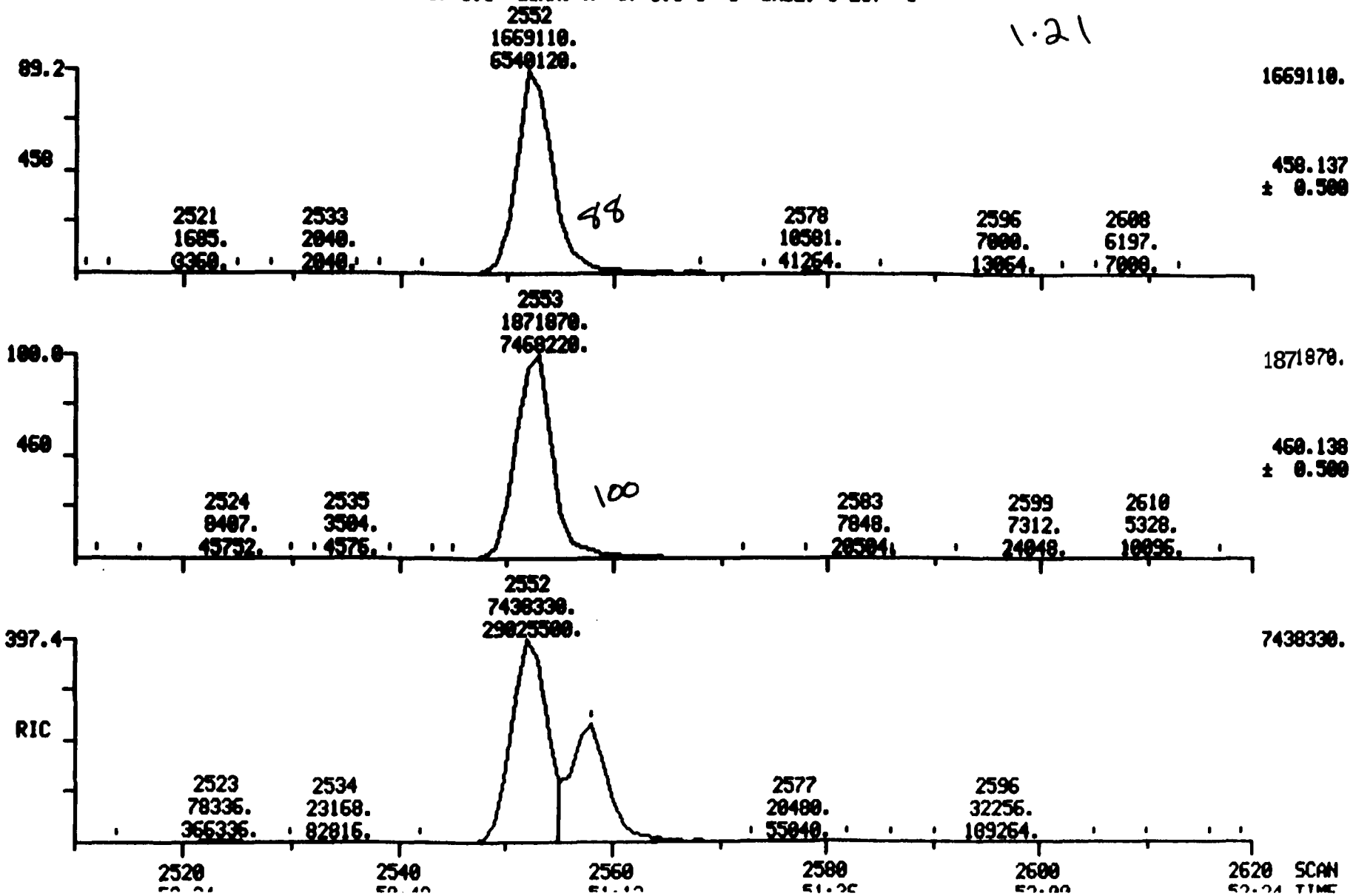
C20039 4
C3

1.56


72.8
316
16973300.
3284990.
316.094
± 0.500
1094
5014.
10512.
1110
42349.
152416.
74
1174
20901.
102832.
1197
9179.
28260.
100.0
318
23055000.
4513790.
318.095
± 0.500
1099
5248.
9024.
100
1174
29113.
165943.
1196
31784.
171248.
1215
6280.
8632.
365.9
RIC
107708000.
16515000.
13582300.
73949600.
1111
350360.
1787900.
1180
2611428.
13455000.
1140
1160

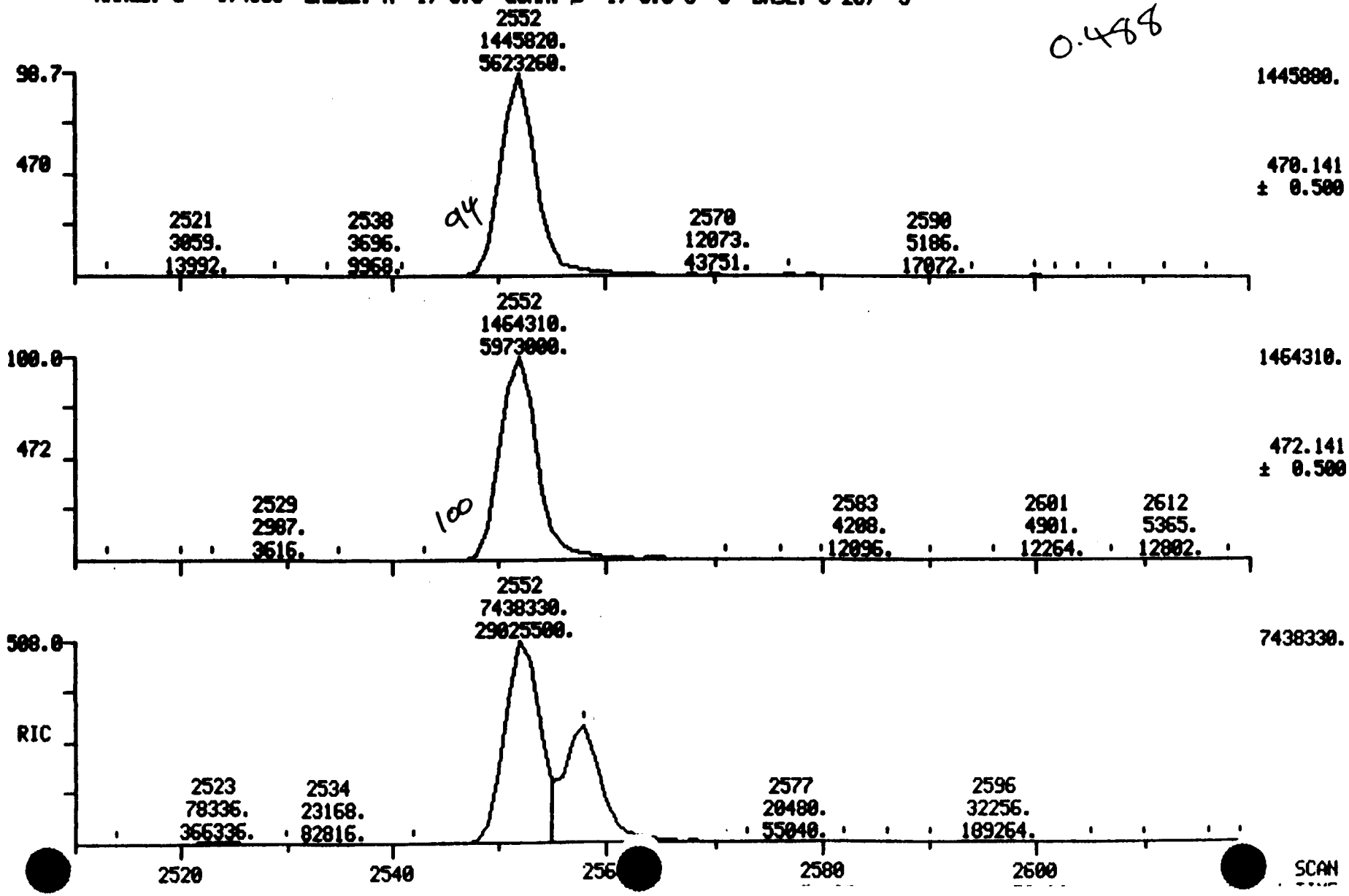
MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 2510 TO 2620 OCDD
03/27/91 9:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.21



3200395

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 2510 TO 2620
03/27/91 9:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: ρ 1, 3.0 J 0 BASE: U 20, 3

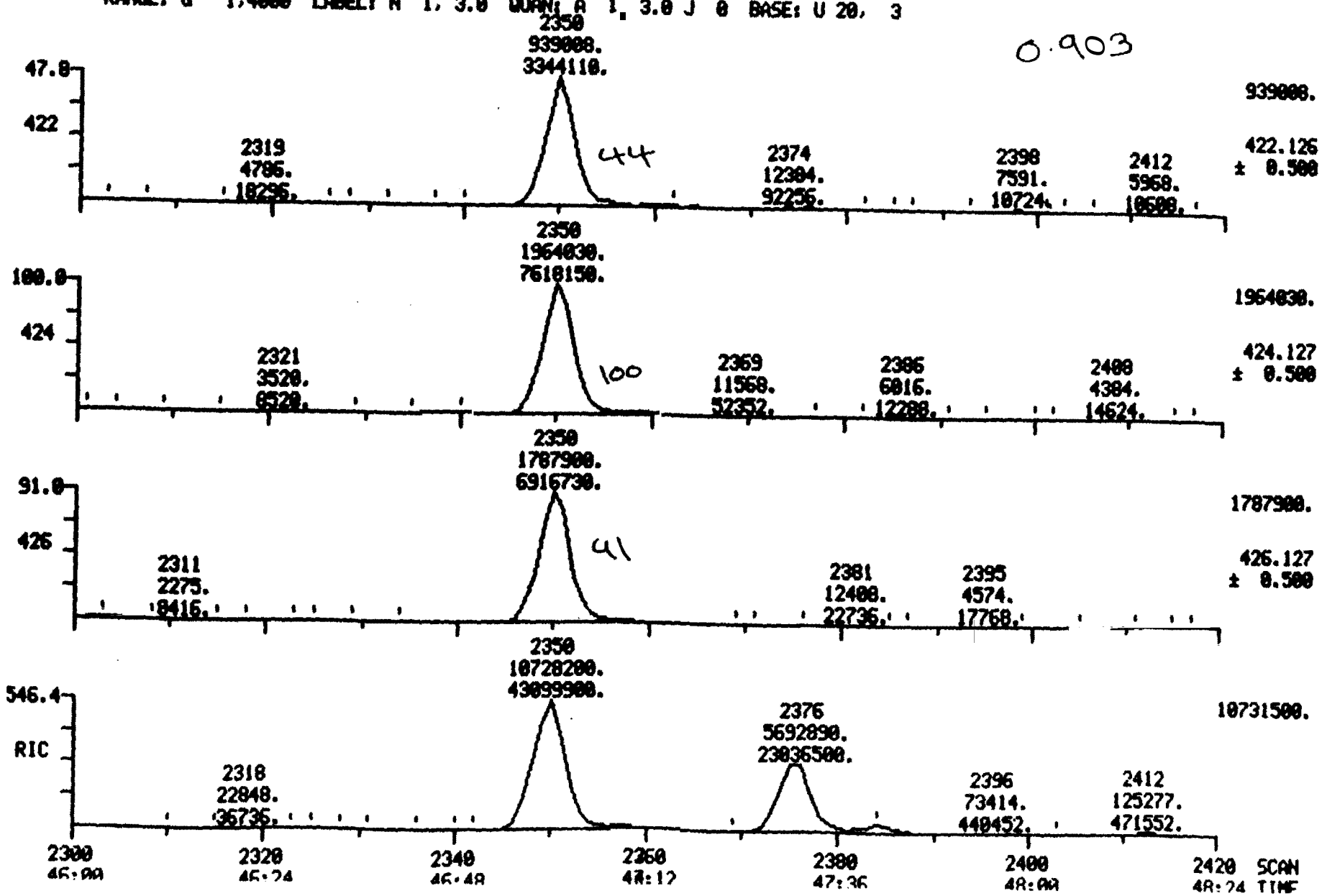


MIDRIC+MASS CHROMATOGRAMS
03/27/91 9:40:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

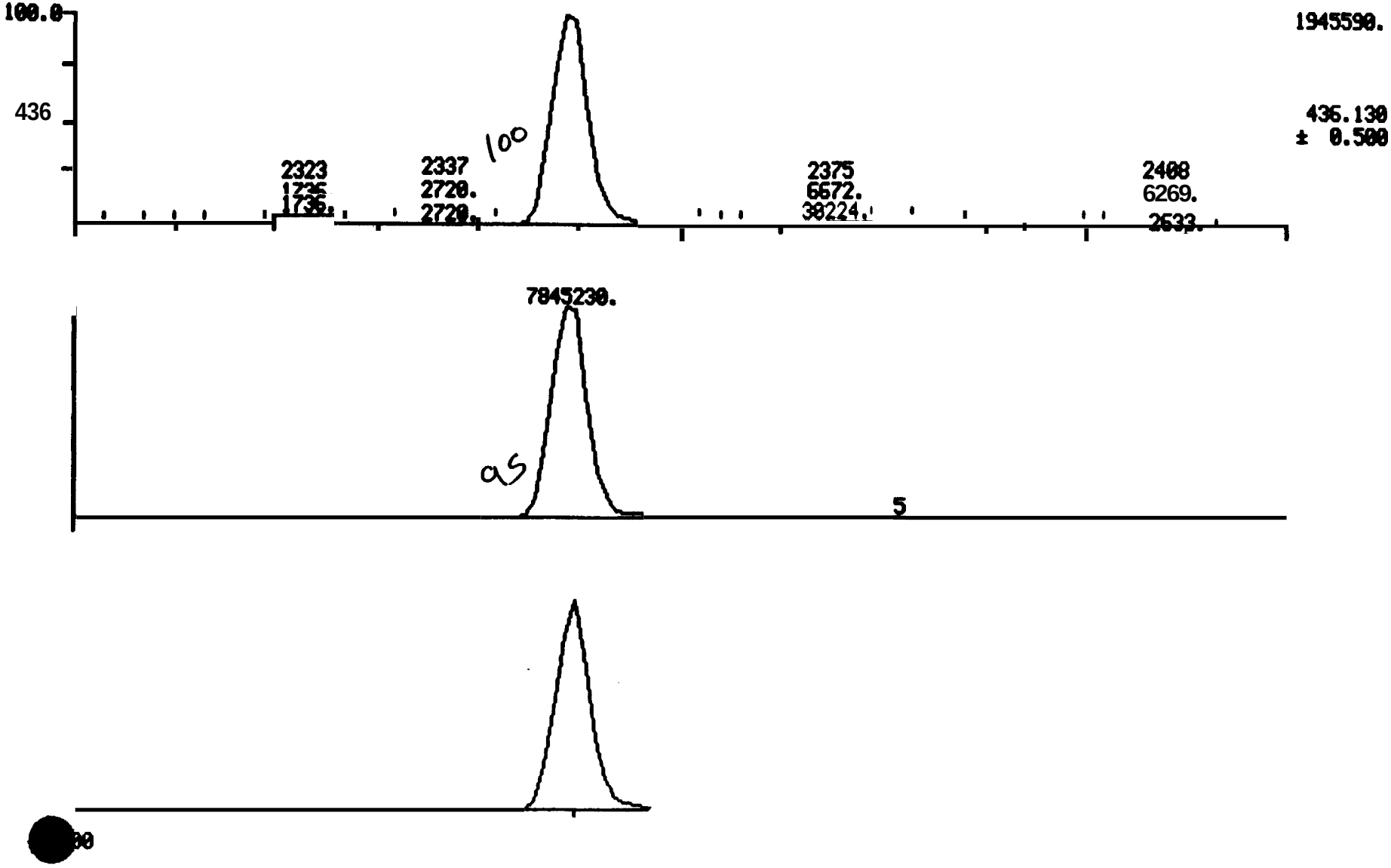
DATA: 68506IV2 #1
CALI: CAL910306A #2

SCANS 2300 TO 2420

HPCDD

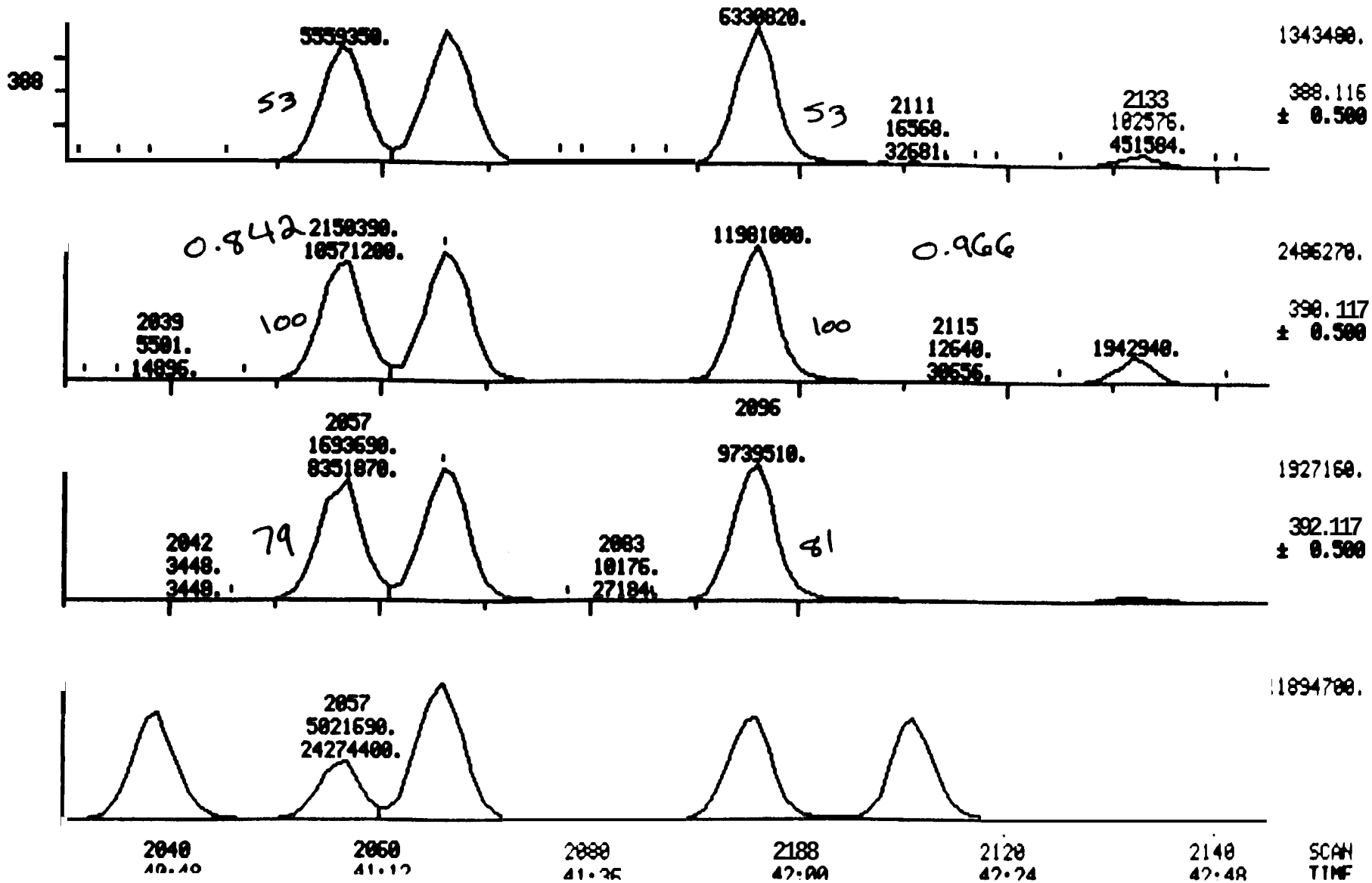


3200396

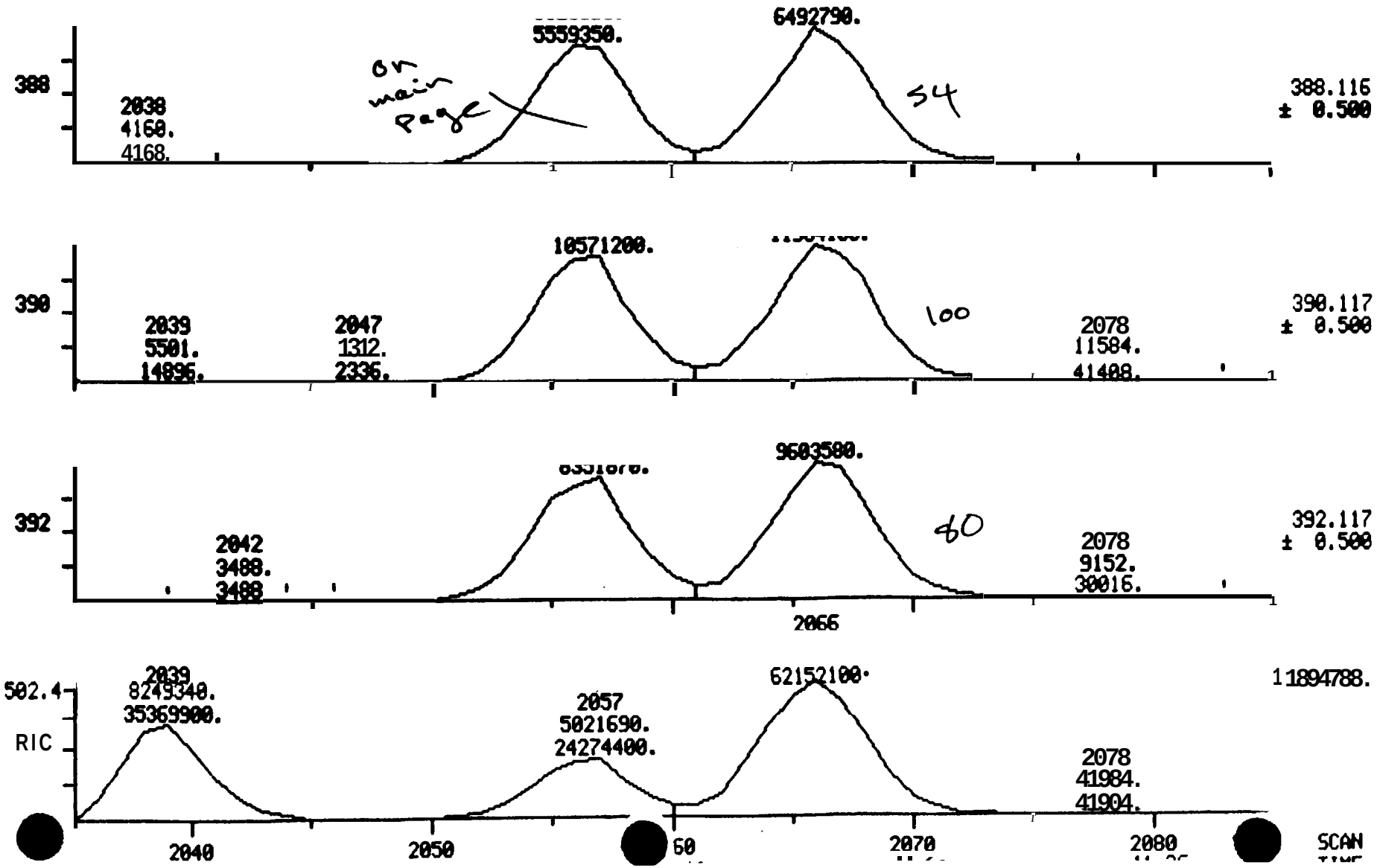

100.0
436
1945590.
436.130
± 0.500
2323
1736.
2337
2720.
100
2375
6672.
38224.
2408
6269.
2633.
7845230.
95
5

HxCDD

60M

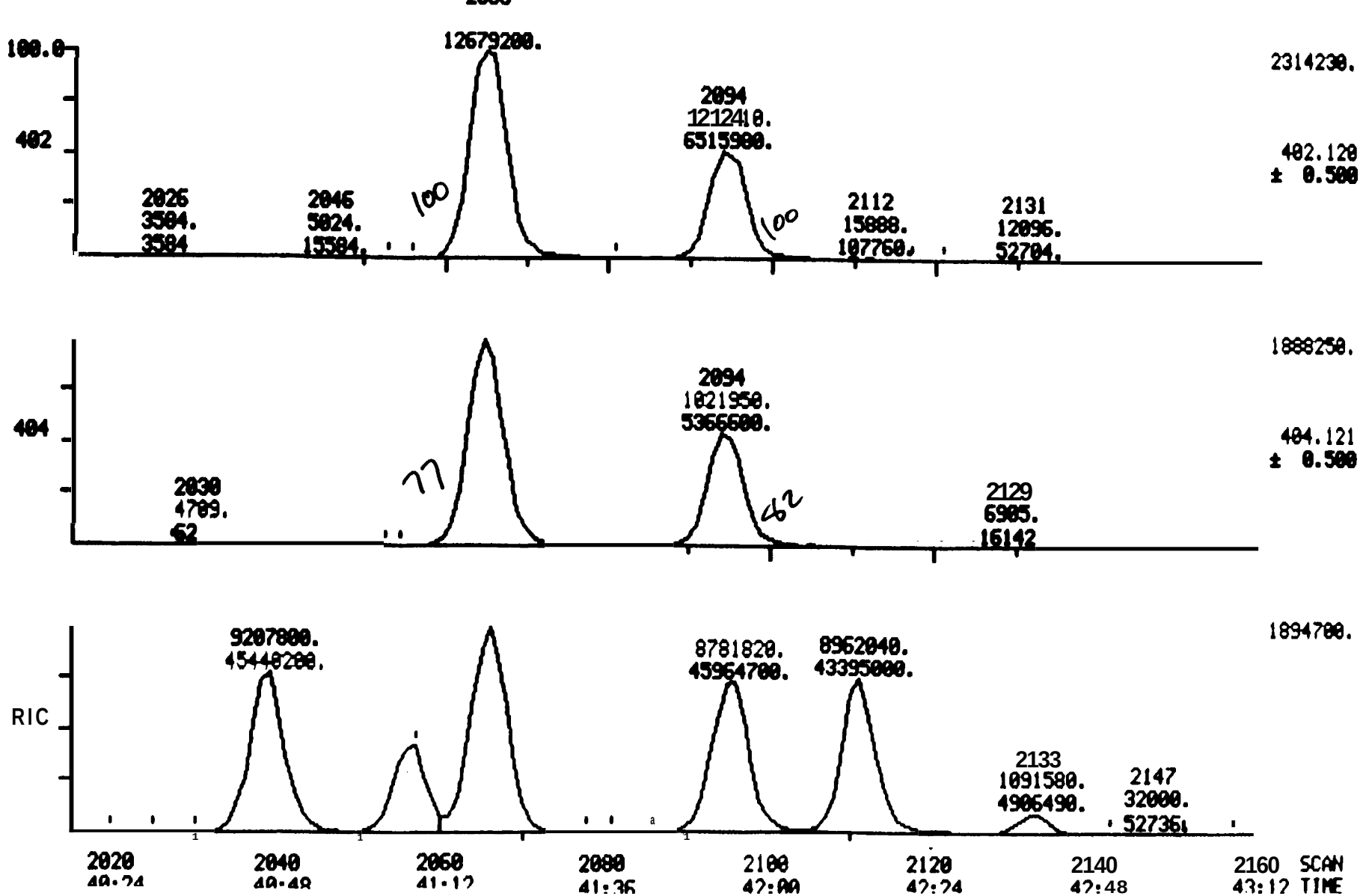


3200397


388
2038
4160.
4168.
5559350.
6492790.
on main Page
54
388.116
± 0.500
390
2039
5501.
14896.
2047
1312.
2336.
10571200.
100
2078
11584.
41408.
390.117
± 0.500
392
2042
3488.
3488
9603580.
80
2078
9152.
30016.
392.117
± 0.500
2066
502.4
RIC
2039
8249340.
35369900.
2057
5021690.
24274400.
62152100.
2078
41984.
41904.
11894788.
2040
2050
60
2070
2080
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 2015 TO 2160
03/27/91 9:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.946

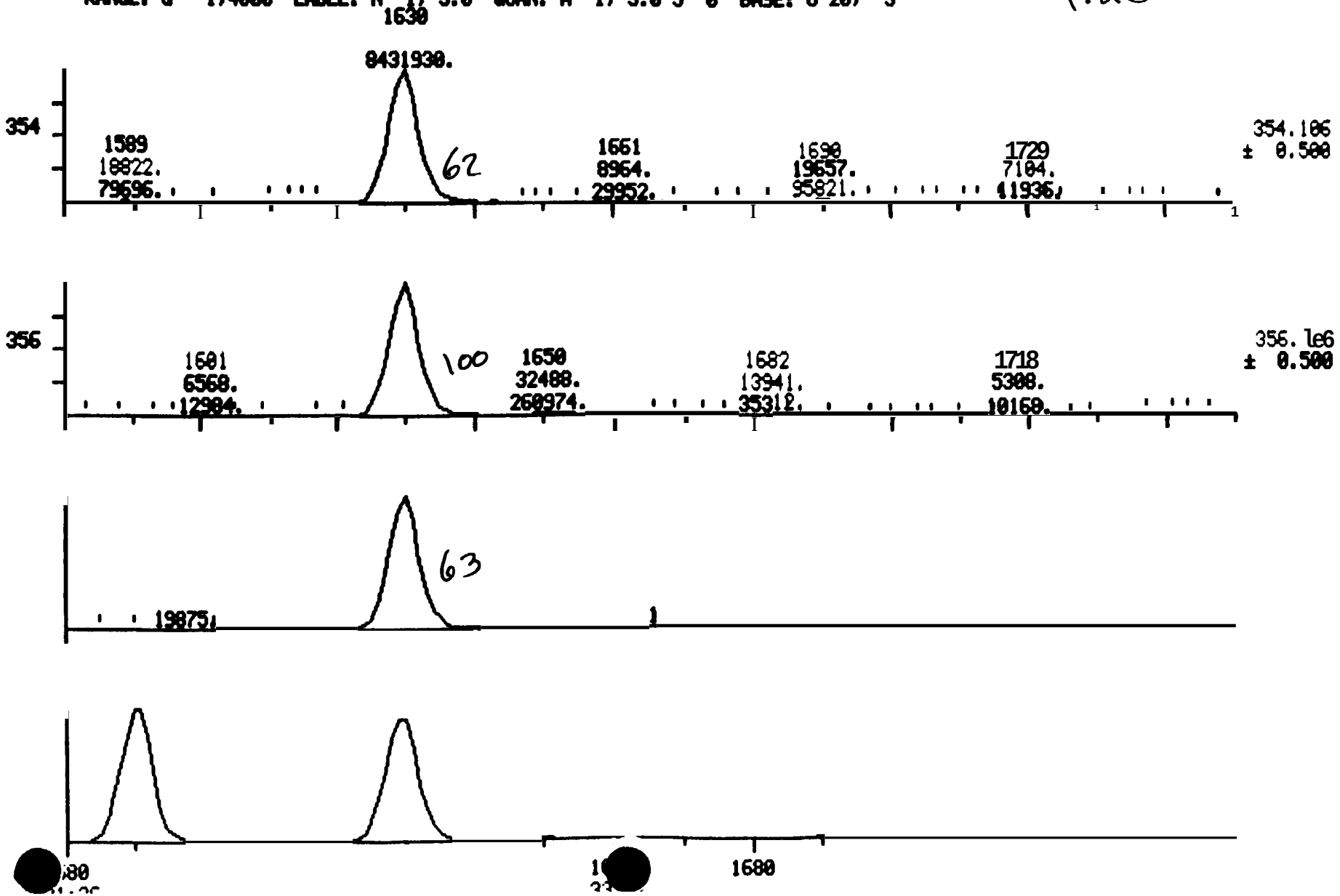


3200398

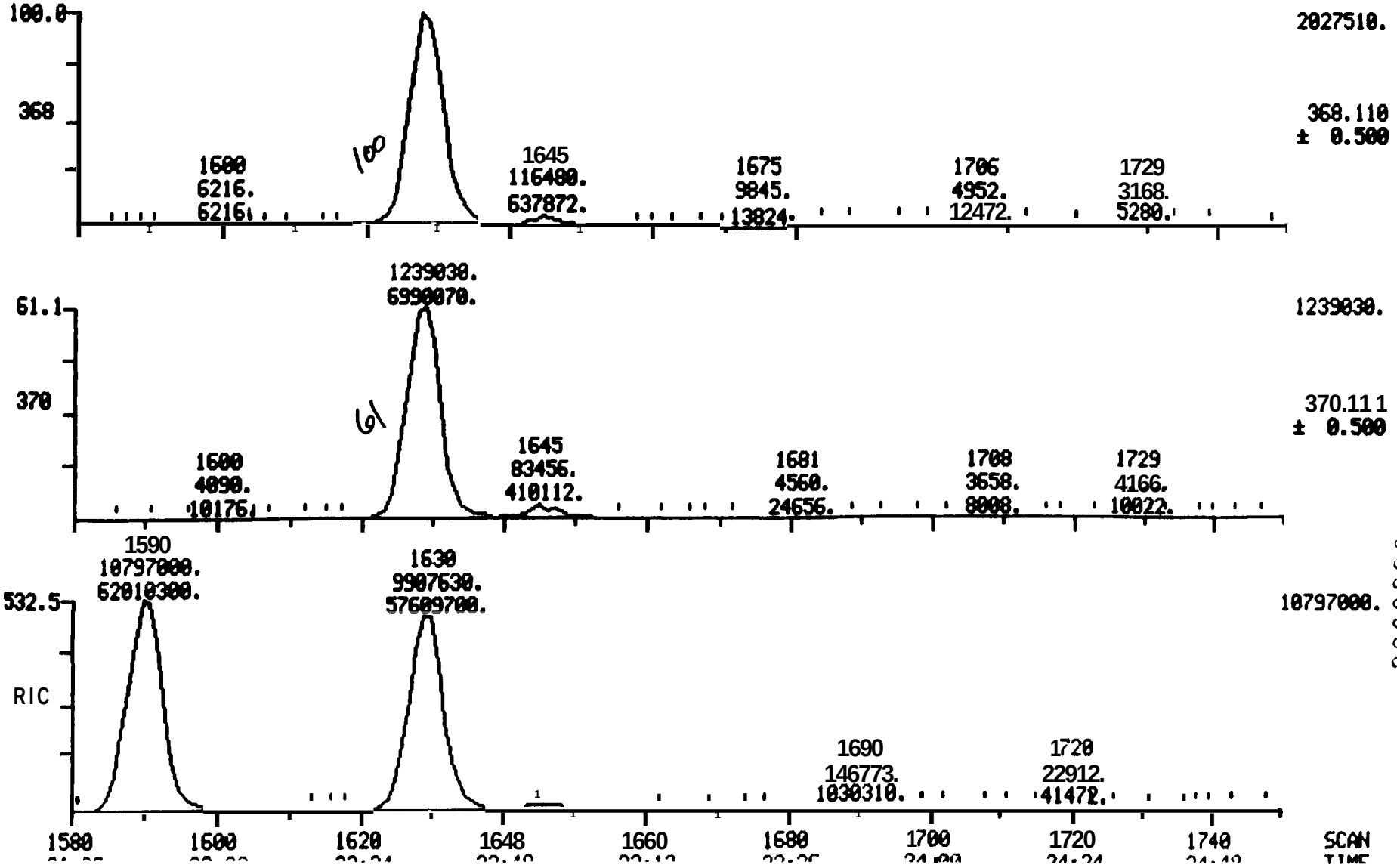
PecDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV2 #1 SCANS 1580 TO 1750
03/27/91 9:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

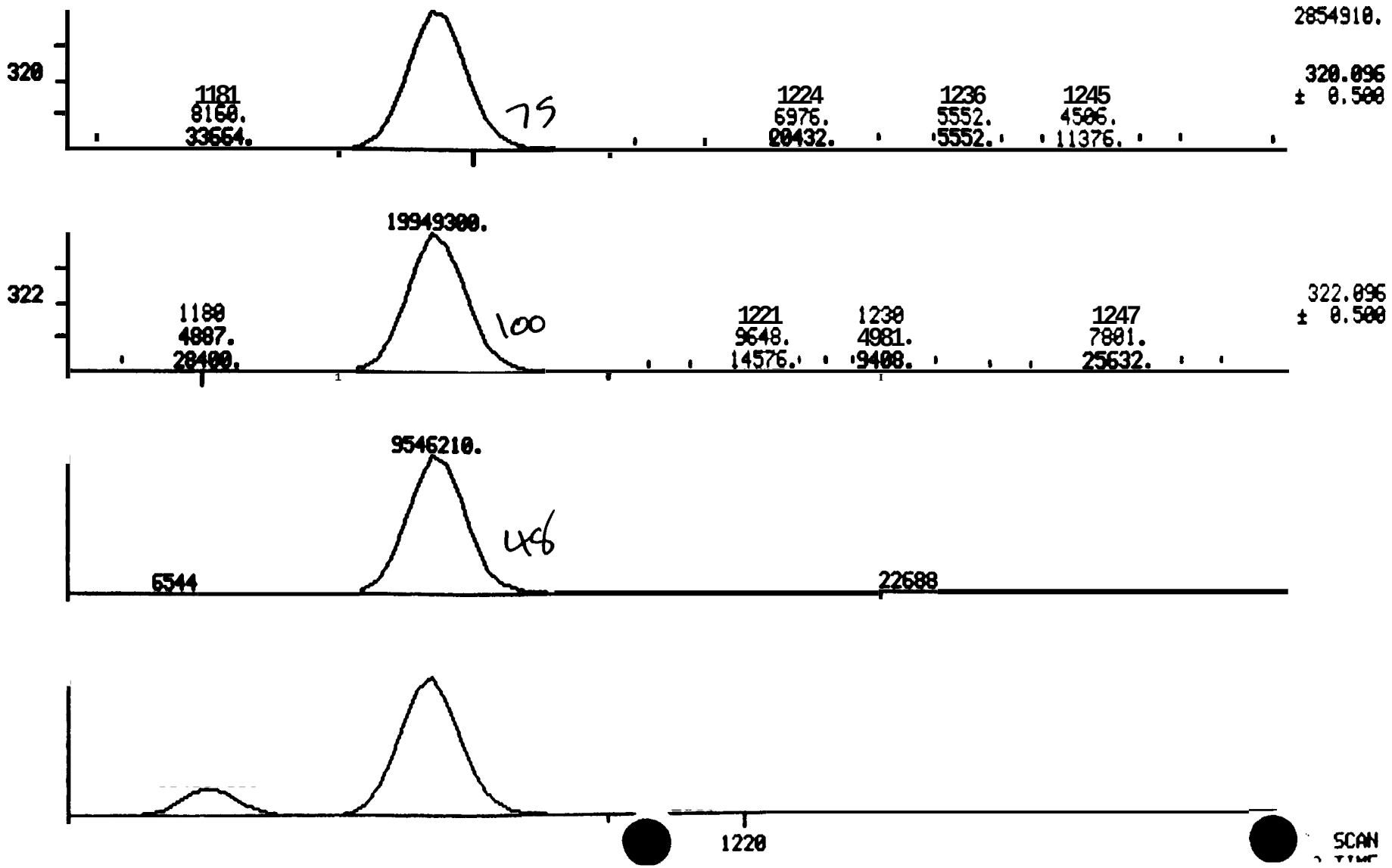
1.20



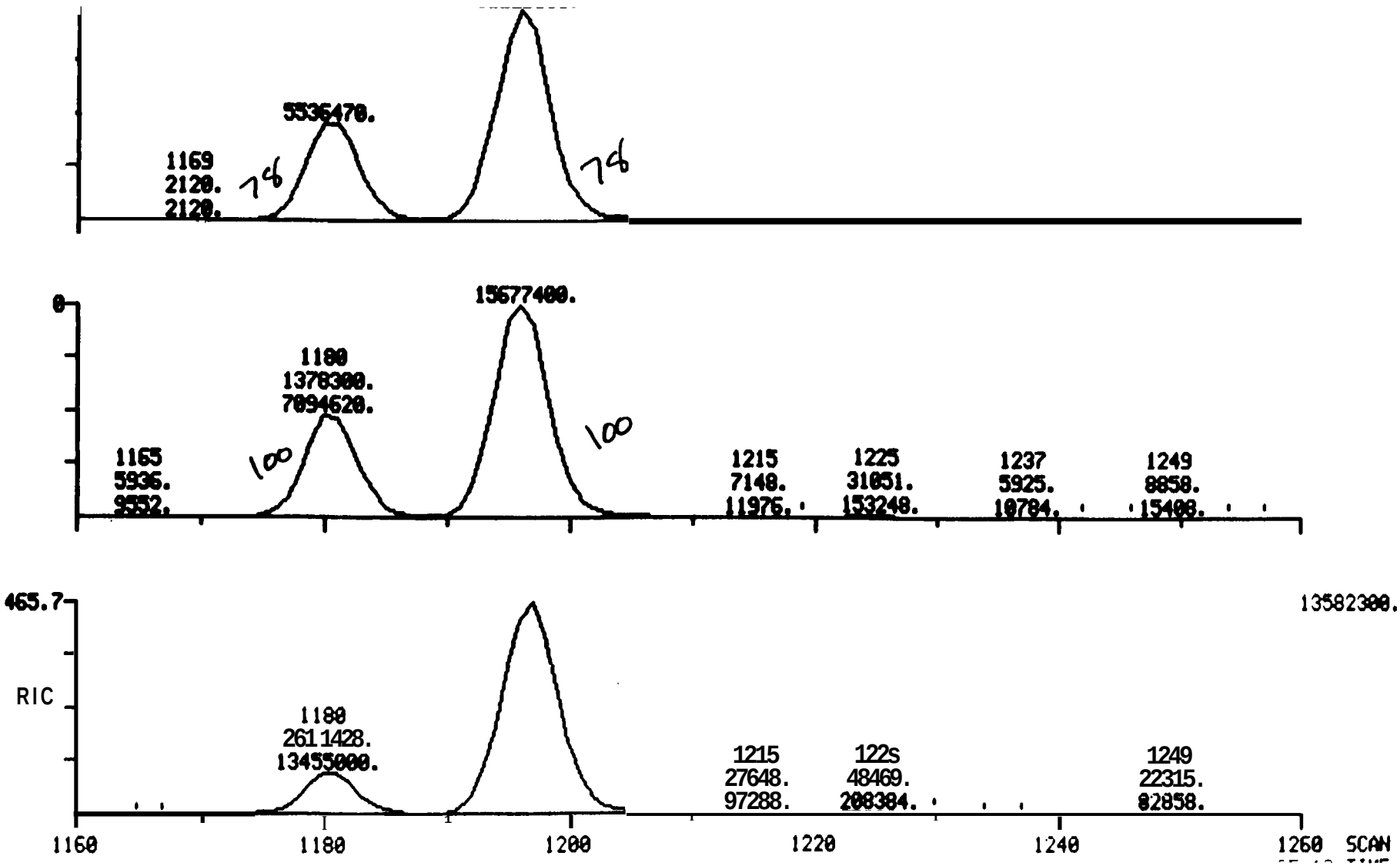
0.732



320C390


2854910.
320
320.096
± 0.500
1181
8160.
33654.
75
1224
6976.
20432.
1236
5552.
5552.
1245
4506.
11376.
19949300.
322
322.096
± 0.500
1180
4887.
28400.
100
1221
9648.
14576.
1230
4981.
9408.
1247
7801.
25632.
9546210.
6544
48
22688
1220
SCAN

1.10


5536470.
1169
2120.
2120.
74
74
0
15677400.
1180
1378300.
7094620.
1165
5936.
9552.
100
100
1215
7148.
11976.
1225
31051.
153248.
1237
5925.
10784.
1249
8858.
15408.
465.7
13582300.
RIC
1180
2611428.
13455000.
1215
27648.
97288.
1225
48469.
208384.
1249
22315.
82858.
1160
1180
1200
1220
1240
1260
SCAN

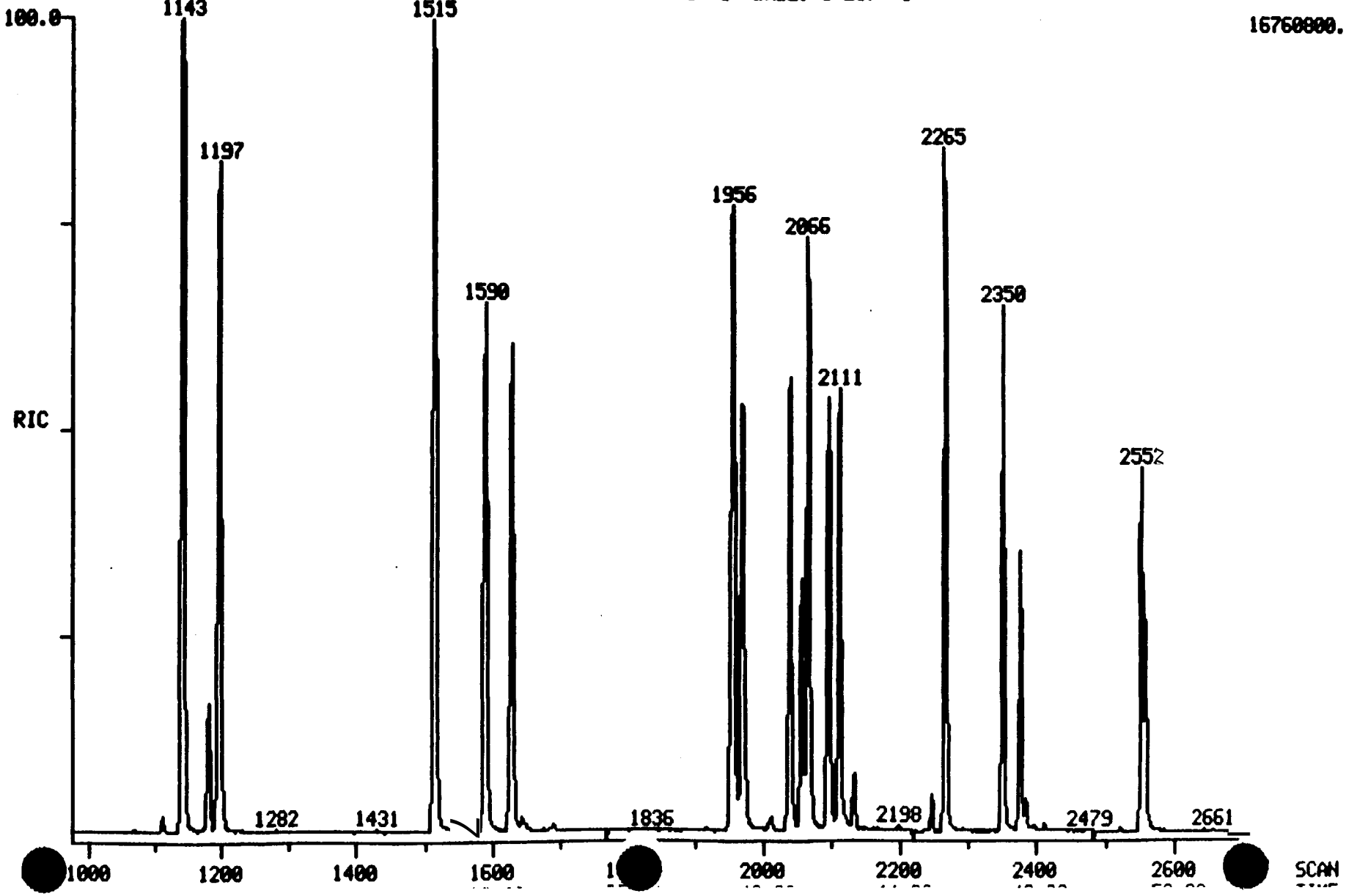
320

MIDRIC
03/27/91 9:48:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506IV2 #1
CALI: CAL910306A #2

SCANS 975 TO 2720

alc. nm 3-28-91
QC RH 3-28-91



4	419.550	420.050	0.054	3 100	40	1	0	Po.
3	421.550	422.050	0.054	3 100	40	1	0	Po.
6	423.550	424.050	0.054	3 100	40	1	0	Po.
7	425.550	426.050	0.052	3 100	40	1	0	eo.
8	435.550	436.050	0.032	3 100	40	1	0	Pos
9	437.550	438.050	0.032	3 100	40	1	0	Po.
10	441.550	442.050	0.034	3 100	40	1	0	Pos
11	443.550	444.050	0.054	3 100	40	1	0	Pos
12	457.550	458.050	0.052	3 100	40	1	0	Po.
13	459.550	460.050	0.032	3 100	40	1	0	Po.
14	469.550	470.050	0.034	3 100	40	1	0	Po.
15	471.550	472.050	0.052	3 100	40	1	0	Po.
16	479.550	480.050	0.054	3 100	40	1	0	Pos
17	313.550	514.050	0.054	3 100	40	1	0	Po.

3200401

3/27/91 9:37:13 SCAN 2733
Acquisition stoppod

3/27/91 9:37:17
ACQUISITION COMPLETED
SCANS 1 TO 1768 Controid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Controid
SCAN a19 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2753 Controid

Mode	Scans	Secs	out of	%	Peaks per scan	per sec
Controid	2750	634.2	3300.0	19.2	84019. 31.	23.

MID scan
Scan time: 1.200 ■

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	337.650	338.150	0.034	3	100	40	1	0	Po.
2	339.650	340.130	0.032	3	100	40	1	0	Po.
3	341.650	342.150	0.054	3	100	40	1	0	Po.
4	351.650	352.150	0.052	3	100	40	1	0	Po.
5	353.630	334.150	0.054	3	100	40	1	0	Po.
6	355.630	356.150	0.052	3	100	40	1	0	Po.
7	337.630	358.130	0.034	3	100	40	1	0	Po.
8	367.630	368.150	0.052	3	100	40	1	0	Por
9	369.630	370.130	0.032	3	100	40	1	0	Po.
10	371.630	372.150	0.032	3	100	40	1	0	Po.
11	373.630	374.150	0.032	3	100	40	1	0	Po.
12	375.650	376.150	0.032	3	100	40	1	0	Po.
13	379.650	380.150	0.052	3	100	40	1	0	Po.
14	381.650	382.130	0.052	3	100	40	1	0	Po.
13	385.650	386.130	0.032	3	100	40	1	0	Po.
16	387.630	388.150	0.052	3	100	40	1	0	Po.
17	389.630	390.150	0.032	3	100	40	1	0	Po.
18	391.630	392.150	0.052	3	100	40	1	0	Po.
19	401.650	402.130	0.052	3	100	40	1	0	Po.
20	403.630	404.150	0.054	3	100	40	1	0	Po.
21	445.530	446.050	0.052	3	100	40	1	0	Po.

3/27/91 9:26:15 SCAN 2219 OF 4000

HID scan
Scan time: 1.200 s

Desc: 03
Samp. Int.: 0.200 ms

Mass interval.: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Po.
2	373.650	374.130	0.052	3	100	40	1	0	Po.
3	375.650	376.130	0.052	3	100	40	1	0	eo.
4	385.650	386.150	0.032	3	100	40	1	0	Po.
3	387.650	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.650	392.150	0.052	3	100	40	1	0	Po.
8	401.650	402.150	0.052	3	100	40	1	0	Po.
9	403.650	404.150	0.034	3	100	40	1	0	Po.
10	405.550	406.050	0.034	3	100	40	1	0	Po.
11	407.550	408.050	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.550	422.050	0.634	3	100	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Po.
16	425.550	426.050	0.032	3	100	40	1	0	eo.
17	435.550	436.050	0.032	3	100	40	1	0	Po.
18	437.550	438.050	0.052	3	100	40	1	0	Po.
19	479.550	480.050	0.034	3	100	40	1	0	Po.

3/27/91 9:31:42 SCAN 2484 OF 4000

HID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Pos
3	409.530	410.050	0.054	3	100	40	1	0	Pos

3200402

3/27/91 8:40:30 SCAN 1 OF 4000
Acquisition started

Acquire
03/27/91 8:40:00 + 0:05
Run 0:68506IV1
Free sectors: 21083
ACQUIRING
Scan: 4 of 4000
Sample: 2UL OF 685:06-IV @ 500 PPB RUN #1 MULTIPOINT
Conds. : 60M DB-5/TOTALS.
Formula:
Instrument: G3
Weight: 0.000
Submitted by: DM
Analyst: NM
Acct. No: PC4622

********** GC PARAMETERS **********

Loaded GC Desc: BW Current GC oven tmp: 69 DegC Injector : 300 DegC
Current GC Desc: BW GC elapsed time : 3:41 min Int. oven : 273 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan
Desc: B1
Mass intervals: 21
Scan time: 1.200 s
Samp. int. : 0.200 ms
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BC	ION
1	303.650	304.150	0.032	3	100	40	1	0	Po.
2	305.650	306.150	0.052	3	100	40	1	0	Pom
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.032	3	100	40	1	0	Po.
3	317.650	318.150	0.054	3	100	40	1	0	Po.
6	319.650	320.150	0.052	3	100	40	1	0	Po.
7	321.650	322.150	0.054	3	100	40	1	0	Po.
8	323.650	324.150	0.032	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Po.
12	339.650	340.150	0.052	3	100	40	1	0	Po.
13	341.650	342.150	0.032	3	100	40	1	0	Po.
14	351.650	352.150	0.054	3	100	40	1	0	Pos
13	353.650	354.150	0.052	3	100	40	1	0	Pom
16	355.650	356.150	0.054	3	100	40	1	0	Po.
17	357.650	358.150	0.052	3	100	40	1	0	Po.
18	367.650	368.150	0.054	3	100	40	1	0	Po.
19	369.650	370.150	0.052	3	100	40	1	0	Po.
20	375.650	376.150	0.052	3	100	40	1	0	Po.
21	409.550	410.050	0.052	3	100	40	1	0	eo.

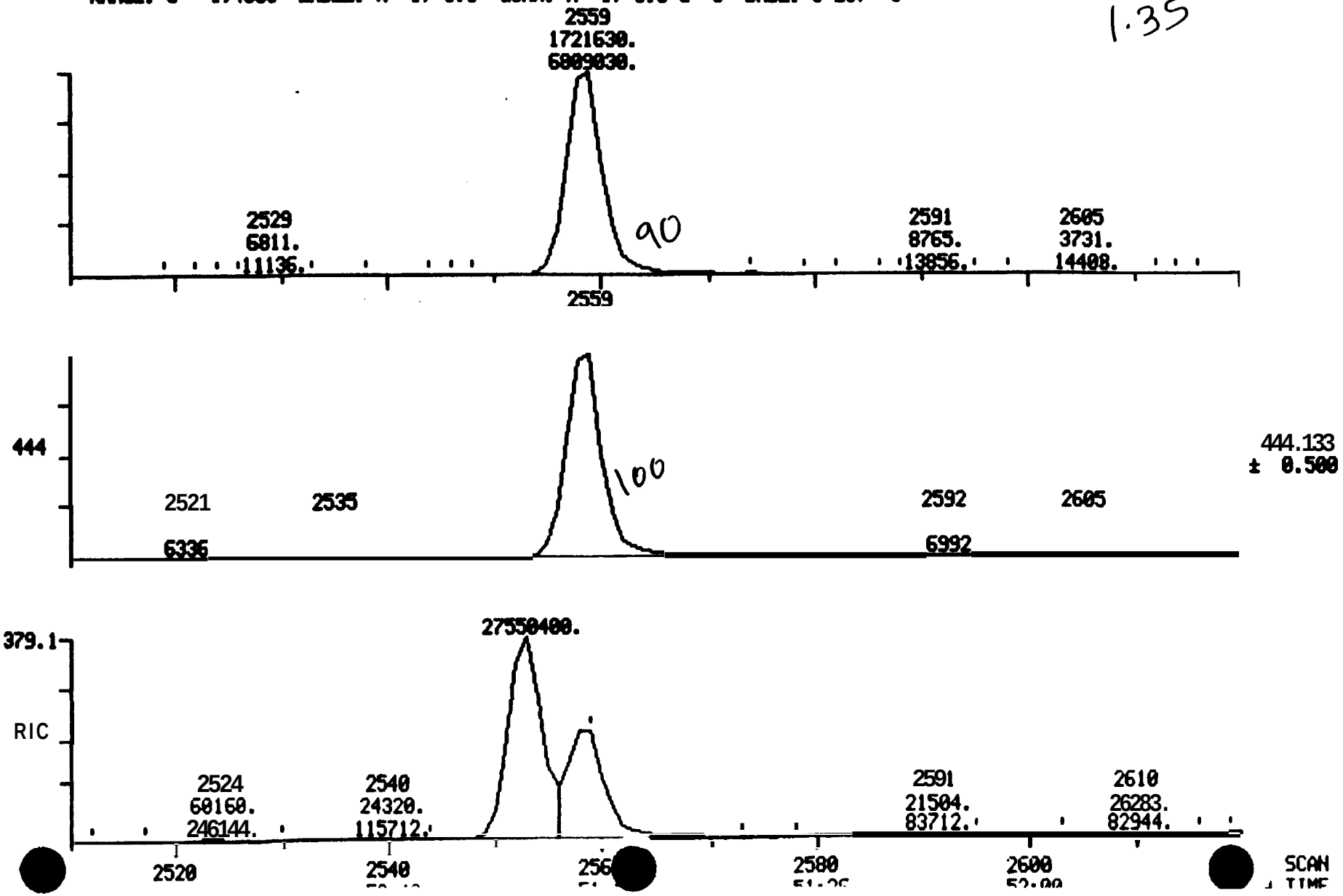
Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/27/91 9:17:00 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 2510 TO 2620
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDF

1.35

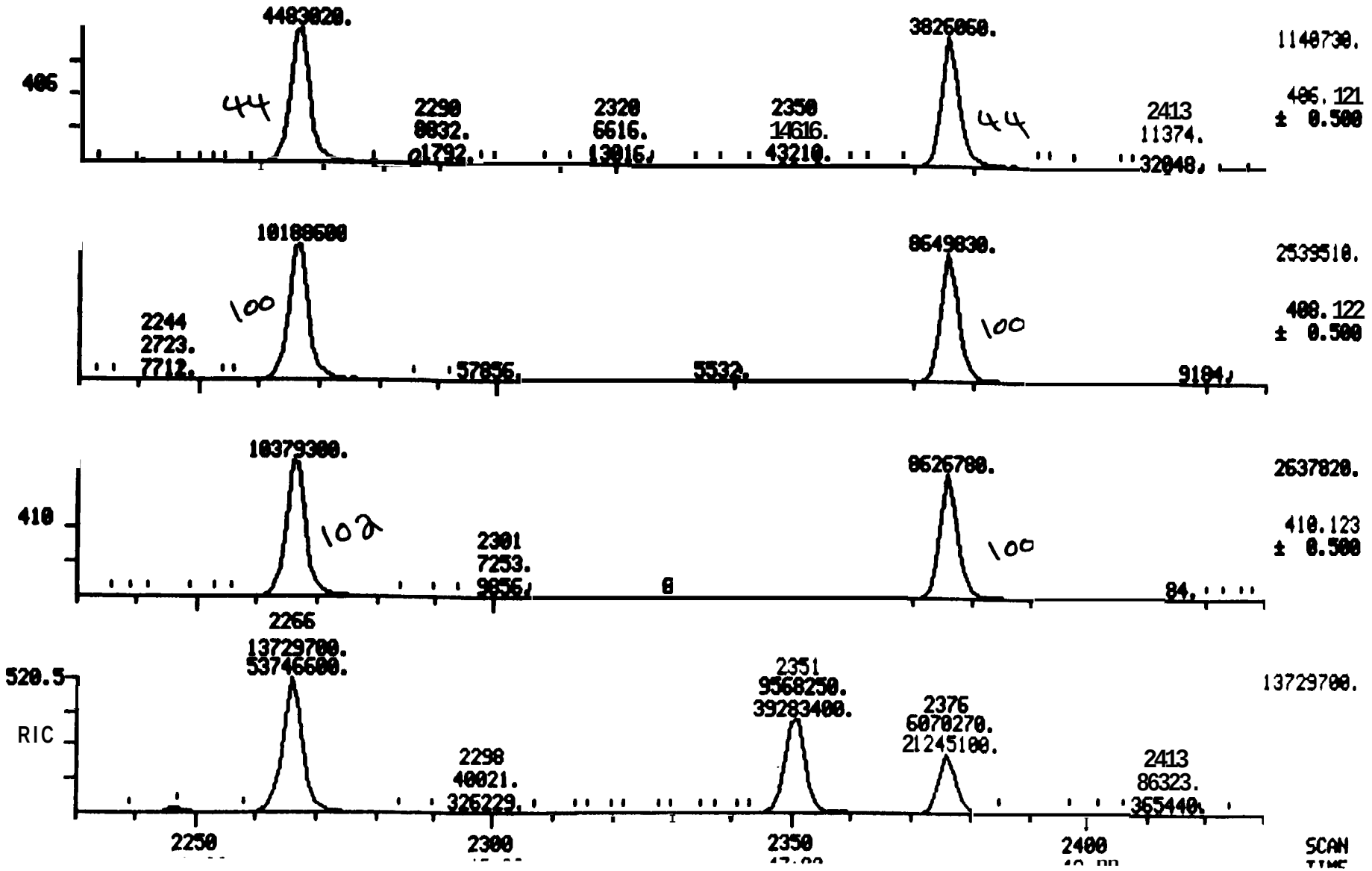


MIDRIC+MASS CHROMATOGRAMS
03/27/91 8:40:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.

DATA: 68506IV1 #1
CALI: CAL910306A #2

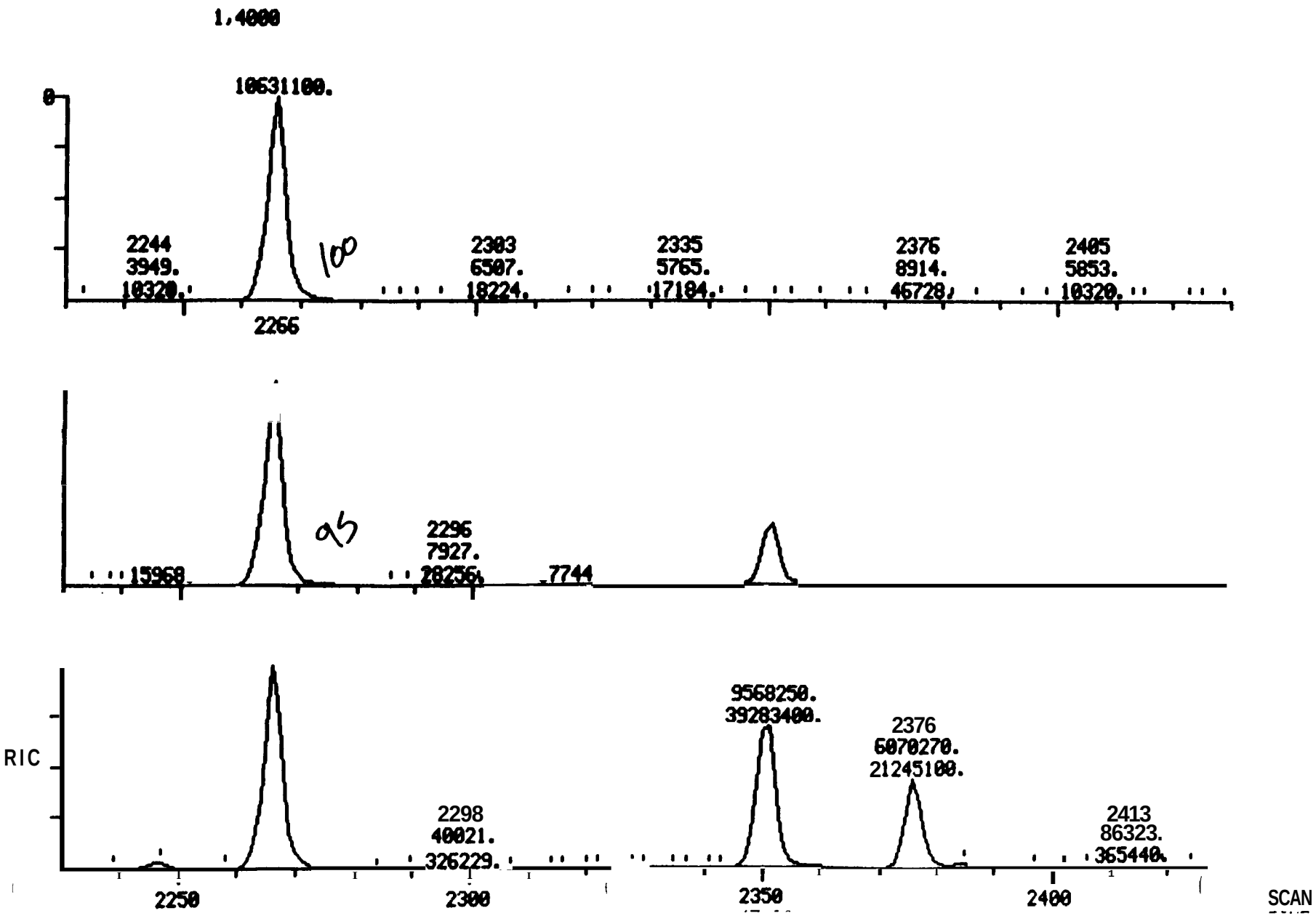
SCANS 2230 TO 2430

HpCDF



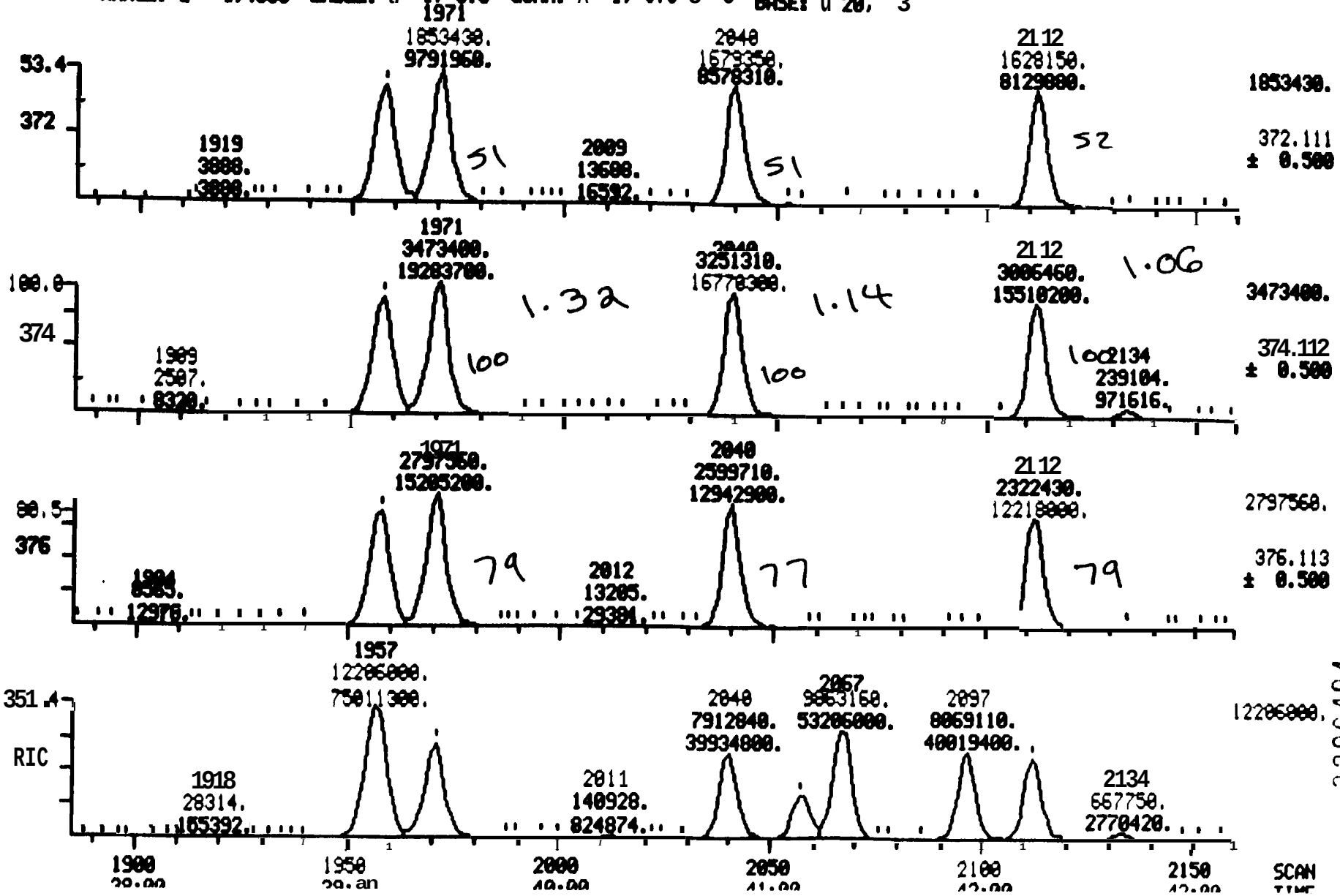
3200403

0.974


1.4000
10631100.
0
2244
3949.
10320.
100
2303
6507.
18224.
2335
5765.
17184.
2376
8914.
46728.
2405
5853.
10320.
2266
95
2296
7927.
28256.
15968
7744
RIC
2298
40021.
326229.
9568250.
39283400.
2376
6070270.
21245100.
2413
86323.
365440.
2250
2300
2350
2400
SCAN

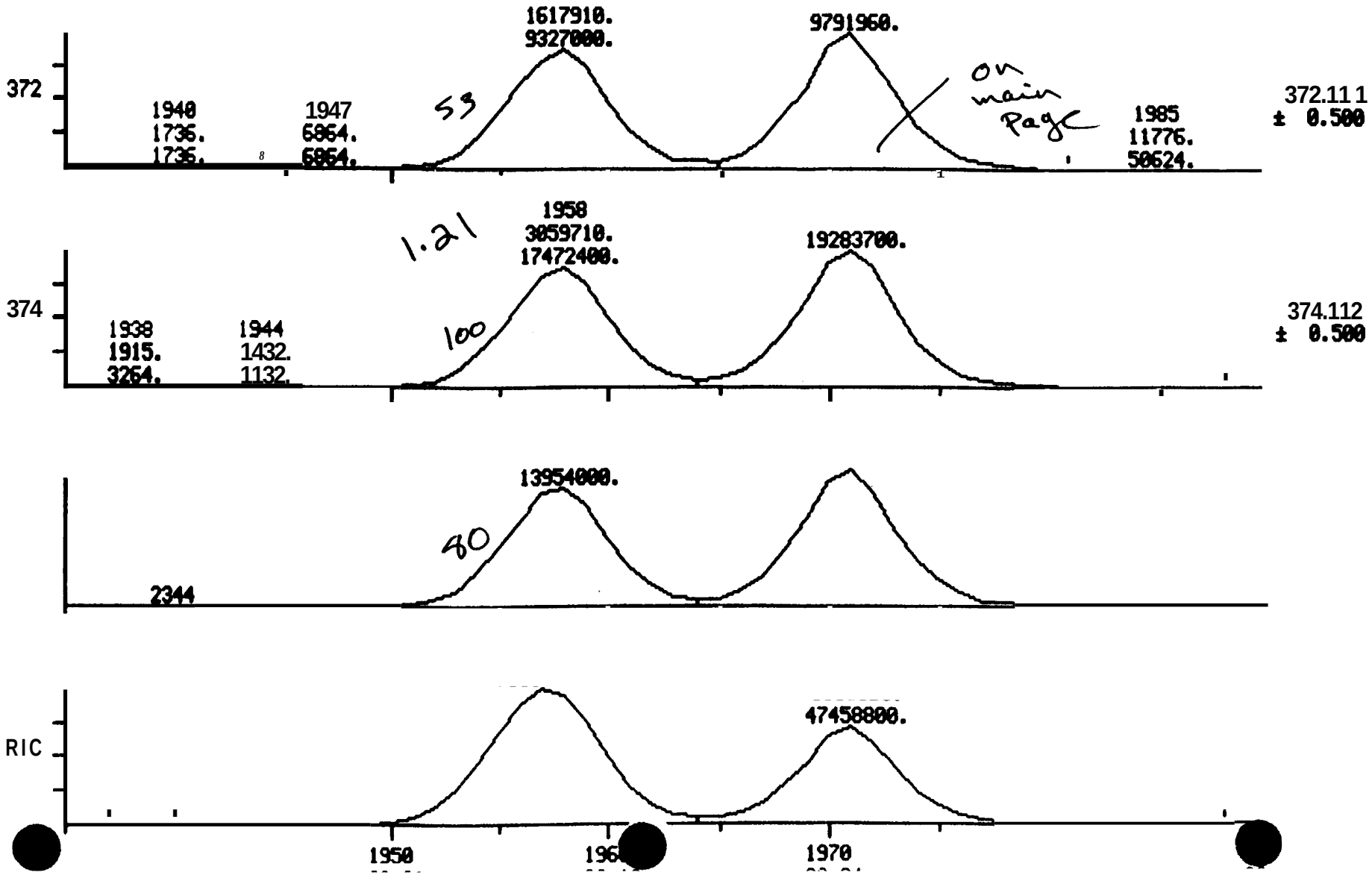
HxCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68586IU1 41 SCANS 1885 TO 2160
03/27/91 8:40:00 CALI: CAL9103060 02
SAMPLE: 2UL OF 685:06-IV e 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: ti 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3



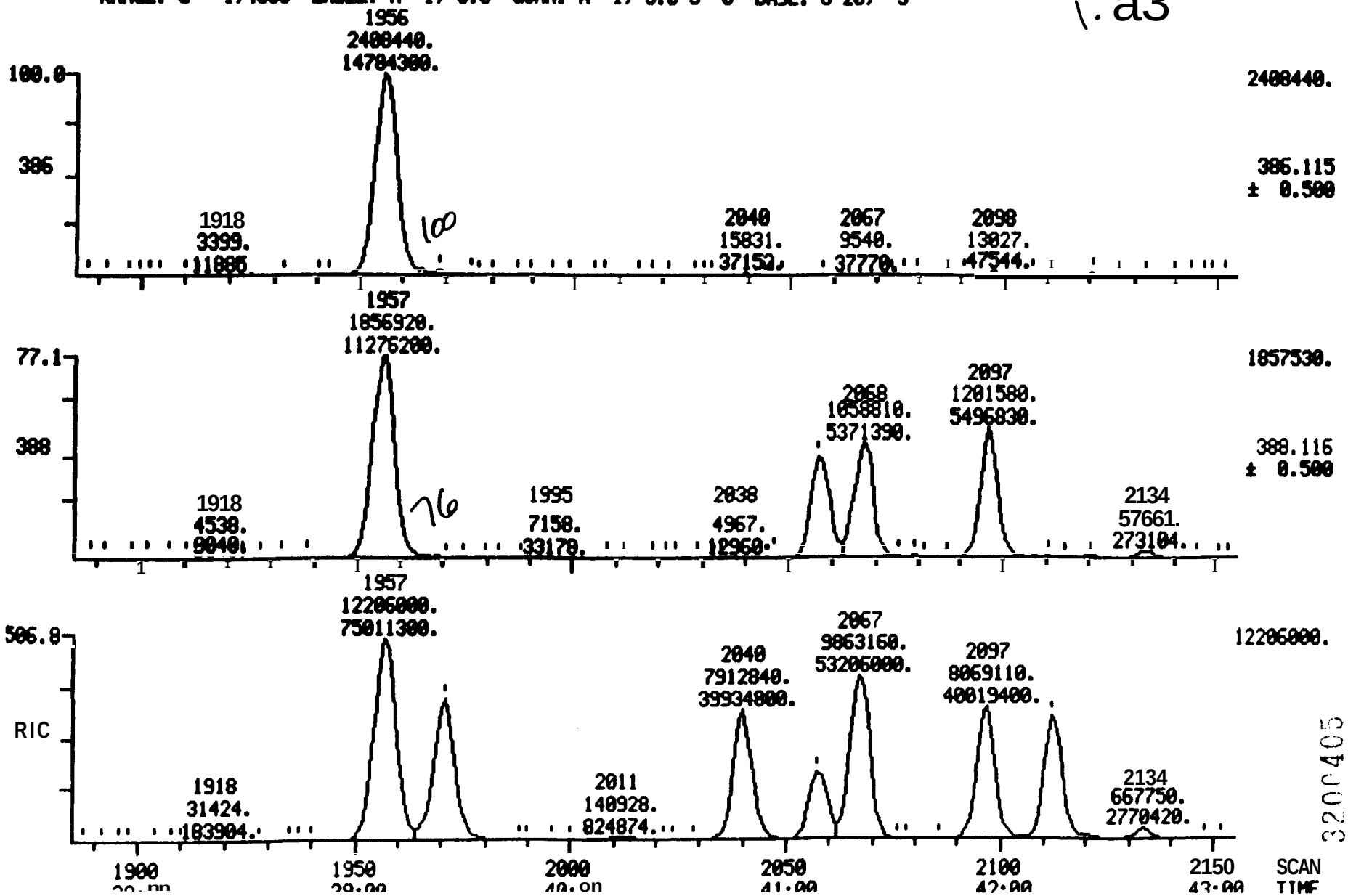
3200404

HxCDF


372
1940
1736.
1736.
1947
6864.
6864.
53
1617910.
9327000.
9791960.
on main Page
1985
11776.
50624.
372.111
± 0.500
374
1938
1915.
3264.
1944
1432.
1132.
1.21
100
1958
3059710.
17472400.
19283700.
374.112
± 0.500
2344
80
13954000.
RIC
47458800.
1950
1960
1970

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 1885 TO 2155
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

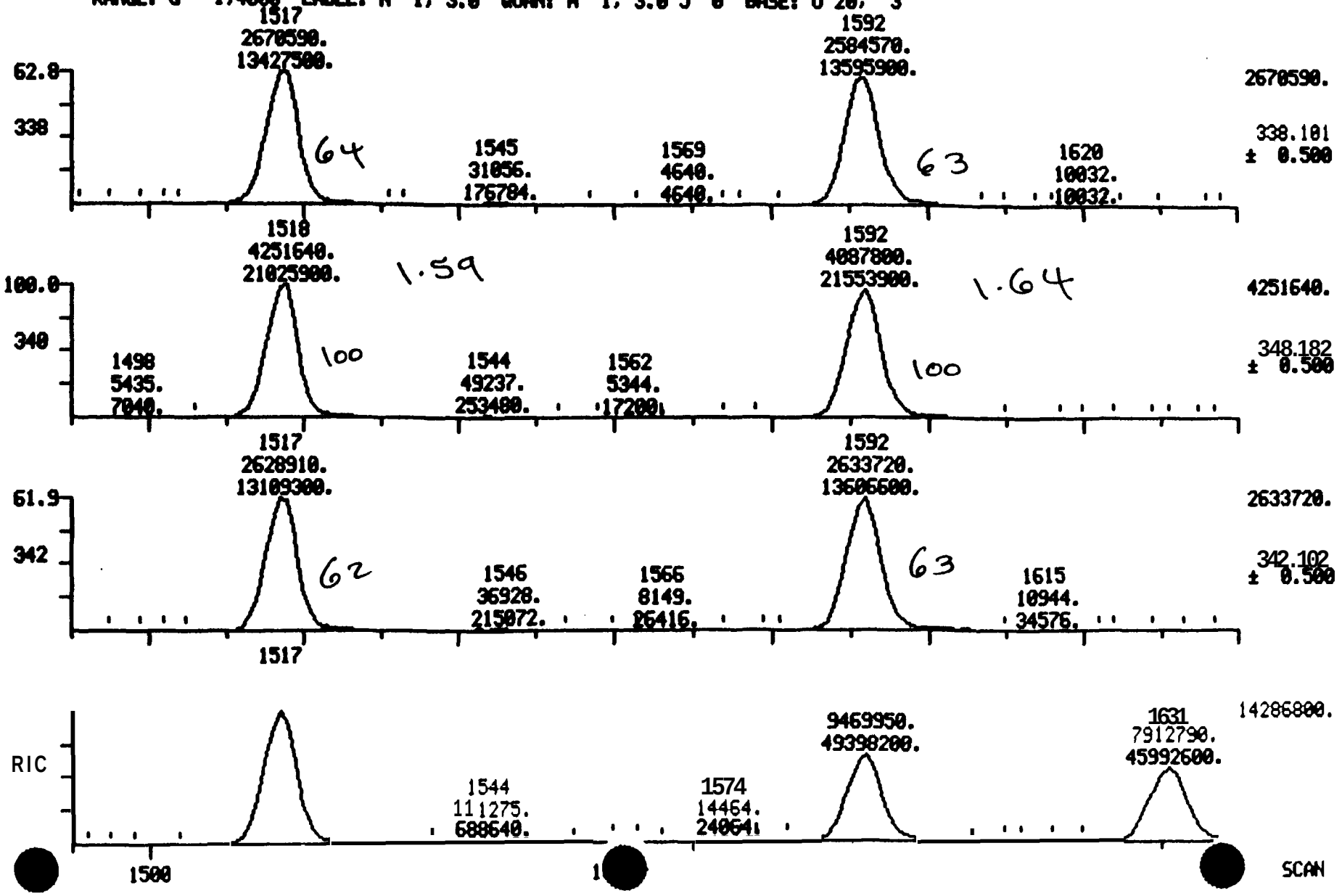
1.a3



3200405

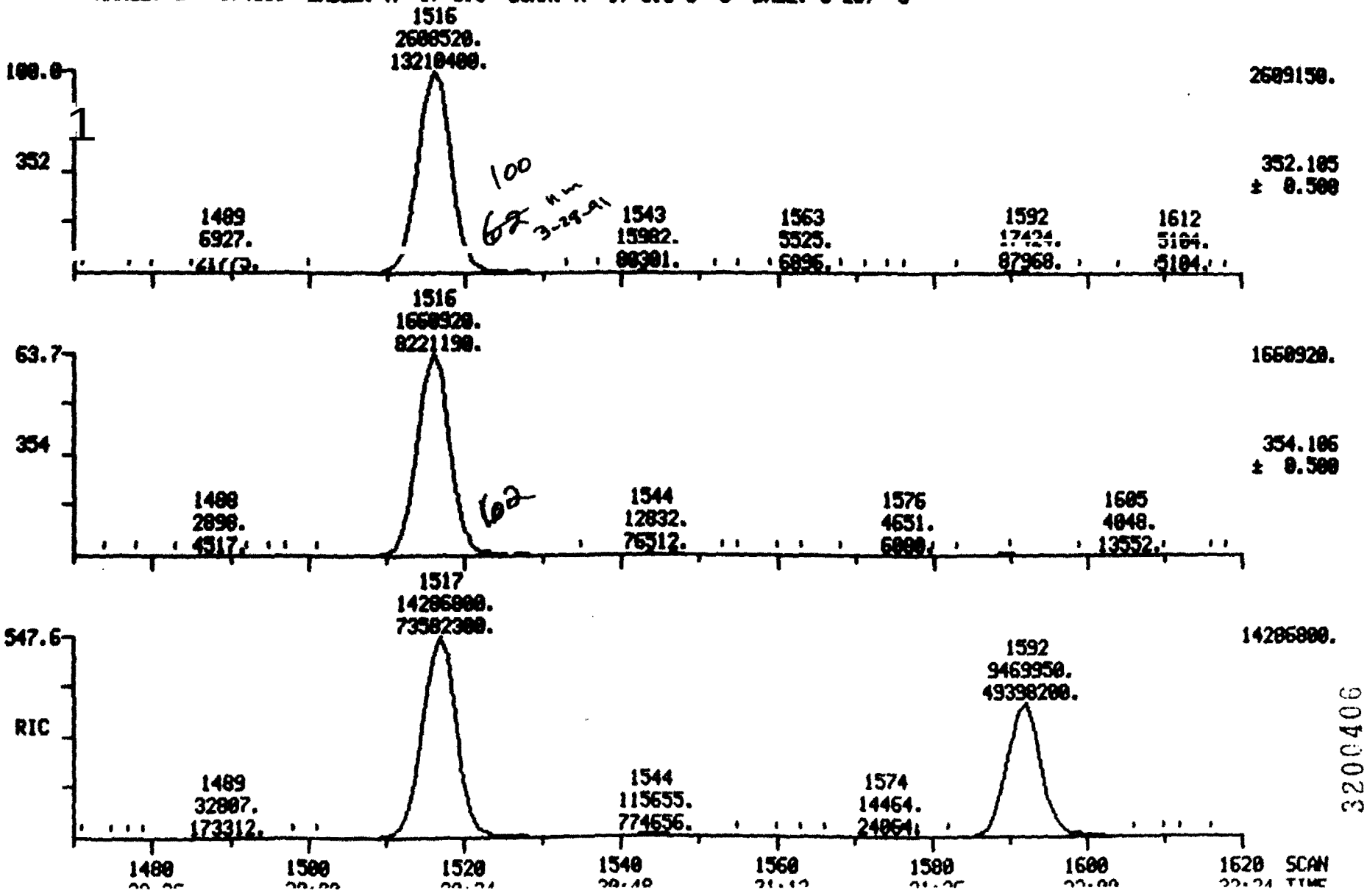
PeCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 1490 TO 1640
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 1470 TO 1620
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.21

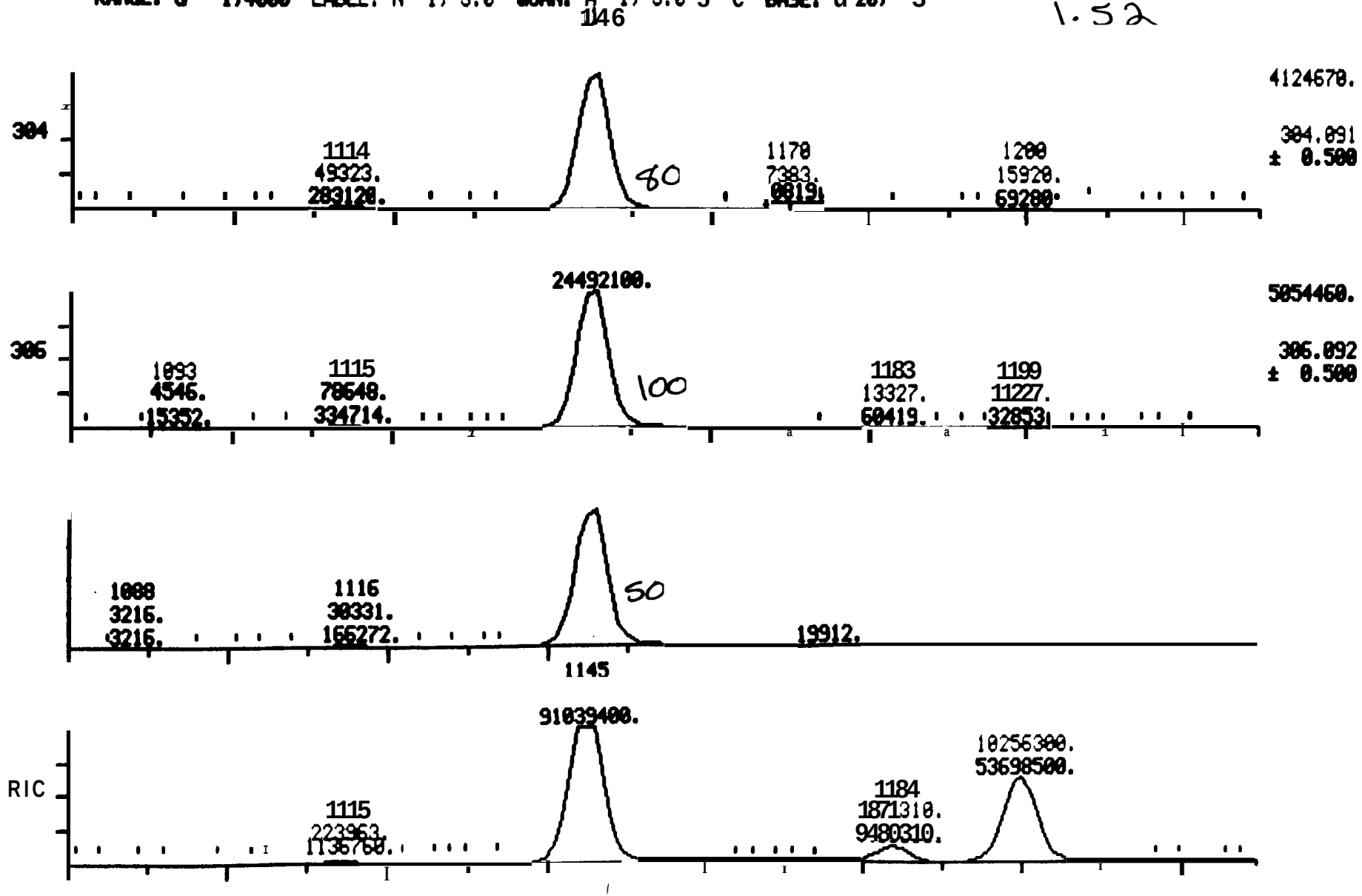


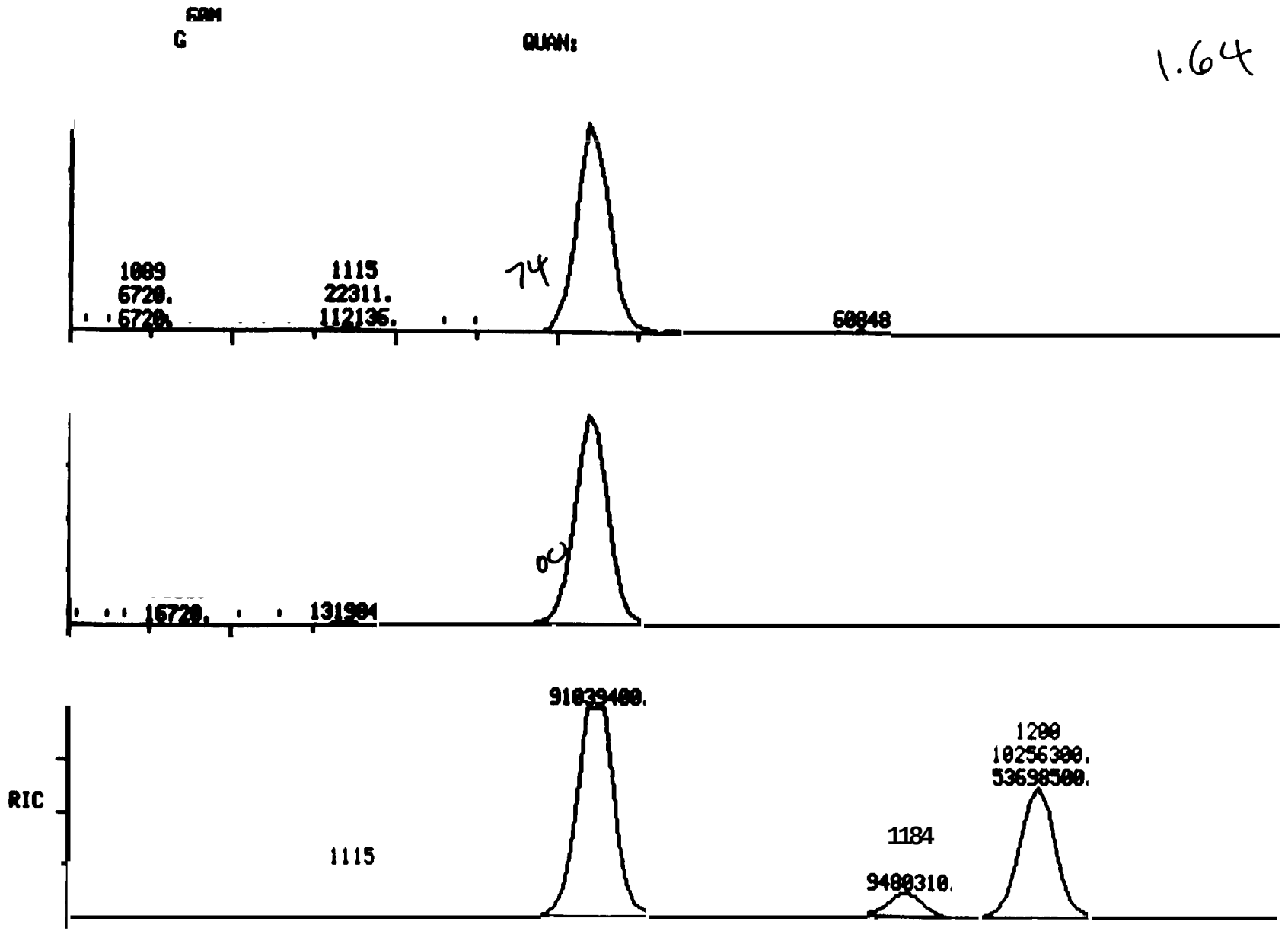
3200406

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 1000 TO 1230
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

TCDF

1.52



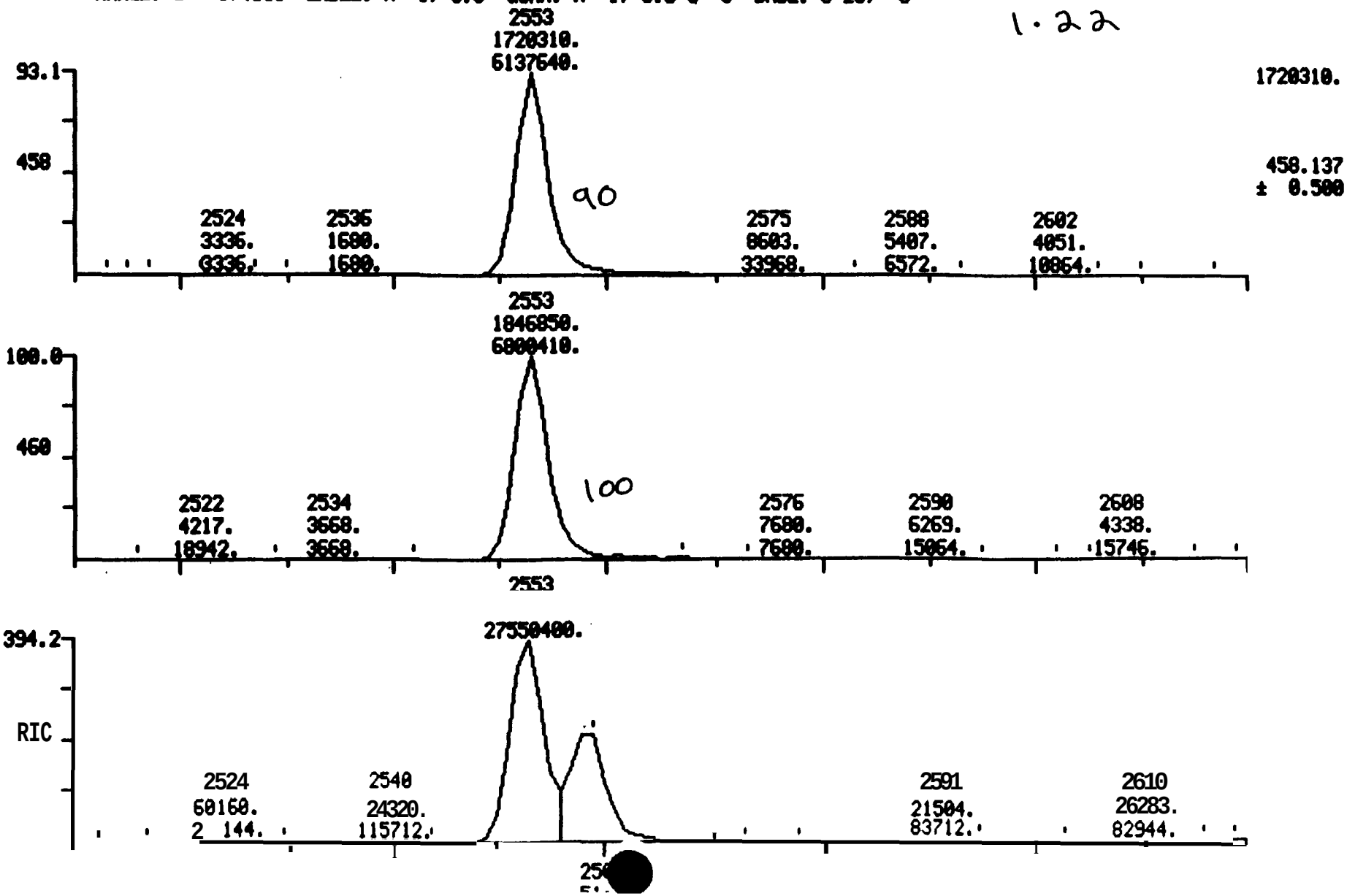

SRM
G
QUAN:
1.64
1089
6720.
6720.
1115
22311.
112136.
74
60848
16720.
131984
OC
91839400.
RIC
1115
1184
9480310.
1200
10256300.
53698500.

2004407

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 2510 TO 2620
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

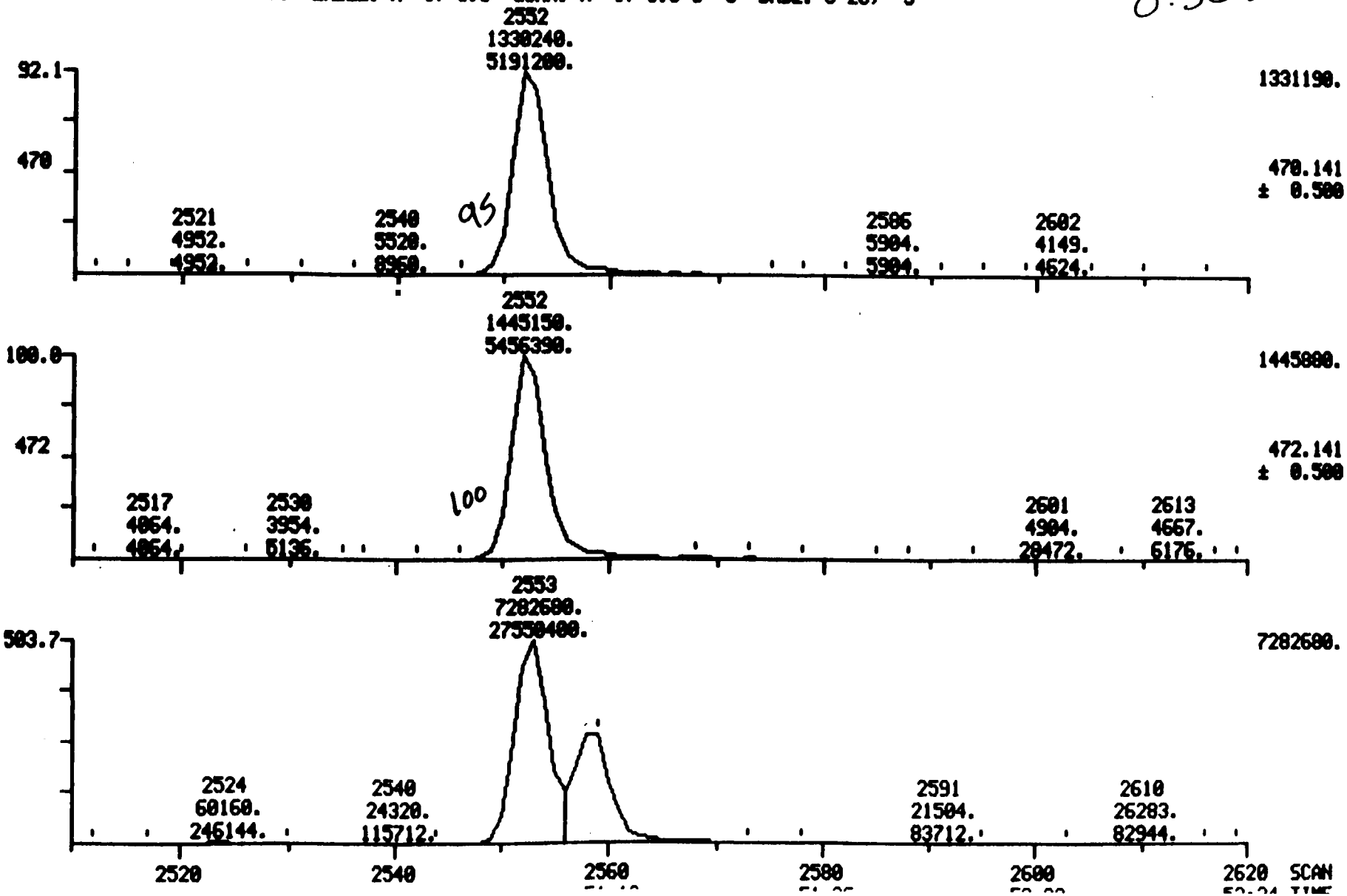
OCDD

1.22



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 2510 TO 2620
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

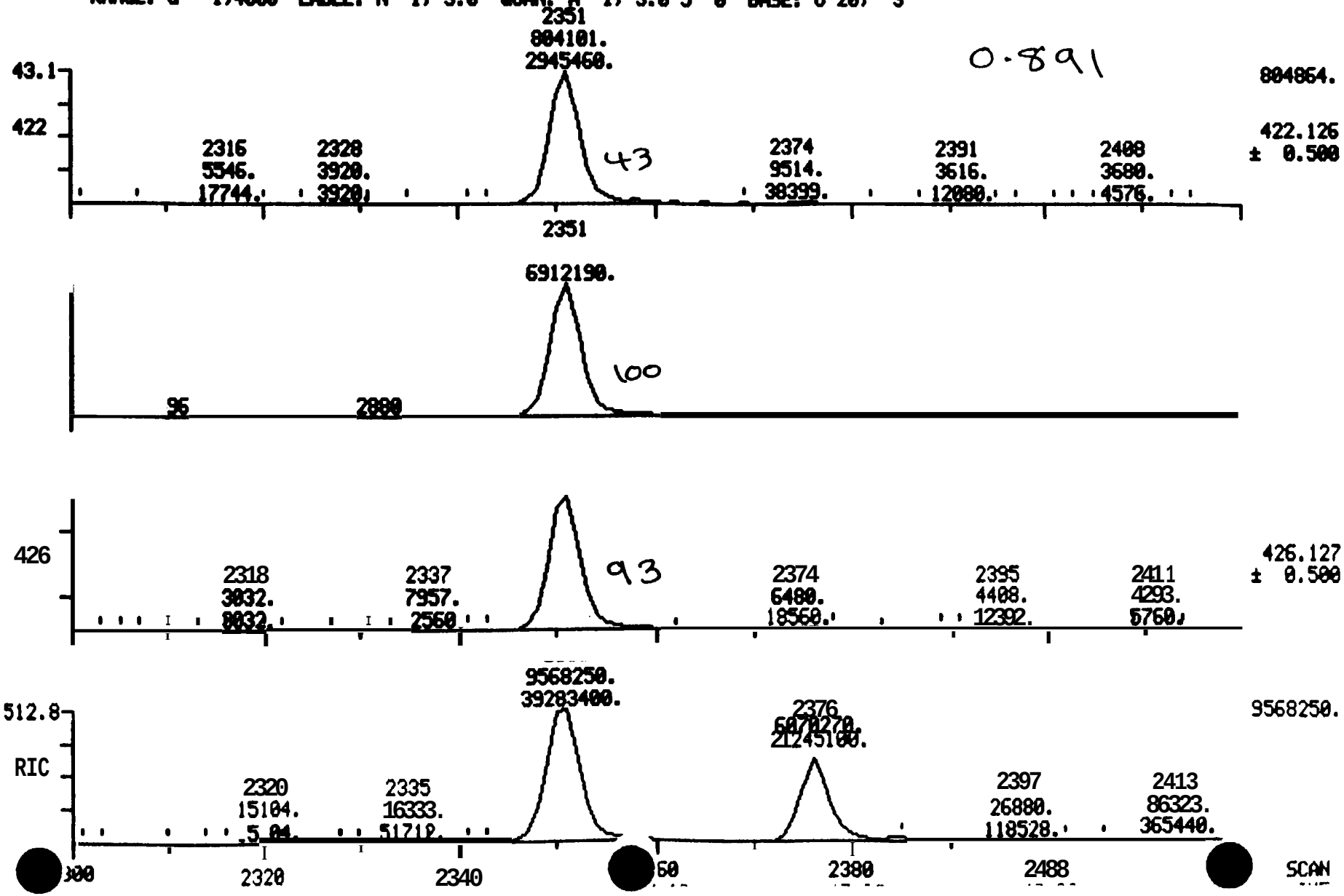
0.502



3200408

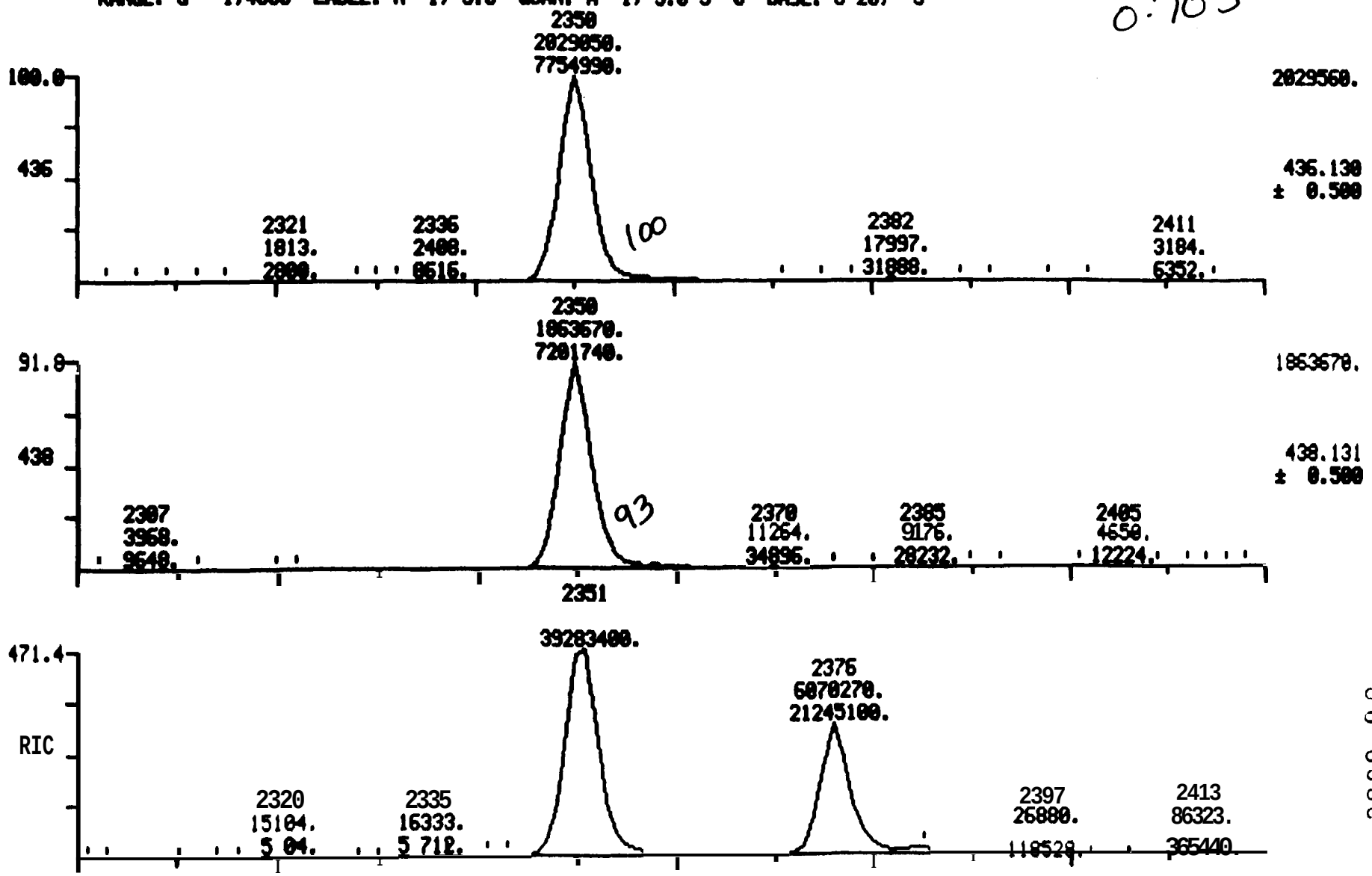
HPCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 2300 TO 2420
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 685061V1 #1 SCANS 2300 TO 2420
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

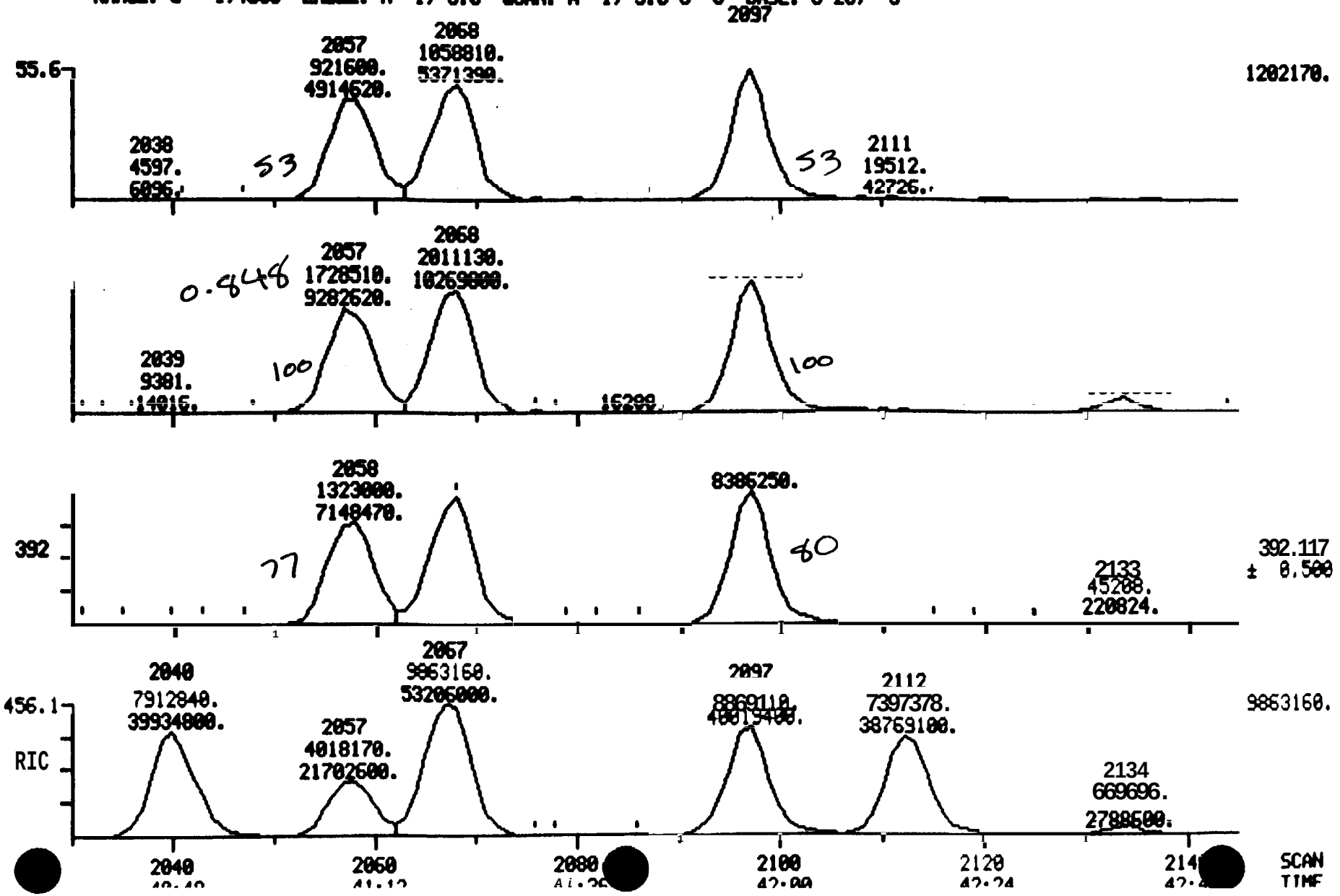
0.705



3200 00

HxCDD

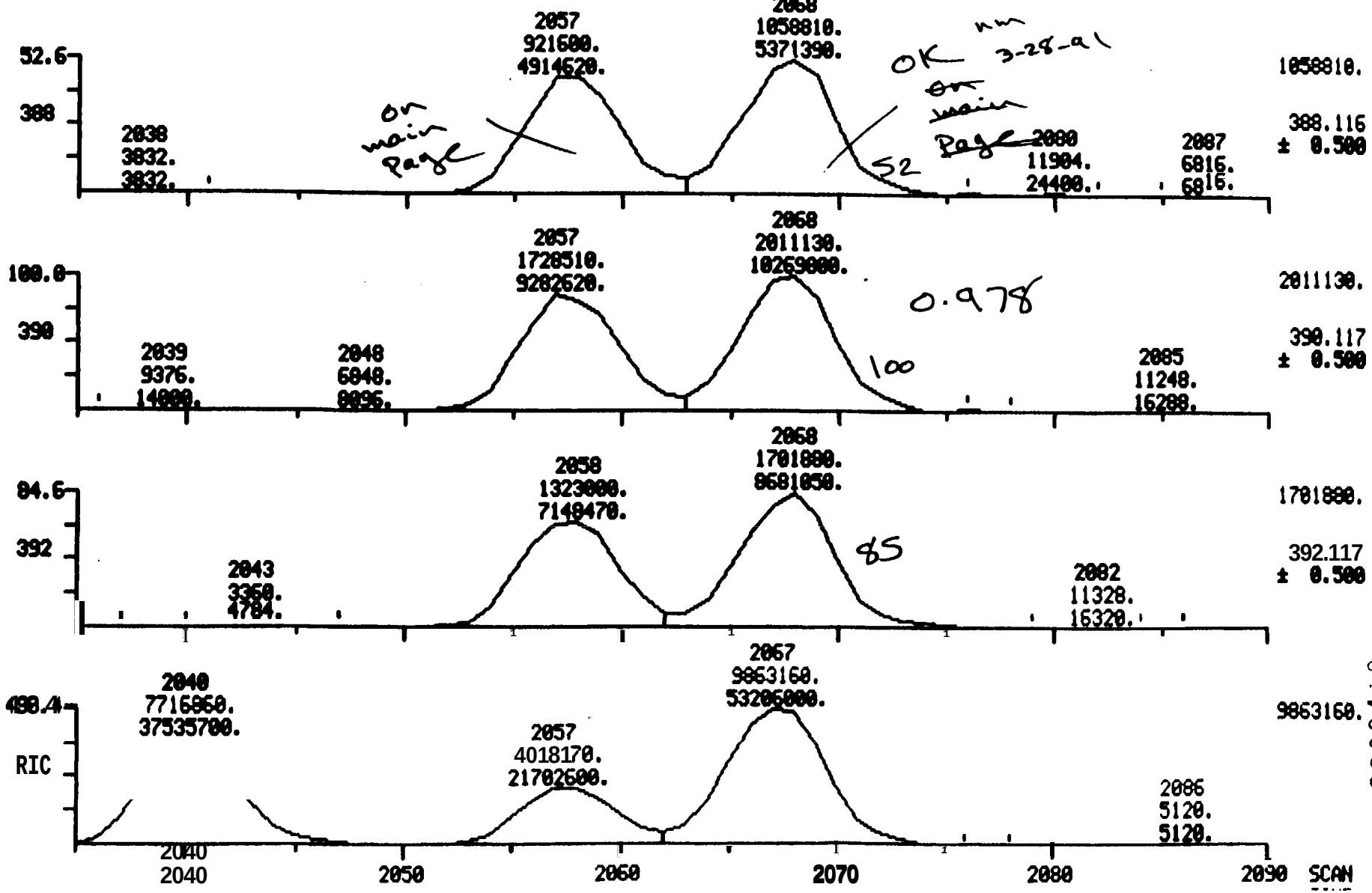
MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 2030 TO 2145
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



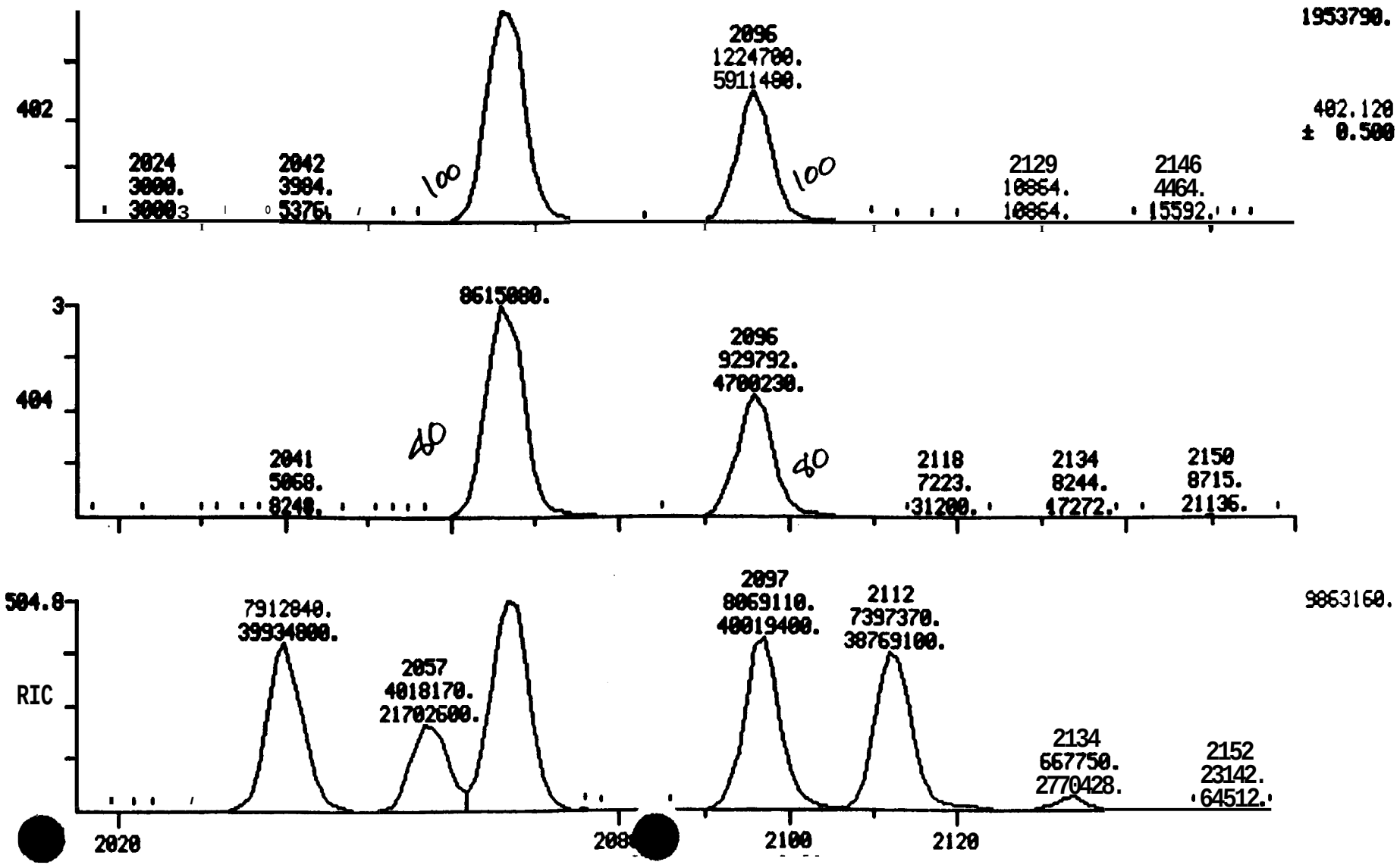
1/1

HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 2035 TO 2090
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



32004:0

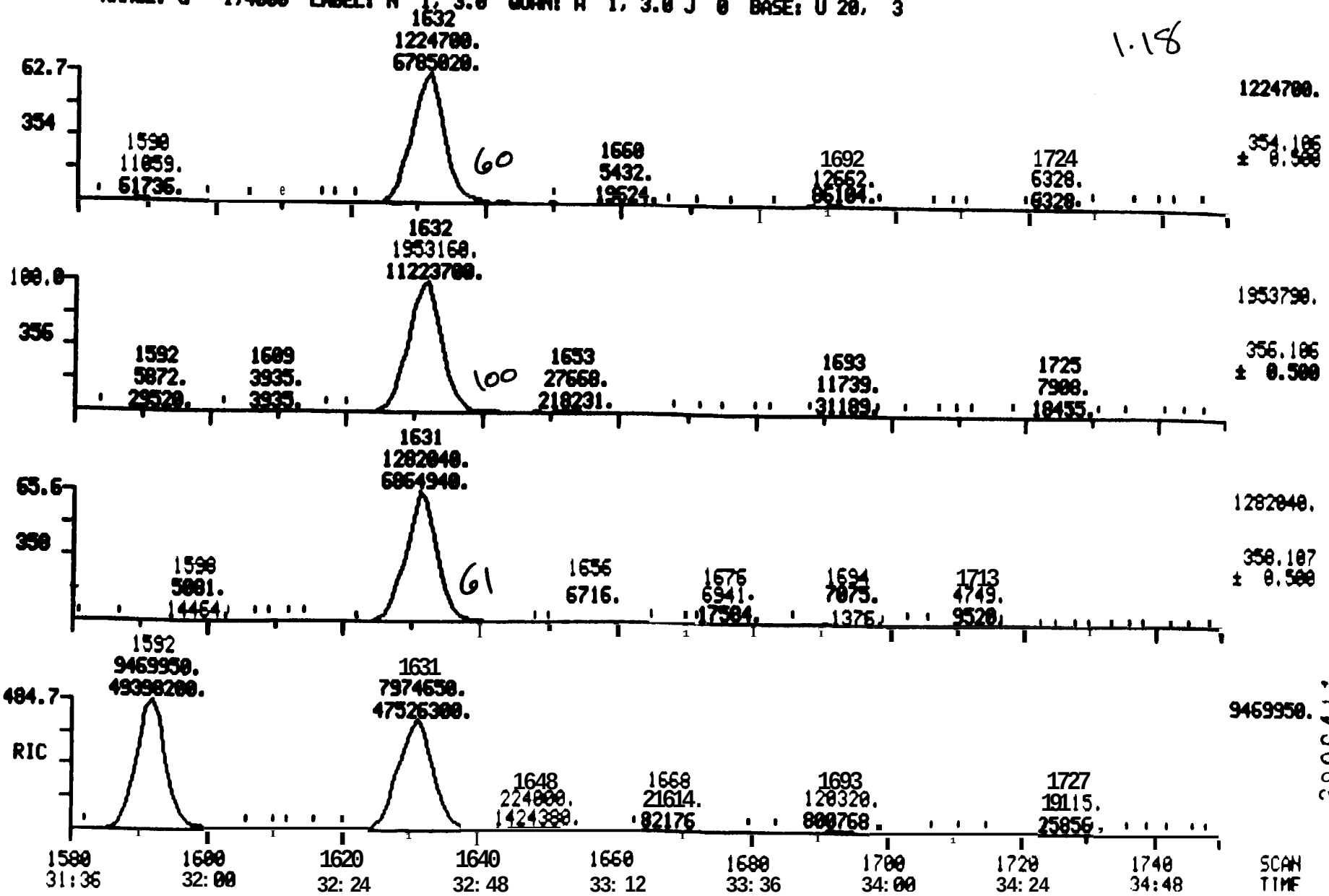

1953790.
402
402.120
± 0.500
2024
3000.
3000
2042
3904.
5376.
100
2096
1224700.
5911400.
100
2129
10864.
10864.
2146
4464.
15592.
3
404
8615000.
2096
929792.
4700230.
40
40
2041
5068.
8240.
2118
7223.
31200.
2134
8244.
47272.
2150
8715.
21136.
504.8
RIC
9863160.
7912840.
39934000.
2057
4018170.
21702600.
2097
8069110.
40019400.
2112
7397370.
38769100.
2134
667750.
2770428.
2152
23142.
64512.
2020
2100
2120

MIDRIC+MASS CHROMATOGRAMS
03/27/91 8:40:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506IV1 #1
CALI: CAL910306A #2
RUN #1 FOR MULTIPOINT

SCANS 1580 TO 1750

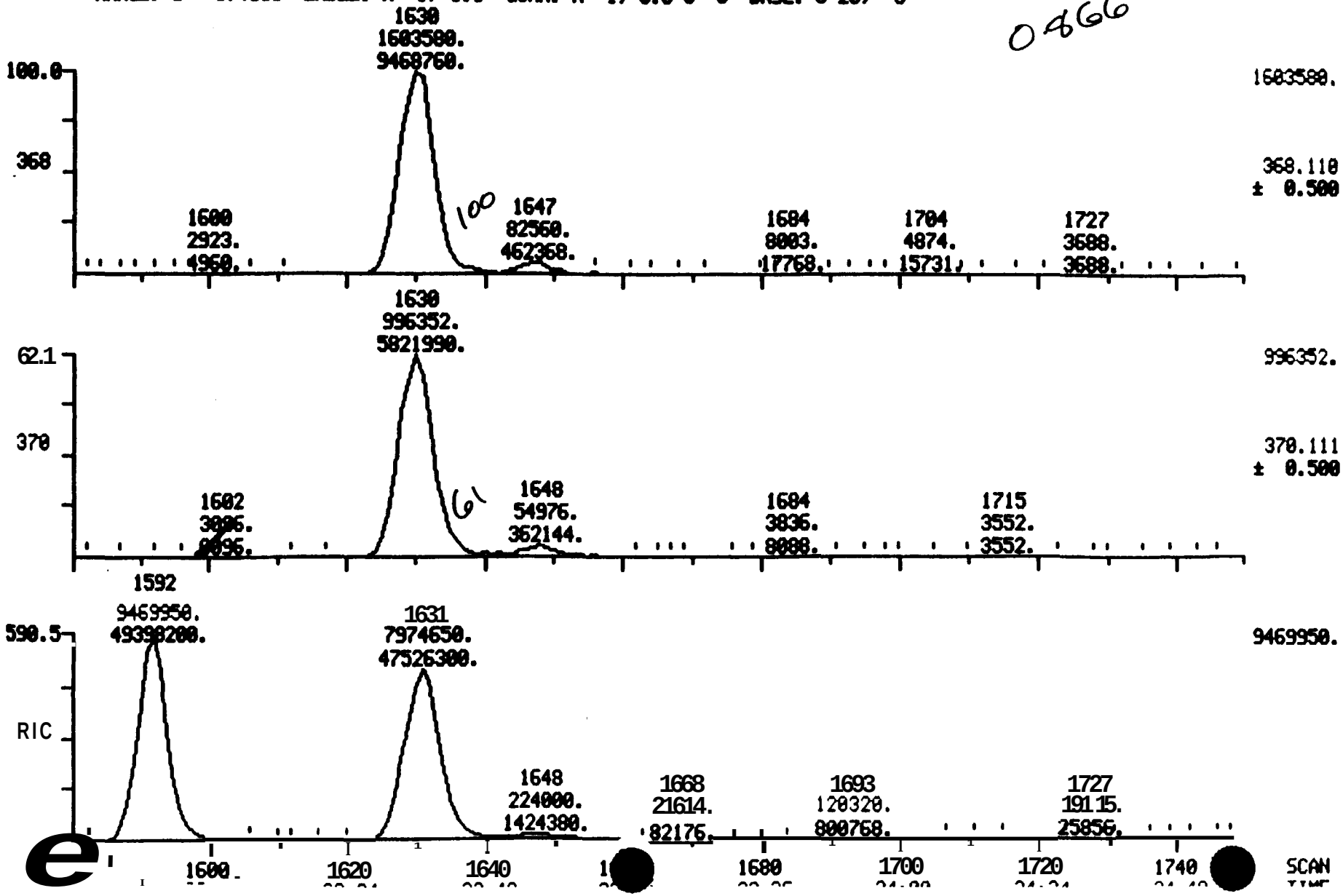
PeCDD



3300411

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 1500 TO 1750
03/27/91 8:40:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0466



MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV1 #1 SCANS 1170 TO 1260

03/27/91 8:40:00 CALI: CAL910306A #2

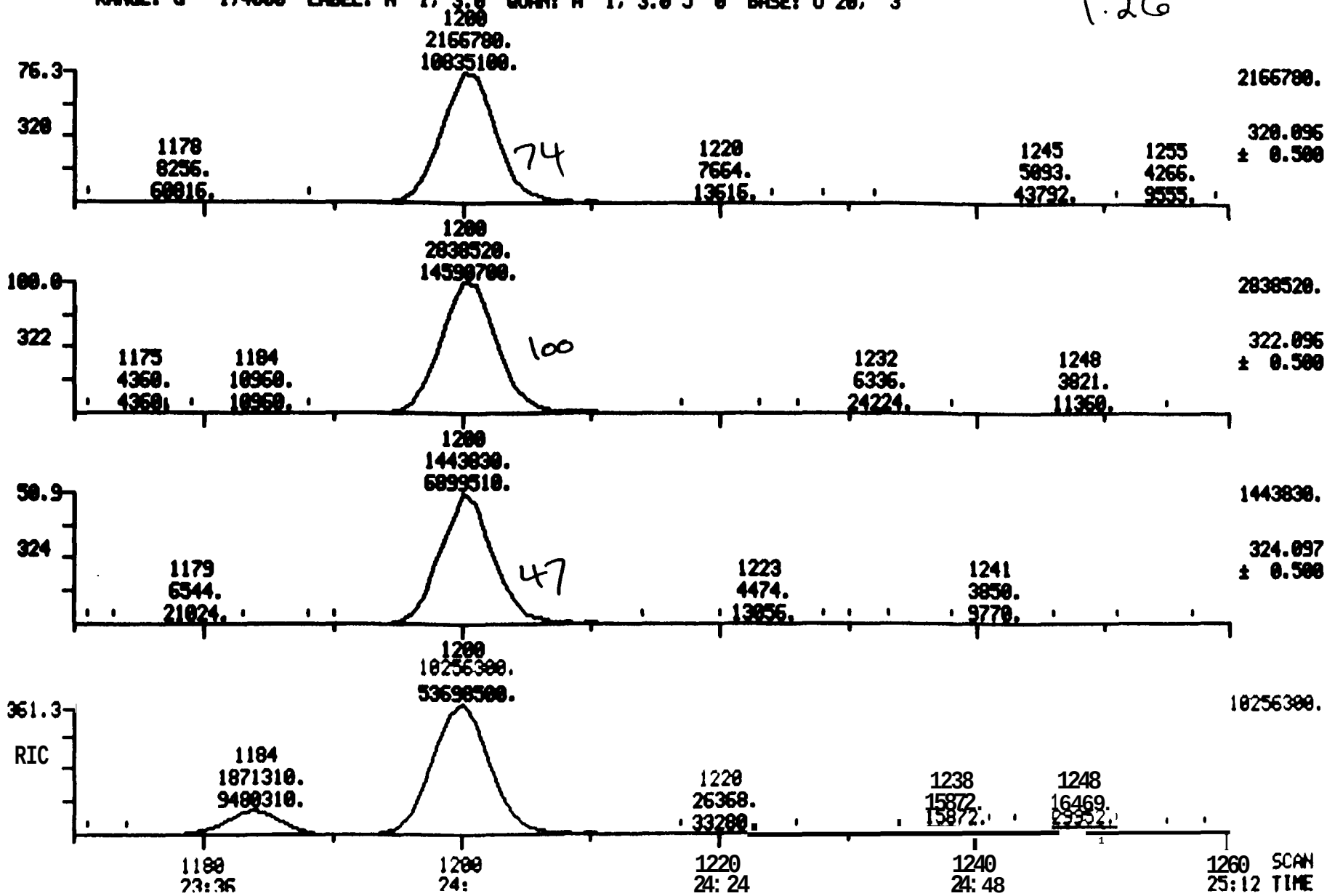
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #1 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDD

1.26



320C 412

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1170 TO 1260

03/27/91 15:20:00 CALI: CAL910306A #2

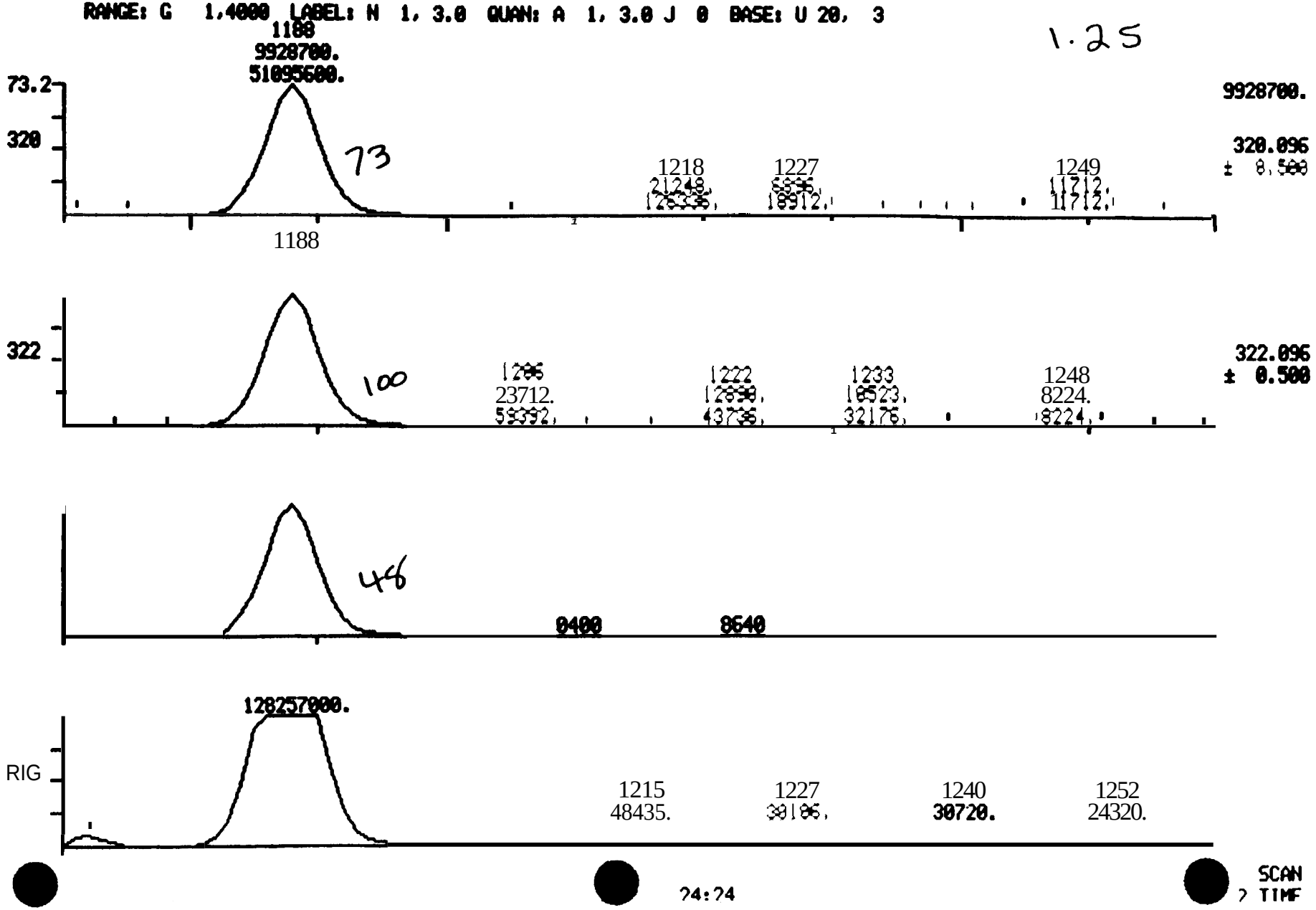
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

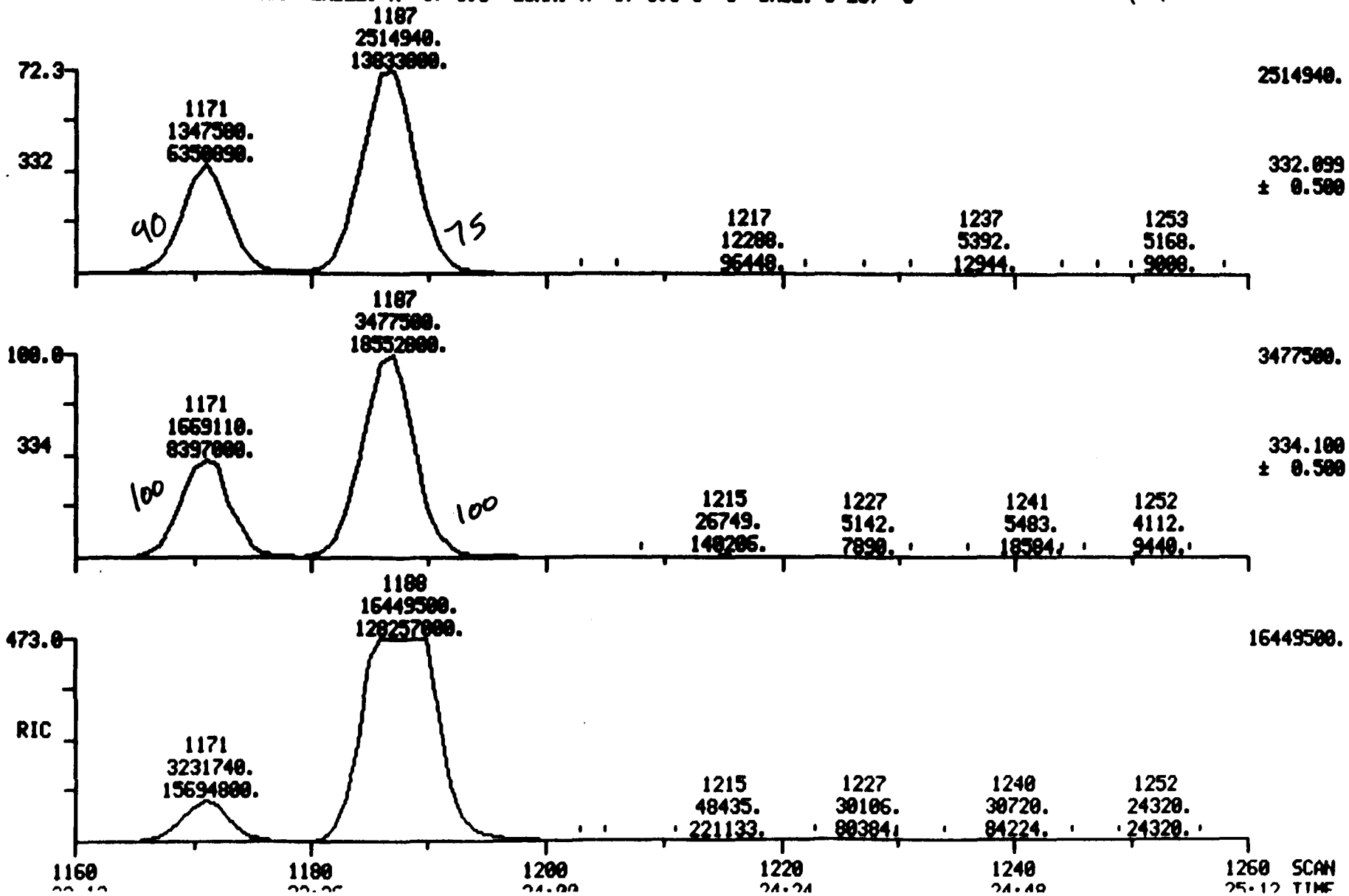
TCDD

1.25



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1160 TO 1260
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.10



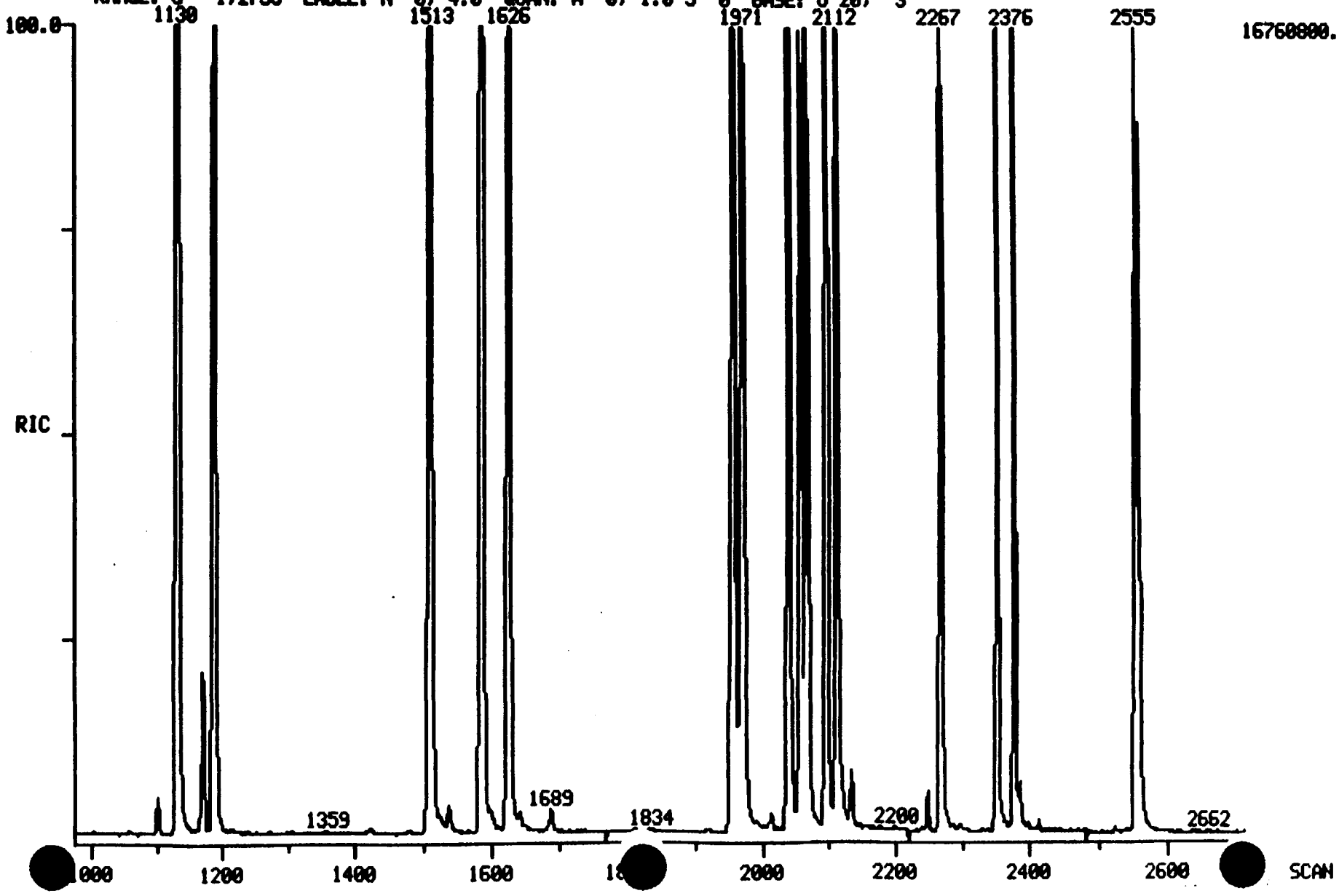
3200413

MIDRIC
03/27/91 15:20:00
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506V3 #1
CALI: CAL910306A #2

SCANS 975 TO 2720

alc-nm 3-28-91
QC RM 3-28-91



4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	423.550	426.050	0.052	3	100	40	1	0	Por
8	435.350	436.050	0.052	3	100	40	1	0	Por
9	437.550	438.050	0.052	3	100	40	1	0	Pos
10	441.550	442.050	0.054	3	100	40	1	0	Pos
11	443.530	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.350	480.090	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3200414

3/27/91 15:15:50 SCAN 2683
Acquisition rtoppad

3/27/91 15:15:53
ACQUISITION COMPLETED
SCANS 1 TO 1768 Cantroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Cantroid
SCAN 2484 Suspended
SCANS 2485 TO 2683 Centroid

Mode	Scans	Sacs	Out of	%	Peaks	par scan	par sac
Cantroid	2680	621.1	3216.0	19.3	82284.	31.	26.

HID scan
Scan time: 1.200 ■

Desc: Q2
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	HI mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Po.
2	339.650	340.150	0.052	3	100	40	1	0	Po.
3	341.650	342.150	0.054	3	100	40	1	0	Po.
4	351.650	352.150	0.052	3	100	40	1	0	Po.
5	353.650	354.150	0.034	3	100	40	1	0	Po.
6	355.650	356.150	0.052	3	100	40	1	0	Po.
7	357.650	358.150	0.054	3	100	40	1	0	Po.
0	367.650	360.150	0.052	3	100	40	1	0	Po.
9	369.650	370.130	0.052	3	100	40	1	0	Po.
10	371.650	372.130	0.052	3	100	40	1	0	Po.
11	373.650	374.150	0.052	3	100	40	1	0	Po.
12	375.650	376.150	0.052	3	100	40	1	0	Po.
13	379.650	380.150	0.052	3	100	40	1	0	Po.
14	381.650	382.150	0.052	3	100	40	1	0	Po.
15	385.650	386.150	0.052	3	100	40	1	0	Po.
16	387.650	388.150	0.052	3	100	40	1	0	Po.
17	389.650	390.150	0.052	3	100	40	1	0	Po.
18	391.630	392.150	0.052	3	100	40	1	0	Po.
19	401.630	402.150	0.052	3	100	40	1	0	Po.
20	403.650	404.130	0.054	3	100	40	1	0	Po.
21	445.550	446.050	0.052	3	100	40	1	0	Po.

3/27/91 15:06:17 SCAN 2219 OF 4000

HID scan
Scan time: 1.200 s

Desc: a3
Samp. Int.: 0.200 ms

Mass Intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Po.
2	373.650	374.130	0.052	3	100	40	1	0	Po.
3	375.650	376.150	0.052	3	100	40	1	0	Po.
4	385.650	386.150	0.052	3	100	40	1	0	Po.
3	387.650	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.650	392.150	0.052	3	100	40	1	0	Po.
8	401.650	402.150	0.052	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	403.350	406.050	0.054	3	100	40	1	0	Po.
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.330	422.050	0.054	3	100	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Po.
16	425.550	426.050	0.052	3	100	40	1	0	Po.
17	435.550	436.050	0.052	3	100	40	1	0	Po.
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	Po.

3/27/91 15:11:44 SCAN 2484 OF 4000

HID scan
Scan time: 1.200 s

Desc: a4
Samp. Int.: 0.200 ms

Mass intarvals: 17
Master rate: 4096

Int #	Lo mass	HI mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Po.
3	409.550	410.050	0.054	3	100	40	1	0	Po.

3/27/91 14:20:32 SCAN 1 OF 4000 320C415
Acquisition started

Acquire Run 0:68506V2 ACQUIRING
03/27/91 14:20:00 + 0:04 Free sectors: 18080 Scan: 3 of 4000
Sample: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
Conds.: 60M DB-5/TOTALS.
Formula: Instrument: 43 Weight: 0.000
Submitted by: DM Analyst: NM Acct. No: PC4622

********** QC PARAMETERS **********
Loaded OC Desc:BW Current OC oven tmp: 69 DegC Injector : 300 DegC
Current OC Desc:BW QC elapsed time : 1:41 min fnt.oven : 273 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	30 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200 ms Master rate: 409b

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.032	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Po.
4	315.650	316.150	0.052	3	100	40	1	0	Po.
3	317.650	318.150	0.054	3	100	40	1	0	Po.
6	319.650	320.150	0.052	3	100	40	1	0	Po.
7	321.650	322.150	0.054	3	100	40	1	0	Po.
8	323.650	324.150	0.052	3	100	40	1	0	Po.
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Po.
11	337.650	338.150	0.054	3	100	40	1	0	Po.
12	339.650	340.150	0.052	3	100	40	1	0	Por
13	341.650	342.150	0.052	3	100	40	1	0	Po.
14	351.650	352.150	0.054	3	100	40	1	0	Po.
15	353.650	354.150	0.052	3	100	40	1	0	Po.
16	355.650	356.150	0.054	3	100	40	1	0	Po.
17	357.650	358.150	0.052	3	100	40	1	0	Po.
18	367.650	368.150	0.054	3	100	40	1	0	Po.
19	369.650	370.150	0.052	3	100	40	1	0	Po.
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Po.

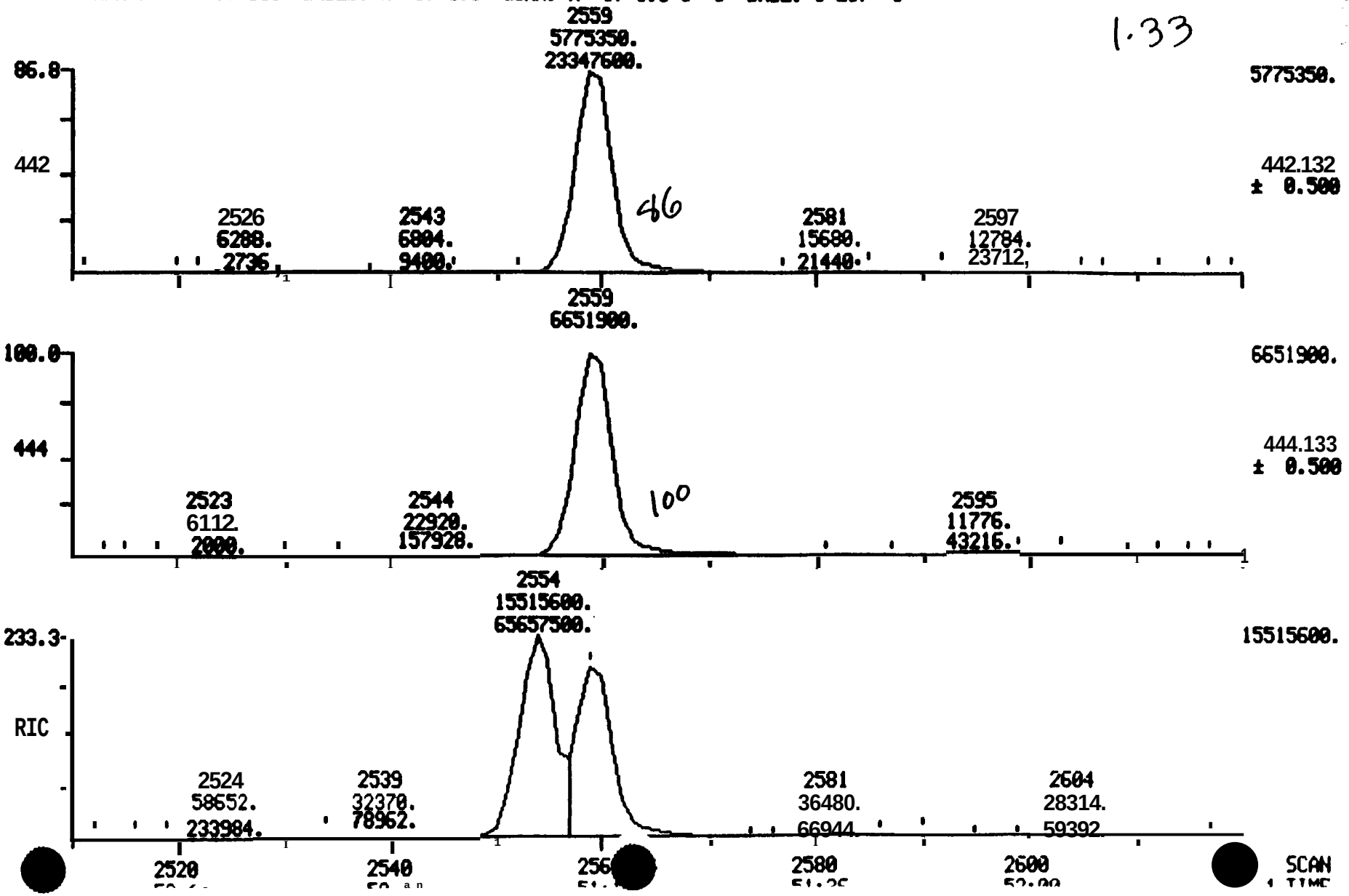
Interface nurbor	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	@	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/27/91 14:37:03 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2510 TO 2620
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

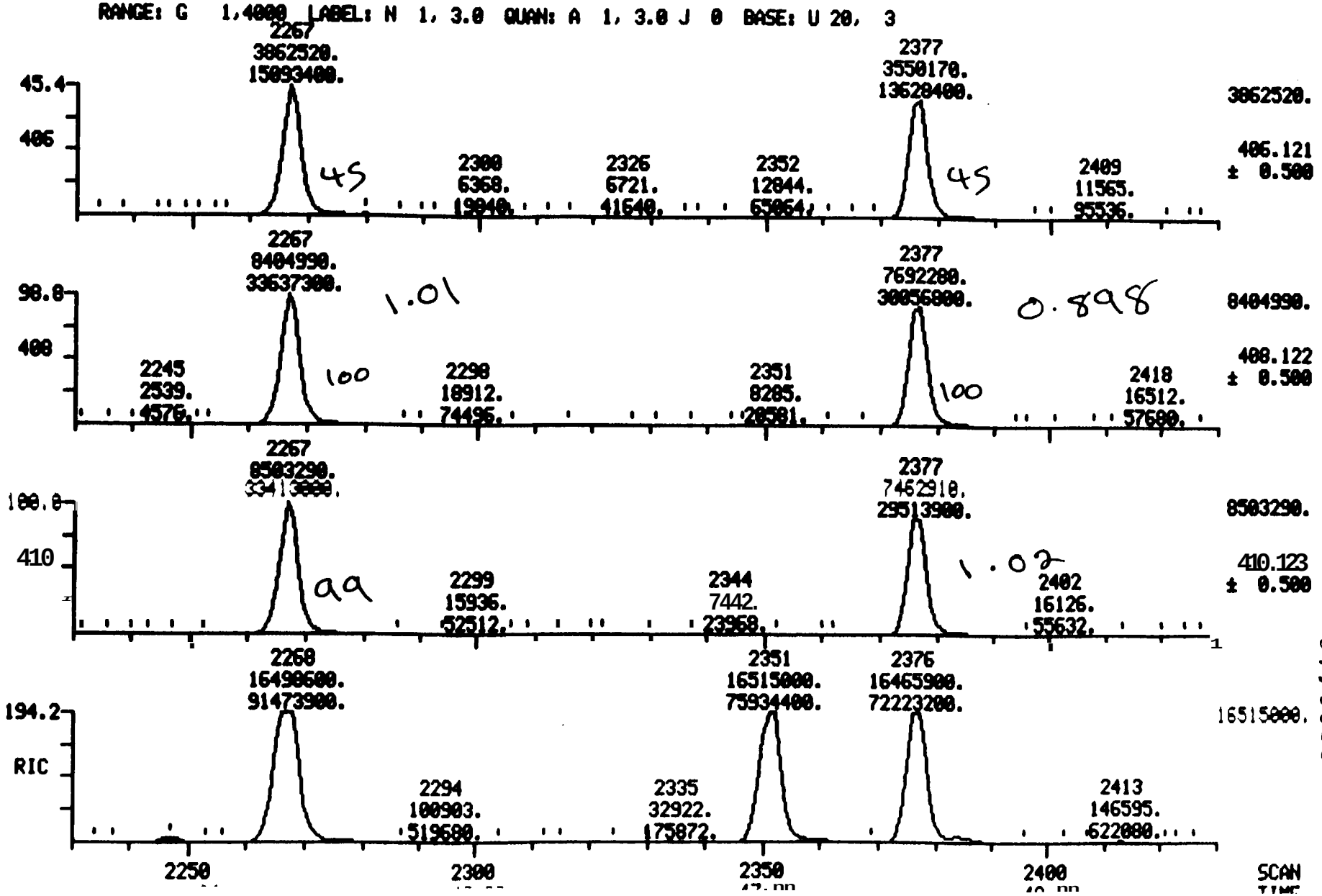
OCDF

1.33



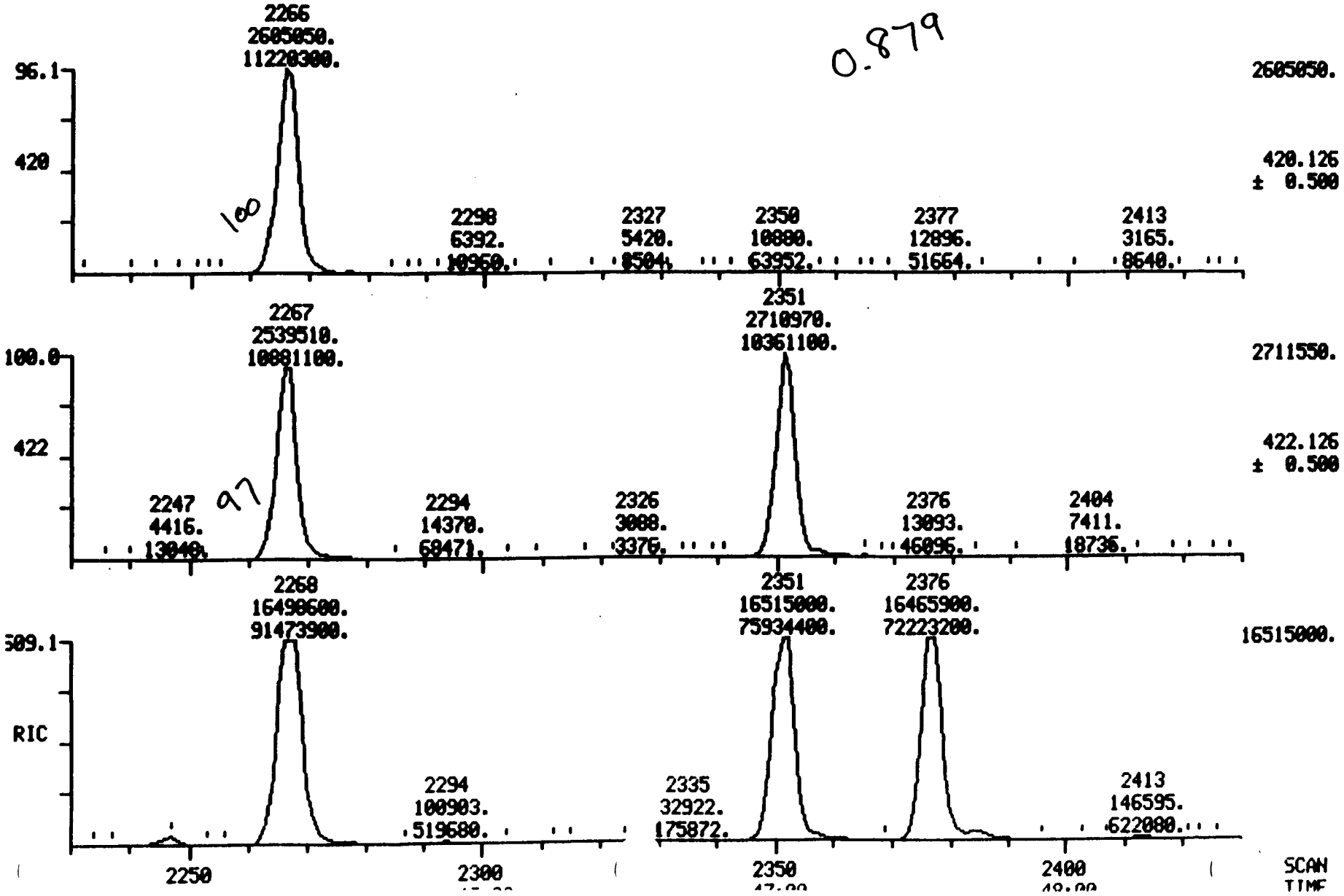
HpCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2230 TO 2430
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



320C413

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2230 TO 2430
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

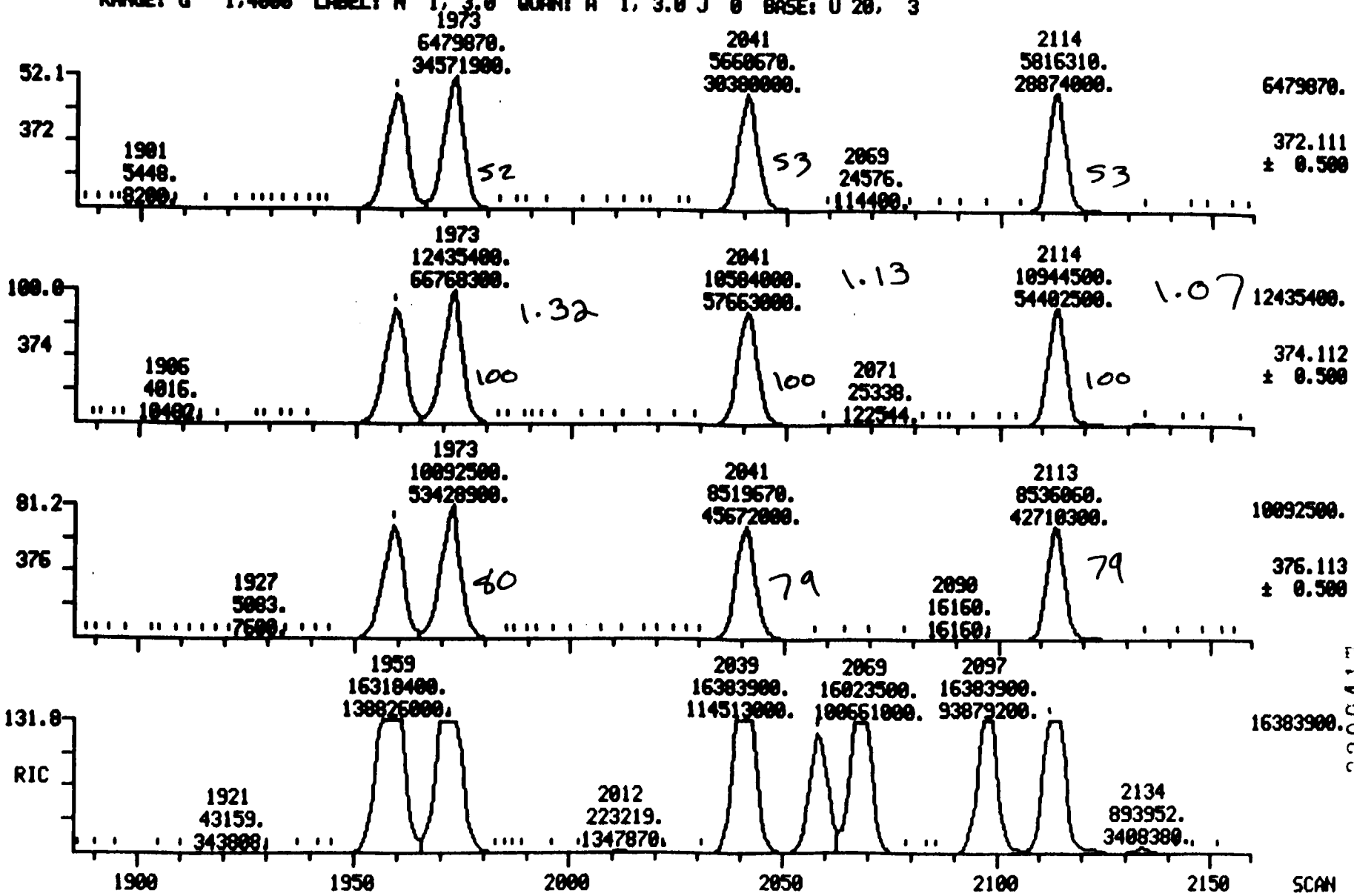


HxCDF

MIDRIC+MASS CHROMATOGRAMS
03/27/91 14:20:00
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506V2 #1
CALI: CAL910306A #2

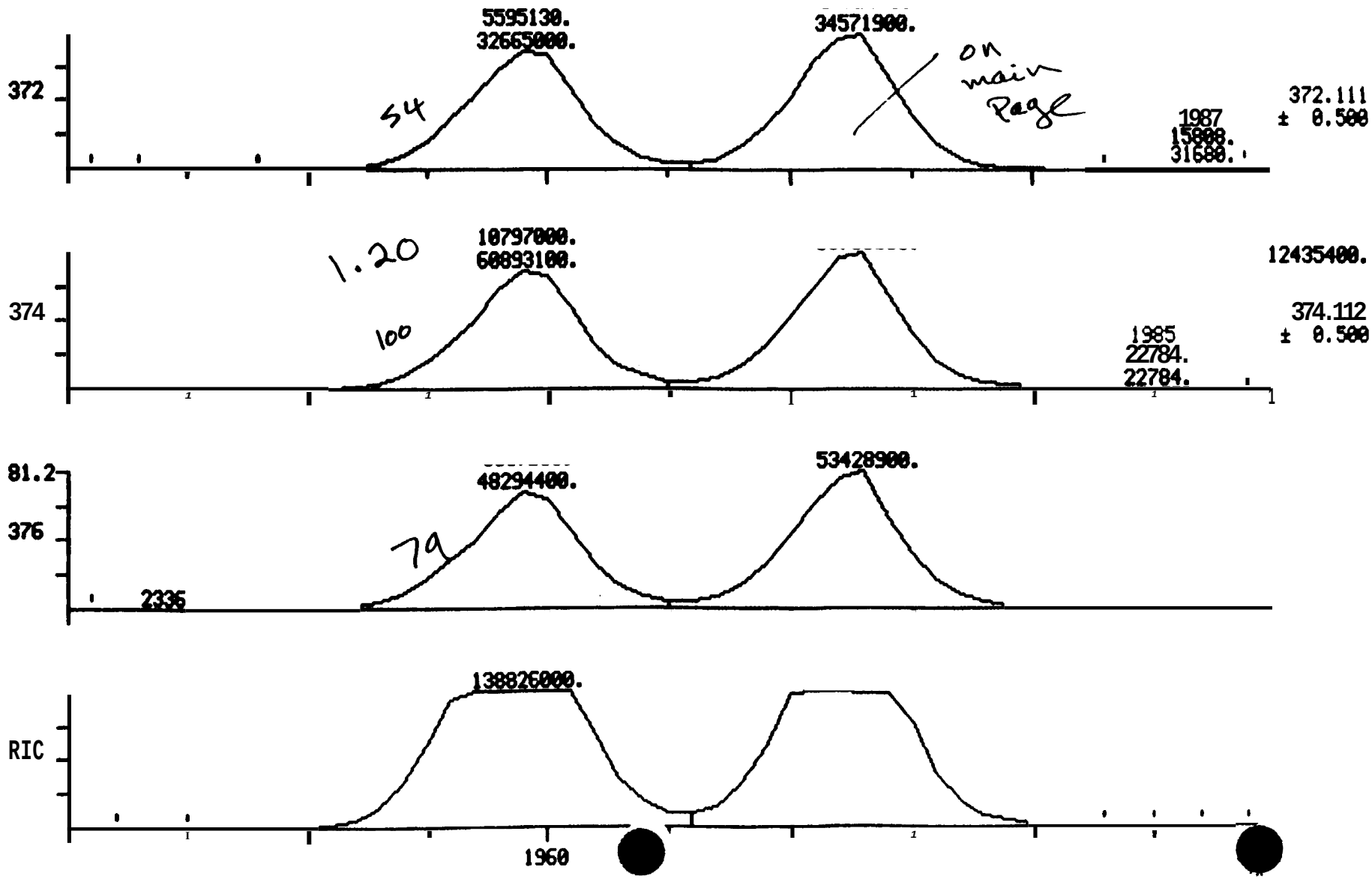
SCANS 1885 TO 2160



320C417

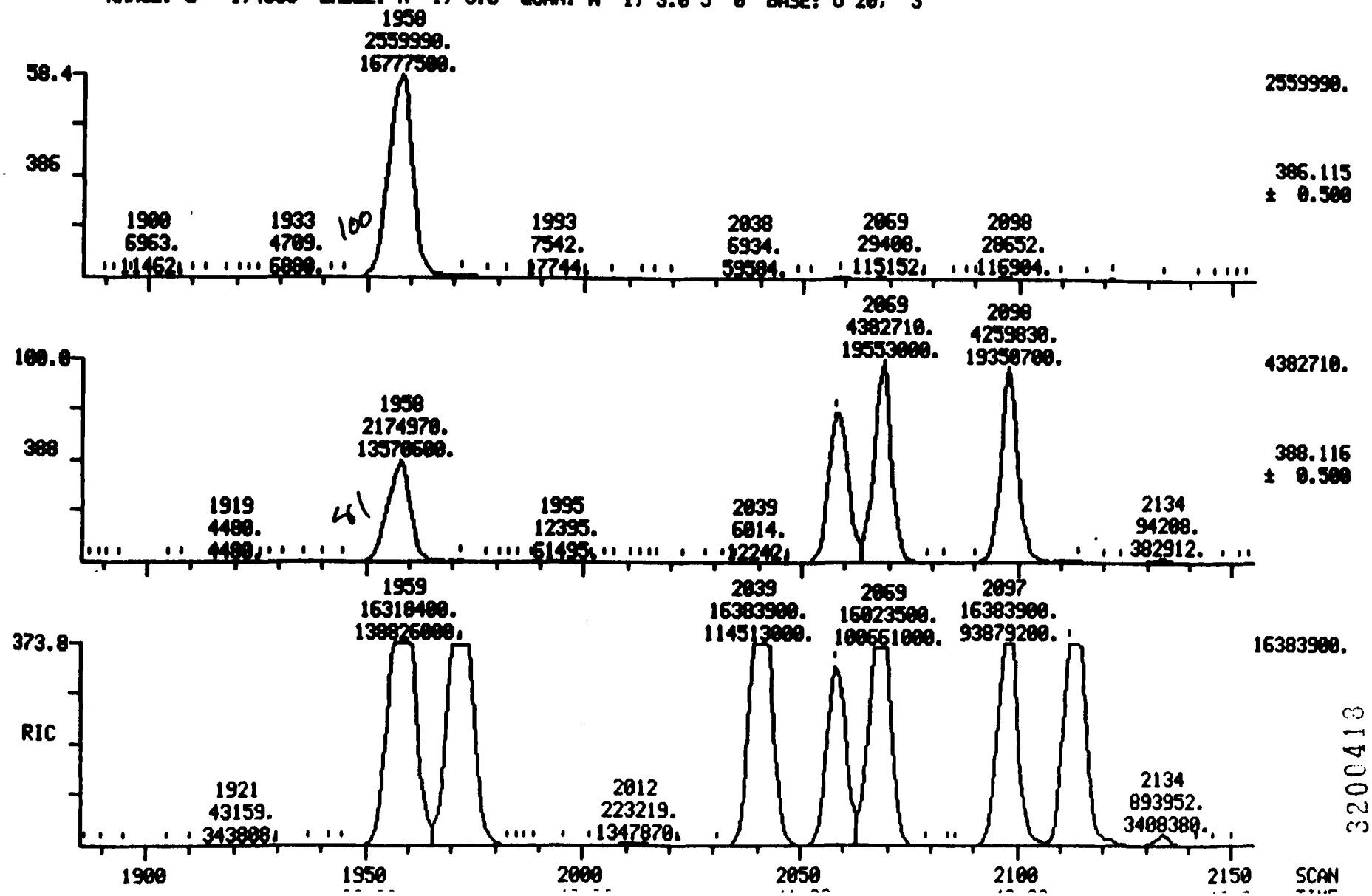
1\ MIDRIC+MASS CHROMATOGRAMS

HxCDF



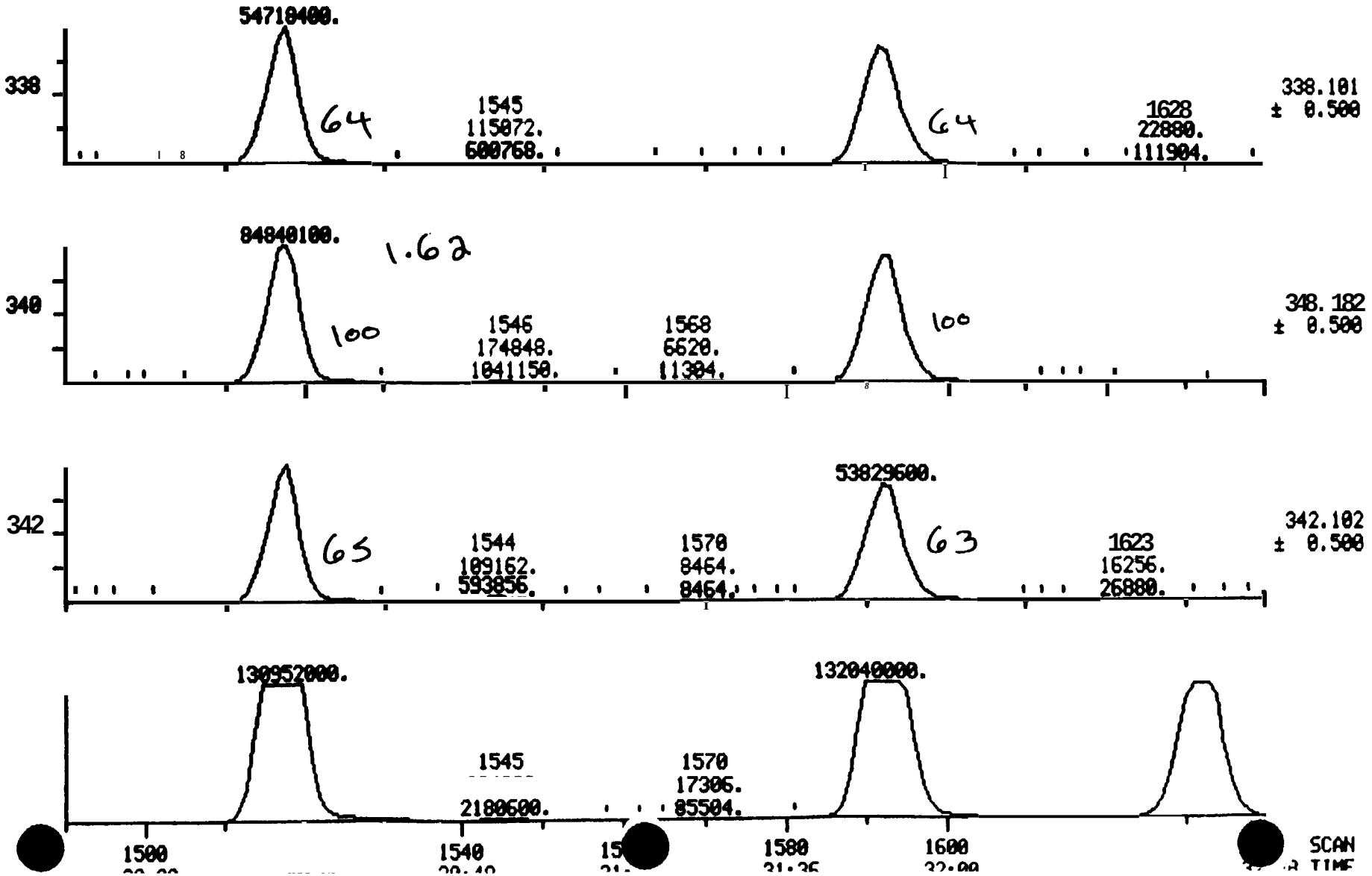
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 1885 TO 2155
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.21



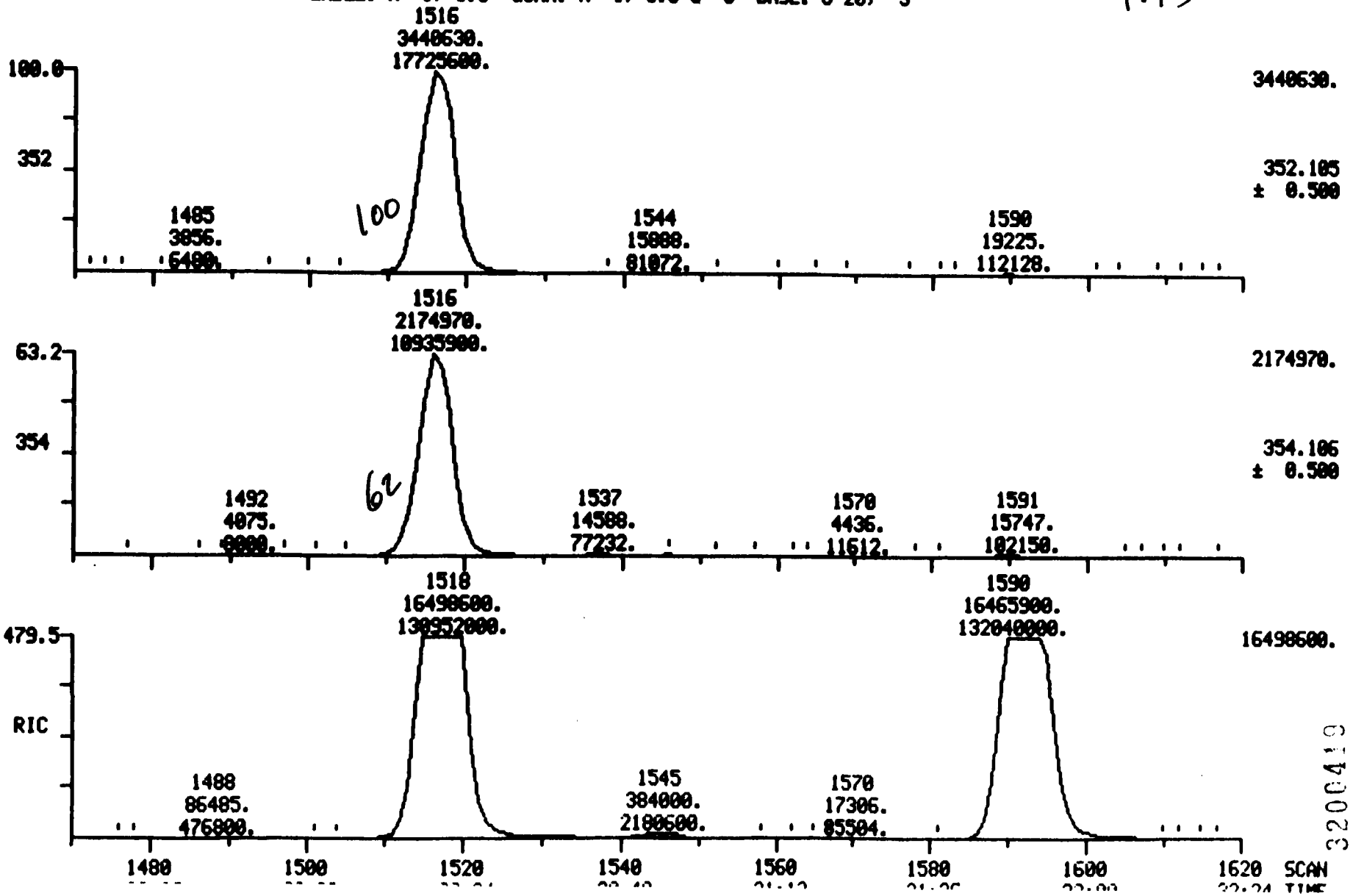
3200413

PeCDF


54718400.
338
64
1545
115072.
600768.
64
1628
22880.
111904.
338.101
± 0.500
84840100.
1.62
340
100
1546
174848.
1041150.
1568
6620.
11304.
100
340.182
± 0.500
342
65
1544
109162.
593856.
1570
8464.
8464.
53829600.
63
1623
16256.
26880.
342.102
± 0.500
130952000.
1545
2180600.
1570
17306.
85504.
132040000.
1500
1540
1580
1600
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 1470 TO 1620
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.13

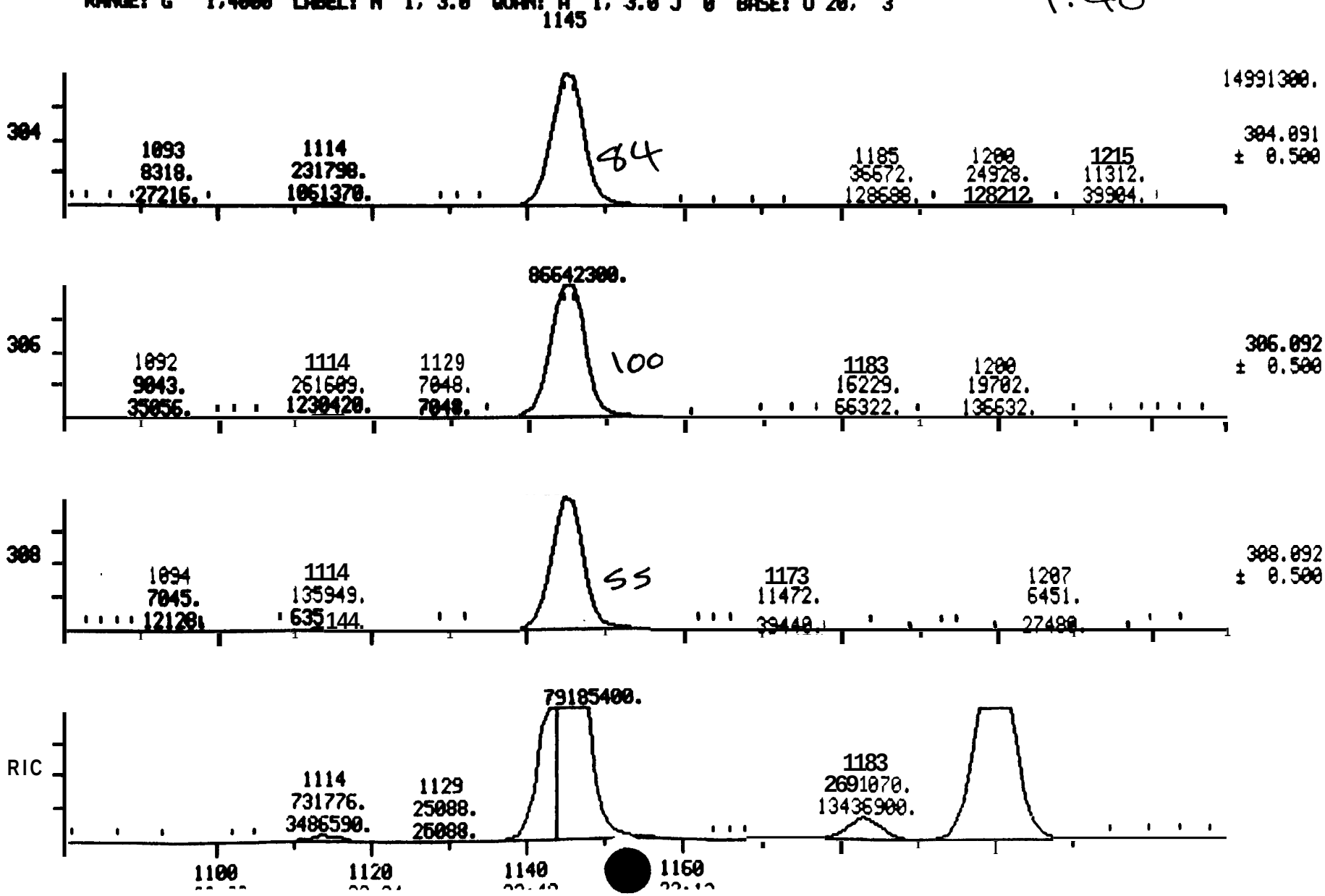


3200419

TCDF

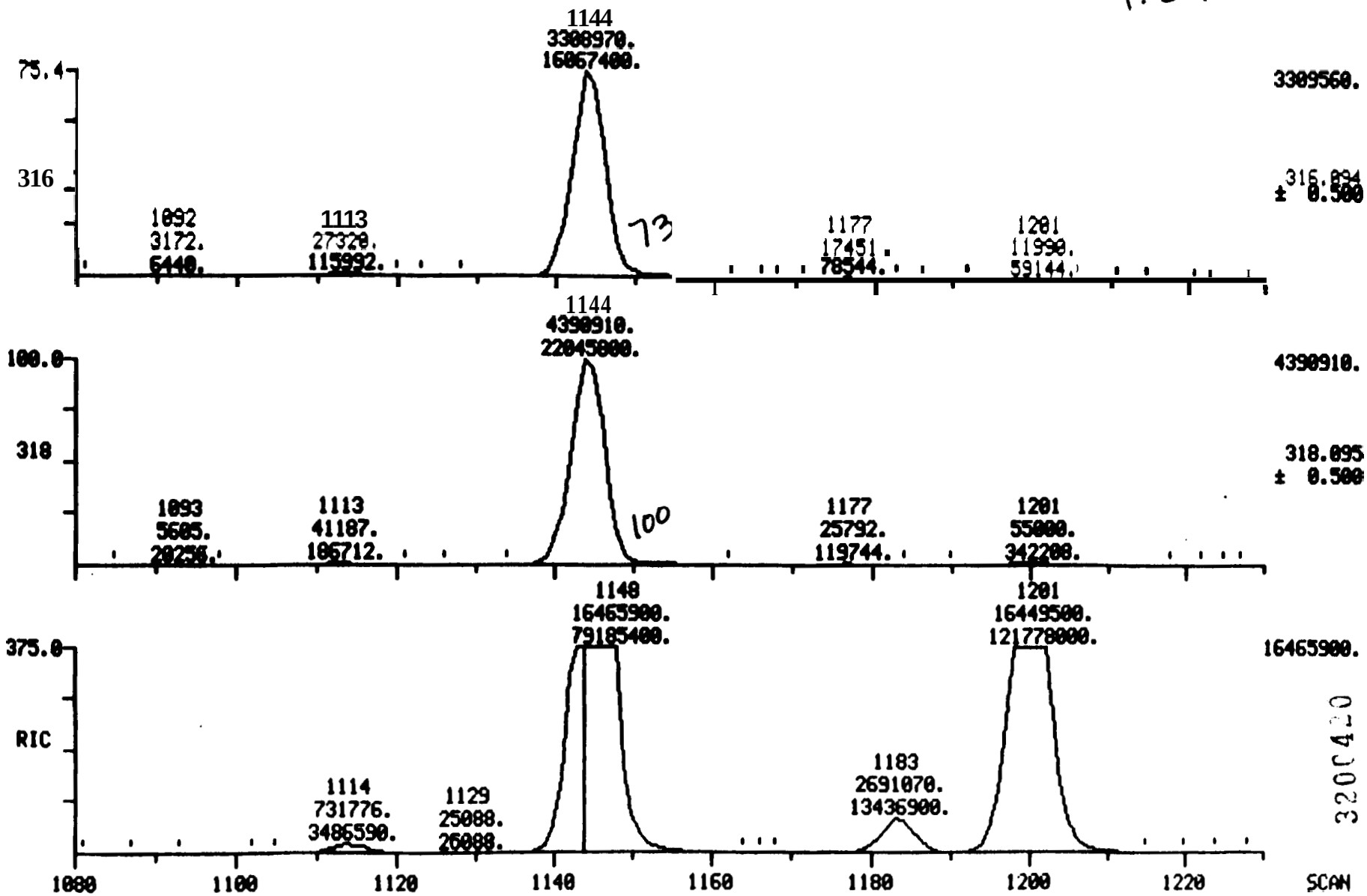
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 1080 TO 1230
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.40



MIDRIC+MASS CHROMATOGRAMS DATA: 68506U2 #1 SCANS 1000 TO 1230
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 20L OF 685:06-V e 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: H 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

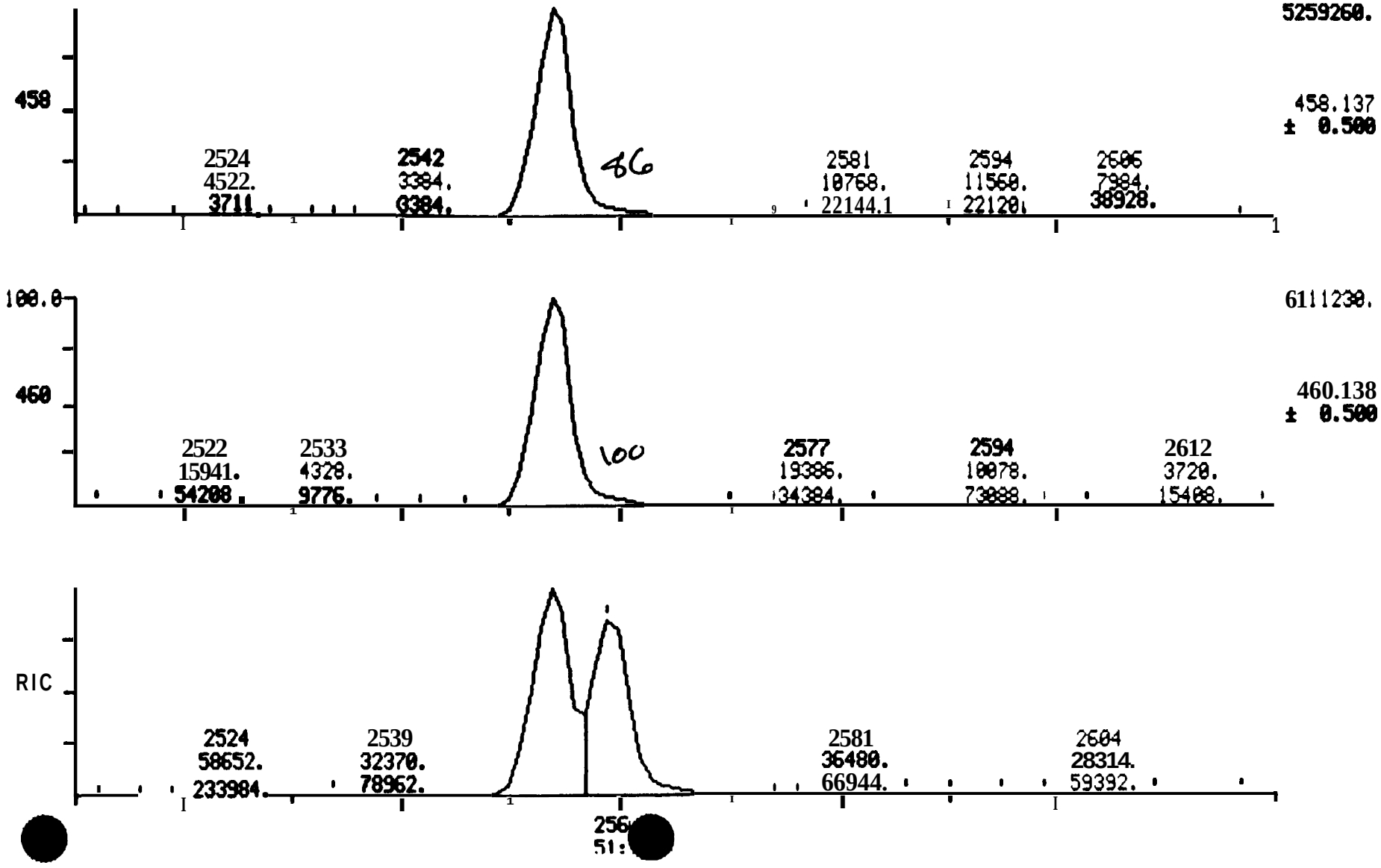
1.51



32004420

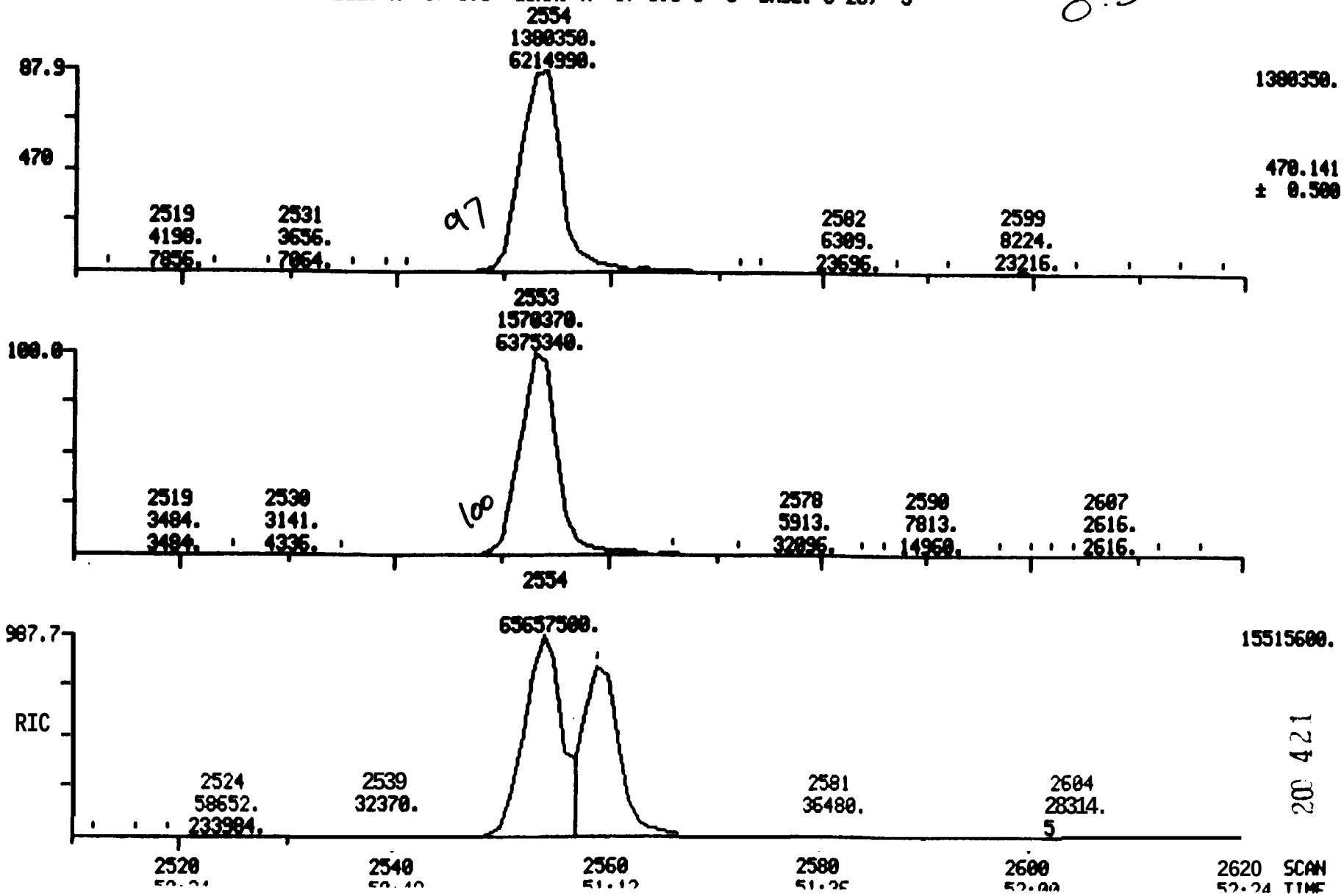
OCDD

1.21


5259260.
458
458.137
± 0.500
2524
4522.
3711.
2542
3384.
6384.
86
2581
10768.
22144.1
2594
11560.
22120.
2606
7984.
38928.
6111230.
100.0
460
460.138
± 0.500
2522
15941.
54208.
2533
4328.
9776.
100
2577
19386.
34384.
2594
10078.
73888.
2612
3720.
15408.
RIC
2524
58652.
233984.
2539
32370.
78962.
2581
36480.
66944.
2604
28314.
59392.

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2510 TO 2620
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

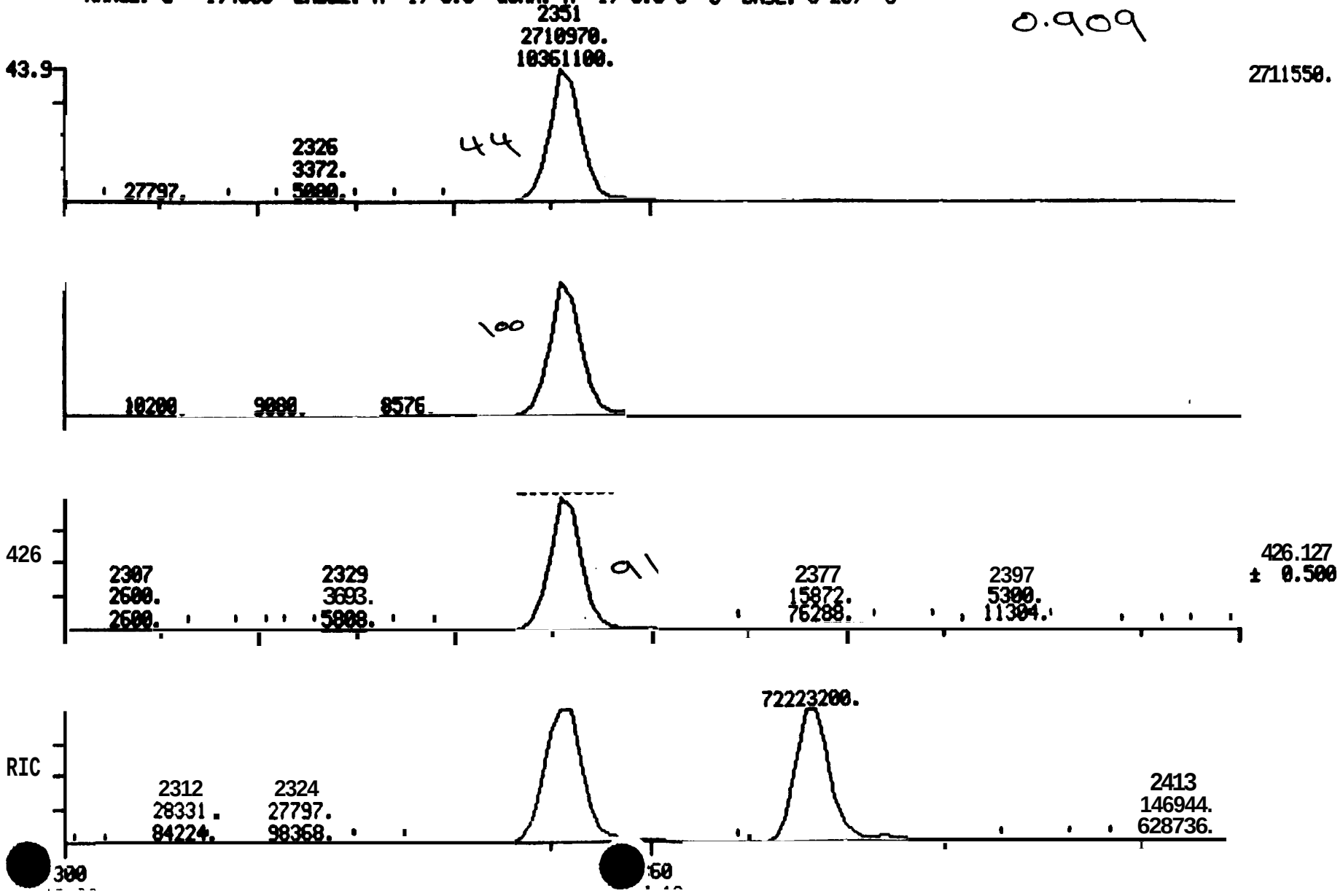
0.501



200 421

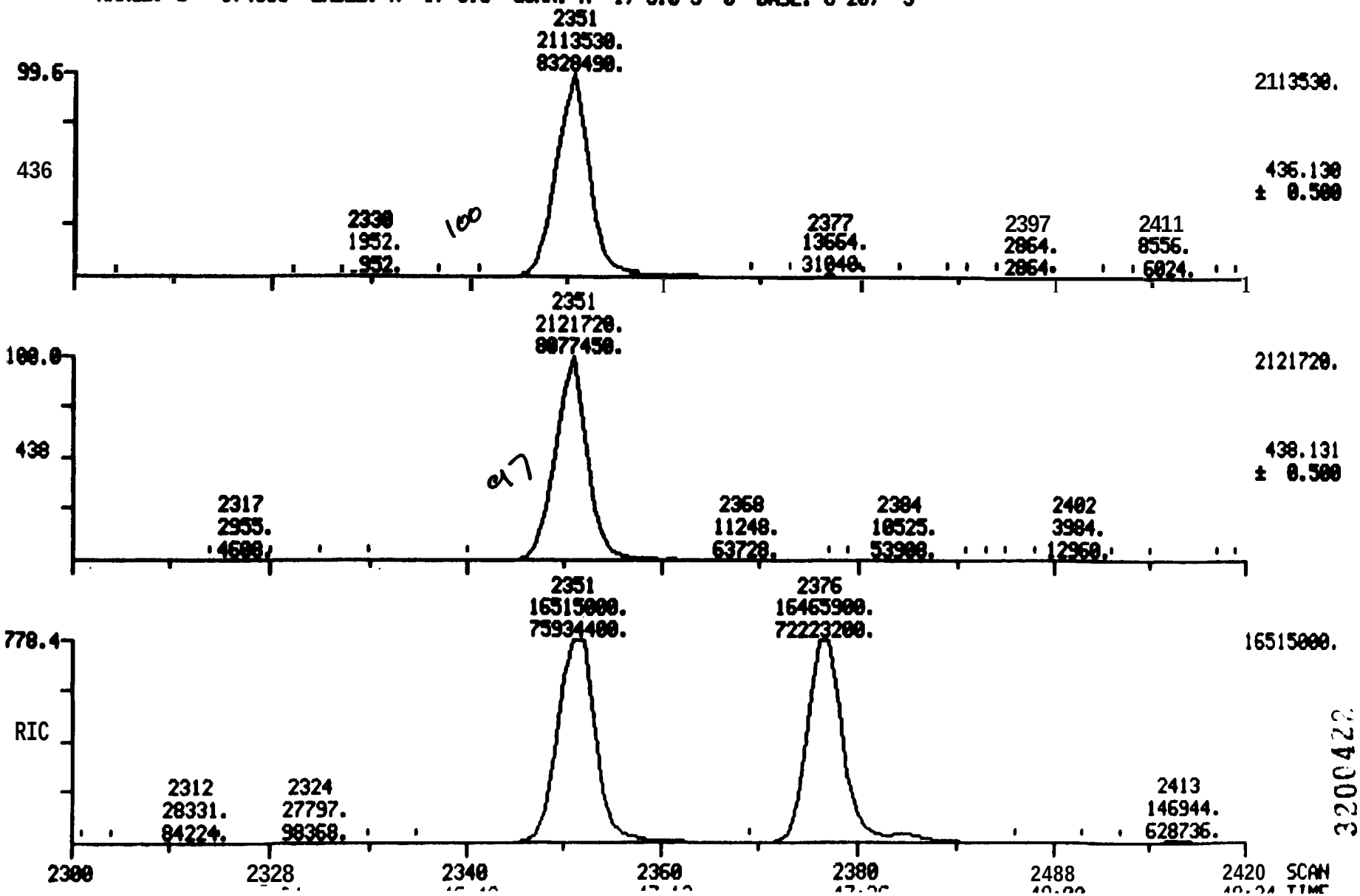
HpCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2300 TO 2420
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2300 TO 2420
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

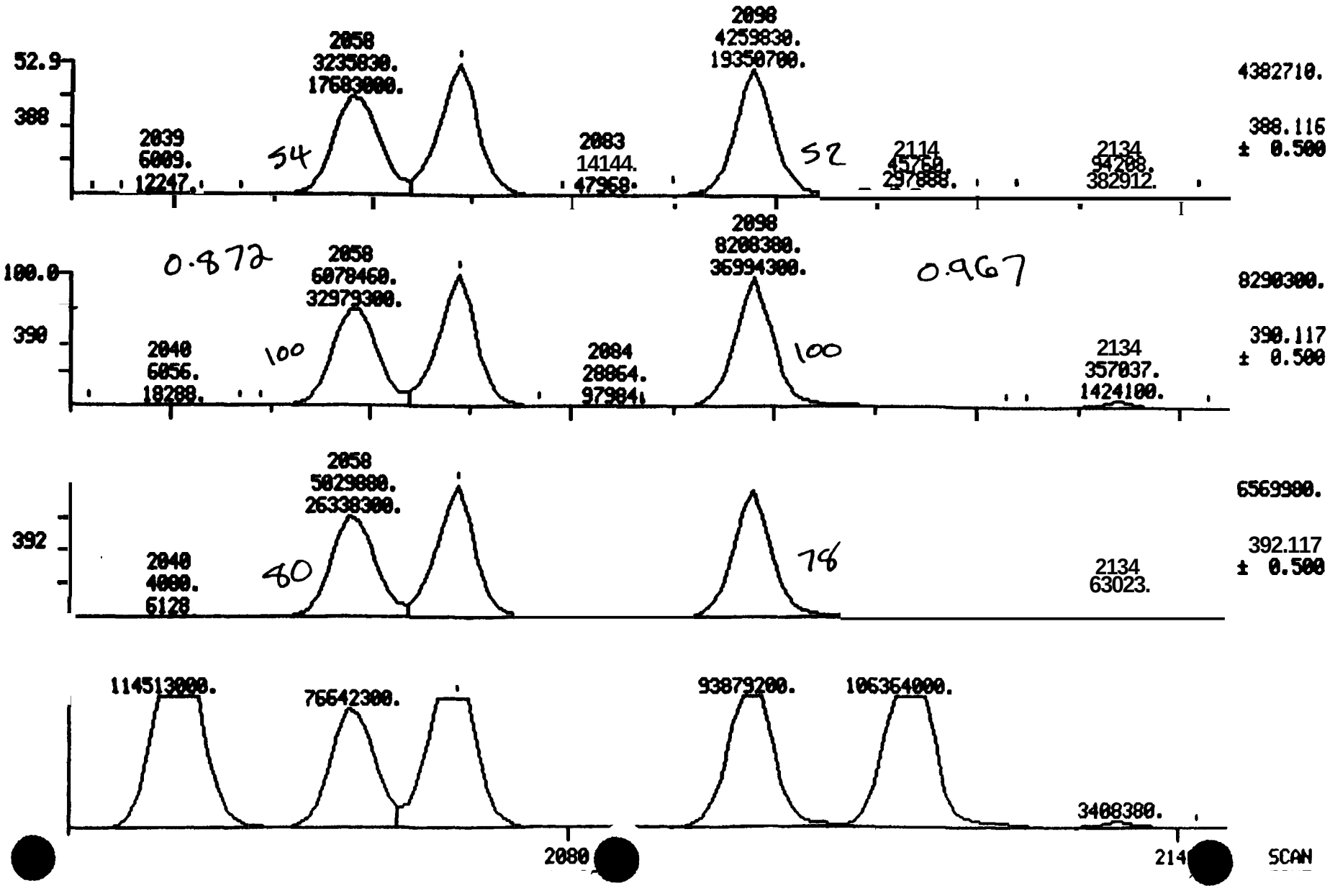
0.653



3200422

HxCDD

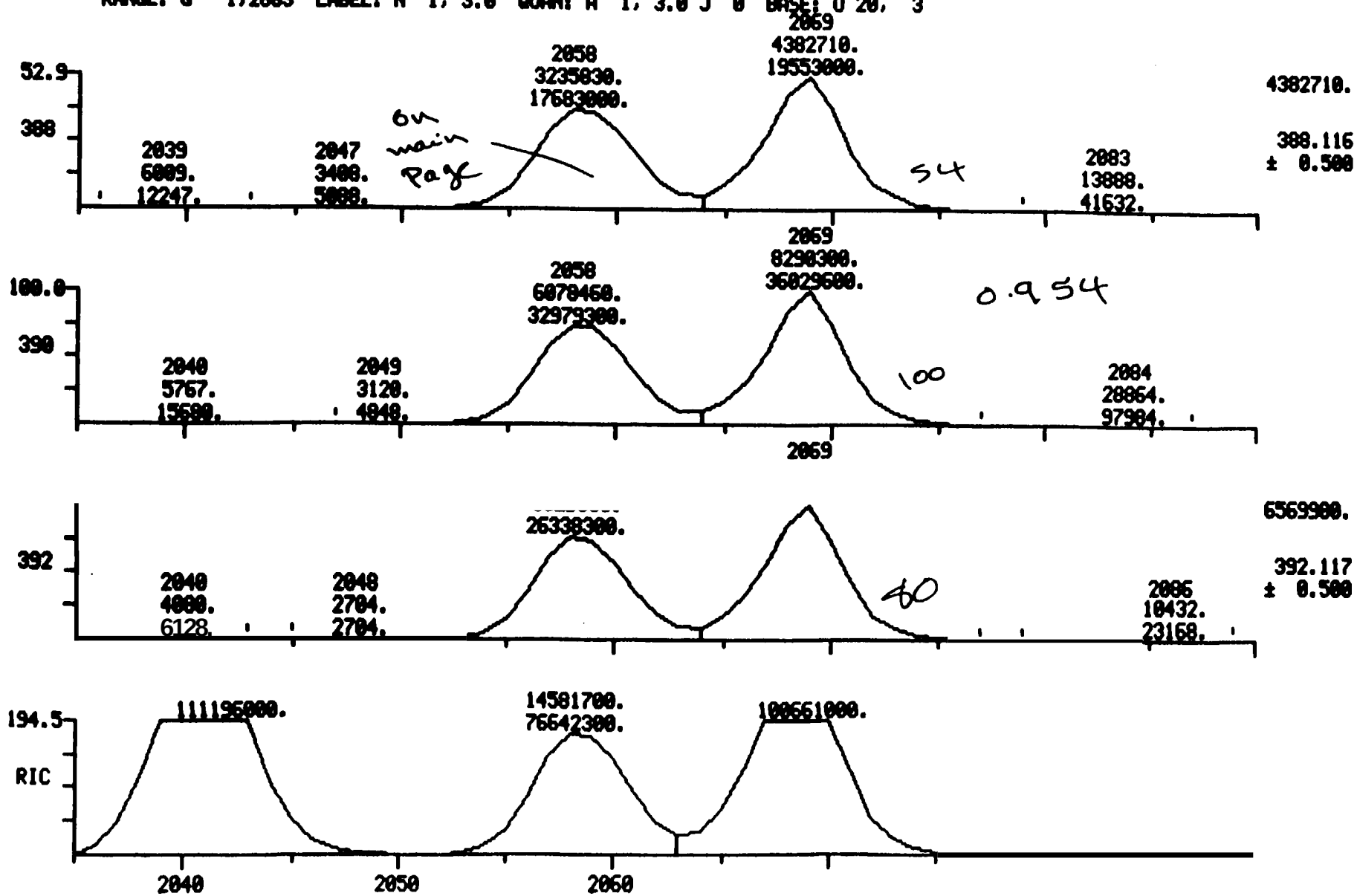
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2030 TO 2145
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



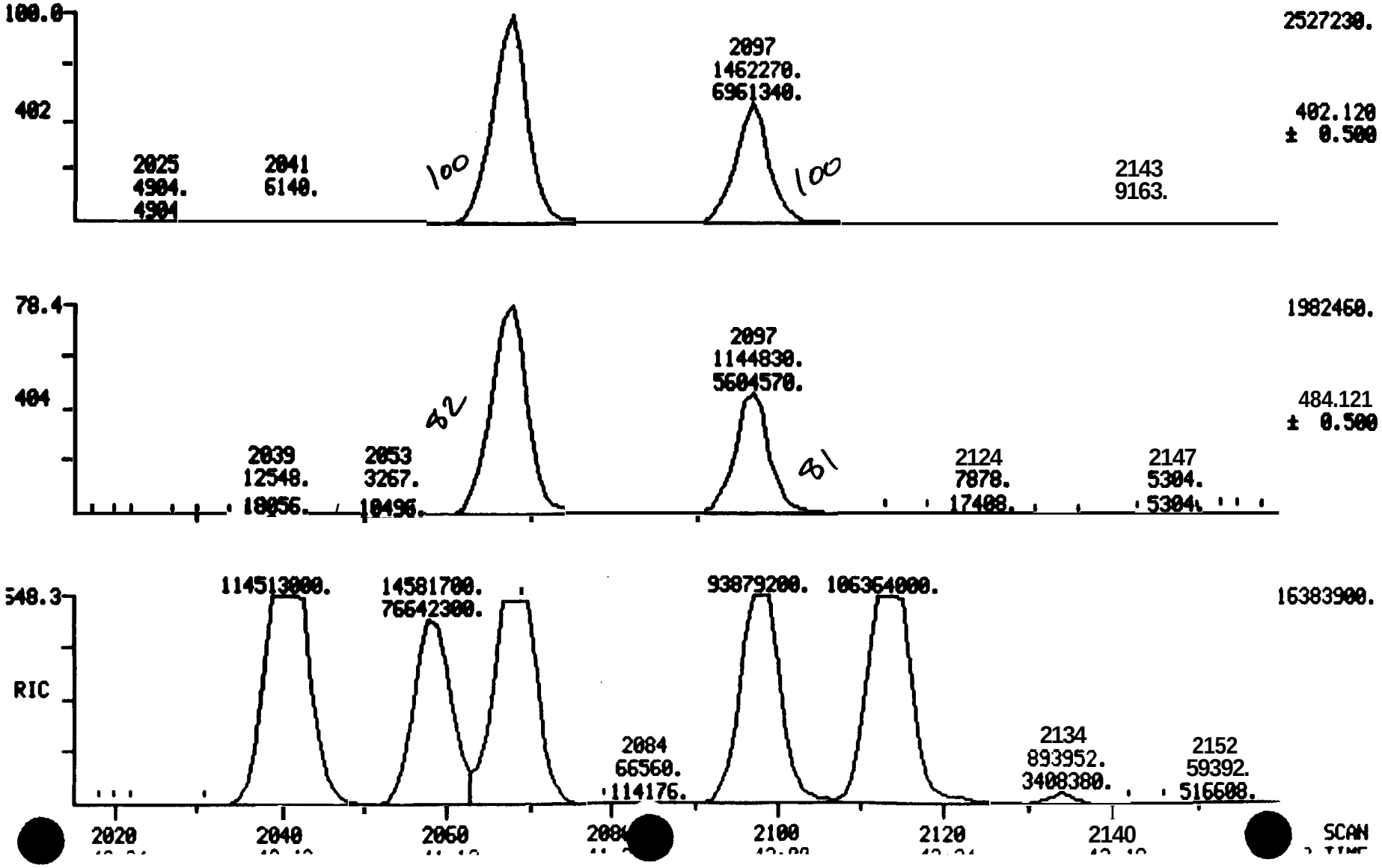
1/1

HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 2035 TO 2090
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2683 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



0.902


100.0
402
2025
4904.
4904
2041
6140.
100
2097
1462270.
6961340.
100
2143
9163.
2527230.
402.120
± 0.500
78.4
404
2039
12548.
18056.
2053
3267.
10496.
82
2097
1144830.
5604570.
81
2124
7878.
17408.
2147
5304.
5304.
1982460.
484.121
± 0.500
548.3
RIC
114513000.
14581700.
76642300.
2084
66560.
114176.
93879200.
106364000.
2134
893952.
3408380.
2152
59392.
516608.
16383900.
2020
2040
2060
2100
2120
2140
SCAN

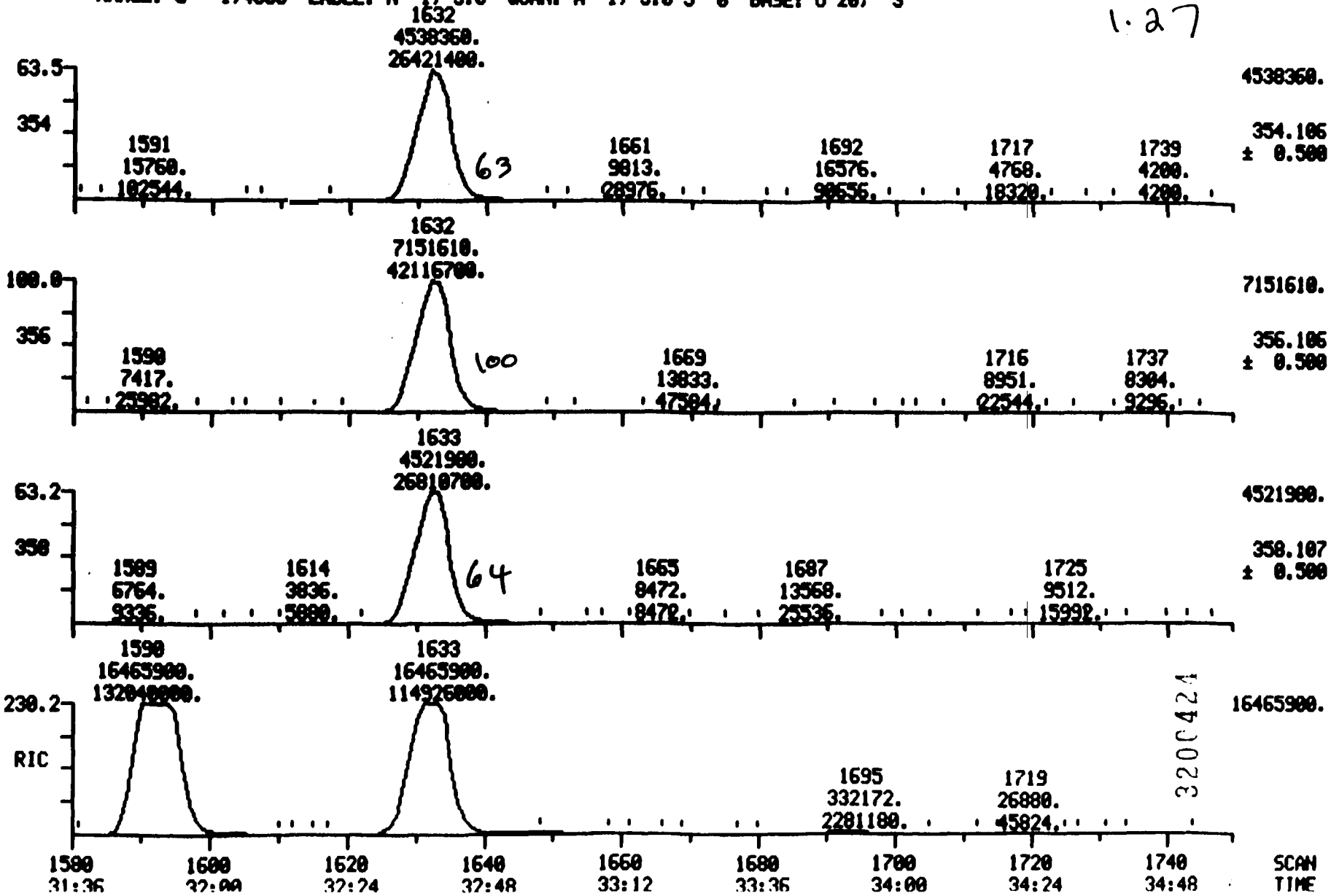
MIDRIC+MASS CHROMATOGRAMS
03/27/91 14:20:00
SAMPLE: 2UL OF 685:06-V @ 3000
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506V2 #1
CALI: CAL910306A #2
RUN #2 FOR MULTIPOINT

SCANS 500 TO

PecD

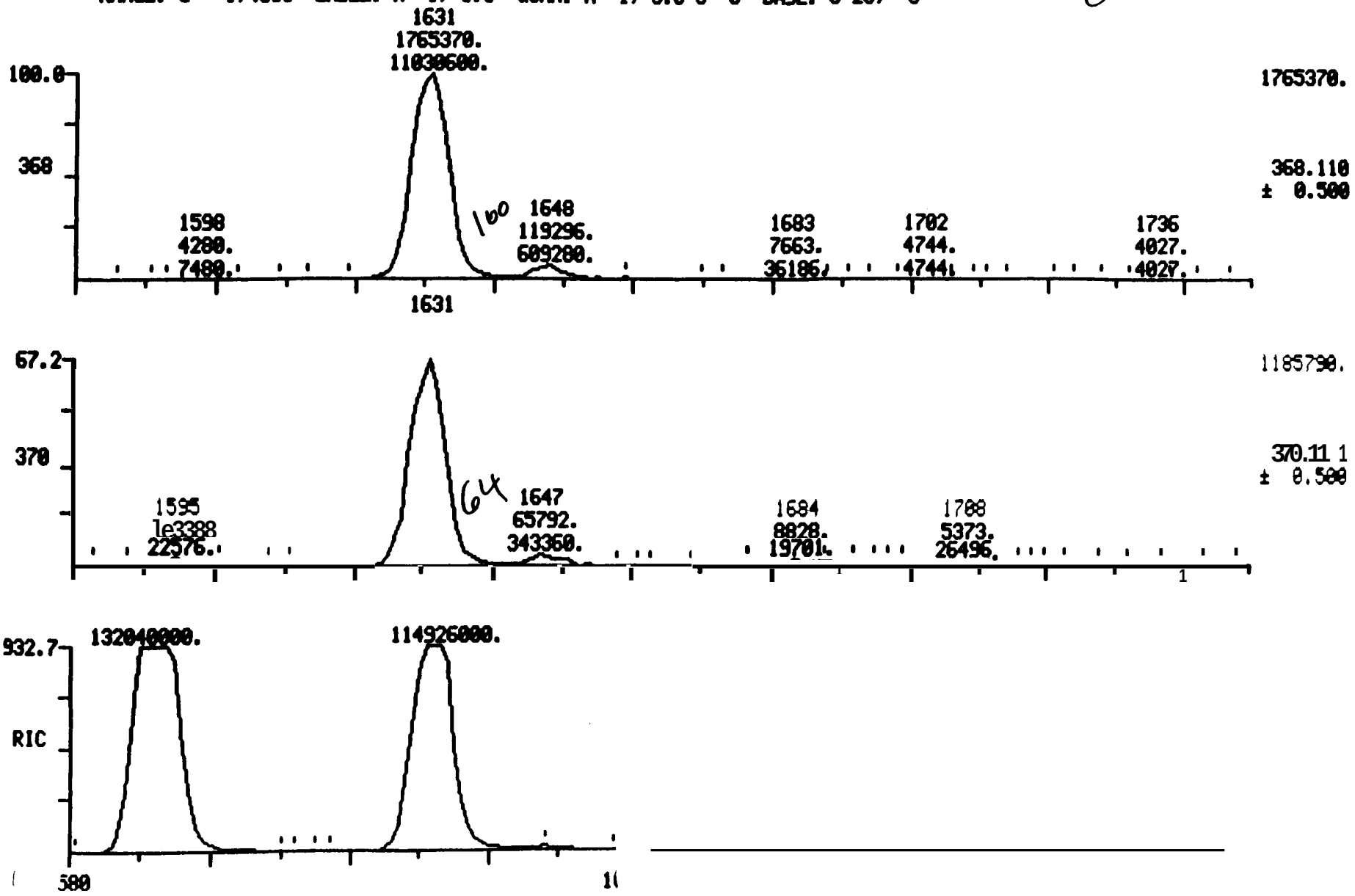
1.27



3200424

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V2 #1 SCANS 1500 TO 1750
03/27/91 14:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.716



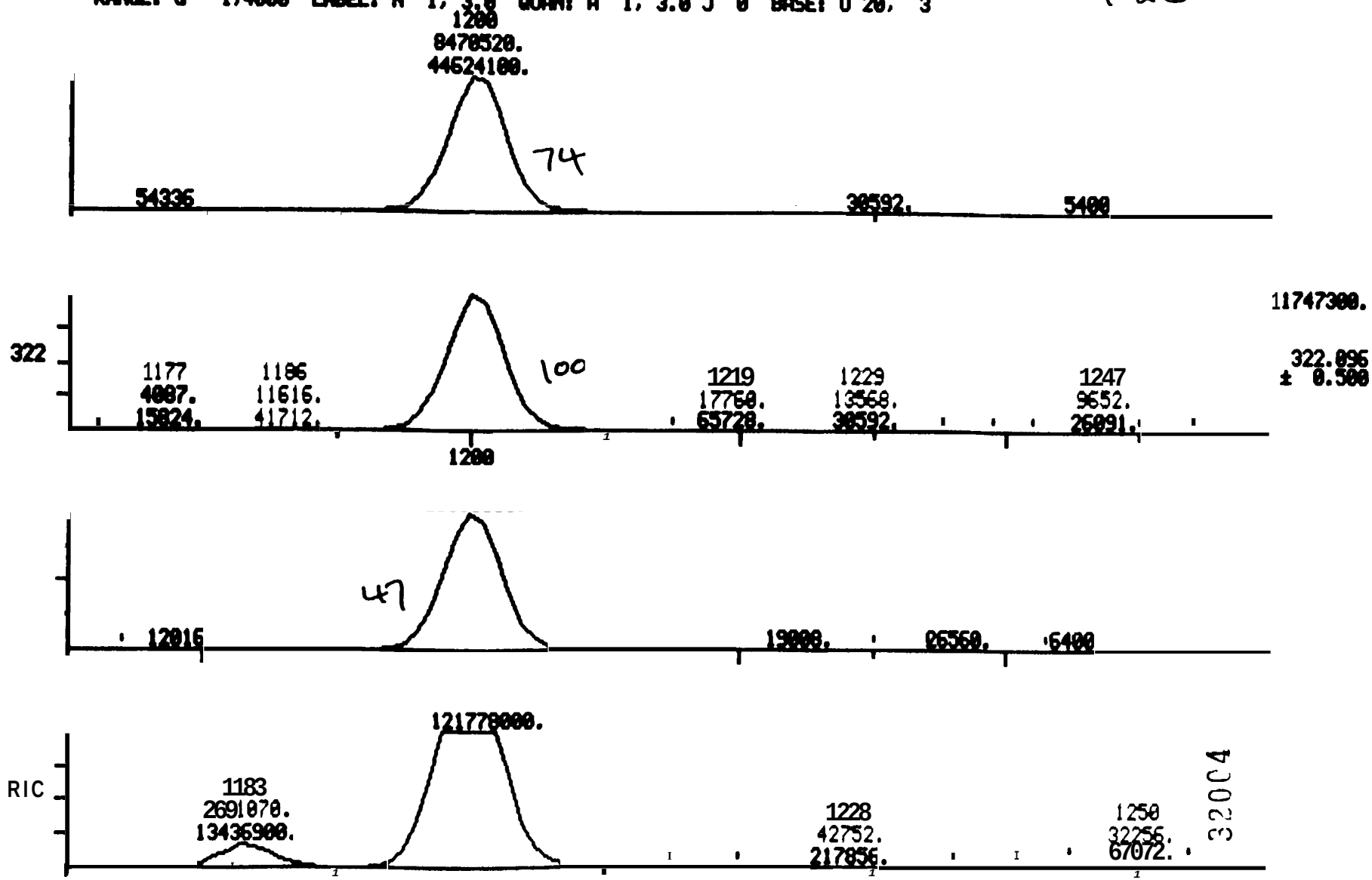
TCDD

MIDRIC+MASS CHROMATOGRAMS
03/27/91 14:20:00
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506V2 #1
CALI: CAL910306A #2

SCANS 1170 TO 1260

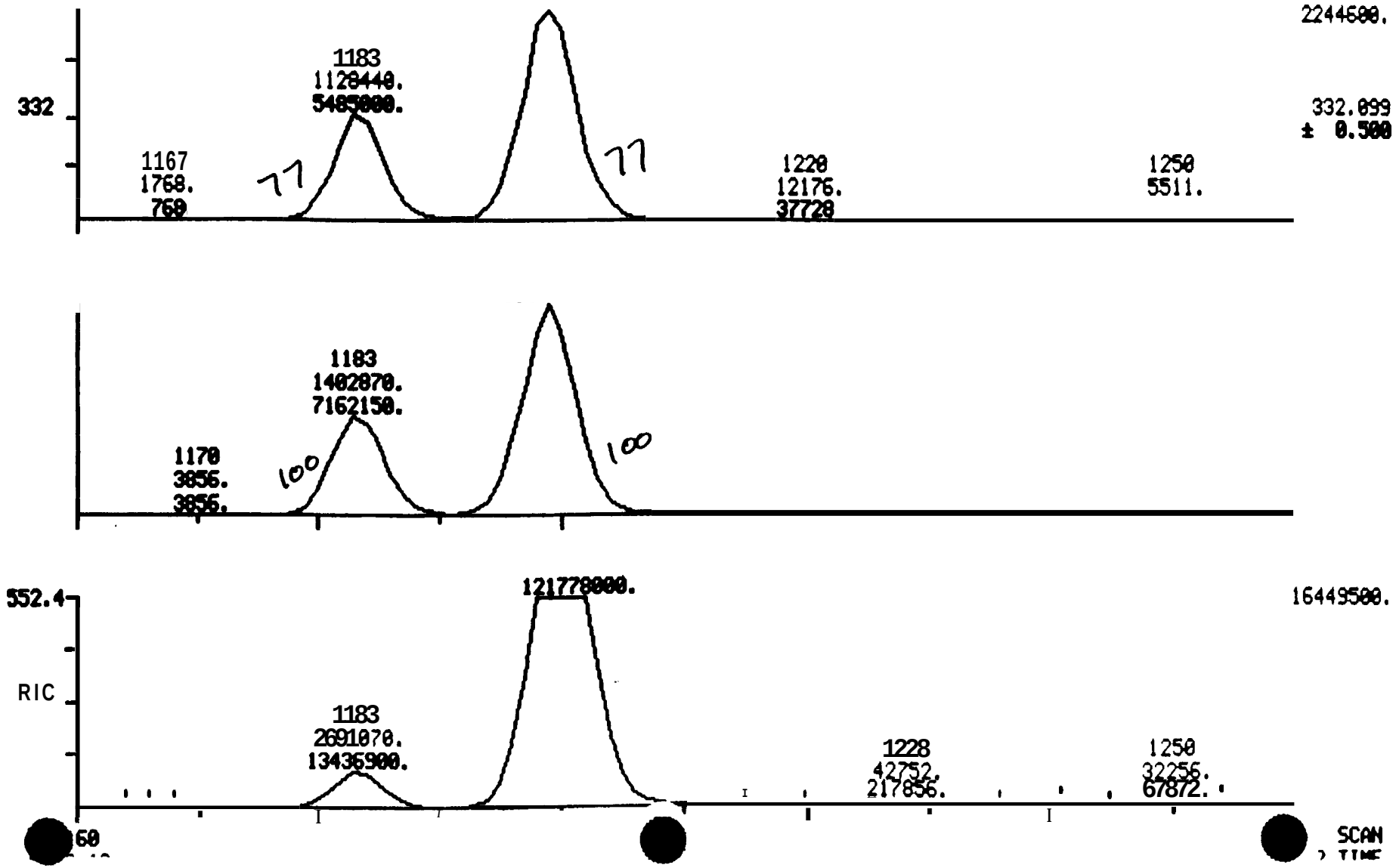
1.26



32004

2UL

1.10

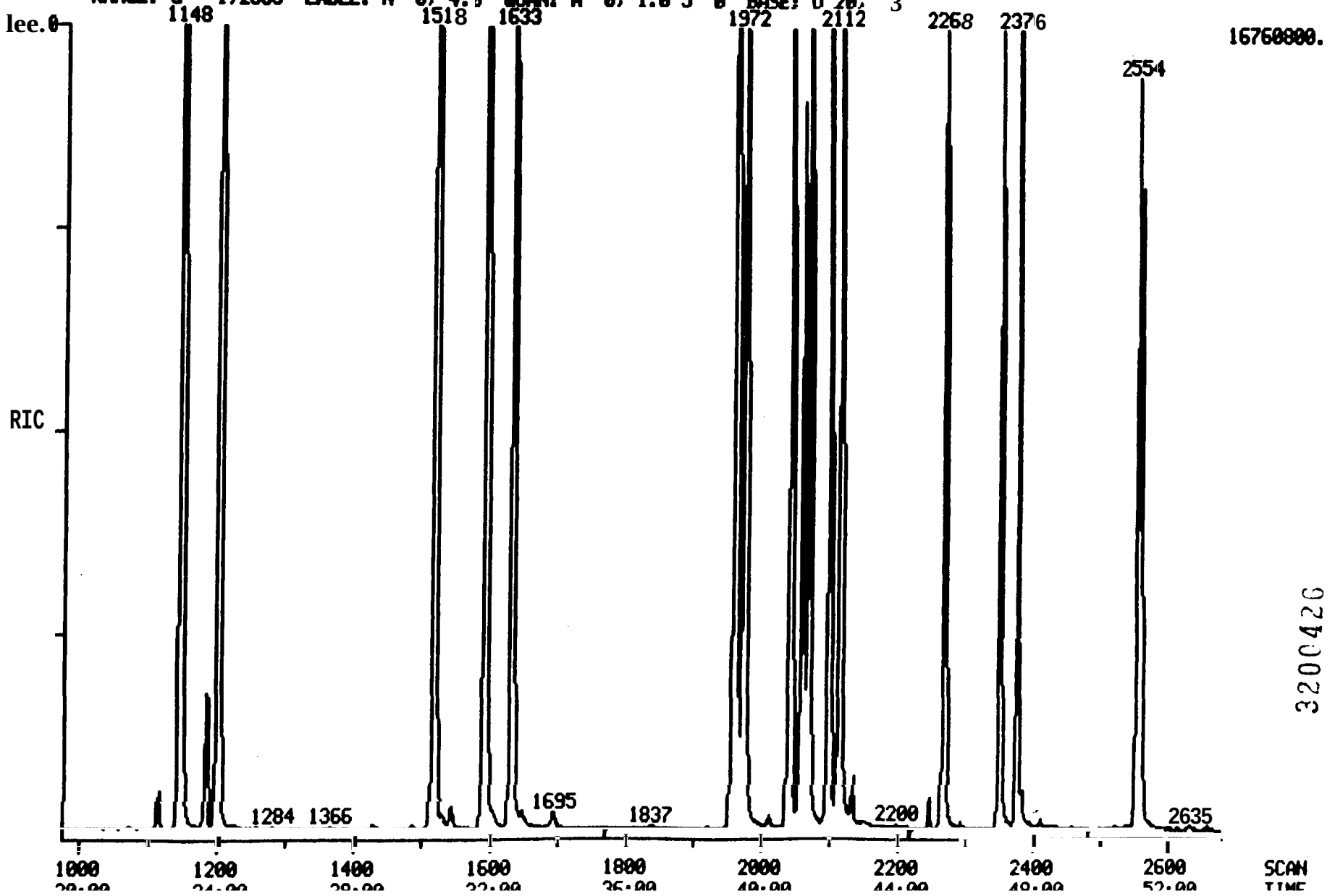

2244600.
332
332.099
± 0.500
1183
1128440.
5485000.
1167
1768.
760
77
77
1220
12176.
37720
1250
5511.
1183
1402870.
7162150.
1170
3856.
3856.
100
100
552.4
RIC
121778000.
16449500.
1183
2691070.
13436900.
1228
42752.
217856.
1250
32256.
67872.
60
SCAN
TIME

MIDRIC
03/27/91 14:20:00
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #2 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2683 LABEL: N 0, 4.3 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506V2 #1
CALI: CAL910306A #2

SCANS 975 TO 2683

alc. nm 3-28-91
QC D.M. 3-28-91



3200426

4	419.550	420.050	0.054	3	100	40	1	0	Pos
3	421.550	422.030	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
8	433.550	436.050	0.032	3	100	40	1	0	Pos
9	437.550	438.050	0.052	3	100	40	1	0	Pos
10	441.350	442.050	0.054	3	100	40	1	0	Pos
11	443.530	444.050	0.054	3	100	40	1	0	Pos
12	457.550	438.030	0.052	3	100	40	1	0	Pos
13	459.350	460.030	0.032	3	100	40	1	0	Pos
14	469.350	470.030	0.054	3	100	40	1	0	Pos
13	471.550	472.030	0.052	3	100	40	1	0	Pos
16	479.550	480.050	0.054	3	100	40	1	0	Pos
17	313.350	314.050	0.054	3	100	40	1	0	Pos

3/27/91 13:57:26 SCAN 2661
Acquisition stopped

3/27/91 13:37:28
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2464 Suspended
SCANS 2483 TO 2661 Centroid

Hode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2638	618.8	3189.6	19.4	81713. 31.	26.

MID scan
Scan tire: 1.200 s

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.034	3	100	40	1	0	Pos
2	339.650	340.150	0.032	3	100	40	1	0	Pos
4	341.650	342.150	0.054	3	100	40	1	0	Pos
	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353.650	354.150	0.054	3	100	40	1	0	Pos
6	355.650	356.150	0.032	3	100	40	1	0	Pos
7	357.650	338.150	0.034	3	100	40	1	0	Pos
8	367.650	368.150	0.032	3	100	40	1	0	Pos
9	369.650	370.150	0.032	3	100	40	1	0	Pos
10	371.650	372.150	0.032	3	100	40	1	0	Pos
11	373.650	374.150	0.032	3	100	40	1	0	Pos
12	375.650	376.150	0.032	3	100	40	1	0	Pos
13	379.650	380.150	0.032	3	100	40	1	0	Pos
14	381.650	382.150	0.032	3	100	40	1	0	Pos
13	385.650	386.150	0.032	3	100	40	1	0	Pos
16	387.650	388.150	0.052	3	100	40	1	0	Pos
17	389.650	390.150	0.032	3	100	40	1	0	Pos
18	391.650	392.150	0.032	3	100	40	1	0	Pos
19	401.650	402.150	0.032	3	100	40	1	0	Pos
20	403.650	404.150	0.054	3	100	40	1	0	Pos
21	445.550	446.050	0.032	3	100	40	1	0	Pos

3/27/91 13:48:19 SCAN 2219 OF 4000

MID scan
Scan time: 1.200 s

Desc: 03
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	time	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
8	373.650	374.150	0.052	3	100	40	1	0	Pos
	375.650	376.150	0.052	3	100	40	1	0	Po.
4	385.650	386.150	0.052	3	100	40	1	0	Pos
3	387.650	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	eo.
7	391.650	392.150	0.052	3	100	40	1	0	Pos
e	401.650	402.150	0.052	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Pos
10	405.550	406.050	0.054	3	100	40	1	0	Ro.
11	407.550	408.050	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.050	0.054	3	100	40	1	0	Pos
13	423.550	424.050	0.054	3	100	40	1	0	Pos
16	425.550	426.050	0.052	3	100	40	1	0	Po.
17	435.550	436.050	0.052	3	100	40	1	0	Pos
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	eo.

3/27/91 13:33:46 SCAN 2484 OF 4000

HID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Pos
3	409.550	410.050	0.054	3	100	40	1	0	Po.

3200427

3/27/91 13:02:34 SCAN 1 OF 4000
Acquisition started

Acquire Run 0:68506V1 ACQU RINO
03/27/91 13:02:00 + 0:04 Free sectors: 18822 Scan: 3 of 4000
Sample: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
Conds. : 60H DB-5/TOTALS.
Formula: Instrument: G3 Weight: 0.000
Submitted by: DM Analyst: NM Acct. No: PC4622

********** QC PARAMETERS **********
Loaded QC Desc: BW Current QC oven tmp: 73 DegC Injector : 300 DegC
Current QC Desc: BW QC elapsed time : 2:37 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

MID scan Desc: Bl Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPU	MFW	HA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.130	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.034	3	100	40	1	0	Pos
4	315.650	316.130	0.031	3	100	40	1	0	Pos
3	317.650	318.130	0.034	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.032	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.650	332.150	0.054	3	100	40	1	0	Pos
13	353.650	354.150	0.032	3	100	40	1	0	Pos
16	333.630	336.150	0.054	3	100	40	1	0	Pos
17	337.630	358.130	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.031	3	100	40	1	0	Pos
20	375.650	376.150	0.033	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	amu
Offset at low mass	0	amu
Offset at high mass	0	amu
Voltage settling time(MS)	4	

3/27/91 13:39:05 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 2510 TO 2620

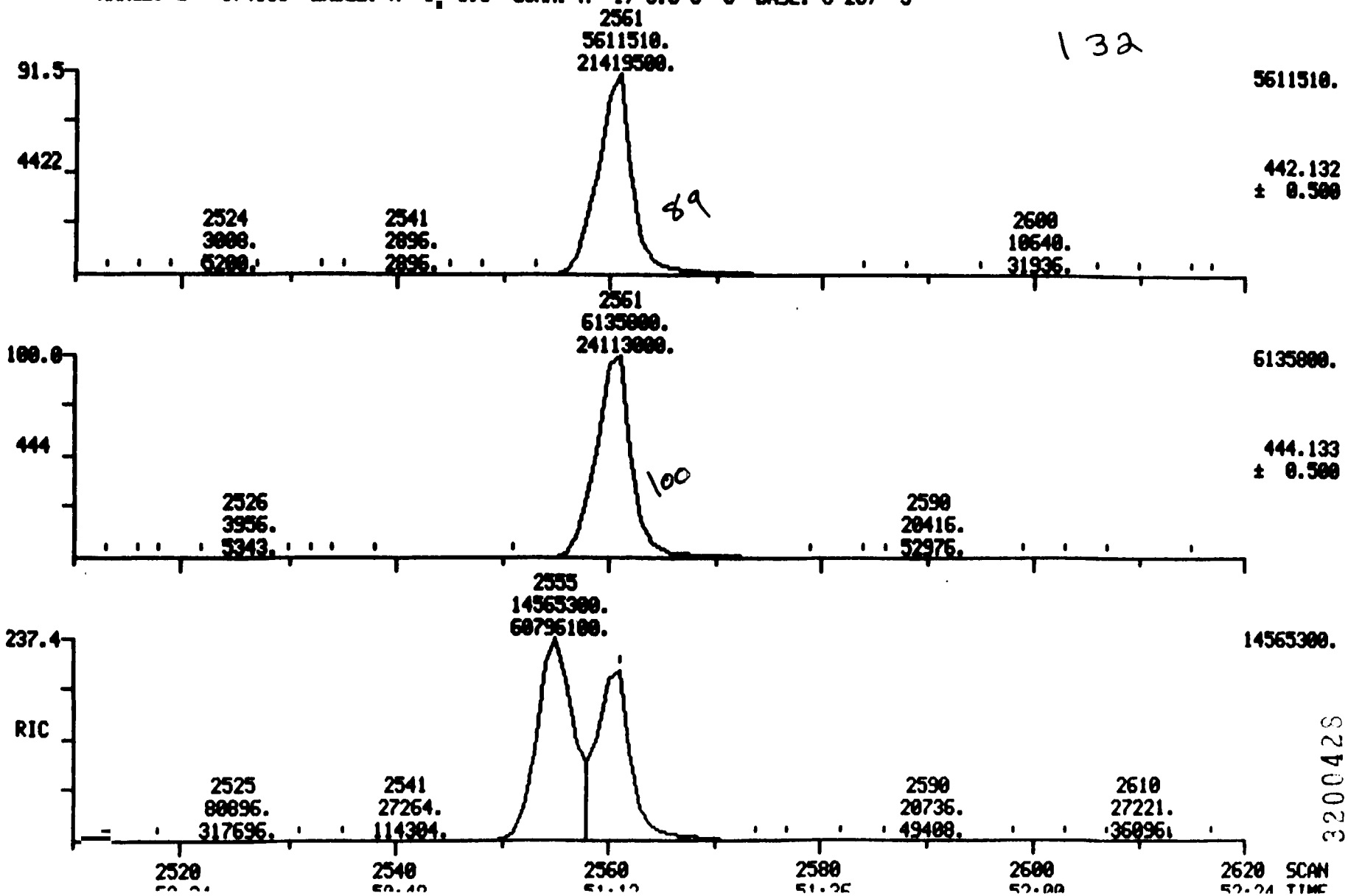
03/27/91 13:02:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

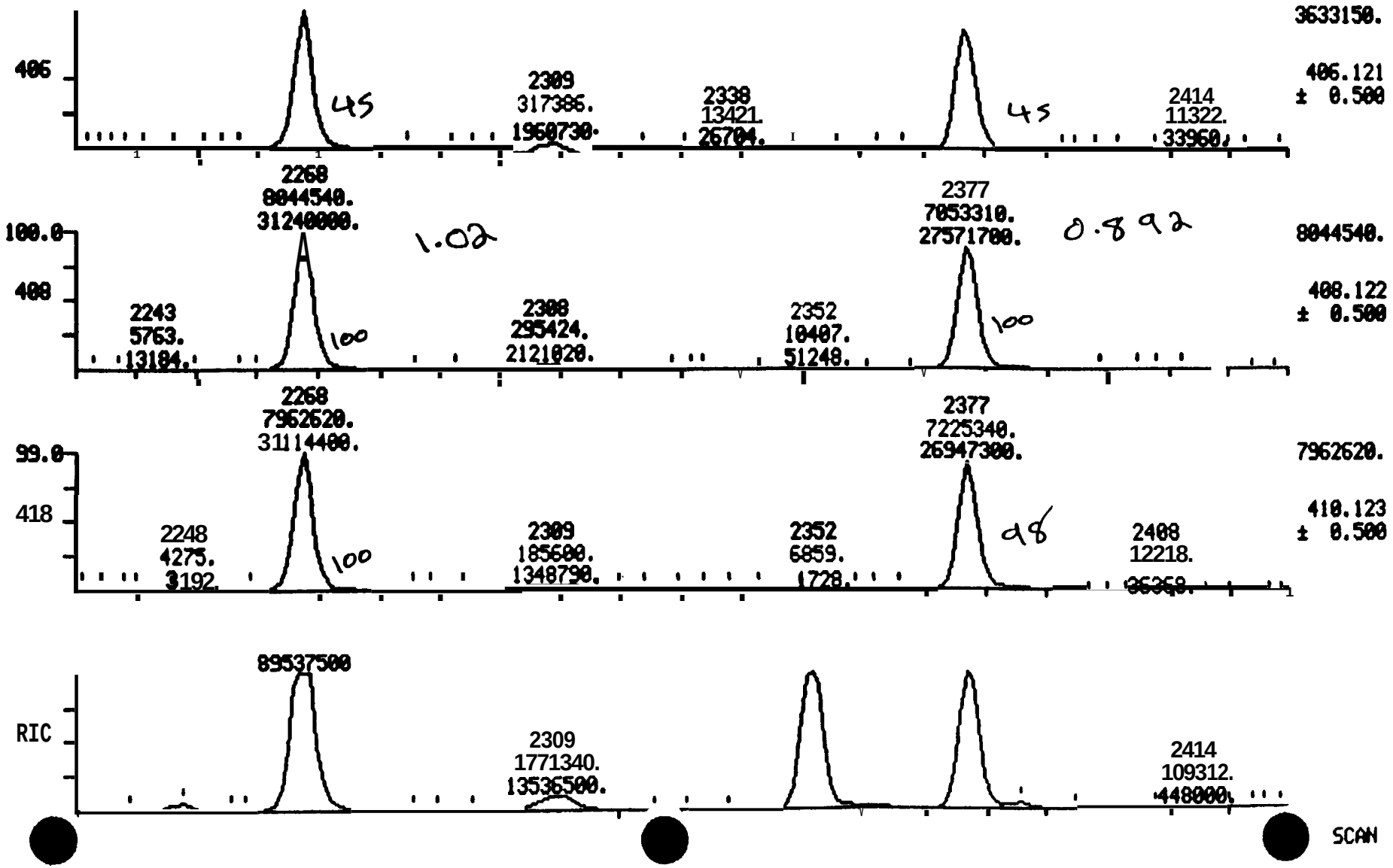
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDF



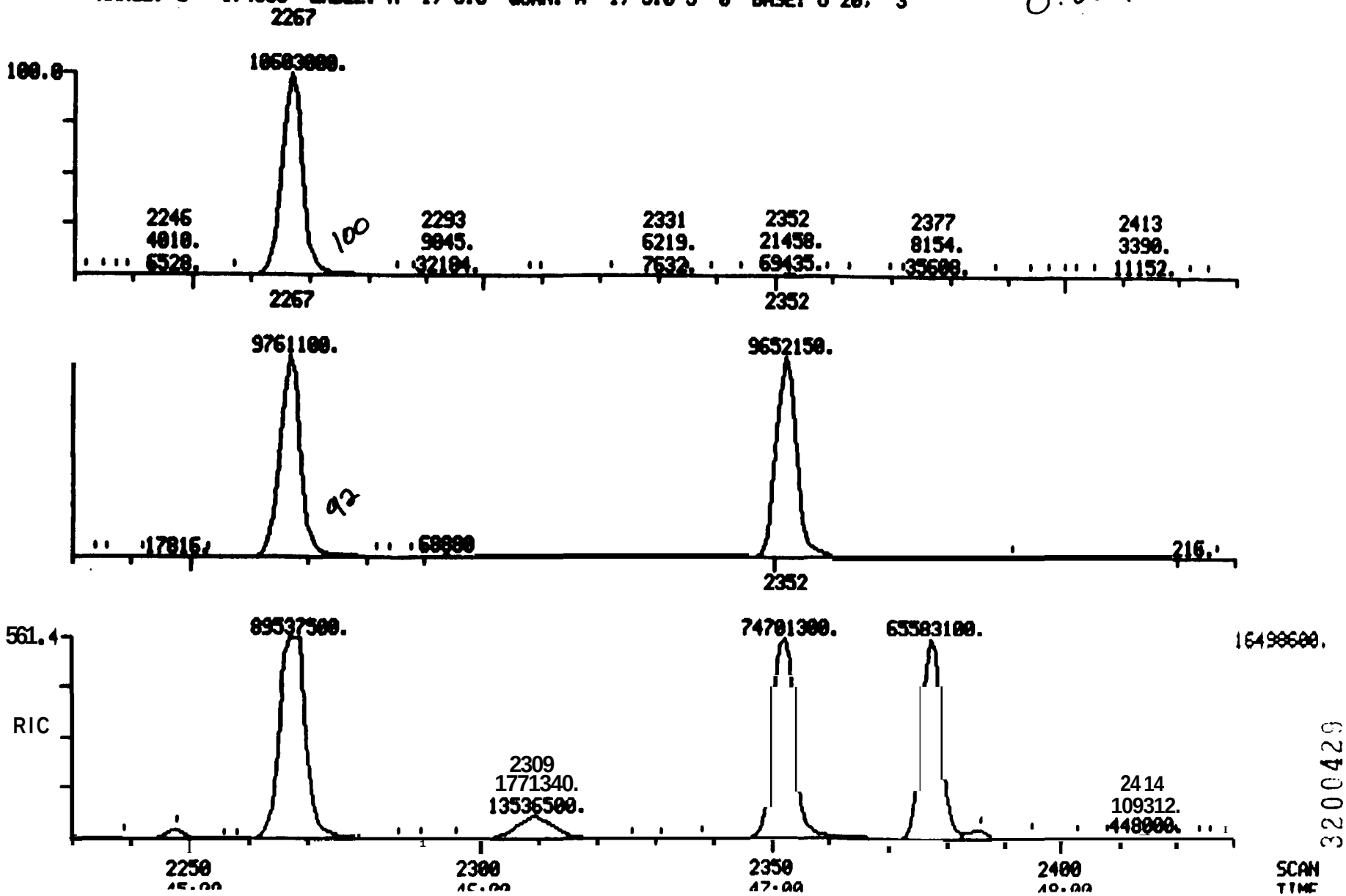
320042S

HpCDF


406
45
2309
317386.
1960730.
2338
13421.
26704.
45
2414
11322.
33960.
3633150.
406.121
± 0.500
100.0
408
2268
8044540.
31240000.
1.02
2377
7053310.
27571700.
0.892
8044540.
408.122
± 0.500
2243
5763.
13184.
100
2308
295424.
2121020.
2352
10407.
51240.
100
99.0
418
2268
7962620.
31114400.
2377
7225340.
26947300.
7962620.
410.123
± 0.500
2248
4275.
3192.
100
2309
185600.
1348790.
2352
6859.
1728.
98
2408
12218.
36368.
RIC
89537500
2309
1771340.
13536500.
2414
109312.
448000.
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 2230 TO 2430
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

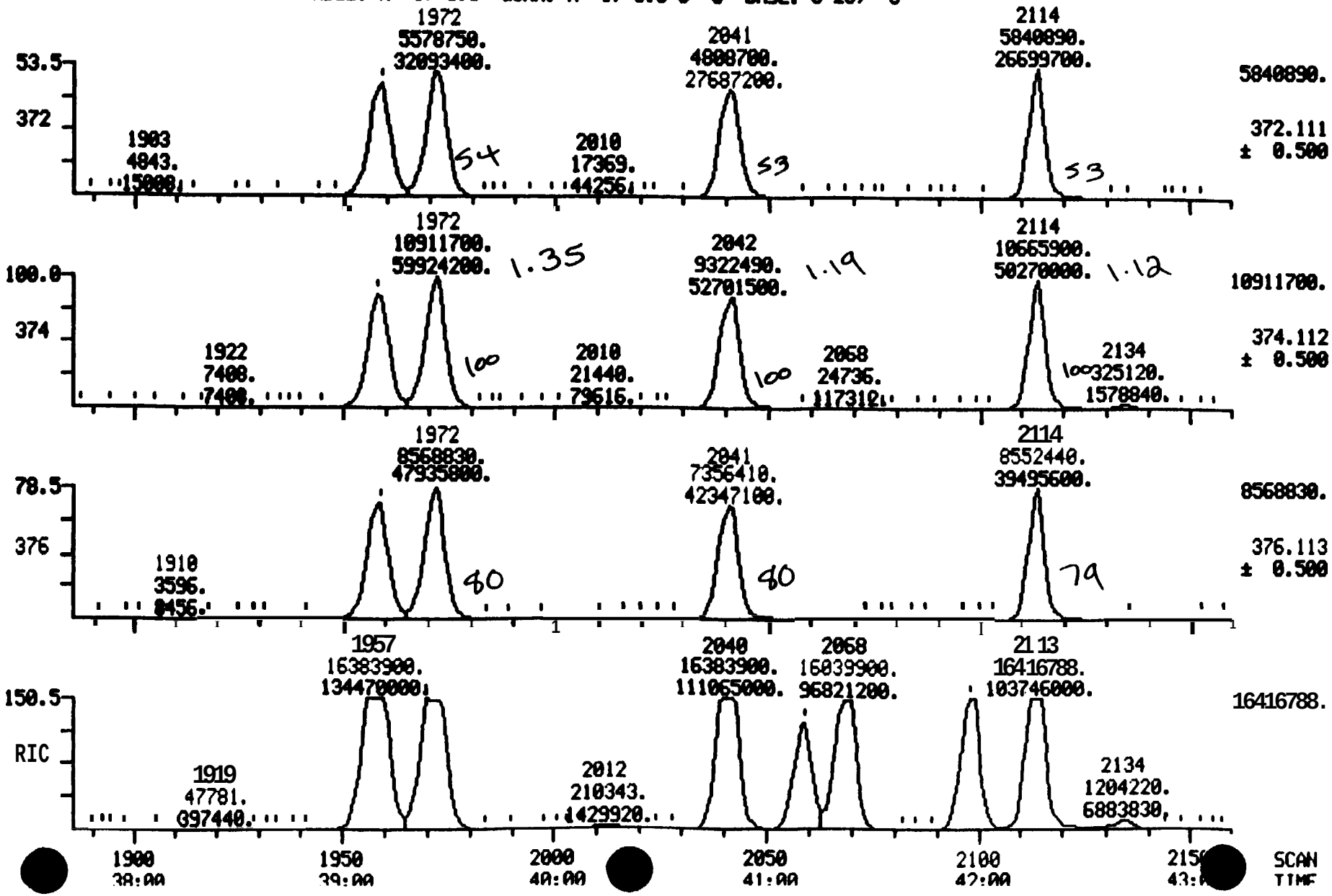
0.887



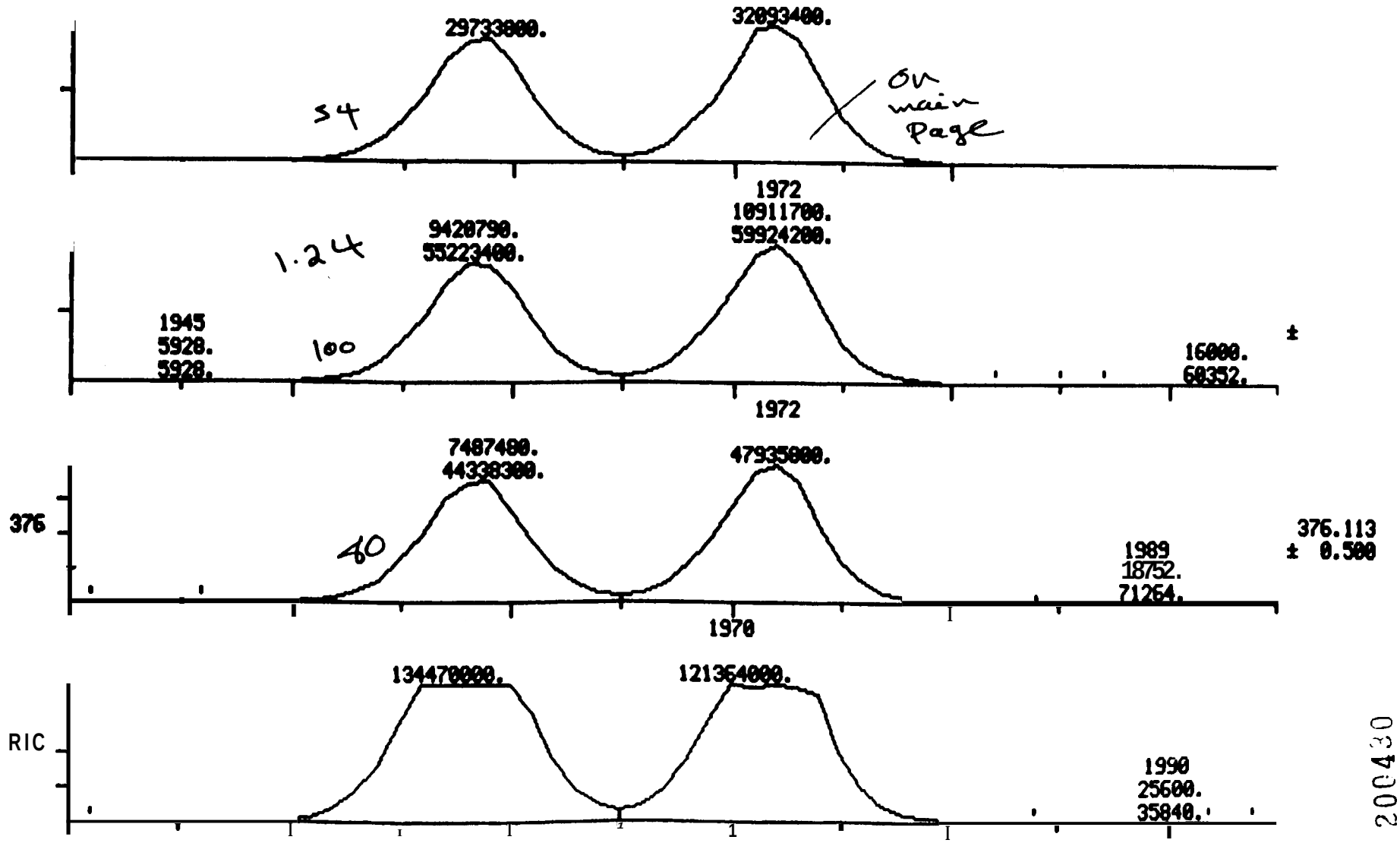
3200429

F

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 1885 TO 2160
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



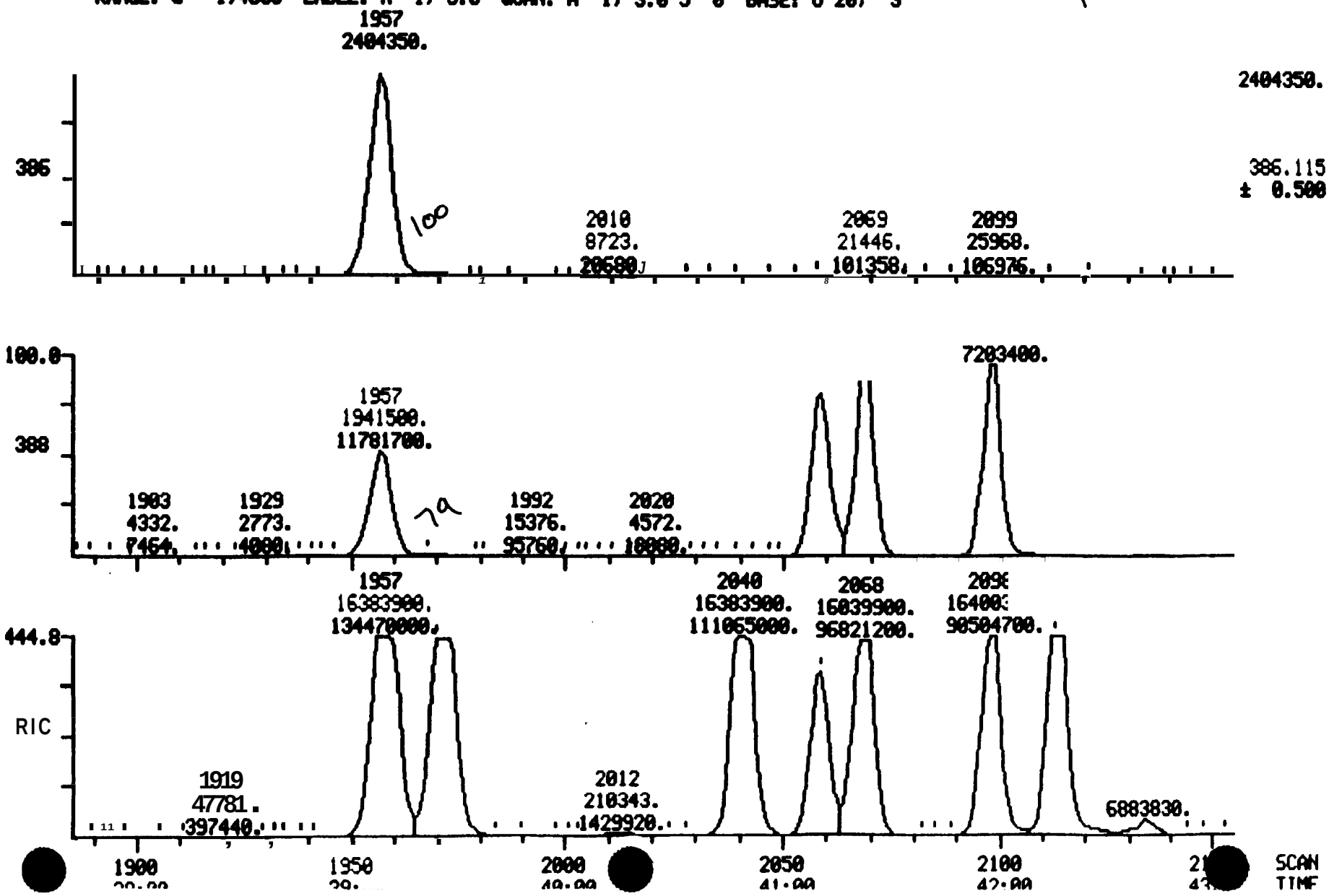
HxCDF



200430

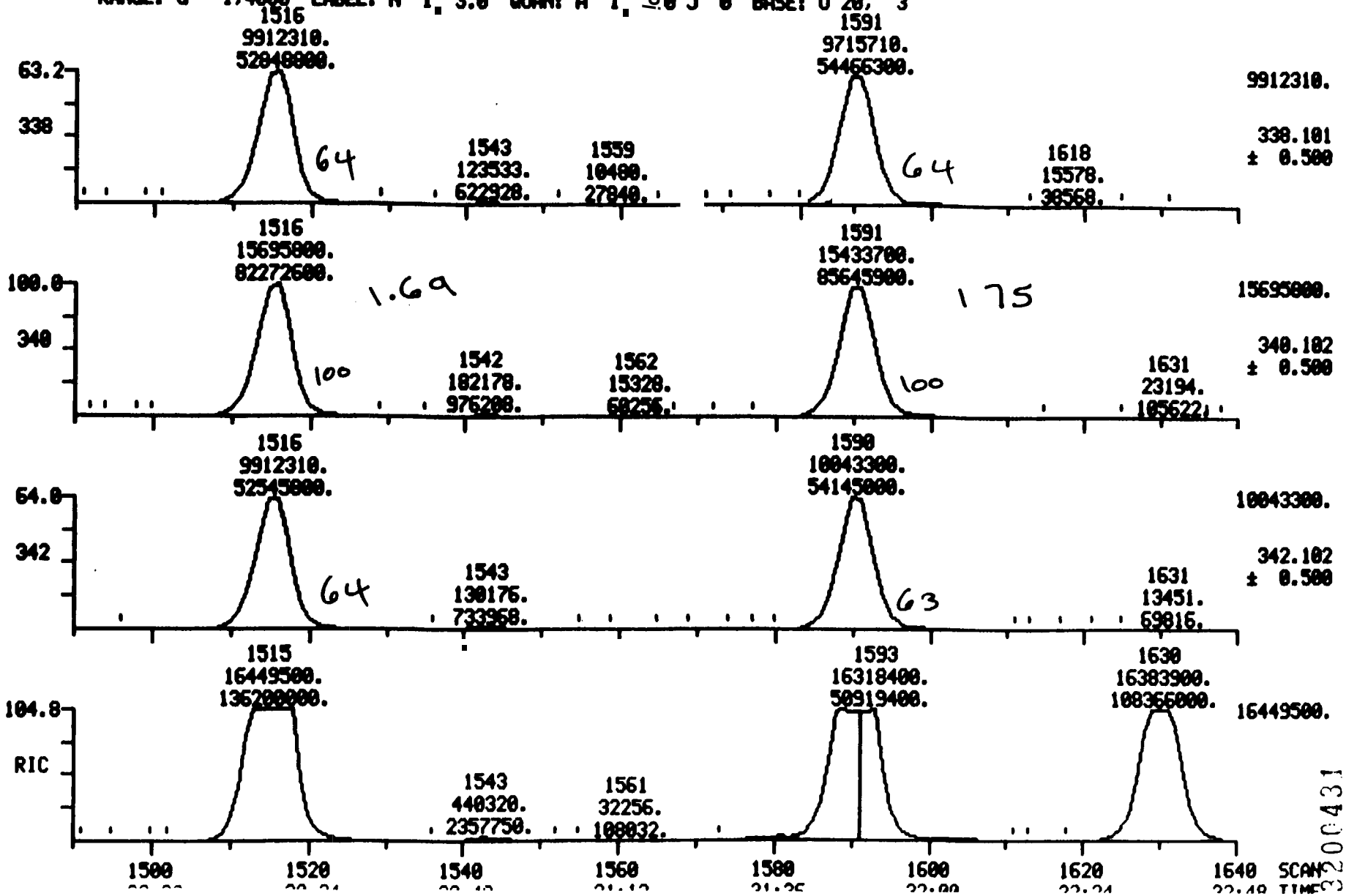
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 1885 TO 2155
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.16



PeCDF

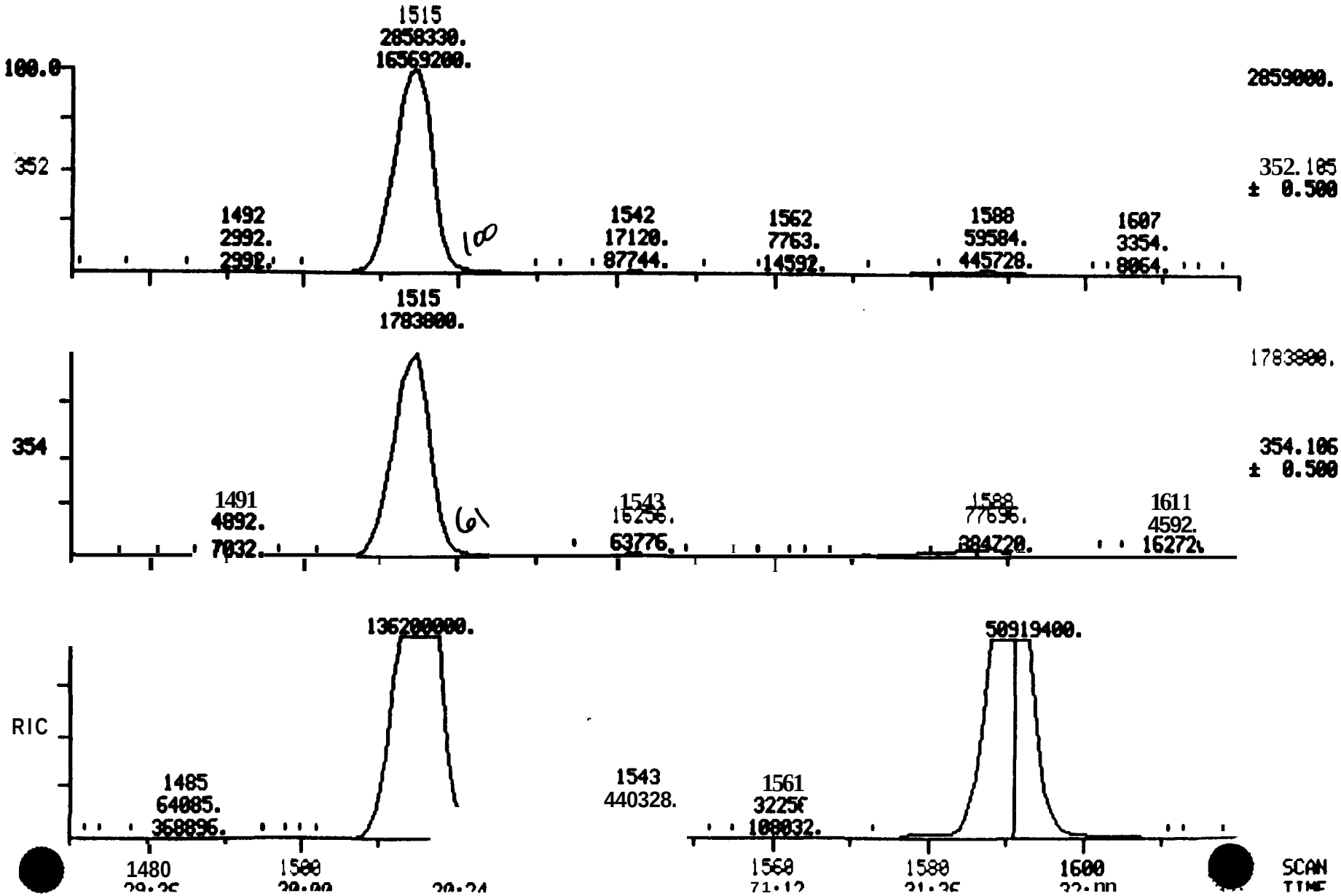
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 1490 TO 1640
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 2.0 J 0 BASE: U 20, 3



320 0431

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 1470 TO 1620
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

1.07



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 1000 TO 1230

03/27/91 13:02:00 CALI: CAL910306A #2

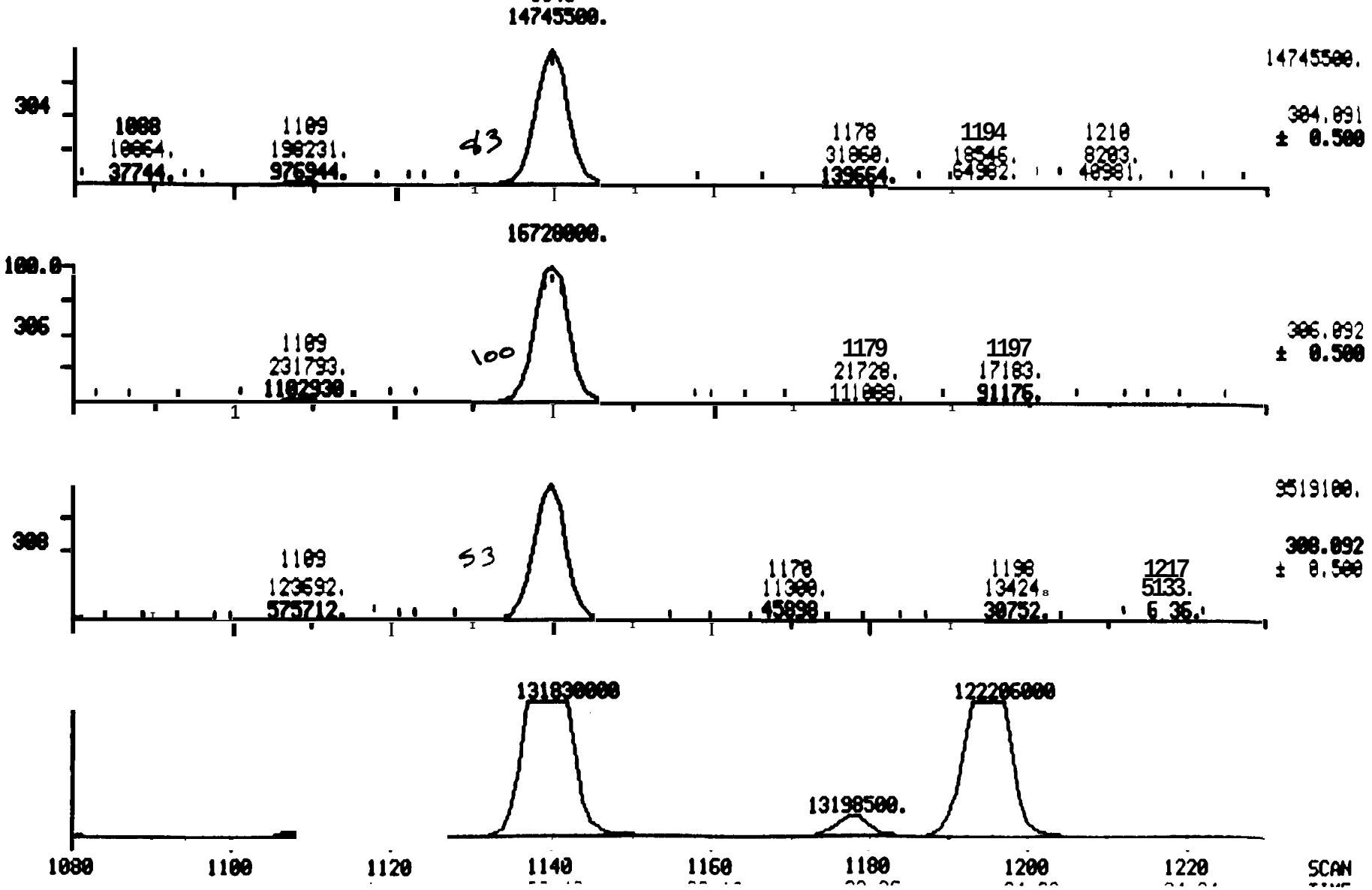
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

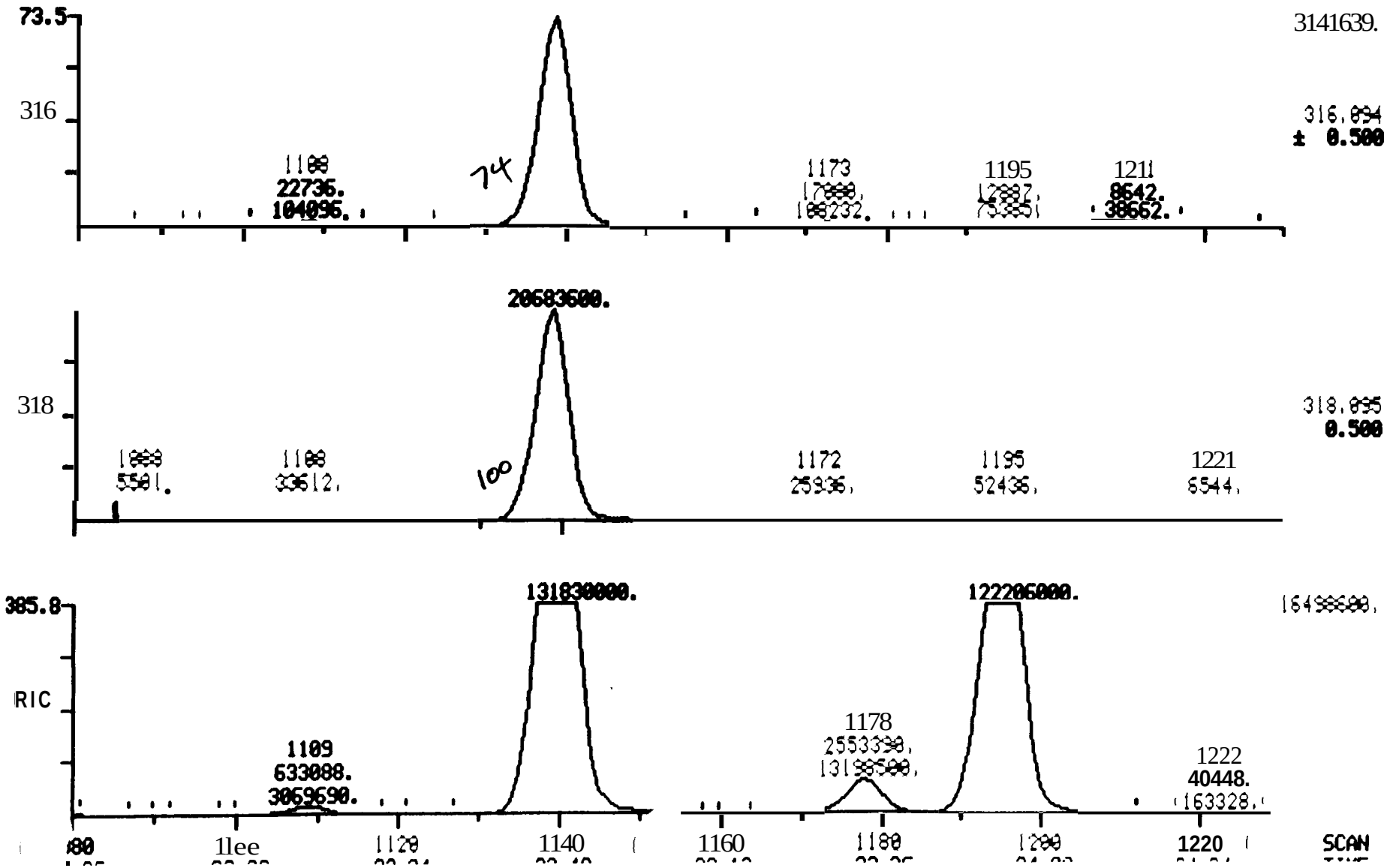
TCDF

1.44



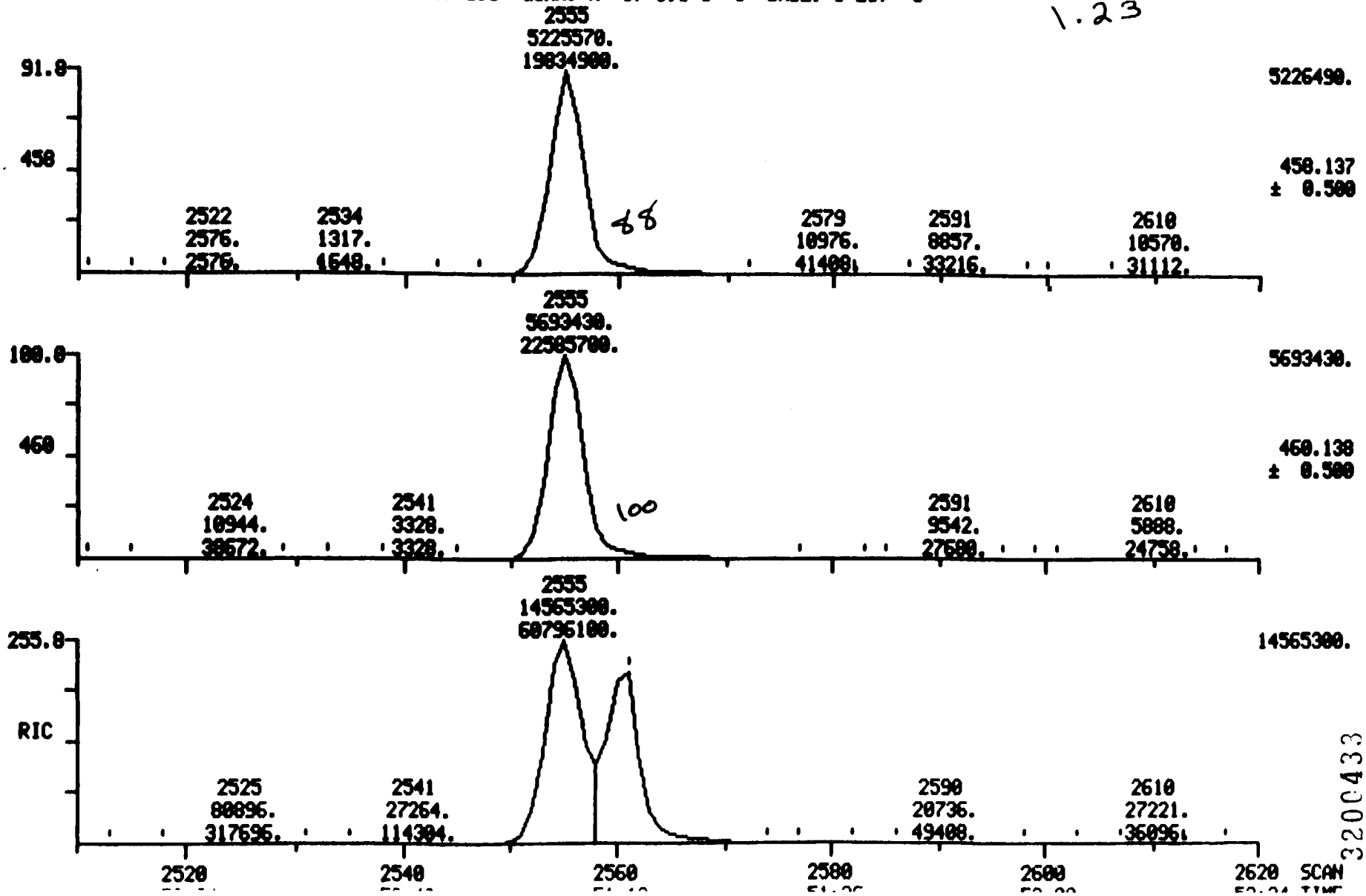
60M

1.44


73.5
316
3141639.
316.094
± 0.500
1100
22736.
104096.
74
1173
1195
1211
8642.
38662.
20583600.
318
318.095
0.500
1100
33612.
100
1172
25936.
1195
52436.
1221
6544.
385.8
RIC
131830000.
122206000.
1109
633088.
3069690.
1178
1222
40448.
163328.
1140
1160
1180
1220
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 2510 TO 2620 OCDD
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

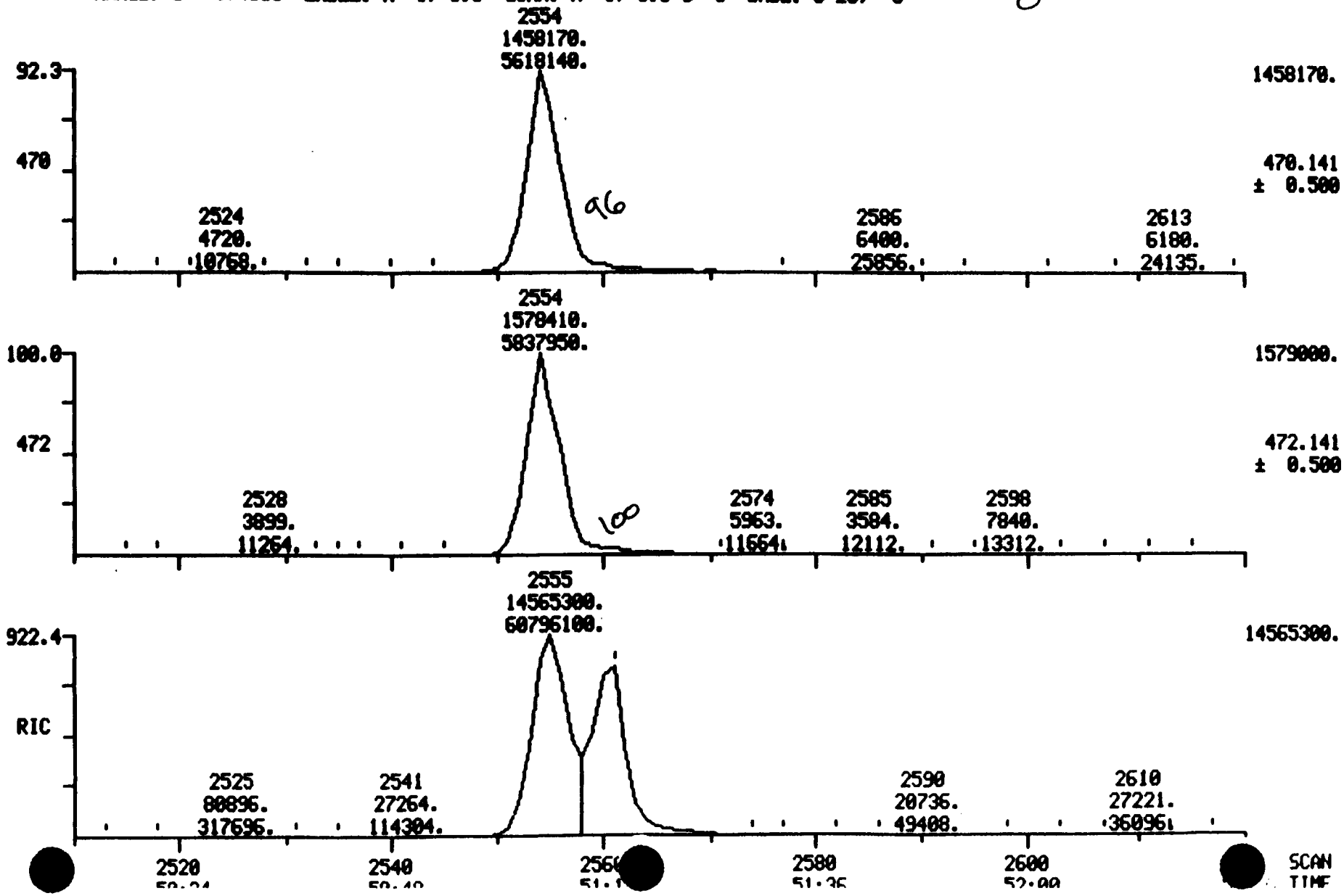
1.23



320C433

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 2510 TO 2620
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

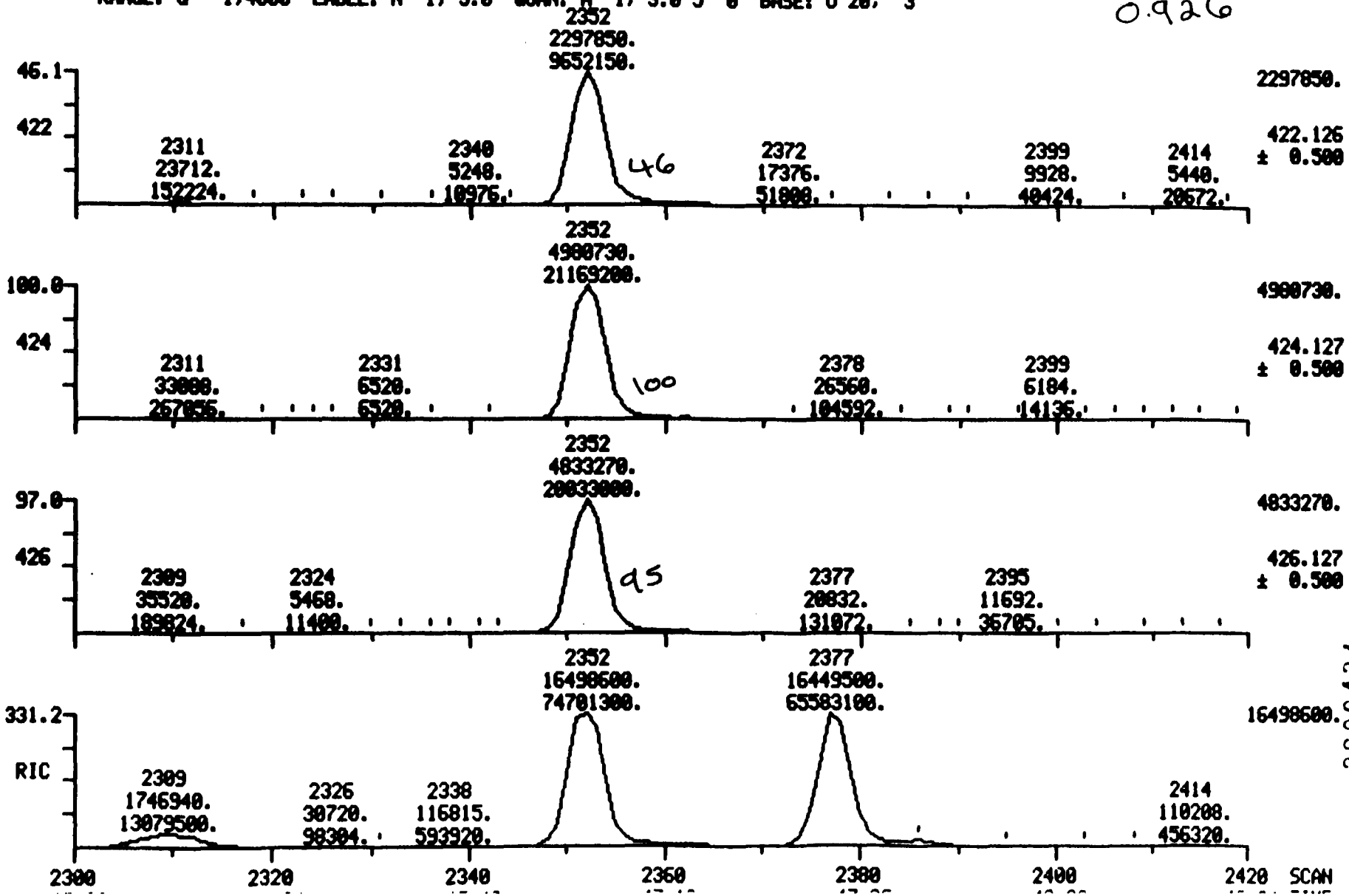
0.499



HpCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 2300 TO 2420
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

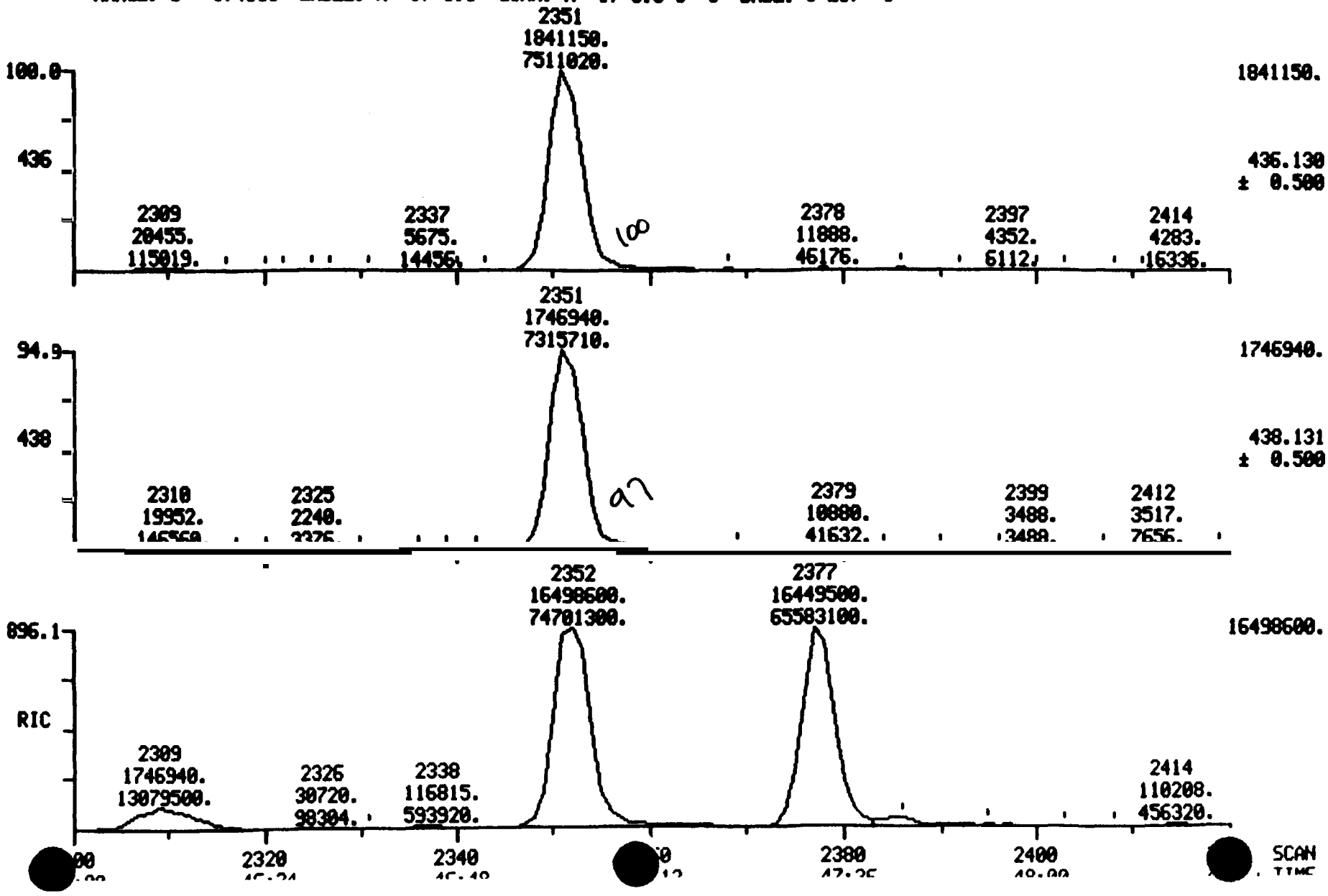
0.926



320C434

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 2300 TO 2420
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.646

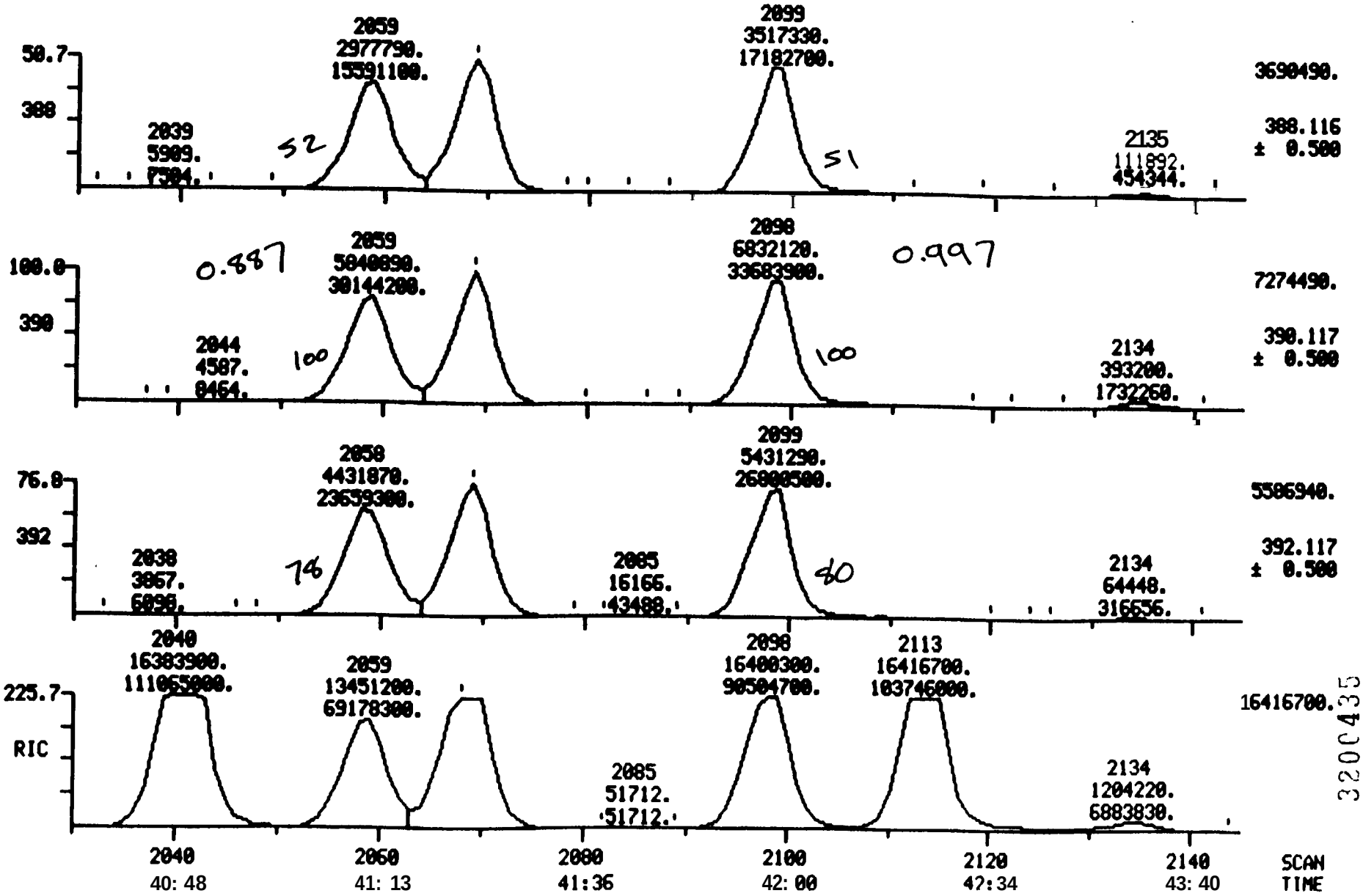


HxCDD

MIDRIC+MASS CHROMATOGRAMS
03/27/91 13:02:00
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506V1 #1
CALI: CAL910306A #2

SCANS 2030 TO 2145

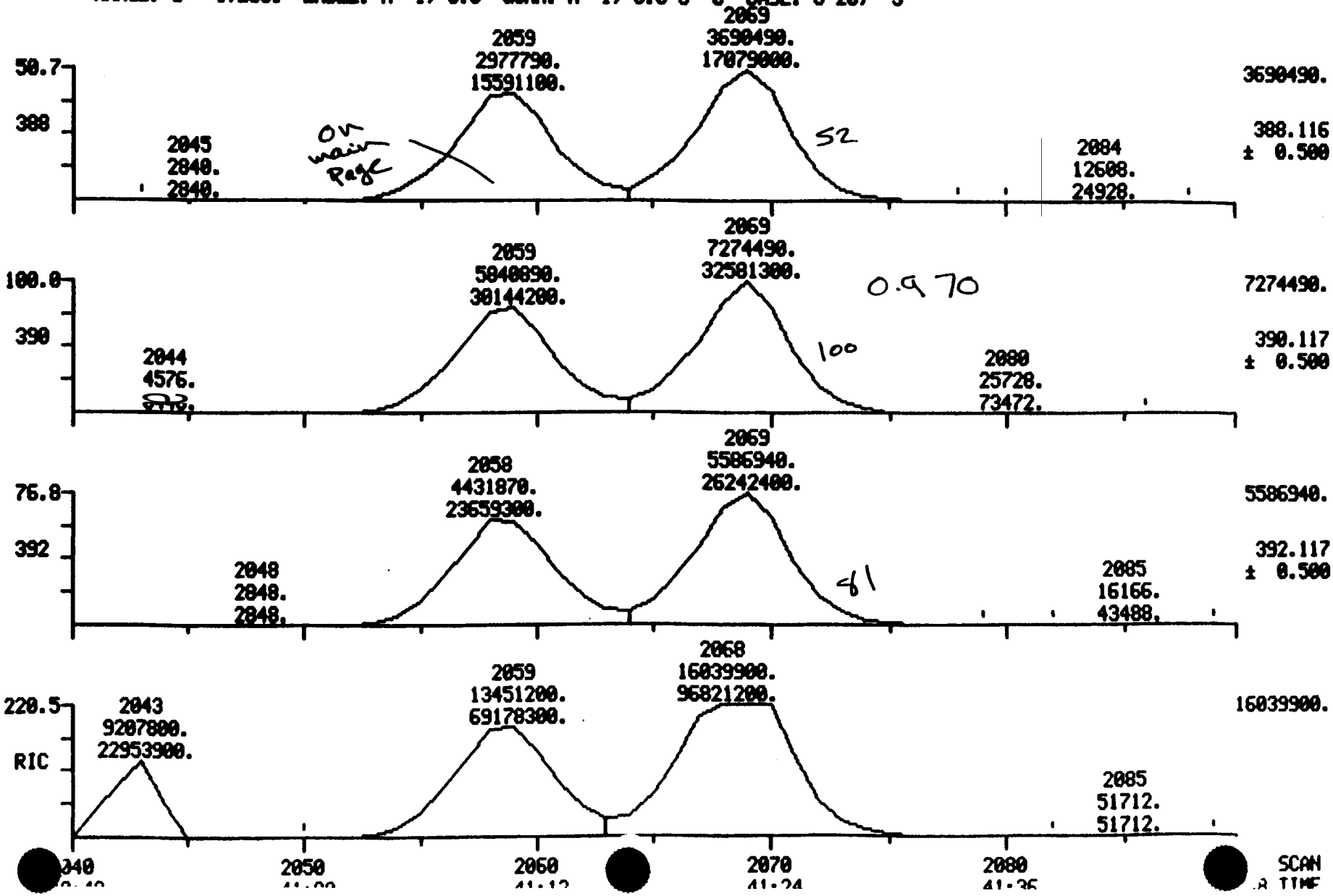


3200435

1/1

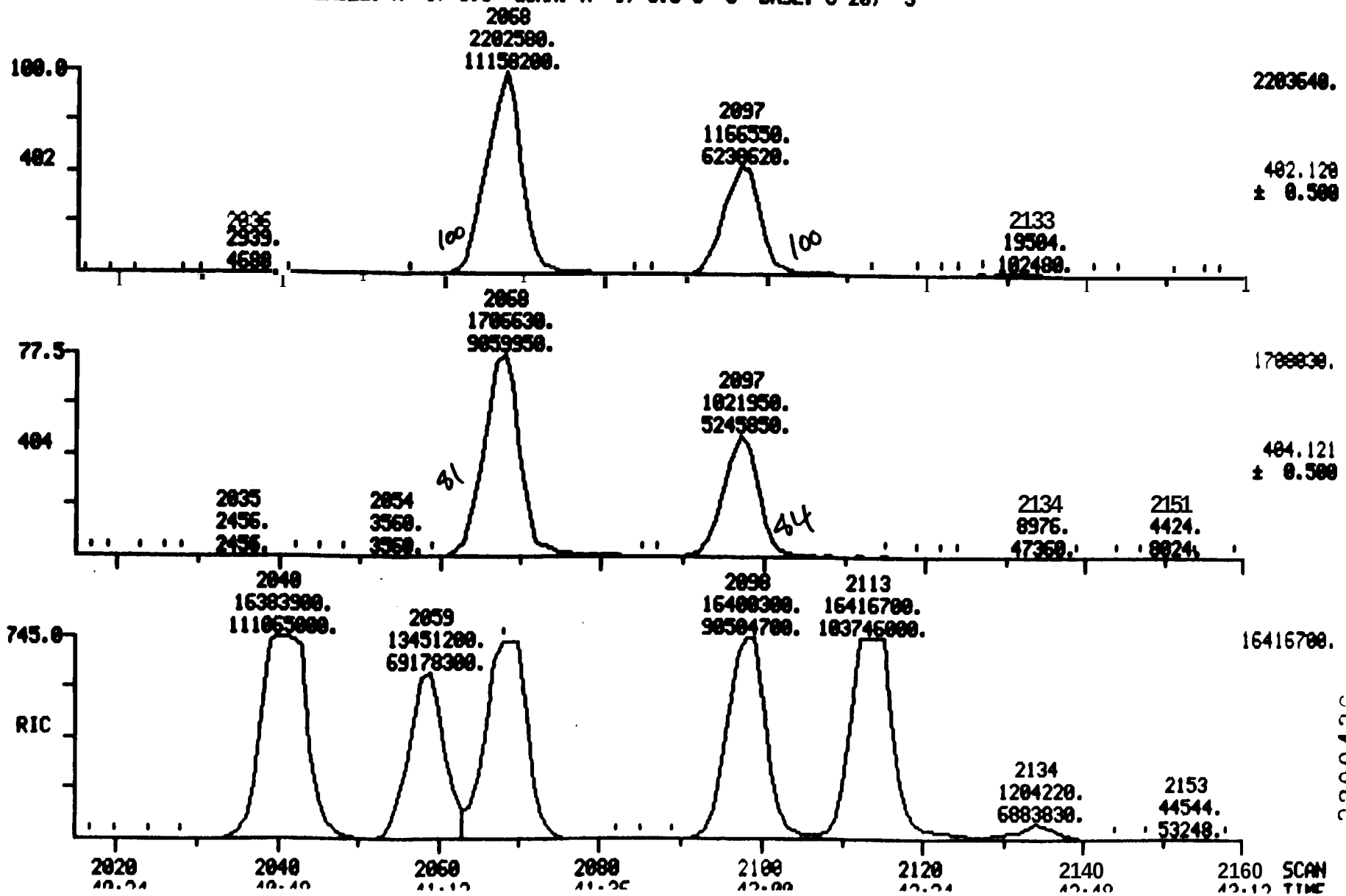
HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2661 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 2015 TO 2160
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

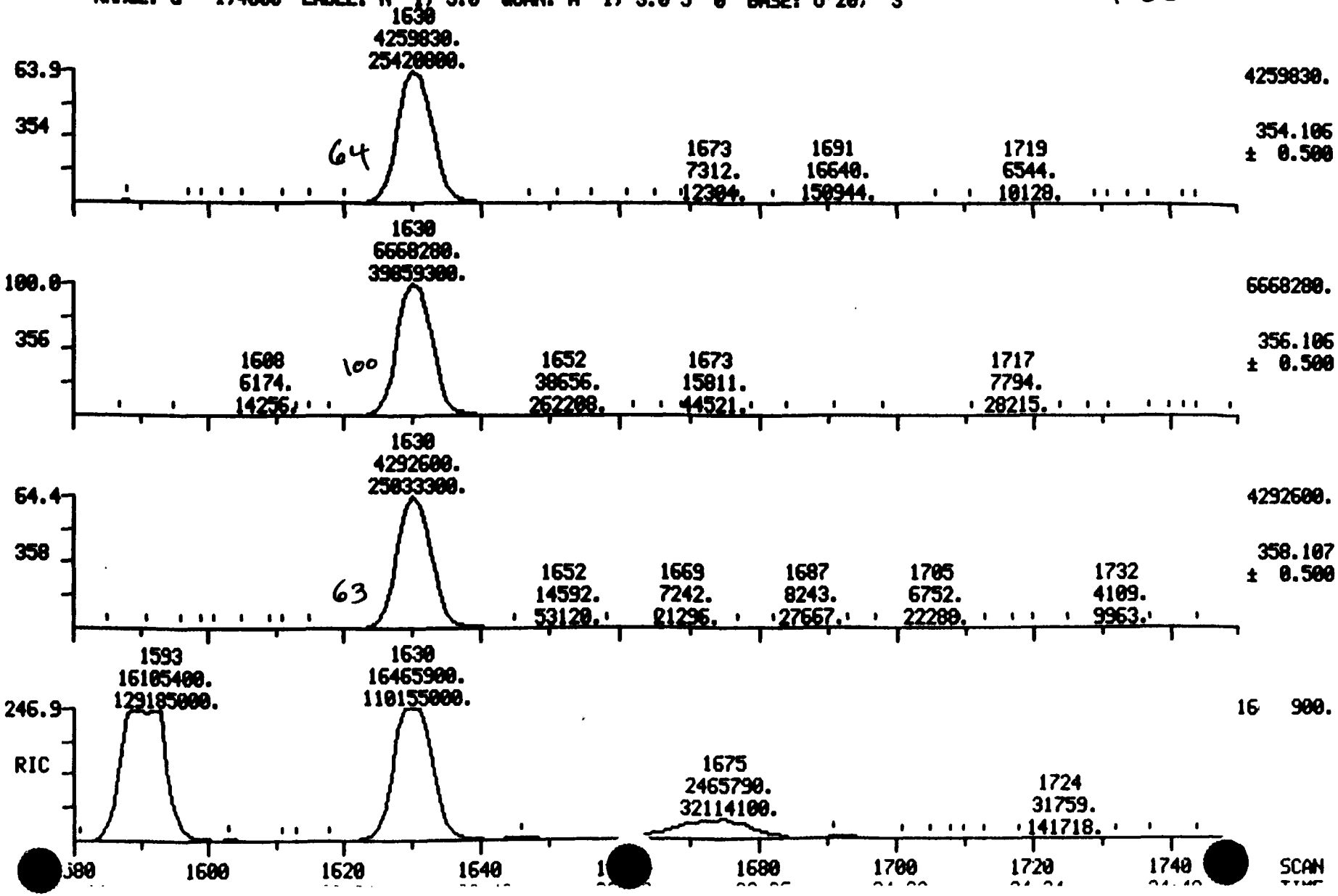
0480



3200436

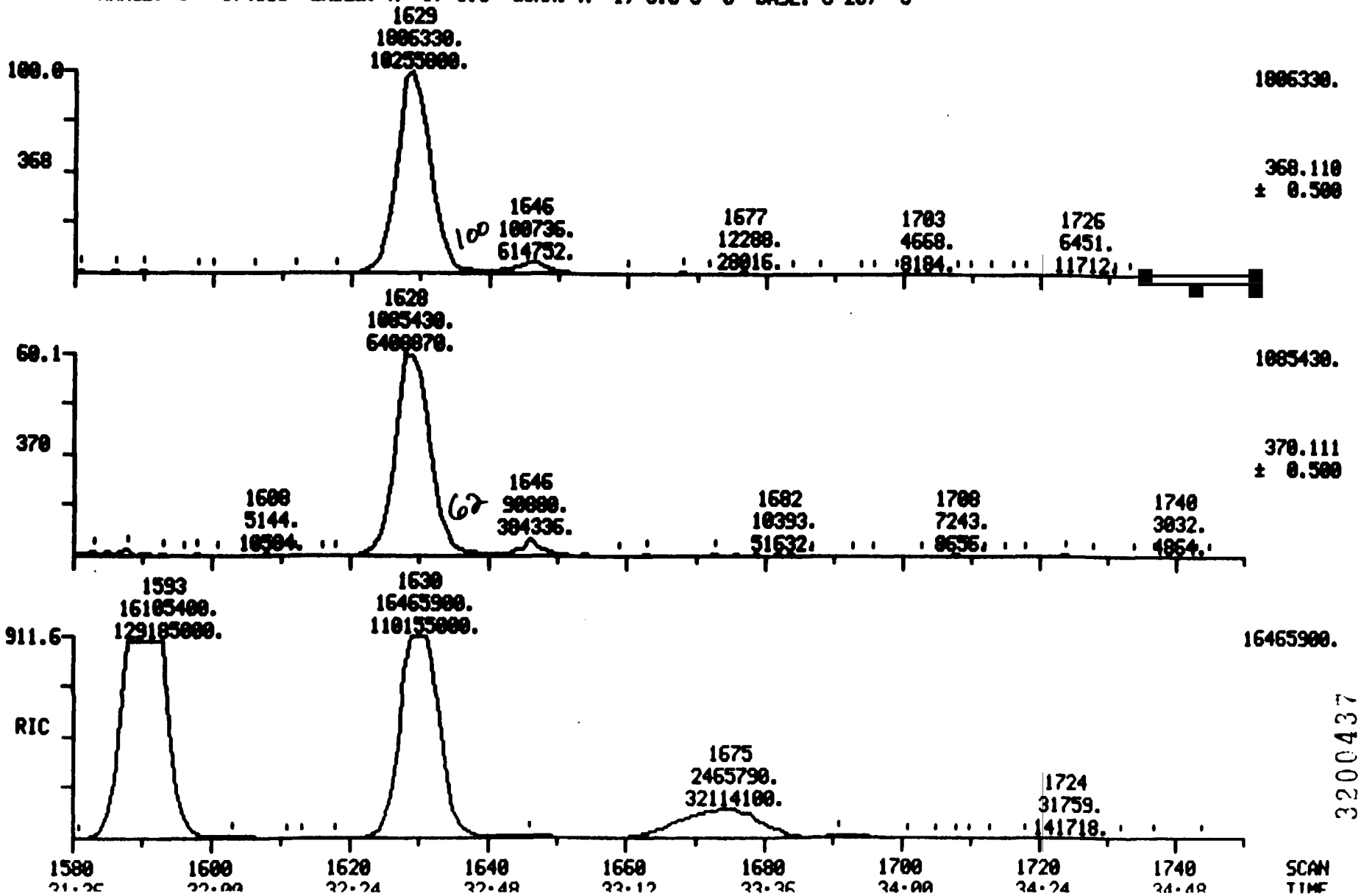
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.30



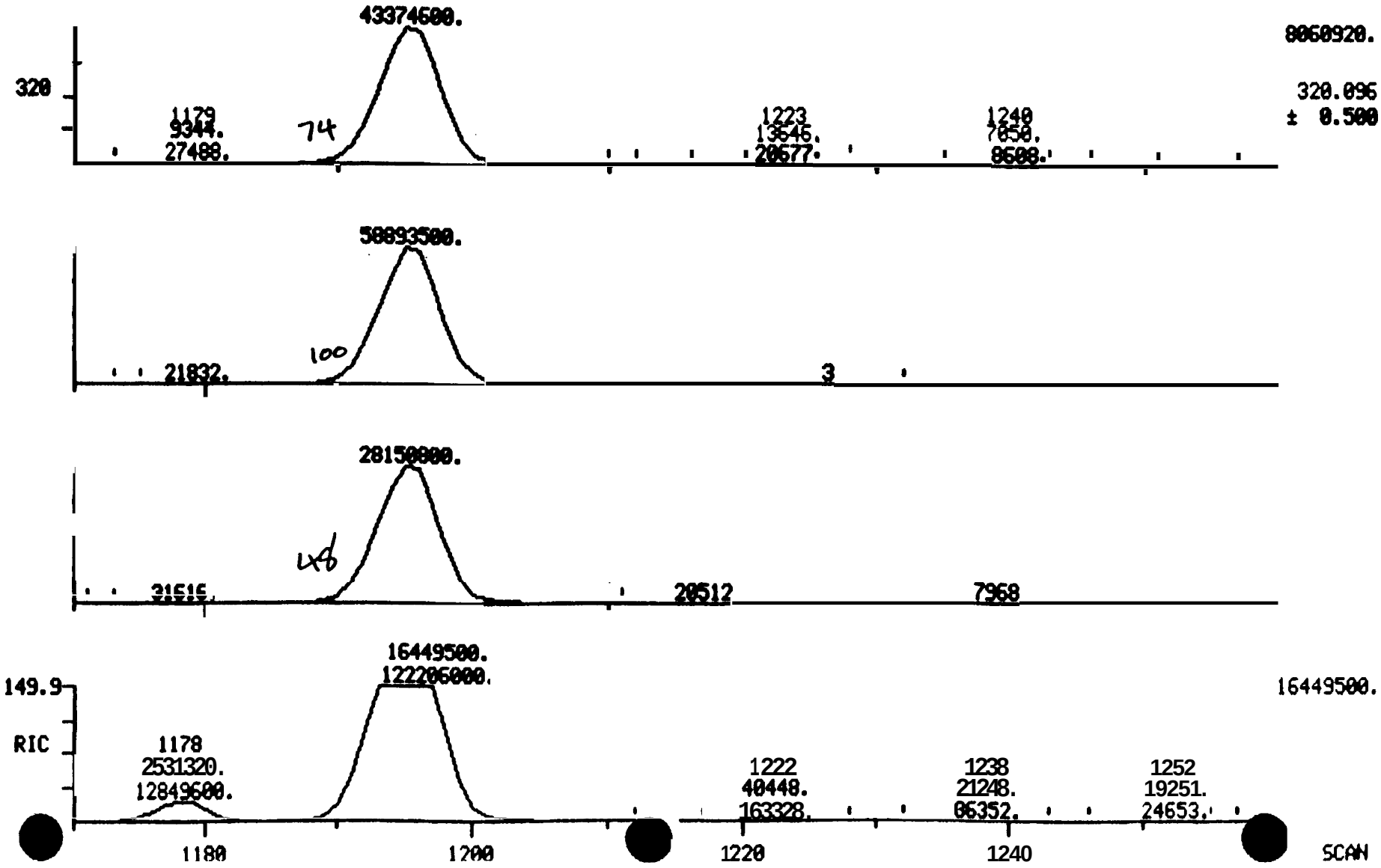
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 1500 TO 1750
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.670



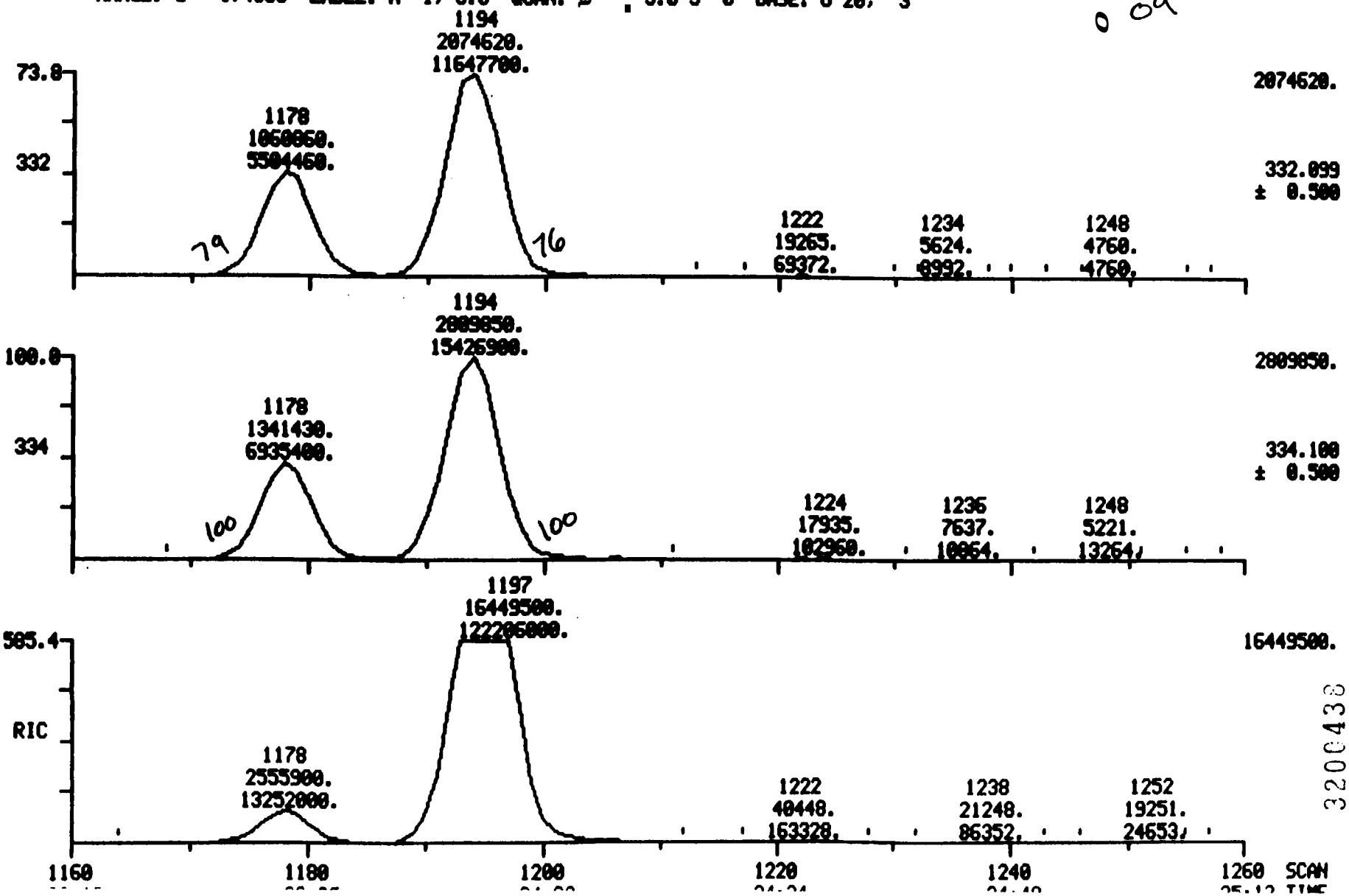
3200437

2UL


43374600.
8060920.
320
320.096
± 0.500
1179
9344.
27488.
74
1223
13546.
20677.
1240
7650.
8608.
58893500.
21832.
100
3
28150000.
31515.
46
20512
7968
16449500.
122206000.
149.9
RIC
1178
2531320.
12849600.
1222
40448.
163328.
1238
21248.
86352.
1252
19251.
24653.
16449500.
1180
1200
1220
1240
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V1 #1 SCANS 1160 TO 1260
03/27/91 13:02:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: ρ 3.0 J 0 BASE: U 20, 3

0 09



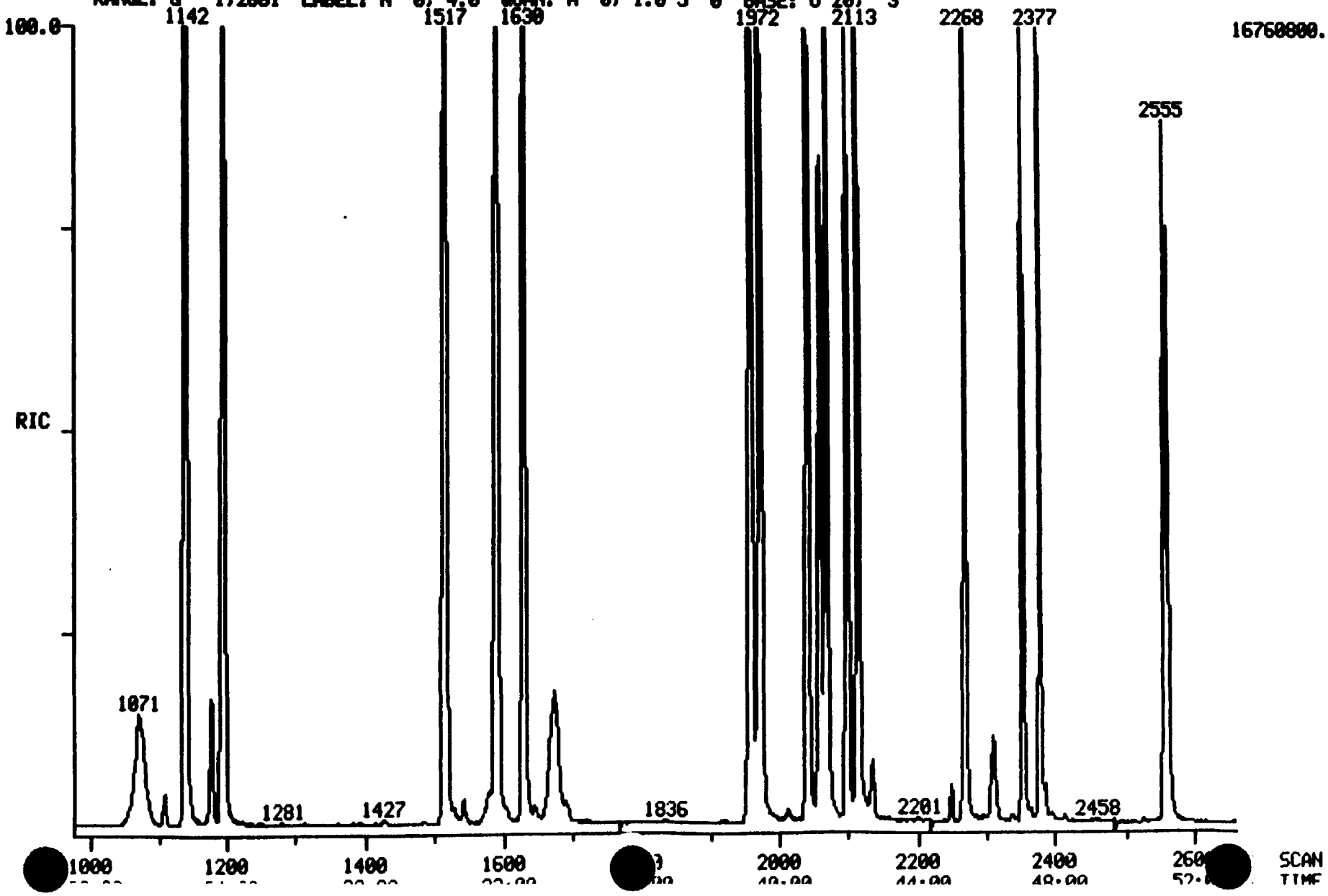
3200438

MIDRIC
03/27/91 13:02:00
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #1 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2661 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: 68506V1 #1
CALI: CAL910306A #2

SCANS 975 TO 2661

alc.nm 3-28-91
QC FB 3-28-91



3200430

4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.050	0.054	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Pos
8	435.550	436.050	0.052	3	100	40	1	0	Por
9	437.550	438.050	0.052	3	100	40	1	0	Pos
10	441.350	442.050	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	480.050	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

3/27/91 11:33:02 SCAN 2631
Acquisition stopped

3/27/91 11:33:04
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2631 Centroid

Mode	Scans	Secs	out of	%	Peaks per scan	per sec
Centroid	2628	615.3	3133.6	19.3	80949. 31.	26.

HID scan
Scan time: 1.200 s

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	HPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Por
2	339.650	340.150	0.052	3	100	40	1	0	Po.
3	341.650	342.150	0.034	3	100	40	1	0	Po.
4	351.650	352.150	0.052	3	100	40	1	0	Po.
5	353.650	354.150	0.054	3	100	40	1	0	Po.
6	355.650	336.150	0.052	3	100	40	1	0	Po.
7	357.650	358.130	0.054	3	100	40	1	0	Po.
8	367.650	368.130	0.052	3	100	40	1	0	Po.
9	369.650	370.130	0.052	3	100	40	1	0	Po.
10	371.650	372.150	0.032	3	100	40	1	0	Por
11	373.650	374.150	0.052	3	100	40	1	0	Po.
12	375.650	376.150	0.032	3	100	40	1	0	Po.
13	379.630	380.150	0.032	3	100	40	1	0	Po.
14	381.650	382.150	0.052	3	100	40	1	0	Po.
15	385.650	386.150	0.032	3	100	40	1	0	Po.
16	387.650	388.150	0.052	3	100	40	1	0	Po.
17	389.650	390.150	0.052	3	100	40	1	0	Po.
18	391.650	392.150	0.052	3	100	40	1	0	Po.
19	401.650	402.150	0.052	3	100	40	1	0	Po.
20	403.650	404.150	0.034	3	100	40	1	0	Po.
21	445.330	446.050	0.032	3	100	40	1	0	Po.

3/27/91 11:46:33 SCAN 2219 OF 4000

MID scan
Scan time: 1.200 ■

Desc: 03
Samp. Int.: 0.200 ms

Mars interval.: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1 '	371.650	372.150	0.032	3	100	40	1	0	Po.
2	373.650	374.130	0.052	3	100	40	1	0	Pos
3	375.650	376.150	0.052	3	100	40	1	0	Po.
4	385.650	386.150	0.052	3	100	40	1	0	Po.
3	387.650	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.650	392.150	0.052	3	100	40	1	0	Po.
8	401.650	402.150	0.052	3	100	40	1	0	Pos
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	403.330	406.050	0.034	3	100	40	1	0	Po.
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.550	422.050	0.054	3	I00	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Po.
16	425.550	426.050	0.052	3	100	40	1	0	Po.
17	435.550	436.050	0.052	3	100	40	1	0	Po.
18	437.550	438.050	0.052	3	100	40	1	0	Po.
19	479.330	480.050	0.054	3	100	40	1	0	Pos

3/27/91 11:32:00 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Tin.	MPW	MFW	HA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Po.
3	409.550	410.050	0.054	3	100	40	1	0	Pos

3/27/91 11:00:47 SCAN 1 OF 4000 320C410

Acquisition started

Acquire Run 0:68506IV3 ACQUIRING
03/97/91 11:00:00 + 0:04 Free sectors: 19337 Scan: 3 of 4000
Sample: 2UL OF 685:06-IV ● 1000 PPB RUN #3 FOR MULTIPOINT
Conds. : 60M DB-5/TOTALS,
Formula: Instrument: 03 Weight: 0.000
Submitted by: DM Analyst: NM Acct. No: PC4622

********** GC PARAMETERS **********

Loaded GC Desc: BW Current GC oven tmp: 69 DegC Injector : 300 DegC
Current GC Desc: BW GC elapsed time : 1:33 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan Desc: B1 Mass intervals: 21
Scan tire: 1.200 s Samp. int. : 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.052	3	100	40	1	0	Pos
'3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
3	317.650	318.150	0.054	3	100	40	1	0	Por
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Po.
8	323.650	324.150	0.052	3	100	40	1	0	Po.
9	331.650	332.150	0.052	3	100	40	1	0	Po.
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Po.
13	341.650	342.150	0.052	3	100	40	1	0	Po.
14	331.650	352.150	0.054	3	100	40	1	0	Po.
15	353.650	354.150	0.052	3	100	40	1	0	Po.
16	355.650	356.150	0.054	3	100	40	1	0	Po.
17	357.650	358.150	0.052	3	100	40	1	0	Po.
18	367.650	368.150	0.054	3	100	40	1	0	Po.
19	369.650	370.150	0.052	3	100	40	1	0	Po.
20	375.650	376.150	0.052	3	100	40	1	0	Po.
21	409.550	410.050	0.052	3	loo	40	1	0	Po.

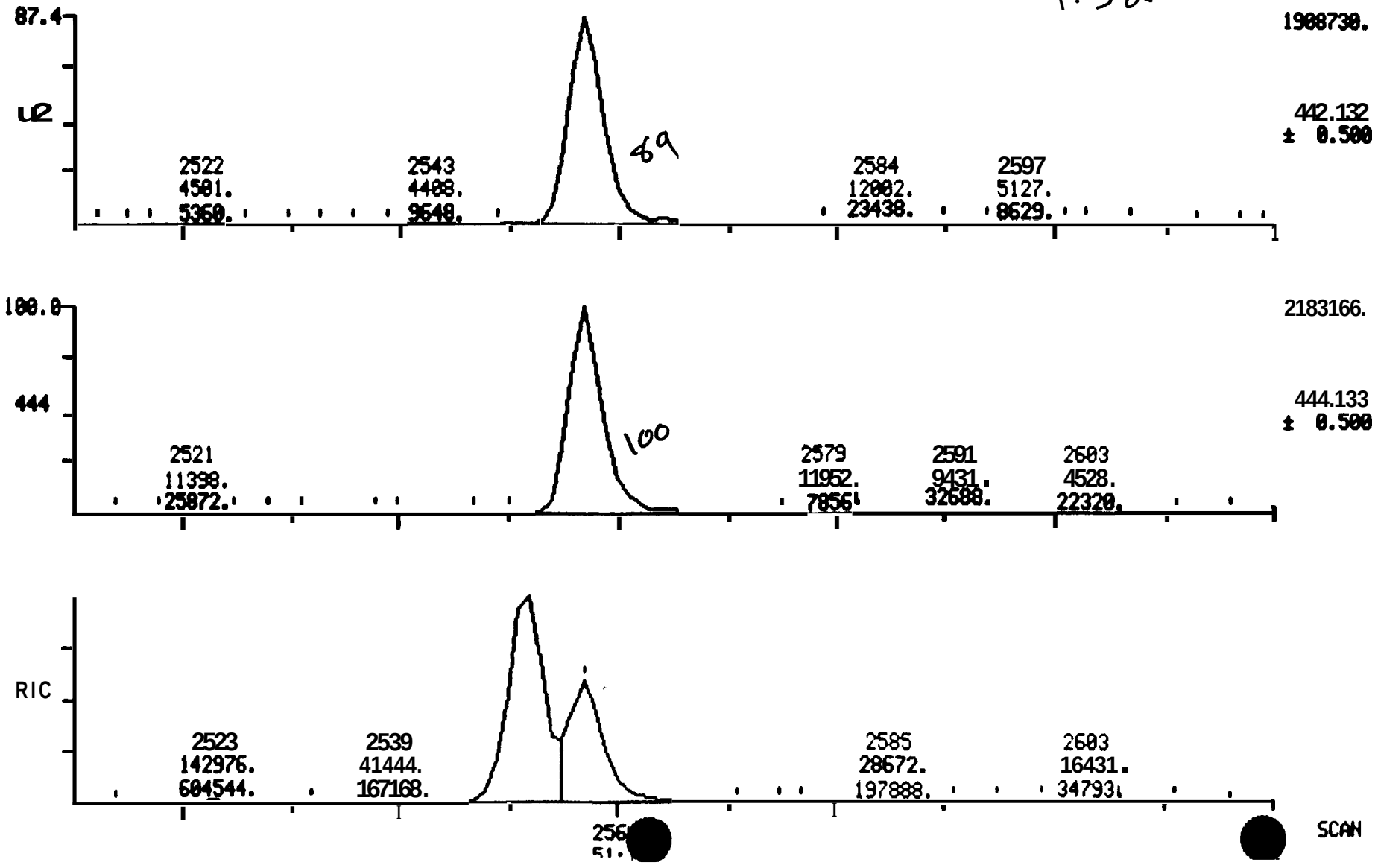
Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/27/91 11:37:18 SCAN 1769 OF 4000

OCDF

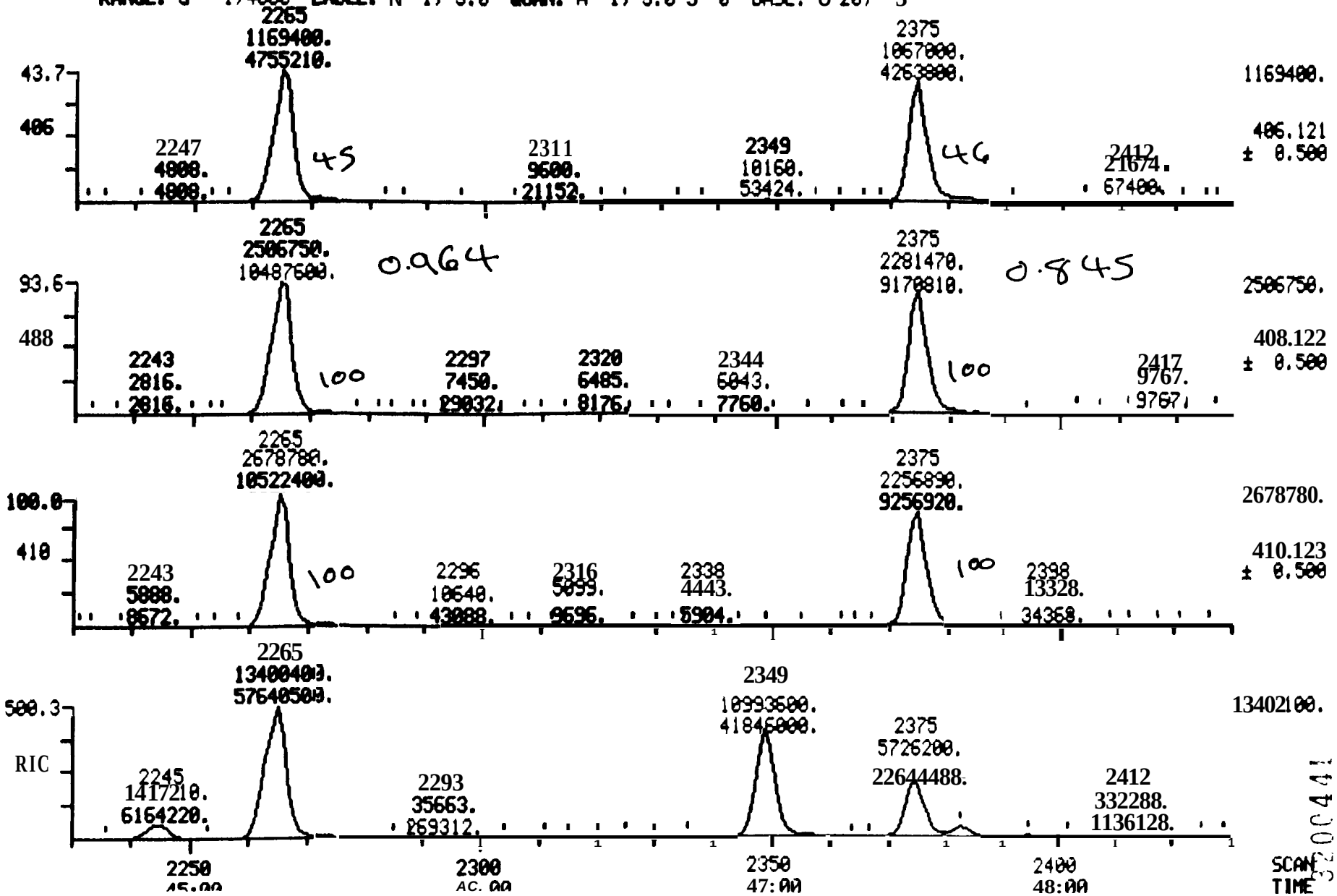
LABEL:

1.32



HpCDF

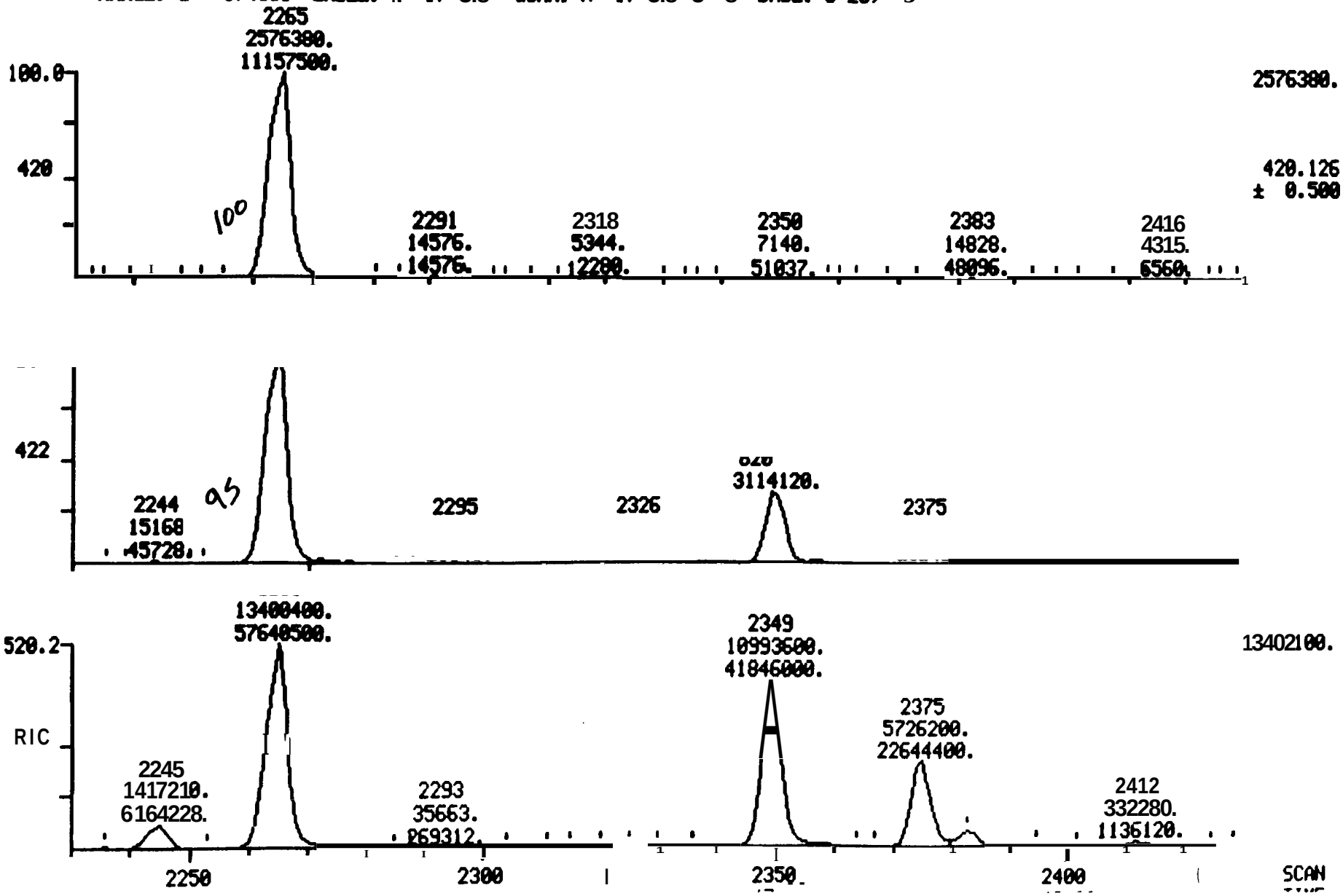
MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 #1 SCANS 2230 TO 2430
03/27/91 11:00:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



32004411

MIDRIC+MASS CHROMATOGRAMS DATA: 68506IV3 01 SCANS 2230 TO 2430
03/27/91 11:00:00 CALI: CAL910306A 02
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.8 QUAN: A 1, 3.8 J 8 BASE: U 20, 3

0.973

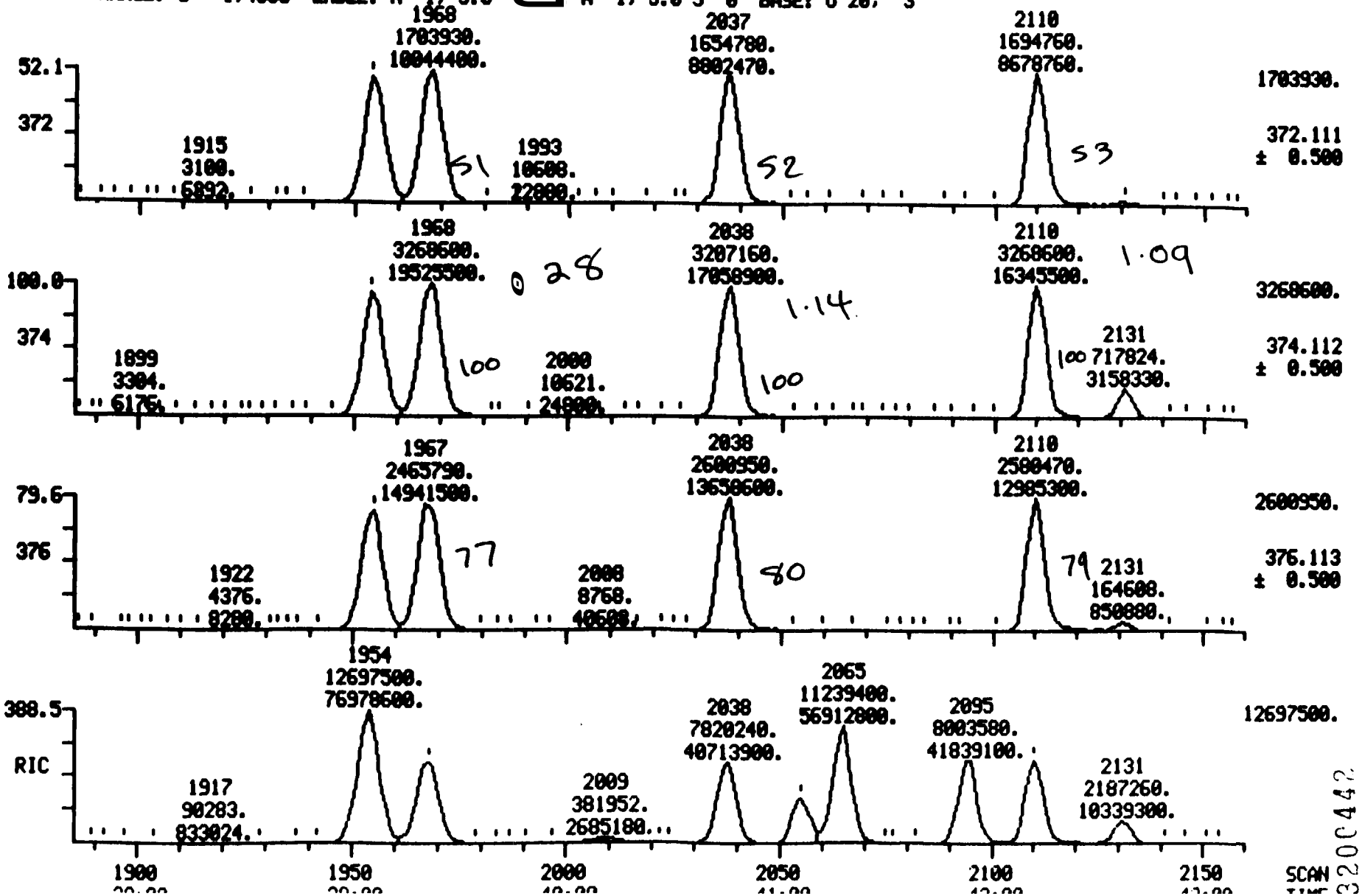


HxCDF

MIDRIC+MASS CHROMATOGRAMS
03/27/91 11:00:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506IV3 #1
CALI: CAL910306A #2

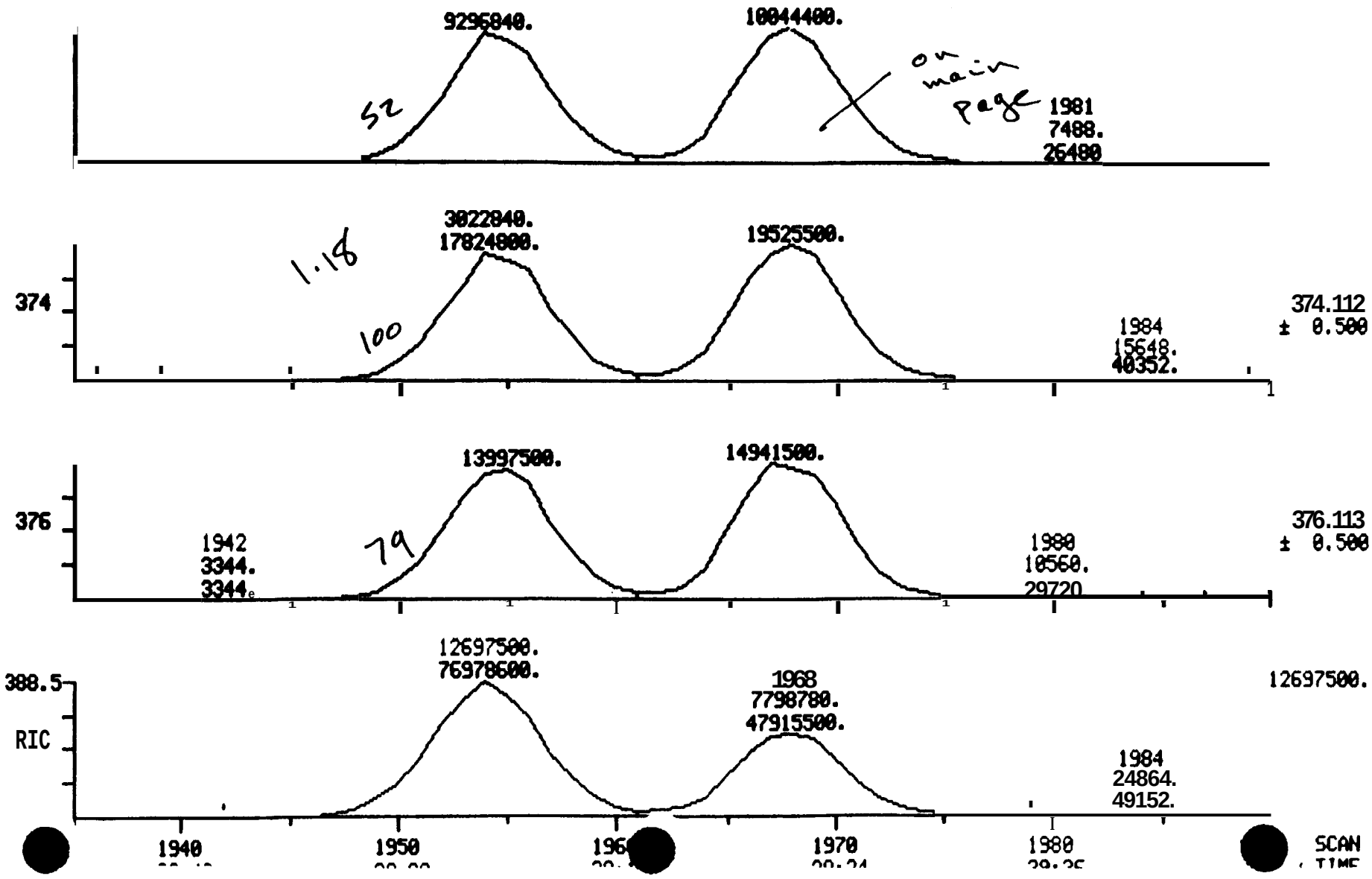
SCANS 1885 TO 2160



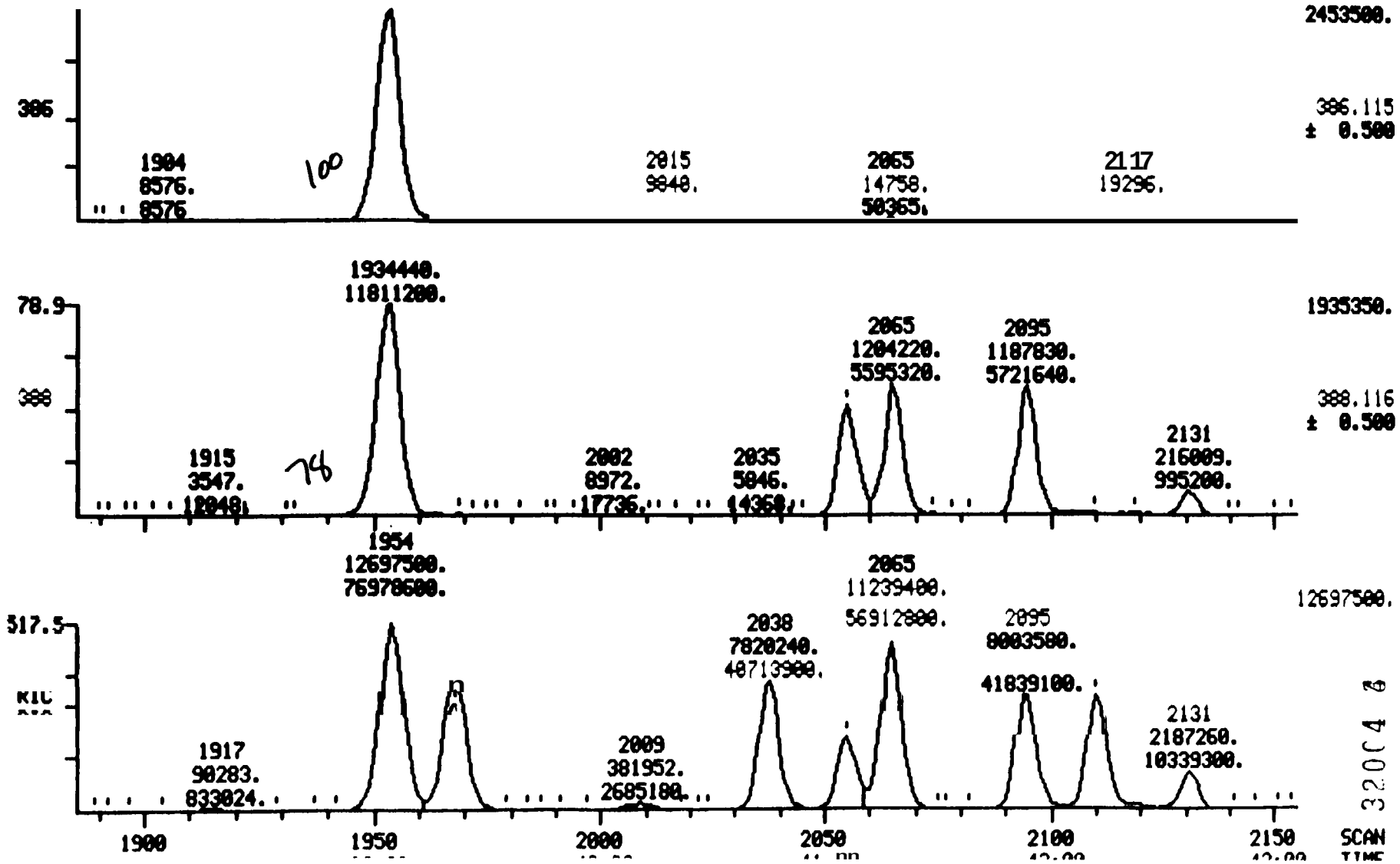
320C442

1/1

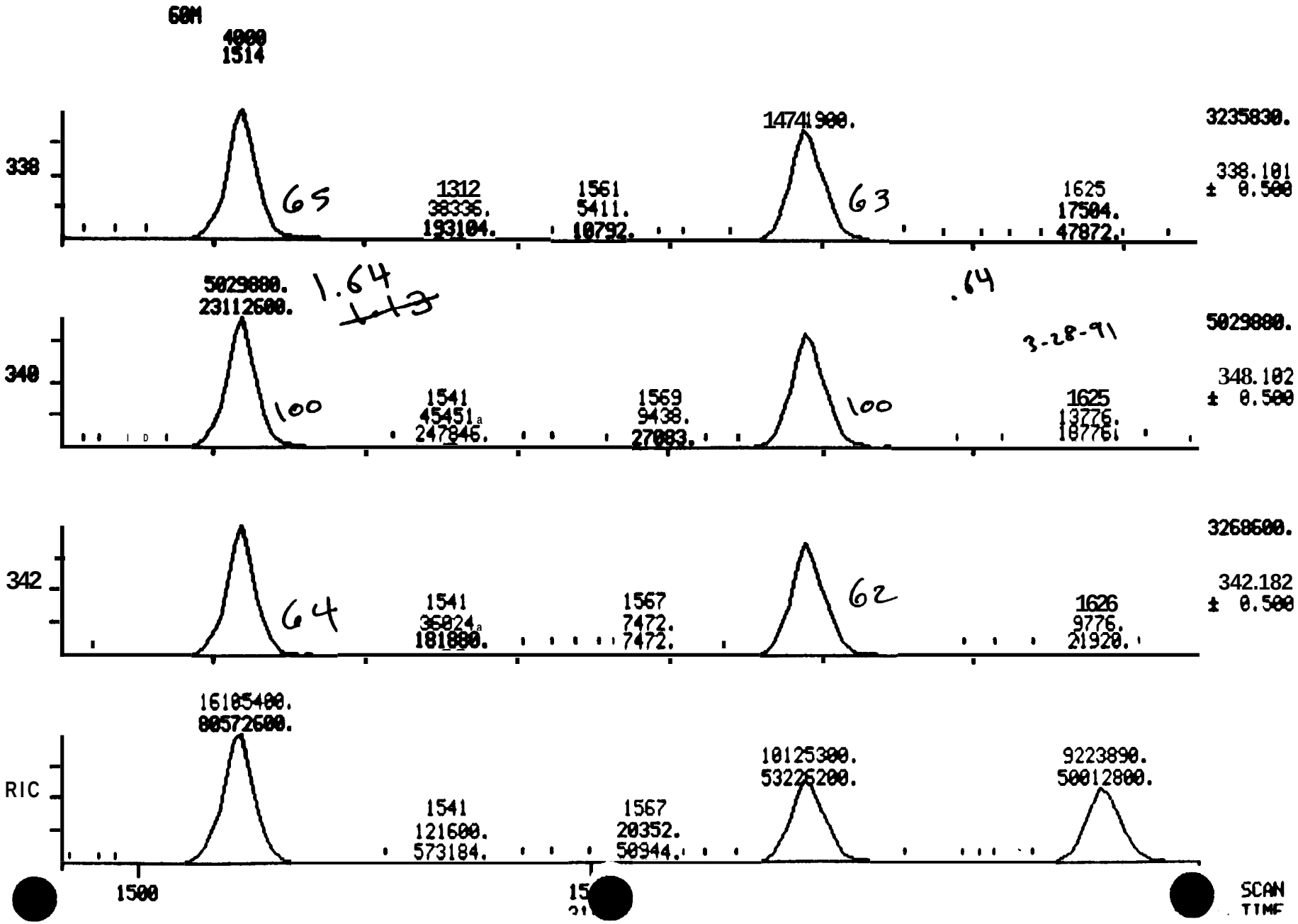
HxCDF


9296840.
10044400.
52
on main page
1981
7488.
26480
3022840.
17824800.
19525500.
1.18
374
100
1984
15648.
40352.
374.112
± 0.500
13997500.
14941500.
376
79
1942
3344.
3344.
1980
10560.
29720
376.113
± 0.500
12697500.
76978600.
388.5
RIC
1968
7798780.
47915500.
12697500.
1984
24864.
49152.
1940
1950
1970
1980
SCAN
TIME

1.20


2453500.
386
386.115
± 0.500
1904
8576.
8576
100
2015
9840.
2065
14758.
50365.
2117
19296.
1934440.
11811200.
78.9
1935350.
388
388.116
± 0.500
1915
3547.
12048.
74
2002
8972.
17736.
2035
5846.
14368.
2065
1204220.
5595320.
2095
1187830.
5721640.
2131
216009.
995200.
1954
12697500.
76978600.
2065
11239400.
56912800.
12697500.
517.5
2038
7820240.
48713900.
2095
8003500.
41839100.
1917
90283.
833024.
2009
381952.
2685180.
2131
2187260.
10339300.
1900
1950
2000
2050
2100
2150
SCAN

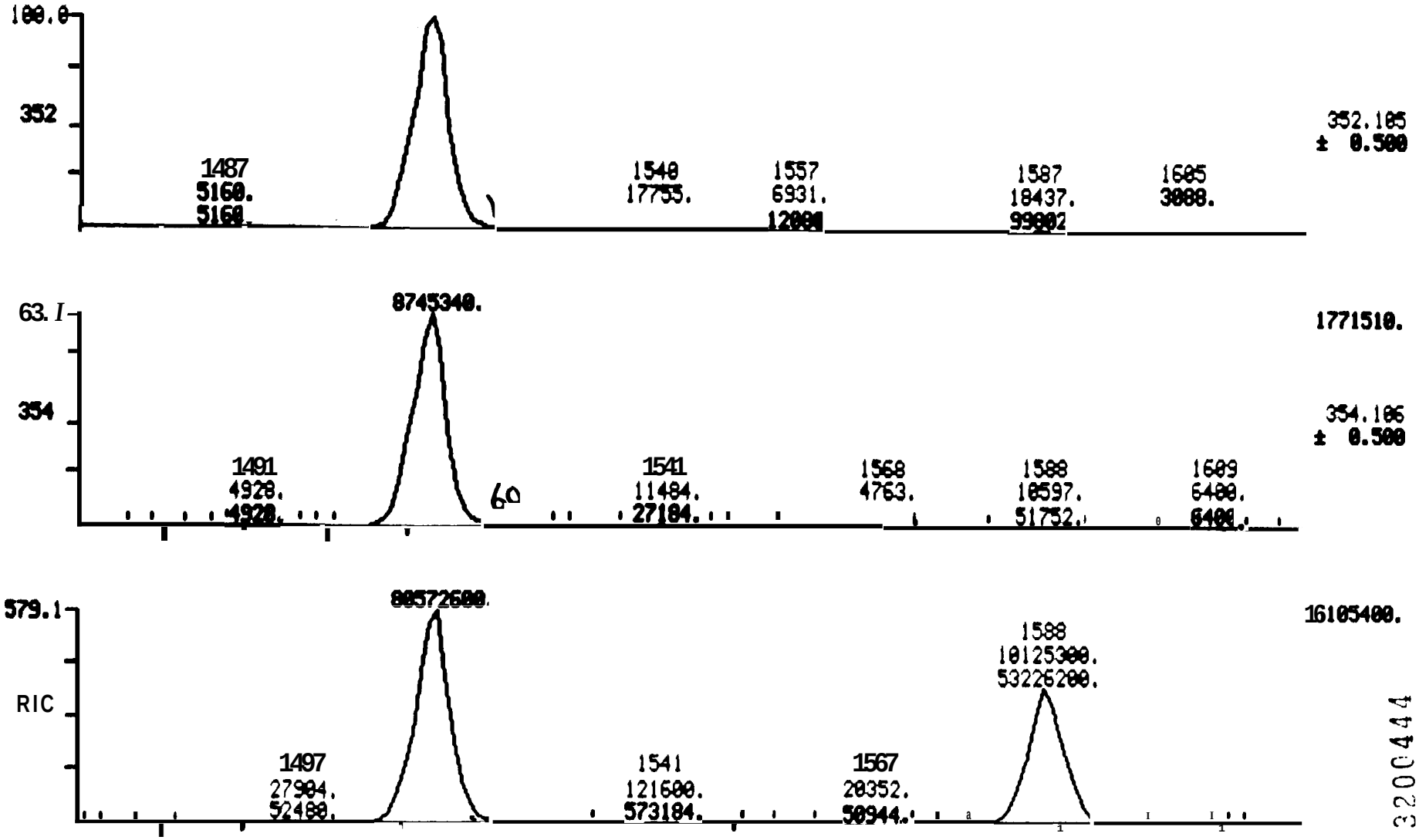
PecDF


60M
4000
1514
338
65
1312
38336.
193104.
1561
5411.
10792.
14741900.
63
1625
17504.
47872.
3235830.
338.101
± 0.500
5029880.
23112600.
1.64
100
1541
45451a
247846.
1569
9438.
27083.
.64
100
1625
13776.
18776.
3-28-91
5029880.
348.102
± 0.500
342
64
1541
36024a
181880.
1567
7472.
7472.
62
1626
9776.
21920.
3268600.
342.182
± 0.500
RIC
16105400.
80572600.
1541
121600.
573184.
1567
20352.
50944.
10125300.
53226200.
9223890.
50012800.
1500
SCAN
TIME

MIDRIC+MASS CHROMATOGRAMS
03/27/91 11:00:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.

DATA: 68506IV3 #1
CALI: CAL910306A #2

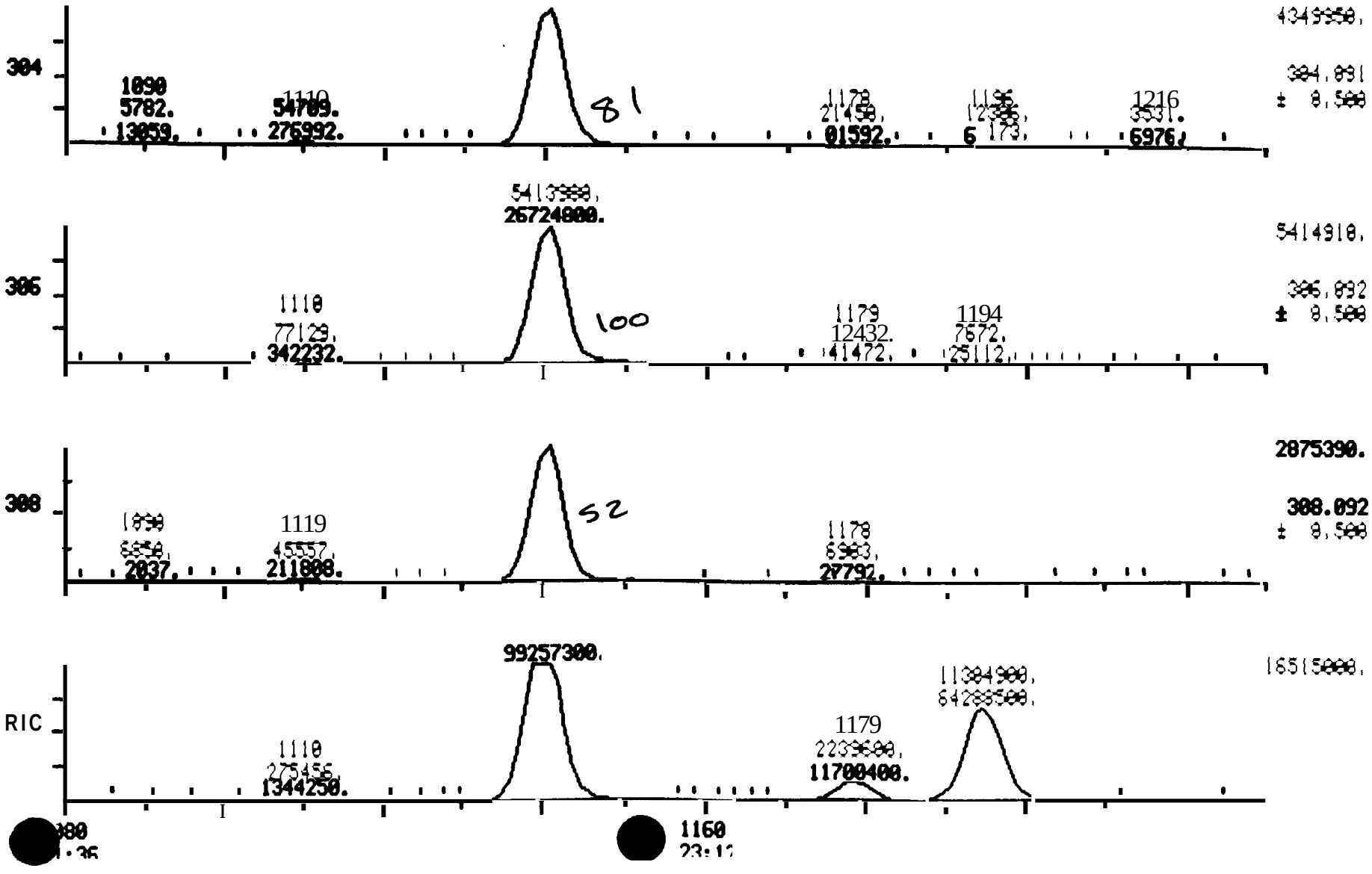
SCANS 1470 TO 1620



32004444

TCDF

1.43

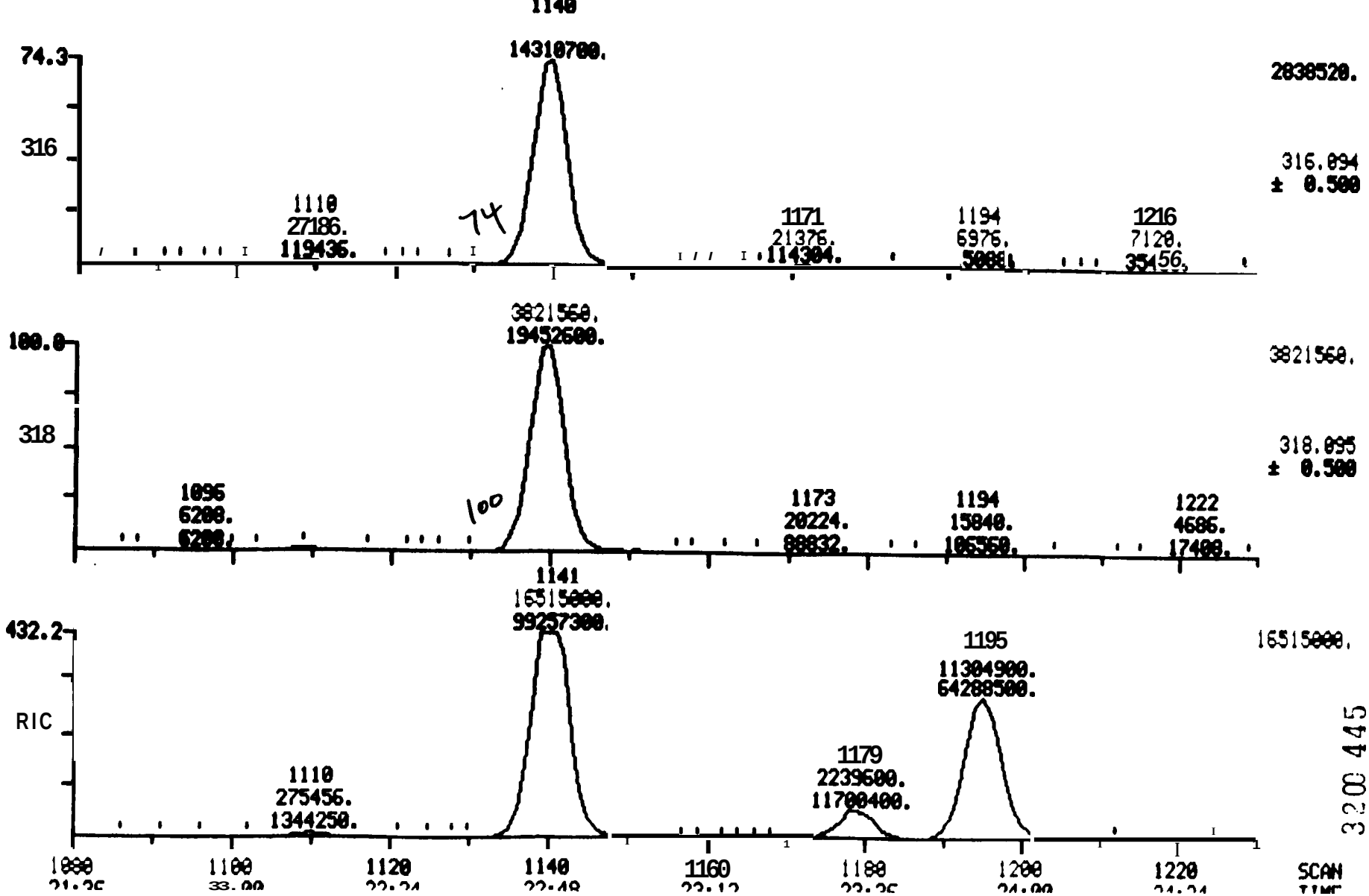

304
1090
5782.
13059.
1110
54709.
276992.
81
1178
21458.
01592.
1195
12386.
6173.
1216
3531.
6976.
4349550.
304.091
± 0.500
305
1110
77129.
342232.
5413988.
26724800.
100
1179
12432.
41472.
1194
7672.
25112.
5414910.
305.092
± 0.500
308
1090
5858.
2037.
1119
45557.
211808.
52
1178
6983.
27792.
2875390.
308.092
± 0.500
RIC
1110
275456.
1344250.
99257300.
1179
2239600.
11700400.
11384900.
64288500.
16515000.
1160

MIDRIC+MASS CHROMATOGRAMS
03/27/91 11:00:00
SAMPLE: 2UL OF 685:06-IV @ 1000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: 68506IV3 #1
CALI: CAL910306A #2

SCANS 1080 TO 1230

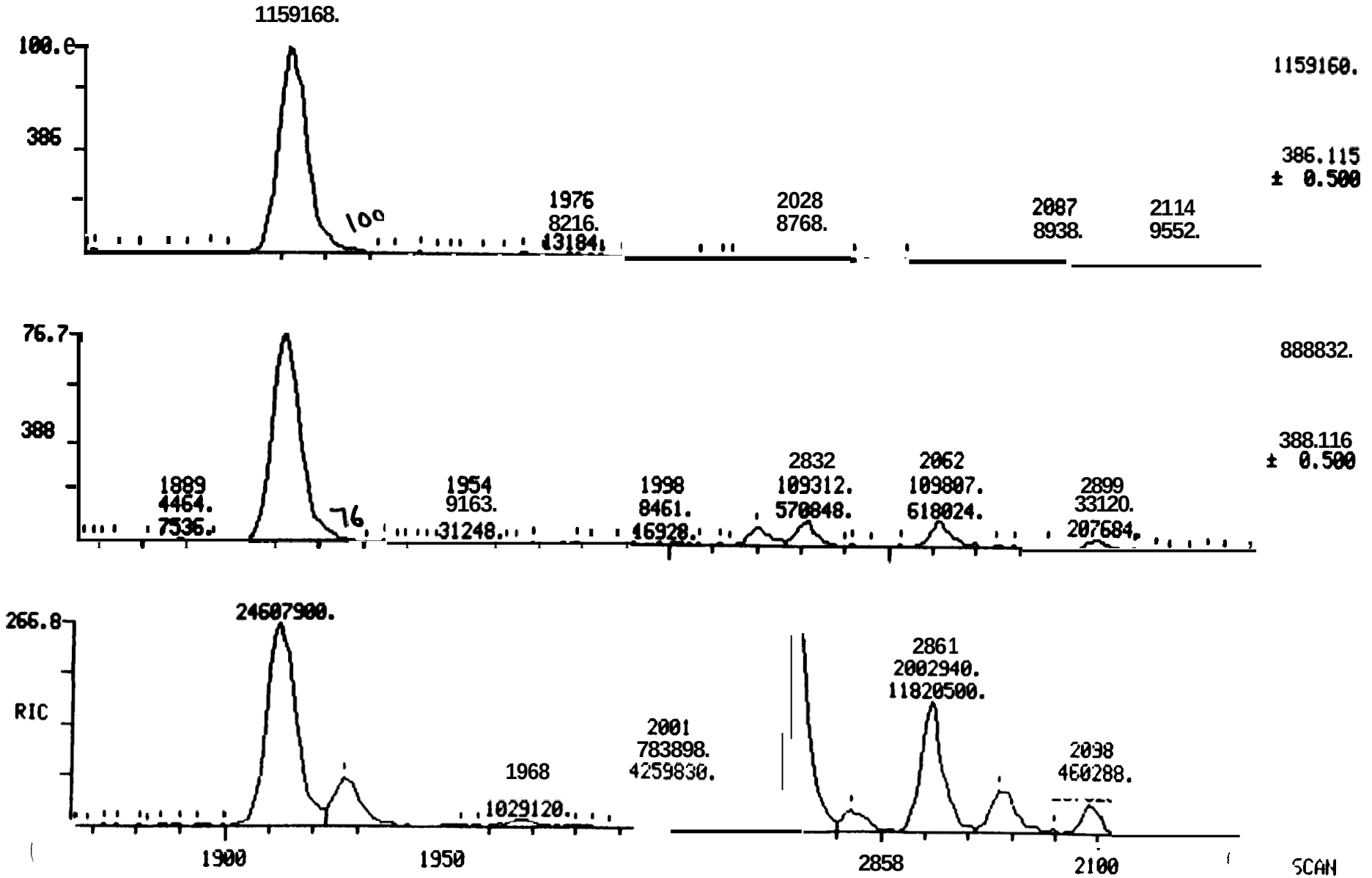
1.54



3200 445

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 1865 TO 2135
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

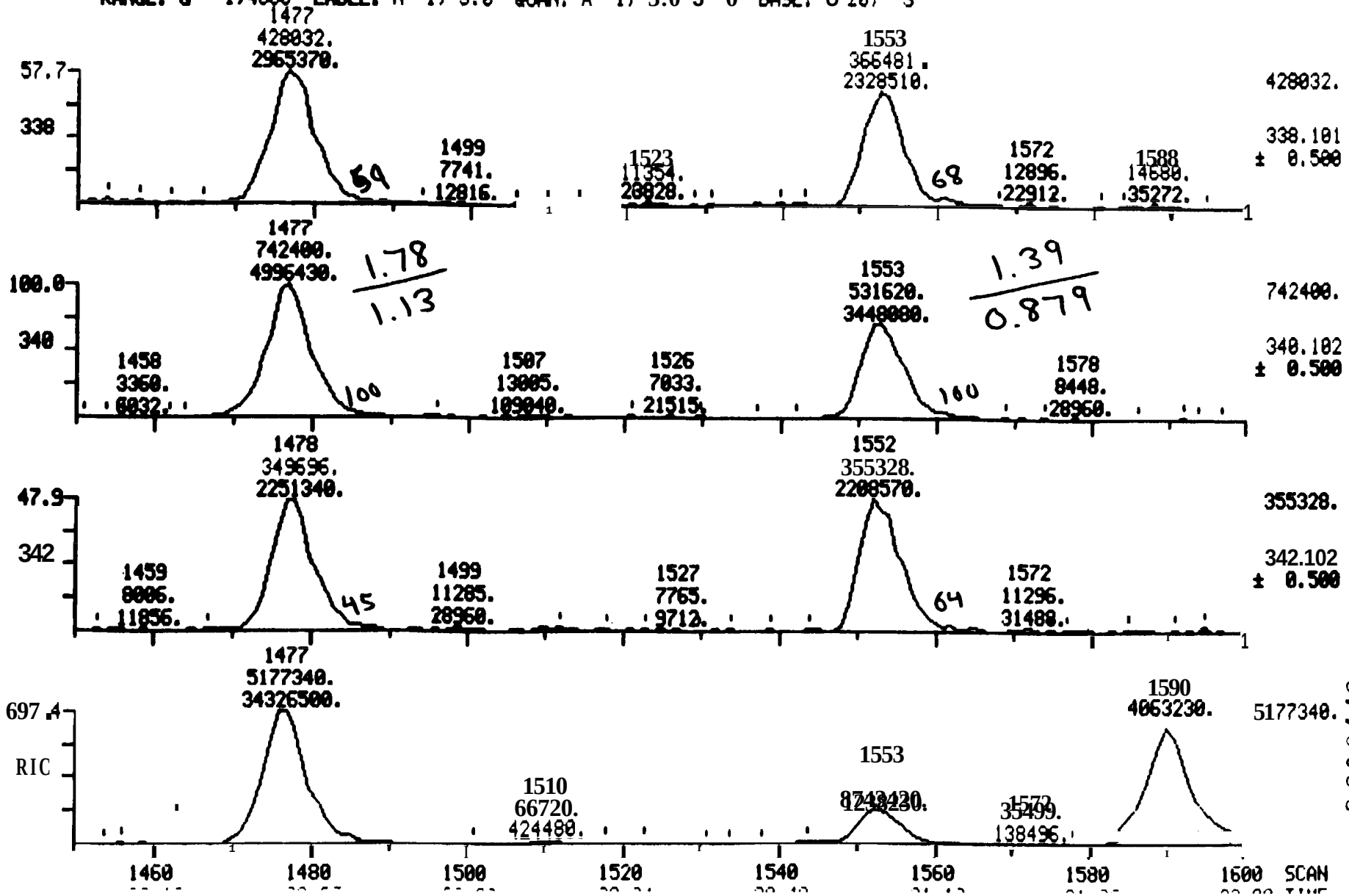
1.24
0.992



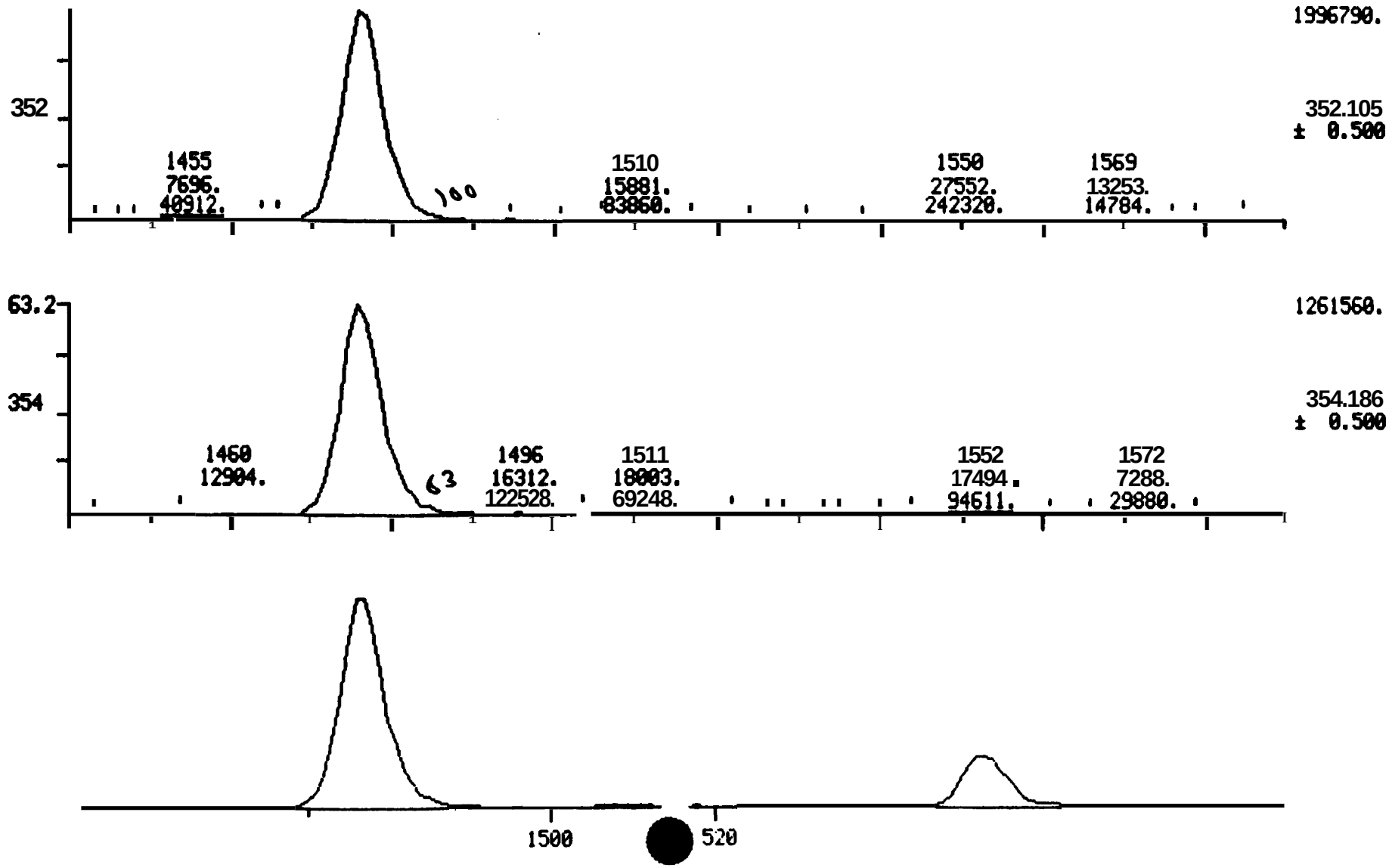
PeCDF

$\bar{x} = \frac{1.58}{1.00}$

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 1450 TO 1600
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



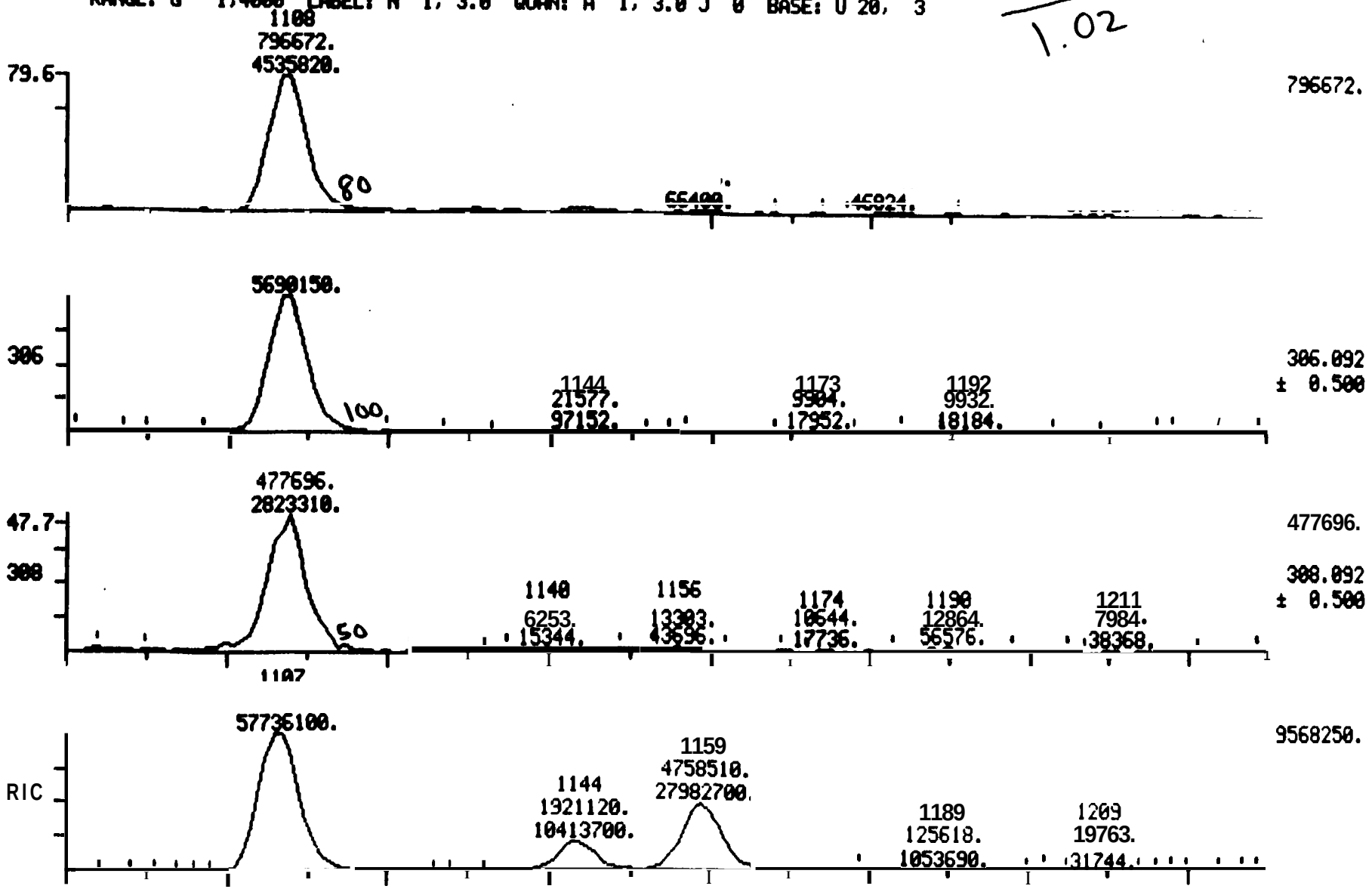
3200446


1996790.
352
352.105
± 0.500
1455
7696.
40912.
100
1510
15881.
83860.
1550
27552.
242320.
1569
13253.
14784.
63.2
1261560.
354
354.186
± 0.500
1460
12904.
63
1496
16312.
122528.
1511
18003.
69248.
1552
17494.
94611.
1572
7288.
29880.
1500
520

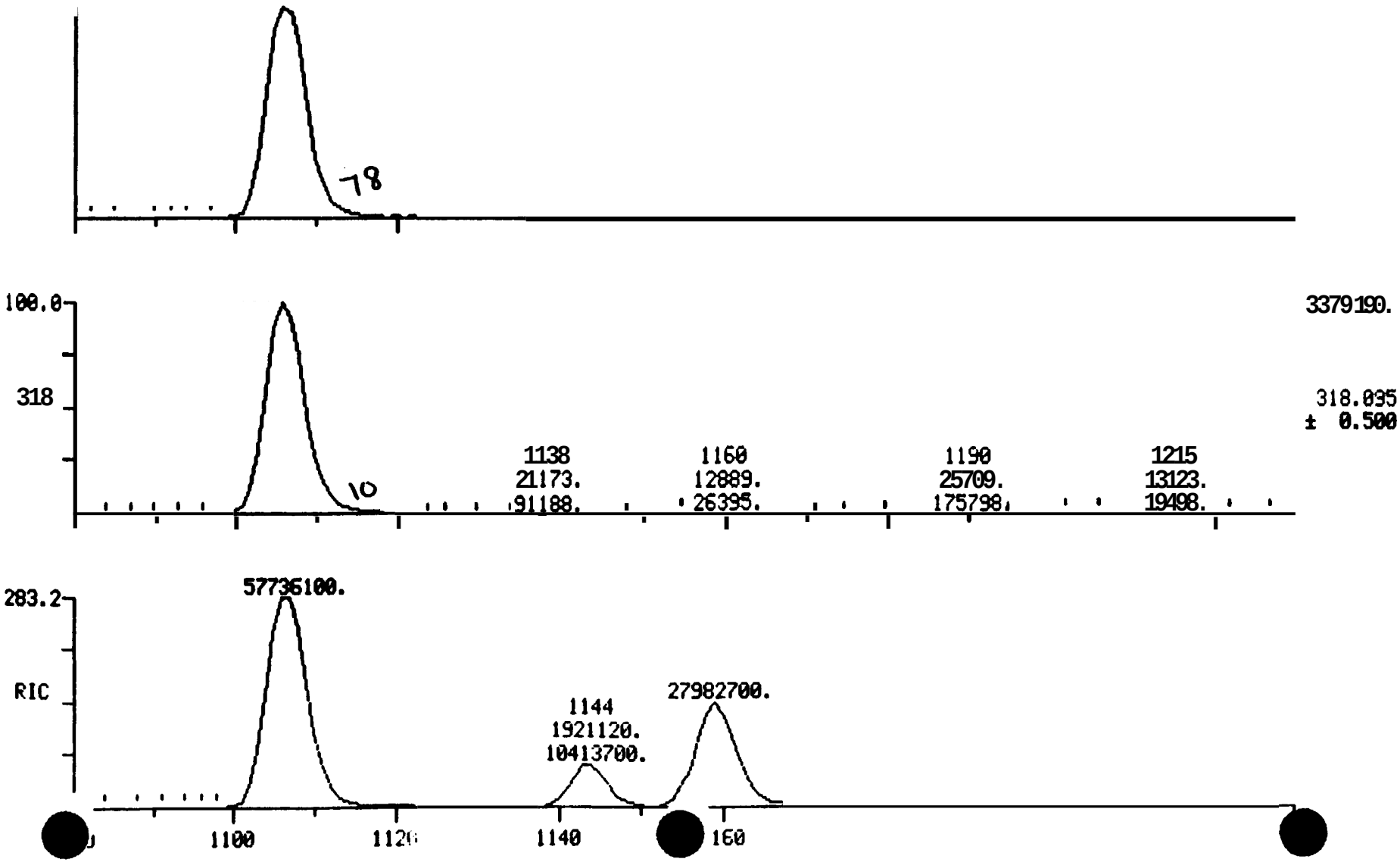
TCDF

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 1080 TO 1230
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.49
1.02



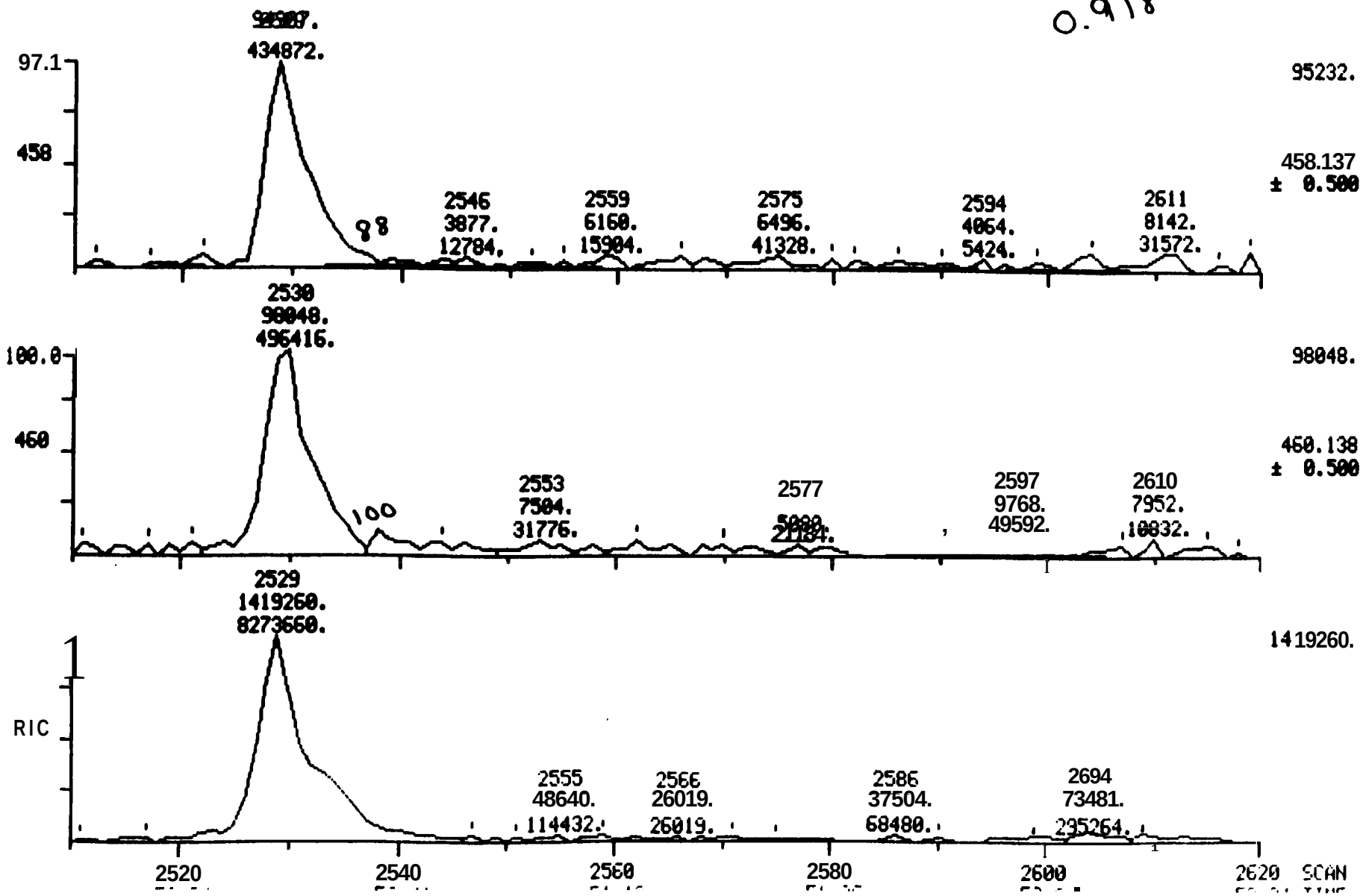
320C 7


78
100.0
318
10
1138
21173.
91188.
1160
12889.
26395.
1190
25709.
175798.
1215
13123.
19498.
3379190.
318.035
± 0.500
283.2
RIC
57736100.
1144
1921120.
10413700.
27982700.
1100
1140
160

OCDD

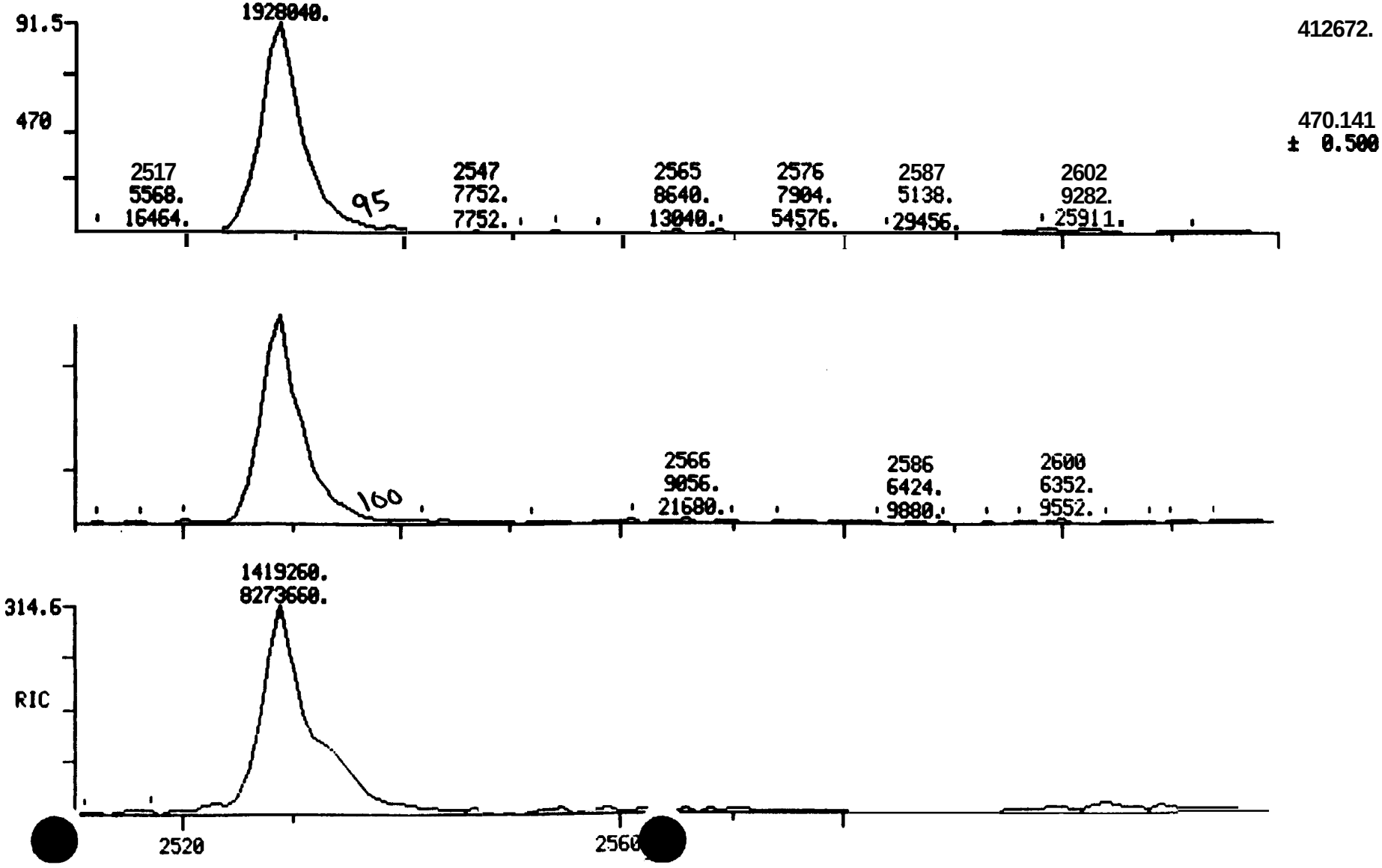
MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD 111 SCANS 2510 TO 2628
04/17/91 8:03:00 CALI: CAL910306A 112
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

$\frac{1.}{0.918}$



320C4 8

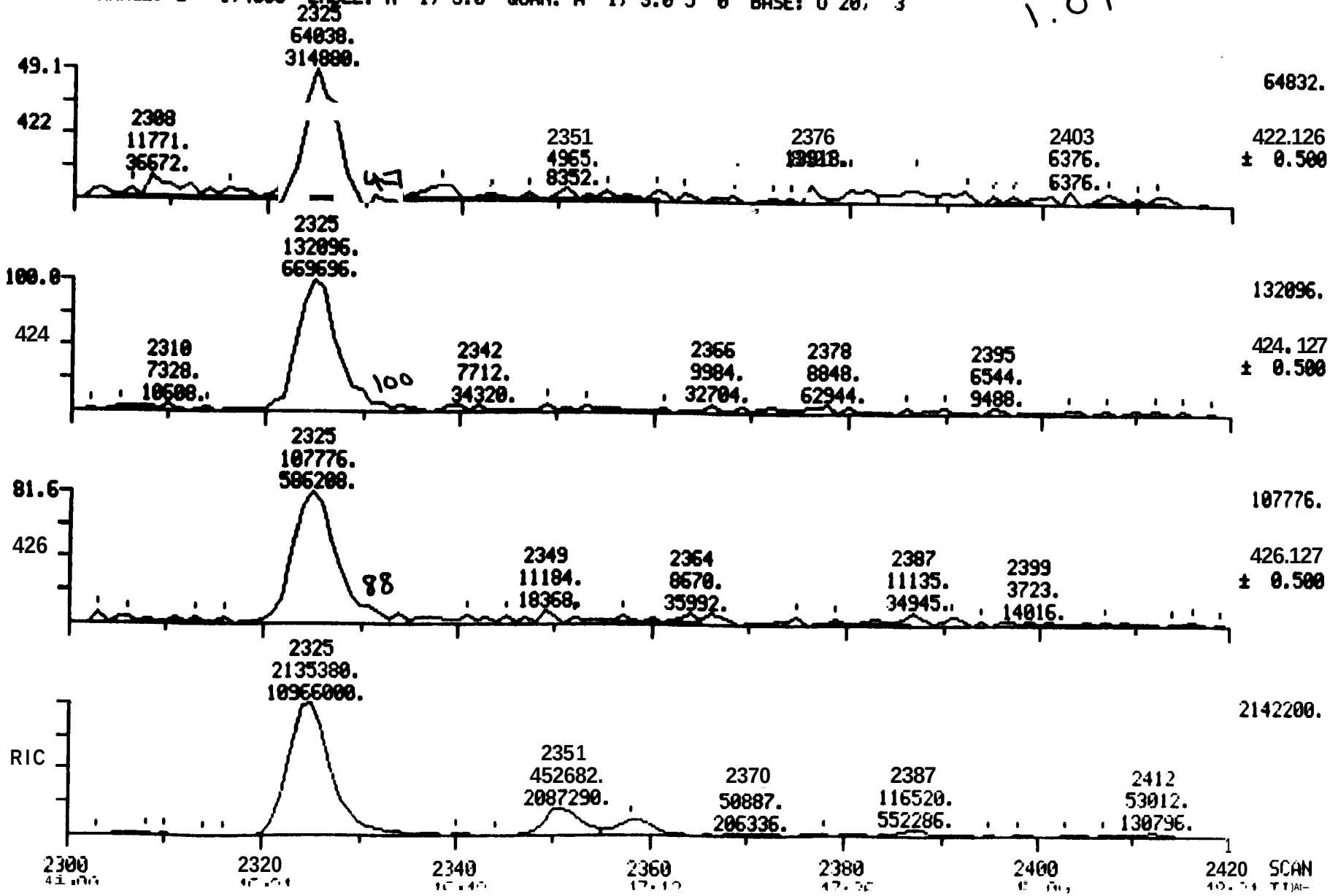
OF


91.5
470
1928040.
95
2517
5568.
16464.
2547
7752.
7752.
2565
8640.
13040.
2576
7904.
54576.
2587
5138.
29456.
2602
9282.
25911.
412672.
470.141
± 0.500
100
2566
9056.
21680.
2586
6424.
9880.
2600
6352.
9552.
314.6
RIC
1419260.
8273660.
2520
2560

HpCDD

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 2300 TO 2420
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

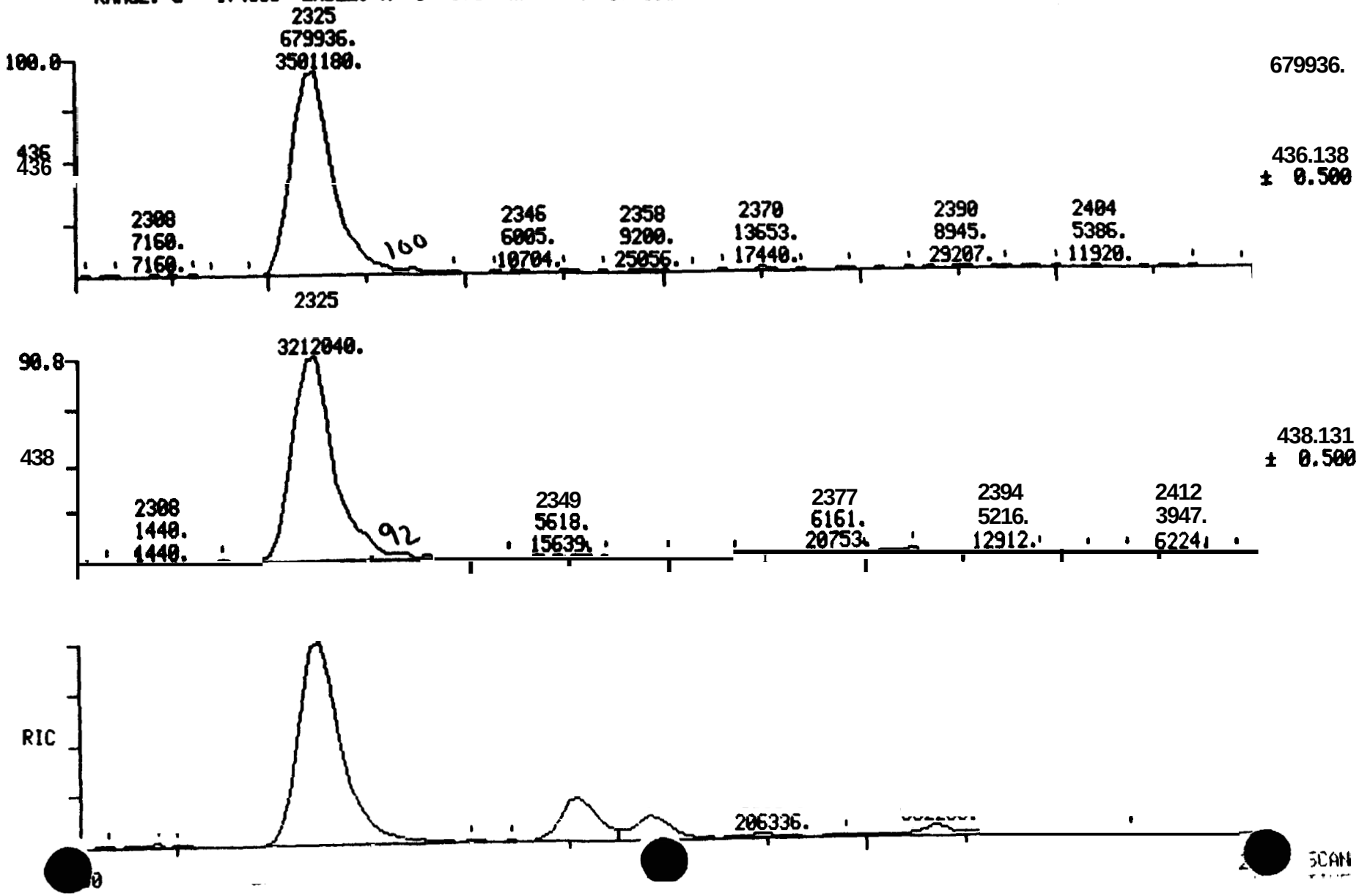
0.935
1.01



320C449

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 2300 TO 2420
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

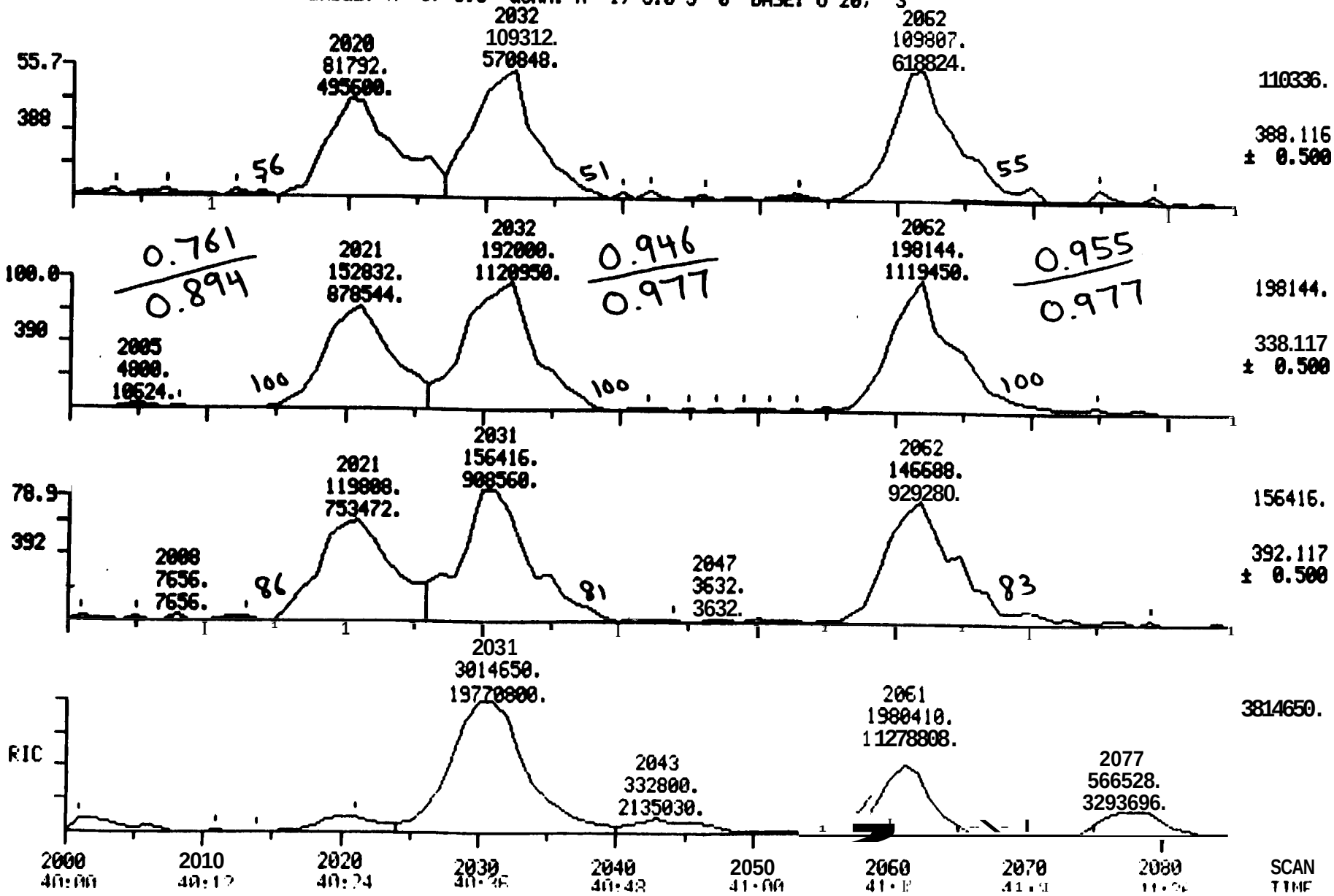
0.532
0.778



Hx CDD

$\bar{x} = \frac{0.888}{0.951}$

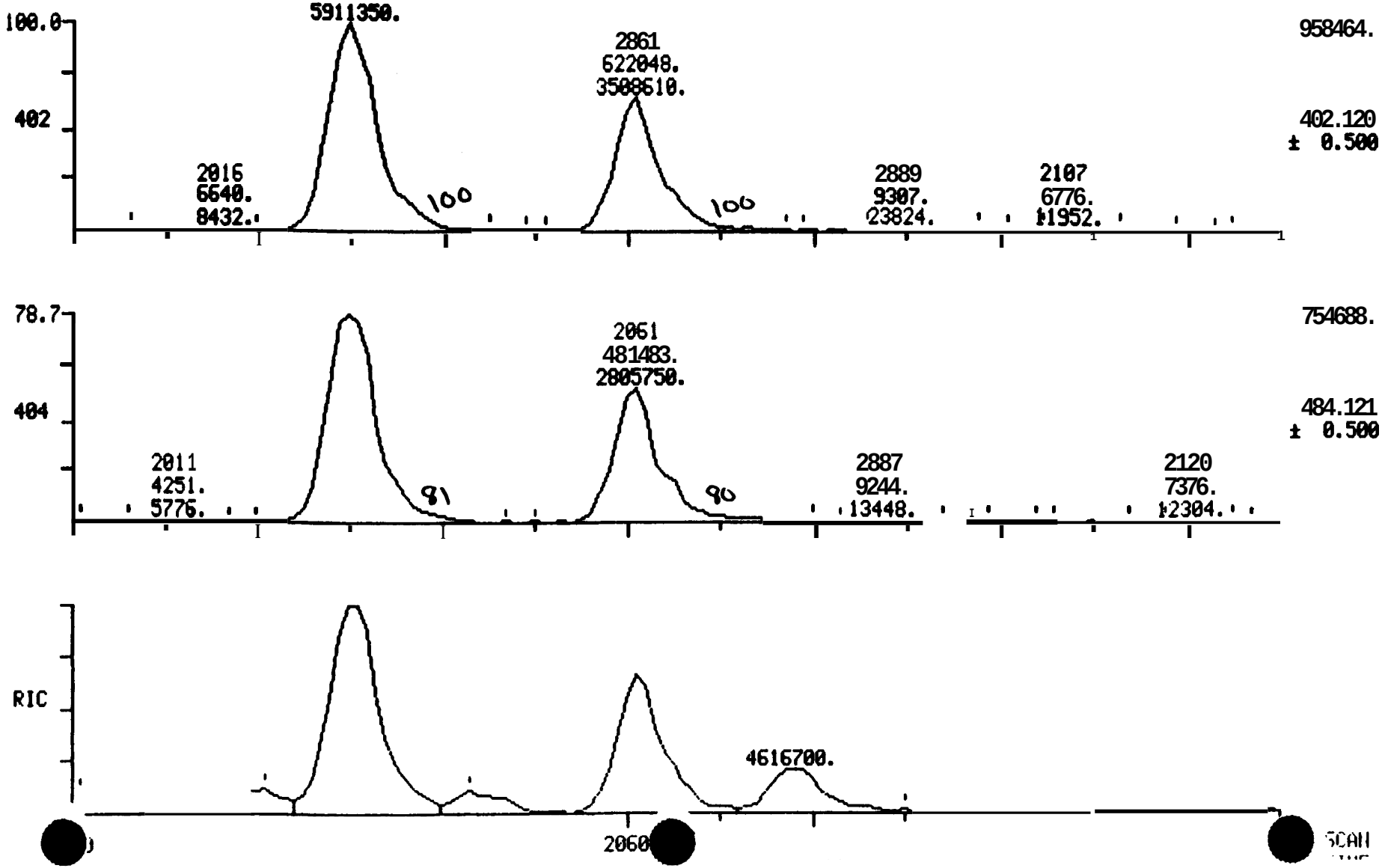
MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 2000 TO 2085
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200450

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 2000 TO 2130
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3
2030

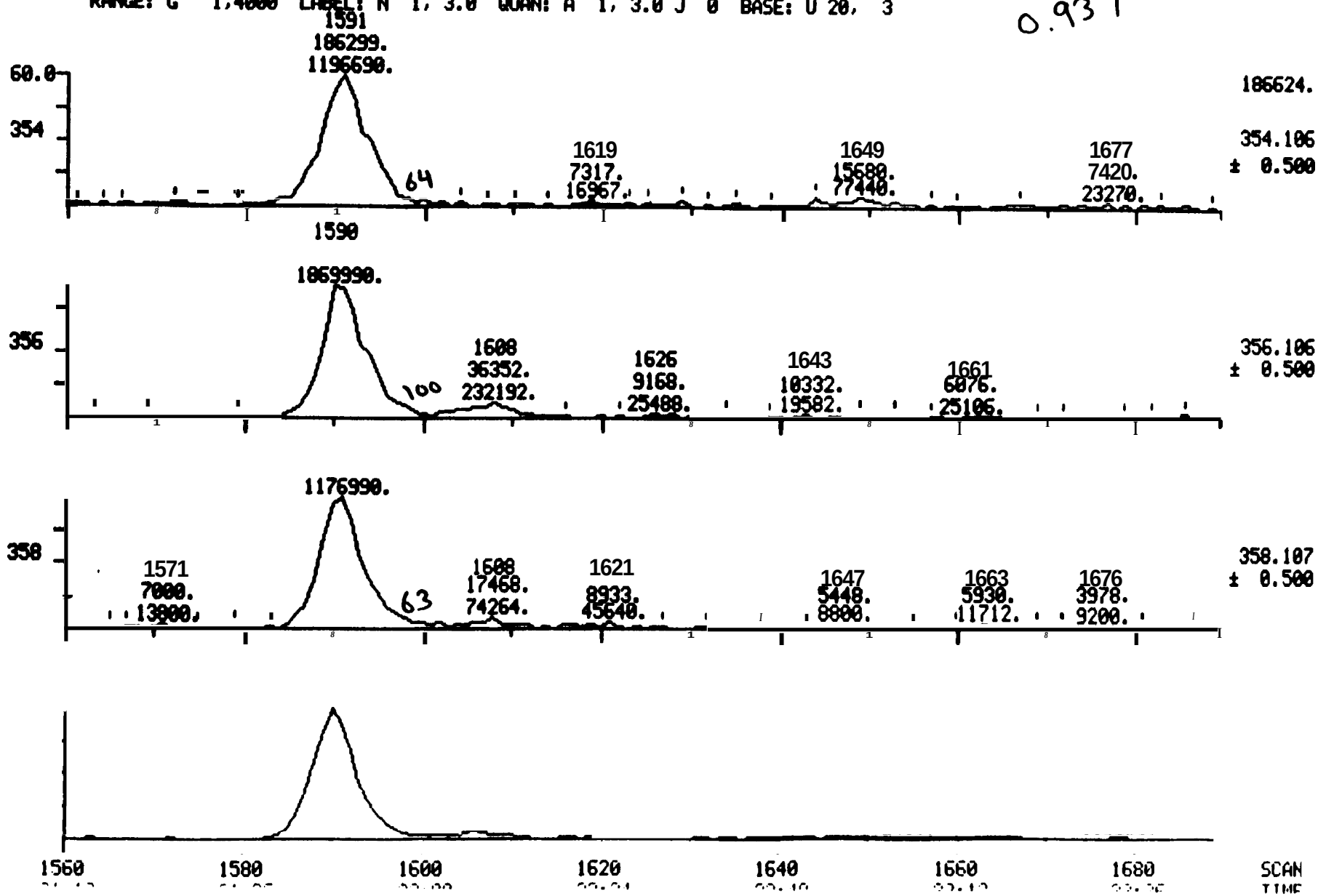
0.849
0.934



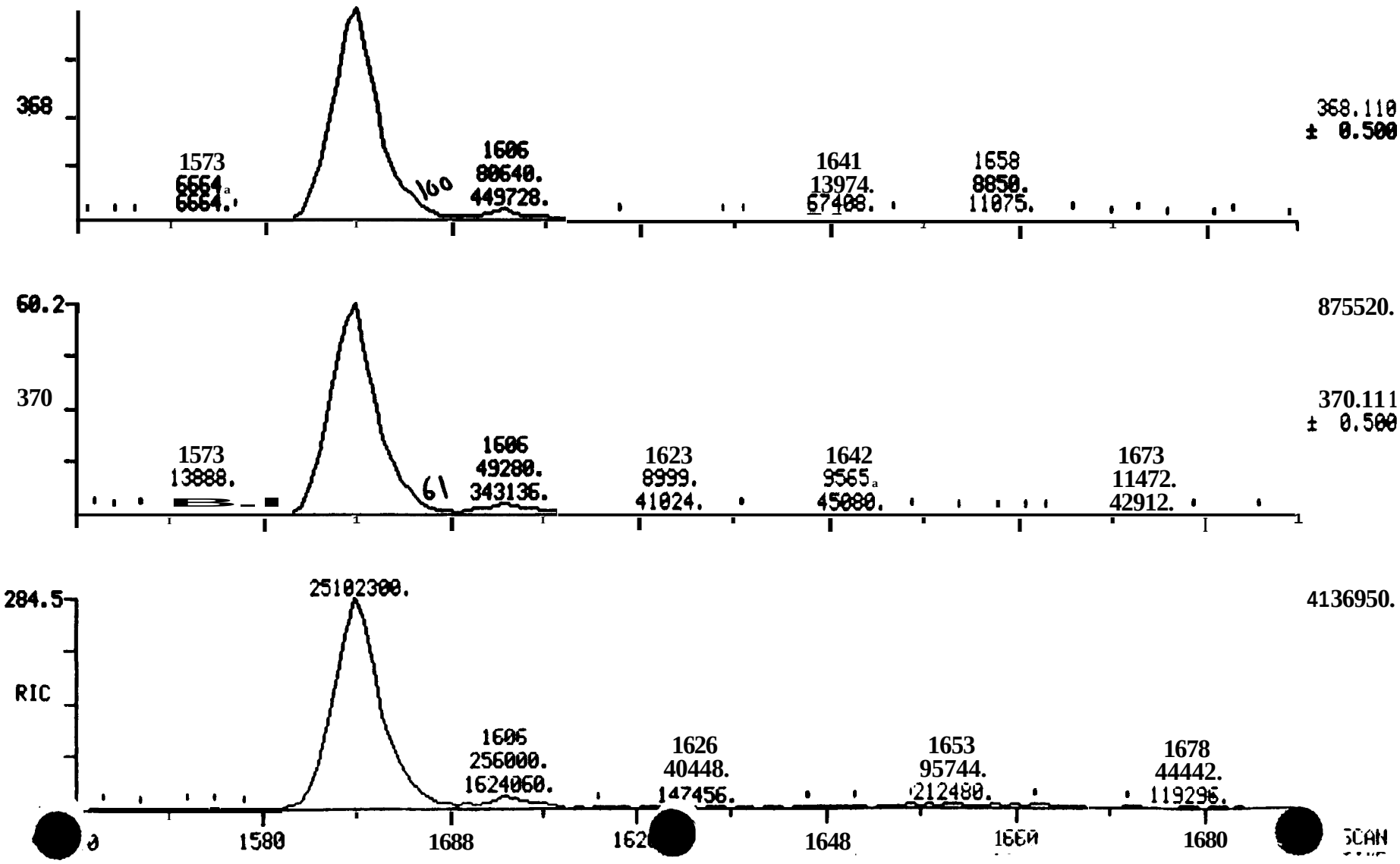
PeCDD

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 1560 TO 1690
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.11 / 0.937



SAMPLE: 685:06-I

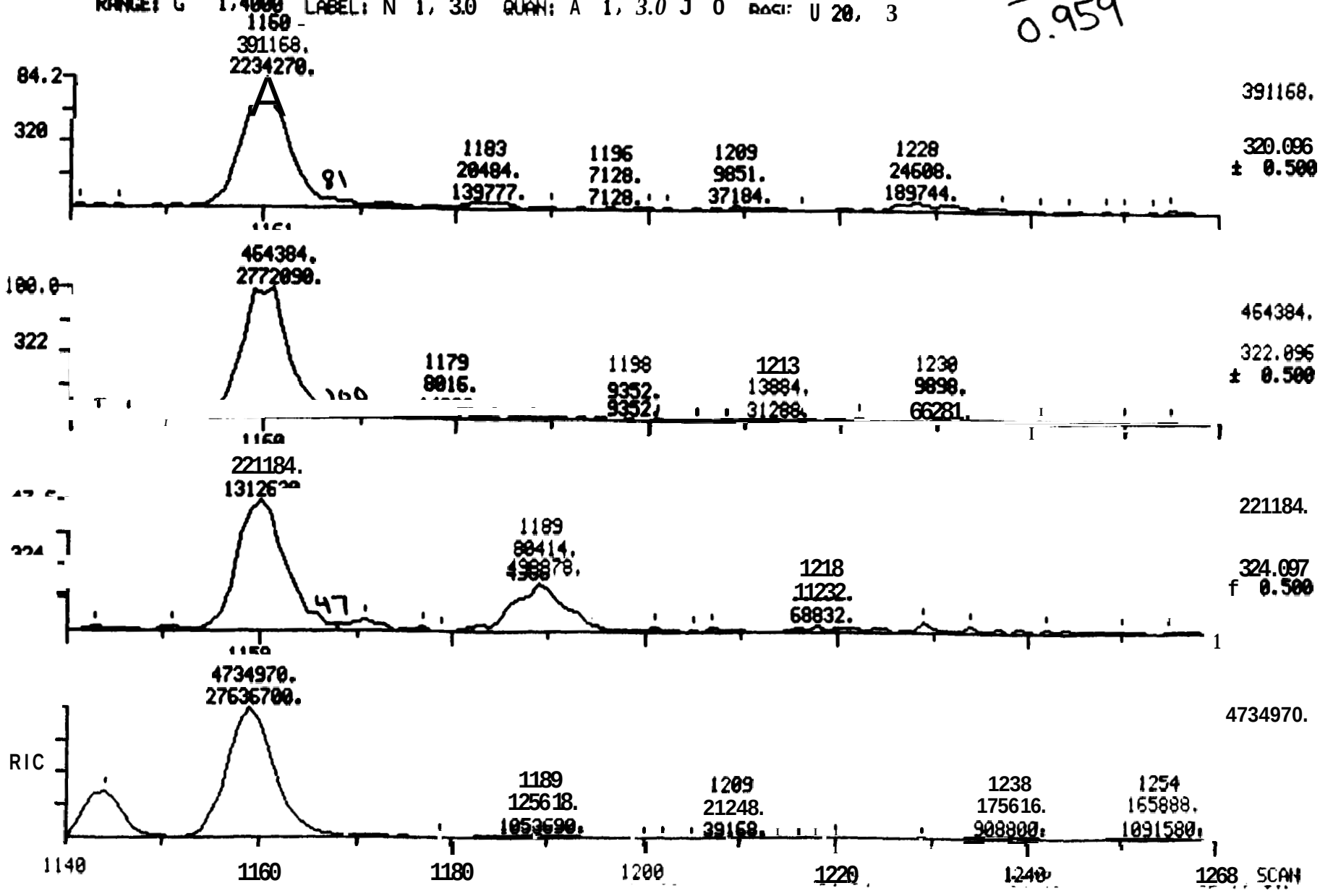


TCDD

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 1140 TO 1260
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 RGCI: U 20, 3

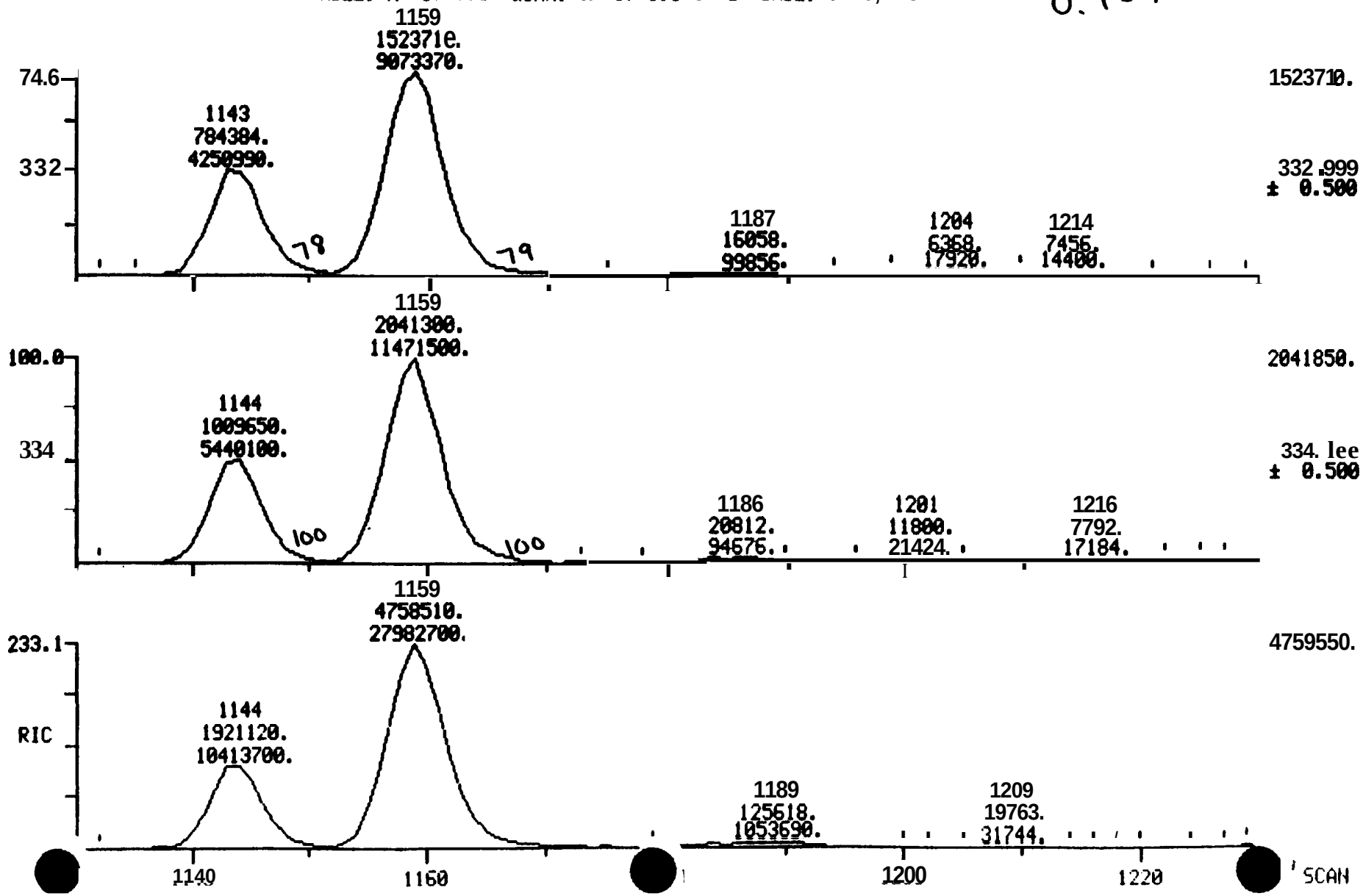
1.22
0.959



320 0452

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 1130 TO 1230
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: a 1, 3.0 J 0 BASE: U 20, 3

1.06
0.981

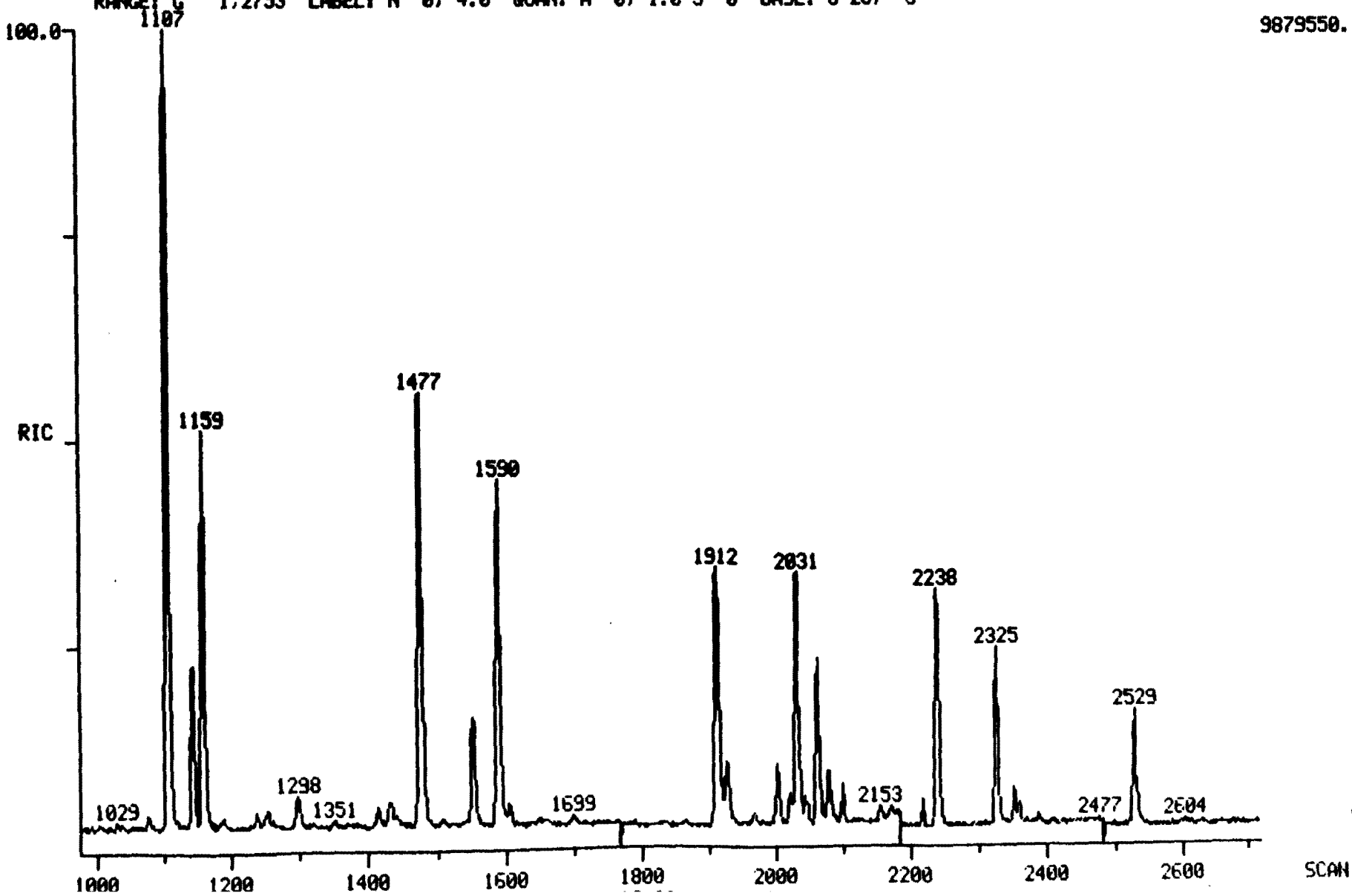


Calc. D.M. 4/17/91

MIDRIC
04/17/91 8:03:00
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: T910417STD #1
CALI: CAL910306A #2

9879550.



3200453

4	419.550	420.050	0.054	3	100	40	1	0	Pos
3	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.530	424.030	0.054	3	100	40	1	0	Pos
7	425.550	426.030	0.052	3	100	40	1	0	Pos
8	435.550	436.030	0.052	3	100	40	1	0	Pos
9	437.530	430,030	0.052	3	100	40	1	0	Pos
10	441.550	442.030	0.054	3	100	40	1	0	Pos
11	443.550	444.030	0.054	3	100	40	1	0	Pos
12	437.550	430.050	0.052	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.030	0.054	3	100	40	1	0	Pos
15	471.550	472.050	0.052	3	100	40	1	0	Pos
16	479.550	400.050	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Pos

4/8/91 12:06:20 SCAN 2753
Acquisition stopped

4/8/91 12:06:22
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2210 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2403 TO 2753 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	636.1	3300.0	19.3	83982. 31.	25.

MID scan
Scan time: 1.200 s

Desc: G2
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

3200454

Int #	Lo mass	Hi mass	Tine	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Pos
2	339.630	340.150	0.032	3	100	40	1	0	Po.
3	341.630	342.150	0.034	3	100	40	1	0	Pos
4	351.630	332.130	0.032	3	100	40	1	0	Pos
3	353.630	334.150	0.034	3	100	40	1	0	Po.
6	335.650	356.150	0.032	3	100	40	1	0	Po.
7	357.630	358.150	0.054	3	100	40	1	0	Po.
8	367.630	360.150	0.052	3	100	40	1	0	Po.
9	369.650	370.150	0.052	3	100	40	1	0	Po.
10	371.630	372.150	0.032	3	100	40	1	0	Pos
11	373.650	374.150	0.032	3	100	40	1	0	Pos
12	375.650	376.150	0.032	3	100	40	1	0	Pos
13	379.630	380.150	0.032	3	100	40	1	0	Pos
14	301.630	382.130	0.032	3	100	40	1	0	Po.
15	385.650	386.150	0.052	3	100	40	1	0	Po.
16	307.650	388.150	0.032	3	100	40	1	0	Pos
17	389.650	390.150	0.032	3	100	40	1	0	Pos
18	391.630	392.150	0.032	3	100	40	1	0	Po.
19	401.650	402.150	0.032	3	100	40	1	0	Pos
20	403.630	404.150	0.034	3	100	40	1	0	Pos
21	443.530	446.050	0.032	3	100	40	1	0	Pos

4/8/91 11:55:20 SCAN 2219 OF 4000

MID scan
Scan tine: 1.200 s

Desc: G3
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.630	372.150	0.052	3	100	40	1	0	Pos
2	373.630	374.150	0.052	3	100	40	1	0	Pos
3	375.650	376.150	0.052	3	100	40	1	0	Po.
4	383.630	386.150	0.052	3	100	40	1	0	Pos
5	387.630	388.150	0.052	3	100	40	1	0	Pos
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.650	392.150	0.052	3	100	40	1	0	Pos
8	401.650	402.150	0.052	3	100	40	1	0	Pos
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	405.550	406.050	0.054	3	100	40	1	0	Pos
11	407.330	408.050	0.032	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.550	420.OW	0.054	3	100	40	1	0	Po.
14	421.550	422.050	0.054	3	100	40	1	0	Pos
15	423.550	424.OW	0.054	3	100	40	1	0	Pos
16	425.550	426.050	0.052	3	100	40	1	0	Po.
17	435.550	436.050	0.052	3	100	40	1	0	Por
18	437.550	438.050	0.032	3	100	40	1	0	Po.
19	479.550	480.050	0.054	3	100	40	1	0	Po.

4/8/91 12:00:47 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Pos
3	409.550	410.050	0.054	3	100	40	1	0	Pos

4/8/91 11:09:35 SCAN 1 OF 4000
Acquisition started

Acquire Run 0:T910408STD3 ACQUIRINC
04/08/91 11:09:00 + 0:04 Free sectors: 7338 Scan: 3 of 4000
Sample: 2UL OF 685:06-I STANDARD, NATIVES Q 200 PPB
Conds.: 60M DB-5/TOTALS.
Formula: Instrument: Q3 Weight: 0.000
Submitted by: DM Analyst: NM Acct. No: PC4622

********** QC PARAMETERS **********
Loaded CC Desc: BW Current CC oven tmp: 69 DegC Injector : 300 DegC
Current CC Desc: BW CC elapsed time : 2:11 min Int. oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	30 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int..: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.130	0.052	3	100	40	1	0	Pos
2	305.630	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.630	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.650	332.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	355.650	356.150	0.054	3	100	40	1	0	Pos
17	357.650	350.150	0.052	3	100	40	1	0	Pos
10	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

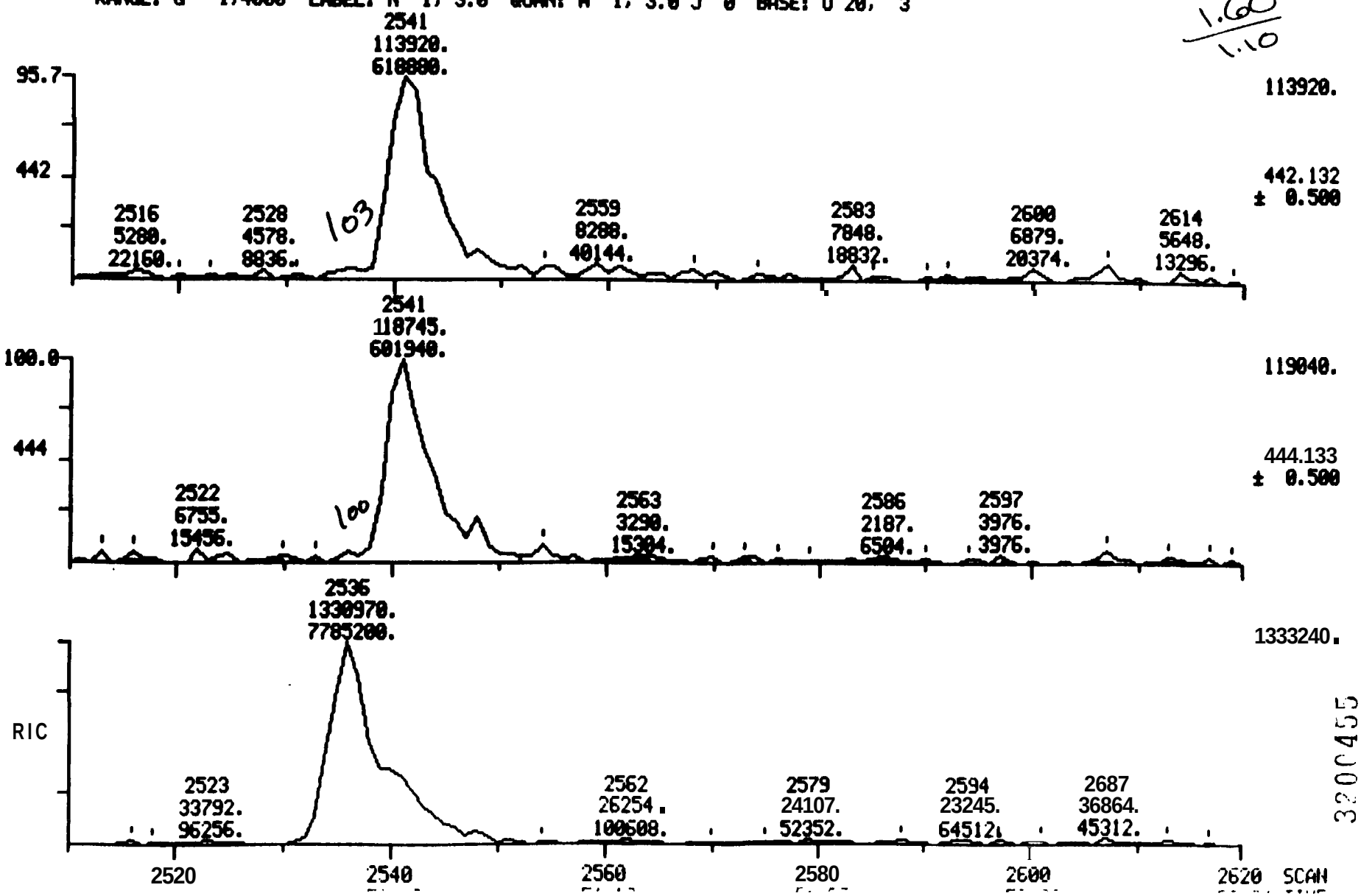
Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/8/91 11:46:04 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2510 TO 2620
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDF

1.60
1.10

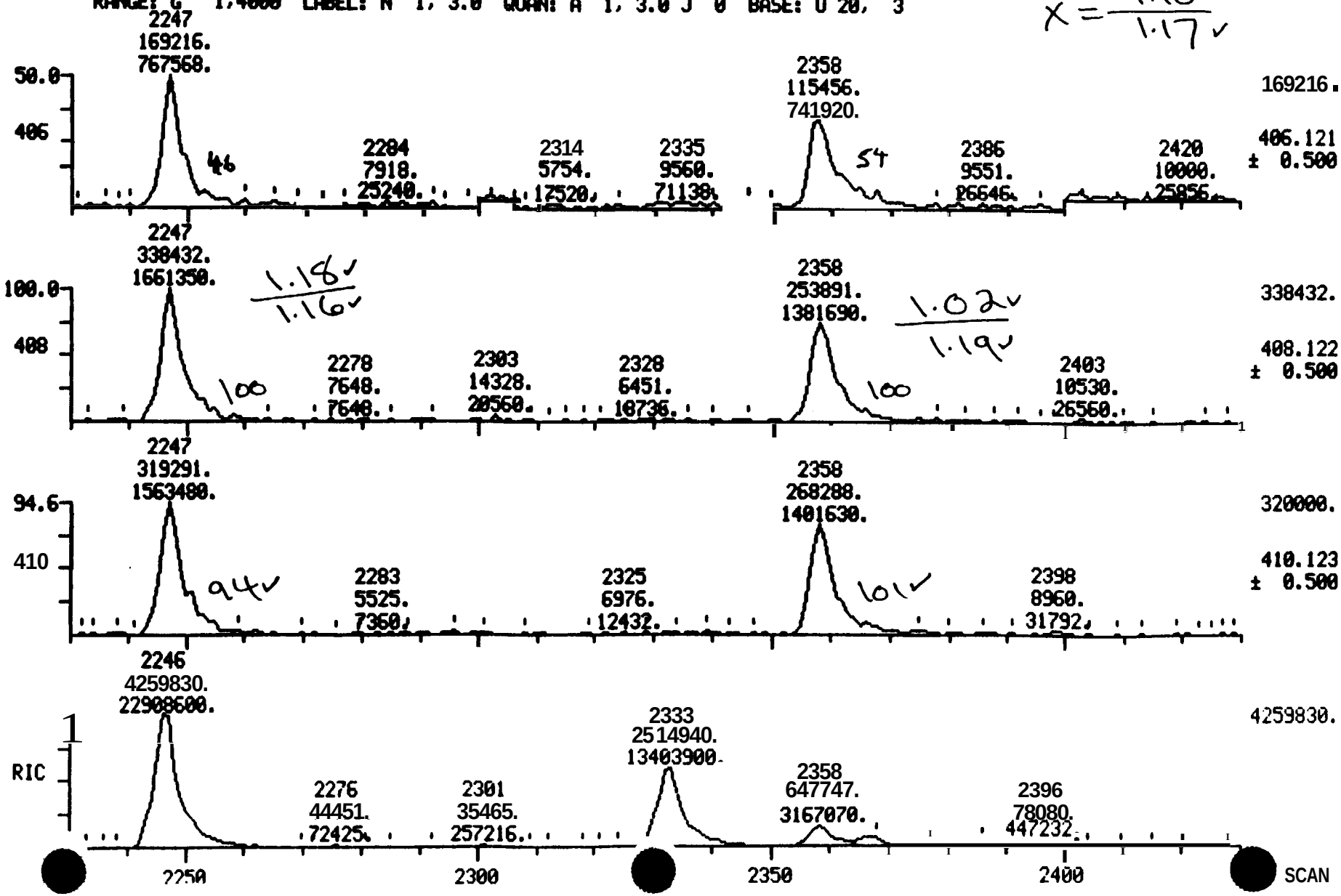


3200455

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2230 TO 2430
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

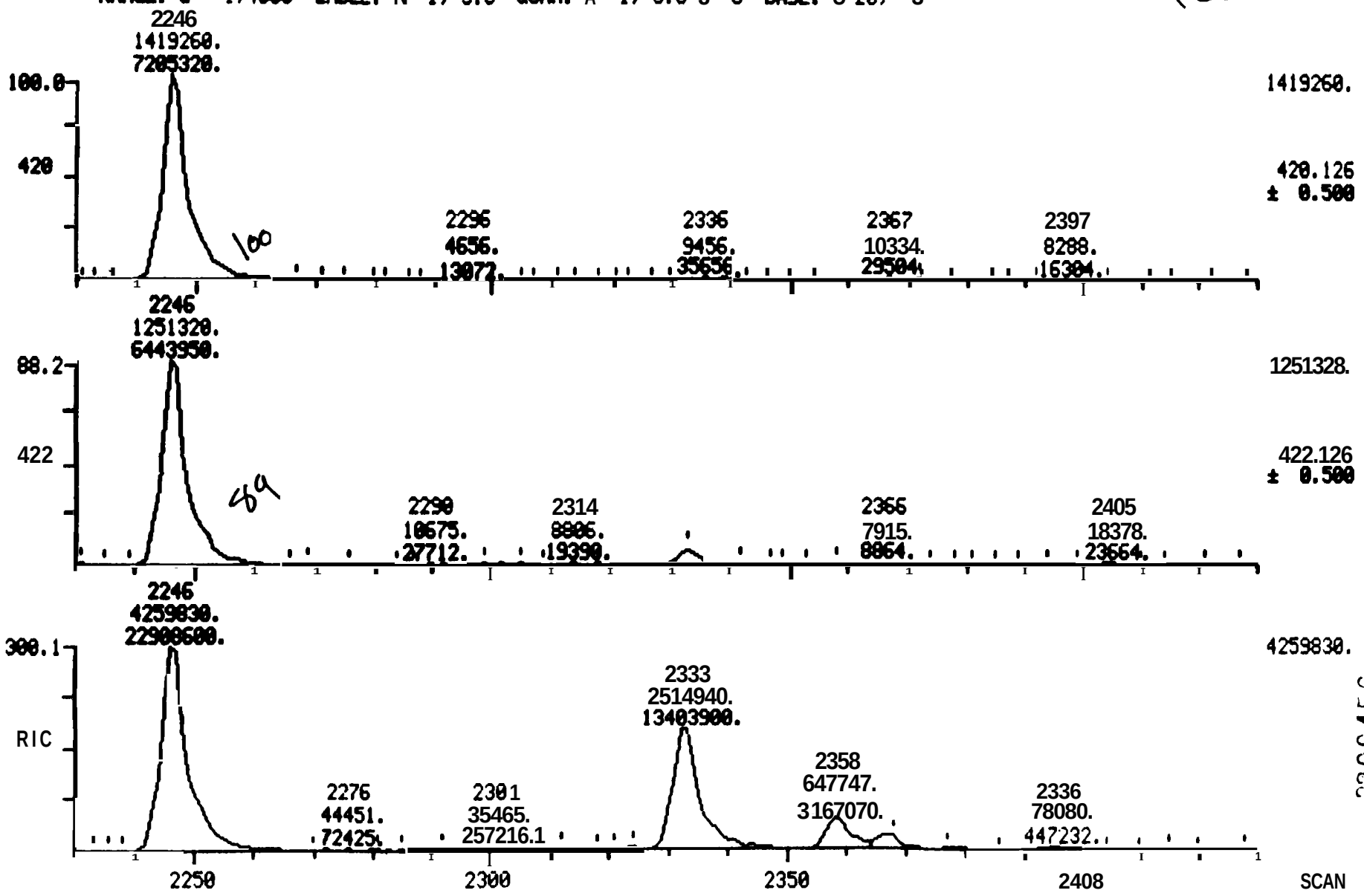
HPCDF

$\bar{X} = \frac{1.10}{1.17}$



MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2230 TO 2430
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.03 / 1.05



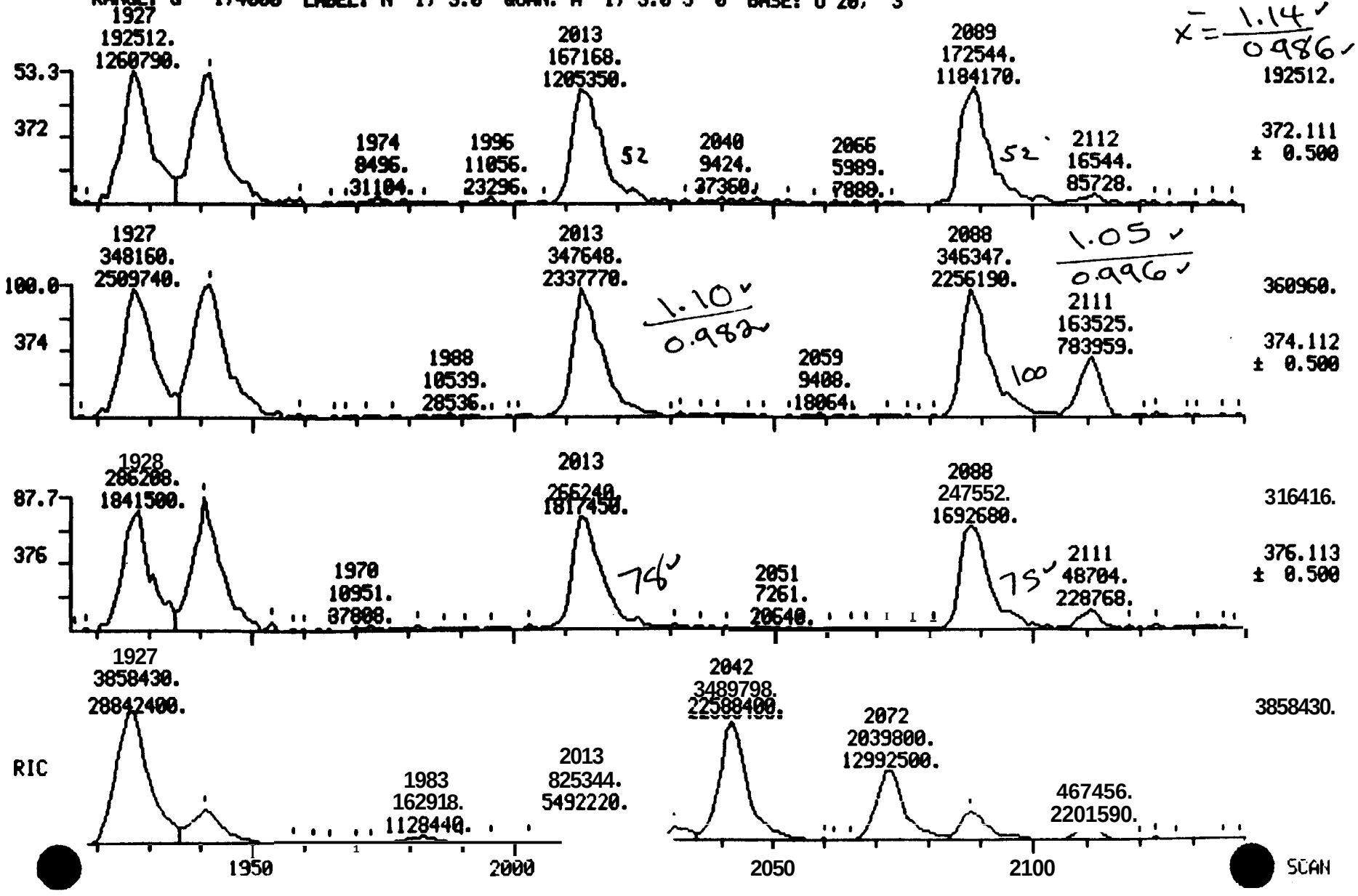
320C456

HxCDF

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1915 TO 2140
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

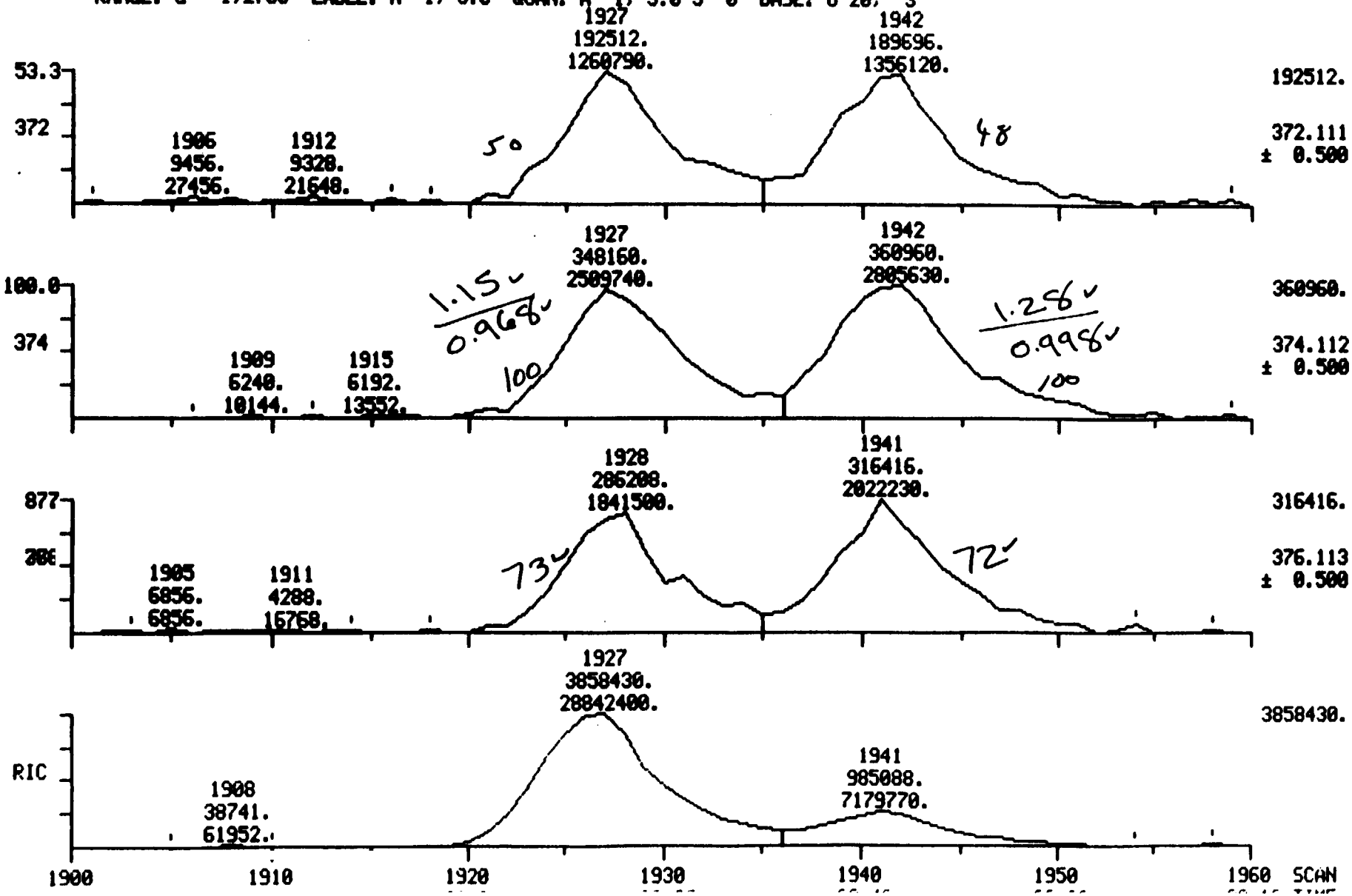
nm 4-8-91 ~~x̄ = 1.05~~

x̄ = 1.14 / 0.986



MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1900 TO 1960
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

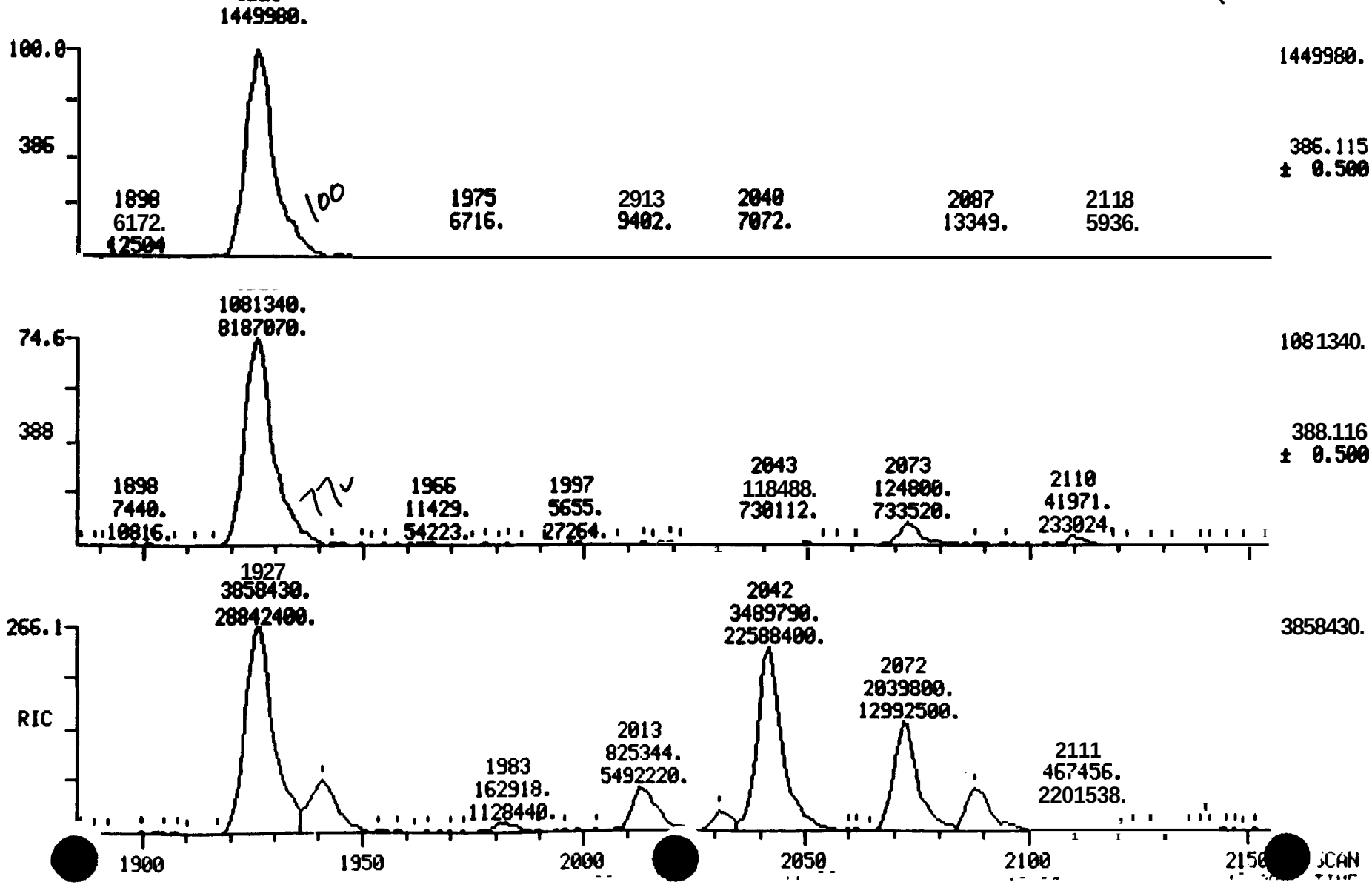
HxCDF



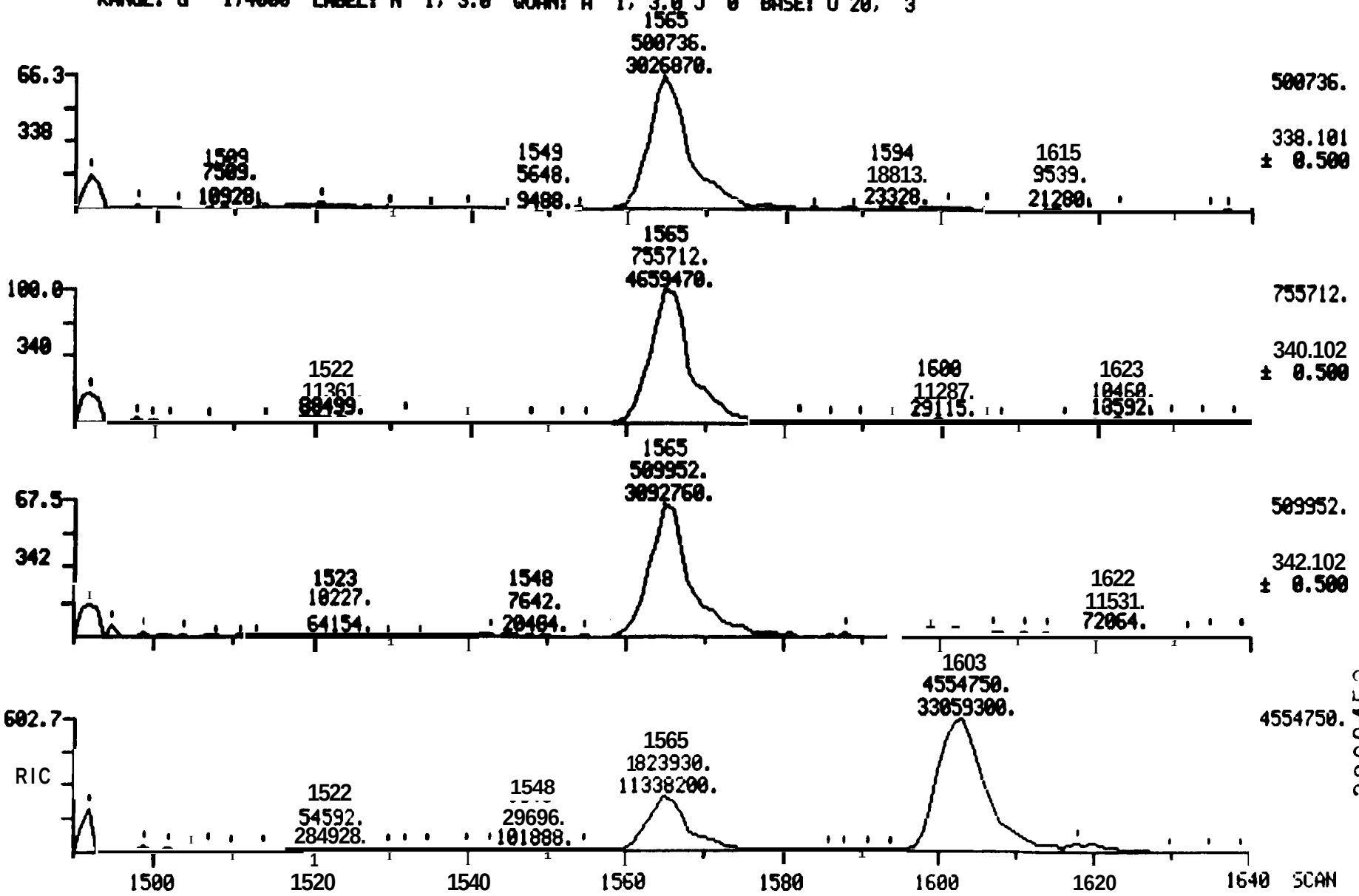
3200457

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1885 TO 2155
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.42 / 1.14

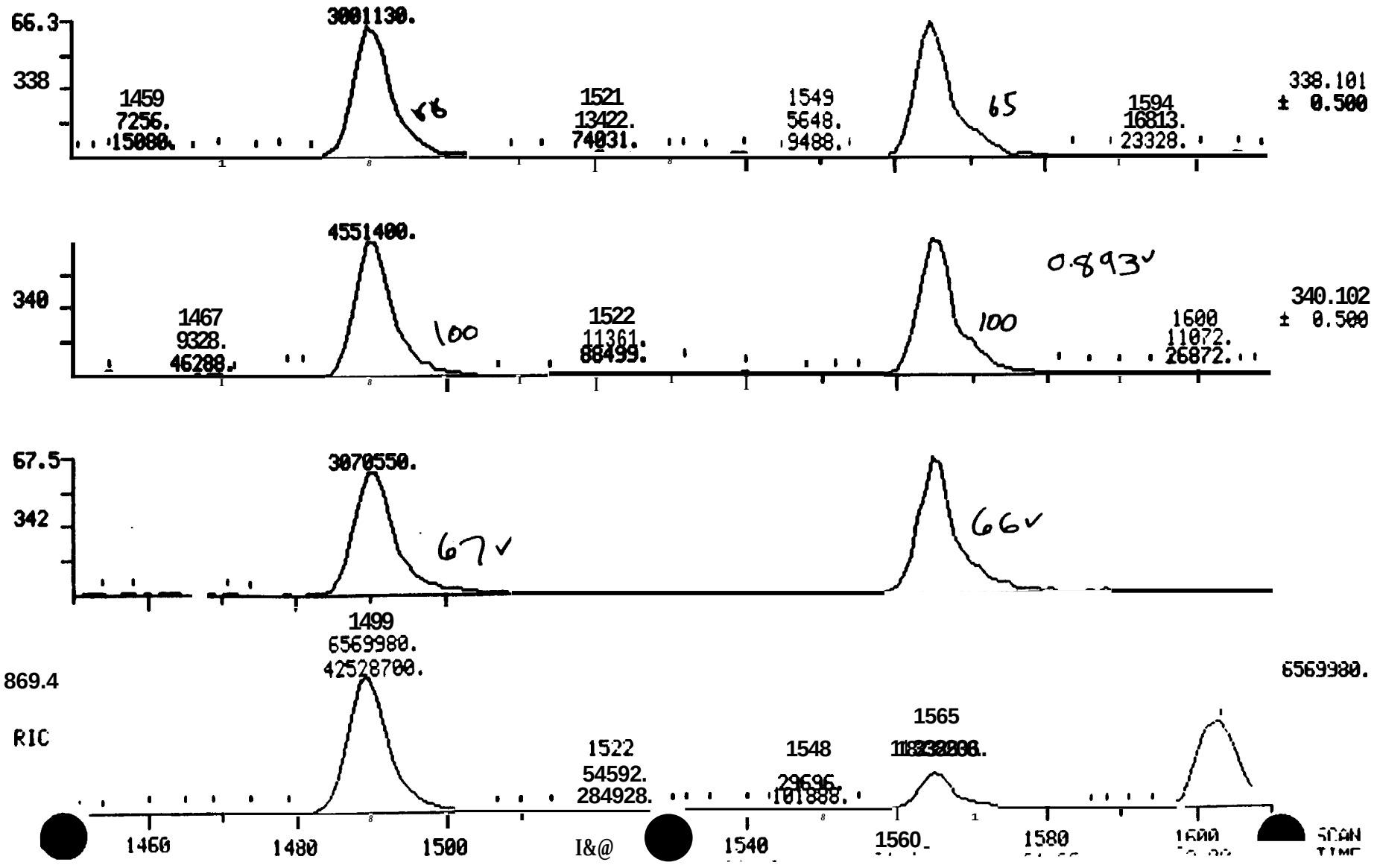


MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1490 TO 1640
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

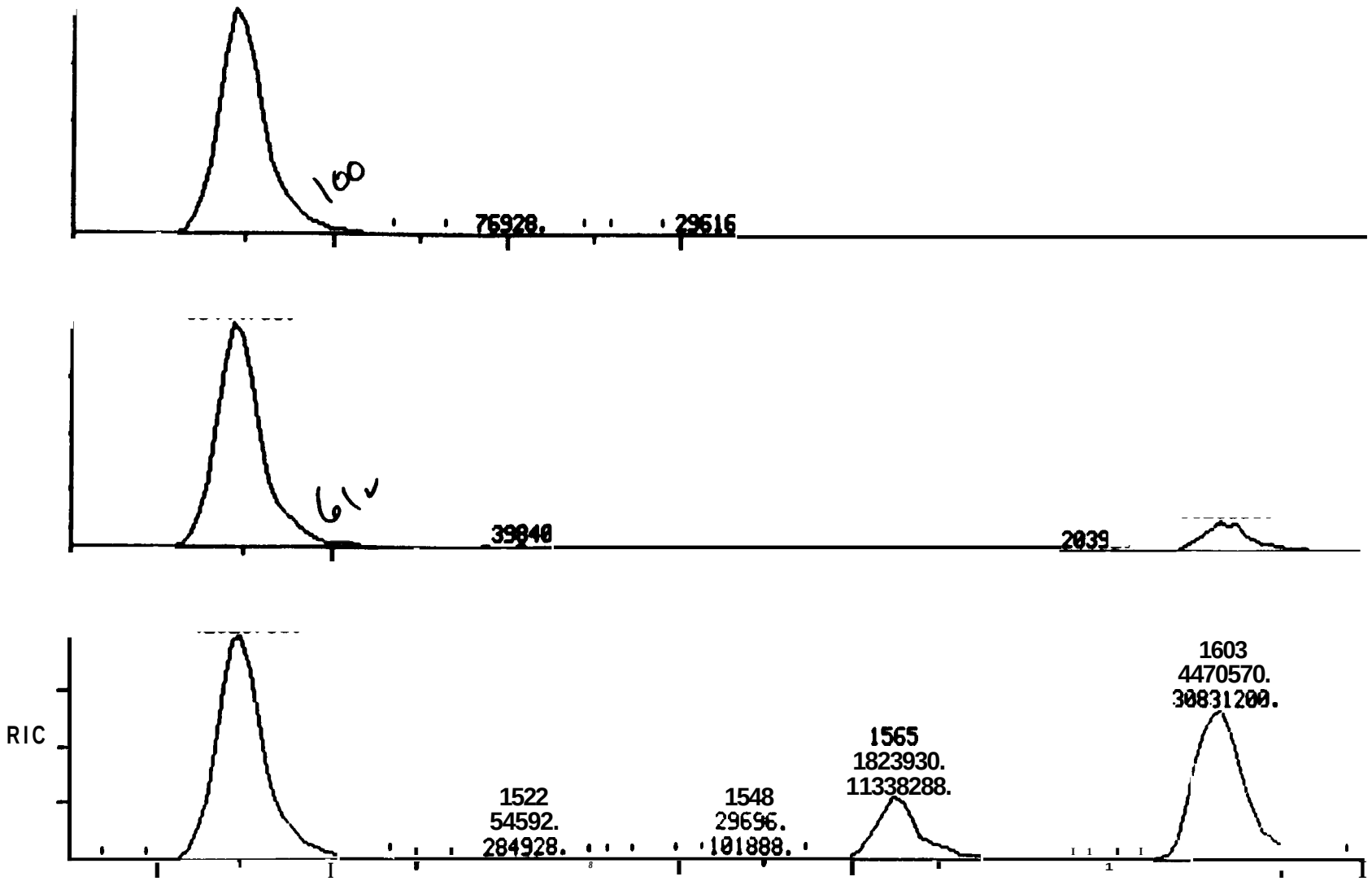


320C4458

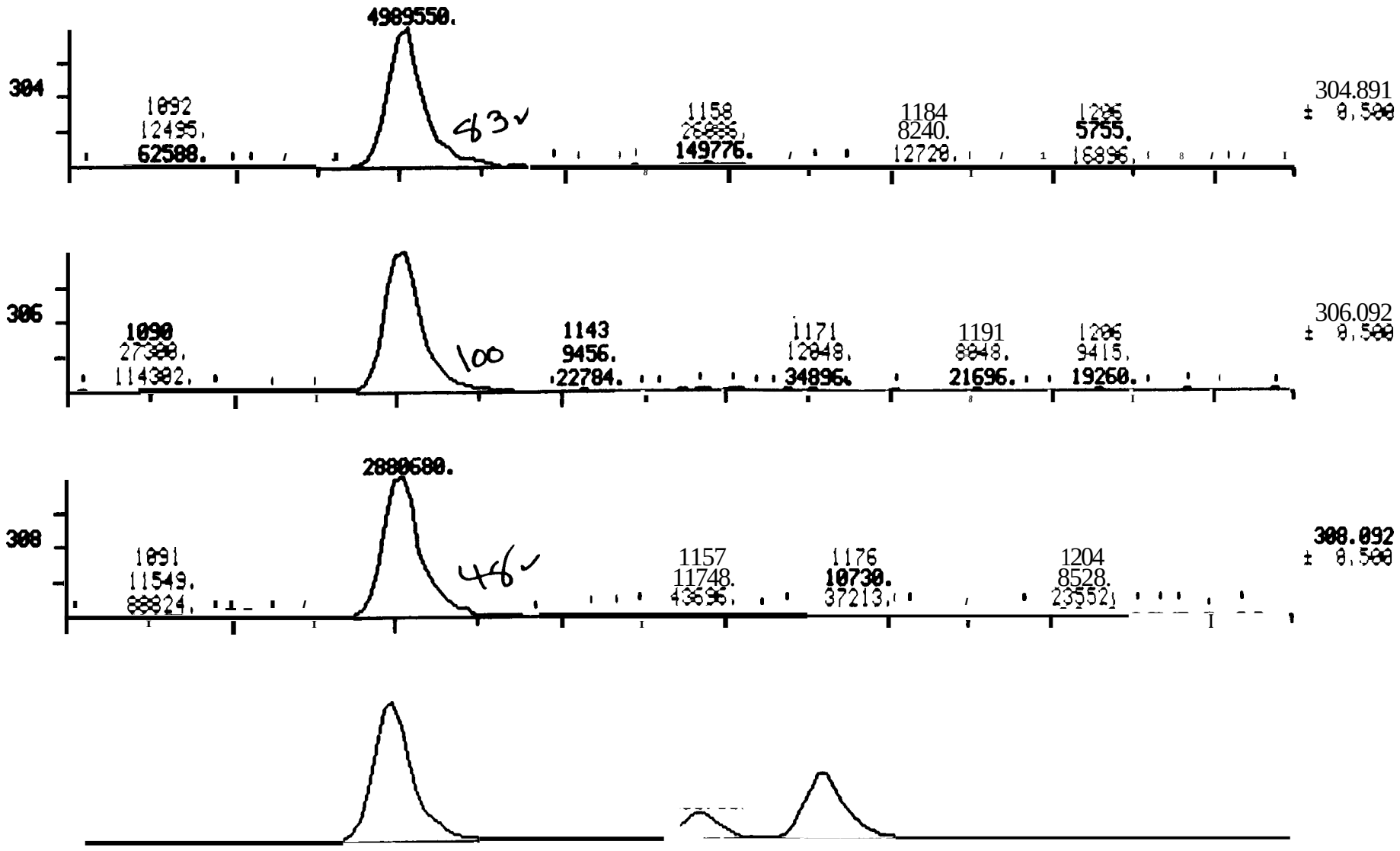
PeCDF


66.3
338
3001130.
1459
7256.
15080.
66
1521
13422.
74031.
1549
5648.
9488.
65
1594
16813.
23328.
338.101
± 0.500
340
4551400.
1467
9328.
46288.
100
1522
11361.
88499.
0.893
100
1600
11072.
26872.
340.102
± 0.500
67.5
342
3070550.
67
66
869.4
RIC
1499
6569980.
42528700.
1522
54592.
284928.
1548
29696.
101888.
1565
6569980.
1460
1480
1500
I&@
1540
1560
1580
1600
SCAN TIME

LABEL:

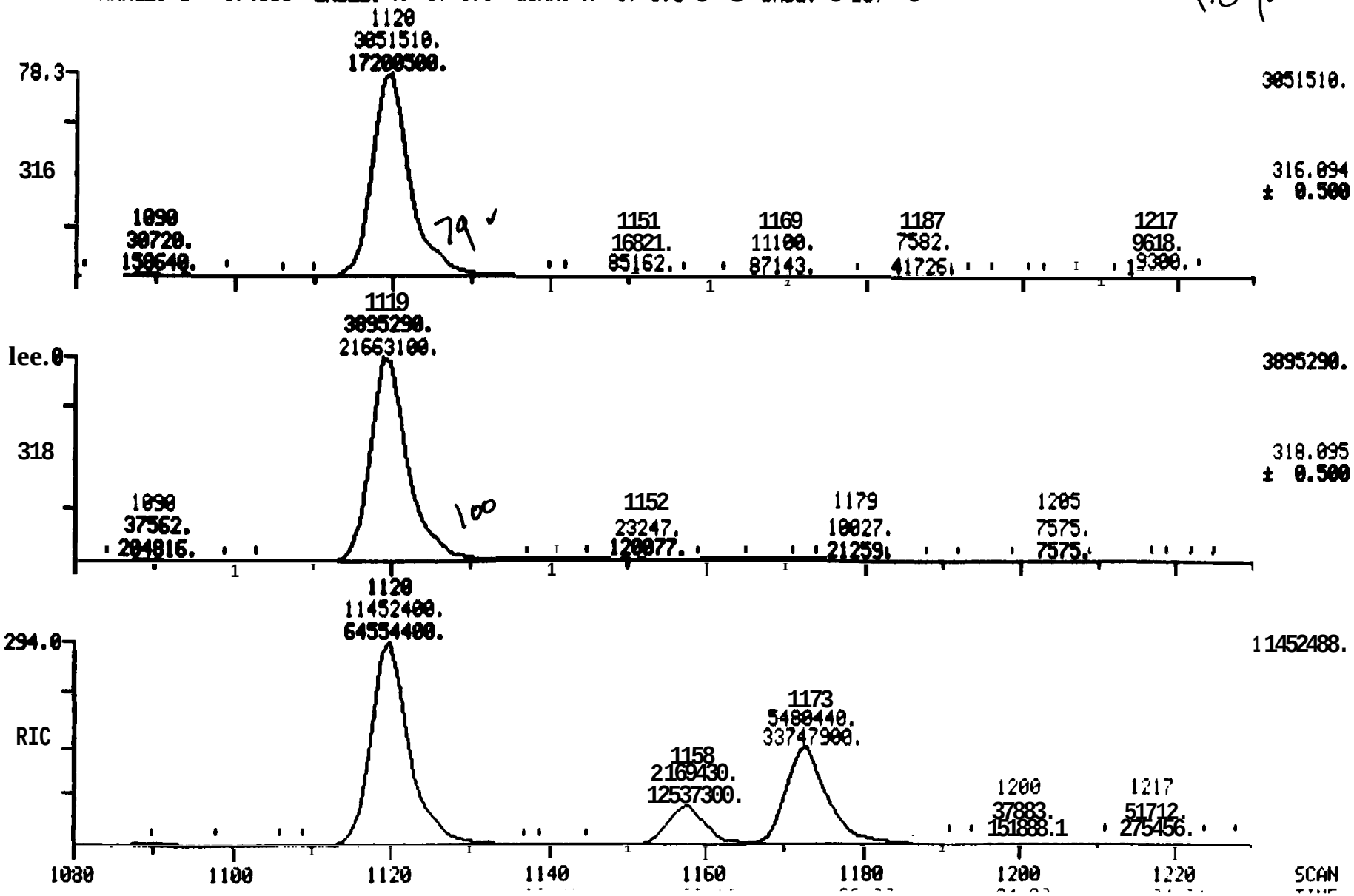


3200450


4989550.
304
1092
12495.
62588.
63
1158
149776.
1184
8240.
12720.
1206
5755.
16896.
304.891
± 0.500
306
1090
27300.
114302.
100
1143
9456.
22784.
1171
12048.
34896.
1191
8848.
21696.
1206
9415.
19260.
306.092
± 0.500
2880680.
308
1091
11549.
88824.
46
1157
11748.
43696.
1176
10730.
37213.
1204
8528.
23552.
308.092
± 0.500

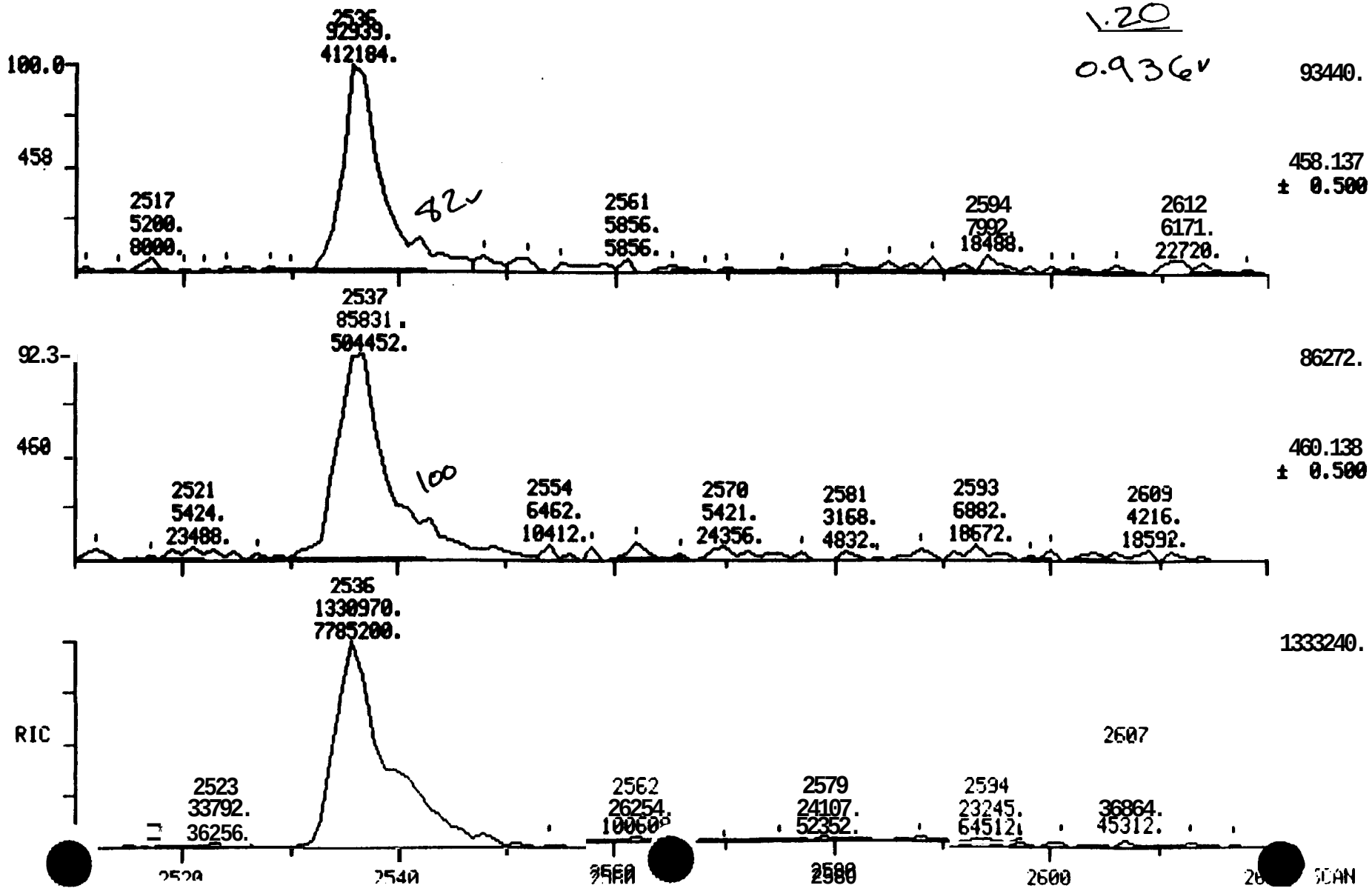
MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1080 TO 1230
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

1.68
1.07



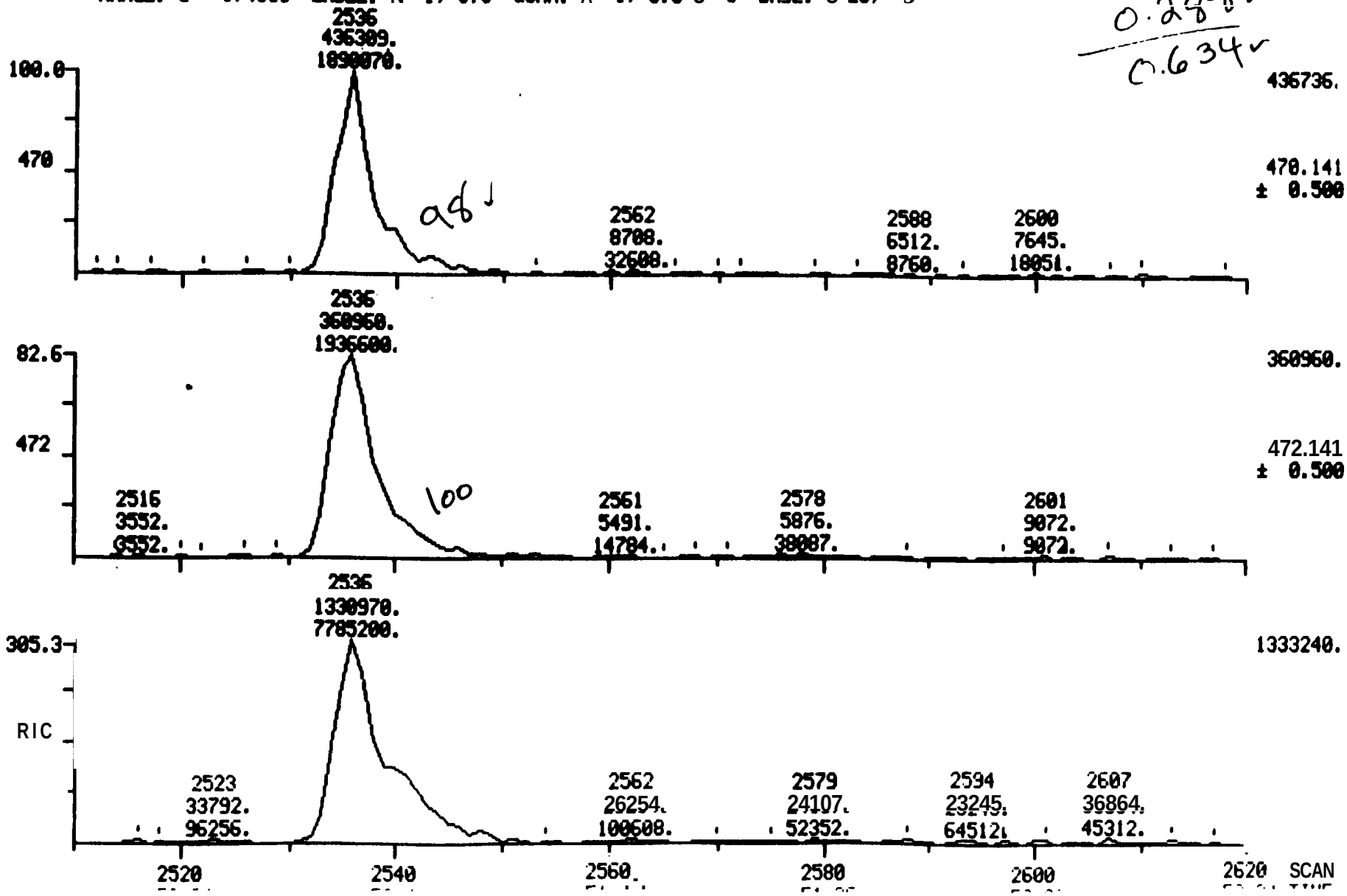
3200460

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2510 TO 2620 OCDD
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2510 TO 2620
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.288 ✓
0.634 ✓

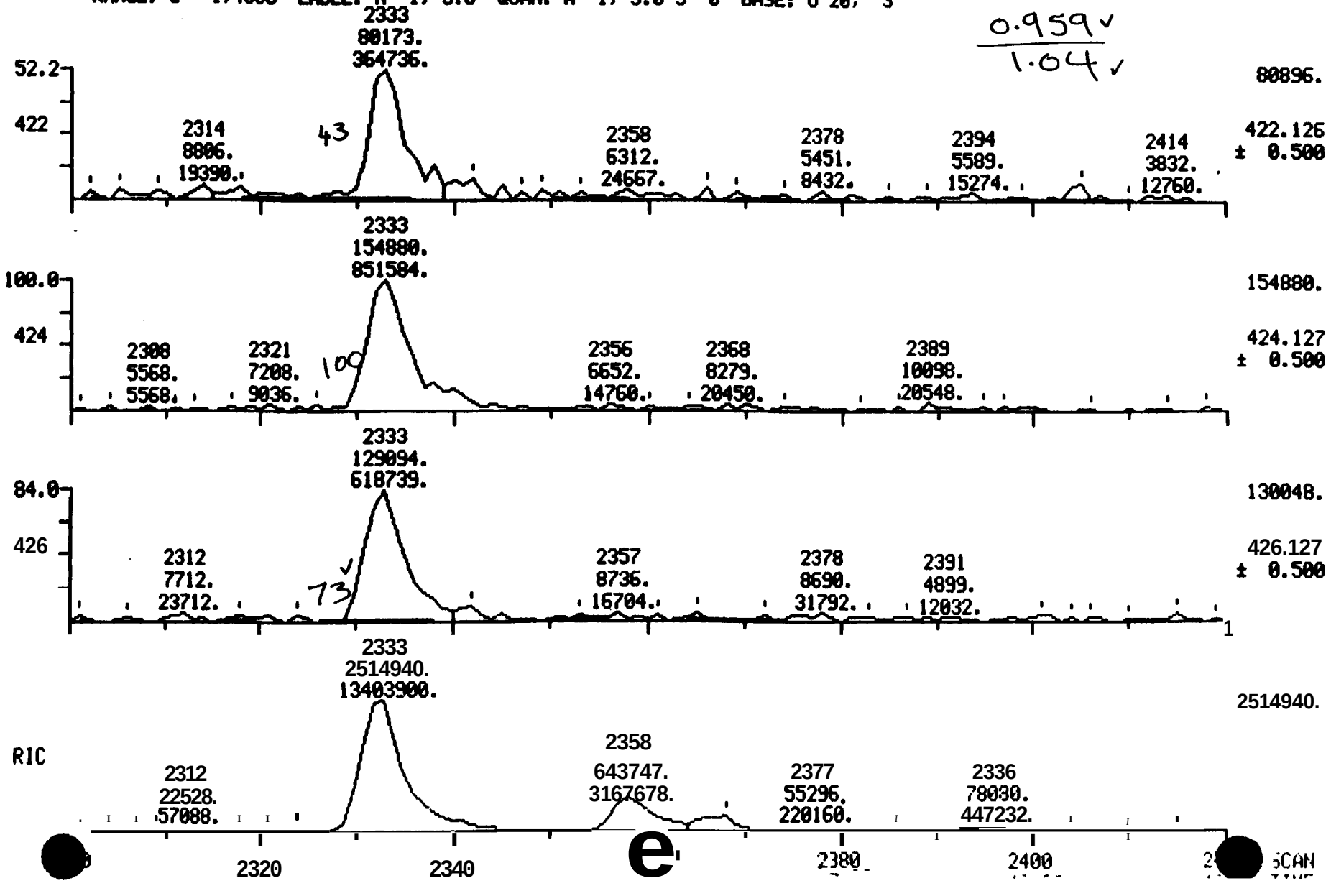


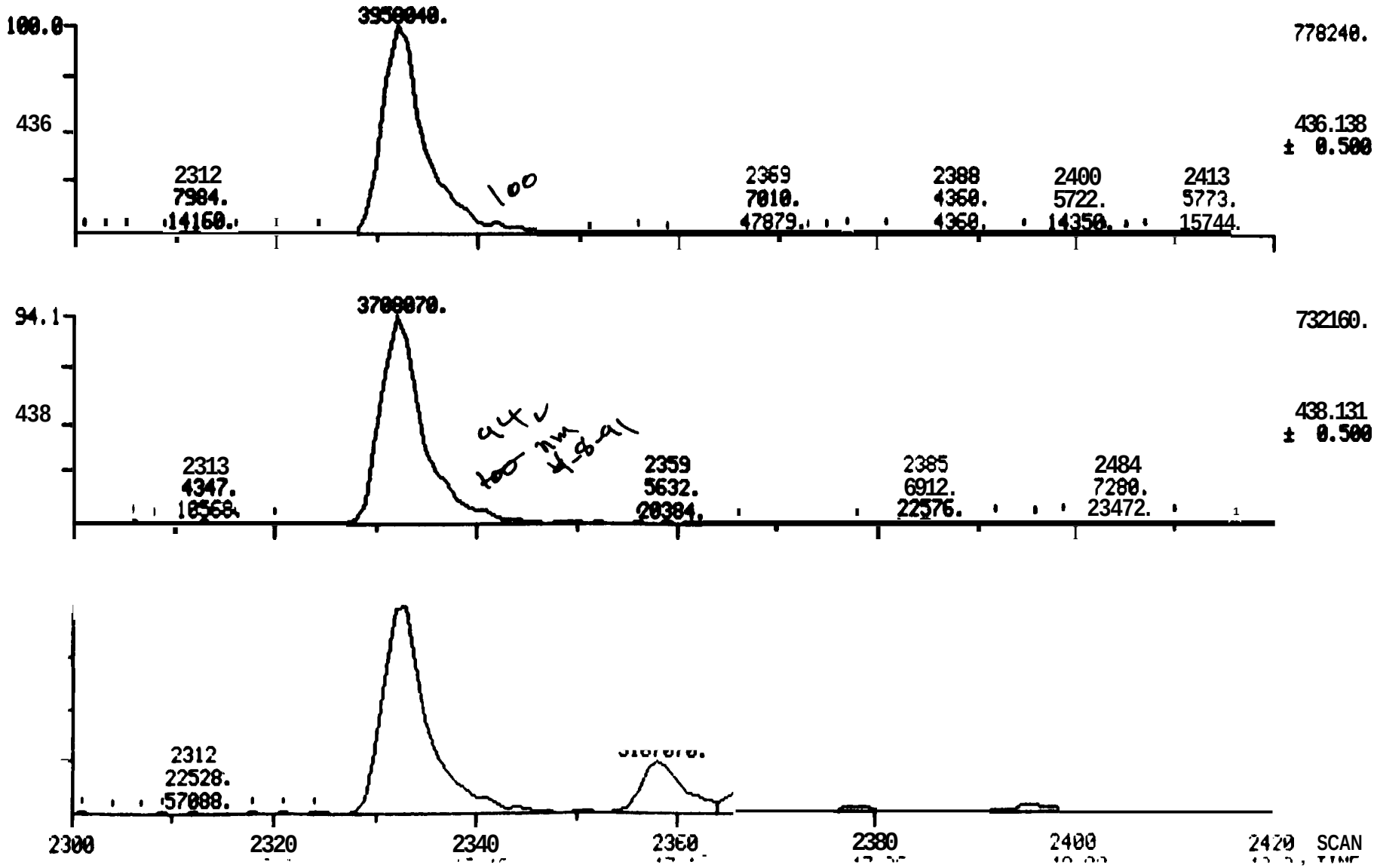
320046

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2300 TO 2420
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HpCDD

0.959 ✓
1.04 ✓

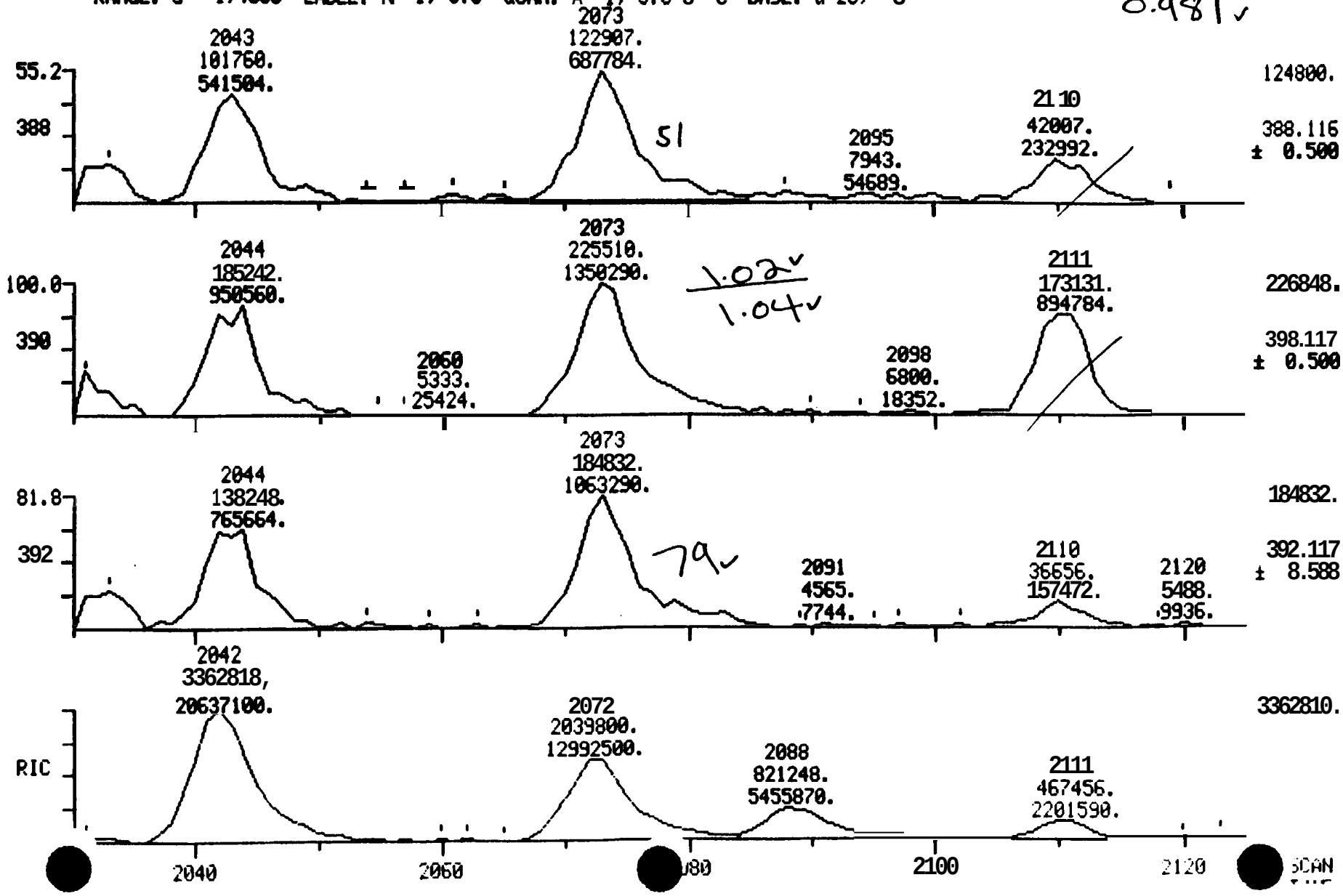



100.0
3958040.
778240.
436
436.138
± 0.500
2312
7984.
14160.
100
2369
7010.
47879.
2388
4360.
4360.
2400
5722.
14350.
2413
5773.
15744.
94.1
3708070.
732160.
438
438.131
± 0.500
94%
too
2313
4347.
10568.
2359
5632.
20384.
2385
6912.
22576.
2484
7280.
23472.
2312
22528.
57088.
2300
2320
2340
2360
2380
2400
2420
SCAN

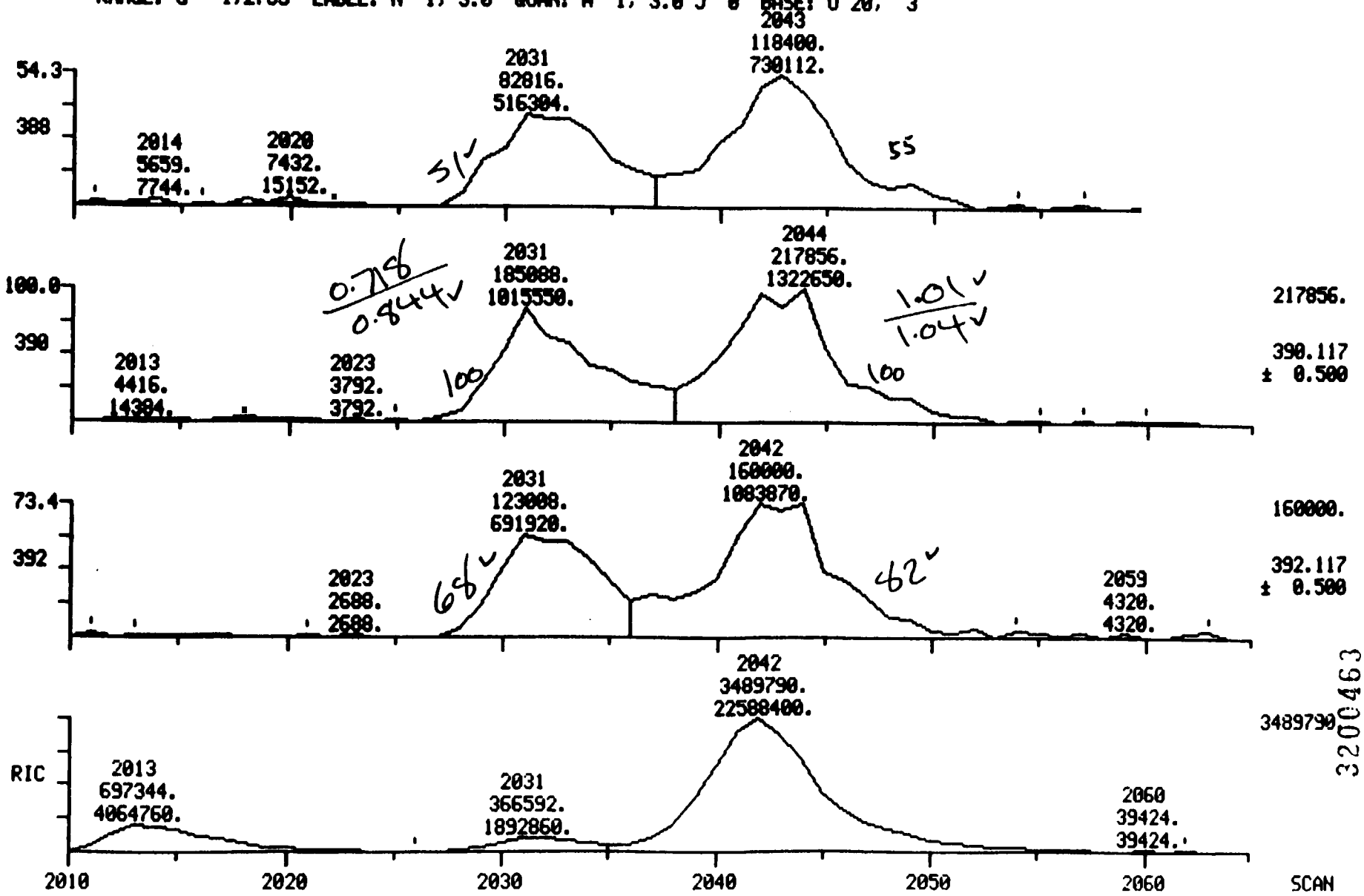
HxCDD

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2030 TO 2125
84/88/31 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J @ BASE: U 20, 3

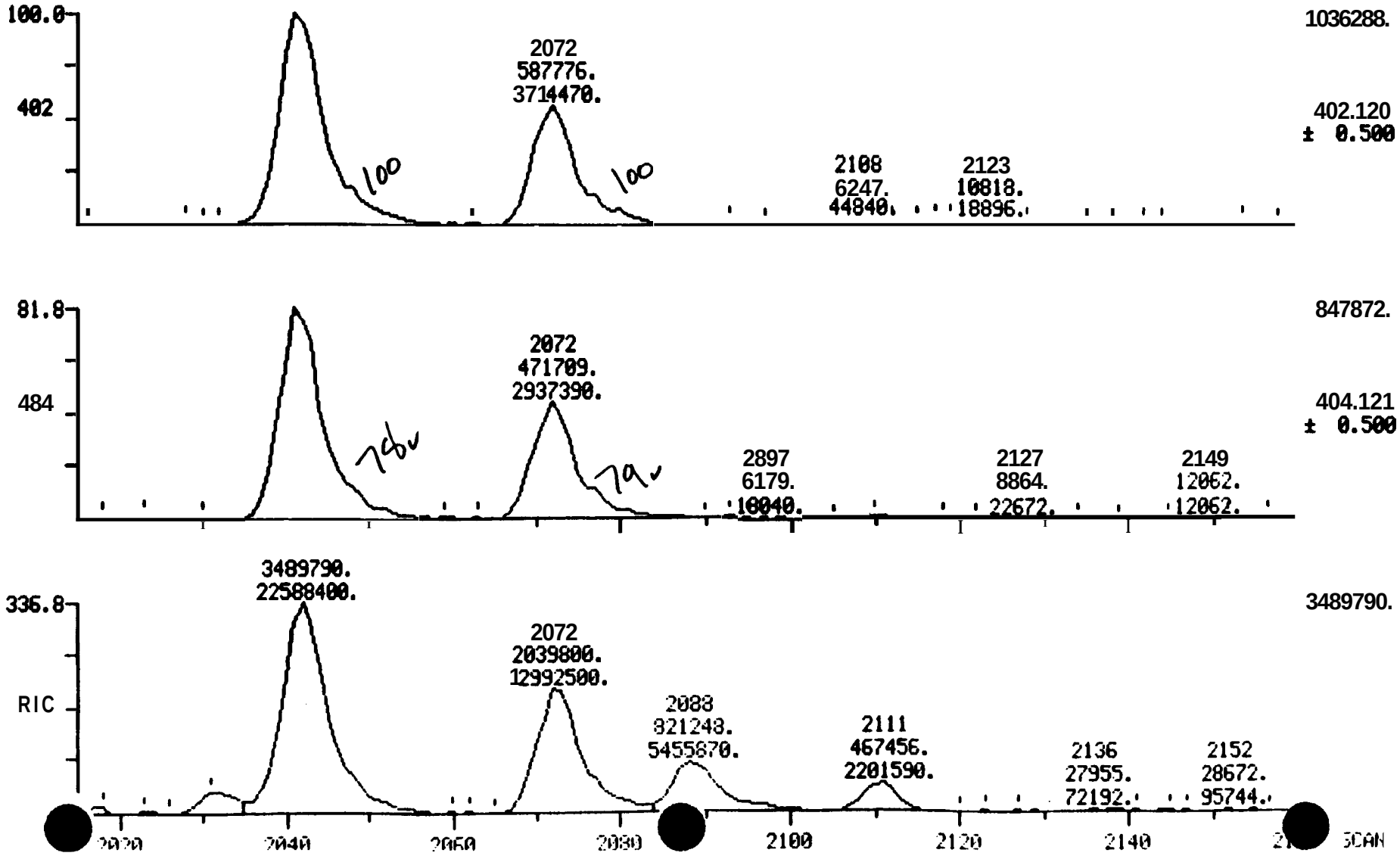
$X = \frac{0.915}{0.981}$



MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 2010 TO 2065
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



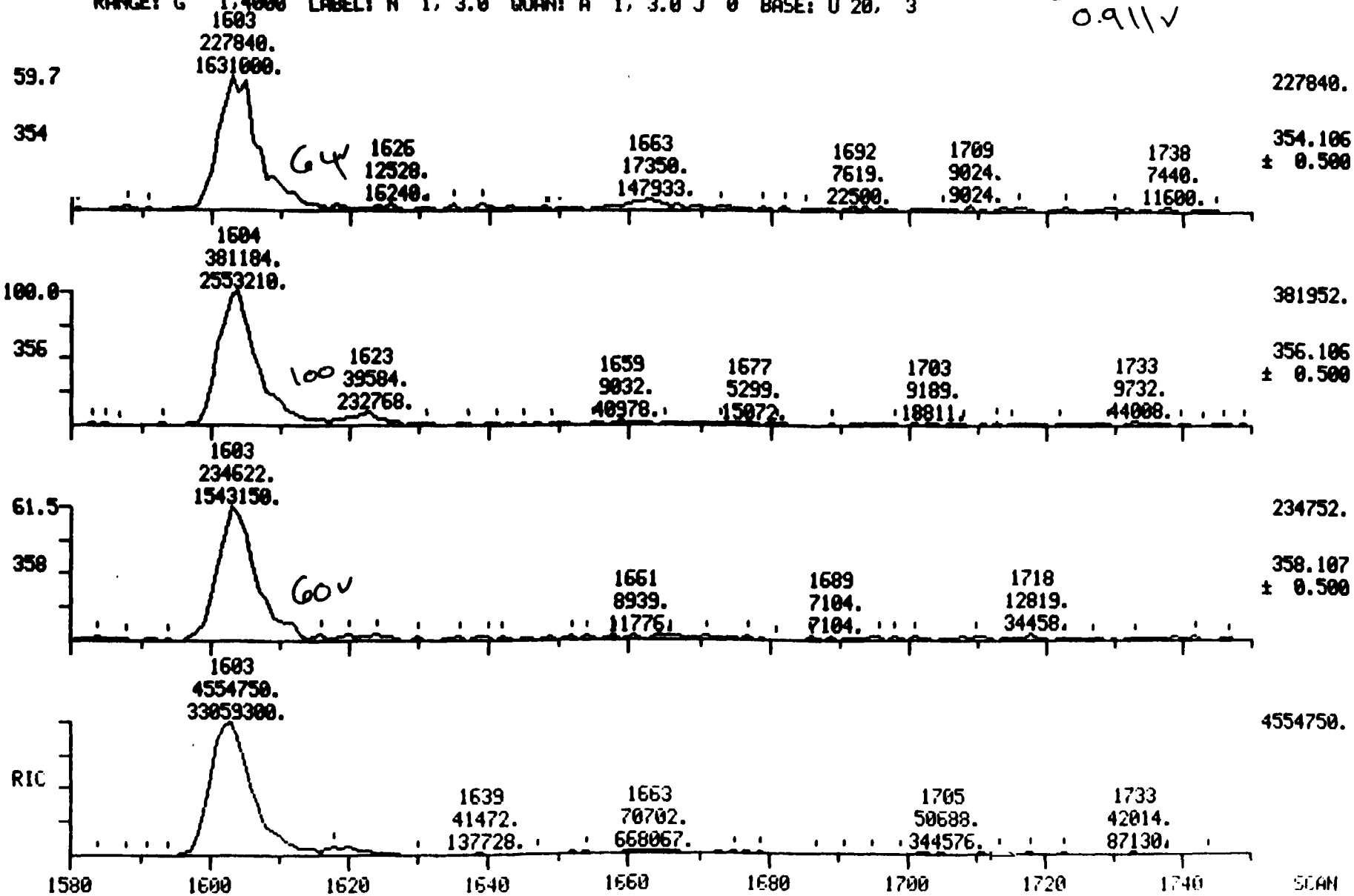
320C463


100.0
402
2072
587776.
3714470.
100
100
2108
6247.
44840.
2123
10818.
18896.
1036288.
402.120
± 0.500
81.8
484
2072
471709.
2937390.
2897
6179.
10040.
2127
8864.
22672.
2149
12062.
12062.
847872.
404.121
± 0.500
336.8
RIC
3489790.
22588400.
2072
2039800.
12992500.
2088
821248.
5455870.
2111
467456.
2201590.
2136
27955.
72192.
2152
28672.
95744.
3489790.
2100
2120
2140
SCAN

PeCDD

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1580 TO 750
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

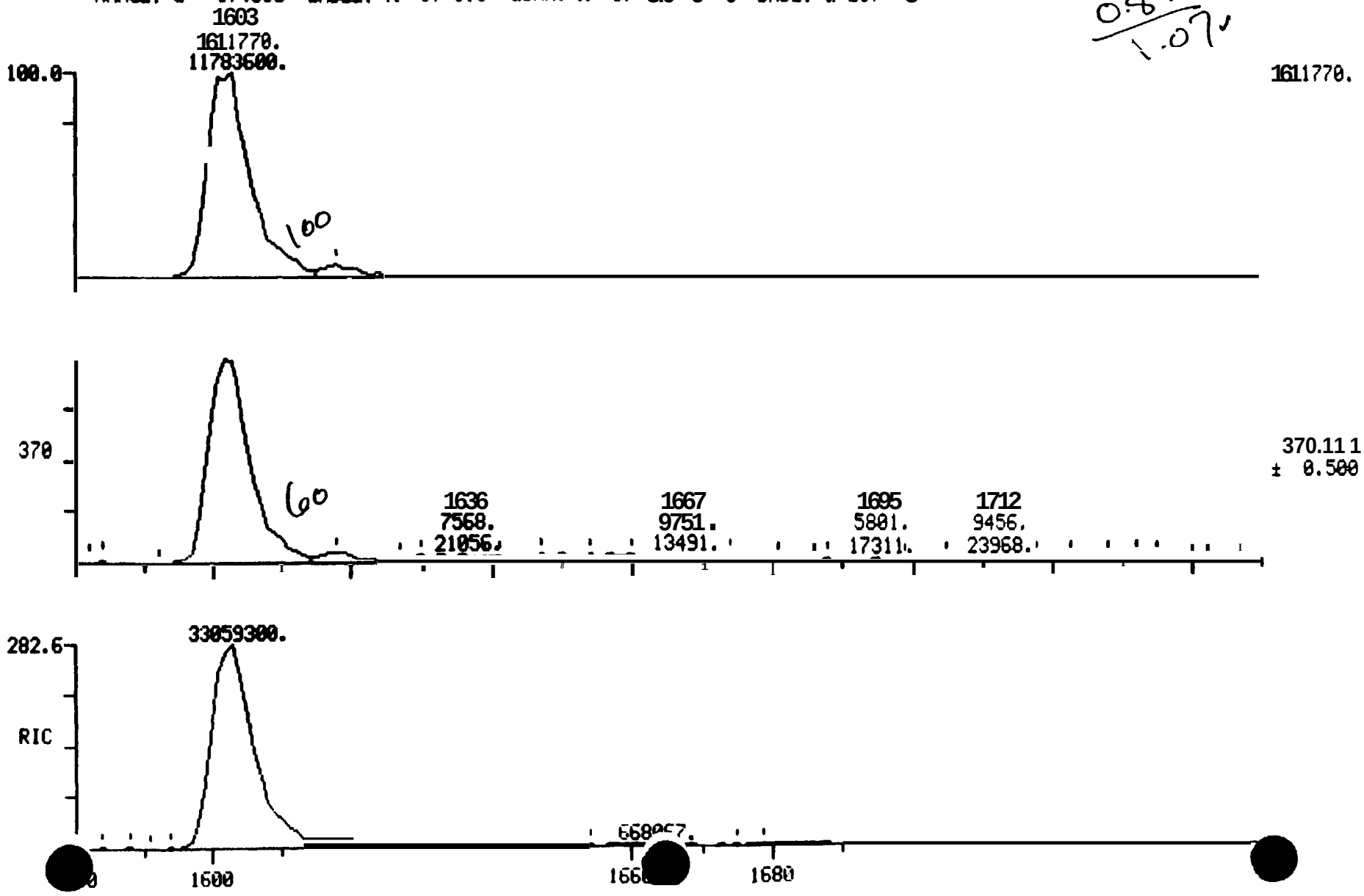
1.08
0.911 v



3200464

MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1580 TO 1750
04/08/91 11:09:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J @ BASE: U 20, 3

0.816 ✓
1.07 ✓



MIDRIC+MASS CHROMATOGRAMS DATA: T910408STD3 #1 SCANS 1140 TO 1260

04/08/91 11:09:00 CALI: CAL910306A #2

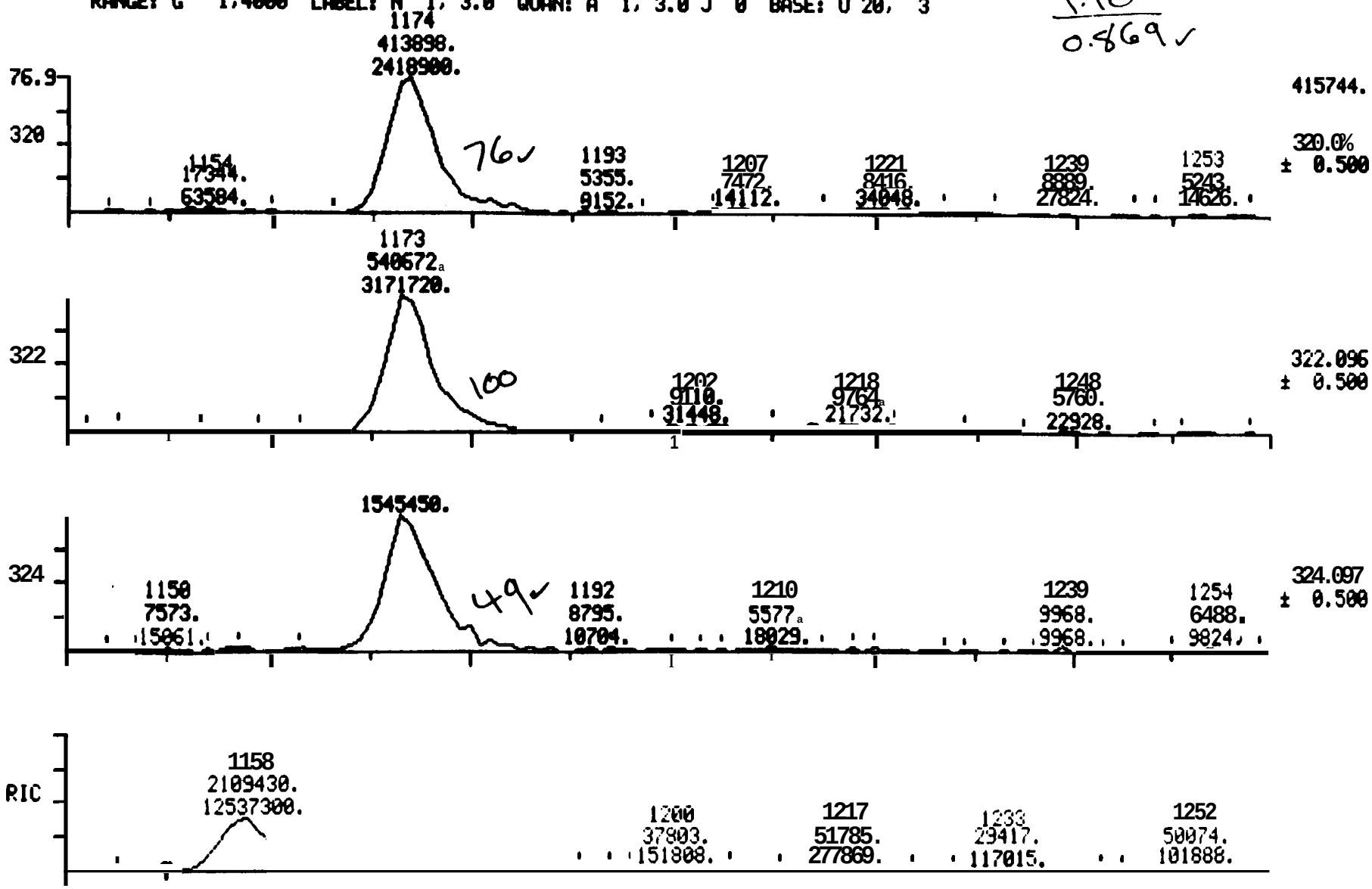
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB

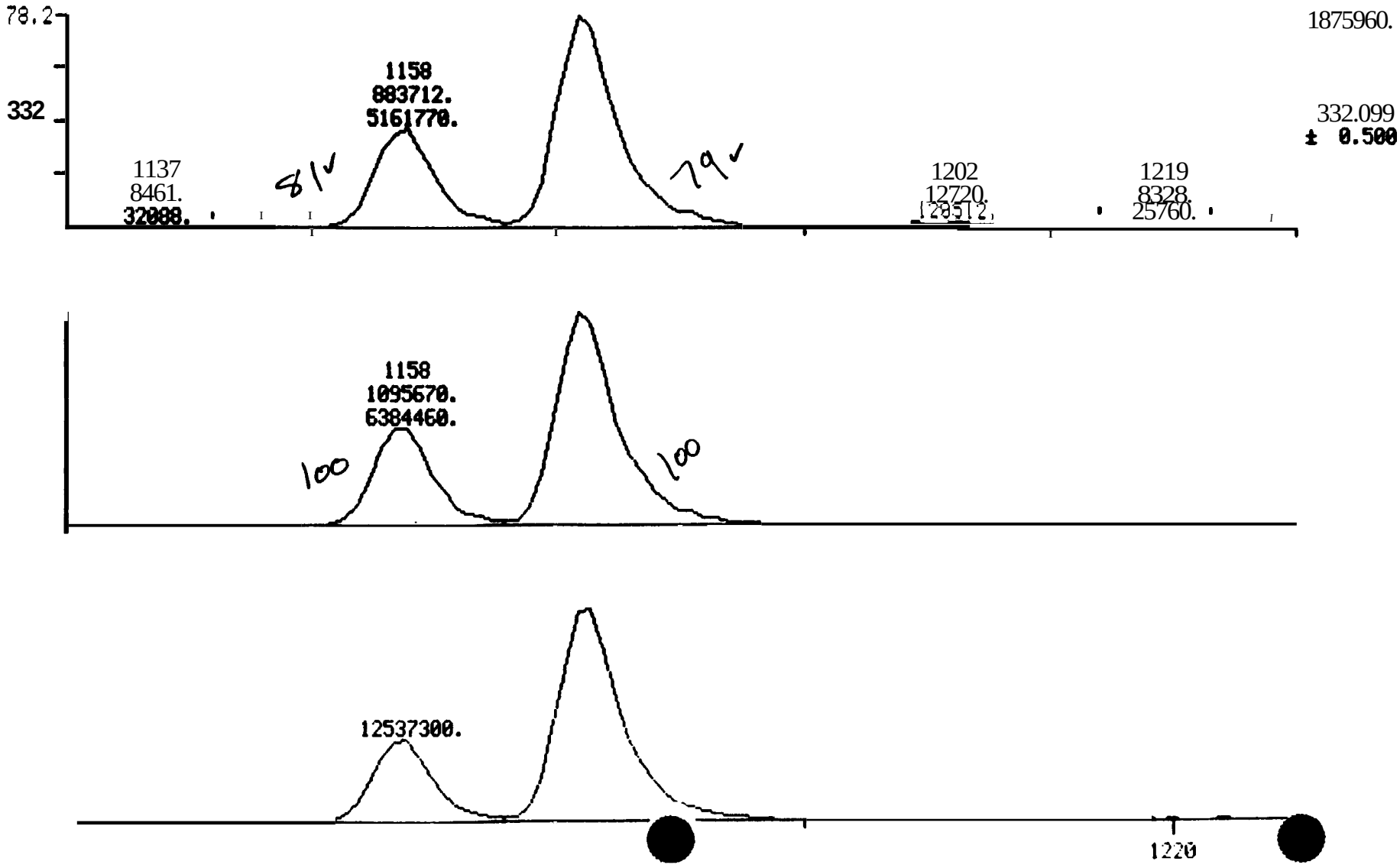
CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDD

1.10 ✓
0.869 ✓

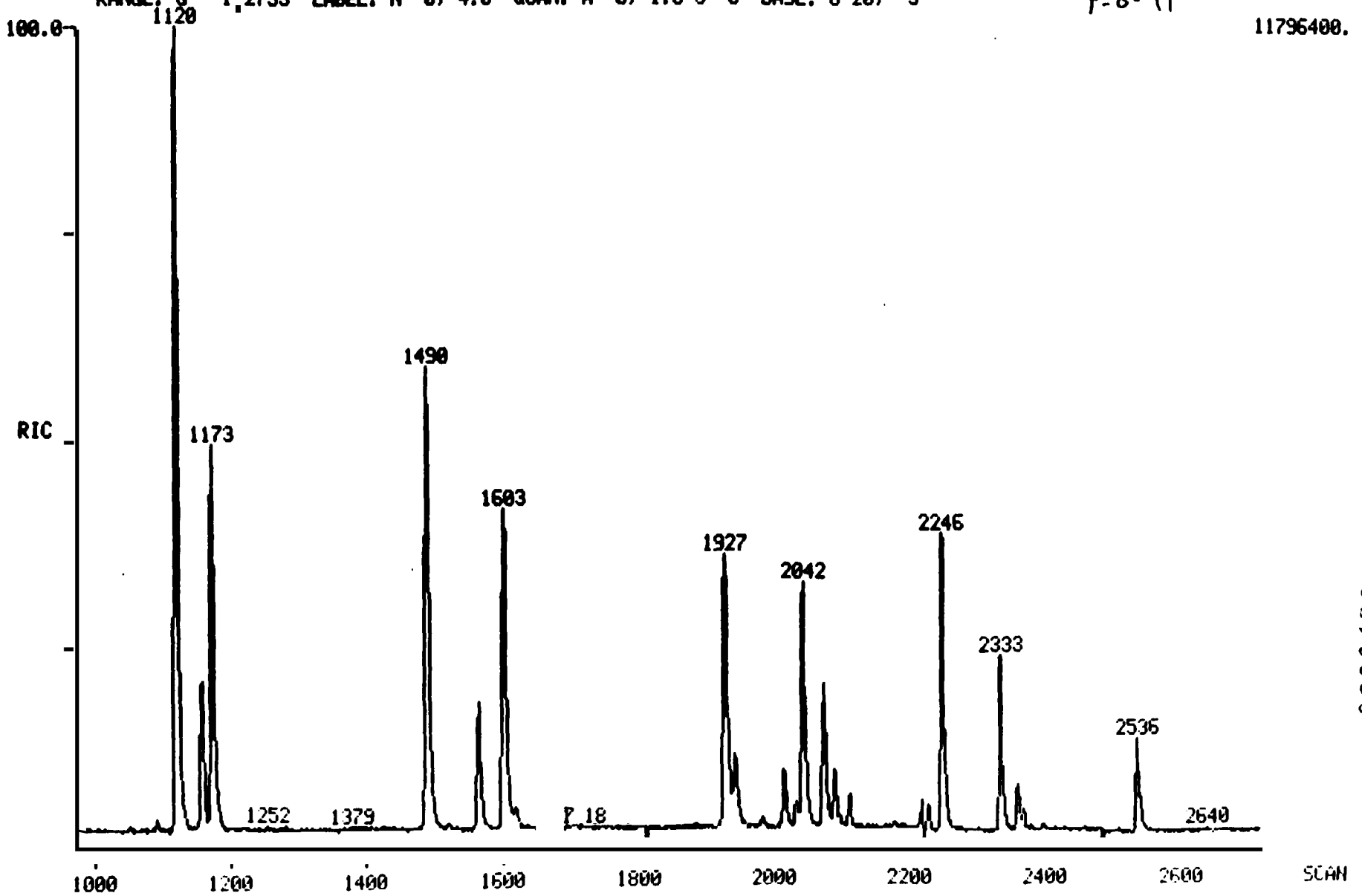



78.2
332
1875960.
332.099
± 0.500
1158
883712.
5161770.
1137
8461.
32088.
81✓
79✓
1202
12720.
128512.
1219
8328.
25760.
1158
1095670.
6384460.
100
100
12537300.
1220

MIDRIC
04/08/91 11:09:00
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: T910408STD3 #1 SCANS 975 TO 2720
CALI: CAL910306A #2

4-8-91
calc. nm
QC DT
4-8-91



4	419.530	420.050	0.054	3	100	40	1	0	Por
3	421.550	422.050	0.054	3	100	40	1	0	Por
6	423.550	404.030	0.054	3	100	40	1	0	Por
7	423.330	426.030	0.052	3	100	40	1	0	Por
8	433.330	436.030	0.052	3	100	40	1	0	Po.
9	437.550	438.050	0.052	3	100	40	1	0	Por
10	441.530	442.030	0.054	3	100	40	1	0	Pos
11	443.550	444.050	0.054	3	100	40	1	0	Por
12	457.530	438.030	0.052	3	100	40	1	0	Pos
13	459.350	460.030	0.052	3	100	40	1	0	Por
14	469.550	470.050	0.054	3	100	40	1	0	Pos
13	471.550	472.050	0.052	3	100	40	1	0	Por
16	479.550	480.050	0.054	3	100	40	1	0	Por
17	313.330	314.030	0.054	3	100	40	1	0	Por

3/27/91 16:17:30 SCAN 2753
Acquisition stopped

3/27/91 16:17:40
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2403 Centroid
SCAN 2404 Suspended
SCANS 2485 TO 2733 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2750	634.7	3300.0	19.2	84040.	31.	23.

MID scan — Desc: 02 — Mass intervals: 21
Scan tire: 1.200 ■ — Samp. fnt.: 0.200 ms — Master rate: 4096

Int #	Lo ma	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Po.
2	339.650	340.150	0.052	3	100	40	1	0	Pos
3	341.650	342.150	0.034	3	100	40	1	0	Por
4	351.650	332.150	0.032	3	100	40	1	0	Po.
5	353.630	354.150	0.054	3	100	40	1	0	Po.
6	333.650	356.150	0.032	3	100	40	1	0	Po.
7	337.630	358.150	0.054	3	100	40	1	0	Po.
8	367.650	368.150	0.032	3	100	40	1	0	Por
9	369.650	370.130	0.032	3	100	40	1	0	Por
10	371.650	372.150	0.032	3	100	40	1	0	Po.
11	373.650	374.150	0.032	3	100	40	1	0	Po.
12	375.650	376.150	0.052	3	100	40	1	0	Po.
13	379.650	380.150	0.052	3	100	40	1	0	Po.
14	381.650	382.150	0.032	3	100	40	1	0	Po.
15	385.650	386.150	0.032	3	100	40	1	0	Po.
16	387.650	388.150	0.032	3	100	40	1	0	Po.
17	389.650	390.130	0.032	3	100	40	1	0	Po.
18	391.650	392.150	0.032	3	100	40	1	0	Por
19	401.650	402.150	0.052	3	100	40	1	0	Po.
20	403.650	404.150	0.054	3	100	40	1	0	Po.
21	445.550	446.050	0.032	3	100	40	1	0	Po.

3/27/91 16:06:38 SCAN a19 OF 4000

HID scan — Desc: 03 — Mass intervals: 19
Scan time: 1.200 r — Samp. Int.: 0.200 ms — Master rate: 4096

Int #	Lo mar.	Hi mass	Tire	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Po.
2	373.650	374.150	0.052	3	100	40	1	0	Po.
3	375.650	376.150	0.032	3	100	40	1	0	Pos
4	385.650	386.150	0.052	3	100	40	1	0	Po.
3	387.650	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Por
7	391.650	392.150	0.052	3	100	40	1	0	Po.
8	401.650	402.150	0.052	3	100	40	1	0	Por
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	405.550	406.050	0.054	3	100	40	1	0	Por
11	407.550	408.050	0.052	3	100	40	1	0	Pos
12	409.550	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.550	422.050	0.054	3	100	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Pos
16	425.550	426.050	0.0S2	3	100	40	1	0	Po.
17	435.550	436.050	0.052	3	100	40	1	0	Po.
18	437.550	438.050	0.052	3	100	40	1	0	PO%
19	479.550	480.050	0.054	3	100	40	1	0	Po.

3/27/91 16:12:03 SCAN 2484 OF 4000

MID scan — Desc: 04 — Mass intervals: 17
Scan tire: 1.200 r — Samp. Int.: 0.200 ms — Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	PO%
2	407.550	408.050	0.052	3	100	40	1	0	Por
3	409.550	410.050	0.054	3	100	40	1	0	Po.

3/27/91 15:20:32 SCAN 1 OF 4000
Acquisition started

Acquire Run 0:68506V3 ACQUIRING
03/27/91 15:20:00 + 0:04 Free sectors: 17332 Scan: 3 of 4000
Sample: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
Conds. : 60M DB-5/TOTALS.
Formula: Instrument: 03 Weight: 0.000
Submitted by: DM Analyst: NM Acct. No: PC4622

********** GC PARAMETERS **********
Loaded OC Desc:BW Current OC oven tmp: 83 DegC Injector : 300 DegC
Current OC Desc:BW OC elapsed time : 1:26 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 30	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	23.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion

MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200 ms Master rate: 4096

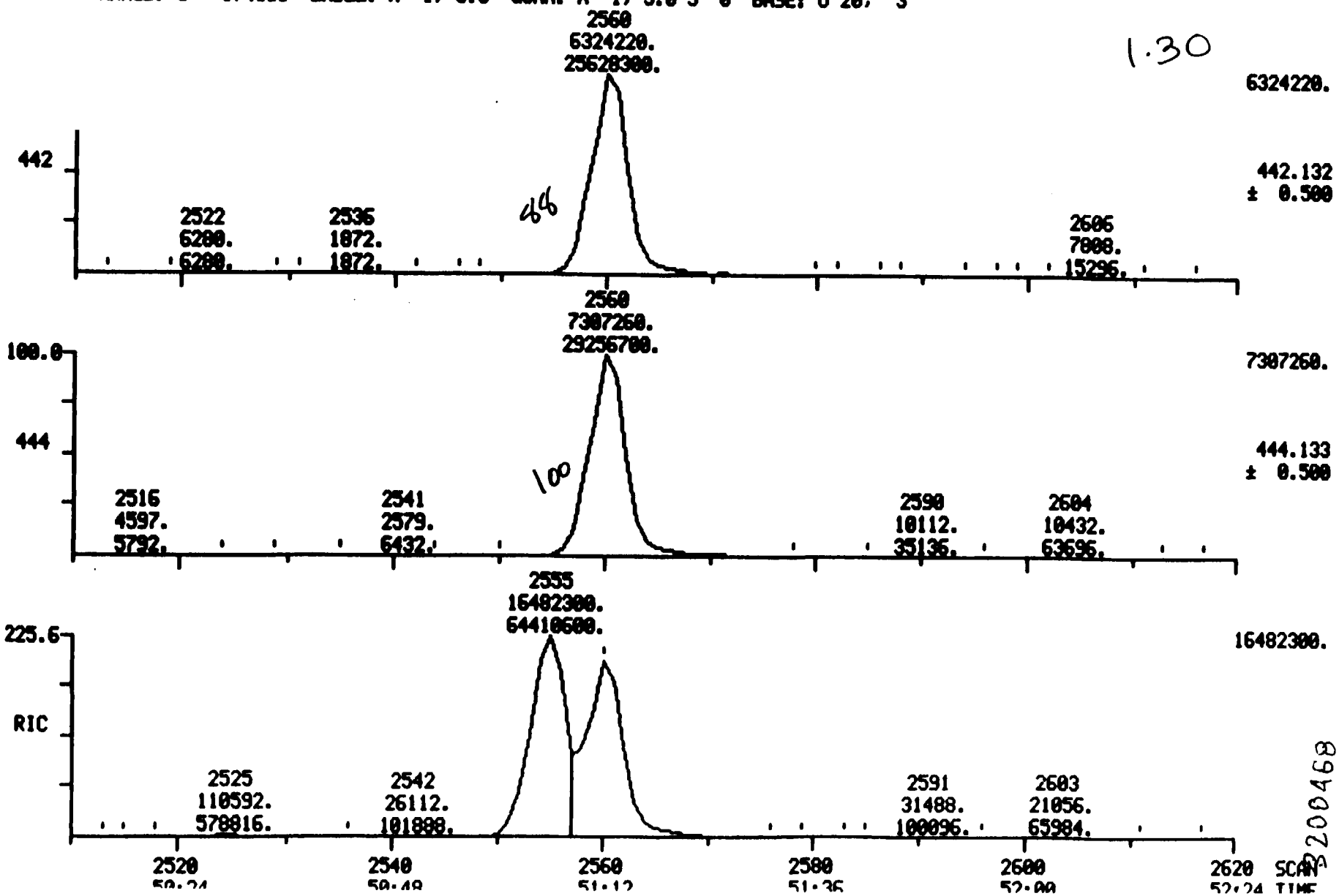
Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.032	3	100	40	1	0	Po.
2	305.650	306.130	0.032	3	100	40	1	0	Pos
3	307.650	308.150	0.034	3	100	40	1	0	Pos
4	315.650	316.130	0.052	3	100	40	1	0	Pos
3	317.650	318.150	0.054	3	100	40	1	0	Po.
6	319.650	320.150	0.052	3	100	40	1	0	Po.
7	321.650	322.150	0.034	3	100	40	1	0	Po.
8	323.650	324.150	0.032	3	100	40	1	0	Po.
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.150	0.034	3	100	40	1	0	Po.
11	337.630	338.150	0.054	3	100	40	1	0	Po.
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.032	3	100	40	1	0	Pos
14	351.650	352.130	0.054	3	100	40	1	0	Pos
13	353.650	354.130	0.032	3	100	40	1	0	Po.
16	355.650	356.150	0.054	3	100	40	1	0	Po.
17	357.650	358.150	0.052	3	100	40	1	0	Po.
18	367.650	368.150	0.054	3	100	40	1	0	Po.
19	369.650	370.150	0.032	3	100	40	1	0	Po.
20	375.650	376.150	0.052	3	100	40	1	0	Po.
21	409.550	410.050	0.052	3	100	40	1	0	Po.

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument typo	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

3/27/91 13:37:23 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 2510 TO 2620
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

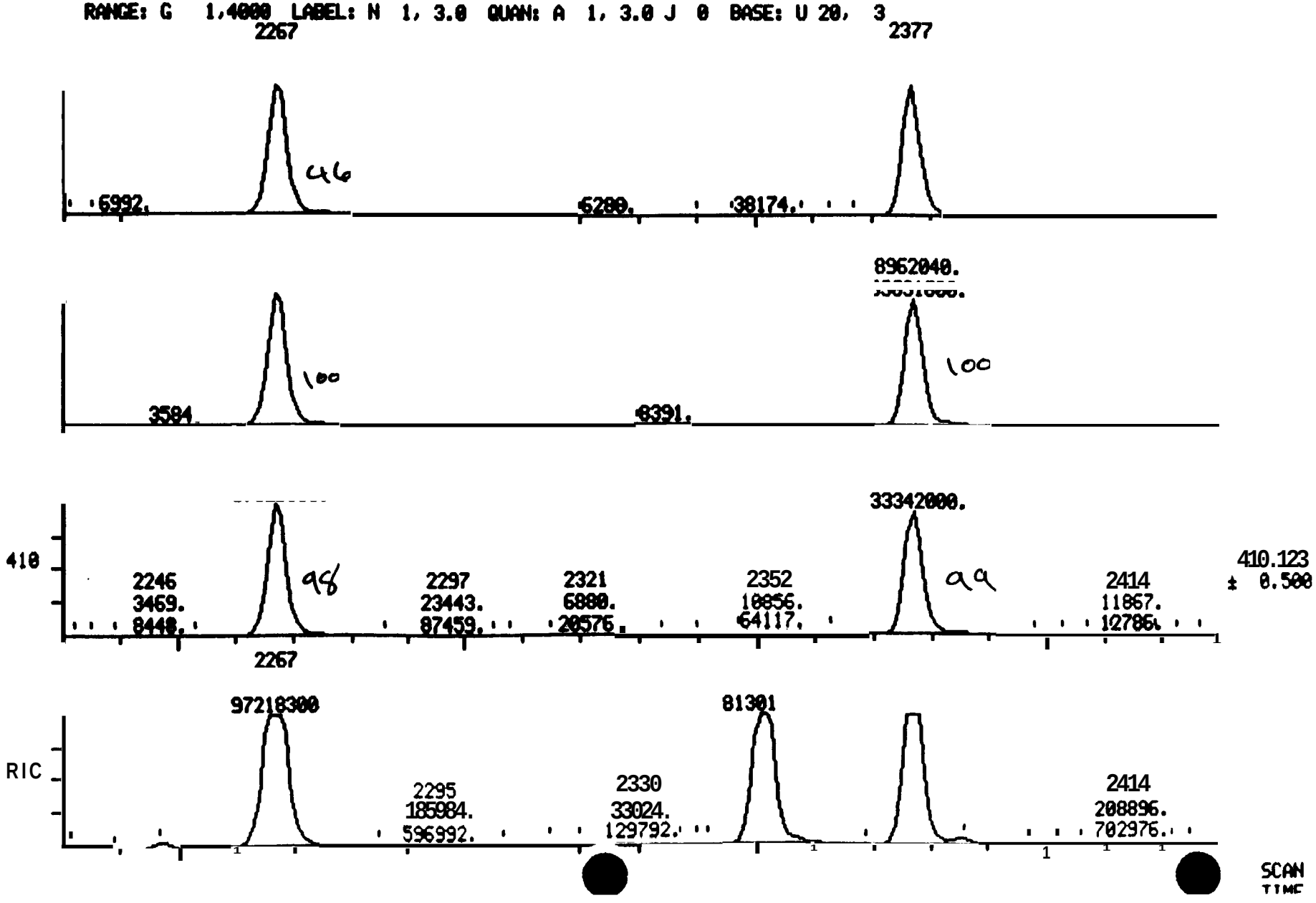
OCDF



3200468

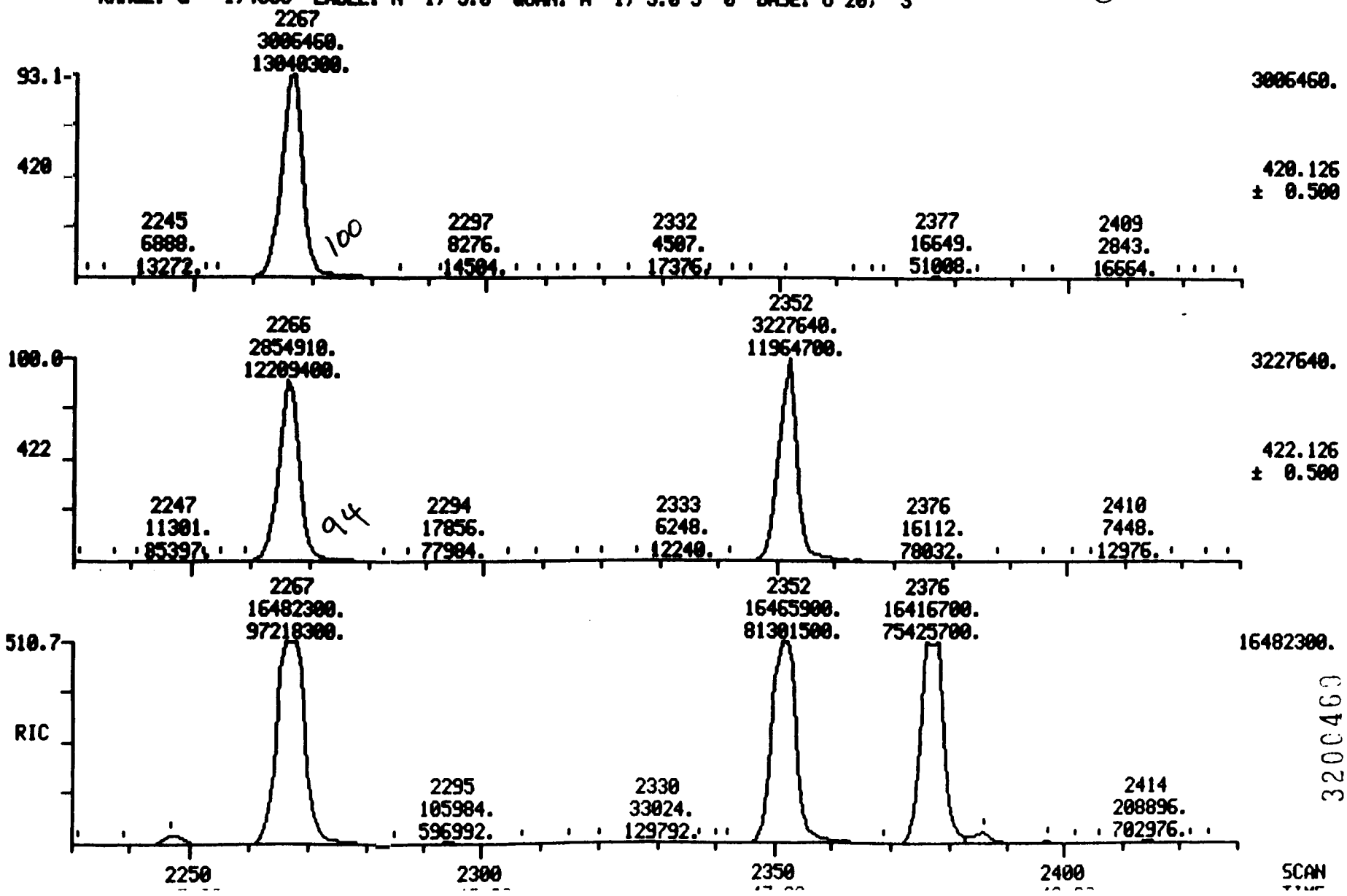
HpCDF

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 2230 TO 2430
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

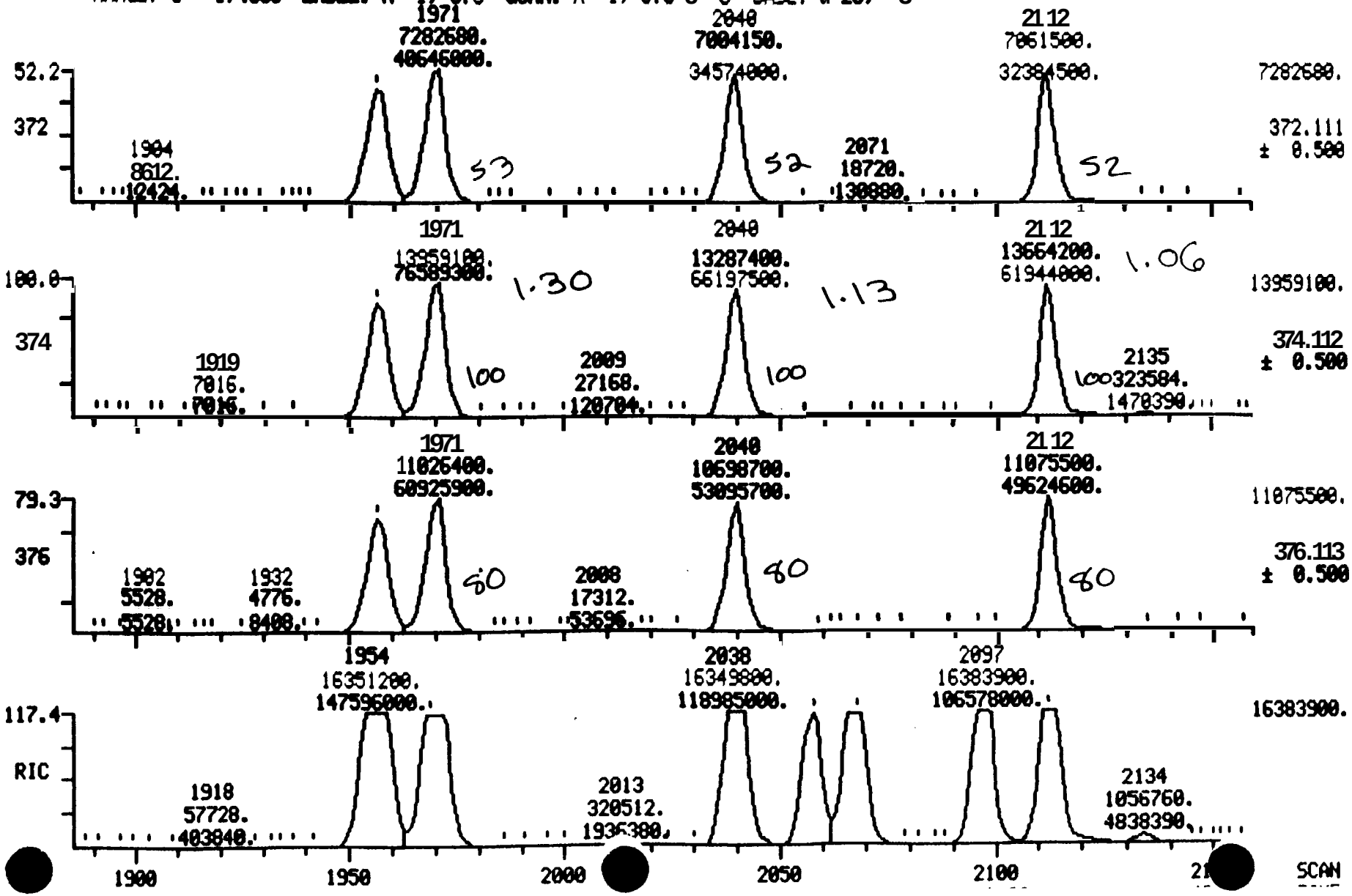
0.460



320C469

HxCDF

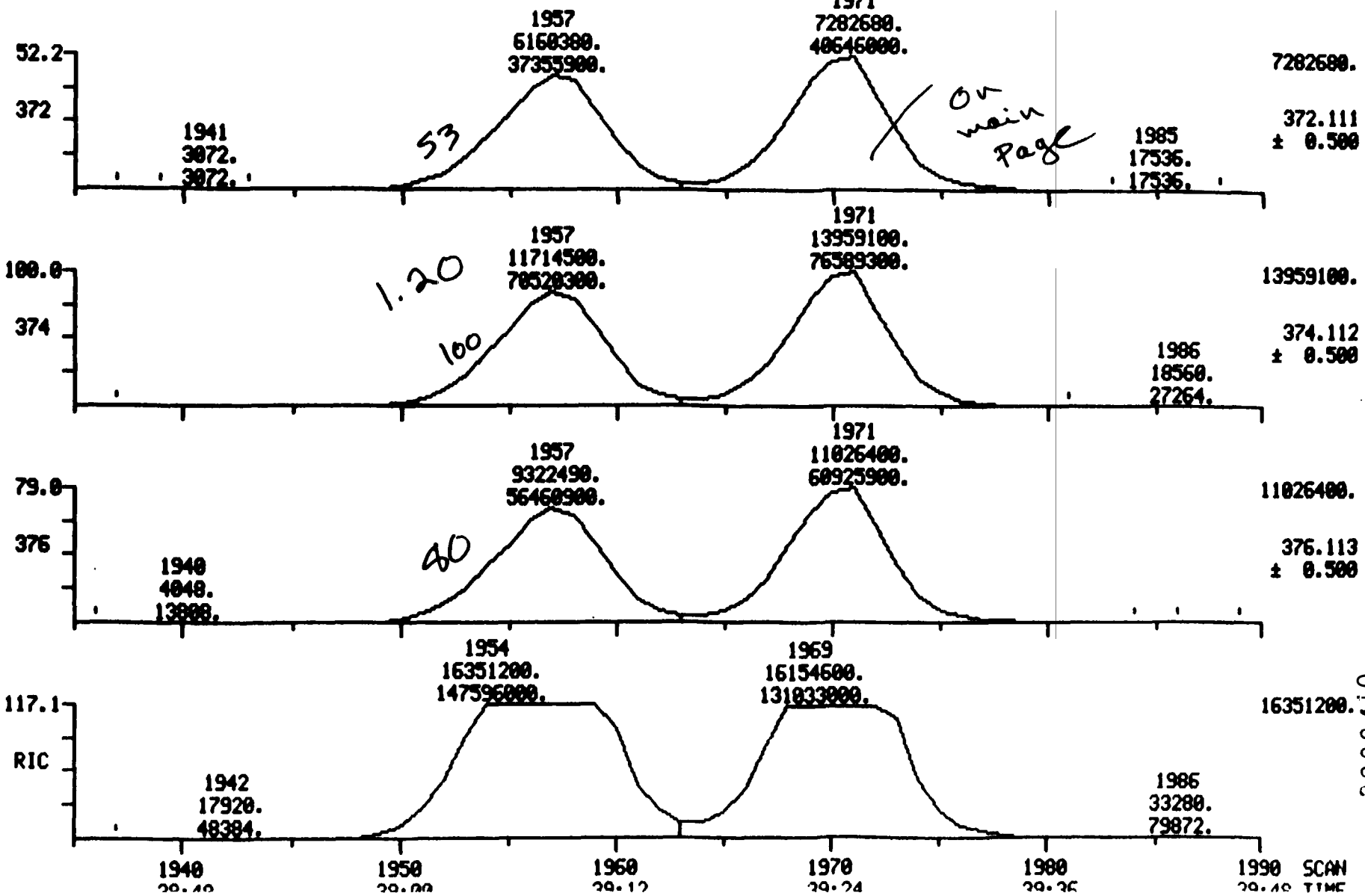
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1885 TO 2160
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



1/1

HXCD

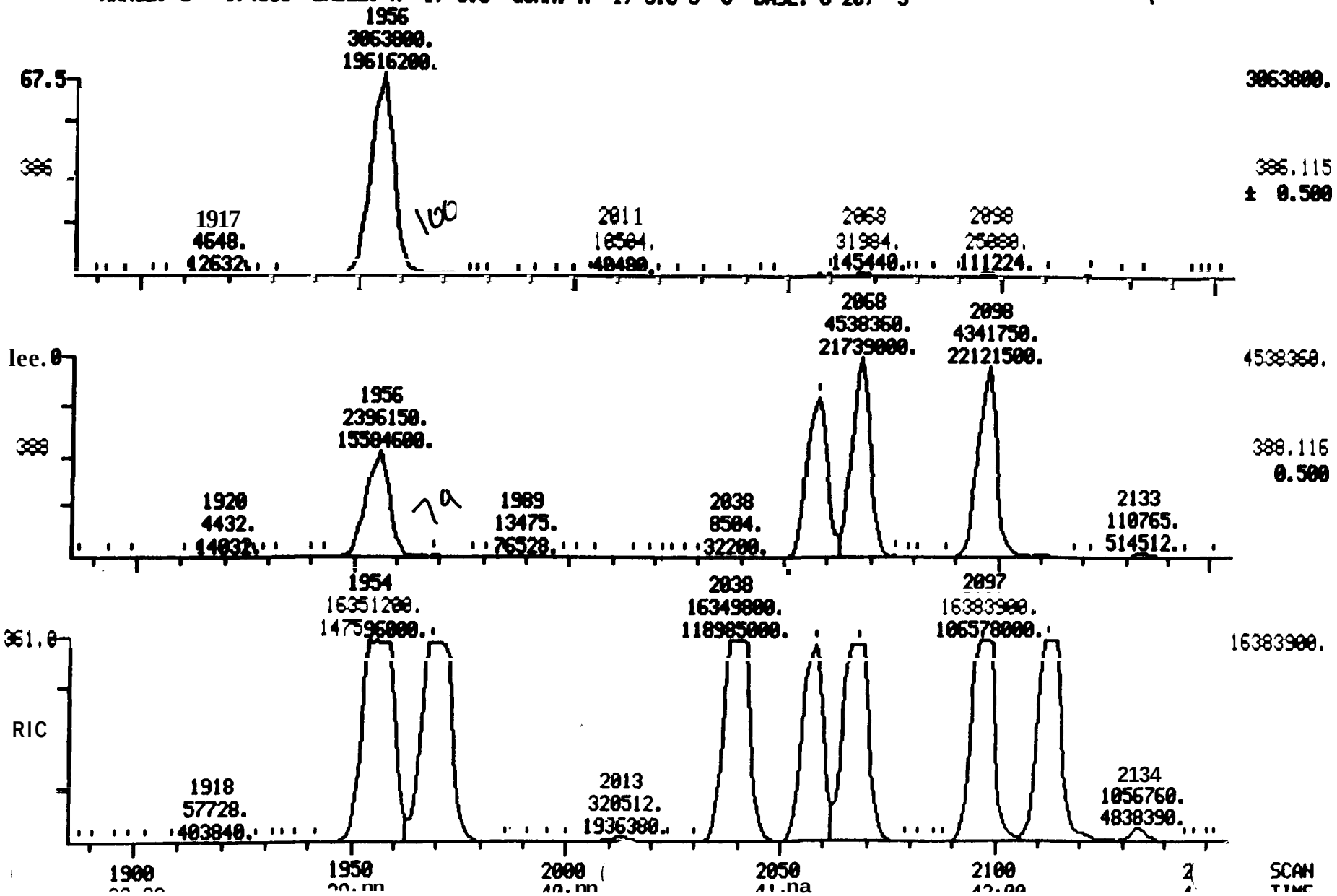
MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1935 TO 1990
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



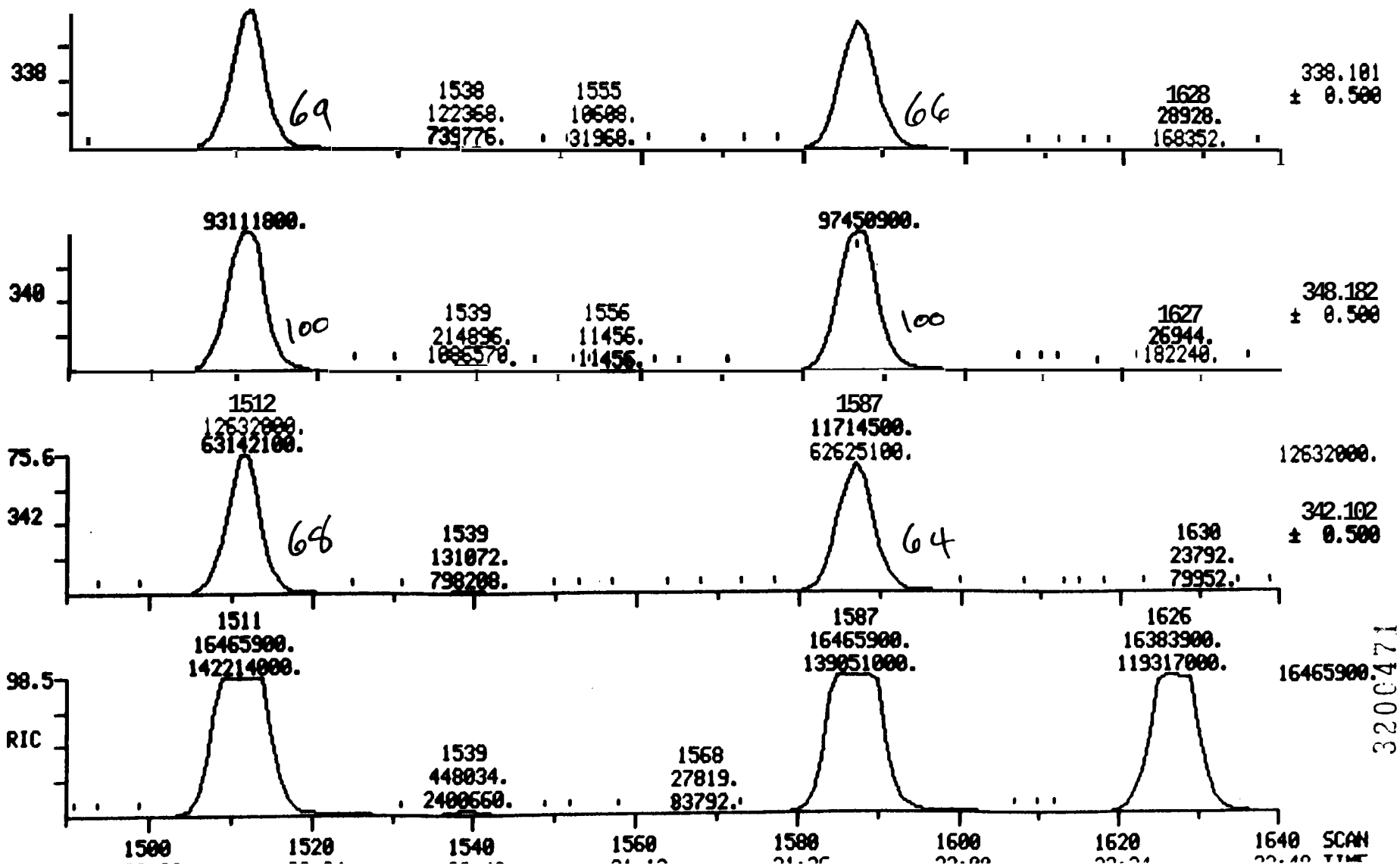
3200410

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1885 TO 2155
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.20



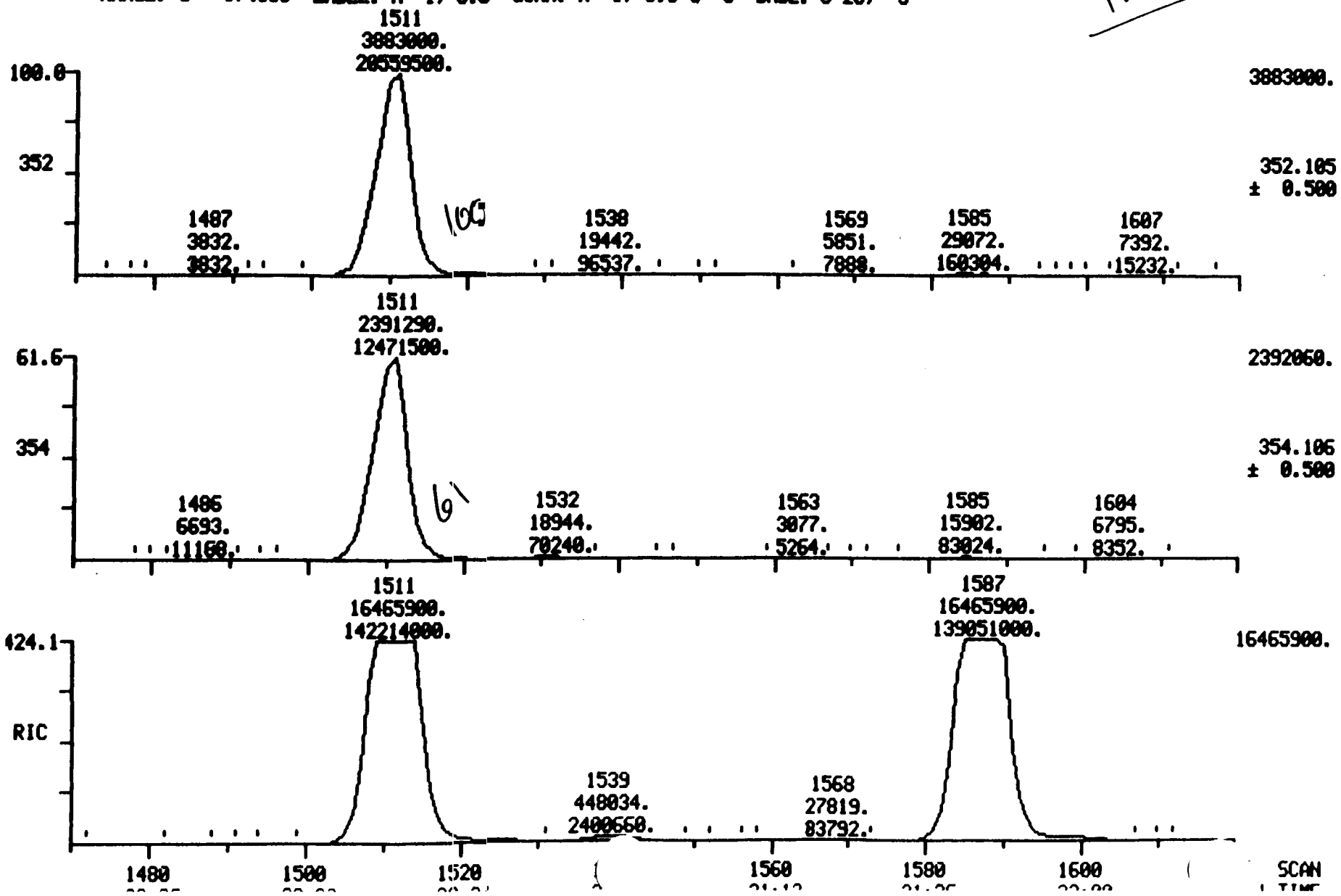
LABEL:



3200471

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1470 TO 1620
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.12



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1000 TO 1230

03/27/91 15:20:00 CALI: CAL910306A #2

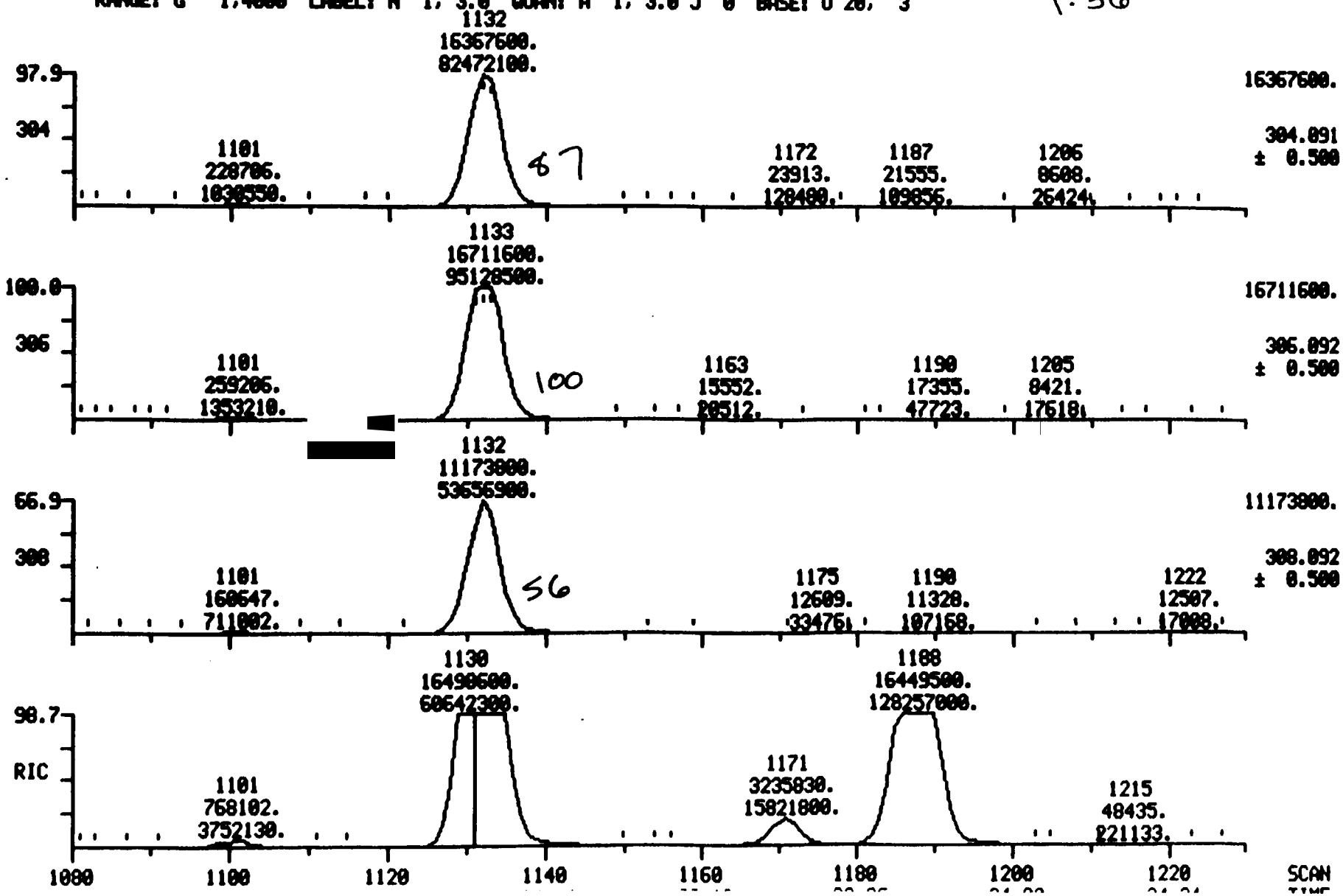
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDF

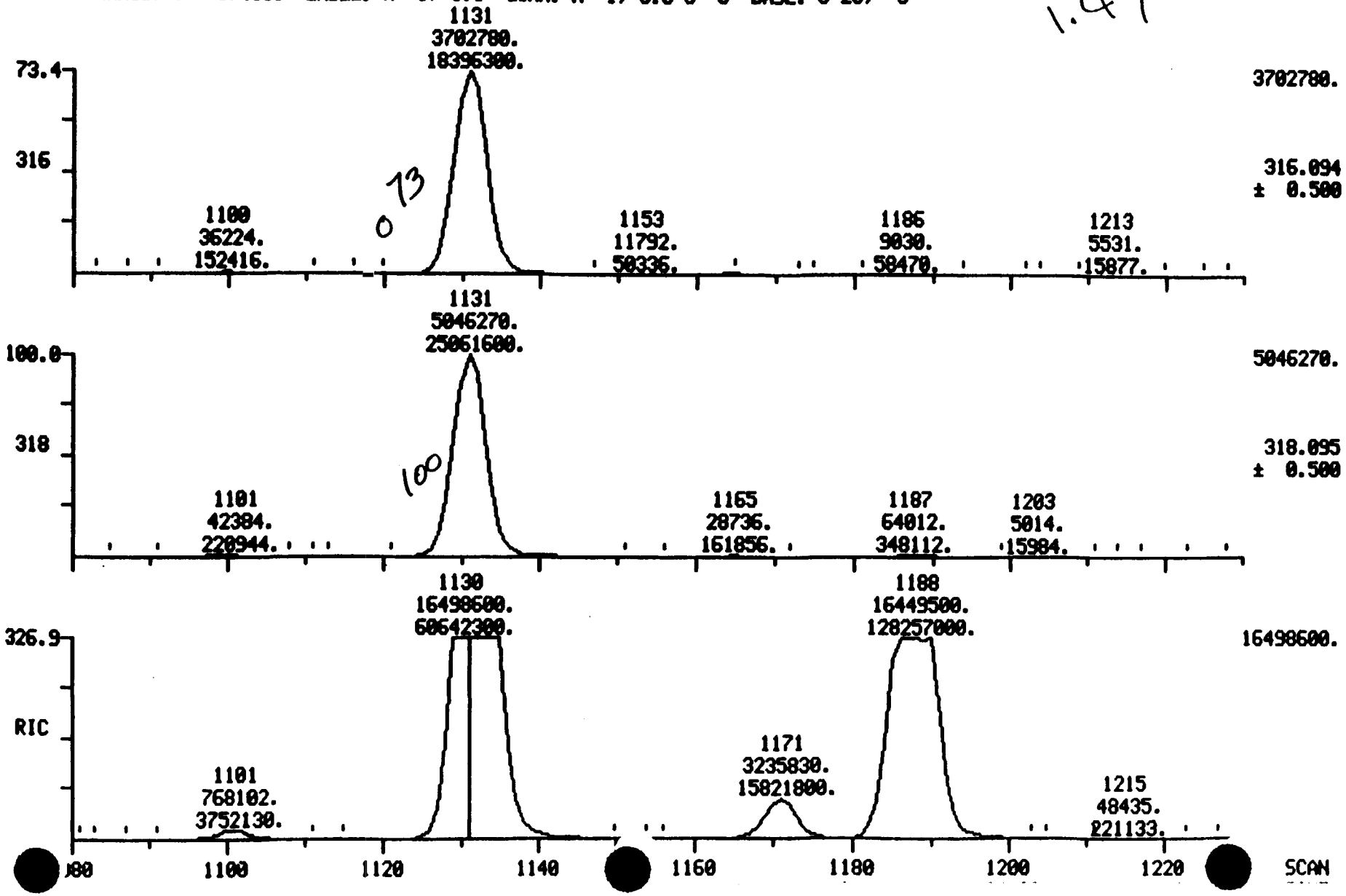
1.36



3200472

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1080 TO 1230
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

1.47



MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 2510 TO 2620

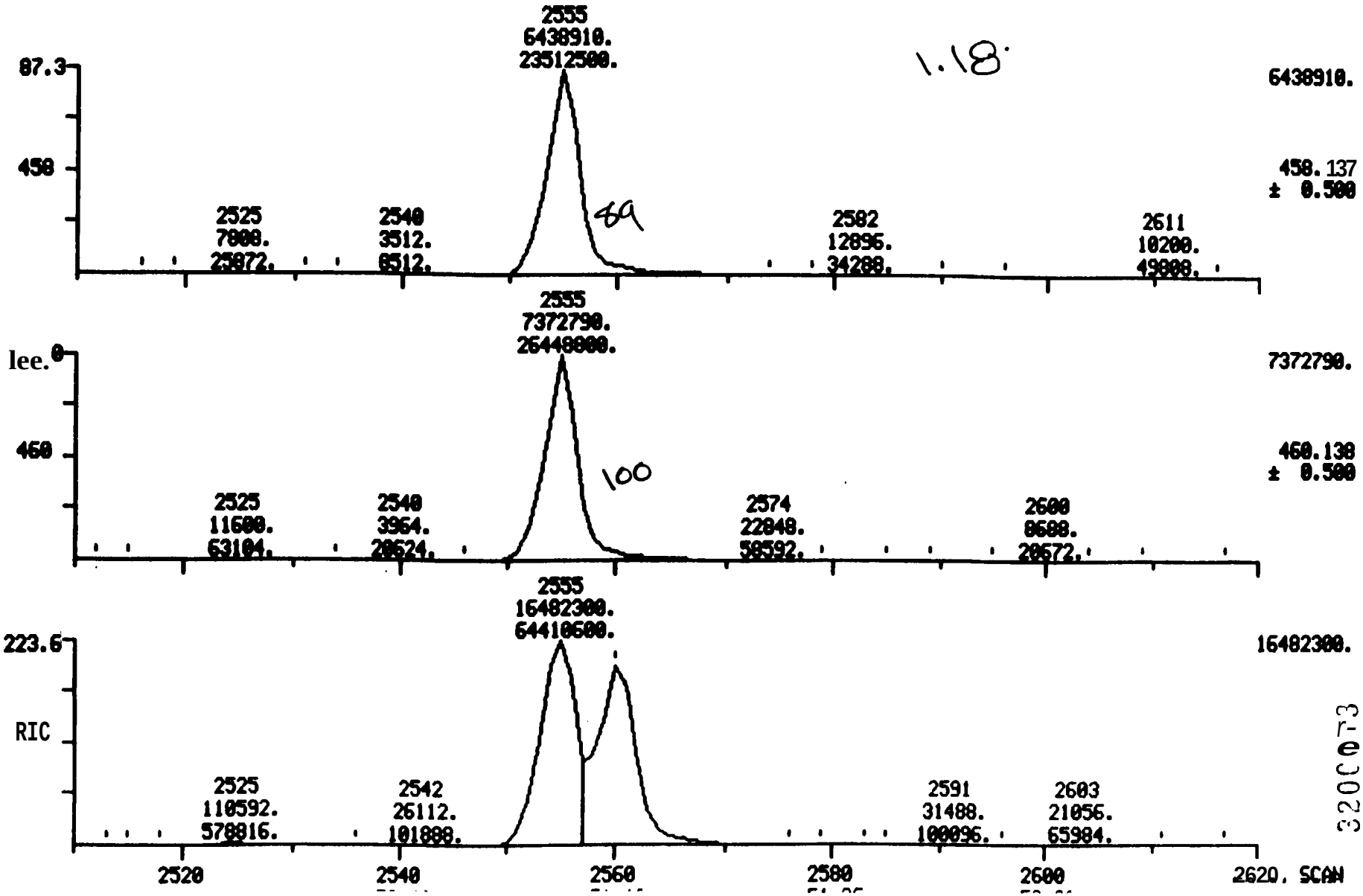
03/27/91 15:20:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

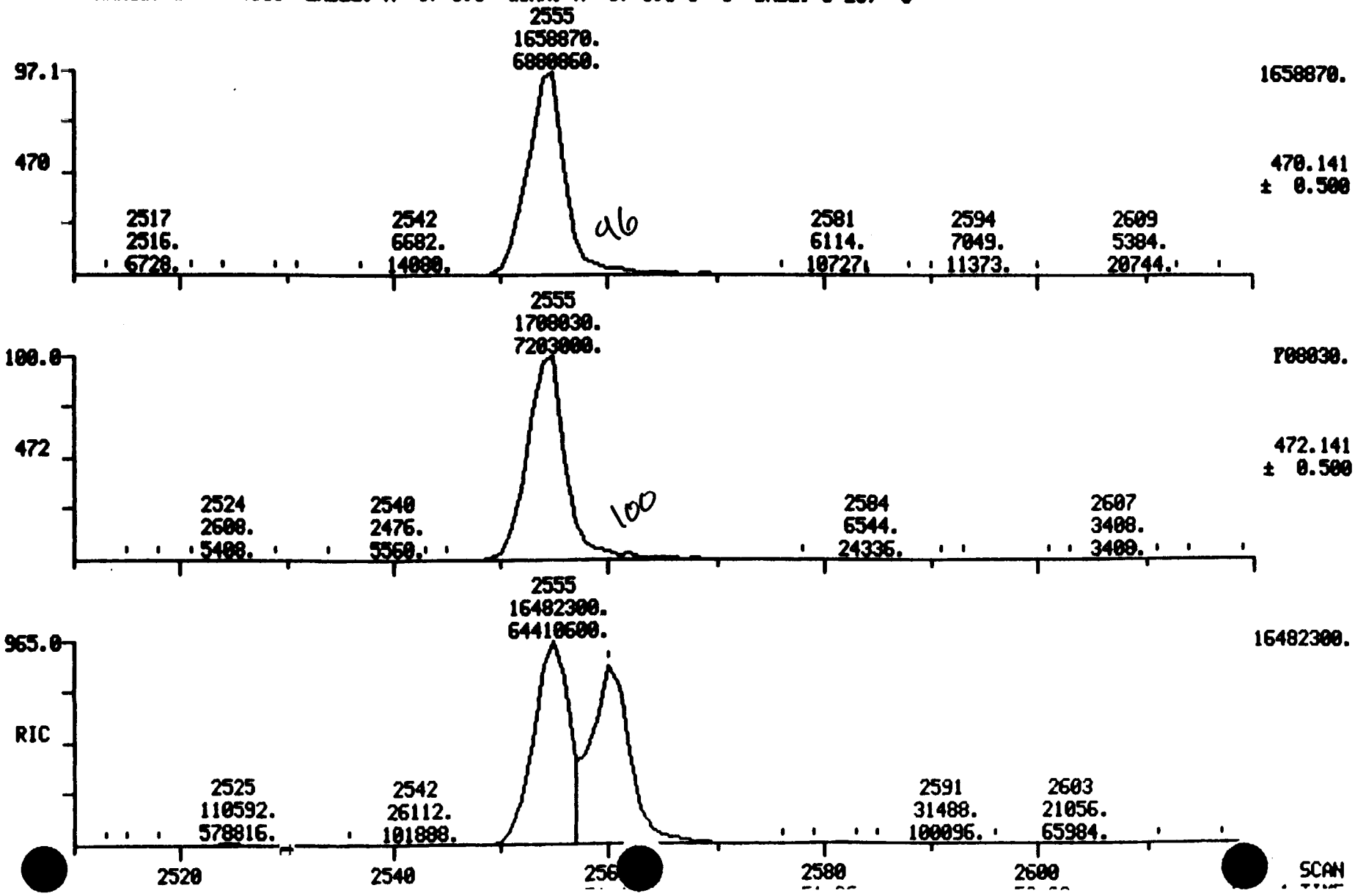
OCDD



3200073

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 2510 TO 2620
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.479



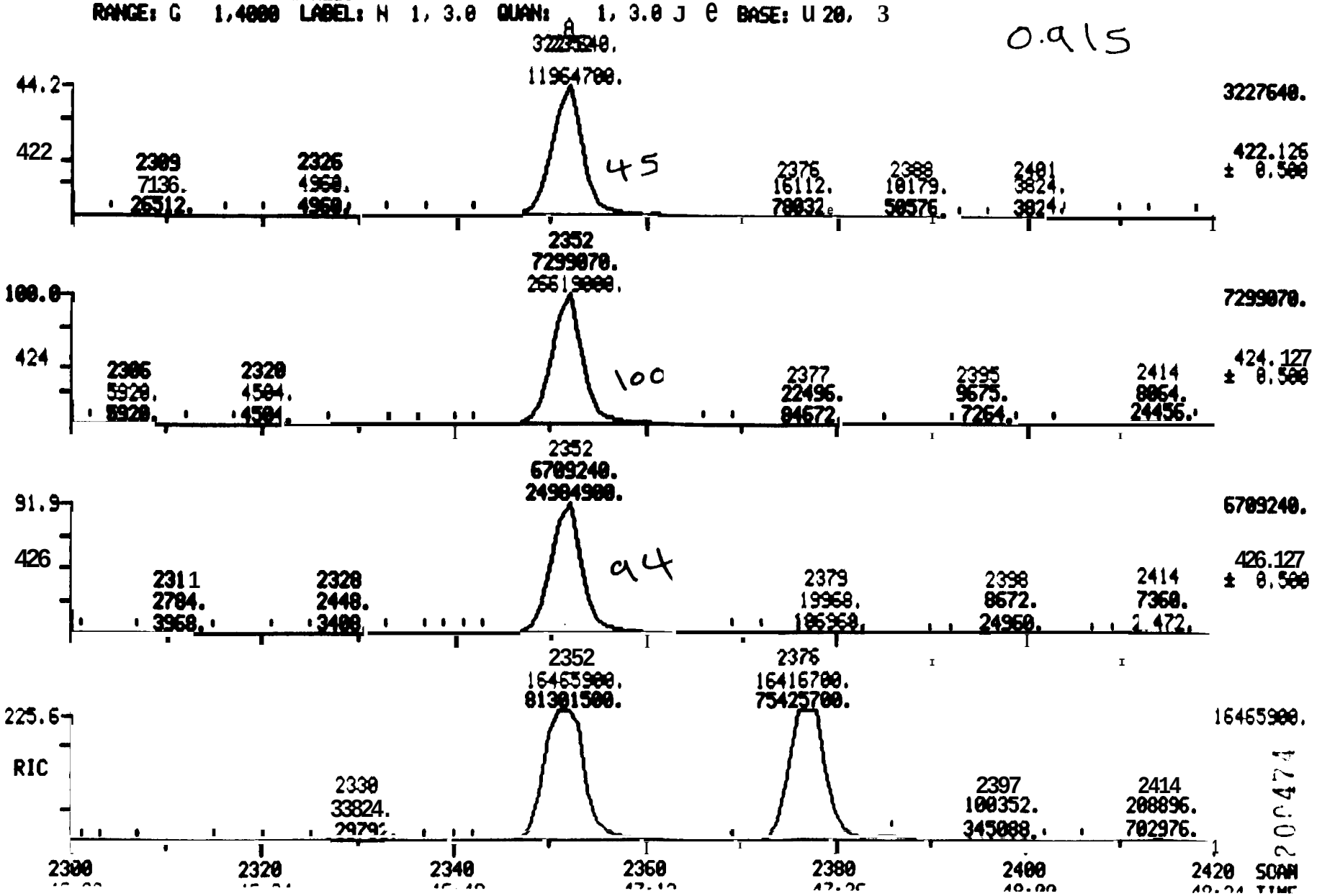
MIDRIC:MASS CHROMATOGRAMS DATA: [illegible] SCANS 2300 TO 2420 #PCDD

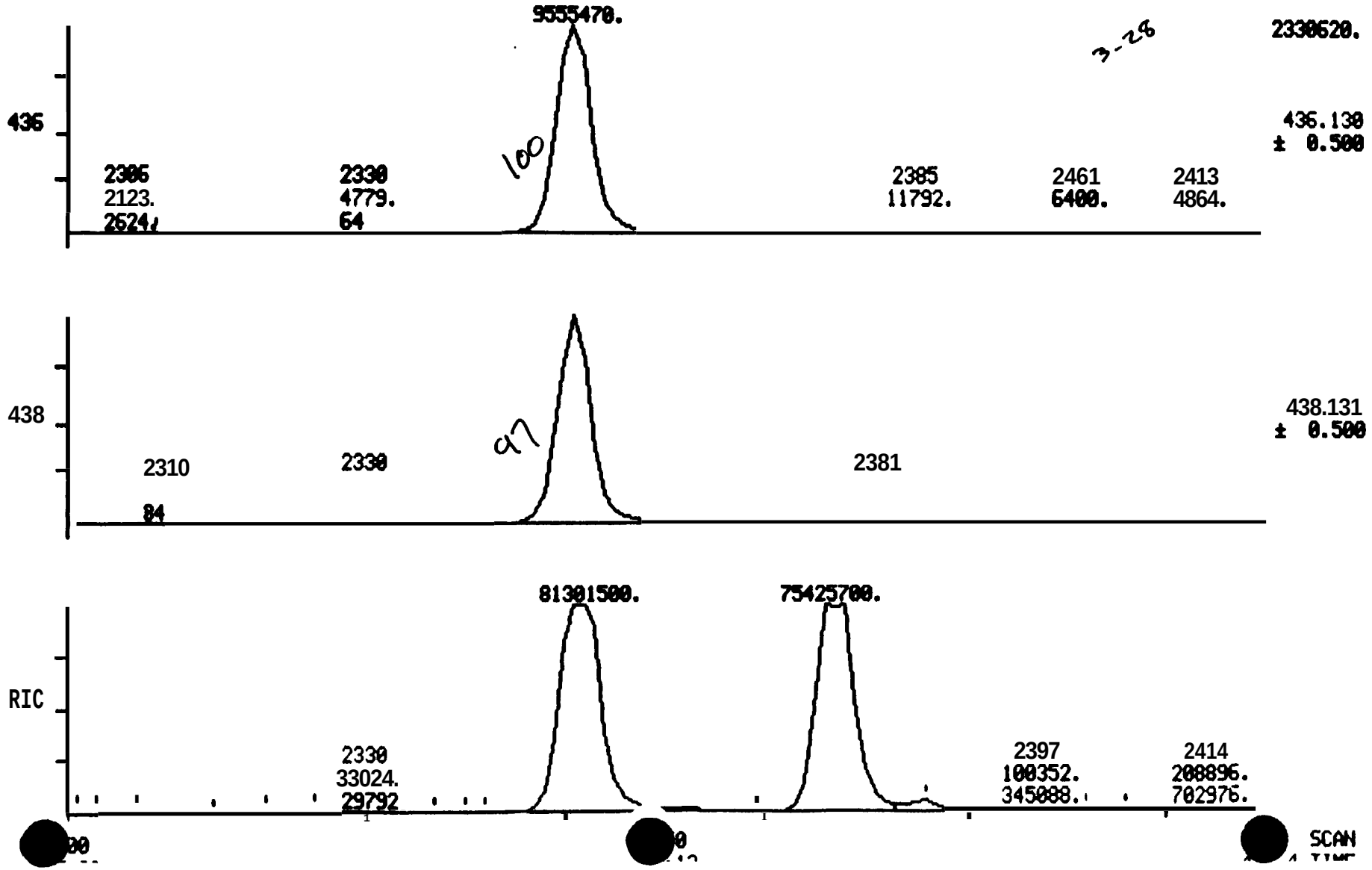
03/27/91 15:[illegible] CALI CAL9103060.02

SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN 83 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: H 1, 3.0 QUAN: 1, 3.0 J e BASE: U 20, 3




9555470.
3-28
2330620.
436
436.130
± 0.500
100
2305
2123.
2624
2330
4779.
64
2385
11792.
2461
6400.
2413
4864.
438
438.131
± 0.500
97
2310
84
2330
2381
RIC
81301500.
75425700.
2330
33024.
29792
2397
100352.
345088.
2414
208896.
702976.
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 2030 TO 2145

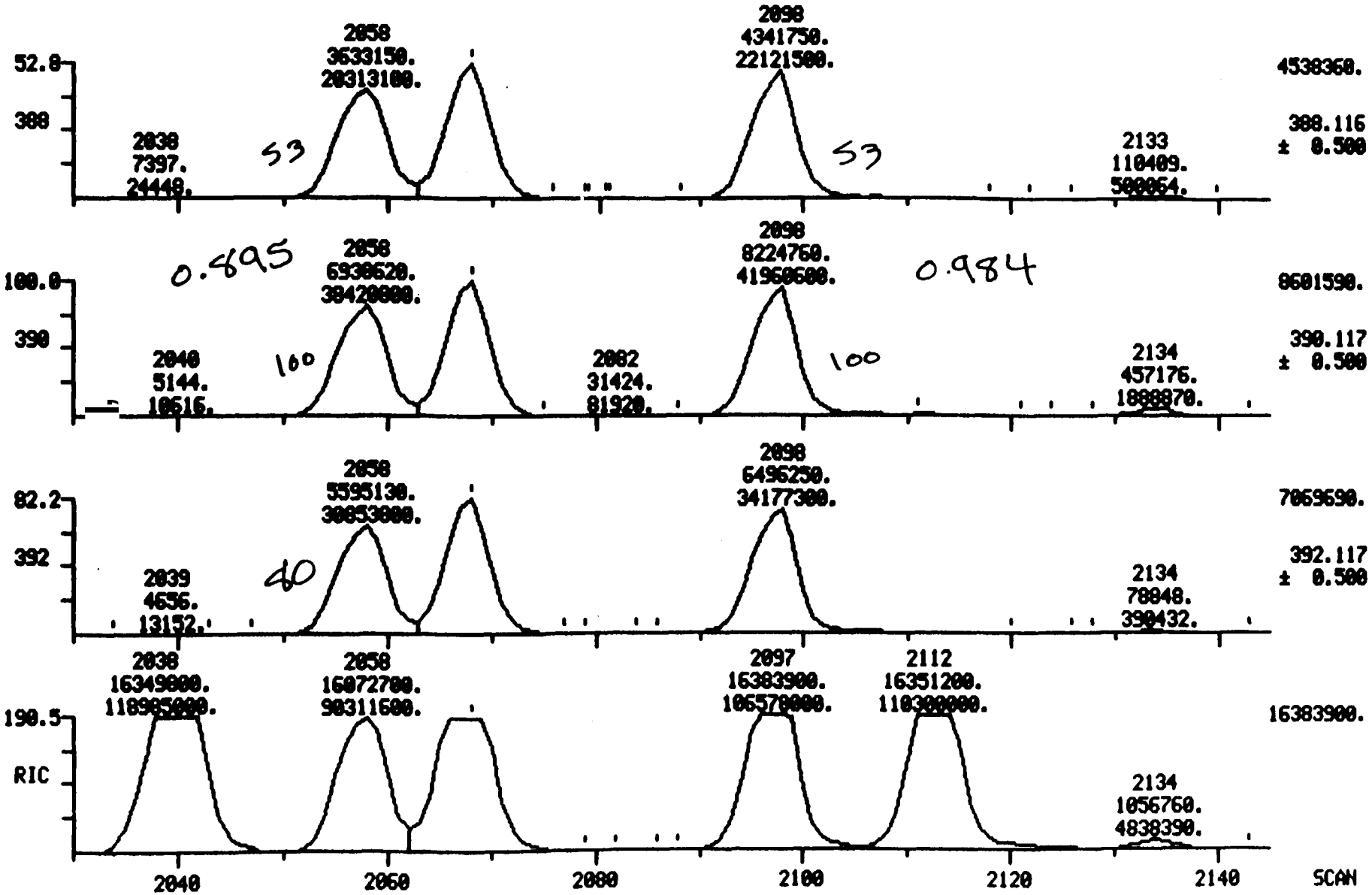
03/27/91 15:20:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HxCDD



3200475

1/1

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 2035 TO 2090

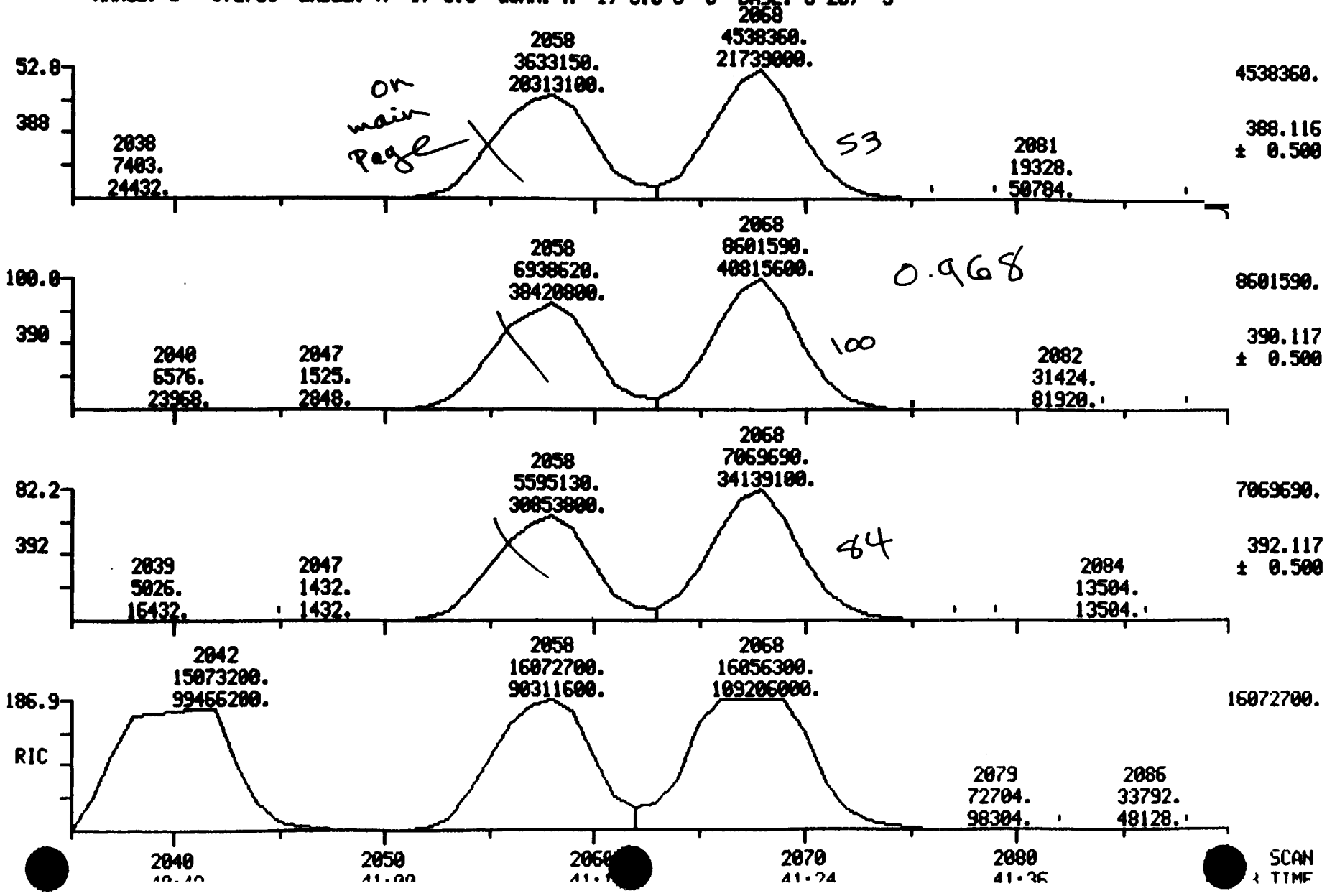
03/27/91 15:20:00 CALI: CAL910306A #2

SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT

CONDS.: 60M DB-5/TOTALS.

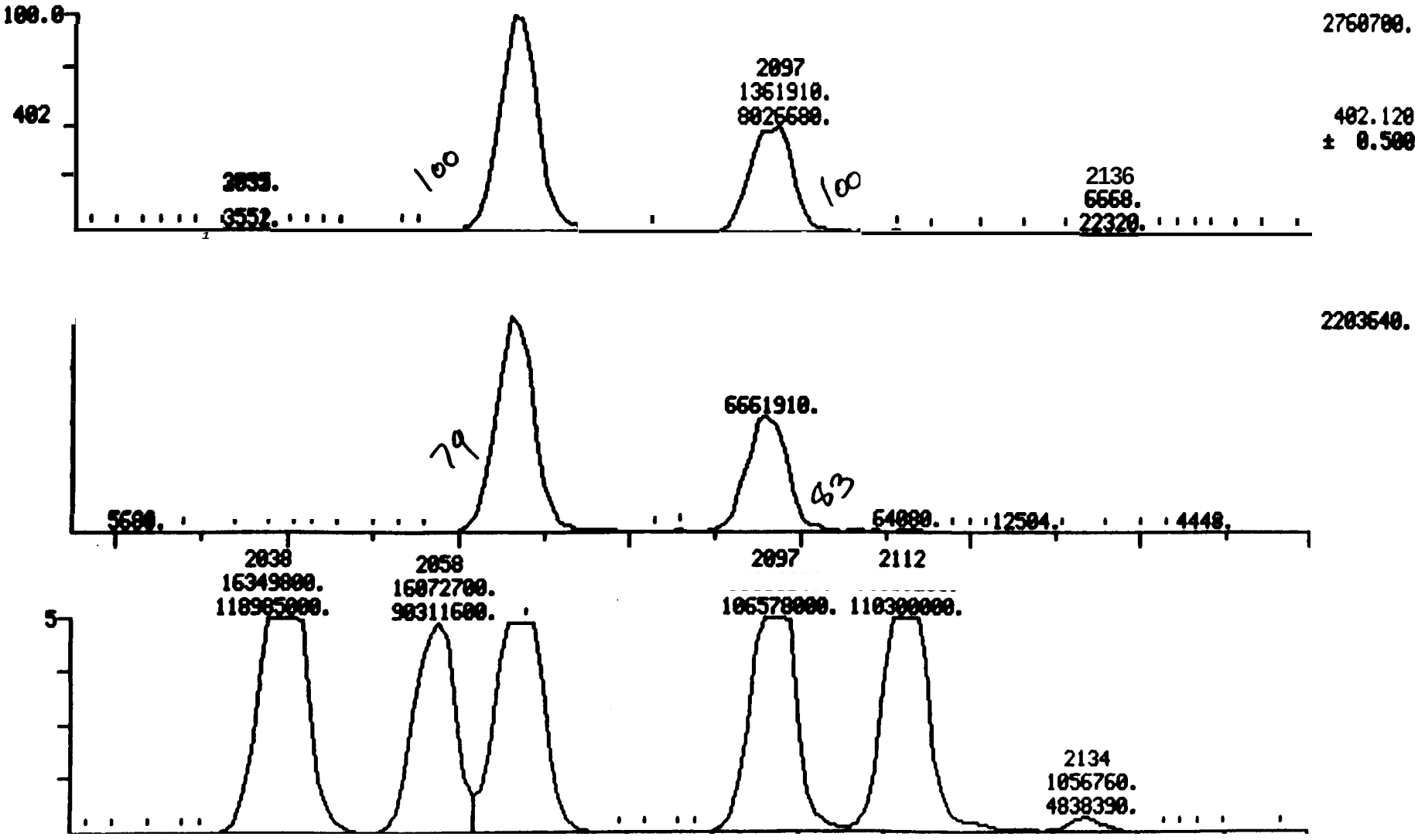
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HxCDD



LABEL:

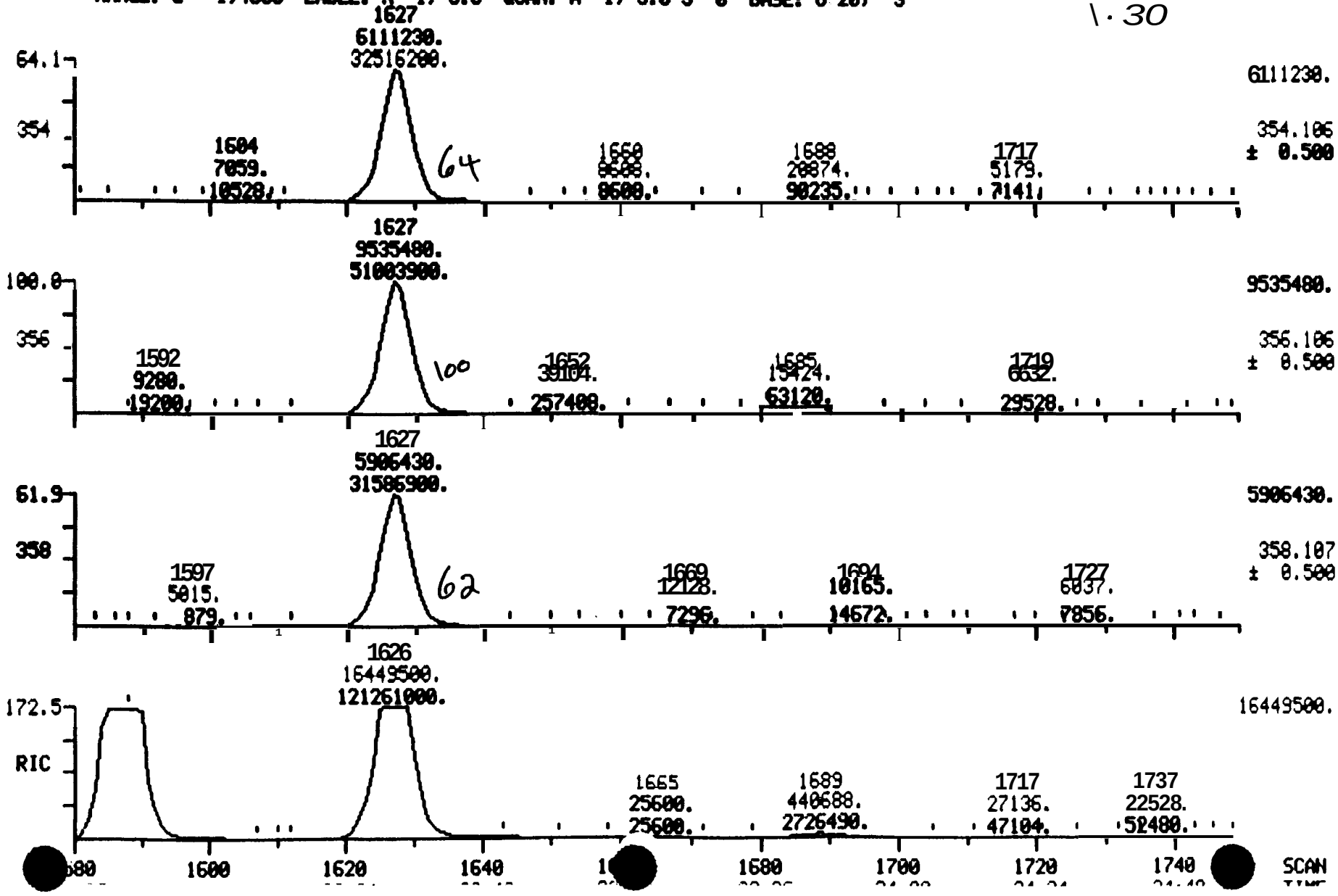
0.878


100.0
402
2760700.
402.120
± 0.500
2097
1361910.
8026680.
100
100
2136
6668.
22320.
2203640.
6661910.
79
63
64080.
12504.
4448.
2038
16349800.
118985000.
2058
16072700.
90311600.
2097
2112
106578000.
110300000.
5
2134
1056760.
4838390.

MIDRIC+MASS CHROMATOGRAMS DATA: 68506V3 #1 SCANS 1500 TO 1750
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

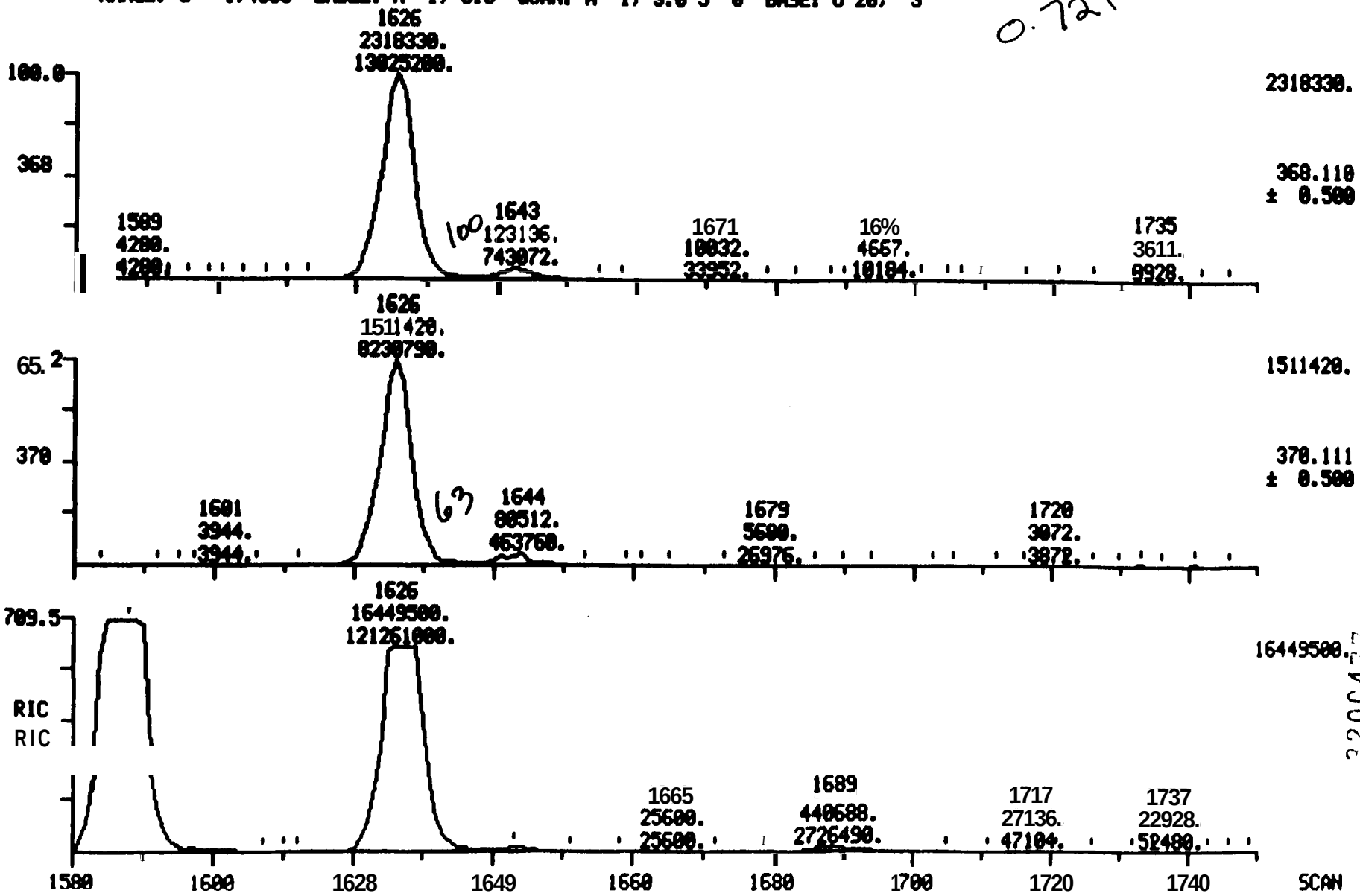
PecDD

1.30



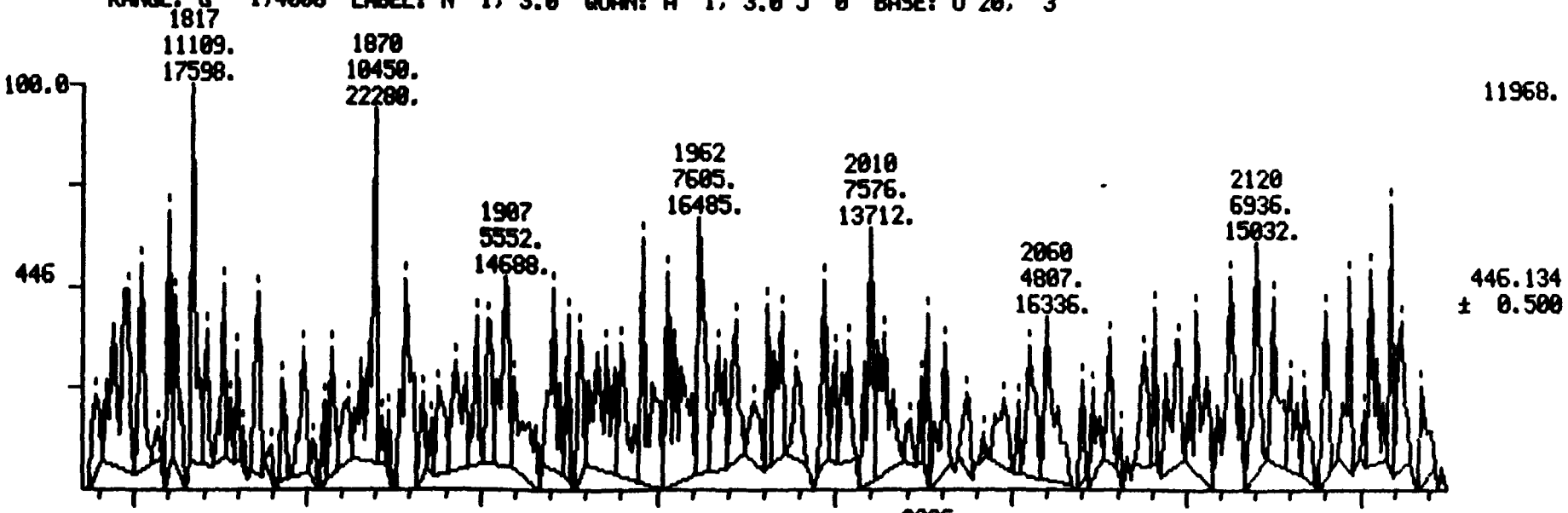
MIDRIC+MASS CHROMATOGRAMS DATA: 68506U3 #1 SCANS 1500 TO 1750
03/27/91 15:20:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-V @ 3000 PPB RUN #3 FOR MULTIPOINT
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

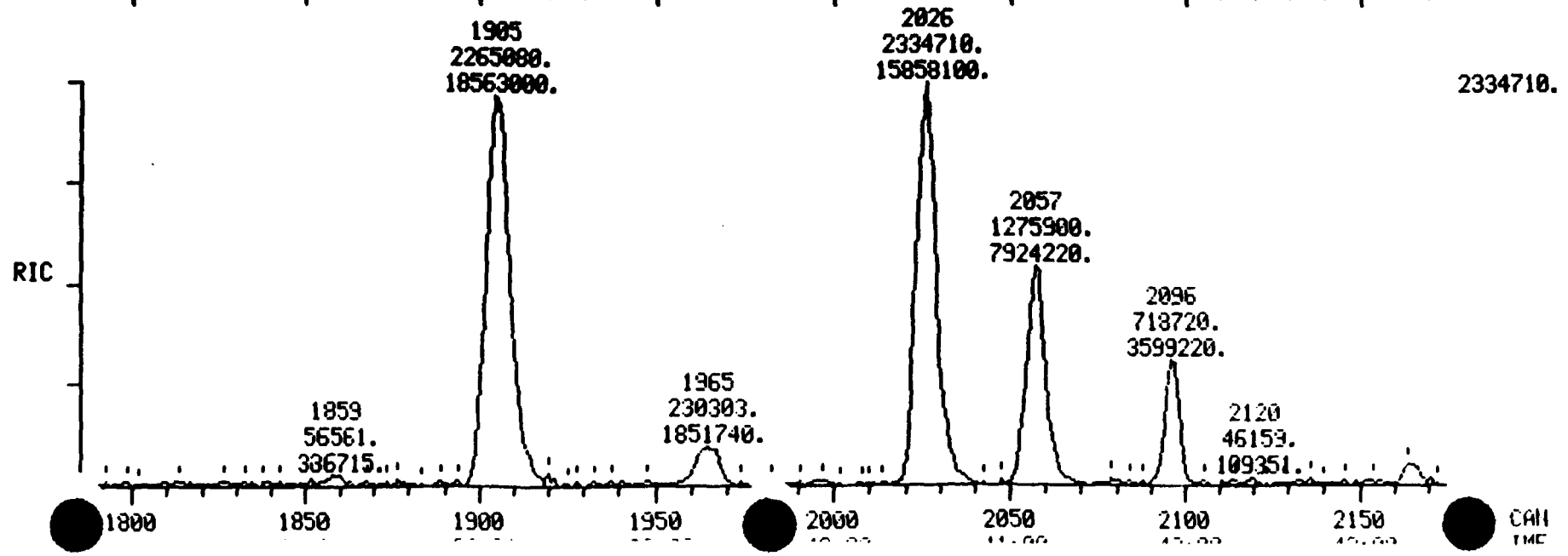
0.721



3200477

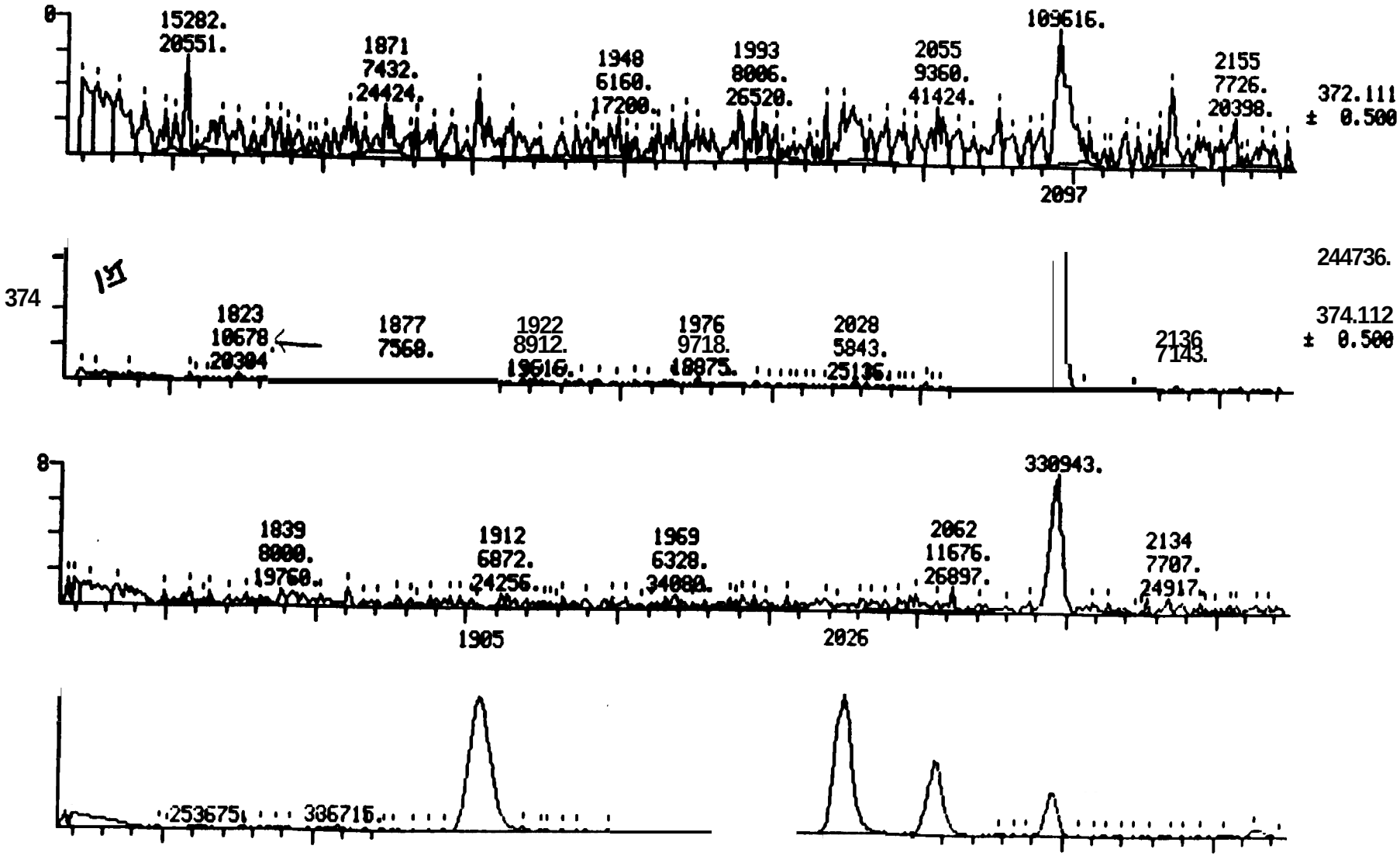
MIDRIC+MASS CHROMATOGRAM DATA: TBB3461EE #1 SCANS 1785 TO 2175
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3





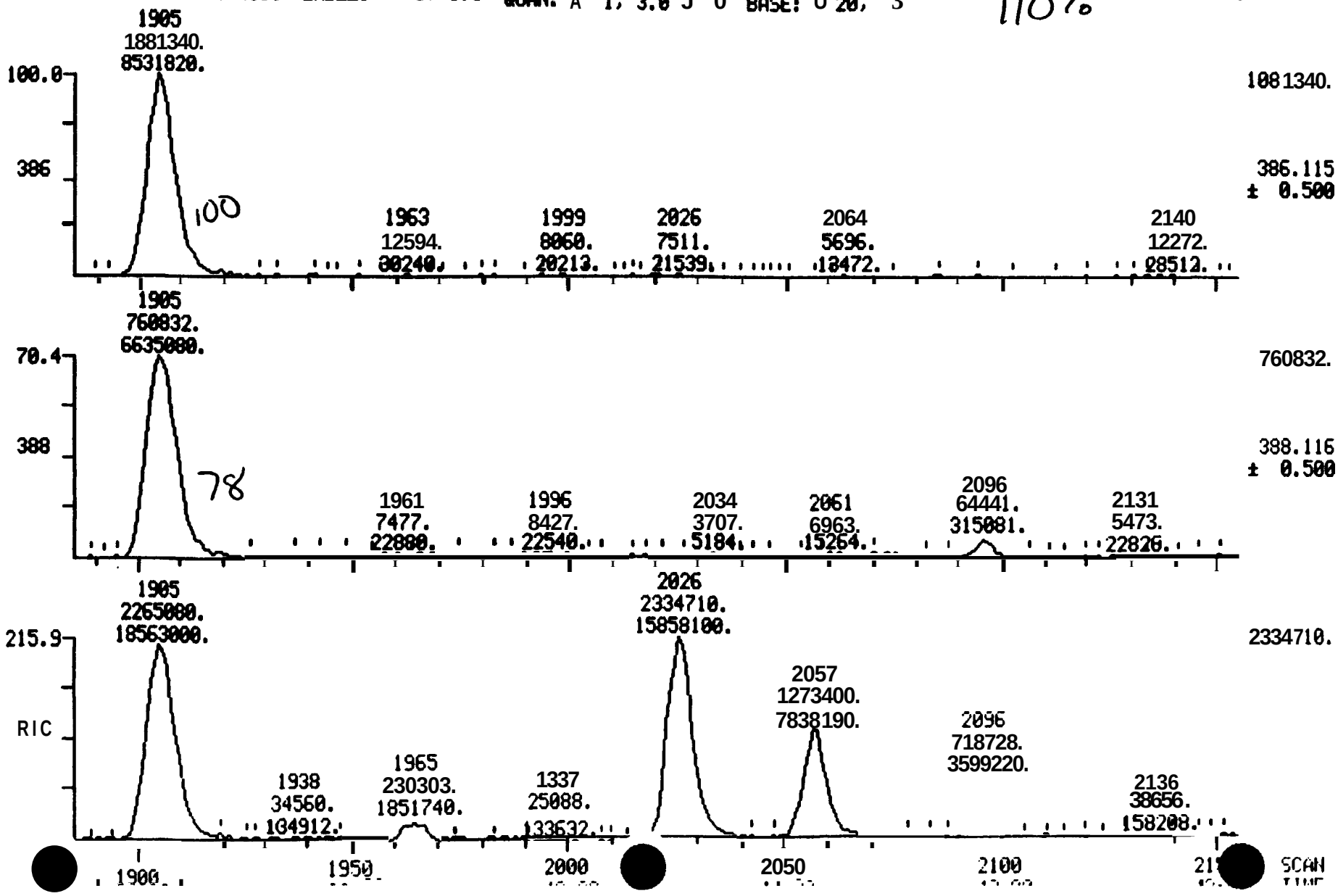
MIDRIC+MASS CHROMATOGRAMS DATA: TB83461EE #1 SCANS 1765 TO 2175
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 883461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HxCDF
ND(1.1 PPt)

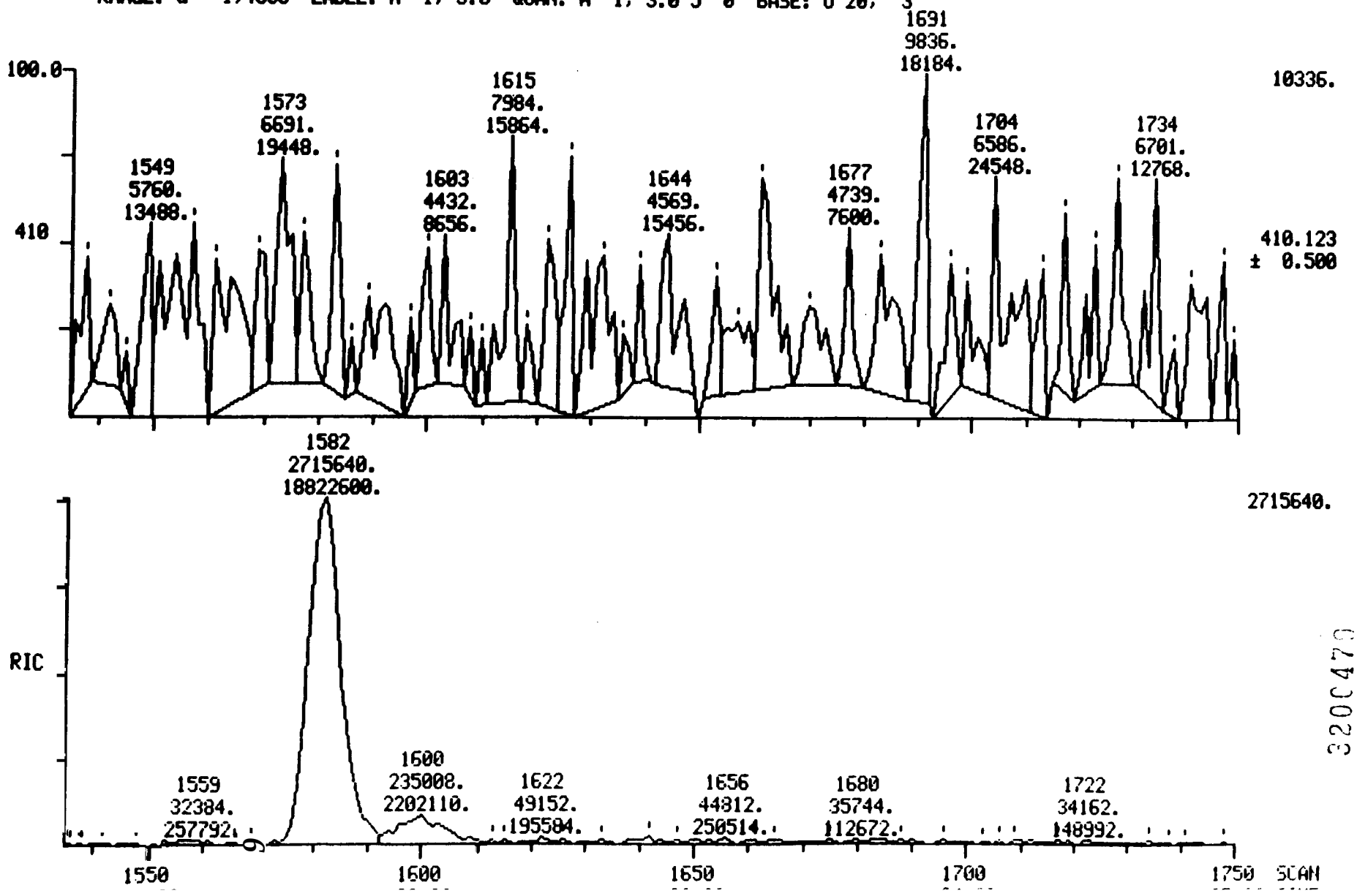


MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 1885 TO 2155
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DT 4-22-91
~~92~~ % Recovery
110%

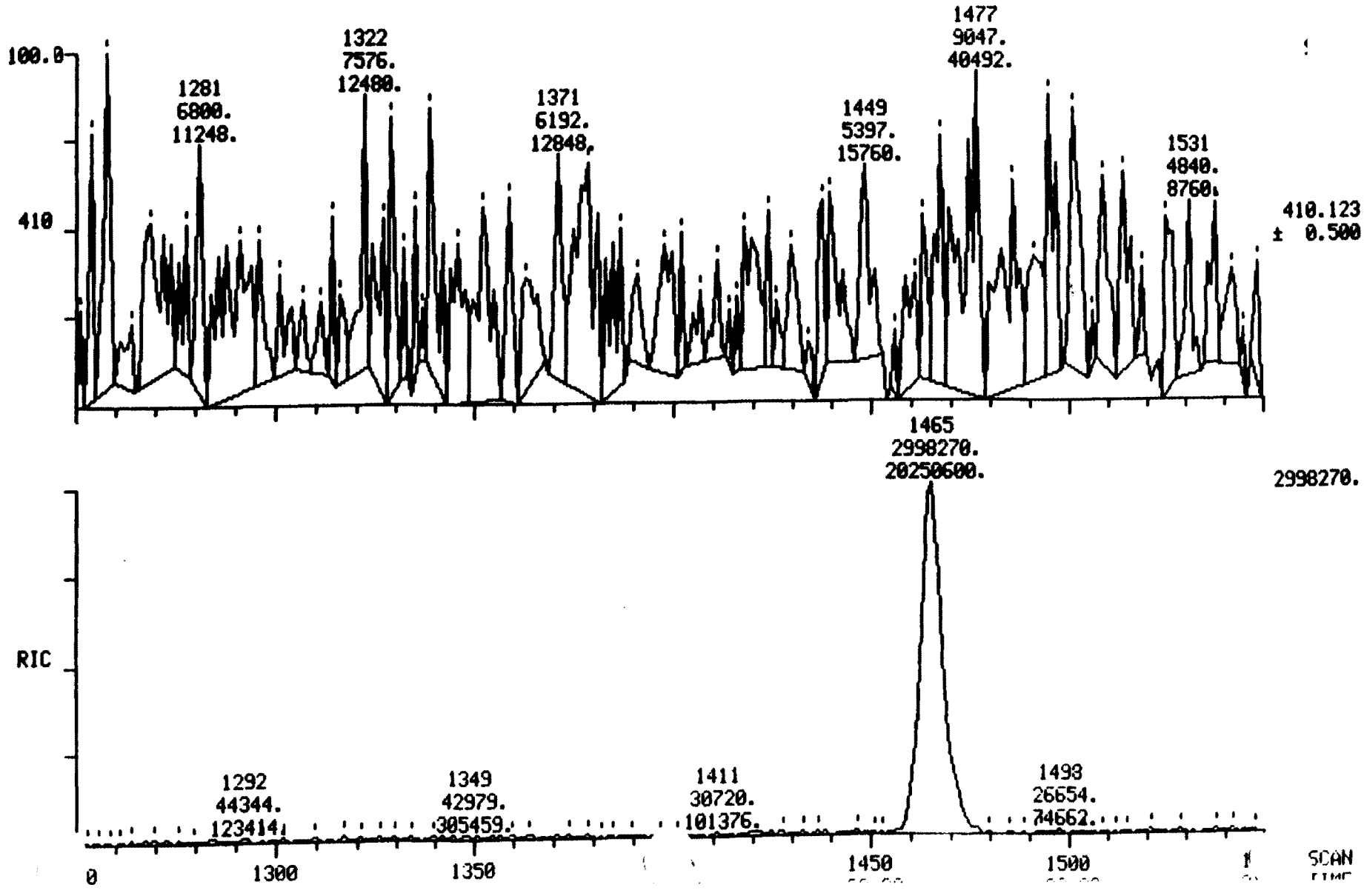


MIDRIC+MASS CHROMATOGRAM DATA: TBB3461EE #1 SCANS 1535 TO 1750
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML [illegible]) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

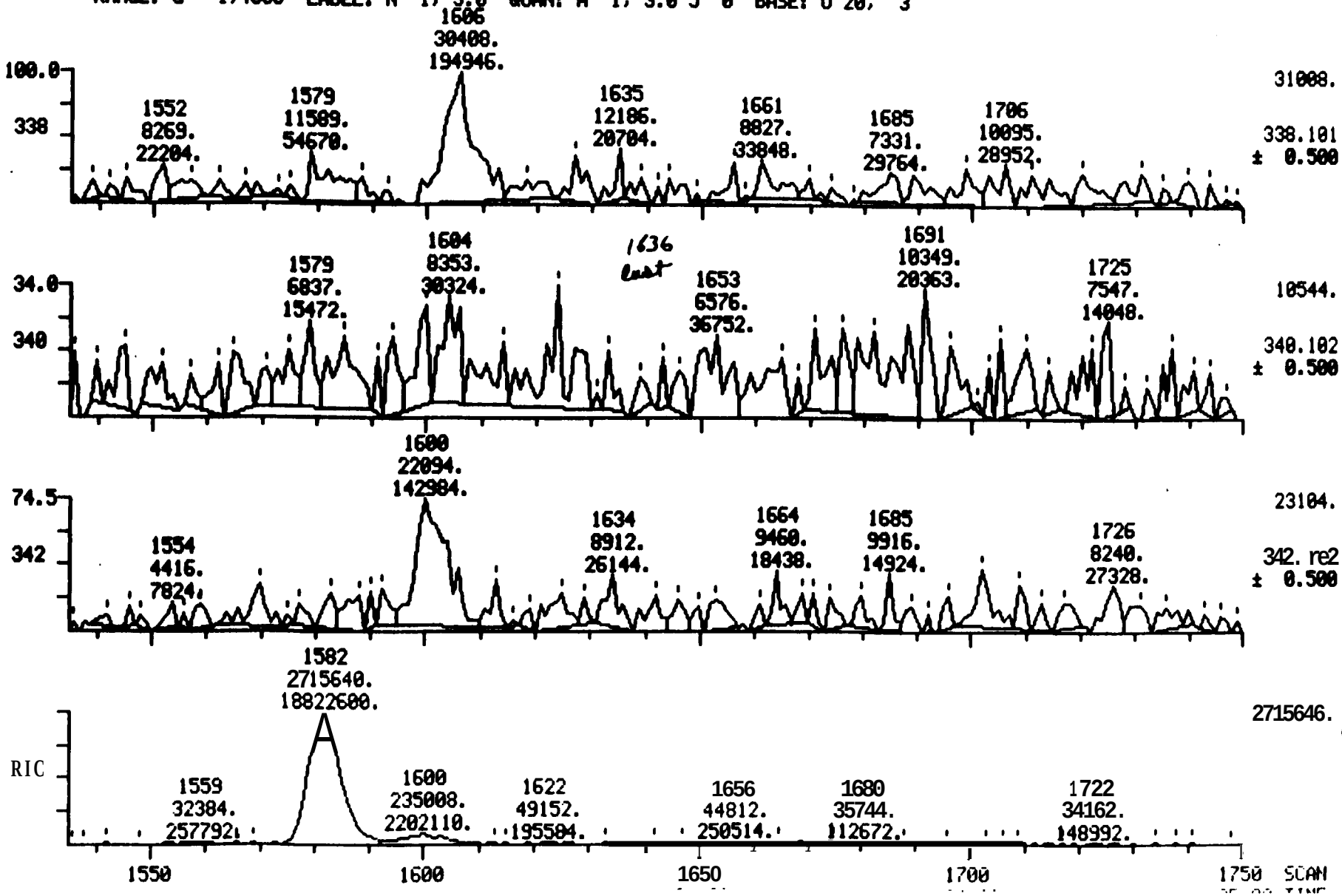


3200470

MIDRIC+MASS CHROMATOGRAM DATA: TB83461EE #1 SCANS 1250 TO 1550
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 1535 TO 1750
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

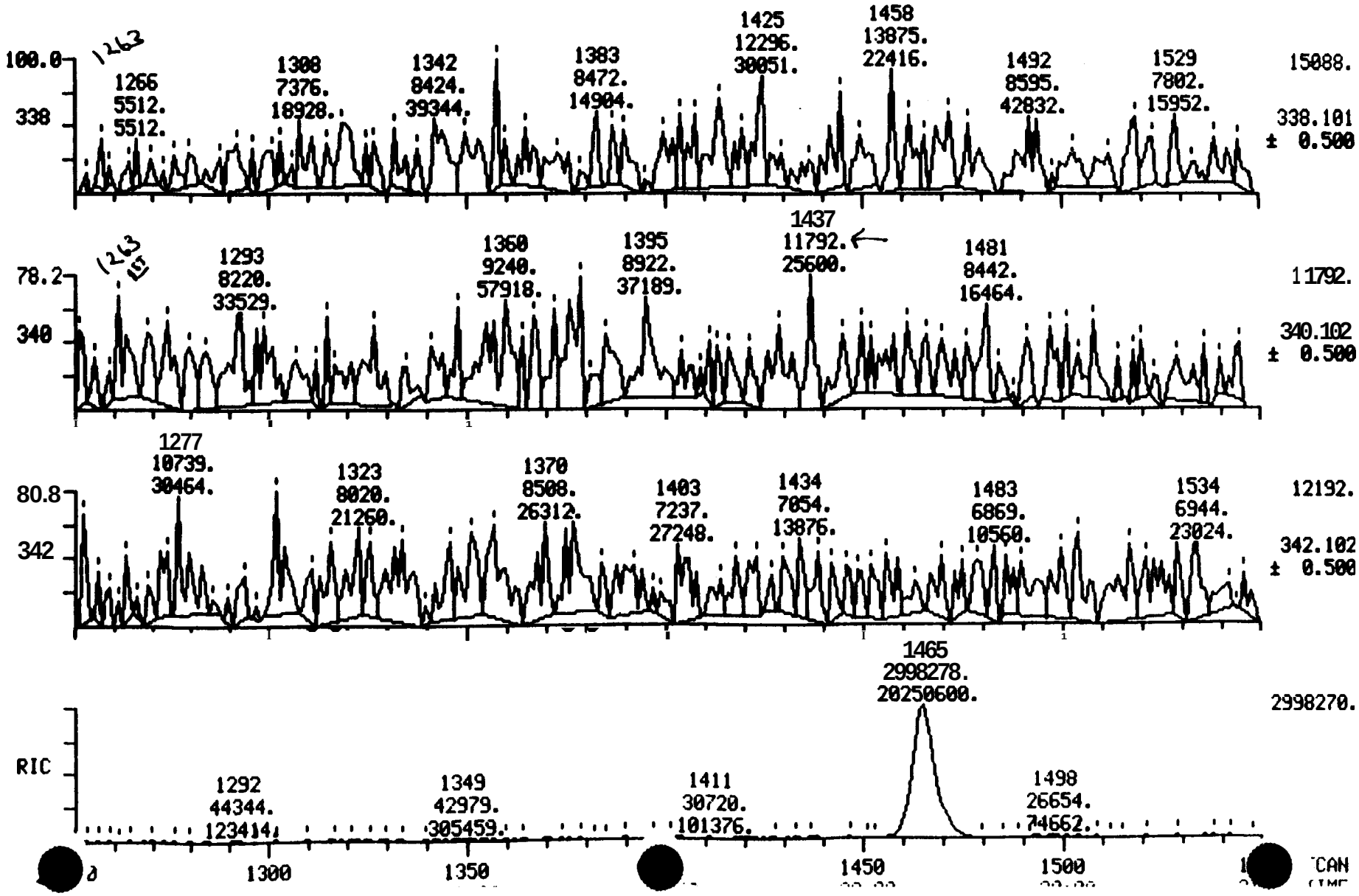


3200460

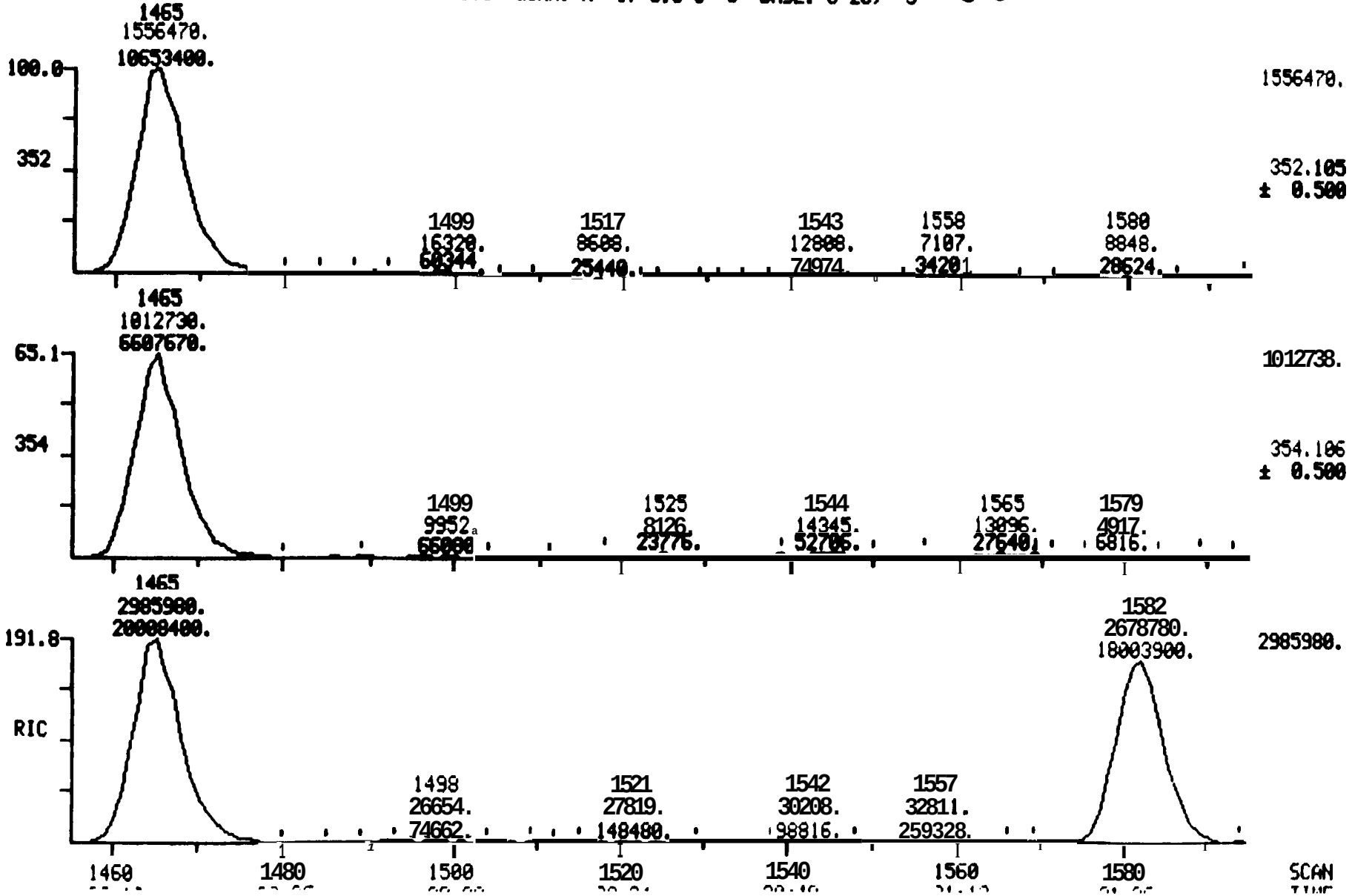
I

PeCDF
ND(0.60 ppt)

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE 01 SCANS 1250 TO 1550
04/17/91 9:36:00 CALI: CAL910306A 02
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

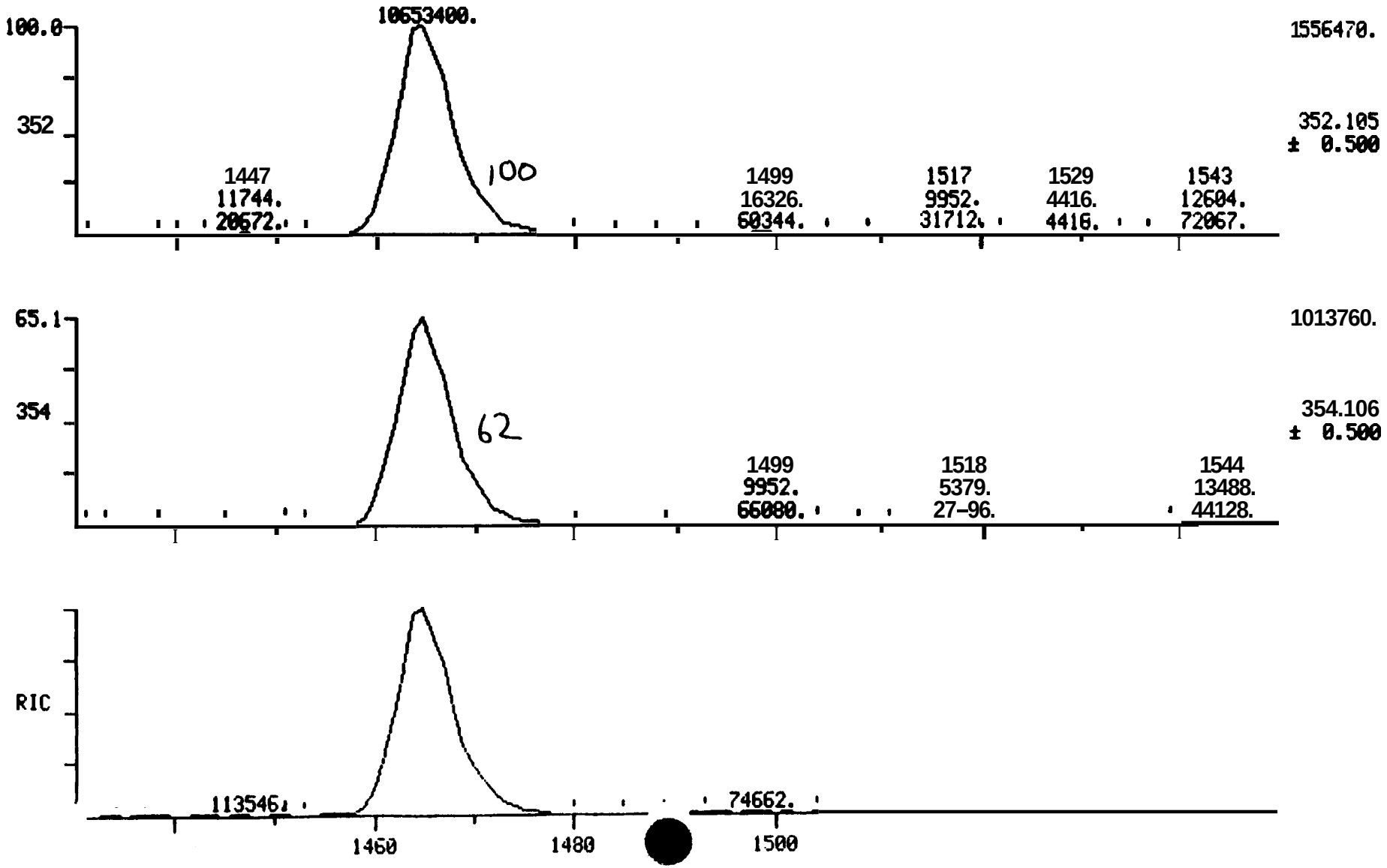


MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 1455 TO 1595
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3 See BLOW UP PAGE

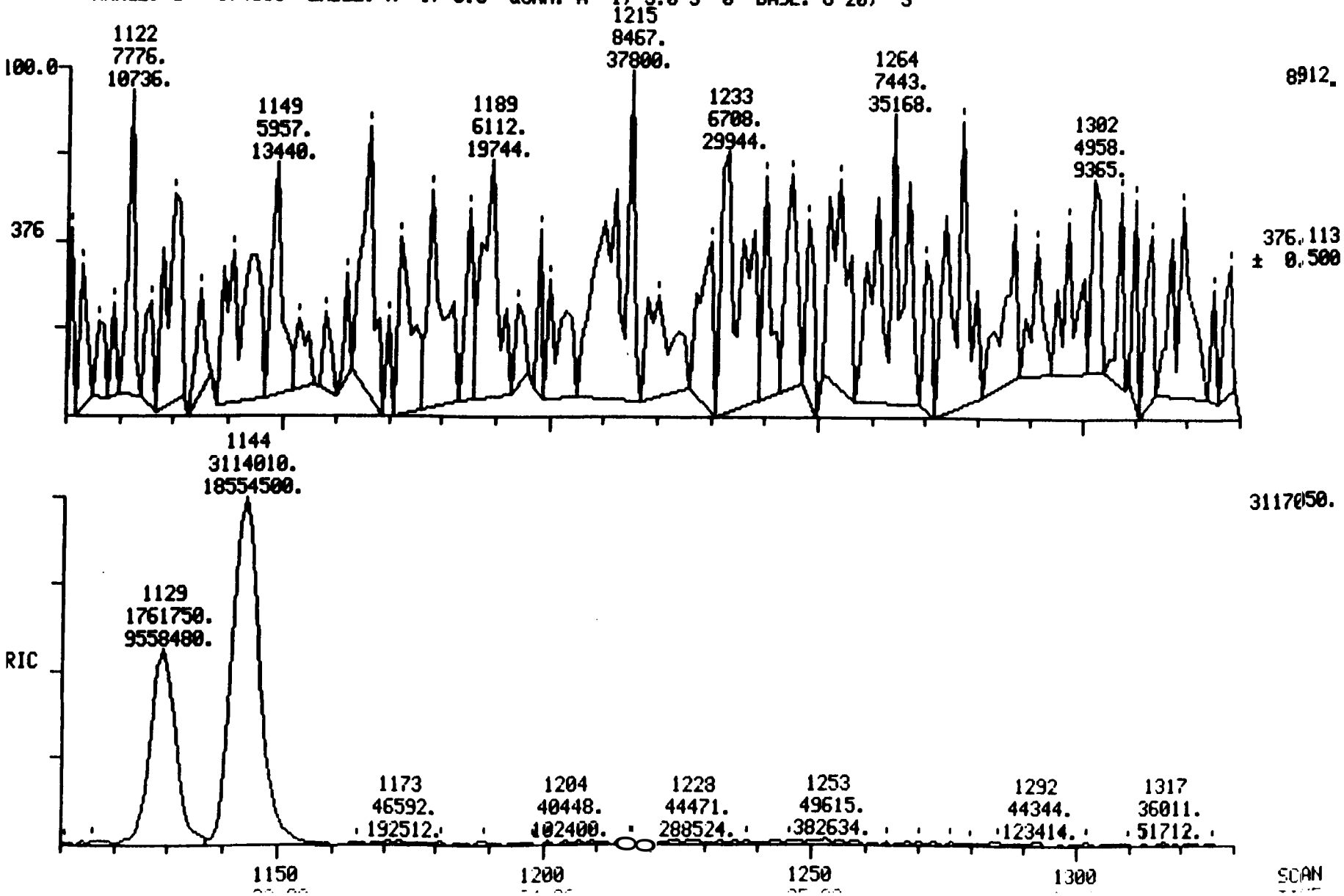


320043

93% Recovery

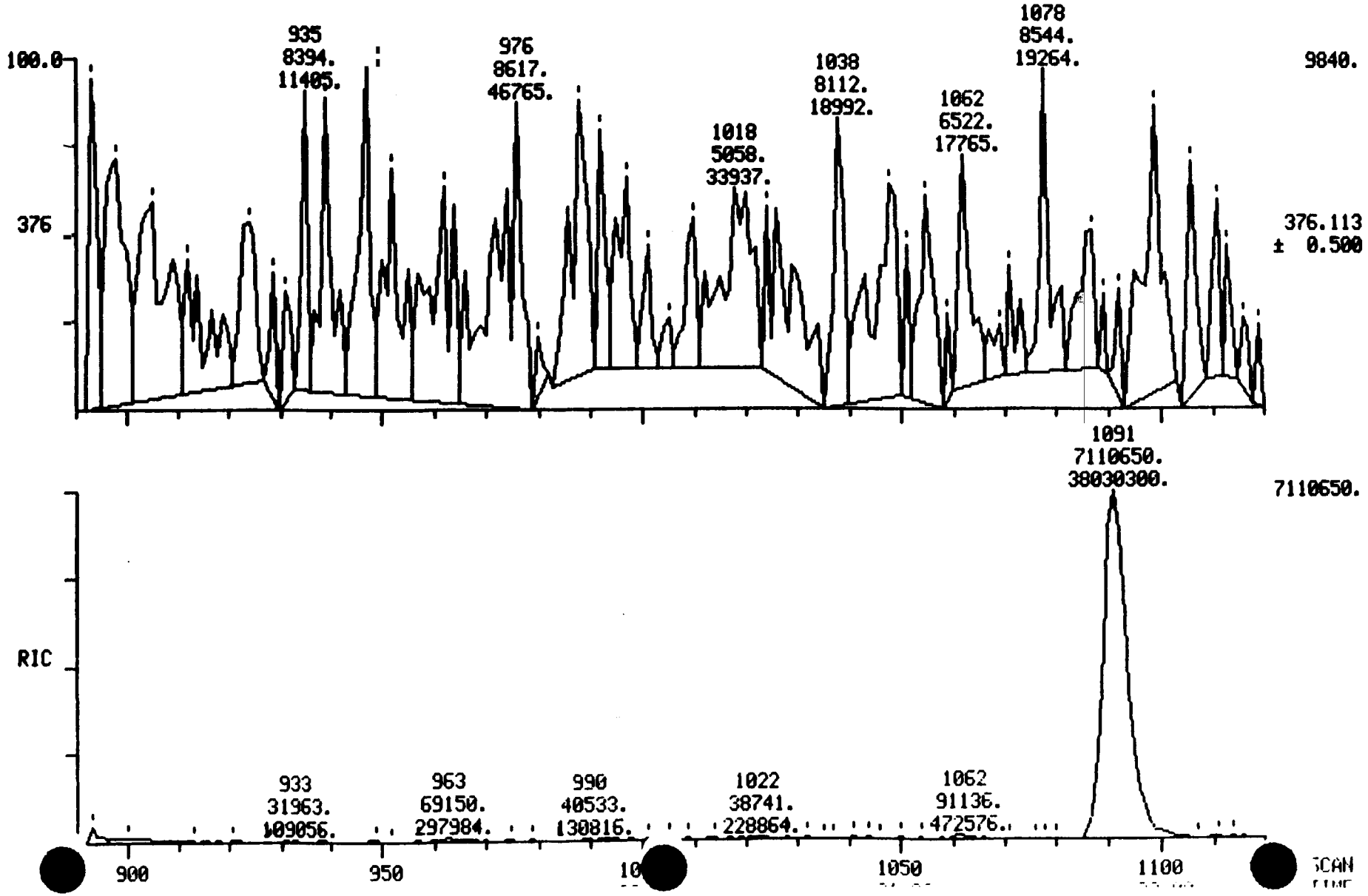

100.0
10653400.
1556470.
352
352.105
± 0.500
1447
11744.
20672.
100
1499
16326.
60344.
1517
9952.
31712.
1529
4416.
4416.
1543
12604.
72067.
65.1
1013760.
354
354.106
± 0.500
62
1499
9952.
66080.
1518
5379.
27-96.
1544
13488.
44128.
RIC
113546.
74662.
1460
1480
1500

MIDRIC+MASS CHROMATOGRAM DATA: TBB3461EE #1 SCANS 1110 TO 1330
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



320C4S2

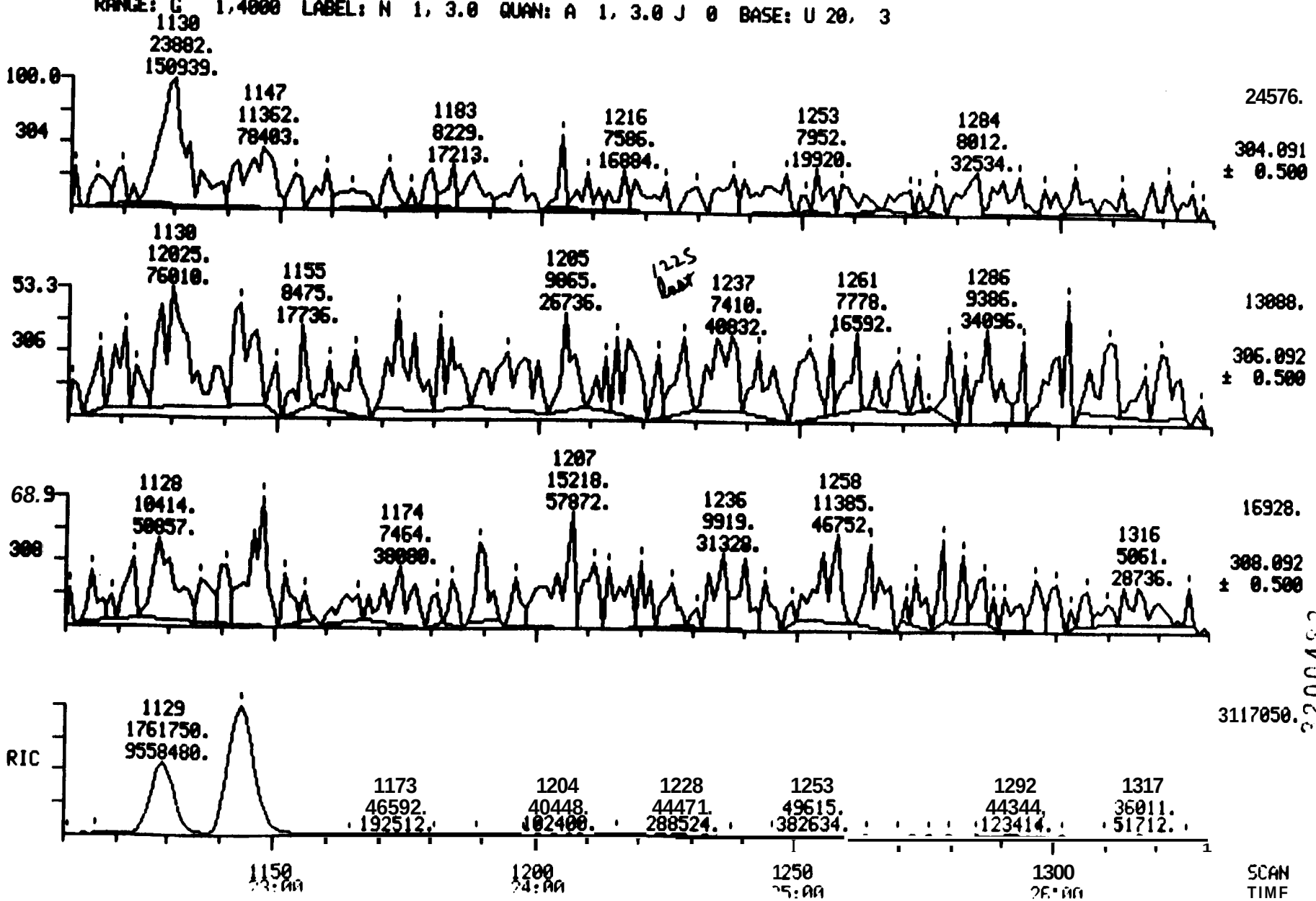
MIDRIC+MASS CHROMATOGRAM DATA: TBB3461EE #1 SCANS 890 TO 1120
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS
04/17/91 9:36:00
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: TBB3461EE #1
CALI: CAL910306A #2

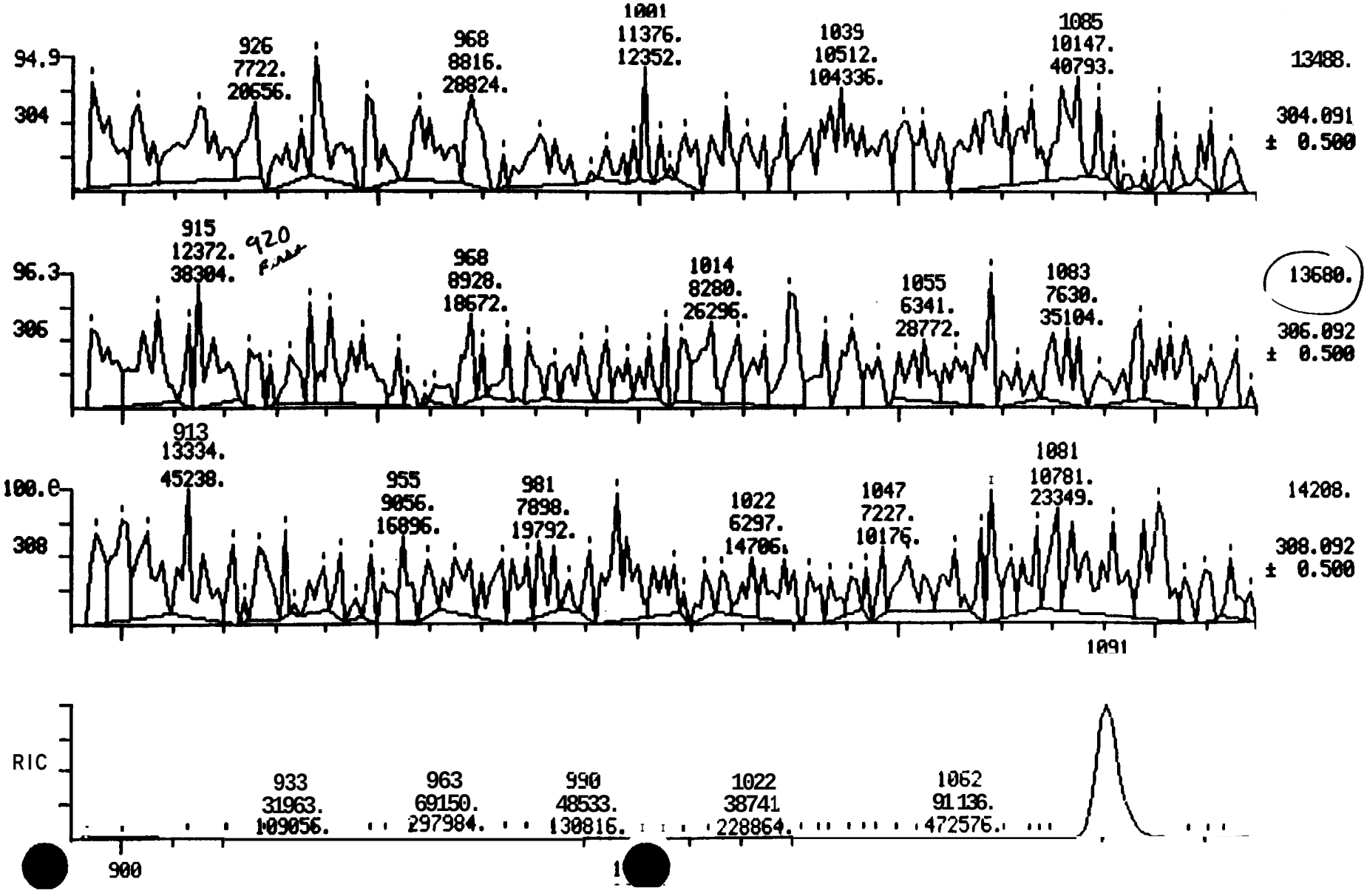
SCANS 1110 TO 1330



3200433

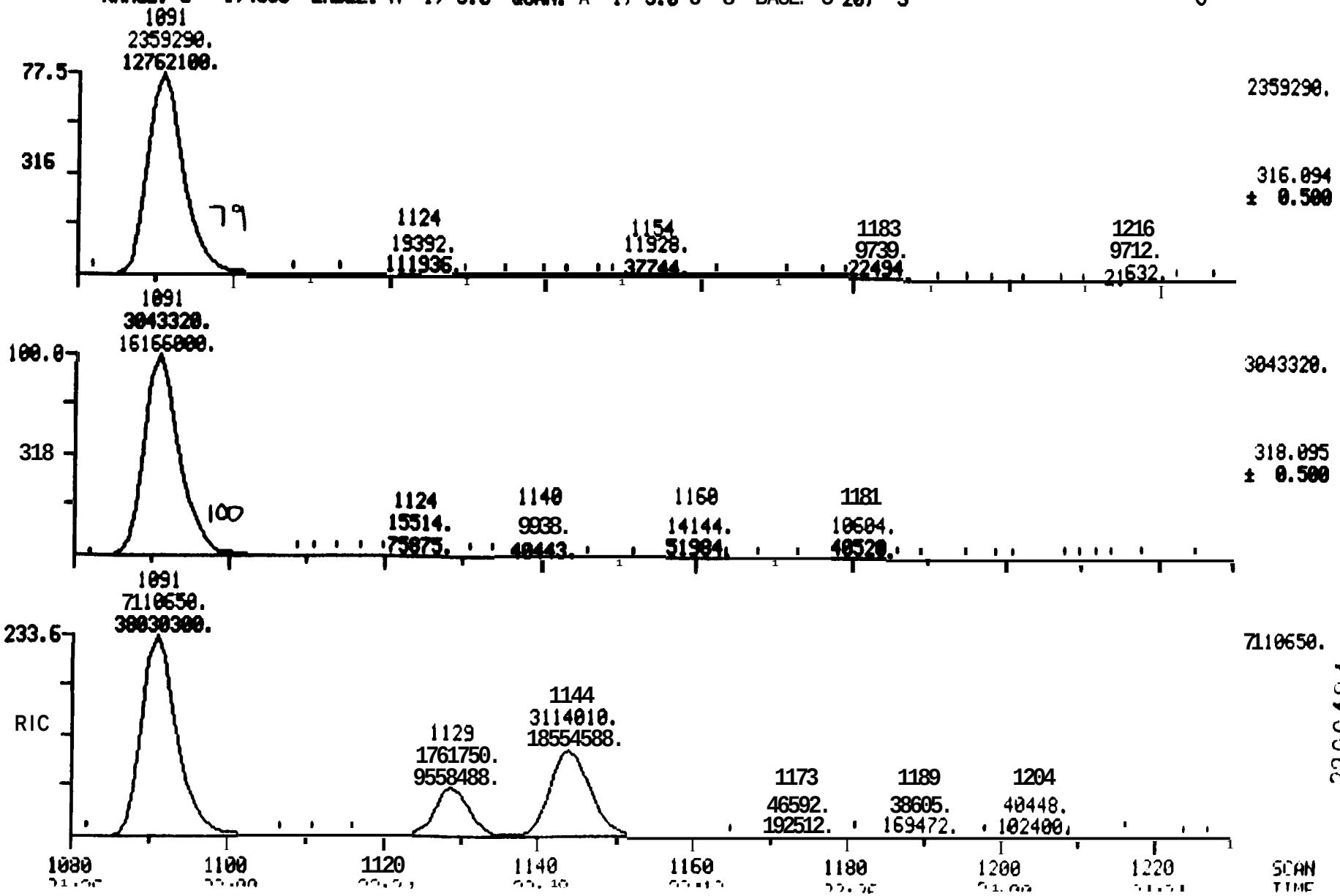
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 890 TO 1120
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDF
ND(0.38 ppt)



MIDRIC+MASS CHROMATOGRAMS DATA: TB83461EE #1 SCANS 1080 TO 1230
04/17/91 9:36:00 CALI: CAL910306A 12
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

107% Recovery

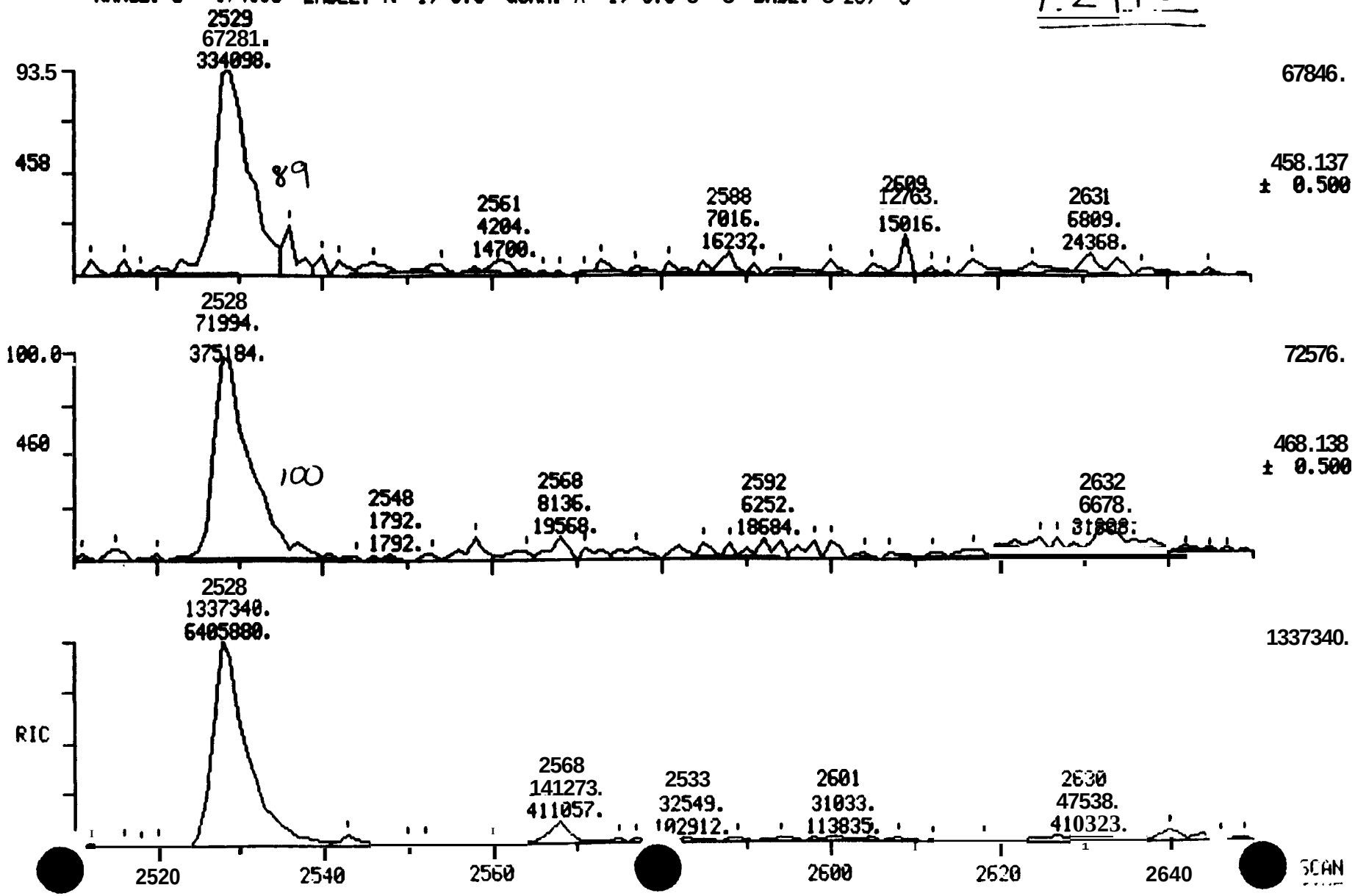


3200484

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE 81 SCANS 2510 TO 2650
04/17/91 9:36:00 CALI: CAL910306A 82
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 6 BASE: U 20, 3

OCDD

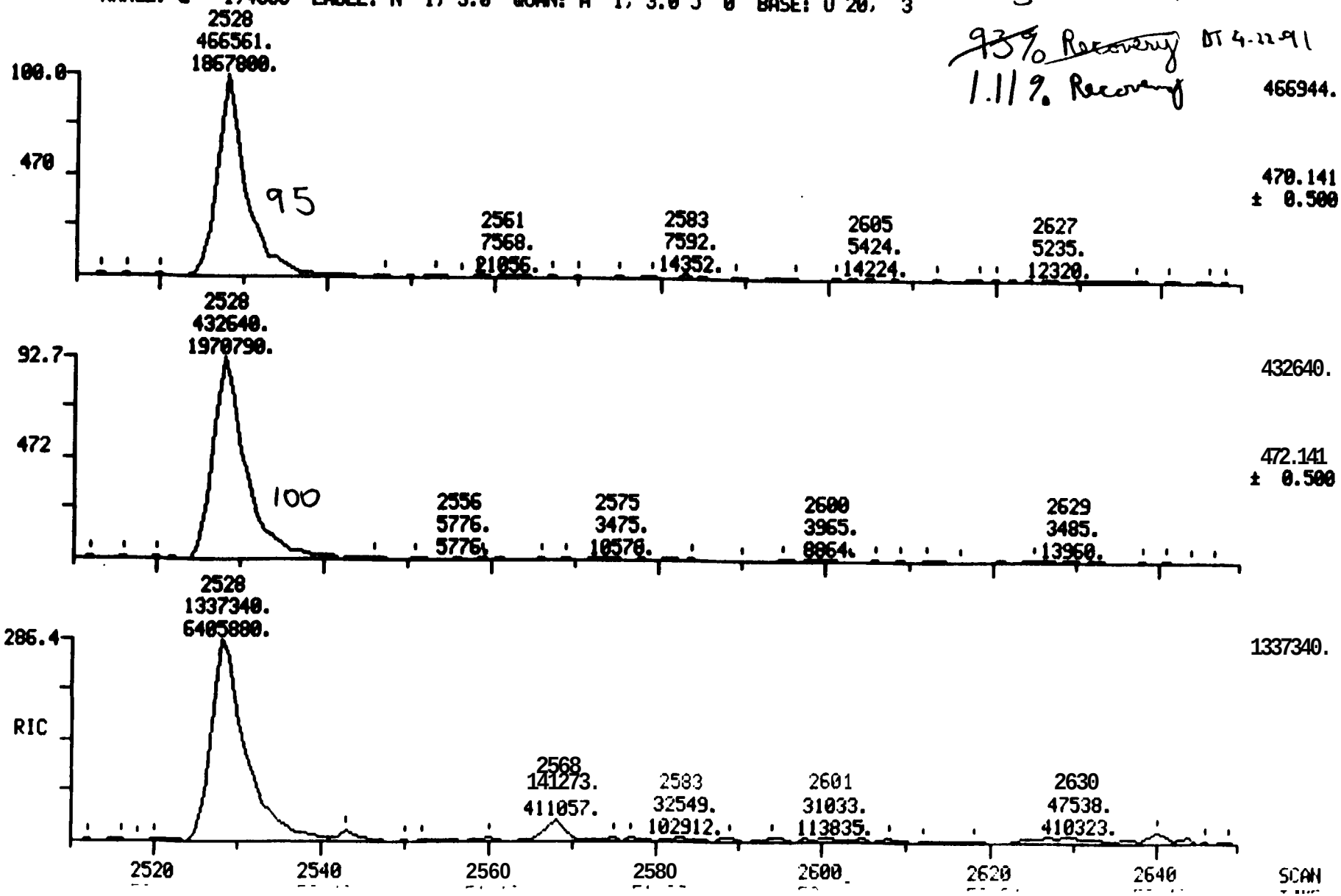
7.2 ppt



MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 2510 TO 2650
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

Daily RF= 0.314

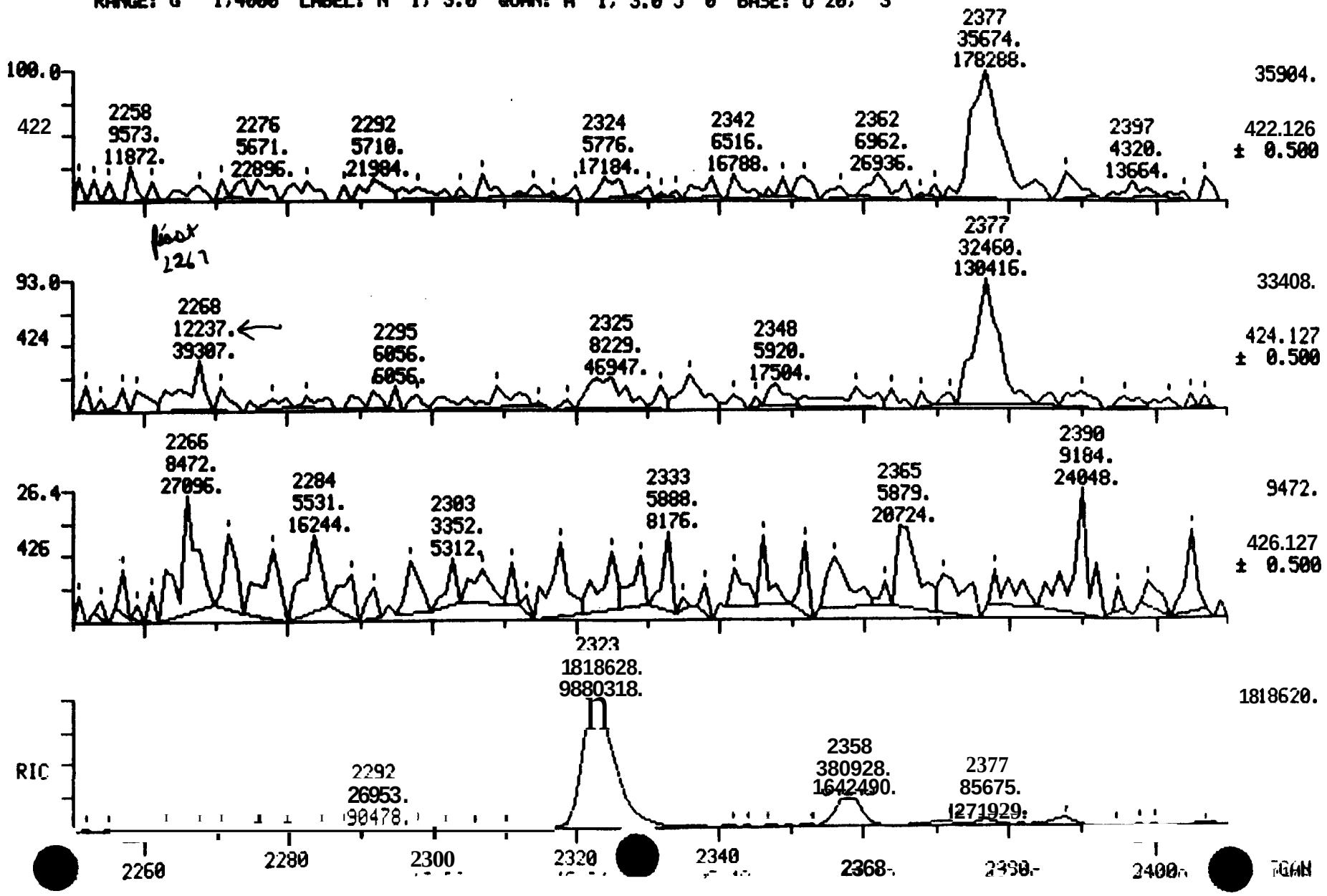
~~93% Recovery~~ DT 4-22-91
1.11% Recovery



3200485

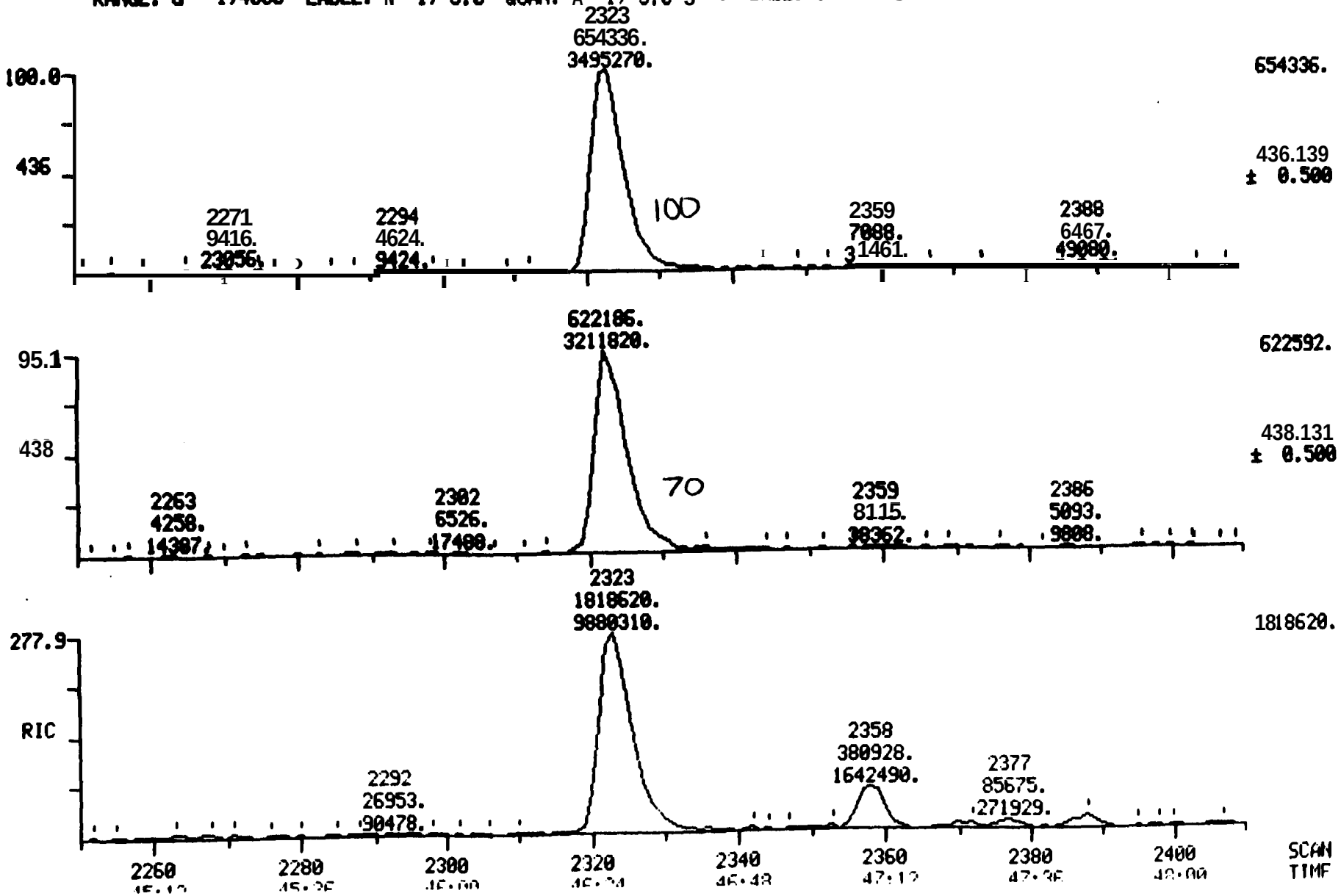
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 2250 TO 2410
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

H_pCDD
ND (2.5 ppt)



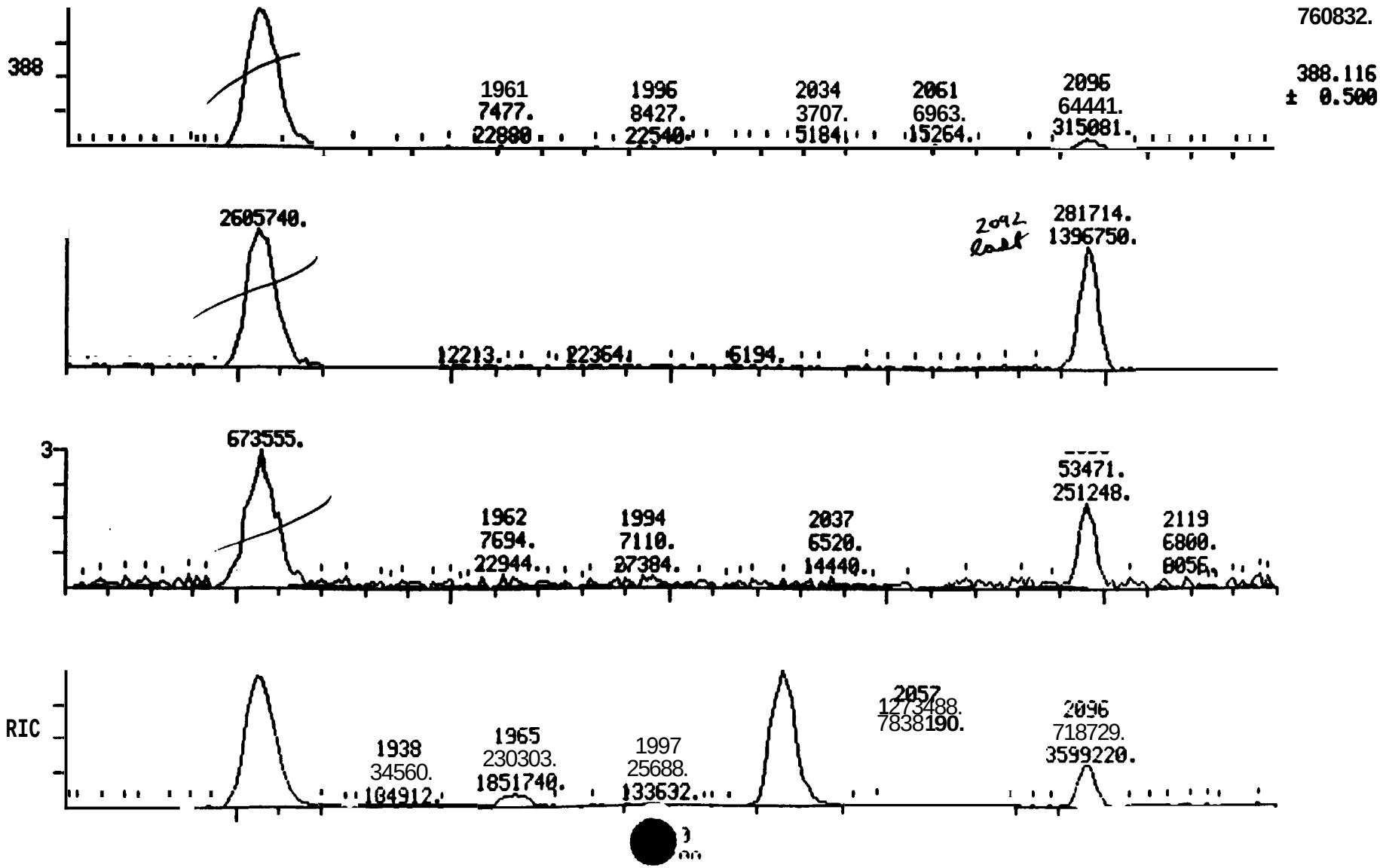
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 2250 TO 2410
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

87% Recovery



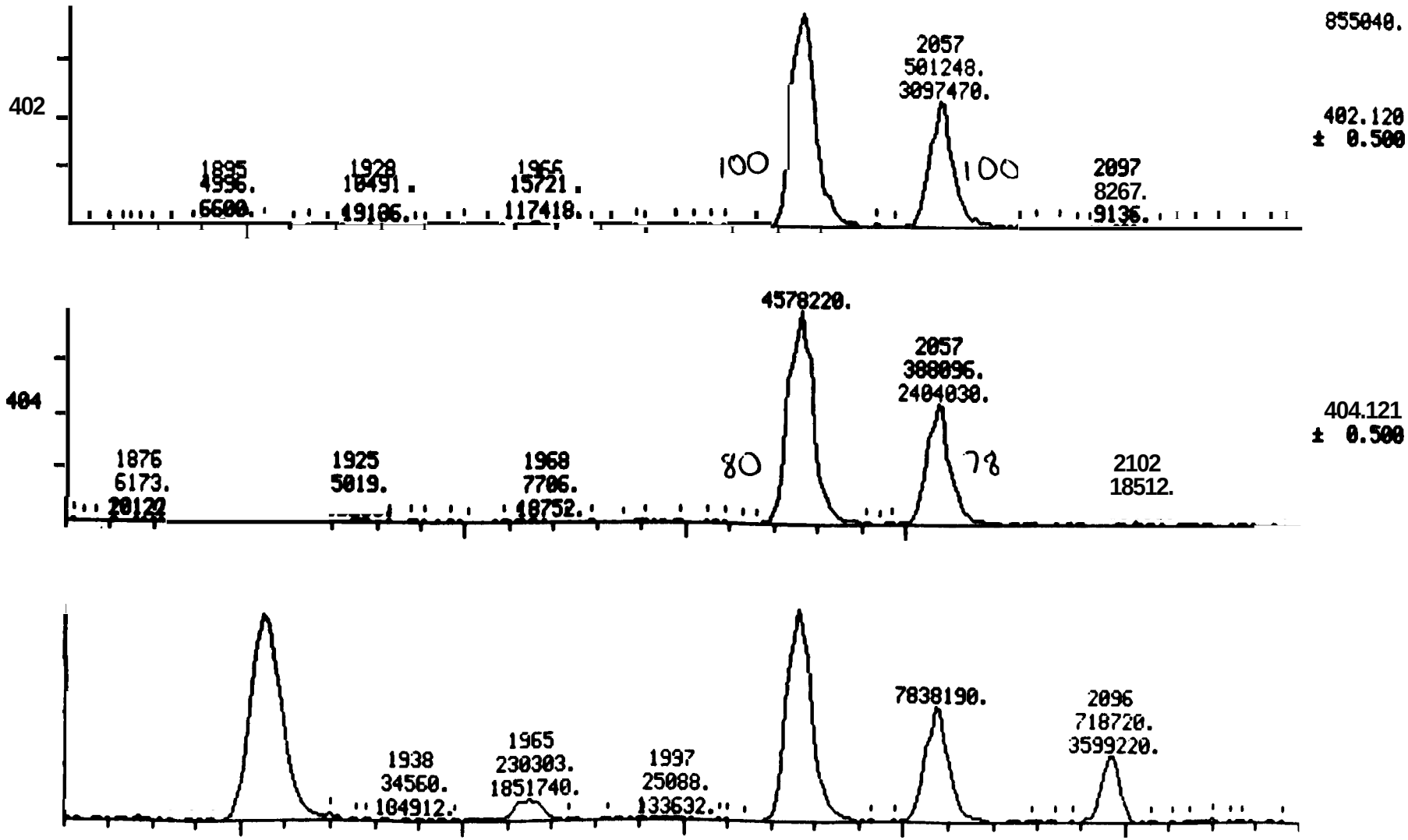
3200439

2UL

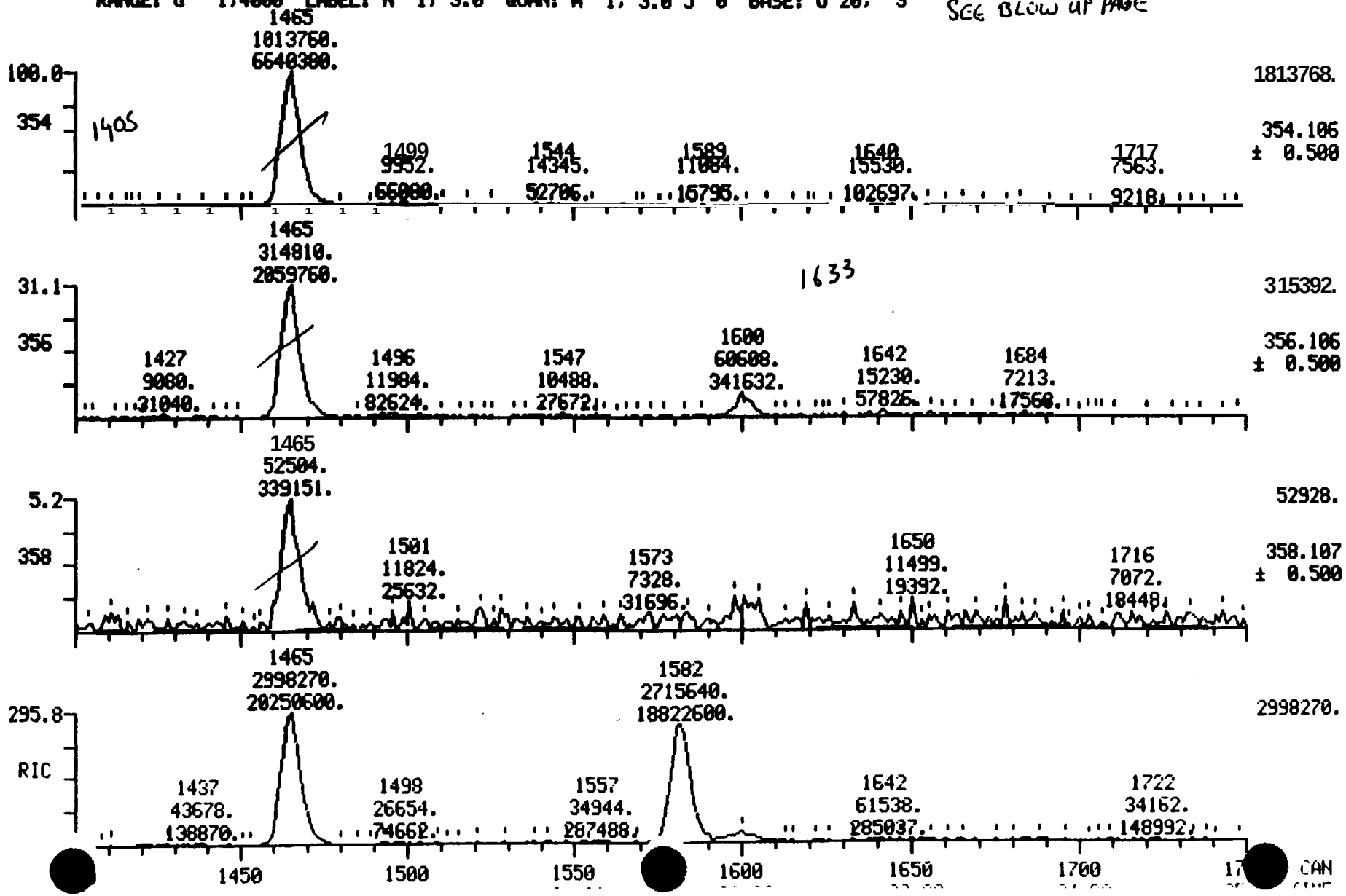

760832.
388
388.116
± 0.500
1961
7477.
22880.
1996
8427.
22540.
2034
3707.
5184.
2061
6963.
15264.
2096
64441.
315081.
2605740.
2092
Rest
281714.
1396750.
12213.
22364.
6194.
3
673555.
53471.
251248.
1962
7694.
22944.
1994
7110.
27384.
2037
6520.
14440.
2119
6800.
8056.
RIC
1938
34560.
104912.
1965
230303.
1851740.
1997
25688.
133632.
2057
1273488.
7838190.
2096
718729.
3599220.

CONDS.

103% Rec



MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 1400 TO 1750 Pe CDD
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3 SEE BLOW UP PAGE



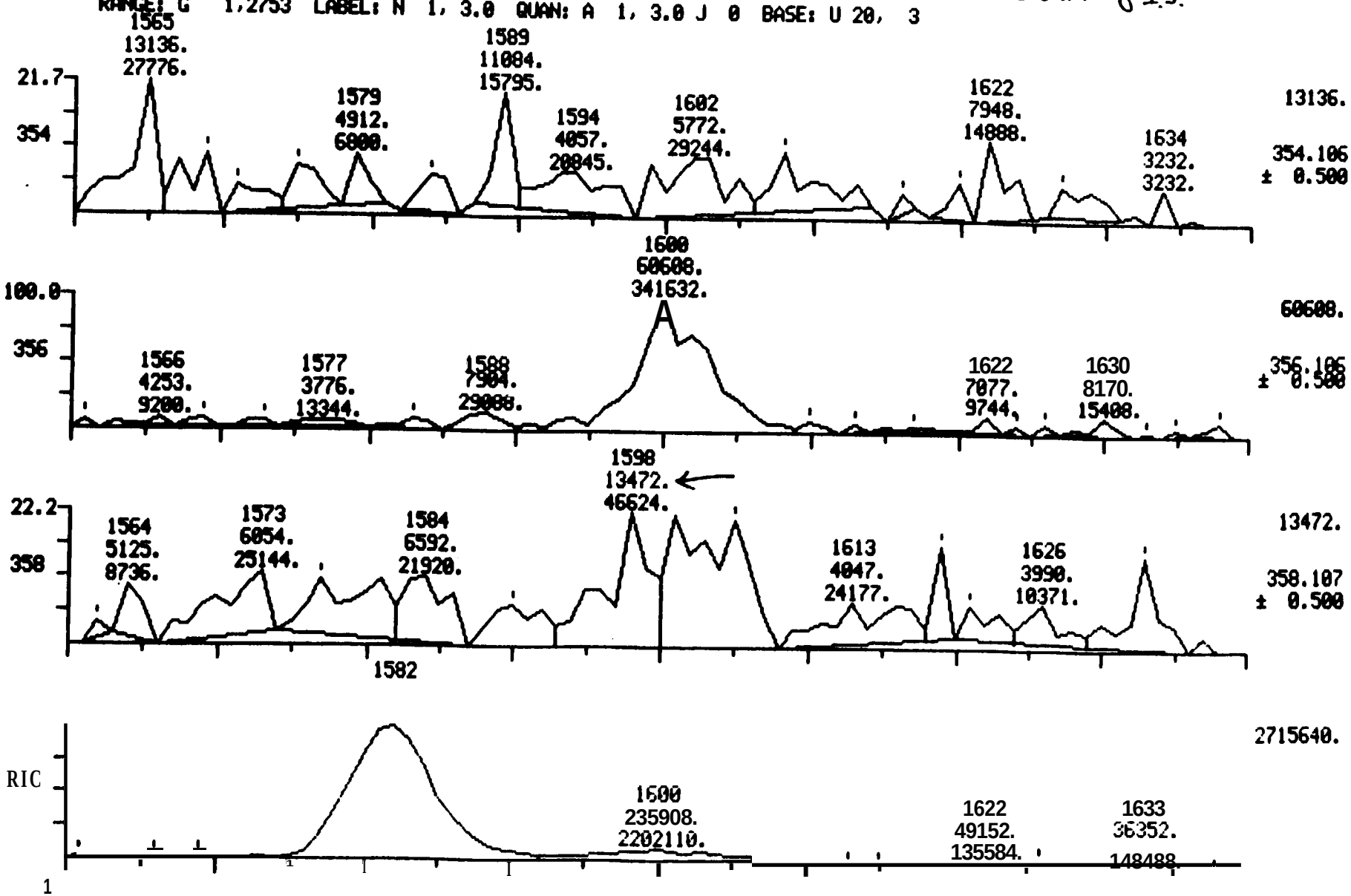
PeCDD

MIDRIC+MASS CHROMATOGRAMS
04/17/91 9:36:00
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: TBB3461EE #1
CALI: CAL910306A #2

SCANS 1560 TO 1640

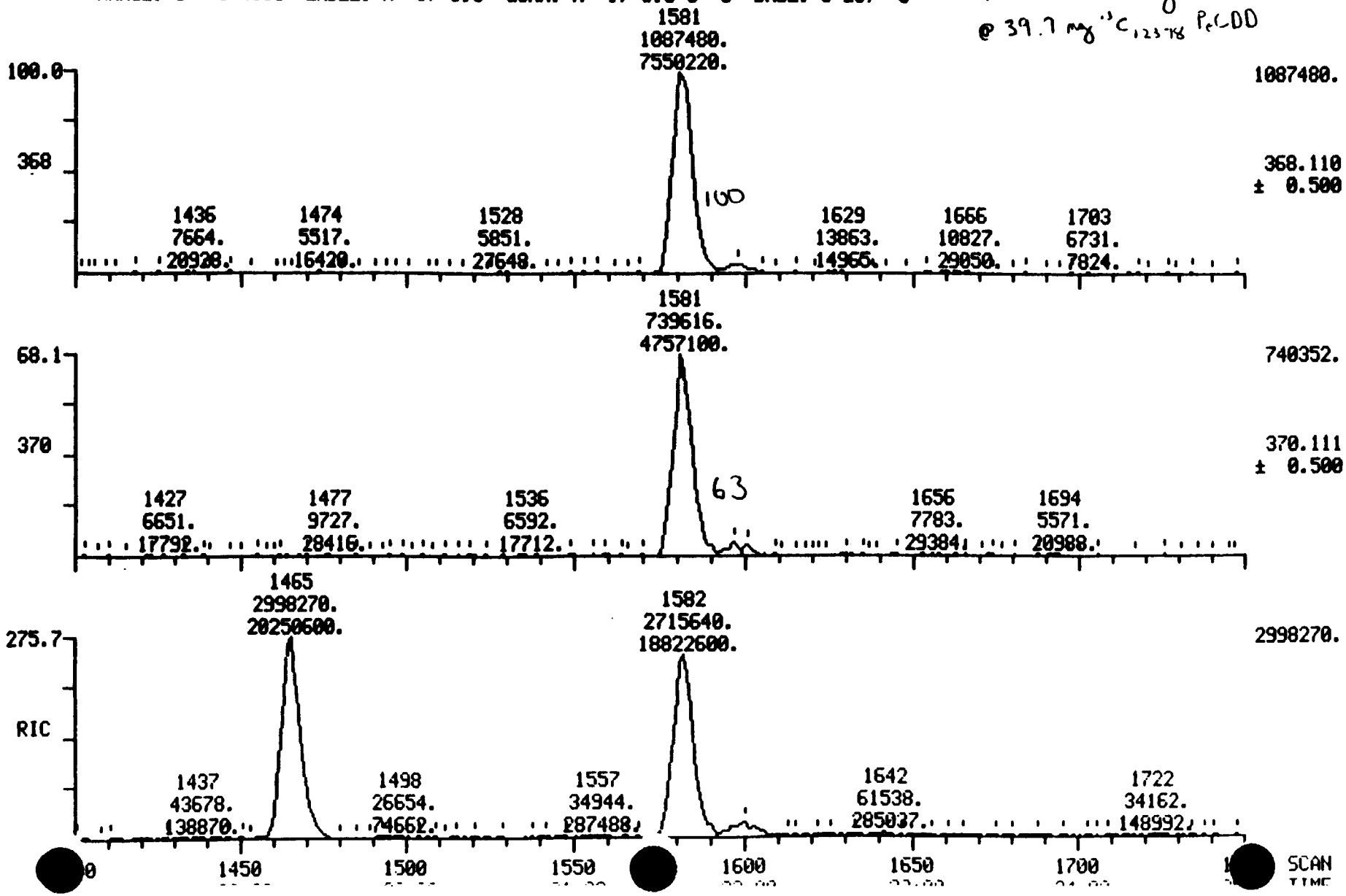
ND(1.5 ppt)
@ 39.7 mg I.S.



3200488

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 1400 TO 1750
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

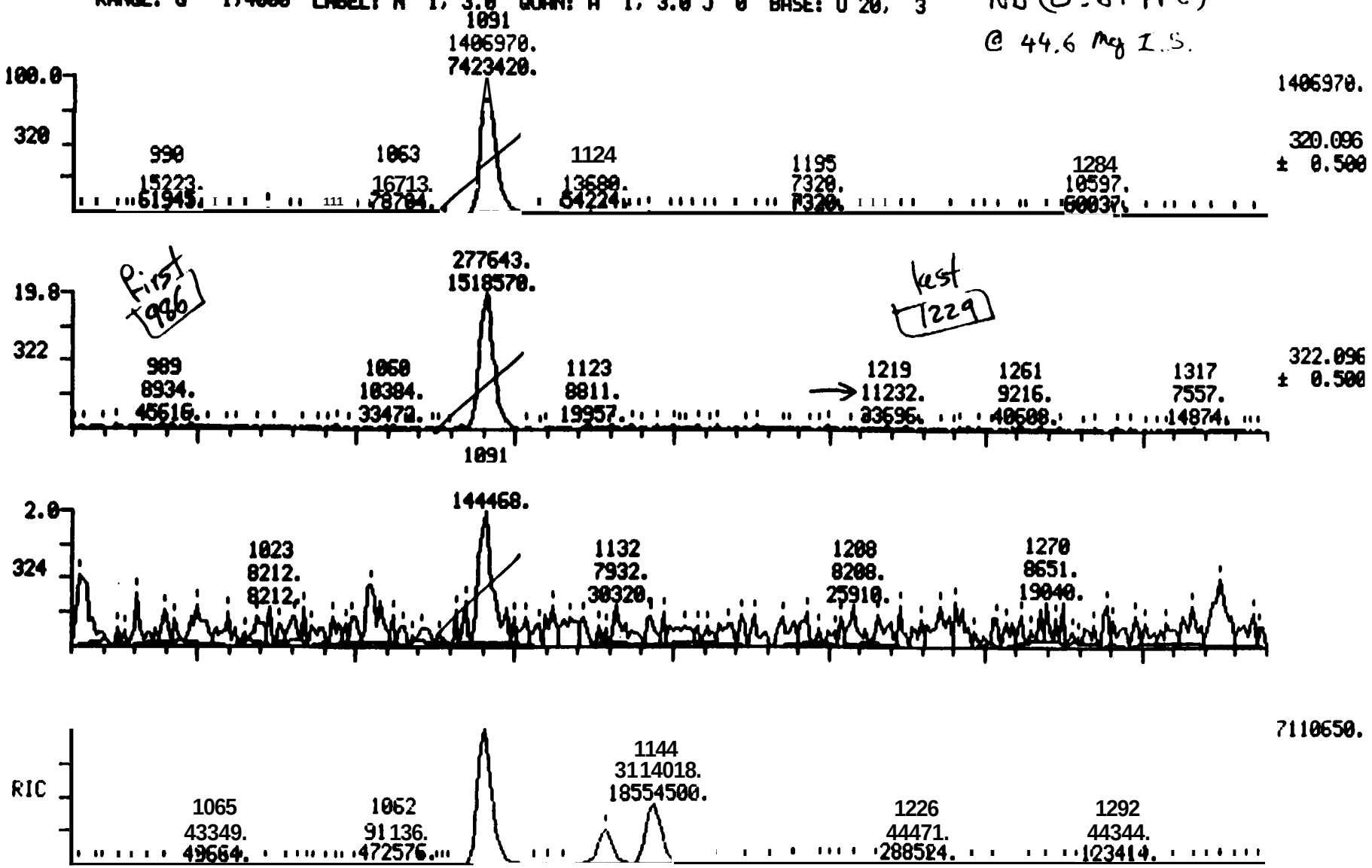
118% Recovery
@ 39.7 ng $^{13}C_{12378}$ PeCDD



MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 960 TO 1340
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDD

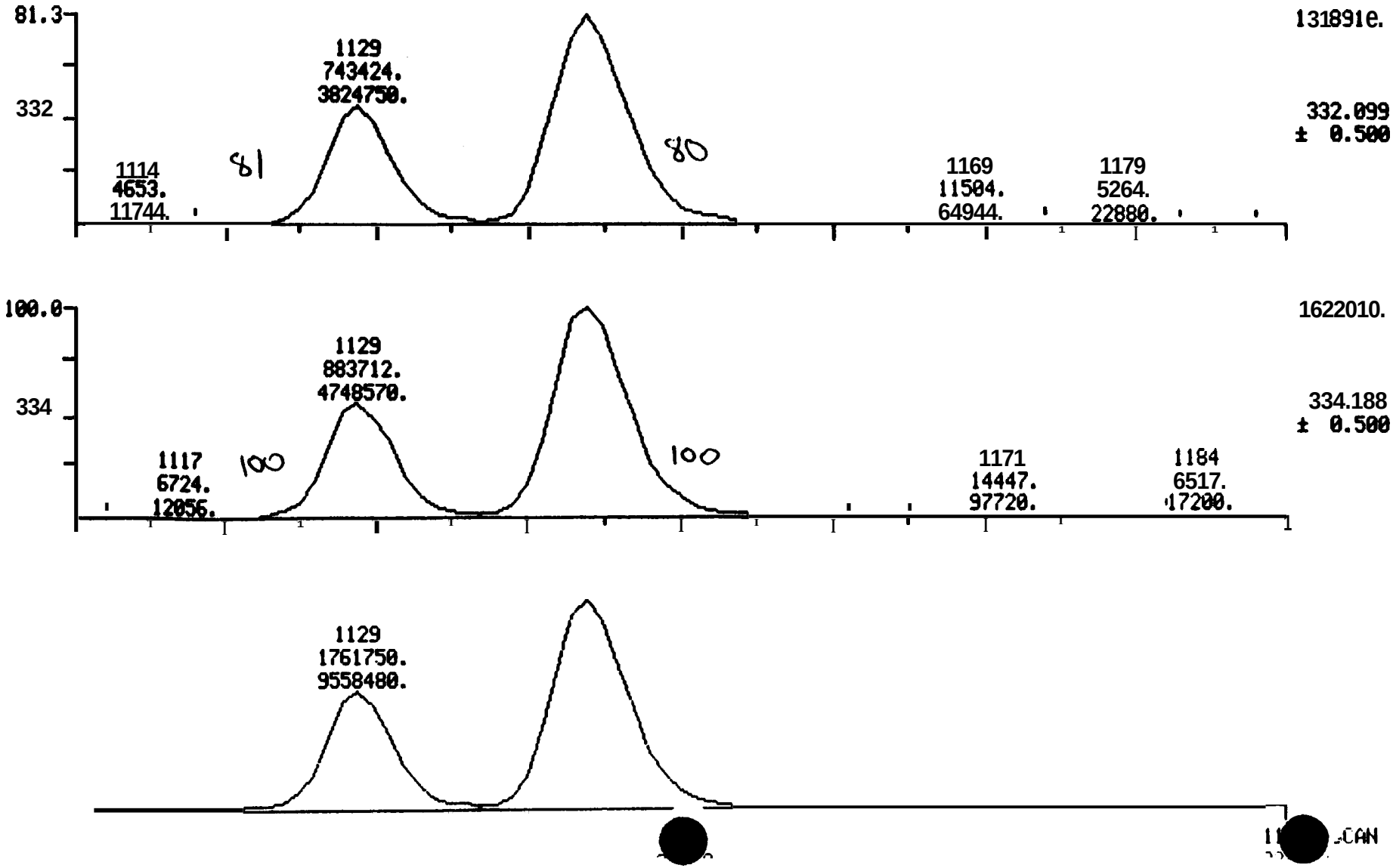
ND (0.61 ppt)
@ 44.6 mg I.S.



MIDRIC+MASS CHROMATOGRAMS
04/17/91 9:36:00
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N

DATA: TBB3461EE #1
CALI: CAL910306A #2

SCANS 1110 TO 1198



MIDRIC DATA: TBB3461EE #1 SCANS 1000 TO 2750

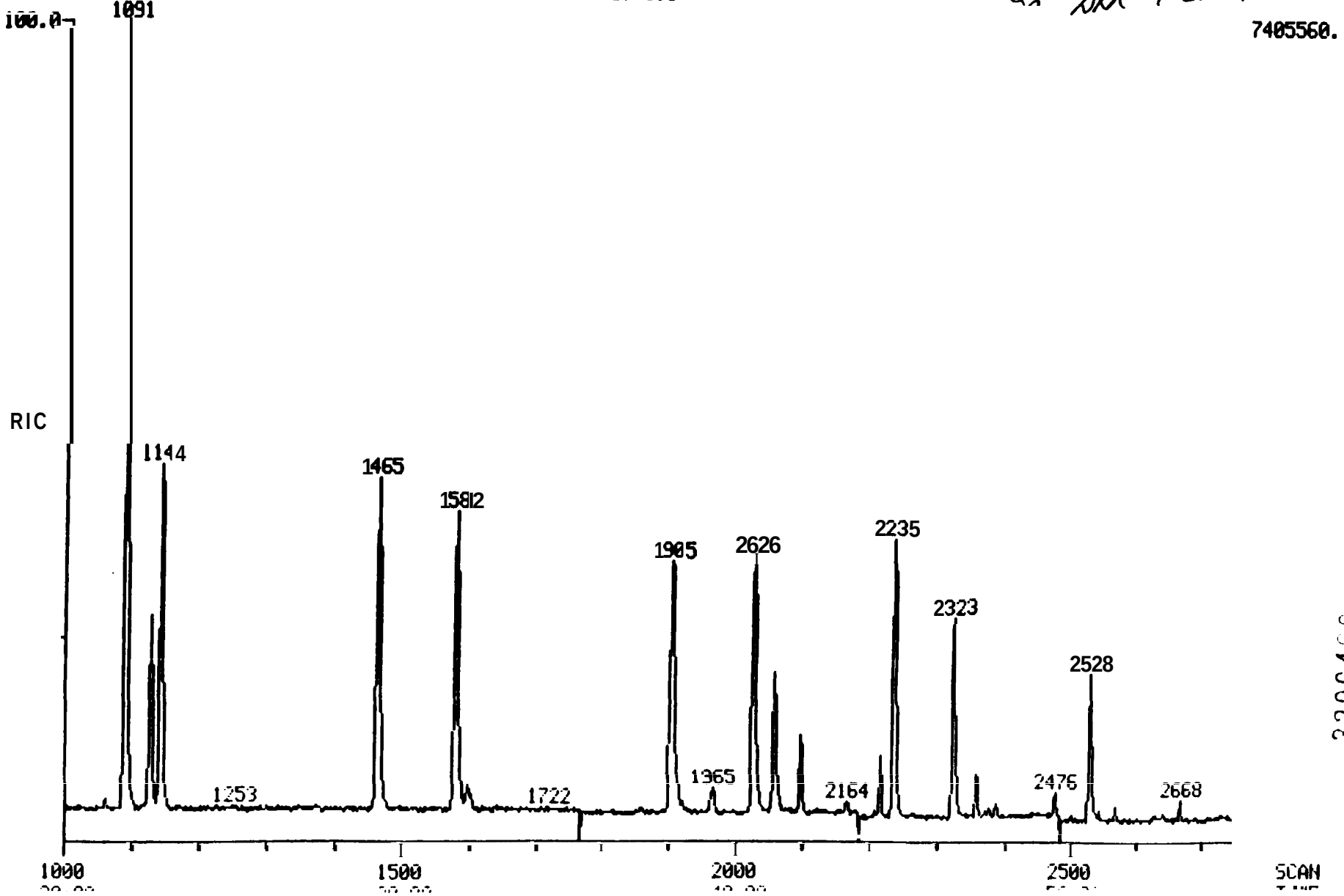
04/17/91 9:26:00 CALI: CAL910306A #2

SAMPLE: 21E OF BB3461 (1000ML WATER) FOR TOTALS

CONDS.: 60M DB-5/TOTALS.

RANGE. G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

Calc DT 4-22-91
JB 4-22-91
QC DKR 4-23-91



3205420

SCANS 1 TO 5 CENTROID
SCANS 6 TO 105 SUSPENDED
SCANS 106 TO 1303 CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1403	130.3	1543.3	8.5	42621. 30.	28.

4/8/91 10:24:52 SCAN 1 OF 2000
Acquisition started

Acquire Run 0: IBLK1989 Acquiring
04/08/91 10:24:00 + 0:03 Free sectors: 17923 Scan: 3 of 2000
Sample: 2 UL OF BLK1989 (1000ML WATER) FOR TCDD/F
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: DM Analyst: DT Acct. No:

********** CC PARAMETERS **********
Loaded GC Desc: TD Current CC oven tmp: 512 DegC Injector : 260 DegC
Current CC Desc: TD CC elapsed time : 1:15 min Int. oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Desc: TC Mass intervals: 10
Scan tire: 1.100 s Samp. int.: 0.200 ns Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Pos
5	315.648	316.148	0.105	1	100	40	2	0	Pos
6	317.640	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	M U
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

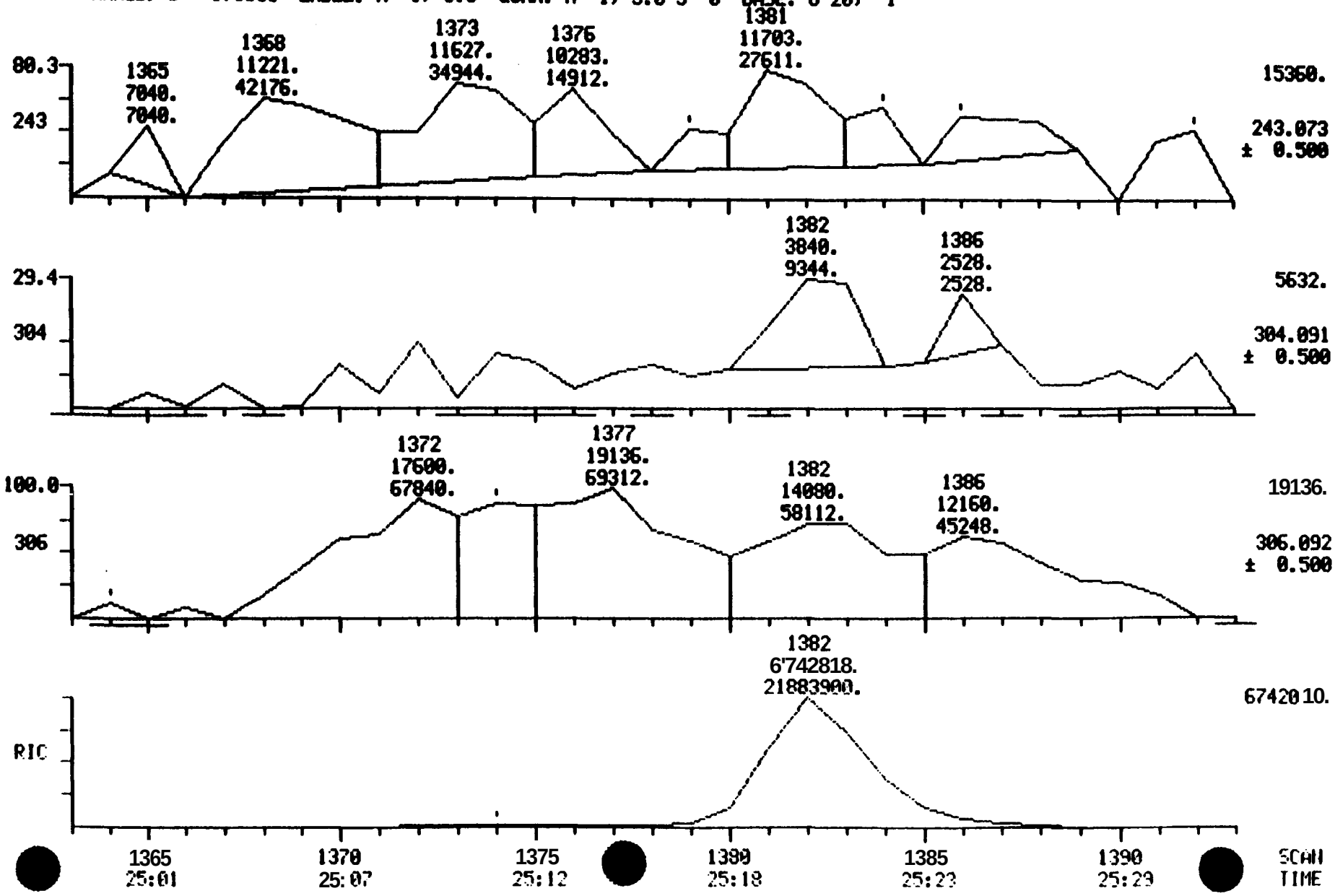
4/8/91 10:24:58 SCAN 5 OF 2000
Mode changed to suspended centroid positive ion

4/8/91 10:26:51 SCAN 106 OF 2000
Mode changed to centroid positive ion

4/8/91 10:33:13 SCAN 1503
Acquisition stopped

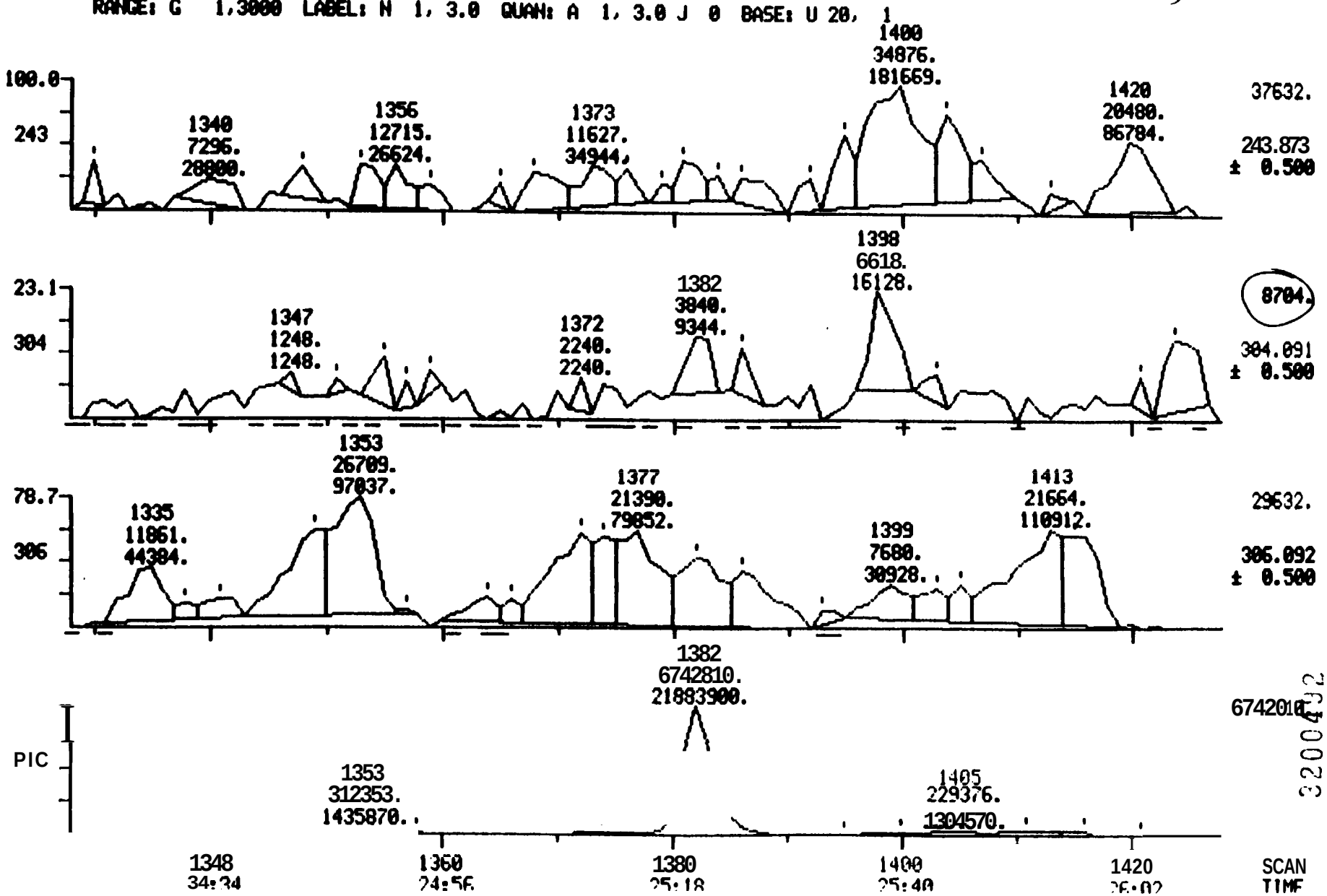
4/8/91 10:53:13
ACQUISITION COMPLETED

MIDRIC+MASS CHROMATOGRAMS DATA: IBLK1989 #1378 SCANS 1363 TO 1393
04/08/91 10:24:00 CALI: CAL022291 #3
SAMPLE: 2 UL OF BLK1989 (1000ML WATER) FOR TCDD/F
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

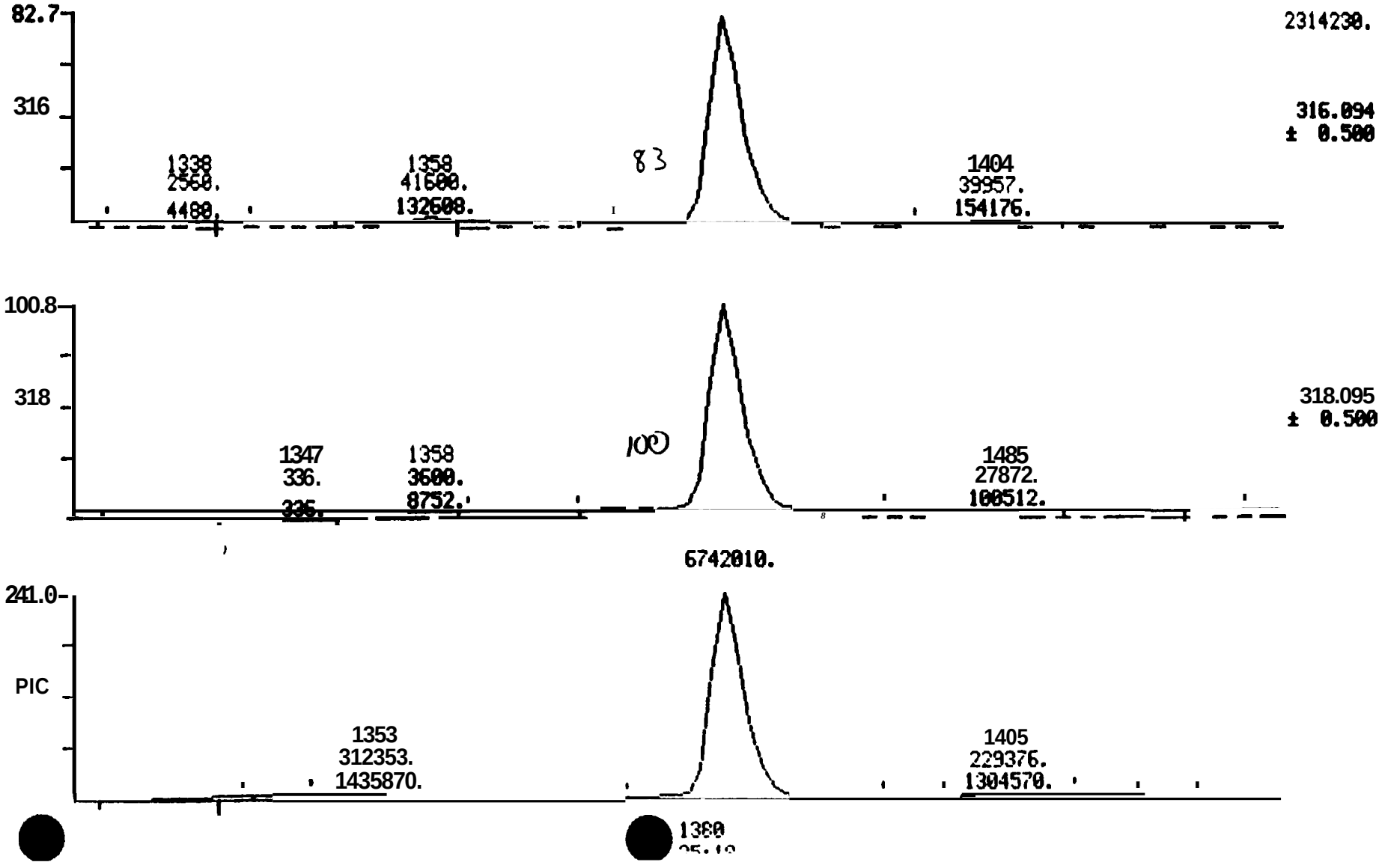


MIDRIC+MASS CHROMATOGRAMS DATA: IBLK1989 #1378 SCANS 1328 TO 1428
04/08/91 10:24:00 CALI: CAL022291 #3
SAMPLE: 2 UL OF BLK1989 (1000ML WATER) FOR TCDD/F
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

ND (0.36 ppb) TCDF



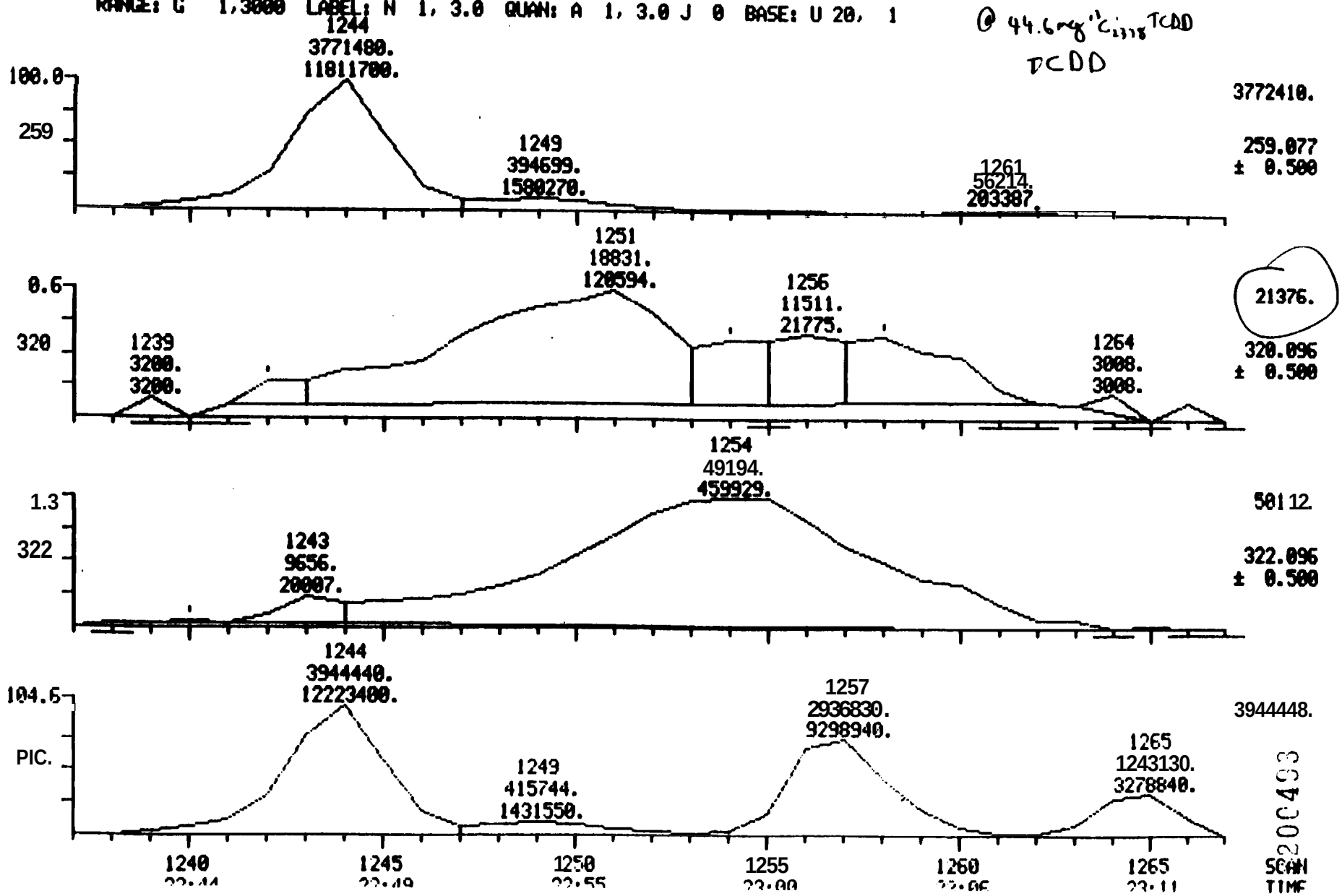
32004492


82.7
316
2314230.
316.094
± 0.500
1338
2560.
4480.
1358
41600.
132608.
83
1404
39957.
154176.
100.8
318
318.095
± 0.500
1347
336.
336.
1358
3600.
8752.
100
1485
27872.
100512.
6742010.
241.0
PIC
1353
312353.
1435870.
1405
229376.
1304570.
1380

MIDRIC+MASS CHROMATOGRAMS
04/08/91 10:24:00
SAMPLE: 2 UL OF BLK1989 (1000ML WATER) FOR TCDD/F
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

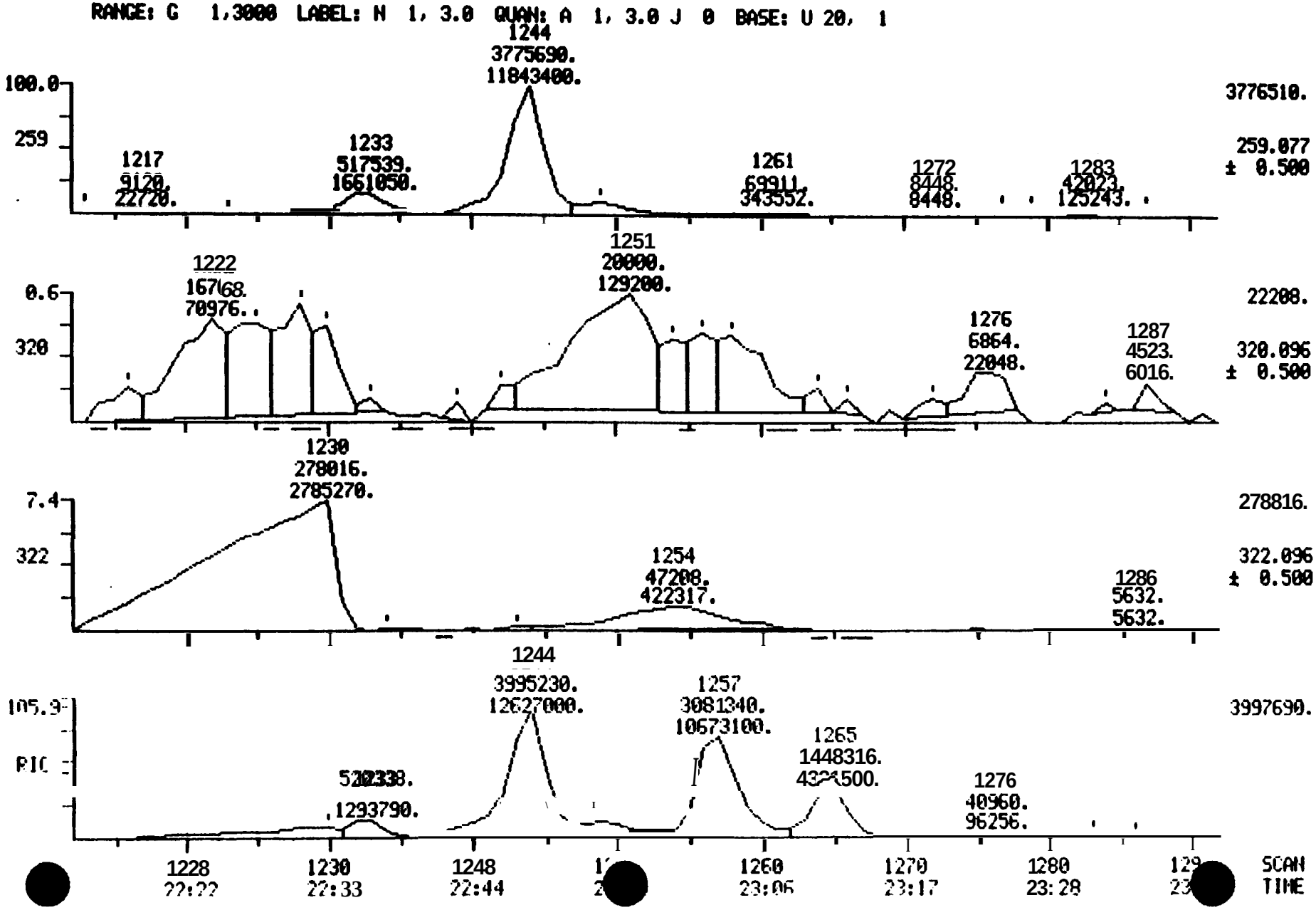
DATA: IBLK1989 #1252 SCANS 1237 TO 1267
CALI: CAL022291 #3

ND(1.6 ppt)
@ 44.6 mg $^{13}C_{1378}$ TCDD
TCDD



20C493

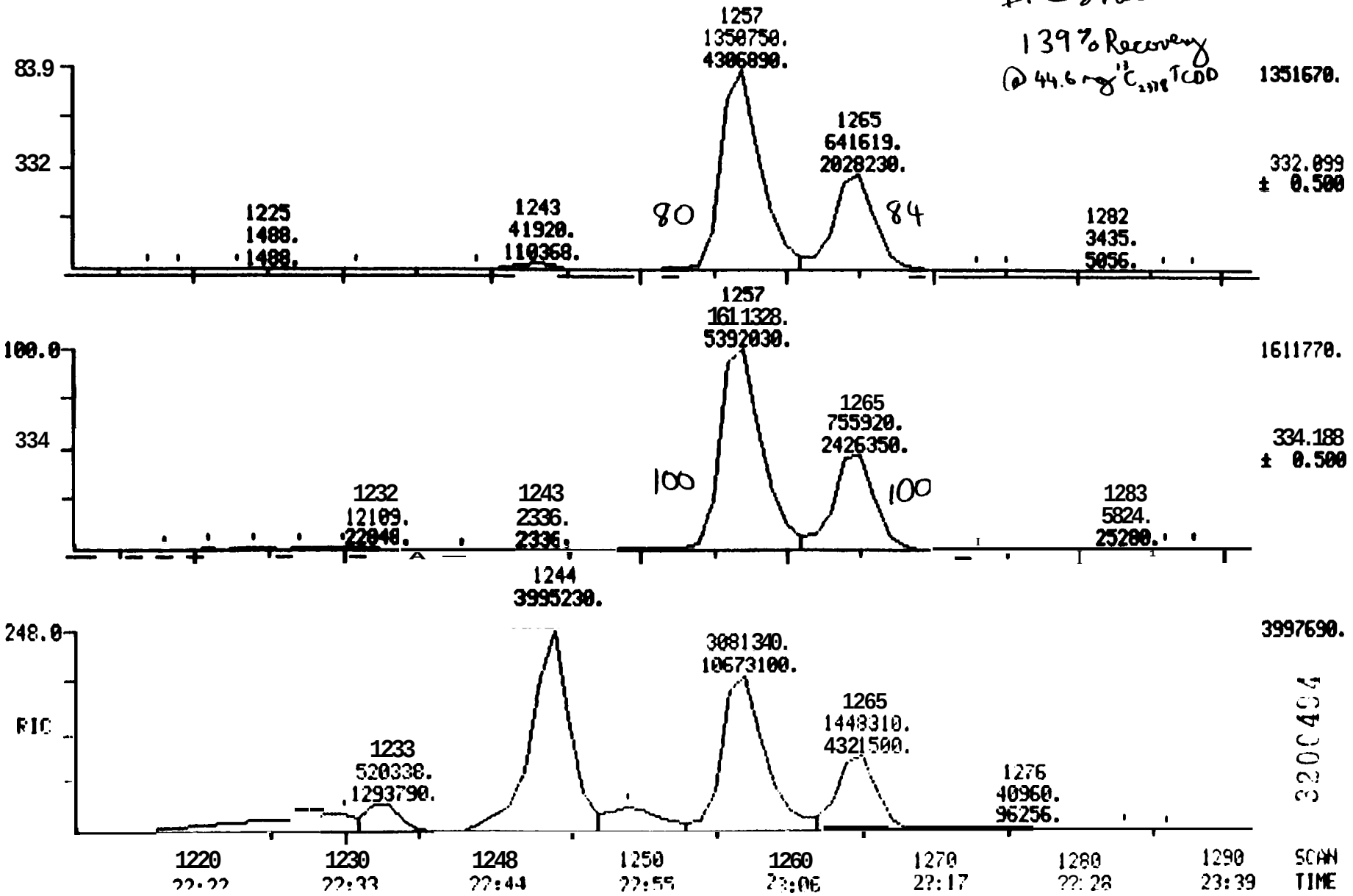
MIDRIC+MASS CHROMATOGRAMS DATA: IBLK1989 #1252 SCANS 1212 TO 1292
04/08/91 10:24:00 CALI: CAL022291 #3
SAMPLE: 2 UL OF BLK1989 (1000ML WATER) FOR TCDD/F
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



MIDRIC+MASS CHROMATOGRAMS DATA: IBLK1989 #1252 SCANS 1212 TO 1292
04/08/91 10:24:00 CALI: CAL022291 e3
SAMPLE: 2 U OF BLK1989 (1000ML WATER) FOR TCDD/F
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

112% Rec DT 4-17-91

139% Recovery
@ 44.6 ng $^{13}C_{12}$ TCDD

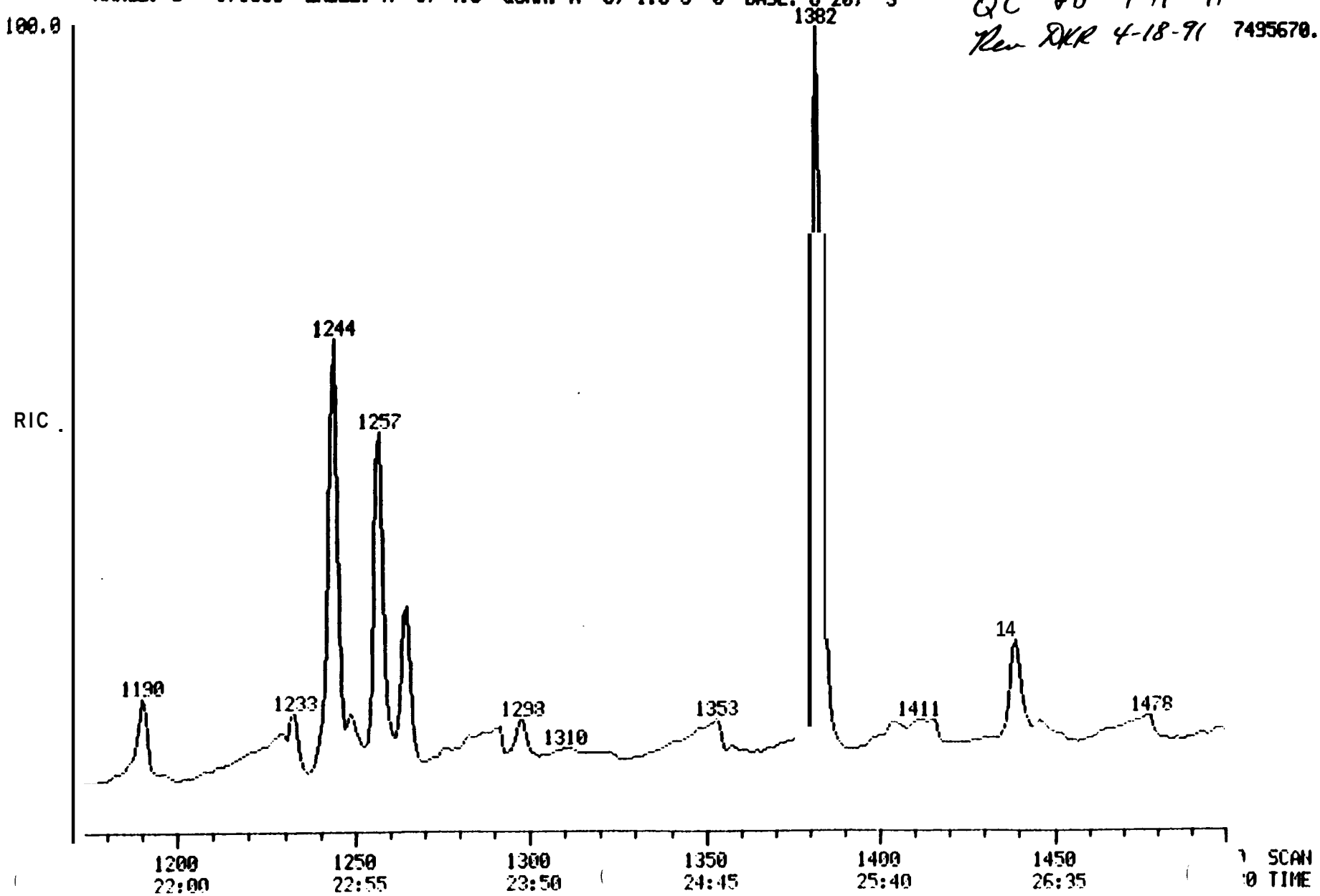


3200494

MIDRIC
04/08/91 10:24:00
SAMPLE: 2 UL OF BLK1989 (1000ML WATER) FOR TCDD/F
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: IBLK1989 11252 SCANS 1170 TO 1500
CALI: CAL022291 #3

Cole DT 4-17-91
QC JB 4-17-91
Rev DKR 4-18-91



7495670.

SCANS 1 TO 3 CENTROID
SCANS 6 TO 105 SUSPENDED
SCANS 106 TO 1504 CENTROID

3200495

MODE	SCANS	SECS	OUT OF	%	PEAKS	PER SCAN	PER SEC
CENTROID	1404	139.9	1544.4	9.1	08226.	43.	57.

4/8/91 13:44:16 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:IBB3463EE Acquiring
04/08/91 13:44:00 + 0:03 Free sectors: 16982 Scan: 3 of 2000
Sample: 2UL OF BB3463 (1000ML WATER) FOR TCDD
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: DT Acct. No:

********** GC PARAMETERS **********
Loaded GC Desc: TD Current OC oven tmp: 312 DegC Injector : 260 DegC
Current OC Desc: TD GC elapsed time : 3:15 min Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

HID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	258.649	259.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Pos
5	315.648	316.148	0.103	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Por
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	a	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

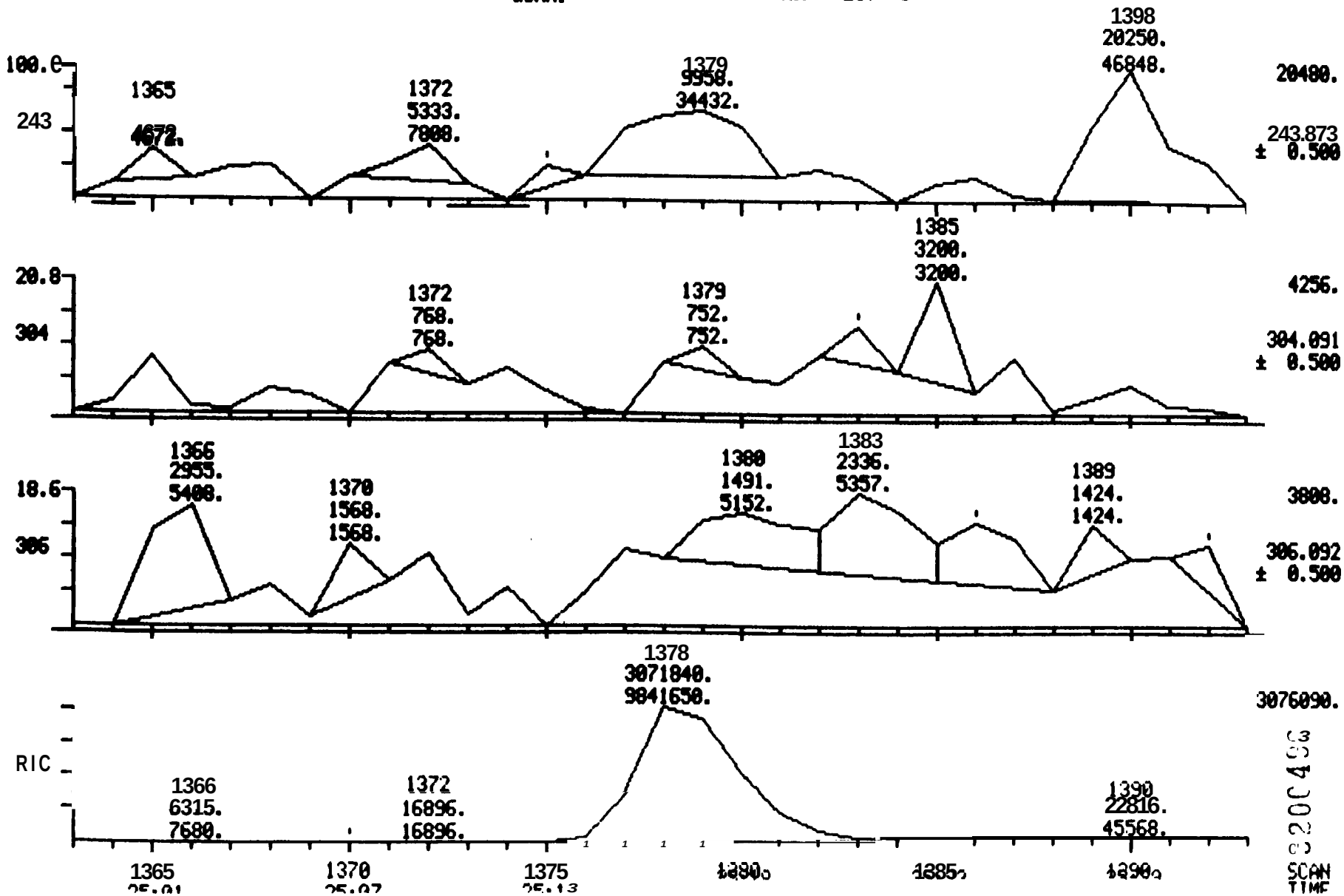
4/8/91 13:44:22 SCAN 5 OF 2000
Mode changed to suspended centroid positive ion

4/8/91 13:46:16 SCAN 106 OF 2000
Mode changed to centroid positive ion

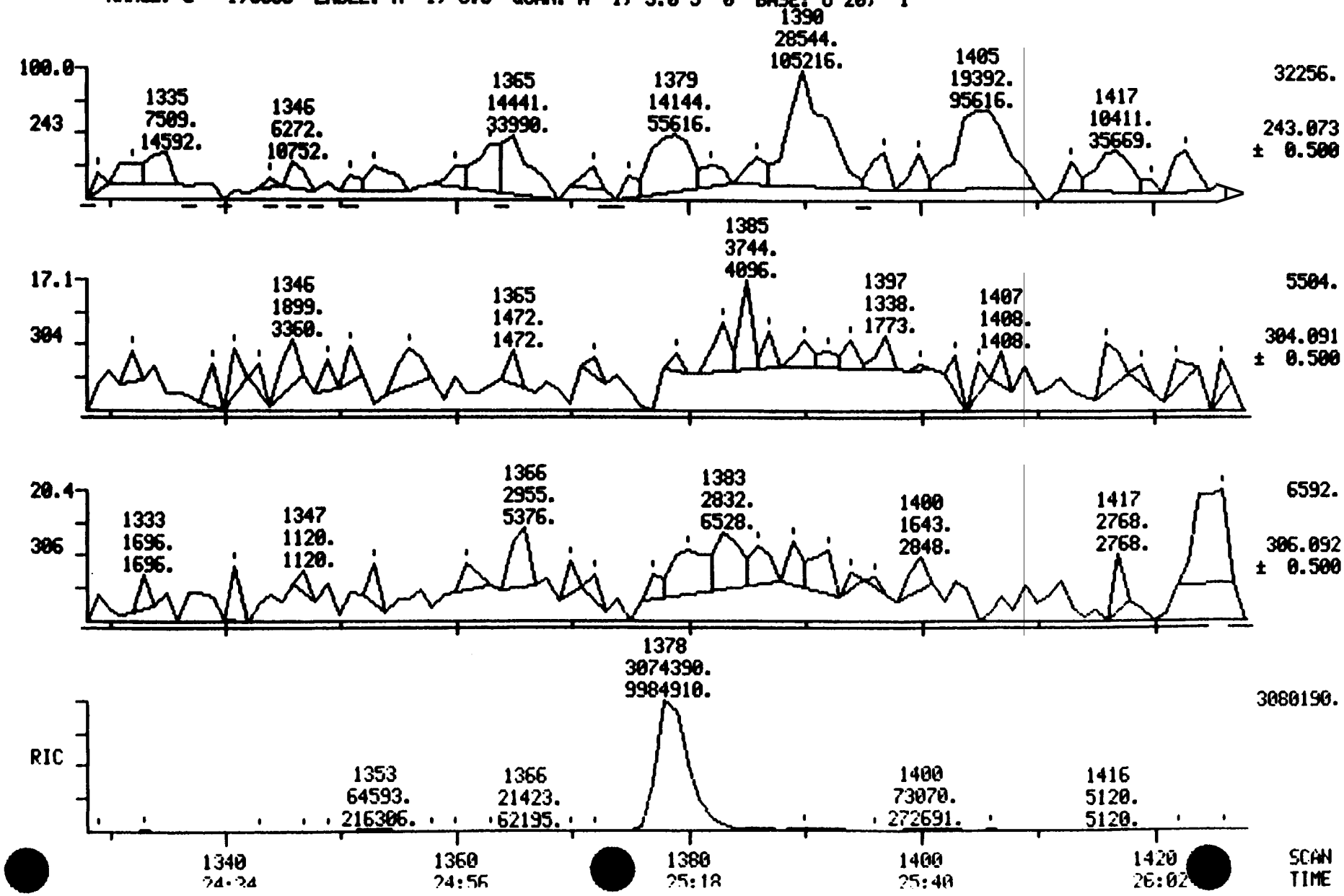
4/8/91 14:12:38 SCAN 1504
Acquisition stopped

4/8/91 14:12:40
ACOUISITION COMPLETED

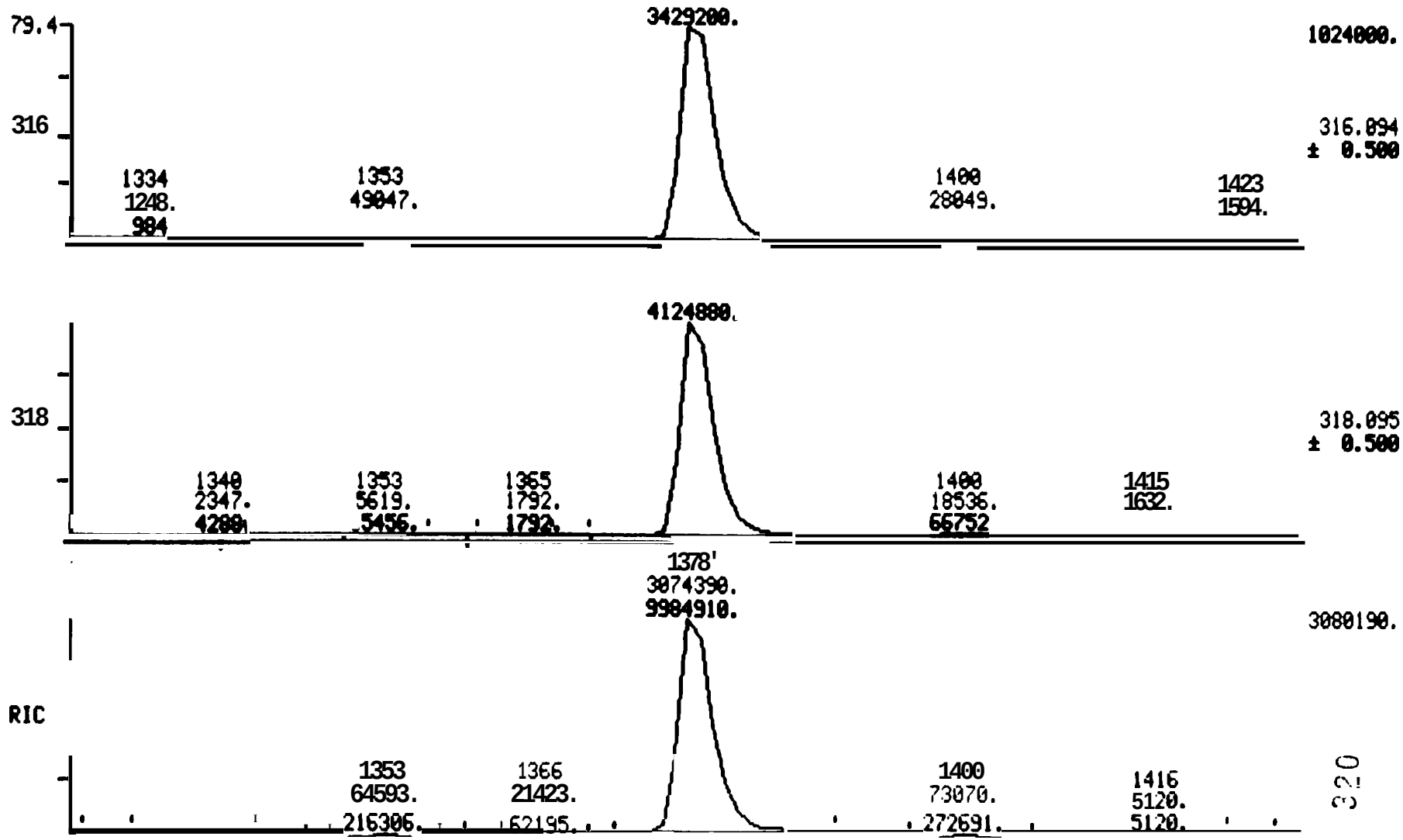
MIDRIC+MASS CHROMATOGRAMS DATA: IB83463EE #1378 SCANS 1363 TO 1393
04/08/91 13:44:00 CALI: CAL022291 #3
SAMPLE: 20L OF 883463 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



MIDRIC+MASS CHROMATOGRAMS DATA: IBB3463EE #1378 SCANS 1328 TO 1428
04/08/91 13:44:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3463 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

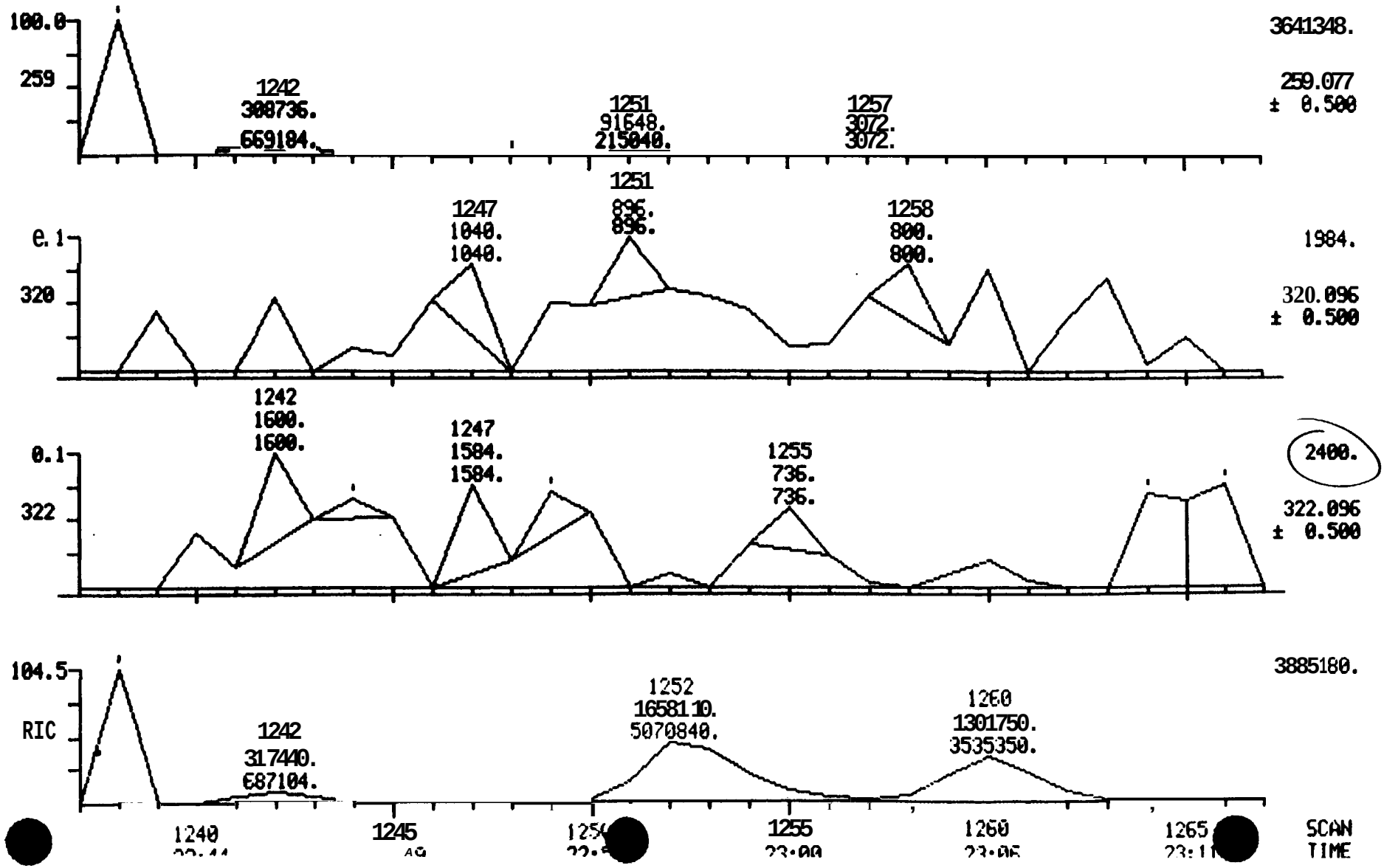


MIDRIC+MASS CHROMATOGRAMS DATA: IBB3463EE #1378 SCANS 1328 TO 1428
04/08/91 13:44:00 CALI: CAL022291 03
SAMPLE: 2UL OF BB3463 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC

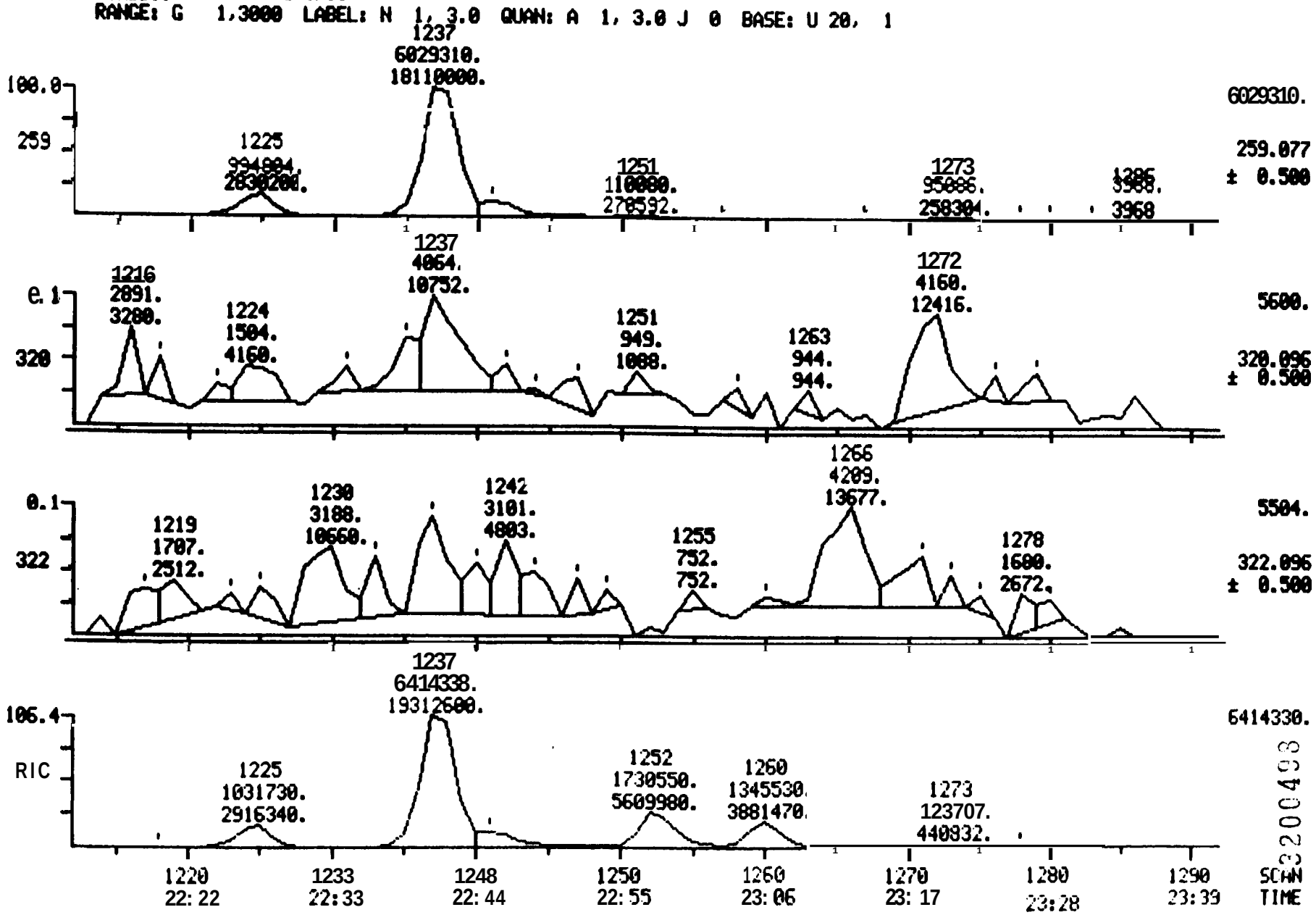


MIDRIC+MASS CHROMATOGRAMS DATA: IBB3463EE #1252 SCANS 1237 TO 1267
04/08/91 13:44:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3463 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 1

ND (0.28 ppb)

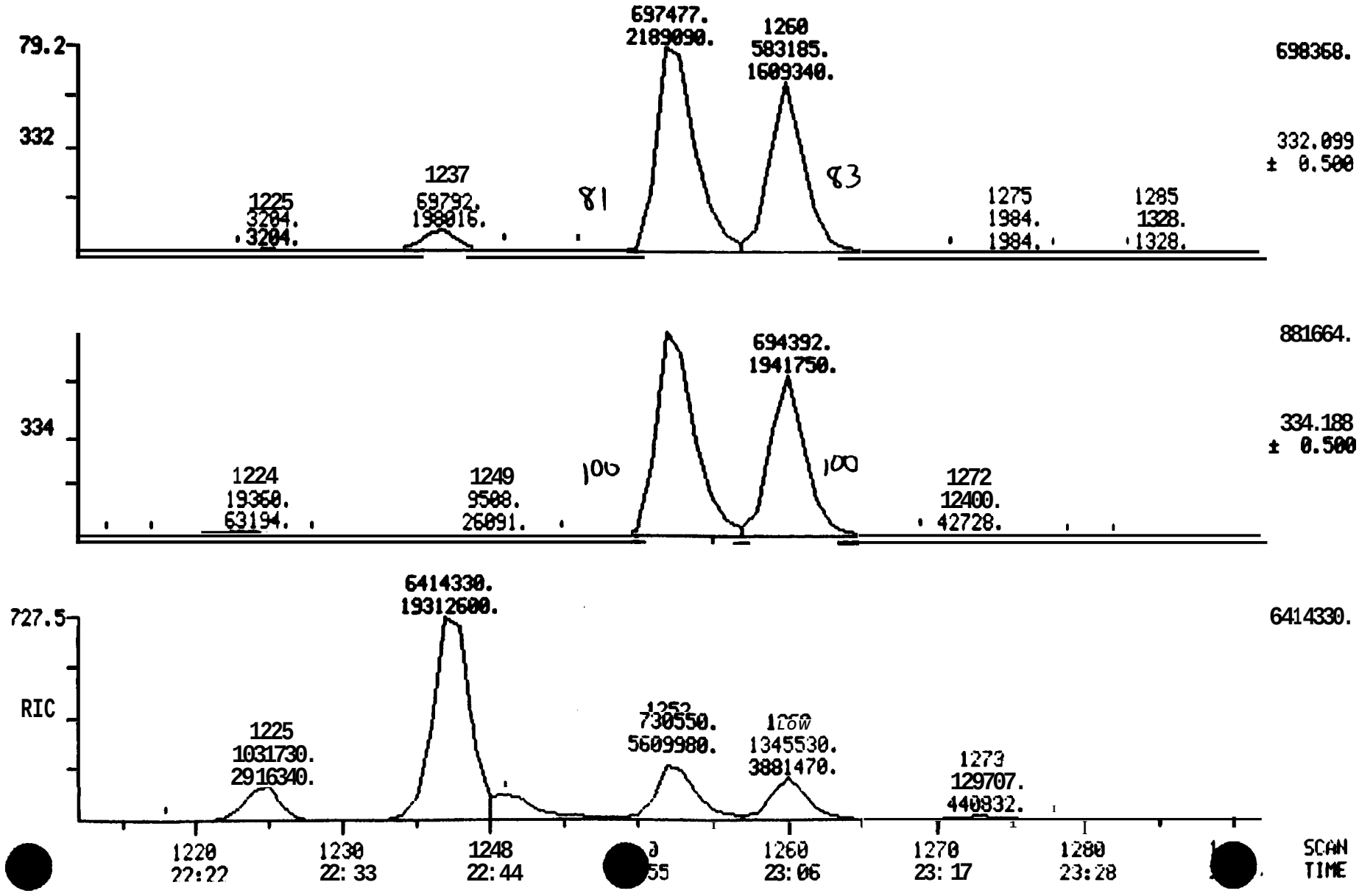


MIDRIC+MASS CHROMATOGRAMS DATA: IB83463EE #1252 SCANS 1212 TO 1292
04/08/91 13:44:00 CALI: CAL022291 03
SAMPLE: 2UL OF B83463 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



3200498

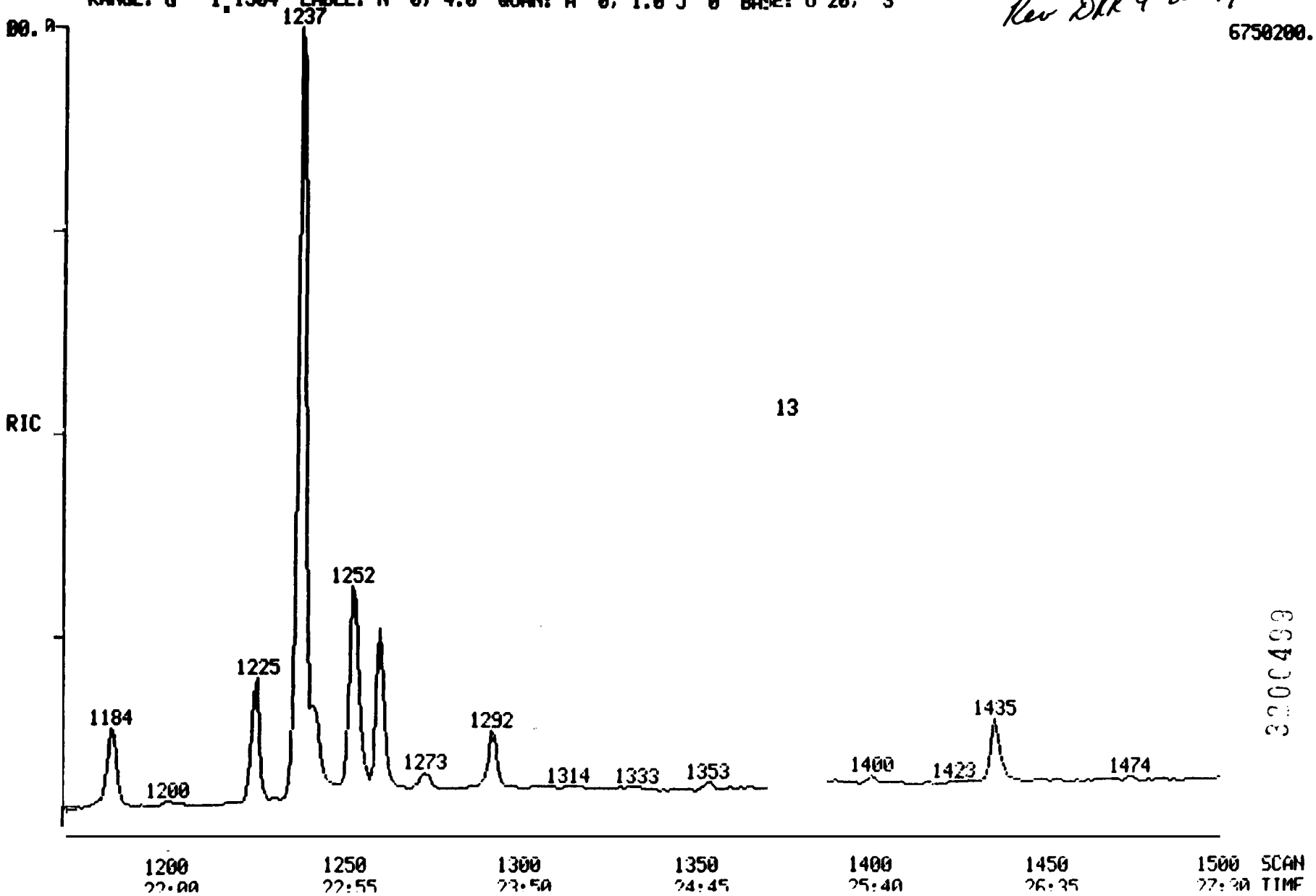
88% Recovery


79.2
332
1225
3204.
3204.
1237
69792.
198016.
81
697477.
2189090.
1260
583185.
1609340.
83
1275
1984.
1984.
1285
1328.
1328.
698368.
332.099
± 0.500
334
1224
19360.
63194.
1249
9508.
26091.
100
694392.
1941750.
100
1272
12400.
42728.
881664.
334.188
± 0.500
727.5
RIC
1225
1031730.
2916340.
6414330.
19312600.
730550.
5609980.
1345530.
3881470.
1273
129707.
440832.
6414330.
1220
22:22
1230
22:33
1248
22:44
1260
23:06
1270
23:17
1280
23:28
SCAN
TIME

MIDRIC
04/08/91 13:44:00
SAMPLE: 2UL OF BB3463 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1.1504 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: IBB3463EE #1252 SCANS 1170 TO 1500
ALI: CAL022291 #3

Calc DT 4-17-91
QC JB 4-18-91
Rev DKR 4-20-91



3200499

SCANS	1	TO	3	CENTROID
SCANS	6	TO	103	SUSPENDED
SCANS	106	TO	1303	CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC
CENTROID	1403	143.5	1543.3	9.3	28301. 20.	18.

4/8/91 11:40:33 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:IBB3462EE Acquiring
04/08/91 11:40:00 + 0:03 Free sectors: 17262 Scan: 3 of 2000
Sample: 2UL OF BB3462 (1000ML WATER) FOR TCDD
Conds.: ISOMER SPECIFIC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: DT Acct. No:

********** GC PARAMETERS **********
Loaded GC Desc: TD Current GC oven tmp: 312 DegC Injector : 260 DegC
Current CC Desc: TD GC elapsed tine 1:15 rin Int.oven : 260 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	21.1	0.0
2	30 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

HID scan Desc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Po.
2	258.649	239.150	0.105	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	303.640	306.148	0.108	1	100	40	2	0	Pos
5	313.648	316.148	0.105	1	100	40	2	0	Po.
6	317.640	310.148	0.105	1	100	40	2	0	Po.
	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.640	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.150	0.105	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# 00 acqu buffers	16	
Instrument type	G	
Full scale mass	1024	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	amu
Offset at low mass	0	amu
Offset at high mass	0	amu
Voltage settling time(MS)	4	

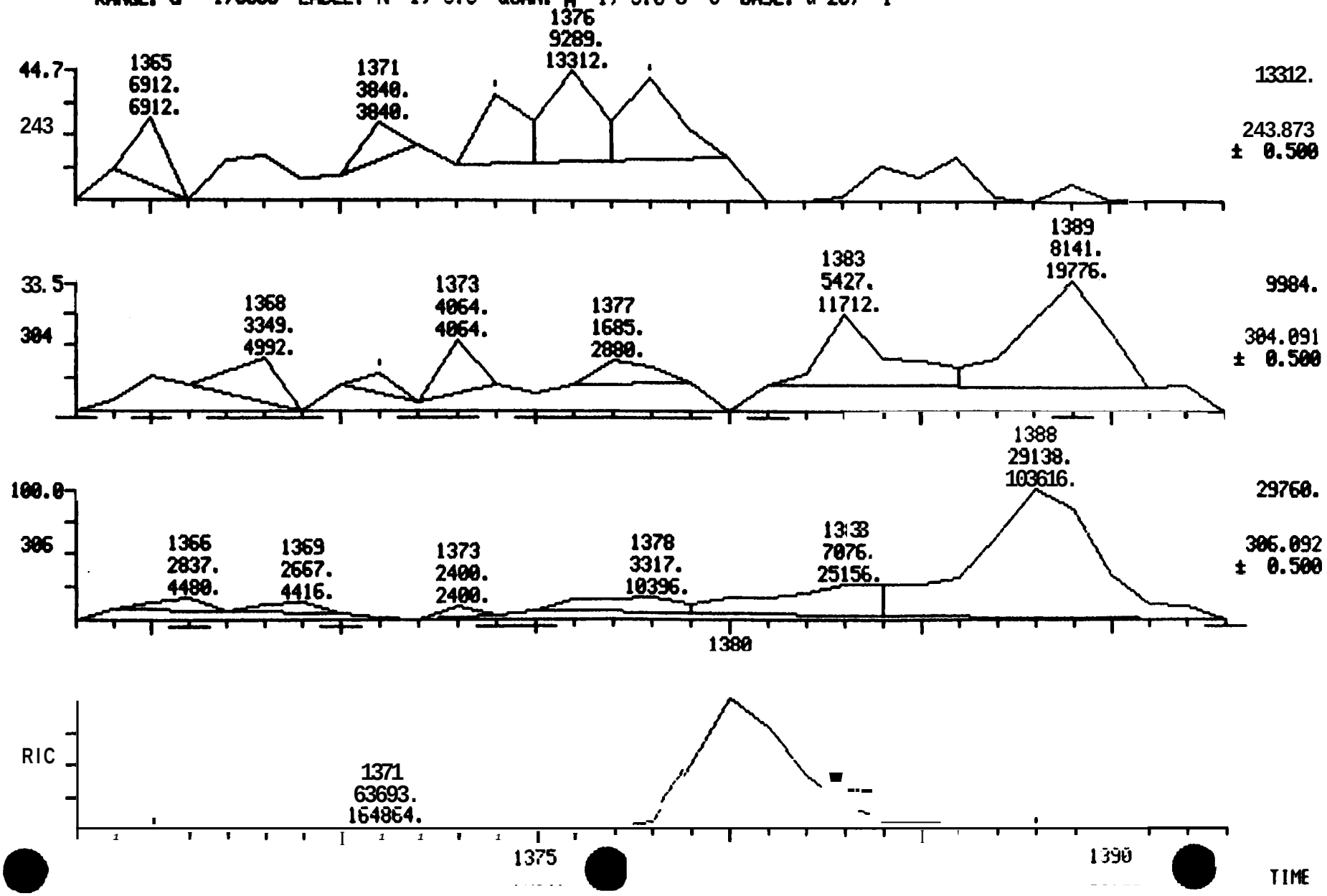
4/8/91 11:41:01 SCAN 3 OF 2000
Mode changed to suspended centroid positive ion

4/8/91 11:42:55 SCAN 106 OF 2000
Mode changed to centroid positive ion

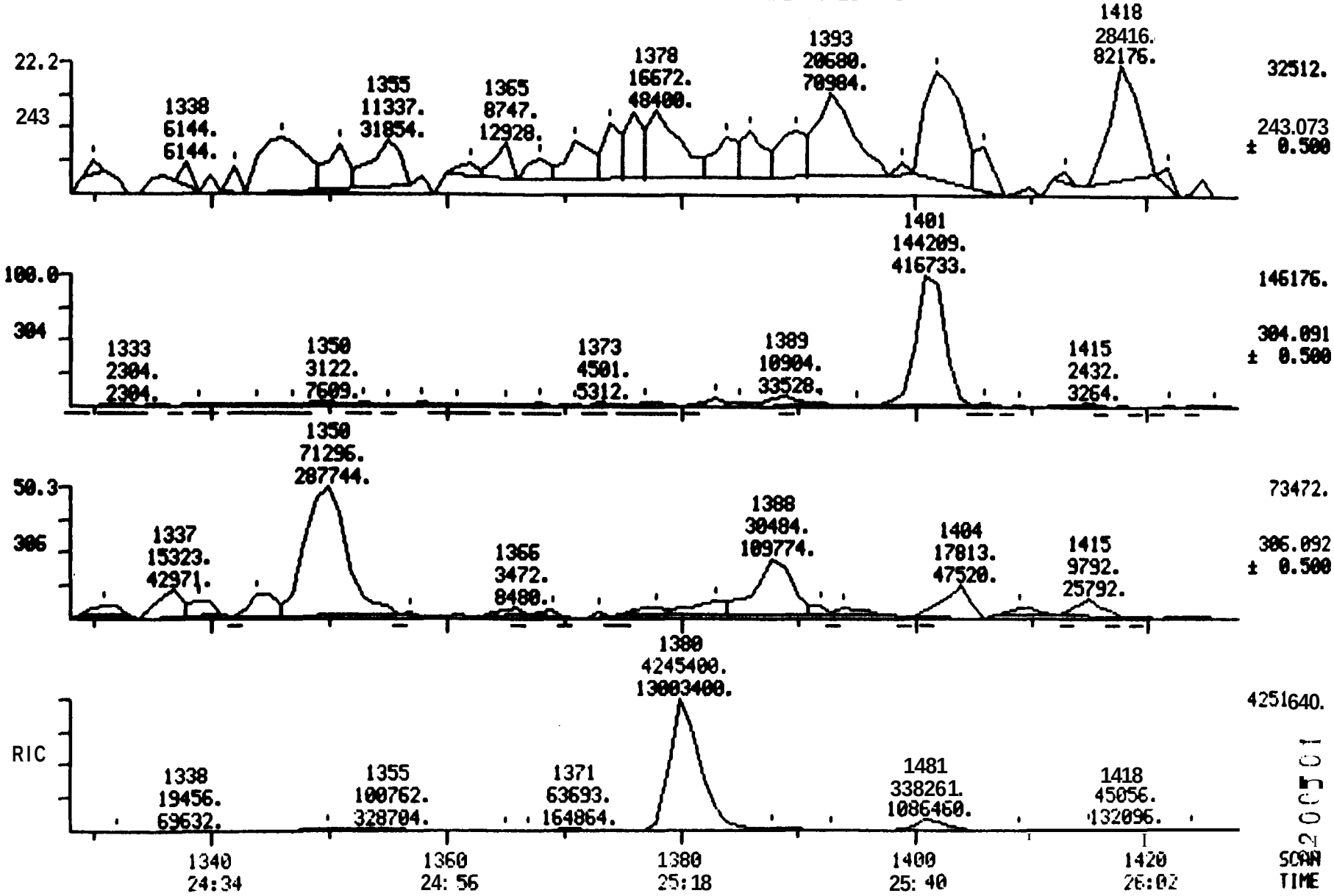
4/8/91 12:09:17 SCAN 1503
Acquisition stopped

4/8/91 12:09:19
ACQUISITION COMPLETED

MIDRIC+MASS CHROMATOGRAMS DATA: IBB3462EE #1378 SCANS 1363 TO 1393
04/08/91 11:40:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 1

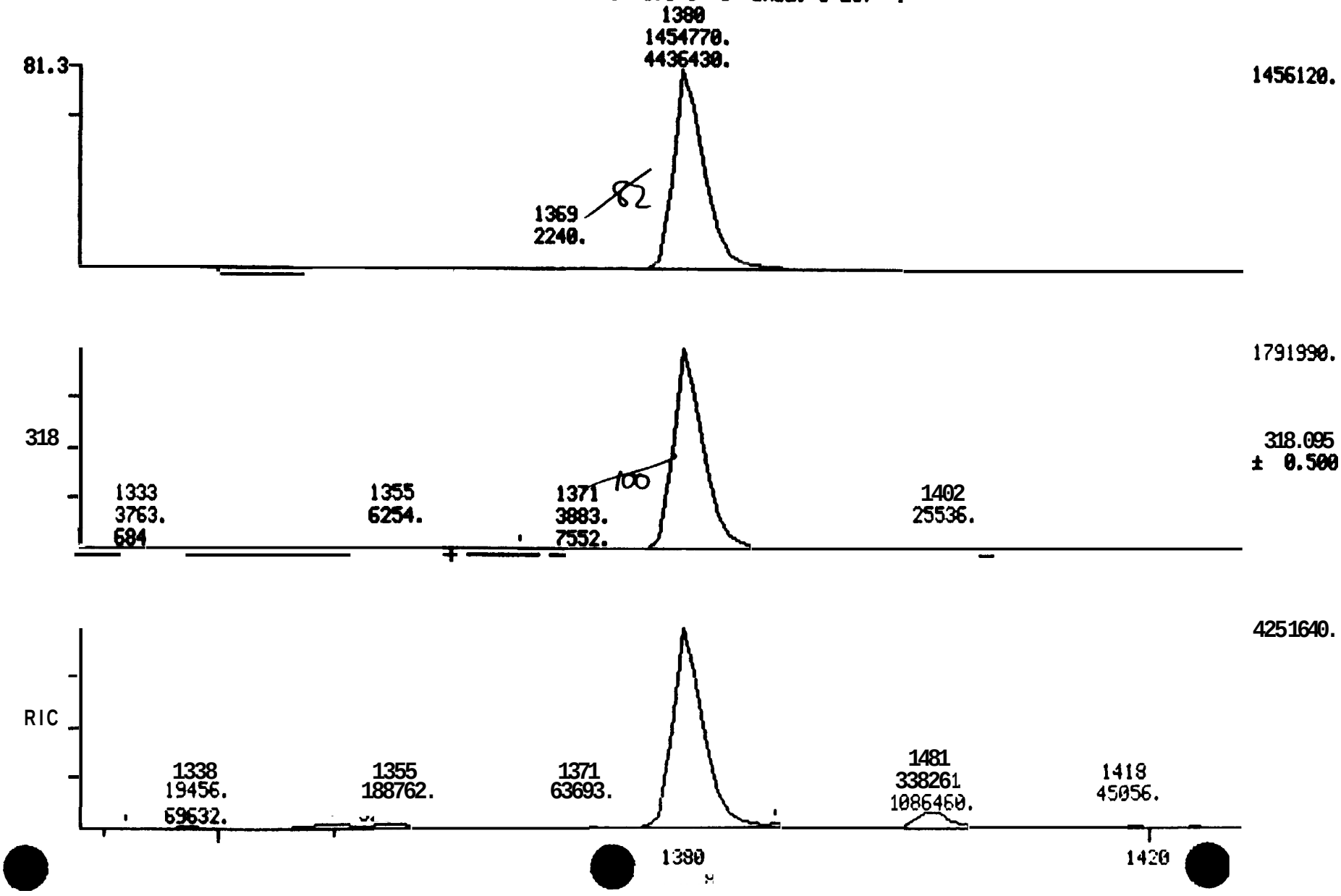


MIDRIC+MASS CHROMATOGRAMS DATA: IBB3462EE #1378 SCANS 1328 TO 1428
04/08/91 11:40:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

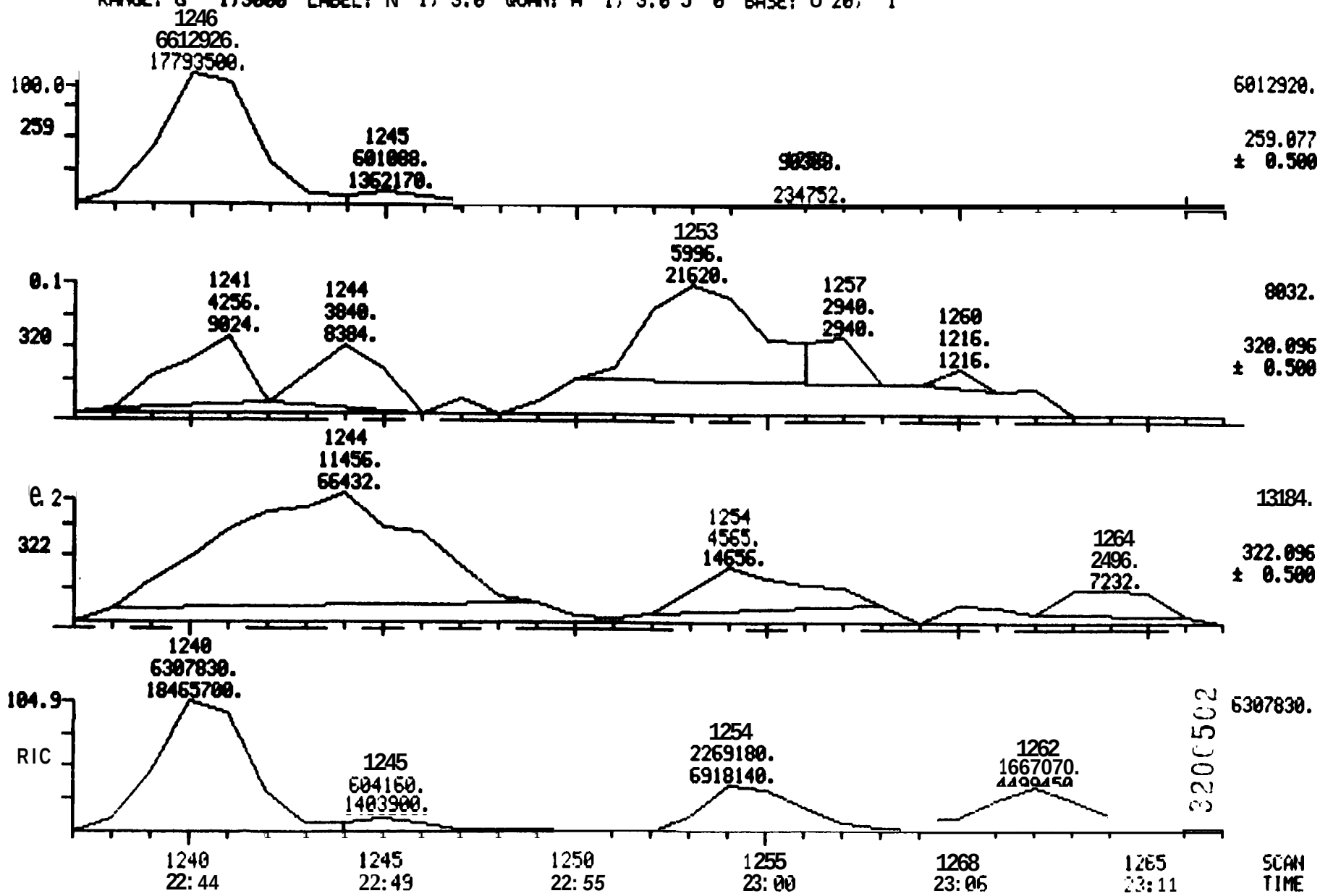


MIDRIC+MASS CHROMATOGRAMS DATA: IBB3462EE #1378 SCANS 1328 TO 1428
04/08/91 11:40:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

80% Recovery



MIDRIC+MASS CHROMATOGRAMS DATA: IBB3462EE 01252 SCANS 1237 TO 1267
04/08/91 11:40:00 CALI: CAL022291 03
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

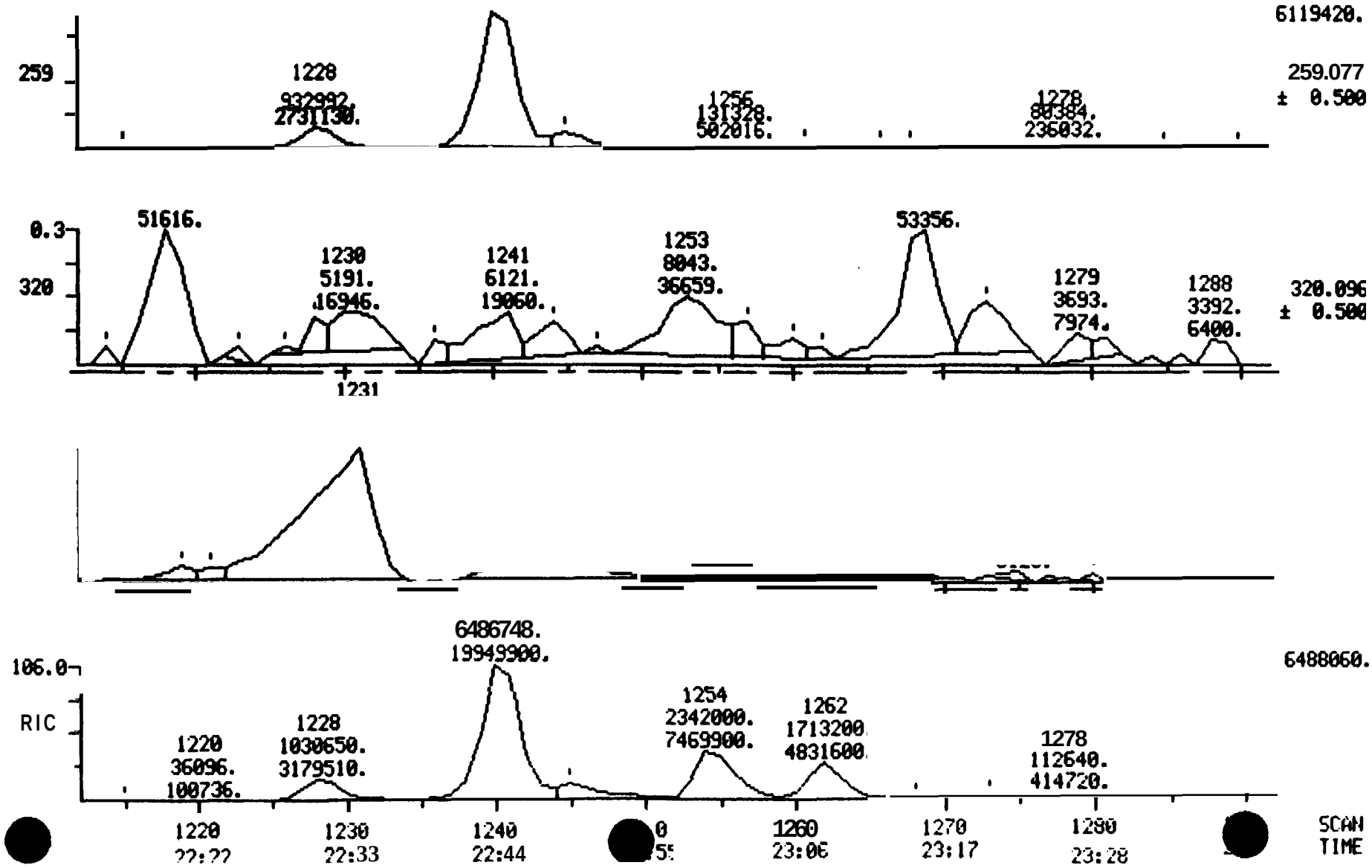


3200502

DT 4-17-91

~~NB (0.42 PPt)~~

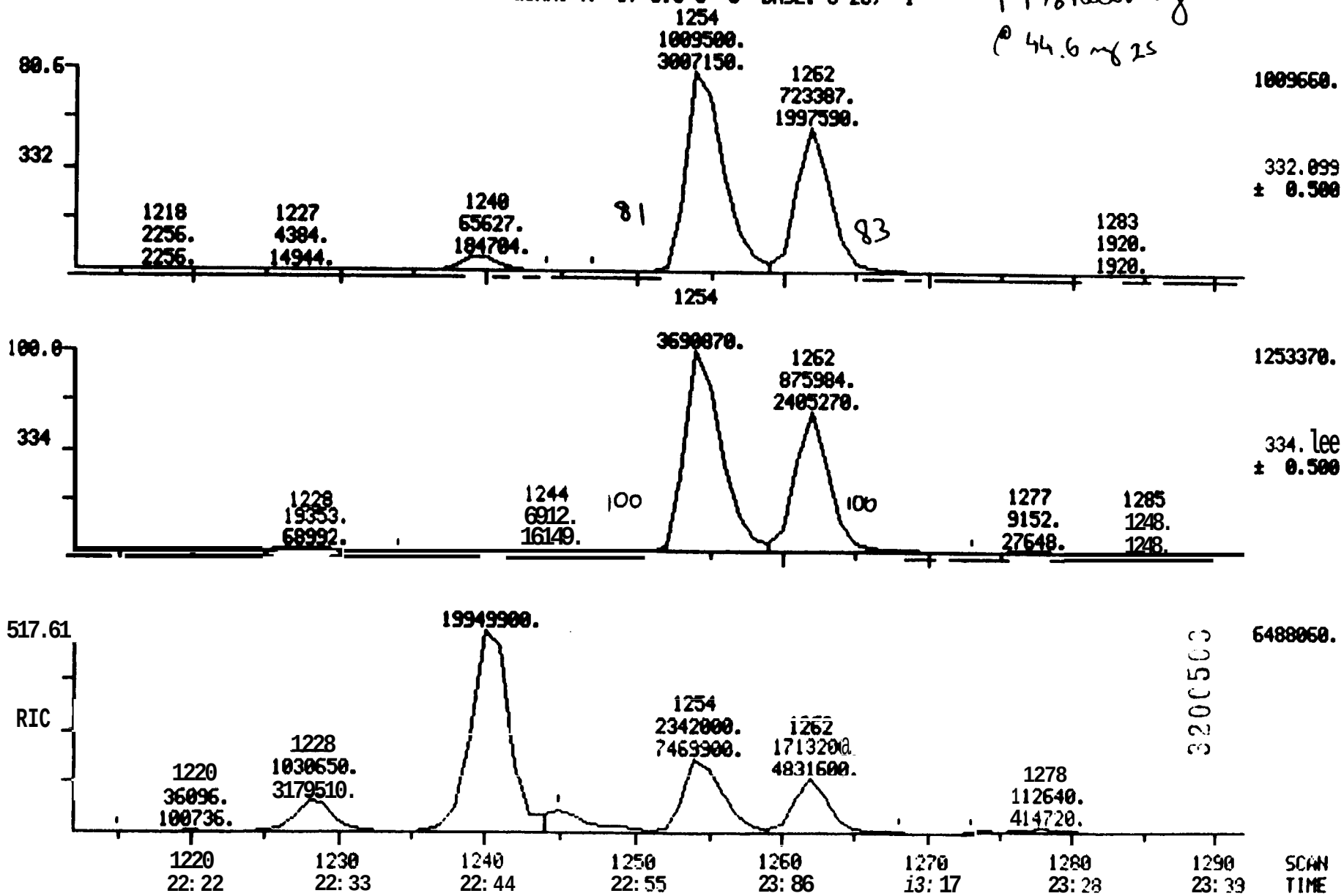
TCDD



MIDRIC+MASS CHROMATOGRAMS
04/08/91 11:40:00
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

DATA: IBB3462EE #1252 SCANS 1212 TO 1292
CALI: CAL022291 #3

97% Recovery
@ 44.6 ng 2S

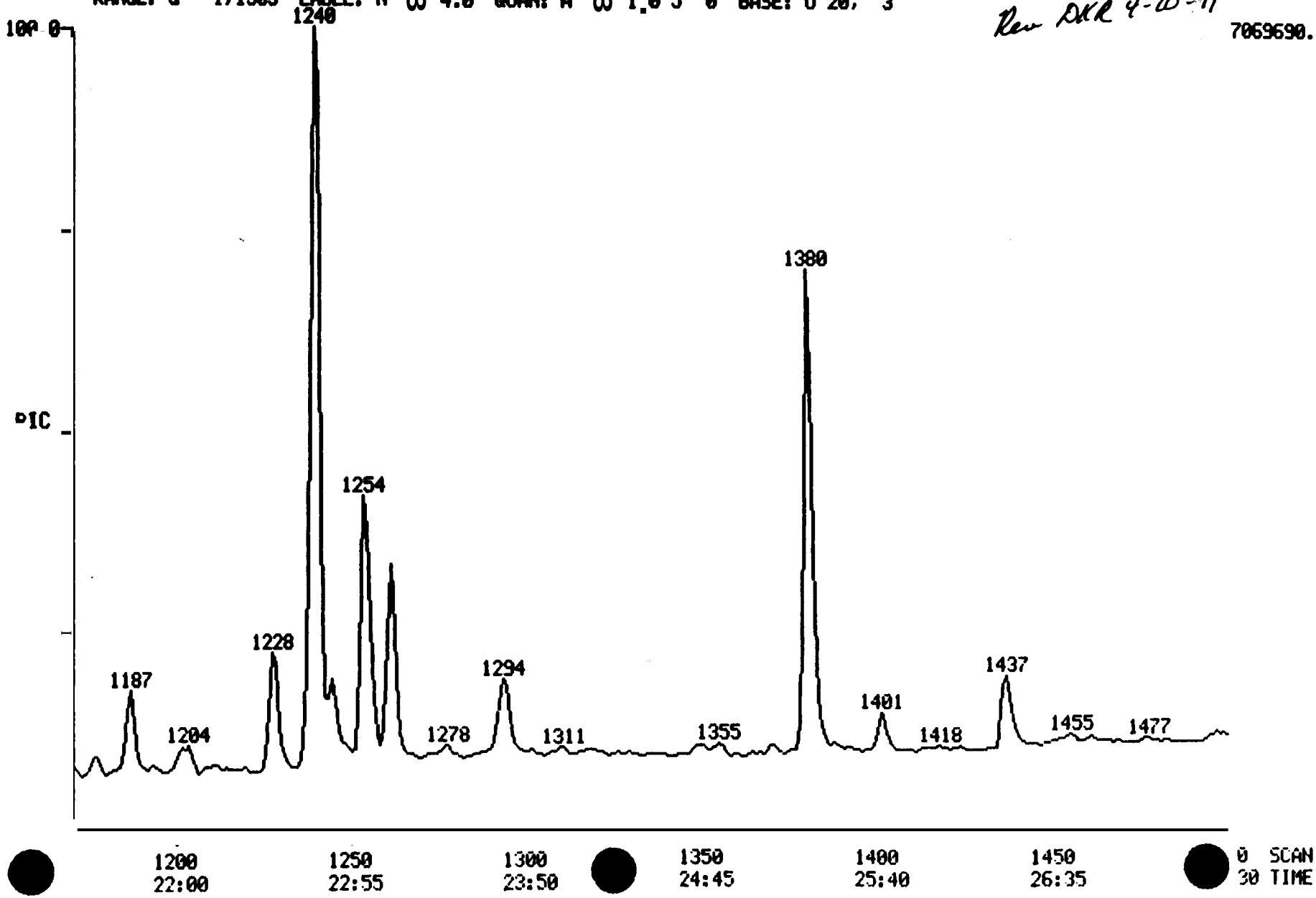


320C5C3

MIDRIC
04/08/91 11:40:00
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,1503 LABEL: N ω 4.0 QUAN: A ω 1.0 J 0 BASE: U 20, 3

DATA: IBB3462EE #1252 SCANS 1170 TO 1500
CALI: CAL022291 #3

Calc DT 4-17-91
QC JB 4-17-91
Rev DKR 4-20-91



SCANS 1 TO 5 CENTROID
SCANS 6 TO 105 SUSPENDED
SCANS 106 TO 1503 CENTROID

MODE	SCANS	SECS	OUT OF	%	PEAKS PER SCAN	PER SEC	
CENTROID	1403	135.7	1543.3	8.8	26964.	19.	17.

3200504

4/8/91 11:05:11 SCAN 1 OF 2000
Acquisition started

Acquire Run 0:IBB3461EE Acquiring
04/08/91 11:05:00 + 0:04 Free sectors: 17331 Scan: 4 of 2000
Sample: 2UL OF 883461 (1000 ML WATER) FOR TCDD
Condr.: ISOMER SPECIFXC
Formula: Instrument: FINN Weight: 0.000
Submitted by: JB Analyst: DT Acct. No:

********** QC PARAMETERS **********
Loaded GC Desc:TD Current CC oven tmp: 512 DegC Injector : 260 DegC
Current GC Desc:TD CC elapsed time : 2: 0 min Int.oven : 260 DegC

Seq.#	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 30	-	0.1	0.1	Sweep/Split	21.1	0.0
2	50 - 70	20.0	1.0	1.1	Divert	21.1	0.0
3	70 - 70	-	20.0	21.1			
4	70 - 70	-	0.0	21.1			

********** SCAN PARAMETERS **********
***** Mode: Centroid positive ion + R1 (Temp)

MID scan Derc: TC Mass intervals: 10
Scan time: 1.100 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mars	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	242.650	243.150	0.105	1	100	40	2	0	Pos
2	238.649	239.130	0.103	1	100	40	2	0	Pos
3	303.649	304.149	0.105	1	100	40	2	0	Pos
4	305.648	306.148	0.108	1	100	40	2	0	Pos
5	315.648	316.148	0.103	1	100	40	2	0	Pos
6	317.648	318.148	0.105	1	100	40	2	0	Pos
7	319.649	320.149	0.105	1	100	40	2	0	Pos
8	321.649	322.149	0.108	1	100	40	2	0	Pos
9	331.648	332.148	0.105	1	100	40	2	0	Pos
10	333.649	334.130	0.103	1	100	40	2	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1024	u
Zero scale mass	l	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage rattling time(MS)	4	

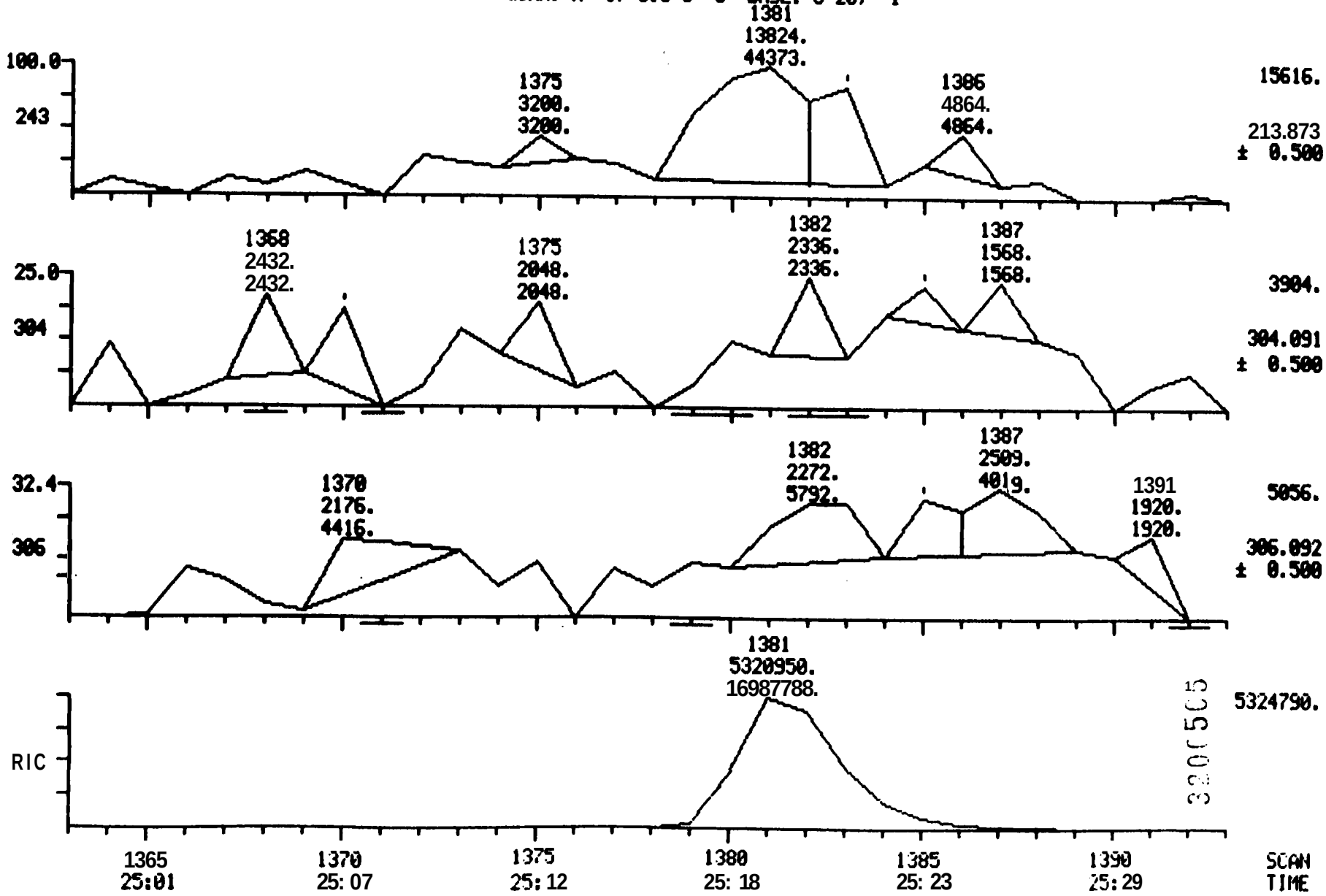
4/8/91 11:05:17 SCAN 6 OF 2000
Mode changed to suspended centroid positive ion

4/8/91 11:07:10 SCAN 106 OF 2000
Mode changed to centroid positive ion

4/8/91 11:33:32 SCAN 1503
Acquisition stopped

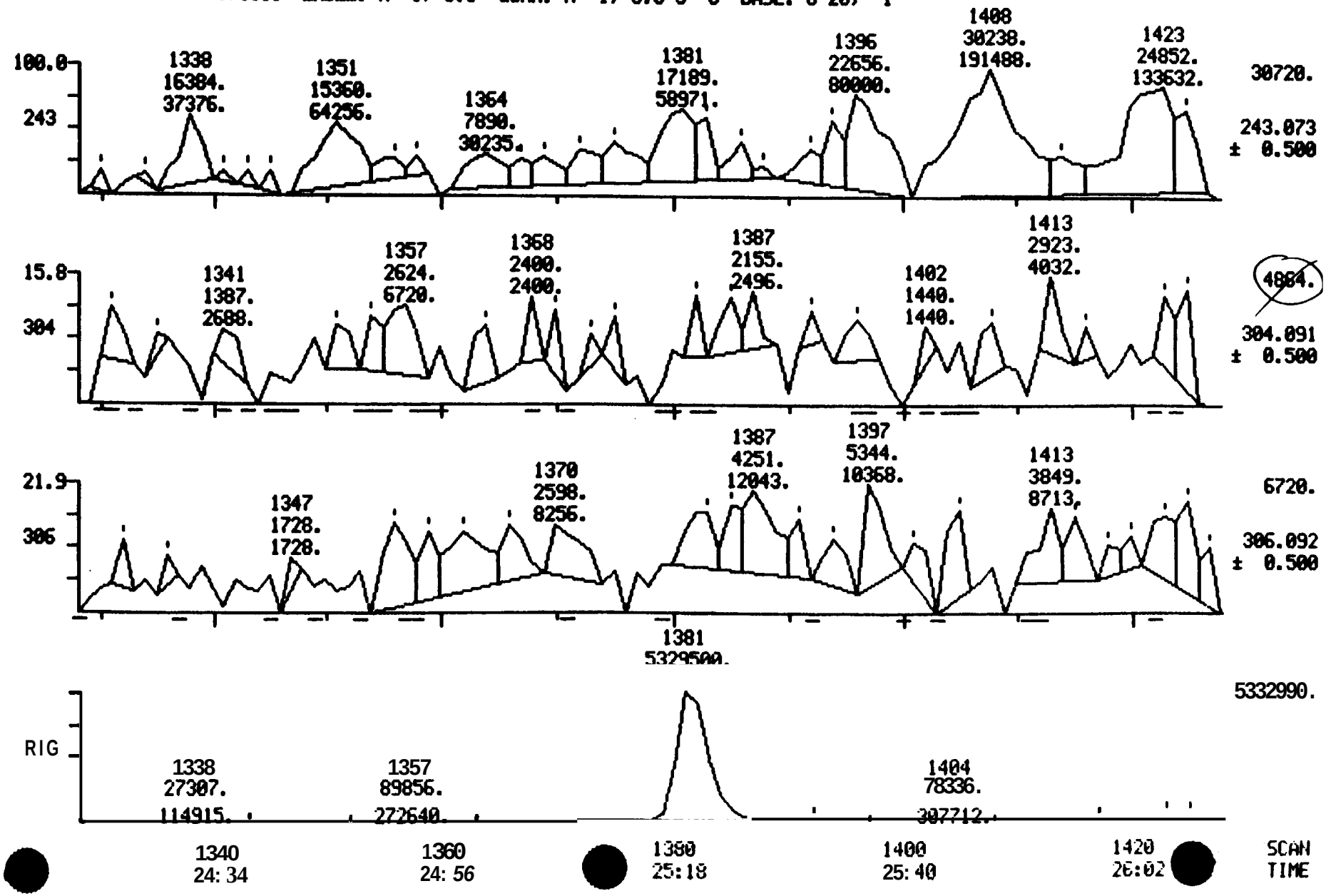
4/8/91 11:33:34
ACQUISITION COMPLETED

MIDRIC+MASS CHROMATOGRAMS DATA: IBB3461EE #1378 SCANS 1363 TO 1393
04/08/91 11:05:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3461 (1000 ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



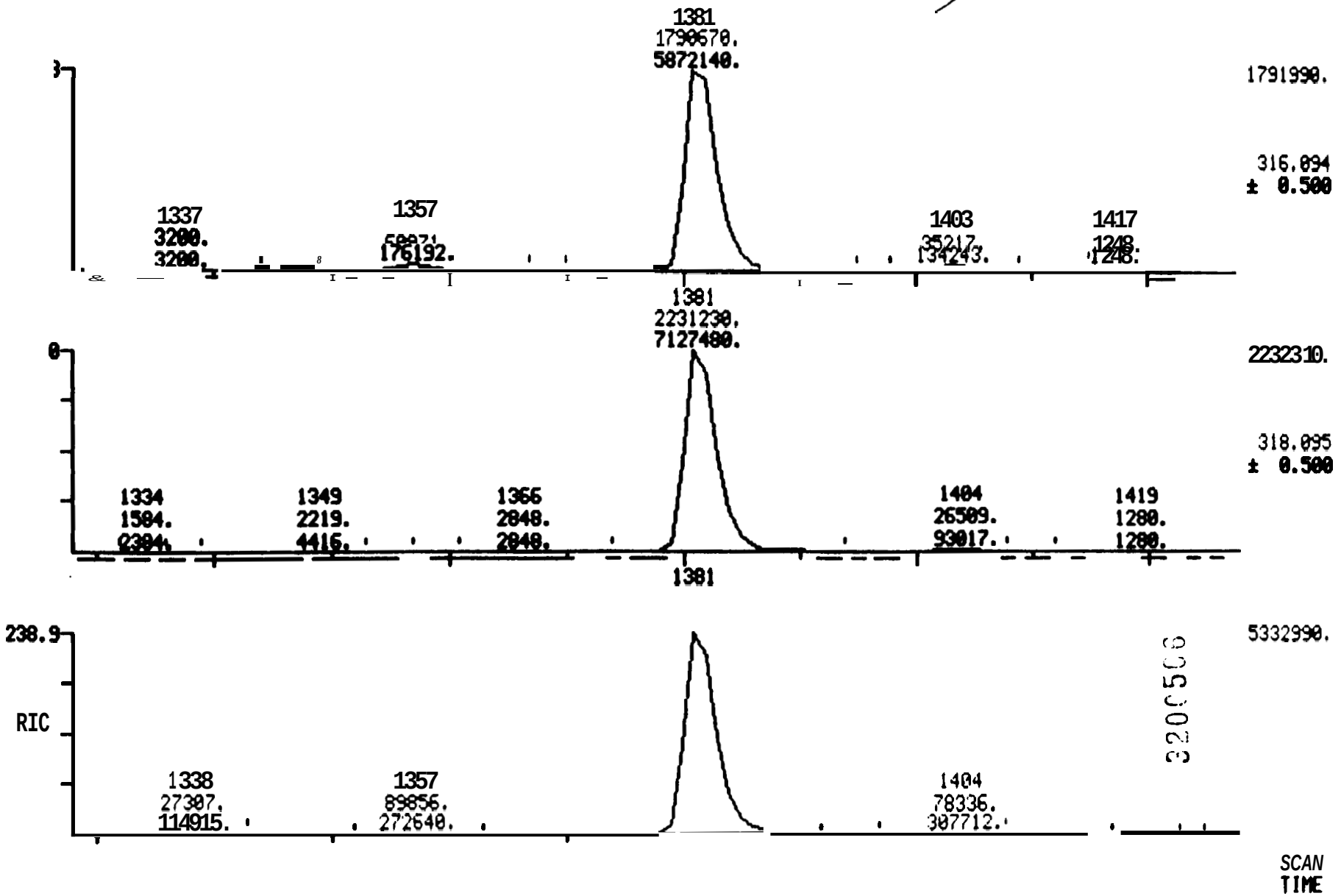
MIDRIC+MASS CHROMATOGRAMS DATA: IBB3461EE 11378. SCANS 1328 TO 1428
04/08/91 11:05:00 MIC: CAL022291 #3
SAMPLE: 2UL OF BB3461 (1000 ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

ND (0.26 PPt)



MIDRIC+MASS CHROMATOGRAMS DATA: IBB3461EE #1378 SCANS 1328 TO 1428
04/08/91 11:05:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3461 (1000 ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1

100% Recovery

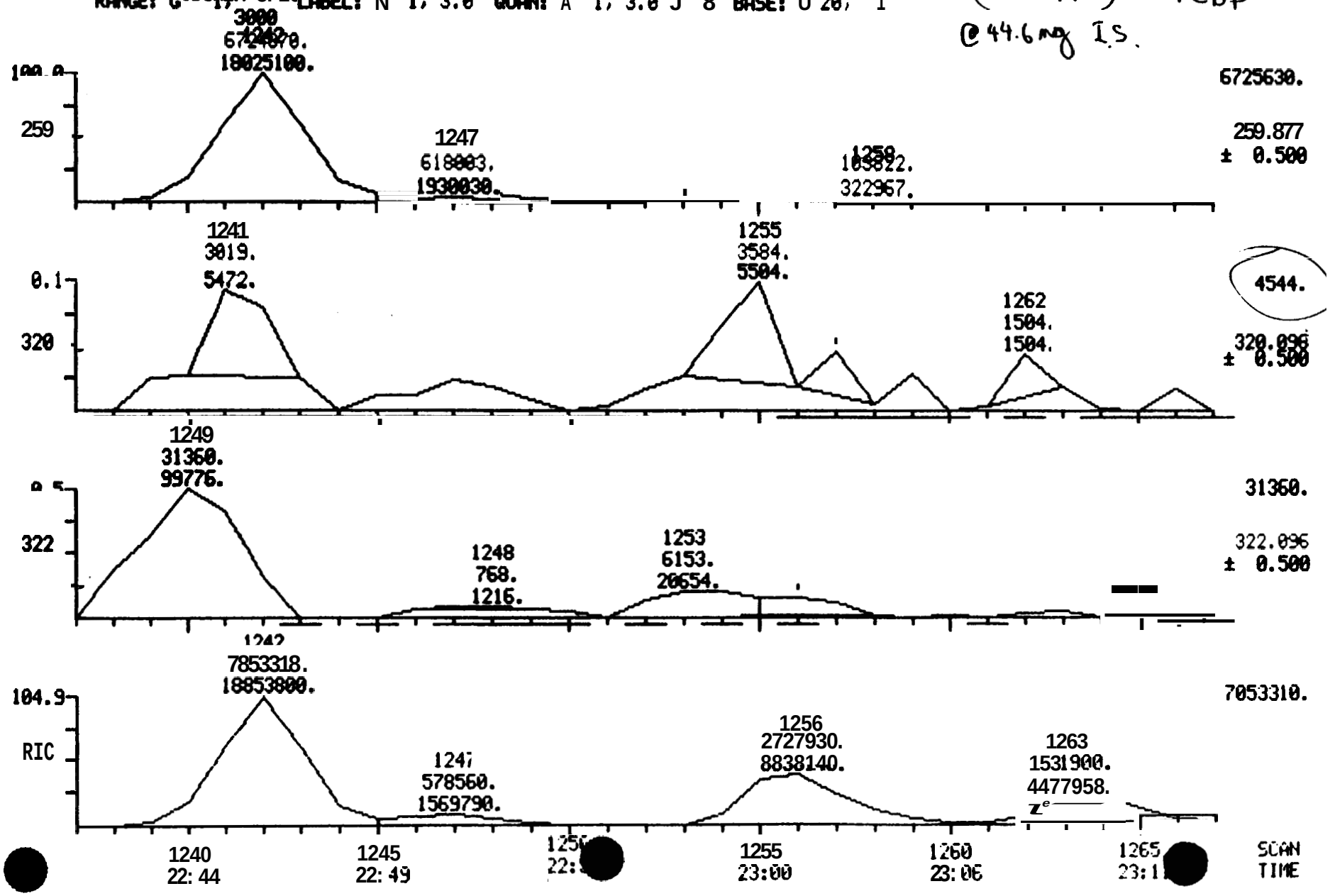


320050

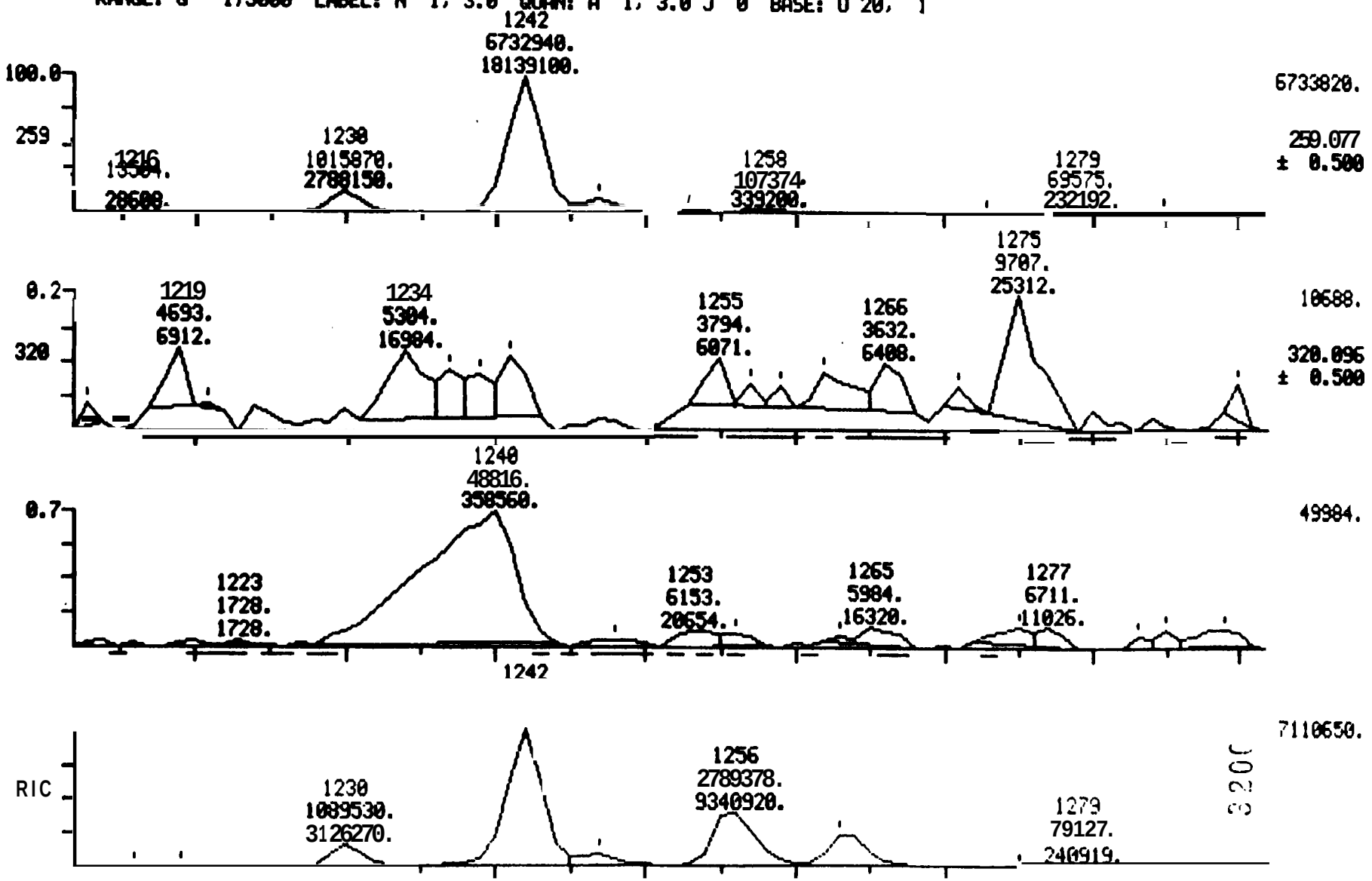
MIDRIC+MASS CHROMATOGRAMS DATA: IBB3461EE #1252 SCANS 1237 TO 1267
04/08/91 11:05:00 CALI: CAL022291 #3
2UL OF BB3461 (1000 ML WATER) FOR TCDD

SOURCE: ISOMER SPECIFIC
RANGE: G 17, 3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 1

ND(0.38 ppt) TCDP
@ 44.6 mg I.S.

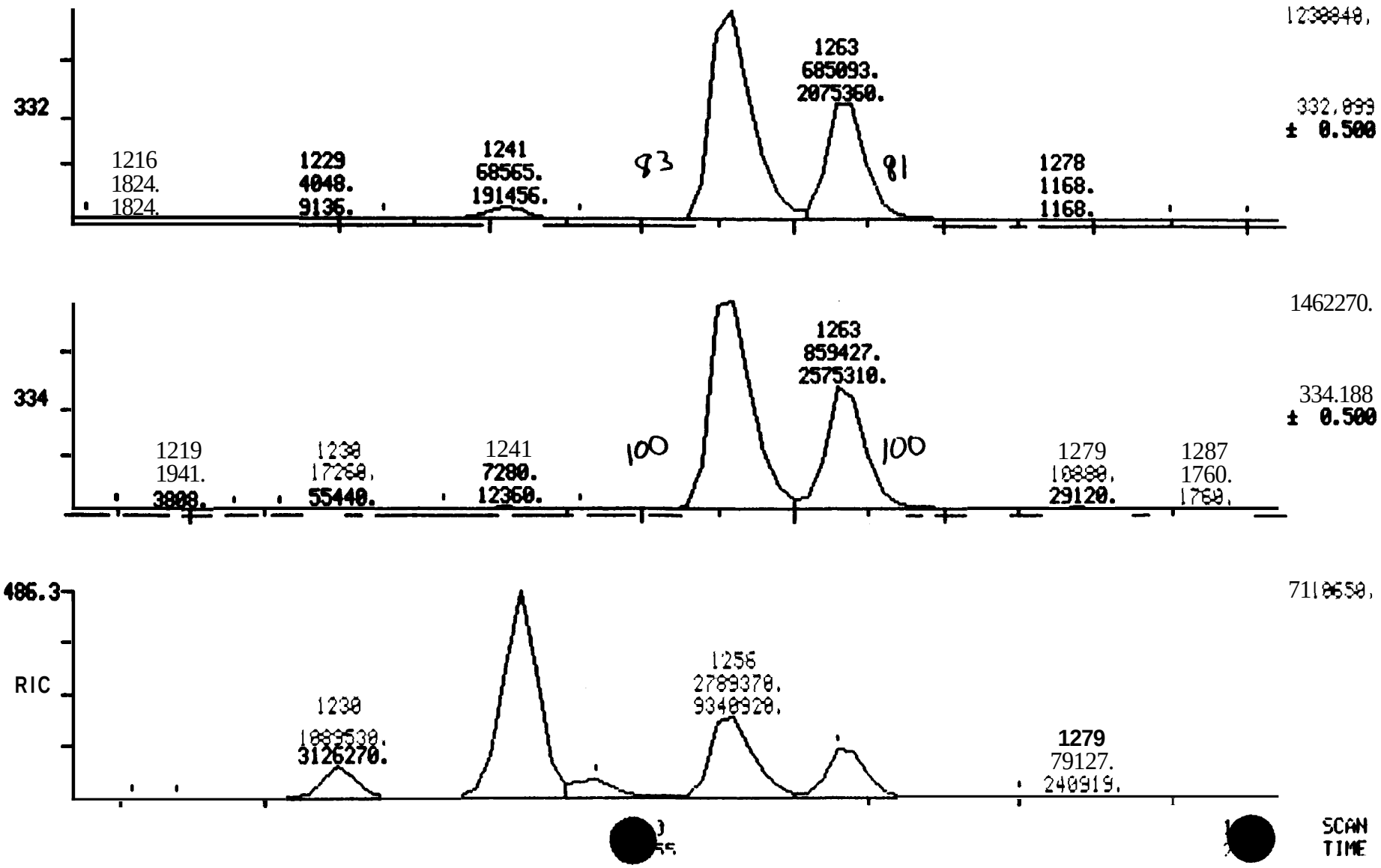


MIDRIC+MASS CHROMATOGRAMS DATA: IBB3461EE #1252 SCANS 1212 TO 1292
04/08/91 11:05:00 CALI: CAL022291 #3
SAMPLE: 2UL OF BB3461 (1000 ML WATER) FOR TCDD
CONDS.: ISOMER SPECIFIC
RANGE: G 1,3000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 1



ISOMER

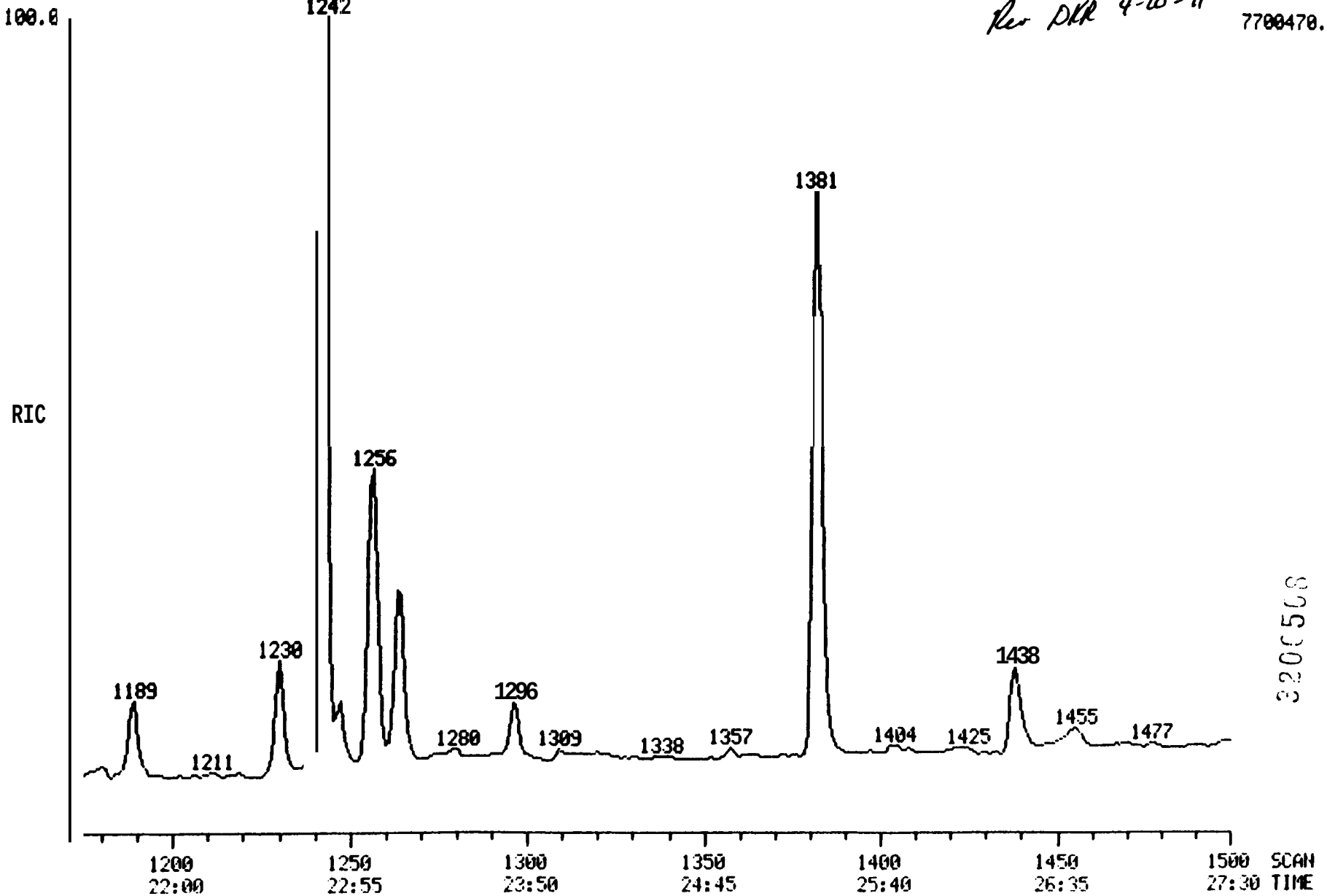
119% Recovery



MIDRIC
04/08/91 11:05:00
SAMPLE: 2UL OF B83461 (1000 ml WATER) FOR TCDD
CONDS.: ISOMER SPEC
RANGE: G 1,1503 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: IBB3461EE #1252 SCANS 1170 TO 1500
CALI: CAL022291 #3

Calc 4-17-91
QC JB 4-17-91
Rev DKR 4-20-91



320059S

4	419.330	420.030	0.034	3	100	40	1	0	Pos
3	421.330	422.050	0.054	3	100	40	1	0	Pos
6	423.330	424.030	0.034	3	100	40	1	0	Pos
7	423.330	426.030	0.052	3	100	40	1	0	Pos
8	433.330	436.030	0.032	3	100	40	1	0	Pos
9	437.330	438.030	0.032	3	100	40	1	0	Pos
10	441.330	442.030	0.034	3	100	40	1	0	Pos
11	443.550	444.030	0.034	3	100	40	1	0	Pos
12	437.330	438.030	0.032	3	100	40	1	0	Pos
13	439.550	460.030	0.032	3	100	40	1	0	Pos
14	469.330	470.030	0.034	3	100	40	1	0	Pos
13	471.330	472.030	0.032	3	100	40	1	0	Pos
16	479.330	480.030	0.034	3	100	40	1	0	Pos
17	513.550	314.030	0.034	3	100	40	1	0	Por

4/17/91 8:59:50 SCAN 2733
Acquisition stopped

4/17/91 0:39:32
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2183 Centroid
SCAN 2184 Suspended
SCANS 2183 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2483 TO 2733 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2730	634.3	3300.0	19.2	83701.	30.	23.

MID scan
Scan tire: 1.200 s

Desc: 92
Srrp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 409b

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Po.
2	339.650	340.150	0.052	3	100	40	1	0	Po.
3	341.650	342.150	0.054	3	100	40	1	0	Po.
4	331.650	332.150	0.052	3	100	40	1	0	Po.
5	353.650	354.150	0.034	3	100	40	1	0	Po.
b	355.650	356.130	0.052	3	100	40	1	0	Pos
7	357.650	338.150	0.054	3	100	40	1	0	Po.
e	367.650	368.150	0.052	3	100	40	1	0	Por
9	369.650	370.130	0.052	3	100	40	1	0	Por
10	371.650	372.130	0.032	3	100	40	1	0	Por
11	373.650	374.150	0.052	3	100	40	1	0	Por
12	373.630	376.150	0.052	3	100	40	1	0	Po.
13	379.650	380.150	0.052	3	100	40	1	0	Po.
14	381.630	382.150	0.052	3	100	40	1	0	Po.
13	385.650	386.130	0.052	3	100	40	1	0	Po.
16	387.650	388.130	0.052	3	100	40	1	0	Po.
17	389.650	390.130	0.052	3	100	40	1	0	Po.
18	391.650	392.150	0.032	3	100	40	1	0	Po.
19	401.650	402.130	0.032	3	100	40	1	0	Po.
20	403.650	404.150	0.054	3	100	40	1	0	Por
21	445.550	446.050	0.052	3	100	40	1	0	Pos

4/17/91 8:48:07 SCAN 2184 OF 4000

MID scan
Scan tire: 1.200 s

Desc: 93
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Tine	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Po.
2	373.650	374.150	0.052	3	100	40	1	0	Po.
3	373.650	376.150	0.052	3	100	40	1	0	Po.
4	385.650	386.150	0.052	3	100	40	1	0	Po.
5	387.630	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.650	392.150	0.052	3	100	40	1	0	Po.
8	401.650	402.150	0.052	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	405.550	406.050	0.054	3	100	40	1	0	Po.
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.050	0.054	3	100	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Po.
16	423.550	426.050	0.052	3	100	40	1	0	Po.
17	435.550	436.050	0.052	3	100	40	1	0	Pos
18	437.550	438.050	0.052	3	100	40	1	0	Po.
19	479.550	480.050	0.054	3	100	40	1	0	Po.

4/17/91 8:34:17 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: 94
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

fnt #	Lo mass	Hi mass	Tim.	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Po.
3	409.550	410.050	0.054	3	100	40	1	0	Po.

4/17/91 8:03:04 SCAN 1 OF 4000
Acquisition started

Acquire Run 0:T910417STD ACQUIRING
04/17/91 8:03:00 + 0:04 Free sectors: 9275 Scan: 3 of 4000
Sample: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
Conds. : 60M DB-5/TOTALS.
Formula: Instrument: G3 Weight: 0.000
Submitted by: DM Analyst: NM Acct. No: PC4622

********** GC PARAMETERS **********

Loaded GC Desc: BW Current GC oven tmp: 70 DegC Injector : 300 DegC
Current GC Desc: BW GC elapsed time 1: 0 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan Desc: B1 Mass intervals: 21
Scan time: 1.200 s Samp. int.: 0.200 ms Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.450	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.052	3	100	40	1	0	Pos
5	317.650	310.150	0.054	3	100	40	1	0	Pos
4	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.450	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.450	332.150	0.052	3	100	40	1	0	Pos
10	333.450	334.150	0.054	3	100	40	1	0	Pos
11	337.450	338.150	0.054	3	100	40	1	0	Pos
12	339.450	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.450	352.130	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
14	355.650	356.150	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.450	368.130	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.450	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

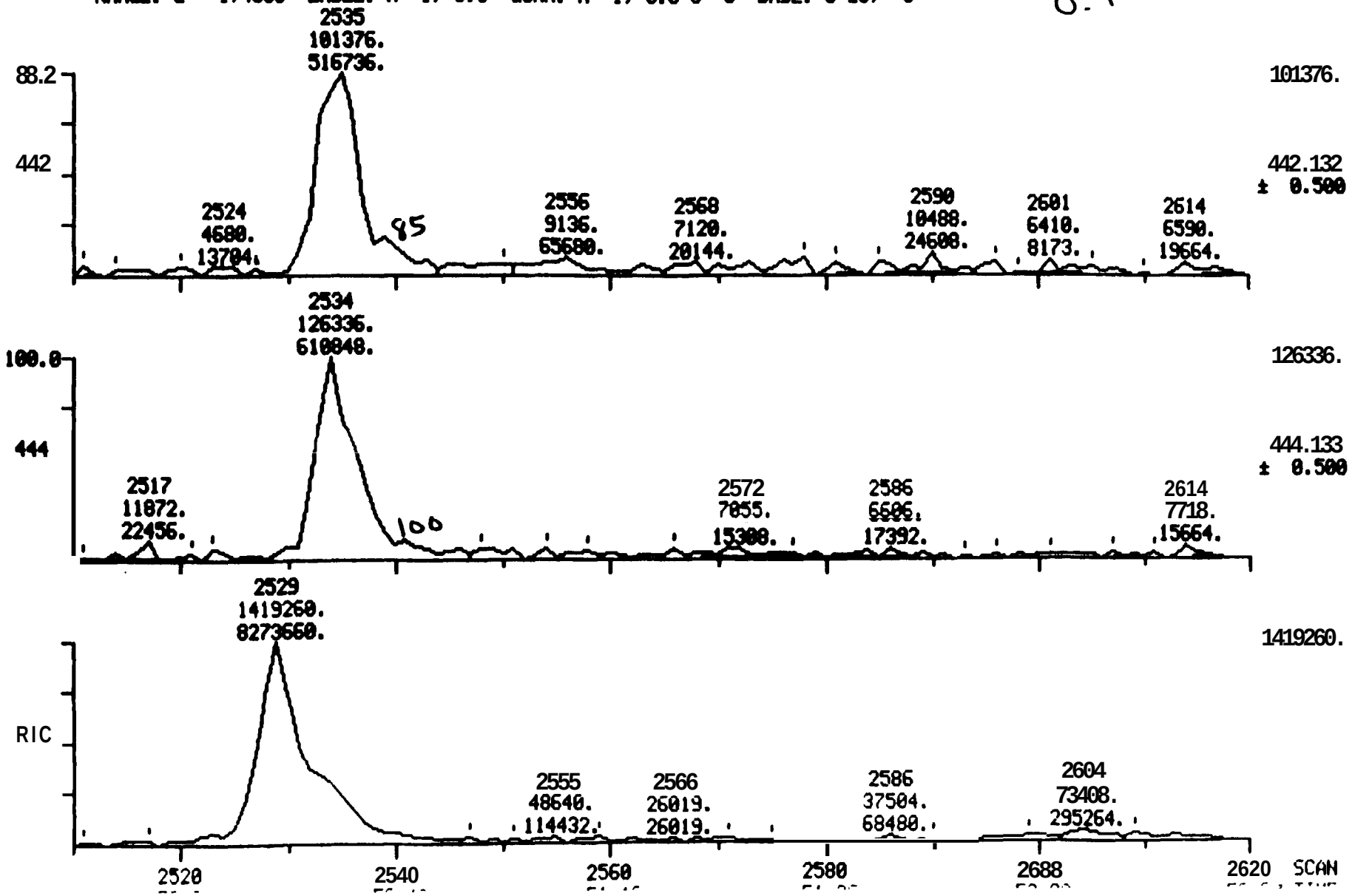
Interface number	0	
Sub-interface number	0	
# of acqu buffers	14	
Instrument type	G	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/17/91 8:39:33 SCAN 1769 OF 4000

OCDF

1.42
0.981

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 2510 TO 2620
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

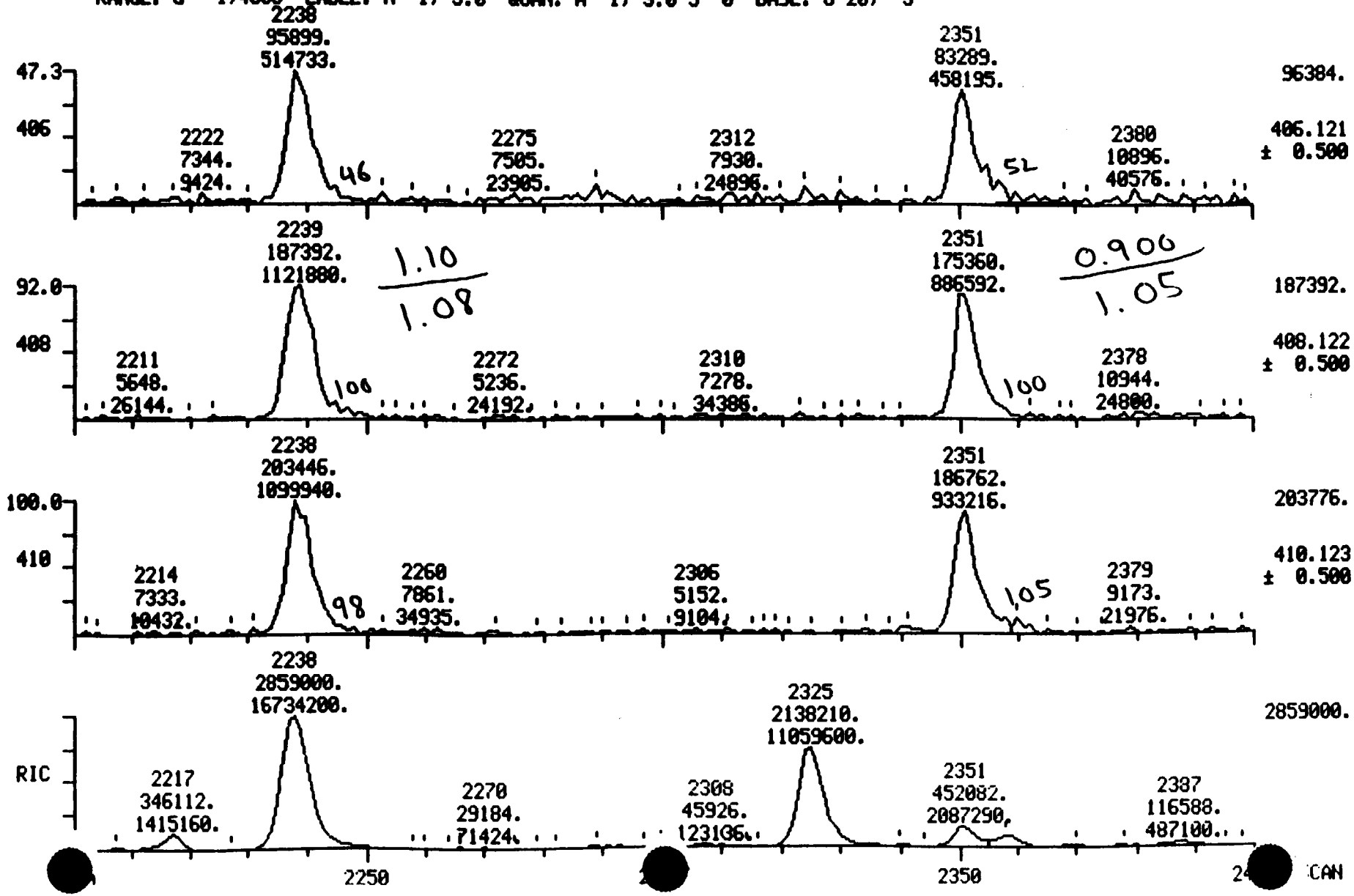


320051a

HpCDF

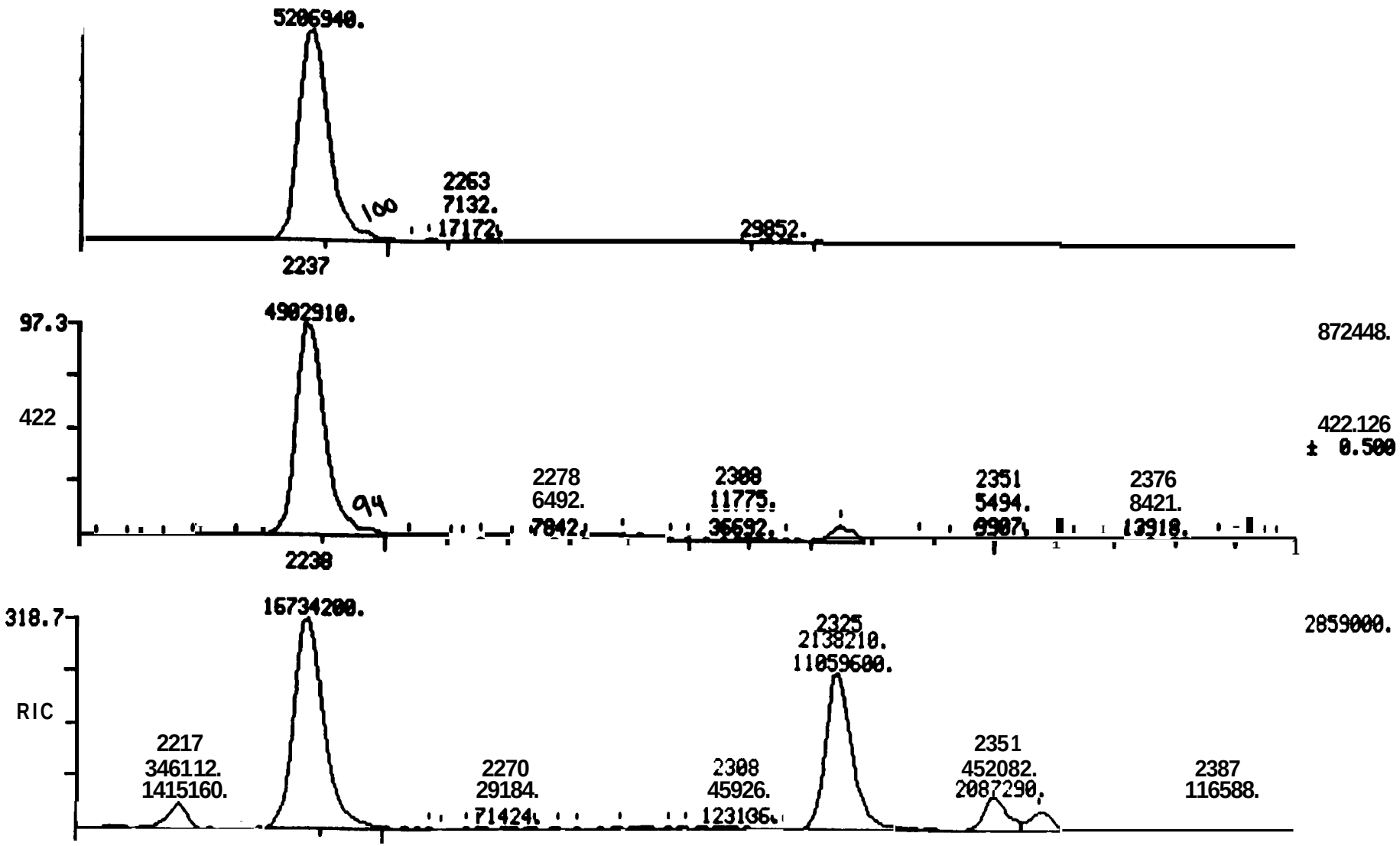
$\bar{x} = \frac{0.999}{1.07}$

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 2200 TO 2400
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 2200 TO 2400
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

0.801
0.817

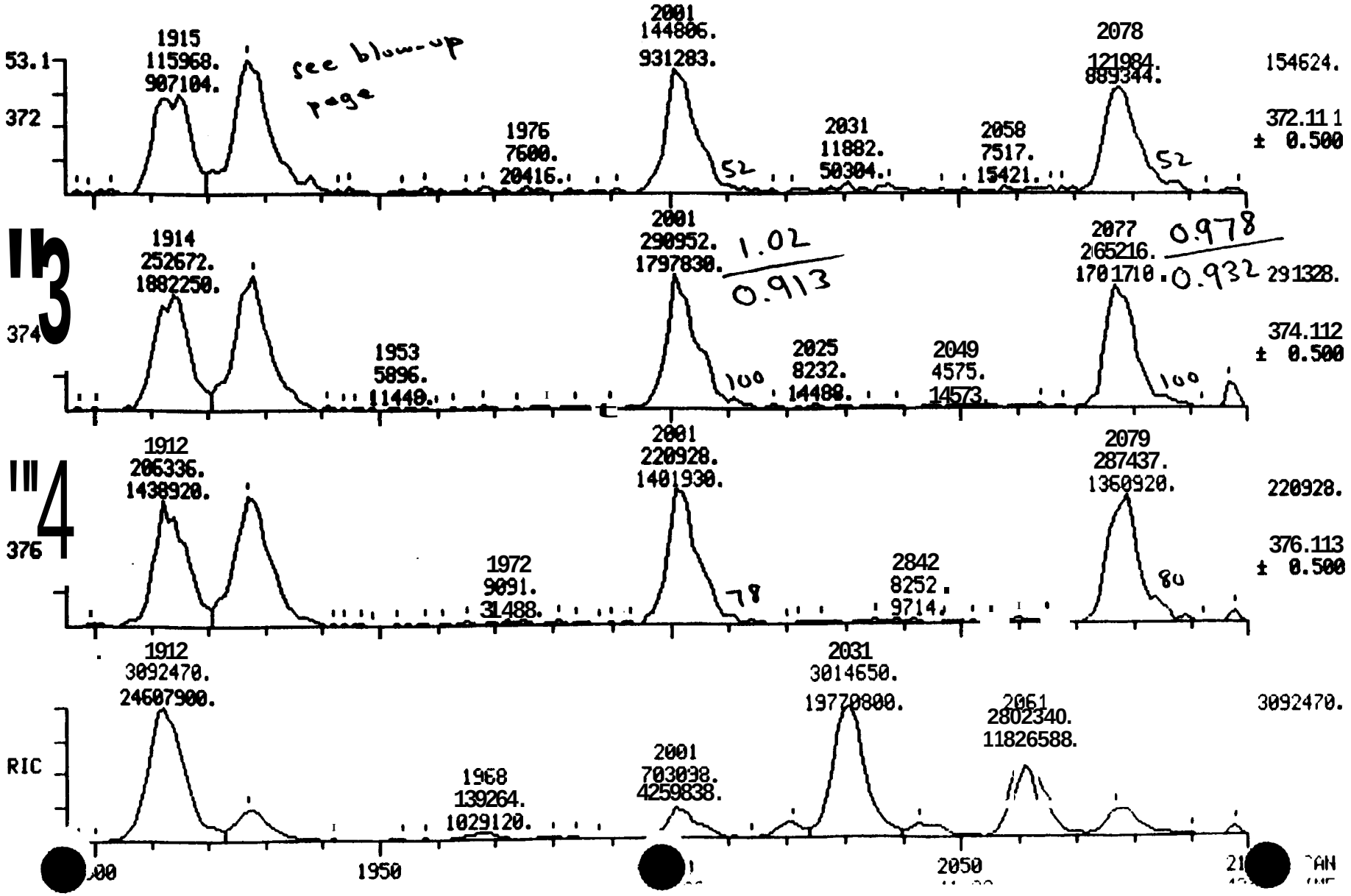


32005511

HxCDF

$\bar{x} = \frac{1.06}{0.914}$

MIDRIC+MASS CHROMATOGRAMS DATA: T910417STD #1 SCANS 1895 TO 2100
04/17/91 8:03:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 685:06-I STANDARD, NATIVES @ 200 PPB
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



4	419.550	4m.050	0.054	3 100	40	1	0	Pos
5	421.550	422.050	0.054	3 100	40	1	0	Pos
6	423.550	424.050	0.054	3 100	40	1	0	Por
7	425.550	426.050	0.052	3 100	40	1	0	Pos
8	435.550	436.050	0.052	3 100	40	1	0	Pos
9	437.550	438.050	0.052	3 100	40	1	0	Por
10	441.550	442.050	0.054	3 100	40	1	0	Pos
11	443.550	444.050	0.054	3 100	40	1	0	Pos
12	457.550	458.050	0.052	3 100	40	1	0	Pos
13	459.550	460.030	0.052	3 100	40	1	0	Pos
14	469.550	470.050	0.054	3 100	40	1	0	Pas
15	471.550	472.030	0.052	3 100	40	1	0	Pos
16	479.550	480.050	0.054	3 100	40	1	a	Pos
17	513.550	514.050	0.054	3 100	40	1	0	Pos

4/8/91 15:32:20 SCAN 2747
Acquisition stopped

4/8/91 15:32:22
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2218 Centroid
SCAN 2219 Suspended
SCANS 2220 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2483 TO 2747 Centroid:

Mode	Scans	Sets	out of	%	Peaks per scan	per sec
Centroid	2744	634.8	3292.8	19.3	03673.	30. 25.

MID scan
Scan time: 1.200 s

Derc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	fine	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.034	3	100	40	1	0	Por
2	339.650	340.150	0.052	3	100	40	1	0	Po.
3	341.650	342.150	0.034	3	100	40	1	0	Por
4	351.650	352.150	0.032	3	100	40	1	0	Pos
5	333.630	354.150	0.034	3	100	40	1	0	Po.
6	335.630	356.150	0.052	3	100	40	1	0	Por
7	337.630	330.150	0.054	3	100	40	1	0	Pos
8	367.650	368.150	0.032	3	100	40	1	0	Por
9	369.630	370.150	0.032	3	100	40	1	0	Por
10	371.650	372.150	0.032	3	100	40	1	0	Po.
11	373.650	374.130	0.052	3	100	40	1	0	Pos
12	375.650	376.150	0.032	3	100	40	1	0	Po.
13	379.650	380.150	0.032	3	100	40	1	0	Por
14	381.650	382.150	0.032	3	100	40	1	0	Por
13	303.650	386.130	0.032	3	100	40	1	0	Pos
16	387.650	388.150	0.032	3	100	40	1	0	Por
17	389.650	390.150	0.032	3	100	40	1	0	Pos
18	391.650	392.130	0.032	3	100	40	1	0	Por
19	401.650	402.130	0.032	3	100	40	1	0	Pos
20	403.630	404.150	0.054	3	100	40	1	0	Por
21	443.550	446.050	0.052	3	100	40	1	0	Pos

4/8/91 15:21:28 SCAN 2219 OF 4000

HID scan
Scan time: 1.200 s

Derc: 03
Samp. Int. : 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.630	372.150	0.032	3	100	40	1	0	Por
2	373.650	374.150	0.032	3	100	40	1	0	Por
3	375.650	376.150	0.052	3	100	40	1	0	Por
4	385.650	386.150	0.052	3	100	40	1	0	Por
3	387.650	388.150	0.052	3	100	40	1	0	Pos
6	389.650	390.150	0.032	3	100	40	1	0	Por
7	391.650	392.150	0.052	3	100	40	1	0	Por
e	401.650	402.150	0.052	3	100	40	1	0	Por
9	403.650	404.150	0.054	3	100	40	1	0	Por
10	405.550	406.050	0.054	3	100	40	1	0	Por
11	407.530	408.050	0.052	3	100	40	1	0	Por
12	409.550	410.050	0.054	3	100	40	1	0	Pos
13	419.550	420.050	0.034	3	100	40	1	0	Por
14	421.550	422.050	0.054	3	100	40	1	0	Pos
15	423.550	424.050	0.054	3	100	40	1	0	Pos
16	425.550	426.050	0.052	3	100	40	1	0	Por
17	435.550	436.050	0.052	3	100	40	1	0	Por
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	Pos

4/8/91 13:26:55 SCAN 2484 OF 4000

HID scan
Scan time: 1.200 r

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	403.550	406.050	0.054	3	100	40	1	0	Por
2	407.330	408.050	0.052	3	100	40	1	0	Por
3	409.330	410.050	0.054	3	100	40	1	0	Por

4/8/91 14.35:43 SCAN 1 OF 4000
Acquirition started

Acquire
04/08/91 14:35:00 + 0:04
Run 0:RBLK1989
Free sectors: 9813
ACQUIRING
Scan. 3 of 4000

Sample. 2UL OF BLK1989 1000ML WATER FOR TOTALS, APP. IX, & FURAN
Conds. : 60M DB-5/TOTALS.
Formula:
Instrument: Q3
Weight: 0 000
Submitted by. DM
Analyst: NM
Acct. No: PC4622

********** GC PARAMETERS **********

Loaded GC Desc: BW Current GC oven tmp: 69 DegC Injector . 300 DegC
Current CC Desc: BW GC elapsed time 1:37 min Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10 8	0 0
2	50 - 70	23.0	0.7	0.8	Divert	10.8	0 0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

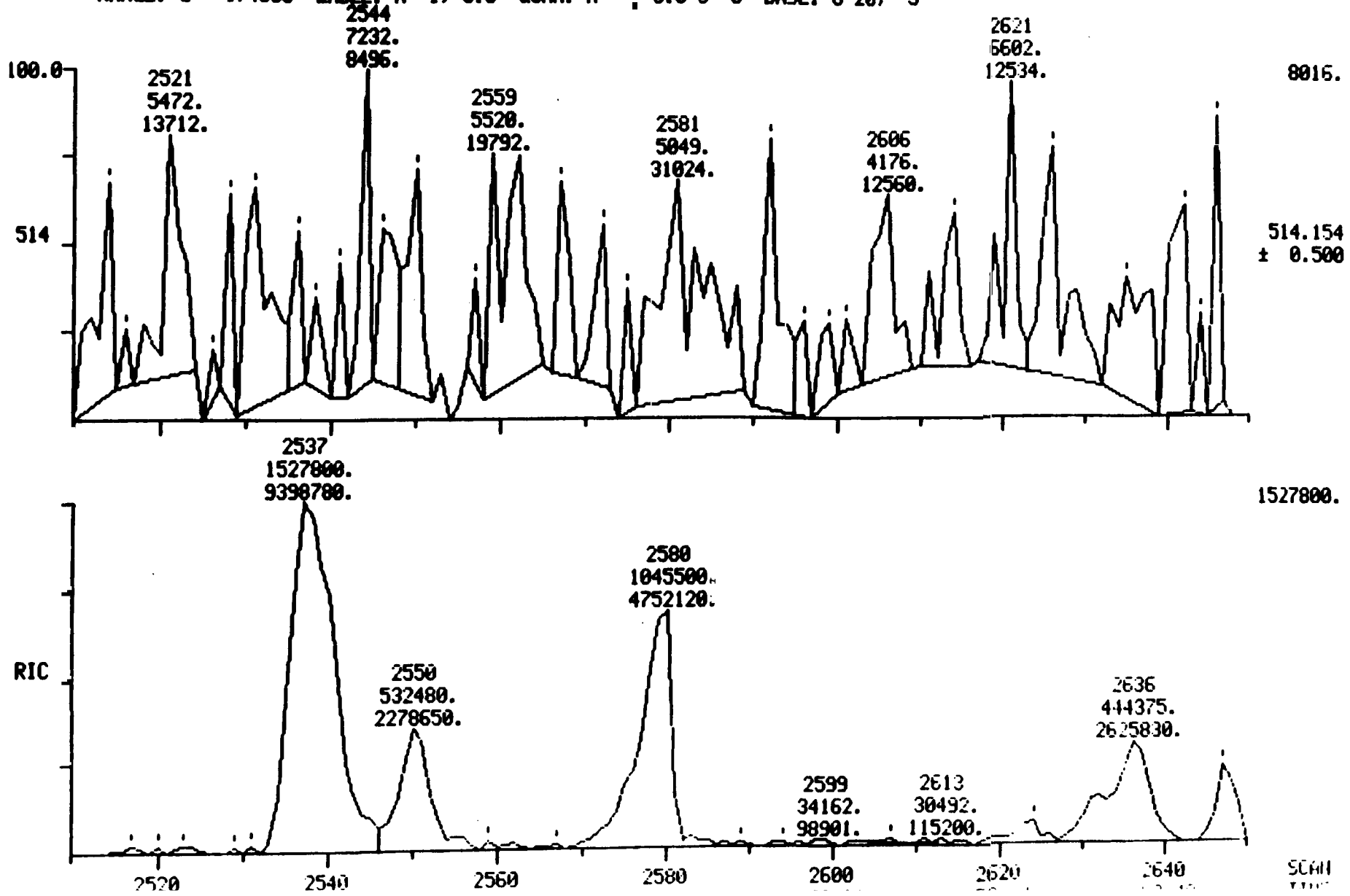
MID scan
Scan time: 1.200s
Desc: B1
Samp. int.: 0.200 ms
Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.630	304.150	0.032	3	100	40	1	0	Pos
2	303.630	306.150	0.032	3	100	40	1	0	Pos
3	307.630	308.130	0.034	3	100	40	1	0	Pos
4	313.650	316.130	0.052	3	100	40	1	0	Pos
3	317.630	318.130	0.034	3	100	40	1	0	Pos
6	319.630	320.130	0.032	3	100	40	1	0	Pos
7	321.650	322.130	0.034	3	100	40	1	0	Pos
8	323.630	324.150	0.032	3	100	40	1	0	Pos
9	331.630	332.130	0.032	3	100	40	1	0	Pos
10	333.650	334.130	0.034	3	100	40	1	0	Pos
11	337.630	338.150	0.034	3	100	40	1	0	Pos
12	339.630	340.130	0.052	3	100	40	1	0	Pos
13	341.630	342.130	0.032	3	100	40	1	0	Pos
14	331.630	352.130	0.034	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	333.630	336.130	0.034	3	100	40	1	0	Pos
17	357.650	358.150	0.032	3	100	40	1	0	Pos
18	367.650	368.150	0.034	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of rcqu buffers	14	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Perk Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/8/91 15:12:13 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAM DATA: RBLK1989 #1 SCANS 2510 TO 2650
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A , 3.0 J 0 BASE: U 20, 3

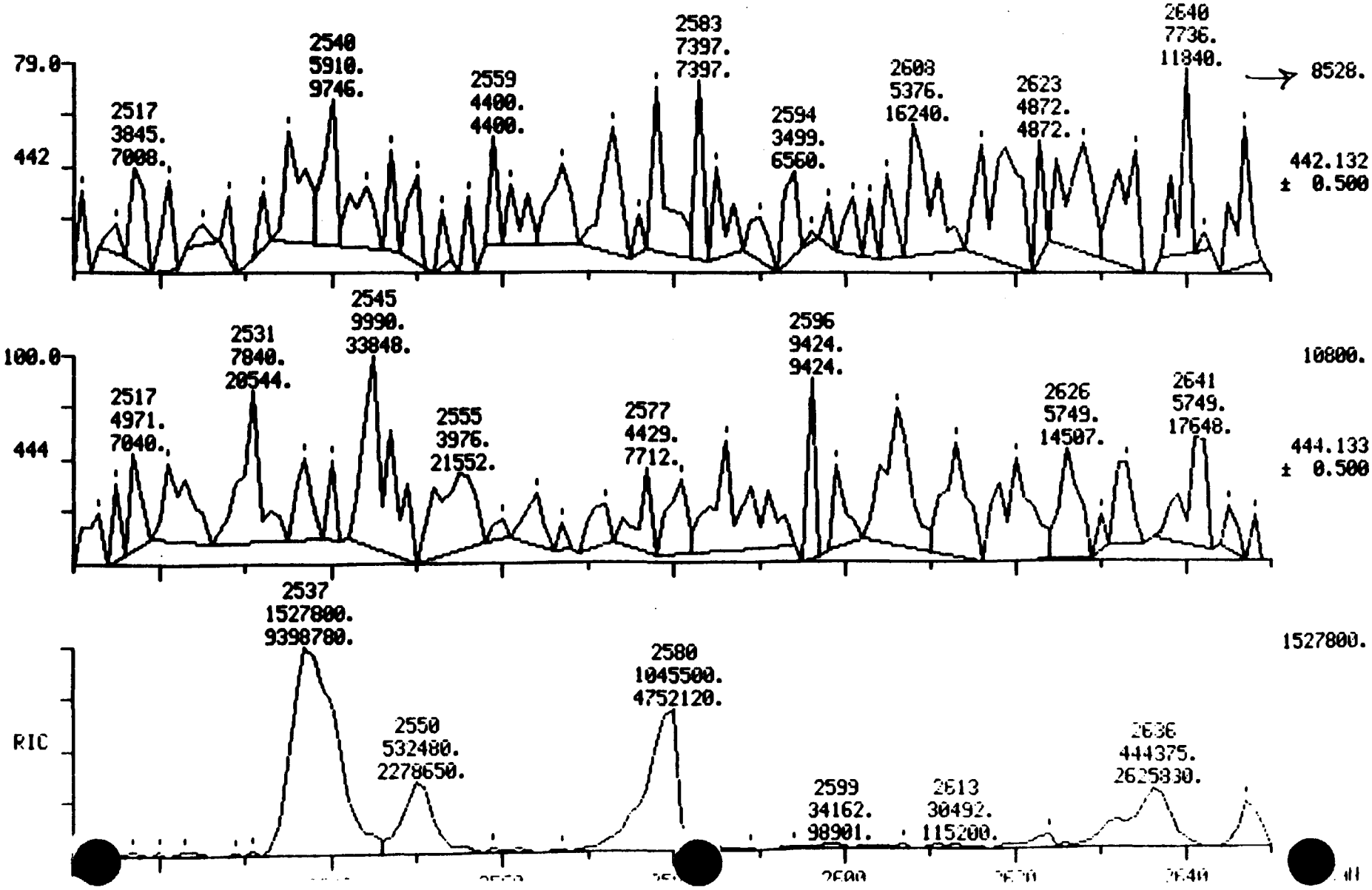


3200514

OCDF

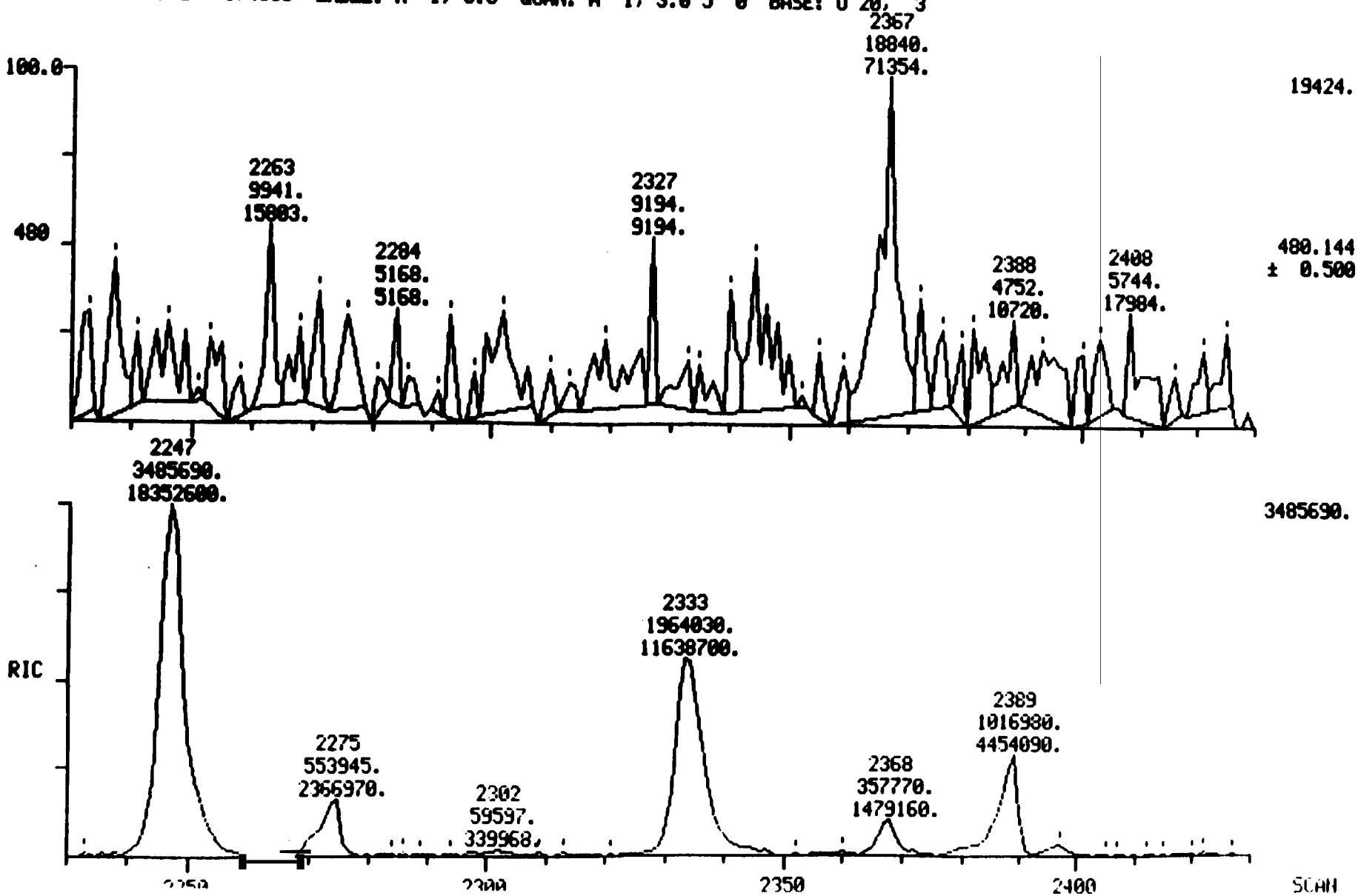
ND(1.7 PPE)

MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 2510 TO 2650
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAM
04/08/91 14:35:00
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

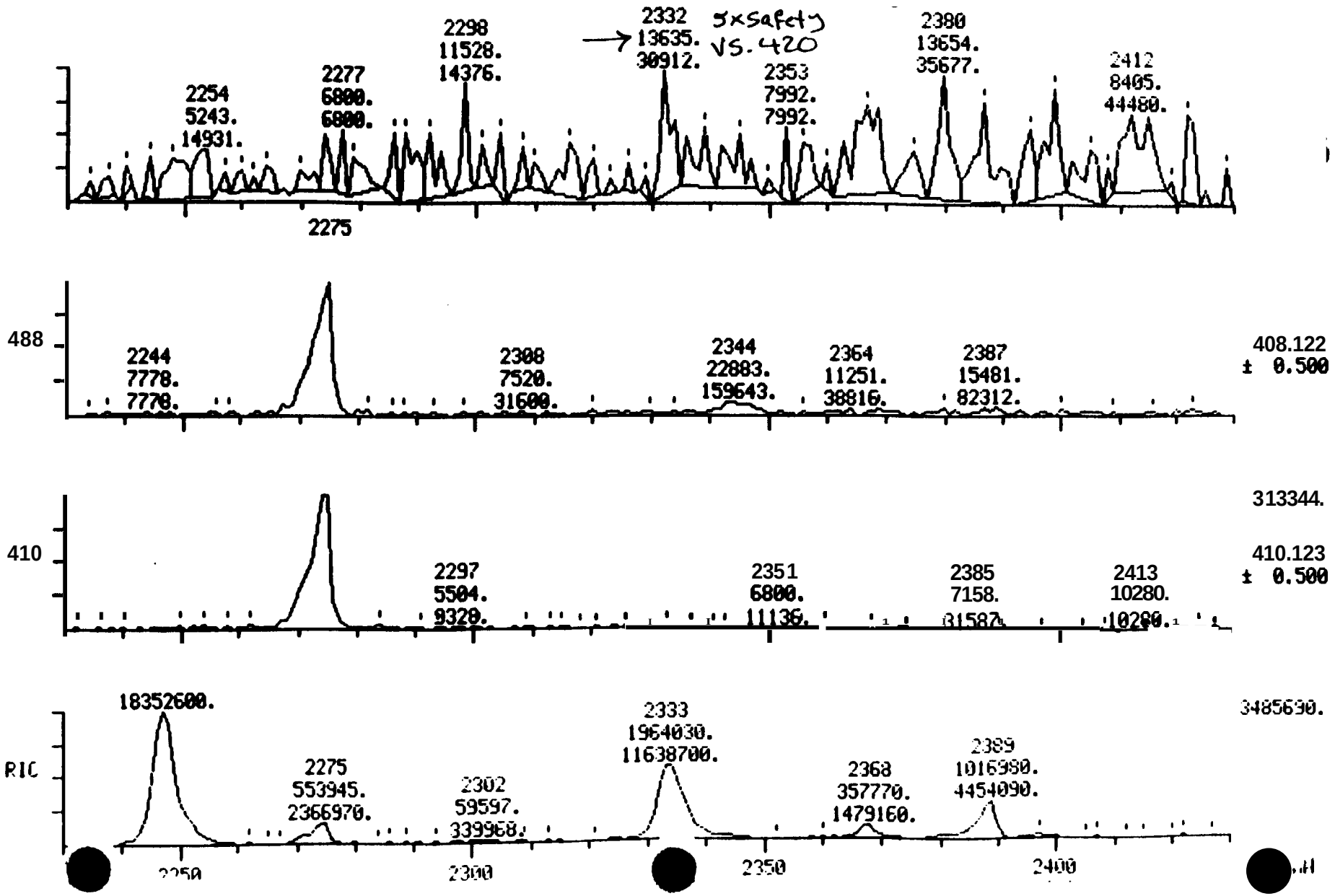
DATA: RBLK1989 #1
CALI: CAL910306A #2
SCANS 2230 TO 2430



3200515

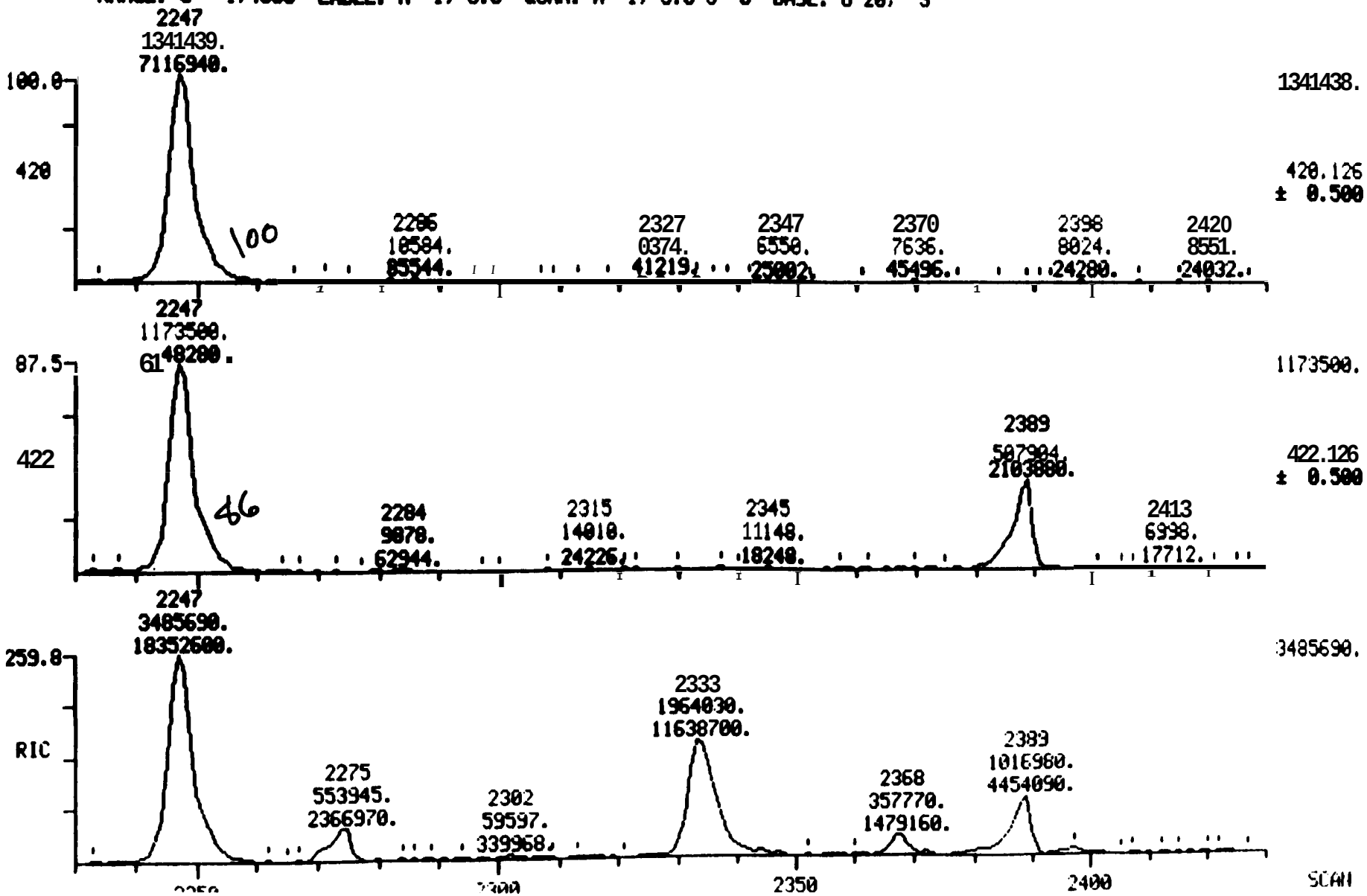
HpCDF

(2.7 ppt)


2254
5243.
14931.
2277
6800.
6800.
2298
11528.
14376.
2332
13635.
30912.
5xsafety
vs.420
2353
7992.
7992.
2380
13654.
35677.
2412
8405.
44480.
2275
488
2244
7778.
7778.
2308
7520.
31600.
2344
22883.
159643.
2364
11251.
38816.
2387
15481.
82312.
408.122
± 0.500
313344.
410
2297
5504.
9320.
2351
6800.
11136.
2385
7158.
31587.
2413
10280.
10280.
410.123
± 0.500
RIC
18352600.
2275
553945.
2366970.
2302
59597.
339968.
2333
1964030.
11638700.
2368
357770.
1479160.
2389
1016980.
4454090.
3485690.
2250
2300
2350
2400

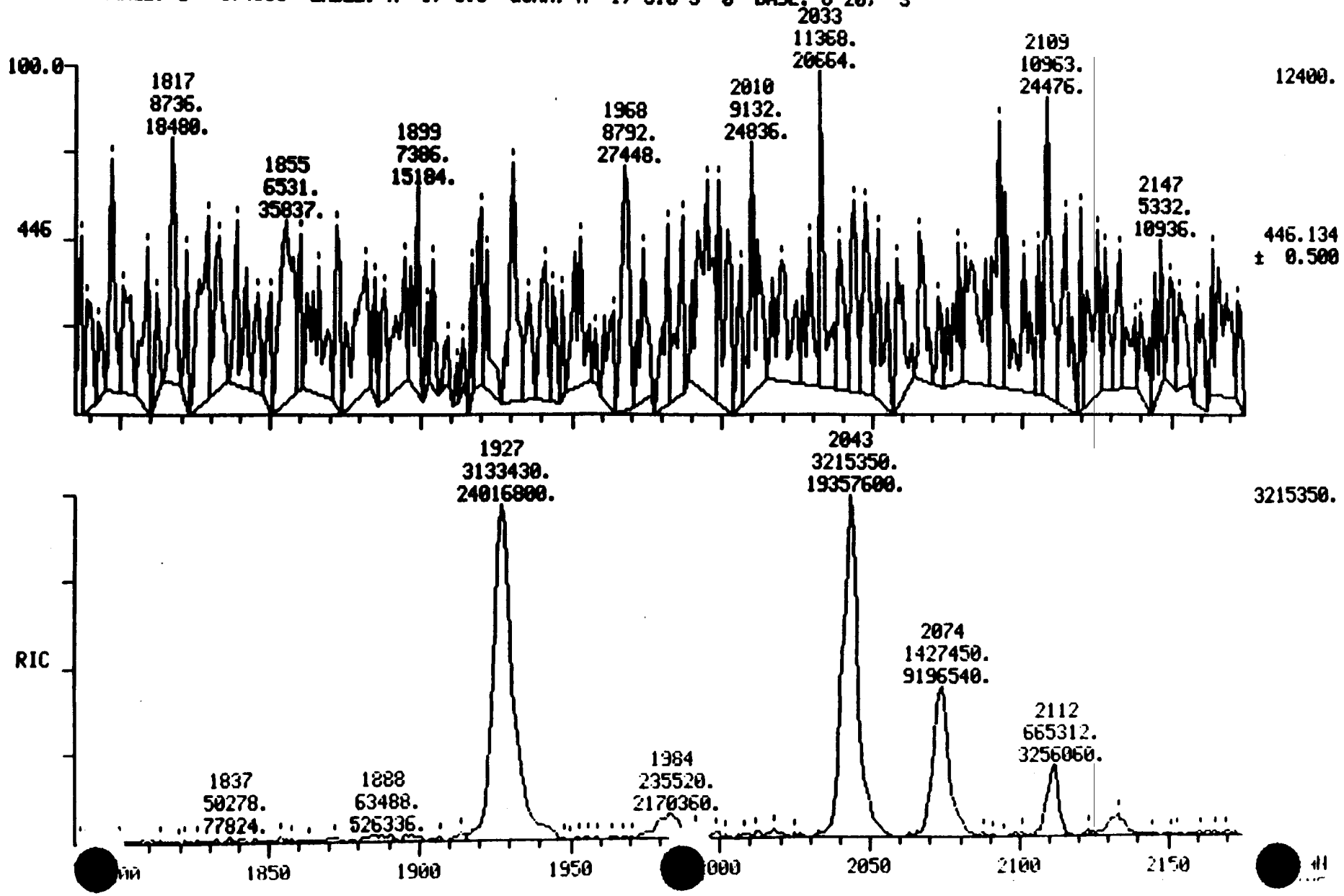
MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 2238 TO 2436
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

107% Rec.



3200519

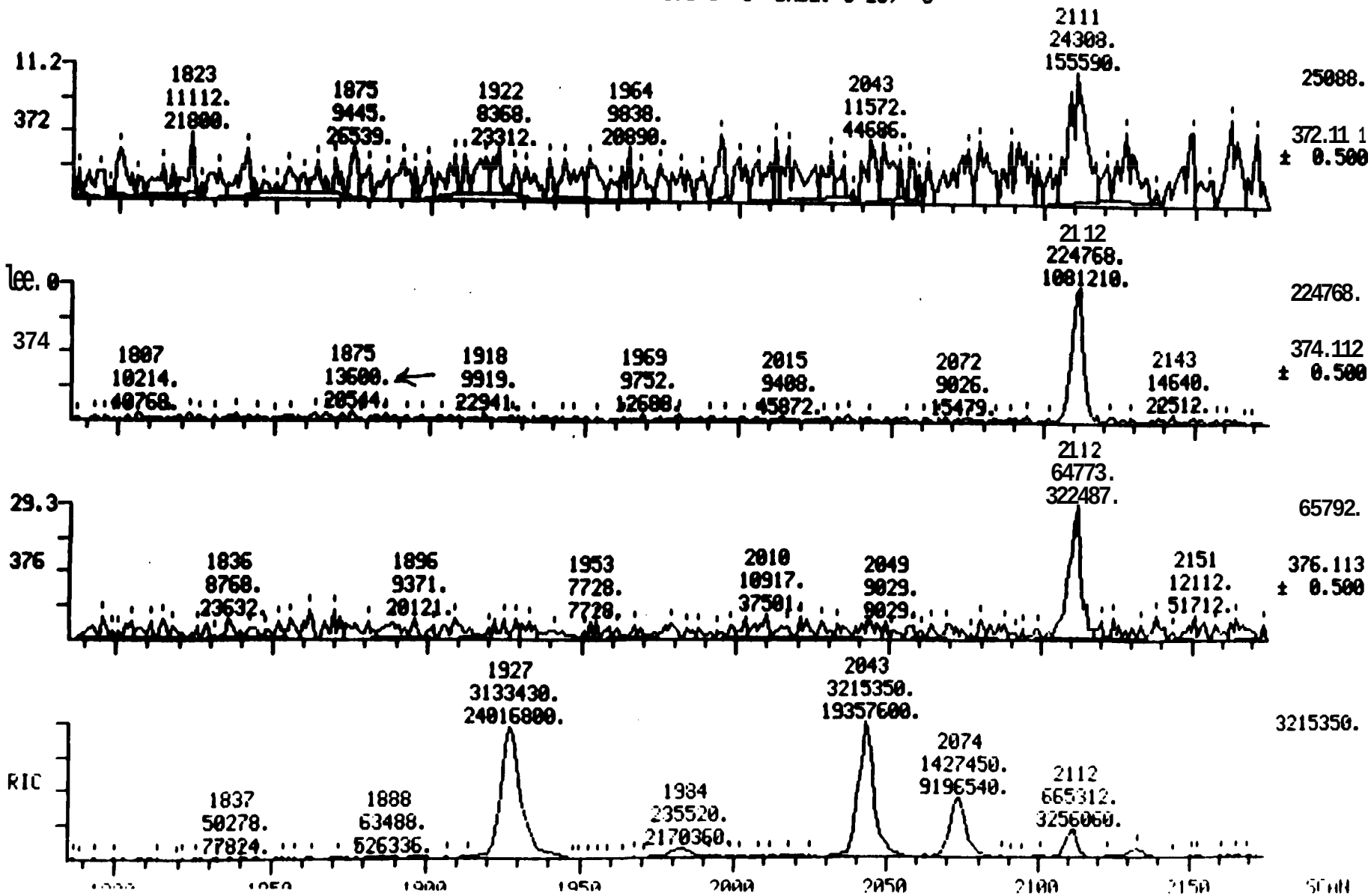
MIDRIC+MASS CHROMATOGRAM DATA: RBLK1989 #1 SCANS 1785 TO 2175
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



H x CDF
~~H x CDD~~
ND(1.0 ppt)

MIDRIC+MASS CHROMATOGRAMS
04/08/91 14:35:00
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

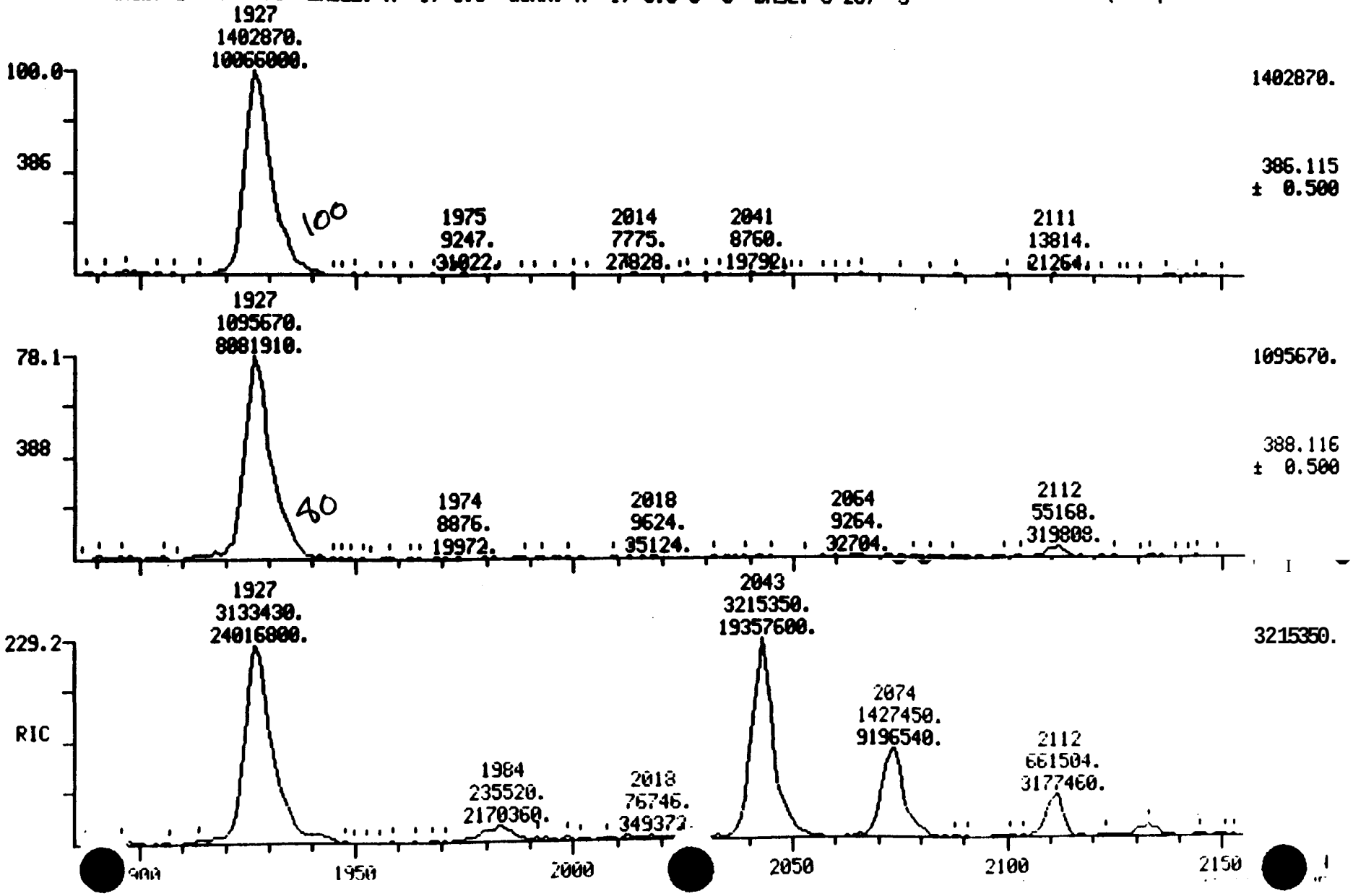
DATA: RBLK1989 #1
CALI: CAL910306A #2
SCANS 1785 TO 2175



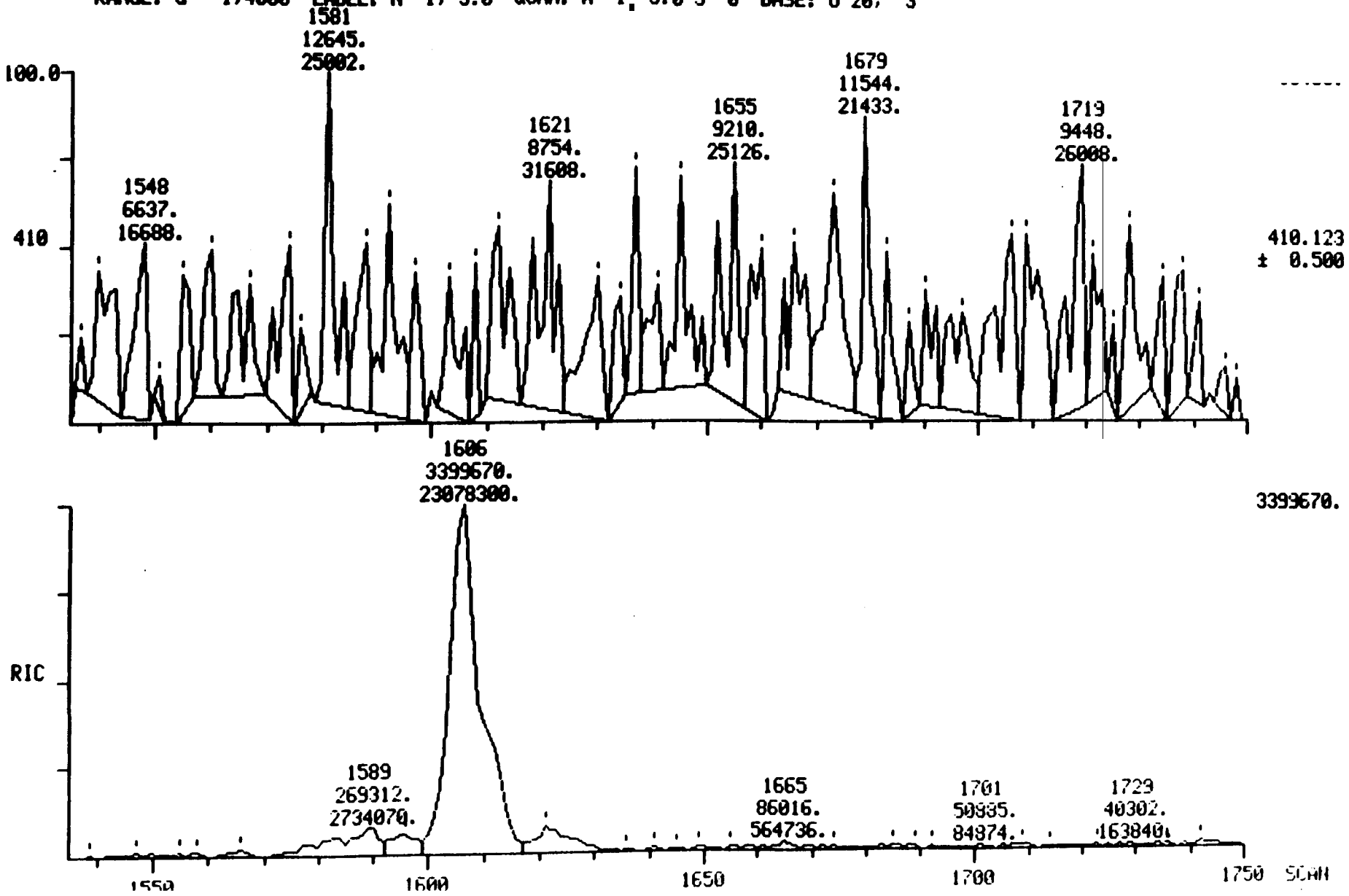
3200517

MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1885 TO 2155
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

115% Rec.

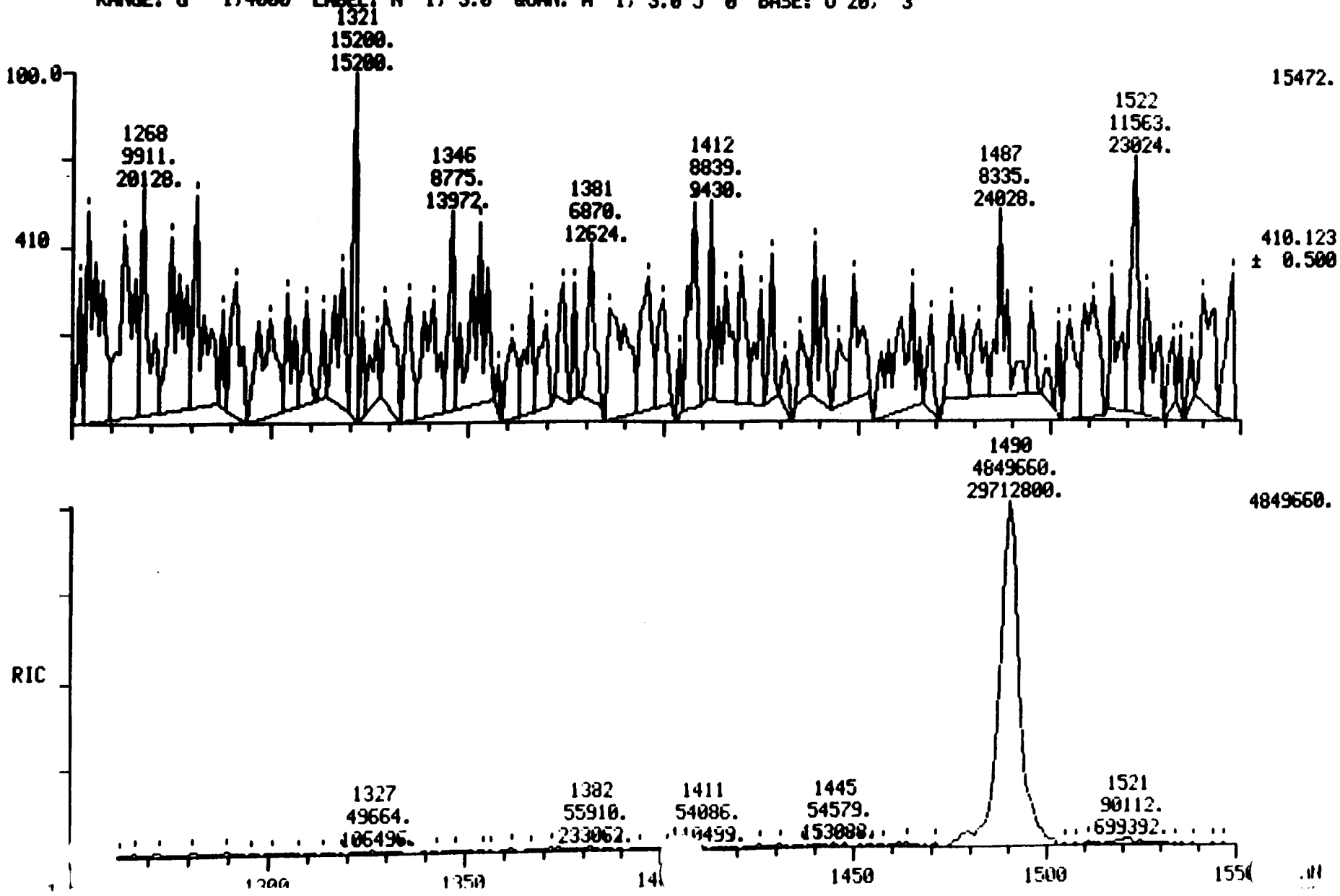


MIDRIC+MASS CHROMATOGRAM DATA▸ RBLK1989 #1 SCANS 1535 TO 1750
04/08/91 14:35:00 CALI▸ CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

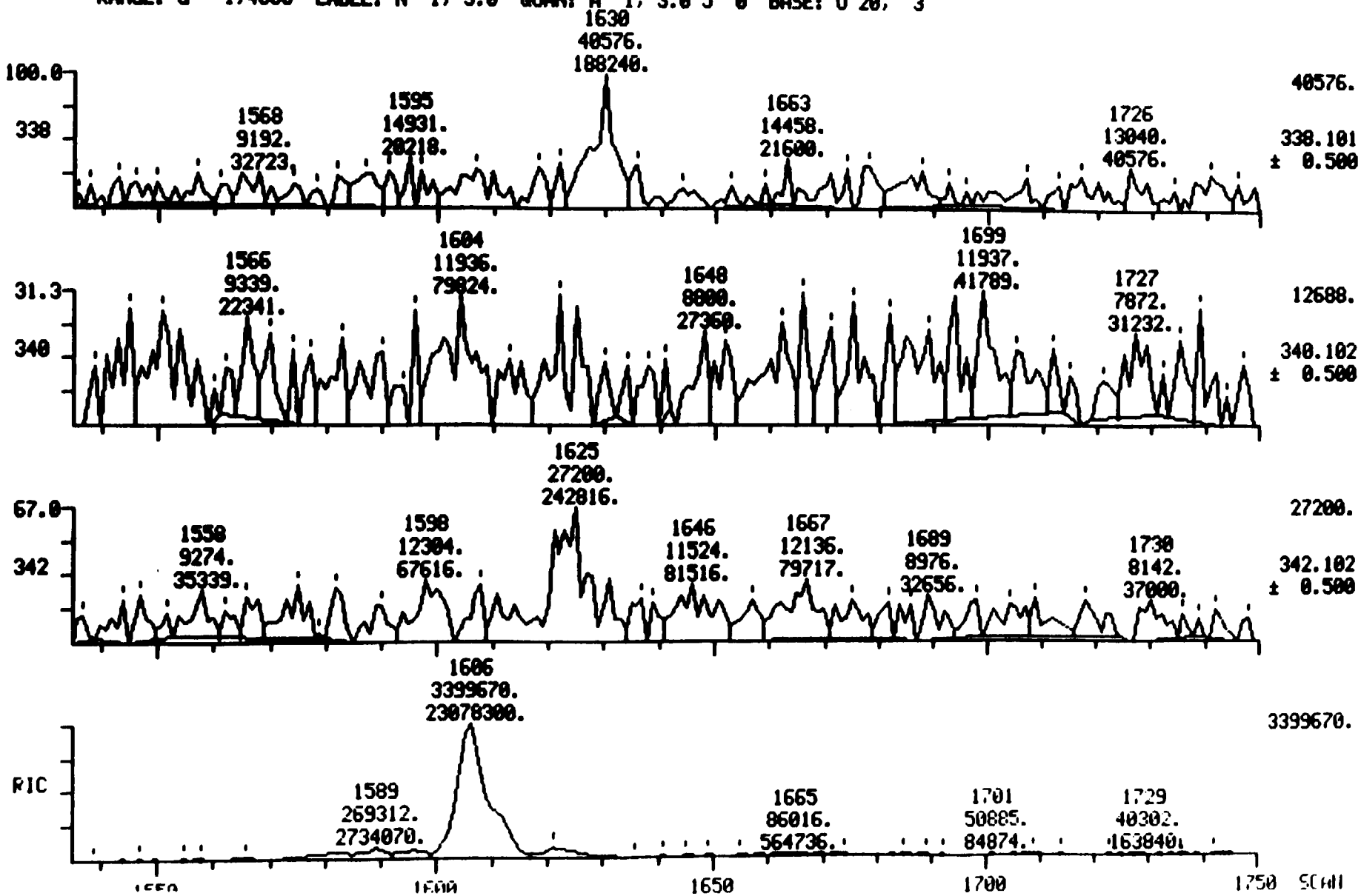


3200518

MIDRIC+MASS CHROMATOGRAM DATA: RBLK1989 #1 SCANS 1250 TO 1550
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



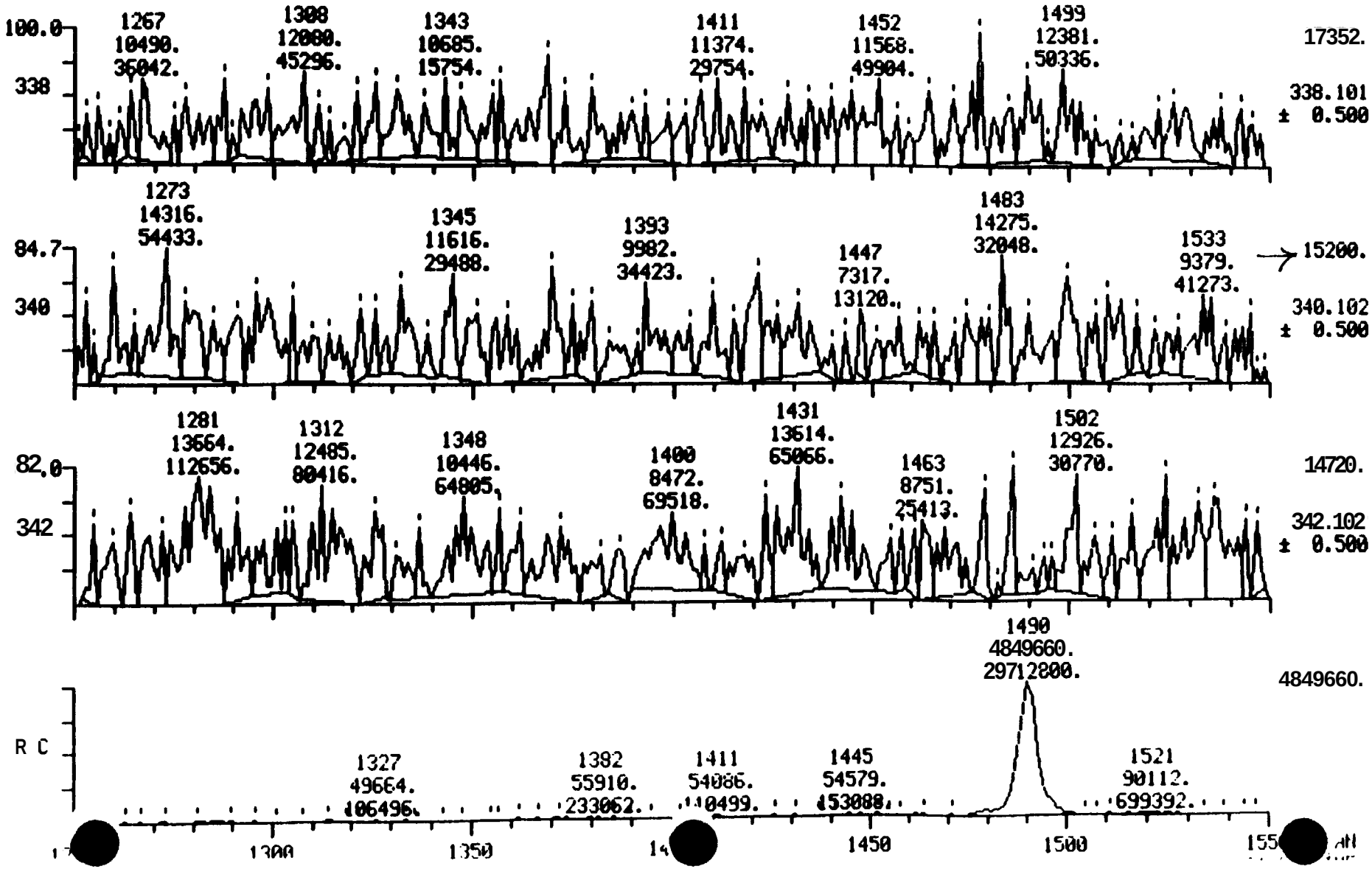
MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1535 TO 1750
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



320510

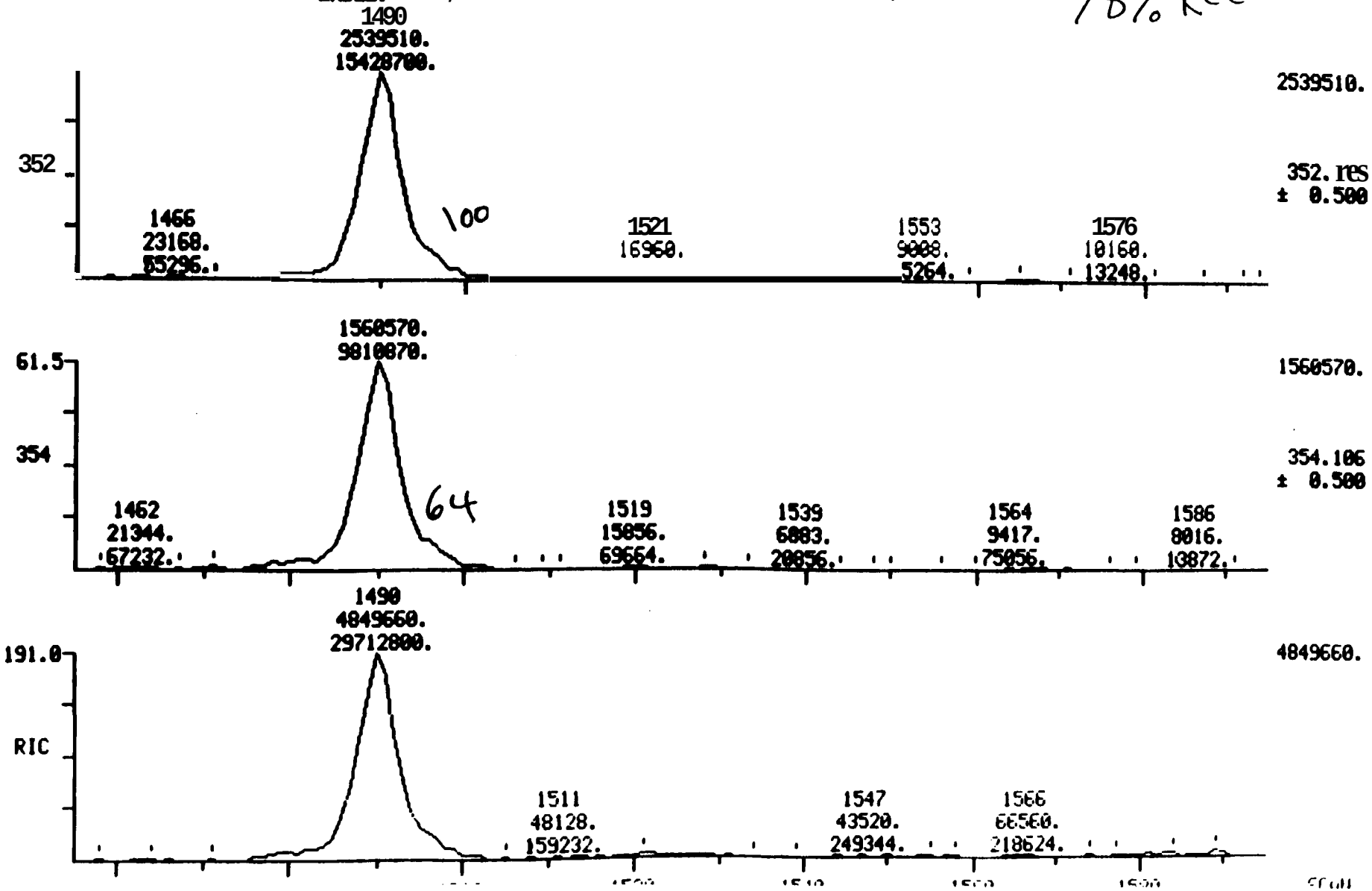
MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1250 TO 1550
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

PeCDF
ND(0.47 ppt)



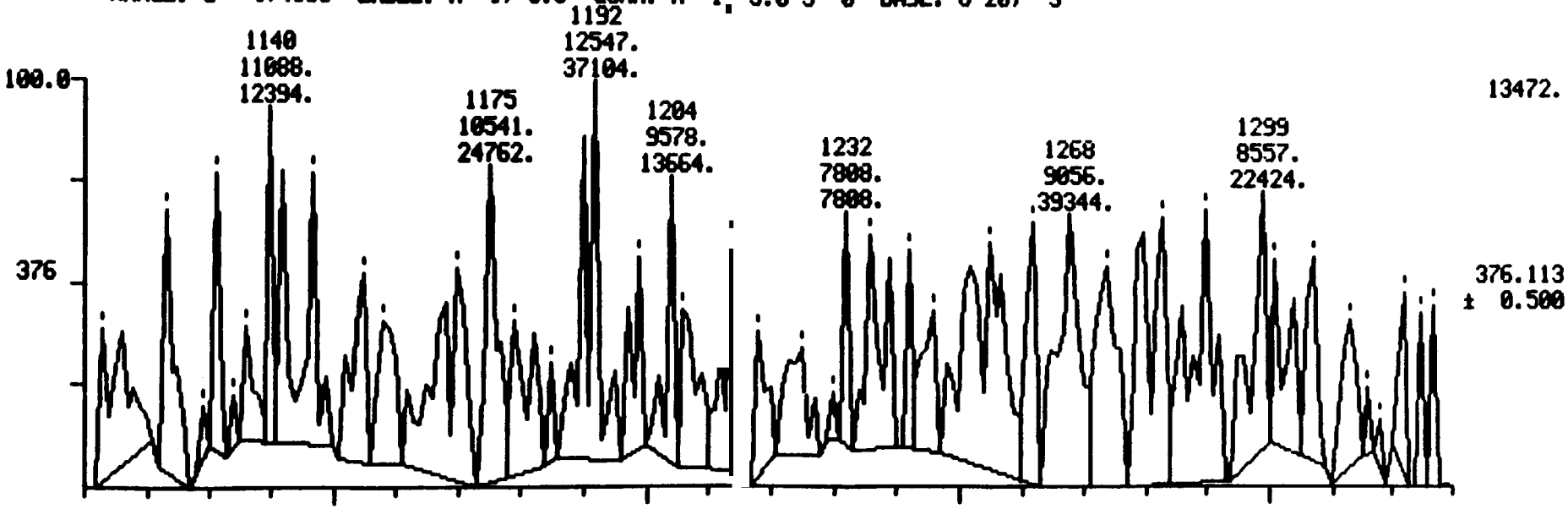
MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1455 TO 1595
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: e 1,4000 LABEL: N I, 3.0 WAN: A 1, 3.0 J e BASE: U 20, 3

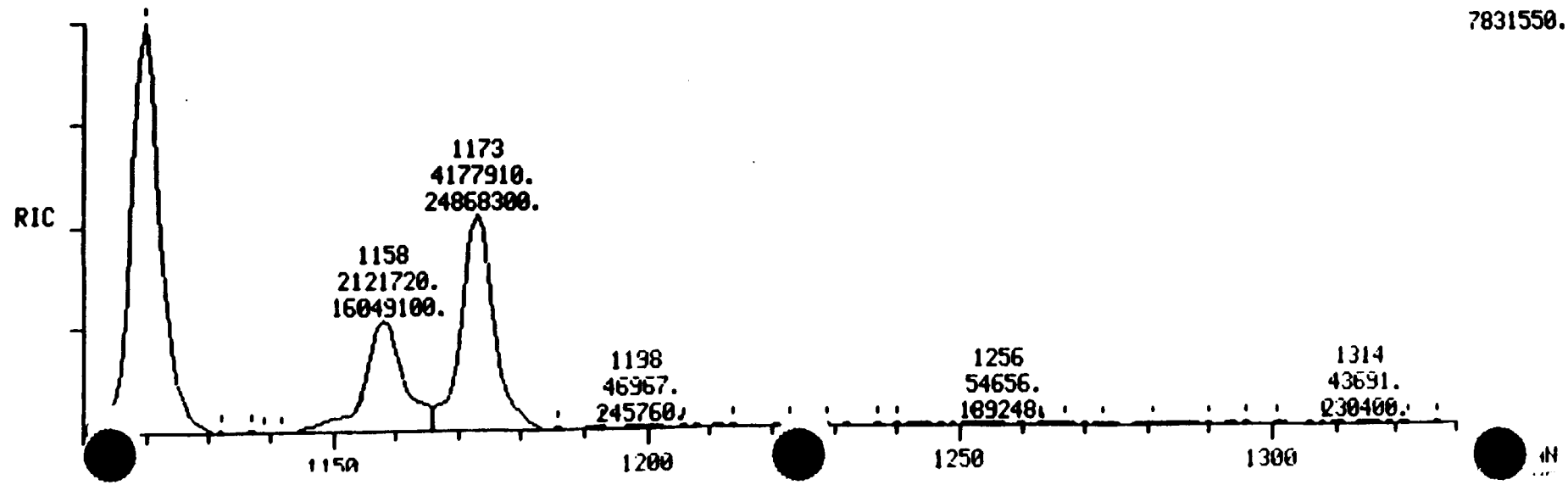
78% Rec.



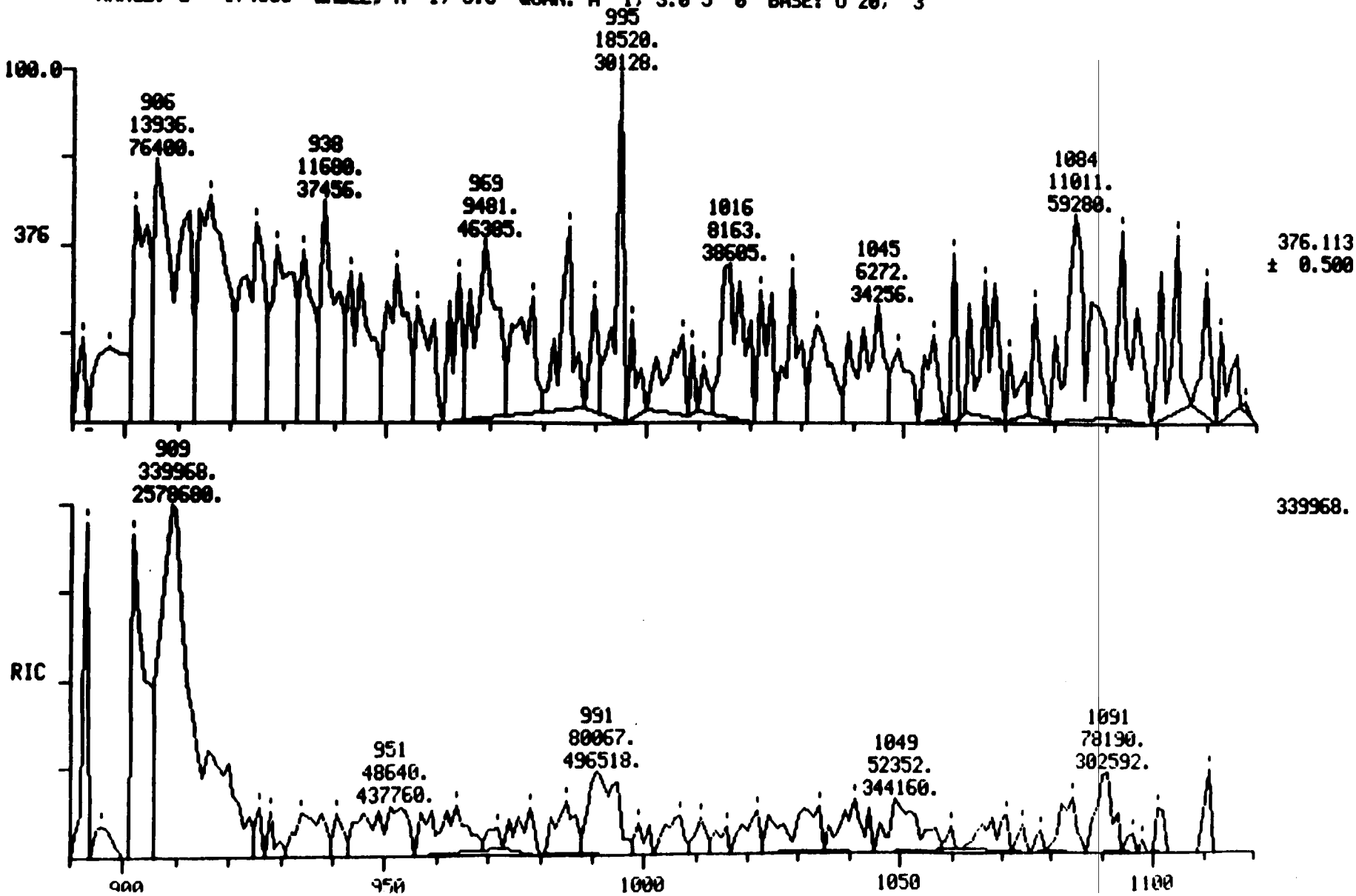
320C5-0

MIDRIC+MASS CHROMATOGRAM DATA: RBLK1989 #1 SCANS 1110 TO 1330
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3





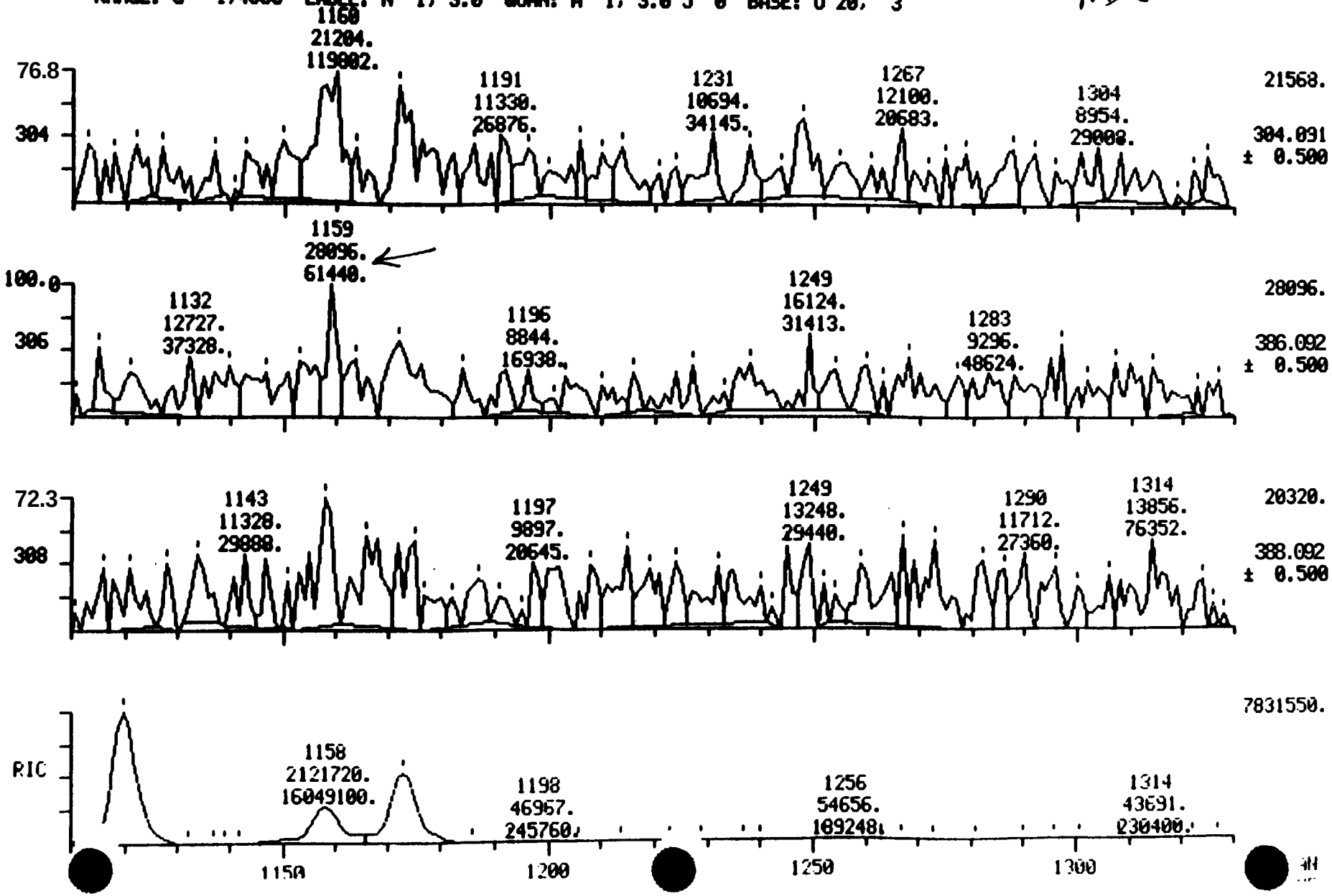
MIDRIC+MASS CHROMATOGRAM DATA: RBLK1989 #1 SCANS 890 TO 1120
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



320C521

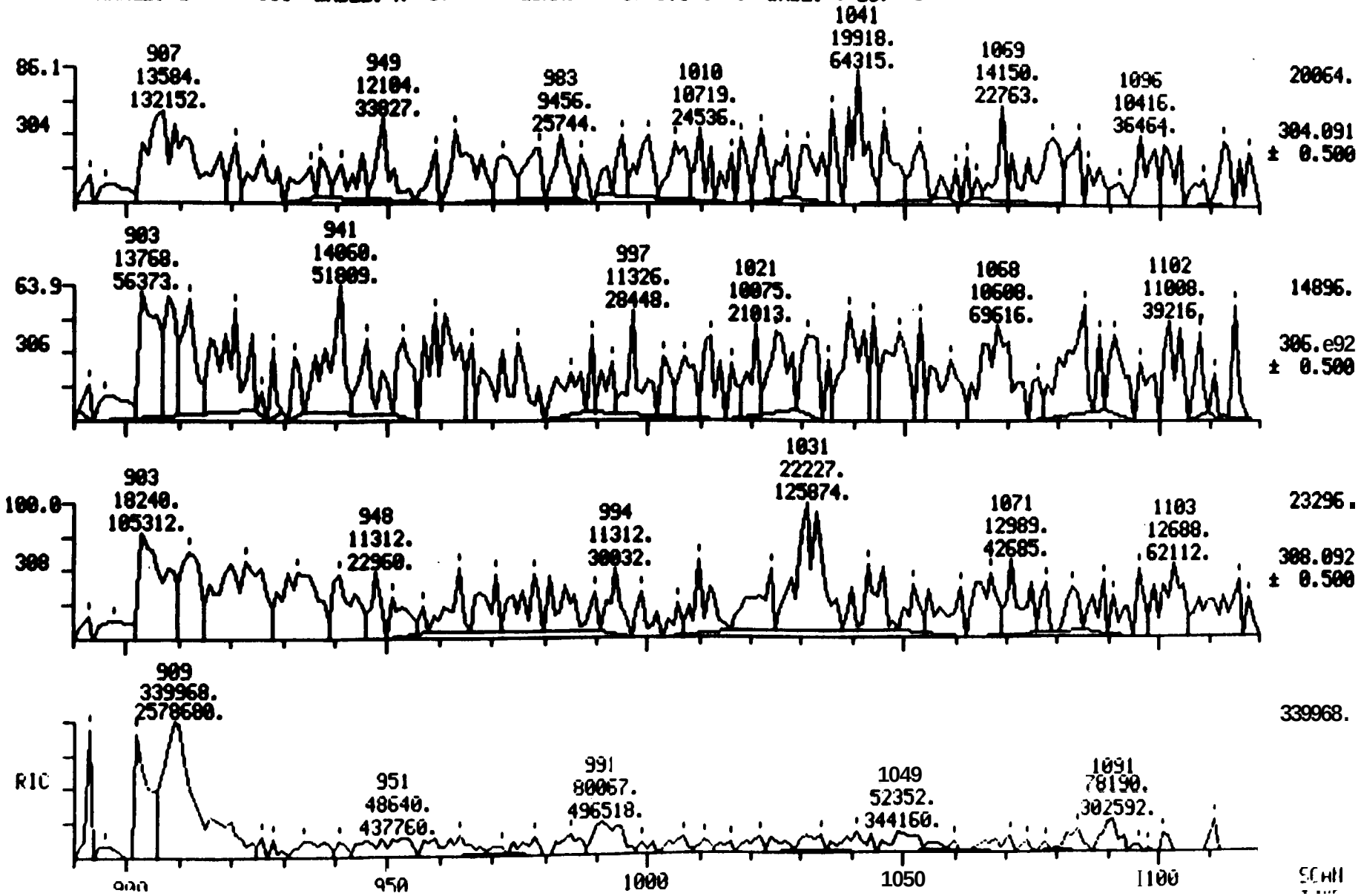
MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1110 TO 1330
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDDF DT 4-9-91
ND(0.69 ppt)



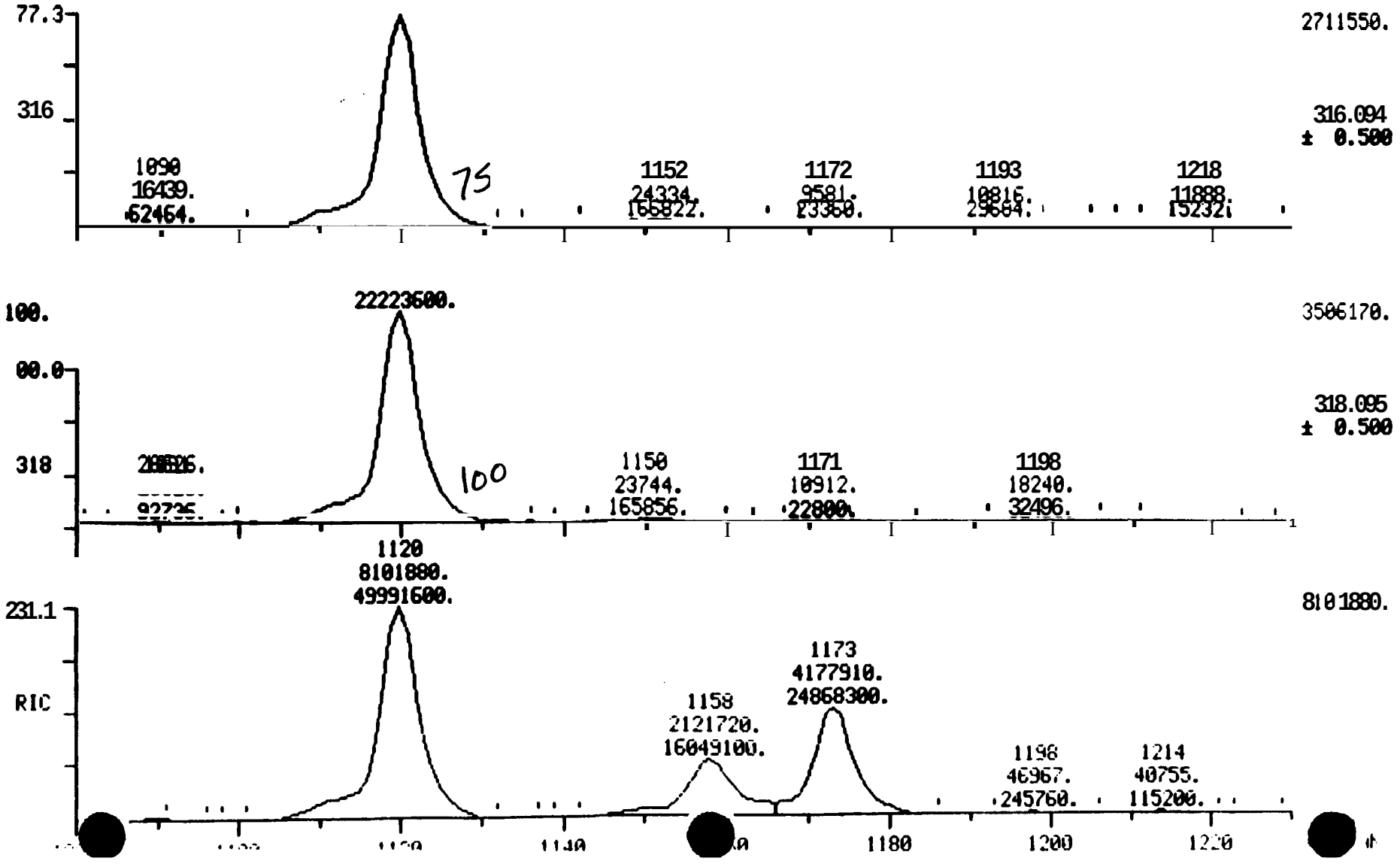
MIDRIC+MASS CHROMATOGRAMS
04/08/91 14:35:00
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

DATA: RBLK1989 #1 SCANS 890 TO 1120
CALI: CAL910306A #2



320 522

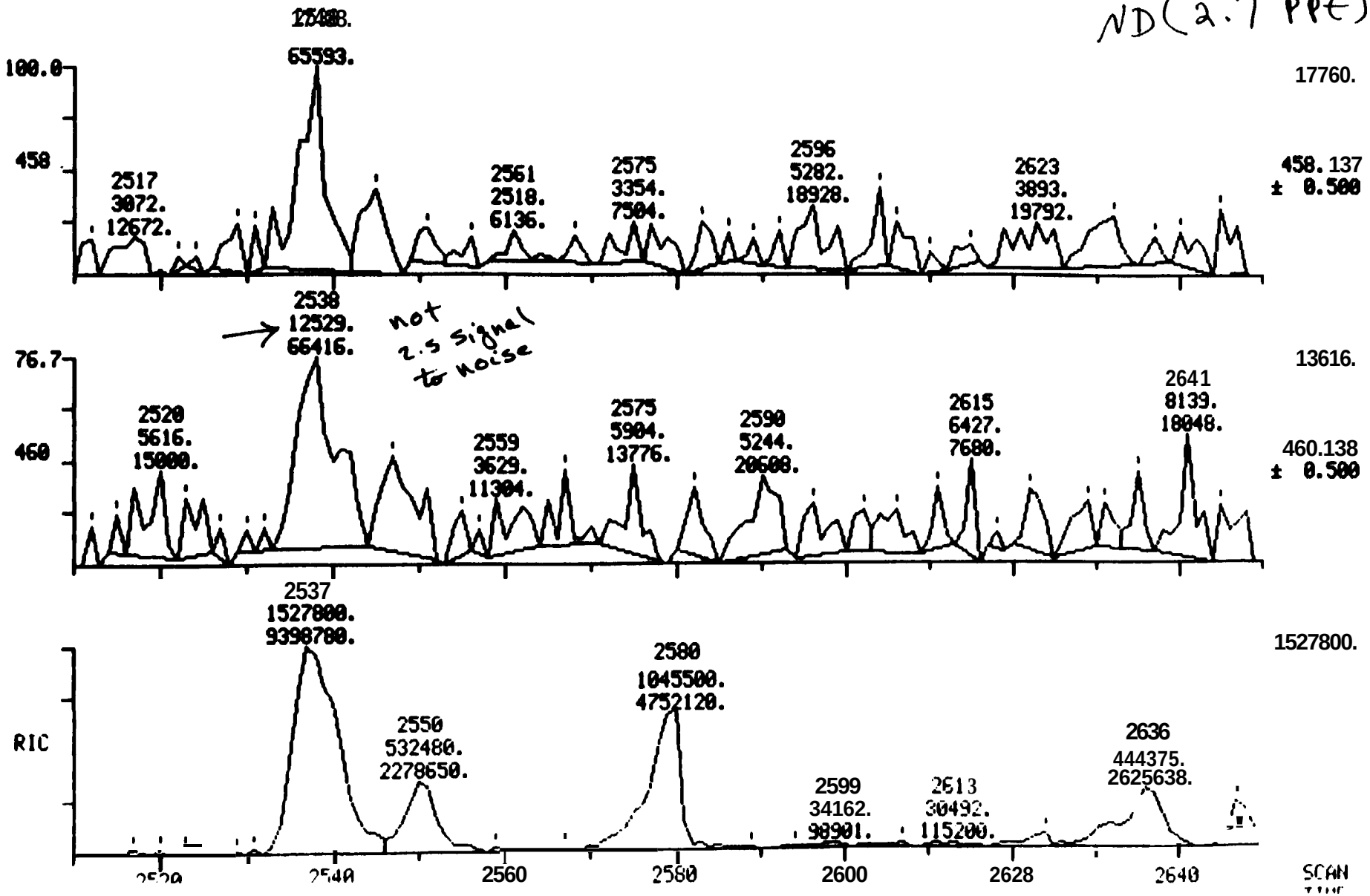
43%R


77.3
316
2711550.
316.094
± 0.500
1090
16439.
62464.
75
1152
24334.
165822.
1172
9581.
23360.
1193
10816.
29664.
1218
11888.
15232.
100.
00.0
318
3506170.
318.095
± 0.500
22223600.
100
1150
23744.
165856.
1171
10912.
22800.
1198
18240.
32496.
231.1
RIC
8101880.
1120
8101880.
49991600.
1158
2121720.
16049100.
1173
4177910.
24868300.
1196
46967.
245760.
1214
40755.
115200.
1140
1180
1200
1220

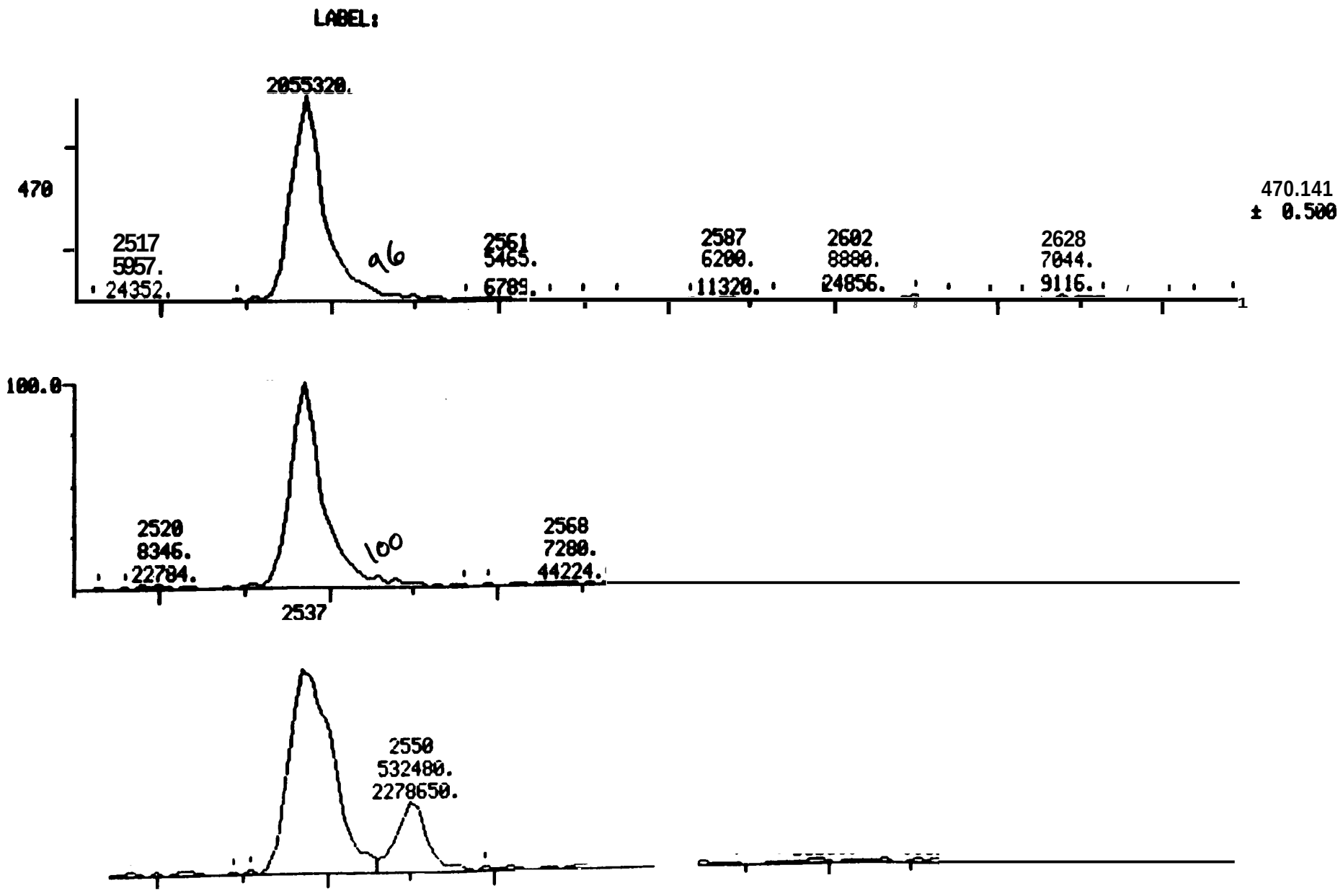
MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 I1 SCANS 2510 TO 2650
04/08/91 14:35:00 CALI: CAL910306A.12
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS/AFF.IX/6 FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDD

ND(2.7 ppt)



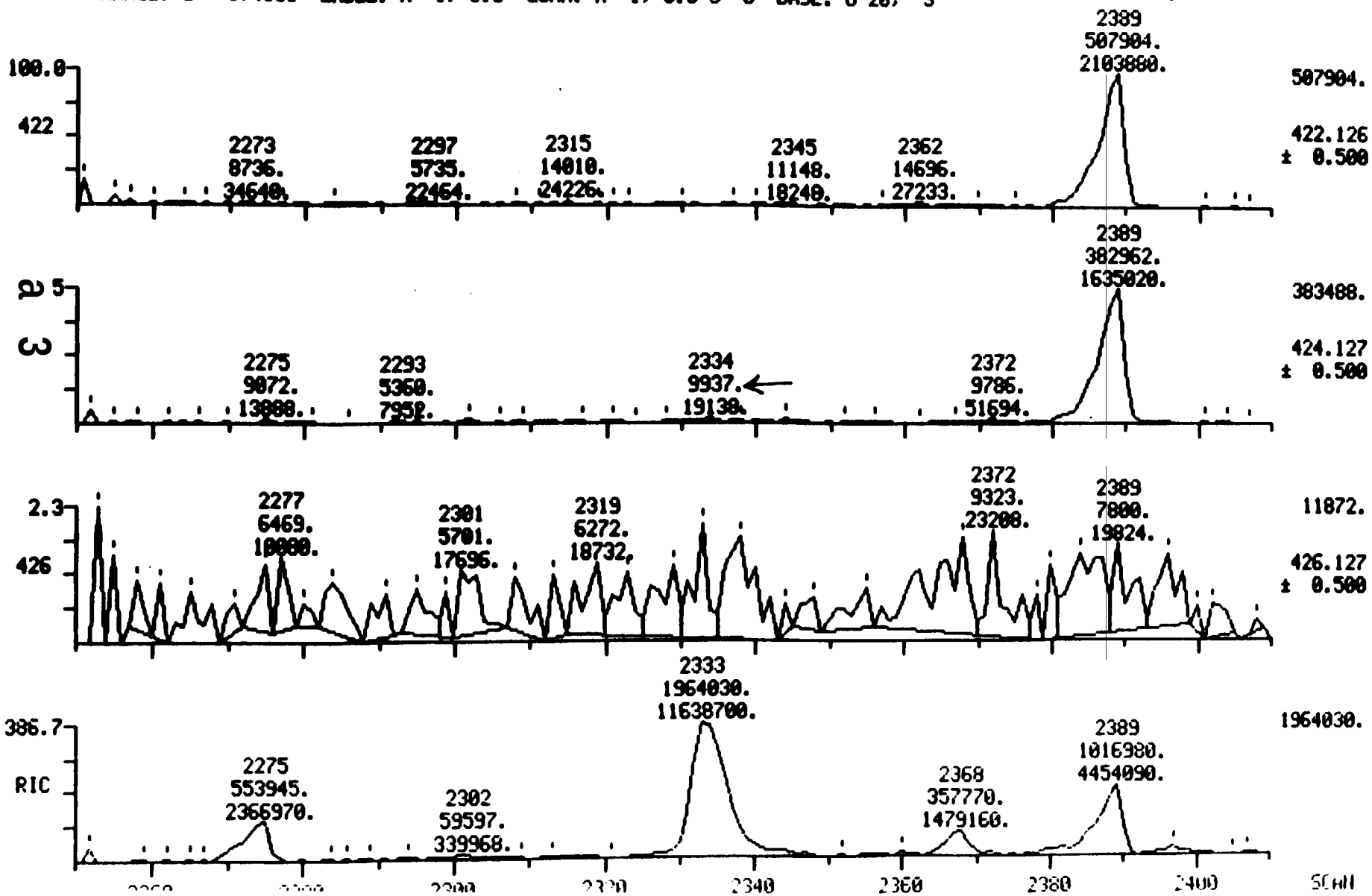
320C523


LABEL:
2055320.
470
470.141
± 0.500
2517
5957.
24352.
96
2561
5465.
6789.
2587
6200.
11320.
2602
8880.
24856.
2628
7044.
9116.
100.0
2520
8346.
22784.
100
2568
7280.
44224.
2537
2550
532480.
2278650.

MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 2250 TO 2410
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HpCDD

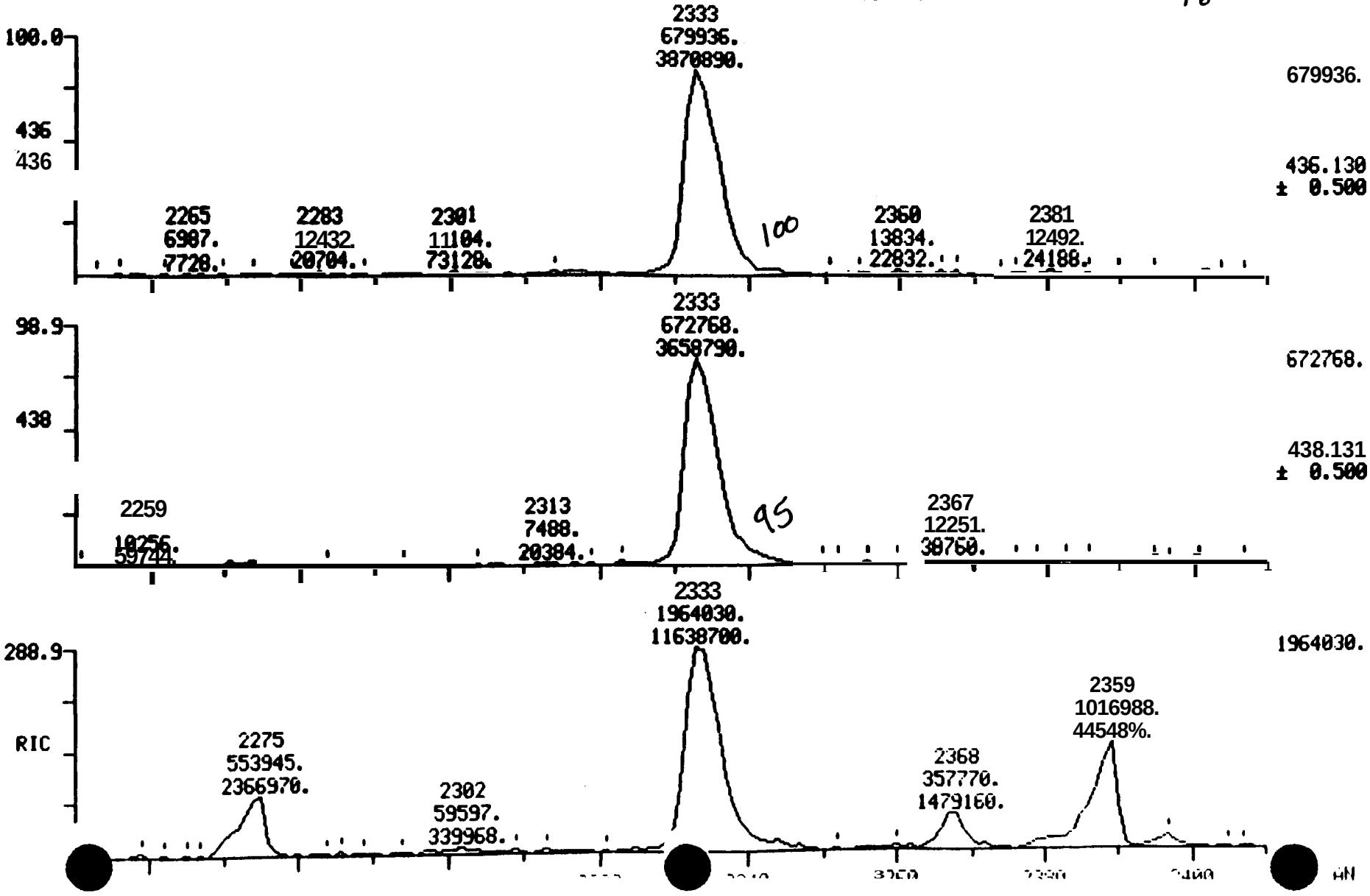
ND(2.0 ppt)



320C524

MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 2250 TO 2410
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

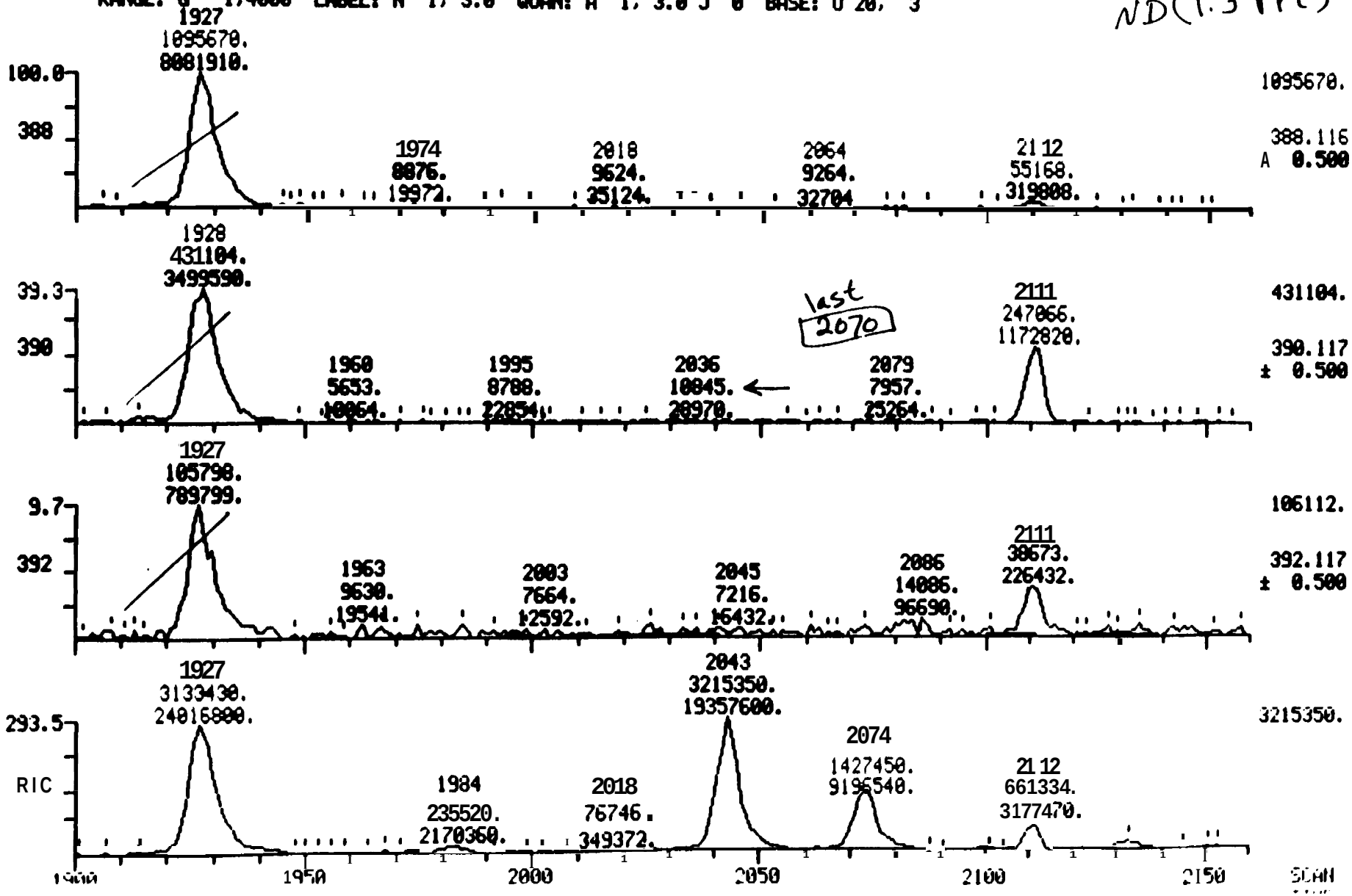
67% Rec.



MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1900 TO 2160
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HxCDD

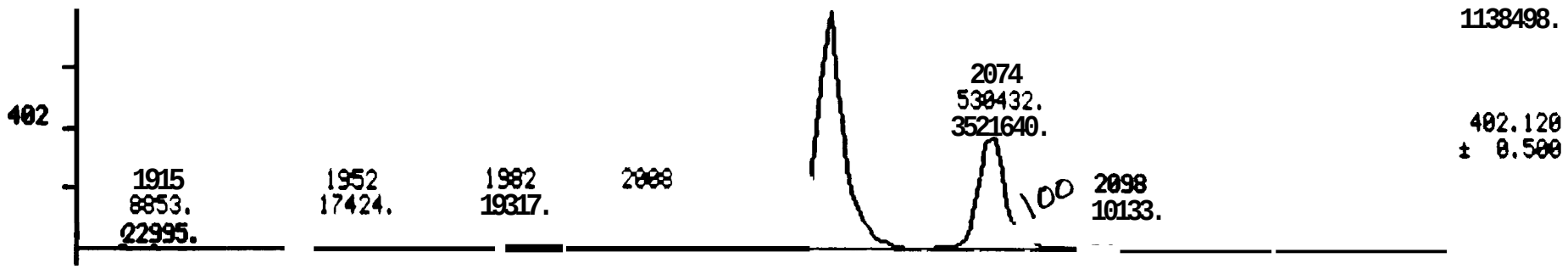
ND(1.3 ppt)

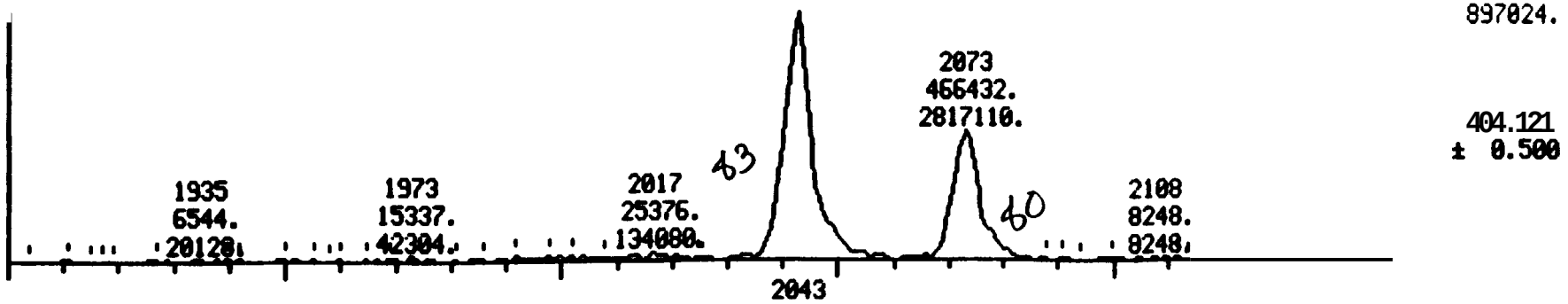


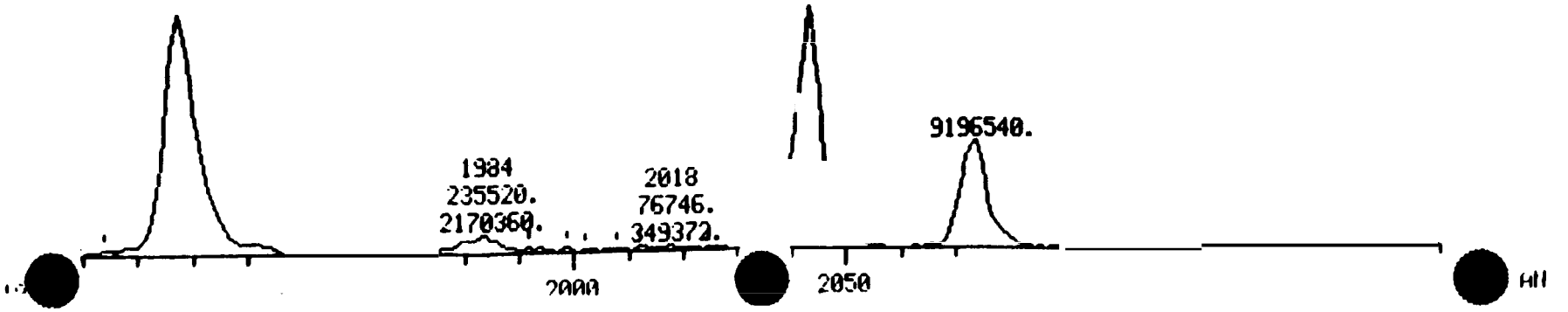
3200525

OF

106% Rec.


1138498.
402
402.120
± 0.500
1915
8853.
22995.
1952
17424.
1982
19317.
2008
2074
530432.
3521640.
100
2098
10133.


897024.
404.121
± 0.500
1935
6544.
20120.
1973
15337.
42304.
2017
25376.
134080.
43
2073
466432.
2817110.
40
2108
8248.
8248.
2043


1984
235520.
2170360.
2018
76746.
349372.
9196540.
2000
2050
AU

MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1400 TO 1750

04/08/91 14:35:00 CALI: CAL910306A #2

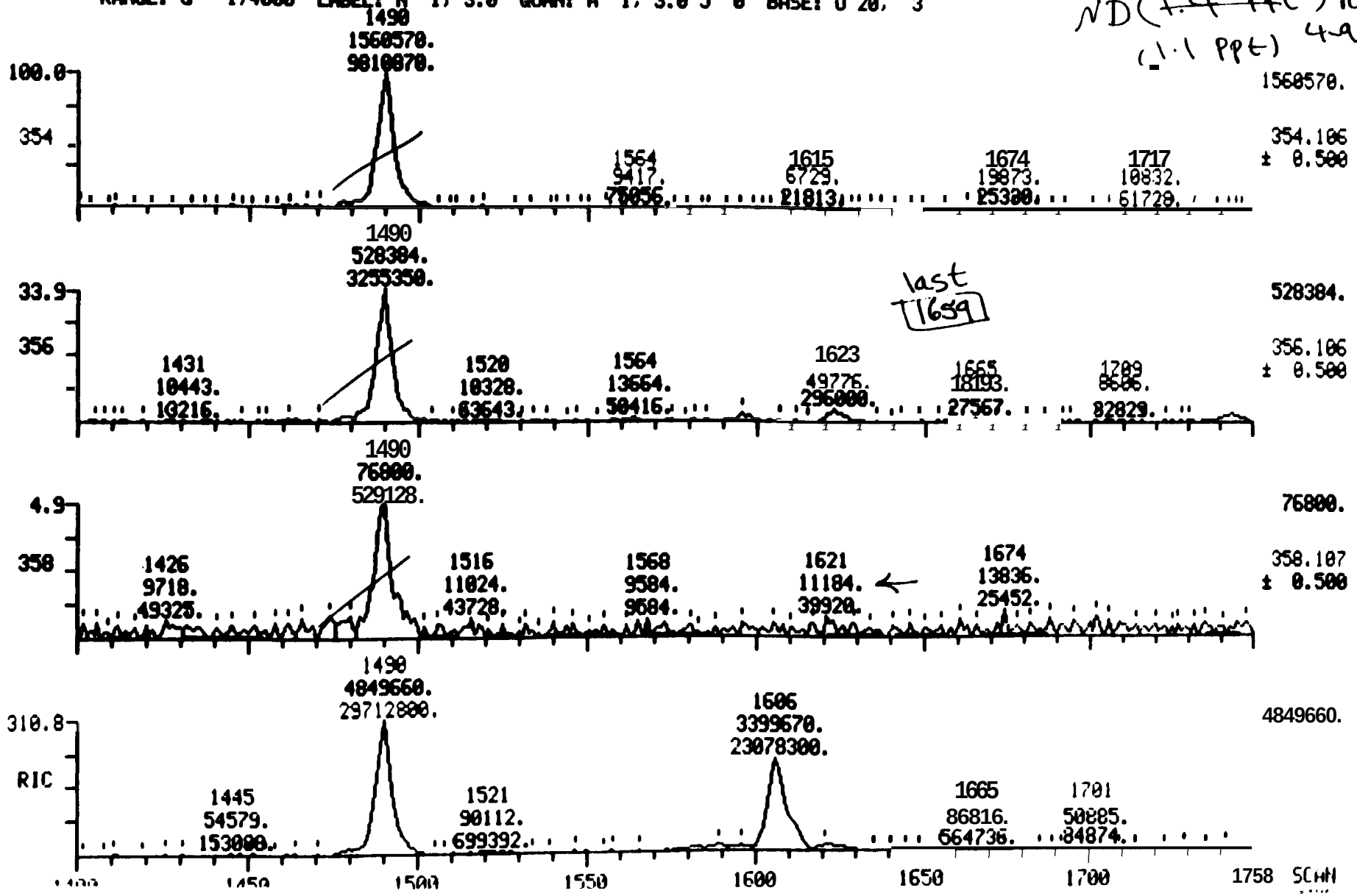
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN

CONDS.: 60M DB-5/TOTALS.

RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

PeCDD

ND(~~1.4 PPt~~) nm
(1.1 PPt) 4-9-91



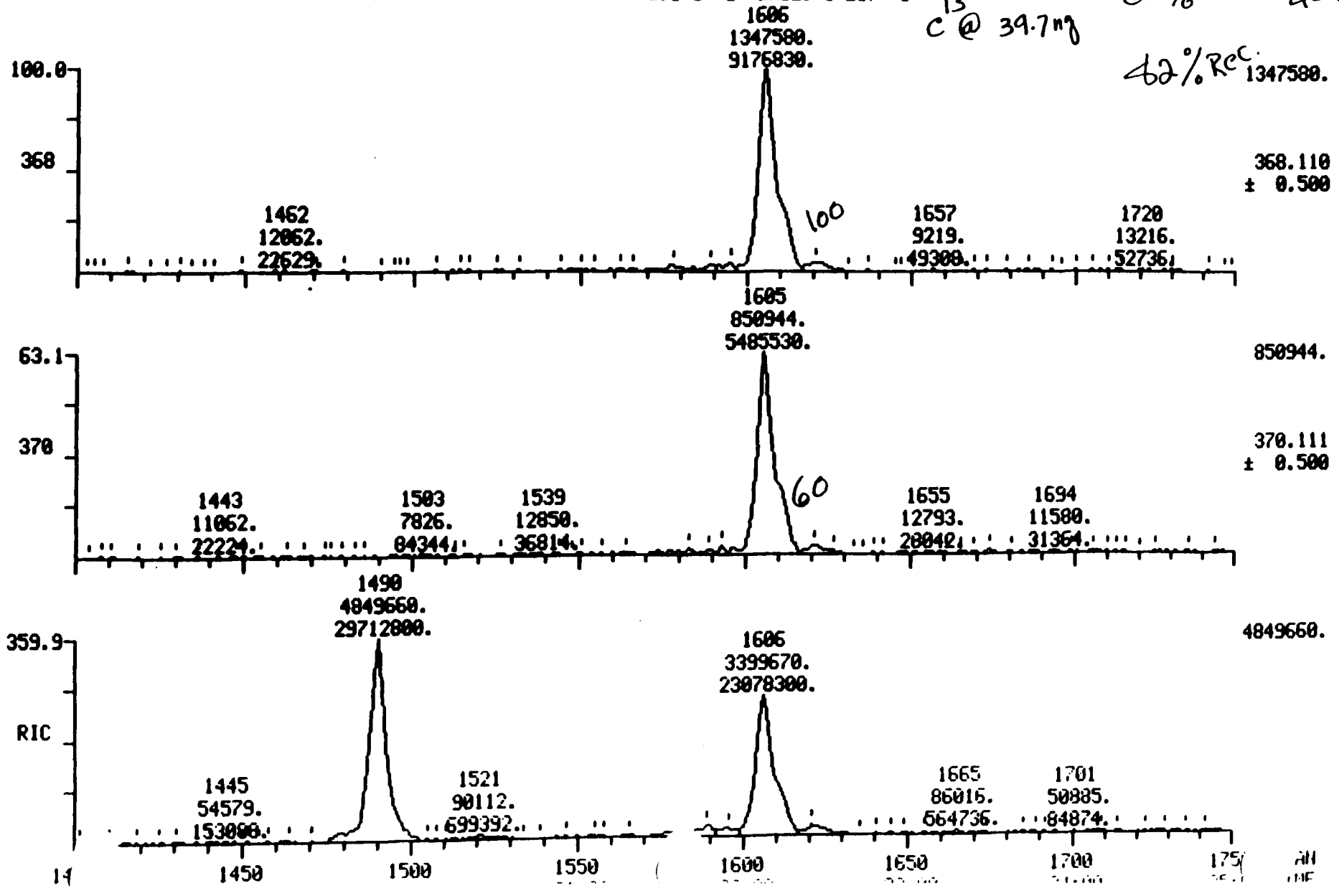
526

MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1400 TO 1750
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

~~65% Rec.~~ nm 4-9-91

C^{13} @ 39.7ng

42% Rec.



MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 960 TO 1340
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

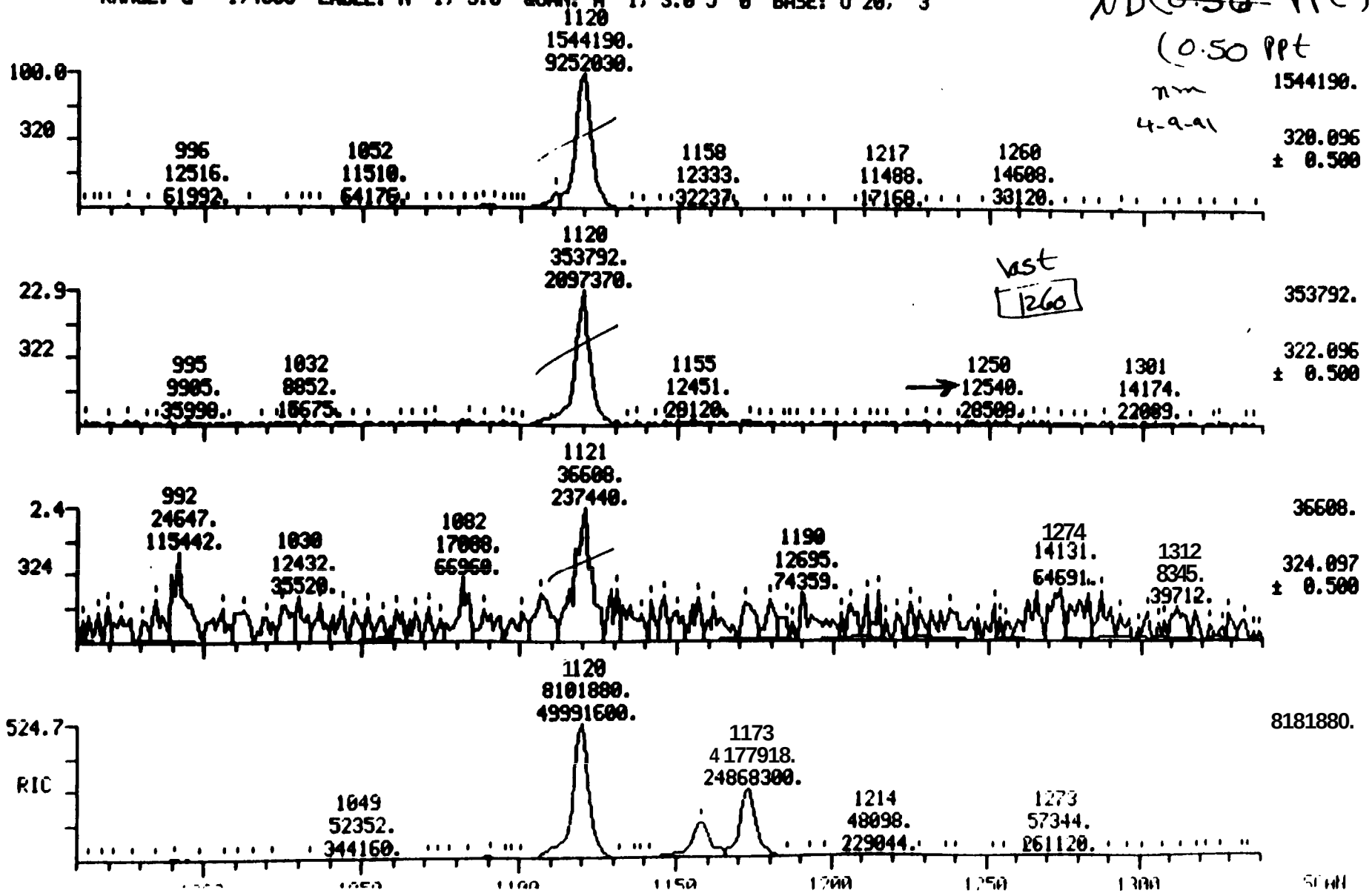
TCDD

ND(~~0.50~~ ppt)

(0.50 ppt

nm

4-9-91

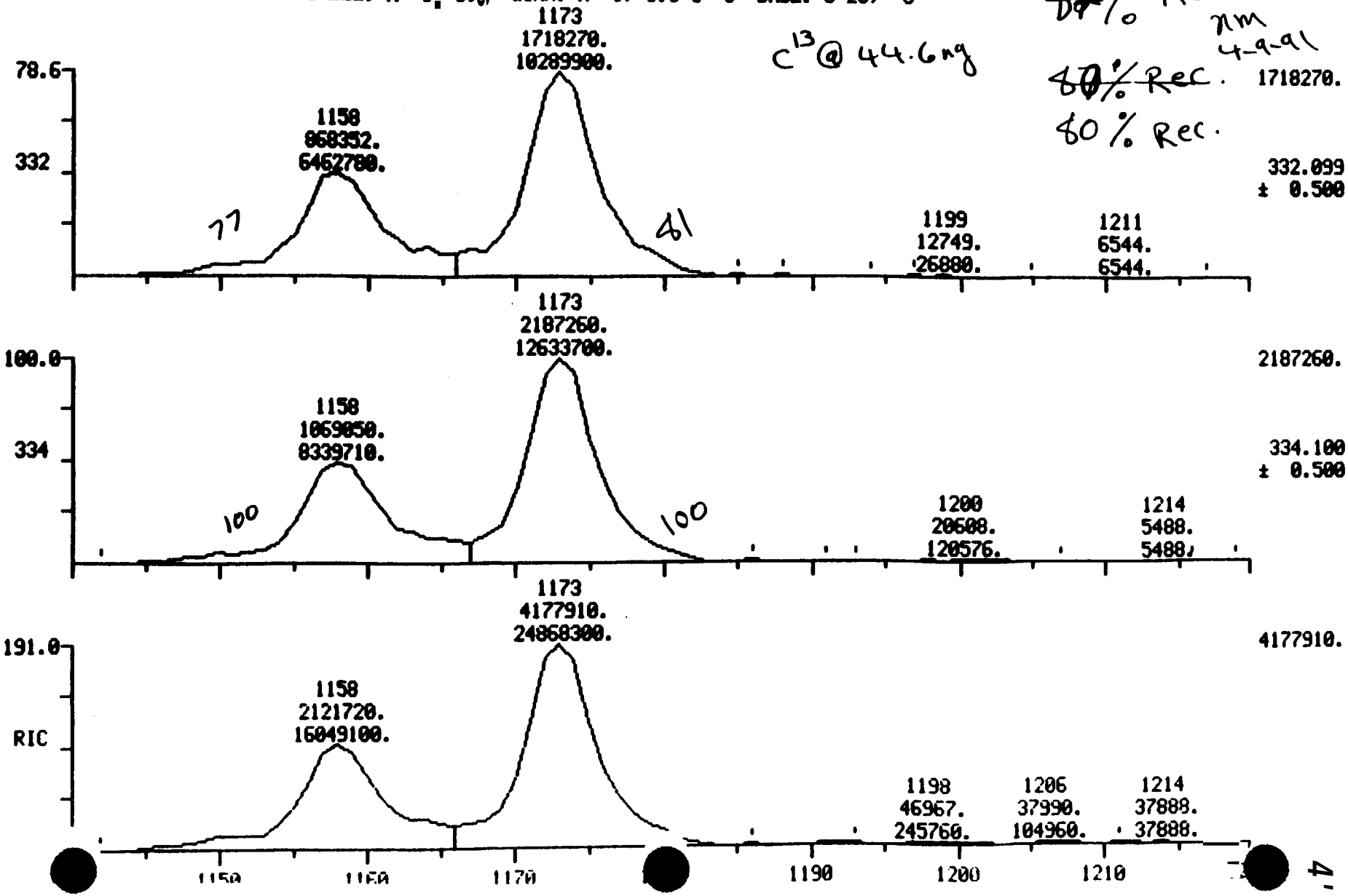


vast

1260

MIDRIC+MASS CHROMATOGRAMS DATA: RBLK1989 #1 SCANS 1140 TO 1220
04/08/91 14:35:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

~~99~~ % Rec.
nm 4-9-91



~~80~~ % Rec.

80 % Rec.

4-

MIDRIC
04/08/91 14:35:00
SAMPLE: 2UL OF BLK1989 1000ML WATER FOR TOTALS,APP.IX,& FURAN
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2747 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

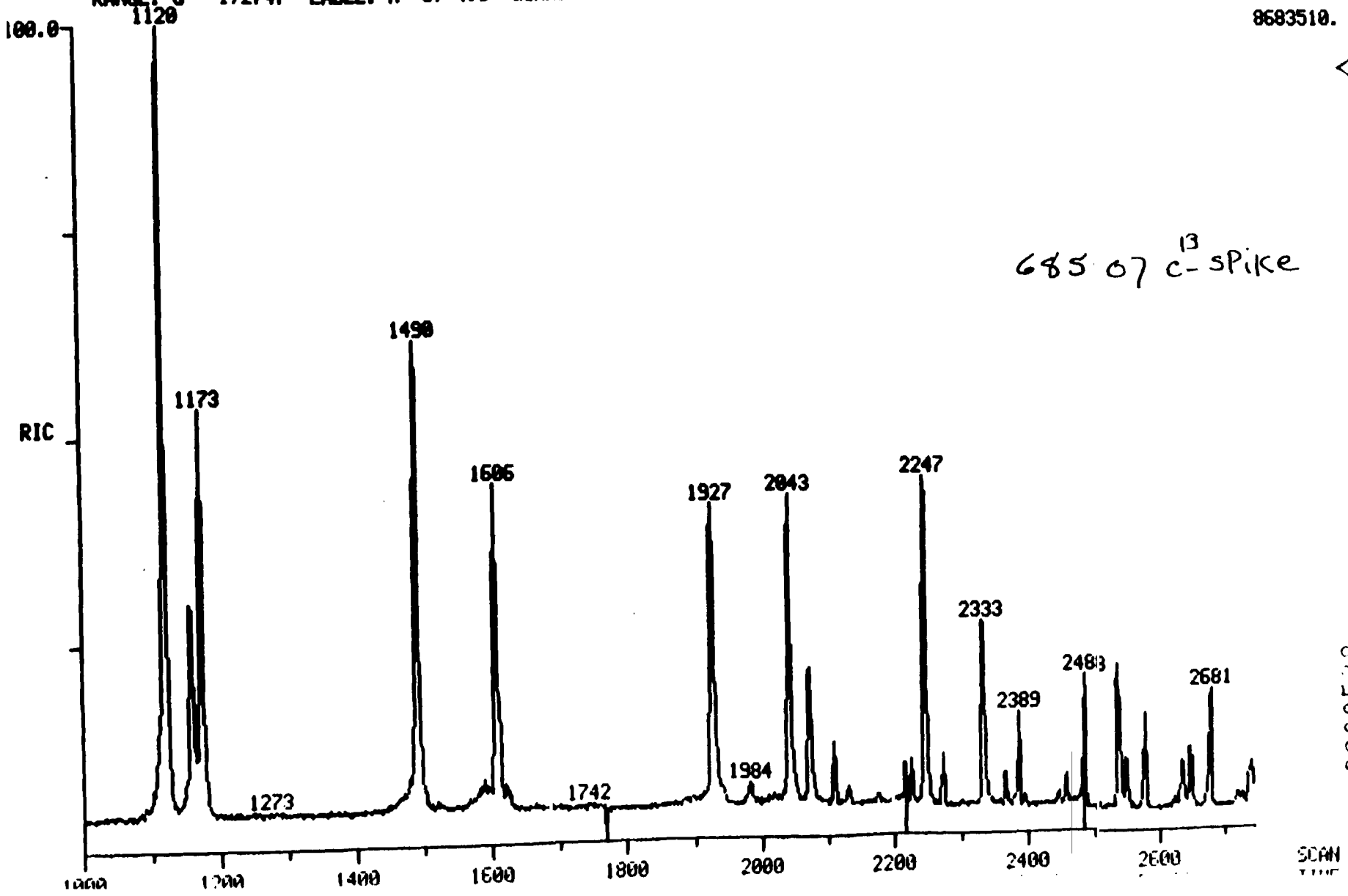
DATA: RBLK1989 #1
CALI: CAL910306A #2

SCANS 1000 TO 2747

arc. nm
QC JB
Rev. DKR

4-9-91
4-9-91
4-23-91

8683510.



685 07 C^{13} spike

3200528

4	419.550	420.030	0.054	3	100	40	1	0	Pos
3	421.550	422.050	0.054	3	100	40	1	0	Pos
6	423.550	424.030	0.054	3	100	40	1	0	Po.
7	423.550	426.030	0.052	3	100	40	1	0	Pos
8	433.330	436.050	0.052	3	100	40	1	0	Po.
9	437.330	438.050	0.052	3	100	40	1	0	Po.
10	441.330	442.030	0.054	3	100	40	1	0	Pos
11	443.330	444.030	0.054	3	100	40	1	0	Pos
12	457.550	458.050	0.052	3	100	40	1	0	Pos
13	459.330	460.030	0.052	3	100	40	1	0	Po.
14	469.330	470.030	0.054	3	100	40	1	0	Po.
15	471.330	472.050	0.052	3	100	40	1	0	PO%
16	479.550	480.030	0.054	3	100	40	1	0	Pos
17	313.530	514.050	0.054	3	100	40	1	0	Pos

4/17/91 12:43:52 SCAN 2680
Acquisition stopped

4/17/91 12:43:34
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2183 Centroid
SCAN 2184 Suspended
SCANS 2183 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2680 Centroid

Mode	Scans	Secs	Out of	%	Perks per scan	per sec
Centroid	2677	622.4	3212.4	19.4	81973.	31.	26.

MID scan
Scan time: 1.200 s

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

Int #	Lo ma	Hi mass	Tine	MPW	MFW	MA	TH	BL	ION
1	337.650	338.150	0.034	3	100	40	1	0	Po.
2	339.650	340.150	0.032	3	100	40	1	0	Po.
3	341.630	342.150	0.034	3	100	40	1	0	Po.
4	351.650	352.150	0.032	3	100	40	1	0	Po.
5	353.650	354.150	0.034	3	100	40	1	0	Po.
6	355.650	356.130	0.052	3	100	40	1	0	Po.
7	357.650	350.150	0.054	3	100	40	1	0	Pos
8	367.650	368.150	0.032	3	100	40	1	0	Por
9	369.650	370.150	0.052	3	100	40	1	0	Por
10	371.630	372.150	0.052	3	100	40	1	0	Pos
11	373.650	374.150	0.052	3	100	40	1	0	Pos
12	375.650	376.150	0.052	3	100	40	1	0	Po.
13	379.650	380.150	0.052	3	100	40	1	0	Pos
14	381.630	382.150	0.052	3	100	40	1	0	Po.
15	385.650	306.130	0.032	3	100	40	1	0	Po.
16	307.650	388.150	0.032	3	100	40	1	0	Po.
17	309.650	390.150	0.052	3	100	40	1	0	Pos
10	391.650	392.150	0.052	3	100	40	1	0	Po.
19	401.650	402.150	0.052	3	100	40	1	0	Po.
20	403.650	404.150	0.054	3	100	40	1	0	Po.
21	445.530	446.050	0.052	3	100	40	1	0	Po.

4/17/91 12:33:39 SCAN 2184 OF 4000

MID scan
Scan tire: 1.200 s

Desc: 03
Samp. Int.: 0.200 ms

Mass interval.: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	371.650	372.150	0.032	3	100	40	1	0	Po.
2	373.650	374.150	0.032	3	100	40	1	0	Pos
3	375.650	376.150	0.032	3	100	40	1	0	Po.
4	385.650	386.150	0.052	3	100	40	1	0	Pos
5	387.650	388.150	0.052	3	100	40	1	0	Pos
6	309.650	390.150	0.052	3	100	40	1	0	Pos
7	391.650	392.150	0.032	3	100	40	1	0	Pos
8	401.650	402.150	0.032	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	405.550	406.050	0.034	3	100	40	1	0	Po.
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Por
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.550	422.050	0.054	3	100	40	1	0	Po.
15	423.550	424.050	0.054	3	100	40	1	0	Pos
16	425.550	426.050	0.052	3	100	40	1	0	Po.
17	435.550	436.050	0.032	3	100	40	1	0	Po.
18	437.550	438.050	0.052	3	100	40	1	0	Po.
19	479.550	480.050	0.034	3	100	40	1	0	Po.

4/17/91 12:39:49 SCAN 2484 OF 4000

HID scan
Scan tine: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Po.
3	409.550	410.050	0.054	3	100	40	1	0	Pos

3206520

4/17/91 11:48:37 SCAN 1 OF 4000
Acquisition started

Acquire
04/17/91 11:48:00 + 0:04
Sample: 2UL OF BB3463 (1000ML WATER) FOR TOTALS
Conds. : 60M DB-5/TOTALS.
Formula:
Submitted by: JB

Run 0:TBB3463EE
Free sectors: 6994
Instrument: G3
Analyst: DT

ACQUIRING
Scan: 3 of 4000
Weight: 0.000
Acct. No: PC4622

********** CC PARAMETERS **********

Loaded GC Desc:BW Current GC oven tmp: 69 DegC Injector : 300 DegC
Current CC Desc:BW CC elapsed time : 2:11 min Int. oven : 275 DcgC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	SO - 70	25.0	0.7	0.e	Divert	10.8	0.0
3	70 - 70	-	10.0	10.e			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan
Scan time: 1.200 s

Desc: B1
Samp. int.: 0.200 ms

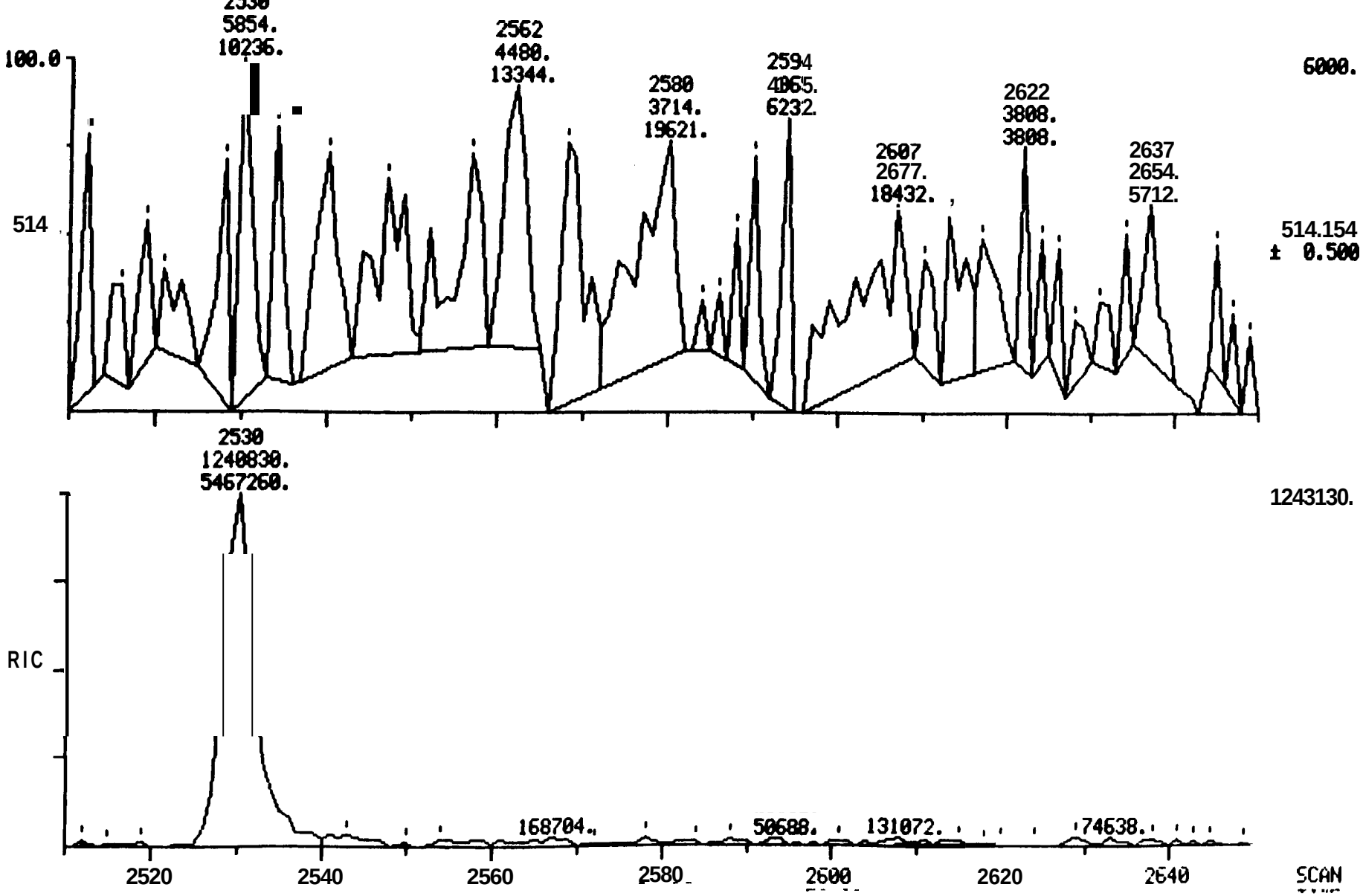
Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.032	3	100	40	1	0	Pos
2	303.630	306.150	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.630	316.150	0.052	3	100	40	1	0	Pos
3	317.650	318.150	0.034	3	100	40	1	0	Pos
6	319.630	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.630	334.150	0.034	3	100	40	1	0	Pos
11	337.630	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.052	3	100	40	1	0	Pos
14	351.630	352.150	0.054	3	100	40	1	0	Pos
15	353.650	334.150	0.052	3	100	40	1	0	Pos
16	355.630	356.150	0.054	3	100	40	1	0	Pos
17	357.630	358.150	0.052	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.430	370.150	0.052	3	100	40	1	0	Pos
20	375.650	376.150	0.052	3	100	40	1	0	Por
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	a	
Full scale mass	1000	u
Zero scale mass	l	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mnu
Voltage settling time(MS)	4	

4/17/91 12:25:08 SCAN 1769 OF 4000

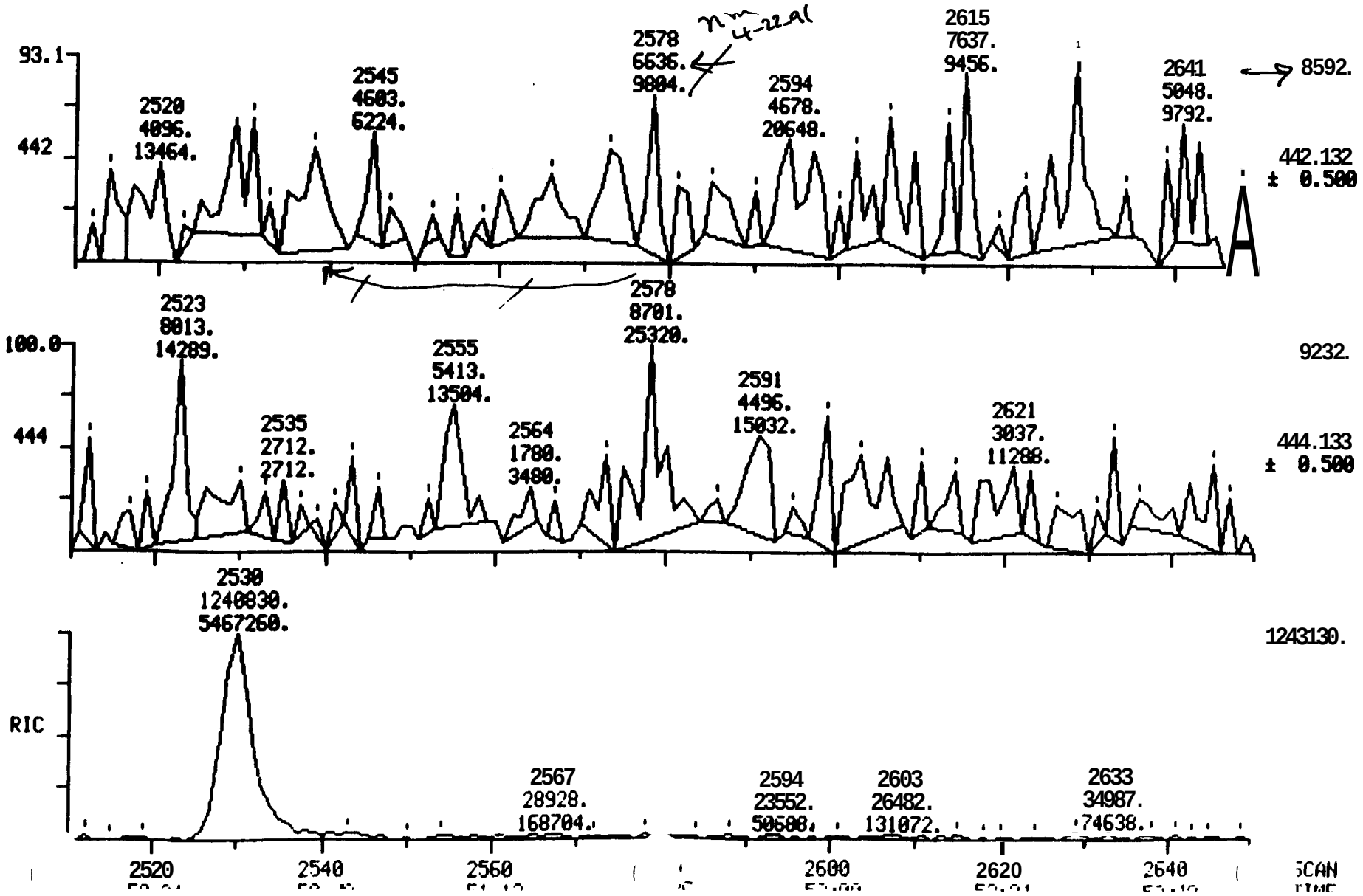
MIDRIC+MASS CHROMATOGRAM DATA: TBB3463EE 41 SCANS 2510 TO 2650
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



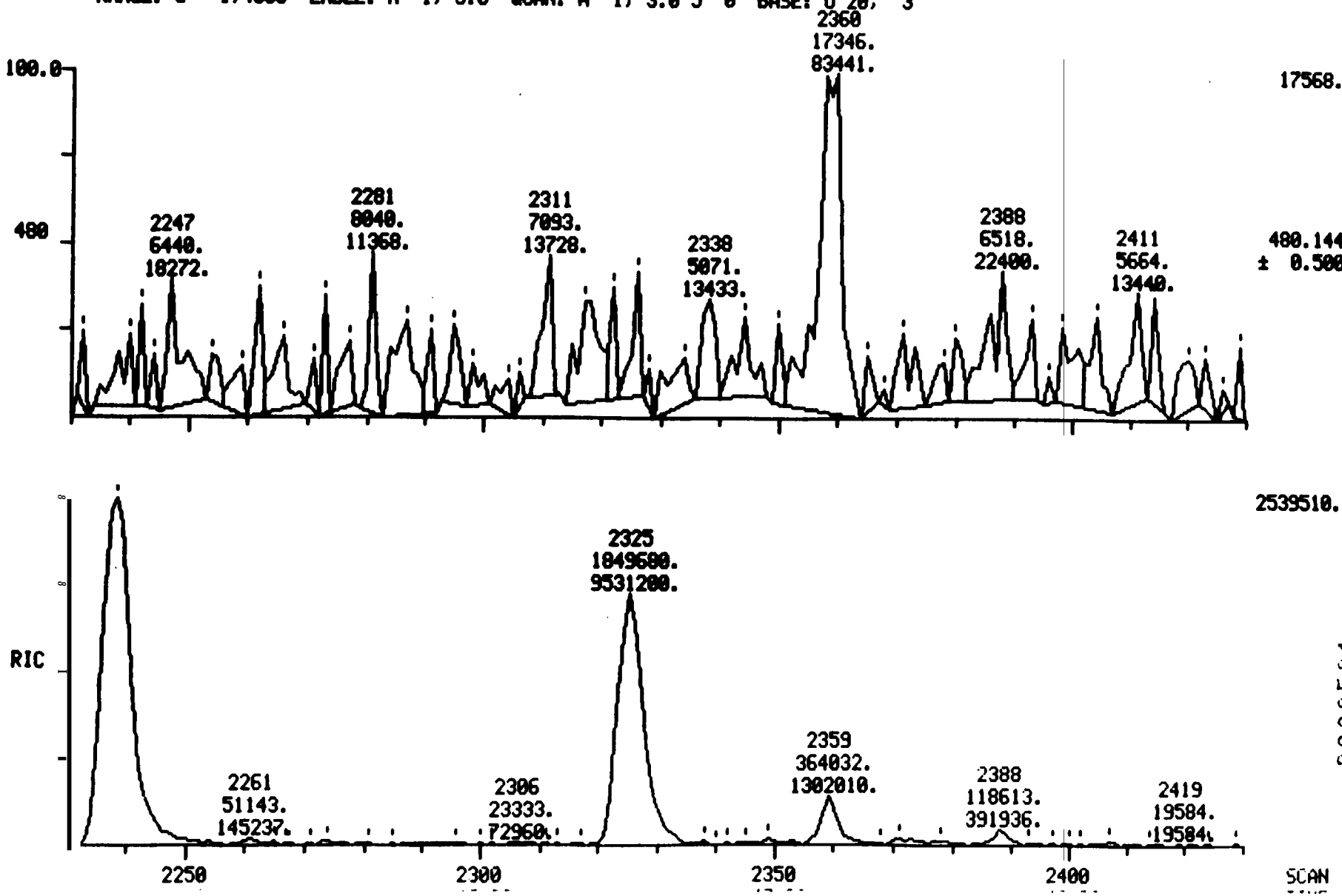
0550

MIDRIC+MASS CHROMATOGRAMS DATA: TB83463EE #1 SCANS 2510 TO 2650
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 883463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDF
NDC 1.8 PPE)



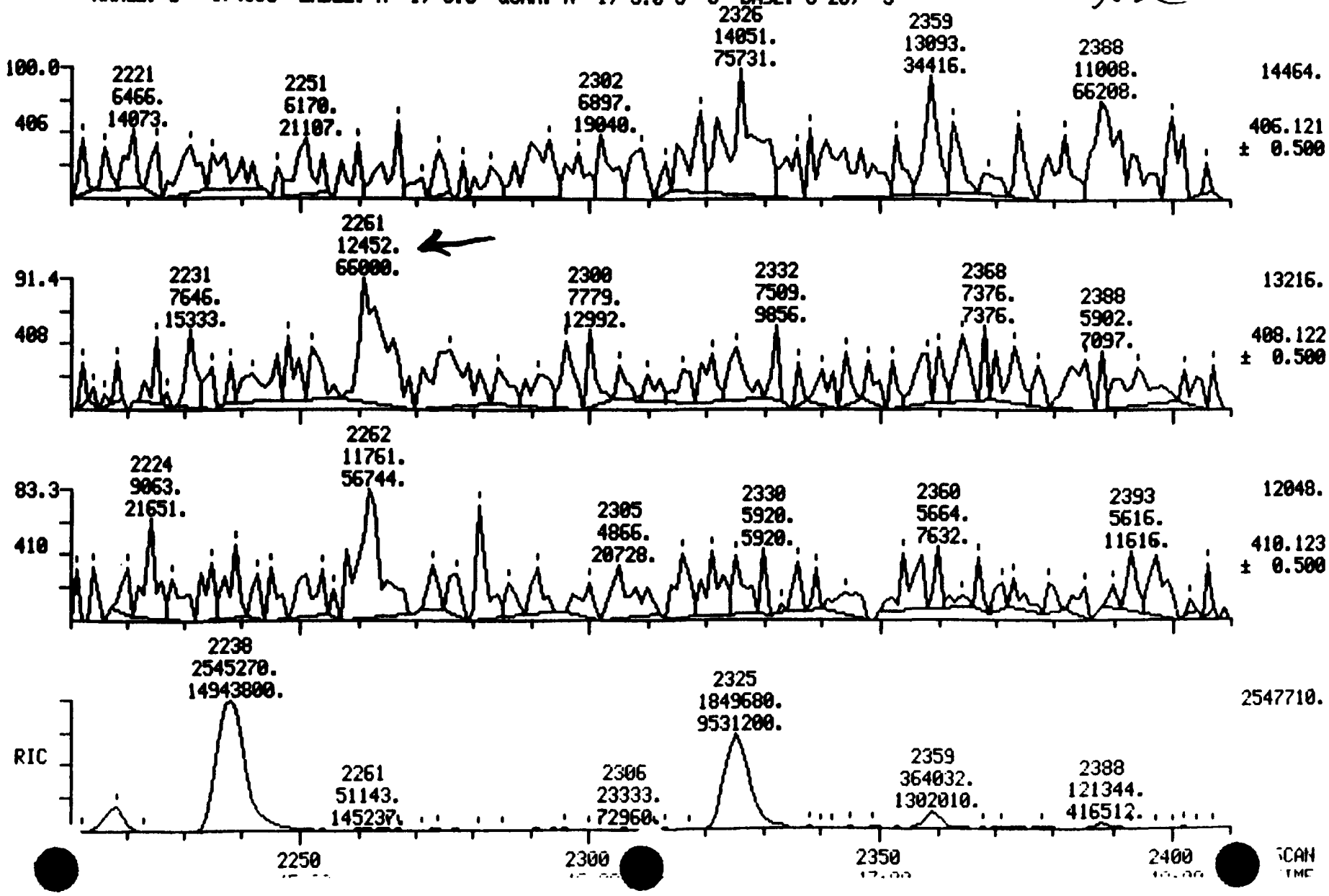
MIDRIC+MASS CHROMATOGRAM DATA: TBB3463EE #1 SCANS ≧30 TO ≯30
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200531

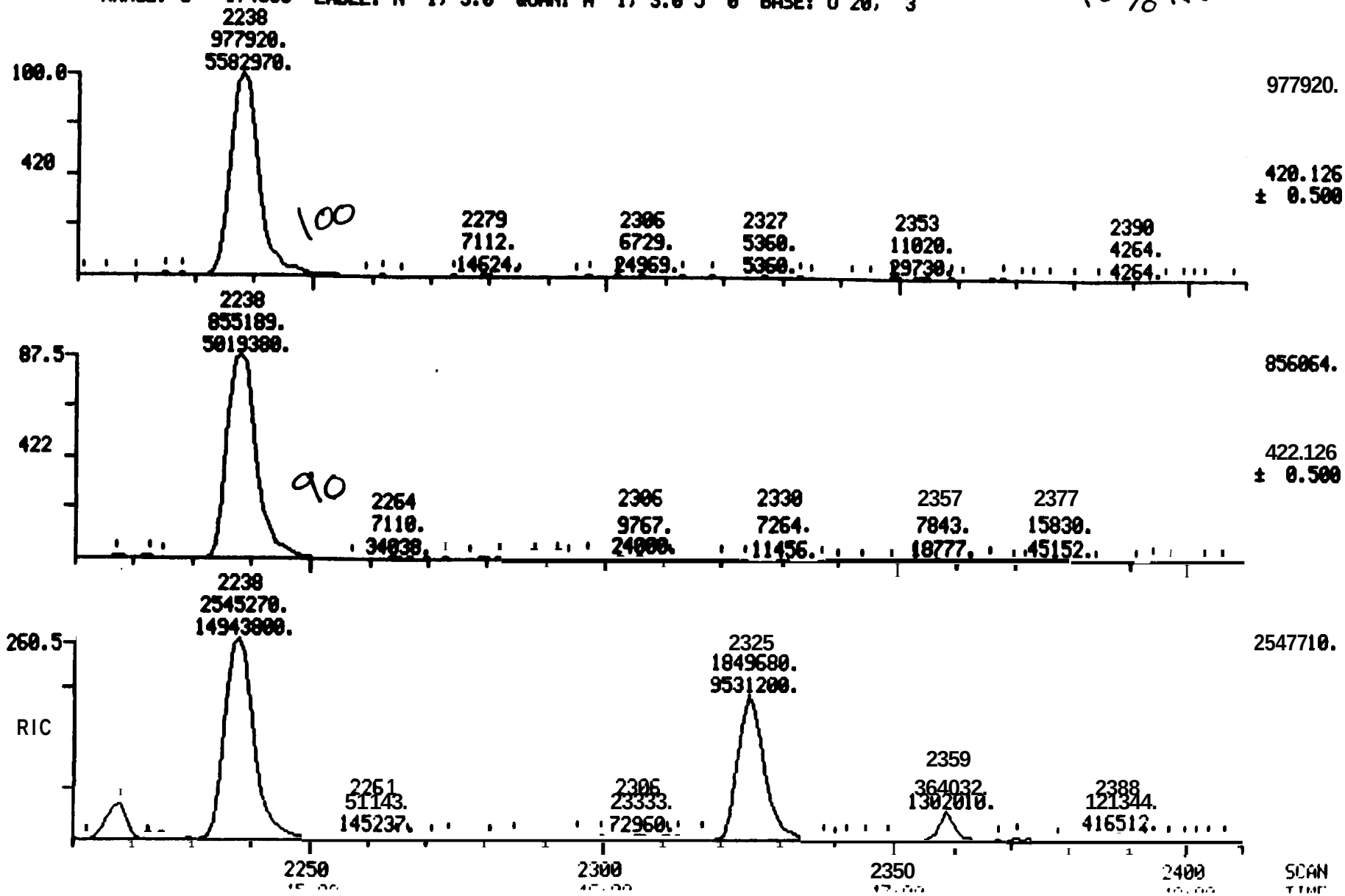
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 2210 TO 2410
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HpCDF
NDC 1.7 ppt



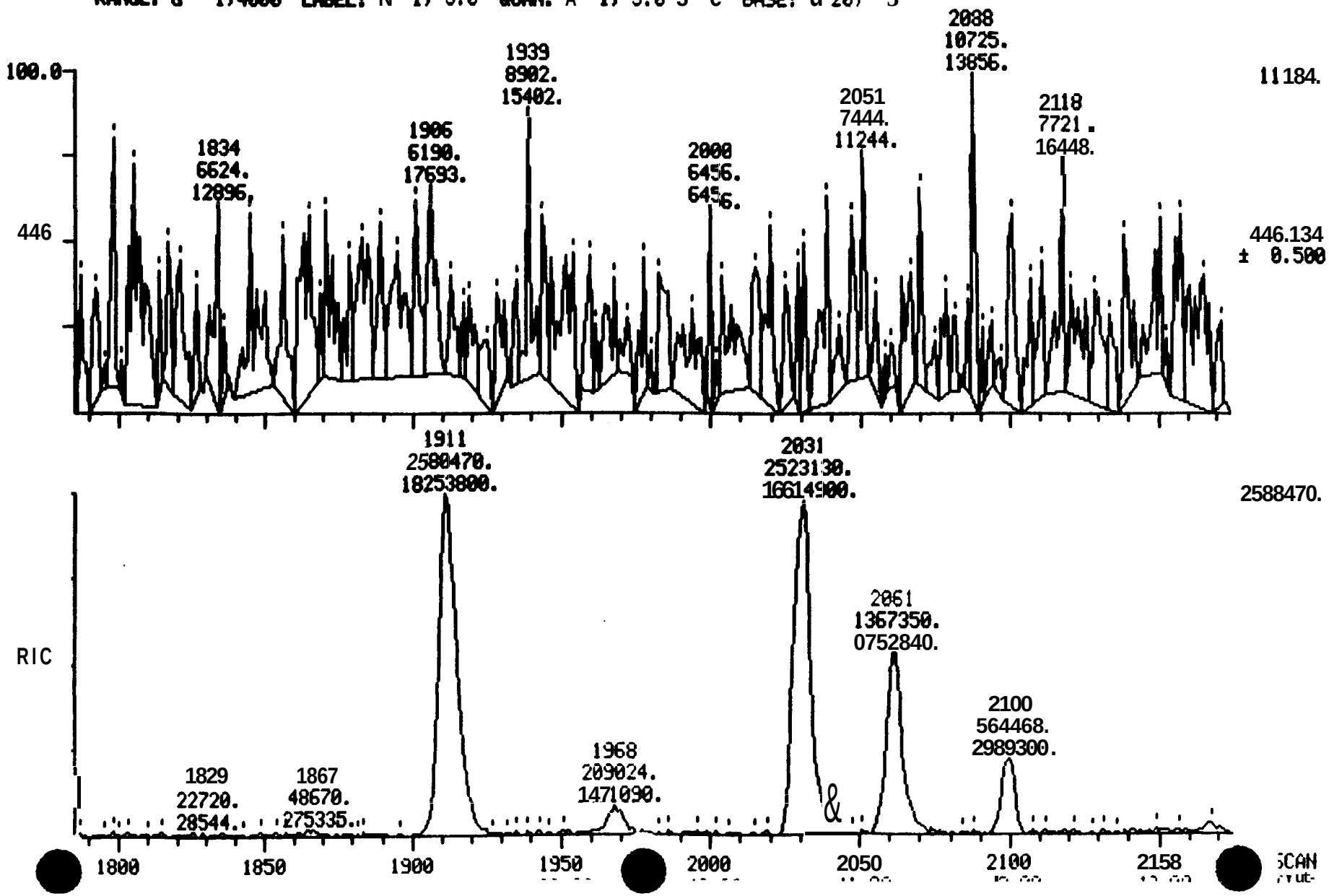
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 2210 TO 2410
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

92% Rec.



3200532

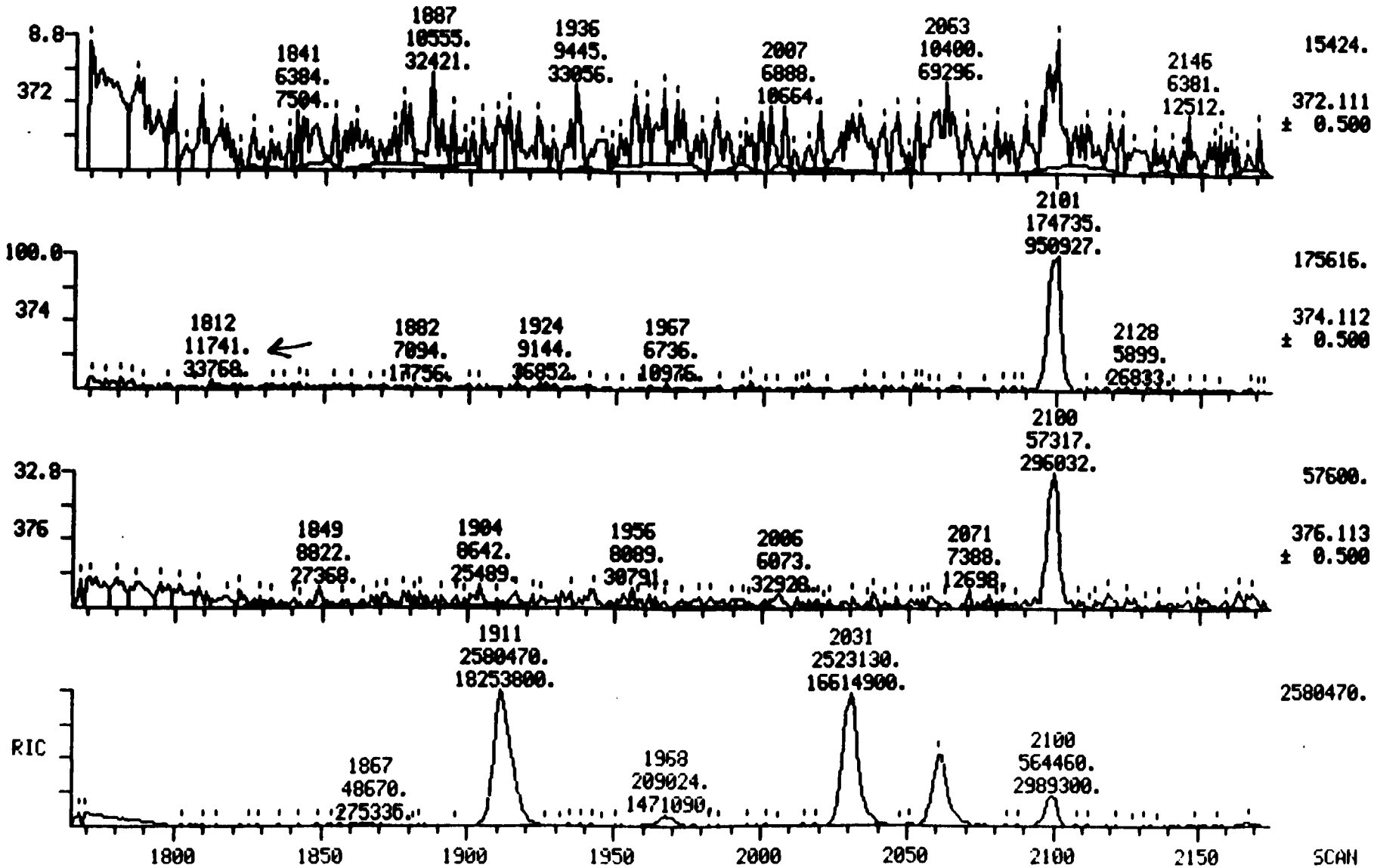
MIDRIC+MASS CHROMATOGRAM DATA: TB83463EE #1 SCANS 1785 TO 2175
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF B83463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1765 TO 2175
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HxCDF

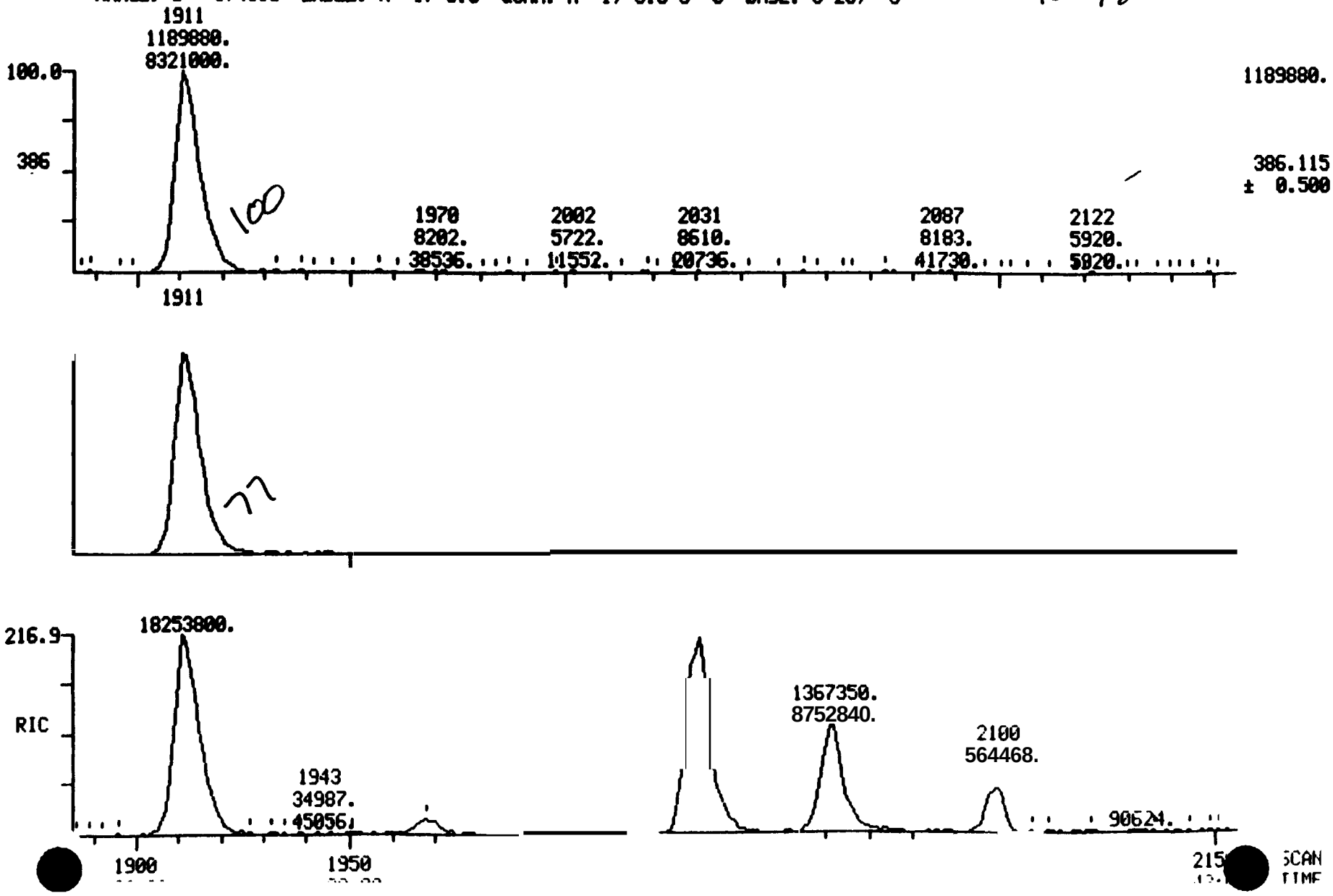
ND(1.1 PPt)



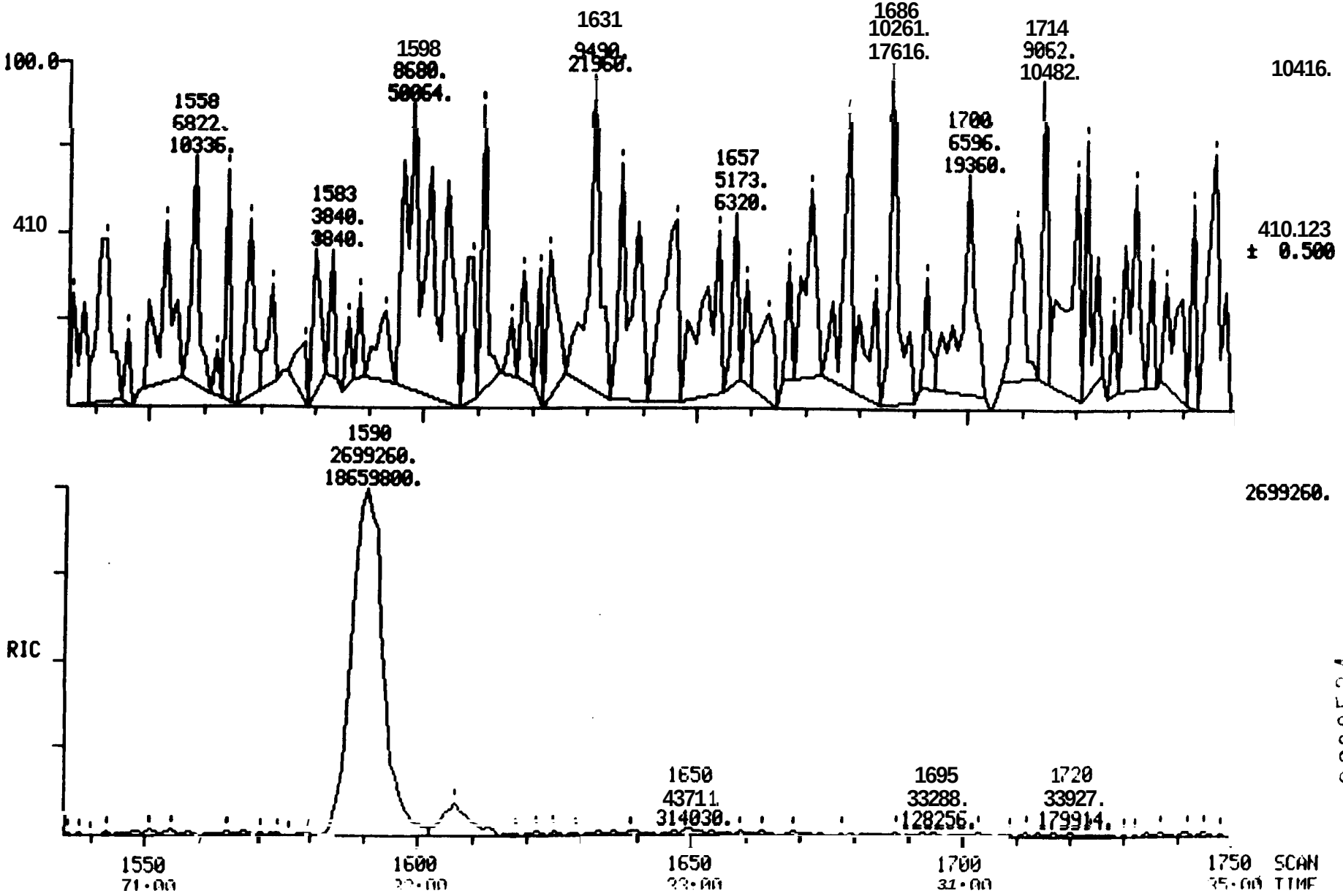
320C533

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1885 TO 2155
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

100% Rec.

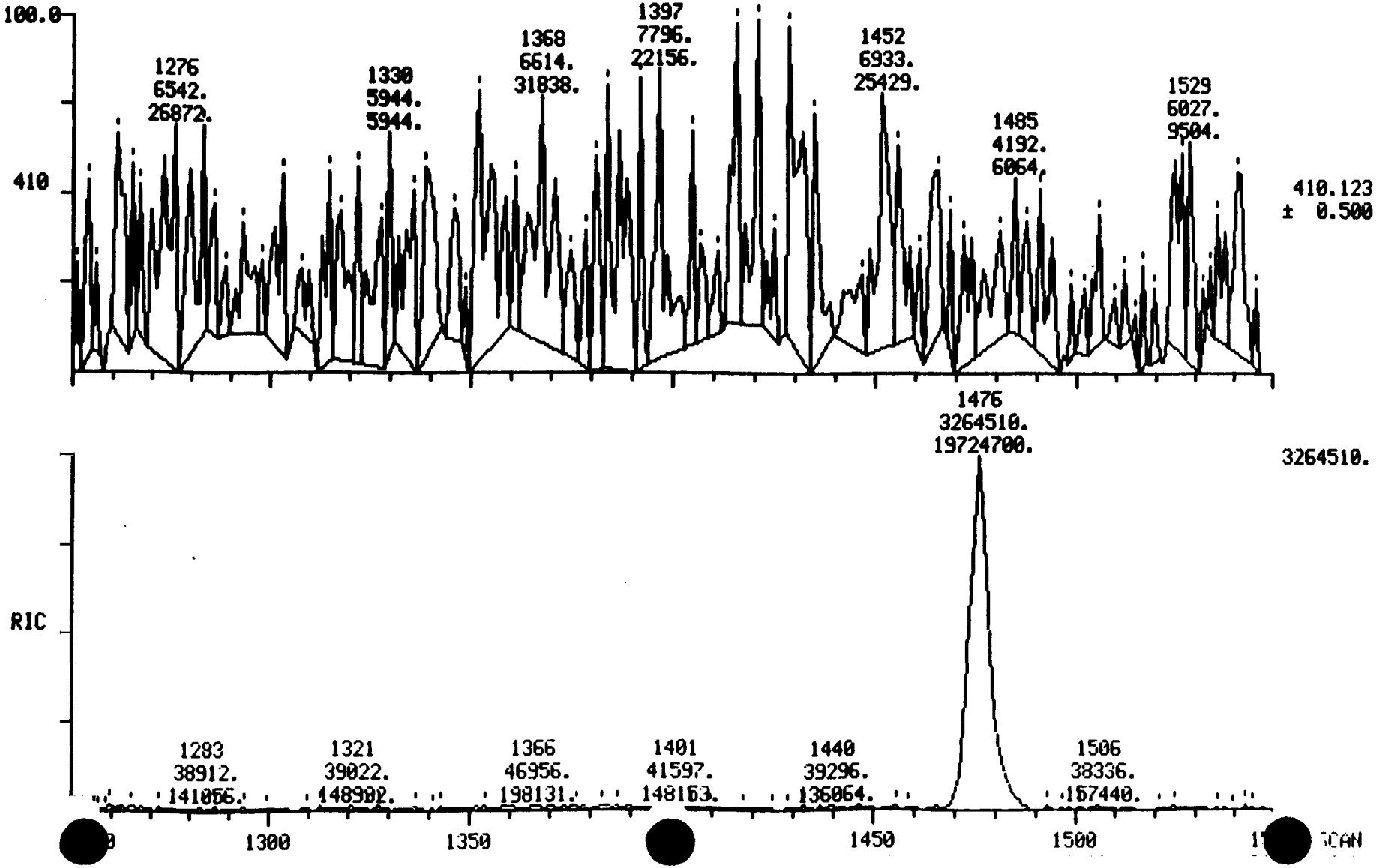


MIDRIC+MASS CHROMATOGRAM DATA: TBB3463EE #1 SCANS 1535 TO 1750
84/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

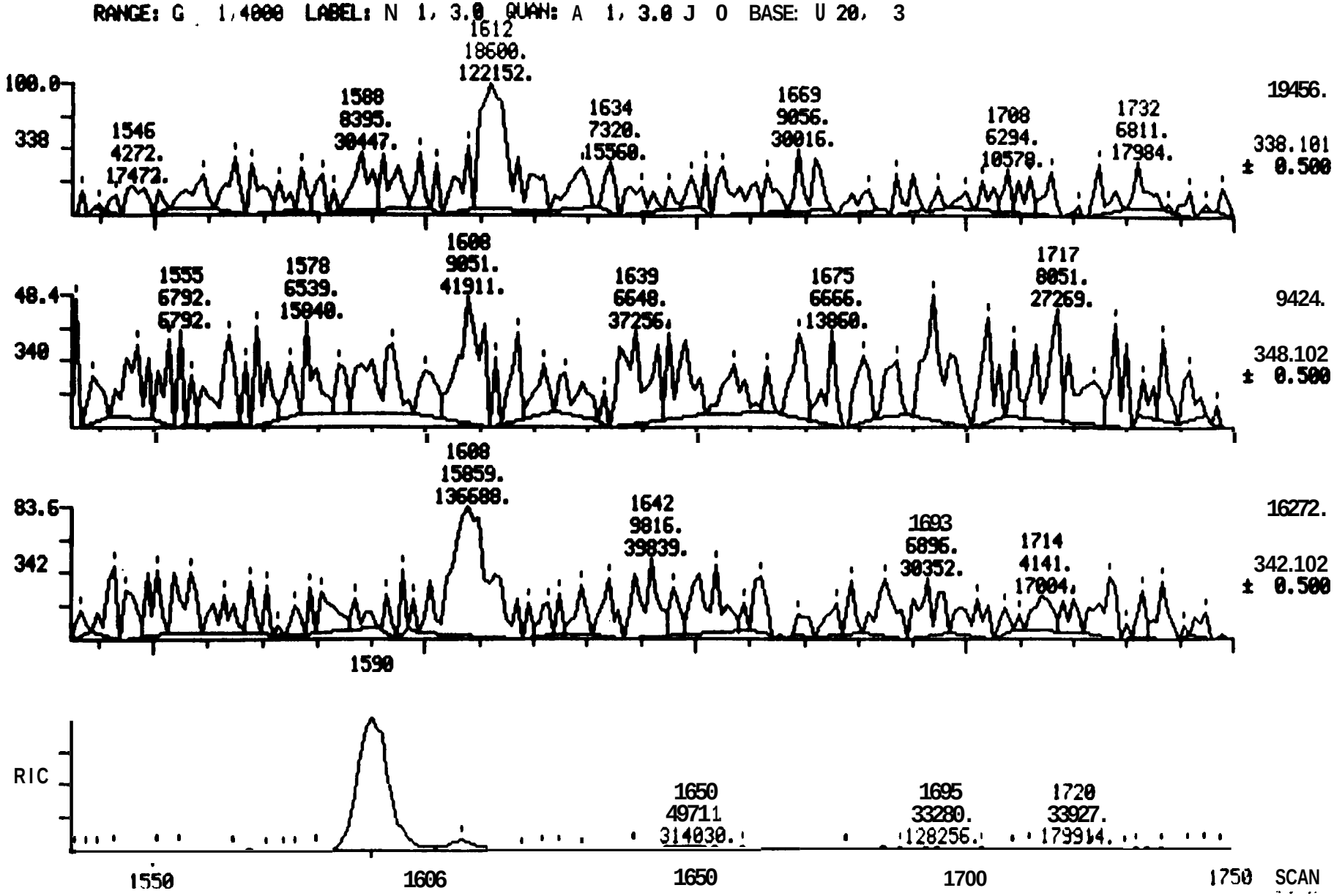


3200534

MIDRIC+MASS CHROMATOGRAM DATA: TBB3463EE #1 SCANS 1250 TO 1550
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



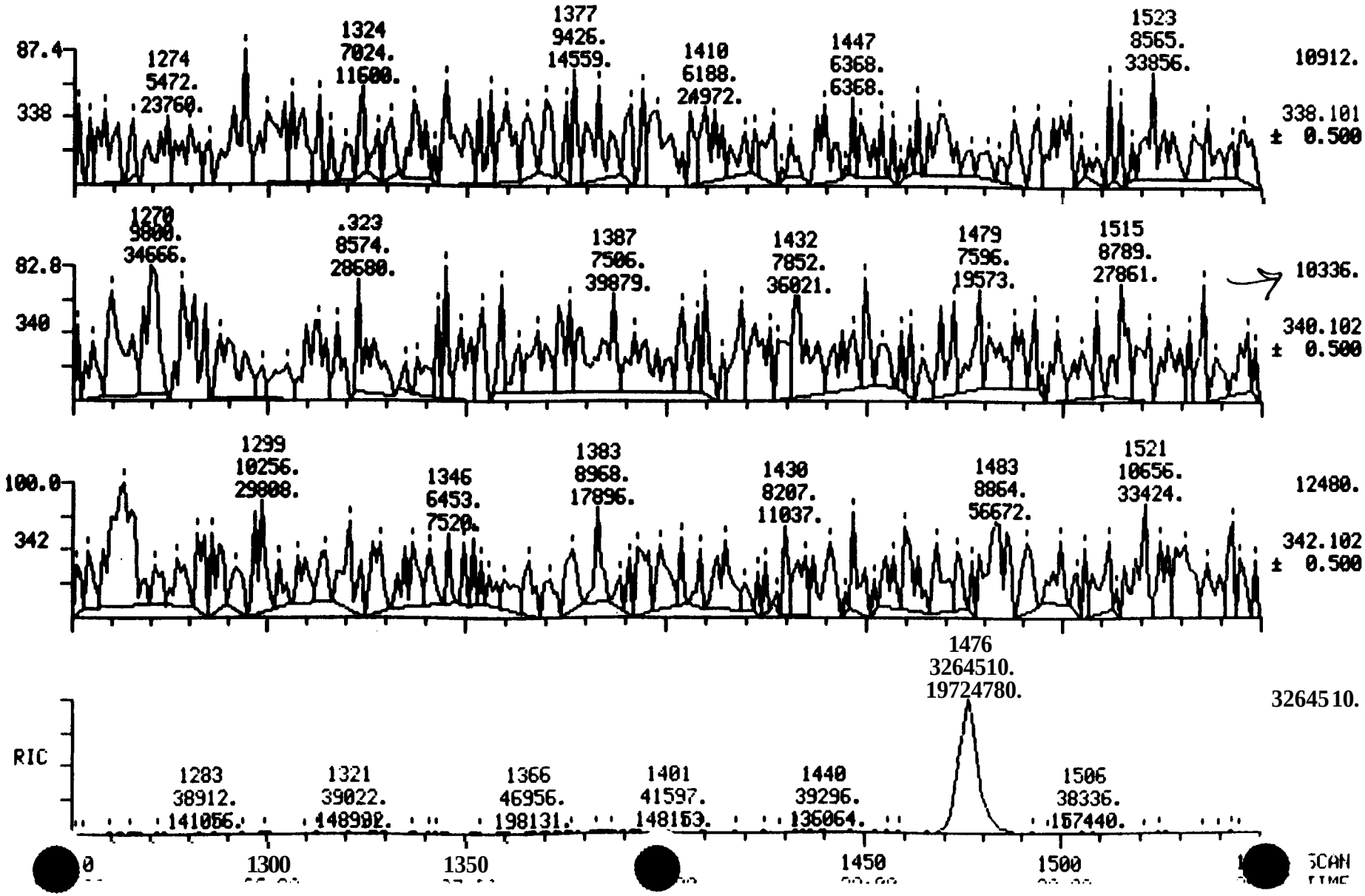
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1535 TO 1750
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 883463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



32005

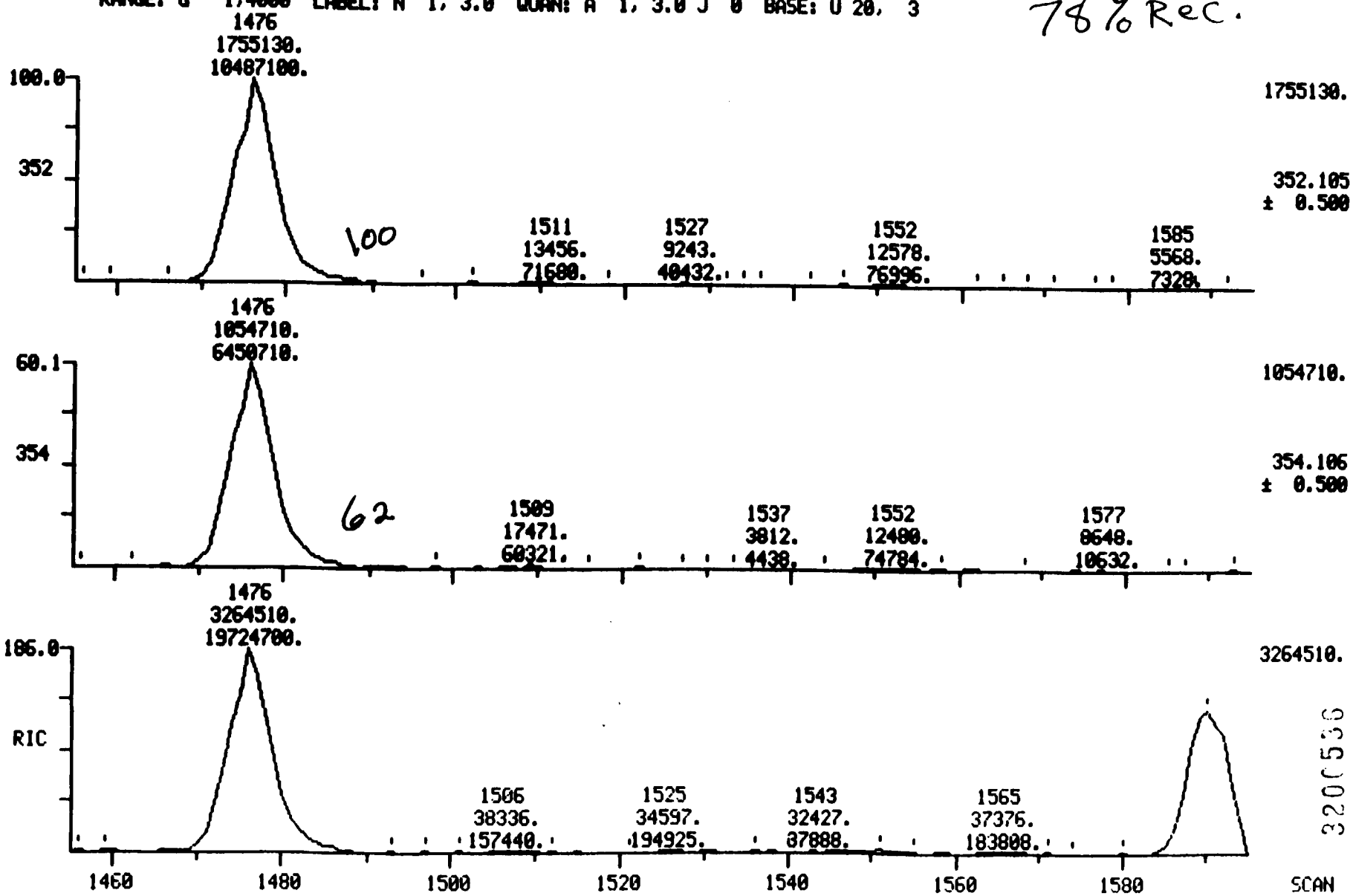
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1250 TO 1550
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

PeCDF
ND(0.47 ppt)



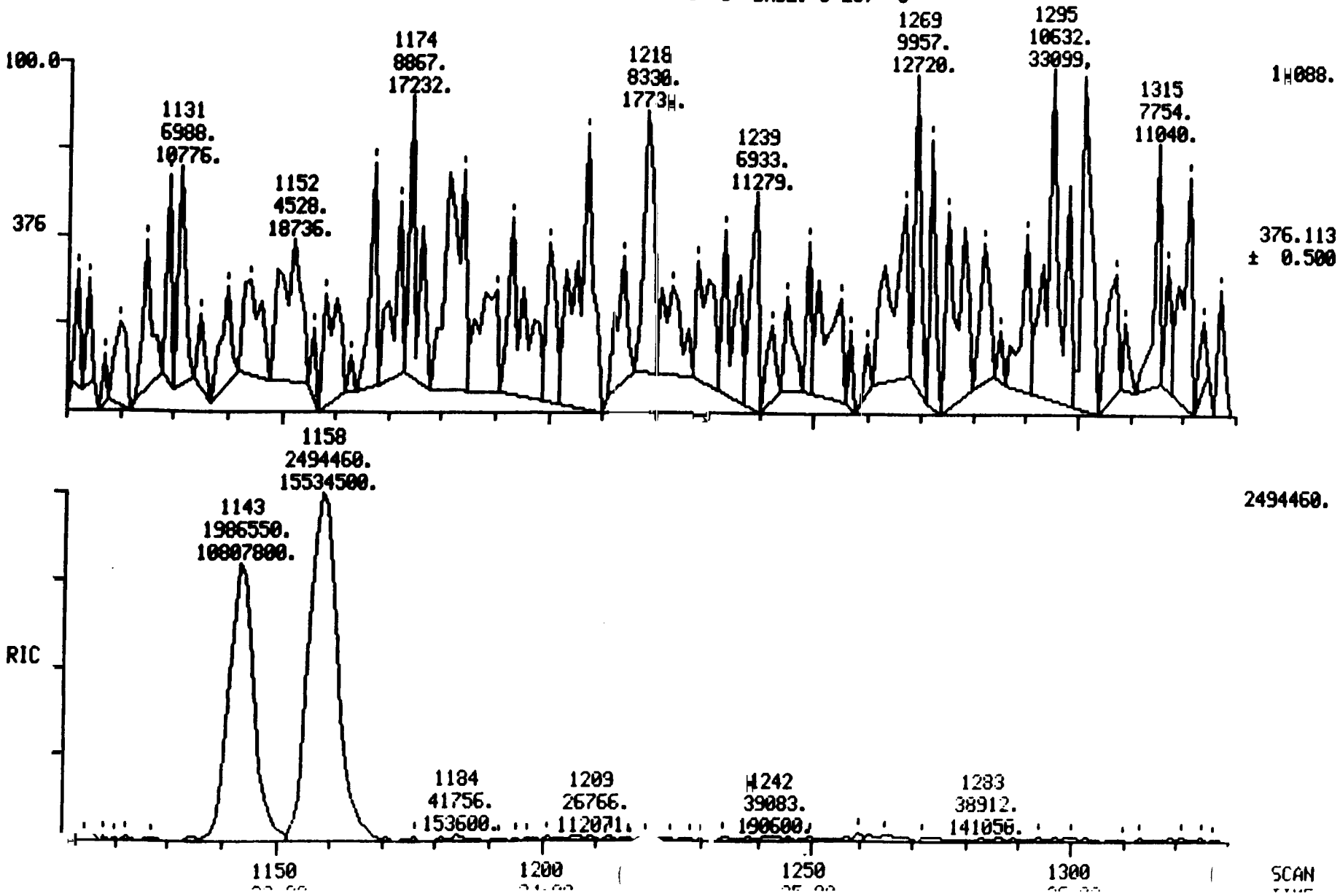
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1455 TO 1595
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

78% Rec.

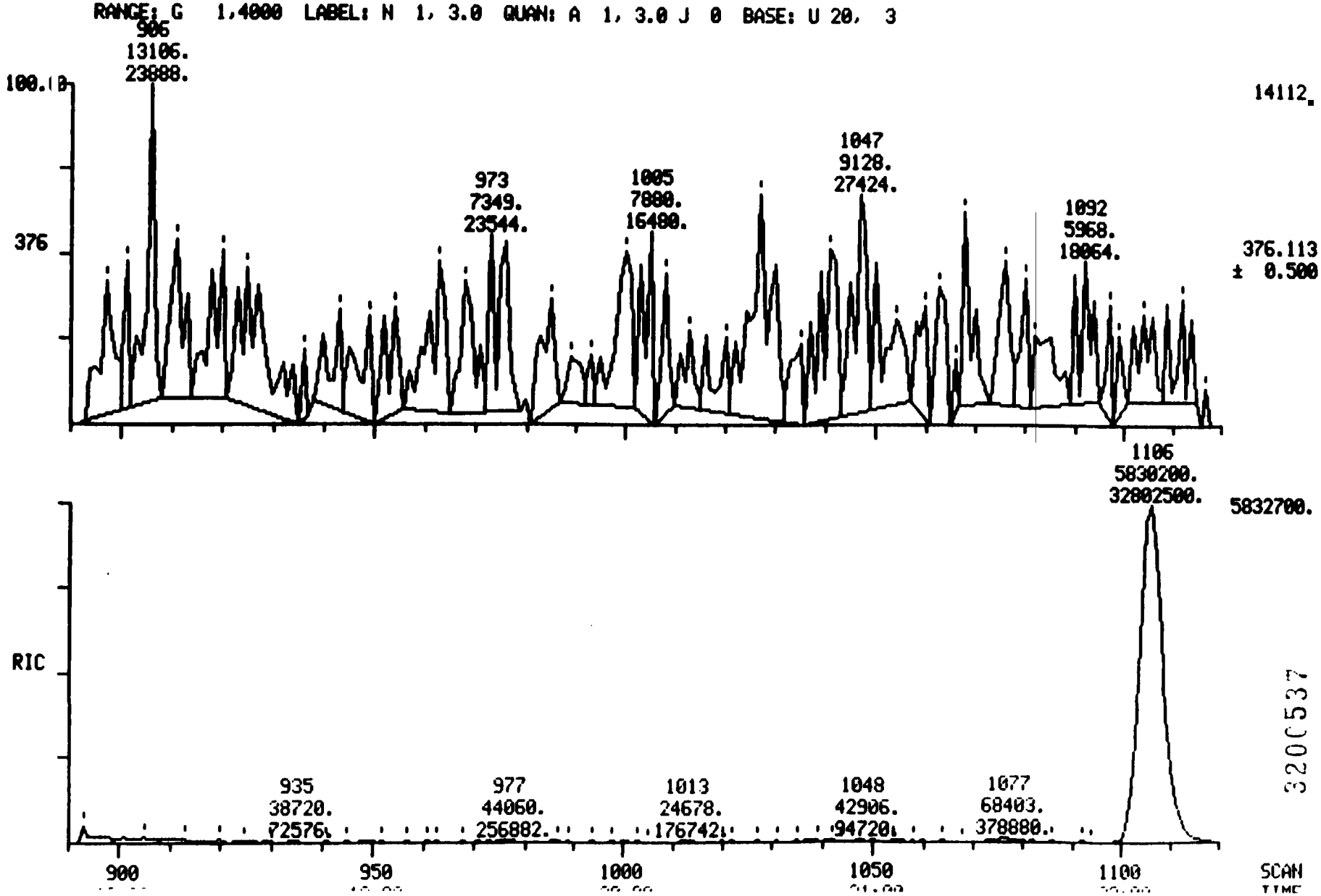


320C536

MIDRIC+MASS CHROMATOGRAM DATA: TBB3463EE #1 SCANS 1110 TO 1330
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAM DATA: TBB3463EE #1 SCANS 890 TO 1120
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1.4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

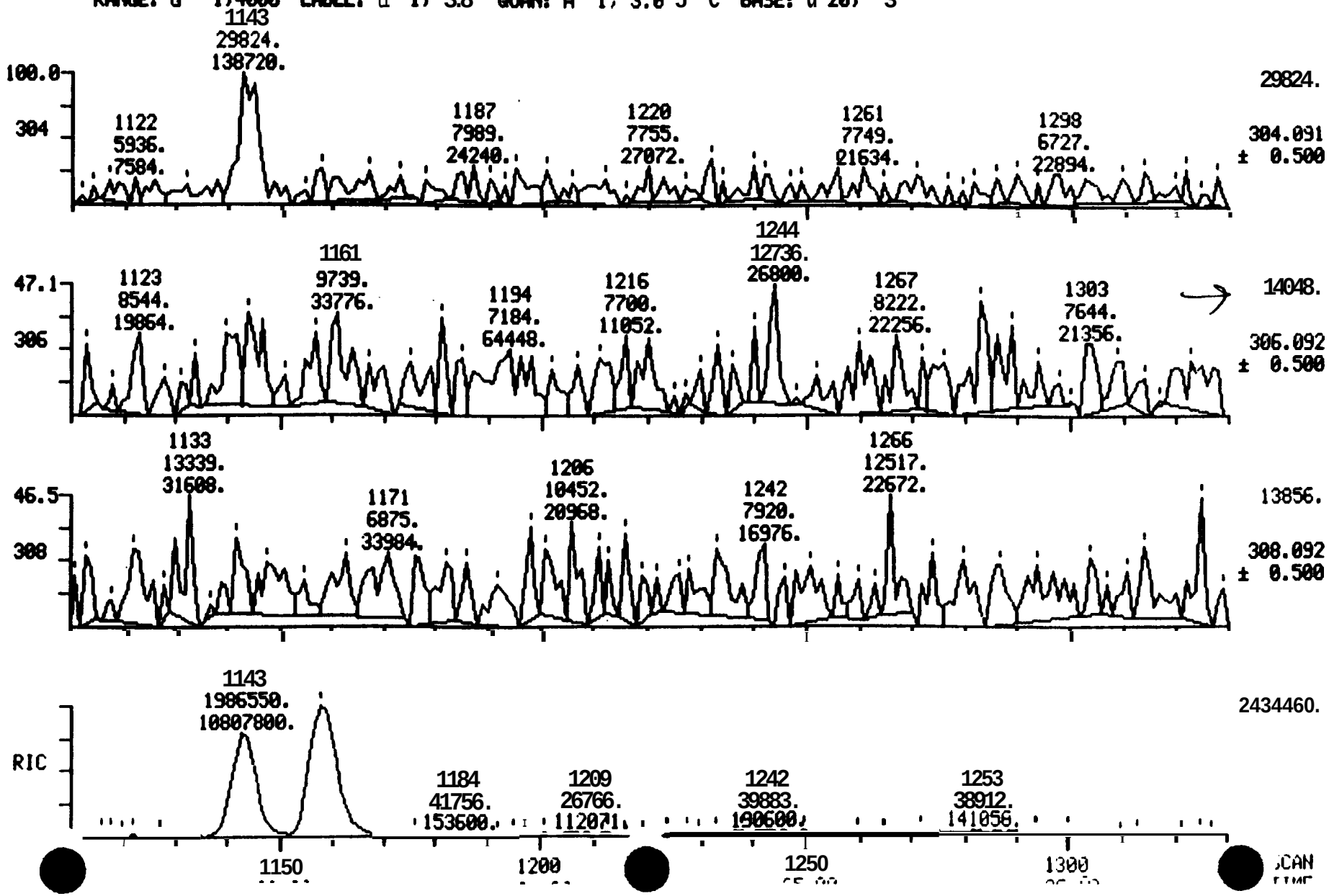


3200537

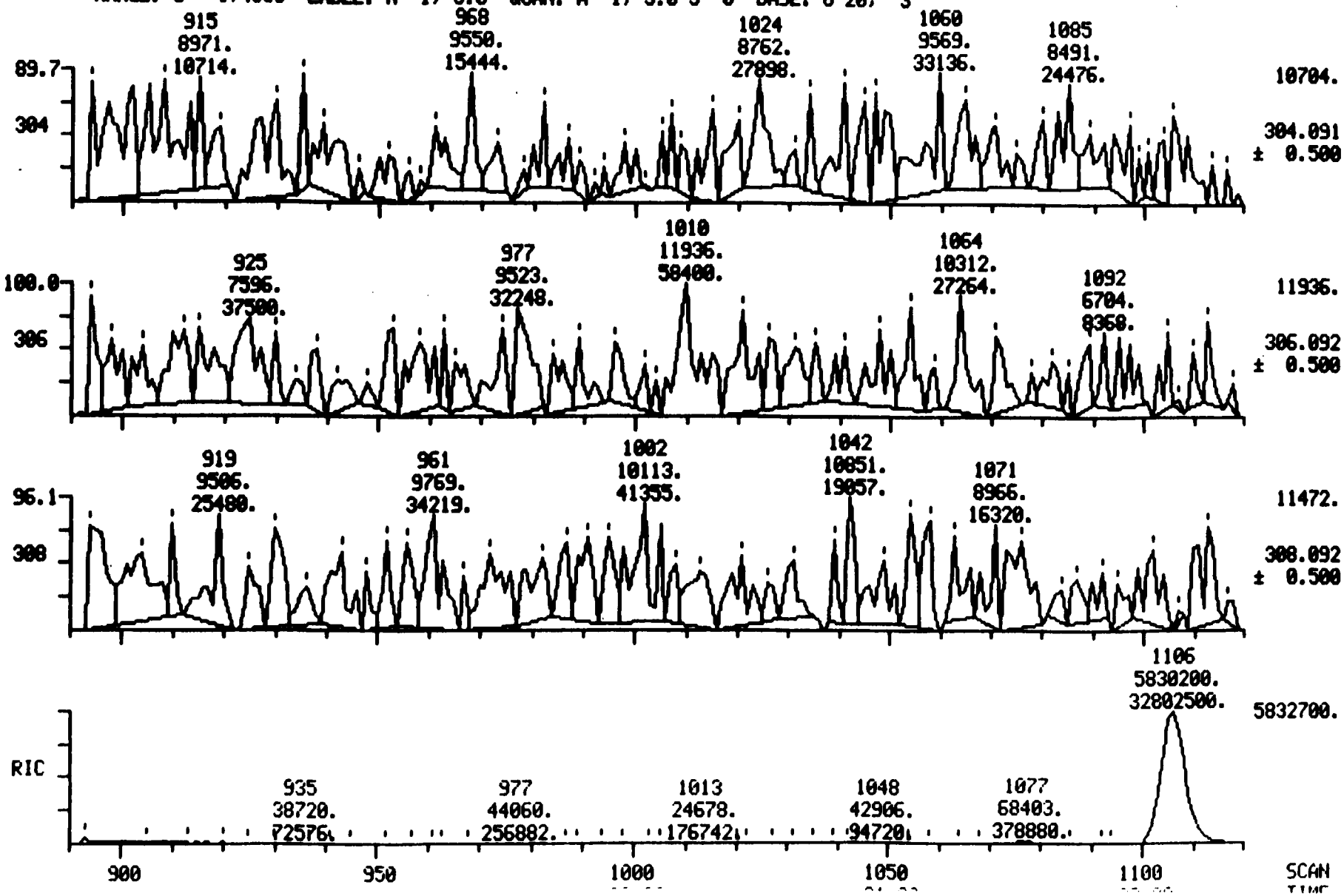
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1110 TO 1330
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: ti 1, 3.8 QUAN: A 1, 3.0 J e BASE: U 20, 3

TCDF

NDC & PPE)

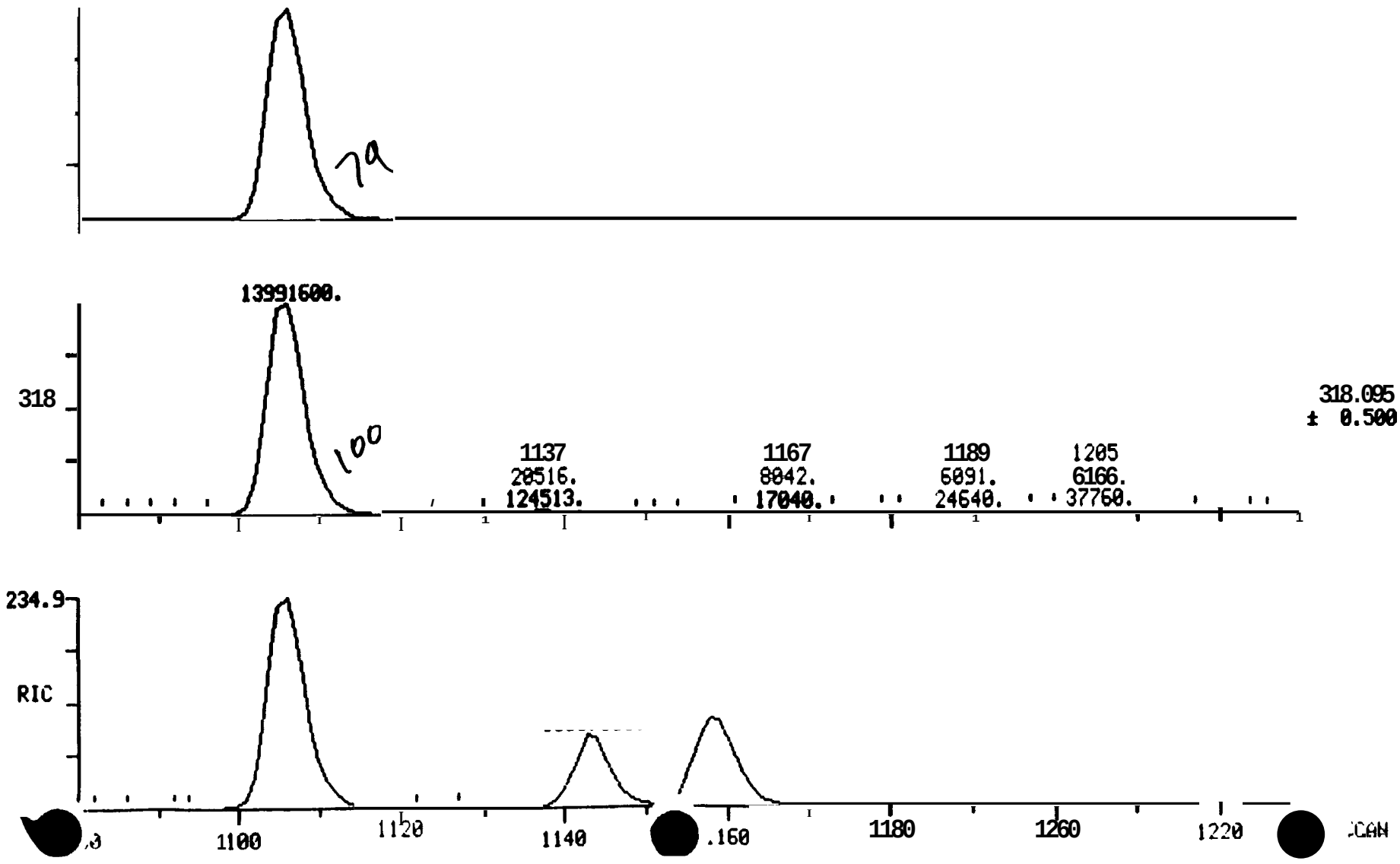


MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 890 TO 1120
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



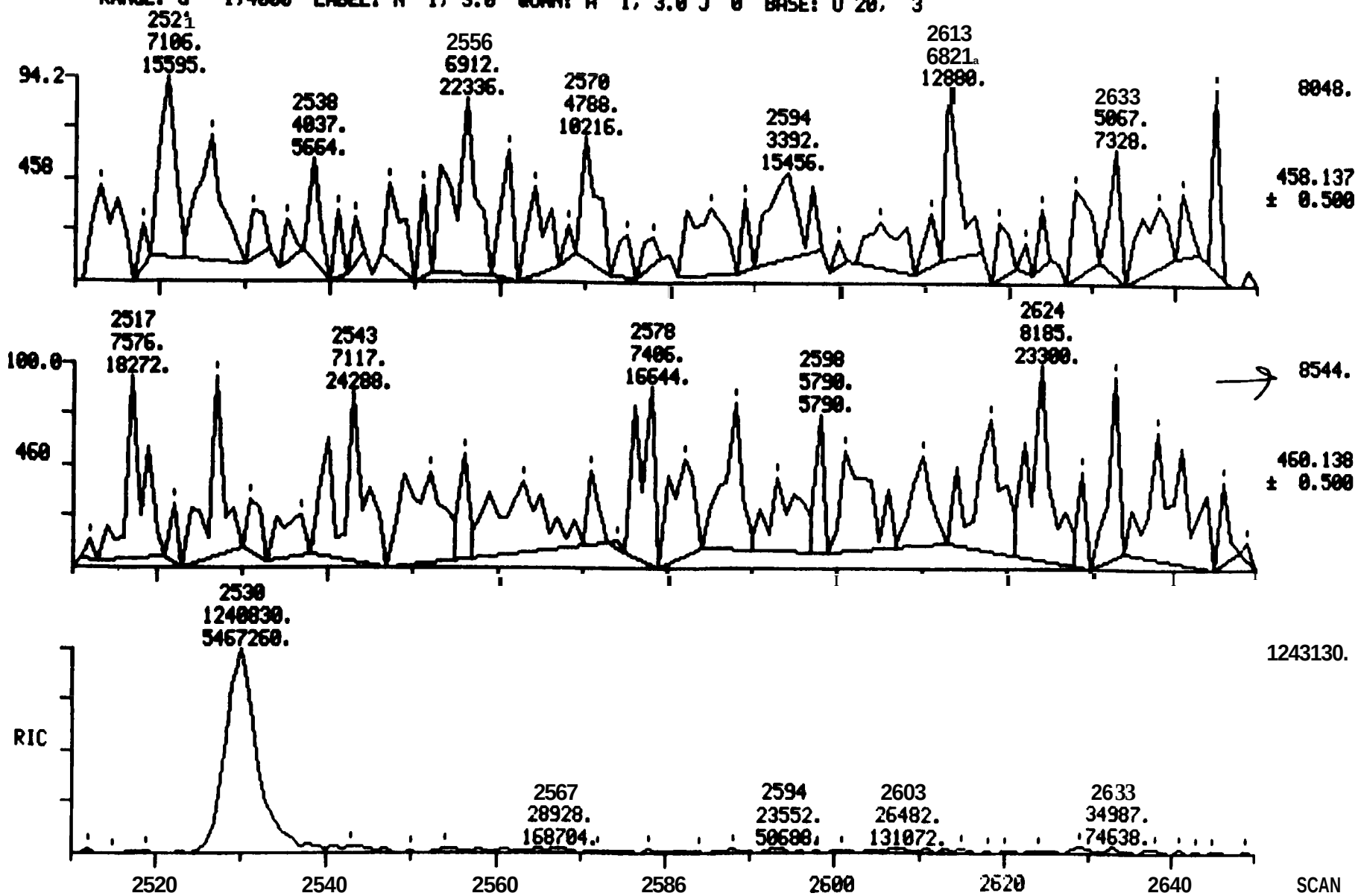
3201533

80%R


79
13991600.
318
100
1137
20516.
124513.
1167
8042.
17040.
1189
6091.
24640.
1205
6166.
37760.
318.095
± 0.500
234.9
RIC
1100
1120
1140
1160
1180
1260
1220
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 2510 TO 2650
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDD
ND(1.7 ppt)

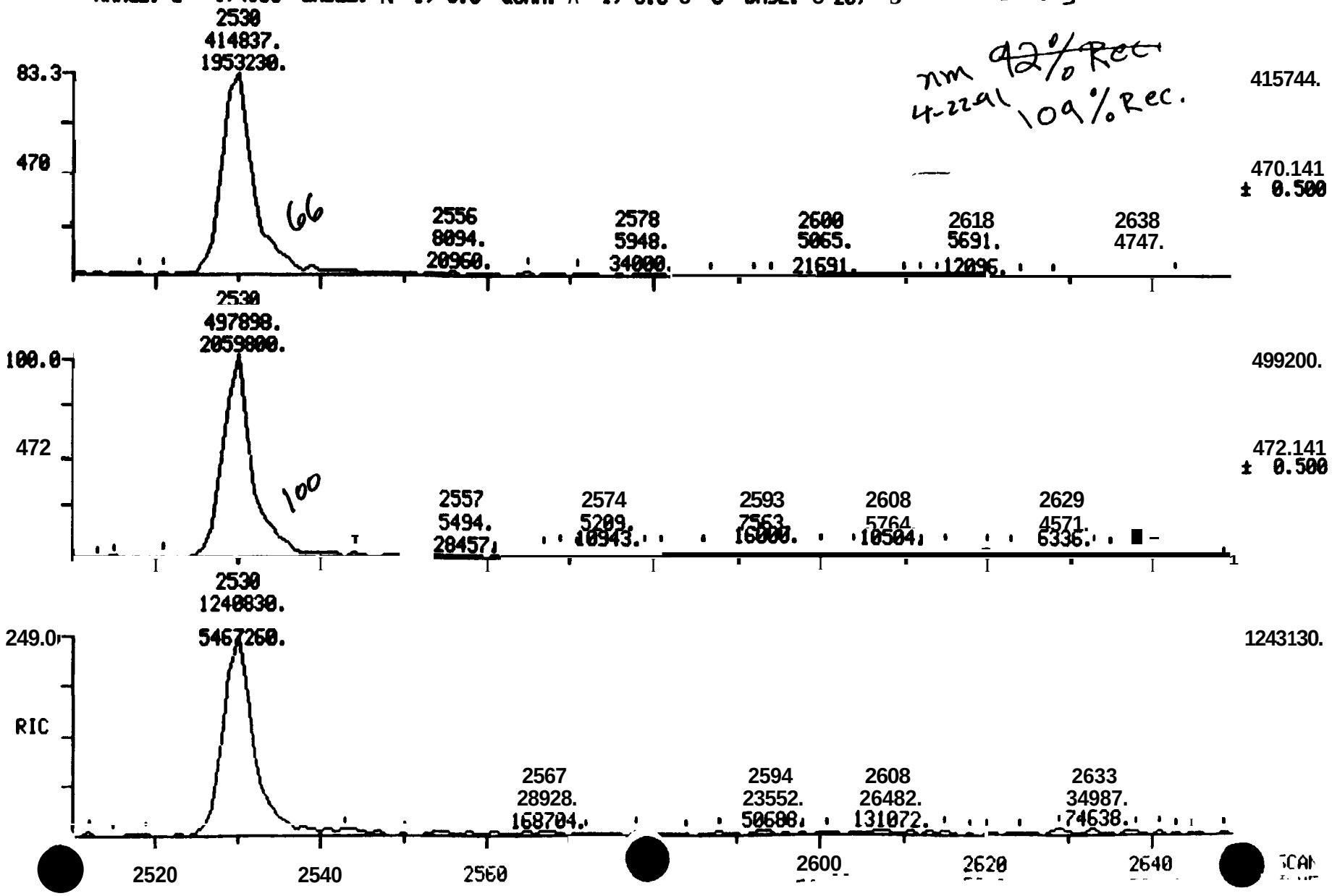


320530

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE 01 SCANS 2510 TO 2650
04/17/91 11:48:00 CALI: CAL910306A 02
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

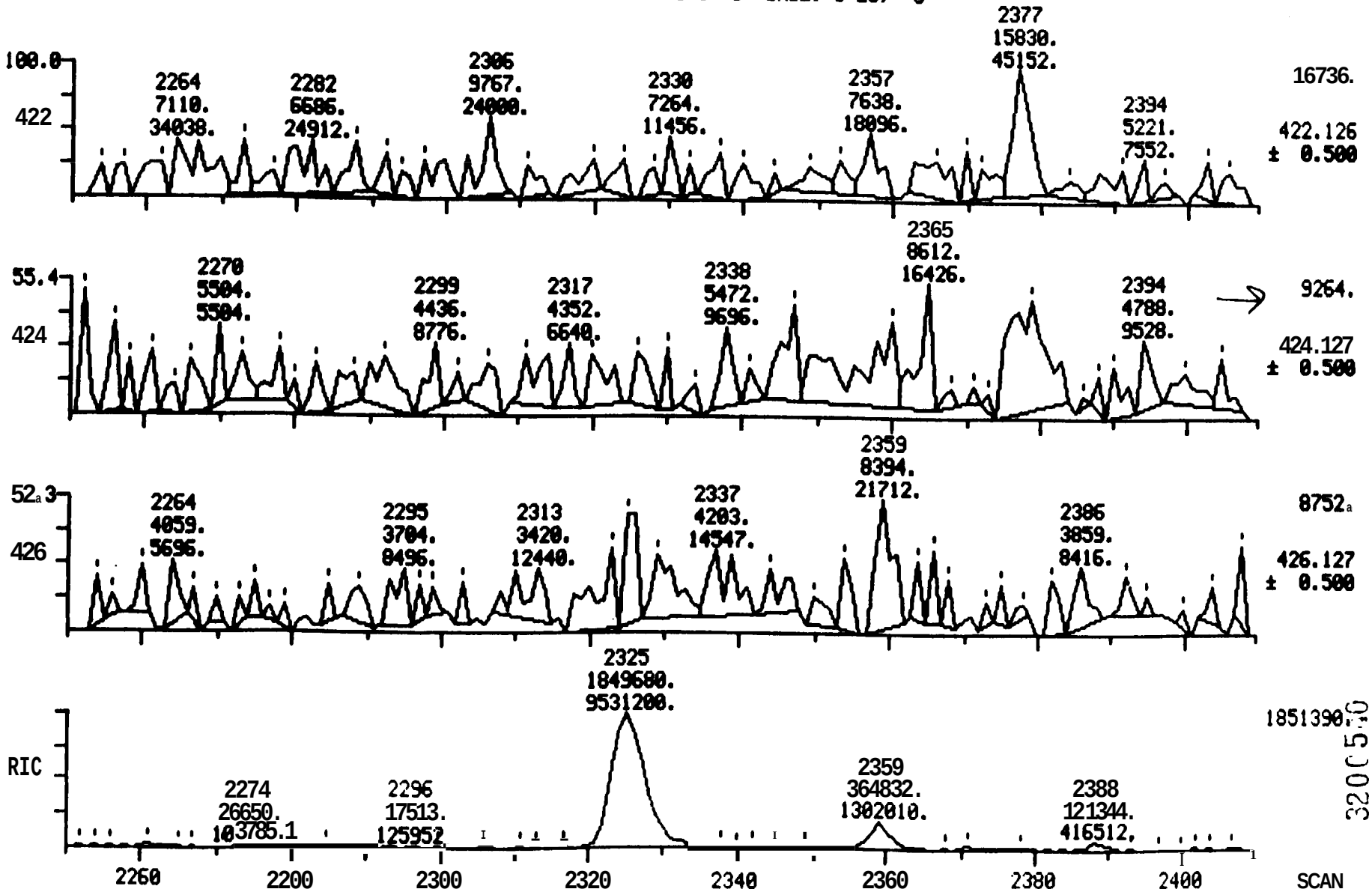
Daily RF = 0.314

nm ~~92% Rec~~
4-22al 109% Rec.



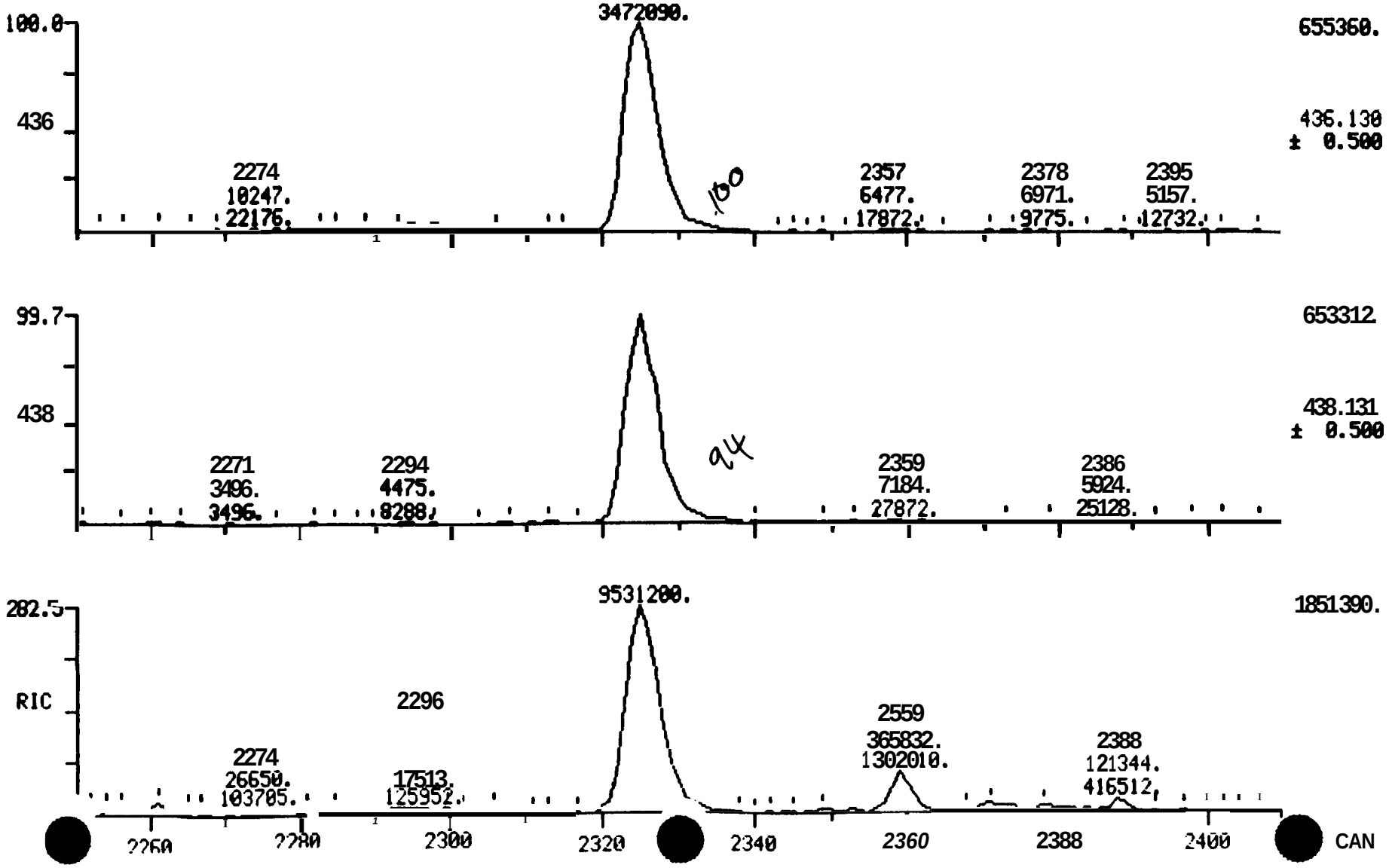
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 2250 TO 2410
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

HpCDD
ND(1.9 ppt)



320C5.0

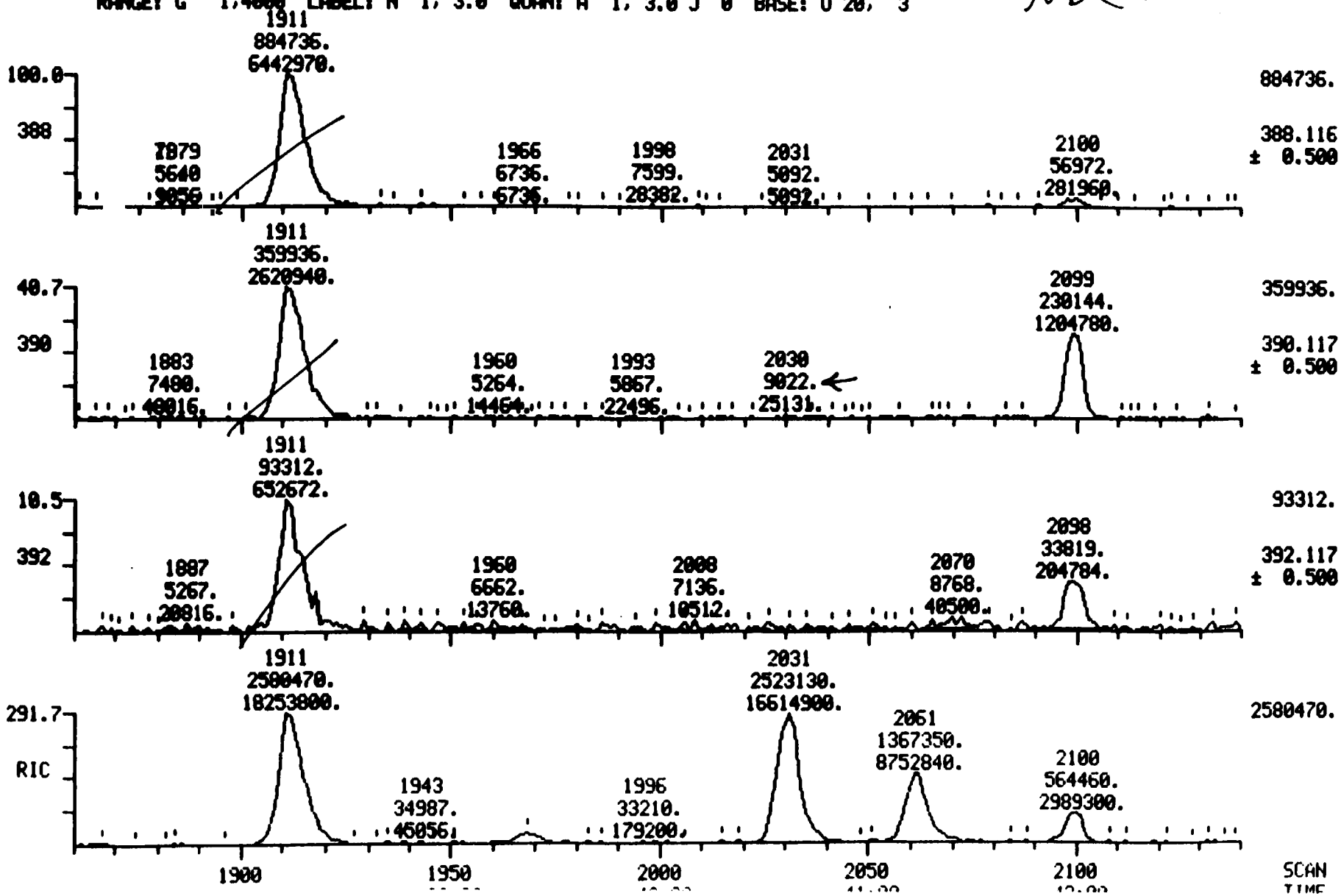
64% Rec


100.0
436
3472090.
655360.
436.130
± 0.500
2274
10247.
22176.
100
2357
6477.
17872.
2378
6971.
9775.
2395
5157.
12732.
99.7
438
653312
438.131
± 0.500
2271
3496.
3496.
2294
4475.
8288.
94
2359
7184.
27872.
2386
5924.
25128.
282.5
RIC
9531200.
1851390.
2296
2274
26650.
103705.
17513.
125952.
2559
365832.
1302010.
2388
121344.
416512.
2260
2280
2300
2320
2340
2360
2388
2400
CAN

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1860 TO 2140
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

H7xCDD

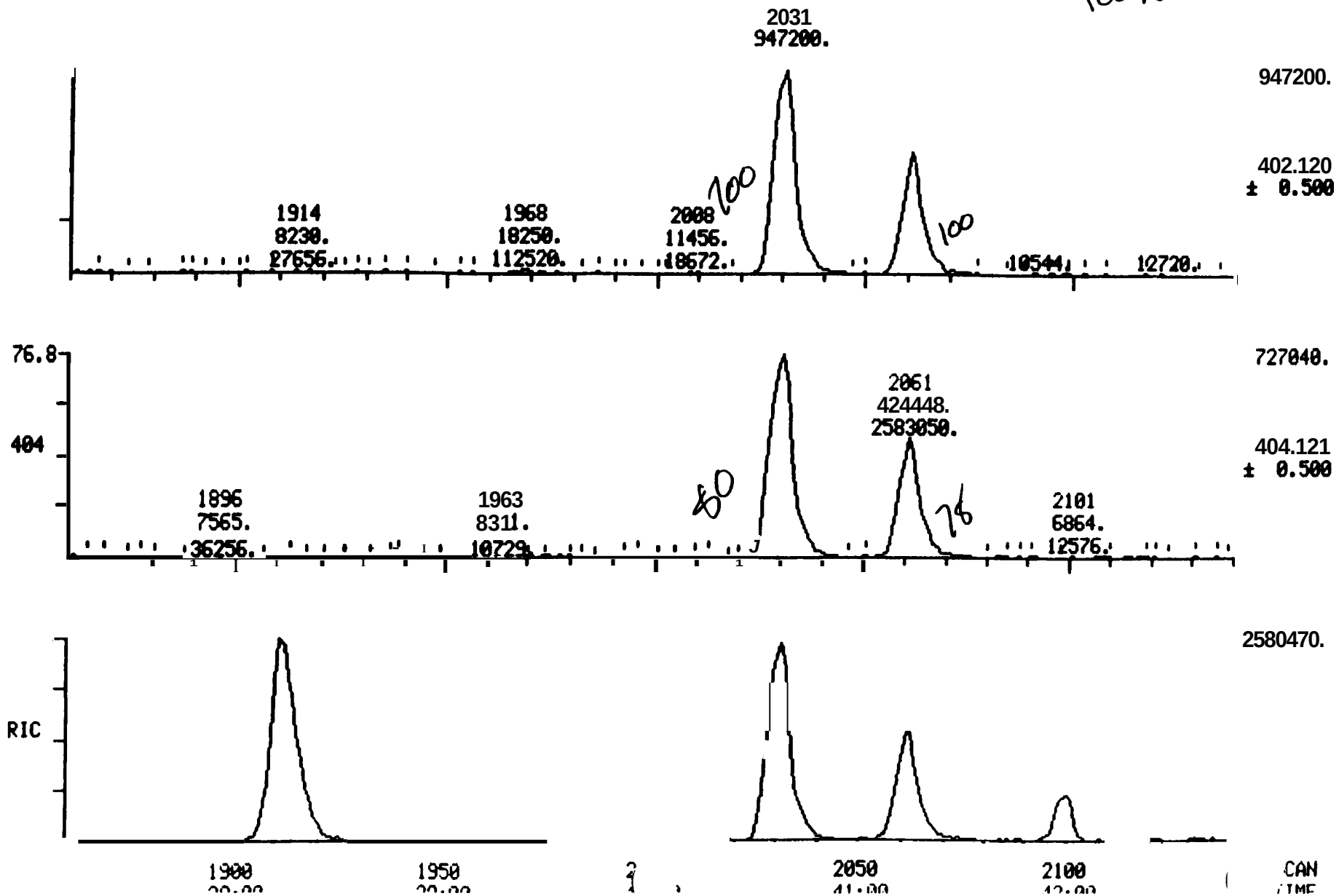
ND(1.3 ppt)



320C54

MIDRIC+MASS CHROMATOGRAMS DATA: TB83463EE #1 SCANS 1860 TO 2140
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

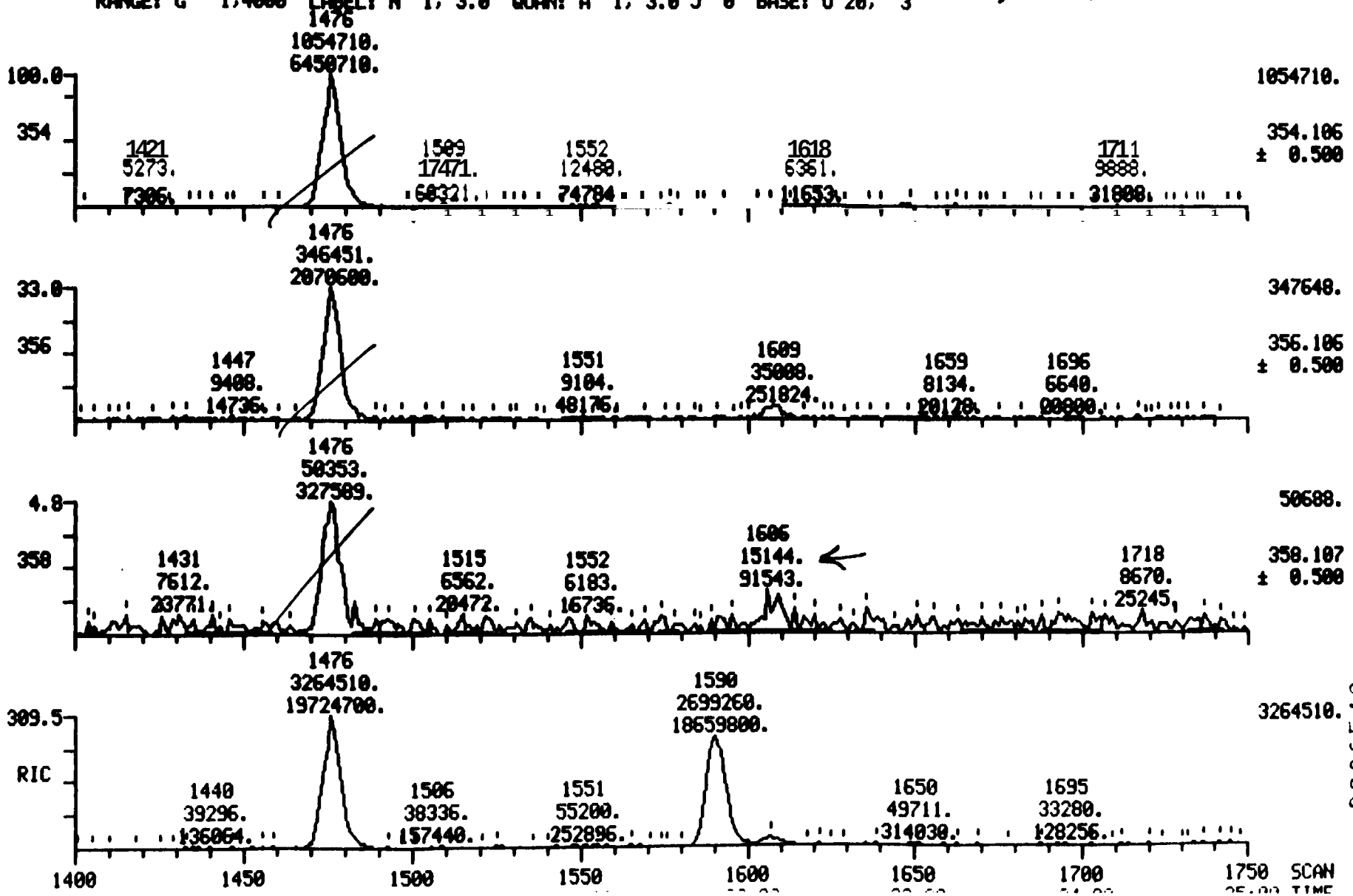
102% Rec.



MIDRIC+MASS CHROMATOGRAMS DATA: TB83463EE #1 SCANS 1400 TO 1750
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

PeCDD

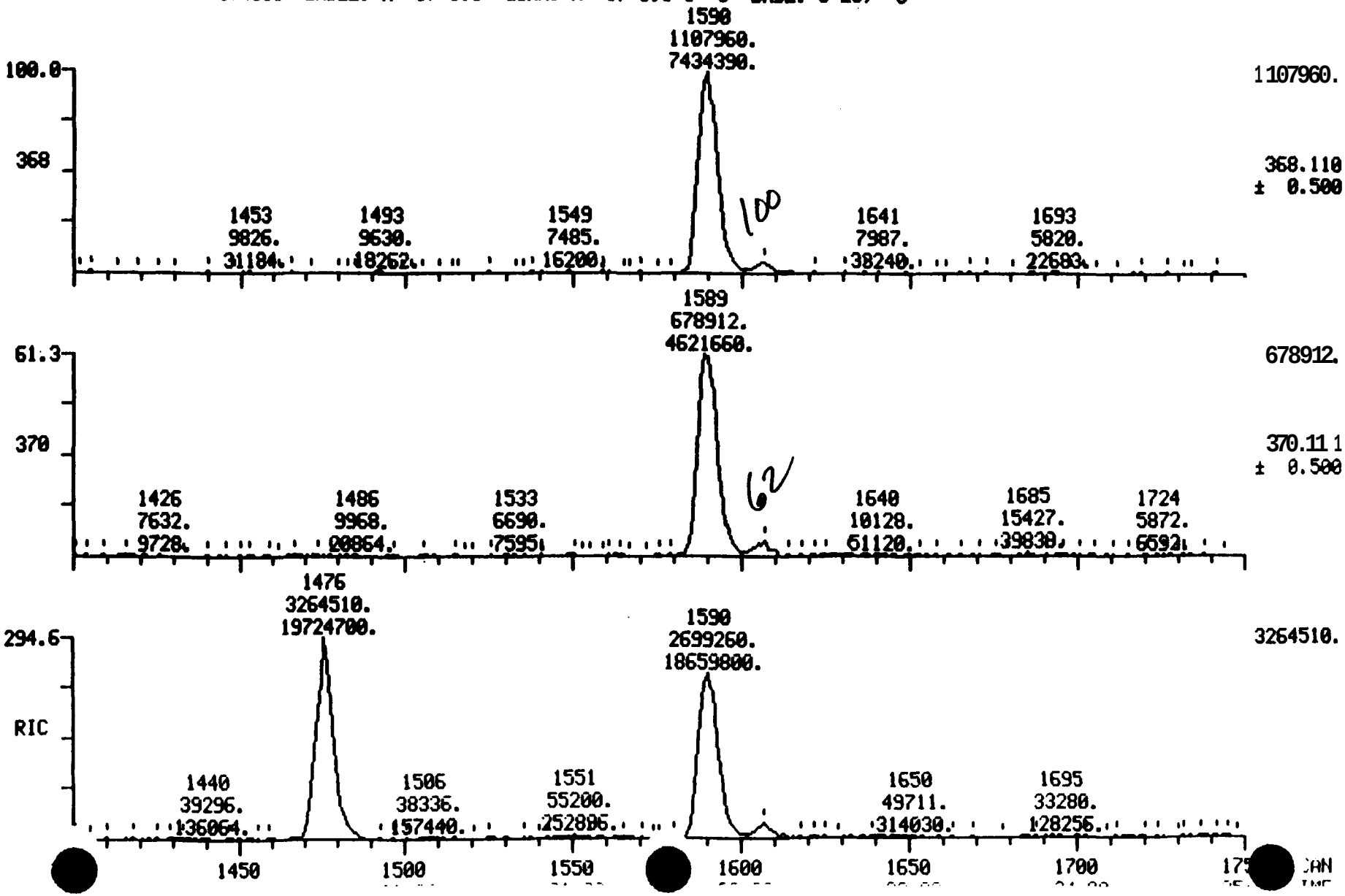
ND(1.9 ppt)



3205542

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1400 TO 1750
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

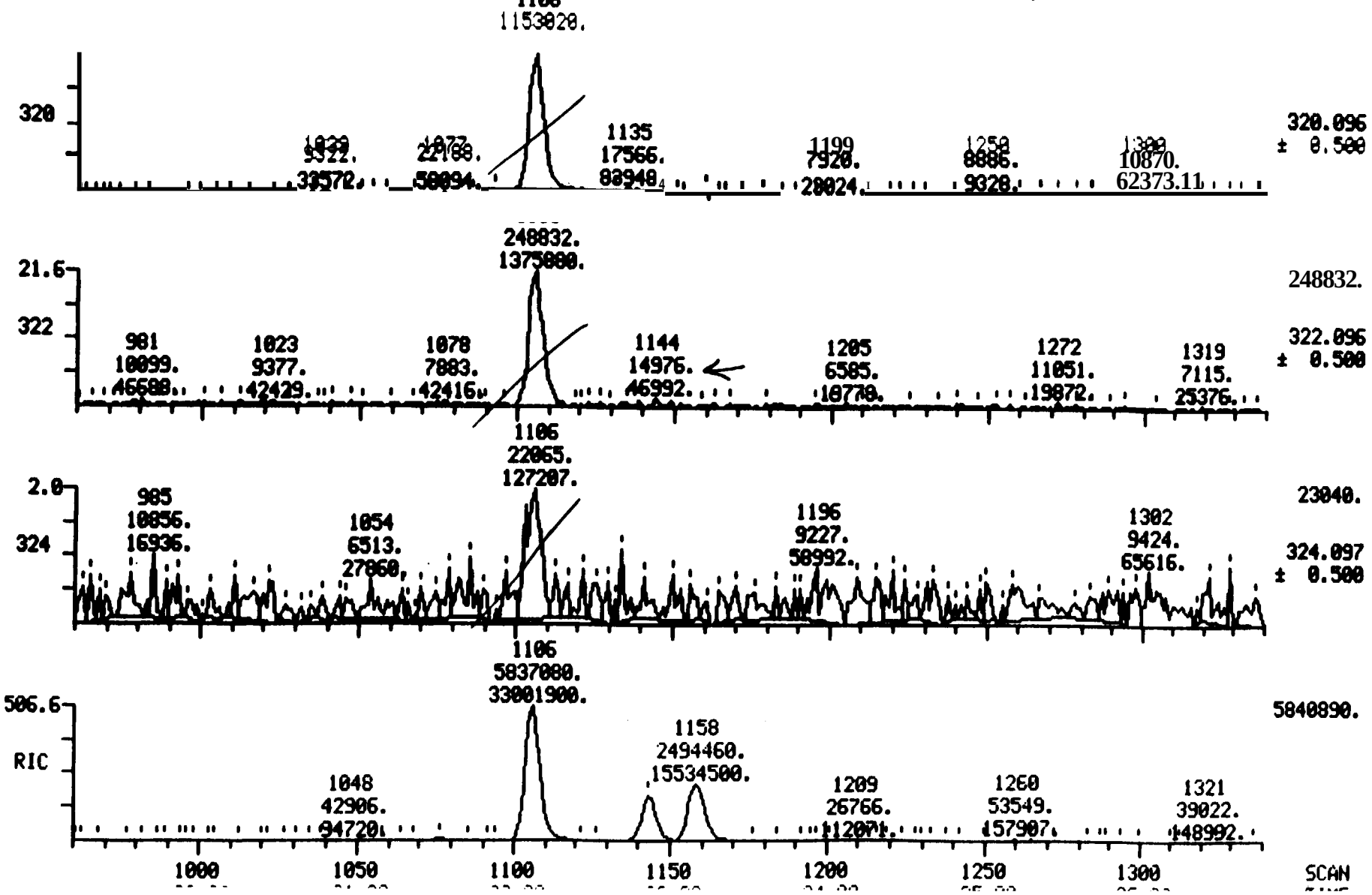
100% Rec.



MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 960 TO 1340
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDD

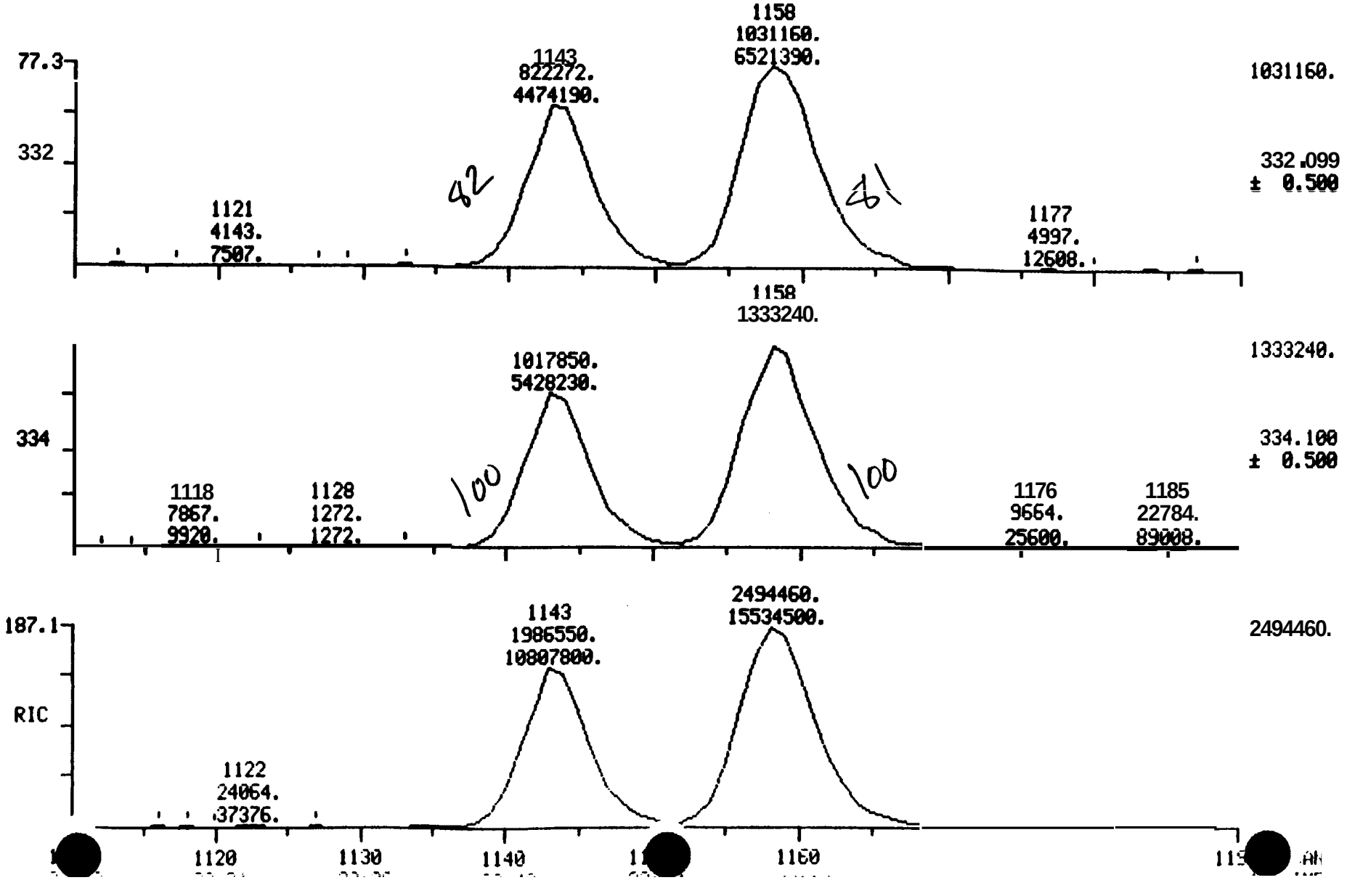
ND (0.99 ppt)



3205543

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3463EE #1 SCANS 1110 TO 1190
04/17/91 11:48:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

76% Rec.



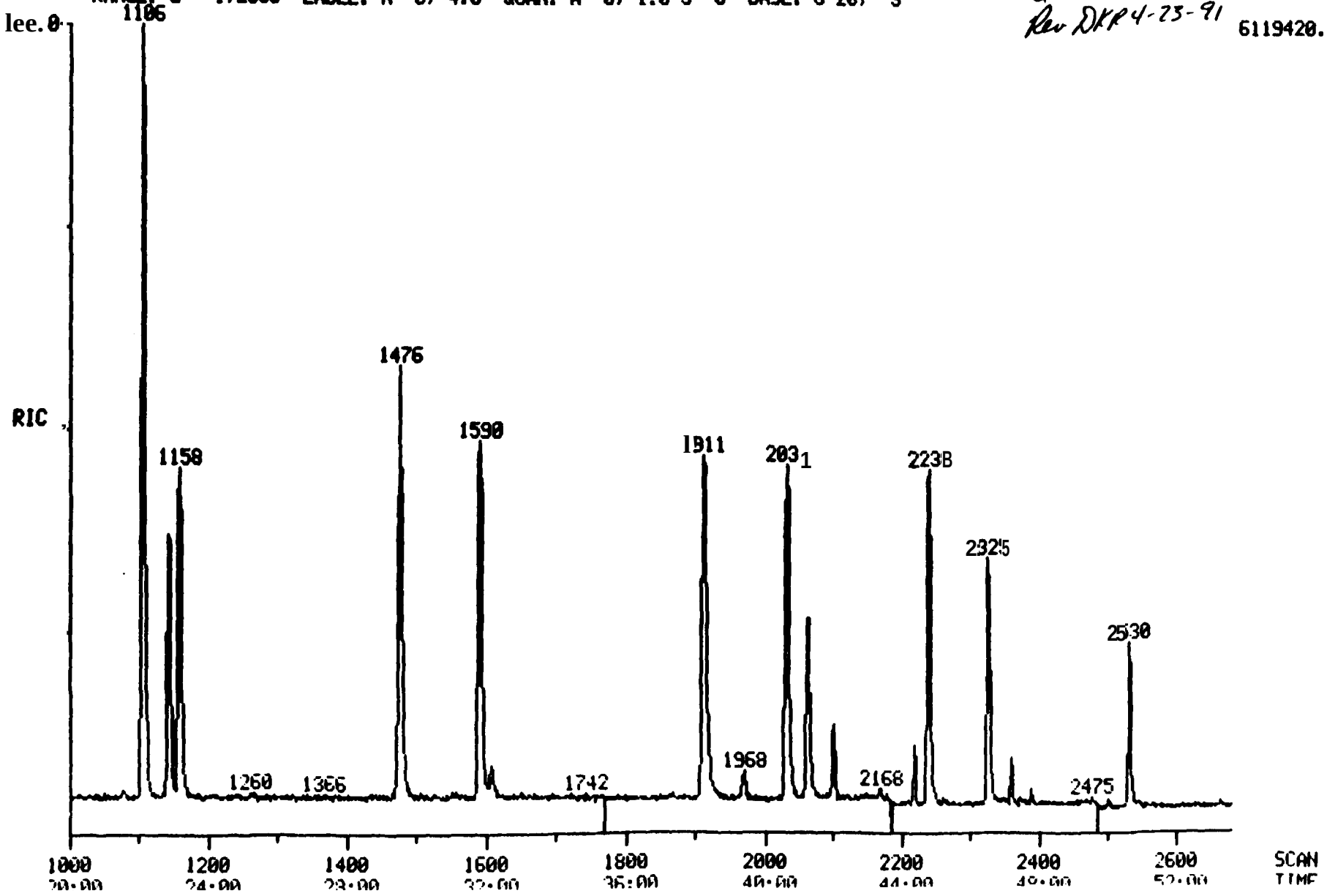
MIDRIC
04/17/91 11:48:00
SAMPLE: 2UL OF BB3463 (1000 ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2680 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: TBB3463EE #1
CALI: CAL910306A #2

SCANS 1000 TO 2680

alc. nm
4-22-91
QC JB 4-22-91
Rev DKP 4-23-91

6119420.



3200544

4	419.550	420.050	0.054	3	100	40	1	0	Pos
5	421.550	422.050	0.054	3	100	40	1	0	Pos
4	423.550	424.030	0.034	3	100	40	1	0	Pos
7	425.550	426.050	0.052	3	100	40	1	0	Por
8	435.550	436.050	0.052	3	100	40	1	0	Pos
9	437.550	430.050	0.052	3	100	40	1	0	Pos
10	441.550	442.030	0.054	3	100	40	1	0	Por
11	443.550	444.030	0.054	3	100	40	1	0	Pos
12	457.530	458.050	0.032	3	100	40	1	0	Pos
13	459.550	460.050	0.052	3	100	40	1	0	Pos
14	469.550	470.050	0.054	3	100	40	1	0	Por
15	471.330	472.050	0.052	3	100	40	1	0	Por
16	479.550	400.050	0.054	3	100	40	1	0	Por
17	313.330	314.050	0.054	3	100	40	1	0	Por

4/17/91 11:38:19 SCAN 2753
Acquisition stopped

4/17/91 11:38:21
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2183 Centroid
SCAN 2104 Suspended
SCANS 2185 TO 2483 Centroid
SCAN 2404 Suspended
SCANS 2485 TO 2753 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec	
Centroid	2750	633.4	3300.0	19.3	83707.	30.	25.

MID scan
Scan tire: 1.200 s

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Plaster rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	337.630	338.150	0.034	3	100	40	1	0	Po.
2	339.650	340.150	0.032	3	100	40	1	0	Po.
3	341.630	342.150	0.054	3	100	40	1	0	Pos
4	351.650	352.150	0.052	3	100	40	1	0	Pos
5	353.630	334.150	0.034	3	100	40	1	0	Po.
6	355.630	336.150	0.052	3	100	40	1	0	Por
7	357.650	338.130	0.034	3	100	40	1	0	Por
8	367.630	368.150	0.052	3	100	40	1	0	Por
9	369.650	370.130	0.052	3	100	40	1	0	Po.
10	371.630	372.150	0.032	3	100	40	1	0	Pos
11	373.650	374.150	0.052	3	100	40	1	0	Po.
12	375.650	376.150	0.052	3	100	40	1	0	Po.
13	379.650	380.130	0.052	3	100	40	1	0	Pos
14	381.650	382.150	0.052	3	100	40	1	0	Po.
13	383.650	386.150	0.032	3	100	40	1	0	Pos
16	307.650	388.130	0.032	3	100	40	1	0	Po.
17	389.650	390.150	0.052	3	100	40	1	0	Po.
18	391.650	392.150	0.052	3	100	40	1	0	Po.
19	401.650	402.150	0.032	3	100	40	1	0	Po.
20	463.650	404.150	0.054	3	100	40	1	0	Po.
21	445.550	446.050	0.032	3	100	40	1	0	Po.

4/17/91 11:26:33 SCAN 2184 OF 4000

MID scan
Scan time: 1.200 s

Desc: 03
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo ma	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	371.630	372.150	0.052	3	100	40	1	0	Po.
2	373.630	374.150	0.052	3	100	40	1	0	Po.
3	375.650	376.150	0.052	3	100	40	1	0	Pos
4	385.630	386.150	0.052	3	100	40	1	0	Po.
5	387.650	388.150	0.052	3	100	40	1	0	Po.
6	389.650	390.150	0.052	3	100	40	1	0	Po.
7	391.630	392.150	0.052	3	100	40	1	0	Po.
0	401.630	402.150	0.052	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	403.330	406.050	0.054	3	100	40	1	0	Pos
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.530	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Po.
14	421.330	422.050	0.054	3	100	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Po.
16	425.550	426.050	0.052	3	100	40	1	0	Po,
17	435.550	436.050	0.052	3	100	40	1	0	Po.
18	437.550	438.050	0.052	3	100	40	1	0	Po.
19	479.550	480.050	0.054	3	100	40	1	0	Po.

4/17/91 11:32:46 SCAN 2484 OF 4000

HID scan
Scan tine: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Tine	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.054	3	100	40	1	0	Po.
2	407.550	408.050	0.052	3	100	40	1	0	Po.
3	409.330	410.050	0.054	3	100	40	1	0	Pos

3205545

4/17/91 10:41:34 SCAN 1 OF 4000
Acquisition started

Acquire
04/17/91 10:41:00 + 0:04
Sample: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
Condr.: 60M DB-5/TOTALS.
Formula:
Submitted by: JD

Run 0:TBB3462EE
Free sectors: 7754
Instrument: 03
Analyst: DT

ACQUIRING
Scan: 3 of 4000
Weight: 0.000
Acct. No: PC4622

********** GC PARAMETERS **********

Loaded GC Desc: BW Current GC oven tmp: 71 DegC Injector . 300 DegC
Current GC Desc: BW GC elapsed time : 2:15 min Int. oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	_	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	_	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

MID scan
Scan time: 1.200 s

Desc: Bl
Samp. int.: 0.200 ms

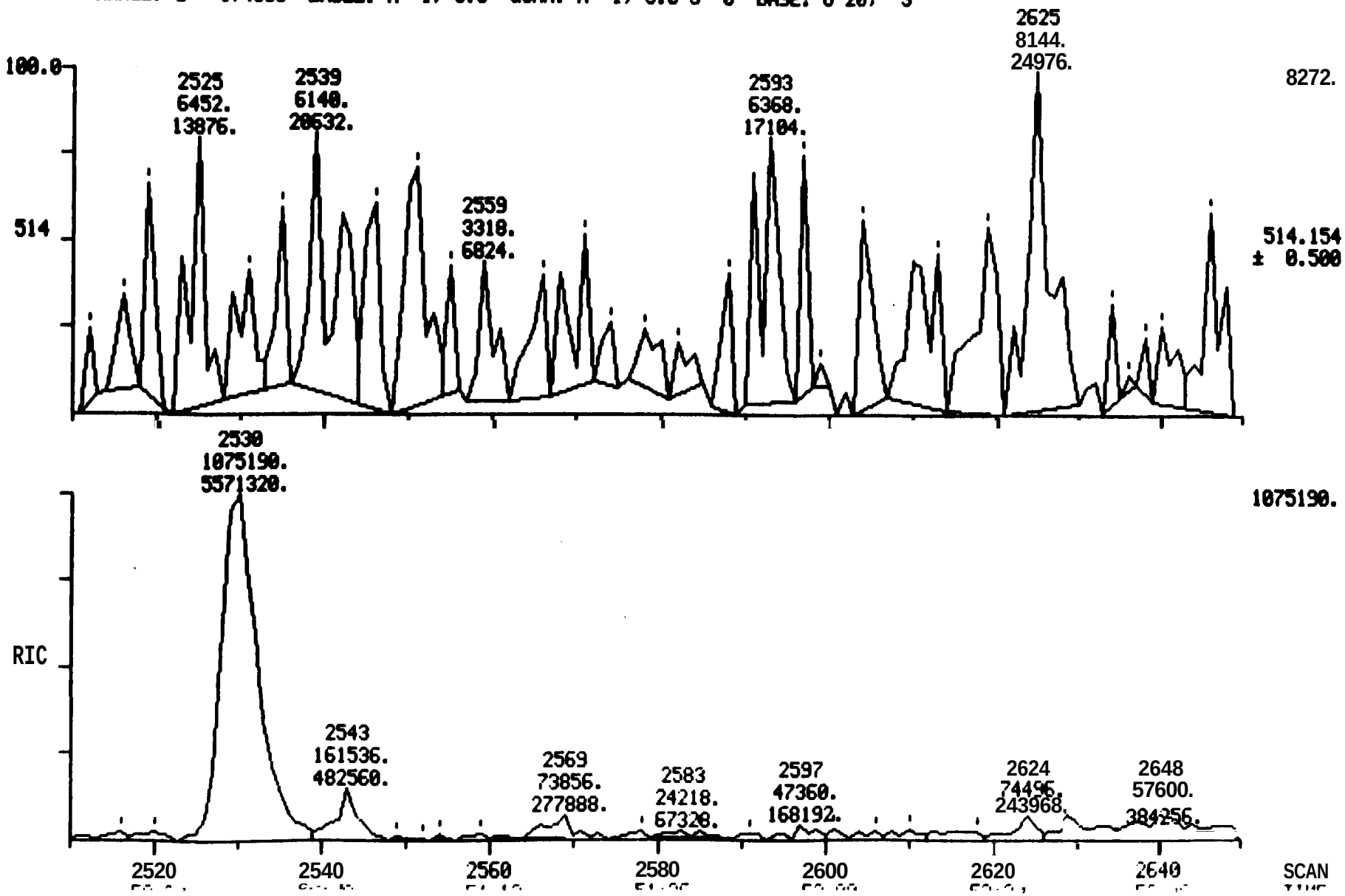
Mass intervals: 21
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.130	0.052	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.150	0.032	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.450	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.650	334.130	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.130	0.052	3	100	40	1	0	Pos
14	351.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Pos
16	355.650	354.130	0.054	3	100	40	1	0	Pos
17	357.630	358.150	0.032	3	100	40	1	0	Pos
18	367.650	368.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.032	3	100	40	1	0	Pos
20	375.630	376.150	0.052	3	100	40	1	0	Pos
21	409.530	410.0 W	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Perk Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/17/91 11:18:04 SCAN 1769 OF 4000

MIDRIC+MASS CHROMATOGRAM DATA: TBB3462EE #1 SCANS 2510 TO 2650
04/17/91 10:41:00 MIC: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

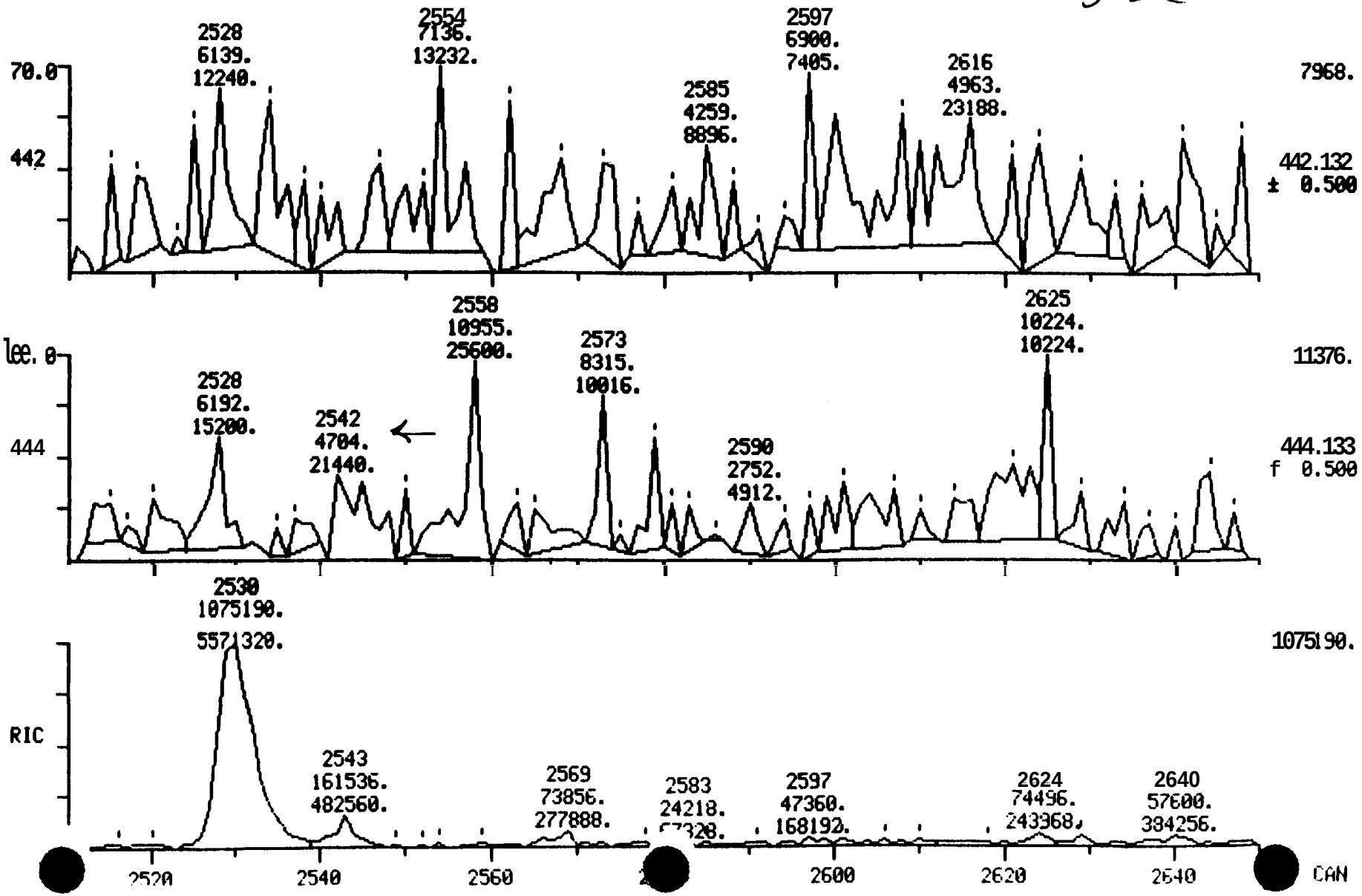


3200546

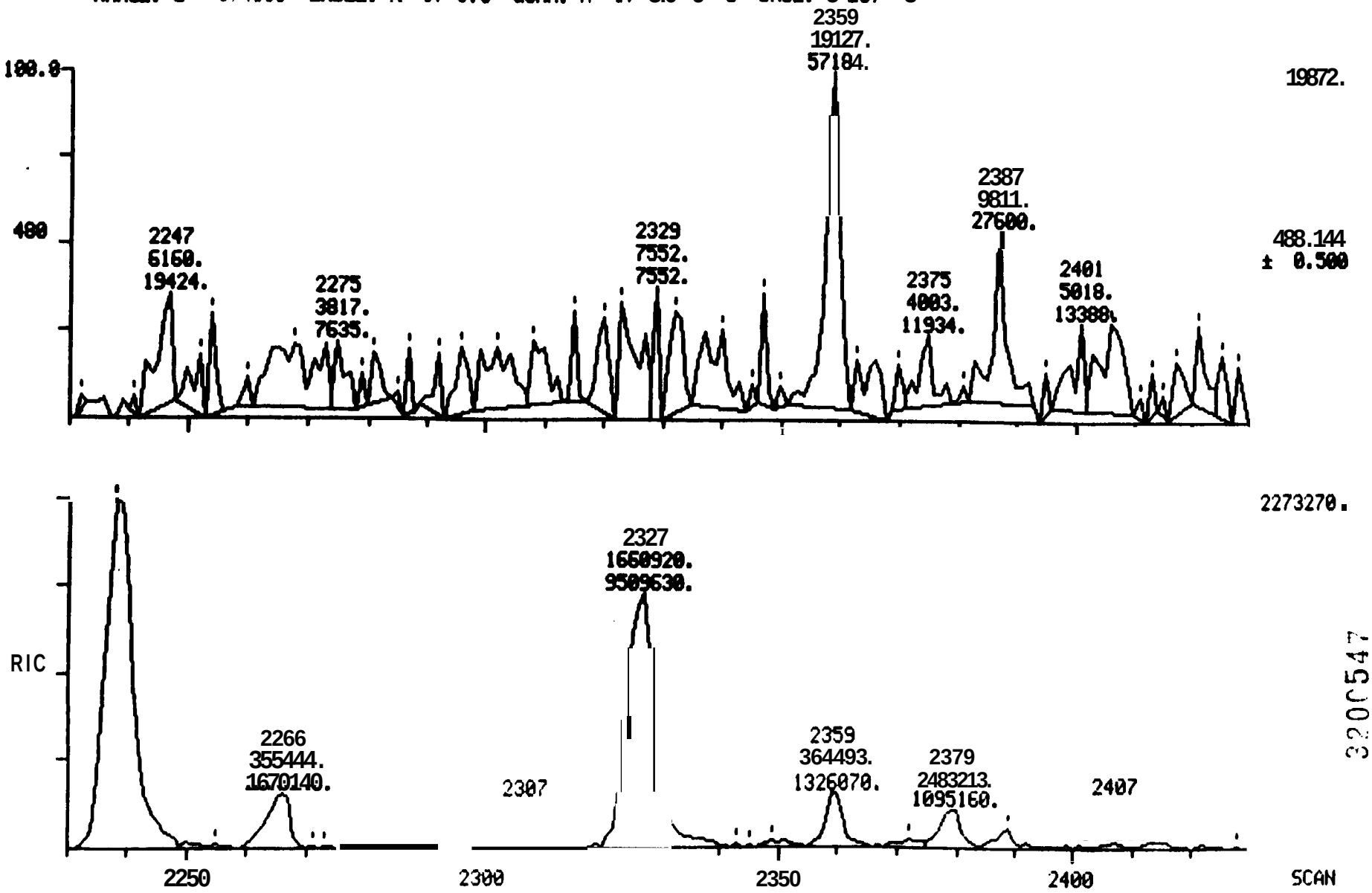
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 2510 TO 2650
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 8 BASE: U 20, 3

OCDF

ND(1.1 ppt)



MIDRIC+MASS CHROMATOGRAM DATA: TBB3462EE #1 SCANS 2230 TO 2438
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

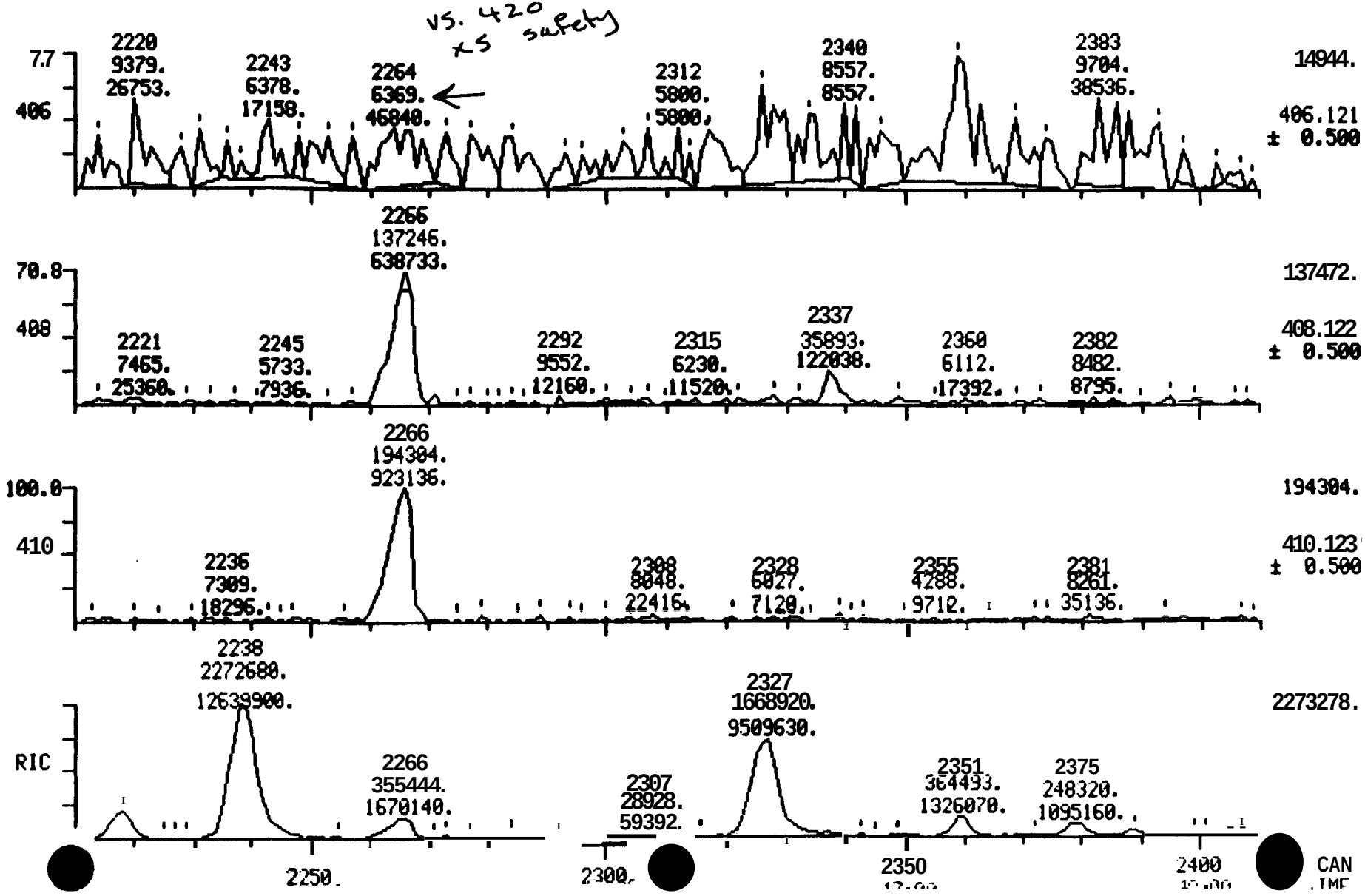


3200547

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 2210 TO 2410
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

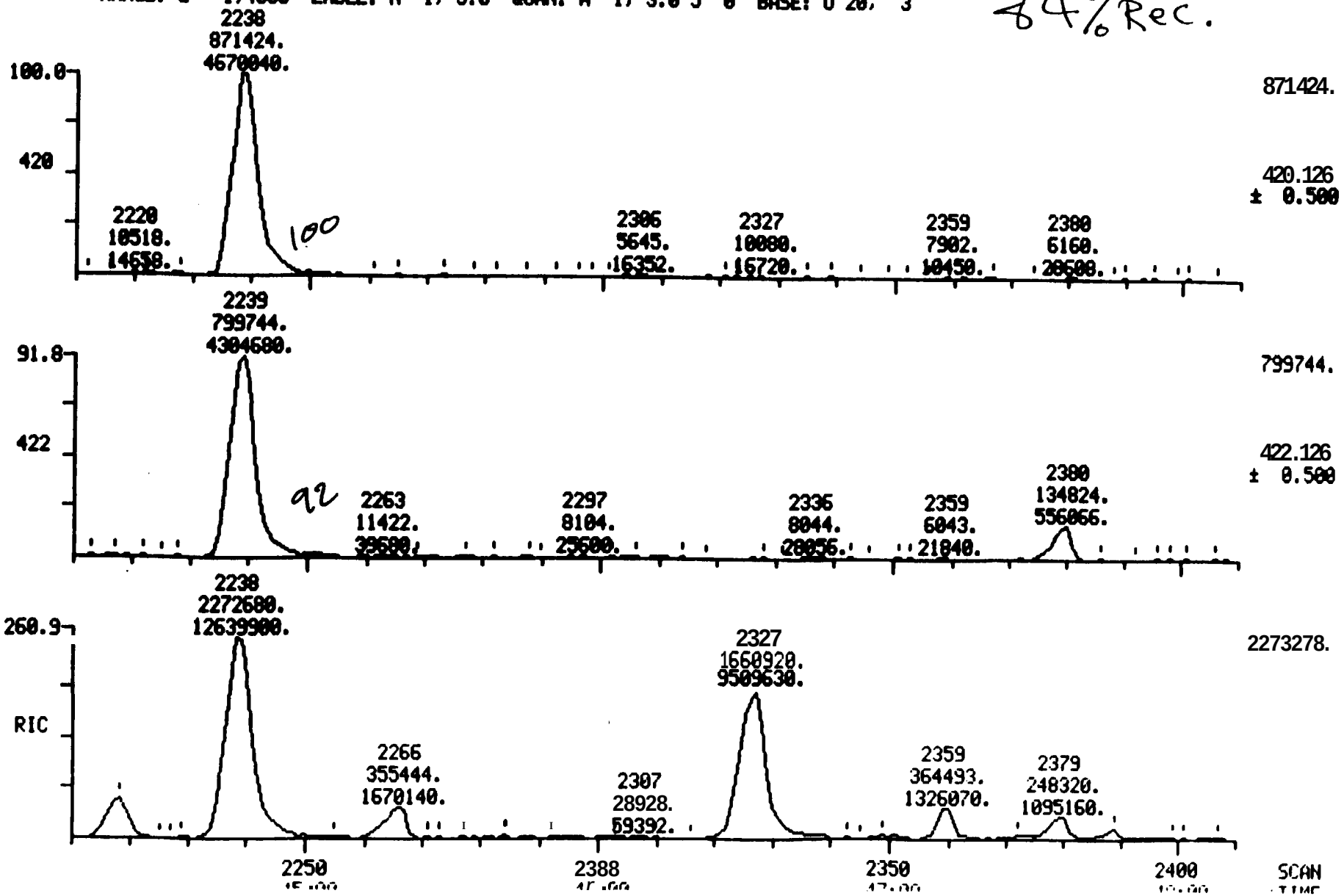
HPCDF

ND(1.9 ppt)



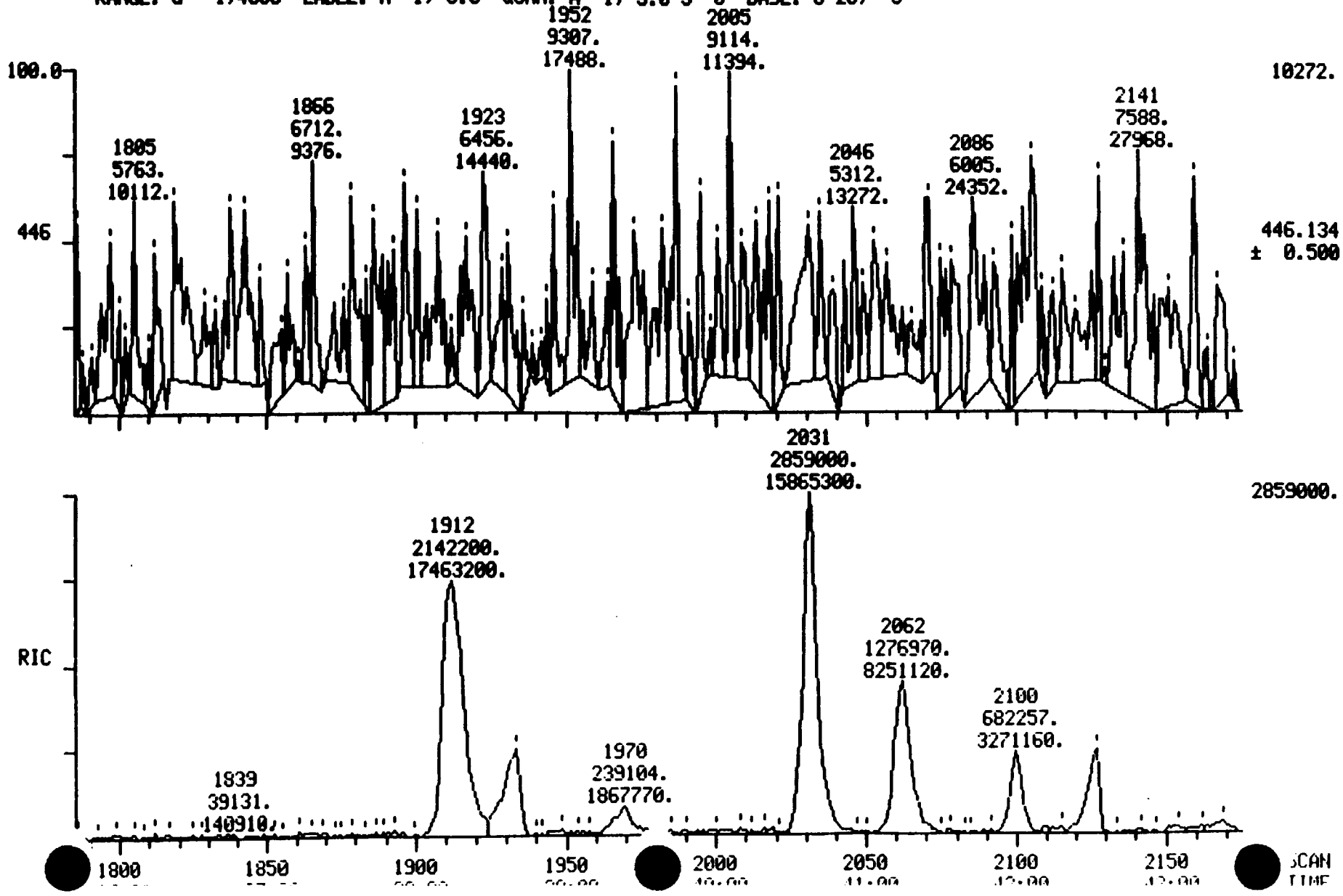
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 2210 TO 2410
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

84% Rec.



3200543

MIDRIC+MASS CHROMATOGRAM DATA: TBB3462EE #1
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

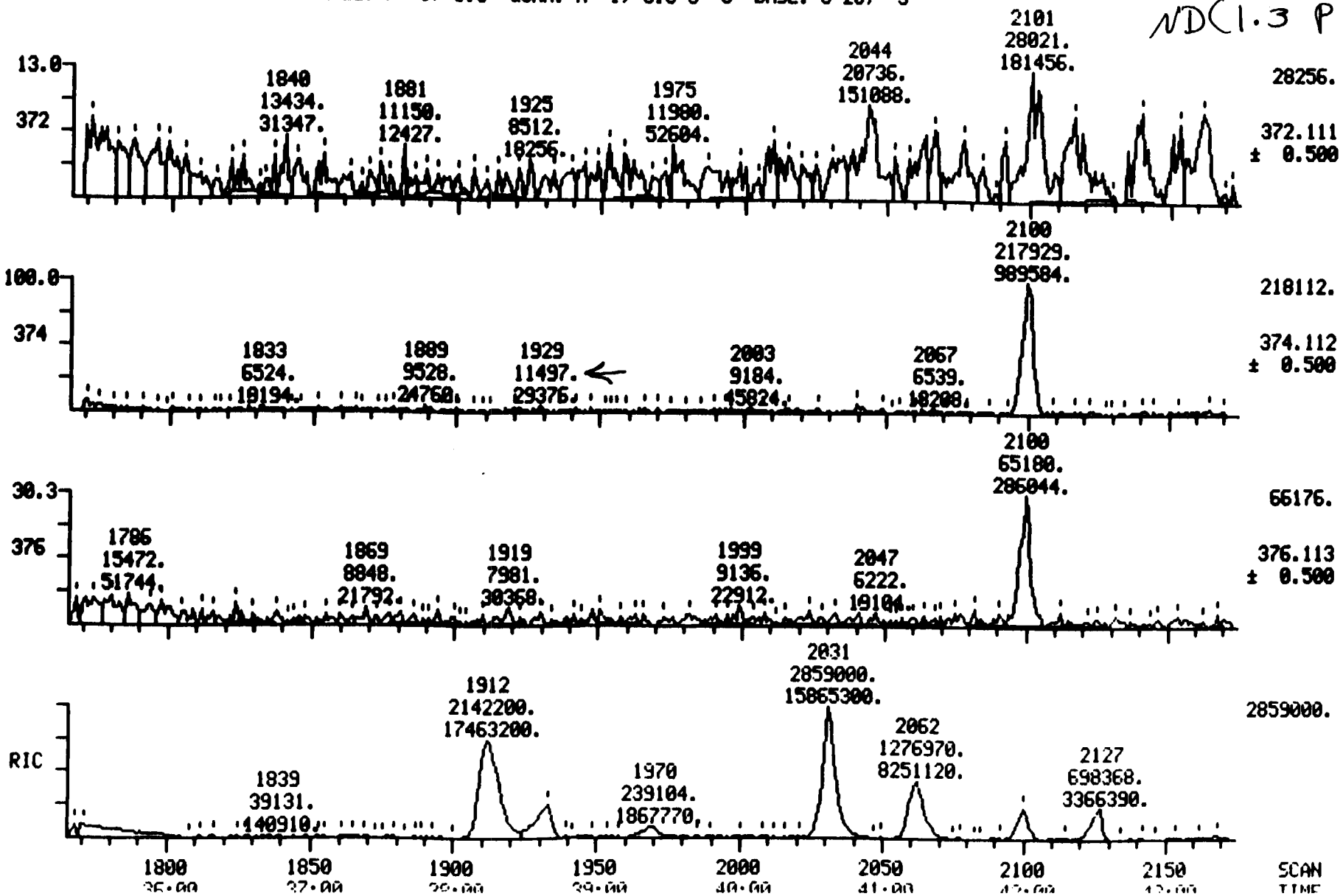


MIDRIC+MASS CHROMATOGRAMS
04/17/91 10:41:00
SAMPLE: 2UL OF BB3462 (1000ML [redacted]) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: TBB3462EE #1
CALI: CAL910306A #2

SCANS 1765 TO 2175

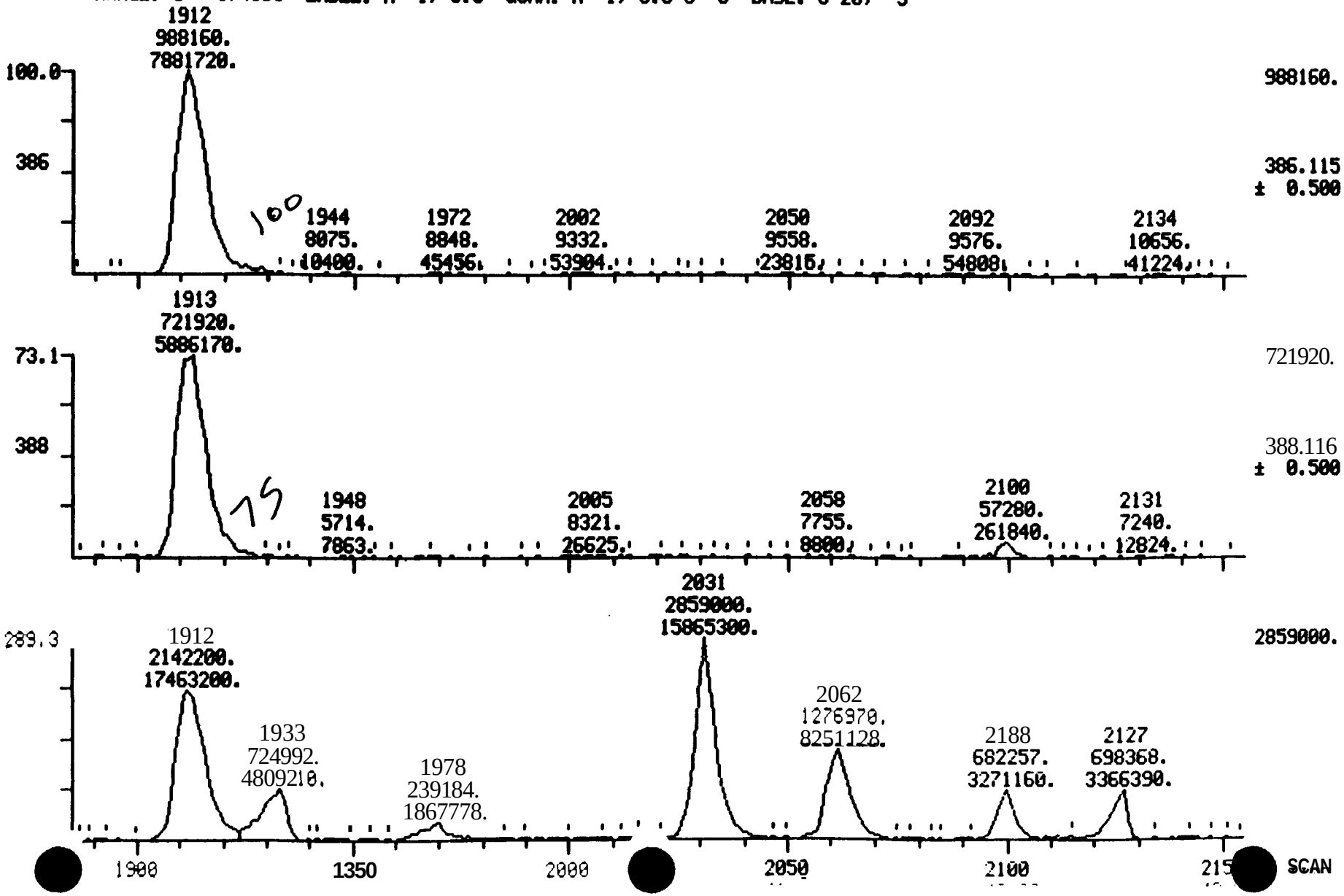
HxCDC
NDC1.3 P. 80



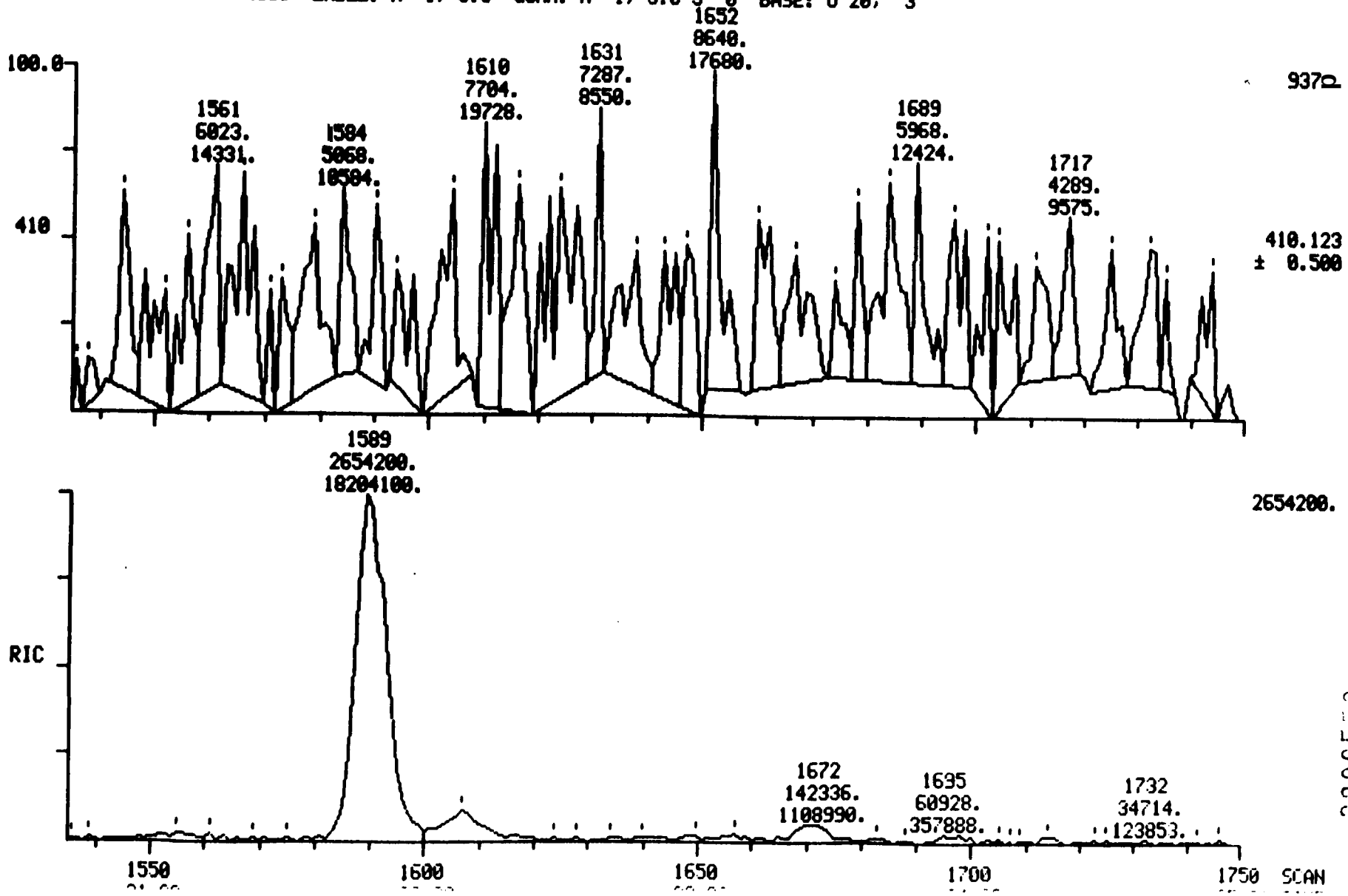
320C540

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 1885 TO 2155
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

100% Rec.

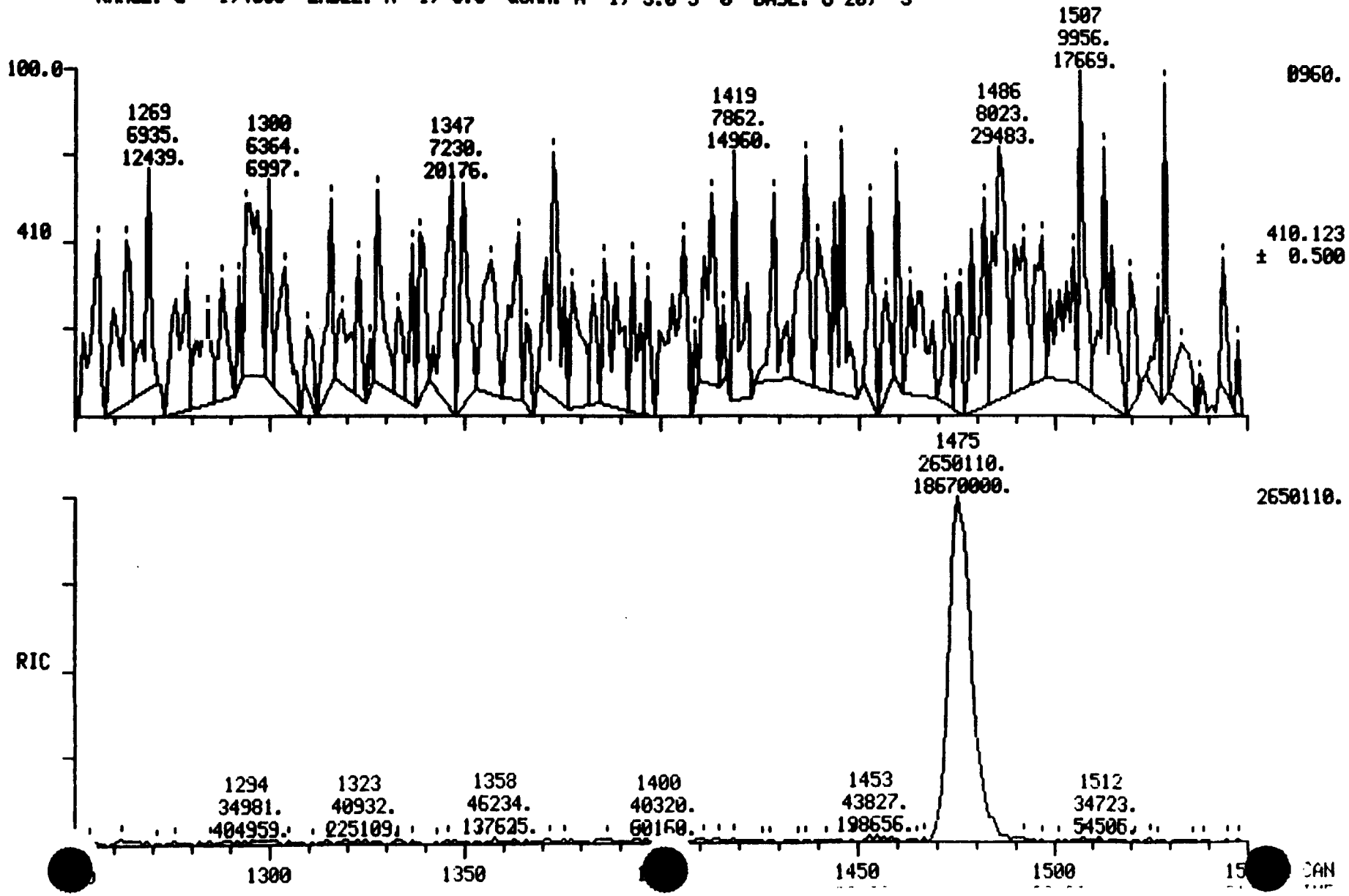


MIDRIC+MASS CHROMATOGRAM DATA: TBB3462EE #1
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3200550

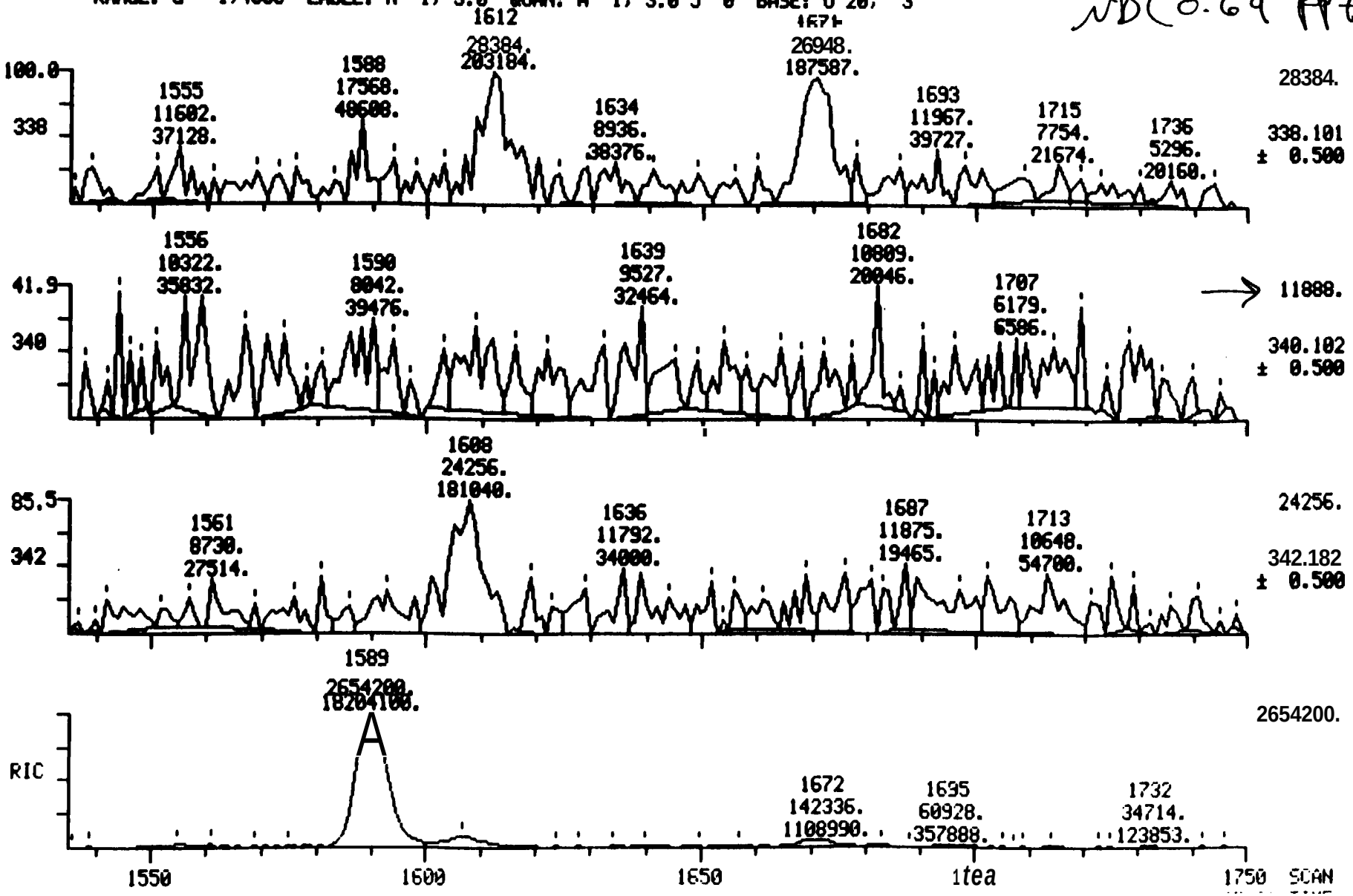
MIDRIC+MASS CHROMATOGRAM DATA: TBB3462EE #1 SCANS 1250 TO 1550
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



MIDRIC+MASS CHROMATOGRAMS DATA: TB83462EE #1 SCANS 1535 TO 1750
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

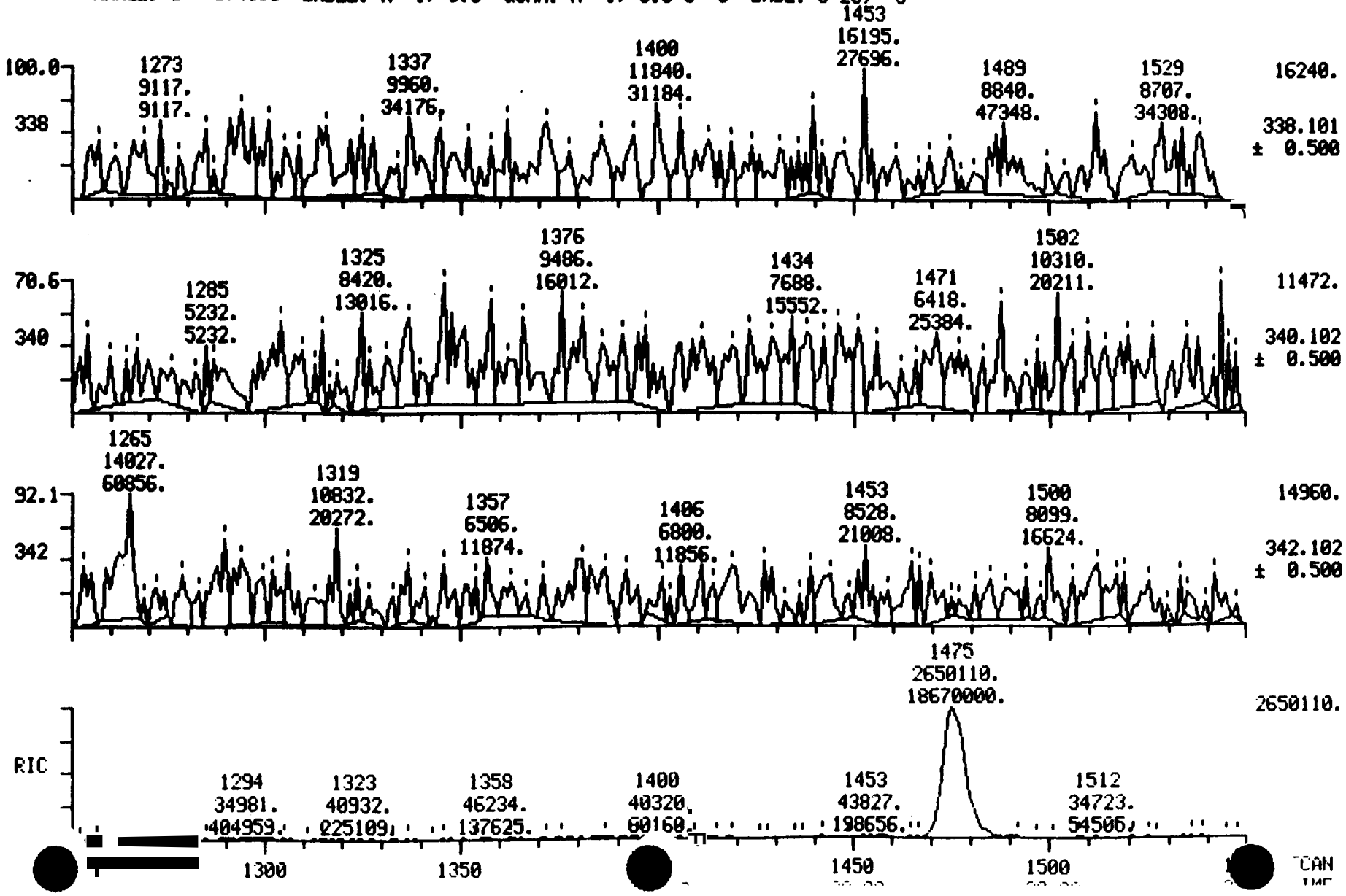
PeCDF

ND(0.69 ppt)



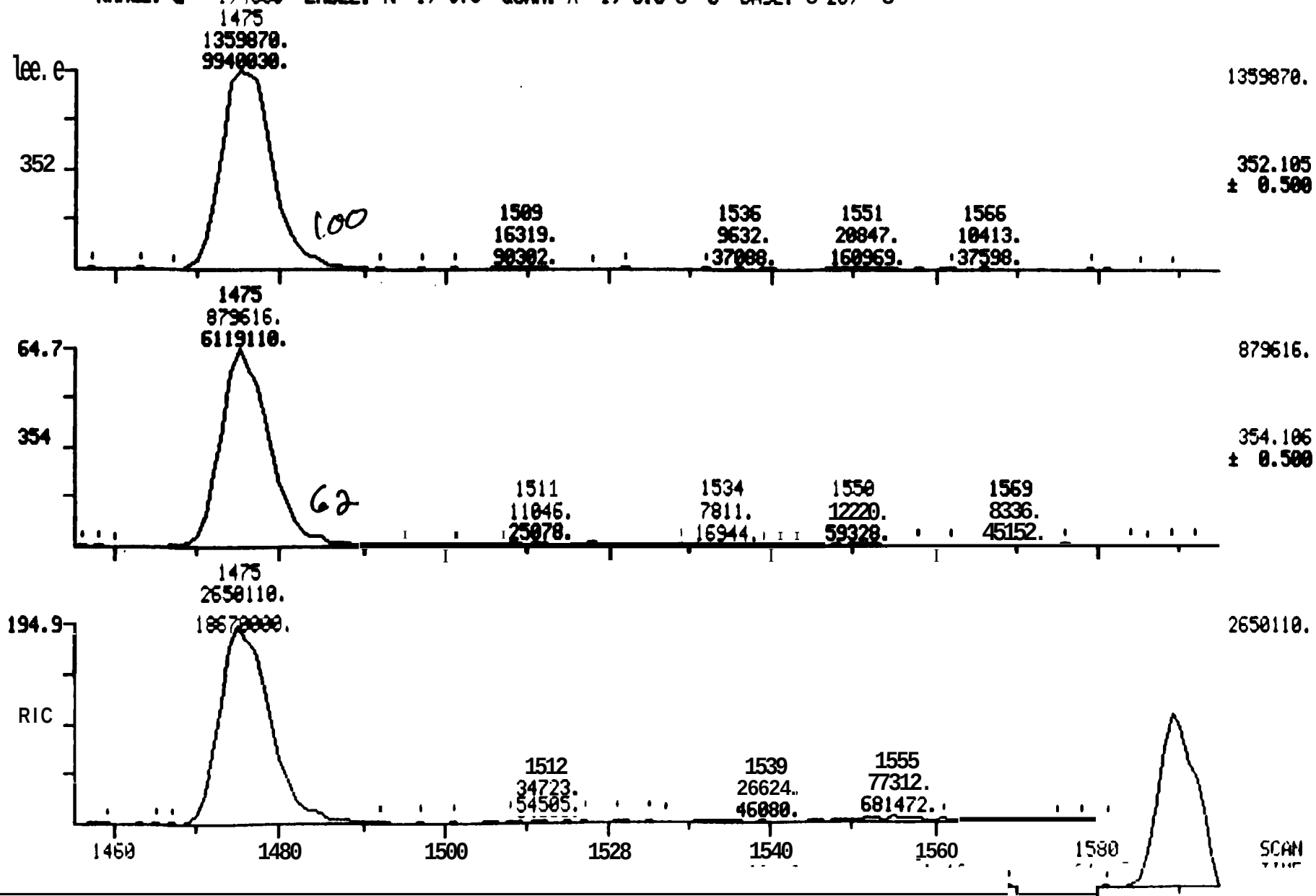
32005 1

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 1250 TO 1550
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



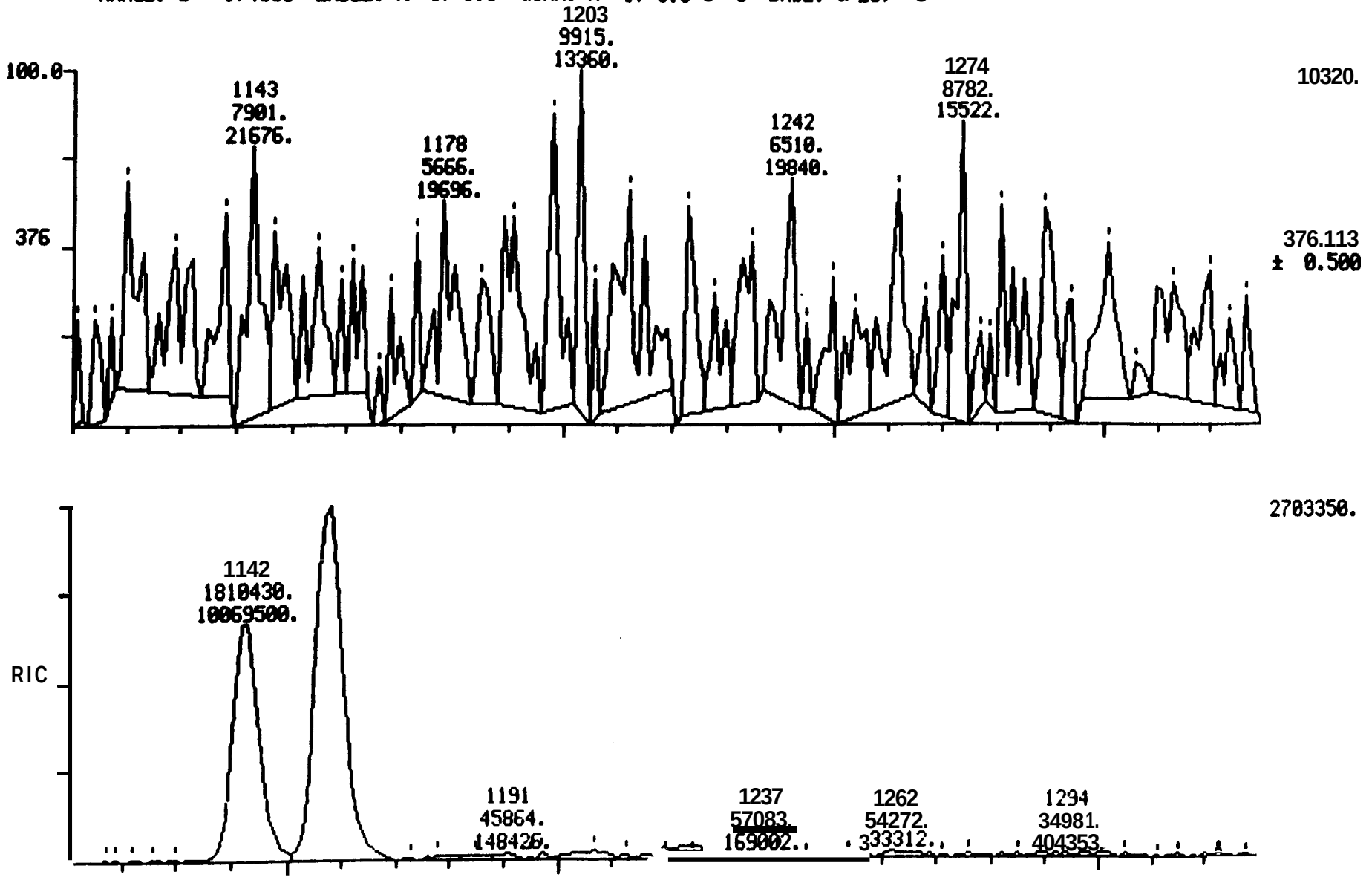
MIDRIC+MASS CHROMATOGRAMS DATA: TB83462EE #1 SCANS 1455 TO 1595
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

40% Rec.

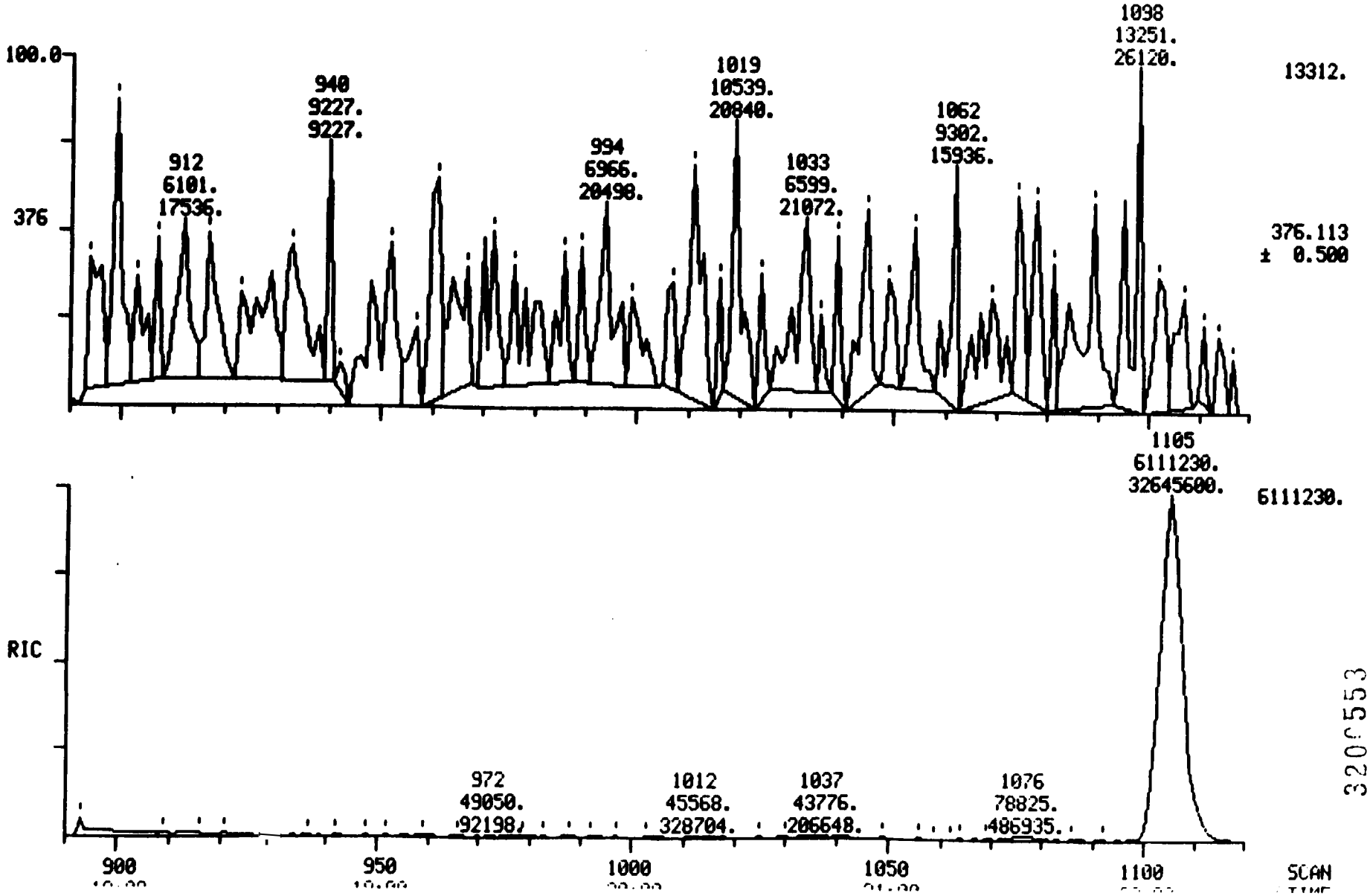


320C552

MIDRIC+MASS CHROMATOGRAM DATA: TBB3462EE #1 SCANS 1110 TO 1330
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTACS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



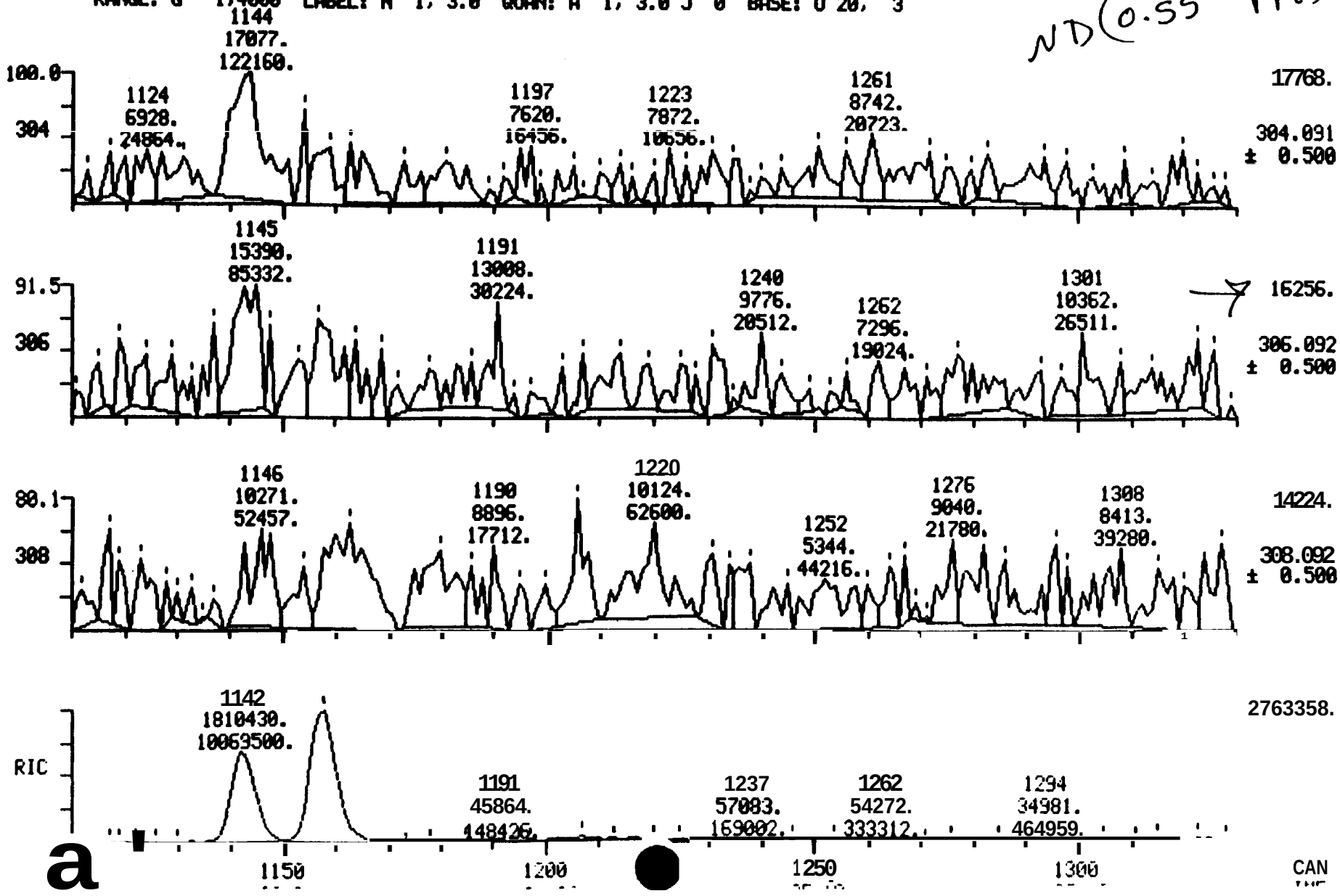
MIDRIC+MASS CHROMATOGRAM DATA: TBB3462EE #1 SCANS 890 TO 1120
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3205553

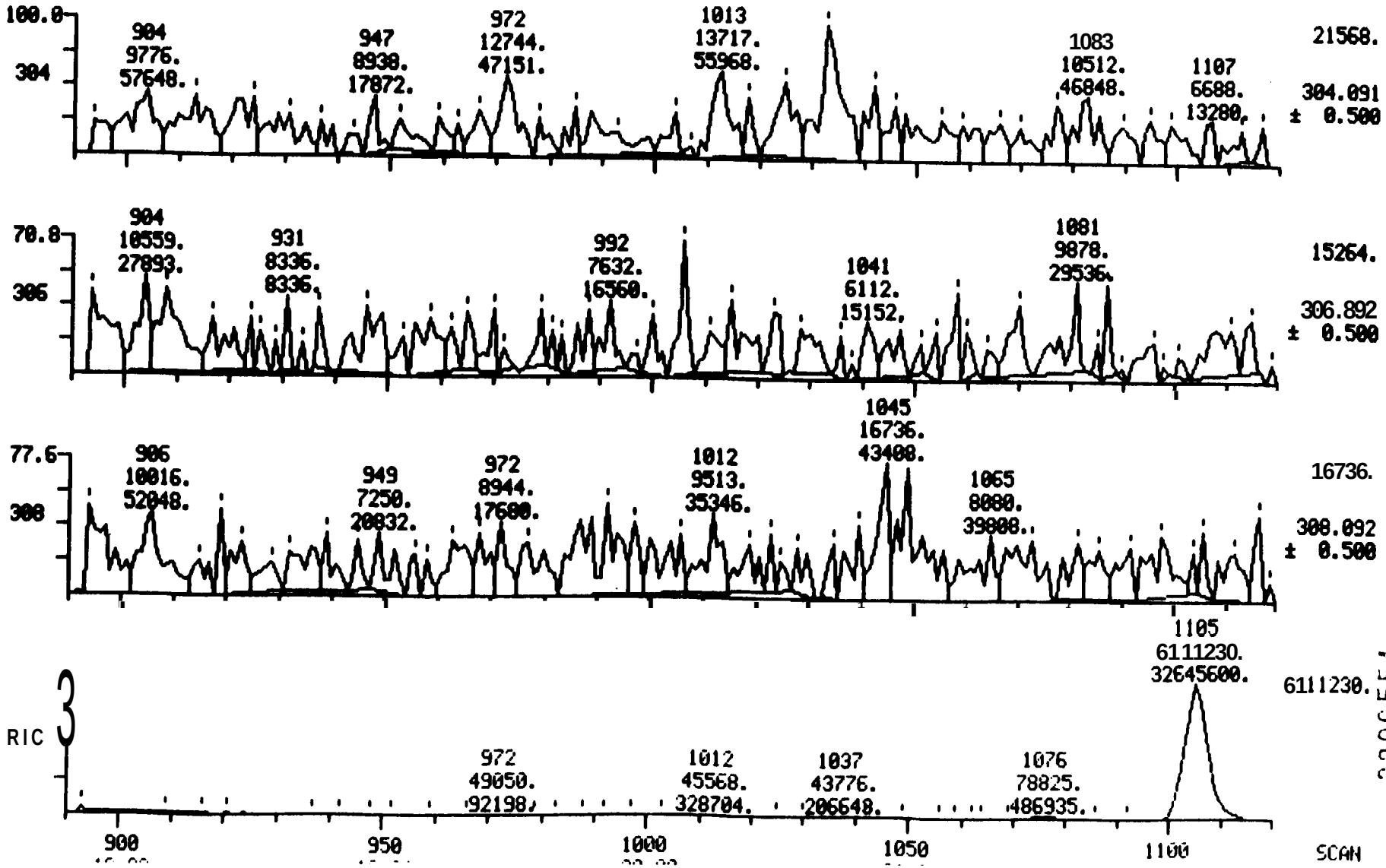
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 1110 TO 1330
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

TCDF
ND(0.55 ppt)



a

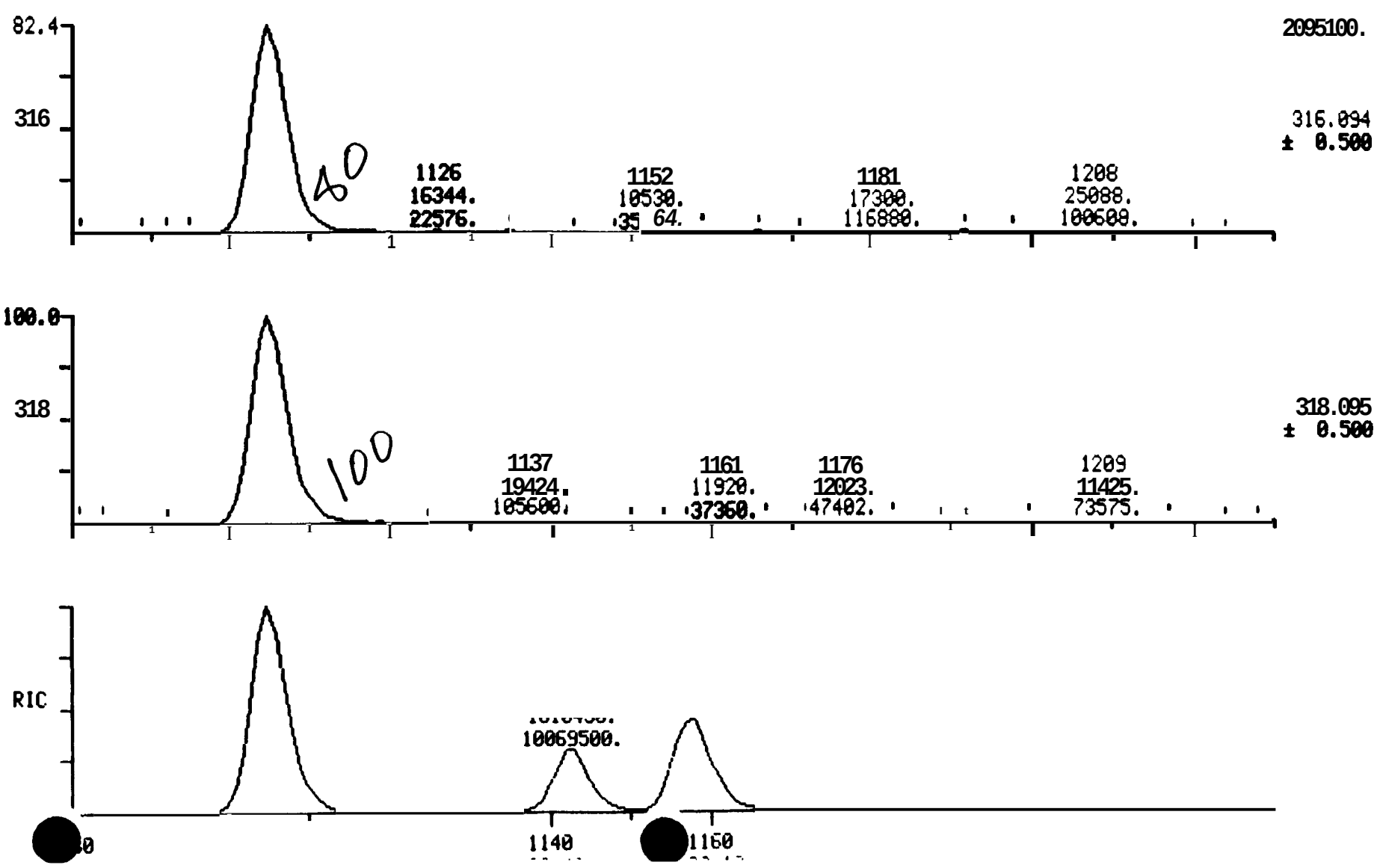
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 890 TO 1120
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.8 QUAN: A 1, 3.8 J 8 BASE: U 20, 3



320C554

MIDRIC+MASS CHROMATOGRAMS DATA: TB83462EE #1 SCANS 1080 TO 1230
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

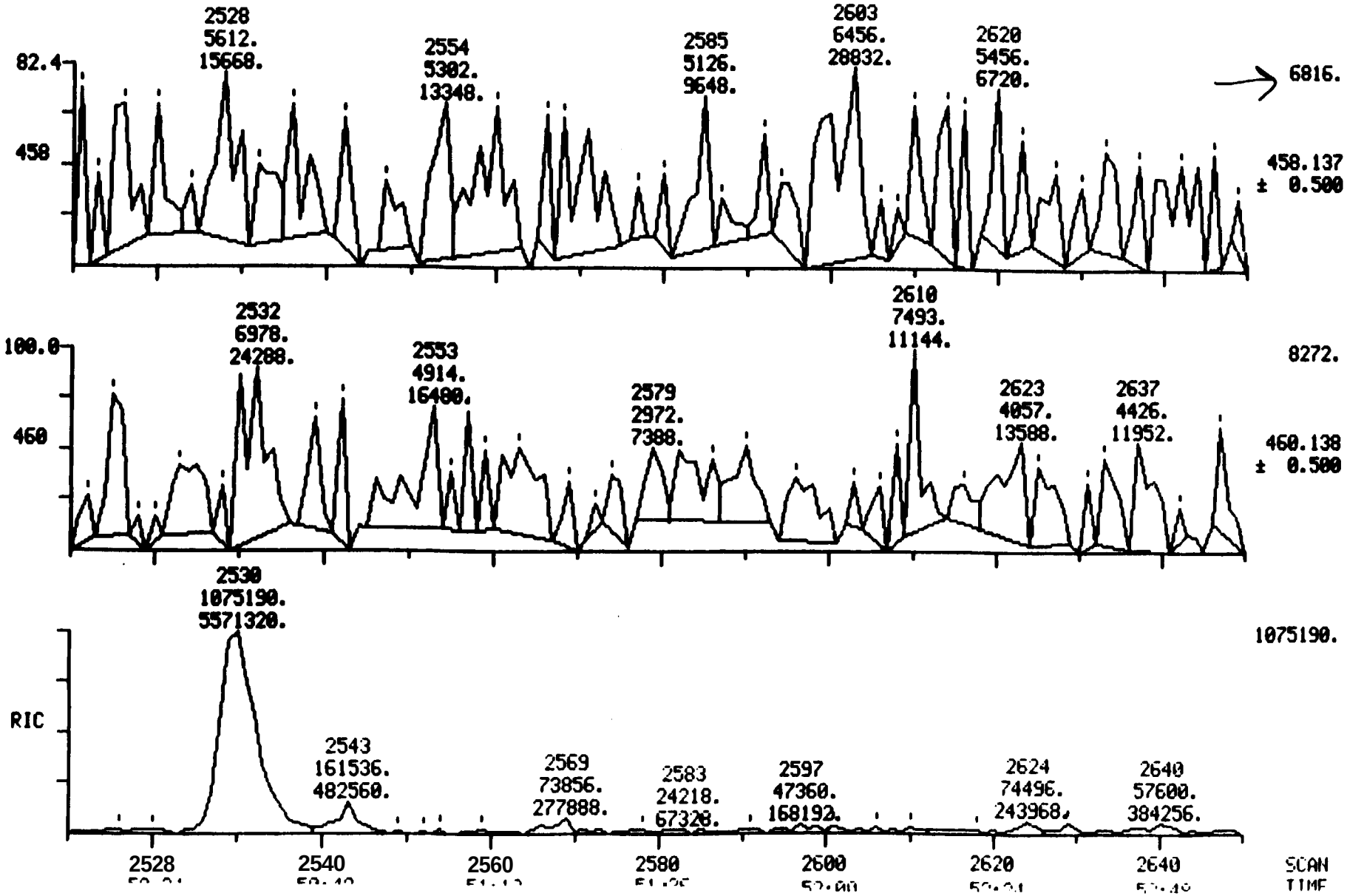
45 % Rec.



MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 2510 TO 2650
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

OCDD

ND(1.7 PPt)

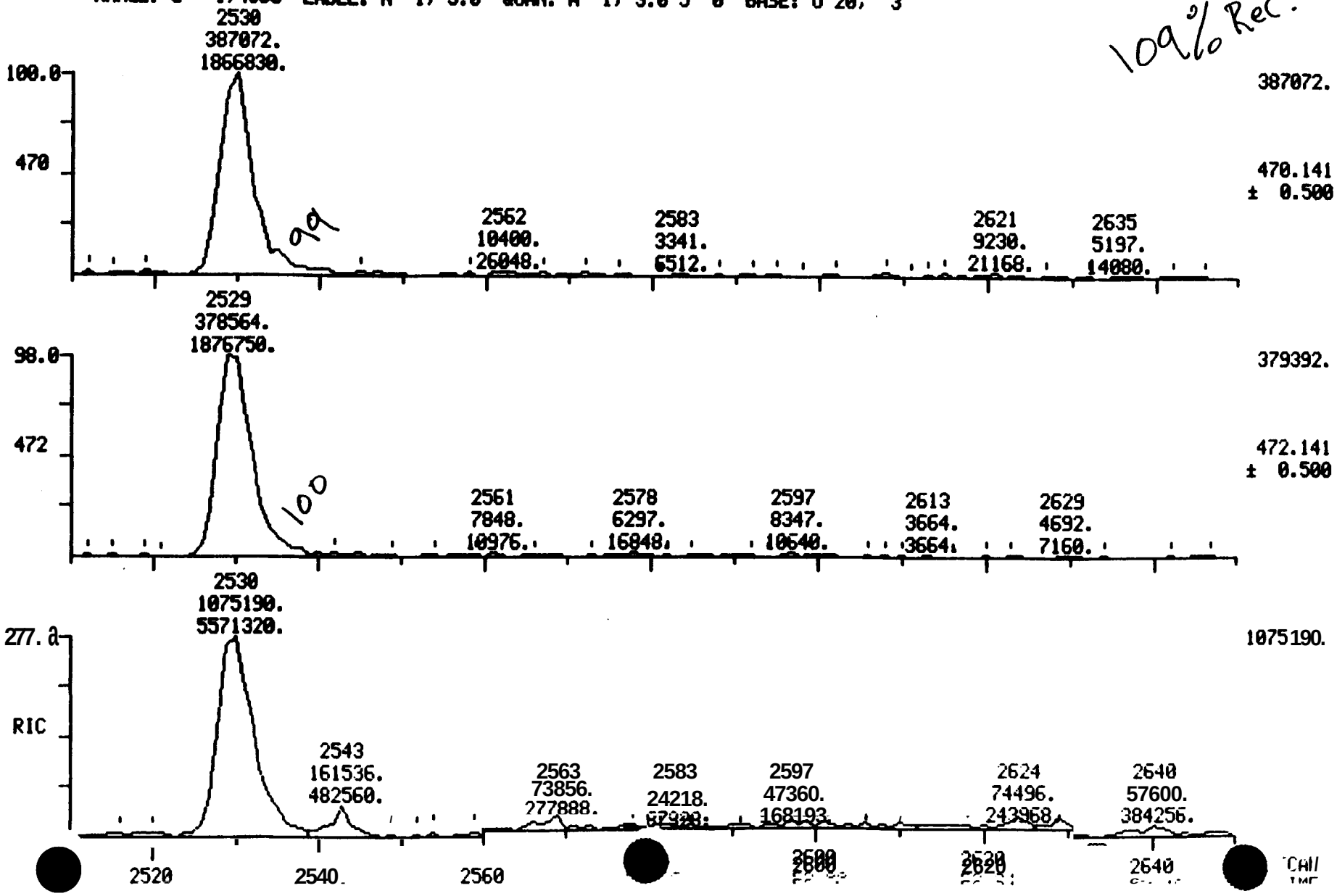


320C555

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 2510 TO 2650
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

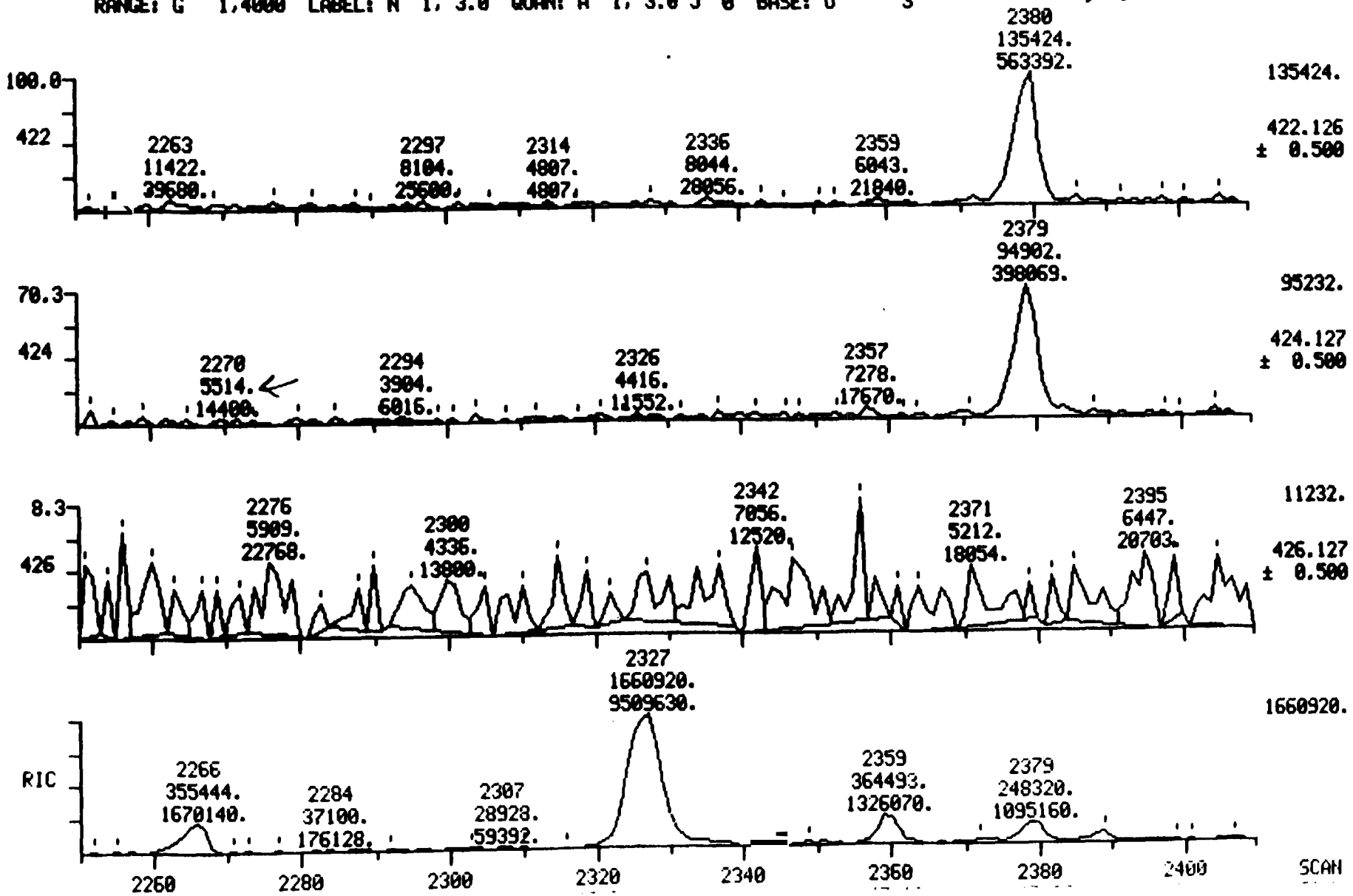
Daily RF=0.314

109% Rec.



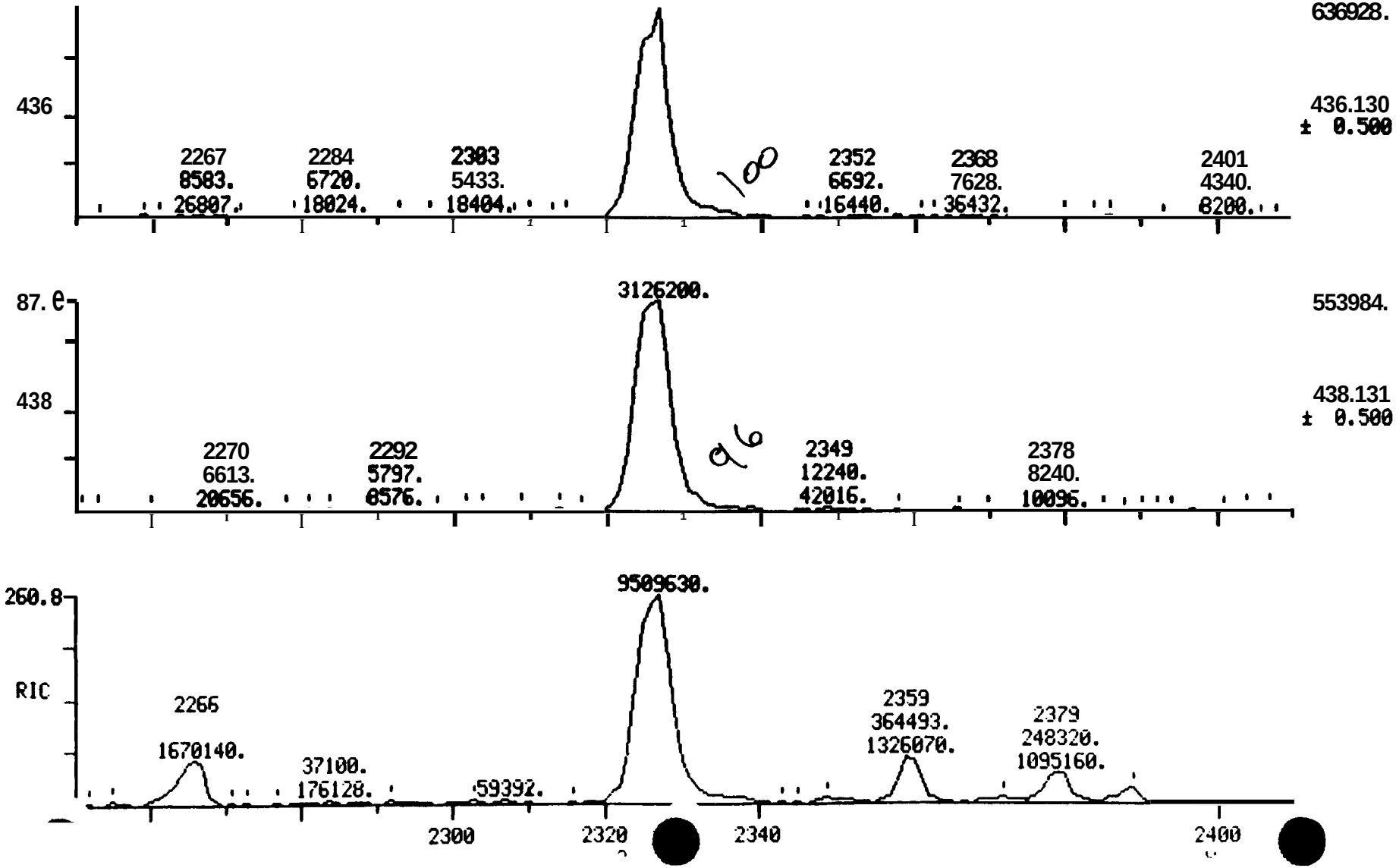
MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS — TO 2410
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U # 3

HpCDD
ND(1.2 PPt.



320C556

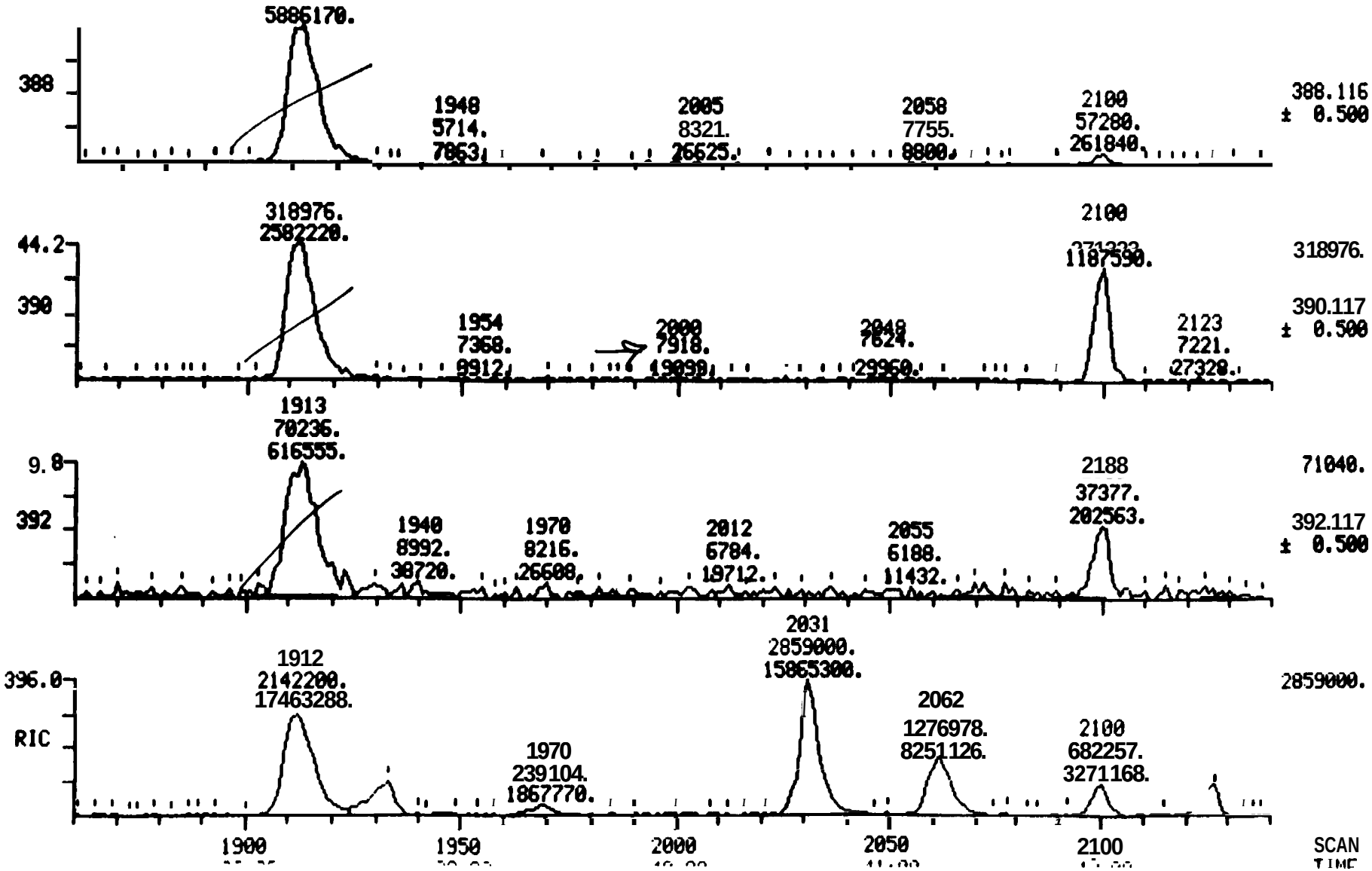
45% Rec.


636928.
436
436.130
± 0.500
2267
8583.
26807.
2284
6720.
18024.
2303
5433.
18404.
100
2352
6692.
16440.
2368
7628.
36432.
2401
4340.
8200.
553984.
87.0
438
438.131
± 0.500
3126200.
2270
6613.
20656.
2292
5797.
8576.
96
2349
12240.
42016.
2378
8240.
10096.
260.8
RIC
9509630.
2266
1670140.
37100.
176128.
59392.
2359
364493.
1326070.
2379
248320.
1095160.
2300
2320
2340
2400

MIDRIC+MASS CHROMATOGRAMS DATA: TB83462EE #1 SCANS 1860 TO 2140
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF 883462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.

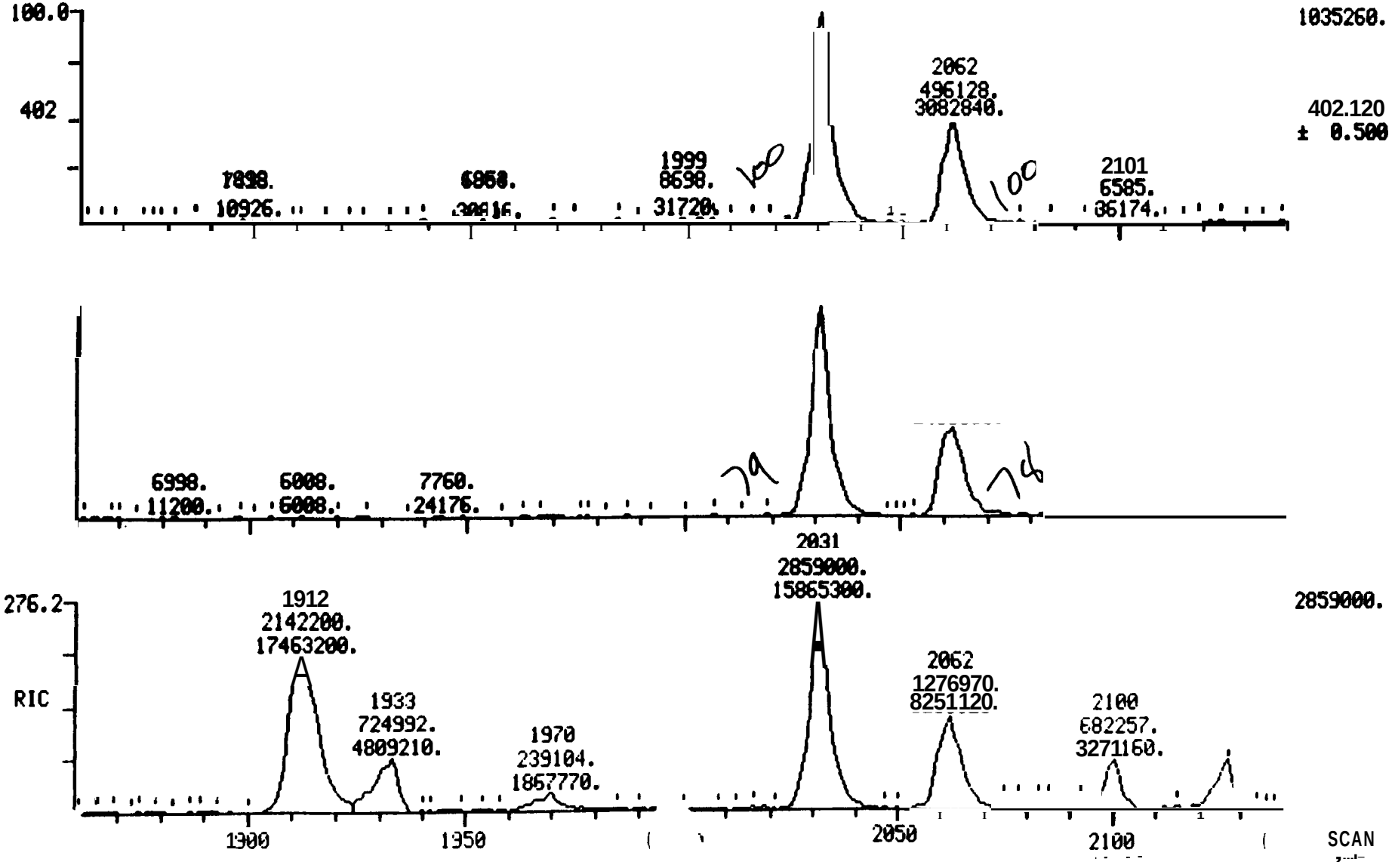
HxCDD

ND(1.0 PPt)



320C557

LABEL:

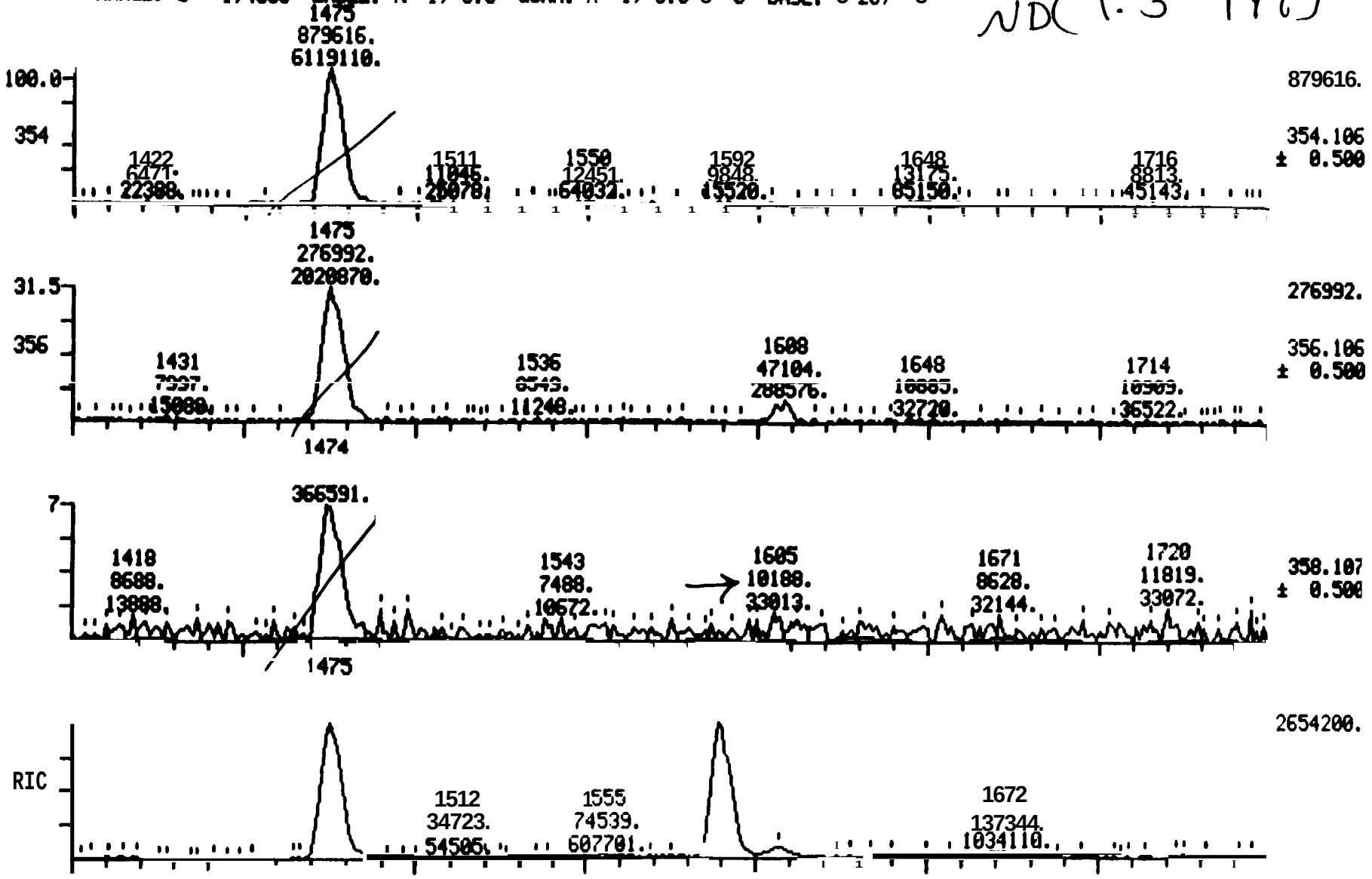

100.0
402
1035260.
402.120
± 0.500
2062
496128.
3082840.
1999
8698.
31720.
2101
6585.
36174.
100
100
6998.
11200.
6008.
6008.
7760.
24176.
74
74
276.2
RIC
1912
2142200.
17463200.
1933
724992.
4809210.
1970
239104.
1867770.
2031
2859000.
15865300.
2859000.
2062
1276970.
8251120.
2100
682257.
3271160.
1900
1950
2050
2100
SCAN

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1
04/17/91 10:41:00 CALI: CAL910306A #2 SCANS 1400 TO 1750

PeCDD

SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

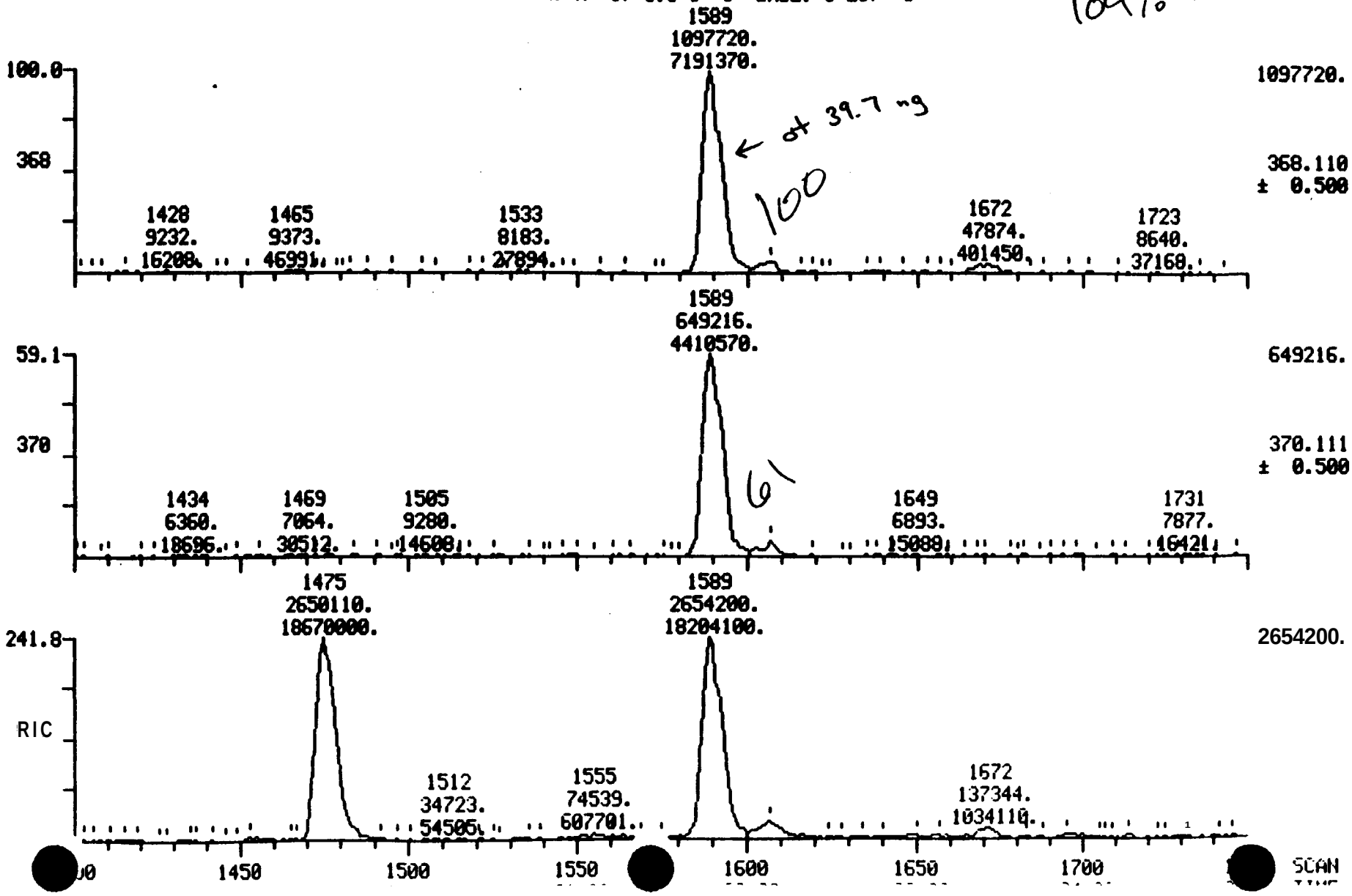
ND(1.3 ppt)



32005

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3462EE #1 SCANS 1400 TO 1750
04/17/91 10:41:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

104% Rec.



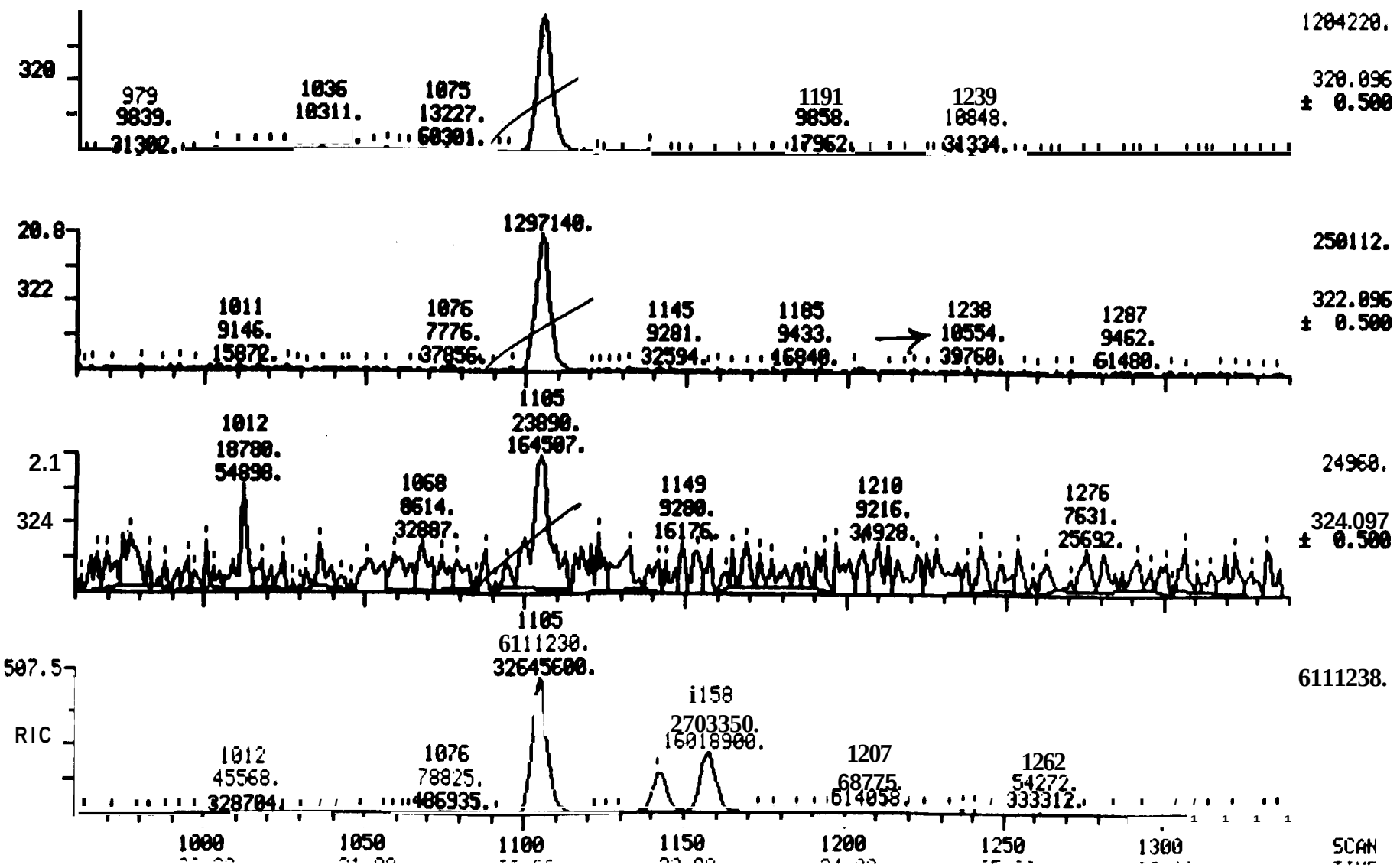
MIDRIC+MASS CHROMATOGRAMS
04/17/91 10:41:00
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: TBB3462EE #1
CALI: CAL910306A #2

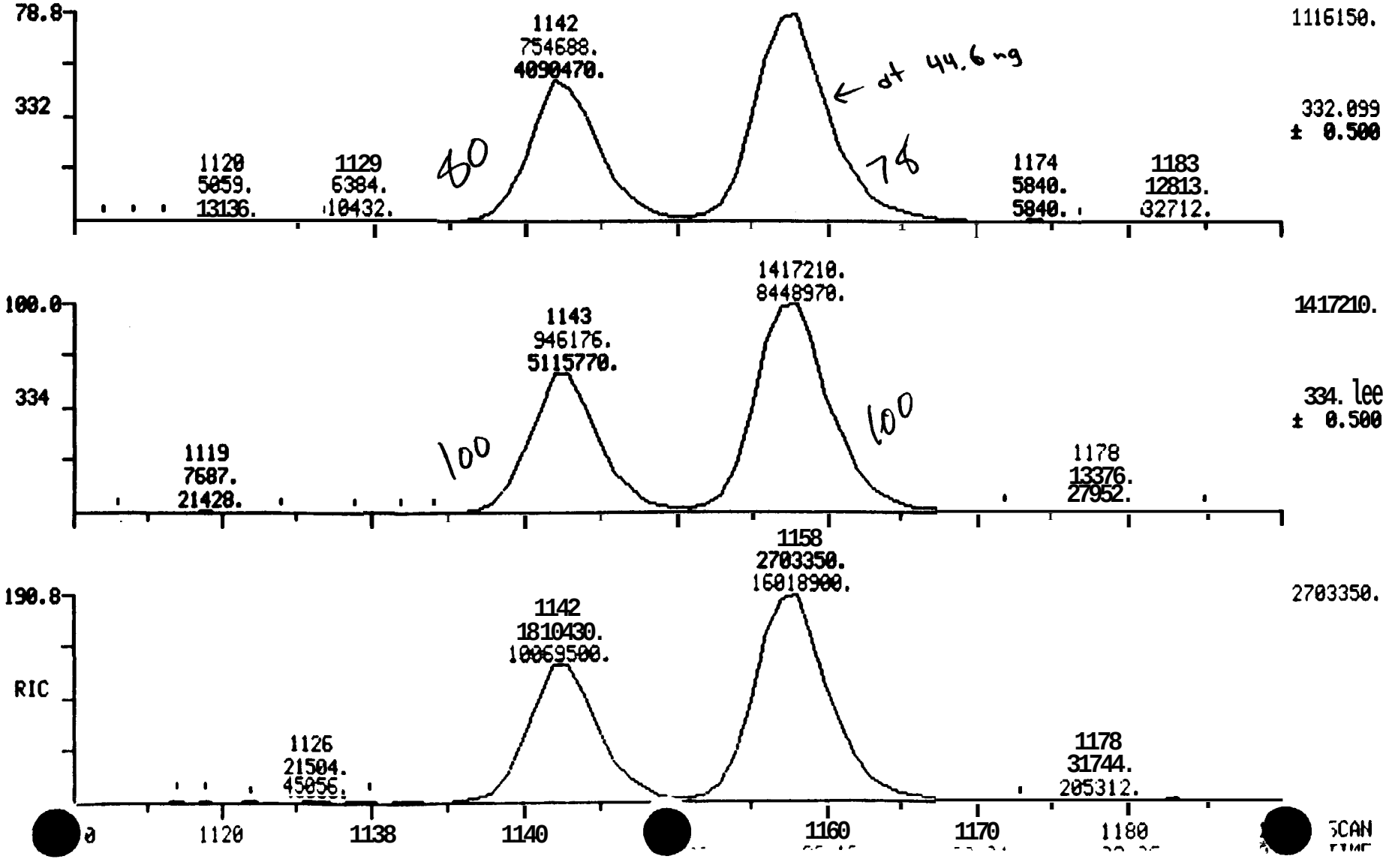
SCANS 960 TO 1340

TCDD

ND(0.65 ppt)



320C553


78.8
332
1142
754688.
4090470.
← at 44.6 mg
80
78
1120
5859.
13136.
1129
6384.
10432.
1174
5840.
5840.
1183
12813.
32712.
1116150.
332.099
± 0.500
100.0
334
1143
946176.
5115770.
1417210.
8448970.
100
100
1119
7687.
21428.
1178
13376.
27952.
1417210.
334. lee
± 0.500
190.8
RIC
1142
1810430.
10069500.
1158
2703350.
16018900.
1126
21504.
45056.
1178
31744.
205312.
2703350.
1120
1138
1140
1160
1170
1180
SCAN

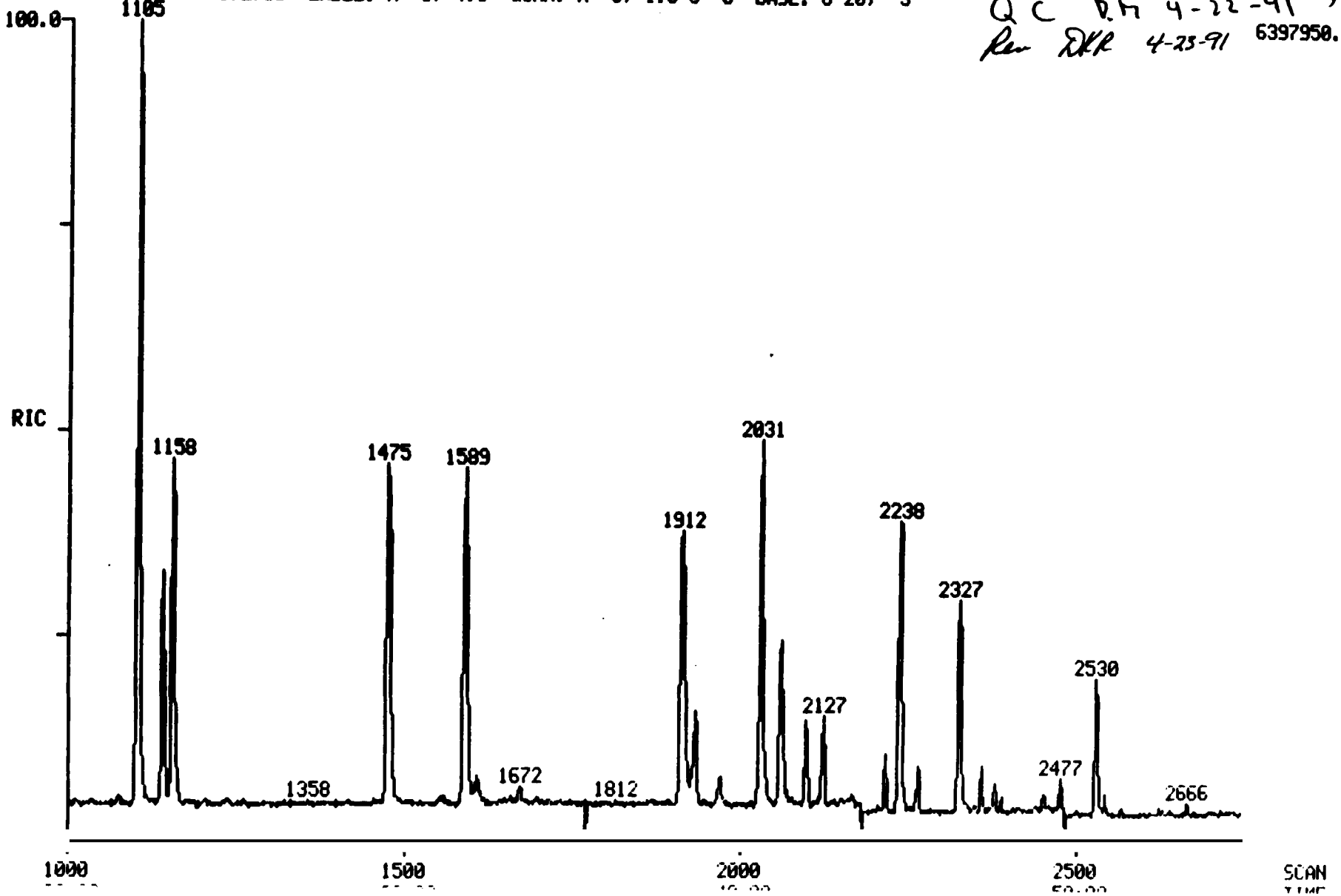
MIDRIC
04/17/91 10:41:00
SAMPLE: 2UL OF BB3462 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,2753 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: TBB3462EE #1
CALI: CAL910306A #2

SCANS 1000 TO 2750

alc-nm
4-22-91
QC D.M 4-22-91
Rev DKR 4-23-91

6397950.



3200560

4	419.350	420.030	0.054	3	100	40	1	0	Por
3	421.330	422.030	0.054	3	100	40	1	0	Po.
6	423.550	424.030	0.054	3	100	40	1	0	Po.
7	423.550	424.030	0.052	3	100	40	1	0	Po.
8	433.330	43b.050	0.052	3	100	40	1	0	Po.
9	437.550	438.030	0.052	3	100	40	1	0	Pos
10	441.350	442.030	0.054	3	100	40	1	0	Po.
11	443.550	444.030	0.054	3	100	40	1	0	Po.
12	457.550	438.030	0.052	3	100	40	1	0	Por
13	439.550	460.030	0.031	3	100	40	1	0	Po.
14	469.550	470.050	0.034	3	100	40	1	0	Pos
13	471.550	472.030	0.052	3	100	40	1	0	Por
16	479.550	400.030	0.054	3	100	40	1	0	Pos
17	513.550	514.050	0.054	3	100	40	1	0	Por

4/17/91 10:33:19 SCAN 2733
Acquisition stopped

4/17/91 10:33:21
ACQUISITION COMPLETED
SCANS 1 TO 1768 Centroid
SCAN 1769 Suspended
SCANS 1770 TO 2183 Centroid
SCAN 2184 Suspended
SCANS 2185 TO 2483 Centroid
SCAN 2484 Suspended
SCANS 2485 TO 2733 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	2730	631.8	3300.0	19.1	83804.	30.	25.

HID scan
Scan time: 1.200 s

Desc: 02
Samp. Int.: 0.200 ms

Mass intervals: 21
Master rate: 4096

3200561

Int #	Lo mass	Hi mass	Time	MPW	MFW	HA	TW	BL	ION
1	337.650	338.150	0.054	3	100	40	1	0	Po.
2	339.630	340.150	0.032	3	100	40	1	0	Po.
3	341.630	342.150	0.034	3	100	40	1	0	Po.
4	351.650	332.150	0.032	3	100	40	1	0	Pos
5	333.630	354.150	0.034	3	100	40	1	0	Po.
6	333.650	336.130	0.032	3	100	40	1	0	Po.
7	357.650	358.150	0.054	3	100	40	1	0	Po.
8	367.630	368.130	0.032	3	100	40	1	0	Po.
9	369.630	370.130	0.052	3	100	40	1	0	Po.
10	371.630	372.150	0.052	3	100	40	1	0	Po.
11	373.630	374.150	0.032	3	100	40	1	0	Po.
12	373.630	376.150	0.032	3	100	40	1	0	Po.
13	379.630	380.150	0.052	3	100	40	1	0	Po.
14	381.650	382.150	0.032	3	100	40	1	0	Po.
13	385.650	386.150	0.052	3	100	40	1	0	Pos
16	387.630	388.150	0.052	3	100	40	1	0	Po.
17	389.630	390.150	0.032	3	100	40	1	0	Pos
18	391.630	392.150	0.052	3	100	40	1	0	Pos
19	401.650	402.150	0.052	3	100	40	1	0	Po.
20	403.430	404.150	0.034	3	100	40	1	0	Po.
21	445.530	446.050	0.032	3	100	40	1	0	Po.

4/17/91 10:21:35 SCAN 2184 OF 4000

HID 'scan
Scan time: 1.200 s

Desc: 03
Samp. Int.: 0.200 ms

Mass intervals: 19
Master rate: 4096

Int #	Lo mass	Hi mass	Tine	MPW	MFW	MA	TH	BL	ION
1	371.650	372.150	0.052	3	100	40	1	0	Pos
2	373.650	374.150	0.052	3	100	40	1	0	Po.
3	375.650	376.150	0.052	3	100	40	1	0	Po.
4	385.650	386.150	0.052	3	100	40	1	0	Pos
5	387.650	388.150	0.052	3	100	40	1	0	Pos
6	389.650	390.150	0.052	3	100	40	1	0	eo.
7	391.650	392.150	0.052	3	100	40	1	0	Po.
8	401.650	402.150	0.052	3	100	40	1	0	Po.
9	403.650	404.150	0.054	3	100	40	1	0	Po.
10	405.550	406.050	0.054	3	100	40	1	0	Pos
11	407.550	408.050	0.052	3	100	40	1	0	Po.
12	409.550	410.050	0.054	3	100	40	1	0	Po.
13	419.550	420.050	0.054	3	100	40	1	0	Pos
14	421.550	422.050	0.054	3	100	40	1	0	Po.
13	423.550	424.050	0.054	3	100	40	1	0	Pos
16	423.550	426.050	0.052	3	100	40	1	0	Pos
17	435.550	436.050	0.052	3	100	40	1	0	Pos
18	437.550	438.050	0.052	3	100	40	1	0	Pos
19	479.550	480.050	0.054	3	100	40	1	0	Pos

4/17/91 10:27:43 SCAN 2484 OF 4000

MID scan
Scan time: 1.200 s

Desc: 04
Samp. Int.: 0.200 ms

Mass intervals: 17
Master rate: 4096

Int #	Lo mass	Hi mass	Tire	MPW	MFW	MA	TH	BL	ION
1	405.550	406.050	0.034	3	100	40	1	0	Pos
2	407.550	408.050	0.052	3	100	40	1	0	Pos
3	409.550	410.050	0.054	3	100	40	1	0	Po.

4/17/91 9:36:33 SCAN 1 OF 4000
Acquisition started

Acquire
04/17/91 9:36:00 + 0:04
Run 0:TBB3461EE
Free sectors: 8515
ACQUIRING
Scan: 3 of 4000
Sample: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
Conds.: 60M DB-5/TOTALS.
Formula:
Instrument: Q3
Weight: 0.000
Submitted by: JB
Analyst: DT
Acct. No: PC4622

********** GC PARAMETERS **********

Loaded GC Desc: BW
Current GC Desc: BW
Current GC oven tmp: 89 DegC
GC elapsed time 1:26 min
Injector : 300 DegC
Int.oven : 275 DegC

Seq. #	Temp(C)	Rate(C/m)	Time(min)	Total time(min)		Open	Close
1	50 - 50	-	0.1	0.1	Sweep/Split	10.8	0.0
2	50 - 70	25.0	0.7	0.8	Divert	10.8	0.0
3	70 - 70	-	10.0	10.8			

********** SCAN PARAMETERS **********

***** Mode: Centroid positive ion

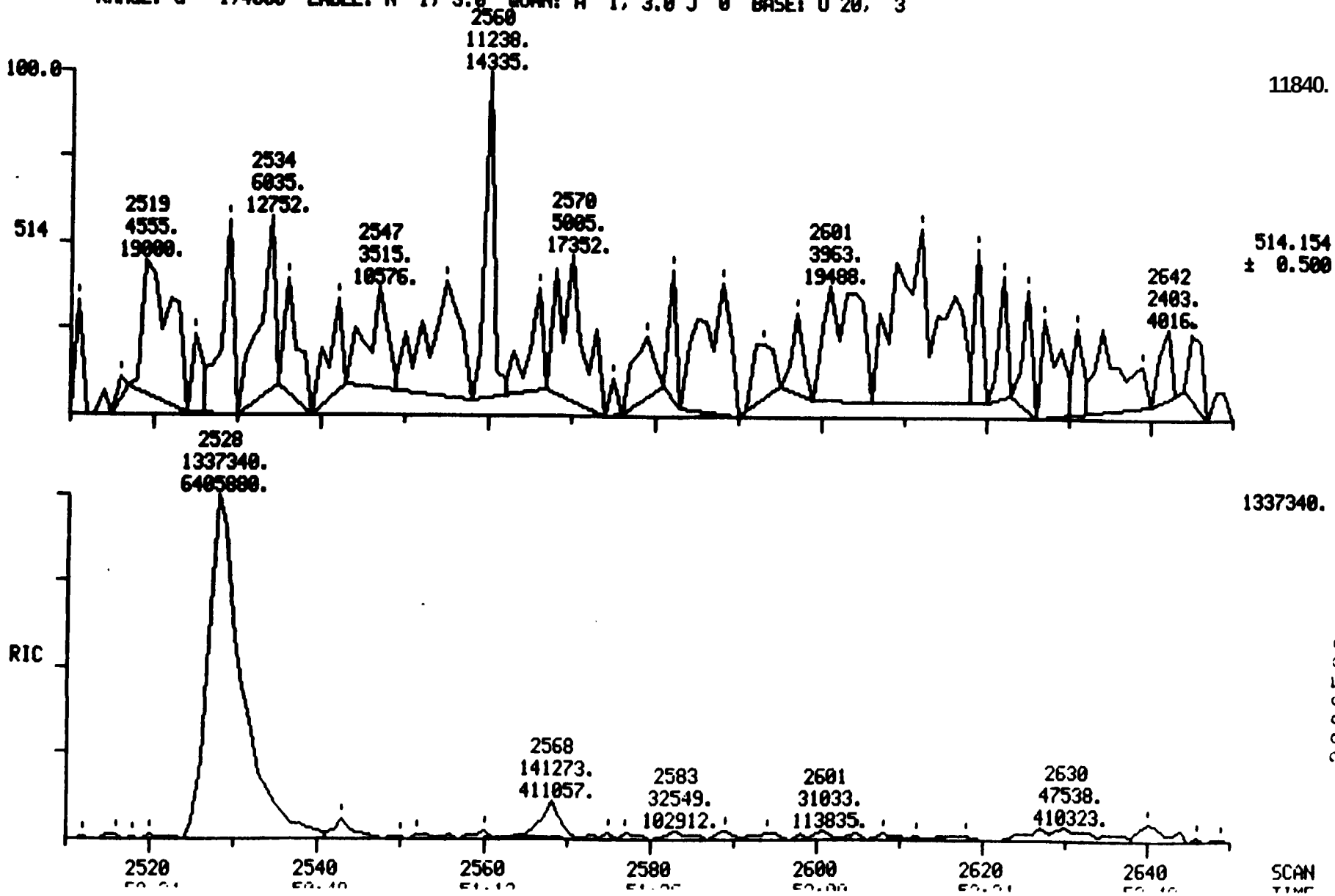
MID scan
Desc: E1
Mass intervals: 21
Scan time: 1.200 s
Samp. int.: 0.200 ms
Master rate: 4096

Int #	Lo mass	Hi mass	Time	MPW	MFW	MA	TH	BL	ION
1	303.650	304.150	0.052	3	100	40	1	0	Pos
2	305.650	306.150	0.032	3	100	40	1	0	Pos
3	307.650	308.150	0.054	3	100	40	1	0	Pos
4	315.650	316.130	0.052	3	100	40	1	0	Pos
5	317.650	318.150	0.054	3	100	40	1	0	Pos
6	319.650	320.150	0.052	3	100	40	1	0	Pos
7	321.650	322.150	0.054	3	100	40	1	0	Pos
8	323.650	324.150	0.052	3	100	40	1	0	Pos
9	331.650	332.150	0.052	3	100	40	1	0	Pos
10	333.630	334.150	0.054	3	100	40	1	0	Pos
11	337.650	338.150	0.054	3	100	40	1	0	Pos
12	339.650	340.150	0.052	3	100	40	1	0	Pos
13	341.650	342.150	0.032	3	100	40	1	0	Pos
14	331.650	352.150	0.054	3	100	40	1	0	Pos
15	353.650	354.150	0.052	3	100	40	1	0	Po.
16	355.630	336.150	0.054	3	100	40	1	0	Pos
17	357.650	358.150	0.052	3	100	40	1	0	Pos
18	367.650	360.150	0.054	3	100	40	1	0	Pos
19	369.650	370.150	0.052	3	100	40	1	0	Pos
20	373.650	376.150	0.052	3	100	40	1	0	Pos
21	409.550	410.050	0.052	3	100	40	1	0	Pos

Interface number	0	
Sub-interface number	0	
# of acqu buffers	16	
Instrument type	Q	
Full scale mass	1000	u
Zero scale mass	1	u
Intensity/ion	2	
Peak Width	1000.	mmu
Offset at low mass	0	mmu
Offset at high mass	0	mmu
Voltage settling time(MS)	4	

4/17/91 10:13:04 SCAN 1769 OF 4000

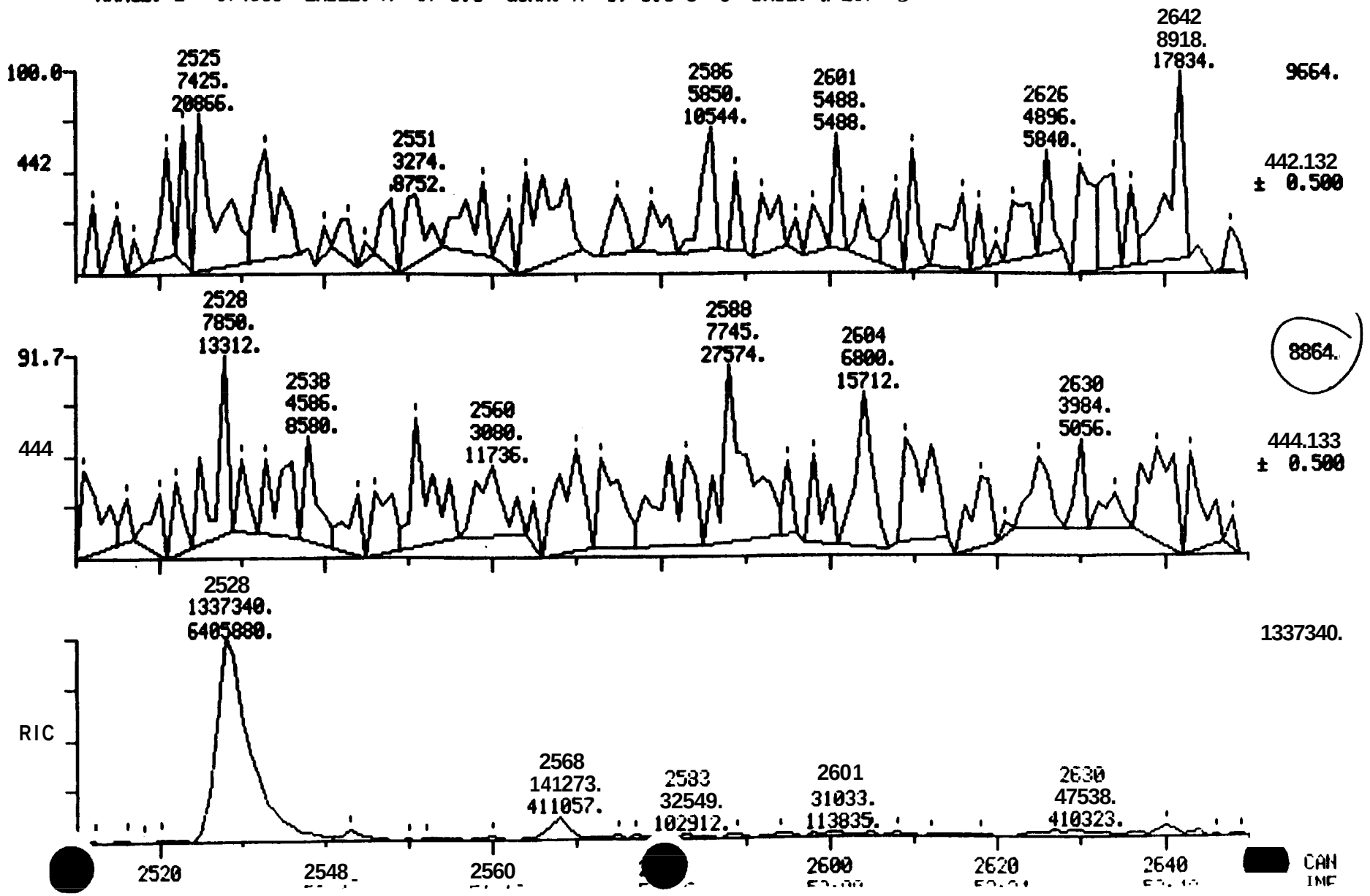
MIDRIC+MASS CHROMATOGRAM DATA: TB83461EE #1 SCANS 2510 TO 2650
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3



3205562

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 2510 TO 2650
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

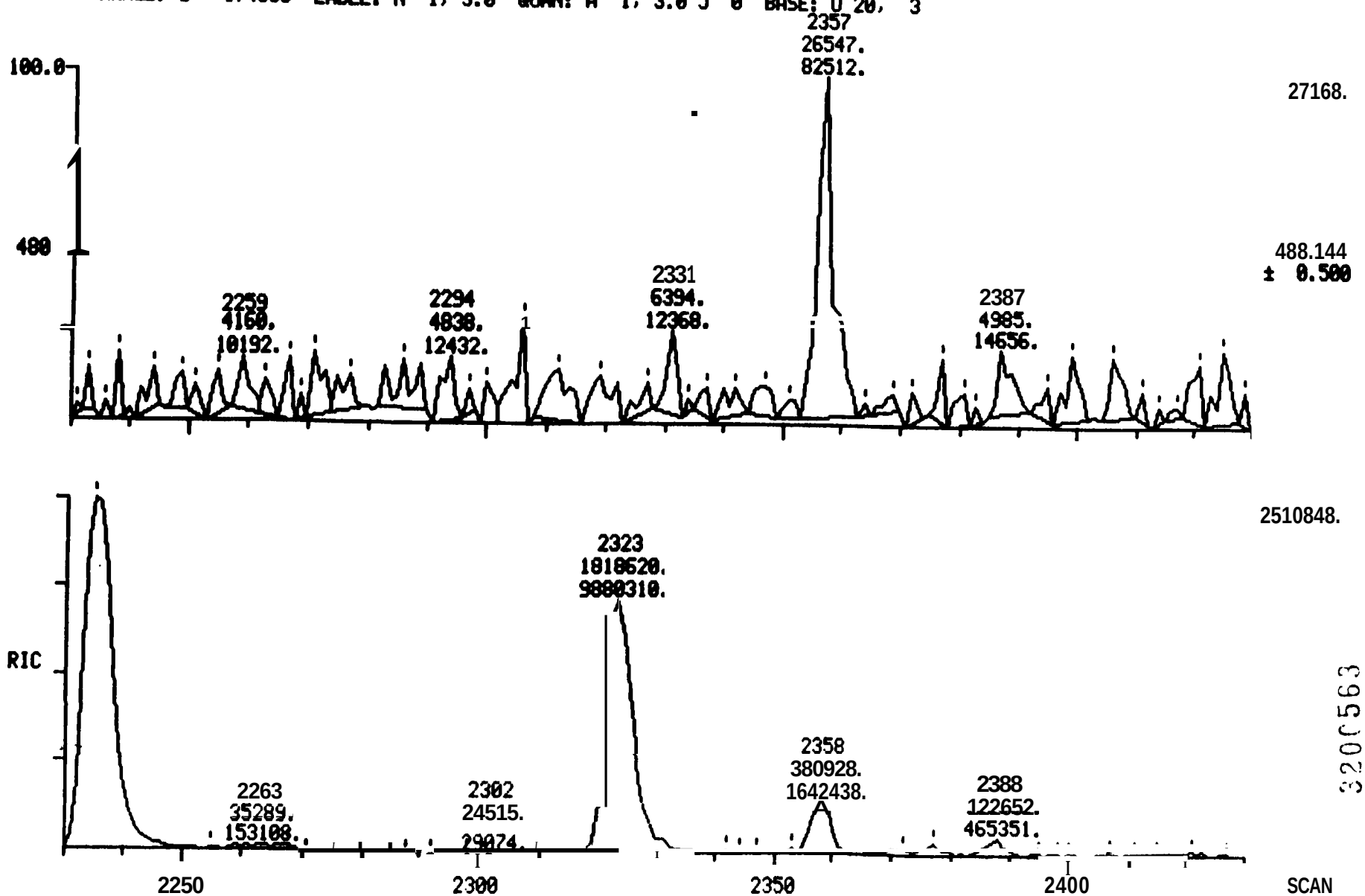
OCDF
ND (1.8 PPt)



MIDRIC+MASS CHROMATOGRAM
04/17/91 9:36:00
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DATA: TBB3461EE #1
CALI: CAL910306A #2

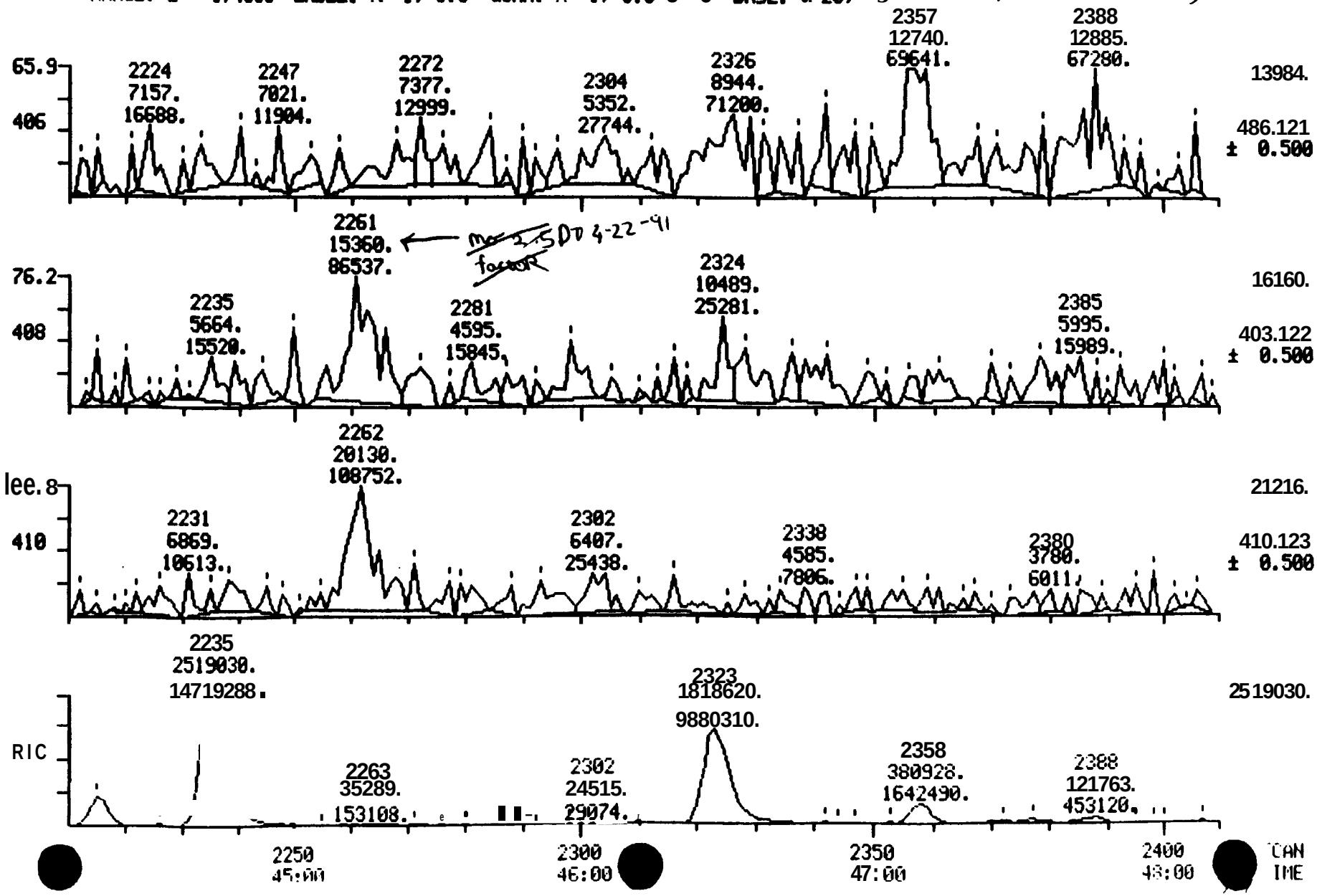
SCANS 2230 TO 2430



3205563

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 2218 TO 2410
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J e BASE: U 20, 3

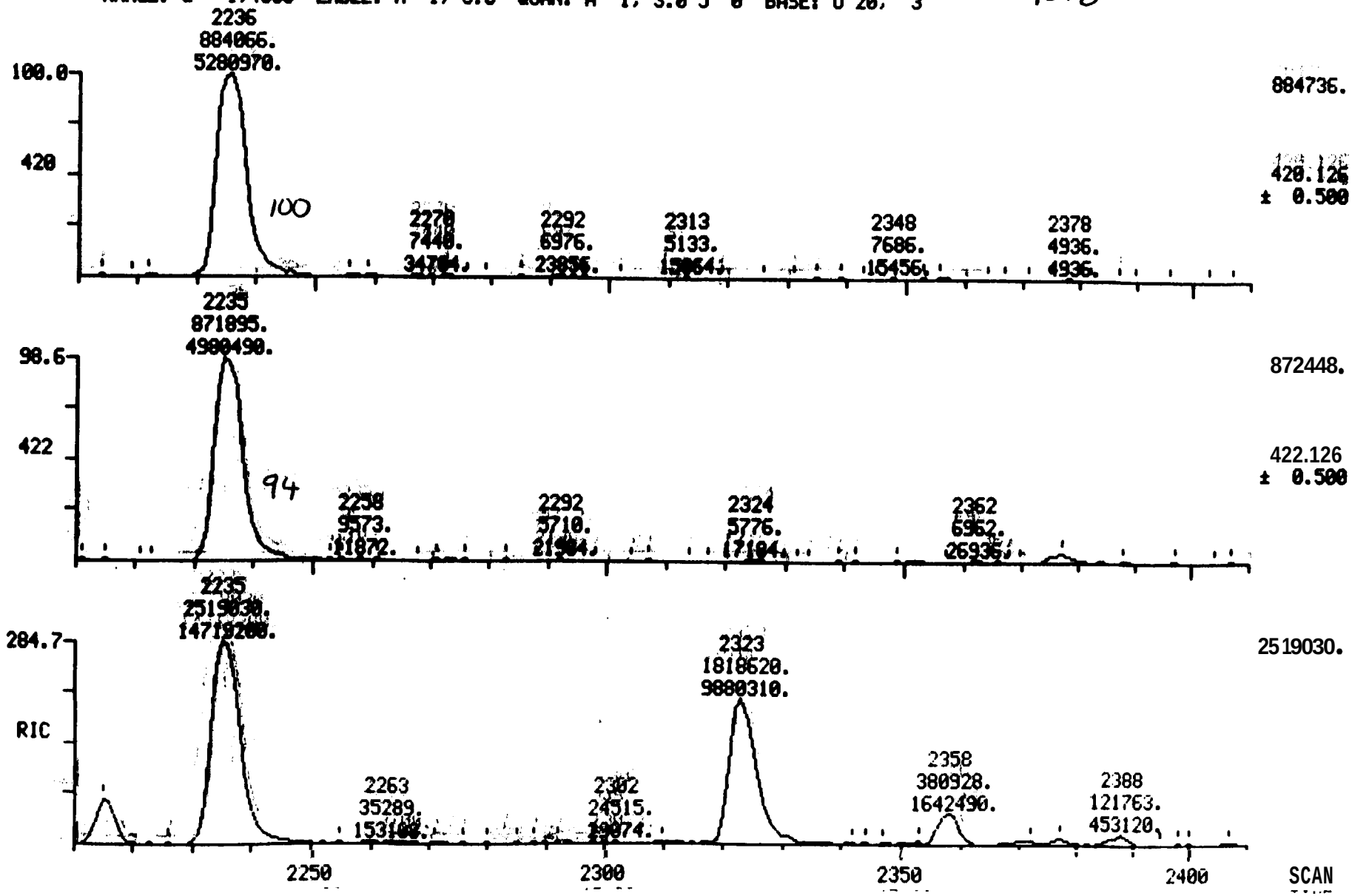
HpCDF
~~ND (0.93 PPt)~~ DT 4-22-91
ND (2.3 PPt)



~~mass 2.5 factor~~ DT 4-22-91

MIDRIC+MASS CHROMATOGRAMS DATA: TBB3461EE #1 SCANS 2210 TO 2410
04/17/91 9:36:00 CALI: CAL910306A #2
SAMPLE: 2UL OF BB3461 (1000ML WATER) FOR TOTALS
CONDS.: 60M DB-5/TOTALS.
RANGE: G 1,4000 LABEL: N 1, 3.0 QUAN: A 1, 3.0 J 0 BASE: U 20, 3

DT 4-22-91
~~79%~~ Recovery
95%



320056