Gradient Corporation

1989 Antrim Iron Works (Tar Lake) Site Investigation

Volume II - Tar and Soil Organic Compound Data

March 1990

44 Brattle Street □ Cambridge, MA 02138 □ (617) 576-1555 □ FAX: (617) 864-8469

COMPUCHEM
LABORATORIES

JAN ! 9 1990

18/JAN/90

[redacted]

ENSAFE
ATTN. Mr. Phil Coop
P.O.Box341315(Zip38184-1315)
5705 Stage Rd./Suite 212
Memphis, TN 38134

Subject. Report of Data - Account Number 178202

ATTN. Mr. Phil Coop

Enclosed herewith are the results of analytical work and associated Quality Control data for the samples received by CompuChem@ under the referenced account number.

As you know, CLP service is performed in accordance with EPA methodologies as defined for the National Contract Laboratory Program; 'SOW For Organic Analysis; Multi-Media, Multi-Concentration' effective 2/88, revision 9/88. Your original data has been stored and is available for future reference.

Thank you for selecting CompuChem@ Laboratories for your sample analysis. We would like to continue providing you analytical support and services in the future. If you should have questions or require additional analytical services, please contact your representative at 1-919-549-8263.

Sincerely,

Elise L. Cobb

Elise L. Cobb
Supervisor, Report Deliverables

Attachment

COMPUCHEM
LABORATORIES, INC.

18/JAN/90

ENSAFE
ATTN. Mr. Phil Coop
P.O.Box341315(Zip38184-1315)
5705 Stage Rd./Suite 212
Memphis, TN 38134

ACCOUNT #. 178202

CC#	SAMPLE-ID	RECEIPT DATE
309679	B201A	12/20/89
309686	B201B	12/20/89
309687	B202TAR	12/20/89
309688	B202A	12/20/89
309689	B202B	12/20/89
309690	B202C	12/20/89

TOTAL NUMBER OF SAMPLES = 6

I. SAMPLE DATA SUMMARY PACKAGE

The Sample Data Summary Package shall contain data for samples in one Sample Delivery Group of the Case, as follows:

1. Case Narrative

2. By fraction (VOA, SV, PEST) and by sample within each fraction - tabulated target compound results (Form I) and tentatively identified compounds (Form I, TIC) (VOA and SV only)

3. By fraction (VOA, SV, PEST) - surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil, by concentration (Low or Medium)

4. By fraction (VOA, SV, PEST) - matrix spike/matrix spike duplicate results (Form III)

5. By fraction (VOA, SV, PEST) - blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only)

6. By fraction (VOA and SV only) - internal standard area data (Form VIII)

CASE#: 18756 SDG#: 07 SAS#: _____

1. **Case Narrative**

CLP CASE NARRATIVE--CASE # 18756
Contract No. Z-88 (REVS) SDG No. 07
CompuChem Laboratories, Inc.

Sample Numbers:BZ01A, BZ01B, BZ02A, BZ02B, BZ02C, BZ02TAR

This portion of Case # 18756 consisted of six solid samples for volatile and semivolatile analysis. The samples were received intact on 12/20/89 via Federal Express in properly sealed shipping containers with traffic reports. Due to a discrepancy between the sample container and the chain-of-custody the C-O-C ID was used for sample BZ02A. Moisture content of the samples ranged from 9% to 64%. The pH values were within the values specified in EPA protocols.

VOLATILES:
Because of the nature of the samples, it was not possible to analyze the Low Level sample spikes within holding time requirements. All other volatile fractions were extracted and analyzed within holding time requirements. Because of the level of sample constitutents, two analyses, a Low Level and a Medium Level, were reported for samples BZ01A, BZ01B, and BZ02TAR. The Low Level analyses of those three samples all contained toluene, 2-hexanone and total xylenes at levels outside their analytical ranges. In addition, sample BZ01A also contained benzene and ethylbenzene and sample BZ02TAR, methylene chloride, acetone, and ethylbenzene, at levels outside their analytical range in the Low Level analyses. Because of sample inhomogeneity and the differences in preparation procedures for the Low and Medium analyses, some of the reported concentrations did not compare well between the two reported analyses for these three samples. The total xylene concentration was mistakenly flagged with an "E" in the dilution of sample BZ02TAR. Since the analysis partially separates the xylenes, the individual xylene concentrations were acceptable. The surrogate D8-toluene failed recovery criteria in sample BZ01A due to matrix interference. All other surrogate recoveries met acceptance criteria. Both the Low and Medium Level matrix spike/matrix spike duplicate results were acceptable. Due to a scheduling error, the sample requested for use as the spike original was not used. Toluene failed recovery criteria in the Medium Level MS and MSD, and also failed %RPD in the Medium Level analyses.

SEMIVOLATILES:
All semivolatile fractions were extracted and analyzed within holding time requirements. Coeluting compounds were flagged with an "X" on Form I. Because of the levels of 2-methylphenol, 4-methylphenol, and 2,4-dimethylphenol present, two analyses were reported for sample BZ01A, a 20:1 and a 50:1 dilution. Both a neat and a 5:1 analysis were reported for sample BZ02B because of the levels of 4-methylphenol and 2,4-dimethylphenol present. In addition to the above-mentioned TCL's, such compounds as phenol and various polyaromatic hydrocarbons were detected in one or more of these samples. Due to the viscosity of the extract, only a 5:1 dilution of the Medium Level extraction was reported for sample BZ01B. Because of the dilution necessary no surrogate recovery data was available for the Low Level matrix spike/ matrix spike duplicate. The recovery for D5-nitrobenzene in sample BZ01A exceeded recovery criteria. All other surrogates met recovery criteria. Because of the dilution necessary, there was no Low Level spike recovery data. A Low Level blank spike, extracted and analyzed with these samples, had acceptable results.

The failure of the %RPD for 2,4-dinitrotoluene in the blank spike was allowed, since the %RPD criteria are internal CompuChem requirements and not contractual necessities. The Medium Level matrix spike/matrix spike duplicate results were acceptable. The recoveries for n-nitroso-di-n-propylamine and 1,2,4-trichlorobenzene failed QC limits for both the MS and MSD. In addition the recovery for 1,4-dichlorobenzene failed QC limits in the MSD. The %RPD's exceeded QC limits for 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and acenaphthene.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Sarah A Hubbard

Sarah A. Hubbard 1/18/90
Technical Reviewer

COMPUCHEM LABORATORIES

DETECTION LIMIT CALCULATION CLARIFICATION

To protect our G C columns from unnecessary contamination, soil samples prepared according to Caucus Protocol methods are routinely diluted 5 : 1. Through a series of experiments we have determined that our instrument Detection Limit for pesticides is 5X lower than the EPA Contract Required Quantitation Limit (CRQL). We, therefore, only adjust our detection limits if the dilution necessary to analyze the sample is greater than 5 : 1. If the sample is diluted by a factor of X the detection limit is adjusted by X/5 instead of X.

Doug McCormack
Doug McCormack
Manager, GC Laboratory

Robert E. Meierer
Robert E. Meierer
Vice - President, Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

COMPUCHEM LABORATORIES

CHANGES TO THE EPA'S ORGANIC STATEMENT OF WORK (SOW) FOR THE CONTRACT LABORATORY PROGRAM (CLP)

Effective with samples received at CompuChem Laboratories, Inc. on April 3, 1989, the new "SOW for Organics Analysis; Multi-Media, Multi-Concentration" will be in effect. The new SOW is dated 2/88 with revisions dated 9/88.

EPA introduces modifications to the CLP SOW for a variety of reasons. They are:

- as a result of technical caucuses attended by representatives from EPA regional laboratories and the CLP, new or modified analytical methods are required,
- as a result of analytical data being supplied to the Agency by the CLP laboratories, QC acceptance criteria are updated and made a requirement of the program,
- as a result of requirements by the end users of the data (the EPA regions and the Program Office), changes to the deliverable requirements of the CLP are necessary.

As a service to our clients utilizing the EPA CLP SOW for their analytical needs, the following information is provided to point out the substantive changes between the new SOW and the previous one (10/86 with revisions through 8/87).

"KEY" CHANGES TO THE ORGANIC SOW

1) Wide bore capillary columns (internal diameter greater than 0.32 mm) are allowed for pesticide/PCB analysis in addition to packed columns. Fused silica capillary columns remain an optional confirmation column.

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2) The Sample Data Summary Package (SDSP) was introduced in the 10/86 SOW. The SDSP consists of copies of specific summary forms. In the 2/88 SOW, Form VIII, the Internal Standard Area Summary Form for volatile and semi-volatile analyses, has been added to the SDSP. Form VIII for volatiles and semi-volatiles is also to be included in the QC Summary Package.

3) A clarification for dealing with the three xylene isomers has been added. For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak exceeds 200 ug/l.

4) The volatile target analyte, 2-butanone, is to be quantified against the first internal standard, bromochloromethane. In the prior SOW, 2-butanone was quantified against the second internal standard, 1,4-difluorobenzene.

5) Turnaround time for the delivery of data has been lowered from 40 days to 35 days for routine analytical service (RAS) work associated with the Superfund program. The turnaround time is calculated from the Validated Time of Sample Receipt (VTSR) of the last sample in the Sample Delivery Group (SDG).

The above represents the major changes in the new organic SOW for EPA's CLP. There are, of course, other minor changes which have not been addressed in this announcement. Of note, the hardcopy deliverable forms have not changed and, in fact, retain the same revision dates as the prior SOW.

If there are any questions concerning the information presented, please feel free to contact your account administrator at 1-800-833-8097.

Robert E. Meierer
Vice President of Quality Assurance

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

DATA REPORTING QUALIFIERS - PAGE 2

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

COMPUCHEM LABORATORIES

QUALITY ASSURANCE NOTICE

With the advent of the new organics Statement of Work (SOW 2/88, Revision: 9/88) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in Compuchem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer

Robert E. Meierer
Director of Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 2308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

QUALITY ASSURANCE NOTICE

Specific guidelines are presented in the EPA CLP Organic Statement of Work for the positive qualitative identification of compounds through mass spectral interpretation. Applying these guidelines absolutely may not be possible when the nature of the sample is less than pure reference material. Where the mass spectral pattern of a compound to be identified demonstrates interferences or coelution from one or more additional compounds, either unknowns, internal standards, or surrogate standards, the "+" sign is added to the top of the dual spectra page.

Linda Fowler 4/10/89
Linda Fowler
Sr. Quality Assurance Specialist

Robert E. Meierer 4/12/89
Robert E. Meierer
Vice President, Quality Assurance

LABORATORY NOTICE

On June 15, 1985 CompuChem Laboratories began adding D3-2,4-Dinitrophenol to all standards and samples. The purpose of this addition is to enable the laboratory to have higher and more consistent analytical sensitivity for the native 2,4-Dinitrophenol. The peak corresponding to the deuterated analog is clearly labeled on each RIC as D3@1 and will not be searched and reported as a tentatively identified compound (TIC). This compound is not being used as an internal or surrogate standard.

L. Richard Flynn,
Development Chemist

Bob Materer,
Director of Quality Assurance

2. By fraction (VOA , SV , PEST) and by sample within each fraction – tabulated target compound results (Form I) and tentatively identified compounds (Form I , TIC) (VOA and SV only)

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009679C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	32	B
67-64-1	Acetone	150	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	120	
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	260	E
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	17	
591-78-6	2-Hexanone	580	E
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	720	E
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	420	E
100-42-5	Styrene	210	
1330-20-7	Total Xylenes	1300	E

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B201A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009679C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	625-86-5	FURAN,2,5-DIMETHYL-	8.22	240	J
2.	1192-62-7	ETHANONE,1-(2-FURANYL)-	11.02	250	J
3.		UNKNOWN	13.44	460	J
4.		UNKNOWN	13.45	220	J
5.		UNKNOWN	14.05	190	J
6.		UNKNOWN	14.55	300	J
7.	100-66-3	BENZENE,METHOXY-	14.70	510	J
8.	103-65-1	BENZENE,PROPYL-	15.34	190	J
9.		UNKNOWN	15.60	1500	J
10.		SUBSTITUTED BENZENE	16.05	800	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ARE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09679B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/28/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	440	BDJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	690	U
75-35-4	1,1-Dichloroethene	690	U
75-34-3	1,1-Dichloroethane	690	U
540-59-0	1,2-Dichloroethene (total)	690	U
67-66-3	Chloroform	690	U
107-06-2	1,2-Dichloroethane	690	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	690	U
56-23-5	Carbon Tetrachloride	690	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	690	U
78-87-5	1,2-Dichloropropane	690	U
10061-01-5	cis-1,3-Dichloropropene	690	U
79-01-6	Trichloroethene	690	U
124-48-1	Dibromochloromethane	690	U
79-00-5	1,1,2-Trichloroethane	690	U
71-43-2	Benzene	630	DJ
10061-02-6	Trans-1,3-Dichloropropene	690	U
75-25-2	Bromoform	690	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	630	DJ
127-18-4	Tetrachloroethene	690	U
79-34-5	1,1,2,2-Tetrachloroethane	690	U
108-88-3	Toluene	4200	D
108-90-7	Chlorobenzene	690	U
100-41-4	Ethylbenzene	3100	D
100-42-5	Styrene	1300	D
1330-20-7	Total Xylenes	9500	D

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201ARE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09679B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/28/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1192-62-7	ETHANONE,1-(2-FURANYL)-	9.80	820	J
2.		UNKNOWN	12.19	1200	J
3.		SUBSTITUTED BENZENE	14.05	1400	J
4.		SUBSTITUTED BENZENE	14.29	8400	J
5.		SUBSTITUTED BENZENE	14.45	2300	J
6.		SUBSTITUTED BENZENE	14.77	7000	J
7.		SUBSTITUTED BENZENE	15.14	9900	J
8.	496-11-7	1H-INDENE,2,3-DIHYDRO-	15.30	960	J
9.	271-89-6	BENZOFURAN	15.55	9200	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009686C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/27/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	57	U
74-83-9	Bromomethane	57	U
75-01-4	Vinyl Chloride	57	U
75-00-3	Chloroethane	57	U
75-09-2	Methylene Chloride	69	B
67-64-1	Acetone	370	B
75-15-0	Carbon Disulfide	28	U
75-35-4	1,1-Dichloroethene	28	U
75-34-3	1,1-Dichloroethane	28	U
540-59-0	1,2-Dichloroethene (total)	28	U
67-66-3	Chloroform	28	U
107-06-2	1,2-Dichloroethane	28	U
78-93-3	2-Butanone	260	
71-55-6	1,1,1-Trichloroethane	28	U
56-23-5	Carbon Tetrachloride	28	U
108-05-4	Vinyl Acetate	57	U
75-27-4	Bromodichloromethane	28	U
78-87-5	1,2-Dichloropropane	28	U
10061-01-5	cis-1,3-Dichloropropene	28	U
79-01-6	Trichloroethene	28	U
124-48-1	Dibromochloromethane	28	U
79-00-5	1,1,2-Trichloroethane	28	U
71-43-2	Benzene	140	
10061-02-6	Trans-1,3-Dichloropropene	28	U
75-25-2	Bromoform	28	U
108-10-1	4-Methyl-2-Pentanone	71	
591-78-6	2-Hexanone	1600	BE
127-18-4	Tetrachloroethene	28	U
79-34-5	1,1,2,2-Tetrachloroethane	28	U
108-88-3	Toluene	1600	E
108-90-7	Chlorobenzene	28	U
100-41-4	Ethylbenzene	980	
100-42-5	Styrene	540	
1330-20-7	Total Xylenes	3300	E

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009686C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/27/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	11.04	500	J
2.		METHYLESTERPENTENOIC ACID +	13.45	1400	J
3.		UNKNOWN	14.09	1100	J
4.	110-43-0	2-HEPTANONE	14.27	1400	J
5.		UNKNOWN	14.42	910	J
6.		UNKNOWN	14.55	1100	J
7.	100-66-3	BENZENE,METHOXY-	14.72	2300	J
8.		UNKNOWN	15.35	500	J
9.		ETHYLMETHYLBENZENE + UNKNOWN	15.60	5400	J
10.	611-14-3	BENZENE,1-ETHYL-2-METHYL-	16.07	1500	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201BRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C5R09686B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/29/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	540	DBJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	2200	D
10061-02-6	Trans-1,3-Dichloropropene	710	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	2400	D
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	16000	D
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	7400	D
100-42-5	Styrene	2800	D
1330-20-7	Total Xylenes	21000	D

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201BRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C5R09686B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/29/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	625-86-5	FURAN,2,5-DIMETHYL-	7.28	1800	J
2.		UNKNOWN	10.02	2000	J
3.		UNKNOWN	12.34	2800	J
4.		METHYLETHYLBENZENE + UNKNOWN	13.44	710	J
5.	103-65-1	BENZENE,PROPYL-	14.22	3100	J
6.	98-82-8	BENZENE,(1-METHYLETHYL)-	14.45	17000	J
7.		TRIMETHYLBENZENE ISOMER	14.60	4700	J
8.		ETHYLMETHYLBENZENE + UNKNOWN	14.94	14000	J
9.		TRIMETHYLBENZENE ISOMER	15.30	18000	J
10.	611-15-4	BENZENE,1-ETHENYL-2-METHYL-	15.45	2000	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
B202A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309688

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009688C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	33	B
67-64-1	Acetone	37	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	26	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	13	
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	2	J

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309688

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009688C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	13.00	6.8	J
2.		UNKNOWN	14.37	5.7	J
3.		UNKNOWN	15.57	6.8	J
4.		INSTRUMENT ARTIFACT	15.92	6.8	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
B202B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009689C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	30	B
67-64-1	Acetone	53	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	40	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	23	
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	15	
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	12	
100-42-5	Styrene	3	J
1330-20-7	Total Xylenes	54	

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009689C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	13.39	8.1	J
2.		UNKNOWN	14.05	7.0	J
3.		UNKNOWN	14.40	8.1	J
4.		UNKNOWN	14.49	8.1	J
5.	103-65-1	BENZENE,PROPYL-	15.35	8.1	J
6.	620-14-4	BENZENE,1-ETHYL-3-METHYL-	15.55	84	J
7.	611-14-3	BENZENE,1-ETHYL-2-METHYL-	16.04	21	J

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VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
B202C

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309690

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009690A19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 13 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	23	B
67-64-1	Acetone	26	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	3	J
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	7	

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202C

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309690

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009690A19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 13 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	13.02	9.2	J
2.	4971-18-0	CYCLOPENTANONE,2-ETHYL-	15.59	14	J
3.		INSTRUMENT ARTIFACT	15.97	9.2	J

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009687C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 64 Date Analyzed: 12/27/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	140	U
74-83-9	Bromomethane	140	U
75-01-4	Vinyl Chloride	140	U
75-00-3	Chloroethane	140	U
75-09-2	Methylene Chloride	8300	EB
67-64-1	Acetone	3500	EB
75-15-0	Carbon Disulfide	69	U
75-35-4	1,1-Dichloroethene	69	U
75-34-3	1,1-Dichloroethane	69	U
540-59-0	1,2-Dichloroethene (total)	69	U
67-66-3	Chloroform	69	U
107-06-2	1,2-Dichloroethane	69	U
78-93-3	2-Butanone	5000	E
71-55-6	1,1,1-Trichloroethane	69	U
56-23-5	Carbon Tetrachloride	69	U
108-05-4	Vinyl Acetate	140	U
75-27-4	Bromodichloromethane	69	U
78-87-5	1,2-Dichloropropane	69	U
10061-01-5	cis-1,3-Dichloropropene	69	U
79-01-6	Trichloroethene	69	U
124-48-1	Dibromochloromethane	69	U
79-00-5	1,1,2-Trichloroethane	69	U
71-43-2	Benzene	1200	
10061-02-6	Trans-1,3-Dichloropropene	69	U
75-25-2	Bromoform	69	U
108-10-1	4-Methyl-2-Pentanone	1200	
591-78-6	2-Hexanone	12000	EB
127-18-4	Tetrachloroethene	69	U
79-34-5	1,1,2,2-Tetrachloroethane	69	U
108-88-3	Toluene	8600	E
108-90-7	Chlorobenzene	69	U
100-41-4	Ethylbenzene	8000	E
100-42-5	Styrene	2300	
1330-20-7	Total Xylenes	15000	E

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202TAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009687C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 64 Date Analyzed: 12/27/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	534-22-5	FURAN,2-METHYL-	4.95	9000	J
2.	625-86-5	FURAN,2,5-DIMETHYL-	8.23	13000	J
3.		UNKNOWN	11.05	4700	J
4.		UNKNOWN	11.50	3200	J
5.		UNKNOWN	13.49	2600	J
6.		UNKNOWN	14.09	2900	J
7.	13368-65-5	CYCLOHEXANONE,3-METHYL-,(R)-	14.45	1700	J
8.		UNKNOWN	14.75	3900	J
9.		UNKNOWN	15.65	11000	J
10.	3141-02-4	1,3-CYCLOPENTADIENE,5-(1-MET	16.10	4400	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TARDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09687C13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 Date Analyzed: 12/29/89

Column: (pack/cap) CAP Dilution Factor: 3.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11000	U
74-83-9	Bromomethane	11000	U
75-01-4	Vinyl Chloride	11000	U
75-00-3	Chloroethane	11000	U
75-09-2	Methylene Chloride	16000	BD
67-64-1	Acetone	15000	D
75-15-0	Carbon Disulfide	5700	U
75-35-4	1,1-Dichloroethene	5700	U
75-34-3	1,1-Dichloroethane	5700	U
540-59-0	1,2-Dichloroethene (total)	5700	U
67-66-3	Chloroform	5700	U
107-06-2	1,2-Dichloroethane	5700	U
78-93-3	2-Butanone	11000	U
71-55-6	1,1,1-Trichloroethane	5700	U
56-23-5	Carbon Tetrachloride	5700	U
108-05-4	Vinyl Acetate	11000	U
75-27-4	Bromodichloromethane	5700	U
78-87-5	1,2-Dichloropropane	5700	U
10061-01-5	cis-1,3-Dichloropropene	5700	U
79-01-6	Trichloroethene	5700	U
124-48-1	Dibromochloromethane	5700	U
79-00-5	1,1,2-Trichloroethane	5700	U
71-43-2	Benzene	5000	DJ
10061-02-6	Trans-1,3-Dichloropropene	5700	U
75-25-2	Bromoform	5700	U
108-10-1	4-Methyl-2-Pentanone	11000	U
591-78-6	2-Hexanone	11000	U
127-18-4	Tetrachloroethene	5700	U
79-34-5	1,1,2,2-Tetrachloroethane	5700	U
108-88-3	Toluene	100000	D
108-90-7	Chlorobenzene	5700	U
100-41-4	Ethylbenzene	100000	D
100-42-5	Styrene	22000	D
1330-20-7	Total Xylenes	280000	DE

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202TARDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09687C13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 Date Analyzed: 12/29/89

Column (pack/cap) CAP Dilution Factor: 3.3

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	534-22-5	FURAN,2-METHYL-	4.20	29000	J
2.	625-86-5	FURAN,2,5-DIMETHYL-	7.15	49000	J
3.	1192-62-7	ETHANONE,1-(2-FURANYL)-	9.84	61000	J
4.	37609-41-9	BICYCLO[3.2.1]OCT-2-ENE,3-(1	12.24	85000	J
5.	24156-95-4	2-CYCLOPENTEN-1-ONE,3,5,5-TR	12.80	40000	J
6.		UNKNOWN	13.30	34000	J
7.		SUBST. BENZENE	14.10	48000	J
8.		SUBST. BENZENE	14.35	300000	J
9.		SUBST. BENZENE	14.82	220000	J
10.		SUBST. BENZENE	15.19	170000	J

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
B202AMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309680

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3R09680A19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 01/02/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	16	B
67-64-1	Acetone	37	
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	20	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	8	J
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

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1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201BREMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 311271

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN011271B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/29/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	490	BJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	710	U
10061-02-6	Trans-1,3-Dichloropropene	710	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	2700	
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	710	U
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	7600	
100-42-5	Styrene	2900	
1330-20-7	Total Xylenes	22000	

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1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202AMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309681

Sample wt/vol: 5.0 (g/mL) G Lab File ID: G3R09681A19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 01/02/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	25	B
67-64-1	Acetone	61	
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	33	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	15	
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	6	U
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	6	U

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201BREMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 311272

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN011272B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/29/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	530	BJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	710	U
10061-02-6	Trans-1,3-Dichloropropene	710	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	3600	
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	710	U
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	7700	
100-42-5	Styrene	2900	
1330-20-7	Total Xylenes	22000	

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1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G3D09679B08

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	44000	
111-44-4	bis(2-Chloroethyl)Ether	7300	U
95-57-8	2-Chlorophenol	7300	U
541-73-1	1,3-Dichlorobenzene	7300	U
106-46-7	1,4-Dichlorobenzene	7300	U
100-51-6	Benzyl Alcohol	7300	U
95-50-1	1,2-Dichlorobenzene	7300	U
95-48-7	2-Methylphenol	130000	E
39638-32-9	bis(2-Chloroisopropyl)Ether	7300	U
106-44-5	4-Methylphenol	180000	E
621-64-7	N-Nitroso-Di-n-Propylamine	7300	U
67-72-1	Hexachloroethane	7300	U
98-95-3	Nitrobenzene	7300	U
78-59-1	Isophorone	7300	U
88-75-5	2-Nitrophenol	7300	U
105-67-9	2,4-Dimethylphenol	240000	E
65-85-0	Benzoic Acid	35000	U
111-91-1	bis(2-Chloroethoxy)Methane	7300	U
120-83-2	2,4-Dichlorophenol	7300	U
120-82-1	1,2,4-Trichlorobenzene	7300	U
91-20-3	Naphthalene	54000	
106-47-8	4-Chloroaniline	7300	U
87-68-3	Hexachlorobutadiene	7300	U
59-50-7	4-Chloro-3-Methylphenol	7300	U
91-57-6	2-Methylnaphthalene	49000	
77-47-4	Hexachlorocyclopentadiene	7300	U
88-06-2	2,4,6-Trichlorophenol	7300	U
95-95-4	2,4,5-Trichlorophenol	35000	U
91-58-7	2-Chloronaphthalene	7300	U
88-74-4	2-Nitroaniline	35000	U
131-11-3	Dimethyl Phthalate	7300	U
208-96-8	Acenaphthylene	4200	J
606-20-2	2,6-Dinitrotoluene	7300	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G3D09679B08

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. _____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 20

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	35000	U
83-32-9	Acenaphthene	3700	J
51-28-5	2,4-Dinitrophenol	35000	U
100-02-7	4-Nitrophenol	35000	U
132-64-9	Dibenzofuran	14000	
121-14-2	2,4-Dinitrotoluene	7300	U
84-66-2	Diethylphthalate	7300	U
7005-72-3	4-Chlorophenyl-phenylether	7300	U
86-73-7	Fluorene	7300	U
100-01-6	4-Nitroaniline	35000	U
534-52-1	4,6-Dinitro-2-Methylphenol	35000	U
86-30-6	N-Nitrosodiphenylamine (1)	7300	U
101-55-3	4-Bromophenyl-phenylether	7300	U
118-74-1	Hexachlorobenzene	7300	U
87-86-5	Pentachlorophenol	35000	U
85-01-8	Phenanthrene	19000	
120-12-7	Anthracene	4700	J
84-74-2	Di-n-Butylphthalate	7300	U
206-44-0	Fluoranthene	3600	J
129-00-0	Pyrene	3200	J
85-68-7	Butylbenzylphthalate	7300	U
91-94-1	3,3'-Dichlorobenzidine	15000	U
56-55-3	Benzo(a)Anthracene	2300	J
218-01-9	Chrysene	1500	J
117-81-7	bis(2-Ethylhexyl)Phthalate	7300	U
117-84-0	Di-n-Octyl Phthalate	7300	U
205-99-2	Benzo(b)Fluoranthene	780	JX
207-08-9	Benzo(k)Fluoranthene	780	JX
50-32-8	Benzo(a)Pyrene	7300	U
193-39-5	Indeno(1,2,3-cd)Pyrene	7300	U
53-70-3	Dibenzo(a,h)Anthracene	7300	U
191-24-2	Benzo(g,h,i)Perylene	7300	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B201A

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G3D09679B08

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 20

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	28790-86-5	2-CYCLOPENTEN-1-ONE, 2,3,4-T	7.57	110000	J
2.	526-75-0	PHENOL, 2,3-DIMETHYL-	7.73	88000	J
3.	526-75-0	PHENOL, 2,3-DIMETHYL-	8.27	170000	J
4.	93-51-6	PHENOL, 2-METHOXY-4-METHYL-	8.44	88000	J
5.	28715-26-6	BENZOFURAN, 4,7-DIMETHYL-	8.80	67000	J
6.	698-71-5	PHENOL, 3-ETHYL-5-METHYL-	8.92	73000	J
7.	5873-86-9	BENZENECARBOTHIOIC ACID, O-M	9.19	56000	J
8.	24599-58-4	BENZENE, 1,4-DIMETHOXY-2-MET	9.32	150000	J
9.		UNKNOWN	9.64	36000	J
10.	91-57-6	NAPHTHALENE, 2-METHYL-	9.72	34000	J
11.	91-10-1	PHENOL, 2,6-DIMETHOXY-	9.90	95000	J
12.		UNKNOWN	9.99	45000	J
13.		UNKNOWN	10.07	59000	J
14.	17453-94-0	UNDECANE, 5-ETHYL-	10.24	47000	J
15.	121-34-6	BENZOIC ACID, 4-HYDROXY-3-ME	10.69	190000	J
16.		UNKNOWN	11.29	130000	J
17.	54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	11.74	48000	J
18.		UNKNOWN	11.89	95000	J
19.	629-78-7	HEPTADECANE	12.44	56000	J
20.	544-76-3	HEXADECANE	13.10	37000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ADL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G2D09679C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. _____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	23000	D
111-44-4	bis(2-Chloroethyl)Ether	18000	U
95-57-8	2-Chlorophenol	18000	U
541-73-1	1,3-Dichlorobenzene	18000	U
106-46-7	1,4-Dichlorobenzene	18000	U
100-51-6	Benzyl Alcohol	18000	U
95-50-1	1,2-Dichlorobenzene	18000	U
95-48-7	2-Methylphenol	120000	D
39638-32-9	bis(2-Chloroisopropyl)Ether	18000	U
106-44-5	4-Methylphenol	170000	D
621-64-7	N-Nitroso-Di-n-Propylamine	18000	U
67-72-1	Hexachloroethane	18000	U
98-95-3	Nitrobenzene	18000	U
78-59-1	Isophorone	18000	U
88-75-5	2-Nitrophenol	18000	U
105-67-9	2,4-Dimethylphenol	170000	D
65-85-0	Benzoic Acid	88000	U
111-91-1	bis(2-Chloroethoxy)Methane	18000	U
120-83-2	2,4-Dichlorophenol	18000	U
120-82-1	1,2,4-Trichlorobenzene	18000	U
91-20-3	Naphthalene	42000	D
106-47-8	4-Chloroaniline	18000	U
87-68-3	Hexachlorobutadiene	18000	U
59-50-7	4-Chloro-3-Methylphenol	18000	U
91-57-6	2-Methylnaphthalene	27000	D
77-47-4	Hexachlorocyclopentadiene	18000	U
88-06-2	2,4,6-Trichlorophenol	18000	U
95-95-4	2,4,5-Trichlorophenol	88000	U
91-58-7	2-Chloronaphthalene	18000	U
88-74-4	2-Nitroaniline	88000	U
131-11-3	Dimethyl Phthalate	18000	U
208-96-8	Acenaphthylene	3600	DJ
606-20-2	2,6-Dinitrotoluene	18000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ADL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G2D09679C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	88000	U
83-32-9	Acenaphthene	2600	DJ
51-28-5	2,4-Dinitrophenol	88000	U
100-02-7	4-Nitrophenol	88000	U
132-64-9	Dibenzofuran	7900	DJ
121-14-2	2,4-Dinitrotoluene	18000	U
84-66-2	Diethylphthalate	18000	U
7005-72-3	4-Chlorophenyl-phenylether	18000	U
86-73-7	Fluorene	18000	U
100-01-6	4-Nitroaniline	88000	U
534-52-1	4,6-Dinitro-2-Methylphenol	88000	U
86-30-6	N-Nitrosodiphenylamine (1)	18000	U
101-55-3	4-Bromophenyl-phenylether	18000	U
118-74-1	Hexachlorobenzene	18000	U
87-86-5	Pentachlorophenol	88000	U
85-01-8	Phenanthrene	7700	DJ
120-12-7	Anthracene	1900	DJ
84-74-2	Di-n-Butylphthalate	18000	U
206-44-0	Fluoranthene	2100	DJ
129-00-0	Pyrene	2900	DJ
85-68-7	Butylbenzylphthalate	18000	U
91-94-1	3,3'-Dichlorobenzidine	36000	U
56-55-3	Benzo(a)Anthracene	18000	U
218-01-9	Chrysene	18000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	18000	U
117-84-0	Di-n-Octyl Phthalate	18000	U
205-99-2	Benzo(b)Fluoranthene	18000	U
207-08-9	Benzo(k)Fluoranthene	18000	U
50-32-8	Benzo(a)Pyrene	18000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	18000	U
53-70-3	Dibenzo(a,h)Anthracene	18000	U
191-24-2	Benzo(g,h,i)Perylene	18000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201ADL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G2D09679C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 50

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	7.07	110000	J
2.		DIMETHYLPHENOL	7.23	100000	J
3.		DIMETHYLPHENOL	7.73	140000	J
4.		DIMETHYLPHENOL	7.83	72000	J
5.		UNKNOWN SUBSTITUTED HYDROCAR	8.23	55000	J
6.		UNKNOWN SUBSTITUTED HYDROCAR	8.34	61000	J
7.		UNKNOWN	8.59	84000	J
8.		UNKNOWN SUBSTITUTED HYDROCAR	8.72	290000	J
9.		UNKNOWN	9.00	46000	J
10.		UNKNOWN	9.07	48000	J
11.		DIMETHOXY PHENOL	9.25	150000	J
12.		UNKNOWN	9.34	57000	J
13.		UNKNOWN	9.40	84000	J
14.		UNKNOWN	9.57	42000	J
15.		UNKNOWN	9.77	48000	J
16.		UNKNOWN	9.99	350000	J
17.		UNKNOWN	10.54	280000	J
18.		UNKNOWN	11.10	180000	J
19.		UNKNOWN	11.57	44000	J
20.		UNKNOWN HYDROCARBON	12.22	26000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD009686A21

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 12/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: 5.8 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	120000	
111-44-4	bis(2-Chloroethyl)Ether	110000	U
95-57-8	2-Chlorophenol	110000	U
541-73-1	1,3-Dichlorobenzene	110000	U
106-46-7	1,4-Dichlorobenzene	110000	U
100-51-6	Benzyl Alcohol	110000	U
95-50-1	1,2-Dichlorobenzene	110000	U
95-48-7	2-Methylphenol	400000	
39638-32-9	bis(2-Chloroisopropyl)Ether	110000	U
106-44-5	4-Methylphenol	690000	
621-64-7	N-Nitroso-Di-n-Propylamine	110000	U
67-72-1	Hexachloroethane	110000	U
98-95-3	Nitrobenzene	110000	U
78-59-1	Isophorone	110000	U
88-75-5	2-Nitrophenol	110000	U
105-67-9	2,4-Dimethylphenol	610000	
65-85-0	Benzoic Acid	550000	U
111-91-1	bis(2-Chloroethoxy)Methane	110000	U
120-83-2	2,4-Dichlorophenol	110000	U
120-82-1	1,2,4-Trichlorobenzene	110000	U
91-20-3	Naphthalene	160000	
106-47-8	4-Chloroaniline	110000	U
87-68-3	Hexachlorobutadiene	110000	U
59-50-7	4-Chloro-3-Methylphenol	110000	U
91-57-6	2-Methylnaphthalene	120000	
77-47-4	Hexachlorocyclopentadiene	110000	U
88-06-2	2,4,6-Trichlorophenol	110000	U
95-95-4	2,4,5-Trichlorophenol	550000	U
91-58-7	2-Chloronaphthalene	110000	U
88-74-4	2-Nitroaniline	550000	U
131-11-3	Dimethyl Phthalate	110000	U
208-96-8	Acenaphthylene	11000	J
606-20-2	2,6-Dinitrotoluene	110000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD009686A21

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 12/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: 5.8 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	550000	U
83-32-9	Acenaphthene	110000	U
51-28-5	2,4-Dinitrophenol	550000	U
100-02-7	4-Nitrophenol	550000	U
132-64-9	Dibenzofuran	43000	J
121-14-2	2,4-Dinitrotoluene	110000	U
84-66-2	Diethylphthalate	110000	U
7005-72-3	4-Chlorophenyl-phenylether	110000	U
86-73-7	Fluorene	35000	J
100-01-6	4-Nitroaniline	550000	U
534-52-1	4,6-Dinitro-2-Methylphenol	550000	U
86-30-6	N-Nitrosodiphenylamine (1)	110000	U
101-55-3	4-Bromophenyl-phenylether	110000	U
118-74-1	Hexachlorobenzene	110000	U
87-86-5	Pentachlorophenol	550000	U
85-01-8	Phenanthrene	46000	J
120-12-7	Anthracene	11000	J
84-74-2	Di-n-Butylphthalate	110000	U
206-44-0	Fluoranthene	110000	U
129-00-0	Pyrene	14000	J
85-68-7	Butylbenzylphthalate	110000	U
91-94-1	3,3'-Dichlorobenzidine	230000	U
56-55-3	Benzo(a)Anthracene	110000	U
218-01-9	Chrysene	110000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	110000	U
117-84-0	Di-n-Octyl Phthalate	110000	U
205-99-2	Benzo(b)Fluoranthene	110000	U
207-08-9	Benzo(k)Fluoranthene	110000	U
50-32-8	Benzo(a)Pyrene	110000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	110000	U
53-70-3	Dibenzo(a,h)Anthracene	110000	U
191-24-2	Benzo(g,h,i)Perylene	110000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GD009686A21

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 12/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

GPC Cleanup: (Y/N) N pH: 5.8 Dilution Factor: 5.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	8.22	500000	J
2.	104-55-2	2-PROPENAL, 3-PHENYL-	8.45	34000	J
3.		UNKNOWN DIMETHYL PHENOL	8.87	140000	J
4.	93-51-6	PHENOL, 2-METHOXY-4-METHYL-	9.05	45000	J
5.		UNKNOWN DIMETHYL PHENOL	9.10	68000	J
6.		UNKNOWN	9.44	68000	J
7.		UNKNOWN	9.50	80000	J
8.		UNKNOWN TRIMETHYL PHENOL	9.80	100000	J
9.		UNKNOWN SUBST. HYDROCARBON	9.92	320000	J
10.		UNKNOWN	10.34	57000	J
11.		UNKNOWN SUBST. HYDROCARBON	10.47	170000	J
12.		UNKNOWN	10.55	68000	J
13.		UNKNOWN	10.64	110000	J
14.		UNKNOWN	10.82	68000	J
15.		UNKNOWN	11.22	310000	J
16.		UNKNOWN	11.79	330000	J
17.		UNKNOWN	12.22	45000	J
18.		UNKNOWN	12.37	190000	J
19.		UNKNOWN HYDROCARBON	12.89	80000	J
20.		UNKNOWN HYDROCARBON	13.50	91000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309688

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009688C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	370	U
111-44-4	bis(2-Chloroethyl)Ether	370	U
95-57-8	2-Chlorophenol	370	U
541-73-1	1,3-Dichlorobenzene	370	U
106-46-7	1,4-Dichlorobenzene	370	U
100-51-6	Benzyl Alcohol	370	U
95-50-1	1,2-Dichlorobenzene	370	U
95-48-7	2-Methylphenol	52	J
39638-32-9	bis(2-Chloroisopropyl)Ether	370	U
106-44-5	4-Methylphenol	6000	
621-64-7	N-Nitroso-Di-n-Propylamine	370	U
67-72-1	Hexachloroethane	370	U
98-95-3	Nitrobenzene	370	U
78-59-1	Isophorone	370	U
88-75-5	2-Nitrophenol	370	U
105-67-9	2,4-Dimethylphenol	1600	
65-85-0	Benzoic Acid	1800	U
111-91-1	bis(2-Chloroethoxy)Methane	370	U
120-83-2	2,4-Dichlorophenol	370	U
120-82-1	1,2,4-Trichlorobenzene	370	U
91-20-3	Naphthalene	67	J
106-47-8	4-Chloroaniline	370	U
87-68-3	Hexachlorobutadiene	370	U
59-50-7	4-Chloro-3-Methylphenol	370	U
91-57-6	2-Methylnaphthalene	80	J
77-47-4	Hexachlorocyclopentadiene	370	U
88-06-2	2,4,6-Trichlorophenol	370	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	370	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethyl Phthalate	370	U
208-96-8	Acenaphthylene	370	U
606-20-2	2,6-Dinitrotoluene	370	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309688

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009688C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	370	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	370	U
121-14-2	2,4-Dinitrotoluene	370	U
84-66-2	Diethylphthalate	370	U
7005-72-3	4-Chlorophenyl-phenylether	370	U
86-73-7	Fluorene	74	J
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-Methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	370	U
101-55-3	4-Bromophenyl-phenylether	370	U
118-74-1	Hexachlorobenzene	370	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	39	J
120-12-7	Anthracene	370	U
84-74-2	Di-n-Butylphthalate	370	U
206-44-0	Fluoranthene	370	U
129-00-0	Pyrene	370	U
85-68-7	Butylbenzylphthalate	370	U
91-94-1	3,3'-Dichlorobenzidine	750	U
56-55-3	Benzo(a)Anthracene	370	U
218-01-9	Chrysene	370	U
117-81-7	bis(2-Ethylhexyl)Phthalate	63	J
117-84-0	Di-n-Octyl Phthalate	370	U
205-99-2	Benzo(b)Fluoranthene	370	U
207-08-9	Benzo(k)Fluoranthene	370	U
50-32-8	Benzo(a)Pyrene	370	U
193-39-5	Indeno(1,2,3-cd)Pyrene	370	U
53-70-3	Dibenzo(a,h)Anthracene	370	U
191-24-2	Benzo(g,h,i)Perylene	370	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309688

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009688C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 8.1 Dilution Factor: 1.00

Number TICs found: 11

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	6.60	190	J
2.		DIMETHYLPHENOL ISOMER	7.23	300	J
3.		DIMETHYLPHENOL ISOMER	7.47	150	J
4.		DIMETHYLPHENOL ISOMER	7.75	2700	J
5.		DIMETHYLPHENOL ISOMER	7.83	190	J
6.	621-27-2	PHENOL, 3-PROPYL-	8.50	1200	J
7.	2416-94-6	PHENOL, 2,3,6-TRIMETHYL-	8.64	340	J
8.		UNKNOWN	9.20	190	J
9.		UNKNOWN	9.35	530	J
10.		UNKNOWN	10.04	340	J
11.		UNKNOWN	11.10	230	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009689C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	1300	
111-44-4	bis(2-Chloroethyl)Ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
100-51-6	Benzyl Alcohol	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	2400	
39638-32-9	bis(2-Chloroisopropyl)Ether	380	U
106-44-5	4-Methylphenol	13000	E
621-64-7	N-Nitroso-Di-n-Propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	7300	E
65-85-0	Benzoic Acid	1900	U
111-91-1	bis(2-Chloroethoxy)Methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	1200	
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-Methylphenol	380	U
91-57-6	2-Methylnaphthalene	1800	
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	1900	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	1900	U
131-11-3	Dimethyl Phthalate	380	U
208-96-8	Acenaphthylene	140	J
606-20-2	2,6-Dinitrotoluene	380	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009689C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1900	U
83-32-9	Acenaphthene	180	J
51-28-5	2,4-Dinitrophenol	1900	U
100-02-7	4-Nitrophenol	1900	U
132-64-9	Dibenzofuran	600	
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	570	
100-01-6	4-Nitroaniline	1900	U
534-52-1	4,6-Dinitro-2-Methylphenol	1900	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	1900	U
85-01-8	Phenanthrene	860	
120-12-7	Anthracene	180	J
84-74-2	Di-n-Butylphthalate	82	J
206-44-0	Fluoranthene	230	J
129-00-0	Pyrene	270	J
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	770	U
56-55-3	Benzo(a)Anthracene	63	J
218-01-9	Chrysene	74	J
117-81-7	bis(2-Ethylhexyl)Phthalate	88	J
117-84-0	Di-n-Octyl Phthalate	380	U
205-99-2	Benzo(b)Fluoranthene	380	U
207-08-9	Benzo(k)Fluoranthene	380	U
50-32-8	Benzo(a)Pyrene	380	U
193-39-5	Indeno(1,2,3-cd)Pyrene	380	U
53-70-3	Dibenzo(a,h)Anthracene	380	U
191-24-2	Benzo(g,h,i)Perylene	380	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B202B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009689C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 dec. Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 1.00

Number TICs found: 20 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		DIMETHYLPHENOL + ISOMER	7.75	2800	J
2.	621-27-2	PHENOL, 3-PROPYL-	8.50	1500	J
3.		UNKNOWN	9.37	1300	J
4.		UNKNOWN	9.57	1300	J
5.		DIMETHYLNAPHTHALENE ISOMER	9.90	1400	J
6.		UNKNOWN	10.05	1500	J
7.	54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	10.95	1900	J
8.		UNKNOWN	11.10	1000	J
9.	629-78-7	HEPTADECANE	11.59	1500	J
10.	54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	12.20	1100	J
11.		UNKNOWN	12.55	1100	J
12.	544-76-3	HEXADECANE	12.77	1800	J
13.	57-10-3	HEXADECANOIC ACID	13.12	1400	J
14.		HEPTADECANE ISOMER	13.32	1600	J
15.		PENTACOSANE ISOMER	13.84	2300	J
16.		PENTACOSANE ISOMER	14.80	2400	J
17.	7206-19-1	3-OCTADECENE, (E)-	15.24	5000	J
18.		UNKNOWN	15.70	1400	J
19.		UNKNOWN	16.12	4600	J
20.		UNKNOWN	16.60	2100	J

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

B202BDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD009689A20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	920	DJ
111-44-4	bis(2-Chloroethyl)Ether	1900	U
95-57-8	2-Chlorophenol	1900	U
541-73-1	1,3-Dichlorobenzene	1900	U
106-46-7	1,4-Dichlorobenzene	1900	U
100-51-6	Benzyl Alcohol	1900	U
95-50-1	1,2-Dichlorobenzene	1900	U
95-48-7	2-Methylphenol	2200	D
39638-32-9	bis(2-Chloroisopropyl)Ether	1900	U
106-44-5	4-Methylphenol	12000	D
621-64-7	N-Nitroso-Di-n-Propylamine	1900	U
67-72-1	Hexachloroethane	1900	U
98-95-3	Nitrobenzene	1900	U
78-59-1	Isophorone	1900	U
88-75-5	2-Nitrophenol	1900	U
105-67-9	2,4-Dimethylphenol	7300	D
65-85-0	Benzoic Acid	9300	U
111-91-1	bis(2-Chloroethoxy)Methane	1900	U
120-83-2	2,4-Dichlorophenol	1900	U
120-82-1	1,2,4-Trichlorobenzene	1900	U
91-20-3	Naphthalene	1300	DJ
106-47-8	4-Chloroaniline	1900	U
87-68-3	Hexachlorobutadiene	1900	U
59-50-7	4-Chloro-3-Methylphenol	1900	U
91-57-6	2-Methylnaphthalene	1800	DJ
77-47-4	Hexachlorocyclopentadiene	1900	U
88-06-2	2,4,6-Trichlorophenol	1900	U
95-95-4	2,4,5-Trichlorophenol	9300	U
91-58-7	2-Chloronaphthalene	1900	U
88-74-4	2-Nitroaniline	9300	U
131-11-3	Dimethyl Phthalate	1900	U
208-96-8	Acenaphthylene	1900	U
606-20-2	2,6-Dinitrotoluene	1900	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202BDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD009689A20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	9300	U
83-32-9	Acenaphthene	220	DJ
51-28-5	2,4-Dinitrophenol	9300	U
100-02-7	4-Nitrophenol	9300	U
132-64-9	Dibenzofuran	660	DJ
121-14-2	2,4-Dinitrotoluene	1900	U
84-66-2	Diethylphthalate	1900	U
7005-72-3	4-Chlorophenyl-phenylether	1900	U
86-73-7	Fluorene	580	DJ
100-01-6	4-Nitroaniline	9300	U
534-52-1	4,6-Dinitro-2-Methylphenol	9300	U
86-30-6	N-Nitrosodiphenylamine (1)	1900	U
101-55-3	4-Bromophenyl-phenylether	1900	U
118-74-1	Hexachlorobenzene	1900	U
87-86-5	Pentachlorophenol	9300	U
85-01-8	Phenanthrene	900	DJ
120-12-7	Anthracene	200	DJ
84-74-2	Di-n-Butylphthalate	200	DJ
206-44-0	Fluoranthene	260	DJ
129-00-0	Pyrene	260	DJ
85-68-7	Butylbenzylphthalate	1900	U
91-94-1	3,3'-Dichlorobenzidine	3800	U
56-55-3	Benzo(a)Anthracene	1900	U
218-01-9	Chrysene	1900	U
117-81-7	bis(2-Ethylhexyl)Phthalate	1900	U
117-84-0	Di-n-Octyl Phthalate	1900	U
205-99-2	Benzo(b)Fluoranthene	1900	U
207-08-9	Benzo(k)Fluoranthene	1900	U
50-32-8	Benzo(a)Pyrene	1900	U
193-39-5	Indeno(1,2,3-cd)Pyrene	1900	U
53-70-3	Dibenzo(a,h)Anthracene	1900	U
191-24-2	Benzo(g,h,i)Perylene	1900	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

B202BDL

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD009689A20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 7.7 Dilution Factor: 5.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		DIMETHYLPHENOL ISOMER	7.70	6400	J
2.	621-27-2	PHENOL, 3-PROPYL-	8.47	3500	J
3.	2416-94-6	PHENOL, 2,3,6-TRIMETHYL-	8.59	1700	J
4.		UNKNOWN	8.97	1600	J
5.	4453-90-1	1,4-METHANONAPHTHALENE, 1,4-	9.05	1600	J
6.		UNKNOWN	9.54	2100	J
7.	569-41-5	NAPHTHALENE, 1,8-DIMETHYL-	9.85	2100	J
8.		UNKNOWN	10.00	2100	J
9.	54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	10.92	2500	J
10.	629-78-7	HEPTADECANE	11.55	3100	J
11.	54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	12.15	2300	J
12.		UNKNOWN	12.50	1900	J
13.	544-76-3	HEXADECANE	12.70	3100	J
14.		PENTACOSANE ISOMER	13.25	2700	J
15.		PENTACOSANE ISOMER	13.77	3900	J
16.	629-97-0	DOCOSANE	14.27	8700	J
17.		PENTACOSANE ISOMER	14.75	3100	J
18.		UNKNOWN	15.19	6000	J
19.		UNKNOWN	16.04	6200	J
20.		UNKNOWN	16.50	2900	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202C

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309690

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009690A20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	380	U
111-44-4	bis(2-Chloroethyl)Ether	380	U
95-57-8	2-Chlorophenol	380	U
541-73-1	1,3-Dichlorobenzene	380	U
106-46-7	1,4-Dichlorobenzene	380	U
100-51-6	Benzyl Alcohol	380	U
95-50-1	1,2-Dichlorobenzene	380	U
95-48-7	2-Methylphenol	380	U
39638-32-9	bis(2-Chloroisopropyl)Ether	380	U
106-44-5	4-Methylphenol	510	
621-64-7	N-Nitroso-Di-n-Propylamine	380	U
67-72-1	Hexachloroethane	380	U
98-95-3	Nitrobenzene	380	U
78-59-1	Isophorone	380	U
88-75-5	2-Nitrophenol	380	U
105-67-9	2,4-Dimethylphenol	1400	
65-85-0	Benzoic Acid	1800	U
111-91-1	bis(2-Chloroethoxy)Methane	380	U
120-83-2	2,4-Dichlorophenol	380	U
120-82-1	1,2,4-Trichlorobenzene	380	U
91-20-3	Naphthalene	130	J
106-47-8	4-Chloroaniline	380	U
87-68-3	Hexachlorobutadiene	380	U
59-50-7	4-Chloro-3-Methylphenol	380	U
91-57-6	2-Methylnaphthalene	140	J
77-47-4	Hexachlorocyclopentadiene	380	U
88-06-2	2,4,6-Trichlorophenol	380	U
95-95-4	2,4,5-Trichlorophenol	1800	U
91-58-7	2-Chloronaphthalene	380	U
88-74-4	2-Nitroaniline	1800	U
131-11-3	Dimethyl Phthalate	380	U
208-96-8	Acenaphthylene	380	U
606-20-2	2,6-Dinitrotoluene	380	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202C

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309690

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009690A20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 1.00

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1800	U
83-32-9	Acenaphthene	380	U
51-28-5	2,4-Dinitrophenol	1800	U
100-02-7	4-Nitrophenol	1800	U
132-64-9	Dibenzofuran	39	J
121-14-2	2,4-Dinitrotoluene	380	U
84-66-2	Diethylphthalate	380	U
7005-72-3	4-Chlorophenyl-phenylether	380	U
86-73-7	Fluorene	59	J
100-01-6	4-Nitroaniline	1800	U
534-52-1	4,6-Dinitro-2-Methylphenol	1800	U
86-30-6	N-Nitrosodiphenylamine (1)	380	U
101-55-3	4-Bromophenyl-phenylether	380	U
118-74-1	Hexachlorobenzene	380	U
87-86-5	Pentachlorophenol	1800	U
85-01-8	Phenanthrene	380	U
120-12-7	Anthracene	380	U
84-74-2	Di-n-Butylphthalate	280	J
206-44-0	Fluoranthene	380	U
129-00-0	Pyrene	380	U
85-68-7	Butylbenzylphthalate	380	U
91-94-1	3,3'-Dichlorobenzidine	760	U
56-55-3	Benzo(a)Anthracene	380	U
218-01-9	Chrysene	380	U
117-81-7	bis(2-Ethylhexyl)Phthalate	77	J
117-84-0	Di-n-Octyl Phthalate	380	U
205-99-2	Benzo(b)Fluoranthene	380	U
207-08-9	Benzo(k)Fluoranthene	380	U
50-32-8	Benzo(a)Pyrene	380	U
193-39-5	Indeno(1,2,3-cd)Pyrene	380	U
53-70-3	Dibenzo(a,h)Anthracene	380	U
191-24-2	Benzo(g,h,i)Perylene	380	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1F

EPA SAMPLE NO.

B202C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309690

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH009690A20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 13 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 8.2 Dilution Factor: 1.00

Number TICs found: 13

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		ALDOL	5.62	380	AJ
2.		DIMETHYLPHENOL + UNKNOWN	7.25	310	J
3.		DIMETHYLPHENOL ISOMER	7.75	1000	J
4.		DIMETHYLPHENOL ISOMER	7.85	150	J
5.		TRIMETHYLPHENOL ISOMER	8.10	110	J
6.		ETHYLMETHYLPHENOL ISOMER	8.25	310	J
7.		TRIMETHYLPHENOL ISOMER	8.35	310	J
8.		ETHYLMETHYLPHENOL ISOMER	8.52	840	J
9.		TRIMETHYLPHENOL ISOMER	8.64	460	J
10.		UNKNOWN	9.00	230	J
11.		UNKNOWN	9.09	190	J
12.		UNKNOWN	9.20	270	J
13.		UNKNOWN	9.30	540	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRD09687A08

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330000	
111-44-4	bis(2-Chloroethyl)Ether	280000	U
95-57-8	2-Chlorophenol	280000	U
541-73-1	1,3-Dichlorobenzene	280000	U
106-46-7	1,4-Dichlorobenzene	280000	U
100-51-6	Benzyl Alcohol	280000	U
95-50-1	1,2-Dichlorobenzene	280000	U
95-48-7	2-Methylphenol	1100000	
39638-32-9	bis(2-Chloroisopropyl)Ether	280000	U
106-44-5	4-Methylphenol	1400000	
621-64-7	N-Nitroso-Di-n-Propylamine	280000	U
67-72-1	Hexachloroethane	280000	U
98-95-3	Nitrobenzene	280000	U
78-59-1	Isophorone	280000	U
88-75-5	2-Nitrophenol	280000	U
105-67-9	2,4-Dimethylphenol	2000000	
65-85-0	Benzoic Acid	1300000	U
111-91-1	bis(2-Chloroethoxy)Methane	280000	U
120-83-2	2,4-Dichlorophenol	280000	U
120-82-1	1,2,4-Trichlorobenzene	280000	U
91-20-3	Naphthalene	340000	
106-47-8	4-Chloroaniline	280000	U
87-68-3	Hexachlorobutadiene	280000	U
59-50-7	4-Chloro-3-Methylphenol	280000	U
91-57-6	2-Methylnaphthalene	560000	
77-47-4	Hexachlorocyclopentadiene	280000	U
88-06-2	2,4,6-Trichlorophenol	280000	U
95-95-4	2,4,5-Trichlorophenol	1300000	U
91-58-7	2-Chloronaphthalene	280000	U
88-74-4	2-Nitroaniline	1300000	U
131-11-3	Dimethyl Phthalate	280000	U
208-96-8	Acenaphthylene	280000	U
606-20-2	2,6-Dinitrotoluene	280000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRD09687A08

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1300000	U
83-32-9	Acenaphthene	280000	U
51-28-5	2,4-Dinitrophenol	1300000	U
100-02-7	4-Nitrophenol	1300000	U
132-64-9	Dibenzofuran	51000	J
121-14-2	2,4-Dinitrotoluene	280000	U
84-66-2	Diethylphthalate	280000	U
7005-72-3	4-Chlorophenyl-phenylether	280000	U
86-73-7	Fluorene	100000	J
100-01-6	4-Nitroaniline	1300000	U
534-52-1	4,6-Dinitro-2-Methylphenol	1300000	U
86-30-6	N-Nitrosodiphenylamine (1)	280000	U
101-55-3	4-Bromophenyl-phenylether	280000	U
118-74-1	Hexachlorobenzene	280000	U
87-86-5	Pentachlorophenol	1300000	U
85-01-8	Phenanthrene	280000	U
120-12-7	Anthracene	280000	U
84-74-2	Di-n-Butylphthalate	280000	U
206-44-0	Fluoranthene	280000	U
129-00-0	Pyrene	280000	U
85-68-7	Butylbenzylphthalate	280000	U
91-94-1	3,3'-Dichlorobenzidine	550000	U
56-55-3	Benzo(a)Anthracene	280000	U
218-01-9	Chrysene	280000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	280000	U
117-84-0	Di-n-Octyl Phthalate	280000	U
205-99-2	Benzo(b)Fluoranthene	280000	U
207-08-9	Benzo(k)Fluoranthene	280000	U
50-32-8	Benzo(a)Pyrene	280000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	280000	U
53-70-3	Dibenzo(a,h)Anthracene	280000	U
191-24-2	Benzo(g,h,i)Perylene	280000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202TAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRD09687A08

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 5.0

Number TICs found: 20

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	620-14-4	BENZENE, 1-ETHYL-3-METHYL-	7.13	1100000	J
2.		UNKNOWN	8.35	1800000	J
3.	104-55-2	2-PROPENAL, 3-PHENYL-	8.60	1200000	J
4.		UNKNOWN	8.99	1200000	J
5.		UNKNOWN	9.20	1900000	J
6.	28715-26-6	BENZOFURAN, 4,7-DIMETHYL-	9.52	1400000	J
7.		UNKNOWN	9.84	1300000	J
8.	24599-58-4	BENZENE, 1,4-DIMETHOXY-2-MET	9.99	3300000	J
9.		DIMETHOXYPHENOL + UNKNOWN	10.52	1200000	J
10.		UNKNOWN	10.67	1200000	J
11.		DODECANE + UNKNOWN	10.75	1100000	J
12.		UNKNOWN	11.22	1500000	J
13.	544-76-3	HEXADECANE	11.45	1700000	J
14.		UNKNOWN	11.77	3300000	J
15.		UNKNOWN	12.00	1000000	J
16.	544-76-3	HEXADECANE	12.12	1600000	J
17.	629-78-7	HEPTADECANE	12.77	2100000	J
18.	54105-67-8	HEPTADECANE, 2,6-DIMETHYL-	13.37	1200000	J
19.	544-76-3	HEXADECANE	13.94	1100000	J
20.		UNKNOWN	16.60	3300000	J

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ADLMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309683

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD009683C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	18000	U
111-44-4	bis(2-Chloroethyl)Ether	18000	U
95-57-8	2-Chlorophenol	18000	U
541-73-1	1,3-Dichlorobenzene	18000	U
106-46-7	1,4-Dichlorobenzene	18000	U
100-51-6	Benzyl Alcohol	18000	U
95-50-1	1,2-Dichlorobenzene	18000	U
95-48-7	2-Methylphenol	150000	D
39638-32-9	bis(2-Chloroisopropyl)Ether	18000	U
106-44-5	4-Methylphenol	240000	D
621-64-7	N-Nitroso-Di-n-Propylamine	18000	U
67-72-1	Hexachloroethane	18000	U
98-95-3	Nitrobenzene	18000	U
78-59-1	Isophorone	18000	U
88-75-5	2-Nitrophenol	18000	U
105-67-9	2,4-Dimethylphenol	220000	D
65-85-0	Benzoic Acid	88000	U
111-91-1	bis(2-Chloroethoxy)Methane	18000	U
120-83-2	2,4-Dichlorophenol	18000	U
120-82-1	1,2,4-Trichlorobenzene	18000	U
91-20-3	Naphthalene	57000	D
106-47-8	4-Chloroaniline	18000	U
87-68-3	Hexachlorobutadiene	18000	U
59-50-7	4-Chloro-3-Methylphenol	18000	U
91-57-6	2-Methylnaphthalene	37000	D
77-47-4	Hexachlorocyclopentadiene	18000	U
88-06-2	2,4,6-Trichlorophenol	18000	U
95-95-4	2,4,5-Trichlorophenol	88000	U
91-58-7	2-Chloronaphthalene	18000	U
88-74-4	2-Nitroaniline	88000	U
131-11-3	Dimethyl Phthalate	18000	U
208-96-8	Acenaphthylene	4700	DJ
606-20-2	2,6-Dinitrotoluene	18000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ADLMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309683

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD009683C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	88000	U
83-32-9	Acenaphthene	18000	U
51-28-5	2,4-Dinitrophenol	88000	U
100-02-7	4-Nitrophenol	88000	U
132-64-9	Dibenzofuran	10000	DJ
121-14-2	2,4-Dinitrotoluene	18000	U
84-66-2	Diethylphthalate	18000	U
7005-72-3	4-Chlorophenyl-phenylether	18000	U
86-73-7	Fluorene	3300	DJ
100-01-6	4-Nitroaniline	88000	U
534-52-1	4,6-Dinitro-2-Methylphenol	88000	U
86-30-6	N-Nitrosodiphenylamine (1)	18000	U
101-55-3	4-Bromophenyl-phenylether	18000	U
118-74-1	Hexachlorobenzene	18000	U
87-86-5	Pentachlorophenol	88000	U
85-01-8	Phenanthrene	10000	DJ
120-12-7	Anthracene	3800	DJ
84-74-2	Di-n-Butylphthalate	2100	DJ
206-44-0	Fluoranthene	3000	DJ
129-00-0	Pyrene	18000	U
85-68-7	Butylbenzylphthalate	18000	U
91-94-1	3,3'-Dichlorobenzidine	36000	U
56-55-3	Benzo(a)Anthracene	18000	U
218-01-9	Chrysene	18000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	18000	U
117-84-0	Di-n-Octyl Phthalate	18000	U
205-99-2	Benzo(b)Fluoranthene	18000	U
207-08-9	Benzo(k)Fluoranthene	18000	U
50-32-8	Benzo(a)Pyrene	18000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	18000	U
53-70-3	Dibenzo(a,h)Anthracene	18000	U
191-24-2	Benzo(g,h,i)Perylene	18000	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ADLMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309684

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD009684C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	18000	U
111-44-4	bis(2-Chloroethyl)Ether	18000	U
95-57-8	2-Chlorophenol	18000	U
541-73-1	1,3-Dichlorobenzene	18000	U
106-46-7	1,4-Dichlorobenzene	18000	U
100-51-6	Benzyl Alcohol	18000	U
95-50-1	1,2-Dichlorobenzene	18000	U
95-48-7	2-Methylphenol	130000	D
39638-32-9	bis(2-Chloroisopropyl)Ether	18000	U
106-44-5	4-Methylphenol	200000	D
621-64-7	N-Nitroso-Di-n-Propylamine	18000	U
67-72-1	Hexachloroethane	18000	U
98-95-3	Nitrobenzene	18000	U
78-59-1	Isophorone	18000	U
88-75-5	2-Nitrophenol	18000	U
105-67-9	2,4-Dimethylphenol	160000	D
65-85-0	Benzoic Acid	88000	U
111-91-1	bis(2-Chloroethoxy)Methane	18000	U
120-83-2	2,4-Dichlorophenol	18000	U
120-82-1	1,2,4-Trichlorobenzene	18000	U
91-20-3	Naphthalene	45000	D
106-47-8	4-Chloroaniline	18000	U
87-68-3	Hexachlorobutadiene	18000	U
59-50-7	4-Chloro-3-Methylphenol	18000	U
91-57-6	2-Methylnaphthalene	30000	D
77-47-4	Hexachlorocyclopentadiene	18000	U
88-06-2	2,4,6-Trichlorophenol	18000	U
95-95-4	2,4,5-Trichlorophenol	88000	U
91-58-7	2-Chloronaphthalene	18000	U
88-74-4	2-Nitroaniline	88000	U
131-11-3	Dimethyl Phthalate	18000	U
208-96-8	Acenaphthylene	3500	DJ
606-20-2	2,6-Dinitrotoluene	18000	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ADLMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309684

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GD009684C20

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 dec. _____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

GPC Cleanup: (Y/N) N pH: 6.0 Dilution Factor: 50

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	88000	U
83-32-9	Acenaphthene	18000	U
51-28-5	2,4-Dinitrophenol	88000	U
100-02-7	4-Nitrophenol	88000	U
132-64-9	Dibenzofuran	7500	DJ
121-14-2	2,4-Dinitrotoluene	18000	U
84-66-2	Diethylphthalate	18000	U
7005-72-3	4-Chlorophenyl-phenylether	18000	U
86-73-7	Fluorene	2100	DJ
100-01-6	4-Nitroaniline	88000	U
534-52-1	4,6-Dinitro-2-Methylphenol	88000	U
86-30-6	N-Nitrosodiphenylamine (1)	18000	U
101-55-3	4-Bromophenyl-phenylether	18000	U
118-74-1	Hexachlorobenzene	18000	U
87-86-5	Pentachlorophenol	88000	U
85-01-8	Phenanthrene	16000	DJ
120-12-7	Anthracene	2200	DJ
84-74-2	Di-n-Butylphthalate	18000	U
206-44-0	Fluoranthene	2500	DJ
129-00-0	Pyrene	18000	U
85-68-7	Butylbenzylphthalate	18000	U
91-94-1	3,3'-Dichlorobenzidine	36000	U
56-55-3	Benzo(a)Anthracene	18000	U
218-01-9	Chrysene	18000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	18000	U
117-84-0	Di-n-Octyl Phthalate	18000	U
205-99-2	Benzo(b)Fluoranthene	18000	U
207-08-9	Benzo(k)Fluoranthene	18000	U
50-32-8	Benzo(a)Pyrene	18000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	18000	U
53-70-3	Dibenzo(a,h)Anthracene	18000	U
191-24-2	Benzo(g,h,i)Perylene	18000	U

(1) - Cannot be separated from Diphenylamine

FORM I SV-2 1/87 Rev.

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TARMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 310767

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRD10767A08

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	280000	U
111-44-4	bis(2-Chloroethyl)Ether	280000	U
95-57-8	2-Chlorophenol	280000	U
541-73-1	1,3-Dichlorobenzene	280000	U
106-46-7	1,4-Dichlorobenzene	280000	U
100-51-6	Benzyl Alcohol	280000	U
95-50-1	1,2-Dichlorobenzene	280000	U
95-48-7	2-Methylphenol	1200000	
39638-32-9	bis(2-Chloroisopropyl)Ether	280000	U
106-44-5	4-Methylphenol	1500000	
621-64-7	N-Nitroso-Di-n-Propylamine	280000	U
67-72-1	Hexachloroethane	280000	U
98-95-3	Nitrobenzene	280000	U
78-59-1	Isophorone	280000	U
88-75-5	2-Nitrophenol	280000	U
105-67-9	2,4-Dimethylphenol	2000000	
65-85-0	Benzoic Acid	1300000	U
111-91-1	bis(2-Chloroethoxy)Methane	280000	U
120-83-2	2,4-Dichlorophenol	280000	U
120-82-1	1,2,4-Trichlorobenzene	280000	U
91-20-3	Naphthalene	320000	
106-47-8	4-Chloroaniline	280000	U
87-68-3	Hexachlorobutadiene	280000	U
59-50-7	4-Chloro-3-Methylphenol	280000	U
91-57-6	2-Methylnaphthalene	540000	
77-47-4	Hexachlorocyclopentadiene	280000	U
88-06-2	2,4,6-Trichlorophenol	280000	U
95-95-4	2,4,5-Trichlorophenol	1300000	U
91-58-7	2-Chloronaphthalene	280000	U
88-74-4	2-Nitroaniline	1300000	U
131-11-3	Dimethyl Phthalate	280000	U
208-96-8	Acenaphthylene	280000	U
606-20-2	2,6-Dinitrotoluene	280000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TARMS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 310767

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRD10767A08

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1300000	U
83-32-9	Acenaphthene	280000	U
51-28-5	2,4-Dinitrophenol	1300000	U
100-02-7	4-Nitrophenol	1300000	U
132-64-9	Dibenzofuran	50000	J
121-14-2	2,4-Dinitrotoluene	280000	U
84-66-2	Diethylphthalate	280000	U
7005-72-3	4-Chlorophenyl-phenylether	280000	U
86-73-7	Fluorene	110000	J
100-01-6	4-Nitroaniline	1300000	U
534-52-1	4,6-Dinitro-2-Methylphenol	1300000	U
86-30-6	N-Nitrosodiphenylamine (1)	280000	U
101-55-3	4-Bromophenyl-phenylether	280000	U
118-74-1	Hexachlorobenzene	280000	U
87-86-5	Pentachlorophenol	1300000	U
85-01-8	Phenanthrene	280000	U
120-12-7	Anthracene	280000	U
84-74-2	Di-n-Butylphthalate	280000	U
206-44-0	Fluoranthene	280000	U
129-00-0	Pyrene	280000	U
85-68-7	Butylbenzylphthalate	280000	U
91-94-1	3,3'-Dichlorobenzidine	550000	U
56-55-3	Benzo(a)Anthracene	280000	U
218-01-9	Chrysene	280000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	280000	U
117-84-0	Di-n-Octyl Phthalate	280000	U
205-99-2	Benzo(b)Fluoranthene	280000	U
207-08-9	Benzo(k)Fluoranthene	280000	U
50-32-8	Benzo(a)Pyrene	280000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	280000	U
53-70-3	Dibenzo(a,h)Anthracene	280000	U
191-24-2	Benzo(g,h,i)Perylene	280000	U

(1) - Cannot be separated from Diphenylamine

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TARMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 310768

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRD10768A08

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	280000	U
111-44-4	bis(2-Chloroethyl)Ether	280000	U
95-57-8	2-Chlorophenol	280000	U
541-73-1	1,3-Dichlorobenzene	280000	U
106-46-7	1,4-Dichlorobenzene	280000	U
100-51-6	Benzyl Alcohol	280000	U
95-50-1	1,2-Dichlorobenzene	280000	U
95-48-7	2-Methylphenol	1100000	
39638-32-9	bis(2-Chloroisopropyl)Ether	280000	U
106-44-5	4-Methylphenol	1400000	
621-64-7	N-Nitroso-Di-n-Propylamine	280000	U
67-72-1	Hexachloroethane	280000	U
98-95-3	Nitrobenzene	280000	U
78-59-1	Isophorone	280000	U
88-75-5	2-Nitrophenol	280000	U
105-67-9	2,4-Dimethylphenol	1800000	
65-85-0	Benzoic Acid	1300000	U
111-91-1	bis(2-Chloroethoxy)Methane	280000	U
120-83-2	2,4-Dichlorophenol	280000	U
120-82-1	1,2,4-Trichlorobenzene	280000	U
91-20-3	Naphthalene	220000	J
106-47-8	4-Chloroaniline	280000	U
87-68-3	Hexachlorobutadiene	280000	U
59-50-7	4-Chloro-3-Methylphenol	280000	U
91-57-6	2-Methylnaphthalene	410000	
77-47-4	Hexachlorocyclopentadiene	280000	U
88-06-2	2,4,6-Trichlorophenol	280000	U
95-95-4	2,4,5-Trichlorophenol	1300000	U
91-58-7	2-Chloronaphthalene	280000	U
88-74-4	2-Nitroaniline	1300000	U
131-11-3	Dimethyl Phthalate	280000	U
208-96-8	Acenaphthylene	280000	U
606-20-2	2,6-Dinitrotoluene	280000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TARMSD

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 310768

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GRD10768A08

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

GPC Cleanup: (Y/N) N pH: 8.5 Dilution Factor: 5.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1300000	U
83-32-9	Acenaphthene	280000	U
51-28-5	2,4-Dinitrophenol	1300000	U
100-02-7	4-Nitrophenol	1300000	U
132-64-9	Dibenzofuran	38000	J
121-14-2	2,4-Dinitrotoluene	280000	U
84-66-2	Diethylphthalate	280000	U
7005-72-3	4-Chlorophenyl-phenylether	280000	U
86-73-7	Fluorene	75000	J
100-01-6	4-Nitroaniline	1300000	U
534-52-1	4,6-Dinitro-2-Methylphenol	1300000	U
86-30-6	N-Nitrosodiphenylamine (1)	280000	U
101-55-3	4-Bromophenyl-phenylether	280000	U
118-74-1	Hexachlorobenzene	280000	U
87-86-5	Pentachlorophenol	1300000	U
85-01-8	Phenanthrene	280000	U
120-12-7	Anthracene	280000	U
84-74-2	Di-n-Butylphthalate	280000	U
206-44-0	Fluoranthene	280000	U
129-00-0	Pyrene	280000	U
85-68-7	Butylbenzylphthalate	280000	U
91-94-1	3,3'-Dichlorobenzidine	550000	U
56-55-3	Benzo(a)Anthracene	280000	U
218-01-9	Chrysene	280000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	280000	U
117-84-0	Di-n-Octyl Phthalate	280000	U
205-99-2	Benzo(b)Fluoranthene	280000	U
207-08-9	Benzo(k)Fluoranthene	280000	U
50-32-8	Benzo(a)Pyrene	280000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	280000	U
53-70-3	Dibenzo(a,h)Anthracene	280000	U
191-24-2	Benzo(g,h,i)Perylene	280000	U

(1) - Cannot be separated from Diphenylamine

3. By fraction (VOA , SV , PEST) - surrogate spike analysis results (Form II) by matrix (Water and/or Soil) and for soil , by concentration (Low or Medium)

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	B201A	80 *	90	97		1
02	B201B	90	99	94		0
03	B202A	95	92	97		0
04	B202B	92	96	97		0
05	B202C	94	91	97		0
06	B202TAR	88	93	97		0
07	B202AMS	101	98	92		0
08	B202AMSD	114	113	102		0
09	VBLKL8	107	98	95		0
10	VBLKB4	97	87	97		0
11	VBLKF5	92	91	92		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	B201ARE	91	93	111		0
02	B201BRE	115	105	113		0
03	B202TARDL	82	110	109		0
04	B201BREMS	90	100	90		0
05	B201BREMSD	86	101	104		0
06	VBLKH1	110	103	117		0
07	VBLKH9	101	104	117		0
08	VBLKI6	112	106	121		0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(81-117)
S2 (BFB)	= Bromofluorobenzene	(74-121)
S3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	B201A	556 *	97	66	70	63	35		1
02	B201ADL	D	D	D	D	D	D		0
03	B202A	63	69	84	67	71	81		0
04	B202B	66	64	77	81	79	84		0
05	B202BDL	70	69	77	59	67	77		0
06	B202C	86	86	108	86	88	98		0
07	B201ADLMS	D	D	D	D	D	D		0
08	B201ADLMSD	D	D	D	D	D	D		0
09	SBLK44	67	65	85	71	73	48		0
10	SBLK44	87	100	106	78	62	38		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

2D

SOIL SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Level:(low/med) MED

	EPA SAMPLE NO.	S1 (NBZ) #	S2 (FBP) #	S3 (TPH) #	S4 (PHL) #	S5 (2FP) #	S6 (TBP) #	OTHER	TOT OUT
01	B201B	90	102	110	83	73	84		0
02	B202TAR	86	102	100	59	53	31		0
03	B202TARMS	100	112	105	72	71	64		0
04	B202TARMSD	77	100	94	78	73	105		0
05	SBLK82	55	81	78	71	69	73		0
06	SBLK79	57	73	72	44	47	63		0

		QC LIMITS
S1 (NBZ)	= Nitrobenzene-d5	(23-120)
S2 (FBP)	= 2-Fluorobiphenyl	(30-115)
S3 (TPH)	= Terphenyl	(18-137)
S4 (PHL)	= Phenol-d5	(24-113)
S5 (2FP)	= 2-Fluorophenol	(25-121)
S6 (TBP)	= 2,4,6-Tribromophenol	(19-122)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogates diluted out

4. By fraction (VOA , SV , PEST) – matrix spike duplicate results (Form III)

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix Spike - EPA Sample No.: B202A Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	56.8	0	58.1	102	59-172
Trichloroethene	56.8	0	47.3	83	62-137
Benzene	56.8	0	55.2	97	66-142
Toluene	56.8	1.45	53.9	92	59-139
Chlorobenzene	56.8	0	52.0	92	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	56.8	53.5	94	8	22	59-172
Trichloroethene	56.8	47.5	84	-1	24	62-137
Benzene	56.8	55.1	97	0	21	66-142
Toluene	56.8	54.0	93	-1	21	59-139
Chlorobenzene	56.8	50.9	90	2	21	60-133

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP ,1875,67, , ,SOIL,309688,VOLATILE, ,
TUNE: 0019 122289 0013

FORM III VOA-2 1/87 Rev.

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix Spike - EPA Sample No.: B201BRE Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	7100	0	4730	67	59-172
Trichloroethene	7100	0	6950	98	62-137
Benzene	7100	2160	9740	107	66-142
Toluene	7100	15900	18900	42 *	59-139
Chlorobenzene	7100	0	6970	98	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	7100	4330	61	9	22	59-172
Trichloroethene	7100	6970	98	0	24	62-137
Benzene	7100	10500	118	-10	21	66-142
Toluene	7100	18000	30 *	33 *	21	59-139
Chlorobenzene	7100	7230	102	-4	21	60-133

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

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS: CLP ,1875,67, , ,SOIL,309686,VOLATILE, ,
TUNE: 0013 122989 1535

FORM III VOA-2 1/87 Rev.

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix Spike - EPA Sample No.: B201ADL Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	7340	22900	0	-312 *	26- 90
2-Chlorophenol	7340	0	0	0 *	25-102
1,4-Dichlorobenzene	3670	0	0	0 *	28 104
N-Nitroso-di-n-prop.(1)	3670	0	0	0 *	41 126
1,2,4-Trichlorobenzene	3670	0	0	0 *	38 107
4-Chloro-3-methylphenol	7340	0	0	0 *	26 103
Acenaphthene	3670	2590	0	-71 *	31-137
4-Nitrophenol	7340	0	0	0 *	11-114
2,4-Dinitrotoluene	3670	0	0	0 *	28- 89
Pentachlorophenol	7340	0	0	0 *	17-109
Pyrene	3670	2920	0	-80 *	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	7340	0	-312 *	0	35	26- 90
2-Chlorophenol	7340	0	0 *	0	50	25-102
1,4-Dichlorobenzene	3670	0	0 *	0	27	28 104
N-Nitroso-di-n-prop.(1)	3670	0	0 *	0	38	41 126
1,2,4-Trichlorobenzene	3670	0	0 *	0	23	38 107
4-Chloro-3-methylphenol	7340	0	0 *	0	33	26 103
Acenaphthene	3670	0	-71 *	0	19	31-137
4-Nitrophenol	7340	0	0 *	0	50	11-114
2,4-Dinitrotoluene	3670	0	0 *	0	47	28- 89
Pentachlorophenol	7340	0	0 *	0	47	17-109
Pyrene	3670	0	-80 *	0	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 11 outside limits
Spike Recovery: 22 out of 22 outside limits

COMMENTS: CLP ,1875,67, , ,SOIL,309679,BNA, ,
TUNE: 0020 122289 0034

FORM III SV-2 1/87 Rev.

3D

SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix Spike - EPA Sample No.: B202TAR Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
Phenol	1110000	331000	825000	45	26- 90
2-Chlorophenol	1110000	0	458000	41	25-102
1,4-Dichlorobenzene	556000	0	216000	39	28 104
N-Nitroso-di-n-prop.(1)	556000	0	225000	40 *	41 126
1,2,4-Trichlorobenzene	556000	0	201000	36 *	38 107
4-Chloro-3-methylphenol	1110000	0	675000	61	26 103
Acenaphthene	556000	0	431000	78	31-137
4-Nitrophenol	1110000	0	389000	35	11-114
2,4-Dinitrotoluene	556000	0	277000	50	28- 89
Pentachlorophenol	1110000	0	197000	18	17-109
Pyrene	556000	0	264000	47	35-142

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	1110000	836000	46	-2	35	26- 90
2-Chlorophenol	1110000	464000	42	-2	50	25-102
1,4-Dichlorobenzene	556000	124000	22 *	56 *	27	28 104
N-Nitroso-di-n-prop.(1)	556000	181000	33 *	19	38	41 126
1,2,4-Trichlorobenzene	556000	157000	28 *	25 *	23	38 107
4-Chloro-3-methylphenol	1110000	658000	59	3	33	26 103
Acenaphthene	556000	353000	63	21 *	19	31-137
4-Nitrophenol	1110000	400000	36	-3	50	11-114
2,4-Dinitrotoluene	556000	276000	50	0	47	28- 89
Pentachlorophenol	1110000	191000	17	6	47	17-109
Pyrene	556000	253000	46	2	36	35-142

(1) N-Nitroso-di-n-propylamine

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 3 out of 11 outside limits
Spike Recovery: 5 out of 22 outside limits

COMMENTS: CLP ,1875,67, , ,SOIL,309687,BNA, ,
TUNE: 0008 011090 0610

5. By fraction (VOA , SV , PEST) – blank data (Form IV) and tabulated results (Form I) including tentatively identified compounds (Form I, TIC) (VOA and SV only)

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: GH009785C19 Lab Sample ID: VBLKB4

Date Analyzed: 12/22/89 Time Analyzed: 0156

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

Instrument ID: 19

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B201A	309679	GH009679C19	0418
02	B202A	309688	GH009688C19	0656
03	B202B	309689	GH009689C19	0740
04	B202C	309690	GH009690A19	0815

COMMENTS: CLP , , , , , ,309785,VOLATILE,BLANK,
TUNE: 0019 122289 0013

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKB4

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKB4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009785C19

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

% Moisture: not dec. ____ Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	9	
67-64-1	Acetone	5	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKB4

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKB4

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009785C19

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

% Moisture: not dec. ____ Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: GH010660C19 Lab Sample ID: VBLKF5

Date Analyzed: 12/27/89 Time Analyzed: 0229

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

Instrument ID: 19

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B201B	309686	GR009686C19	0539
02	B202TAR	309687	GR009687C19	0710

COMMENTS: CLP , , , , , ,310660,VOLATILE,BLANK,
TUNE: 0019 122789 0032

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
VBLKF5

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKF5

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH010660C19

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

% Moisture: not dec. ____ Date Analyzed: 12/27/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	J
67-64-1	Acetone	3	J
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	3	J
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLKF5

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKF5

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH010660C19

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

% Moisture: not dec. ____ Date Analyzed: 12/27/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: CN011246B13 Lab Sample ID: VBLKH1

Date Analyzed: 12/28/89 Time Analyzed: 1742

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

Instrument ID: 13

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B202TARDL	309687	C3R09687C13	0152

COMMENTS: CLP , , , , , , ,311246,VOLATILE,BLANK,
TUNE: 0013 122889 1528

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKH1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKH1

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN011246B13

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/28/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	290	J
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
540-59-0	1,2-Dichloroethene (total)	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U
78-87-5	1,2-Dichloropropane	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
1330-20-7	Total Xylenes	630	U

FORM I VOA 1/87 Rev.

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKH1

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKH1

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN011246B13

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/28/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

FORM I VOA-TIC 1/87 Rev.

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: CN011397B13 Lab Sample ID: VBLKH9

Date Analyzed: 12/28/89 Time Analyzed: 1900

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

Instrument ID: 13

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B201ARE	309679	C3R09679B13	2034

COMMENTS: CLP , , , , , ,311397,VOLATILE,BLANK,
TUNE: 0013 122889 1528

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKH9

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKH9

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN011397B13

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/28/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	290	J
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
540-59-0	1,2-Dichloroethene (total)	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U
78-87-5	1,2-Dichloropropane	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
1330-20-7	Total Xylenes	630	U

FORM I VOA 1/87 Rev.

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKH9

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKH9

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CN011397B13

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/28/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: CR011532B13 Lab Sample ID: VBLKI6

Date Analyzed: 12/29/89 Time Analyzed: 1829

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

Instrument ID: 13

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B201BRE	309686	C5R09686B13	2010
02	B201BREMS	311271	CN011271B13	2154
03	B201BREMSD	311272	CN011272B13	2234

COMMENTS: CLP , , , , , , ,311532,VOLATILE,BLANK,
TUNE: 0013 122989 1535

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKI6

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKI6

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR011532B13

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ Date Analyzed: 12/29/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1300	U
74-83-9	Bromomethane	1300	U
75-01-4	Vinyl Chloride	1300	U
75-00-3	Chloroethane	1300	U
75-09-2	Methylene Chloride	140	J
67-64-1	Acetone	1300	U
75-15-0	Carbon Disulfide	630	U
75-35-4	1,1-Dichloroethene	630	U
75-34-3	1,1-Dichloroethane	630	U
540-59-0	1,2-Dichloroethene (total)	630	U
67-66-3	Chloroform	630	U
107-06-2	1,2-Dichloroethane	630	U
78-93-3	2-Butanone	1300	U
71-55-6	1,1,1-Trichloroethane	630	U
56-23-5	Carbon Tetrachloride	630	U
108-05-4	Vinyl Acetate	1300	U
75-27-4	Bromodichloromethane	630	U
78-87-5	1,2-Dichloropropane	630	U
10061-01-5	cis-1,3-Dichloropropene	630	U
79-01-6	Trichloroethene	630	U
124-48-1	Dibromochloromethane	630	U
79-00-5	1,1,2-Trichloroethane	630	U
71-43-2	Benzene	630	U
10061-02-6	Trans-1,3-Dichloropropene	630	U
75-25-2	Bromoform	630	U
108-10-1	4-Methyl-2-Pentanone	1300	U
591-78-6	2-Hexanone	1300	U
127-18-4	Tetrachloroethene	630	U
79-34-5	1,1,2,2-Tetrachloroethane	630	U
108-88-3	Toluene	630	U
108-90-7	Chlorobenzene	630	U
100-41-4	Ethylbenzene	630	U
100-42-5	Styrene	630	U
1330-20-7	Total Xylenes	630	U

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1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKI6

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKI6

Sample wt/vol: 4.0 (g/mL) G Lab File ID: CR011532B13

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ Date Analyzed: 12/29/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

4A
VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: GH011975A19 Lab Sample ID: VBLKL8

Date Analyzed: 01/02/90 Time Analyzed: 1119

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

Instrument ID: 19

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	B202AMS	309680	G3R09680A19	1352
02	B202AMSD	309681	G3R09681A19	1426

COMMENTS: CLP, , , , , ,311975,VOLATILE,BLANK,
TUNE: 0019 010290 0924

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKL8

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKL8

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH011975A19

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

% Moisture: not dec. ____ Date Analyzed: 01/02/90

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	10	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	5	
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	10	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	5	U
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	10	U
591-78-6	2-Hexanone	10	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	5	U
100-42-5	Styrene	5	U
1330-20-7	Total Xylenes	5	U

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLKL8

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: VBLKL8

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH011975A19

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

% Moisture: not dec. ____ Date Analyzed: 01/02/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: G2J10176C20 Lab Sample ID: SBLK44

Date Extracted: 12/21/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 12/22/89 Time Analyzed: 0034

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

Instrument ID: 20

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	B201ADL	309679	G2D09679C20	12/22/89
02	B202A	309688	GH009688C20	12/22/89
03	B202B	309689	GH009689C20	12/22/89
04	B202BDL	309689	GD009689A20	12/22/89
05	B202C	309690	GH009690A20	12/22/89
06	B201ADLMS	309683	GD009683C20	12/22/89
07	B201ADLMSD	309684	GD009684C20	12/22/89

COMMENTS: CLP , , , , , ,310176,BNA,BLANK,
TUNE: 0020 122289 0034

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK44

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK44

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G2J10176C20

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl Alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
39638-32-9	bis(2-Chloroisopropyl)Ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK44

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK44

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G2J10176C20

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	330	U
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenzo(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

1F

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

SBLK44

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK44

Sample wt/vol: 30.0 (g/mL) G Lab File ID: G2J10176C20

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/22/89

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

Number TICs found: 1

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	TRIBROMOPHENOL ISOMER	11.92	230	J

4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: GH010176B08 Lab Sample ID: SBLK44

Date Extracted: 12/21/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 12/28/89 Time Analyzed: 2041

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

Instrument ID: 08

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	B201A	309679	G3D09679B08	12/28/89

COMMENTS: CLP , , , , , ,310176,BNA,BLANK,
TUNE: 0008 122889 1109

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK44

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK44

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH010176B08

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

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	330	U
111-44-4	bis(2-Chloroethyl)Ether	330	U
95-57-8	2-Chlorophenol	330	U
541-73-1	1,3-Dichlorobenzene	330	U
106-46-7	1,4-Dichlorobenzene	330	U
100-51-6	Benzyl Alcohol	330	U
95-50-1	1,2-Dichlorobenzene	330	U
95-48-7	2-Methylphenol	330	U
39638-32-9	bis(2-Chloroisopropyl)Ether	330	U
106-44-5	4-Methylphenol	330	U
621-64-7	N-Nitroso-Di-n-Propylamine	330	U
67-72-1	Hexachloroethane	330	U
98-95-3	Nitrobenzene	330	U
78-59-1	Isophorone	330	U
88-75-5	2-Nitrophenol	330	U
105-67-9	2,4-Dimethylphenol	330	U
65-85-0	Benzoic Acid	1600	U
111-91-1	bis(2-Chloroethoxy)Methane	330	U
120-83-2	2,4-Dichlorophenol	330	U
120-82-1	1,2,4-Trichlorobenzene	330	U
91-20-3	Naphthalene	330	U
106-47-8	4-Chloroaniline	330	U
87-68-3	Hexachlorobutadiene	330	U
59-50-7	4-Chloro-3-Methylphenol	330	U
91-57-6	2-Methylnaphthalene	330	U
77-47-4	Hexachlorocyclopentadiene	330	U
88-06-2	2,4,6-Trichlorophenol	330	U
95-95-4	2,4,5-Trichlorophenol	1600	U
91-58-7	2-Chloronaphthalene	330	U
88-74-4	2-Nitroaniline	1600	U
131-11-3	Dimethyl Phthalate	330	U
208-96-8	Acenaphthylene	330	U
606-20-2	2,6-Dinitrotoluene	330	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK44

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK44

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH010176B08

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

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	1600	U
83-32-9	Acenaphthene	330	U
51-28-5	2,4-Dinitrophenol	1600	U
100-02-7	4-Nitrophenol	1600	U
132-64-9	Dibenzofuran	330	U
121-14-2	2,4-Dinitrotoluene	330	U
84-66-2	Diethylphthalate	330	U
7005-72-3	4-Chlorophenyl-phenylether	330	U
86-73-7	Fluorene	330	U
100-01-6	4-Nitroaniline	1600	U
534-52-1	4,6-Dinitro-2-Methylphenol	1600	U
86-30-6	N-Nitrosodiphenylamine (1)	330	U
101-55-3	4-Bromophenyl-phenylether	330	U
118-74-1	Hexachlorobenzene	330	U
87-86-5	Pentachlorophenol	1600	U
85-01-8	Phenanthrene	330	U
120-12-7	Anthracene	330	U
84-74-2	Di-n-Butylphthalate	330	U
206-44-0	Fluoranthene	330	U
129-00-0	Pyrene	330	U
85-68-7	Butylbenzylphthalate	330	U
91-94-1	3,3'-Dichlorobenzidine	660	U
56-55-3	Benzo(a)Anthracene	330	U
218-01-9	Chrysene	330	U
117-81-7	bis(2-Ethylhexyl)Phthalate	63	J
117-84-0	Di-n-Octyl Phthalate	330	U
205-99-2	Benzo(b)Fluoranthene	330	U
207-08-9	Benzo(k)Fluoranthene	330	U
50-32-8	Benzo(a)Pyrene	330	U
193-39-5	Indeno(1,2,3-cd)Pyrene	330	U
53-70-3	Dibenzo(a,h)Anthracene	330	U
191-24-2	Benzo(g,h,i)Perylene	330	U

(1) - Cannot be separated from Diphenylamine

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1F

EPA SAMPLE NO.

SBLK44

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK44

Sample wt/vol: 30.0 (g/mL) G Lab File ID: GH010176B08

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

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/21/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 12/28/89

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

Number TICs found: 5

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	3074-71-3	HEPTANE, 2,3-DIMETHYL-	4.95	430	J
2.	2216-34-4	OCTANE, 4-METHYL-	5.03	400	J
3.		ALDOL	5.95	400	AJ
4.		UNKNOWN	7.97	270	J
5.		TRIBROMOPHENOL ISOMER	12.84	330	J

4B
SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: GH011831C21 Lab Sample ID: SBLK82

Date Extracted: 12/29/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 01/02/90 Time Analyzed: 0723

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

Instrument ID: 21

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	B201B	309686	GD009686A21	01/02/90

COMMENTS: CLP , , , , , ,311831,BNA,BLANK,
TUNE: 0021 010290 0223

1B

EPA SAMPLE NO.

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

SBLK82

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK82

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH011831C21

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl)Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	96000	U
111-91-1	bis(2-Chloroethoxy)Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	96000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	96000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

FORM I SV-1 1/87 Rev.

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK82

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK82

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH011831C21

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	96000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	96000	U
100-02-7	4-Nitrophenol	96000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethylphthalate	20000	U
7005-72-3	4-Chlorophenyl-phenylether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	96000	U
534-52-1	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6	N-Nitrosodiphenylamine (1)	20000	U
101-55-3	4-Bromophenyl-phenylether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	96000	U
85-01-8	Phenanthrene	20000	U
120-12-7	Anthracene	20000	U
84-74-2	Di-n-Butylphthalate	20000	U
206-44-0	Fluoranthene	20000	U
129-00-0	Pyrene	20000	U
85-68-7	Butylbenzylphthalate	20000	U
91-94-1	3,3'-Dichlorobenzidine	40000	U
56-55-3	Benzo(a)Anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0	Di-n-Octyl Phthalate	20000	U
205-99-2	Benzo(b)Fluoranthene	20000	U
207-08-9	Benzo(k)Fluoranthene	20000	U
50-32-8	Benzo(a)Pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3	Dibenzo(a,h)Anthracene	20000	U
191-24-2	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SBLK82

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK82

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GH011831C21

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/29/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/02/90

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

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4B

SEMIVOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID: GJ011481A08 Lab Sample ID: SBLK79

Date Extracted: 12/28/89 Extraction:(SepF/Cont/Sonc) SONC

Date Analyzed: 01/10/90 Time Analyzed: 1147

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

Instrument ID: 08

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	B202TAR	309687	GRD09687A08	01/10/90
02	B202TARMS	310767	GRD10767A08	01/10/90
03	B202TARMSD	310768	GRD10768A08	01/10/90

COMMENTS: CLP , , , , , ,311481,BNA,BLANK,
TUNE: 0008 011090 0610

1B

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK79

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK79

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ011481A08

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
108-95-2	Phenol	20000	U
111-44-4	bis(2-Chloroethyl)Ether	20000	U
95-57-8	2-Chlorophenol	20000	U
541-73-1	1,3-Dichlorobenzene	20000	U
106-46-7	1,4-Dichlorobenzene	20000	U
100-51-6	Benzyl Alcohol	20000	U
95-50-1	1,2-Dichlorobenzene	20000	U
95-48-7	2-Methylphenol	20000	U
39638-32-9	bis(2-Chloroisopropyl)Ether	20000	U
106-44-5	4-Methylphenol	20000	U
621-64-7	N-Nitroso-Di-n-Propylamine	20000	U
67-72-1	Hexachloroethane	20000	U
98-95-3	Nitrobenzene	20000	U
78-59-1	Isophorone	20000	U
88-75-5	2-Nitrophenol	20000	U
105-67-9	2,4-Dimethylphenol	20000	U
65-85-0	Benzoic Acid	96000	U
111-91-1	bis(2-Chloroethoxy)Methane	20000	U
120-83-2	2,4-Dichlorophenol	20000	U
120-82-1	1,2,4-Trichlorobenzene	20000	U
91-20-3	Naphthalene	20000	U
106-47-8	4-Chloroaniline	20000	U
87-68-3	Hexachlorobutadiene	20000	U
59-50-7	4-Chloro-3-Methylphenol	20000	U
91-57-6	2-Methylnaphthalene	20000	U
77-47-4	Hexachlorocyclopentadiene	20000	U
88-06-2	2,4,6-Trichlorophenol	20000	U
95-95-4	2,4,5-Trichlorophenol	96000	U
91-58-7	2-Chloronaphthalene	20000	U
88-74-4	2-Nitroaniline	96000	U
131-11-3	Dimethyl Phthalate	20000	U
208-96-8	Acenaphthylene	20000	U
606-20-2	2,6-Dinitrotoluene	20000	U

1C

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

SBLK79

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK79

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ011481A08

Level: (low/med) MED Date Received: _____

% Moisture: not dec. _____ dec. _____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
99-09-2	3-Nitroaniline	96000	U
83-32-9	Acenaphthene	20000	U
51-28-5	2,4-Dinitrophenol	96000	U
100-02-7	4-Nitrophenol	96000	U
132-64-9	Dibenzofuran	20000	U
121-14-2	2,4-Dinitrotoluene	20000	U
84-66-2	Diethylphthalate	20000	U
7005-72-3	4-Chlorophenyl-phenylether	20000	U
86-73-7	Fluorene	20000	U
100-01-6	4-Nitroaniline	96000	U
534-52-1	4,6-Dinitro-2-Methylphenol	96000	U
86-30-6	N-Nitrosodiphenylamine (1)	20000	U
101-55-3	4-Bromophenyl-phenylether	20000	U
118-74-1	Hexachlorobenzene	20000	U
87-86-5	Pentachlorophenol	96000	U
85-01-8	Phenanthrene	20000	U
120-12-7	Anthracene	20000	U
84-74-2	Di-n-Butylphthalate	20000	U
206-44-0	Fluoranthene	20000	U
129-00-0	Pyrene	20000	U
85-68-7	Butylbenzylphthalate	20000	U
91-94-1	3,3'-Dichlorobenzidine	40000	U
56-55-3	Benzo(a)Anthracene	20000	U
218-01-9	Chrysene	20000	U
117-81-7	bis(2-Ethylhexyl)Phthalate	20000	U
117-84-0	Di-n-Octyl Phthalate	20000	U
205-99-2	Benzo(b)Fluoranthene	20000	U
207-08-9	Benzo(k)Fluoranthene	20000	U
50-32-8	Benzo(a)Pyrene	20000	U
193-39-5	Indeno(1,2,3-cd)Pyrene	20000	U
53-70-3	Dibenzo(a,h)Anthracene	20000	U
191-24-2	Benzo(g,h,i)Perylene	20000	U

(1) - Cannot be separated from Diphenylamine

1F

EPA SAMPLE NO.

SBLK79

SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: SBLK79

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GJ011481A08

Level: (low/med) MED Date Received: _____

% Moisture: not dec. ____ dec. ____ Date Extracted: 12/28/89

Extraction: (SepF/Cont/Sonc) SONC Date Analyzed: 01/10/90

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

Number TICs found: 0

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

6. By fraction (VOA , SV only) - internal standard area data (Form VIII)

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): CT891228B13 Date Analyzed: 12/28/89

Instrument ID: 13 Time Analyzed: 1636

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	56600	5.10	191000	6.77	229000	11.42
	UPPER LIMIT	113200		382000		458000	
	LOWER LIMIT	28300		95500		114500	
	EPA SAMPLE NO.						
01	B201ARE	49900	4.98	183000	6.60	234000	11.29
02	B202TARDL	49600	4.95	173000	6.62	250000	11.32
03	VBLKH1	52000	5.10	180000	6.75	227000	11.37
04	VBLKH9	51300	5.03	171000	6.67	225000	11.32

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): CS891229A13 Date Analyzed: 12/29/89

Instrument ID: 13 Time Analyzed: 1555

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	59500	5.13	195000	6.82	273000	11.54
	UPPER LIMIT	119000		390000		546000	
	LOWER LIMIT	29750		97500		136500	
	EPA SAMPLE NO.						
01	B201BRE	54500	5.10	190000	6.75	270000	11.42
02	B201BREMS	57000	5.08	163000	6.75	272000	11.42
03	B201BREMSD	51500	5.07	168000	6.75	259000	11.42
04	VBLKI6	52400	5.10	171000	6.77	269000	11.45

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): GS891222C19 Date Analyzed: 12/22/89

Instrument ID: 19 Time Analyzed: 0013

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	44400	5.90	176000	7.70	178000	12.55
	UPPER LIMIT	88800		352000		356000	
	LOWER LIMIT	22200		88000		89000	
	EPA SAMPLE NO.						
01	B201A	34900	5.80	134000	7.60	159000	12.50
02	B202A	49300	5.83	196000	7.63	206000	12.49
03	B202B	46800	5.80	192000	7.60	204000	12.50
04	B202C	49100	5.77	202000	7.60	211000	12.49
05	VBLKB4	49300	5.85	199000	7.65	200000	12.54

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): GT891227C19 Date Analyzed: 12/27/89

Instrument ID: 19 Time Analyzed: 0137

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	66200	5.90	245000	7.70	250000	12.57
	UPPER LIMIT	132400		490000		500000	
	LOWER LIMIT	33100		122500		125000	
	EPA SAMPLE NO.						
01	B201B	52500	5.80	198000	7.62	195000	12.50
02	B202TAR	68100	5.78	245000	7.60	246000	12.52
03	VBLKF5	80100	5.83	310000	7.63	311000	12.54

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): GS900102A19 Date Analyzed: 01/02/90

Instrument ID: 19 Time Analyzed: 0942

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	52100	5.90	198000	7.68	214000	12.54
	UPPER LIMIT	104200		396000		428000	
	LOWER LIMIT	26050		99000		107000	
	EPA SAMPLE NO.						
01	B202AMS	53700	5.88	212000	7.72	234000	12.60
02	B202AMSD	59400	5.87	223000	7.68	245000	12.60
03	VBLKL8	53000	5.90	210000	7.70	232000	12.59

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HH891228A08 Date Analyzed: 12/28/89

Instrument ID: 08 Time Analyzed: 1217

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	121000	6.78	370000	8.55	197000	11.10
	UPPER LIMIT	242000		740000		394000	
	LOWER LIMIT	60500		185000		98500	
	EPA SAMPLE NO.						
01	B201A	133000	6.77	336000	8.54	193000	11.09
02	SBLK44	163000	6.73	520000	8.49	259000	11.05

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HH891228A08 Date Analyzed: 12/28/89

Instrument ID: 08 Time Analyzed: 1217

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	250000	13.27	162000	17.22	128000	19.67
	UPPER LIMIT	500000		324000		256000	
	LOWER LIMIT	125000		81000		64000	
	EPA SAMPLE NO.						
01	B201A	205000	13.29	165000	17.27	188000	19.77
02	SBLK44	320000	13.25	200000	17.22	161000	19.69

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HH900110C08 Date Analyzed: 01/10/90

Instrument ID: 08 Time Analyzed: 0746

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	168000	7.65	539000	9.32	289000	11.74
	UPPER LIMIT	336000		1078000		578000	
	LOWER LIMIT	84000		269500		144500	
	EPA SAMPLE NO.						
01	B202TAR	168000	7.67	571000	9.32	307000	11.72
02	B202TARMS	186000	7.75	611000	9.40	318000	11.80
03	B202TARMSD	204000	7.75	670000	9.40	351000	11.77
04	SBLK79	207000	7.67	618000	9.32	331000	11.74

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HH900110C08 Date Analyzed: 01/10/90

Instrument ID: 08 Time Analyzed: 0746

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	409000	13.75	302000	17.50	266000	20.74
	UPPER LIMIT	818000		604000		532000	
	LOWER LIMIT	204500		151000		133000	
	EPA SAMPLE NO.						
01	B202TAR	458000	13.75	306000	17.49	291000	20.72
02	B202TARMS	451000	13.82	316000	17.60	290000	20.90
03	B202TARMSD	494000	13.80	310000	17.55	273000	20.84
04	SBLK79	451000	13.77	282000	17.52	215000	20.77

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HG891221B20 Date Analyzed: 12/21/89

Instrument ID: 20 Time Analyzed: 2305

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	258000	6.33	725000	7.98	349000	10.37
	UPPER LIMIT	516000		1450000		698000	
	LOWER LIMIT	129000		362500		174500	
	EPA SAMPLE NO.						
01	B201ADL	269000	6.33	858000	7.97	349000	10.37
02	B202A	229000	6.35	667000	7.98	284000	10.35
03	B202B	213000	6.33	754000	7.98	396000	10.37
04	B202BDL	227000	6.32	677000	7.95	355000	10.32
05	B202C	306000	6.35	837000	7.98	421000	10.37
06	B201ADLMS	274000	6.27	909000	7.93	426000	10.32
07	B201ADLMSD	238000	6.32	837000	7.97	401000	10.35
08	SBLK44	344000	6.27	884000	7.92	394000	10.30

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HG891221B20 Date Analyzed: 12/21/89

Instrument ID: 20 Time Analyzed: 2305

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	386000	12.37	227000	16.00	177000	18.57
	UPPER LIMIT	772000		454000		354000	
	LOWER LIMIT	193000		113500		88500	
	EPA SAMPLE NO.						
01	B201ADL	402000	12.37	187000	15.99	118000	18.54
02	B202A	326000	12.35	158000	15.95	100000	18.45
03	B202B	488000	12.37	315000	15.95	248000	18.47
04	B202BDL	417000	12.30	234000	15.87	205000	18.37
05	B202C	442000	12.37	264000	15.95	213000	18.47
06	B201ADLMS	493000	12.32	291000	15.92	223000	18.42
07	B201ADLMSD	473000	12.35	336000	15.95	245000	18.45
08	SBLK44	399000	12.30	197000	15.95	127000	18.49

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8B

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HG900102C21 Date Analyzed: 01/02/90

Instrument ID: 21 Time Analyzed: 0239

		IS1(DCB) AREA #	RT	IS2(NPT) AREA #	RT	IS3(ANT) AREA #	RT
	12 HOUR STD	142000	7.50	446000	9.22	247000	11.69
	UPPER LIMIT	284000		892000		494000	
	LOWER LIMIT	71000		223000		123500	
	EPA SAMPLE NO.						
01	B201B	243000	7.47	824000	9.19	433000	11.67
02	SBLK82	172000	7.48	480000	9.20	246000	11.67

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

8C

SEMIVOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): HG900102C21 Date Analyzed: 01/02/90

Instrument ID: 21 Time Analyzed: 0239

		IS4(PHN) AREA #	RT	IS5(CRY) AREA #	RT	IS6(PRY) AREA #	RT
	12 HOUR STD	390000	13.77	331000	17.65	257000	21.17
	UPPER LIMIT	780000		662000		514000	
	LOWER LIMIT	195000		165500		128500	
	EPA SAMPLE NO.						
01	B201B	593000	13.75	386000	17.60	334000	21.09
02	SBLK82	362000	13.75	309000	17.60	252000	21.07

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
IS6 (PRY) = Perylene-d12

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

II. SAMPLE DATA PACKAGE

The Sample Data Package shall include data for analyses of all samples in one Sample Delivery Group, including field samples, reanalyses, blanks, matrix spikes and matrix spike duplicates. The Sample Data Package consists of the following:

1. CASE NARRATIVE
2. TRAFFIC REPORTS
3. VOLATILES DATA
4. SEMIVOLATILES DATA
5. PESTICIDE / PCB DATA

CASE#: 18756 SDG#: 07 SAS#: _____

1. CASE NARRATIVE

This document shall be clearly labeled " Case Narrative " and shall contain : laboratory name ; sample numbers in the Sample Delivery Group (SDG) , differentiating between initial analyses and re - analyses ; SDG number ; Contract number ; and detailed documentation of any quality control, sample, shipment and / or analytical problems encountered in processing the samples reported in the data package.

Whenever data from sample re - analyses are submitted, the Contractor shall state in the Case Narrative for each re - analysis, whether it considers the re - analysis to be billable, and if so, why.

The contractor must also include documentation of any internal quality control processes used, a summary of corrective actions taken, and the resolution.

CLP CASE NARRATIVE--CASE # 18756
Contract No. Z-98 (REVS) SDG No. 07
CompuChem Laboratories, Inc.

Sample Numbers:BZ01A, BZ01B, BZ02A, BZ02B, BZ02C, BZ02TAR

This portion of Case # 18756 consisted of six solid samples for volatile and semivolatile analysis. The samples were received intact on 12/20/89 via Federal Express in properly sealed shipping containers with traffic reports. Due to a discrepancy between the sample container and the chain-of-custody, the C-O-C ID was used for sample BZ02A. Moisture content of the samples ranged from 9% to 64%. The pH values were within the values specified in SOW protocols.

VOLATILES:
Because of the nature of the samples, it was not possible to analyze the Low Level sample spikes within holding time requirements. All other volatile fractions were extracted and analyzed within holding time requirements. Because of the level of sample constitutents, two analyses, a Low Level and a Medium Level, were reported for samples BZ01A, BZ01B, and BZ02TAR. The Low Level analyses of those three samples all contained toluene, 2-hexanone, and total xylenes at levels outside their analytical ranges. In addition, sample BZ01A also contained benzene and ethylbenzene and sample BZ02TAR, methylene chloride, acetone, and ethylbenzene, at levels outside their analytical range in the Low Level analyses. Because of sample inhomogeneity and the differences in preparation procedures for the Low and Medium analyses, some of the reported concentrations did not compare well between the two reported analyses for these three samples. The total xylene concentration was mistakenly flagged with an "E" in the dilution of sample BZ02TAR. Since the analysis partially separates the xylenes, the individual xylene concentrations were acceptable. The surrogate D8-toluene failed recovery criteria in sample BZ01A due to matrix interference. All other surrogate recoveries met acceptance criteria. Both the Low and Medium Level matrix spike/matrix spike duplicate results were acceptable. Due to a scheduling error, the sample requested for use as the spike original was not used. Toluene failed recovery criteria in the Medium Level MS and MSD, and also failed %RPD in the Medium Level analyses.

SEMIVOLATILES:
All semivolatile fractions were extracted and analyzed within holding time requirements. Coeluting compounds were flagged with an "X" on Form I. Because of the levels of 2-methylphenol, 4-methylphenol, and 2,4-dimethylphenol present, two analyses were reported for sample BZ01A, a 20:1 and a 50:1 dilution. Both a neat and a 5:1 analysis were reported for sample BZ02B because of the levels of 4-methylphenol and 2,4-dimethylphenol present. In addition to the above-mentioned TCL's, such compounds as phenol and various polyaromatic hydrocarbons were detected in one or more of these samples. Due to the viscosity of the extract, only a 5:1 dilution of the Medium Level extraction was reported for sample BZ01B. Because of the dilution necessary, no surrogate recovery data was available for the Low Level matrix spike/ matrix spike duplicate. The recovery for D5-nitrobenzene in sample BZ01A exceeded recovery criteria. All other surrogates met recovery criteria. Because of the dilution necessary, there was no Low Level spike recovery data. The Low Level blank spike, extracted and analyzed with these samples, had acceptable results

The failure of the %RPD for 2,4-dinitrotoluene in the blank spike was allowed since the %RPD criteria are internal CompuChem requirements and not contractual necessities. The Medium Level matrix spike/matrix spike duplicate results were acceptable. The recoveries for n-nitroso-di-n-propylamine and 1,2,4-trichlorobenzene failed QC limits for both the MS and MSD. In addition, the recovery for 1,4-dichlorobenzene failed QC limits in the MSD. The %RPD s exceeded QC limits for 1,4-dichlorobenzene, 1,2,4-trichlorobenzene, and acenaphthene.

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package has been authorized by the Laboratory Manager or his designee as verified by the following signature.

Note: This report was paginated for reference and accountability in decreasing numerical sequence.

Sarah A. Hubbard 1/18/90
Technical Reviewer

COMPUCHEM LABORATORIES

DETECTION LIMIT CALCULATION CLARIFICATION

To protect our G C columns from unnecessary contamination, soil samples prepared according to Caucus Protocol methods are routinely diluted 5 : 1. Through a series of experiments we have determined that our instrument Detection Limit for pesticides is 5X lower than the EPA Contract Required Quantitation Limit (CRQL). We, therefore, only adjust our detection limits if the dilution necessary to analyze the sample is greater than 5 : 1. If the sample is diluted by a factor of X the detection limit is adjusted by X/5 instead of X.

Doug McCormack
Doug McCormack
Manager, GC Laboratory

Robert E. Meierer
Robert E. Meierer
Vice - President, Quality Assurance

COMPUCHEM LABORATORIES, INC. P O. Box 12652 3308 Chapel Hill / Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

CHANGES TO THE EPA'S ORGANIC STATEMENT OF WORK (SOW) FOR THE CONTRACT LABORATORY PROGRAM (CLP)

Effective with samples received at CompuChem Laboratories, Inc. on April 3, 1989, the new "SOW for Organics Analysis; Multi-Media, Multi-Concentration" will be in effect. The new SOW is dated 2/88 with revisions dated 9/88.

EPA introduces modifications to the CLP SOW for a variety of reasons. They are:

- as a result of technical caucuses attended by representatives from EPA regional laboratories and the CLP, new or modified analytical methods are required,
- as a result of analytical data being supplied to the Agency by the CLP laboratories, QC acceptance criteria are updated and made a requirement of the program,
- as a result of requirements by the end users of the data (the EPA regions and the Program Office), changes to the deliverable requirements of the CLP are necessary.

As a service to our clients utilizing the EPA CLP SOW for their analytical needs, the following information is provided to point out the substantive changes between the new SOW and the previous one (10/86 with revisions through 8/87).

"KEY" CHANGES TO THE ORGANIC SOW

1) Wide bore capillary columns (internal diameter greater than 0.32 mm) are allowed for pesticide/PCB analysis in addition to packed columns. Fused silica capillary columns remain an optional confirmation column.

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2) The Sample Data Summary Package (SDSP) was introduced in the 10/86 SOW. The SDSP consists of copies of specific summary forms. In the 2/88 SOW, Form VIII, the Internal Standard Area Summary Form for volatile and semi-volatile analyses, has been added to the SDSP. Form VIII for volatiles and semi-volatiles is also to be included in the QC Summary Package.

3) A clarification for dealing with the three xylene isomers has been added. For total xylenes, where three isomers are quantified as two peaks, the calibration range of each peak should be considered separately, e.g., a diluted analysis is not required for total xylenes unless the concentration of either peak exceeds 200 ug/l.

4) The volatile target analyte, 2-butanone, is to be quantified against the first internal standard, bromochloromethane. In the prior SOW, 2-butanone was quantified against the second internal standard, 1,4-difluorobenzene.

5) Turnaround time for the delivery of data has been lowered from 40 days to 35 days for routine analytical service (RAS) work associated with the Superfund program. The turnaround time is calculated from the Validated Time of Sample Receipt (VTSR) of the last sample in the Sample Delivery Group (SDG).

The above represents the major changes in the new organic SOW for EPA's CLP. There are, of course, other minor changes which have not been addressed in this announcement. Of note, the hardcopy deliverable forms have not changed and, in fact, retain the same revision dates as the prior SOW.

If there are any questions concerning the information presented, please feel free to contact your account administrator at 1-800-833-8097.

Robert E. Meierer
Vice President of Quality Assurance

DATA REPORTING QUALIFIERS

For reporting results to EPA, the following result qualifiers are used. Additional flags or footnotes explaining results are encouraged. However, the definition of each flag must be explicit.

VALUE - If the result is a value greater than or equal to the detection limit, report the value.

U - Indicates compound was analyzed but not detected. The sample quantitation limit must be corrected for dilution and for percent moisture. For example, 10 U for phenol in water if the sample final volume is the protocol-specified final volume. If a 1 to 10 dilution of extract is necessary, the reported limit is 100 U. For a soil sample, the value must also be adjusted for percent moisture. For example, if the sample had 24% moisture and a 1 to 10 dilution factor, the sample quantitation limit for phenol (330 U) would be corrected to:

$$\frac{(330\ U)}{D} \times df \qquad \text{where } D = \frac{100 - \%\ \text{moisture}}{100}$$

and df = dilution factor

$$\text{at 24\% moisture, } D = \frac{100-24}{100} = 0.76$$

$$\frac{(330\ U)}{.76} \times 10 = 4300\ U$$ rounded to the appropriate number of significant figures

For soil sample subjected to GPC clean-up procedures, the CRQL is also multiplied by 2, to account for the fact that only half of the extract is recovered.

J - Indicates an estimated value. This flag is used either when estimating a concentration for tentatively identified compounds where a 1:1 response is assumed, or when the mass spectral data indicate the presence of a compound that meets the identification criteria but the result is less than the sample quantitation limit but greater than zero. For example, if the sample quantitation limit is 10 ug/L, but a concentration is 3 ug/L is calculated, report it as 3J. The sample quantitation limit must be adjusted for both dilution and percent moisture as discussed for the U flag, so that if a sample with 24% moisture and a 1 to 10 dilution factor has a calculated concentration of 300 ug/L and a sample quantitation limit of 430 ug/kg, report the concentration as 300J on Form I.

C - This flag applies to pesticide results where the identification has been confirmed by GC/MS. Single component pesticides $\geq$10 ng/ul in the final extract shall be confirmed by GC/MS.

B - This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates possible/probable blank contamination and warns the data user to take appropriate action. This flag must be used for a TIC as well as for a positively identified TCL compound.

E - This flag identifies compounds whose concentrations exceed the calibration range of the GC/MS instrument for that specific analysis. This flag will not apply to pesticides/PCBs analyzed by GC/EC methods. If one or more compounds have a response greater than full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater than full scale should have the concentration flagged with an "E" on the Form I for the original analysis. If the dilution of the extract causes any compounds identified in the first analysis to be below the calibration range in the second analysis, then the results of both analyses shall be reported on separate Forms I. The Form I for the diluted sample shall have the "DL" suffix appended to the sample number.

D - This flag identifies all compounds identified in an analysis at a secondary dilution factor. If a sample or extract is re-analyzed at a higher dilution factor, as in the "E" flag above, the "DL" suffix is appended to the sample number on the Form I for the diluted sample and all concentration values reported on that Form I are flagged with the "D" flag.

A - This flag indicates that TIC is a suspected aldol-condensation product.

X - Other specific flags and footnotes may be required to properly define the results. If used, they must be fully described and such description attached to the Sample Data Summary Package and the Case Narrative. If more than one is required, use "Y" and "Z", as needed. If more than five qualifiers are required for a sample result, use the "X" flag to combine several flags, as needed. For instance, the "X" flag might combine the "A", "B", and "D" flags for some sample.

COMPUCHEM LABORATORIES

QUALITY ASSURANCE NOTICE

With the advent of the new organics Statement of Work (SOW 2/88, Revision: 9/88) participants in EPA's Contract Laboratory Program (CLP) are required to provide hard copy and diskette deliverables. CompuChem employs the Finnigan QA Formaster Program (Format A) to generate these requirements using data files from our analytical instrumentation. Currently, and independently, quantitation reports are generated by the instruments and are used with CompuChem-developed software to calculate results. The GC and GC/MS quantitation routines employ the convention of carrying at least one extra significant figure until the mathematical computations are completed. Then, the quantitative results are rounded to the SOW-required number of significant figures for reporting. In addition, the algorithm used by the Formaster Program is slightly different than that employed in Compuchem's software routines. Therefore, results presented in the supportive data supplied with our deliverables packages may be slightly different than those which appear on the hard copy forms generated via Formaster.

This notice serves to alert the end users of these data packages as to the reason why slight differences may be observed.

Robert E. Meierer

Robert E. Meierer
Director of Quality Assurance

COMPUCHEM LABORATORIES, INC. P.O. Box 12652 3308 Chapel Hill/Nelson Highway Research Triangle Park, NC 27709 (919) 549-8263

QUALITY ASSURANCE NOTICE

Specific guidelines are presented in the EPA CLP Organic Statement of Work for the positive qualitative identification of compounds through mass spectral interpretation. Applying these guidelines absolutely may not be possible when the nature of the sample is less than pure reference material. Where the mass spectral pattern of a compound to be identified demonstrates interferences or coelution from one or more additional compounds, either unknowns, internal standards, or surrogate standards, the "+" sign is added to the top of the dual spectra page.

Linda Fowler 4/10/89
Linda Fowler
Sr. Quality Assurance Specialist

Robert E. Meierer 4/12/89
Robert E. Meierer
Vice President, Quality Assurance

LABORATORY NOTICE

On June 15, 1985 CompuChem Laboratories began adding D3-2,4-Dinitrophenol to all standards and samples. The purpose of this addition is to enable the laboratory to have higher and more consistent analytical sensitivity for the native 2,4-Dinitrophenol. The peak corresponding to the deuterated analog is clearly labeled on each RIC as D3#1 and will not be searched and reported as a tentatively identified compound (TIC). This compound is not being used as an internal or surrogate standard.

L. Richard Flynn,
Development Chemist

Bob Maierer,
Director of Quality Assurance

2. TRAFFIC REPORTS

A copy of the Sample Traffic Reports in Item A for all of the samples in the SDG. The Traffic Reports shall be arranged in increasing EPA number order, considering both letters and numbering in ordering samples.

Key [illegible]

Lot# 1025-006
TARLAKE

1446

18756 07 SAMPLE DATA PACKAGE

EnSafe™
Environmental and Safety Designs, Inc.

CHAIN OF CUSTODY RECORD

PAGE 1 of 1

CLIENT NAME: TARLAKE SITE
COLLECTED BY: Phil Coop

SAMPLE ID	DATE	TIME	comp	grab	well	SAMPLE LOCATION	# of Containers	pH, Sp. Cond	TOC	TOX	Cl, Fl, SO4	NITRATES	VOC	METALS	PESTICIDE	HERBICIDE	PHENOL	ACID/BN Ext	COLIFORM	CYANIDE			
									SAMPLE ANALYSIS (F)														
B201A	12/18/89	1030		X		13½ - 15 ft.	4		30 30	96 96	91 79		X	X	X			X		X			
B201B	12/18/89	1330		X		15 - 16½ ft	2		30 30	96 96	99 86		X	X	X			X		X			
B202TAR	12/19/89	35 pm		X			2		30 30	96 97	87 00		X	X	X			X		X			
B202A	12/19/89	4:00 pm		X		19 - 20 ft	2		30 30	96 97	88 01		X	X	X			X		X			
B202B	12/19/89	4 pm		X		21 - 22½	2		30 30	96 97	89 02		X	X	X			X		X			
B202C	12/19/89	10 am		1		22½ - 24	2		30 30	96 97	90 03		X	X	X			X		X			

F - filtered P - preserved

NO PRESERVATIVES
CLP Protocol

REMARKS

use for matrix spike please

ID on Bottle
B202 used C-ORG ID 8/19/89

12/19/89

RECEIVED IN GOOD CONDITION

Relinquished by:	Date	Time	Received by:	Relinquished by:	Date	Time	Received by:
Holly C. Coop	12/19/89	4 pm.					

Relinquished by:	Date	Time	Received by lab by:	Date	Time	Remarks
			V. Batt	12/20/89	10:15	

Please call P. Coop, 901-372-7962 if insufficient sample for full analysis.

3. VOLATILES DATA

A. QC SUMMARY

B. SAMPLE DATA

C. STANDARDS DATA

D. RAW QC DATA

CASE#: 18756 SDG#: 07 SAS#: _____

A. QC SUMMARY

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

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

(3) Method Blank Summary (Form IV VOA)

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

(4) GC / MS Tuning and Mass Calibration (Form V VOA)

BFB in chronological order ; by instrument

(5) Internal Standard Area Summary (Form VIII VOA)

In chronological order ; by instrument

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

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Level:(low/med) LOW

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	B201A	80 *	90	97		1
02	B201B	90	99	94		0
03	B202A	95	92	97		0
04	B202B	92	96	97		0
05	B202C	94	91	97		0
06	B202TAR	88	93	97		0
07	B202AMS	101	98	92		0
08	B202AMSD	114	113	102		0
09	VBLKL8	107	98	95		0
10	VBLKB4	97	87	97		0
11	VBLKF5	92	91	92		0

		QC LIMITS
S1 (TOL)	= Toluene-d8	(81-117)
S2 (BFB)	= Bromofluorobenzene	(74-121)
S3 (DCE)	= 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

2B

SOIL VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Level: (low/med) MED

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	B201ARE	91	93	111		0
02	B201BRE	115	105	113		0
03	B202TARDL	82	110	109		0
04	B201BREMS	90	100	90		0
05	B201BREMSD	86	101	104		0
06	VBLKH1	110	103	117		0
07	VBLKH9	101	104	117		0
08	VBLKI6	112	106	121		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(81-117)
S2 (BFB) = Bromofluorobenzene	(74-121)
S3 (DCE) = 1,2-Dichloroethane-d4	(70-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogates diluted out

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

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix Spike - EPA Sample No.: B202A Level:(low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	56.8	0	58.1	102	59-172
Trichloroethene	56.8	0	47.3	83	62-137
Benzene	56.8	0	55.2	97	66-142
Toluene	56.8	1.45	53.9	92	59-139
Chlorobenzene	56.8	0	52.0	92	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	56.8	53.5	94	8	22	59-172
Trichloroethene	56.8	47.5	84	-1	24	62-137
Benzene	56.8	55.1	97	0	21	66-142
Toluene	56.8	54.0	93	-1	21	59-139
Chlorobenzene	56.8	50.9	90	2	21	60-133

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

* Values outside of QC limits

RPD: 0 out of 5 outside limits
Spike Recovery: 0 out of 10 outside limits

COMMENTS: CLP ,1875,67, , ,SOIL,309688,VOLATILE, ,
TUNE: 0019 122289 0013

FORM III VOA-2 1/87 Rev.

3B

SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix Spike - EPA Sample No.: B201BRE Level:(low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	7100	0	4730	67	59-172
Trichloroethene	7100	0	6950	98	62-137
Benzene	7100	2160	9740	107	66-142
Toluene	7100	15900	18900	42 *	59-139
Chlorobenzene	7100	0	6970	98	60-133

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	7100	4330	61	9	22	59-172
Trichloroethene	7100	6970	98	0	24	62-137
Benzene	7100	10500	118	-10	21	66-142
Toluene	7100	18000	30 *	33 *	21	59-139
Chlorobenzene	7100	7230	102	-4	21	60-133

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

* Values outside of QC limits

RPD: 1 out of 5 outside limits
Spike Recovery: 2 out of 10 outside limits

COMMENTS: CLP ,1875,67, , ,SOIL,309686,VOLATILE, ,
TUNE: 0013 122989 1535

FORM III VOA-2 1/87 Rev.

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Lab File ID (Standard): GS900102A19 Date Analyzed: 01/02/90

Instrument ID: 19 Time Analyzed: 0942

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

	IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
12 HOUR STD	52100	5.90	198000	7.68	214000	12.54
UPPER LIMIT	104200		396000		428000	
LOWER LIMIT	26050		99000		107000	
EPA SAMPLE NO.						
01 B202AMS	53700	5.88	212000	7.72	234000	12.60
02 B202AMSD	59400	5.87	223000	7.68	245000	12.60
03 VBLKL8	53000	5.90	210000	7.70	232000	12.59

IS1 (BCM) = Bromochloromethane
IS2 (DFB) = 1,4-Difluorobenzene
IS3 (CBZ) = Chlorobenzene

UPPER LIMIT = + 100% of internal standard area.
LOWER LIMIT = - 50% of internal standard area.

Column used to flag internal standard area values with an asterisk

B. SAMPLE DATA

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I VOA , including Form I VOA - TIC), followed by the raw data for volatile samples. These sample packets should then be placed in increasing EPA number order, considering both letters and numbers in ordering samples.

- TCL Results - Organic Analysis Data Sheet (Form I VOA). Tabulated results (identification and quantitation) of the specified target compounds (Exhibit C).

- Tentatively Identified Compounds (Form I VOA - TIC). This form must be included even if no compounds are found. If so, indicate this on the form by entering " 0 " in the field for " Number Found ".

- Reconstructed total ion chromatograms (RIC) for each sample, sample extract, standard, blank and spiked sample.

- For each sample, by each compound identified.

  (a) Copies of raw spectra and copies of background - substracted mass spectra of target compounds listed in Exhibit C (TCL) that are identified in the sample and corresponding background - subetracted TCL standard mass spectra. Compound names must be clearly marked on all spectra.

  (b) Copies of mass spectra of nonsurrogate organic compounds not listed in Exhibit C (TCL) (Tentatively Identified Compounds) which associated best - match spectra (three best matches).

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009679C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	32	B
67-64-1	Acetone	150	B
75-15-0	Carbon Disulfide	5	U
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	5	U
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	120	
71-55-6	1,1,1-Trichloroethane	5	U
56-23-5	Carbon Tetrachloride	5	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	5	U
78-87-5	1,2-Dichloropropane	5	U
10061-01-5	cis-1,3-Dichloropropene	5	U
79-01-6	Trichloroethene	5	U
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	260	E
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	5	U
108-10-1	4-Methyl-2-Pentanone	17	
591-78-6	2-Hexanone	580	E
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	5	U
108-88-3	Toluene	720	E
108-90-7	Chlorobenzene	5	U
100-41-4	Ethylbenzene	420	E
100-42-5	Styrene	210	
1330-20-7	Total Xylenes	1300	E

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009679C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	625-86-5	FURAN,2,5-DIMETHYL-	8.22	240	J
2.	1192-62-7	ETHANONE,1-(2-FURANYL)-	11.02	250	J
3.		UNKNOWN	13.44	460	J
4.		UNKNOWN	13.45	220	J
5.		UNKNOWN	14.05	190	J
6.		UNKNOWN	14.55	300	J
7.	100-66-3	BENZENE,METHOXY-	14.70	510	J
8.	103-65-1	BENZENE,PROPYL-	15.34	190	J
9.		UNKNOWN	15.60	1500	J
10.		SUBSTITUTED BENZENE	16.05	800	J

COMPUCHEM LABS

RIC

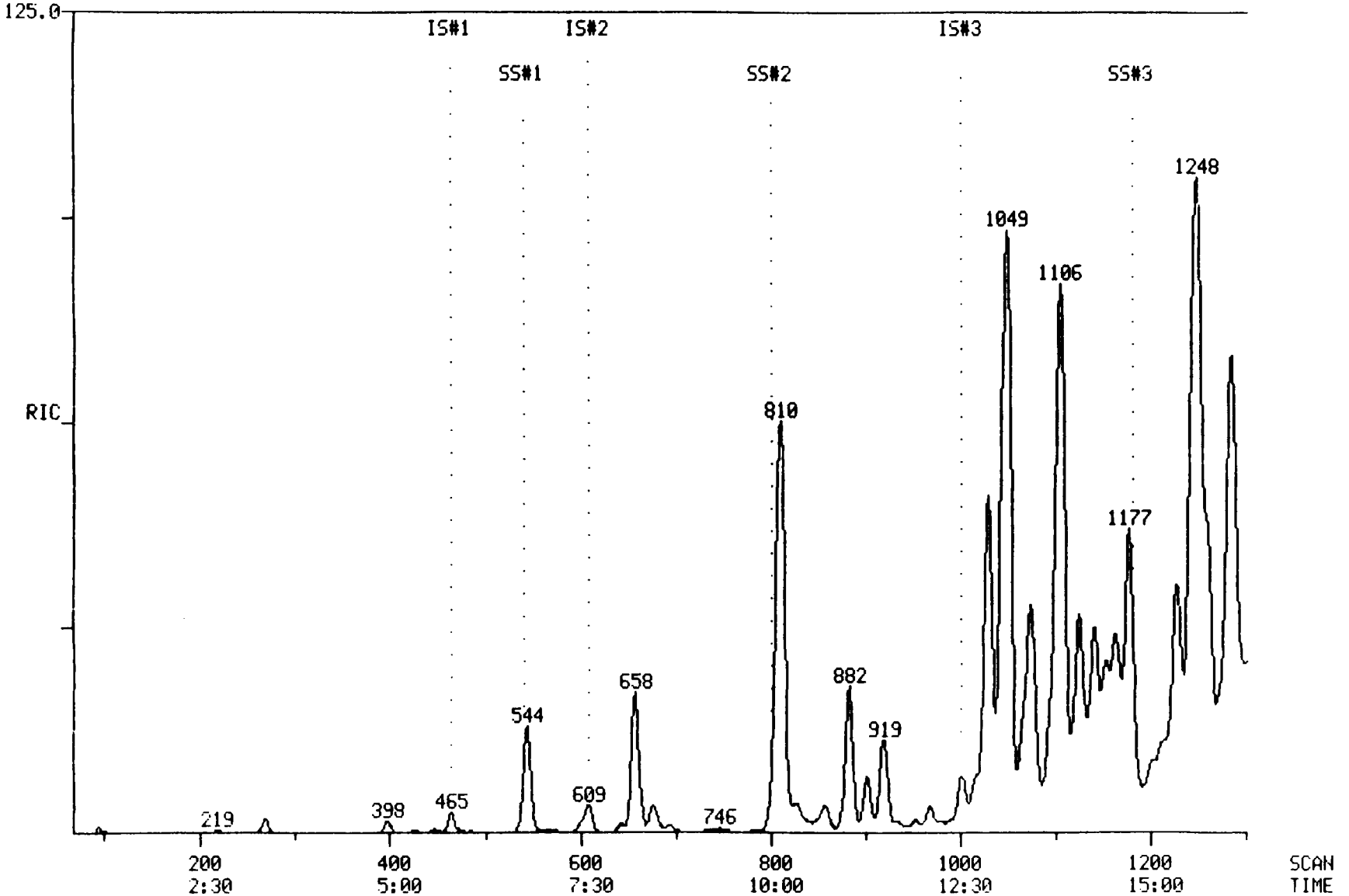
COMPUCHEM DATA: GH009679C19 SCANS 69 TO 1300

12/22/89 4:18:00

SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19

CONDS.:

1247990.



QUANTITATION REPORT FILE: GHC09679C19
DATA: GH009679C19.TI
12/22/89 4:18:00
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1422

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
2	221 CHLOROMETHANE <74-87-3> RO#2
3	231 VINYL CHLORIDE <75-01-4> RO#3
4	220 BROMOMETHANE <78-83-9> RO#4
5	209 CHLOROETHANE <75-00-3> RO#5
6	216 1,1-DICHLOROETHENE <75-35-4> RO#8
7	254 CARBON DISULFIDE <75-15-0> RO#9
8	252 ACETONE (2-PROPANONE) <67-64-1> RO#13
9	*249 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
10	222 METHYLENE CHLORIDE <75-09-2> RO#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
12	214 1,1-DICHLOROETHANE <75-34-3> RO#19
13	257 VINYL ACETATE <108-05-4> RO#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
15	253 2-BUTANONE <78-93-3> RO#22
16	211 CHLOROFORM <67-66-2> RO#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
18	206 CARBON TETRACHLORIDE <56-23-5> RO#25
19	203 BENZENE <71-43-2> RO#26
20	215 1,2-DICHLOROETHANE <107-06-2> RO#27
21	*270 D5-CHLOROBENZENE (IS) RO#29
22	229 TRICHLOROETHENE <79-01-6> RO#30
23	217 1,2-DICHLOROPROPANE <78-87-5> RO#31
24	212 BROMODICHLOROMETHANE <75-27-4> RO#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
26	256 4-METHYL-2-PENTANONE <108-01-1> RO#36
27	225 TOLUENE <108-88-3> RO#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
30	224 TETRACHLOROETHENE <127-18-4> RO#41
31	255 2-HEXANONE <591-78-6> RO#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
33	207 CHLOROBENZENE <108-90-7> RO#45
34	219 ETHYLBENZENE <100-41-4> RO#47
35	330 M,P-XYLENE <133-02-7> RO#48
36	239 O-XYLENE <133-02-7> RO#49
37	251 STYRENE <100-42-5> RO#50
38	205 BROMOFORM <75-25-2> RO#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
40	#258 D4-1,2-DICHLOROETHANE RO#57
41	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
42	#233 D8-TOLUENE RO#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	464	5:48	1	1.000	A BB	34851.	50.000 UG/KG	1.34
2	50	NOT FOUND							

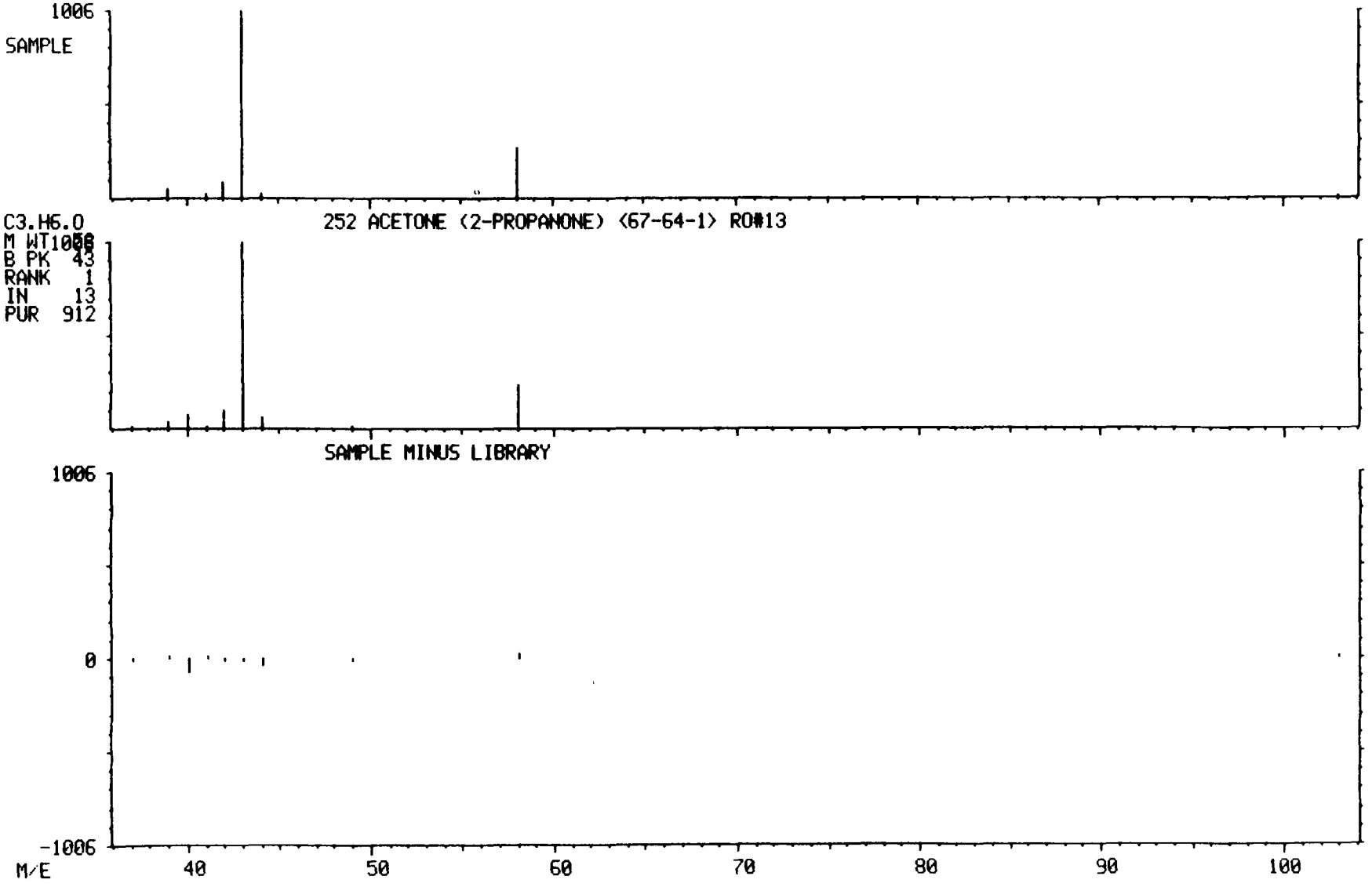
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	219	2:44	1	0.472	A BB	24465.	132.645	UG/KG	3.56
9	114	609	7:37	9	1.000	A BB	134420.	50.000	UG/KG	1.34
10	84	269	3:22	1	0.580	A BB	33717.	29.437	UG/KG	0.79
11	96	NOT FOUND								
12	63	NOT FOUND								
13	43	NOT FOUND								
14	96	NOT FOUND								
15	72	448	5:36	1	0.966	A BB	8006.	107.176	UG/KG	2.88
16	83	NOT FOUND								
17	97	NOT FOUND								
18	117	NOT FOUND								
19	78	544	6:48	9	0.893	A BB	561099.	233.122	UG/KG	6.26
20	62	NOT FOUND								
21	117	1000	12:30	21	1.000	A BB	158516.	50.000	UG/KG	1.34
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	801	10:01	21	0.801	A BB	12617.	15.507	UG/KG	0.42
27	92	810	10:07	21	0.810	A BB	1524640.	651.540	UG/KG	17.50
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	919	11:29	21	0.919	A VB	324090.	523.670	UG/KG	14.07
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	1029	12:52	21	1.029	A BV	615073.	382.836	UG/KG	10.28
35	106	1049	13:07	21	1.049	A VB	1458110.	652.791	UG/KG	17.54
36	106	1104	13:48	21	1.104	A BB	1024930.	519.806	UG/KG	13.96
37	104	1108	13:51	21	1.108	A BB	663203.	190.361	UG/KG	5.11
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	540	6:45	1	1.164	A BB	70282.	48.323	UG/KG	1.30
41	95	1181	14:46	21	1.181	A VB	122608.	45.209	UG/KG	1.21
42	98	801	10:01	21	0.801	A BB	132677.	39.945	UG/KG	1.07

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:54	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:06		10.000			50.00		0.952	
3	1:11		10.000			50.00		1.256	
4	1:26		10.000			50.00		1.579	
5	1:34		10.000			50.00		0.796	
6	2:37		5.000			50.00		1.346	
7	2:46		5.000			50.00		3.709	
8	2:48	0.98	10.000	0.05	132.64	50.00	0.702	0.265	2.65
9	7:42	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	3:27	0.97	5.000	0.12	29.44	50.00	0.967	1.643	0.59
11	3:53		5.000			50.00		1.486	
12	4:34		5.000			50.00		2.635	
13	4:52		10.000			50.00		0.458	
14	5:33		5.000			50.00		1.675	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:42	0.98	10.000	0.10	107.18	50.00	0.230	0.107	2.14
16	6:10		5.000			50.00		3.433	
17	6:18		5.000			50.00		0.814	
18	6:34		5.000			50.00		0.755	
19	6:53	0.99	5.000	0.18	233.12	50.00	4.174	0.895	4.66
20	6:58		5.000			50.00		2.523	
21	12:34	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	8:01		5.000			50.00		0.569	
23	8:22		5.000			50.00		0.352	
24	8:55		5.000			50.00		0.701	
25	9:41		5.000			50.00		0.690	
26	10:04	0.99	15.000	0.05	15.51	50.00	0.080	0.257	0.31
27	10:10	1.00	5.000	0.16	651.54	50.00	9.618	0.738	13.03
28	10:42		5.000			50.00		0.342	
29	10:58		5.000			50.00		0.349	
30	11:06		5.000			50.00		0.723	
31	11:33	0.99	15.000	0.06	523.67	50.00	2.045	0.195	10.47
32	11:35		5.000			50.00		0.690	
33	12:37		5.000			50.00		1.092	
34	12:55	1.00	5.000	0.21	382.84	50.00	3.880	0.507	7.66
35	13:10	1.00	5.000	0.21	652.79	50.00	9.199	0.705	13.06
36	13:52	1.00	5.000	0.22	519.81	50.00	6.466	0.622	10.40
37	13:54	1.00	5.000	0.22	190.36	50.00	4.184	1.099	3.81
38	14:07		5.000			50.00		0.664	
39	15:16		5.000			50.00		0.557	
40	6:52	0.98	5.000	0.23	48.32	50.00	2.017	2.087	0.97
41	14:49	1.00	5.000	0.24	45.21	50.00	0.773	0.855	0.90
42	10:04	0.99	5.000	0.16	39.95	50.00	0.837	1.048	0.80

COMPUCHEM LABS

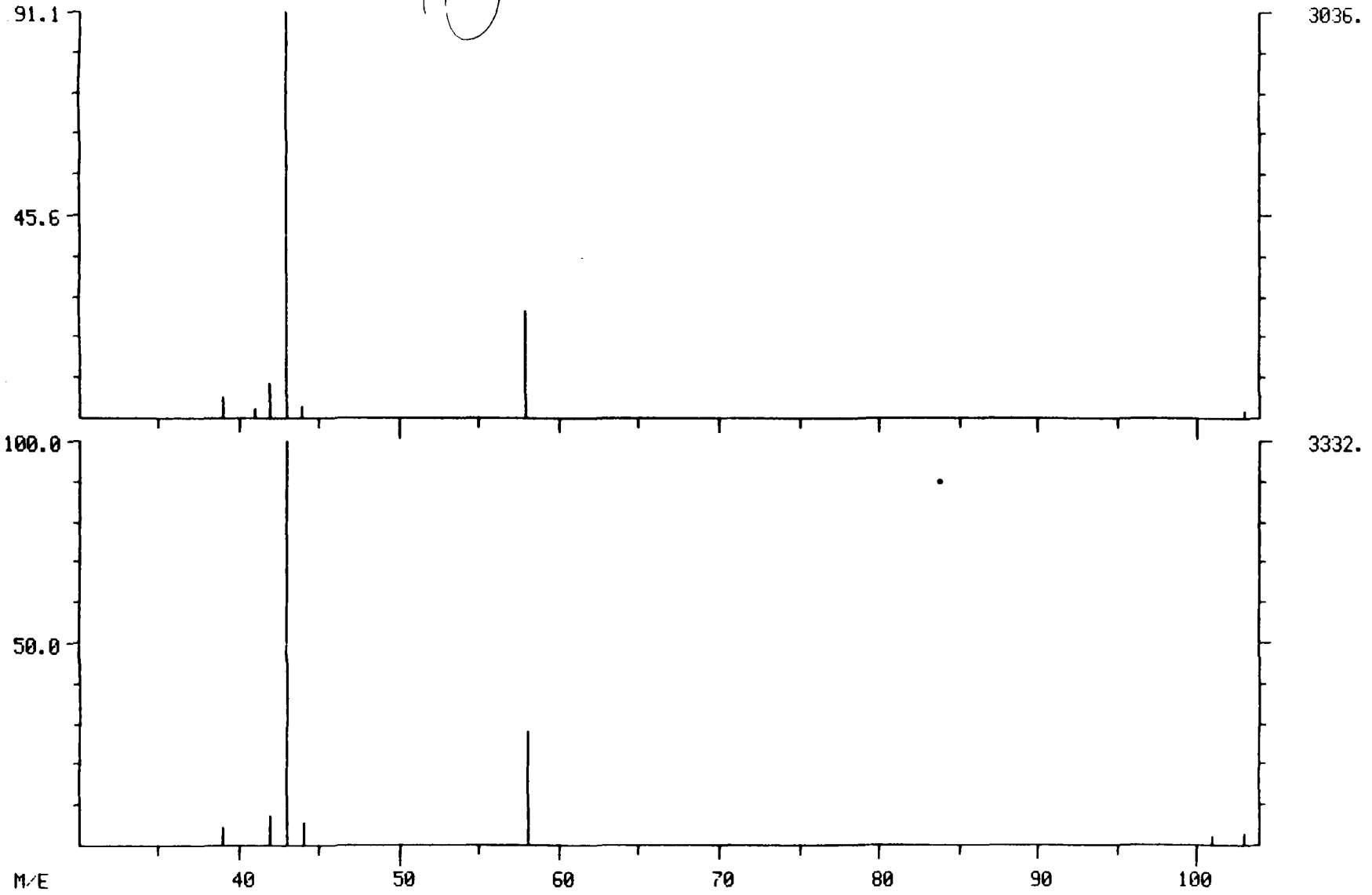
LIBRARY SEARCH DATA: GH009679C19 # 219 BASE M/E: 43
12/22/89 4:18:00 + 2:44 RIC: 4463.
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 2:44
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 252 ACETONE (2-PROPANONE) (67-64-1) RO#13

DATA: GH009679C19 #219 BASE M/E: 43/ 43
RIC: 4463./ 5023.

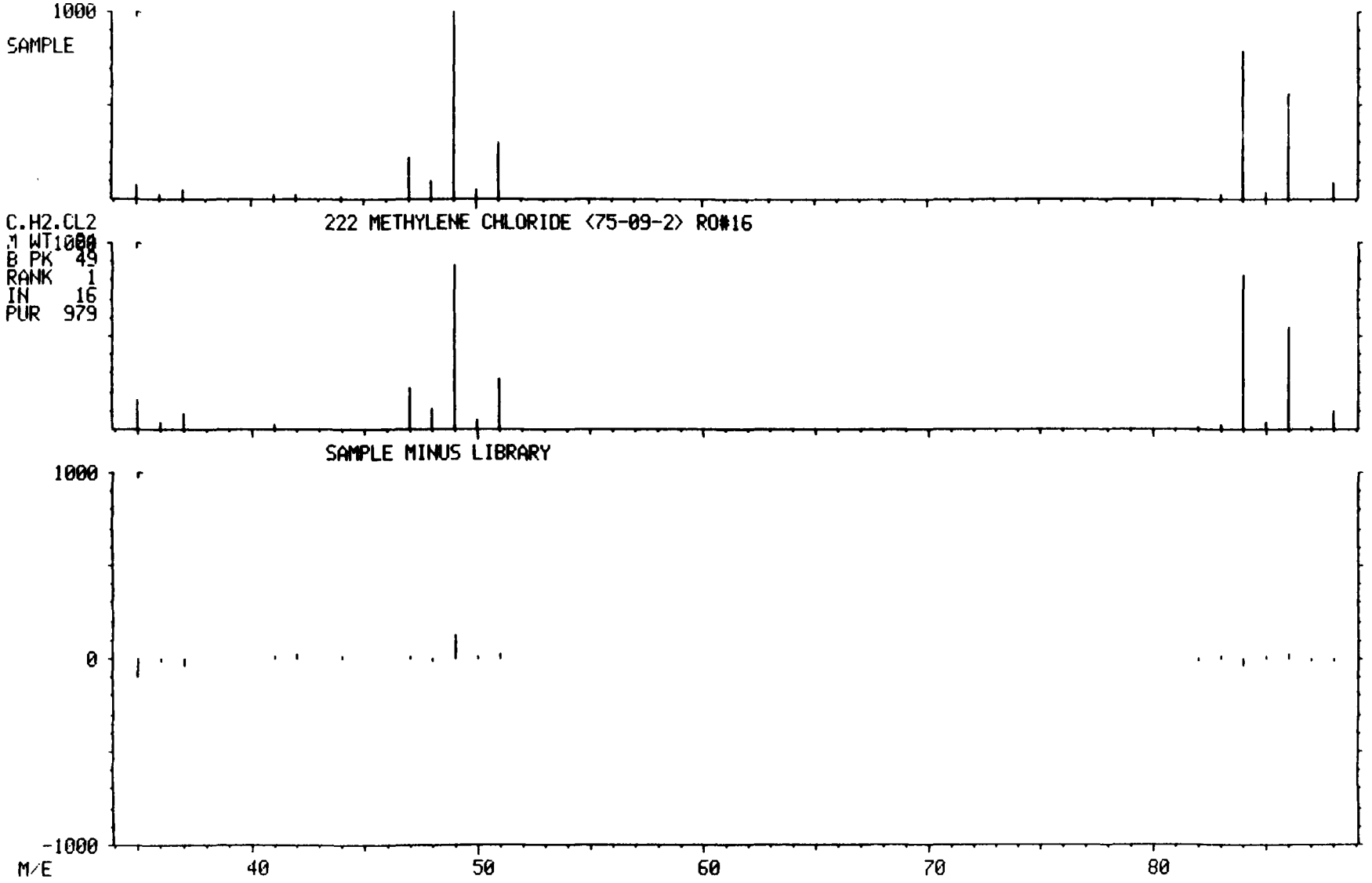


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 3:22
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH09679C19 # 269
BASE M/E: 49
RIC: 18079.

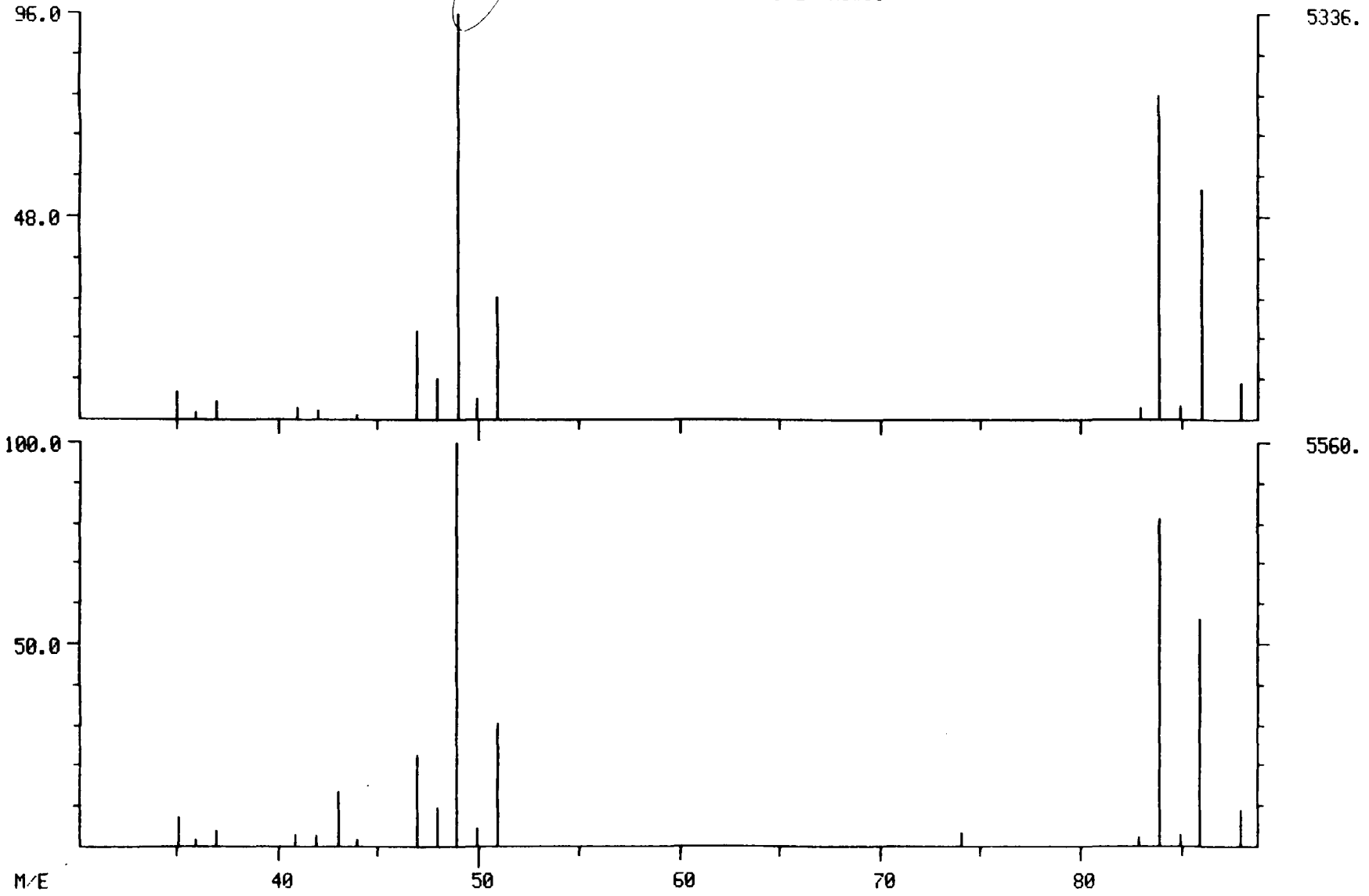


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 3:22
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 222 METHYLENE CHLORIDE (75-09-2) RO#16

DATA: GH009679C19 #269 BASE M/E: 49/ 49
RIC: 18079./ 19807.

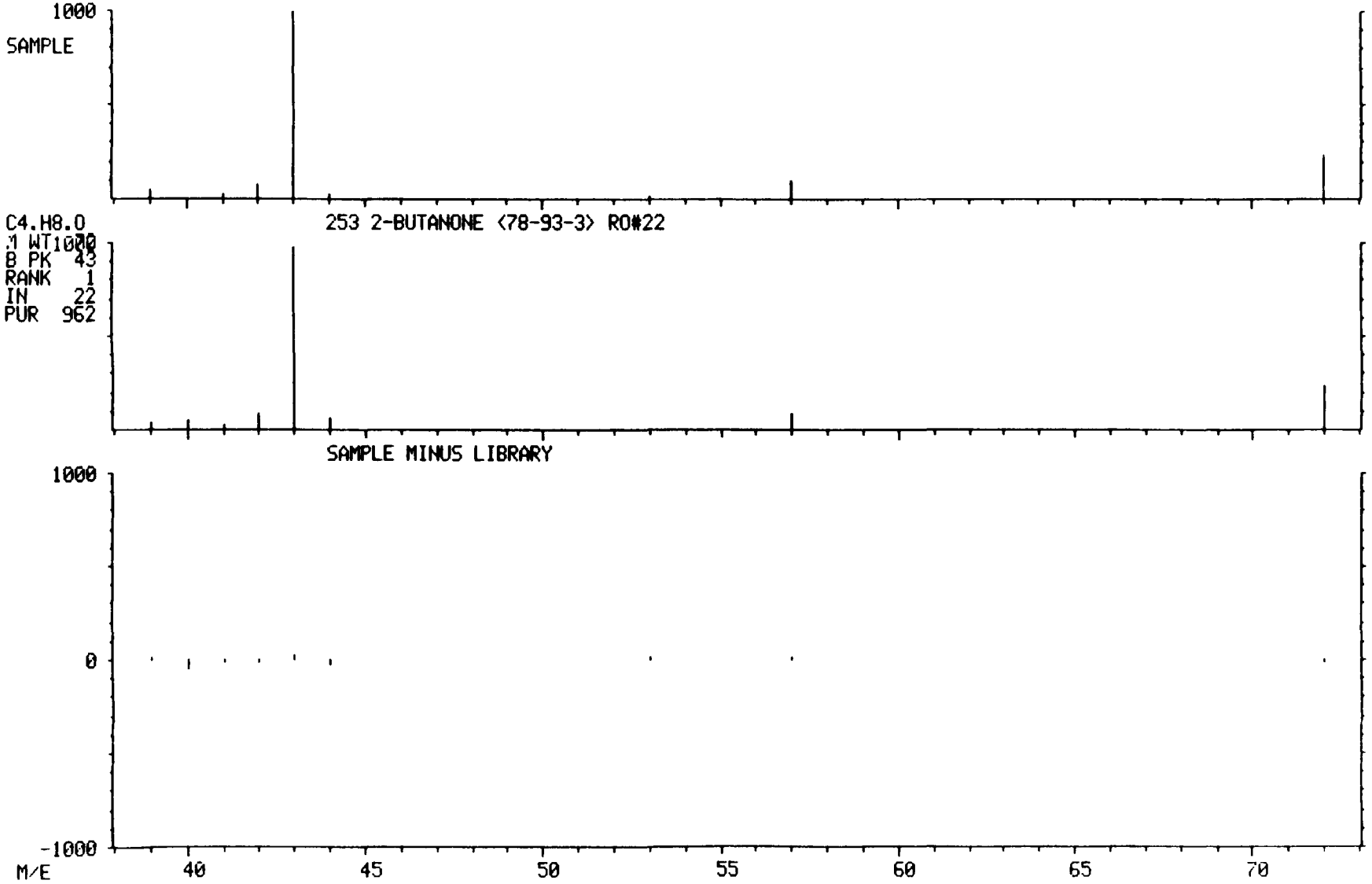


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 5:36
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 # 448
BASE M/E: 43
RIC: 4663.

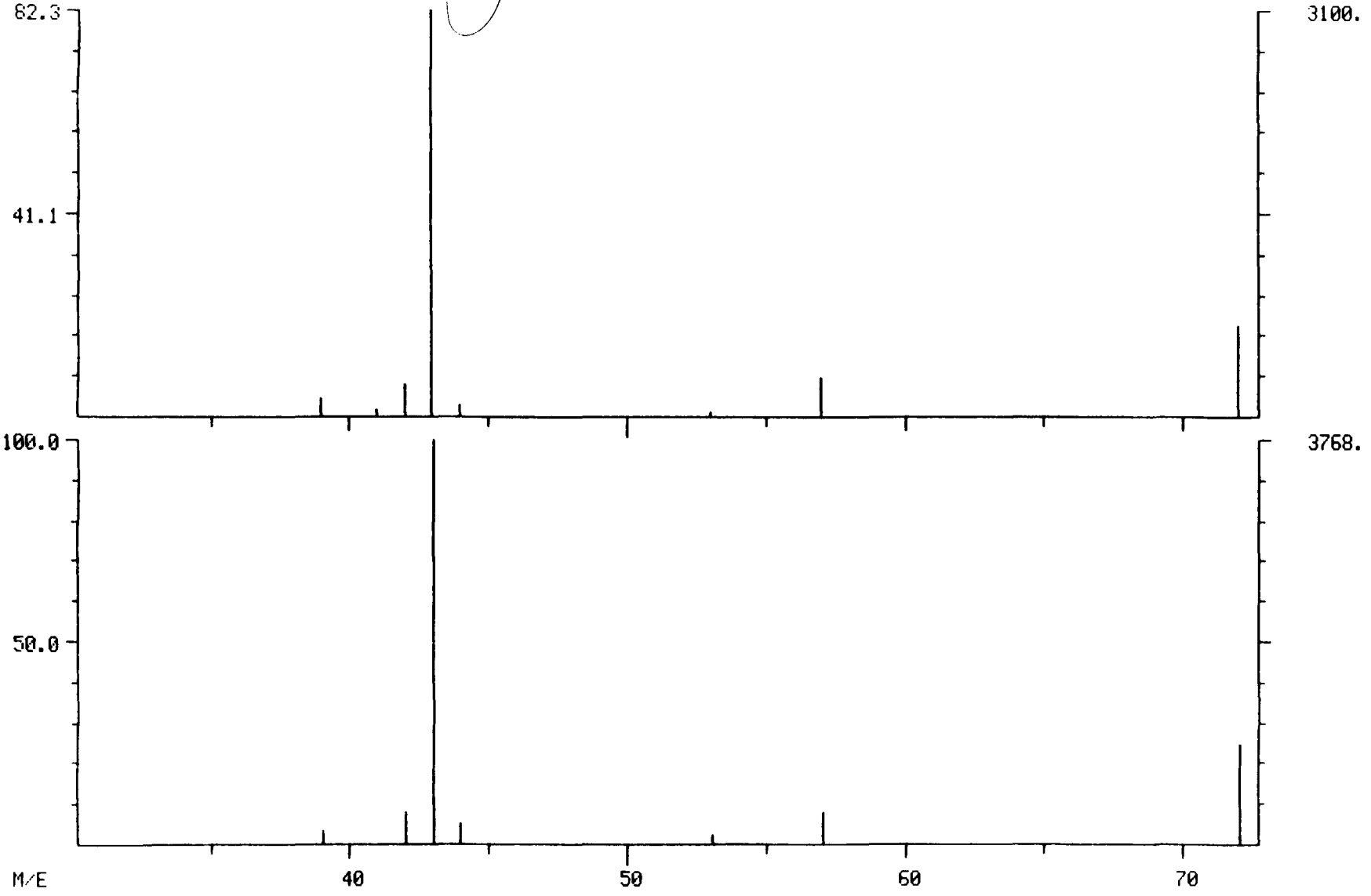


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 5:36
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) / 253 2-BUTANONE <78-93-3> RO#22

DATA: GH009679C19 #448 BASE M/E: 43/ 43
RIC: 4663./ 5703.

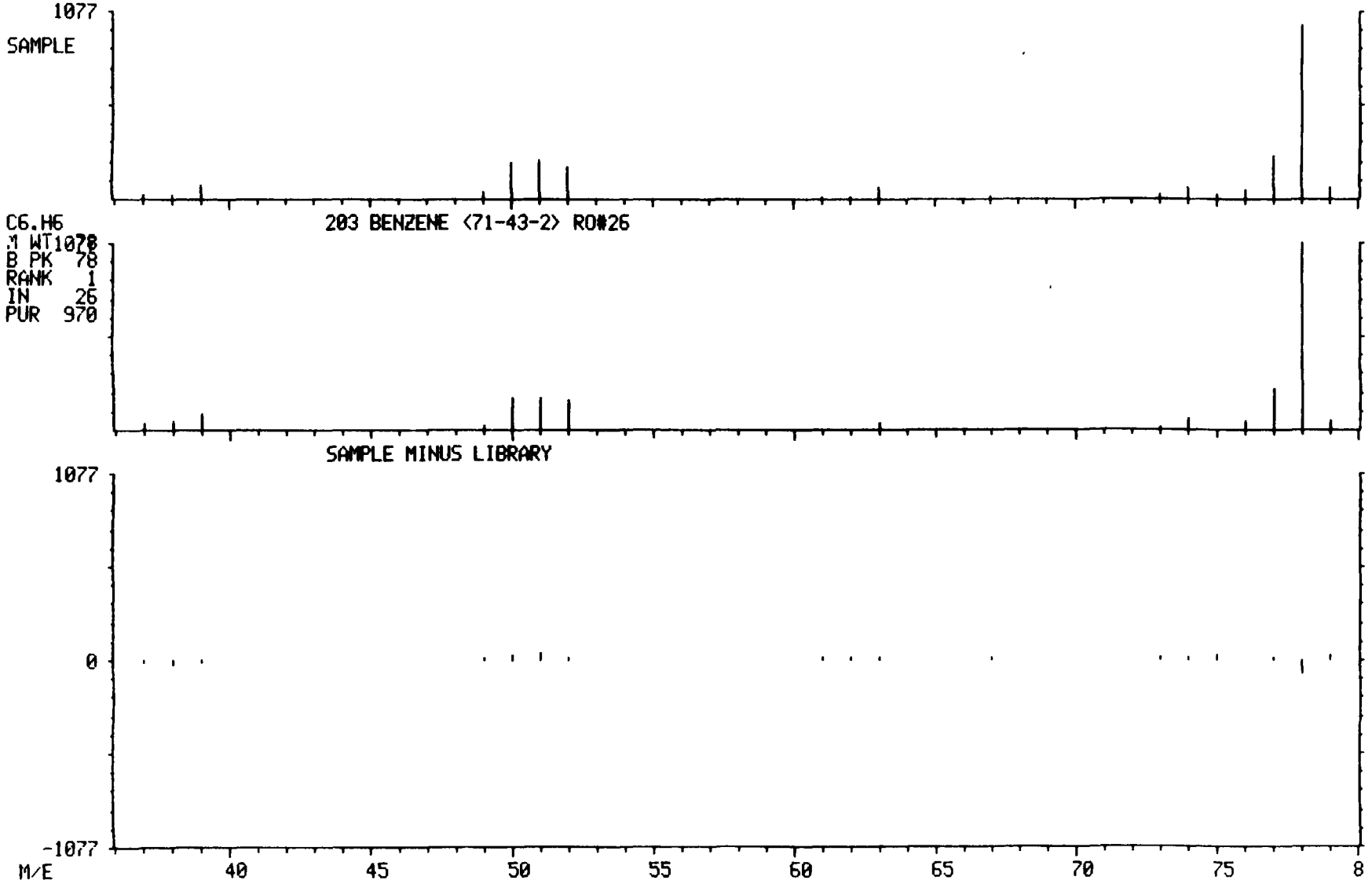


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 6:48
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

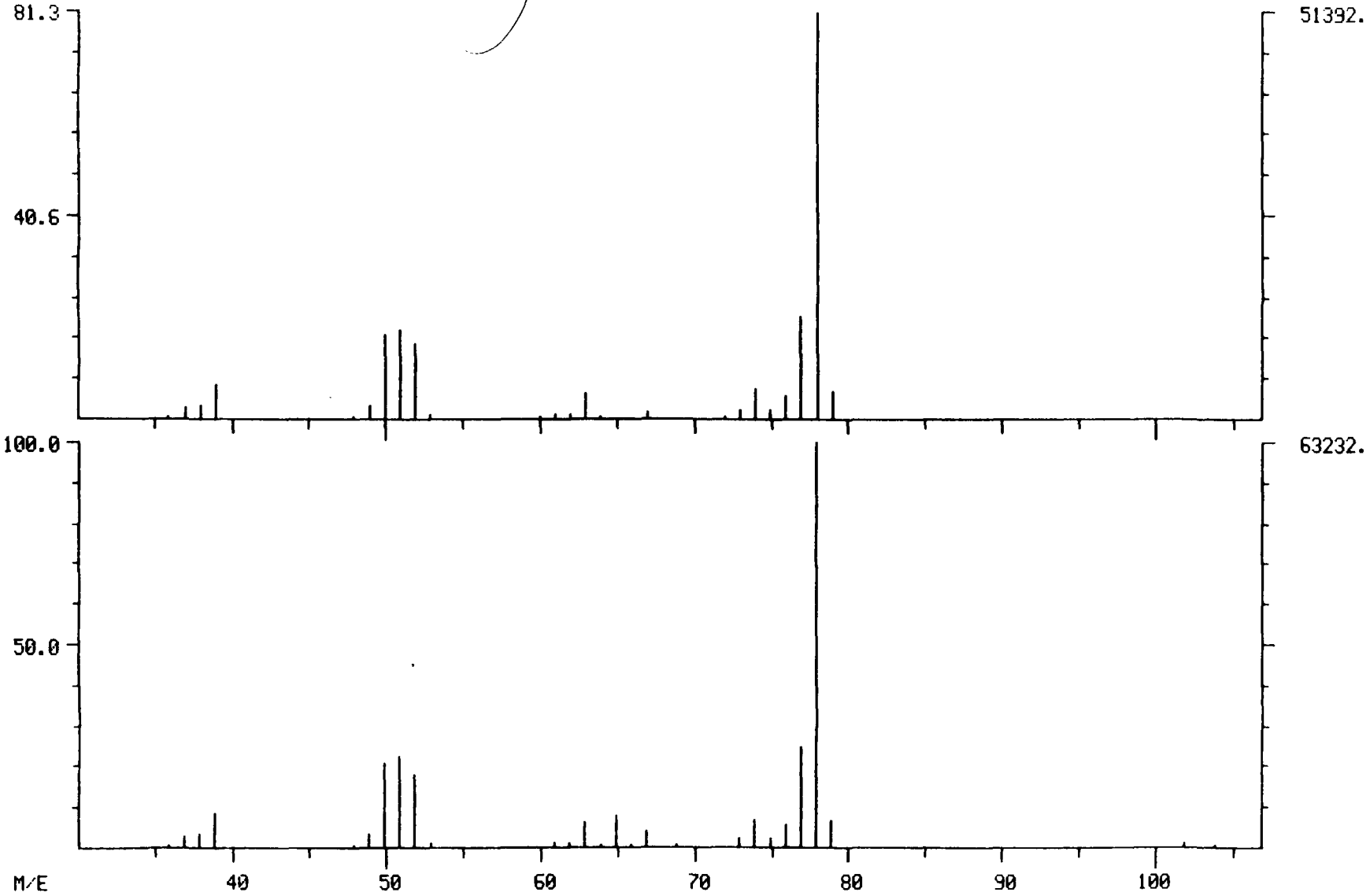
DATA: GH009679C19 # 544
BASE M/E: 78
RIC: 123007.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 6:48
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 203 BENZENE <71-43-2> RO#26

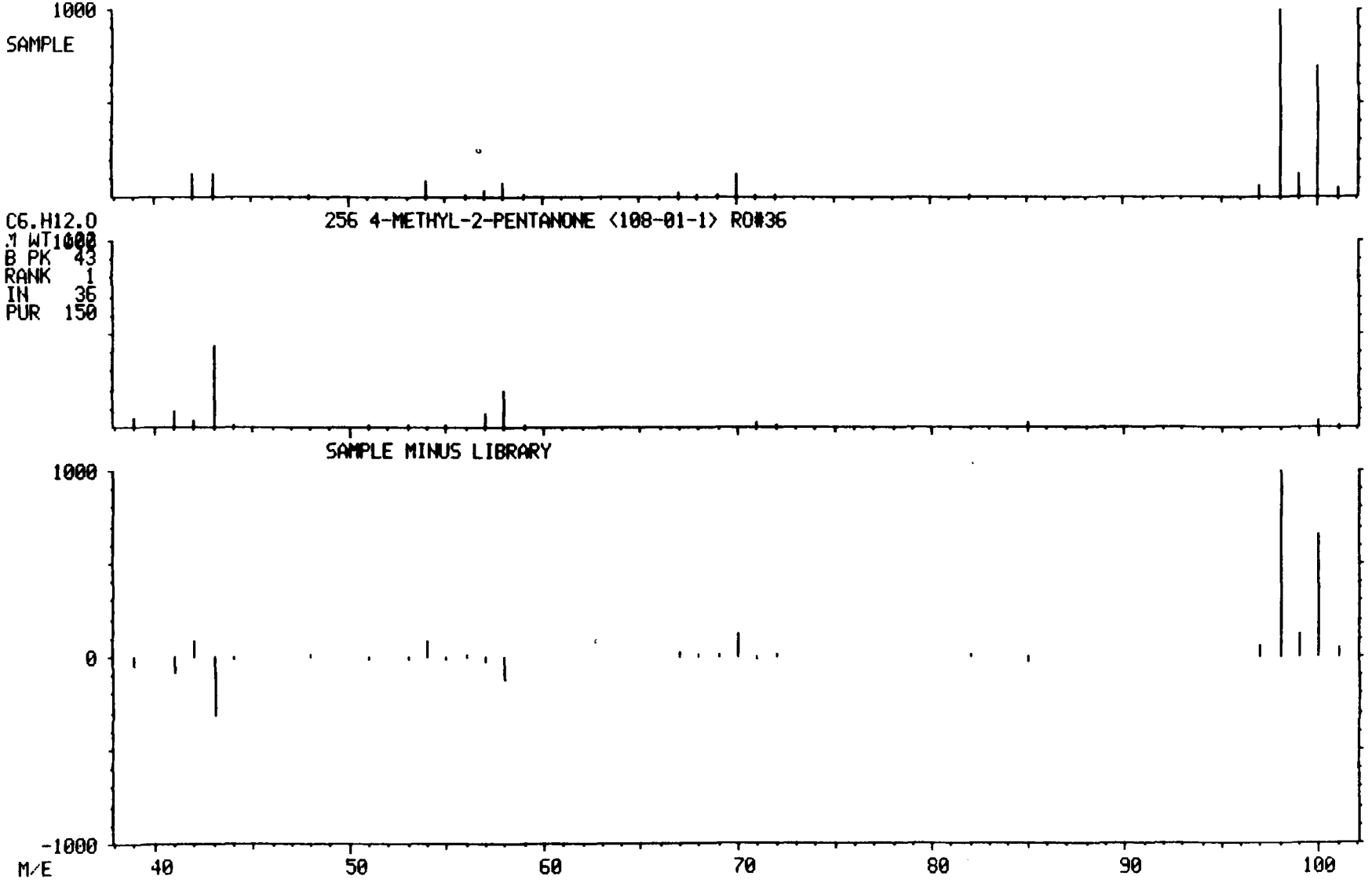
DATA: GH009679C19 #544 BASE M/E: 78/ 78
RIC: 124671./ 159999.



18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009679C19 # 801 BASE M/E: 98
12/22/89 4:18:00 + 10:01 RIC: 30463.
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

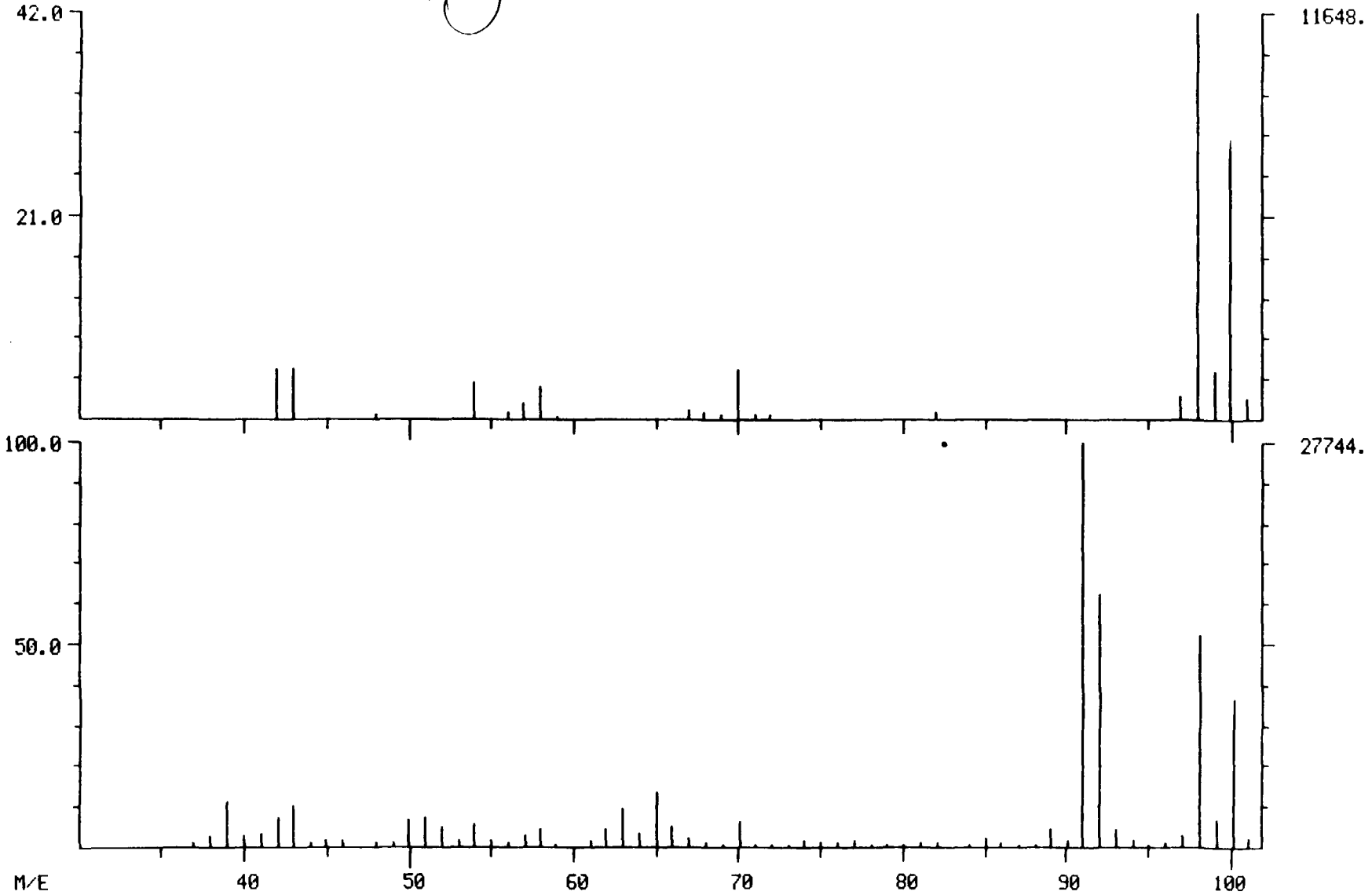


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 10:01
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N)

DATA: GH009679C19 #801 BASE M/E: 98/ 91
RIC: 30463./ 117119.

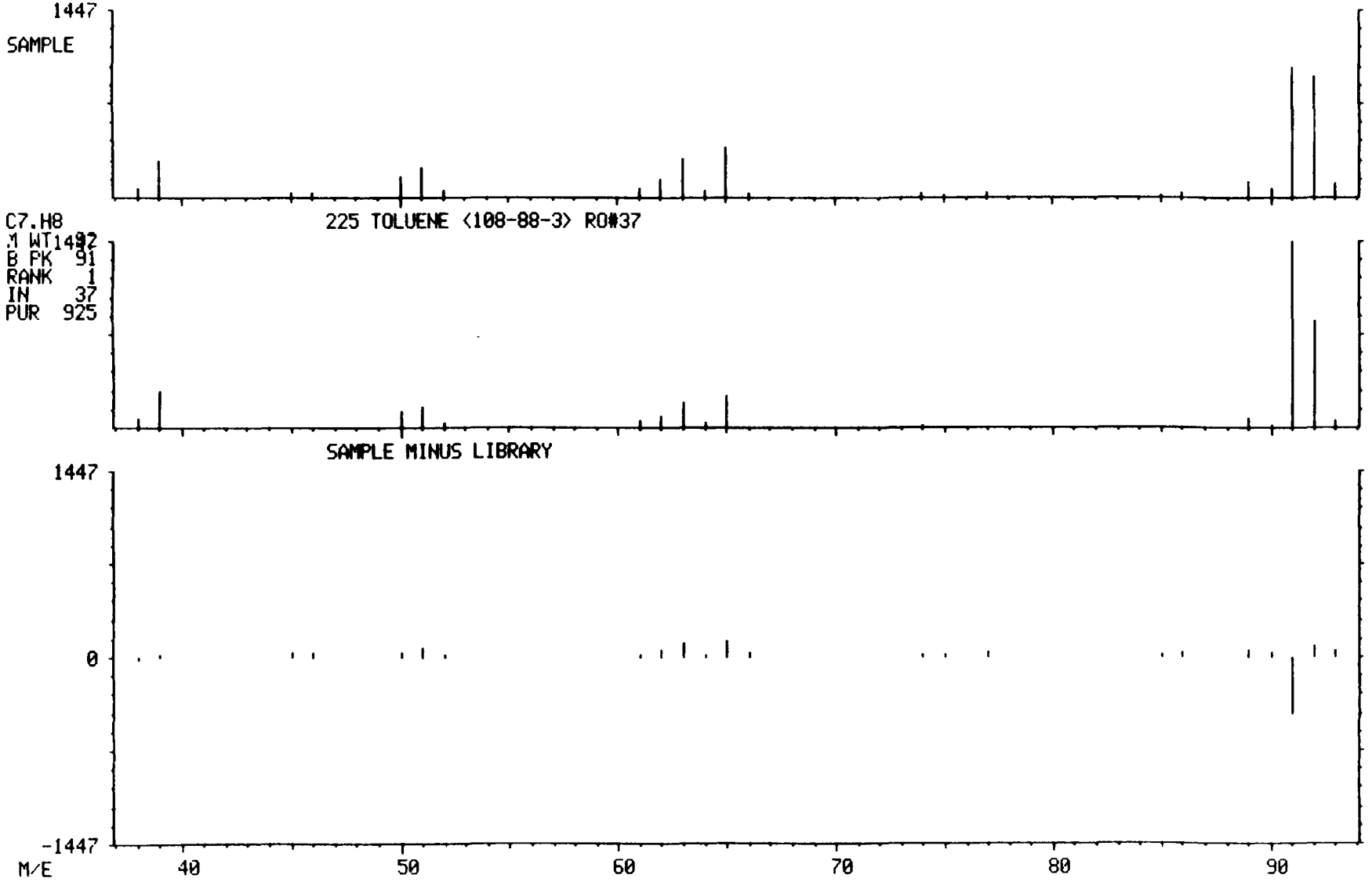
256 4-METHYL-2-PENTANONE (108-01-1) RO#36



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 10:07
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 # 810
BASE M/E: 91
RIC: 432127.

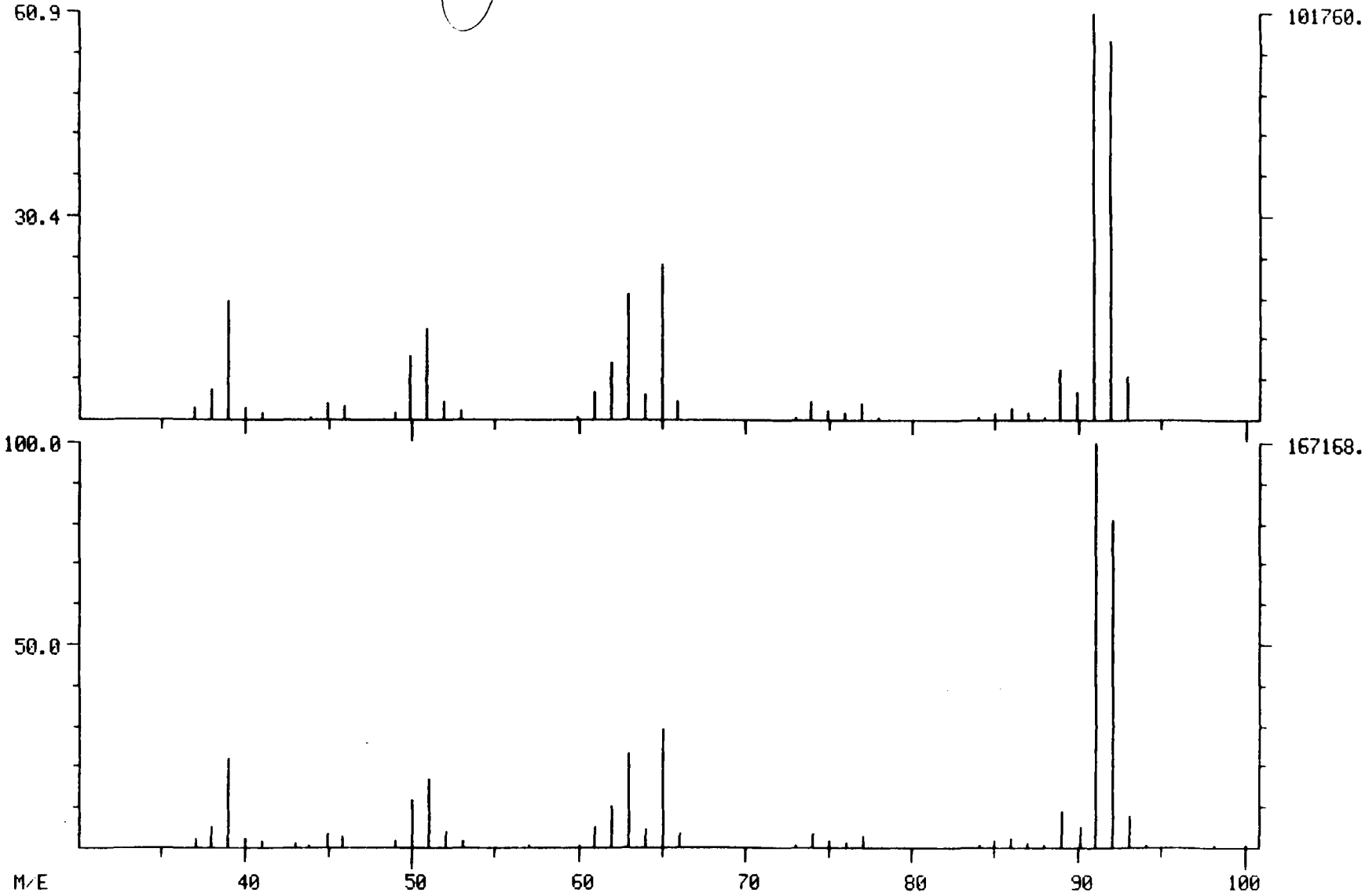


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 10:07
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 225 TOLUENE (108-88-3) RO#37

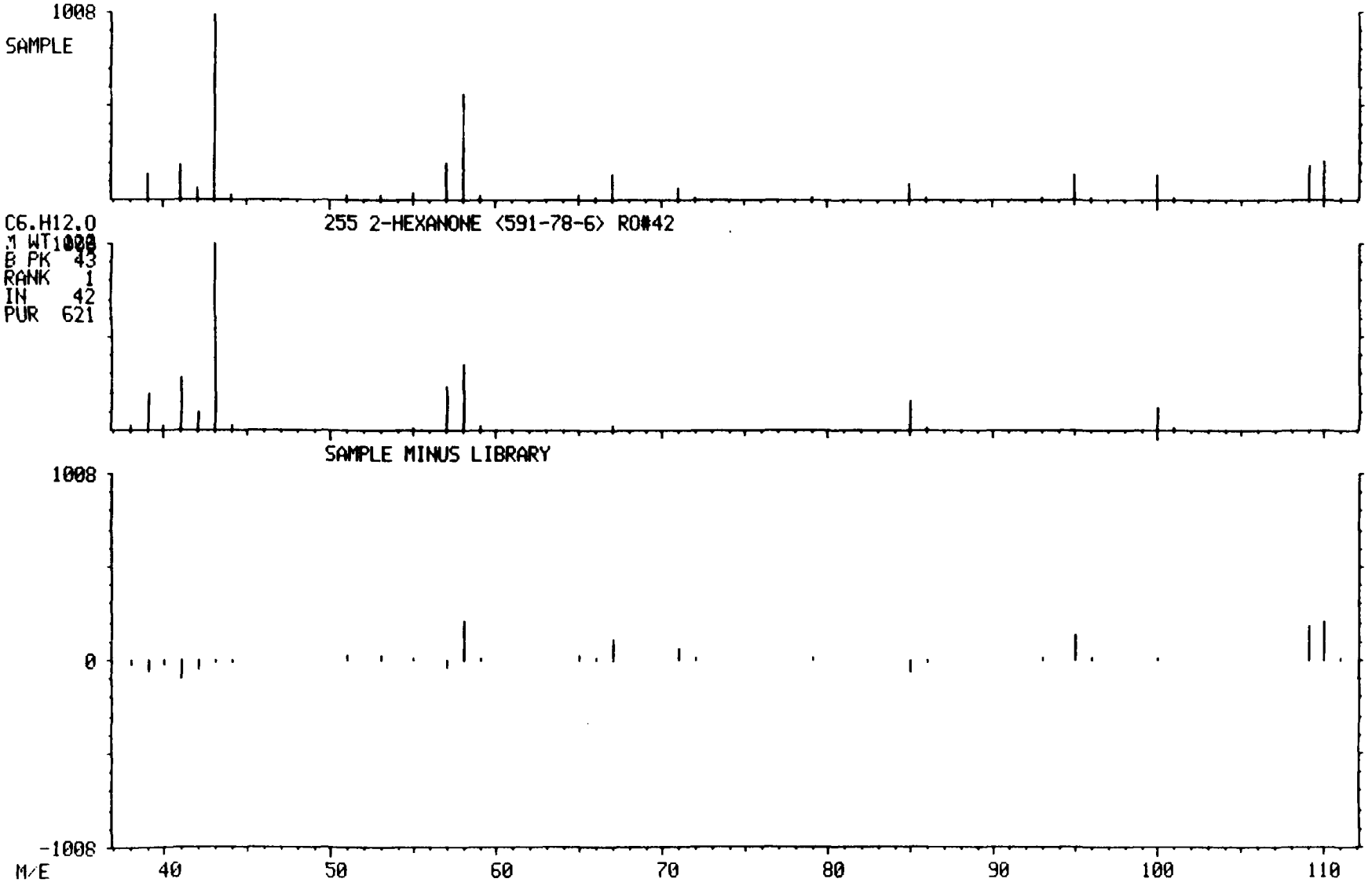
DATA: GH009679C19 #810 BASE M/E: 91/ 91
RIC: 451071./ 625663.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 11:29
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

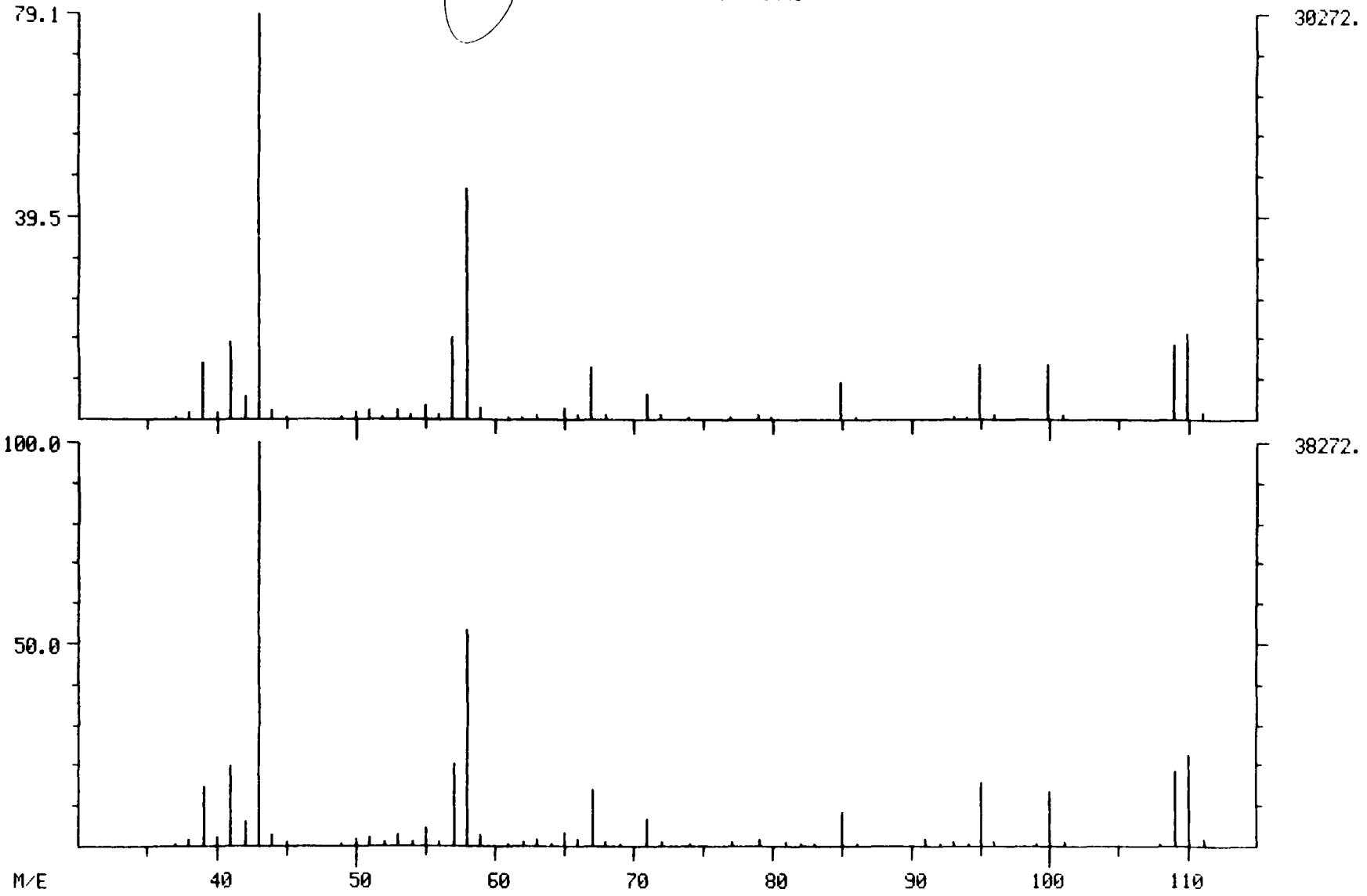
DATA: GH0909679C19 # 919
BASE M/E: 43
RIC: 101503.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 11:29
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 255 2-HEXANONE (591-78-6) RO#42

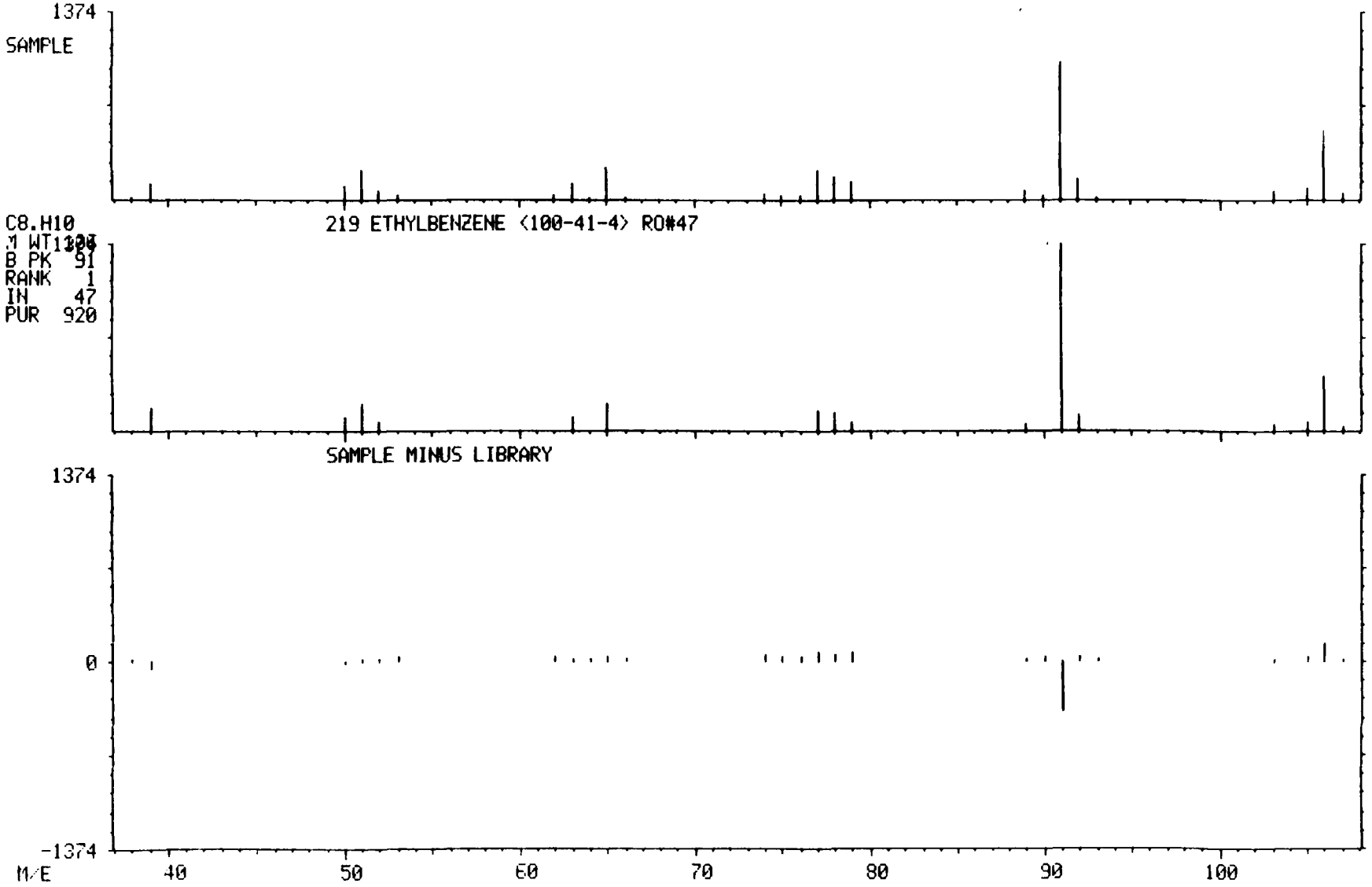
DATA: GH009679C19 #919 BASE M/E: 43/ 43
RIC: 105983./ 140799.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 12:52
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

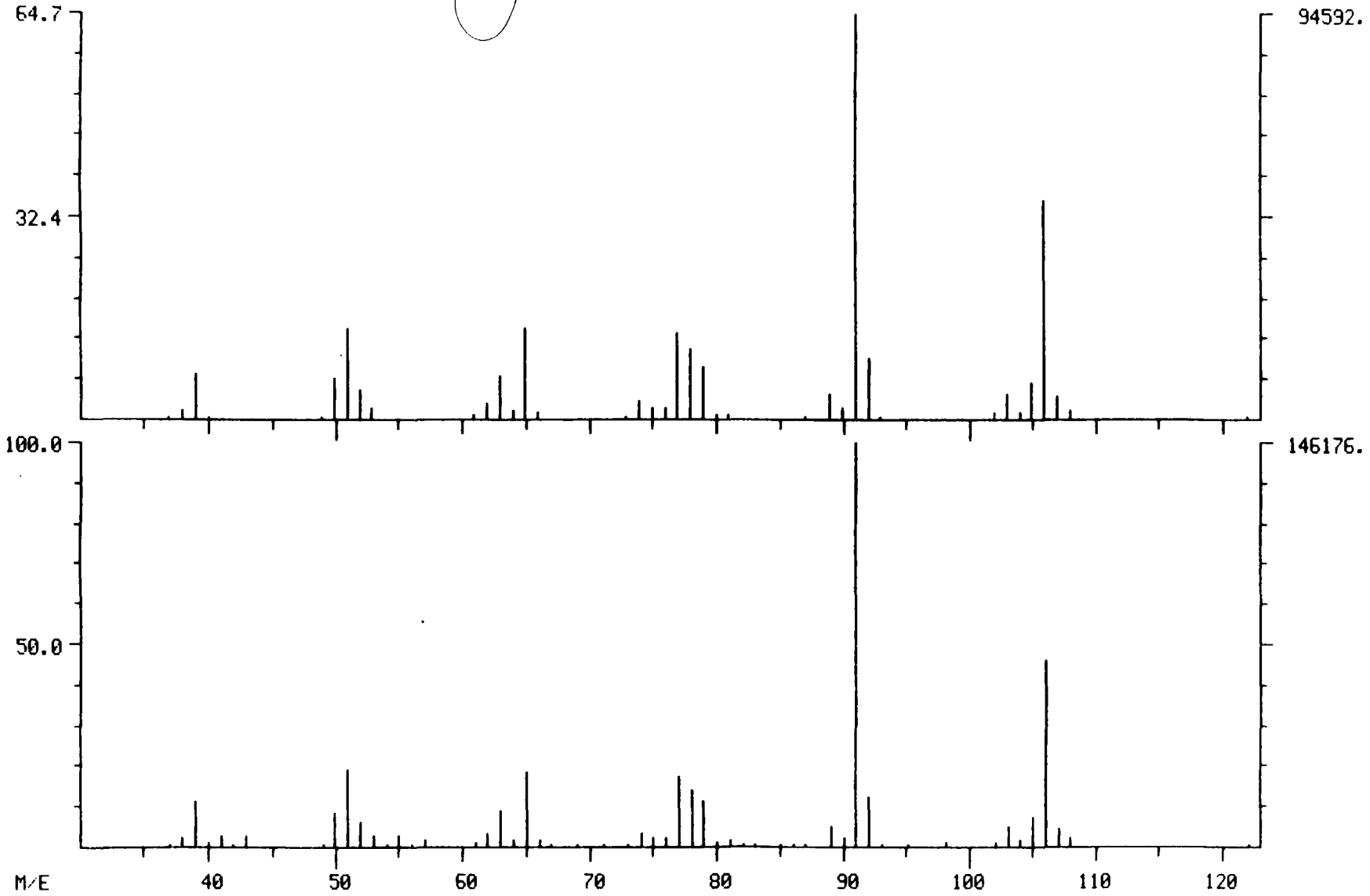
DATA: GH009679C19 #1029
BASE M/E: 91
RIC: 338431.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 12:52
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 219 ETHYLBENZENE (100-41-4) RO#47

DATA: GH009679C19 #1029 BASE M/E: 91/ 91
RIC: 350207./ 514047.



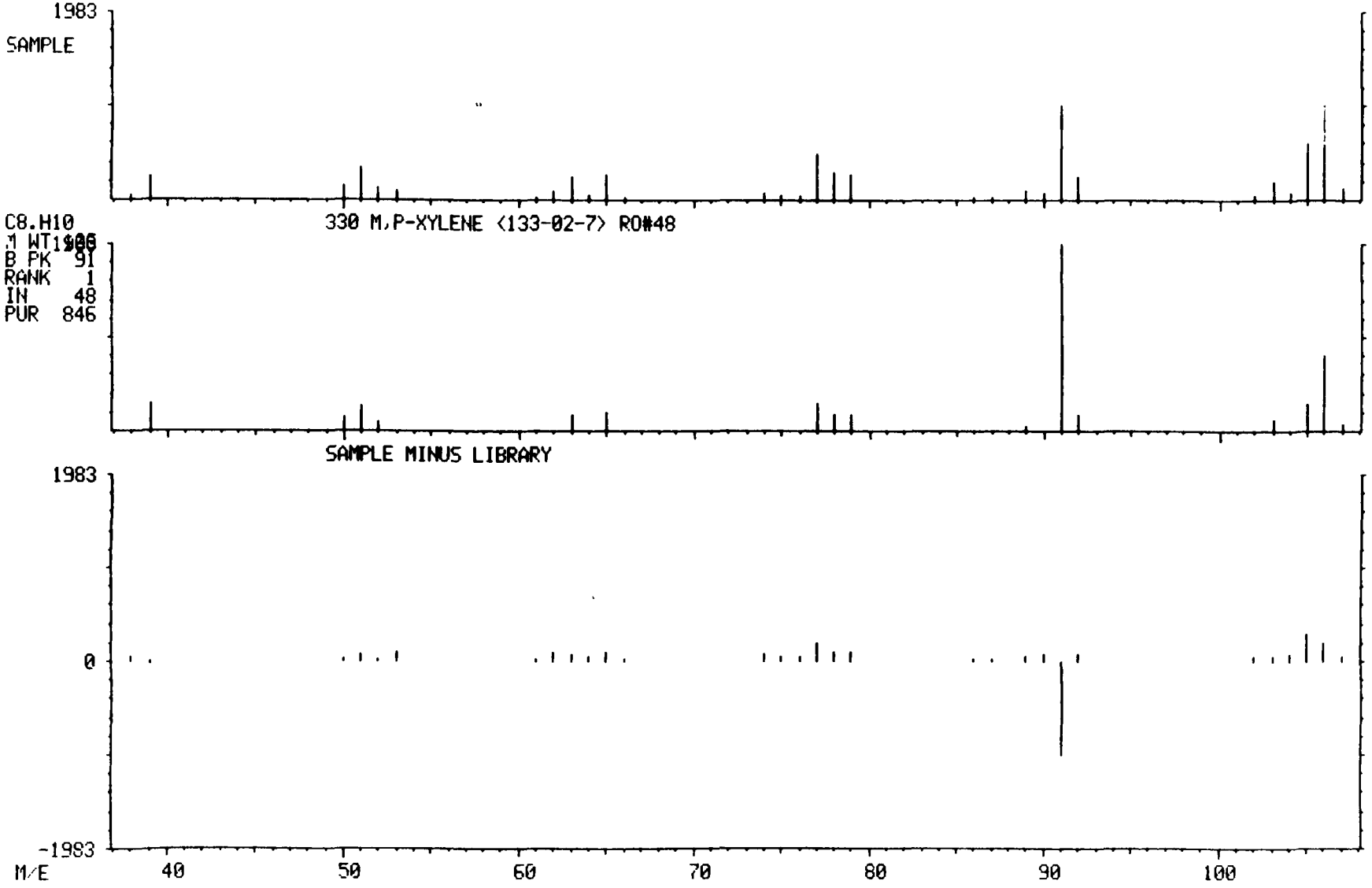
18756 07 SAMPLE DATA PACKAGE

1416

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 13:07
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#8201A ON#19
ENHANCED (S 15B 2N 0T)

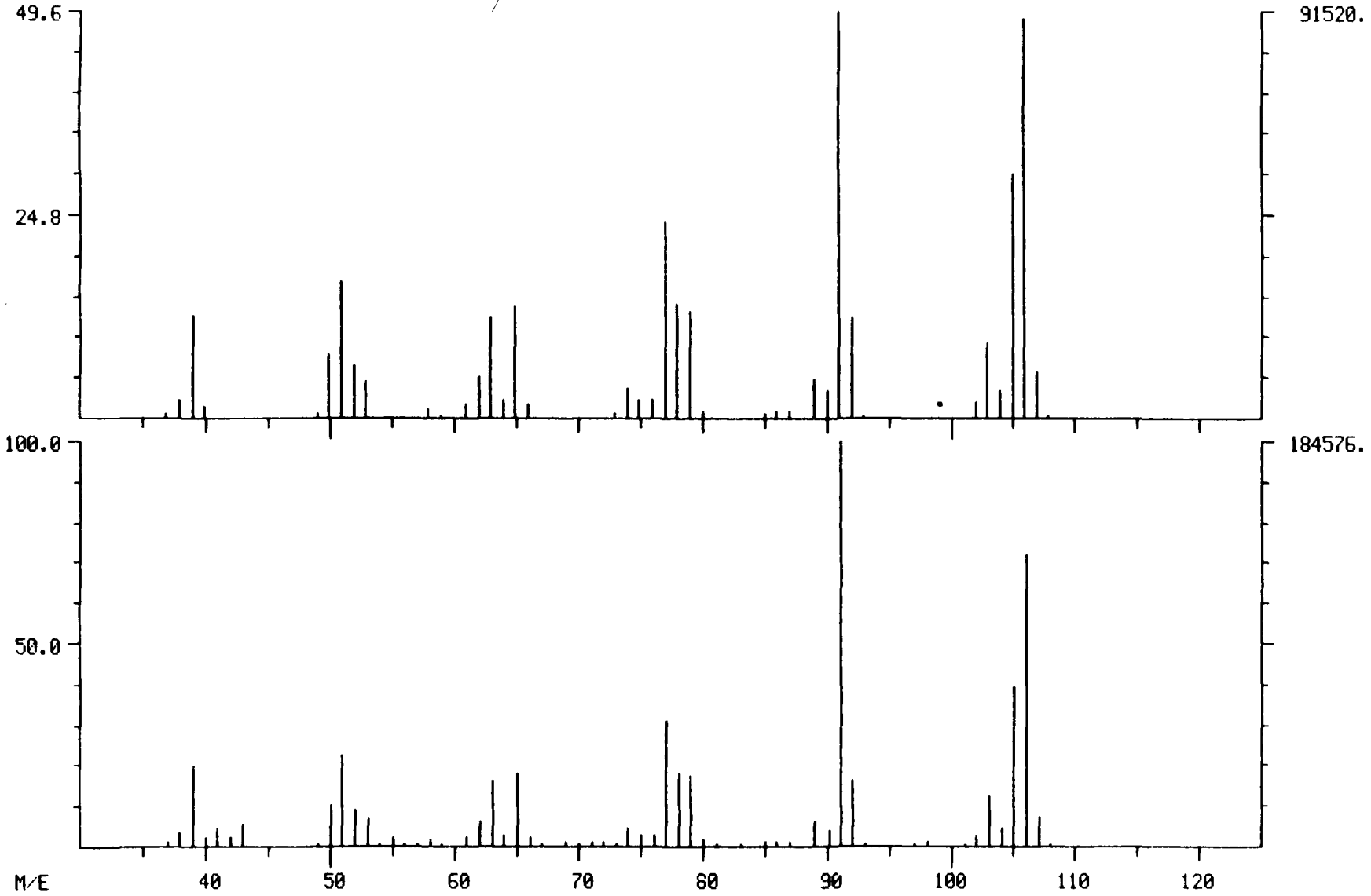
DATA: GH009679C19 #1049
BASE M/E: 91
RIC: 584703.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 13:07
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 330 M,P-XYLENE (133-02-7) RO#48

DATA: GH009679C19 #1049 BASE M/E: 91/ 91
RIC: 595967./ 919551.



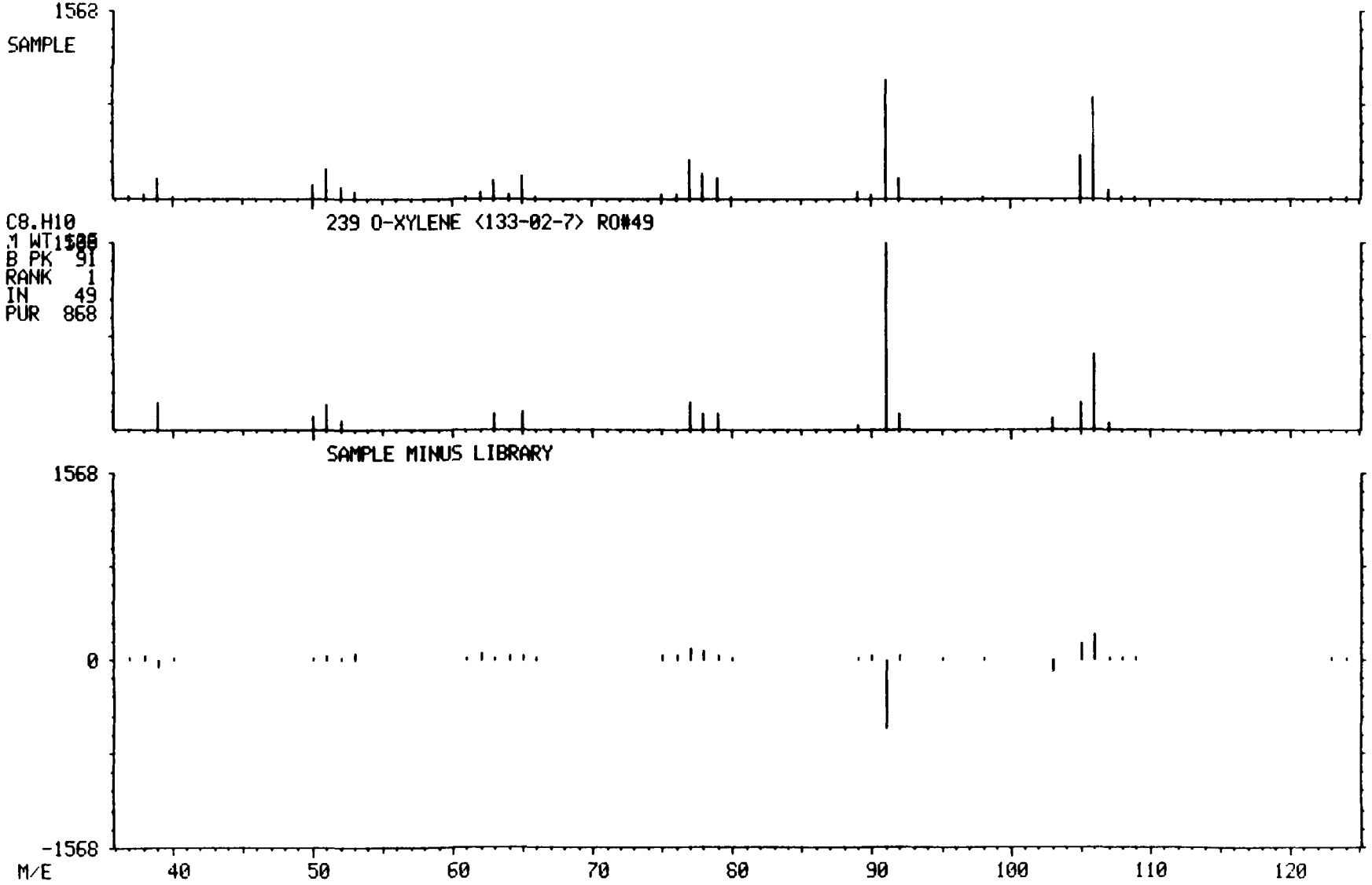
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 13:48
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 #1104

BASE M/E: 91
RIC: 419327.

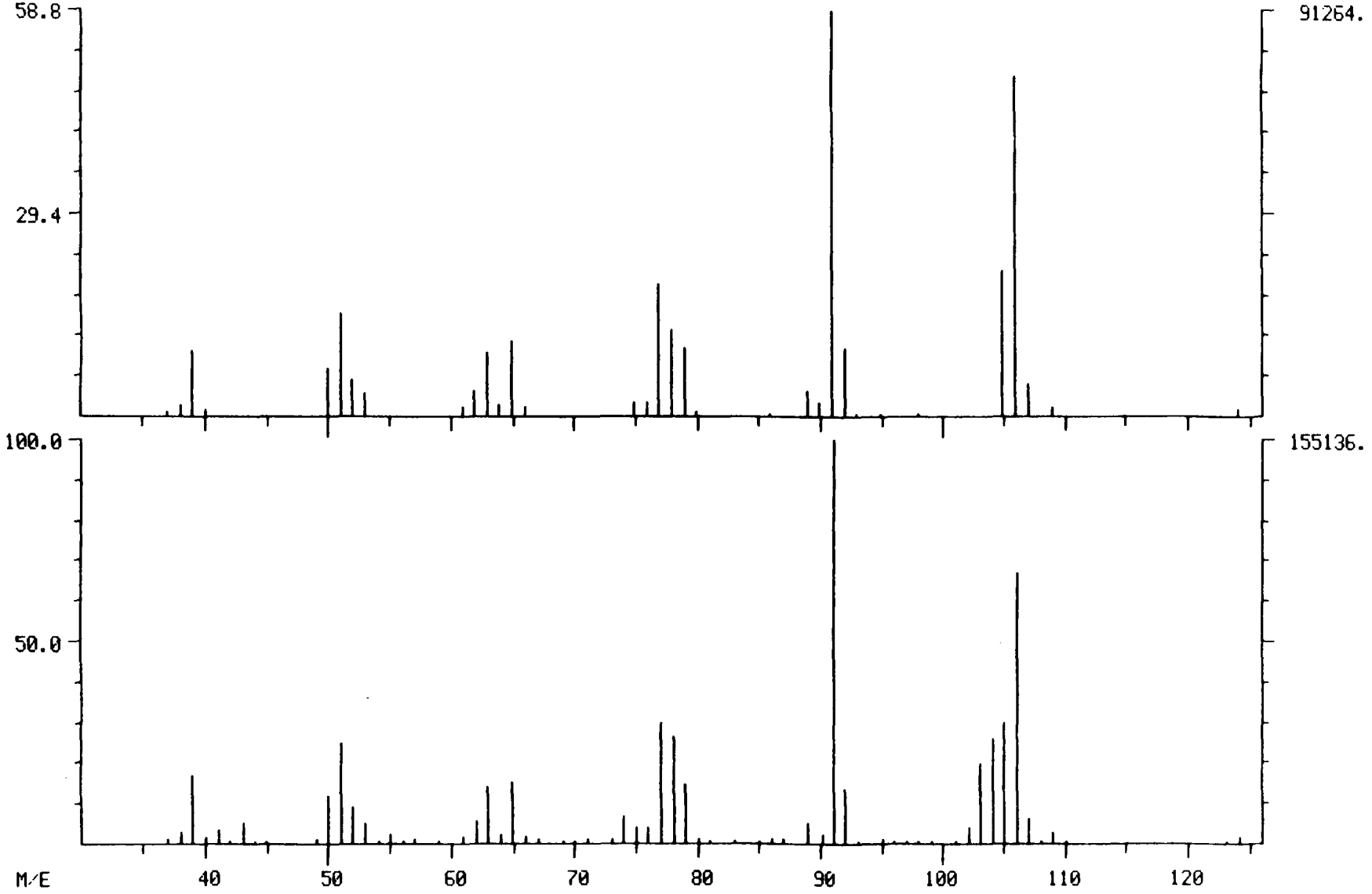


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 13:48
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 239 O-XYLENE (133-02-7) RO#49

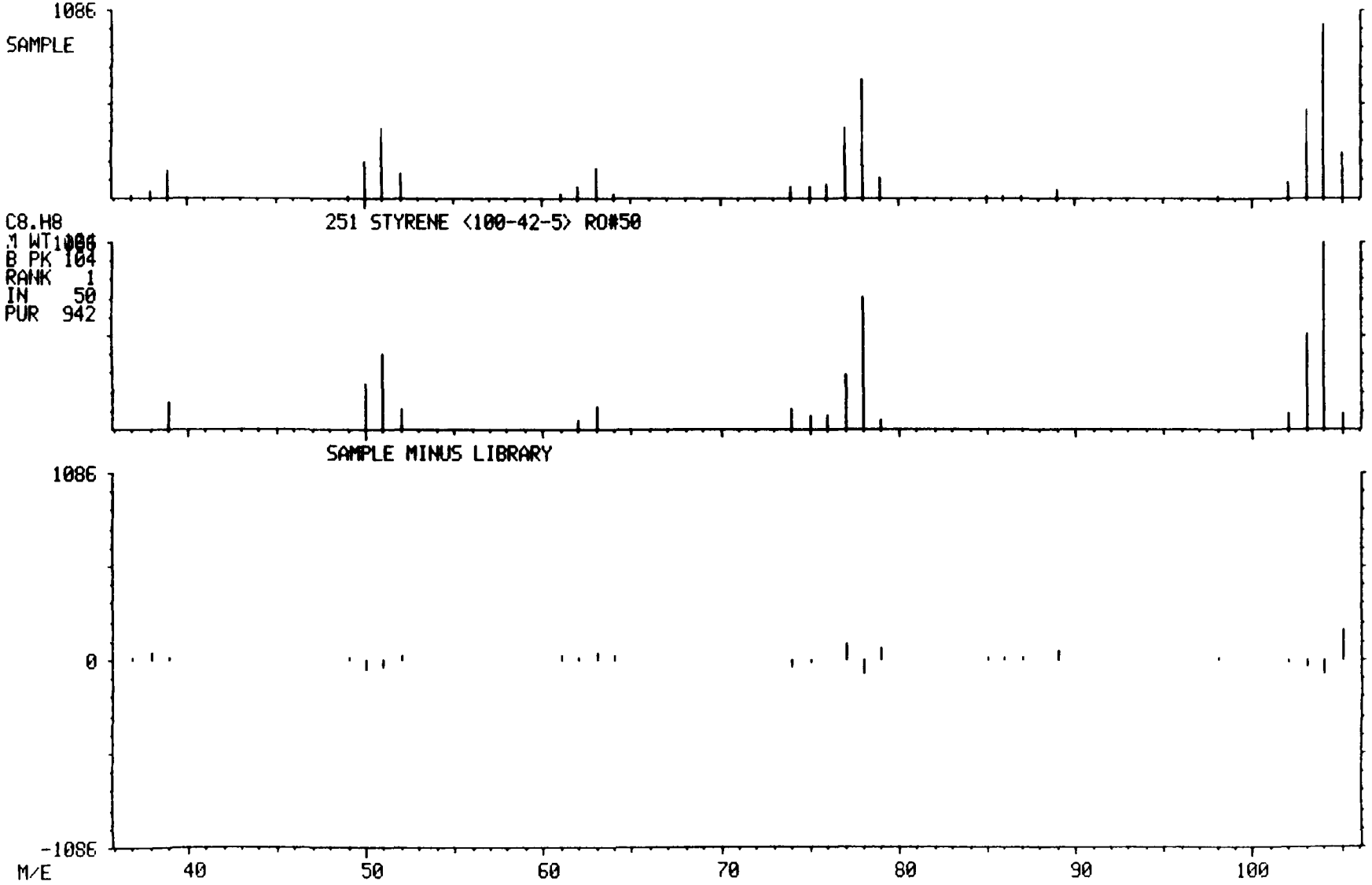
DATA: GH009679C19 #1104 BASE M/E: 91/ 91
RIC: 420863./ 789503.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 13:51
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 #1108
BASE M/E: 104
RIC: 279551.

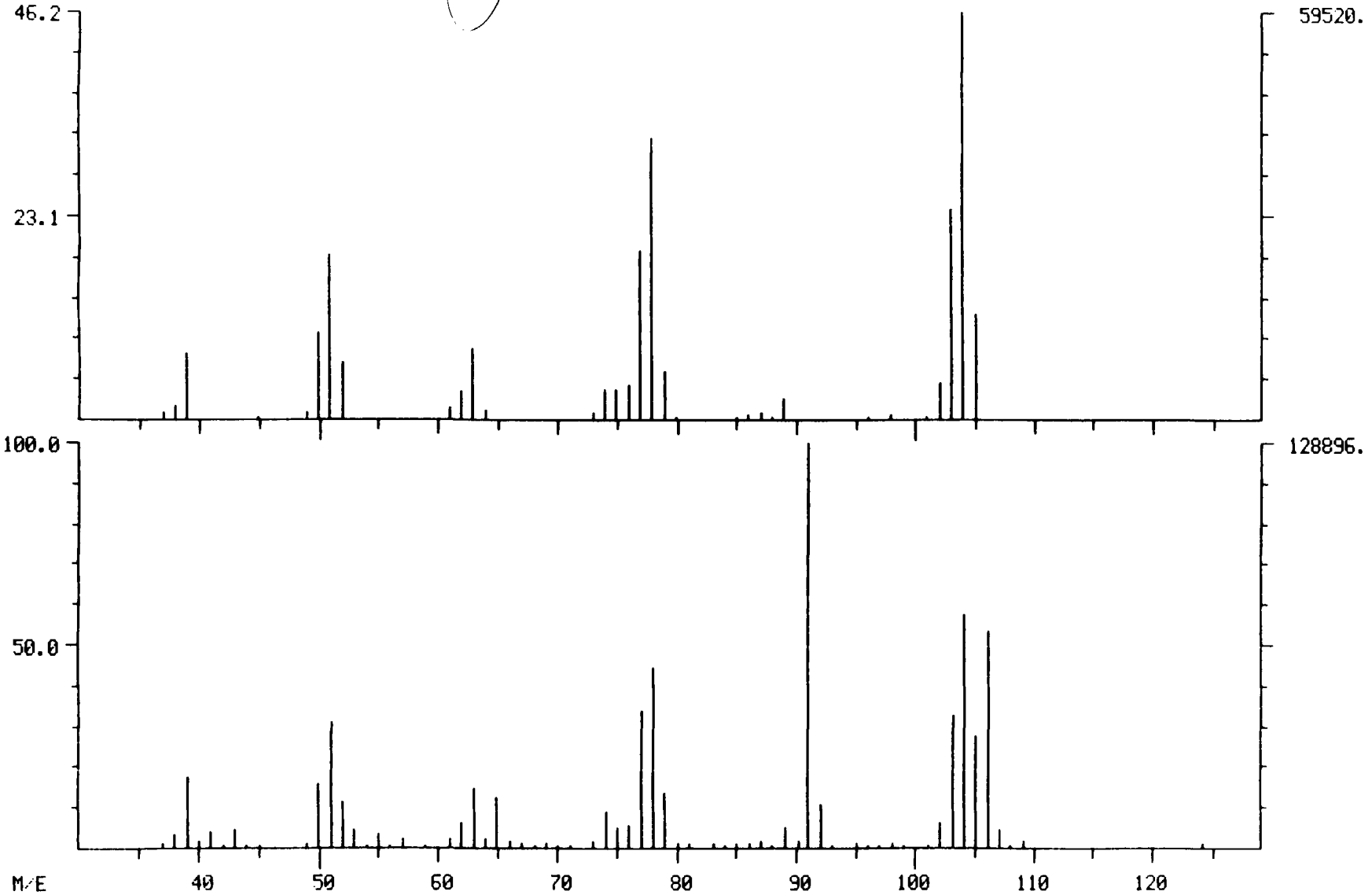


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 4:18:00 + 13:51
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N) 251 STYRENE (100-42-5) RO#50

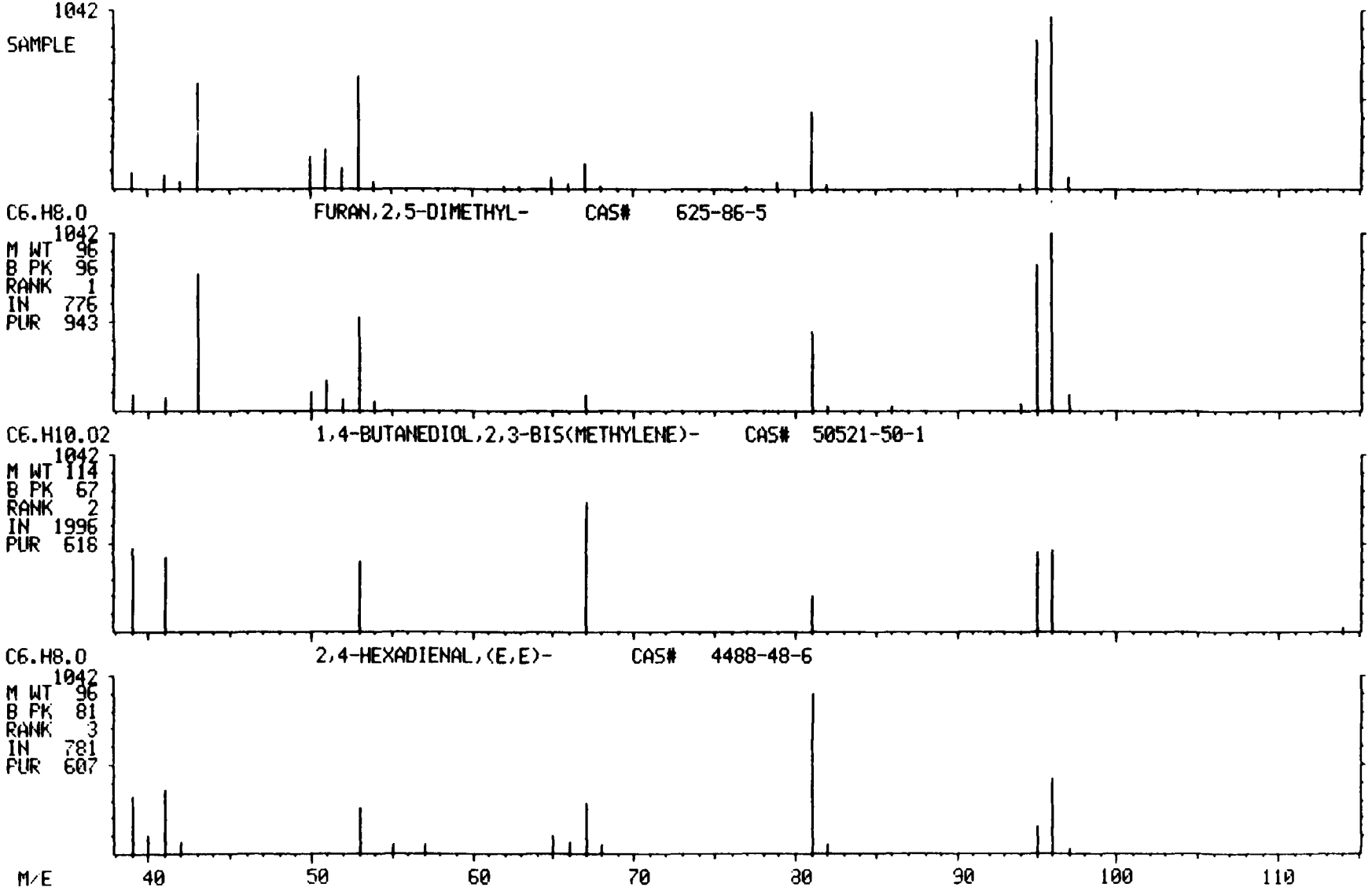
DATA: GH009679C19 #1108 BASE M/E: 104/ 91
RIC: 282111./ 740351.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 8:13
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

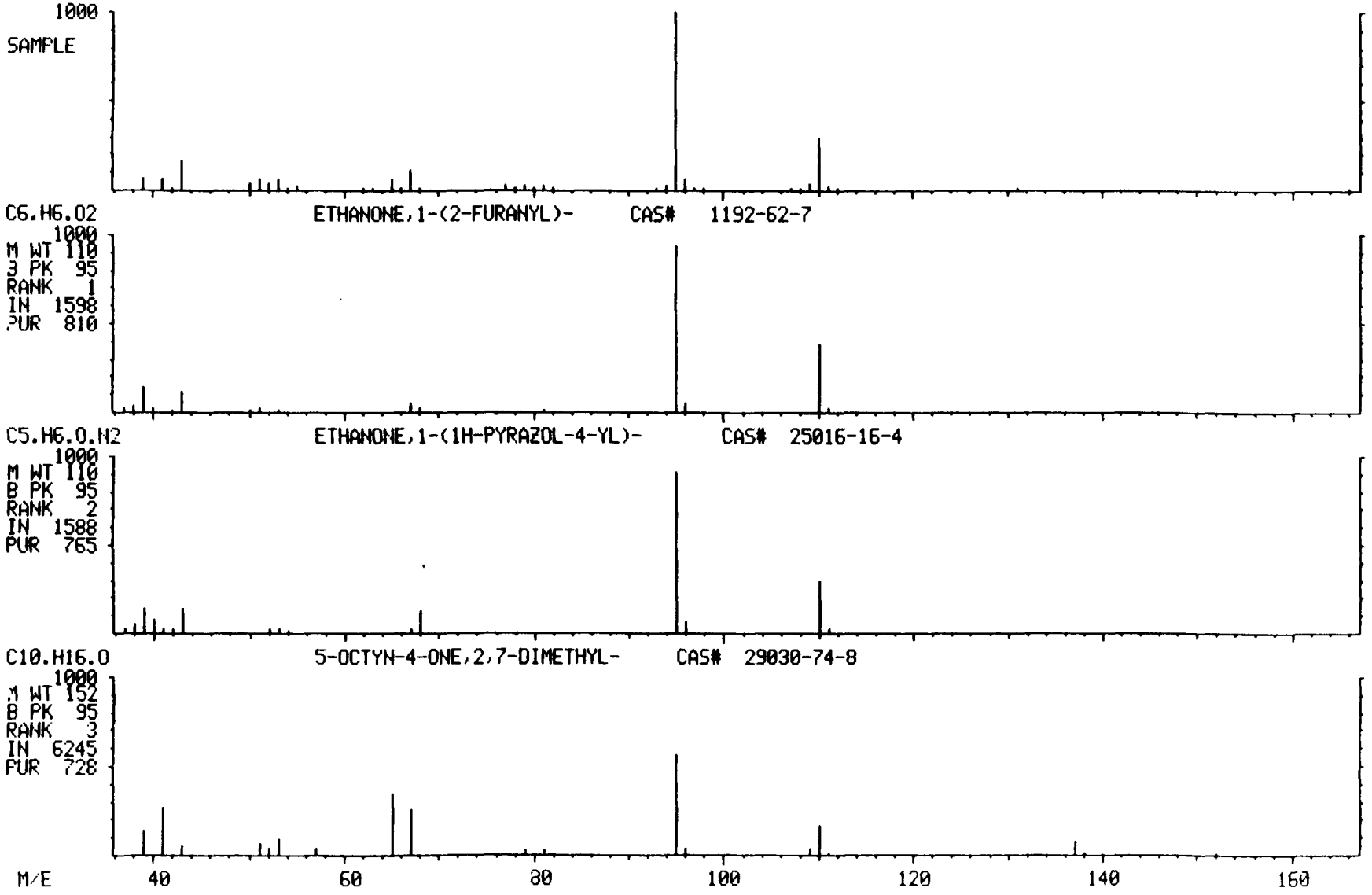
DATA: GH009679C19 # 658
BASE M/E: 96
RIC: 165119.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 11:01
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 # 882
BASE M/E: 95
RIC: 172799.

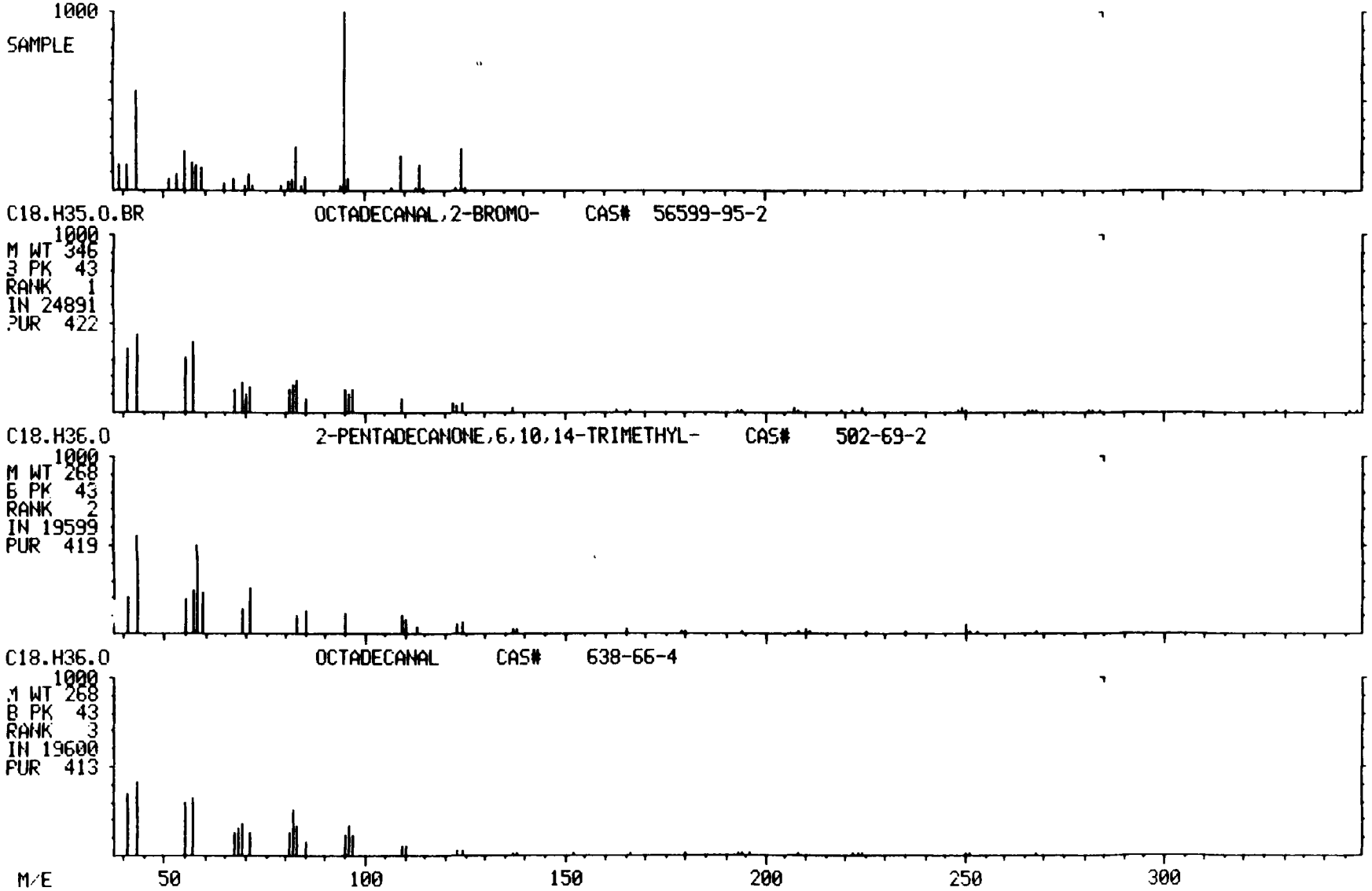


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 13:26
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 #1075
BASE M/E: 95
RIC: 156927.

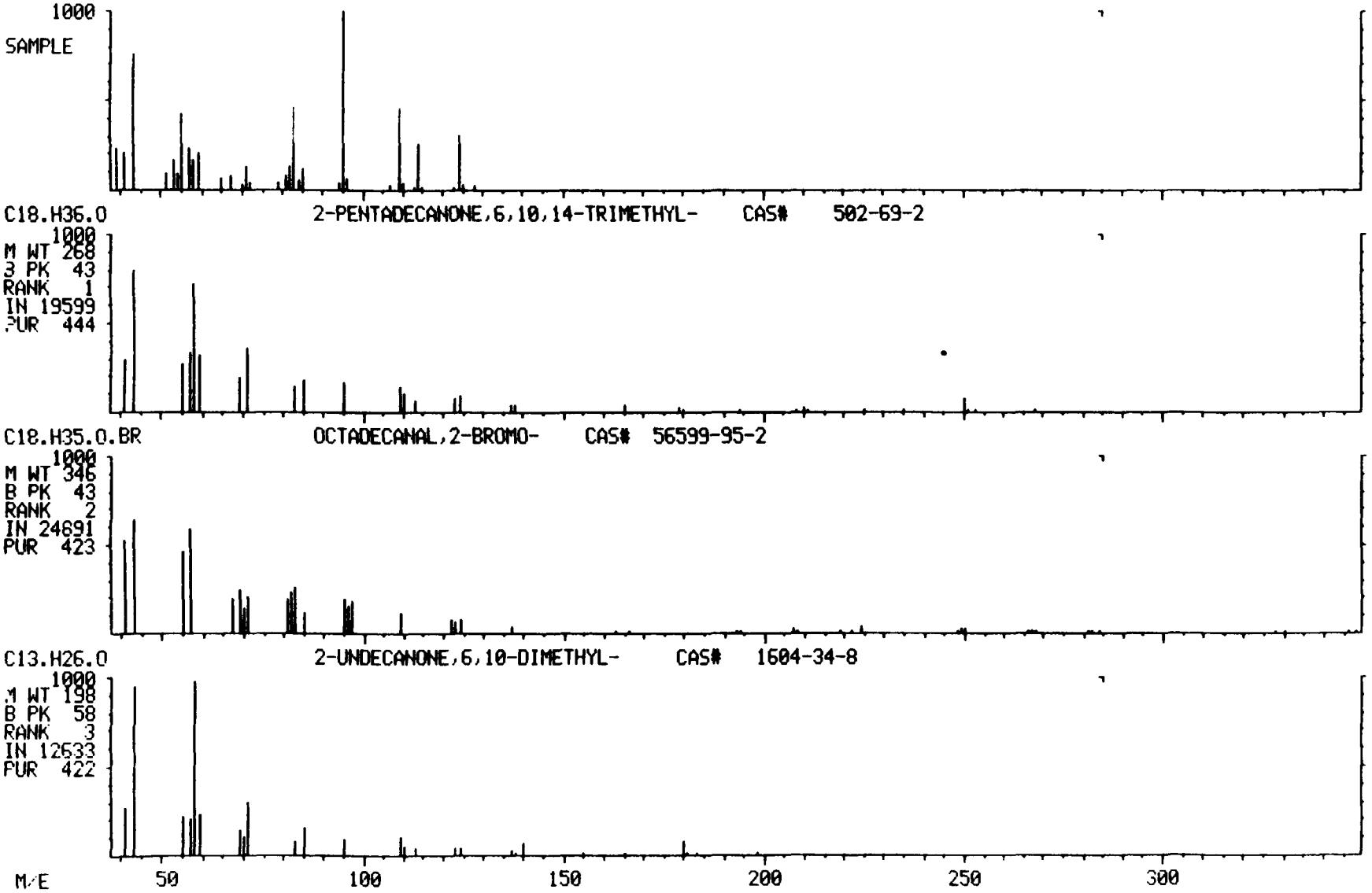


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 13:27
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

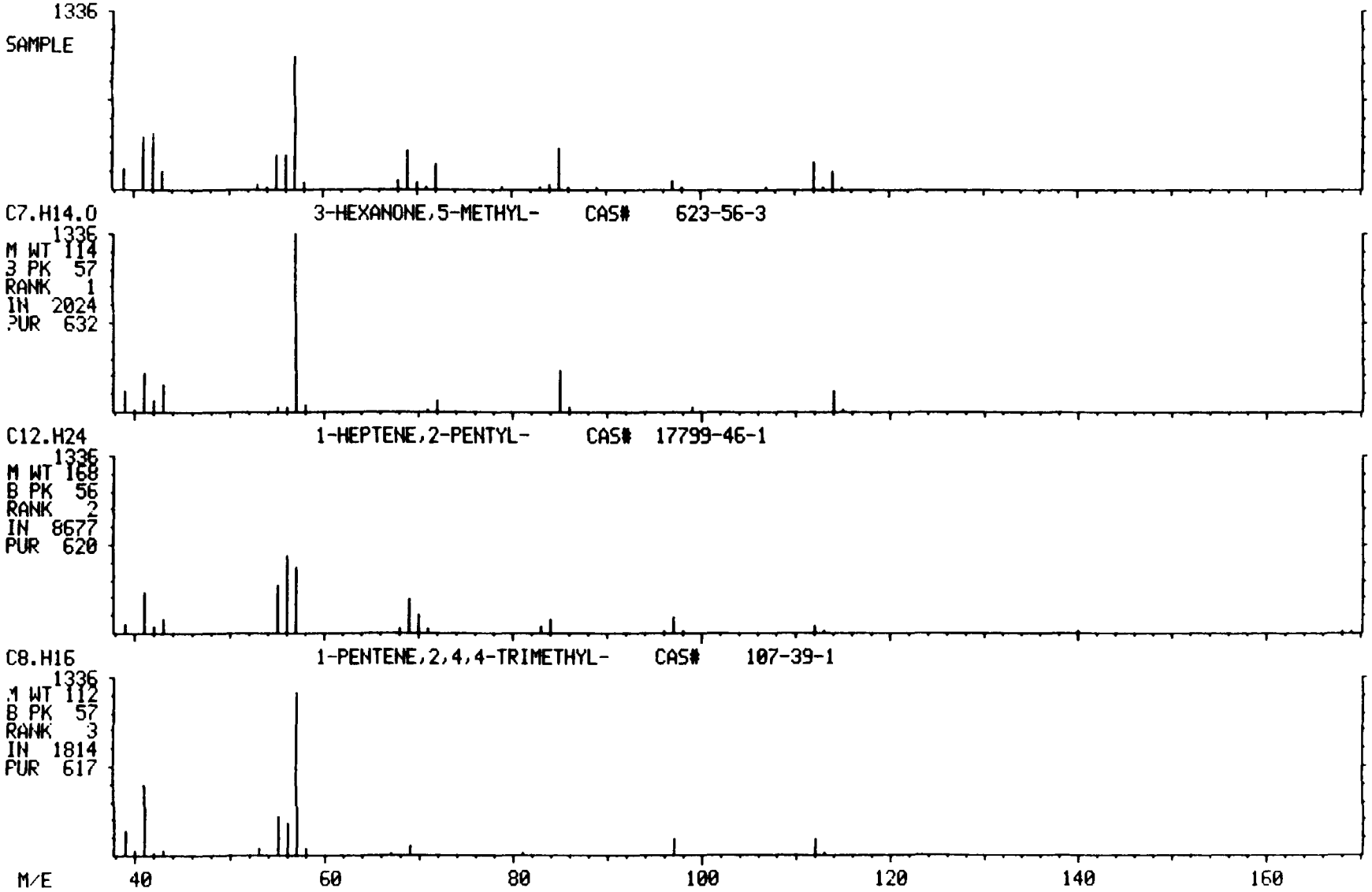
DATA: GH009679C19 #1076
BASE M/E: 95
RIC: 154623.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 14:04
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 #1125
BASE M/E: 57
RIC: 169215.

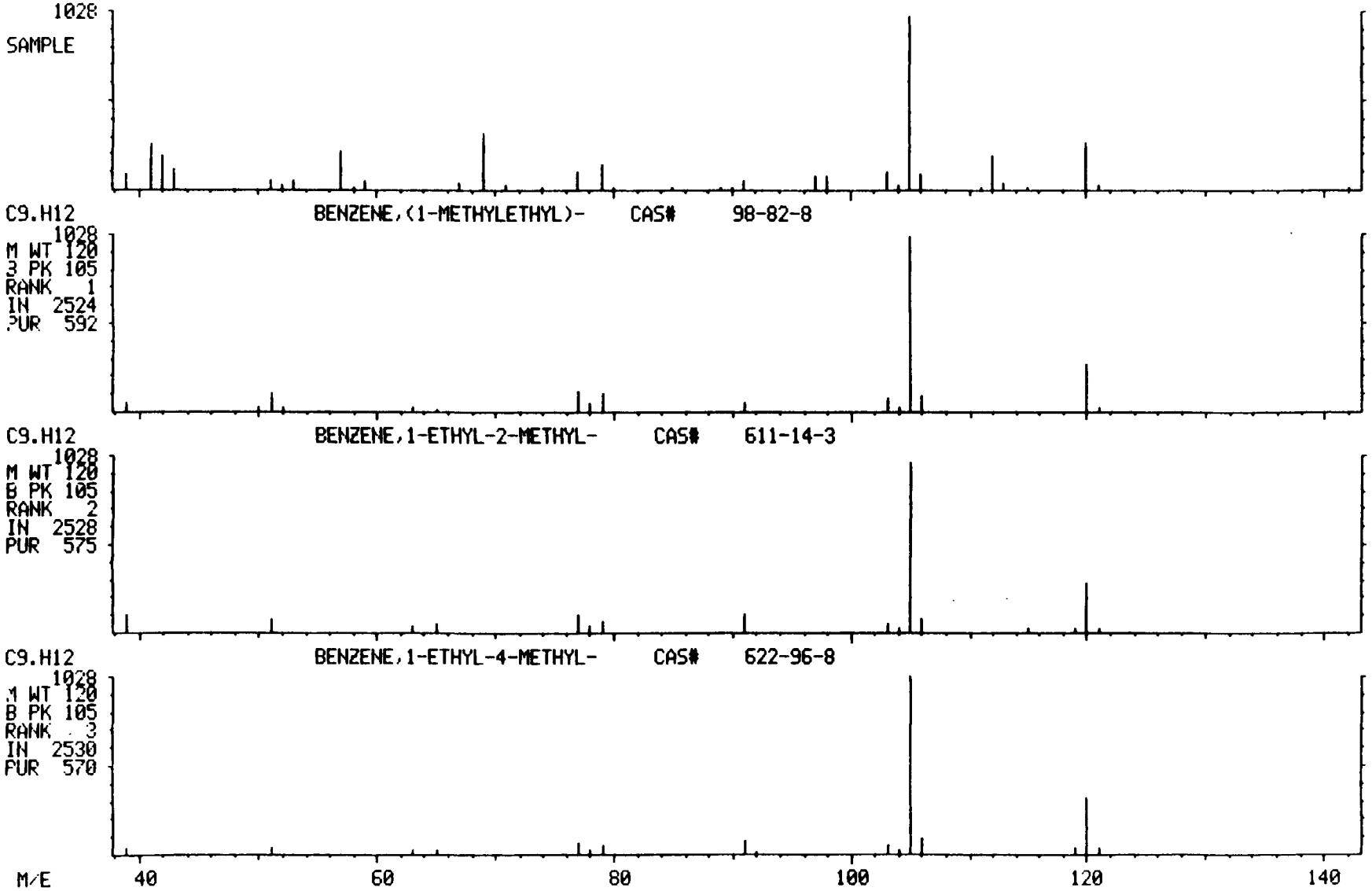


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 14:33
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

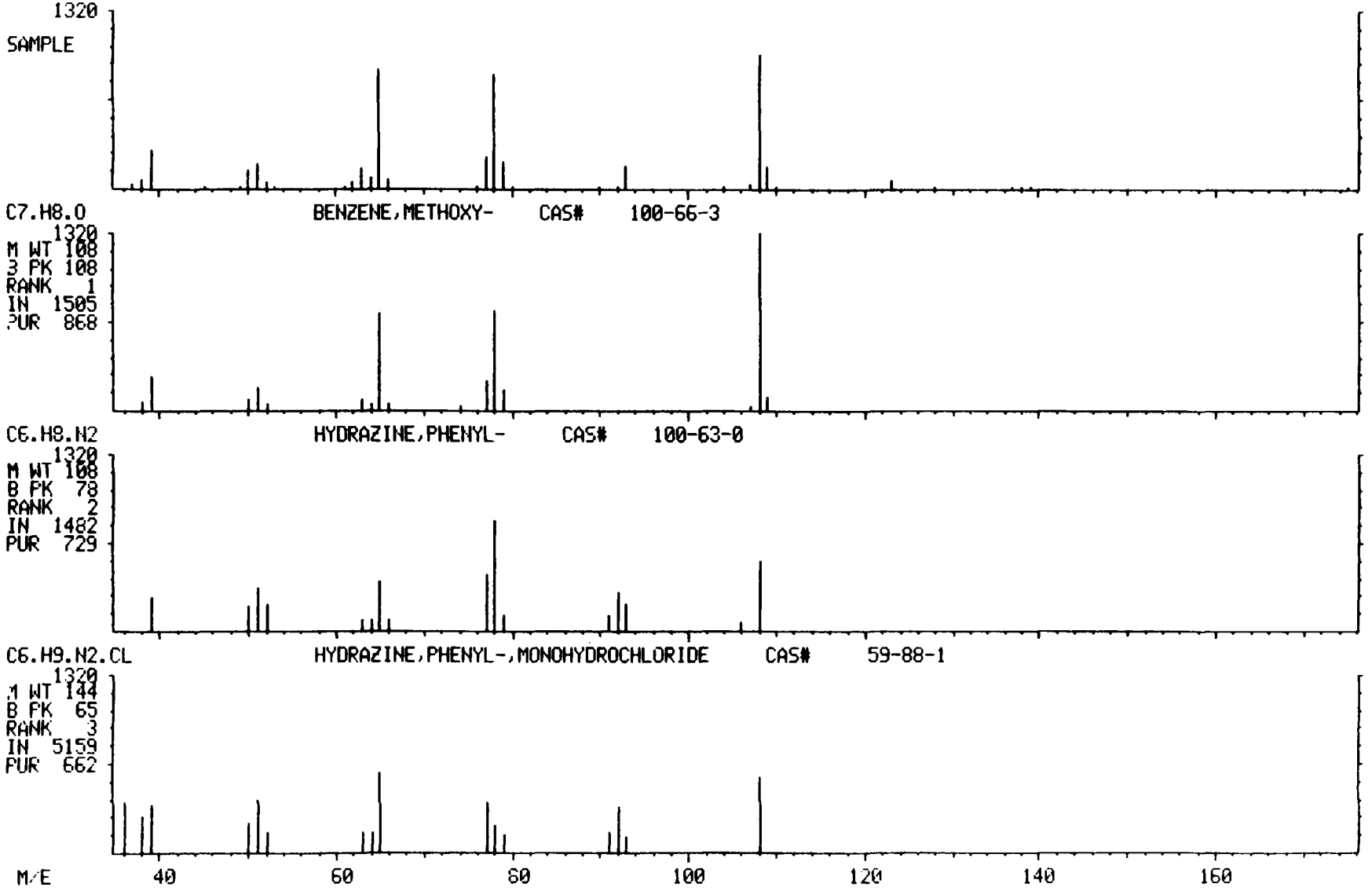
DATA: GH009679C19 #1164
BASE M/E: 105
RIC: 72191.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 14:43
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

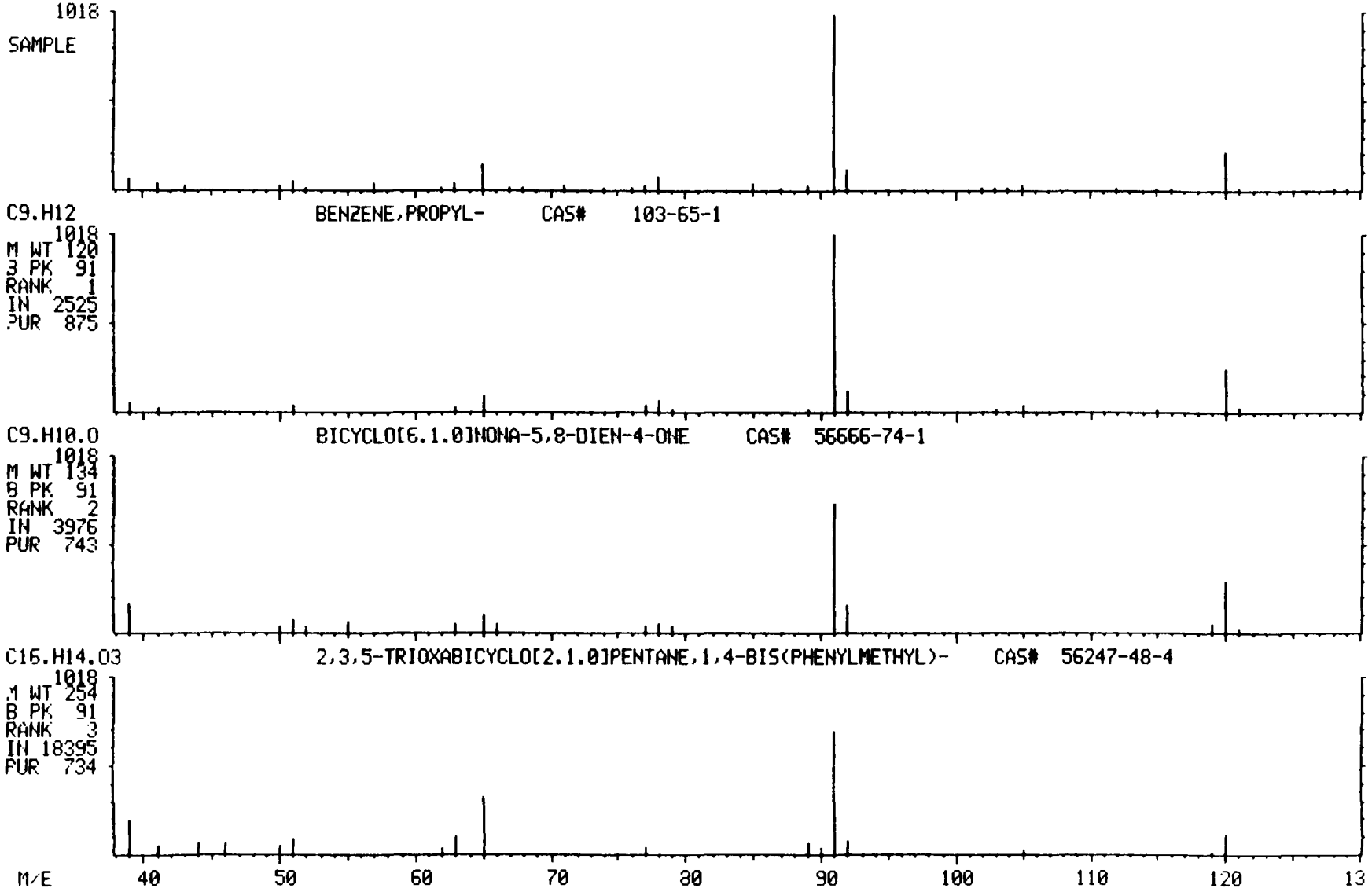
DATA: GH009679C13 #1177
BASE M/E: 108
RIC: 270847.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 15:20
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 #1227
BASE M/E: 91
RIC: 174079.

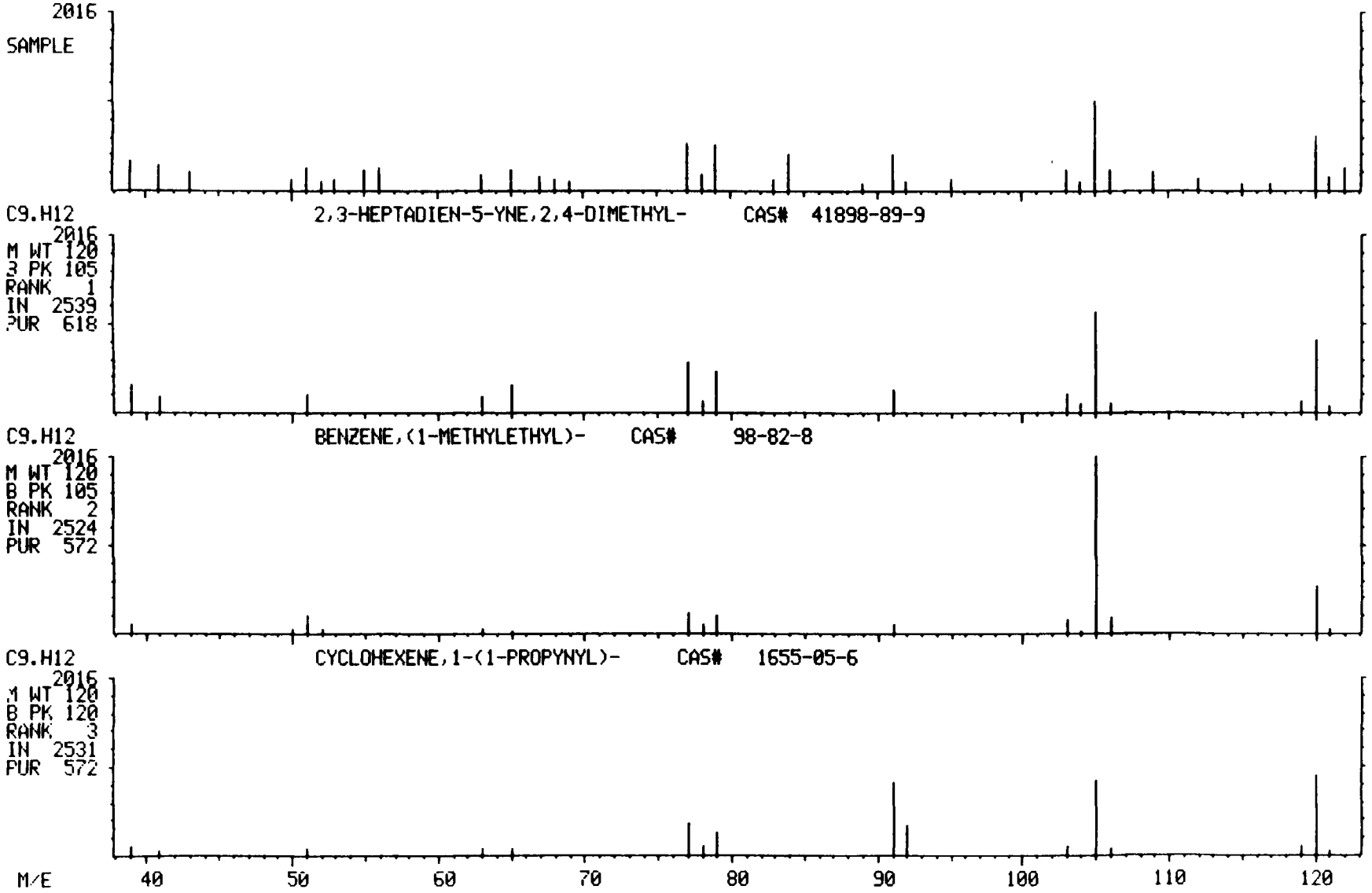


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 15:36
SAMPLE: 5G CC#3Ø9679 CASE#18756.7 EPA#B2Ø1A ON#19
ENHANCED (S 15B 2N ØT)

DATA: GH009679C19 #1248
BASE M/E: 105
RIC: 347135.

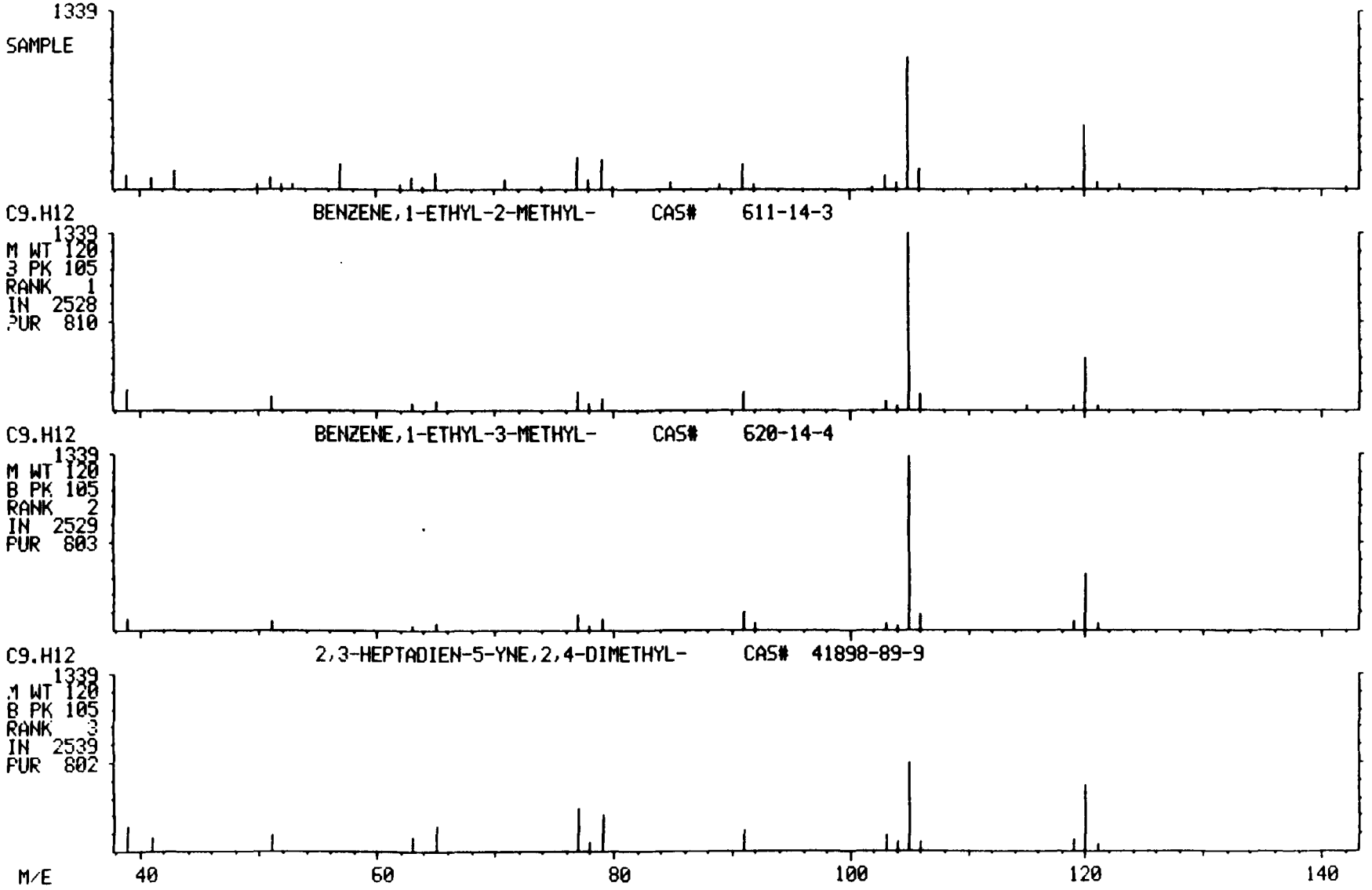


18756 Ø7 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 4:18:00 + 16:04
SAMPLE: 5G CC#309679 CASE#18756.7 EPA#B201A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009679C19 #1285
BASE M/E: 105
RIC: 323583.



18756 07 SAMPLE DATA PACKAGE

1400

LAB INSTRUCTIONS:
USE FOR QC!!! SAMPLED DATE 12/18/89

RECEIPT DATE 12/20/89 CASE#: 18756 7 DUE DATE

VOA R[ ] R2[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 309679
R3[ ] R4[ ] D2[ ] (:1)

L.L. SOLID, EPA SOW 2/88

Sample Prep Code---155
Instrument Code----413
Compound List------494
Surrogate Std------394
Internal Std-------036

==========

SAMPLE ID#: B201A Dry Wt. Factor 1.10 % Moisture 9

==========

GC/MS ANALYSIS
Amount Purged: [/] 10mls/Xg soil or [ ] Dilution _____ ul/10000ul/Xg soil
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename 6H891227B19 Disk (28574)
Blank Filename 6H0097956C19 Disk ( )
Standard Filename 6S891227C19 Disk ( )
Sample Filename 6H0096796C19 Disk ( )

ANALYST(S): Injection 1422-16 Work-up 1422-16

==========

GC/MS REVIEW

CONDITION CODE: [DI]

Entry Codes OK,EA,ES,SM,JS,SL,SH,JA,DA

Non-Entry Codes IM,IL,IH,SW,CT,CS,PC,NR IF,LA,DI,CO,RN,DW,SI,SF UP,BB,OT,VC,FO,NS

Disposition: [ ] Complete
[ ] Reprep neat required
[/] Reprep using 1.0 g
[ ] Dilute (:1)

Extraneous Peak Search Results:
# of Peaks Found: 10

Quality Assurance Notice(s):
Notices Required _____

COMMENTS:

GC/MS Review [signature] Date 1/4/90 Auditor _____ Date ___/___/___

==========

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): 6H0096796C19 / C3R0967913B13

==========

QA COMMENTS:

Initials _____ Date ___/___/___

==========

FINAL REVIEW Initials _____ Date ___/___/___

AC1007 (05/89)

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 155 ASSIGNED TO Harshad Joshi DATE 12/20/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309763	18520	0164			5.0g	TB-12	
309768	↓	↓			5.0g	WB5-1	
309769					5.0g	WB5-2	
309770					5.0g	WB5-4	
309679	18756	0007			5.0g	B201A	
309680			SS	309679	5.0g	B201A MS	
309681			SS	309679	5.0g	B201A MSD	
309682			BS		0.0g		
309686					5.0g	B201B	
309687					5.0g	B202TAR	
309688					5.0g	B202A	
309689					5.0g	B202B	
309690					5.0g	B202C	
309784			B1		5.0 ml	B_3	
309785			B2		0.0 ml	B_4	
309786			B3		0.0 ml	B_5	
309787			B4		0.0 ml	B_6	
309788			B5		0.0 ml	B_7	

SURROGATE # 4 LOT # 1 MANUAL OPERATOR 739 / 516

AMOUNT

RELINQUISHED BY [signature] DATE 12/20/89 RECEIVED BY [signature] DATE 12/20

VOLATILE - LOW LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
234	128	I	BROMOCHLOROMETHANE (IS)	464	34800	50.0		
221	50		CHLOROMETHANE				BDL	10
231	62		VINYL CHLORIDE				BDL	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE				BDL	10
216	96		1,1-DICHLOROETHENE				BDL	
254	76		CARBON DISULFIDE				BDL	
252	43		ACETONE (2-PROPANONE)			133.0	150 ~~130~~ B	1
248	114	I	1,4-DIFLUOROBENZENE (IS)	609	134000	50.0		
222	84		METHYLENE CHLORIDE			29.4	32 ~~29~~ B	
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLOROETHANE				BDL	5
257	43		VINYL ACETATE				BDL	10
237	96		CIS-1,2-DICHLOROETHENE				BDL	5
253	72		2-BUTANONE			107.0	120 ~~110~~	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
206	117		CARBON TETRACHLORIDE				BDL	5
203	78		BENZENE			233.0	260 ~~220~~ E	5
215	62		1,2-DICHLOROETHANE				BDL	5
270	117	I	D5-CHLOROBENZENE (IS) RO#29	1000	158000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROPANE				BDL	5
212	83		BROMODICHLOROMETHANE				BDL	5
218	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE			15.5	17 ~~15~~	10
225	92		TOLUENE			652.0	720 ~~650~~ E	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
228	97		1,1,2-TRICHLOROETHANE				BDL	5
224	164		TETRACHLOROETHENE				BDL	5
255	43		2-HEXANONE			524.0	580 ~~520~~ E	10
208	129		DIBROMOCHLOROMETHANE				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE			383.0	~~380~~ 420 E	5
330	106		M,P-XYLENE			653.0	~~650~~ 720 E	5
239	106		O-XYLENE			520.0	570 ~~520~~ E	5
251	104		STYRENE			190.0	210 ~~190~~	5
205	173		BROMOFORM				BDL	5
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	5
258	65	S	D4-1,2-DICHLOROETHANE RO#57			48.3	97.%	
247	95	S	BROMOFLUOROBENZENE			45.2	90.%	
233	98	S	D8-TOLUENE RO#59			39.9	80.%	
289	106		XYLENES (TOTAL)			1170.0	1200 1300 E	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 1/3/90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT. LIMIT (UG/KG)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	
CHECKSUMS: 3979.				2073	326800.	4893.3		4892.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 11/3/92

VOLATILE - LOW LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE RO#57	48.3	50.0	97.	70-121	X	
41	247	BROMOFLUOROBENZENE	45.2	50.0	90.	74-121	X	
42	233	D8-TOLUENE RO#59	39.9	50.0	80.	81-117		

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{GC/MS DILUTION FACTOR} \times \text{DRY WEIGHT FACTOR} =$$

$$\frac{5.0\ G}{5.00\ (G)} \times \frac{1.0}{} \times \frac{1.10}{1.00} = \frac{1.10}{1.000}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 8

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 1/30/90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201ARE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09679B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/28/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	440	BDJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	690	U
75-35-4	1,1-Dichloroethene	690	U
75-34-3	1,1-Dichloroethane	690	U
540-59-0	1,2-Dichloroethene (total)	690	U
67-66-3	Chloroform	690	U
107-06-2	1,2-Dichloroethane	690	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	690	U
56-23-5	Carbon Tetrachloride	690	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	690	U
78-87-5	1,2-Dichloropropane	690	U
10061-01-5	cis-1,3-Dichloropropene	690	U
79-01-6	Trichloroethene	690	U
124-48-1	Dibromochloromethane	690	U
79-00-5	1,1,2-Trichloroethane	690	U
71-43-2	Benzene	630	DJ
10061-02-6	Trans-1,3-Dichloropropene	690	U
75-25-2	Bromoform	690	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	630	DJ
127-18-4	Tetrachloroethene	690	U
79-34-5	1,1,2,2-Tetrachloroethane	690	U
108-88-3	Toluene	4200	D
108-90-7	Chlorobenzene	690	U
100-41-4	Ethylbenzene	3100	D
100-42-5	Styrene	1300	D
1330-20-7	Total Xylenes	9500	D

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201ARE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309679

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09679B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 9 Date Analyzed: 12/28/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 9

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	1192-62-7	ETHANONE,1-(2-FURANYL)-	9.80	820	J
2.		UNKNOWN	12.19	1200	J
3.		SUBSTITUTED BENZENE	14.05	1400	J
4.		SUBSTITUTED BENZENE	14.29	8400	J
5.		SUBSTITUTED BENZENE	14.45	2300	J
6.		SUBSTITUTED BENZENE	14.77	7000	J
7.		SUBSTITUTED BENZENE	15.14	9900	J
8.	496-11-7	1H-INDENE,2,3-DIHYDRO-	15.30	960	J
9.	271-89-6	BENZOFURAN	15.55	9200	J

COMPUCHEM LABS

RIC

COMPUCHEM DATA: C3R03679B13 SCANS 53 TO 1250

12/28/83 20:34:00 RE scan 1440

SAMPLE: 100UL CC#303679 EPA#B201A CASE#18756 ON #13

CONDS.:

232960.

125.0

RIC

IS#1 IS#2 IS#3

SS#1 SS#2 SS#3

138 233 354 399 467 529 570 649 702 783 903 949 1003 1081 1143 1211

200 2:30 400 5:00 600 7:30 800 10:00 1000 12:30 1200 15:00 SCAN TIME

GUANTITATION REPORT FILE: C3R09679B13
DATA: C3R09679B13.TI
12/28/89 20:34:00 RE sett 1460
SAMPLE: 100UL CC#309679 EPA#B201A, CASE#18756 ON #13
CONDS.:
SUBMITTED BY: 13 ANALYST: 1452

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
2	221 CHLOROMETHANE <74-87-3> NA#2
3	231 VINYL CHLORIDE <75-01-4> NA#3
4	220 BROMOMETHANE <78-83-9> NA#4
5	209 CHLOROETHANE <75-00-3> NA#5
6	216 1,1-DICHLOROETHENE <75-35-4> NA#8
7	254 CARBON DISULFIDE <75-15-0> NA#9
8	252 ACETONE (2-PROPANONE) <67-64-1> NA#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
10	222 METHYLENE CHLORIDE <75-09-2> NA#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
12	214 1,1-DICHLOROETHANE <75-34-3> NA#19
13	257 VINYL ACETATE <108-05-4> NA#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
15	253 2-BUTANONE <78-93-3> NA#22
16	211 CHLOROFORM <67-66-2> NA#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
18	206 CARBON TETRACHLORIDE <56-23-5> NA#25
19	203 BENZENE <71-43-2> NA#26
20	215 1,2-DICHLOROETHANE <107-06-2> NA#27
21	*270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
22	229 TRICHLOROETHENE <79-01-6> NA#30
23	217 1,2-DICHLOROPROPANE <78-87-5> NA#31
24	212 BROMODICHLOROMETHANE <75-27-4> NA#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
26	256 4-METHYL-2-PENTANONE <108-01-1> NA#36
27	225 TOLUENE <108-88-3> NA#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
30	224 TETRACHLOROETHENE <127-18-4> NA#41
31	255 2-HEXANONE <591-78-6> NA#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
33	207 CHLOROBENZENE <108-90-7> NA#45
34	219 ETHYLBENZENE <100-41-4> NA#47
35	330 M,P-XYLENE <133-02-7> NA#48
36	239 O-XYLENE <133-02-7> NA#49
37	251 STYRENE <100-42-5> NA#50
38	205 BROMOFORM <75-25-2> NA#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
40	#258 D4-1,2-DICHLOROETHANE NA#57
41	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
42	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	399	4:59	1	1.000	A BB	49850.	50.000 UG/L	11.33
2	50	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	96	NOT FOUND							
7	76	NOT FOUND							
8	43	NOT FOUND							
9	114	529	6:37	9	1.000	A BB	183215.	50.000 UG/L	11.33
10	84	230	2:52	1	0.576	A BB	4693.	3.220 UG/L	0.73
11	96	NOT FOUND							
12	63	NOT FOUND							
13	43	NOT FOUND							
14	96	NOT FOUND							
15	72	NOT FOUND							
16	83	NOT FOUND							
17	97	NOT FOUND							
18	117	NOT FOUND							
19	78	464	5:48	9	0.877	A BB	14911.	4.601 UG/L	1.04
20	62	NOT FOUND							
21	117	903	11:17	21	1.000	A BB	233794.	50.000 UG/L	11.33
22	130	NOT FOUND							
23	63	NOT FOUND							
24	83	NOT FOUND							
25	75	NOT FOUND							
26	43	NOT FOUND							
27	92	709	8:52	21	0.785	A BB	47080.	30.288 UG/L	6.86
28	75	NOT FOUND							
29	97	NOT FOUND							
30	164	NOT FOUND							
31	43	833	10:25	21	0.922	A VB	4890.	4.587 UG/L	1.04
32	129	NOT FOUND							
33	112	NOT FOUND							
34	106	930	11:37	21	1.030	A BV	43049.	22.352 UG/L	5.06
35	106	949	11:52	21	1.051	A VB	133550.	40.297 UG/L	9.13
36	106	1003	12:32	21	1.111	A BB	84236.	29.039 UG/L	6.58
37	104	1009	12:37	21	1.117	A BB	48223.	9.512 UG/L	2.15
38	173	NOT FOUND							
39	83	NOT FOUND							
40	65	468	5:51	1	1.173	A BB	96951.	55.464 UG/L	12.57
41	95	1081	13:31	21	1.197	A BB	195806.	46.412 UG/L	10.52
42	98	701	8:46	21	0.776	A BV	114936.	45.629 UG/L	10.34

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:07	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:52		10.000			50.00		0.882	
3	0:58		10.000			50.00		1.005	
4	1:11		10.000			50.00		1.237	
5	1:18		10.000			50.00		0.626	
6	2:10		5.000			50.00		1.230	
7	2:16		5.000			50.00		3.765	
8	2:31		10.000			50.00		0.257	
9	6:46	0.98	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	2:58	0.97	5.000	0.12	3.22	50.00	0.094	1.462	0.06
11	3:18		5.000			50.00		1.270	
12	3:56		5.000			50.00		2.282	
13	4:14		10.000			50.00		0.848	
14	4:48		5.000			50.00		1.568	

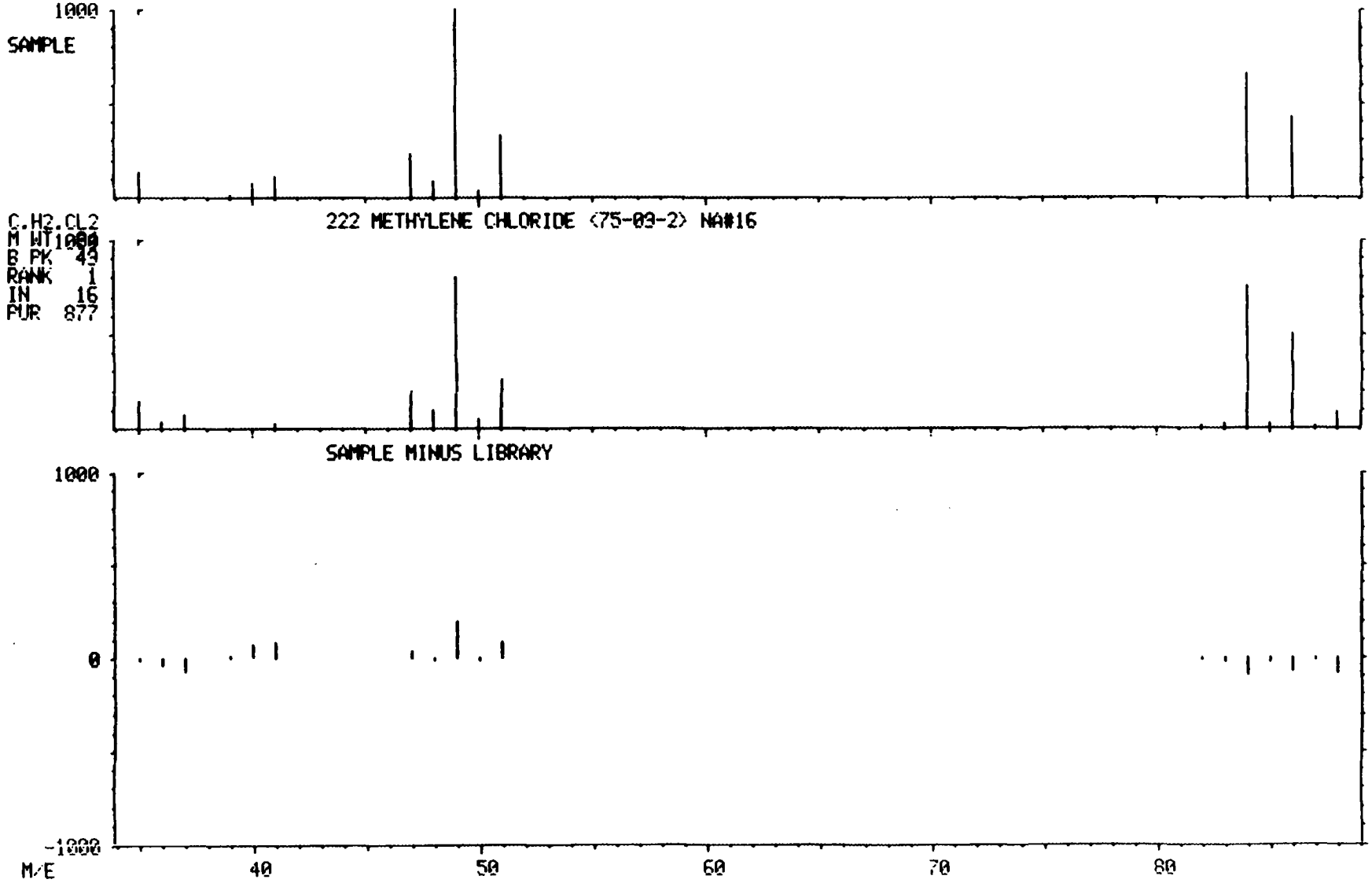
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:01		10.000			50.00		0.124	
16	5:22		5.000			50.00		2.770	
17	5:24		5.000			50.00		0.713	
18	5:37		5.000			50.00		0.656	
19	5:57	0.97	5.000	0.18	4.60	50.00	0.081	0.884	0.09
20	6:06		5.000			50.00		1.804	
21	11:25	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	7:01		5.000			50.00		0.453	
23	7:22		5.000			50.00		0.350	
24	7:56		5.000			50.00		0.642	
25	8:40		5.000			50.00		0.553	
26	9:07		15.000			50.00		0.233	
27	9:04	0.98	5.000	0.16	30.29	50.00	0.201	0.332	0.61
28	9:40		5.000			50.00		0.243	
29	9:56		5.000			50.00		0.277	
30	9:53		5.000			50.00		0.303	
31	10:35	0.98	15.000	0.06	4.59	50.00	0.021	0.228	0.09
32	10:30		5.000			50.00		0.846	
33	11:28		5.000			50.00		0.966	
34	11:49	0.98	5.000	0.21	22.35	50.00	0.184	0.412	0.45
35	12:04	0.98	5.000	0.21	40.30	50.00	0.571	0.709	0.81
36	12:46	0.98	5.000	0.22	29.04	50.00	0.360	0.620	0.58
37	12:50	0.98	5.000	0.22	9.51	50.00	0.206	1.084	0.19
38	13:06		5.000			50.00		0.762	
39	14:19		5.000			50.00		0.705	
40	6:00	0.98	5.000	0.23	55.46	50.00	1.945	1.753	1.11
41	13:44	0.98	5.000	0.24	46.41	50.00	0.838	0.902	0.93
42	8:57	0.98	5.000	0.16	45.63	50.00	0.492	0.539	0.91

COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 2:52
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R03679B13 # 230
BASE M/E: 49
RIC: 1869.

RE 5a 8.1-1/90



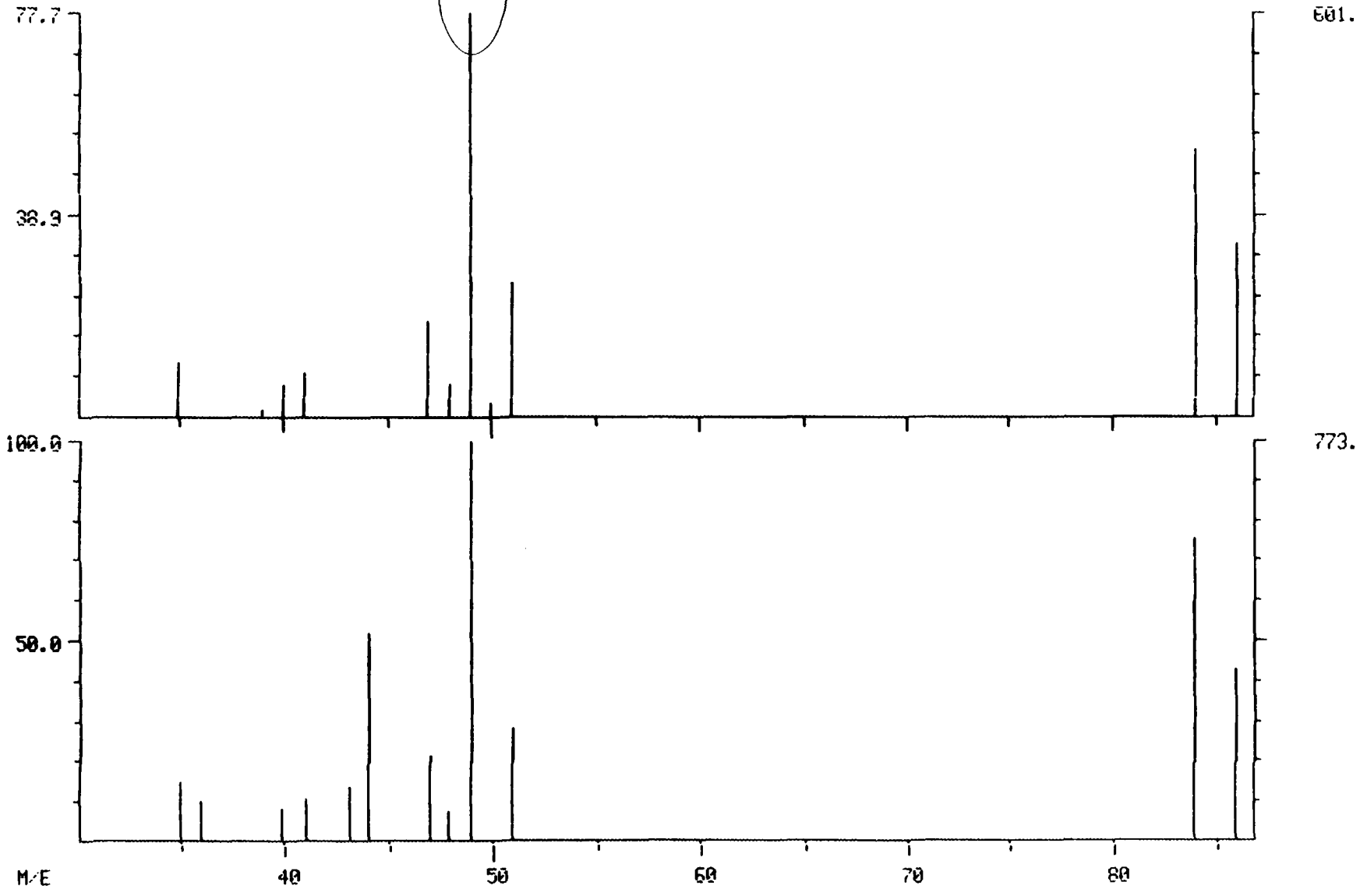
COMPUCHEM LABS

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 2:52
SAMPLE: 100UL CC#303679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N)

Re saw 1-4-90

DATA: C3R03679B13 #230 BASE M/E: 49 49
RIC: 1869. 2959.

222 METHYLENE CHLORIDE (75-09-2) NA#16

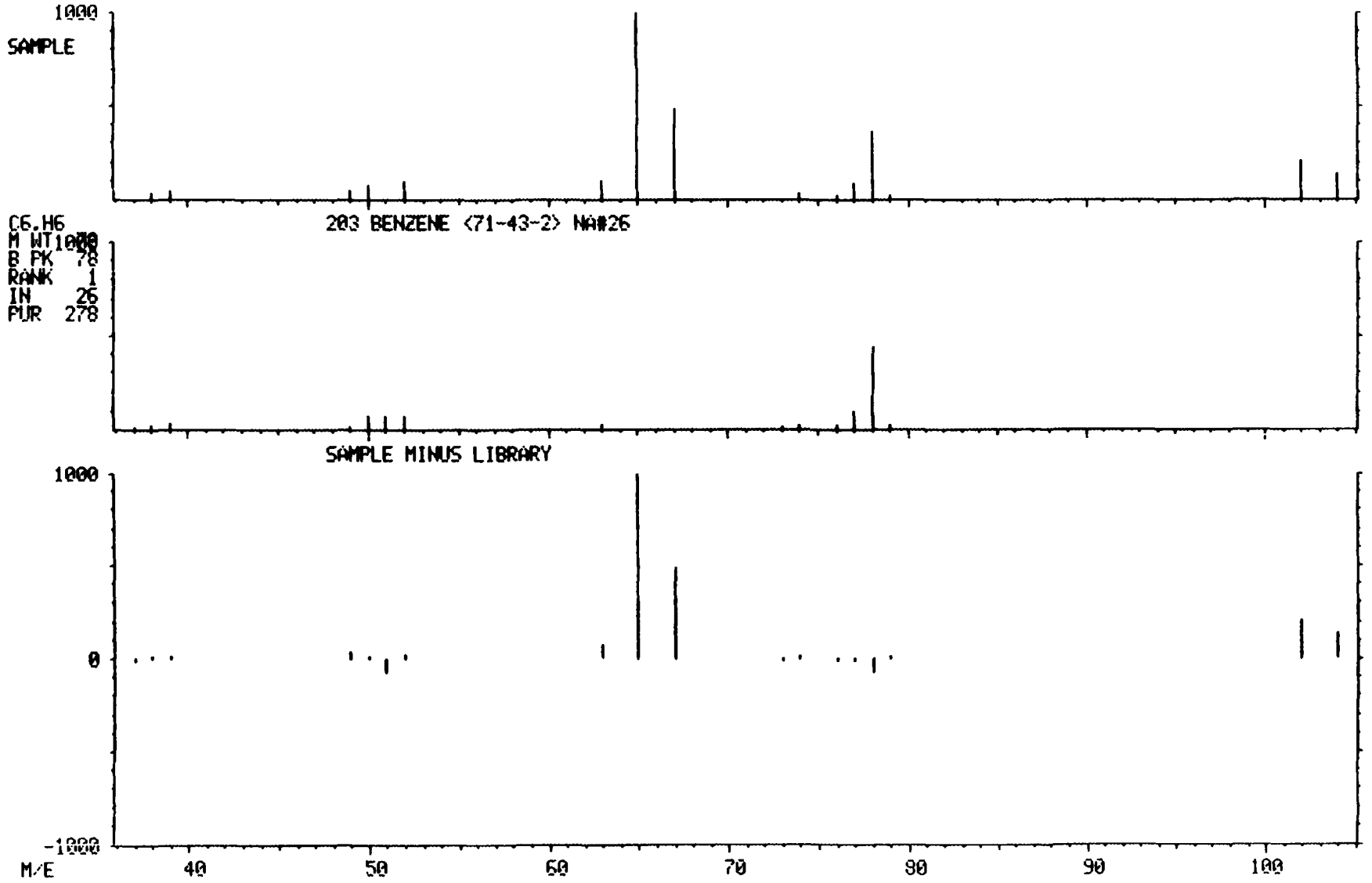


COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 5:48
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

RE 4m H 1/4/90

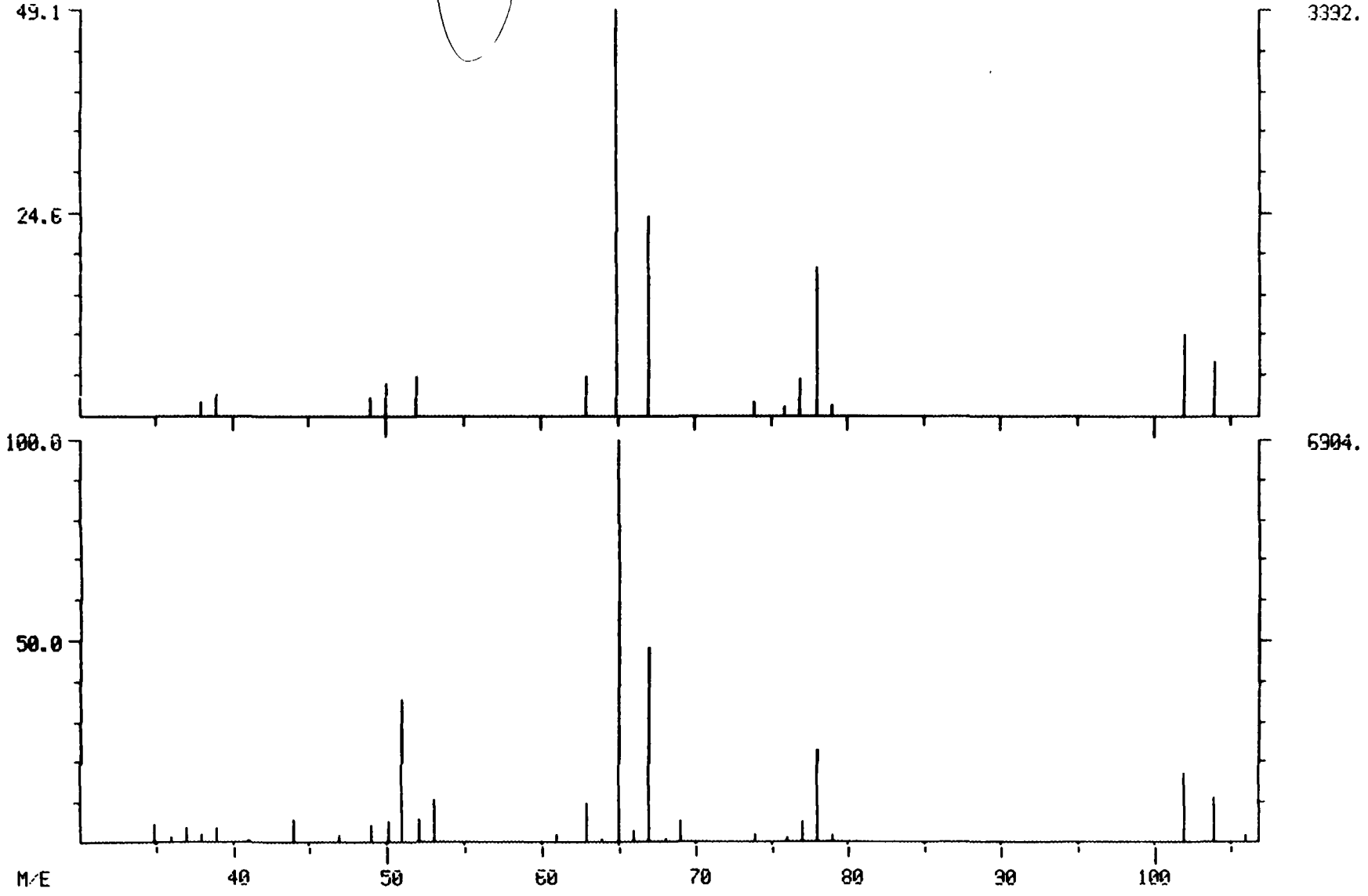
DATA: C3R09673B13 # 464
BASE M/E: 65
RIC: 9375.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 5:48
SAMPLE: 100UL CC#309679 EPA#8201A CASE#18756 ON #13
ENHANCED (S 15B 2N) 203 BENZENE (71-43-2) NA#26

DATA: C3R09679B13 #464 BASE M/E: 65/ 65
RIC: 9375./ 21823.

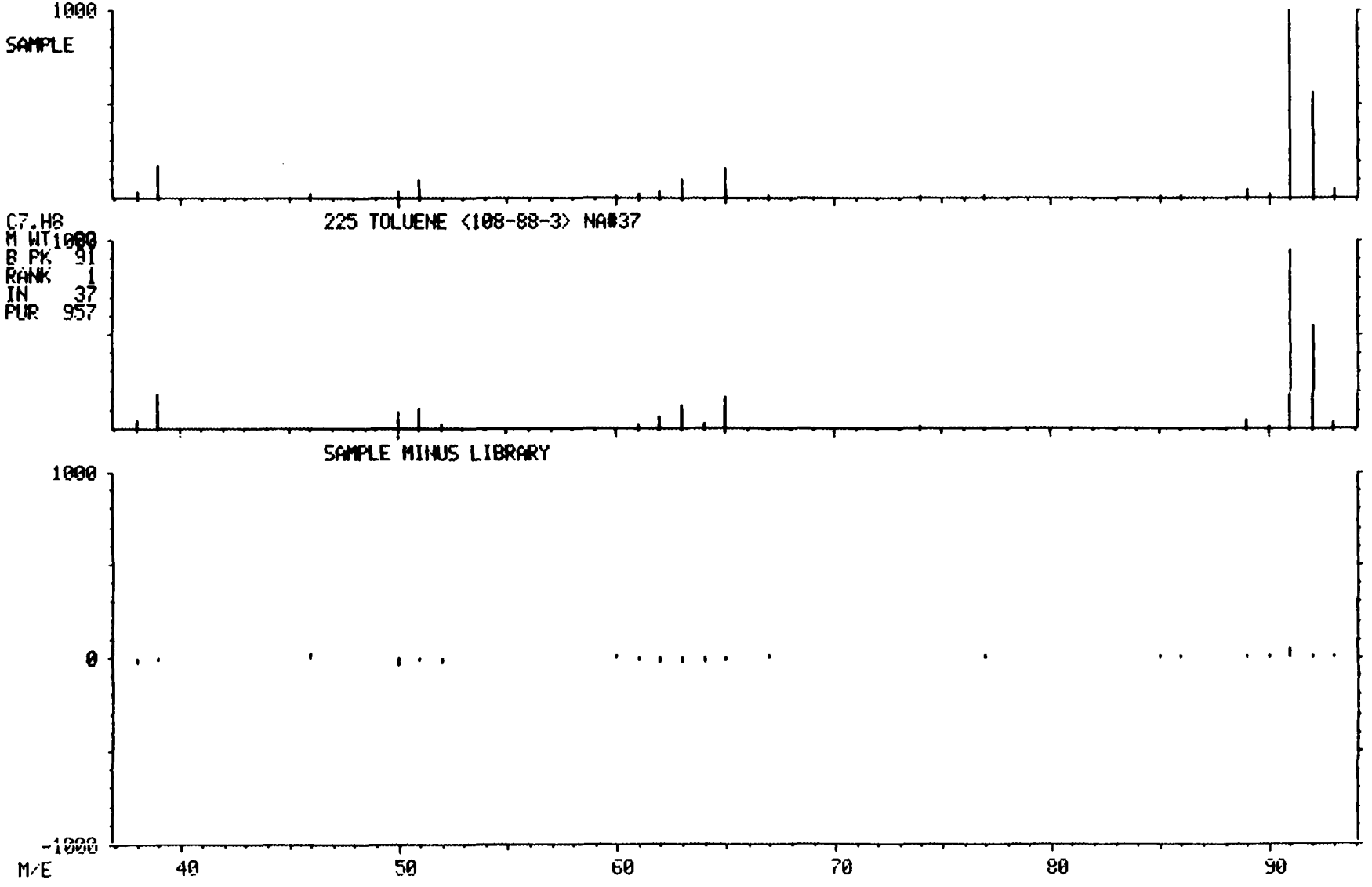


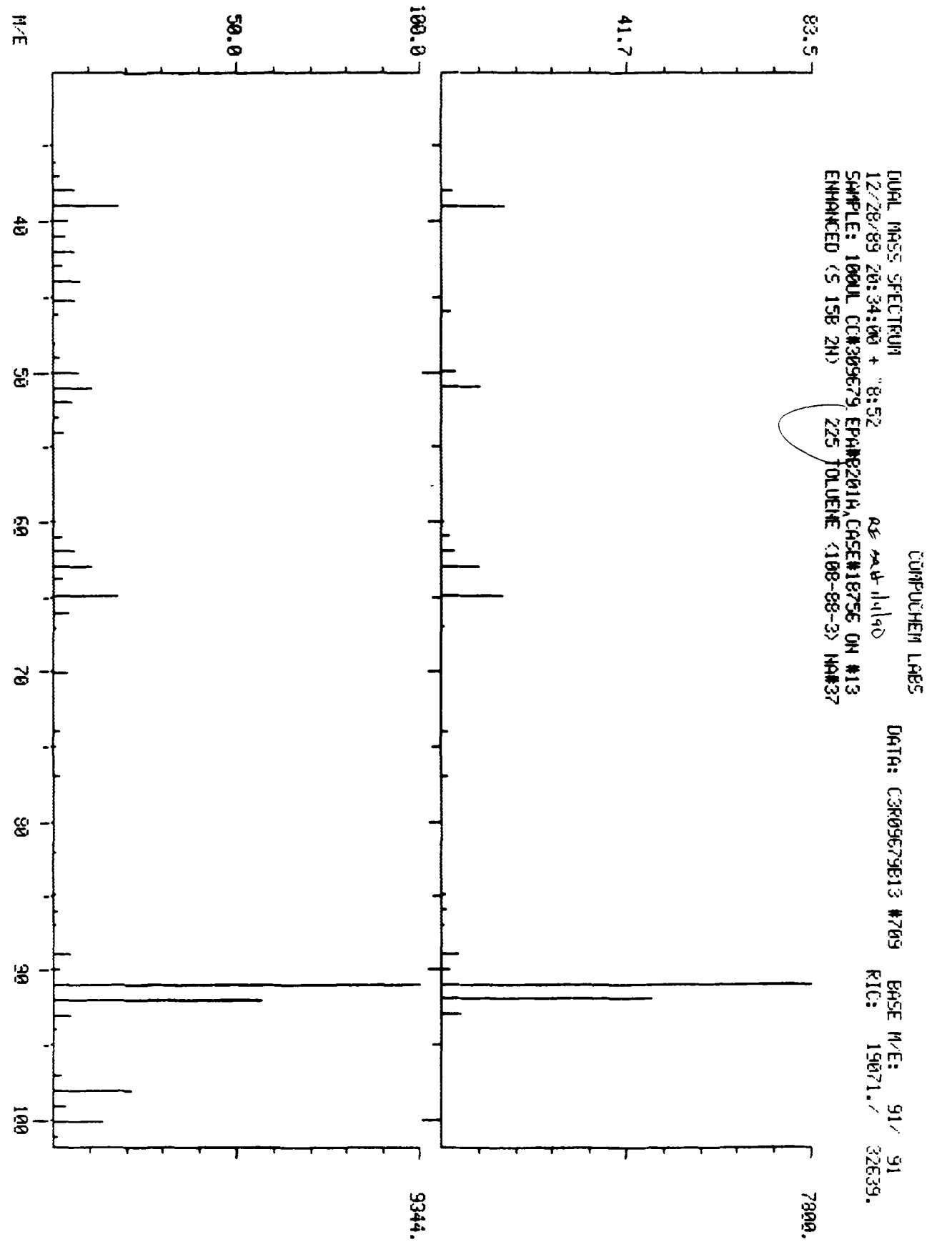
COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 8:52
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

RE SAM 1/4/90

DATA: C3R09679B13 # 709
BASE M/E: 91
RIC: 19039.



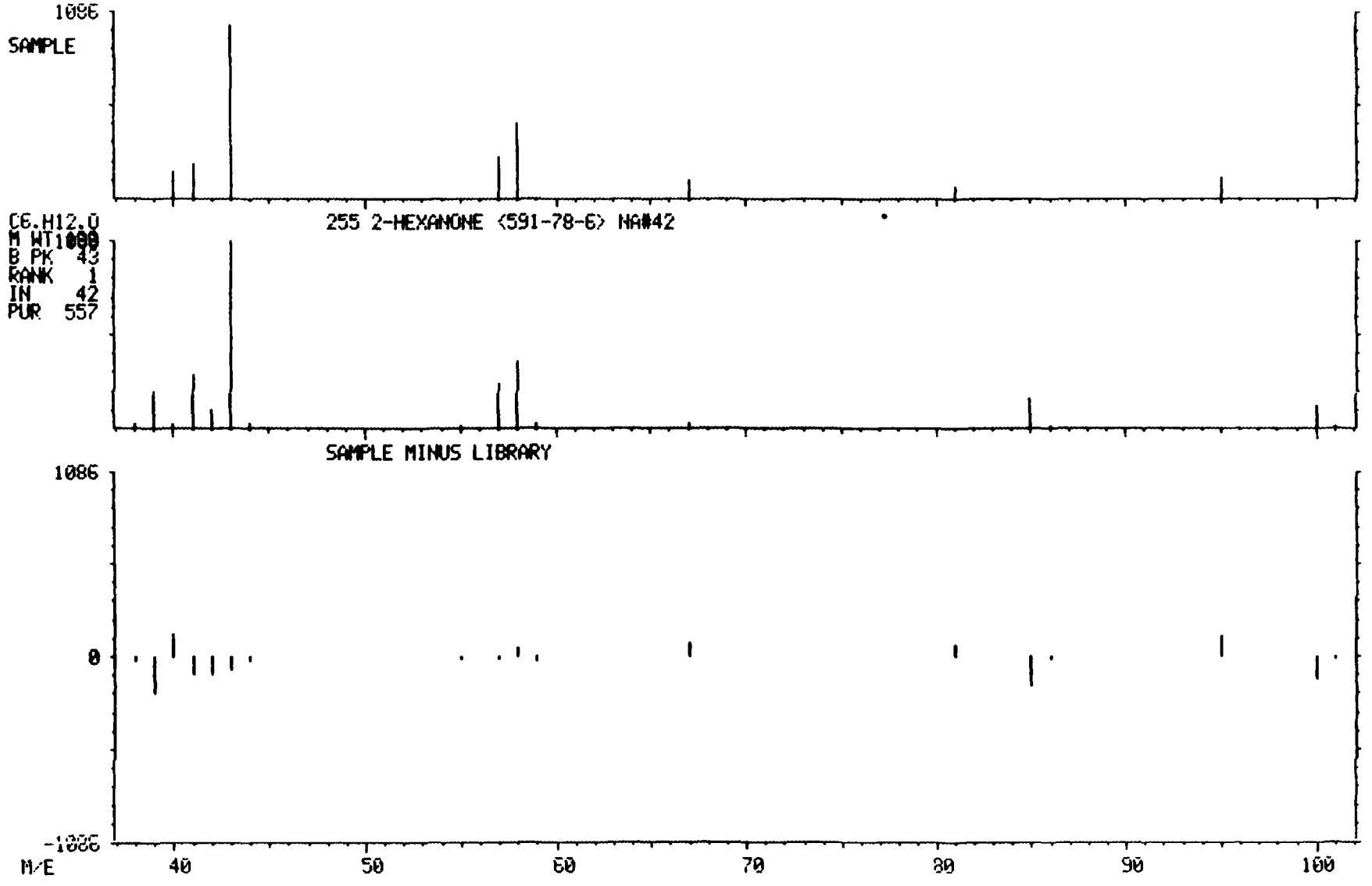

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 8:52
SAMPLE: 100UL CC#305679 EPA#8201A,CASE#18756 ON #13
ENHANCED (S 15B 2N)
225 TOLUENE (108-88-3) NA#37
COMPUCHEM LABS
DATA: C3R05679B13 #709
BASE M/E: 91/ 91
RIC: 19871./ 32639.
83.5
41.7
100.0
50.0
M/E
40
50
60
70
80
90
100
7800.
9344.

COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 10:25
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09679B13 # 833
BASE M/E: 43
RIC: 740.

RG 1/4/90

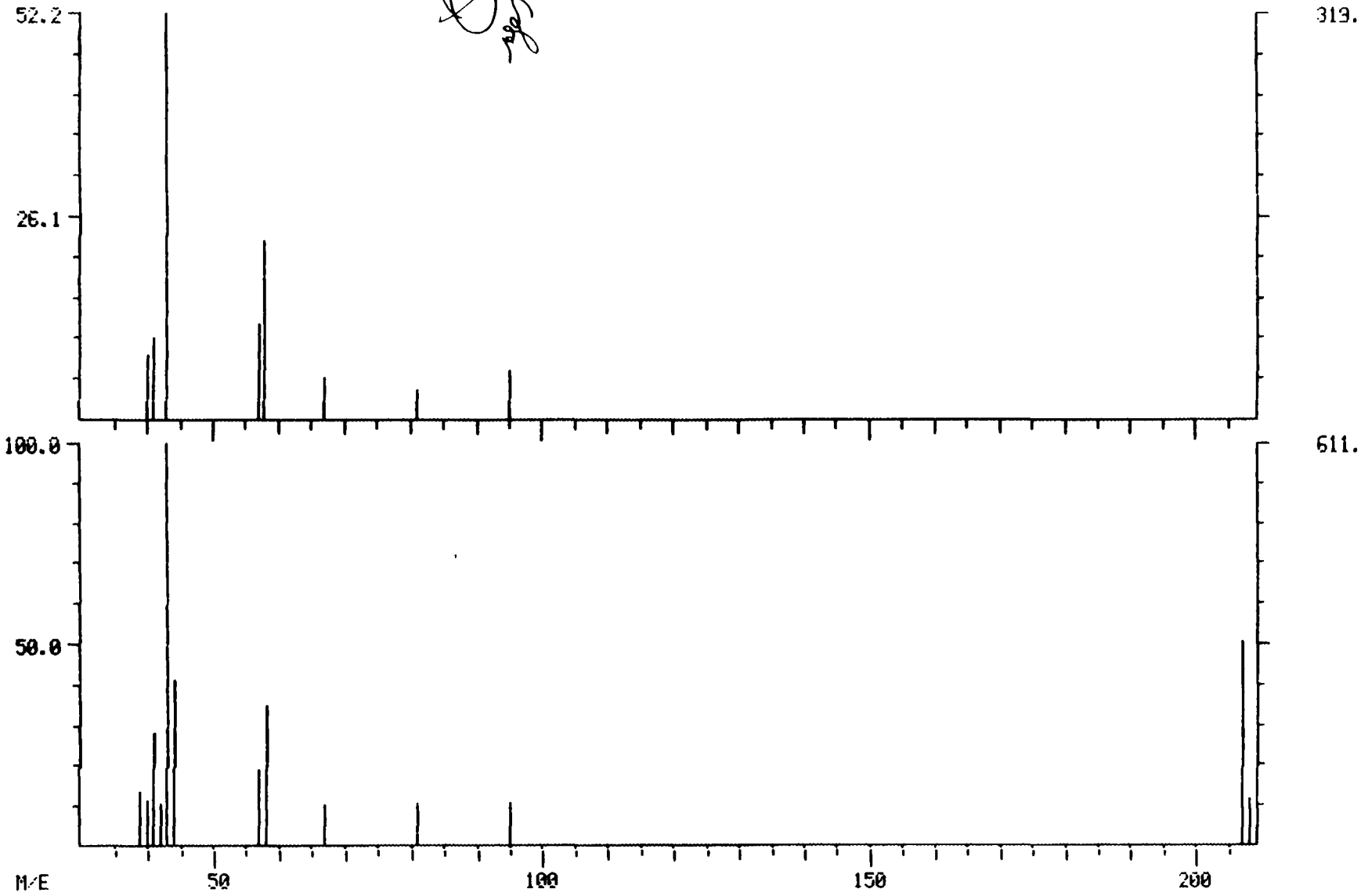


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 10:25
SAMPLE: 100UL CC#309679 EPA#8201A,CASE#18756 ON #13
ENHANCED (S 15B 2N)

DATA: C3R09679B13 #833
BASE M/E: 43/ 43
RIC: 740./ 2155.

258 2-HEXANONE (591-78-6) NA#42

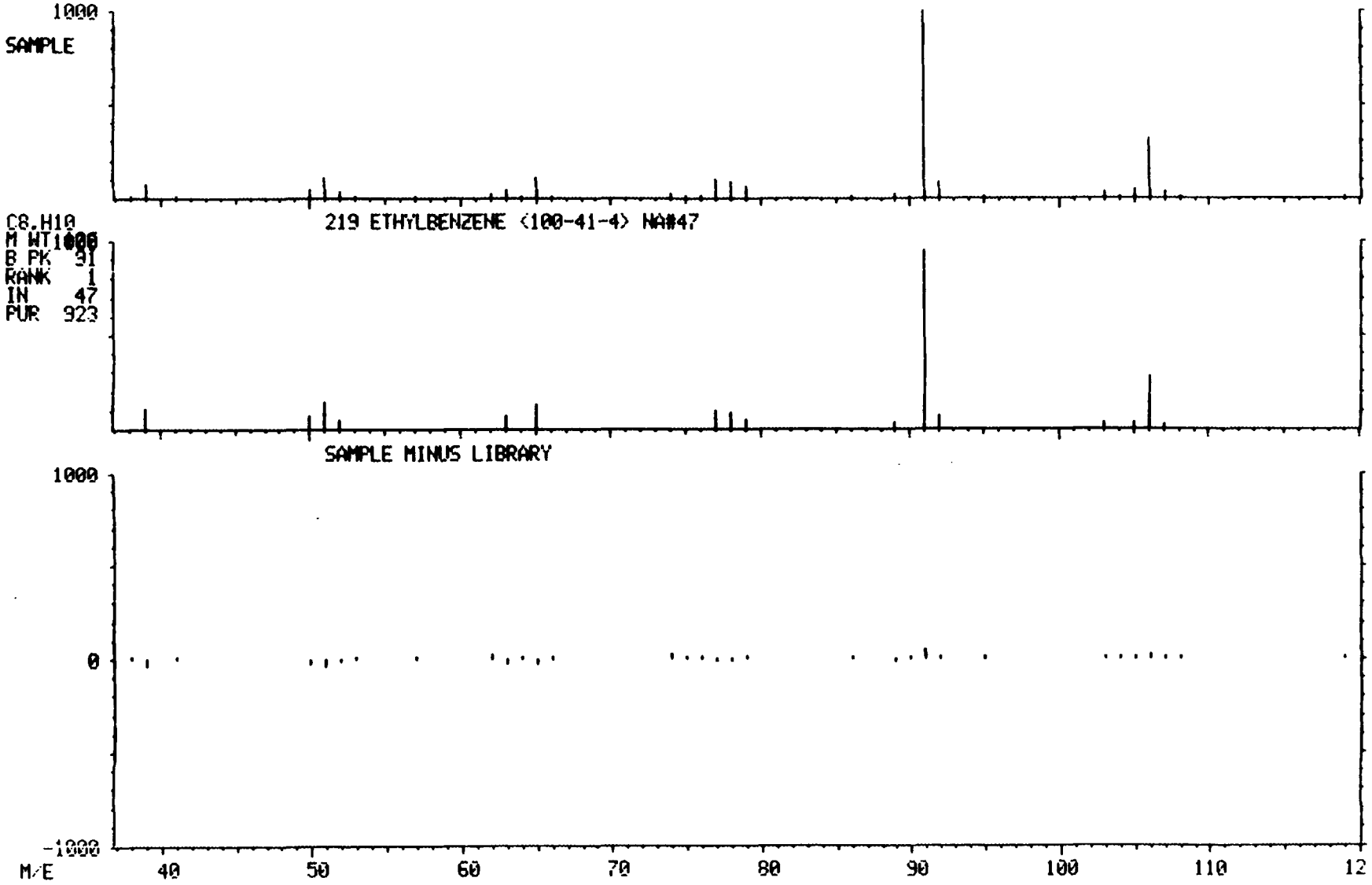


COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 11:37
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

re sch 1/4/90

DATA: C3R09679B13 # 930
BASE M/E: 31
RIC: 37183.



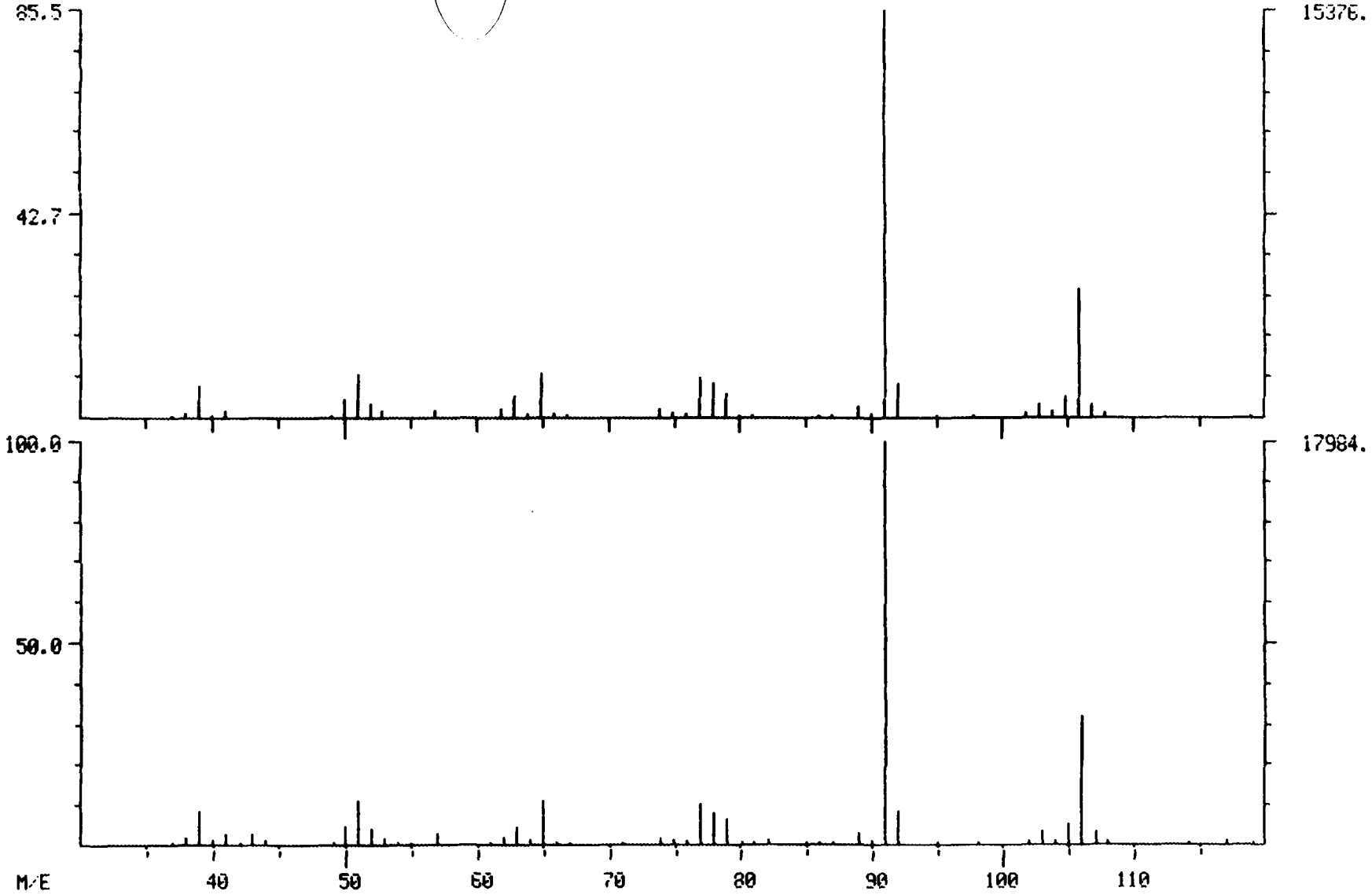
COMPUCHEM LABS

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 11:37
SAMPLE: 100UL CC#303679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N)

RE scan 1-11-90

213 ETHYLBENZENE <100-41-4> NA#47

DATA: C3R03679B13 #930
BASE M/E: 91 / 91
RIC: 37951. / 46847.

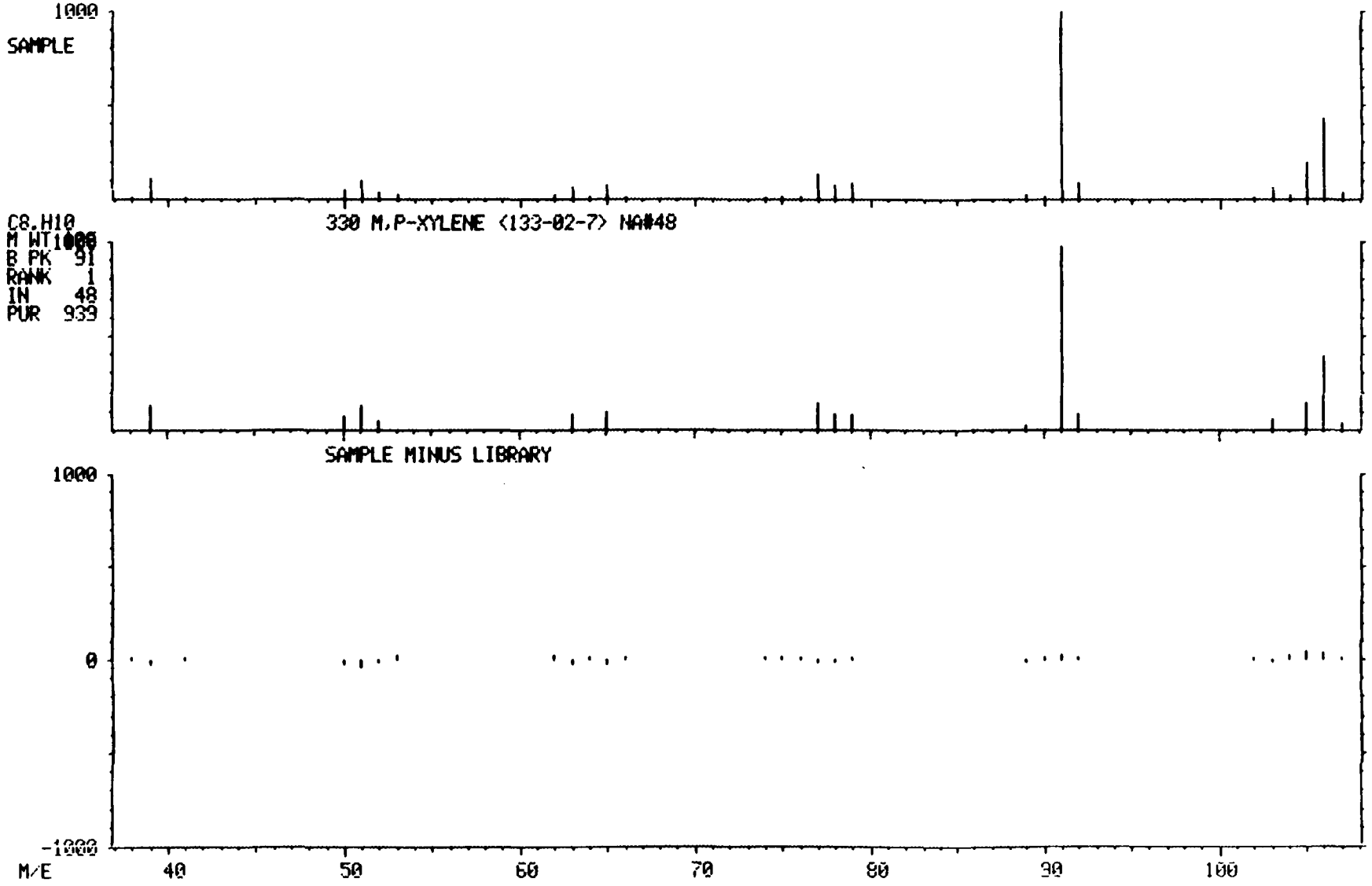


COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 11:52
SAMPLE: 100UL CC#309679 EPA#B201A, CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

RE sch 1/4/90

DATA: C3R09679B13 # 949
BASE M/E: 91
RIC: 86911.

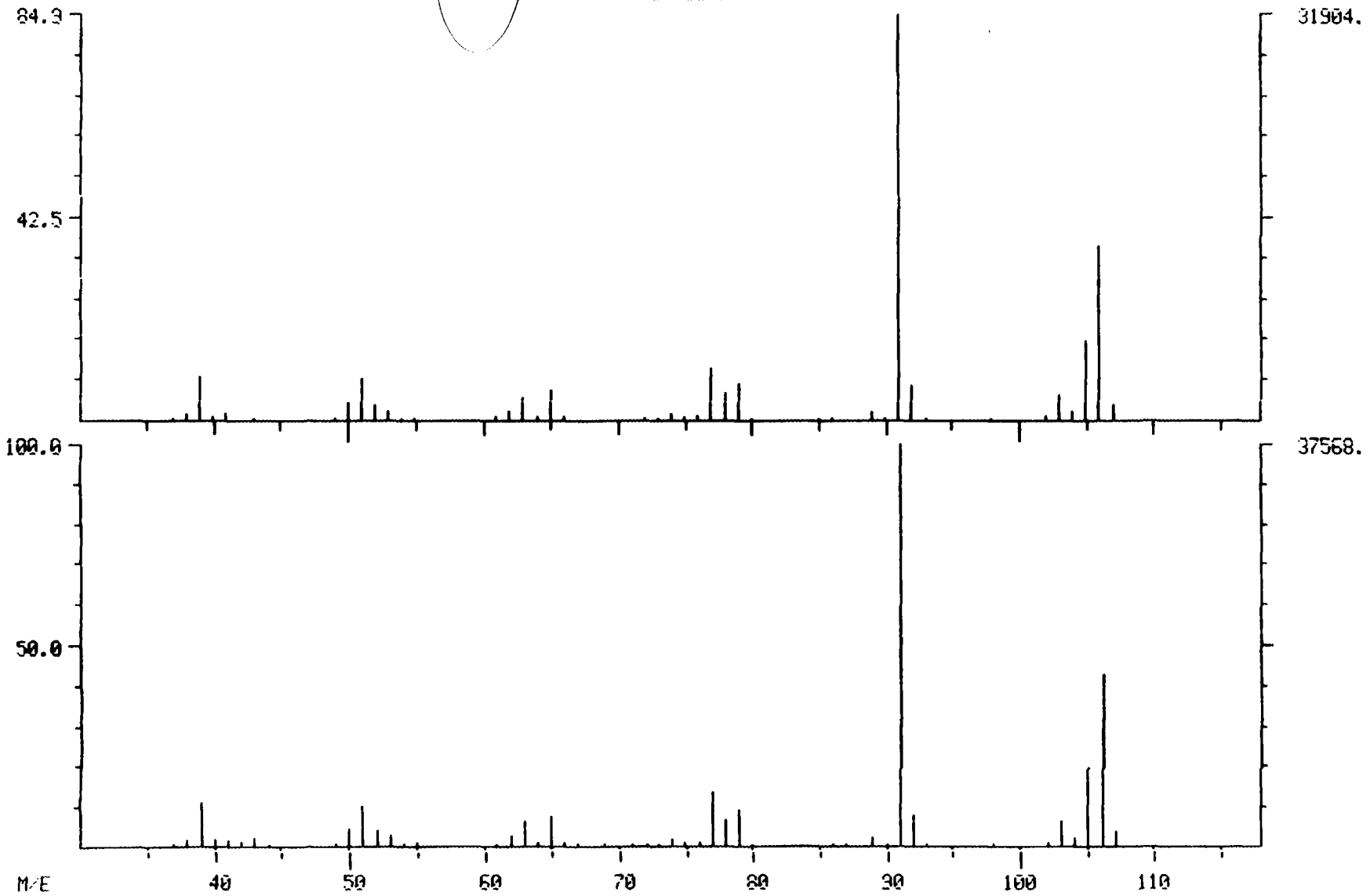


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 11:52
SAMPLE: 100UL CC#309679 EPA#8201A CASE#18756 ON #13
ENHANCED (S 15B 2N)

DATA: C3R09679B13 #349 BASE M/E: 91/ 91
RIC: 89727./ 109183.

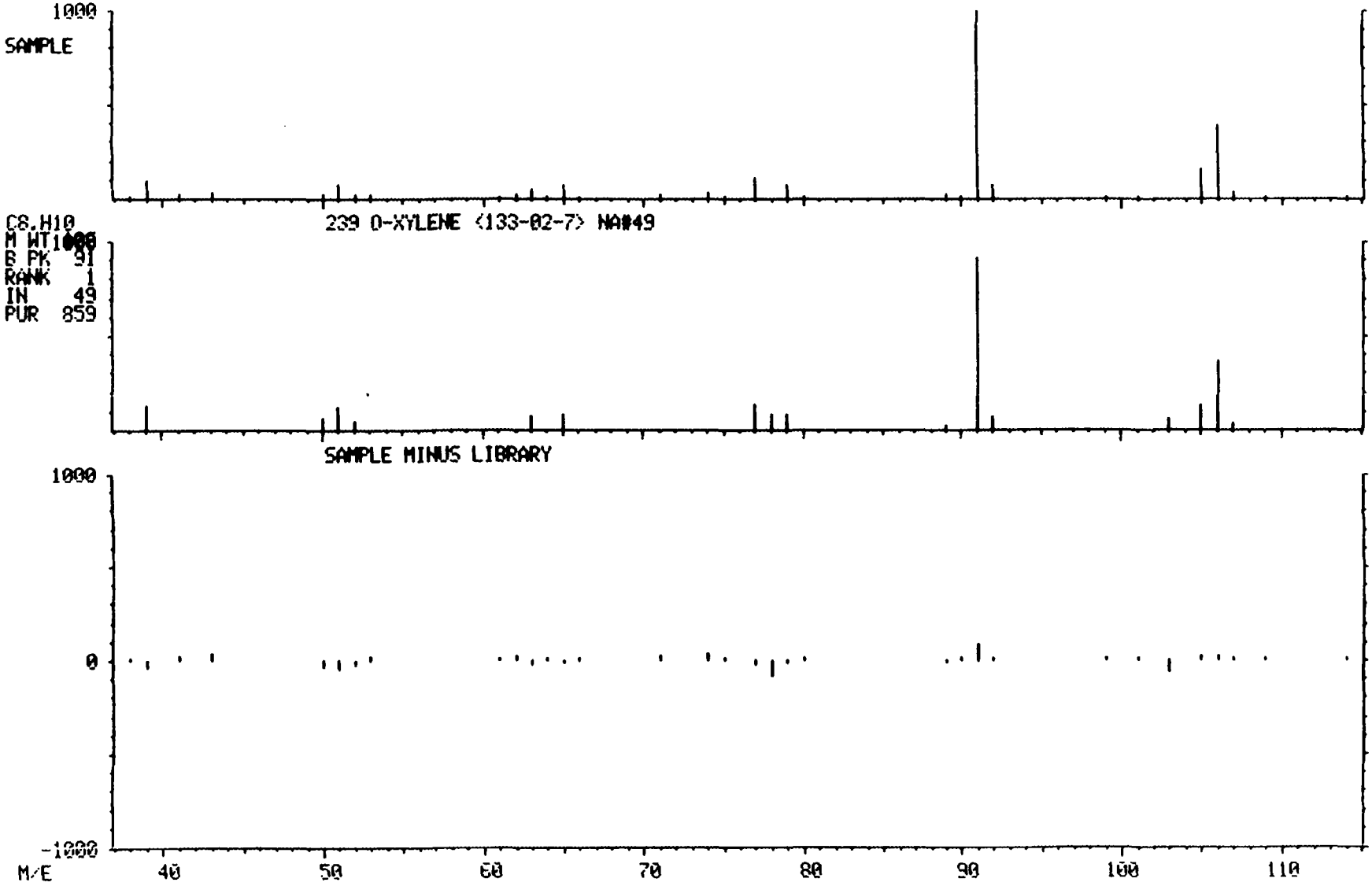
330 M/P-XYLENE (133-02-7) NA#48



COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 12:32 RE ban 1/4/90
SAMPLE: 100UL CC#309679 EPA#B201A, CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09679B13 #1003
BASE M/E: 91
RIC: 51583.



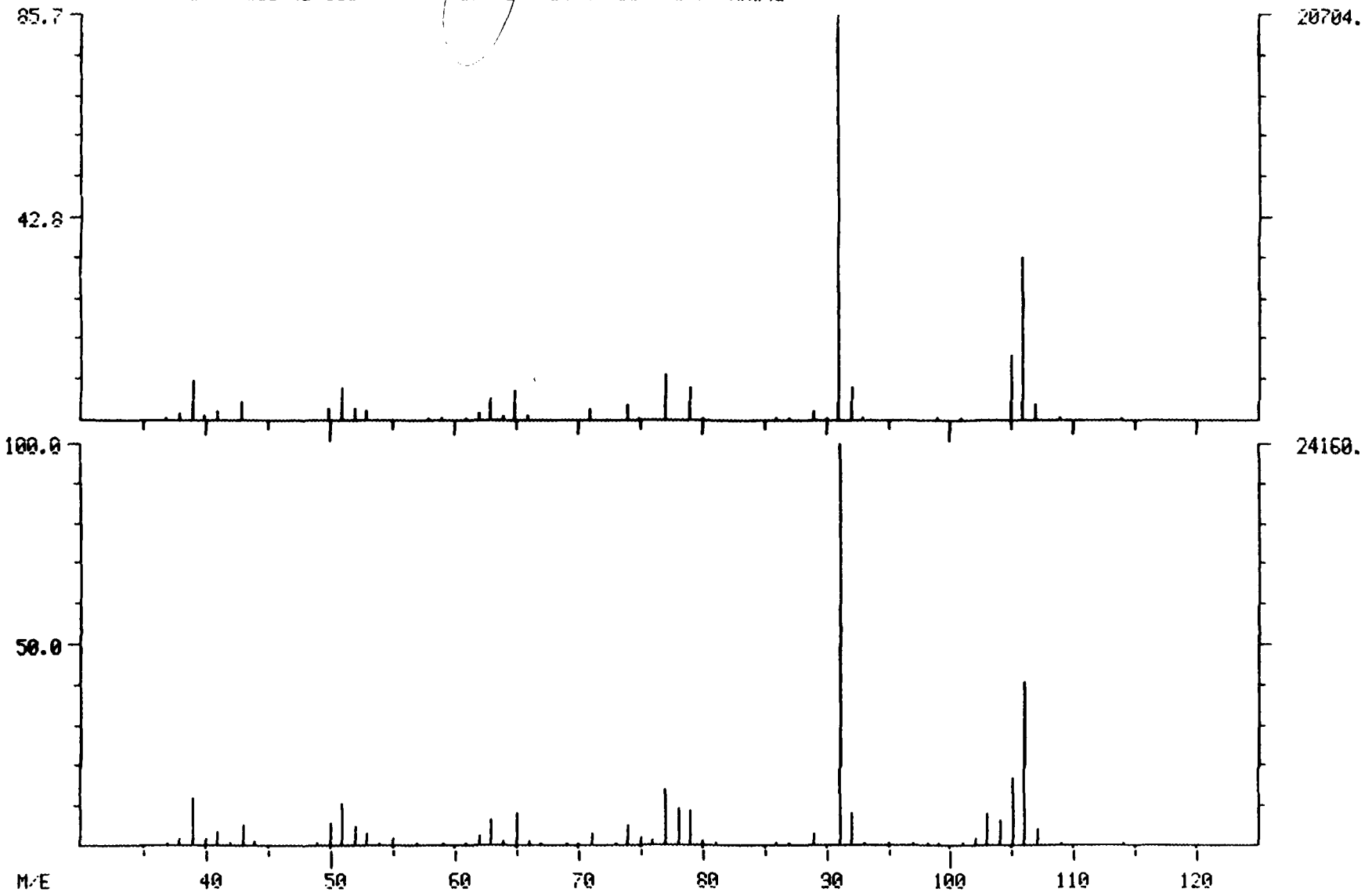
COMPUCHEM LABS

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 12:32
SAMPLE: 100UL CC#303673 EPA#8201A CASE#18756 ON #13
ENHANCED (S 15B 2N)

Reanalyzed

DATA: C3R03673B13 #1003 BASE M/E: 91/ 91
RIC: 52671./ 75135.

239 O-XYLENE (133-02-7) NA#49



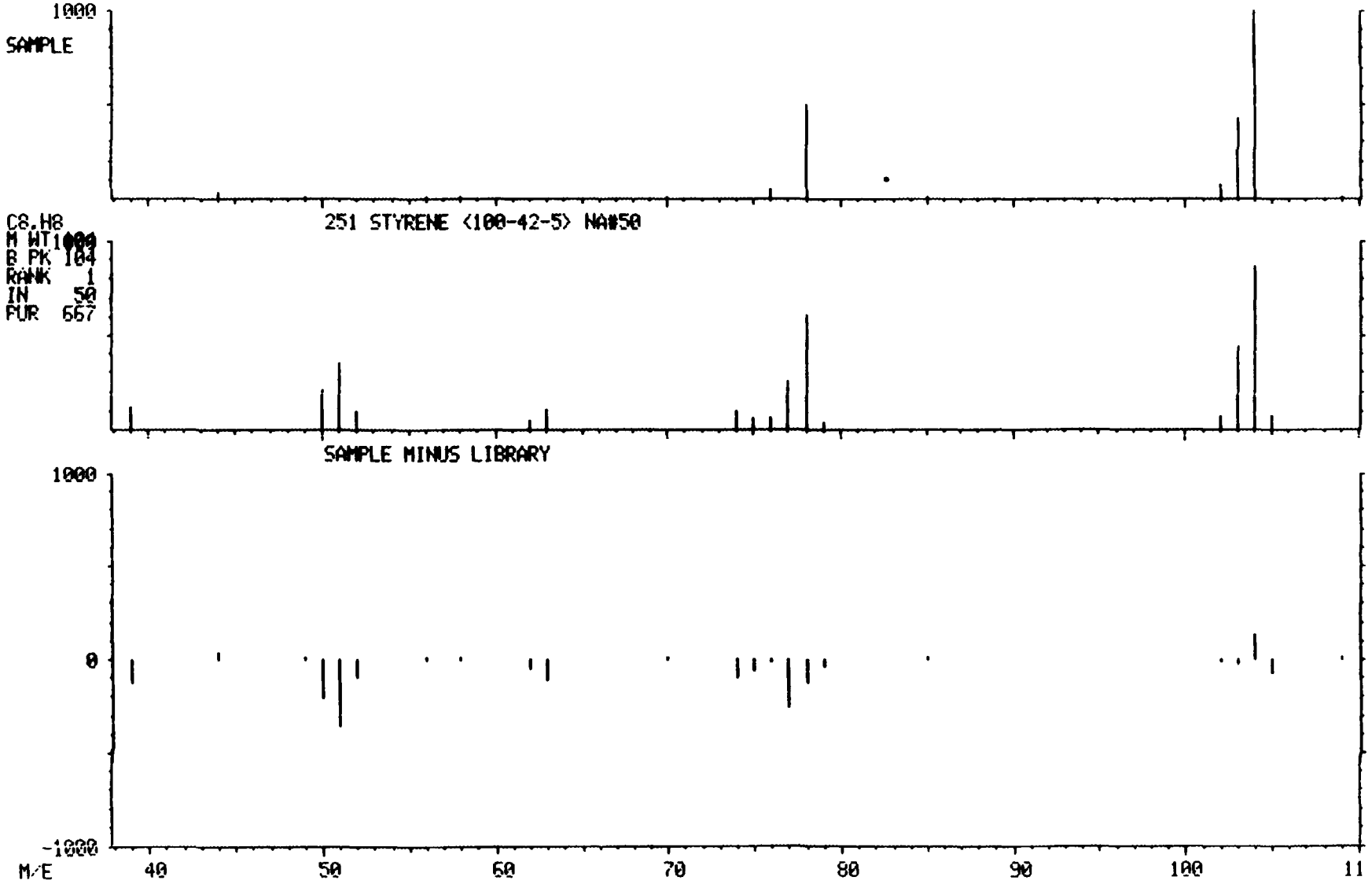
COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 12:37
SAMPLE: 100UL CC#303679 EPA#B201A, CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

RT= sat. 14.40

DATA: C3R09679B13 #1009

BASE M/E: 104
RIC: 9967.

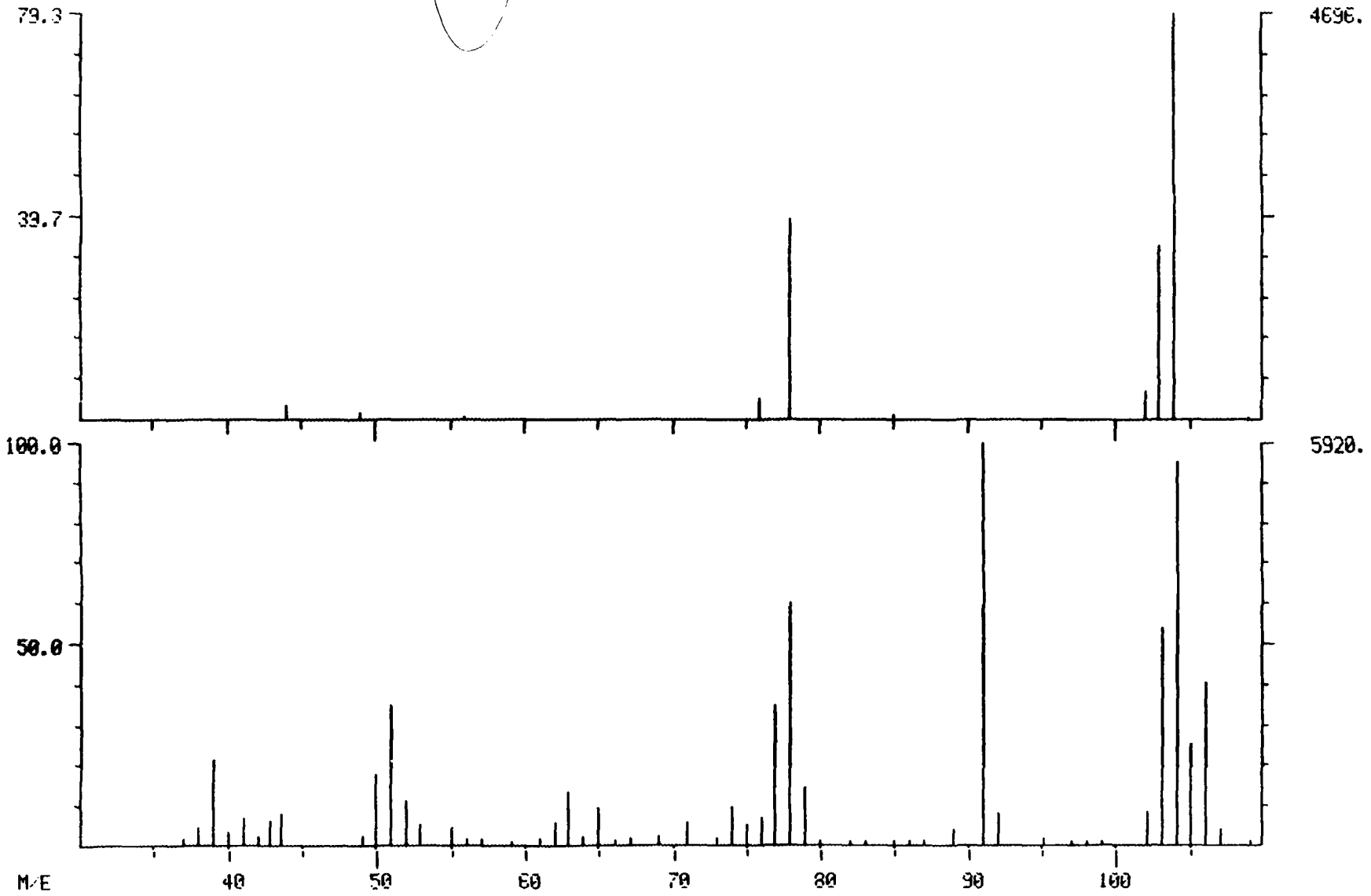


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/28/89 20:34:00 + 12:37
SAMPLE: 100UL CC#303673 EPA#8201A CASE#18756 ON #13
ENHANCED (S 15B 2N)

DATA: C3R03673B13 #1003 BASE M/E: 104/ 91
RIC: 9967./ 39231.

251 STYRENE (100-42-5) NA#50



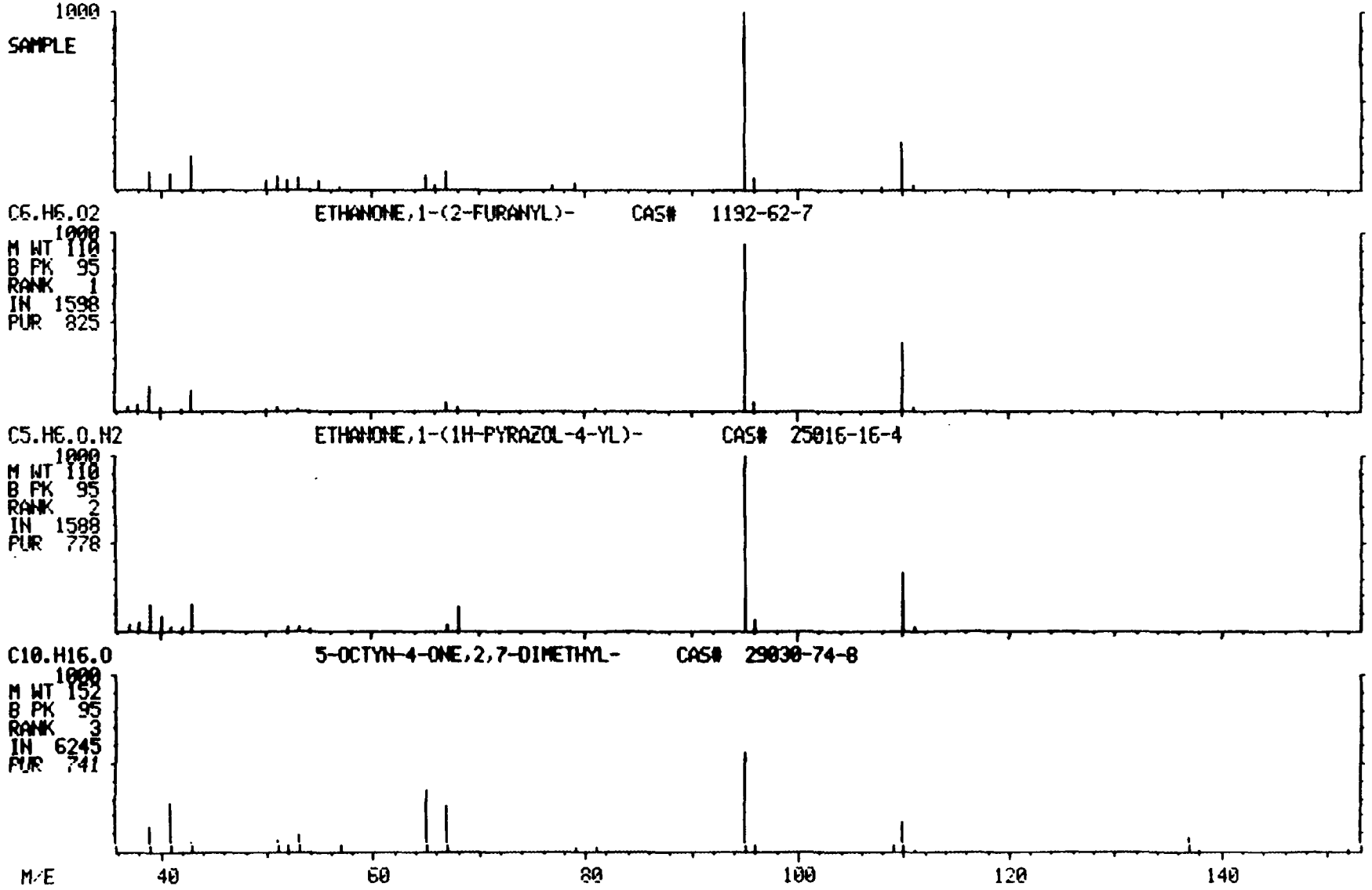
COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 9:48
SAMPLE: 100UL CC#309679 EPA#B201A, CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09679B13 # 784

BASE M/E: 95
RIC: 7815.

RE Jan 14 90

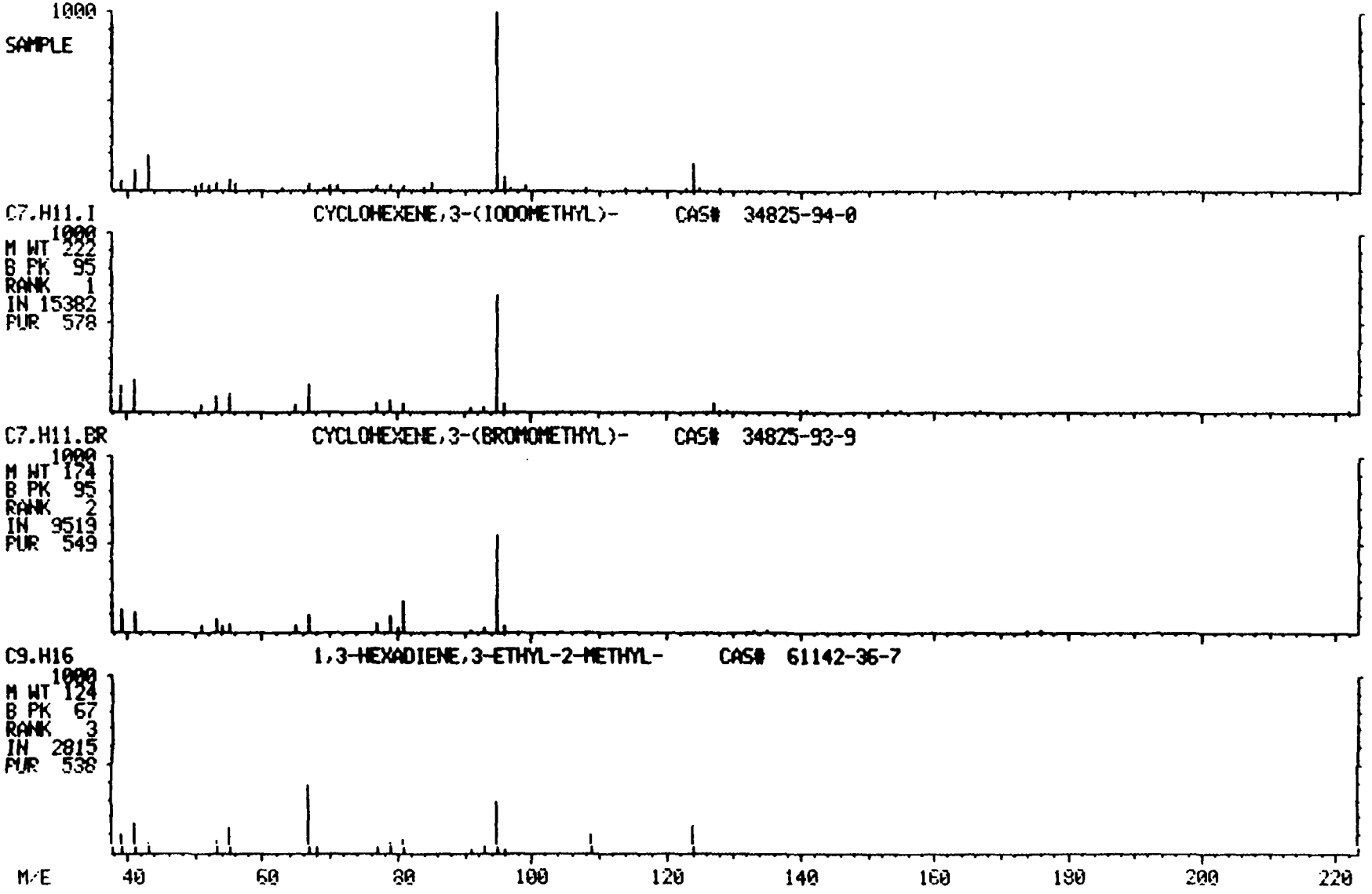


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 12:11
SAMPLE: 100UL CC#309679 EPA#8201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

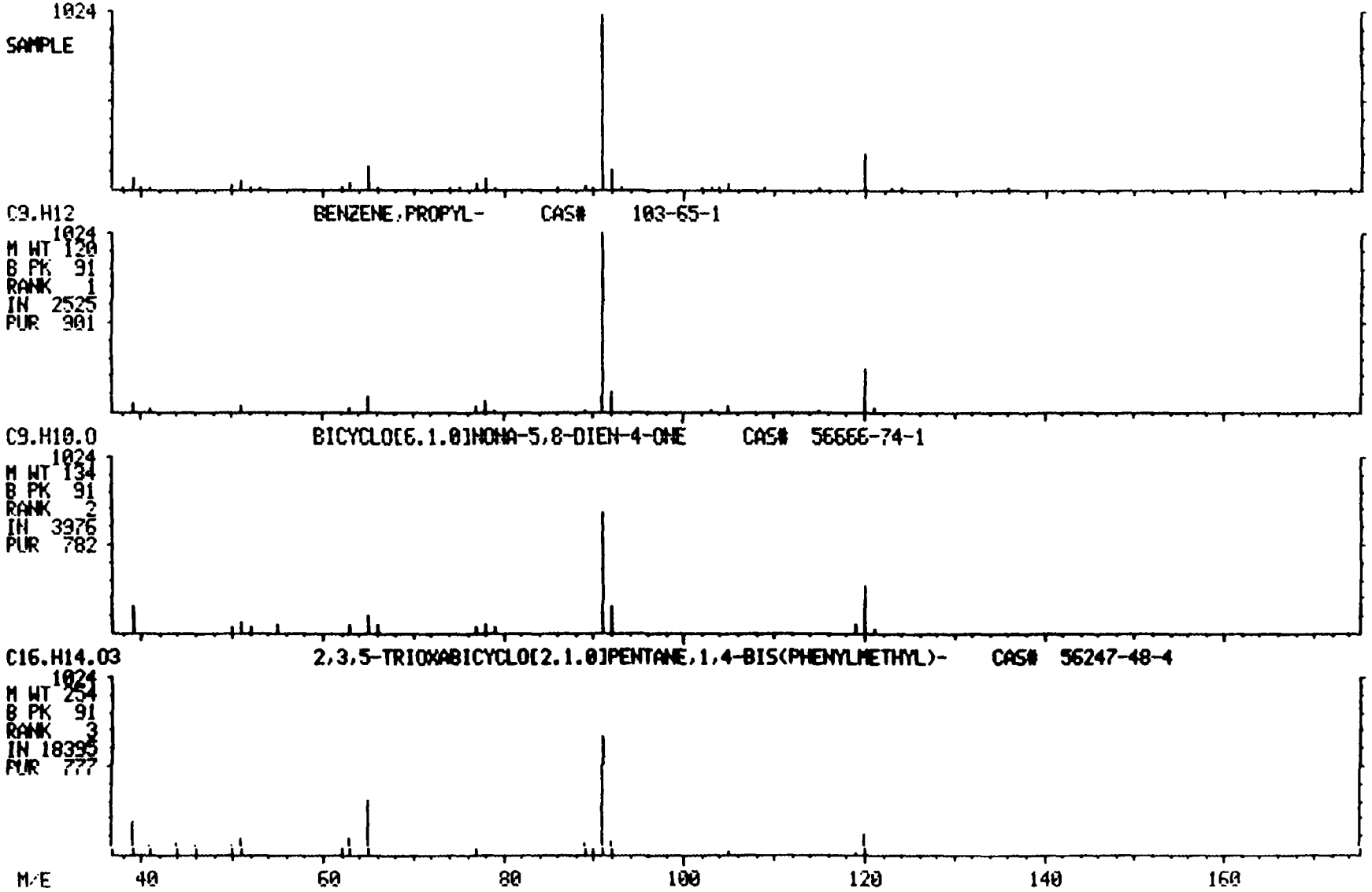
DATA: C3R03679B13 # 375
BASE M/E: 95
RIC: 9775.



COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 14:04
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

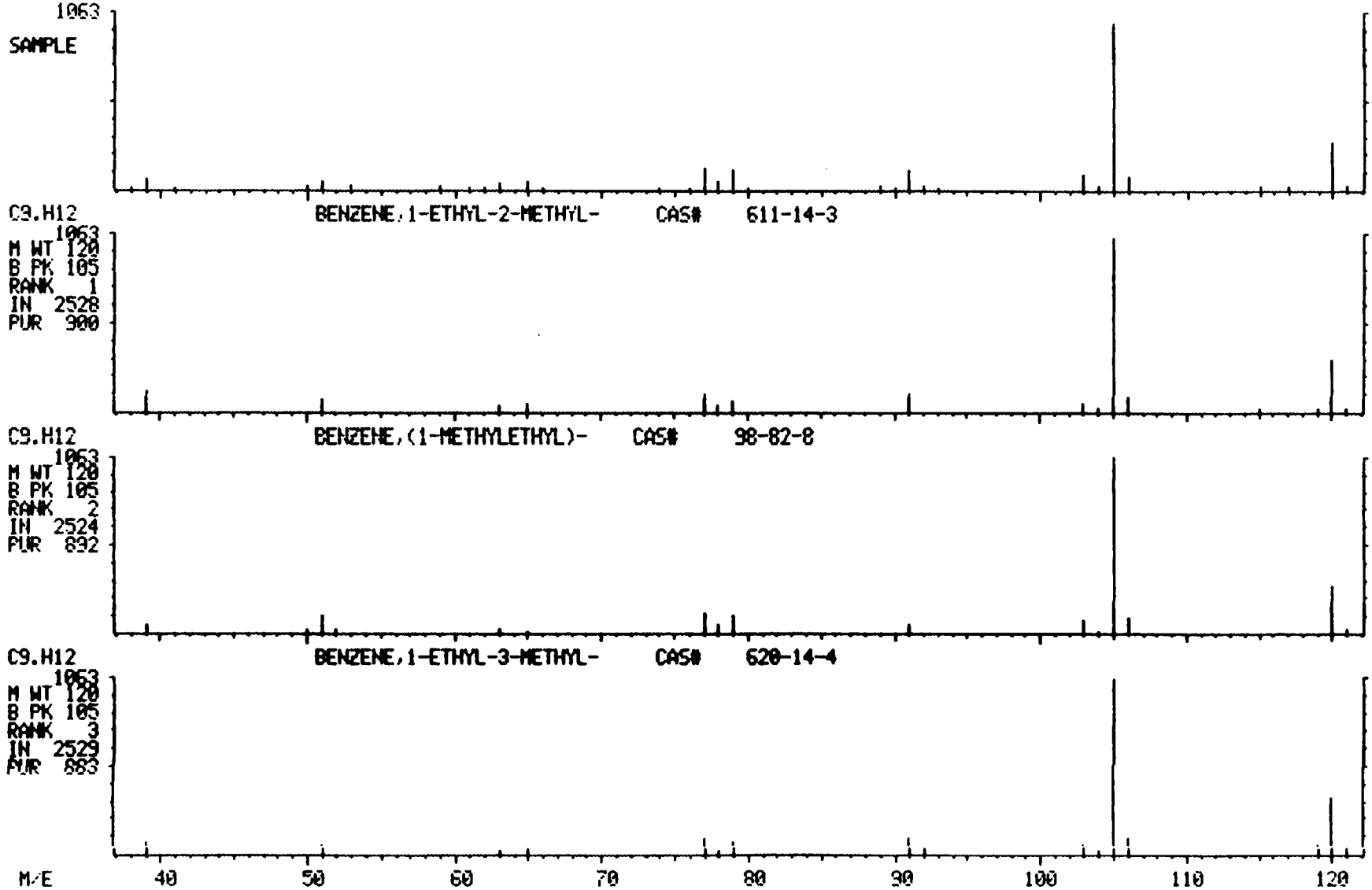
DATA: C3R09679B13 #1125
BASE M/E: 91
RIC: 20831.



COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 14:17
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09679B13 #1143
BASE M/E: 105
RIC: 69887.

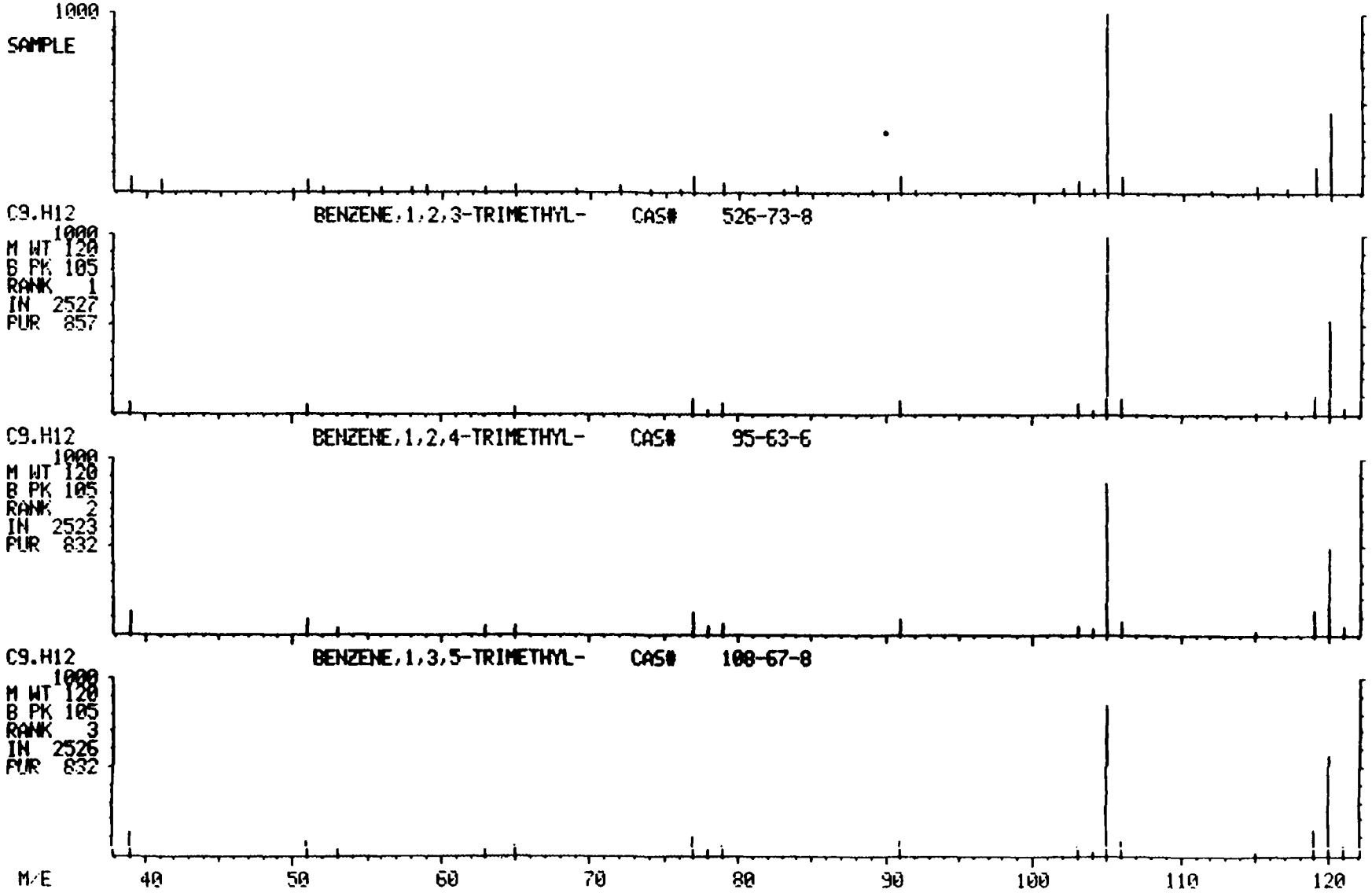


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 14:27 RE sa#, 1/4/90
SAMPLE: 100UL CC#309679 EPA#B201A, CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

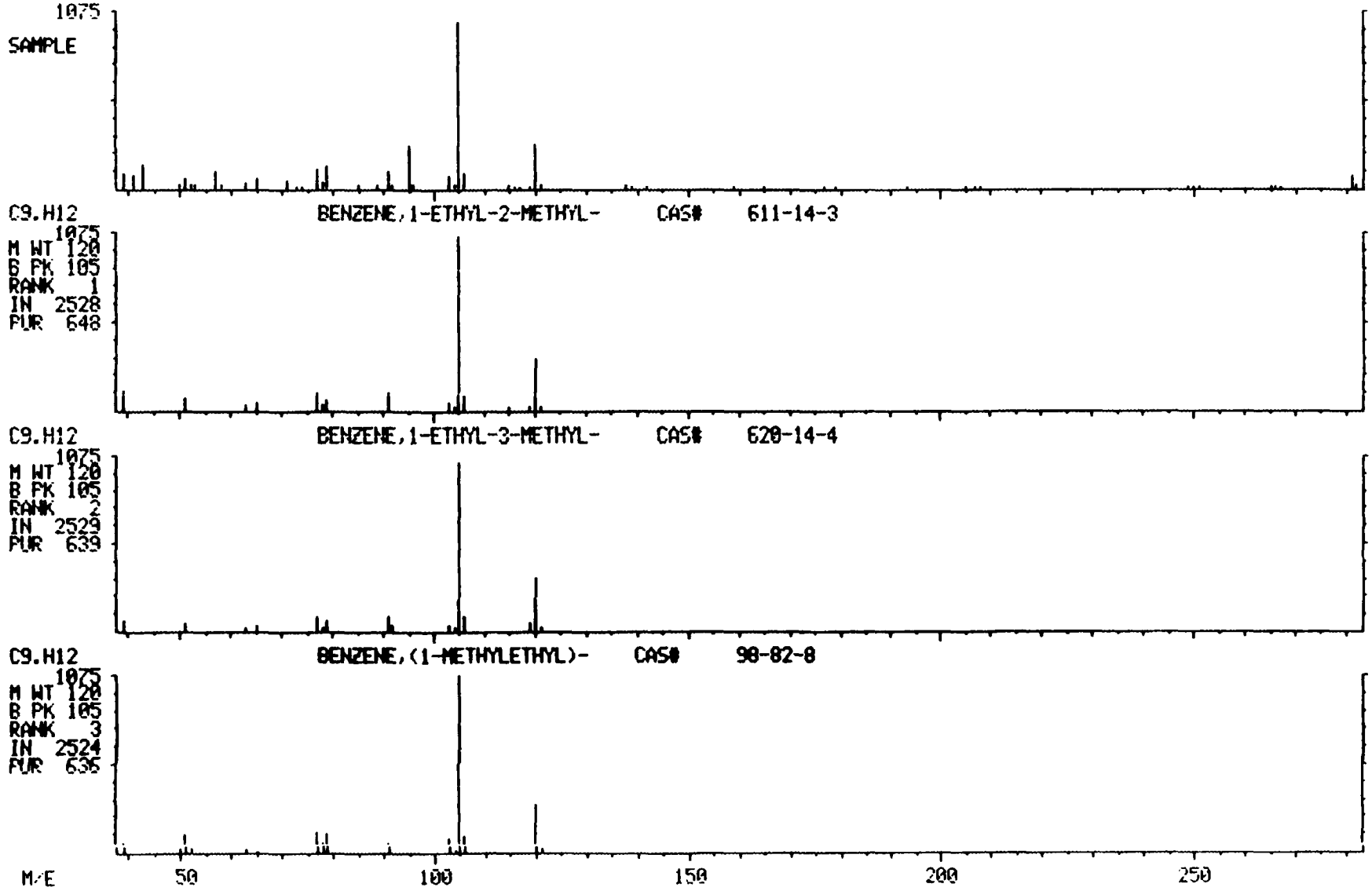
DATA: C3R03679B13 #1156 BASE M/E: 105
RIC: 18943.



COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 14:46 RE saw 14h0
SAMPLE: 100UL CC#303679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

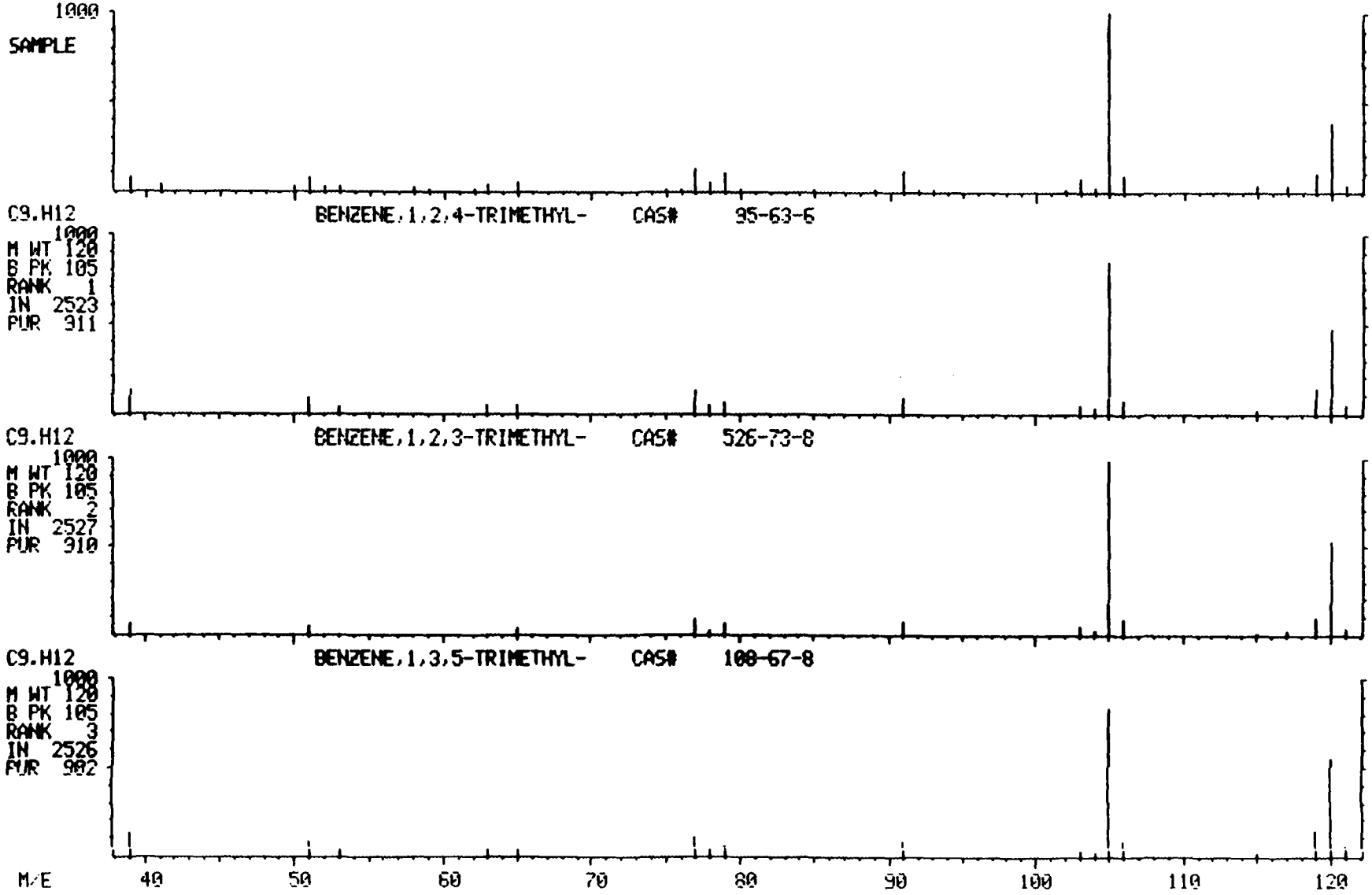
DATA: C3R03679B13 #1182
BASE M/E: 105
RIC: 55935.



COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 15:08 RE sa#1/4/90
SAMPLE: 100UL CC#303679 EPA#B201A, CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

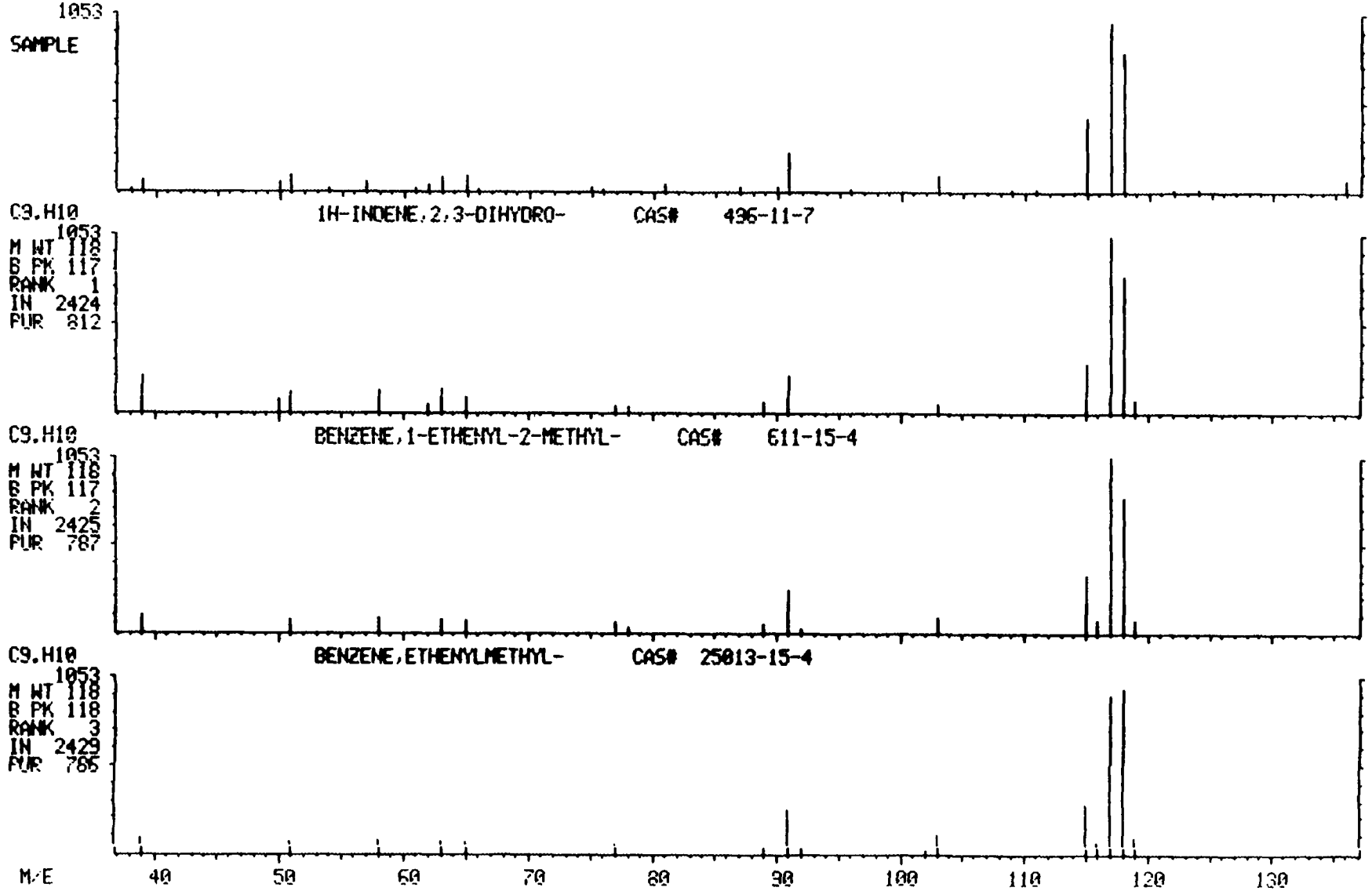
DATA: C3R03679B13 #1211
BASE M/E: 105
RIC: 104191.



COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 15:18
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09679B13 #1224
BASE M/E: 117
RIC: 11743.

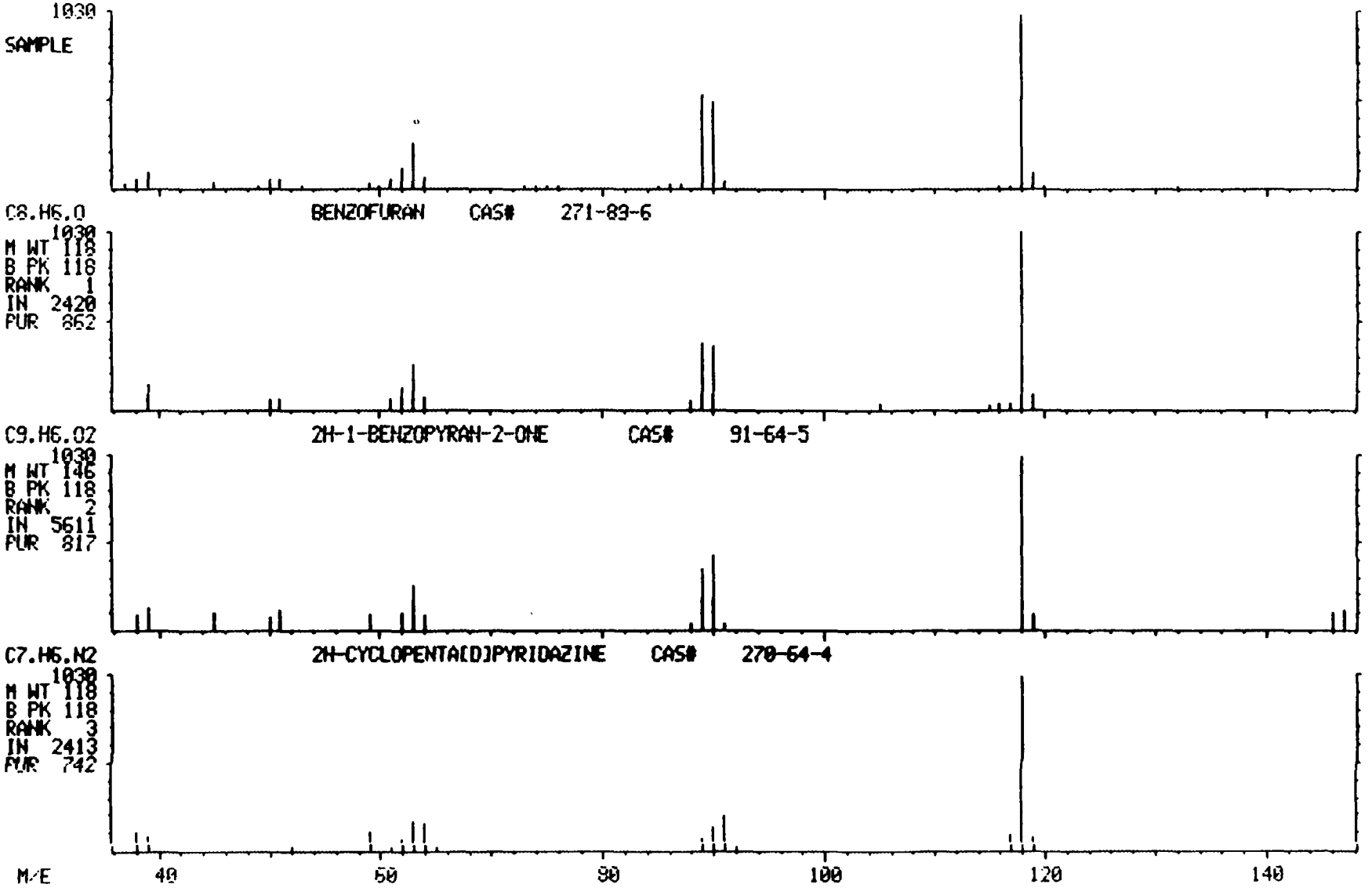


COMPUCHEM LABS

LIBRARY SEARCH
12/28/89 20:34:00 + 15:33
SAMPLE: 100UL CC#309679 EPA#B201A CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09679B13 #1244
BASE M/E: 118
RIC: 142591.

RE salt 1/4/90



VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 156 ASSIGNED TO Hrishad Joshi DATE 12/28/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309679R	18756.	7			40g	B201A	
311396			B1		10.0ml	Hg	
311397			B2		10.0ml	Hg	
			B3				
			B4				
			B5				

SURROGATE # 394 LOT # 30537 MANUAL OPERATOR 742 / _____

AMOUNT 0.5mL

RELINQUISHED BY _____ DATE 12/28/89 RECEIVED BY 1536 DATE _____

COMPUCHEM # R09679 FILE: C3R09679B13 COMPOUND LIST 495 PAGE
VOLATILE - MEDIUM LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)		DETECT. LIMIT (UG/KG)
234	128	I	BROMOCHLOROMETHANE (IS)	399	49800	50.0			
221	50		CHLOROMETHANE				BDL		120
231	62		VINYL CHLORIDE				BDL		120
220	94		BROMOMETHANE				BDL		120
209	64		CHLOROETHANE				BDL		120
216	96		1,1-DICHLOROETHENE				BDL		62
254	76		CARBON DISULFIDE				BDL		62
252	43		ACETONE (2-PROPANONE)				BDL		120
248	114	I	1,4-DIFLUOROBENZENE (IS)	529	183000	50.0	440		
222	84		METHYLENE CHLORIDE			3.2	~~400~~ J	130	62
226	96		TRANS-1,2-DICHLOROETHENE				BDL		62
214	63		1,1-DICHLOROETHANE				BDL		62
257	43		VINYL ACETATE				BDL		120
237	96		CIS-1,2-DICHLOROETHENE				BDL		62
253	72		2-BUTANONE				BDL		120
211	83		CHLOROFORM				BDL		62
227	97		1,1,1-TRICHLOROETHANE				BDL		62
206	117		CARBON TETRACHLORIDE				BDL		62
203	78		BENZENE			4.6	630 ~~5800~~	D	62
215	62		1,2-DICHLOROETHANE				BDL		62
270	117	I	D5-CHLOROBENZENE (IS)	903	234000	50.0			
229	130		TRICHLOROETHENE				BDL		62
217	63		1,2-DICHLOROPROPANE				BDL		62
212	83		BROMODICHLOROMETHANE				BDL		62
218	75		CIS-1,3-DICHLOROPROPENE				BDL		62
256	43		4-METHYL-2-PENTANONE				BDL	D	1200
225	92		TOLUENE			30.3	1200 ~~3800~~	D	62
250	75		TRANS-1,3-DICHLOROPROPENE				BDL		62
228	97		1,1,2-TRICHLOROETHANE				BDL		62
224	164		TETRACHLOROETHENE				BDL		62
255	43		2-HEXANONE			4.6	~~4.6~~ 630 ~~5800~~ BDL	D	1200
208	129		DIBROMOCHLOROMETHANE				BDL		62
207	112		CHLOROBENZENE				BDL		62
219	106		ETHYLBENZENE			22.4	310 ~~2800~~	D	62
330	106		M,P-XYLENE			40.3	560 ~~5000~~	D	62
239	106		O-XYLENE			29.0	400 ~~2600~~	D	62
251	104		STYRENE			9.5	130 ~~1200~~	D	62
205	173		BROMOFORM				BDL		62
223	83		1,1,2,2-TETRACHLOROETHANE				BDL		62
258	65	S	D4-1,2-DICHLOROETHANE NA#57			55.5	111.%		
247	95	S	BROMOFLUOROBENZENE			46.4	93.%		
233	98	S	D8-TOLUENE NA#59			45.6	91.%		
289	106		XYLENES (TOTAL)			69.3	~~8700~~ 960	D	62

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 1/5/90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
299	96	1,	2-DICHLOROETHENE (TOTAL)				BDL	62
CHECKSUMS: 3979.				1831	466800.	510.7	26955.	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 1/3/90

VOLATILE - MEDIUM LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE NA#57	55.5	50.0	111.	70-121	X	
41	247	BROMOFLUOROBENZENE	46.4	50.0	93.	74-121	X	
42	233	D8-TOLUENE NA#59	45.6	50.0	91.	81-117	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{4.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{LIBRARY ADJUSTMENT} \times \text{DRY WEIGHT FACTOR} \times \frac{10000\ UL}{UL\ USED} =$$

$$\frac{4.0\ G}{4.00\ (G)} \times \frac{1.25}{} \times \frac{\cancel{1.00}\ 1.10}{} \times \frac{10000\ UL}{100.\ UL} = \cancel{125.000}\ 137.5$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

$$\frac{100.\ UL}{UL\ USED} =$$

$$\frac{100.\ UL}{100.\ UL} = 1.0$$

VERSION 8

CORRECTED/REVIEWED BY _____ (GC/MS DATA REVIEWER)

DATE 1/3/90

LABORATORY NOTICE
COMPUCHEM ID # 309679
CLIENT ID # B201A
CASE # 18756

The volatile fraction of this sample was prepared and analyzed as both a Low Level Solid and a Medium Level Solid. The initial analysis of 5 g sample from the Low Level preparation indicated that a Medium Level analysis was necessary in order to bring target compound concentrations into the instrument's analytical range. The analysis of 100 ul of the Medium Level extract proved to be an acceptable dilution. However, the following table of results shows that the concentrations for these analytes did not compare well.

	Reported Concentration, ug/Kg	
Target Compound	5g Low Level	100 ul Medium Level Extract
toluene	720 *	4200
ethylbenzene	420	3100
m,p-xylene	720 *	5600
o-xylene	570	4000
styrene	210	1300

*estimated concentration of saturated compound

We have concluded that these differences are due to a combination of sample inhomogeneity and the difference between the Low Level purge and trap and the Medium Level extraction procedure. In addition, the surrogate D8-toluene failed recovery acceptance criteria in the Low Level analysis due to the presence of a large concentration of the native compound. Secondary ion calculations did not improve the recovery. The data is being reported with reference to this qualifier.

Sarah A Hubbard

Sarah A. Hubbard
Senior Volatile Data Specialist
January 3, 1990

QA Approval #1013
Linda Fowler
Employee #820
Sr. Quality Assurance Specialist
January 4, 1990

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009686C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/27/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	57	U
74-83-9	Bromomethane	57	U
75-01-4	Vinyl Chloride	57	U
75-00-3	Chloroethane	57	U
75-09-2	Methylene Chloride	69	B
67-64-1	Acetone	370	B
75-15-0	Carbon Disulfide	28	U
75-35-4	1,1-Dichloroethene	28	U
75-34-3	1,1-Dichloroethane	28	U
540-59-0	1,2-Dichloroethene (total)	28	U
67-66-3	Chloroform	28	U
107-06-2	1,2-Dichloroethane	28	U
78-93-3	2-Butanone	260	
71-55-6	1,1,1-Trichloroethane	28	U
56-23-5	Carbon Tetrachloride	28	U
108-05-4	Vinyl Acetate	57	U
75-27-4	Bromodichloromethane	28	U
78-87-5	1,2-Dichloropropane	28	U
10061-01-5	cis-1,3-Dichloropropene	28	U
79-01-6	Trichloroethene	28	U
124-48-1	Dibromochloromethane	28	U
79-00-5	1,1,2-Trichloroethane	28	U
71-43-2	Benzene	140	
10061-02-6	Trans-1,3-Dichloropropene	28	U
75-25-2	Bromoform	28	U
108-10-1	4-Methyl-2-Pentanone	71	
591-78-6	2-Hexanone	1600	BE
127-18-4	Tetrachloroethene	28	U
79-34-5	1,1,2,2-Tetrachloroethane	28	U
108-88-3	Toluene	1600	E
108-90-7	Chlorobenzene	28	U
100-41-4	Ethylbenzene	980	
100-42-5	Styrene	540	
1330-20-7	Total Xylenes	3300	E

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009686C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/27/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS;
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	11.04	500	J
2.		METHYLESTERPENTENOIC ACID +	13.45	1400	J
3.		UNKNOWN	14.09	1100	J
4.	110-43-0	2-HEPTANONE	14.27	1400	J
5.		UNKNOWN	14.42	910	J
6.		UNKNOWN	14.55	1100	J
7.	100-66-3	BENZENE,METHOXY-	14.72	2300	J
8.		UNKNOWN	15.35	500	J
9.		ETHYLMETHYLBENZENE + UNKNOWN	15.60	5400	J
10.	611-14-3	BENZENE,1-ETHYL-2-METHYL-	16.07	1500	J

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009686C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/27/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	57	U
74-83-9	Bromomethane	57	U
75-01-4	Vinyl Chloride	57	U
75-00-3	Chloroethane	57	U
75-09-2	Methylene Chloride	69	B
67-64-1	Acetone	370	B
75-15-0	Carbon Disulfide	28	U
75-35-4	1,1-Dichloroethene	28	U
75-34-3	1,1-Dichloroethane	28	U
540-59-0	1,2-Dichloroethene (total)	28	U
67-66-3	Chloroform	28	U
107-06-2	1,2-Dichloroethane	28	U
78-93-3	2-Butanone	260	
71-55-6	1,1,1-Trichloroethane	28	U
56-23-5	Carbon Tetrachloride	28	U
108-05-4	Vinyl Acetate	57	U
75-27-4	Bromodichloromethane	28	U
78-87-5	1,2-Dichloropropane	28	U
10061-01-5	cis-1,3-Dichloropropene	28	U
79-01-6	Trichloroethene	28	U
124-48-1	Dibromochloromethane	28	U
79-00-5	1,1,2-Trichloroethane	28	U
71-43-2	Benzene	140	
10061-02-6	Trans-1,3-Dichloropropene	28	U
75-25-2	Bromoform	28	U
108-10-1	4-Methyl-2-Pentanone	71	
591-78-6	2-Hexanone	1600	BE
127-18-4	Tetrachloroethene	28	U
79-34-5	1,1,2,2-Tetrachloroethane	28	U
108-88-3	Toluene	1600	E
108-90-7	Chlorobenzene	28	U
100-41-4	Ethylbenzene	980	
100-42-5	Styrene	540	
1330-20-7	Total Xylenes	3300	E

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009686C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/27/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	11.04	500	J
2.		METHYLESTERPENTENOIC ~~AICD~~ +	13.45	1400	J
3.		UNKNOWN	14.09	1100	J
4.	110-43-0	2-HEPTANONE	14.27	1400	J
5.		UNKNOWN	14.42	910	J
6.		UNKNOWN	14.55	1100	J
7.	100-66-3	BENZENE,METHOXY-	14.72	2300	J
8.		UNKNOWN	15.35	500	J
9.		ETHYLMETHYLBENZENE + UNKNOWN	15.60	5400	J
10.	611-14-3	BENZENE,1-ETHYL-2-METHYL-	16.07	1500	J

COMPUCHEM LABS

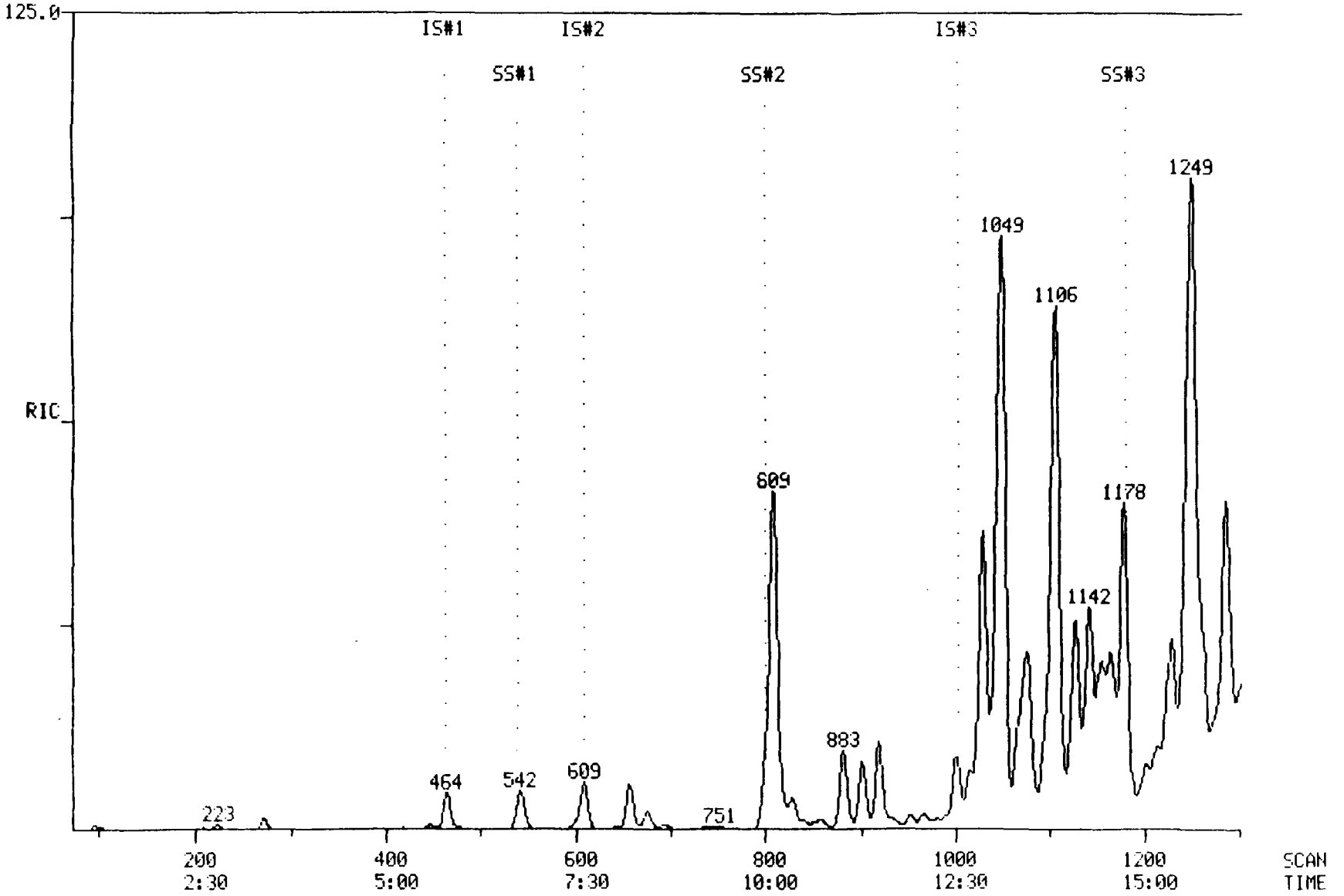
RIC COMPUCHEM DATA: GR009686C19 SCANS 73 TO 1300

12/27/89 5:39:00

SAMPLE: 1G CC#309686 CASE#18756.7 EPA#8201B ON#19

CONDS.:

956160.



GUANTITATION REPORT FILE: GR009686C19
DATA: GR009686C19.TI
12/27/89 5:39:00.
SAMPLE: 1G CC#309685 CASE#18756 7 EPA#B201B ON#19
CONDS.:
SUBMITTED BY 19 ANALYST: 1422

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
2	221 CHLOROMETHANE <74-87-3> RO#2
3	231 VINYL CHLORIDE <75-01-4> RO#3
4	220 BROMOMETHANE <78-83-9> RO#4
5	209 CHLOROETHANE <75-00-3> RO#5
6	216 1,1-DICHLOROETHENE <75-35-4> RO#8
7	254 CARBON DISULFIDE <75-15-0> RO#9
8	252 ACETONE (2-PROPANONE) <67-64-1> RO#13
9	*249 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
10	222 METHYLENE CHLORIDE <75-09-2> RO#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
12	214 1,1-DICHLOROETHANE <75-34-3> RO#19
13	257 VINYL ACETATE <108-05-4> RO#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
15	253 2-BUTANONE <78-93-3> RO#22
16	211 CHLOROFORM <67-66-2> RO#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
18	206 CARBON TETRACHLORIDE <56-23-5> RO#25
19	203 BENZENE <71-43-2> RO#26
20	215 1,2-DICHLOROETHANE <107-06-2> RO#27
21	*270 D5-CHLOROBENZENE (IS) RO#29
22	229 TRICHLOROETHENE <79-01-6> RO#30
23	217 1,2-DICHLOROPROPANE <78-87-5> RO#31
24	212 BROMODICHLOROMETHANE <75-27-4> RO#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
26	256 4-METHYL-2-PENTANONE <108-01-1> RO#36
27	225 TOLUENE <108-88-3> RO#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
30	224 TETRACHLOROETHENE <127-18-4> RO#41
31	255 2-HEXANONE <591-78-6> RO#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
33	207 CHLOROBENZENE <108-90-7> RO#45
34	219 ETHYLBENZENE <100-41-4> RO#47
35	330 M,P-XYLENE <133-02-7> RO#48
36	239 O-XYLENE <133-02-7> RO#49
37	251 STYRENE <100-42-5> RO#50
38	205 BROMOFORM <75-25-2> RO#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
40	#258 D4-1,2-DICHLOROETHANE RO#57
41	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
42	#233 D8-TOLUENE RO#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	464	5.48	1	1.000	A BB	52467.	50.000 UG/KG	2.69
2	50	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	96	NOT FOUND							
7	76	NOT FOUND							
8	43	223	2:47	1	0.481	A BB	21293.	64.779 UG/KG	3.48
9	114	610	7:37	9	1.000	A BB	198306.	50.000 UG/KG	2.69
10	84	272	3:24	1	0.586	A BB	23058.	12.079 UG/KG	0.65
11	96	NOT FOUND							
12	63	NOT FOUND							
13	43	NOT FOUND							
14	96	NOT FOUND							
15	72	446	5:34	1	0.961	A BB	6558.	46.449 UG/KG	2.50
16	83	NOT FOUND							
17	97	NOT FOUND							
18	117	NOT FOUND							
19	78	544	6:48	9	0.892	A BB	99903.	25.277 UG/KG	1.36
20	62	NOT FOUND							
21	117	1001	12:31	21	1.000	A BB	195114.	50.000 UG/KG	2.69
22	130	NOT FOUND							
23	63	658	8:13	9	1.079	A BB	1872.	1.333 UG/KG	0.07
24	83	NOT FOUND							
25	75	NOT FOUND							
26	43	801	10:01	21	0.800	A BB	17674.	12.528 UG/KG	0.67
27	92	809	10:07	21	0.808	A BB	915382.	279.559 UG/KG	15.03
28	75	NOT FOUND							
29	97	NOT FOUND							
30	164	NOT FOUND							
31	43	920	11:30	21	0.919	A VB	306556.	272.924 UG/KG	14.67
32	129	NOT FOUND							
33	112	NOT FOUND							
34	106	1030	12:52	21	1.029	A BV	369299.	171.818 UG/KG	9.24
35	106	1049	13:07	21	1.048	A VB	1079840.	337.204 UG/KG	18.13
36	106	1104	13:48	21	1.103	A BB	714692.	249.421 UG/KG	13.41
37	104	1108	13:51	21	1.107	A BB	492304.	95.283 UG/KG	5.12
38	173	NOT FOUND							
39	83	NOT FOUND							
40	65	540	6:45	1	1.164	A BB	81903.	47.219 UG/KG	2.54
41	95	1182	14:46	21	1.181	A BB	164551.	49.670 UG/KG	2.67
42	98	800	10:00	21	0.799	A BB	203086.	44.872 UG/KG	2.41

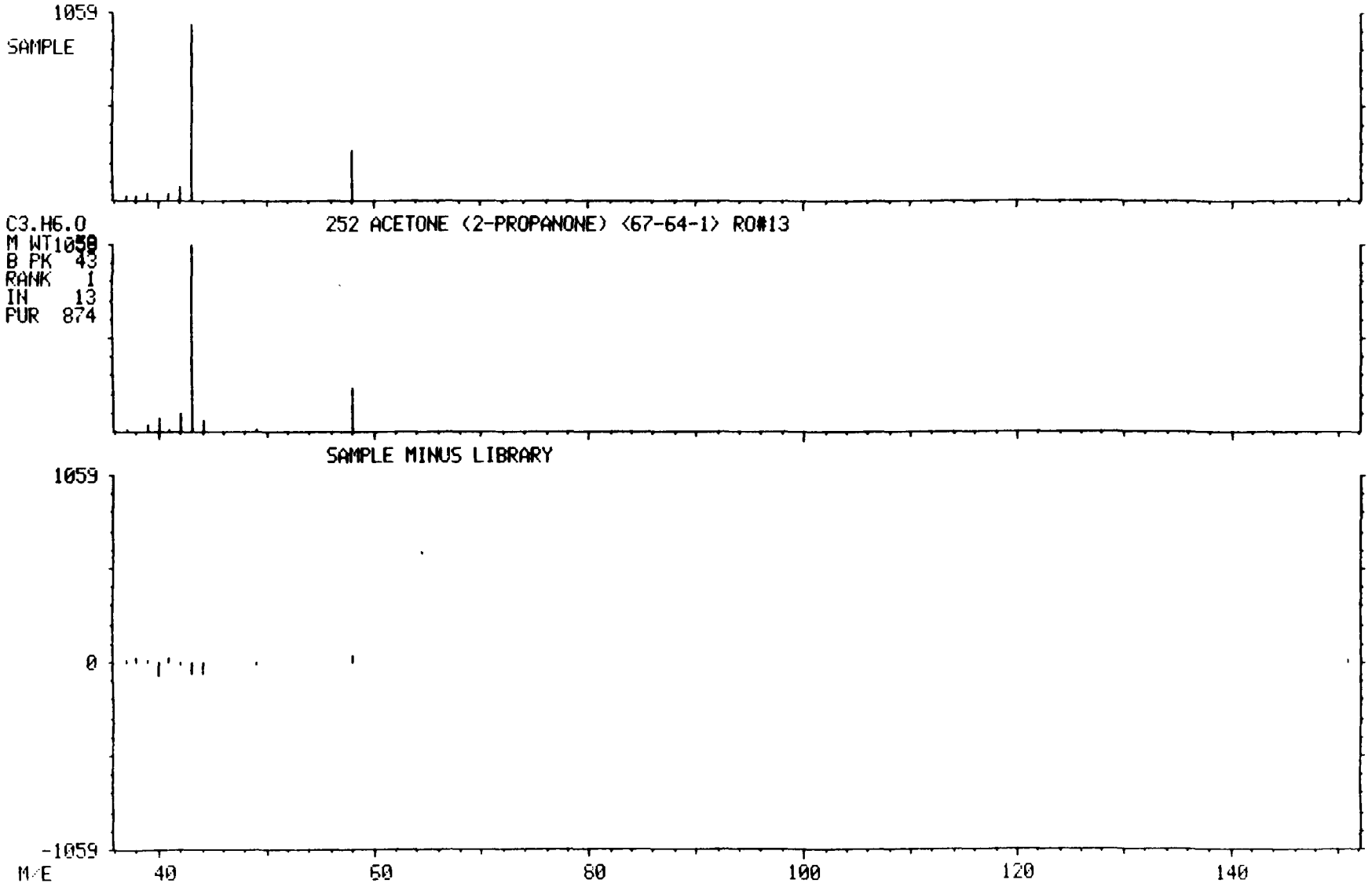
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:55	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:07		10.000			50.00		0.930	
3	1:13		10.000			50.00		1.260	
4	1:31		10.000			50.00		1.632	
5	1:37		10.000			50.00		0.710	
6	2:40		5.000			50.00		1.612	
7	2:50		5.000			50.00		4.085	
8	2.52	0.97	10.000	0.05	64.78	50.00	0.406	0.313	1.30
9	7:42	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	3:28	0.98	5.000	0.12	12.08	50.00	0.439	1.819	0.24
11	3:54		5.000			50.00		1.643	
12	4.36		5.000			50.00		2.402	
13	4:52		10.000			50.00		0.538	
14	5:34		5.000			50.00		1.673	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:41	0.98	10.000	0.10	46.45	50.00	0.125	0.135	0.93
16	6:10		5.000			50.00		3.249	
17	6:19		5.000			50.00		0.880	
18	6:34		5.000			50.00		0.898	
19	6:53	0.99	5.000	0.18	25.28	50.00	0.504	0.997	0.51
20	6:58		5.000			50.00		2.119	
21	12:34	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	8:01		5.000			50.00		0.581	
23	8:21	0.99	5.000	0.22	1.33	50.00	0.009	0.354	0.03
24	8:55		5.000			50.00		0.785	
25	9:41		5.000			50.00		0.771	
26	10:04	0.99	15.000	0.05	12.53	50.00	0.091	0.362	0.25
27	10:10	0.99	5.000	0.16	279.56	50.00	4.692	0.839	5.59
28	10:41		5.000			50.00		0.357	
29	10:57		5.000			50.00		0.407	
30	11:06		5.000			50.00		0.673	
31	11:34	0.99	15.000	0.06	272.92	50.00	1.571	0.288	5.46
32	11:34		5.000			50.00		0.776	
33	12:37		5.000			50.00		1.212	
34	12:55	1.00	5.000	0.21	171.82	50.00	1.893	0.551	3.44
35	13:09	1.00	5.000	0.21	337.20	50.00	5.534	0.821	6.74
36	13:51	1.00	5.000	0.22	249.42	50.00	3.663	0.734	4.99
37	13:54	1.00	5.000	0.22	95.28	50.00	2.523	1.324	1.91
38	14:07		5.000			50.00		0.577	
39	15:15		5.000			50.00		0.655	
40	6:51	0.99	5.000	0.23	47.22	50.00	1.561	1.653	0.94
41	14:49	1.00	5.000	0.24	49.67	50.00	0.843	0.849	0.99
42	10:04	0.99	5.000	0.16	44.87	50.00	1.041	1.160	0.90

COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 2:47
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 # 223
BASE M/E: 43
RIC: 4103.



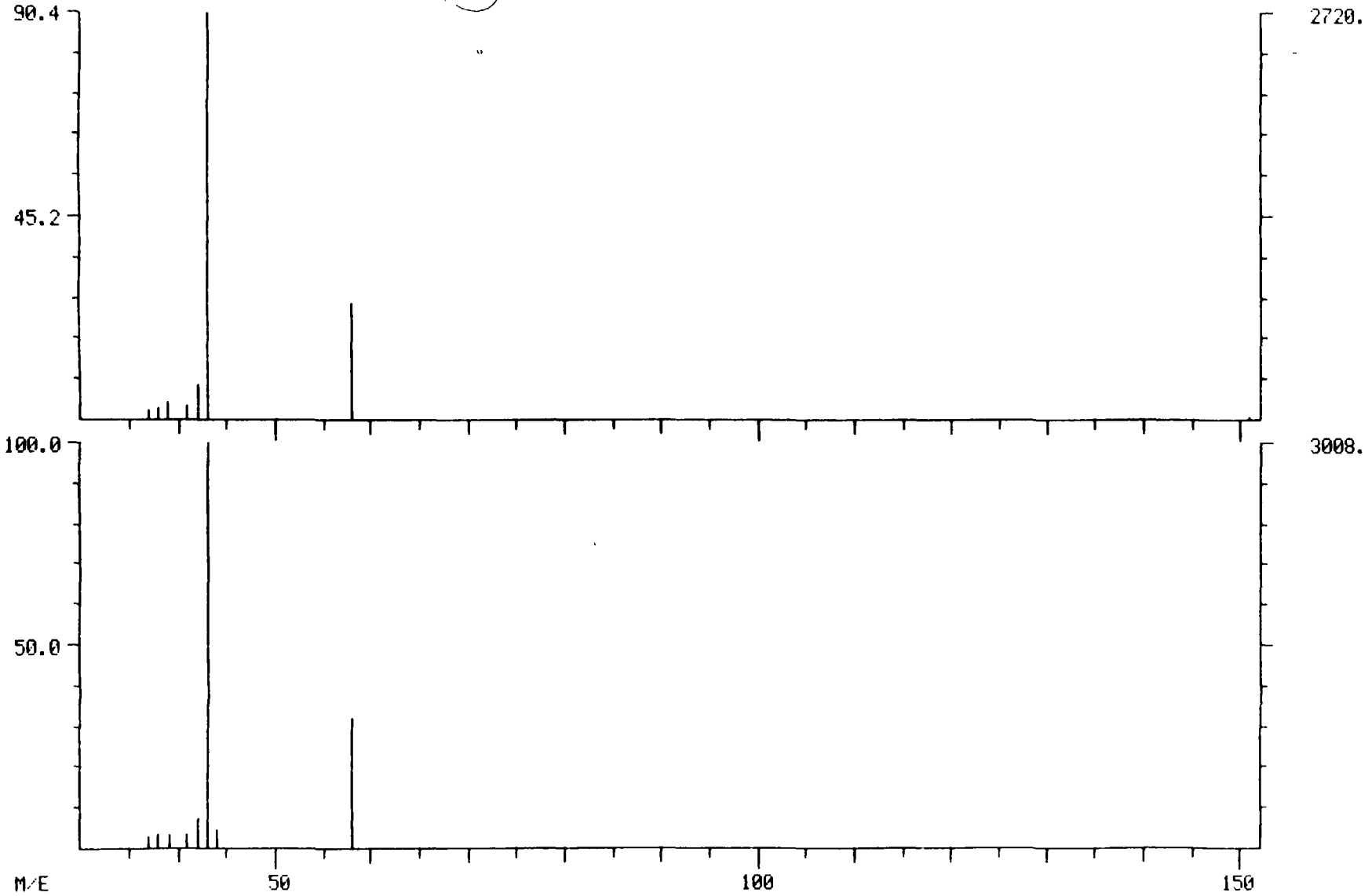
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 2:47
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N)

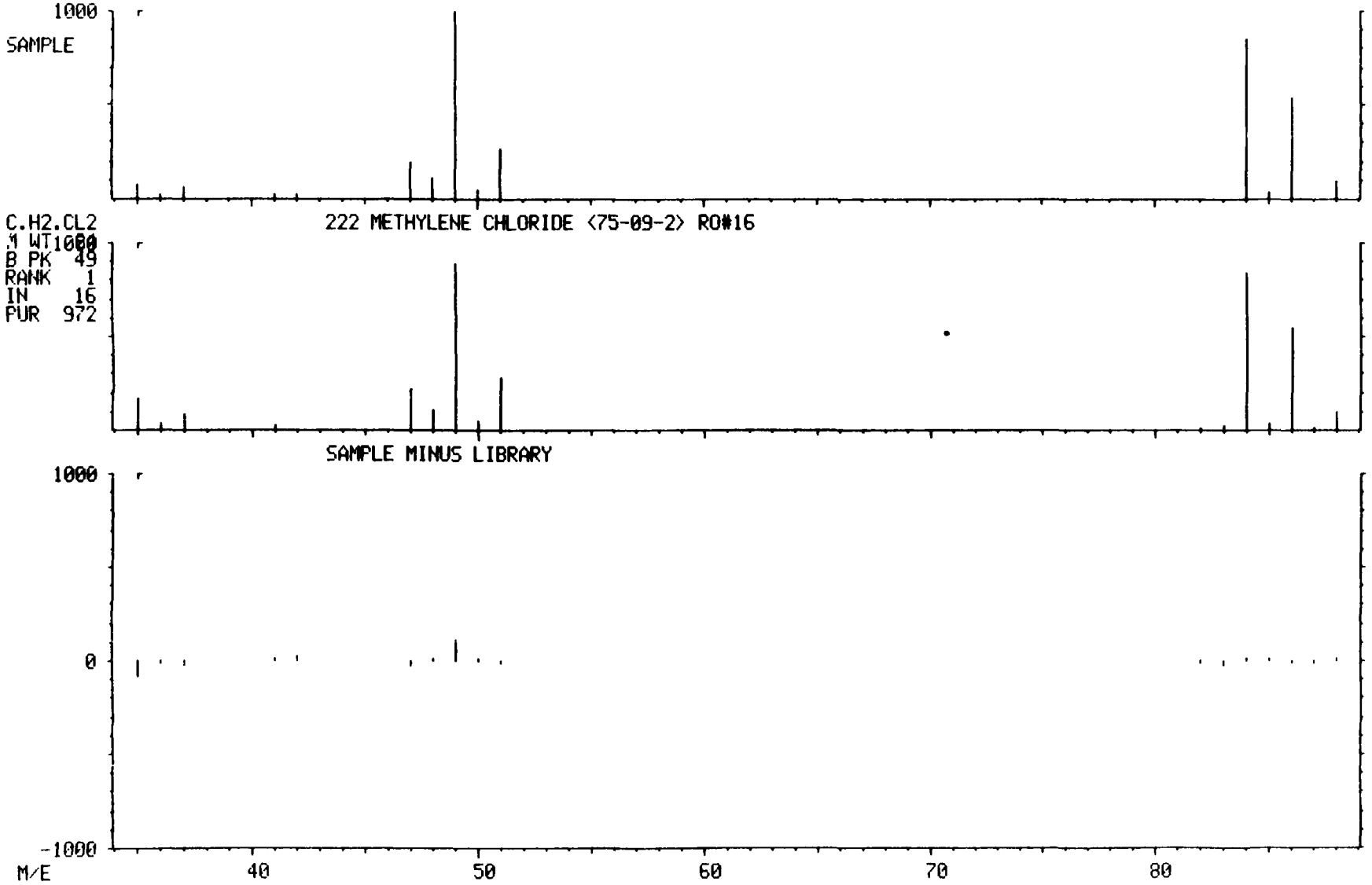
DATA: GR009686C19 #223 BASE M/E: 43/ 43
RIC: 4103./ 4695.

252 ACETONE (2-PROPANONE) (67-64-1) RO#13



COMPUCHEM LABS

LIBRARY SEARCH DATA: GR009686C19 # 272 BASE M/E: 49
12/27/89 5:39:00 + 3:24 RIC: 11711.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

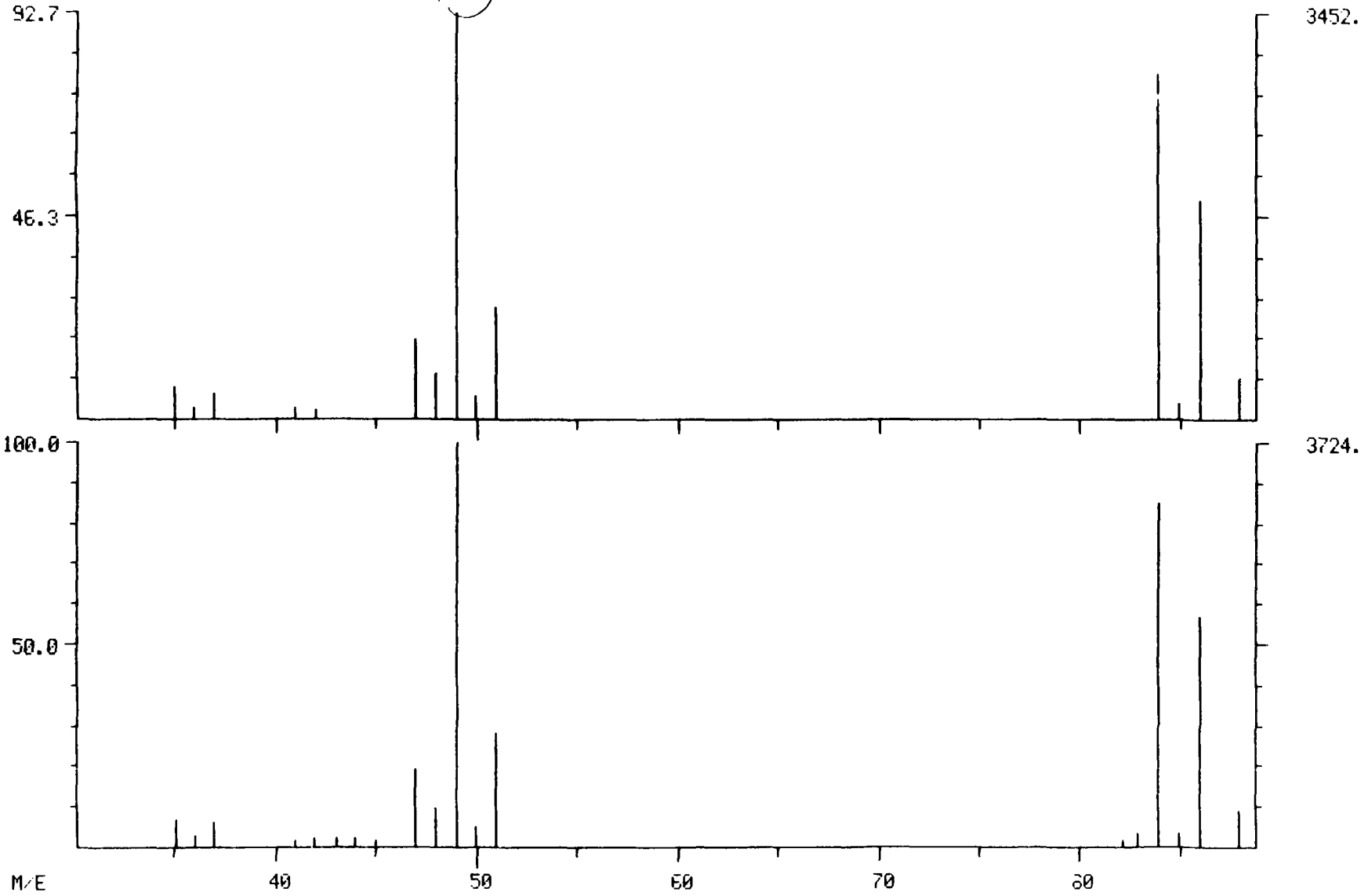


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 3:24
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N)

DATA: GR009686C19 #272 BASE M/E: 49/ 49
RIC: 11711./ 12863.

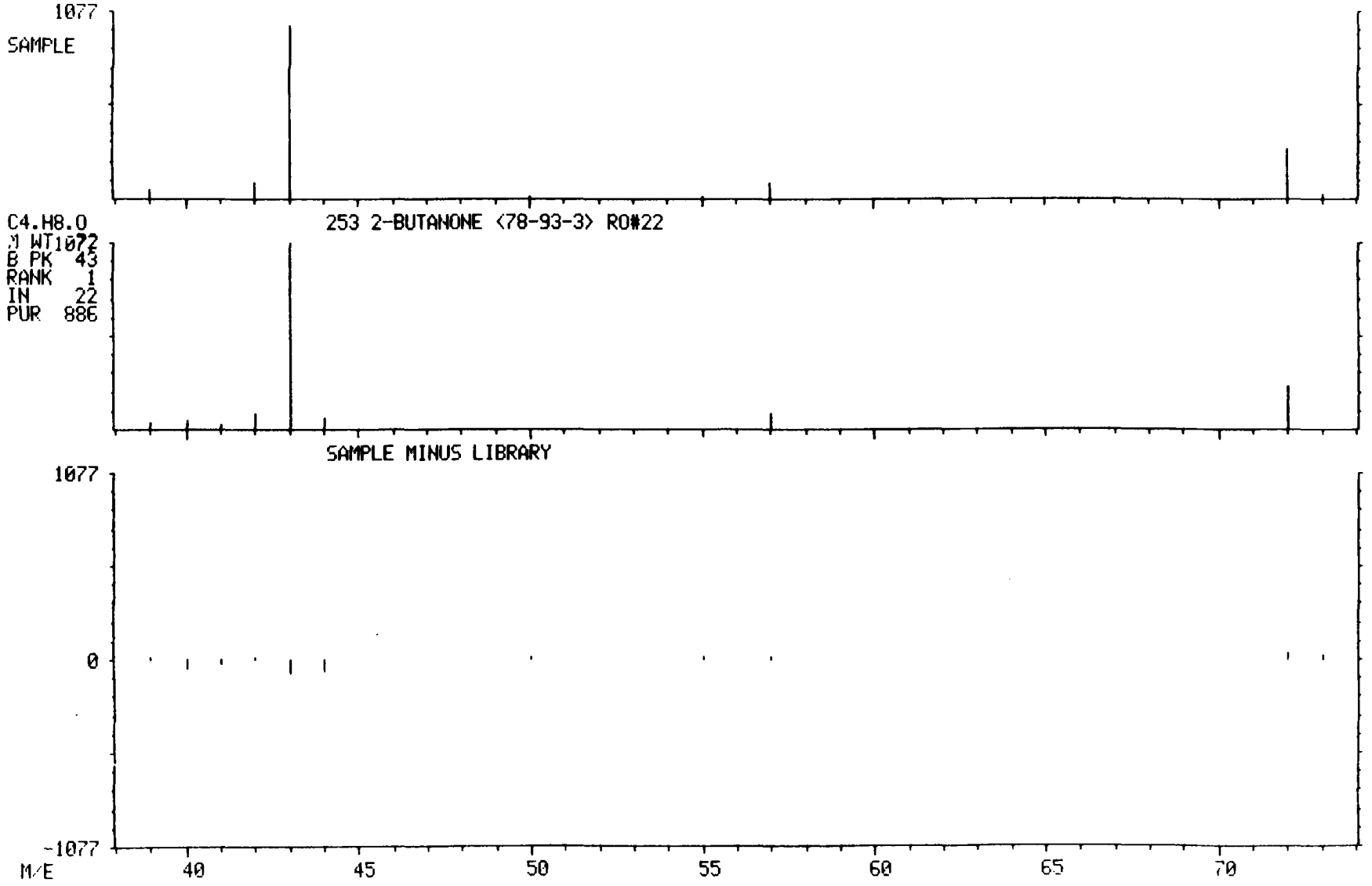
222 METHYLENE CHLORIDE (75-09-2) RO#16



18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH DATA: GR009686C19 # 446 BASE M/E: 43
12/27/89 5:39:00 + 5:34 RIC: 2959.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

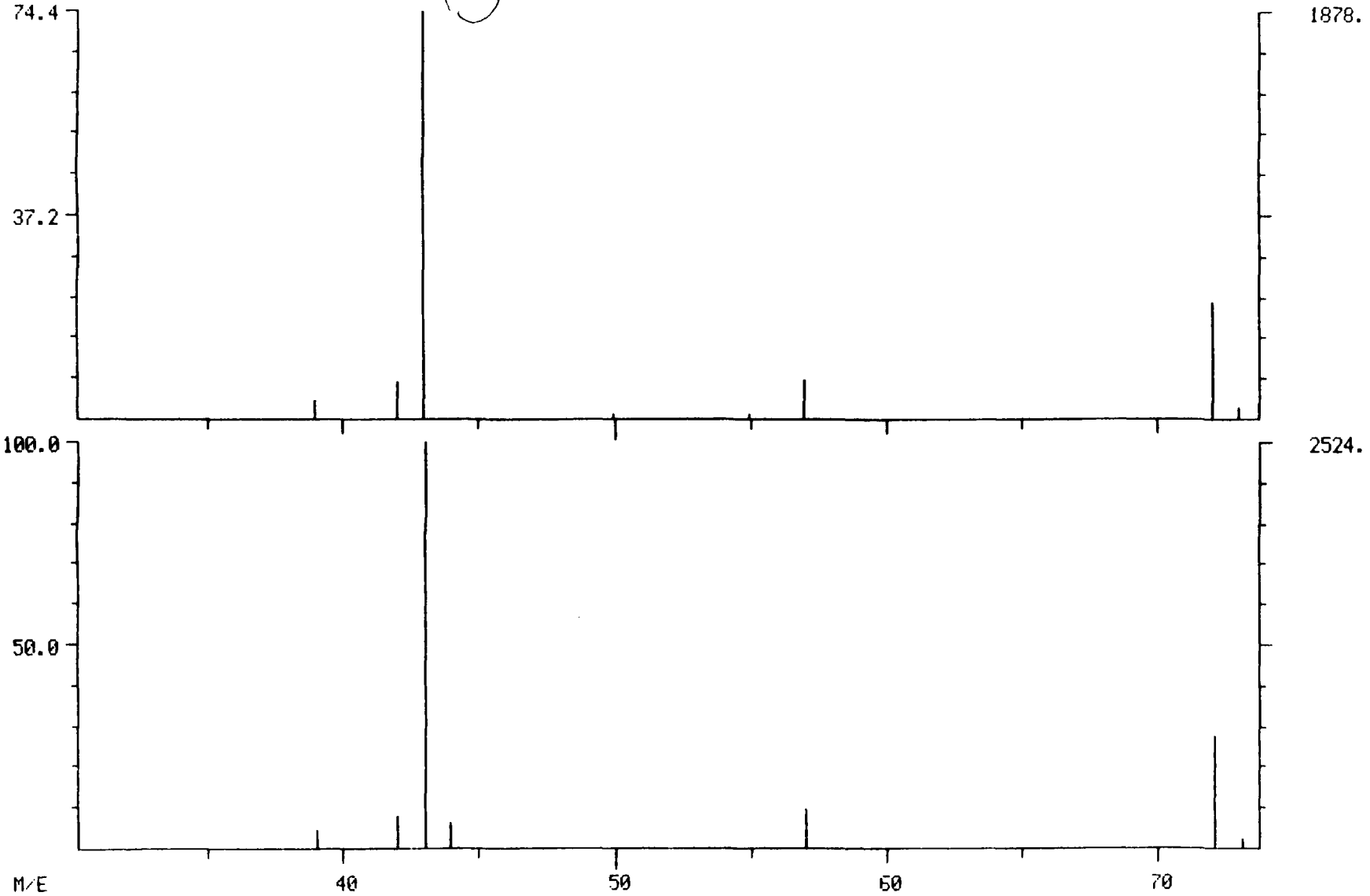


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 5:34
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N)

DATA: GR009686C19 #446 BASE M/E: 43/ 43
RIC: 2959./ 3999.

253 2-BUTANONE <78-93-3> RO#22

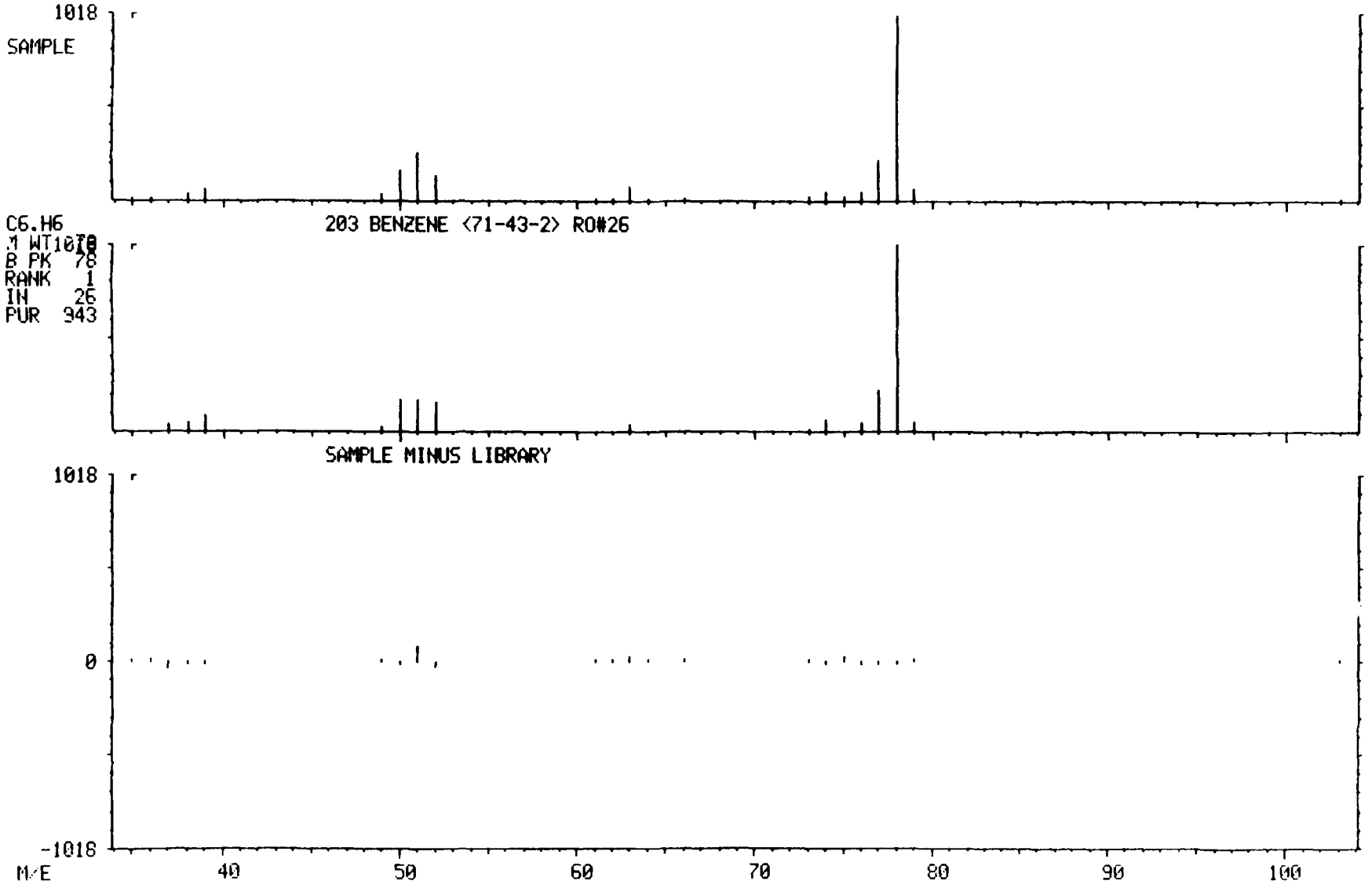


COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 6:48
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR0096BEC19 # 544

BASE M/E: 78
RIC: 21503.

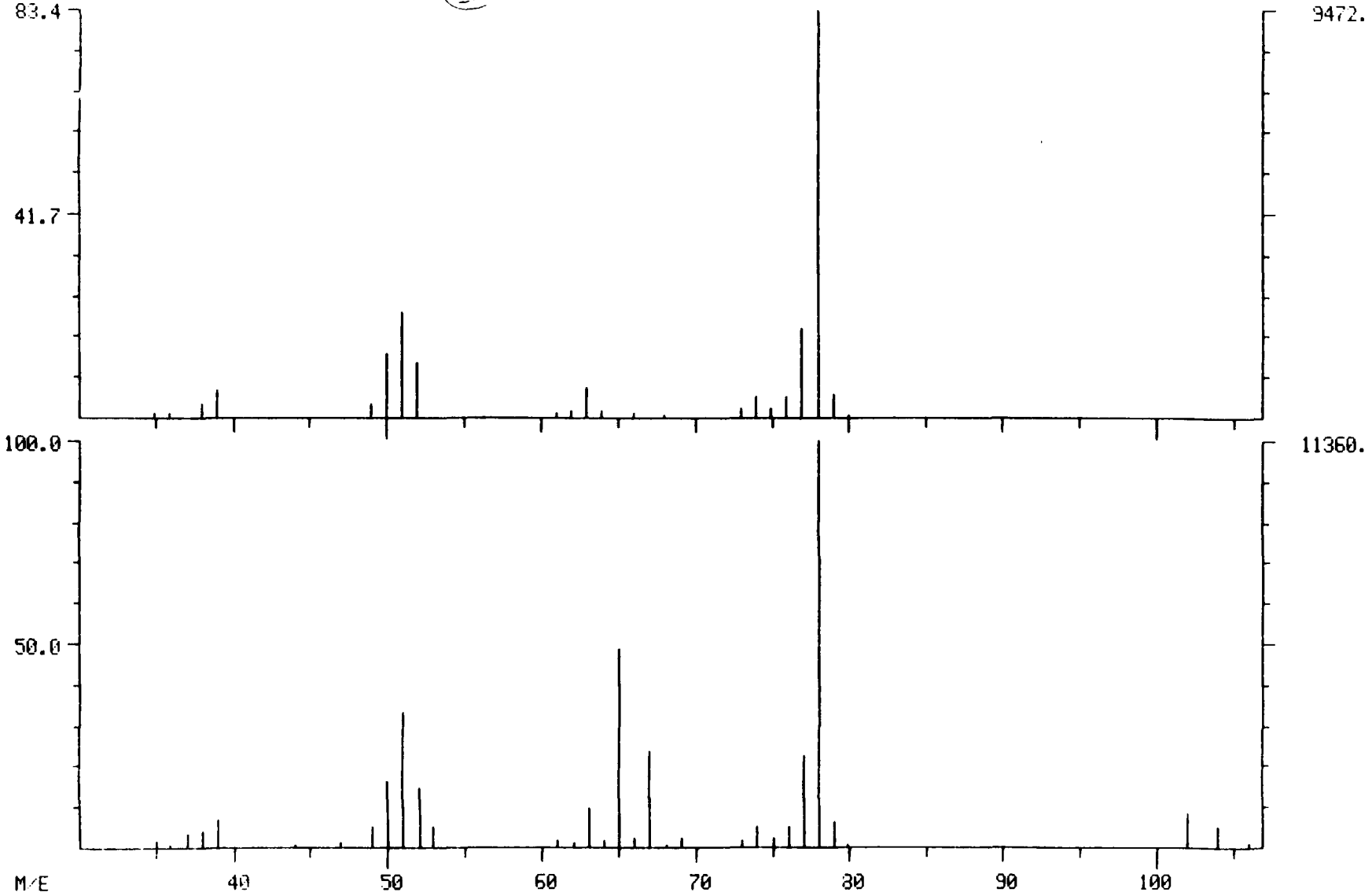


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 6:48
SAMPLE: 1G CC#309686 CASE#16756.7 EPA#B201B ON#19
ENHANCED (S 150 2N) (20) BENZENE (71-43-2) RO#26

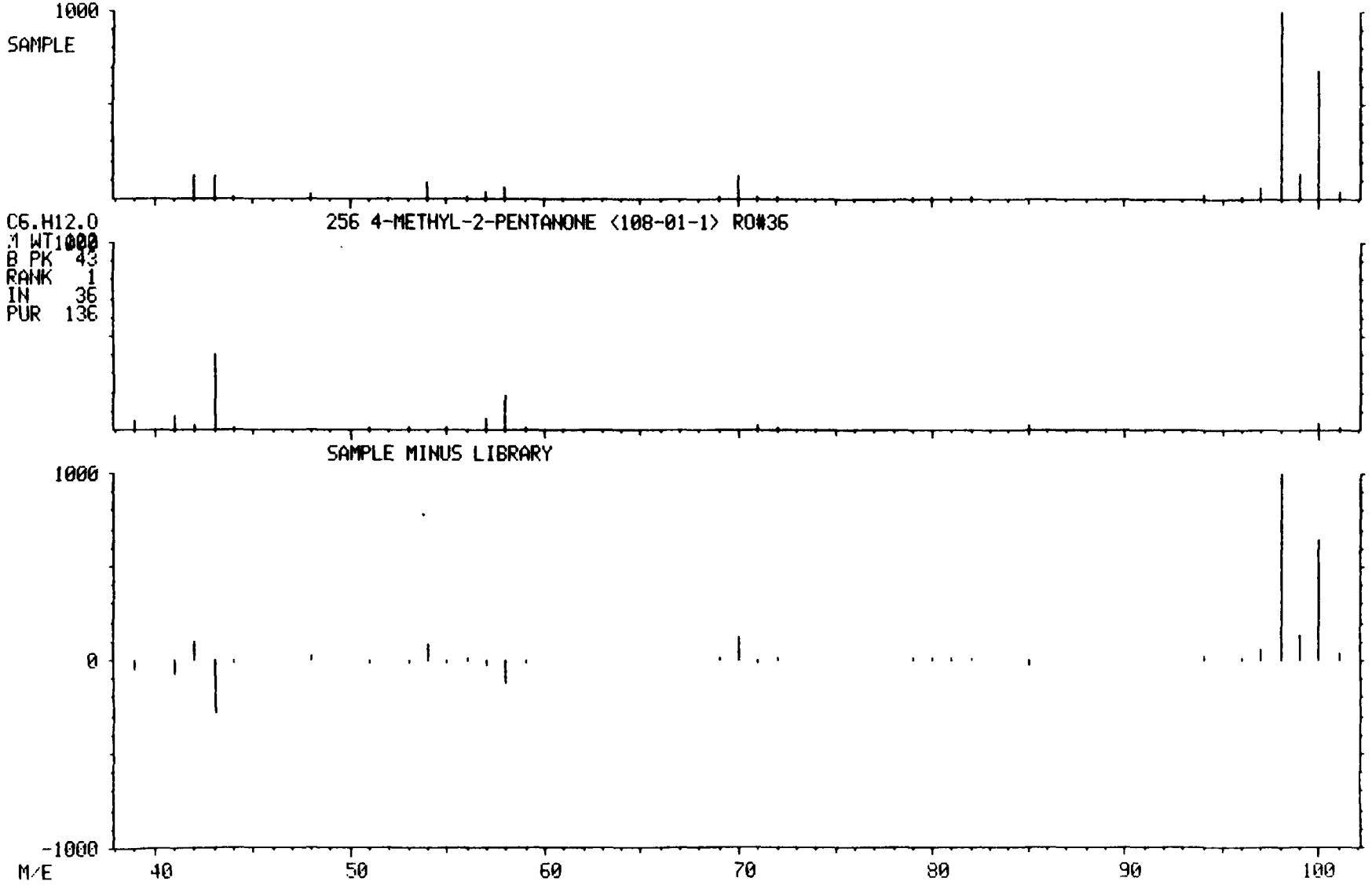
DATA: GR009686C19 #544 BASE M/E: 78/ 78
RIC: 21599./ 38911.



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 10:01
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR00968EC19 # 801
BASE M/E: 98
RIC: 46783.

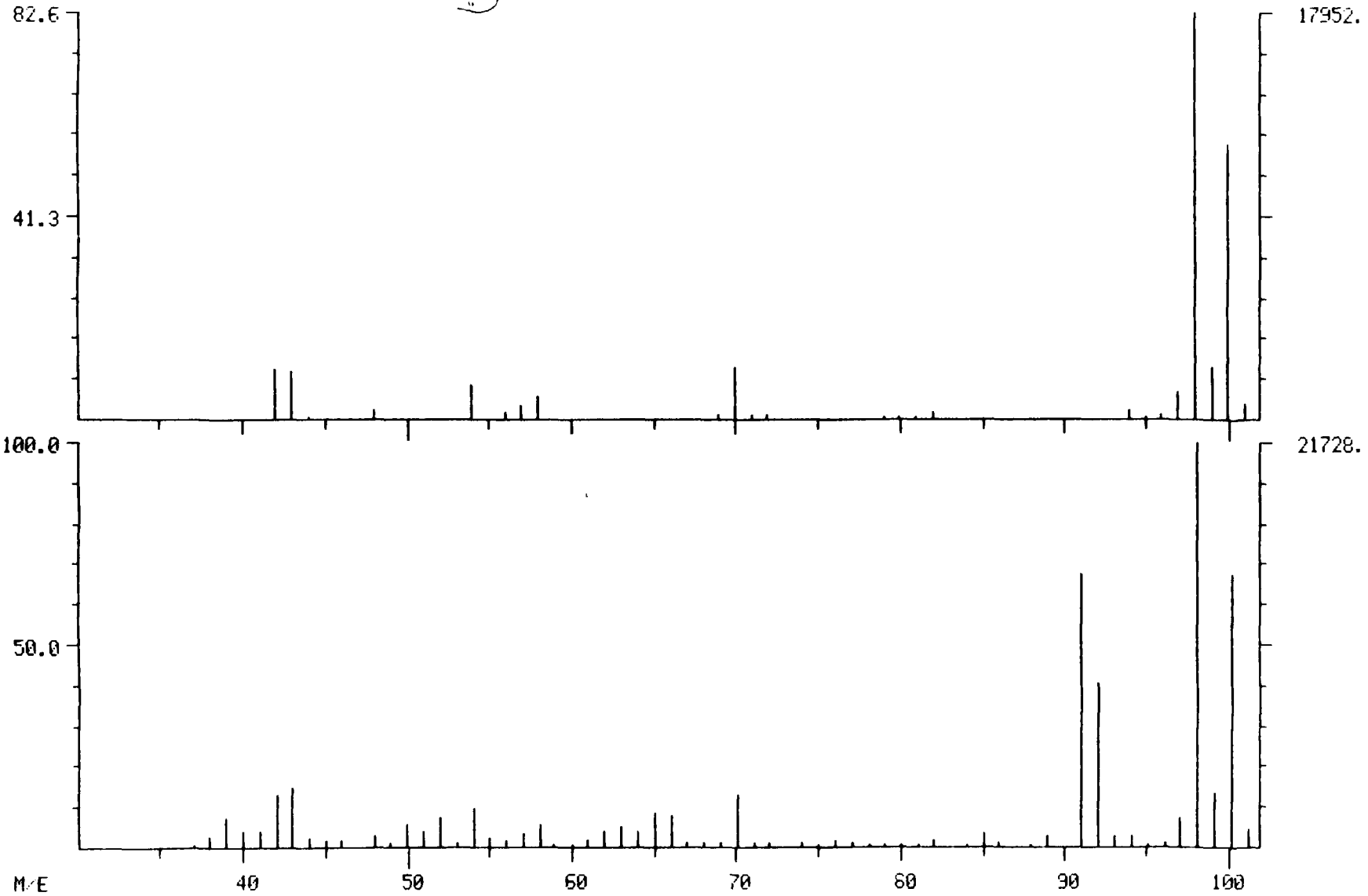


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 10:01
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N)

DATA: GR009686C19 #801 BASE M/E: 98 98
RIC: 46783. 102527.

256 4-METHYL-2-PENTANONE (108-01-1) RO#36

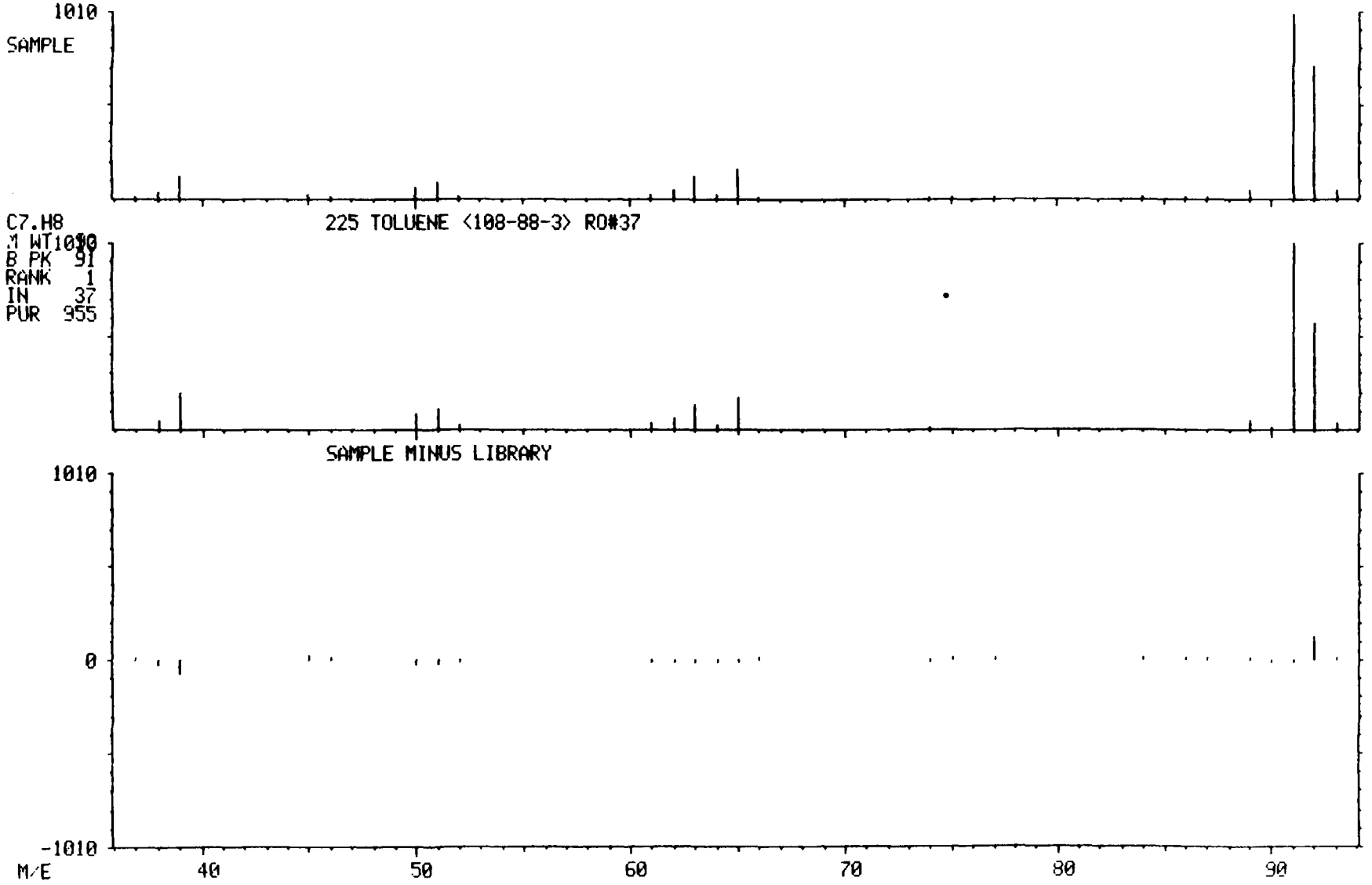


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 10:07
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 # 809
BASE M/E: 91
RIC: 304639.

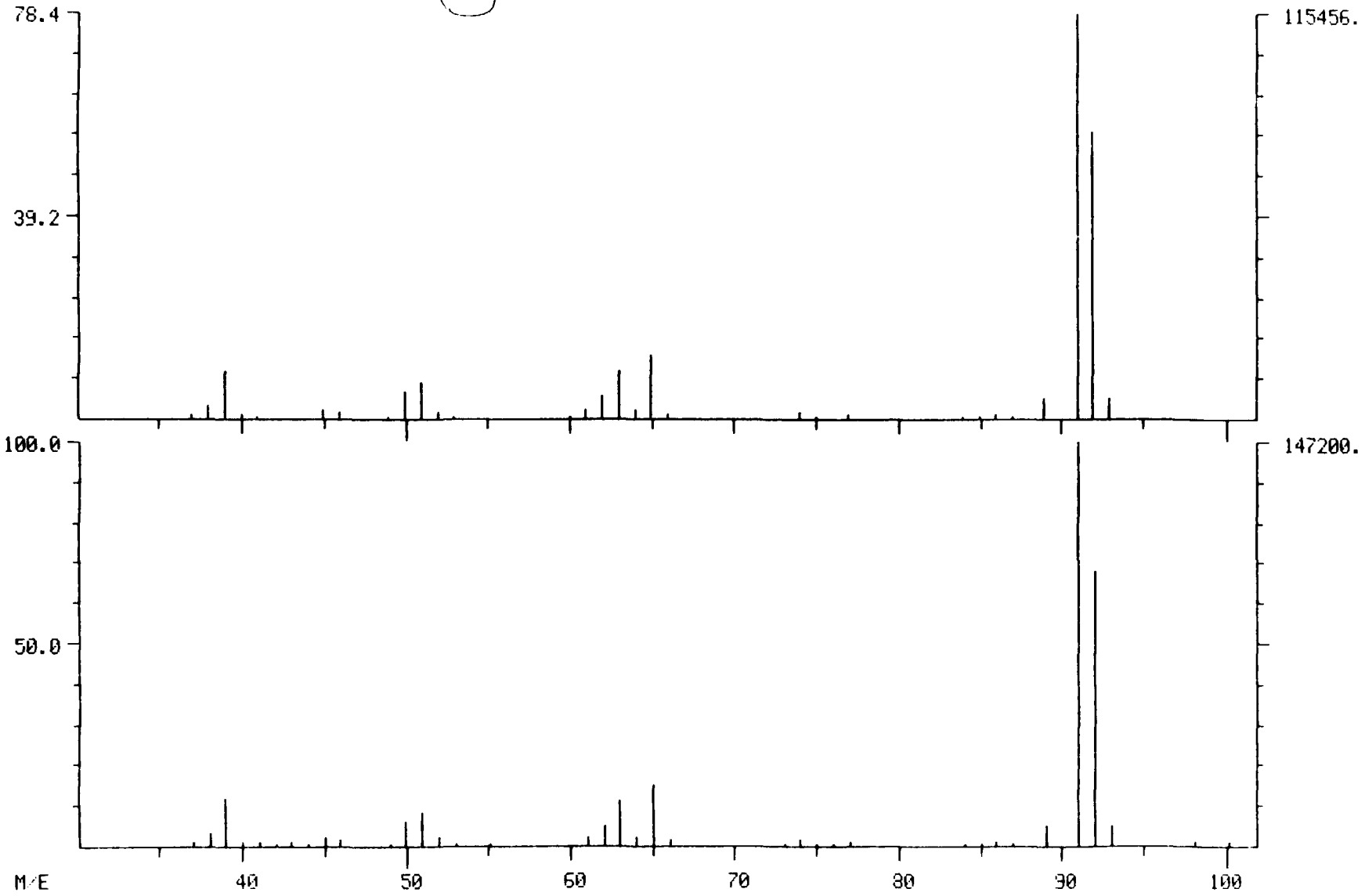


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

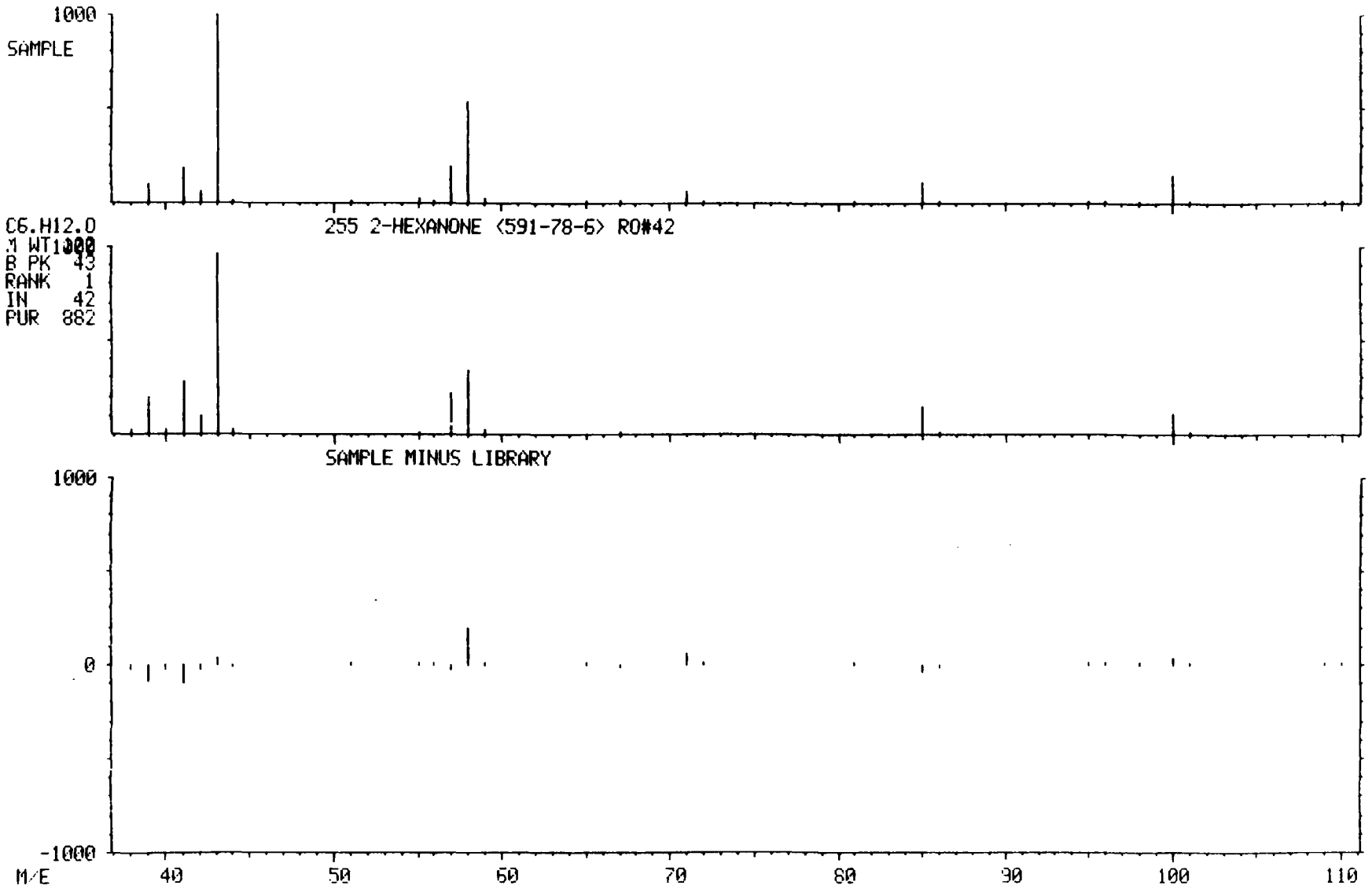
DUAL MASS SPECTRUM
12/27/89 5:39:00 + 10:07
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N) 225 TOLUENE (108-88-3) RO#37

DATA: GR009686C19 #809 BASE M/E: 91/ 91
RIC: 309247./ 398335.



COMPUCHEM LABS

LIBRARY SEARCH DATA: GR009686C19 # 320 BASE M/E: 43
12/27/89 5:39:00 + 11:30 RIC: 77439.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

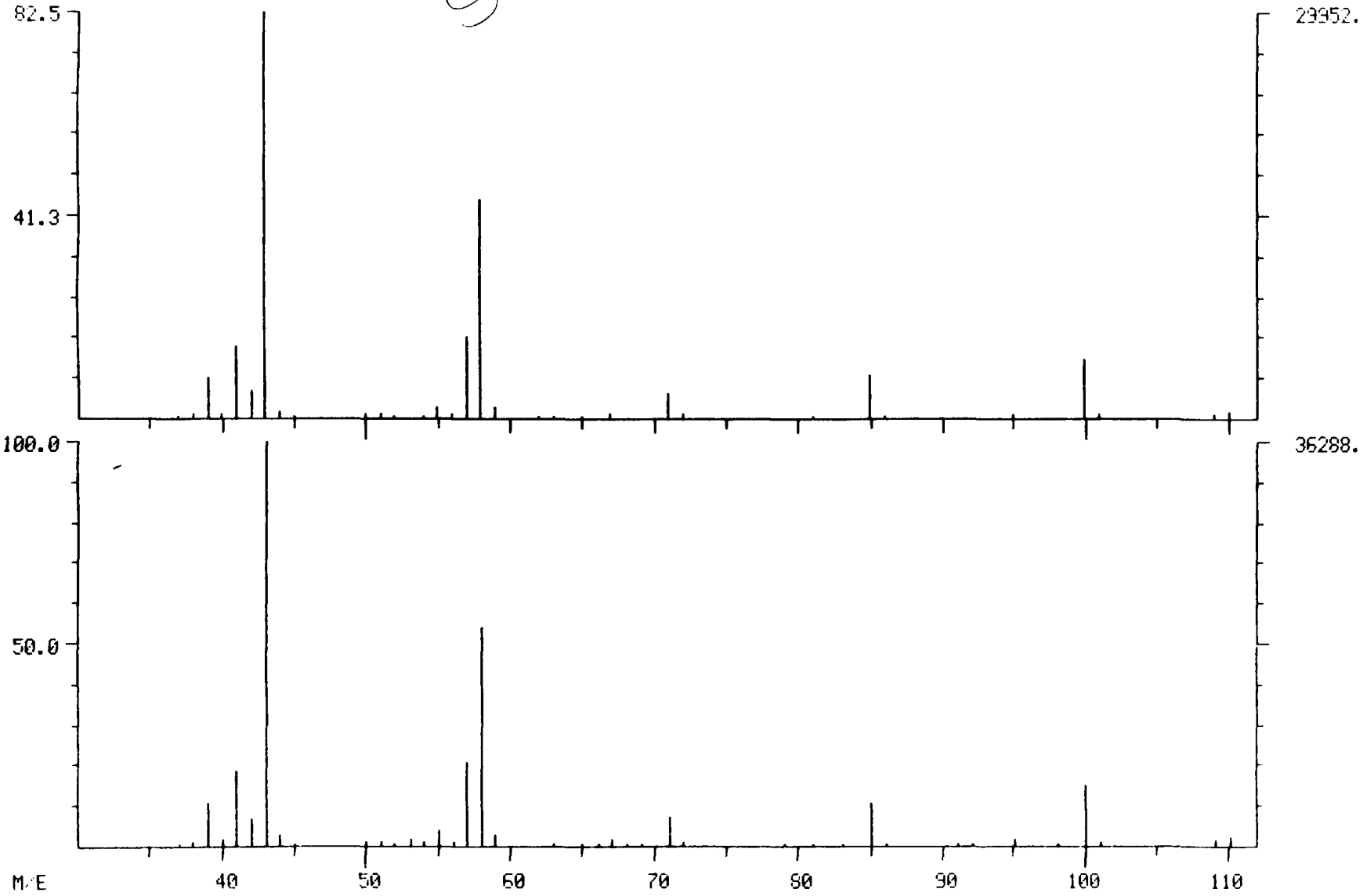


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 11:30
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N)

DATA: GR009686C19 #920 BASE M/E: 43/ 43
RIC: 79359./ 102271.

255 2-HEXANONE <591-78-6> RO#42

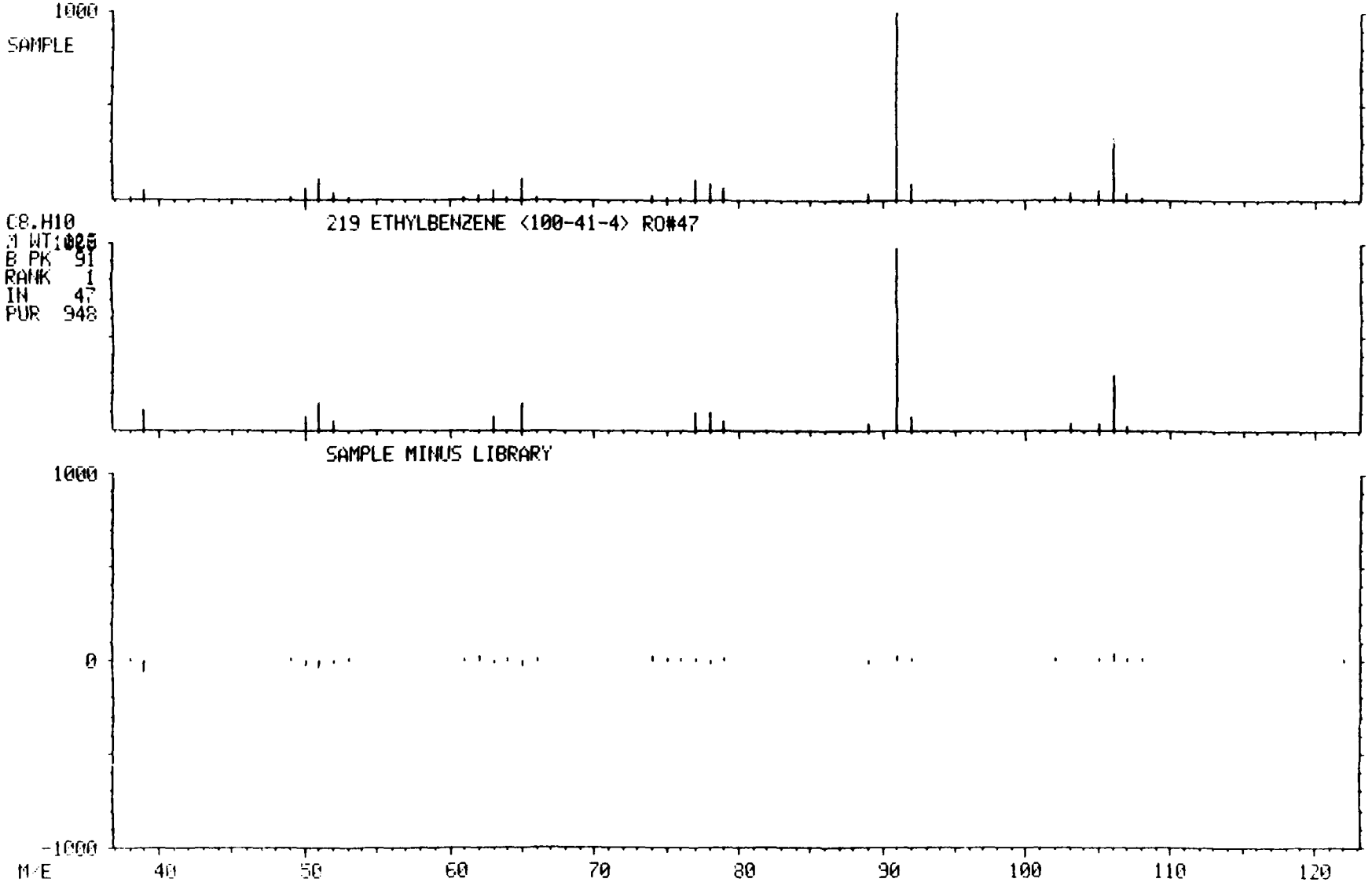


COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 12:52
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 #1030

BASE M/E: 91
RIC: 247551.

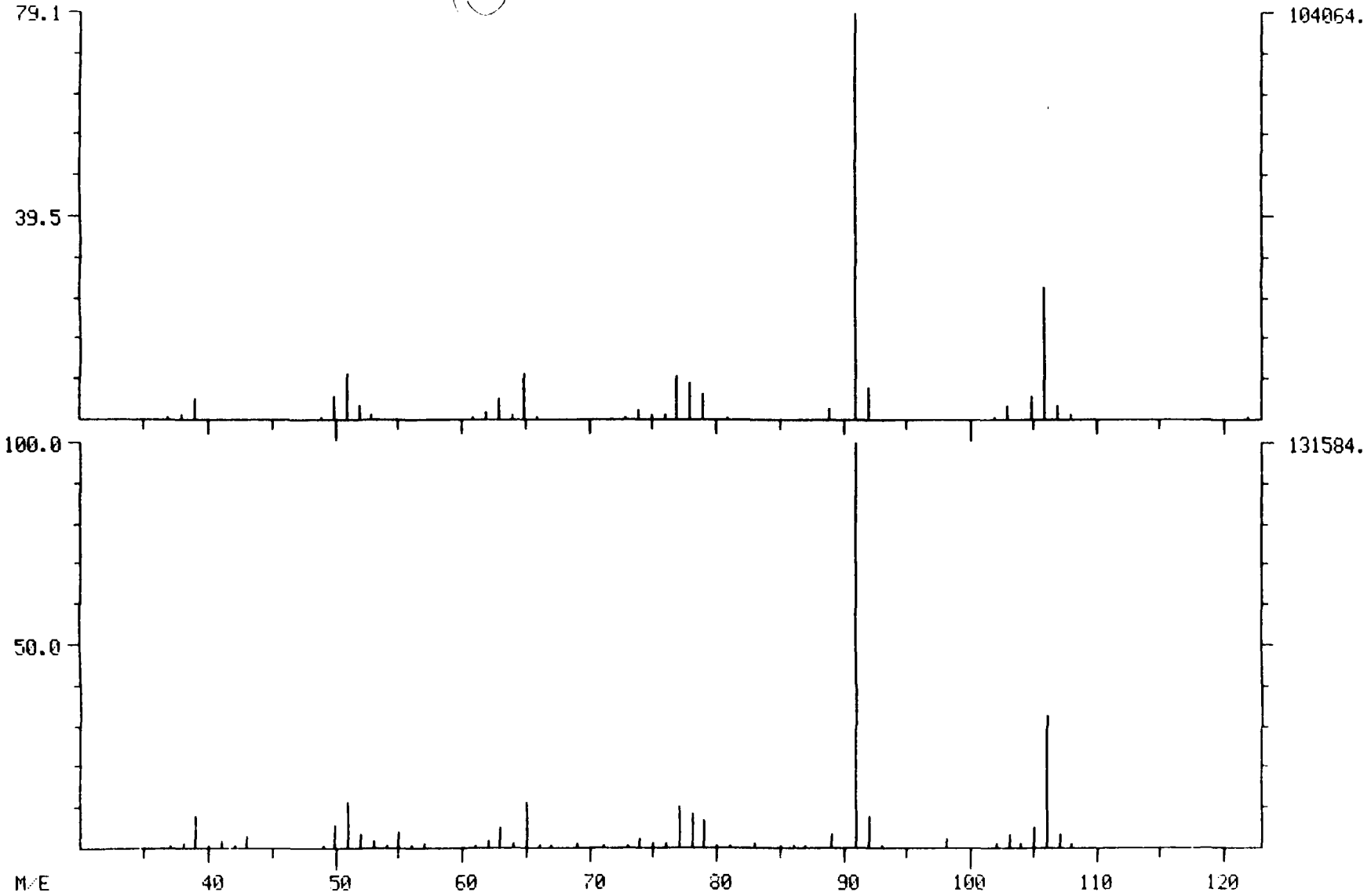


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 12:52
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N)

DATA: GR00968EC19 #1030 BASE M/E: 91/ 91
RIC: 249599./ 348671.

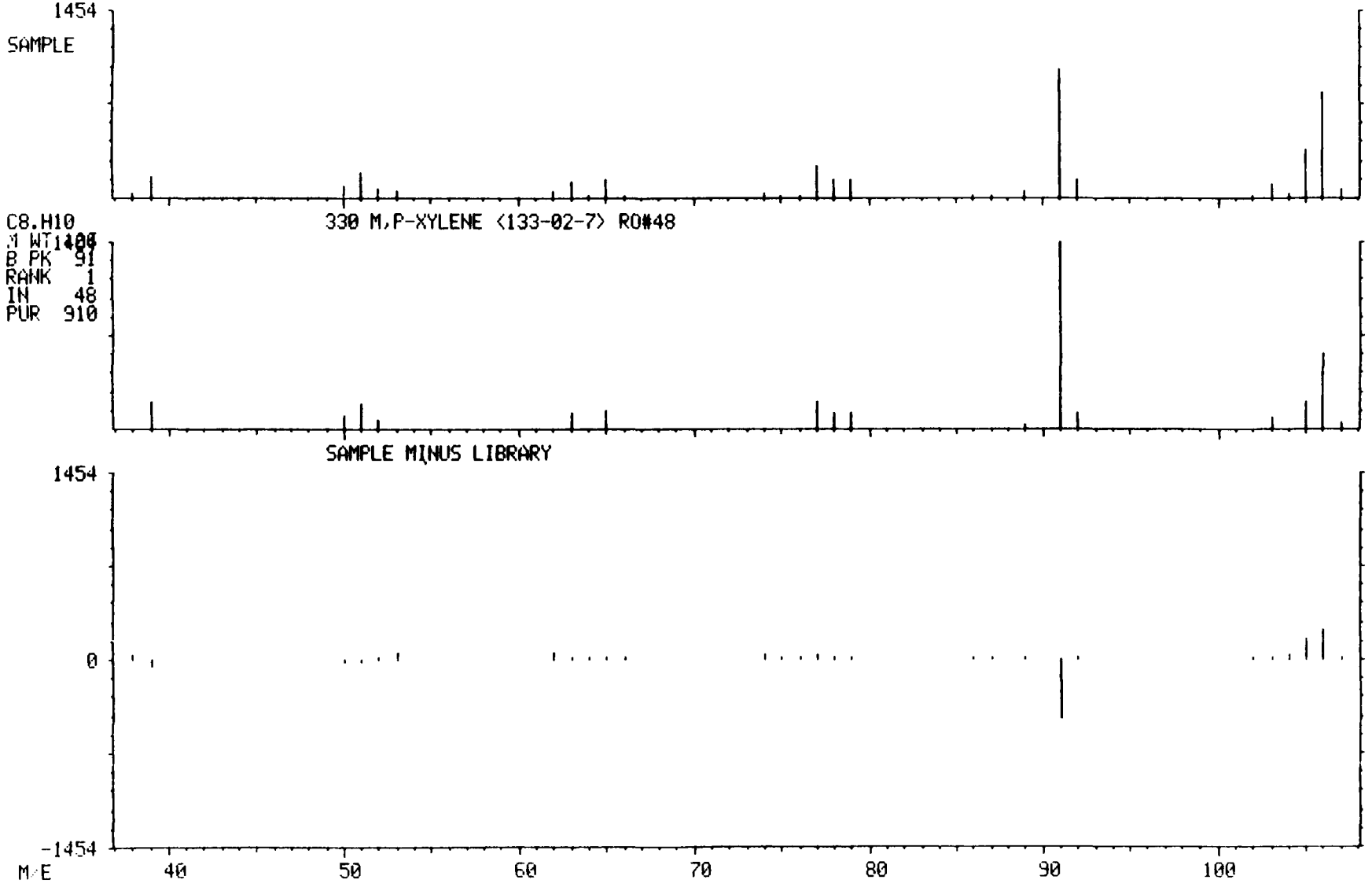
219 ETHYLBENZENE (100-41-4) RO#47



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 13:07
SAMPLE: 1G CC#309666 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 #1049
BASE M/E: 91
RIC: 475647.

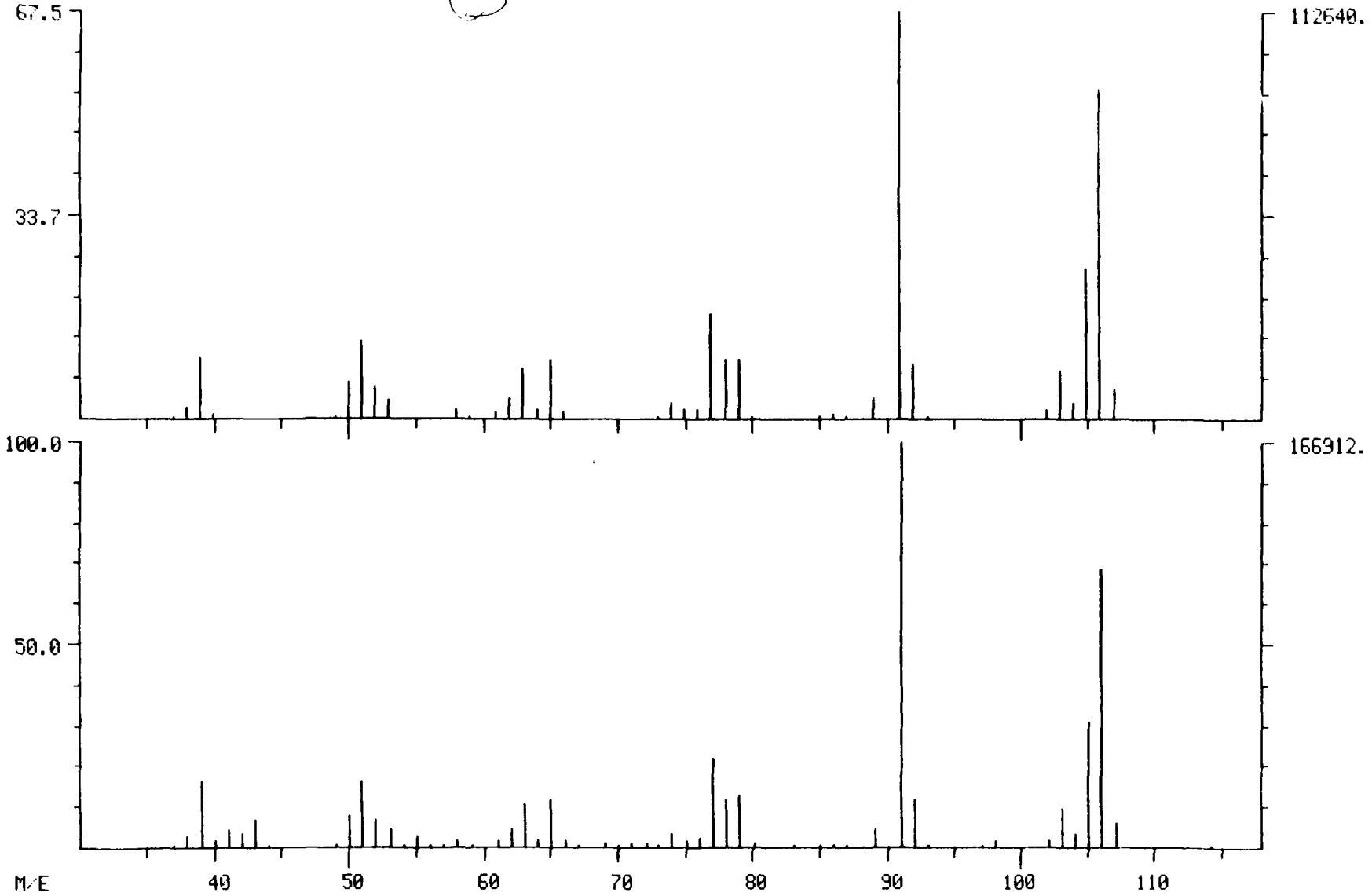


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 13:07
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N) 330 M,P-XYLENE (133-02-7) RO#48

DATA: GR009686C19 #1049 BASE M/E: 91/ 91
RIC: 486399./ 696319.

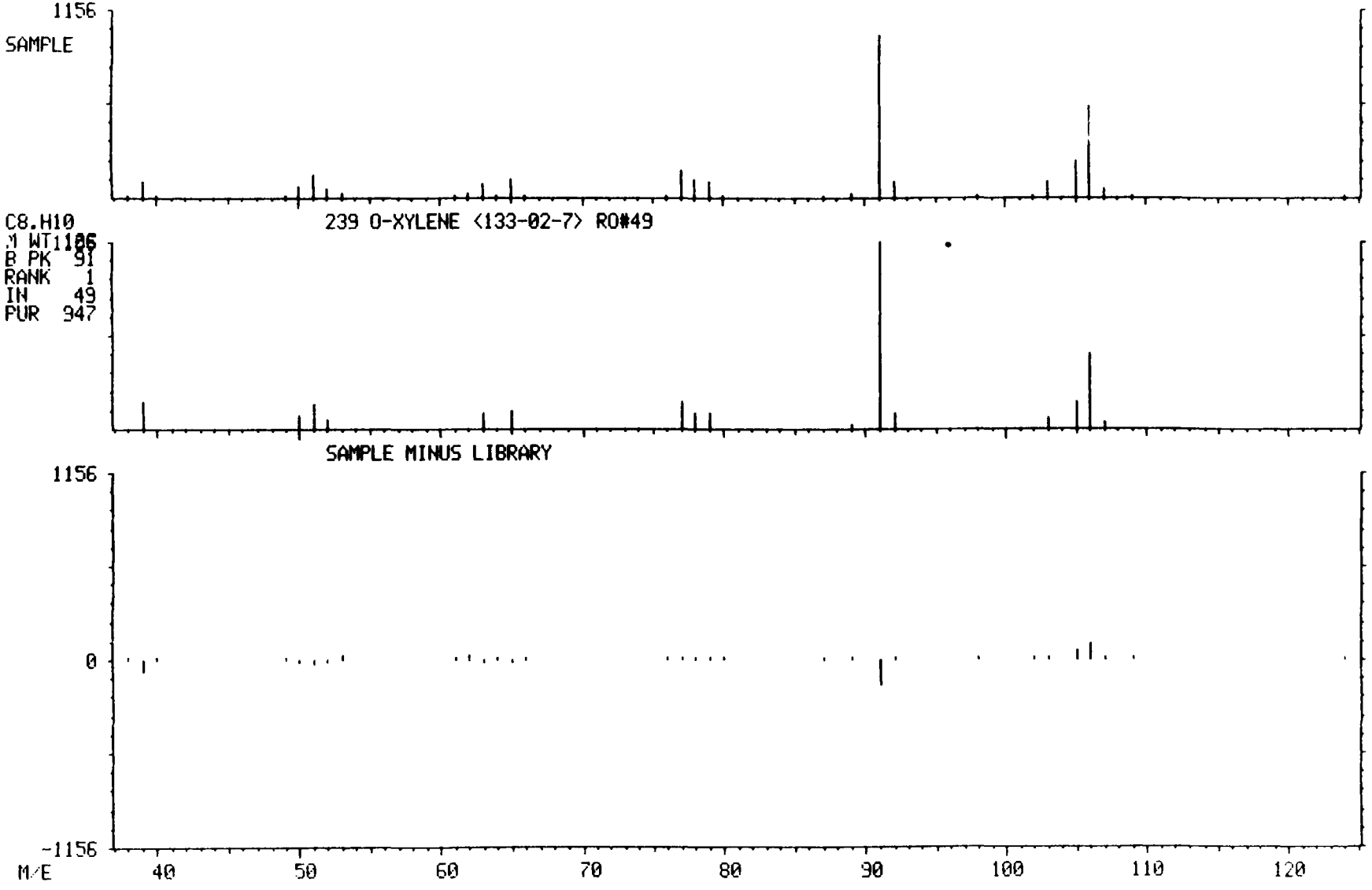


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 13:48
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 #1104
BASE M/E: 91
RIC: 342527.

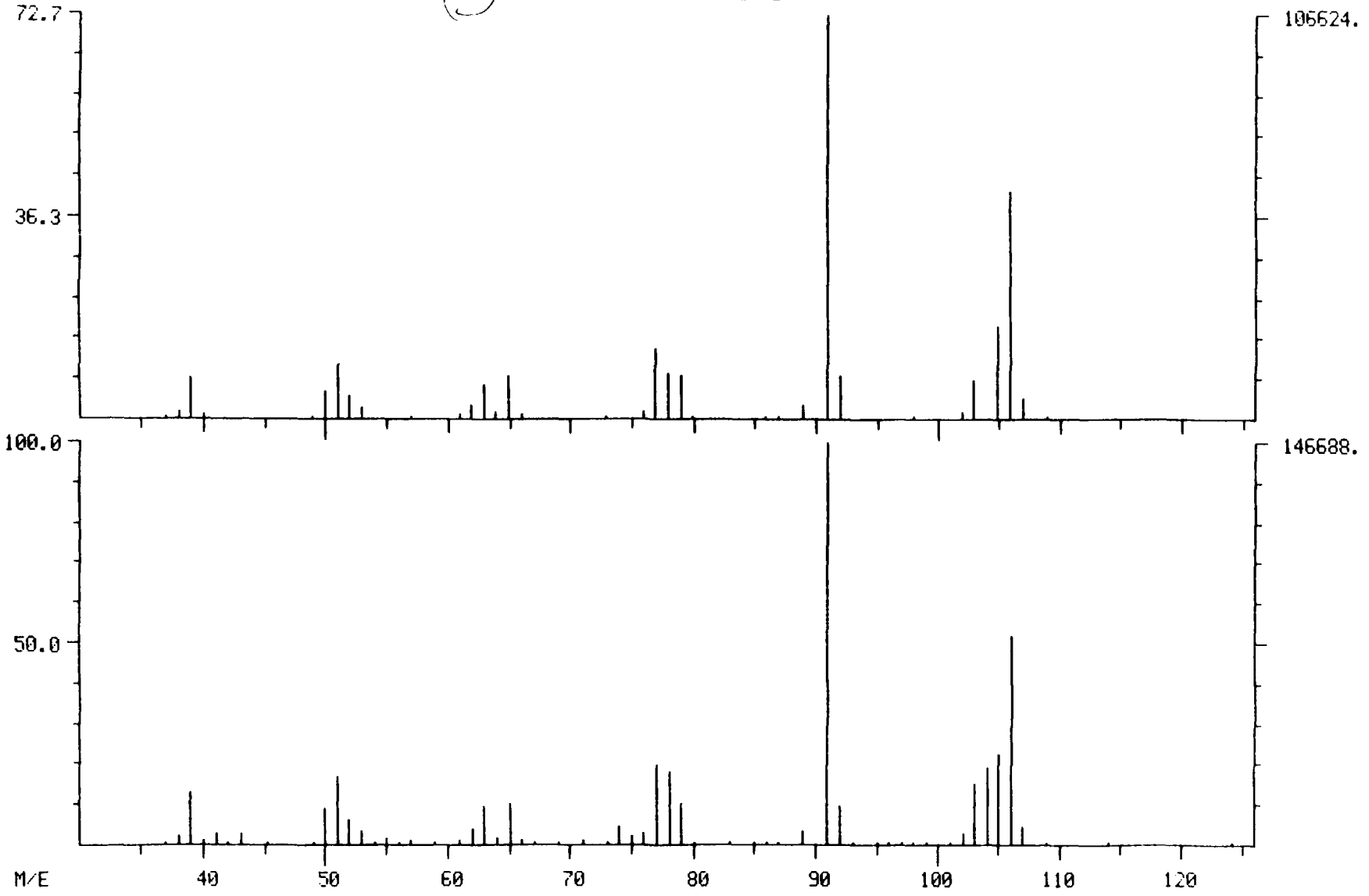


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 5:39:00 + 13:48
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#8201B ON#19
ENHANCED (S 15B 2N) 239 O-XYLENE <133-02-7> RO#49

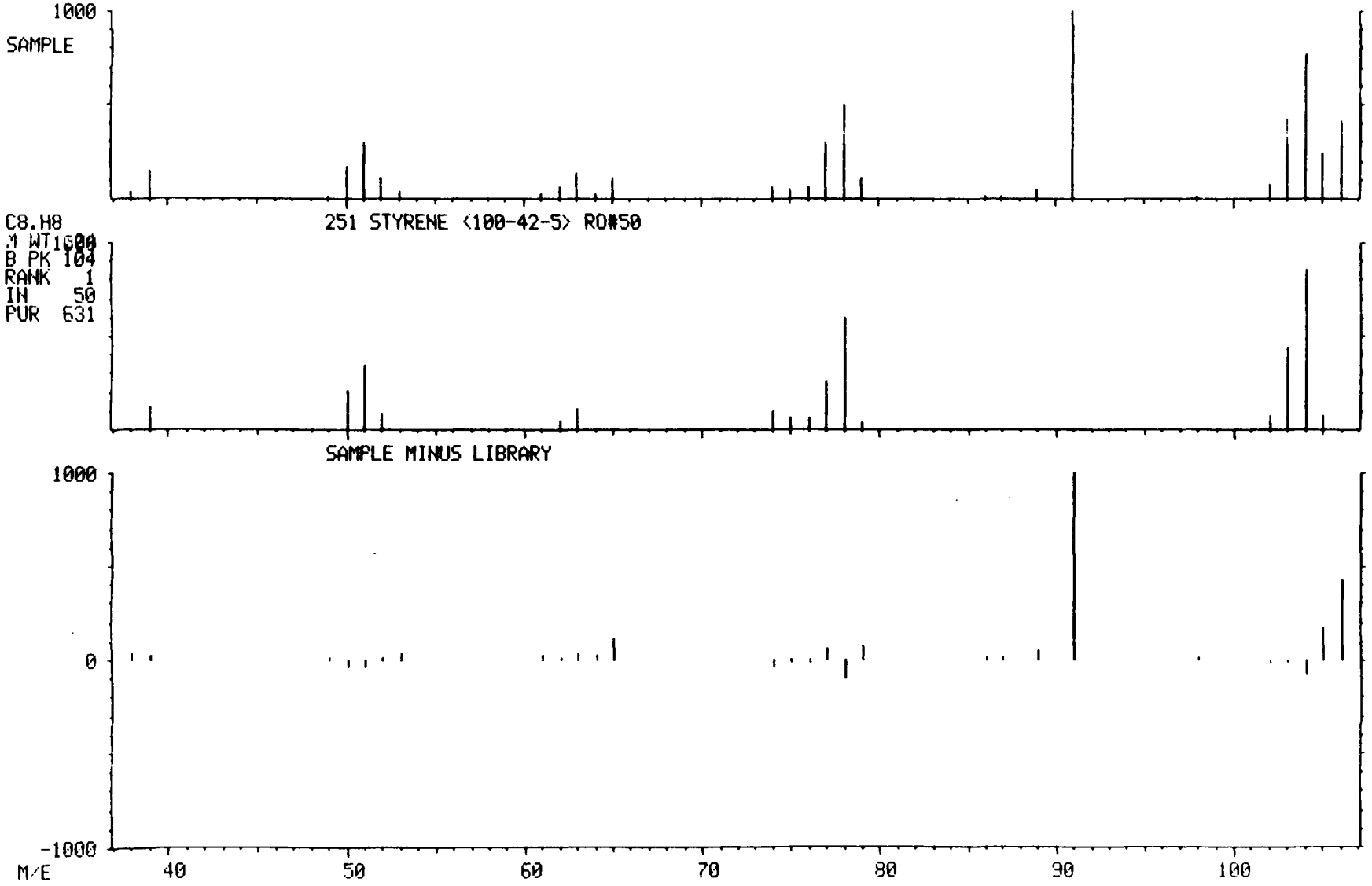
DATA: GR009686C19 #1104 BASE M/E: 91/ 91
RIC: 345599./ 570367.



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 13:51
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

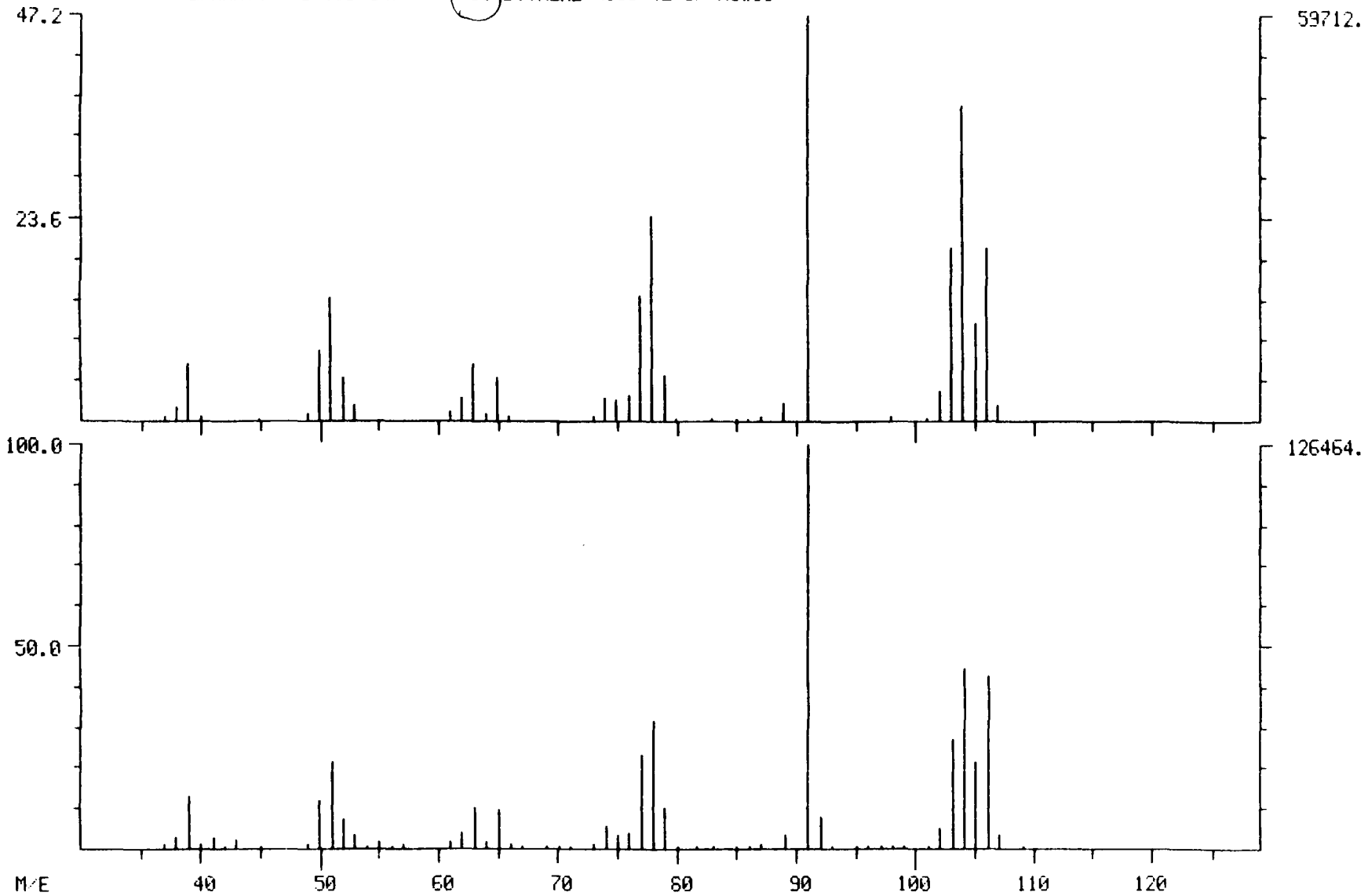
DATA: GR009686C19 #1108
BASE M/E: 91
RIC: 314879.



COMPUCHEM LABS

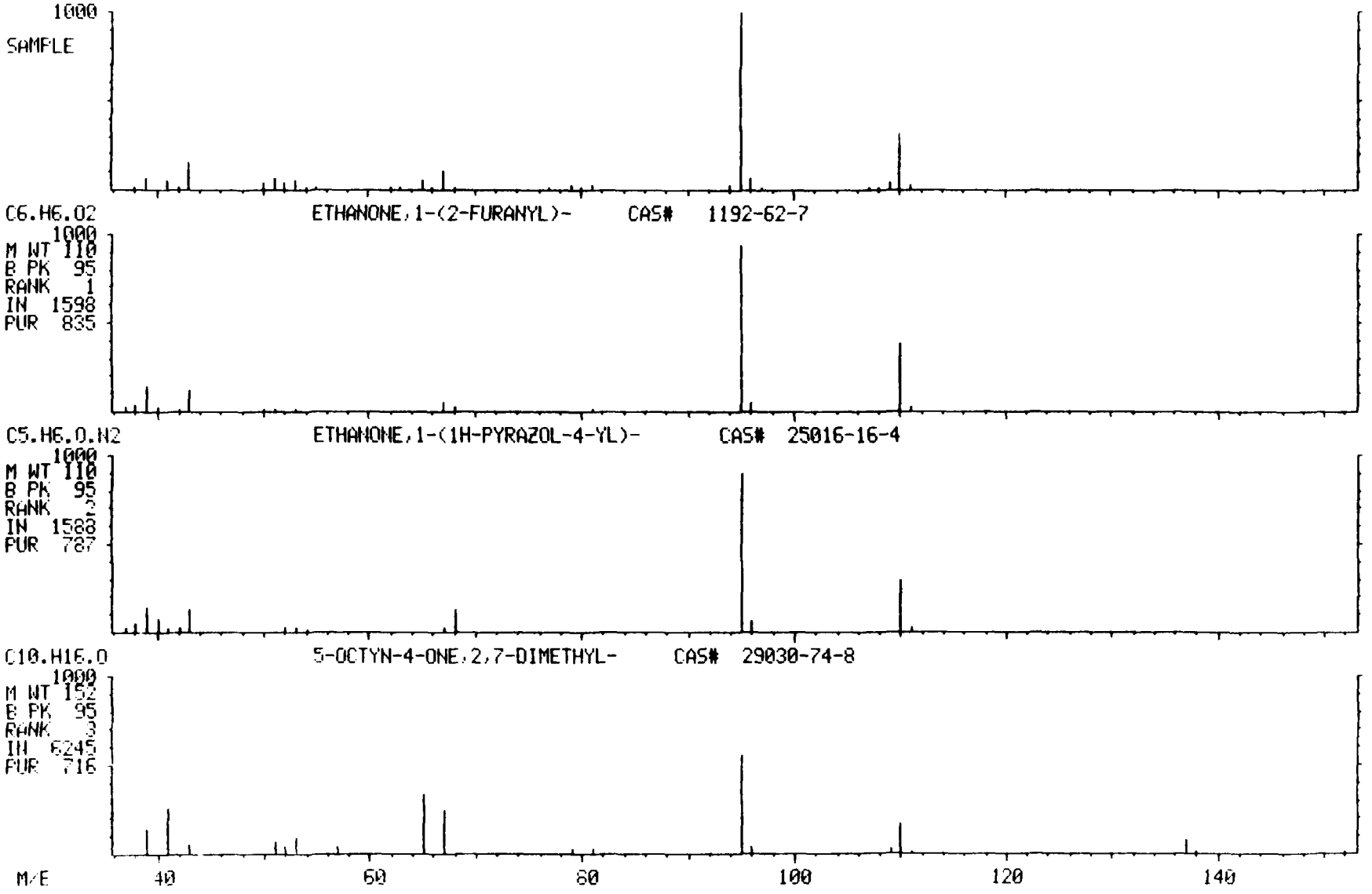
DUAL MASS SPECTRUM
12/27/89 5:39:00 + 13:51
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N) (251) STYRENE (100-42-5) RO#50

DATA: GR009686C19 #1108 BASE M/E: 91/ 91
RIC: 321535./ 563199.



COMPUCHEM LABS

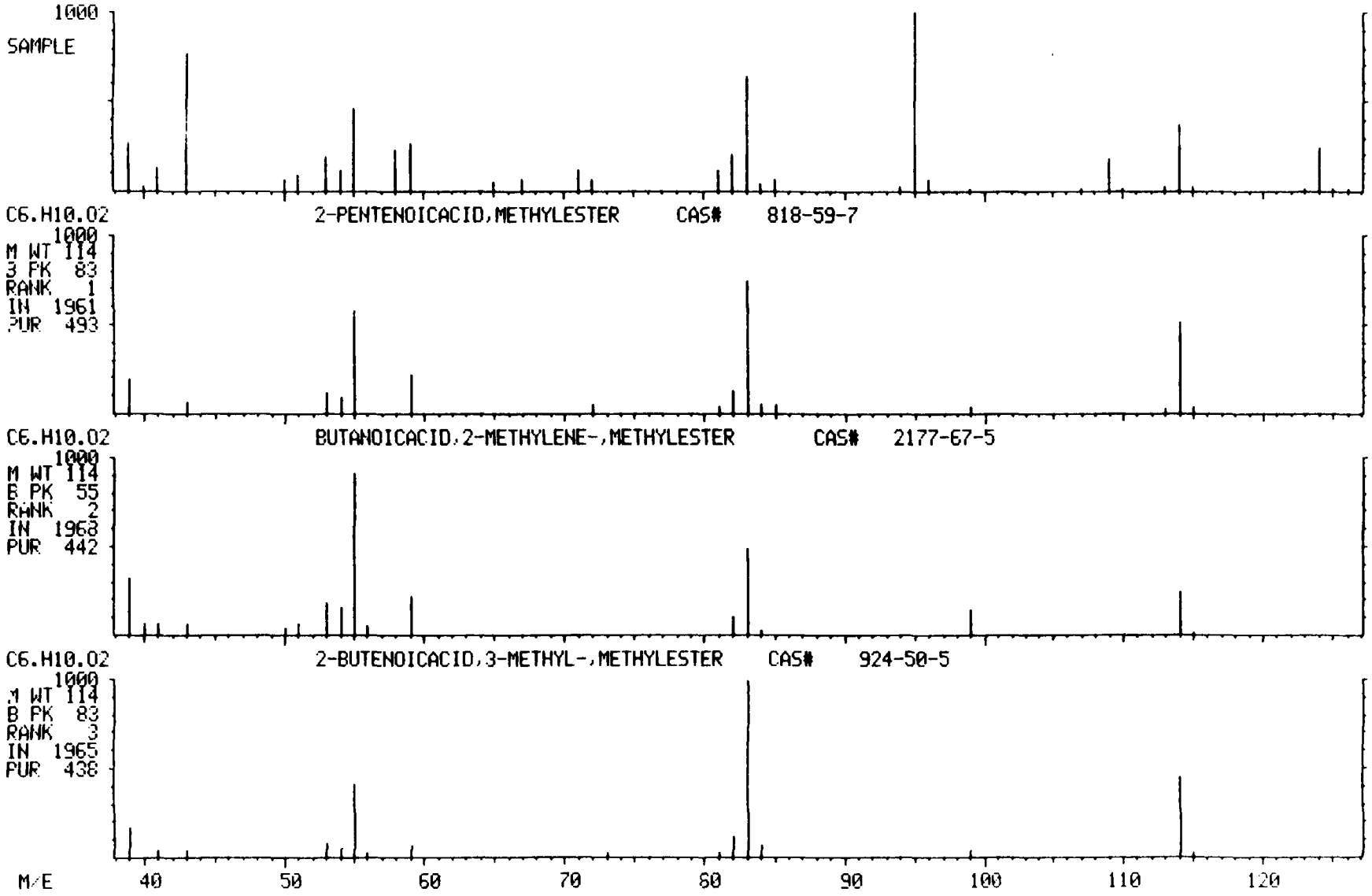
LIBRARY SEARCH DATA: GR009686C19 # 883 BASE M/E: 95
12/27/89 5:39:00 + 11:02 RIC: 72191.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 5:39:00 + 13:27
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

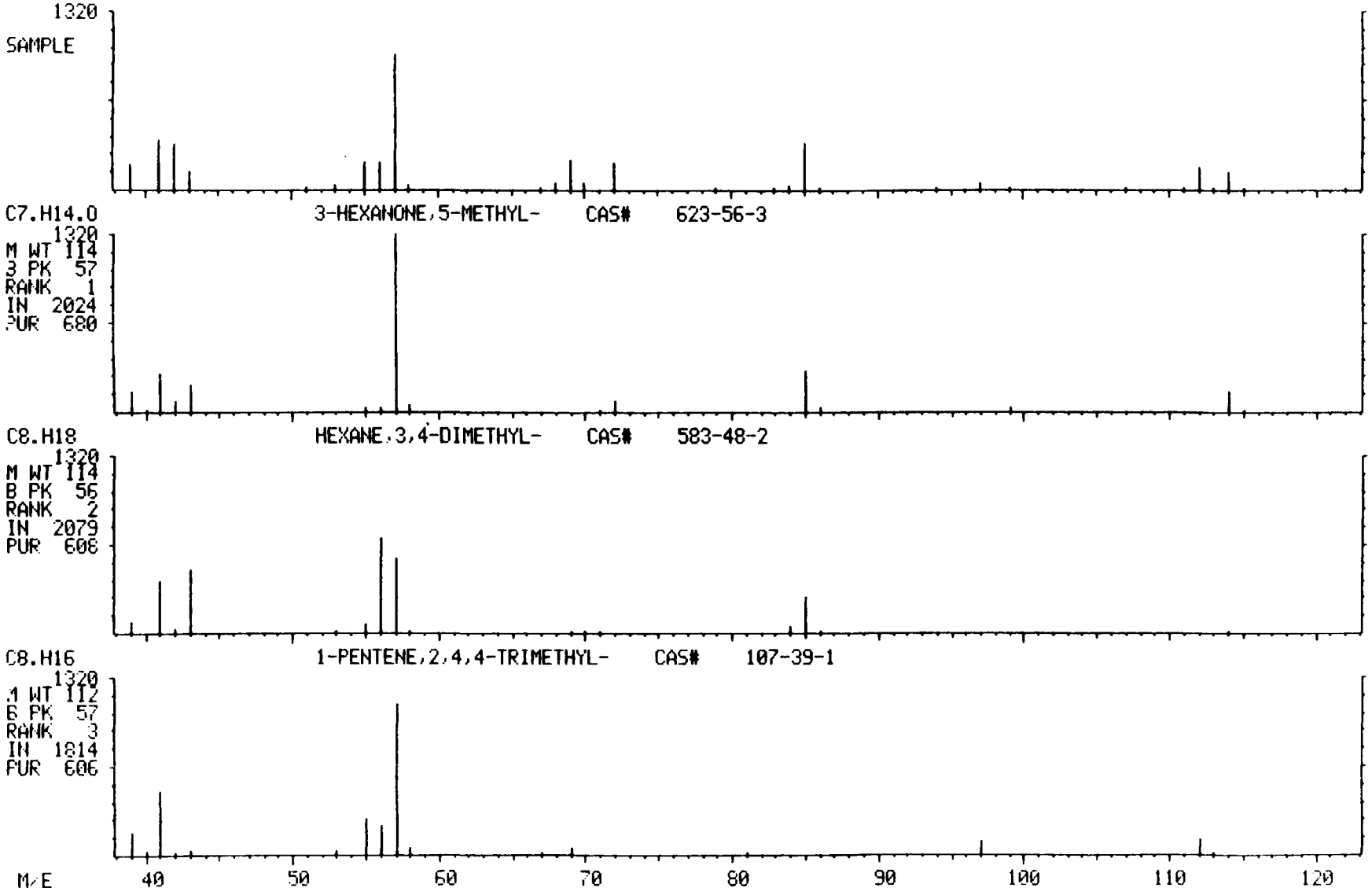
DATA: GR009686C19 #1076
BASE M/E: 95
RIC: 97535.



COMPUCHEM LABS

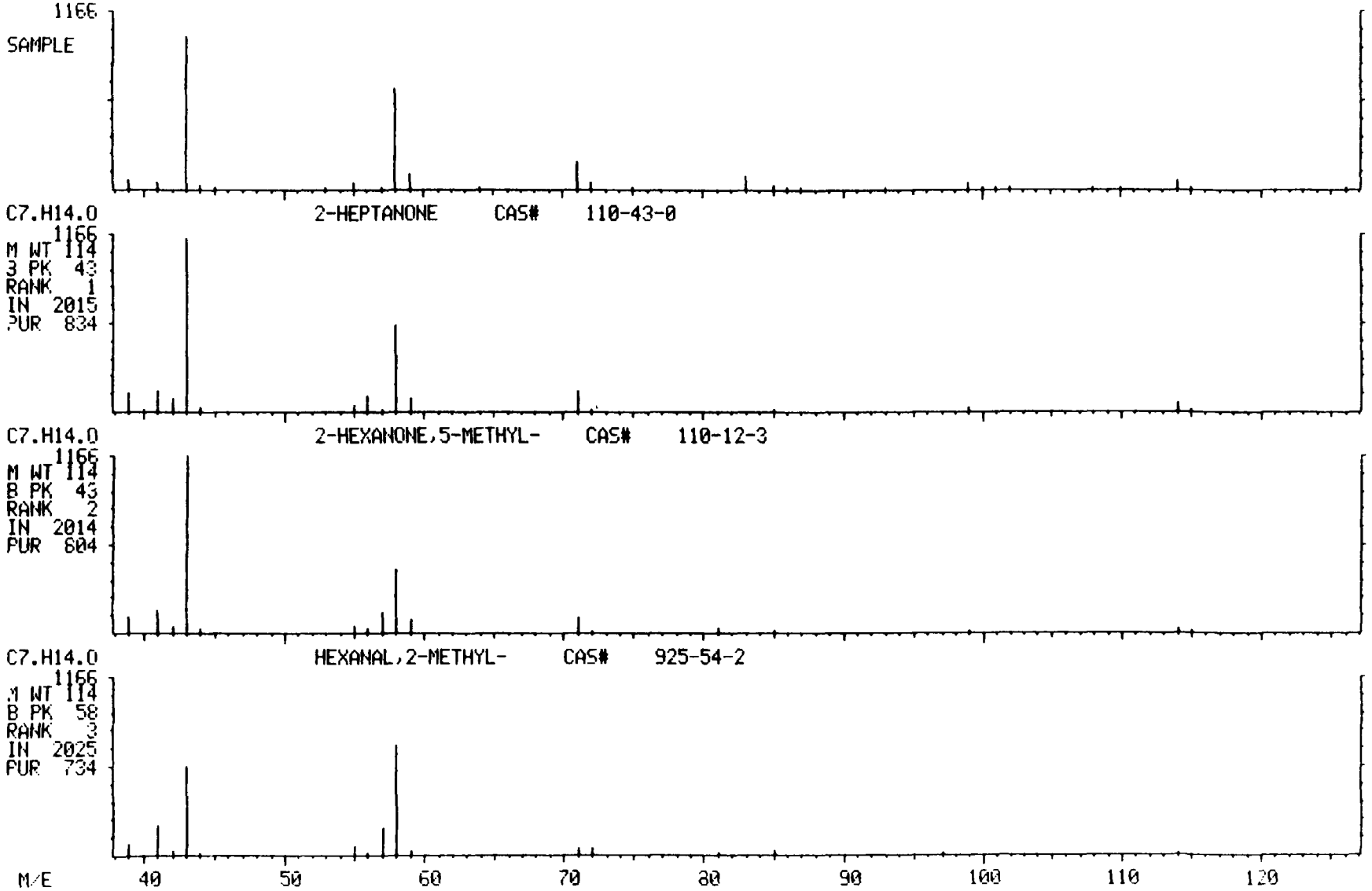
LIBRARY SEARCH
12/27/89 5:39:00 + 14:05
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 #1127
BASE M/E: 57
RIC: 137727.



COMPUCHEM LABS

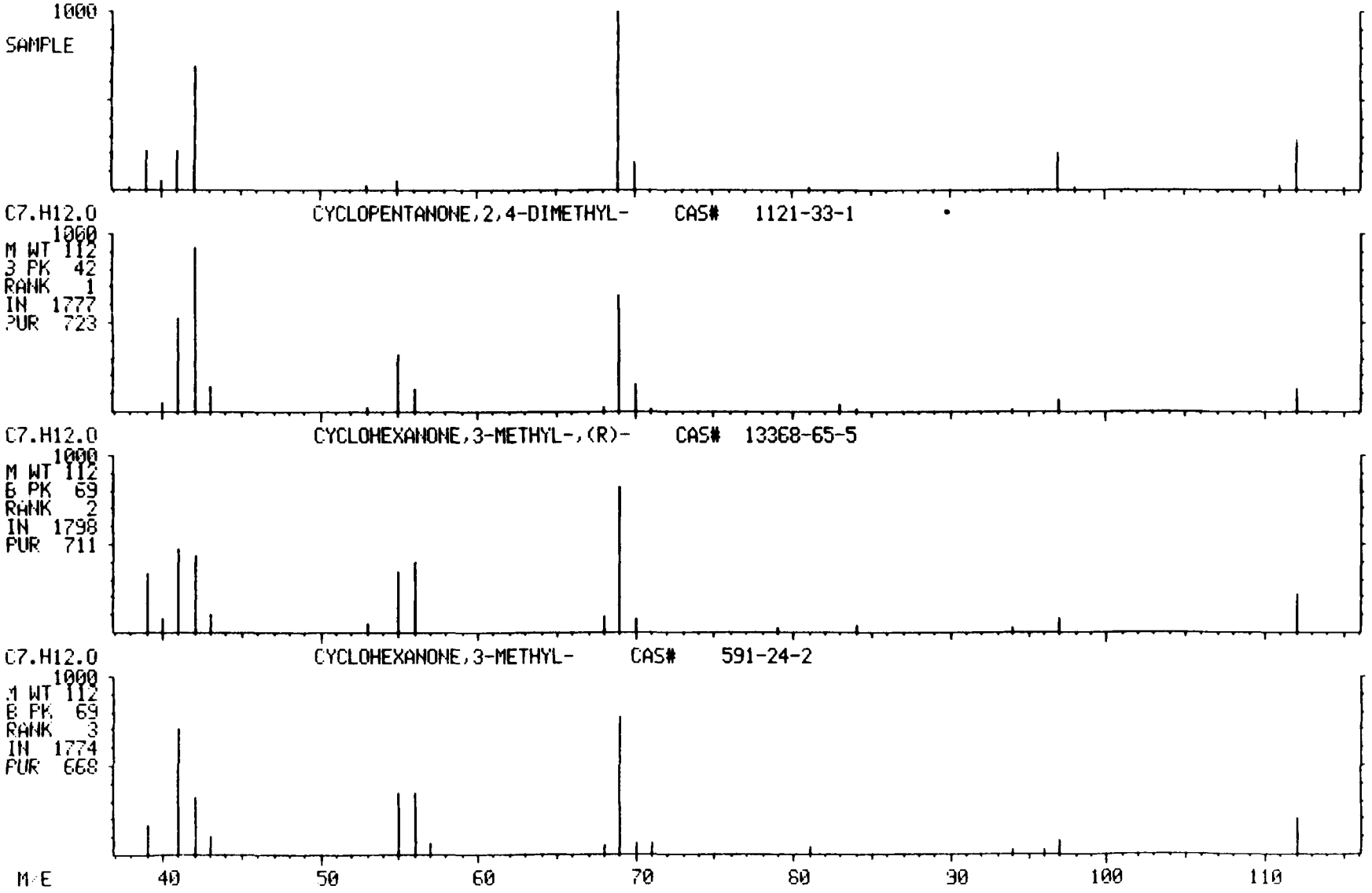
LIBRARY SEARCH DATA: GR009686C19 #1142 BASE M/E: 43
12/27/89 5:33:00 + 14:16 RIC: 141823.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

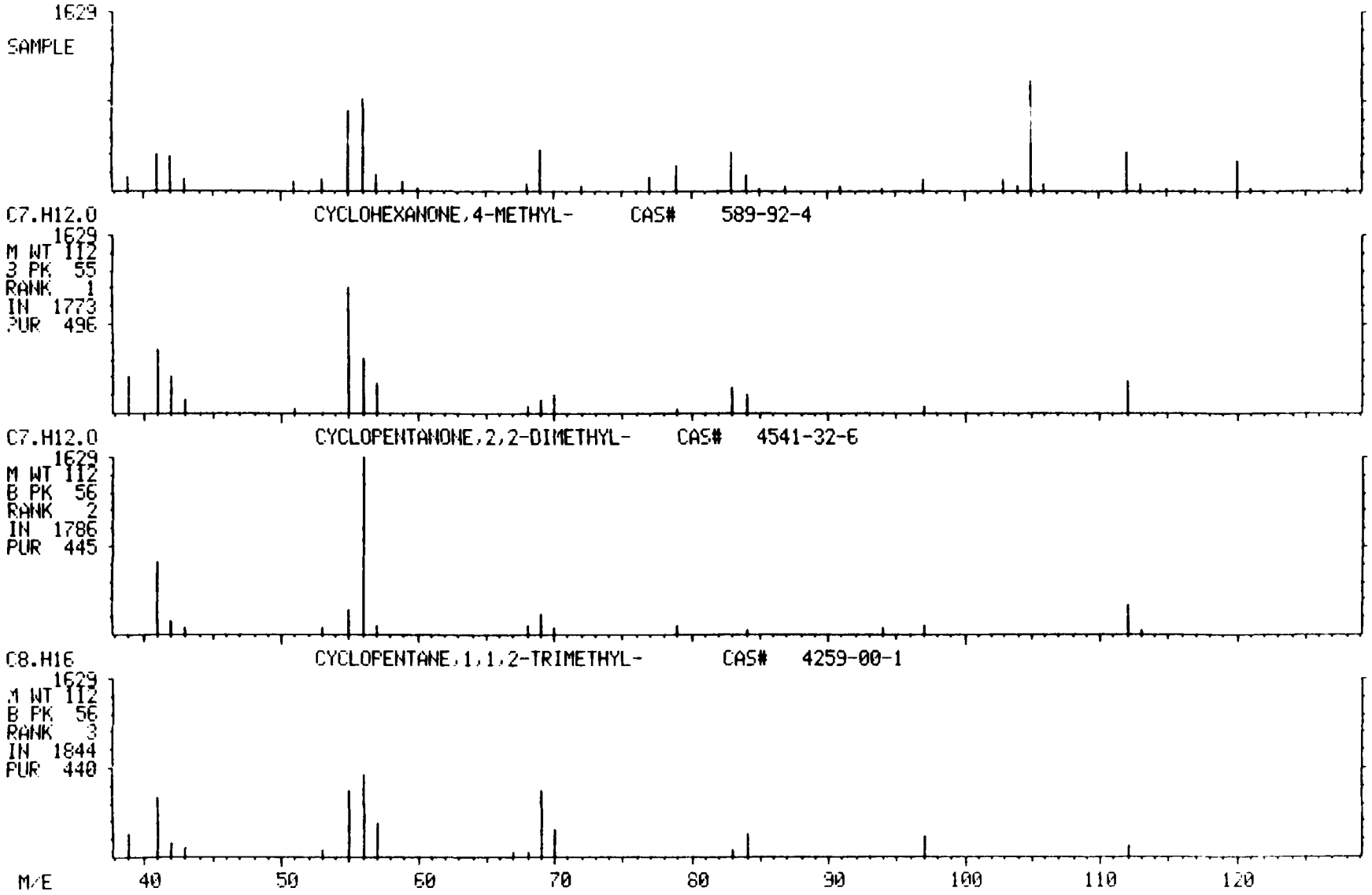
LIBRARY SEARCH
12/27/89 5:39:00 + 14:25
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 #1154 BASE M/E: 69
RIC: 53055.



COMPUCHEM LABS

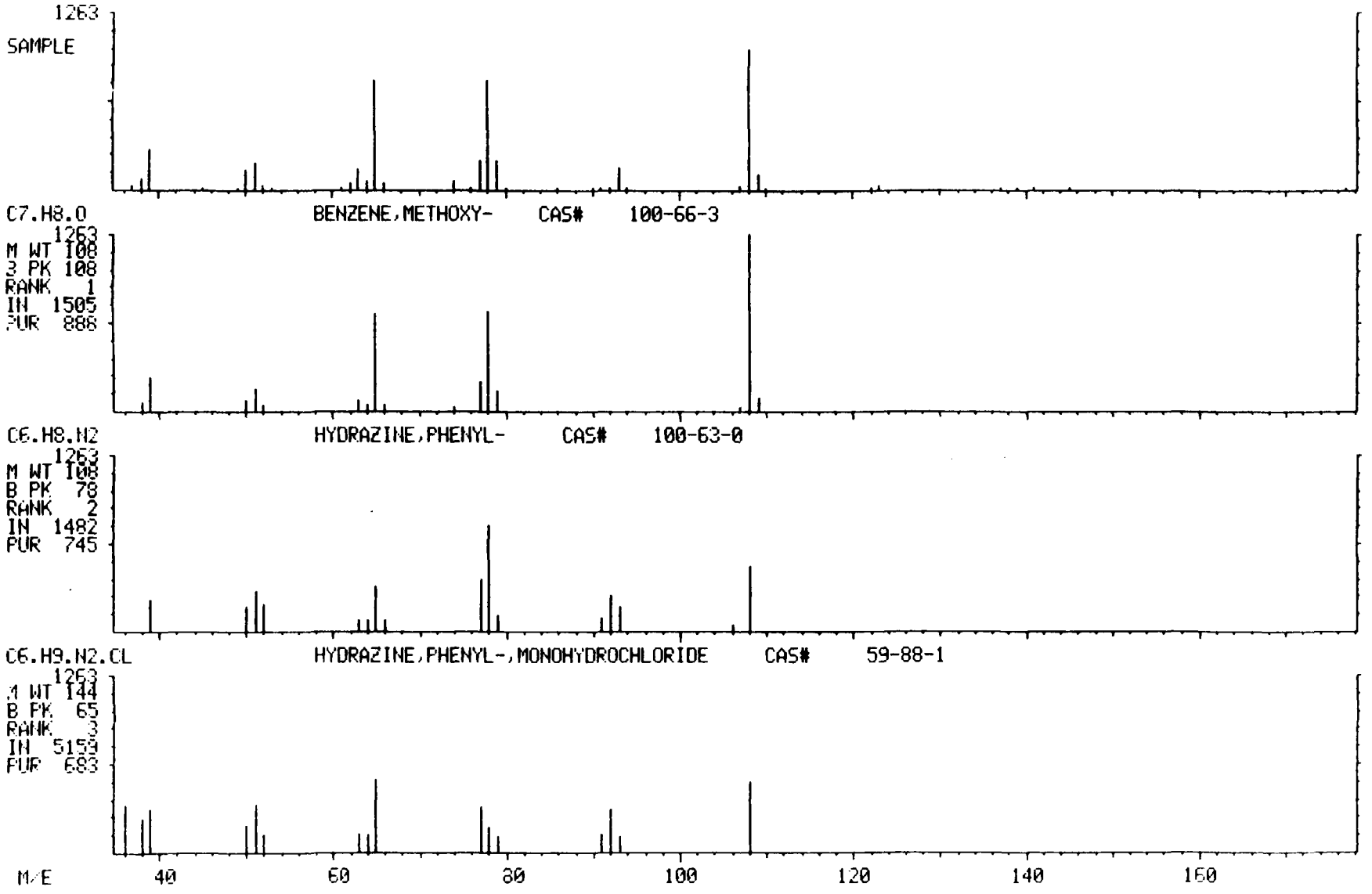
LIBRARY SEARCH DATA: GR009686C19 #1164 BASE M/E: 105
12/27/89 5:39:00 + 14:33 RIC: 51775.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

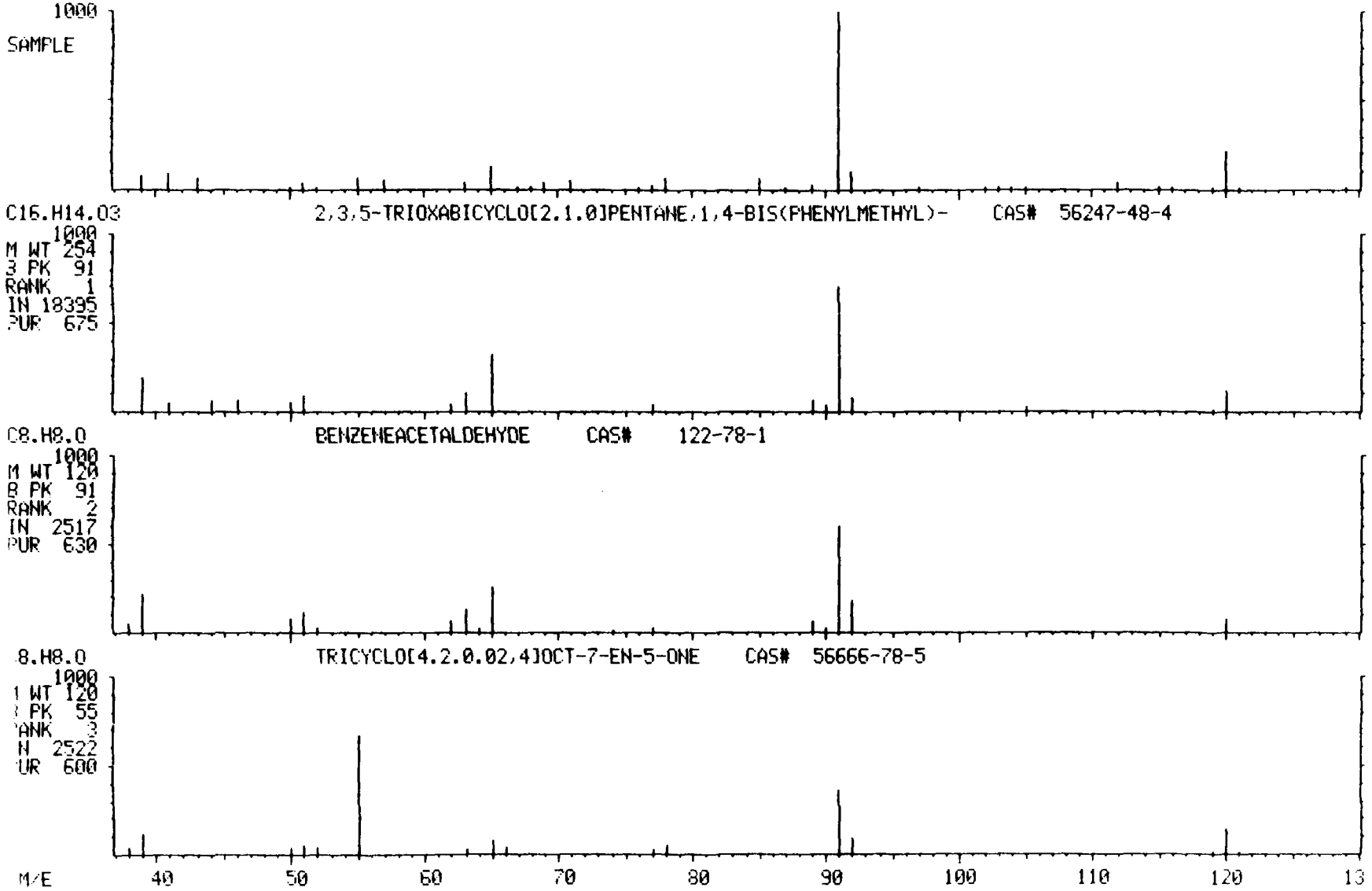
LIBRARY SEARCH
12/27/89 5:39:00 + 14:43
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#8201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 #1178
BASE M/E: 108
RIC: 237311.



COMPUCHEM LABS

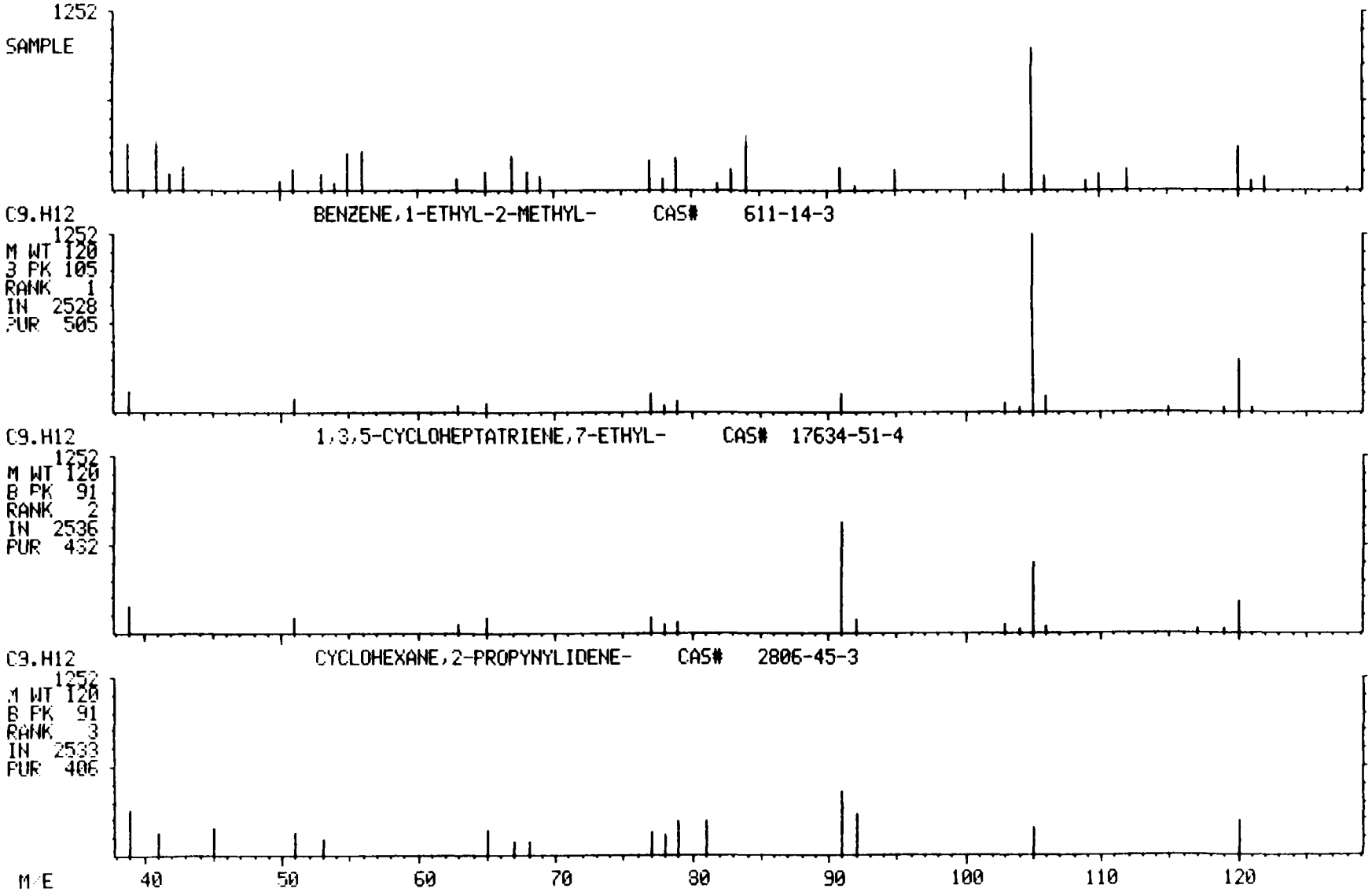
LIBRARY SEARCH DATA: GR009686C19 #1228 BASE M/E: 91
12/27/89 5:39:00 + 15:21 RIC: 101119.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

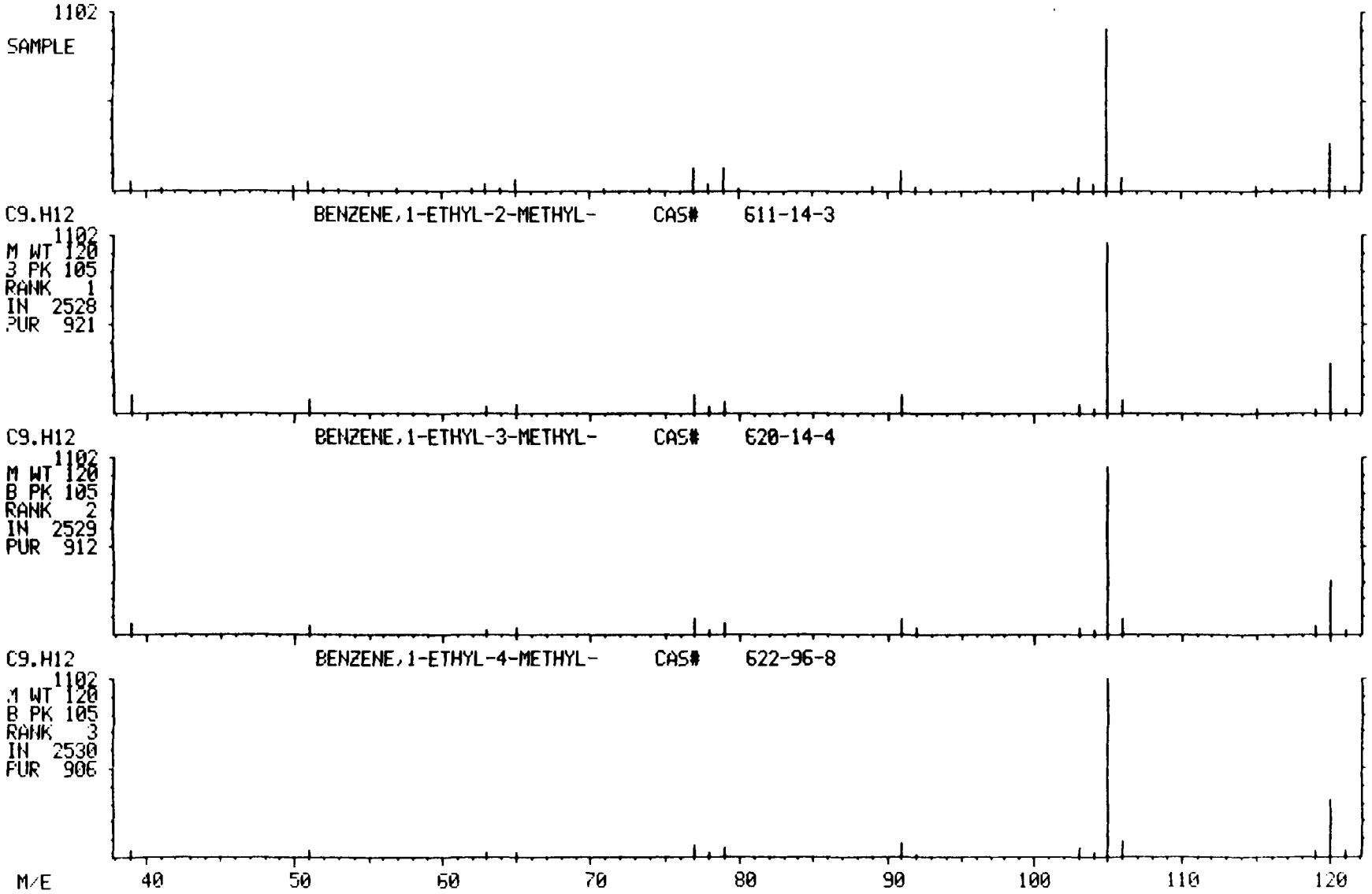
LIBRARY SEARCH
12/27/89 5:39:00 + 15:37
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009686C19 #1249
BASE M/E: 105
RIC: 338943.



COMPUCHEM LABS

LIBRARY SEARCH DATA: GR009686C19 #1286 BASE M/E: 105
12/27/89 5:39:00 + 16:04 RIC: 204799.
SAMPLE: 1G CC#309686 CASE#18756.7 EPA#B201B ON#19
ENHANCED (S 15B 2N 0T)



LAB INSTRUCTIONS

SAMPLED DATE 12/18/89

RECEIPT DATE 12/20/89 CASE# 18756 7 DUE DATE

VOA
GC/MS WORKSHEET COMPUCHEM# 309686R

R1[X] R2[ ] D1[ ] [ ]
R3[ ] R4[ ] D2[ ] [ ]

L L SOLID, EPA SOW 2/88

Sample Prep Code---15E
Instrument Code----413
Compound List------494
Surrogate Std------394
Internal Std-------036

SAMPLE ID#: B201B Dry Wt. Factor 1.4 % Moisture 5

GC/MS ANALYSIS

Amount Purged [✓] 10mls/Xg soil or [ ] Dilution _____ ul/10000ul/Xg soil
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BE891227.C13 Disk (25514)
Blank Filename HC1660.C14 Disk ( )
Standard Filename 6T891227.C14 Disk ( )
Sample Filename SB00965C.C14 Disk ( )

ANALYST(S): Injection 1422:16 Work-up 1422:16

GC/MS REVIEW

CONDITION CODE: MI

Entry Codes OK, EA, ES, SM, JS, SL, SH, JA, DA

Non-Entry Codes IM, IL, IH, SW, CT, CS, PC, NP
IF, LA, DI, CO, RN, DW, SI, SF
UP, BB, OT, VC, FO, NS

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found 10

[ ] Reprep neat required

[ ] Reprep using _____

Quality Assurance Notice(s):
Notices Required 2

[ ] Dilute ( )
[✓] Reprep Med.

COMMENTS:

GC/MS Review [illegible] Date 1/2/90 Auditor SDWagner Date 1/3/90

REPORT INTEGRATION Total # of Injections 6
Final Reportable Package(s) GRQ-C19 / CSR-C13

QA COMMENTS

Initials _____ Date ____/____/____

FINAL REVIEW Initials _____ Date ____/____/____

AC1007 10E 87

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 155 ASSIGNED TO Harshad Joshi DATE 12/22/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309679R	18756	0007			1.0g	B201A	
309680R	"	"	SS	309679	1.0g	B201A MS	
309681R	"	"	SS	309679	1.0g	B201A MSD	
309682R	"	"	BS		0.0g		
309686R	"	"			1.0g	B201B	
309687R	"	"			1.0g	B202TAR	
310543	18244	0142			5.0g	MW-17-30	
310555	18477	0132			5.0g	EPTP10122	
310560	"	"	SS	310555	5.0g	EPTP10122 MS	
310561	"	"	SS	310555	5.0g	EPTP10122 MSD	
310562	"	"	BS		0.0g		
310659			B1		5.0ml	F4	
310660			B2		0.0ml	F5	
310661			B3		0.0ml	F6	
310662			B4		0.0ml	F7	
310663			B5		0.0ml	F8	

SURROGATE # 1 LOT # 1 MANUAL OPERATOR 739 / 518

AMOUNT 1

RELINQUISHED BY [illegible] DATE 12/22/89 RECEIVED BY [illegible] DATE [illegible]

VOLATILE - LOW LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
							X5 7	
234	128	I	BROMOCHLOROMETHANE (IS)	464	52500	50.0		
221	50		CHLOROMETHANE				BDL	5 ~~6~~ 5
231	62		VINYL CHLORIDE				BDL	5
220	94		BROMOMETHANE				BDL	5
209	64		CHLOROETHANE				BDL	5
216	96		1,1-DICHLOROETHENE				BDL	25
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)			64.8	~~320~~ 370 B	5
248	114	I	1,4-DIFLUOROBENZENE (IS)	610	198000	50.0		
222	84		METHYLENE CHLORIDE			12.1	~~60~~ 69 B	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLOROETHANE				BDL	5
257	43		VINYL ACETATE				BDL	5
237	96		CIS-1,2-DICHLOROETHENE				BDL	5
253	72		2-BUTANONE			46.4	~~230~~ 260	5
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
206	117		CARBON TETRACHLORIDE				BDL	5
203	78		BENZENE			25.3	~~130~~ 140	5
215	62		1,2-DICHLOROETHANE				BDL	5
270	117	I	D5-CHLOROBENZENE (IS) RO#29	1001	195000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROPANE			~~1.3~~	BDL ~~69~~	5
212	83		BROMODICHLOROMETHANE				BDL	5
218	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE			12.5	~~62~~ 71	5
225	92		TOLUENE			280.0	1600 ~~1400~~ E	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
228	97		1,1,2-TRICHLOROETHANE				BDL	5
224	164		TETRACHLOROETHENE				BDL	5
255	43		2-HEXANONE			273.0	1600 ~~1400~~ E B	50
208	129		DIBROMOCHLOROMETHANE				BDL	25
207	112		CHLOROBENZENE				BDL	25
219	106		ETHYLBENZENE			172.0	~~860~~ 950	25
330	106		M,P-XYLENE			337.0	1900 ~~1700~~ E	25
239	106		O-XYLENE			249.0	1400 ~~1200~~ E	25
251	104		STYRENE			95.3	570 ~~480~~	25
205	173		BROMOFORM				BDL	25
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	25
258	65	S	D4-1,2-DICHLOROETHANE RO#57			47.2	94.%	
247	95	S	BROMOFLUOROBENZENE			49.7	99.%	
233	98	S	D8-TOLUENE RO#59			44.9	90.%	
289	106		XYLENES (TOTAL)			587.0	3300 ~~2700~~ E	25

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 1-2-90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)	
299	96		1,2-DICHLORDETHENE (TOTAL)				BDL		E
CHECKSUMS: 3979.				2075	445500.	2447.5		11031	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE _____

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P *
40	258	D4-1,2-DICHLOROETHANE RO#57	47.2	50.0	94.	70-121	X
41	247	BROMOFLUOROBENZENE	49.7	50.0	99.	74-121	X
42	233	D8-TOLUENE RO#59	44.9	50.0	90.	81-117	X

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{GC/MS DILUTION FACTOR} \times \text{DRY WEIGHT FACTOR} =$$

$$\frac{5.0\ G}{1.00\ (G)} \times \frac{1.0}{\text{GC/MS DILUTION FACTOR}} \times \frac{\cancel{1.00}\ 1.14}{\text{DRY WEIGHT FACTOR}} = \cancel{5.000}\ 5.7$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 8

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 1-2-90

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B201BRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C5R09686B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/29/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	1400	U
74-83-9	Bromomethane	1400	U
75-01-4	Vinyl Chloride	1400	U
75-00-3	Chloroethane	1400	U
75-09-2	Methylene Chloride	540	DBJ
67-64-1	Acetone	1400	U
75-15-0	Carbon Disulfide	710	U
75-35-4	1,1-Dichloroethene	710	U
75-34-3	1,1-Dichloroethane	710	U
540-59-0	1,2-Dichloroethene (total)	710	U
67-66-3	Chloroform	710	U
107-06-2	1,2-Dichloroethane	710	U
78-93-3	2-Butanone	1400	U
71-55-6	1,1,1-Trichloroethane	710	U
56-23-5	Carbon Tetrachloride	710	U
108-05-4	Vinyl Acetate	1400	U
75-27-4	Bromodichloromethane	710	U
78-87-5	1,2-Dichloropropane	710	U
10061-01-5	cis-1,3-Dichloropropene	710	U
79-01-6	Trichloroethene	710	U
124-48-1	Dibromochloromethane	710	U
79-00-5	1,1,2-Trichloroethane	710	U
71-43-2	Benzene	2200	D
10061-02-6	Trans-1,3-Dichloropropene	710	U
75-25-2	Bromoform	710	U
108-10-1	4-Methyl-2-Pentanone	1400	U
591-78-6	2-Hexanone	2400	D
127-18-4	Tetrachloroethene	710	U
79-34-5	1,1,2,2-Tetrachloroethane	710	U
108-88-3	Toluene	16000	D
108-90-7	Chlorobenzene	710	U
100-41-4	Ethylbenzene	7400	D
100-42-5	Styrene	2800	D
1330-20-7	Total Xylenes	21000	D

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B201BRE

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309686

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C5R09686B13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/29/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	625-86-5	FURAN,2,5-DIMETHYL-	7.28	1800	J
2.		UNKNOWN	10.02	2000	J
3.		UNKNOWN	12.34	2800	J
4.		METHYLETHYLBENZENE + UNKNOWN	13.44	710	J
5.	103-65-1	BENZENE,PROPYL-	14.22	3100	J
6.	98-82-8	BENZENE,(1-METHYLETHYL)-	14.45	17000	J
7.		TRIMETHYLBENZENE ISOMER	14.60	4700	J
8.		ETHYLMETHYLBENZENE + UNKNOWN	14.94	14000	J
9.		TRIMETHYLBENZENE ISOMER	15.30	18000	J
10.	611-15-4	BENZENE,1-ETHENYL-2-METHYL-	15.45	2000	J

COMPUCHEM LABS

RIC

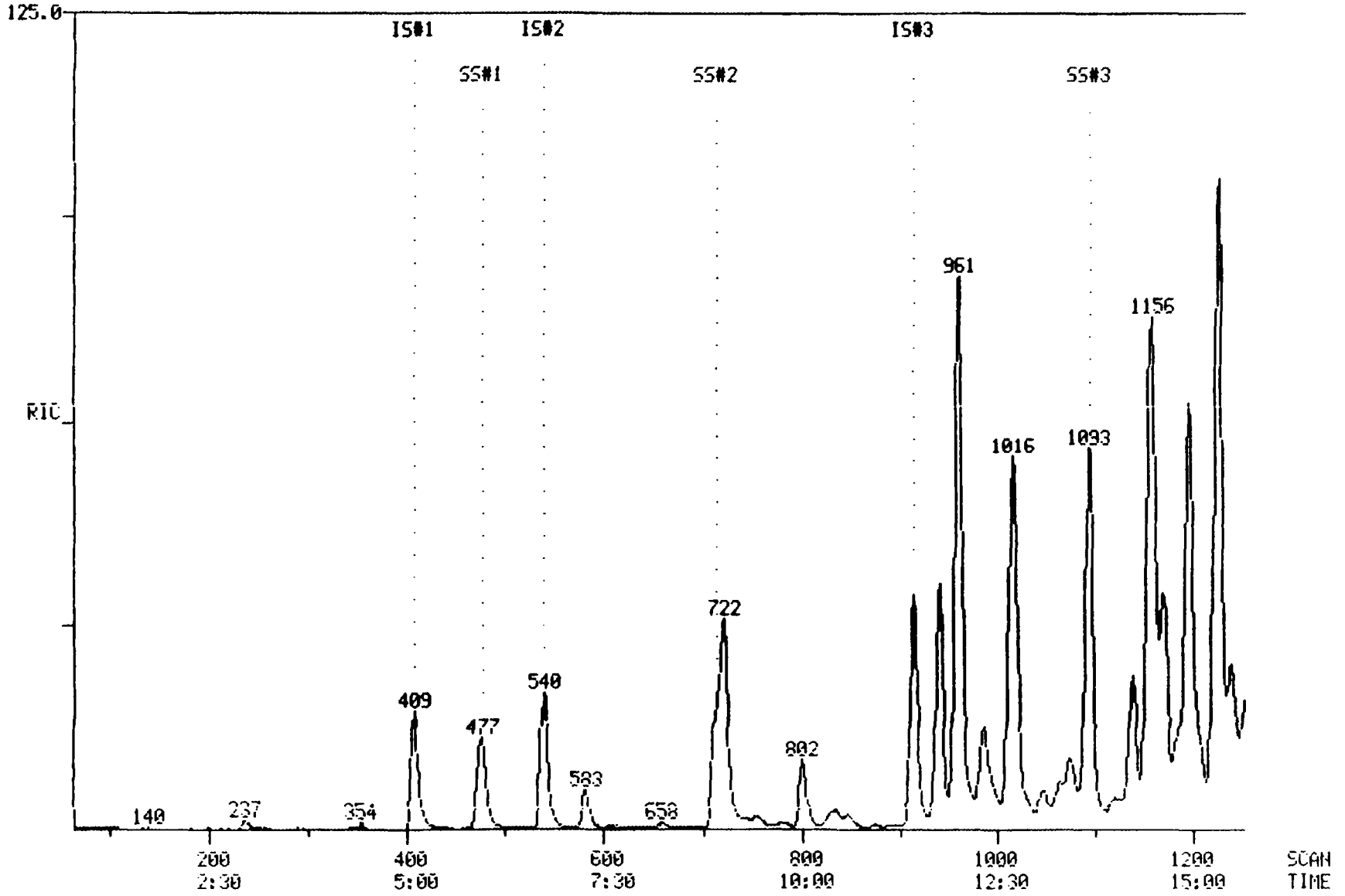
COMPUCHEM DATA: C5R09686B13 SCANS 65 TO 1250

12/29/89 20:10:00

SAMPLE: 100UL CC#309686 EPA#8201B CASE#18763 ON #13

CONDS.:

359040.



QUANTITATION REPORT FILE: C5R09686B13
DATA: C5R09686B13.TI
12/29/89 20:10:00 RE
SAMPLE: 100UL CC#309686 EPA#8201B CASE#18765 ON #13
CONDS.:
SUBMITTED BY: 13 ANALYST: 13

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
2	221 CHLOROMETHANE <74-87-3> NA#2
3	231 VINYL CHLORIDE <75-01-4> NA#3
4	220 BROMOMETHANE <78-83-9> NA#4
5	209 CHLOROETHANE <75-00-3> NA#5
6	216 1,1-DICHLOROETHENE <75-35-4> NA#8
7	254 CARBON DISULFIDE <75-15-0> NA#9
8	252 ACETONE (2-PROPANONE) <67-64-1> NA#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
10	222 METHYLENE CHLORIDE <75-09-2> NA#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
12	214 1,1-DICHLOROETHANE <75-34-3> NA#19
13	257 VINYL ACETATE <108-05-4> NA#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
15	253 2-BUTANONE <78-93-3> NA#22
16	211 CHLOROFORM <67-66-2> NA#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
18	206 CARBON TETRACHLORIDE <56-23-5> NA#25
19	203 BENZENE <71-43-2> NA#26
20	215 1,2-DICHLOROETHANE <107-06-2> NA#27
21	*270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
22	229 TRICHLOROETHENE <79-01-6> NA#30
23	217 1,2-DICHLOROPROPANE <78-87-5> NA#31
24	212 BROMODICHLOROMETHANE <75-27-4> NA#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
26	256 4-METHYL-2-PENTANONE <108-01-1> NA#36
27	225 TOLUENE <108-88-3> NA#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
30	224 TETRACHLOROETHENE <127-18-4> NA#41
31	255 2-HEXANONE <591-78-6> NA#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
33	207 CHLOROBENZENE <108-90-7> NA#45
34	219 ETHYLBENZENE <100-41-4> NA#47
35	330 M,P-XYLENE <133-02-7> NA#48
36	239 O-XYLENE <133-02-7> NA#49
37	251 STYRENE <100-42-5> NA#50
38	205 BROMOFORM <75-25-2> NA#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
40	#258 D4-1,2-DICHLOROETHANE NA#57
41	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
42	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	409	5:07	1	1.000	A BB	54485.	50.000 UG/L	7.29
2	50	NOT FOUND							

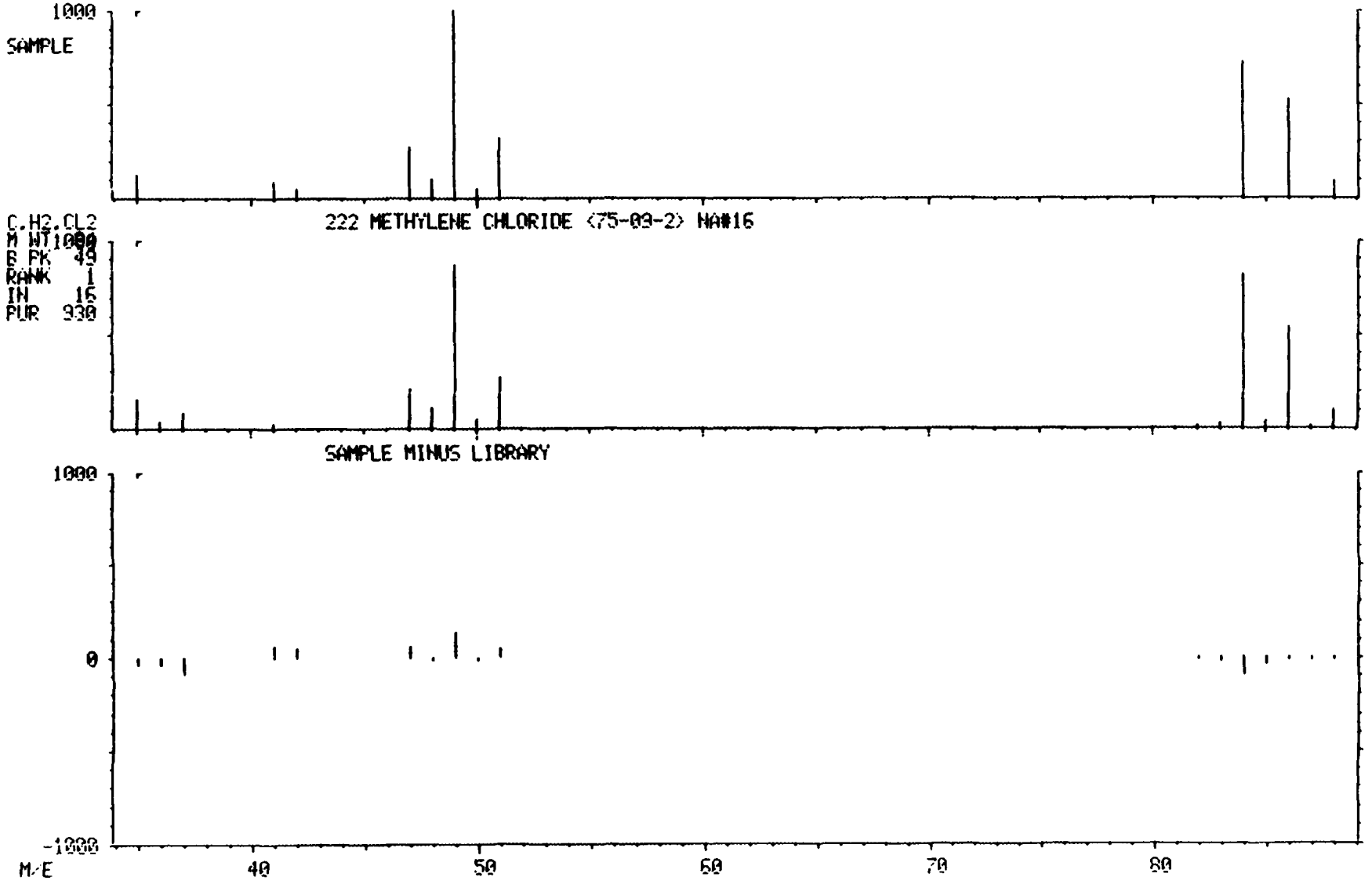
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	96	NOT FOUND							
7	76	NOT FOUND							
8	43	199	2:29	1	0.487	A BV	367.	1.436 UG/L	0.21
9	114	540	6:45	9	1.000	A BB	189860.	50.000 UG/L	7.29
10	84	238	2:58	1	0.582	A BB	5930.	3.790 UG/L	0.55
11	96	NOT FOUND							
12	63	NOT FOUND							
13	43	NOT FOUND							
14	96	NOT FOUND							
15	72	NOT FOUND							
16	83	NOT FOUND							
17	97	NOT FOUND							
18	117	NOT FOUND							
19	78	474	5:55	9	0.878	A BB	45195.	15.249 UG/L	2.22
20	62	NOT FOUND							
21	117	914	11:25	21	1.000	A BB	269834.	50.000 UG/L	7.29
22	130	NOT FOUND							
23	63	NOT FOUND							
24	83	NOT FOUND							
25	75	NOT FOUND							
26	43	724	9:03	21	0.792	A VB	2277.	2.042 UG/L	0.30
27	92	723	9:02	21	0.791	A BB	156888.	111.890 UG/L	16.31
28	75	NOT FOUND							
29	97	NOT FOUND							
30	164	NOT FOUND							
31	43	847	10:35	21	0.927	A VB	18130.	16.819 UG/L	2.45
32	129	NOT FOUND							
33	112	NOT FOUND							
34	106	942	11:46	21	1.031	A BV	105991.	52.018 UG/L	7.58
35	106	960	12:00	21	1.050	A VB	310656.	86.631 UG/L	12.63
36	106	1015	12:41	21	1.111	A BB	189103.	60.376 UG/L	8.80
37	104	1021	12:46	21	1.117	A BB	105821.	19.642 UG/L	2.86
38	173	NOT FOUND							
39	83	NOT FOUND							
40	65	477	5:58	1	1.166	A BB	110676.	56.352 UG/L	8.22
41	95	1094	13:40	21	1.197	A BB	247443.	52.302 UG/L	7.63
42	98	714	8:55	21	0.781	A BB	145509.	57.294 UG/L	8.35

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:08	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:50		10.000			50.00		0.551	
3	0:57		10.000			50.00		0.697	
4	1:11		10.000			50.00		0.985	
5	1:17		10.000			50.00		0.487	
6	2:10		5.000			50.00		1.108	
7	2:17		5.000			50.00		3.396	
8	2:31	0.99	10.000	0.05	1.44	50.00	0.007	0.235	0.03
9	6:49	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	2:58	1.00	5.000	0.12	3.79	50.00	0.109	1.436	0.08
11	3:19		5.000			50.00		1.159	
12	3:56		5.000			50.00		1.953	
13	4:16		10.000			50.00		0.803	
14	4:49		5.000			50.00		1.474	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:04		10.000			50.00		0.137	
16	5:24		5.000			50.00		2.637	
17	5:25		5.000			50.00		0.654	
18	5:37		5.000			50.00		0.592	
19	5:59	0.99	5.000	0.18	15.25	50.00	0.238	0.781	0.30
20	6:08		5.000			50.00		1.645	
21	11:32	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	7:04		5.000			50.00		0.387	
23	7:25		5.000			50.00		0.311	
24	7:59		5.000			50.00		0.547	
25	8:43		5.000			50.00		0.467	
26	9:10	0.99	15.000	0.05	2.04	50.00	0.008	0.207	0.04
27	9:07	0.99	5.000	0.16	111.89	50.00	0.581	0.260	2.24
28	9:49		5.000			50.00		0.369	
29	10:04		5.000			50.00		0.516	
30	10:04		5.000			50.00		0.512	
31	10:40	0.99	15.000	0.06	16.82	50.00	0.067	0.200	0.34
32	10:38		5.000			50.00		0.809	
33	11:35		5.000			50.00		0.867	
34	11:53	0.99	5.000	0.21	52.02	50.00	0.393	0.378	1.04
35	12:07	0.99	5.000	0.21	86.63	50.00	1.151	0.664	1.73
36	12:48	0.99	5.000	0.22	60.38	50.00	0.701	0.580	1.21
37	12:52	0.99	5.000	0.22	19.64	50.00	0.392	0.998	0.39
38	13:08		5.000			50.00		0.696	
39	14:21		5.000			50.00		0.587	
40	6:01	0.99	5.000	0.23	56.35	50.00	2.031	1.802	1.13
41	13:47	0.99	5.000	0.24	52.30	50.00	0.917	0.877	1.05
42	9:01	0.99	5.000	0.16	57.29	50.00	0.539	0.471	1.15

COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09686B13 # 238 BASE M/E: 49
12/23/89 20:10:00 + 2:58 RIC: 3043.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



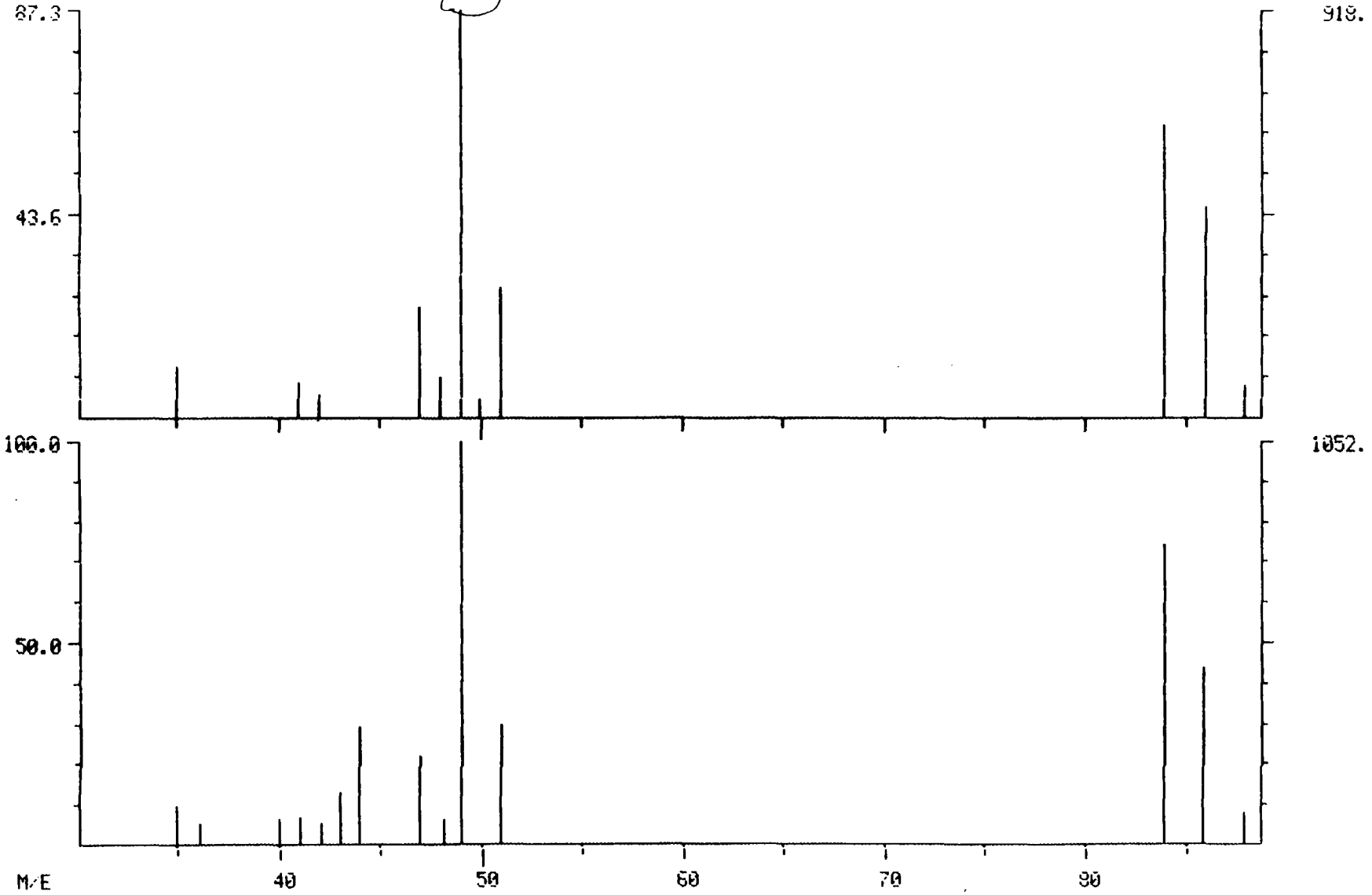
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 20:10:00 + 2:58
SAMPLE: 100UL CC#303686 EPA#B201B CASE#18756 ON #13
ENHANCED (S 15B 2N)

DATA: C5R03686B13 #238 BASE M/E: 49/ 49
RIC: 3043./ 3763.

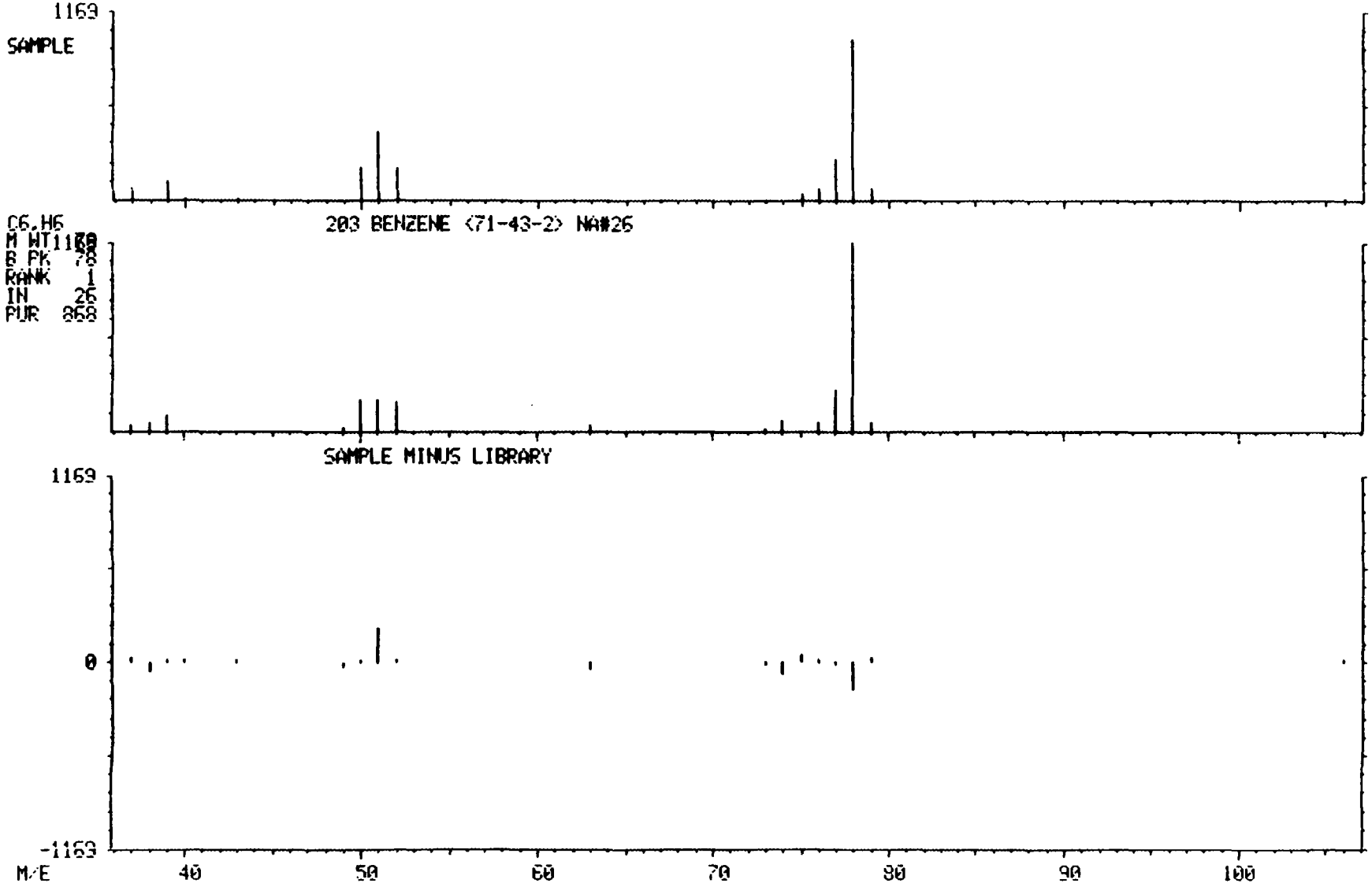
222 METHYLENE CHLORIDE (75-09-2) HA#16



18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09686B13 # 474 BASE M/E: 78
12/29/89 20:10:00 + 5:55 RIC: 9439.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18755 ON #13
ENHANCED (S 15B 2N 0T)

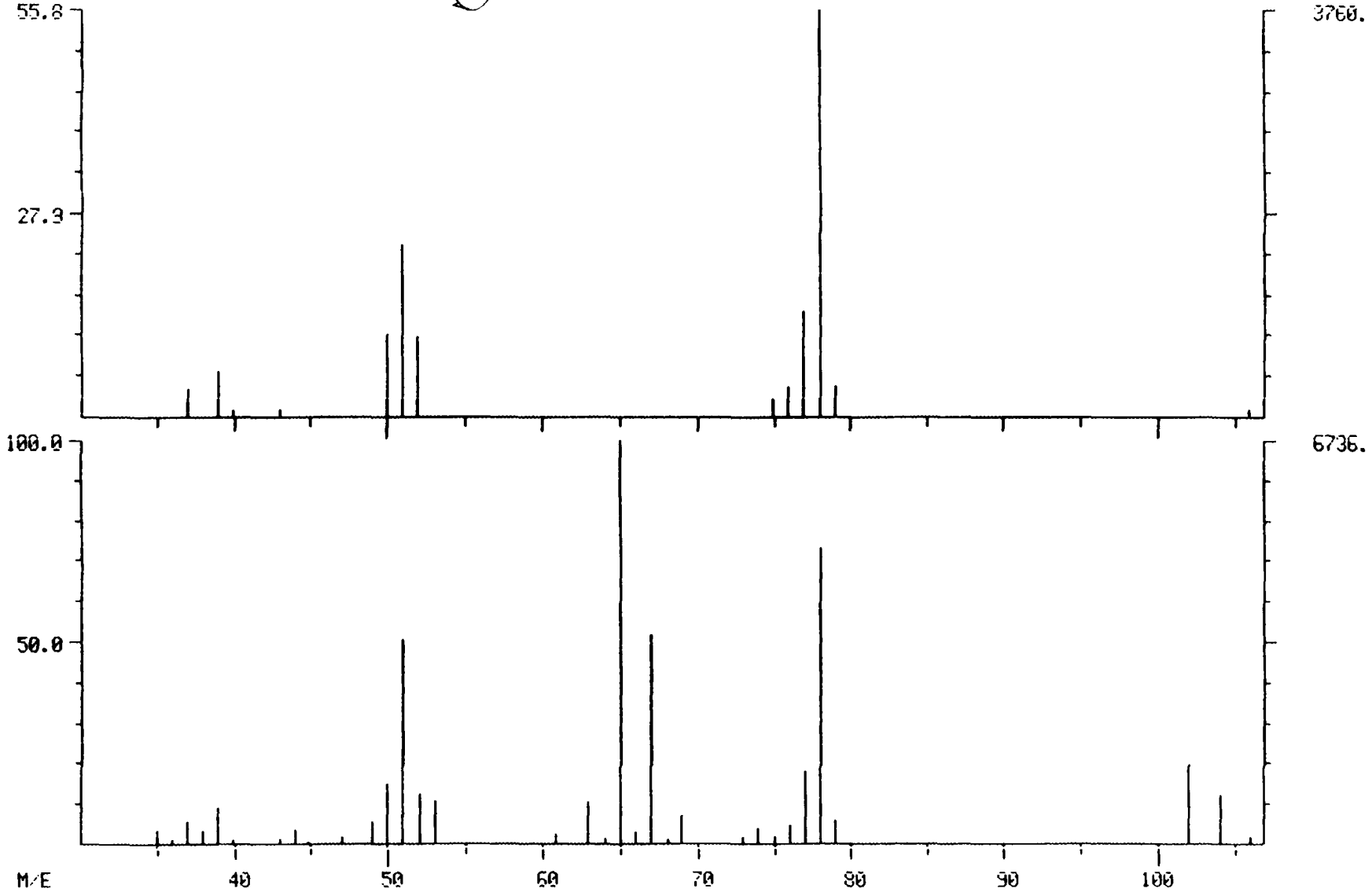


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 20:10:00 + 5:55
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N)

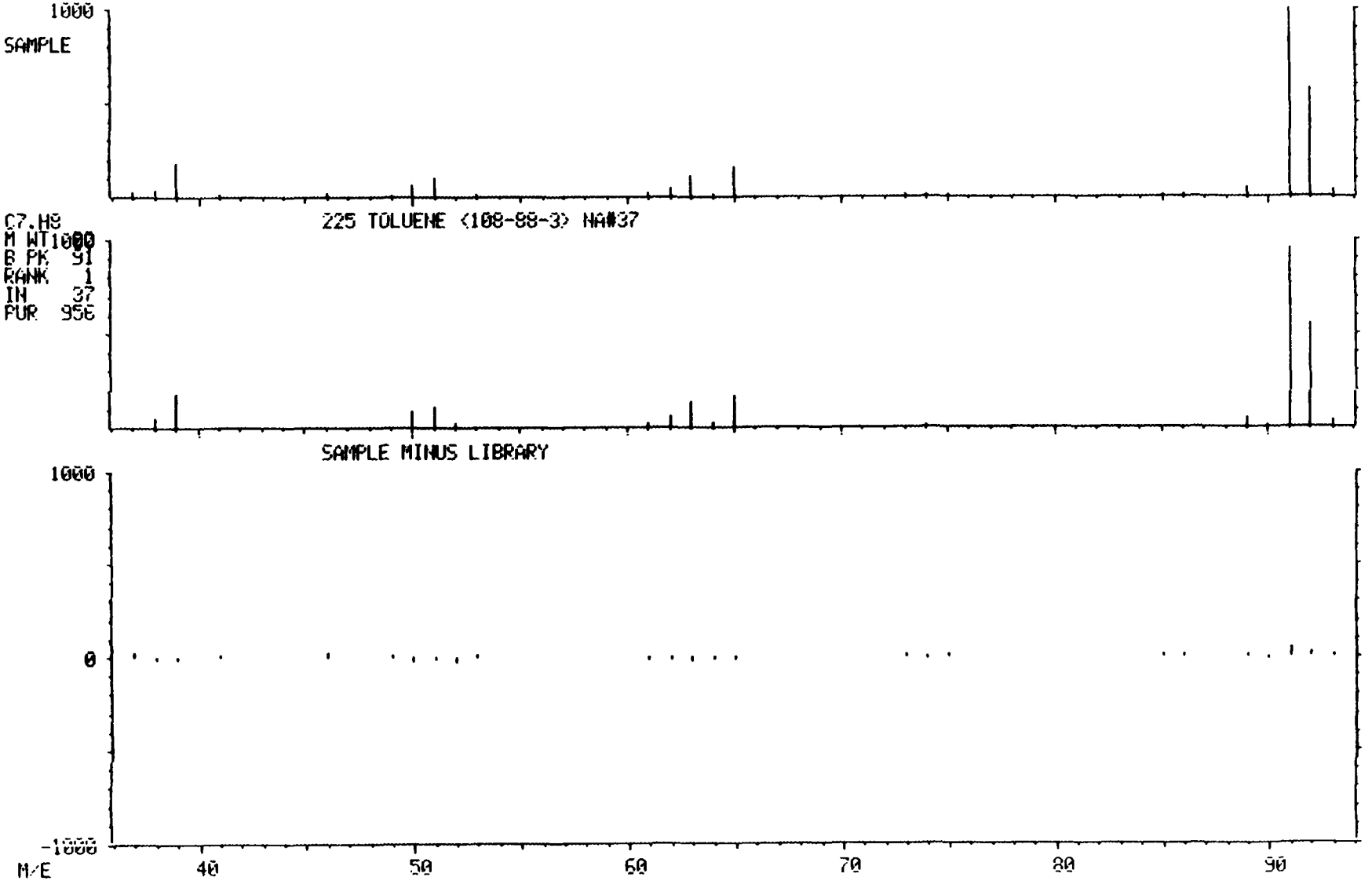
DATA: C5R03686B13 #474 BASE M/E: 78/ 65
RIC: 9439./ 29887.

203 BENZENE (71-43-2) NA#26



COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09688B13 # 723 BASE M/E: 91
12/29/89 20:10:00 + 9:02 RIC: 61759.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 20:10:00 + 3:02
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18756 ON #13
ENHANCED (S 15B 2N)

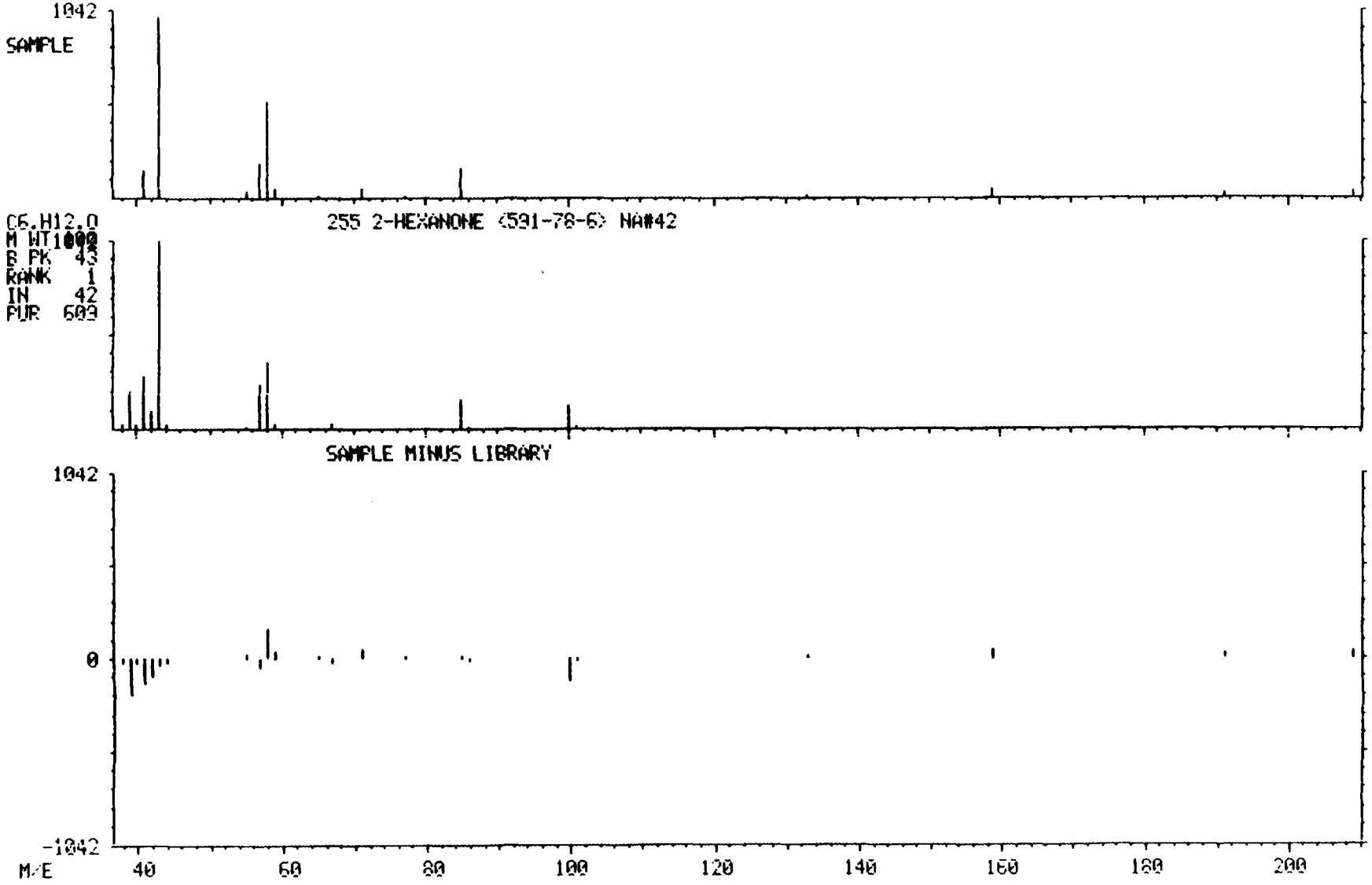
DATA: C5R03686B13 #723
Re opened SC sent 1.2.90
225 TOLUENE (108-88-3) NA#37

BASE M/E: 91 91
RIC: 61951. 91775.

78.3
39.2
100.0
50.0
24736.
31584.
M/E
40
50
60
70
80
90
100

COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R03686B13 # 847 BASE M/E: 43
12/29/89 20:10:00 + 10:35 RIC: 2815.
SAMPLE: 100UL CC#303686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)

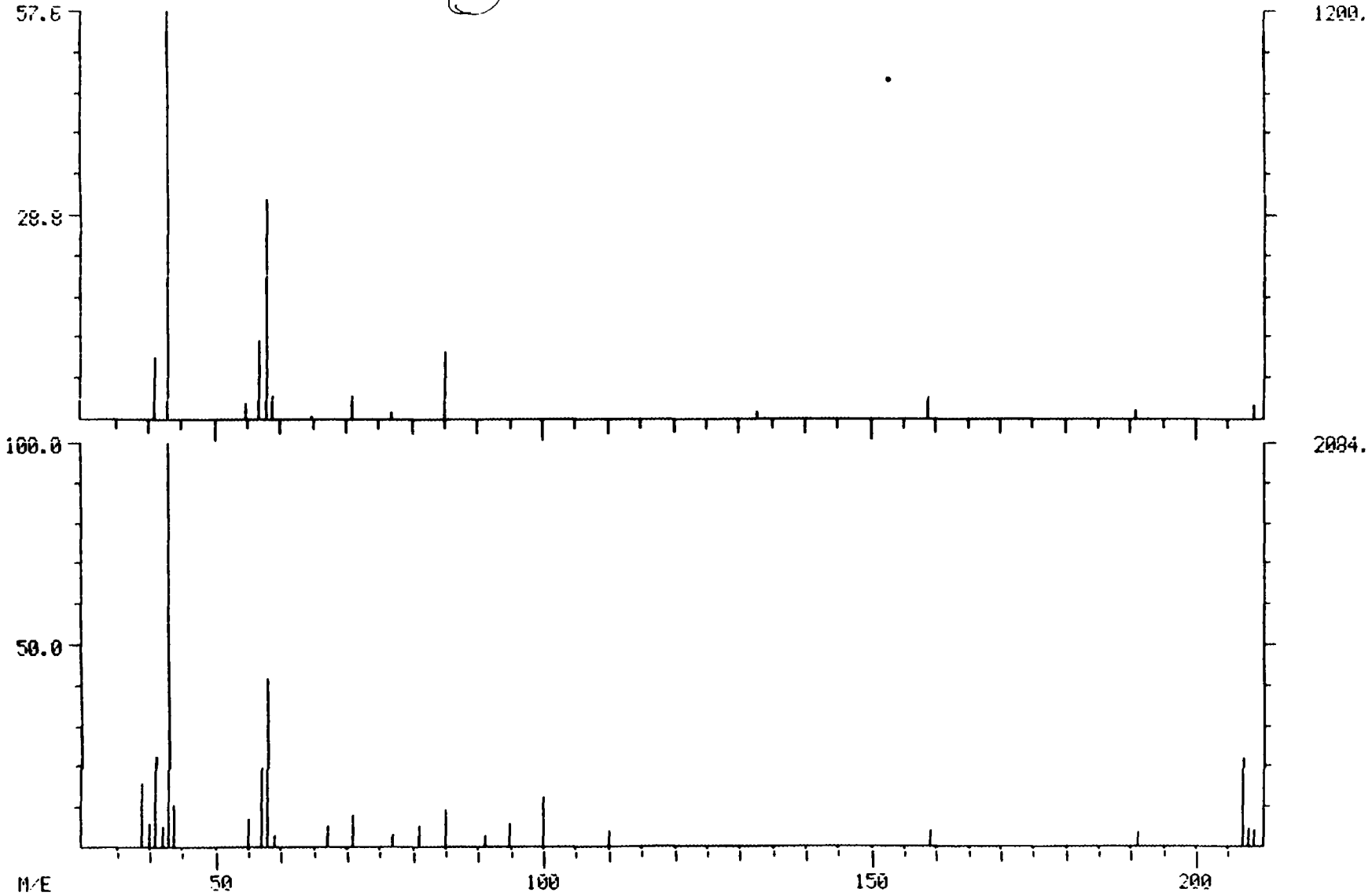


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 20:10:00 + 10:35
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N)

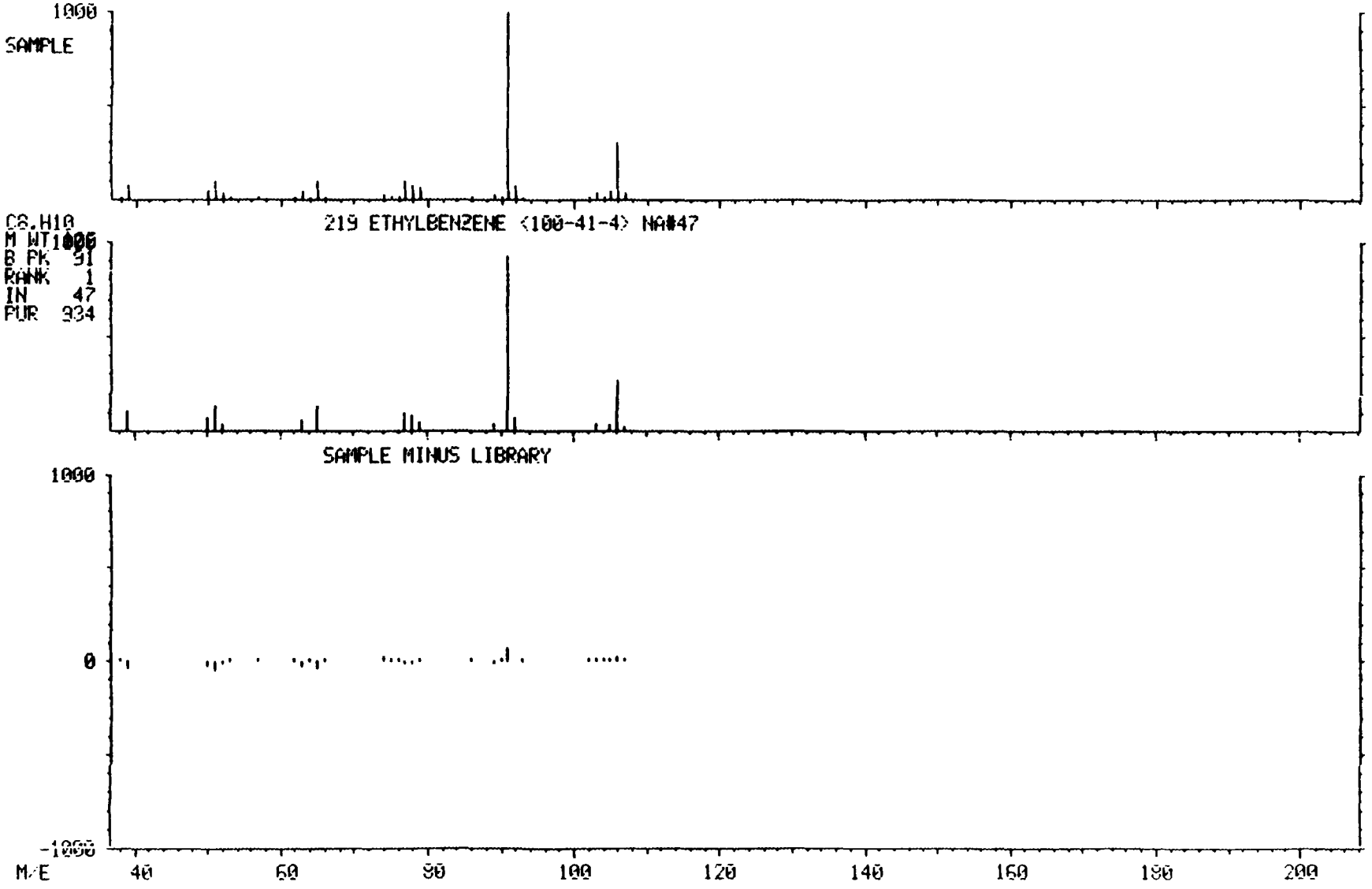
DATA: C5R09E86B13 #847
BASE M/E: 43/ 43
RIC: 2815./ 6719.

255 2-HEXANONE <591-78-6> NA#42



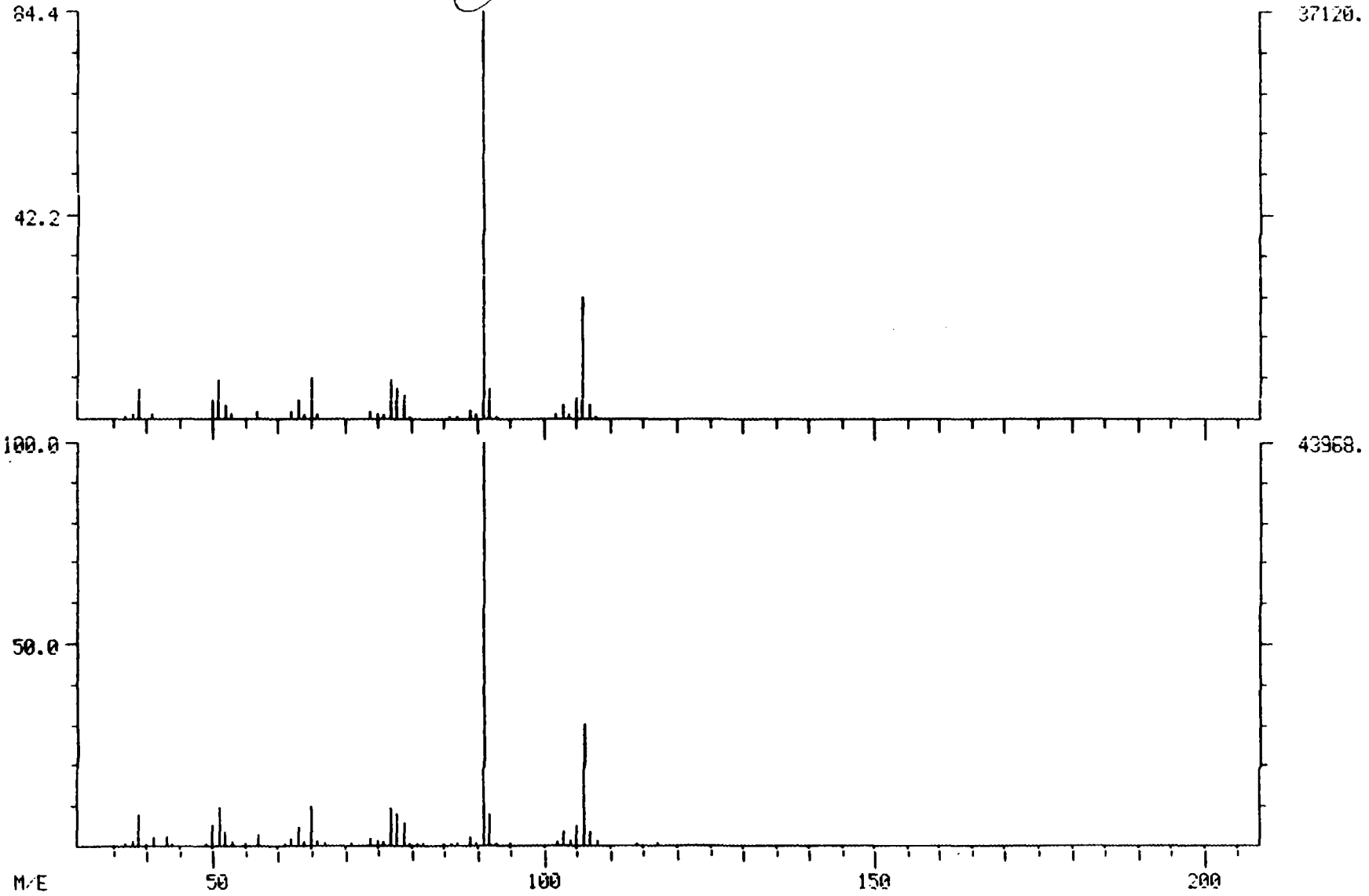
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09688B13 # 942 BASE M/E: 91
12/29/89 20:10:00 + 11:46 RIC: 84863.
SAMPLE: 100UL CC#309686 EPA#8201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



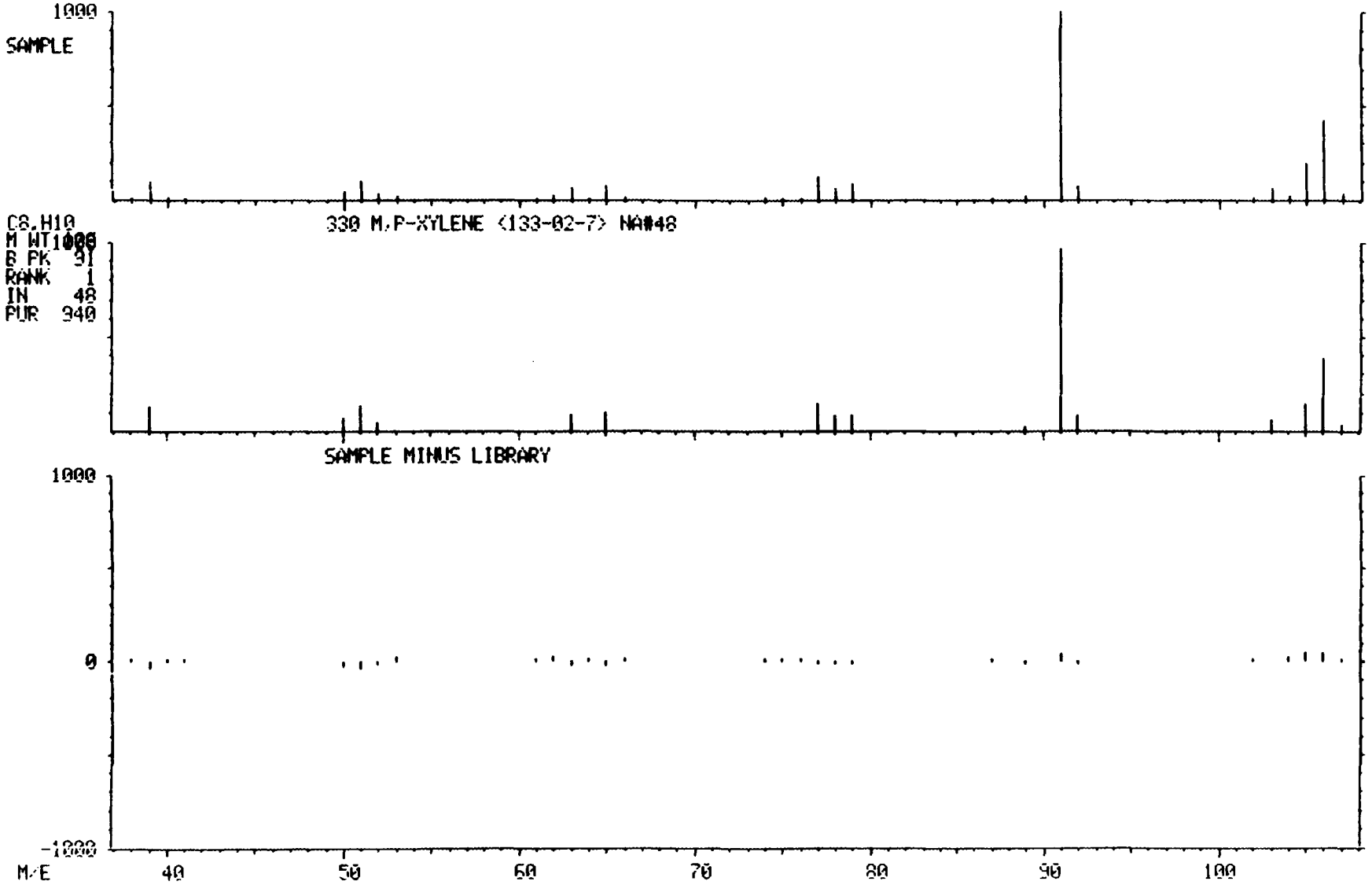
COMPUCHEM LABS

DUAL MASS SPECTRUM DATA: C5R09686B13 #342 BASE M/E: 91/ 91
12/23/89 20:10:00 + 11:46 RIC: 86393./ 108927.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18756 ON #13
ENHANCED (S 15B 2N) 219 ETHYLBENZENE <100-41-4> NA#47



COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R03686B13 # 360 BASE M/E: 91
12/29/89 20:10:00 + 12:00 RIC: 135071.
SAMPLE: 100UL CC#303686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)

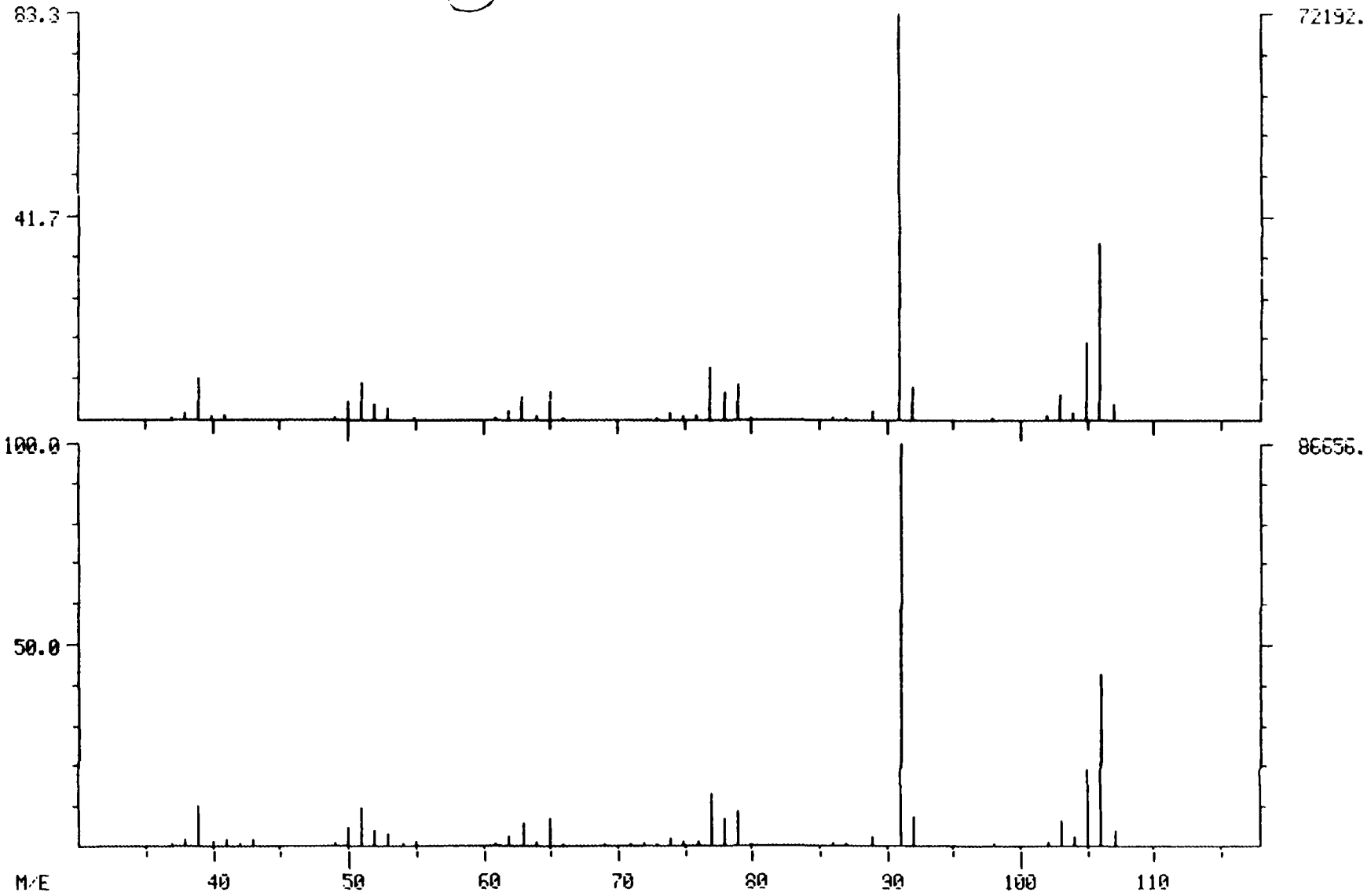


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 20:10:00 + 12:00
SAMPLE: 100UL CC#303686 EPA#B201B CASE#18756 ON #13
ENHANCED (S 15B 2N)

DATA: C5R03686B13 #360 BASE M/E: 91 91
RIC: 198399. 243139.

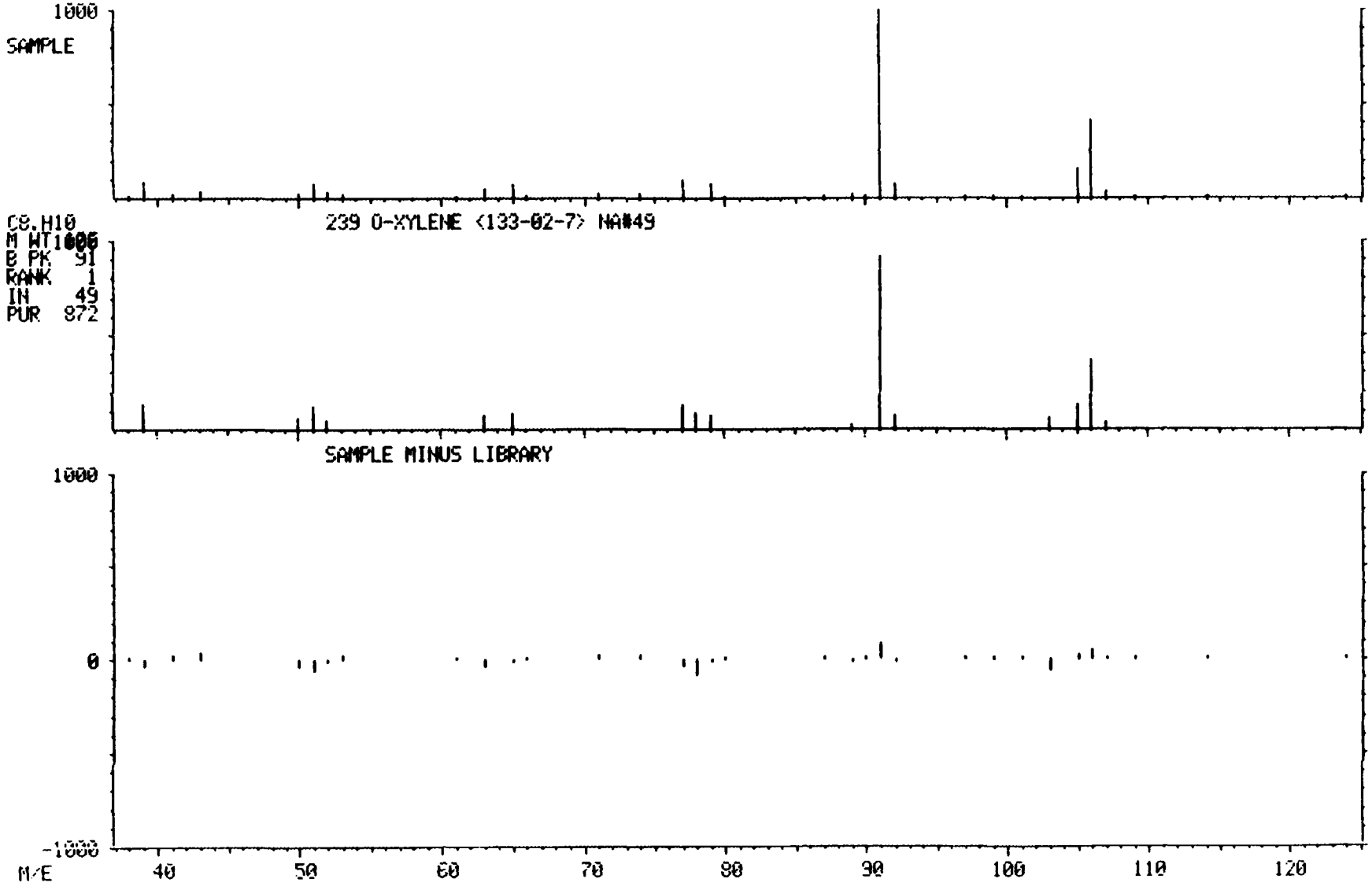
330 M,P-XYLENE (133-02-7) NA#48



18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09688B13 #1015 BASE M/E: 91
12/29/89 20:10:00 + 12:41 RIC: 110079.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)

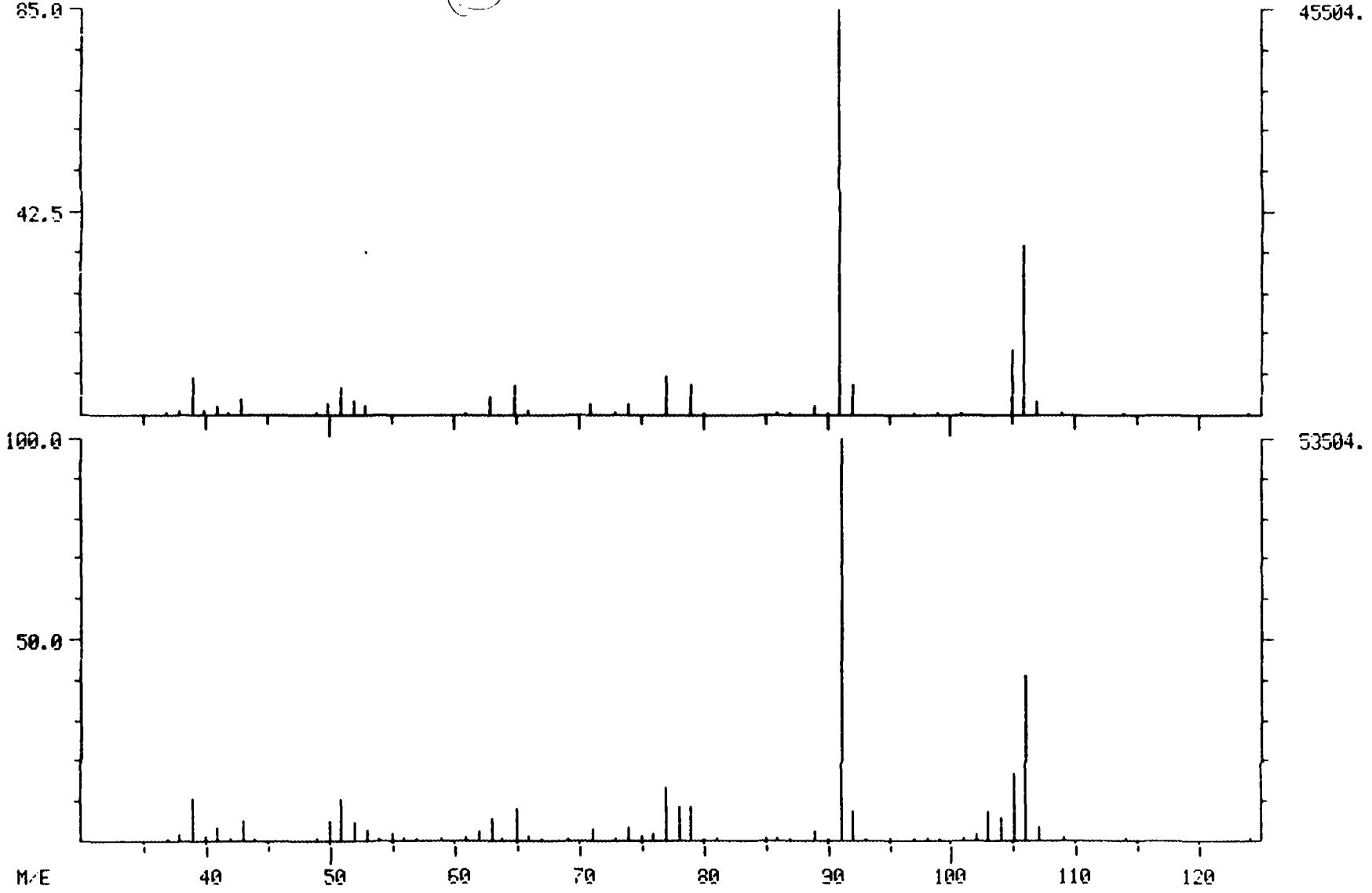


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/23/89 20:10:00 + 12:41
SAMPLE: 100UL CC#309586 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N)

DATA: C5R09686B13 #1015 BASE M/E: 91/ 91
RIC: 112255./ 162815.

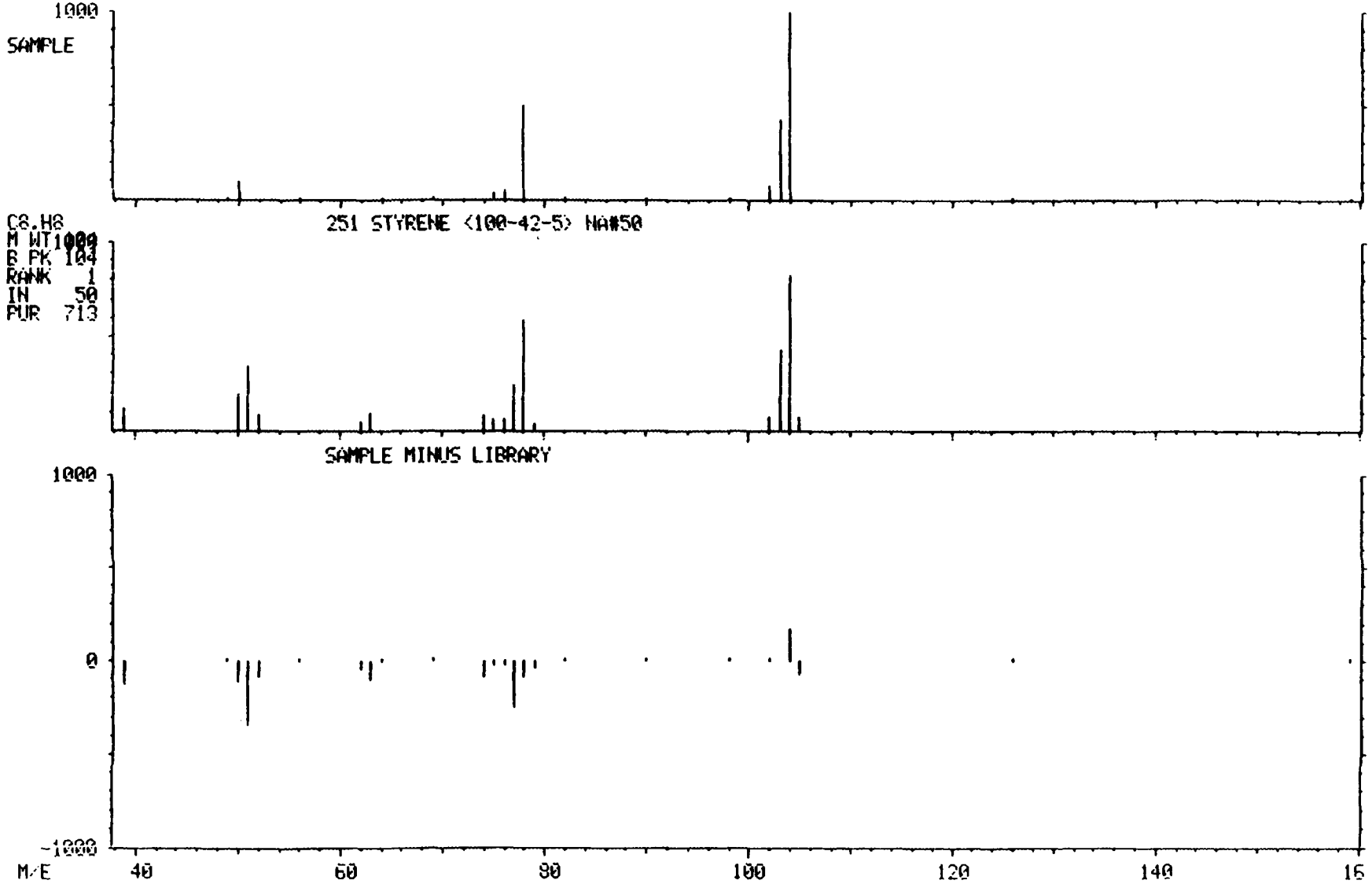
239 O-XYLENE (133-02-7) NA#49



COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 20:10:00 + 12:46
SAMPLE: 100UL CC#303686 EPA#8201B CASE#18755 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C5R03686B13 #1021
BASE M/E: 104
RIC: 23231.



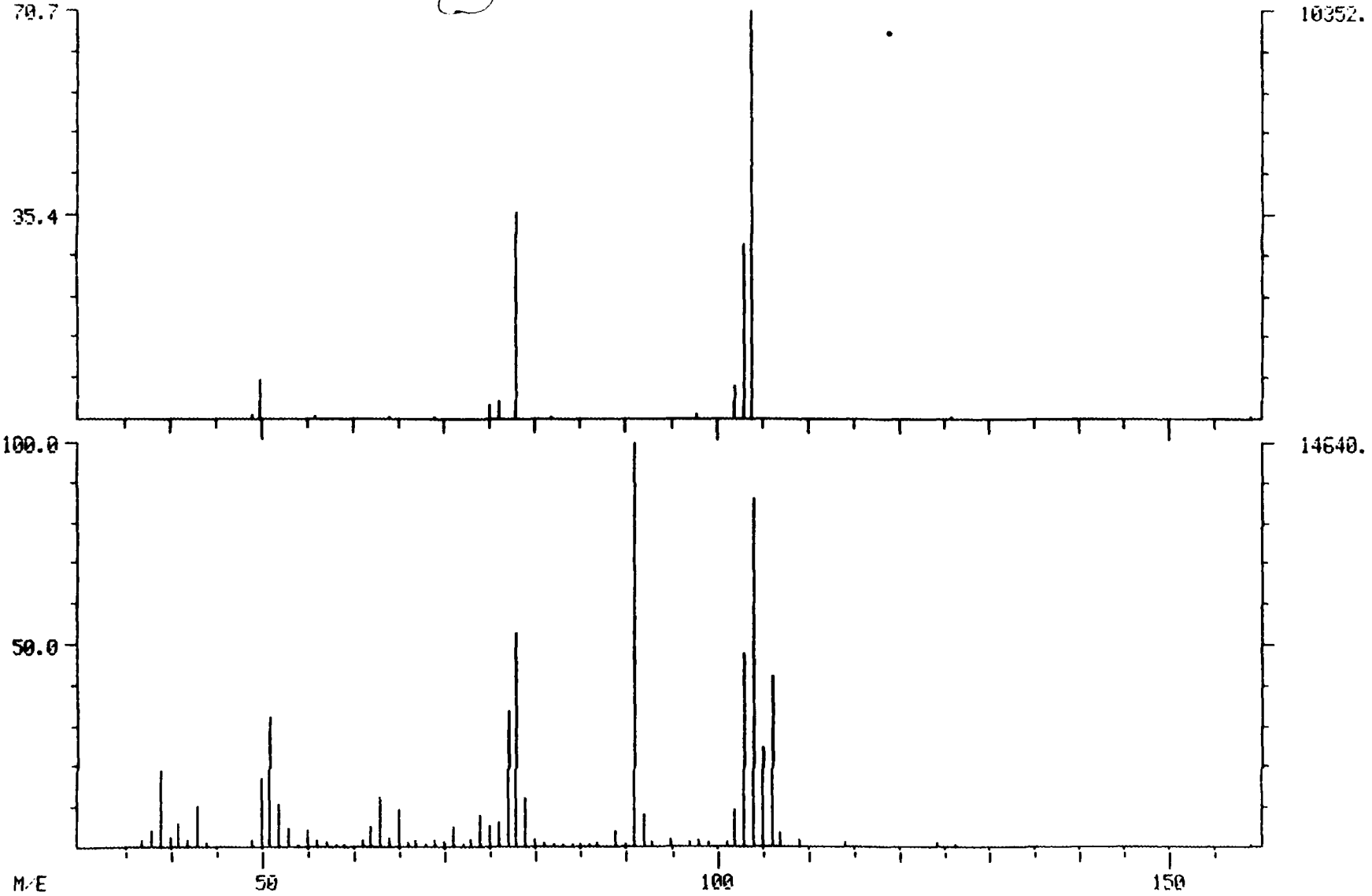
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 20:10:00 + 12:46
SAMPLE: 100UL CC#303686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N)

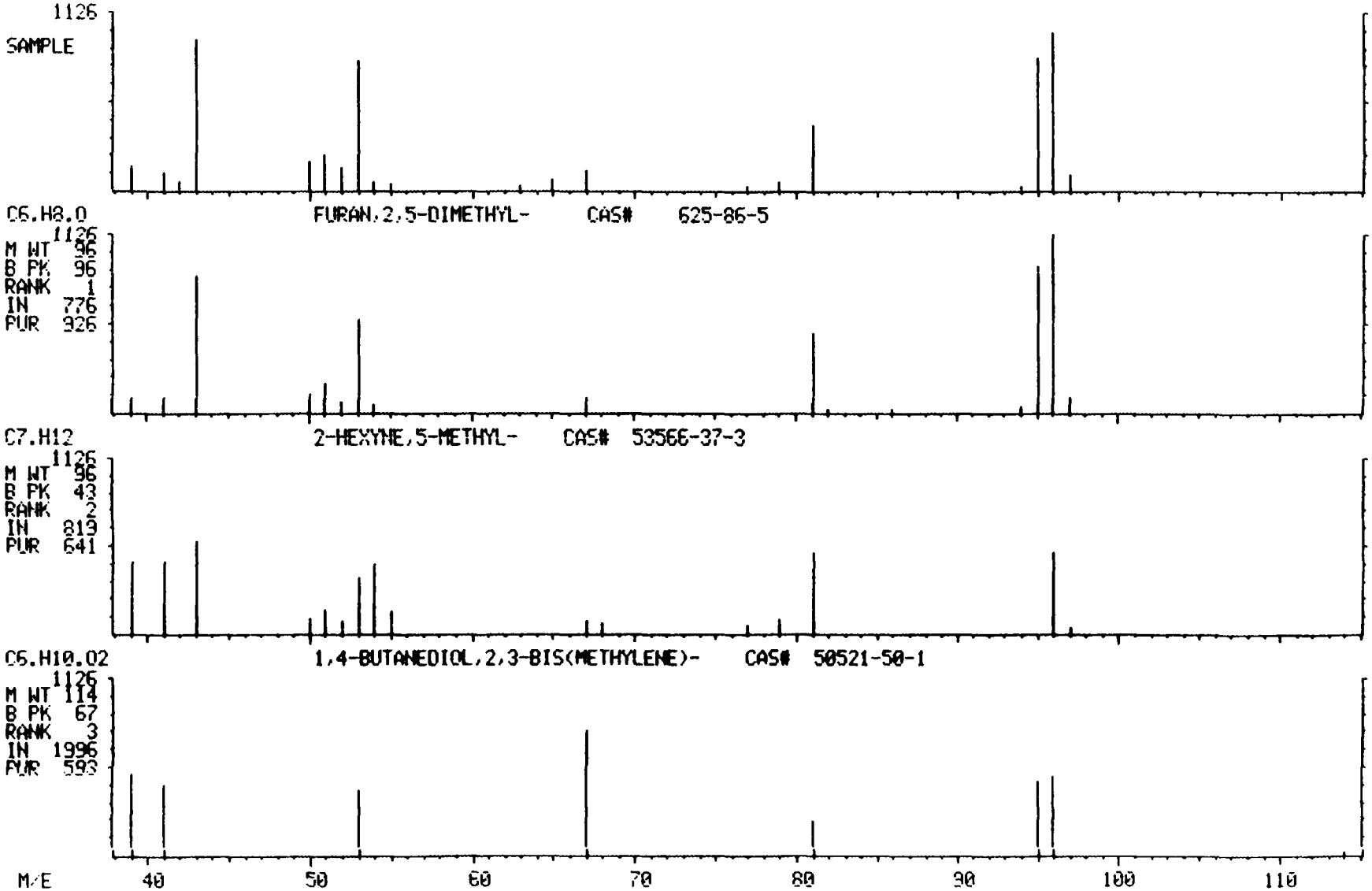
DATA: C5R09686B13 #1021 BASE M/E: 104/ 91
RIC: 23231./ 91519.

251 STYRENE (100-42-5) NA#50



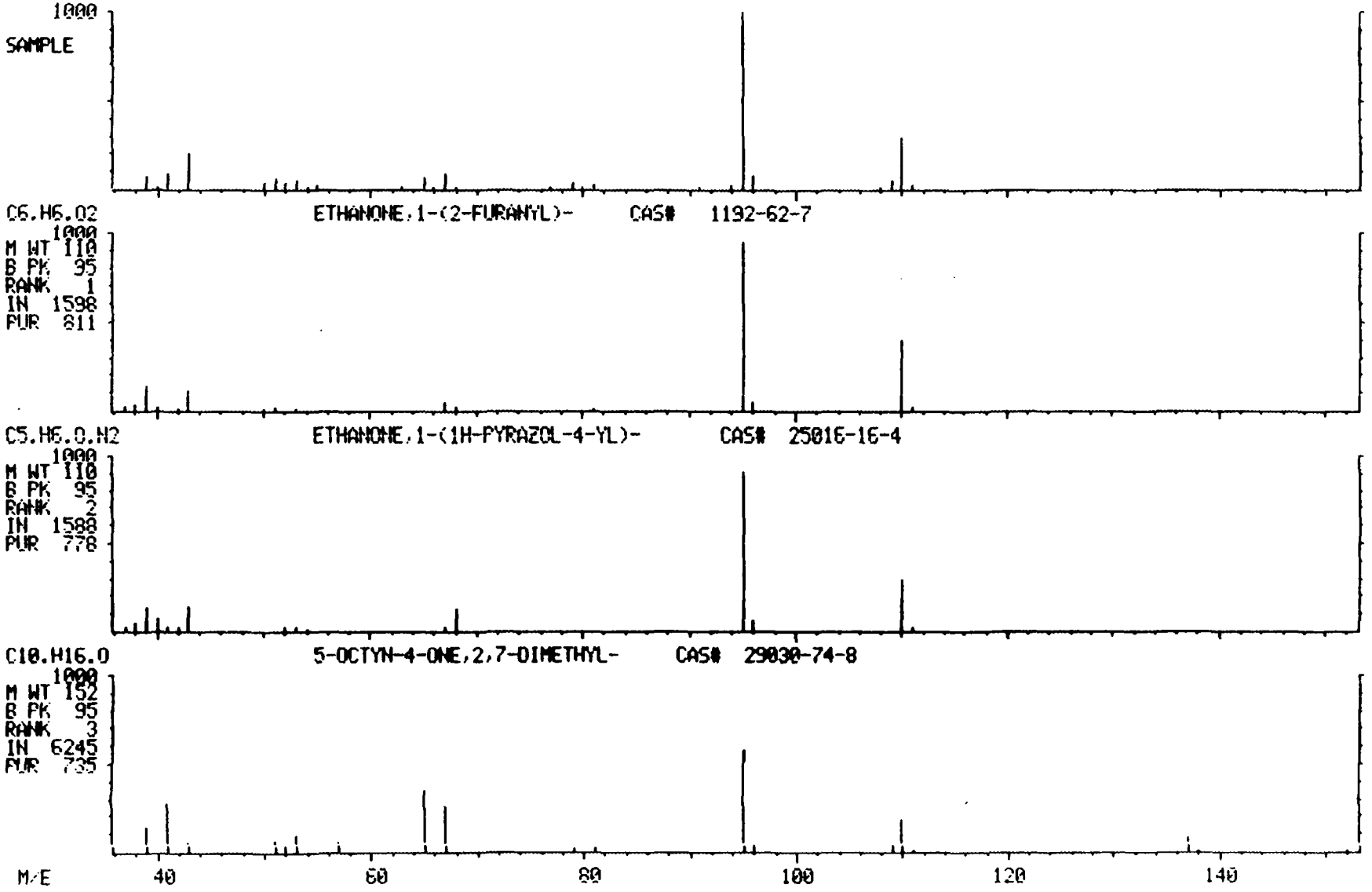
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09686B13 # 583 BASE M/E: 96
12/29/89 20:10:00 + 7:17 RIC: 13247.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



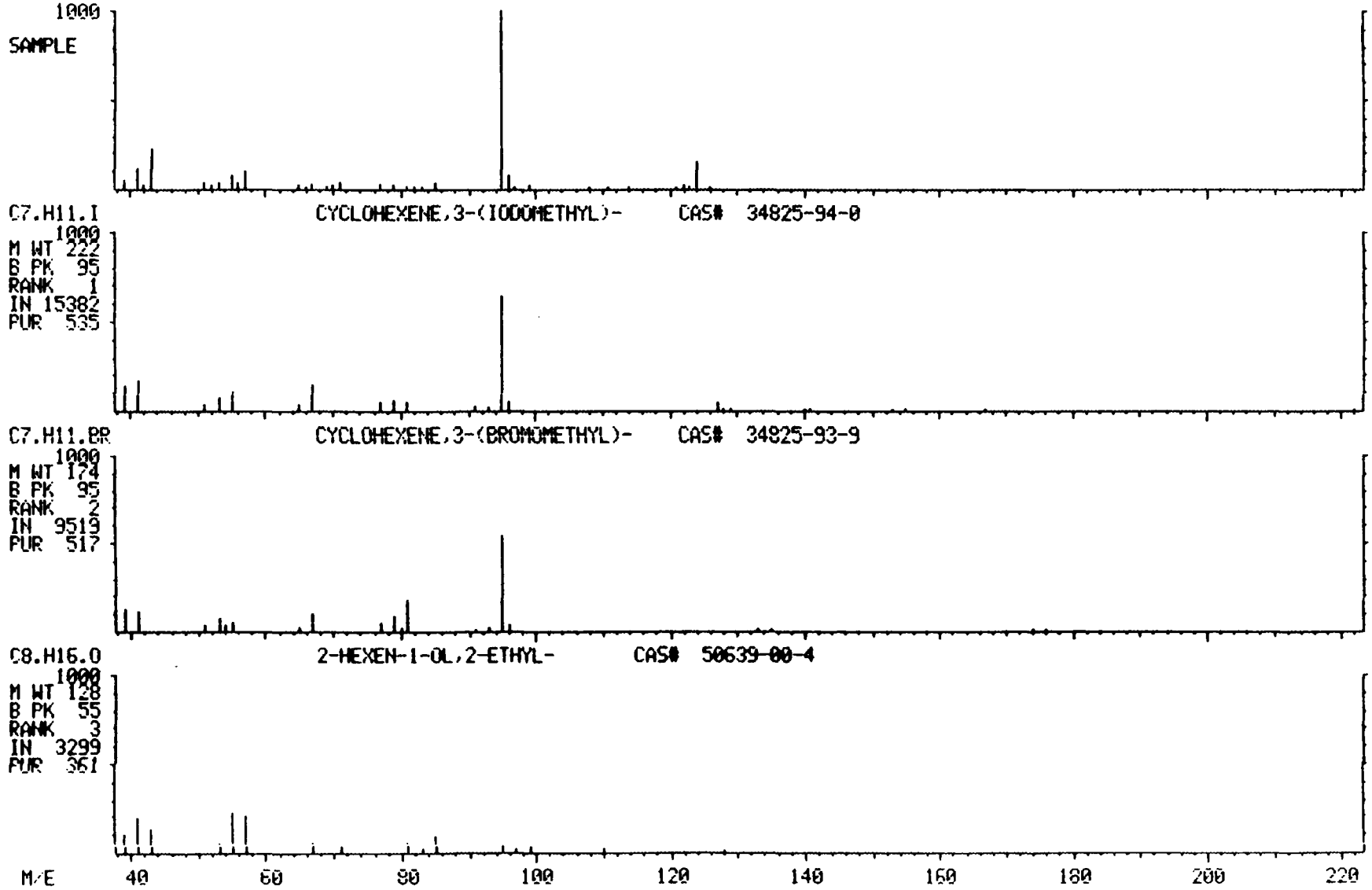
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R03686B13 # 802 BASE M/E: 95
12/29/89 20:10:00 + 10:01 RIC: 23615.
SAMPLE: 100UL CC#309686 EPA#8201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



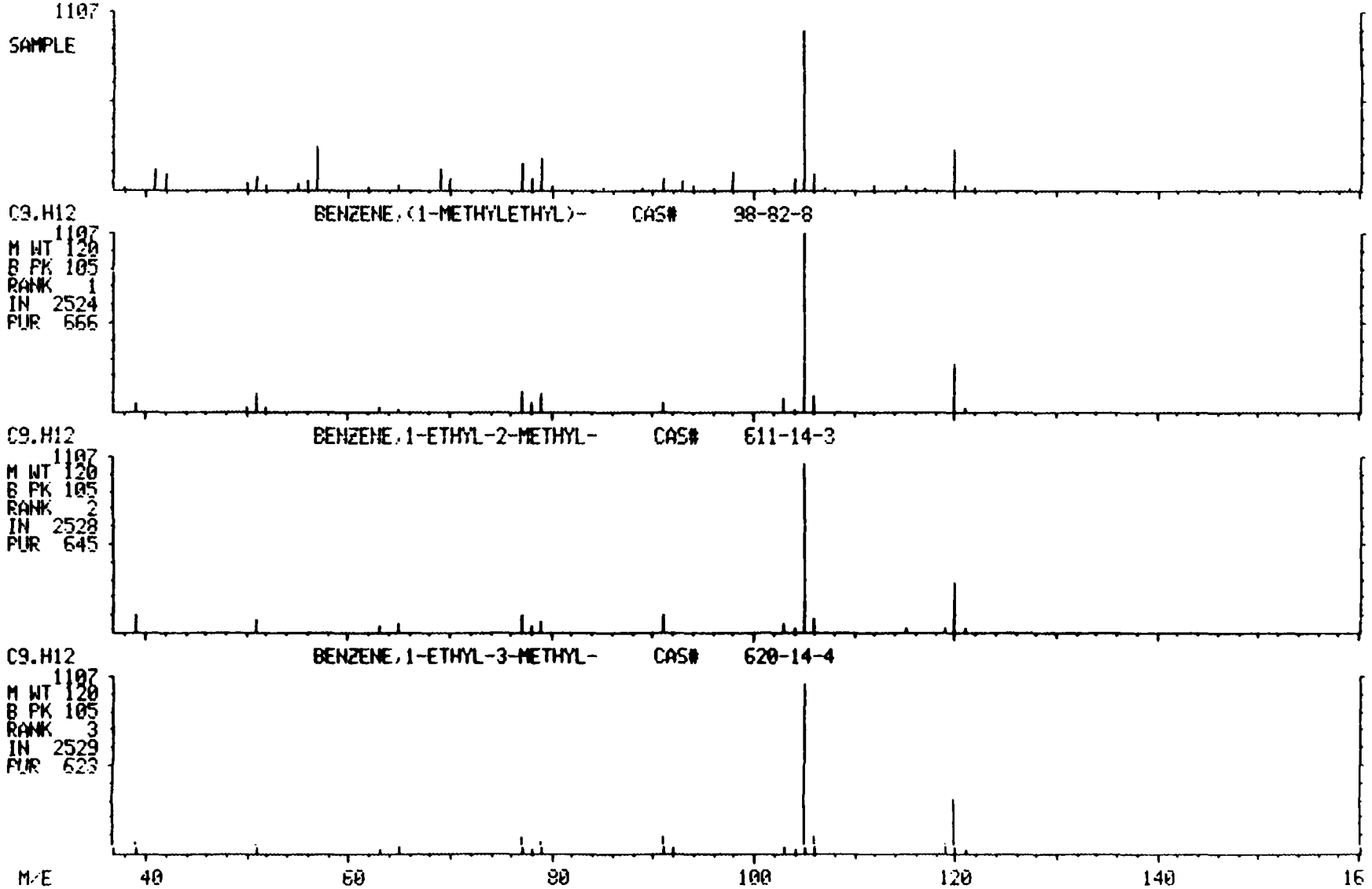
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09688B13 # 987 BASE M/E: 95
12/29/89 20:10:00 + 12:20 RIC: 25831.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

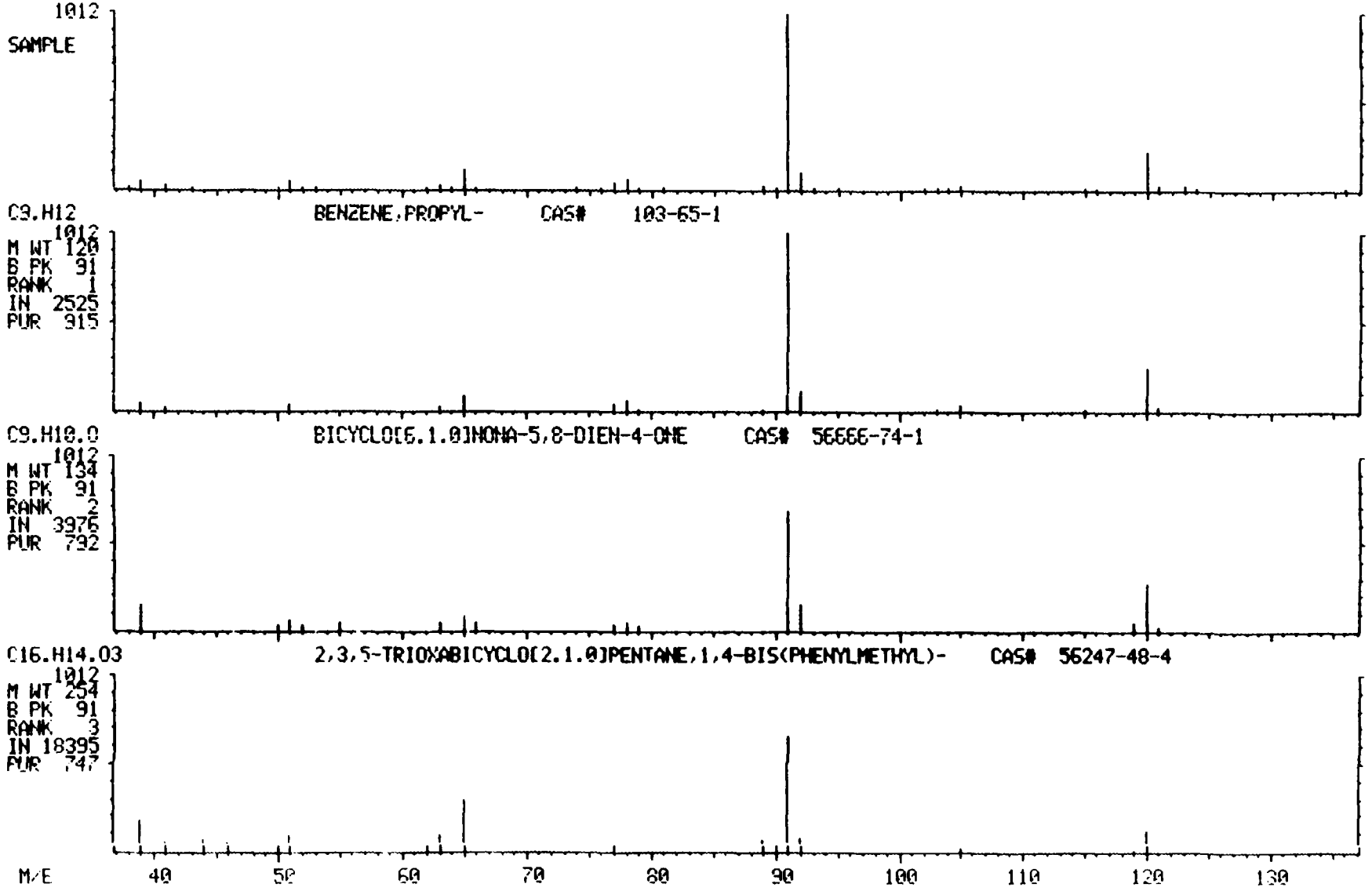
LIBRARY SEARCH DATA: C5R03686B13 #1075 BASE M/E: 105
12/29/83 20:10:00 + 13:26 RIC: 13935.
SAMPLE: 100UL CC#303686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

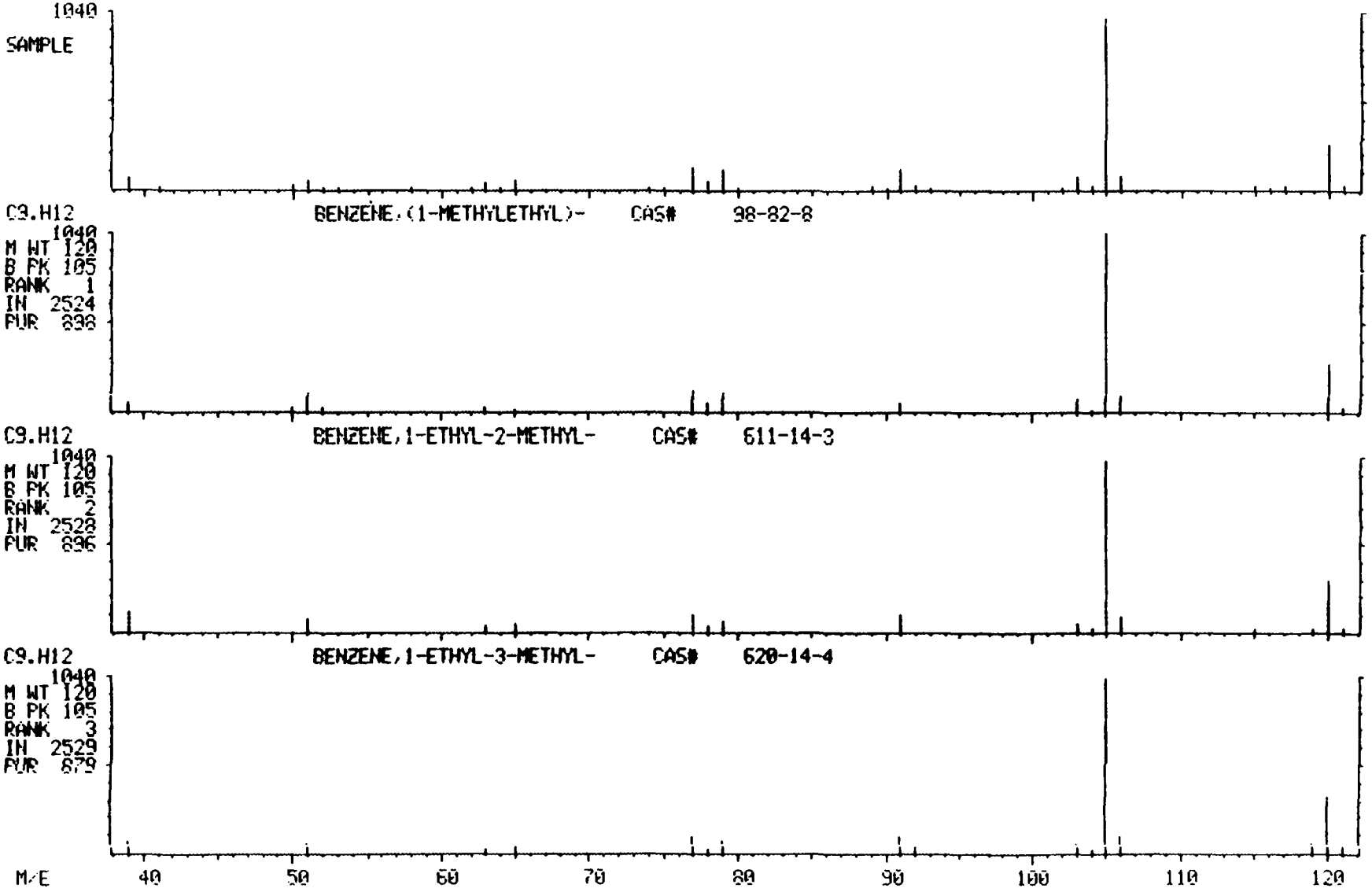
LIBRARY SEARCH
12/23/89 20:10:00 + 14:13
SAMPLE: 100UL CC#303686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C5R03686B13 #1138
BASE M/E: 91
RIC: 47295.



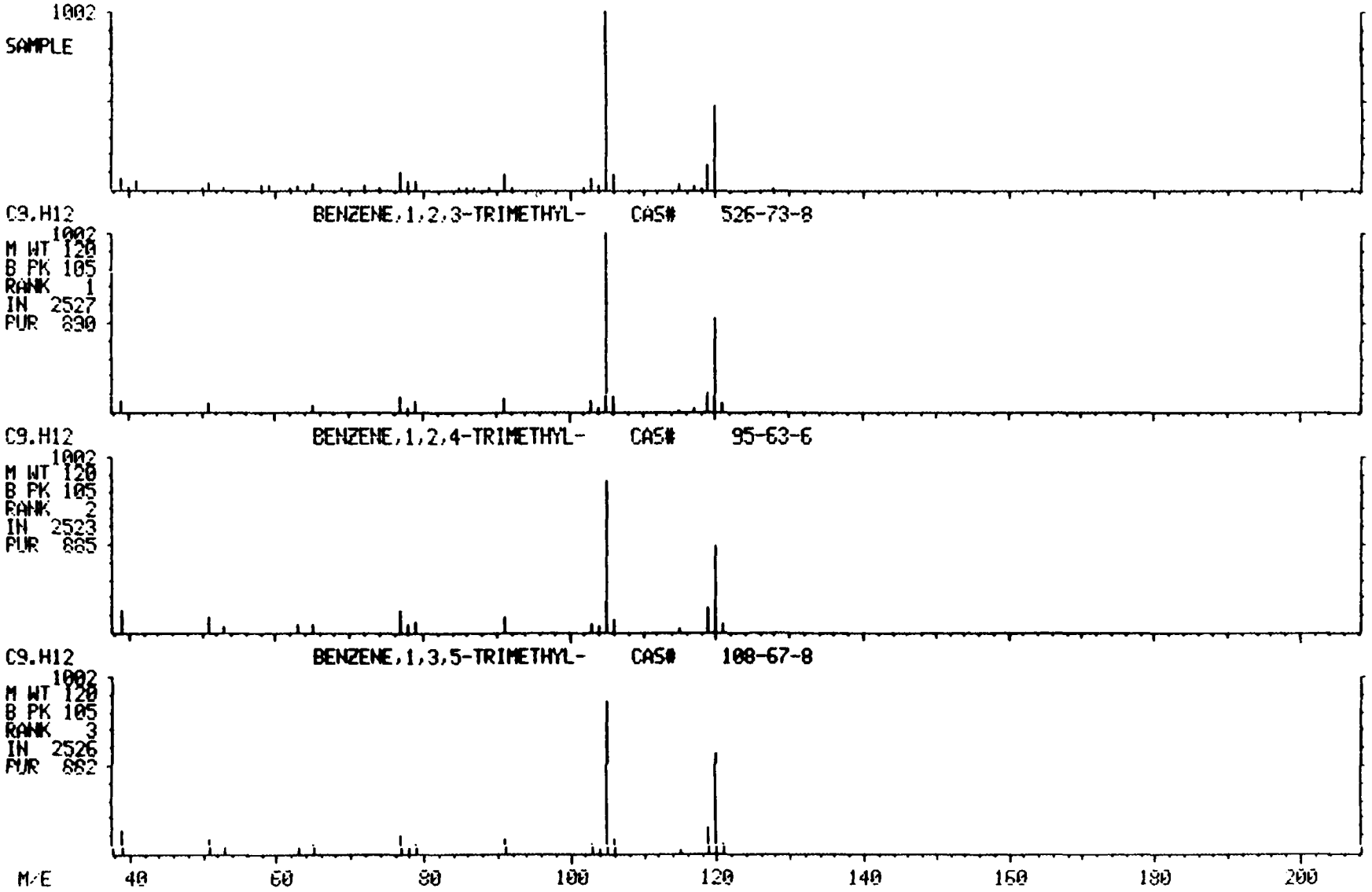
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09686B13 #1156 BASE M/E: 105
12/29/89 20:10:00 + 14:27 RIC: 150527.
SAMPLE: 100UL CC#309686 EPA#8201B CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)



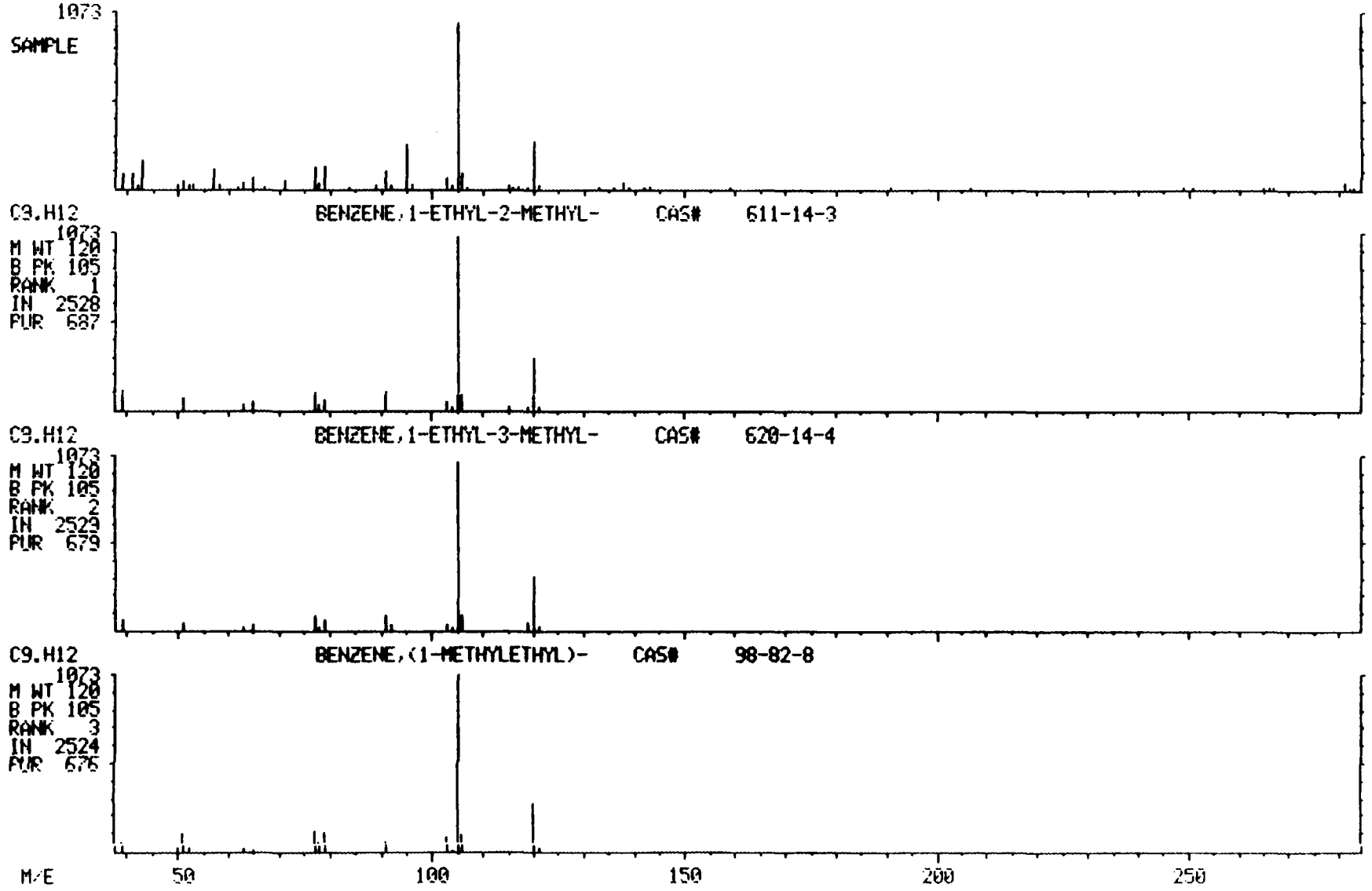
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R03686B13 #1163 BASE M/E: 105
12/29/89 20:10:00 + 14:37 RIC: 39615.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)



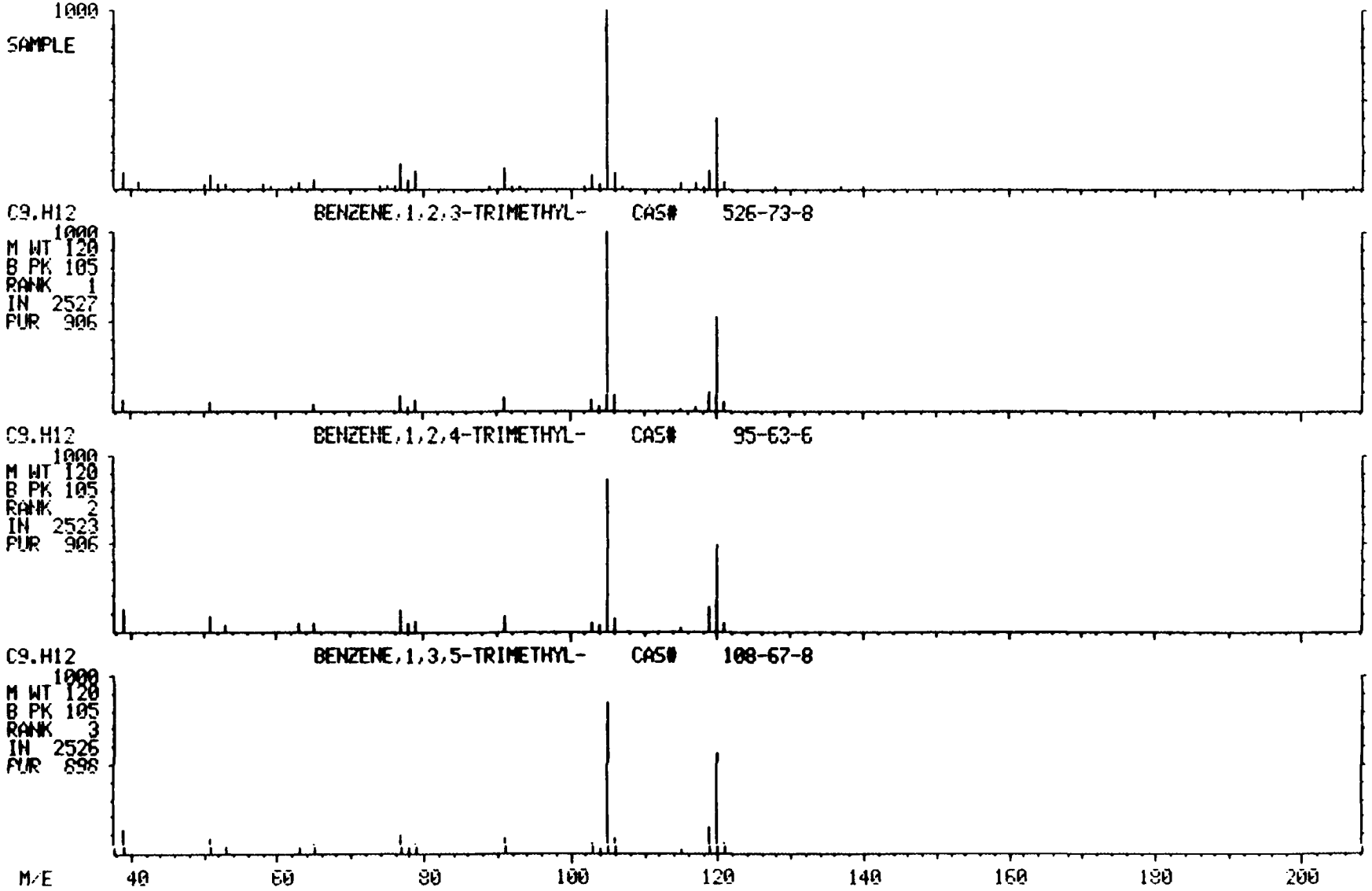
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09686B13 #1195 BASE M/E: 105
12/23/83 20:10:00 + 14:56 RIC: 120063.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



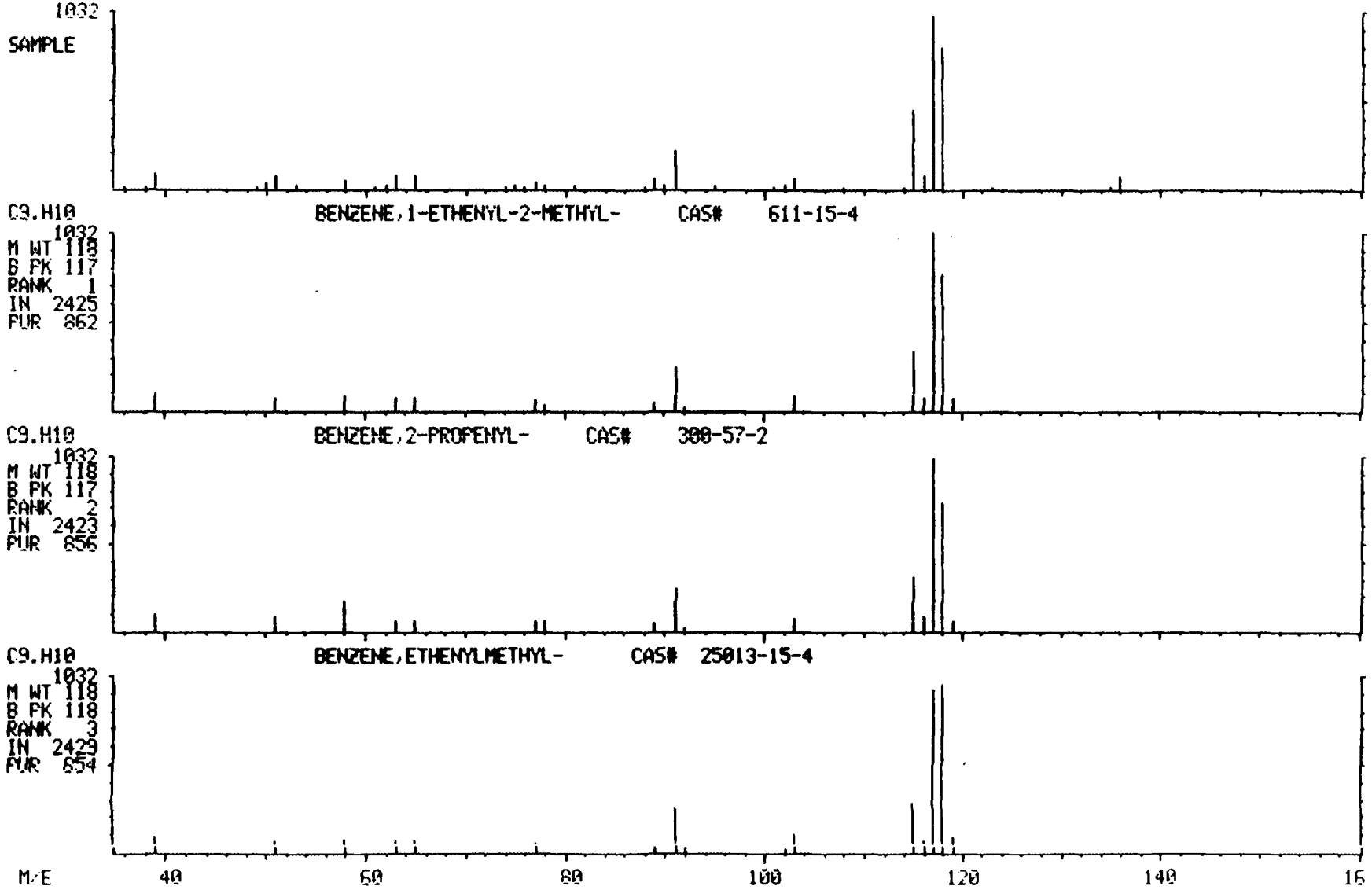
COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09686B13 #1224 BASE M/E: 105
12/29/89 20:10:00 + 15:18 RIC: 217599.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

LIBRARY SEARCH DATA: C5R09686B13 #1237 BASE M/E: 117
12/29/89 20:10:00 + 15:28 RIC: 26943.
SAMPLE: 100UL CC#309686 EPA#B201B CASE#18765 ON #13
ENHANCED (S 15B 2N 0T)



AR INSTRUCTIONS:

ECEIPT DATE _ _ CASE#: 18756 56 kgatt 11/12/90 DUE DATE ,

VOA
C/MS WORKSHEET COMPUCHEM#: 3096862 R1[ ] R2[ ] D (:1)
R3[ ] R4[ ] D2[ ] (:1)

MED. SOLID. EPA SOW 2/87

Sample Prep Code---156
Instrument Code----414
Compound List------495
Surrogate Std------394
Internal Std-------036

SAMPLE ID#: B201B RE OKS 2.90 Dry Wt. Factor .14 % Moisture 12

GC/MS ANALYSIS
mount Purged: I] 10mls/5g soil or [ ]Dilution 100 ul/10000ul/5g soil
nternal Standard Volume Added 5 ul
urrogate Standard Volume Added — ul
FB Filename BF81229A13 Disk( )
lank Filename CN011532B13 Disk ( )
'andard Filename CS71229A13 Disk ( )
ample Filename CSR0686B13 Disk ( )

JAN 03 1990

ANALYST(S): Injection 1452 Nguyen Work-up 1452 Nguyen

GC/MS REVIEW

CONDITION CODE: B EJA OKS 2.90

Entry Codes OK,EA,ES,SM,JS,SL,SH,JA,DA

Non-Entry Codes IP IL,IH,SW,CT,CS,PC,NR
I ,LA,DI,CO,RN,DW,SI,SF
LP,BB,OT,VC,FO,NS

Disposition: [ ] Complete

Extraneous Peak Search Results:
# of Peaks Found: 10

[ ] Reprep neat required

[ ] Reprep using ____g

Quality Assurance Notice(s):
Notices Required 1

[ ] Dilute (:1)

COMMENTS:

GC/MS Review OK Date 1/2/90 Auditor SDWagner Date 1/3/90

REPORT INTEGRATION Total # of Injections: 6
Final Reportable Package(s): CSR-B13 / GRD-C19

QA COMMENTS:

Initials ____ Date ____/____/____

FINAL REVIEW: Initials ____ Date ____/____/____

AC1010 (4/89)

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE -156 ASSIGNED TO HAMID Jami DATE 12/29/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309686	18756	0007			4.0 g	B201B	
311271	↓	↓	SS	309686	4.0 g	B201BMS	
311272			SS	309686	4.0 g	B201BMSD	
311273			BS	309686	10.0 ml		
311532			B1		10.0 ml	I4	
311533			B2		10.0 ml	I7	
			B3				
			B4				
			B5				

SURROGATE # 394 LOT # 30837 MANUAL OPERATOR 742 / 267

AMOUNT 0.5ml

RELINQUISHED BY [signature] DATE 12/29/89 RECEIVED BY 1556 DATE 12/29/89

VOLATILE - MEDIUM LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
							K142	
234	128	I	BROMOCHLOROMETHANE (IS)	409	54500	50.0		
221	50		CHLOROMETHANE				BDL	1200
231	62		VINYL CHLORIDE				BDL	1200
220	94		BROMOMETHANE				BDL	1200
209	64		CHLOROETHANE				BDL	1200
216	96		1,1-DICHLOROETHENE				BDL	620
254	76		CARBON DISULFIDE				BDL	620
252	43		ACETONE (2-PROPANONE)			1.4	30 180J	1200
248	114	I	1,4-DIFLUOROBENZENE (IS)	540	190000	50.0		
222	84		METHYLENE CHLORIDE			3.8	590 480U D B	620
226	96		TRANS-1,2-DICHLOROETHENE				BDL	620
214	63		1,1-DICHLOROETHANE				BDL	620
257	43		VINYL ACETATE				BDL	1200
237	96		CIS-1,2-DICHLOROETHENE				BDL	620
253	72		2-BUTANONE				BDL	1200
211	83		CHLOROFORM				BDL	620
227	97		1,1,1-TRICHLOROETHANE				BDL	620
206	117		CARBON TETRACHLORIDE				BDL	620
203	78		BENZENE			15.2	2200 1900 D	620
215	62		1,2-DICHLOROETHANE				BDL	620
270	117	I	D5-CHLOROBENZENE (IS)	914	270000	50.0		
229	130		TRICHLOROETHENE				BDL	620
217	63		1,2-DICHLOROPROPANE				BDL	620
212	83		BROMODICHLOROMETHANE				BDL	620
218	75		CIS-1,3-DICHLOROPROPENE				BDL	620
256	43		4-METHYL-2-PENTANONE			2.0	BDL 250J	1200
225	92		TOLUENE			112.0	16000 14000 D	620
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	620
228	97		1,1,2-TRICHLOROETHANE				BDL	620
224	164		TETRACHLOROETHENE				BDL	620
255	43		2-HEXANONE			16.8	2400 2100 D	1200
208	129		DIBROMOCHLOROMETHANE				BDL	620
207	112		CHLOROBENZENE				BDL	620
219	106		ETHYLBENZENE			52.0	7400 6500 D	620
330	106		M,P-XYLENE			86.6	12000 11000 D	620
239	106		O-XYLENE			60.4	8600 7600 D	620
251	104		STYRENE			19.6	2800 2400 D	620
205	173		BROMOFORM				BDL	620
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	620
258	65	S	D4-1,2-DICHLOROETHANE NA#57			56.4	113. %	
247	95	S	BROMOFLUOROBENZENE			52.3	105. %	
233	98	S	D8-TOLUENE NA#59			57.3	115. %	
289	106		XYLENES (TOTAL)			147.0	21000 18000 D	620

CORRECTED/REVIEWED BY CK Stuart
(GC/MS DATA REVIEWER)

DATE 12-90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
299	96	1,	2-DICHLOROETHENE (TOTAL)				BDL	62
CHECKSUMS: 3979.				1863	514500.	832.8	64743	

CORRECTED/REVIEWED BY C K Stuber
(GC/MS DATA REVIEWER)

DATE 1-2-90

VOLATILE - MEDIUM LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE NA#57	56.4	50.0	113.	70-121	X	
41	247	BROMOFLUOROBENZENE	52.3	50.0	105.	74-121	X	
42	233	D8-TOLUENE NA#59	57.3	50.0	115.	81-117	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{4.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{LIBRARY ADJUSTMENT} \times \text{DRY WEIGHT FACTOR} \times \frac{10000\ UL}{UL\ USED} =$$

$$\frac{4.0\ G}{4.00\ (G)} \times \frac{1.25}{} \times \frac{~~1.00~~\ 1.14}{} \times \frac{10000\ UL}{100.\ UL} = ~~125~~\ 142.000$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

$$\frac{100.\ UL}{UL\ USED} =$$

POSTED

$$\frac{100.\ UL}{100.\ UL} = 1.0$$

VERSION 8

CORRECTED/REVIEWED BY [signature]
(GC/MS DATA REVIEWER)

DATE 12-90

LABORATORY NOTICE

CompuChem ID #309686 (Client ID#BZ01B)

Case# 18756

The volatile fraction of this sample was analyzed at 1.0 gram as a Low Level Solid. The 1.0 gram analysis indicated a Medium Level Solid preparation was necessary to bring concentrations of the target compounds Toluene 2-Hexanone, M,P-Xylene, and O-Xylene within the analytical range. The analysis of 100 ul of the Medium Level extract should have resulted in quantitation report concentrations in the upper half of the analytical range. However results varied between the two analyses as shown in the following table of reported amounts:

	Low Level Soil		Medium Level Soil	
Acetone	370	ug/kg	BDL*	
Methylene Chloride	69	ug/kg	540	ug/kg
2-Butanone	260	ug/kg	BDL	
Benzene	140	ug/kg	2200	ug/kg
4-Methyl-2-Pentanone	71	ug/kg	BDL	
Toluene	1600	ug/kg	16000	ug/kg
2-Hexanone	1600	ug/kg	2400	ug/kg
Ethylbenzene	980	ug/kg	7400	ug/kg
M,P-Xylene	1900	ug/kg	12000	ug/kg
O-Xylene	1400	ug/kg	8600	ug/kg
Styrene	540	ug/kg	2800	ug/kg

* = Below Detection Limits

We are attributing these variations to an inhomogeneous soil matrix as well as to differences in the Low Level Soil Purge and Trap analysis and the Medium Level Soil methanol extraction procedure. We are reporting these data with reference to this notice.

Owen K. Studt
Data Review Specialist
15 January, 1990

QA Approval #1032
Linda Fowler
Sr. Quality Assurance Specialist
January 16, 1990

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309688

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009688C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	33	B
67-64-1	Acetone	37	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	26	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	13	
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	1	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	6	U
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	2	J

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202A

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309688

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009688C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 12 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 4

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	13.00	6.8	J
2.		UNKNOWN	14.37	5.7	J
3.		UNKNOWN	15.57	6.8	J
4.		INSTRUMENT ARTIFACT	15.92	6.8	J

COMPUCHEM LABS

RIC

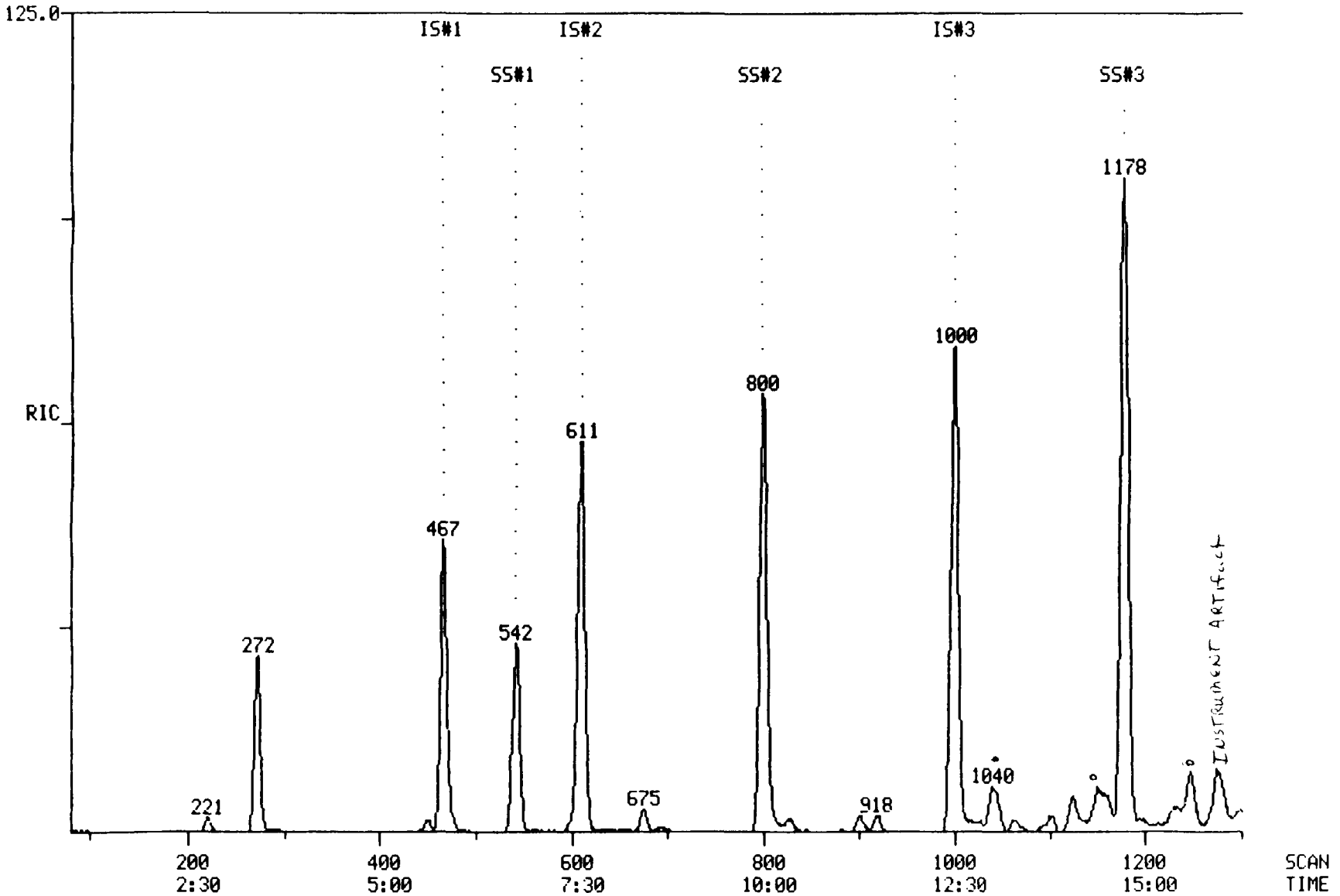
COMPUCHEM DATA: GH009688C19 SCANS 80 TO 1300

12/22/89 6:56:00

SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19

CONDS.:

119840.



QUANTITATION REPORT FILE: GH009688C19
DATA: GH009688C19.TI
12/22/89 6:56:00
SAMPLE: 5G CC#309683 CASE#18756.7 EPA#8202A ON#19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1422

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
2	221 CHLOROMETHANE <74-87-3> RO#2
3	231 VINYL CHLORIDE <75-01-4> RO#3
4	220 BROMOMETHANE <78-83-9> RO#4
5	209 CHLOROETHANE <75-00-3> RO#5
6	216 1,1-DICHLOROETHENE <75-35-4> RO#8
7	254 CARBON DISULFIDE <75-15-0> RO#9
8	252 ACETONE (2-PROPANONE) <67-64-1> RO#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
10	222 METHYLENE CHLORIDE <75-09-2> RO#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
12	214 1,1-DICHLOROETHANE <75-34-3> RO#19
13	257 VINYL ACETATE <108-05-4> RO#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
15	253 2-BUTANONE <78-93-3> RO#22
16	211 CHLOROFORM <67-66-2> RO#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
18	206 CARBON TETRACHLORIDE <56-23-5> RO#25
19	203 BENZENE <71-43-2> RO#26
20	215 1,2-DICHLOROETHANE <107-06-2> RO#27
21	*270 D5-CHLOROBENZENE (IS) RO#29
22	229 TRICHLOROETHENE <79-01-6> RO#30
23	217 1,2-DICHLOROPROPANE <78-87-5> RO#31
24	212 BROMODICHLOROMETHANE <75-27-4> RO#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
26	256 4-METHYL-2-PENTANONE <108-01-1> RO#36
27	225 TOLUENE <108-88-3> RO#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
30	224 TETRACHLOROETHENE <127-18-4> RO#41
31	255 2-HEXANONE <591-78-6> RO#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
33	207 CHLOROBENZENE <108-90-7> RO#45
34	219 ETHYLBENZENE <100-41-4> RO#47
35	330 M,P-XYLENE <133-02-7> RO#48
36	239 O-XYLENE <133-02-7> RO#49
37	251 STYRENE <100-42-5> RO#50
38	205 BROMOFORM <75-25-2> RO#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
40	#258 D4-1,2-DICHLOROETHANE RO#57
41	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
42	#233 D8-TOLUENE RO#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	467	5:50	1	1.000	A BB	49330.	50.000 UG/KG	12.64
2	50	NOT FOUND							

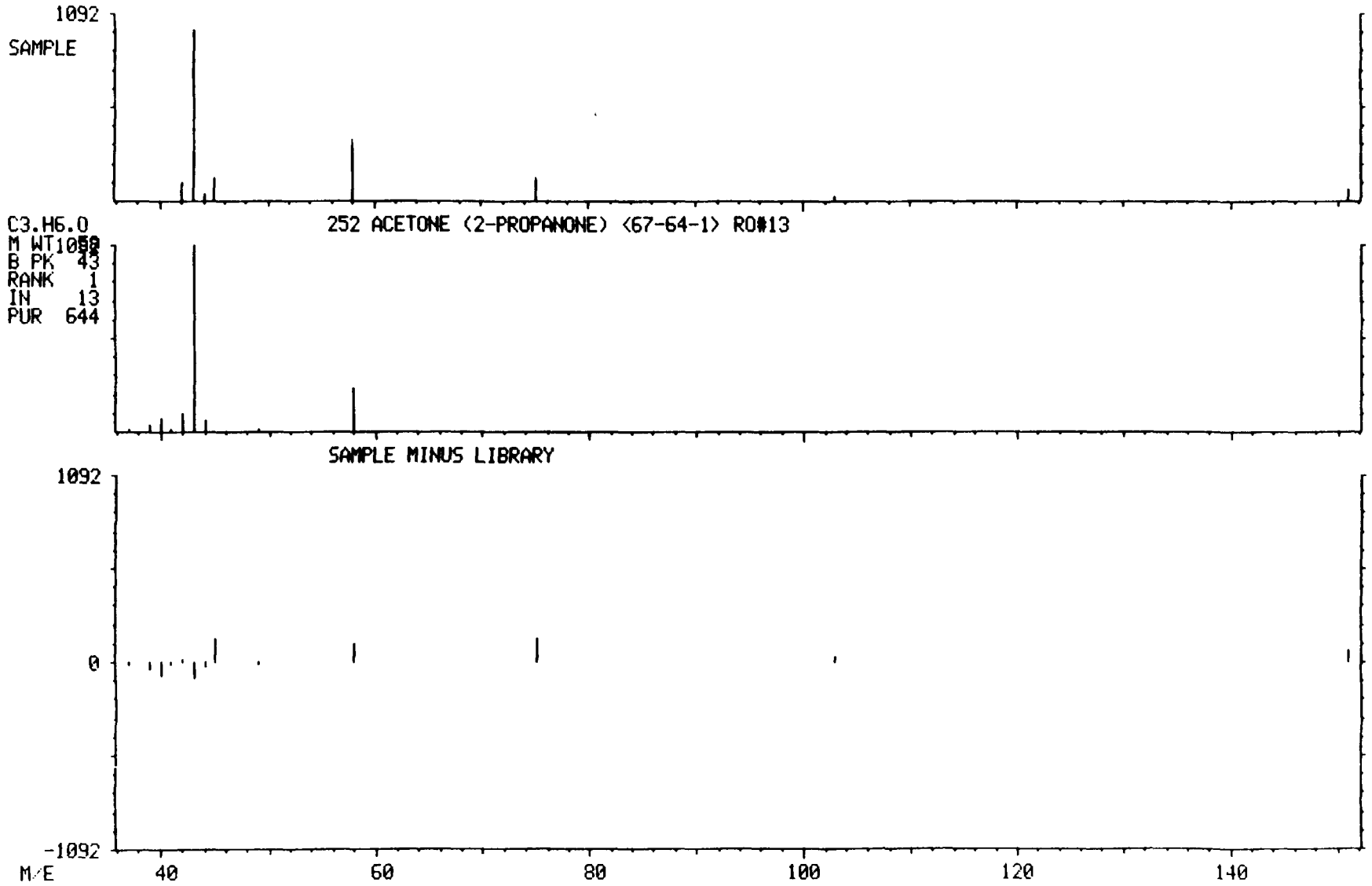
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	96	NOT FOUND							
7	76	NOT FOUND							
8	43	222	2:46	1	0.475	A BB	8503.	32.570 UG/KG	8.23
9	114	611	7:38	9	1.000	A BB	196249.	50.000 UG/KG	12.64
10	84	271	3:23	1	0.580	A BB	47558.	29.334 UG/KG	7.41
11	96	NOT FOUND							
12	63	NOT FOUND							
13	43	NOT FOUND							
14	96	NOT FOUND							
15	72	451	5:38	1	0.966	A BB	2422.	22.907 UG/KG	5.79
16	83	NOT FOUND							
17	97	NOT FOUND							
18	117	NOT FOUND							
19	78	NOT FOUND							
20	62	NOT FOUND							
21	117	999	12:29	21	1.000	A BB	206316.	50.000 UG/KG	12.64
22	130	NOT FOUND							
23	63	NOT FOUND							
24	83	NOT FOUND							
25	75	NOT FOUND							
26	43	801	10:01	21	0.802	A BB	2425.	2.290 UG/KG	0.58
27	92	808	10:06	21	0.809	A BB	3891	1.278 UG/KG	0.32
28	75	NOT FOUND							
29	97	NOT FOUND							
30	164	NOT FOUND							
31	43	920	11:30	21	0.921	A VB	8912.	11.064 UG/KG	2.80
32	129	NOT FOUND							
33	112	NOT FOUND							
34	106	~~1046~~	13:04	21	1.047	A BB	~~4995~~.	~~2.389~~ UG/KG	0.60
35	106	1046	13:04	21	1.047	A BB	4995.	1.718 UG/KG	0.43
36	106	NOT FOUND							
37	104	NOT FOUND							
38	173	NOT FOUND							
39	83	NOT FOUND							
40	65	542	6:46	1	1.161	A BB	99647.	48.404 UG/KG	12.23
41	95	1178	14:43	21	1.179	A BB	162654.	46.080 UG/KG	11.65
42	98	800	10:00	21	0.801	A BB	206033.	47.659 UG/KG	12.04

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:54	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:06		10.000			50.00		0.952	
3	1:11		10.000			50.00		1.256	
4	1:26		10.000			50.00		1.579	
5	1:34		10.000			50.00		0.796	
6	2:37		5.000			50.00		1.346	
7	2:46		5.000			50.00		3.709	
8	2:48	0.99	10.000	0.05	32.57	50.00	0.172	0.265	0.65
9	7:42	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	3:27	0.98	5.000	0.12	29.33	50.00	0.964	1.643	0.59
11	3:53		5.000			50.00		1.486	
12	4:34		5.000			50.00		2.635	
13	4:52		10.000			50.00		0.458	
14	5:33		5.000			50.00		1.675	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:42	0.99	10.000	0.10	22.91	50.00	0.049	0.107	0.46
16	6:10		5.000			50.00		3.433	
17	6:18		5.000			50.00		0.814	
18	6:34		5.000			50.00		0.755	
19	6:53		5.000			50.00		0.895	
20	6:58		5.000			50.00		2.523	
21	12:34	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	8:01		5.000			50.00		0.569	
23	8:22		5.000			50.00		0.352	
24	8:55		5.000			50.00		0.701	
25	9:41		5.000			50.00		0.690	
26	10:04	0.99	15.000	0.05	2.29	50.00	0.012	0.257	0.05
27	10:10	0.99	5.000	0.16	1.28	50.00	0.019	0.738	0.03
28	10:42		5.000			50.00		0.342	
29	10:58		5.000			50.00		0.349	
30	11:06		5.000			50.00		0.723	
31	11:33	1.00	15.000	0.06	11.06	50.00	0.043	0.195	0.22
32	11:35		5.000			50.00		0.690	
33	12:37		5.000			50.00		1.092	
34	12:55	1.01	5.000	0.21	2.39	50.00	0.024	0.507	0.05
35	13:10	0.99	5.000	0.21	1.72	50.00	0.024	0.705	0.03
36	13:52		5.000			50.00		0.622	
37	13:54		5.000			50.00		1.099	
38	14:07		5.000			50.00		0.664	
39	15:16		5.000			50.00		0.557	
40	6:52	0.99	5.000	0.23	48.40	50.00	2.020	2.087	0.97
41	14:49	0.99	5.000	0.24	46.08	50.00	0.788	0.855	0.92
42	10:04	0.99	5.000	0.16	47.66	50.00	0.999	1.048	0.95

COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009688C19 # 222 BASE M/E: 43
12/22/89 6:56:00 + 2:46 RIC: 1783.
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

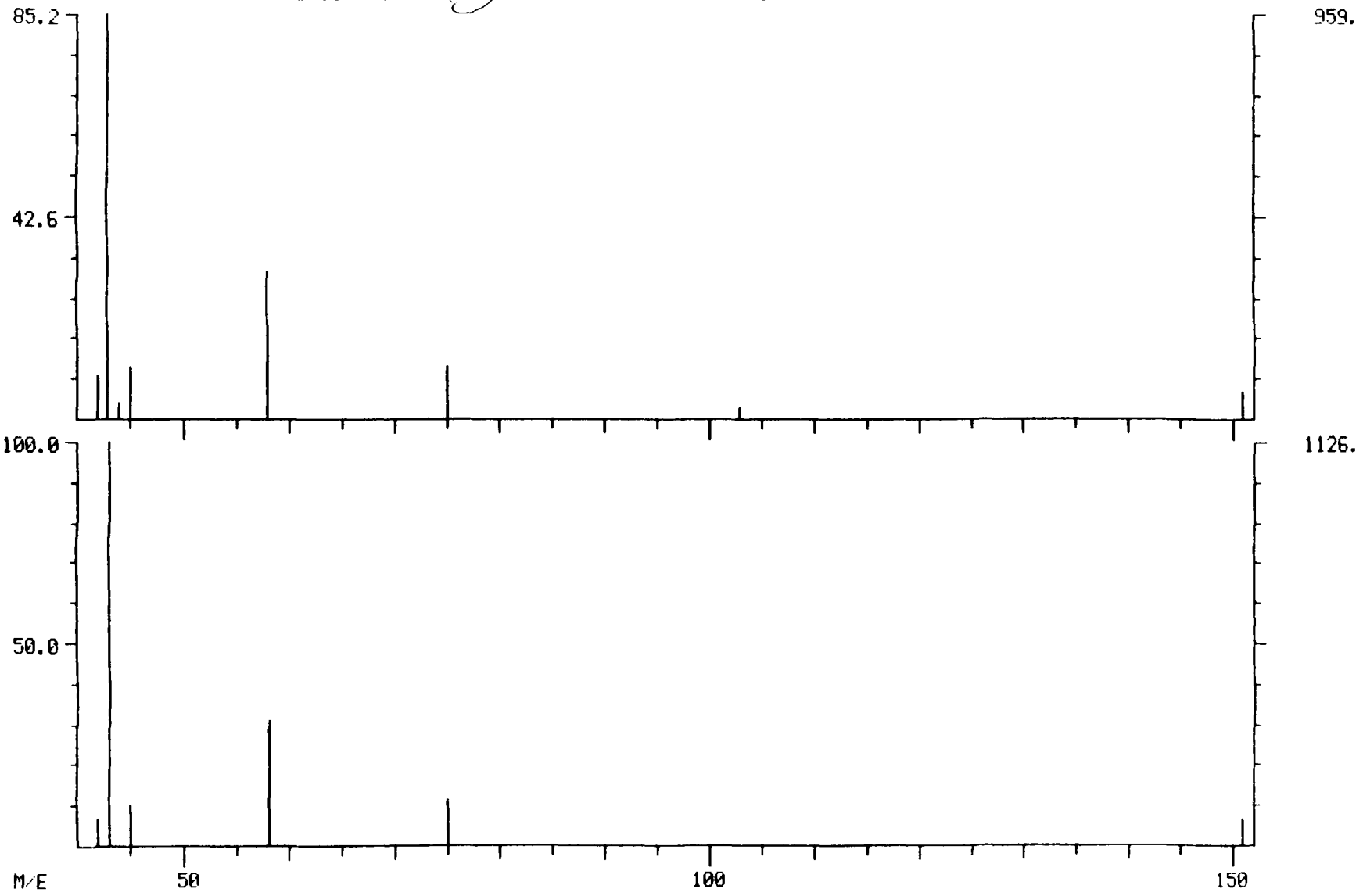


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 6:56:00 + 2:46
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N)

DATA: GH009688C19 #222 BASE M/E: 43/ 43
RIC: 1783./ 1869.

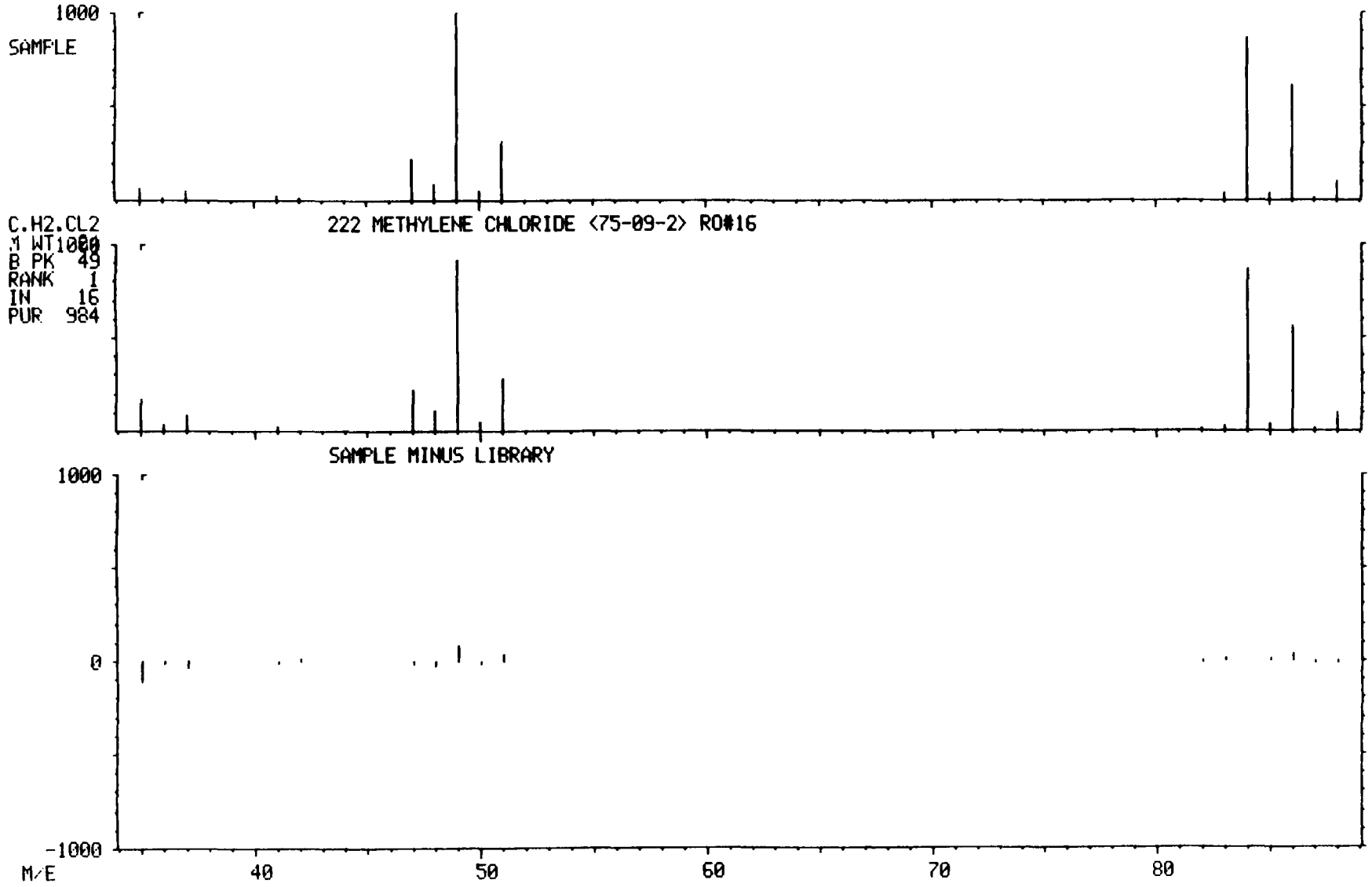
252 ACETONE (2-PROPANONE) (67-64-1) RO#13



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 3:23
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009688C19 # 271
BASE M/E: 49
RIC: 23519.

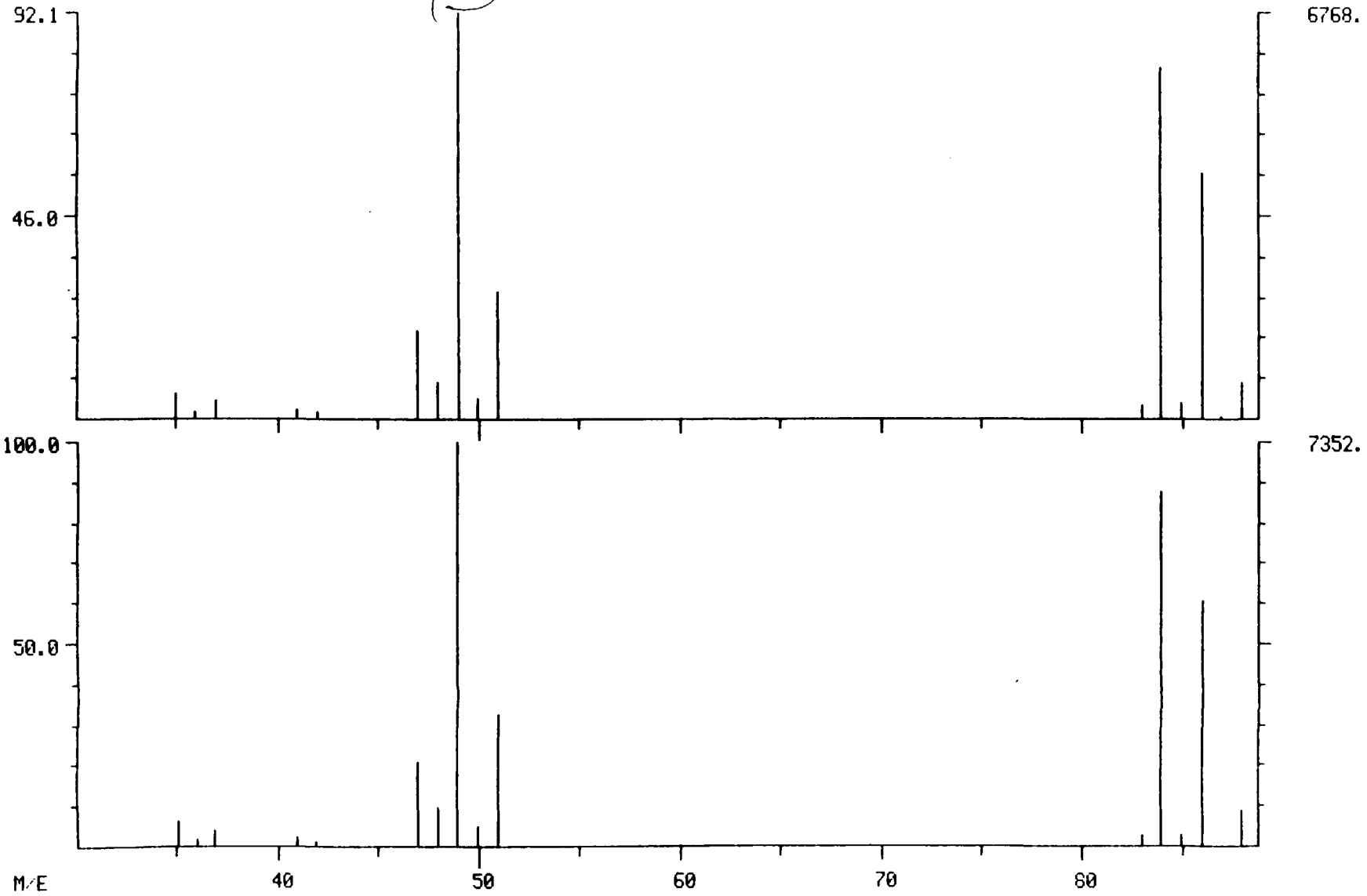


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 6:56:00 + 3:23
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N)

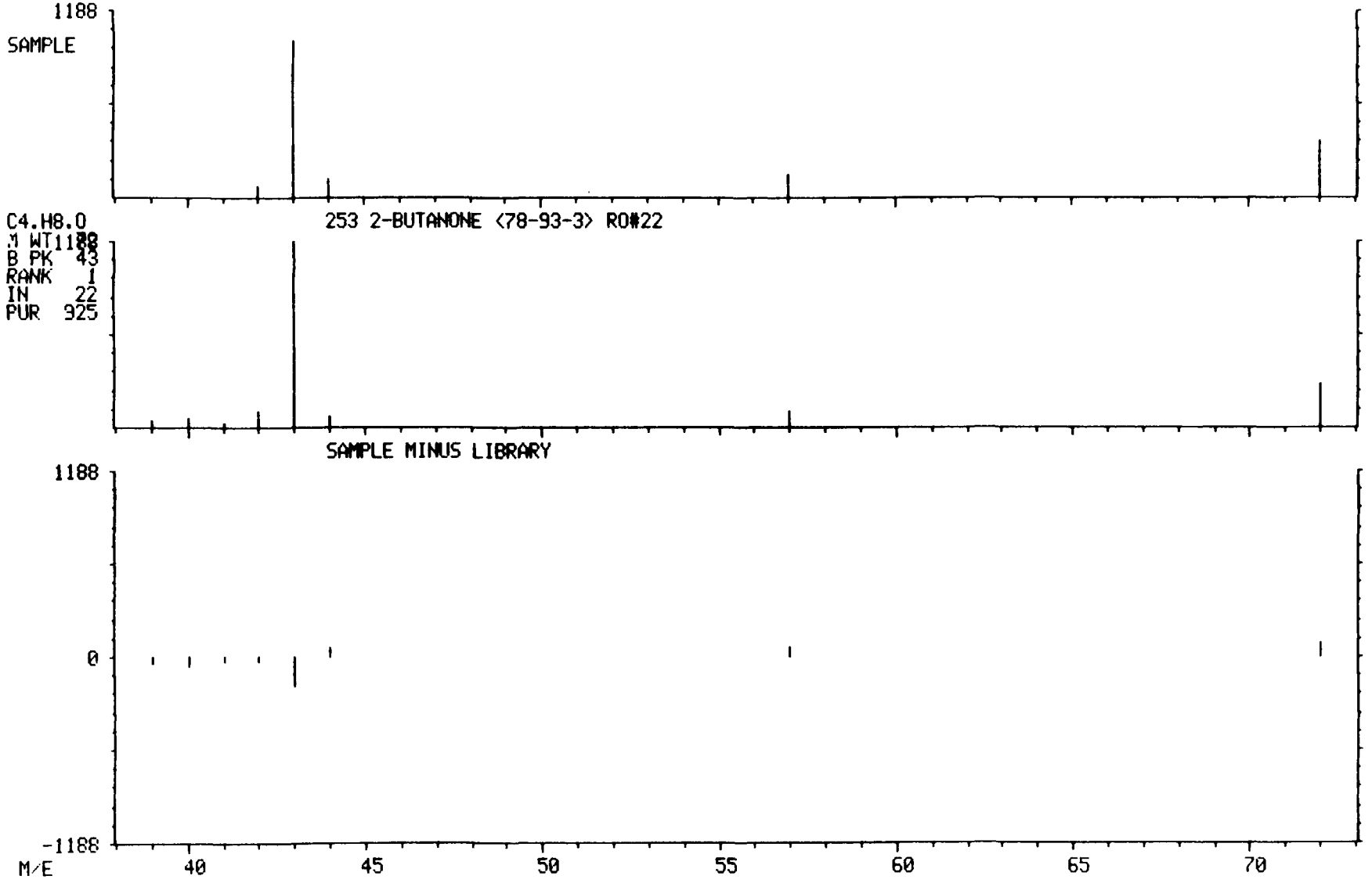
DATA: GH009688C19 #271 BASE M/E: 49/ 49
RIC: 23519./ 25439.

222 METHYLENE CHLORIDE (75-09-2) RO#16



COMPUCHEM LABS

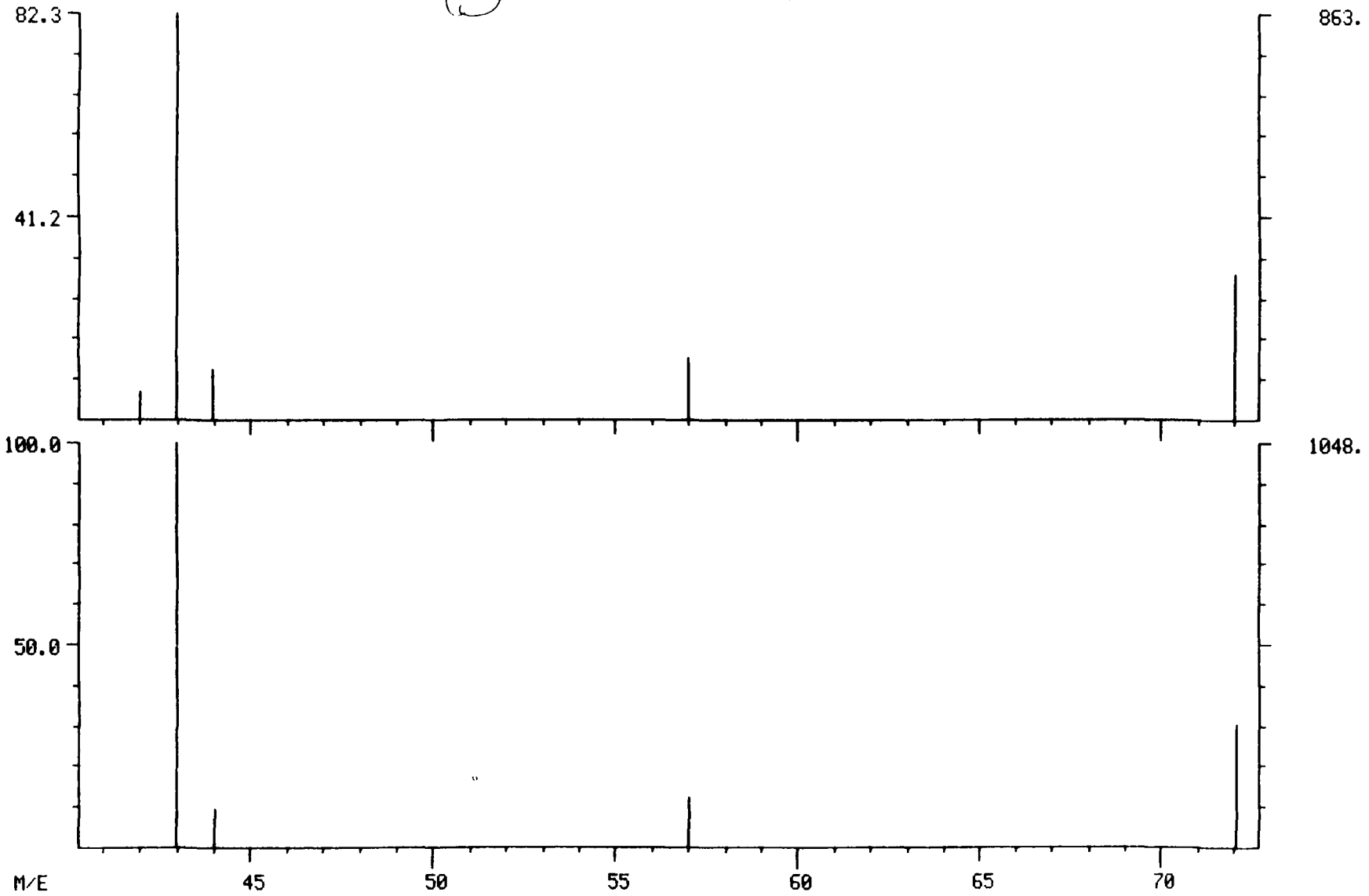
LIBRARY SEARCH DATA: GH009688C19 # 451 BASE M/E: 43
12/22/89 6:56:00 + 5:38 RIC: 1463.
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 6:56:00 + 5:38
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N) 253 2-BUTANONE (78-93-3) RO#22

DATA: GH009688C19 #451 BASE M/E: 43/ 43
RIC: 1463./ 1591.

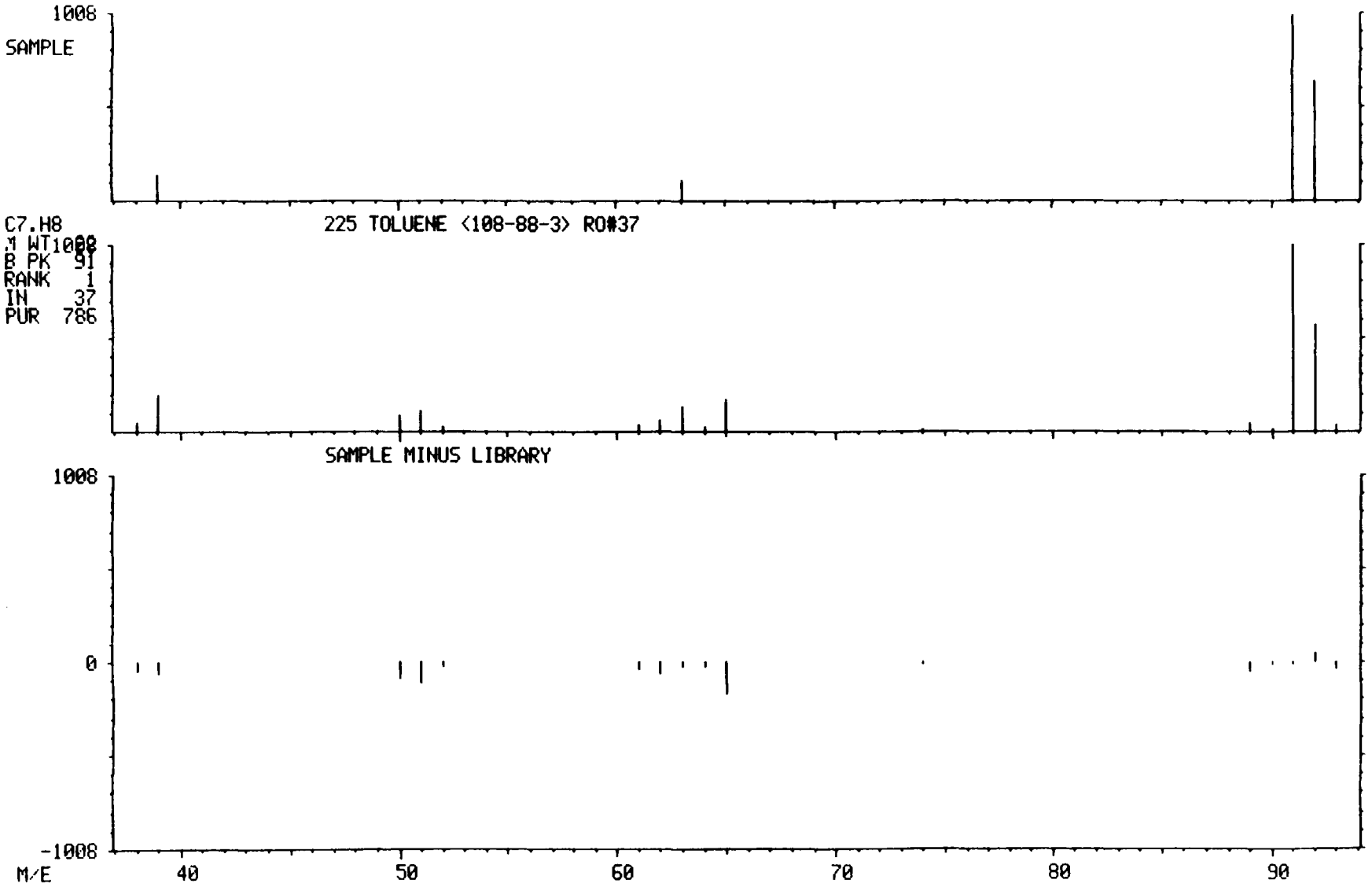


18756 07 SAMPLE DATA PACKAGE 1263

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 10:06
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

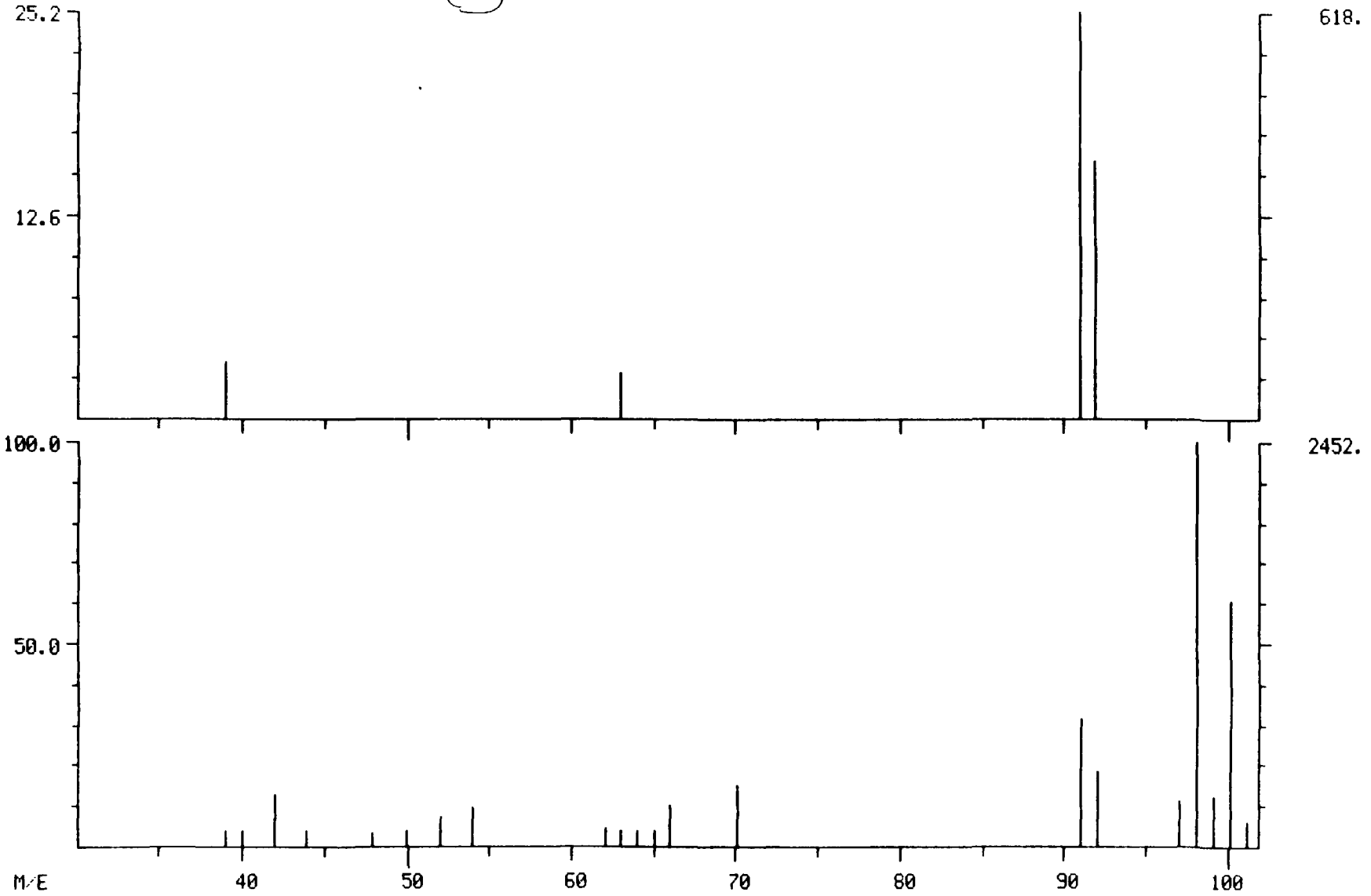
DATA: GH009688C19 # 808
BASE M/E: 91
RIC: 1167.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 6:56:00 + 10:06
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N) 225 TOLUENE (108-88-3) RO#37

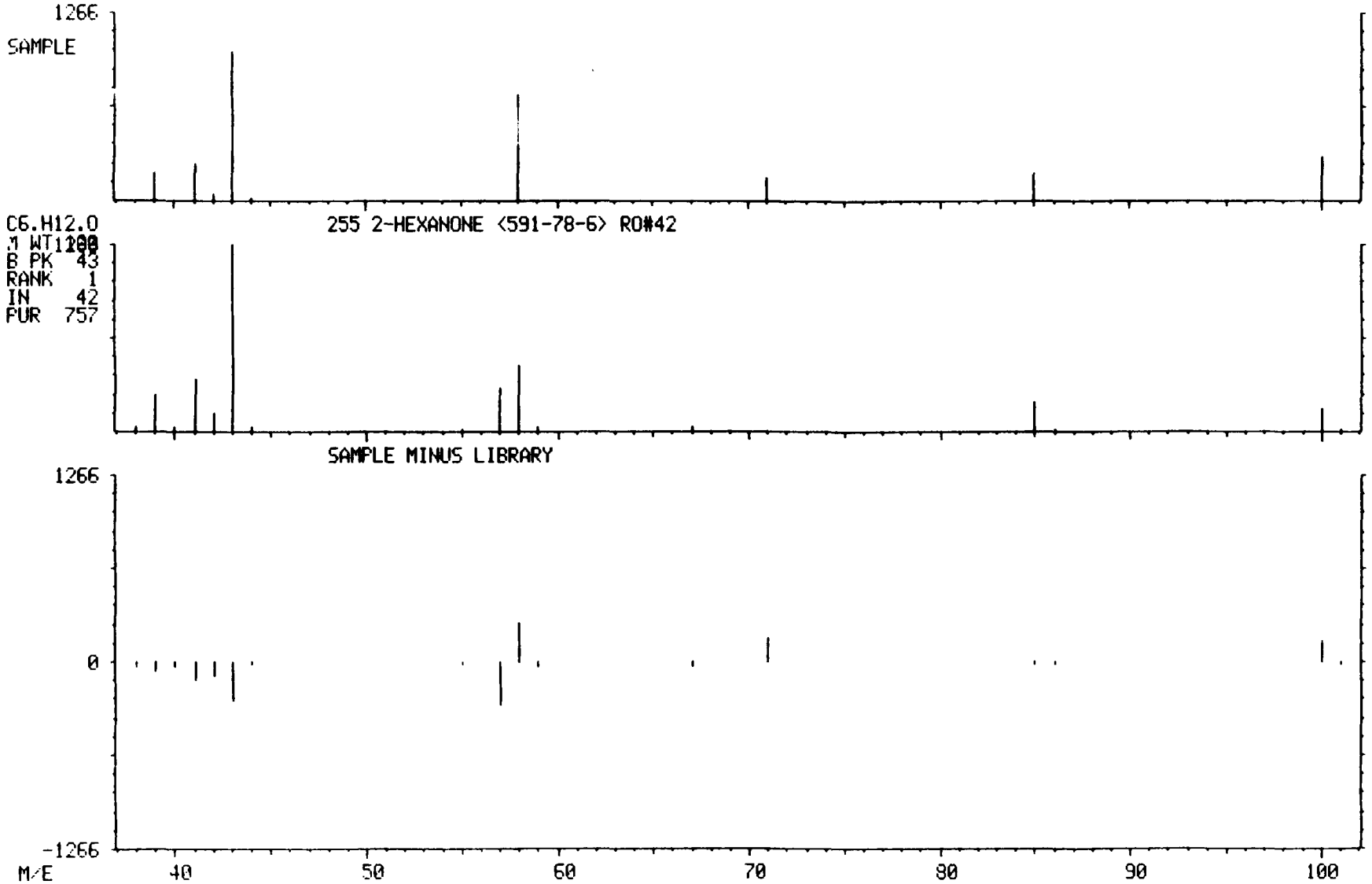
DATA: GH009688C19 #808 BASE M/E: 91/ 98
RIC: 1167./ 8103.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 11:30
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#8202A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009688C19 # 920
BASE M/E: 43
RIC: 1721.

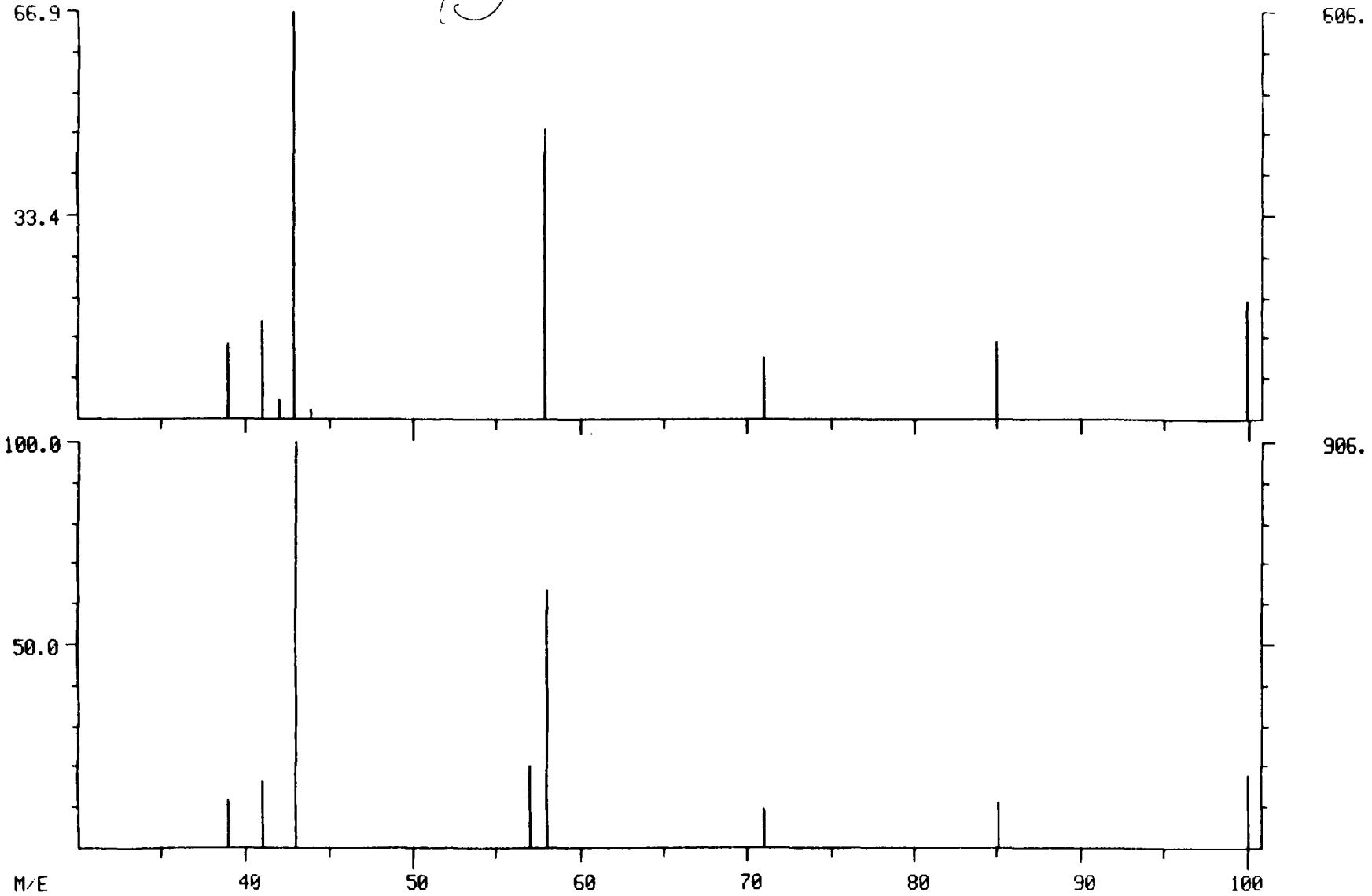


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 6:56:00 + 11:30
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N)

DATA: GH009688C19 #920 BASE M/E: 43/ 43
RIC: 1721./ 2267.

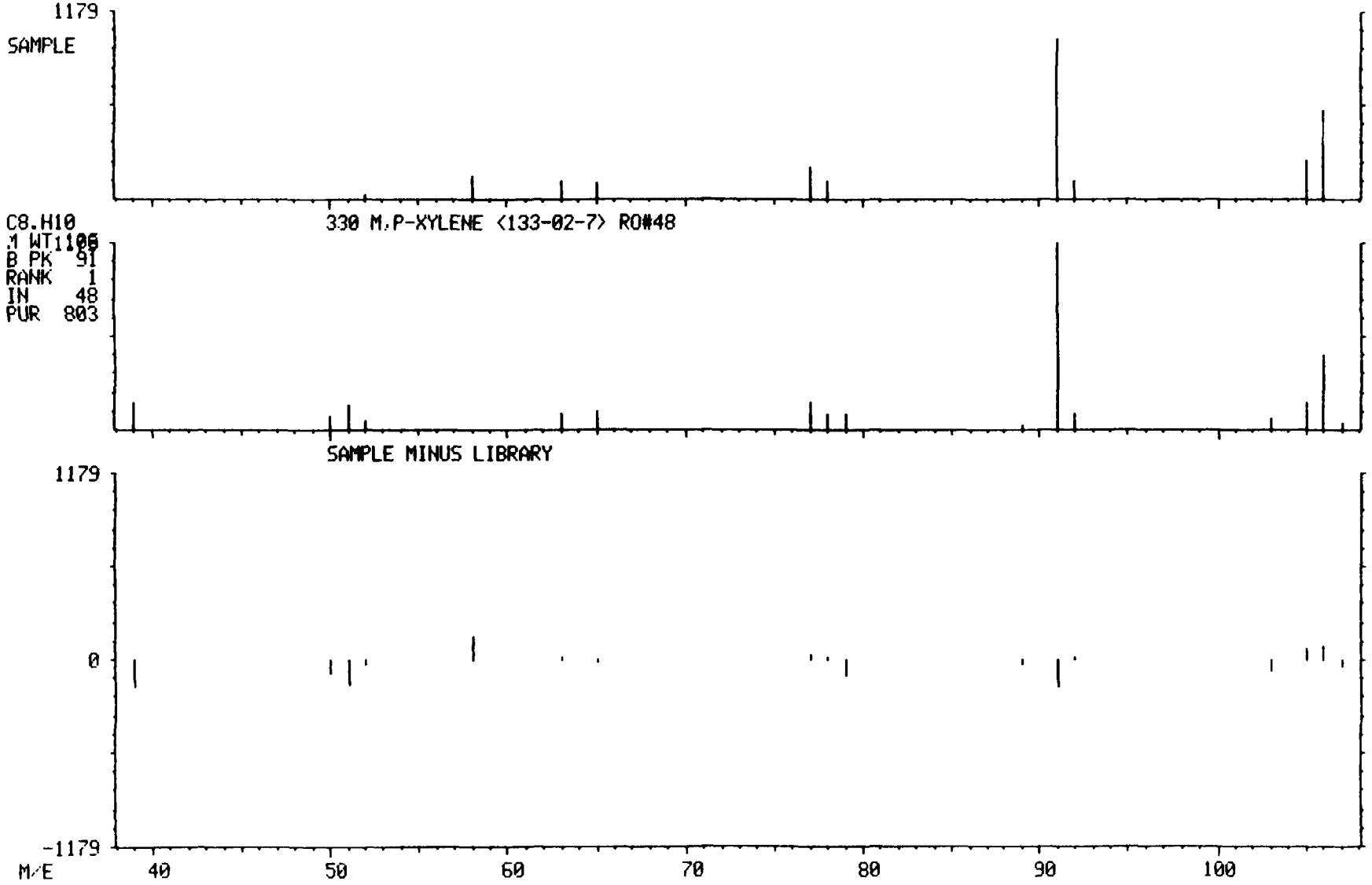
255 2-HEXANONE (591-78-6) RO#42



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 13:04
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009688C19 #1046
BASE M/E: 91
RIC: 2363.

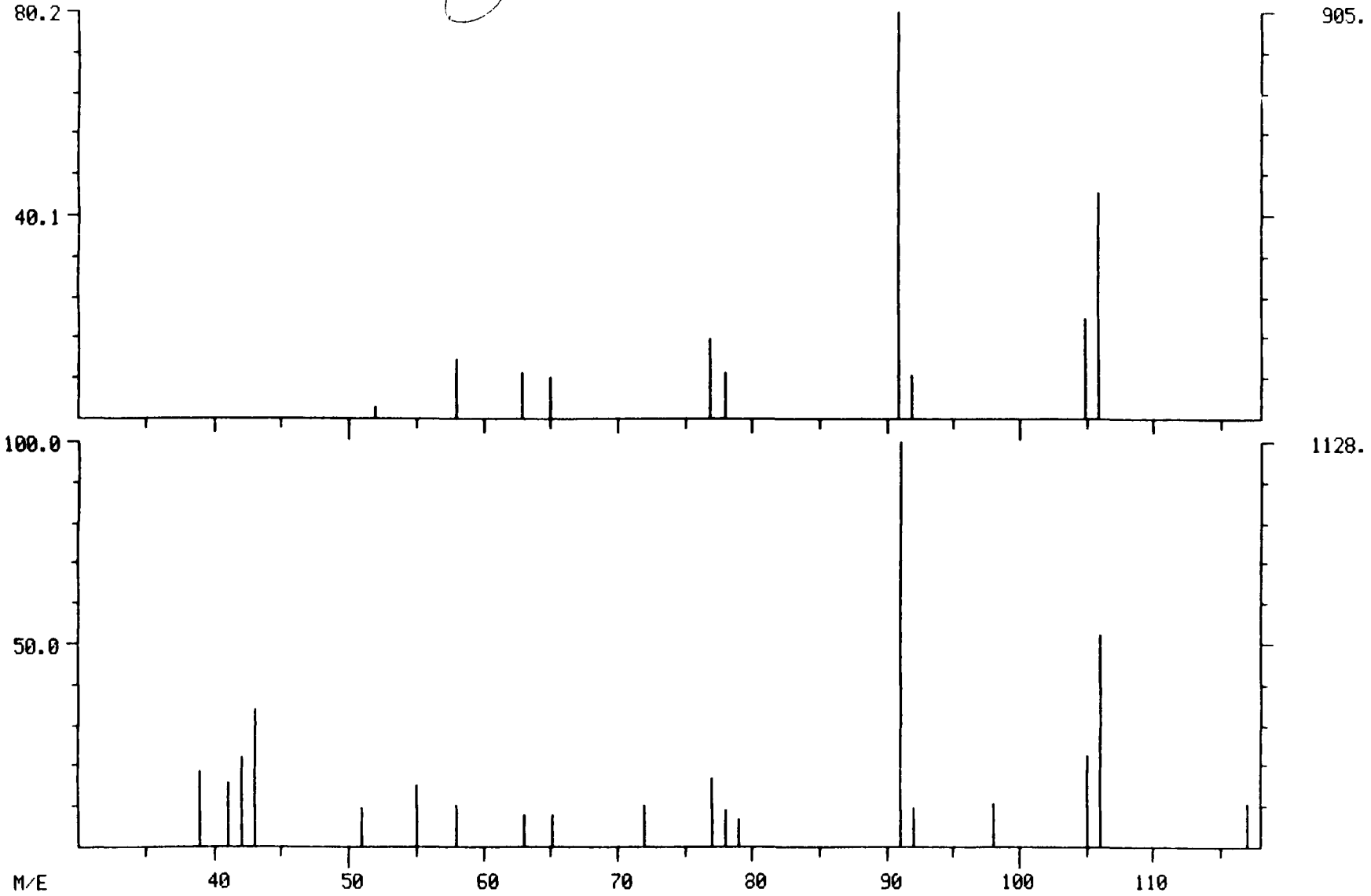


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 6:56:00 + 13:04
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N)

DATA: GH009688C19 #1046 BASE M/E: 91/ 91
RIC: 2363./ 4391.

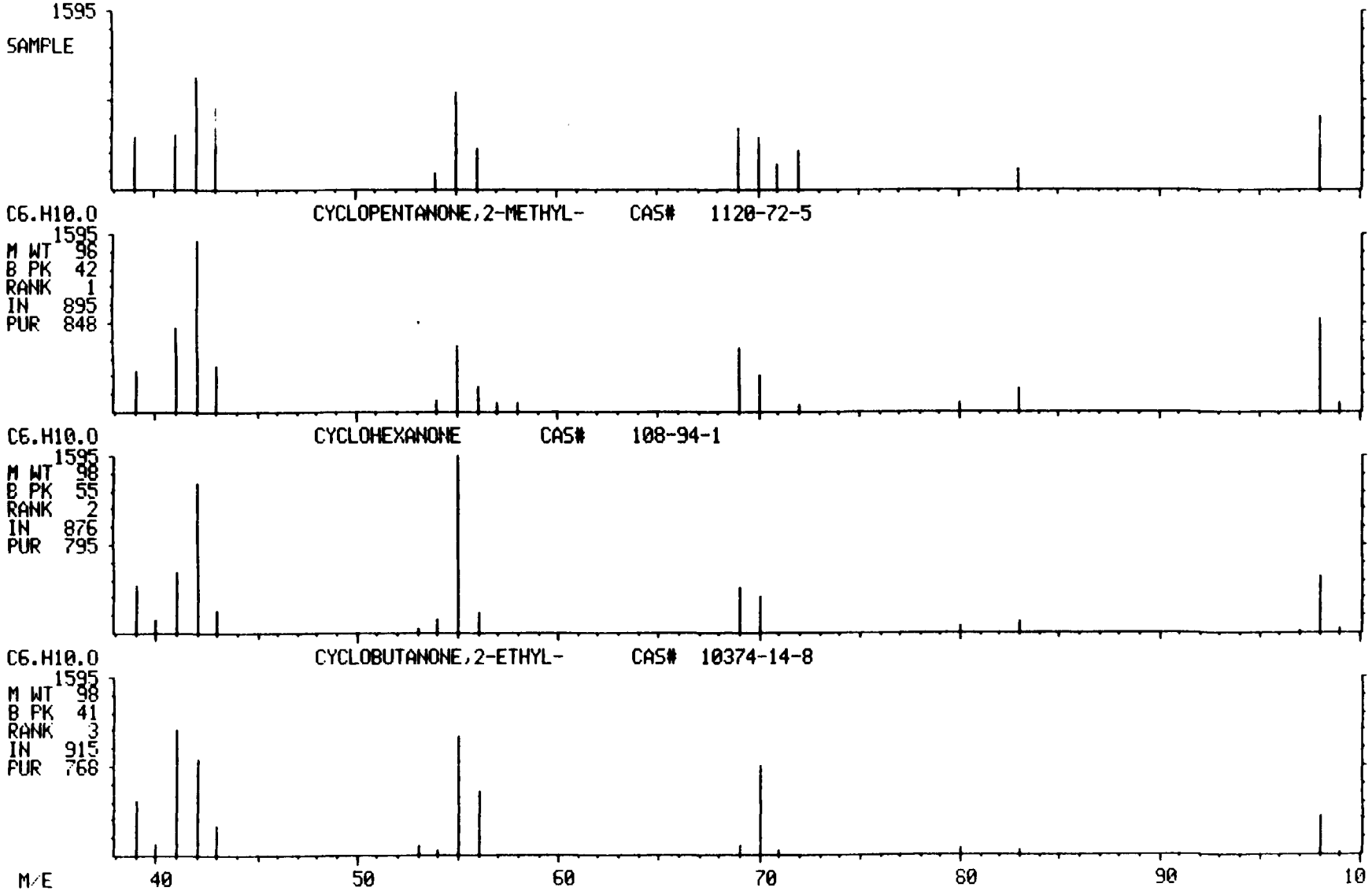
330 M,P-XYLENE <133-02-7> RO#48



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 13:00
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

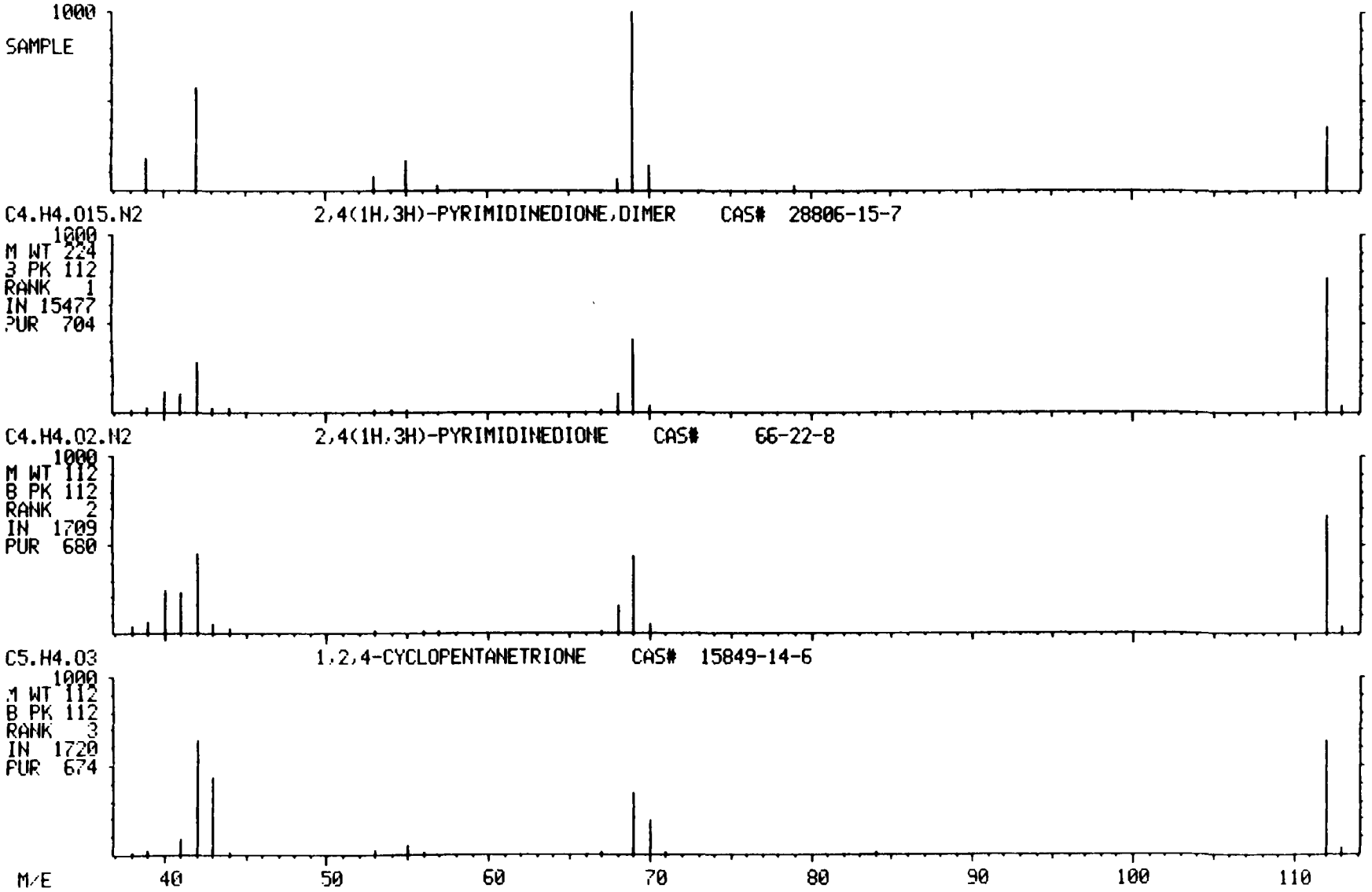
DATA: GH009688C19 #1040
BASE M/E: 42
RIC: 4375.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 14:22
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

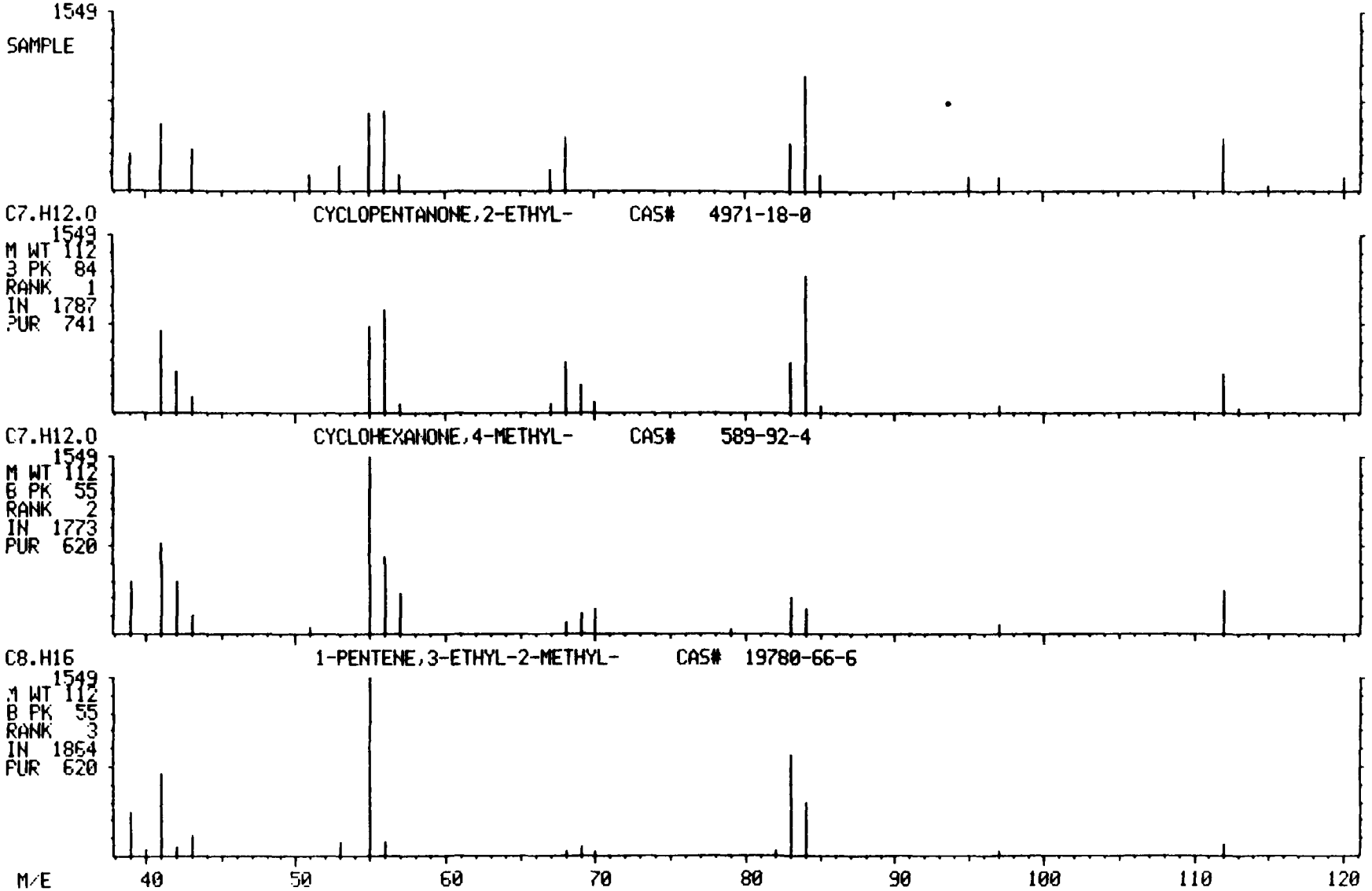
DATA: GH009688C19 #1150
BASE M/E: 69
RIC: 2387.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 15:34
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009688C19 #1246
BASE M/E: 84
RIC: 4343.

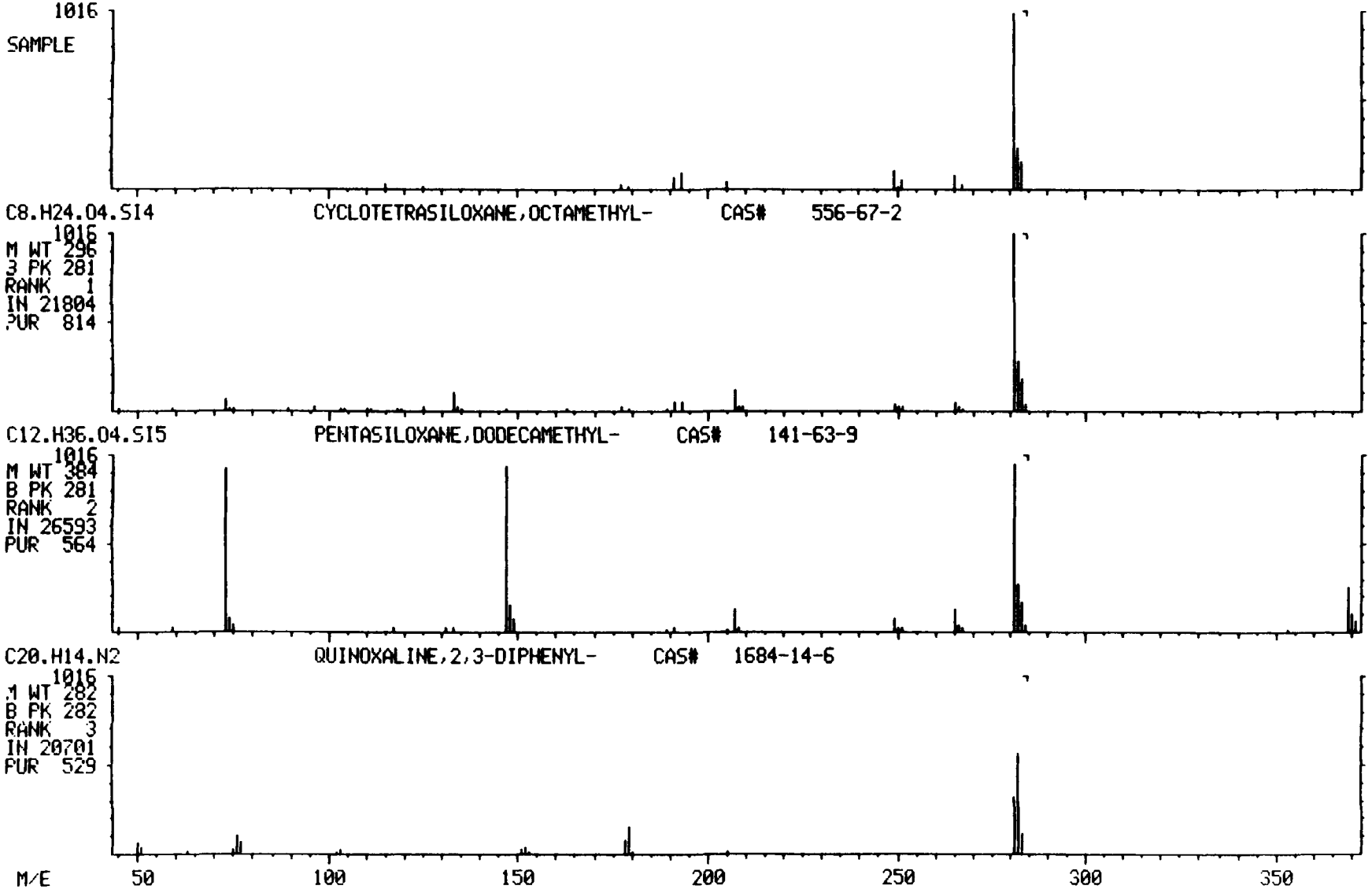


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 6:56:00 + 15:55
SAMPLE: 5G CC#309688 CASE#18756.7 EPA#B202A ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009688C19 #1274
BASE M/E: 281
RIC: 4863.



LAB INSTRUCTIONS:

SAMPLED DATE 12/18/89

RECEIPT DATE 12/20/89 CASE#: 18756 7 DUE DATE:

VOA R[ ] R2[ ] D[ ] (1)
GC/MS WORKSHEET COMPUCHEM#: 309688
R3[ ] R4[ ] D2[ ] (1)

L.L. SOLID, EPA SOW 2/88

Sample Prep Code---155
Instrument Code----413
Compound List------494
Surrogate Std------394
Internal Std-------036

SAMPLE ID#: B202A Dry Wt. Factor 1.14 % Moisture 12

GC/MS ANALYSIS
Amount Purged: [/] 10mls/Xg soil or [ ]Dilution_____ul/10000ul/Xg soil
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename 6H891221B19 Disk(2956A)
Blank Filename 6H009785C19 Disk (6)
Standard Filename 6589177?C19 Disk ( )
Sample Filename 6H009899C19 Disk ( )

DEC 2 8 1989

ANALYST(S): Injection MZZ-66 MZZ-66

GC/MS REVIEW

CONDITION CODE: OK

Entry Codes OK,EA,ES,SM,JS,SL,SH,JA,DA

Non-Entry Codes IM,IL,IH,SW,CT,CS,PC,NR IF,LA,DI,CO,RN,DW,SI,SF UP,BB,OT,VC,FO,NS

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found: 4

[ ] Reprep neat required

[ ] Reprep using_____g

Quality Assurance Notice(s):
Notices Required 1

[ ] Dilute (1)

COMMENTS:

GC/MS Review OK Date 12/27/89 Auditor [illegible] Date 12/28/89

REPORT INTEGRATION Total # of Injections 1
Final Reportable Package(s): GH0-C19 /

QA COMMENTS:

Initials_____ Date____/____/____

FINAL REVIEW Initials_____ Date____/____/____

AC1007 (05/89)

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 155 ASSIGNED TO Harshad Joshi DATE 12/20/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309763	18520	0164			5.0g	TB-12	
309768	↓	↓			5.0g	WB5-1	
309769					5.0g	WB5-2	
309770					5.0g	WB5-4	
309679	18756	0007			5.0g	B201A	
309680			SS	309679	5.0g	B201A MS	
309681			SS	309679	5.0g	B201A MSD	
309682			BS		0.0g		
309686					5.0g	B201B	
309687					5.0g	B202TAR	
309688					5.0g	B202A	
309689					5.0g	B202B	
309690	↓	↓			5.0g	B202C	
309784			B1		5.0 ml	B_3	
309785			B2		0.0 ml	B_4	
309786			B3		0.0 ml	B_5	
309787			B4		0.0 ml	B_6	
309788			B5		0.0 ml	B_7	

SURROGATE # 4 LOT # 1 MANUAL OPERATOR 739 / 516

AMOUNT

RELINQUISHED BY [signature] DATE 12/20/89 RECEIVED BY [signature] DATE

VOLATILE - LOW LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
234	128	I	BROMOCHLOROMETHANE (IS)	467	49300	50.0	X1.4	
221	50		CHLOROMETHANE				BDL	1~~0~~
231	62		VINYL CHLORIDE				BDL	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE				BDL	10
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE				BDL	
252	43		ACETONE (2-PROPANONE)			32.6	~~33~~ 37.5	1
248	114	I	1,4-DIFLUOROBENZENE (IS)	611	196000	50.0		
222	84		METHYLENE CHLORIDE			29.3	~~29~~ 33 B	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLOROETHANE				BDL	5
257	43		VINYL ACETATE				BDL	10
237	96		CIS-1,2-DICHLOROETHENE				BDL	5
253	72		2-BUTANONE			22.9	~~23~~ 26	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
206	117		CARBON TETRACHLORIDE				BDL	5
203	78		BENZENE				BDL	5
215	62		1,2-DICHLOROETHANE				BDL	5
270	117	I	D5-CHLOROBENZENE (IS) RO#29	999	206000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROPANE				BDL	5
212	83		BROMODICHLOROMETHANE				BDL	5
218	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE			~~2.3~~	BDL ~~20~~	10
225	92		TOLUENE			1.3	~~1.0~~ 1J	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
228	97		1,1,2-TRICHLOROETHANE				BDL	5
224	164		TETRACHLOROETHENE				BDL	5
255	43		2-HEXANONE			11.1	~~11~~ 13	10
208	129		DIBROMOCHLOROMETHANE				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE			~~2.4~~	BDL ~~20~~	5
330	106		M,P-XYLENE			1.7	~~2.0~~ 2J	5
239	106		O-XYLENE				BDL	5
251	104		STYRENE				BDL	5
205	173		BROMOFORM				BDL	5
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	5
258	65	S	D4-1,2-DICHLOROETHANE RO#57			48.4	97.%	
247	95	S	BROMOFLUOROBENZENE			46.1	92.%	
233	98	S	D8-TOLUENE RO#59			47.6	95.%	
289	106		XYLENES (TOTAL)			1.7	~~2.0~~ 2J	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12/27/89

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	
CHECKSUMS: 3979.				2077	451300.	397.4		389.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12-27-89

VOLATILE - LOW LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P *
40	258	D4-1,2-DICHLOROETHANE RO#57	48.4	50.0	97.	70-121	X
41	247	BROMOFLUOROBENZENE	46.1	50.0	92.	74-121	X
42	233	D8-TOLUENE RO#59	47.6	50.0	95.	81-117	X

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{GC/MS DILUTION FACTOR} \times \text{DRY WEIGHT FACTOR} =$$

$$\frac{5.0\ G}{5.00\ (G)} \times \frac{1.0}{} \times \frac{\cancel{1.00}\ 1.14}{} = \cancel{1.000}\ 1.14$$

GUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 8

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12-27-89

LABORATORY NOTICE

Sample I.D. # 309655

Client I.D. # B202A

CASE # 18756.7

The analysis of the volatile fraction of this sample indicated the presence of one or more extraneous peaks at the scan(s) listed below which were tentatively identified as siloxanes. This is a frequently observed laboratory artifact and should not be considered an actual sample constituent. It is being reported as an instrument artifact. While the peak(s) have been included in the total number of Library Searches, they have not been counted as one of the ten most intense TIC's requiring Library Search. If the siloxane was also detected in the associated blank, it has been flagged in the sample data with a "B", whether or not its concentration in the blank was great enough to require a Library Search. The data is being reported with reference to this qualifier.

scan(s): 1274 _____ _____ _____

Data Reviewer: [signature]

Date: 12-27-89

Approved by: Robert J. Whitehead

Manager, Quality Assurance

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009689C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	12	U
74-83-9	Bromomethane	12	U
75-01-4	Vinyl Chloride	12	U
75-00-3	Chloroethane	12	U
75-09-2	Methylene Chloride	30	B
67-64-1	Acetone	53	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	40	
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	12	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	12	U
591-78-6	2-Hexanone	23	
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	15	
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	12	
100-42-5	Styrene	3	J
1330-20-7	Total Xylenes	54	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202B

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309689

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009689C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 14 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 7

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	13.39	8.1	J
2.		UNKNOWN	14.05	7.0	J
3.		UNKNOWN	14.40	8.1	J
4.		UNKNOWN	14.49	8.1	J
5.	103-65-1	BENZENE,PROPYL-	15.35	8.1	J
6.	620-14-4	BENZENE,1-ETHYL-3-METHYL-	15.55	84	J
7.	611-14-3	BENZENE,1-ETHYL-2-METHYL-	16.04	21	J

COMPUCHEM LABS

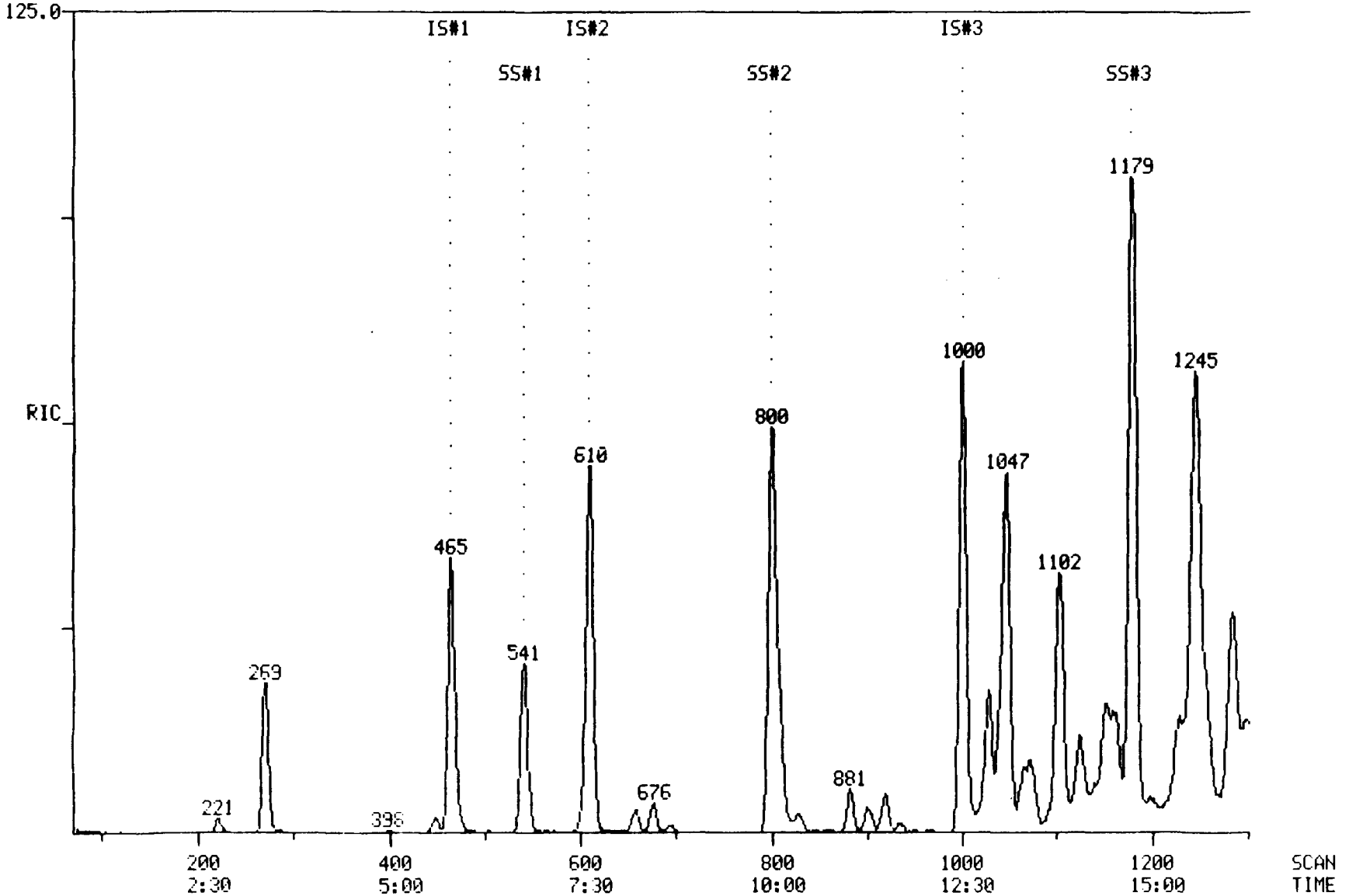
RIC COMPUCHEM DATA: GH009689C19 SCANS 71 TO 1300

12/22/89 7:40:00

SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19

CONDS.:

123040.



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QUANTITATION REPORT     FILE: GH009689C19
DATA: GH009689C19.TI
12/22/89  7:40:00
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
CONDS.:
SUBMITTED BY: 19              ANALYST: 1422

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM  LIBRARY ENTRY -

 NO   NAME
  1   *234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
  2    221 CHLOROMETHANE <74-87-3> RO#2
  3    231 VINYL CHLORIDE <75-01-4> RO#3
  4    220 BROMOMETHANE <78-83-9> RO#4
  5    209 CHLOROETHANE <75-00-3> RO#5
  6    216 1,1-DICHLOROETHENE <75-35-4> RO#8
  7    254 CARBON DISULFIDE <75-15-0> RO#9
  8    252 ACETONE (2-PROPANONE) <67-64-1> RO#13
  9   *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
 10    222 METHYLENE CHLORIDE <75-09-2> RO#16
 11    226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
 12    214 1,1-DICHLOROETHANE <75-34-3> RO#19
 13    257 VINYL ACETATE <108-05-4> RO#20
 14    237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
 15    253 2-BUTANONE <78-93-3> RO#22
 16    211 CHLOROFORM <67-66-2> RO#23
 17    227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
 18    206 CARBON TETRACHLORIDE <56-23-5> RO#25
 19    203 BENZENE <71-43-2> RO#26
 20    215 1,2-DICHLOROETHANE <107-06-2> RO#27
 21   *270 D5-CHLOROBENZENE (IS) RO#29
 22    229 TRICHLOROETHENE <79-01-6> RO#30
 23    217 1,2-DICHLOROPROPANE <78-87-5> RO#31
 24    212 BROMODICHLOROMETHANE <75-27-4> RO#33
 25    218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
 26    256 4-METHYL-2-PENTANONE <108-01-1> RO#36
 27    225 TOLUENE <108-88-3> RO#37
 28    250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
 29    228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
 30    224 TETRACHLOROETHENE <127-18-4> RO#41
 31    255 2-HEXANONE <591-78-6> RO#42
 32    208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
 33    207 CHLOROBENZENE <108-90-7> RO#45
 34    219 ETHYLBENZENE <100-41-4> RO#47
 35    330 M,P-XYLENE <133-02-7> RO#48
 36    239 O-XYLENE <133-02-7> RO#49
 37    251 STYRENE <100-42-5> RO#50
 38    205 BROMOFORM <75-25-2> RO#51
 39    223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
 40   #258 D4-1,2-DICHLOROETHANE RO#57
 41   #247 BROMOFLUOROBENZENE <460-00-4> RO#58
 42   #233 D8-TOLUENE RO#59

 NO   M/E  SCAN   TIME  REF   RRT  METH     AREA(HGHT)  AMOUNT          %TOT
  1   128   465   5:49   1  1.000  A BB       46782.    50.000 UG/KG 10.15
  2    50  NOT FOUND
```

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	96	NOT FOUND							
7	76	NOT FOUND							
8	43	221	2:46	1	0.475	A BB	11289.	45.597 UG/KG	9.26
9	114	609	7:37	9	1.000	A BB	191540.	50.000 UG/KG	10.15
10	84	270	3:22	1	0.581	A BB	40013.	26.024 UG/KG	5.28
11	96	NOT FOUND							
12	63	NOT FOUND							
13	43	NOT FOUND							
14	96	NOT FOUND							
15	72	448	5:36	1	0.963	A BB	3418.	34.087 UG/KG	6.92
16	83	NOT FOUND							
17	97	NOT FOUND							
18	117	NOT FOUND							
19	78	NOT FOUND							
20	62	NOT FOUND							
21	117	1000	12:30	21	1.000	A BB	203559.	50.000 UG/KG	10.15
22	130	NOT FOUND							
23	63	NOT FOUND							
24	83	NOT FOUND							
25	75	NOT FOUND							
26	43	799	9:59	21	0.799	A BB	2497.	2.390 UG/KG	0.49
27	92	808	10:06	21	0.808	A BB	38527.	12.821 UG/KG	2.60
28	75	NOT FOUND							
29	97	NOT FOUND							
30	164	NOT FOUND							
31	43	919	11:29	21	0.919	A VB	16058.	20.205 UG/KG	4.10
32	129	NOT FOUND							
33	112	NOT FOUND							
34	106	1027	12:50	21	1.027	A BV	20927.	10.143 UG/KG	2.06
35	106	1047	13:05	21	1.047	A VB	73966.	25.787 UG/KG	5.23
36	106	1103	13:47	21	1.103	A BB	53160.	20.995 UG/KG	4.26
37	104	1106	13:49	21	1.106	A BB	12112.	2.707 UG/KG	0.55
38	173	NOT FOUND							
39	83	NOT FOUND							
40	65	540	6:45	1	1.161	A BB	94248.	48.275 UG/KG	9.80
41	95	1179	14:44	21	1.179	A BB	166628.	47.845 UG/KG	9.71
42	98	800	10:00	21	0.800	A BB	195344.	45.798 UG/KG	9.30

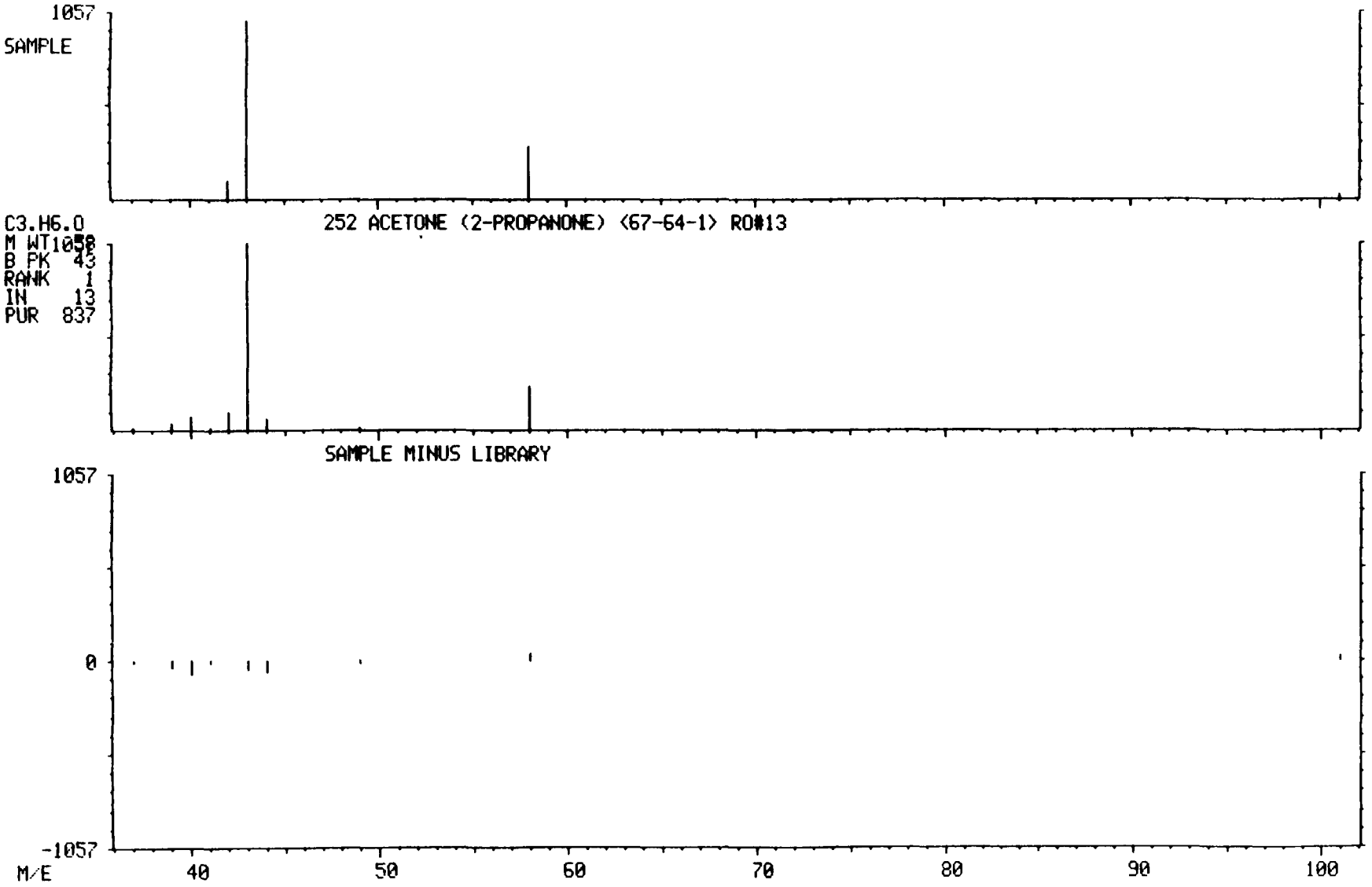
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:54	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:06		10.000			50.00		0.952	
3	1:11		10.000			50.00		1.256	
4	1:26		10.000			50.00		1.579	
5	1:34		10.000			50.00		0.796	
6	2:37		5.000			50.00		1.346	
7	2:46		5.000			50.00		3.709	
8	2:48	0.99	10.000	0.05	45.60	50.00	0.241	0.265	0.91
9	7:42	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	3:27	0.98	5.000	0.12	26.02	50.00	0.855	1.643	0.52
11	3:53		5.000			50.00		1.486	
12	4:34		5.000			50.00		2.635	
13	4:52		10.000			50.00		0.458	
14	5:33		5.000			50.00		1.675	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:42	0.98	10.000	0.10	34.09	50.00	0.073	0.107	0.68
16	6:10		5.000			50.00		3.433	
17	6:18		5.000			50.00		0.814	
18	6:34		5.000			50.00		0.755	
19	6:53		5.000			50.00		0.895	
20	6:58		5.000			50.00		2.523	
21	12:34	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	8:01		5.000			50.00		0.569	
23	8:22		5.000			50.00		0.352	
24	8:55		5.000			50.00		0.701	
25	9:41		5.000			50.00		0.690	
26	10:04	0.99	15.000	0.05	2.39	50.00	0.012	0.257	0.05
27	10:10	0.99	5.000	0.16	12.82	50.00	0.189	0.738	0.26
28	10:42		5.000			50.00		0.342	
29	10:58		5.000			50.00		0.349	
30	11:06		5.000			50.00		0.723	
31	11:33	0.99	15.000	0.06	20.21	50.00	0.079	0.195	0.40
32	11:35		5.000			50.00		0.690	
33	12:37		5.000			50.00		1.092	
34	12:55	0.99	5.000	0.21	10.14	50.00	0.103	0.507	0.20
35	13:10	0.99	5.000	0.21	25.79	50.00	0.363	0.705	0.52
36	13:52	0.99	5.000	0.22	20.99	50.00	0.261	0.622	0.42
37	13:54	0.99	5.000	0.22	2.71	50.00	0.060	1.099	0.05
38	14:07		5.000			50.00		0.664	
39	15:16		5.000			50.00		0.557	
40	6:52	0.98	5.000	0.23	48.27	50.00	2.015	2.087	0.97
41	14:49	0.99	5.000	0.24	47.84	50.00	0.819	0.855	0.96
42	10:04	0.99	5.000	0.16	45.80	50.00	0.960	1.048	0.92

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 2:46
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009689C19 # 221
BASE M/E: 43
RIC: 2003.

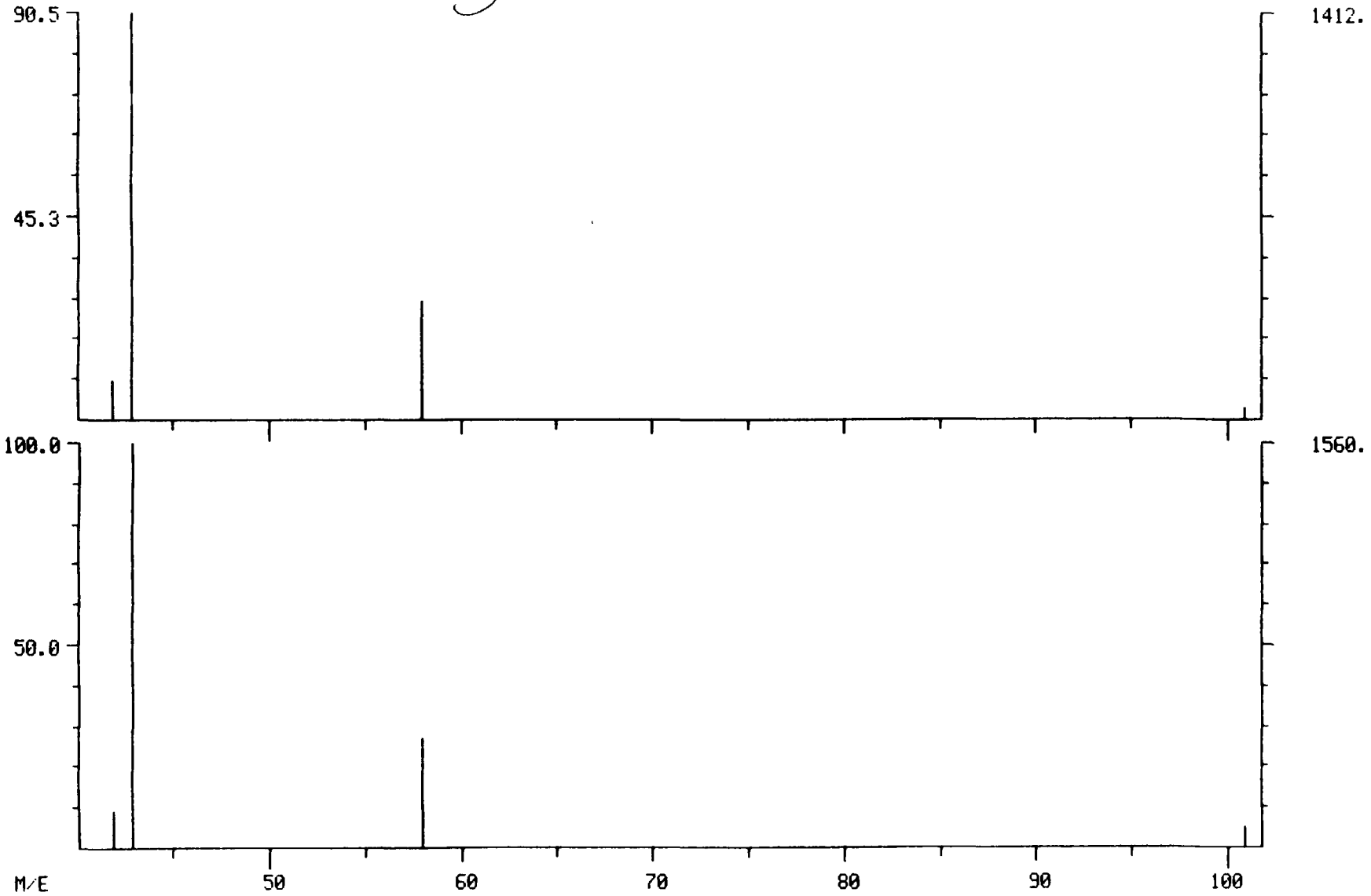


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 2:46
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N)

DATA: GH009689C19 #221 BASE M/E: 43/ 43
RIC: 2003./ 2195.

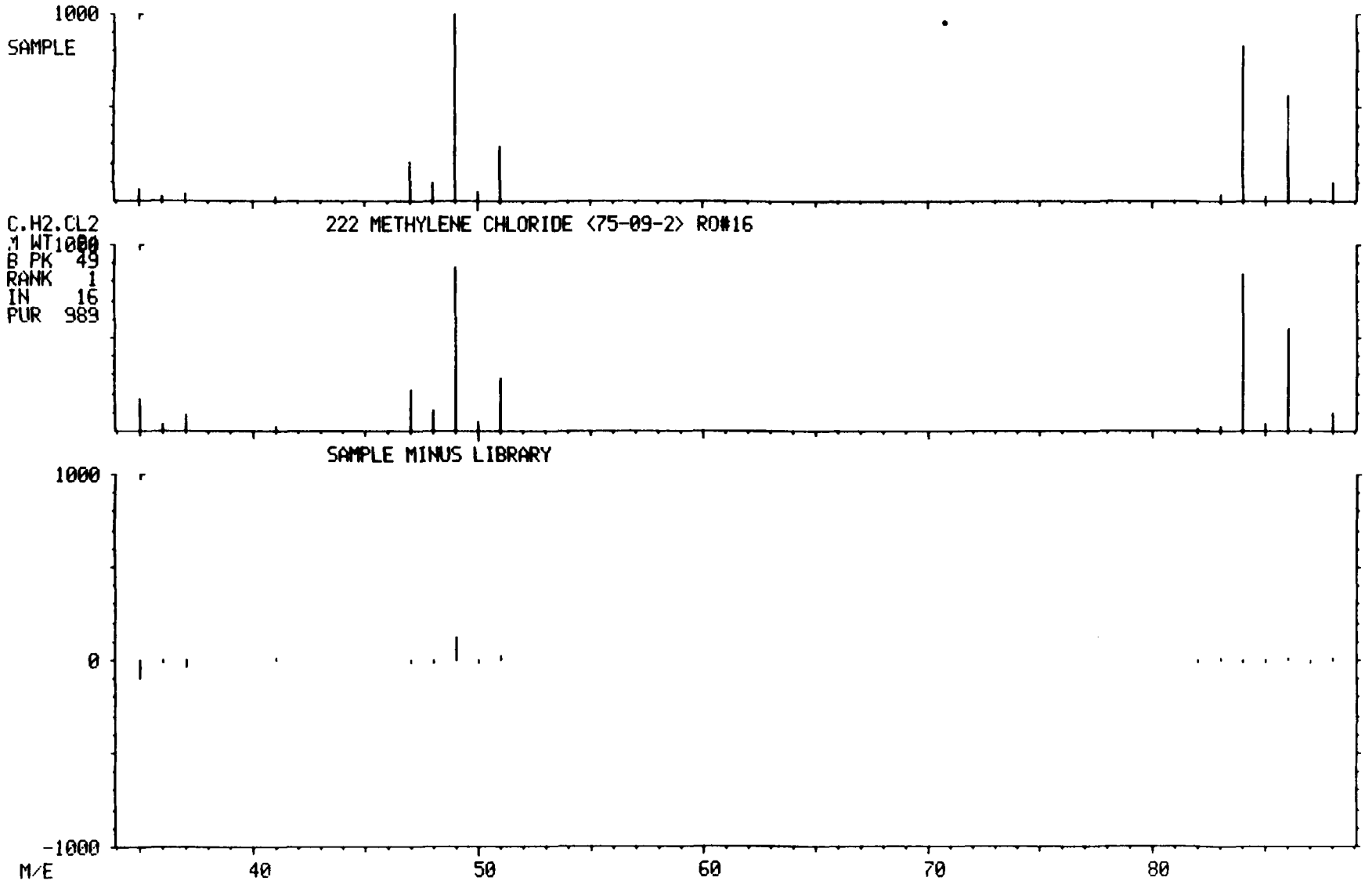
252 ACETONE (2-PROPANONE) (67-64-1) RO#13



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 3:22
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009689C19 # 270
BASE M/E: 49
RIC: 21151.

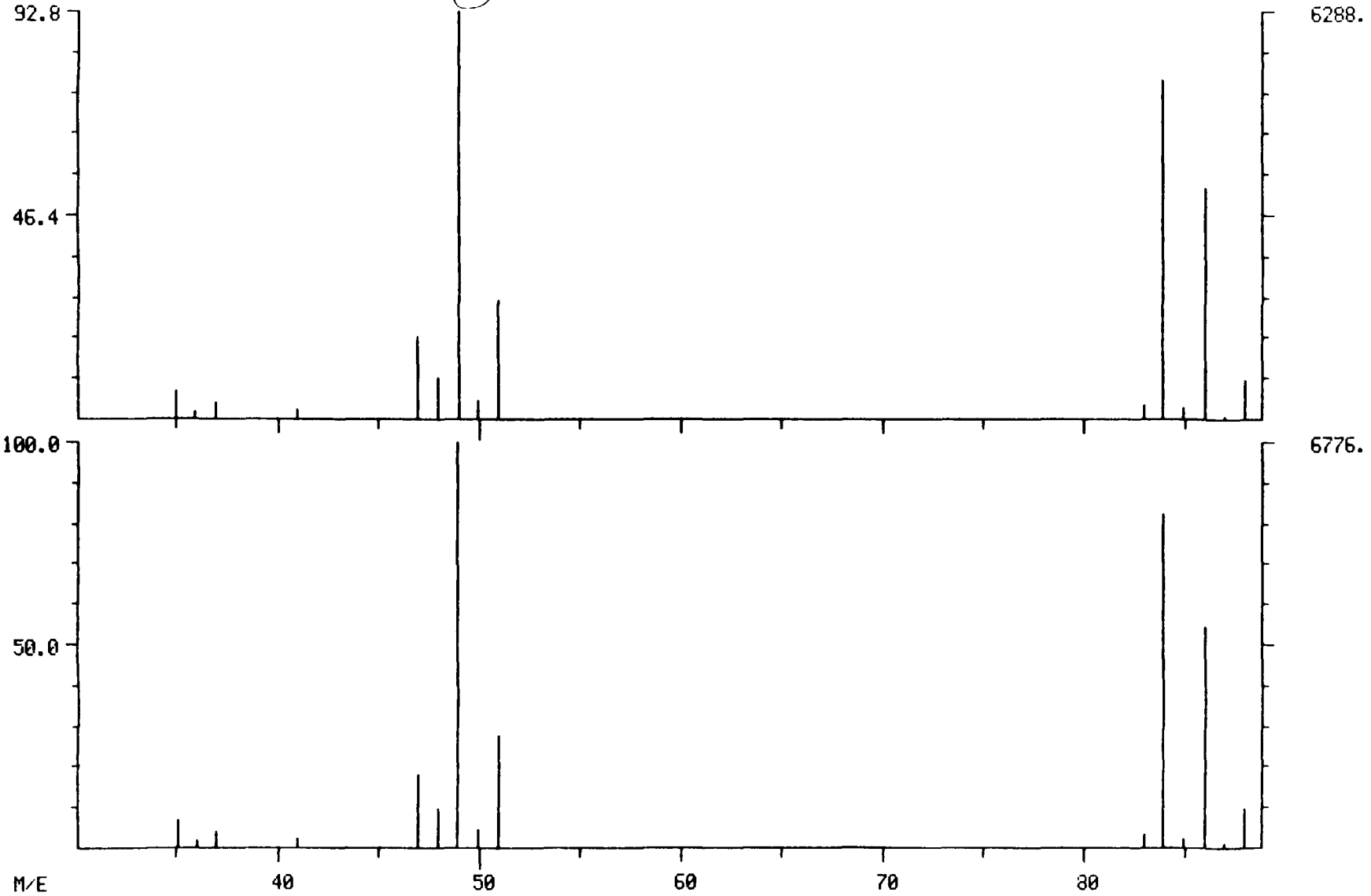


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 3:22
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N)

DATA: GH009689C19 #270 BASE M/E: 49/ 49
RIC: 21151./ 22143.

222 METHYLENE CHLORIDE (75-09-2) RO#16

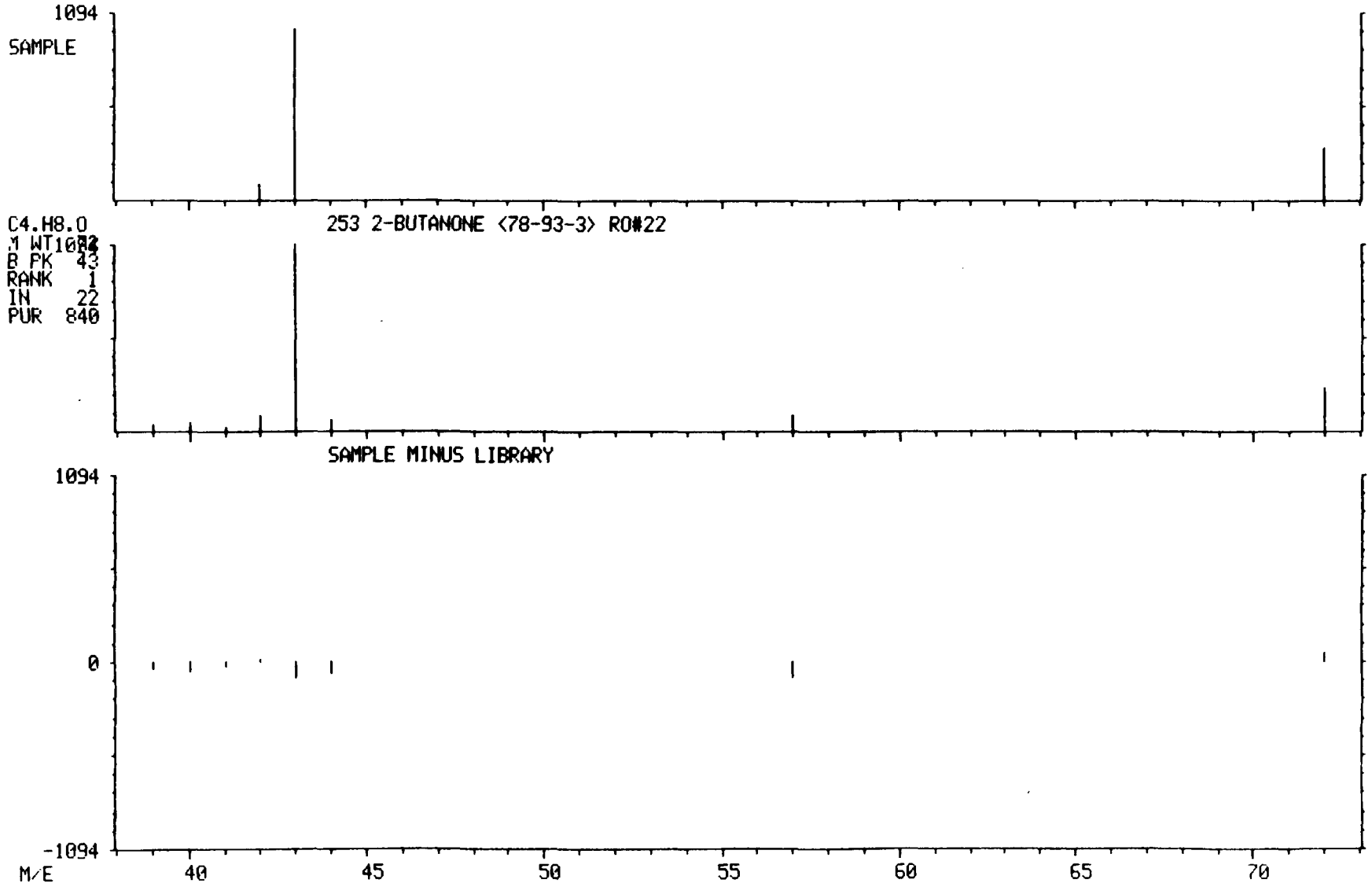


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 5:36
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009689C19 # 448
BASE M/E: 43
RIC: 1631.

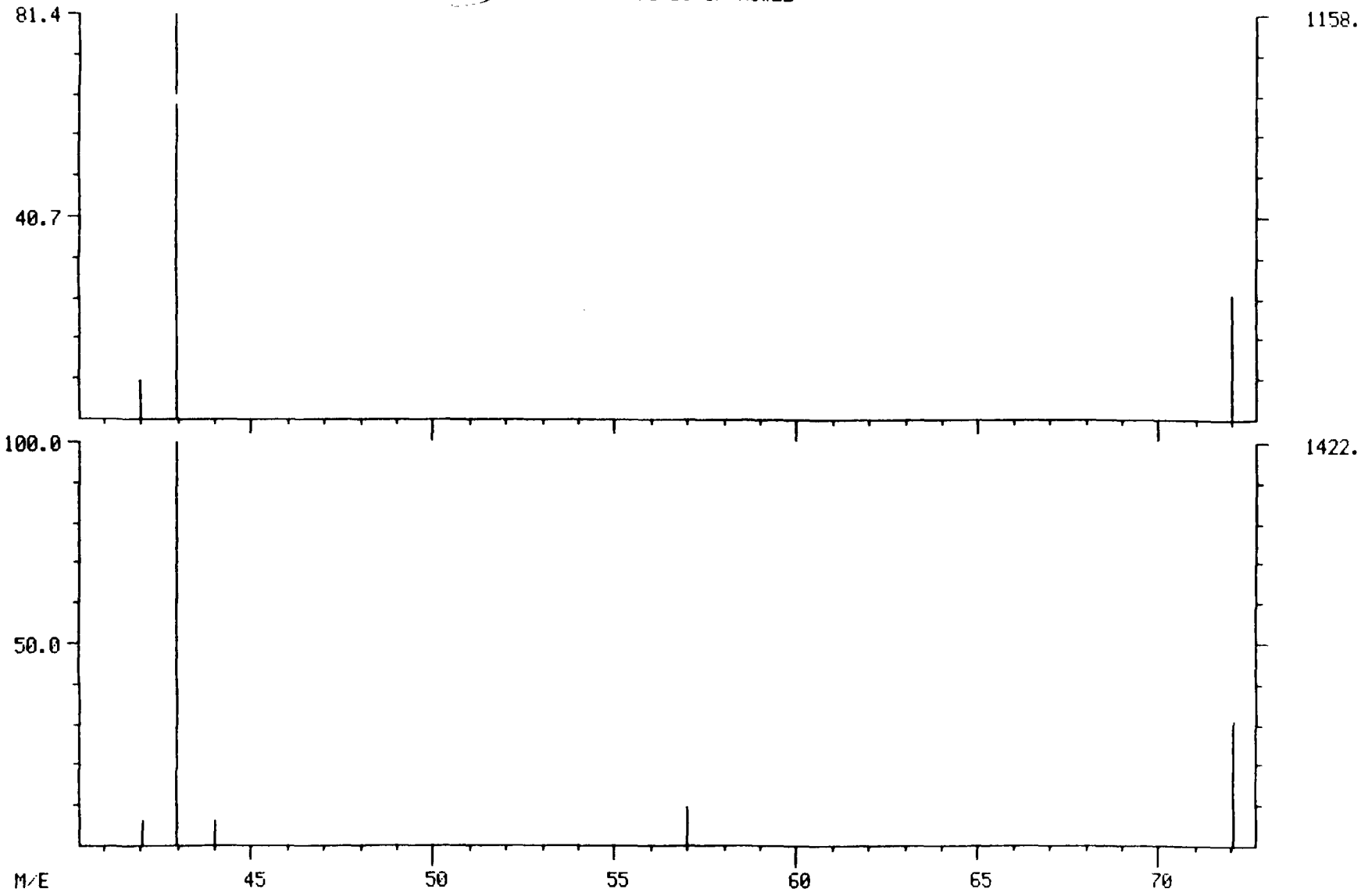


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

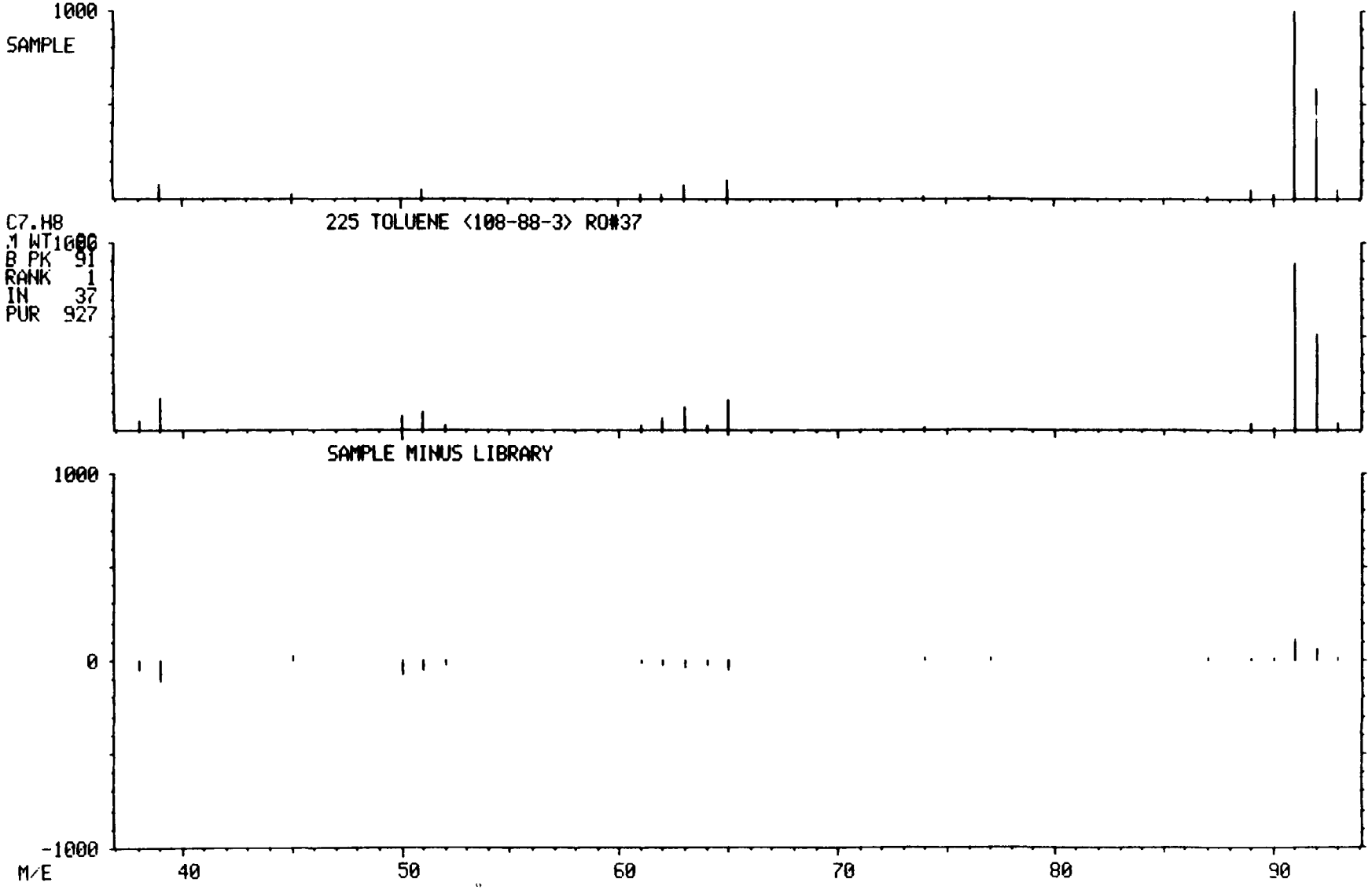
DUAL MASS SPECTRUM
12/22/89 7:40:00 + 5:36
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N) 253 2-BUTANONE (78-93-3) RO#22

DATA: GH009689C19 #448 BASE M/E: 43/ 43
RIC: 1631./ 2171.



COMPUCHEM LABS

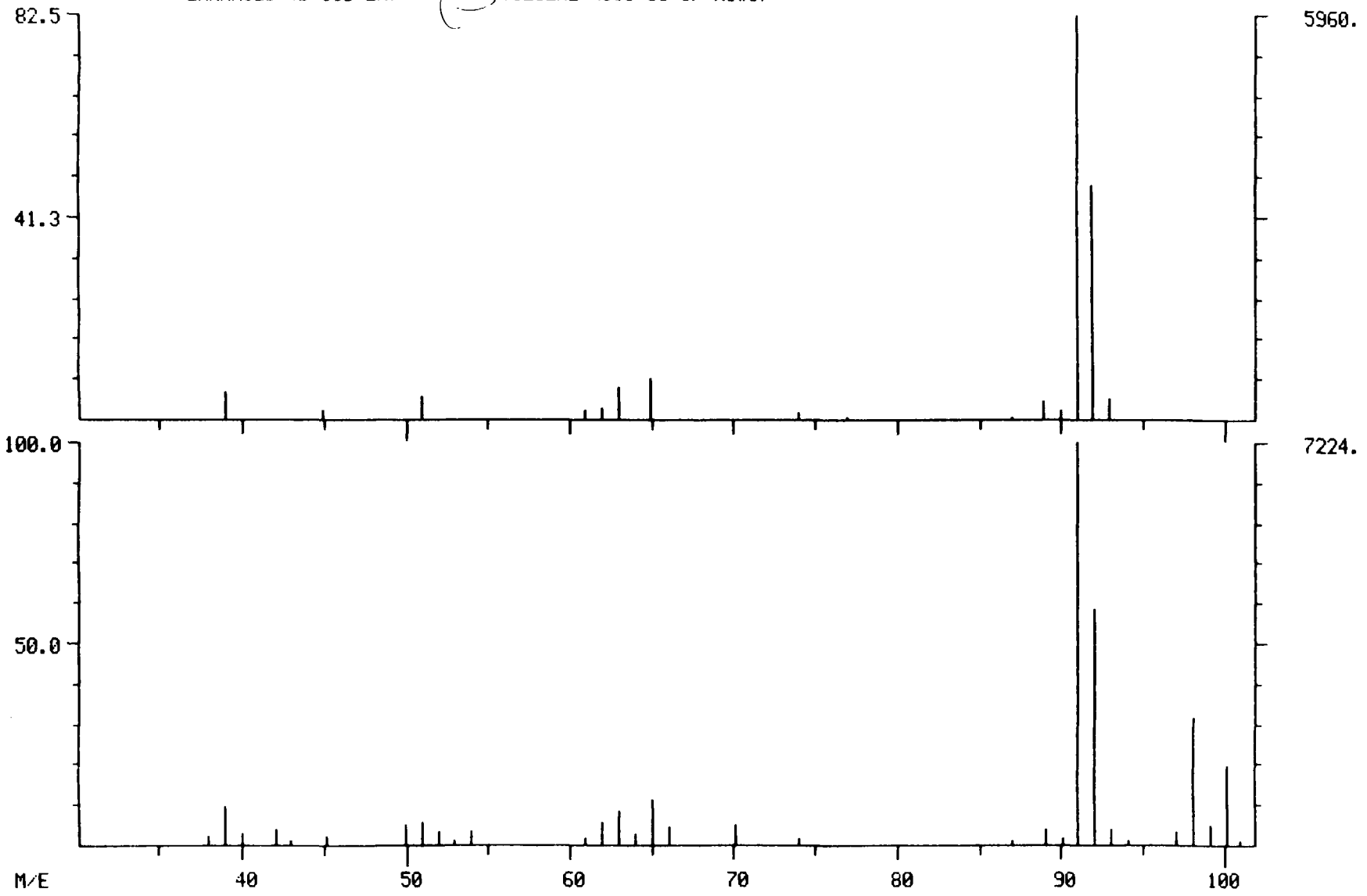
LIBRARY SEARCH DATA: GH009689C19 # 808 BASE M/E: 91
12/22/89 7:40:00 + 10:06 RIC: 12559.
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 10:06
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N) (225) TOLUENE (108-88-3) RO#37

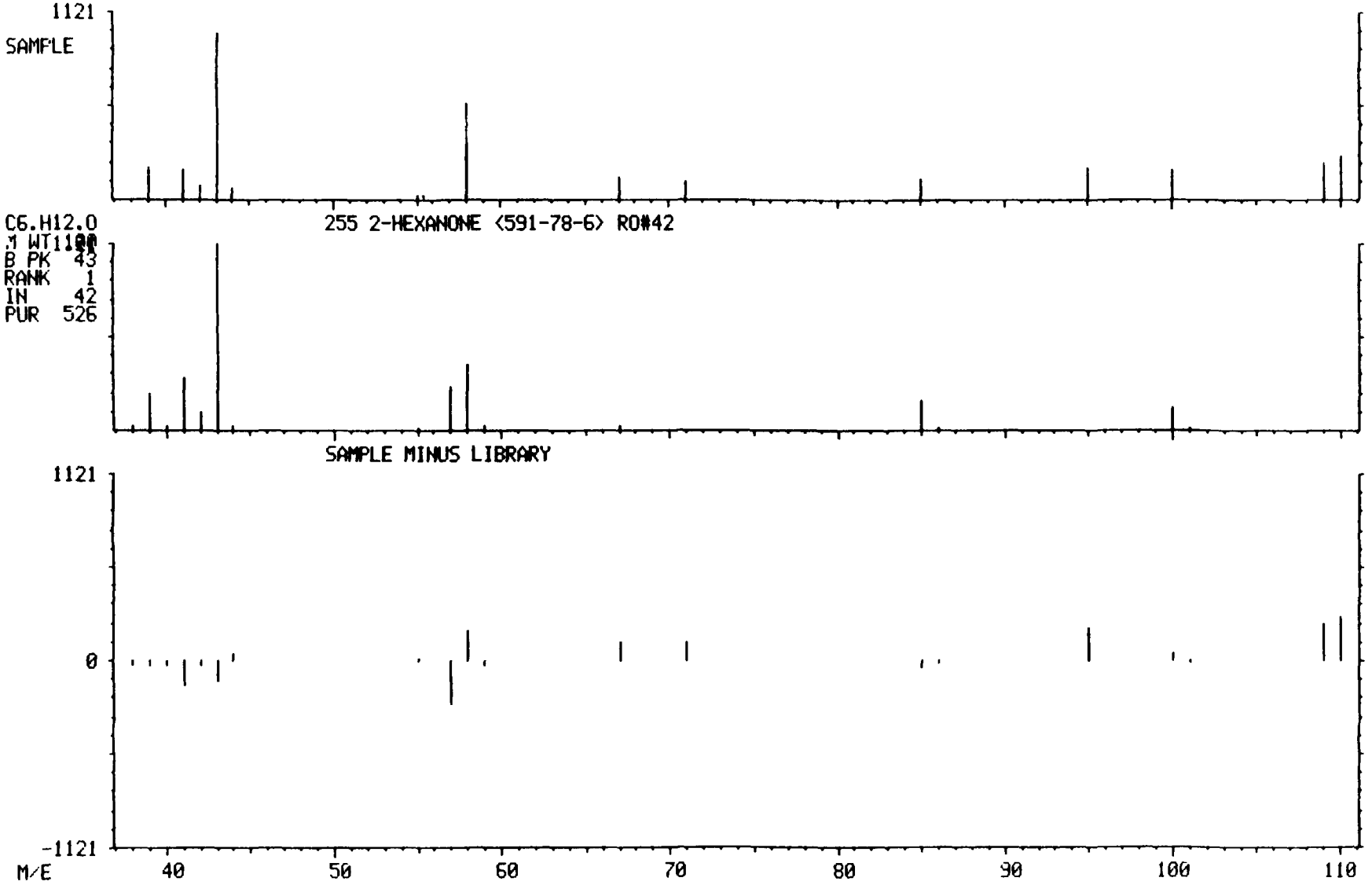
DATA: GH009689C19 #808 BASE M/E: 91/ 91
RIC: 12559./ 22591.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 11:29
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009689C19 # 919
BASE M/E: 43
RIC: 4359.



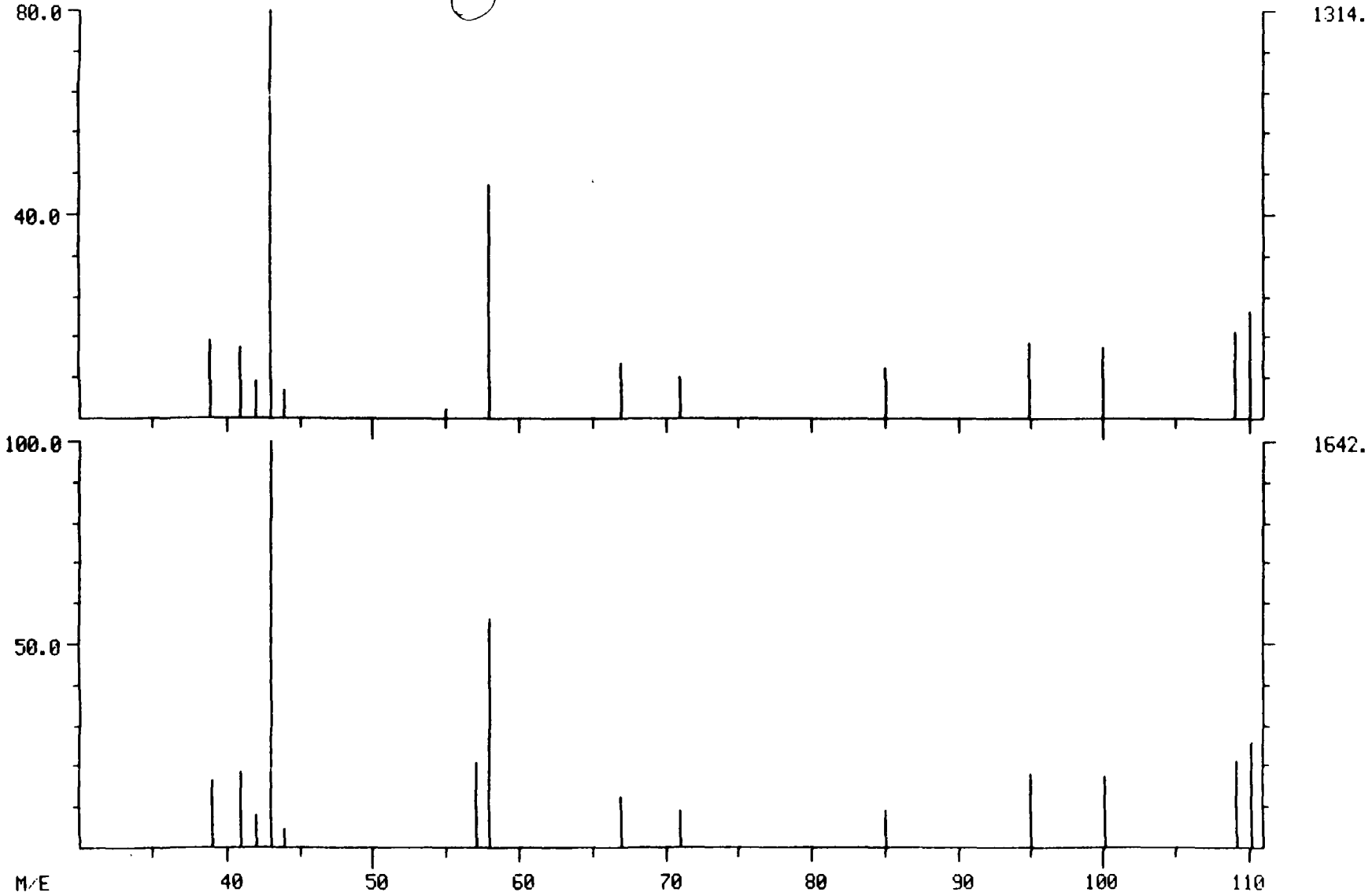
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 11:29
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N)

DATA: GH009689C19 #919 BASE M/E: 43/ 43
RIC: 4359./ 5535.

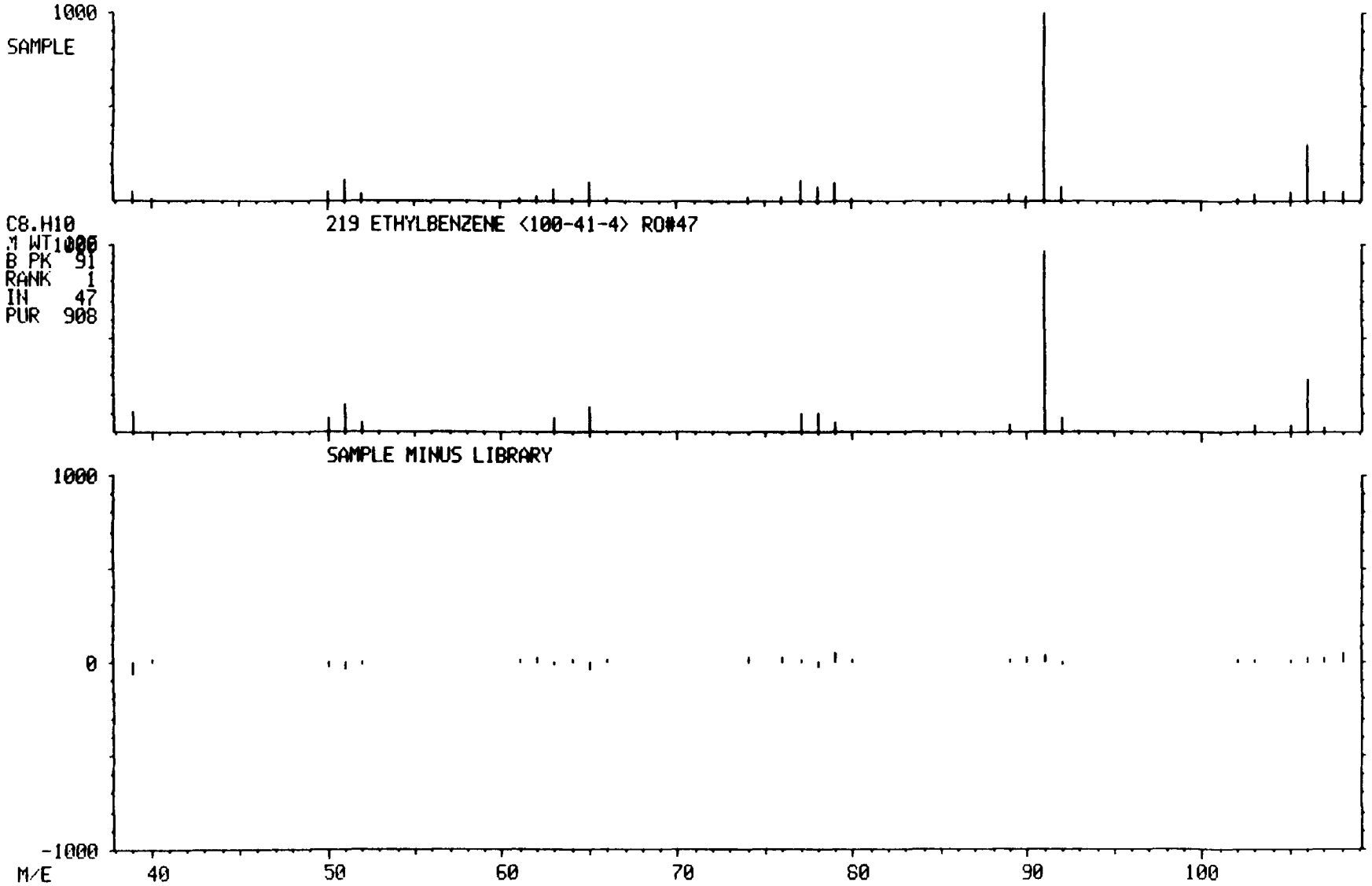
255 2-HEXANONE <591-78-6> RO#42



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 12:50
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

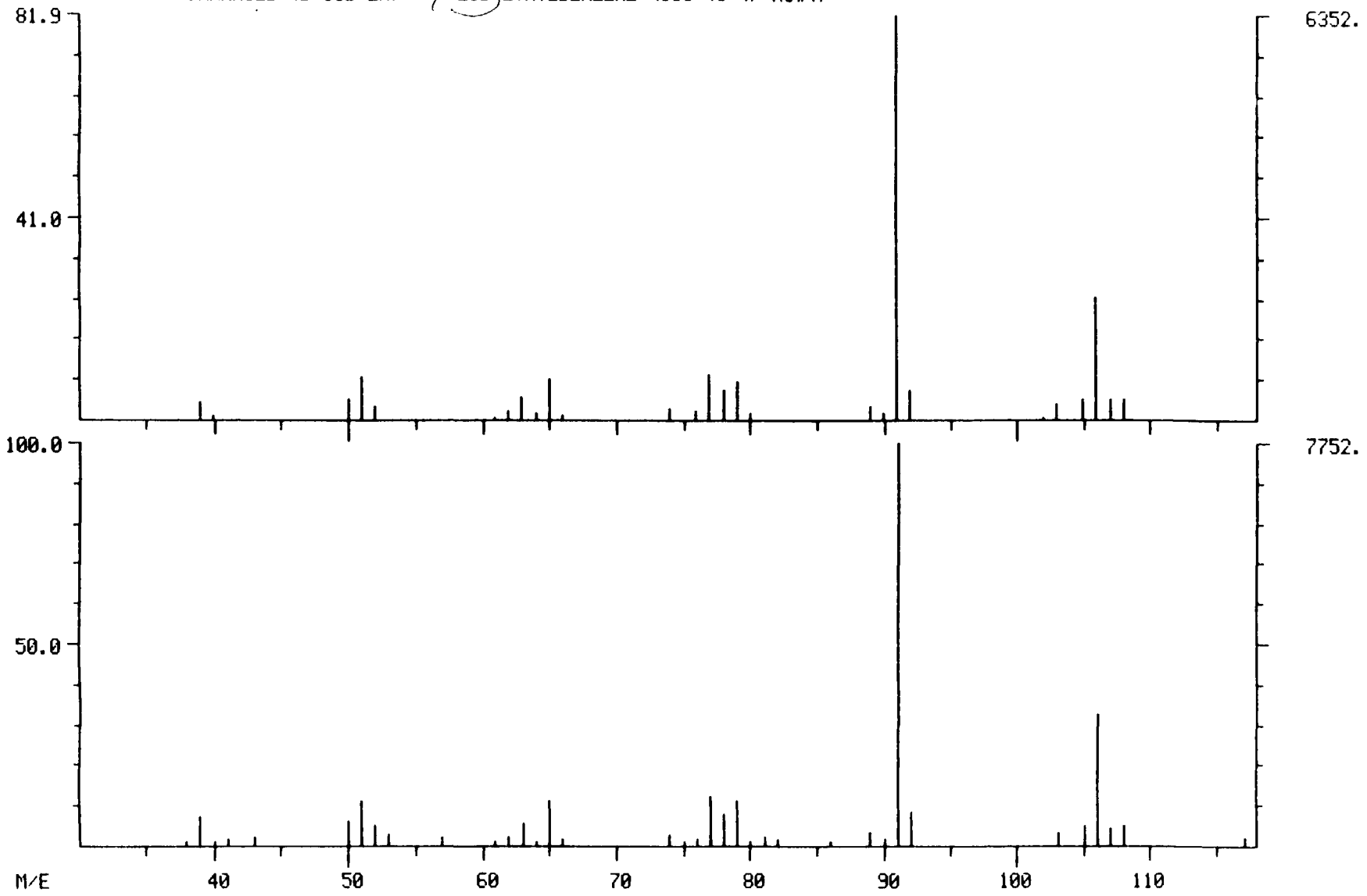
DATA: GH009689C19 #1027
BASE M/E: 91
RIC: 15471.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 12:50
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N) 219 ETHYLBENZENE <100-41-4> RO#47

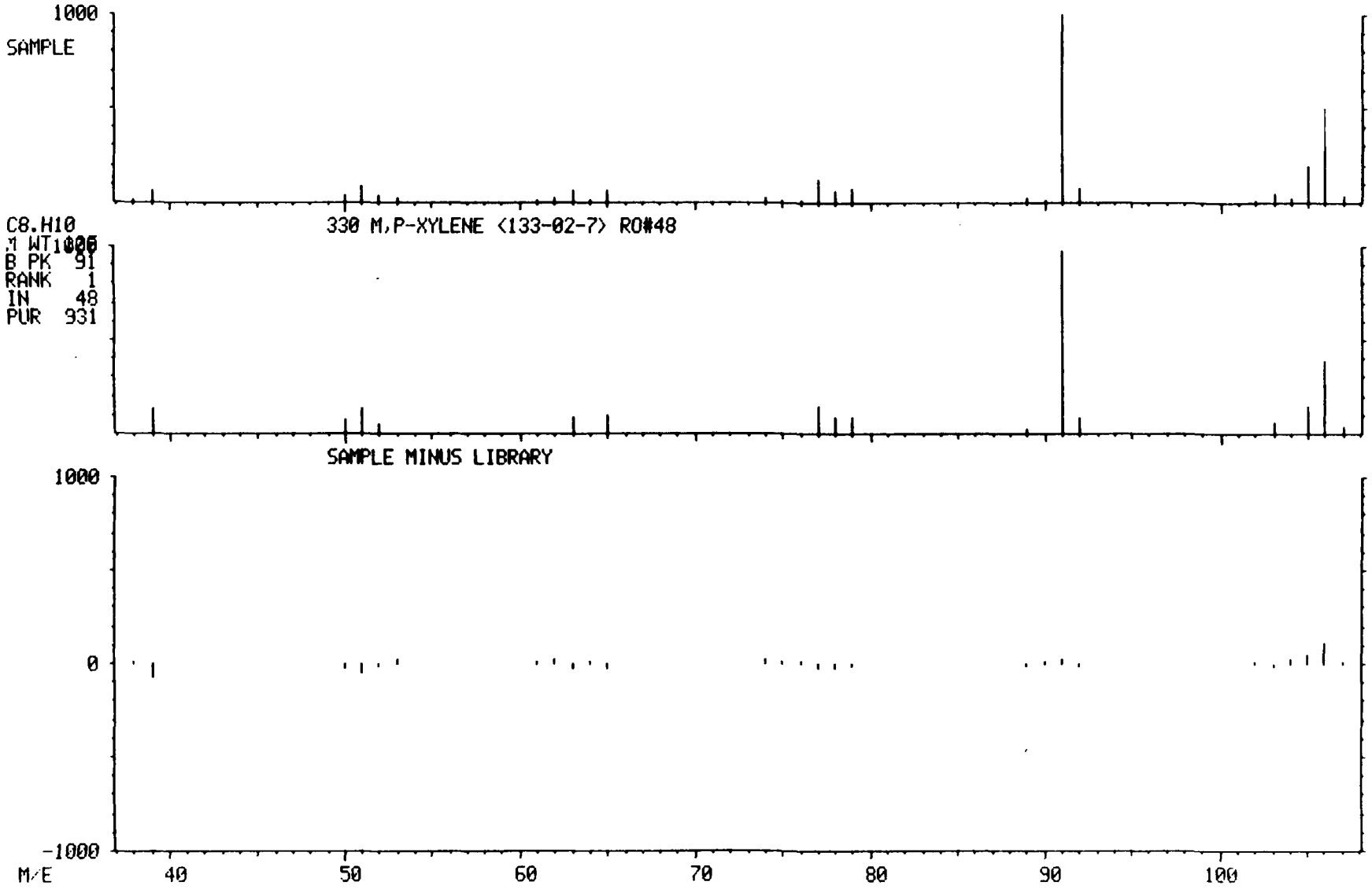
DATA: GH009689C19 #1027 BASE M/E: 91/ 91
RIC: 15471./ 21151.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 13:05
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

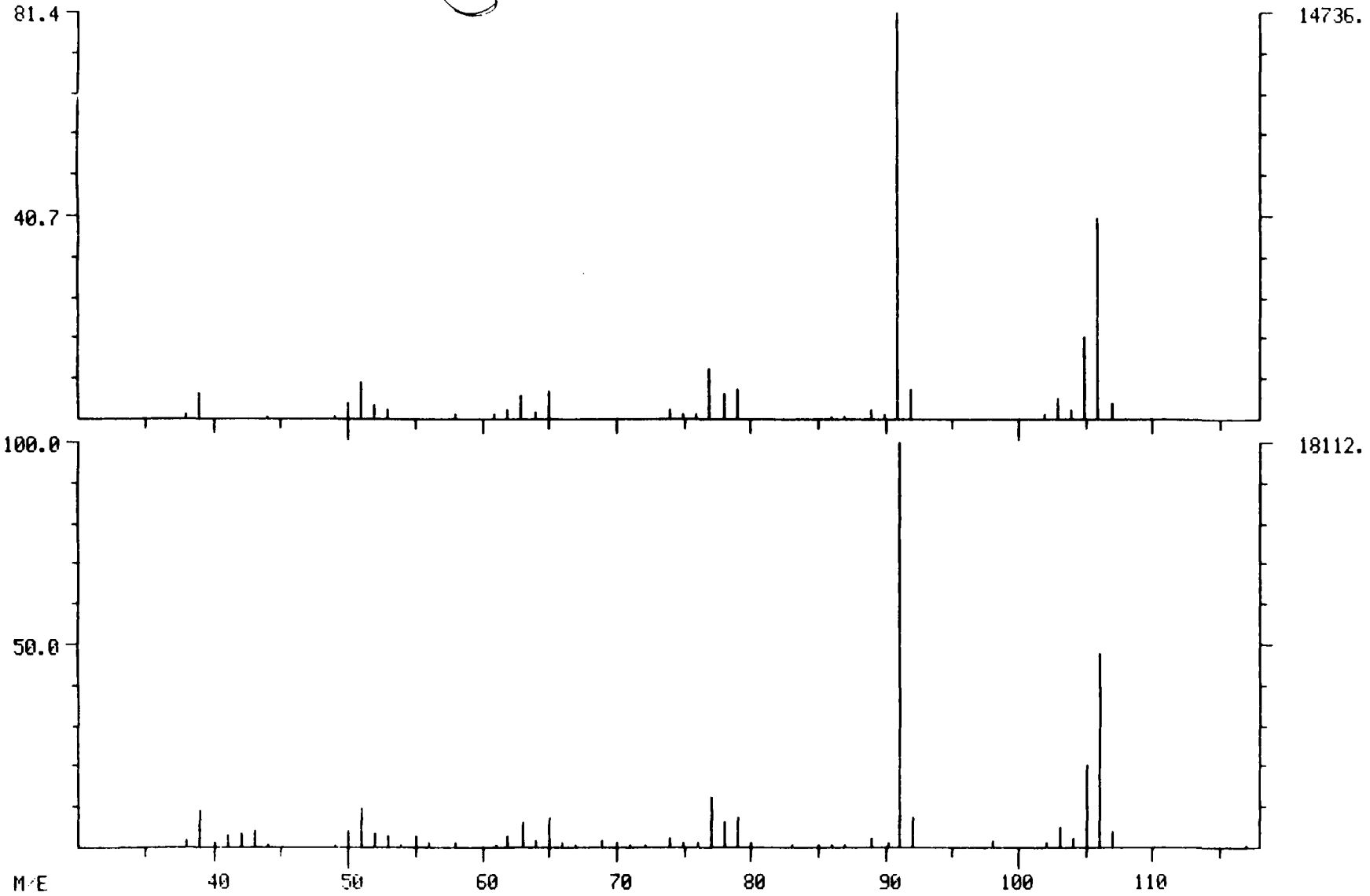
DATA: GH009689C19 #1047
BASE M/E: 91
RIC: 39487.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 13:05
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N) 330 M/P-XYLENE <133-02-7> RO#48

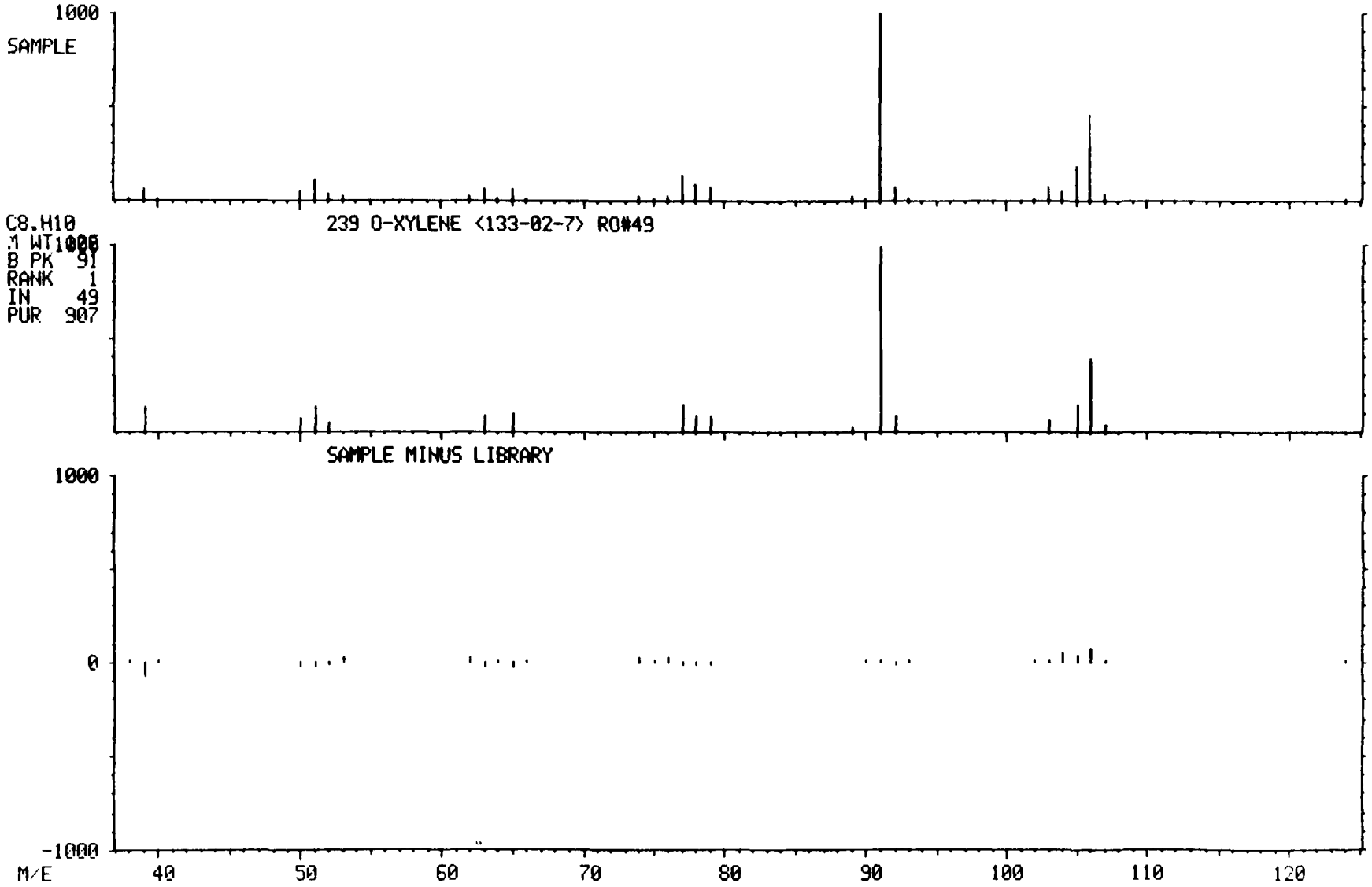
DATA: GH009689C19 #1047 BASE M/E: 91/ 91
RIC: 39999./ 54207.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 13:47
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009689C19 #1103
BASE M/E: 91
RIC: 29471.

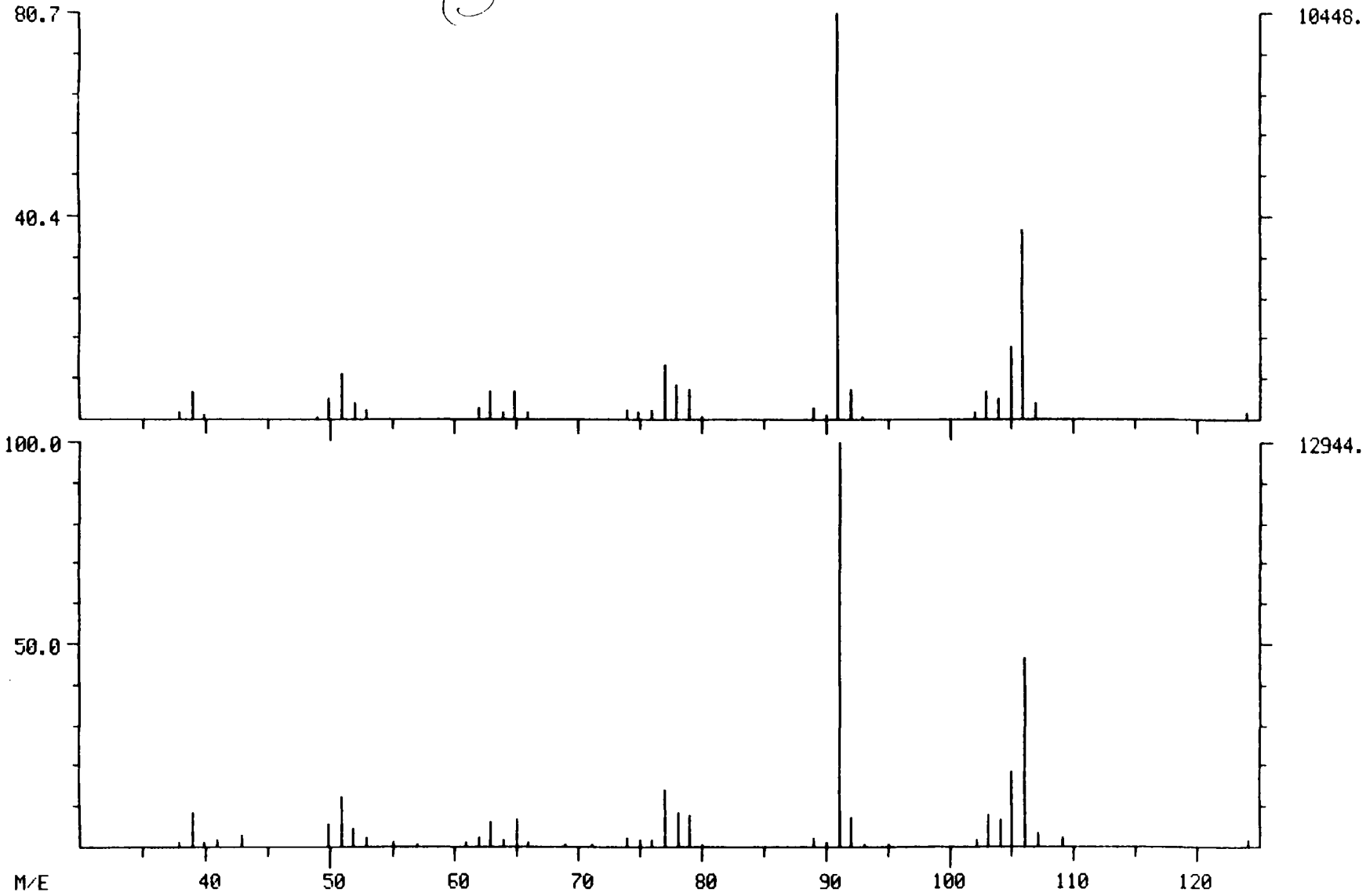


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 13:47
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N)

DATA: GH009689C19 #1103 BASE M/E: 91/ 91
RIC: 29695./ 38655.

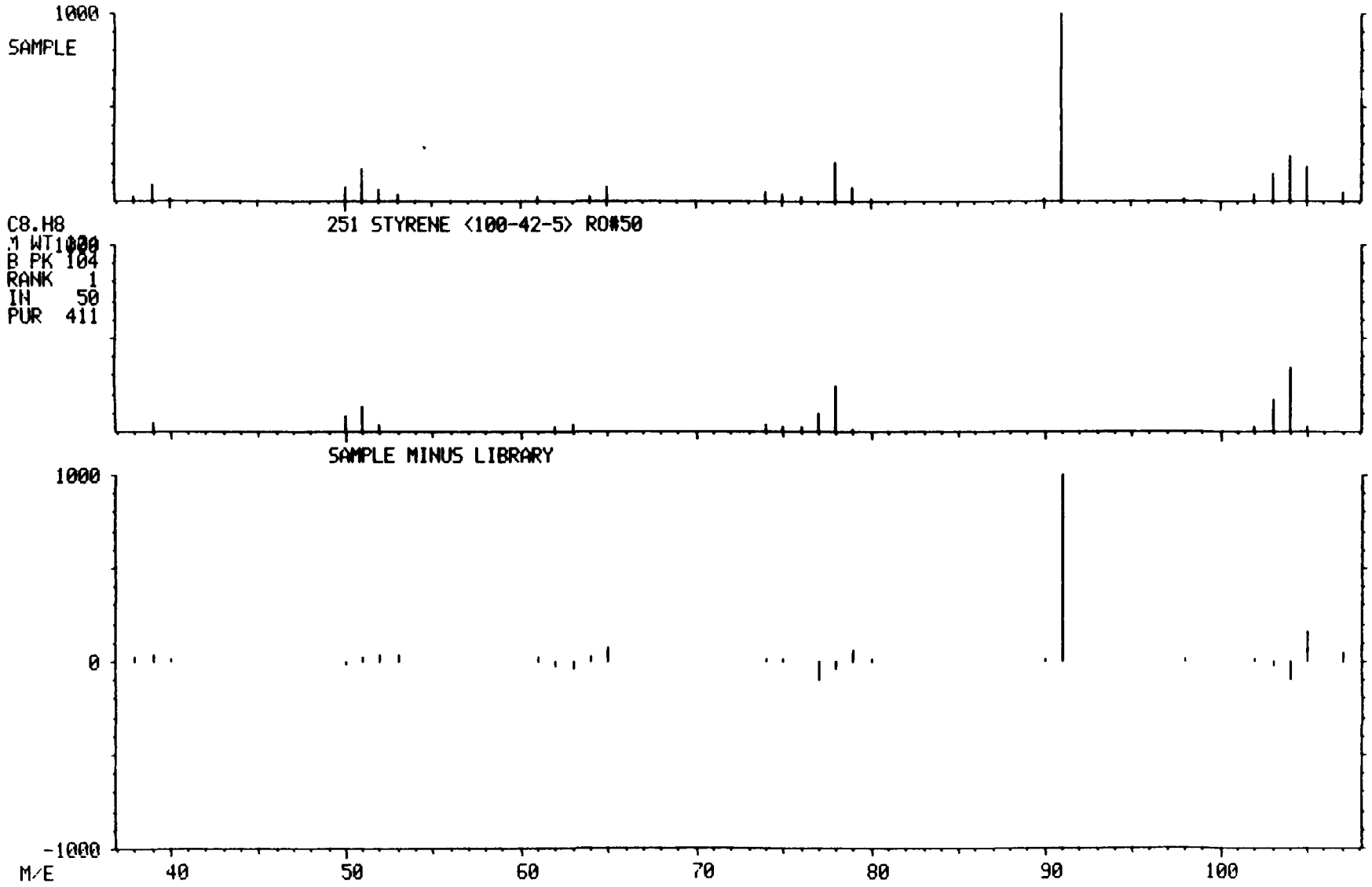
239 O-XYLENE (133-02-7) RO#49



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 13:49
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009689C19 #1106
BASE M/E: 91
RIC: 10063.

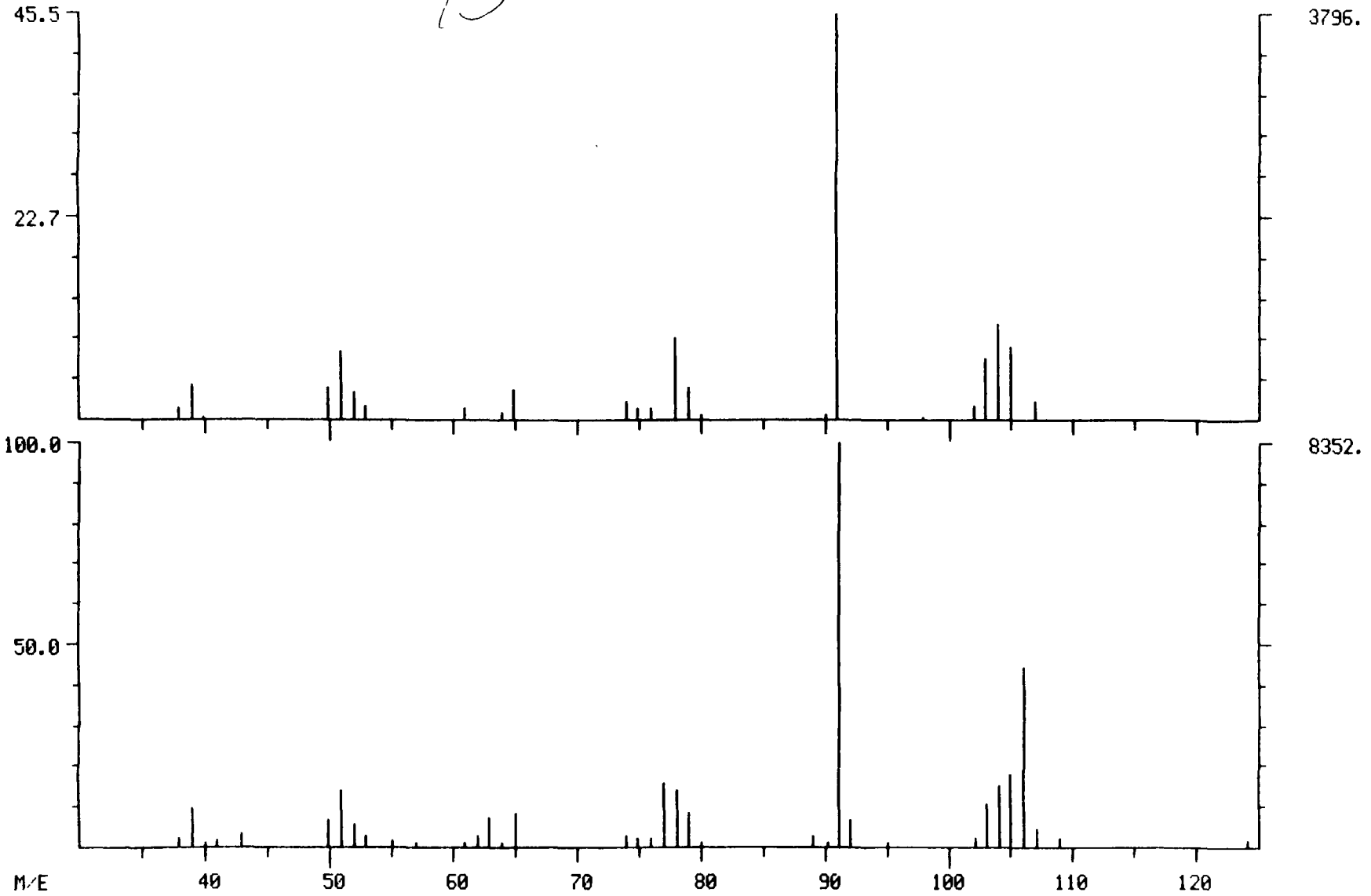


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 7:40:00 + 13:49
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N) 251 STYRENE (100-42-5) RO#50

DATA: GH009689C19 #1106 BASE M/E: 91/ 91
RIC: 10063./ 27519.

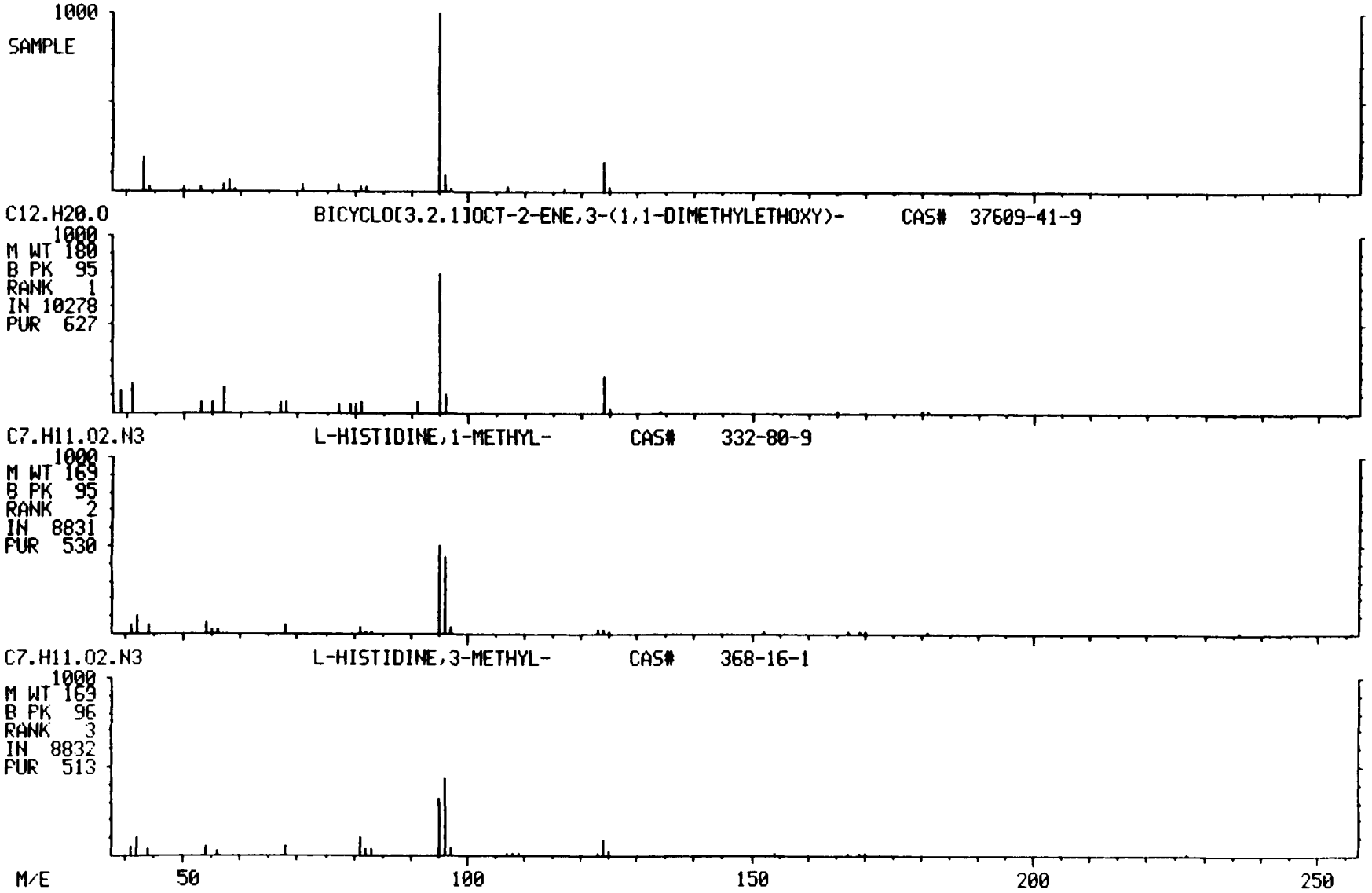


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 13:23
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

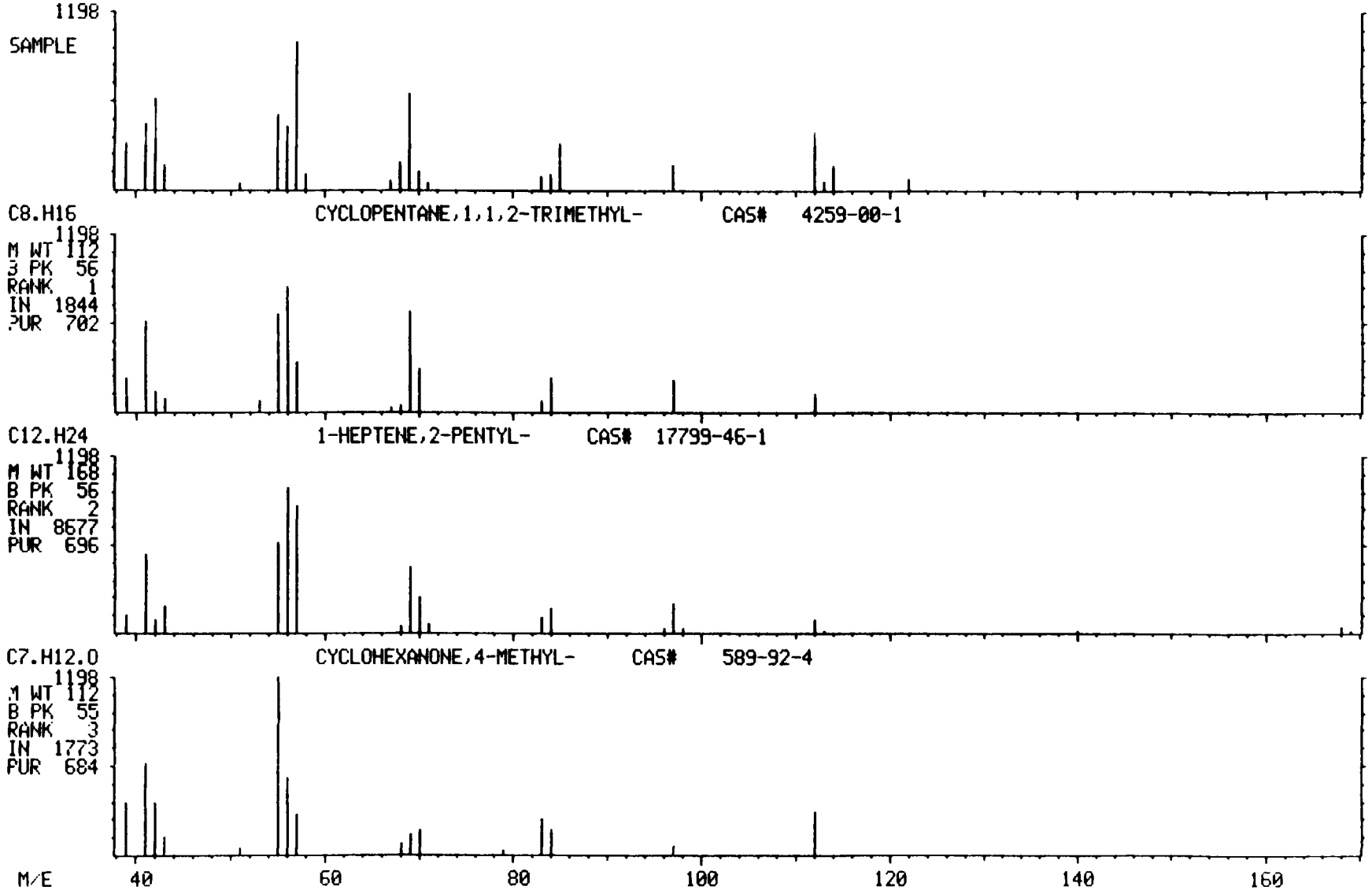
DATA: GH009689C19 #1071 BASE M/E: 95
RIC: 4887.



18756 07 SAMPLE DATA PACKAGE 1222

COMPUCHEM LABS

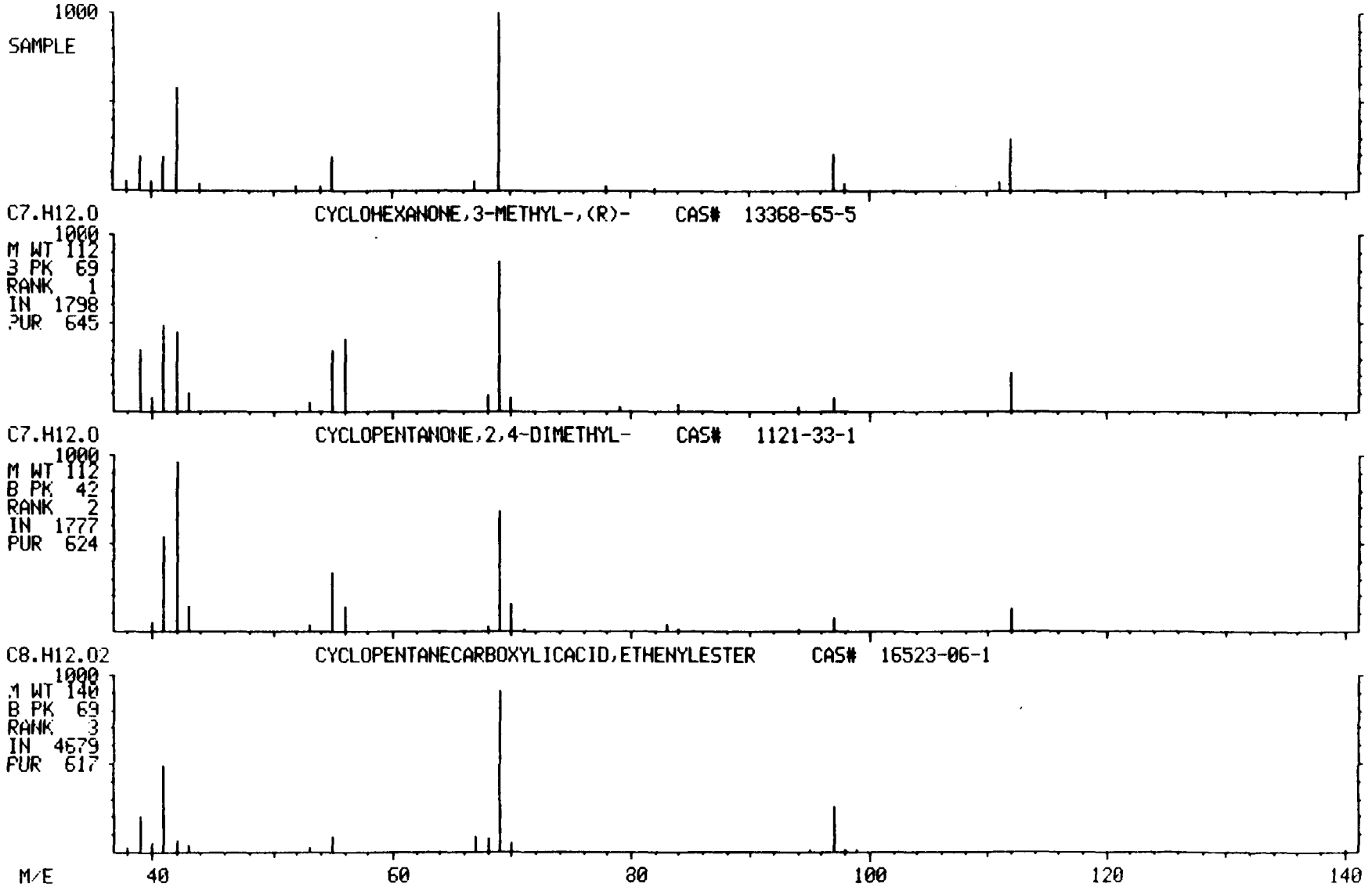
LIBRARY SEARCH DATA: GH009689C19 #1124 BASE M/E: 57
12/22/89 7:40:00 + 14:03 RIC: 7303.
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 14:24
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

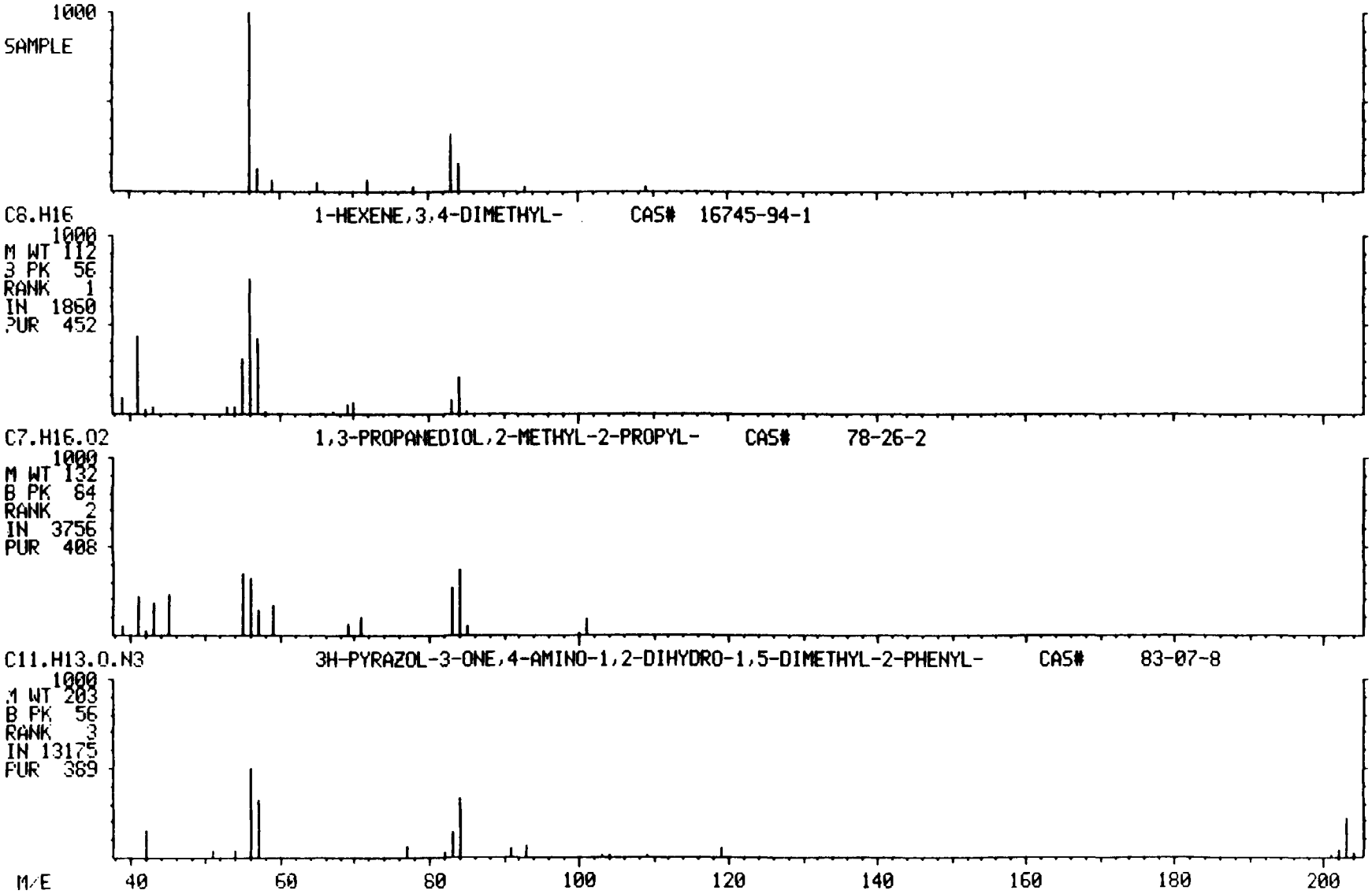
DATA: GH009689C19 #1152
BASE M/E: 69
RIC: 6431.



18756 07 SAMPLE DATA PACKAGE 12220

COMPUCHEM LABS

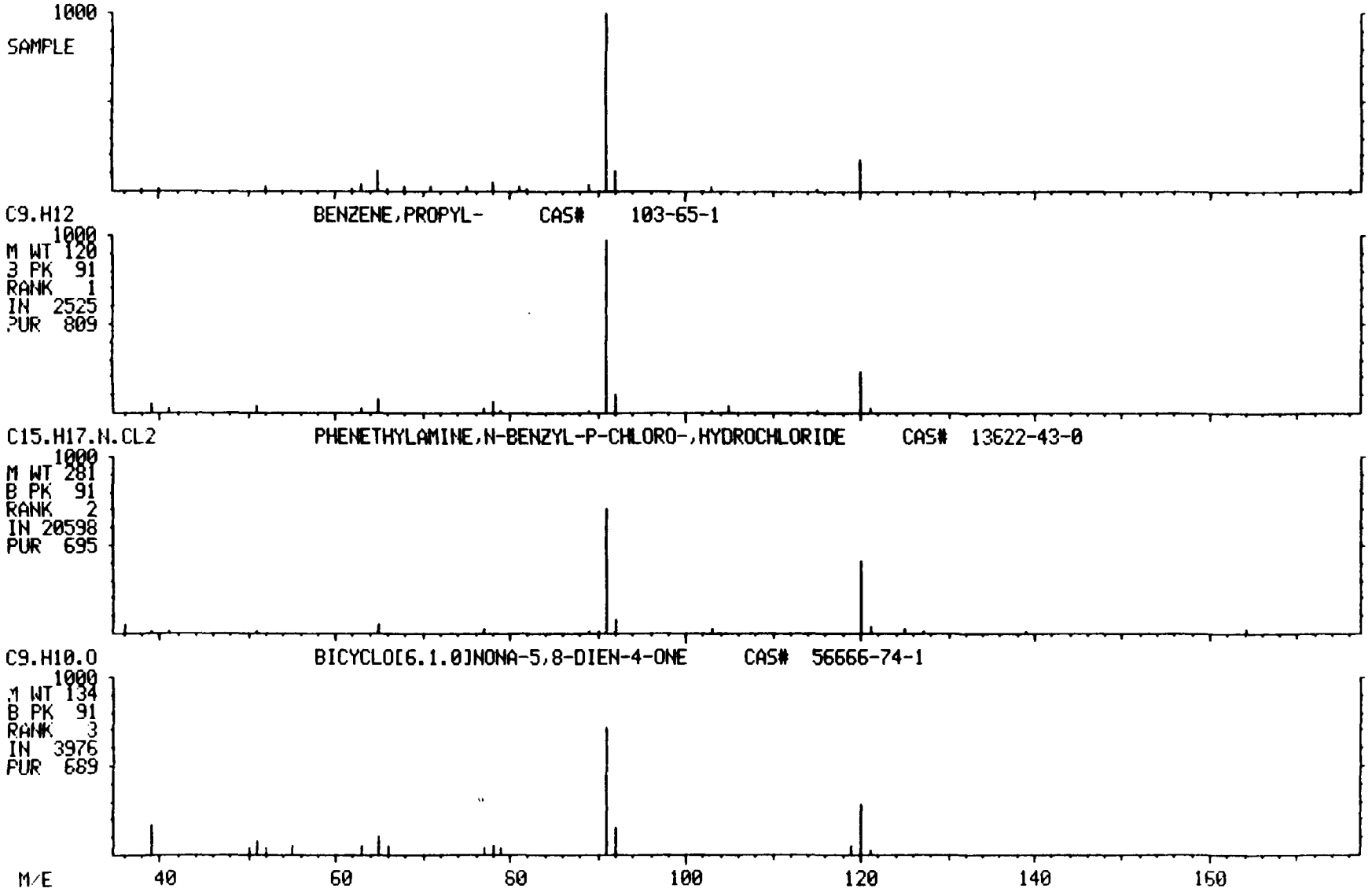
LIBRARY SEARCH DATA: GH009689C19 #1159 BASE M/E: 56
12/22/89 7:40:00 + 14:29 RIC: 2447.
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 15:21
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

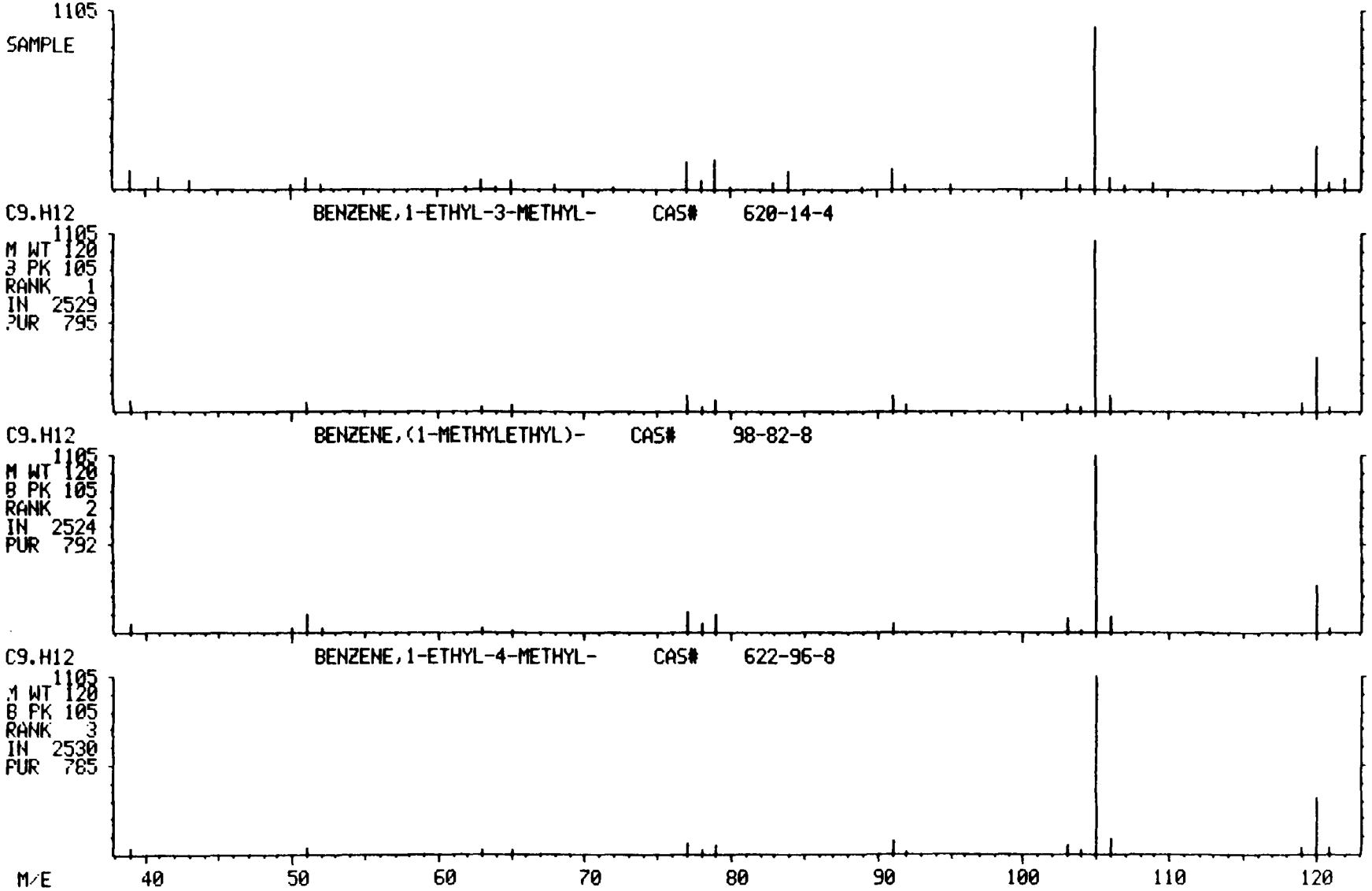
DATA: GH009689C19 #1228
BASE M/E: 91
RIC: 4903.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 15:34
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

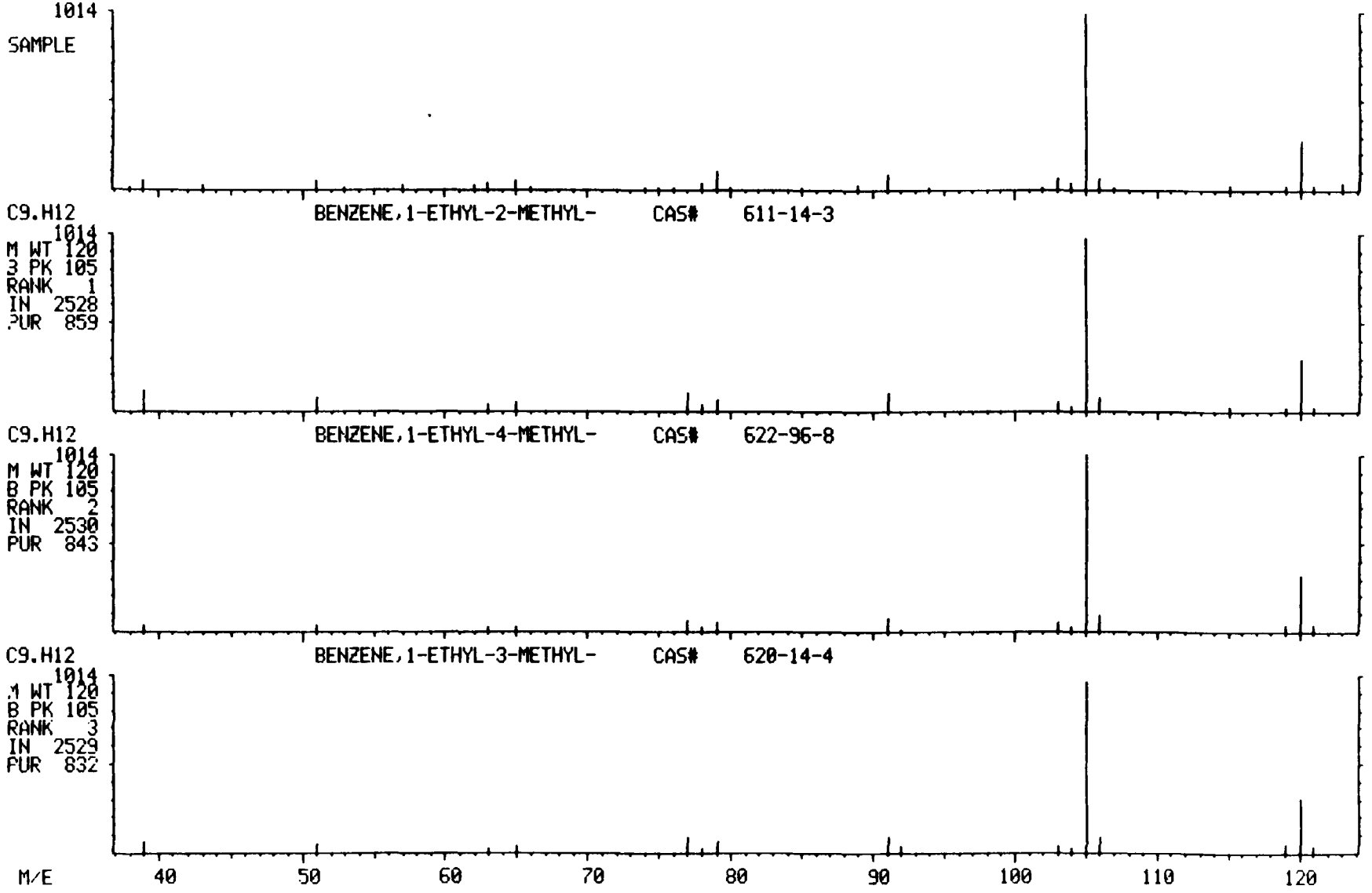
DATA: GH009689C19 #1245
BASE M/E: 105
RIC: 30879.



COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 7:40:00 + 16:02
SAMPLE: 5G CC#309689 CASE#18756.7 EPA#B202B ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009689C19 #1283
BASE M/E: 105
RIC: 17055.



LAB INSTRUCTIONS:

RECEIPT DATE 12/20/89 CASE#: 18756 7 DUE DATE:

VOA R[ ] R2[ ] D[ ] (1)
GC/MS WORKSHEET COMPUCHEM#: 309689
R3[ ] R4[ ] D2[ ] (1)

L L SOLID, EPA SOW 2/88

Sample Prep Code---155
Instrument Code----413
Compound List------494
Surrogate Std------394
Internal Std-------036

SAMPLE ID#: B202B Dry Wt. Factor 1.16 % Moisture 14

GC/MS ANALYSIS
Amount Purged: [/] 10mls/Xg soil or [ ]Dilution_____ul/10000ul/Xg soil
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename 6A891221.DM Disk(29584)
Blank Filename GH009705C19 Disk ( )
Standard Filename GS891222C19 Disk ( )
Sample Filename GH009689C19 Disk ( )

DEC 28 1989

ANALYST(S): Injection 1222-66 Work-up-1452

GC/MS REVIEW

CONDITION CODE: OK

Entry Codes OK,EA,ES,SM,JS,SL,SH,JA,DA

Non-Entry Codes IM,IL,IH,SW,CT,CS,PC,NR IF,LA,DI,CO,RN,DW,SI,SF UP,BB,OT,VC,FO,NS

Disposition: [/] Complete

Extraneous Peak Search Results:
# of Peaks Found 07

[ ] Reprep neat required

[ ] Reprep using_____g

Quality Assurance Notice(s):
Notices Required 0

[ ] Dilute (1)

COMMENTS:

GC/MS Review [illegible] Date 12/27/89 Auditor [illegible] Date 12/28/89

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): GHO-C19 /

QA COMMENTS:

Initials_____ Date____/____/____

FINAL REVIEW Initials_____ Date____/____/____

AC1007 (05/89)

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 155 ASSIGNED TO Harshad Joshi DATE 12/20/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309763	18520	0164			5.0g	TB-12	
309768	↓	↓			5.0g	WB5-1	
309769					5.0g	WB5-2	
309770					5.0g	WB5-4	
309679	18756	0007			5.0g	B201A	
309680			SS	309679	5.0g	B201A MS	
309681			SS	309679	5.0g	B201A MSD	
309682			BS		0.0g		
309686					5.0g	B201B	
309687					5.0g	B202TAR	
309688					5.0g	B202A	
309689					5.0g	B202B	
309690	↓	↓			5.0g	B202C	
309784			B1		5.0 ml	B_3	
309785			B2		0.0 ml	B_4	
309786			B3		0.0 ml	B_5	
309787			B4		0.0 ml	B_6	
309788			B5		0.0 ml	B_7	

SURROGATE # 4 LOT # 1 MANUAL OPERATOR 739 / 516

AMOUNT

RELINQUISHED BY [signature] DATE 12/20/89 RECEIVED BY [signature] DATE

VOLATILE - LOW LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT. LIMIT (UG/KG)
234	128	I	BROMOCHLOROMETHANE (IS)	465	46800	50.0		
221	50		CHLOROMETHANE				BDL	1
231	62		VINYL CHLORIDE				BDL	1
220	94		BROMOMETHANE				BDL	1
209	64		CHLOROETHANE				BDL	1
216	96		1,1-DICHLOROETHENE				BDL	
254	76		CARBON DISULFIDE				BDL	
252	43		ACETONE (2-PROPANONE)			45.6	~~46~~ 53B	1
248	114	I	1,4-DIFLUOROBENZENE (IS)	609	192000	50.0		
222	84		METHYLENE CHLORIDE			26.0	~~26~~	
226	96		TRANS-1,2-DICHLOROETHENE				BDL	
214	63		1,1-DICHLOROETHANE				BDL	
257	43		VINYL ACETATE				BDL	1
237	96		CIS-1,2-DICHLOROETHENE				BDL	
253	72		2-BUTANONE			34.1	~~34~~	1
211	83		CHLOROFORM				BDL	
227	97		1,1,1-TRICHLOROETHANE				BDL	
206	117		CARBON TETRACHLORIDE				BDL	
203	78		BENZENE				BDL	
215	62		1,2-DICHLOROETHANE				BDL	
270	117	I	D5-CHLOROBENZENE (IS) RO#29	1000	204000	50.0		
229	130		TRICHLOROETHENE				BDL	
217	63		1,2-DICHLOROPROPANE				BDL	
212	83		BROMODICHLOROMETHANE				BDL	
218	75		CIS-1,3-DICHLOROPROPENE				BDL	
256	43		4-METHYL-2-PENTANONE			~~2.4~~	BDL ~~20~~	1
225	92		TOLUENE			12.8	~~13~~ 15	
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	
228	97		1,1,2-TRICHLOROETHANE				BDL	
224	164		TETRACHLOROETHENE				BDL	
255	43		2-HEXANONE			20.2	~~20~~ 23	1
208	129		DIBROMOCHLOROMETHANE				BDL	
207	112		CHLOROBENZENE				BDL	
219	106		ETHYLBENZENE			10.1	~~10~~ 12	
330	106		M,P-XYLENE			25.8	~~26~~ 30	
239	106		O-XYLENE			21.0	~~21~~ 24	
251	104		STYRENE			2.7	~~3~~ 3J	
205	173		BROMOFORM				BDL	
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	
258	65	S	D4-1,2-DICHLOROETHANE RO#57			48.3	97.%	
247	95	S	BROMOFLUOROBENZENE			47.8	96.%	
233	98	S	D8-TOLUENE RO#59			45.8	92.%	
289	106		XYLENES (TOTAL)			46.8	~~47~~ 54	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12 27 89

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT. LIMIT (UG/KG)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	
CHECKSUMS: 3979.				2074	442800.	539.4		533.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12-27-85

VOLATILE - LOW LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE RO#57	48.3	50.0	97.	70-121	X	
41	247	BROMOFLUOROBENZENE	47.8	50.0	96.	74-121	X	
42	233	D8-TOLUENE RO#59	45.8	50.0	92.	81-117	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{GC/MS DILUTION FACTOR} \times \text{DRY WEIGHT FACTOR} =$$

$$\frac{5.0\ G}{5.00\ (G)} \times \frac{1.0}{1} \times \frac{1.16}{~~1.00~~} = \frac{1.16}{~~1.000~~}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 8

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12-27-89

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.
B202C

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309690

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009690A19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 13 Date Analyzed: 12/22/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11	U
74-83-9	Bromomethane	11	U
75-01-4	Vinyl Chloride	11	U
75-00-3	Chloroethane	11	U
75-09-2	Methylene Chloride	23	B
67-64-1	Acetone	26	B
75-15-0	Carbon Disulfide	6	U
75-35-4	1,1-Dichloroethene	6	U
75-34-3	1,1-Dichloroethane	6	U
540-59-0	1,2-Dichloroethene (total)	6	U
67-66-3	Chloroform	6	U
107-06-2	1,2-Dichloroethane	6	U
78-93-3	2-Butanone	3	J
71-55-6	1,1,1-Trichloroethane	6	U
56-23-5	Carbon Tetrachloride	6	U
108-05-4	Vinyl Acetate	11	U
75-27-4	Bromodichloromethane	6	U
78-87-5	1,2-Dichloropropane	6	U
10061-01-5	cis-1,3-Dichloropropene	6	U
79-01-6	Trichloroethene	6	U
124-48-1	Dibromochloromethane	6	U
79-00-5	1,1,2-Trichloroethane	6	U
71-43-2	Benzene	6	U
10061-02-6	Trans-1,3-Dichloropropene	6	U
75-25-2	Bromoform	6	U
108-10-1	4-Methyl-2-Pentanone	11	U
591-78-6	2-Hexanone	11	U
127-18-4	Tetrachloroethene	6	U
79-34-5	1,1,2,2-Tetrachloroethane	6	U
108-88-3	Toluene	2	J
108-90-7	Chlorobenzene	6	U
100-41-4	Ethylbenzene	1	J
100-42-5	Styrene	6	U
1330-20-7	Total Xylenes	7	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202C

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309690

Sample wt/vol: 5.0 (g/mL) G Lab File ID: GH009690A19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 13 Date Analyzed: 12/22/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 3

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	13.02	9.2	J
2.	4971-18-0	CYCLOPENTANONE,2-ETHYL-	15.59	14	J
3.		INSTRUMENT ARTIFACT	15.97	9.2	J

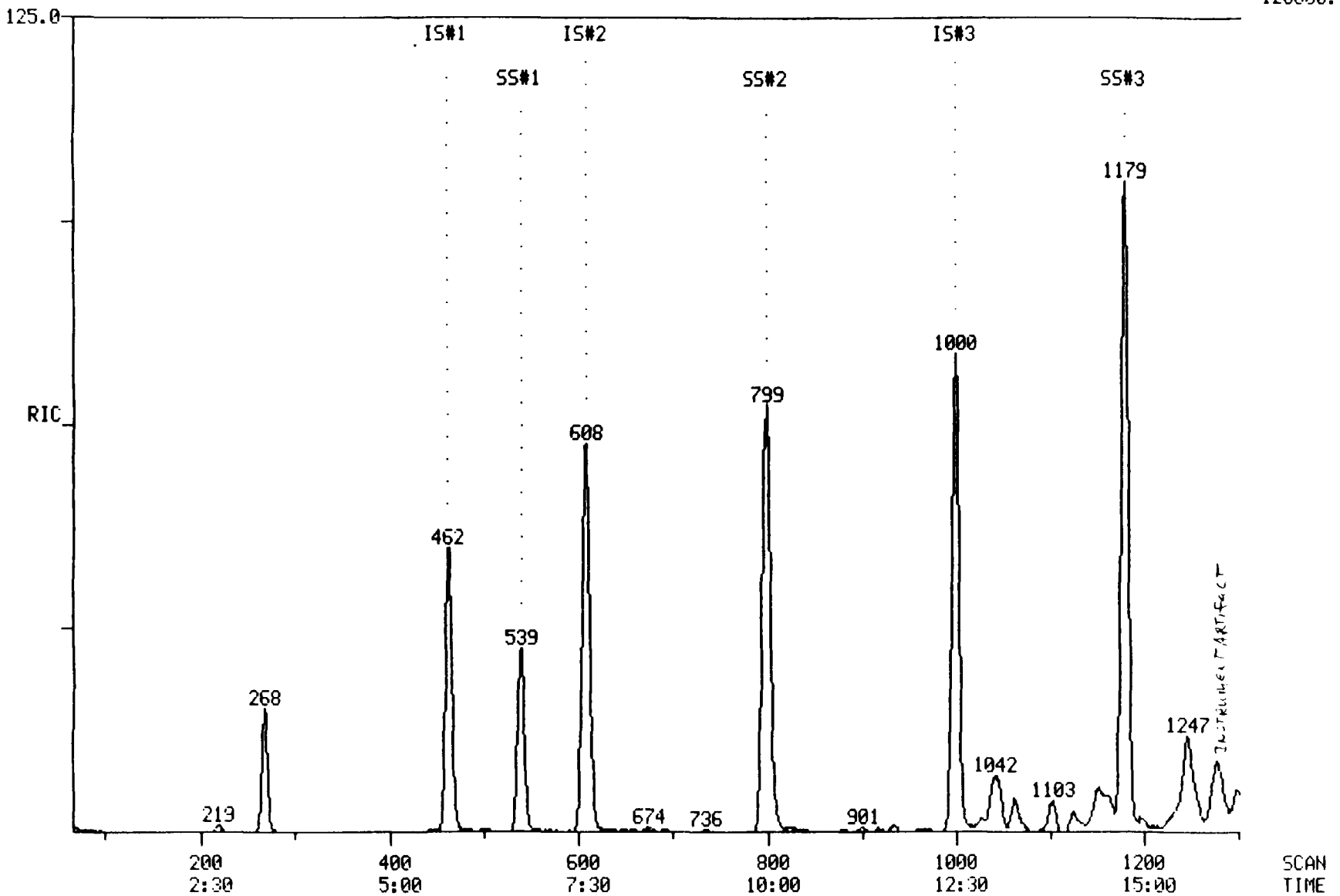
COMPUCHEM LABS

RIC COMPUCHEM DATA: GH009690A19 SCANS 67 TO 1300

12/22/89 8:15:00

SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19

CONDS.:



QUANTITATION REPORT FILE: GH009690A19
DATA: GH009690A19.TI
12/22/89 8:15:00
SAMPLE: 5 GRAMS CC#309690 EPA#: B202C CASE#18756.7 ON#19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1492

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
2	221 CHLOROMETHANE <74-87-3> RO#2
3	231 VINYL CHLORIDE <75-01-4> RO#3
4	220 BROMOMETHANE <78-83-9> RO#4
5	209 CHLOROETHANE <75-00-3> RO#5
6	216 1,1-DICHLOROETHENE <75-35-4> RO#8
7	254 CARBON DISULFIDE <75-15-0> RO#9
8	252 ACETONE (2-PROPANONE) <67-64-1> RO#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
10	222 METHYLENE CHLORIDE <75-09-2> RO#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
12	214 1,1-DICHLOROETHANE <75-34-3> RO#19
13	257 VINYL ACETATE <108-05-4> RO#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
15	253 2-BUTANONE <78-93-3> RO#22
16	211 CHLOROFORM <67-66-2> RO#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
18	206 CARBON TETRACHLORIDE <56-23-5> RO#25
19	203 BENZENE <71-43-2> RO#26
20	215 1,2-DICHLOROETHANE <107-06-2> RO#27
21	*270 D5-CHLOROBENZENE (IS) RO#29
22	229 TRICHLOROETHENE <79-01-6> RO#30
23	217 1,2-DICHLOROPROPANE <78-87-5> RO#31
24	212 BROMODICHLOROMETHANE <75-27-4> RO#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
26	256 4-METHYL-2-PENTANONE <108-01-1> RO#36
27	225 TOLUENE <108-88-3> RO#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
30	224 TETRACHLOROETHENE <127-18-4> RO#41
31	255 2-HEXANONE <591-78-6> RO#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
33	207 CHLOROBENZENE <108-90-7> RO#45
34	219 ETHYLBENZENE <100-41-4> RO#47
35	330 M,P-XYLENE <133-02-7> RO#48
36	239 O-XYLENE <133-02-7> RO#49
37	251 STYRENE <100-42-5> RO#50
38	205 BROMOFORM <75-25-2> RO#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
40	#258 D4-1,2-DICHLOROETHANE RO#57
41	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
42	#233 D8-TOLUENE RO#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	462	5:46	1	1.000	A BV	49081.	50.000 UG/KG	14.22
2	50	NOT FOUND							

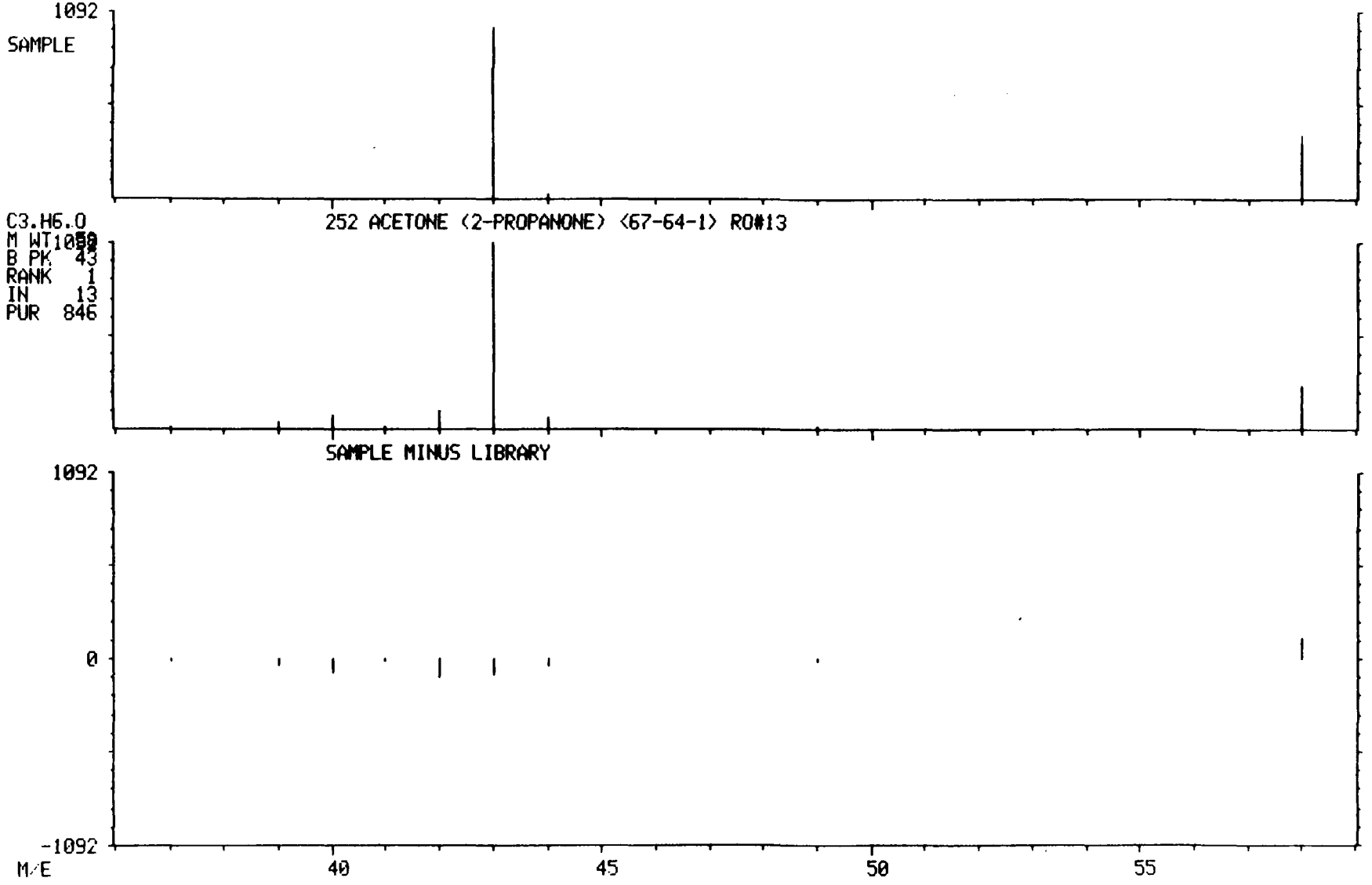
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	219	2:44	1	0.474	A BB	5922.	22.799	UG/KG	6.49
9	114	608	7:36	9	1.000	A BB	202282.	50.000	UG/KG	14.22
10	84	268	3:21	1	0.580	A BB	31695.	19.649	UG/KG	5.59
11	96	NOT FOUND								
12	63	NOT FOUND								
13	43	NOT FOUND								
14	96	NOT FOUND								
15	72	446	5:34	1	0.965	A BB	317.	3.013	UG/KG	0.86
16	83	NOT FOUND								
17	97	NOT FOUND								
18	117	NOT FOUND								
19	78	NOT FOUND								
20	62	NOT FOUND								
21	117	999	12:29	21	1.000	A BB	211350.	50.000	UG/KG	14.22
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	809	10:07	21	0.810	A BB	5280.	1.692	UG/KG	0.48
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	920	11:30	21	0.921	A BB	2639.	3.198	UG/KG	0.91
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	~~1048~~	13:06	21	1.049	A BB	~~9518.~~	~~4.443~~	UG/KG	1.26
35	106	1048	13:06	21	1.049	A BB	9518.	3.196	UG/KG	0.91
36	106	1103	13:47	21	1.104	A BB	7427.	2.825	UG/KG	0.80
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	538	6:43	1	1.165	A BB	98864.	48.267	UG/KG	13.73
41	95	1179	14:44	21	1.180	A BB	164284.	45.433	UG/KG	12.93
42	98	799	9:59	21	0.800	A BB	208117.	46.995	UG/KG	13.37

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:54	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:06		10.000			50.00		0.952	
3	1:11		10.000			50.00		1.256	
4	1:26		10.000			50.00		1.579	
5	1:34		10.000			50.00		0.796	
6	2:37		5.000			50.00		1.346	
7	2:46		5.000			50.00		3.709	
8	2:48	0.98	10.000	0.05	22.80	50.00	0.121	0.265	0.46
9	7:42	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	3:27	0.97	5.000	0.12	19.65	50.00	0.646	1.643	0.39
11	3:53		5.000			50.00		1.486	
12	4:34		5.000			50.00		2 635	
13	4:52		10.000			50.00		0.458	
14	5:33		5.000			50.00		1.675	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	5:42	0.98	10.000	0.10	3.01	50.00	0.006	0.107	0.06
16	6:10		5.000			50.00		3.433	
17	6:18		5.000			50.00		0.814	
18	6:34		5.000			50.00		0.755	
19	6:53		5.000			50.00		0.895	
20	6:58		5.000			50.00		2.523	
21	12:34	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	8:01		5.000			50.00		0.569	
23	8:22		5.000			50.00		0.352	
24	8:55		5.000			50.00		0.701	
25	9:41		5.000			50.00		0.690	
26	10:04		15.000			50.00		0.257	
27	10:10	0.99	5.000	0.16	1.69	50.00	0.025	0.738	0.03
28	10:42		5.000			50.00		0.342	
29	10:58		5.000			50.00		0.349	
30	11:06		5.000			50.00		0.723	
31	11:33	1.00	15.000	0.06	3.20	50.00	0.012	0.195	0.06
32	11:35		5.000			50.00		0.690	
33	12:37		5.000			50.00		1.092	
34	12:55	1.01	5.000	0.21	4.44	50.00	0.045	0.507	0.09
35	13:10	1.00	5.000	0.21	3.20	50.00	0.045	0.705	0.06
36	13:52	0.99	5.000	0.22	2.83	50.00	0.035	0.622	0.06
37	13:54		5.000			50.00		1.099	
38	14:07		5.000			50.00		0.664	
39	15:16		5.000			50.00		0.557	
40	6:52	0.98	5.000	0.23	48.27	50.00	2.014	2.087	0.97
41	14:49	0.99	5.000	0.24	45.43	50.00	0.777	0.855	0.91
42	10:04	0.99	5.000	0.16	46.99	50.00	0.985	1.048	0.94

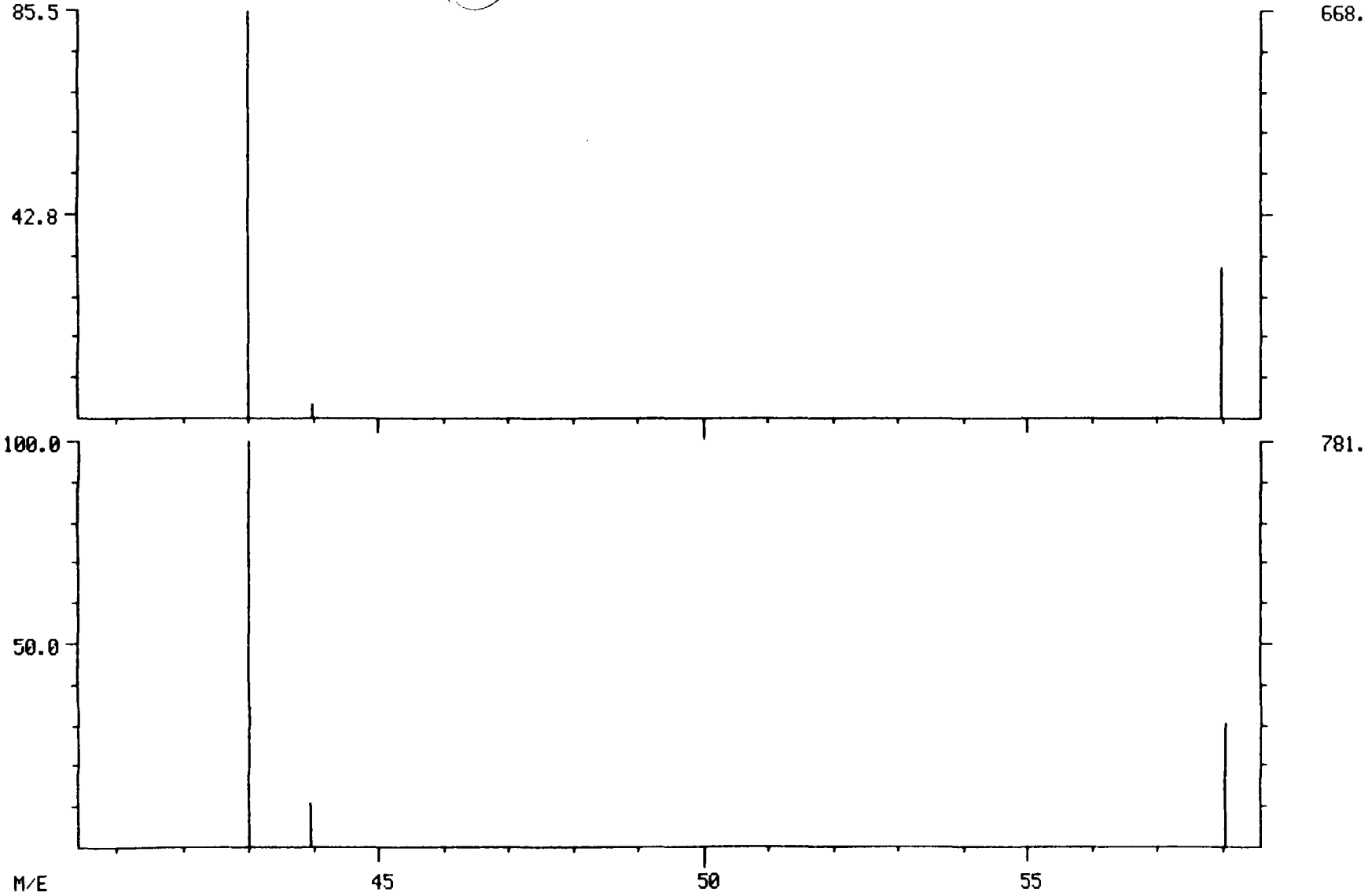
COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009690A19 # 219 BASE M/E: 43
12/22/89 8:15:00 + 2:44 RIC: 938.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)



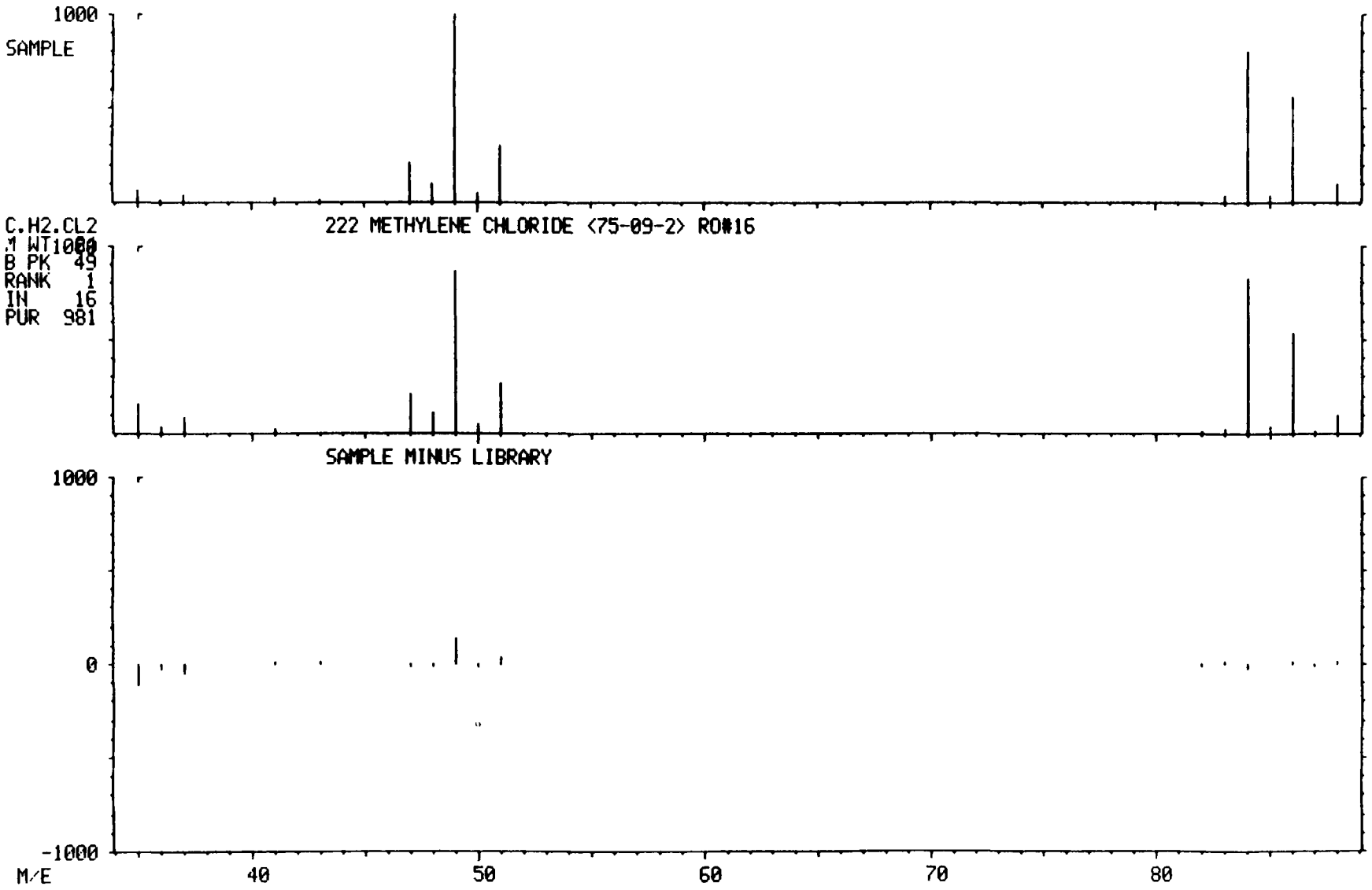
COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 8:15:00 + 2:44
DATA: GH009690A19 #219
BASE M/E: 43/ 43
RIC: 938./ 1105.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N) 252 ACETONE (2-PROPANONE) (67-64-1) RO#13



COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009690A19 # 268 BASE M/E: 49
12/22/89 8:15:00 + 3:21 RIC: 17151.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)

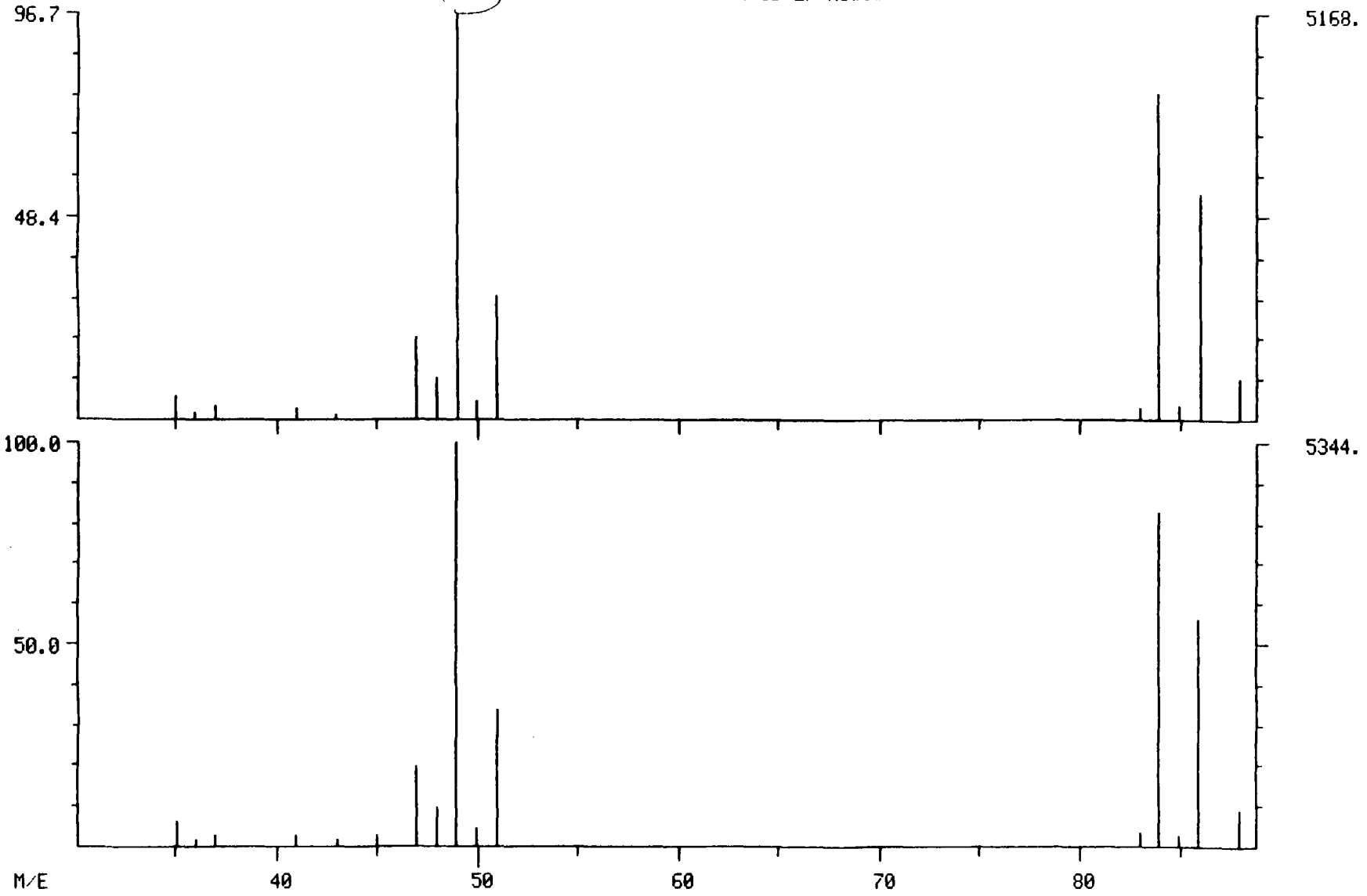


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 8:15:00 + 3:21
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N)

DATA: GH009690A19 #268 BASE M/E: 49/ 49
RIC: 17151./ 18143.

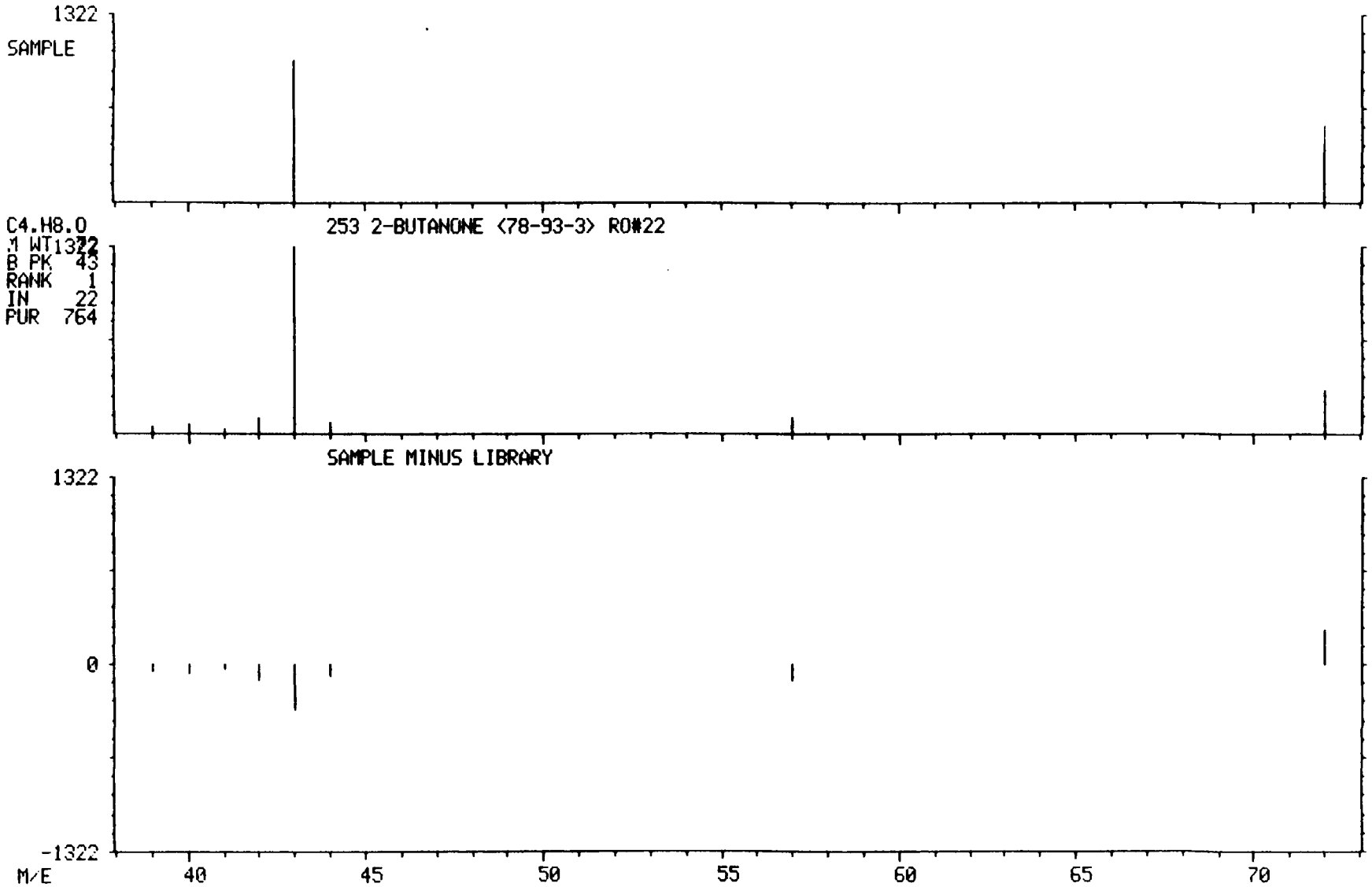
222 METHYLENE CHLORIDE <75-09-2> RO#16



18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009690A19 # 446 BASE M/E: 43
12/22/89 8:15:00 + 5:34 RIC: 361.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)

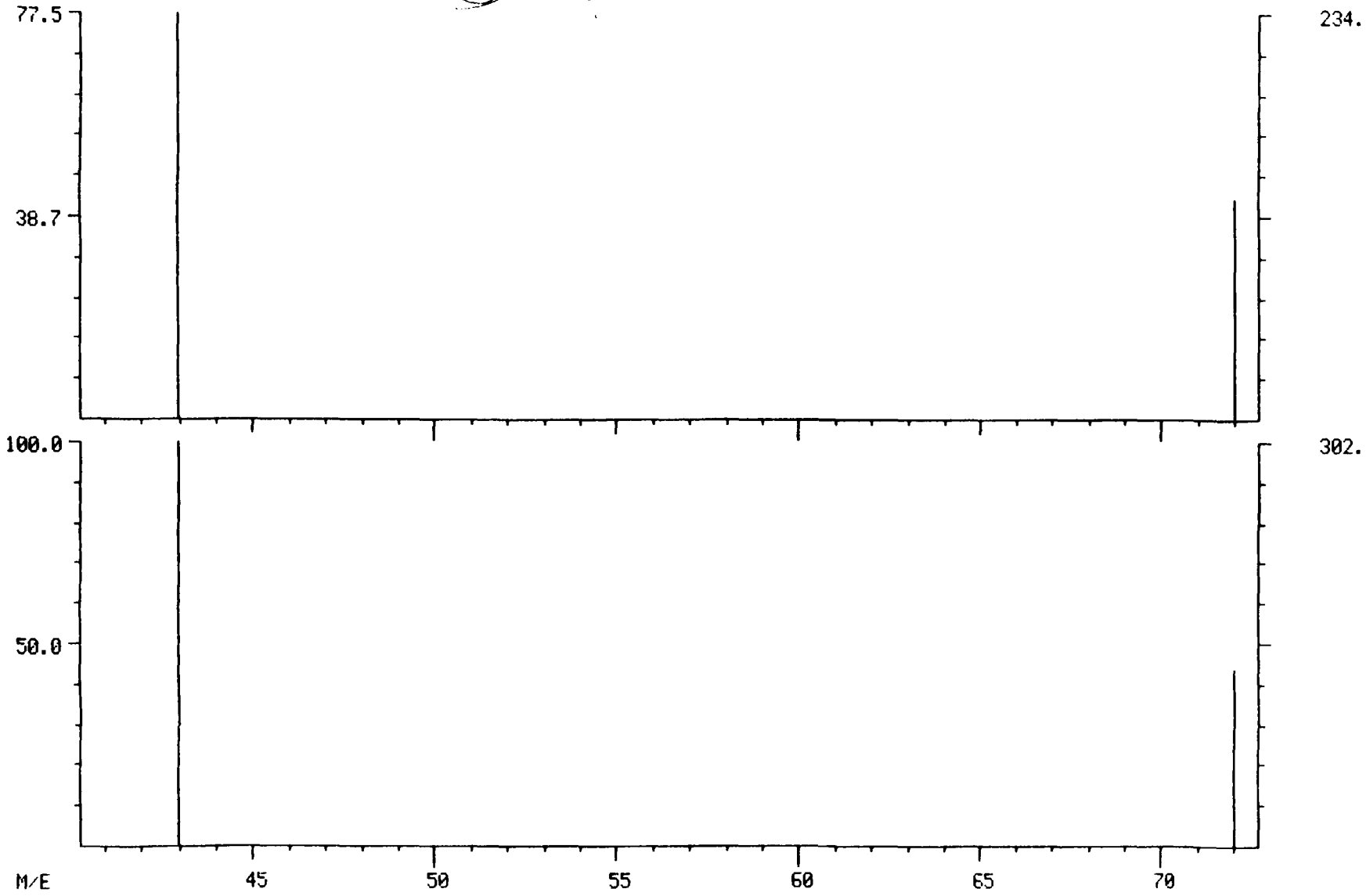


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 8:15:00 + 5:34
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N)

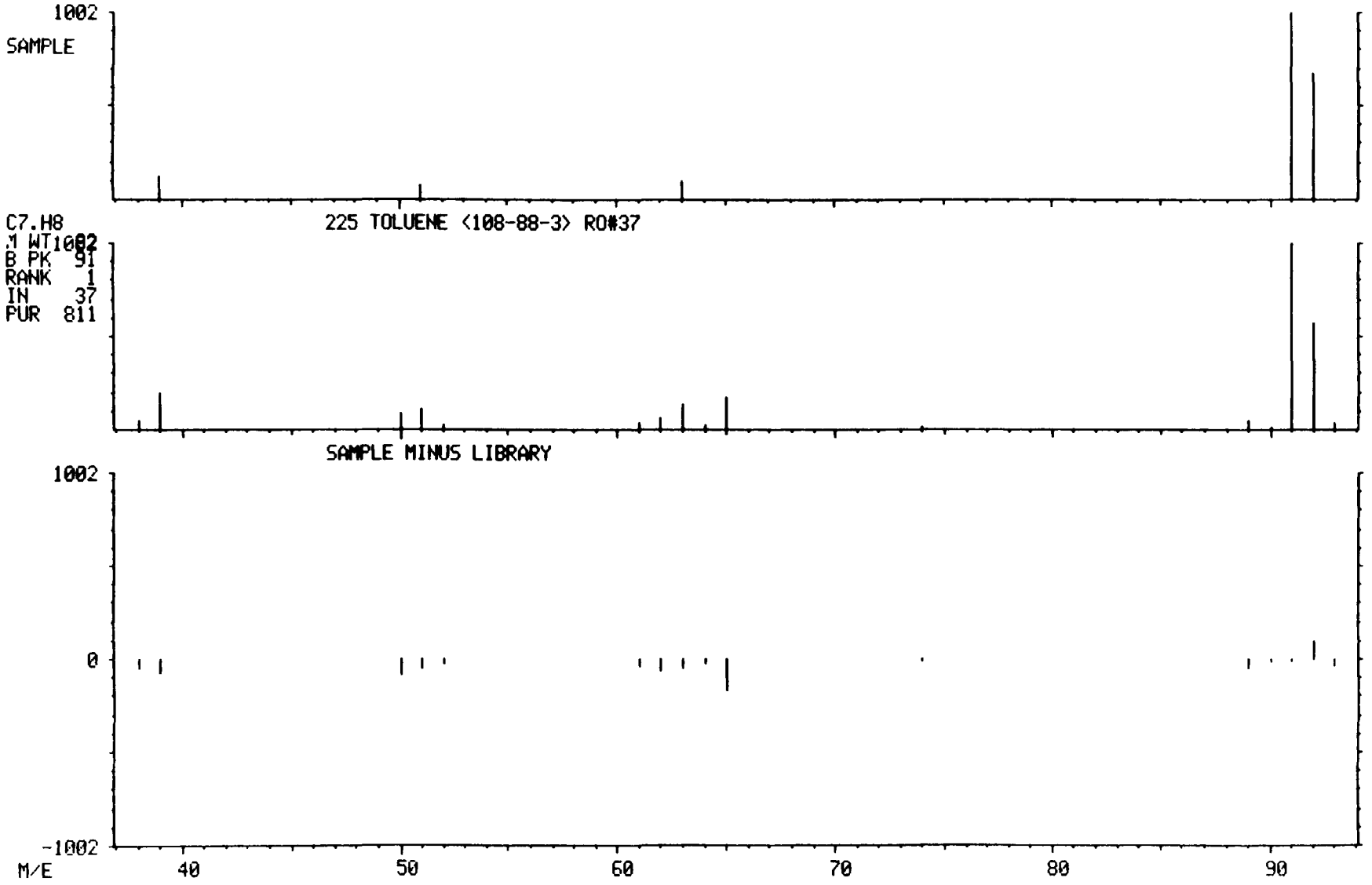
DATA: GH009690A19 #446 BASE M/E: 43/ 43
RIC: 361./ 433.

253 2-BUTANONE (78-93-3) RO#22



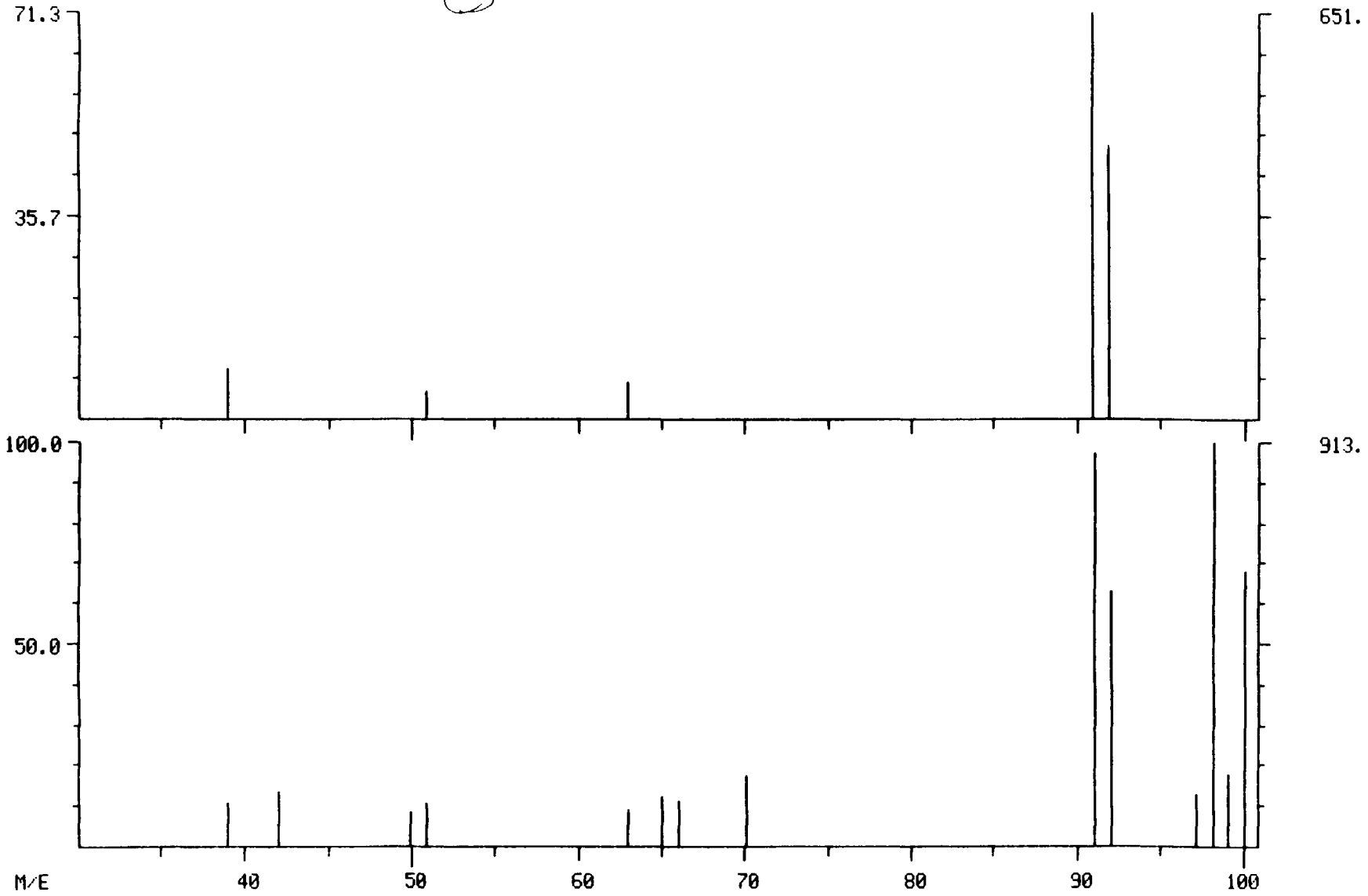
COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009690A19 # 809 BASE M/E: 91
12/22/89 8:15:00 + 10:07 RIC: 1277.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 8:15:00 + 10:07
DATA: GH009690A19 #809
BASE M/E: 91/ 98
RIC: 1277./ 4135.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N) 225 TOLUENE (108-88-3) RO#37

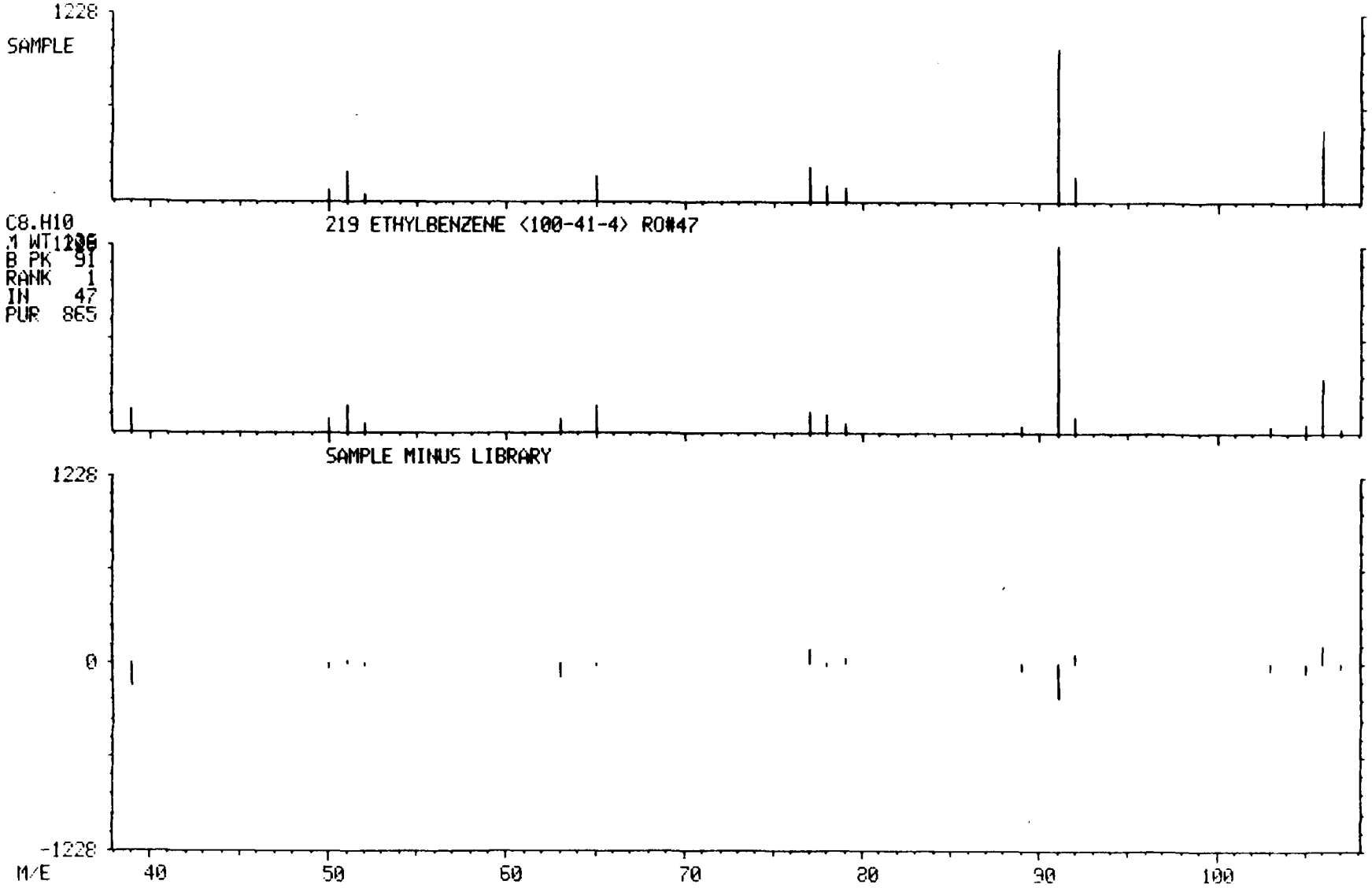


18756 07 SAMPLE DATA PACKAGE 1197

COMPUCHEM LABS

LIBRARY SEARCH
12/22/89 8:15:00 + 12:51
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)

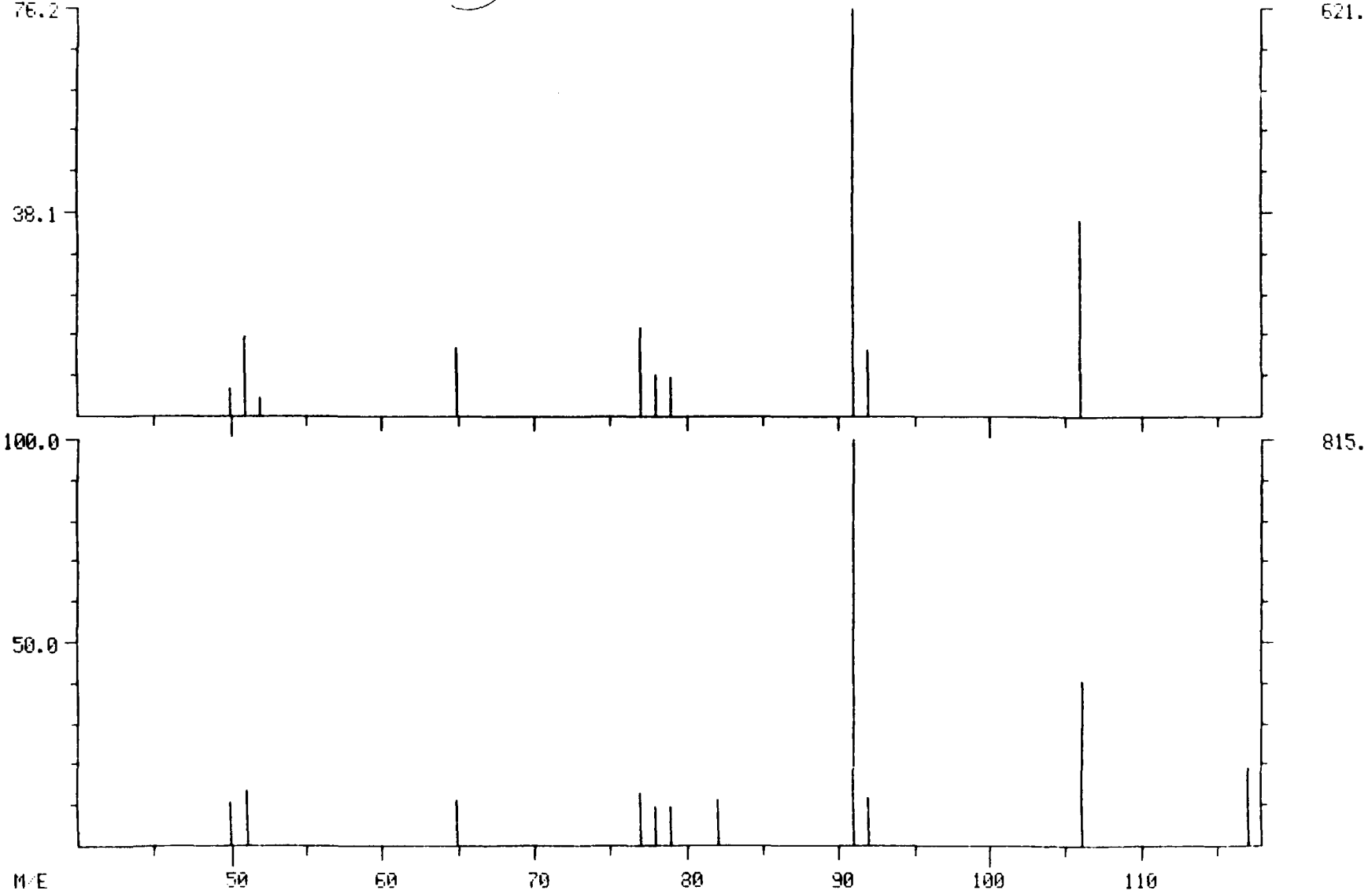
DATA: GH009690A19 #1028
BASE M/E: 91
RIC: 1577.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/83 8:15:00 + 12:51
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N) 219 ETHYLBENZENE (100-41-4) RO#47

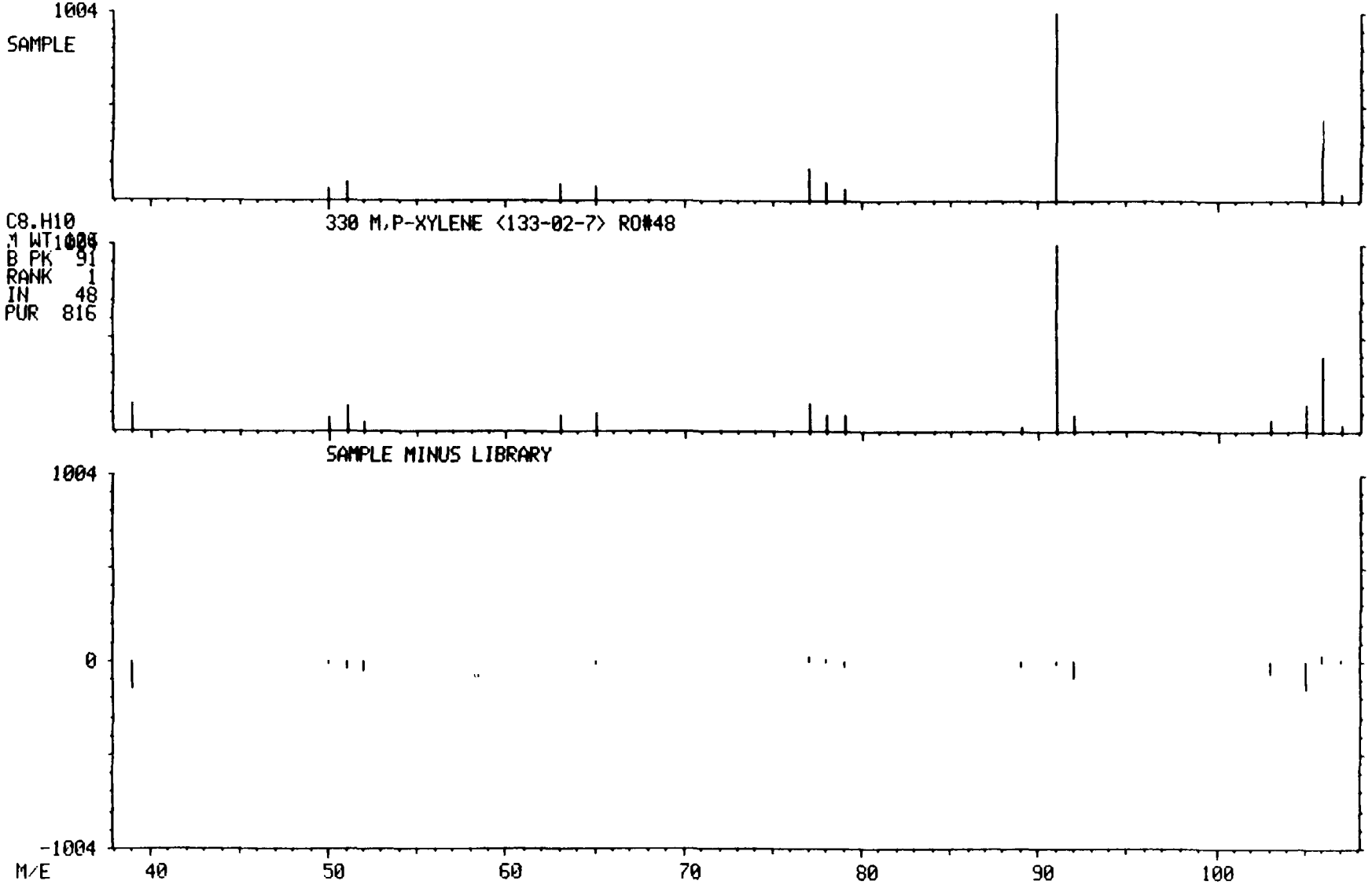
DATA: GH009690A19 #1028 BASE M/E: 91 91
RIC: 1577. 2035.



18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009690A19 #1048 BASE M/E: 91
12/22/89 8:15:00 + 13:06 RIC: 3267.
SAMPLE: 5 GRAMS CC#309690 EPA#:8202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)

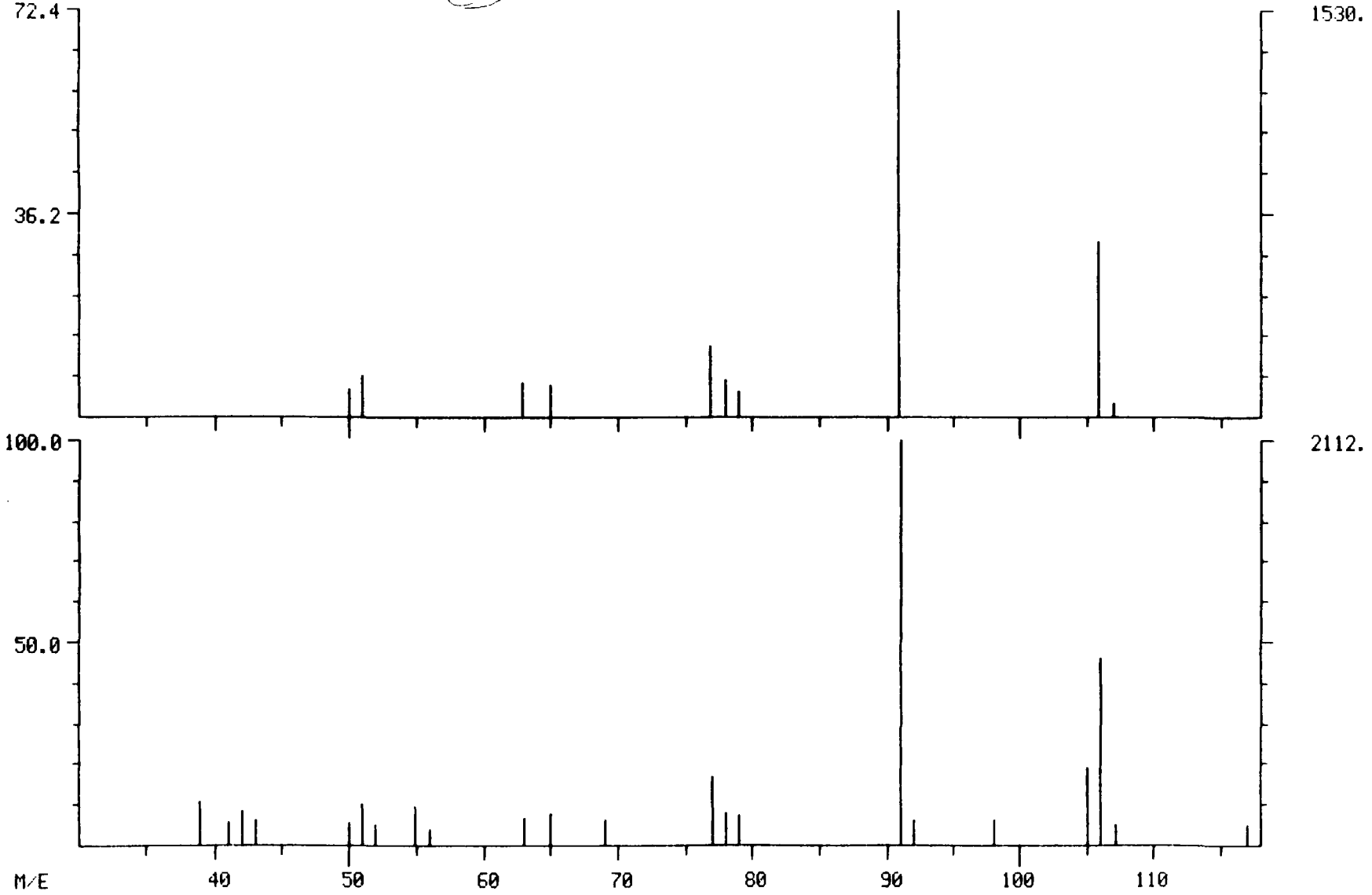


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/22/89 8:15:00 + 13:06
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N)

DATA: GH009690A19 #1048 BASE M/E: 91/ 91
RIC: 3267./ 6471.

330 M,P-XYLENE <133-02-7> RO#48

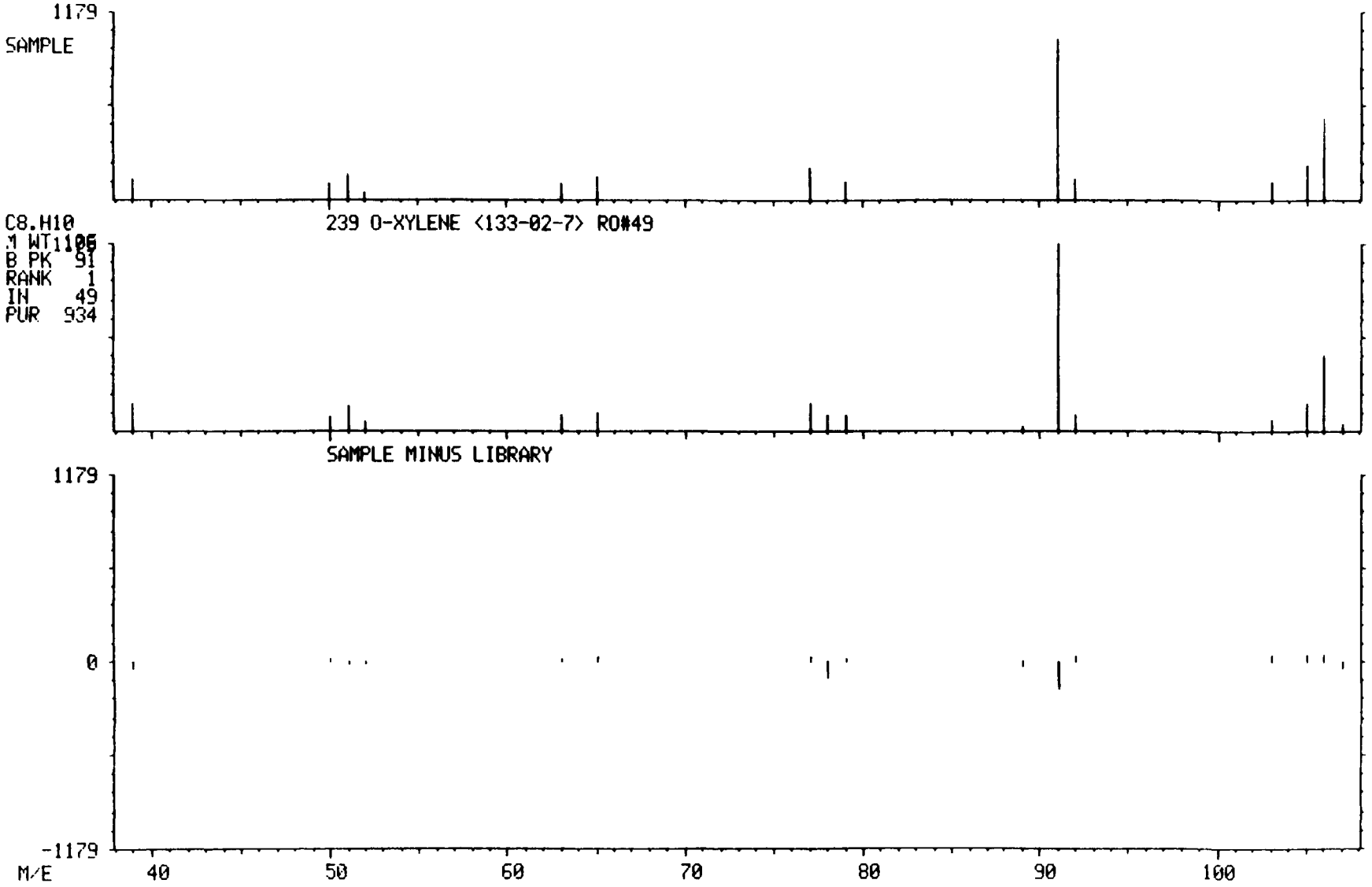


18756 07 SAMPLE DATA PACKAGE

1195

COMPUCHEM LABS

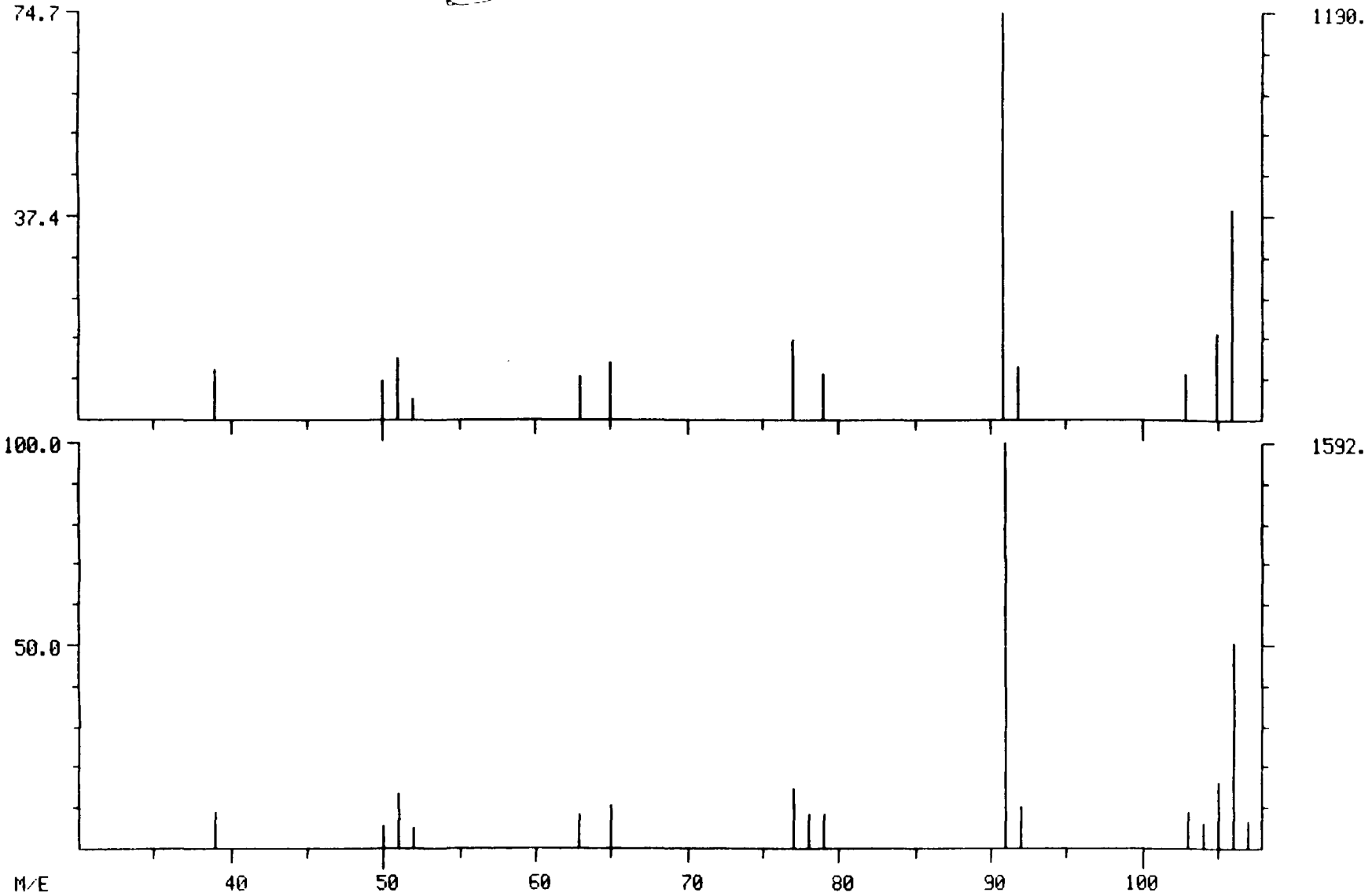
LIBRARY SEARCH DATA: GH009690A19 #1103 BASE M/E: 91
12/22/89 8:15:00 + 13:47 RIC: 3523.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

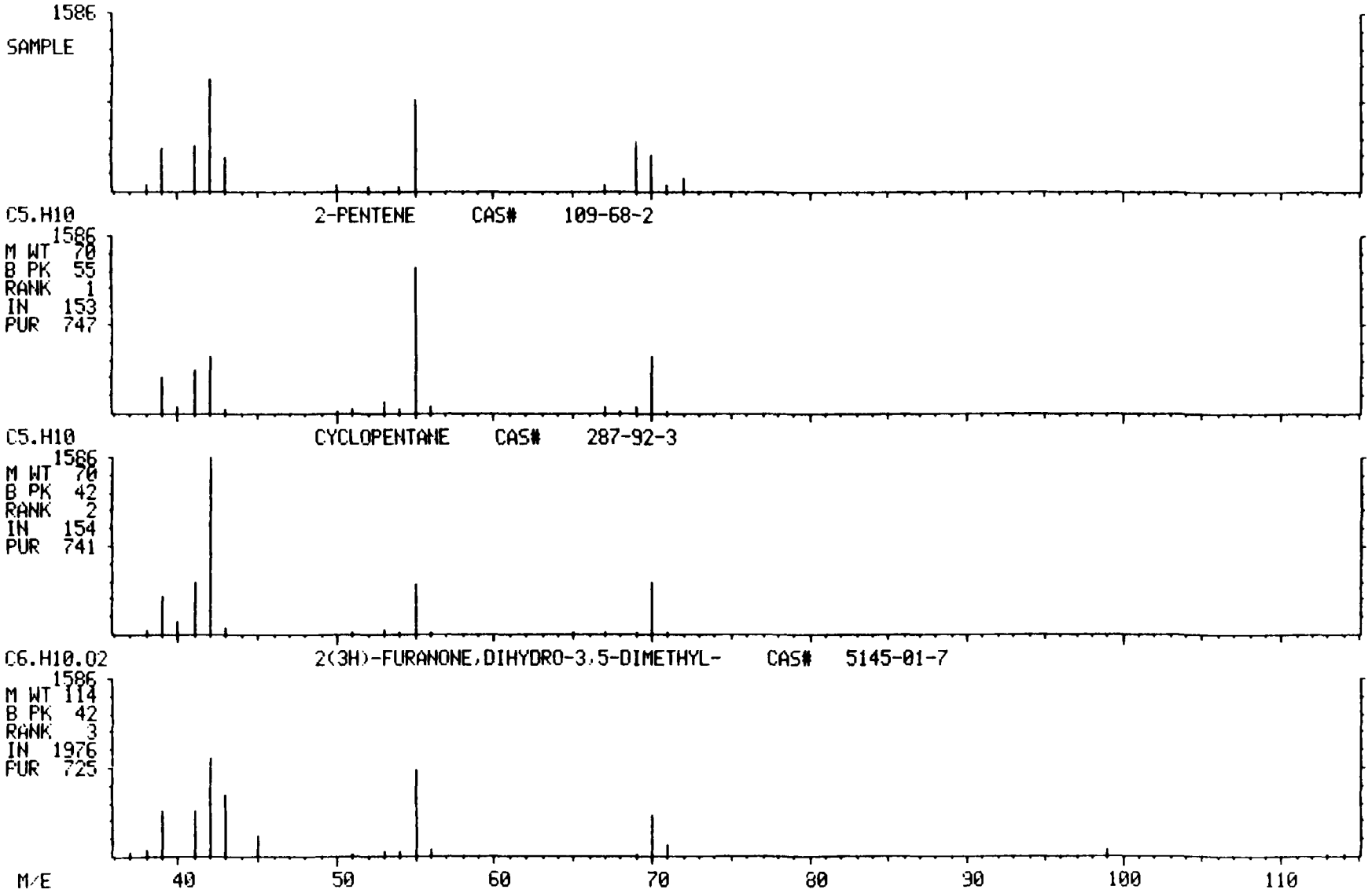
DUAL MASS SPECTRUM
12/22/89 8:15:00 + 13:47
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N) (239) O-XYLENE (133-02-7) RO#49

DATA: GH009690A19 #1103 BASE M/E: 91/ 91
RIC: 3523./ 4511.



COMPUCHEM LABS

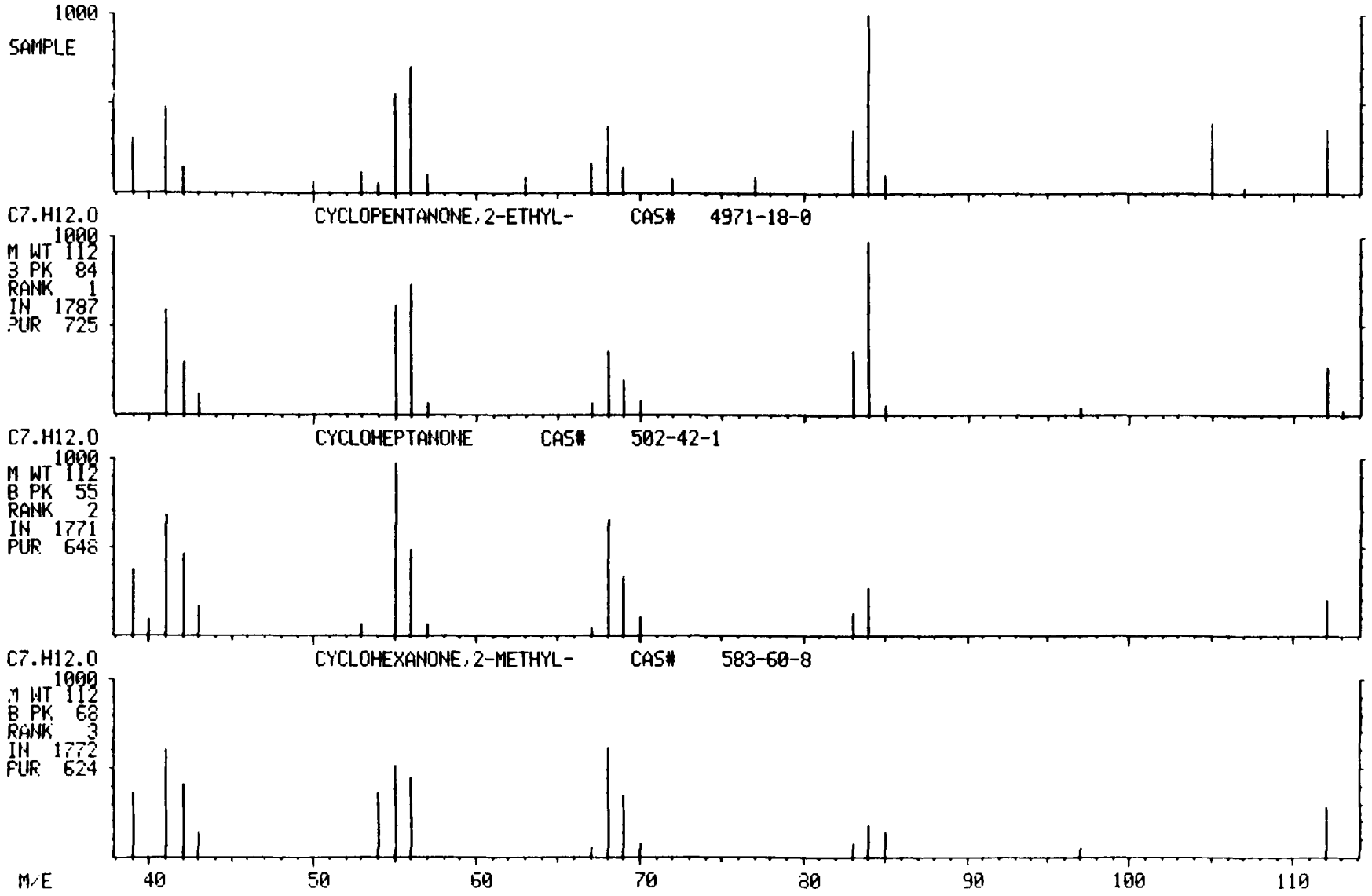
LIBRARY SEARCH DATA: GH009690A19 #1042 BASE M/E: 42
12/22/89 8:15:00 + 13:01 RIC: 2899.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

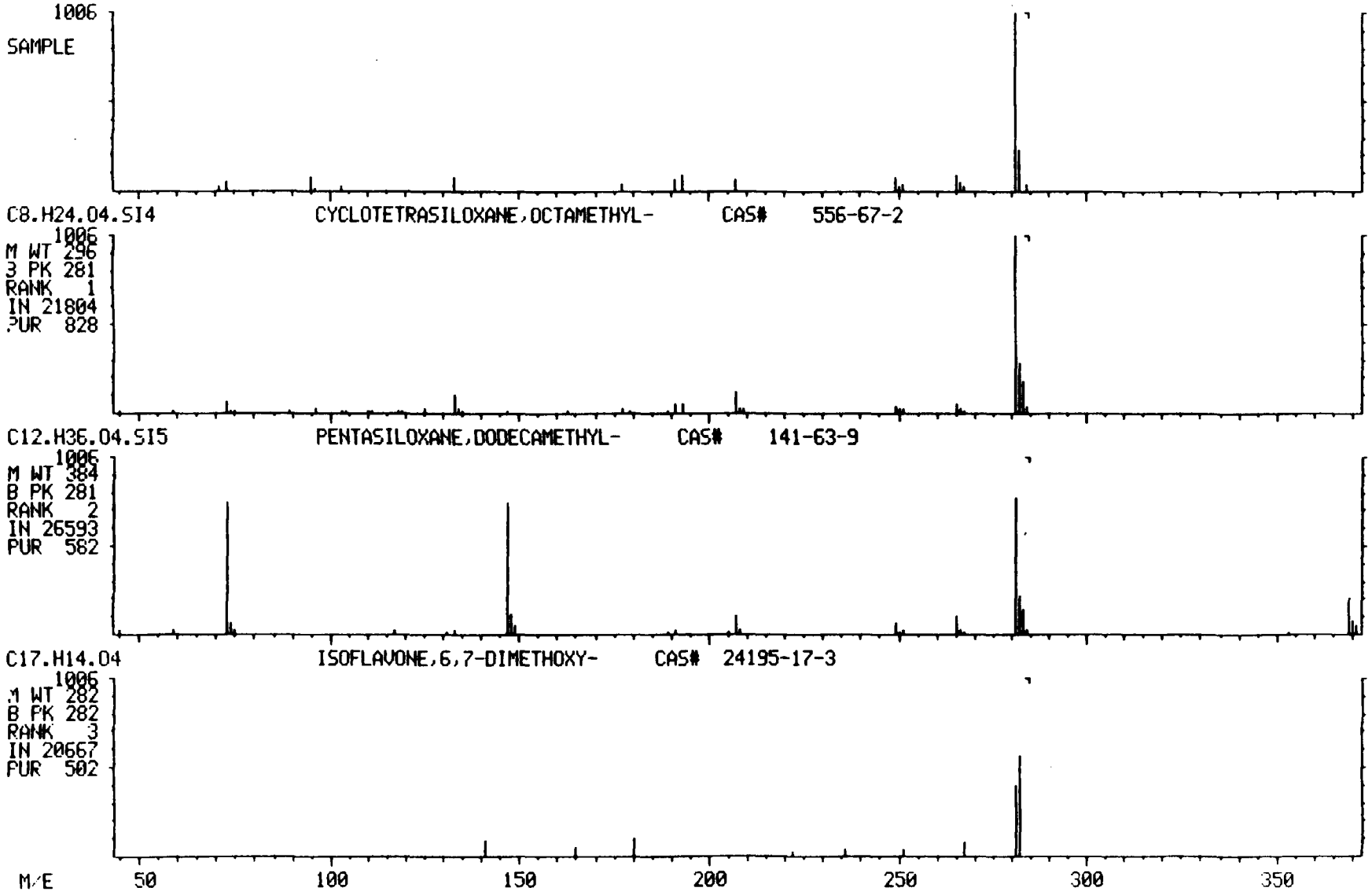
LIBRARY SEARCH
12/22/89 8:15:00 + 15:35
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)

DATA: GH009690A19 #1247
BASE M/E: 84
RIC: 6671.



COMPUCHEM LABS

LIBRARY SEARCH DATA: GH009690A19 #1278 BASE M/E: 281
12/22/89 8:15:00 + 15:58 RIC: 4967.
SAMPLE: 5 GRAMS CC#309690 EPA#:B202C CASE#18756.7 ON#19
ENHANCED (S 15B 2N 0T)



LAB INSTRUCTIONS:

RECEIPT DATE 12/20/89 CASE#: 18756 7 DUE DATE

VOA R[ ] R2[ ] D[ ] (1)
GC/MS WORKSHEET COMPUCHEM#: 309690
R3[ ] R4[ ] D2[ ] (1)

L L. SOLID, EPA SOW 2/88

Sample Prep Code---155
Instrument Code----413
Compound List------494
Surrogate Std------394
Internal Std-------036

SAMPLE ID#: B202C Dry Wt. Factor 1.15 % Moisture 13

GC/MS ANALYSIS
Amount Purged: [✓] 10mls/Xg soil or [ ]Dilution_____ul/10000ul/Xg soil
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename B6891221B19 Disk( )
Blank Filename GH009785C19 Disk ( )
Standard Filename G3891221B19 Disk ( )
Sample Filename GH009690A19 Disk ( )

RECEIVED
DEC 29 1989

ANALYST(S): Injection MJ92/Alan Fish Work-up 1852

GC/MS REVIEW

CONDITION CODE: OK

Entry Codes OK,EA,ES,SM,JS,SL,SH,JA,DA

Non-Entry Codes IM,IL,IH,SW,CT,CS,PC,NR
IF,LA,DI,CO,RN,DW,SI,SF
UP,BB,OT,VC,FO,NS

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 03

[ ] Reprep neat required

[ ] Reprep using_____g

Quality Assurance Notice(s):
Notices Required 1

[ ] Dilute (1)

COMMENTS:

GC/MS Review [signature] Date 12/28/89 Auditor SDWagner Date 12/29/89

REPORT INTEGRATION Total # of Injections 1
Final Reportable Package(s): GHO-A19 /

QA COMMENTS:

Initials_____ Date____/____/____

FINAL REVIEW Initials_____ Date____/____/____

AC1007 (05/89)

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 155 ASSIGNED TO Harshad Joshi DATE 12/20/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309763	18520	01164			5.0g	TB-12	
309768					5.0g	WB5-1	
309769					5.0g	WB5-2	
309770					5.0g	WB5-4	
309679	18756	0007			5.0g	B201A	
309680			SS	309679	5.0g	B201A MS	
309681			SS	309679	5.0g	B201A MSD	
309682			BS		0.0g		
309686					5.0g	B201B	
309687					5.0g	B202TAR	
309688					5.0g	B202A	
309689					5.0g	B202B	
309690					5.0g	B202C	
309784			B1		5.0 ml	B_3	
309785			B2		0.0 ml	B_4	
309786			B3		0.0 ml	B_5	
309787			B4		0.0 ml	B_6	
309788			B5		0.0 ml	B_7	

SURROGATE # 4 LOT # 1 MANUAL OPERATOR 739 / 516

AMOUNT

RELINQUISHED BY [signature] DATE 12/20/89 RECEIVED BY [signature] DATE 12/20/89

COMPUCHEM # 009690 FILE GH009690A19 COMPOUND LIST 494 PAGE 1
VOLATILE - LOW LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
							X 1.5	
234	128	I	BROMOCHLOROMETHANE (IS)	462	49100	50.0		
221	50		CHLOROMETHANE				BDL	2.1
231	62		VINYL CHLORIDE				BDL	1
220	94		BROMOMETHANE				BDL	1
209	64		CHLOROETHANE				BDL	1
216	96		1,1-DICHLOROETHENE				BDL	
254	76		CARBON DISULFIDE				BDL	
252	43		ACETONE (2-PROPANONE)			~~22.8~~	~~23~~ 26 B	1
248	114	I	1,4-DIFLUOROBENZENE (IS)	608	202000	50.0		
222	84		METHYLENE CHLORIDE			19.6	~~20~~ 23 B	
226	96		TRANS-1,2-DICHLOROETHENE				BDL	
214	63		1,1-DICHLOROETHANE				BDL	
257	43		VINYL ACETATE				BDL	1
237	96		CIS-1,2-DICHLOROETHENE				BDL	
253	72		2-BUTANONE			3.0	~~3J~~ 3J	1
211	83		CHLOROFORM				BDL	
227	97		1,1,1-TRICHLOROETHANE				BDL	
206	117		CARBON TETRACHLORIDE				BDL	
203	78		BENZENE				BDL	
215	62		1,2-DICHLOROETHANE				BDL	
270	117	I	D5-CHLOROBENZENE (IS) RO#29	999	211000	50.0		
229	130		TRICHLOROETHENE				BDL	
217	63		1,2-DICHLOROPROPANE				BDL	
212	83		BROMODICHLOROMETHANE				BDL	
218	75		CIS-1,3-DICHLOROPROPENE				BDL	
256	43		4-METHYL-2-PENTANONE				BDL	1
225	92		TOLUENE			1.7	~~2J~~ 2J	
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	
228	97		1,1,2-TRICHLOROETHANE				BDL	
224	164		TETRACHLOROETHENE				BDL	
255	43		2-HEXANONE			~~8.8~~	BDL ~~3J 4.7~~	1
208	129		DIBROMOCHLOROMETHANE				BDL	
207	112		CHLOROBENZENE				BDL	
219	106		ETHYLBENZENE			1.2 ~~4.4~~	~~4J~~ 1J	
330	106		M,P-XYLENE			~~3.2~~ 3.2	~~3J~~ 4J	
239	106		O-XYLENE			2.8	~~3J~~ 3J	
251	104		STYRENE				BDL	
205	173		BROMOFORM				BDL	
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	
258	65	S	D4-1,2-DICHLOROETHANE RO#57			48.3	97.%	
247	95	S	BROMOFLUOROBENZENE			45.4	91.%	
233	98	S	D8-TOLUENE RO#59			47.0	94.%	
289	106		XYLENES (TOTAL)			6.0	~~6~~ 7	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12-27-95

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT. LIMIT (UG/KG)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	
CHECKSUMS: 3979.				2069	462100.	357.4		349.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12/27/84

VOLATILE - LOW LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P
40	258	D4-1,2-DICHLOROETHANE RO#57	48.3	50.0	97.	70-121	X
41	247	BROMOFLUOROBENZENE	45.4	50.0	91.	74-121	X
42	233	D8-TOLUENE RO#59	47.0	50.0	94.	81-117	X

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{GC/MS DILUTION FACTOR} \times \text{DRY WEIGHT FACTOR} =$$

$$\frac{5.0\ G}{5.00\ (G)} \times \frac{1.0}{} \times \frac{1.15}{\sout{1.00}} = \sout{1.000}\ \ 1.15$$

GUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 8

CORRECTED/REVIEWED BY C E Stuart
(GC/MS DATA REVIEWER)

DATE 12-22-88

LABORATORY NOTICE

Sample I.D. # 30969C

Client I.D. # B2C2C

CASE # 18756.7

The analysis of the volatile fraction of this sample indicated the presence of one or more extraneous peaks at the scan(s) listed below which were tentatively identified as siloxanes. This is a frequently observed laboratory artifact and should not be considered an actual sample constituent. It is being reported as an instrument artifact. While the peak(s) have been included in the total number of Library Searches, they have not been counted as one of the ten most intense TIC's requiring Library Search. If the siloxane was also detected in the associated blank, it has been flagged in the sample data with a "B", whether or not its concentration in the blank was great enough to require a Library Search. The data is being reported with reference to this qualifier.

scan(s): 1278 _____ _____ _____

Data Reviewer: [signature]

Date: 12-27-89

Approved by: Robert J. Whitehead

Manager, Quality Assurance

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009687C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 64 Date Analyzed: 12/27/89

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	140	U
74-83-9	Bromomethane	140	U
75-01-4	Vinyl Chloride	140	U
75-00-3	Chloroethane	140	U
75-09-2	Methylene Chloride	8300	EB
67-64-1	Acetone	3500	EB
75-15-0	Carbon Disulfide	69	U
75-35-4	1,1-Dichloroethene	69	U
75-34-3	1,1-Dichloroethane	69	U
540-59-0	1,2-Dichloroethene (total)	69	U
67-66-3	Chloroform	69	U
107-06-2	1,2-Dichloroethane	69	U
78-93-3	2-Butanone	5000	E
71-55-6	1,1,1-Trichloroethane	69	U
56-23-5	Carbon Tetrachloride	69	U
108-05-4	Vinyl Acetate	140	U
75-27-4	Bromodichloromethane	69	U
78-87-5	1,2-Dichloropropane	69	U
10061-01-5	cis-1,3-Dichloropropene	69	U
79-01-6	Trichloroethene	69	U
124-48-1	Dibromochloromethane	69	U
79-00-5	1,1,2-Trichloroethane	69	U
71-43-2	Benzene	1200	
10061-02-6	Trans-1,3-Dichloropropene	69	U
75-25-2	Bromoform	69	U
108-10-1	4-Methyl-2-Pentanone	1200	
591-78-6	2-Hexanone	12000	EB
127-18-4	Tetrachloroethene	69	U
79-34-5	1,1,2,2-Tetrachloroethane	69	U
108-88-3	Toluene	8600	E
108-90-7	Chlorobenzene	69	U
100-41-4	Ethylbenzene	8000	E
100-42-5	Styrene	2300	
1330-20-7	Total Xylenes	15000	E

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202TAR

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 1.0 (g/mL) G Lab File ID: GR009687C19

Level: (low/med) LOW Date Received: 12/20/89

% Moisture: not dec. 64 Date Analyzed: 12/27/89

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	534-22-5	FURAN,2-METHYL-	4.95	9000	J
2.	625-86-5	FURAN,2,5-DIMETHYL-	8.23	13000	J
3.		UNKNOWN	11.05	4700	J
4.		UNKNOWN	11.50	3200	J
5.		UNKNOWN	13.49	2600	J
6.		UNKNOWN	14.09	2900	J
7.	13368-65-5	CYCLOHEXANONE,3-METHYL-,(R)-	14.45	1700	J
8.		UNKNOWN	14.75	3900	J
9.		UNKNOWN	15.65	11000	J
10.	3141-02-4	1,3-CYCLOPENTADIENE,5-(1-MET	16.10	4400	J

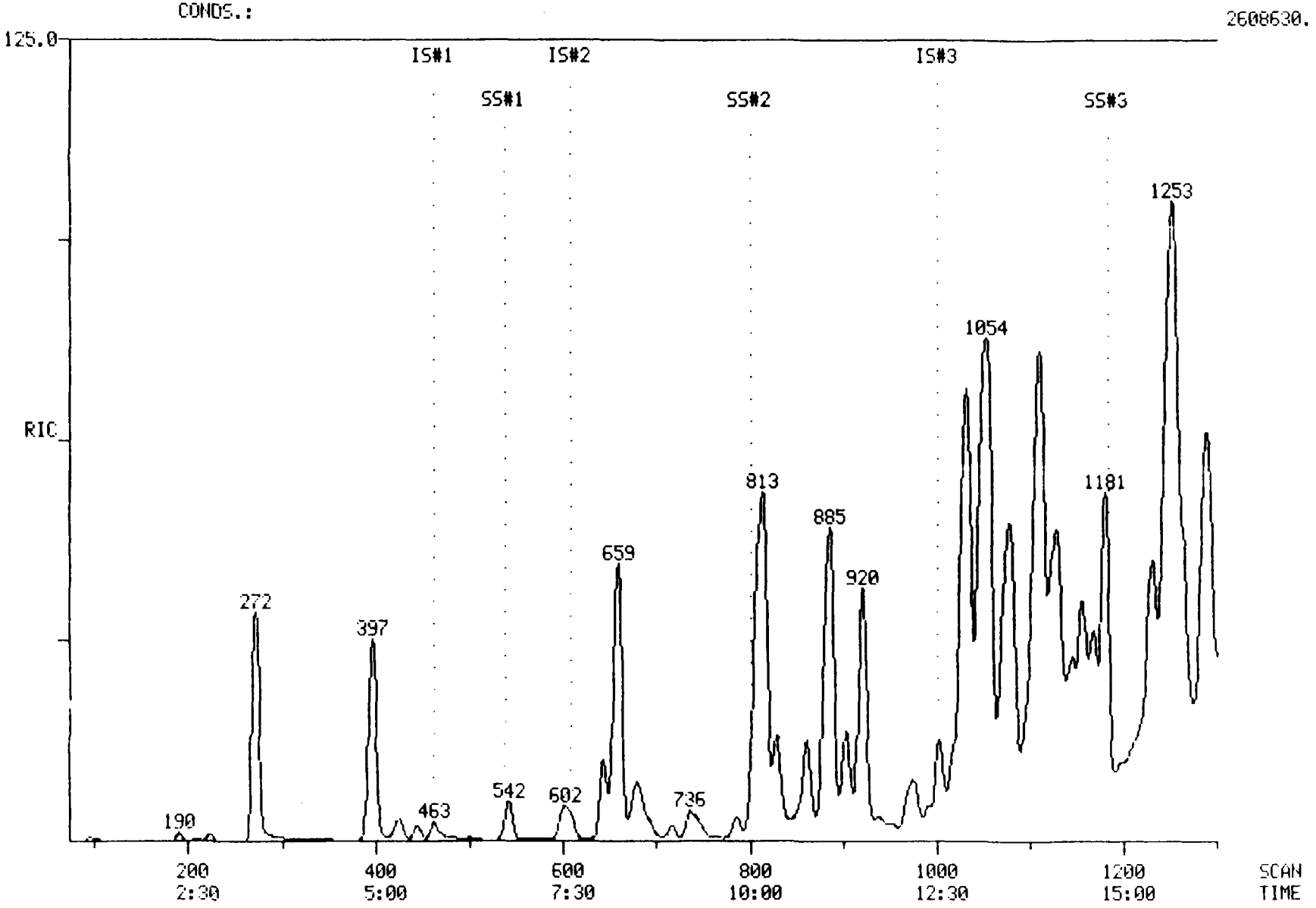
COMPUCHEM LABS

RIC COMPUCHEM DATA: GR009687C19 SCANS 75 TO 1300

12/27/89 7:10:00

SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19

CONDS.:



QUANTITATION REPORT FILE: GR009687C19
DATA: GR009687C19.TI
12/27/89 7:10:00
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1422

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
2	221 CHLOROMETHANE <74-87-3> RO#2
3	231 VINYL CHLORIDE <75-01-4> RO#3
4	220 BROMOMETHANE <78-83-9> RO#4
5	209 CHLOROETHANE <75-00-3> RO#5
6	216 1,1-DICHLOROETHENE <75-35-4> RO#8
7	254 CARBON DISULFIDE <75-15-0> RO#9
8	252 ACETONE (2-PROPANONE) <67-64-1> RO#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
10	222 METHYLENE CHLORIDE <75-09-2> RO#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
12	214 1,1-DICHLOROETHANE <75-34-3> RO#19
13	257 VINYL ACETATE <108-05-4> RO#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
15	253 2-BUTANONE <78-93-3> RO#22
16	211 CHLOROFORM <67-66-2> RO#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
18	206 CARBON TETRACHLORIDE <56-23-5> RO#25
19	203 BENZENE <71-43-2> RO#26
20	215 1,2-DICHLOROETHANE <107-06-2> RO#27
21	*270 D5-CHLOROBENZENE (IS) RO#29
22	229 TRICHLOROETHENE <79-01-6> RO#30
23	217 1,2-DICHLOROPROPANE <78-87-5> RO#31
24	212 BROMODICHLOROMETHANE <75-27-4> RO#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
26	256 4-METHYL-2-PENTANONE <108-01-1> RO#36
27	225 TOLUENE <108-88-3> RO#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
30	224 TETRACHLOROETHENE <127-18-4> RO#41
31	255 2-HEXANONE <591-78-6> RO#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
33	207 CHLOROBENZENE <108-90-7> RO#45
34	219 ETHYLBENZENE <100-41-4> RO#47
35	330 M,P-XYLENE <133-02-7> RO#48
36	239 O-XYLENE <133-02-7> RO#49
37	251 STYRENE <100-42-5> RO#50
38	205 BROMOFORM <75-25-2> RO#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
40	#258 D4-1,2-DICHLOROETHANE RO#57
41	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
42	#233 D8-TOLUENE RO#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	463	5:47	1	1.000	A BB	68062.	50.000 UG/KG	1 00
2	50	NOT FOUND							

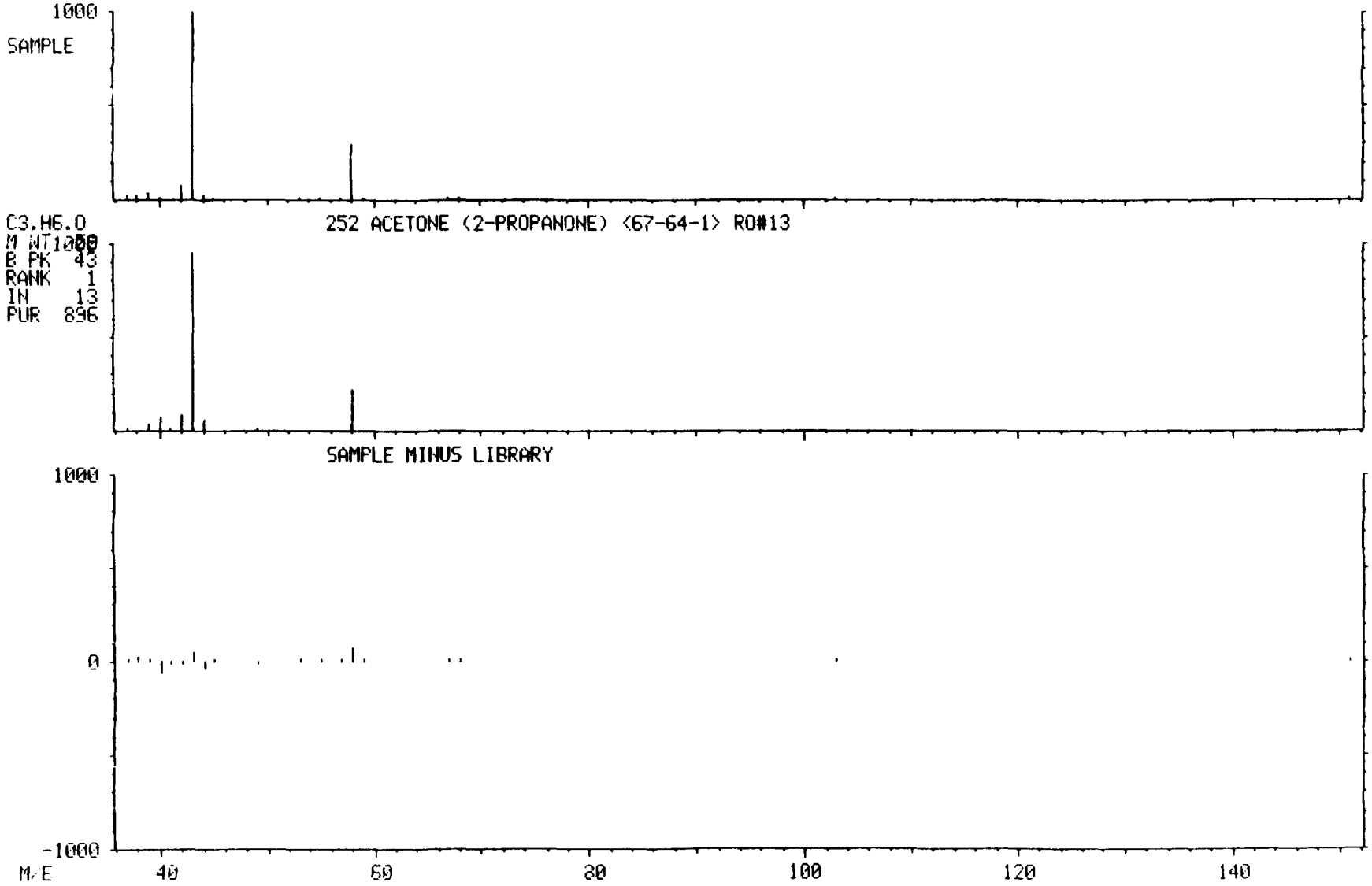
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	96	NOT FOUND							
7	76	NOT FOUND							
8	43	223	2:47	1	0.482	A BB	106545.	249.872 UG/KG	5.00
9	114	608	7:36	9	1.000	A BB	244667.	50.000 UG/KG	1.00
10	84	272	3:24	1	0.587	A BB	1484160.	599.342 UG/KG	11.98
11	96	NOT FOUND							
12	63	NOT FOUND							
13	43	NOT FOUND							
14	96	NOT FOUND							
15	72	445	5:34	1	0.961	A BB	66327.	362.147 UG/KG	7.24
16	83	NOT FOUND							
17	97	NOT FOUND							
18	117	NOT FOUND							
19	78	543	6:47	9	0.893	A BB	429611.	88.102 UG/KG	1.76
20	62	NOT FOUND							
21	117	1002	12:31	21	1.000	A BB	245709.	50.000 UG/KG	1.00
22	130	NOT FOUND							
23	63	659	8:14	9	1.084	A VB	29817.	17.206 UG/KG	0.34
24	83	NOT FOUND							
25	75	NOT FOUND							
26	43	804	10:03	21	0.802	A BB	154427.	86.918 UG/KG	1.74
27	92	812	10:09	21	0.810	A BB	2565720	622.229 UG/KG	12.44
28	75	850	10:37	9	1.398	A BB	14331.	8.212 UG/KG	0.16
29	97	NOT FOUND							
30	164	NOT FOUND							
31	43	921	11:31	21	0.919	A VB	1185630.	838.206 UG/KG	16.76
32	129	NOT FOUND							
33	112	NOT FOUND							
34	106	1033	12:55	21	1.031	A BV	1557220.	575.321 UG/KG	11.50
35	106	1056	13:12	21	1.054	A BB	2145270.	531.968 UG/KG	10.64
36	106	1109	13:52	21	1.107	A BB	2051480.	568.526 UG/KG	11.37
37	104	1113	13:55	21	1.111	A BB	1068810.	164.268 UG/KG	3.28
38	173	NOT FOUND							
39	83	NOT FOUND							
40	65	539	6:44	1	1.164	A BB	109159.	48.513 UG/KG	0.97
41	95	1185	14:49	21	1.183	A VB	194920.	46.721 UG/KG	0.93
42	98	802	10:01	21	0.800	A BB	251153.	44.065 UG/KG	0.88

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:55	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:07		10.000			50.00		0.930	
3	1:13		10.000			50.00		1.260	
4	1:31		10.000			50.00		1.632	
5	1:37		10.000			50.00		0.710	
6	2:40		5.000			50.00		1.612	
7	2:50		5.000			50.00		4.085	
8	2:52	0.97	10.000	0.05	249.87	50.00	1.565	0.313	5.00
9	7:42	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	3:28	0.98	5.000	0.12	599.34	50.00	21.806	1.819	11.99
11	3:54		5.000			50.00		1.643	
12	4.36		5.000			50.00		2.402	
13	4:52		10.000			50.00		0.538	
14	5:34		5.000			50.00		1.673	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:41	0.98	10.000	0.10	362.15	50.00	0.975	0.135	7.24
16	6:10		5.000			50.00		3.249	
17	6:19		5.000			50.00		0.880	
18	6:34		5.000			50.00		0.898	
19	6:53	0.99	5.000	0.18	88.10	50.00	1.756	0.997	1.76
20	6:58		5.000			50.00		2.119	
21	12:34	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	8:01		5.000			50.00		0.581	
23	8:21	0.99	5.000	0.22	17.21	50.00	0.122	0.354	0.34
24	8:55		5.000			50.00		0.785	
25	9:41		5.000			50.00		0.771	
26	10:04	1.00	15.000	0.05	86.92	50.00	0.628	0.362	1.74
27	10:10	1.00	5.000	0.16	622.23	50.00	10.442	0.839	12.44
28	10:41	0.99	5.000	0.28	8.21	50.00	0.059	0.357	0.16
29	10:57		5.000			50.00		0.407	
30	11:06		5.000			50.00		0.673	
31	11:34	1.00	15.000	0.06	838.21	50.00	4.825	0.288	16.76
32	11:34		5.000			50.00		0.776	
33	12:37		5.000			50.00		1.212	
34	12:55	1.00	5.000	0.21	575.32	50.00	6.338	0.551	11.51
35	13:09	1.00	5.000	0.21	531.97	50.00	8.731	0.821	10.64
36	13:51	1.00	5.000	0.22	568.53	50.00	8.349	0.734	11.37
37	13:54	1.00	5.000	0.22	164.27	50.00	4.350	1.324	3.29
38	14:07		5.000			50.00		0.577	
39	15:15		5.000			50.00		0.655	
40	6:51	0.98	5.000	0.23	48.51	50.00	1.604	1.653	0.97
41	14:49	1.00	5.000	0.24	46.72	50.00	0.793	0.849	0.93
42	10:04	1.00	5.000	0.16	44.07	50.00	1.022	1.160	0.88

COMPUCHEM LABS

LIBRARY SEARCH DATA: GR009E87C19 # 223 BASE M/E: 43
12/27/89 7:10:00 + 2:47 RIC: 19967.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

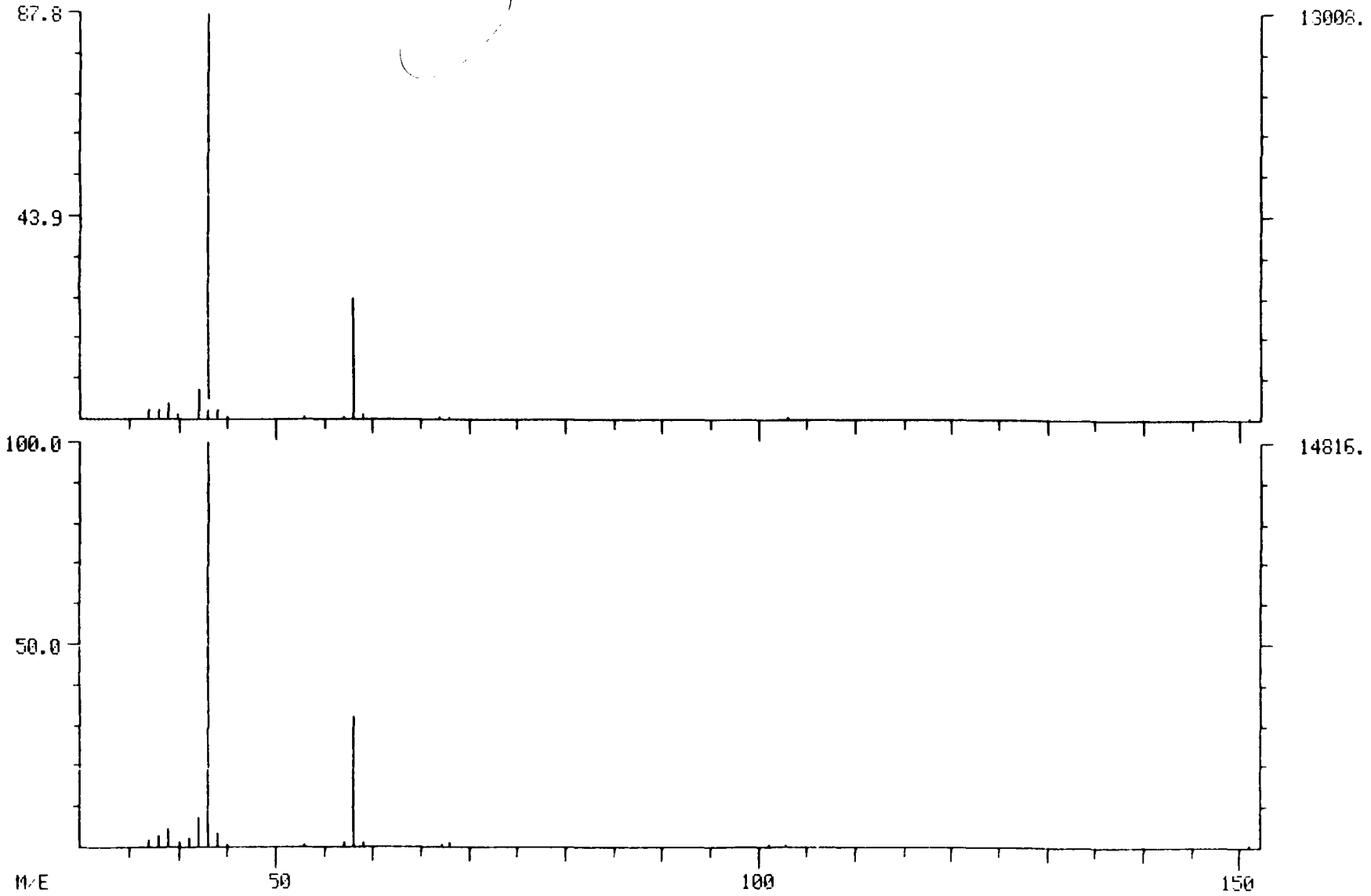


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 2:47

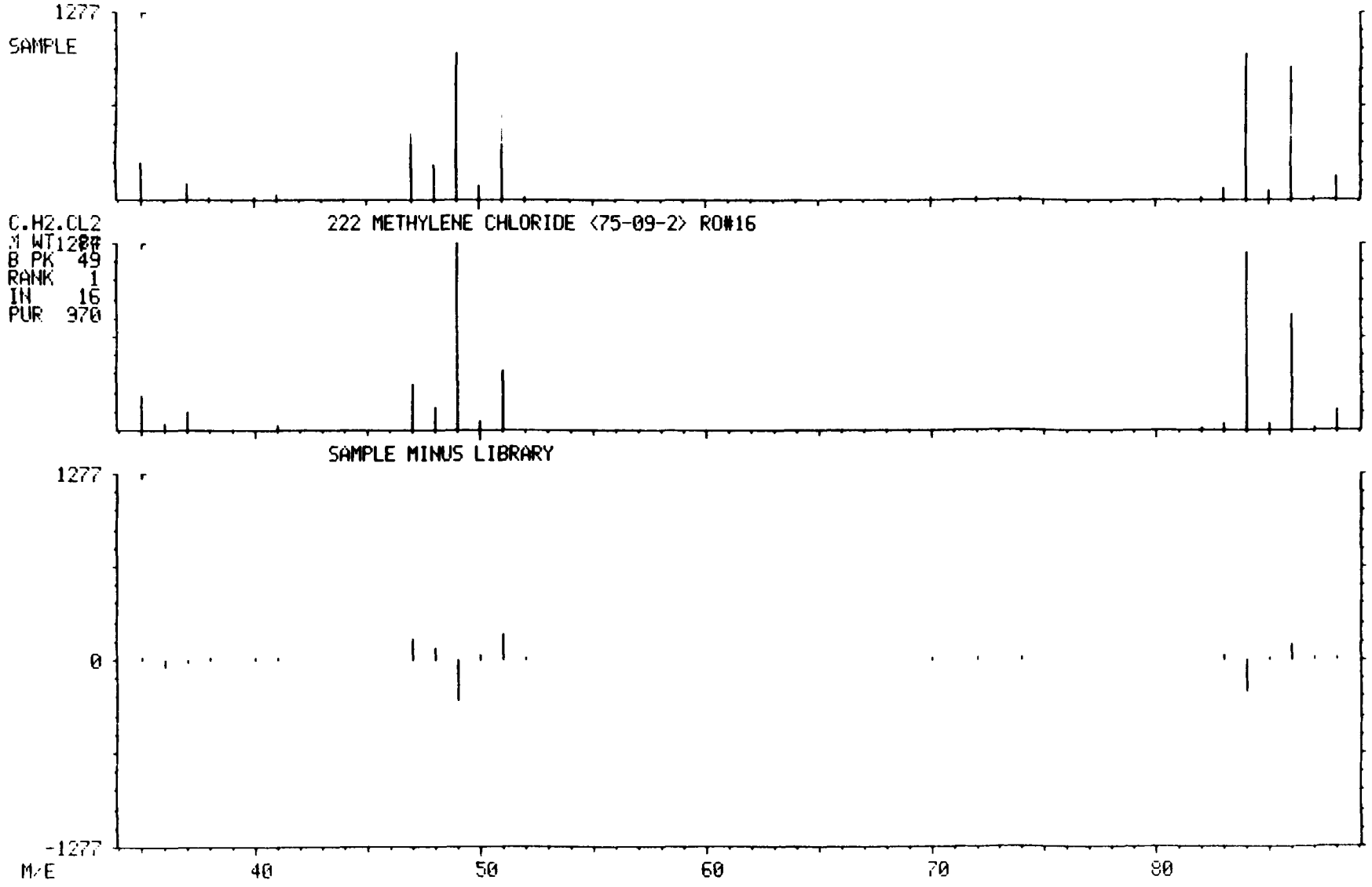
DATA: GR009687019 #223 BASE M/E: 43/ 43
RIC: 19967./ 23807.

SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 252 ACETONE (2-PROPANONE) (67-64-1) RO#13



COMPUCHEM LABS

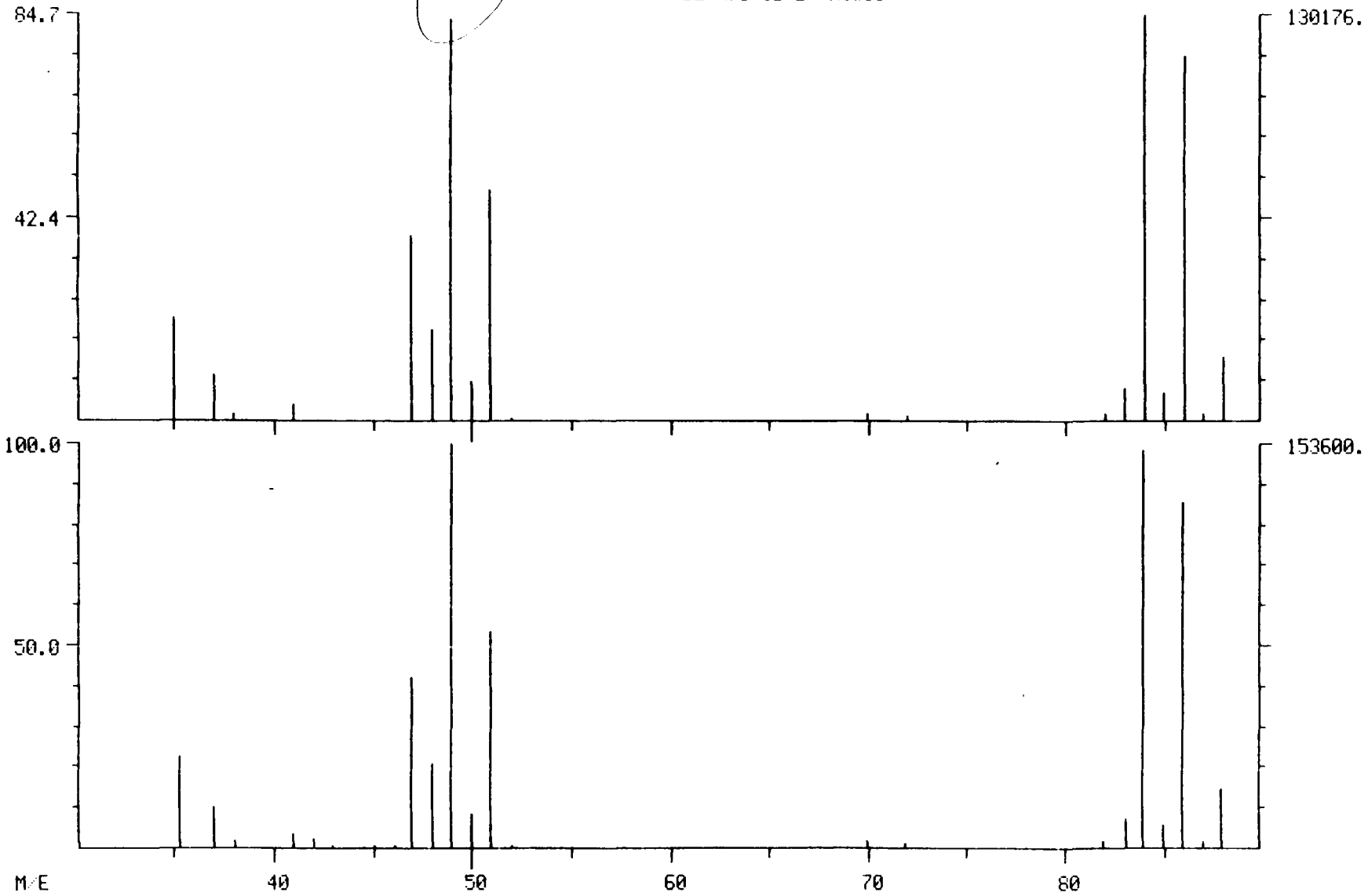
LIBRARY SEARCH DATA: GR009687C19 # 272 BASE M/E: 84
12/27/89 7:10:00 + 3:24 RIC: 655359.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

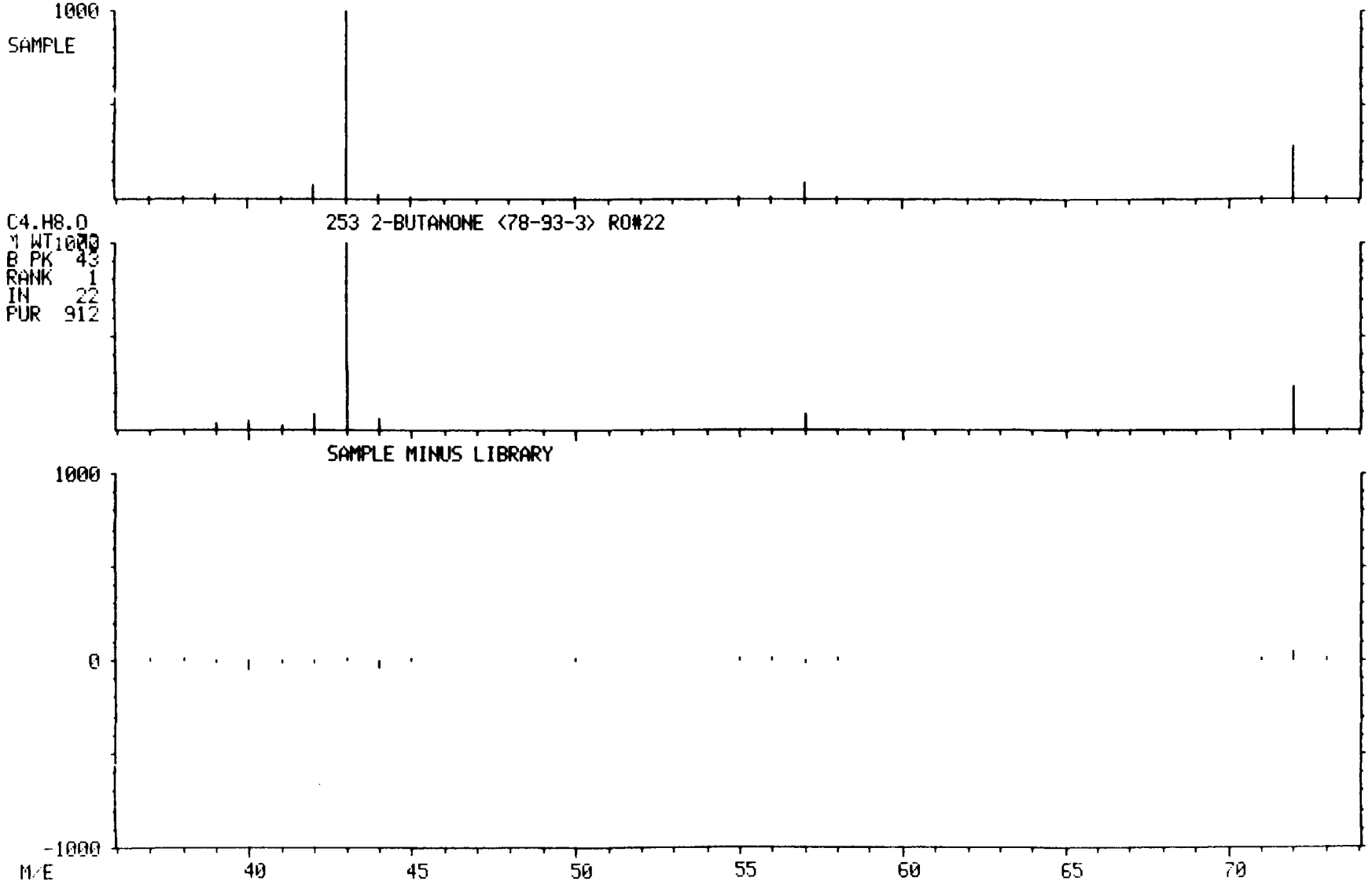
DUAL MASS SPECTRUM
12/27/89 7:10:00 + 3:24
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 222 METHYLENE CHLORIDE <75-09-2> RO#16

DATA: GR009687C19 #272 BASE M/E: 84/ 49
RIC: 655359./ 746495.



COMPUCHEM LABS

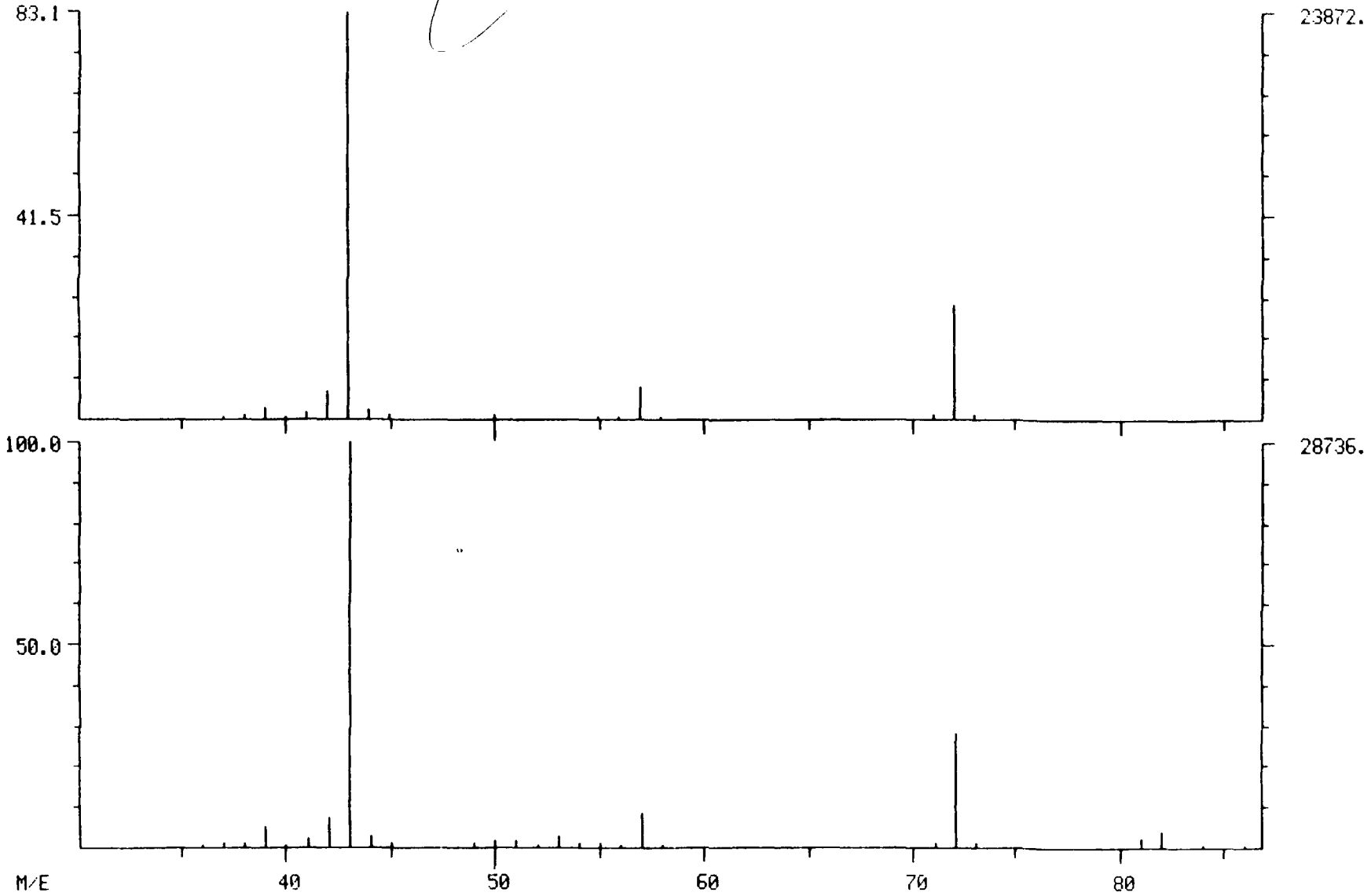
LIBRARY SEARCH DATA: GR009687C19 # 445 BASE M/E: 43
12/27/89 7:10:00 + 5:34 RIC: 37567.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 5:34
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 253 2-BUTANONE (78-93-3) RO#22

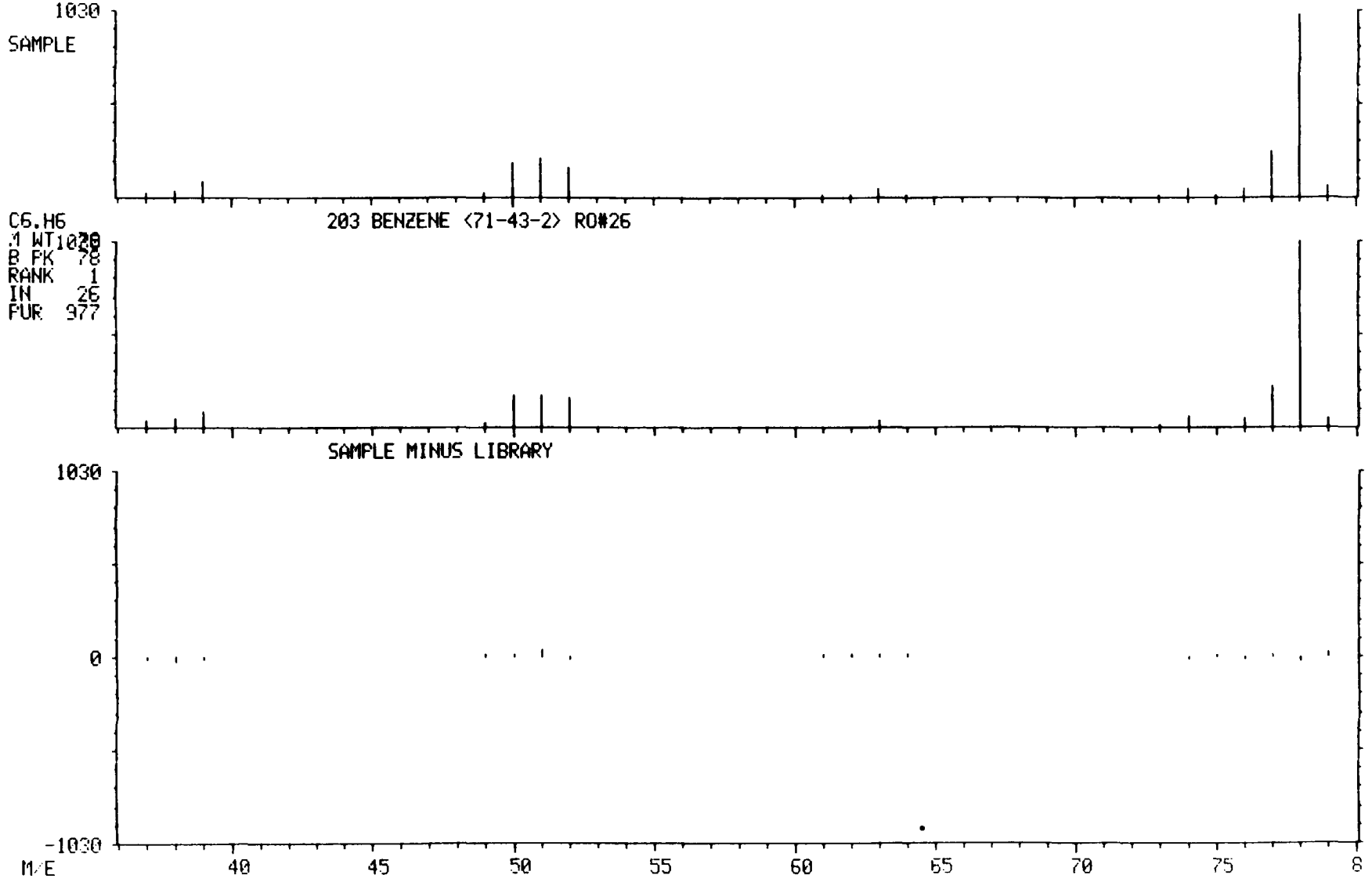
DATA: GR009687C19 #445 BASE M/E: 43 43
RIC: 37695. 51391.



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 5:47
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR030687019 # 543
BASE M/E: 78
RIC: 87935.

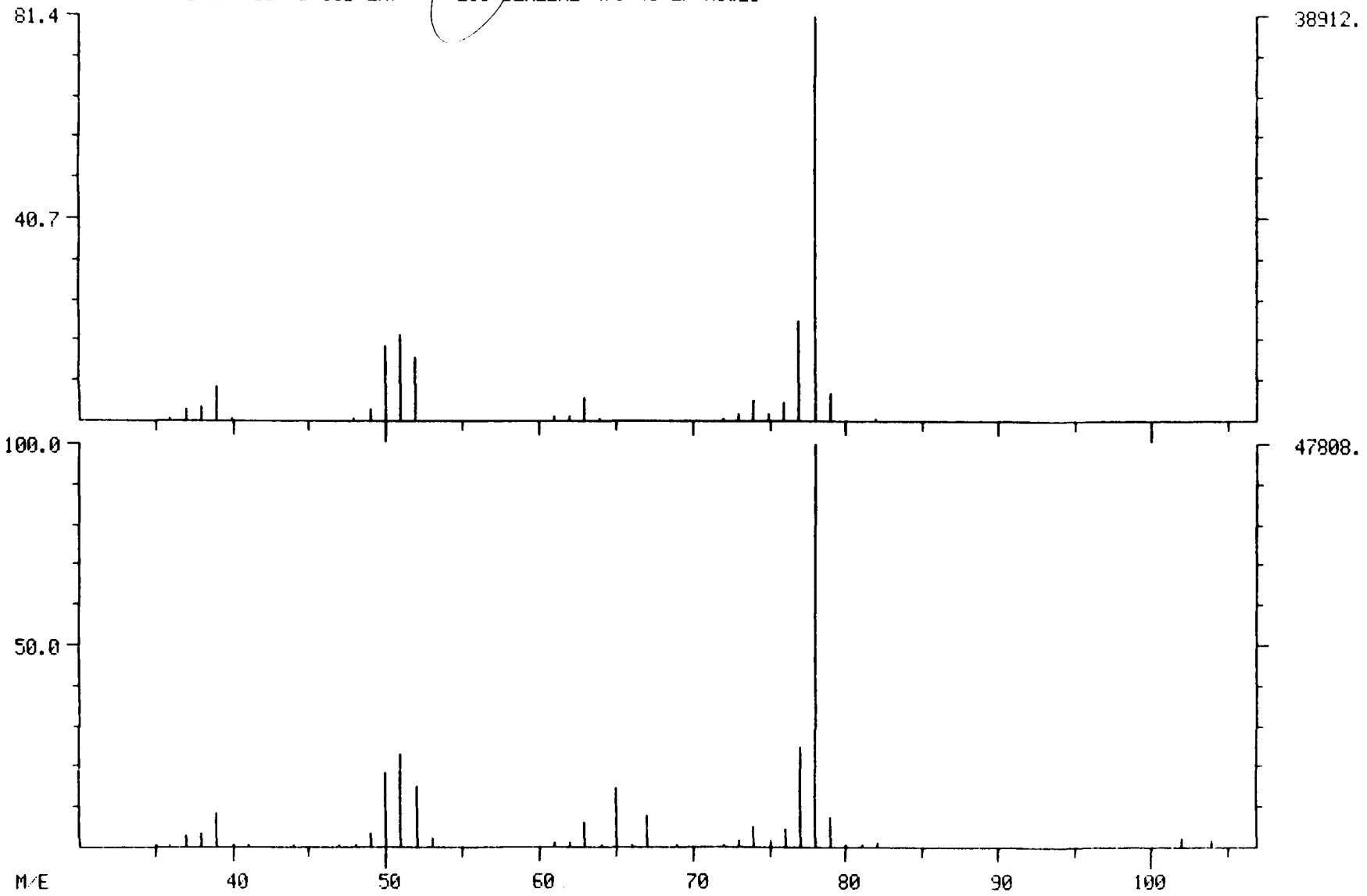


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

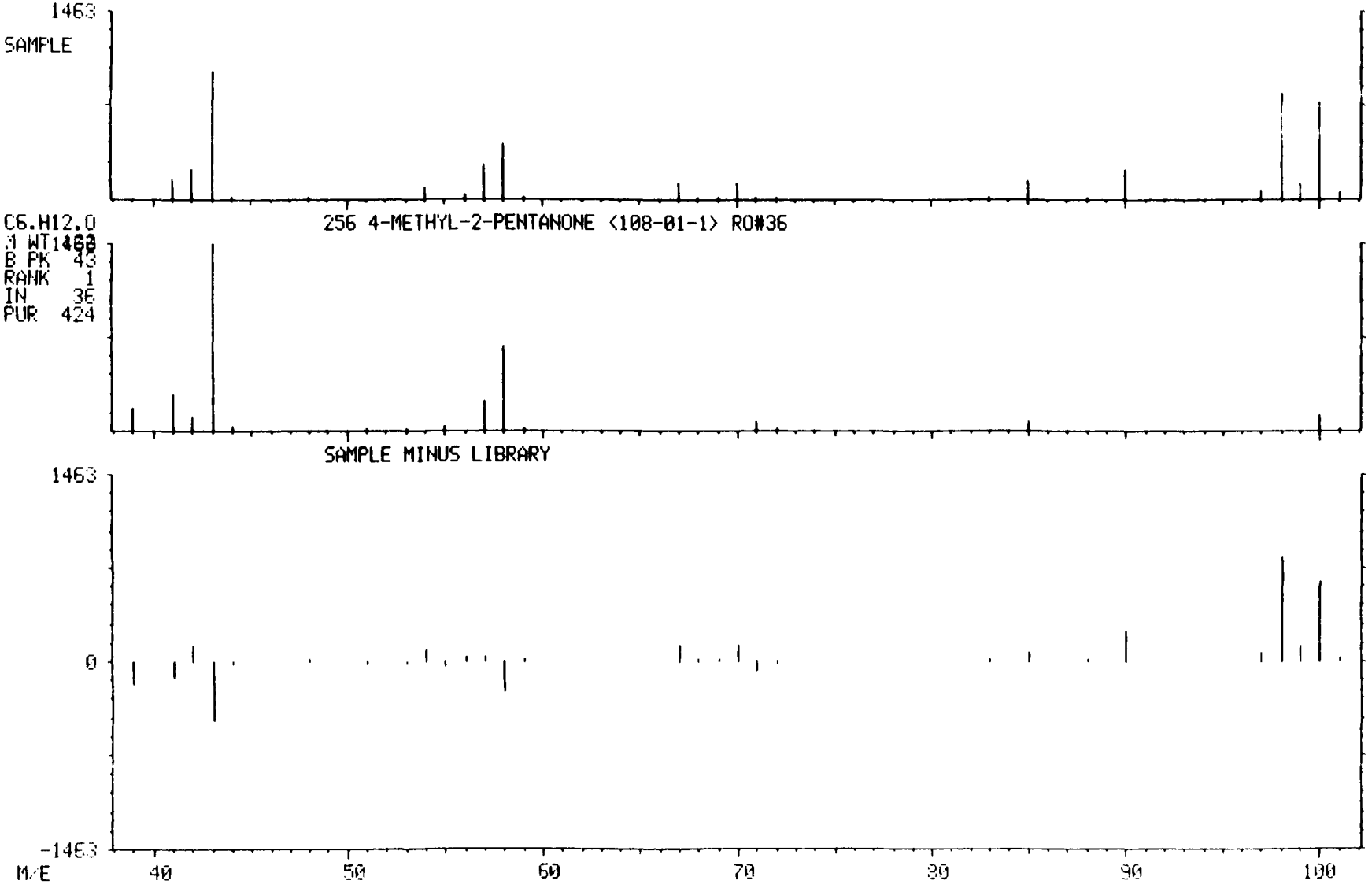
DUAL MASS SPECTRUM
12/27/89 7:10:00 + 6:47
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 203 BENZENE (71-43-2) RO#26

DATA: GR0309687C19 #543 BASE M/E: 78/ 78
RIC: 88959./ 126847.



COMPUCHEM LABS

LIBRARY SEARCH DATA: GR009687C19 # 804 BASE M/E: 43
12/27/89 7:10:00 + 10:03 RIC: 78719.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

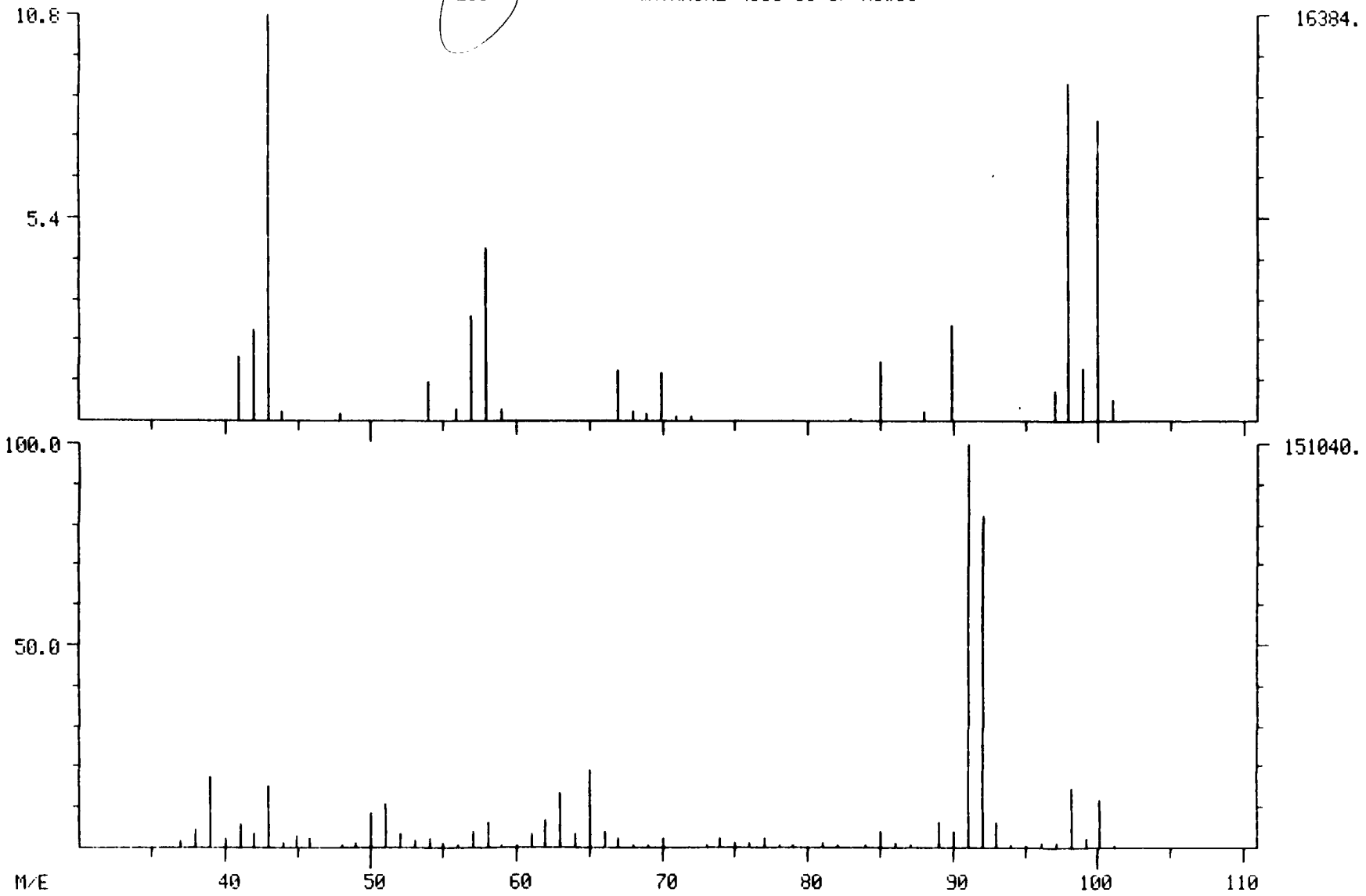


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 10:03
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N)

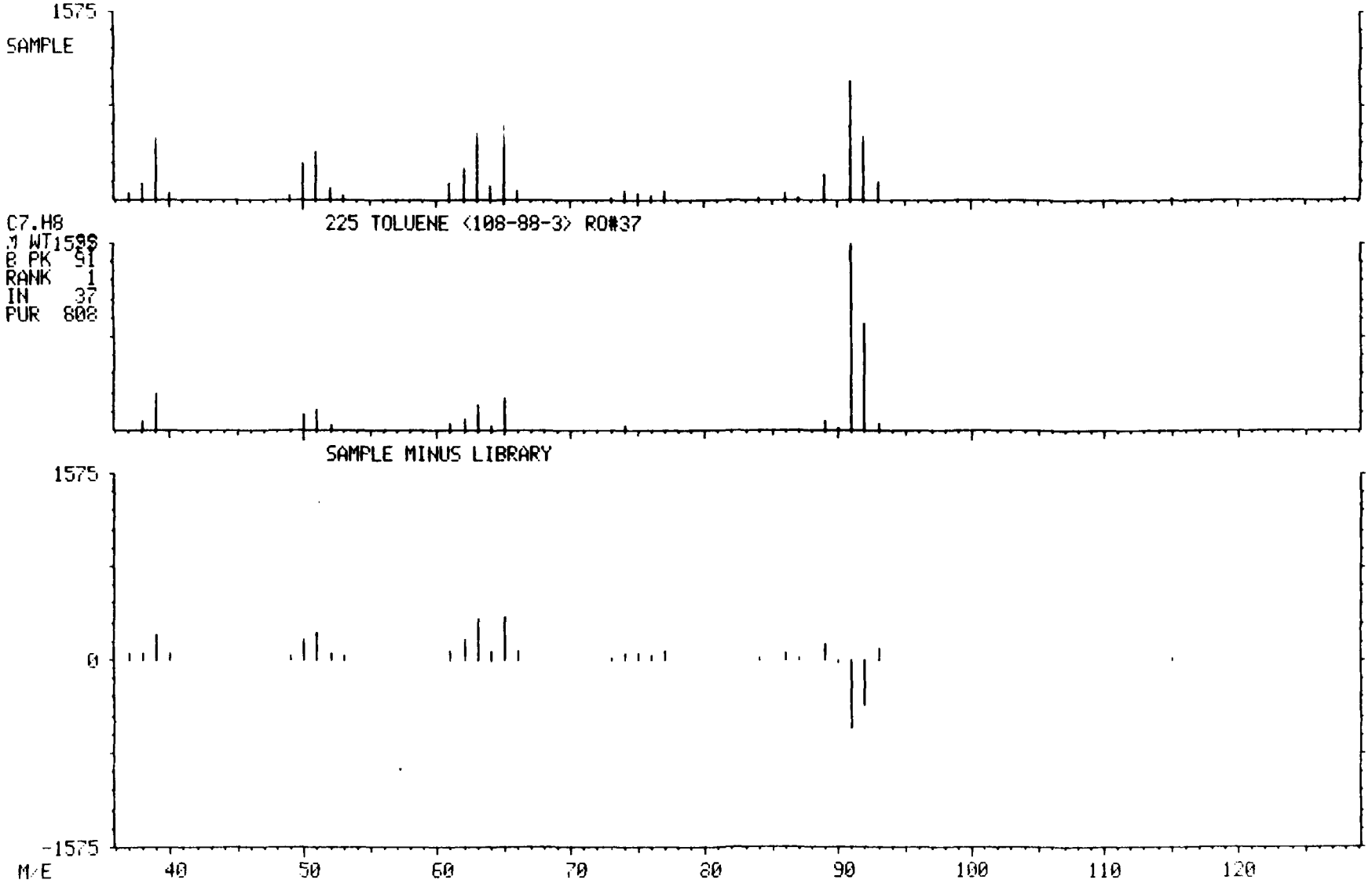
DATA: GR009687C19 #804 BASE M/E: 43/ 91
RIC: 78719./ 603135.

256 4-METHYL-2-PENTANONE (108-01-1) RO#36



COMPUCHEM LABS

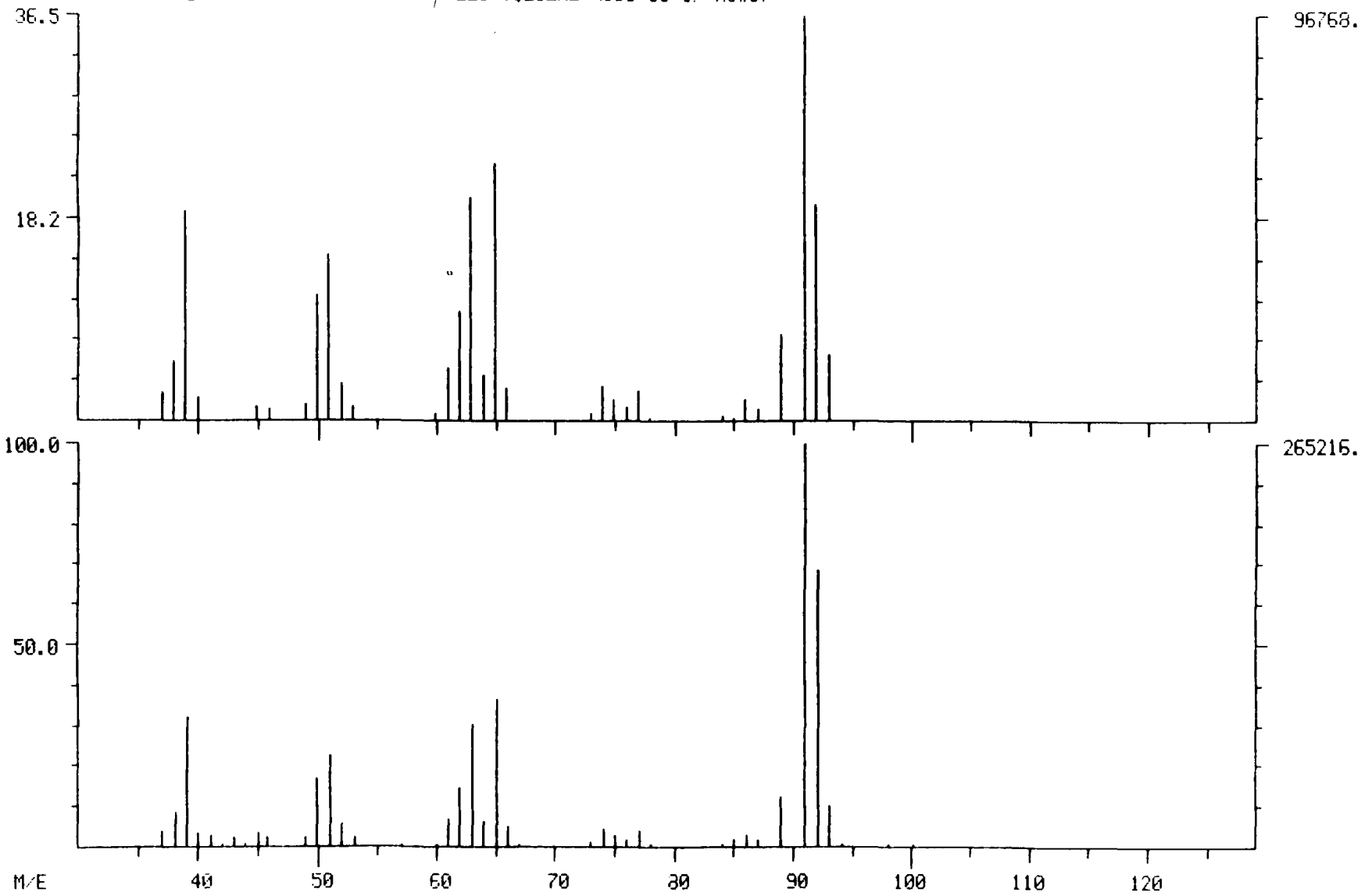
LIBRARY SEARCH DATA: GR009687C19 # 812 BASE M/E: 91
12/27/89 7:10:00 + 10:09 RIC: 549887.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 10:09
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) / 225 TOLUENE (108-88-3) RO#37

DATA: GR009687C19 #812 BASE M/E: 91/ 91
RIC: 559103./ 1128440.

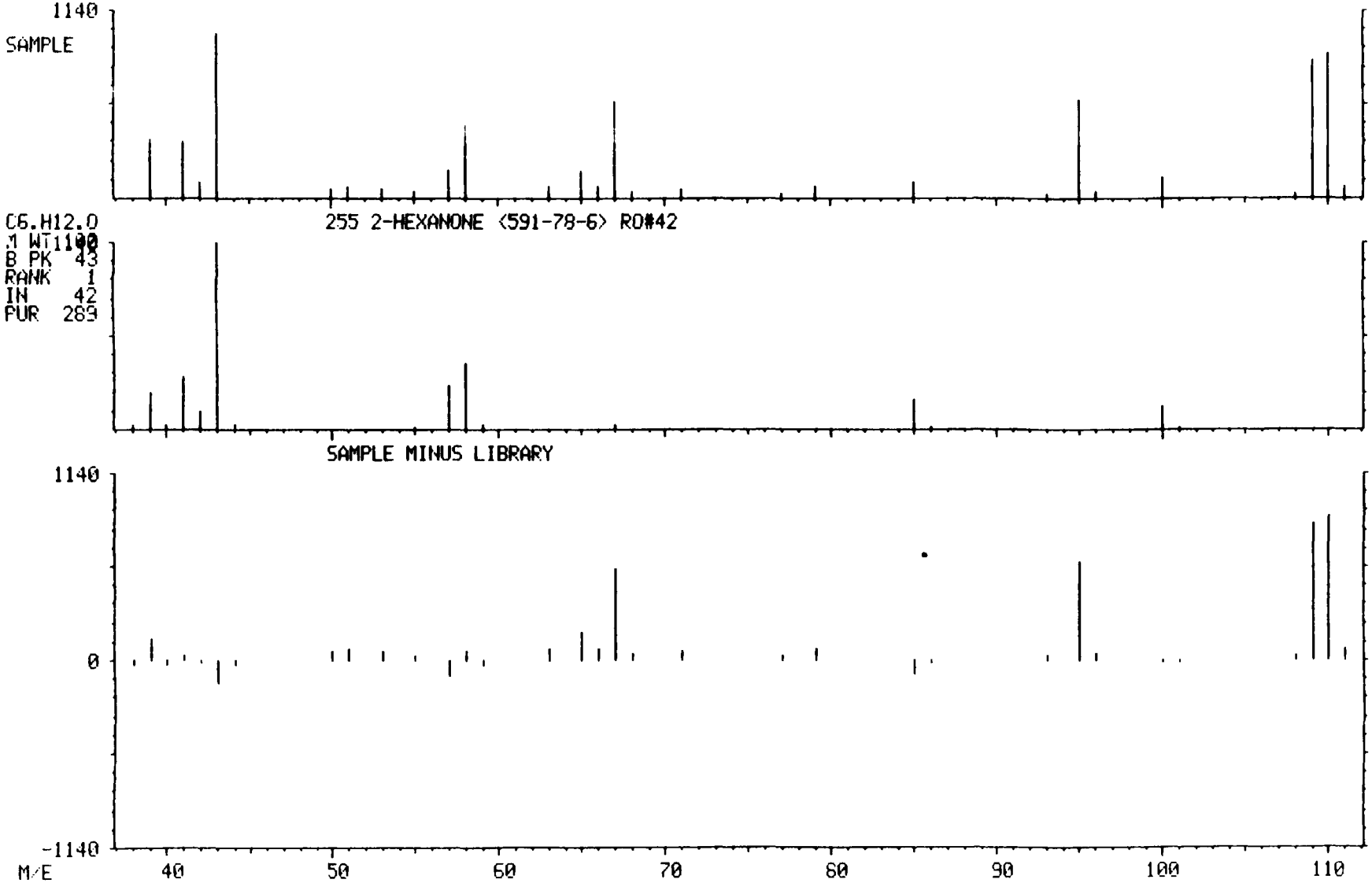


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 11:31
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009687C19 # 921
BASE M/E: 43
RIC: 550911.

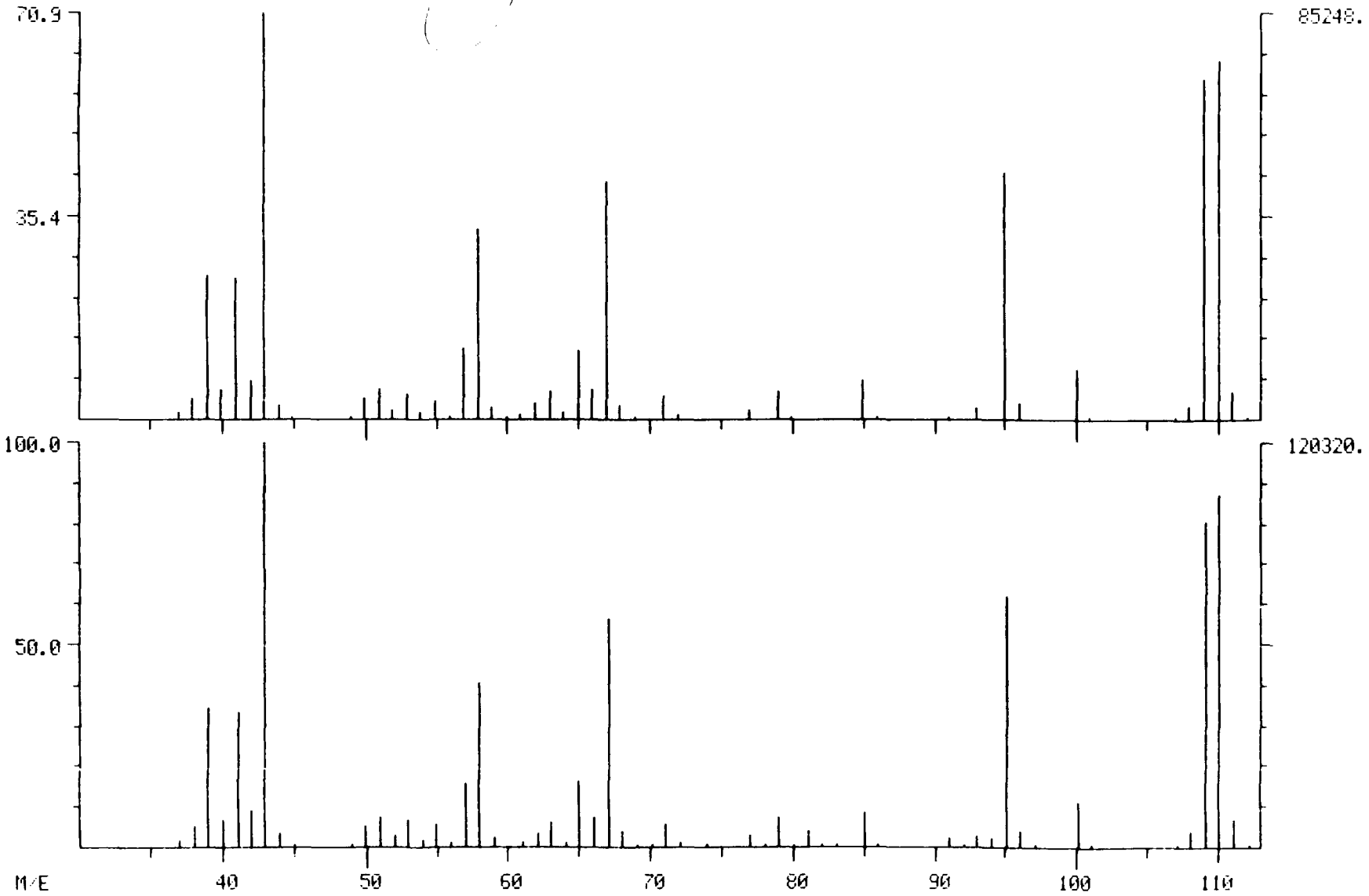


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 11:31
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 255 2-HEXANONE <591-78-6> RO#42

DATA: GR0309687C19 #921 BASE M/E: 43/ 43
RIC: 563679./ 818175.

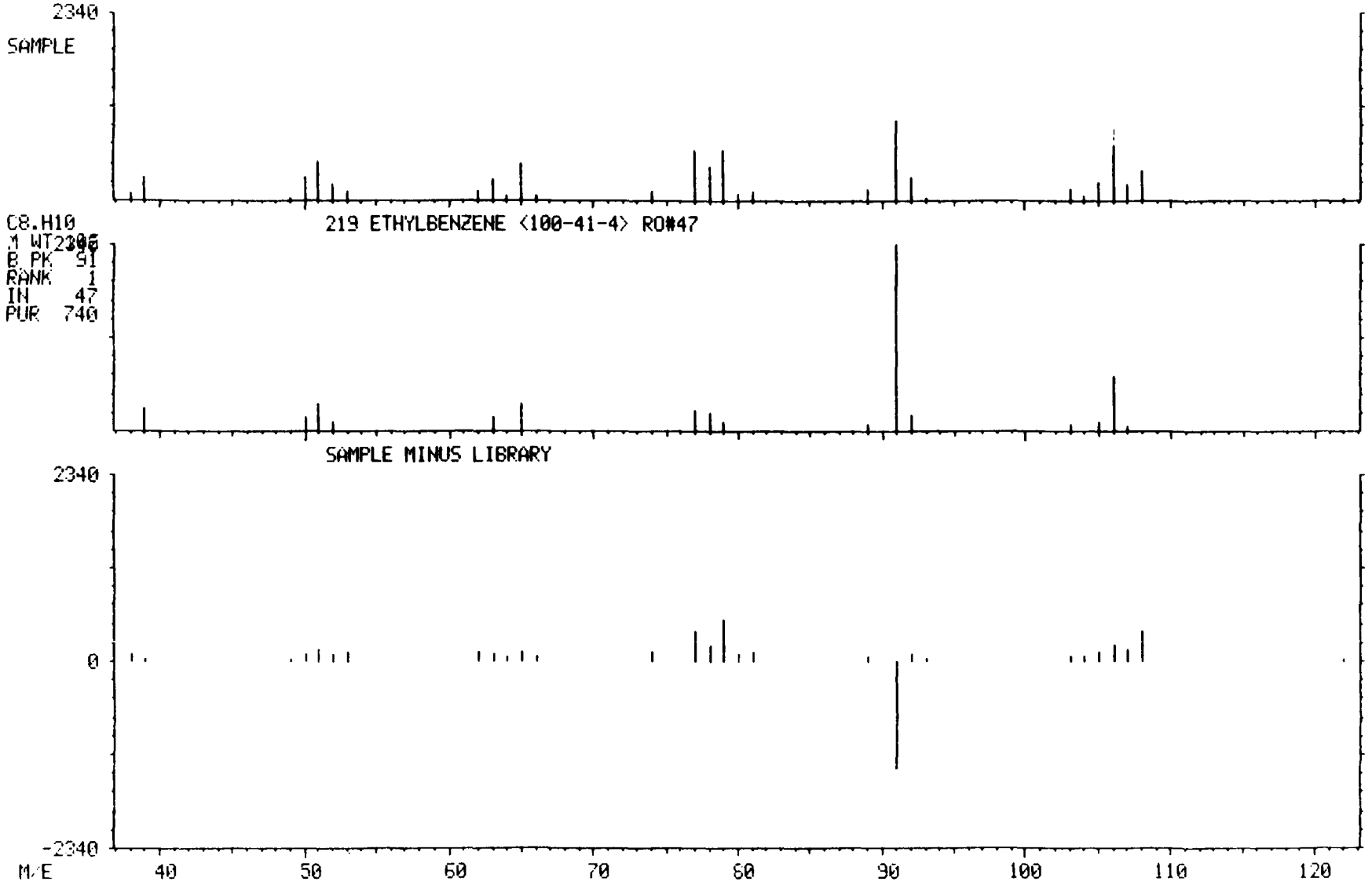


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 12:55
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

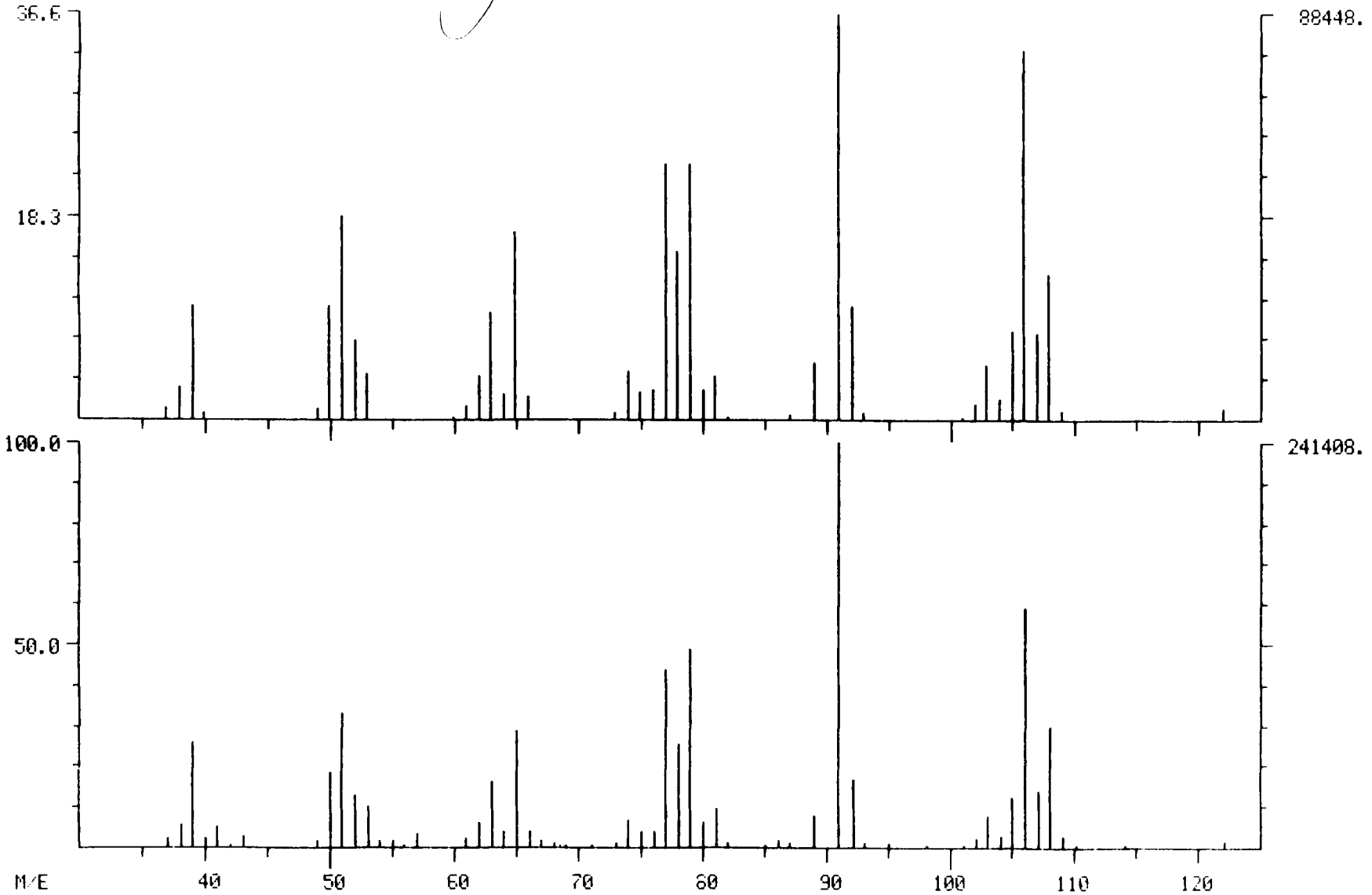
DATA: GR009687C19 #1033
BASE M/E: 91
RIC: 685055.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 12:55
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 219 ETHYLBENZENE (100-41-4) RO#47

DATA: GR009687C19 #1033 BASE M/E: 91/ 91
RIC: 713727./ 1470460.

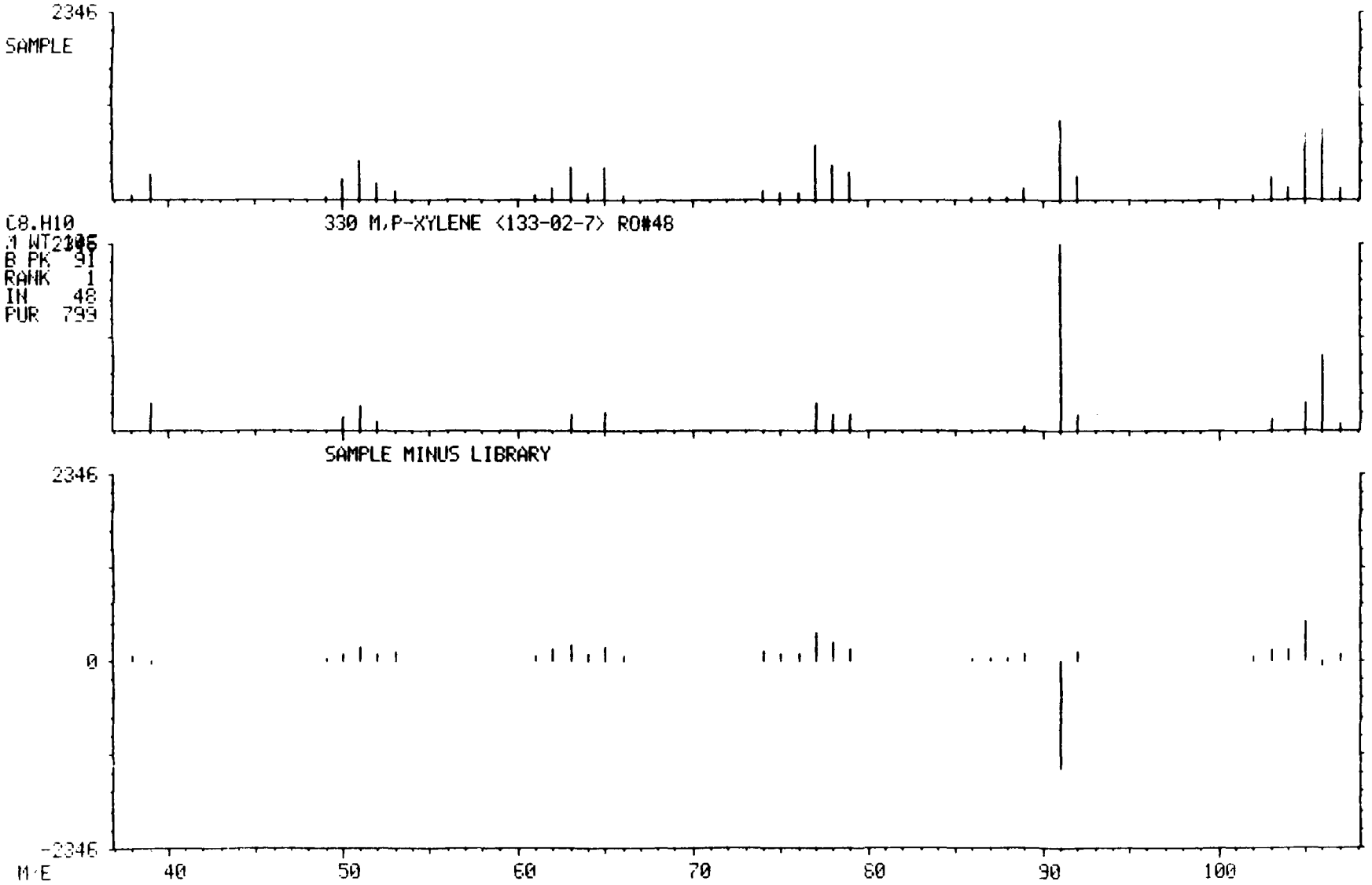


COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 13:12
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009687C19 #1056

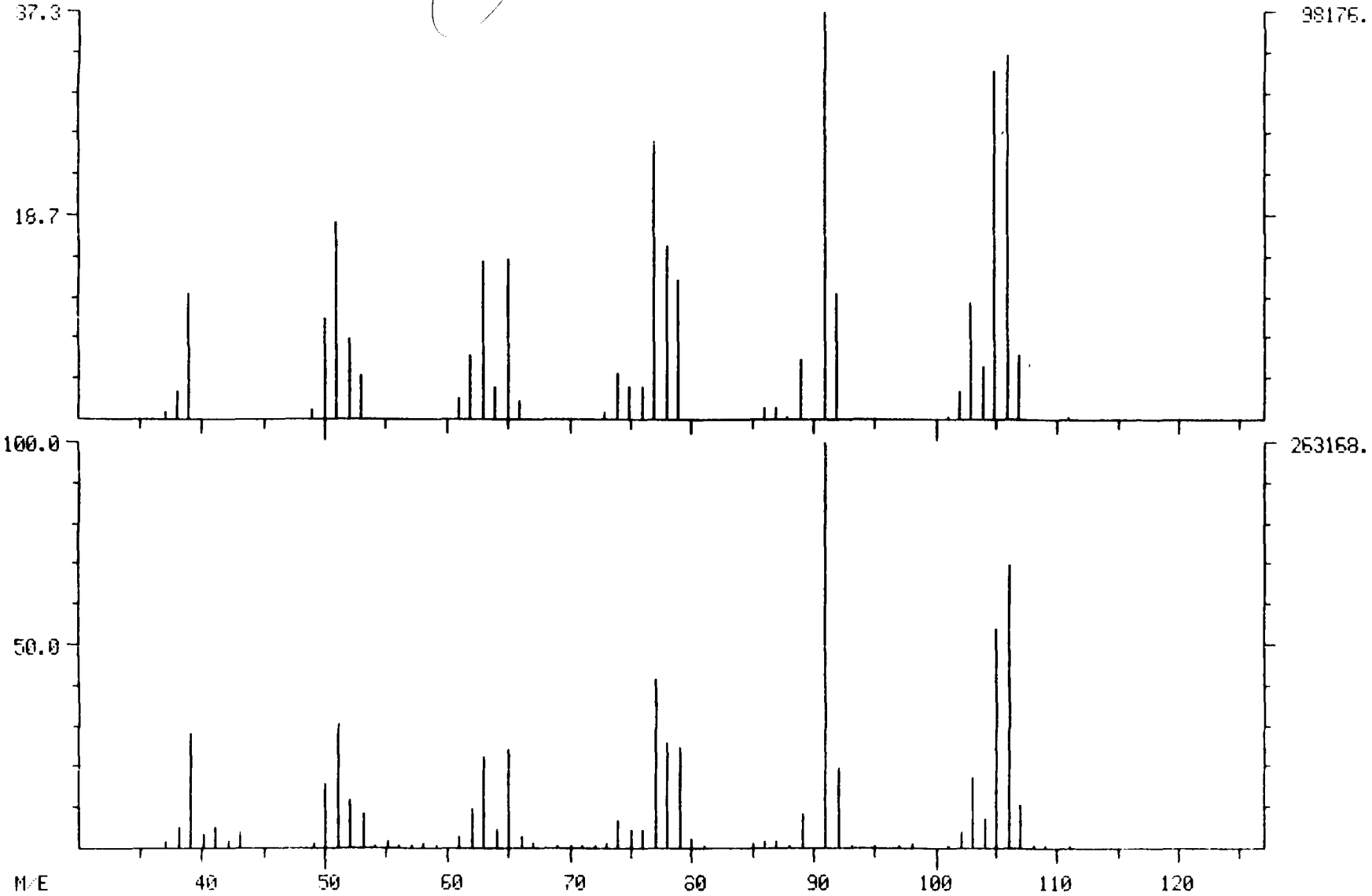
BASE M/E: 91
RIC: 802815.



COMPUCHEM LABS

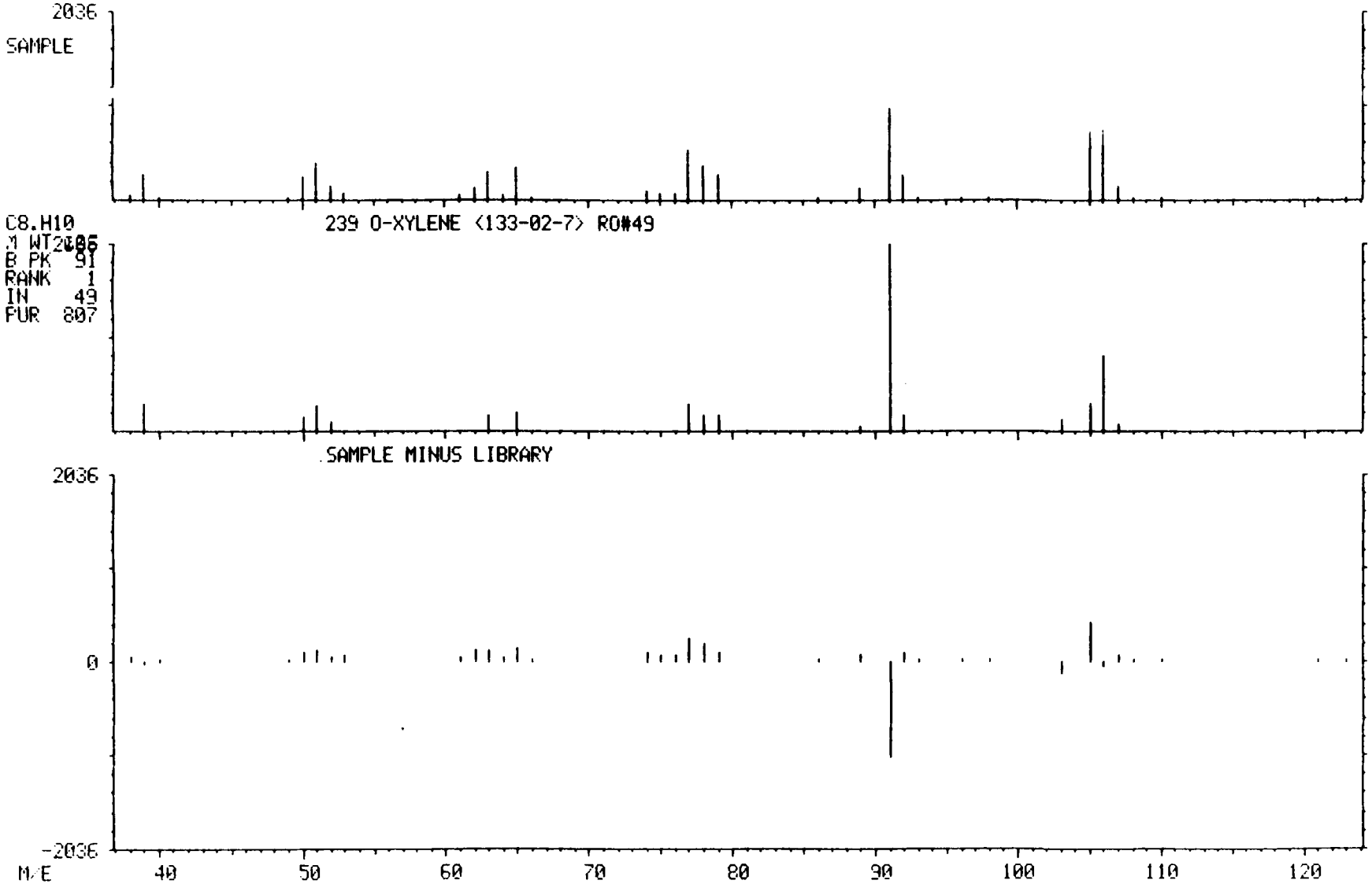
DUAL MASS SPECTRUM
12/27/89 7:10:00 + 13:12
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 330 M/P-XYLENE (133-02-7) RO#48

DATA: GR009687C19 #1056 BASE M/E: 91/ 91
RIC: 808959./ 1597430.



COMPUCHEM LABS

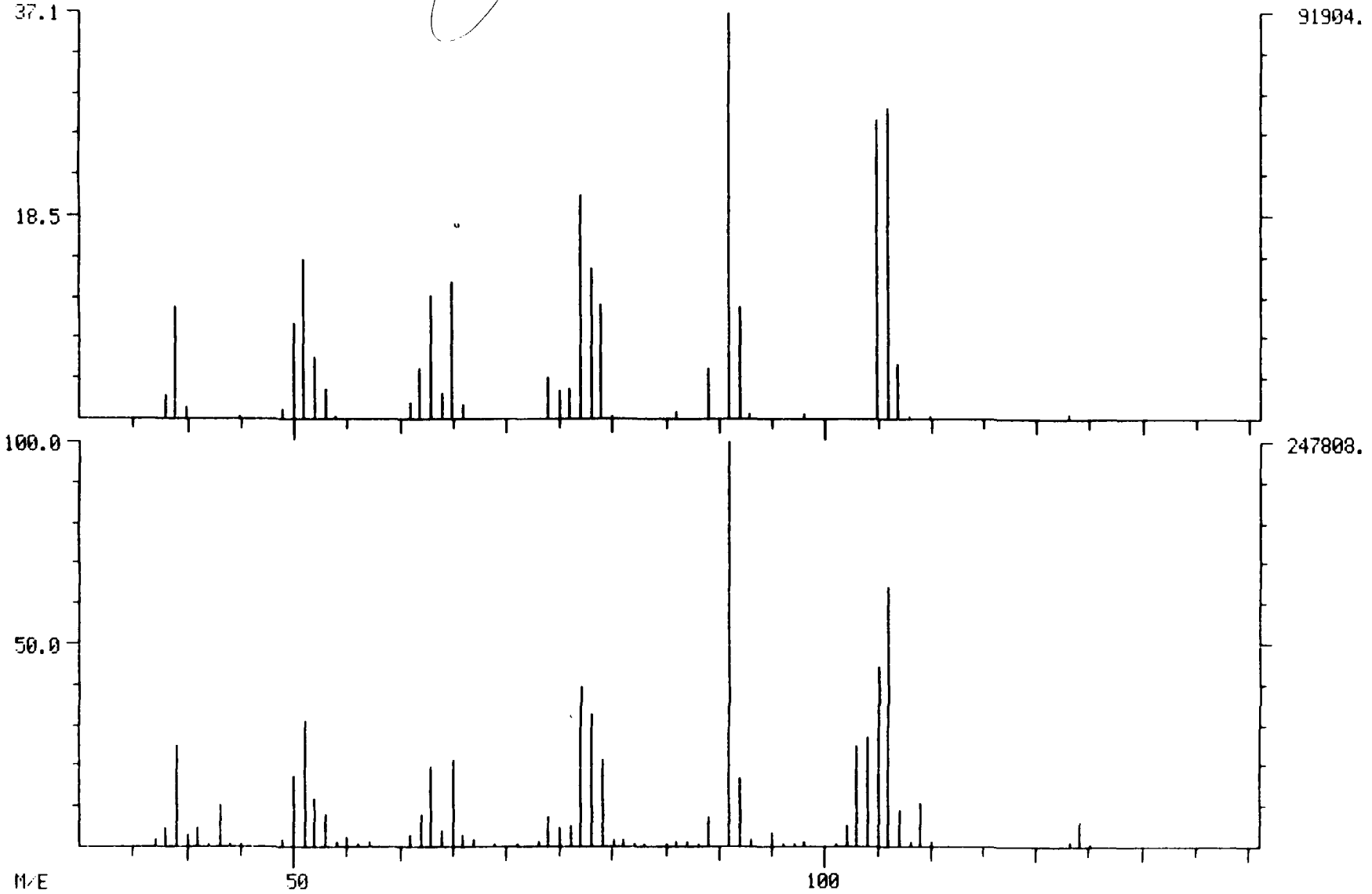
LIBRARY SEARCH DATA: GR009687C19 #1109 BASE M/E: 91
12/27/89 7:10:00 + 13:52 RIC: 615423.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 13:52
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 239 O-XYLENE (133-02-7) RO#49

DATA: GR009687C1S #1109 BASE M/E: 91 91
RIC: 616447. 1576950.

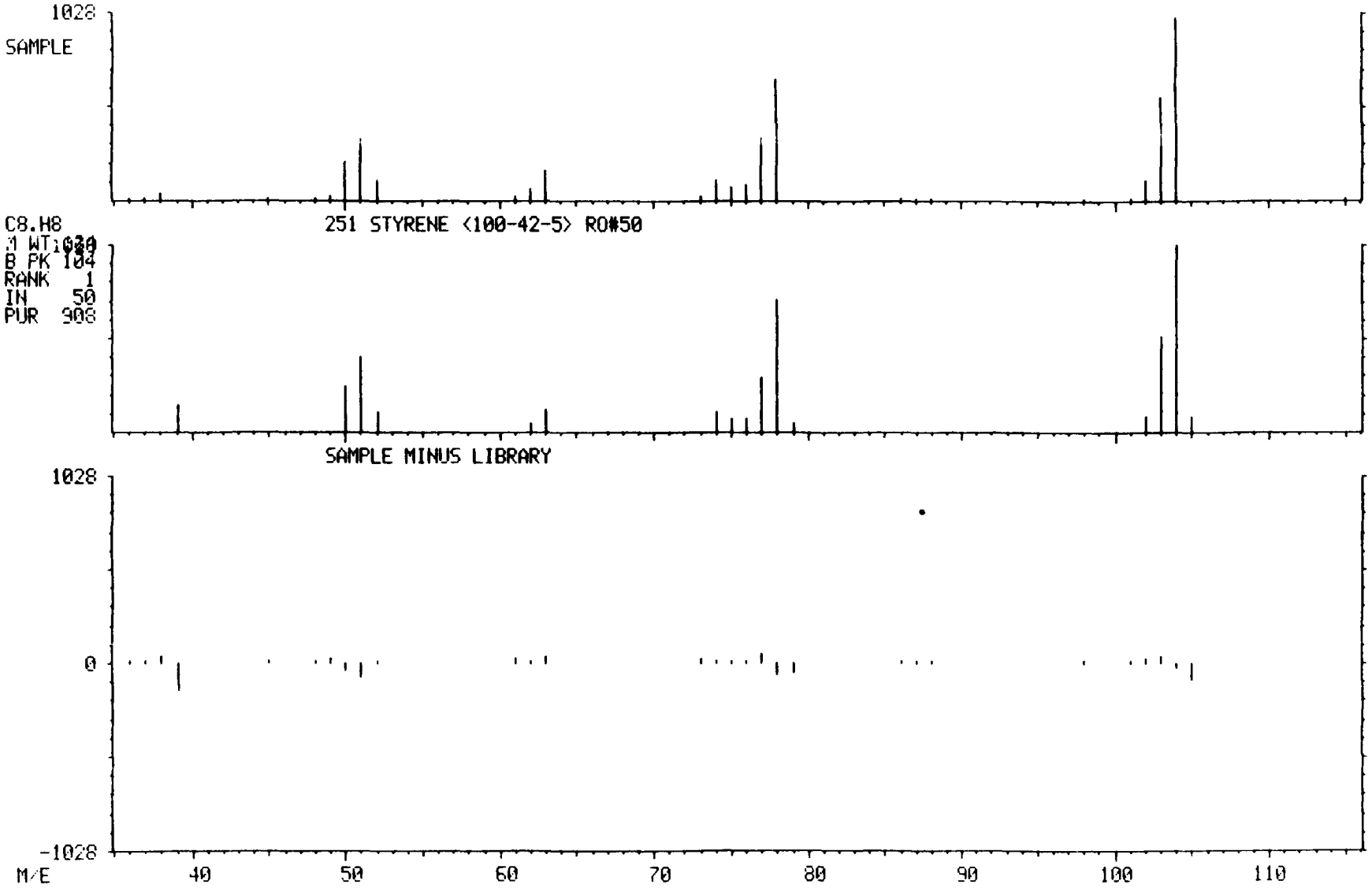


18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 13:55
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

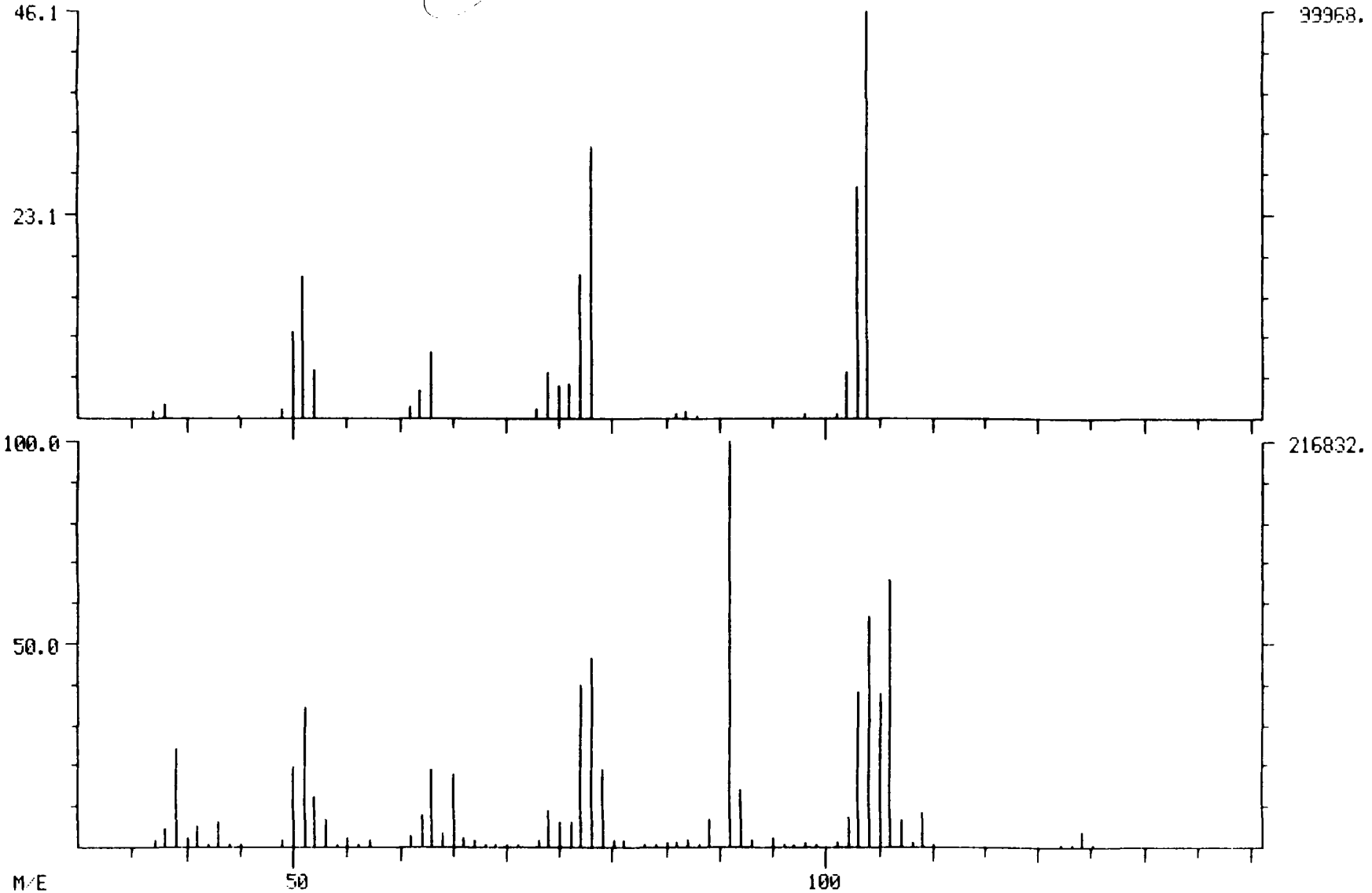
DATA: GR009687C19 #1113
BASE M/E: 104
RIC: 408575.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/27/89 7:10:00 + 13:55
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N) 251/STYRENE (100-42-5) RO#50

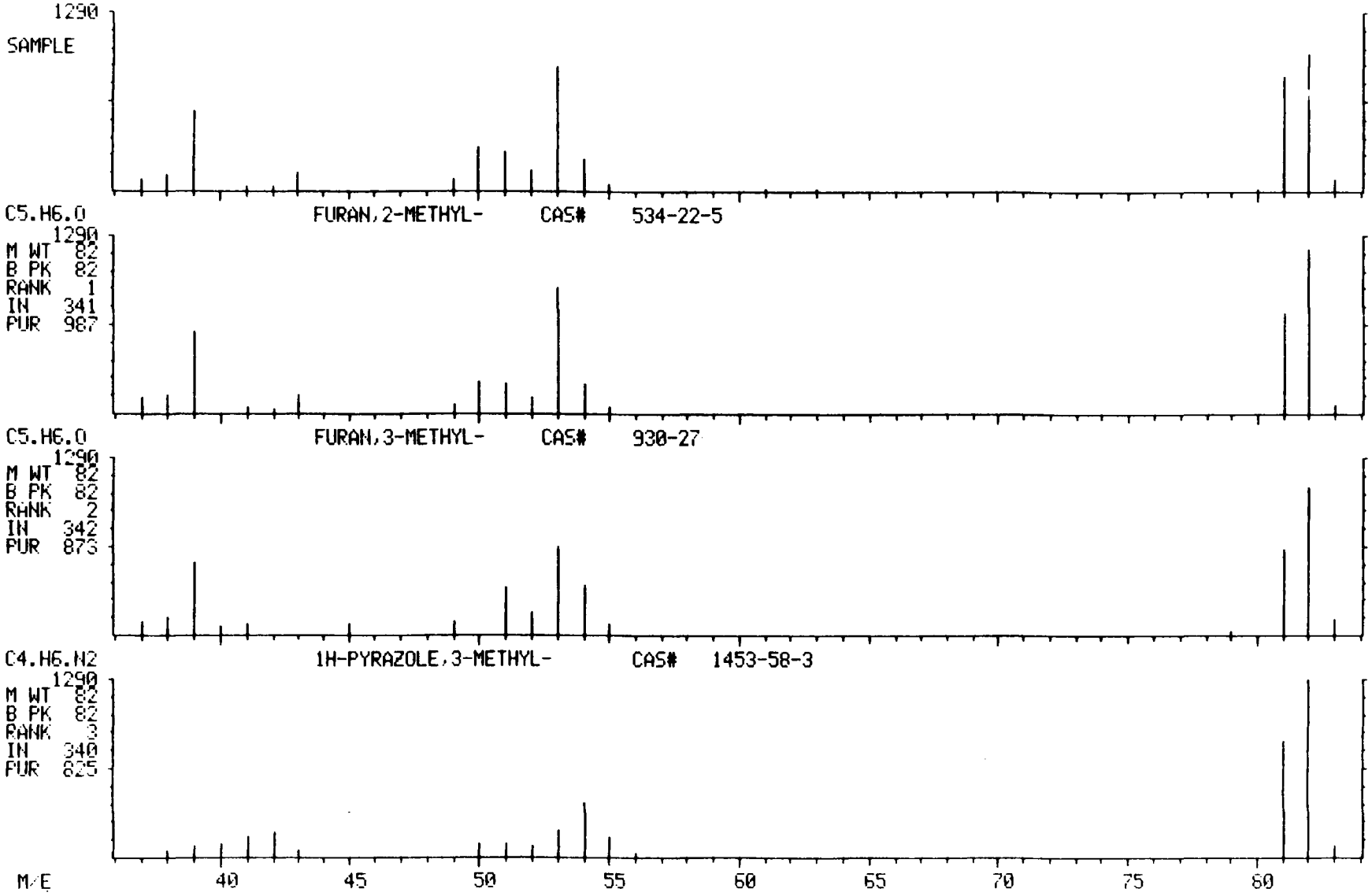
DATA: GR009687C19 #1113 BASE M/E: 104/ 91
RIC: 408063./ 1468410.



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 4:58
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

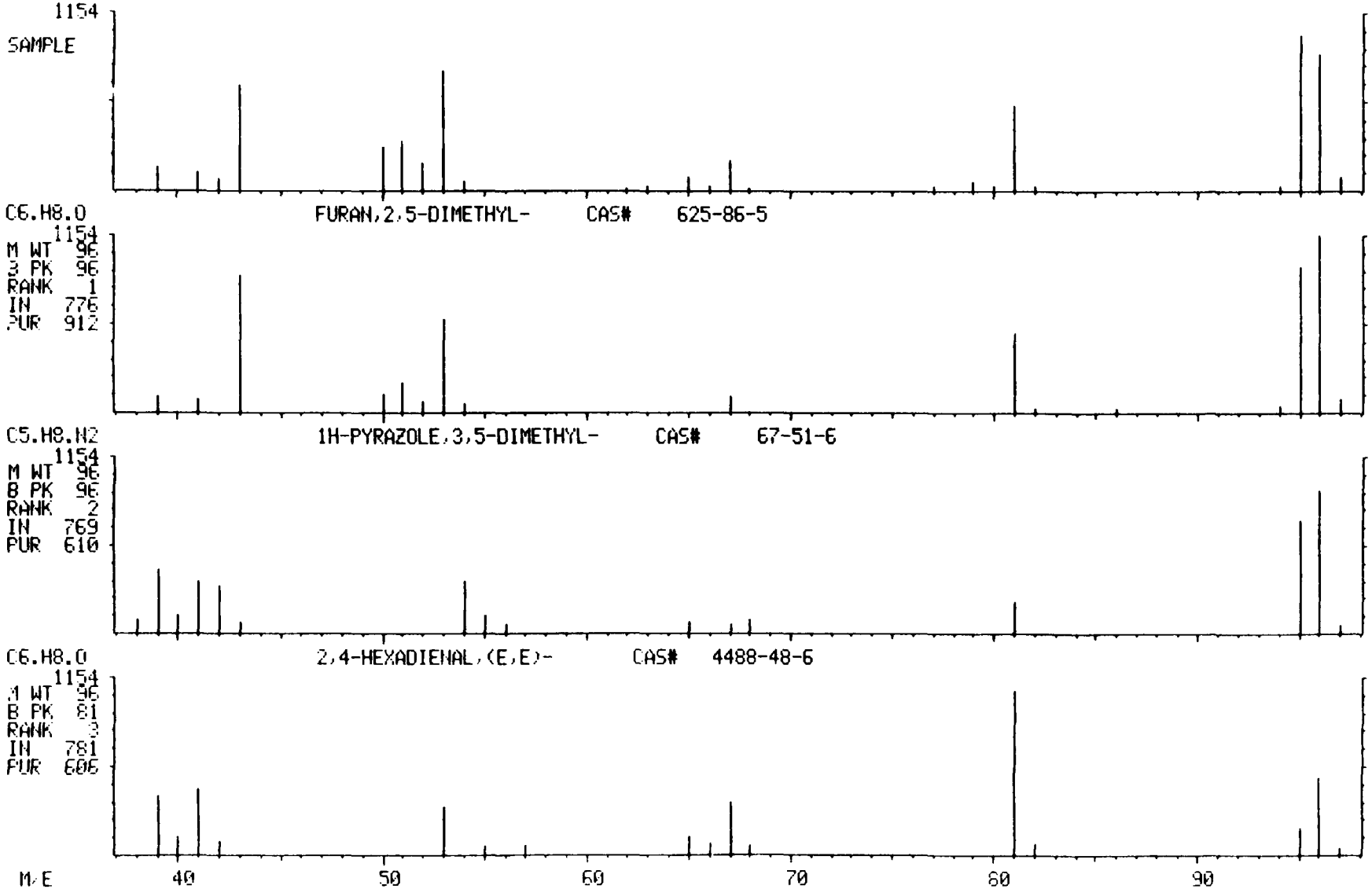
DATA: GR009687C19 # 397
BASE M/E: 82
RIC: 508415.



18756 07 SAMPLE DATA PACKAGE

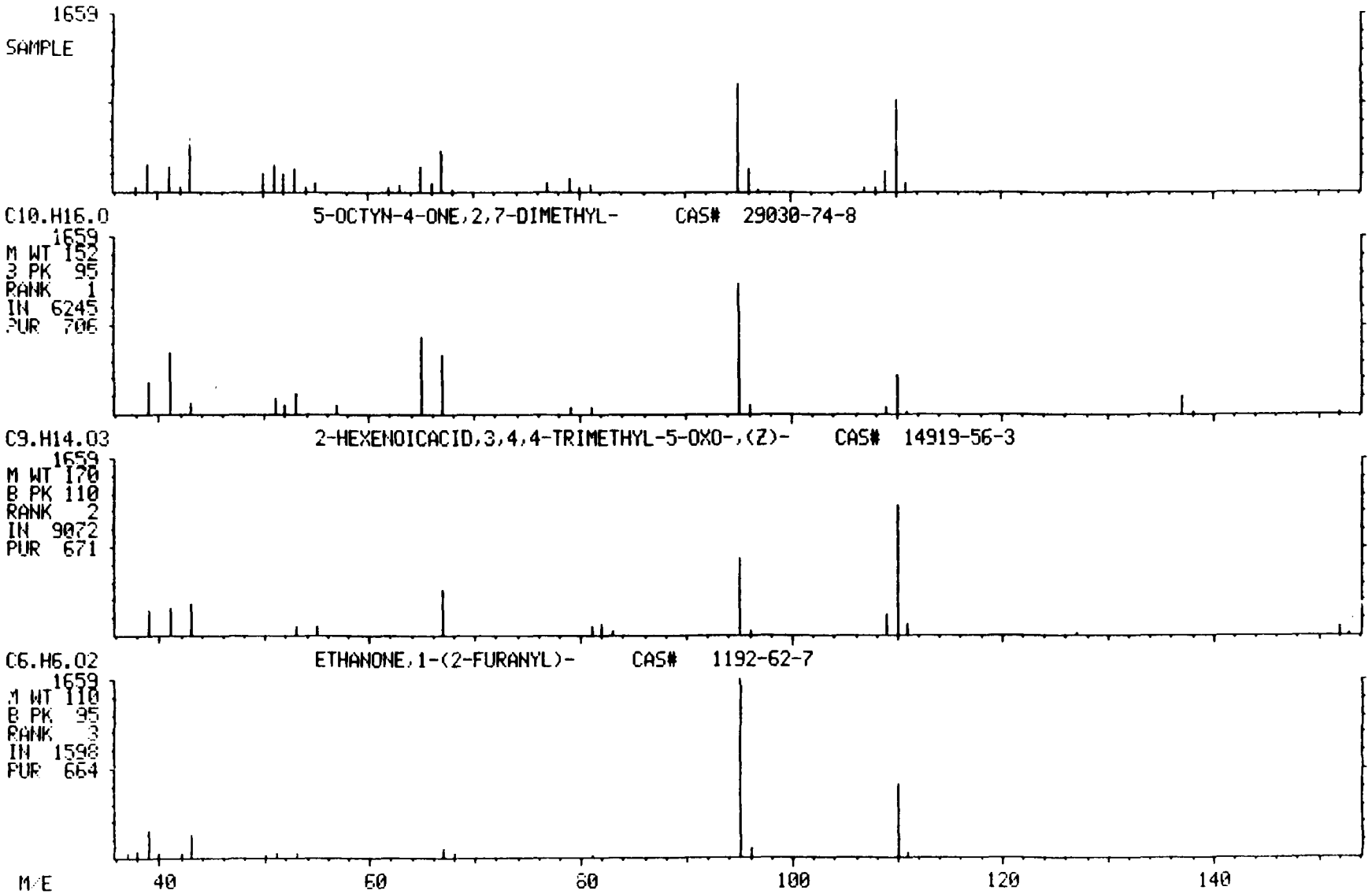
COMPUCHEM LABS

LIBRARY SEARCH DATA: GR009687C19 # 659 BASE M/E: 95
12/27/89 7:10:00 + 8:14 RIC: 610303.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

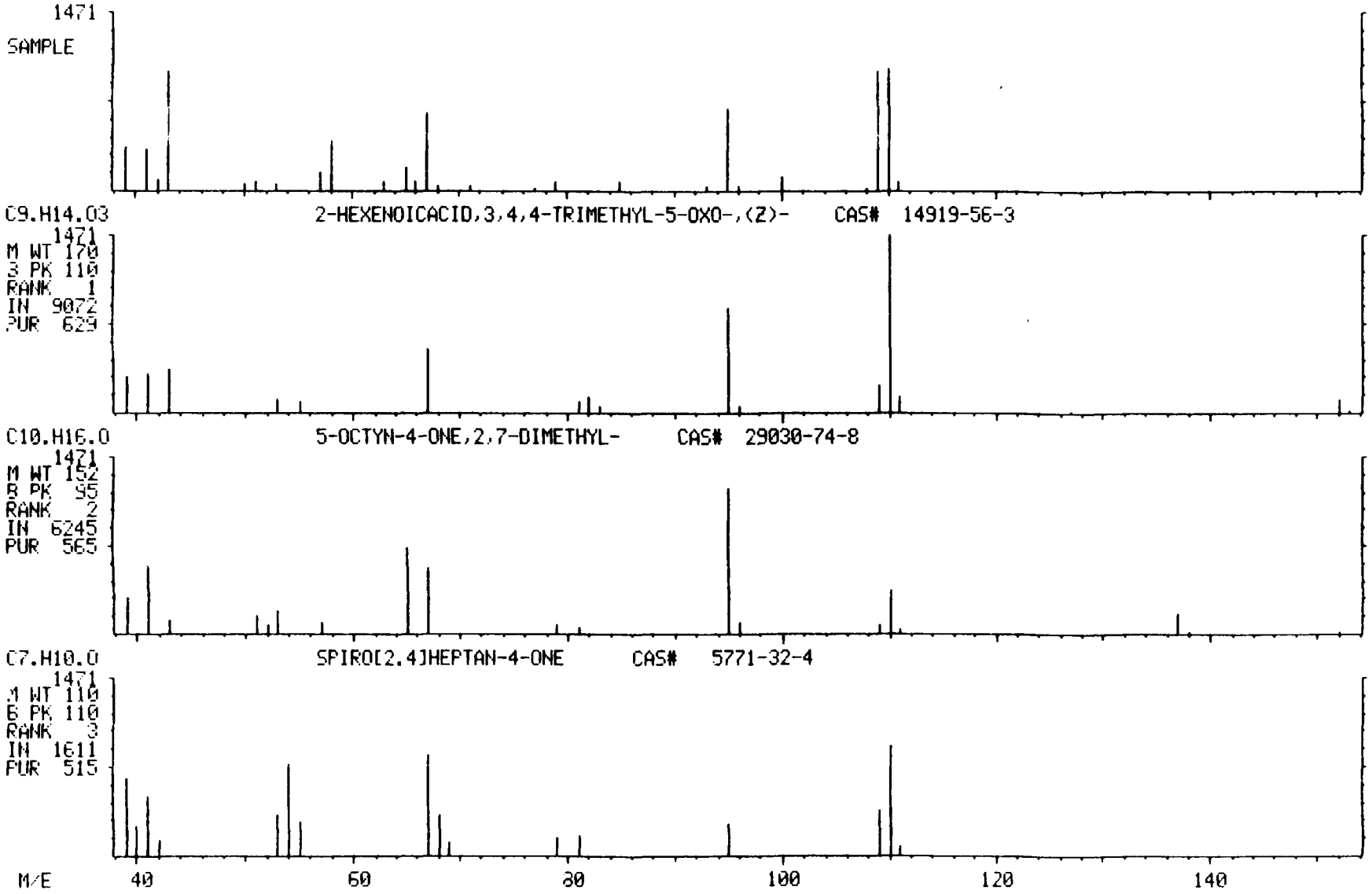
LIBRARY SEARCH DATA: GR009687C19 # 884 BASE M/E: 95
12/27/89 7:10:00 + 11:03 RIC: 594943.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 11:30
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

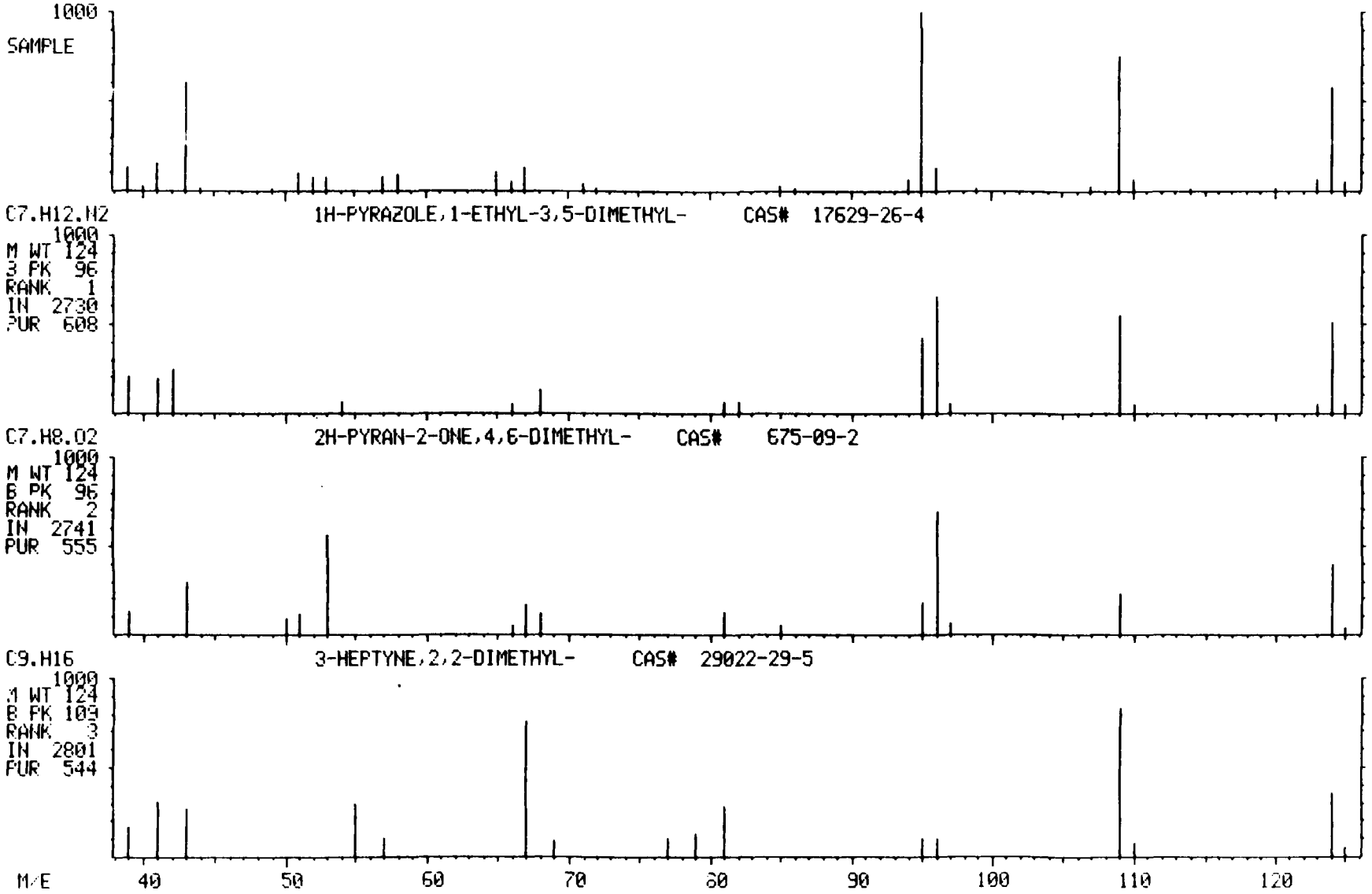
DATA: GR009687C19 # 920
BASE M/E: 110
RIC: 560127.



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 13:29
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

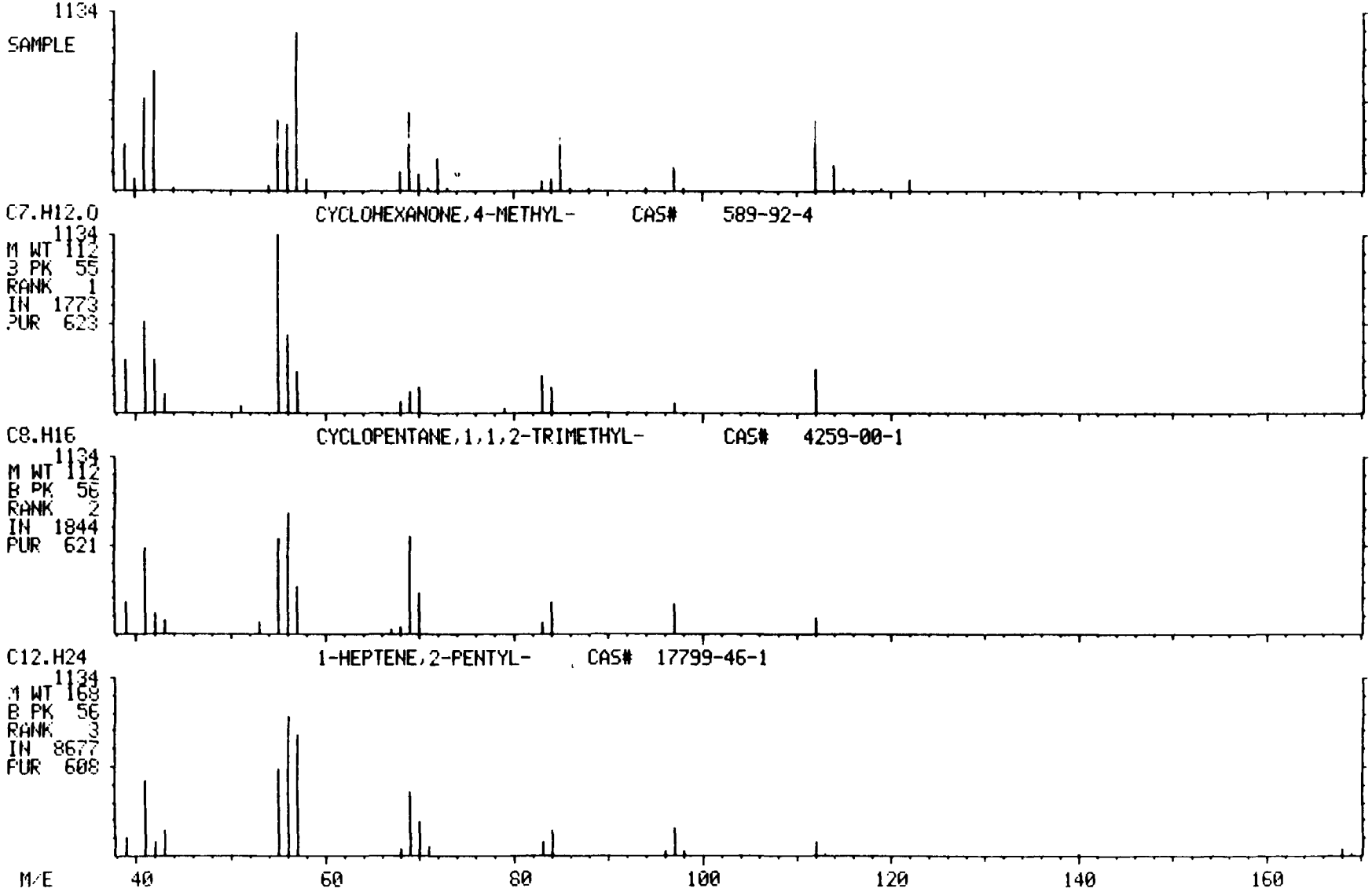
DATA: GR009687C19 #1079
BASE M/E: 95
RIC: 376831.



COMPUCHEM LABS

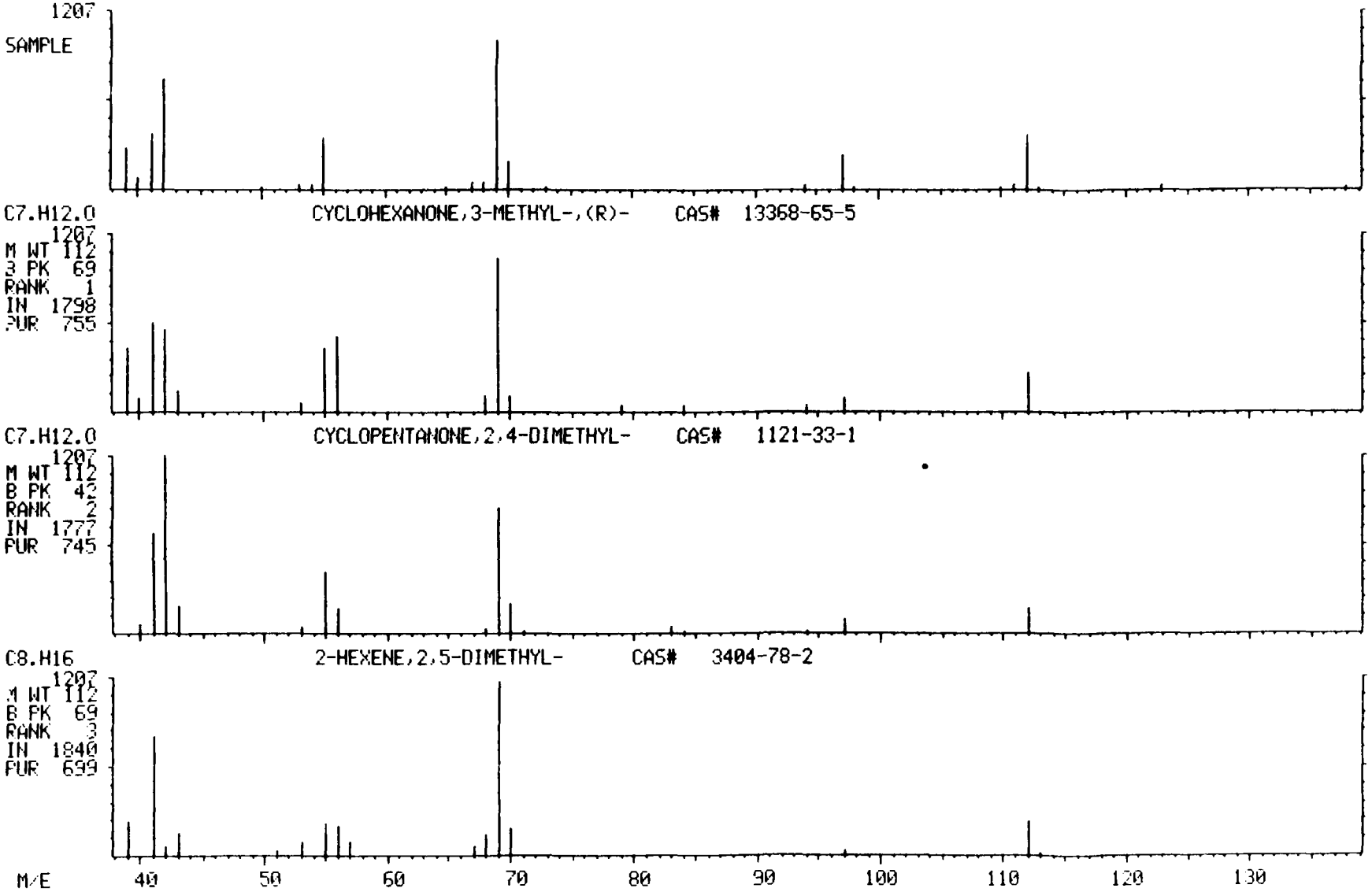
LIBRARY SEARCH
12/27/89 7:10:00 + 14:05
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009E87C19 #1127
BASE M/E: 57
RIC: 273407.



COMPUCHEM LABS

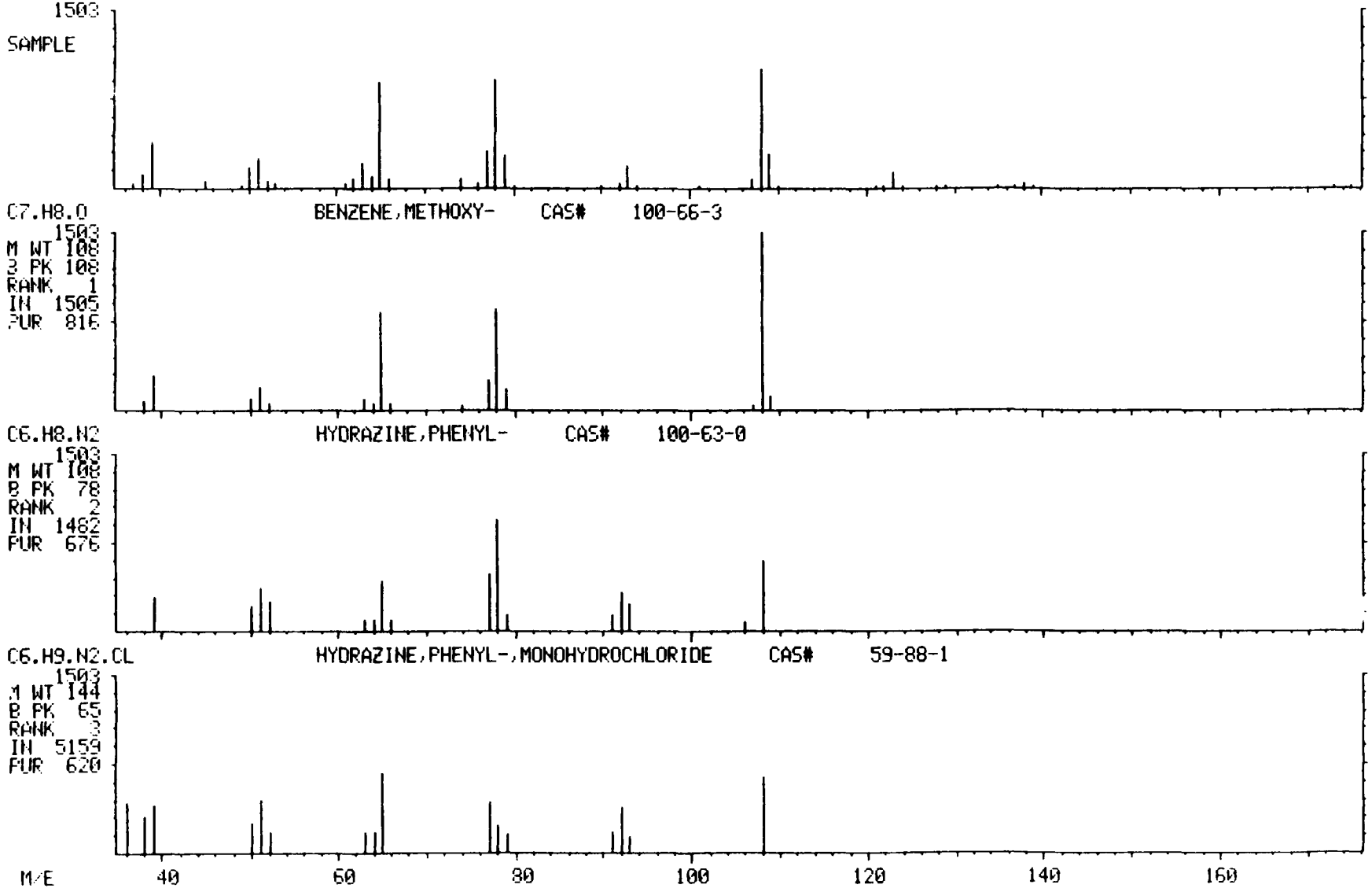
LIBRARY SEARCH DATA: GR009687C19 #1157 BASE M/E: 69
12/27/89 7:10:00 + 14:28 RIC: 285186.
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 14:45
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

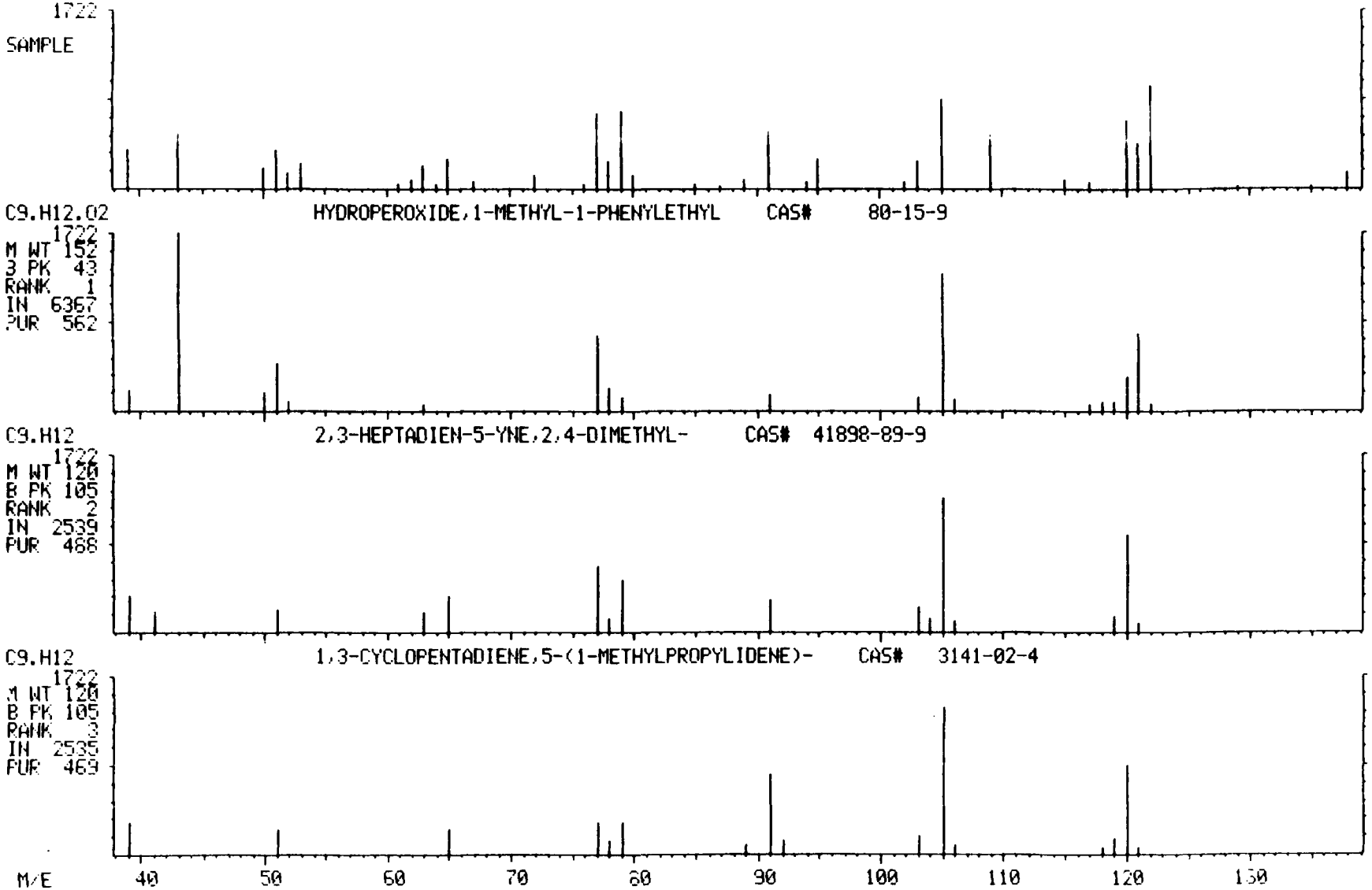
DATA: GR009687C19 #1181
BASE M/E: 108
RIC: 686079.



COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 15:40
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009687C19 #1253
BASE M/E: 122
RIC: 485375.

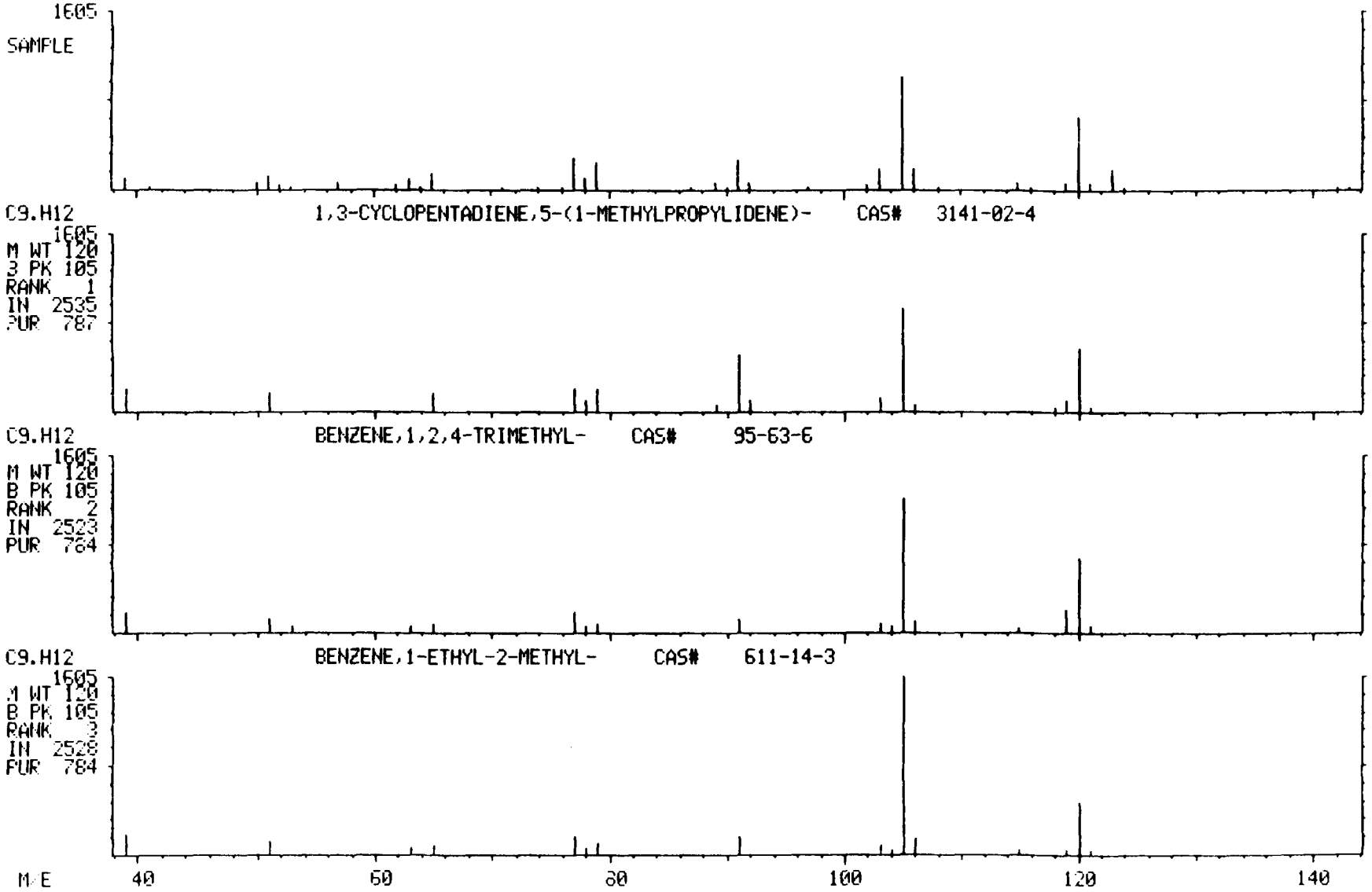


COMPUCHEM LABS

LIBRARY SEARCH
12/27/89 7:10:00 + 16:06
SAMPLE: 1G CC#309687 CASE#18756.7 EPA#B202TAR ON#19
ENHANCED (S 15B 2N 0T)

DATA: GR009687C19 #1288

BASE M/E: 105
RIC: 469503.



18756 07 SAMPLE DATA PACKAGE

LAB INSTRUCTIONS

SAMPLED DATE 12/18/89

RECEIPT DATE 12/20/89 CASE# 18756 7 DUE DATE

VOA R1[X] R2[ ] D[ ] ( )
GC/MS WORKSHEET COMPUCHEM# 309687R R3[ ] R4[ ] D2[ ] ( )

L L SOLID, EPA SOW 2/88

Sample Prep Code---155
Instrument Code----417
Compound List------494
Surrogate Std------394
Internal Std-------036

SAMPLE ID# B202TAR Dry Wt. Factor 2.78 % Moisture 64

GC/MS ANALYSIS

Amount Purged: [✓] 10mls/Xg soil or [ ] Dilution_____ul/10000ul/Xg soil

Internal Standard Volume Added 5 ul

Surrogate Standard Volume Added 5 ul

BFB Filename DFB41227C19 Disk (2858A)

Blank Filename 6H10106BUC19 Disk ( )

Standard Filename 6T841227C19 Disk ( )

Sample Filename 6R029687C19 Disk ( )

ANALYST(S) Injection 1422-16 Work-up 1422-16

GC/MS REVIEW

CONDITION CODE: DW, DI

Entry Codes OK,EA,ES,SM,JS,SL,SH,JA,DA

Non-Entry Codes IM,IL,IH,SW,CT,CS,PC,NR IF,LA,DI,CO,RN,DW,SI,SF UP,BB,OT,VC,FO,NS

Disposition: [ ] Complete

[ ] Reprep neat required

[ ] Reprep using_____g

[ ] Dilute ( )

[✓] Reprep med

Extraneous Peak Search Results:
# of Peaks Found 10

Quality Assurance Notice(s):
Notices Required_____

COMMENTS:

GC/MS Review [signature] Date 1/3/90 Auditor_____Date____/____/____

REPORT INTEGRATION Total # of Injections _____

Final Reportable Package(s): C6R09687C19 / C3R09687C13

QA COMMENTS:

Initials_____ Date____/____/____

FINAL REVIEW Initials_____ Date____/____/____

AC1007 (05/89)

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 155 ASSIGNED TO Harshad Joshi DATE 12/22/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
309679R	18756	0007			1.0g	B201A	
309680R	"	"	SS	309679	1.0g	B201A MS	
309681R	"	"	SS	309679	1.0g	B201A MSD	
309682R	"	"	BS		0.0g		
309686R	"	"			1.0g	B201B	
309687R	"	"			1.0g	B202TAR	
310543	18244	0142			5.0g	MW-17-30	
310555	18477	0132			5.0g	EPTP10122	
310560	"	"	SS	310555	5.0g	EPTP10122 MS	
310561	"	"	SS	310555	5.0g	EPTP10122 MSD	
310562	"	"	BS		0.0g		
310659			B1		5.0ml	F4	
310660			B2		0.0ml	F5	
310661			B3		0.0ml	F6	
310662			B4		0.0ml	F7	
310663			B5		0.0ml	F8	

SURROGATE # 1 LOT # 1 MANUAL OPERATOR 73 / SK

AMOUNT 1

RELINQUISHED BY [signature] DATE 12/22/89 RECEIVED BY [signature] DATE

VOLATILE - LOW LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)
234	128	I	BROMOCHLOROMETHANE (IS)	463	68100	50.0		
221	50		CHLOROMETHANE				BDL	5
231	62		VINYL CHLORIDE				BDL	5
220	94		BROMOMETHANE				BDL	5
209	64		CHLOROETHANE				BDL	5
216	96		1,1-DICHLOROETHENE				BDL	2
254	76		CARBON DISULFIDE				BDL	2
252	43		ACETONE (2-PROPANONE)			250.0	350 ~~1200~~ E	5
248	114	I	1,4-DIFLUOROBENZENE (IS)	608	245000	50.0		
222	84		METHYLENE CHLORIDE			599.0	830 ~~3000~~ E	2
226	96		TRANS-1,2-DICHLOROETHENE				BDL	2
214	63		1,1-DICHLOROETHANE				BDL	2
257	43		VINYL ACETATE				BDL	5
237	96		CIS-1,2-DICHLOROETHENE				BDL	2
253	72		2-BUTANONE			362.0	500 ~~1800~~ E	5
211	83		CHLOROFORM				BDL	2
227	97		1,1,1-TRICHLOROETHANE				BDL	2
206	117		CARBON TETRACHLORIDE				BDL	2
203	78		BENZENE			88.1	1200 ~~440~~	2
215	62		1,2-DICHLOROETHANE				BDL	2
270	117	I	D5-CHLOROBENZENE (IS) RO#29	1002	246000	50.0		
229	130		TRICHLOROETHENE				BDL	2
217	63		1,2-DICHLOROPROPANE			~~17.2~~	~~80~~ DL	2
212	83		BROMODICHLOROMETHANE				BDL	2
218	75		CIS-1,3-DICHLOROPROPENE				BDL	2
256	43		4-METHYL-2-PENTANONE			86.9	1200 ~~430~~	5
225	92		TOLUENE			622.0	8600 ~~3100~~ E	2
250	75		TRANS-1,3-DICHLOROPROPENE			~~8.2~~	~~40~~ DL	2
228	97		1,1,2-TRICHLOROETHANE				BDL	2
224	164		TETRACHLOROETHENE				BDL	2
255	43		2-HEXANONE			838.0	12000 ~~4200~~ E	5
208	129		DIBROMOCHLOROMETHANE				BDL	2
207	112		CHLOROBENZENE				BDL	2
219	106		ETHYLBENZENE			575.0	8000 ~~2900~~ E	2
330	106		M,P-XYLENE			532.0	7400 2700 E	2
239	106		O-XYLENE			568.0	7400 2800 E	2
251	104		STYRENE			164.0	2300 820	2
205	173		BROMOFORM				BDL	2
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	2
258	65	S	D4-1,2-DICHLOROETHANE RO#57			48.5	97 %	
247	95	S	BROMOFLUOROBENZENE			46.7	93 %	
233	98	S	D8-TOLUENE RO#59			44.1	88 %	
289	106		XYLENES (TOTAL)			1100.0	~~5500~~ 15000 E	2

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12/31/89

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT LIMIT (UG/KG)	
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL		E
CHECKSUMS: 3979				2073	559100.	6099.7		29295	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12/3/87

VOLATILE - LOW LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P
40	258	D4-1,2-DICHLOROETHANE RO#57	48.5	50.0	97.	70-121	X
41	247	BROMOFLUOROBENZENE	46.7	50.0	93.	74-121	X
42	233	D8-TOLUENE RO#59	44.1	50.0	88.	81-117	X

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED x 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{GC/MS DILUTION FACTOR} \times \text{DRY WEIGHT FACTOR} =$$

$$\frac{5.0\ G}{1.00\ (G)} \times \frac{1.0}{\cancel{1.00}\ 2.78} \times \cancel{5.000}\ 13.9$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 8

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE _____

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

B202TARDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09687C13

Level: (low/med) MED Date Received: 12/20/89

% Moisture: not dec. 64 Date Analyzed: 12/29/89

Column: (pack/cap) CAP Dilution Factor: 3.3

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/KG	Q
74-87-3	Chloromethane	11000	U
74-83-9	Bromomethane	11000	U
75-01-4	Vinyl Chloride	11000	U
75-00-3	Chloroethane	11000	U
75-09-2	Methylene Chloride	16000	BD
67-64-1	Acetone	15000	D
75-15-0	Carbon Disulfide	5700	U
75-35-4	1,1-Dichloroethene	5700	U
75-34-3	1,1-Dichloroethane	5700	U
540-59-0	1,2-Dichloroethene (total)	5700	U
67-66-3	Chloroform	5700	U
107-06-2	1,2-Dichloroethane	5700	U
78-93-3	2-Butanone	11000	U
71-55-6	1,1,1-Trichloroethane	5700	U
56-23-5	Carbon Tetrachloride	5700	U
108-05-4	Vinyl Acetate	11000	U
75-27-4	Bromodichloromethane	5700	U
78-87-5	1,2-Dichloropropane	5700	U
10061-01-5	cis-1,3-Dichloropropene	5700	U
79-01-6	Trichloroethene	5700	U
124-48-1	Dibromochloromethane	5700	U
79-00-5	1,1,2-Trichloroethane	5700	U
71-43-2	Benzene	5000	DJ
10061-02-6	Trans-1,3-Dichloropropene	5700	U
75-25-2	Bromoform	5700	U
108-10-1	4-Methyl-2-Pentanone	11000	U
591-78-6	2-Hexanone	11000	U
127-18-4	Tetrachloroethene	5700	U
79-34-5	1,1,2,2-Tetrachloroethane	5700	U
108-88-3	Toluene	100000	D
108-90-7	Chlorobenzene	5700	U
100-41-4	Ethylbenzene	100000	D
100-42-5	Styrene	22000	D
1330-20-7	Total Xylenes	280000	DE

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

B202TARDL

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Matrix: (soil/water) SOIL Lab Sample ID: 309687

Sample wt/vol: 4.0 (g/mL) G Lab File ID: C3R09687C13

Level: (low/med) MED Date Received: 12/20/89

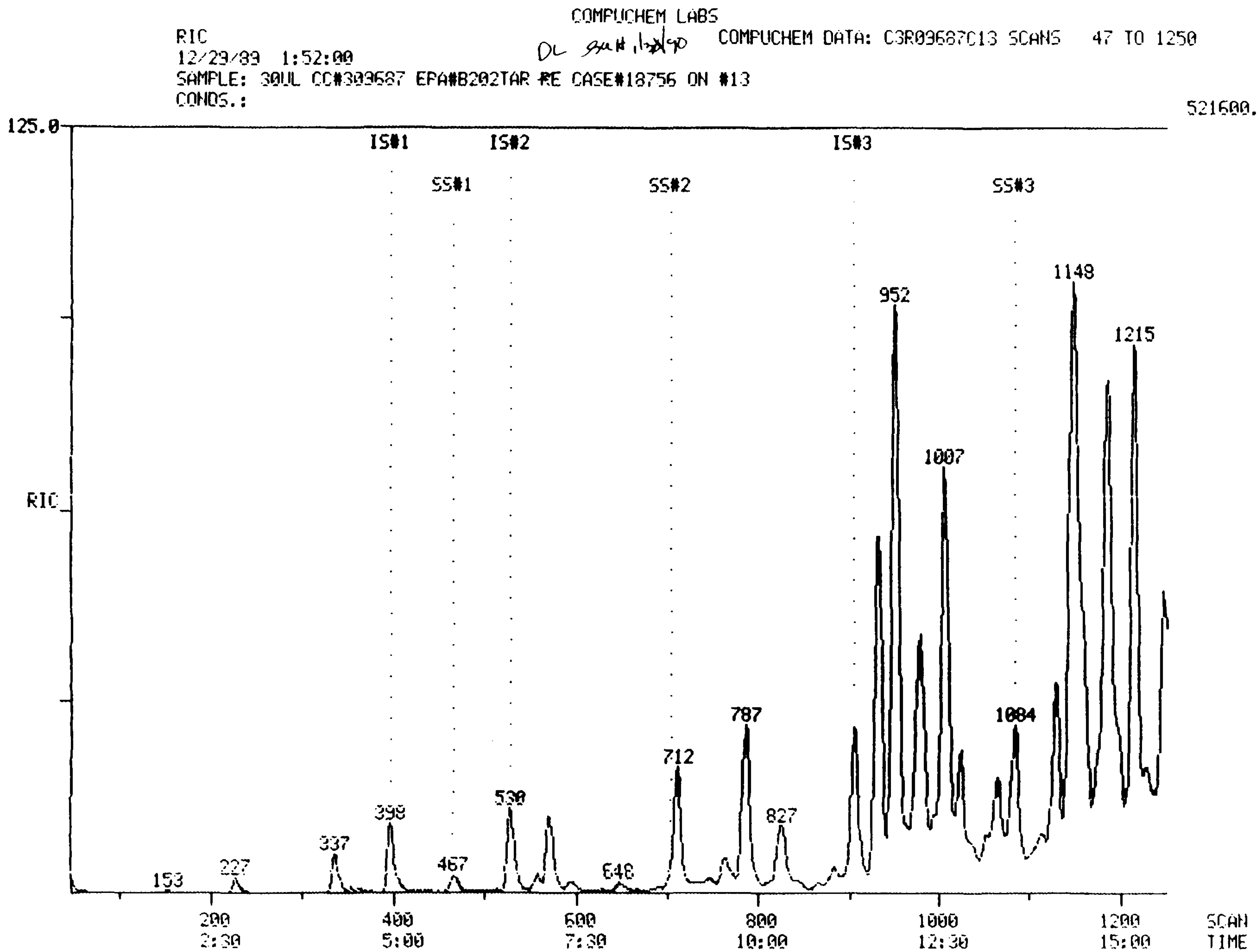
% Moisture: not dec. 64 Date Analyzed: 12/29/89

Column (pack/cap) CAP Dilution Factor: 3.3

Number TICs found: 10

CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/KG

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	534-22-5	FURAN,2-METHYL-	4.20	29000	J
2.	625-86-5	FURAN,2,5-DIMETHYL-	7.15	49000	J
3.	1192-62-7	ETHANONE,1-(2-FURANYL)-	9.84	61000	J
4.	37609-41-9	BICYCLO[3.2.1]OCT-2-ENE,3-(1	12.24	85000	J
5.	24156-95-4	2-CYCLOPENTEN-1-ONE,3,5,5-TR	12.80	40000	J
6.		UNKNOWN	13.30	34000	J
7.		SUBST. BENZENE	14.10	48000	J
8.		SUBST. BENZENE	14.35	300000	J
9.		SUBST. BENZENE	14.82	220000	J
10.		SUBST. BENZENE	15.19	170000	J


COMPUCHEM LABS
RIC
12/29/89 1:52:00
COMPUCHEM DATA: C3R09687C13 SCANS 47 TO 1250
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
CONDS.:
125.0
521600.
RIC
IS#1
IS#2
IS#3
SS#1
SS#2
SS#3
153
227
337
398
467
530
648
712
787
827
952
1007
1084
1148
1215
200
2:30
400
5:00
600
7:30
800
10:00
1000
12:30
1200
15:00
SCAN
TIME

QUANTITATION REPORT FILE: C3R09687C13
DATA: C3R09687C13.TI
12/29/89 1:52:00 DL subt 1/30/90
SAMPLE: 30UL CC#309687 EPA#8202TAR ~~RE~~ CASE#18756 ON #13
CONDS. :
SUBMITTED BY: 13 ANALYST: 1452

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
2	221 CHLOROMETHANE <74-87-3> NA#2
3	231 VINYL CHLORIDE <75-01-4> NA#3
4	220 BROMOMETHANE <78-83-9> NA#4
5	209 CHLOROETHANE <75-00-3> NA#5
6	216 1,1-DICHLOROETHENE <75-35-4> NA#8
7	254 CARBON DISULFIDE <75-15-0> NA#9
8	252 ACETONE (2-PROPANONE) <67-64-1> NA#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
10	222 METHYLENE CHLORIDE <75-09-2> NA#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
12	214 1,1-DICHLOROETHANE <75-34-3> NA#19
13	257 VINYL ACETATE <108-05-4> NA#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
15	253 2-BUTANONE <78-93-3> NA#22
16	211 CHLOROFORM <67-66-2> NA#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
18	206 CARBON TETRACHLORIDE <56-23-5> NA#25
19	203 BENZENE <71-43-2> NA#26
20	215 1,2-DICHLOROETHANE <107-06-2> NA#27
21	*270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
22	229 TRICHLOROETHENE <79-01-6> NA#30
23	217 1,2-DICHLOROPROPANE <78-87-5> NA#31
24	212 BROMODICHLOROMETHANE <75-27-4> NA#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
26	256 4-METHYL-2-PENTANONE <108-01-1> NA#36
27	225 TOLUENE <108-88-3> NA#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
30	224 TETRACHLOROETHENE <127-18-4> NA#41
31	255 2-HEXANONE <591-78-6> NA#42
32	208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
33	207 CHLOROBENZENE <108-90-7> NA#45
34	219 ETHYLBENZENE <100-41-4> NA#47
35	330 M,P-XYLENE <133-02-7> NA#48
36	239 O-XYLENE <133-02-7> NA#49
37	251 STYRENE <100-42-5> NA#50
38	205 BROMOFORM <75-25-2> NA#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
40	#258 D4-1,2-DICHLOROETHANE NA#57
41	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
42	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	397	4:58	1	1.000	A BB	49580.	50.000 UG/L	7.50
2	50	NOT FOUND							

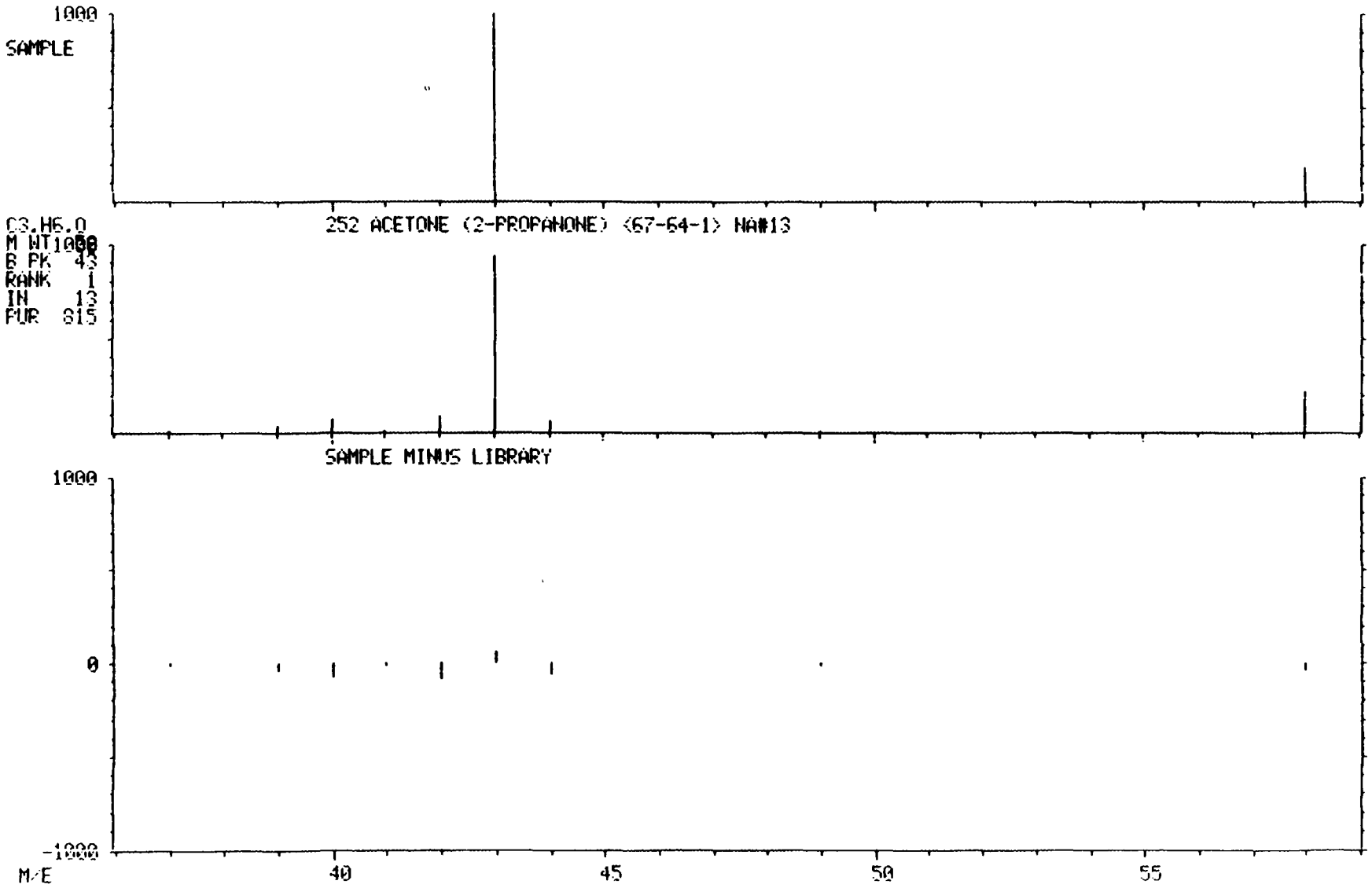
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	96	NOT FOUND							
7	76	NOT FOUND							
8	43	~~NOT FOUND~~ 195					3369	13.220 ug/L	
9	114	530	6:37	9	1.000	A BB	172864.	50.000 UG/L	7.50
10	84	227	2:50	1	0.572	A BV	20440.	14.102 UG/L	2.11
11	96	NOT FOUND							
12	63	NOT FOUND							
13	43	NOT FOUND							
14	96	NOT FOUND							
15	72	NOT FOUND							
16	83	NOT FOUND							
17	97	NOT FOUND							
18	117	NOT FOUND							
19	78	464	5:48	9	0.875	A BB	13235.	4.329 UG/L	0.65
20	62	NOT FOUND							
21	117	906	11:19	21	1.000	A BB	250054.	50.000 UG/L	7.50
22	130	NOT FOUND							
23	63	NOT FOUND							
24	83	NOT FOUND							
25	75	NOT FOUND							
26	43	714	8:55	21	0.788	A*BB	2827.	2.424 UG/L	0.36
27	92	712	8:54	21	0.786	A BB	151864.	91.345 UG/L	13.70
28	75	NOT FOUND							
29	97	786	9:49	9	1.483	A BB	1846.	1.930 UG/L	0.29
30	164	NOT FOUND							
31	43	NOT FOUND							
32	129	NOT FOUND							
33	112	NOT FOUND							
34	106	933	11:40	21	1.030	A BV	186205.	90.394 UG/L	13.55
35	106	952	11:54	21	1.051	A VB	526501.	148.536 UG/L	22.27
36	106	1006	12:34	21	1.110	A BB	306746.	98.871 UG/L	14.82
37	104	1012	12:39	21	1.117	A BB	105930.	19.536 UG/L	2.93
38	173	NOT FOUND							
39	83	NOT FOUND							
40	65	467	5:30	1	1.176	A BB	28655.	16.482 UG/L	2.47
41	95	1085	13:34	21	1.198	A VB	74996.	16.620 UG/L	2.49
42	98	704	8:48	21	0.777	A BB	33435.	12.410 UG/L	1.86

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:07	0.97	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:52		10.000			50.00		0.882	
3	0:58		10.000			50.00		1.005	
4	1:11		10.000			50.00		1.237	
5	1:18		10.000			50.00		0.626	
6	2:10		5.000			50.00		1.230	
7	2:16		5.000			50.00		3.765	
8	2:31		10.000			50.00		0.257	
9	6:46	0.98	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	2:58	0.95	5.000	0.11	14.10	50.00	0.412	1.462	0.28
11	3:18		5.000			50.00		1.270	
12	3:56		5.000			50.00		2.282	
13	4:14		10.000			50.00		0.848	
14	4:48		5.000			50.00		1.568	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	5:01		10.000			50.00		0.124	
16	5:22		5.000			50.00		2.770	
17	5:24		5.000			50.00		0.713	
18	5:37		5.000			50.00		0.656	
19	5:57	0.97	5.000	0.18	4.33	50.00	0.077	0.884	0.09
20	6:06		5.000			50.00		1.804	
21	11:25	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	7:01		5.000			50.00		0.453	
23	7:22		5.000			50.00		0.350	
24	7:56		5.000			50.00		0.642	
25	8:40		5.000			50.00		0.553	
26	9:07	0.98	15.000	0.05	2.42	50.00	0.011	0.233	0.05
27	9:04	0.98	5.000	0.16	91.35	50.00	0.607	0.332	1.83
28	9:40		5.000			50.00		0.243	
29	9:56	0.99	5.000	0.30	1.93	50.00	0.011	0.277	0.04
30	9:53		5.000			50.00		0.303	
31	10:35		15.000			50.00		0.228	
32	10:30		5.000			50.00		0.846	
33	11:28		5.000			50.00		0.966	
34	11:49	0.99	5.000	0.21	90.39	50.00	0.745	0.412	1.81
35	12:04	0.99	5.000	0.21	148.54	50.00	2.106	0.709	2.97
36	12:46	0.99	5.000	0.22	98.87	50.00	1.227	0.620	1.98
37	12:50	0.99	5.000	0.22	19.54	50.00	0.424	1.084	0.39
38	13:06		5.000			50.00		0.762	
39	14:19		5.000			50.00		0.705	
40	6:00	0.97	5.000	0.24	16.48	50.00	0.578	1.753	0.33
41	13:44	0.99	5.000	0.24	16.62	50.00	0.300	0.902	0.33
42	8:57	0.98	5.000	0.16	12.41	50.00	0.134	0.539	0.25

COMPUCHEM LABS

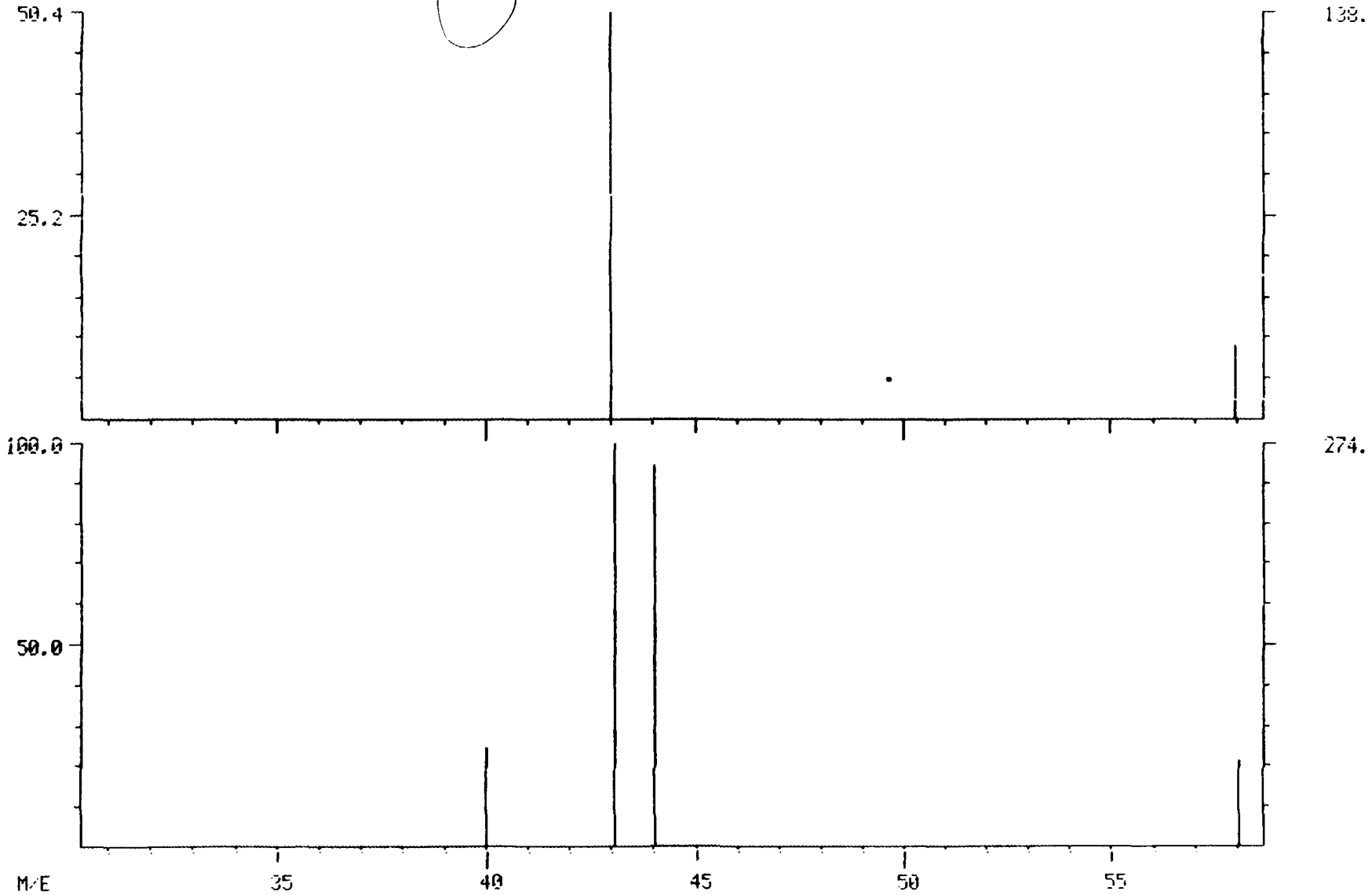
LIBRARY SEARCH
12/29/89 1:52:00 + 2:26
DC sm# 1580
DATA: C3R03687C13 # 135
BASE M/E: 43
RIC: 162.
SAMPLE: 30UL CC#303687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

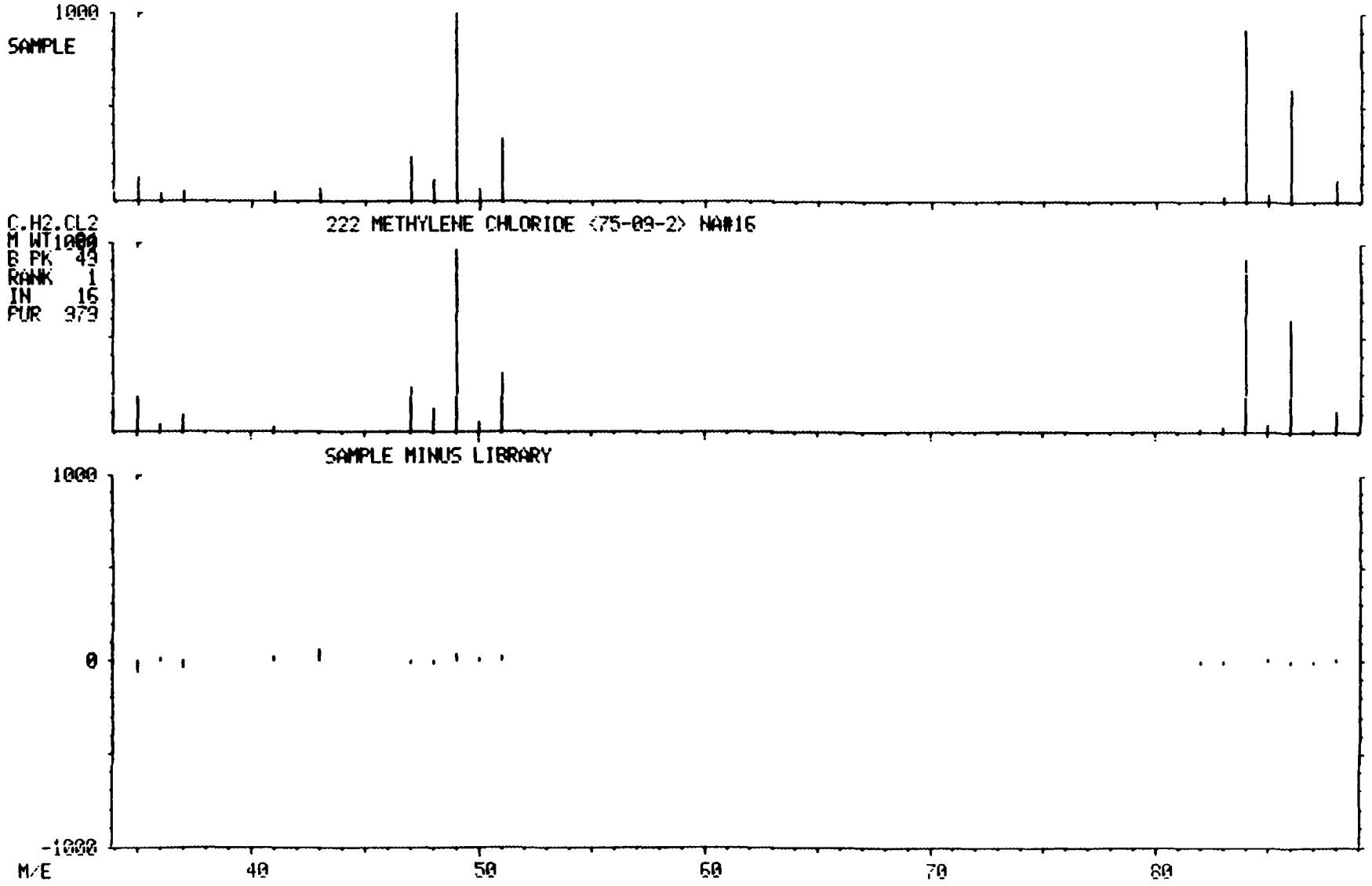
DUAL MASS SPECTRUM
12/29/89 1:52:00 + 2:26
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N) 252 ACETONE (2-PROPANONE) (67-64-1) NA#13

DATA: C3R09687C13 #135 BASE M/E: 43 43
RIC: 162. 657.



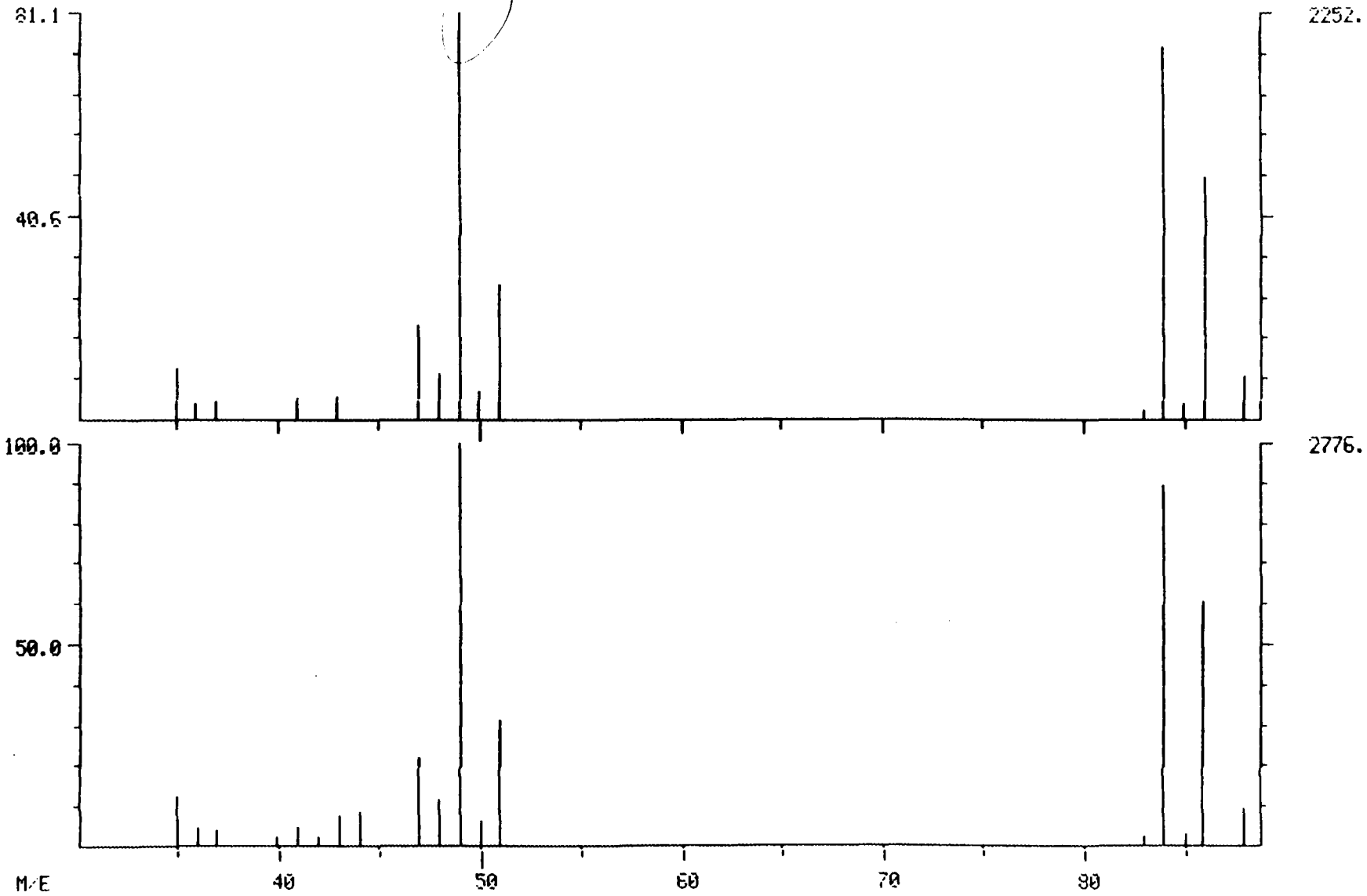
COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 2:50 DL Sath, 1/3/90 DATA: C3R09687013 # 227 BASE M/E: 49
RIC: 8415.
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)



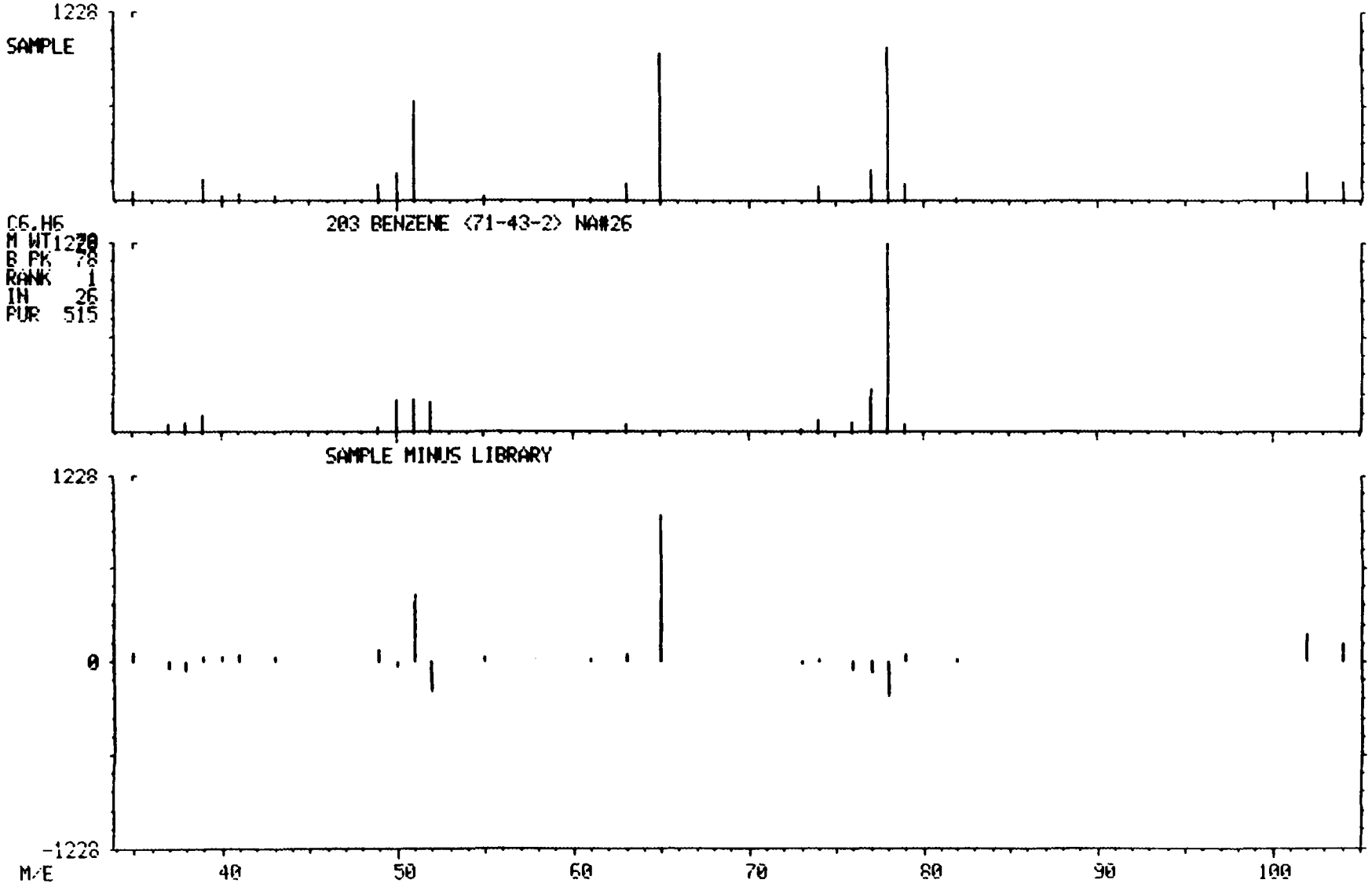
COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 1:52:00 + 2:50
DL 1/3/90
DATA: C3R09687C13 #227 BASE M/E: 49/ 49
RIC: 8415./ 10607.
SAMPLE: 30UL CC#309687 EPA#8202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N) 222 METHYLENE CHLORIDE (75-09-2) NA#16



COMPUCHEM LABS

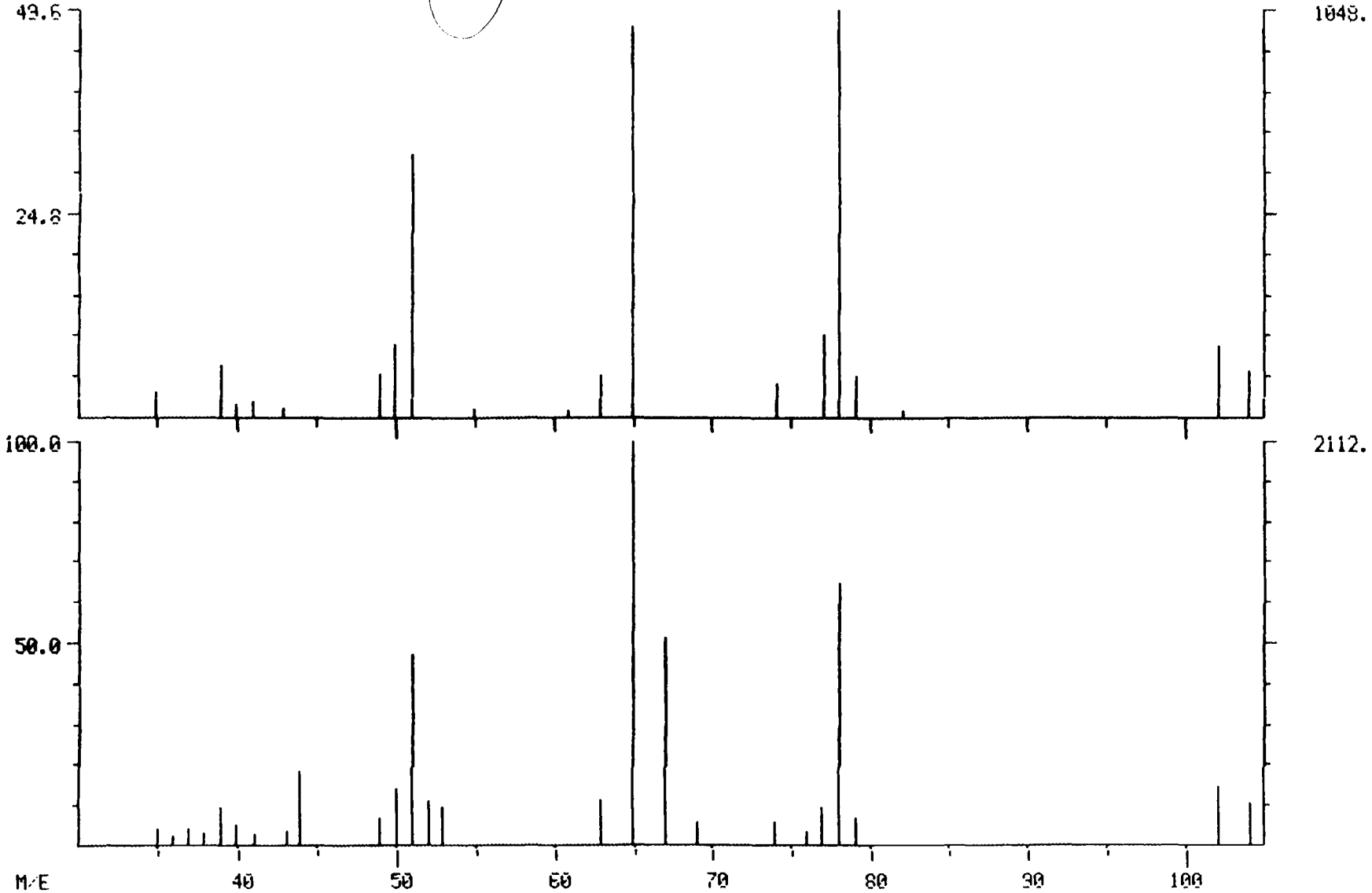
LIBRARY SEARCH
12/29/89 1:52:00 + 5:48
DL 1/30/90
DATA: C3R03687C13 # 464
BASE M/E: 78
RIC: 4223.
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 1:52:00 + 5:48
SAMPLE: 30UL CC#309687 EPA#8202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N) 203 BENZENE <71-43-2> NA#26

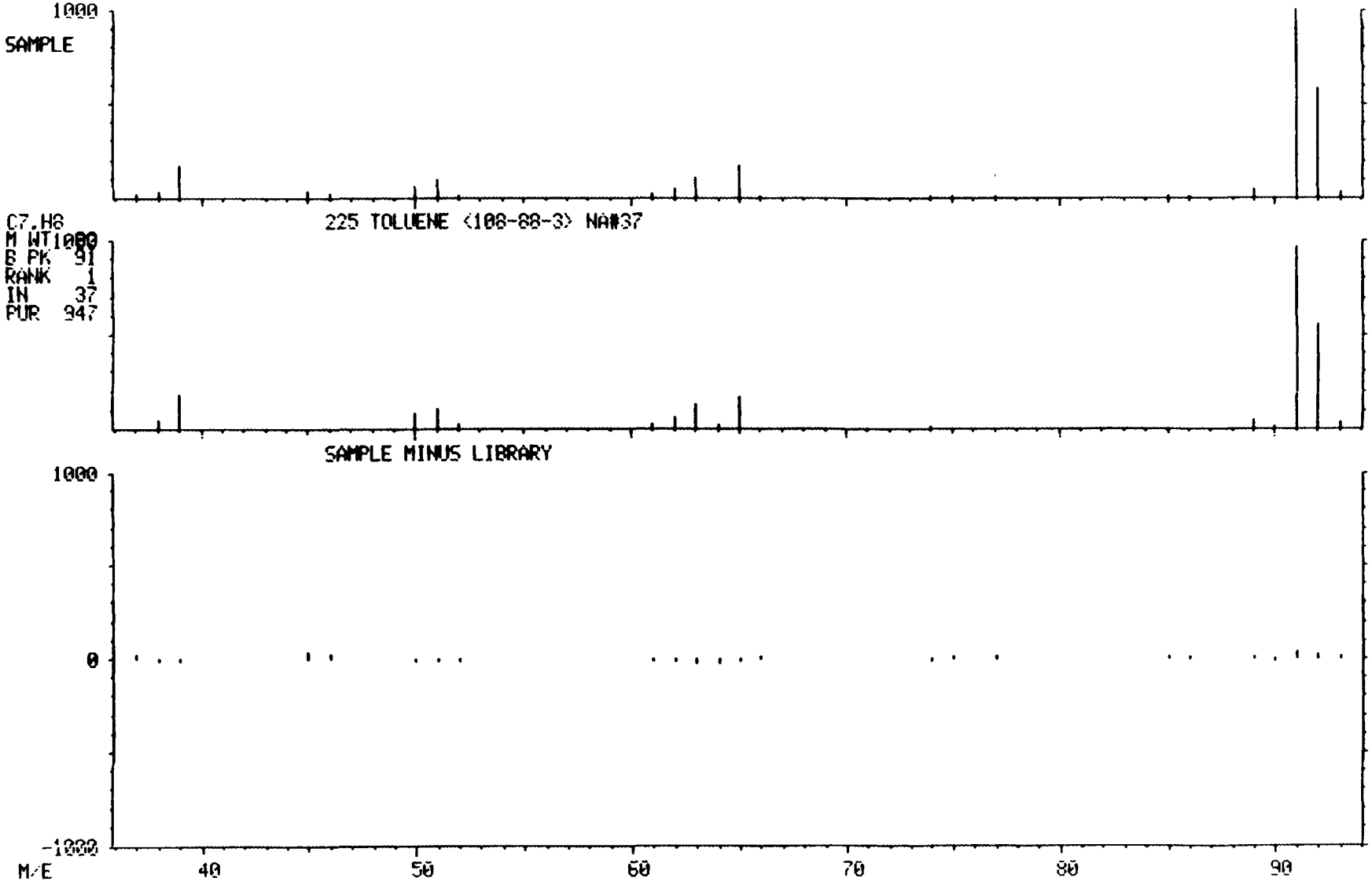
DATA: C3R09687C13 #464 BASE M/E: 78/ 65
RIC: 4223./ 8975.



18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH DATA: C3R03687C13 # 712 BASE M/E: 31
12/29/89 1:52:00 + 8:54 RIC: 65535.
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

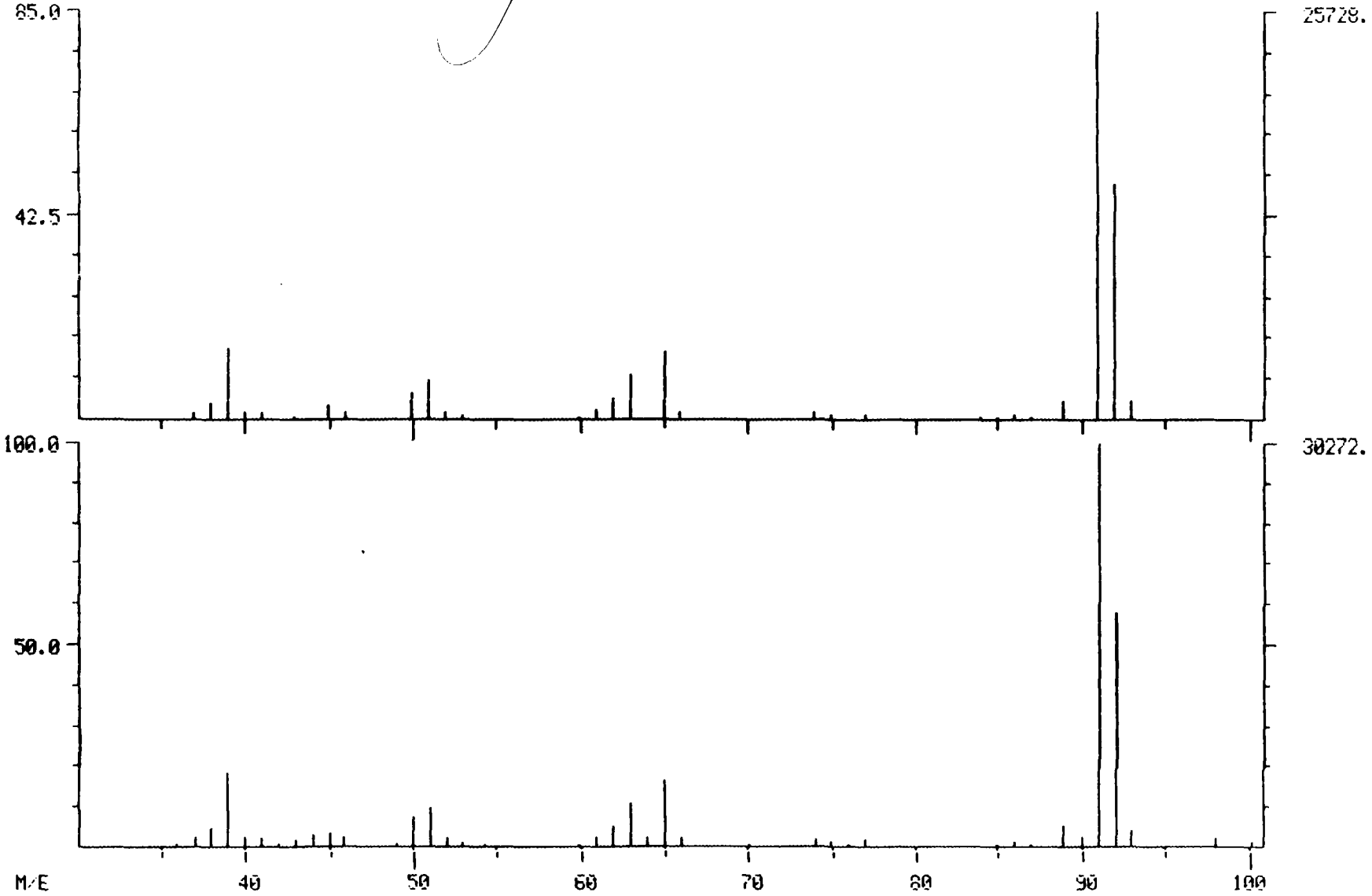


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 1:52:00 + 8:54
SAMPLE: 30UL CC#303687 EPA#8202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N) 225 TOLUENE (108-88-3) NA#37

DL and 1/3/90

DATA: C3R03687C13 #712 BASE M/E: 91 91
RIC: 67071. 86271.

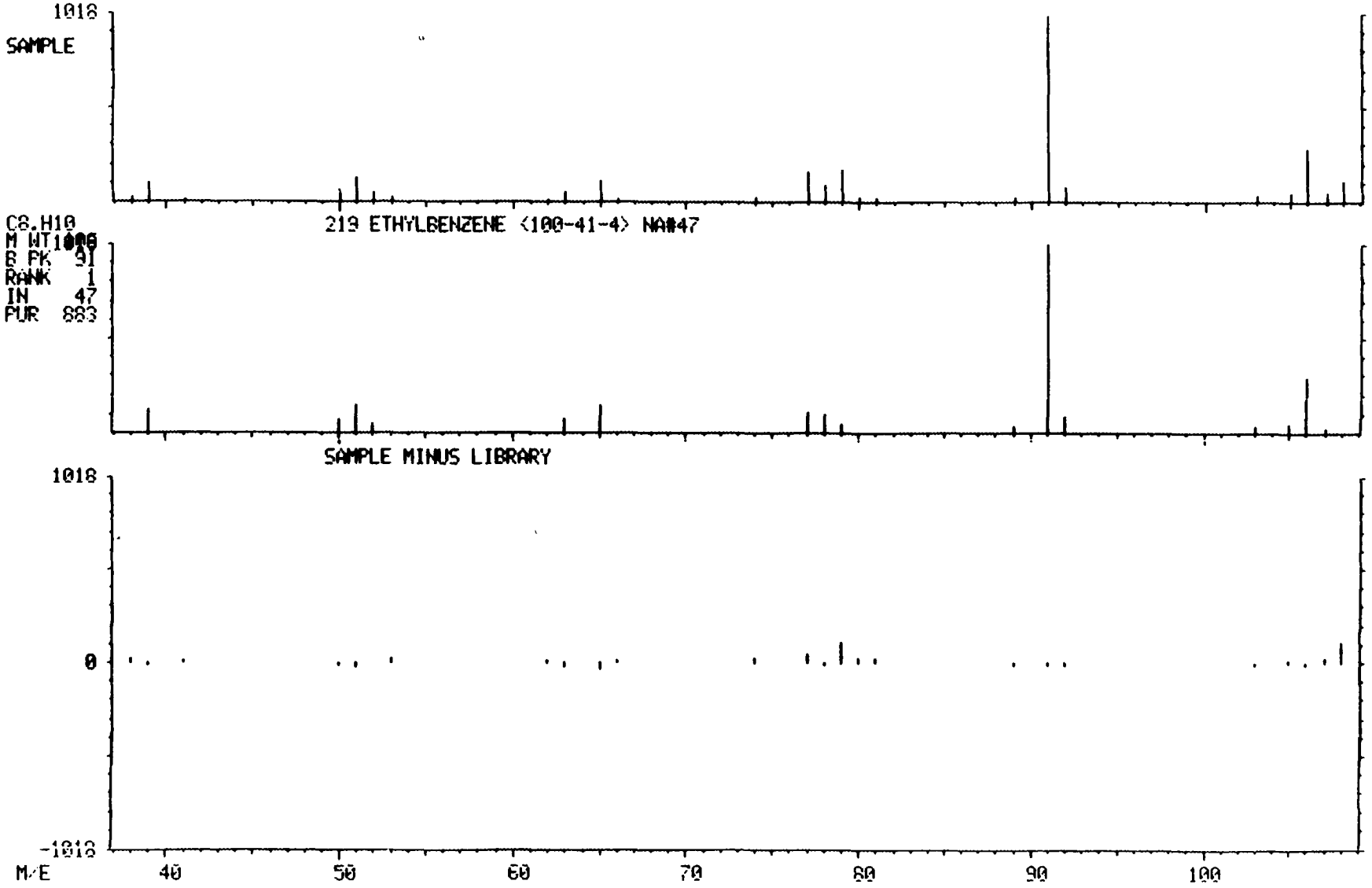


COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 11:40
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DL sad 1/3/90

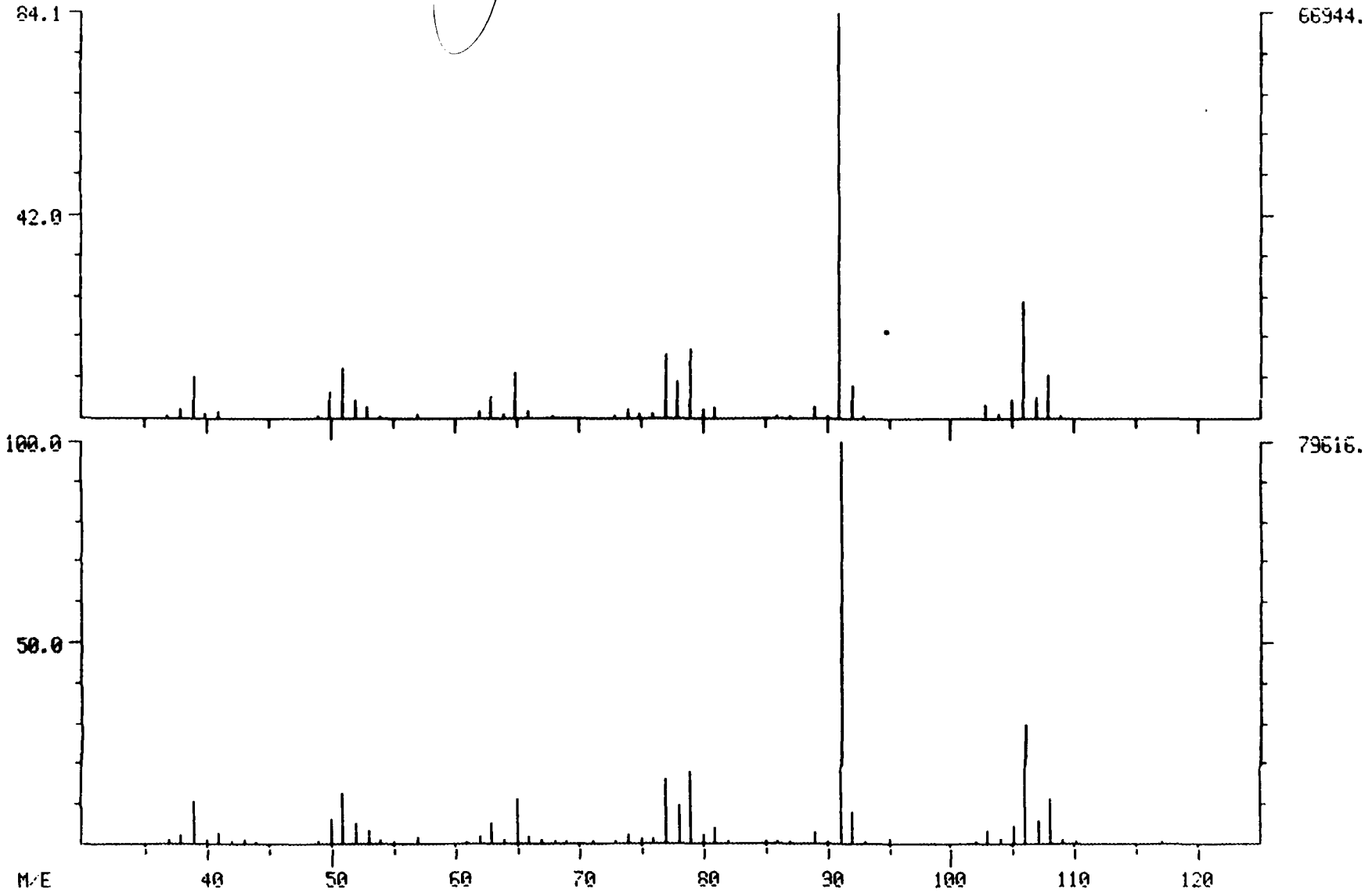
DATA: C3R09687C13 # 933
BASE M/E: 91
RIC: 182527.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 1:52:00 + 11:40
SAMPLE: 30UL CC#303687 EPA#8202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N) 219 ETHYLBENZENE <100-41-4> NA#47

DATA: C3R03687C13 #933 BASE M/E: 91/ 91
RIC: 191743./ 243967.



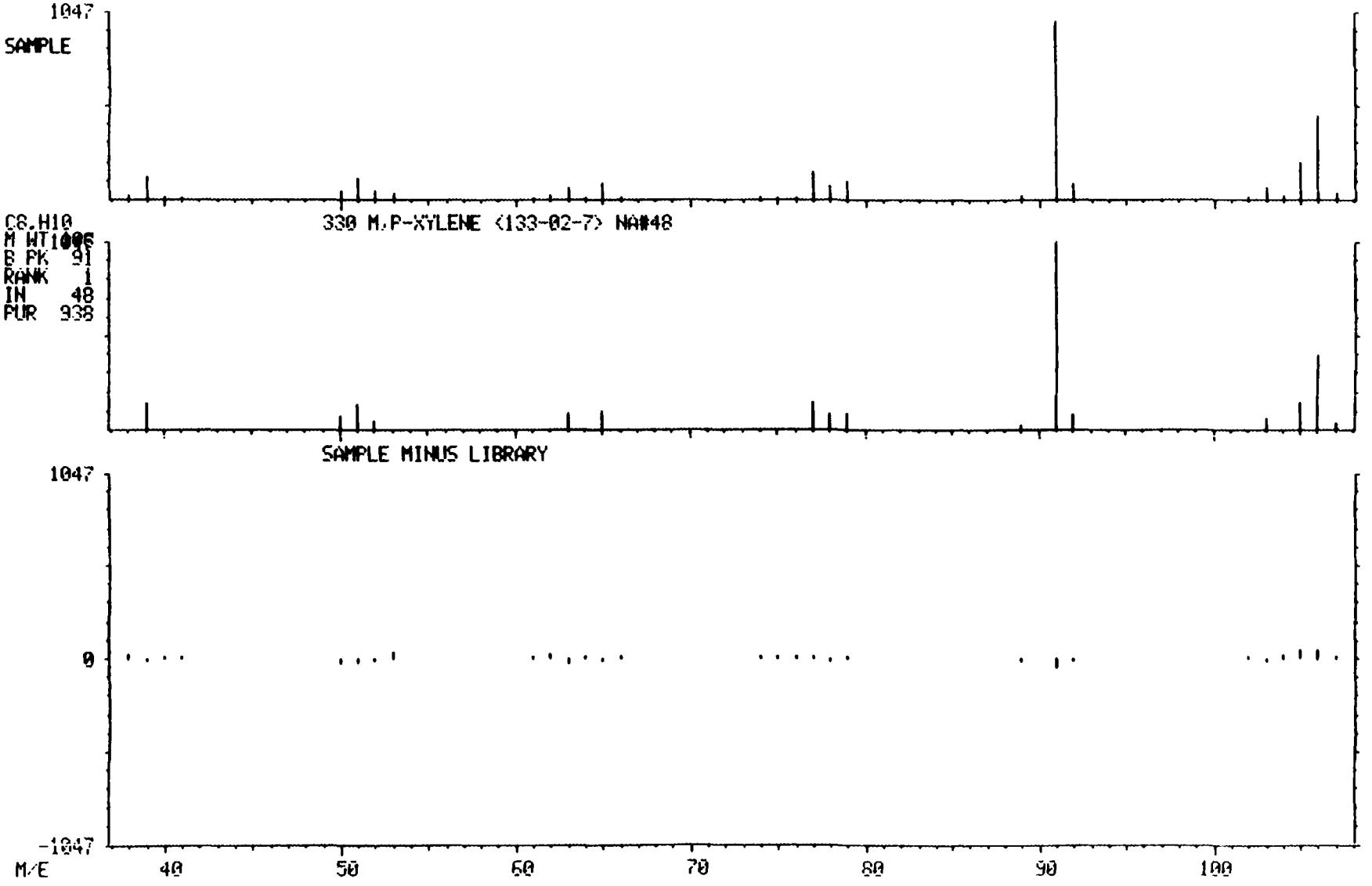
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 11:54
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DL gmh 1/3/90

DATA: C3R09687C13 # 952
BASE M/E: 91
RIC: 312831.

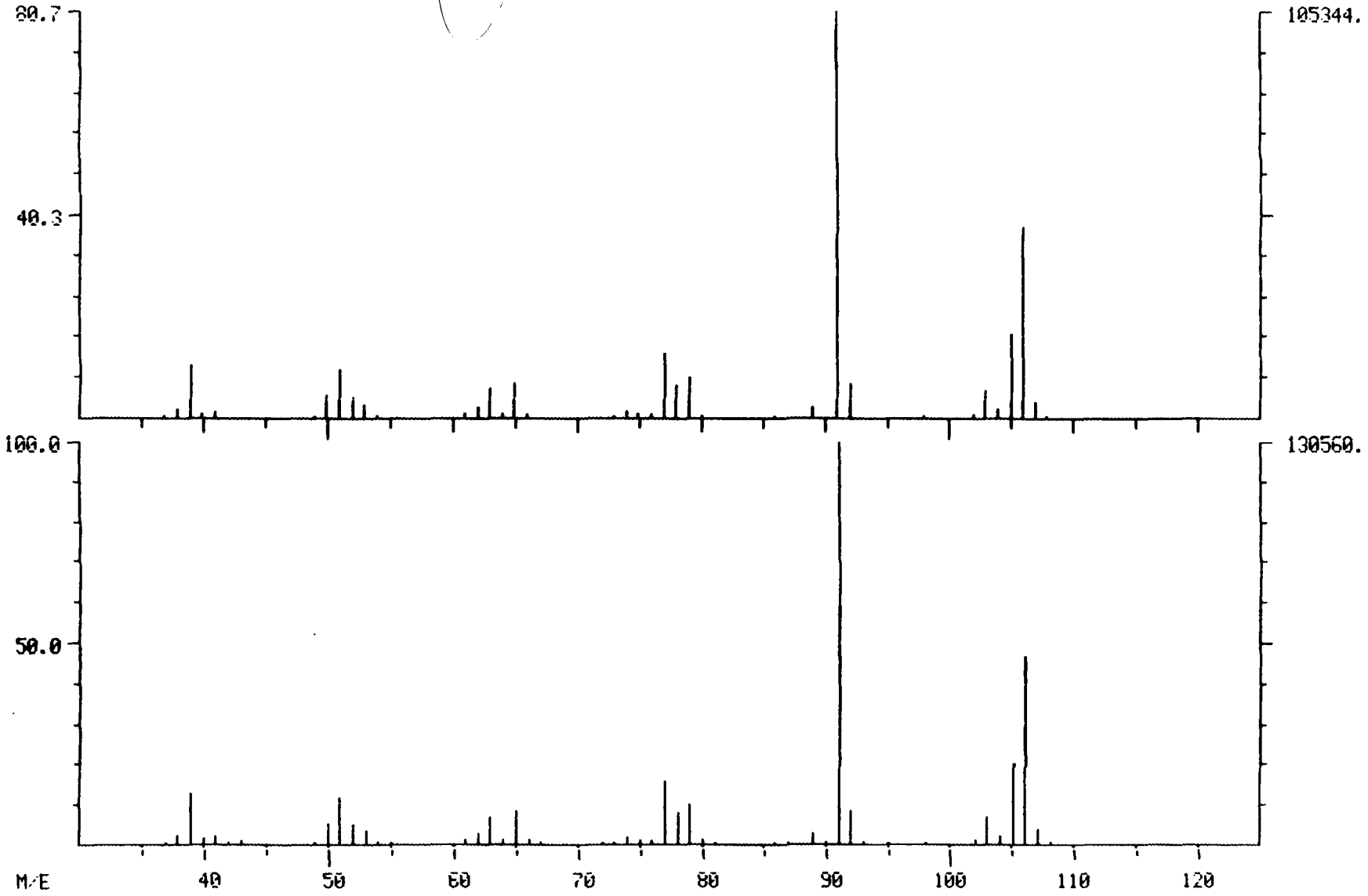


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 1:52:00 + 11:54
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N) 330 M/P-XYLENE <133-02-7> NA#48

DL gmh 1/3/90

DATA: C3R09687C13 #952 BASE M/E: 91/ 91
RIC: 318463./ 401407.

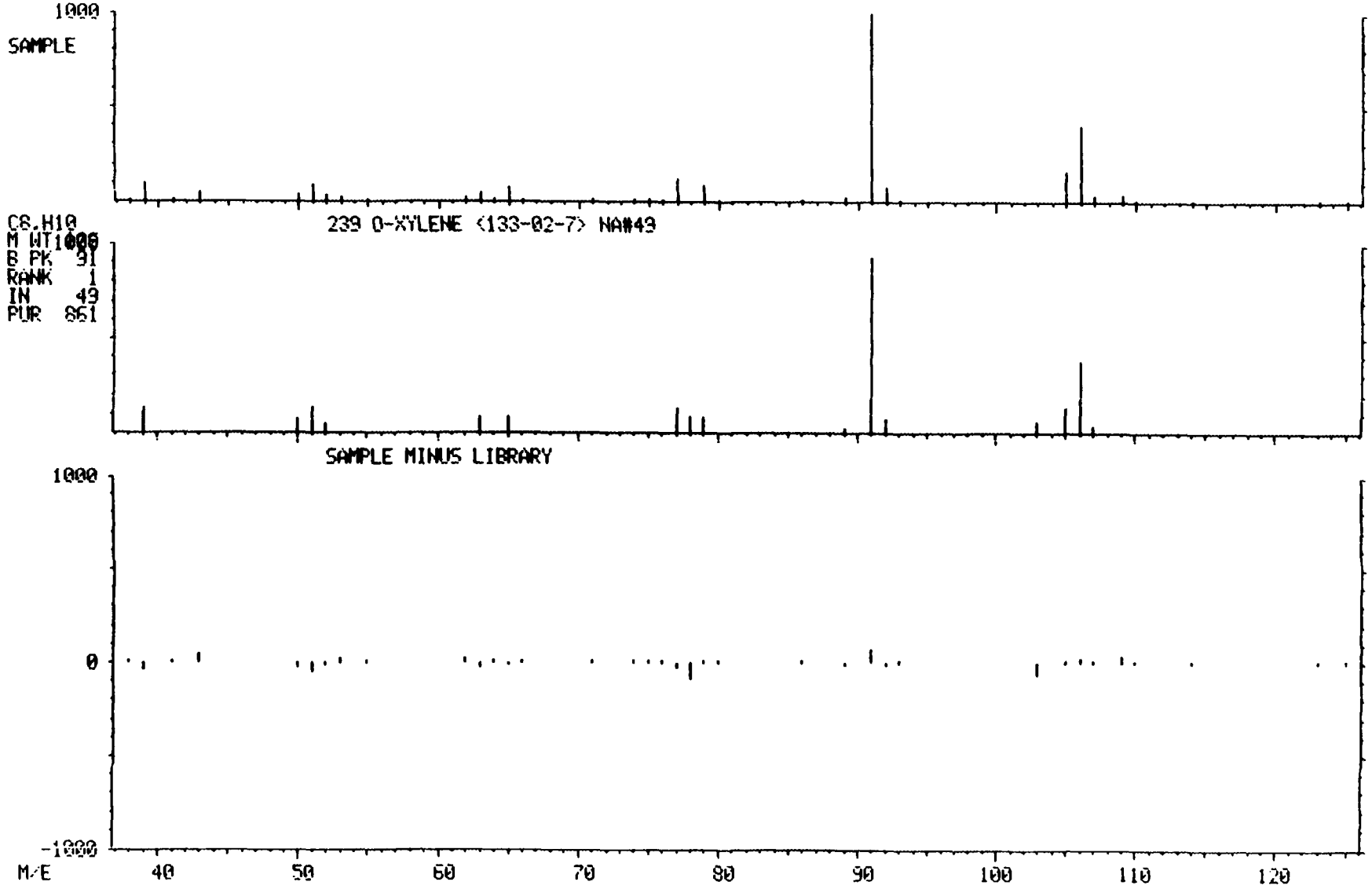


COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 12:34
SAMPLE: 30UL CC#309687 EPA#8202TAR-RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DC 8a#1,3,4d DATA: C3R09687C13 #1006

BASE M/E: 91
RIC: 179967.

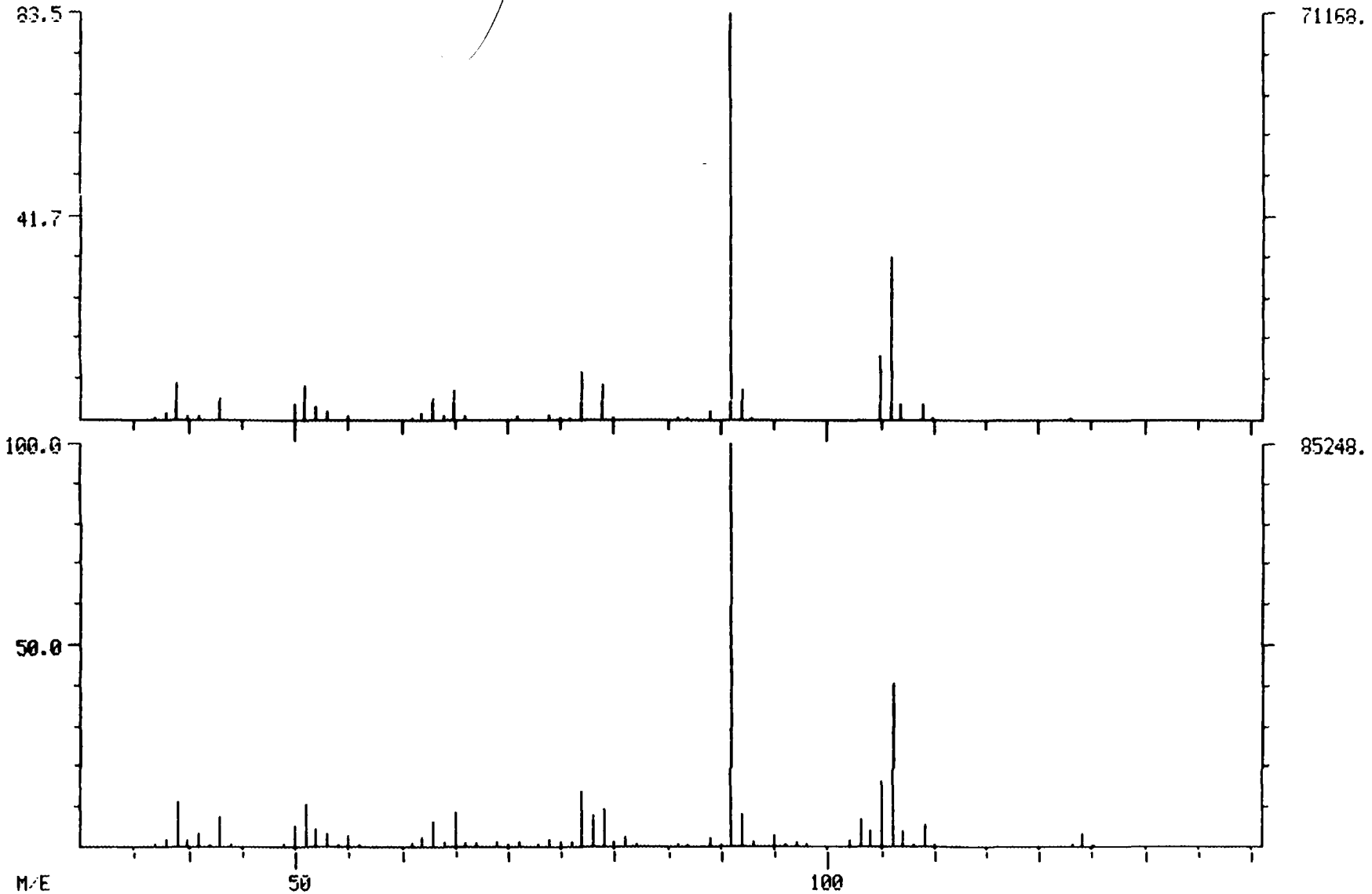


COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 1:52:00 + 12:34
SAMPLE: 30UL CC#309687 EPA#8202TAR BE CASE#18756 ON #13
ENHANCED (S 15B 2N) 239 O-XYLENE (133-02-7) NA#49

DL 1/2/90

DATA: C3R09687C13 #100E BASE M/E: 91 91
RIC: 182527. 274431.



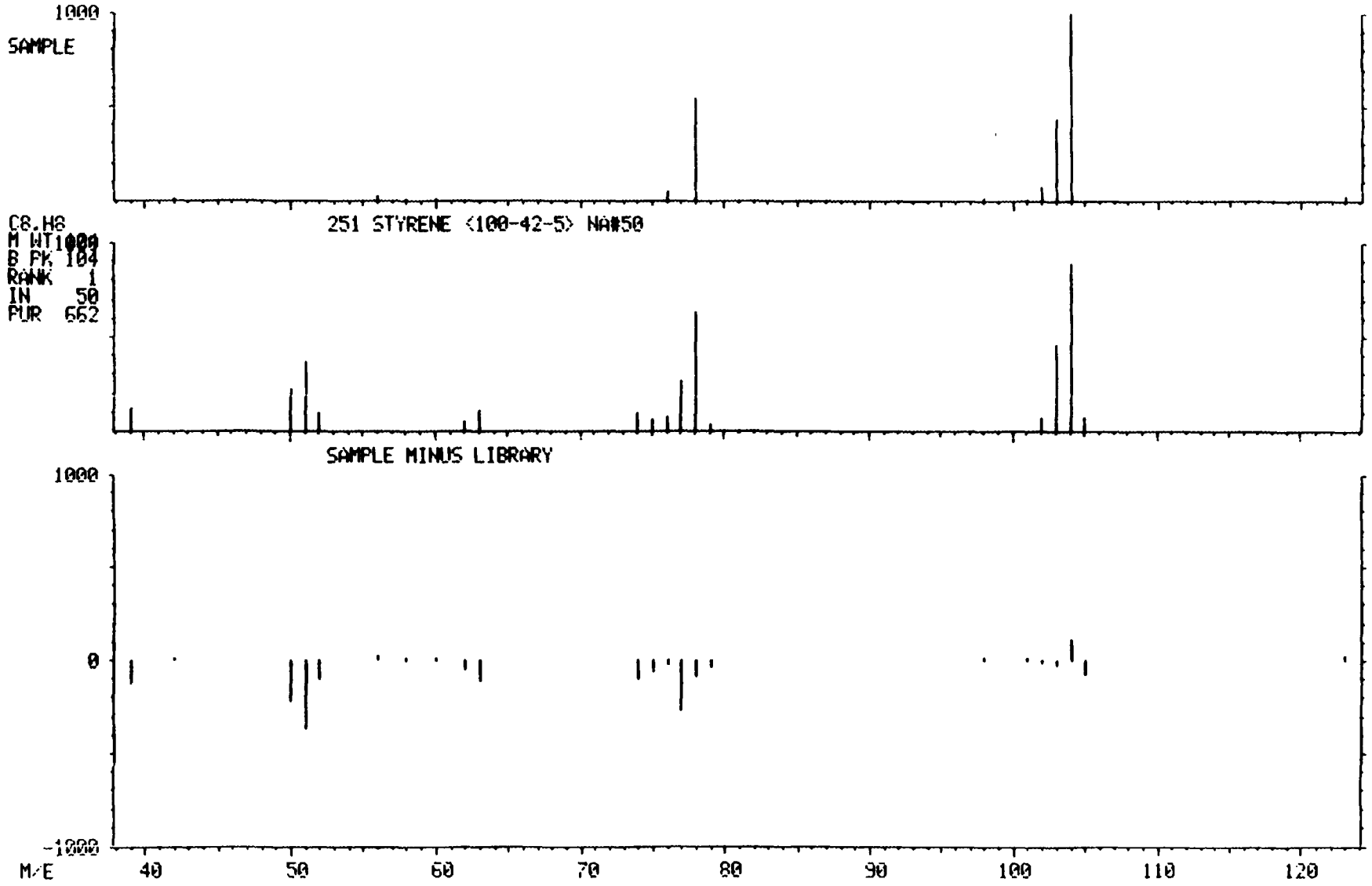
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 12:39
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DL sa# 1/3/90

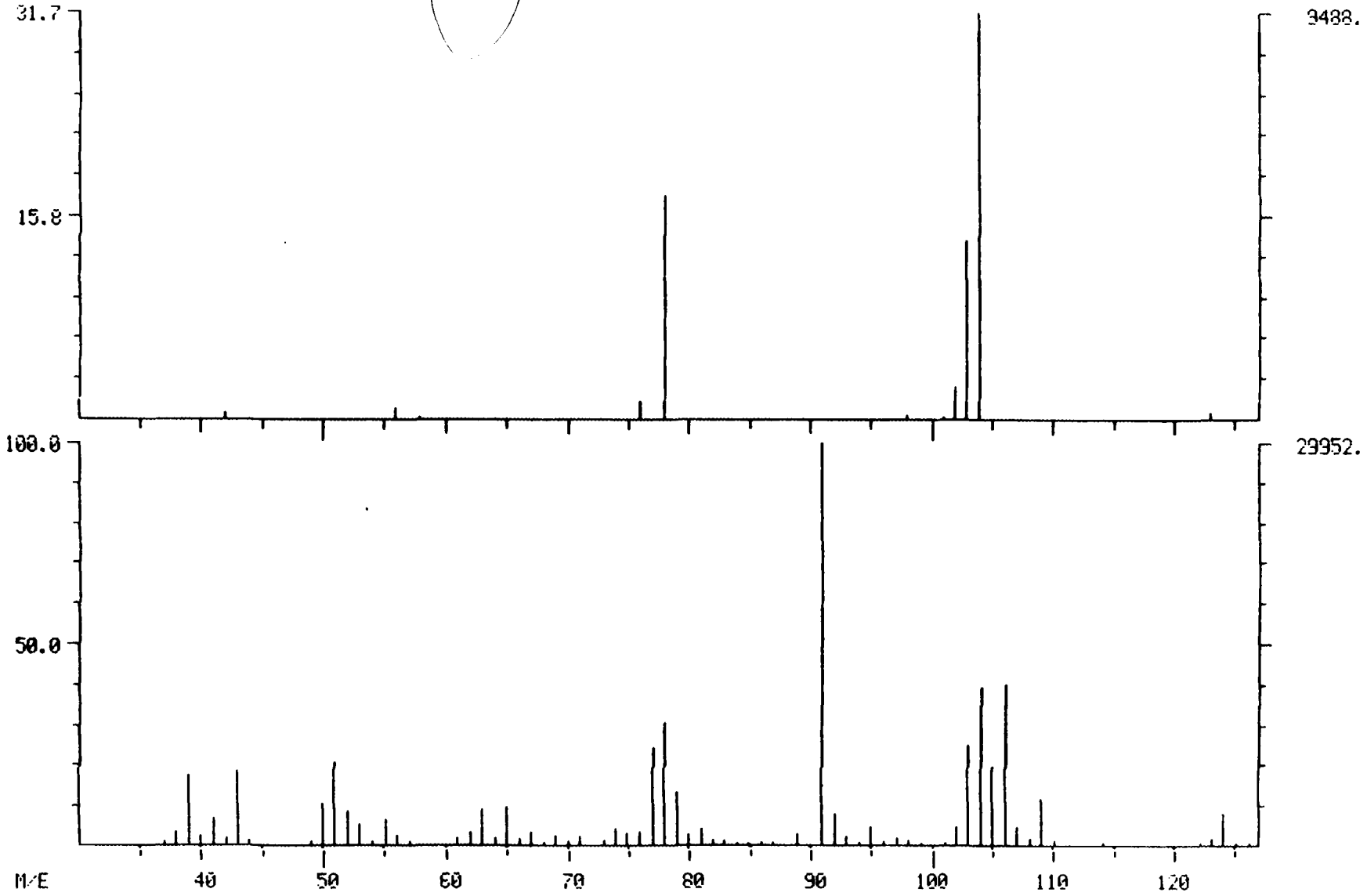
DATA: C3R09687C13 #1012
BASE M/E: 104
RIC: 20863.



COMPUCHEM LABS

DUAL MASS SPECTRUM
12/29/89 1:52:00 + 12:39
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N) 251 STYRENE (100-42-5) NA#50

DATA: C3R09687C13 #1012 BASE M/E: 104/ 91
RIC: 20863./ 154111.



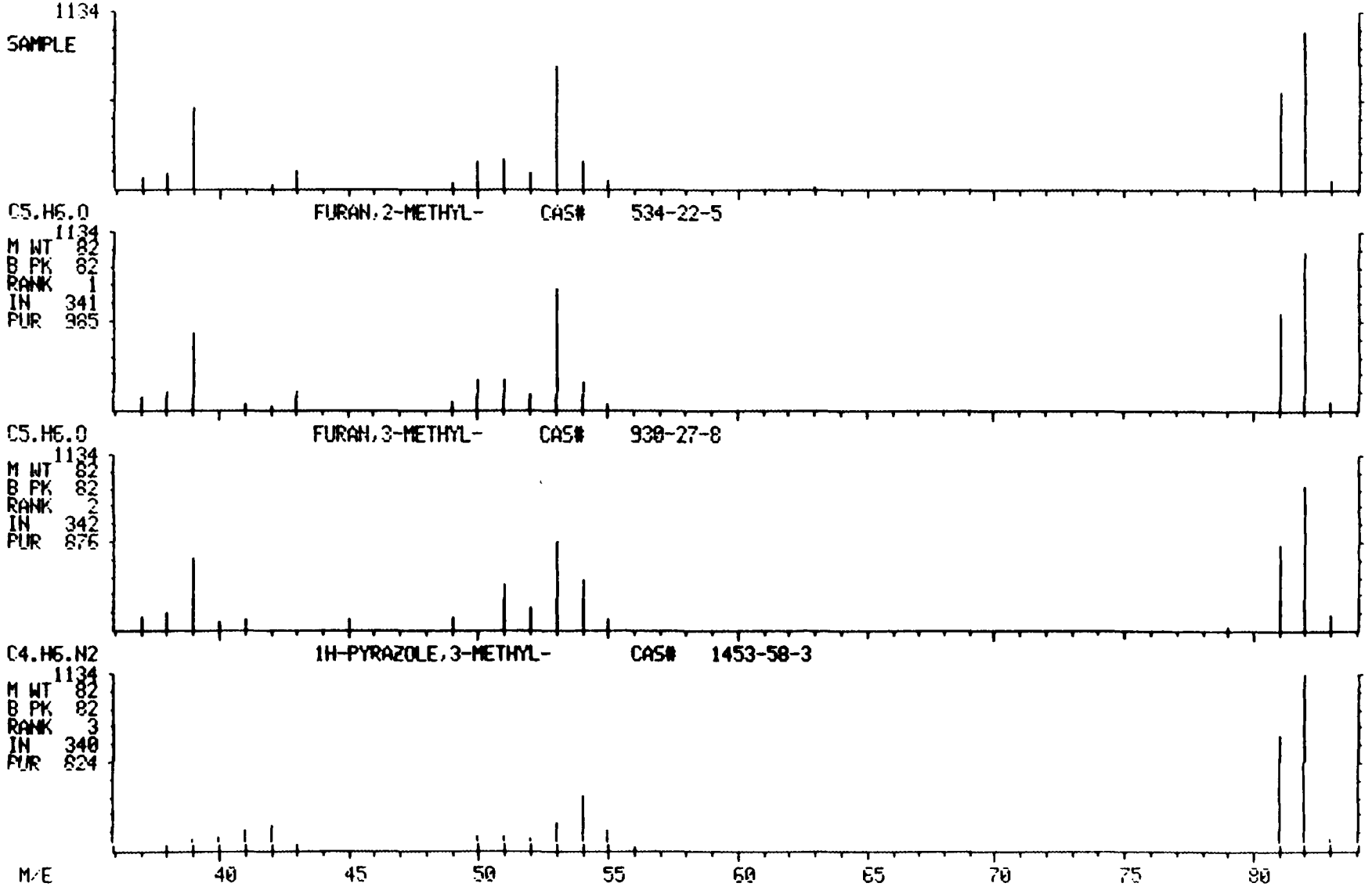
18756 07 SAMPLE DATA PACKAGE

COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 4:13
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0D)

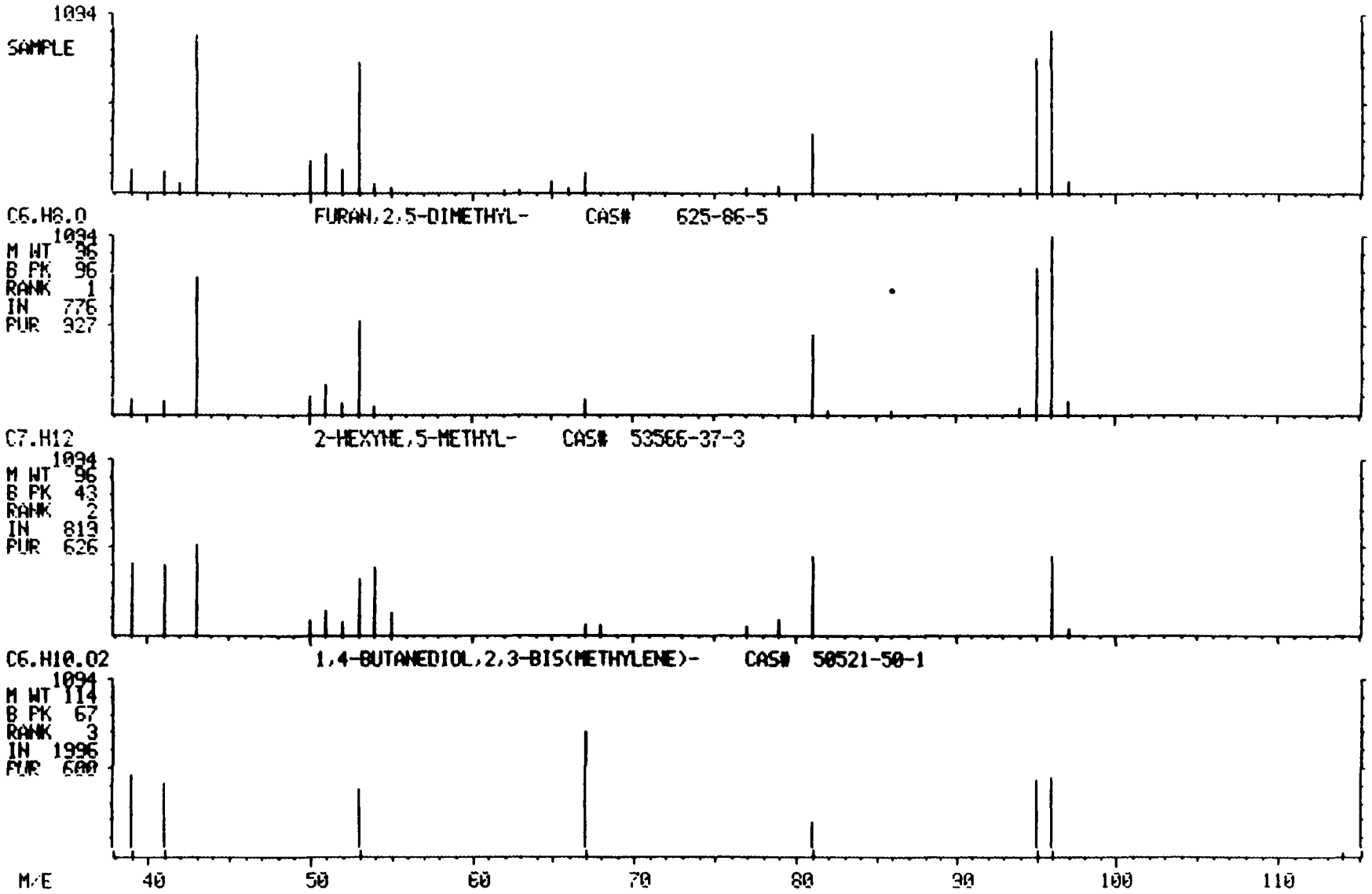
DL 2nd, 1600

DATA: C3R09687C13 # 337
BASE M/E: 82
RIC: 20383.



COMPUCHEM LABS

LIBRARY SEARCH DATA: C3R09687C13 # 573 BASE M/E: 96
12/29/89 1:52:00 + 7:10 DL sad 1/3/90 RIC: 39167.
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

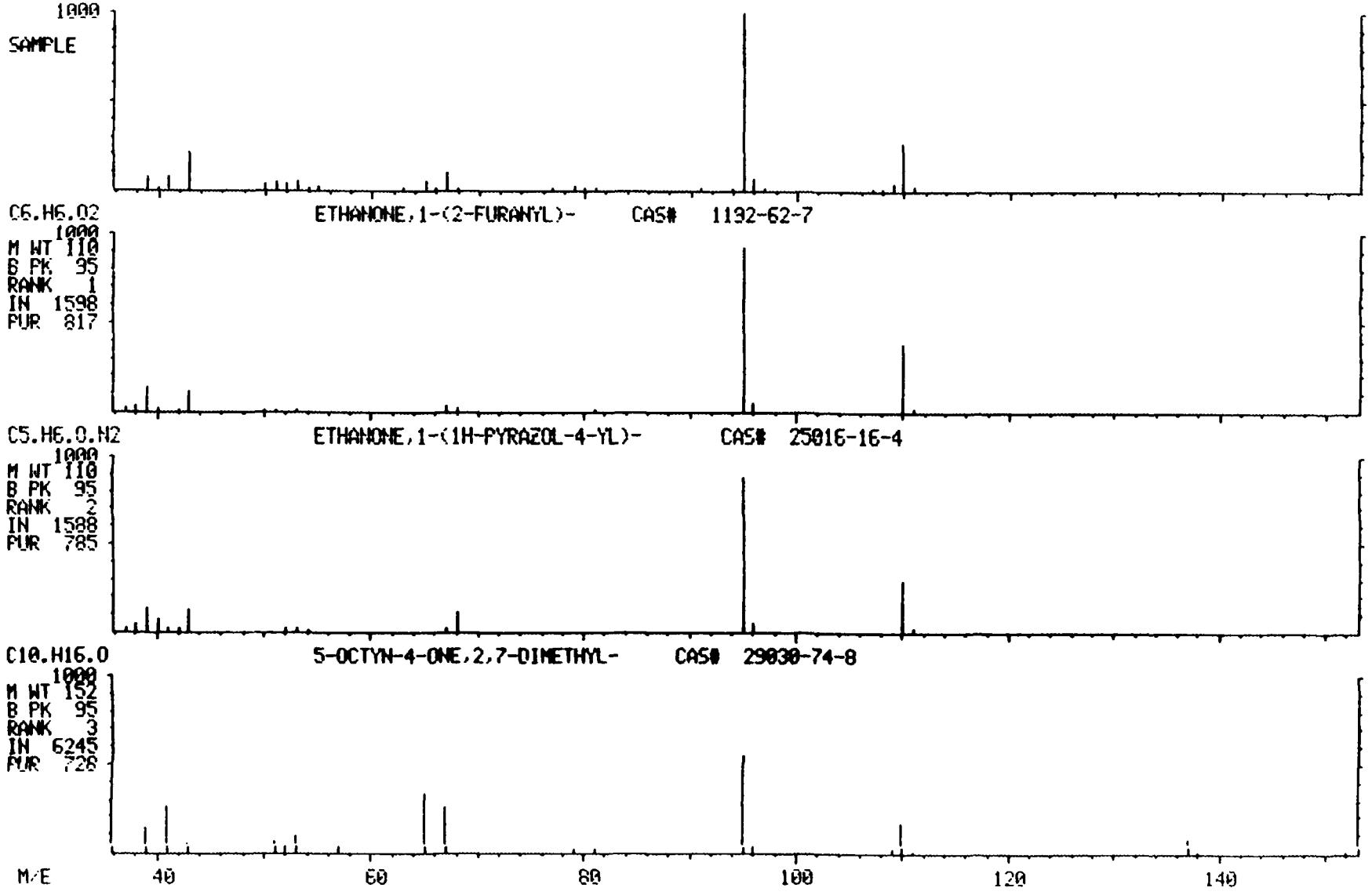


COMPUCHEM LABS

LIBRARY SEARCH
12/23/89 1:52:00 + 9:50
SAMPLE: 30UL CC#309687 EPA#8202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DC 3aN 1/3/90

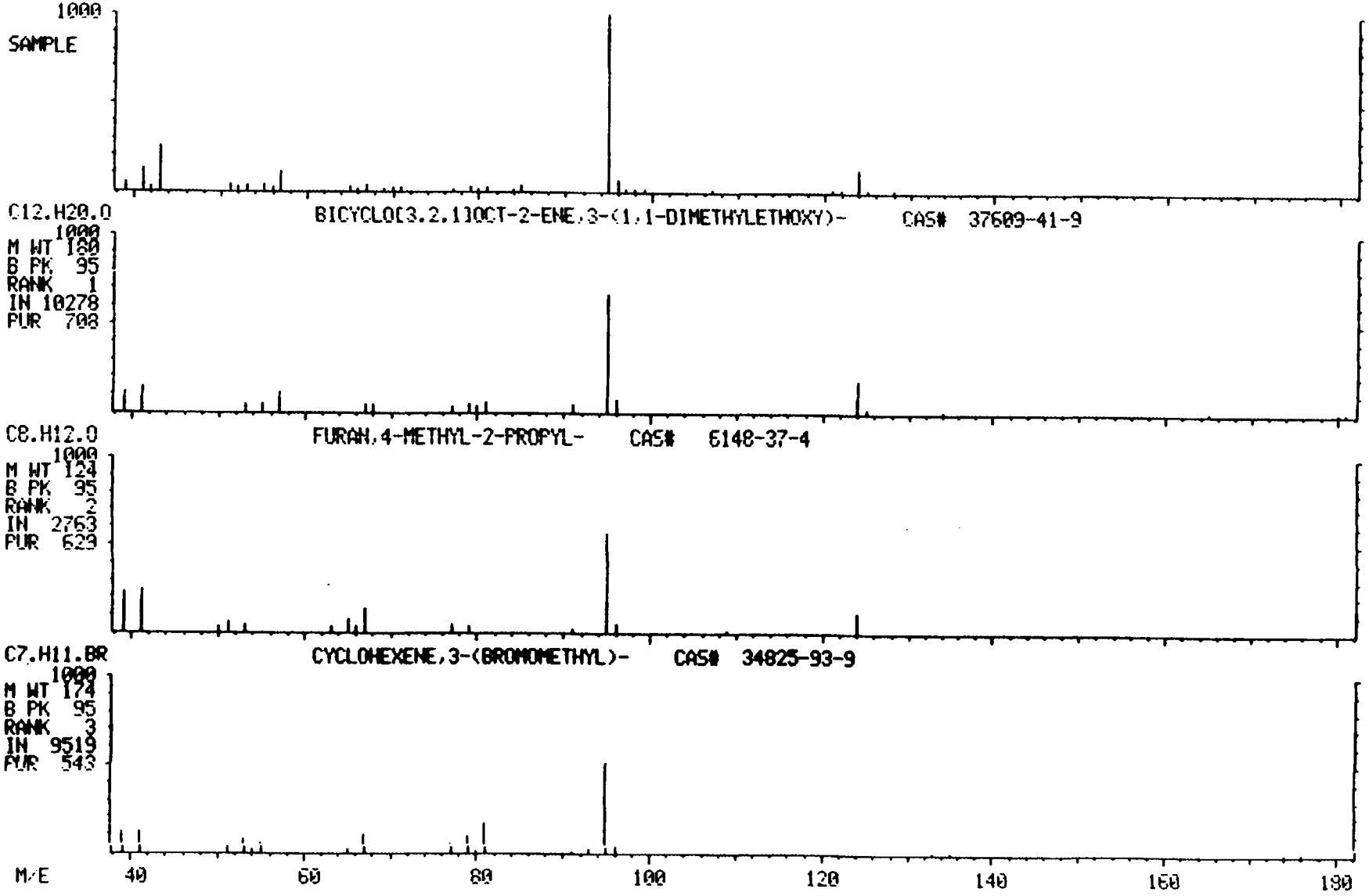
DATA: C3R09687C13 # 787
BASE M/E: 95
RIC: 84607.



COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 12:14 DC 1/3/90
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09687C13 # 979 BASE M/E: 95
RIC: 99967.

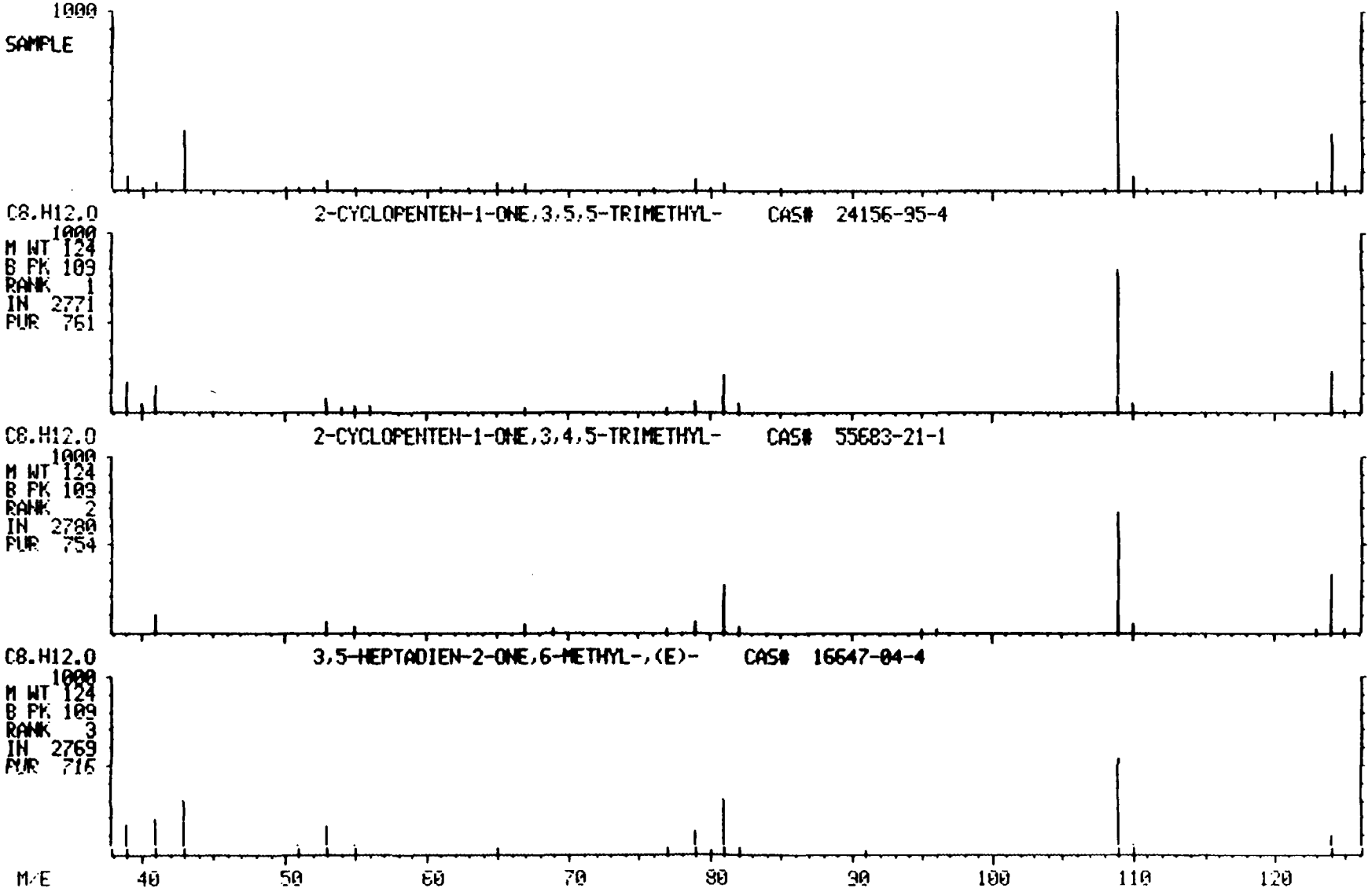


COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 12:49
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DL 9/11/90

DATA: C3R09687C13 #1025
BASE M/E: 109
RIC: 55935.

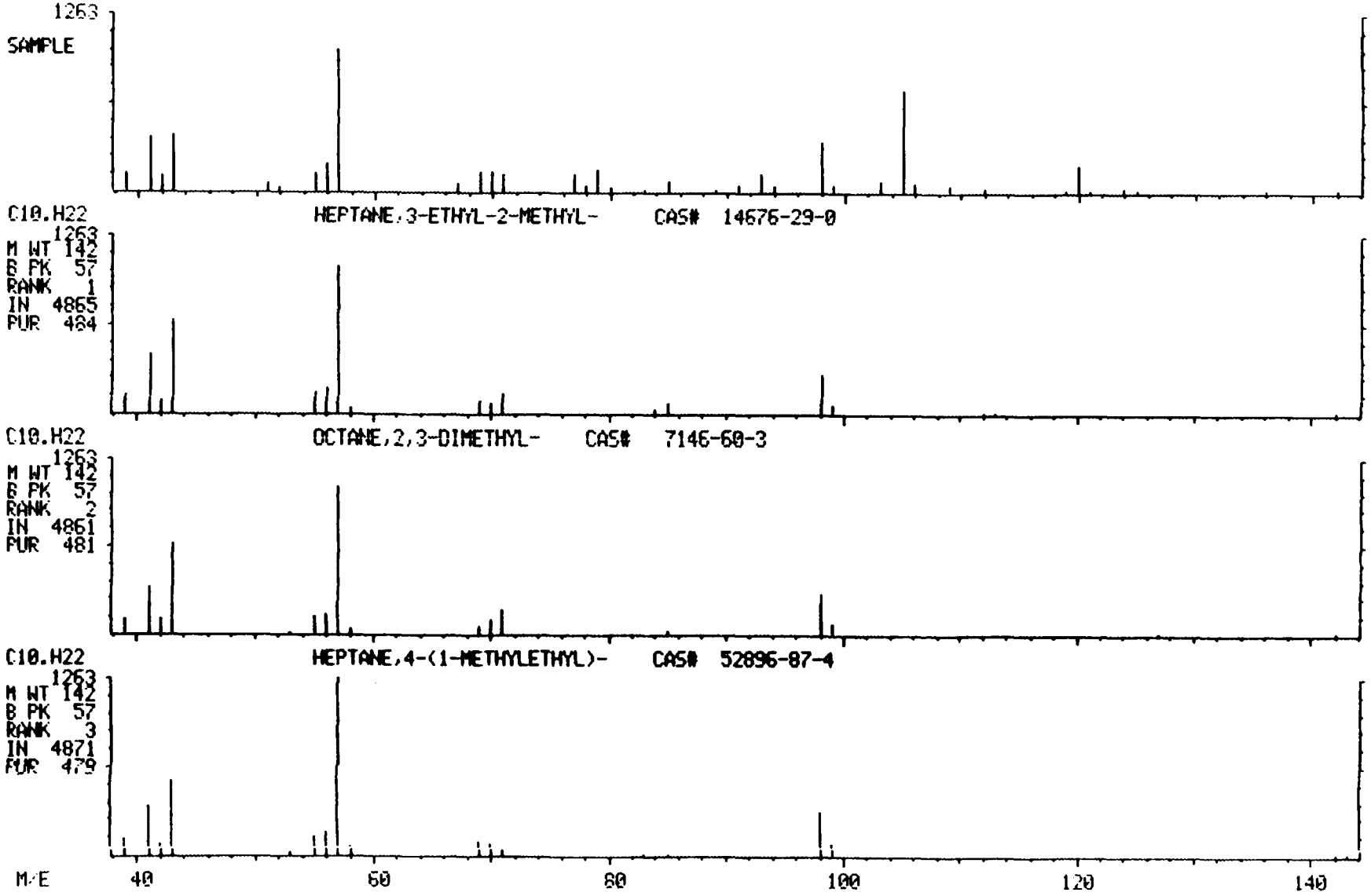


COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 13:13
SAMPLE: 30UL CC#309687 EPA#B202TAR-RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3R09687C13 #1065

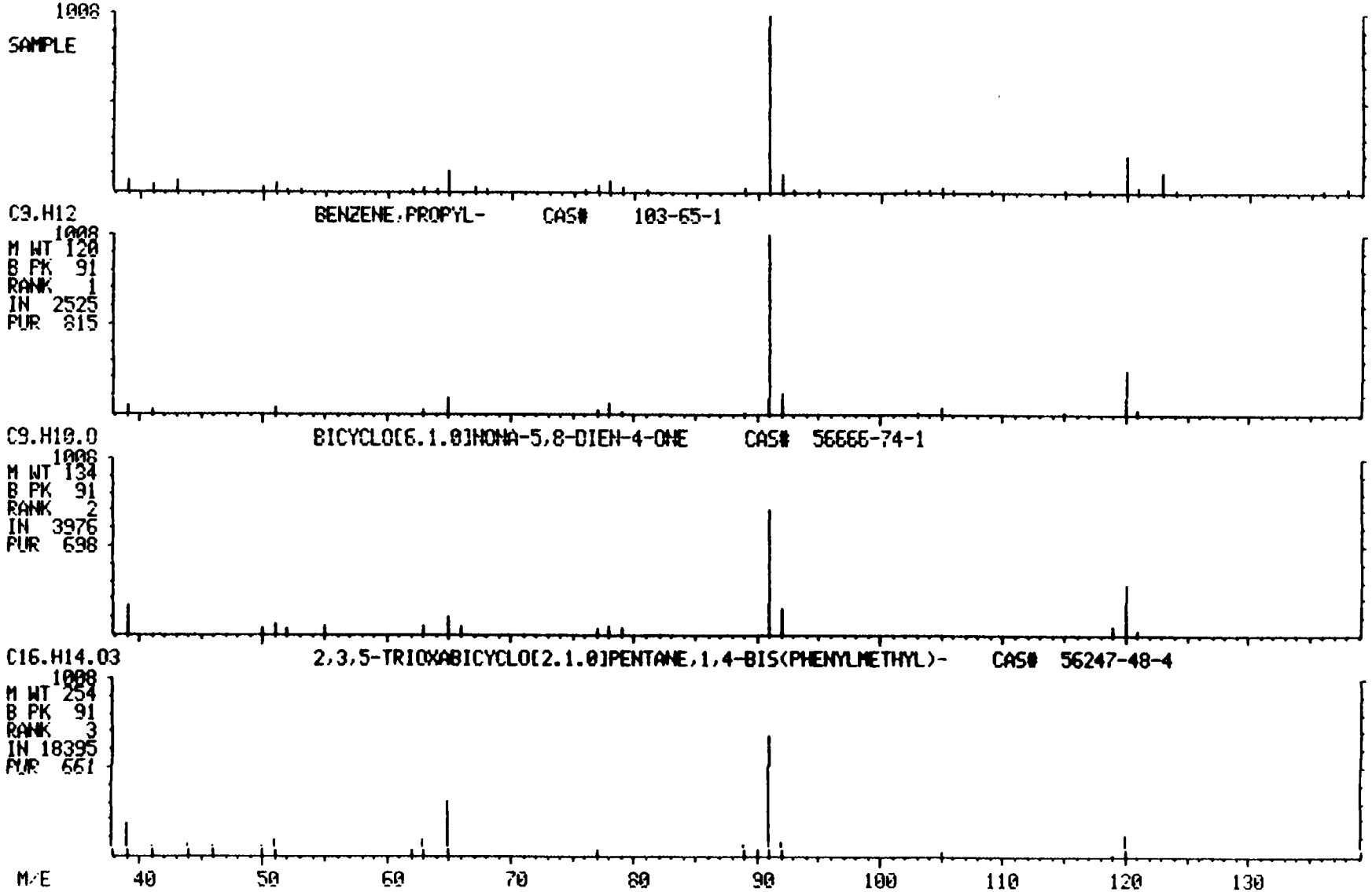
BASE M/E: 57
RIC: 37695.



COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 14:07
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DATA: C3B09687C13 #1129 BASE M/E: 91
RIC: 92415.



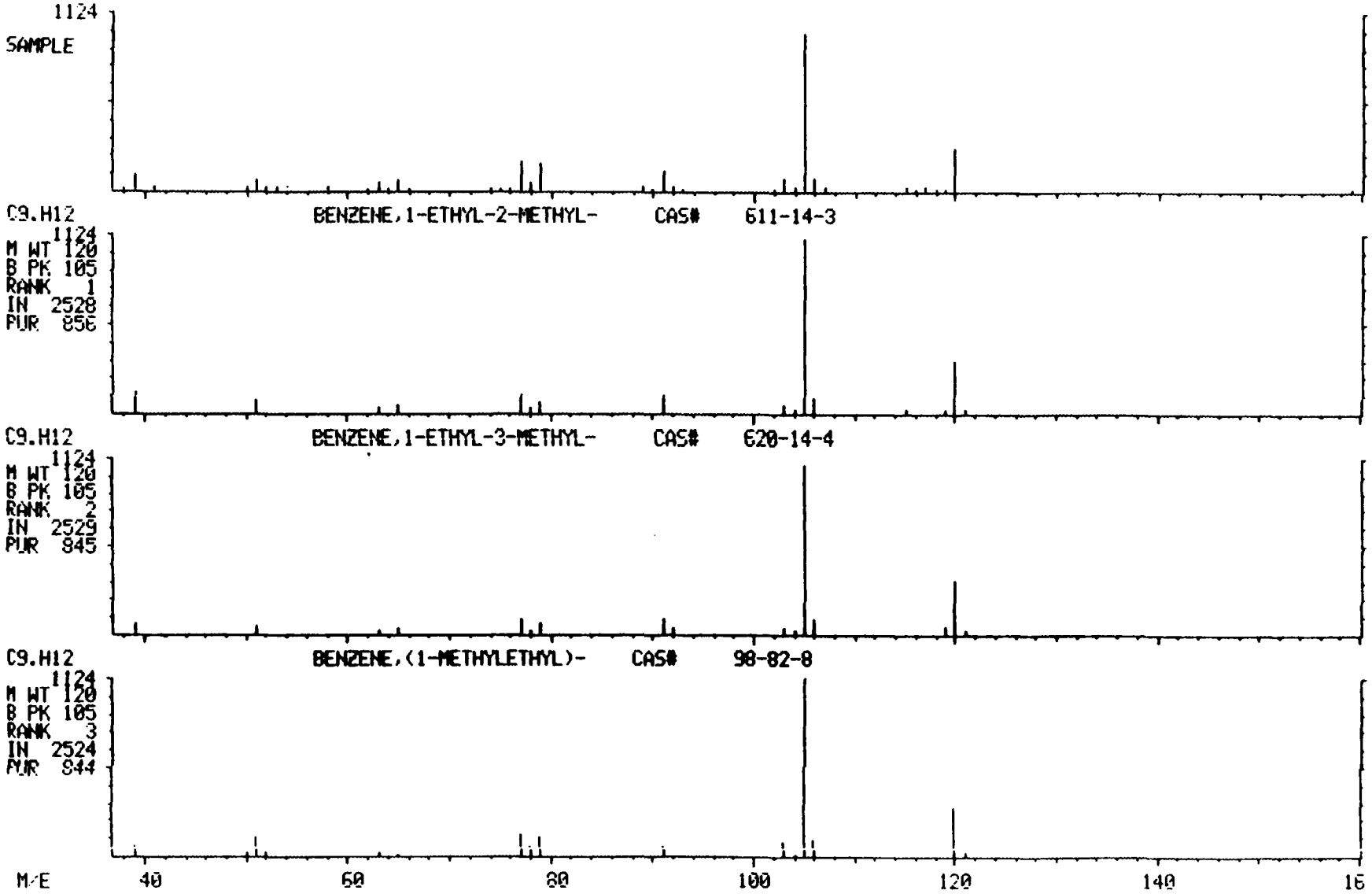
COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 14:21
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DL 5aH, 1/90

DATA: C3R09687C13 #1148

BASE M/E: 105
RIC: 222463.

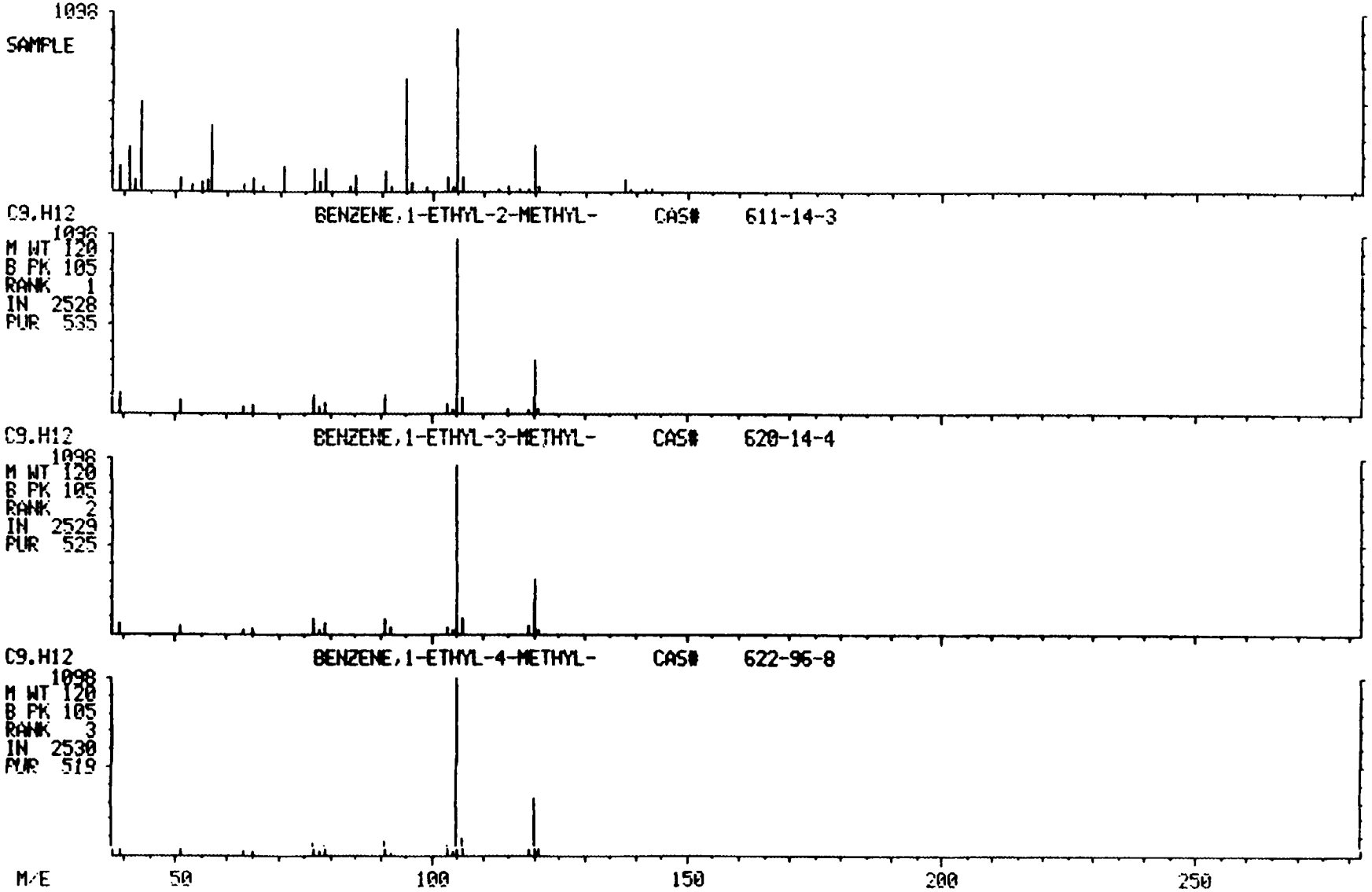


COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 14:43
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DL 9/11/1990

DATA: C3R03687C13 #1186
BASE M/E: 105
RIC: 199935.

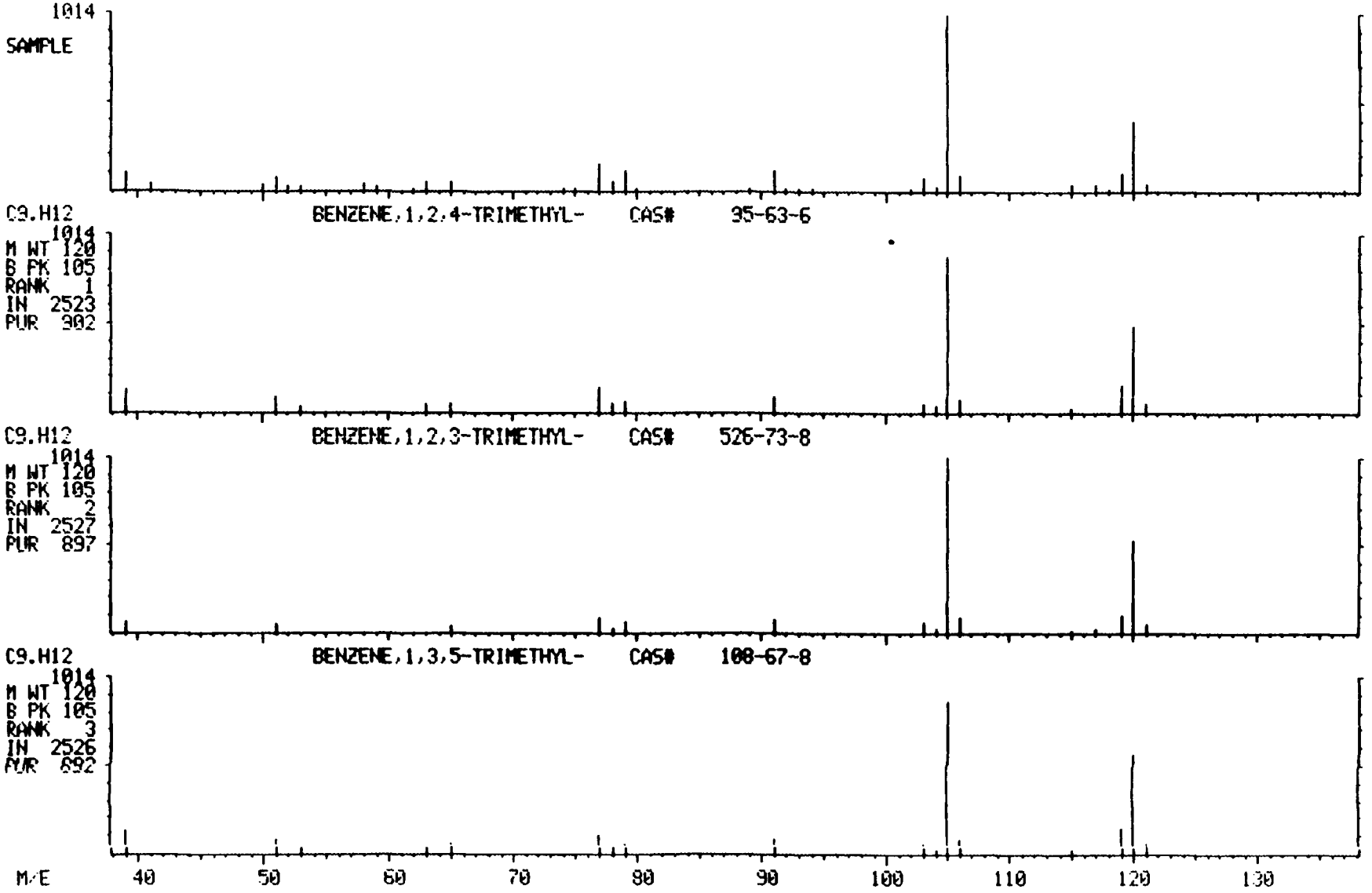


COMPUCHEM LABS

LIBRARY SEARCH
12/29/89 1:52:00 + 15:11
SAMPLE: 30UL CC#309687 EPA#B202TAR RE CASE#18756 ON #13
ENHANCED (S 15B 2N 0T)

DL 5aN,1bHd DATA: C3R09687013 #1215

BASE M/E: 105
RIC: 269823.



18756 07 SAMPLE DATA PACKAGE 1107

AR INSTRUCTIONS:

RECEIPT DATE _ _ CASE#: 18756 DUE DATE

VOA
C/MS WORKSHEET COMPUCHEM#: 309687R3

R1[ ] R2[ ] D (:1)
R3[ ] R4[ ] D2[ ] (:1)

MED. SOLID, EPA SOW 2/87

Sample Prep Code---156
Instrument Code----414
Compound List------495
Surrogate Std------394
Internal Std-------036

SAMPLE ID#: B20ZTARRE Dry Wt. Factor 2.78 % Moisture 64

GC/MS ANALYSIS
Amount Purged: [ ] 10mls/Xg soil or [ ]Dilution 30 ul/10000ul/Xg soil
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
VFB Filename RG891228A15 Disk( )
Blank Filename CV011246B13 Disk ( )
Standard Filename CI891228B13 Disk ( )
Sample Filename C3R09687B13 Disk ( )

JAN 04 1990

ANALYST(S): Injection [illegible] Work-up [illegible]

GC/MS REVIEW

CONDITION CODE: DA

Entry Codes OK,EA,ES,SM,JS,SL,SH,JA,DA

Non-Entry Codes IM,IL,IH,SW,CT,CS,PC,NR
IF,LA,DI,CO,RN,DW,SI,SF
UP,BB,OT,VC,FO,NS

Disposition: [ ] Complete

Extraneous Peak Search Results:
# of Peaks Found: 10

[ ] Reprep neat required

[ ] Reprep using _____g

Quality Assurance Notice(s):
Notices Required 1

[ ] Dilute (:1)

COMMENTS:

GC/MS Review [signature] Date 1/3/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: _____
Final Reportable Package(s): C3R09687B13 / C6R09687C13

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC1010 (4/89)

VOLATILE PREPARATION WORKSHEET

QUEUE # 19 PREP CODE 156 ASSIGNED TO Harshad Joshi DATE 12/27/89

SAMPLE NUMBER	CASE NUMBER	SDG	QC SAMPLE TYPE	QC SAMPLE ORIGINAL	SAMPLE WEIGHT (G) VOLUME (ML)	SAMPLE ID	COMMENTS
310062R	18765	0014			4.0g	E-7R #1	
311233	↓	↓	SS	310062	4.0g	E-7R #1 MS	
311234			SS	310062	4.0g	E-7R #1 MSD	
311235	↓	↓	BS		10.0ml		
309686R	18756	7			4.0g	B201B	
309687R	↓	↓			4.0g	B202TBR	
311246			B1		10.0ml	H_1	
311247			B2		10.0ml	H_2	
			B3				
			B4				
			B5				

SURROGATE # 394 LOT # 30784 MANUAL OPERATOR 742 / 265

AMOUNT 0.5 ml

RELINQUISHED BY [illegible] DATE 12/27/89 RECEIVED BY Alan Funk DATE 12/27/89

PASSED

COMPUCHEM # R09687 FILE: C3R09687C13 COMPOUND LIST 495 PAGE

VOLATILE - MEDIUM LEVEL SOLID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT. LIMIT (UG/KG)
234	128	I	BROMOCHLOROMETHANE (IS)	397	49600	50.0		
221	50		CHLOROMETHANE				BDL	420
231	62		VINYL CHLORIDE				BDL	420
220	94		BROMOMETHANE				BDL	420
209	64		CHLOROETHANE				BDL	420
216	96		1,1-DICHLOROETHENE				BDL	210
254	76		CARBON DISULFIDE				BDL	210
252	43		ACETONE (2-PROPANONE)			13.2	~~BDL~~	420
248	114	I	1,4-DIFLUOROBENZENE (IS)	530	173000	50.0		
222	84		METHYLENE CHLORIDE			14.1	~~5900~~	210
226	96		TRANS-1,2-DICHLOROETHENE				BDL	210
214	63		1,1-DICHLOROETHANE				BDL	210
257	43		VINYL ACETATE				BDL	420
237	96		CIS-1,2-DICHLOROETHENE				BDL	210
253	72		2-BUTANONE				BDL	420
211	83		CHLOROFORM				BDL	210
227	97		1,1,1-TRICHLOROETHANE				BDL	210
206	117		CARBON TETRACHLORIDE				BDL	210
203	78		BENZENE			4.3	~~1800~~ J D	210
215	62		1,2-DICHLOROETHANE				BDL	210
270	117	I	D5-CHLOROBENZENE (IS)	906	250000	50.0		
229	130		TRICHLOROETHENE				BDL	210
217	63		1,2-DICHLOROPROPANE				BDL	210
212	83		BROMODICHLOROMETHANE				BDL	210
218	75		CIS-1,3-DICHLOROPROPENE				BDL	210
256	43		4-METHYL-2-PENTANONE			~~2.4~~	~~1000~~ J DL	420
225	92		TOLUENE			91.3	~~38000~~ D	210
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	210
228	97		1,1,2-TRICHLOROETHANE			~~1.9~~	~~790~~ DL	210
224	164		TETRACHLOROETHENE				BDL	210
255	43		2-HEXANONE				BDL	420
208	129		DIBROMOCHLOROMETHANE				BDL	210
207	112		CHLOROBENZENE				BDL	210
219	106		ETHYLBENZENE			90.4	~~38000~~ D	210
330	106		M,P-XYLENE			148.0	~~52000~~ D	210
239	106		O-XYLENE			98.9	~~41000~~ D	210
251	104		STYRENE			19.5	~~8100~~ D	210
205	173		BROMOFORM				BDL	210
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	210
258	65	S	D4-1,2-DICHLOROETHANE NA#57			16.5	110.%	
247	95	S	BROMOFLUOROBENZENE			16.6	111.%	
233	98	S	D8-TOLUENE NA#59			12.4	83.%	
289	106		XYLENES (TOTAL)			247.0	~~100000~~	210

CORRECTED/REVIEWED BY

(GC/MS DATA REVIEWER)

DATE 12/31/89

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/KG)	DETECT. LIMIT (UG/KG)
299	96	1,	2-DICHLOROETHENE (TOTAL)				BDL	210
CHECKSUMS: 3979.				1833	472600.	913.3	296894.	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12/31/87

VOLATILE - MEDIUM LEVEL SOLID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE NA#57	16.5	15.0	110.	70-121	X	
41	247	BROMOFLUOROBENZENE	16.6	15.0	111.	74-121	X	
42	233	D8-TOLUENE NA#59	12.4	15.0	83.	81-117	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{4.0\ G}{\text{WET WEIGHT OF SAMPLE (G)}} \times \text{LIBRARY ADJUSTMENT} \times \text{DRY WEIGHT FACTOR} \times \frac{10000\ UL}{UL\ USED} =$$

$$\frac{4.0\ G}{4.00\ (G)} \times \frac{1.25}{} \times \frac{2.78 \text{ ~~1.00~~}}{} \times \frac{10000\ UL}{30.\ UL} = \text{~~417.000~~ } 1160$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

$$\frac{100.\ UL}{UL\ USED} =$$

$$\frac{100.\ UL}{30.\ UL} = 3.3$$

VERSION 8

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 12/20/07

LABORATORY NOTICE
COMPUCHEM ID # 309687
CLIENT ID # 8202TAR
CASE # 18756

The volatile fraction of this sample was prepared and analyzed as both a Low Level Solid and a Medium Level Solid. The initial analysis of 1 g sample from the Low Level preparation indicated that a Medium Level analysis was necessary in order to bring target compound concentrations into the instrumental analytical range. The analysis of 30 ul of the Medium Level extract proved to be an acceptable dilution. However, the following table of results shows that the concentrations for these analytes did not compare well.

Target Compound	Reported Concentration, ug/Kg 1 g Low Level		30 ul Medium Level Extract*
acetone	3500		15000
2-butanone	5000		BDL
benzene	1200		5000
toluene	8600	*	110000
2-hexanone	12000	*	BDL
ethylbenzene	8000	*	100000
m,p-xylene	7400	*	170000
o-xylene	7900	*	110000
styrene	2300		23000

*estimated concentration of saturated compound
BDL - Below Detection Limit

We have concluded that these differences are due to a combination of sample inhomogeneity and the difference between the Low Level purge and trap and the Medium Level extraction procedure. In addition, because of the magnitude of the dilution, the 2-butanone and 2-hexanone are being reported only from the Low Level analysis, even though their concentrations are outside their analytical ranges. The data is being reported with reference to this qualifier.

Sarah A. Hubbard
Senior Volatile Data Specialist
January 3, 1990

QA Approval #1010
Linda Fowler
Employee #820
Sr. Quality Assurance Specialist
January 3, 1990

C. STANDARDS DATA

(1) Initial Calibration Data (Form VI VOA) - in order by instrument if more than one intrument used.

(a) VOA standard (s) reconstructed ion chromatograms and quantitation reports (or legible facsimile) for the initial (five point) calibration. Spectra are not required.

(b) All initial calibration data must be included , regardless of when it was performed and for which case. When more than one initial calibration is performed , the data must be put in chronological order , by instrument.

(2) Continuing Calibration (Form VII VOA) - in order by instrument , if more than one instrument used.

(a) VOA standard (s) reconstructed ion chromatograms and quantitation reports (or legible facsimile) for all continuing (12 hour) calibrations. Spectra are not required.

(b) When more than one continuing calibration is performed, forms must be in chronological order , within fraction and instrument.

(3) Internal Standard Area Summary (Form VIII VOA) - in order by instrument , if more than one instrument used.

When more than one continuing calibration is performed , forms must be in chronological order , by instrument.

(1) Initial Calibration Data (Form VI VOA) - in order by instrument if more than one instrument used.

(a) VOA standard(s) reconstructed ion chromatograms and quantitation reports (or legible facsimile) for the initial (five point) calibration. Spectra are not required.

(b) All initial calibration data must be included, regardless of when it was performed and for which case. When more than one initial calibration is performed, the data must be put in chronological order, by instrument.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

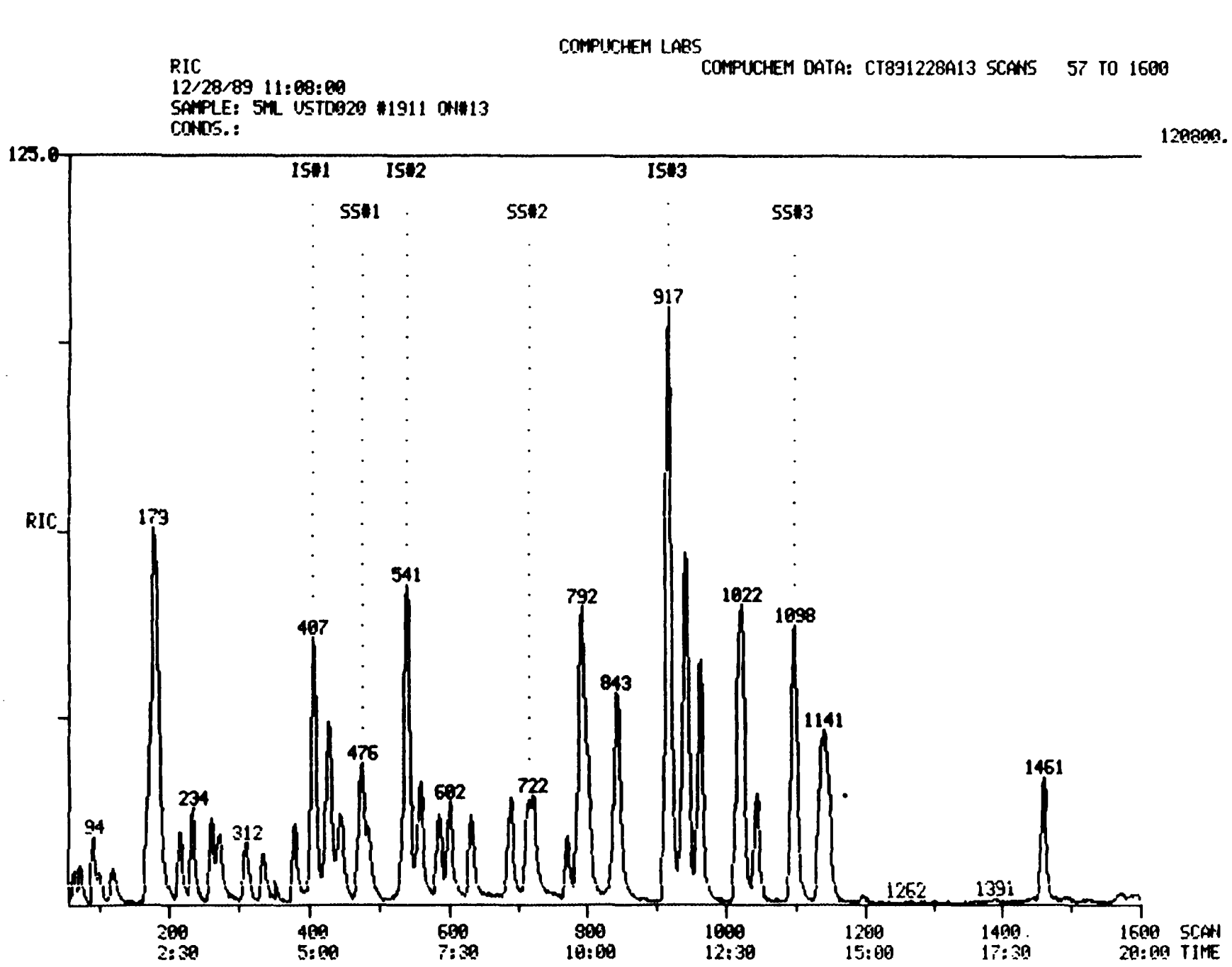
Instrument ID: 13 Calibration Date(s): 12/28/89 12/28/89

Matrix:(soil/water) SOIL Level:(low/med) MED Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = CT891228A13 RRF50 = CV891228A13
RRF100= CW891228A13 RRF150= CU891228A13 RRF200= CS891228A13

COMPOUND		RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
Chloromethane	#	0.922	0.670	0.512	0.672	0.871	0.729	22.9	#
Bromomethane		1.421	1.124	0.895	1.062	1.106	1.122	17.0	
Vinyl Chloride	*	1.079	0.833	0.646	0.869	1.059	0.897	19.9	*
Chloroethane		0.688	0.574	0.465	0.536	0.556	0.564	14.3	
Methylene Chloride		1.498	1.461	1.422	1.487	1.479	1.469	2.0	
Acetone		0.205	0.274	0.250	0.278	0.232	0.248	12.2	
Carbon Disulfide		3.675	4.009	3.209	2.528	1.513	2.987	33.3	
1,1-Dichloroethene	*	1.232	1.266	1.087	0.733	0.619	0.987	29.9	*
1,1-Dichloroethane	#	2.258	2.261	2.274	2.640	2.727	2.432	9.5	#
1,2-Dichloroethene (total)		2.452	2.683	2.756	3.131	3.097	2.824	10.2	
Chloroform	*	2.808	2.681	2.649	3.007	2.854	2.800	5.1	*
1,2-Dichloroethane		1.831	1.779	1.830	2.110	2.128	1.936	8.7	
2-Butanone		0.098	0.130	0.100	0.124	0.107	0.112	12.9	
1,1,1-Trichloroethane		0.715	0.757	0.764	0.744	0.697	0.735	3.9	
Carbon Tetrachloride		0.603	0.697	0.728	0.686	0.669	0.677	6.9	
Vinyl Acetate		0.793	1.007	1.016	1.009	0.997	0.964	10.0	
Bromodichloromethane		0.600	0.663	0.685	0.677	0.665	0.658	5.1	
1,2-Dichloropropane	*	0.370	0.356	0.358	0.363	0.361	0.362	1.5	*
cis-1,3-Dichloropropene		0.499	0.558	0.589	0.585	0.556	0.557	6.5	
Trichloroethene		0.389	0.441	0.446	0.427	0.393	0.419	6.4	
Dibromochloromethane		0.782	0.934	0.953	0.835	0.754	0.852	10.5	
1,1,2-Trichloroethane		0.544	0.563	0.560	0.516	0.466	0.530	7.6	
Benzene		0.822	0.886	0.848	0.878	0.858	0.858	3.0	
Trans-1,3-Dichloropropene		0.412	0.475	0.462	0.453	0.500	0.460	7.0	
Bromoform	#	0.603	0.806	0.894	0.750	0.655	0.742	15.7	#
4-Methyl-2-Pentanone		0.179	0.192	0.207	0.235	0.217	0.206	10.6	
2-Hexanone		0.207	0.244	0.217	0.227	0.217	0.222	6.3	
Tetrachloroethene		0.487	0.559	0.548	0.532	0.480	0.521	6.9	
1,1,2,2-Tetrachloroethane	#	0.653	0.694	0.682	0.684	0.705	0.684	2.8	#
Toluene	*	0.255	0.278	0.294	0.329	0.320	0.295	10.3	*
Chlorobenzene	#	0.862	0.983	0.951	0.959	0.968	0.945	5.0	#
Ethylbenzene	*	0.391	0.414	0.414	0.408	0.400	0.405	2.4	*
Styrene		0.950	1.121	1.008	1.029	0.990	1.020	6.2	
Total Xylenes		1.166	1.376	1.238	1.291	1.251	1.264	6.1	
Toluene-d8		0.461	0.495	0.501	0.552	0.543	0.510	7.3	
BFB		0.898	0.936	0.873	0.879	0.892	0.896	2.8	
1,2-Dichloroethane-d4		1.919	1.882	1.814	1.985	2.012	1.922	4.1	


COMPUCHEM LABS
RIC
COMPUCHEM DATA: CT891228A13 SCANS 57 TO 1600
12/28/89 11:08:00
SAMPLE: 5ML VSTD020 #1911 ON#13
CONDS.:
120000.
125.0
IS#1
IS#2
IS#3
SS#1
SS#2
SS#3
RIC
94
179
234
312
407
476
541
602
722
792
843
917
1022
1098
1141
1262
1391
1461
200
2:30
400
5:00
600
7:30
800
10:00
1000
12:30
1200
15:00
1400
17:30
1600 SCAN
20:00 TIME

QUANTITATION REPORT FILE: CT891228A13
DATA: CT891228A13.TI
12/28/89 11:08:00
SAMPLE: 5ML VSTD020 #1911 ON#13
CONDS.:
SUBMITTED BY: 13 ANALYST: 1492

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
2	221 CHLOROMETHANE <74-87-3> NA#2
3	231 VINYL CHLORIDE <75-01-4> NA#3
4	220 BROMOMETHANE <78-83-9> NA#4
5	209 CHLOROETHANE <75-00-3> NA#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> NA#6
7	201 ACROLEIN <107-02-8> NA#7
8	216 1,1-DICHLOROETHENE <75-35-4> NA#8
9	254 CARBON DISULFIDE <75-15-0> NA#9
10	285 IODOMETHANE <74-88-4> NA#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> NA#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> NA#12
13	252 ACETONE (2-PROPANONE) <67-64-1> NA#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
15	298 3-CHLOROPROPENE <107-05-1> NA#15
16	222 METHYLENE CHLORIDE <75-09-2> NA#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
18	202 ACRYLONITRILE <107-13-1> NA#18
19	214 1,1-DICHLOROETHANE <75-34-3> NA#19
20	257 VINYL ACETATE <108-05-4> NA#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
22	253 2-BUTANONE <78-93-3> NA#22
23	211 CHLOROFORM <67-66-2> NA#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
25	206 CARBON TETRACHLORIDE <56-23-5> NA#25
26	203 BENZENE <71-43-2> NA#26
27	215 1,2-DICHLOROETHANE <107-06-2> NA#27
28	272 CROTONALDEHYDE <4170-30-3> NA#28
29	*270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
30	229 TRICHLOROETHENE <79-01-6> NA#30
31	217 1,2-DICHLOROPROPANE <78-87-5> NA#31
32	286 DIBROMOMETHANE <74-95-3> NA#32
33	212 BROMODICHLOROMETHANE <75-27-4> NA#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> NA#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
36	256 4-METHYL-2-PENTANONE <108-01-1> NA#36
37	225 TOLUENE <108-88-3> NA#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
40	287 ETHYLMETHACRYLATE <96-18-4> NA#40
41	224 TETRACHLOROETHENE <127-18-4> NA#41
42	255 2-HEXANONE <591-78-6> NA#42
43	208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
44	245 1,2-DIBROMOETHANE <1060-93-4> NA#44
45	207 CHLOROBENZENE <108-90-7> NA#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> NA#46

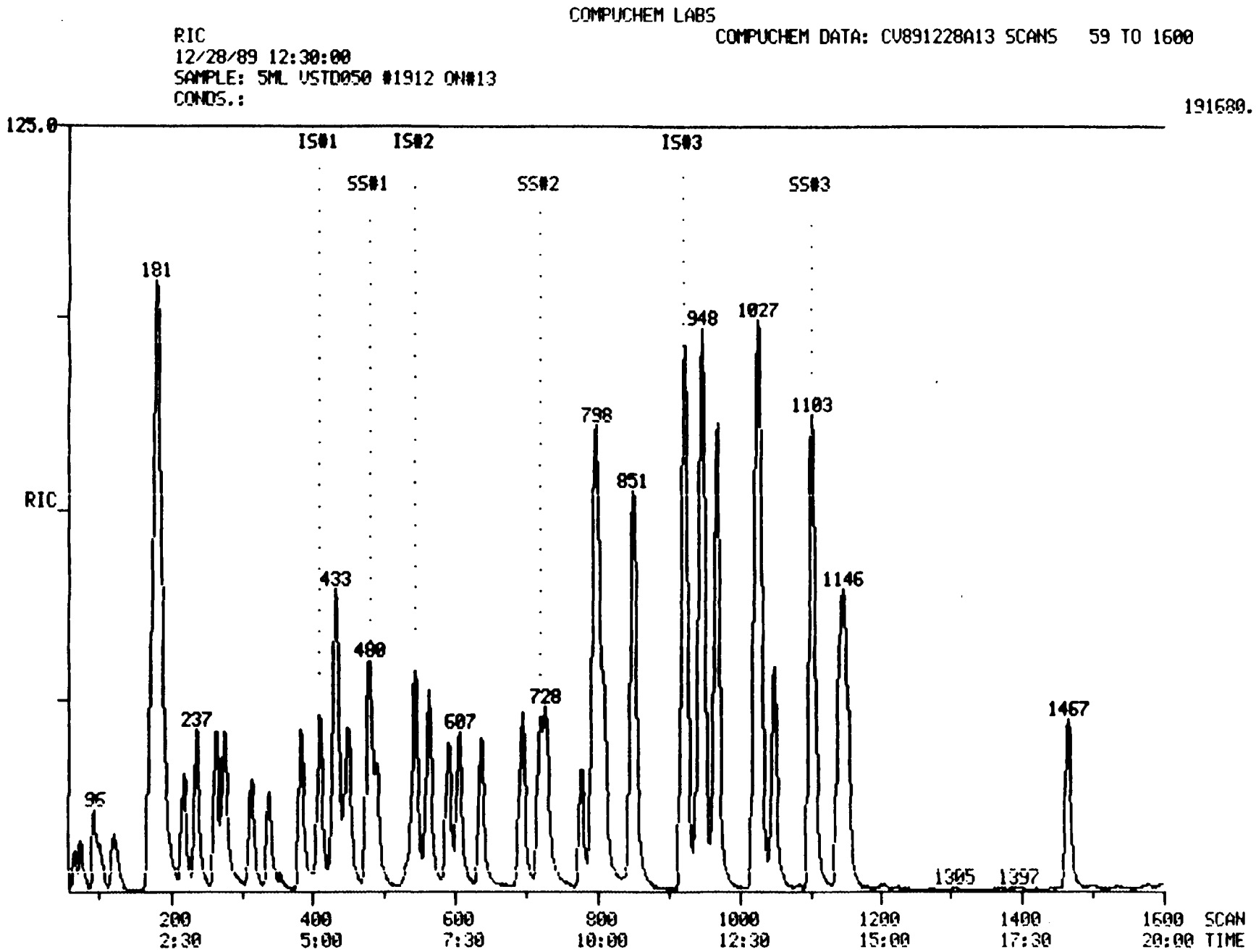
NO	NAME
47	219 ETHYLBENZENE <100-41-4> NA#47
48	330 M,P-XYLENE <133-02-7> NA#48
49	239 O-XYLENE <133-02-7> NA#49
50	251 STYRENE <100-42-5> NA#50
51	205 BROMOFORM <75-25-2> NA#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> NA#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> NA#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> NA#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> NA#56
57	#258 D4-1,2-DICHLOROETHANE NA#57
58	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
59	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	407	5:05	1	1.000	A BB	46617.	50.000	UG/L	1.70
2	50	67	0:50	1	0.165	A BB	17194.	33.278	UG/L	1.13
3	62	76	0:57	1	0.187	A BB	20113.	41.206	UG/L	1.40
4	94	94	1:10	1	0.231	A BB	26492.	26.039	UG/L	0.88
5	64	103	1:17	1	0.253	A BB	12828.	25.521	UG/L	0.87
6	101	121	1:31	1	0.297	A BB	22113.	20.950	UG/L	0.71
7	56	173	2:10	1	0.425	A BV	17002.	545.937	UG/L	18.54
8	96	171	2:08	1	0.420	A BB	22967.	29.049	UG/L	0.99
9	76	179	2:14	1	0.440	A BB	68529.	87.581	UG/L	2.97
10	142	181	2:16	1	0.445	A BB	71895.	38.002	UG/L	1.29
11	117	178	2:13	1	0.437	A BB	22914.	28.658	UG/L	0.97
12	85	181	2:16	1	0.445	A BB	26119.	30.916	UG/L	1.05
13	43	196	2:27	1	0.482	M XX	3814.	27.835	UG/L	0.95
14	114	541	6:46	14	1.000	A BB	156951.	50.000	UG/L	1.70
15	76	217	2:43	1	0.533	A BB	11153.	36.904	UG/L	1.25
16	84	234	2:55	1	0.575	A BV	27937.	37.683	UG/L	1.28
17	96	261	3:16	1	0.641	A BB	22510.	19.066	UG/L	0.65
18	53	273	3:25	1	0.671	A BB	37642.	417.407	UG/L	14.17
19	63	312	3:54	1	0.767	A BB	42105.	21.888	UG/L	0.74
20	43	337	4:13	14	0.623	A BB	49760.	43.109	UG/L	1.46
21	96	381	4:46	1	0.936	A BB	23212.	15.368	UG/L	0.52
22	72	398	4:58	1	0.978	M XX	1820.	24.888	UG/L	0.85
23	83	428	5:21	1	1.052	A BB	52354.	21.314	UG/L	0.72
24	97	430	5:22	14	0.795	A BB	44893.	28.309	UG/L	0.96
25	117	446	5:34	14	0.824	A VB	37842.	25.121	UG/L	0.85
26	78	473	5:55	14	0.874	A BB	51590.	22.074	UG/L	0.75
27	62	486	6:04	1	1.194	A BB	34146.	22.892	UG/L	0.78
28	70	541	6:46	14	1.000	M XX	11842.	240.090	UG/L	8.15
29	117	916	11:27	29	1.000	A BB	215033.	50.000	UG/L	1.70
30	130	559	6:59	14	1.033	A BB	24440.	18.598	UG/L	0.63
31	63	587	7:20	14	1.085	A BB	23214.	25.808	UG/L	0.88
32	174	603	7:32	1	1.482	A BB	28633.	21.158	UG/L	0.72
33	83	634	7:55	14	1.172	A BB	37687.	19.976	UG/L	0.68
34	63	687	8:35	14	1.270	A BB	7812.	20.257	UG/L	0.69
35	75	691	8:38	14	1.277	A BB	31339.	16.186	UG/L	0.55
36	43	729	9:07	29	0.796	M XX	15409.	14.135	UG/L	0.48
37	92	723	9:02	29	0.789	A BB	21894.	7.724	UG/L	0.26
38	75	772	9:39	14	1.427	A BV	25875.	30.605	UG/L	1.04
39	97	795	9:56	14	1.470	A BB	34151.	29.571	UG/L	1.00
40	69	803	10:02	29	0.877	A BB	43242.	33.466	UG/L	1.14
41	164	790	9:52	29	0.862	A BB	41921.	19.403	UG/L	0.66

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	849	10:37	29	0.927	A BB	17781.	23.176	UG/L	0.79
43	129	842	10:31	14	1.556	A BB	49093.	28.643	UG/L	0.97
44	107	845	10:34	14	1.562	A BB	53655.	27.527	UG/L	0.93
45	112	920	11:30	29	1.004	A BB	74120.	17.743	UG/L	0.60
46	131	941	11:46	14	1.739	A BB	50447.	32.341	UG/L	1.10
47	106	945	11:49	29	1.032	A BV	33645.	18.786	UG/L	0.64
48	106	964	12:03	29	1.052	A VB	53353.	18.652	UG/L	0.63
49	106	1018	12:43	29	1.111	A BB	46934.	18.455	UG/L	0.63
50	104	1024	12:48	29	1.118	A BB	81705.	18.830	UG/L	0.64
51	173	1045	13:04	14	1.932	A BB	37826.	29.210	UG/L	0.99
52	88	1103	13:47	14	2.039	A BB	16719.	38.853	UG/L	1.32
53	110	1136	14:12	29	1.240	A BB	19282.	22.333	UG/L	0.76
54	83	1143	14:17	29	1.248	A BB	56168.	18.298	UG/L	0.62
55	53	1150	14:22	29	1.255	A BB	13551.	27.943	UG/L	0.95
56	157	1461	18:16	29	1.595	A BB	32001.	232.101	UG/L	7.88
57	65	478	5:58	1	1.174	A BB	35785.	26.495	UG/L	0.90
58	95	1098	13:43	29	1.199	A BB	77257.	19.766	UG/L	0.67
59	98	716	8:57	29	0.782	A BB	39622.	7.959	UG/L	0.27

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:08	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:50	1.00	10.000	0.02	33.28	50.00	0.369	0.554	0.67
3	0:56	1.01	10.000	0.02	41.21	50.00	0.431	0.524	0.82
4	1:11	0.99	10.000	0.02	26.04	50.00	0.568	1.091	0.52
5	1:17	1.00	10.000	0.03	25.52	50.00	0.275	0.539	0.51
6	1:34	0.96	10.000	0.03	20.95	50.00	0.474	1.132	0.42
7	2:16	0.95	90.000	0.00	545.94	500.01	0.036	0.033	1.09
8	2:10	0.98	5.000	0.08	29.05	50.00	0.493	0.848	0.58
9	2:17	0.98	5.000	0.09	87.58	50.00	1.470	0.839	1.75
10	2:17	0.99	10.000	0.04	38.00	50.00	1.542	2.029	0.76
11	2:13	1.00	10.000	0.04	28.66	50.00	0.492	0.858	0.57
12	2:15	1.01	10.000	0.04	30.92	50.00	0.560	0.906	0.62
13	2:45	0.89	10.000	0.05	27.83	50.00	0.082	0.147	0.56
14	6:46	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	2:44	0.99	10.000	0.05	36.90	50.00	0.239	0.324	0.74
16	2:59	0.98	5.000	0.11	37.68	50.00	0.599	0.795	0.75
17	3:18	0.99	5.000	0.13	19.07	50.00	0.483	1.266	0.38
18	3:35	0.95	120.000	0.01	417.41	500.01	0.081	0.097	0.83
19	3:56	0.99	5.000	0.15	21.89	50.00	0.903	2.063	0.44
20	4:17	0.98	10.000	0.06	43.11	50.00	0.317	0.368	0.86
21	4:49	0.99	5.000	0.19	15.37	50.00	0.498	1.620	0.31
22	5:16	0.95	10.000	0.10	24.89	50.00	0.039	0.078	0.50
23	5:25	0.99	5.000	0.21	21.31	50.00	1.123	2.635	0.43
24	5:24	1.00	5.000	0.16	28.31	50.00	0.286	0.505	0.57
25	5:35	1.00	5.000	0.16	25.12	50.00	0.241	0.480	0.50
26	5:57	0.99	5.000	0.17	22.07	50.00	0.329	0.745	0.44
27	6:07	0.99	5.000	0.24	22.89	50.00	0.732	1.600	0.46
28	6:38	0.97	100.000	0.01	240.09	500.01	0.008	0.016	0.48
29	11:26	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	7:01	1.00	5.000	0.21	18.60	50.00	0.156	0.419	0.37
31	7:23	0.99	5.000	0.22	25.81	50.00	0.148	0.287	0.52
32	7:34	1.00	5.000	0.30	21.16	50.00	0.614	1.451	0.42
33	7:57	1.00	5.000	0.23	19.98	50.00	0.240	0.601	0.40
34	8:37	1.00	10.000	0.13	20.26	50.00	0.050	0.123	0.41
35	8:40	1.00	5.000	0.26	16.19	50.00	0.200	0.617	0.32
36	9:11	0.99	15.000	0.05	14.14	50.00	0.072	0.253	0.28

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	9:04	1.00	5.000	0.16	7.72	50.00	0.102	0.659	0.15
38	9:42	0.99	5.000	0.29	30.61	50.00	0.165	0.269	0.61
39	9:58	1.00	5.000	0.29	29.57	50.00	0.218	0.368	0.59
40	10:04	1.00	10.000	0.09	33.47	50.00	0.201	0.300	0.67
41	9:55	1.00	5.000	0.17	19.40	50.00	0.195	0.502	0.39
42	10:38	1.00	15.000	0.06	23.18	50.00	0.083	0.178	0.46
43	10:33	1.00	5.000	0.31	28.64	50.00	0.313	0.546	0.57
44	10:35	1.00	5.000	0.31	27.53	50.00	0.342	0.621	0.55
45	11:29	1.00	5.000	0.20	17.74	50.00	0.345	0.971	0.35
46	11:45	1.00	5.000	0.35	32.34	50.00	0.321	0.497	0.65
47	11:47	1.00	5.000	0.21	18.79	50.00	0.156	0.416	0.38
48	12:02	1.00	5.000	0.21	18.65	50.00	0.248	0.665	0.37
49	12:43	1.00	5.000	0.22	18.45	50.00	0.218	0.591	0.37
50	12:47	1.00	5.000	0.22	18.83	50.00	0.380	1.009	0.38
51	13:04	1.00	5.000	0.39	29.21	50.00	0.241	0.413	0.58
52	13:47	1.00	15.000	0.14	38.85	50.00	0.107	0.137	0.78
53	14:12	1.00	15.000	0.08	22.33	50.00	0.090	0.201	0.45
54	14:16	1.00	5.000	0.25	18.30	50.00	0.261	0.714	0.37
55	14:22	1.00	15.000	0.08	27.94	50.00	0.063	0.113	0.56
56	18:15	1.00	10.000	0.16	232.10	100.00	0.074	0.032	2.32
57	6:01	0.99	5.000	0.23	26.50	50.00	0.768	1.449	0.53
58	13:42	1.00	5.000	0.24	19.77	50.00	0.359	0.909	0.40
59	8:58	1.00	5.000	0.16	7.96	50.00	0.184	1.158	0.16



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12/28/89 12:30:00
SAMPLE: 5ML VSTD050 #1912 ON#13
CONDS. :
SUBMITTED BY: 13 ANALYST: 1492

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
2	221 CHLOROMETHANE <74-87-3> NA#2
3	231 VINYL CHLORIDE <75-01-4> NA#3
4	220 BROMOMETHANE <78-83-9> NA#4
5	209 CHLOROETHANE <75-00-3> NA#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> NA#6
7	201 ACROLEIN <107-02-8> NA#7
8	216 1,1-DICHLOROETHENE <75-35-4> NA#8
9	254 CARBON DISULFIDE <75-15-0> NA#9
10	285 IODOMETHANE <74-88-4> NA#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> NA#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> NA#12
13	252 ACETONE (2-PROPANONE) <67-64-1> NA#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
15	298 3-CHLOROPROPENE <107-05-1> NA#15
16	222 METHYLENE CHLORIDE <75-09-2> NA#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
18	202 ACRYLONITRILE <107-13-1> NA#18
19	214 1,1-DICHLOROETHANE <75-34-3> NA#19
20	257 VINYL ACETATE <108-05-4> NA#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
22	253 2-BUTANONE <78-93-3> NA#22
23	211 CHLOROFORM <67-66-2> NA#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
25	206 CARBON TETRACHLORIDE <56-23-5> NA#25
26	203 BENZENE <71-43-2> NA#26
27	215 1,2-DICHLOROETHANE <107-06-2> NA#27
28	272 CROTONALDEHYDE <4170-30-3> NA#28
29	*270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
30	229 TRICHLOROETHENE <79-01-6> NA#30
31	217 1,2-DICHLOROPROPANE <78-87-5> NA#31
32	286 DIBROMOMETHANE <74-95-3> NA#32
33	212 BROMODICHLOROMETHANE <75-27-4> NA#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> NA#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
36	256 4-METHYL-2-PENTANONE <108-01-1> NA#36
37	225 TOLUENE <108-88-3> NA#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
40	287 ETHYLMETHACRYLATE <96-18-4> NA#40
41	224 TETRACHLOROETHENE <127-18-4> NA#41
42	255 2-HEXANONE <591-78-6> NA#42
43	208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
44	245 1,2-DIBROMOETHANE <1060-93-4> NA#44
45	207 CHLOROBENZENE <108-90-7> NA#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> NA#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> NA#47
48	330 M,P-XYLENE <133-02-7> NA#48
49	239 O-XYLENE <133-02-7> NA#49
50	251 STYRENE <100-42-5> NA#50
51	205 BROMOFORM <75-25-2> NA#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> NA#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> NA#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> NA#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> NA#56
57	#258 D4-1,2-DICHLOROETHANE NA#57
58	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
59	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	411	5:08	1	1.000	A BB	49092.	50.000	UG/L	0.65
2	50	69	0:52	1	0.168	A BB	32881.	60.432	UG/L	0.79
3	62	78	0:58	1	0.190	A BB	40889.	79.546	UG/L	1.04
4	94	96	1:12	1	0.234	A BB	55164.	51.486	UG/L	0.67
5	64	104	1:18	1	0.253	A BB	28171.	53.221	UG/L	0.70
6	101	124	1:33	1	0.302	A BB	64061.	57.632	UG/L	0.75
7	56	176	2:12	1	0.428	A BB	50732.	1546.880	UG/L	20.25
8	96	173	2:10	1	0.421	A BB	62145.	74.639	UG/L	0.98
9	76	181	2:16	1	0.440	A BB	196827.	238.866	UG/L	3.13
10	142	183	2:17	1	0.445	A BB	171231.	85.945	UG/L	1.13
11	117	183	2:17	1	0.445	A BB	56453.	67.046	UG/L	0.88
12	85	183	2:17	1	0.445	A BB	57599.	64.741	UG/L	0.85
13	43	201	2:31	1	0.489	A BB	13442.	93.155	UG/L	1.22
14	114	344	6:48	14	1.000	A BB	155642.	50.000	UG/L	0.65
15	76	220	2:45	1	0.535	A BB	26751.	84.055	UG/L	1.10
16	84	237	2:58	1	0.577	A BB	71711.	91.850	UG/L	1.20
17	96	264	3:18	1	0.642	A BB	63194.	50.827	UG/L	0.67
18	53	277	3:28	1	0.674	A BB	126119.	1327.990	UG/L	17.39
19	63	315	3:56	1	0.766	A BB	110996.	54.792	UG/L	0.72
20	43	339	4:14	14	0.623	A BB	156787.	136.971	UG/L	1.79
21	96	384	4:48	1	0.934	A BB	68551.	43.098	UG/L	0.56
22	72	404	5:03	1	0.983	A BB	6403.	83.145	UG/L	1.09
23	83	432	5:24	1	1.051	A BB	131627.	50.886	UG/L	0.67
24	97	434	5:25	14	0.798	A BB	117834.	74.929	UG/L	0.98
25	117	450	5:37	14	0.827	A VB	108525.	72.647	UG/L	0.95
26	78	478	5:58	14	0.879	A BB	137824.	59.466	UG/L	0.78
27	62	490	6:07	1	1.192	A BB	87350.	55.608	UG/L	0.73
28	70	542	6:46	14	0.996	A BB	27326.	558.688	UG/L	7.32
29	117	921	11:31	29	1.000	A BB	214975.	50.000	UG/L	0.65
30	130	564	7:03	14	1.037	A BB	68586.	52.632	UG/L	0.69
31	63	592	7:24	14	1.088	A BB	55390.	62.098	UG/L	0.81
32	174	607	7:35	1	1.477	A BB	69389.	48.689	UG/L	0.64
33	83	638	7:58	14	1.173	A BB	103207.	55.163	UG/L	0.72
34	63	692	8:39	14	1.272	A BB	21721.	56.797	UG/L	0.74
35	75	696	8:42	14	1.279	A BB	86863.	45.241	UG/L	0.59
36	43	732	9:09	29	0.795	A BB	41181.	37.788	UG/L	0.49
37	92	728	9:06	29	0.790	A BB	59721.	21.075	UG/L	0.28
38	75	778	9:43	14	1.430	A BB	73893.	88.137	UG/L	1.15
39	97	800	10:00	14	1.471	A BB	87554.	76.450	UG/L	1.00
40	69	809	10:07	29	0.878	A BB	106009.	82.065	UG/L	1.07
41	164	796	9:57	29	0.864	A BB	120239.	55.667	UG/L	0.73

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	854	10:40	29	0.927	A BB	52500.	68.448	UG/L	0.90
43	129	849	10:37	14	1.561	A BB	145428.	85.562	UG/L	1.12
44	107	852	10:39	14	1.566	A BB	135624.	70.164	UG/L	0.92
45	112	925	11:34	29	1.004	A BB	211271.	50.588	UG/L	0.66
46	131	946	11:49	14	1.739	A BB	125021.	80.825	UG/L	1.06
47	106	949	11:52	29	1.030	A BV	89104.	49.767	UG/L	0.65
48	106	969	12:07	29	1.052	A VB	158362.	55.379	UG/L	0.73
49	106	1023	12:47	29	1.111	A BB	137471.	54.069	UG/L	0.71
50	104	1029	12:52	29	1.117	A BB	241045.	55.568	UG/L	0.73
51	173	1050	13:07	14	1.930	A BB	125477.	97.710	UG/L	1.28
52	88	1107	13:50	14	2.035	A BB	41412.	97.047	UG/L	1.27
53	110	1141	14:16	29	1.239	A BB	45674.	52.916	UG/L	0.69
54	83	1148	14:21	29	1.246	A BB	149173.	48.608	UG/L	0.64
55	53	1155	14:26	29	1.254	A BB	33741.	69.595	UG/L	0.91
56	157	1467	18:20	29	1.593	A BB	70698.	512.907	UG/L	6.72
57	65	482	6:01	1	1.173	A BB	92403.	64.966	UG/L	0.85
58	95	1102	13:46	29	1.197	A BB	201164.	51.480	UG/L	0.67
59	98	721	9:01	29	0.783	A BB	106455.	21.390	UG/L	0.28

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
1	5:08	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:50	1.03	10.000	0.02	60.43	50.00	0.670	0.554	1.21
3	0:56	1.04	10.000	0.02	79.55	50.00	0.833	0.524	1.59
4	1:11	1.01	10.000	0.02	51.49	50.00	1.124	1.091	1.03
5	1:17	1.01	10.000	0.03	53.22	50.00	0.574	0.539	1.06
6	1:34	0.98	10.000	0.03	57.63	50.00	1.305	1.132	1.15
7	2:16	0.97	90.000	0.00	1546.89	500.01	0.103	0.033	3.09
8	2:10	0.99	5.000	0.08	74.64	50.00	1.266	0.848	1.49
9	2:17	0.99	5.000	0.09	238.87	50.00	4.009	0.839	4.78
10	2:17	1.00	10.000	0.04	85.95	50.00	3.488	2.029	1.72
11	2:13	1.03	10.000	0.04	67.05	50.00	1.150	0.858	1.34
12	2:15	1.02	10.000	0.04	64.74	50.00	1.173	0.906	1.29
13	2:45	0.91	10.000	0.05	93.15	50.00	0.274	0.147	1.86
14	6:46	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	2:44	1.00	10.000	0.05	84.05	50.00	0.545	0.324	1.68
16	2:59	0.99	5.000	0.12	91.85	50.00	1.461	0.795	1.84
17	3:18	1.00	5.000	0.13	50.83	50.00	1.287	1.266	1.02
18	3:35	0.97	120.000	0.01	1328.00	500.01	0.257	0.097	2.66
19	3:56	1.00	5.000	0.15	54.79	50.00	2.261	2.063	1.10
20	4:17	0.99	10.000	0.06	136.97	50.00	1.007	0.368	2.74
21	4:49	1.00	5.000	0.19	43.10	50.00	1.396	1.620	0.86
22	5:16	0.96	10.000	0.10	83.15	50.00	0.130	0.078	1.66
23	5:25	1.00	5.000	0.21	50.89	50.00	2.681	2.635	1.02
24	5:24	1.00	5.000	0.16	74.93	50.00	0.757	0.505	1.50
25	5:35	1.01	5.000	0.17	72.65	50.00	0.697	0.480	1.45
26	5:57	1.00	5.000	0.18	59.47	50.00	0.886	0.745	1.19
27	6:07	1.00	5.000	0.24	55.61	50.00	1.779	1.600	1.11
28	6:58	0.97	100.000	0.01	558.69	500.01	0.018	0.016	1.12
29	11:26	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	7:01	1.01	5.000	0.21	52.63	50.00	0.441	0.419	1.05
31	7:23	1.00	5.000	0.22	62.10	50.00	0.356	0.287	1.24
32	7:34	1.00	5.000	0.30	48.69	50.00	1.413	1.451	0.97
33	7:57	1.00	5.000	0.23	55.16	50.00	0.663	0.601	1.10
34	8:37	1.00	10.000	0.13	56.80	50.00	0.140	0.123	1.14
35	8:40	1.00	5.000	0.26	45.24	50.00	0.558	0.617	0.90
36	9:11	1.00	15.000	0.05	37.79	50.00	0.192	0.253	0.76

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	9:04	1.00	5.000	0.16	21.07	50.00	0.278	0.659	0.42
38	9:42	1.00	5.000	0.29	88.14	50.00	0.475	0.269	1.76
39	9:58	1.00	5.000	0.29	76.45	50.00	0.563	0.368	1.53
40	10:04	1.00	10.000	0.09	82.07	50.00	0.493	0.300	1.64
41	9:55	1.00	5.000	0.17	55.67	50.00	0.559	0.502	1.11
42	10:38	1.00	15.000	0.06	68.45	50.00	0.244	0.178	1.37
43	10:33	1.01	5.000	0.31	85.56	50.00	0.934	0.546	1.71
44	10:35	1.01	5.000	0.31	70.16	50.00	0.871	0.621	1.40
45	11:29	1.01	5.000	0.20	50.59	50.00	0.983	0.971	1.01
46	11:45	1.01	5.000	0.35	80.82	50.00	0.803	0.497	1.62
47	11:47	1.01	5.000	0.21	49.77	50.00	0.414	0.416	1.00
48	12:02	1.01	5.000	0.21	55.38	50.00	0.737	0.665	1.11
49	12:43	1.00	5.000	0.22	54.07	50.00	0.639	0.591	1.08
50	12:47	1.01	5.000	0.22	55.57	50.00	1.121	1.009	1.11
51	13:04	1.00	5.000	0.39	97.71	50.00	0.806	0.413	1.95
52	13:47	1.00	15.000	0.14	97.05	50.00	0.266	0.137	1.94
53	14:12	1.00	15.000	0.08	52.92	50.00	0.212	0.201	1.06
54	14:16	1.01	5.000	0.25	48.61	50.00	0.694	0.714	0.97
55	14:22	1.00	15.000	0.08	69.60	50.00	0.157	0.113	1.39
56	18:15	1.00	10.000	0.16	512.91	100.00	0.164	0.032	5.13
57	6:01	1.00	5.000	0.23	64.97	50.00	1.882	1.449	1.30
58	13:42	1.01	5.000	0.24	51.48	50.00	0.936	0.909	1.03
59	8:58	1.01	5.000	0.16	21.39	50.00	0.495	1.158	0.43

COMPUCHEM LABS

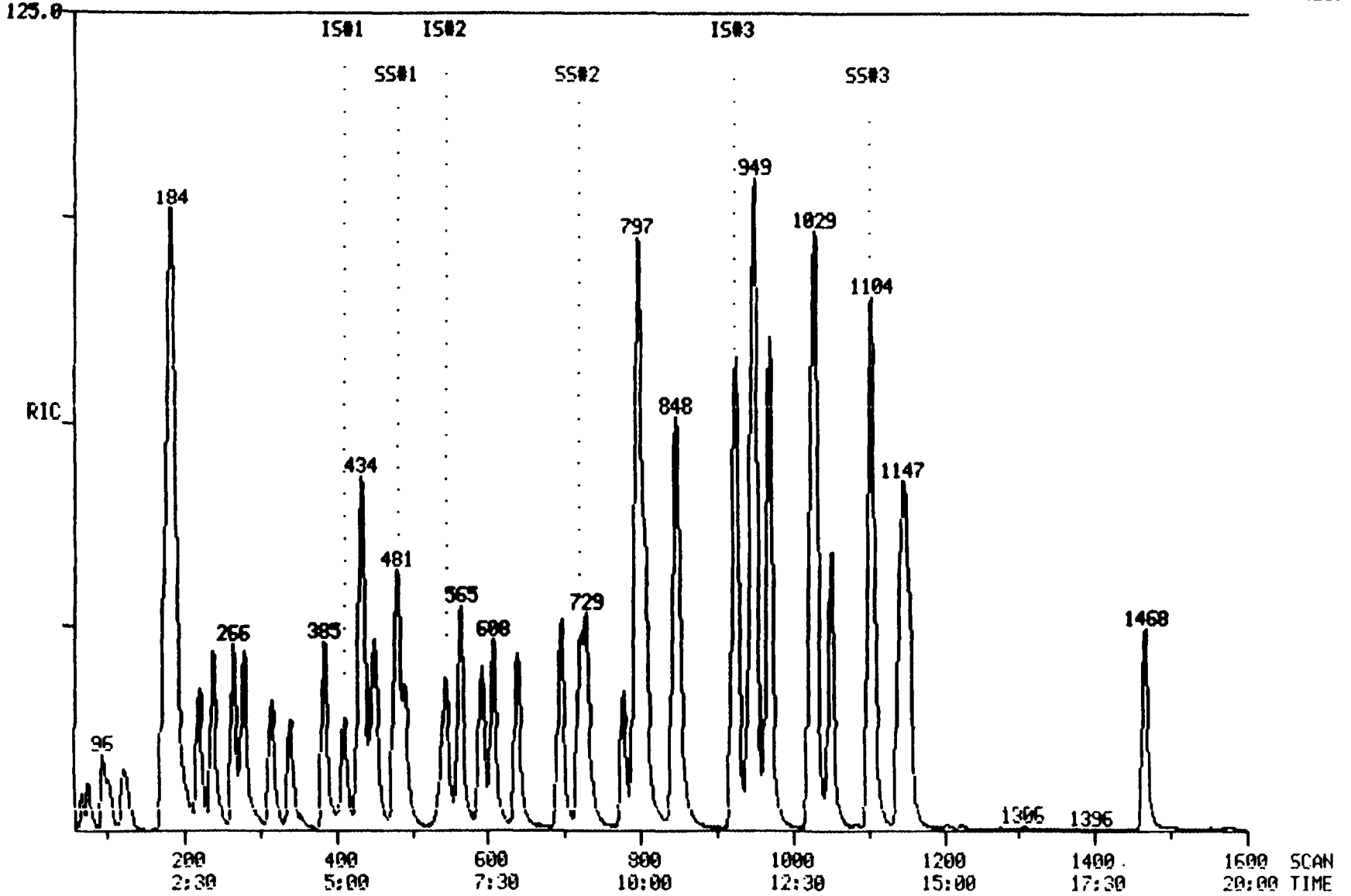
RIC

COMPUCHEM DATA: CW891228A13 SCANS 58 TO 1600

12/28/89 13:04:00

SAMPLE: 5ML VSTD100 #1913 ON#13

CONDS.:



QUANTITATION REPORT FILE: CW891228A13
DATA: CW891228A13.TI
12/28/89 13:04:00
SAMPLE: 5ML VSTD100 #1913 ON#13
CONDS.:
SUBMITTED BY: 13 ANALYST: 1492

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
2	221 CHLOROMETHANE <74-87-3> NA#2
3	231 VINYL CHLORIDE <75-01-4> NA#3
4	220 BROMOMETHANE <78-83-9> NA#4
5	209 CHLOROETHANE <75-00-3> NA#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> NA#6
7	201 ACROLEIN <107-02-8> NA#7
8	216 1,1-DICHLOROETHENE <75-35-4> NA#8
9	254 CARBON DISULFIDE <75-15-0> NA#9
10	285 IODOMETHANE <74-88-4> NA#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> NA#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> NA#12
13	252 ACETONE (2-PROPANONE) <67-64-1> NA#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
15	298 3-CHLOROPROPENE <107-05-1> NA#15
16	222 METHYLENE CHLORIDE <75-09-2> NA#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
18	202 ACRYLONITRILE <107-13-1> NA#18
19	214 1,1-DICHLOROETHANE <75-34-3> NA#19
20	257 VINYL ACETATE <108-05-4> NA#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
22	253 2-BUTANONE <78-93-3> NA#22
23	211 CHLOROFORM <67-66-2> NA#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
25	206 CARBON TETRACHLORIDE <56-23-5> NA#25
26	203 BENZENE <71-43-2> NA#26
27	215 1,2-DICHLOROETHANE <107-06-2> NA#27
28	272 CROTONALDEHYDE <4170-30-3> NA#28
29	*270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
30	229 TRICHLOROETHENE <79-01-6> NA#30
31	217 1,2-DICHLOROPROPANE <78-87-5> NA#31
32	286 DIBROMOMETHANE <74-95-3> NA#32
33	212 BROMODICHLOROMETHANE <75-27-4> NA#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> NA#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
36	256 4-METHYL-2-PENTANONE <108-01-1> NA#36
37	225 TOLUENE <108-88-3> NA#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
40	287 ETHYLMETHACRYLATE <96-18-4> NA#40
41	224 TETRACHLOROETHENE <127-18-4> NA#41
42	255 2-HEXANONE <591-78-6> NA#42
43	208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
44	245 1,2-DIBROMOETHANE <1060-93-4> NA#44
45	207 CHLOROBENZENE <108-90-7> NA#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> NA#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> NA#47
48	330 M,P-XYLENE <133-02-7> NA#48
49	239 O-XYLENE <133-02-7> NA#49
50	251 STYRENE <100-42-5> NA#50
51	205 BROMOFORM <75-25-2> NA#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> NA#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> NA#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> NA#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> NA#56
57	#258 D4-1,2-DICHLOROETHANE NA#57
58	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
59	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	411	5:08	1	1.000	A BB	50862.	50.000	UG/L	0.36
2	50	68	0:51	1	0.165	A BB	52040.	92.316	UG/L	0.66
3	62	77	0:58	1	0.187	A BB	65721.	123.406	UG/L	0.88
4	94	96	1:12	1	0.234	A BB	90994.	81.972	UG/L	0.58
5	64	104	1:18	1	0.253	A BB	47273.	86.201	UG/L	0.61
6	101	124	1:33	1	0.302	A BB	121361.	105.382	UG/L	0.75
7	56	178	2:13	1	0.433	A BB	88287.	2598.300	UG/L	18.48
8	96	174	2:10	1	0.423	A BB	110591.	128.203	UG/L	0.91
9	76	182	2:16	1	0.443	A BB	326410.	382.341	UG/L	2.72
10	142	184	2:18	1	0.448	A BB	328150.	158.975	UG/L	1.13
11	117	184	2:18	1	0.448	A BB	104825.	120.162	UG/L	0.85
12	85	184	2:18	1	0.448	A BB	113353.	122.975	UG/L	0.87
13	43	206	2:34	1	0.501	A BB	25393.	169.856	UG/L	1.21
14	114	546	6:49	14	1.000	A BB	159946.	50.000	UG/L	0.36
15	76	220	2:45	1	0.535	A BB	59358.	180.017	UG/L	1.28
16	84	239	2:59	1	0.582	A BB	144666.	178.847	UG/L	1.27
17	96	266	3:19	1	0.647	A BB	132919.	103.186	UG/L	0.73
18	53	280	3:30	1	0.681	A BB	247761.	2518.050	UG/L	17.91
19	63	316	3:57	1	0.769	A BB	231318.	110.213	UG/L	0.78
20	43	341	4:16	14	0.625	A BB	325034.	276.313	UG/L	1.97
21	96	385	4:49	1	0.937	A BB	147368.	89.427	UG/L	0.64
22	72	405	5:04	1	0.985	A BB	10127.	126.926	UG/L	0.90
23	83	434	5:25	1	1.056	A BB	269496.	100.560	UG/L	0.72
24	97	434	5:25	14	0.795	A BB	244479.	151.277	UG/L	1.08
25	117	451	5:38	14	0.826	A VB	232950.	151.741	UG/L	1.08
26	78	479	5:59	14	0.877	A BB	271170.	113.852	UG/L	0.81
27	62	492	6:09	1	1.197	A BB	186189.	114.405	UG/L	0.81
28	70	543	6:47	14	0.995	A BB	48189.	958.710	UG/L	6.82
29	117	922	11:31	29	1.000	A BB	223864.	50.000	UG/L	0.36
30	130	565	7:04	14	1.035	A BB	142743.	106.591	UG/L	0.76
31	63	593	7:25	14	1.086	A BB	114512.	124.924	UG/L	0.89
32	174	608	7:36	1	1.479	A BB	150879.	102.186	UG/L	0.73
33	83	640	8:00	14	1.172	A BB	219106.	113.959	UG/L	0.81
34	63	692	8:39	14	1.267	A BB	46321.	117.863	UG/L	0.84
35	75	697	8:43	14	1.277	A BB	188559.	95.565	UG/L	0.68
36	43	733	9:10	29	0.795	A BB	92619.	81.612	UG/L	0.58
37	92	729	9:07	29	0.791	A BB	131497.	44.561	UG/L	0.32
38	75	778	9:43	14	1.425	A BB	147905.	171.669	UG/L	1.22
39	97	800	10:00	14	1.465	A BB	179186.	152.250	UG/L	1.08
40	69	808	10:06	29	0.876	A BB	229941.	170.938	UG/L	1.22
41	164	796	9:57	29	0.863	A BB	245455.	109.126	UG/L	0.78

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	853	10:40	29	0.925	A BB	96936.	121.364	UG/L	0.86
43	129	846	10:34	14	1.549	A BB	304793.	174.498	UG/L	1.24
44	107	849	10:37	14	1.555	A BB	275261.	138.572	UG/L	0.99
45	112	926	11:34	29	1.004	A BB	425771.	97.901	UG/L	0.70
46	131	946	11:49	14	1.733	A BB	258819.	162.822	UG/L	1.16
47	106	951	11:53	29	1.031	A BV	185426.	99.452	UG/L	0.71
48	106	970	12:07	29	1.052	A VB	298588.	100.269	UG/L	0.71
49	106	1025	12:49	29	1.112	A BB	255651.	96.559	UG/L	0.69
50	104	1031	12:53	29	1.118	A BB	451242.	99.894	UG/L	0.71
51	173	1051	13:08	14	1.925	A BB	286025.	216.736	UG/L	1.54
52	88	1109	13:52	14	2.031	A BB	87342.	199.174	UG/L	1.42
53	110	1143	14:17	29	1.240	A BB	97398.	108.361	UG/L	0.77
54	83	1149	14:22	29	1.246	A BB	305238.	95.513	UG/L	0.68
55	53	1156	14:27	29	1.254	A BB	67438.	133.576	UG/L	0.95
56	157	1467	18:20	29	1.591	A BB	152773.	1064.340	UG/L	7.57
57	65	483	6:02	1	1.175	A BB	184564.	125.245	UG/L	0.89
58	95	1103	13:47	29	1.196	A BB	390703.	96.015	UG/L	0.68
59	98	721	9:01	29	0.782	A BB	224449.	43.307	UG/L	0.31

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
1	5:08	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:50	1.01	10.000	0.02	92.32	50.00	1.023	0.554	1.85
3	0:56	1.03	10.000	0.02	123.41	50.00	1.292	0.524	2.47
4	1:11	1.01	10.000	0.02	81.97	50.00	1.789	1.091	1.64
5	1:17	1.01	10.000	0.03	86.20	50.00	0.929	0.539	1.72
6	1:34	0.98	10.000	0.03	105.38	50.00	2.386	1.132	2.11
7	2:16	0.98	90.000	0.00	2598.31	500.01	0.174	0.033	5.20
8	2:10	1.00	5.000	0.08	128.20	50.00	2.174	0.848	2.56
9	2:17	0.99	5.000	0.09	382.34	50.00	6.418	0.839	7.65
10	2:17	1.01	10.000	0.04	158.98	50.00	6.452	2.029	3.18
11	2:13	1.03	10.000	0.04	120.16	50.00	2.061	0.858	2.40
12	2:15	1.02	10.000	0.04	122.97	50.00	2.229	0.906	2.46
13	2:45	0.94	10.000	0.05	169.86	50.00	0.499	0.147	3.40
14	6:46	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	2:44	1.00	10.000	0.05	180.02	50.00	1.167	0.324	3.60
16	2:59	1.00	5.000	0.12	178.85	50.00	2.844	0.795	3.58
17	3:18	1.01	5.000	0.13	103.19	50.00	2.613	1.266	2.06
18	3:35	0.98	120.000	0.01	2518.06	500.01	0.487	0.097	5.04
19	3:56	1.00	5.000	0.15	110.21	50.00	4.548	2.063	2.20
20	4:17	0.99	10.000	0.06	276.31	50.00	2.032	0.368	5.53
21	4:49	1.00	5.000	0.19	89.43	50.00	2.897	1.620	1.79
22	5:16	0.96	10.000	0.10	126.93	50.00	0.199	0.078	2.54
23	5:25	1.00	5.000	0.21	100.56	50.00	5.299	2.635	2.01
24	5:24	1.00	5.000	0.16	151.28	50.00	1.529	0.505	3.03
25	5:35	1.01	5.000	0.17	151.74	50.00	1.456	0.480	3.03
26	5:57	1.01	5.000	0.18	113.85	50.00	1.695	0.745	2.28
27	6:07	1.00	5.000	0.24	114.41	50.00	3.661	1.600	2.29
28	6:58	0.97	100.000	0.01	958.71	500.01	0.030	0.016	1.92
29	11:26	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	7:01	1.01	5.000	0.21	106.59	50.00	0.892	0.419	2.13
31	7:23	1.00	5.000	0.22	124.92	50.00	0.716	0.287	2.50
32	7:34	1.00	5.000	0.30	102.19	50.00	2.966	1.451	2.04
33	7:57	1.01	5.000	0.23	113.96	50.00	1.370	0.601	2.28
34	8:37	1.00	10.000	0.13	117.86	50.00	0.290	0.123	2.36
35	8:40	1.01	5.000	0.26	95.56	50.00	1.179	0.617	1.91
36	9:11	1.00	15.000	0.05	81.61	50.00	0.414	0.253	1.63

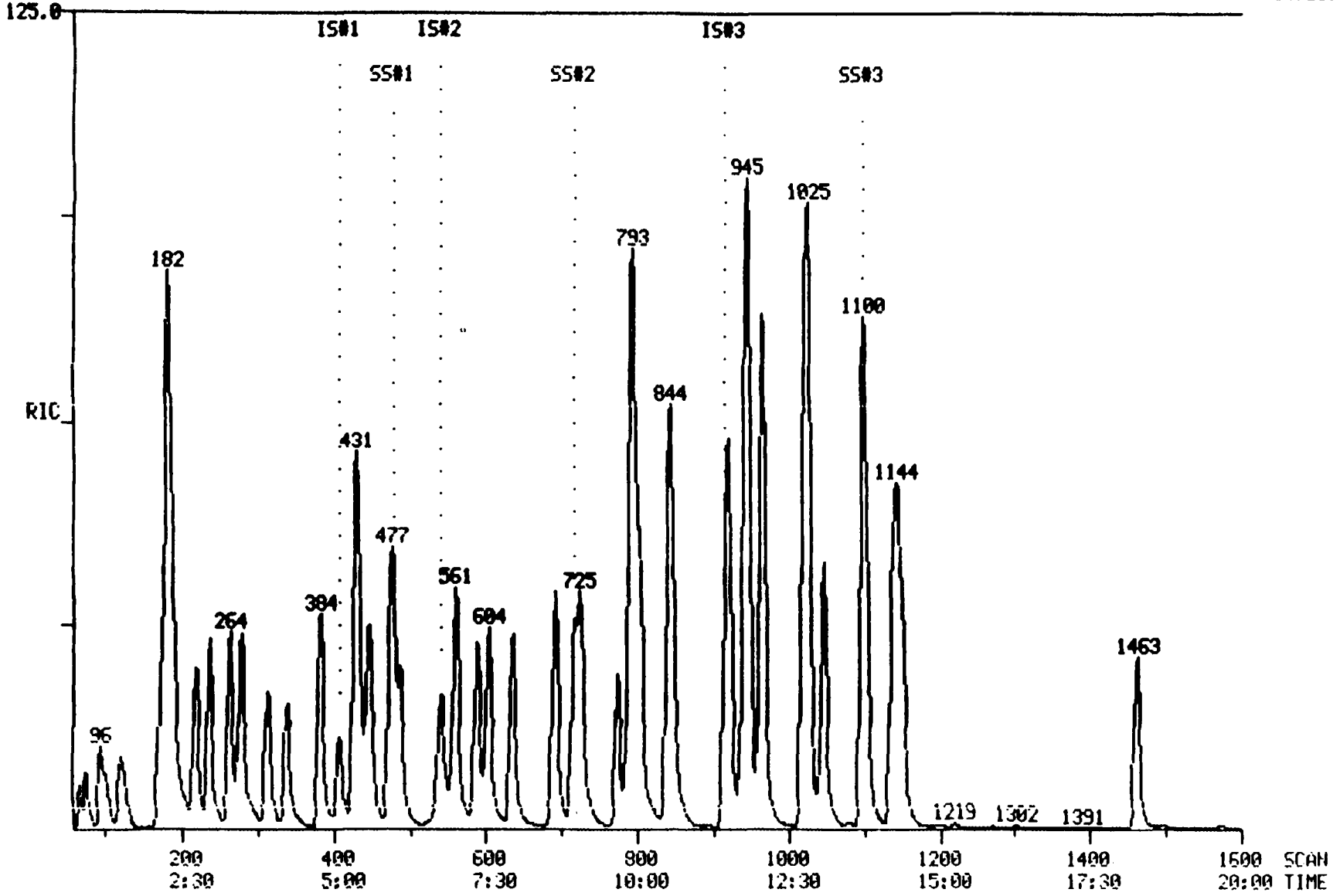
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	9:04	1.00	5.000	0.16	44.56	50.00	0.587	0.659	0.89
38	9:42	1.00	5.000	0.28	171.67	50.00	0.925	0.269	3.43
39	9:58	1.00	5.000	0.29	152.25	50.00	1.120	0.368	3.04
40	10:04	1.00	10.000	0.09	170.94	50.00	1.027	0.300	3.42
41	9:55	1.00	5.000	0.17	109.13	50.00	1.096	0.502	2.18
42	10:38	1.00	15.000	0.06	121.36	50.00	0.433	0.178	2.43
43	10:33	1.00	5.000	0.31	174.50	50.00	1.906	0.546	3.49
44	10:35	1.00	5.000	0.31	138.57	50.00	1.721	0.621	2.77
45	11:29	1.01	5.000	0.20	97.90	50.00	1.902	0.971	1.96
46	11:45	1.01	5.000	0.35	162.82	50.00	1.618	0.497	3.26
47	11:47	1.01	5.000	0.21	99.45	50.00	0.828	0.416	1.99
48	12:02	1.01	5.000	0.21	100.27	50.00	1.334	0.665	2.01
49	12:43	1.01	5.000	0.22	96.56	50.00	1.142	0.591	1.93
50	12:47	1.01	5.000	0.22	99.89	50.00	2.016	1.009	2.00
51	13:04	1.01	5.000	0.38	216.74	50.00	1.788	0.413	4.33
52	13:47	1.01	15.000	0.14	199.17	50.00	0.546	0.137	3.98
53	14:12	1.01	15.000	0.08	108.36	50.00	0.435	0.201	2.17
54	14:16	1.01	5.000	0.25	95.51	50.00	1.363	0.714	1.91
55	14:22	1.01	15.000	0.08	133.58	50.00	0.301	0.113	2.67
56	18:15	1.00	10.000	0.16	1064.35	100.00	0.341	0.032	10.64
57	6:01	1.00	5.000	0.24	125.25	50.00	3.629	1.449	2.50
58	13:42	1.01	5.000	0.24	96.02	50.00	1.745	0.909	1.92
59	8:58	1.01	5.000	0.16	43.31	50.00	1.003	1.158	0.87

COMPUCHEM LABS

RIC
12/28/89 11:52:00
SAMPLE: 5ML VSTD150 #1914 ON#13
CONDS.:

COMPUCHEM DATA: CU891228A13 SCANS 58 TO 1600

494720.



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QUANTITATION REPORT     FILE: CU891228A13
DATA: CU891228A13.TI
12/28/89 11:52:00
SAMPLE: 5ML VSTD150 #1914 ON#13
CONDS.:
SUBMITTED BY: 13              ANALYST: 1492

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

 NO  NAME
  1  *234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
  2   221 CHLOROMETHANE <74-87-3> NA#2
  3   231 VINYL CHLORIDE <75-01-4> NA#3
  4   220 BROMOMETHANE <78-83-9> NA#4
  5   209 CHLOROETHANE <75-00-3> NA#5
  6   230 TRICHLOROFLUOROMETHANE <75-69-4> NA#6
  7   201 ACROLEIN <107-02-8> NA#7
  8   216 1,1-DICHLOROETHENE <75-35-4> NA#8
  9   254 CARBON DISULFIDE <75-15-0> NA#9
 10   285 IODOMETHANE <74-88-4> NA#10
 11   297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> NA#11
 12   266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> NA#12
 13   252 ACETONE (2-PROPANONE) <67-64-1> NA#13
 14  *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
 15   298 3-CHLOROPROPENE <107-05-1> NA#15
 16   222 METHYLENE CHLORIDE <75-09-2> NA#16
 17   226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
 18   202 ACRYLONITRILE <107-13-1> NA#18
 19   214 1,1-DICHLOROETHANE <75-34-3> NA#19
 20   257 VINYL ACETATE <108-05-4> NA#20
 21   237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
 22   253 2-BUTANONE <78-93-3> NA#22
 23   211 CHLOROFORM <67-66-2> NA#23
 24   227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
 25   206 CARBON TETRACHLORIDE <56-23-5> NA#25
 26   203 BENZENE <71-43-2> NA#26
 27   215 1,2-DICHLOROETHANE <107-06-2> NA#27
 28   272 CROTONALDEHYDE <4170-30-3> NA#28
 29  *270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
 30   229 TRICHLOROETHENE <79-01-6> NA#30
 31   217 1,2-DICHLOROPROPANE <78-87-5> NA#31
 32   286 DIBROMOMETHANE <74-95-3> NA#32
 33   212 BROMODICHLOROMETHANE <75-27-4> NA#33
 34   210 2-CHLOROETHYL VINYL ETHER <110-75-8> NA#34
 35   218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
 36   256 4-METHYL-2-PENTANONE <108-01-1> NA#36
 37   225 TOLUENE <108-88-3> NA#37
 38   250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
 39   228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
 40   287 ETHYLMETHACRYLATE <96-18-4> NA#40
 41   224 TETRACHLOROETHENE <127-18-4> NA#41
 42   255 2-HEXANONE <591-78-6> NA#42
 43   208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
 44   245 1,2-DIBROMOETHANE <1060-93-4> NA#44
 45   207 CHLOROBENZENE <108-90-7> NA#45
 46   273 1,1,1,2-TETRACHLOROETHANE <630-20-6> NA#46
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NO	NAME
47	219 ETHYLBENZENE <100-41-4> NA#47
48	330 M,P-XYLENE <133-02-7> NA#48
49	239 O-XYLENE <133-02-7> NA#49
50	251 STYRENE <100-42-5> NA#50
51	205 BROMOFORM <75-25-2> NA#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> NA#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> NA#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> NA#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> NA#56
57	#258 D4-1,2-DICHLOROETHANE NA#57
58	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
59	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	410	5:07	1	1.000	A BB	43992.	50.000	UG/L	0.35
2	50	68	0:51	1	0.166	A BB	88667.	115.744	UG/L	0.81
3	62	77	0:58	1	0.188	A BB	114634.	123.051	UG/L	0.86
4	94	95	1:11	1	0.232	A BB	140205.	144.059	UG/L	1.01
5	64	104	1:18	1	0.254	A BB	70679.	144.564	UG/L	1.01
6	101	123	1:32	1	0.300	A BB	188225.	158.532	UG/L	1.11
7	56	181	2:16	1	0.441	A BB	78157.	2282.980	UG/L	16.02
8	96	172	2:09	1	0.420	A BB	96709.	177.519	UG/L	1.25
9	76	181	2:16	1	0.441	A BB	333585.	250.630	UG/L	1.76
10	142	182	2:16	1	0.444	A BB	365340.	231.854	UG/L	1.63
11	117	182	2:16	1	0.444	A BB	115313.	220.687	UG/L	1.55
12	85	185	2:19	1	0.451	A BB	125702.	251.987	UG/L	1.77
13	43	206	2:34	1	0.502	A BB	36738.	179.955	UG/L	1.26
14	114	542	6:46	14	1.000	A BB	162016.	50.000	UG/L	0.35
15	76	219	2:44	1	0.534	A BB	81052.	137.548	UG/L	0.97
16	84	237	2:58	1	0.578	A BB	196196.	150.783	UG/L	1.06
17	96	264	3:18	1	0.644	A BB	186701.	157.884	UG/L	1.11
18	53	280	3:30	1	0.683	A BB	390716.	1505.730	UG/L	10.57
19	63	314	3:55	1	0.766	A BB	348461.	145.228	UG/L	1.02
20	43	340	4:15	14	0.627	A BB	490189.	151.686	UG/L	1.06
21	96	384	4:48	1	0.937	A BB	226505.	146.850	UG/L	1.03
22	72	407	5:05	1	0.993	A BB	16330.	172.774	UG/L	1.21
23	83	431	5:23	1	1.051	A BB	396908.	158.089	UG/L	1.11
24	97	432	5:24	14	0.797	A BB	361703.	160.183	UG/L	1.12
25	117	448	5:36	14	0.827	A VB	333314.	153.763	UG/L	1.08
26	78	476	5:57	14	0.878	A BB	426843.	153.488	UG/L	1.08
27	62	488	6:06	1	1.190	A BB	278509.	148.748	UG/L	1.04
28	70	542	6:46	14	1.000	A BB	73351.	1522.070	UG/L	10.68
29	117	916	11:27	29	1.000	A BB	201041.	50.000	UG/L	0.35
30	130	561	7:01	14	1.035	A BB	207493.	162.956	UG/L	1.14
31	63	589	7:22	14	1.087	A BB	176263.	150.652	UG/L	1.06
32	174	604	7:33	1	1.473	A BB	215121.	179.115	UG/L	1.26
33	83	636	7:57	14	1.173	A BB	329132.	152.833	UG/L	1.07
34	63	689	8:37	14	1.271	A BB	70406.	155.513	UG/L	1.09
35	75	693	8:40	14	1.279	A BB	284481.	157.862	UG/L	1.11
36	43	729	9:07	29	0.796	M XX	141877.	162.736	UG/L	1.14
37	92	725	9:04	29	0.791	A BB	198577.	154.171	UG/L	1.08
38	75	775	9:41	14	1.430	A BB	220082.	135.742	UG/L	0.95
39	97	795	9:56	14	1.467	A BB	250560.	166.005	UG/L	1.16
40	69	803	10:02	29	0.877	A BB	350415.	146.604	UG/L	1.03
41	164	791	9:53	29	0.864	A BB	320778.	166.269	UG/L	1.17

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	848	10:36	29	0.926	A BB	136819.	157.088	UG/L	1.10
43	129	842	10:31	14	1.554	A BB	405644.	166.027	UG/L	1.17
44	107	845	10:34	14	1.559	A BB	386154.	168.239	UG/L	1.18
45	112	921	11:31	29	1.005	A BB	578171.	148.546	UG/L	1.04
46	131	943	11:47	14	1.740	A BB	347573.	170.189	UG/L	1.19
47	106	947	11:50	29	1.034	A BV	246163.	153.159	UG/L	1.07
48	106	966	12:04	29	1.055	A VB	424052.	154.852	UG/L	1.09
49	106	1021	12:46	29	1.115	A BB	354552.	154.716	UG/L	1.09
50	104	1027	12:50	29	1.121	A BB	620824.	155.950	UG/L	1.09
51	173	1048	13:06	14	1.934	A BB	364594.	171.783	UG/L	1.21
52	88	1105	13:49	14	2.039	A BB	125941.	166.499	UG/L	1.17
53	110	1138	14:13	29	1.242	A BB	128620.	155.649	UG/L	1.09
54	83	1145	14:19	29	1.250	A BB	412598.	145.547	UG/L	1.02
55	53	1152	14:24	29	1.258	A BB	99762.	145.228	UG/L	1.02
56	157	1463	18:17	29	1.597	A BB	170498.	400.953	UG/L	2.81
57	65	479	5:59	1	1.168	A BB	262031.	148.044	UG/L	1.04
58	95	1099	13:44	29	1.200	A BB	530281.	147.851	UG/L	1.04
59	98	717	8:58	29	0.783	A BB	332877.	152.578	UG/L	1.07

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:05	1.01	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:52	0.99	10.000	0.02	115.74	200.00	0.504	0.871	0.58
3	0:58	1.00	10.000	0.02	123.05	200.00	0.651	1.059	0.62
4	1:11	1.00	10.000	0.02	144.06	200.00	0.797	1.106	0.72
5	1:17	1.01	10.000	0.03	144.56	200.00	0.402	0.556	0.72
6	1:31	1.01	10.000	0.03	158.53	200.00	1.070	1.349	0.79
7	2:12	1.03	90.000	0.00	2282.99	2000.04	0.044	0.039	1.14
8	2:07	1.01	5.000	0.08	177.52	200.00	0.550	0.619	0.89
9	2:13	1.02	5.000	0.09	250.63	200.00	1.896	1.513	1.25
10	2:15	1.01	10.000	0.04	231.85	200.00	2.076	1.791	1.16
11	2:15	1.01	10.000	0.04	220.69	200.00	0.655	0.594	1.10
12	2:16	1.02	10.000	0.05	251.99	200.00	0.714	0.567	1.26
13	2:35	1.00	10.000	0.05	179.96	200.00	0.209	0.232	0.90
14	6:43	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	2:43	1.01	10.000	0.05	137.55	200.00	0.461	0.670	0.69
16	2:56	1.01	5.000	0.12	150.78	200.00	1.115	1.479	0.75
17	3:16	1.01	5.000	0.13	157.88	200.00	1.061	1.344	0.79
18	3:29	1.00	120.000	0.01	1505.73	2000.04	0.222	0.295	0.75
19	3:54	1.01	5.000	0.15	145.23	200.00	1.980	2.727	0.73
20	4:13	1.01	10.000	0.06	151.69	200.00	0.756	0.997	0.76
21	4:46	1.01	5.000	0.19	146.85	200.00	1.287	1.753	0.73
22	5:04	1.00	10.000	0.10	172.77	200.00	0.093	0.107	0.86
23	5:20	1.01	5.000	0.21	158.09	200.00	2.256	2.854	0.79
24	5:21	1.01	5.000	0.16	160.18	200.00	0.558	0.697	0.80
25	5:33	1.01	5.000	0.17	153.76	200.00	0.514	0.669	0.77
26	5:54	1.01	5.000	0.18	153.49	200.00	0.659	0.858	0.77
27	6:04	1.01	5.000	0.24	148.75	200.00	1.583	2.128	0.74
28	6:46	1.00	100.000	0.01	1522.07	2000.04	0.011	0.015	0.76
29	11:23	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	6:58	1.01	5.000	0.21	162.96	200.00	0.320	0.393	0.81
31	7:19	1.01	5.000	0.22	150.65	200.00	0.272	0.361	0.75
32	7:30	1.01	5.000	0.29	179.11	200.00	1.223	1.365	0.90
33	7:53	1.01	5.000	0.23	152.83	200.00	0.508	0.665	0.76
34	8:33	1.01	10.000	0.13	155.51	200.00	0.109	0.140	0.78
35	8:36	1.01	5.000	0.26	157.86	200.00	0.439	0.556	0.79
36	9:05	1.00	15.000	0.05	162.74	200.00	0.176	0.217	0.81

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	9:00	1.01	5.000	0.16	154.17	200.00	0.247	0.320	0.77
38	9:37	1.01	5.000	0.29	135.74	200.00	0.340	0.500	0.68
39	9:53	1.01	5.000	0.29	166.00	200.00	0.387	0.466	0.83
40	9:59	1.01	10.000	0.09	146.60	200.00	0.436	0.594	0.73
41	9:50	1.01	5.000	0.17	166.27	200.00	0.399	0.480	0.83
42	10:34	1.00	15.000	0.06	157.09	200.00	0.170	0.217	0.79
43	10:28	1.01	5.000	0.31	166.03	200.00	0.626	0.754	0.83
44	10:31	1.00	5.000	0.31	168.24	200.00	0.596	0.708	0.84
45	11:25	1.01	5.000	0.20	148.55	200.00	0.719	0.968	0.74
46	11:41	1.01	5.000	0.35	170.19	200.00	0.536	0.630	0.85
47	11:46	1.01	5.000	0.21	153.16	200.00	0.306	0.400	0.77
48	11:59	1.01	5.000	0.21	154.85	200.00	0.527	0.681	0.77
49	12:40	1.01	5.000	0.22	154.72	200.00	0.441	0.570	0.77
50	12:46	1.01	5.000	0.22	155.95	200.00	0.772	0.990	0.78
51	13:01	1.01	5.000	0.39	171.78	200.00	0.563	0.655	0.86
52	13:44	1.01	15.000	0.14	166.50	200.00	0.194	0.233	0.83
53	14:09	1.01	15.000	0.08	155.65	200.00	0.160	0.206	0.78
54	14:13	1.01	5.000	0.25	145.55	200.00	0.513	0.705	0.73
55	14:19	1.01	15.000	0.08	145.23	200.00	0.124	0.171	0.73
56	18:12	1.00	10.000	0.16	400.95	400.00	0.106	0.106	1.00
57	5:56	1.01	5.000	0.23	148.04	200.00	1.489	2.012	0.74
58	13:40	1.01	5.000	0.24	147.85	200.00	0.659	0.892	0.74
59	8:54	1.01	5.000	0.16	152.58	200.00	0.414	0.543	0.76

COMPUCHEM LABS

RIC

COMPUCHEM DATA: CS891228A13 SCANS 59 TO 1600

12/28/89 10:34:00

SAMPLE: 5ML VSTD200 #1915 ON#13

CONDS.:

603520.

125.0

RIC

IS#1 IS#2 IS#3

SS#1 SS#2 SS#3

179 235 381 428 474 557 631 688 789 839 938 1019 1094 1138 1213 1296 1387 1456

200 2:30 400 5:00 600 7:30 800 10:00 1000 12:30 1200 15:00 1400 17:30 1600 20:00 SCAN TIME

QUANTITATION REPORT FILE: CS891228A13
DATA: CS891228A13.TI
12/28/89 10:34:00
SAMPLE: 5ML VSTD200 #1915 ON#13
CONDS. :
SUBMITTED BY: 13 ANALYST: 1492

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> NA#1
2	221 CHLOROMETHANE <74-87-3> NA#2
3	231 VINYL CHLORIDE <75-01-4> NA#3
4	220 BROMOMETHANE <78-83-9> NA#4
5	209 CHLOROETHANE <75-00-3> NA#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> NA#6
7	201 ACROLEIN <107-02-8> NA#7
8	216 1,1-DICHLOROETHENE <75-35-4> NA#8
9	254 CARBON DISULFIDE <75-15-0> NA#9
10	285 IODOMETHANE <74-88-4> NA#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> NA#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> NA#12
13	252 ACETONE (2-PROPANONE) <67-64-1> NA#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> NA#14
15	298 3-CHLOROPROPENE <107-05-1> NA#15
16	222 METHYLENE CHLORIDE <75-09-2> NA#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> NA#17
18	202 ACRYLONITRILE <107-13-1> NA#18
19	214 1,1-DICHLOROETHANE <75-34-3> NA#19
20	257 VINYL ACETATE <108-05-4> NA#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> NA#21
22	253 2-BUTANONE <78-93-3> NA#22
23	211 CHLOROFORM <67-66-2> NA#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> NA#24
25	206 CARBON TETRACHLORIDE <56-23-5> NA#25
26	203 BENZENE <71-43-2> NA#26
27	215 1,2-DICHLOROETHANE <107-06-2> NA#27
28	272 CROTONALDEHYDE <4170-30-3> NA#28
29	*270 D5-CHLOROBENZENE (IS) <XX-XX-X> NA#29
30	229 TRICHLOROETHENE <79-01-6> NA#30
31	217 1,2-DICHLOROPROPANE <78-87-5> NA#31
32	286 DIBROMOMETHANE <74-95-3> NA#32
33	212 BROMODICHLOROMETHANE <75-27-4> NA#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> NA#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> NA#35
36	256 4-METHYL-2-PENTANONE <108-01-1> NA#36
37	225 TOLUENE <108-88-3> NA#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> NA#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> NA#39
40	287 ETHYLMETHACRYLATE <96-18-4> NA#40
41	224 TETRACHLOROETHENE <127-18-4> NA#41
42	255 2-HEXANONE <591-78-6> NA#42
43	208 DIBROMOCHLOROMETHANE <124-48-1> NA#43
44	245 1,2-DIBROMOETHANE <1060-93-4> NA#44
45	207 CHLOROBENZENE <108-90-7> NA#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> NA#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> NA#47
48	330 M,P-XYLENE <133-02-7> NA#48
49	239 O-XYLENE <133-02-7> NA#49
50	251 STYRENE <100-42-5> NA#50
51	205 BROMOFORM <75-25-2> NA#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> NA#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> NA#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> NA#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> NA#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> NA#56
57	#258 D4-1,2-DICHLOROETHANE NA#57
58	#247 BROMOFLUOROBENZENE <460-00-4> NA#58
59	#233 D8-TOLUENE NA#59

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	407	5:05	1	1.000	A BB	45838.	50.000	UG/L	0.29
2	50	69	0:52	1	0.170	A BB	159642.	200.000	UG/L	1.18
3	62	77	0:58	1	0.189	A BB	194140.	200.000	UG/L	1.18
4	94	95	1:11	1	0.233	A BB	202817.	200.000	UG/L	1.18
5	64	103	1:17	1	0.253	A BB	101885.	200.000	UG/L	1.18
6	101	122	1:31	1	0.300	A BB	247425.	200.000	UG/L	1.18
7	56	176	2:12	1	0.432	A BB	71343.	2000.030	UG/L	11.80
8	96	170	2:07	1	0.418	A BB	113528.	200.000	UG/L	1.18
9	76	178	2:13	1	0.437	A BB	277367.	200.000	UG/L	1.18
10	142	180	2:15	1	0.442	A BB	328371.	200.000	UG/L	1.18
11	117	180	2:15	1	0.442	A BB	108889.	200.000	UG/L	1.18
12	85	182	2:16	1	0.447	A BB	103955.	200.000	UG/L	1.18
13	43	207	2:35	1	0.509	M XX	42544.	200.000	UG/L	1.18
14	114	538	6:43	14	1.000	A BB	167560.	50.000	UG/L	0.29
15	76	217	2:43	1	0.533	A BB	122798.	200.000	UG/L	1.18
16	84	235	2:56	1	0.577	A BB	271157.	200.000	UG/L	1.18
17	96	262	3:16	1	0.644	A BB	246428.	200.000	UG/L	1.18
18	53	279	3:29	1	0.686	A BB	540759.	2000.030	UG/L	11.80
19	63	312	3:54	1	0.767	A BB	500017.	200.000	UG/L	1.18
20	43	338	4:13	14	0.628	A BB	668435.	200.000	UG/L	1.18
21	96	381	4:46	1	0.936	A BB	321429.	200.000	UG/L	1.18
22	72	405	5:04	1	0.995	A BB	19696.	200.000	UG/L	1.18
23	83	427	5:20	1	1.049	A BB	523202.	200.000	UG/L	1.18
24	97	428	5:21	14	0.796	A BB	467066.	200.000	UG/L	1.18
25	117	444	5:33	14	0.825	A VB	448377.	200.000	UG/L	1.18
26	78	472	5:54	14	0.877	A BB	575221.	200.000	UG/L	1.18
27	62	485	6:04	1	1.192	A BB	390184.	200.000	UG/L	1.18
28	70	541	6:46	14	1.006	A BB	99683.	2000.030	UG/L	11.80
29	117	911	11:23	29	1.000	A BB	193949.	50.000	UG/L	0.29
30	130	557	6:58	14	1.035	A BB	263376.	200.000	UG/L	1.18
31	63	585	7:19	14	1.087	A BB	242008.	200.000	UG/L	1.18
32	174	600	7:30	1	1.474	A BB	250284.	200.000	UG/L	1.18
33	83	631	7:53	14	1.173	A BB	445447.	200.000	UG/L	1.18
34	63	684	8:33	14	1.271	A BB	93645.	200.000	UG/L	1.18
35	75	688	8:36	14	1.279	A BB	372749.	200.000	UG/L	1.18
36	43	727	9:05	29	0.798	A BB	168214.	200.000	UG/L	1.18
37	92	720	9:00	29	0.790	A BB	248520.	200.000	UG/L	1.18
38	75	770	9:37	14	1.431	A BB	335360.	200.000	UG/L	1.18
39	97	791	9:53	14	1.470	A BB	312200.	200.000	UG/L	1.18
40	69	799	9:59	29	0.877	A BB	461178.	200.000	UG/L	1.18
41	164	787	9:50	29	0.864	A BB	372243.	200.000	UG/L	1.18

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	845	10:34	29	0.928	A BB	168049.	200.000	UG/L	1.18
43	129	837	10:28	14	1.556	A BB	505368.	200.000	UG/L	1.18
44	107	841	10:31	14	1.563	A BB	474763.	200.000	UG/L	1.18
45	112	914	11:25	29	1.003	A BB	750980.	200.000	UG/L	1.18
46	131	935	11:41	14	1.738	A BB	422433.	200.000	UG/L	1.18
47	106	941	11:46	29	1.033	A BV	310108.	200.000	UG/L	1.18
48	106	959	11:59	29	1.053	A VB	528368.	200.000	UG/L	1.18
49	106	1014	12:40	29	1.113	A BB	442157.	200.000	UG/L	1.18
50	104	1021	12:46	29	1.121	A BB	768099.	200.000	UG/L	1.18
51	173	1042	13:01	14	1.937	A BB	439008.	200.000	UG/L	1.18
52	88	1099	13:44	14	2.043	A BB	156458.	200.000	UG/L	1.18
53	110	1132	14:09	29	1.243	A BB	159439.	200.000	UG/L	1.18
54	83	1138	14:13	29	1.249	A BB	546961.	200.000	UG/L	1.18
55	53	1146	14:19	29	1.258	A BB	132540.	200.000	UG/L	1.18
56	157	1456	18:12	29	1.598	A BB	164092.	399.999	UG/L	2.36
57	65	479	5:56	1	1.167	A BB	368845.	200.000	UG/L	1.18
58	95	1093	13:40	29	1.200	A BB	692016.	200.000	UG/L	1.18
59	98	712	8:54	29	0.782	A BB	420945.	200.000	UG/L	1.18

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	5:05	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:52	1.00	10.000	0.02	200.00	200.00	0.871	0.871	1.00
3	0:58	1.00	10.000	0.02	200.00	200.00	1.059	1.059	1.00
4	1:11	1.00	10.000	0.02	200.00	200.00	1.106	1.106	1.00
5	1:17	1.00	10.000	0.03	200.00	200.00	0.556	0.556	1.00
6	1:31	1.00	10.000	0.03	200.00	200.00	1.349	1.349	1.00
7	2:12	1.00	90.000	0.00	2000.04	2000.04	0.039	0.039	1.00
8	2:07	1.00	5.000	0.08	200.00	200.00	0.619	0.619	1.00
9	2:13	1.00	5.000	0.09	200.00	200.00	1.513	1.513	1.00
10	2:15	1.00	10.000	0.04	200.00	200.00	1.791	1.791	1.00
11	2:15	1.00	10.000	0.04	200.00	200.00	0.594	0.594	1.00
12	2:16	1.00	10.000	0.04	200.00	200.00	0.567	0.567	1.00
13	2:35	1.00	10.000	0.05	200.00	200.00	0.232	0.232	1.00
14	6:43	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	2:43	1.00	10.000	0.05	200.00	200.00	0.670	0.670	1.00
16	2:56	1.00	5.000	0.12	200.00	200.00	1.479	1.479	1.00
17	3:16	1.00	5.000	0.13	200.00	200.00	1.344	1.344	1.00
18	3:29	1.00	120.000	0.01	2000.04	2000.04	0.295	0.295	1.00
19	3:54	1.00	5.000	0.15	200.00	200.00	2.727	2.727	1.00
20	4:13	1.00	10.000	0.06	200.00	200.00	0.997	0.997	1.00
21	4:46	1.00	5.000	0.19	200.00	200.00	1.753	1.753	1.00
22	5:04	1.00	10.000	0.10	200.00	200.00	0.107	0.107	1.00
23	5:20	1.00	5.000	0.21	200.00	200.00	2.854	2.854	1.00
24	5:21	1.00	5.000	0.16	200.00	200.00	0.697	0.697	1.00
25	5:33	1.00	5.000	0.17	200.00	200.00	0.669	0.669	1.00
26	5:54	1.00	5.000	0.18	200.00	200.00	0.858	0.858	1.00
27	6:04	1.00	5.000	0.24	200.00	200.00	2.128	2.128	1.00
28	6:46	1.00	100.000	0.01	2000.04	2000.04	0.015	0.015	1.00
29	11:23	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	6:58	1.00	5.000	0.21	200.00	200.00	0.393	0.393	1.00
31	7:19	1.00	5.000	0.22	200.00	200.00	0.361	0.361	1.00
32	7:30	1.00	5.000	0.29	200.00	200.00	1.365	1.365	1.00
33	7:53	1.00	5.000	0.23	200.00	200.00	0.665	0.665	1.00
34	8:33	1.00	10.000	0.13	200.00	200.00	0.140	0.140	1.00
35	8:36	1.00	5.000	0.26	200.00	200.00	0.556	0.556	1.00
36	9:05	1.00	15.000	0.05	200.00	200.00	0.217	0.217	1.00

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	9:00	1.00	5.000	0.16	200.00	200.00	0.320	0.320	1.00
38	9:37	1.00	5.000	0.29	200.00	200.00	0.500	0.500	1.00
39	9:53	1.00	5.000	0.29	200.00	200.00	0.466	0.466	1.00
40	9:59	1.00	10.000	0.09	200.00	200.00	0.594	0.594	1.00
41	9:50	1.00	5.000	0.17	200.00	200.00	0.480	0.480	1.00
42	10:34	1.00	15.000	0.06	200.00	200.00	0.217	0.217	1.00
43	10:28	1.00	5.000	0.31	200.00	200.00	0.754	0.754	1.00
44	10:31	1.00	5.000	0.31	200.00	200.00	0.708	0.708	1.00
45	11:25	1.00	5.000	0.20	200.00	200.00	0.968	0.968	1.00
46	11:41	1.00	5.000	0.35	200.00	200.00	0.630	0.630	1.00
47	11:46	1.00	5.000	0.21	200.00	200.00	0.400	0.400	1.00
48	11:59	1.00	5.000	0.21	200.00	200.00	0.681	0.681	1.00
49	12:40	1.00	5.000	0.22	200.00	200.00	0.570	0.570	1.00
50	12:46	1.00	5.000	0.22	200.00	200.00	0.990	0.990	1.00
51	13:01	1.00	5.000	0.39	200.00	200.00	0.655	0.655	1.00
52	13:44	1.00	15.000	0.14	200.00	200.00	0.233	0.233	1.00
53	14:09	1.00	15.000	0.08	200.00	200.00	0.206	0.206	1.00
54	14:13	1.00	5.000	0.25	200.00	200.00	0.705	0.705	1.00
55	14:19	1.00	15.000	0.08	200.00	200.00	0.171	0.171	1.00
56	18:12	1.00	10.000	0.16	400.00	400.00	0.106	0.106	1.00
57	5:56	1.00	5.000	0.23	200.00	200.00	2.012	2.012	1.00
58	13:40	1.00	5.000	0.24	200.00	200.00	0.892	0.892	1.00
59	8:54	1.00	5.000	0.16	200.00	200.00	0.543	0.543	1.00

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

INITIAL TIME OF TUNE 10:18 SHIFT(S) (A) X (B) ___ (C) ___
TIME TUNE EXPIRES 22:18 DATE 12/28/89
ANALYSIS TYPE NAST
PREVENTIVE MAINTENANCE ___

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF891228A13	/	/ /	10 18	BFB			2uL	1492	#7008
2		CS891228A13	/	/ /	10 34	VSTD0300 (ALT)		1915	5mL	1492	
3		CT891228A13	/	/ /	11 08	VSTD020		1911	5mL	1492	
4		CU891228A13	/	/ /	11 52	VSTD150		1914	5mL	1492	
5		CV891228A13	/	/ /	12 30	VSTD050		1912	5mL	1492	
6		CW891228A13	/	/ /	13 04	VSTD100		1913	5mL	1492	
7			/	/ /	:	NAST MP	GOOD				
8			/	/ /	:						
9			/	/ /	:						
10			/	/ /	:						
11			/	/ /	:						
12			/	/ /	:						
13			/	/ /	:						
14			/	/ /	:						
15			/	/ /	:						
16			/	/ /	:						
17			/	/ /	:						
18			/	/ /	:						
19			/	/ /	:						
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23			/	/ /	:						
24			/	/ /	:						
			/	/ /	:						

VERIFIED KR 12/27/89
SUPERVISOR APPROVAL 1452 [illegible]

1672

18756 07 SAMPLE DATA PACKAGE

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM LABS Contract: (2-88)-REVS

Lab Code: COMPU Case No.: 18756 SAS No.: _____ SDG No.: 07

Instrument ID: 19 Calibration Date(s): 12/12/89 12/13/89

Matrix:(soil/water) SOIL Level:(low/med) LOW Column:(pack/cap) CAP

Min $\overline{RRF}$ for SPCC(#) = 0.300 (0.250 for Bromoform) Max %RSD for CCC(*) = 30.0%

LAB FILE ID: RRF20 = GS891213C19 RRF50 = GT891212B19
RRF100= GW891212B19 RRF150= GU891213C19 RRF200= GU891212B19

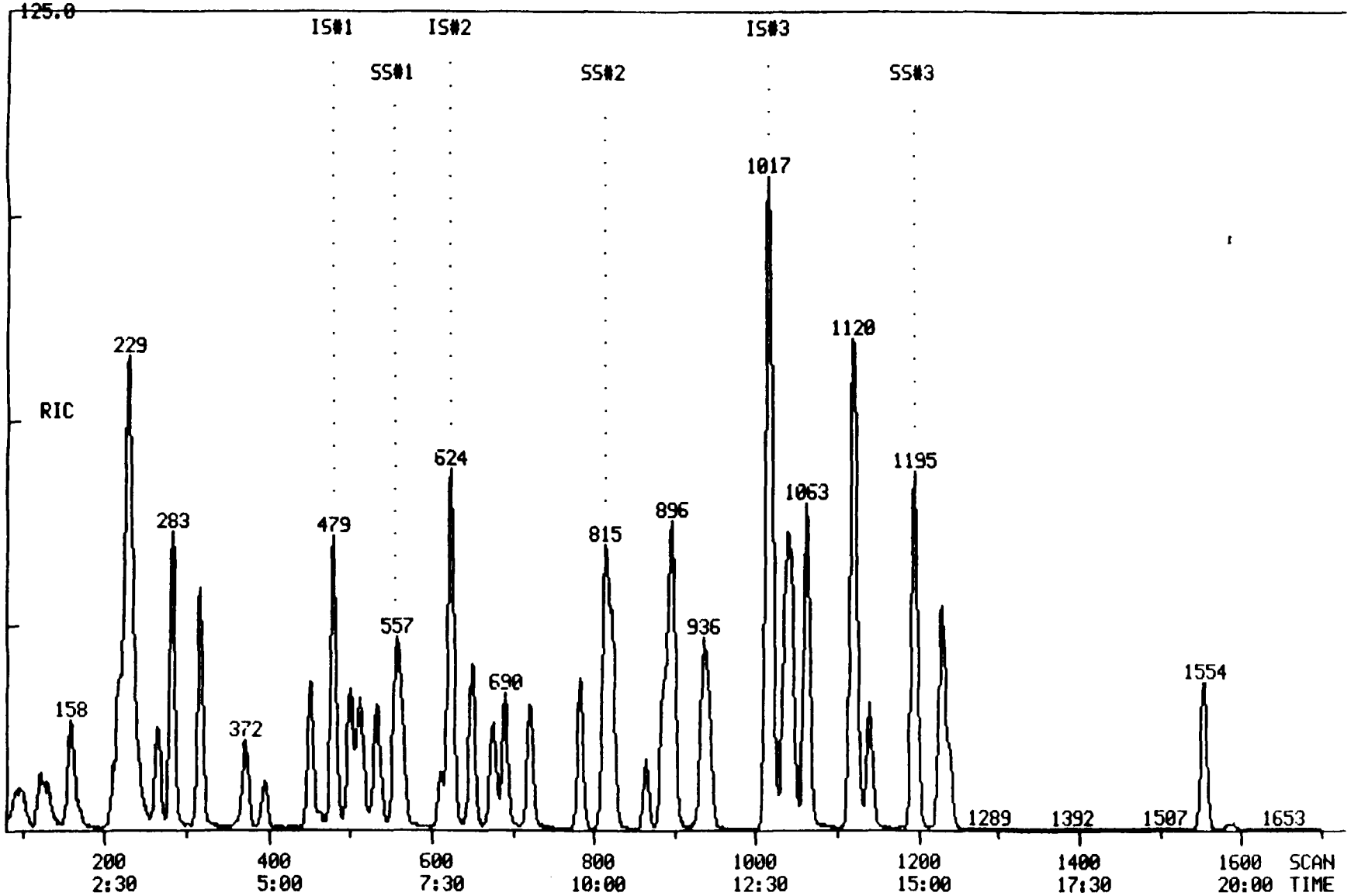
COMPOUND	RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD
Chloromethane #	1.440	1.182	1.251	1.328	1.407	1.322	8.1#
Bromomethane	1.727	1.457	1.288	1.417	1.415	1.461	11.1
Vinyl Chloride *	1.973	1.406	1.526	1.614	1.586	1.621	13.1*
Chloroethane	0.889	0.850	0.641	0.645	0.705	0.746	15.6
Methylene Chloride	4.228	2.065	1.924	1.732	1.845	2.359	44.6
Acetone	0.659	0.385	0.357	0.359	0.276	0.407	36.0
Carbon Disulfide	4.886	5.046	4.423	3.515	3.811	4.336	15.3
1,1-Dichloroethene *	1.604	1.458	1.509	1.290	1.504	1.473	7.8*
1,1-Dichloroethane #	3.309	3.038	3.372	3.207	3.488	3.283	5.2#
1,2-Dichloroethene (total)	3.715	3.247	3.438	3.277	3.466	3.429	5.4
Chloroform *	3.900	3.567	3.772	3.644	3.800	3.737	3.5*
1,2-Dichloroethane	2.844	2.476	2.640	2.683	2.590	2.647	5.1
2-Butanone	0.147	0.111	0.151	0.163	0.127	0.140	14.8
1,1,1-Trichloroethane	0.863	0.807	0.883	0.900	0.834	0.857	4.4
Carbon Tetrachloride	0.729	0.743	0.813	0.826	0.796	0.781	5.5
Vinyl Acetate	0.654	0.637	0.745	0.819	0.645	0.700	11.4
Bromodichloromethane	0.795	0.792	0.930	1.018	0.858	0.879	10.9
1,2-Dichloropropane *	0.384	0.330	0.361	0.387	0.330	0.358	7.8*
cis-1,3-Dichloropropene	0.884	0.793	0.968	1.022	0.873	0.908	9.8
Trichloroethene	0.500	0.413	0.465	0.472	0.436	0.457	7.4
Dibromochloromethane	0.695	0.647	0.737	0.806	0.672	0.711	8.8
1,1,2-Trichloroethane	0.422	0.346	0.422	0.466	0.371	0.405	11.7
Benzene	0.946	0.821	0.907	0.894	0.800	0.874	7.0
Trans-1,3-Dichloropropene	0.429	0.386	0.476	0.532	0.461	0.457	11.9
Bromoform #	0.610	0.564	0.683	0.779	0.623	0.652	12.7#
4-Methyl-2-Pentanone	0.408	0.336	0.451	0.503	0.388	0.417	15.2
2-Hexanone	0.295	0.225	0.385	0.407	0.289	0.320	23.4
Tetrachloroethene	0.592	0.514	0.565	0.543	0.527	0.548	5.7
1,1,2,2-Tetrachloroethane #	0.549	0.553	0.691	0.767	0.650	0.642	14.5#
Toluene *	0.737	0.657	0.760	0.746	0.724	0.725	5.5*
Chlorobenzene #	1.064	0.921	1.053	1.060	1.011	1.022	5.9#
Ethylbenzene *	0.482	0.436	0.491	0.471	0.460	0.468	4.6*
Styrene	1.290	1.194	1.212	1.166	1.071	1.187	6.7
Total Xylenes	1.606	1.573	1.563	1.490	1.405	1.527	5.3
Toluene-d8	1.270	1.119	1.291	1.129	1.101	1.182	7.7
BFB	1.061	0.991	1.103	0.983	0.937	1.015	6.5
1,2-Dichloroethane-d4	2.700	2.601	2.731	2.493	2.451	2.595	4.7

COMPUCHEM LABS

RIC
12/13/89 0:31:00
SAMPLE: 10ML EPA STANDARD VSTD020 (1906) ON#19
CONDS.:

COMPUCHEM DATA: GS891213C19 SCANS 80 TO 1700
OUT OF 80 TO 1700

104160.



QUANTITATION REPORT FILE: GS891213C19
DATA: GS891213C19.TI
12/13/89 0:31:00
SAMPLE: 10ML EPA STANDARD VSTD020 (1906) ON#19
CONDS. :
SUBMITTED BY: 19 ANALYST: 1422

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
2	221 CHLOROMETHANE <74-87-3> RO#2
3	231 VINYL CHLORIDE <75-01-4> RO#3
4	220 BROMOMETHANE <78-83-9> RO#4
5	209 CHLOROETHANE <75-00-3> RO#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> RO#6
7	201 ACROLEIN <107-02-8> RO#7
8	216 1,1-DICHLOROETHENE <75-35-4> RO#8
9	254 CARBON DISULFIDE <75-15-0> RO#9
10	285 IODOMETHANE <74-88-4> RO#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> RO#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> RO#12
13	252 ACETONE (2-PROPANONE) <67-64-1> RO#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
15	298 3-CHLOROPROPENE <107-05-1> RO#15
16	222 METHYLENE CHLORIDE <75-09-2> RO#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
18	202 ACRYLONITRILE <107-13-1> RO#18
19	214 1,1-DICHLOROETHANE <75-34-3> RO#19
20	257 VINYL ACETATE <108-05-4> RO#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
22	253 2-BUTANONE <78-93-3> RO#22
23	211 CHLOROFORM <67-66-2> RO#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
25	206 CARBON TETRACHLORIDE <56-23-5> RO#25
26	203 BENZENE <71-43-2> RO#26
27	215 1,2-DICHLOROETHANE <107-06-2> RO#27
28	272 CROTONALDEHYDE <4170-30-3> RO#28
29	*270 D5-CHLOROBENZENE (IS) RO#29
30	229 TRICHLOROETHENE <79-01-6> RO#30
31	217 1,2-DICHLOROPROPANE <78-87-5> RO#31
32	286 DIBROMOMETHANE <74-95-3> RO#32
33	212 BROMODICHLOROMETHANE <75-27-4> RO#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> RO#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
36	256 4-METHYL-2-PENTANONE <108-01-1> RO#36
37	225 TOLUENE <108-88-3> RO#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
40	287 ETHYLMETHACRYLATE <96-18-4> RO#40
41	224 TETRACHLOROETHENE <127-18-4> RO#41
42	255 2-HEXANONE <591-78-6> RO#42
43	208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
44	245 1,2-DIBROMOMETHANE <1060-93-4> RO#44
45	207 CHLOROBENZENE <108-90-7> RO#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> RO#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> RO#47
48	330 M,P-XYLENE <133-02-7> RO#48
49	239 O-XYLENE <133-02-7> RO#49
50	251 STYRENE <100-42-5> RO#50
51	205 BROMOFORM <75-25-2> RO#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> RO#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> RO#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> RO#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> RO#56
57	#258 D4-1,2-DICHLOROETHANE RO#57
58	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
59	#233 D8-TOLUENE RO#59

66 12-13-89 LCS 12.13.89

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	479	5:59	1	1.000	A BB	36628.	50.000 UG/KG	2.23
2	50	90	1:07	1	0.188	A BB	21095.	24.364 UG/KG	1.08
3	62	101	1:16	1	0.211	A BB	28901.	28.057 UG/KG	1.25
4	94	122	1:31	1	0.255	A BV	25299.	23.702 UG/KG	1.05
5	64	130	1:37	1	0.271	A BB	13028.	20.929 UG/KG	0.93
6	101	160	2:00	1	0.334	A BB	57856.	19.617 UG/KG	0.87
7	56	210	2:37	1	0.438	A BV	18802.	263.679 UG/KG	11.73
8	96	217	2:43	1	0.453	A BB	23503.	22.000 UG/KG	0.98
9	76	230	2:52	1	0.480	A BB	71591.	19.366 UG/KG	0.86
10	142	227	2:50	1	0.474	A BB	80851.	22.128 UG/KG	0.98
11	117	227	2:50	1	0.474	A BB	23447.	22.511 UG/KG	1.00
12	85	232	2:54	1	0.484	A BB	26377.	22.484 UG/KG	1.00
13	43	233	2:55	1	0.486	A BB	9660.	34.223 UG/KG	1.52
14	114	624	7:48	14	1.000	A BB	146288.	50.000 UG/KG	2.23
15	76	265	3:19	1	0.553	A BB	12206.	21.454 UG/KG	0.95
16	84	283	3:32	1	0.591	A BB	61944.	40.946 UG/KG	1.82
17	96	317	3:58	1	0.662	A BV	23667.	21.827 UG/KG	0.97
18	53	317	3:58	1	0.662	A BB	38263.	245.603 UG/KG	10.93
19	63	372	4:39	1	0.777	A BB	48483.	21.783 UG/KG	0.97
20	43	396	4:57	14	0.635	A BB	38271.	20.530 UG/KG	0.91
21	96	450	5:37	1	0.939	A BB	30761.	23.766 UG/KG	1.06
22	72	464	5:48	1	0.969	A BB	2153.	26.381 UG/KG	1.17
23	83	501	6:16	1	1.046	A BB	57140.	21.868 UG/KG	0.97
24	97	512	6:24	14	0.821	A BB	50512.	21.399 UG/KG	0.95
25	117	533	6:40	14	0.854	A BB	42668.	19.638 UG/KG	0.87
26	78	558	6:58	14	0.894	A BB	55377.	23.059 UG/KG	1.03
27	62	565	7:04	1	1.180	A BB	41667.	22.972 UG/KG	1.02
28	70	611	7:38	14	0.979	A BV	12535.	379.487 UG/KG	16.89
29	117	1016	12:42	29	1.000	A BB	167999.	50.000 UG/KG	2.23
30	130	650	8:07	14	1.042	A BB	29278.	24.240 UG/KG	1.08
31	63	677	8:28	14	1.085	A BB	22445.	23.273 UG/KG	1.04
32	174	690	8:37	1	1.441	A BB	29400.	21.777 UG/KG	0.97
33	83	722	9:01	14	1.157	A BB	46543.	20.088 UG/KG	0.89
34	63	NOT FOUND							
35	75	783	9:47	14	1.255	A BB	51724.	22.306 UG/KG	0.99
36	43	815	10:11	29	0.802	A BB	27447.	24.316 UG/KG	1.08
37	92	823	10:17	29	0.810	A BB	49493.	22.431 UG/KG	1.00
38	75	864	10:48	14	1.385	A BB	25090.	22.241 UG/KG	0.99
39	97	885	11:04	14	1.418	A BB	24691.	24.369 UG/KG	1.08
40	69	893	11:10	29	0.879	A BB	42102.	22.777 UG/KG	1.01
41	164	897	11:13	29	0.883	A BB	39807.	23.030 UG/KG	1.02

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	933	11:40	29	0.918	A BB	19816.	26.231	UG/KG	1.17
43	129	936	11:42	14	1.500	A BB	40694.	21.508	UG/KG	0.96
44	107	943	11:47	14	1.511	A BB	42115.	21.445	UG/KG	0.95
45	112	1019	12:44	29	1.003	A BB	71476.	23.086	UG/KG	1.03
46	131	1037	12:58	14	1.662	A BB	39928.	20.605	UG/KG	0.92
47	106	1042	13:01	29	1.026	A BV	32367.	22.097	UG/KG	0.98
48	106	1062	13:16	29	1.045	A VB	58855.	20.435	UG/KG	0.91
49	106	1118	13:58	29	1.100	A BB	49068.	20.401	UG/KG	0.91
50	104	1122	14:01	29	1.104	A BB	86661.	21.608	UG/KG	0.96
51	173	1141	14:16	14	1.829	A BB	35672.	21.636	UG/KG	0.96
52	88	1193	14:55	14	1.912	A BB	12780.	20.112	UG/KG	0.89
53	110	1227	15:20	29	1.208	A BB	13668.	21.669	UG/KG	0.96
54	83	1231	15:23	29	1.212	A BB	36908.	19.880	UG/KG	0.88
55	53	1239	15:29	29	1.219	A BB	10760.	19.543	UG/KG	0.87
56	157	1554	19:25	29	1.530	A BB	28462.	48.047	UG/KG	2.14
57	65	555	6:56	1	1.159	A BB	39560.	20.759	UG/KG	0.92
58	95	1195	14:56	29	1.176	A BB	71276.	21.408	UG/KG	0.95
59	98	815	10:11	29	0.802	A BB	85365.	22.714	UG/KG	1.01

NO	REI(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	6:07	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:10	0.96	10.000	0.02	24.36	50.00	0.576	1.182	0.49
3	1:17	0.98	10.000	0.02	28.06	50.00	0.789	1.406	0.56
4	1:36	0.95	10.000	0.03	23.70	50.00	0.691	1.457	0.47
5	1:42	0.96	10.000	0.03	20.93	50.00	0.356	0.850	0.42
6	2:03	0.98	10.000	0.03	19.62	50.00	1.580	4.026	0.39
7	2:42	0.97	90.000	0.00	263.68	500.01	0.051	0.097	0.53
8	2:48	0.97	5.000	0.09	22.00	50.00	0.642	1.458	0.44
9	2:58	0.97	5.000	0.10	19.37	50.00	1.955	5.046	0.39
10	2:55	0.97	10.000	0.05	22.13	50.00	2.207	4.988	0.44
11	2:58	0.96	10.000	0.05	22.51	50.00	0.640	1.422	0.45
12	2:59	0.97	10.000	0.05	22.48	50.00	0.720	1.601	0.45
13	2:59	0.97	10.000	0.05	34.22	50.00	0.264	0.385	0.68
14	7:54	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	3:26	0.96	15.000	0.04	21.45	50.00	0.333	0.777	0.43
16	3:40	0.97	5.000	0.12	40.95	50.00	1.691	2.065	0.82
17	4:06	0.97	5.000	0.13	21.83	50.00	0.646	1.480	0.44
18	4:05	0.97	120.000	0.01	245.60	500.01	0.104	0.213	0.49
19	4:47	0.97	5.000	0.16	21.78	50.00	1.324	3.038	0.44
20	5:04	0.98	10.000	0.06	20.53	50.00	0.262	0.637	0.41
21	5:46	0.98	5.000	0.19	23.77	50.00	0.840	1.767	0.48
22	5:54	0.98	10.000	0.10	26.38	50.00	0.059	0.111	0.53
23	6:22	0.98	5.000	0.21	21.87	50.00	1.560	3.567	0.44
24	6:31	0.98	5.000	0.16	21.40	50.00	0.345	0.807	0.43
25	6:46	0.98	5.000	0.17	19.64	50.00	0.292	0.743	0.39
26	7:05	0.98	5.000	0.18	23.06	50.00	0.379	0.821	0.46
27	7:10	0.99	5.000	0.24	22.97	50.00	1.138	2.476	0.46
28	7:43	0.99	100.000	0.01	379.49	500.01	0.009	0.011	0.76
29	12:44	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	8:13	0.99	5.000	0.21	24.24	50.00	0.200	0.413	0.48
31	8:32	0.99	5.000	0.22	23.27	50.00	0.153	0.330	0.47
32	8:43	0.99	5.000	0.29	21.78	50.00	0.803	1.843	0.44
33	9:05	0.99	5.000	0.23	20.09	50.00	0.318	0.792	0.40
34	9:14		10.000			50.00		0.001	
35	9:52	0.99	5.000	0.25	22.31	50.00	0.354	0.793	0.45
36	10:15	0.99	15.000	0.05	24.32	50.00	0.163	0.336	0.49

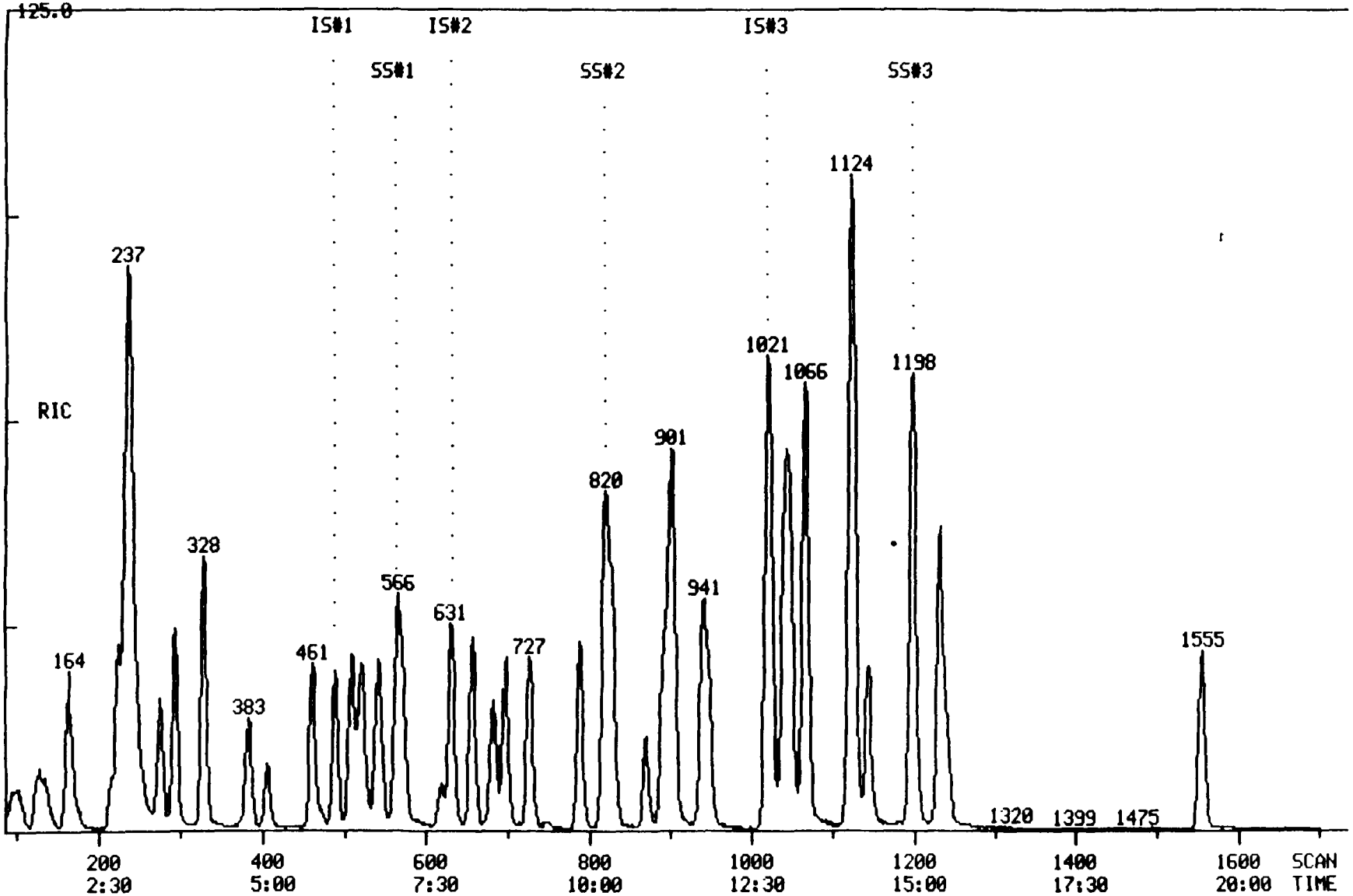
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	10:22	0.99	5.000	0.16	22.43	50.00	0.295	0.657	0.45
38	10:52	0.99	5.000	0.28	22.24	50.00	0.172	0.386	0.44
39	11:07	0.99	5.000	0.28	24.37	50.00	0.169	0.346	0.49
40	11:13	0.99	10.000	0.09	22.78	50.00	0.251	0.550	0.46
41	11:16	0.99	5.000	0.18	23.03	50.00	0.237	0.514	0.46
42	11:43	0.99	15.000	0.06	26.23	50.00	0.118	0.225	0.52
43	11:45	1.00	5.000	0.30	21.51	50.00	0.278	0.647	0.43
44	11:50	1.00	5.000	0.30	21.44	50.00	0.288	0.671	0.43
45	12:47	1.00	5.000	0.20	23.09	50.00	0.425	0.921	0.46
46	13:00	1.00	5.000	0.33	20.61	50.00	0.273	0.662	0.41
47	13:05	1.00	5.000	0.21	22.10	50.00	0.193	0.436	0.44
48	13:19	1.00	5.000	0.21	20.43	50.00	0.350	0.857	0.41
49	14:01	1.00	5.000	0.22	20.40	50.00	0.292	0.716	0.41
50	14:04	1.00	5.000	0.22	21.61	50.00	0.516	1.194	0.43
51	14:17	1.00	5.000	0.37	21.64	50.00	0.244	0.564	0.43
52	14:57	1.00	15.000	0.13	20.11	50.00	0.087	0.217	0.40
53	15:22	1.00	15.000	0.08	21.67	50.00	0.081	0.188	0.43
54	15:25	1.00	5.000	0.24	19.88	50.00	0.220	0.553	0.40
55	15:31	1.00	15.000	0.08	19.54	50.00	0.064	0.164	0.39
56	19:26	1.00	10.000	0.15	48.05	100.00	0.085	0.176	0.48
57	7:03	0.98	5.000	0.23	20.76	50.00	1.080	2.601	0.42
58	14:58	1.00	5.000	0.24	21.41	50.00	0.424	0.991	0.43
59	10:15	0.99	5.000	0.16	22.71	50.00	0.508	1.119	0.45

COMPUCHEM LABS

RIC
12/12/89 20:54:00
SAMPLE: 10 ML EPA ID# VSTD050 (STD# 1907) ON #19
CONDS.:

COMPUCHEM DATA: GT891212B19 SCANS 86 TO 1700
OUT OF 86 TO 1700

217920.



QUANTITATION REPORT FILE: GT891212B19
DATA: GT891212B19.TI
12/12/89 20:54:00
SAMPLE: 10 ML EPA ID# VSTD050 (STD# 1907) ON #19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1009

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
2	221 CHLOROMETHANE <74-87-3> RO#2
3	231 VINYL CHLORIDE <75-01-4> RO#3
4	220 BROMOMETHANE <78-83-9> RO#4
5	209 CHLOROETHANE <75-00-3> RO#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> RO#6
7	201 ACROLEIN <107-02-8> RO#7
8	216 1,1-DICHLOROETHENE <75-35-4> RO#8
9	254 CARBON DISULFIDE <75-15-0> RO#9
10	285 IODOMETHANE <74-88-4> RO#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> RO#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> RO#12
13	252 ACETONE (2-PROPANONE) <67-64-1> RO#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
15	298 3-CHLOROPROPENE <107-05-1> RO#15
16	222 METHYLENE CHLORIDE <75-09-2> RO#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
18	202 ACRYLONITRILE <107-13-1> RO#18
19	214 1,1-DICHLOROETHANE <75-34-3> RO#19
20	257 VINYL ACETATE <108-05-4> RO#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
22	253 2-BUTANONE <78-93-3> RO#22
23	211 CHLOROFORM <67-66-2> RO#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
25	206 CARBON TETRACHLORIDE <56-23-5> RO#25
26	203 BENZENE <71-43-2> RO#26
27	215 1,2-DICHLOROETHANE <107-06-2> RO#27
28	272 CROTONALDEHYDE <4170-30-3> RO#28
29	*270 D5-CHLOROBENZENE (IS) RO#29
30	229 TRICHLOROETHENE <79-01-6> RO#30
31	217 1,2-DICHLOROPROPANE <78-87-5> RO#31
32	286 DIBROMOMETHANE <74-95-3> RO#32
33	212 BROMODICHLOROMETHANE <75-27-4> RO#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> RO#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
36	256 4-METHYL-2-PENTANONE <108-01-1> RO#36
37	225 TOLUENE <108-88-3> RO#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
40	287 ETHYLMETHACRYLATE <96-18-4> RO#40
41	224 TETRACHLOROETHENE <127-18-4> RO#41
42	255 2-HEXANONE <591-78-6> RO#42
43	208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
44	245 1,2-DIBROMOMETHANE <1060-93-4> RO#44
45	207 CHLOROBENZENE <108-90-7> RO#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> RO#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> RO#47
48	330 M,P-XYLENE <133-02-7> RO#48
49	239 O-XYLENE <133-02-7> RO#49
50	251 STYRENE <100-42-5> RO#50
51	205 BROMOFORM <75-25-2> RO#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> RO#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> RO#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> RO#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> RO#56
57	#258 D4-1,2-DICHLOROETHANE RO#57
58	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
59	#233 D8-TOLUENE RO#59

DS 12-13-89

66 12-13-89

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	489	6:07	1	1.000	A BB	39810.	50.000	UG/KG	1.02
2	50	94	1:10	1	0.192	A BB	47052.	112.068	UG/KG	2.28
3	62	103	1:17	1	0.211	A BB	55979.	83.642	UG/KG	1.70
4	94	128	1:36	1	0.262	A BB	58007.	69.843	UG/KG	1.42
5	64	136	1:42	1	0.278	A BB	33828.	79.782	UG/KG	1.63
6	101	164	2:03	1	0.335	A BB	160277.	71.797	UG/KG	1.46
7	56	216	2:42	1	0.442	A BB	38751.	567.867	UG/KG	11.57
8	96	224	2:48	1	0.458	A BB	58056.	48.001	UG/KG	0.98
9	76	238	2:58	1	0.487	A BB	200896.	59.018	UG/KG	1.20
10	142	234	2:55	1	0.479	A BB	198558.	53.506	UG/KG	1.09
11	117	237	2:58	1	0.485	A BB	56602.	63.920	UG/KG	1.30
12	85	239	2:59	1	0.489	A BB	63752.	70.690	UG/KG	1.44
13	43	239	2:59	1	0.489	A BB	15339.	82.097	UG/KG	1.67
14	114	632	7:54	14	1.000	A BB	164799.	50.000	UG/KG	1.02
15	76	275	3:26	1	0.562	A BB	30919.	59.074	UG/KG	1.20
16	84	293	3:40	1	0.599	A BB	82213.	46.469	UG/KG	0.95
17	96	328	4:06	1	0.671	A BB	58926.	47.430	UG/KG	0.97
18	53	327	4:05	1	0.669	A BV	84666.	569.281	UG/KG	11.60
19	63	383	4:47	1	0.783	A BB	120952.	61.136	UG/KG	1.25
20	43	406	5:04	14	0.642	A BB	105000.	92.626	UG/KG	1.89
21	96	461	5:46	1	0.943	A BB	70339.	53.234	UG/KG	1.09
22	72	472	5:54	1	0.965	A VB	4435.	45.632	UG/KG	0.93
23	83	509	6:22	1	1.041	A BB	141995.	54.891	UG/KG	1.12
24	97	522	6:31	14	0.826	A BB	132958.	66.081	UG/KG	1.35
25	117	542	6:46	14	0.858	A BB	122382.	76.236	UG/KG	1.55
26	78	567	7:05	14	0.897	A BB	135273.	45.519	UG/KG	0.93
27	62	573	7:10	1	1.172	A BB	98568.	71.508	UG/KG	1.46
28	70	618	7:43	14	0.978	A BV	18606.	347.123	UG/KG	7.08
29	117	1019	12:44	29	1.000	A BB	191140.	50.000	UG/KG	1.02
30	130	657	8:13	14	1.040	A BB	68035.	42.286	UG/KG	0.86
31	63	683	8:32	14	1.081	A BB	54323.	55.361	UG/KG	1.13
32	174	697	8:43	1	1.425	A BB	73367.	51.312	UG/KG	1.05
33	83	727	9:05	14	1.150	A BB	130509.	60.688	UG/KG	1.24
34	63	NOT FOUND								
35	75	789	9:52	14	1.248	A BB	130611.	57.151	UG/KG	1.16
36	43	820	10:15	29	0.805	A BB	64211.	68.963	UG/KG	1.41
37	92	829	10:22	29	0.814	A BB	125522.	43.917	UG/KG	0.90
38	75	870	10:52	14	1.377	A BB	63543.	62.992	UG/KG	1.28
39	97	890	11:07	14	1.408	A BB	57072.	48.413	UG/KG	0.99
40	69	898	11:13	29	0.881	A BB	105155.	57.672	UG/KG	1.18
41	164	902	11:16	29	0.885	A BB	98327.	41.854	UG/KG	0.85

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	938	11:43	29	0.921	A BB	42975.	66.919	UG/KG	1.36
43	129	940	11:45	14	1.487	A BB	106574.	64.078	UG/KG	1.31
44	107	947	11:50	14	1.498	A BB	110621.	62.679	UG/KG	1.28
45	112	1023	12:47	29	1.004	A BB	176126.	43.530	UG/KG	0.89
46	131	1040	13:00	14	1.646	A BB	109149.	72.672	UG/KG	1.48
47	106	1047	13:05	29	1.027	A BV	83326.	44.865	UG/KG	0.91
48	106	1066	13:19	29	1.046	A VB	163843.	53.586	UG/KG	1.09
49	106	1121	14:01	29	1.100	A BB	136822.	54.005	UG/KG	1.10
50	104	1125	14:04	29	1.104	A BB	228151.	52.441	UG/KG	1.07
51	173	1143	14:17	14	1.809	A BB	92870.	83.493	UG/KG	1.70
52	88	1196	14:57	14	1.892	A BB	35793.	84.106	UG/KG	1.71
53	110	1230	15:22	29	1.207	A BB	35883.	59.364	UG/KG	1.21
54	83	1233	15:25	29	1.210	A BB	105613.	42.187	UG/KG	0.86
55	53	1241	15:31	29	1.218	A BB	31321.	71.926	UG/KG	1.47
56	157	1555	19:26	29	1.526	A BB	67398.	110.003	UG/KG	2.24
57	65	564	7:03	1	1.153	A BB	103563.	85.063	UG/KG	1.73
58	95	1198	14:58	29	1.176	A BB	189399.	61.599	UG/KG	1.26
59	98	820	10:15	29	0.805	A BB	213794.	55.006	UG/KG	1.12

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	6:01	1.02	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:08	1.03	10.000	0.02	112.07	50.00	1.182	0.527	2.24
3	1:14	1.04	10.000	0.02	83.64	50.00	1.406	0.841	1.67
4	1:30	1.07	10.000	0.03	69.84	50.00	1.457	1.043	1.40
5	1:38	1.04	10.000	0.03	79.78	50.00	0.850	0.533	1.60
6	1:58	1.04	10.000	0.03	71.80	50.00	4.026	2.804	1.44
7	2:37	1.03	90.000	0.00	567.87	500.01	0.097	0.086	1.14
8	2:42	1.04	5.000	0.09	48.00	50.00	1.458	1.519	0.96
9	2:52	1.03	5.000	0.10	59.02	50.00	5.046	4.275	1.18
10	2:49	1.04	10.000	0.05	53.51	50.00	4.988	4.661	1.07
11	2:49	1.05	10.000	0.05	63.92	50.00	1.422	1.112	1.28
12	2:52	1.04	10.000	0.05	70.69	50.00	1.601	1.133	1.41
13	2:53	1.03	10.000	0.05	82.10	50.00	0.385	0.235	1.64
14	7:49	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	3:19	1.03	15.000	0.04	59.07	50.00	0.777	0.657	1.18
16	3:33	1.03	5.000	0.12	46.47	50.00	2.065	2.222	0.93
17	3:59	1.03	5.000	0.13	47.43	50.00	1.480	1.560	0.95
18	3:59	1.03	120.000	0.01	569.28	500.01	0.213	0.187	1.14
19	4:40	1.02	5.000	0.16	61.14	50.00	3.038	2.485	1.22
20	4:58	1.02	10.000	0.06	92.63	50.00	0.637	0.344	1.85
21	5:40	1.02	5.000	0.19	53.23	50.00	1.767	1.660	1.06
22	5:48	1.02	10.000	0.10	45.63	50.00	0.111	0.122	0.91
23	6:16	1.01	5.000	0.21	54.89	50.00	3.567	3.249	1.10
24	6:25	1.02	5.000	0.17	66.08	50.00	0.807	0.610	1.32
25	6:41	1.01	5.000	0.17	76.24	50.00	0.743	0.487	1.52
26	7:01	1.01	5.000	0.18	45.52	50.00	0.821	0.902	0.91
27	7:05	1.01	5.000	0.23	71.51	50.00	2.476	1.731	1.43
28	7:40	1.01	100.000	0.01	347.12	500.01	0.011	0.016	0.69
29	12:42	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	8:09	1.01	5.000	0.21	42.29	50.00	0.413	0.488	0.85
31	8:28	1.01	5.000	0.22	55.36	50.00	0.330	0.298	1.11
32	8:39	1.01	5.000	0.29	51.31	50.00	1.843	1.796	1.03
33	9:02	1.01	5.000	0.23	60.69	50.00	0.792	0.652	1.21
34	9:14		10.000			50.06		0.001	
35	9:49	1.01	5.000	0.25	57.15	50.00	0.793	0.693	1.14
36	10:12	1.00	15.000	0.05	68.96	50.00	0.336	0.244	1.38

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	10:18	1.01	5.000	0.16	43.92	50.00	0.657	0.748	0.88
38	10:49	1.00	5.000	0.28	62.99	50.00	0.386	0.306	1.26
39	11:05	1.00	5.000	0.28	48.41	50.00	0.346	0.358	0.97
40	11:10	1.00	10.000	0.09	57.67	50.00	0.550	0.477	1.15
41	11:14	1.00	5.000	0.18	41.85	50.00	0.514	0.615	0.84
42	11:41	1.00	15.000	0.06	66.92	50.00	0.225	0.168	1.34
43	11:42	1.00	5.000	0.30	64.08	50.00	0.647	0.505	1.28
44	11:48	1.00	5.000	0.30	62.68	50.00	0.671	0.535	1.25
45	12:46	1.00	5.000	0.20	43.53	50.00	0.921	1.058	0.87
46	12:58	1.00	5.000	0.33	72.67	50.00	0.662	0.456	1.45
47	13:03	1.00	5.000	0.21	44.87	50.00	0.436	0.486	0.90
48	13:17	1.00	5.000	0.21	53.59	50.00	0.857	0.800	1.07
49	13:59	1.00	5.000	0.22	54.00	50.00	0.716	0 663	1.08
50	14:02	1.00	5.000	0.22	52.44	50.00	1.194	1.138	1.05
51	14:15	1.00	5.000	0.36	83.49	50.00	0.564	0.337	1.67
52	14:55	1.00	15.000	0.13	84.11	50.00	0.217	0.129	1.68
53	15:22	1.00	15.000	0.08	59.36	50.00	0.188	0.158	1.19
54	15:23	1.00	5.000	0.24	42.19	50.00	0.553	0.655	0.84
55	15:30	1.00	15.000	0.08	71.93	50.00	0.164	0.114	1.44
56	19:25	1.00	10.000	0.15	110.00	100.00	0.176	0.160	1.10
57	6:58	1.01	5.000	0.23	85.06	50.00	2.601	1.529	1.70
58	14:57	1.00	5.000	0.24	61.60	50.00	0.991	0.804	1.23
59	10:13	1.00	5.000	0.16	55.01	50.00	1.119	1.017	1.10

COMPUCHEM LABS

RIC

12/12/89 23:47:00

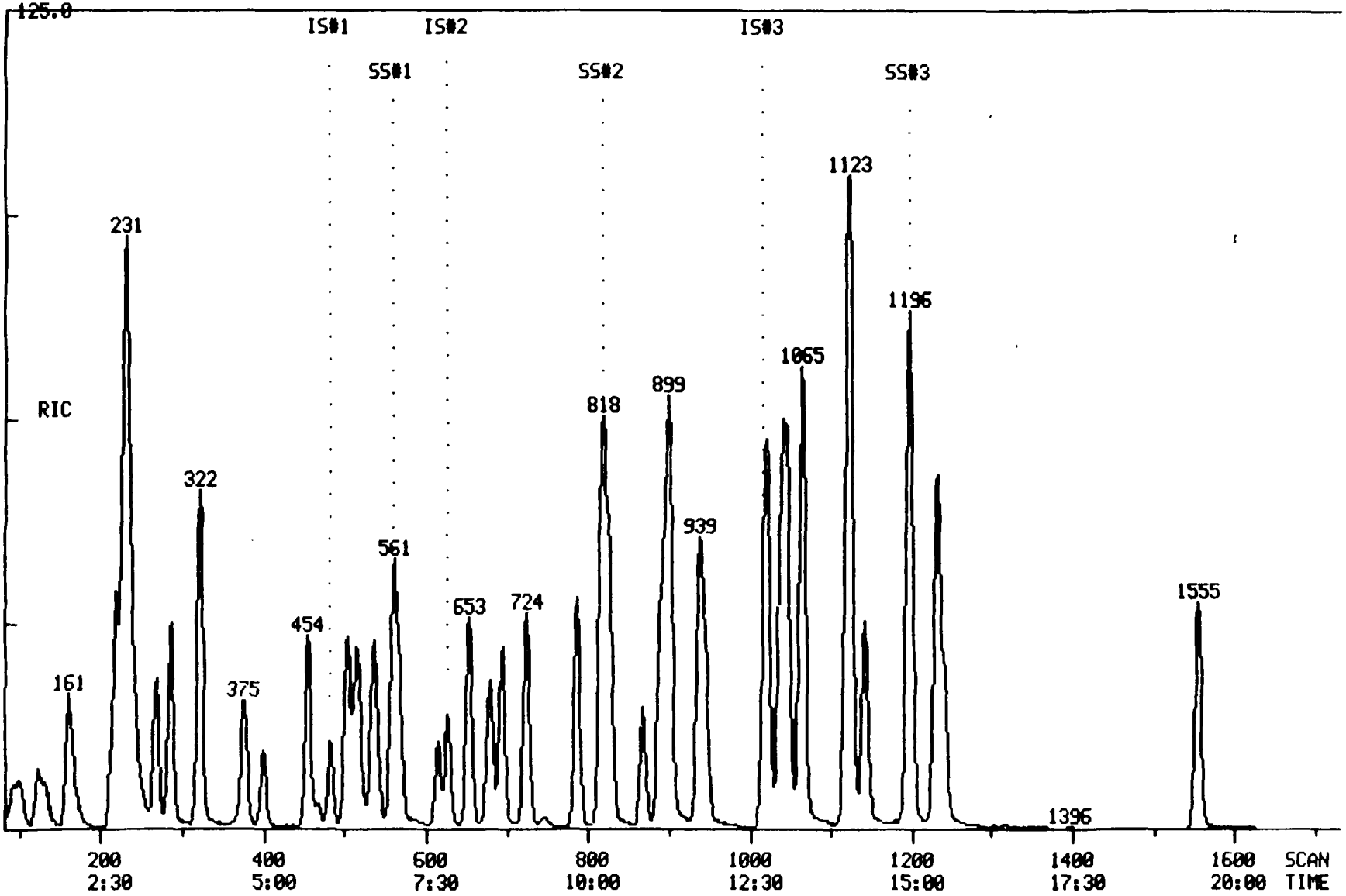
SAMPLE: 10ML EPA ID# VSTD100 (STD# 1908) ON #19

CONDS.:

COMPUCHEM DATA: GW891212B19 SCANS 82 TO 1700

OUT OF 82 TO 1700

405120.



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QUANTITATION REPORT     FILE: GW891212B19
DATA: GW891212B19.TI
12/12/89 23:47:00
SAMPLE: 10ML EPA ID# VSTD100 (STD# 1908) ON #19
CONDS.:
SUBMITTED BY: 19              ANALYST: 1009

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM  LIBRARY ENTRY

 NO   NAME
  1   *234 BROMOCHLOROMETHANE (IS) <75-97-5> RO#1
  2    221 CHLOROMETHANE <74-87-3> RO#2
  3    231 VINYL CHLORIDE <75-01-4> RO#3
  4    220 BROMOMETHANE <78-83-9> RO#4
  5    209 CHLOROETHANE <75-00-3> RO#5
  6    230 TRICHLOROFLUOROMETHANE <75-69-4> RO#6
  7    201 ACROLEIN <107-02-8> RO#7
  8    216 1,1-DICHLOROETHENE <75-35-4> RO#8
  9    254 CARBON DISULFIDE <75-15-0> RO#9
 10    285 IODOMETHANE <74-88-4> RO#10
 11    297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> RO#11
 12    266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> RO#12
 13    252 ACETONE (2-PROPANONE) <67-64-1> RO#13
 14   *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> RO#14
 15    298 3-CHLOROPROPENE <107-05-1> RO#15
 16    222 METHYLENE CHLORIDE <75-09-2> RO#16
 17    226 TRANS-1,2-DICHLOROETHENE <156-60-5> RO#17
 18    202 ACRYLONITRILE <107-13-1> RO#18
 19    214 1,1-DICHLOROETHANE <75-34-3> RO#19
 20    257 VINYL ACETATE <108-05-4> RO#20
 21    237 CIS-1,2-DICHLOROETHENE <156-59-2> RO#21
 22    253 2-BUTANONE <78-93-3> RO#22
 23    211 CHLOROFORM <67-66-2> RO#23
 24    227 1,1,1-TRICHLOROETHANE <71-55-6> RO#24
 25    206 CARBON TETRACHLORIDE <56-23-5> RO#25
 26    203 BENZENE <71-43-2> RO#26
 27    215 1,2-DICHLOROETHANE <107-06-2> RO#27
 28    272 CROTONALDEHYDE <4170-30-3> RO#28
 29   *270 D5-CHLOROBENZENE (IS) RO#29
 30    229 TRICHLOROETHENE <79-01-6> RO#30
 31    217 1,2-DICHLOROPROPANE <78-87-5> RO#31
 32    286 DIBROMOMETHANE <74-95-3> RO#32
 33    212 BROMODICHLOROMETHANE <75-27-4> RO#33
 34    210 2-CHLOROETHYL VINYL ETHER <110-75-8> RO#34
 35    218 CIS-1,3-DICHLOROPROPENE <10061-1-5> RO#35
 36    256 4-METHYL-2-PENTANONE <108-01-1> RO#36
 37    225 TOLUENE <108-88-3> RO#37
 38    250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> RO#38
 39    228 1,1,2-TRICHLOROETHANE <79-00-5> RO#39
 40    287 ETHYLMETHACRYLATE <96-18-4> RO#40
 41    224 TETRACHLOROETHENE <127-18-4> RO#41
 42    255 2-HEXANONE <591-78-6> RO#42
 43    208 DIBROMOCHLOROMETHANE <124-48-1> RO#43
 44    245 1,2-DIBROMOMETHANE <1060-93-4> RO#44
 45    207 CHLOROBENZENE <108-90-7> RO#45
 46    273 1,1,1,2-TETRACHLOROETHANE <630-20-6> RO#46
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NO	NAME
47	219 ETHYLBENZENE <100-41-4> RO#47
48	330 M,P-XYLENE <133-02-7> RO#48
49	239 O-XYLENE <133-02-7> RO#49
50	251 STYRENE <100-42-5> RO#50
51	205 BROMOFORM <75-25-2> RO#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> RO#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> RO#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> RO#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> RO#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> RO#56
57	#258 D4-1,2-DICHLOROETHANE RO#57
58	#247 BROMOFLUOROBENZENE <460-00-4> RO#58
59	#233 D8-TOLUENE RO#59

OKS 12.13.89

LG 12-13-89

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	483	6:02	1	1.000	A BB	40867.	50.000	UG/KG	0.46
2	50	92	1:09	1	0.190	A BB	102274.	105.871	UG/KG	0.98
3	62	100	1:15	1	0.207	A BB	124707.	108.506	UG/KG	1.01
4	94	122	1:31	1	0.253	A BB	105280.	88.401	UG/KG	0.82
5	64	135	1:41	1	0.280	A BB	52430.	75.490	UG/KG	0.70
6	101	161	2:01	1	0.333	A BB	280196.	85.149	UG/KG	0.79
7	56	214	2:40	1	0.443	A BB	105028.	1320.120	UG/KG	12.27
8	96	219	2:44	1	0.453	A BB	123305.	103.448	UG/KG	0.96
9	76	232	2:54	1	0.480	A BB	361519.	87.649	UG/KG	0.81
10	142	229	2:52	1	0.474	A BB	371437.	91.114	UG/KG	0.85
11	117	230	2:52	1	0.476	A BB	109646.	94.352	UG/KG	0.88
12	85	234	2:55	1	0.484	A BB	128084.	97.857	UG/KG	0.91
13	43	236	2:57	1	0.489	A BB	29166.	92.609	UG/KG	0.86
14	114	627	7:50	14	1.000	A BB	160552.	50.000	UG/KG	0.46
15	76	268	3:21	1	0.555	A BB	69198.	109.008	UG/KG	1.01
16	84	286	3:34	1	0.592	A BB	157293.	93.187	UG/KG	0.87
17	96	320	4:00	1	0.663	A BB	127522.	105.407	UG/KG	0.98
18	53	322	4:01	1	0.667	A BB	231597.	1332.360	UG/KG	12.39
19	63	375	4:41	1	0.776	A BB	275599.	110.982	UG/KG	1.03
20	43	399	4:59	14	0.636	A BB	239151.	116.895	UG/KG	1.09
21	96	455	5:41	1	0.942	A BB	153530.	106.313	UG/KG	0.99
22	72	467	5:50	1	0.967	A VB	12310.	135.193	UG/KG	1.26
23	83	504	6:18	1	1.043	A BB	308267.	105.741	UG/KG	0.98
24	97	515	6:26	14	0.821	A BB	283449.	109.413	UG/KG	1.02
25	117	536	6:42	14	0.855	A BB	261110.	109.500	UG/KG	1.02
26	78	562	7:01	14	0.896	A BB	291212.	110.486	UG/KG	1.03
27	62	569	7:07	1	1.178	A BB	215786.	106.629	UG/KG	0.99
28	70	614	7:40	14	0.979	A BV	75840.	2092.000	UG/KG	19.45
29	117	1017	12:43	29	1.000	A BB	179393.	50.000	UG/KG	0.46
30	130	653	8:10	14	1.041	A BB	149206.	112.555	UG/KG	1.05
31	63	679	8:29	14	1.083	A BB	115808.	109.412	UG/KG	1.02
32	174	694	8:40	1	1.437	A BB	152374.	101.158	UG/KG	0.94
33	83	724	9:03	14	1.155	A BB	298541.	117.401	UG/KG	1.09
34	63	NOT FOUND								
35	75	786	9:49	14	1.254	A BB	310849.	122.146	UG/KG	1.14
36	43	818	10:13	29	0.804	A BB	161789.	134.231	UG/KG	1.25
37	92	827	10:20	29	0.813	A BB	272759.	115.764	UG/KG	1.08
38	75	868	10:51	14	1.384	A BB	152826.	123.435	UG/KG	1.15
39	97	888	11:06	14	1.416	A BB	135450.	121.805	UG/KG	1.13
40	69	895	11:11	29	0.880	A BB	239580.	121.377	UG/KG	1.13
41	164	900	11:15	29	0.885	A BB	202584.	109.761	UG/KG	1.02

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	936	11:42	29	0.920	A BB	138119.	171.217	UG/KG	1.59
43	129	939	11:44	14	1.498	A BB	236586.	113.933	UG/KG	1.06
44	107	945	11:49	14	1.507	A BB	231901.	107.591	UG/KG	1.00
45	112	1021	12:46	29	1.004	A BB	377723.	114.252	UG/KG	1.06
46	131	1039	12:59	14	1.657	A BB	215170.	101.175	UG/KG	0.94
47	106	1046	13:04	29	1.029	A BV	176083.	112.577	UG/KG	1.05
48	106	1065	13:19	29	1.047	A VB	307441.	99.965	UG/KG	0.93
49	106	1120	14:00	29	1.101	A BB	253339.	98.642	UG/KG	0.92
50	104	1124	14:03	29	1.105	A BB	434682.	101.500	UG/KG	0.94
51	173	1141	14:16	14	1.820	A BB	219162.	121.116	UG/KG	1.13
52	88	1195	14:56	14	1.906	A BB	85401.	122.454	UG/KG	1.14
53	110	1229	15:22	29	1.208	A BB	77032.	114.366	UG/KG	1.06
54	83	1232	15:24	29	1.211	A BB	248074.	125.135	UG/KG	1.16
55	53	1241	15:31	29	1.220	A BB	74508.	126.729	UG/KG	1.18
56	157	1554	19:25	29	1.528	A BB	165105.	261.012	UG/KG	2.43
57	65	559	6:59	1	1.157	A BB	223256.	105.000	UG/KG	0.98
58	95	1197	14:58	29	1.177	A BB	395588.	111.271	UG/KG	1.03
59	98	817	10:13	29	0.803	A BB	463188.	115.419	UG/KG	1.07

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	6:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	1:10	0.98	10.000	0.02	105.87	50.00	2.503	1.182	2.12
3	1:17	0.97	10.000	0.02	108.51	50.00	3.052	1.406	2.17
4	1:36	0.95	10.000	0.03	88.40	50.00	2.576	1.457	1.77
5	1:42	0.99	10.000	0.03	75.49	50.00	1.283	0.850	1.51
6	2:03	0.98	10.000	0.03	85.15	50.00	6.856	4.026	1.70
7	2:42	0.99	90.000	0.00	1320.13	500.01	0.257	0.097	2.64
8	2:48	0.98	5.000	0.09	103.45	50.00	3.017	1.458	2.07
9	2:58	0.97	5.000	0.10	87.65	50.00	8.846	5.046	1.75
10	2:55	0.98	10.000	0.05	91.11	50.00	9.089	4.988	1.82
11	2:58	0.97	10.000	0.05	94.35	50.00	2.683	1.422	1.89
12	2:59	0.98	10.000	0.05	97.86	50.00	3.134	1.601	1.96
13	2:59	0.99	10.000	0.05	92.61	50.00	0.714	0.385	1.85
14	7:54	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	3:26	0.97	15.000	0.04	109.01	50.00	1.693	0.777	2.18
16	3:40	0.98	5.000	0.12	93.19	50.00	3.849	2.065	1.86
17	4:06	0.98	5.000	0.13	105.41	50.00	3.120	1.480	2.11
18	4:05	0.98	120.000	0.01	1332.36	500.01	0.567	0.213	2.66
19	4:47	0.98	5.000	0.16	110.98	50.00	6.744	3.038	2.22
20	5:04	0.98	10.000	0.06	116.89	50.00	1.490	0.637	2.34
21	5:46	0.99	5.000	0.19	106.31	50.00	3.757	1.767	2.13
22	5:54	0.99	10.000	0.10	135.19	50.00	0.301	0.111	2.70
23	6:22	0.99	5.000	0.21	105.74	50.00	7.543	3.567	2.11
24	6:31	0.99	5.000	0.16	109.41	50.00	1.765	0.807	2.19
25	6:46	0.99	5.000	0.17	109.50	50.00	1.626	0.743	2.19
26	7:05	0.99	5.000	0.18	110.49	50.00	1.814	0.821	2.21
27	7:10	0.99	5.000	0.24	106.63	50.00	5.280	2.476	2.13
28	7:43	0.99	100.000	0.01	2092.00	500.01	0.047	0.011	4.18
29	12:44	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	8:13	0.99	5.000	0.21	112.55	50.00	0.929	0.413	2.25
31	8:32	0.99	5.000	0.22	109.41	50.00	0.721	0.330	2.19
32	8:43	1.00	5.000	0.29	101.16	50.00	3.729	1.843	2.02
33	9:05	1.00	5.000	0.23	117.40	50.00	1.859	0.792	2.35
34	9:14		10.000			50.00		0.001	
35	9:52	1.00	5.000	0.25	122.15	50.00	1.936	0.793	2.44
36	10:15	1.00	15.000	0.05	134.23	50.00	0.902	0.336	2.68

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	10:22	1.00	5.000	0.16	115.76	50.00	1.520	0.657	2.32
38	10:52	1.00	5.000	0.28	123.43	50.00	0.952	0.386	2.47
39	11:07	1.00	5.000	0.28	121.81	50.00	0.844	0.346	2.44
40	11:13	1.00	10.000	0.09	121.38	50.00	1.336	0.550	2.43
41	11:16	1.00	5.000	0.18	109.76	50.00	1.129	0.514	2.20
42	11:43	1.00	15.000	0.06	171.22	50.00	0.770	0.225	3.42
43	11:45	1.00	5.000	0.30	113.93	50.00	1.474	0.647	2.28
44	11:50	1.00	5.000	0.30	107.59	50.00	1.444	0.671	2.15
45	12:47	1.00	5.000	0.20	114.25	50.00	2.106	0.921	2.29
46	13:00	1.00	5.000	0.33	101.17	50.00	1.340	0.662	2.02
47	13:05	1.00	5.000	0.21	112.58	50.00	0.982	0.436	2.25
48	13:19	1.00	5.000	0.21	99.97	50.00	1.714	0.857	2.00
49	14:01	1.00	5.000	0.22	98.64	50.00	1.412	0.716	1.97
50	14:04	1.00	5.000	0.22	101.50	50.00	2.423	1.194	2.03
51	14:17	1.00	5.000	0.36	121.12	50.00	1.365	0.564	2.42
52	14:57	1.00	15.000	0.13	122.45	50.00	0.532	0.217	2.45
53	15:22	1.00	15.000	0.08	114.37	50.00	0.429	0.188	2.29
54	15:25	1.00	5.000	0.24	125.14	50.00	1.383	0.553	2.50
55	15:31	1.00	15.000	0.08	126.73	50.00	0.415	0.164	2.53
56	19:26	1.00	10.000	0.15	261.01	100.00	0.460	0.176	2.61
57	7:03	0.99	5.000	0.23	105.00	50.00	5.463	2.601	2.10
58	14:58	1.00	5.000	0.24	111.27	50.00	2.205	0.991	2.23
59	10:15	1.00	5.000	0.16	115.42	50.00	2.582	1.119	2.31