IL 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
2. VOLATILES DATA
4. SEMIVOLATILES DATA
5. PESTICIDE / PCB DATA

CASE#: 20124 SDG#: 01 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.

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

Style 9 Case Narrative #20124
Client-New York D.E.C.
Account #255501
CompuChem Laboratories, Inc.

SAMPLE IDENTIFICATIONS: 73800101, 73800102, 73800103, 73800104, 73800105, 73800106, 73800107, 73800108, 73800109, 73800110, 73800111, 73800112, 73800113, 738001TB1, 738001TB2

These samples were received in good condition with the proper chains-of-custody (COCs) on the dates May 8th, and May 9th, 1990. Analyses were scheduled in accordance with the COCs. Method 8240 3rd ED. TCL VOA analyses were performed as requested. The samples were logged into the Laboratory Management System and stored at 4 degrees Celsius.

VOLATILES:
The volatile fractions for this case were all analyzed within the prescribed holding time requirements. Target analytes were present in all the samples, in number from one(1) to ten(10) per analysis. The concentrations for the analytes ranged from below the contract required quantitation limit(CRQL), to well above. The more concentrated analytes were detected in sample 73800112, the original for the spike analyses. This sample was analyzed using 2000 microliters, instead of the customary 5000 microliters, due to significant concentrations of the xylene compounds.

QC SUMMARY
All surrogate recovery criteria were met for all the samples analyzed in this case. The spike duplicate data generated for the case passed QC requirements excellently, but with one exception. Benzene failed the relative percent difference criterion. The blanks associated with the samples also met the QC requirements. Concentrations of methylene chloride and/or acetone were present in the associated blanks, these occurrences were flagged accordingly with the "B" footnote.

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.

Toney C. Spruell 5-30-90
TONEY C. SPRUELL DATE 05/30/90
TECHNICAL REVIEWER

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

CASE NARRATIVE CASE #20124
SDG #02 CONTRACT # 255501
COMPUCHEM LABORATORIES, INC.

SAMPLE NUMBERS: 73800101 73800102 73800103 73800104
73800105 73800106 73800107 73800108
73800109 73800110 73800111 73800112
73800113

The samples listed above were received intact on 5-8-90 and 5-9-90. This narrative summarizes the analysis of these thirteen samples for semivolatiles by 8270 methodology.

SEMIVOLATILES:
All sample and QC fractions were initially extracted within holding times except for sample 73800112. For all samples which required reextraction, the reextraction could not be performed within holding times. Only in sample 73800112 was an analyte, aniline, detected at an amount above the detection limit. A dilution was necessary in order to report aniline within analytical range. The samples contained 1 to 25 tentatively identified compounds (TICs). All sample and QC fractions met the surrogate recovery criteria except for samples 73800102, 73800104, 73800106, 73800107, 73800109, and 73800113 which a matrix effect affecting the acid surrogates was confirmed via duplicate analyses. The matrix spike duplicates met all accuracy and precision criteria. All associated method blanks met all QC criteria.

NOTE: THE "X" FOOTNOTE DENOTES THE COELUTION OF INDISTINGUISHABLE ISOMERS.

NOTE: THIS DATA PACKAGE WAS PAGINATED FOR REFERENCE AND ACCOUNTABILITY IN DECREASING NUMERICAL SEQUENCE.

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 PACKAGE AND IN THE COMPUTER-READABLE DATA SUBMITTED ON FLOPPY DISKETTE HAS BEEN AUTHORIZED BY THE LABORATORY

MANAGER OR HIS DESIGNEE AS VERIFIED BY THE FOLLOWING SIGNATURE.

ELISABETH ROBINS NOWELL
TECHNICAL REVIEWER
5-31-90

COMPUCHEM LABORATORIES

METHOD REFERENCE

To determine the concentration of Volatile organic compounds in a variety of waste matrices, CompuChem® employs the methods stated in the RCRA Method 8240.

As a point of information, the Priority Pollutants analytes present on the enclosed compound list have been validated for Method 8240 as required by SW-846.

Method Summary

The volatile compounds are introduced to the gas chromatograph by the direct injection, or the Purge-and-Trap Method (RCRA Method 5030). The components are separated via the gas chromatograph and detected using a mass spectrometer which is used to provide both qualitative and quantitative information. The chromatographic conditions as well as typical mass spectrometer operating parameters are given in the RCRA Method 8240.

A library search is performed by automated comparison of the unknown peak spectrum to the National Institute of Standards and Technology (NIST, formerly the National Bureau of Standards) mass spectral library. Estimated concentration is calculated using the known concentration and peak area of the closest internal standard while assuming a response factor of one for the unknown compound.

COMPUCHEM LABORATORIES

DATA REPORTING QUALIFIERS

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:

$$\frac{(330\ U) \times df}{D} \quad \text{Where } D = \frac{100 - \%\ \text{Moisture}}{100}$$

and df = dilution factor

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

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

For soil sample subjected to GCP 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.

DATA REPORTING QUALIFIERS - PAGE 2

C - This flag applies to pesticides results where the identification has been confirmed by GC/MS. Single Component pesticides ≥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 then full scale, the sample or extract must be diluted and re-analyzed according to the specifications. All such compounds with a response greater then 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 seperate 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

REPORTING ANOMALLIES

There is an anomaly on the Volatile reporting form. The dilution factor is relative only to Semi-volatile extracts and is not used for Volatiles. Dilutions are indicated by the sample weight/volume section on the header.

COMPUCHEM LABORATORIES

QUALITY ASSURANCE NOTICE

CompuChem has implemented the use of the Finnigan QA Formaster Program (Format A) in order to automatically generate reporting and summary forms directly from our mainframe computers. These computers are networked directly to our GC/MS instrumentation. While initially employing the Finnigan product to provide the deliverable requirements in EPA's Contract Laboratory Program (CLP), CompuChem has expanded its usage for non-CLP GC/MS analyses. By utilizing this software program, the frequency of clerical errors is minimized while the process of report generation is expedited. We have not, however, eliminated any of our multi-tiered data review steps.

Independent from the generation of reporting and summary forms, quantitation reports are generated by each of our GC/MS instruments. They utilize CompuChem-developed software to calculate results. It has been determined that the algorithm used by the Formaster Program is slightly different than CompuChem's quantitation software routine. Therefore, results presented in any supportive data supplied with our deliverables packages may be <u>slightly</u> different than those which appear on the hard copy forms generated via Formaster. Any minor differences observed are certainly within the experimental error of the GC/MS technique.

Even though any observed differences are minor, our computer programmers will be modifying the in-house GC/MS quantitation software routine so that all data generated by it will be exactly the same as that generated by the Formaster program.

This notice serves to alert the end user of CompuChem data packages as to the reason why slight differences may be observed between reporting forms and supporting data supplied.

Robert E. Meierer
Vice President of Quality Assurance

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

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.

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005762

1751

337389, 337381, 337390, 337382,

PROJECT NAME:

PROJECT NUMBER: 738001

SAMPLERS (SIGNATURE)

Robert J. McNamee

PRINTED NAME

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	0	1	
7	3	8	0	0	1	0	2	
~~7~~	~~3~~	~~8~~	~~0~~	~~0~~				

#	GC/MS					GC							INORGANICS				OTHER										MATRIX: Water/Soil	SAMPLING INFO		REMARKS
No. of Bottles/Vials	624 (8240)	625 (8270)	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols							DATE	TIME	
5	✓	✓																										5/1/90	1310	
3	✓	✓																												partial set

RELINQUISHED BY: Robert J. McNamee — Date/Time: 5/1/90

COMPANY NAME: NYSDEC

RECEIVED BY: Delivered to

COMPANY NAME: Federal Express

RELINQUISHED BY

COMPANY NAME

Date/Time

RELINQUISHED BY

COMPANY NAME

Date/Time

RECEIVED BY

COMPANY NAME

Date/Time: 5/8/90 9:00

RELINQUISHED BY

COMPANY NAME

Date/Time

RELINQUISHED BY

COMPANY NAME

Date/Time

RECEIVED BY

COMPANY NAME

Date/Time

RELINQUISHED BY

COMPANY NAME

Date/Time

SHIPPING INFORMATION

Number of Shipping Containers-

Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005560

1750

337391, 337383, 337392, 337385

PROJECT NAME:

PROJECT NUMBER: 738001

SAMPLERS (SIGNATURE)

PRINTED NAME: Robert J. McNamee

CLIENT ID (9 CHARACTERS)

	1	2	3	4	5	6	7	8	9
	7	3	8	0	0	1	0	3	
	7	3	8	0	0	1	0	4	

#	GC/MS					GC							INORGANICS				OTHER								MATRIX: Water / Soil
No. of Bottles/Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols				
11	✓																								
5	✓																								

SAMPLING INFO

DATE	TIME
4/1/90	1410

REMARKS

well did not recharge for sufficient volume

RELINQUISHED BY: Robert J. McNamee
COMPANY NAME: NYSDEC
Date/Time: 4/1/90

RECEIVED BY: Delivered to
COMPANY NAME: Federal Express
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RECEIVED BY:
COMPANY NAME:
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

SHIPPING INFORMATION

Number of Shipping Containers-

Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005537

1749

337390, 337382, 337391, 337383, 337377

PROJECT NAME:

PROJECT NUMBER: 73801

SAMPLERS (SIGNATURE)

Robert J. McNamara

PRINTED NAME

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	0	2	
7	3	8	0	0	1	0	3	
7	3	8	0	0	1	T	B	1

#	GC/MS						GC						INORGANICS				OTHER								MATRIX: Water / Soil
No. of Bottles / Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:		601-8010	602-8020	608-8080	8140	TCL PEST / PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols				
2	✓																								
4	✓	✓																							
1	✓																								

SAMPLING INFO	
DATE	TIME
5/1/90	1320

REMARKS

partial set
partial set
trip blank

RELINQUISHED BY: Robert J. McNamara
COMPANY NAME: NYSDEC
Date/Time: 5/1/90

RECEIVED BY: Delivered to
COMPANY NAME: Federal Express
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RECEIVED BY:
COMPANY NAME:
Date/Time: 5/2/90 9:00

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RELINQUISHED BY:
COMPANY NAME:
Date/Time:

RECEIVED BY:
COMPANY NAME:
Date/Time:

SHIPPING INFORMATION
Number of Shipping Containers-
Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005504

PROJECT NAME:

PROJECT NUMBER: 738001

SAMPLERS (SIGNATURE): [signature]

Robert J. McNamee

PRINTED NAME

CLIENT ID (9 CHARACTERS) 1 2 3 4 5 6 7 8 9	# No. of Bottles/Vials	GC/MS 624-8240	GC/MS 625-8270	GC/MS TCL-VOA	GC/MS TCL-SVOA	GC/MS Other:	GC 601-8010	GC 602-8020	GC 608-8080	GC 8140	GC TCL PEST/PCB's	GC Herbicides	GC Other:	INORGANICS Metals	INORGANICS Cyanide	INORGANICS TAL Metals	INORGANICS Other:	OTHER TOC	OTHER TOX	OTHER Oil & Grease	OTHER Pet. Hydro.	OTHER Phenols	MATRIX: Water/Soil	SAMPLING INFO DATE	SAMPLING INFO TIME	REMARKS
																								5/8/90	1555	
7 3 8 0 0 1 1 3	5	✓	✓																					337840		
																								337850		

RECEIVED IN GOOD CONDITION 5/9/90

RELINQUISHED BY: [signature]	Date/Time 5/8/90	RELINQUISHED BY	Date/Time	RELINQUISHED BY.	Date/Time	SHIPPING INFORMATION
COMPANY NAME: NYSDEC		COMPANY NAME		COMPANY NAME:		Number of Shipping Containers-
RECEIVED BY: Delivered to	Date/Time 5/8/90	RECEIVED BY: V. Batt	Date/Time 5/9/90 10:50	RECEIVED BY.	Date/Time	Method of Shipment
COMPANY NAME: Federal Express		COMPANY NAME: CompuChem		COMPANY NAME		
RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	Special Handling Requirements
COMPANY NAME		COMPANY NAME:		COMPANY NAME		

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005529

1747

PROJECT NAME:

PROJECT NUMBER: 738001

SAMPLERS (SIGNATURE)

Robert J. McNamee

PRINTED NAME

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	0	9	
7	3	8	0	0	1	1	0	

#	GC/MS						GC							INORGANICS				OTHER									MATRIX: Water / Soil	SAMPLING INFO		REMARKS
No. of Bottles / Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST / PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols						DATE	TIME	
5	✓	✓	✓																								5/8/90	1340	337839
3	✓	✓																											337838
																													337848

337849 partial set

5/9/90

RECEIVED IN GOOD CONDITION

RELINQUISHED BY	Date / Time	RELINQUISHED BY	Date / Time	RELINQUISHED BY	Date / Time
COMPANY NAME: NYSDEC	5/8/90	COMPANY NAME:		COMPANY NAME	
RECEIVED BY: Delivered to	Date / Time	RECEIVED BY: V. Bottle	Date / Time 5/9/90 10:30	RECEIVED BY:	Date / Time
COMPANY NAME: Federal Express	5/9/90	COMPANY NAME: Compu Chem		COMPANY NAME	
RELINQUISHED BY	Date / Time	RELINQUISHED BY	Date / Time	RELINQUISHED BY	Date / Time
COMPANY NAME		COMPANY NAME		COMPANY NAME	

SHIPPING INFORMATION

Number of Shipping Containers

Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005506

1746

PROJECT NAME:

PROJECT NUMBER: 738001

SAMPLERS (SIGNATURE): Robert J. McManus

PRINTED NAME: Robert J. McManus

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	1		
7	3	8	0	0	1	1	2	

#	GC/MS					GC						INORGANICS				OTHER						MATRIX: Water/Soil	SAMPLING INFO		REMARKS
No. of Bottles/Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols			DATE	TIME	
1	✓																							5/18/90	1540	
5	✓																									
																								337846		partial set
																								337837		337847

RECEIVED IN 5/19/90
GOOD CONDITION

RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time
COMPANY NAME: NYSDEC	5/18/90	COMPANY NAME		COMPANY NAME	
RECEIVED BY: Delivered to	Date/Time 5/18/90	RECEIVED BY: V. Batt	Date/Time 5/19/90 14:30	RECEIVED BY:	Date/Time
COMPANY NAME: Federal Express		COMPANY NAME: Compu Chem		COMPANY NAME	
RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time
COMPANY NAME		COMPANY NAME		COMPANY NAME	

SHIPPING INFORMATION

Number of Shipping Containers-

Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005819

1745

PROJECT NAME:

PROJECT NUMBER: 73800/

SAMPLERS (SIGNATURE)

Robert J. McNamee

PRINTED NAME

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	M	S	

#	GC/MS					GC						INORGANICS				OTHER					MATRIX: Water/Soil	SAMPLING INFO		REMARKS
No. of Bottles/Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols		DATE	TIME	IDUSED on 5/1/90 73800112
5	V	V																				W	1540	Matrix Spike of 73800112
																								337837
																								337847

RECEIVED IN on 5/1/90 GOOD CONDITION

RELINQUISHED BY	Date/Time
COMPANY NAME: NYSDEC	5/1/90
RECEIVED BY: Delivered to	Date/Time: 5/1/90
COMPANY NAME: Federal Express	
RELINQUISHED BY:	Date/Time:
COMPANY NAME:	

RELINQUISHED BY	Date/Time
COMPANY NAME:	
RECEIVED BY: V. Bath	Date/Time: 5/1/90 10:30
COMPANY NAME: Compu Chem	
RELINQUISHED BY:	Date/Time:
COMPANY NAME:	

RELINQUISHED BY	Date/Time
COMPANY NAME:	
RECEIVED BY:	Date/Time:
COMPANY NAME:	
RELINQUISHED BY:	Date/Time:
COMPANY NAME:	

SHIPPING INFORMATION

Number of Shipping Containers:

Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005101

1744

PROJECT NAME:

PROJECT NUMBER: 73801

SAMPLERS (SIGNATURE)

Robert J. McNamara

PRINTED NAME

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	0	7	
7	3	8	0	0	1	0	8	

#	GC/MS					GC						INORGANICS				OTHER							MATRIX: Water / Soil	SAMPLING INFO		REMARKS
No. of Bottles/Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols			DATE	TIME	
1	✓																							5/8/90	1135	
5	✓	✓																								
																								337844		partial set
																								337835		337845

RECEIVED IN GOOD CONDITION 5/9/90

RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time
COMPANY NAME: ICF SEC	5/8/90	COMPANY NAME:		COMPANY NAME	
RECEIVED BY: Bo Ward to Federal Express	5/8/90	RECEIVED BY: J. Bath	5/9/90 10:30	RECEIVED BY:	
COMPANY NAME:		COMPANY NAME: Compu Chem		COMPANY NAME:	
RELINQUISHED BY	Date/Time	RELINQUISHED BY:	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME:		COMPANY NAME:		COMPANY NAME:	

SHIPPING INFORMATION

Number of Shipping Containers-

Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005530

PROJECT NAME:
PROJECT NUMBER: 738001
SAMPLERS (SIGNATURE): [signature]
Robert J McNamee
PRINTED NAME

CLIENT ID (9 CHARACTERS) 1 2 3 4 5 6 7 8 9	No. of Bottles/Vials	GC/MS: 624-8240	625-8270	TCL-VOA	TCL-SVOA	Other	GC: 601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other	INORGANICS: Metals	Cyanide	TAL Metals	Other	OTHER: TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols	MATRIX: Water/Soil	SAMPLING INFO: DATE	TIME	REMARKS
73800110	2		✓																					5/8/90	1555	~~337848~~ ~~337838~~ partial set
73800111	4	✓	✓✓																							337846 337836 partial set

RECEIVED IN GOOD CONDITION 5/9/90

RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	SHIPPING INFORMATION
[signature]	5/8/90					Number of Shipping Containers:
COMPANY NAME: NYSDEC		COMPANY NAME		COMPANY NAME:		Method of Shipment
RECEIVED BY: Delivered to	5/8/90	RECEIVED BY: V. Bath	5/9/90 10:30	RECEIVED BY:		
COMPANY NAME: Federal Express		COMPANY NAME: CompuChem		COMPANY NAME		
RELINQUISHED BY	Date/Time	RELINQUISHED BY:	Date/Time	RELINQUISHED BY:	Date/Time	Special Handling Requirements
COMPANY NAME		COMPANY NAME:		COMPANY NAME		

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005098

1742

PROJECT NAME:

PROJECT NUMBER: 73 8001

SAMPLERS (SIGNATURE)

Robert J. McNamee

PRINTED NAME

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	0	5	
7	3	8	0	0	1	0	6	

#	GC/MS					GC						INORGANICS				OTHER							MATRIX: Water/Soil	SAMPLING INFO		REMARKS
No. of Bottles/Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet Hydro.	Phenols			DATE	TIME	
5	V	V																					W	5/8/90	1100	
3	V	V																					W			partial set

337842
337832
337843
337833

RECEIVED IN [illegible]
GOOD CONDITION

RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time
COMPANY NAME: NYSDEC	5/8/90	COMPANY NAME		COMPANY NAME:	
RECEIVED BY: Delivered to	Date/Time	RECEIVED BY: V. Bell	Date/Time 5/9/90 10:54	RECEIVED BY:	Date/Time
COMPANY NAME: Federal Express	5/8/90	COMPANY NAME: Compuchem		COMPANY NAME:	
RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time
COMPANY NAME:		COMPANY NAME:		COMPANY NAME	

SHIPPING INFORMATION

Number of Shipping Containers-

Method of Shipment

Special Handling Requirements

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005099

1741

PROJECT NAME:

PROJECT NUMBER: 73800

SAMPLERS (SIGNATURE): Robert J. McKenzie

PRINTED NAME: Robert J. McKenzie

CLIENT ID (9 CHARACTERS)

#	GC/MS						GC							INORGANICS				OTHER										SAMPLING INFO		REMARKS
	No. of Bottles/Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST/PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols					MATRIX: Water/Soil	DATE	TIME	
																												5/8/90	1120	
1 2 3 4 5 6 7 8 9																														
7380010 6	2	✓			✓																							337843		partial set
7380010 7	4	✓			✓																							337834 337844		partial set
7380 1TB 2	2	✓			✓																							337841		trip blank day 2

RECEIVED IN GOOD CONDITION

RELINQUISHED BY:	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	SHIPPING INFORMATION	
COMPANY NAME: NYSDEC	5/8/90	COMPANY NAME		COMPANY NAME		Number of Shipping Containers-	
RECEIVED BY: Delivered to	Date/Time	RECEIVED BY:	Date/Time 5/9/90 10:30	RECEIVED BY:	Date/Time	Method of Shipment	
COMPANY NAME: Federal Express	5/8/90	COMPANY NAME: Compu		COMPANY NAME:			
RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	Special Handling Requirements	
COMPANY NAME		COMPANY NAME		COMPANY NAME			

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABORATORIES

CHAIN-OF-CUSTODY RECORD

№ 005104

1740

PROJECT NAME:

PROJECT NUMBER: 738001

SAMPLERS (SIGNATURE)

Robert J. McKenna

PRINTED NAME

CLIENT ID (9 CHARACTERS)

1	2	3	4	5	6	7	8	9
7	3	8	0	0	1	M	S	D

#	GC/MS					GC						INORGANICS				OTHER						MATRIX: Water / Soil
No. of Bottles / Vials	624-8240	625-8270	TCL-VOA	TCL-SVOA	Other:	601-8010	602-8020	608-8080	8140	TCL PEST / PCB's	Herbicides	Other:	Metals	Cyanide	TAL Metals	Other:	TOC	TOX	Oil & Grease	Pet. Hydro.	Phenols	
X	X																					

SAMPLING INFO

DATE	TIME
5/8/90	1540

REMARKS

ID USED 5/9/90
738012

337837 Matrix spike
337847 duplicate of
73800112

Recd 2-40ml VOA vials not on C-o-C 5/9/90

RECEIVED IN GOOD CONDITION 5/9/90

SHIPPING INFORMATION

Number of Shipping Containers-

Method of Shipment

Special Handling Requirements

RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time
COMPANY NAME: NYSDEC	5/8/90	COMPANY NAME:		COMPANY NAME:	
RECEIVED BY: Relinquished to	Date/Time 5/8/90	RECEIVED BY: T. Bath	Date/Time 5/9/90 10:30	RECEIVED BY:	Date/Time
COMPANY NAME: Federal Express		COMPANY NAME: Compu Chem		COMPANY NAME:	
RELINQUISHED BY	Date/Time	RELINQUISHED BY	Date/Time	RELINQUISHED BY:	Date/Time
COMPANY NAME		COMPANY NAME		COMPANY NAME	

NYDEC RA090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee

TELEPHONE NUMBER: 5184575677

REGION NO: 0

CONTRACT LAB: Compu Chem

SAMPLING DATE: [illegible]/90

TIME: 1:25 ☐ AM ☒ PM

SAMPLING POINT:

COUNTY:

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number ______ ______ ______ Outfall Number ______ ______ ______ Flow ______ . ______ . ______ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 73800109

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term ______ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) ______

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—Includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 15. Inorganic—Water
☐ 16. Base Neutral Acids (BNA)—Water
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 18. Pesticides/PCBs—Water
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 20. Inorganic—Soil/Sediment
☐ 21. BNA—Soil/Sediment
☐ 22. VOA—Soil/Sediment
☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☒ 28. VOA—8240
☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSSS-01 ☐ RSRR-01

☐ 31. Other (Specify) ______

[redacted]ation for each sample submitted to a contract labora-[redacted], send Part 1 of this form to New York State Depart-[redacted] Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]phone: (518) 457-7470. Send Part 2 of this form to the [redacted] with the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee	TELEPHONE NUMBER: 9845786 77	REGION NO: 8
CONTRACT LAB: Compu Chem	SAMPLING DATE: 5/8/90	TIME: 1:40 ☐ AM ☒ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 73800110

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX: ☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

- ☐ 1. All (SPDES)—Includes 2-8
- ☐ 2. Metals (SPDES)
- ☐ 3. Volatiles—USEPA 624 (SPDES)
- ☐ 4. Acids (SPDES)
- ☐ 5. Base/Neutrals (SPDES)
- ☐ 6. Cyanide (SPDES)
- ☐ 7. Pesticides/PCBs (SPDES)
- ☐ 8. PCBs only (SPDES)
- ☐ 9. USEPA 503.1—Water
- ☐ 10. USEPA 601—Water
- ☐ 11. USEPA 602—Water
- ☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
- ☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

- ☐ 14. (ALL)—Water—INCLUDES 14-18
- ☐ 15. Inorganic—Water
- ☐ 16. Base Neutral Acids (BNA)—Water
- ☐ 17. Volatile Organic Analysis (VOA)—Water
- ☐ 18. Pesticides/PCBs—Water
- ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
- ☐ 20. Inorganic—Soil/Sediment
- ☐ 21. BNA—Soil/Sediment
- ☐ 22. VOA—Soil/Sediment
- ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

- ☐ 24. EP Toxicity
- ☐ 25. EP Toxicity (Metals Only)
- ☐ 26. Ignitability
- ☐ 27. Corrosivity
- ☒ 28. VOA—8240
- ☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

- ☐ RSGB-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
- ☐ RSGR-01 ☐ RSRS-01 ☐ RSRO-01 ☐ RSRS-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]ation for each sample submitted to a contract labora-[redacted], send Part 1 of this form to New York State Depart-[redacted] Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]phone: (518) 457-7470. Send Part 2 of this form to the [redacted] with the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

1738

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PART 2

74-15-1 (7/87)—9e

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee	TELEPHONE NUMBER: 5184577677	REGION NO: 0
CONTRACT LAB: Compu Chem	SAMPLING DATE: 5/18/90 TIME: 340 ☐ AM ☒ PM	
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS.

SPDES Number ____ Outfall Number ____ Flow ____ MGD

DEC ID NUMBER (Contract Regional Code Custodian): RA090 0507 7380012

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term ____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) ____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

- ☐ 1. All (SPDES)—Includes 2-8
- ☐ 2. Metals (SPDES)
- ☐ 3. Volatiles—USEPA 624 (SPDES)
- ☐ 4. Acids (SPDES)
- ☐ 5. Base/Neutrals (SPDES)
- ☐ 6. Cyanide (SPDES)
- ☐ 7. Pesticides/PCBs (SPDES)
- ☐ 8. PCBs only (SPDES)
- ☐ 9. USEPA 503.1—Water
- ☐ 10. USEPA 601—Water
- ☐ 11. USEPA 602—Water
- ☐ 12. Std. WWTP. BOD, COD, SOLIDS, pH
- ☐ 13. Expanded WWTP 10 pams + NAP

CONTRACT LABORATORY PROTOCOLS

- ☐ 14. (ALL)—Water—INCLUDES 14-18
- ☐ 15. Inorganic—Water
- ☐ 16. Base Neutral Acids (BNA)—Water
- ☐ 17. Volatile Organic Analysis (VOA)—Water
- ☐ 18. Pesticides/PCBs—Water
- ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
- ☐ 20. Inorganic—Soil/Sediment
- ☐ 21. BNA—Soil/Sediment
- ☐ 22. VOA—Soil/Sediment
- ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

- ☐ 24. EP Toxicity
- ☐ 25. EP Toxicity (Metals Only)
- ☐ 26. Ignitability
- ☐ 27. Corrosivity
- ☒ 28. VOA—8240
- ☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

- ☐ RSGB-01 ☐ RSSR-01 ☐ RBR1-01 (EP Toxicity-Metals only + RSRR-01
- ☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSSB-01 ☐ RSRR-01

☐ 31. Other (Specify) ____

[redacted]ation for each sample submitted to a contract laboratory, send Part 1 of this form to New York State Department of Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]phone: (518) 457-7470. Send Part 2 of this form to the [redacted] the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert J. MacNamee	TELEPHONE NUMBER: 845/1677	REGION NO: 0
CONTRACT LAB: Cornell Chem	SAMPLING DATE: 5/8/90 TIME: 3:40 ☐ AM ☒ PM	
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 7380145

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—Includes 2-8 ☐ 2. Metals (SPDES) ☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES) ☐ 5. Base/Neutrals (SPDES) ☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES) ☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water ☐ 10. USEPA 601—Water ☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH ☐ 13. Extended WWTP 10 plus + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18 ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water ☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water ☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water ☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity ☐ 25. EP Toxicity (Metals Only) ☐ 26. Ignitability
☐ 27. Corrosivity ☒ 28. VOA—8240 ☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRC-01 ☐ RSSB-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]nation for each sample submitted to a contract laboratory, send Part 1 of this form to New York State Department of Conservation, 50 Wolf Road, Room 317, Albany, New York. Telephone: (518) 457-7470. Send Part 2 of this form to the [redacted] with the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

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74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert [redacted]Nemec	TELEPHONE NUMBER: 518 457 8677	REGION NO: 0
CONTRACT LAB: Compuchem	SAMPLING DATE: 5/8/90	TIME: 1135 ☒ AM ☐ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 7380108

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—Includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 601.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 10 parms. + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water
☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water
☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water
☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☒ 28. VOA—8240
☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGS-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRS-01 ☐ RSRO-01 ☐ RSSS-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]nation for each sample submitted to a contract laboratory, send Part 1 of this form to New York State Department of Conservation, 50 Wolf Road, Room 317, Albany, New York. Telephone: (518) 457-7470. Send Part 2 of this form to the laboratory with the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

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74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee	TELEPHONE NUMBER: 9845753677	REGION NO: 0
CONTRACT LAB: Coma Chem	SAMPLING DATE: 4/8/90	TIME: 3:35 ☐ AM ☒ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number ____ ____ ____ ____ Outfall Number ____ ____ ____ Flow ____ ____ ____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 7380011

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term ____ ____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) ____ ____ ____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 19 parms + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water
☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water
☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water
☐ 23. Pesticides/PCBs—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☒ 28. VOA—8240
☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSBB-01 ☐ RSRR-01

☐ 31. Other (Specify) ____

[redacted]nation for each sample submitted to a contract laboratory, send Part 1 of this form to New York State Department of Conservation, 50 Wolf Road, Room 317, Albany, New York. Telephone: (518) 457-7470. Send Part 2 of this form to the [redacted] sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—Ba

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert Mckamee	TELEPHONE NUMBER: 5184578077	REGION NO: 8
CONTRACT LAB: CompuChem	SAMPLING DATE: 5/8/90	TIME: 1120 ☒ AM ☐ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS.

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): R8090 0507 73800107

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSES

PRIORITY POLLUTANTS (Water Part 136)

- ☐ 1. All (SPDES)—includes 2-8
- ☐ 2. Metals (SPDES)
- ☐ 3. Volatiles—USEPA 624 (SPDES)
- ☐ 4. Acids (SPDES)
- ☐ 5. Base/Neutrals (SPDES)
- ☐ 6. Cyanide (SPDES)
- ☐ 7. Pesticides/PCBs (SPDES)
- ☐ 8. PCBs only (SPDES)
- ☐ 9. USEPA 503.1—Water
- ☐ 10. USEPA 601—Water
- ☐ 11. USEPA 602—Water
- ☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
- ☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

- ☐ 14. (ALL)—Water—INCLUDES 14-18
- ☐ 15. Inorganic—Water
- ☐ 16. Base Neutral Acids (BNA)—Water
- ☐ 17. Volatile Organic Analysis (VOA)—Water
- ☐ 18. Pesticides/PCBs—Water
- ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
- ☐ 20. Inorganic—Soil/Sediment
- ☐ 21. BNA—Soil/Sediment
- ☐ 22. VOA—Soil/Sediment
- ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

- ☐ 24. EP Toxicity
- ☐ 25. EP Toxicity (Metals Only)
- ☐ 26. Ignitability
- ☐ 27. Corrosivity
- ☒ 28. VOA—8240
- ☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

- ☐ RSGB-01 ☐ RSBR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
- ☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSSB-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]uation for each sample submitted to a contract labora-[redacted], send Part 1 of this form to New York State Depart-[redacted] Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]elephone: (518) 457-7470. Send Part 2 of this form to the [redacted] with the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC R8090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—Ba

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert [redacted]	TELEPHONE NUMBER: 5184578677	REGION NO: 0
CONTRACT LAB: Comp Chem	SAMPLING DATE:	TIME: ☐ AM ☐ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 73800/TB2

TYPE OF SAMPLE: ☐ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX: ☐ Air ☐ Soil/Sediment ☐ Groundwater ☐ Surface Water ☐ Wastewater ☒ Other (Specify) Trip blank

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

- ☐ 1. All (SPDES)—Includes 2-8
- ☐ 2. Metals (SPDES)
- ☐ 3. Volatiles—USEPA 624 (SPDES)
- ☐ 4. Acids (SPDES)
- ☐ 5. Base/Neutrals (SPDES)
- ☐ 6. Cyanide (SPDES)
- ☐ 7. Pesticides/PCBs (SPDES)
- ☐ 8. PCBs only (SPDES)
- ☐ 9. USEPA 503.1—Water
- ☐ 10. USEPA 601—Water
- ☐ 11. USEPA 602—Water
- ☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
- ☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

- ☐ 14. (ALL)—Water—INCLUDES 14-18
- ☐ 15. Inorganic—Water
- ☐ 16. Base Neutral Acids (BNA)—Water
- ☐ 17. Volatile Organic Analysis (VOA)—Water
- ☐ 18. Pesticides/PCBs—Water
- ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
- ☐ 20. Inorganic—Soil/Sediment
- ☐ 21. BNA—Soil/Sediment
- ☐ 22. VOA—Soil/Sediment
- ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

- ☐ 24. EP Toxicity
- ☐ 25. EP Toxicity (Metals Only)
- ☐ 26. Ignitability
- ☐ 27. Corrosivity
- ☒ 28. VOA—8240
- ☐ 29. BNA—8270

30. MUNICIPAL SLUDGE

- ☐ RSGS-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
- ☐ RSGR-01 ☐ RSRS-01 ☐ RSRO-01 ☐ RSSS-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]ation for each sample submitted to a contract laboratory, send Part 1 of this form to New York State Department of Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]phone: (518) 457-7470. Send Part 2 of this form to the [redacted] sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee	TELEPHONE NUMBER: 518 457 5677	REGION NO. 8
CONTRACT LAB: Coastal Chem	SAMPLING DATE: 5/18/90	TIME: 3:40 ☐ AM ☒ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC I.D NUMBER (Contact Regional Code Custodian): RA090 0507 73800 MSD

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—Includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 10 parms + NEP

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water
☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water
☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water
☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☒ 28. VOA—8240
☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGS-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity Metals only + RSRR-01
☐ RSGR-01 ☐ RSRS-01 ☐ RSRC-01 ☐ RSSS-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]ation for each sample submitted to a contract laboratory, send Part 1 of this form to New York State Department of Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]hone: (518) 457-7470. Send Part 2 of this form to the [redacted] the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee	TELEPHONE NUMBER: 5184578677	REGION NO: 6
CONTRACT LAB: Compuchem	SAMPLING DATE: 5/18/90	TIME: 1045 ☒ AM ☐ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 7380105

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water
☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water
☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water
☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☒ 28. VOA—8240
☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSBR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSSB-01 ☐ RBRR-01

☐ 31. Other (Specify) _____

[redacted]ation for each sample submitted to a contract labora-[redacted], send Part 1 of this form to New York State Depart-[redacted] Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]hone: (518) 457-7470. Send Part 2 of this form to the [redacted] the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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PART 2

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert [redacted] James | TELEPHONE NUMBER: 8457677 | REGION NO: 0

CONTRACT LAB: Conau Chem | SAMPLING DATE: 8/8/90 | TIME: 355 ☐ AM ☒ PM

SAMPLING POINT: | COUNTY:

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 7380011 3

TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP. BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water
☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water
☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water
☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☒ 28. VOA—8240
☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSSB-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]nation for each sample submitted to a **contract** labora-
[redacted], send Part 1 of this form to New York State Depart-
[redacted]t Conservation, 50 Wolf Road, Room 317, Albany, New
[redacted]phone: (518) 457-7470. Send Part 2 of this form to the
[redacted] **sample.** Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

NYDEC RA090 0507 ORGANIC

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74-15-1 (7/87)—Sa

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee | TELEPHONE NUMBER: 518 457 5677 | REGION NO: 8

CONTRACT LAB: Compu Chem | SAMPLING DATE: May 7, 1990 | TIME: 1310 ☐ AM ☒ PM

SAMPLING POINT: | COUNTY:

NEEDED FOR DIVISION OF WATER PROGRAMS.

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 73800101 | TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ Hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—Includes 2-8 ☐ 2. Metals (SPDES) ☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES) ☐ 5. Base/Neutrals (SPDES) ☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES) ☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water ☐ 10. USEPA 601—Water ☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH ☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18 ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water ☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water ☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water ☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity ☐ 25. EP Toxicity (Metals Only) ☐ 26. Ignitability
☐ 27. Corrosivity ☒ 28. VOA—8240 ☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSBR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSGB-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]mation for each sample submitted to a **contract** laboratory, send Part 1 of this form to New York State Department of Environmental Conservation, 50 Wolf Road, Room 317, Albany, New York. Telephone: (518) 457-7470. Send Part 2 of this form to the laboratory **with the sample.** Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert [redacted]Nemec | TELEPHONE NUMBER: 5184578677 | REGION NO: 0

CONTRACT LAB: ComalChem | SAMPLING DATE: 5/7/90 | TIME: 1800 ☐ AM ☑ PM

SAMPLING POINT: | COUNTY:

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 73800104 | TYPE OF SAMPLE: ☑ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☑ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—Includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 10 parms + M&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water
☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water
☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water
☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☑ 28. VOA—8240
☑ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSSB-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]nation for each sample submitted to a contract labora-[redacted], send Part 1 of this form to New York State Depart-[redacted] Conservation, 50 Wolf Road, Room 317, Albany, New [redacted]phone: (518) 457-7470. Send Part 2 of this form to the [redacted] this sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

74-15-1 (7/87)—9a

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert [redacted]lamee | TELEPHONE NUMBER: 5184577877 | REGION NO: 0

CONTRACT LAB: CompuChem | SAMPLING DATE: 5/7/90 | TIME: 1410 ☐ AM ☒ PM

SAMPLING POINT: | COUNTY:

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number: _____ Outfall Number: _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 T3B00103 | TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—includes 2-8
☐ 2. Metals (SPDES)
☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES)
☐ 5. Base/Neutrals (SPDES)
☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES)
☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water
☐ 10. USEPA 601—Water
☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH
☐ 13. Extended WWTP 10 params. + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18
☐ 15. Inorganic—Water
☐ 16. Base Neutral Acids (BNA)—Water
☐ 17. Volatile Organic Analysis (VOA)—Water
☐ 18. Pesticides/PCBs—Water
☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 20. Inorganic—Soil/Sediment
☐ 21. BNA—Soil/Sediment
☐ 22. VOA—Soil/Sediment
☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity
☐ 25. EP Toxicity (Metals Only)
☐ 26. Ignitability
☐ 27. Corrosivity
☒ 28. VOA—8240
☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSSA-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSAO-01 ☐ RSSS-01 ☐ RSRP-01

☐ 31. Other (Specify) _____

[redacted]ation for each sample submitted to a contract laboratory, send Part 1 of this form to New York State Department of Conservation, 50 Wolf Road, Room 317, Albany, New York. Phone: (518) 457-7470. Send Part 2 of this form to the lab with the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

74-15-1 (7/87)—Se

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert [redacted]amee	TELEPHONE NUMBER: 8457 8677	REGION NO: 0
CONTRACT LAB: Compuchem	SAMPLING DATE: May 7, 1990 / TIME: 1320	☐ AM ☒ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 7380102 | TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☐ Other (Specify) _____

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—Includes 2-8 ☐ 2. Metals (SPDES) ☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES) ☐ 5. Base/Neutrals (SPDES) ☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES) ☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water ☐ 10. USEPA 601—Water ☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH ☐ 13. Extended WWTP 10 par/mo + NAP

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18 ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water ☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water ☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water ☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity ☐ 25. EP Toxicity (Metals Only) ☐ 26. Ignitability
☐ 27. Corrosivity ☒ 28. VOA—8240 ☒ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSBR-01 ☐ RSRT-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSAB-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]ation for each sample submitted to a contract labora-
send Part 1 of this form to New York State Depart-
l Conservation, 50 Wolf Road, Room 317, Albany, New
phone: (518) 457-7470. Send Part 2 of this form to the
sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

74-15-1 (7/87) — Re

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

CONTRACT LAB SAMPLE INFORMATION SHEET

SUBMITTED BY: Robert McNamee	TELEPHONE NUMBER: 5184575677	REGION NO: 0
CONTRACT LAB: CompuChem	SAMPLING DATE: 5-3-90 TB	TIME: ☐ AM ☐ PM
SAMPLING POINT:	COUNTY:	

NEEDED FOR DIVISION OF WATER PROGRAMS:

SPDES Number _____ Outfall Number _____ Flow _____ MGD

DEC ID NUMBER (Contact Regional Code Custodian): RA090 0507 7380TB1	TYPE OF SAMPLE: ☒ Grab ☐ Composite Term _____ hrs

SAMPLE MATRIX:
☐ Air ☐ Soil/Sediment ☒ Groundwater ☐ Surface Water ☐ Wastewater ☒ Other (Specify) TRIP BLANK

CHECK THE BOX PRECEDING THE REQUESTED ANALYSIS

PRIORITY POLLUTANTS (Water Part 136)

☐ 1. All (SPDES)—includes 2-8 ☐ 2. Metals (SPDES) ☐ 3. Volatiles—USEPA 624 (SPDES)
☐ 4. Acids (SPDES) ☐ 5. Base/Neutrals (SPDES) ☐ 6. Cyanide (SPDES)
☐ 7. Pesticides/PCBs (SPDES) ☐ 8. PCBs only (SPDES)

☐ 9. USEPA 503.1—Water ☐ 10. USEPA 601—Water ☐ 11. USEPA 602—Water
☐ 12. Std. WWTP, BOD, COD, SOLIDS, pH ☐ 13. Extended WWTP 10 parms + N&P

CONTRACT LABORATORY PROTOCOLS

☐ 14. (ALL)—Water—INCLUDES 14-18 ☐ 19. (ALL) Soil/Sediments—INCLUDES 19-23
☐ 15. Inorganic—Water ☐ 20. Inorganic—Soil/Sediment
☐ 16. Base Neutral Acids (BNA)—Water ☐ 21. BNA—Soil/Sediment
☐ 17. Volatile Organic Analysis (VOA)—Water ☐ 22. VOA—Soil/Sediment
☐ 18. Pesticides/PCBs—Water ☐ 23. Pesticides/PCB's—Soil/Sediment

HAZARDOUS WASTES

☐ 24. EP Toxicity ☐ 25. EP Toxicity (Metals Only) ☐ 26. Ignitability
☐ 27. Corrosivity ☒ 28. VOA—8240 ☐ 29. BNA—8270

30. MUNICIPAL SLUDGE

☐ RSGB-01 ☐ RSSR-01 ☐ RSR1-01 (EP Toxicity-Metals only + RSRR-01
☐ RSGR-01 ☐ RSRB-01 ☐ RSRO-01 ☐ RSBB-01 ☐ RSRR-01

☐ 31. Other (Specify) _____

[redacted]mation for each sample submitted to a contract laboratory[redacted], send Part 1 of this form to New York State Department of Environmental Conservation, 50 Wolf Road, Room 317, Albany, New York. Telephone: (518) 457-7470. Send Part 2 of this form to the lab with the sample. Retain Part 3 for your record.

CAUTION (check if applicable)

☐ Lab Personnel are expected to use caution when handling DEC samples, however, please use special precautions when handling this sample since it is believed to contain significant concentrations of hazardous and/or toxic material(s).

Place QA Label Here

3. VOLATILES DATA

A. QC SUMMARY

B. SAMPLE DATA

C. STANDARDS DATA

D. RAW QC DATA

CASE#: 20124 SDG#: 01 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)

2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	73800101	101	96	83		0
02	73800102	102	100	110		0
03	73800103	107	104	109		0
04	73800104	93	94	101		0
05	73800105	98	94	110		0
06	73800106	95	93	90		0
07	73800107	106	90	101		0
08	73800108	97	94	85		0
09	73800109	101	100	92		0
10	73800110	91	87	87		0
11	73800111	89	86	86		0
12	73800112	92	98	99		0
13	73800113	100	101	105		0
14	738001TB1	97	96	90		0
15	738001TB2	97	94	85		0
16	73800112MS	92	95	98		0
17	73800112MSD	98	96	109		0
18	VBLKPQ	103	103	97		0
19	VBLKPU	88	86	86		0
20	VBLKOH	91	87	78		0

	QC LIMITS
S1 (TOL) = Toluene-d8	(88-110)
S2 (BFB) = Bromofluorobenzene	(86-115)
S3 (DCE) = 1,2-Dichloroethane-d4	(76-114)

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)

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix Spike - EPA Sample No.: 73800112

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene	50.0	0	39.4	79	61-145
Trichloroethene	50.0	0	48.3	97	71-120
Benzene	50.0	31.6	76.7	90	76-127
Toluene	50.0	11.4	55.7	89	76-125
Chlorobenzene	50.0	7.20	57.5	101	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,1-Dichloroethene	50.0	41.2	82	-4	14	61-145
Trichloroethene	50.0	47.5	95	2	14	71-120
Benzene	50.0	82.9	103	-13 *	11	76-127
Toluene	50.0	58.8	95	-7	13	76-125
Chlorobenzene	50.0	55.6	97	4	13	75-130

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: 0 out of 10 outside limits

COMMENTS: CLP ,2012,4,73800112,LOW,WATER,337837,VOLATILE,EPA,
CAP, CT900515B19,BF900515A19, , , ,

FORM III VOA-1 1/87 Rev.

(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)

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: SDG No.: 01

Lab File ID: CB900515C19 Lab Sample ID: VBLKPO

Date Analysed: 05/15/90 Time Analyzed: 0415

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

Inetrument ID: 19

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	73800102	337390	CN037390A19	0828
02	73800103	337391	CN037391A19	0858
03	73800104	337392	CN037392A19	0934
04	73800105	337832	CN037832A19	1014
05	73800106	337833	CN037833A19	1059
06	73800107	337834	CN037834A19	1141
07	73800108	337835	CN037835A19	1208
08	73800111	337836	CN037836A19	1314
09	738001TB1	337377	CN037377C19	0651

COMMENTS: CLP ,2012,4, ,LOW, ,000000,VOLATILE,BLANK,
CAP, CS900515C19,BF900515C19, , , ,

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID: CB900515B19 Lab Sample ID: VBLKPU

Date Analyzed: 05/15/90 Time Analyzed: 1853

Matrix: (soil/water) WATER 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	73800112	337837	C2R37837C19	0113
02	73800113	337840	CN037840B19	2345
03	73800112MS	337378	CN037378C19	0151
04	73800112MSD	337379	CN037379C19	0237

COMMENTS: CLP , , , ,LOW, ,000000,VOLATILE,BLANK,
CAP, CT900515B19,BF900515A19, , , ,

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: SDG No.: 01

Lab File ID: CB900518A19 Lab Sample ID: VBLKOH

Date Analyzed: 05/18/90 Time Analyzed: 1930

Matrix: (soil/water) WATER 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	73800101	337389	CR037389B19	2202
02	73800109	337839	CR037839A19	2024
03	73800110	337838	CR037838B19	2050
04	738001TB2	337841	CN037841B19	2131

COMMENTS: CLP ,2012,4, ,LOW, ,000000,VOLATILE,BLANK,
CAP, CW900518A19,BH900518A19, , , ,

(4) GC / MS Tuning and Mass Calibration (Form V VOA)

BFB in chronological order ; by instrument

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID: BF90050BC19 BFB Injection Date: 05/08/90

Instrument ID: 19 BFB Injection Time: 0059

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	19.1
75	30.0 - 60.0% of mass 95	53.0
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.6
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	70.3
175	5.0 - 9.0% of mass 174	4.9 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	68.5 (97.4)1
177	5.0 - 9.0% of mass 176	5.6 (8.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD020		CS900508C19	05/08/90	0118
02	VSTD050		CT900508C19	05/08/90	0207
03	VSTD100		CU90050RC19	05/08/90	0240
04	VSTD150		CV900508C19	05/08/90	0303
05	VSTD200		CW900508C19	05/08/90	0400

5A
VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: SDG No.: 01

Lab File ID: BF900515C19 BFB Injection Date: 05/15/90

Instrument ID: 19 BFB Injection Time: 0304

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.4
75	30.0 - 60.0% of mass 95	55.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.4
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	97.4
175	5.0 - 9.0% of mass 174	6.2 (6.4)1
176	Greater than 95.0%, but less than 101.0% of mass 174	97.4 (100.0)1
177	5.0 - 9.0% of mass 176	6.0 (6.2)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MB, MSO, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050		CS900515C19	05/15/90	0340
02	VBLKPQ	VBLKPQ	CB900515C19	05/15/90	0415
03	738001TB1	337377	CN037377C19	05/15/90	0651
04	73800102	337390	CN037390A19	05/15/90	0828
05	738DD103	337391	CN037391A19	05/15/90	0858
06	73800104	337392	CN037392A19	05/15/90	0934
07	73B00105	337832	CN037832A19	05/15/90	1014
08	73800106	337833	CN037833A19	05/15/90	1059
09	73800107	337834	CN037834A19	05/15/90	1141
10	73800108	337835	CN037835A19	05/15/90	1208
11	73800111	337836	CN037836A19	05/15/90	1314

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID: BF900515A19 BFB Injection Date: 05/15/90

Instrument ID: 19 BFB Injection Time: 1457

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	26.9
75	30.0 - 60.0% of mass 95	56.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	95.3
175	5.0 - 9.0% of mass 174	6.7 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	91.0 (95.5)1
177	5.0 - 9.0% of mass 176	5.3 (5.8)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VBTD050		CT900515B19	05/15/90	1757
02	VBLKPU	VBLKPU	CB900515B19	05/15/90	1853
03	73800113	337840	CN037840B19	05/15/90	2345
04	73800112	337837	C2R37837C19	05/16/90	0113
05	73B00112MS	337378	CN037378C19	05/16/90	0151
06	73800112MSD	337379	CN037379C19	05/16/90	0237

5A

VOLATILE ORGANIC GC/MS TUNING AND MASS CALIBRATION - BROMOFLUOROBENZENE (BFB)

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID: BH900518A19 BFB Injection Date: 05/18/90

Instrument ID: 19 BFB Injection Time: 1455

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	23.1
75	30.0 - 60.0% of mass 95	51.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less then 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	88.0
175	5.0 - 9.0% of mass 174	6.6 (7.5)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.9 (97.6)1
177	5.0 - 9.0% of mass 176	5.6 (6.5)2

1-Value is % mass 174 2-Value is % mass 176

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD050		CW900518A19	05/18/90	1810
02	VBLKOH	VBLKOH	CB900518A19	05/18/90	1930
03	73800109	337839	CR037839A19	05/18/90	2024
04	73800110	337838	CR037838B19	05/18/90	2050
05	738001TB2	337841	CN037841B19	05/18/90	2131
06	73800101	337389	CR037389B19	05/18/90	2202

(5) Internal Standard Area Summary (Form VIII VOA)

In chronological order; by instrument

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): CS900515C19 Date Analyzed: 05/15/90

Instrument ID: 19 Time Analyzed: 0140

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	49400	3.10	199000	4.75	134000	9.40
	UPPER LIMIT	98800		398000		268000	
	LOWER LIMIT	24700		99500		67000	
	EPA SAMPLE NO.						
01	73800102	46200	3.07	190000	4.72	121000	9.39
02	73800103	42500	3.08	170000	4.73	116000	9.40
03	73800104	42900	3.10	183000	4.73	121000	9.39
04	73800105	42900	3.07	189000	4.68	120000	9.34
05	73800106	46200	3.07	184000	4.68	124000	9.34
06	73800107	46700	3.07	190000	4.68	122000	9.35
07	73800108	43100	3.05	175000	4.65	122000	9.34
08	73800111	45000	3.07	185000	4.70	129000	9.35
09	738001TB1	44100	3.10	181000	4.73	126000	9.35
10	VBLKPQ	45600	3.10	180000	4.73	121000	9.39

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: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): CW900518A19 Date Analyzed: 05/18/90

Instrument ID: 19 Time Analyzed: 1810

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	106000	3.08	514000	4.63	333000	9.25
	UPPER LIMIT	212000		1028000		666000	
	LOWER LIMIT	53000		257000		166500	
	EPA SAMPLE NO.						
01	73800101	83300	3.10	403000	4.65	263000	9.30
02	73800109	90400	3.10	463000	4.68	287000	9.32
03	73800110	101000	3.08	520000	4.65	319000	9.30
04	738001TB2	93100	3.10	509000	4.65	300000	9.32
05	VBLKON	117000	3.10	540000	4.68	342000	9.30

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: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): CT900515B19 Date Analyzed: 05/15/90

Instrument ID: 19 Time Analyzed: 1757

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	50600	3.10	198000	4.72	137000	9.37
	UPPER LIMIT	101200		396000		274000	
	LOWER LIMIT	25300		99000		68500	
	EPA SAMPLE NO.						
01	73800112	47900	3.05	190000	4.70	136000	9.40
02	73800113	40600	12.55	157000	19.05	117000	37.82
03	73800112MS	47700	3.08	190000	4.73	140000	9.40
04	73800112MSD	51000	3.10	206000	4.75	146000	9.42
05	VBLKPU	53300	3.10	211000	4.70	141000	9.35

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 – substracted 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.

73800101

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337389

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR037389B19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. ____ Date Analyzed: 05/18/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	18	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	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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

73800101

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337389

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR037389B19

LeVel: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. _____ Date Analyzed: 05/18/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICe found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

COMPUCHEM LABS

RIC

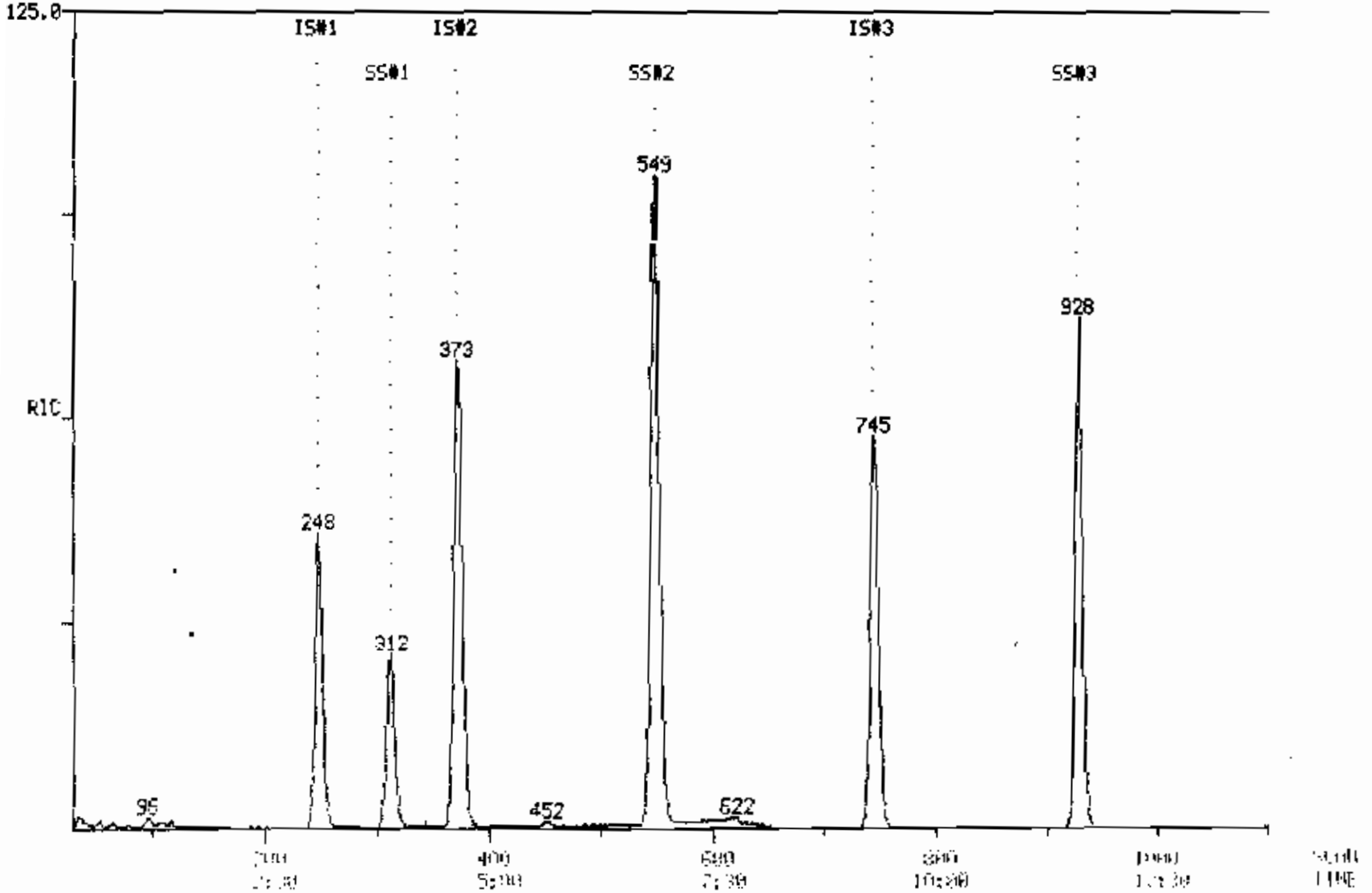
COMPUCHEM DATA: CR8273090819 SCANS 00 TO 1100

05/18/90 22:02:00

SAMPLE: 5ML CCS 337189 ID# 73000101 CS# 20124 ON #13

CONDS.:

194240.



1701

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CR037389B19
DATA: CR037389B19.TI
05/18/90 22:02:00
SAMPLE: 5ML CCO 337289 ID# 73800101 CS# 20124 ON #19
COMDS.:
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> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETH4NE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*27D D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLORDETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	248	3:06	1	1.000	A BB	80253.	50.000 UG/L	16.24
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	96	1:12	.1	0.387	A BV	11984.	18.231	UG/L	5.92
9	114	373	4:40	9	1.000	A BB	403195.	50.000	UG/L	16.24
10	84	NOT FOUND								
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	NOT FOUND								
20	62	NOT FOUND								
21	117	745	9:19	21	1.000	A BB	263032.	50.000	UG/L	16.24
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	312	3:54	1	1.258	A BB	126607.	41.611	UG/L	13.51
41	95	928	11:36	21	1.246	A BB	180230.	47.768	UG/L	15.51
42	98	549	6:52	21	0.737	A BB	459725.	50.378	UG/L	16.36

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:05	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:31		10.000			50.00		0.485	
3	0:34		10.000			50.00		0.624	
4	0:38		10.000			50.00		1.306	
5	0:42		10.000			50.00		0.899	
6	1:04		5.000			50.00		1.407	
7	1:08		5.000			50.00		0.508	
8	1:12	1.00	10.000	0.04	18.23	50.00	0.144	0.395	0.36
9	4:38	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:28		5.000			50.00		1.154	
11	1:41		5.000			50.00		1.195	
12	2:07		5.000			50.00		1.738	
13	2:19		10.000			50.00		0.305	
14	2:49		5.000			50.00		1.171	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	2:58		10.000			50.00		0.061	
16	3:20		5.000			50.00		2.644	
17	3:21		5.000			50.00		0.589	
18	3:32		5.000			50.00		0.619	
19	3:52		5.000			50.00		0.575	
20	4:01		5.000			50.00		1.875	
21	9:15	1.01	9.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:52		5.000			50.00		0.461	
23	5:12		5.000			50.00		0.273	
24	5:48		5.000			50.00		0.701	
25	6:31		5.000			50.00		0.707	
26	6:58		15.000			50.00		0.533	
27	6:55		5.000			50.00		1.061	
28	7:34		5.000			50.00		0.325	
29	7:48		5.000			50.00		0.218	
30	7:43		5.000			50.00		0.615	
31	8:27		15.000			50.00		0.128	
32	8:22		5.000			50.00		0.422	
33	9:17		5.000			50.00		0.885	
34	9:37		5.000			50.00		0.408	
35	9:52		5.000			50.00		0.578	
36	10:32		5.000			50.00		0.578	
37	10:37		5.000			50.00		1.005	
38	10:52		5.000			50.00		0.250	
39	12:10		5.000			50.00		0.347	
40	3:54	1.00	5.000	0.25	41.61	50.00	1.521	1.828	0.83
41	11:31	1.01	5.000	0.25	47.77	50.00	0.685	0.717	0.96
42	6:49	1.01	5.000	0.15	50.38	50.00	1.748	1.735	1.01

Lab Instructions:

Receipt Date: Case#: 20124 SAS#

CompuChem#: 337389R

GC/MS: VOA; WATER: EPA SOW 2/88
8240

Sample Prep Code---000
Instrument Code----412
Compound List------493
Surrogate Std------394
Internal Std-------036

SDG# EPA ID# 73800101

GC/MS Analysis WELL1

Amount Purged: [✓] 5.0 mL or [ ] Dilution _____ uL / 5.0 mL

Internal Standard Volume Added 5 uL
Surrogate Standard Volume Added 5 uL
BFB Filename: BH900518.D\9
Blank Filename: CB900518.D\9
Standard Filename: CC900518.D\9
Sample Filename: TR037389.D\9

RECEIVED
MAY 21 '90

Analyte(s) Injection: 1009 hr Work-up 1wfm

GC/MS Review

Condition Codes: JA

Entry Codes: OK,EA,ES,SM,JS,SL,SH,,JA,DA

Non-entry Codes: IM,IL,SW,CT,CS,VC,VO,UP PC,NR,IP,LA,DI,OT,SP,SI CO,RM,DW

Extraneous Peak Search Results:

Number of Peaks Found: 0

Quality Assurance Notice(s):

Number of Notices Required: 1

Disposition

[✓] Complete

[ ] Reinject Neat

[ ] Dilute

_____ uL / 5 mL

Comments:

GC/MS Review [signature] Date 5/19/90 Auditor _____ Date __/__/__

Report Integration Total # of Injections 2

Final Reportable Package(s): CRA-B19 /

QA Comments:

Initials _____ Date __/__/__

Final Review Initials _____ Date __/__/__

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	248	83300	50.0		
221	50		CHLOROMETHANE				BDL	10
231	62		VINYL CHLORIDE				BDL	10
220	94		BROMOMETHANE				BDL	10
229	64		CHLOROETHANE				BDL	10
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)			15.2	18.3	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	373	403000	50.0		
222	84		METHYLENE CHLORIDE				BDL	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				BDL	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)	745	263000	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				BDL	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE , 124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
230	106		M,P-XYLENE				BDL	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 WE#57			41.6	83.%	
247	95	S	BROMOFLUOROBENZENE			47.8	96.%	
233	98	S	D8-TOLUENE WE#59 SS#2			50.4	101.%	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-19-89

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)	
259	96		1,2-DICHLOROETHENE (TOTAL)				BDL		10
CHECKSUMS:									
	3979.			1366	749300.		308.0	18.	

CORRECTED/REVIEWED BY E K Shuster
(GC/MS DATA REVIEWER)

DATE 5-19-93

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	41.6	50.0	83.	76-114	X	
41	247	BROMOFLUOROBENZENE	47.8	50.0	96.	86-115	X	
42	233	DB-TOLUENE WE#59 SS#2	50.4	50.0	101.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 \times \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-19-90

QUALITY ASSURANCE NOTICE
CompuChem # 237389
Blank ID # CBLK051819
Case 20129

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Acetone	12	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

CW295
6/1028

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800102

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Caae No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337390

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037390A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	9	J
75-00-3	Chloroethane	7	J
75-09-2	Methylene Chloride	3	BJ
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	4	J
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

73800102

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337390

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037390A19

Level: (low/med) LOW Date Received: 05/09/90

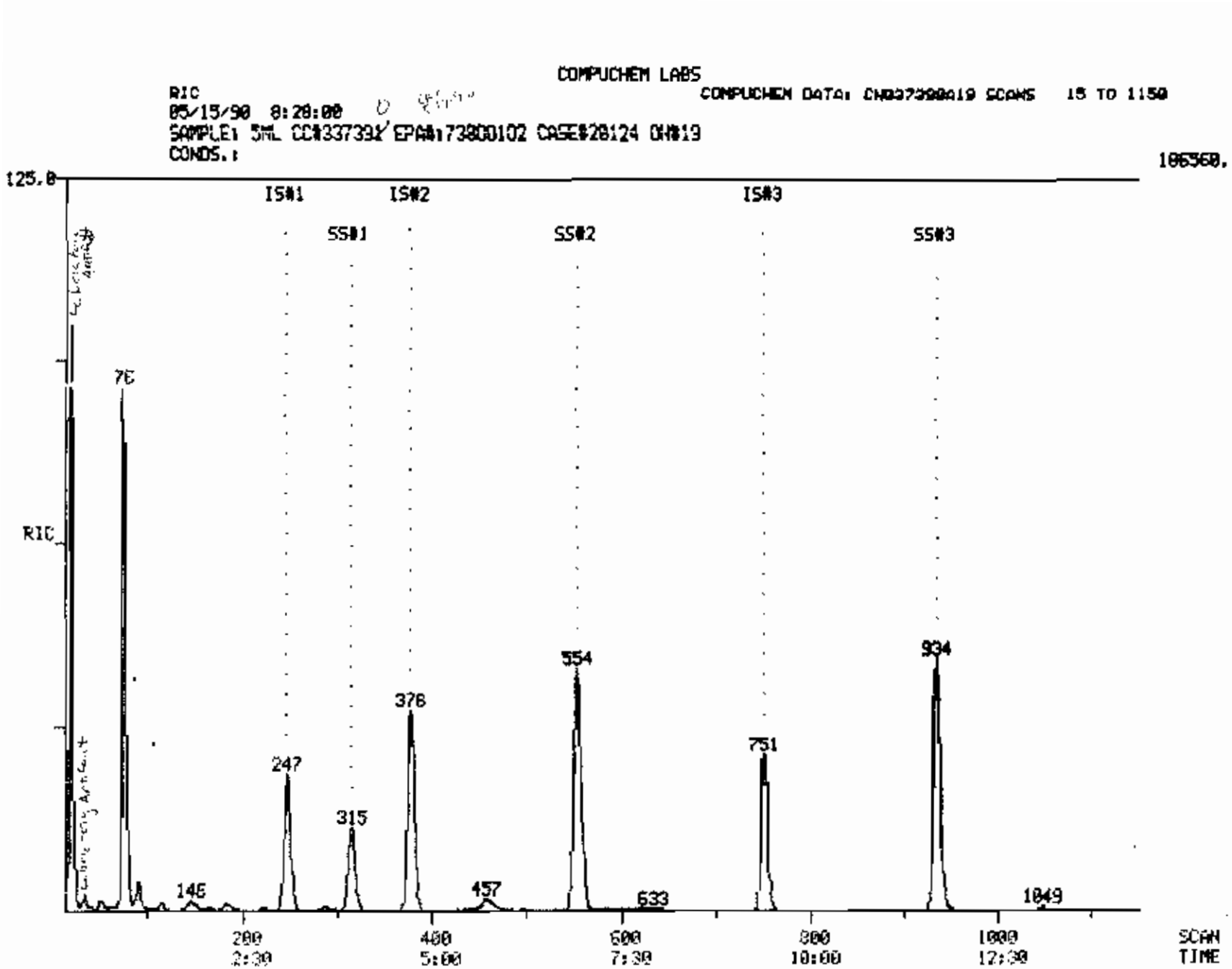
% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 4

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		LABORATORY ARTIFACT	0.27	75	J
2.		LABORATORY ARTIFACT	0.43	2.0	J
3.	60-29-7	ETHANE,1,1'-OXYBIS-	0.95	100	J
4.	109-87-5	METHANE,DIMETHOXY-	1.13	7.0	J



1690

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037390A19
DATA: CN037390A19.TI
05/15/90 8:28:00
SAMPLE: 5ML CC#33739 EPA#: 73800102 CASE#20124 ON#19
CMNDS.:
SUBMITTED BY: 19 ANALYST: 1492

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

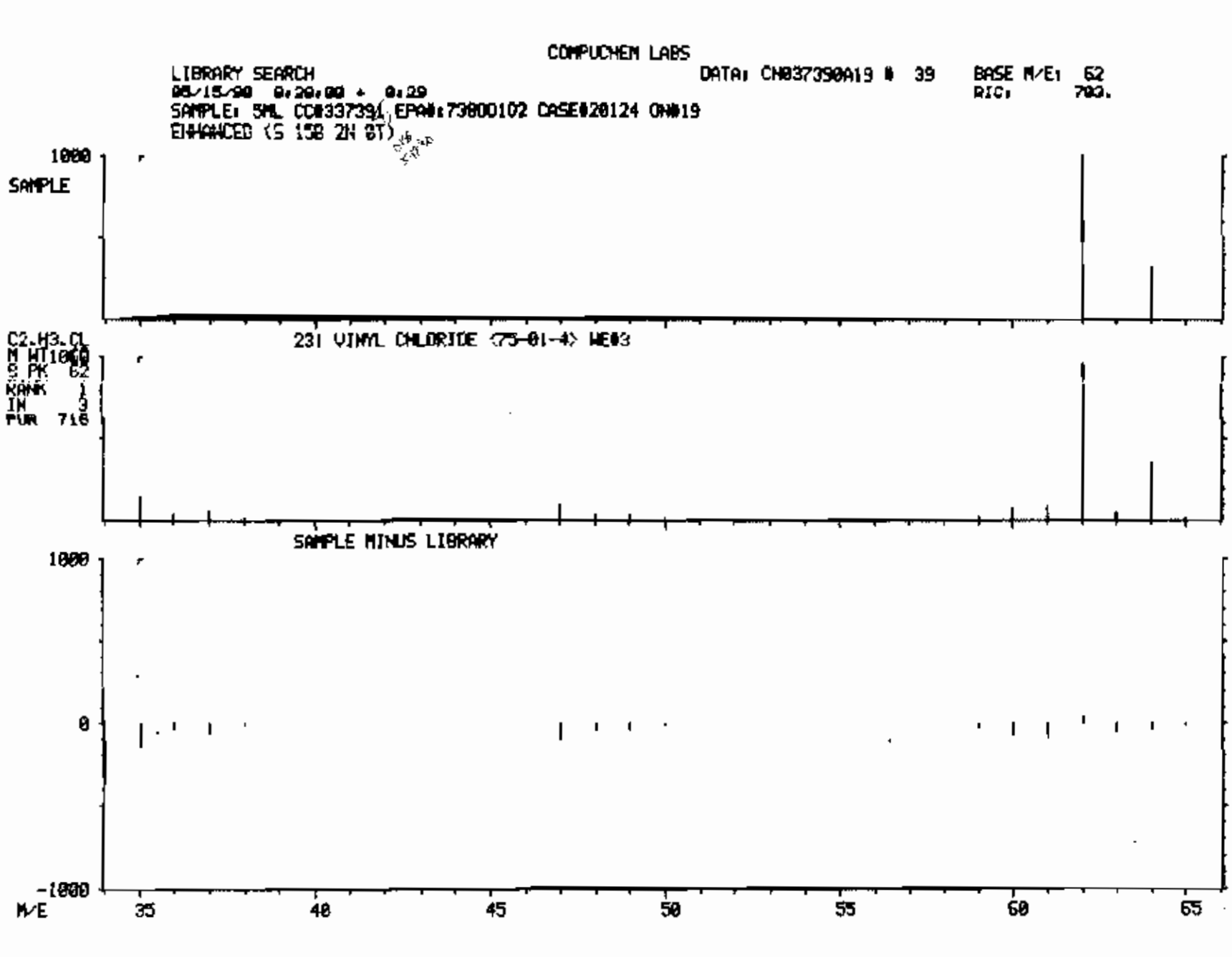
NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	246	3:04	1	1.000	A B8	46235.	50.000 UG/L	14.61
2	50	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	39	0:29	1	0.159	A BB	4013.	9.244	UG/L	2.70
4	94	NOT FOUND								
5	64	51	0:38	1	0.207	A BB	5136.	7.394	UG/L	2.16
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	92	1:09	1	0.374	A BB	929.	3.878	UG/L	1.13
9	114	378	4:43	9	1.000	A BB	189755.	50.000	UG/L	14.61
10	84	114	1:25	1	0.463	A BB	2608.	3.219	UG/L	0.94
11	96	NOT FOUND								
12	63	166	2:04	1	0.675	A BB	3694.	3.621	UG/L	1.06
13	43	185	2:19	9	0.489	A BB	4518.	4.660	UG/L	1.36
14	96	222	2:46	1	0.902	A BB	1920.	2.216	UG/L	0.65
15	72	NOT FOUND								
16	83	NOT FOUND								
17	97	NOT FOUND								
18	117	NOT FOUND								
19	78	312	3:54	9	0.825	A BB	2203.	1.173	UG/L	0.34
20	62	325	4:04	1	1.321	A BB	1524.	1.334	UG/L	0.39
21	117	751	9:23	21	1.000	A BB	121200.	50.000	UG/L	14.61
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	314	3:55	1	1.276	A BB	63431.	54.765	UG/L	16.01
41	95	935	11:41	21	1.245	A BB	71191.	49.909	UG/L	14.59
42	98	554	6:55	21	0.738	A BB	169144.	50.780	UG/L	14.84

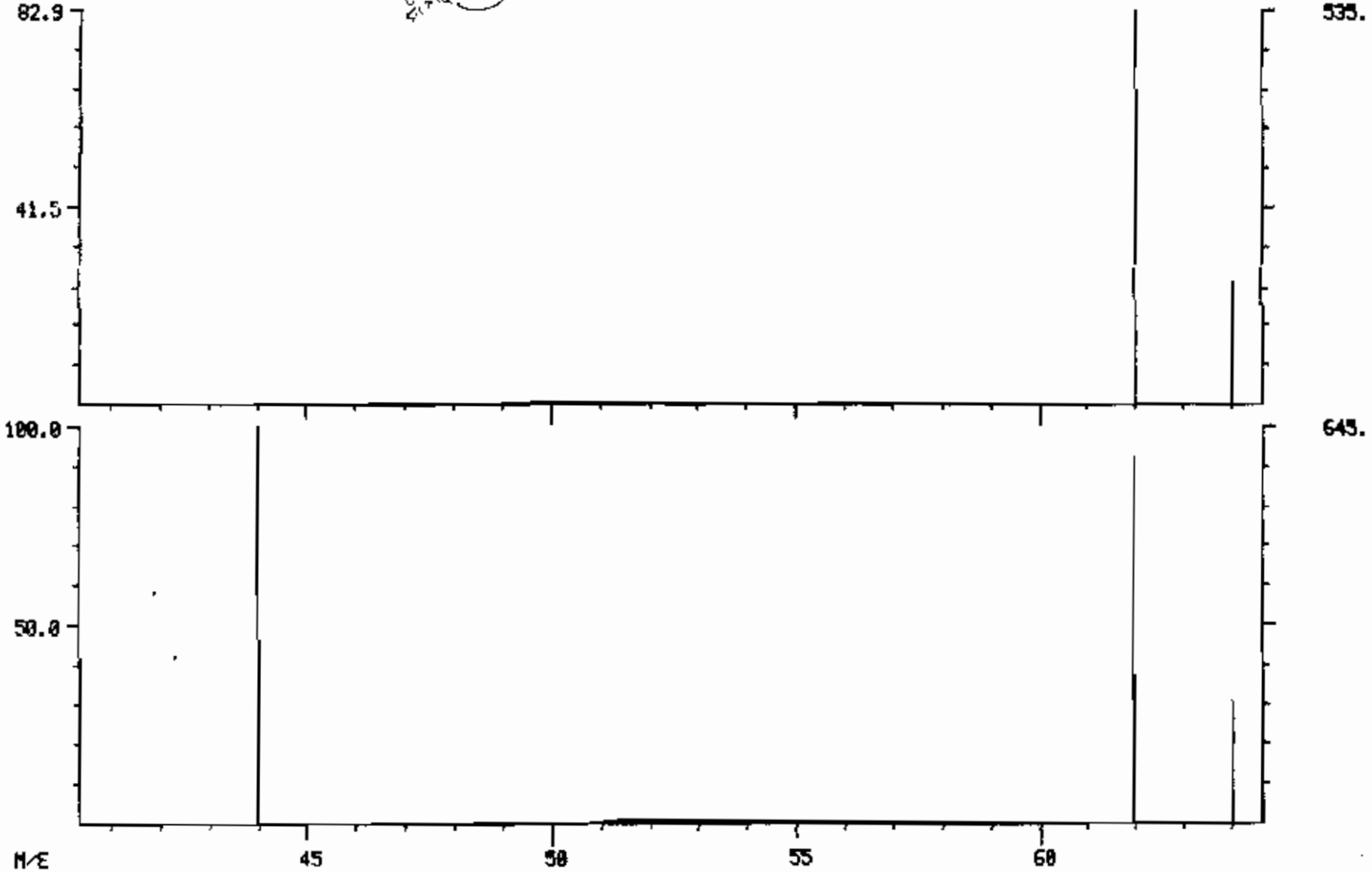
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30	0.98	10.000	0.02	9.24	50.00	0.087	0.469	0.18
4	0:37		10.000			50.00		1.152	
5	0:39	0.98	10.000	0.02	7.39	50.00	0.111	0.751	0.15
6	1:03		5.000			50.00		1.389	
7	1:07		5.000			50.00		3.616	
8	1:11	0.97	10.000	0.04	3.88	50.00	0.020	0.259	0.08
9	4:45	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	0.98	5.000	0.09	3.22	50.00	0.056	0.876	0.06
11	1:40		5.000			50.00		0.941	
12	2:05	0.99	5.000	0.13	3.62	50.00	0.080	1.103	0.07
13	2:19	0.99	10.000	0.05	4.66	50.00	0.024	0.255	0.09
14	2:49	0.98	5.000	0.18	2.22	50.00	0.042	0.937	0.04

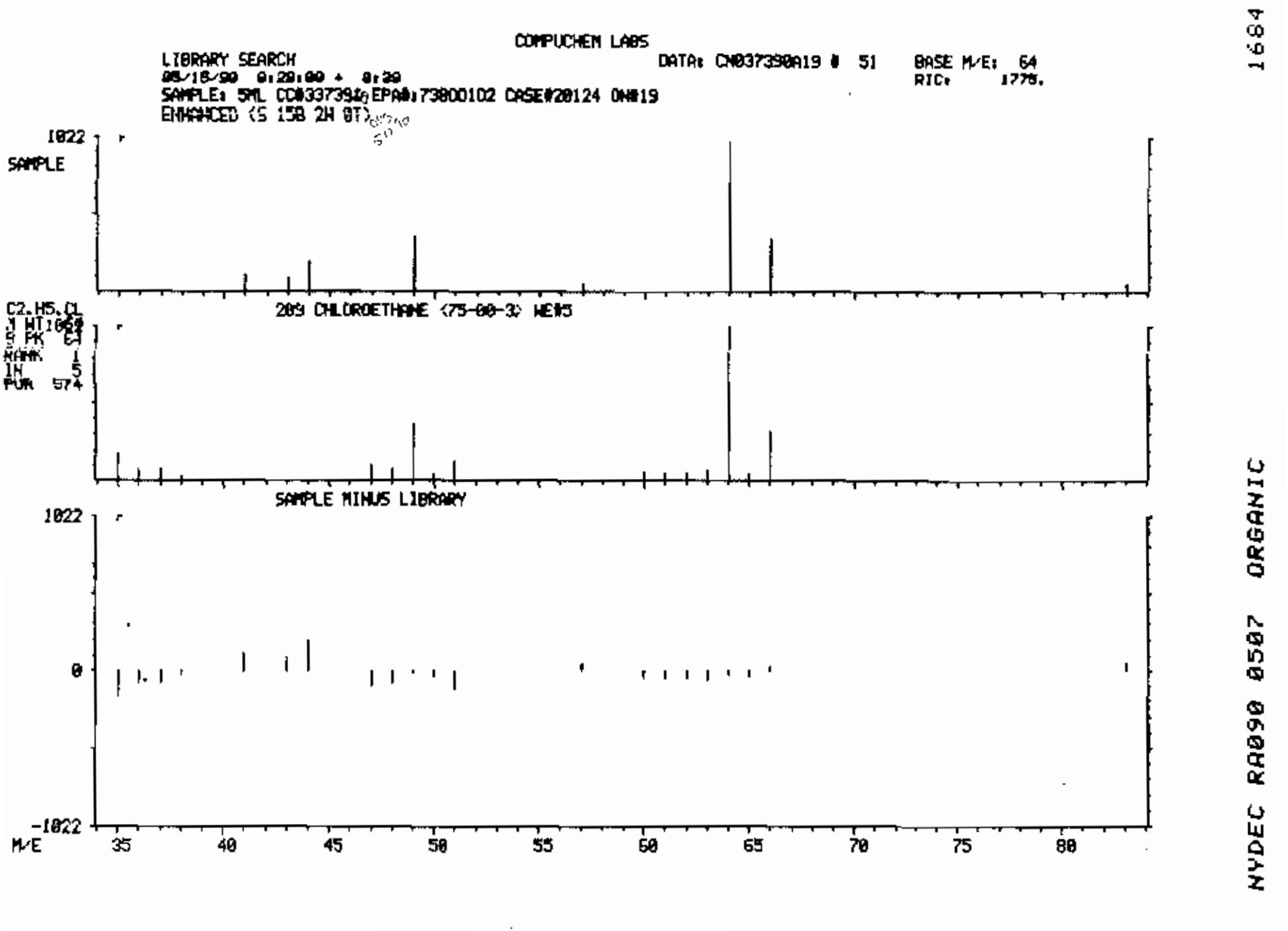
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000			50.00		0.560	
19	3:55	0.99	5.000	0.17	1.17	50.00	0.012	0.495	0.02
20	4:04	1.00	5.000	0.26	1.33	50.00	0.033	1.236	0.03
21	9:24	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.455	
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	0.99	5.000	0.26	34.77	50.00	1.372	1.253	1.10
41	11:42	1.00	5.000	0.25	49.91	50.00	0.587	0.588	1.00
42	6:57	1.00	5.000	0.15	50.78	50.00	1.511	1.488	1.02


COMPUCHEM LABS
LIBRARY SEARCH
DATA: CN037390A19 # 39
BASE M/E: 62
RIC: 703.
SAMPLE: SML CC#337391 EPA#:73000102 CASE#20124 ON#19
ENHANCED (S 15B 2N 0T)
1000
SAMPLE
C2.H3.CL
231 VINYL CHLORIDE <75-01-4> WE03
SAMPLE MINUS LIBRARY
1000
0
-1000
M/E
35
40
45
50
55
60
65

COMPUCHEM LABS

DUAL MASS SPECTRUM DATA: CN037390A19 #39 BASE M/E: 62/ 44
06/15/90 9:29:00 + 0:29 RIC: 709./ 1422.
SAMPLE: SNL CC#33739 EPA: 73900102 CASE#28124 CN#19
ENHANCED (S 15B 2N) 231 VINYL CHLORIDE (75-01-4) WE#3



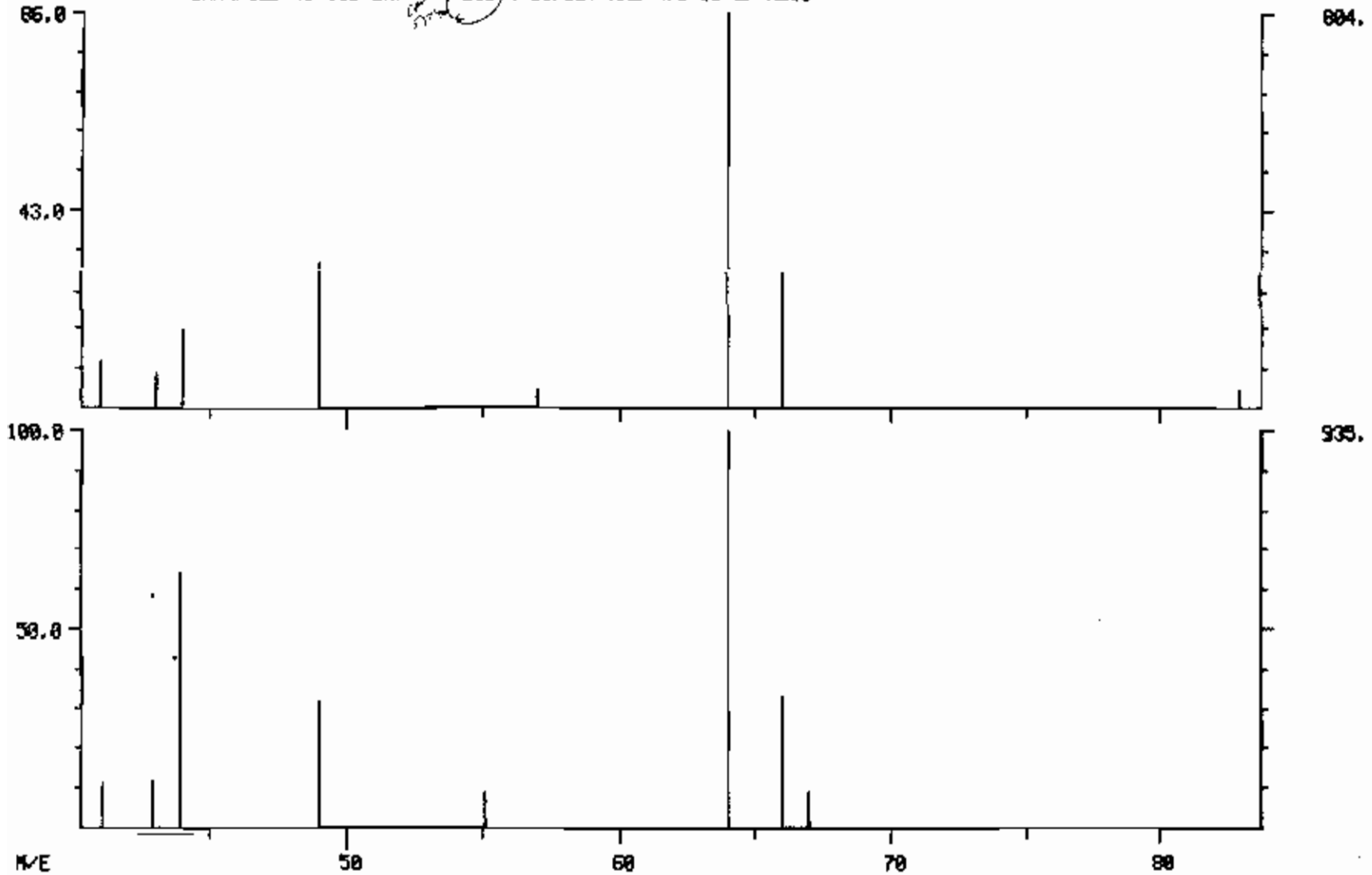

COMPUCHEM LABS
LIBRARY SEARCH
DATA: CN037390A19 # 51
BASE M/E: 64
RIC: 1775.
SAMPLE: 5ML CC#337394 EPA#:73800102 CASE#20124 ON#19
ENHANCED (S 15B 2H 0T)
1022
SAMPLE
C2.H5.CL
209 CHLOROETHANE (75-00-3) WE#5
SAMPLE MINUS LIBRARY
1022
0
-1022
M/E
35
40
45
50
55
60
65
70
75
80

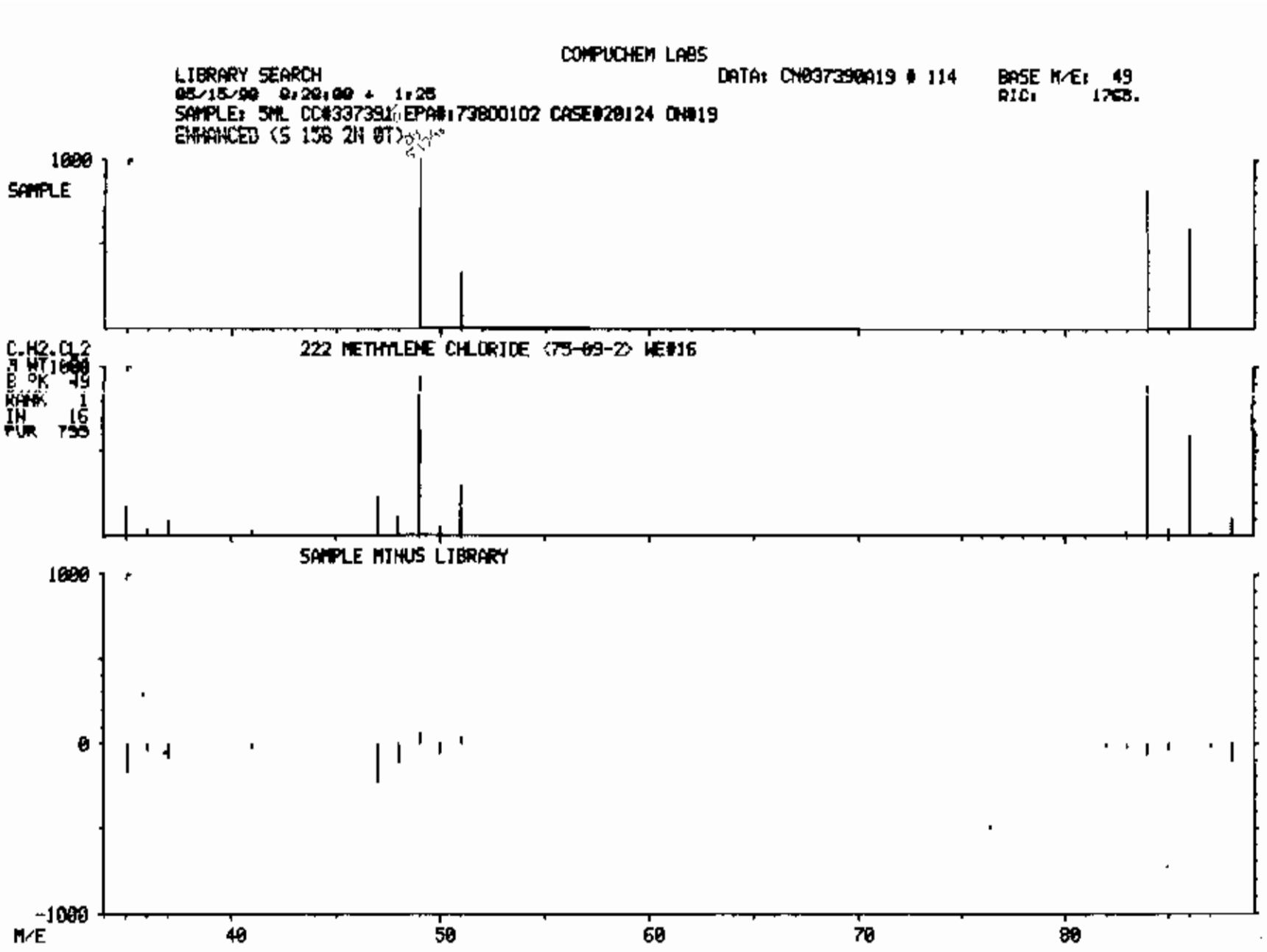
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 0:20:00 + 0:30

DATA: CN037390A19 #51 BASE M/E: 64/ 64
RIC: 1775./ 2519.

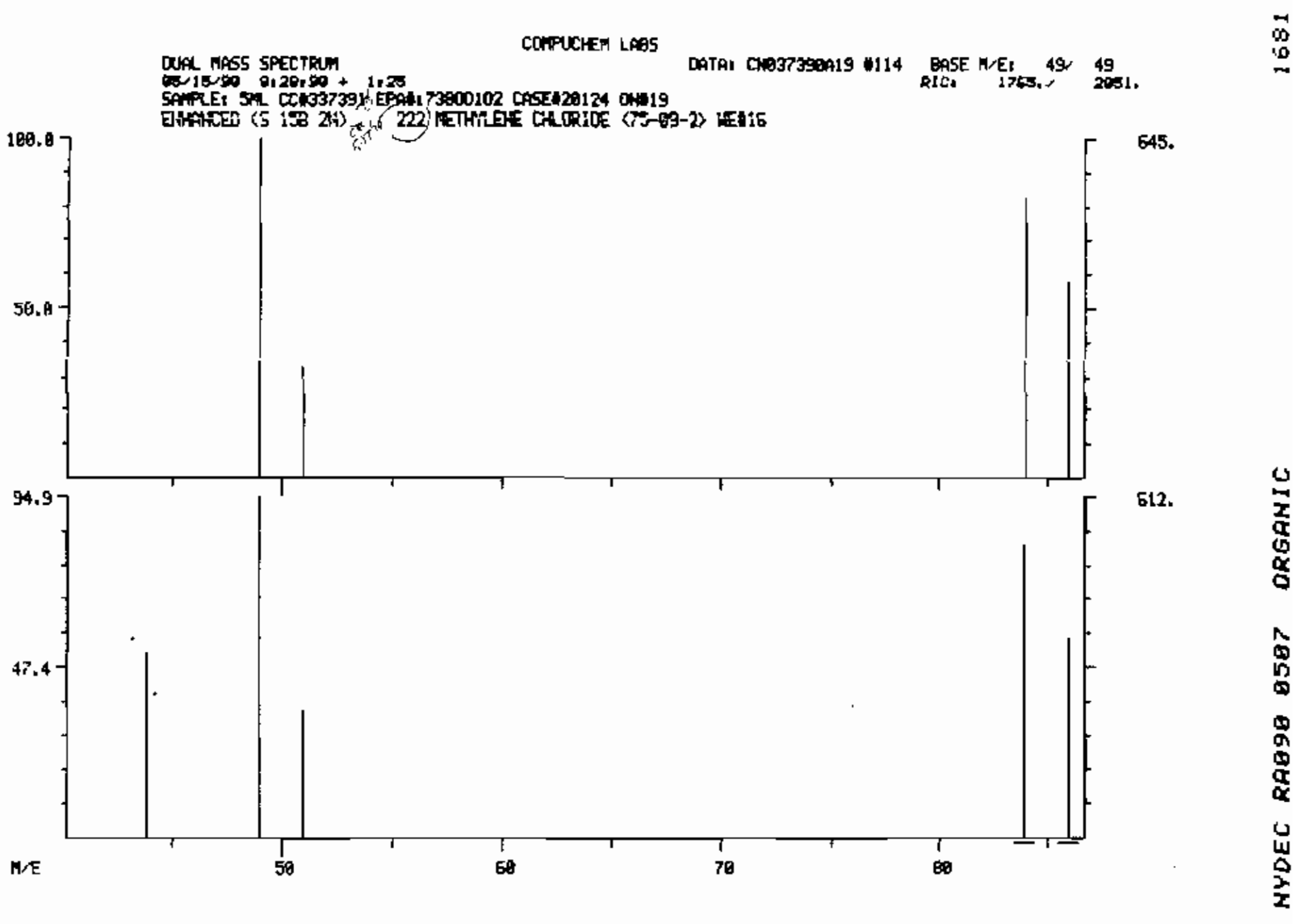
SAMPLE: 5ML CC#337391 EPA#:73000102 CASE#28124 CN#19
ENHANCED (5 15S 2H) 203 CHLORODETHANE (75-00-3) WE#5





1682

NYDEC RA090 0507 ORGANIC



COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037390A19 @ 166 BASE M/E: 63
05/15/90 0:20:00 + 2:04 RIC: 547.
SAMPLE: 5ML CC#337391 EPA#:73000102 CASE#20124 DN#19
ENHANCED (S 15B ZN 8T)

SAMPLE

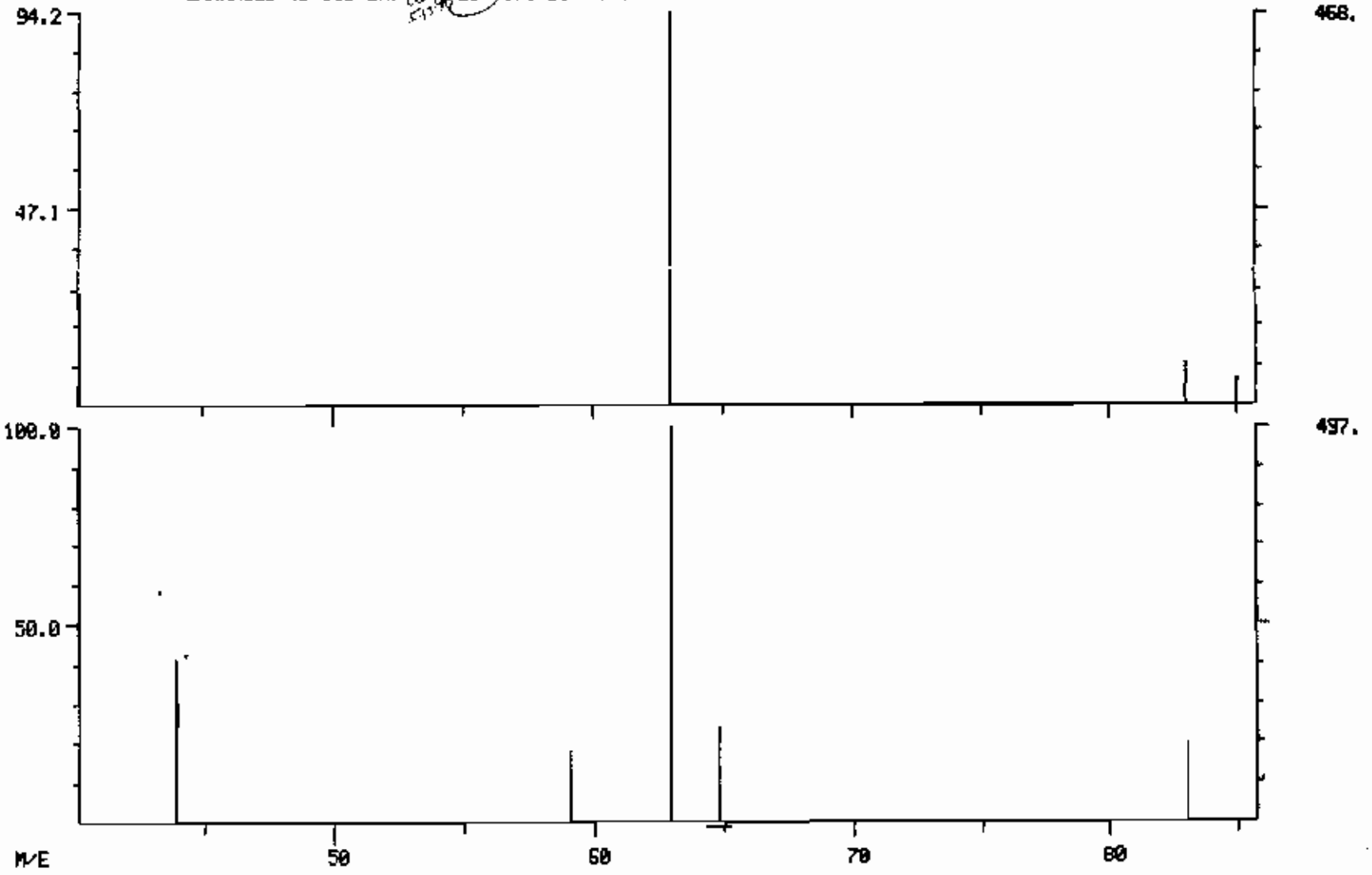
C2.H4.Cl2
214 1,1-DICHLOROETHANE (75-34-3) WE#19
A WT1000
S PK 63
RANK 1
IN 19
PUR 966

SAMPLE MINUS LIBRARY

1000
0
-1000
M/E
40
50
60
70
80
90
100

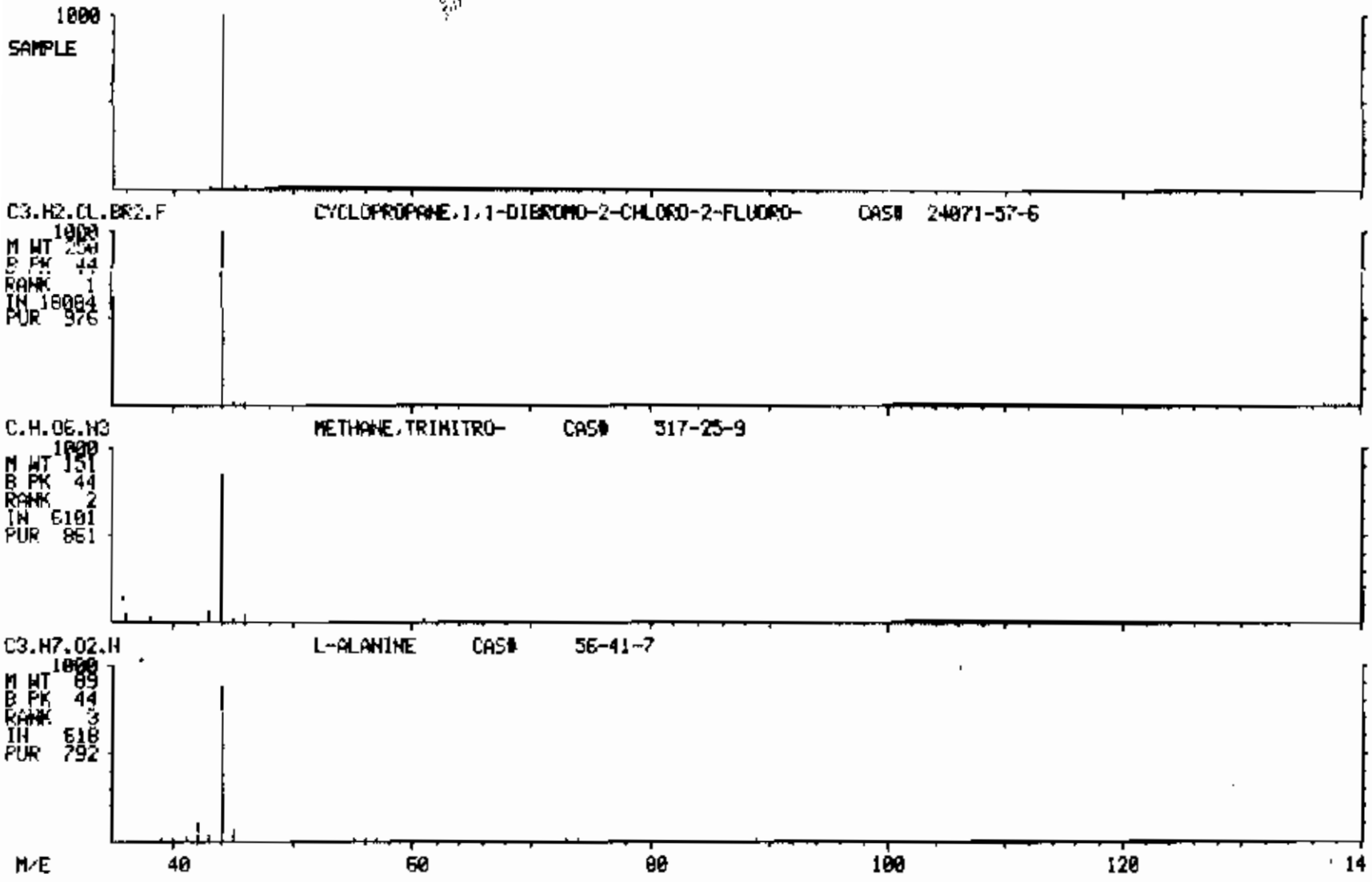
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 0:20:00 + 2:04
DATA: CM037390A19 #165 BASE M/E: 63/ 63
RIC: 547./ 1004.
SAMPLE: SML CC#33739 EPA# 73800102 CASE#20124 ON#19
ENHANCED (S 15B 2N) 214 1,1-DICHLOROETHANE (75-34-3) WE#19



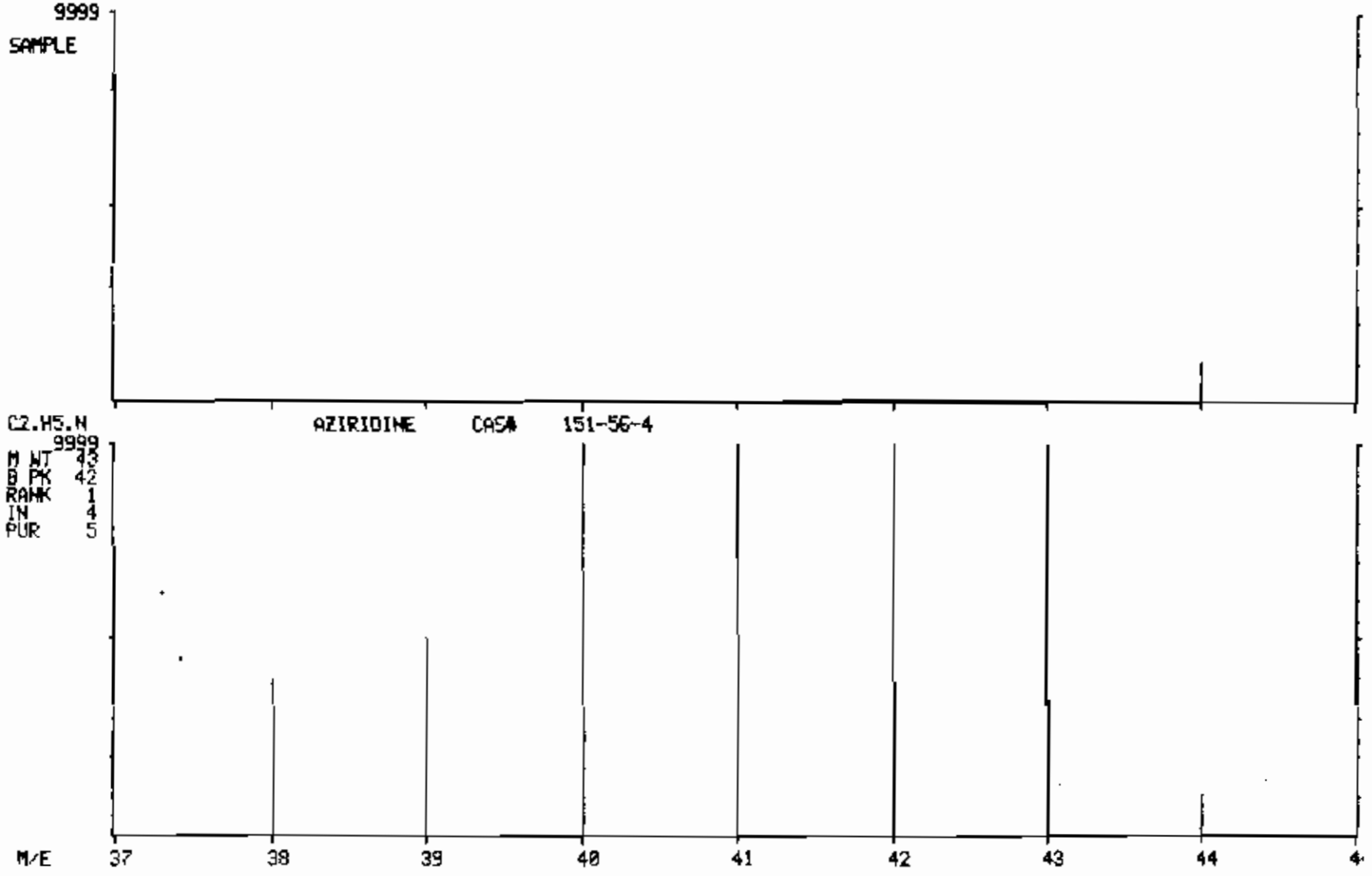
COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037390A19 # 22 BASE M/E: 44
05/15/90 9:20:00 + 0:15 RIC: 124799.
SAMPLE: 5ML CC#337394 EPA#:73800102 CASE#20124 CN#19
ENHANCED (S 15B 2N BT)



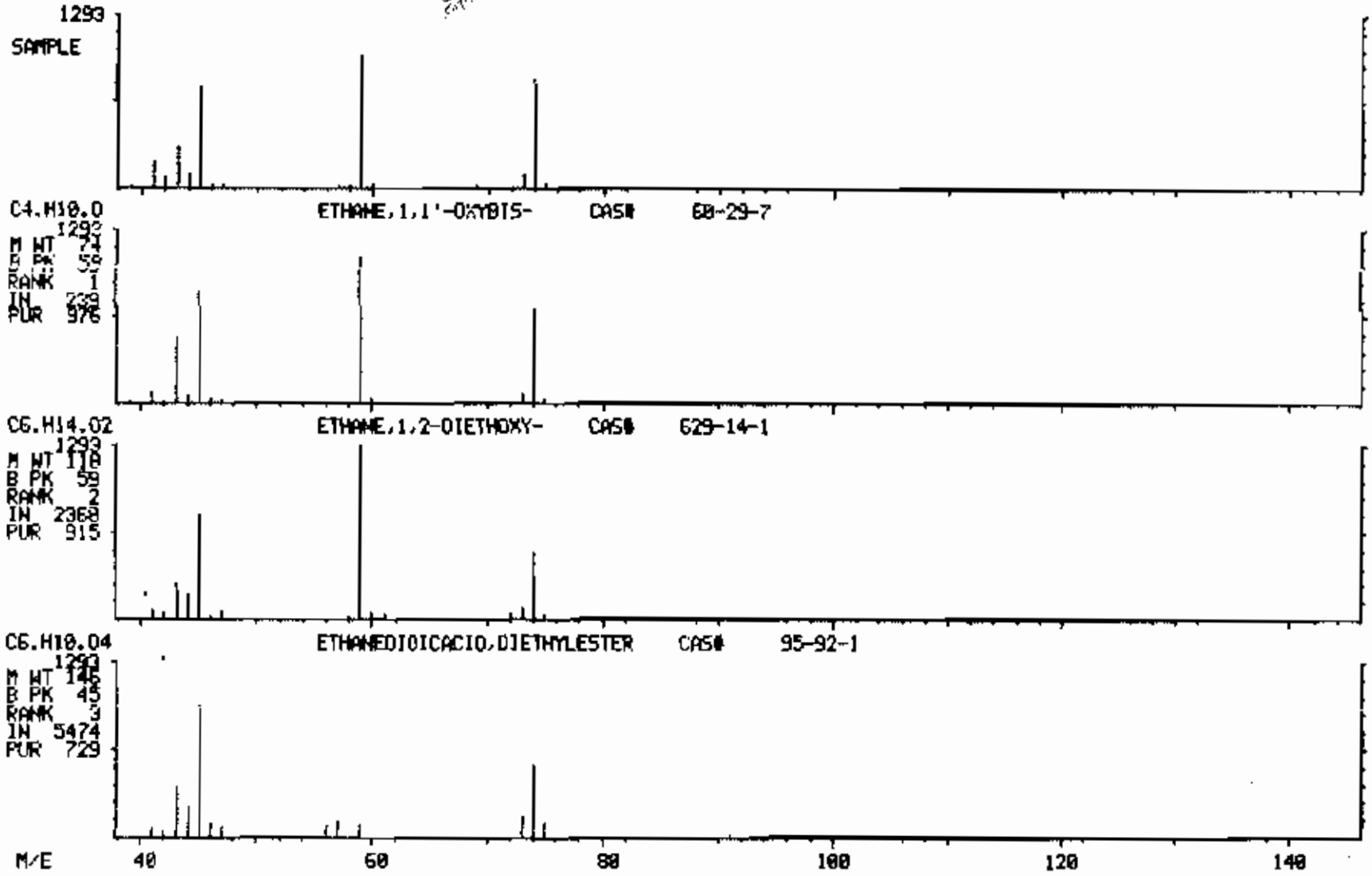
COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037390A19 # 35 BASE M/E: 44
05/15/90 0:20:00 + 0:25 RIC: 2919.
SAMPLE: 5ML CC#337391 EPA#:73000102 CASE#20124 ON#19
ENHANCED (5 156 2N 0T)



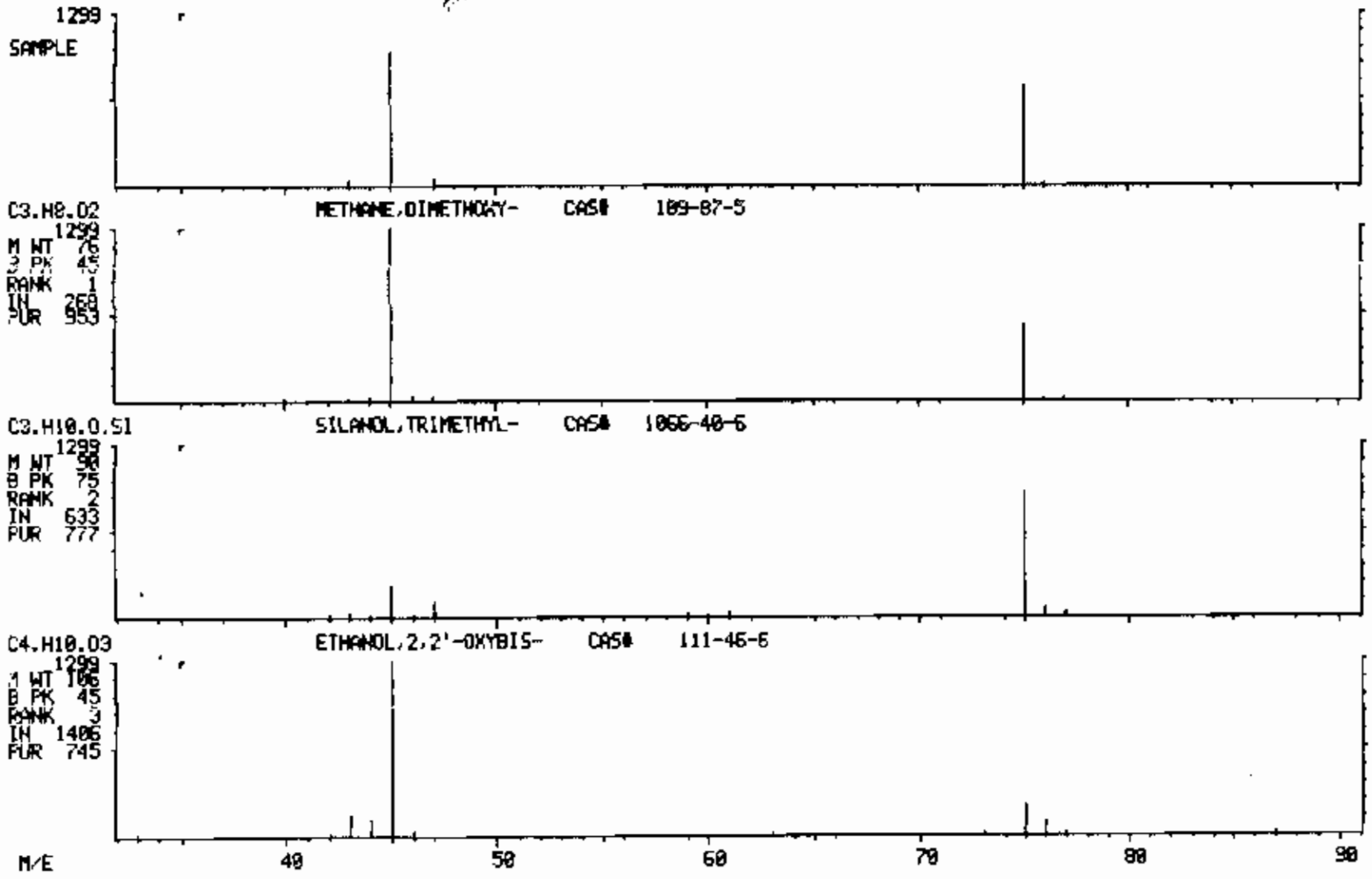
COMPUCHEM LABS

LIBRARY SEARCH
05/15/90 0:29:00 + 0:57
DATA: CN037390A19 # 76 BASE M/E: 59
RIC: 126947.
SAMPLE: 5ML CC#337391 EPA#:73800102 CASE#20124 ON#19
ENHANCED (S 15B 2H 8T)



COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037390A19 # 91 BASE M/E: 45
05/15/90 9:29:00 + 1:00 RIC: 6271.
SAMPLE: 5ML CC#337391 EPA#:73800102 CASE#20124 ON#19
ENHANCED (S 15B 2N 8T)



LAB INSTRUCTIONS PPS# _____
CAUTION LOW VOLUME ONE | SAMPLE- ID73800104 ONLY HAS 1 VOA

RECEIPT DATE: 05/08/90 CASE#: 20124

VOA J1[ ] J3[ ] D1[ ] ( )
GC/MS WORKSHEET COMPUCHEM#: 337390
2J1[ ] J4[ ] D2[ ] ( )

GC/MS, TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73800102

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] _____ Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF900515C19 Disk ( )
Blank Filename CB900515C19 Disk ( )
Standard Filename CS900515C19 Disk ( )
Sample Filename CN037390A19 Disk ( )

RECEIVED MAY 18 1990

ANALYST(S): Injection 1492/Alan Fish Work-up Alan Fish

GC/MS REVIEW

CONDITION CODE | OK |

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 34 5-18-90

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 2

[ ] Dilute (:1)

COMMENTS:

*GC/MS Review Date 5/17/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN0-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

COMPUCHEM # 037390 FILE: CN037390A19 COMPOUND LIST 493 PAGE 1
VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	246	46200	50.0		
221	50		CHLOROMETHANE				BDL	10
201	62		VINYL CHLORIDE			9.2	9J	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE			7.4	7J	10
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)			~~3.9~~	BDL ~~4J~~	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	378	190000	50.0		
222	84		METHYLENE CHLORIDE			3.2	3JB	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLOROETHANE			3.6	4J	5
257	43		VINYL ACETATE			~~4.7~~	BDL ~~5J~~	10
237	96		CIS-1,2-DICHLOROETHENE			~~2.2~~	BDL ~~2J~~	5
253	72		2-BUTANONE				BDL	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
206	117		CARBON TETRACHLORIDE				BDL	5
203	78		BENZENE			~~1.2~~	BDL ~~1J~~	5
215	62		1,2-DICHLOROETHANE			~~1.3~~	BDL ~~1J~~	5
270	117	I	D5-CHLOROBENZENE (IS)	791	121000	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				BDL	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	5
209	106		O-XYLENE				BDL	5
251	104		STYRENE				BDL	5
205	173		BROMOFORM				BDL	5
220	83		1,1,2,2-TETRACHLOROETHANE				BDL	5
258	65	S	D4-1,2-DICHLOROETHANE WE#57			54.8	110.%	
247	95	S	BROMOFLUOROBENZENE			49.9	100.%	
233	98	S	D8-TOLUENE WE#59 BS#2			50.8	102.%	
269	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(CC/MB DATA REVIEWER)

DATE 5/16/90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)	
299	96		1,2-DICHLOROETHENE (TOTAL)			2.2	2J		10
CHECKSUMS:									
	3979.			1375	357200.	344.4		38.	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/6/90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE,COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	54.8	50.0	110.	76-114	X	
41	247	BROMOFLUOROBENZENE	49.9	50.0	100.	86-115	X	
42	233	08-TOLUENE WE#59 SS#2	50.8	50.0	102.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ UL}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ UL}{5000.\ (UL)} = 1.00 = \frac{5.000\ ML}{5.000\ (ML)}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5-16-91

QUALITY ASSURANCE NOTICE
CompuChem # 337370
Instrument Blank : CB960515C19
Client ID # 738C01E2
Case 26124

The early-eluting peak on the RIC of the volatile fraction at scan # 2235 is an instrument artifact believed to be a mixture of water and various atmospheric gases. This peak is usually present at less than 10% of the nearest-eluting internal standard peak height, although it may exceed this height under certain instrument conditions.

Periodically, a number of maintenance procedures are performed in an effort to reduce the intensity of this artifact. These procedures may include:

-trap replacement
-reconditioning and/or replacing column
-replacing six-port valve in Tekmar
-cleaning of the separator
-cleaning or replacing source
-replacing lines in Tekmar

In many cases, even after maintenance, the artifact peak remains at a height greater than 10% of the nearest internal standard. Since the analytical quality of these data have not been compromised, we are reporting this analysis with reference to this qualifer. The artifact is not included as part of the Library Search requirements for the associated samples.

Robert J. Whitehead
Manager, Quality Assurance

QAN19V
072917

QUALITY ASSURANCE NOTICE
CompuChem # 337350
Blank ID # CB090515A5
Case 20124

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg or acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C-4285
6-1026

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800103

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337391

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037391A19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	BJ
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

73800103

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337391

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037391A19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1. 60-29-7	ETHANE,1,1'-OXYBIS-	0.95	8.0	J

FORM I VOA-TIC 1/87 Rev.

COMPUCHEM LABS

RIC

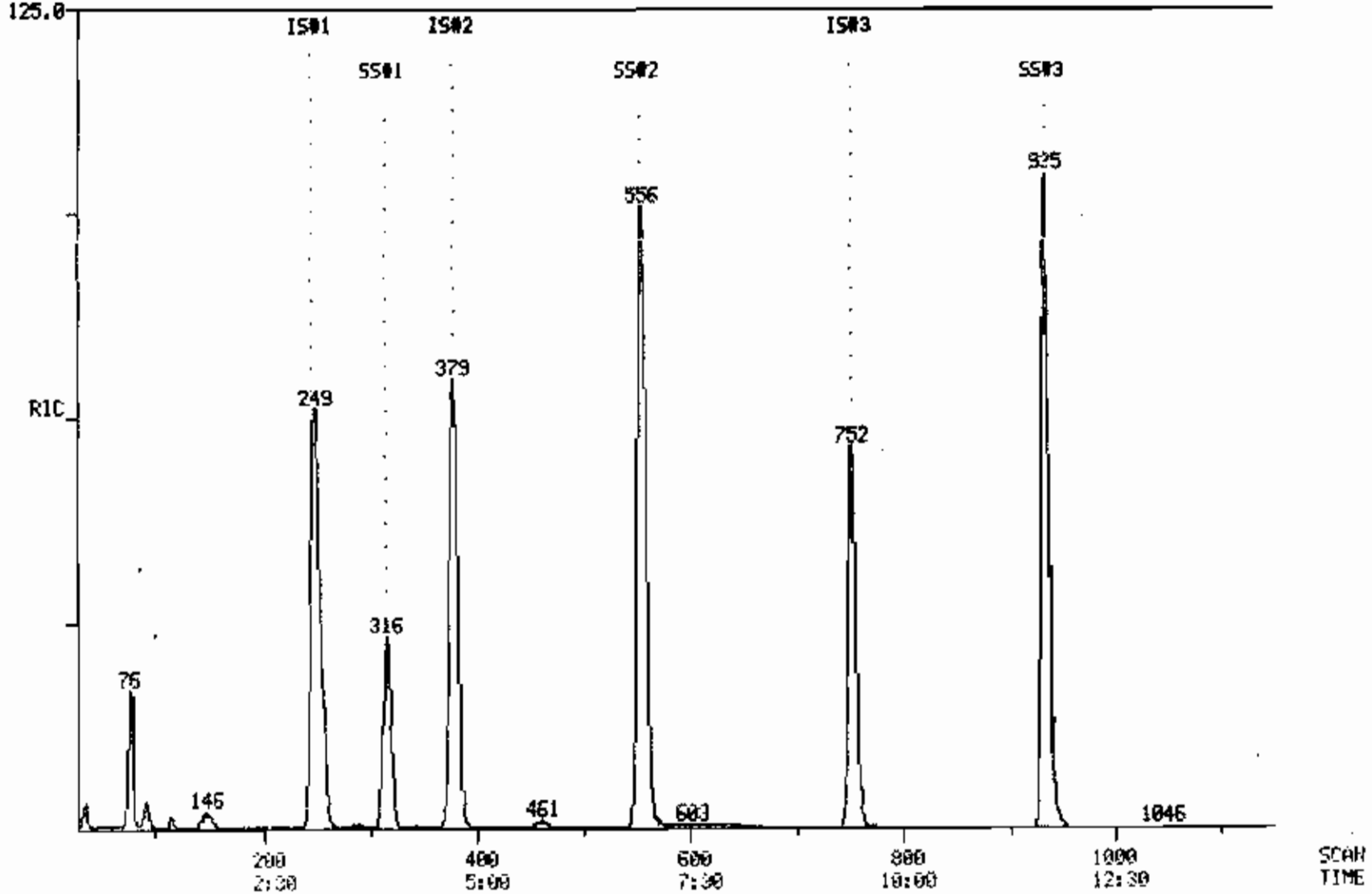
COMPUCHEM DaTa: CN0973Q1Q1Q SCANS 20 TO 1150

05/15/90 8:50:00

SAMPLE: 5ML CC#337331 EPA#:73800103 CASE#20124 ON#19

CONDS.:

79600.



NYDEC RA090 0507 ORGANIC

```
QUANTITATION REPORT     FILE:  CN037391A19
DATA:  CN037391A19.TI
05/15/90   8:58:00
SAMPLE:  5ML CC#337391 EPA#: 73800103 CASE#20124 OR#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> WE#1
  2    221 CHLOROMETHANE <74-87-3> WE#2
  3    231 VINYL CHLORIDE <75-01-4> WE#3
  4    220 BROMOMETHANE <78-83-9> WE#4
  5    209 CHLOROETHANE <75-00-3> WE#5
  6    216 1,1-DICHLOROETHENE <75-35-4> WE#8
  7    254 CARBON DISULFIDE <75-15-0> WE#9
  8    252 ACETONE (2-PROPANONE) <67-64-1> WE#13
  9   #248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE414
 10    222 METHYLENE CHLORIDE <75-09-2> WE#16
 11    226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
 12    214 1,1-DICHLOROETHANE <75-34-3> WE#19
 13    257 VINYL ACETATE <108-05-4> WE#20
 14    237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
 15    253 2-BUTANONE <78-93-3> WE#22
 16    211 CHLOROFORM <67-66-2> WE#23
 17    227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
 18    206 CARBON TETRACHLORIDE <56-23-5> WE#25
 19    203 BENZENE <71-43-2> WE#26
 20    215 1,2-DICHLOROETHANE <107-06-2> WE#27
 21   #270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
 22    229 TRICHLOROETHENE <79-01-6> WE#30
 23    217 1,2-DICHLOROPROPANE <78-87-5> WE#31
 24    212 BROMODICHLOROMETHANE <75-27-4> WE#33
 25    218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
 26    256 4-METHYL-2-PENTANONE <108-01-1> WE#36
 27    225 TOLUENE <108-88-3> WE#37
 28    250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
 29    228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
 30    224 TETRACHLOROETHENE <127-18-4> WE#41
 31    255 2-HEXANONE <591-78-6> WE#42
 32    208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
 33    207 CHLOROBENZENE <108-90-7> WE#45
 34    219 ETHYLBENZENE <100-41-4> WE#47
 35    330 M,P-XYLENE <133-02-7> WE#48
 36    239 O-XYLENE <133-02-7> WE#49
 37    231 STYRENE <100-42-5> WE#50
 38    205 BROMOFORM <75-25-2> WE#51
 39    223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
 40   #258 D4-1,2-DICHLOROETHANE WE#57 SS#1
 41   #247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
 42   #233 DB-TOLUENE WE#59 SS#2

 NO   M/E   SCAN    TIME   REF    RRT   METH      AREA(HGHT)   AMOUNT          %TOT
  1   128    247    3:05     1   1.000  A BB        42514.     50.000 UG/L   15.85
  2    50   NOT FOUND
```

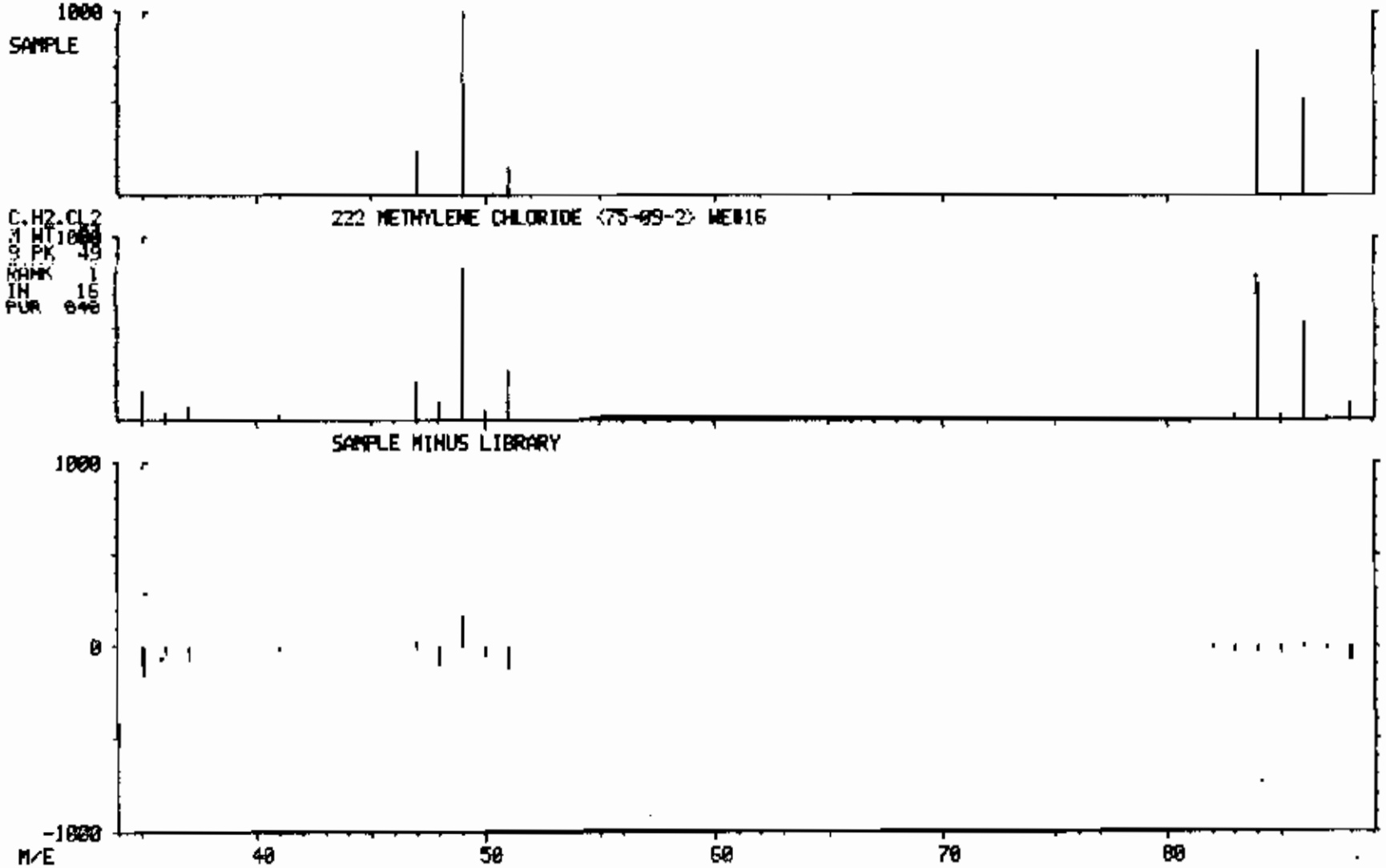
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	96	1:12	1	0.389	A*BB	755.	3.427	UG/L	1.09
9	114	379	4:44	9	1.000	A BB	170110.	50.000	UG/L	15.85
10	84	115	1:26	1	0.466	A BB	1314.	1.764	UG/L	0.56
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	NOT FOUND								
20	62	NOT FOUND								
21	117	752	9:24	21	1.000	A BB	116061.	50.000	UG/L	15.85
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	316	3:57	1	1.279	A BB	58170.	54.619	UG/L	17.31
41	99	935	11:41	21	1.243	A BB	71050.	52.016	UG/L	16.49
42	98	555	6:56	21	0.738	A BB	185474.	53.702	UG/L	17.02

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39		10.000			50.00		0.751	
6	1:03		5.000			50.00		1.389	
7	1:07		5.000			50.00		3.616	
8	1:11	1.01	10.000	0.04	3.43	50.00	0.018	0.259	0.07
9	4:45	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	0.99	5.000	0.09	1.76	50.00	0.031	0.876	0.04
11	1:40		5.000			50.00		0.941	
12	2:05		5.000			50.00		1.103	
13	2:19		10.000			50.00		0.255	
14	2:49		5.000			50.00		0.937	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000			50.00		0.560	
19	3:55		5.000			50.00		0.498	
20	4:04		5.000			50.00		1.236	
21	9:24	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.455	
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	0.99	5.000	0.26	54.62	50.00	1.368	1.253	1.09
41	11:42	1.00	5.000	0.25	52.02	50.00	0.612	0.588	1.04
42	6:57	1.00	5.000	0.15	53.70	50.00	1.598	1.488	1.07

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037391A19 @ 115 BASE M/E: 49
05/15/90 0:50:00 + 1:26 RIC: 1101.
SAMPLE: 5ML CC#337391 EPA#:73900103 CASE#20124 ON#19
ENHANCED (S 15B 2N 0T)

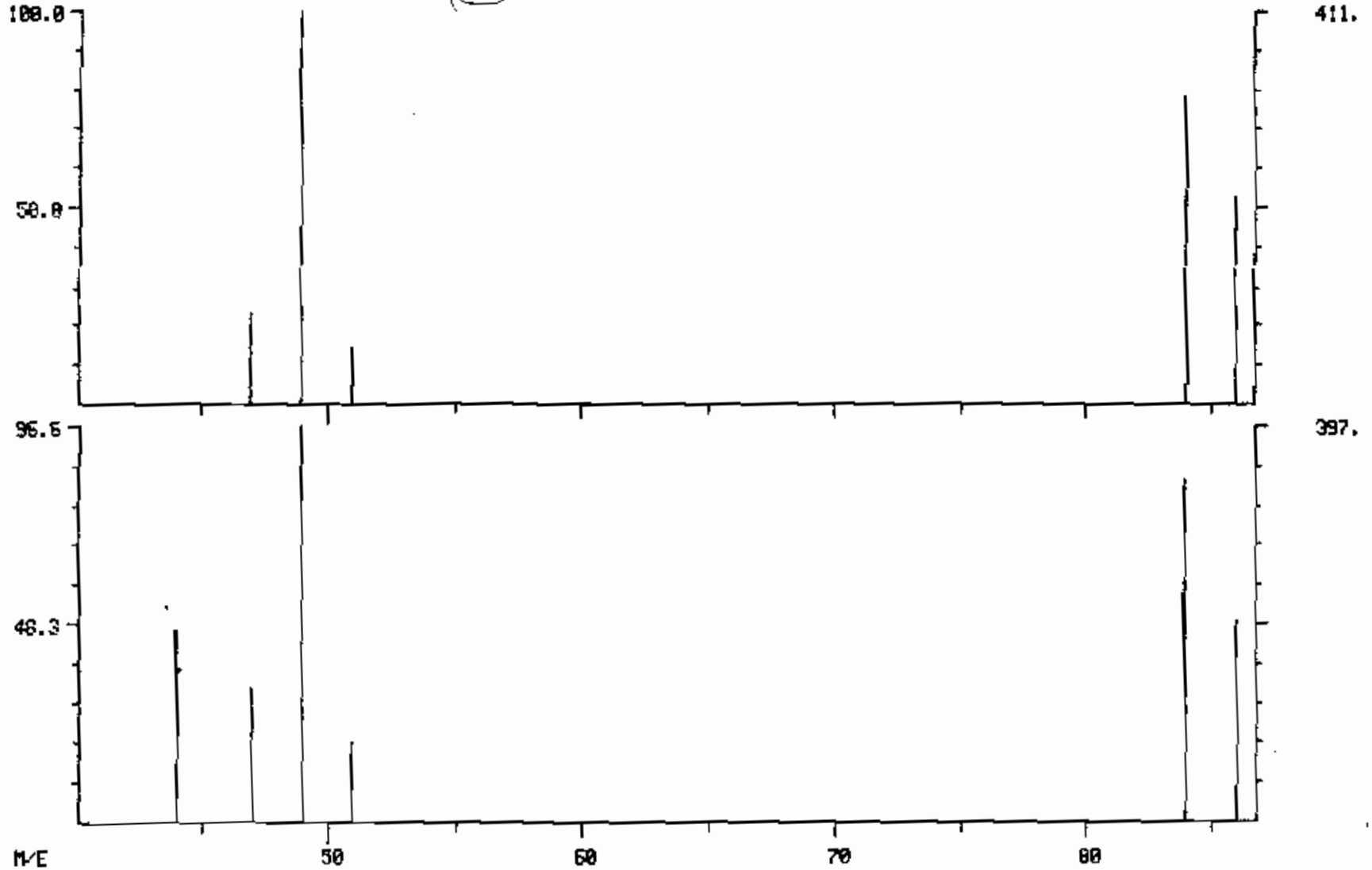


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 0:59:90 + 1:26
SAMPLE: 5ML CC#337391 EPA#:73800103 CASE#20124 ON#19
ENHANCED (S 15B 2N)

DATA: CN037391A19 #115 BASE M/E: 49/ 49
RIC: 1101./ 1245.

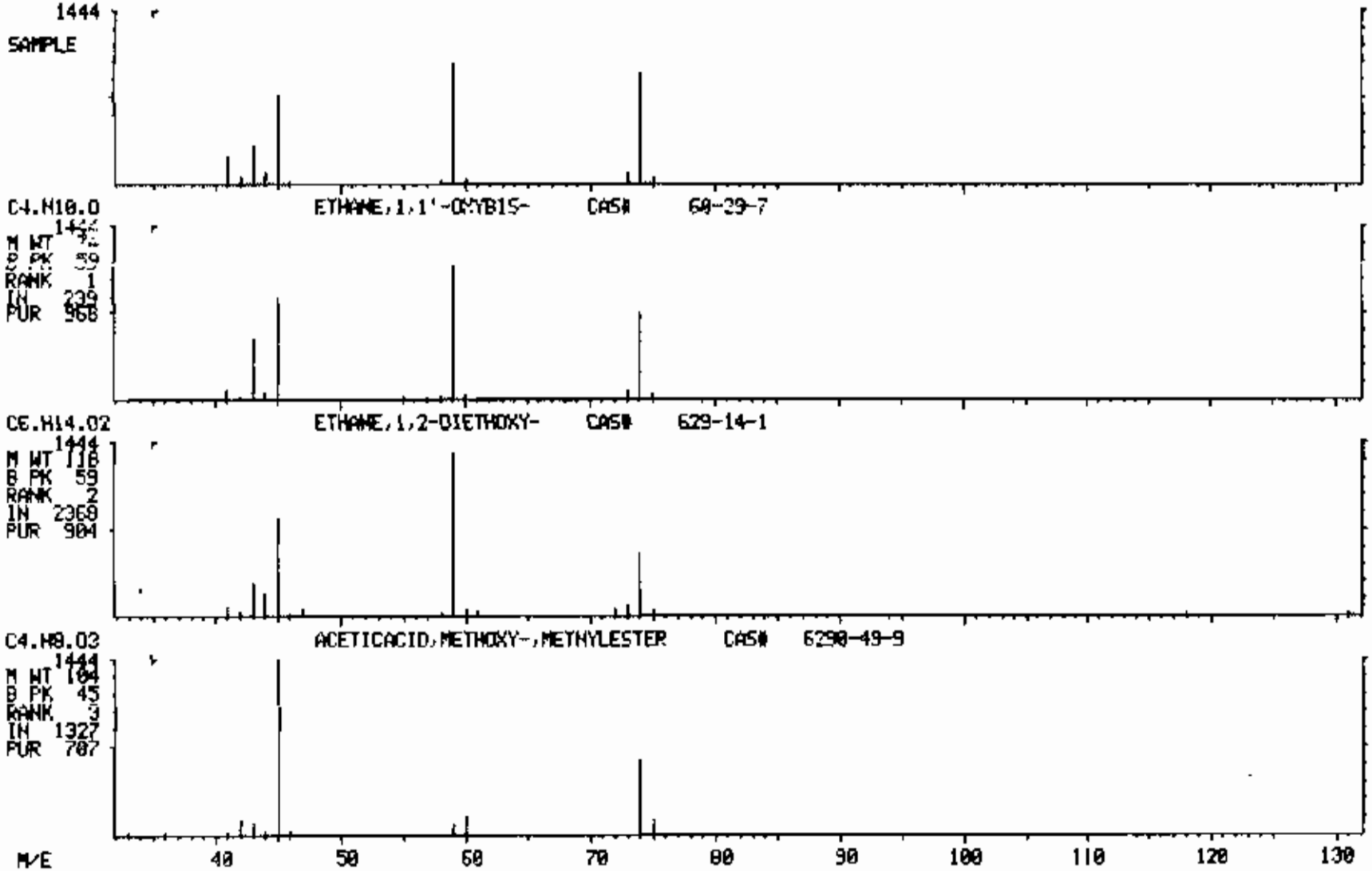
222 METHYLENE CHLORIDE <75-09-2> WE#16



NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037391A19 # 76 BASE M/E: 59
05/15/90 9:59:00 + 0:57 RIC: 12479.
SAMPLE: SML CC#037391 EPA#:73800103 CASE#20124 ON#19
ENHANCED (S 15B 2N 0T)



1660

NYDEC RA090 0507 ORGANIC

LAB INSTRUCTIONS: PPS# _____
CAUTION LOW VOLUME ONE (SAMPLE- ID73800104 ONLY HAS 1 VOA

RECEIPT DATE: 05/08/90 CASE#: 20124

VOA JC [ ] J3C [ ] DC [ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 337391
2JC [ ] J4C [ ] D2C [ ] (:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73800103

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF90515C19 Disk ( )
Blank Filename CB90515C19 Disk ( )
Standard Filename CS90515C19 Disk ( )
Sample Filename CV037391A19 Disk ( )

RECEIVED MAY 17 1990

ANALYST(S): Injection 1494/Alan Trol Work-up 1492/Alan Trol

GC/MS REVIEW

CONDITION CODE [OK]

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 1

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 01

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review [signature] Date 5/14/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN0-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

COMPUCHEM # 037391 FILE: CN037391A19 COMPOUND LIST 493 PAGE 1

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	247	42500	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	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)			9.4	12J	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	379	170000	50.0		
222	84		METHYLENE CHLORIDE			1.8	2J	5
226	96		TRANS-1,2-DICHLORDETHENE				BDL	5
214	63		1,1-DICHLOROETHANE				BDL	5
257	43		VINYL ACETATE				BDL	10
237	96		CIS-1,2-DICHLORDETHENE				BDL	5
253	72		2-BUTANONE				BDL	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLORDETHANE				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)	752	116000	50.0		
229	130		TRICHLORDETHENE				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				BDL	10
225	92		TOLUENE				BDL	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
228	97		1,1,2-TRICHLORDETHANE				BDL	5
224	164		TETRACHLORDETHENE				BDL	5
255	43		2-HEXANONE				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLORDBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	5
239	106		O-XYLENE				BDL	5
251	104		STYRENE				BDL	5
209	173		BROMOFORM				BDL	5
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	5
258	65	S	D4-1,2-DICHLORDETHANE WE#57			54.6	109. %	
247	95	S	BROMOFLUOROBENZENE			52.0	104. %	
233	98	S	D8-TOLUENE WE#59 SS#2			53.7	107. %	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-16-90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS: 3979.				1378	328500.		315.5	5.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-18-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC IO#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	54.6	50.0	109.	76-114	X	
41	247	BROMOFLUOROBENZENE	52.0	50.0	104.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	53.7	50.0	107.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/16/90

QUALITY ASSURANCE NOTICE
CompuChem # 337197
Blank ID # CA5ac15819
Case Forty

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2.	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

CC:N295
SC:1026

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800104

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337392

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN017392A19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	38	
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	14	
75-35-4	1,1-Dichloroethene	2	J
75-34-3	1,1-Dichloroethane	67	
540-59-0	1,2-Dichloroethene (total)	10	
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethene	5	
78-93-3	2-Butanone	10	U
71-55-6	1,1,1-Trichloroethane	200	
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	2	J
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	2	J
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.

71800104

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337392

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN017392A19

Level: (low/med) LOW Date Received: 05/08/90

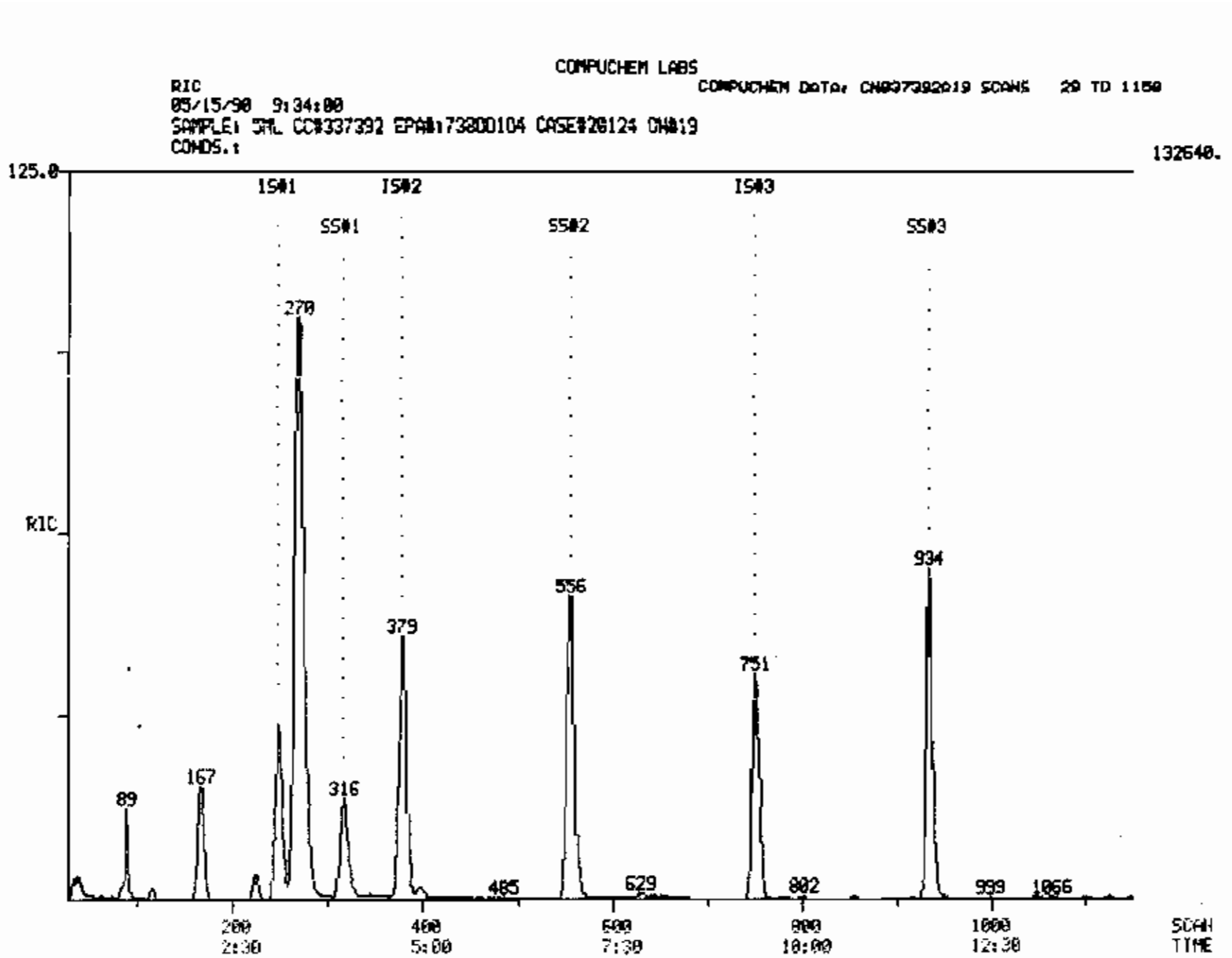
% Moisture: not dec. _____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1652

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037392A19
DATA: CN037392A19.TI
05/15/90 9:34:00
SAMPLE: 5ML CC#337392 EPA#: 73800104 CASE#20124 ON#19
CONDS. :
SUBMITTED BY: 19 ANALYST: 1492

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

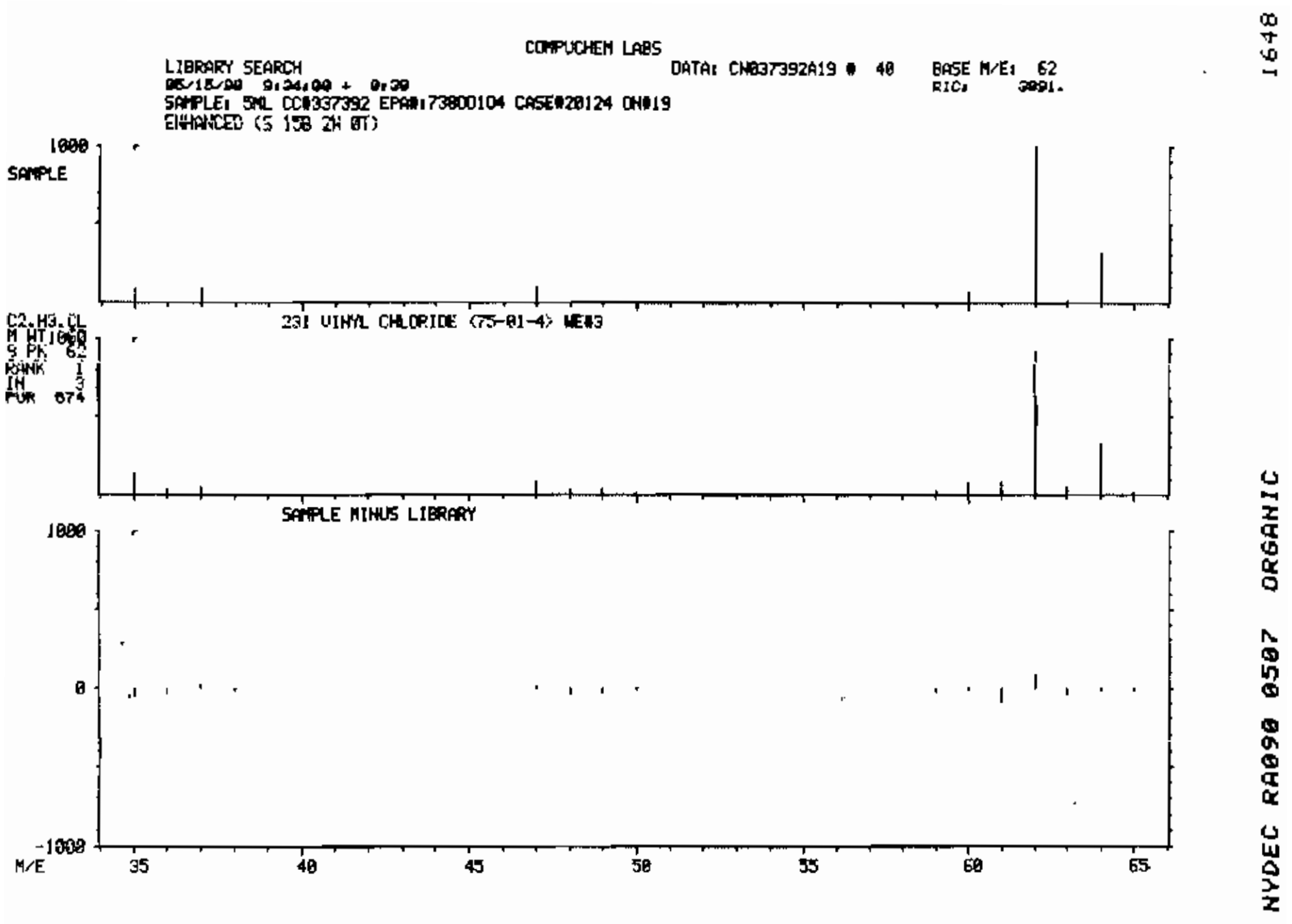
NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#256 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

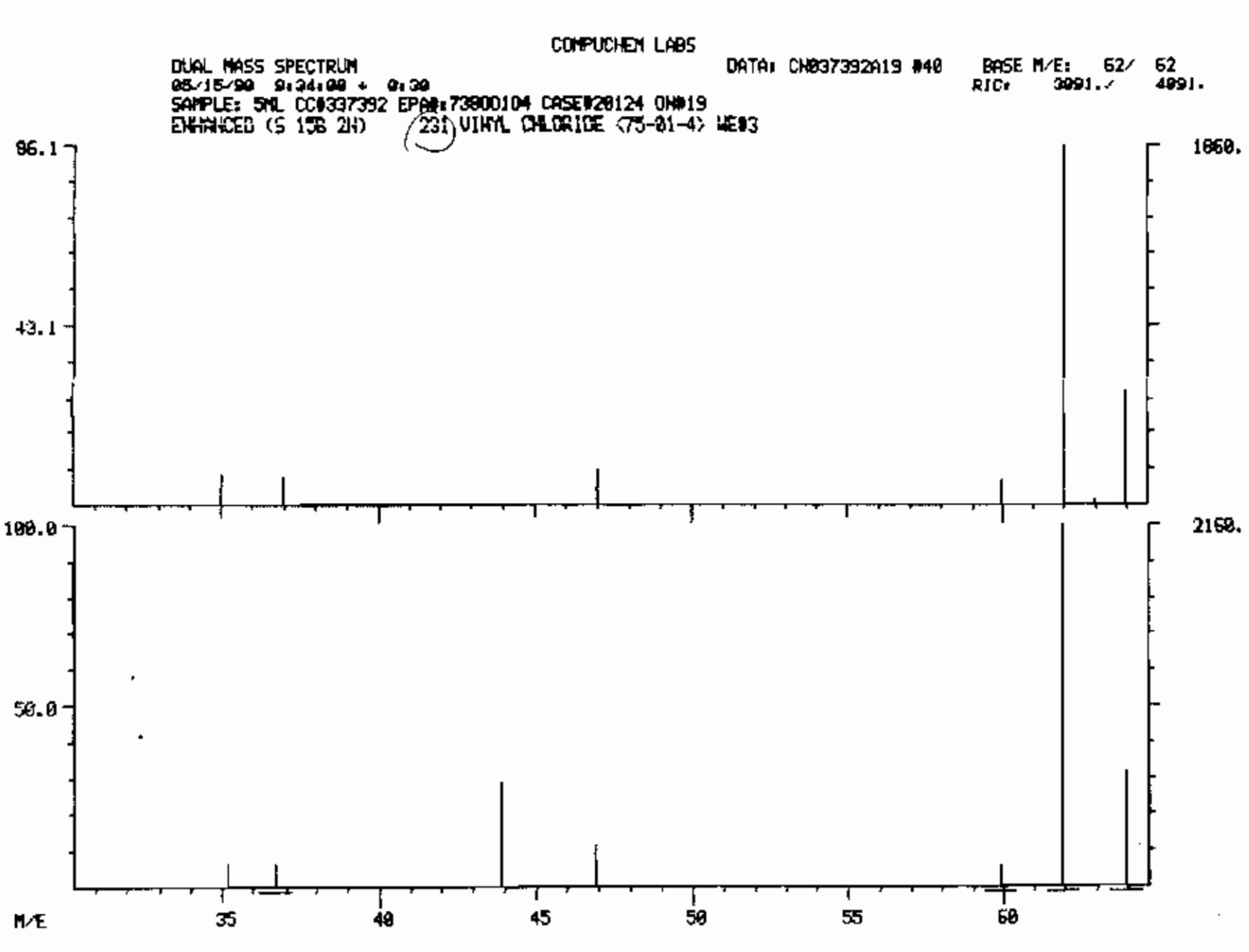
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	249	3:07	1	1.000	A BB	42956.	50.000 UG/L	7.81
2	50	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	40	0:30	1	0.161	A BB	15316.	38.062	UG/L	5.95
4	94	NOT FOUND								
5	64	51	0:38	1	0.205	A VB	950.	1.475	UG/L	0.23
6	96	83	1:02	1	0.333	A BB	1841.	1.546	UG/L	0.24
7	76	89	1:07	1	0.357	A BB	44766.	14.442	UG/L	2.26
8	43	NOT FOUND								
9	114	379	4:44	9	1.000	A BB	182919.	50.000	UG/L	7.81
10	84	116	1:27	1	0.466	A BB	2255.	3.003	UG/L	0.47
11	96	NOT FOUND								
12	63	167	2:05	1	0.671	A BB	63397.	67.039	UG/L	10.48
13	43	NOT FOUND								
14	96	224	2:48	1	0.900	A BB	8353.	10.399	UG/L	1.63
15	72	NOT FOUND								
16	83	NOT FOUND								
17	97	270	3:22	9	0.712	A BB	342571.	198.429	UG/L	31.01
18	117	NOT FOUND								
19	78	313	3:55	9	0.826	A BB	2174.	1.201	UG/L	0.19
20	62	327	4:05	1	1.313	A BB	8295.	4.999	UG/L	0.78
21	117	751	9:23	21	1.000	A BB	120822.	50.000	UG/L	7.81
22	130	397	4:58	9	1.047	A BB	3667.	2.204	UG/L	0.34
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	562	7:01	21	0.748	A BB	4801.	2.164	UG/L	0.34
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	856	10:42	21	1.140	A BB	1432.	1.202	UG/L	0.19
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	317	3:58	1	1.273	A BB	54114.	50.405	UG/L	7.88
41	95	934	11:40	21	1.244	A BB	66638.	46.864	UG/L	7.32
42	98	555	6:56	21	0.739	A BB	167169.	46.495	UG/L	7.27

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30	1.00	10.000	0.02	38.06	50.00	0.397	0.469	0.76
4	0:37		10.000			50.00		1.152	
5	0:39	0.98	10.000	0.02	1.48	50.00	0.022	0.791	0.03
6	1:03	0.99	5.000	0.07	1.55	50.00	0.043	1.389	0.03
7	1:07	1.00	5.000	0.07	14.44	50.00	1.045	3.616	0.29
8	1:11		10.000			50.00		0.259	
9	4:45	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	1.00	5.000	0.09	3.00	50.00	0.053	0.876	0.06
11	1:40		5.000			50.00		0.941	
12	2:05	1.00	5.000	0.13	67.04	50.00	1.479	1.103	1.34
13	2:19		10.000			50.00		0.255	
14	2:49	0.99	5.000	0.18	10.40	50.00	0.195	0.937	0.21

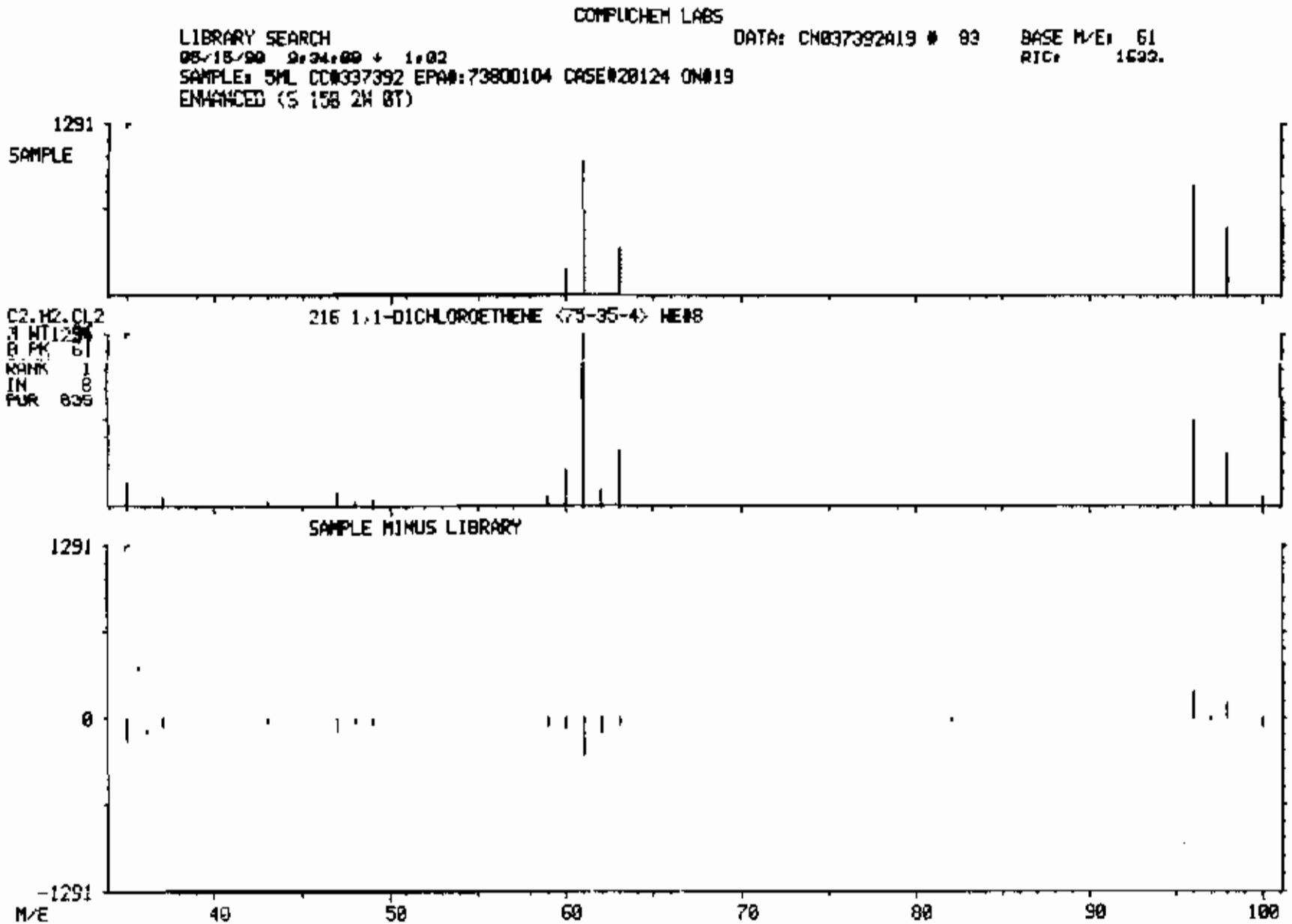
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22	1.00	5.000	0.14	198.43	50.00	1.873	0.472	3.97
18	3:36		5.000			50.00		0.560	
19	3:55	1.00	5.000	0.17	1.20	50.00	0.012	0.495	0.02
20	4:04	1.00	5.000	0.26	5.00	50.00	0.124	1.236	0.10
21	9:24	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58	1.00	5.000	0.21	2.20	50.00	0.020	0.455	0.04
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03	1.00	5.000	0.15	2.16	50.00	0.040	0.918	0.04
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42	1.00	5.000	0.23	1.20	50.00	0.012	0.493	0.02
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	1.00	5.000	0.29	50.41	50.00	1.263	1.253	1.01
41	11:42	1.00	5.000	0.25	46.86	50.00	0.552	0.588	0.94
42	6:57	1.00	5.000	0.19	46.50	50.00	1.381	1.488	0.93





1647

NYDEC RA090 0507 ORGANIC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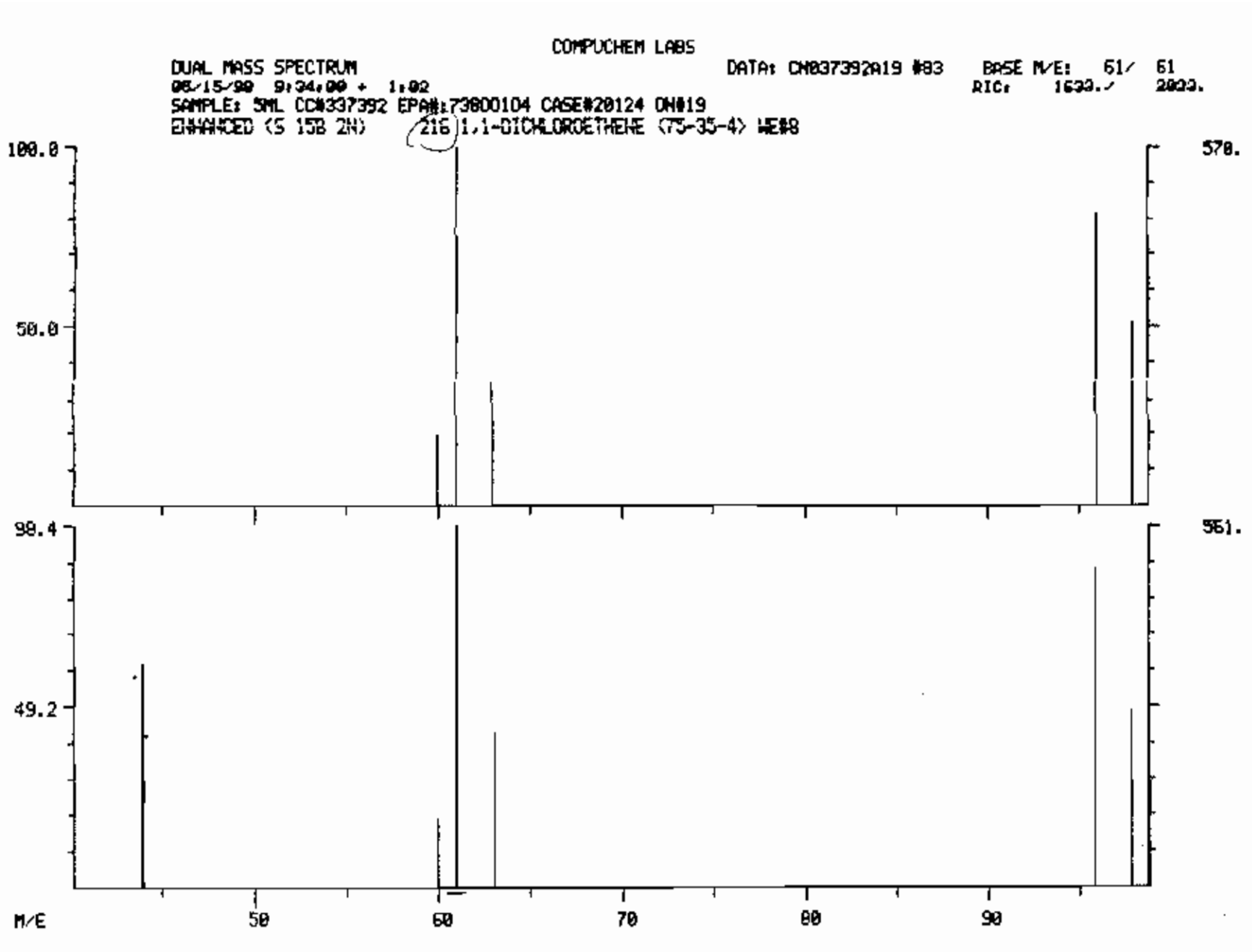
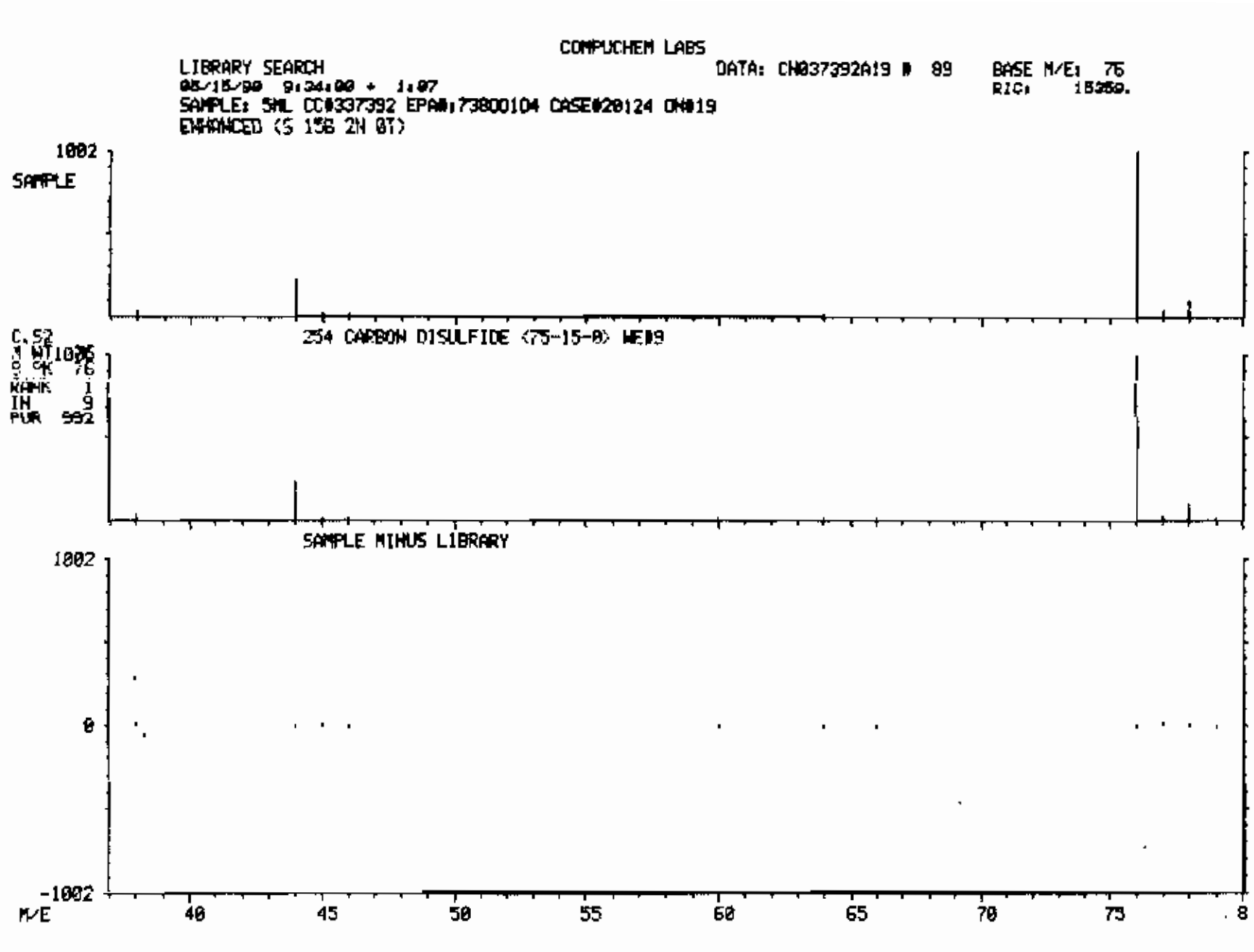
LIBRARY SEARCH
DATA: CN037392A19 # 83
BASE M/E: 61
RIC: 1633.
05/15/90 9:34:00 + 1:02
SAMPLE: 5ML CC#337392 EPA#:73800104 CASE#20124 ON#19
ENHANCED (S 158 2W 8T)
1291
SAMPLE
C2.H2.Cl2
216 1,1-DICHLOROETHENE <75-35-4> NE#8
SAMPLE MINUS LIBRARY
1291
0
-1291
M/E
40
50
60
70
80
90
100



1645

NYDEC RA090 0507 ORGANIC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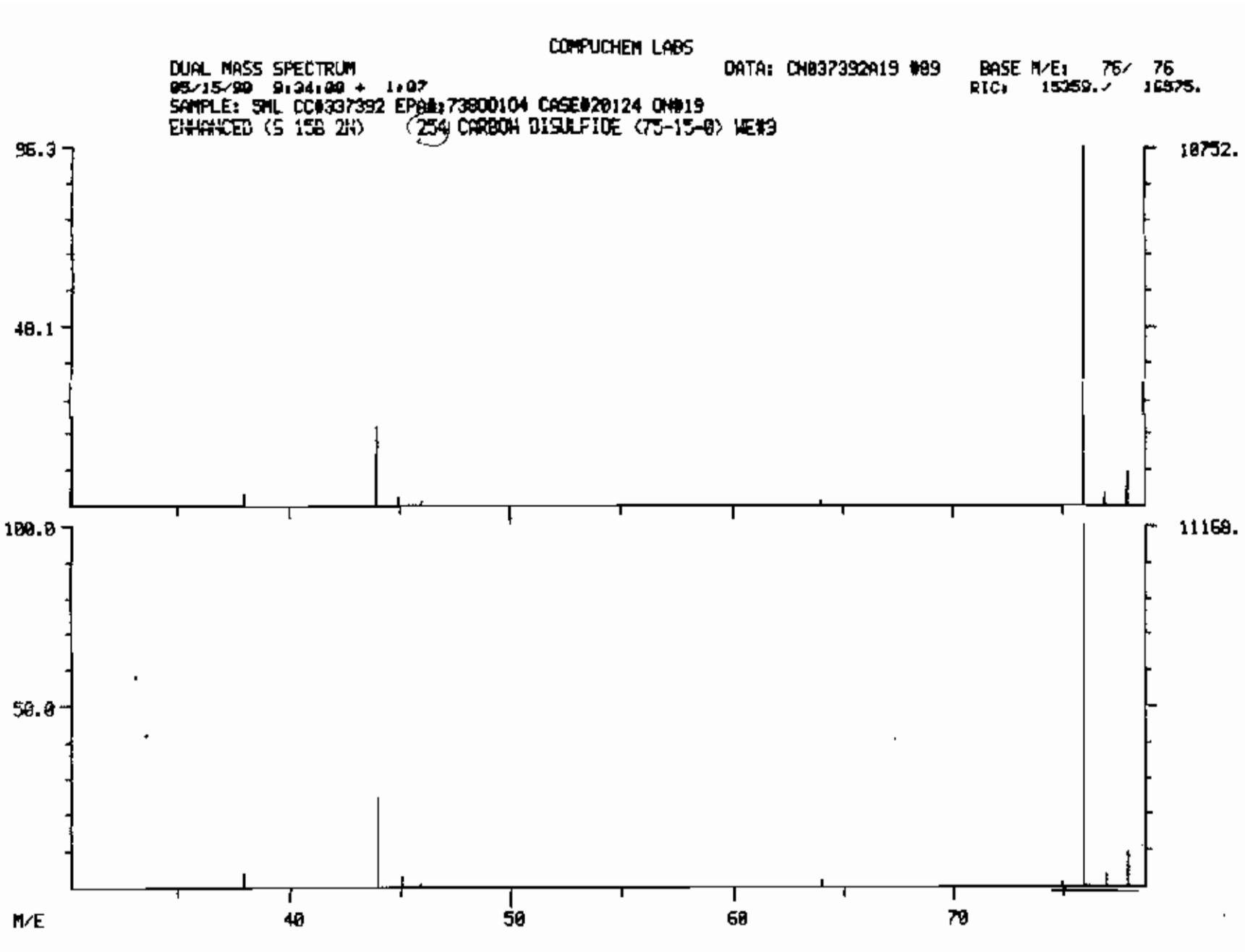
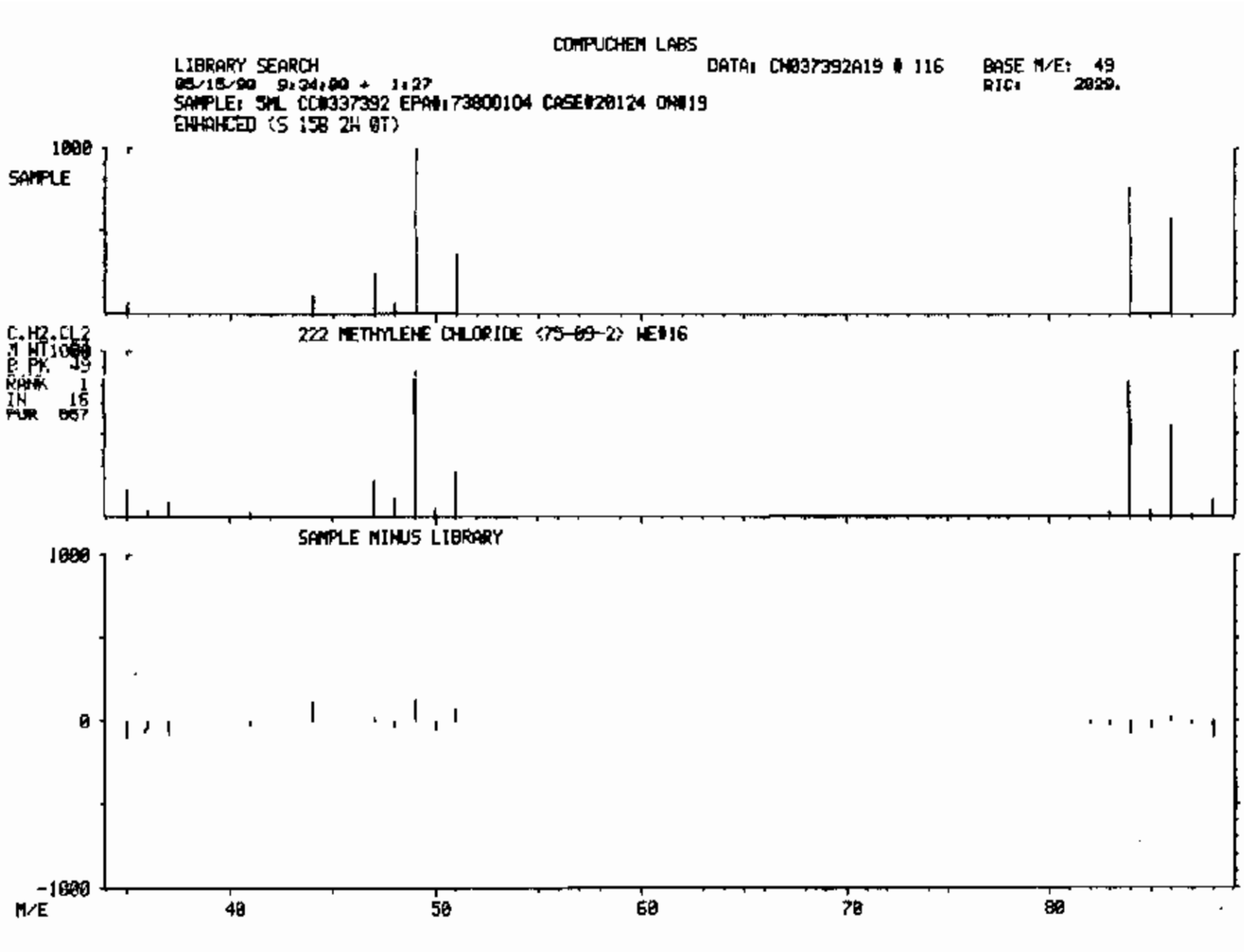
LIBRARY SEARCH
DATA: CN037392A19 # 89
BASE M/E: 76
RIC: 15360.
05/15/90 9:34:00 + 1.07
SAMPLE: SML CC#337392 EPA#;73800104 CASE#20124 CN#19
ENHANCED (S 15B 2N 0T)
1002
SAMPLE
C.52
M WT 1036
S 9K 76
RANK 1
IN 9
PUR 992
254 CARBON DISULFIDE (75-15-0) WE#9
SAMPLE MINUS LIBRARY
1002
0
-1002
M/E
40
45
50
55
60
65
70
75
8



1643

NYDEC RA890 0507 ORGANIC



1642

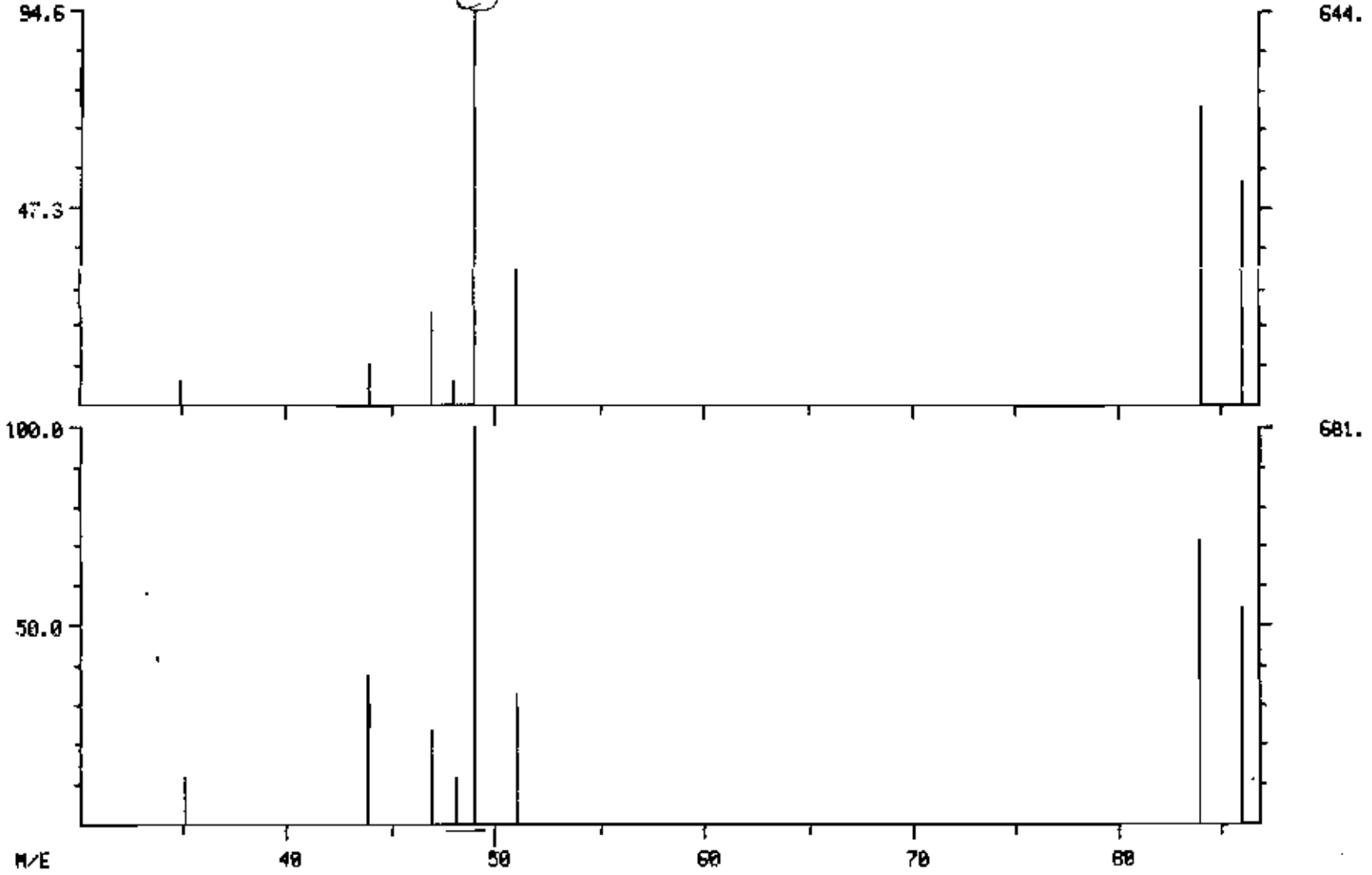
NYDEC RA090 0507 ORGANIC

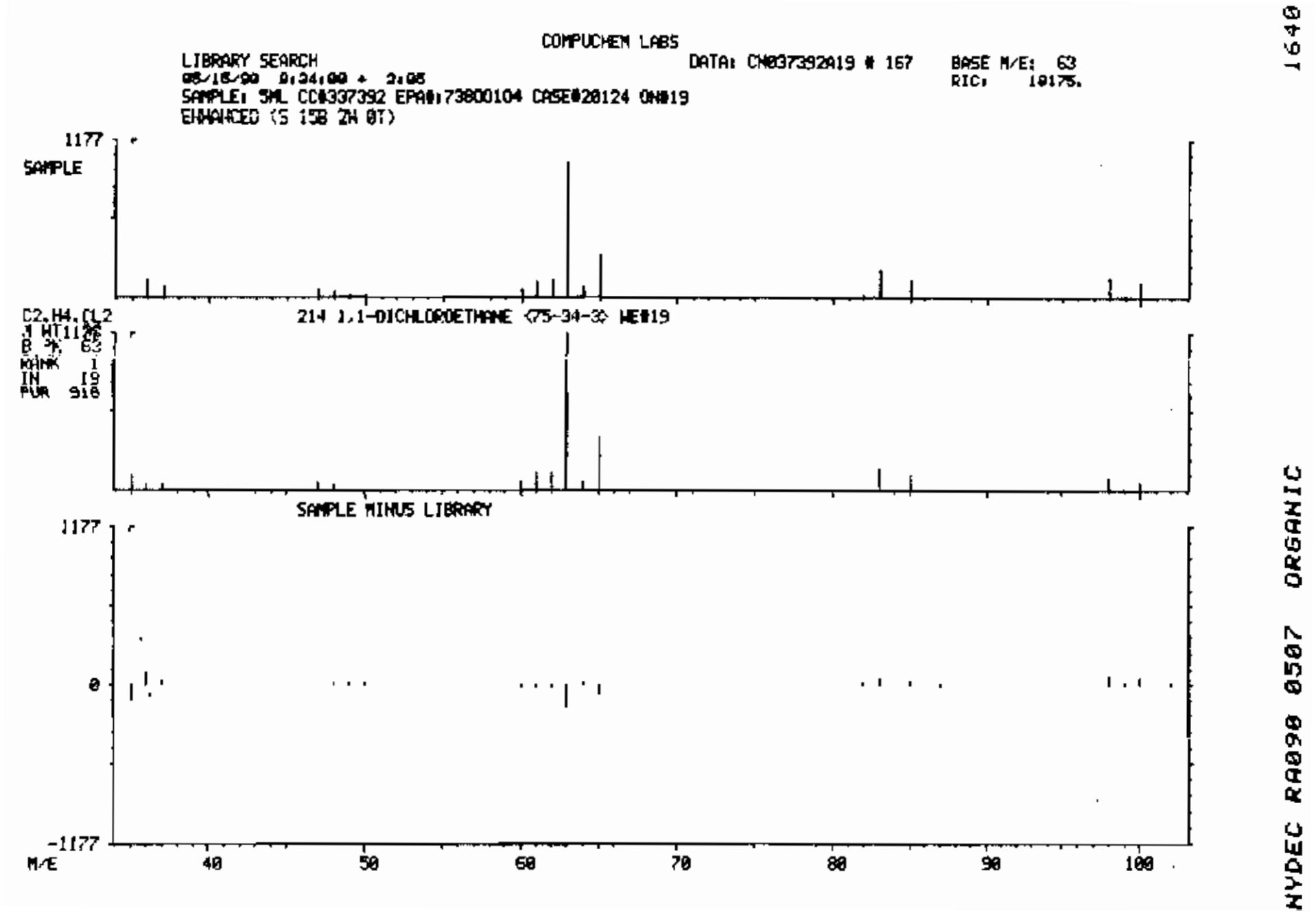
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 9:34:00 + 1:27

DATA: CN037392A19 #116 BASE M/E: 49/ 49
RIC: 2029./ 2335.

SAMPLE: 5ML CC#337392 EPA#:73000104 CASE#20124 ON#19
ENHANCED (S 15B 2N) (22) METHYLENE CHLORIDE (75-09-2) WE#16



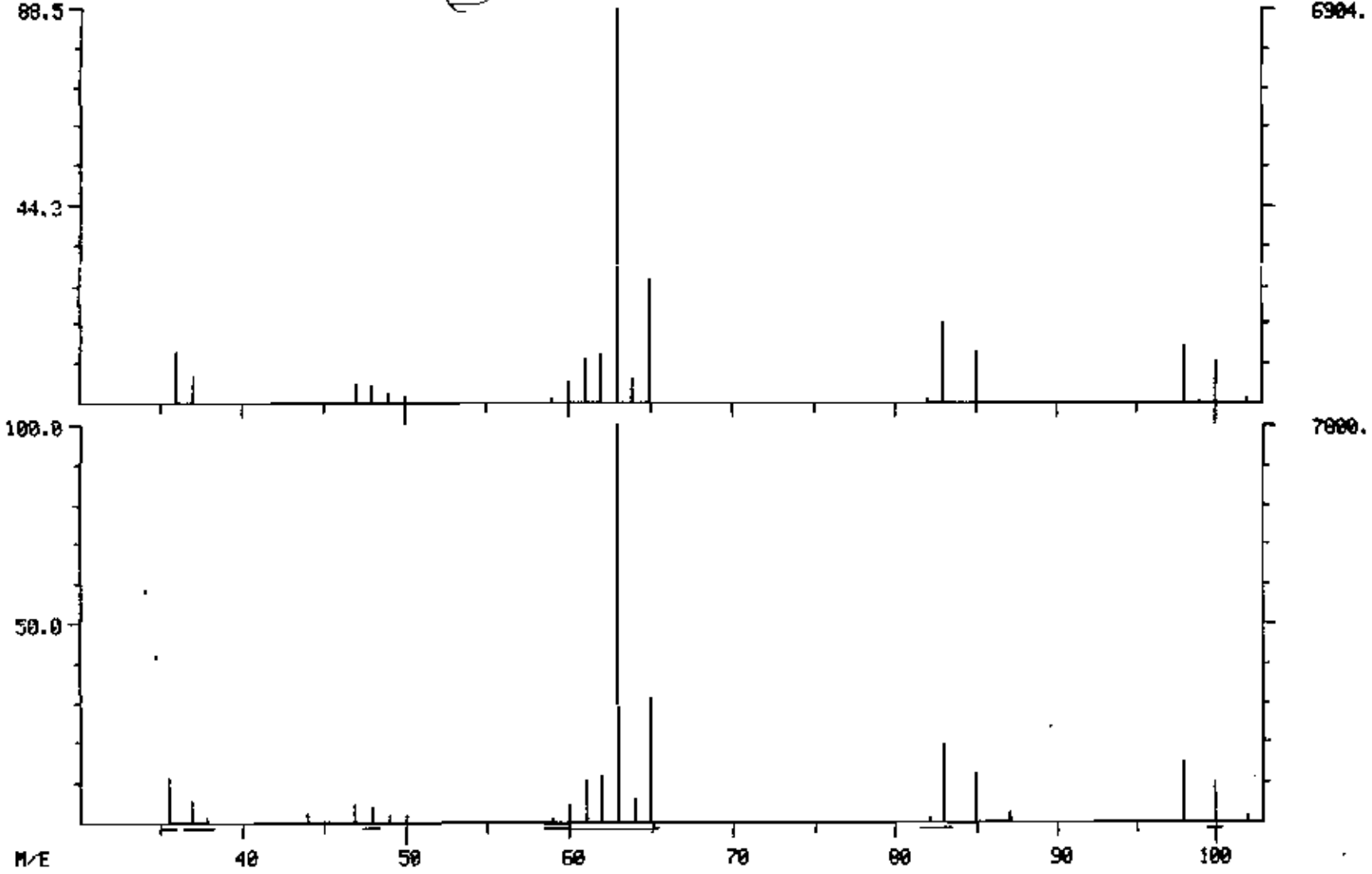


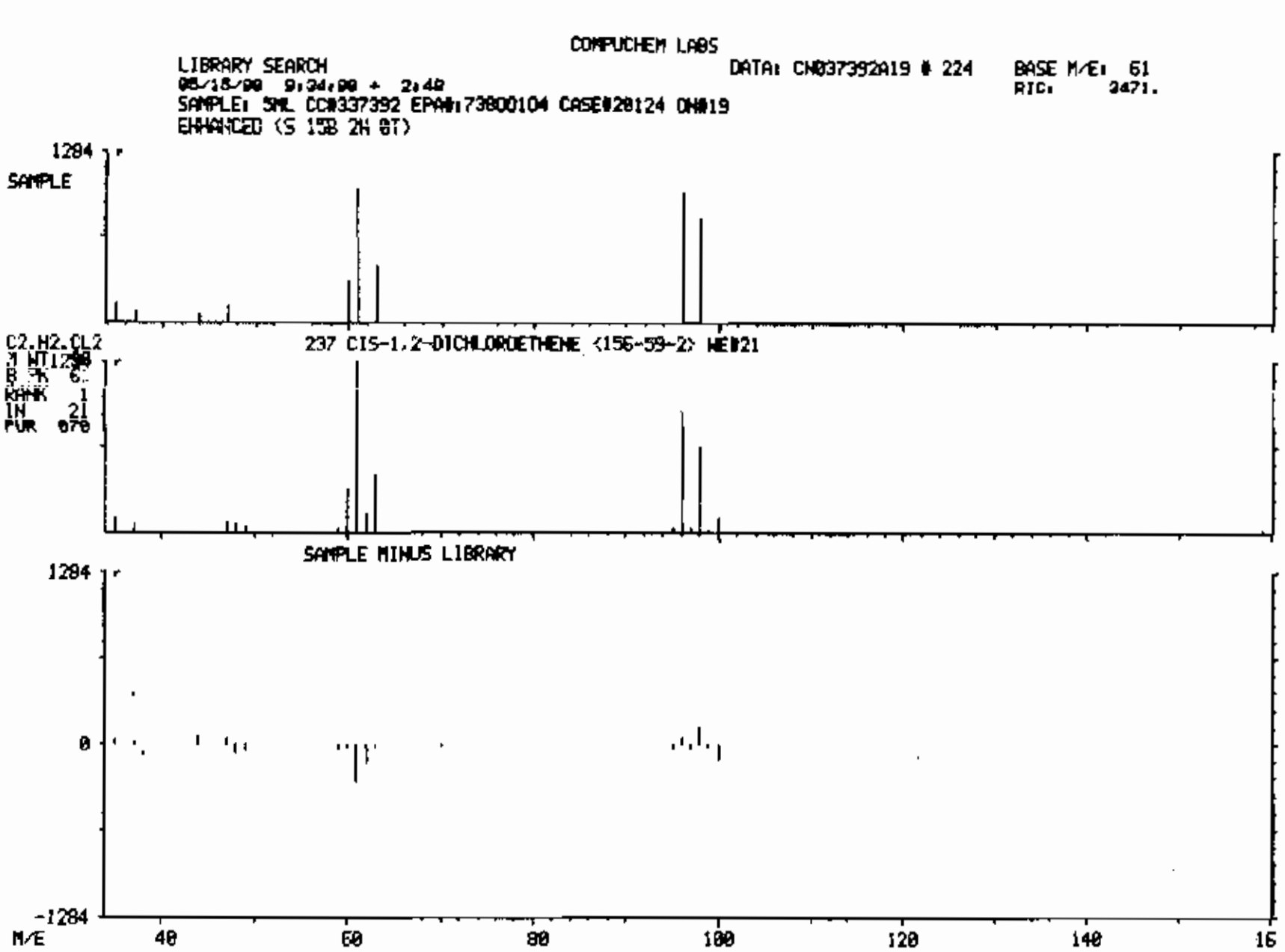
1640

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 9:34:00 + 2:05
DATA: CN837392A19 #167 BASE M/E: 63/ 63
RIC: 10239./ 20223.
SAMPLE: 5ML CC#337392 EPA#:73800104 CASE#20124 CN#19
ENHANCED (S 15B 2N) 214 1,1-DICHLOROETHANE (75-34-3) ME#19



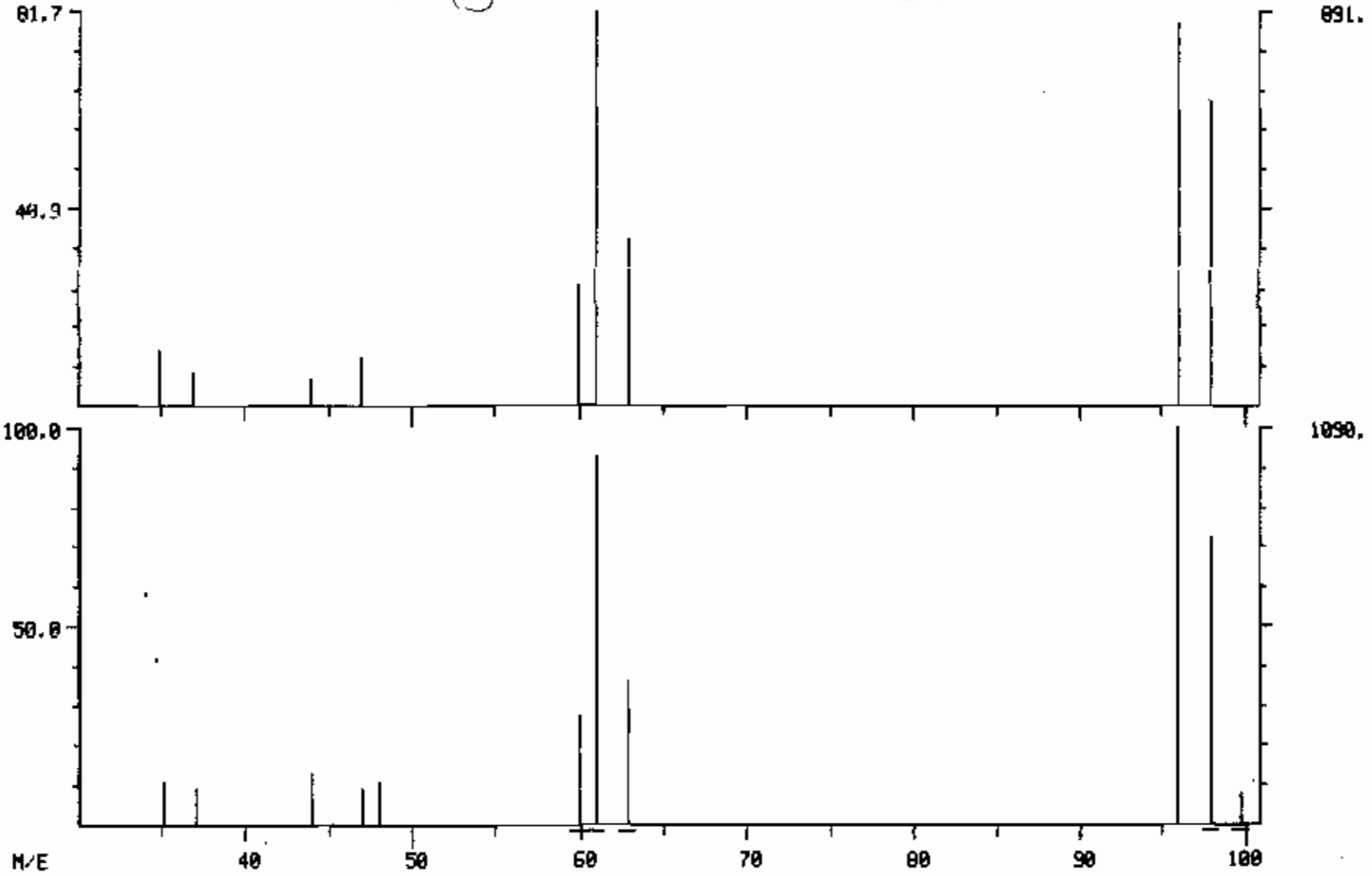

COMPUCHEM LABS
LIBRARY SEARCH
DATA: CN037392A19 # 224
BASE M/E: 61
RIC: 2471.
05/15/90 9:34:00 + 2:40
SAMPLE: 5ML CC#337392 EPA#173800104 CASE#20124 DN#19
ENHANCED (S 15B 2N 0T)
1284
SAMPLE
C2.H2.CL2
237 CIS-1,2-DICHLOROETHENE (156-59-2) WE#21
SAMPLE MINUS LIBRARY
1284
0
-1284
M/E
40
60
80
100
120
140
16

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 9:34:00 + 2:40

DATA: CN037392A19 #224 BASE M/E: 61/ 96
RIC: 3471./ 4256.

SAMPLE: 5ML CC#337392 EPA#:73800104 CASE#20124 ON#19
ENHANCED (S 15B 2N) (23) CIS-1,2-DICHLOROETHENE (156-59-2) WE#21



1637

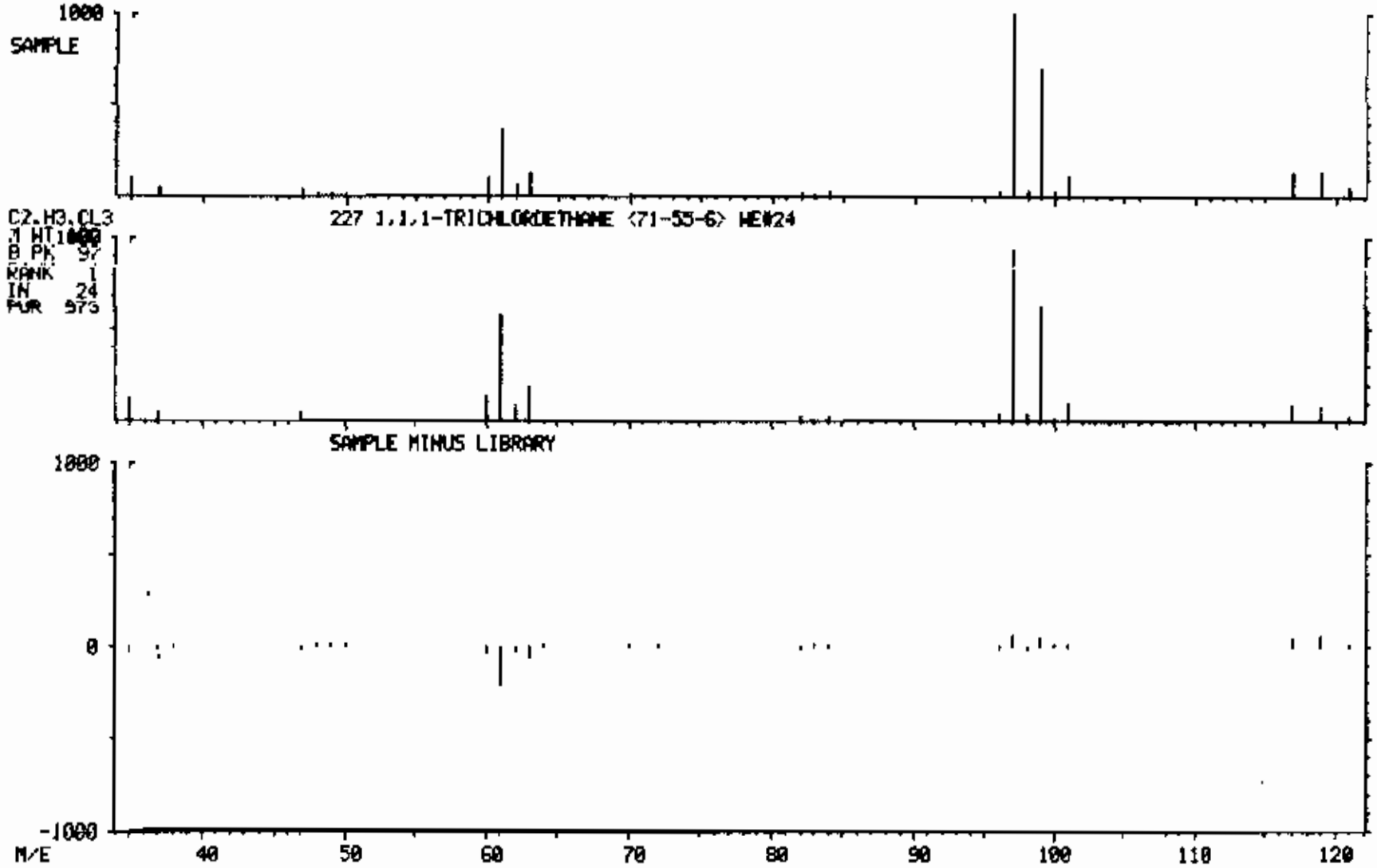
NYDEC RA090 0507 ORGANIC

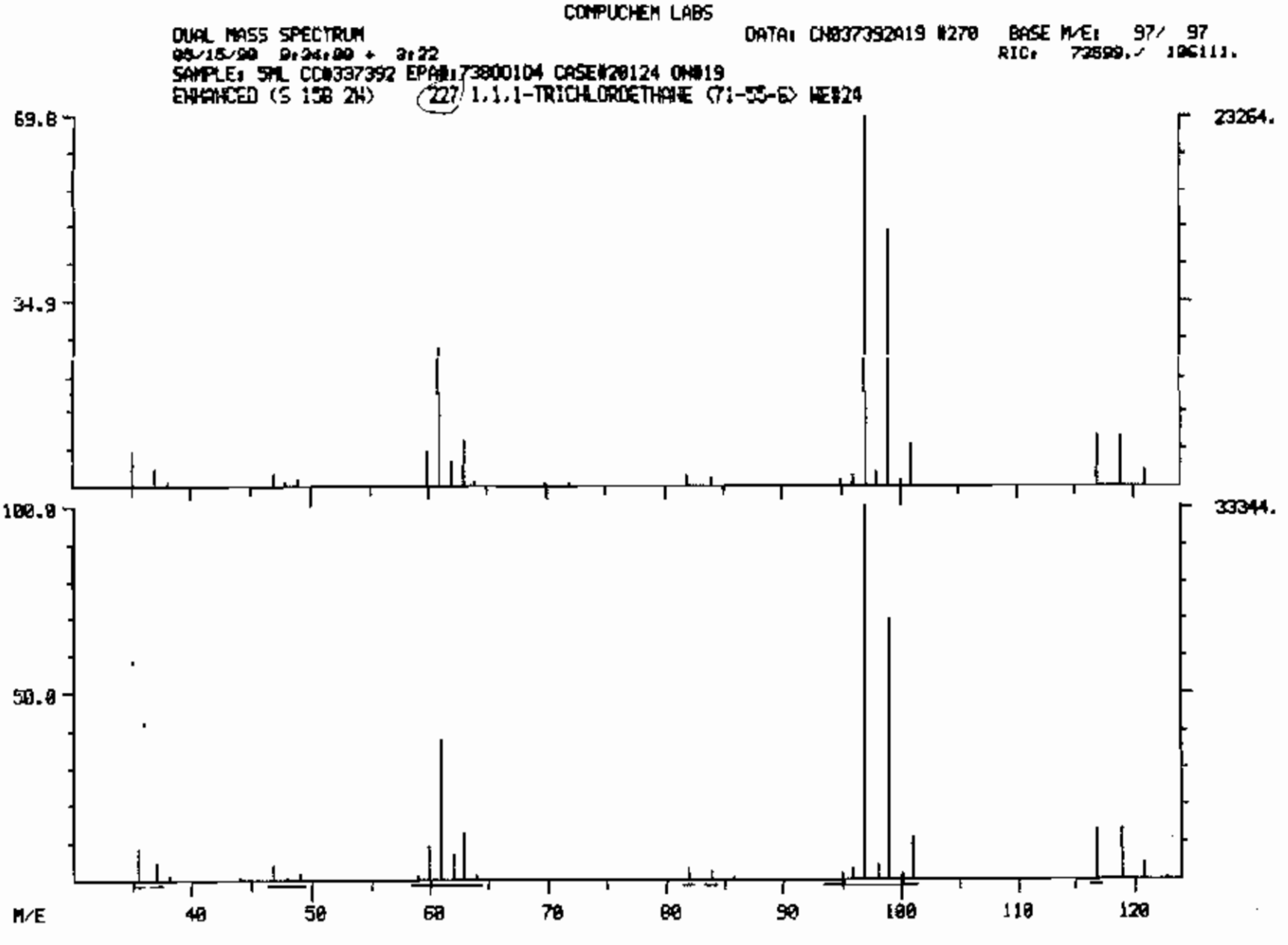
COMPUCHEM LABS

LIBRARY SEARCH
05-18-90 9:24:00 + 3:22

DATA: CN037392A19 # 270 BASE M/E: 97
RIC: 79215.

SAMPLE: 5ML CC#337392 EPA#:73800104 CASE#20124 CN#19
ENHANCED (S 15B 2H 0T)



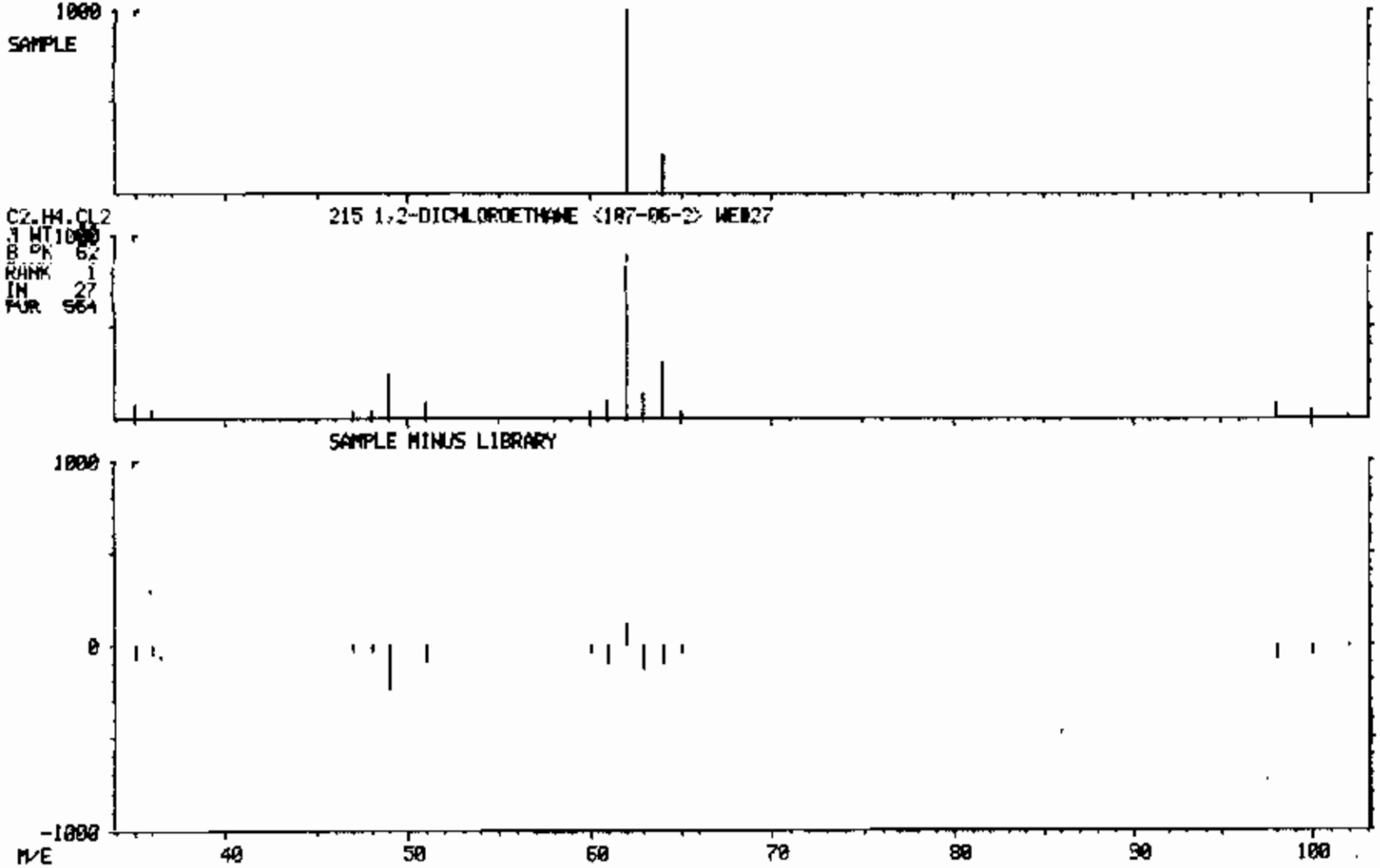


1635 •

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037392A19 # 327 BASE M/E: 62
05/15/90 9:34:00 + 4:05 RIC: 691.
SAMPLE: 5ML CC#337392 EPA#:73800104 CASE#20124 CN#19
ENHANCED (S 15B 2N 0T)

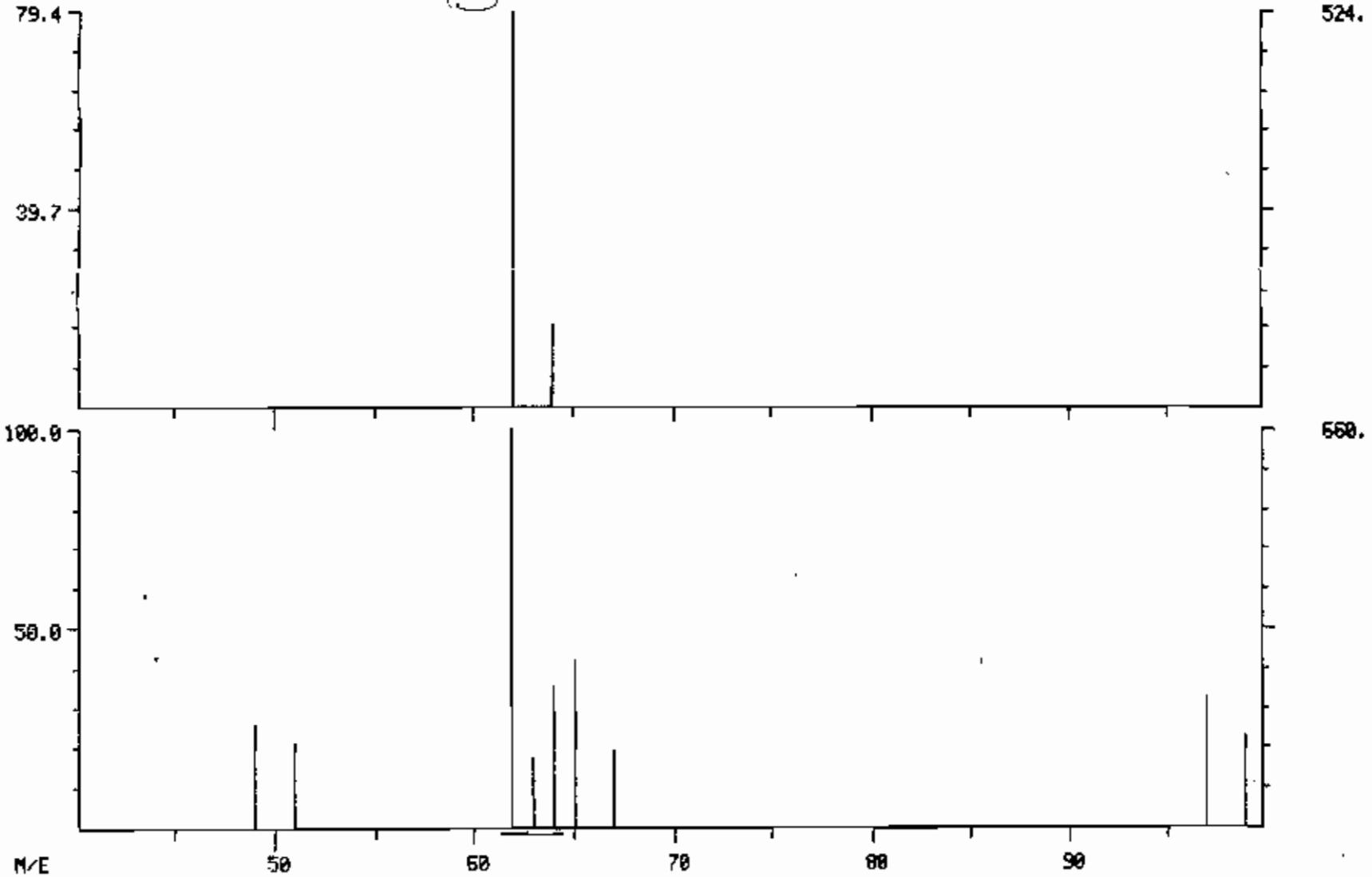


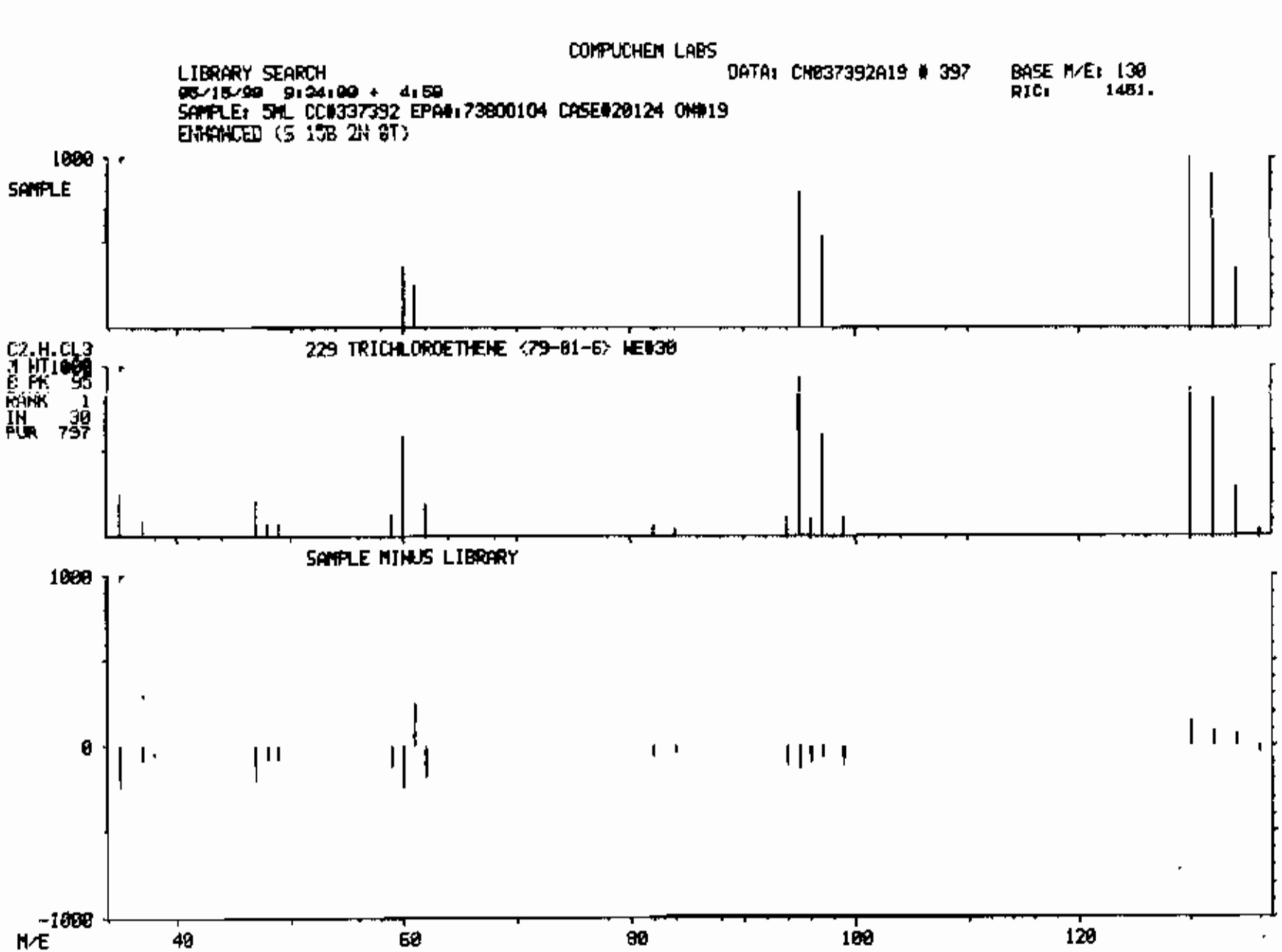
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 9:34:00 + 4:05

DATA: CN037392A19 #327 BASE M/E: 62/ 62
RIC: 631./ 2095.

SAMPLE: 5ML CC#337392 EPA#173800104 CASE#20124 ON#19
ENHANCED (S 156 2H) (215) 1,2-DICHLOROETHANE (107-06-2) WE#27





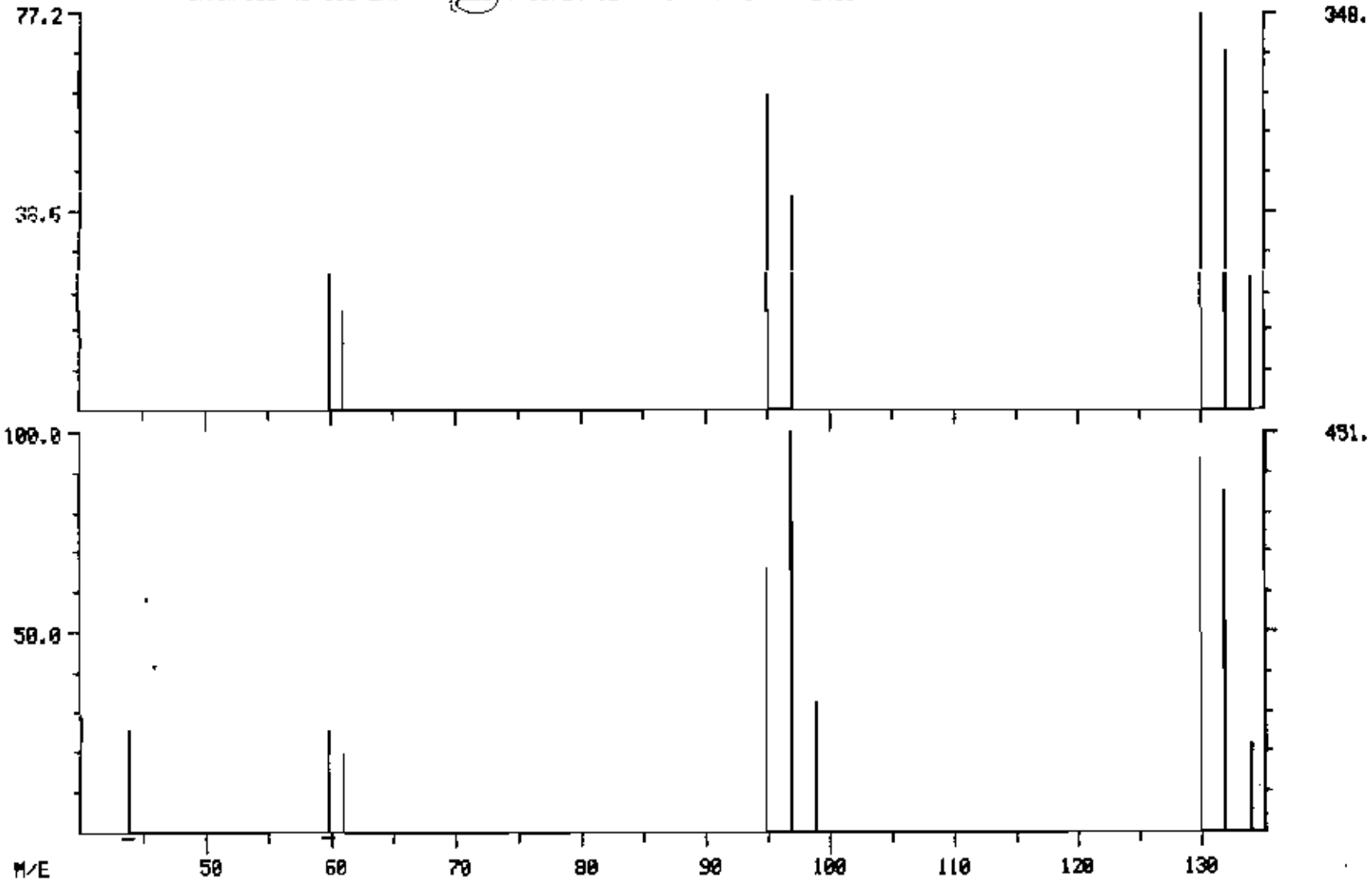
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

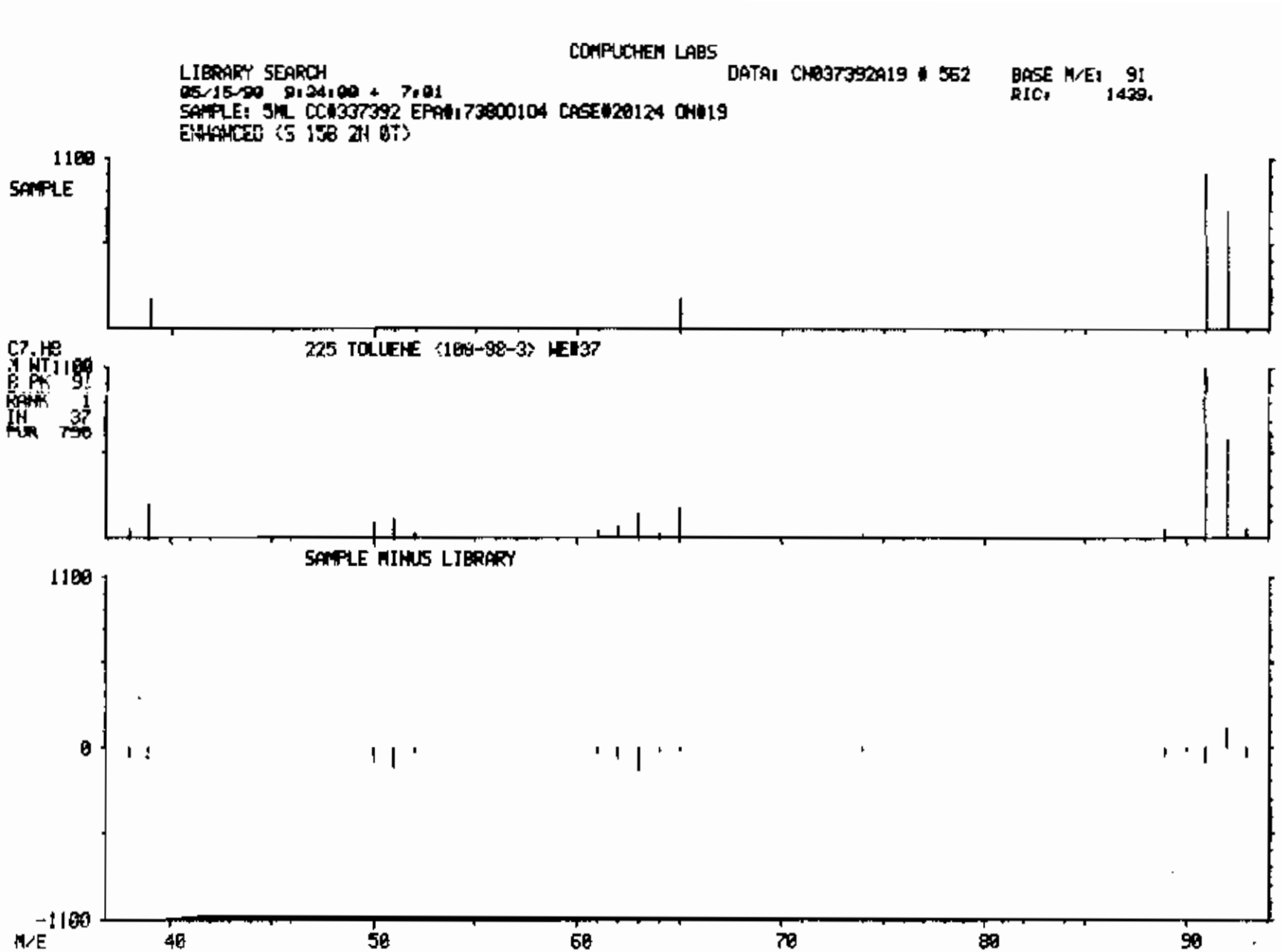
DUAL MASS SPECTRUM
05/16/90 9:34:00 + 4:50
SAMPLE: 5ML CC#337392 EPA#173800104 CASE#20124 ON#19
ENHANCED (S 15B 2N)

DATA: CN037392A19 #337 BASE M/E: 130/ 97
RIC: 1451./ 2115.

223 TRICHLOROETHENE (79-01-6) WE#30



NYDEC RA090 0507 ORGANIC



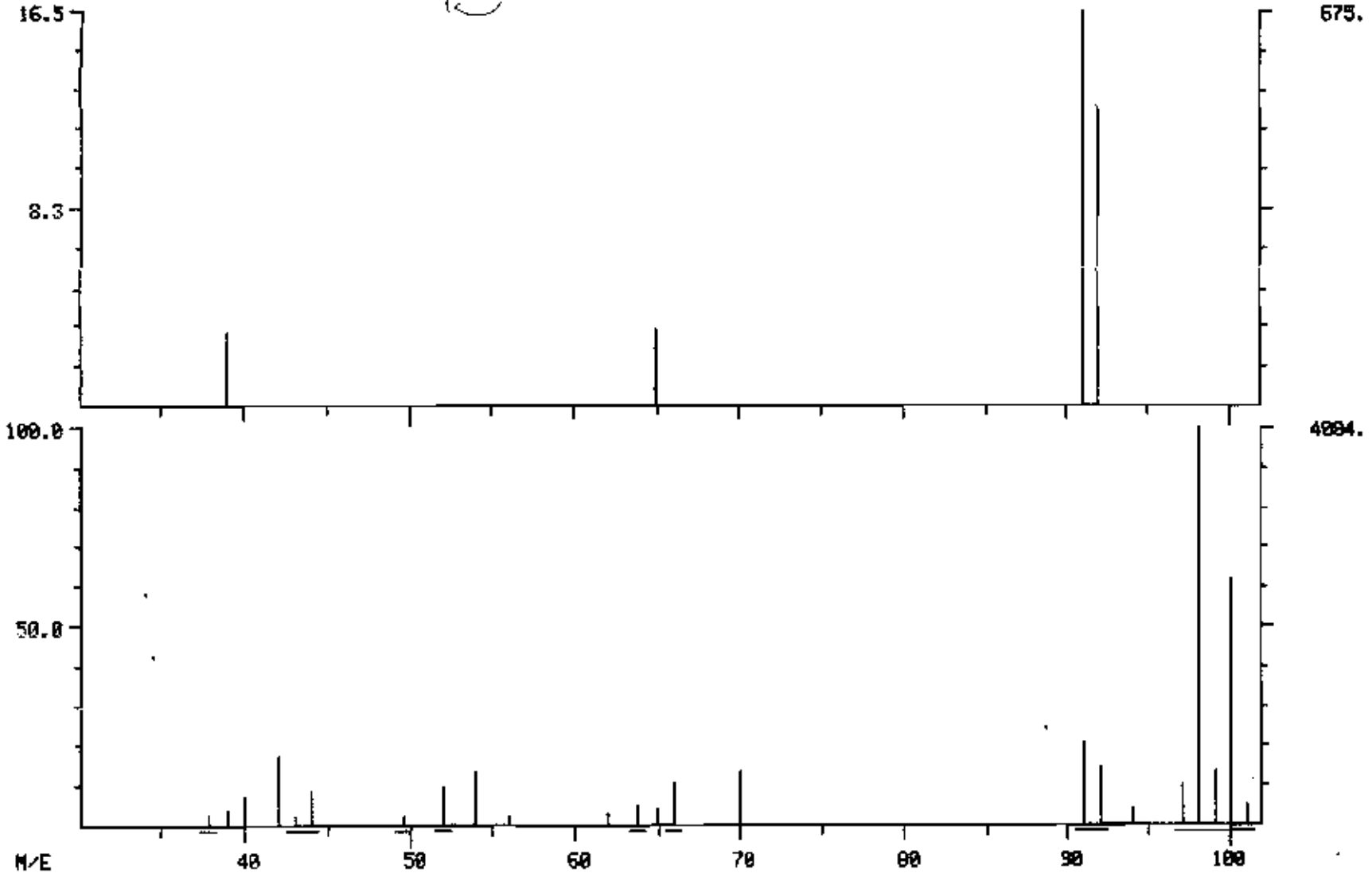
1630

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/89 9:34:09 + 7:01
SAMPLE: 5ML CC#337392 EPA# 73800104 CASE#20124 ON#19
ENHANCED (S 150 2H) (225) TOLUENE (108-88-3) WE#37

DATA: CN#37392A19 #562 BASE M/E: 91/ 98
RIC: 1429./ 13663.



1629

HYDEC RA090 0507 ORGANIC

RECEIPT DATE: 05/08/90 CASE#: 20124

VOA J1[ ] J3[ ] D1[ ] (1)
GC/MS WORKSHEET COMPUCHEM#: 337392
2J[ ] J4[ ] D2[ ] (.1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73800104

GC/MS ANALYSIS

Amount Purged: [✓] 5 mls or [ ] Dilution ____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF900515C19 Disk ( )
Blank Filename CB900515C19 Disk ( )
Standard Filename CS900515C19 Disk ( )
Sample Filename CN037392A19 Disk ( )

RECEIVED
MAY 17 1990

ANALYST(S): Injection 1492/Allen Fiedler Work-up 1492/Allen Fiedler

GC/MS REVIEW

CONDITION CODE: Ok

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 0 per 40

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 01

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review DeSalle Date 5/16/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN1-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

COMPUCHEM # 037392 FILE: CN037392A19 COMPOUND LIST 493 PAGE 1
VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	249	42900	50.0		
221	50		CHLOROMETHANE				BDL	10
231	62		VINYL CHLORIDE			38.1	38	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE			~~1.9~~	BDL ~~2J~~	10
216	96		1,1-DICHLOROETHENE			1.9	2J	5
254	76		CARBON DISULFIDE			14.4	14	5
252	43		ACETONE (2-PROPANONE)				BDL	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	379	183000	50.0		
222	84		METHYLENE CHLORIDE			3.0	3J B	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLORDETHANE			67.0	67	5
257	43		VINYL ACETATE				BDL	10
207	96		CIS-1,2-DICHLOROETHENE			10.4	10	5
253	72		2-BUTANONE				BDL	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE			198.0	200	5
206	117		CARBON TETRACHLORIDE				BDL	5
203	78		BENZENE			~~1.9~~	BDL ~~1J~~	5
215	62		1,2-DICHLOROETHANE			5.0	5	5
270	117	I	D5-CHLOROBENZENE (IS)	751	121000	50.0		
229	130		TRICHLOROETHENE			2.2	2J	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				BDL	10
225	92		TOLUENE			2.2	2J	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				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	5
239	106		O-XYLENE			~~1.2~~	BDL ~~1J~~	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 WE#57			50.4	101. %	
247	95	S	BROMOFLUOROBENZENE			46.9	94. %	
233	98	S	D8-TOLUENE WE#59 SS#2			46.5	93. %	
289	106		XYLENES (TOTAL)			~~1.2~~	2 BDL ~~1J~~	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/6/96

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)			10.4	10	10
CHECKBUMS:								
	3979.			1379	346900.	651.1		358.

CORRECTED/REVIEWED BY _____
(QC/MS DATA REVIEWER)

DATE 5-16-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLORDETHANE WE#57	50.4	50.0	101.	76-114	X	
41	247	BROMOFLUOROBENZENE	46.9	50.0	94.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	46.5	50.0	93.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATS SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(OC/MS DATA REVIEWER)

DATE 5-6-93

QUALITY ASSURANCE NOTICE
CompuChem # 35392
Blank ID # CB[illegible]
Case 20124

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C-4295
6-1026

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800105

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337832

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037832A19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	1	J
75-09-2	Methylene Chloride	4	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	3	J
75-35-4	1,1-Dichloroethene	5	U
75-34-3	1,1-Dichloroethane	50	
540-59-0	1,2-Dichloroethene (total)	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	6	
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	19	
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	U
108-88-3	Toluene	5	U
108-90-7	Chlorobenzene	5	
100-41-4	Ethylbenzene	8	
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.

73800105

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337832

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037832A19

Level: (low/med) LOW Date Received: 05/08/90

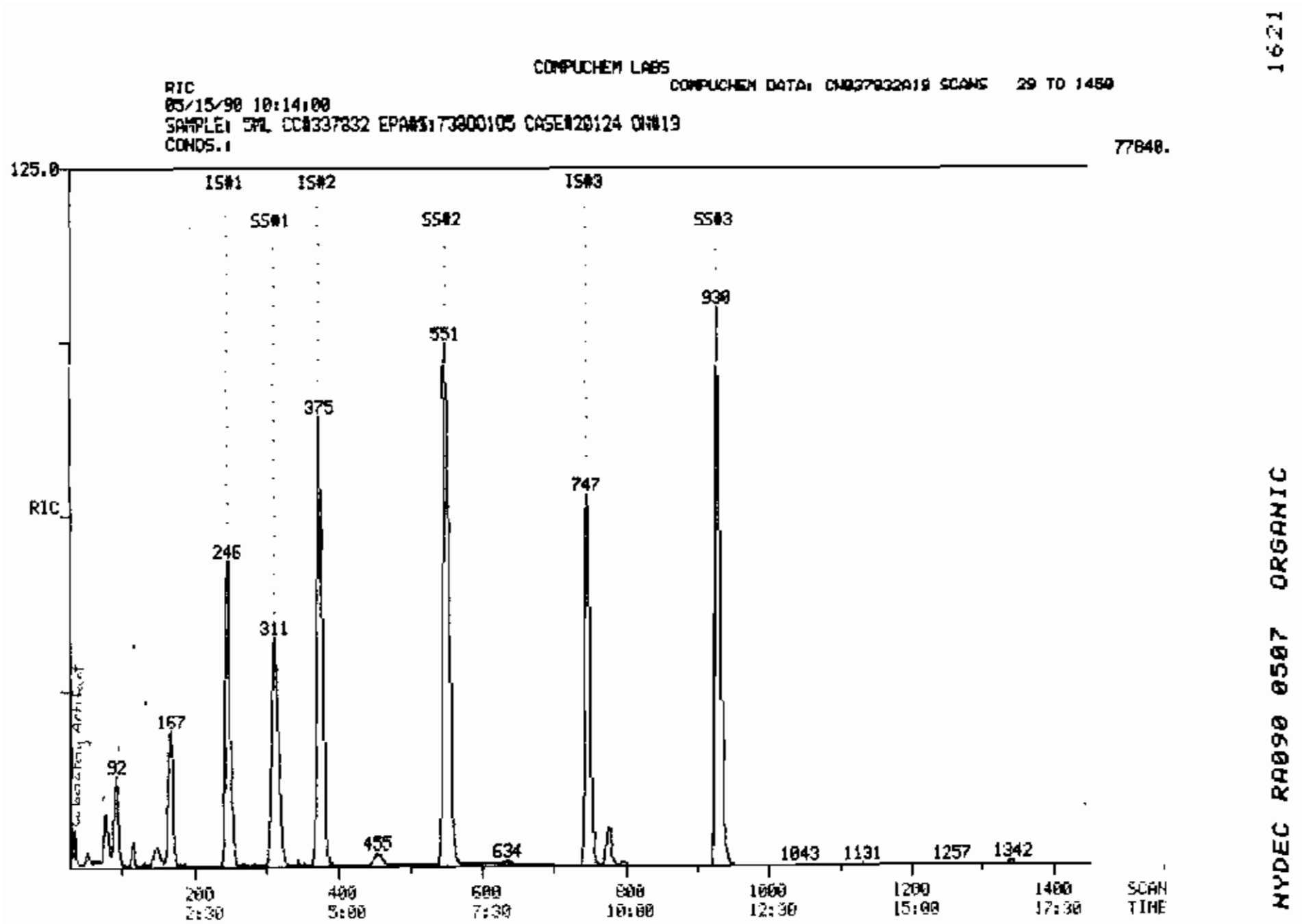
% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 3

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

	CAS NUMBER	COMPOUND NANE	RT	EST. CONC.	Q
1.	60-29-7	ETHANE,1,1'-OXYBIS-	0.95	6.0	J
2.	109-87-5	METHANE,DIMETHOXY-	1.15	13	J
3.		LABORATORY ARTIFACT	0.43	2.0	J


COMPUCHEM LABS
COMPUCHEM DATA: CN0279320019 SCANS 29 TO 1450
RIC
05/15/90 10:14:00
SAMPLE: SML CC#337832 EPA#:5173000105 CASE#20124 ON#19
CONDS.:
77840.
125.0
RIC
IS#1
IS#2
IS#3
SS#1
SS#2
SS#3
92
157
246
311
375
455
551
634
747
930
1043
1131
1257
1342
200
2:30
400
5:00
600
7:30
800
10:00
1000
12:30
1200
15:00
1400
17:30
SCAN
TIME
1621
NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037832A19
DATA: CN037832A19.T1
05/15/90 10:14:00
SAMPLE: 5ML CC#037832 EPA##:73800105 CASE#20124 DN#19
COND8.:
SUBMITTED BY: 19 ANALYST: 1492.

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

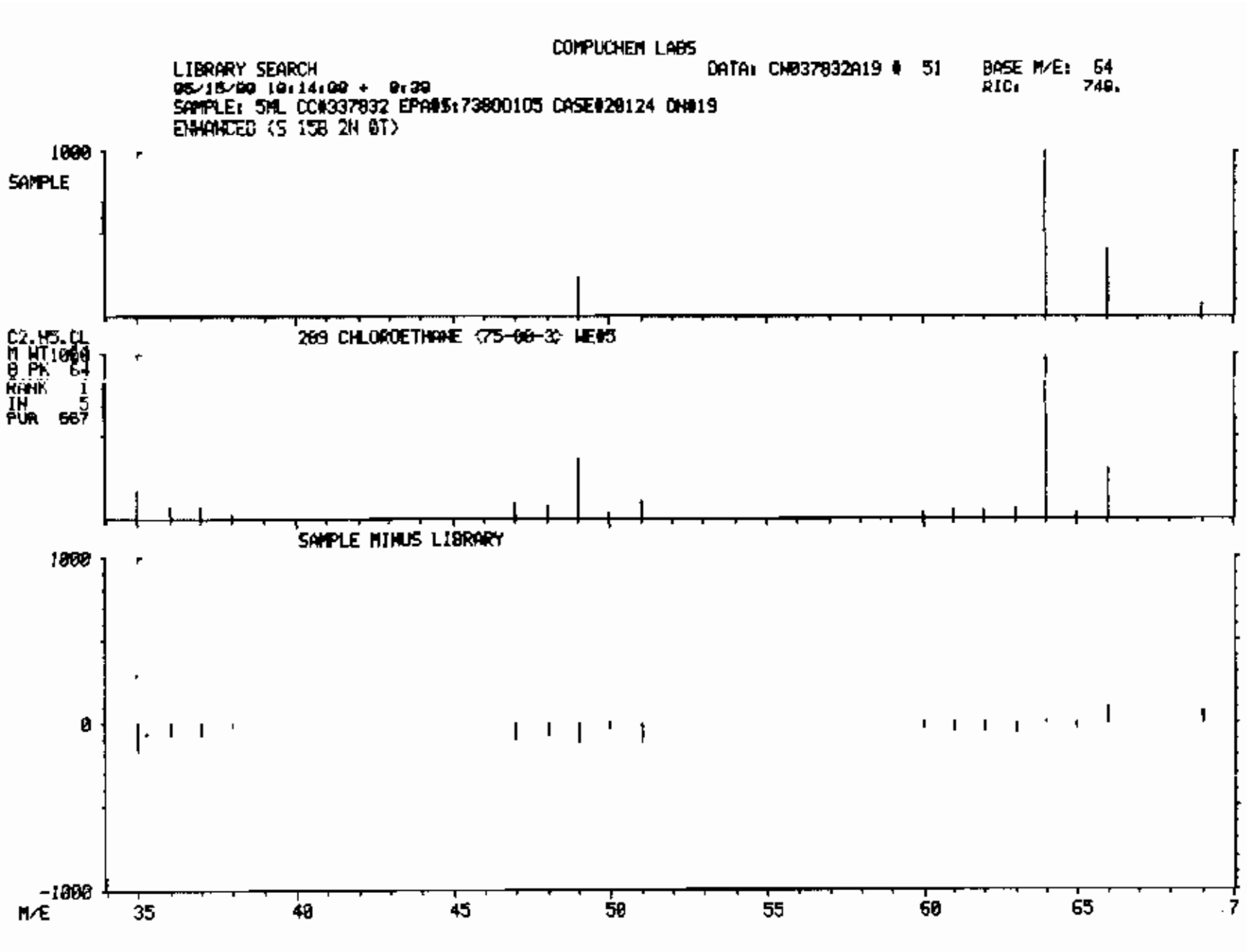
NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-93-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	246	3:04	1	1.000	A BB	42902.	50.000 UG/L	12.24
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	51	0:38	1	0.207	A BB	2150.	3.336	UG/L	0.82
6	96	NOT FOUND								
7	76	88	1:06	1	0.358	A BB	9731.	3.136	UG/L	0.77
8	43	92	1:09	1	0.374	A BB	850.	3.823	UG/L	0.94
9	114	375	4:41	9	1.000	A BB	169244.	50.000	UG/L	12.24
10	84	115	1:26	1	0.467	A BB	3167.	4.213	UG/L	1.03
11	96	NOT FOUND								
12	63	167	2:05	1	0.679	A BB	46912.	49.554	UG/L	12.13
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	310	3:52	9	0.827	A BB	34832.	18.602	UG/L	4.55
20	62	321	4:01	1	1.305	A BB	6123.	5.774	UG/L	1.41
21	117	747	9:20	21	1.000	A BB	120214.	50.000	UG/L	12.24
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	750	9:22	21	1.004	A BB	9757.	5.438	UG/L	1.33
34	106	776	9:42	21	1.039	A BB	6786.	7.911	UG/L	1.94
35	106	~~776~~	9:42	21	1.039	A BB	~~6786.~~	~~5.849~~	UG/L	1.43
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	313	3:55	1	1.272	A BB	58863.	54.770	UG/L	13.41
41	95	930	11:37	21	1.245	A BB	66689.	47.137	UG/L	11.54
42	98	551	6:53	21	0.738	A BB	175093.	48.945	UG/L	11.98

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39	0.98	10.000	0.02	3.34	50.00	0.050	0.751	0.07
6	1:03		5.000			50.00		1.389	
7	1:07	0.99	5.000	0.07	3.14	50.00	0.227	3.616	0.06
8	1:11	0.97	10.000	0.04	3.82	50.00	0.020	0.259	0.08
9	4:45	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	0.99	5.000	0.09	4.21	50.00	0.074	0.876	0.08
11	1:40		5.000			50.00		0.941	
12	2:05	1.00	5.000	0.14	49.55	50.00	1.093	1.103	0.99
13	2:19		10.000			50.00		0.255	
14	2:49		5.000			50.00		0.937	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000			50.00		0.560	
19	3:55	0.99	5.000	0.17	18.60	50.00	0.184	0.495	0.37
20	4:04	0.98	5.000	0.26	5.77	50.00	0.143	1.236	0.12
21	9:24	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.455	
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26	0.99	5.000	0.20	5.44	50.00	0.081	0.746	0.11
34	9:46	0.99	5.000	0.21	7.91	50.00	0.056	0.357	0.16
35	10:01	0.97	5.000	0.21	5.84	50.00	0.056	0.483	0.12
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	0.98	5.000	0.25	94.77	50.00	1.372	1.253	1.10
41	11:42	0.99	5.000	0.25	47.14	50.00	0.555	0.588	0.94
42	6:57	0.99	5.000	0.15	48.95	50.00	1.457	1.488	0.98



1617

NYDEC RA090 0507 ORGANIC

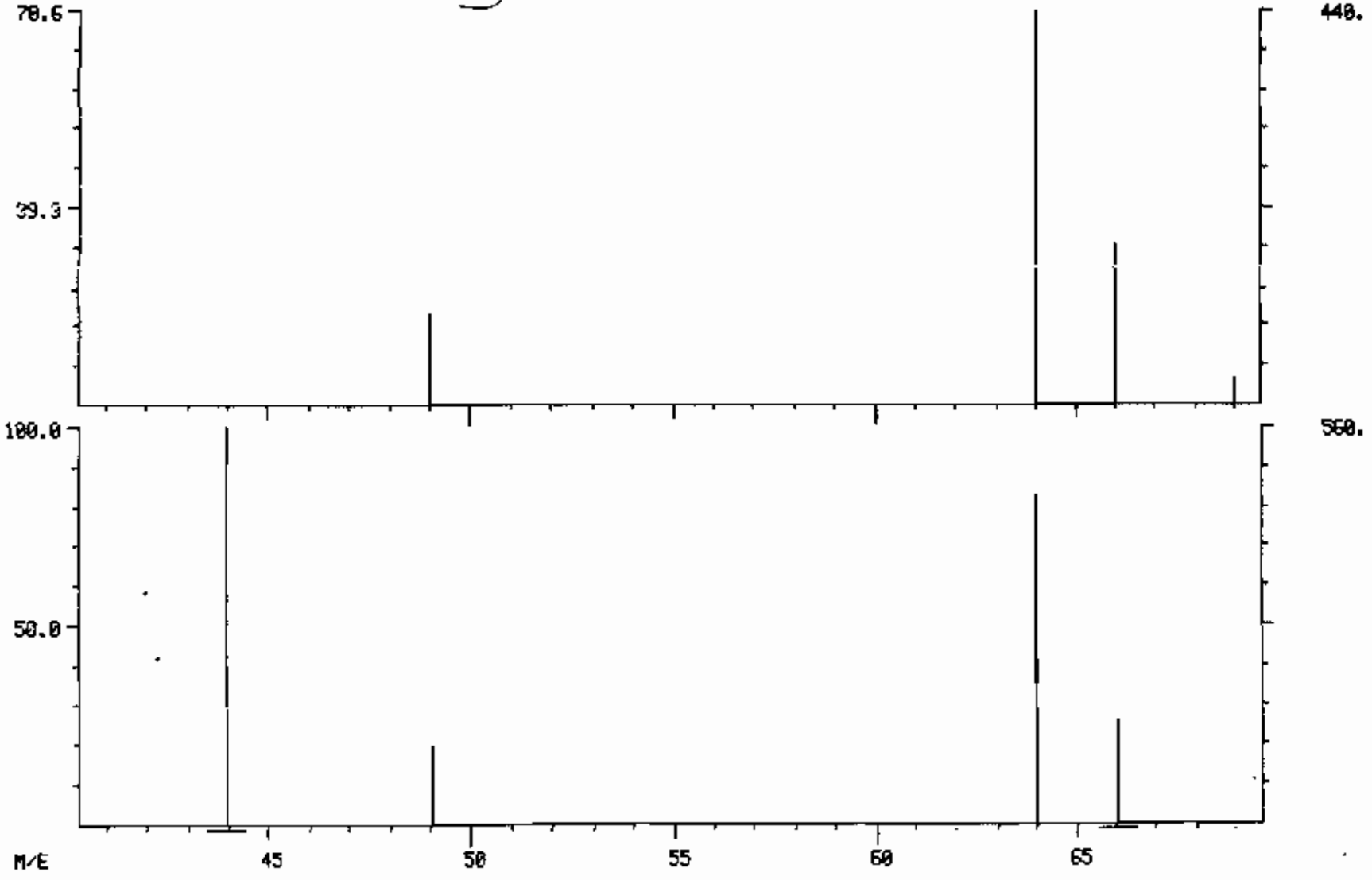
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 10:14:00 + 0:30
SAMPLE: SML CC#337832 EP#05:73000105 CASE#20124 ON#19
ENHANCED (S 15B 2H)

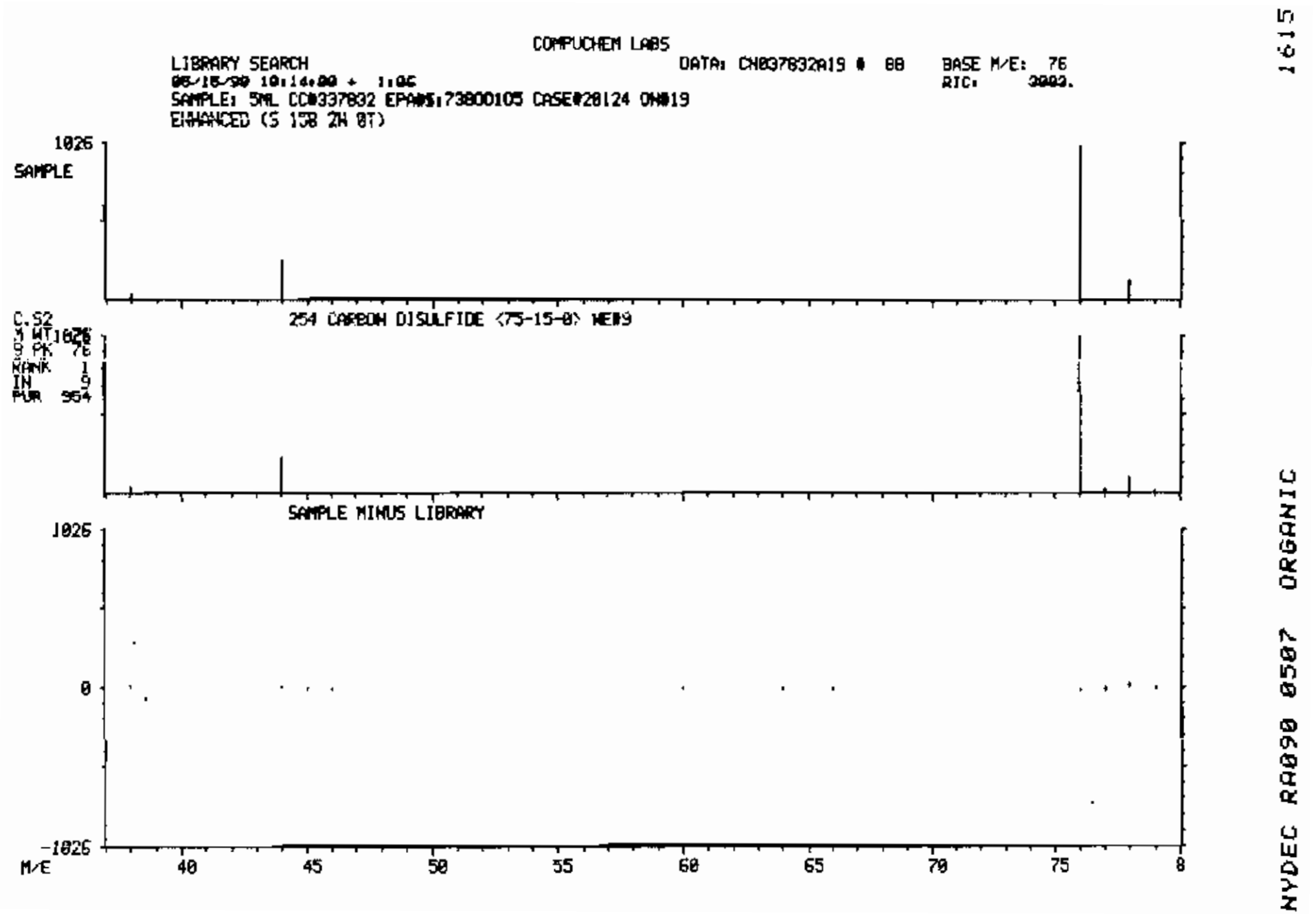
DATA: CN037832A19 #51

BASE M/E: 64/ 44
RIC: 740./ 1277.

(209) CHLOROETHANE (75-00-3) WE#5



NYDEC RA090 0507 ORGANIC



1615

NYDEC RA090 0507 ORGANIC

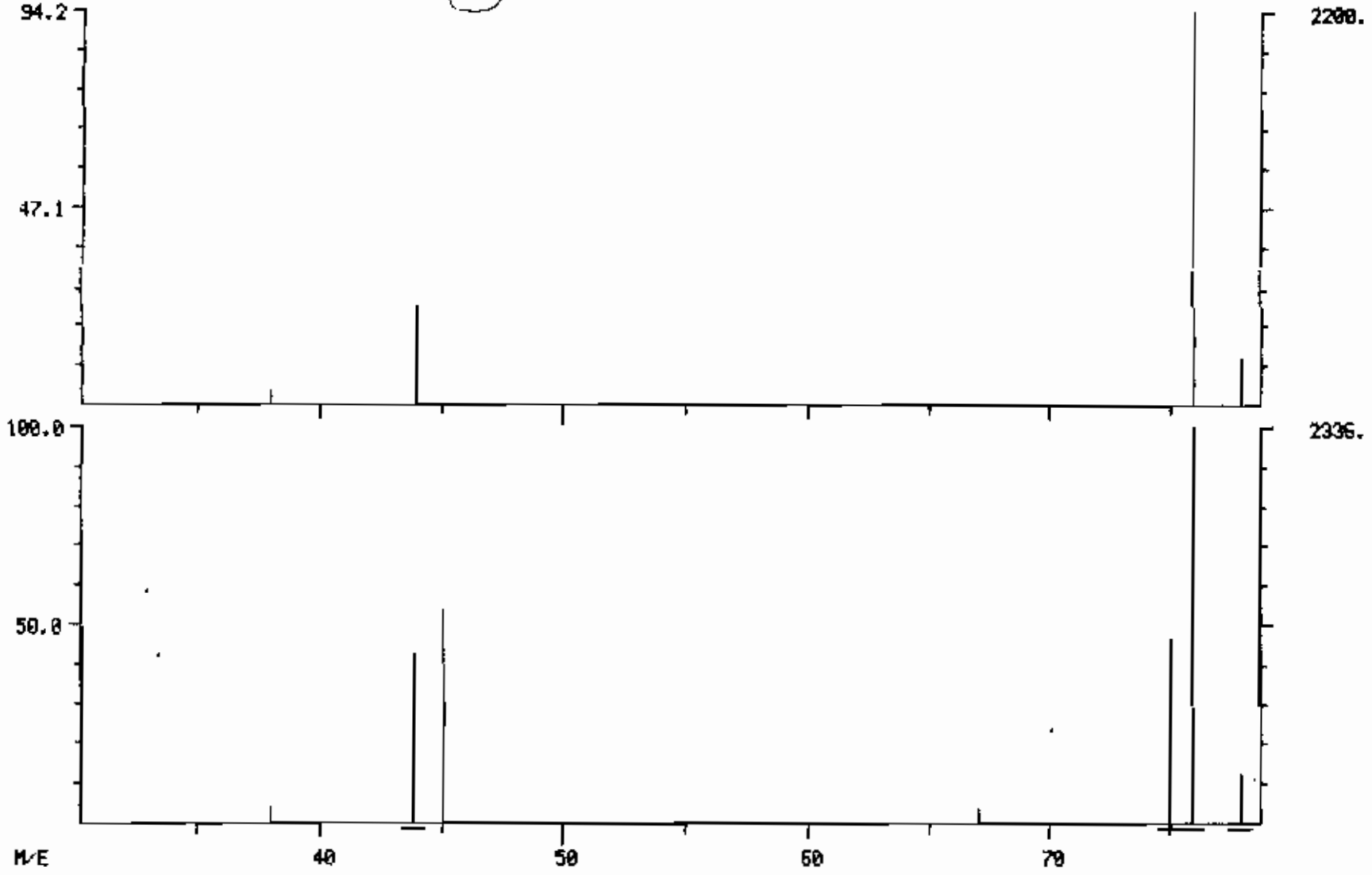
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 10:14:00 + 1:05
SAMPLE: 5ML CC#337832 EPA#S:73800105 CASE#20124 ON#19
ENHANCED (S 15B 2N)

DATA: CN037832A19 #00

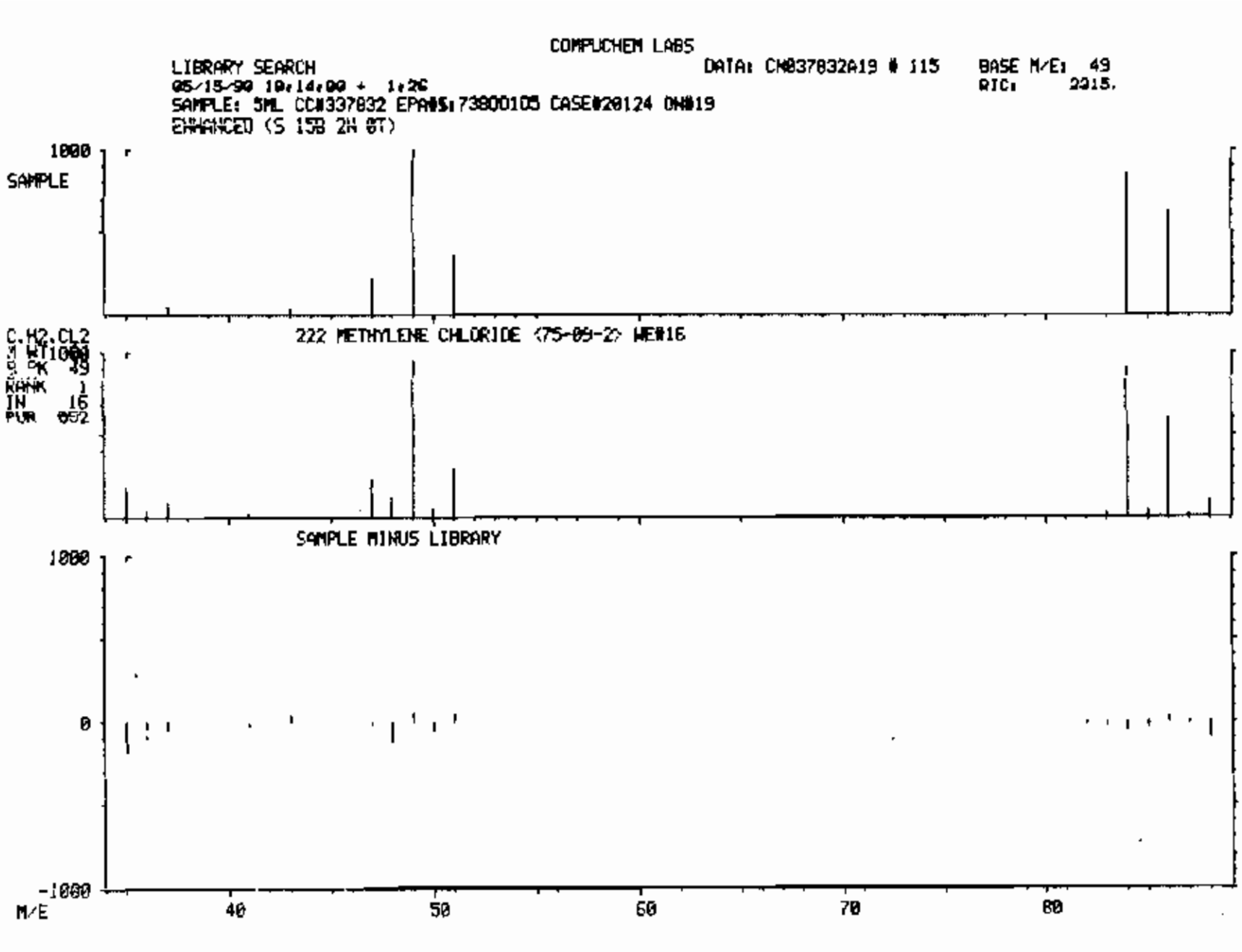
BASE M/E: 76/ 76
RIC: 2003./ 6143.

254 CARBON DISULFIDE (75-15-0) WE#9



1614

NYDEC RA090 0507 ORGANIC

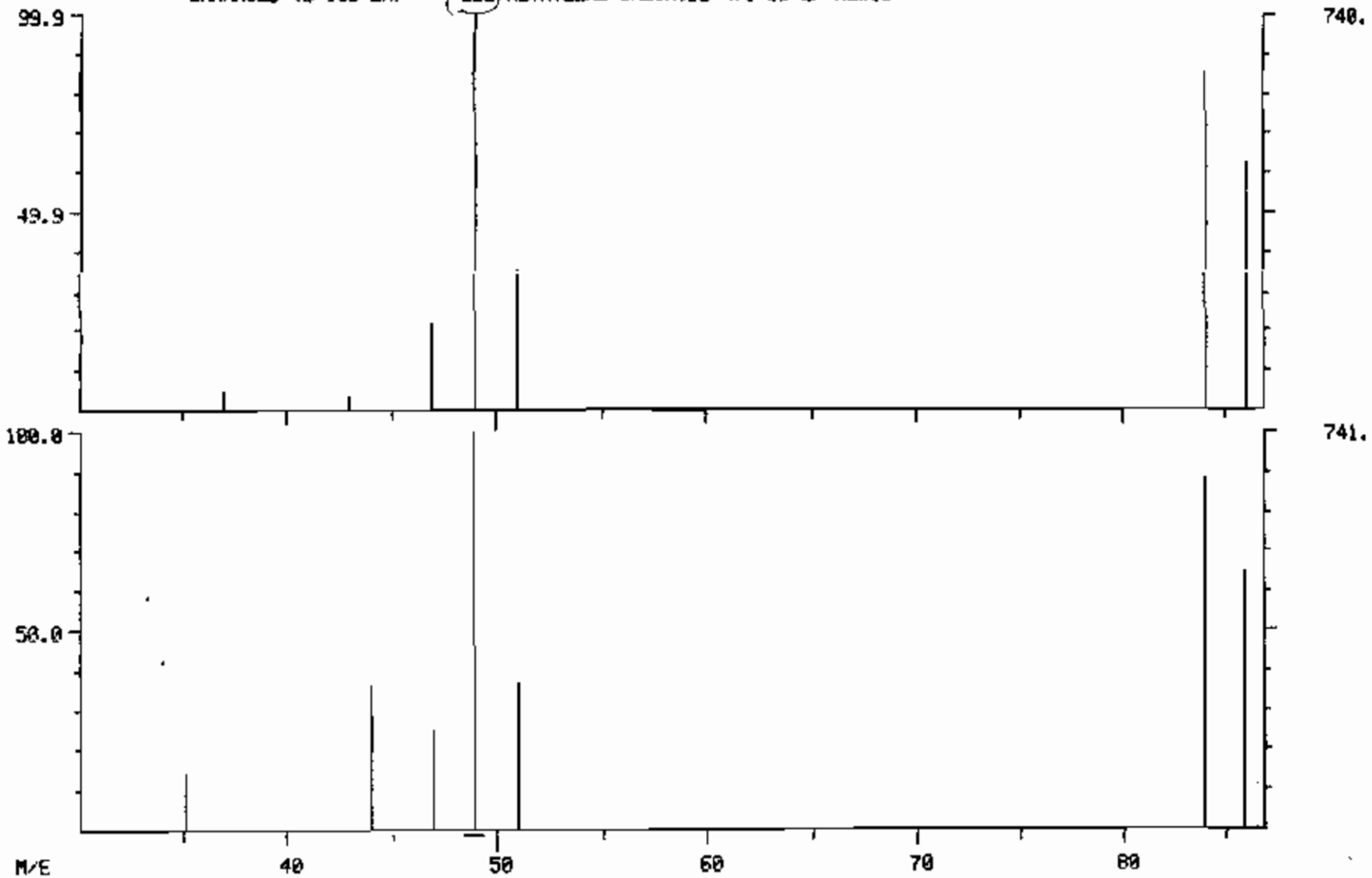


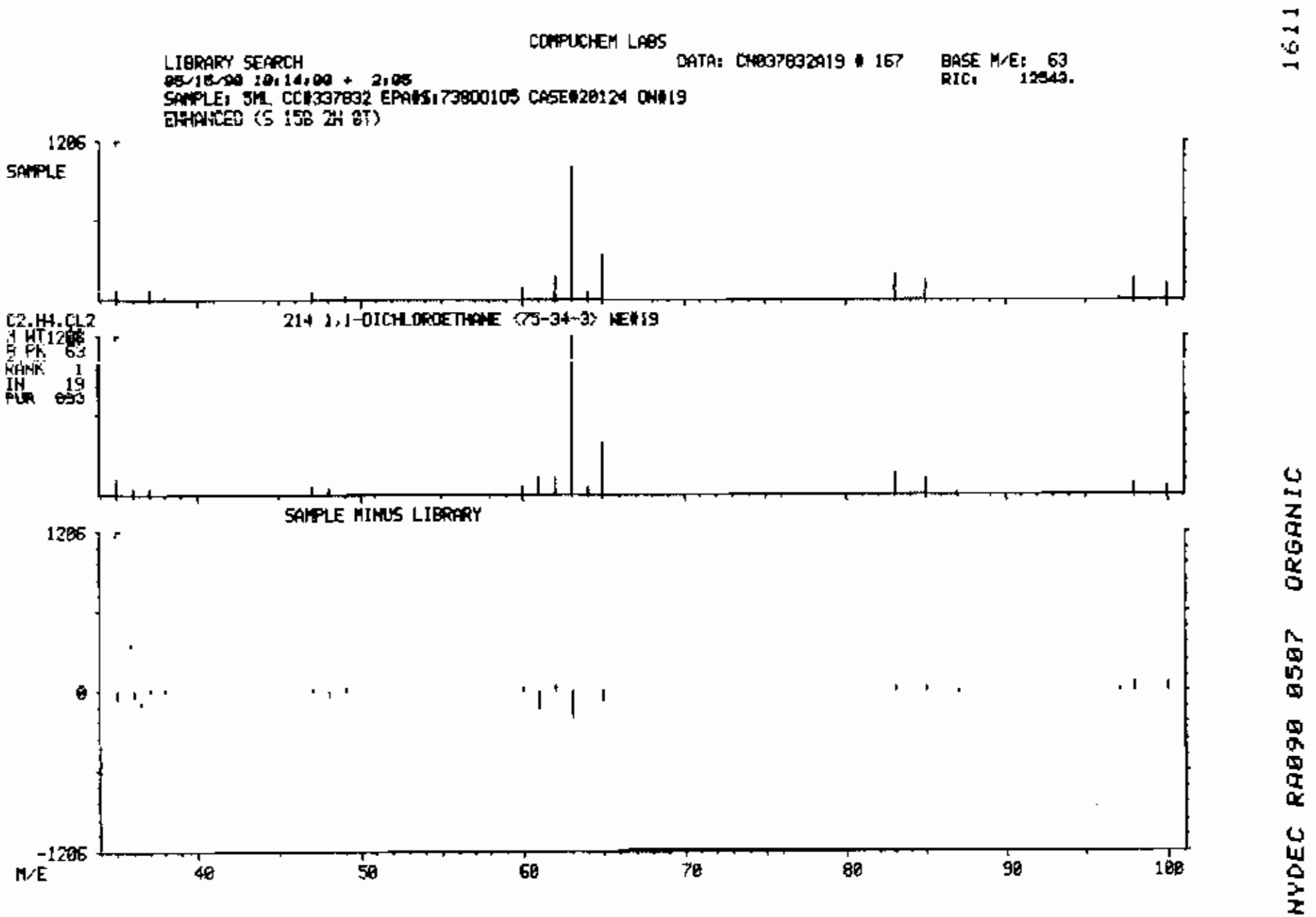
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 10:14:00 + 1:25
SAMPLE: 5ML CC#337832 EPA#5:73800105 CASE#20124 ON#19
ENHANCED (S 15B 2N)

DATA: CN037832A19 #115 BASE M/E: 49/ 49
RIC: 2315./ 2699.

222 METHYLENE CHLORIDE (75-09-2) WE#16





1611

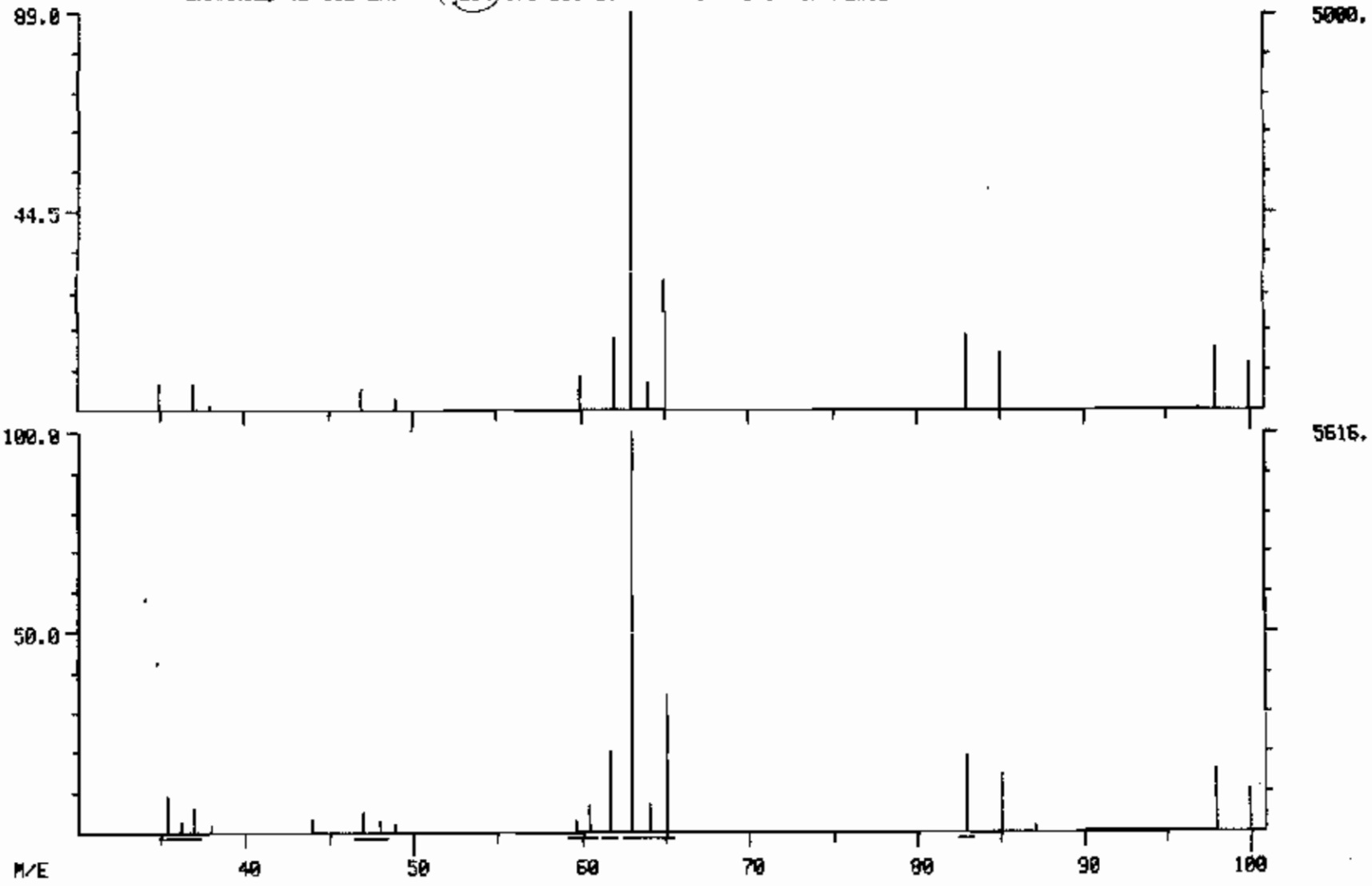
NYDEC RA090 0507 ORGANIC

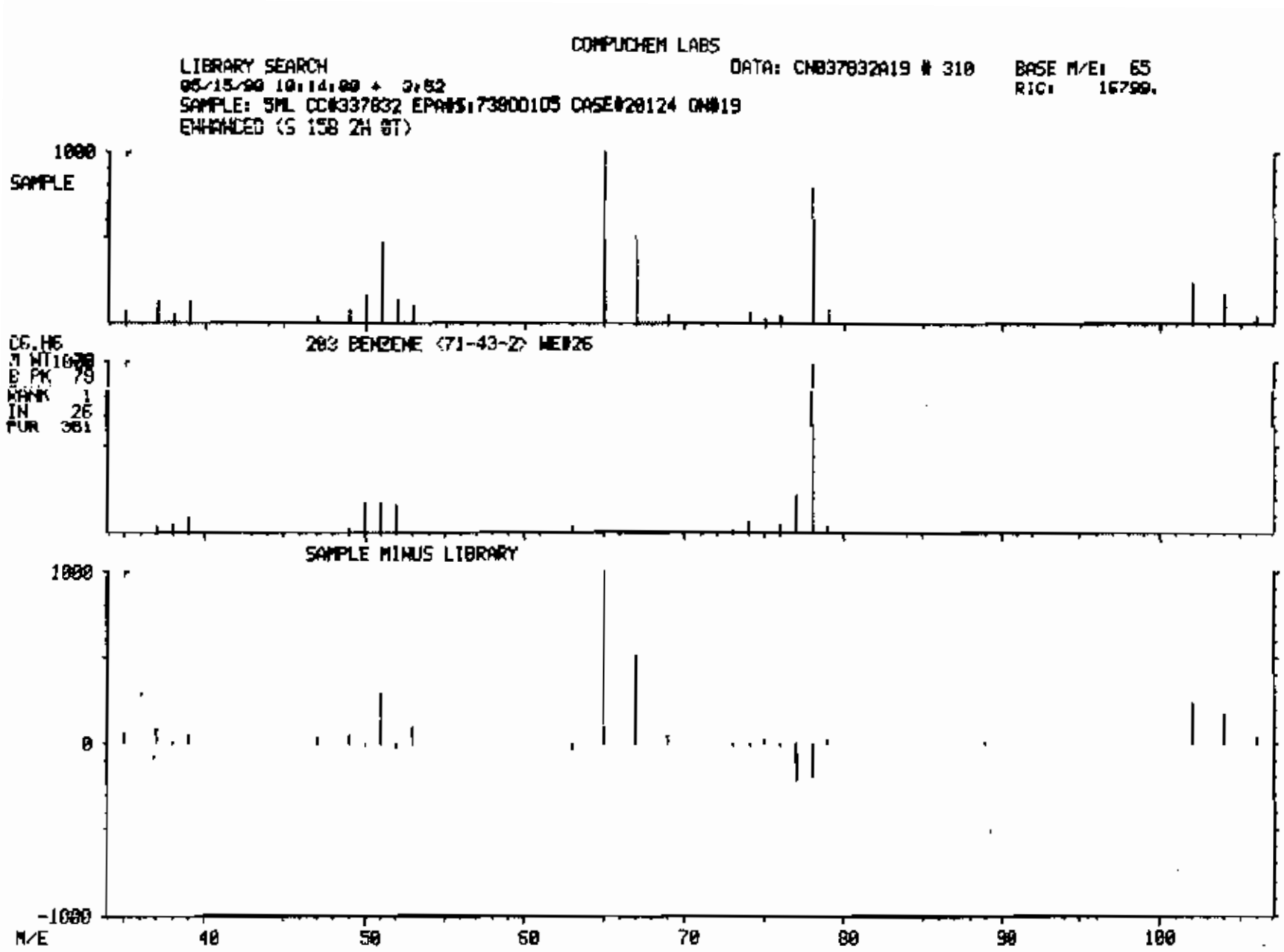
COMPUCHEM LABS

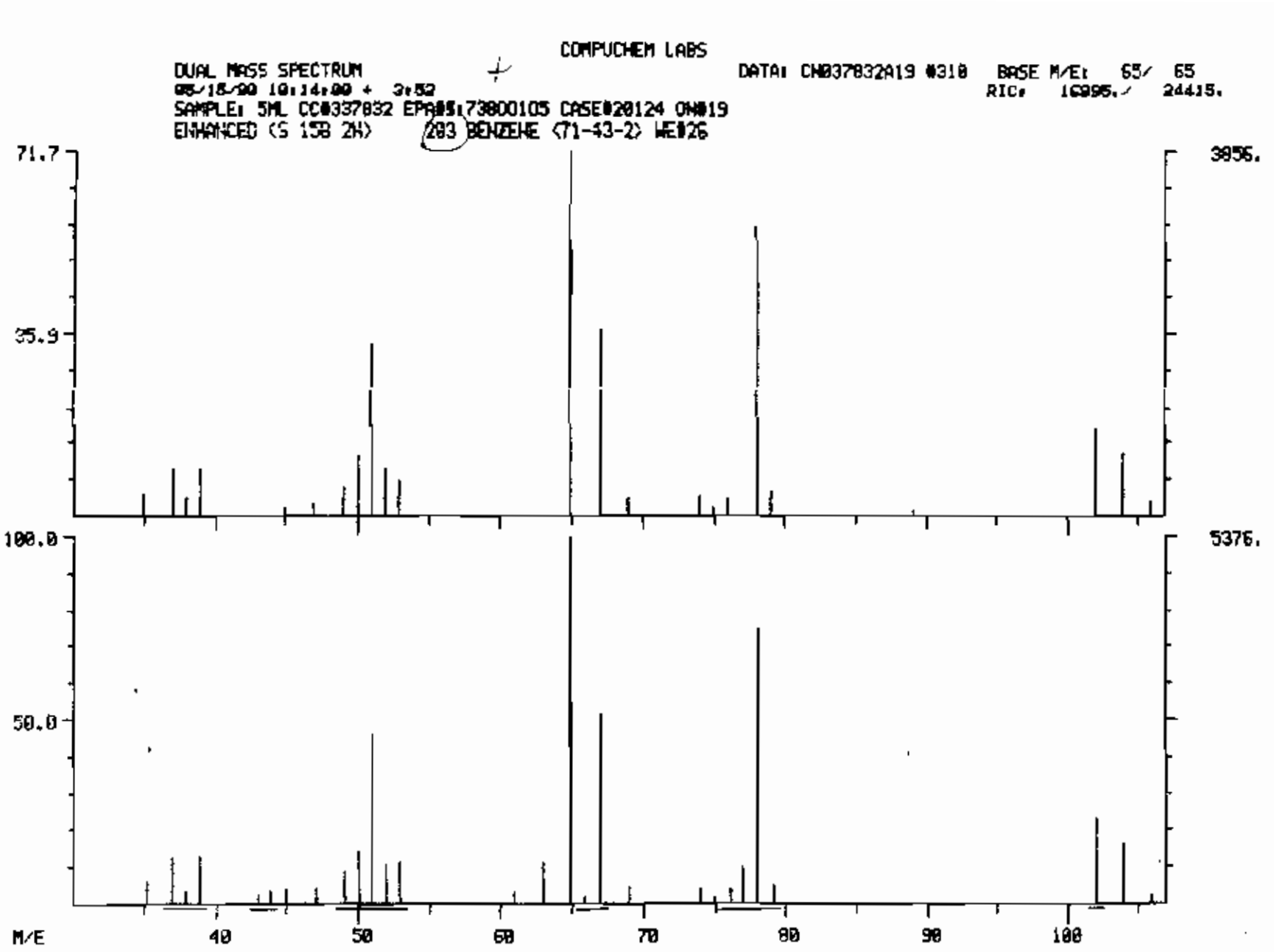
DUAL MASS SPECTRUM
05/15/90 10:14:00 + 2:05
SAMPLE: 5ML CC#337832 EPA#:73800105 CASE#20124 ON#19
ENHANCED (S 15B 2N)

DATA: CN037832A19 #167 BASE M/E: 63/ 63
RIC: 12843./ 14463.

214 1,1-DICHLORGETHANE (75-34-3) WE#13

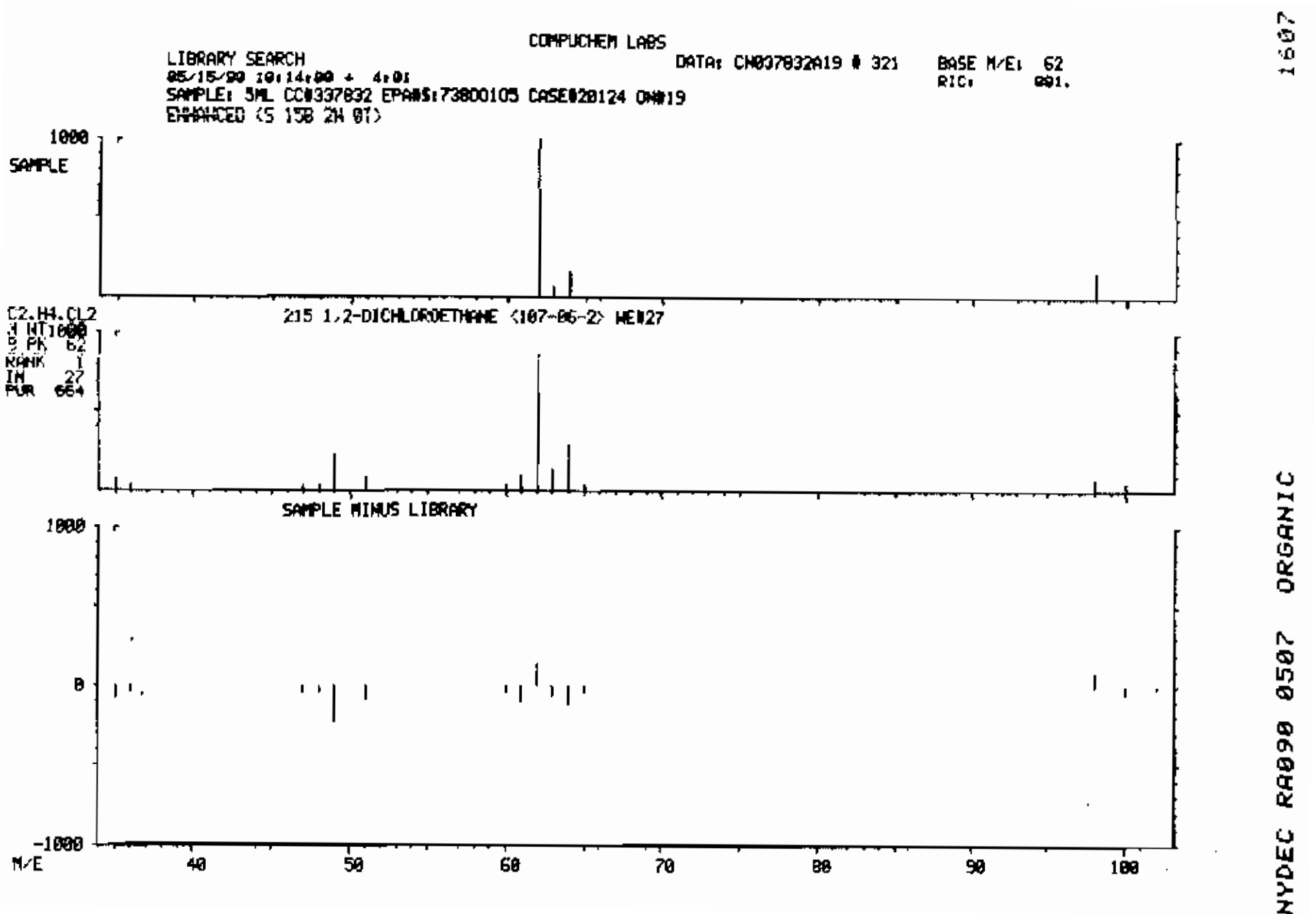






1608

HYDEC RA090 0507 ORGANIC

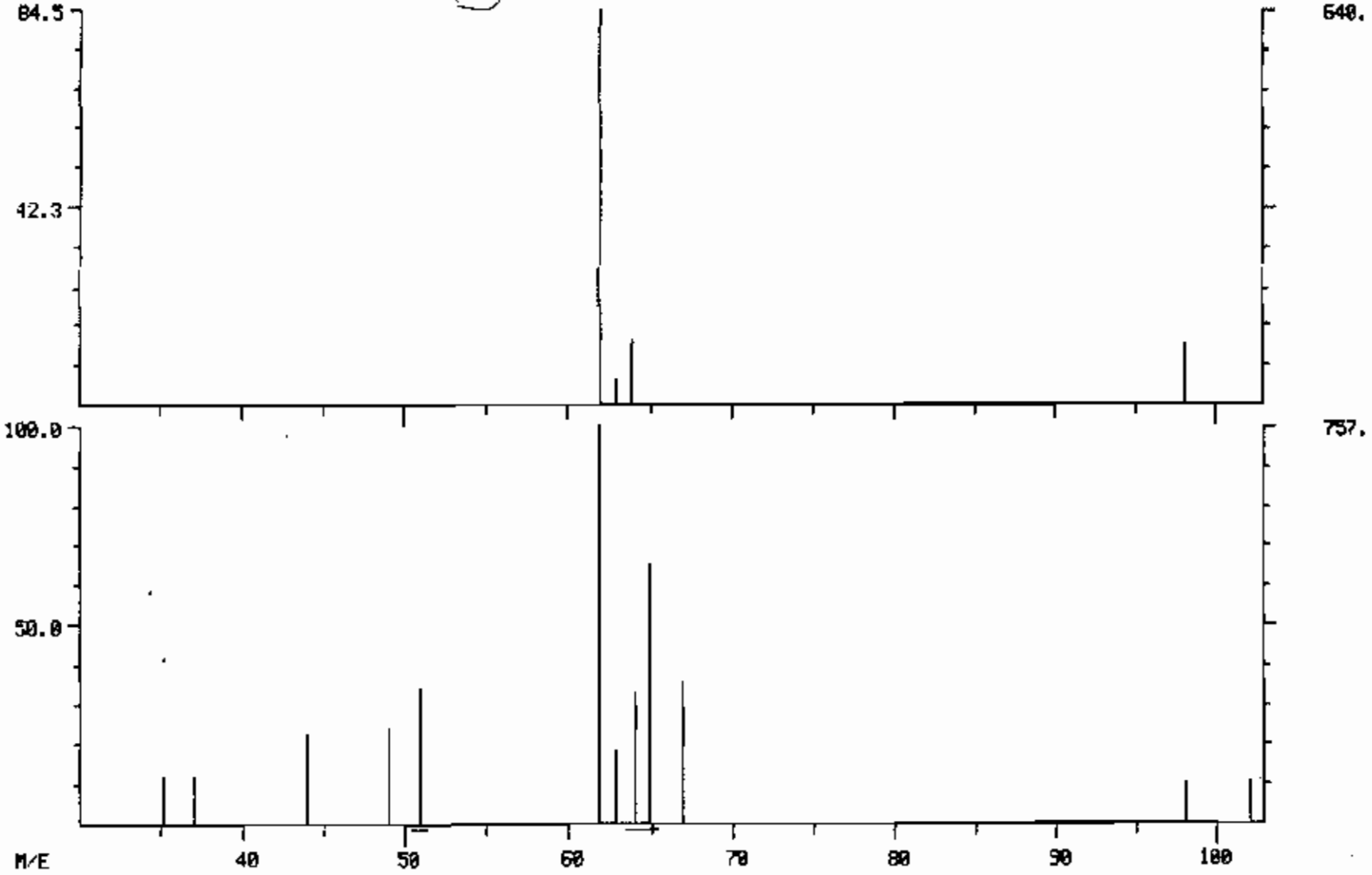


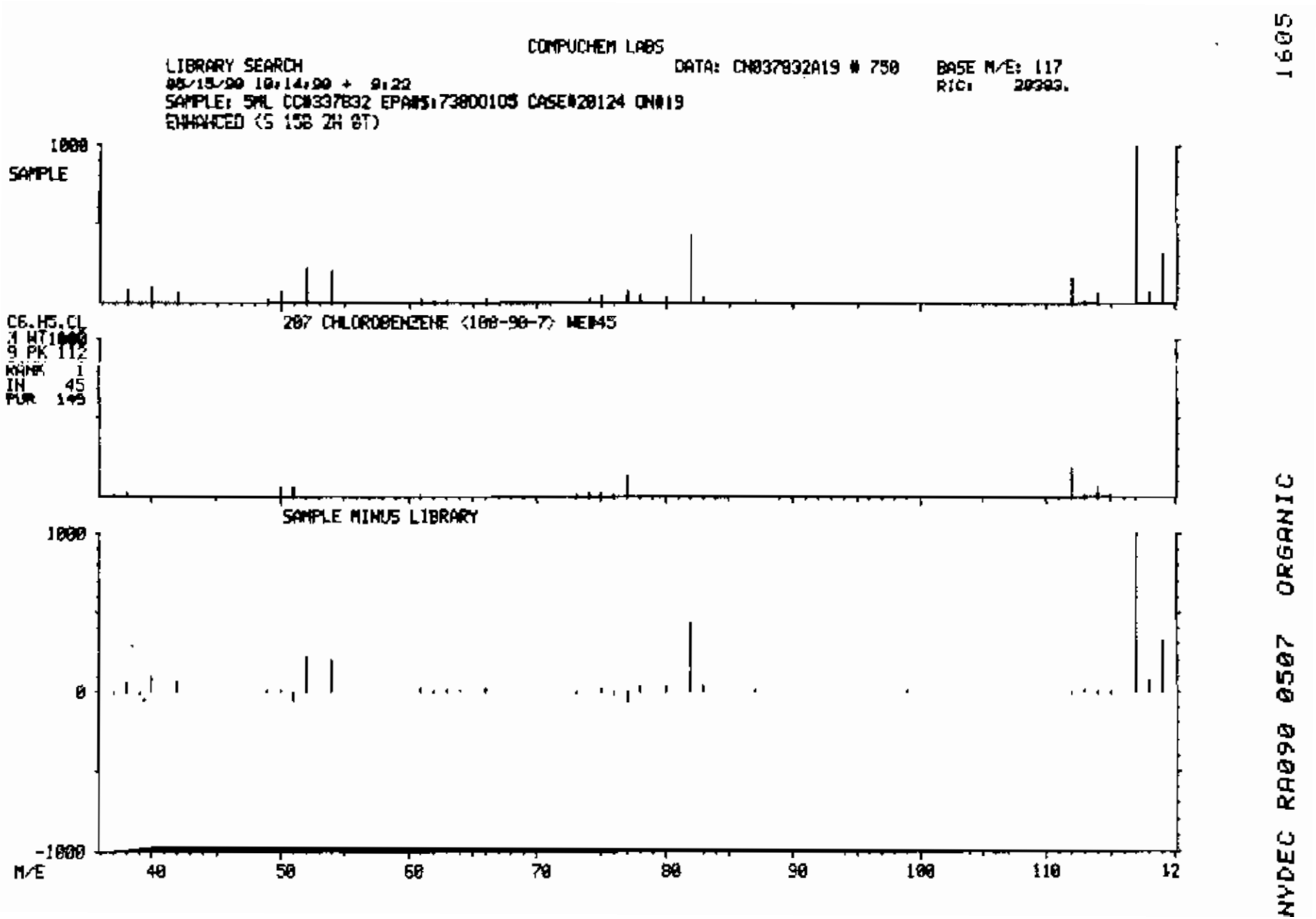
NYDEC RA090 0507 ORGANIC

1607

COMPUCHEM LABS

DUAL MASS SPECTRUM DATA: CN037832A19 #321 BASE M/E: 62/ 62
05/15/90 10:14:00 + 4:01 RIC: 901./ 2047.
SAMPLE: 5ML CC#337832 EPA#: 73600105 CASE#20124 CN#19
ENHANCED (S 150 2N) (215) 1,2-DICHLOROETHANE (107-06-2) WE#27



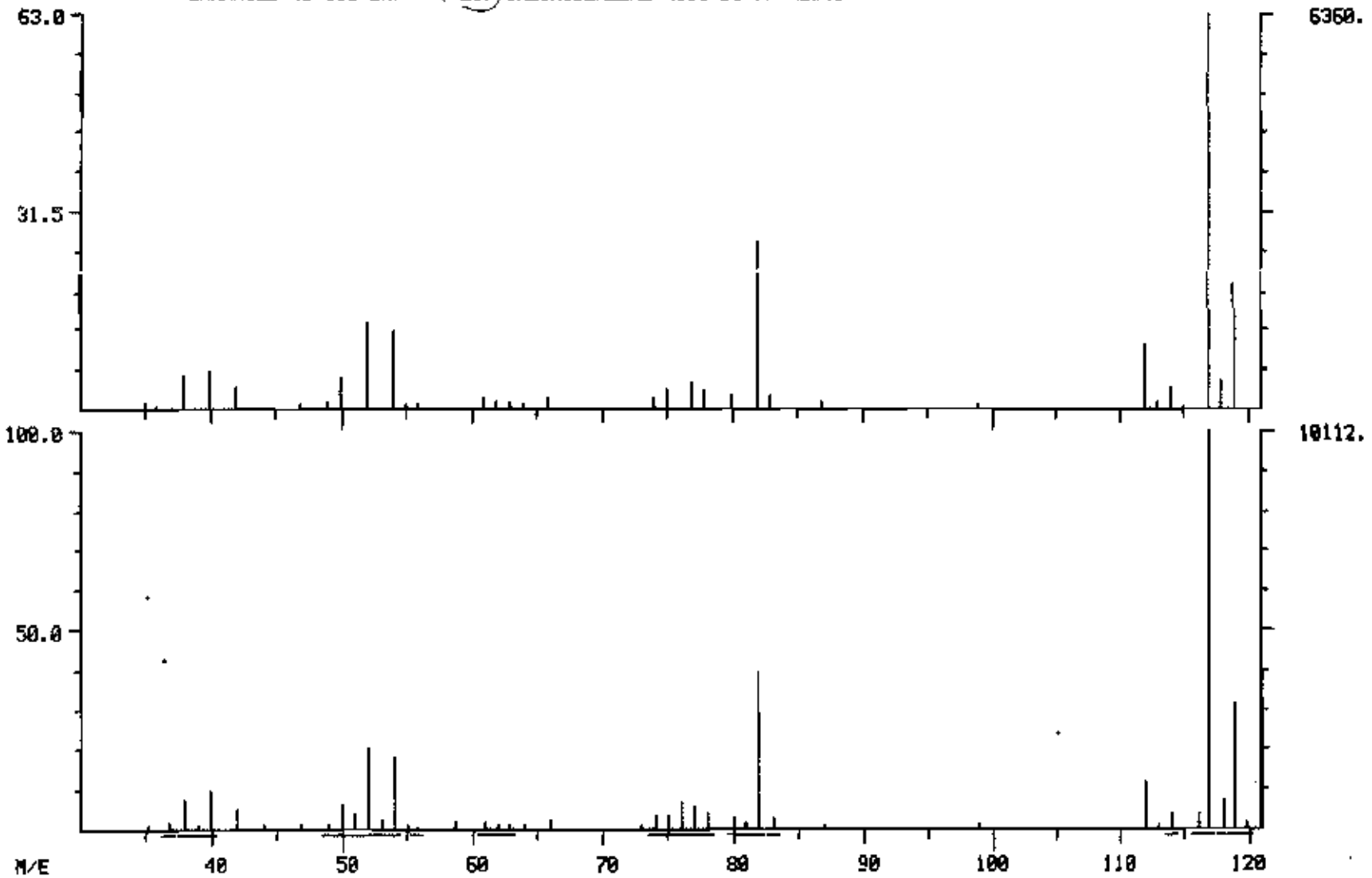

COMPUCHEM LABS
LIBRARY SEARCH
DATA: CN037932A19 # 750
BASE M/E: 117
RIC: 20393.
05/15/90 10:14:20 + 9:22
SAMPLE: SML CC#337832 EPA#5:73800105 CASE#20124 CN#19
ENHANCED (S 15B 2H 8T)
SAMPLE
1000
C6.H5.CL
207 CHLOROBENZENE (108-90-7) MW=45
SAMPLE MINUS LIBRARY
1000
0
-1000
M/E
40
50
60
70
80
90
100
110
12

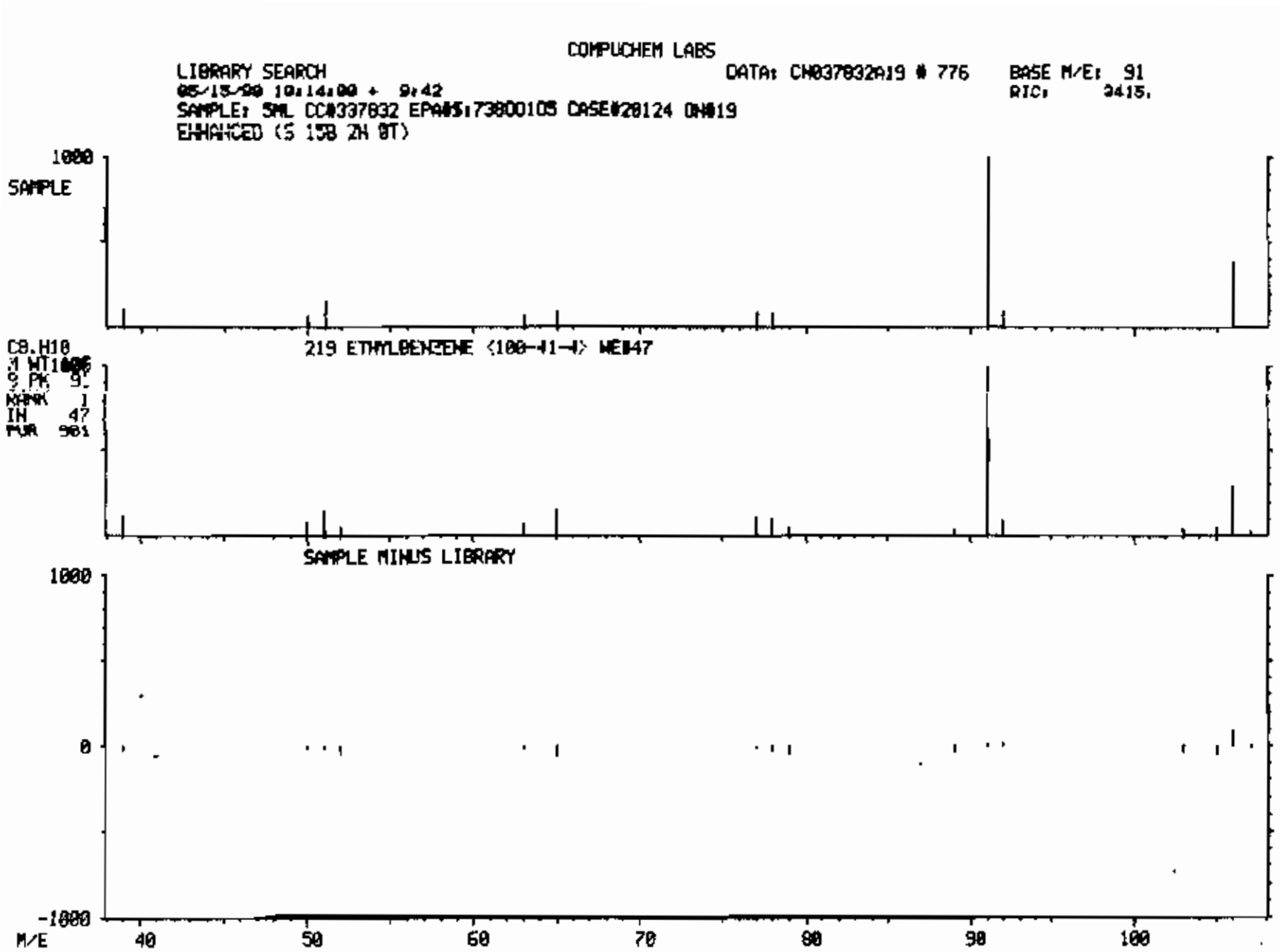
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 10:14:00 + 0:22
SAMPLE: 5ML CC#337832 EPA#S:7380010S CASE#20124 ON#19
ENHANCED (S 15B 2H)

DATA: CN#37832A19 #750 BASE M/E: 117/ 117
RIC: 20767./ 32767.

(287) CHLOROBENZENE (108-90-7) WE#45





1603

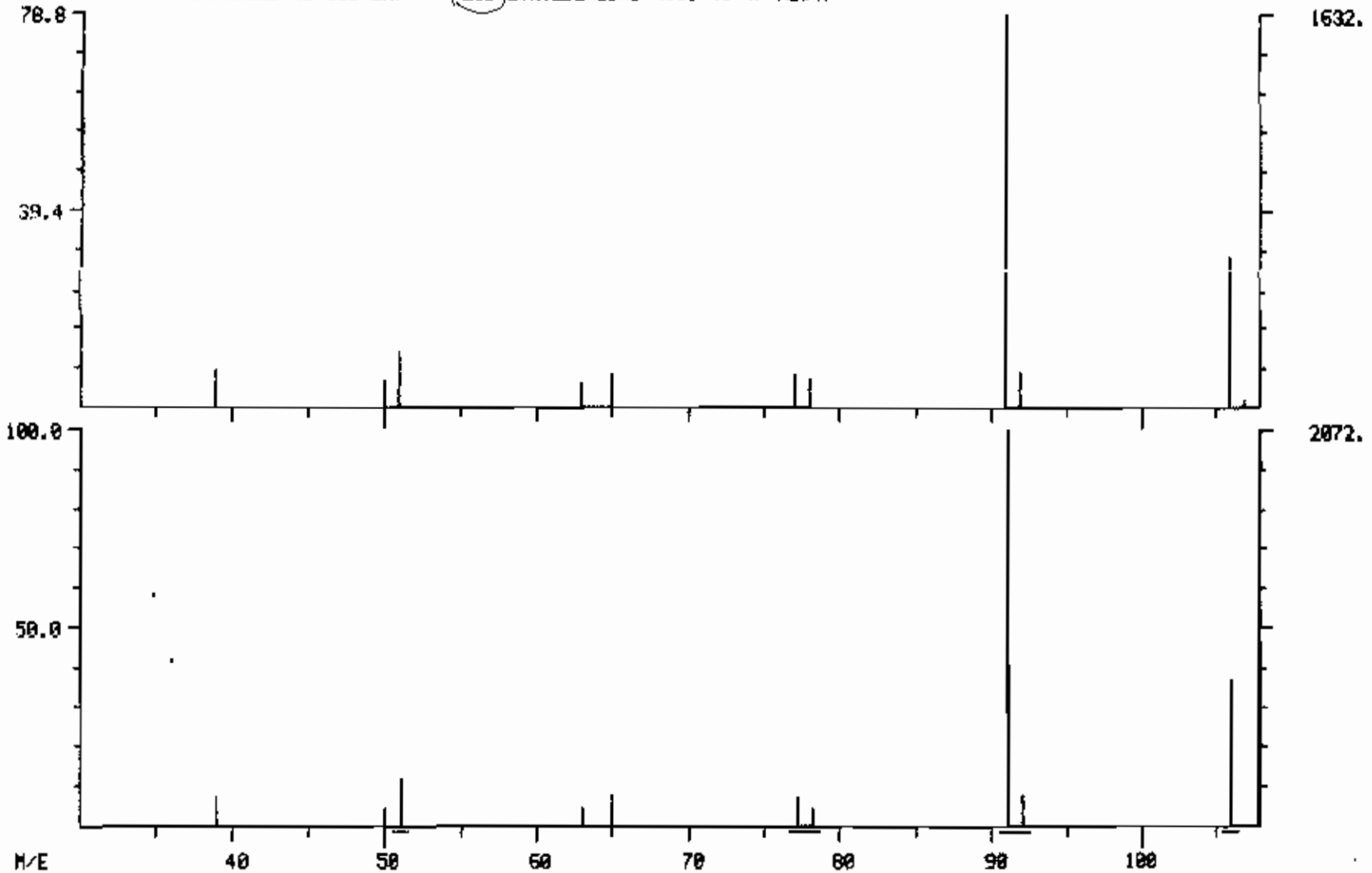
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 10:14:00 + 9:42
SAMPLE: 5ML CC#337832 EPA#S:73800105 CASE#20124 ON#19
ENHANCED (S 158 214)

DATA: CN037832A19 #776 BASE M/E: 91/ 91
RIC: 9416./ 3971.

219 ETHYLBENZENE (100-41-4) WE#47

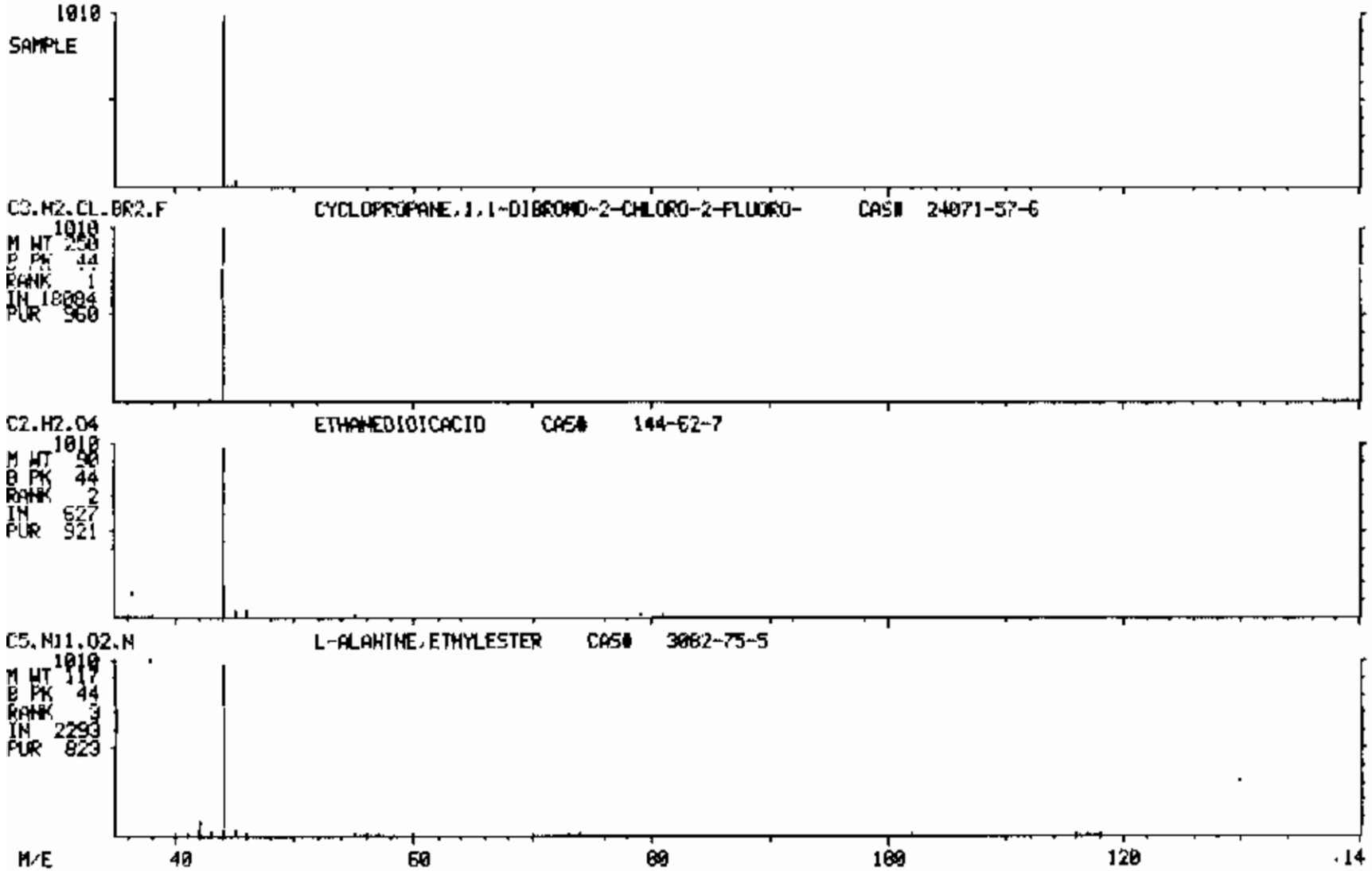


1602

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037832A19 # 35 BASE M/E: 44
05/15/90 10:14:00 + 0:26 RIC: 3023.
SAMPLE: 5ML CC#337832 EPA#S:73800105 CASE#20124 ON#19
ENHANCED (S 15B 2N 8T)



COMPUCHEM LABS
LIBRARY SEARCH
SAMPLE: 5ML CC0337832 EPA#S173800105 CASE#20124 ON#19
ENHANCED (5 15B 2H 0T)
DATA: CH0378320419 # 76
BASE M/E: 59
RIC: 6023.
1444
SAMPLE
C4,H10,O
M WT 74
B PK 59
RANK 1
IN PUR 223
927
ETHANE,1,1'-OXYBIS-
CAS# 60-29-7
C6,H14,O2
M WT 118
B PK 59
RANK 2
IN PUR 2358
835
ETHANE,1,2-DIETHOXY-
CAS# 629-14-1
C4,H10,O
M WT 74
B PK 59
RANK 3
IN PUR 245
710
PROPANE,2-METHOXY-
CAS# 598-53-8
M/E
40
50
60
70
80
90
100
110
120
130

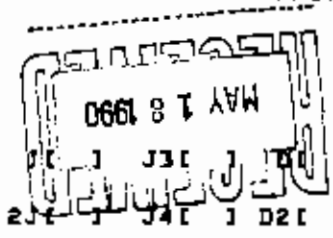
LIBRARY SEARCH
COMPUCHEM LABS
DATA: CN0337832A19 # 92
BASE M/E: 45
SAMPLE: 5ML CN0337832 EPA#51738001D5 CASE#20124 CN#19
ENHANCED (S 1SB 2H 0T)
1401
SAMPLE
C3.H8.02
METHANE,DIMETHOXY-
CAS# 109-87-5
C3.H10.0.SI
SILANOL,TRIMETHYL-
CAS# 1066-40-6
C4.H10.03
ETHANOL,2,2'-OXYBIS-
CAS# 111-46-6
M/E
40
50
60
70
80
90

LAB INSTRUCTIONS:
SEE PPS#407 CASE#RA090 SDG#0507

PPS#: _____

RECEIPT DATE: 05/09/90 CASE#: 20124

VOA
GC/MS WORKSHEET COMPUCHEM#: 337832



J3[ ] D1[ ] (:1)
J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73800105

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF900515C19 Disk ( )
Blank Filename CB900515C19 Disk ( )
Standard Filename CS900515C19 Disk ( )
Sample Filename CN037832A19 Disk ( )

ANALYST(S): Injection MR2/Alan Fink Work-up MR2/Alan Fink

GC/MS REVIEW

CONDITION CODE [QC]

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 3

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 2

[ ] Dilute (:1)

COMMENTS:

GC/MS Review Richard Date 5/17/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN0-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	246	42900	50.0		
221	50		CHLOROMETHANE				BDL	10
231	62		VINYL CHLORIDE				BDL	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE			3.3	3J	10
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE			3.1	3J	5
252	43		ACETONE (2-PROPANONE)			~~3.8~~	~~4J~~	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	375	189000	50.0		
222	84		METHYLENE CHLORIDE			4.2	4JB	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLOROETHANE			49.6	50	5
257	43		VINYL ACETATE				BDL	10
237	96		CIS-1,2-DICHLOROETHENE				BDL	5
253	72		2-BUTANONE				BDL	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
206	117		CARBON TETRACHLORIDE				BDL	5
203	78		BENZENE			18.6	19	5
215	62		1,2-DICHLOROETHANE			5.8	6	5
270	117	I	D5-CHLOROBENZENE (IS)	747	120000	50.0		
229	120		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				BDL	15
225	92		TOLUENE				BDL	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				BDL	15
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE			3.4	3	5
219	106		ETHYLBENZENE			7.9	8	5
330	106		M,P-XYLENE			~~5.8~~	~~BDL 6~~	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 WE#57			54.8	110.%	
247	95	S	BROMOFLUOROBENZENE			47.1	94.%	
233	98	S	D8-TOLUENE WE#59 SS#2			48.9	98.%	
289	106		XYLENES (TOTAL)			~~5.8~~	~~6~~	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-16-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS: 3979.				1368	351900.	414.1		114.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-16-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	54.8	50.0	110.	76-114	X	
41	247	BROMOFLUOROBENZENE	47.1	50.0	94.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	48.9	50.0	98.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ UL}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ UL}{5000.\ (UL)} = 1.00 = \frac{5.000\ ML}{5.000\ (ML)}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-16-91

QUALITY ASSURANCE NOTICE
CompuChem # 337832
Instrument Blank : CBSCC05C/9
Client ID # 739GW15
Case 20124

The early-eluting peak on the RIC of the volatile fraction at scan # 35 is an instrument artifact believed to be a mixture of water and various atmospheric gases. This peak is usually present at less than 10% of the nearest-eluting internal standard peak height, although it may exceed this height under certain instrument conditions.

Periodically, a number of maintenance procedures are performed in an effort to reduce the intensity of this artifact. These procedures may include:

-trap replacement
-reconditioning and/or replacing column
-replacing six-port valve in Tekmar
-cleaning of the separator
-cleaning or replacing source
-replacing lines in Tekmar

In many cases, even after maintenance, the artifact peak remains at a height greater than 10% of the nearest internal standard. Since the analytical quality of these data have not been compromised, we are reporting this analysis with reference to this qualifer. The artifact is not included as part of the Library Search requirements for the associated samples.

Robert J. Whitehead
Manager, Quality Assurance

QAN:19V
872917

QUALITY ASSURANCE NOTICE
CompuChem # 337932
Blank ID # CB0001509
Case 20124

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C-4295
8-1026

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800106

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337833

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037833A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	23	B
67-64-1	Acetone	17	
75-15-0	Carbon Disulfide	9	
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	3	J
124-48-1	Dibromochloromethane	5	U
79-00-5	1,1,2-Trichloroethane	5	U
71-43-2	Benzene	4	J
10061-02-6	Trans-1,3-Dichloropropene	5	U
75-25-2	Bromoform	10	U
108-10-1	4-Methyl-2-Pentanone	3	J
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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

71800106

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337833

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037833A19

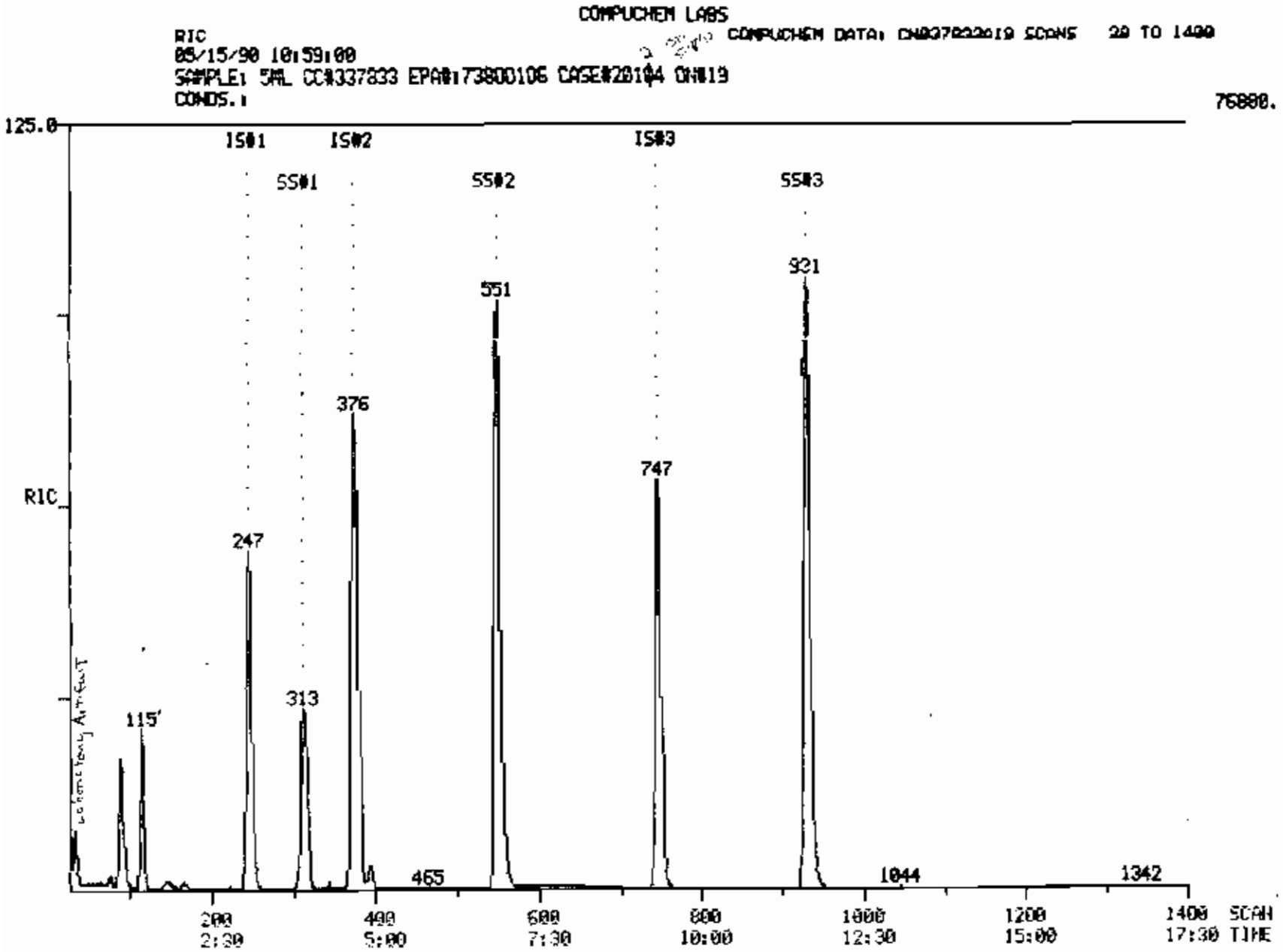
Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	0.43	3.0	J



1590

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037833A19
DATA: CN037833A19.T1
05/15/90 10:59:00
SAMPLE: 5ML CC#337833 EPA#: 73800106 CASE#20104 ON#19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1492

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

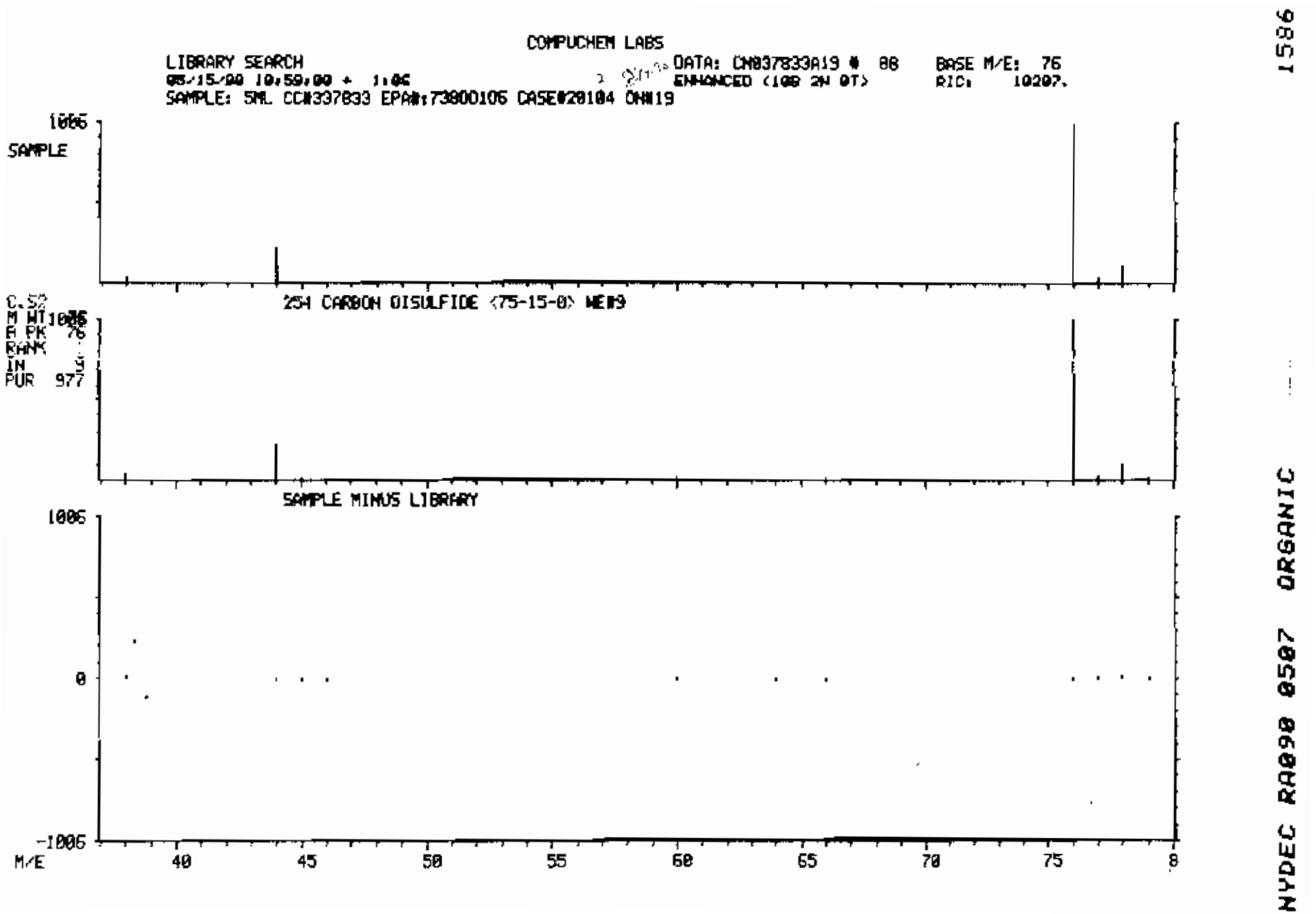
NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLORDETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE414
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLORDETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLORDETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLORDETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLORDPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

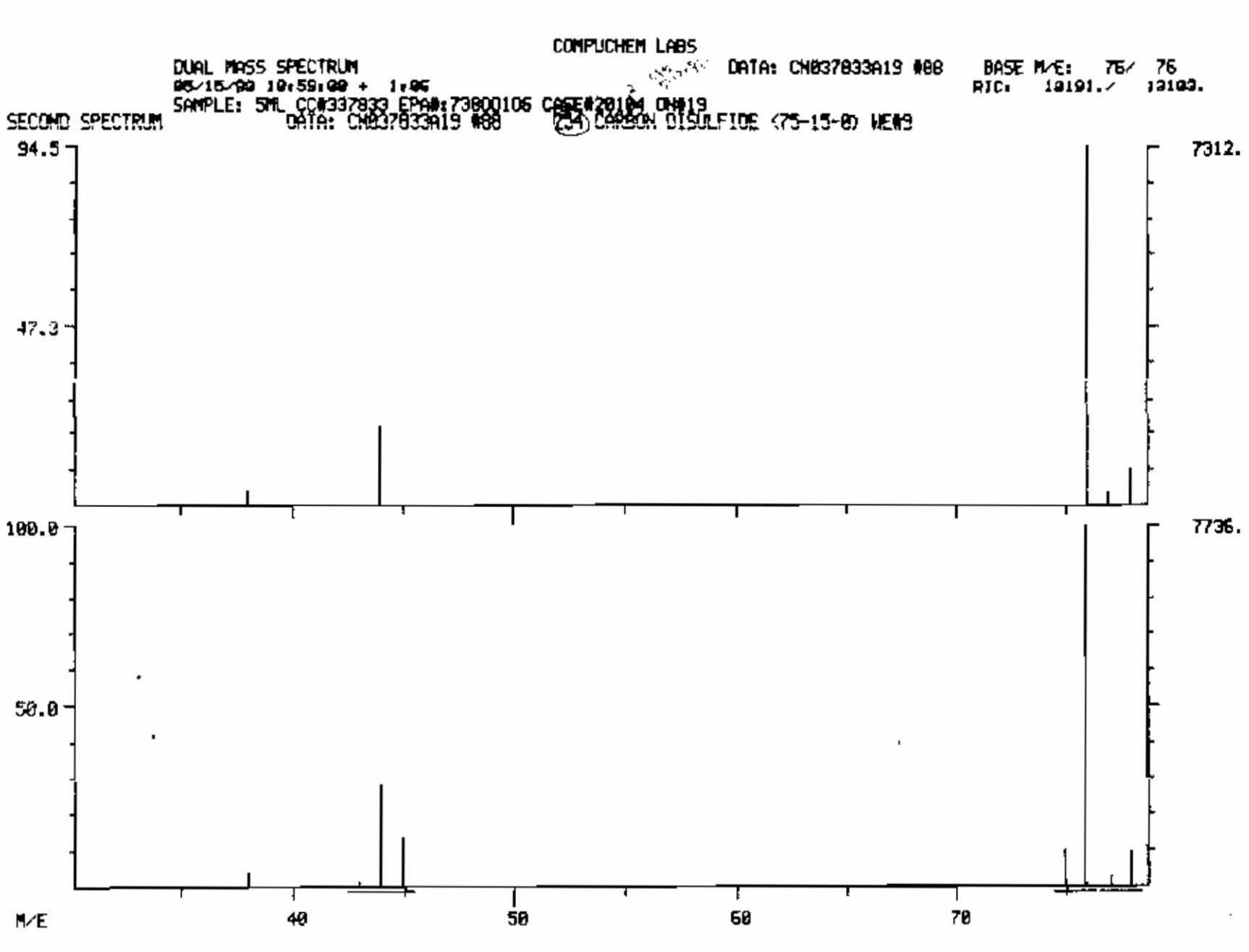
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	246	3:04	1	1.000	A BB	46240.	30.000 UG/L	14.22
2	50	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		XTOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	88	1:06	1	0.358	A BB	30713.	9.183	UG/L	2.61
8	43	92	1:09	1	0.374	A BB	4065.	16.965	UG/L	4.83
9	114	375	4:41	9	1.000	A BB	180996.	50.000	UG/L	14.22
10	84	115	1:26	1	0.467	A BB	18779.	23.177	UG/L	6.59
11	96	NOT FOUND								
12	63	166	2:04	1	0.675	A BB	2809.	2.753	UG/L	0.78
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	311	3:53	9	0.829	A BB	8012.	4.401	UG/L	1.25
20	62	NOT FOUND								
21	117	747	9:20	21	1.000	A BB	124430.	50.000	UG/L	14.22
22	130	393	4:55	9	1.048	A BB	4515.	2.698	UG/L	0.77
23	63	NOT FOUND								
24	80	NOT FOUND								
25	75	NOT FOUND								
26	43	565	7:04	21	0.756	A VB	2968	3.290	UG/L	0.94
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	313	3:59	1	1.272	A BB	52084.	44.964	UG/L	12.79
41	95	931	11:38	21	1.246	A BB	68053.	46.471	UG/L	13.22
42	98	551	6:53	21	0.738	A BB	176572.	47.686	UG/L	13.57

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39		10.000			50.00		0.751	
6	1:03		5.000			50.00		1.389	
7	1:07	0.99	5.000	0.07	9.18	50.00	0.664	3.616	0.18
8	1:11	0.97	10.000	0.04	16.97	50.00	0.088	0.259	0.34
9	4:45	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	0.99	5.000	0.09	23.18	50.00	0.106	0.876	0.46
11	1:40		5.000			50.00		0.941	
12	2:05	0.99	5.000	0.13	2.75	50.00	0.061	1.103	0.06
13	2:19		10.000			50.00		0.255	
14	2:49		5.000			50.00		0.937	

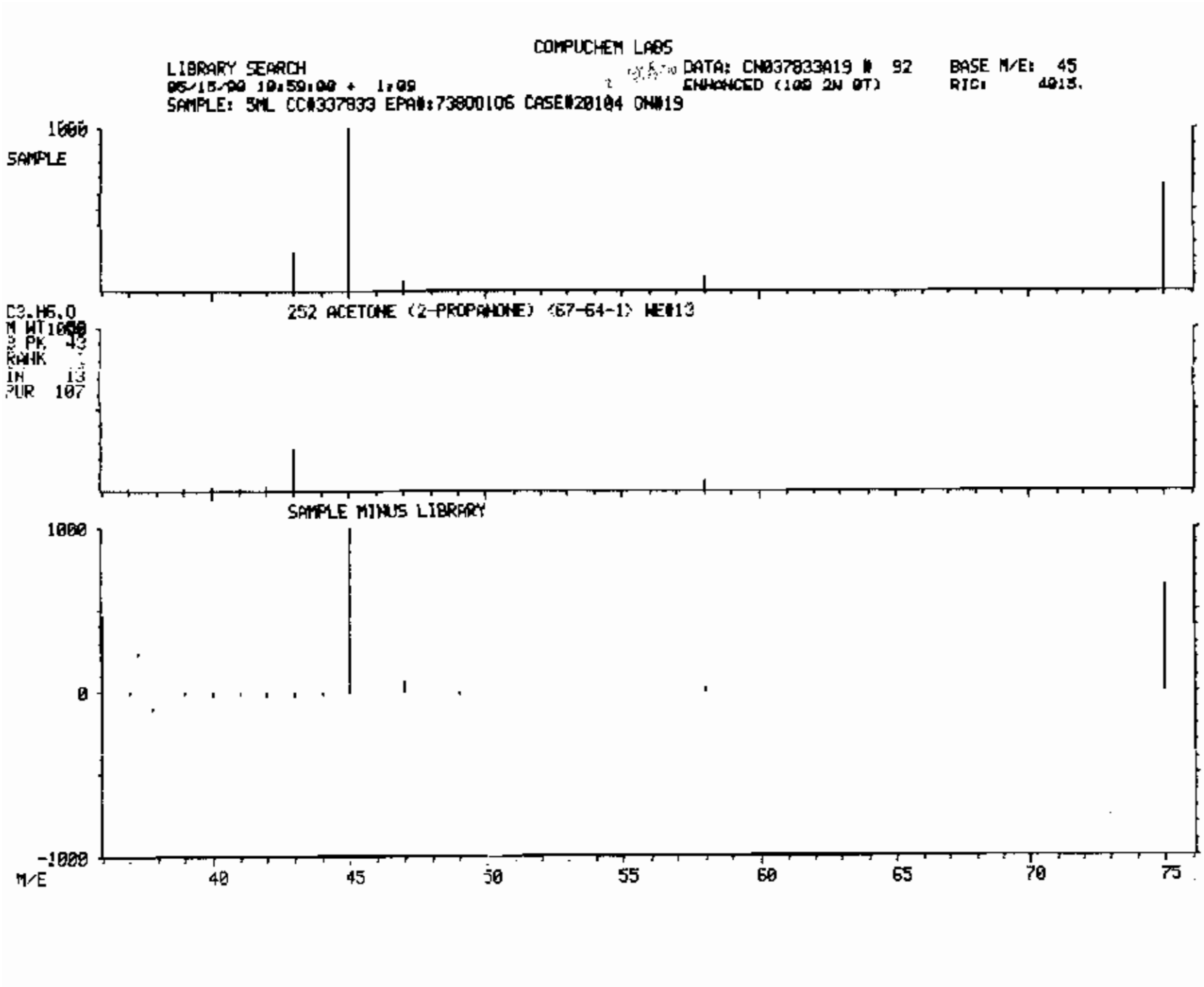
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000			50.00		0.560	
19	3:55	0.99	5.000	0.17	4.40	50.00	0.014	0.495	0.09
20	4:04		5.000			50.00		1.236	
21	9:24	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58	0.99	5.000	0.21	2.70	50.00	0.025	0.455	0.05
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06	0.99	15.000	0.05	3.29	50.00	0.024	0.362	0.07
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	0.98	5.000	0.25	44.96	50.00	1.126	1.253	0.90
41	11:42	0.99	5.000	0.25	46.47	50.00	0.547	0.588	0.93
42	6:57	0.99	5.000	0.15	47.69	50.00	1.419	1.488	0.95

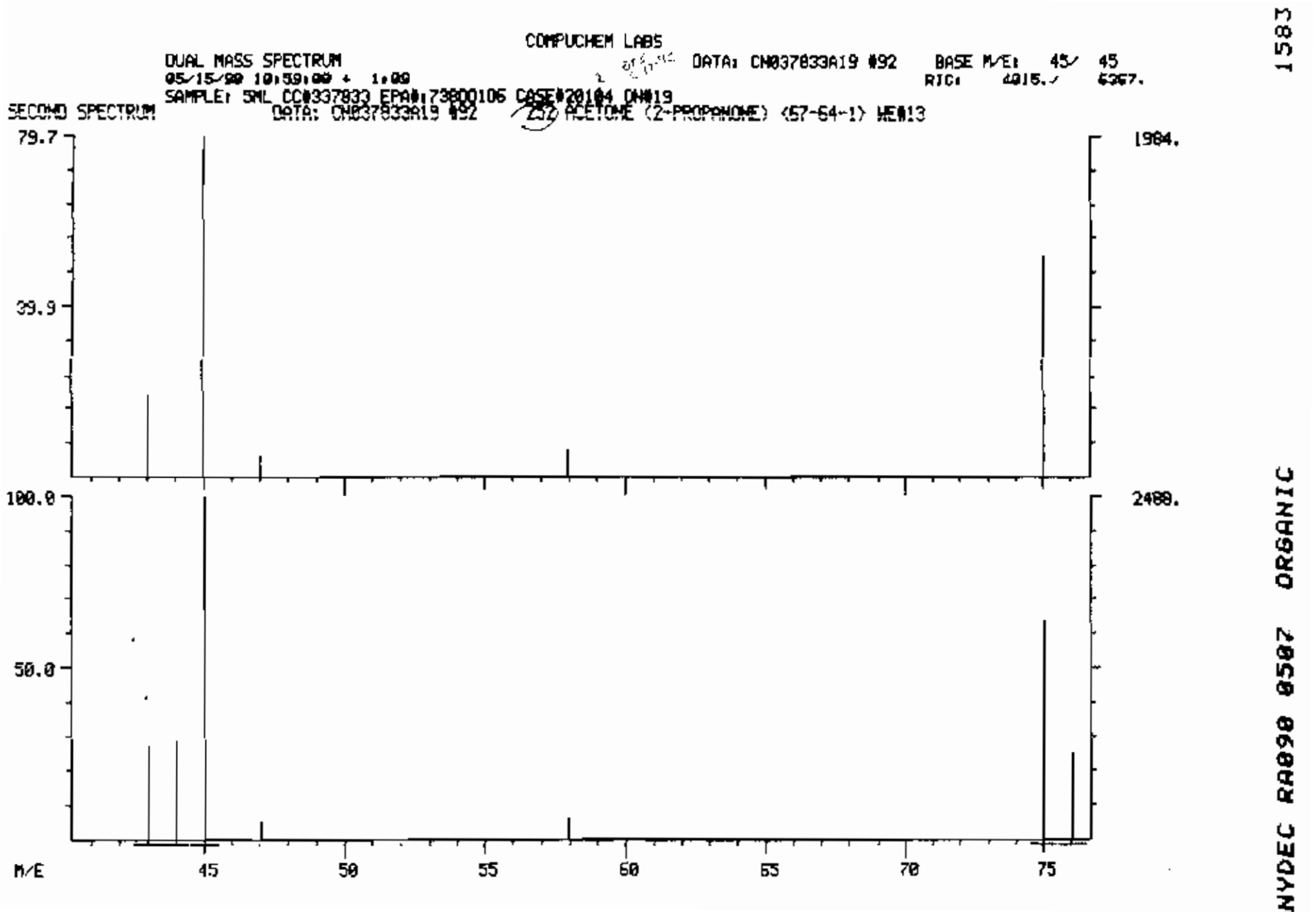




1585

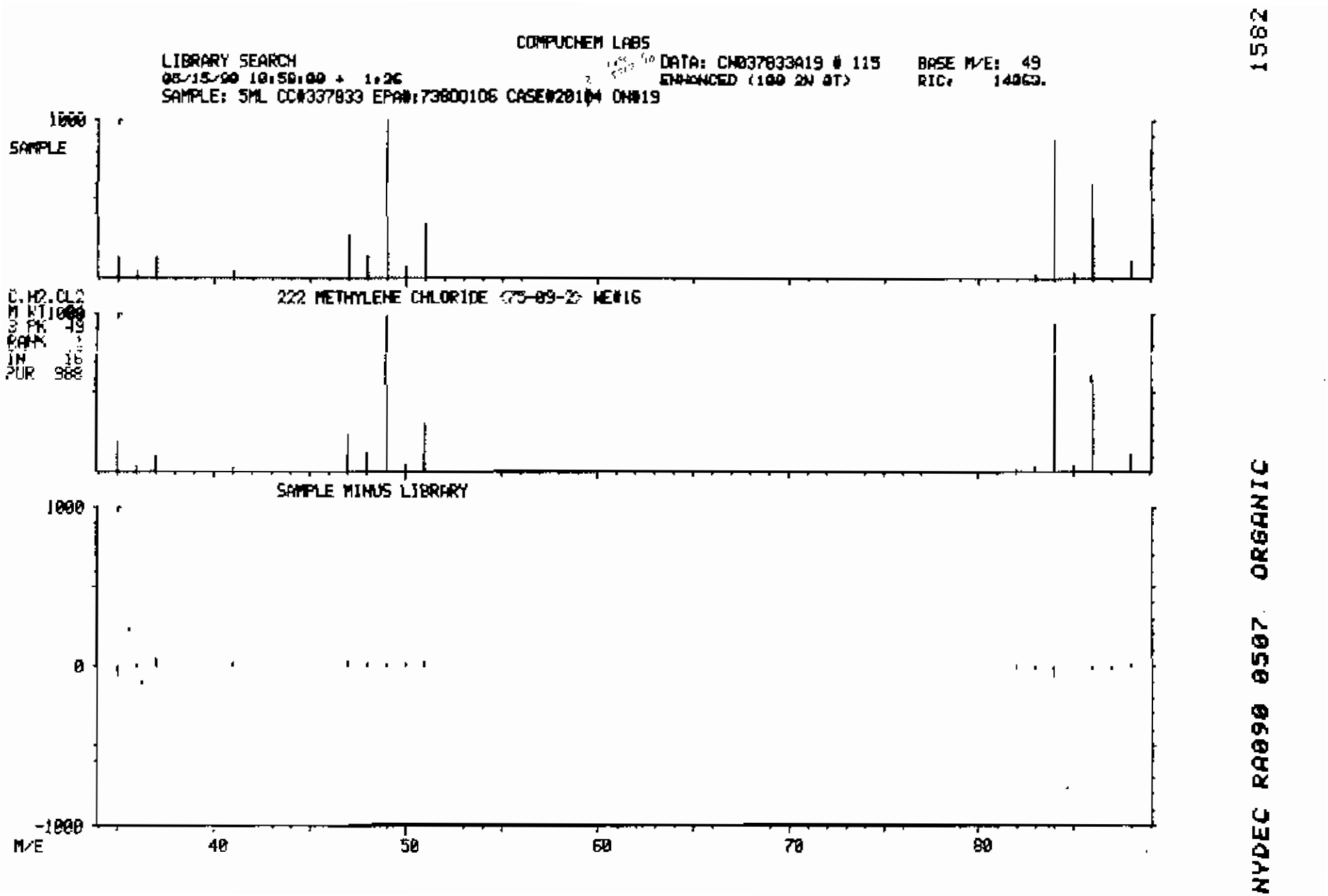
NYDEC RA090 0507 ORGANIC


COMPUCHEM LABS
LIBRARY SEARCH
05/15/90 10:59:00 + 1:09
DATA: CN037833A19 # 92
ENHANCED (100 2N 0T)
BASE M/E: 45
RIC: 4915.
SAMPLE: 5ML CC#337833 EPA#:73800106 CASE#20104 ON#19
SAMPLE
1000
C3.H6.O
M WT 1000
PK
RANK
IN 13
PUR 107
252 ACETONE (2-PROPANONE) (67-64-1) NE#13
SAMPLE MINUS LIBRARY
1000
0
-1000
M/E
40
45
50
55
60
65
70
75



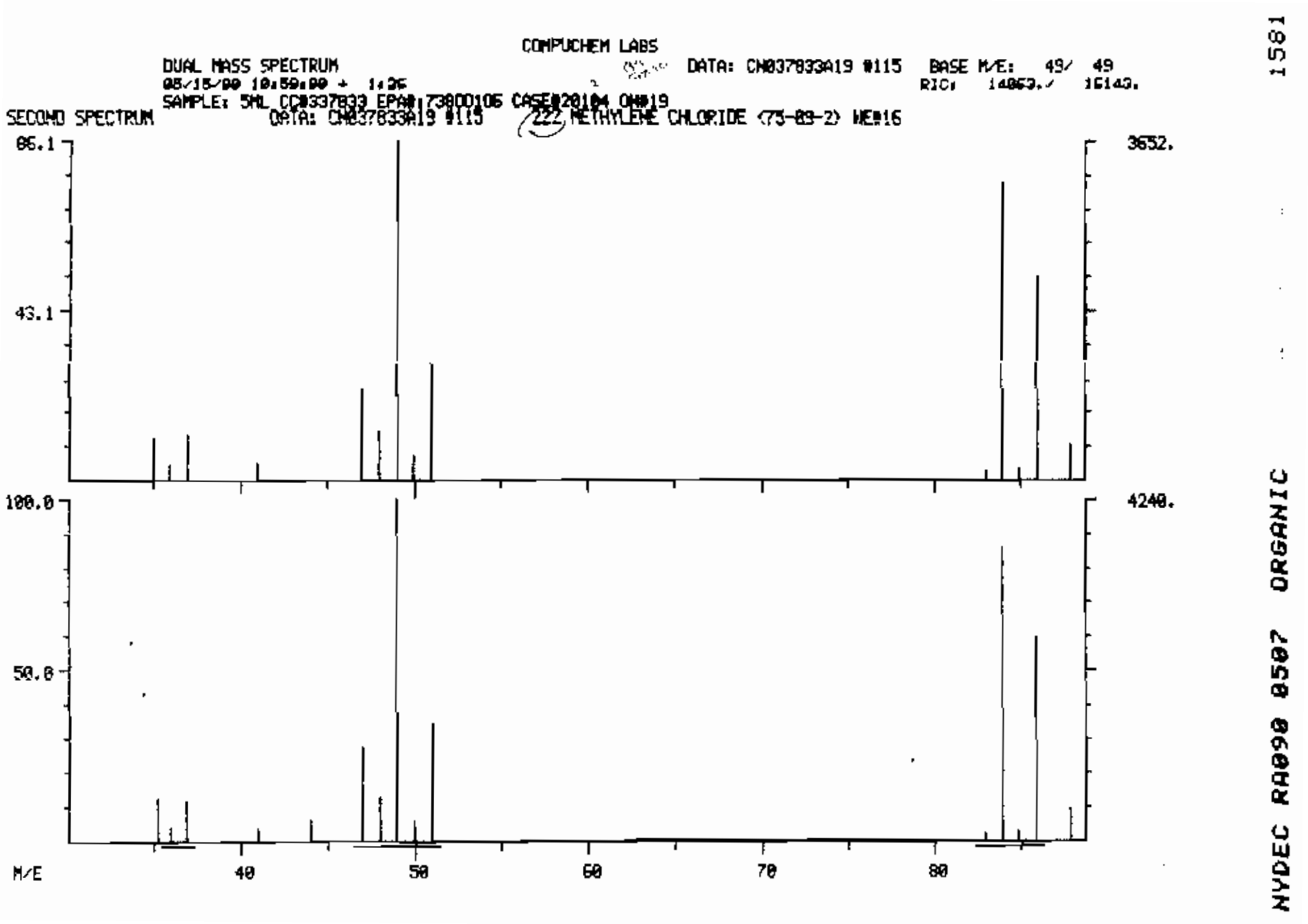
1583

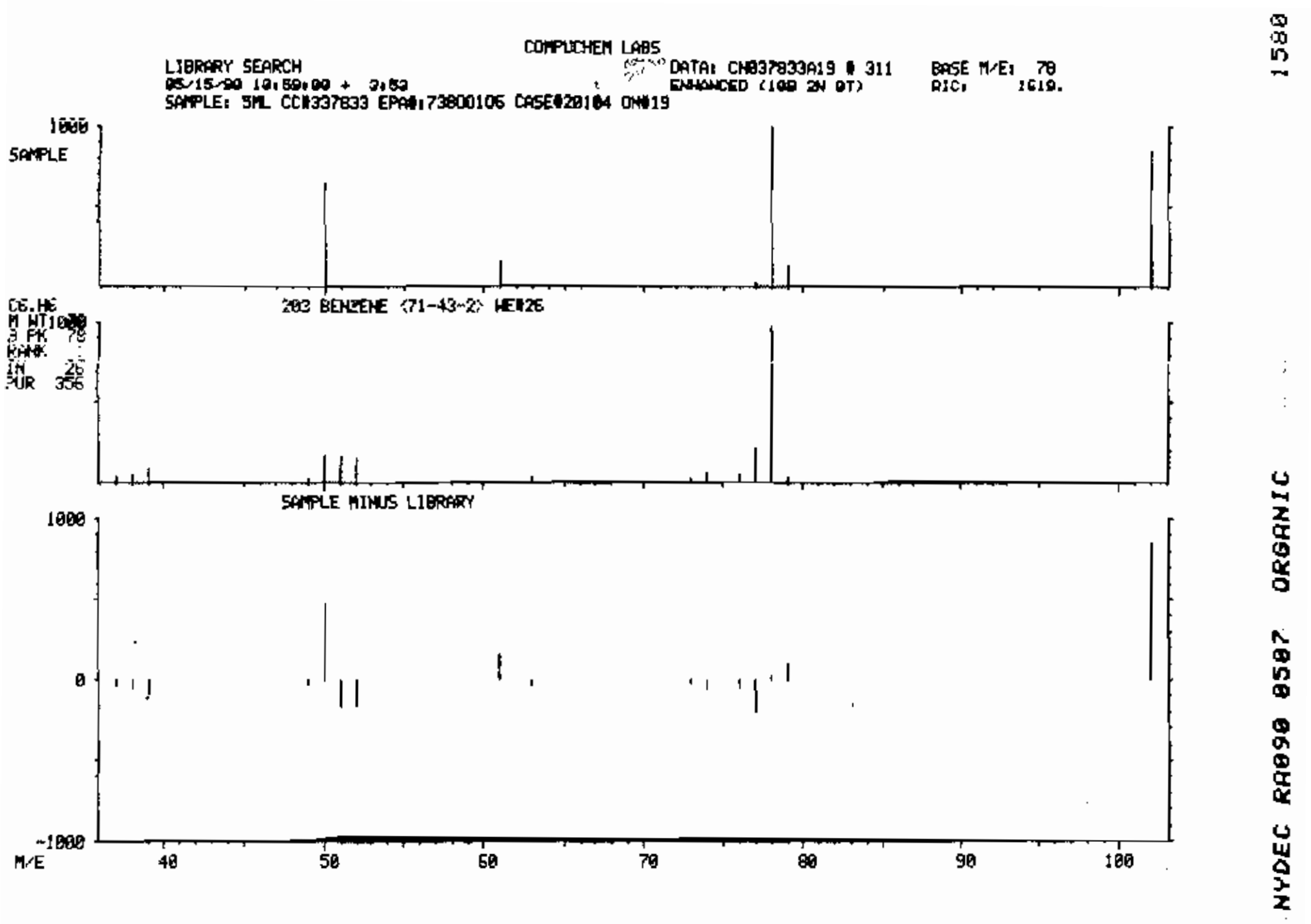
NYDEC RA090 0507 ORGANIC

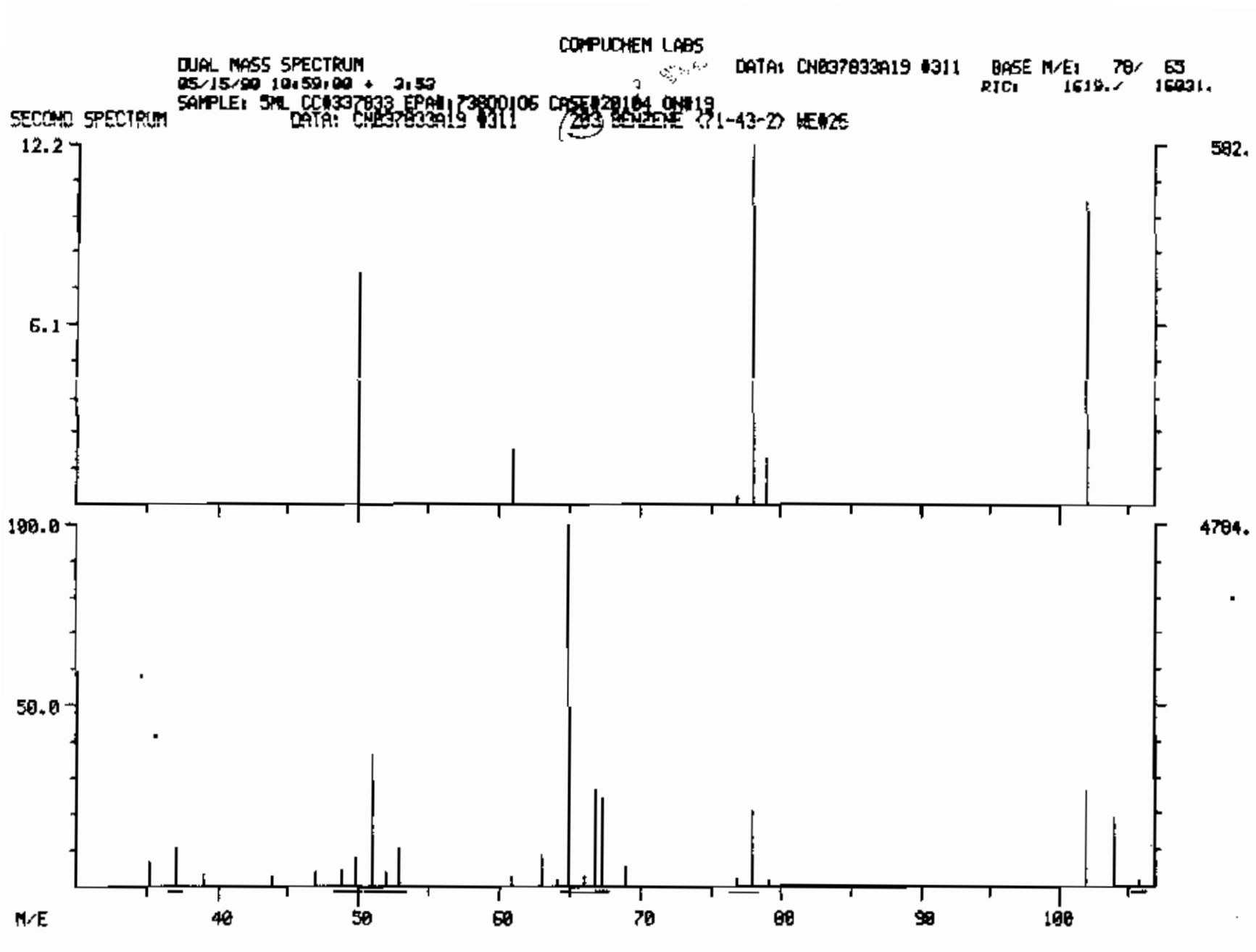


1562

NYDEC RA090 0507 ORGANIC

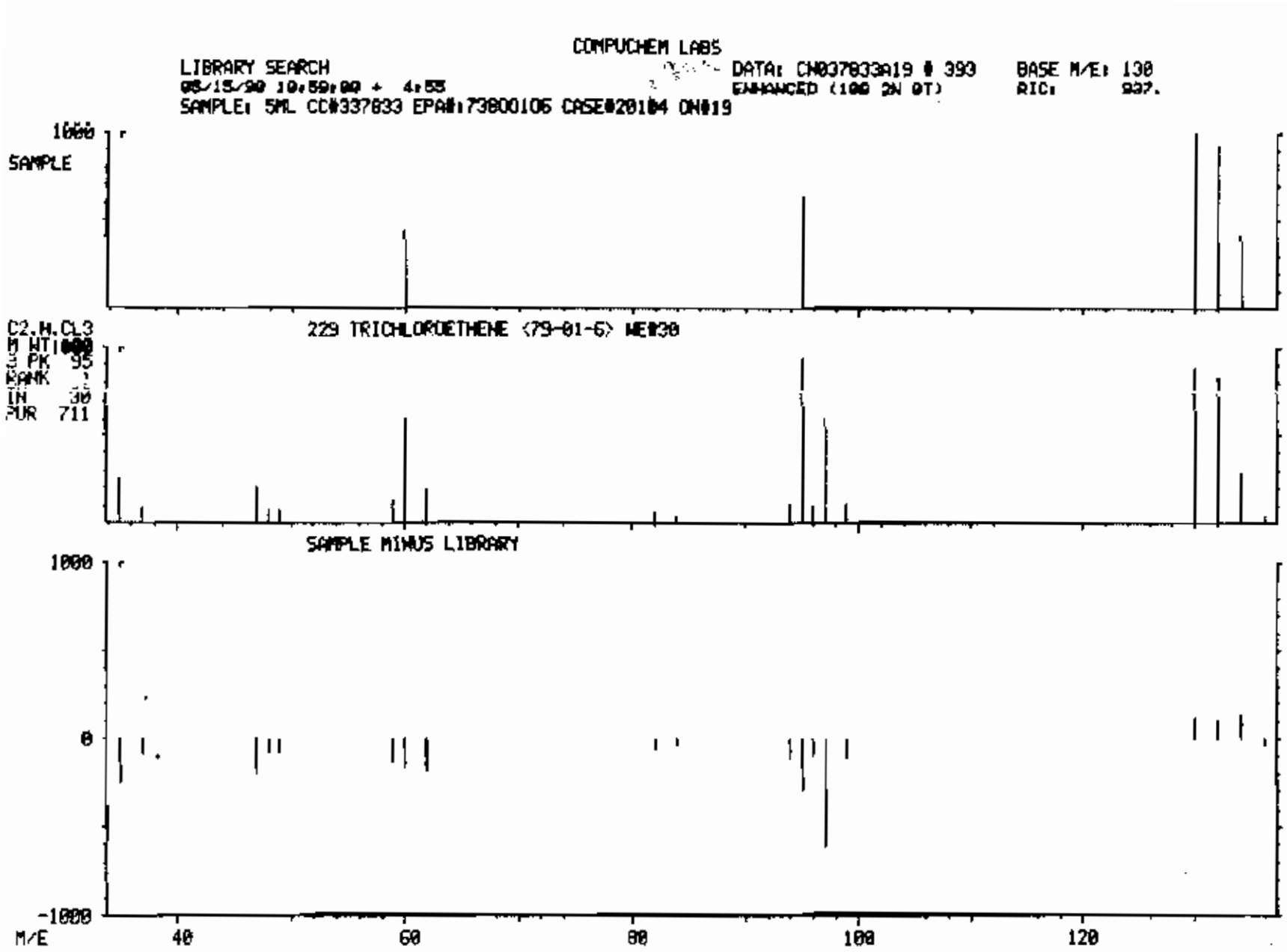


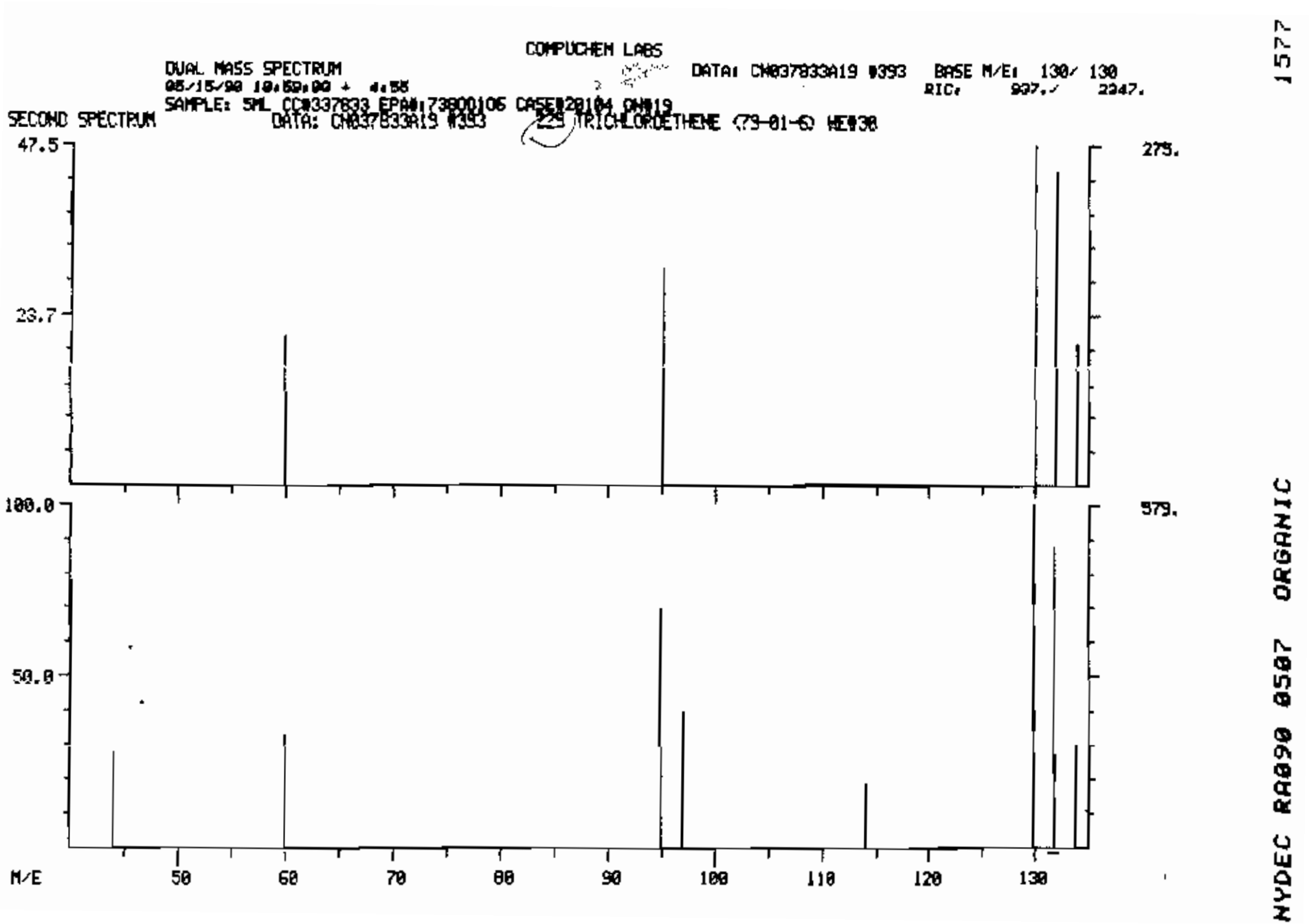




1579

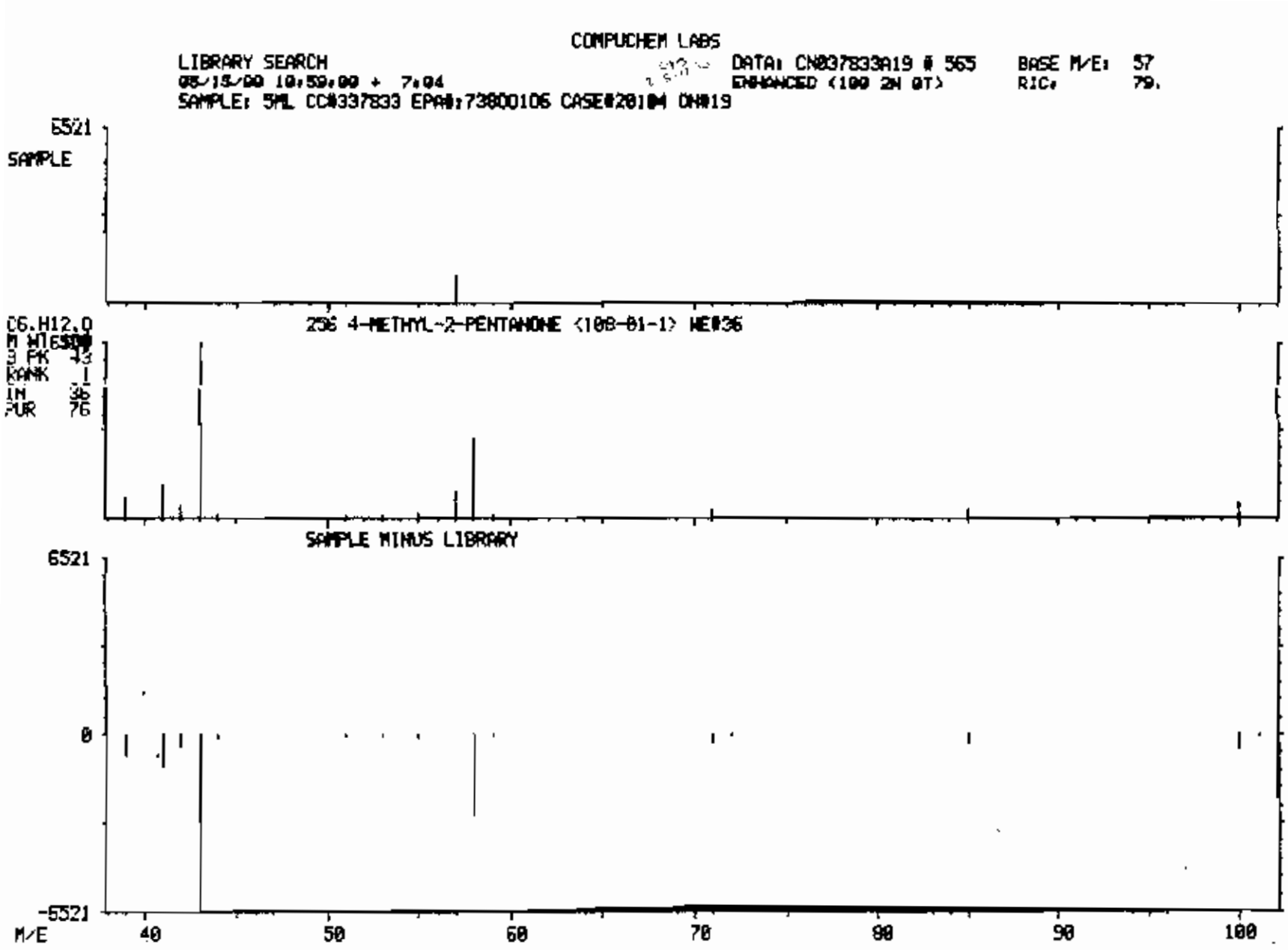
HYDEC RA090 0507 ORGANIC


COMPUCHEM LABS
LIBRARY SEARCH
05/15/90 10:59:00 + 4:55
SAMPLE: 5ML CC#337633 EPA#:73000106 CASE#20184 ON#19
DATA: CN037033A19 # 393
ENHANCED (100 2N 0T)
BASE M/E: 130
RIC: 937.
SAMPLE
C2.H.CL3
M WT
PK 95
RANK
IN 30
PUR 711
229 TRICHLOROETHENE (79-01-6) ME#30
SAMPLE MINUS LIBRARY
1000
0
-1000
M/E
40
60
80
100
120



1577

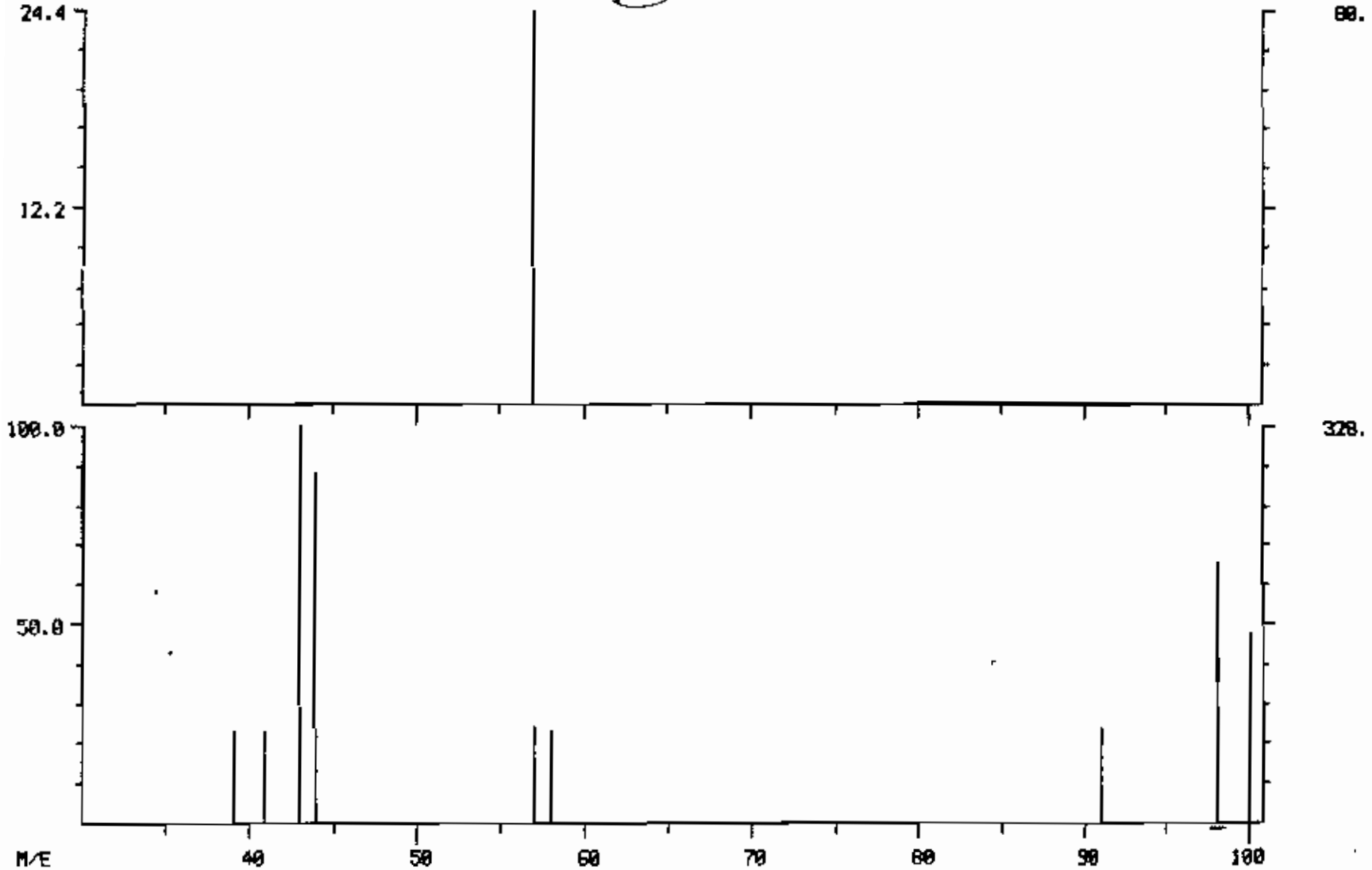
NYDEC RA090 0507 ORGANIC



COMPUCHEM LABS

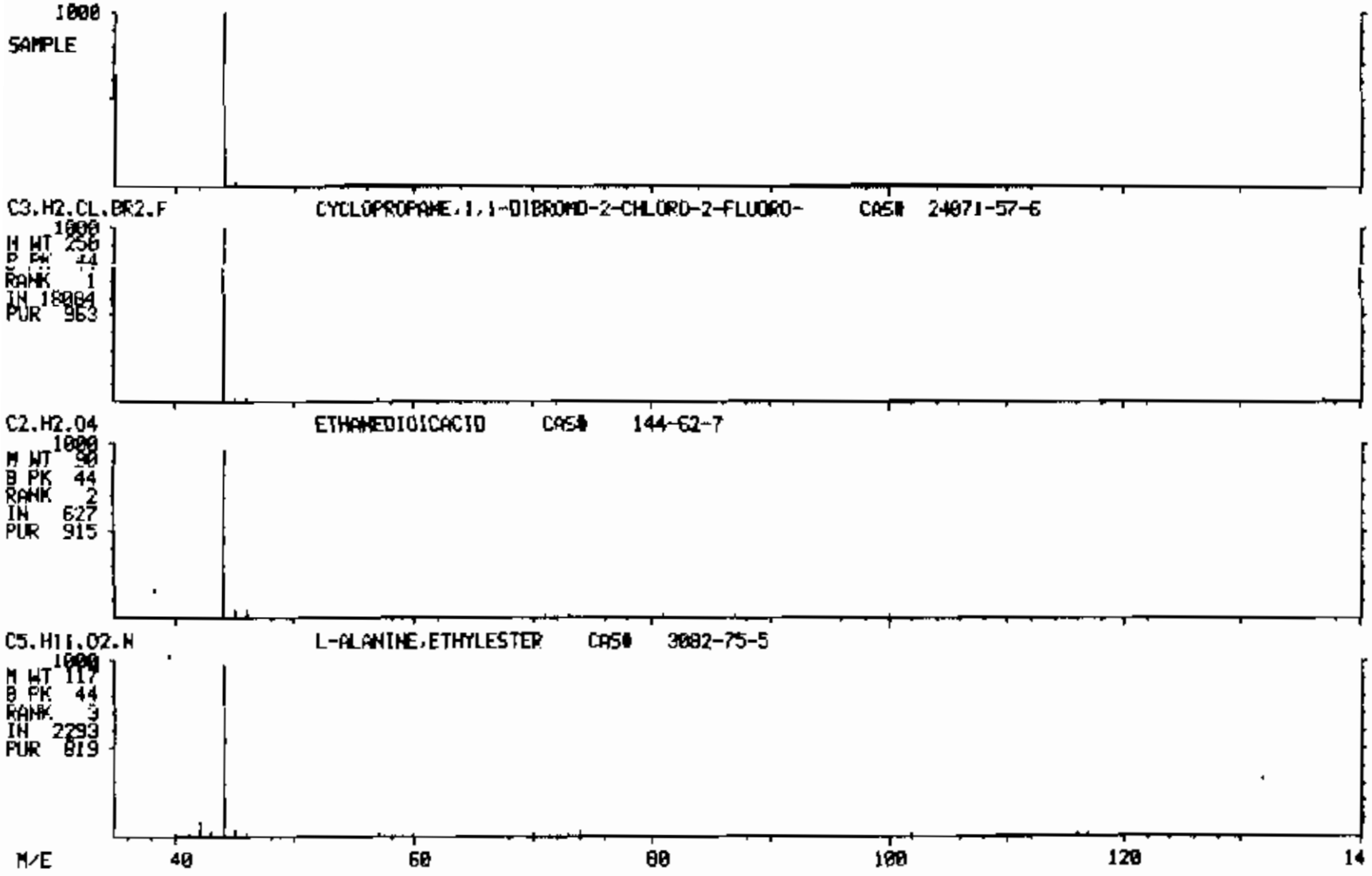
DUAL MASS SPECTRUM DATA: CN037833A19 #565 BASE M/E: 57/ 43
05/15/90 10:59:00 + 7:04 RIC: 79./ 1972.
SAMPLE: 5ML CC#337833 EPA#173000106 CASE#20104 DN#19

SECOND SPECTRUM DATA: CN037833A19 #565 205 4-METHYL-2-PENTANONE (108-01-1) WE#35



COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037833A19 # 35 BASE M/E: 44
05/15/90 10:59:00 + 0:26 RIC: 4011.
SAMPLE: 5ML CC#337833 EPA#:73800106 CASE#20104 CN#19
ENHANCED (S 15B 2N 0T)



LAB INSTRUCTIONS:
SEE PPS#407 CASE#RA090 SDG#0507

PPS#: _____

RECEIPT DATE: 05/09/90 CASE#: 20124

VOA J[ ] J3[ ] D[ ] (:1)
GC/MS WORKSHEET COMPUCHEM#: 337833
2J[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: T3800106

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added _____ ul
BFB Filename BF900515C19 Disk ( )
Blank Filename CBW0515C19 Disk ( )
Standard Filename CS900515C19 Disk ( )
Sample Filename CN037933A19 Disk ( )

RECEIVED
MAY 1 1990

ANALYST(S): Injection 1492/Alan Fuhr Work-up 1492/Alan Fuhr

GC/MS REVIEW

CONDITION CODE: Ok

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 1

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 2

[ ] Dilute (:1)

COMMENTS:

GC/MS Review Date 5/17/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN0-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	246	46200	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	5
254	76		CARBON DISULFIDE			9.2	9	5
282	43		ACETONE (2-PROPANONE)			17.0	17	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	375	184000	50.0		
202	84		METHYLENE CHLORIDE			23.2	23B	5
225	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLOROETHANE			~~2.8~~	~~BDL 3J~~	5
237	43		VINYL ACETATE				BDL	10
237	96		CIS-1,2-DICHLOROETHENE				BDL	5
253	72		2-BUTANONE				BDL	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
206	117		CARBON TETRACHLORIDE				BDL	5
203	78		BENZENE			4.4	4J	5
215	62		1,2-DICHLOROETHANE				BDL	5
270	117	I	D5-CHLOROBENZENE (IS)	747	124000	50.0		
229	130		TRICHLOROETHENE			2.7	3J	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			3.3	3J	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE , 124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	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 WE#57			45.0	90.%	
247	95	S	BROMOFLUOROBENZENE			46.5	93.%	
233	98	S	D8-TOLUENE WE#59 SS#2			47.7	95.%	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/7/90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS:								
	3979.			1368	354200.	351.8		62.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5.17.90

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	45.0	50.0	90.	76-114	X	
41	247	BROMOFLUOROBENZENE	46.5	50.0	93.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	47.7	50.0	95.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ UL}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ UL}{5000.\ (UL)} = 1.00 = \frac{5.000\ ML}{5.000\ (ML)}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5/17/90

QUALITY ASSURANCE NOTICE
CompuChem # 337532
Blank ID # CB900517CF
Case 90134

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2.	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C-4296
6-1026

QUALITY ASSURANCE NOTICE
CompuChem # 33782
Instrument Blank : 8090517S19
Client ID # 738CC10L
Case 3011

The early-eluting peak on the RIC of the volatile fraction at scan # 35 is an instrument artifact believed to be a mixture of water and various atmospheric gases. This peak is usually present at less than 10% of the nearest-eluting internal standard peak height, although it may exceed this height under certain instrument conditions.

Periodically, a number of maintenance procedures are performed in an effort to reduce the intensity of this artifact. These procedures may include:

-trap replacement
-reconditioning and/or replacing column
-replacing six-port valve in Tekmar
-cleaning of the separator
-cleaning or replacing source
-replacing lines in Tekmar

In many cases, even after maintenance, the artifact peak remains at a height greater than 10% of the nearest internal standard. Since the analytical quality of these data have not been compromised, we are reporting this analysis with reference to this qualifer. The artifact is not included as part of the Library Search requirements for the associated samples.

Robert J. Whitehead
Manager, Quality Assurance

QAN:1SV
870917

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800107

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337834

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037834A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	3	BJ
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

73800107

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337834

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037834A19

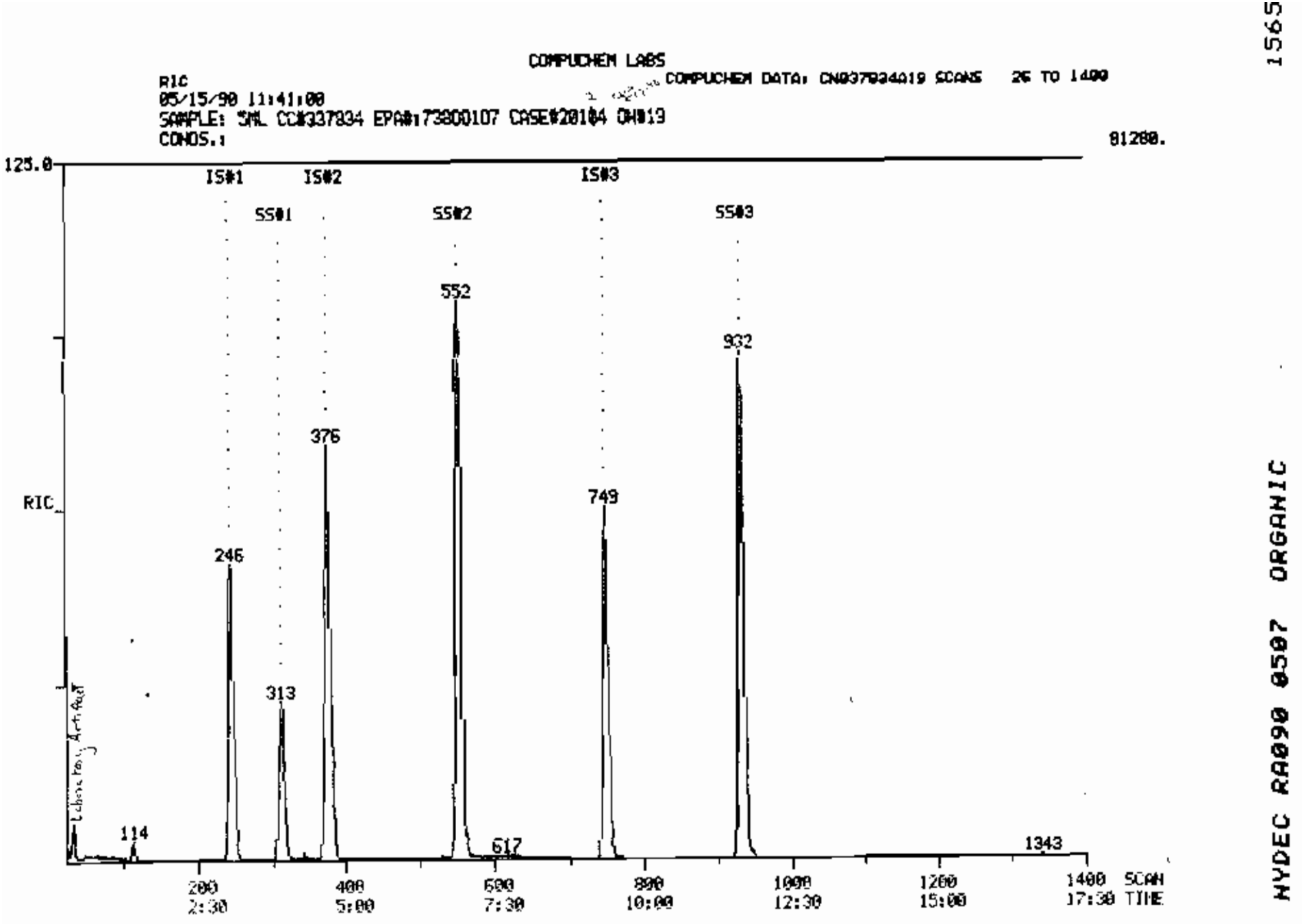
Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	0.45	2.0	J


COMPUCHEM LABS
RIC
05/15/90 11:41:00
SAMPLE: SML CC#037834 EPA#173000107 CASE#20104 OH#19
CONDS.:
COMPUCHEM DATA: CN037834019 SCANS 26 TO 1400
81200.
125.0
RIC
IS#1
IS#2
IS#3
SS#1
SS#2
SS#3
246
313
376
552
749
902
114
617
1343
200
2:30
400
5:00
600
7:30
800
10:00
1000
12:30
1200
15:00
1400
17:30
SCAN
TIME
1565
HYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037834A19
DATA: CN037834A19.TI
05/15/90 11:41:00
SAMPLE: SML CC#337834 EPA#:73800107 CASE#20104 ON#19
CONDS. :
SUBMITTED BY: 19 ANALYST: 1492

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

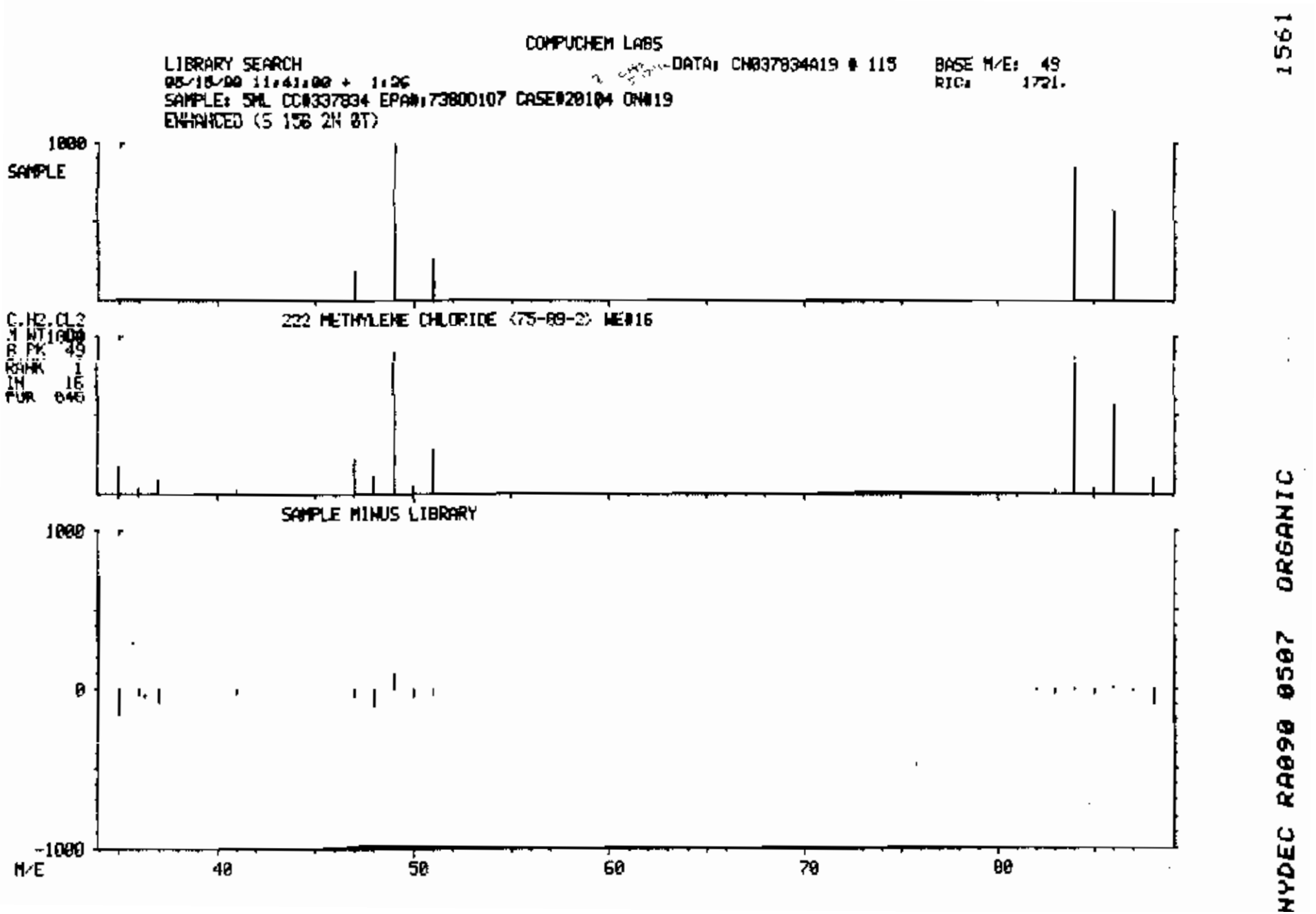
NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-79-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	246	3:04	1	1.000	A BB	46668.	50.000 UG/L	16.42
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	92	1:09	1	0.374	A BB	702.	2.903	UG/L	0.95
9	114	375	4:41	9	1.000	A BB	189732.	50.000	UG/L	16.42
10	84	115	1:26	1	0.467	A BB	2553.	3.122	UG/L	1.03
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	NOT FOUND								
20	62	NOT FOUND								
21	117	749	9:22	21	1.000	A BB	121548.	50.000	UG/L	16.42
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	313	3:55	1	1.272	A BB	59277.	50.704	UG/L	16.65
41	95	933	11:40	21	1.246	A BB	64257.	14.919	UG/L	14.75
42	98	553	6:55	21	0.738	A BB	191174.	52.854	UG/L	17.36

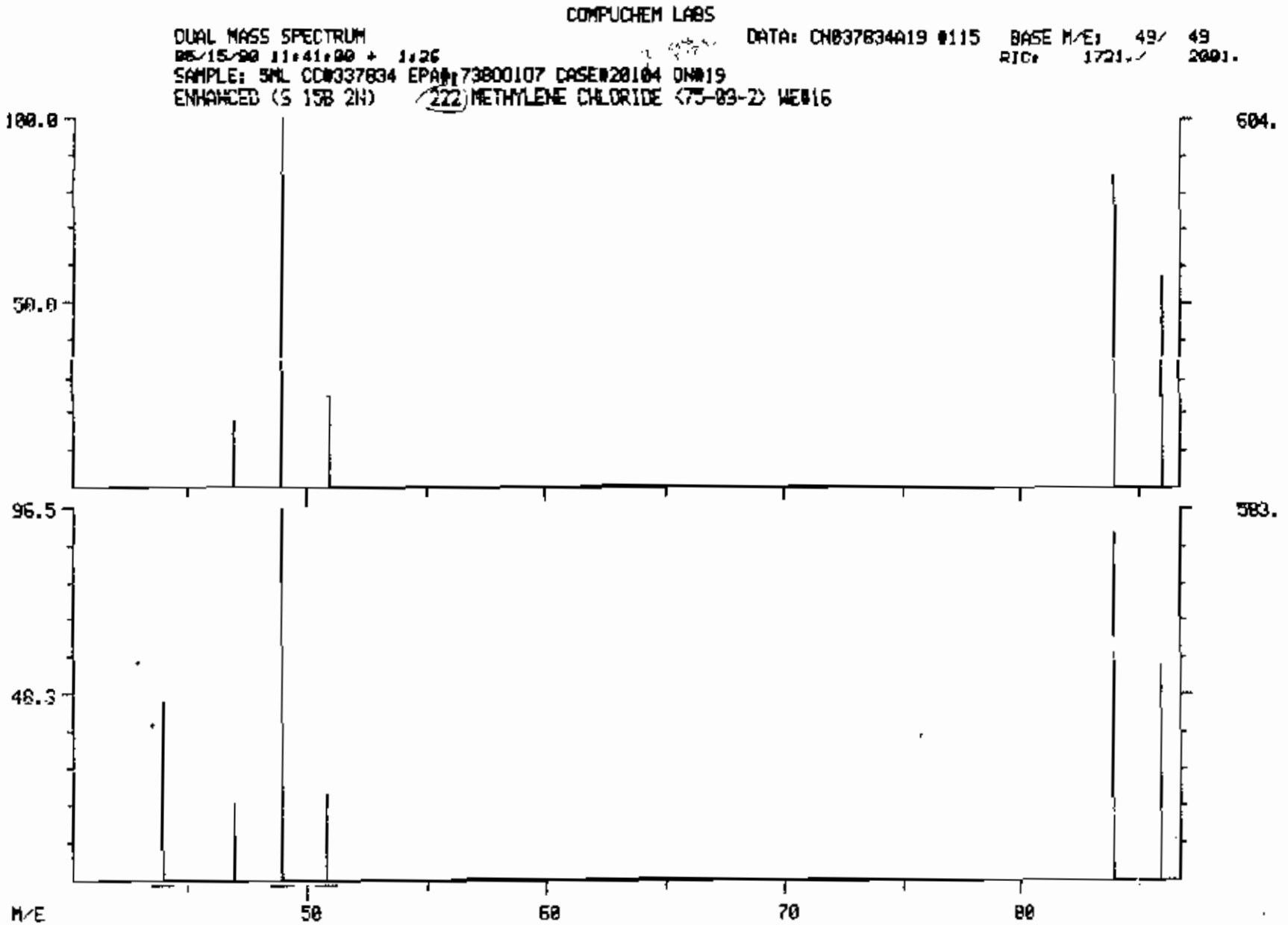
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39		10.000			50.00		0.751	
6	1:03		5.000			50.00		1.389	
7	1:07		5.000			50.00		3.616	
8	1:11	0.97	10.000	0.04	2.90	50.00	0.019	0.259	0.06
9	4:45	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	0.99	5.000	0.09	3.12	50.00	0.053	0.876	0.06
11	1:40		5.000			50.00		0.941	
12	2:05		5.000			50.00		1.103	
13	2:19		10.000			50.00		0.255	
14	2:49		5.000			50.00		0.937	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000.			50.00		0.560	
19	3:55		5.000			50.00		0.495	
20	4:04		5.000			50.00		1.236	
21	9:24	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.455	
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	0.98	5.000	0.25	50.70	50.00	1.270	1.253	1.01
41	11:42	1.00	5.000	0.25	44.92	50.00	0.529	0.588	0.90
42	6:57	0.99	5.000	0.15	52.85	50.00	1.573	1.488	1.06



1561

HYDEC RA090 0507 ORGANIC

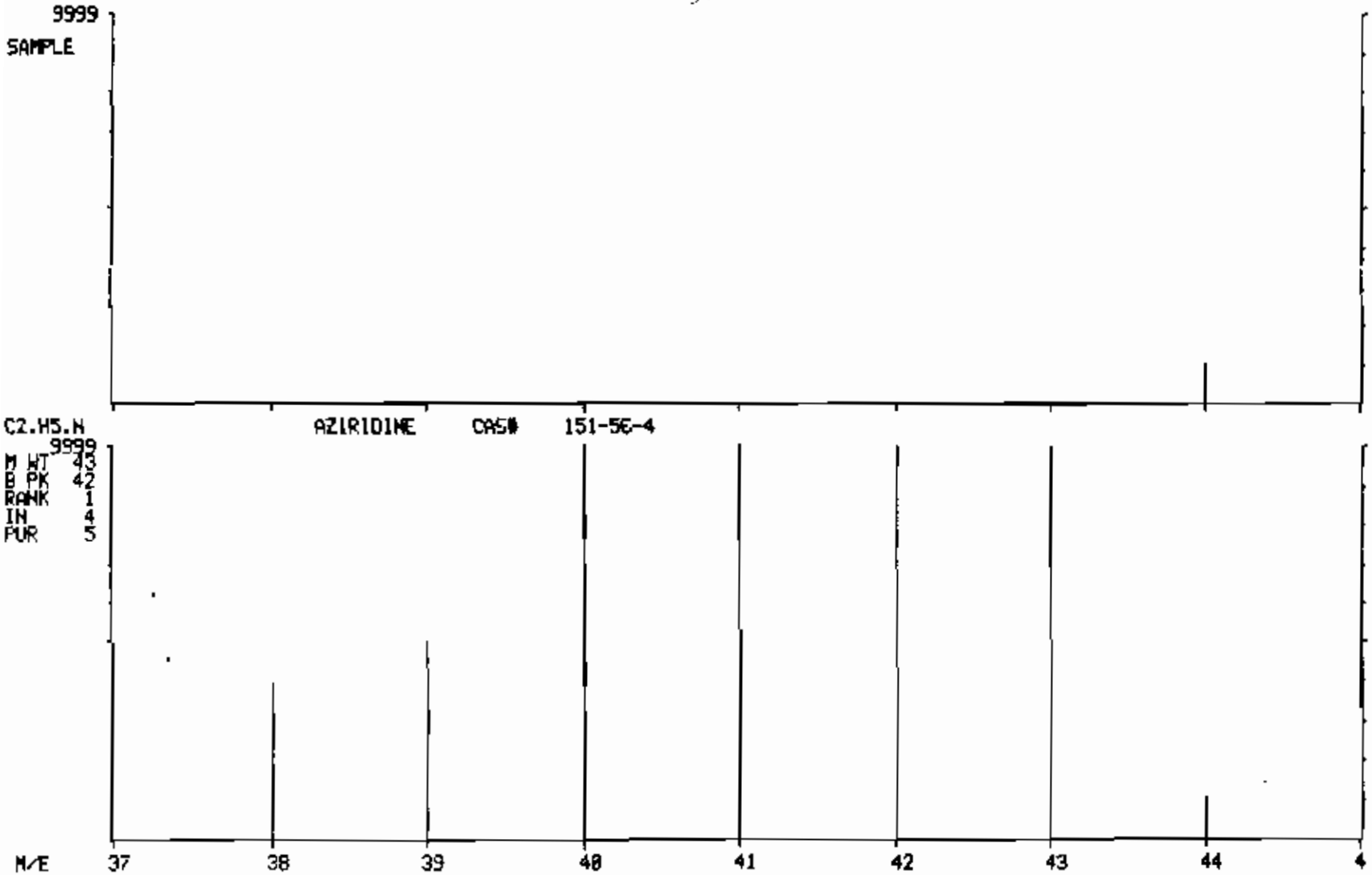


1560

HYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037834A19 # 36 BASE M/E: 44
05/15/90 11:41:00 + 0:27 RIC: 3343.
SAMPLE: 5ML CC#337834 EPA#:73800107 CASE#20184 DN#19
ENHANCED (S 15B 2N 8T)



1559

NYDEC RA090 0507 ORGANIC

RECEIPT DATE: 05/09/90 CASE#: 20124

VOA
GC/MS WORKSHEET COMPUCHEM#: 337834

J[ ] JJ[ ] D[ ] [:1)
2J[ ] J4[ ] D2[ ] [:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73800107

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] _____ Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF900515C19 Disk ( )
Blank Filename CB900515C19 Disk ( )
Standard Filename CS900515C19 Disk ( )
Sample Filename CN037834A19 Disk ( )

ANALYST(S): Injection 1492/Alan Frahl Work-up 1492/Alan Frahl

GC/MS REVIEW

CONDITION CODE: OK

RECEIVED
MAY 16 1990

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: _____

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 2

[ ] Dilute (:1)

COMMENTS:

@GC/MS Review OKStahl Date 5/17/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN0-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	246	46700	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	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)			~~2.9~~	BDL ~~BJ~~	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	375	190000	50.0		
222	84		METHYLENE CHLORIDE			3.1	BJB	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				BDL	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)	749	122003	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				BDL	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	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 WE#57			50.7	101.%	
247	95	S	BROMOFLUOROBENZENE			44.9	90.%	
233	98	S	D8-TOLUENE WE#59 SB#2			52.9	106.%	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5.17.90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS:								
	3979.			1370	358700.	304.5		6.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	50.7	50.0	101.	76-114	X	
41	247	BROMOFLUOROBENZENE	44.9	50.0	90.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	52.9	50.0	106.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5/17/90

QUALITY ASSURANCE NOTICE
CompuChem # 237834
Instrument Blank : CB5005/5C19
Client ID # 73002107
Case 2c124

The early-eluting peak on the RIC of the volatile fraction at scan # 36 is an instrument artifact believed to be a mixture of water and various atmospheric gases. This peak is usually present at less than 10% of the nearest-eluting internal standard peak height, although it may exceed this height under certain instrument conditions.

Periodically, a number of maintenance procedures are performed in an effort to reduce the intensity of this artifact. These procedures may include:

-trap replacement
-reconditioning and/or replacing column
-replacing six-port valve in Tekmar
-cleaning of the separator
-cleaning or replacing source
-replacing lines in Tekmar

In many cases, even after maintenance, the artifact peak remains at a height greater than 10% of the nearest internal standard. Since the analytical quality of these data have not been compromised, we are reporting this analysis with reference to this qualifer. The artifact is not included as part of the Library Search requirements for the associated samples.

Robert J. Whitehead
Manager, Quality Assurance

QAN:1SU
872917

QUALITY ASSURANCE NOTICE
CompuChem # 737834
Blank ID # ZB9005156
Case 30124

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C-4295
6-1026

1A
VOLATILE ORGAMICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800108

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337835

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037835A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	BJ
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

73800108

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337835

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037835A19

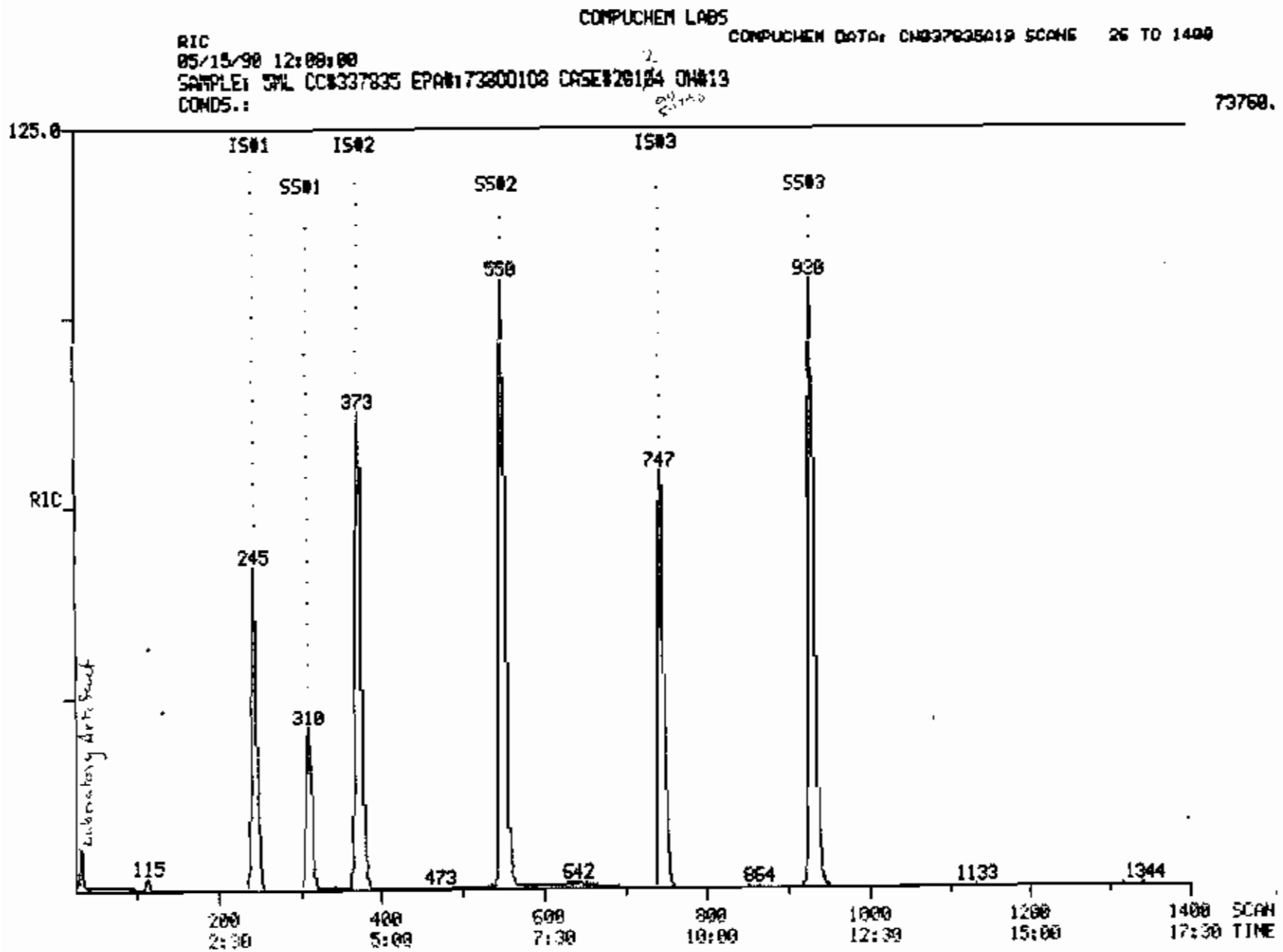
Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 1 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	LABORATORY ARTIFACT	0.42	2.0	J



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NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037835A19
DATA: CN037835A19.TI
05/15/90 12:08:00
SAMPLE: 5ML CC#337835 EPA#: 73800108 CASE#2019 SDG#19
CONDS.:
SUBMITTED BY: 19 . ANALYST: 1492

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

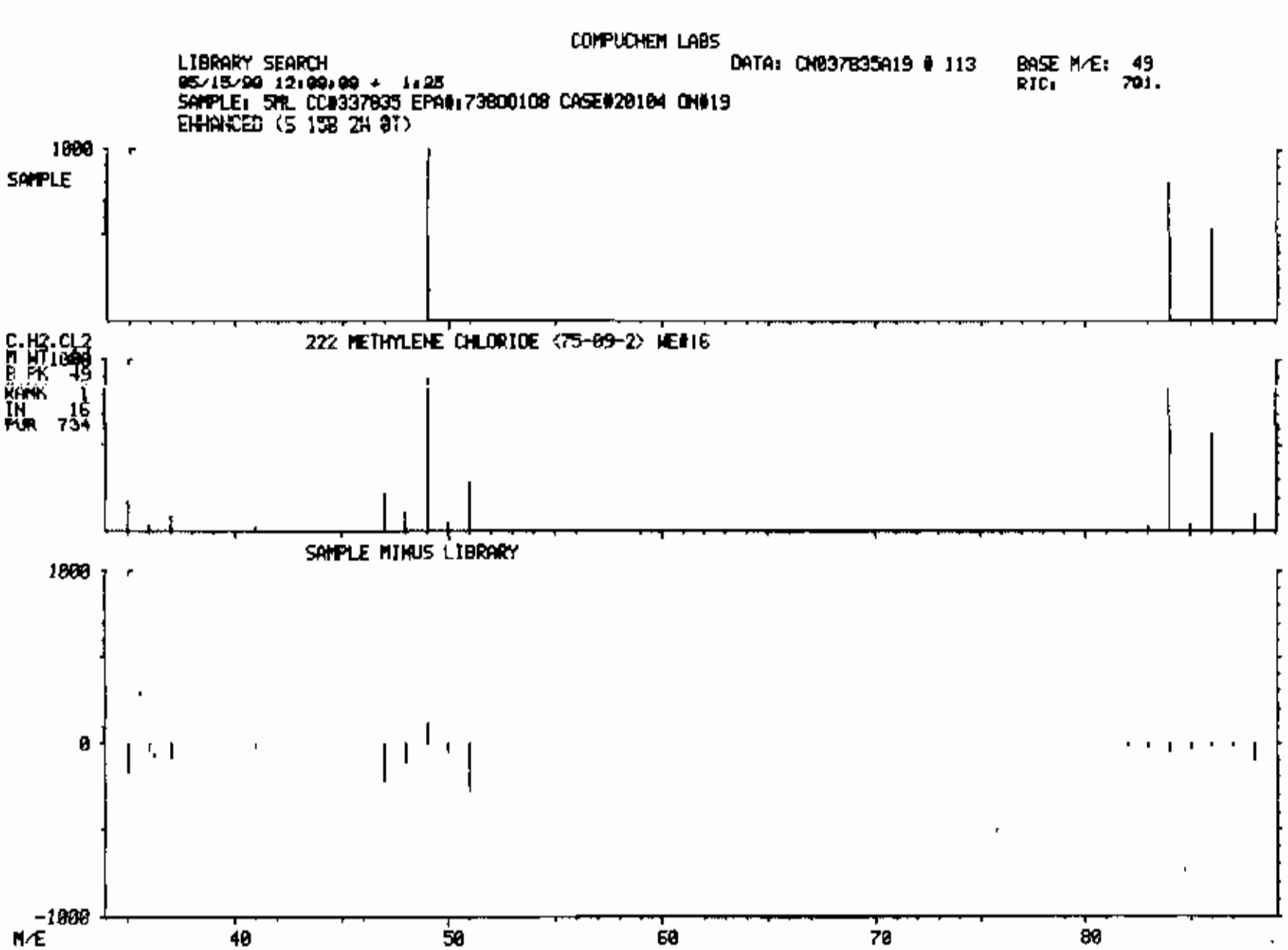
NO	NAME
1	*234 BROMOCHLOROMETHANE (IB) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS43
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	244	3:03	1	1.000	A BB	43117.	50.000 UG/L	17.29
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	NOT FOUND								
9	114	373	4:40	9	1.000	A BB	175297.	50.000	UG/L	17.29
10	84	113	1:25	1	0.463	A BB	1252.	1.657	UG/L	0.57
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	NOT FOUND								
20	62	NOT FOUND								
21	117	747	9:20	21	1.000	A BB	121569.	50.000	UG/L	17.29
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	310	3:52	1	1.270	A BB	46008.	42.595	UG/L	14.73
41	95	930	11:37	21	1.245	A BB	66955.	46.797	UG/L	16.18
42	98	550	6:52	21	0.736	A BB	174634.	48.273	UG/L	16.69

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39		10.000			50.00		0.751	
6	1:03		5.000			50.00		1.389	
7	1:07		5.000			50.00		3.616	
8	1:11		10.000			50.00		0.259	
9	4:45	0.98	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	0.97	5.000	0.09	1.66	50.00	0.049	0.876	0.03
11	1:40		5.000			50.00		0.941	
12	2:05		5.000			50.00		1.103	
13	2:19		10.000			50.00		0.255	
14	2:49		5.000			50.00		0.937	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000.			50.00		0.560	
19	3:55		9.000			50.00		0.495	
20	4:04		5.000			50.00		1.236	
21	9:24	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.455	
23	5:19		3.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		3.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	0.97	5.000	0.25	42.60	50.00	1.067	1.253	0.85
41	11:42	0.99	5.000	0.25	46.80	50.00	0.551	0.588	0.94
42	6:57	0.99	5.000	0.15	48.27	50.00	1.437	1.488	0.97



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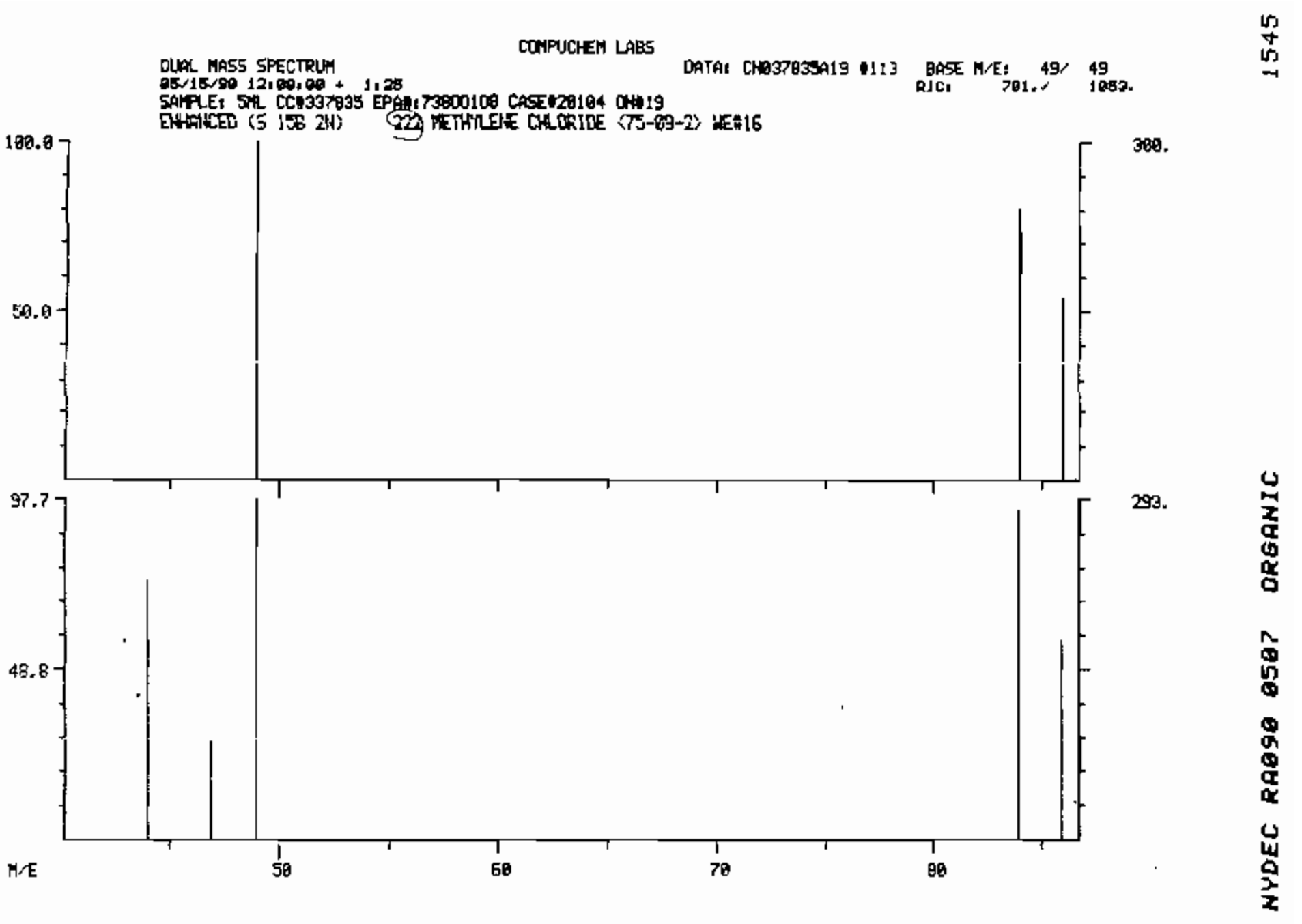
NYDEC RA090 0507 ORGANIC

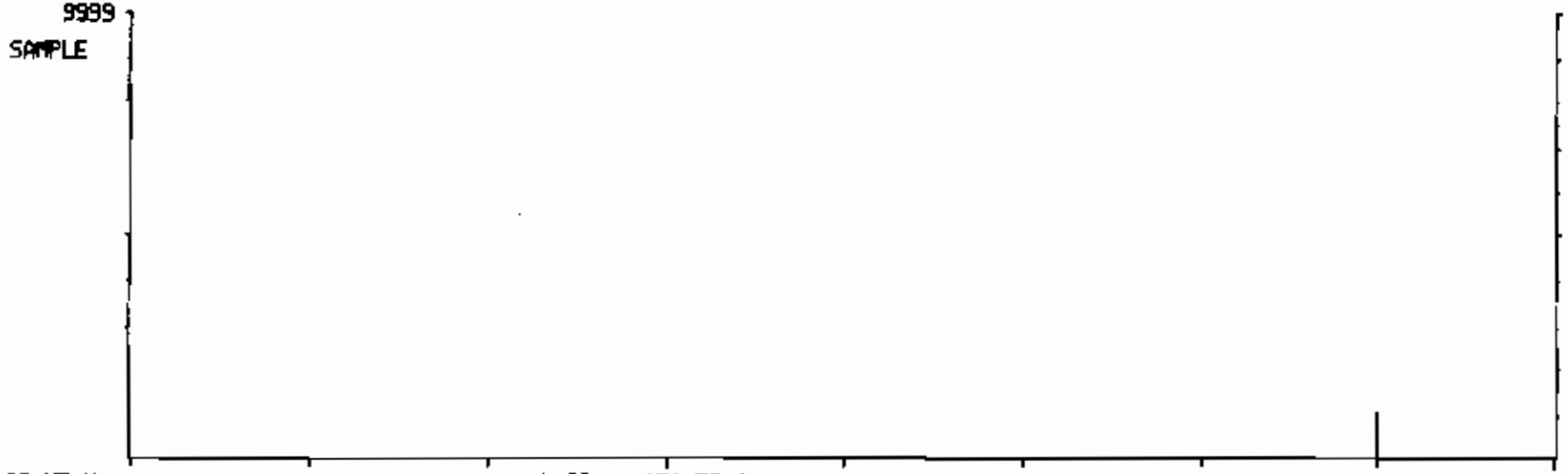


1545

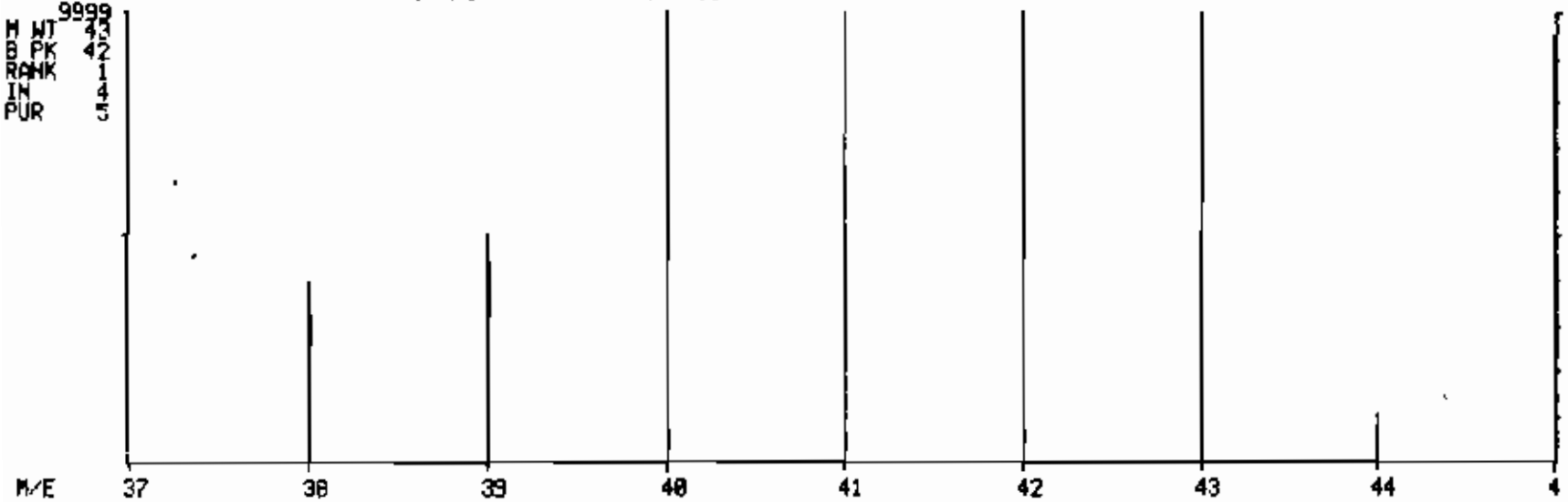
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037835A19 # 34 BASE M/E: 44
05/15/90 12:00:00 + 0:25 RIC: 3121.
SAMPLE: 5ML CC#337835 EPA#:73800108 CASE#20104 ON#19
ENHANCED (S 15B 2N 8T)



C2.H5.N AZIRIDINE CAS# 151-56-4



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NYDEC RA090 0507 ORGANIC

LAB INSTRUCTIONS:
SEE PPS#407 CASE#RA090 SDG#0507

PPS#: _____

RECEIPT DATE: 05/09/90 CASE#: 20124

VOA
GC/MS WORKSHEET COMPUCHEM#: 337835

J[ ] J3[ ] D[ ] (:1)
2J[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73800108

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF900515C19 Disk ( )
Blank Filename CB900515C19 Disk ( )
Standard Filename CS900515C19 Disk ( )
Sample Filename CN037835A19 Disk ( )

RECEIVED
MAY 18 1990

ANALYST(S): Injection 1492/Allen Gould Work-up 1492/Allen Gould

GC/MS REVIEW

CONDITION CODE: C1C

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 8.1

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 2

[ ] Dilute (:1)

COMMENTS:

GC/MS Review OKStanley Date 5/17/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN0-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CHP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	244	43100	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	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)				BDL	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	373	175000	50.0		
222	84		METHYLENE CHLORIDE			1.7	2J 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				BDL	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)	747	122000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROP4NE				BDL	5
212	83		BROMODICHLOROMETH4NE				BDL	5
218	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE				BDL	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	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 WE#57			42.6	85. %	
247	95	S	BROMOFLUOROBENZENE			46.8	94. %	
230	98	S	D8-TOLUENE WE#39 SB#2			48.3	97. %	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5.17.90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS:								
	3979.			1364	340100.	289.4		2.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC IO#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	298	D4-1,2-DICHLOROETHANE WE#57	42.6	50.0	85.	76-114	X	
41	247	BROMOFLUOROBENZENE	46.8	50.0	94.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	48.3	50.0	97.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ UL}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ UL}{5000.\ (UL)} = 1.00 = \frac{5.000\ ML}{5.000\ (ML)}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5/17/90

QUALITY ASSURANCE NOTICE
CompuChem # 327835
Instrument Blank : CB3C0515C15
Client ID # 7356-108
Case 2014

The early-eluting peak on the RIC of the volatile fraction at scan # 34 is an instrument artifact believed to be a mixture of water and various atmospheric gases. This peak is usually present at less than 10% of the nearest-eluting internal standard peak height, although it may exceed this height under certain instrument conditions.

Periodically, a number of maintenance procedures are performed in an effort to reduce the intensity of this artifact. These procedures may include:

-trap replacement
-reconditioning and/or replacing column
-replacing six-port valve in Tekmar
-cleaning of the separator
-cleaning or replacing source
-replacing lines in Tekmar

In many cases, even after maintenance, the artifact peak remains at a height greater than 10% of the nearest internal standard. Since the analytical quality of these data have not been compromised, we are reporting this analysis with reference to this qualifer. The artifact is not included as part of the Library Search requirements for the associated samples.

Robert J. Whitehead
Manager, Quality Assurance

OANISU
870917

QUALITY ASSURANCE NOTICE
CompuChem # 327825
Blank ID # CB060515C1
Case 2012Y

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C-4295
6-1026

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800109

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337839

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR037839A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. _____ Date Analyzed: 05/18/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	13	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	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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

73800109

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337839

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR037839A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/18/90

Column (pack/cap) CAP Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

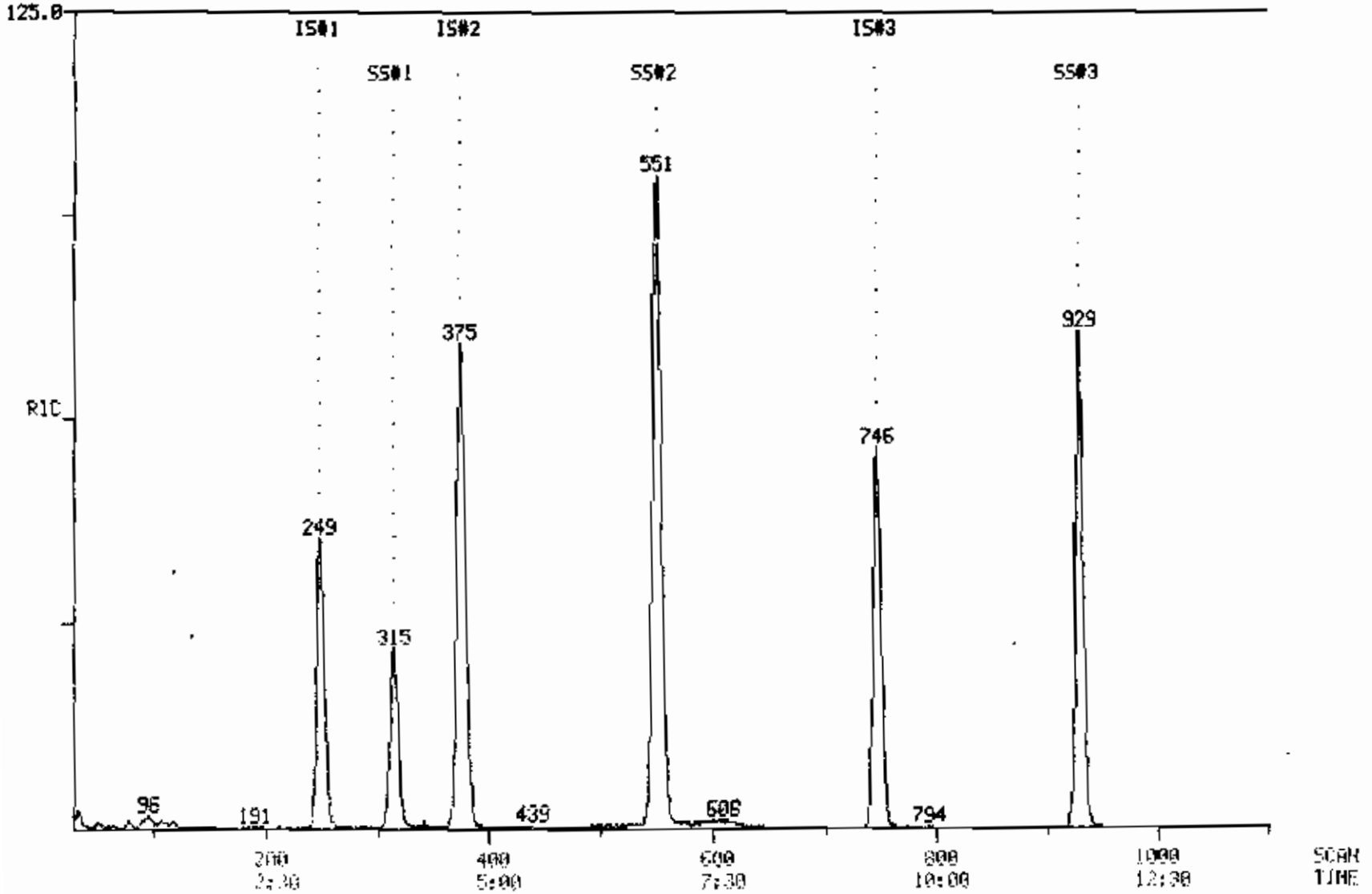
COMPUCHEM LABS

RIC COMPUCHEM DATA: CR897039019 SCANS 31 TO 1100

05/18/90 20:24:00

SAMPLE: 5ML CC# 337833 ID# 73000103 CS# 20124 CH #19

CONDS.:



NYDEC RA090 0507 ORGANIC

```
QUANTITATION REPORT     FILE: CR037839A19
DATA: CR037839A19.TI
05/18/90 20:24:00
SAMPLE: 5ML CC# 337839 ID# 73000109 CS# 20124 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> WE#1
  2   221 CHLOROMETHANE <74-87-3> WE#2
  3   231 VINYL CHLORIDE <75-01-4> WE#3
  4   220 BROMOMETHANE <75-83-9> WE#4
  5   209 CHLOROETHANE <75-00-3> WE#5
  6   216 1,1-DICHLOROETHENE <75-35-4> WE#8
  7   254 CARBON DISULFIDE <75-15-0> WE#9
  8   252 ACETONE (2-PROPANONE) <67-64-1> WE#13
  9  *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
 10   222 METHYLENE CHLORIDE <75-09-2> WE#16
 11   226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
 12   214 1,1-DICHLOROETHANE <75-34-3> WE#19
 13   257 VINYL ACETATE <108-05-4> WE#20
 14   237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
 15   253 2-BUTANONE <78-93-3> WE#22
 16   211 CHLOROFORM <67-66-2> WE#23
 17   227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
 18   206 CARBON TETRACHLORIDE <56-23-5> WE#25
 19   203 BENZENE <71-43-2> WE#26
 20   215 1,2-DICHLOROETHANE <107-06-2> WE#27
 21  *270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
 22   229 TRICHLOROETHENE <79-01-6> WE#30
 23   217 1,2-DICHLOROPROPANE <78-87-5> WE#31
 24   212 BROMODICHLOROMETHANE <75-27-4> WE#32
 25   218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
 26   256 4-METHYL-2-PENTANONE <108-01-1> WE#36
 27   225 TOLUENE <108-88-3> WE#37
 28   250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
 29   228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
 30   224 TETRACHLOROETHENE <127-18-4> WE#41
 31   255 2-HEXANONE <591-78-6> WE#42
 32   208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
 33   207 CHLOROBENZENE <108-90-7> WE#45
 34   219 ETHYLBENZENE <100-41-4> WE#47
 35   330 M,P-XYLENE <133-02-7> WE#48
 36   239 O-XYLENE <133-02-7> WE#49
 37   251 STYRENE <100-42-5> WE#50
 38   205 BROMOFORM <75-25-2> WE#51
 39   223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
 40  #258 D4-1,2-DICHLOROETHANE WE#57 SS#1
 41  #247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
 42  #233 D8-TOLUENE WE#59 SS#2

 NO  M/E  SCAN   TIME  REF   RRT  METH     AREA(HGHT)  AMOUNT          %TOT
  1  128   249   3:07   1  1.000  A BB       90409.     50.000 UG/L  16.15
  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	97	1:13	-1	0.390	A BV	9537.	13.360	UG/L	4.31
9	114	375	4:41	9	1.000	A BB	462679.	50.000	UG/L	16.15
10	84	NOT FOUND								
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	NOT FOUND								
20	62	NOT FOUND								
21	117	746	9:19	21	1.000	A BB	286737.	50.000	UG/L	16.15
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	315	3:56	1	1.265	A BB	151401.	45.810	UG/L	14.79
41	95	929	11:37	21	1.245	A BB	204896.	49.816	UG/L	16.09
42	98	550	6:52	21	0.737	A BB	504599.	50.724	UG/L	16.38

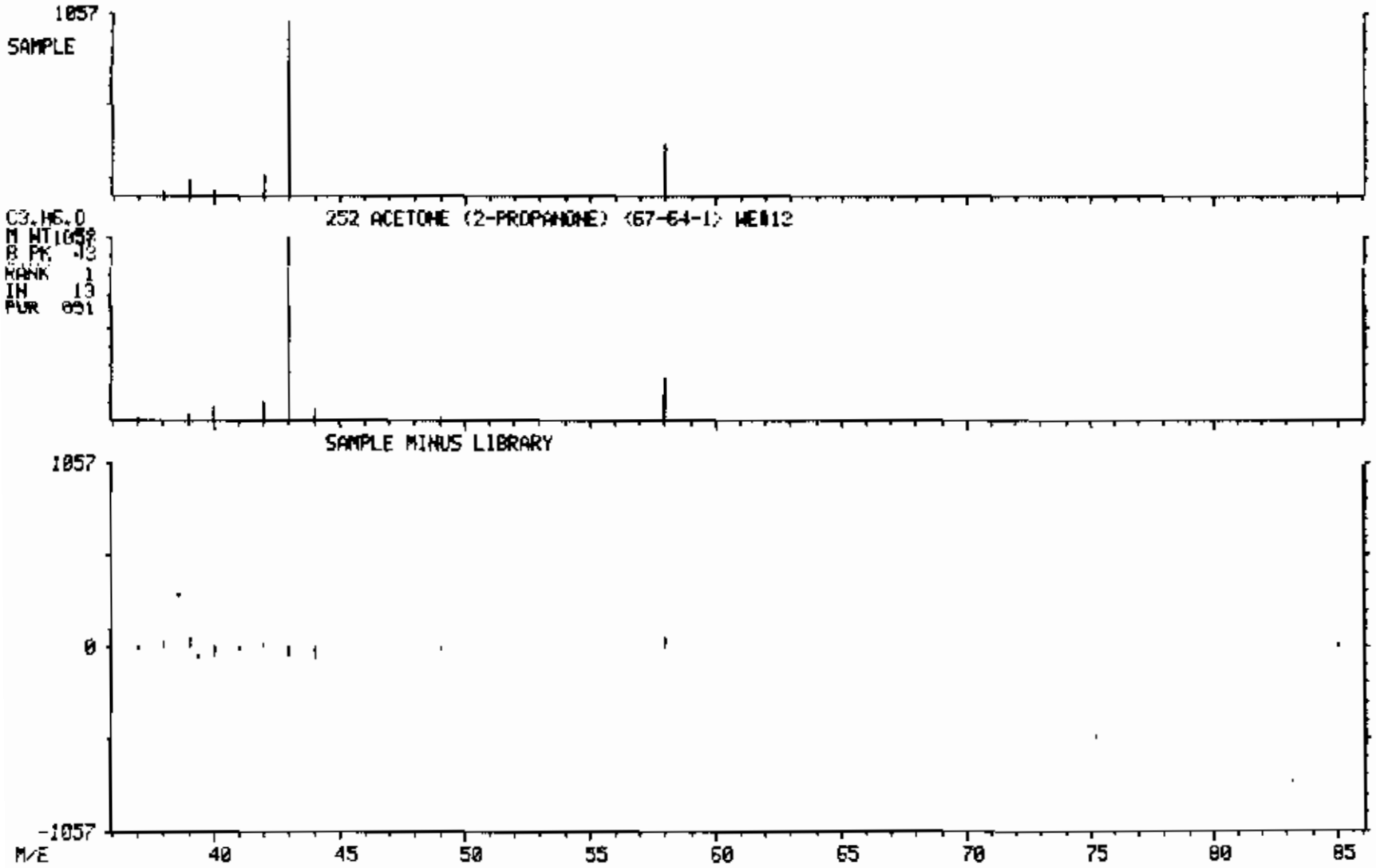
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:05	1.01	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:31		10.000			50.00		0.485	
3	0:34		10.000			50.00		0.624	
4	0:38		10.000			50.00		1.306	
5	0:42		10.000			50.00		0.899	
6	1:04		5.000			50.00		1.407	
7	1:08		5.000			50.00		3.508	
8	1:12	1.01	10.000	0.04	13.36	50.00	0.105	0.395	0.27
9	4:38	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:28		5.000			50.00		1.154	
11	1:41		5.000			50.00		1.195	
12	2:07		5.000			50.00		1.738	
13	2:19		10.000			50.00		0.305	
14	2:49		5.000			50.00		1.171	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	2:58		10.000			50.00		0.061	
16	3:20		5.000			50.00		2.644	
17	3:21		5.000			50.00		0.589	
18	3:32		5.000			50.00		0.619	
19	3:52		5.000			50.00		0.575	
20	4:01		5.000			50.00		1.875	
21	9:15	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:52		5.000			50.00		0.461	
23	5:12		5.000			50.00		0.273	
24	5:48		5.000			50.00		0.701	
25	6:31		5.000			50.00		0.707	
26	6:58		15.000			50.00		0.533	
27	6:55		5.000			50.00		1.061	
28	7:34		5.000			50.00		0.325	
29	7:48		5.000			50.00		0.218	
30	7:43		5.000			50.00		0.615	
31	8:27		15.000			50.00		0.128	
32	8:22		5.000			50.00		0.422	
33	9:17		5.000			50.00		0.885	
34	9:37		5.000			50.00		0.408	
35	9:52		5.000			50.00		0.578	
36	10:32		5.000			50.00		0.578	
37	10:37		5.000			50.00		1.005	
38	10:52		5.000			50.00		0.250	
39	12:10		5.000			50.00		0.347	
40	3:54	1.01	5.000	0.25	45.81	50.00	1.675	1.828	0.92
41	11:31	1.01	5.000	0.25	49.82	50.00	0.715	0.717	1.00
42	6:49	1.01	5.000	0.15	50.72	50.00	1.760	1.735	1.01

COMPUCHEM LABS

LIBRARY SEARCH
05/10/90 20:24:00 + 1:12
SAMPLE: SML CC# 337839 ID# 73000109 CS# 20124 ON #19
ENHANCED (S 15B 2N 0T)

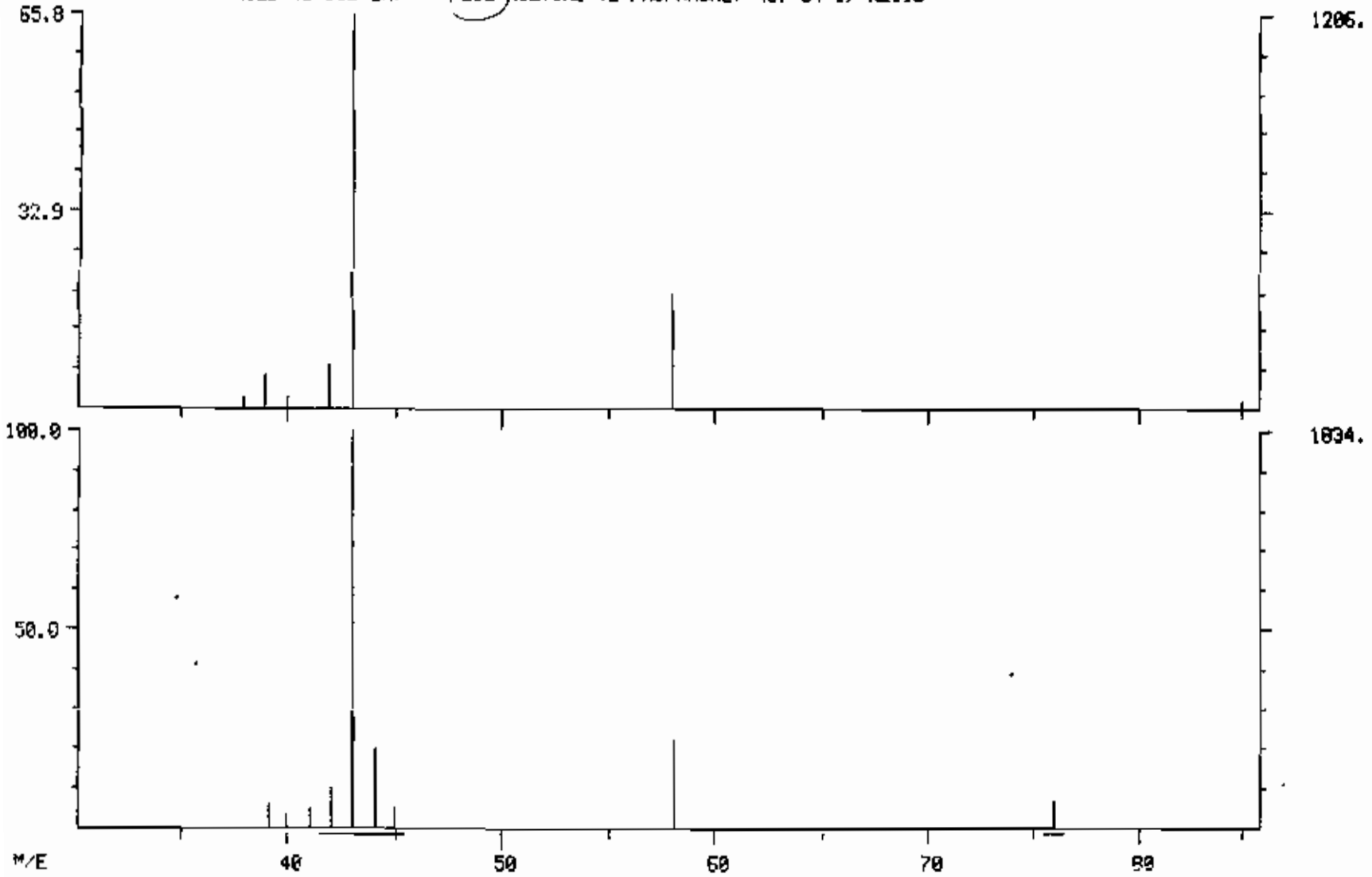
DATA: CR037839A19 # 97 BASE M/E: 43
RIC: 1007.



COMPUCHEM LABS

DUAL MASS SPECTRUM
05/10/90 20:24:00 + 1:13
SAMPLE: 5ML CC# 337039 ID#-73800109 CS# 20124 ON #19
ENHANCED (S 156 2N) 252 ACETONE (2-PROPANONE) (67-64-1) WE#13

DATA: CR037039A19 #97 BASE M/E: 43/ 40
RIC: 1907./ 3271.



1530

NYDEC RA090 0507 ORGANIC

Lab Instructions:

Receipt Date: Case#: 20129 SAS#

CompuChem#: 337839R

GC/MS; VOA; WATER; EPA SOW 2/88

8240

Sample Prep Code---000
Instrument Code----~~412~~ 284
Compound List------493 458
Surrogate Std------394
Internal Std-------036

SDG# EPA ID# 73800109

GC/MS Analysis WELL1

Amount Purged: [✓] 5.0 mL or [ ] Dilution _____ uL / 5.0 mL

Internal Standard Volume Added 5 uL
Surrogate Standard Volume Added 5 uL
BFB Filename: BH9005I8A19
Blank Filename: CB9005I8A19
Standard Filename: CW9005I8A19
Sample Filename: CR037839A19

Analyst(s) Injection: 1009MK Work-up 1009MK

GC/MS Review

Condition Codes: QA

Entry Codes: OK,EA,ES,SM,JS,SL,SH,,JA,DA

POSTED

Non-entry Codes: IM,IL,SW,CT,CS,VC,VO,UP
PC,NR,IF,LA,DI,OT,SF,SI
CO,RN,DW

Extraneous Peak Search Results:

Number of Peaks Found: 0

Disposition
[✓] Complete
[ ] Reinject Neat
[ ] Dilute
_____ uL / 5 mL

Quality Assurance Notice(s):

Number of Notices Required: 1

Comments:

GC/MS Review [illegible] Date 5/21/90 Auditor _____ Date ___/___/___

Report Integration Total # of Injections 2
Final Reportable Package(s): CR - A19 /

QA Comments:

Initials _____ Date ___/___/___

Final Review Initials _____ Date ___/___/___

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	249	90400	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	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)			13.4	13 B	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	375	463000	50.0		
222	84		METHYLENE CHLORIDE				BDL	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				BDL	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)	746	287000	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				BDL	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE ,I24-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	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 WE#57			45.8	92. %	
247	95	S	BROMOFLUOROBENZENE			49.8	100. %	
233	98	S	D8-TOLUENE WE#99 BS#2			50.7	101. %	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(OC/MB DATA REVIEWER)

DATE 5-19-92

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)	
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL		10
CHECKSUMS:									
	3979.			1370	840400.	309.7		13.	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/19/94

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	45.8	50.0	92.	76-114	X	
41	247	BROMOFLUOROBENZENE	49.8	50.0	100.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	50.7	50.0	101.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-15-90

QUALITY ASSURANCE NOTICE
CompuChem # 333737
Blank ID # C890618AB
Case 2024

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Acetone	12	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C#N295
8/1026

EPA SAMPLE NO.

73800110

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 137838

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR037838B19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. _____ Date Analyzed: 05/18/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	10	U
67-64-1	Acetone	15	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	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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

73800110

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337838

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CR037838B19

Level: (low/med) LOW Date Received: 05/09/90

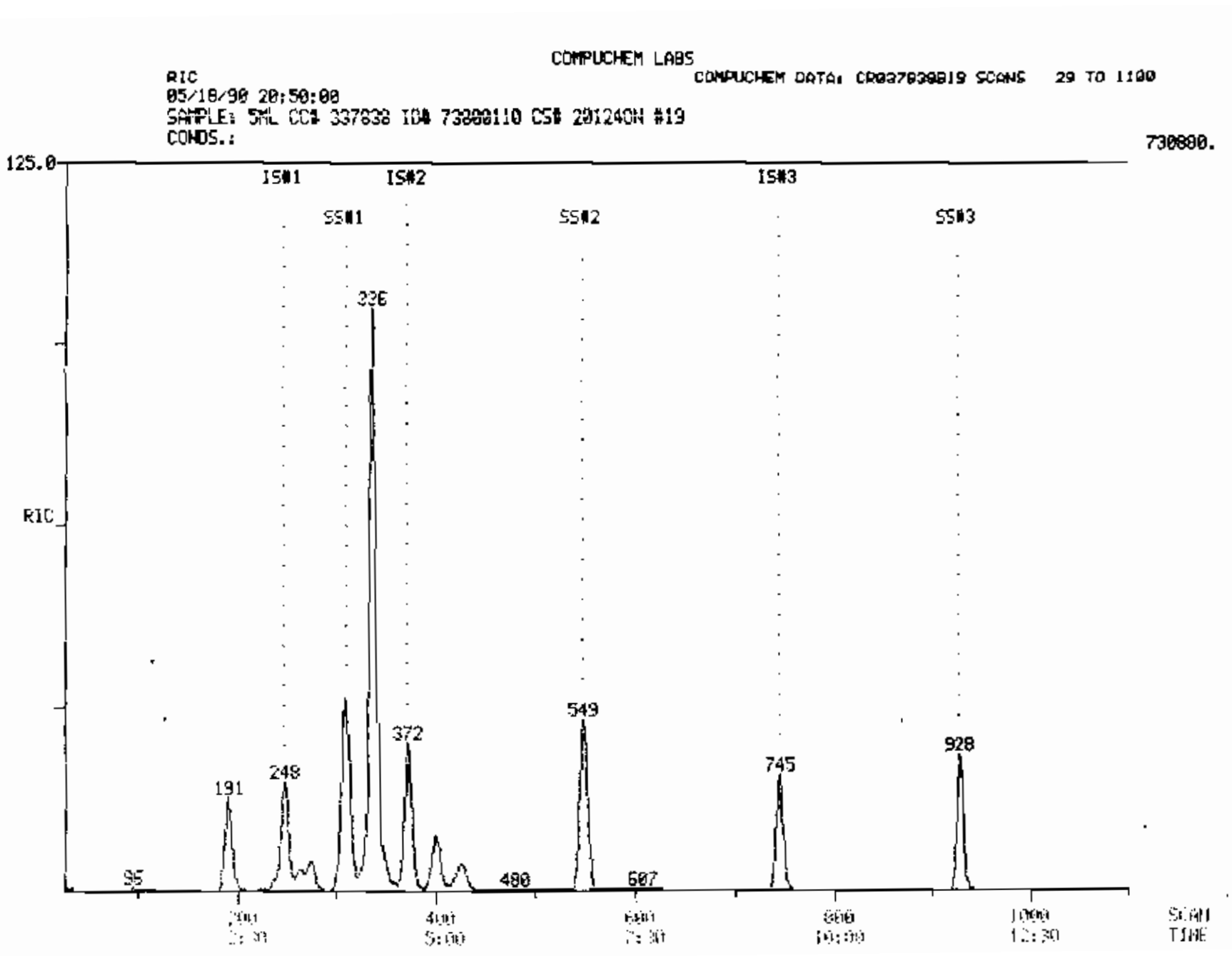
% Moisture: not dec. _____ Date Analyzed: 05/18/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 6

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.		UNKNOWN	2.38	49	J
2.	6971-61-7	2(3H)-FURANONE,DIHYDRO-4,5-D	3.30	4.0	J
3.	29424-94-0	OXETANE,2,4-DIMETHYL-,TRANS-	3.42	11	J
4.		2-(ETHENYLOXY)PROPANE+UNKNOW	4.20	190	J
5.		2,5-HEXANEDIOL+UNKNOWN	5.00	20	J
6.	17257-81-7	2-HEXANONE,3,4-EPOXY-	5.30	11	J



QUANTITATION REPORT FILE: CR037838B19
DATA: CR037838B19.TI
05/18/90 20:50:00
SAMPLE: SML CC# 337838 ID# 73800110 CS# 20124ON #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> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	247	3:05	1	1.000	A B8	100697.	90.000 UG/L	16.82
2	50	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(H2HT)	AMOUNT		%TOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	96	1:12	-1	0.389	A BV	11999.	15.092	UG/L	5.08
9	114	372	4:39	9	1.000	A BB	520263.	50.000	UG/L	16.82
10	84	NOT FOUND								
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	NOT FOUND								
20	62	NOT FOUND								
21	117	745	9:19	21	1.000	A BB	319105.	50.000	UG/L	16.82
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	311	3:53	1	1.259	A BB	159388.	43.300	UG/L	14.56
41	95	928	11:36	21	1.246	A BB	198230.	43.306	UG/L	14.57
42	90	548	6:51	21	0.736	A BB	505271.	45.639	UG/L	15.35

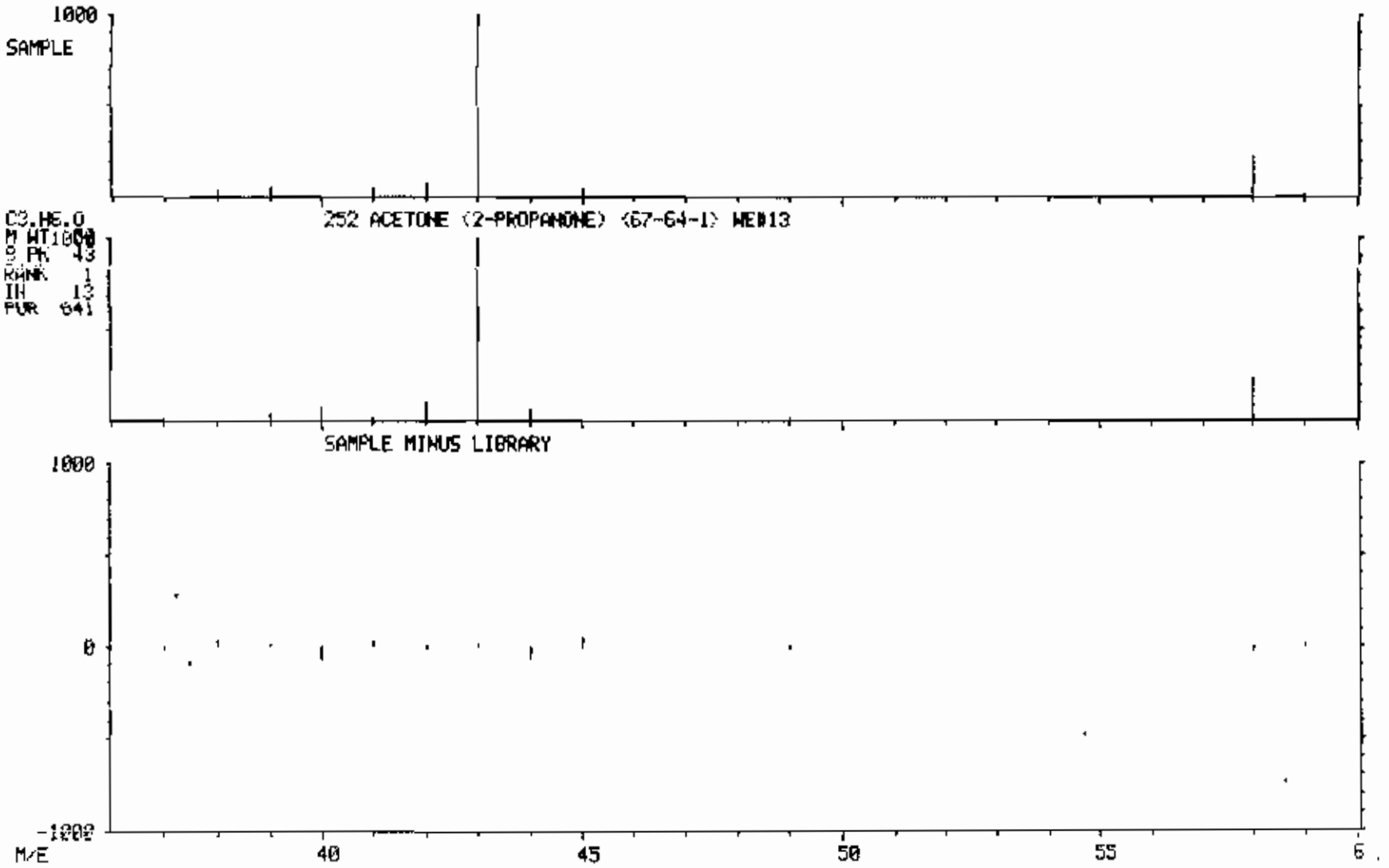
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:05	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:31		10.000			50.00		0.485	
3	0:34		10.000			50.00		0.624	
4	0:38		10.000			50.00		1.306	
5	0:42		10.000			50.00		0.899	
6	1:04		5.000			50.00		1.407	
7	1:08		5.000			50.00		3.508	
8	1:12	1.00	10.000	0.04	15.09	50.00	0.119	0.395	0.30
9	4:38	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:28		5.000			50.00		1.154	
11	1:41		5.000			50.00		1.195	
12	2:07		5.000			50.00		1.738	
13	2:19		10.000			50.00		0.305	
14	2:49		5.000			50.00		1.171	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
13	2:58		10.000			50.00		0.061	
16	3:20		5.000			50.00		2.644	
17	3:21		5.000			50.00		0.589	
18	3:32		5.000			50.00		0.619	
19	3:52		5.000			50.00		0.575	
20	4:01		5.000			50.00		1.875	
21	9:15	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:52		5.000			50.00		0.461	
23	5:12		5.000			50.00		0.273	
24	5:48		5.000			50.00		0.701	
25	6:31		5.000			50.00		0.707	
26	6:58		15.000			50.00		0.533	
27	6:55		5.000			50.00		1.061	
28	7:34		5.000			50.00		0.325	
29	7:48		5.000			50.00		0.218	
30	7:43		5.000			50.00		0.615	
31	8:27		15.000			50.00		0.128	
32	8:22		5.000			50.00		0.422	
33	9:17		5.000			50.00		0.885	
34	9:37		5.000			50.00		0.408	
35	9:52		5.000			50.00		0.578	
36	10:32		5.000			50.00		0.578	
37	10:37		5.000			50.00		1.005	
38	10:52		5.000			50.00		0.250	
39	12:10		5.000			50.00		0.347	
40	3:54	1.00	5.000	0.25	43.30	50.00	1.583	1.628	0.87
41	11:31	1.01	5.000	0.25	43.31	50.00	0.621	0.717	0.87
42	6:49	1.01	5.000	0.15	45.64	50.00	1.583	1.735	0.91

COMPUCHEM LABS

LIBRARY SEARCH
05/18/90 20:50:00 + 1:12
SAMPLE: 5ML CC# 337838 ID# 73000110 CS# 201240N #19
ENHANCED (5 15B 2N 0T)

DATA: CR037838B19 # 96 BASE M/E: 43
RIC: 2355.



1518

NYDEC RA090 0507 ORGANIC

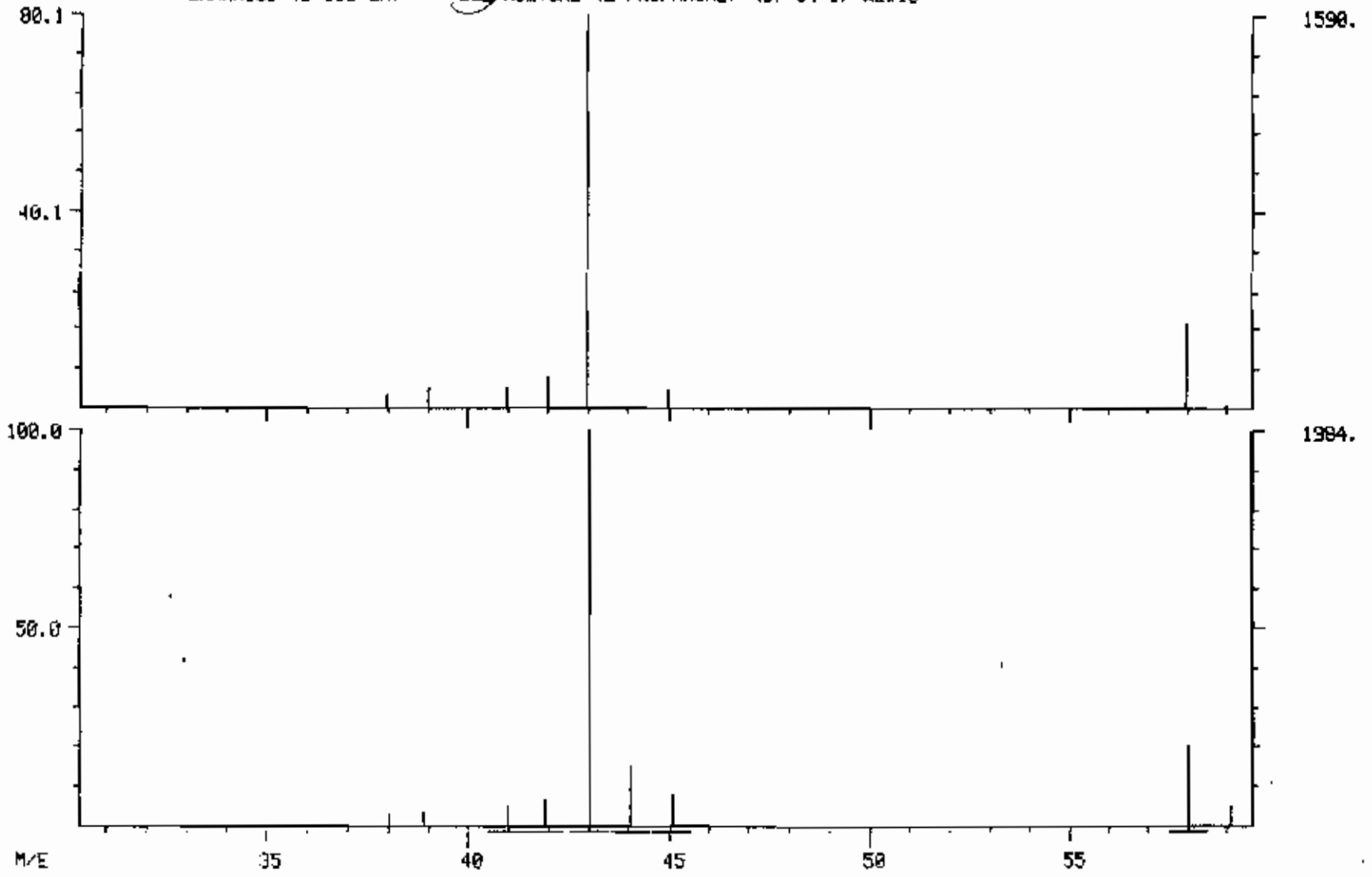
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/10/90 20:50:00 + 1:12
SAMPLE: 5ML CC# 337838 ID# 73000110 CS# 281240N #19
ENHANCED (S 15B 2H)

DATA: CR037838019 #96

BASE M/E: 43/ 43
RIC: 2355./ 3295.

252 ACETONE (2-PROPANONE) (67-64-1) WE#13



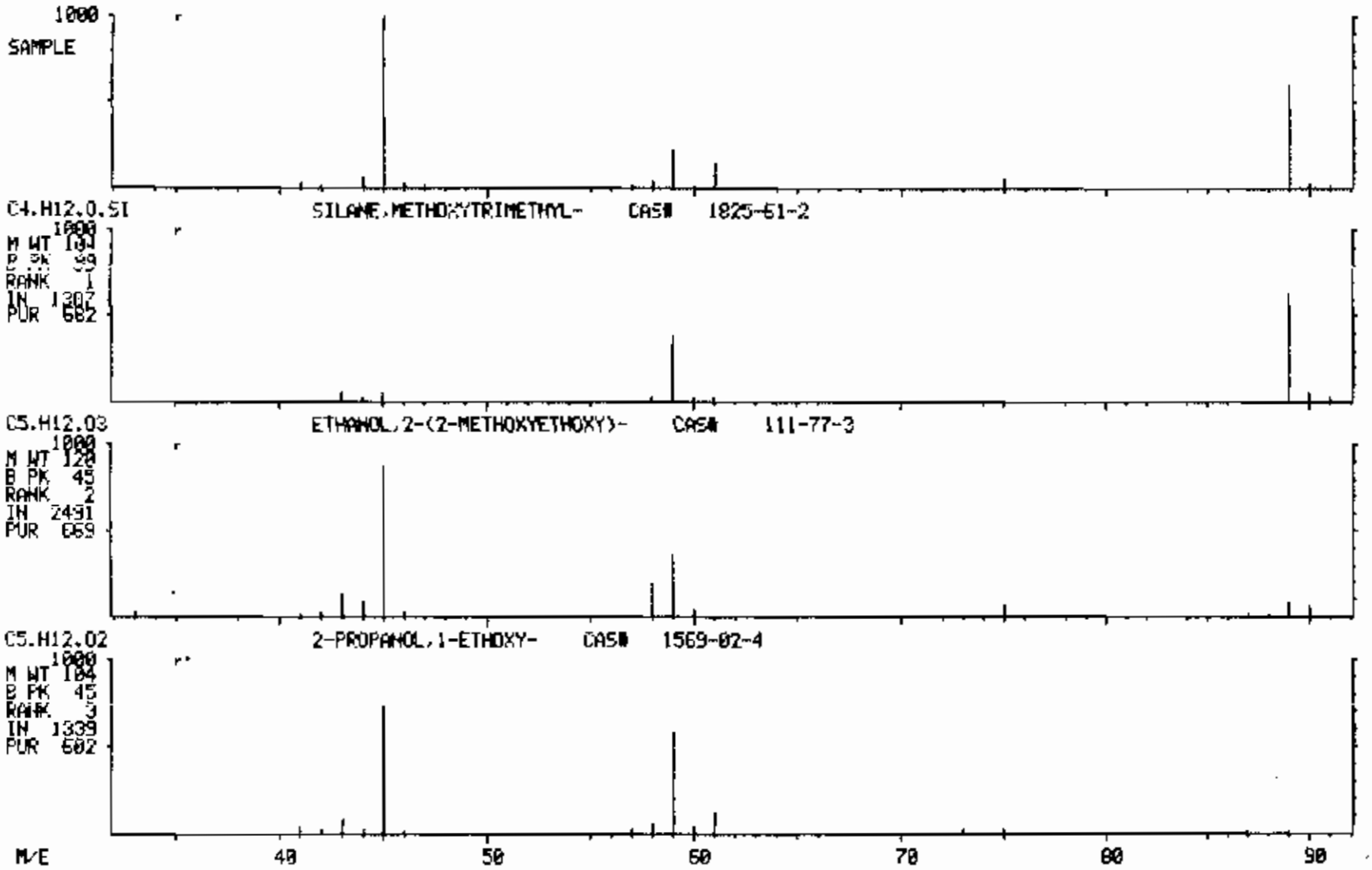
1517

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH
05/10/90 20:50:00 + 2:29
SAMPLE: SML CC# 337838 ID# 73000110 CS# 201240N #19
ENHANCED (S 15B 2N 0T)

DATA: CR037838B19 # 191 BASE M/E: 45
RIC: 76927.

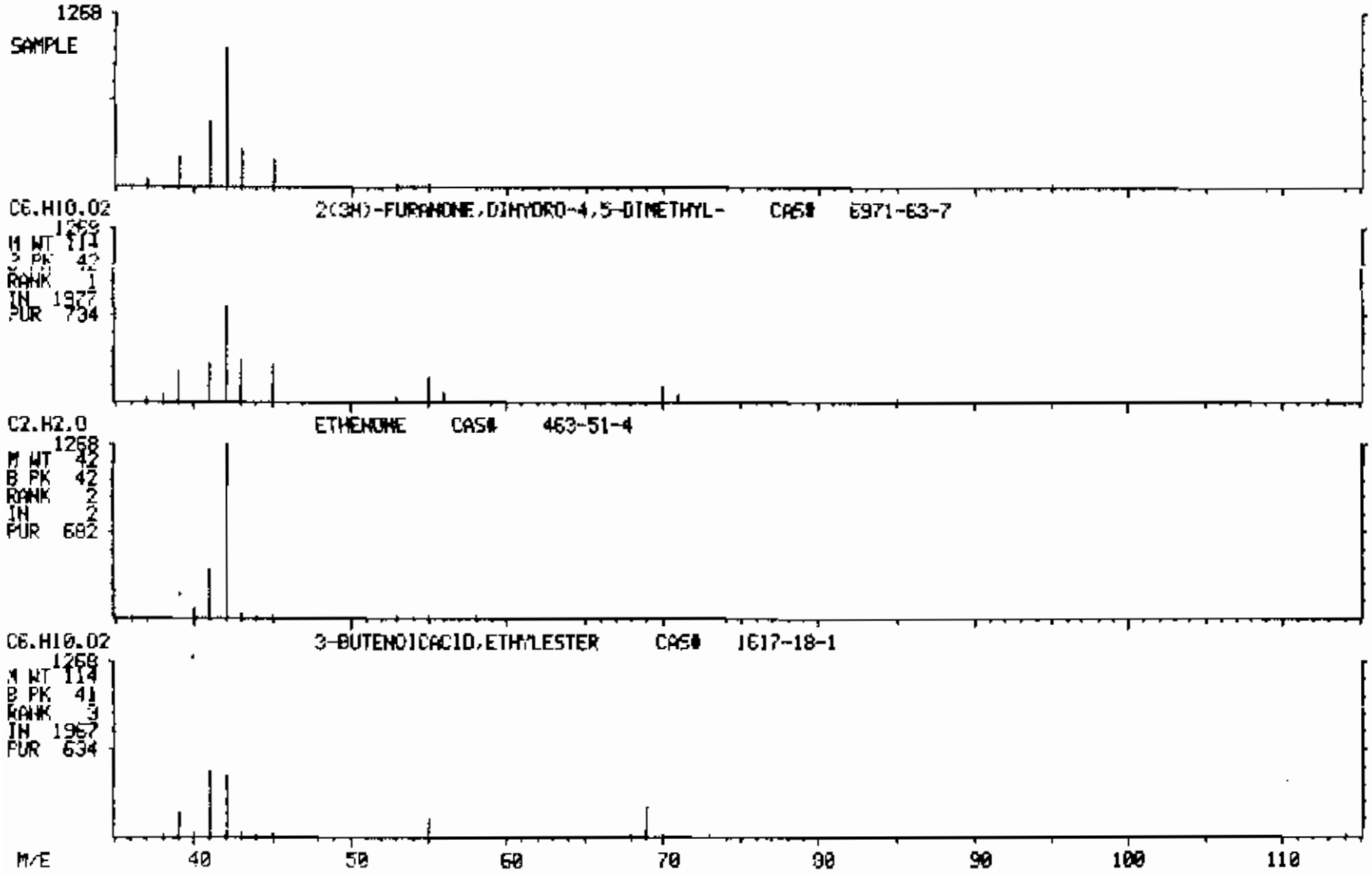


COMPUCHEM LABS

LIBRARY SEARCH
05/10/90 20:50:00 + 3:10
SAMPLE: 5ML CC# 337830 ID# 73000110 CS# 201240N #19
ENHANCED (S 15B 2N 0T)

DATA: CR037830B19 # 264 BASE M/E: 42
RIC: 4415.

1515

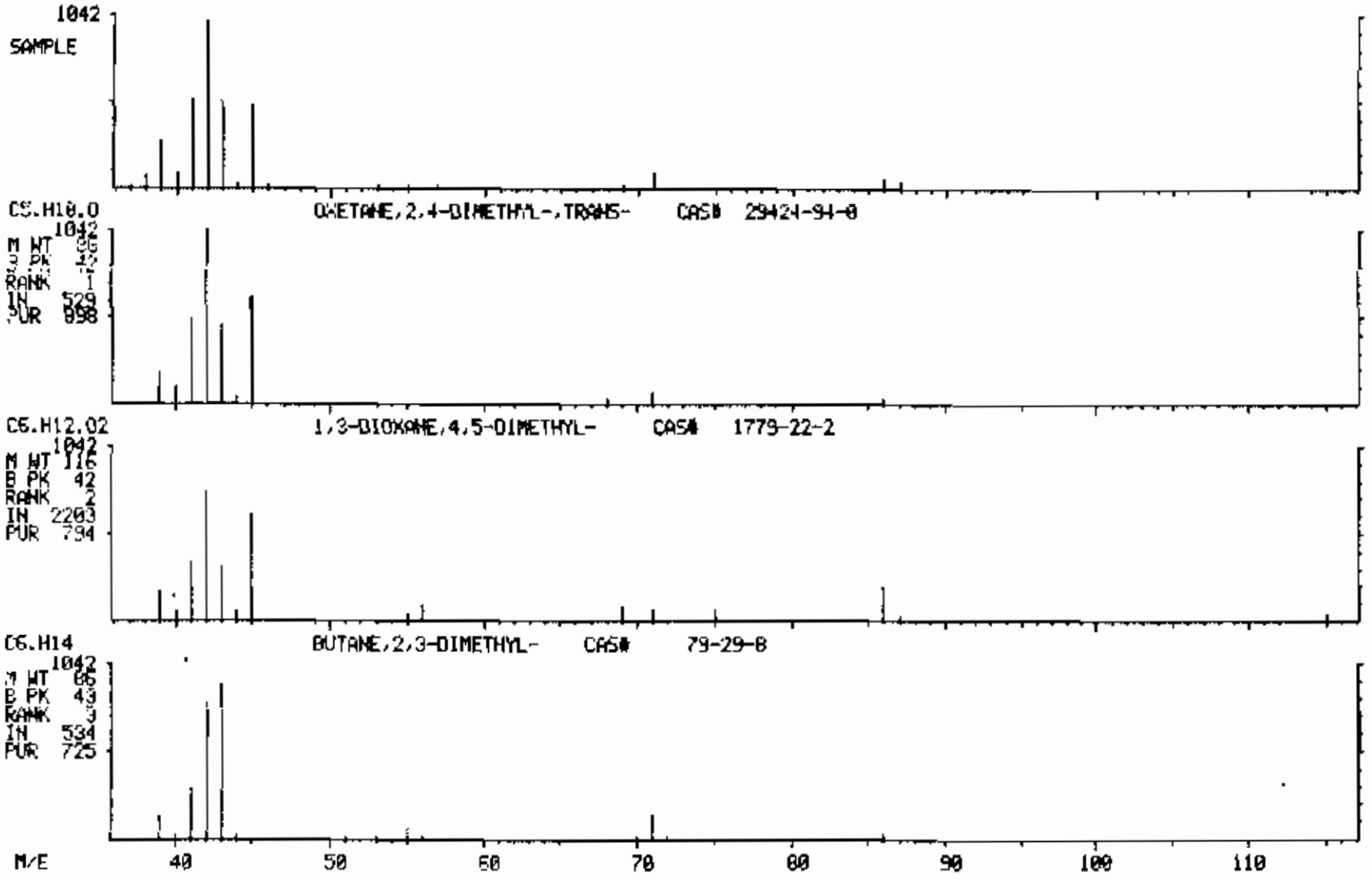


NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH
05/10/90 20:50:00 + 0.25
SAMPLE: 5ML CC# 337838 ID# 73800110 CS# 201240N #19
ENHANCED (S 15B ZN 8T)

DATA: CR037838B19 # 274 BASE M/E: 42
RIC: 15951.



NYDEC RA090 0507 ORGANIC

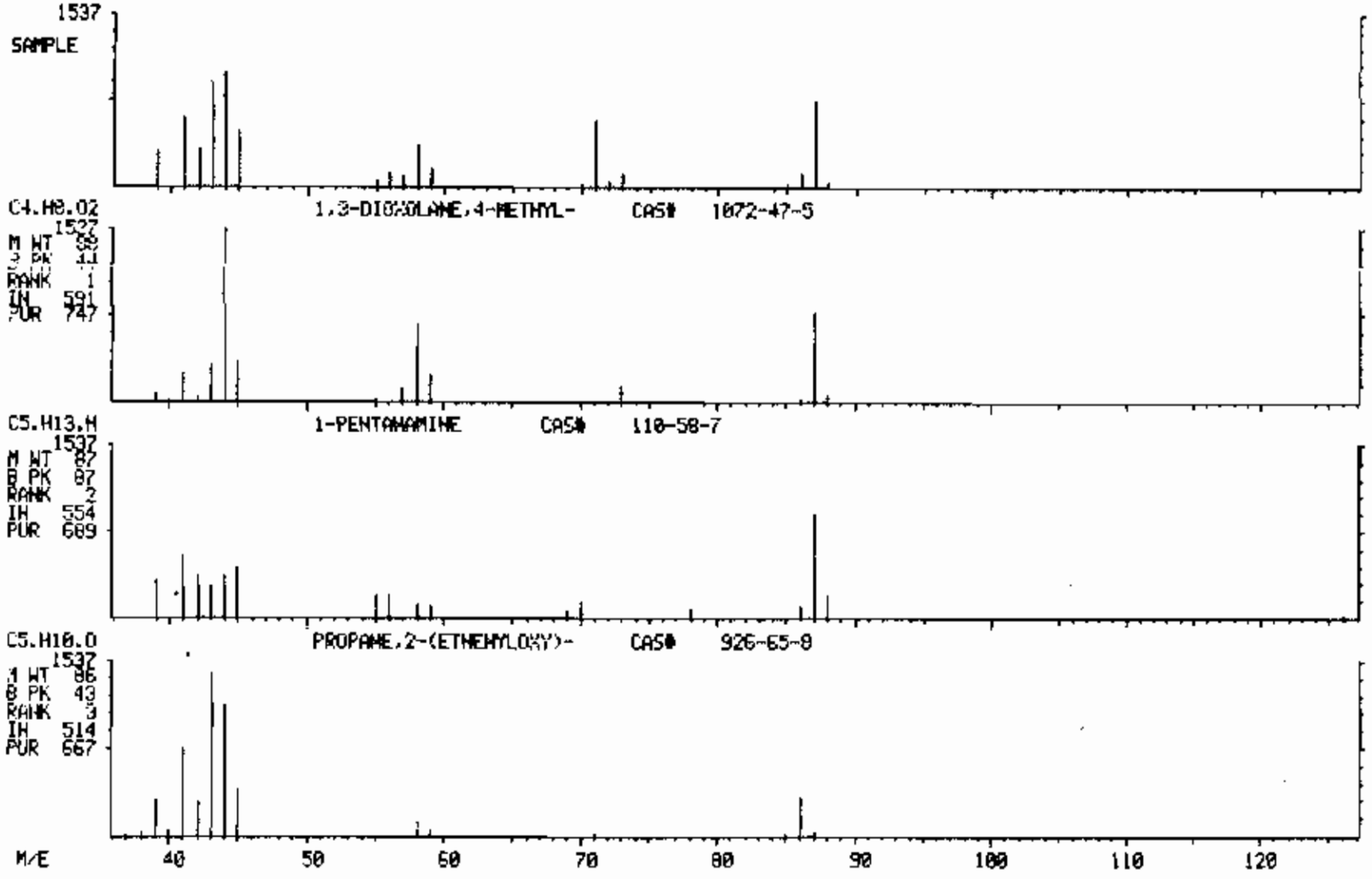
COMPUCHEM LABS

LIBRARY SEARCH
05/10/90 20:50:00 + 4:12

DATA: CR037030B19 # 336

BASE M/E: 44
RIC: 476159.

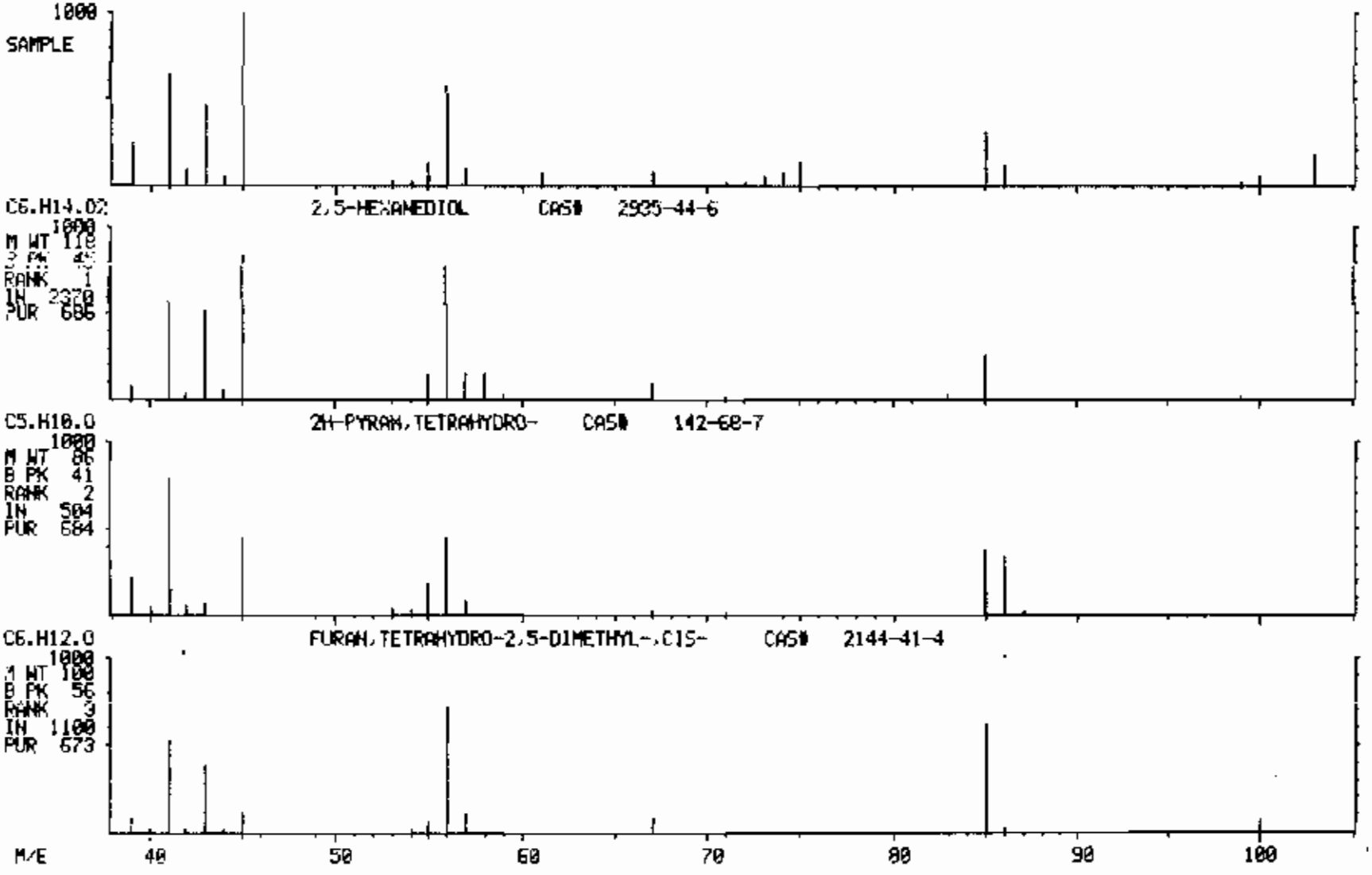
SAMPLE: 5ML CC# 337030 ID# 73000110 CS# 201240N #19
ENHANCED (S 15B 2N 0T)



COMPUCHEM LABS

LIBRARY SEARCH
05/19/90 20:50:00 + 5.00
SAMPLE: 5ML CO# 337030 ID# 73000110 C5# 201240N #19
ENHANCED (S 15B ZH 0T)

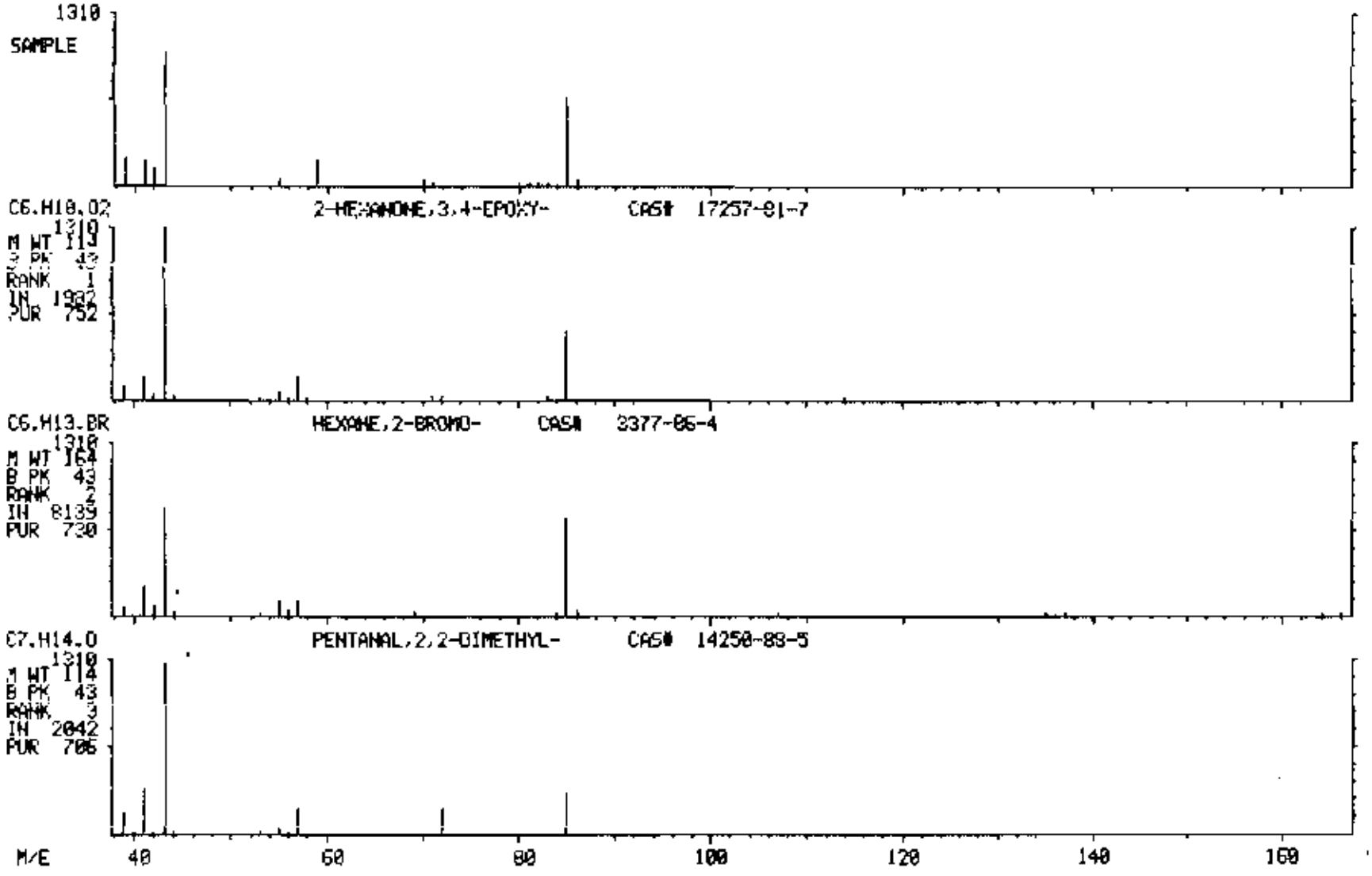
DATA: CR037030019 # 400 BASE M/E: 45
RIC: 36991.



COMPUCHEM LABS

LIBRARY SEARCH
05/10/90 20:50:00 + 5:10
SAMPLE: 5ML CC# 337838 ID# 73000110 CS# 20124ON #19
ENHANCED (S 15B 2H 8T)

DATA: CR037838B19 # 424
BASE M/E: 43
RIC: 11551.



Lab Instructions:

Receipt Date: Case#: 20124 SAS#

CompuChem#: 337838R

GC/MS; VOA; WATER; ~~EPA SOW 2/88~~ 3rd Ed. 8240

Sample Prep Code---000
Instrument Code----~~412~~ 289
Compound List------~~493~~ 457
Surrogate Std------394
Internal Std-------036

SDG# EPA ID# 73800110

GC/MS Analysis WELL1

Amount Purged: [ ] 5.0 mL or [ ] Dilution _____ uL / 5.0 mL

Internal Standard Volume Added 5 uL
Surrogate Standard Volume Added 5 uL
BFB Filename: BH900518B19
Blank Filename: CB900518B19
Standard Filename: CW900518B19
Sample Filename: CR037838B19

Analyst(s) Injection: 1009 MR Work-up 1009 MR

GC/MS Review

Condition Codes: TA, CK

Entry Codes: OK,EA,ES,SM,JS,SL,SH,,JA,DA

Non-Entry Codes: IM,IL,SW,CT,CS,VC,VO,UP PC,NR,IF,LA,DI,OT,SF,SI CO,RN,DW

Extraneous Peak Search Results:

Number of Peaks Found: 6

Quality Assurance Notice(s):

Number of Notices Required: 0

RECEIVED MAY 2 0 1990

Disposition
[+] Complete
[ ] Reinject Neat
[+] Dilute
_____ uL / 5 mL

Comments:

GC/MS Review Date 5/19/90 Auditor _____ Date ___/___/___

Report Integration Total # of Injections 2
Final Reportable Package(s): CR0-B19 /

QA Comments:

Initials _____ Date ___/___/___

Final Review Initials _____ Date ___/___/___

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
204	128	I	BROMOCHLOROMETHANE (IS)	247	101000	50.0		
221	50		CHLOROMETHANE				BDL	10
201	62		VINYL CHLORIDE				BDL	10
121	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE				BDL	10
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE				BDL	5
206	43		ACETONE (2-PROPANONE)			15.1	15J	10
242	114	I	1,4-DIFLUOROBENZENE (IS)	372	520000	50.0		
222	84		METHYLENE CHLORIDE				BDL	5
220	96		TRANS-1,2-DICHLOROETHENE				BDL	5
214	63		1,1-DICHLOROETHANE				BDL	5
157	43		VINYL ACETATE				BDL	10
[illegible]	96		CIS-1,2-DICHLOROETHENE				BDL	5
[illegible]	72		2-BUTANONE				BDL	10
111	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
208	117		CARBON TETRACHLORIDE				BDL	5
213	78		BENZENE				BDL	5
215	62		1,2-DICHLOROETHANE				BDL	5
270	117	I	D5-CHLOROBENZENE (IS)	745	319000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROPANE				BDL	5
212	83		BROMODICHLOROMETHANE				BDL	5
219	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE				BDL	10
225	92		TOLUENE				BDL	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
223	97		1,1,2-TRICHLOROETHANE				BDL	5
224	164		TETRACHLOROETHENE				BDL	5
255	43		2-HEXANONE				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
230	106		M,P-XYLENE				BDL	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 WE#57			43.3	87.%	
247	95	S	BROMOFLUOROBENZENE			43.3	87.%	
223	98	S	D8-TOLUENE WE#59 SS#2			45.6	91.%	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(QC/MS DATA REVIEWER)

DATE 5/9/90

CMF #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)	
259	96		1,2-DICHLOROETHENE (TOTAL)				BDL		10
CHECKSUMS: 3979.				1364	940000.	297.3		15.	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/8/90

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	43.3	50.0	87.	76-114	X	
41	247	BROMOFLUOROBENZENE	43.3	50.0	87.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	45.6	50.0	91.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5-19-90

QUALITY ASSURANCE NOTICE
CompuChem # 33783A
Blank ID # CB [illegible]
Case 20124

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analysed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Acetone	12.	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 60 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

CA4295
ST1026

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800111

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337836

Sample wt/Vol: 5.0 (g/mL) ML Lab File ID: CN037836A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. _____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	BJ
67-64-1	Acetone	10	U
75-15-0	Carbon Disulfide	9	
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	10	U
108-10-1	4-Methyl-2-Pentanone	18	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	8	
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

73800111

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337836

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037836A19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. _____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

COMPUCHEM LABS

RIC

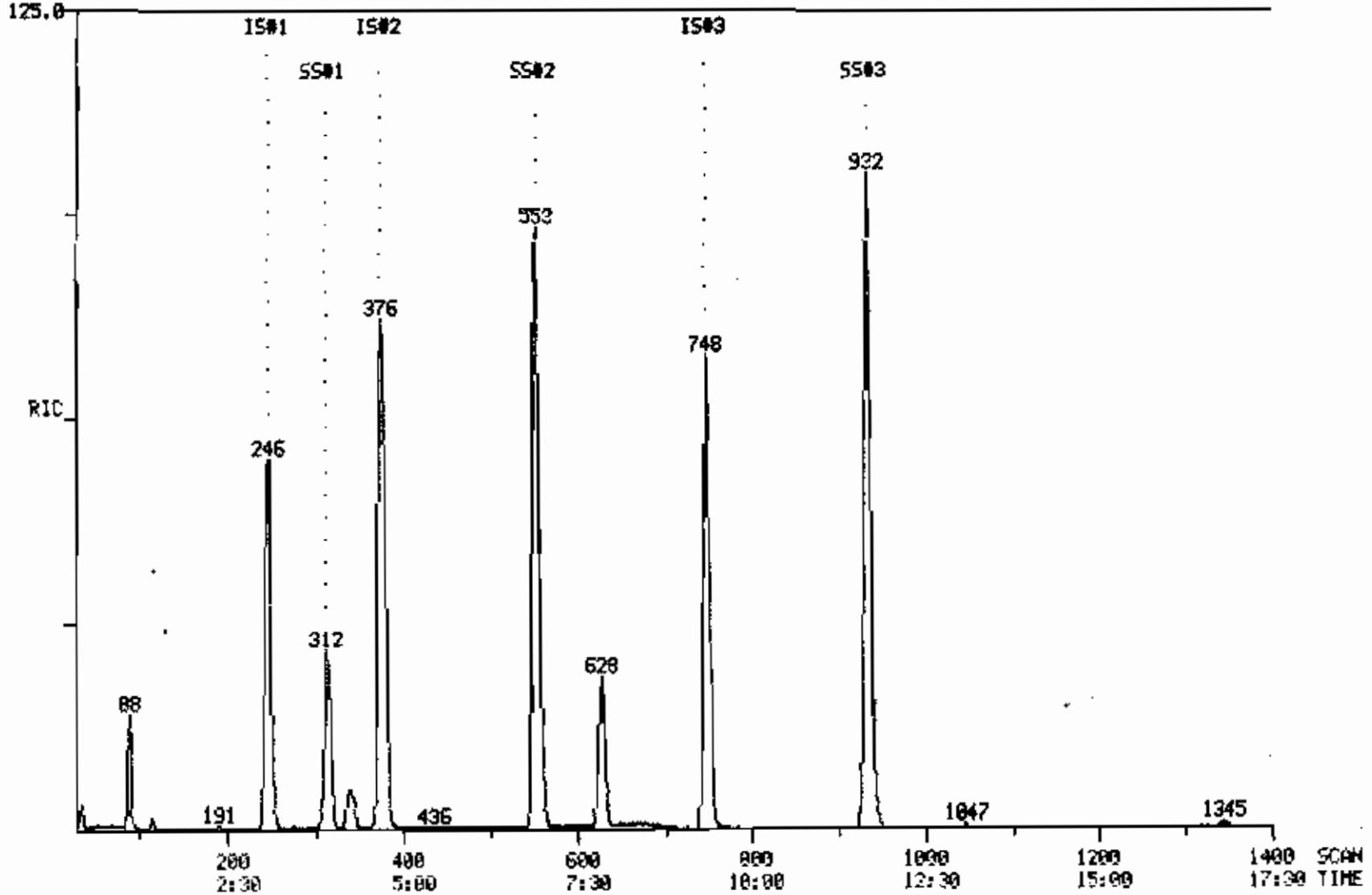
COMPUCHEM DATA: CN037036A19 SCANS 20 TO 1400

05/15/90 13:14:00

SAMPLE: SHL CC#337836 EPA#:73800111 CASE#20124 DA#19

CONDS.:

74000.



```
QUANTITATION REPORT    FILE: CN037836A19
DATA: CN037836A19.TI
05/15/90 13:14:00
SAMPLE: 5ML CC#337836 EPA#: 73800111 CASE#20124 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> WE#1
  2   221 CHLOROMETHANE <74-87-3> WE#2
  3   231 VINYL CHLORIDE <75-01-4> WE#3
  4   220 BROMOMETHANE <74-83-9> WE#4
  5   209 CHLOROETHANE <75-00-3> WE#5
  6   216 1,1-DICHLOROETHENE <75-35-4> WE#8
  7   254 CARBON DISULFIDE <75-15-0> WE#9
  8   252 ACETONE (2-PROPANONE) <67-64-1> WE#13
  9  *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
 10   222 METHYLENE CHLORIDE <75-09-2> WE#16
 11   226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
 12   214 1,1-DICHLOROETHANE <75-34-3> WE#19
 13   257 VINYL ACETATE <108-05-4> WE#20
 14   237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
 15   253 2-BUTANONE <78-93-3> WE#22
 16   211 CHLOROFORM <67-66-2> WE#23
 17   227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
 18   206 CARBON TETRACHLORIDE <56-23-5> WE#25
 19   203 BENZENE <71-43-2> WE#26
 20   215 1,2-DICHLOROETHANE <107-06-2> WE#27
 21  *270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
 22   229 TRICHLOROETHENE <79-01-6> WE#30
 23   217 1,2-DICHLOROPROPANE <78-87-5> WE#31
 24   212 BROMODICHLOROMETHANE <75-27-4> WE#33
 25   218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
 26   256 4-METHYL-2-PENTANONE <108-01-1> WE#36
 27   225 TOLUENE <108-88-3> WE#37
 28   250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
 29   228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
 30   224 TETRACHLOROETHENE <127-18-4> WE#41
 31   255 2-HEXANONE <591-78-6> WE#42
 32   208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
 33   207 CHLOROBENZENE <108-90-7> WE#45
 34   219 ETHYLBENZENE <100-41-4> WE#47
 35   330 M,P-XYLENE <133-02-7> WE#48
 36   239 O-XYLENE <133-02-7> WE#49
 37   251 STYRENE <100-42-5> WE#50
 38   205 BROMOFORM <75-25-2> WE#51
 39   223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
 40  #258 D4-1,2-DICHLOROETHANE WE#57 SS#1
 41  #247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
 42  #233 D8-TOLUENE WE#59 SS#2

 NO  M/E  SCAN   TIME  REF   RRT  METH     AREA(HGHT)  AMOUNT          %TOT
  1  128   246   3:04   1  1.000  A BB       45043.    50.000 UG/L   16.72
  2   50  NOT FOUND
```

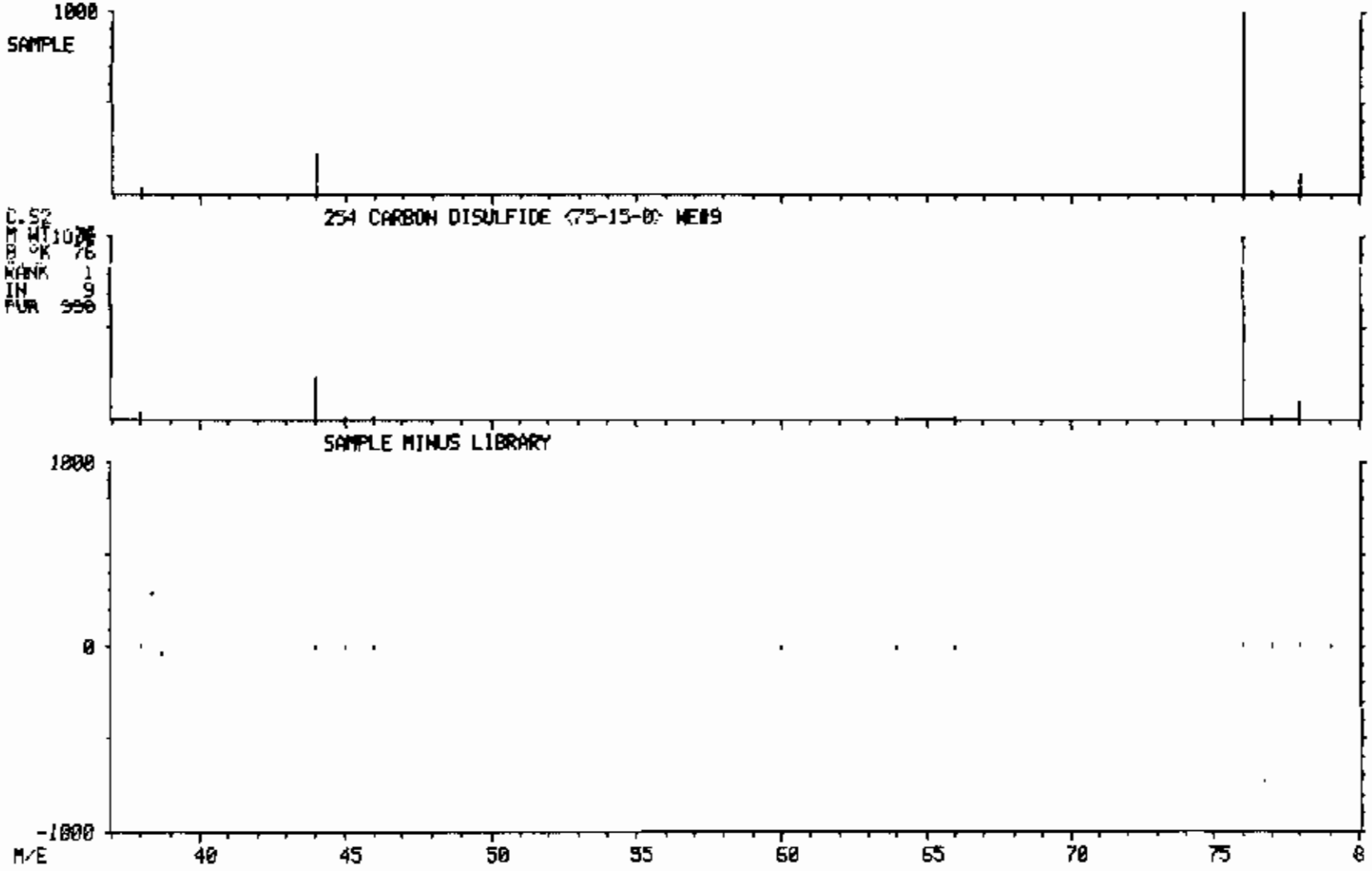
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	88	1:06	1	0.358	A BB	27927.	8.572	UG/L	2.87
8	43	NOT FOUND								
9	114	376	4:42	9	1.000	A BB	184509.	50.000	UG/L	16.72
10	84	113	1:25	1	0.459	A BB	1325.	1.679	UG/L	0.56
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	NOT FOUND								
20	62	NOT FOUND								
21	117	749	9:22	21	1.000	A BB	128966.	50.000	UG/L	16.72
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	628	7:51	21	0.838	A BB	14929.	8.152	UG/L	2.73
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	312	3:54	1	1.268	A BB	48687.	43.148	UG/L	14.43
41	95	933	11:40	21	1.246	A BB	65402.	43.090	UG/L	14.41
42	98	553	6:55	21	0.738	A BB	170633.	44.462	UG/L	14.87

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39		10.000			50.00		0.751	
6	1:03		5.000			50.00		1.389	
7	1:07	0.99	5.000	0.07	8.57	50.00	0.620	3.616	0.17
8	1:11		10.000			50.00		0.259	
9	4:45	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	0.97	5.000	0.09	1.68	50.00	0.029	0.876	0.03
11	1:40		5.000			50.00		0.941	
12	2:05		5.000			50.00		1.103	
13	2:19		10.000			50.00		0.255	
14	2:49		5.000			50.00		0.937	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000			50.00		0.560	
19	3:55		5.000			50.00		0.495	
20	4:04		5.000			50.00		1.236	
21	9:24	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.455	
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52	1.00	5.000	0.17	8.15	50.00	0.116	0.710	0.16
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	0.98	5.000	0.25	43.15	50.00	1.081	1.253	0.86
41	11:42	1.00	5.000	0.25	43.09	50.00	0.507	0.588	0.86
42	6:57	0.99	5.000	0.15	44.46	50.00	1.323	1.488	0.89

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037836A19 # 88 BASE M/E: 76
05/15/90 13:14:00 + 1.06 RIC: 9631.
SAMPLE: 5ML CC#337836 EPA#:73800111 CASE#20124 CN#19
ENHANCED (S 15B 2N 0T)

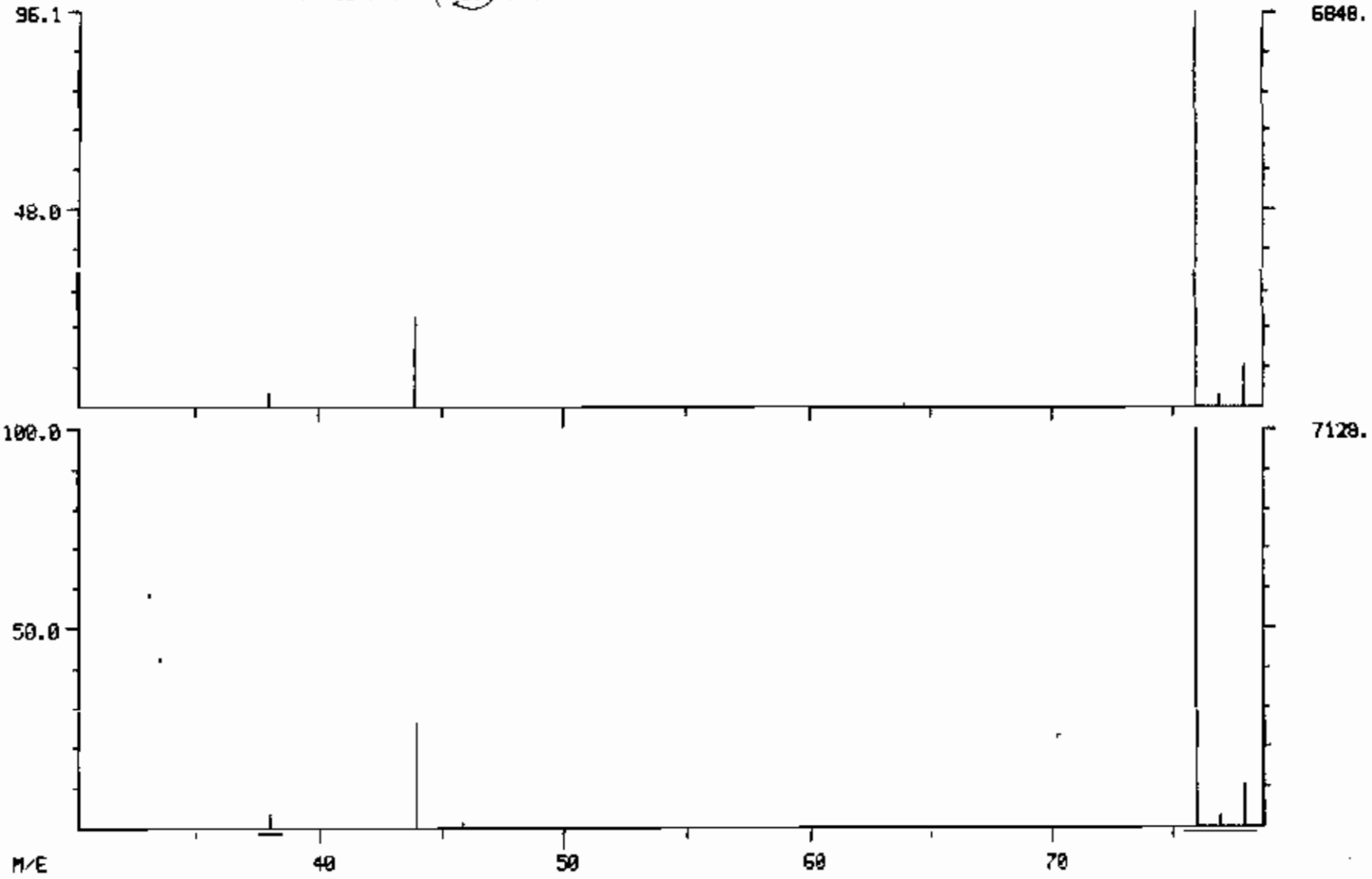


NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

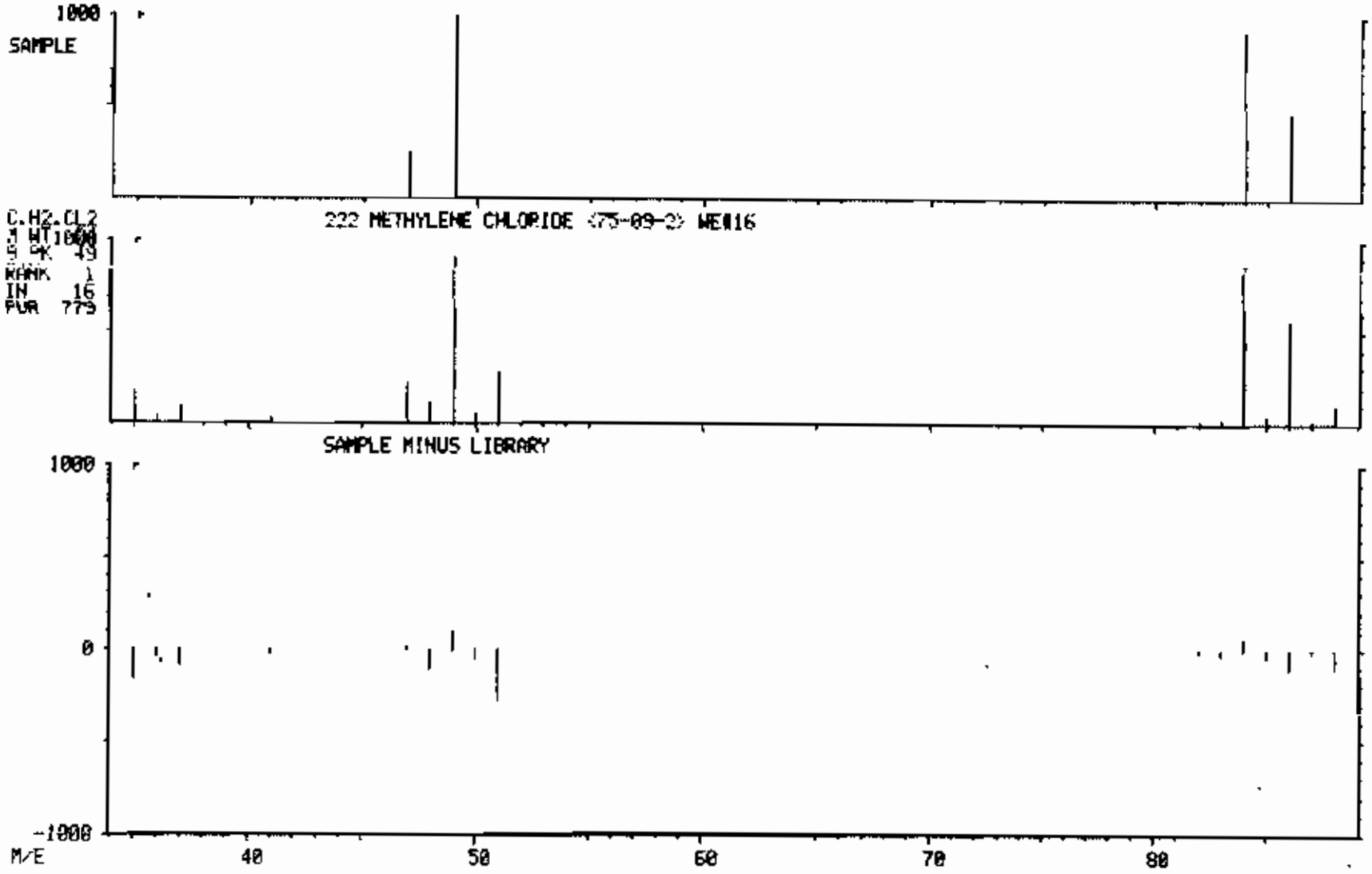
DUAL MASS SPECTRUM
05/15/90 13:14:00 + 1.0C
SAMPLE: SML CC#337836 EPA#:73800111 CASE#20124 DN#19
ENHANCED (S 158 2W) (254) CARBON DISULFIDE (75-15-0) WE#9

DATA: CN037036A19 #88 BASE M/E: 76/ 76
RIC: 9621./ 10319.



COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037036A19 # 113 BASE M/E: 49
05/15/90 13:14:90 + 1.25 RIC: 712.
SAMPLE: 5ML CC#337036 EPA#:73800111 CASE#20124 ON#19
ENHANCED (S 150 2N 0T)

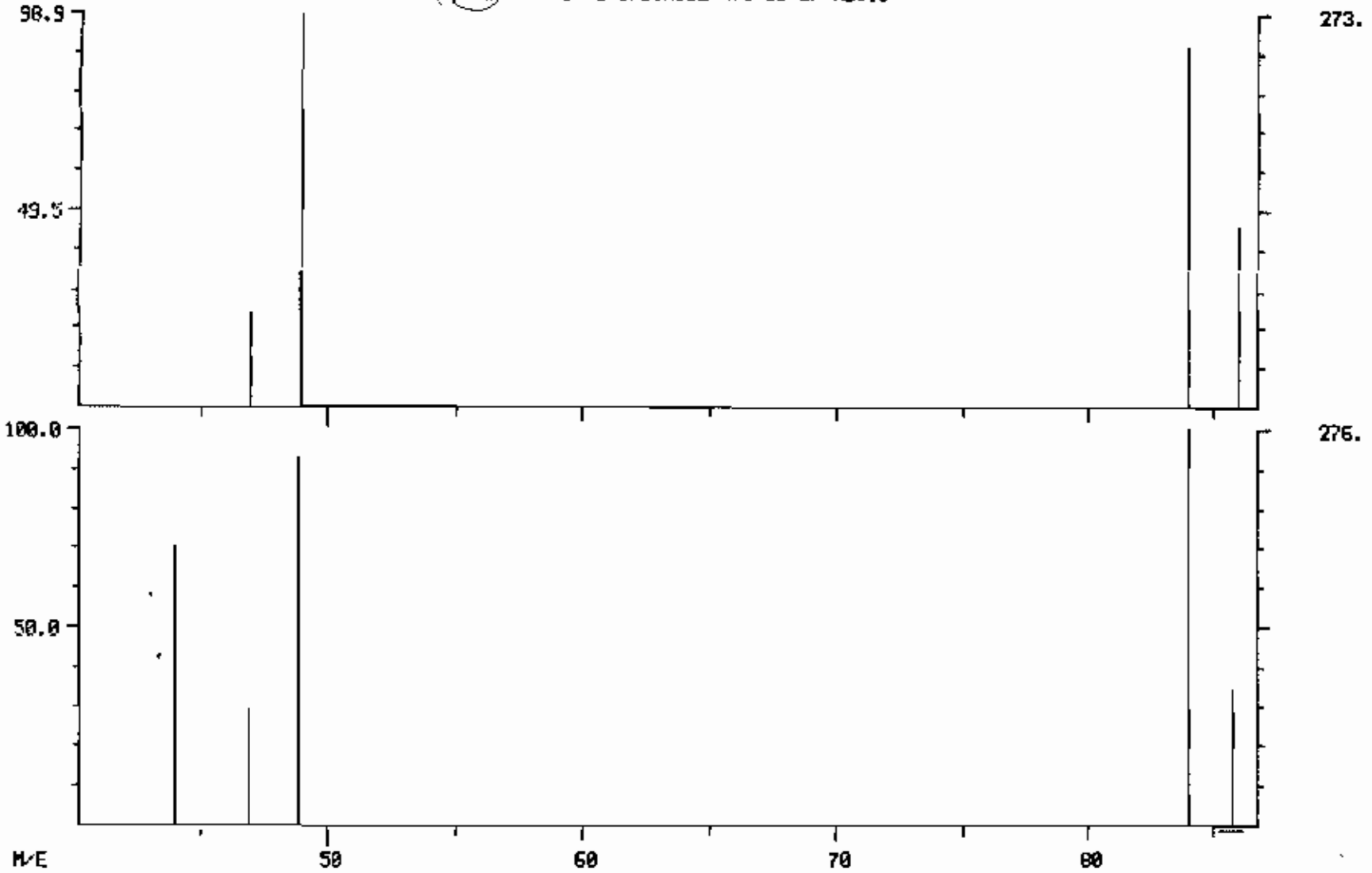


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 13:14:00 + 1.25
SAMPLE: 5ML CC#337836 EPA#:73800111 CASE#20124 OH#19
ENHANCED (S 15B 2N)

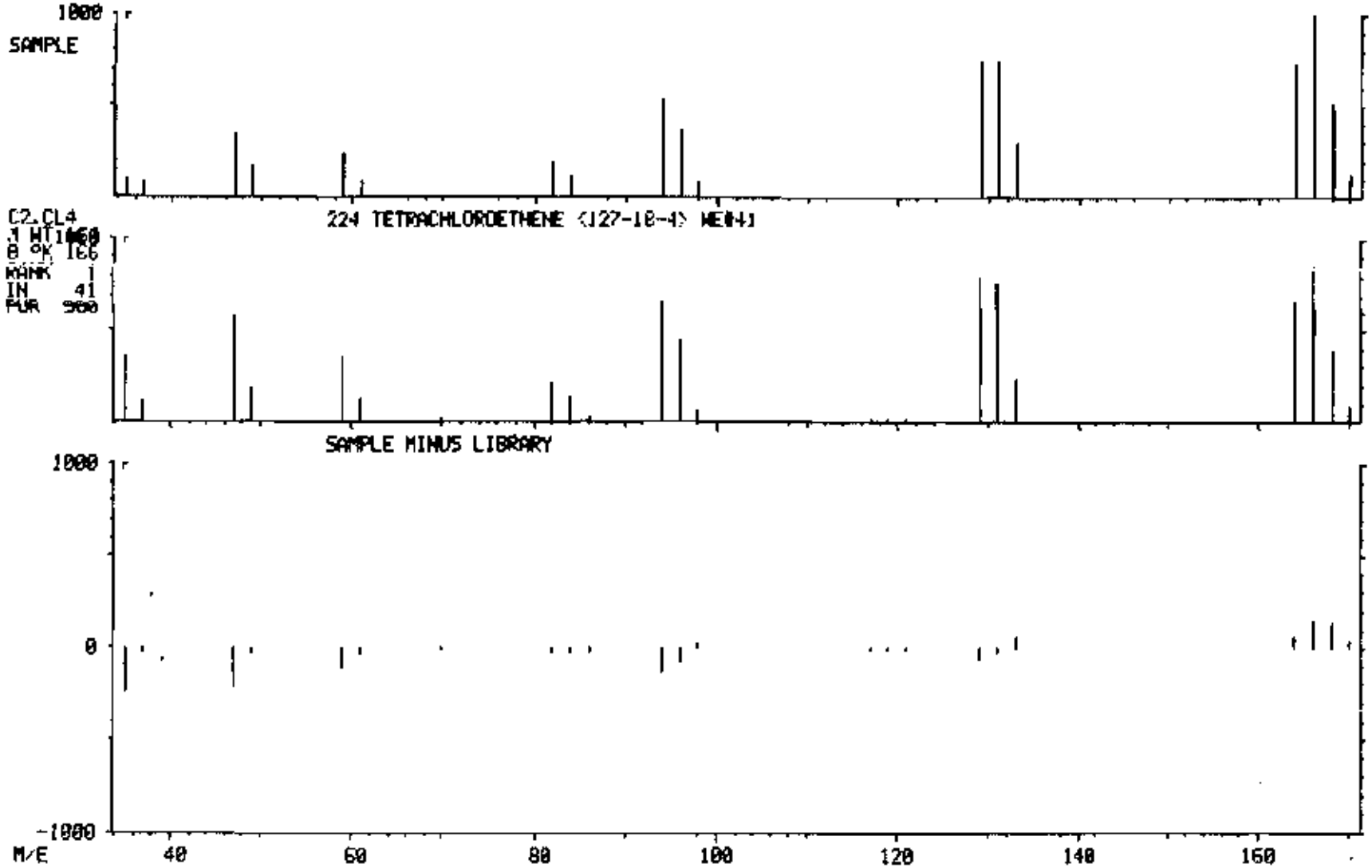
DATA: CH037836A19 #113 BASE M/E: 49/ 84
RIC: 713./ 899.

222 METHYLENE CHLORIDE (75-09-2) WE#16



COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037836A19 # 620 BASE M/E: 166
05/15/90 13:14:00 + 7:51 RIC: 11097.
SAMPLE: 5ML CC#337836 EPA#:73000111 CASE#20124 ON#19
ENHANCED (S 15B 2N 0T)

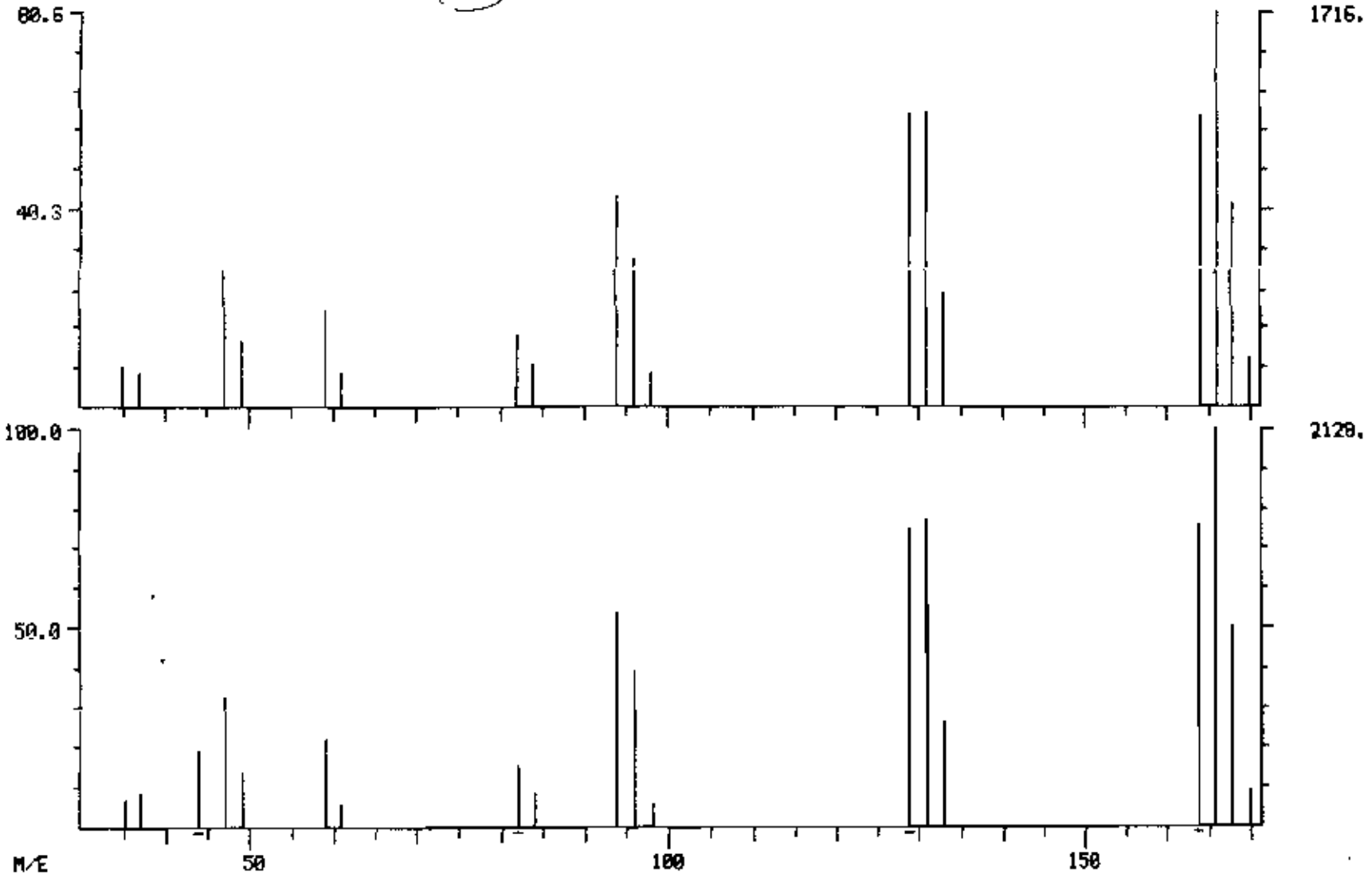


COMPUCHEM LABS

DUAL MASS SPECTRUM
08/16/90 13:14:00 + 7:51
SAMPLE: 5ML CC#337836 EPA#:73000111 CASE#20124 ON#19
ENHANCED (S 158 2N)

DATA: CN037836A19 #620 BASE M/E: 166/ 166
RIC: 11007./ 13647.

224 TETRACHLOROETHENE (127-18-4) WE#41



LAB INSTRUCTIONS:
SEE PPS#407 CASE#RA090 SDG#0507

PPS#: _____

RECEIPT DATE: 05/09/90 CASE#: 20124

VOA
GC/MS WORKSHEET COMPUCHEM#: 337836

J[ ] J3[ ] D[ ] (:1)
2J[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73800111

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] Dilution _____ ul/5000ul Purged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF900515C19 Disk ( )
Blank Filename CB900515C19 Disk ( )
Standard Filename CS900515C19 Disk ( )
Sample Filename CNC37836A19 Disk ( )

RECEIVED
MAY 18 1990
DATA MANAGEMENT

ANALYST(S): Injection 1492/Alan Fuel Work-up 1492/Alan Fuel

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 0

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 1

[ ] Dilute (:1)

COMMENTS:

#GC/MS Review OK-STUDY Date 5/17/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CNO-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	246	45000	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	5
254	76		CARBON DISULFIDE			8.6	9	5
252	43		ACETONE (2-PROPANONE)				BDL	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	376	185000	50.0		
222	84		METHYLENE CHLORIDE			1.7	2J 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				BDL	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)	749	129000	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				BDL	10
225	92		TOLUENE				BDL	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
228	97		1,1,2-TRICHLOROETHANE				BDL	5
224	164		TETRACHLOROETHENE			8.2	8	5
255	43		2-HEXANONE				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	5
229	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 WE#57			43.1	86.%	
247	95	S	BROMOFLUOROBENZENE			43.1	86.%	
233	98	S	D8-TOLUENE WE#59 SS#2			44.5	89.%	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/12-90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS:								
	3979.			1371	359000.	299.2		19.

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5/7/90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
A0	258	D4-1,2-DICHLOROETHANE WE#57	43.1	50.0	86.	76-114	X	
A1	247	BROMOFLUOROBENZENE	43.1	50.0	86.	86-115	X	
A2	233	D8-TOLUENE WE#59 SS#2	44.5	50.0	89.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(CC/MS DATA REVIEWER)

DATE 5/7/90

QUALITY ASSURANCE NOTICE
CompuChem # 227936
Blank ID # CB900505C9
Case 20124

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

CAN295
8/1026

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800112

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337837

Sample wt/vol: 2.0 (g/mL) ML Lab File ID: C2R17837C19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	25	U
75-00-3	Chloroethane	19	J
75-09-2	Methylene Chloride	19	BJ
67-64-1	Acetone	25	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
108-05-4	Vinyl Acetate	25	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	79	
10061-02-6	Trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	38	U
591-78-6	2-Hexanone	38	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	29	
108-90-7	Chlorobenzene	18	
100-41-4	Ethylbenzene	170	
100-42-5	Styrene	13	U
1330-20-7	Total Xylenes	490	

1E

EPA SAMPLE NO.

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

73800112

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337837

Sample wt/vol: 2.0 (g/mL) ML Lab File ID: C2R17837C19

Level: (low/med) LOW Date Received: 05/09/90

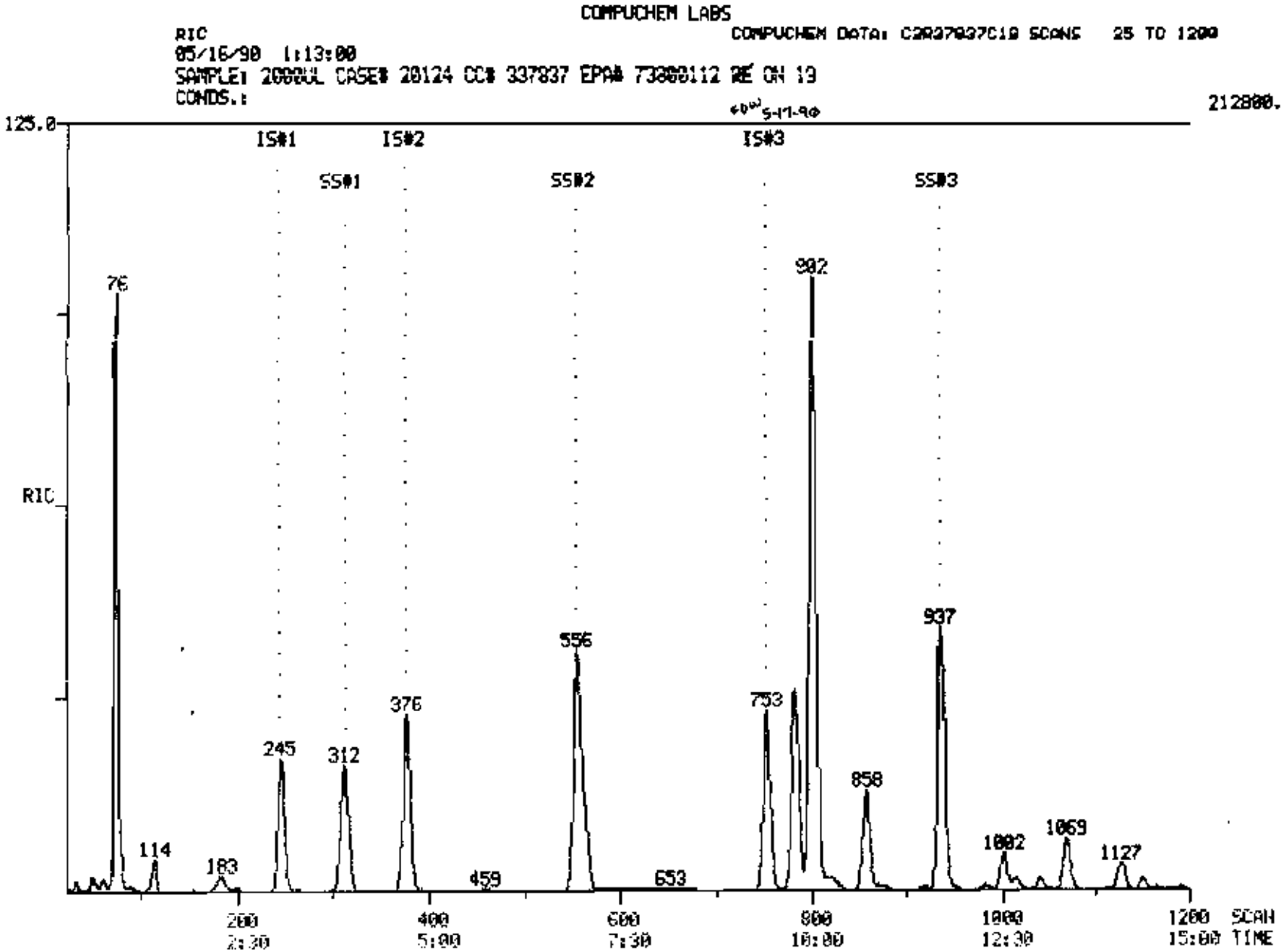
% Moisture: not dec. _____ Date Analyzed: 05/16/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 5

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

	CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
1.	60-29-7	ETHANE,1,1'-OXYBIS-	0.95	330	J
2.	108-20-3	PROPANE,2,2'-OXYBIS-	2.28	18	J
3.		ETHYLMETHYLBENZENE	12.52	28	J
4.		TRIMETHYLBENZENE	13.35	38	J
5.		DIETHYLBENZENE	14.09	23	J



1486

NYDEC RA090.0507 ORGANIC

QUANTITATION REPORT FILE: C2R37837C19
DATA: C2R37837C19.TI
05/16/90 1:13:00
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73800112 RE DN 19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1171

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#10
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TEYRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	XTOT
1	128	245	3:04	1	1.000	A BB	47879.	50.000 UG/L	7.87
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	51	0:38	1	0.208	A BB	6708.	7.629	UG/L	1.20 J S
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	NOT FOUND								
9	114	376	4:42	9	1.000	A BB	190026.	50.000	UG/L	7.87
10	84	114	1:25	1	0.465	A BB	8457.	7.598	UG/L	1.20 J S
11	96	NOT FOUND								
12	63	NOT FOUND								
13	43	182	2:16	9	0.484	A BB	10671.	8.448	UG/L	1.33 ND
14	96	NOT FOUND								
15	72	NOT FOUND								
16	83	NOT FOUND								
17	97	NOT FOUND								
18	117	NOT FOUND								
19	78	311	3:53	9	0.827	A BB	71220.	31.637	UG/L	4.98 J S
20	62	NOT FOUND								
21	117	753	9:25	21	1.000	A BB	136082.	50.000	UG/L	7.87
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	571	7:08	21	0.758	A#VB	1301.	1.154	UG/L	0.18 ND
27	92	564	7:03	21	0.749	A BB	30559.	11.386	UG/L	1.79 J S
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	756	9:27	21	1.004	A BB	16250.	7.203	UG/L	1.13 J S
34	106	783	9:47	21	1.040	A BV	72912.	68.571	UG/L	10.80 J S
35	106	802	10:01	21	1.065	A VB	247745.	163.752	UG/L	25.78 J S
36	106	858	10:43	21	1.139	A BV	46916.	33.093	UG/L	5.21 J S
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	313	3:55	1	1.278	A BB	62630.	49.654	UG/L	7.82
41	95	937	11:43	21	1.244	A BB	79656.	49.094	UG/L	7.73
42	98	556	6:57	21	0.738	A BB	191948.	46.033	UG/L	7.25

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27		10.000			50.00		0.400	
3	0:33		10.000			50.00		0.503	
4	0:37		10.000			50.00		0.813	
5	0:40	0.96	10.000	0.02	7.63	50.00	0.140	0.918	0.15
6	1:03		5.000			50.00		1.664	
7	1:07		5.000			50.00		4.561	
8	1:12		10.000			50.00		0.336	
9	4:43	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:28	0.97	5.000	0.09	7.60	50.00	0.177	1.162	0.15
11	1:40		5.000			50.00		1.149	
12	2:07		5.000			50.00		1.329	
13	2:20	0.97	10.000	0.05	8.45	50.00	0.056	0.332	0.17
14	2:49		5.000			50.00		1.128	

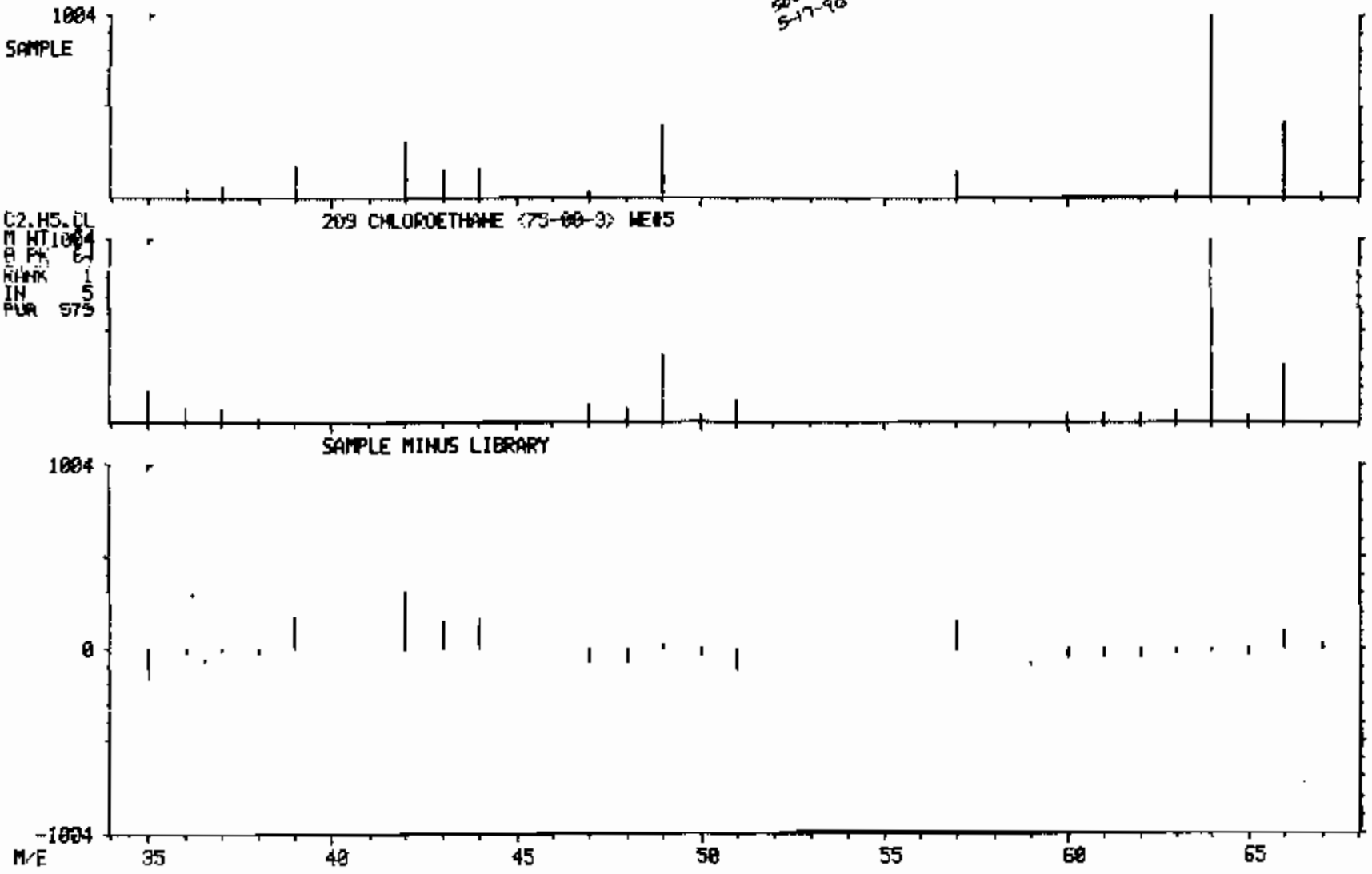
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:01		10.000			50.00		0.067	
16	3:21		5.000			50.00		2.050	
17	3:22		5.000			50.00		0.546	
18	3:34		5.000			50.00		0.634	
19	3:55	0.99	5.000	0.17	31.64	50.00	0.375	0.592	0.63
20	4:04		5.000			50.00		1.419	
21	9:22	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.519	
23	5:18		5.000			50.00		0.228	
24	5:55		5.000			50.00		0.767	
25	6:38		5.000			50.00		0.698	
26	7:04	1.01	15.000	0.05	1.15	50.00	0.010	0.414	0.02
27	7:01	1.00	5.000	0.15	11.39	50.00	0.225	0.986	0.23
28	7:41		5.000			50.00		0.427	
29	7:55		5.000			50.00		0.450	
30	7:51		5.000			50.00		0.814	
31	8:34		15.000			50.00		0.200	
32	8:29		5.000			50.00		0.749	
33	9:25	1.00	5.000	0.20	7.20	50.00	0.119	0.829	0.14
34	9:45	1.00	5.000	0.21	68.57	50.00	0.536	0.391	1.37
35	10:00	1.00	5.000	0.21	163.75	50.00	1.621	0.556	3.28
36	10:41	1.00	5.000	0.23	33.09	50.00	0.345	0.521	0.66
37	10:46		5.000			50.00		0.961	
38	11:01		5.000			50.00		0.618	
39	12:18		5.000			50.00		0.384	
40	3:57	0.99	5.000	0.26	49.65	50.00	1.308	1.317	0.99
41	11:40	1.00	5.000	0.25	49.09	50.00	0.585	0.596	0.98
42	6:55	1.00	5.000	0.15	46.03	50.00	1.411	1.532	0.92

COMPUCHEM LABS

LIBRARY SEARCH
05/16/90 1:13:00 + 0:20
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 BE ON 19
ENHANCED (S 15B 2N 0T)

DATA: C2R37937C19 # 51 BASE M/E: 64
RIC: 2907.

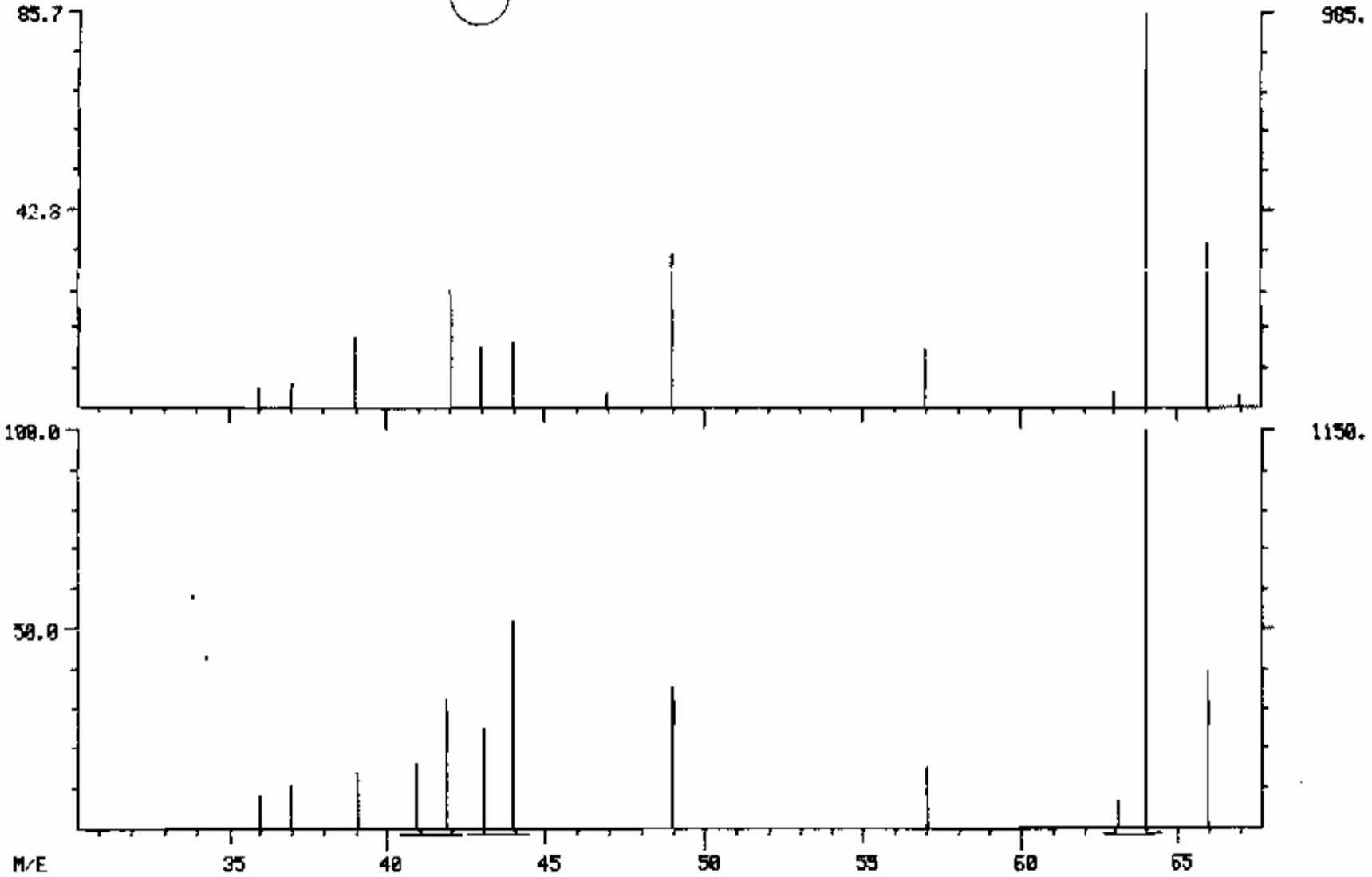
SDW 5-17-90



NYDEC RA090 0507 ORGANIC

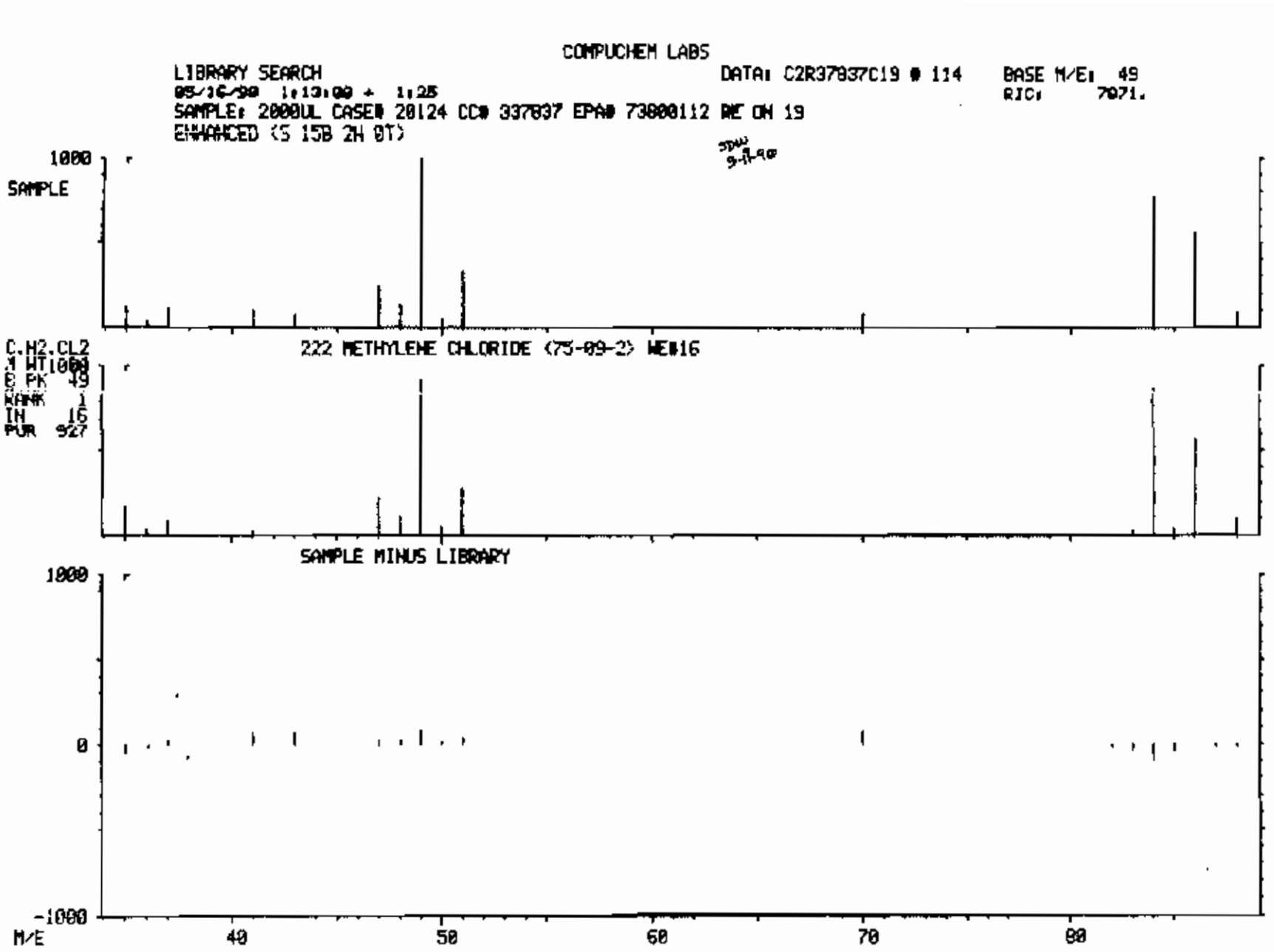
COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:19:00 + 0:00
DATA: C2R37837C19 #51
BASE M/E: 64/ 64
RIC: 2997./ 4967.
SAMPLE: 2000UL CASE# 20124 QC# 337837 EPA# 73000112 RE ON 19
ENHANCED (S 15B 2N) 209 CHLOROETHANE (75-00-3) WE#5



14811

NYDEC RA090 0507 ORGANIC

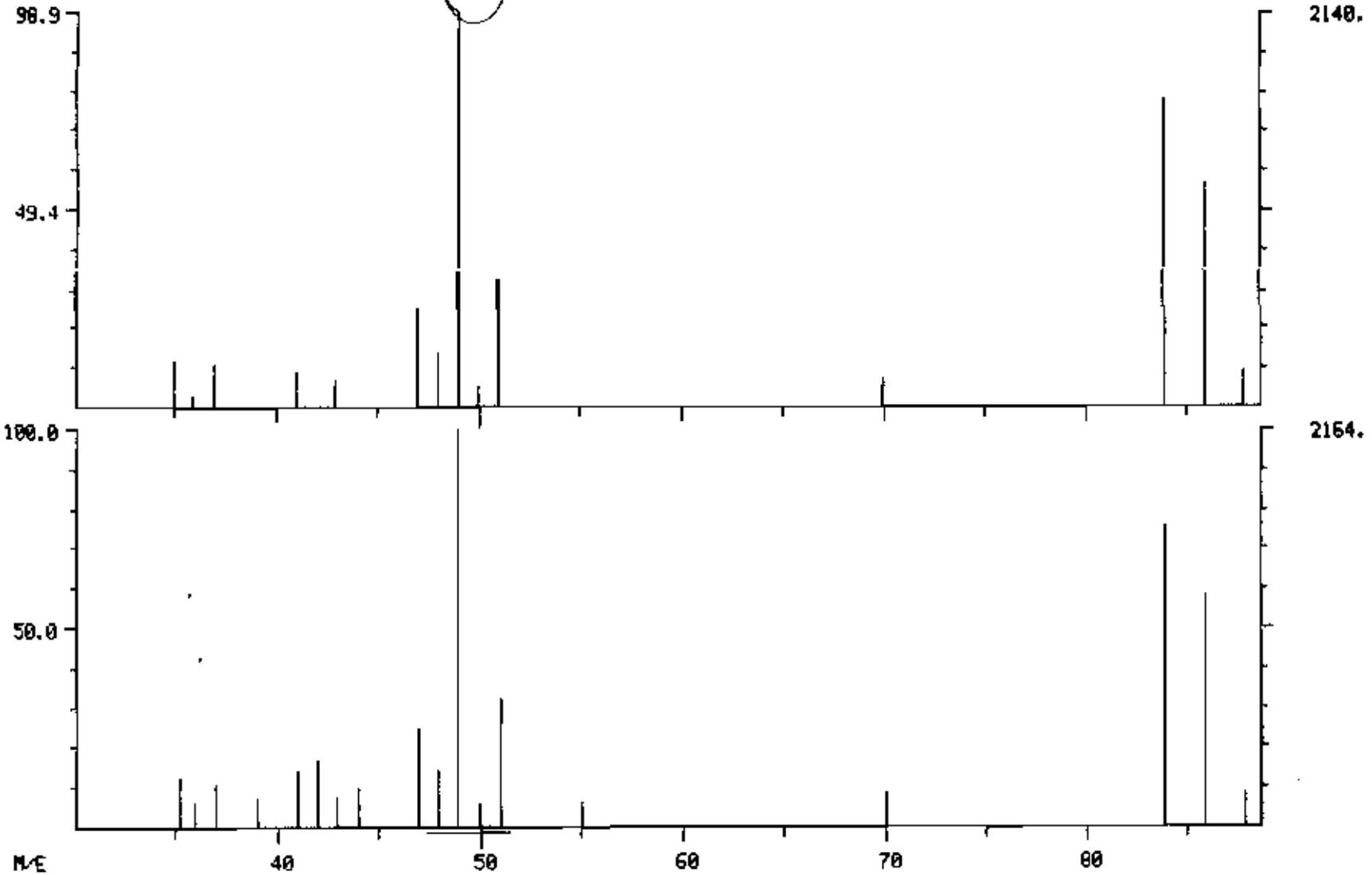


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:19:00 + 1:25
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73900112 RE ON 19
ENHANCED (S 15B 2H)

DATA: C2R37837C19 #114 BASE M/E: 49/ 49
RIC: 7971./ 9023.

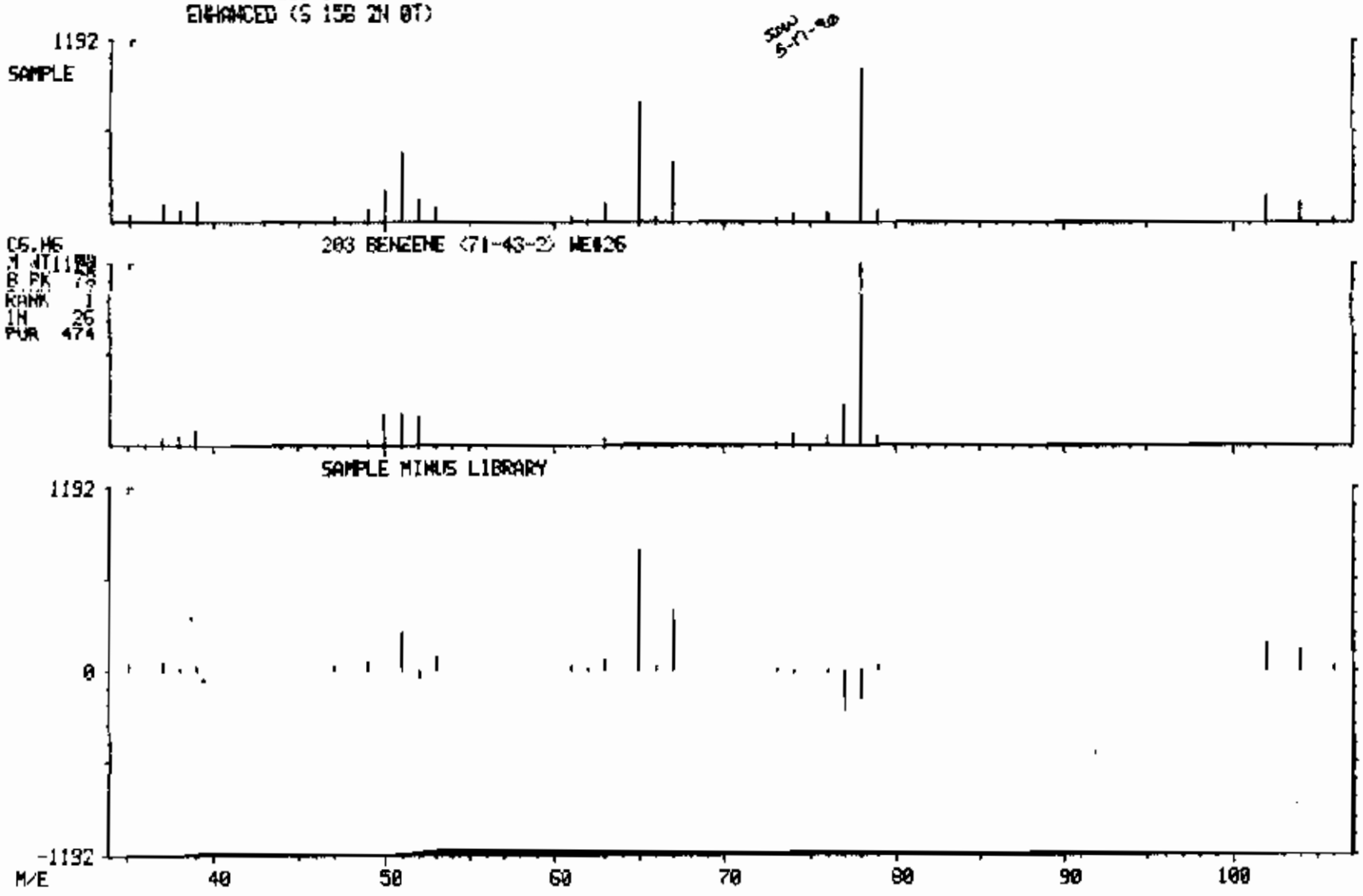
222 METHYLENE CHLORIDE (75-09-2) WE#16

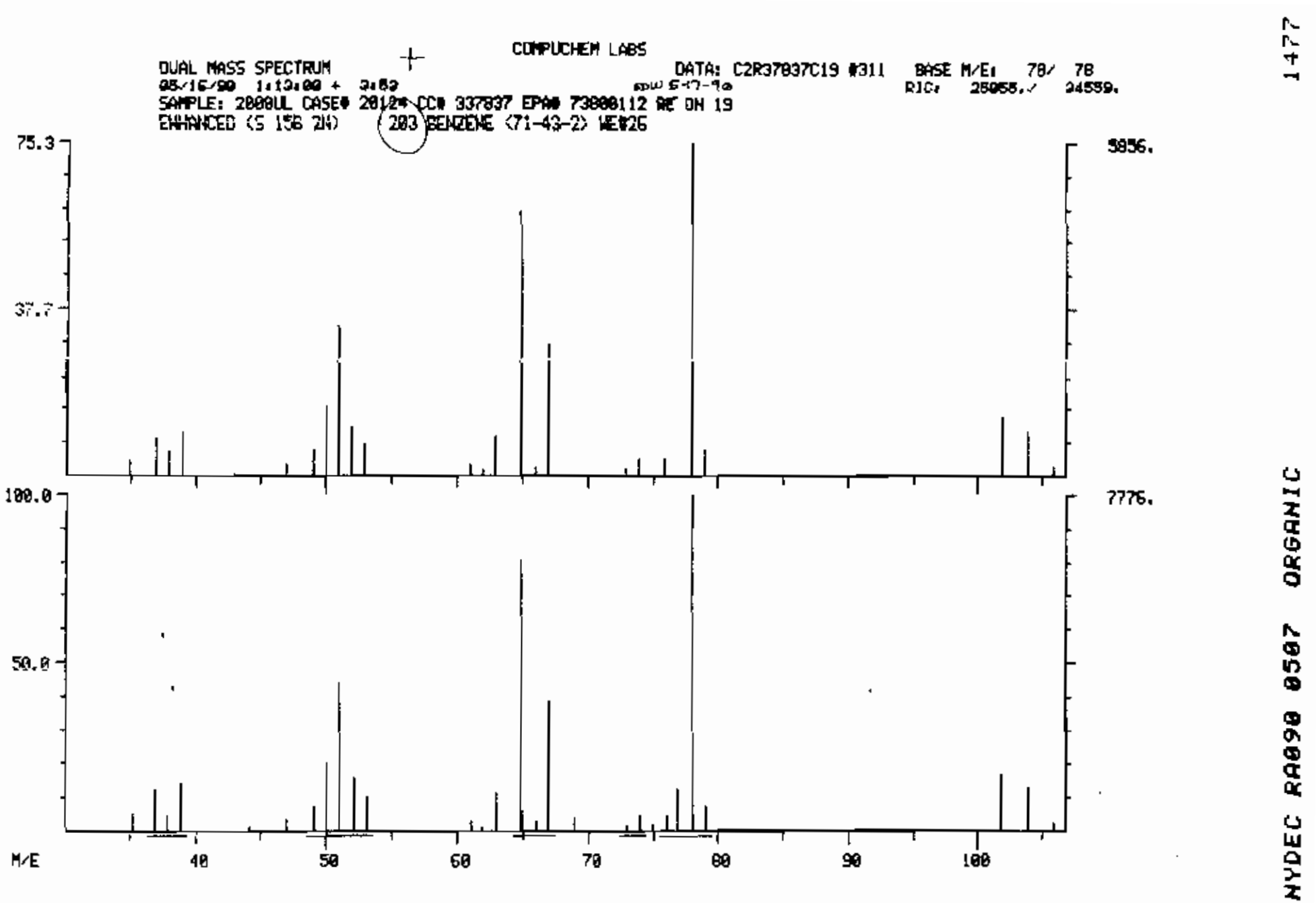


NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: C2R37837C19 # 311 BASE M/E: 78
05/16/90 1:19:00 + 3:53 RIC: 25023.
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73800112 BE ON 19
ENHANCED (S 15B 2N 0T)





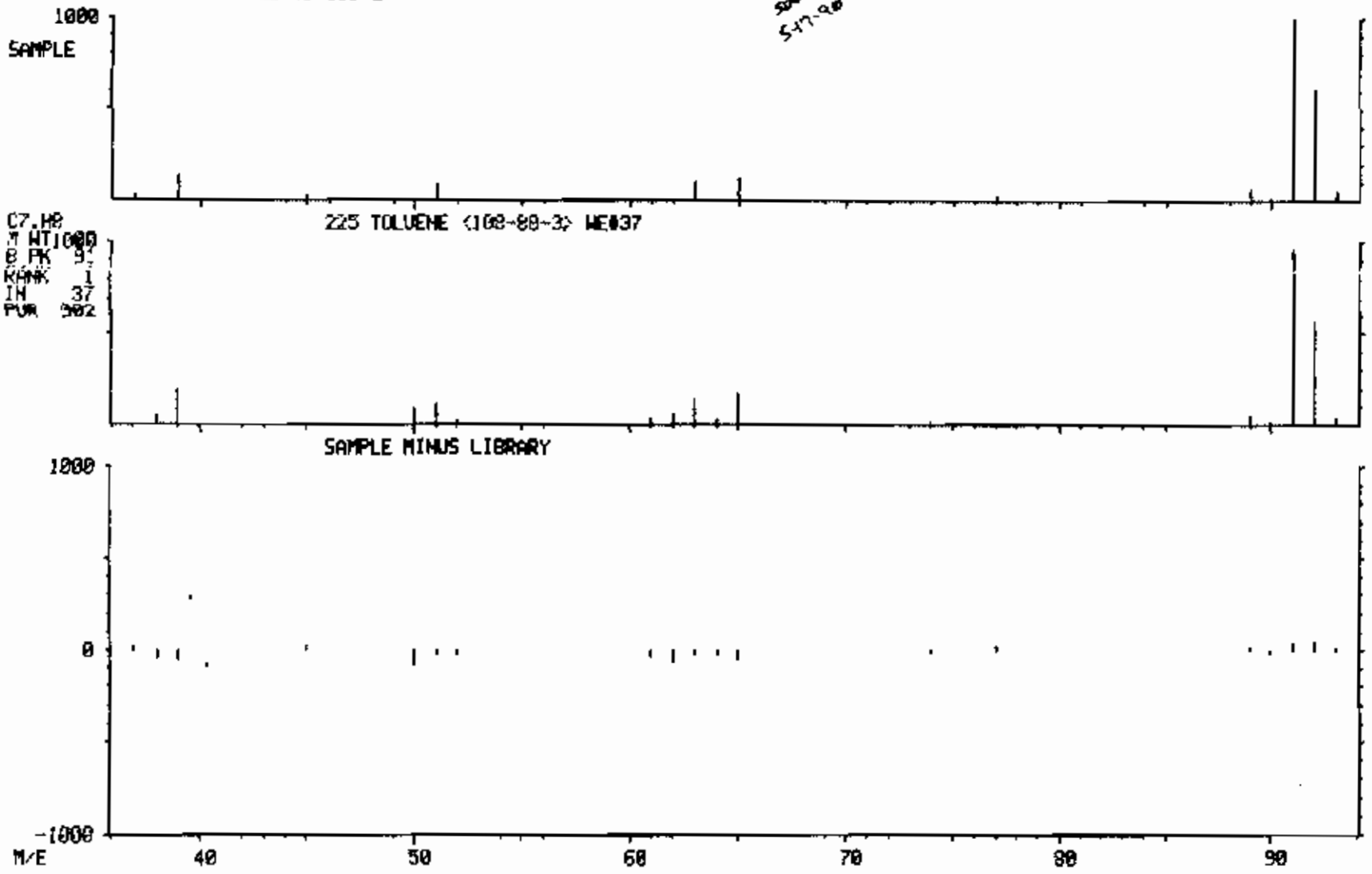
1477

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH
05/16/90 1:13:00 + 7:03
SAMPLE: 2000UL CASE# 28124 CC# 337837 EPA# 73000112 RE OH 19
ENHANCED (S 15B 2N 0T)

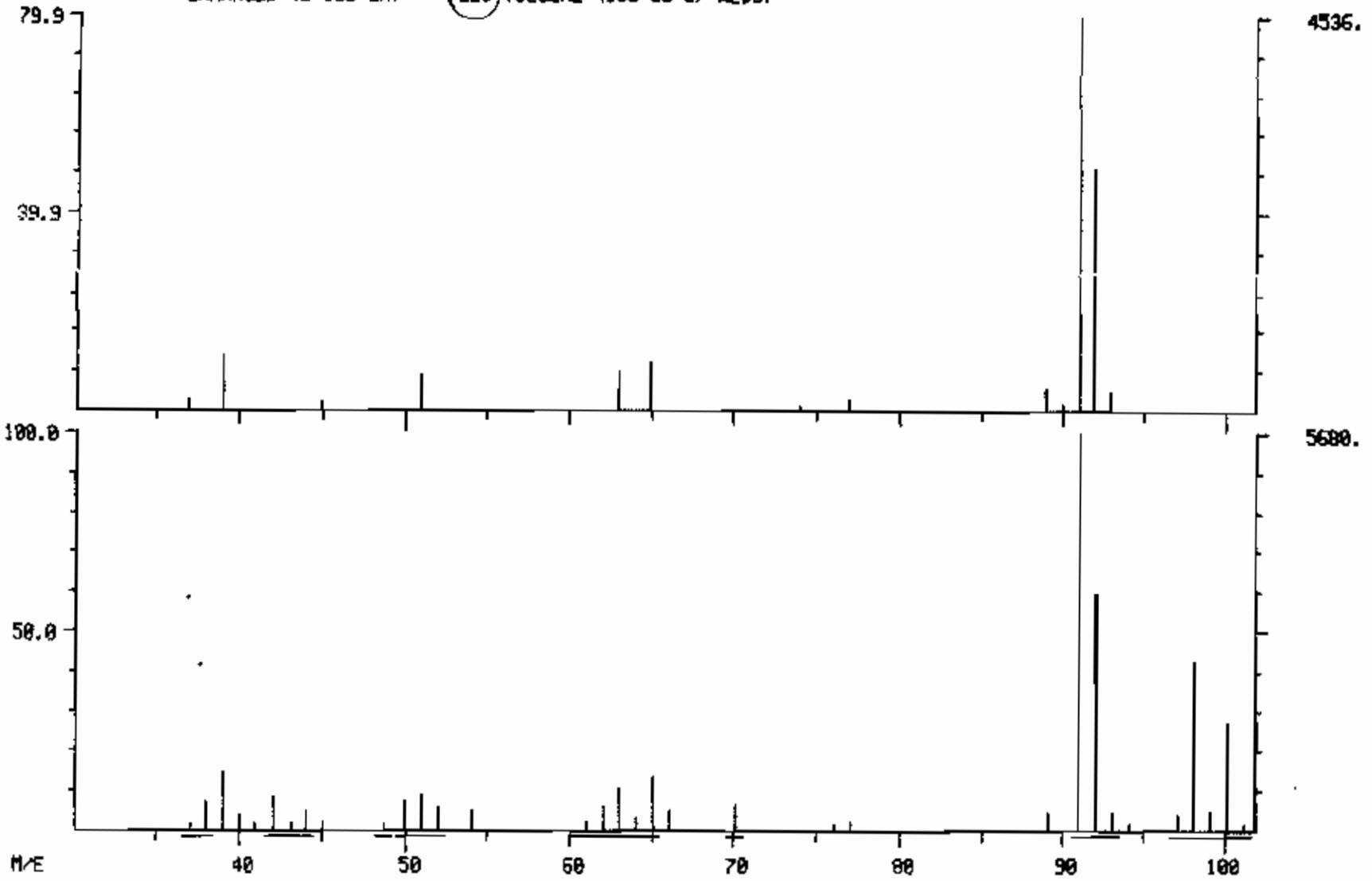
DATA: C2R37837C19 # 564
BASE M/E: 91
RIC: 10271.



COMPUCHEM LABS

DUAL MASS SPECTRUM
08/15/90 1:13:00 + 7:00
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 RE ON 19
ENHANCED (S 15B 2H) (225) TOLUENE (108-88-3) WE#37

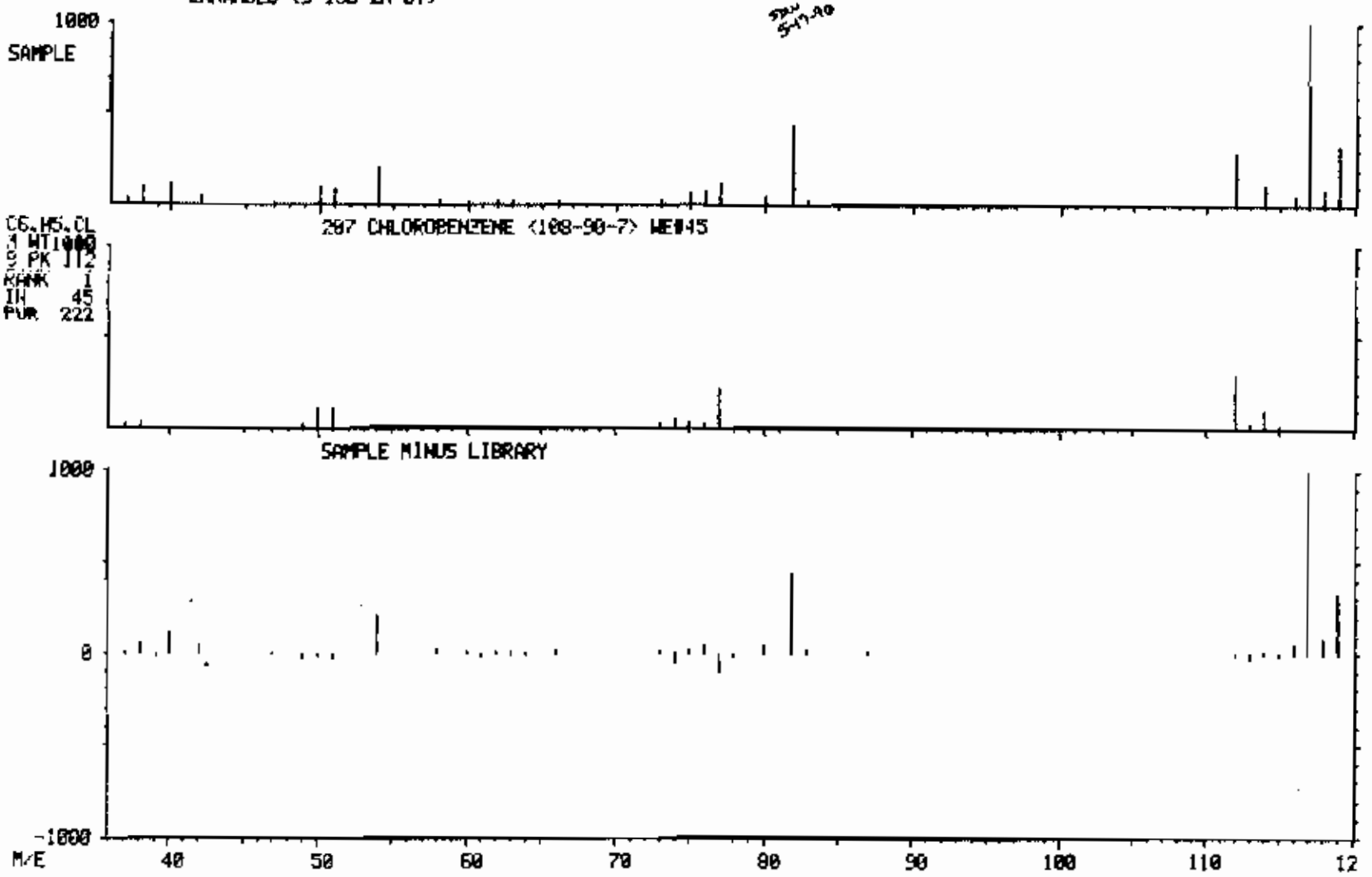
DATA: C2R37837C19 #564 BASE M/E: 91/ 91
RIC: 10271./ 21439.



COMPUCHEM LABS

LIBRARY SEARCH
05/16/90 1:12:00 + 9:27
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 ME ON 19
ENHANCED (S 15B 2N 0T)

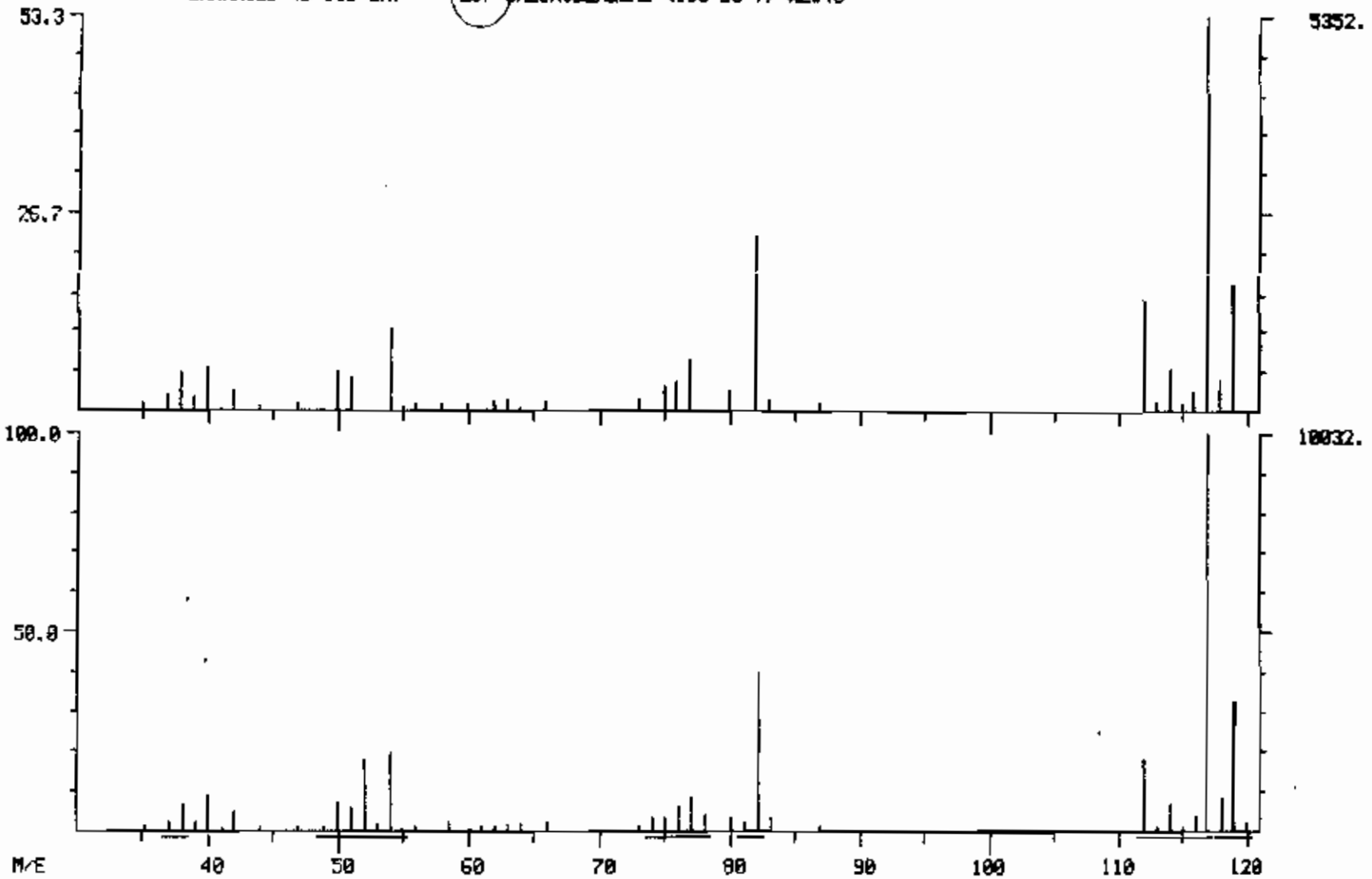
DATA: C2R37837C19 # 756 BASE M/E: 117
RIC: 10761.



COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:13:00 + 9:27
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 RE ON 19
ENHANCED (S 15B 2H) 287 CHLOROBENZENE (108-90-7) WE045

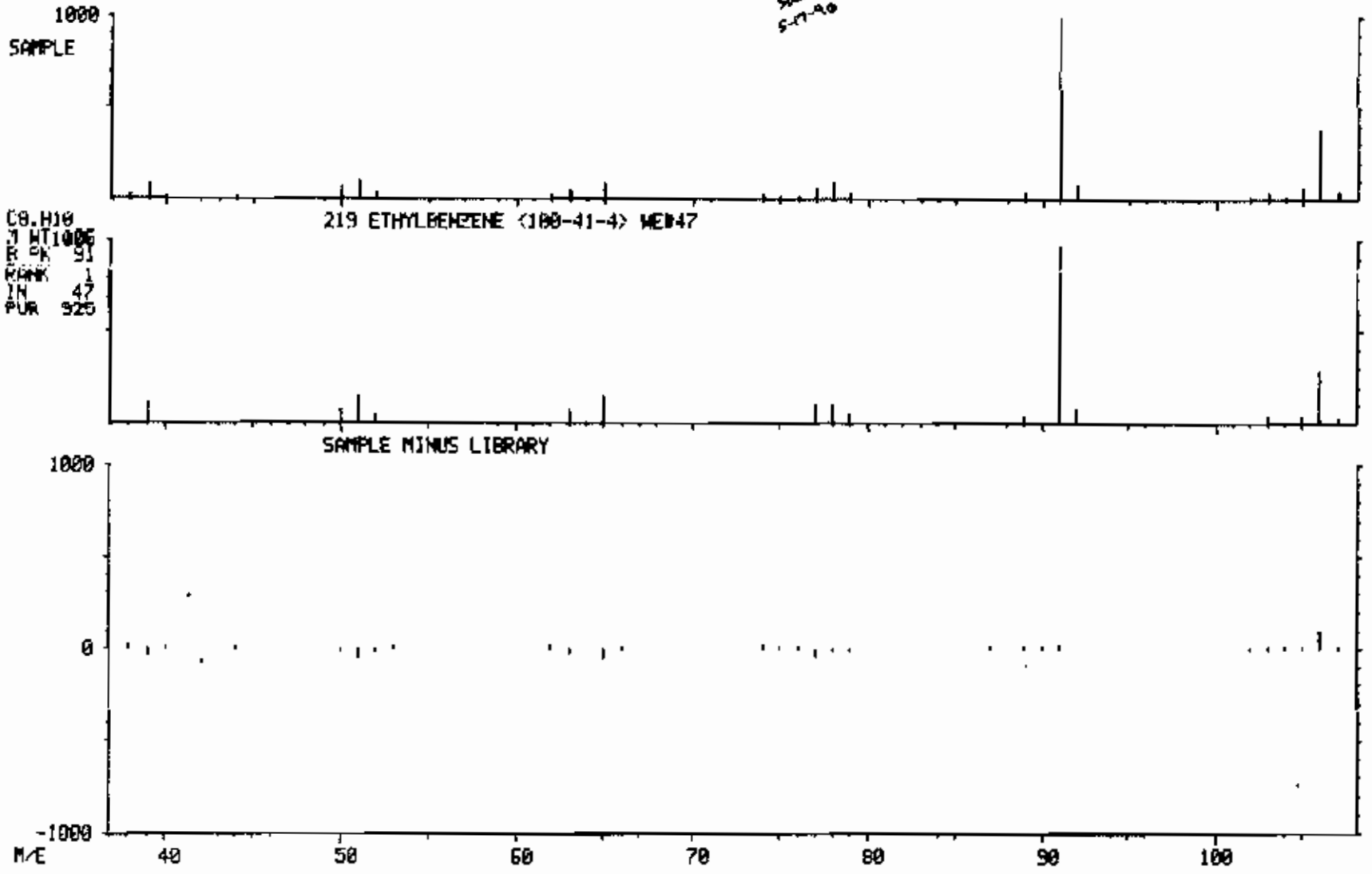
DATA: C2R37837C19 #756 BASE M/E: 117/ 117
RIC: 19497./ 24597.



COMPUCHEM LABS

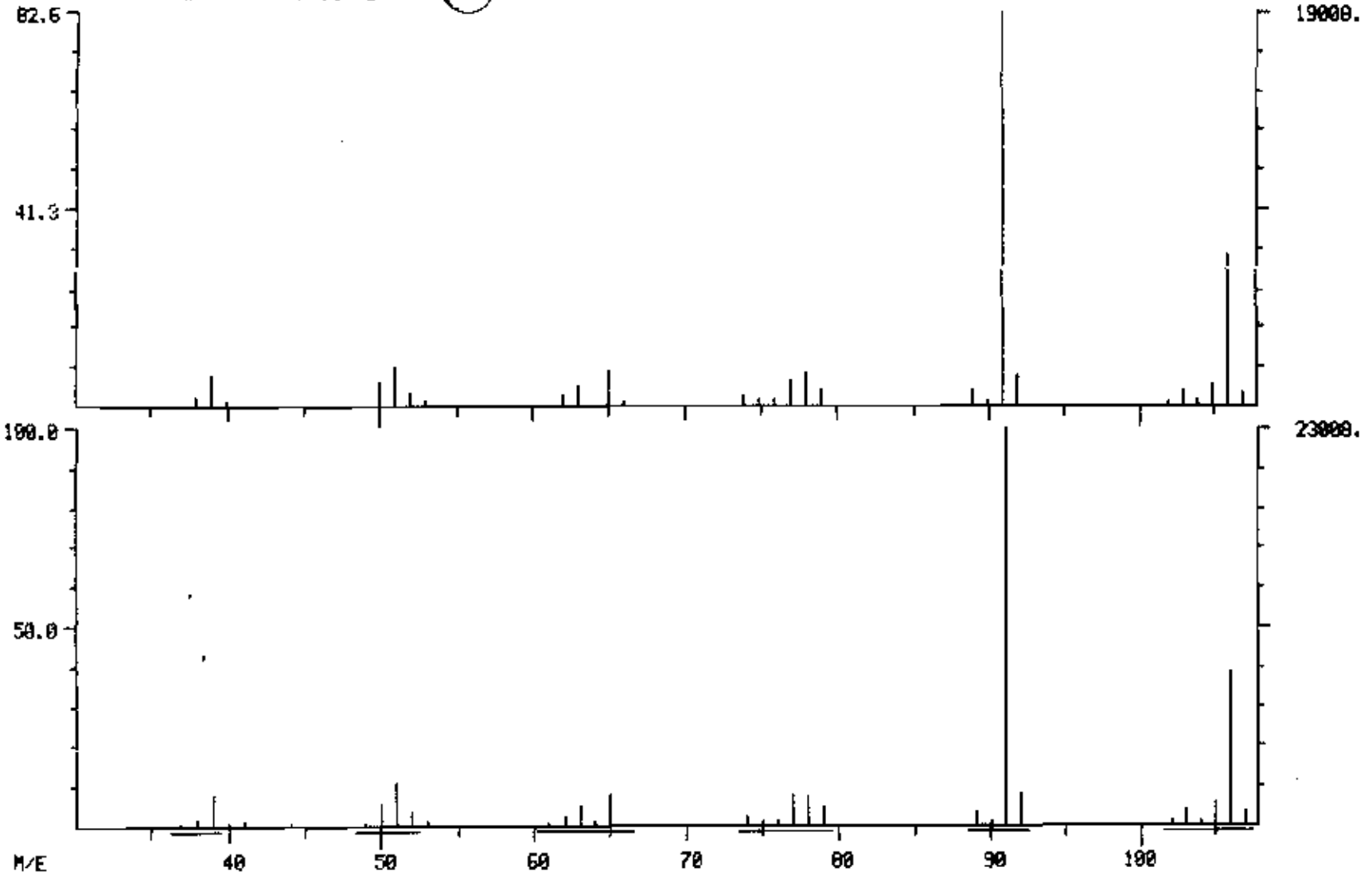
LIBRARY SEARCH
05/15/90 1:13:00 + 9:47
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 BE ON 19
ENHANCED (S 15B 2N 0T)

DATA: C2R37837C19 # 783 BASE M/E: 91
RIC: 46207.



COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:13:00 + 9:47
DATA: C2R37937C19 #783 BASE M/E: 91/ 91
RIC: 46207./ 55679.
SAMPLE: 2000UL CASE# 20124 CC# 337937 EPA# 73000112 RE ON 19
ENHANCED (S 1&8 2H) 213/ETHYLBENZENE (100-41-4) WE#47



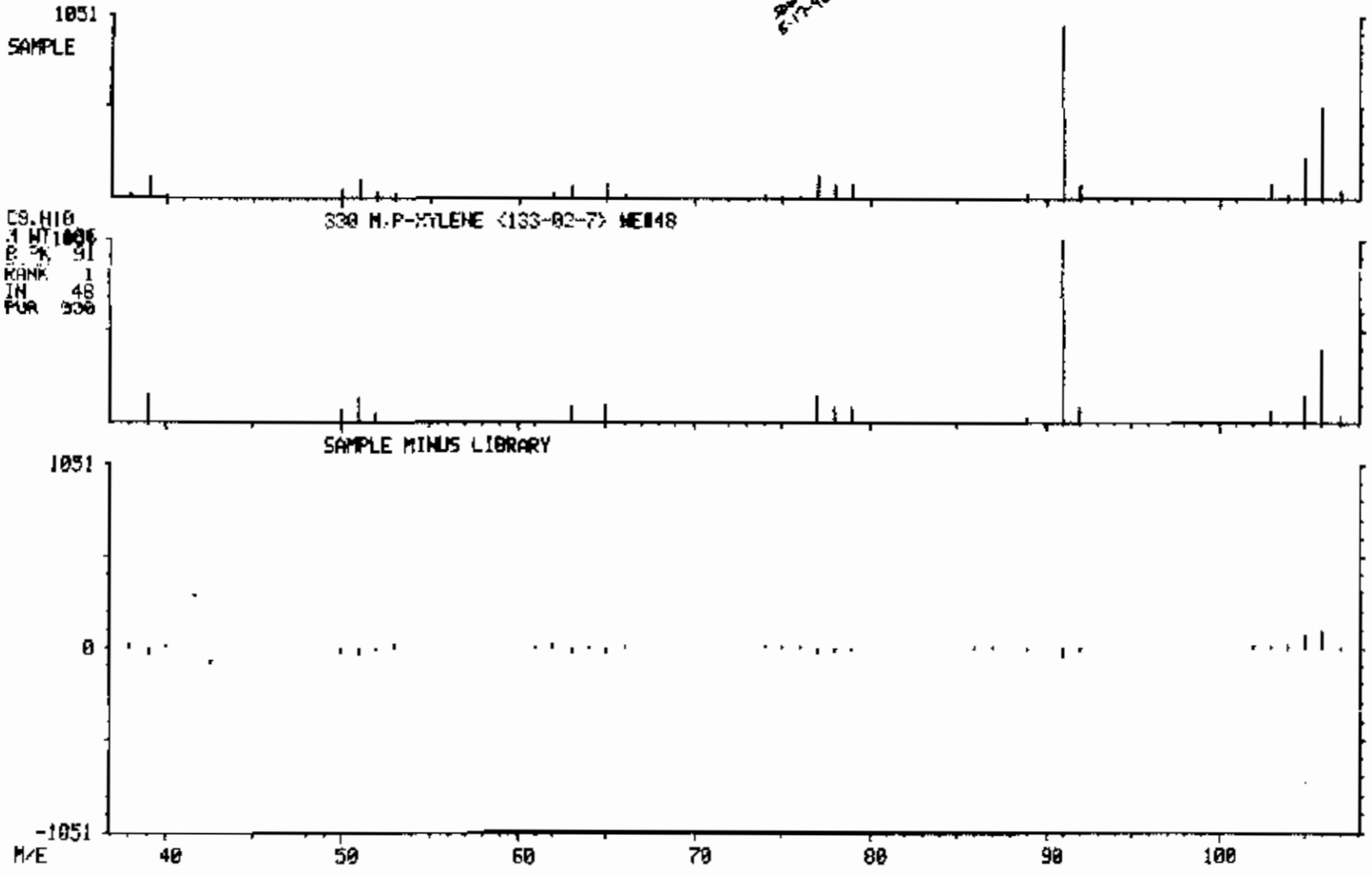
1471

HYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH
05/15/90 1:13:00 + 10:01
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 BE DH 19
ENHANCED (S 15B 2N 0T)

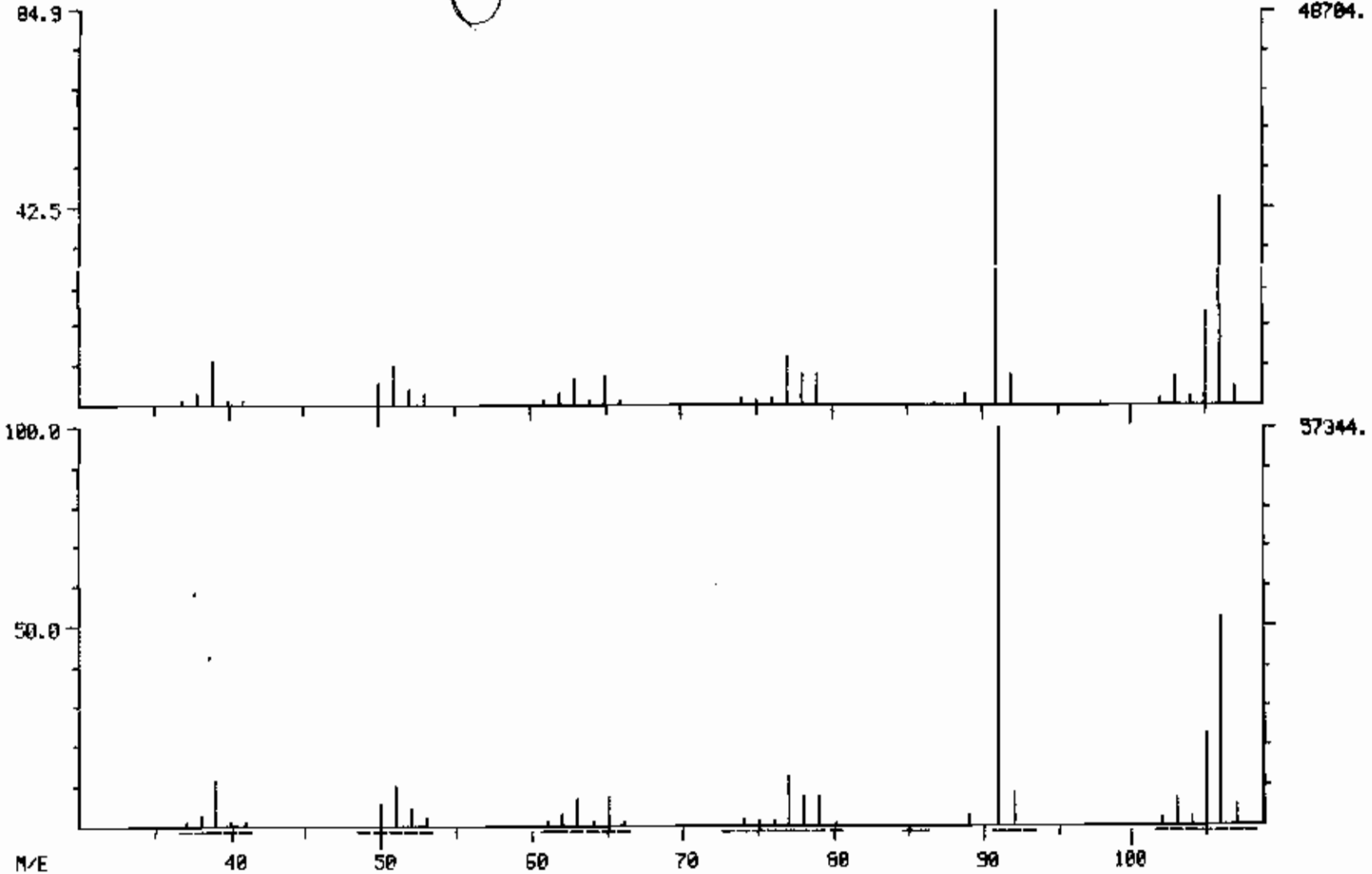
DATA: C2R37837C19 # 802 BASE M/E: 91
RIC: 142615.



COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:13:00 + 10:01
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 RE ON 19
ENHANCED (S 158 ZH) 330 M,P-XYLENE (133-02-7) WE#48

DATA: C2R37837C19 #802 BASE M/E: 91/ 91
RIC: 146175./ 169993.

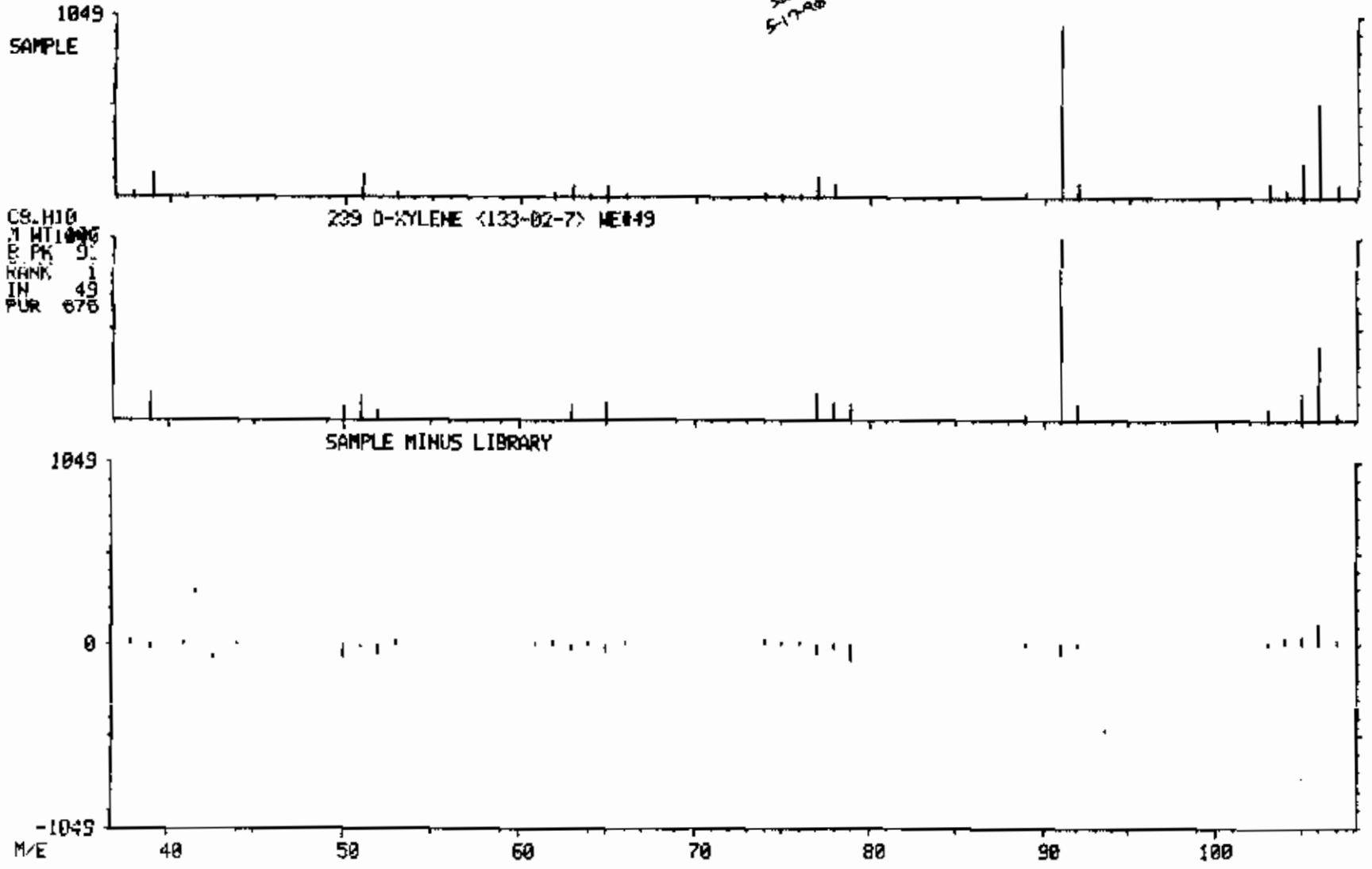


NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH
05/16/90 1:13:00 + 10:43
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73000112 RE ON 19
ENHANCED (S 15B ZH 0T)

DATA: C2R37837C19 # 650
BASE M/E: 91
RIC: 21503.

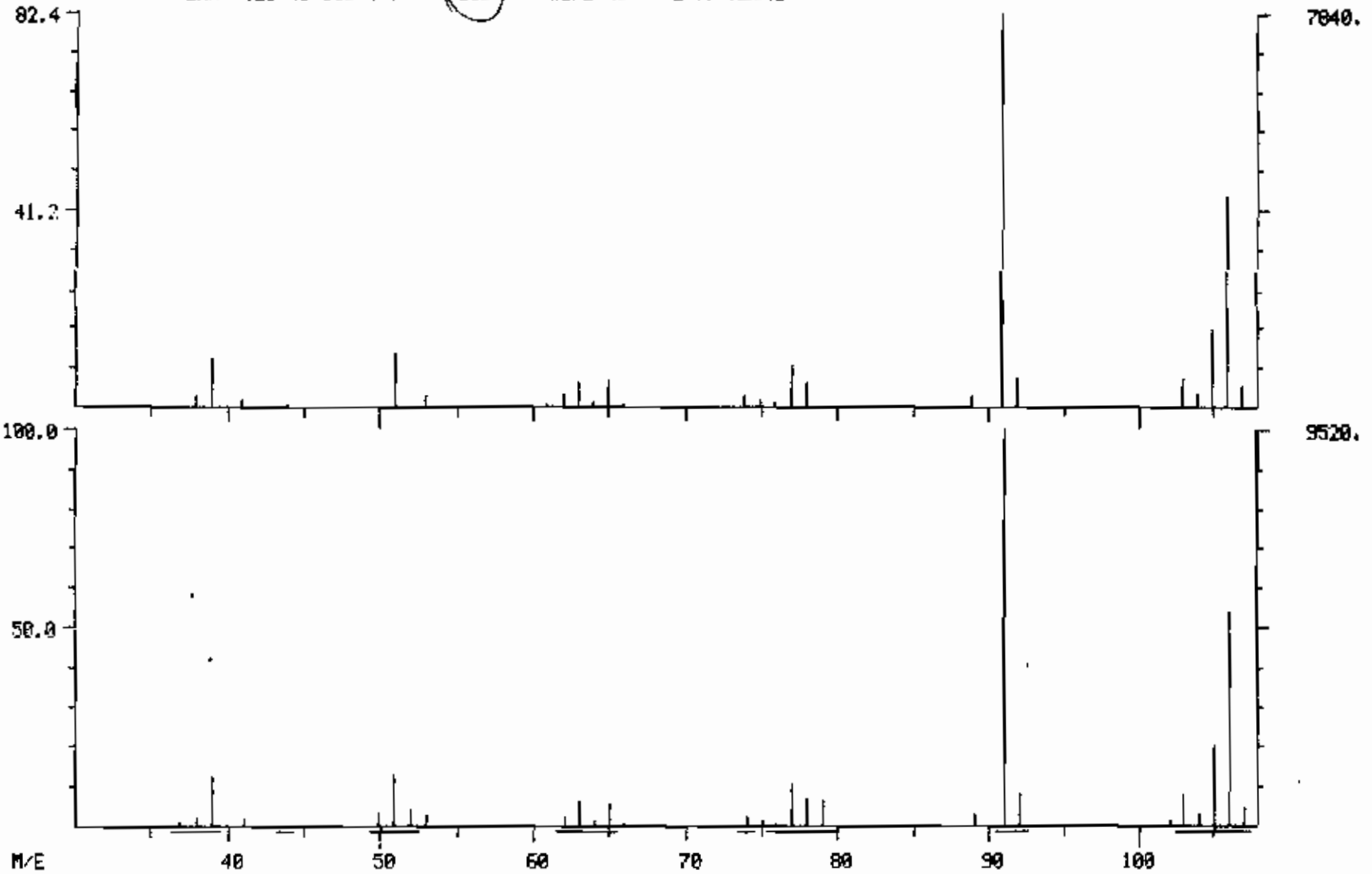


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:19:00 + 19:43
SAMPLE: 2000UL CASE# 20124 CC# 337837 EPA# 73800112 RE DH 19
ENHANCED (S 15B 2N)

DATA: C2R37837C19 #858 BASE M/E: 91/ 91
RIC: 21502./ 27231.

233 O-XYLENE (133-02-7) WE#49



1467

NYDEC RA090 0507 ORGANIC

Lab Instructions:

Receipt Date: Case#: 20124 SAS#

CompuChem#: 3578572

GC/MS; VOA; WATER: TCL 5th Ed 8240 ~~EPA SOW 2/88~~

Sample Prep Code---000
Inatrument Code----~~412~~289
Compound List------~~499~~459
Surrogate Std------394
Internal Std-------036

SDG# EPA ID# 73800 117 DE 5/16-17-90

GC/MS Analysis WELL1

Amount Purged: [ ] 5.0 mL or [ ] Dilution 2000 uL / 5.0 mL

Internal Standard Volume Added 5 uL
Surrogate Standard Volume Added 5 uL
BFB Filename: BF905151A19
Blank Filename: CB905151B19
Standard Filename: CT905151B17
Sample Filename: C2R37857C19

RECEIVED
MAY 17 1990

Analyst(s) Injection: [illegible] Work-up [illegible]

GC/MS Review

Condition Codes: DA

Entry Codes: OK,EA,ES,SM,JS,SL,SH,,JA,DA

Non-entry Codes: IM,IL,SW,CT,CS,VC,VO,UP PC,NR,IF,LA,DI,OT,SF,SI CO,RN,DW

Extraneous Peak Search Results:

Number of Peaks Found: 5

Disposition

[✓] Complete

[ ] Reinject Neat

[ ] Dilute

_____ uL / 5 mL

Quality Assurance Notice(s):

Number of Notices Required: 1

Comments:

GC/MS Review [illegible] Date 5/17/90 Auditor _____ Date __/__/__

Report Integration Total # of Injections 3

Final Reportable Package(s): C2R - C19 /

QA Comments:

Initials _____ Date __/__/__

Final Review Initials _____ Date __/__/__

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	245	47900	50.0		
221	50		CHLOROMETHANE				BDL	25
231	62		VINYL CHLORIDE				BDL	25
220	94		BROMOMETHANE				BDL	25
209	64		CHLOROETHANE			7.6	19J	25
216	96		1,1-DICHLOROETHENE				BDL	12
254	76		CARBON DISULFIDE				BDL	12
252	43		ACETONE (2-PROPANONE)				BDL	25
248	114	I	1,4-DIFLUOROBENZENE (IS)	376	190000	50.0		
222	84		METHYLENE CHLORIDE			7.6	19 B	12
226	96		TRANS-1,2-DICHLOROETHENE				BDL	12
214	63		1,1-DICHLOROETHANE				BDL	12
257	43		VINYL ACETATE			~~8.4~~	~~210~~ BDL	25
237	96		CIS-1,2-DICHLOROETHENE				BDL	12
253	72		2-BUTANONE				BDL	25
211	83		CHLOROFORM				BDL	12
227	97		1,1,1-TRICHLOROETHANE				BDL	12
206	117		CARBON TETRACHLORIDE				BDL	12
203	78		BENZENE			31.6	79	12
215	62		1,2-DICHLOROETHANE				BDL	12
270	117	I	D5-CHLOROBENZENE (IS)	753	136000	50.0		
229	130		TRICHLOROETHENE				BDL	12
217	63		1,2-DICHLOROPROPANE				BDL	12
212	83		BROMODICHLOROMETHANE				BDL	12
218	75		CIS-1,3-DICHLOROPROPENE				BDL	12
256	43		4-METHYL-2-PENTANONE			~~1.2~~	~~BDL~~ BDL	25
225	92		TOLUENE			11.4	28	12
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	12
228	97		1,1,2-TRICHLOROETHANE				BDL	12
224	164		TETRACHLOROETHENE				BDL	12
255	43		2-HEXANONE				BDL	25
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	12
207	112		CHLOROBENZENE			7.2	18	12
219	106		ETHYLBENZENE			68.6	170	12
330	106		M,P-XYLENE			164.0	410	12
239	106		O-XYLENE			33.1	83	12
251	104		STYRENE				BDL	12
205	173		BROMOFORM				BDL	12
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	12
258	65	S	D4-1,2-DICHLOROETHANE WE#57			49.7	99.%	
247	95	S	BROMOFLUOROBENZENE			49.1	98.%	
233	98	S	D8-TOLUENE WE#59 S6#2			46.0	92.%	
289	106		XYLENES (TOTAL)			197.0	490	12

CORRECTED/REVIEWED BY SDWagner
(CC/MS DATA REVIEWER)

DATE 5-17-90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLORDETHENE (TOTAL)				BDL	25
CHECKSUMS: 3979.				1374	373900.	832.5		1340.

CORRECTED/REVIEWED BY SDWJones
(GC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	49.7	50.0	99.	76-114	X	
41	247	BROMOFLUOROBENZENE	49.1	50.0	98.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	46.0	50.0	92.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{2000.\ \text{(UL)}} = 2.50 = \frac{5.000\ \text{ML}}{2.000\ \text{(ML)}}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY S.D. Wilson
(QC/MS DATA REVIEWER)

DATE 5-17-90

QUALITY ASSURANCE NOTICE
CC # 357897
BLANK ID # C890805819
CASE # 20124

CompuChem offers various types of analytical services, one of which is characterized as "Commercial Target Compound List (TCL)". This service exactly mimics the analytical requirements of the EPA's Contract Laboratory Program (CLP).

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The only exception to our policy is made when the volatile analysis or extraction holding times are in jeopardy of being exceeded, then the CLP requirements must be met.

Analysis of the Method Blank (and /or Instrument Blank) associated with the above sample indicated the following common laboratory solvents or phthalates were present at the indicated levels:

common laboratory artifact	blank concentration	units
methylene chloride	3	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

This notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800113

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337840

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037840B19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	8	BJ
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

7360011J

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337840

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037840B19

Level: (low/med) LOW Date Received: 05/09/90

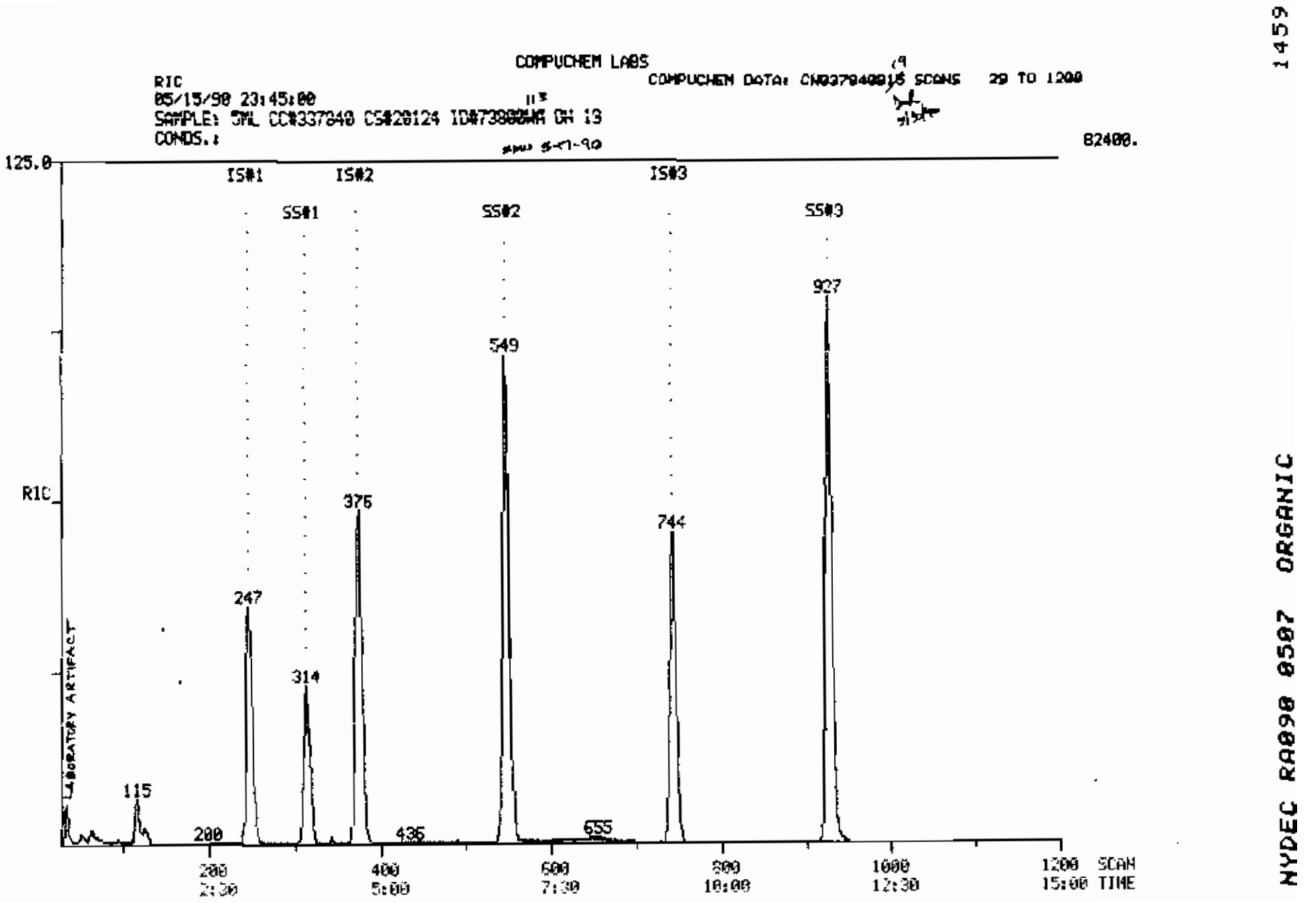
% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1459

HYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037B40B15.TI
DATA: CN037B40B15.TI
05/15/90 23:45:00
SAMPLE: 5ML CC#337B40 CB#20124 ID#73800HA ON 19
CONDS. :
SUBMITTED BY: 19 ANALYST: 1095

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	XTOT
1	128	247	3:05	I	1.000	A BB	40602.	50.000 UG/L	15.74
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	95	1:11	1	0.385	A BB	1817.	6.666	UG/L	2.10
9	114	375	4:41	.9	1.000	A BB	156814.	50.000	UG/L	15.74
10	64	116	1:27	1	0.470	A BV	7520.	7.967	UG/L	2.51
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	NOT FOUND								
20	62	NOT FOUND								
21	117	744	9:18	21	1.000	A BB	116500.	50.000	UG/L	15.74
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	63	NOT FOUND								
40	65	314	3:55	1	1.271	A BB	56197.	52.539	UG/L	16.54
41	95	927	11:35	21	1.246	A BB	70137.	50.492	UG/L	15.90
42	98	548	6:51	21	0.737	A BB	178310.	49.950	UG/L	15.73

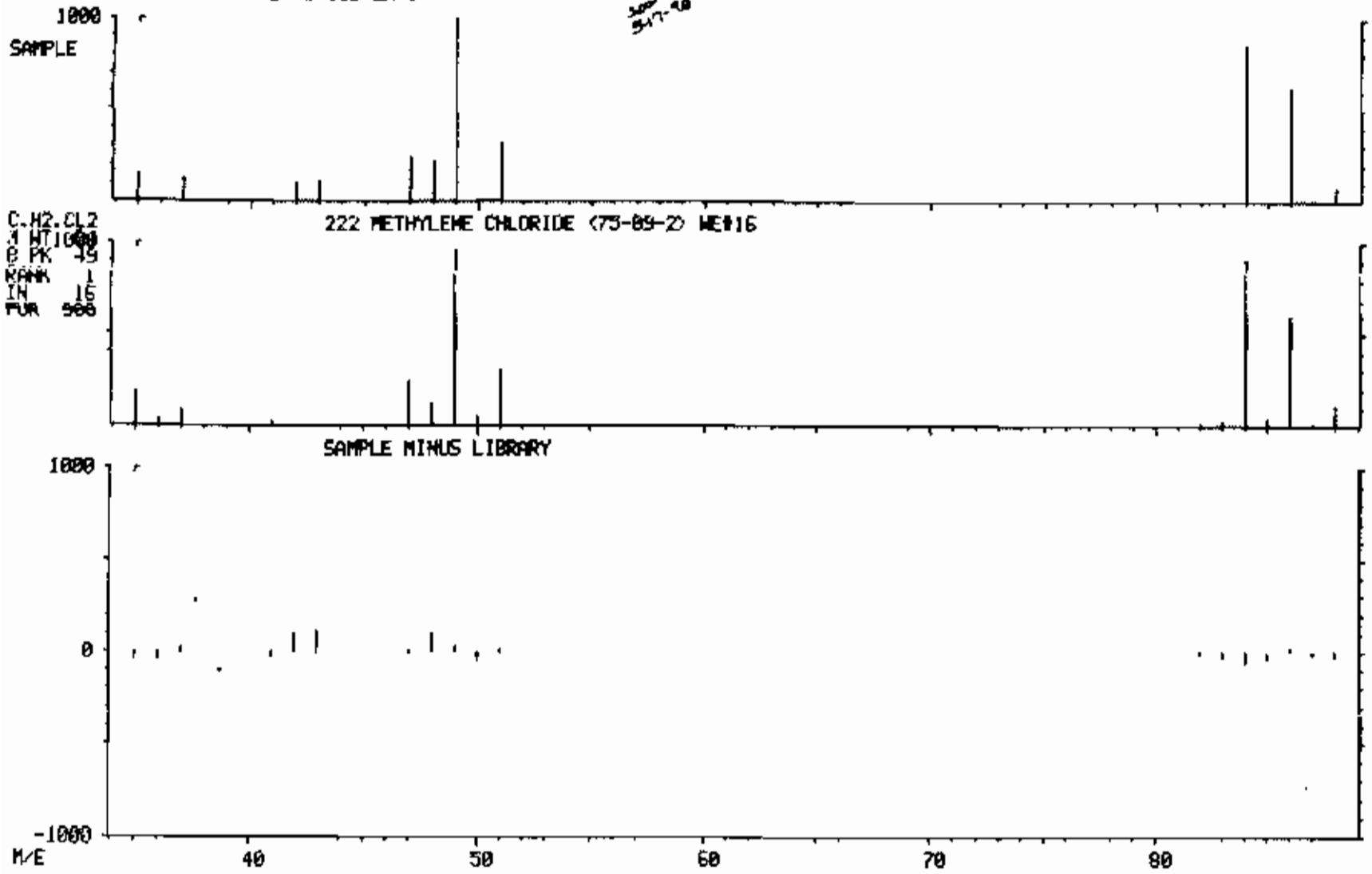
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27		10.000			50.00		0.400	
3	0:33		10.000			50.00		0.503	
4	0:37		10.000			50.00		0.813	
5	0:40		10.000			50.00		0.918	
6	1:03		5.000			50.00		1.664	
7	1:07		5.000			50.00		4.561	
8	1:12	0.99	10.000	0.04	6.67	50.00	0.045	0.336	0.13
9	4:43	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:28	0.99	5.000	0.09	7.97	50.00	0.185	1.162	0.16
11	1:40		5.000			50.00		1.149	
12	2:07		5.000			50.00		1.329	
13	2:20		10.000			50.00		0.332	
14	2:49		5.000			50.00		1.128	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	3:01		10.000			50.00		0.067	
16	3:21		5.000			50.00		2.050	
17	3:22		5.000			50.00		0.546	
18	3:34		5.000			50.00		0.634	
19	3:55		5.000			50.00		0.392	
20	4:04		5.000			50.00		1.415	
21	9:22	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.515	
23	5:18		5.000			50.00		0.228	
24	5:55		5.000			50.00		0.767	
25	6:38		5.000			50.00		0.698	
26	7:04		15.000			50.00		0.414	
27	7:01		5.000			50.00		0.986	
28	7:41		5.000			50.00		0.427	
29	7:55		5.000			50.00		0.450	
30	7:51		5.000			50.00		0.814	
31	8:34		15.000			50.00		0.200	
32	8:29		5.000			50.00		0.749	
33	9:25		5.000			50.00		0.829	
34	9:45		5.000			50.00		0.391	
35	10:00		5.000			50.00		0.556	
36	10:41		5.000			50.00		0.521	
37	10:46		5.000			50.00		0.961	
38	11:01		5.000			50.00		0.618	
39	12:18		5.000			50.00		0.384	
40	3:57	0.99	5.000	0.25	52.54	50.00	1.384	1.317	1.05
41	11:40	0.99	5.000	0.25	50.49	50.00	0.602	0.596	1.01
42	6:55	0.99	5.000	0.15	49.95	50.00	1.531	1.532	1.00

COMPUCHEM LABS

LIBRARY SEARCH
05/15/90 23:48:00 + 1:27
SAMPLE: 5ML CC#337840 CS#20124 IO#73800MA ON 19
ENHANCED (S 15B 2N 0T)

DATA: CN0337840[5 # 116 BASE M/E: 49
RIC: 4229.

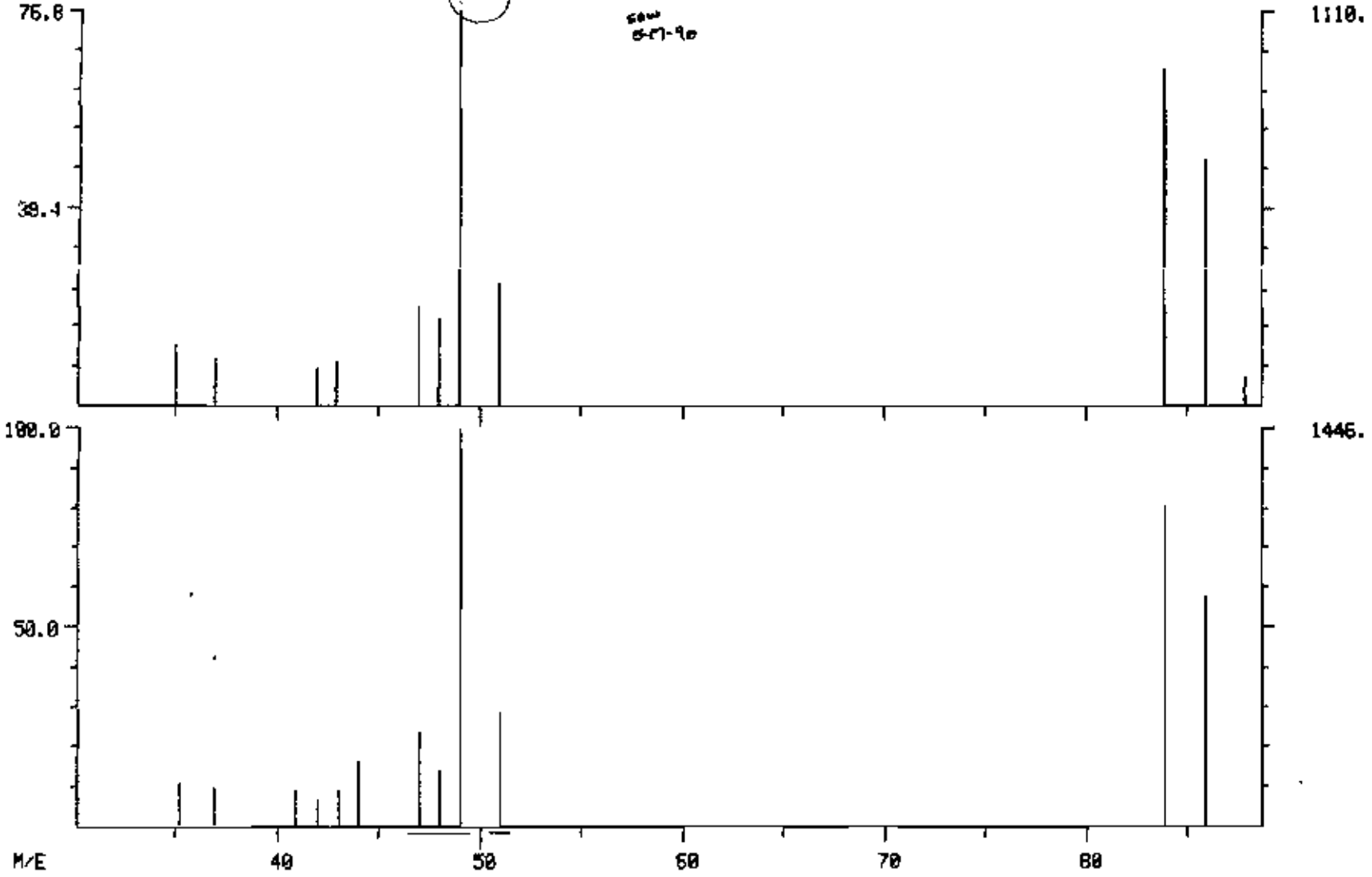


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 23:45:00 + 1:27
SAMPLE: 5ML CC#337040 CS#20124 ID#7300MA DN 19
ENHANCED (S 1SB 2N)

DATA: CN037040B15 #116 BASE M/E: 49✓ 49
RIC: 4223.✓ 6207.

222 METHYLENE CHLORIDE (75-09-2) ME#16



1454

NYDEC RA090 0507 ORGANIC

LAB INSTRUCTIONS:
SEE PPS#407 CASE#RA090 EDG#0507

PPS#: _____

RECEIPT DATE: 05/09/90 CASE#: 20124

VOA
GC/MS WORKSHEET COMPUCHEM#: 337840

J[ ] JJ[ ] D[ ] (:1)

2J[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 73900113

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF90051SA19 Disk ( )
Blank Filename CB90051SA19 Disk ( )
Standard Filename CJ90051SA19 Disk ( )
Sample Filename CN37940B19 Disk ( )

ANALYST(S): Injection _____ Work-up 1171

GC/MS REVIEW

CONDITION CODE: OK

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 1

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 2

[ ] Dilute (:1)

COMMENTS:

*GC/MS Review [illegible] Date 5/17/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN - B19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

COMPUCHEM # 037840 FILE: CN037840B1019 COMPOUND LIST 493 PAGE 1
VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)		DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	247	40600	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		5
254	76		CARBON DISULFIDE				BDL		5
252	43		ACETONE (2-PROPANONE)			~~6.7~~	~~BDL 7J~~		10
248	114	I	1,4-DIFLUOROBENZENE (IS)	375	157000	50.0			
222	84		METHYLENE CHLORIDE			8.0	8	B	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL		5
214	63		1,1-DICHLOROETHANE				BDL		5
257	43		VINYL ACETATE				BDL		10
227	96		CIS-1,2-DICHLOROETHENE				BDL		5
253	72		2-BUTANONE				BDL		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)	744	116000	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				BDL		10
225	92		TOLUENE				BDL		5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL		5
225	97		1,1,2-TRICHLOROETHANE				BDL		5
224	164		TETRACHLOROETHENE				BDL		5
255	43		2-HEXANONE				BDL		10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL		5
207	112		CHLOROBENZENE				BDL		5
219	106		ETHYLBENZENE				BDL		5
000	106		M,P-XYLENE				BDL		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 WE#57			52.5	105. %		
247	95	S	BROMOFLUOROBENZENE			50.5	101. %		
233	98	S	D8-TOLUENE WE#59 SS#2			50.0	100. %		
289	106		XYLENES (TOTAL)				BDL		5

CORRECTED/REVIEWED BY SDWagner
(CC/MS DATA REVIEWER)

DATE 5-17-90

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS: 3979.				1366	313600.	317.7		15.

CORRECTED/REVIEWED BY SDW (GC/MS DATA REVIEWER)

DATE 5-17-90

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	52.5	50.0	105.	76-114	X	
41	247	BROMOFLUOROBENZENE	50.5	50.0	101.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	50.0	50.0	100.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY SDWSone
(CC/MS DATA REVIEWER)

DATE 5-17-90

QUALITY ASSURANCE NOTICE
CC # 387940
BLANK ID # CB090815A19
CASE # 44124

CompuChem offers various types of analytical services, one of which is characterized as "Commercial Target Compound List (TCL)". This service exactly mimics the analytical requirements of the EPA's Contract Laboratory Program (CLP).

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The only exception to our policy is made when the volatile analysis or extraction holding times are in jeopardy of being exceeded, then the CLP requirements must be met.

Analysis of the Method Blank (and /or Instrument Blank) associated with the above sample indicated the following common laboratory solvents or phthalates were present at the indicated levels:

common laboratory artifact	blank concentration	units
methylene chloride	3	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

This notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact is greater that ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

QUALITY ASSURANCE NOTICE
CompuChem # 337540
Instrument Blank : [illegible]
Client ID # 739013
Case 20184

The early-eluting peak on the RIC of the volatile fraction at scan # 35 is an instrument artifact believed to be a mixture of water and various atmospheric gases. This peak is usually present at less than 10% of the nearest-eluting internal standard peak height, although it may exceed this height under certain instrument conditions.

Periodically, a number of maintenance procedures are performed in an effort to reduce the intensity of this artifact. These procedures may include:

-trap replacement
-reconditioning and/or replacing column
-replacing six-port valve in Tekmar
-cleaning of the separator
-cleaning or replacing source
-replacing lines in Tekmar

In many cases, even after maintenance, the artifact peak remains at a height greater than 10% of the nearest internal standard. Since the analytical quality of these data have not been compromised, we are reporting this analysis with reference to this qualifer. The artifact is not included as part of the Library Search requirements for the associated samples.

Robert J. Whitehead
Manager, Quality Assurance

OANI9U
670917

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.: 738001TB1

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337377

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037377C19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	BJ
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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 ORGAMICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

738001TB1

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337377

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037377C19

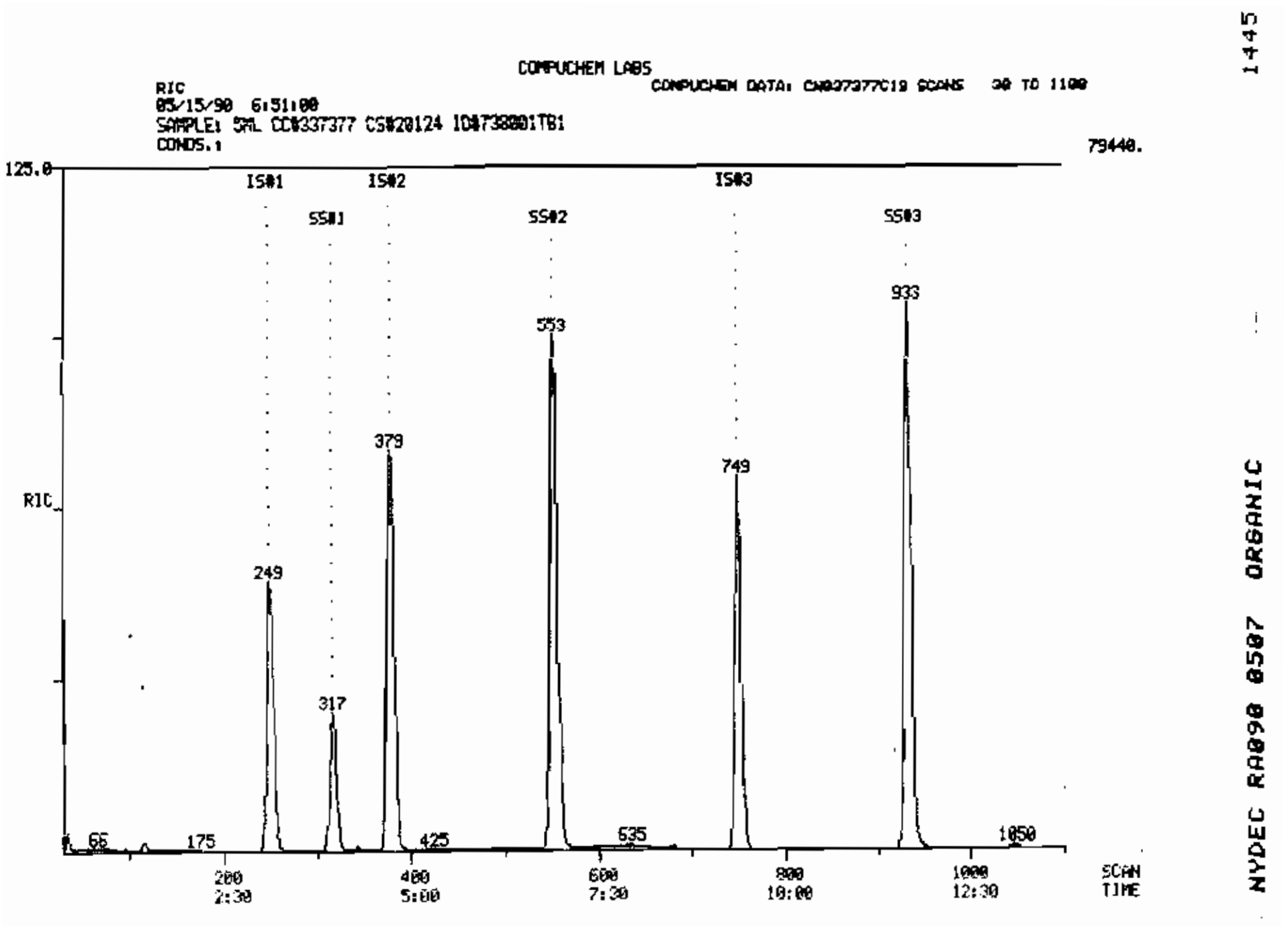
Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. _____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q



1445

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037377C19
DATA: CN037377C19.TI
05/15/90 6:51:00
SAMPLE: 5ML CC#337377 CS#20124 ID#738001TB1
CONDS. :
SUBMITTED BY: 19 ANALYST: 1095

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	216 1,1-DICHLOROETHENE <75-35-4> WE#8
7	254 CARBON DISULFIDE <75-15-0> WE#9
8	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
9	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
10	222 METHYLENE CHLORIDE <75-09-2> WE#16
11	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
12	214 1,1-DICHLOROETHANE <75-34-3> WE#19
13	257 VINYL ACETATE <108-05-4> WE#20
14	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
15	253 2-BUTANONE <78-93-3> WE#22
16	211 CHLOROFORM <67-66-2> WE#23
17	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
18	206 CARBON TETRACHLORIDE <56-23-5> WE#25
19	203 BENZENE <71-43-2> WE#26
20	215 1,2-DICHLOROETHANE <107-06-2> WE#27
21	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
22	229 TRICHLOROETHENE <79-01-6> WE#30
23	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
24	212 BROMODICHLOROMETHANE <75-27-4> WE#33
25	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
26	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
27	225 TOLUENE <108-88-3> WE#37
28	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
29	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
30	224 TETRACHLOROETHENE <127-18-4> WE#41
31	255 2-HEXANONE <591-78-6> WE#42
32	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
33	207 CHLOROBENZENE <108-90-7> WE#45
34	219 ETHYLBENZENE <100-41-4> WE#47
35	330 M,P-XYLENE <133-02-7> WE#48
36	239 O-XYLENE <133-02-7> WE#49
37	251 STYRENE <100-42-5> WE#50
38	205 BROMOFORM <75-25-2> WE#51
39	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
40	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
41	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
42	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	. 249	3:07	1	1.000	A BB	44052.	30.000 UG/L	17.06
2	50	NOT FOUND							

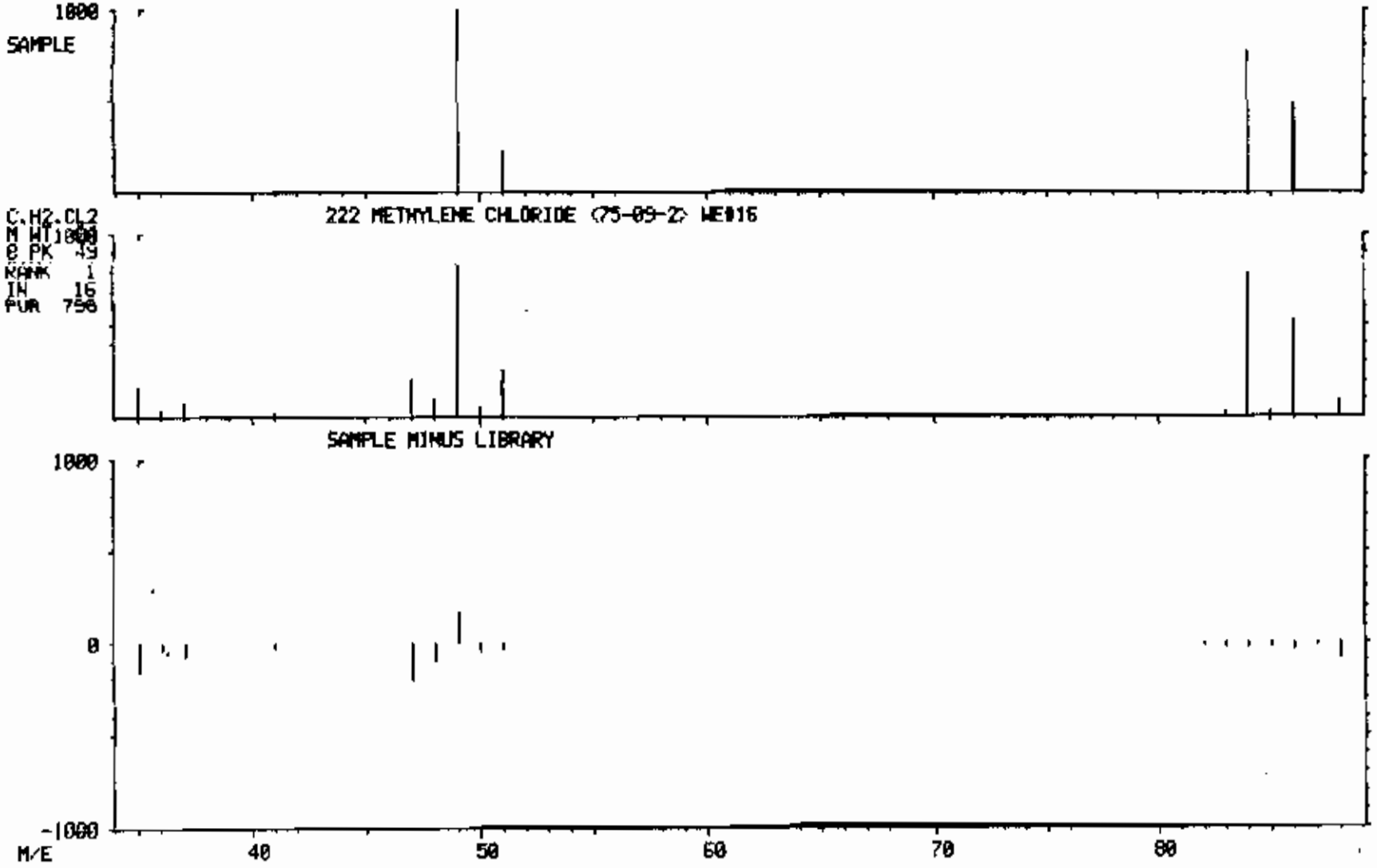
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	NOT FOUND								
9	114	379	4:44	9	1.000	A BB	181306.	50.000	UG/L	17.06
10	84	116	1:27	1	0.466	A BB	1406.	1.821	UG/L	0.62
11	96	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	NOT FOUND								
20	62	NOT FOUND								
21	117	749	9:22	21	1.000	A BB	126056.	50.000	UG/L	17.06
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	317	3:36	1	1.273	A BB	49902.	45.220	UG/L	15.43
41	95	933	11:40	21	1.246	A BB	71040.	47.885	UG/L	16.34
42	98	953	6:55	21	0.738	A BB	181056.	48.267	UG/L	16.47

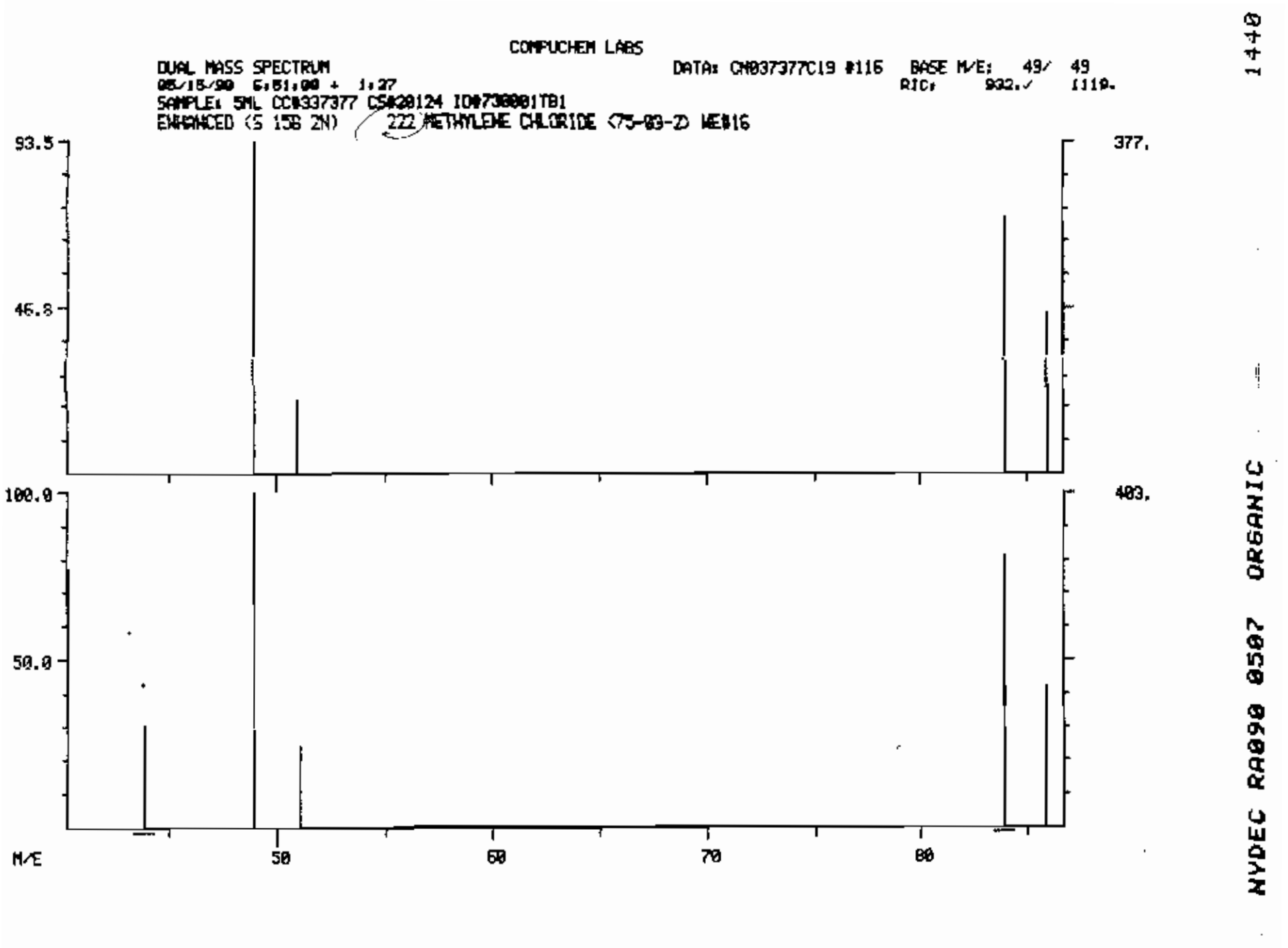
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39		10.000			50.00		0.751	
6	1:03		5.000			50.00		1.389	
7	1:07		5.000			50.00		3.616	
8	1:11		10.000			50.00		0.259	
9	4:45	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:27	1.00	5.000	0.09	1.82	50.00	0.032	0.876	0.04
11	1:40		5.000			50.00		0.941	
12	2:05		5.000			50.00		1.103	
13	2:19		10.000			50.00		0.255	
14	2:49		5.000			50.00		0.937	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
15	3:00		10.000			50.00		0.039	
16	3:21		5.000			50.00		1.748	
17	3:22		5.000			50.00		0.472	
18	3:36		5.000			50.00		0.360	
19	3:55		5.000			50.00		0.498	
20	4:04		5.000			50.00		1.236	
21	9:24	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:58		5.000			50.00		0.455	
23	5:19		5.000			50.00		0.207	
24	5:55		5.000			50.00		0.602	
25	6:39		5.000			50.00		0.596	
26	7:06		15.000			50.00		0.362	
27	7:03		5.000			50.00		0.918	
28	7:42		5.000			50.00		0.389	
29	7:57		5.000			50.00		0.388	
30	7:52		5.000			50.00		0.710	
31	8:36		15.000			50.00		0.116	
32	8:31		5.000			50.00		0.465	
33	9:26		5.000			50.00		0.746	
34	9:46		5.000			50.00		0.357	
35	10:01		5.000			50.00		0.483	
36	10:42		5.000			50.00		0.493	
37	10:47		5.000			50.00		0.826	
38	11:02		5.000			50.00		0.477	
39	12:20		5.000			50.00		0.321	
40	3:58	1.00	5.000	0.25	45.22	50.00	1.133	1.253	0.90
41	11:42	1.00	5.000	0.25	47.88	50.00	0.564	0.588	0.96
42	6:57	0.99	5.000	0.15	48.27	50.00	1.436	1.488	0.97

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037377C19 # 116 BASE M/E: 49
05/15/90 6:51:00 + 1.27 RIC: 932.
SAMPLE: 5ML CC#337377 CS#20124 ID#730801TB1
ENHANCED (S 15B 2H 0T)





1440

NYDEC RA090 0507 ORGANIC

LAB INSTRUCTIONS:
TRIP BLANK/CAUTION LOW VOLUME! ONLY 1 40 ML VOA
CASE#RA090 SDG# 0507

PPS#: 1 of 1

RECEIPT DATE: 05/08/90 CASE#: 20124

VOA
GC/MS WORKSHEET COMPUCHEM#: 337377

J[ ] J3[ ] D[ ] (:1)
2J[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WATER, 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- ~~389-1/2~~
Compound List------ ~~459-1/3~~
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 738001TB1

GC/MS ANALYSIS
Amount Purged: [ ] 5 mls or [ ] Dilution _____ Factor Prepared
Internal Standard Volume Added 5 ul
Surrogate Standard Volume Added 5 ul
BFB Filename BF90515C19 Disk ( )
Blank Filename CB90515C10 Disk ( )
Standard Filename CS90519C19 Disk ( )
Sample Filename CW37737C19 Disk ( )

RECEIVED
MAY 17 1990
USEPA - CLP

ANALYST(S): Injection [signature] Work-up [signature]

GC/MS REVIEW

CONDITION CODE: A

Disposition: [✓] Complete

Extraneous Peak Search Results:
# of Peaks Found: 0

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 1

[ ] Dilute (:1)

COMMENTS:

*GC/MS Review [signature] Date 5/16/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CLD-C19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	249	44100	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	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)				BDL	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	379	181000	50.0		
222	84		METHYLENE CHLORIDE			1.8	2J?	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				BDL	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)	749	126000	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				BDL	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	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 WE#57			45.2	90.%	
247	95	S	BROMOFLUOROBENZENE			47.9	96.%	
233	98	S	D8-TOLUENE WE#59 SS#2			48.3	97.%	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(QC/MS DATA REVIEWER)

DATE 5-16-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)	
299	96		1,2-DICHLORDETHENE (TOTAL)				BDL		10
CHECKSUMS: 3979.				1377	351100.	293.2		2.	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-16-90

QUALITY ASSURANCE NOTICE
CompuChem # 312327
Blank ID # CBS60515C14
Case 20124

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C4/295
8/1026

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

738001TB2

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337841

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN017841B19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. Date Analyzed: 05/18/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	1	BJ
67-64-1	Acetone	15	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	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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

738001TB2

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337841

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CN037841B19

Level: (low/med) LOW Date Received: 05/09/90

% Moisture: not dec. ____ Date Analyzed: 05/18/90

Column (peck/cap) CAP Dilution Fector: 1.0

Number TICe found: 0

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

CAS NUMBER	COMPOUNO NAME	RT	EST. CONC.	Q

COMPUCHEM LABS

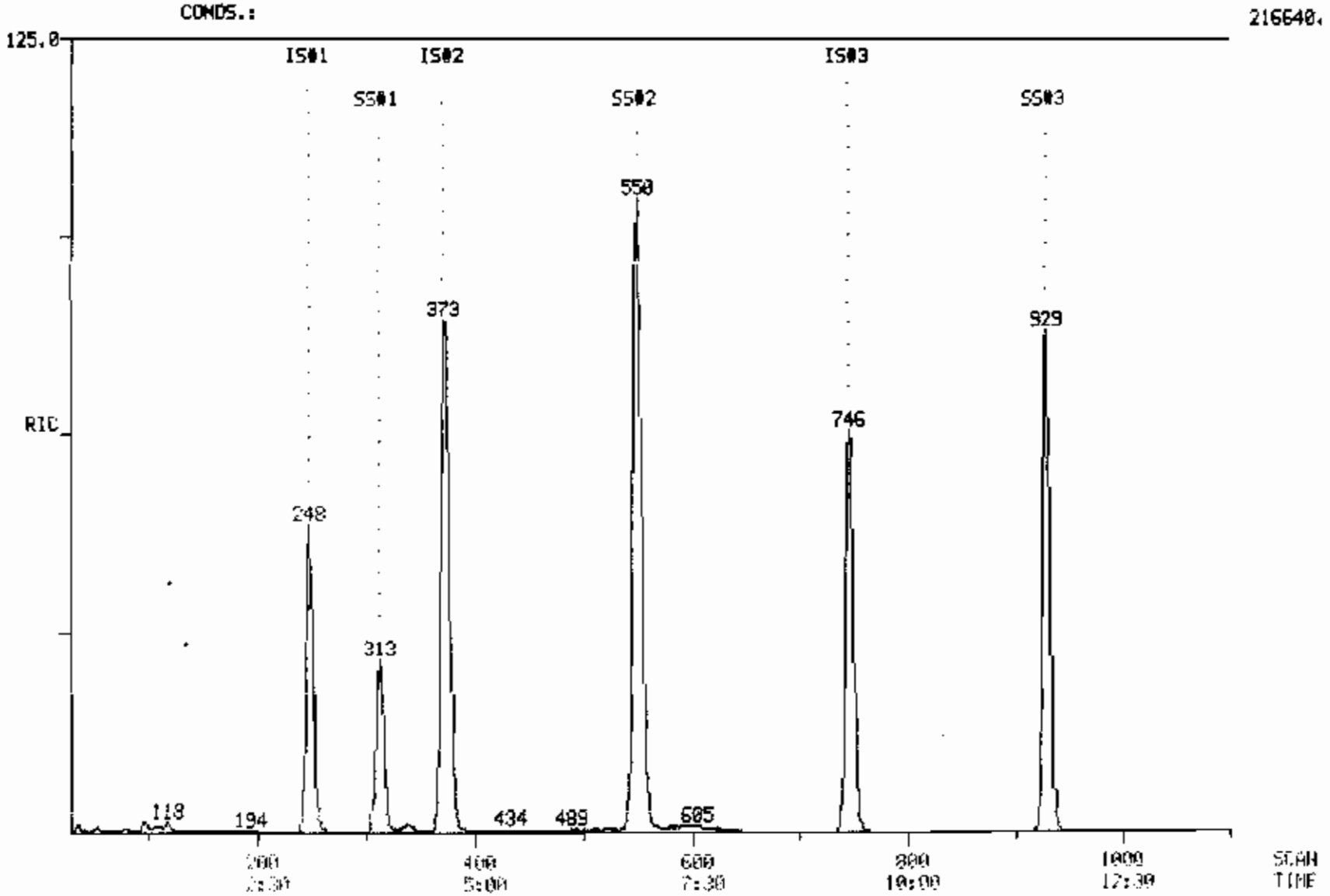
RIC

COMPUCHEM DATA: CN037041D19 SCANS 30 TO 1100

05/18/90 21:31:00

SAMPLE: 5ML CC# 337041 ID# 738001TB2 CS# 337041 ON #19

CONDS.:



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QUANTITATION REPORT    FILE: CN037841B19
DATA: CN037841B19.TI
06/18/90 21:31:00
SAMPLE: 5ML CC# 337841 ID# 738001T82 CS# 337841 GN #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> WE#1
  2   221 CHLOROMSTHANE <74-87-3> WE#2
  3   231 VINYL CHLORIDE <75-01-4> WE#3
  4   220 BROMOMETHANE <78-83-9> WE#4
  5   209 CHLOROETHANE <75-00-3> WE#5
  6   216 1,1-DICHLOROETHENE <75-35-4> WE#8
  7   254 CARBON DISULFIDE <75-15-0> WE#9
  8   252 4CETONE (2-PROPANONE) <67-64-1> WE#13
  9  *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
 10   222 METHYLENE CHLORIDE <75-09-2> WE#16
 11   226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
 12   214 1,1-DICHLOROETHANE <75-34-3> WE#19
 13   257 VINYL ACETATE <108-05-4> WE#20
 14   237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
 15   253 2-BUTANONE <78-93-3> WE#22
 16   211 CHLOROFORM <67-66-2> WE#23
 17   227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
 18   206 CARBON TETRACHLORIDE <56-23-5> WE#25
 19   203 BENZENE <71-43-2> WE#26
 20   215 1,2-DICHLOROETHANE <107-06-2> WE#27
 21  *270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
 22   229 TRICHLOROETHENE <79-01-6> WE#30
 23   217 1,2-DICHLOROPROPANE <78-87-5> WE#31
 24   212 BROMODICHLOROMETHANE <75-27-4> WE#33
 25   218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
 26   256 4-METHYL-2-PENTANONE <108-01-1> WE#36
 27   225 TOLUENE <108-88-3> WE#37
 28   250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
 29   228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
 30   224 TETRACHLOROETHENE <127-18-4> WE#41
 31   255 2-HEXANONE <591-78-6> WE#42
 32   208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
 33   207 CHLOROBENZENE <108-90-7> WE#45
 34   219 ETHYLBENZENE <100-41-4> WE#47
 35   330 M,P-XYLENE <133-02-7> WE#48
 36   239 O-XYLENE <133-02-7> WE#49
 37   251 STYRENE <100-42-5> WE#50
 38   205 BROMOFORM <75-25-2> WE#51
 39   223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
 40  #258 D4-1,2-DICHLOROETHANE WE#57 SS#1
 41  #247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
 42  #233 D8-TOLUENE WE#59 SS#2

 NO  N/E  SCAN   TIME  REF   RRT  METH     AREA(HGHT)  AMOUNT          %TOT
  1  128   248   3:06   1  1.000  A BB       90085.    50.000 UG/L   16.41
  2   50  NOT FOUND
```

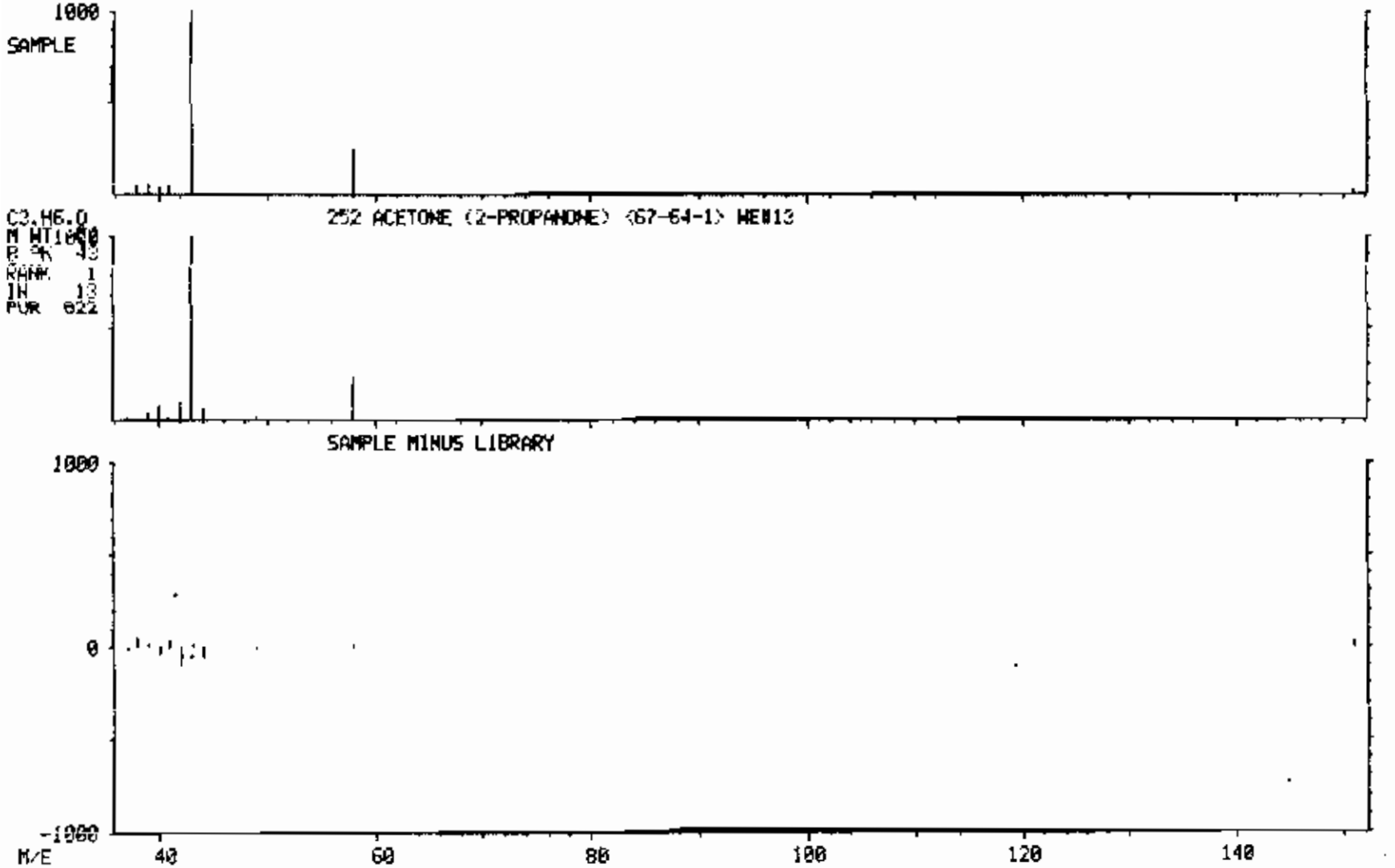
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	96	NOT FOUND								
7	76	NOT FOUND								
8	43	96	1:12	-1	0.387	A BV	11114.	15.122	UG/L	4.96
9	114	373	4:40	9	1.000	A BB	509461.	50.000	UG/L	16.41
10	84	118	1:28	1	0.476	A BB	2669.	1.242	UG/L	0.41
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	NOT FOUND								
20	62	NOT FOUND								
21	117	746	9:19	21	1.000	A BB	299572.	50.000	UG/L	16.41
22	130	NOT FOUND								
23	63	NOT FOUND								
24	83	NOT FOUND								
25	75	NOT FOUND								
26	43	NOT FOUND								
27	92	NOT FOUND								
28	75	NOT FOUND								
29	97	NOT FOUND								
30	164	NOT FOUND								
31	43	NOT FOUND								
32	129	NOT FOUND								
33	112	NOT FOUND								
34	106	NOT FOUND								
35	106	NOT FOUND								
36	106	NOT FOUND								
37	104	NOT FOUND								
38	173	NOT FOUND								
39	83	NOT FOUND								
40	65	813	3:55	1	1.262	A BB	144800.	42.554	UG/L	13.97
41	95	929	11:37	21	1.245	A BB	202484.	47.120	UG/L	15.47
42	98	550	6:52	21	0.737	A BB	305007.	48.590	UG/L	15.95

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:09	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:31		10.000			50.00		0.485	
3	0:34		10.000			50.00		0.624	
4	0:38		10.000			50.00		1.306	
5	0:42		10.000			50.00		0.899	
6	1:04		5.000			50.00		1.407	
7	1:08		5.000			50.00		3.508	
8	1:12	1.00	10.000	0.04	15.12	50.00	0.119	0.395	0.30
9	4:38	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
10	1:28	1.00	5.000	0.10	1.24	50.00	0.029	1.154	0.02
11	1:41		5.000			50.00		1.195	
12	2:07		5.000			50.00		1.738	
13	2:19		10.000			50.00		0.305	
14	2:49		5.000			50.00		1.171	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
15	2:58		10.000			50.00		0.061	
16	3:20		5.000			50.00		2.644	
17	3:21		5.000			50.00		0.589	
18	3:32		5.000			50.00		0.619	
19	3:52		5.000			50.00		0.575	
20	4:01		5.000			50.00		1.875	
21	9:15	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
22	4:52		5.000			50.00		0.461	
23	5:12		5.000			50.00		0.273	
24	5:48		5.000			50.00		0.701	
25	6:01		5.000			50.00		0.707	
26	6:58		15.000			50.00		0.503	
27	6:55		5.000			50.00		1.061	
28	7:34		5.000			50.00		0.325	
29	7:48		5.000			50.00		0.218	
30	7:43		5.000			50.00		0.615	
31	8:27		15.000			50.00		0.128	
32	8:22		5.000			50.00		0.422	
33	9:17		5.000			50.00		0.885	
34	9:37		5.000			50.00		0.408	
35	9:52		5.000			50.00		0.578	
36	10:32		5.000			50.00		0.578	
37	10:37		5.000			50.00		1.005	
38	10:52		5.000			50.00		0.250	
39	12:10		5.000			50.00		0.347	
40	3:54	1.00	5.000	0.25	42.55	50.00	1.556	1.828	0.85
41	11:31	1.01	5.000	0.25	47.12	50.00	0.676	0.717	0.94
42	6:49	1.01	5.000	0.15	48.59	50.00	1.684	1.735	0.97

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037041B19 # 96 BASE M/E: 43
05/10/90 21:31:00 + 1.12 RIC: 2169.
SAMPLE: 5ML CC# 337041 ID# 738001TB2 CS# 337041 ON #19
ENHANCED (5 158 2N 8T)



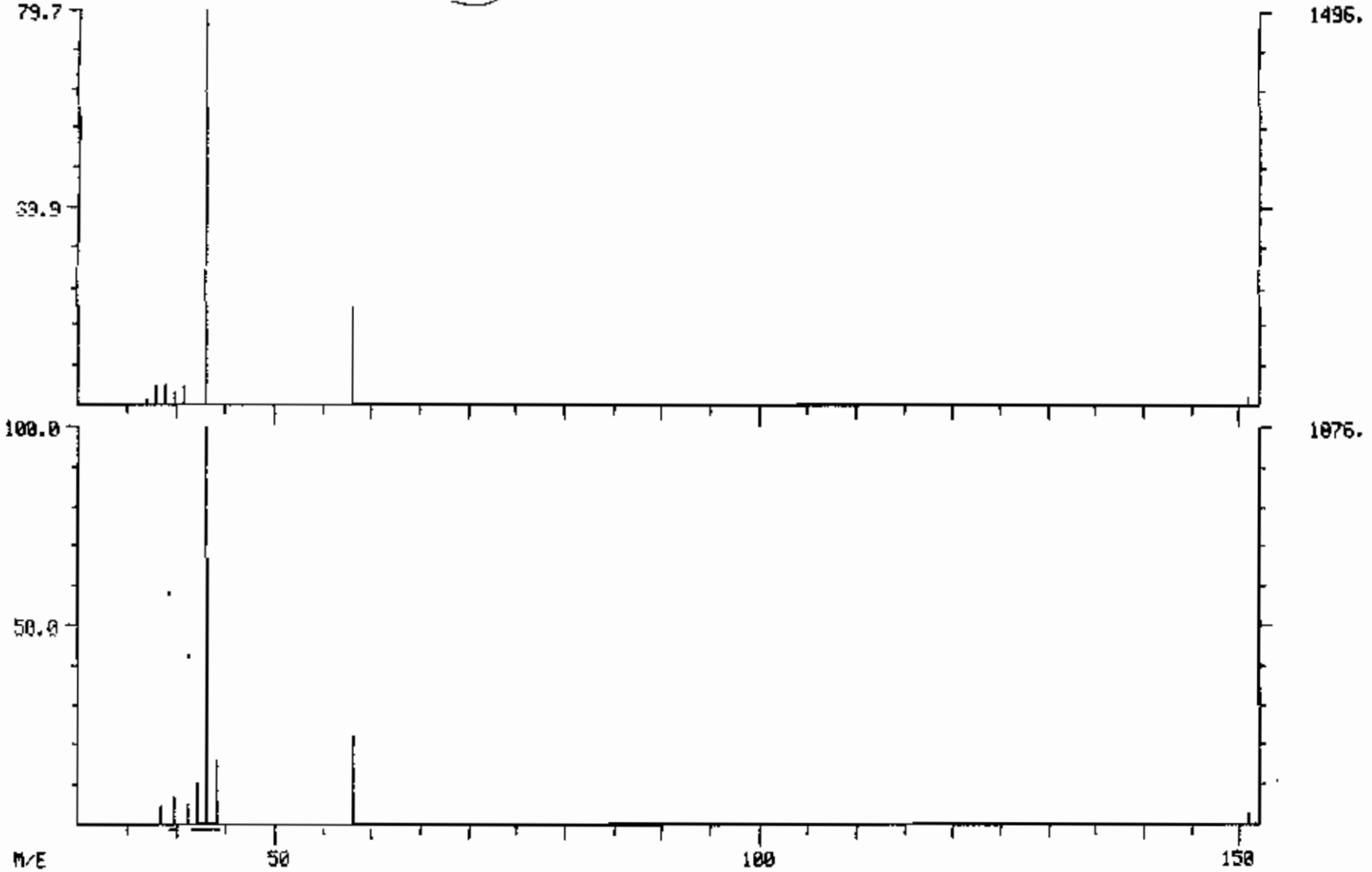
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/10/90 21:31:00 + 1.12
SAMPLE: 5ML CC# 337841 ID#-738001TB2 CS# 337841 ON #19
ENHANCED (S 158 2N)

DATA: CN037841B19 #96 BASE M/E: 43/ 43
RIC: 2163./ 3131.

252 ACETONE (2-PROPANONE) (67-64-1) WE#13

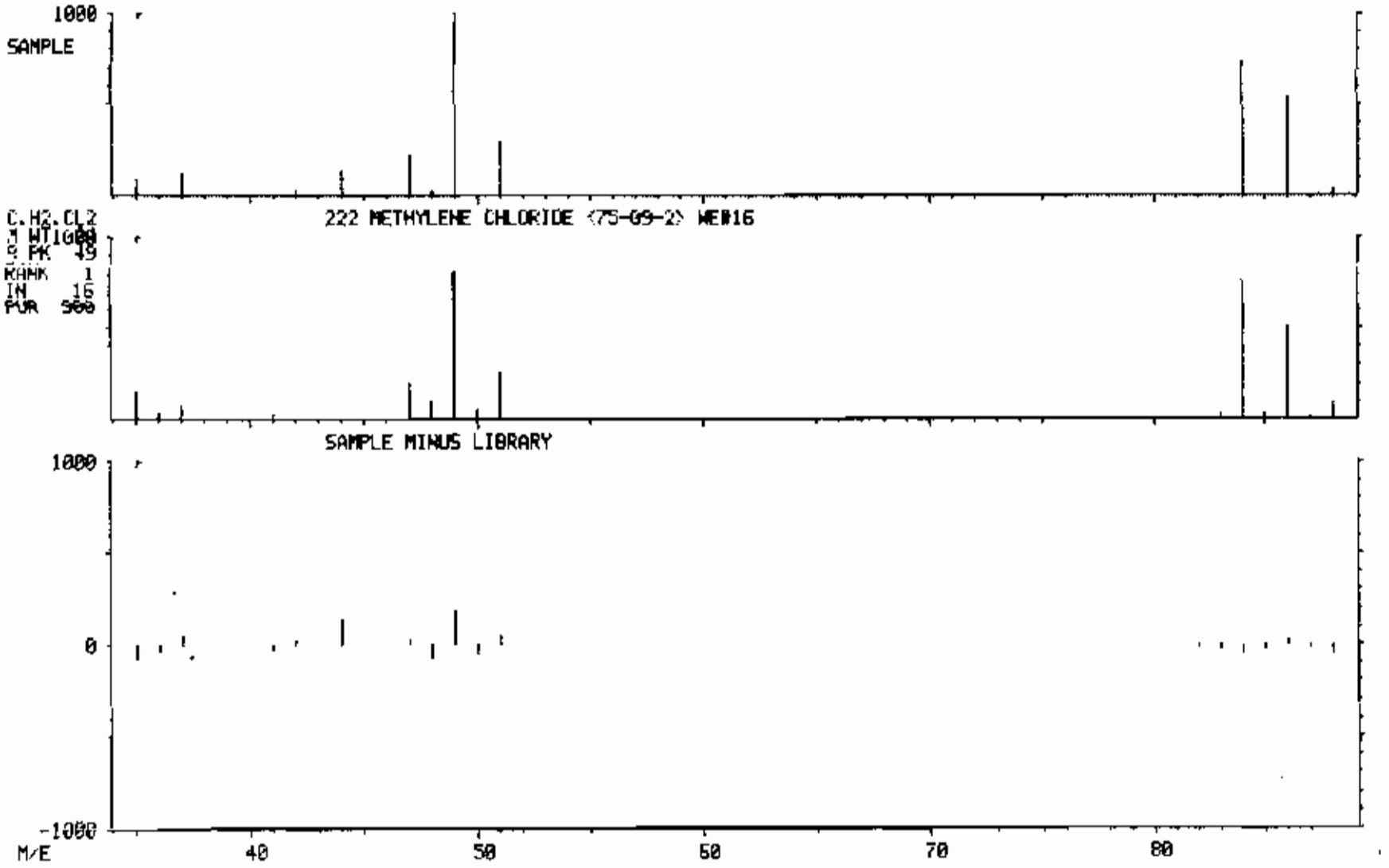


1428

HYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037841B19 # 118 BASE M/E: 49
05/10/90 21:21:00 + 1.20 RIC: 2335.
SAMPLE: 5ML CC# 337841 ID# 738001TB2 CS# 337841 ON #19
ENHANCED (S 1SB 2N 8T)

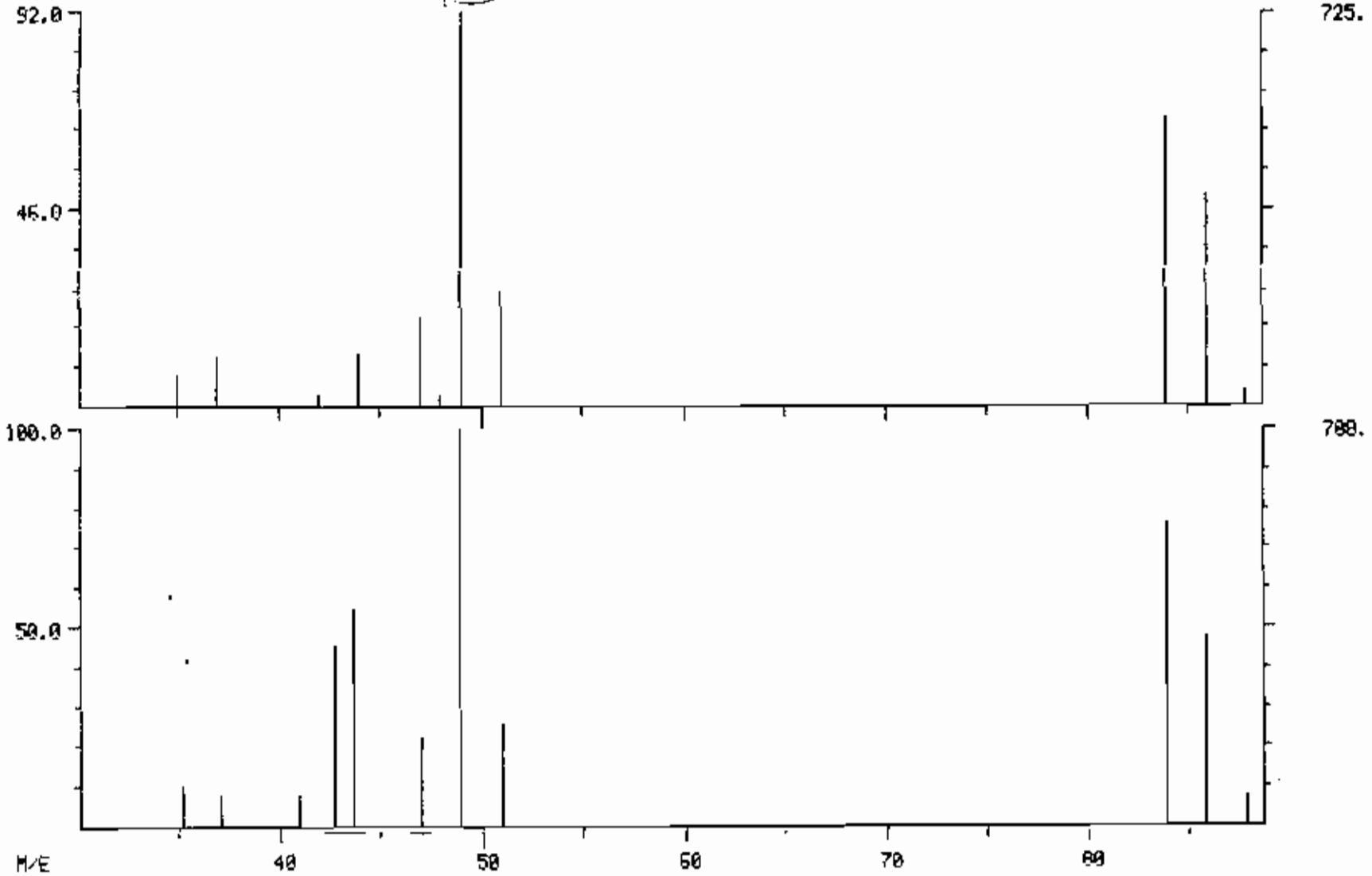


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/10/90 21:31:00 + 1:20
SAMPLE: 5ML CC# 337841 ID# 73800:TB2 CS# 337841 ON #19
ENHANCED (S 15B 2N)

DATA: CN037841B19 #118 BASE M/E: 49/ 49
RIC: 2995./ 9191.

(222) METHYLENE CHLORIDE (75-09-2) WE#16



RECEIPT DATE: 05/09/90 CASE#: 20124

VOA
GC/MS WORKSHEET COMPUCHEM#: 337841

J[ ] J3[ ] D[ ] (:1)
2J[ ] J4[ ] D2[ ] (:1)

GC/MS; TCL VOA; WATER; 3rd Ed. 8240

Sample Prep Code--- 0
Instrument Code---- 289
Compound List------ 458
Surrogate Std------ 394
Internal Std------- 36

SAMPLE ID#: 738001TB2

GC/MS ANALYSIS
Amount Purged: [✓] 5 mls or [ ] Dilution _____ ul/5000ul Sparged
Internal Standard Volume Added 5 _____ ul
Surrogate Standard Volume Added 5 _____ ul
BFB Filename BH9005IRA19 Disk ( )
Blank Filename CB9005IRA19 Disk ( )
Standard Filename CW9005IRA19 Disk ( )
Sample Filename CN037841B19 Disk ( )

ANALYST(S): Injection 1009R Work-up 1009R

GC/MS REVIEW

CONDITION CODE [ ] [Ok]

POSTED

Disposition: [✓] Complete

Extraneous Peak Search Results
# of Peaks Found: 0

[ ] Reinject Neat

Quality Assurance Notice(s):
Notices Required 1

MAY 2 0 1990

[ ] Dilute (:1)

COMMENTS:

@GC/MS Review [illegible] Date 5/19/90 Auditor _____ Date ___/___/___

REPORT INTEGRATION Total # of Injections: 1
Final Reportable Package(s): CN30-A19 /

QA COMMENTS:

Initials _____ Date ___/___/___

FINAL REVIEW: Initials _____ Date ___/___/___

AC0780

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	248	93100	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	5
254	76		CARBON DISULFIDE				BDL	5
252	43		ACETONE (2-PROPANONE)			15.1	15 R	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	373	509000	50.0		
222	84		METHYLENE CHLORIDE			1.2	1J C	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-DICHLORDETHENE				BDL	5
253	72		2-BUTANONE				BDL	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)	744	300000	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				BDL	10
225	92		TOLUENE				BDL	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				BDL	10
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5
207	112		CHLOROBENZENE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	5
239	106		O-XYLENE				BDL	5
251	104		STYRENE				BDL	5
205	173		BROMOFORM				BDL	5
223	83		1,1,2,2-TETRACHLORDETHANE				BDL	5
258	65	S	D4-1,2-DICHLOROETHANE WE#57			42.6	85.%	
247	95	S	BROMOFLUOROBENZENE			47.1	94.%	
233	98	S	D8-TOLUENE WE#59 SS#2			48.6	97.%	
289	106		XYLENES (TOTAL)				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/19/90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS: 3979.				1367	902100.		304.6	16.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/9/91

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
40	258	D4-1,2-DICHLOROETHANE WE#57	42.6	50.0	85.	76-114	X	
41	247	BROMOFLUORODENZENE	47.1	50.0	94.	86-115	X	
42	233	D8-TOLUENE WE#59 SS#2	48.6	50.0	97.	88-110	X	

\+ ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/19/92

QUALITY ASSURANCE NOTICE
CompuChem # 037547
Blank ID # CB5005BA19
Case 2012.4

CompuChem offers various types of analytical services, two of which are characterized as "Volatile Analysis by GC/MS--Method 8240" and "Semivolatile Analysis by GC/MS--Method 8270." Many of the Quality Control requirements of these methods were derived from the EPA's Contract Laboratory Program (CLP). Following the conventions established by the EPA for qualifying common laboratory artifacts in samples analyzed under the CLP Caucus Organics Protocols, we have reported the following compound(s) with the "B" footnote:

common laboratory artifact	blank concentration	units
Acetone	12	ug/L
Methylene Chloride	2	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The concentration of methylene chloride in solid Method Blanks may not exceed 25 ug/kg; acetone may not exceed 50 ug/kg. The only exception to our policy is made when holding times are in jeopardy of being exceeded (although the CLP requirements must still be met).

This Notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact in a sample is greater than ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

C-4295
8-1828

C. STANDARDS DATA

(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.

(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.

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

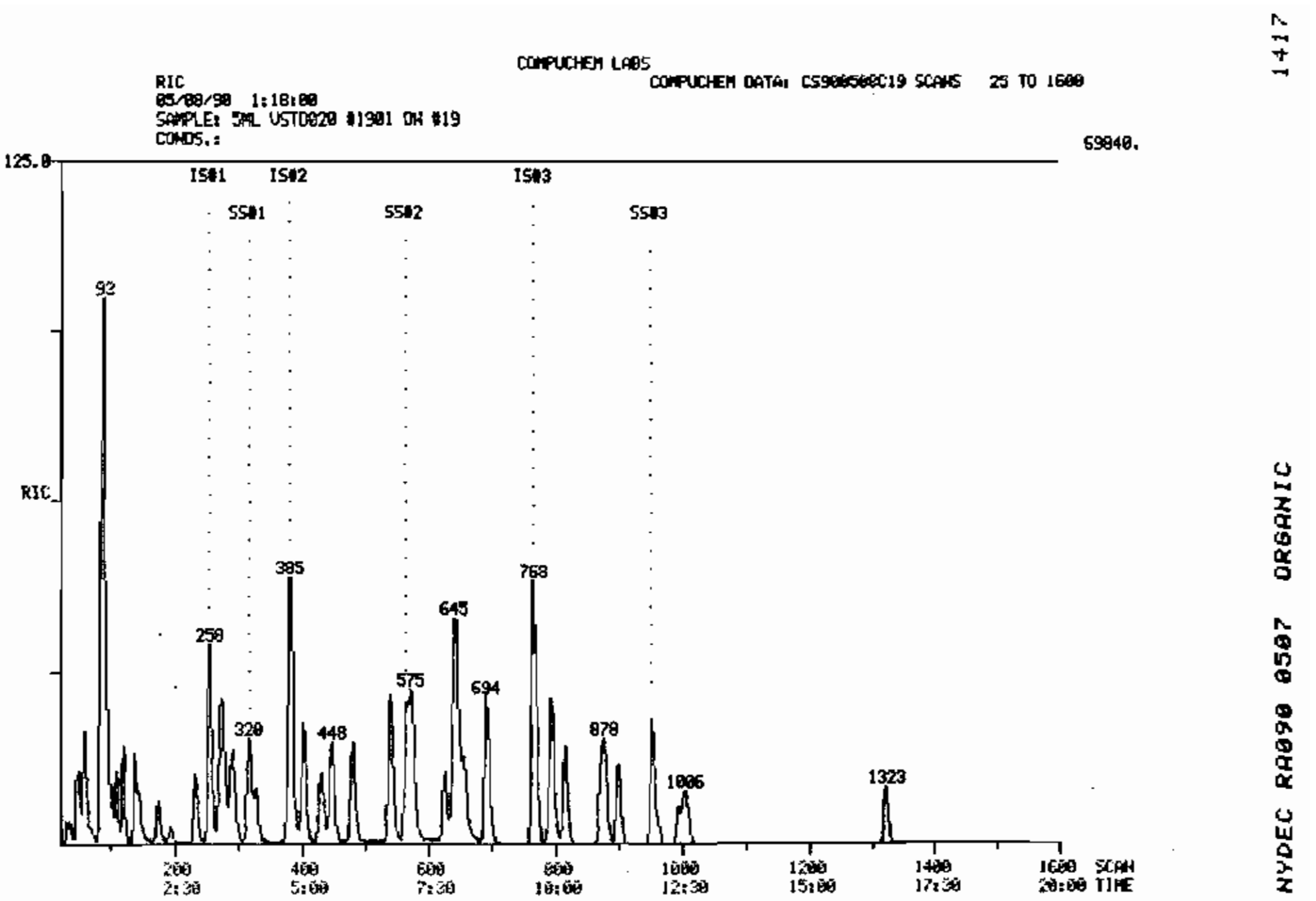
Instrument ID: 19 Calibration Date(s): 05/08/90 05/08/90

Matrix:(soil/water) WATER 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 = CS900508C19 RRF50 = CT900508C19
RRF100= CU900508C19 RRF150= CV900508C19 RRF200= CW900508C19

COMPOUND		RRF20	RRF50	RRF100	RRF150	RRF200	$\overline{RRF}$	% RSD	
Chloromethane	#	0.457	0.479	0.453	0.367	0.388	0.429	11.3	#
Bromomethane		1.288	1.422	1.475	1.407	1.382	1.395	4.9	
Vinyl Chloride	*	0.577	0.654	0.612	0.263	0.569	0.535	29.1	*
Chloroethane		0.734	0.946	1.084	1.003	1.023	0.958	14.1	
Methylene Chloride		1.185	1.161	1.322	1.463	1.533	1.333	12.4	
Acetone		0.131	0.209	0.295	0.323	0.443	0.280	42.2	
Carbon Disulfide		3.394	4.149	5.417	5.721	5.258	4.788	20.5	
1,1-Dichloroethene	*	1.165	1.395	1.523	1.578	1.201	1.372	13.5	*
1,1-Dichloroethane	#	1.379	1.453	1.540	1.643	1.604	1.524	7.1	#
1,2-Dichloroethene (total)		2.358	2.404	2.510	2.645	2.761	2.536	6.6	
Chloroform	*	2.184	2.196	2.196	2.160	2.216	2.190	0.9	*
1,2-Dichloroethane		1.682	1.570	1.575	1.563	1.648	1.608	3.4	
2-Butanone		0.016	0.050	0.055	0.058	0.058	0.047	38.0	
1,1,1-Trichloroethane		0.629	0.614	0.624	0.646	0.646	0.632	2.2	
Carbon Tetrachloride		0.708	0.663	0.665	0.684	0.647	0.673	3.5	
Vinyl Acetate		0.291	0.231	0.250	0.266	0.335	0.275	14.7	
Bromodichloromethane		0.698	0.642	0.647	0.684	0.650	0.664	3.8	
1,2-Dichloropropane	*	0.285	0.256	0.235	0.247	0.242	0.253	7.7	*
cis-1,3-Dichloropropene		0.700	0.643	0.636	0.702	0.671	0.670	4.6	
Trichloroethene		0.534	0.478	0.470	0.472	0.452	0.481	6.5	
Dibromochloromethane		0.608	0.564	0.476	0.740	0.583	0.594	16.1	
1,1,2-Trichloroethane		0.442	0.394	0.346	0.397	0.363	0.388	9.5	
Benzene		0.693	0.663	0.694	0.695	0.717	0.692	2.8	
Trans-1,3-Dichloropropene		0.404	0.377	0.364	0.393	0.361	0.380	4.9	
Bromoform	#	0.535	0.512	0.473	0.480	0.422	0.484	8.9	#
4-Methyl-2-Pentanone		0.363	0.383	0.317	0.347	0.307	0.343	9.2	
2-Hexanone		0.173	0.152	0.132	0.175	0.128	0.152	14.5	
Tetrachloroethene		0.725	0.656	0.580	0.564	0.502	0.605	14.3	
1,1,2,2-Tetrachloroethane	#	0.386	0.374	0.383	0.383	0.363	0.378	2.5	#
Toluene	*	1.095	1.006	0.978	1.000	0.953	1.006	5.3	*
Chlorobenzene	#	0.923	0.838	0.814	0.818	0.783	0.835	6.3	#
Ethylbenzene	*	0.446	0.399	0.415	0.426	0.416	0.420	4.1	*
Styrene		0.935	0.882	0.952	0.942	1.001	0.942	4.5	
Total Xylenes		1.179	1.078	1.119	1.016	1.087	1.096	5.4	
Toluene-d8		1.596	1.532	1.466	1.545	1.486	1.525	3.4	
BFB		0.598	0.603	0.613	0.672	0.688	0.635	6.6	
1,2-Dichloroethane-d4		1.372	1.339	1.448	1.405	1.502	1.413	4.5	


COMPUCHEM LABS
COMPUCHEM DATA: CS900508C19 SCANS 25 TO 1600
RIC
05/08/90 1:18:00
SAMPLE: SML VSTD020 #1901 DH #19
CONDS.:
69840.
125.0
RIC
IS#1
IS#2
IS#3
SS#1
SS#2
SS#3
92
258
320
385
448
575
645
694
768
878
1006
1323
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
1417
NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CS900508C19
DATA: CS900508C19.TI
05/08/90 1:18:00
SAMPLE: 5ML VSTD020 #1901 ON #19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1539

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

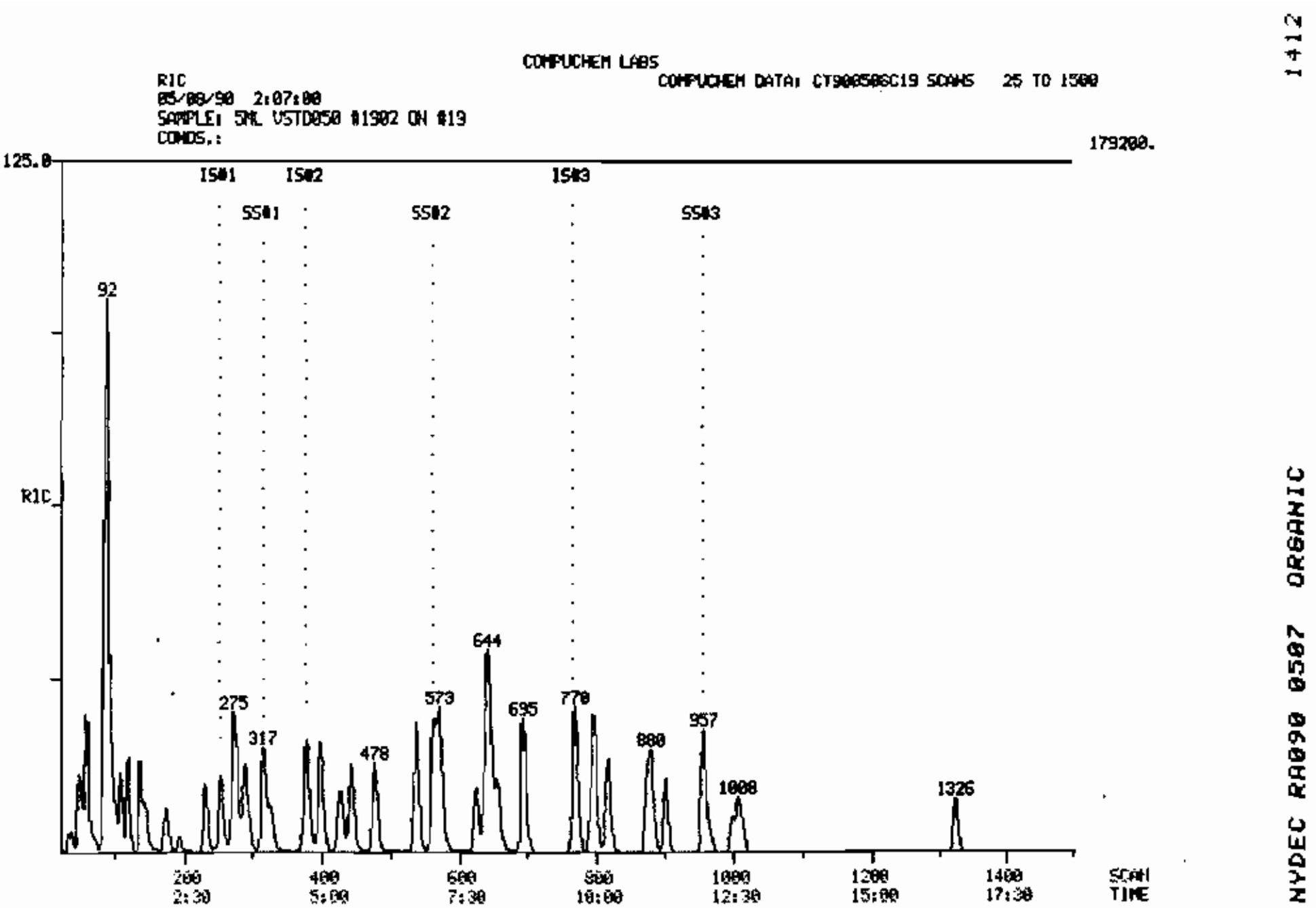
NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 BS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	258	3:13	1	1.000	A BB	26040.	50.000 UG/L	2.62
2	90	35	0:26	1	0.136	A BB	4760.	21.918 UG/L	1.15
3	62	40	0:30	1	0.155	A BB	6010.	21.271 UG/L	1.12
4	94	50	0:37	1	0.194	A BB	13411.	18.493 UG/L	0.97
5	64	54	0:40	1	0.209	A BB	7650.	16.775 UG/L	0.88
6	101	63	0:47	1	0.244	A BB	31665.	17.552 UG/L	0.92
7	56	87	1:05	1	0.337	A BB	7469.	151.159 UG/L	7.93
8	96	87	1:05	1	0.337	A BB	12130.	17.115 UG/L	0.90
9	76	93	1:10	1	0.360	A BB	35351.	17.412 UG/L	0.91
10	142	93	1:10	1	0.360	A BB	49261.	21.271 UG/L	1.12
11	117	91	1:08	1	0.353	A BB	15648.	20.482 UG/L	1.07
12	85	93	1:10	1	0.360	A BB	14566.	20.767 UG/L	1.09
13	43	97	1:13	1	0.376	A VB	1367.	11.833 UG/L	0.62
14	114	385	4:49	14	1.000	A BB	99571.	50.000 UG/L	2.62
15	76	112	1:24	1	0.434	A BB	4740.	18.207 UG/L	0.95
16	84	121	1:31	1	0.469	A BB	12346.	22.272 UG/L	1.17
17	96	140	1:45	1	0.543	A BB	11141.	19.915 UG/L	1.04
18	83	145	1:49	1	0.562	A BB	15703.	223.610 UG/L	11.73
19	63	177	2:13	1	0.686	A BB	14361.	19.961 UG/L	1.05
20	43	195	2:26	14	0.506	A BB	11583.	25.331 UG/L	1.33
21	96	235	2:56	1	0.911	A BB	13413.	20.767 UG/L	1.09
22	72	247	3:05	1	0.957	A*BB	166.	7.417 UG/L	0.39
23	83	275	3:26	1	1.066	A BB	22750.	21.755 UG/L	1.14
24	97	278	3:28	14	0.722	A BB	25045.	21.800 UG/L	1.14
25	117	293	3:40	14	0.761	A VB	28218.	21.854 UG/L	1.15
26	78	319	3:59	14	0.829	A BB	27601.	20.197 UG/L	1.06
27	62	331	4:08	1	1.283	A BB	17518.	21.034 UG/L	1.10
28	70	382	4:46	14	0.992	A BV	6957.	275.636 UG/L	14.46
29	117	767	9:35	29	1.000	A BB	62696.	50.000 UG/L	2.62
30	130	404	5:03	14	1.049	A BB	21250.	20.959 UG/L	1.10
31	63	433	5:25	14	1.125	A BB	11340.	21.796 UG/L	1.14
32	174	447	5:35	1	1.733	A BB	19498.	21.578 UG/L	1.13
33	83	482	6:01	14	1.252	A BB	27816.	20.913 UG/L	1.10
34	63	540	6:45	14	1.403	A BB	7134.	20.012 UG/L	1.05
35	75	542	6:46	14	1.408	A BB	27882.	20.127 UG/L	1.06
36	43	579	7:14	29	0.755	A BB	9095.	19.470 UG/L	1.02
37	92	575	7:11	29	0.750	A BB	27470.	20.573 UG/L	1.08
38	75	628	7:51	14	1.631	A BV	16087.	20.369 UG/L	1.06
39	97	649	8:07	14	1.686	A BB	17597.	22.629 UG/L	1.19
40	69	658	8:13	29	0.858	A BB	21534.	24.010 UG/L	1.26
41	164	642	8:01	29	0.837	A BB	18191.	20.727 UG/L	1.09

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	700	8:45	29	0.913	A BV	4047.	23.217	UG/L	1.22
43	129	694	8:40	14	1.803	A BB	24203.	25.053	UG/L	1.31
44	107	694	8:40	14	1.803	A BB	17326.	26.672	UG/L	1.40
45	112	771	9:38	29	1.005	A BB	23152.	21.803	UG/L	1.14
46	131	795	9:56	14	2.065	A BB	14006.	21.121	UG/L	1.11
47	106	797	9:58	29	1.039	A BB	11175.	21.429	UG/L	1.12
48	106	817	10:13	29	1.065	A BB	14982.	21.378	UG/L	1.12
49	106	875	10:56	29	1.141	A BB	13840.	21.322	UG/L	1.12
50	104	880	11:00	29	1.147	A BB	23454.	20.643	UG/L	1.08
51	173	901	11:16	14	2.340	A BB	21317.	20.199	UG/L	1.06
52	88	962	12:01	14	2.499	A BB	3592.	19.490	UG/L	1.02
53	110	996	12:27	29	1.299	A BB	5047.	21.396	UG/L	1.12
54	83	1004	12:33	29	1.309	A BB	9691.	20.881	UG/L	1.10
55	53	1012	12:39	29	1.319	A BB	2089.	20.716	UG/L	1.09
56	157	1323	16:32	29	1.725	A BB	12433.	43.578	UG/L	2.29
57	65	322	4:01	1	1.248	A BB	14291.	19.539	UG/L	1.02
58	95	954	11:55	29	1.244	A BB	14997.	19.992	UG/L	1.03
59	98	567	7:05	29	0.739	A BB	40026.	19.593	UG/L	1.03

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:19	0.97	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27	0.97	10.000	0.01	21.92	50.00	0.169	0.417	0.44
3	0:31	0.98	10.000	0.02	21.27	50.00	0.231	0.543	0.43
4	0:39	0.96	10.000	0.02	18.49	50.00	0.515	1.392	0.37
5	0:41	0.98	10.000	0.02	16.78	50.00	0.294	0.876	0.34
6	0:48	0.98	10.000	0.02	17.55	50.00	1.216	3.464	0.35
7	1:07	0.97	90.000	0.00	151.16	500.00	0.029	0.093	0.30
8	1:07	0.97	5.000	0.07	17.11	50.00	0.466	1.361	0.34
9	1:12	0.97	5.000	0.07	17.41	50.00	1.358	3.898	0.35
10	1:11	0.98	10.000	0.04	21.27	50.00	1.892	4.447	0.43
11	1:10	0.97	10.000	0.04	20.48	50.00	0.601	1.467	0.41
12	1:11	0.98	10.000	0.04	20.77	50.00	0.539	1.347	0.42
13	1:16	0.95	10.000	0.04	11.83	50.00	0.050	0.222	0.24
14	4:58	0.97	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:27	0.97	15.000	0.03	18.21	50.00	0.182	0.500	0.36
16	1:34	0.96	5.000	0.09	22.27	50.00	0.474	1.064	0.45
17	1:49	0.97	5.000	0.11	19.92	50.00	0.428	1.074	0.40
18	1:54	0.95	120.000	0.00	223.61	500.00	0.060	0.135	0.45
19	2:17	0.97	5.000	0.14	19.96	50.00	0.551	1.381	0.40
20	2:31	0.97	10.000	0.05	25.33	50.00	0.116	0.230	0.51
21	3:01	0.97	5.000	0.18	20.77	50.00	0.515	1.240	0.42
22	3:13	0.96	10.000	0.10	7.42	50.00	0.006	0.043	0.15
23	3:33	0.97	5.000	0.21	21.76	50.00	0.874	2.008	0.44
24	3:34	0.97	5.000	0.14	21.80	50.00	0.252	0.577	0.44
25	3:46	0.97	5.000	0.15	21.85	50.00	0.283	0.648	0.44
26	4:07	0.97	5.000	0.17	20.20	50.00	0.277	0.686	0.40
27	4:15	0.97	5.000	0.26	21.03	50.00	0.673	1.599	0.42
28	4:53	0.98	100.000	0.01	275.64	500.00	0.007	0.013	0.55
29	9:46	0.98	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	5:13	0.97	5.000	0.21	20.96	50.00	0.213	0.509	0.42
31	5:34	0.97	5.000	0.22	21.80	50.00	0.114	0.261	0.44
32	5:45	0.97	5.000	0.35	21.58	50.00	0.749	1.735	0.43
33	6:10	0.98	5.000	0.25	20.91	50.00	0.279	0.668	0.42
34	6:53	0.98	10.000	0.14	20.01	50.00	0.072	0.179	0.40
35	6:55	0.98	5.000	0.28	20.13	50.00	0.280	0.696	0.40
36	7:24	0.98	15.000	0.05	19.47	50.00	0.145	0.373	0.39

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	7:20	0.98	5.000	0.15	20.57	50.00	0.438	1.065	0.41
38	8:00	0.98	5.000	0.33	20.57	50.00	0.162	0.393	0.41
39	8:15	0.98	5.000	0.34	22.63	50.00	0.177	0.390	0.45
40	8:22	0.98	10.000	0.09	24.01	50.00	0.343	0.715	0.48
41	8:11	0.98	5.000	0.17	20.73	50.00	0.290	0.700	0.41
42	8:55	0.98	15.000	0.06	23.22	50.00	0.069	0.149	0.46
43	8:50	0.98	5.000	0.36	25.05	50.00	0.243	0.485	0.50
44	8:52	0.98	5.000	0.36	26.67	50.00	0.174	0.326	0.53
45	9:48	0.98	5.000	0.20	21.80	50.00	0.369	0.847	0.44
46	10:06	0.98	5.000	0.41	21.12	50.00	0.141	0.333	0.42
47	10:08	0.98	5.000	0.21	21.43	50.00	0.178	0.416	0.43
48	11:05	0.92	5.000	0.21	21.38	50.00	0.239	0.559	0.43
49	10:23	1.05	5.000	0.23	21.32	50.00	0.221	0.518	0.43
50	11:10	0.98	5.000	0.23	20.64	50.00	0.374	0.906	0.41
51	11:26	0.98	5.000	0.47	20.20	50.00	0.214	0.530	0.40
52	12:13	0.98	15.000	0.17	19.45	50.00	0.036	0.093	0.39
53	12:38	0.99	15.000	0.09	21.40	50.00	0.080	0.188	0.43
54	12:44	0.99	5.000	0.26	20.88	50.00	0.155	0.370	0.42
55	12:13	1.04	15.000	0.09	20.72	50.00	0.033	0.080	0.41
56	16:49	0.99	10.000	0.17	43.58	100.00	0.094	0.228	0.44
57	4:09	0.97	5.000	0.29	19.54	50.00	0.949	1.404	0.39
58	12:07	0.98	5.000	0.25	19.59	50.00	0.239	0.610	0.39
59	7:14	0.98	5.000	0.15	19.59	50.00	0.638	1.629	0.39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TIME
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CONDS.:
SUBMITTED BY: 19 ANALYST: 1539

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 66#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 66#3
59	#233 D8-TOLUENE WE#59 66#2

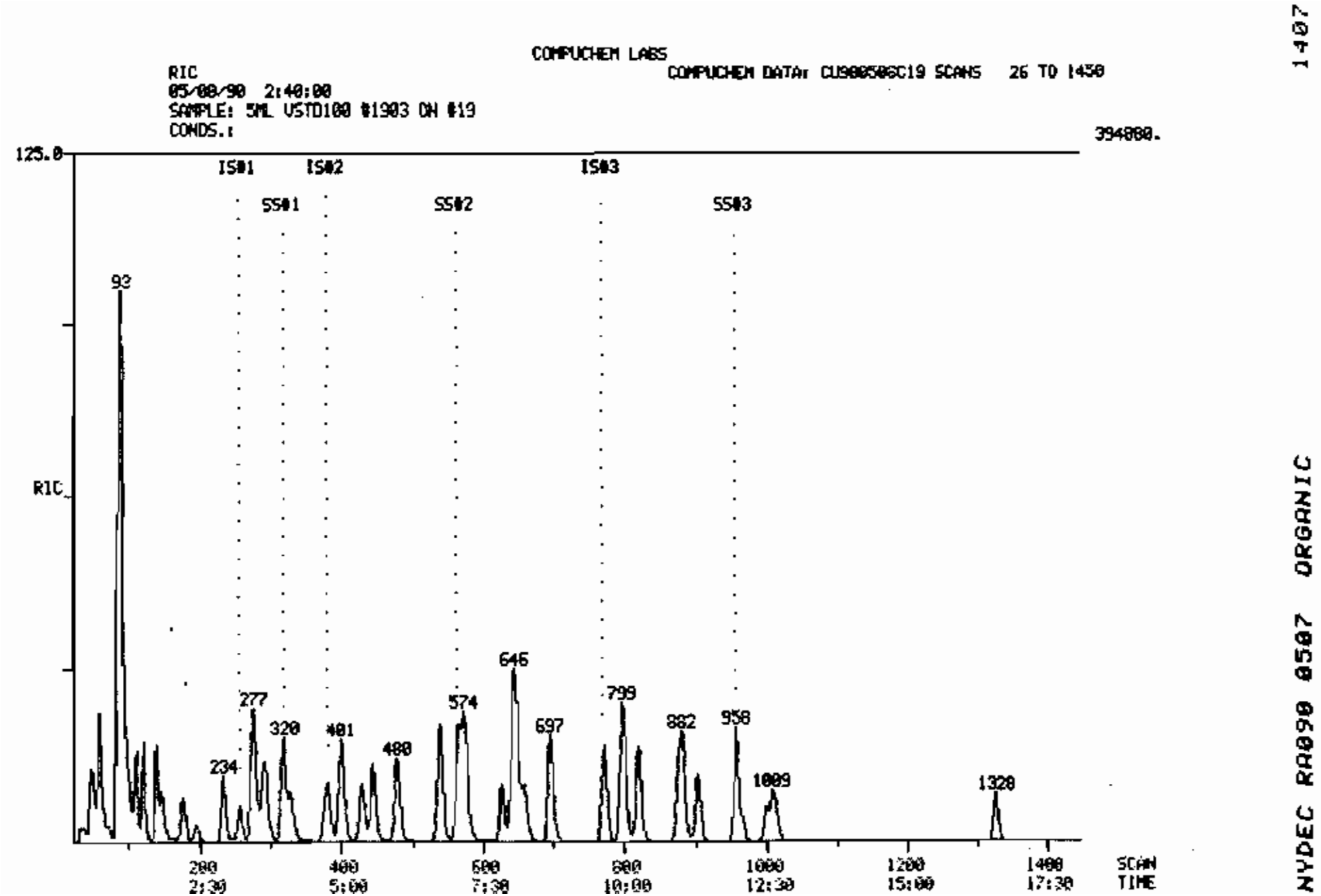
Close-out 5-8-90

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	256	0:12	1	1.000	A BB	25390.	50.000 UG/L	1.16
2	50	36	0:27	1	0.141	A BB	12150.	57.378 UG/L	1.33
3	62	40	0:30	1	0.156	A BB	16617.	60.319 UG/L	1.40
4	94	50	0:37	1	0.195	A BB	36107.	51.063 UG/L	1.18
5	64	53	0:40	1	0.207	A VB	24029.	54.041 UG/L	1.25
6	101	62	0:46	1	0.242	A BB	90241.	51.303 UG/L	1.19
7	56	87	1:05	1	0.340	A BV	22838.	474.032 UG/L	10.99
8	96	87	1:05	1	0.340	A BB	35414.	51.246 UG/L	1.19
9	76	92	1:09	1	0.359	A BV	105333.	53.208 UG/L	1.23
10	142	92	1:09	1	0.359	A BB	103429.	45.805 UG/L	1.06
11	117	91	1:08	1	0.355	A BB	36691.	49.256 UG/L	1.14
12	85	91	1:08	1	0.355	A BB	37250.	54.468 UG/L	1.26
13	43	97	1:13	1	0.379	A BV	5302.	47.065 UG/L	1.09
14	114	380	4:45	14	1.000	A BB	98816.	50.000 UG/L	1.16
15	76	111	1:23	1	0.434	A VB	13365.	52.652 UG/L	1.22
16	84	120	1:30	1	0.469	A BB	29490.	54.362 UG/L	1.26
17	96	138	1:43	1	0.539	A BB	28950.	53.075 UG/L	1.23
18	53	146	1:49	1	0.570	A BB	33609.	490.849 UG/L	11.38
19	63	175	2:11	1	0.684	A BB	36904.	52.609 UG/L	1.22
20	43	193	2:25	14	0.508	A BB	22792.	50.225 UG/L	1.16
21	96	232	2:54	1	0.906	A BB	32091.	50.959 UG/L	1.18
22	72	247	3:05	1	0.965	A BB	1265.	57.970 UG/L	1.34
23	83	273	3:25	1	1.066	A BB	55768.	54.694 UG/L	1.27
24	97	276	3:27	14	0.726	A BB	60642.	53.187 UG/L	1.23
25	117	291	3:38	14	0.766	A VB	65477.	51.097 UG/L	1.18
26	78	316	3:57	14	0.832	A BB	65507.	48.300 UG/L	1.12
27	62	327	4:05	1	1.277	A BB	39857.	49.081 UG/L	1.14
28	70	372	4:39	14	0.979	A*BB	11997.	478.943 UG/L	11.10
29	117	769	9:37	29	1.000	A BB	62618.	50.000 UG/L	1.16
30	130	399	4:59	14	1.050	A BB	47224.	46.934 UG/L	1.09
31	63	427	5:20	14	1.124	A BB	25262.	48.925 UG/L	1.13
32	174	444	5:33	1	1.734	A BB	40475.	45.940 UG/L	1.06
33	83	478	5:58	14	1.258	A BB	63438.	48.059 UG/L	1.11
34	63	537	6:43	14	1.413	A BB	16385.	46.313 UG/L	1.07
35	75	539	6:44	14	1.418	A BB	63534.	46.213 UG/L	1.07
36	43	577	7:13	29	0.750	A BB	24012.	51.470 UG/L	1.19
37	92	573	7:10	29	0.745	A BV	62977.	47.225 UG/L	1.09
38	75	627	7:50	14	1.650	A BB	37303.	48.060 UG/L	1.11
39	97	648	8:06	14	1.705	A BB	38978.	50.508 UG/L	1.17
40	69	658	8:13	29	0.856	A BB	41321.	46.129 UG/L	1.07
41	164	643	8:02	29	0.836	A BB	41079.	46.865 UG/L	1.09

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		XTOT
42	43	701	8:46	29	0.912	A BB	9524.	50.930	UG/L	1.18
43	129	695	8:41	14	1.829	A BB	55775.	58.174	UG/L	1.35
44	107	695	8:41	14	1.829	A BB	37860.	58.728	UG/L	1.36
45	112	772	9:39	29	1.004	A BB	52466.	49.471	UG/L	1.15
46	131	795	9:56	14	2.092	A BV	32275.	49.041	UG/L	1.14
47	106	799	9:59	29	1.039	A BB	24961.	47.915	UG/L	1.11
48	106	819	10:14	29	1.065	A BB	34093.	48.707	UG/L	1.13
49	106	875	10:56	29	1.138	A BB	30711.	47.374	UG/L	1.10
50	104	882	11:01	29	1.147	A BB	55244.	48.684	UG/L	1.13
51	173	903	11:17	14	2.376	A BB	50618.	48.331	UG/L	1.12
52	88	966	12:04	14	2.542	A BB	6877.	18.434	UG/L	1.12
53	110	999	12:29	29	1.299	A BB	11075.	47.009	UG/L	1.09
54	83	1008	12:36	29	1.311	A BB	23421.	50.527	UG/L	1.17
55	53	1013	12:40	29	1.317	A BB	5078.	50.420	UG/L	1.17
56	157	1326	16:34	29	1.724	A BB	27571.	96.757	UG/L	2.24
57	65	319	3:59	1	1.246	A BB	33999.	47.674	UG/L	1.10
58	95	957	11:58	29	1.244	A BB	37783.	49.420	UG/L	1.15
59	98	565	7:04	29	0.735	A BB	95951.	47.028	UG/L	1.09

NO	RET(L)	RATIO	RAT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
1	3:19	0.97	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27	1.00	10.000	0.01	57.38	50.00	0.479	0.417	1.15
3	0:31	0.98	10.000	0.02	60.32	50.00	0.654	0.543	1.21
4	0:39	0.96	10.000	0.02	51.06	50.00	1.422	1.392	1.02
5	0:41	0.96	10.000	0.02	54.04	50.00	0.946	0.876	1.08
6	0:48	0.97	10.000	0.02	51.30	50.00	3.554	3.464	1.03
7	1:07	0.97	90.000	0.00	474.03	500.00	0.090	0.095	0.95
8	1:07	0.97	5.000	0.07	51.25	50.00	1.395	1.361	1.02
9	1:12	0.96	5.000	0.07	53.21	50.00	4.149	3.898	1.06
10	1:11	0.97	10.000	0.04	45.80	50.00	4.074	4.447	0.92
11	1:10	0.97	10.000	0.04	49.26	50.00	1.445	1.467	0.99
12	1:11	0.96	10.000	0.04	54.47	50.00	1.467	1.347	1.09
13	1:16	0.95	10.000	0.04	47.06	50.00	0.209	0.222	0.94
14	4:58	0.95	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:27	0.96	15.000	0.03	52.65	50.00	0.526	0.500	1.05
16	1:34	0.95	5.000	0.09	54.56	50.00	1.161	1.064	1.09
17	1:49	0.95	5.000	0.11	53.08	50.00	1.140	1.074	1.06
18	1:54	0.96	120.000	0.00	490.85	500.00	0.132	0.135	0.98
19	2:17	0.96	5.000	0.14	52.61	50.00	1.453	1.381	1.05
20	2:31	0.96	10.000	0.05	50.23	50.00	0.231	0.230	1.00
21	3:01	0.96	5.000	0.18	50.96	50.00	1.264	1.240	1.02
22	3:13	0.96	10.000	0.10	57.97	50.00	0.050	0.043	1.16
23	3:33	0.96	5.000	0.21	54.69	50.00	2.196	2.008	1.09
24	3:34	0.97	5.000	0.15	53.19	50.00	0.614	0.577	1.06
25	3:46	0.96	5.000	0.15	51.10	50.00	0.663	0.648	1.02
26	4:07	0.96	5.000	0.17	48.30	50.00	0.663	0.686	0.97
27	4:15	0.96	5.000	0.26	49.08	50.00	1.570	1.599	0.98
28	4:53	0.95	100.000	0.01	478.94	500.00	0.012	0.013	0.96
29	9:46	0.98	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	5:13	0.96	5.000	0.21	46.93	50.00	0.478	0.509	0.94
31	5:34	0.96	5.000	0.22	48.92	50.00	0.256	0.261	0.98
32	5:45	0.97	5.000	0.35	45.94	50.00	1.594	1.739	0.92
33	6:10	0.97	5.000	0.25	48.06	50.00	0.642	0.668	0.96
34	6:53	0.97	10.000	0.14	46.31	50.00	0.166	0.179	0.93
35	6:55	0.97	5.000	0.28	46.21	50.00	0.643	0.696	0.92
36	7:24	0.97	15.000	0.05	51.47	50.00	0.383	0.373	1.03

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	7:20	0.98	5.000	0.15	47.22	50.00	1.006	1.065	0.94
38	8:00	0.98	5.000	0.33	48.06	50.00	0.378	0.393	0.96
39	8:15	0.98	5.000	0.34	50.51	50.00	0.394	0.390	1.01
40	8:22	0.98	10.000	0.09	46.13	50.00	0.660	0.715	0.92
41	8:11	0.98	5.000	0.17	46.87	50.00	0.656	0.700	0.94
42	8:55	0.98	15.000	0.06	50.93	50.00	0.152	0.149	1.02
43	8:50	0.98	5.000	0.37	58.17	50.00	0.564	0.485	1.16
44	8:52	0.98	5.000	0.37	58.73	50.00	0.383	0.326	1.17
45	9:48	0.98	5.000	0.20	49.47	50.00	0.838	0.847	0.99
46	10:06	0.98	5.000	0.42	49.04	50.00	0.327	0.333	0.98
47	10:08	0.99	5.000	0.21	47.91	50.00	0.399	0.416	0.96
48	11:05	0.92	5.000	0.21	48.71	50.00	0.514	0.559	0.97
49	10:23	1.05	5.000	0.23	47.37	50.00	0.490	0.518	0.95
50	11:10	0.99	5.000	0.23	48.68	50.00	0.882	0.906	0.97
51	11:26	0.99	5.000	0.48	48.33	50.00	0.512	0.530	0.97
52	12:13	0.99	15.000	0.17	48.43	50.00	0.090	0.093	0.97
53	12:38	0.99	15.000	0.09	47.01	50.00	0.177	0.188	0.94
54	12:44	0.99	5.000	0.26	50.53	50.00	0.374	0.370	1.01
55	12:13	1.04	15.000	0.09	50.42	50.00	0.081	0.080	1.01
56	16:45	0.99	10.000	0.17	96.76	100.00	0.220	0.228	0.97
57	4:09	0.96	5.000	0.25	47.67	50.00	1.339	1.404	0.95
58	12:07	0.99	5.000	0.25	49.42	50.00	0.603	0.610	0.99
59	7:14	0.98	5.000	0.15	47.03	50.00	1.532	1.629	0.94



1407

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CU90050BC19
DATA: CU900508C19.T1
05/08/90 2:40:00
SAMPLE: 5ML VSTD100 #19D3 DN #19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1539

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

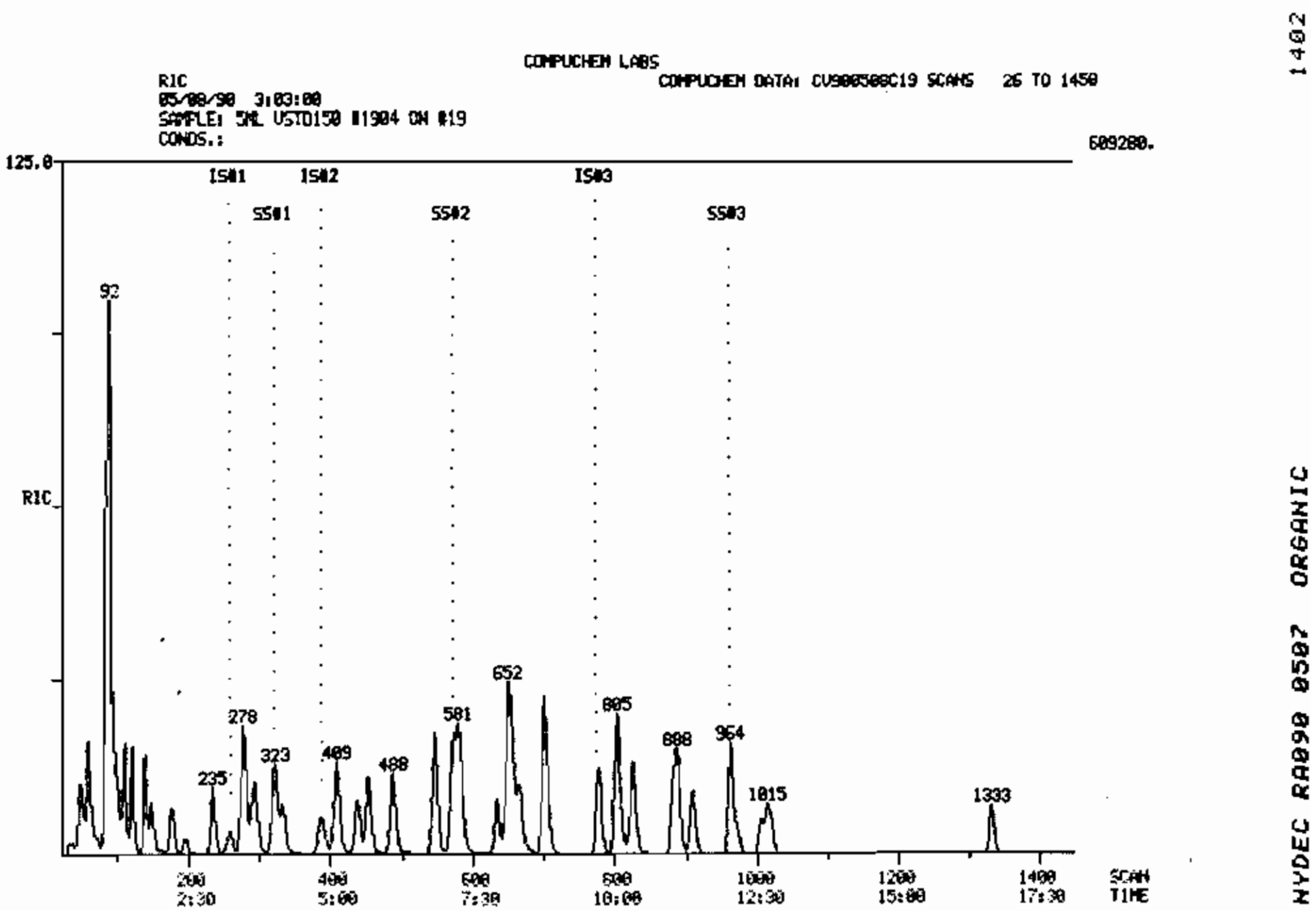
NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	230 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 O4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	257	3:13	1	1.000	A BB	25408.	50.000	UG/L	0.56
2	50	36	0:27	1	0.140	A BB	23019.	108.629	UG/L	1.22
3	62	41	0:31	1	0.160	A BV	31084.	112.753	UG/L	1.26
4	94	50	0:37	1	0.195	A BB	74952.	105.924	UG/L	1.19
5	64	54	0:40	1	0.210	A VB	55075.	123.774	UG/L	1.39
6	101	63	0:47	1	0.245	A BB	182004.	103.398	UG/L	1.16
7	56	88	1:06	1	0.342	A BV	61732.	1280.420	UG/L	14.33
8	96	87	1:05	1	0.339	A BV	77392.	111.911	UG/L	1.25
9	76	93	1:10	1	0.362	A BV	275251.	138.942	UG/L	1.55
10	142	93	1:10	1	0.362	A BB	179724.	79.536	UG/L	0.89
11	117	91	1:08	1	0.354	A BB	72335.	97.037	UG/L	1.09
12	85	93	1:10	1	0.362	A BB	86857.	126.915	UG/L	1.42
13	43	100	1:15	1	0.389	A BB	14971.	132.794	UG/L	1.49
14	114	381	4:46	14	1.000	A BB	100463.	50.000	UG/L	0.56
15	76	112	1:24	1	0.436	A VB	32821.	129.208	UG/L	1.45
16	84	122	1:31	1	0.475	A BB	67179.	124.205	UG/L	1.39
17	96	140	1:45	1	0.545	A BB	64868.	118.841	UG/L	1.33
18	53	148	1:51	1	0.576	A BB	74958.	1093.950	UG/L	12.24
19	63	176	2:12	1	0.685	A BB	78259.	111.485	UG/L	1.25
20	43	195	2:26	14	0.512	A BB	50300.	109.024	UG/L	1.22
21	96	234	2:55	1	0.911	A BB	62665.	99.438	UG/L	1.11
22	72	250	3:07	1	0.973	A BV	2817.	129.001	UG/L	1.44
23	83	276	3:27	1	1.074	A BB	111581.	109.355	UG/L	1.22
24	97	277	3:28	14	0.727	A BB	125283.	108.079	UG/L	1.21
25	117	293	3:40	14	0.769	A VB	133516.	102.485	UG/L	1.15
26	78	319	3:59	14	0.837	A BB	139343.	101.057	UG/L	1.13
27	62	330	4:07	1	1.284	A BB	80026.	98.477	UG/L	1.10
28	70	377	4:43	14	0.990	A BB	22964.	901.765	UG/L	10.09
29	117	771	9:38	29	1.000	A BB	64032.	50.000	UG/L	0.56
30	130	401	5:01	14	1.052	A BB	94417.	92.298	UG/L	1.03
31	63	429	5:22	14	1.126	A BB	47169.	89.854	UG/L	1.01
32	174	445	5:34	1	1.732	A BB	76806	87.114	UG/L	0.97
33	83	480	6:00	14	1.260	A BB	130071.	96.922	UG/L	1.08
34	63	538	6:43	14	1.412	A BB	33376.	92.792	UG/L	1.04
35	75	541	6:46	14	1.420	A BB	127735.	91.388	UG/L	1.02
36	43	579	7:14	29	0.751	A BB	40657.	85.223	UG/L	0.95
37	92	574	7:10	29	0.744	A BB	125301.	91.885	UG/L	1.03
38	75	628	7:51	14	1.648	A BB	73086.	92.617	UG/L	1.04
39	97	649	8:07	14	1.703	A BB	69586.	88.692	UG/L	0.99
40	69	659	8:14	29	0.855	A BB	70155.	76.389	UG/L	0.86
41	164	644	8:03	29	0.835	A BB	74239.	82.825	UG/L	0.93

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	703	8:47	29	0.912	A BV	16870.	80.220	UG/L	0.99
43	129	696	8:42	14	1.827	A BB	95738.	98.220	UG/L	1.10
44	107	697	8:43	14	1.829	A BB	64105.	97.810	UG/L	1.09
45	112	773	9:40	29	1.003	A BB	104265.	96.141	UG/L	1.08
46	131	798	9:58	14	2.094	A BV	65428.	97.786	UG/L	1.09
47	106	800	10:00	29	1.038	A BV	53104.	99.686	UG/L	1.12
48	106	821	10:16	29	1.065	A BB	71908.	100.461	UG/L	1.12
49	106	878	10:58	29	1.139	A BB	69368.	104.641	UG/L	1.17
50	104	883	11:02	29	1.145	A BB	121942.	105.089	UG/L	1.18
51	173	904	11:18	14	2.373	A BB	95073.	89.288	UG/L	1.00
52	88	967	12:05	14	2.538	A BB	19168.	102.867	UG/L	1.15
53	110	1000	12:30	29	1.297	A BB	21900.	90.905	UG/L	1.02
54	83	1009	12:37	29	1.309	A BB	49068.	103.519	UG/L	1.16
55	53	1015	12:41	29	1.316	A BB	11153.	108.293	UG/L	1.21
56	157	1328	16:36	29	1.722	A BB	53492.	183.578	UG/L	2.05
57	65	321	4:01	1	1.249	A BB	73597.	103.125	UG/L	1.15
58	95	958	11:58	29	1.243	A BB	78475.	100.378	UG/L	1.12
59	98	567	7:05	29	0.735	A BB	187798.	90.011	UG/L	1.01

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
1	3:19	0.97	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27	1.00	10.000	0.01	108.63	50.00	0.906	0.417	2.17
3	0:31	1.00	10.000	0.02	112.75	50.00	1.223	0.543	2.26
4	0:39	0.96	10.000	0.02	105.92	50.00	2.950	1.392	2.12
5	0:41	0.98	10.000	0.02	123.77	50.00	2.168	0.876	2.48
6	0:48	0.98	10.000	0.02	103.40	50.00	7.163	3.464	2.07
7	1:07	0.98	90.000	0.00	1280.42	500.00	0.243	0.095	2.56
8	1:07	0.97	5.000	0.07	111.91	50.00	3.046	1.361	2.24
9	1:12	0.97	5.000	0.07	138.94	50.00	10.833	3.898	2.78
10	1:11	0.98	10.000	0.04	79.54	50.00	7.074	4.447	1.59
11	1:10	0.97	10.000	0.04	97.04	50.00	2.847	1.467	1.94
12	1:11	0.98	10.000	0.04	126.91	50.00	3.419	1.347	2.54
13	1:16	0.98	10.000	0.04	132.79	50.00	0.587	0.222	2.66
14	4:58	0.96	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:27	0.97	15.000	0.03	129.21	50.00	1.292	0.500	2.58
16	1:34	0.97	5.000	0.09	124.20	50.00	2.614	1.064	2.48
17	1:49	0.97	5.000	0.11	118.84	50.00	2.553	1.074	2.38
18	1:54	0.97	120.000	0.00	1093.95	500.00	0.295	0.135	2.19
19	2:17	0.96	5.000	0.14	111.48	50.00	3.080	1.381	2.23
20	2:31	0.97	10.000	0.05	109.02	50.00	0.501	0.230	2.18
21	3:01	0.97	5.000	0.18	99.44	50.00	2.466	1.240	1.99
22	3:13	0.97	10.000	0.10	129.00	50.00	0.111	0.043	2.58
23	3:33	0.97	5.000	0.21	109.36	50.00	4.392	2.008	2.19
24	3:34	0.97	5.000	0.15	108.08	50.00	1.247	0.577	2.16
25	3:46	0.97	5.000	0.15	102.49	50.00	1.329	0.648	2.05
26	4:07	0.97	5.000	0.17	101.06	50.00	1.387	0.686	2.02
27	4:15	0.97	5.000	0.26	98.48	50.00	3.150	1.599	1.97
28	4:53	0.96	100.000	0.01	901.76	500.00	0.023	0.013	1.80
29	9:46	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	5:13	0.96	5.000	0.21	92.30	50.00	0.940	0.509	1.85
31	5:34	0.96	5.000	0.23	89.85	50.00	0.470	0.261	1.80
32	5:45	0.97	5.000	0.35	87.11	50.00	3.023	1.735	1.74
33	6:10	0.97	5.000	0.25	96.92	50.00	1.295	0.668	1.94
34	6:53	0.98	10.000	0.14	92.79	50.00	0.342	0.179	1.86
35	6:55	0.98	5.000	0.28	91.39	50.00	1.271	0.696	1.83
36	7:24	0.98	15.000	0.05	85.22	50.00	0.635	0.373	1.70

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
37	7:20	0.98	5.000	0.15	91.88	50.00	1.957	1.065	1.84
38	8:00	0.98	5.000	0.33	92.62	50.00	0.727	0.393	1.85
39	8:15	0.98	5.000	0.34	88.69	50.00	0.693	0.390	1.77
40	8:22	0.98	10.000	0.09	76.59	50.00	1.096	0.715	1.53
41	8:11	0.98	5.000	0.17	82.82	50.00	1.159	0.700	1.66
42	8:55	0.99	15.000	0.06	88.22	50.00	0.263	0.149	1.76
43	8:50	0.98	5.000	0.37	98.22	50.00	0.953	0.485	1.96
44	8:52	0.98	5.000	0.37	97.81	50.00	0.638	0.326	1.96
45	9:48	0.99	5.000	0.20	96.14	50.00	1.628	0.847	1.92
46	10:06	0.99	5.000	0.42	97.79	50.00	0.651	0.333	1.96
47	10:08	0.99	5.000	0.21	99.69	50.00	0.829	0.416	1.99
48	11:05	0.93	5.000	0.21	100.46	50.00	1.123	0.559	2.01
49	10:23	1.06	5.000	0.23	104.64	50.00	1.083	0.518	2.09
50	11:10	0.99	5.000	0.23	105.09	50.00	1.904	0.906	2.10
51	11:26	0.99	5.000	0.47	89.29	50.00	0.946	0.530	1.79
52	12:13	0.99	15.000	0.17	102.87	50.00	0.191	0.093	2.06
53	12:38	0.99	15.000	0.09	90.90	50.00	0.342	0.188	1.82
54	12:44	0.99	5.000	0.26	103.92	50.00	0.766	0.370	2.07
55	12:13	1.04	15.000	0.09	108.29	50.00	0.174	0.080	2.17
56	16:45	0.99	10.000	0.17	183.58	100.00	0.418	0.228	1.84
57	4:09	0.97	5.000	0.25	103.13	50.00	2.897	1.404	2.06
58	12:07	0.99	5.000	0.25	100.38	50.00	1.226	0.610	2.01
59	7:14	0.98	5.000	0.15	90.01	50.00	2.933	1.629	1.80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IS#3
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TIME
HYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CV90050BC19
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05/08/90 3:03:00
SAMPLE: 5ML V8T0150 #1904 DN #19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1539

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	297 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	223 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLORDETHANE <630-20-6> WE#46

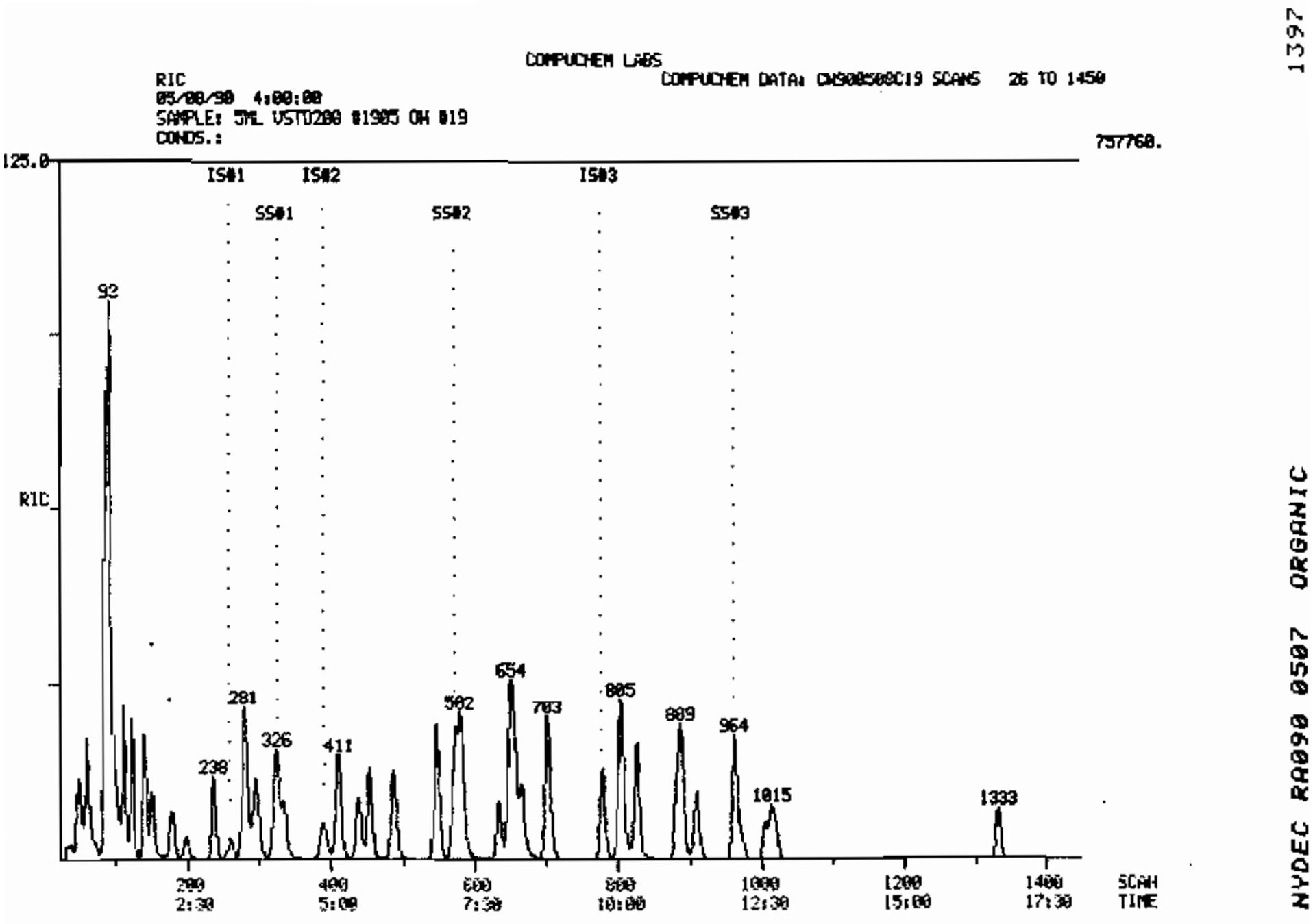
NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	258	3:13	1	1.000	A BB	25222.	50.000	UG/L	0.35
2	50	36	0:27	1	0.140	A BB	27773.	132.030	UG/L	0.92
3	62	41	0:31	1	0.159	A BV	19882.	72.652	UG/L	0.51
4	94	51	0:38	1	0.198	A BB	106454.	151.552	UG/L	1.06
5	64	54	0:40	1	0.209	A VB	75927.	171.896	UG/L	1.20
6	101	62	0:46	1	0.240	A BB	252976.	144.777	UG/L	1.01
7	96	89	1:07	1	0.345	A BB	119513.	2497.160	UG/L	17.49
8	96	87	1:05	1	0.337	A BB	119391.	173.917	UG/L	1.22
9	76	92	1:09	1	0.357	A BV	432913.	220.139	UG/L	1.54
10	142	92	1:09	1	0.357	A BB	252883.	112.738	UG/L	0.79
11	117	91	1:08	1	0.353	A BB	111494.	150.672	UG/L	1.06
12	85	92	1:09	1	0.357	A BB	142371.	209.565	UG/L	1.47
13	43	101	1:16	1	0.391	A VB	24471.	218.657	UG/L	1.53
14	114	388	4:51	14	1.000	A BB	91898.	50.000	UG/L	0.35
15	76	112	1:24	1	0.434	A VB	54843.	217.496	UG/L	1.52
16	84	122	1:31	1	0.473	A BB	110731.	206.237	UG/L	1.44
17	96	140	1:45	1	0.543	A BB	102432.	189.044	UG/L	1.32
18	93	149	1:52	1	0.578	A BB	118177.	1737.400	UG/L	12.17
19	63	177	2:13	1	0.686	A BB	124308.	178.389	UG/L	1.25
20	43	196	2:27	14	0.505	A BB	73388.	173.891	UG/L	1.22
21	96	235	2:56	1	0.911	A BB	97655.	156.104	UG/L	1.09
22	72	253	3:10	1	0.981	A BB	4389.	202.471	UG/L	1.42
23	83	278	3:28	1	1.078	A BB	163418.	161.339	UG/L	1.13
24	97	279	3:29	14	0.719	A BB	178103.	167.966	UG/L	1.18
25	117	294	3:40	14	0.758	A VB	188553.	158.220	UG/L	1.11
26	78	322	4:01	14	0.830	A BB	191542.	151.861	UG/L	1.06
27	62	334	4:10	1	1.295	A BB	118290.	146.636	UG/L	1.03
28	70	384	4:48	14	0.990	A BB	29036.	1246.450	UG/L	8.73
29	117	776	9:42	29	1.000	A BB	63104.	50.000	UG/L	0.35
30	130	409	5:07	14	1.054	A BB	130101.	139.034	UG/L	0.97
31	63	438	5:28	14	1.129	A BB	68082.	141.779	UG/L	0.99
32	174	454	5:40	1	1.760	A BB	111834.	127.778	UG/L	0.90
33	83	488	6:06	14	1.258	A BB	188541.	153.585	UG/L	1.08
34	63	545	6:49	14	1.405	A BB	48754.	148.179	UG/L	1.04
35	75	548	6:51	14	1.412	A BB	193411.	151.272	UG/L	1.06
36	43	586	7:19	29	0.799	A BB	65623.	139.578	UG/L	0.98
37	92	581	7:16	29	0.749	A BB	189298.	140.856	UG/L	0.99
38	75	635	7:56	14	1.637	A BB	108482.	150.284	UG/L	1.05
39	97	656	8:12	14	1.691	A BB	109430.	152.474	UG/L	1.07
40	69	666	8:19	29	0.858	A BB	133900.	148.331	UG/L	1.04
41	164	651	8:08	29	0.839	A BB	106724.	120.819	UG/L	0.85

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	709	8:52	29	0.914	A BB	33047.	175.357	UG/L	1.23
43	129	702	8:46	14	1.809	A BB	204109.	228.915	UG/L	1.60
44	107	703	8:47	14	1.812	A BB	165894.	276.705	UG/L	1.94
45	112	779	9:44	29	1.004	A BB	154869.	144.903	UG/L	1.02
46	131	803	10:02	14	2.070	A BV	97316.	159.000	UG/L	1.11
47	106	806	10:04	29	1.039	A BV	80686.	153.690	UG/L	1.08
48	106	826	10:19	29	1.064	A BB	101170.	143.422	UG/L	1.00
49	106	882	11:01	29	1.137	A BB	86785.	132.840	UG/L	0.93
50	104	889	11:07	29	1.146	A BB	178314.	155.930	UG/L	1.09
51	173	910	11:22	14	2.345	A BB	132270.	135.799	UG/L	0.95
52	88	973	12:10	14	2.508	A BB	29713.	174.320	UG/L	1.22
53	110	1006	12:34	29	1.296	A BB	31403.	132.268	UG/L	0.93
54	83	1015	12:41	29	1.309	A BB	72412.	155.012	UG/L	1.09
55	53	1021	12:46	29	1.316	A BB	17703.	174.420	UG/L	1.22
56	157	1333	16:40	29	1.718	A BB	75275.	262.135	UG/L	1.84
57	65	324	4:03	1	1.256	A BB	106274.	150.011	UG/L	1.05
58	95	964	12:03	29	1.242	A BB	127214.	165.115	UG/L	1.16
59	98	573	7:10	29	0.738	A BB	292573.	142.292	UG/L	1.00

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:19	0.97	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27	1.00	10.000	0.01	132.03	50.00	1.101	0.417	2.64
3	0:31	1.00	10.000	0.02	72.65	50.00	0.788	0.543	1.45
4	0:39	0.98	10.000	0.02	151.55	50.00	4.221	1.392	3.03
5	0:41	0.98	10.000	0.02	171.90	50.00	3.010	0.876	3.44
6	0:48	0.97	10.000	0.02	144.78	50.00	10.030	3.464	2.90
7	1:07	0.99	90.000	0.00	2497.16	500.00	0.474	0.095	4.99
8	1:07	0.97	5.000	0.07	173.92	50.00	4.734	1.361	3.48
9	1:12	0.96	5.000	0.07	220.14	50.00	17.164	3.898	4.40
10	1:11	0.97	10.000	0.04	112.74	50.00	10.026	4.447	2.25
11	1:10	0.97	10.000	0.04	150.67	50.00	4.421	1.467	3.01
12	1:11	0.97	10.000	0.04	209.57	50.00	5.645	1.347	4.19
13	1:16	0.99	10.000	0.04	218.66	50.00	0.970	0.222	4.37
14	4:58	0.97	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:27	0.97	15.000	0.03	217.50	50.00	2.174	0.500	4.35
16	1:34	0.97	5.000	0.09	206.24	50.00	4.390	1.064	4.12
17	1:49	0.97	5.000	0.11	189.04	50.00	4.061	1.074	3.78
18	1:54	0.98	120.000	0.00	1737.41	500.00	0.469	0.135	3.47
19	2:17	0.97	5.000	0.14	178.39	50.00	4.929	1.381	3.57
20	2:31	0.98	10.000	0.05	173.89	50.00	0.799	0.230	3.48
21	3:01	0.97	5.000	0.18	156.10	50.00	3.872	1.240	3.12
22	3:13	0.98	10.000	0.10	202.47	50.00	0.174	0.043	4.05
23	3:33	0.98	5.000	0.22	161.34	50.00	6.479	2.008	3.23
24	3:34	0.98	5.000	0.14	167.97	50.00	1.938	0.577	3.36
25	3:46	0.97	5.000	0.15	158.22	50.00	2.052	0.648	3.16
26	4:07	0.98	5.000	0.17	151.86	50.00	2.084	0.686	3.04
27	4:15	0.98	5.000	0.26	146.64	50.00	4.690	1.599	2.93
28	4:53	0.98	100.000	0.01	1246.46	500.00	0.032	0.013	2.49
29	9:46	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	5:13	0.98	5.000	0.21	139.03	50.00	1.416	0.509	2.78
31	5:34	0.98	5.000	0.23	141.78	50.00	0.741	0.261	2.84
32	5:45	0.99	5.000	0.35	127.78	50.00	4.434	1.735	2.56
33	6:10	0.99	5.000	0.25	153.59	50.00	2.052	0.668	3.07
34	6:53	0.99	10.000	0.14	148.18	50.00	0.531	0.179	2.96
35	6:55	0.99	5.000	0.28	151.27	50.00	2.105	0.696	3.03
36	7:24	0.99	15.000	0.05	139.58	50.00	1.040	0.373	2.79

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	7:20	0.99	5.000	0.15	140.86	50.00	3.000	1.065	2.82
38	8:00	0.99	5.000	0.33	150.28	50.00	1.180	0.393	3.01
39	8:15	0.99	5.000	0.34	152.47	50.00	1.191	0.390	3.05
40	8:22	0.99	10.000	0.09	148.33	50.00	2.122	0.715	2.97
41	8:11	0.99	5.000	0.17	120.82	50.00	1.691	0.700	2.42
42	8:55	0.99	15.000	0.06	175.36	50.00	0.524	0.149	3.51
43	8:50	0.99	5.000	0.36	228.91	50.00	2.221	0.485	4.58
44	8:52	0.99	5.000	0.36	276.70	50.00	1.805	0.326	5.53
45	9:48	0.99	5.000	0.20	144.90	50.00	2.451	0.847	2.90
46	10:06	0.99	5.000	0.41	159.00	50.00	1.059	0.333	3.18
47	10:08	0.99	5.000	0.21	153.69	50.00	1.279	0.416	3.07
48	11:05	0.93	5.000	0.21	143.42	50.00	1.603	0.559	2.87
49	10:23	1.06	5.000	0.23	132.84	50.00	1.375	0.518	2.66
50	11:10	0.99	5.000	0.23	155.93	50.00	2.826	0.906	3.12
51	11:26	0.99	5.000	0.47	135.80	50.00	1.439	0.530	2.72
52	12:13	1.00	15.000	0.17	174.32	50.00	0.323	0.093	3.49
53	12:38	1.00	15.000	0.09	132.27	50.00	0.498	0.188	2.65
54	12:44	1.00	5.000	0.26	155.01	50.00	1.148	0.370	3.10
55	12:13	1.05	15.000	0.09	174.42	50.00	0.281	0.080	3.49
56	16:45	0.99	10.000	0.17	262.13	100.00	0.596	0.228	2.62
57	4:09	0.98	5.000	0.25	150.01	50.00	4.214	1.404	3.00
58	12:07	0.99	5.000	0.25	165.12	50.00	2.016	0.610	3.30
59	7:14	0.99	5.000	0.15	142.29	50.00	4.636	1.629	2.85



1397

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CW900508C19
DATA: CW900508C19.TI
05/08/90 4:00:00
SAMPLE: 5ML VSTD200 #1905 DN #19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1539

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	234 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-3> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	223 TOLUENE C108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE .124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	261	3:16	1	1.000	A BB	26942.	50.000	UG/L	0.27
2	50	36	0:27	1	0.138	A BB	41815.	186.094	UG/L	0.99
3	62	40	0:30	1	0.153	A BB	61277.	209.619	UG/L	1.12
4	94	50	0:37	1	0.192	A BB	146882.	198.423	UG/L	1.06
5	64	54	0:40	1	0.207	A VB	110256.	233.679	UG/L	1.24
6	101	63	0:47	1	0.241	A BB	338843.	181.538	UG/L	0.97
7	56	90	1:07	1	0.345	A BB	155846.	3048.450	UG/L	16.24
8	96	88	1:06	1	0.337	A BB	129404.	176.469	UG/L	0.94
9	76	93	1:10	1	0.356	A BV	566596.	269.724	UG/L	1.44
10	142	93	1:10	1	0.356	A BB	304976.	127.281	UG/L	0.68
11	117	91	1:08	1	0.349	A BB	130950.	165.667	UG/L	0.88
12	85	92	1:09	1	0.352	A BB	187126.	257.858	UG/L	1.37
13	43	104	1:18	1	0.398	A VB	47698.	398.996	UG/L	2.13
14	114	391	4:53	14	1.000	A BB	97818.	50.000	UG/L	0.27
15	76	113	1:25	1	0.433	A VB	85305.	316.703	UG/L	1.69
16	84	124	1:33	1	0.475	A BB	165168.	285.022	UG/L	1.53
17	96	141	1:46	1	0.540	A BB	154212.	266.437	UG/L	1.42
18	53	152	1:54	1	0.582	A BB	190927.	2627.770	UG/L	14.00
19	63	179	2:14	1	0.686	A BB	172876.	232.249	UG/L	1.24
20	43	199	2:29	14	0.509	A BB	131195.	292.047	UG/L	1.56
21	96	238	2:58	1	0.912	A BB	143360.	214.534	UG/L	1.14
22	72	255	3:11	1	0.977	A BB	6269.	270.736	UG/L	1.44
23	83	281	3:31	1	1.077	A BB	238790.	220.702	UG/L	1.18
24	97	281	3:31	14	0.719	A BB	252868.	224.060	UG/L	1.19
25	117	297	3:43	14	0.760	A VB	253311.	199.695	UG/L	1.06
26	78	324	4:03	14	0.829	A BB	280654.	209.045	UG/L	1.11
27	62	335	4:11	1	1.284	A BB	177612.	206.119	UG/L	1.10
28	70	387	4:50	14	0.990	A BB	40847.	1647.350	UG/L	8.78
29	117	777	9:43	29	1.000	A BB	66388.	50.000	UG/L	0.27
30	130	410	5:07	14	1.049	A BB	177021.	177.726	UG/L	0.95
31	63	438	5:28	14	1.120	A BB	94878.	185.624	UG/L	0.99
32	174	454	5:40	1	1.739	A BB	147531.	157.802	UG/L	0.84
33	83	488	6:06	14	1.248	A BB	254157.	194.305	UG/L	1.04
34	63	546	6:49	14	1.396	A BB	66826.	190.812	UG/L	1.02
35	75	549	6:52	14	1.404	A BB	262597.	192.954	UG/L	1.03
36	43	586	7:19	29	0.754	A BB	81590.	164.953	UG/L	0.88
37	92	582	7:16	29	0.749	A BB	253061.	178.987	UG/L	0.95
38	75	636	7:57	14	1.627	A BB	141303.	183.904	UG/L	0.98
39	97	656	8:12	14	1.678	A BB	141863	185.702	UG/L	0.99
40	69	667	8:20	29	0.858	A BB	175135.	184.412	UG/L	0.98
41	164	651	8:08	29	0.838	A BB	133439.	143.589	UG/L	0.76

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	709	8:52	29	0.912	A BB	33987.	171.427	UG/L	0.91
43	129	703	8:47	14	1.798	A BB	228207.	240.452	UG/L	1.28
44	107	704	8:48	14	1.801	A BB	175173.	274.498	UG/L	1.46
45	112	780	9:45	29	1.004	A BB	207900.	184.898	UG/L	0.99
46	131	803	10:02	14	2.054	A BV	133777.	205.342	UG/L	1.09
47	106	806	10:04	29	1.037	A BV	110344.	199.784	UG/L	1.06
48	106	827	10:20	29	1.064	A BB	152244.	205.149	UG/L	1.09
49	106	884	11:03	29	1.138	A BB	131731.	191.663	UG/L	1.02
50	104	889	11:07	29	1.144	A BB	265899.	221.018	UG/L	1.18
51	173	910	11:22	14	2.327	A BB	164993.	159.143	UG/L	0.85
52	88	972	12:09	14	2.486	A BB	40398.	222.662	UG/L	1.19
53	110	1005	12:34	29	1.293	A BB	41663.	166.801	UG/L	0.89
54	83	1015	12:41	29	1.306	A BB	96461.	196.279	UG/L	1.05
55	53	1020	12:45	29	1.313	A BB	24955.	233.707	UG/L	1.25
56	157	1333	16:40	29	1.716	A BB	95668.	316.668	UG/L	1.69
57	65	327	4:05	1	1.253	A BB	161815.	213.828	UG/L	1.14
58	95	964	12:03	29	1.241	A BB	182574.	225.244	UG/L	1.20
59	98	574	7:10	29	0.739	A BB	394634.	182.435	UG/L	0.97

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
1	3:19	0.98	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27	1.00	10.000	0.01	186.09	50.00	1.552	0.417	3.72
3	0:31	0.98	10.000	0.02	209.62	50.00	2.274	0.543	4.19
4	0:39	0.96	10.000	0.02	198.42	50.00	5.526	1.392	3.97
5	0:41	0.98	10.000	0.02	233.68	50.00	4.092	0.876	4.67
6	0:48	0.98	10.000	0.02	181.54	50.00	12.577	3.464	3.63
7	1:07	1.00	90.000	0.00	3048.45	500.00	0.578	0.095	6.10
8	1:07	0.98	5.000	0.07	176.47	50.00	4.803	1.361	3.53
9	1:12	0.97	5.000	0.07	269.72	50.00	21.030	3.898	5.39
10	1:11	0.98	10.000	0.04	127.28	50.00	11.320	4.447	2.55
11	1:10	0.97	10.000	0.03	165.67	50.00	4.820	1.467	3.31
12	1:11	0.97	10.000	0.04	257.86	50.00	6.946	1.347	5.16
13	1:16	1.02	10.000	0.04	399.00	50.00	1.770	0.222	7.98
14	4:58	0.98	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:27	0.97	15.000	0.03	316.70	50.00	3.166	0.500	6.33
16	1:34	0.98	5.000	0.10	288.02	50.00	6.131	1.064	5.76
17	1:49	0.97	5.000	0.11	266.44	50.00	5.724	1.074	5.33
18	1:54	1.00	120.000	0.00	2627.77	500.00	0.709	0.135	5.26
19	2:17	0.98	5.000	0.14	232.25	50.00	6.417	1.381	4.64
20	2:31	0.99	10.000	0.05	292.05	50.00	1.341	0.230	5.84
21	3:01	0.98	5.000	0.18	214.53	50.00	5.321	1.240	4.29
22	3:13	0.99	10.000	0.10	270.74	50.00	0.243	0.043	5.41
23	3:33	0.99	5.000	0.22	220.70	50.00	8.863	2.008	4.41
24	3:34	0.98	5.000	0.14	224.06	50.00	2.589	0.577	4.48
25	3:46	0.98	5.000	0.15	199.69	50.00	2.590	0.648	3.99
26	4:07	0.98	5.000	0.17	209.04	50.00	2.869	0.686	4.18
27	4:15	0.99	5.000	0.26	206.12	50.00	6.992	1.999	4.12
28	4:53	0.99	100.000	0.01	1647.35	500.00	0.042	0.013	3.29
29	9:46	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	5:13	0.98	5.000	0.21	177.73	50.00	1.810	0.509	3.55
31	5:34	0.98	5.000	0.22	185.62	50.00	0.970	0.261	3.71
32	5:45	0.99	5.000	0.35	157.80	50.00	5.476	1.735	3.16
33	6:10	0.99	5.000	0.25	194.51	50.00	2.598	0.668	3.89
34	6:53	0.99	10.000	0.14	190.81	50.00	0.683	0.179	3.82
35	6:55	0.99	5.000	0.28	192.95	50.00	2.685	0.696	3.86
36	7:24	0.99	15.000	0.05	164.95	50.00	1.229	0.373	3.30

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	7:20	0.99	5.000	0.15	178.99	50.00	3.812	1.065	3.58
38	8:00	0.99	5.000	0.33	183.90	50.00	1.445	0.393	3.68
39	8:15	0.99	5.000	0.34	185.70	50.00	1.450	0.390	3.71
40	8:22	1.00	10.000	0.09	184.41	50.00	2.636	0.715	3.69
41	8:11	0.99	5.000	0.17	143.99	50.00	2.010	0.700	2.87
42	8:55	0.99	15.000	0.06	171.43	50.00	0.512	0.149	3.43
43	8:50	0.99	5.000	0.36	240.45	50.00	2.333	0.485	4.81
44	8:52	0.99	5.000	0.36	274.50	50.00	1.791	0.326	5.49
45	9:48	0.99	5.000	0.20	184.90	50.00	3.132	0.847	3.70
46	10:06	0.99	5.000	0.41	205.34	50.00	1.368	0.333	4.11
47	10:08	0.99	5.000	0.21	199.78	50.00	1.662	0.416	4.00
48	11:05	0.93	5.000	0.21	205.15	50.00	2.293	0.559	4.10
49	10:23	1.06	5.000	0.23	191.66	50.00	1.984	0.518	3.83
50	11:10	0.99	5.000	0.23	221.02	50.00	4.005	0.906	4.42
51	11:26	0.99	5.000	0.47	159.14	50.00	1.687	0.530	3.18
52	12:13	0.99	15.000	0.17	222.66	50.00	0.413	0.093	4.45
53	12:38	0.99	15.000	0.09	166.80	50.00	0.628	0.188	3.34
54	12:44	1.00	5.000	0.26	196.28	50.00	1.453	0.370	3.93
55	12:13	1.04	15.000	0.09	233.71	50.00	0.376	0.080	4.67
56	16:45	0.99	10.000	0.17	316.67	100.00	0.721	0.228	3.17
57	4:09	0.98	5.000	0.25	213.83	50.00	6.006	1.404	4.28
58	12:07	0.99	5.000	0.25	225.24	50.00	2.750	0.610	4.50
59	7:14	0.99	5.000	0.15	182.43	50.00	5.914	1.629	3.65

COMPUCHEM LABORATORIES, INC. VOA

GC/MS ANALYSIS LOG

V-5

INITIAL TIME OF TUNE 0:59

TIME TUNE EXPIRES 12:59

SHIFT(S) (A) ____ (B) ____ (C) ✓

DATE 5/8/90

ANALYSIS TYPE WELL

PREVENTIVE MAINTENANCE NONE SW 5/8/90

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO.	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BF900508C19	/	5/8/90	0:59	BFB	—	7008	2uL	1539	
2		CS900508C19	/	5/8/90	1:18	VSTD020	—	1901	5mL	1539	
3		CL900508C19	/	5/8/90	2:07	VSTD050	—	1902	5mL	1539	
4		CU900508C19	/	5/8/90	2:40	VSTD100	—	1903	5mL	1539	
5		CN900508C19	/	5/8/90	3:03	VSTD150	—	1904	5mL	1539	
6		CW900508C19	/	5/8/90	4:00	VSTD200	—	1905	5mL	1539	
7				/ /	:						
8				/ /	:						
9				/ /	:	Multipoint passed					
10				/ /	:						
11				/ /	:						
12				/ /	:						
13				/ /	:						
14				/ /	:						
15				/ /	:						
16				/ /	:						
17				/ /	:						
18				/ /	:						
19				/ /	:						
20				/ /	:						
21				/ /	:						
22				/ /	:						
23				/ /	:						
24				/ /	:						
				/ /	:						

5/6/90

VERIFIED 5-8-90

SUPERVISOR APPROVAL 5/8/90

1392

NYDEC RA090 0507 ORGANIC

(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 chronological order, within fraction and instrument.

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

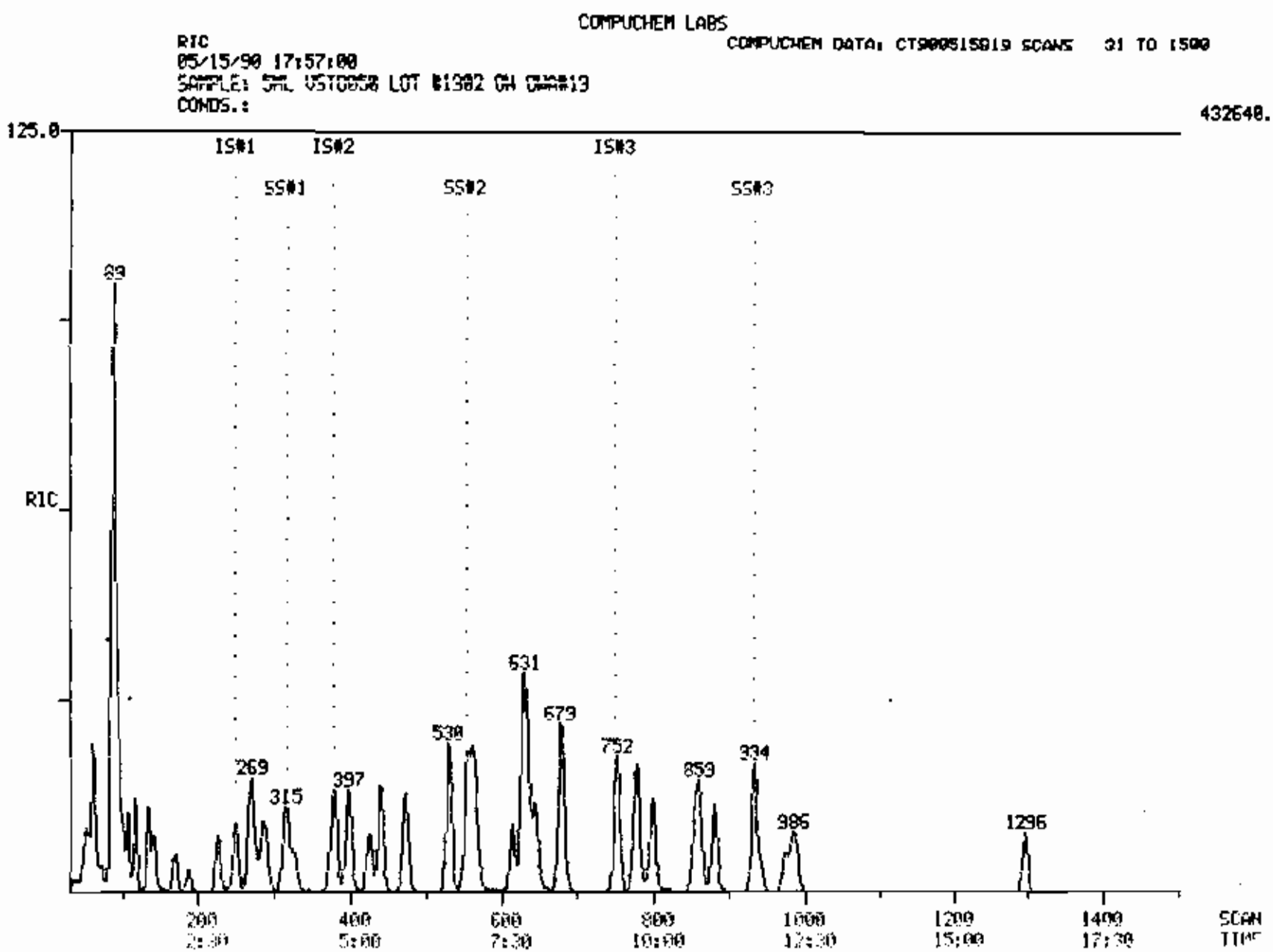
Instrument ID: 19 Calibration date: 05/15/90 Time: 1757

Lab File ID: CT900515B19 Init. Calib. Date(s): 05/08/90 05/08/90

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	0.429	0.400	6.8	#
Bromomethane		1.395	0.813	41.7	
Vinyl Chloride	*	0.535	0.503	6.0	*
Chloroethane		0.958	0.918	4.2	
Methylene Chloride		1.333	1.162	12.8	
Acetone		0.280	0.336	-20.0	
Carbon Disulfide		4.788	4.561	4.7	
1,1-Dichloroethene	*	1.372	1.664	-21.3	*
1,1-Dichloroethane	#	1.524	1.329	12.8	#
1,2-Dichloroethene (total)		2.536	2.277	10.2	
Chloroform	*	2.190	2.050	6.4	*
1,2-Dichloroethane		1.608	1.415	12.0	
2-Butanone		0.047	0.067	-42.6	
1,1,1-Trichloroethane		0.632	0.546	13.6	
Carbon Tetrachloride		0.673	0.634	5.8	
Vinyl Acetate		0.275	0.332	-20.7	
Bromodichloromethane		0.664	0.767	-15.5	
1,2-Dichloropropane	*	0.253	0.228	9.9	*
cis-1,3-Dichloropropene		0.670	0.698	-4.2	
Trichloroethene		0.481	0.515	-7.1	
Dibromochloromethane		0.594	0.749	-26.1	
1,1,2-Trichloroethane		0.388	0.450	-16.0	
Benzene		0.692	0.592	14.5	
Trans-1,3-Dichloropropene		0.380	0.427	-12.4	
Bromoform	#	0.484	0.618	-27.7	#
4-Methyl-2-Pentanone		0.343	0.414	-20.7	
2-Hexanone		0.152	0.200	-31.6	
Tetrachloroethene		0.605	0.814	-34.6	
1,1,2,2-Tetrachloroethane	#	0.378	0.384	-1.6	#
Toluene	*	1.006	0.986	2.0	*
Chlorobenzene	#	0.835	0.829	0.7	#
Ethylbenzene	*	0.420	0.391	6.9	*
Styrene		0.942	0.961	-2.0	
Total Xylenes		1.096	1.077	1.7	
Toluene-d8		1.525	1.532	-0.5	
BFB		0.635	0.596	6.1	
1,2-Dichloroethane-d4		1.413	1.317	6.8	



1389

NYDEC RA090 0507 ORGANIC

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QUANTITATION REPORT    FILE: CT900515B19
DATA: CT900515B19.TI
05/15/90 17:57:00
SAMPLE: 5ML VSTD050 LOT #1902 ON OWA#19
CONDS.:
SUBMITTED BY: 19          ANALYST: 1095

AMOUNT=AREA * REF. AMNT/(REF. AREA)* RESP. FACT)
RESP. FAC. FROM  LIBRARY ENTRY

 NO  NAME
  1  *234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
  2   221 CHLOROMETHANE <74-87-3> WE#2
  3   231 VINYL CHLORIDE <75-01-4> WE#3
  4   220 BROMOMETHANE <79-83-9> WE#4
  5   209 CHLOROETHANE <75-00-3> WE#5
  6   230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
  7   201 ACROLEIN <107-02-8> WE#7
  8   216 1,1-DICHLOROETHENE <75-35-4> WE#8
  9   254 CARBON DISULFIDE <75-15-0> WE#9
 10   255 IODOMETHANE <74-88-4> WE#10
 11   297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
 12   266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
 13   252 ACETONE (2-PROPANONE) <67-64-1> WE#13
 14  *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
 15   298 3-CHLOROPROPENE <107-05-1> WE#15
 16   222 METHYLENE CHLORIDE <75-09-2> WE#16
 17   226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
 18   202 ACRYLONITRILE <107-13-1> WE#18
 19   214 1,1-DICHLOROETHANE <75-34-3> WE#19
 20   257 VINYL ACETATE <108-05-4> WE#20
 21   237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
 22   253 2-BUTANONE <78-93-3> WE#22
 23   211 CHLOROFORM <67-66-2> WE#23
 24   227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
 25   206 CARBON TETRACHLORIDE <56-23-5> WE#25
 26   203 BENZENE <71-43-2> WE#26
 27   215 1,2-DICHLOROETHANE <107-06-2> WE#27
 28   272 CROTONALDEHYDE <4170-30-3> WE#28
 29  *270 O5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
 30   229 TRICHLOROETHENE <79-01-6> WE#30
 31   217 1,2-DICHLOROPROPANE <78-87-5> WE#31
 32   286 DIBROMOMETHANE <74-95-3> WE#32
 33   212 BROMODICHLOROMETHANE <75-27-4> WE#33
 34   210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
 35   218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
 36   256 4-METHYL-2-PENTANONE <108-01-1> WE#36
 37   225 TOLUENE <108-88-3> WE#37
 38   250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
 39   228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
 40   287 ETHYLMETHACRYLATE <96-18-4> WE#40
 41   224 TETRACHLOROETHENE <127-18-4> WE#41
 42   255 2-HEXANONE <591-78-6> WE#42
 43   208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
 44   245 1,2-DIBROMOETHANE <1060-93-4> WE#44
 45   207 CHLOROBENZENE <108-90-7> WE#45
 46   273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46
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NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	300 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

sdw 5-17-90

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	249	3:07	1	1.000	A BB	50617.	50.000	UG/L	1.02
2	50	36	0:27	1	0.145	A BB	20246.	86.998	UG/L	1.78
3	62	44	0:33	1	0.177	A BV	25474.	71.659	UG/L	1.46
4	94	50	0:37	1	0.201	A BV	41141.	61.303	UG/L	1.25
5	64	53	0:40	1	0.213	A VB	46475.	73.462	UG/L	1.50
6	101	61	0:46	1	0.245	A BB	199966.	52.739	UG/L	1.08
7	56	85	1:04	1	0.341	A BB	47889.	602.180	UG/L	12.31
8	96	84	1:03	1	0.337	A BB	84218.	51.832	UG/L	1.06
9	76	89	1:07	1	0.357	A BV	230851.	57.034	UG/L	1.17
10	142	89	1:07	1	0.357	A BB	201400.	59.105	UG/L	1.21
11	117	88	1:06	1	0.353	A BB	83913.	56.572	UG/L	1.16
12	85	89	1:07	1	0.357	A BB	83082.	58.406	UG/L	1.19
13	43	96	1:12	1	0.386	A VV	16989.	56.342	UG/L	1.15
14	114	378	4:43	14	1.000	A BB	198455.	50.000	UG/L	1.02
15	76	108	1:21	1	0.434	A VB	24857.	58.799	UG/L	1.20
16	84	117	1:28	1	0.470	A BV	58833.	55.319	UG/L	1.13
17	96	133	1:40	1	0.534	A BB	58164.	51.943	UG/L	1.06
18	53	140	1:45	1	0.562	A BB	77778.	530.356	UG/L	10.84
19	63	169	2:07	1	0.679	A BB	67278.	56.246	UG/L	1.15
20	43	187	2:20	14	0.495	A BV	65955.	64.218	UG/L	1.31
21	96	226	2:49	1	0.908	A BB	57086.	50.000	UG/L	1.23
22	72	241	3:01	1	0.968	A BB	3387.	67.206	UG/L	1.37
23	83	268	3:21	1	1.076	A BB	100761.	49.042	UG/L	1.00
24	97	269	3:22	14	0.712	A BB	108356.	47.809	UG/L	0.98
25	117	286	3:34	14	0.757	A VB	125849.	48.098	UG/L	0.98
26	78	314	3:55	14	0.831	A BB	117551.	48.719	UG/L	1.00
27	62	325	4:04	1	1.305	A BB	71424.	45.434	UG/L	0.93
28	70	371	4:38	14	0.981	A BB	31067.	578.383	UG/L	11.82
29	117	750	9:22	29	1.000	A BB	137126.	50.000	UG/L	1.02
30	130	397	4:58	14	1.050	A BB	102199.	52.111	UG/L	1.07
31	63	424	5:18	14	1.122	A BB	45274.	50.321	UG/L	1.03
32	174	439	5:29	1	1.763	A BB	117013.	52.905	UG/L	1.08
33	83	473	5:55	14	1.251	A BB	152144.	60.505	UG/L	1.24
34	63	529	6:37	14	1.399	A BB	39361.	55.441	UG/L	1.13
35	75	531	6:38	14	1.405	A BB	138620.	54.933	UG/L	1.12
36	43	566	7:04	29	0.755	A BB	56819.	58.298	UG/L	1.19
37	92	562	7:01	29	0.749	A BB	138229.	49.700	UG/L	1.02
38	75	615	7:41	14	1.627	A BB	84755.	53.114	UG/L	1.09
39	97	634	7:55	14	1.677	A BB	89216.	54.413	UG/L	1.11
40	69	645	8:04	29	0.860	A BB	112520.	53.643	UG/L	1.10
41	164	628	7:51	29	0.837	A BB	111671.	48.644	UG/L	0.99

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	686	8:34	29	0.915	A BB	27426.	69.861	UG/L	1.43
43	129	679	8:29	14	1.796	A BB	148732.	71.337	UG/L	1.46
44	107	679	8:29	14	1.796	A BB	111201.	74.935	UG/L	1.53
45	112	753	9:25	29	1.004	A BB	113673.	51.017	UG/L	1.04
46	131	777	9:43	14	2.056	A BV	68966.	54.844	UG/L	1.12
47	106	780	9:45	29	1.040	A BV	53573.	50.378	UG/L	1.03
48	106	800	10:00	29	1.067	A VB	76227.	54.538	UG/L	1.11
49	106	855	10:41	29	1.140	A BV	71428.	54.097	UG/L	1.11
50	104	861	10:46	29	1.148	A BB	131732.	53.459	UG/L	1.09
51	173	881	11:01	14	2.331	A BB	122575.	54.425	UG/L	1.11
52	88	944	11:48	14	2.497	A BB	21902.	55.379	UG/L	1.13
53	110	976	12:12	29	1.301	A BB	26772.	51.484	UG/L	1.05
54	83	984	12:18	29	1.312	A BB	52608.	52.442	UG/L	1.07
55	93	991	12:23	29	1.321	A BB	12968.	53.156	UG/L	1.09
56	157	1296	16:12	29	1.728	A BB	67284.	104.933	UG/L	2.14
57	65	316	3:57	1	1.269	A BB	66673.	43.184	UG/L	0.88
58	95	934	11:40	29	1.245	A BB	81749.	50.273	UG/L	1.03
59	98	554	6:55	29	0.739	A BB	210098.	50.082	UG/L	1.02

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:05	1.01	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26	1.03	10.000	0.01	87.00	50.00	0.403	0.230	1.74
3	0:30	1.10	10.000	0.02	71.66	50.00	0.503	0.351	1.43
4	0:37	1.02	10.000	0.02	61.30	50.00	0.813	0.663	1.23
5	0:38	1.04	10.000	0.02	73.46	50.00	0.918	0.625	1.47
6	0:45	1.02	10.000	0.02	52.74	50.00	3.951	3.745	1.05
7	1:03	1.01	90.000	0.00	602.18	500.00	0.095	0.079	1.20
8	1:02	1.01	5.000	0.07	51.83	50.00	1.664	1.605	1.04
9	1:06	1.01	5.000	0.07	57.03	50.00	4.961	3.998	1.14
10	1:06	1.01	10.000	0.04	59.10	50.00	4.572	3.868	1.18
11	1:05	1.01	10.000	0.04	56.57	50.00	1.659	1.465	1.13
12	1:05	1.02	10.000	0.04	58.41	50.00	1.641	1.405	1.17
13	1:10	1.02	10.000	0.04	56.34	50.00	0.336	0.298	1.13
14	4:41	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:19	1.02	15.000	0.03	58.80	50.00	0.491	0.418	1.18
16	1:27	1.01	5.000	0.09	55.32	50.00	1.162	1.051	1.11
17	1:09	1.01	5.000	0.11	51.94	50.00	1.149	1.106	1.04
18	1:44	1.01	120.000	0.00	590.36	500.00	0.154	0.145	1.06
19	2:05	1.01	5.000	0.14	56.25	50.00	1.329	1.182	1.12
20	2:19	1.01	10.000	0.05	64.22	50.00	0.332	0.259	1.28
21	2:49	1.00	5.000	0.18	60.00	50.00	1.128	0.940	1.20
22	3:01	1.00	10.000	0.10	67.21	50.00	0.067	0.050	1.34
23	3:19	1.01	5.000	0.22	49.04	50.00	2.050	2.090	0.98
24	3:21	1.00	5.000	0.14	47.81	50.00	0.516	0.571	0.96
25	3:33	1.01	5.000	0.15	48.10	50.00	0.634	0.659	0.96
26	3:52	1.01	5.000	0.17	48.72	50.00	0.592	0.608	0.97
27	4:01	1.01	5.000	0.26	45.43	50.00	1.415	1.557	0.91
28	4:37	1.00	100.000	0.01	578.08	500.00	0.016	0.014	1.16
29	9:22	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:56	1.01	5.000	0.21	52.11	50.00	0.515	0.494	1.04
31	5:16	1.00	5.000	0.22	50.32	50.00	0.228	0.227	1.01
32	5:28	1.00	5.000	0.35	52.90	50.00	2.312	2.185	1.06
33	5:53	1.00	5.000	0.25	60.51	50.00	0.767	0.634	1.21
34	6:36	1.00	10.000	0.14	55.44	50.00	0.198	0.179	1.11
35	6:37	1.00	5.000	0.28	54.93	50.00	0.698	0.636	1.10
36	7:05	1.00	15.000	0.05	58.30	50.00	0.414	0.355	1.17

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
37	7:01	1.00	5.000	0.15	49.70	50.00	0.986	0.992	0.99
38	7:40	1.00	5.000	0.33	53.11	50.00	0.427	0.402	1.06
39	7:55	1.00	5.000	0.34	54.41	50.00	0.456	0.413	1.09
40	8:03	1.00	10.000	0.09	53.64	50.00	0.821	0.765	1.07
41	7:50	1.00	5.000	0.17	48.64	50.00	0.814	0.837	0.97
42	8:34	1.00	15.000	0.06	69.86	50.00	0.200	0.143	1.40
43	8:28	1.00	5.000	0.36	71.34	50.00	0.749	0.525	1.43
44	8:28	1.00	5.000	0.36	74.94	50.00	0.550	0.374	1.50
45	9:25	1.00	5.000	0.20	51.02	50.00	0.827	0.812	1.02
46	9:42	1.00	5.000	0.41	54.84	50.00	0.348	0.317	1.10
47	9:43	1.00	5.000	0.21	50.38	50.00	0.391	0.388	1.01
48	9:59	1.00	5.000	0.21	54.54	50.00	0.556	0.510	1.09
49	10:41	1.00	5.000	0.23	54.10	50.00	0.521	0.481	1.08
50	10:45	1.00	5.000	0.23	53.46	50.00	0.961	0.899	1.07
51	11:01	1.00	5.000	0.47	54.42	50.00	0.618	0.567	1.09
52	11:47	1.00	15.000	0.17	55.38	50.00	0.108	0.098	1.11
53	12:11	1.00	15.000	0.09	51.48	50.00	0.195	0.190	1.03
54	12:18	1.00	5.000	0.26	52.44	50.00	0.384	0.366	1.05
55	12:22	1.00	15.000	0.09	53.16	50.00	0.095	0.089	1.06
56	16:12	1.00	10.000	0.17	104.93	100.00	0.245	0.234	1.05
57	3:55	1.01	5.000	0.25	43.18	50.00	1.017	1.525	0.86
58	11:40	1.00	5.000	0.25	50.27	50.00	0.596	0.593	1.01
59	6:55	1.00	5.000	0.15	50.08	50.00	1.532	1.530	1.00

VOA

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

INITIAL TIME OF TUNE 14:57 SHIFT(S): (A) X (B) ____ (C) ____
TIME TUNE EXPIRES 2:57 DATE 5/15/90
ANALYSIS TYPE WELL
PREVENTIVE MAINTENANCE NONE ALF 5/15/90

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BFB00515A19		5/15/90	14 57	BFB			2uL	1492	#7008
2		CSV00515A19		" "	15 29	VSTD050		1902	15mL	1492	
3		CLB00515CBLK19		5/19/90	17 57	VSTD005			5mL	1005	
4		CBB00515BLK19		5/19/90	18 53	VBLK19			5mL	1005	
5		CRV38979BLK19		5/19/90	19 45	90349	20141	1	5mL	1005	
6		CNV37537BLK19		5/19/90	20 45	738W112	20124	1	5mL	1005	
7		CNV37838BLK19		5/15/90	21 27	738W110	20124		5mL	1005	
8		CVB00515CBLK19		5/15/90	21 58	CVB3			5mL	1005	
9		CNV37839BLK19		5/15/90	22 16	738W029	20124		5mL	1005	
10		CNV37840W3BLK19		5/15/90	23 45	738W113	20141		5mL	1005	
11		CB037837C19	DW	" "	0 50	738001115	20124		1000uL	1171	
12		CB237837C19		" "	1 13	"	"		2000uL	1171	
13		CW037838C19		" "	1 51	738001115RE1	"		2000uL	1171	
14		CW037839C19		" "	2 37	738001115RE2	"		2000uL	1171	
15				" "							
16				" "							
17				" "							
18				" "							
19				" "							
20				" "							
21				" "							
22				" "							
23				" "							
24				" "							
				" "							

VERIFIED [signature] 5-17-90
SUPERVISOR APPROVAL [signature] 5/16/90

1384

NYDEC RA090 0507 ORGANIC

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

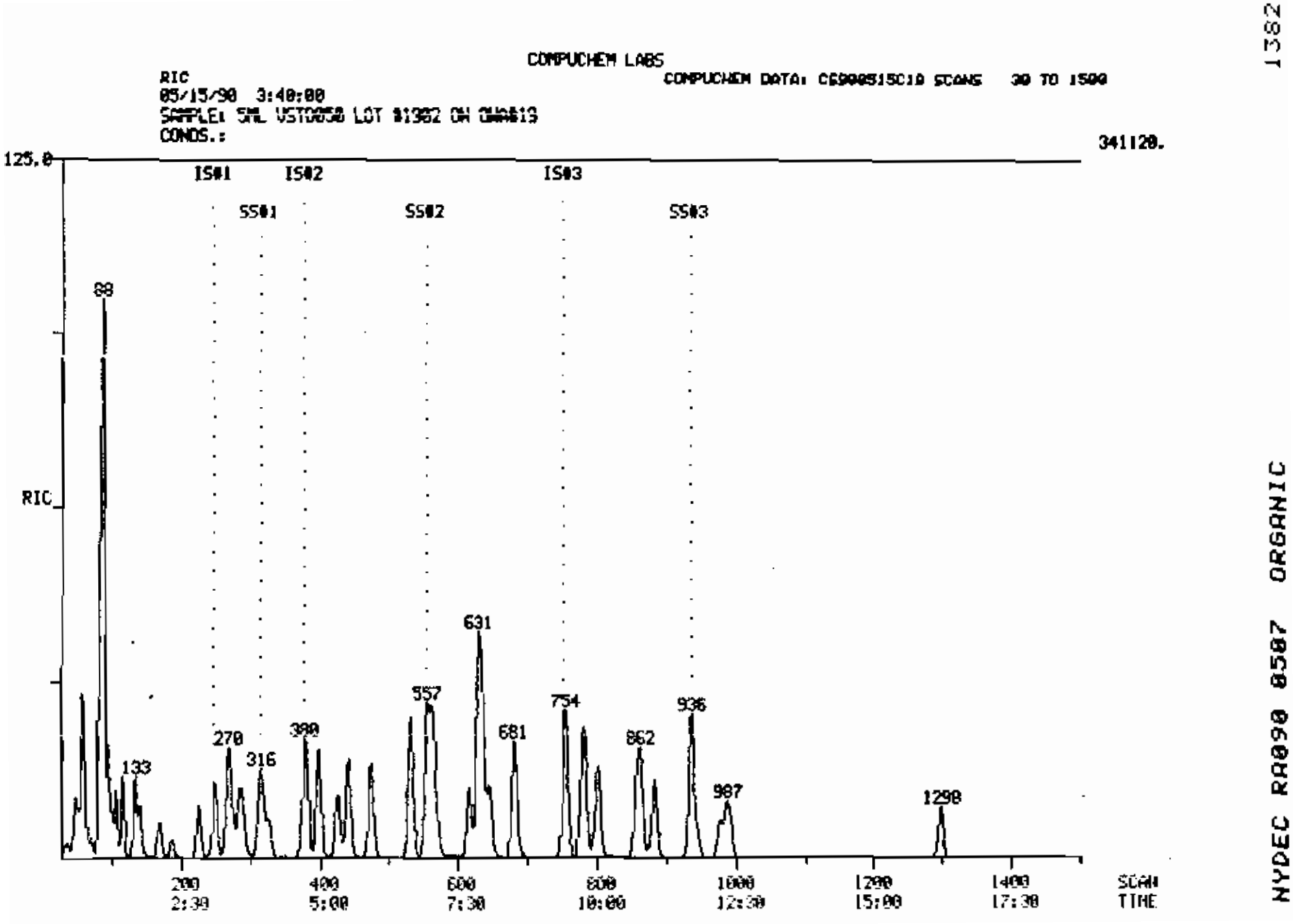
Instrument ID: 19 Calibration date: 05/15/90 Time: 0340

Lab File ID: CS900515C19 Init. Calib. Date(s): 05/08/90 05/08/90

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	0.429	0.333	22.4	#
Bromomethane		1.395	1.152	17.4	
Vinyl Chloride	*	0.535	0.469	12.3	*
Chloroethane		0.958	0.751	21.6	
Methylene Chloride		1.331	0.876	34.3	
Acetone		0.280	0.259	7.5	
Carbon Disulfide		4.788	3.616	24.5	
1,1-Dichloroethene	*	1.372	1.389	-1.2	*
1,1-Dichloroethane	#	1.524	1.103	27.6	#
1,2-Dichloroethene (total)		2.536	1.878	26.0	
Chloroform	*	2.190	1.748	20.2	*
1,2-Dichloroethane		1.608	1.236	23.1	
2-Butanone		0.047	0.039	17.0	
1,1,1-Trichloroethane		0.632	0.472	25.3	
Carbon Tetrachloride		0.673	0.560	16.8	
Vinyl Acetate		0.275	0.255	7.3	
Bromodichloromethane		0.664	0.602	9.3	
1,2-Dichloropropane	*	0.253	0.207	18.2	*
cis-1,3-Dichloropropene		0.670	0.596	11.0	
Trichloroethene		0.481	0.455	5.4	
Dibromochloromethane		0.594	0.465	21.7	
1,1,2-Trichloroethane		0.388	0.388	0.0	
Benzene		0.692	0.495	28.5	
Trans-1,3-Dichloropropene		0.380	0.389	-2.4	
Bromoform	#	0.484	0.477	1.4	#
4-Methyl-2-Pentanone		0.343	0.362	-5.5	
2-Hexanone		0.152	0.116	23.7	
Tetrachloroethene		0.605	0.710	-17.4	
1,1,2,2-Tetrachloroethane	#	0.378	0.321	15.1	#
Toluene	*	1.006	0.918	8.7	*
Chlorobenzene	#	0.815	0.746	10.7	#
Ethylbenzene	*	0.420	0.357	15.0	*
Styrene		0.942	0.826	12.3	
Total Xylenes		1.096	0.976	11.0	
Toluene-d8		1.525	1.488	2.4	
BFB		0.615	0.588	7.4	
1,2-Dichloroethane-d4		1.413	1.253	11.3	



1382

NYDEC RA090 0587 ORGANIC

QUANTITATION REPORT FILE: CS900515C19
DATA: CS900515C19.TI
05/15/90 3:40:00
SAMPLE: 5ML VSTD050 LOT #1902 ON DWA#19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1095

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	265 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*246 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 BS#3
59	#233 DB-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	249	3:07	1	1.000	A BB	49353.	50.000 UG/L	1.14
2	90	35	0:26	1	0.141	A BB	16423.	50.018 UG/L	1.14
3	62	40	0:30	1	0.161	A BB	23170.	53.711 UG/L	1.22
4	94	49	0:37	1	0.197	A BB	36851.	52.635 UG/L	1.20
5	64	52	0:39	1	0.209	A VB	37073.	55.180 UG/L	1.26
6	101	60	0:45	1	0.241	A BB	188483.	57.466 UG/L	1.31
7	56	84	1:03	1	0.337	A BB	33996.	486.974 UG/L	11.08
8	96	84	1:03	1	0.337	A BB	68546.	51.407 UG/L	1.17
9	76	89	1:07	1	0.357	A BV	178482.	50.818 UG/L	1.16
10	142	88	1:06	1	0.353	A BB	178433.	47.679 UG/L	1.08
11	117	87	1:05	1	0.349	A BB	66654.	52.676 UG/L	1.20
12	85	88	1:06	1	0.353	A BB	66067.	51.581 UG/L	1.17
13	43	95	1:11	1	0.382	A VB	12787.	44.490 UG/L	1.01
14	114	380	4:45	14	1.000	A BB	199174.	50.000 UG/L	1.14
15	76	106	1:19	1	0.426	A VB	18551.	49.587 UG/L	1.13
16	84	116	1:27	1	0.466	A BB	43239.	47.882 UG/L	1.09
17	96	133	1:40	1	0.534	A BB	46445.	52.692 UG/L	1.20
18	53	140	1:45	1	0.562	A BB	63605.	475.732 UG/L	10.82
19	63	167	2:05	1	0.671	A BB	54452.	54.810 UG/L	1.25
20	43	186	2:19	14	0.489	A BB	50885.	49.419 UG/L	1.12
21	96	226	2:49	1	0.908	A BB	46253.	50.697 UG/L	1.15
22	72	240	3:00	1	0.964	A BB	1935.	44.711 UG/L	1.02
23	83	268	3:21	1	1.076	A BV	86275.	52.858 UG/L	1.20
24	97	270	3:22	14	0.711	A BB	90992.	55.152 UG/L	1.25
25	117	288	3:36	14	0.758	A VB	111602.	53.496 UG/L	1.22
26	78	314	3:55	14	0.826	A BB	98537.	52.095 UG/L	1.18
27	62	326	4:04	1	1.309	A BB	60994.	54.460 UG/L	1.24
28	70	375	4:41	14	0.987	A BV	24014.	528.844 UG/L	12.03
29	117	752	9:24	29	1.000	A BB	134111.	50.000 UG/L	1.14
30	130	398	4:58	14	1.047	A BB	90584.	53.422 UG/L	1.22
31	63	426	5:19	14	1.121	A BB	41252.	53.202 UG/L	1.21
32	174	440	5:30	1	1.767	A BB	92029.	50.209 UG/L	1.14
33	83	474	5:55	14	1.247	A BB	119961.	55.587 UG/L	1.26
34	63	530	6:37	14	1.395	A BB	30837.	42.287 UG/L	1.19
35	75	532	6:39	14	1.400	A BB	118668.	80.598 UG/L	1.22
36	43	568	7:06	29	0.755	A BB	48611.	57.832 UG/L	1.32
37	92	564	7:03	29	0.750	A BB	122142.	55.055 UG/L	1.25
38	75	616	7:42	14	1.621	A BB	77443.	54.087 UG/L	1.23
39	97	636	7:57	14	1.674	A BB	77208.	51.837 UG/L	1.18
40	69	646	8:04	29	0.859	A BB	78243.	45.616 UG/L	1.04
41	164	630	7:52	29	0.838	A BB	95220.	51.431 UG/L	1.17

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	688	8:36	29	0.915	A BB	19532.	43.848	UG/L	1.00
43	129	681	8:31	14	1.792	A BB	92684.	42.641	UG/L	0.97
44	107	682	8:31	14	1.795	A BB	62158.	39.244	UG/L	0.89
45	112	735	9:26	29	1.004	A BB	100087.	50.803	UG/L	1.16
46	131	779	9:44	14	2.050	A BB	55226.	45.266	UG/L	1.03
47	106	781	9:46	29	1.039	A BV	47850.	52.260	UG/L	1.19
48	106	802	10:01	29	1.066	A VB	64812.	52.158	UG/L	1.19
49	106	856	10:42	29	1.138	A BB	66122.	53.930	UG/L	1.23
50	104	863	10:47	29	1.148	A BB	110804.	50.822	UG/L	1.16
51	173	883	11:02	14	2.324	A BB	95056.	50.425	UG/L	1.15
52	88	945	11:49	14	2.487	A BB	16552.	54.711	UG/L	1.24
53	110	978	12:13	29	1.301	A BB	21168.	50.035	UG/L	1.14
54	83	987	12:20	29	1.312	A BB	43068.	50.191	UG/L	1.14
55	53	992	12:24	29	1.319	A BB	9246.	51.274	UG/L	1.17
56	157	1297	16:13	29	1.725	A BB	49075.	98.750	UG/L	2.25
57	65	318	3:58	1	1.277	A BB	61817.	50.494	UG/L	1.15
58	95	936	11:42	29	1.245	A BB	78918.	48.243	UG/L	1.10
59	98	556	6:57	29	0.739	A BB	199544.	50.248	UG/L	1.14

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:06	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:25	1.03	10.000	0.01	50.02	50.00	0.333	0.333	1.00
3	0:29	1.03	10.000	0.02	53.71	50.00	0.469	0.437	1.07
4	0:36	1.02	10.000	0.02	52.63	50.00	1.152	1.094	1.05
5	0:38	1.02	10.000	0.02	55.18	50.00	0.791	0.681	1.10
6	0:45	1.00	10.000	0.02	57.47	50.00	3.819	3.323	1.15
7	1:02	1.01	90.000	0.00	486.97	500.00	0.069	0.071	0.97
8	1:02	1.01	5.000	0.07	51.41	50.00	1.389	1.351	1.03
9	1:06	1.01	5.000	0.07	50.82	50.00	3.616	3.558	1.02
10	1:06	1.00	10.000	0.04	47.68	50.00	3.615	3.791	0.95
11	1:05	1.00	10.000	0.03	52.88	50.00	1.351	1.277	1.06
12	1:06	1.00	10.000	0.04	51.58	50.00	1.309	1.298	1.03
13	1:10	1.01	10.000	0.04	44.49	50.00	0.259	0.291	0.89
14	4:44	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:19	1.00	15.000	0.03	49.59	50.00	0.376	0.379	0.99
16	1:26	1.01	5.000	0.09	47.88	50.00	0.876	0.915	0.96
17	1:39	1.01	5.000	0.11	52.69	50.00	0.941	0.893	1.05
18	1:44	1.01	120.000	0.00	475.73	500.00	0.129	0.135	0.95
19	2:05	1.00	5.000	0.13	54.81	50.00	1.103	1.006	1.10
20	2:19	1.01	10.000	0.05	49.42	50.00	0.255	0.258	0.99
21	2:48	1.01	5.000	0.18	50.70	50.00	0.937	0.924	1.01
22	2:59	1.00	10.000	0.10	44.71	50.00	0.039	0.044	0.89
23	3:21	1.00	5.000	0.22	52.86	50.00	1.748	1.654	1.06
24	3:22	1.00	5.000	0.14	55.15	50.00	0.472	0.428	1.10
25	3:34	1.01	5.000	0.15	53.50	50.00	0.560	0.524	1.07
26	3:55	1.00	5.000	0.17	52.09	50.00	0.495	0.475	1.04
27	4:03	1.01	5.000	0.26	54.46	50.00	1.236	1.135	1.09
28	4:40	1.00	100.000	0.01	528.84	500.00	0.012	0.012	1.06
29	9:25	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:58	1.00	5.000	0.21	53.42	50.00	0.455	0.426	1.07
31	5:19	1.00	5.000	0.22	53.20	50.00	0.207	0.195	1.06
32	5:30	1.00	5.000	0.35	50.21	50.00	1.865	1.857	1.00
33	5:55	1.00	5.000	0.25	55.59	50.00	0.602	0.542	1.11
34	6:38	1.00	10.000	0.14	52.29	50.00	0.155	0.148	1.05
35	6:40	1.00	5.000	0.28	53.60	50.00	0.596	0.556	1.07
36	7:07	1.00	15.000	0.05	57.83	50.00	0.362	0.313	1.16

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
37	7:03	1.00	5.000	0.15	55.06	50.00	0.918	0.834	1.10
38	7:43	1.00	5.000	0.32	54.09	50.00	0.369	0.359	1.08
39	7:57	1.00	5.000	0.33	51.84	50.00	0.368	0.374	1.04
40	8:05	1.00	10.000	0.09	45.62	50.00	0.551	0.639	0.91
41	7:53	1.00	5.000	0.17	51.43	50.00	0.710	0.690	1.03
42	8:37	1.00	15.000	0.06	43.85	50.00	0.116	0.132	0.88
43	8:31	1.00	5.000	0.36	42.64	50.00	0.465	0.546	0.85
44	8:31	1.00	5.000	0.36	39.24	50.00	0.312	0.398	0.78
45	9:26	1.00	5.000	0.20	50.80	50.00	0.746	0.734	1.02
46	9:44	1.00	5.000	0.41	45.27	50.00	0.277	0.306	0.91
47	9:47	1.00	5.000	0.21	52.26	50.00	0.357	0.341	1.05
48	10:02	1.00	5.000	0.21	52.16	50.00	0.481	0.463	1.04
49	10:43	1.00	5.000	0.23	53.93	50.00	0.493	0.457	1.08
50	10:47	1.00	5.000	0.23	50.82	50.00	0.826	0.813	1.02
51	11:03	1.00	5.000	0.46	50.43	50.00	0.477	0.473	1.01
52	11:49	1.00	15.000	0.17	54.71	50.00	0.083	0.076	1.09
53	12:13	1.00	15.000	0.09	50.04	50.00	0.158	0.158	1.00
54	12:21	1.00	5.000	0.26	50.19	50.00	0.321	0.320	1.00
55	12:25	1.00	15.000	0.09	51.27	50.00	0.069	0.067	1.03
56	16:13	1.00	10.000	0.17	98.79	100.00	0.183	0.185	0.99
57	3:37	1.01	5.000	0.26	50.49	50.00	1.253	1.240	1.01
58	11:42	1.00	5.000	0.25	48.24	50.00	0.358	0.610	0.96
59	6:57	1.00	5.000	0.15	50.25	50.00	1.488	1.481	1.00

VOA

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

INITIAL TIME OF TUNE 1004
TIME TUNE EXPIRES 1504
SHIFT(S) (A) ____ (B) ____ (C) ____
DATE 5/14/90
ANALYSIS TYPE VOA11

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		BFB0515C19	/	5/15/90	3:04	BFB			2.0 µl	1005	
2		CB2005 15C19	/	5/15/90	3:40	VSTD050		19d2	5 mL	1005	
3		CB2005 15C19	/	5/15/90	4:15	VBLK PB			5 mL	1005	
4		CN038367C19	/	5/15/90	4:46	DT231	14030	DT221	5 mL	1005	
5	/	CN038368C19	/	5/15/90	5:33	DT232	14030	DT221	5 mL	1005	
6		CN038368C19	/	5/15/90	6:07	DT233	14030	DT221	5 mL	1005	
7		CN037377C19	/	5/15/90	6:51	73900101	20124	—	5 mL	1005	
8	X	CN037389C19		5/15/90	7:30	73800101	20124	—	5 mL	1005	SH
9		CN037390A19	/	" "	8:28	73800102	20124		5mL	1492	
10		CN037391A19	/	" "	8:58	73800103	"		5mL	1492	
11		CN037392A19	/	" "	9:34	73800104	"		5mL	1492	
12		CN037832A19	/	" "	10:14	73800105	"		5mL	1492	
13		CN037833A19	/	" "	10:59	73800106	"		5mL	1492	
14		CN037834A19	/	" "	11:41	73800107	"		5mL	1492	
15		CN037835A19	/	" "	12:28	73800108	"		5mL	1492	
16	X	CN038979A19	/	" "	12:45	90349	20141.1		5mL	1492	VR
17		CN037836A19	/	" "	13:14	73800111	20124		5mL	1492	
18	X	CR038979A19		" "	14:41	90349	20141.1		5mL	1492	IP
19				" "	:						
20				" "	:						
21				" "	:						
22				" "	:						
23				" "	:						
24				" "	:						
				" "	:						

VERIFIED 1492/Alan Fink 5-15-90
SUPERVISOR APPROVAL 1492/Alan Fink

1377

NYDEC RA090 0507 ORGANIC

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Instrument ID: 19 Calibration date: 05/18/90 Time: 1810

Lab File ID: CW900518A19 Init. Calib. Date(s): 05/08/90 05/08/90

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

Min RRF50 for SPCC(#) = 0.300 (0.250 for Bromoform) Max %D for CCC(*) = 25.0%

COMPOUND		RRF	RRF50	%D	
Chloromethane	#	0.429	0.485	-13.1	#
Bromomethane		1.395	1.306	6.4	
Vinyl Chloride	*	0.535	0.624	-16.6	*
Chloroethane		0.958	0.899	6.2	
Methylene Chloride		1.333	1.154	13.4	
Acetone		0.280	0.395	-41.1	
Carbon Disulfide		4.788	3.508	26.7	
1,1-Dichloroethene	*	1.372	1.407	-2.6	*
1,1-Dichloroethane	#	1.524	1.738	-14.0	#
1,2-Dichloroethene (total)		2.536	2.366	6.7	
Chloroform	*	2.190	2.644	-20.7	*
1,2-Dichloroethane		1.608	1.875	-16.6	
2-Butanone		0.047	0.061	-29.8	
1,1,1-Trichloroethane		0.632	0.589	6.8	
Carbon Tetrachloride		0.673	0.619	8.0	
Vinyl Acetate		0.275	0.305	-10.9	
Bromodichloromethane		0.664	0.701	-5.6	
1,2-Dichloropropane	*	0.253	0.273	-7.9	*
cis-1,3-Dichloropropene		0.670	0.707	-5.5	
Trichloroethene		0.481	0.461	4.2	
Dibromochloromethane		0.594	0.422	29.0	
1,1,2-Trichloroethane		0.388	0.218	43.8	
Benzene		0.692	0.575	16.9	
Trans-1,3-Dichloropropene		0.380	0.325	14.5	
Bromoform	#	0.484	0.250	48.4	#
4-Methyl-2-Pentanone		0.343	0.533	-55.4	
2-Hexanone		0.152	0.128	15.8	
Tetrachloroethene		0.605	0.615	-1.7	
1,1,2,2-Tetrachloroethane	#	0.378	0.347	8.2	#
Toluene	*	1.006	1.061	-5.5	*
Chlorobenzene	#	0.835	0.885	-6.0	#
Ethylbenzene	*	0.420	0.408	2.9	*
Styrene		0.942	1.005	-6.7	
Total Xylenes		1.096	1.156	-5.5	
Toluene-d8		1.525	1.735	-13.8	
BFB		0.635	0.717	-12.9	
1,2-Dichloroethane-d4		1.413	1.828	-29.4	

COMPUCHEM LABS

RIC

COMPUCHEM DATA: CH900518019 SCANS 37 TO 1400

05/18/90 18:10:00

SAMPLE: SHL EPA IDB VSTD050 (STDB 1302) ON #13

CONDS.:

639360.

125.0

RIC

IS#1 IS#2 IS#3

SS#1 SS#2 SS#3

91 135 267 311 371 464 553 619 669 767 847 922 973 1283

200 400 600 800 1000 1200 1400 SCAN

2:30 5:00 7:30 10:00 12:30 15:00 17:30 TIME

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CW90518A19
DATA: CW90518A19.TI
05/18/90 18:10:00
SAMPLE: 5ML EPA ID# V5TD050 (STD# 1902) 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> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-3> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	XTOT
1	128	247	3:05	1	1.000	A BB	105953.	50.000 UG/L	1.09
2	50	42	0:31	1	0.170	A BV	51346.	46.979 UG/L	1.47
3	62	46	0:34	1	0.186	A BB	66158.	65.331 UG/L	1.43
4	94	51	0:38	1	0.206	A BB	138401.	58.994 UG/L	1.29
5	64	56	0:42	1	0.227	A VB	99304.	56.223 UG/L	1.23
6	101	63	0:47	1	0.255	A BB	291260.	52.921 UG/L	1.16
7	36	86	1:04	1	0.348	A BV	87849.	527.209 UG/L	11.53
8	96	86	1:04	1	0.348	A BB	149044.	53.237 UG/L	1.16
9	76	91	1:08	1	0.368	A BV	371656.	55.759 UG/L	1.22
10	142	91	1:08	1	0.368	A BB	481449.	61.413 UG/L	1.34
11	117	91	1:08	1	0.368	A BB	167729.	62.703 UG/L	1.37
12	85	91	1:08	1	0.368	A BB	160448.	60.692 UG/L	1.33
13	43	96	1:12	1	0.389	A BV	41827.	55.372 UG/L	1.21
14	114	371	4:38	14	1.000	A BB	513790.	50.000 UG/L	1.09
15	76	109	1:22	1	0.441	A VB	48990.	60.201 UG/L	1.32
16	84	118	1:28	1	0.478	A BB	122272.	54.496 UG/L	1.19
17	96	135	1:41	1	0.547	A BB	126620.	53.601 UG/L	1.17
18	53	141	1:46	1	0.571	A BV	165155.	547.038 UG/L	11.97
19	63	170	2:07	1	0.688	A BB	184130.	53.414 UG/L	1.17
20	43	186	2:19	14	0.301	A BV	156661.	53.460 UG/L	1.17
21	96	225	2:49	1	0.911	A BB	124051.	50.819 UG/L	1.11
22	72	237	2:58	1	0.960	A VB	6479.	46.051 UG/L	1.01
23	83	267	3:20	1	1.081	A BB	260173.	50.170 UG/L	1.10
24	97	268	3:21	14	0.722	A BB	302731.	50.017 UG/L	1.09
25	117	283	3:32	14	0.763	A VB	318064.	50.804 UG/L	1.11
26	78	309	3:52	14	0.833	A BB	295543.	47.865 UG/L	1.05
27	62	321	4:01	1	1.300	A BB	198713.	48.398 UG/L	1.06
28	70	365	4:34	14	0.984	A BB	76945.	509.678 UG/L	11.15
29	117	740	9:15	29	1.000	A BB	333350.	50.000 UG/L	1.09
30	130	390	4:52	14	1.051	A BB	236767.	52.225 UG/L	1.14
31	63	416	5:12	14	1.121	A BB	140512.	49.414 UG/L	1.08
32	174	431	5:23	1	1.745	A BB	214420.	60.541 UG/L	1.32
33	83	464	5:48	14	1.251	A BB	360166.	55.043 UG/L	1.20
34	63	519	6:29	14	1.399	A BB	104179.	52.743 UG/L	1.15
35	75	521	6:31	14	1.404	A BB	360116.	54.929 UG/L	1.20
36	43	557	6:58	29	0.753	A VB	177696.	49.682 UG/L	1.09
37	92	553	6:55	29	0.747	A BB	353530.	51.892 UG/L	1.14
38	75	605	7:34	14	1.631	A BB	167008.	42.490 UG/L	0.93
39	97	624	7:48	14	1.682	A BB	111761.	28.795 UG/L	0.63
40	69	634	7:55	29	0.857	A BB	104092.	21.038 UG/L	0.46
41	164	618	7:43	29	0.835	A BB	204964.	47.277 UG/L	1.03

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	676	8:27	29	0.914	A BB	42813.	48.043	UG/L	1.05
43	129	669	8:22	14	1.803	A BB	216860.	48.763	UG/L	1.07
44	107	670	8:22	14	1.806	A BB	183896.	52.695	UG/L	1.15
45	112	743	9:17	29	1.004	A BB	294999.	50.479	UG/L	1.10
46	131	766	9:34	14	2.065	A BB	220512.	61.651	UG/L	1.35
47	106	769	9:37	29	1.039	A BV	136018.	51.713	UG/L	1.13
48	106	789	9:52	29	1.066	A VB	192735.	55.164	UG/L	1.21
49	106	843	10:32	29	1.139	A BB	192585.	56.444	UG/L	1.23
50	104	849	10:37	29	1.147	A BB	335100.	56.469	UG/L	1.24
51	173	870	10:52	14	2.345	A BB	128247.	51.617	UG/L	1.13
52	88	931	11:38	14	2.509	A BB	47675.	54.297	UG/L	1.19
53	110	962	12:01	29	1.300	A BV	62249.	53.775	UG/L	1.18
54	83	973	12:10	29	1.315	A BB	115830.	48.153	UG/L	1.05
55	53	977	12:13	29	1.320	A BB	37380.	53.177	UG/L	1.16
56	157	1283	16:02	29	1.734	A BB	97895.	104.242	UG/L	2.28
57	65	312	3:54	1	1.263	A BB	193658.	50.247	UG/L	1.10
58	95	922	11:31	29	1.246	A BB	239086.	51.564	UG/L	1.13
59	98	545	6:49	29	0.736	A BB	578259.	53.327	UG/L	1.17

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
1	3:06	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:29	1.08	10.000	0.02	66.98	50.00	0.485	0.362	1.34
3	0:34	1.00	10.000	0.02	65.33	50.00	0.624	0.478	1.31
4	0:37	1.02	10.000	0.02	58.99	50.00	1.306	1.107	1.18
5	0:41	1.02	10.000	0.02	56.22	50.00	0.899	0.800	1.12
6	0:46	1.02	10.000	0.03	52.92	50.00	2.749	2.597	1.06
7	1:04	1.01	90.000	0.00	527.21	500.00	0.083	0.079	1.05
8	1:04	1.01	5.000	0.07	53.24	50.00	1.407	1.321	1.06
9	1:07	1.01	5.000	0.07	55.76	50.00	3.508	3.145	1.12
10	1:07	1.01	10.000	0.04	61.41	50.00	4.514	3.700	1.23
11	1:07	1.01	10.000	0.04	62.70	50.00	1.583	1.262	1.25
12	1:07	1.01	10.000	0.04	60.69	50.00	1.514	1.248	1.21
13	1:11	1.01	10.000	0.04	55.37	50.00	0.395	0.356	1.11
14	4:40	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:21	1.01	15.000	0.03	60.20	50.00	0.462	0.384	1.20
16	1:28	1.01	5.000	0.10	54.50	50.00	1.154	1.059	1.09
17	1:40	1.01	5.000	0.11	53.60	50.00	1.195	1.115	1.07
18	1:45	1.01	120.000	0.00	547.04	500.00	0.156	0.142	1.09
19	2:07	1.01	5.000	0.14	53.41	50.00	1.738	1.627	1.07
20	2:19	1.00	10.000	0.05	53.46	50.00	0.309	0.285	1.07
21	2:49	1.00	5.000	0.18	50.82	50.00	1.171	1.152	1.02
22	2:58	1.00	10.000	0.10	46.05	50.00	0.061	0.066	0.92
23	3:20	1.00	5.000	0.22	50.17	50.00	2.644	2.635	1.00
24	3:21	1.00	5.000	0.14	50.02	50.00	0.589	0.589	1.00
25	3:31	1.00	5.000	0.15	50.83	50.00	0.619	0.609	1.02
26	3:52	1.00	5.000	0.17	47.87	50.00	0.575	0.601	0.96
27	4:01	1.00	5.000	0.26	48.40	50.00	1.879	1.938	0.97
28	4:34	1.00	100.000	0.01	509.68	500.00	0.015	0.015	1.02
29	9:19	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:53	1.00	5.000	0.21	52.23	50.00	0.461	0.441	1.04
31	5:14	0.99	5.000	0.22	49.41	50.00	0.273	0.277	0.99
32	5:25	0.99	5.000	0.35	60.54	50.00	2.024	1.671	1.21
33	5:51	0.99	5.000	0.25	55.04	50.00	0.701	0.637	1.10
34	6:33	0.99	10.000	0.14	52.74	50.00	0.203	0.192	1.05
35	6:34	0.99	5.000	0.28	54.93	50.00	0.707	0.643	1.10
36	7:01	0.99	15.000	0.05	49.68	50.00	0.533	0.536	0.99

NO	RET(L)	R4TIO	RRT(L)	R4TIO	AMNT	4MNT(L)	R.FAC	R.F4C(L)	R4TIO
37	6:58	0.99	5.000	0.15	51.89	50.00	1.061	1.022	1.04
38	7:37	0.99	5.000	0.33	42.49	50.00	0.329	0.383	0.85
39	7:52	0.99	5.000	0.34	28.80	50.00	0.218	0.378	0.58
40	7:59	0.99	10.000	0.09	21.04	50.00	0.312	0.742	0.42
41	7:47	0.99	5.000	0.17	47.28	50.00	0.615	0.650	0.95
42	8:31	0.99	15.000	0.06	48.04	50.00	0.128	0.134	0.96
43	8:25	0.99	5.000	0.36	48.76	50.00	0.422	0.433	0.98
44	8:25	0.99	5.000	0.36	52.70	50.00	0.358	0.340	1.05
45	9:21	0.99	5.000	0.20	50.48	50.00	0.885	0.877	1.01
46	9:38	0.99	5.000	0.41	61.65	50.00	0.429	0.348	1.23
47	9:40	0.99	5.000	0.21	51.71	50.00	0.408	0.395	1.03
48	9:55	0.99	5.000	0.21	55.16	50.00	0.578	0.524	1.10
49	10:37	0.99	5.000	0.23	56.44	50.00	0.578	0.512	1.13
50	10:41	0.99	5.000	0.23	56.47	50.00	1.005	0.890	1.13
51	10:56	0.99	5.000	0.47	51.62	50.00	0.250	0.242	1.03
52	11:43	0.99	15.000	0.17	54.30	50.00	0.093	0.085	1.09
53	12:07	0.99	15.000	0.09	53.77	50.00	0.187	0.174	1.08
54	12:13	0.99	5.000	0.26	48.15	50.00	0.347	0.361	0.96
55	12:18	0.99	15.000	0.09	53.18	50.00	0.112	0.105	1.06
56	16:07	1.00	10.000	0.17	104.24	100.00	0.147	0.141	1.04
57	3:54	1.00	5.000	0.25	50.25	50.00	1.828	1.819	1.00
58	11:36	0.99	5.000	0.25	51.56	50.00	0.717	0.695	1.03
59	6:52	0.99	5.000	0.15	53.33	50.00	1.735	1.626	1.07

VOLATILE

COMPUCHEM LABORATORIES, INC.
GC/MS ANALYSIS LOG

INITIAL TIME OF TUNE 14:55 SHIFT(S) (A) / (B) ____ (C) ____
TIME TUNE EXPIRES 2:55 DATE 5-18-90
ANALYSIS TYPE WEII
PREVENTIVE MAINTENANCE Daily Prep MS/18/90

RUN LOG

	REJECTED	FILE NAME	REPORTED	DATE	TIME	EPA ID	CASE NO	STD ID #	AMOUNT INJECTED	CHEMIST	COMMENTS (Lot #'s, Disposition, Etc.)
1		BH9005I8A19	/	5/18/90	14:55	BFB			2µl	1009	
2	/	CW9005I8A19		/ /	15:10	VSTD050		1902	5ml	1009	
3	/	CW9005I8A19		/ /	17:05	VSTD050		1902	5ml	1009	
4		CW905I8A19	/	/ /	18:10	VSTD050		1902	5ml	1009	
5		CB9005I8A19	/	/ /	19:30	VBLKOH			5ml	1009	
6		CR037839A19	/	/ /	20:21	73800169	20124		5ml	1009	
7		CR037839B19	/	/ /	20:50	73800110	20124		5ml	1009	
8		CW037841B19	/	/ /	21:31	73800110B2	20124		5ml	1009	
9		CR637389B19	/	/ /	22:02	73800101	20124		5ml	1009	
10		CW039172B19	/	/ /	22:33	ELSPAQC01	19936		5ml	1009	
11		~~CW039171B19 MS/18/90~~	~~/~~	~~/ /~~		~~ELSPAQC01~~	MS/18/90				
12		CW039171B19	/	/ /	23:20	ELSPAQ002	19936		5ml	1009	
13		CW038747B19	/	/ /	23:47	QLSPAQ01	19936		5ml	1009	
14		CW038917C19	/	/ /	0:16	VLSPAQ C01	19936.4		5µl	1071	
15		CW038827C19	/	/ /	0:50	HAL PAQC01	"		5µl	1071	
16		CW038853C19	/	/ /	1:21	HALPAQC01	"		5µl	1071	
17		CW038838C17	/	/ /	1:47	MLSPAQ001	"		5µl	1071	
18		CW038839C19	/	/ /	2:23	HAL PAQ001	"		5µl	1071	
19				/ /	:						
20				/ /	:						
21				/ /	:						
22				/ /	:						
23				/ /	:						
24				/ /	:						

VERIFIED MS/18/90
SUPERVISOR APPROVAL 5/19/90

1370

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(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.

8A

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID (Standerd): C8900515C19 Date Analyzed: 05/15/90

Instrument ID: 19 Time Analyzed: 0340

Matrix:(soil/weter) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	49400	3.10	199000	4.75	134000	9.40
	UPPER LIMIT	98800		398000		268000	
	LOWER LIMIT	24700		99500		67000	
	EPA SAMPLE NO.						
01	73800102	46200	3.07	190000	4.72	121000	9.39
02	73800103	42500	3.08	170000	4.73	116000	9.40
03	73800104	42900	3.10	181000	4.73	121000	9.39
04	73800105	42900	3.07	189000	4.68	120000	9.34
05	73800106	46200	3.07	184000	4.68	124000	9.34
06	73800107	46700	3.07	190000	4.68	122000	9.35
07	73800108	43100	3.05	175000	4.65	122000	9.34
08	73800111	45000	3.07	185000	4.70	129000	9.35
09	738001TB1	44100	3.10	181000	4.73	126000	9.35
10	VBLKPQ	45600	3.10	180000	4.73	121000	9.39

IS1 (BCM) = Bromochloromethene
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 erea valuee with an asterisk

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): CW900518A19 Date Analyzed: 05/18/90

Instrument ID: 19 Time Analyzed: 1810

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	106000	3.08	514000	4.63	333000	9.25
	UPPER LIMIT	212000		1028000		666000	
	LOWER LIMIT	53000		257000		166500	
	EPA SAMPLE NO.						
01	73800101	83100	3.10	403000	4.65	263000	9.30
02	73800109	90400	3.10	463000	4.68	287000	9.32
03	73800110	101000	3.08	520000	4.65	319000	9.30
04	738001TB2	93100	3.10	509000	4.65	300000	9.32
05	VBLKOH	117000	3.10	540000	4.68	342000	9.30

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

VOLATILE INTERNAL STANDARD AREA SUMMARY

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Lab File ID (Standard): CT900515B19 Date Analyzed: 05/15/90

Instrument ID: 19 Time Analyzed: 1757

Matrix:(soil/water) WATER Level:(low/med) LOW Column:(pack/cap) CAP

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	50600	3.10	198000	4.72	137000	9.37
	UPPER LIMIT	101200		396000		274000	
	LOWER LIMIT	25300		99000		68500	
	EPA SAMPLE NO.						
01	73800112	47900	3.05	190000	4.70	136000	9.40
02	73800113	40600	12.55	157000	19.05	117000	37.82
03	73800112MS	47700	3.08	190000	4.73	140000	9.40
04	738D0112MSD	51D00	3.10	206000	4.75	146000	9.42
05	VBLKPU	53300	3.10	211000	4.70	141000	9.35

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

D. RAW QC DATA

(1) BFB (for each 12-hour period, for each GC/MS system utilized)

(a) Bar graph spectrum

(b) Mass listing

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

(a) Tabulated results (Form I VOA)

(b) Tentatively identified Compounds (Form I VOA-Tic) - even if none found.

(c) Reconstructed ion chromatogram(s) and quantitation report(s) or legible facsimile (GC/MS)

(d) TCL spectra with lab generated standard. Data systems which are incapable of dual display shall provide spectra in order:

(e) GC/MS library search spectra for Tentativley Identified Compound(s) (TIC) concentrations

(3) Matrix Spike Data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA-TIC not required.

(b) Reconstructed ion chromatogram(s) and quantitation report(s) or legible facsimile (GC/MS). Spectra not required.

(4) Spike Duplicate Data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA-TIC not required.

(b) Reconstructed ion chromatogram(s) and quantitation report(s) or legible facsimile (GC/MS). Spectra not required.

(1) BFB (for each 12-hour period, for each GC/MS system utilized)

(a) Bar graph spectrum

(b) Mass listing

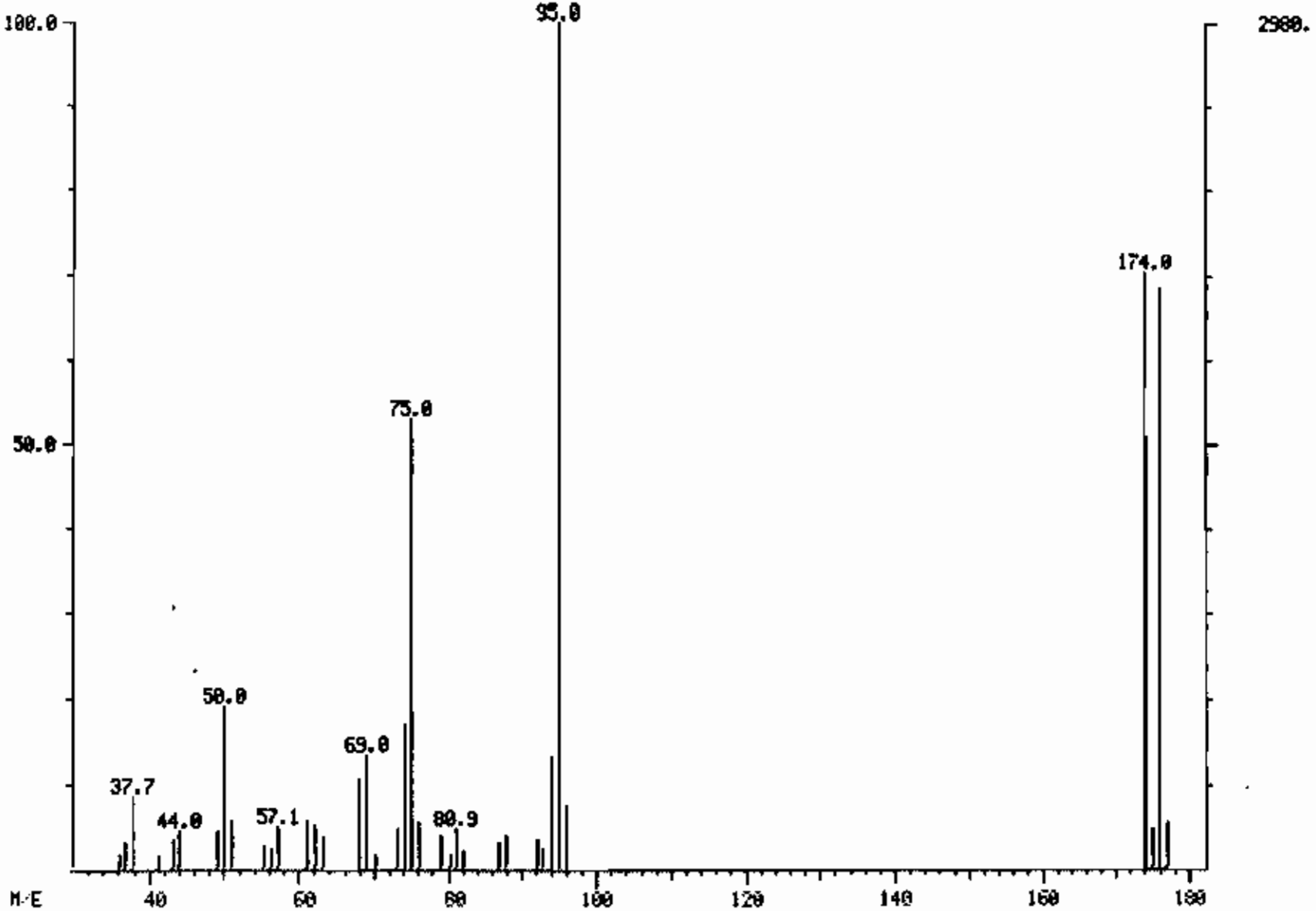
COMPUCHEM LABS

MASS SPECTRUM
05/03/90 0:59:00 + 1:49
SAMPLE: 2UL BFB #31916 ON #19

DATA: BF900508C19 #145

BASE M/E: 95
RIC: 14432.

1363



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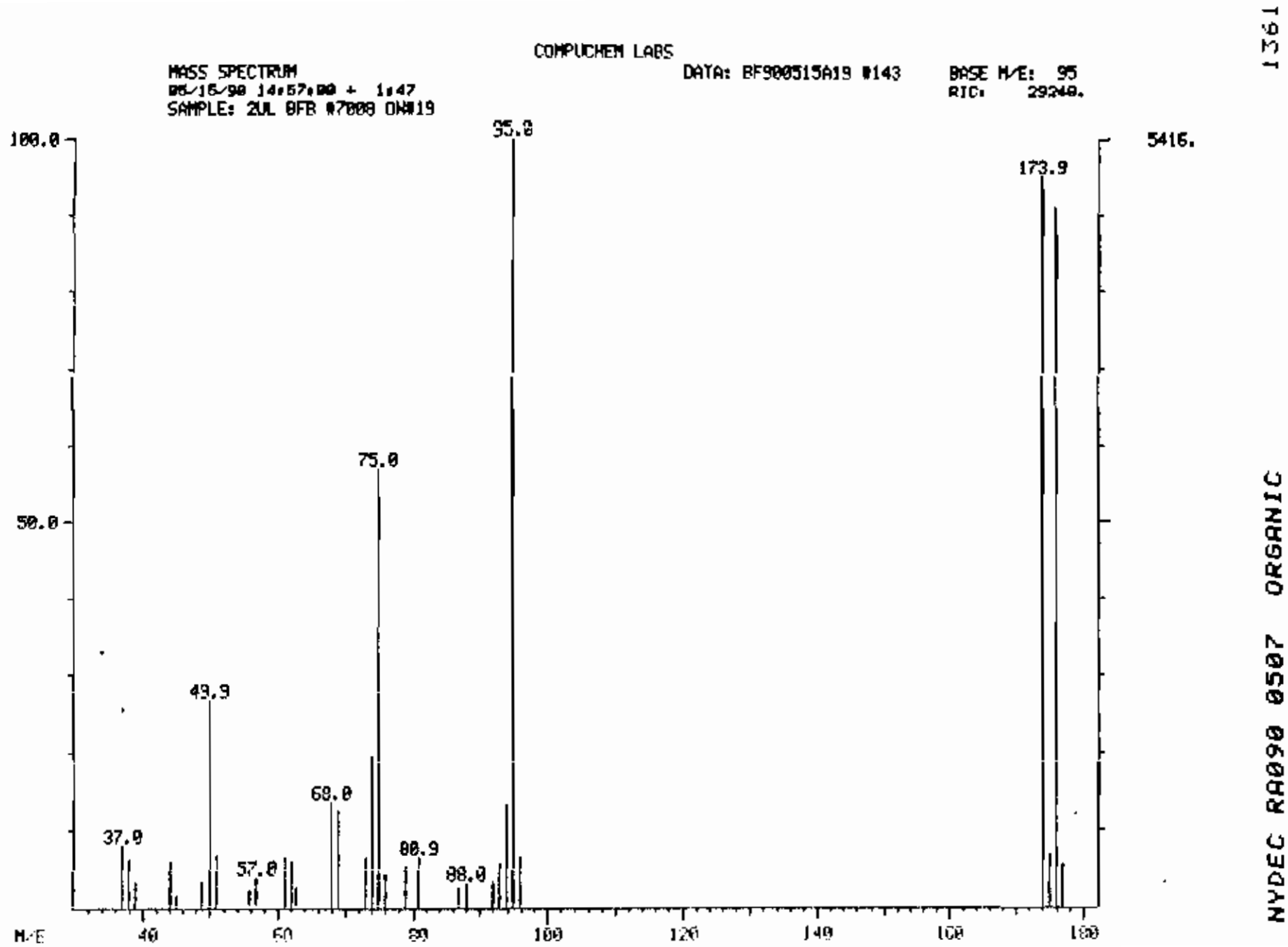
COMPUCHEM LABS

MASS LIST
DATA: BF900508C19 # 145
BASE M/E: 95
05/08/90 0:39:00 + 1:49
RIC: 14432.
SAMPLE: 2UL BFB #31916 ON #19

36 0.00 MINIMA MIN INTEN: 0. MAX INTEN: 2980.
177 # 0 MAXIMA
MASS % RA

MASS	% RA
36	1.91
37	3.36
38	8.59
41	1.85
43	3.66
44	4.70
49	4.70
50	19.13
51	5.84
55	2.92
56	2.65
57	5.07
61	5.97
62	5.27
63	3.76
68	10.81
69	13.52
70	1.71
73	4.80
74	17.01
75	53.02
76	5.57
79	4.16
80	1.81
81	4.97
82	2.42
87	3.39
88	4.16
92	3.39
93	2.98
94	13.32
95	100.00
96	7.98
174	70.34
175	4.90
176	68.52
177	5.60



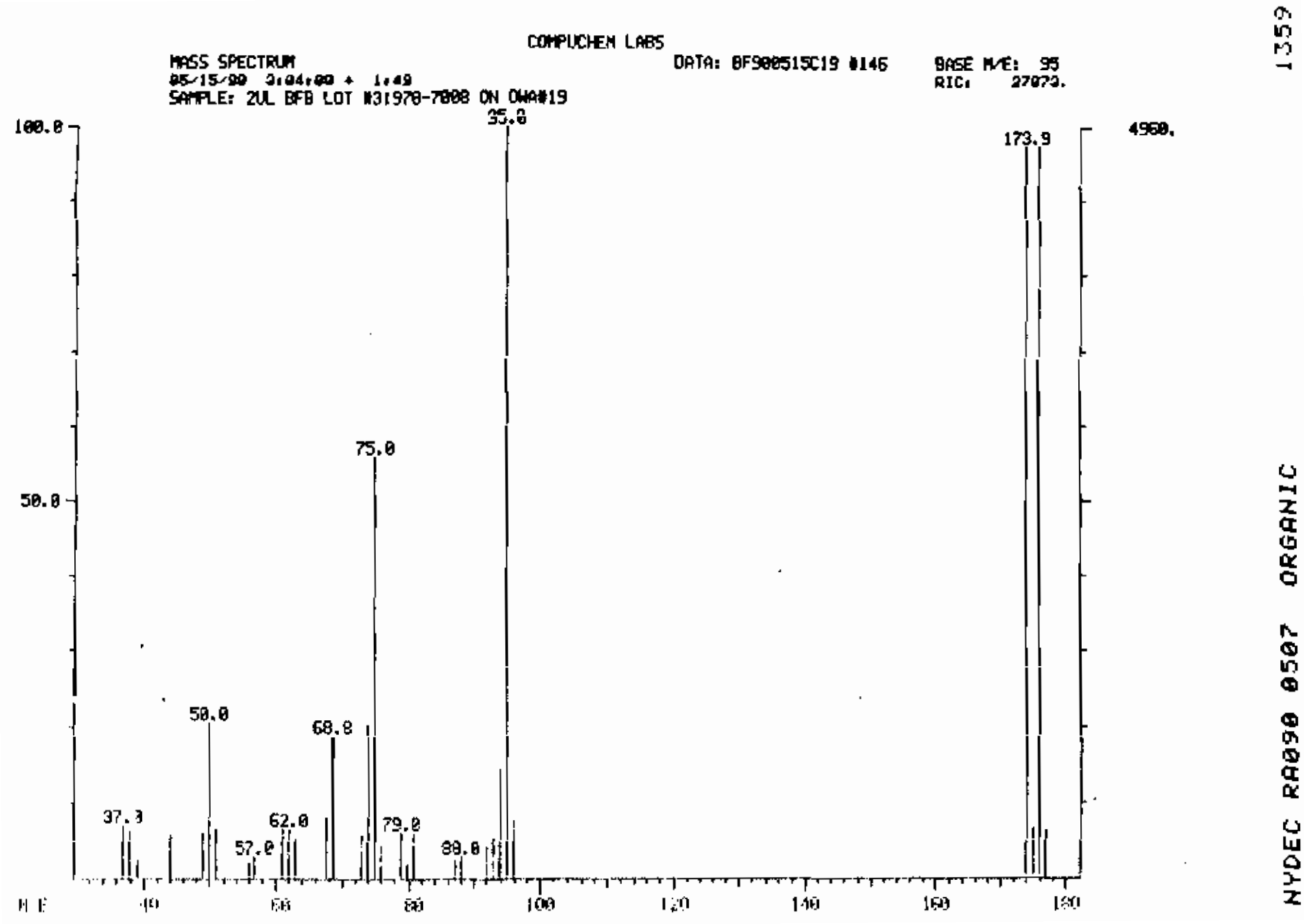
COMPUCHEM LABS

MASS LIST
05/15/90 14:57:00 + 1:47
SAMPLE: 2UL BFB #7008 ON@19

DATA: BF900515A19 # 143 BASE M/E: 95
RIC: 29248.

37 0.00 MINIMA MIN INTEN: 0. MAX INTEN: 9416.
177 # 0 MAXIMA

MASS	% RA
37	7.92
38	6.07
39	3.38
44	5.76
45	1.42
49	3.23
50	26.88
51	6.74
56	2.38
57	3.95
61	6.35
62	5.83
63	2.66
68	13.40
69	12.39
73	6.31
74	19.50
75	36.87
76	4.36
79	5.21
81	6.37
87	2.53
88	3.08
92	3.31
93	5.67
94	13.33
95	100.00
96	6.30
174	95.27
175	6.63
176	90.99
177	5.24



1359

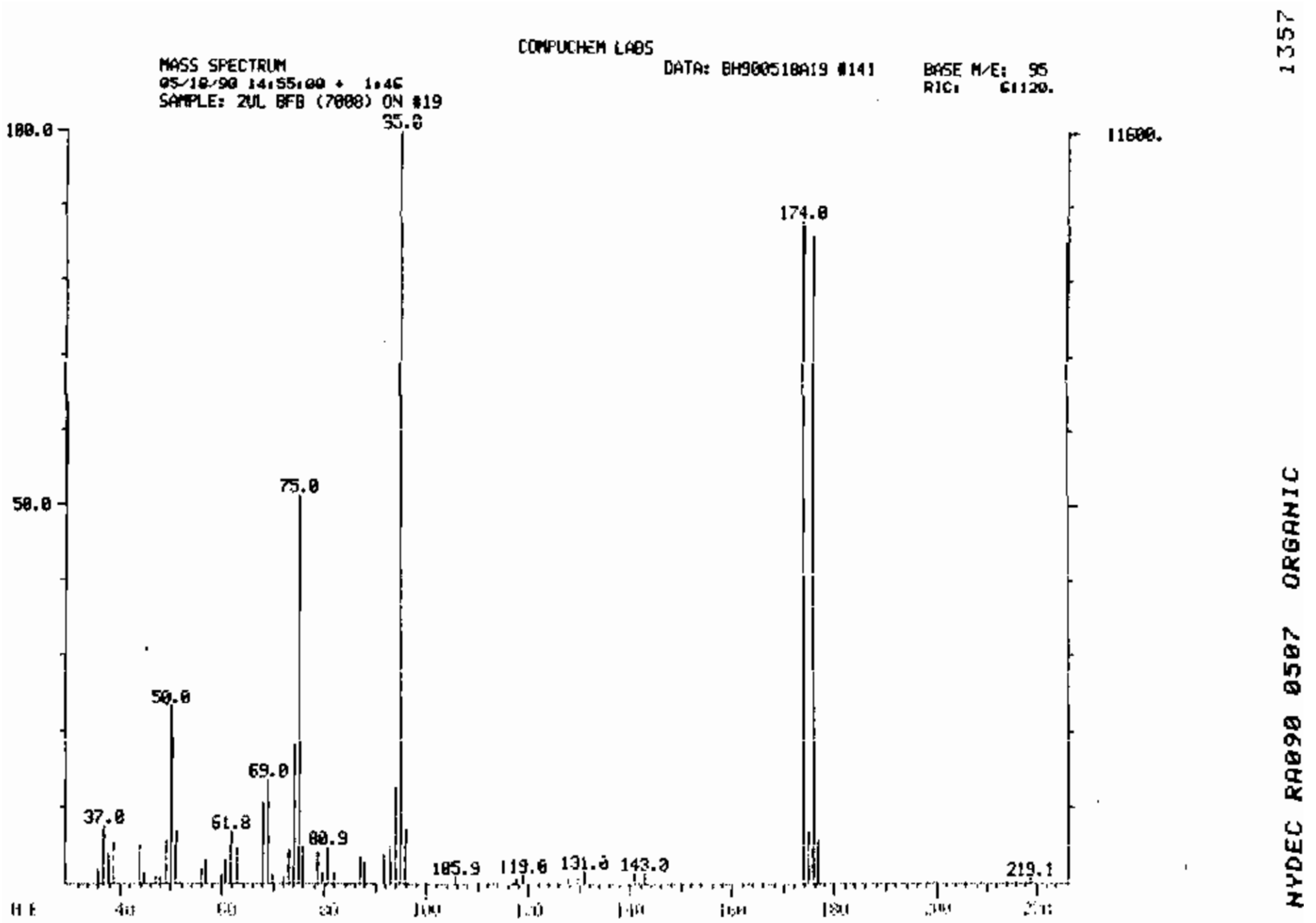
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

MASS LIST DATA: BF900515C19 # 146 BASE M/E: 95
05/15/90 3:04:00 + 1:49 RIC: 27072.
SAMPLE: 2UL BFB LOT #31978-7008 ON OWA#19

37 0.00 MINIMA MIN INTEN: 0. MAX INTEN: 4960.
177 # 0 MAXIMA
MASS % RA

MASS	% RA
37	6.81
38	6.17
39	2.42
44	5.50
49	5.87
50	20.38
51	6.43
56	2.12
57	2.88
61	6.25
62	6.39
63	5.00
68	7.84
69	18.67
73	5.52
74	20.06
75	53.81
76	4.40
79	5.99
80	1.87
81	5.97
87	2.24
88	2.70
92	4.03
93	5.08
94	14.23
95	100.00
96	7.40
174	97.42
175	6.29
176	97.42
177	6.05


COMPUCHEM LABS
MASS SPECTRUM
05/10/90 14:55:00 + 1:46
SAMPLE: 2UL BFB (7000) ON #19
DATA: BH900510A19 #141
BASE M/E: 95
RIC: 61120.
1357
100.0
50.0
95.0
11600.
174.0
75.0
50.0
69.0
37.0
61.8
80.9
105.9
119.0
131.0
143.0
219.1
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

MASS LIST DATA: BH900518A19 # 141 BASE M/E: 95
05/18/90 14:55:00 + 1:46 RIC: 61120.
SAMPLE: 2UL BFB (7008) ON #19

36 0.00 MINIMA MIN INTEN: 0. MAX INTEN: 11600.
219 # 0 MAXIMA

MASS	% RA
36	2.16
37	7.52
38	4.05
39	5.09
44	4.78
45	1.16
47	0.74
48	0.72
49	5.47
50	23.10
51	6.62
56	1.78
57	3.18
60	0.97
61	3.07
62	6.69
63	4.70
68	10.36
69	13.53
70	1.12
72	0.66
73	4.41
74	18.14
75	51.31
76	4.93
79	4.04
80	1.25
81	4.57
82	1.37
87	3.21
88	2.77
92	3.73
93	4.83
94	12.45
95	100.00
96	6.92
106	0.66
118	0.45
119	1.03
128	0.48
130	0.44
131	1.60
141	1.16
143	1.30
174	88.00
175	6.55
176	85.93
177	5.55
219	0.48

(2) Blank Data – In chronological order. NOTE: This order is different from that used for samples.

(a) Tabulated results (Form I VOA)

(b) Tentatively Identified Compounds (Form I VOA – TIC) – even if none found.

(c) Reconstructed ion chromatogram (e) and quantitation report (s) or legible facsimile (GC/MS)

(d) TCL spectra with lab generated standard. Data systems which are incapable of dual display shall provide spectra in order:

- Raw TCL compound spectra
- Enhanced or background substracted spectra
- Laboratory generated TCL standard spectra

(e) GC/MS library search spectra for Tentatively Identified Compound (s) (TIC) concentrations

EPA SAMPLE NO.

VBLKPU

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: VBLKPU

Sample wt/vol: _____ (g/mL) ML Lab File ID: CB900515B19

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

% Moisture: not dec. _____ Date Analyzed: 05/15/90

Column: (pack/cap) CAP Dilution Factor: 1

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) _____	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	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	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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

VBLKPU

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Natrix: (soil/water) WATER Lab Sample ID: VBLKPU

Sample wt/vol: _____ (g/mL) ML Lab File ID: CB900515B19

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

% Moisture: not dec. _____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1

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

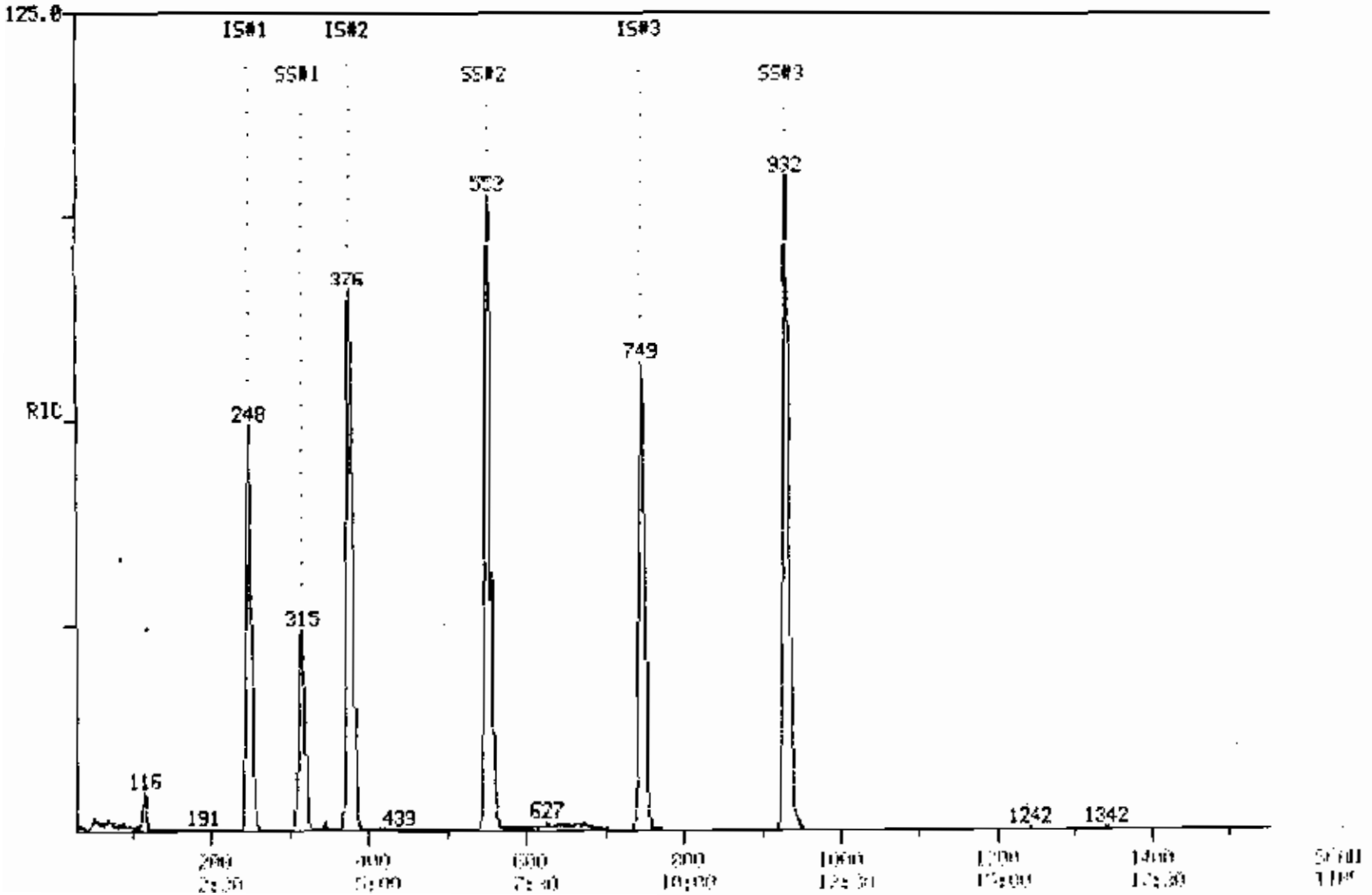
CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

COMPUCHEM LABS

RIC
05/15/90 18:53:00
SAMPLE: 3ML VBLK FU ON CWA#19
CONDS.:

COMPUCHEM DATA: C90005:5019 SCANS 30 TO 1550

81440.



QUANTITATION REPORT FILE: CB900515B19
DATA: CB900515B19.TI
05/15/90 18:53:00
SAMPLE: 5ML VBLK PU ON OWA#19
COMDB.:
SUBMITTED BY: 19 ANALYST: 1095

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	216 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE .124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#238 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	248	3:06	1	1.000	A BB	53250.	50.000 UG/L	17.48
2	50	NOT FOUND							
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	101	NOT FOUND							
7	56	NOT FOUND							
8	96	NOT FOUND							
9	76	NOT FOUND							
10	142	NOT FOUND							
11	117	NOT FOUND							
12	85	NOT FOUND							
13	43	96	1:12	1	0.387	A BB	999.	2.795 UG/L	0.98 NO
14	114	376	4:42	14	1.000	A BB	211232.	50.000 UG/L	17.48
15	76	NOT FOUND							
16	84	116	1:27	1	0.468	A BB	4313.	3.484 UG/L	1.22 yes
17	96	NOT FOUND							
18	53	NOT FOUND							
19	63	NOT FOUND							
20	43	NOT FOUND							
21	96	NOT FOUND							
22	72	NOT FOUND							
23	83	NOT FOUND							
24	97	NOT FOUND							
25	117	NOT FOUND							
26	78	NOT FOUND							
27	62	NOT FOUND							
28	70	NOT FOUND							
29	117	749	9:22	29	1.000	A BB	140578.	50.000 UG/L	17.48
30	130	NOT FOUND							
31	63	NOT FOUND							
32	174	NOT FOUND							
33	83	NOT FOUND							
34	63	NOT FOUND							
35	79	NOT FOUND							
36	43	NOT FOUND							
37	92	NOT FOUND							
38	75	NOT FOUND							
39	97	NOT FOUND							
40	69	NOT FOUND							
41	164	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	NOT FOUND								
43	129	NOT FOUND								
44	107	NOT FOUND								
45	112	NOT FOUND								
46	131	NOT FOUND								
47	106	NOT FOUND								
48	106	NOT FOUND								
49	106	NOT FOUND								
50	104	NOT FOUND								
51	173	NOT FOUND								
52	88	NOT FOUND								
53	110	NOT FOUND								
54	83	NOT FOUND								
55	53	NOT FOUND								
56	157	NOT FOUND								
57	65	315	3:56	1	1.270	A BB	59976.	42.754	UG/L	14.95
58	99	933	11:40	29	1.246	A BB	72361.	43.171	UG/L	15.10
59	98	553	6:55	29	0.738	A BB	188924.	43.859	UG/L	15.34

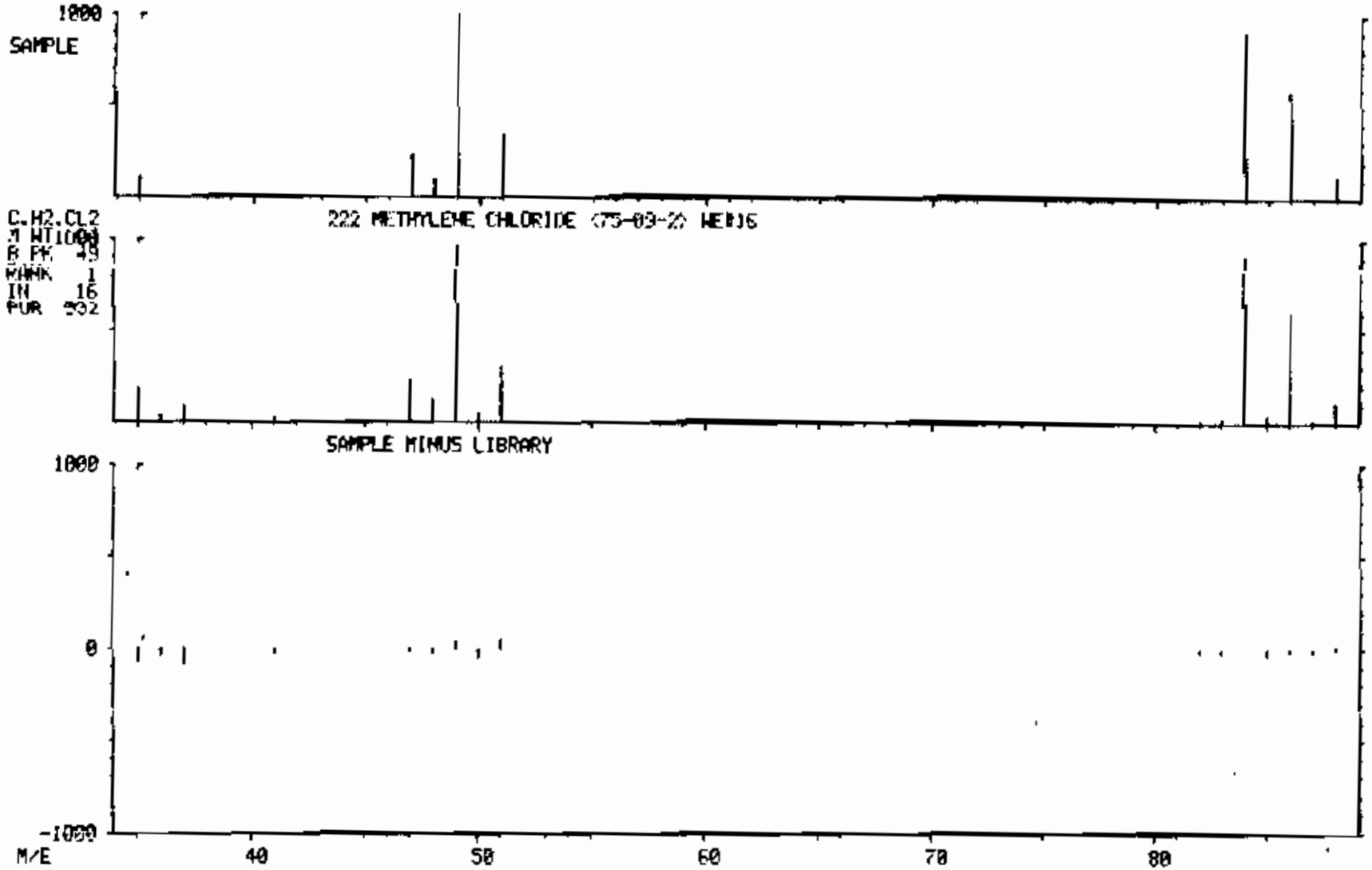
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27		10.000			50.00		0.400	
3	0:33		10.000			50.00		0.503	
4	0:37		10.000			50.00		0.813	
5	0:40		10.000			50.00		0.918	
6	0:46		10.000			50.00		3.951	
7	1:04		90.000			500.00		0.095	
8	1:03		5.000			50.00		1.664	
9	1:07		5.000			50.00		4.561	
10	1:07		10.000			50.00		4.572	
11	1:06		10.000			50.00		1.658	
12	1:07		10.000			50.00		1.641	
13	1:12	1.00	10.000	0.04	2.79	50.00	0.019	0.336	0.06
14	4:43	0.99	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:21		15.000			50.00		0.491	
16	1:28	0.99	5.000	0.09	3.48	50.00	0.031	1.162	0.07
17	1:40		5.000			50.00		1.149	
18	1:45		120.000			500.00		0.154	
19	2:07		5.000			50.00		1.329	
20	2:20		10.000			50.00		0.332	
21	2:49		5.000			50.00		1.128	
22	3:01		10.000			50.00		0.067	
23	3:21		5.000			50.00		2.050	
24	3:22		5.000			50.00		0.546	
25	3:34		5.000			50.00		0.634	
26	3:55		5.000			50.00		0.592	
27	4:04		5.000			50.00		1.415	
28	4:38		100.000			500.00		0.016	
29	9:22	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:58		5.000			50.00		0.515	
31	5:18		5.000			50.00		0.228	
32	5:29		5.000			50.00		2.312	
33	5:55		5.000			50.00		0.767	
34	6:37		10.000			50.00		0.198	
35	6:38		5.000			50.00		0.698	
36	7:04		15.000			50.00		0.414	

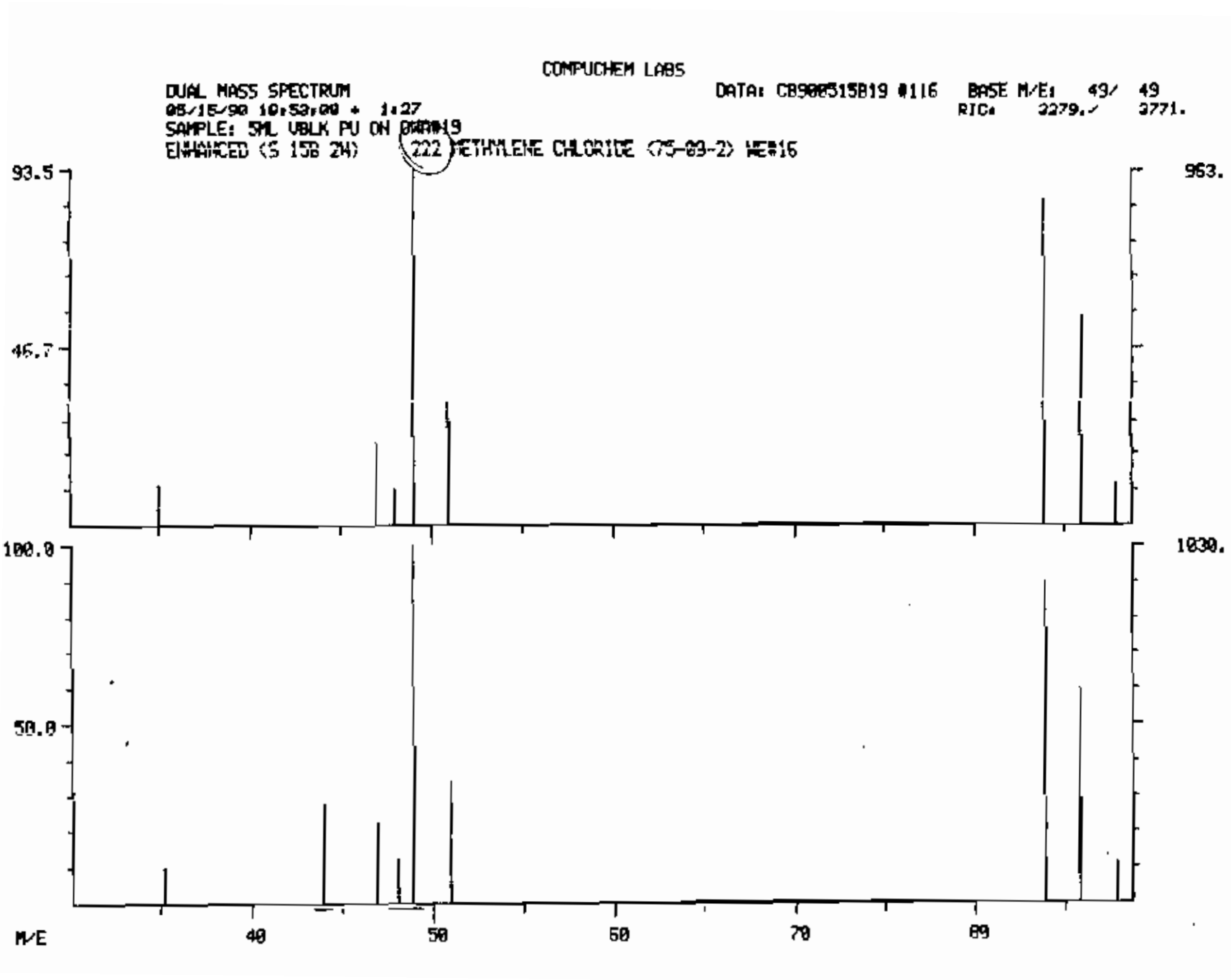
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
37	7:01		5.000			50.00		0.986	
38	7:41		5.000			50.00		0.427	
39	7:55		5.000			50.00		0.450	
40	8:04		10.000			50.00		0.821	
41	7:51		5.000			50.00		0.814	
42	8:34		15.000			50.00		0.200	
43	8:29		5.000			50.00		0.749	
44	8:29		5.000			50.00		0.560	
45	9:25		5.000			50.00		0.829	
46	9:43		5.000			50.00		0.348	
47	9:45		5.000			50.00		0.391	
48	10:00		5.000			50.00		0.556	
49	10:41		5.000			50.00		0.521	
50	10:46		5.000			50.00		0.961	
51	11:01		5.000			50.00		0.618	
52	11:48		15.000			50.00		0.108	
53	12:12		15.000			50.00		0.195	
54	12:18		5.000			50.00		0.384	
55	12:23		15.000			50.00		0.095	
56	16:12		10.000			100.00		0.245	
57	3:57	1.00	5.000	0.25	42.75	50.00	1.126	1.317	0.86
58	11:40	1.00	5.000	0.25	43.17	50.00	0.515	0.596	0.86
59	6:55	1.00	5.000	0.15	43.86	50.00	1.314	1.532	0.88

COMPUCHEM LABS

LIBRARY SEARCH
05/15/90 10:53:00 + 1.27
SAMPLE: 5ML VBLK PU ON 040#19
ENHANCED (S 150 2N 8T)

DATA: C8900515B19 # 116 BASE M/E: 49
RIC: 3279.





HYDEC RA090 0507 ORGANIC

COMPUCHEM # 900515 FILE: CB900515B19 COMPOUND LIST 382 PAGE 1
VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	248	53200	50.0		
221	50		CHLOROMETHANE				BDL	10
231	62		VINYL CHLORIDE				BDL	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE				BDL	10
230	101		TRICHLOROFLUOROMETHANE				BDL	10
201	56		ACROLEIN				BDL	90
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE				BDL	5
235	142		IODOMETHANE				BDL	10
297	117		1,1,1-TRICHLORO-2,2,2-TRIFL				BDL	10
266	85		1,1,2-TRICHLORO-1,2,2-TRIFL				BDL	10
252	43		ACETONE (2-PROPANONE)			~~9.8~~	BDL ~~5J~~	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	376	211000	50.0		
298	76		3-CHLOROPROPENE				BDL	15
222	84		METHYLENE CHLORIDE			3.5	4J	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
202	53		ACRYLONITRILE				BDL	120
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				BDL	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
219	62		1,2-DICHLOROETHANE				BDL	5
272	70		CROTONALDEHYDE				BDL	100
270	117	I	D5-CHLOROBENZENE (IS)	749	141000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROPANE				BDL	5
236	174		DIBROMOMETHANE				BDL	5
212	83		BROMODICHLOROMETHANE				BDL	5
210	63		2-CHLOROETHYL VINYL ETHER				BDL	10
219	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE				BDL	15
225	92		TOLUENE				BDL	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
229	97		1,1,2-TRICHLOROETHANE				BDL	5
287	69		ETHYLMETHACRYLATE				BDL	10
224	164		TETRACHLOROETHENE				BDL	5
255	43		2-HEXANONE				BDL	15
208	129		DIBROMOCHLOROMETHANE , 124-4				BDL	5

CORRECTED/REVIEWED BY SDW Gaines
(GC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
245	107		1,2-DIBROMOETHANE				BDL	5
307	112		CHLOROBENZENE				BDL	5
373	131		1,1,1,2-TETRACHLOROETHANE				BDL	5
419	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	5
239	106		O-XYLENE				BDL	5
251	104		STYRENE				BDL	5
205	173		BROMOFORM				BDL	5
274	98		CIS-1,4-DICHLORO-2-BUTENE				BDL	15
275	110		1,2,3-TRICHLOROPROPANE				BDL	15
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	5
290	53		TRANS-1,4-DICHLORO-2-BUTENE				BDL	15
262	157		1,2-DIBROMO-3-CHLOROPROPANE				BDL	10
258	65	S	D4-1,2-DICHLOROETHANE WE#57			42.8	86. %	
247	95	S	BROMOFLUOROBENZENE			43.2	86. %	
233	98	S	D8-TOLUENE WE#59 SS#2			43.9	88. %	
289	106		XYLENES (TOTAL)				BDL	5
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS:								
	5631.			1373	409200.	286.2		7.

CORRECTED/REVIEWED BY SDWagner
(CC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
57	258	D4-1,2-DICHLOROETHANE WE#57	42.8	50.0	86.	76-114	X	
58	247	BROMOFLUOROBENZENE	43.2	50.0	86.	86-115	X	
59	233	D8-TOLUENE WE#59 SS#2	43.9	50.0	88.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ (\text{UL})} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY SDWagner
(CC/MS DATA REVIEWER)

DATE 5-17-90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKPQ

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: VBLKPQ

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900515C19

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

% Moisture: not dec. ____ Date Analyzed: 05/15/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

VBLKPQ

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: VBLKPQ

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900515C19

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

% Moisture: not dec. ____ Date Analyzed: 05/15/90

Column (pack/cap) CAP Dilution Factor: 1.0

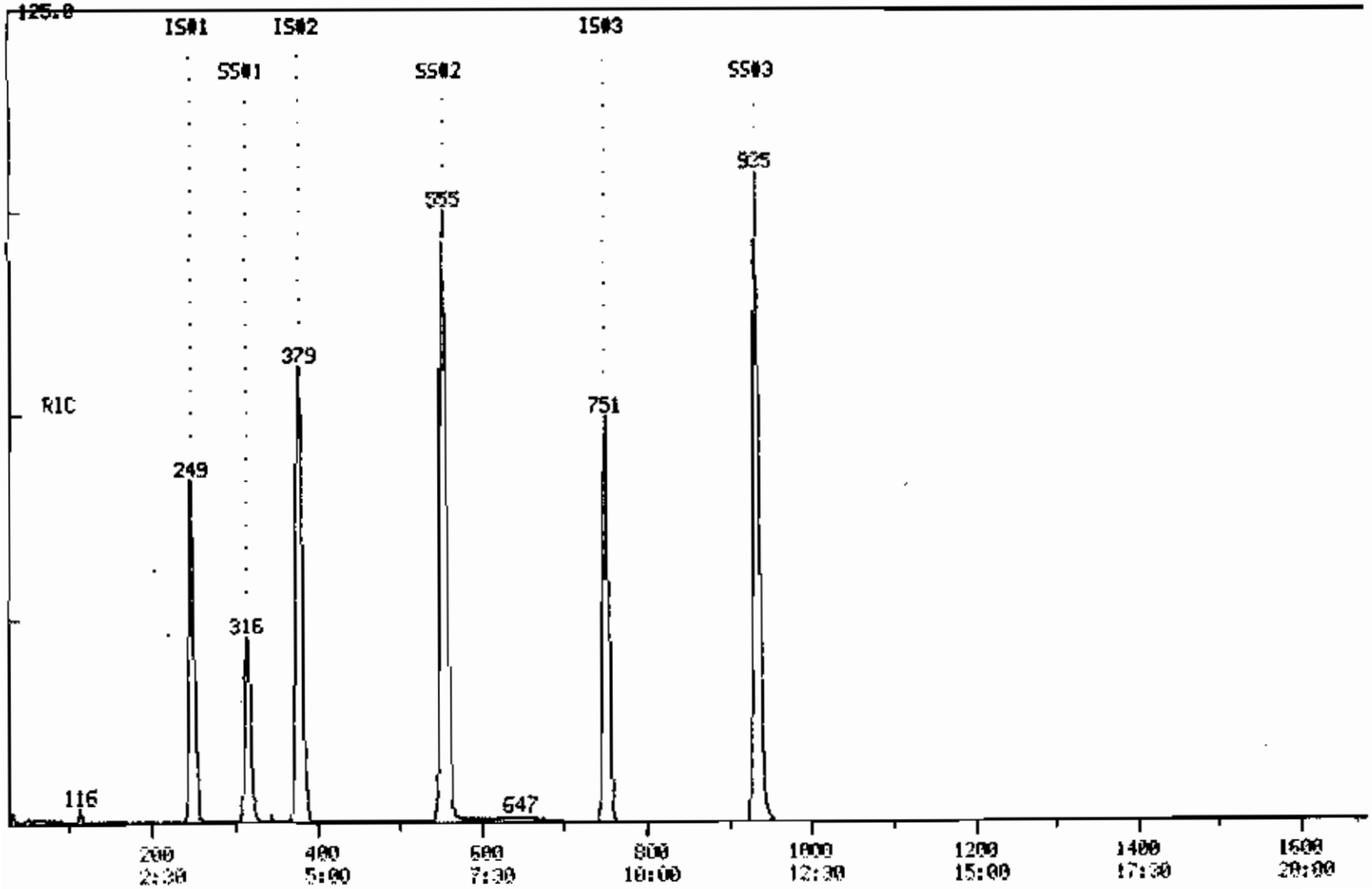
Number TICs found: 0 CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

COMPUCHEM LABS

RIC
05/15/90 4:15:00
SAMPLE: 5ML VBLK PG CH CHAN:19
CONDS.:

COMPUCHEM DATA: CB900515C19 SCANS 30 TO 1699
OUT OF 30 TO 1700



NYDEC RA090 0507 ORGANIC

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QUANTITATION REPORT     FILE: CB900515C19
DATA: CB900515C19.TI
05/15/90  4:15:00
SAMPLE: 5ML VBLK PG ON DWA#19
CONDS. :
SUBMITTED BY: 19            ANALYST: 1095

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM  LIBRARY ENTRY

 NO  NAME
  1  *234 BROMOCHLOROMETHANE (IS) <79-97-5> WE#1
  2   221 CHLOROMETHANE <74-87-3> WE#2
  3   231 VINYL CHLORIDE <75-01-4> WE#3
  4   220 BROMOMETHANE <78-83-9> WE#4
  5   209 CHLOROETHANE <75-00-3> WE#5
  6   230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
  7   201 ACROLEIN <107-02-8> WE#7
  8   216 1,1-DICHLOROETHENE <75-35-4> WE#8
  9   254 CARBON DISULFIDE <75-15-0> WE#9
 10   285 IODOMETHANE <74-88-4> WE#10
 11   297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
 12   266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
 13   252 ACETONE (2-PROPANONE) <67-64-1> WE#13
 14  *248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
 15   298 3-CHLOROPROPENE <107-05-1> WE#15
 16   222 METHYLENE CHLORIDE <75-09-2> WE#16
 17   226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
 18   202 ACRYLONITRILE <107-13-1> WE#18
 19   214 1,1-DICHLOROETHANE <75-34-3> WE#19
 20   257 VINYL ACETATE <108-05-4> WE#20
 21   237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
 22   253 2-BUTANONE <78-93-3> WE#22
 23   211 CHLOROFORM <67-66-2> WE#23
 24   227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
 25   206 CARBON TETRACHLORIDE <56-23-5> WE#25
 26   203 BENZENE <71-43-2> WE#26
 27   215 1,2-DICHLOROETHANE <107-06-2> WE#27
 28   272 CROTONALDEHYDE <4170-30-3> WE#28
 29  *270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
 30   229 TRICHLOROETHENE <79-01-6> WE#30
 31   217 1,2-DICHLOROPROPANE <78-87-5> WE#31
 32   286 DIBROMOMETHANE <74-95-3> WE#32
 33   212 BROMODICHLOROMETHANE <75-27-4> WE#33
 34   210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
 35   218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
 36   256 4-METHYL-2-PENTANONE <108-01-1> WE#36
 37   225 TOLUENE <108-88-3> WE#37
 38   250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
 39   228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
 40   287 ETHYLMETHACRYLATE <96-18-4> WE#40
 41   224 TETRACHLOROETHENE <127-18-4> WE#41
 42   255 2-HEXANONE <591-78-6> WE#42
 43   208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
 44   245 1,2-DIBROMOETHANE <1060-93-4> WE#44
 45   207 CHLOROBENZENE <108-90-7> WE#45
 46   273 1,1,1,2-TETRACHLORDETHANE <630-20-6> WE#46
```

NO	NAME
47	219 ETHYLBENZENE (100-41-4) WE#47
48	330 M,P-XYLENE (133-02-7) WE#48
49	239 O-XYLENE (133-02-7) WE#49
50	251 STYRENE (100-42-5) WE#50
51	205 BROMOFORM (75-25-2) WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE (764-71-0) WE#52
53	275 1,2,3-TRICHLOROPROPANE (96-18-4) WE#53
54	223 1,1,2,2-TETRACHLOROETHANE (79-34-5) WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE (110-57-6) WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE (96-12-8) WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE (460-00-4) WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	248	3:06	1	1.000	A BB	45613.	50.000	UG/L	16.47
2	50	NOT FOUND								
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	NOT FOUND								
6	101	NOT FOUND								
7	36	NOT FOUND								
8	96	NOT FOUND								
9	76	NOT FOUND								
10	142	NOT FOUND								
11	117	NOT FOUND								
12	85	NOT FOUND								
13	43	NOT FOUND								
14	114	379	4:44	14	1.000	A BB	179630.	50.000	UG/L	16.47
15	76	NOT FOUND								
16	84	115	1:26	1	0.464	A BB	1663.	2.081	UG/L	0.69
17	96	NOT FOUND								
18	50	NOT FOUND								
19	63	NOT FOUND								
20	43	NOT FOUND								
21	96	NOT FOUND								
22	72	NOT FOUND								
23	83	NOT FOUND								
24	97	NOT FOUND								
25	117	NOT FOUND								
26	78	NOT FOUND								
27	62	NOT FOUND								
28	70	NOT FOUND								
29	117	751	9:23	29	1.000	A BB	120364.	50.000	UG/L	16.47
30	130	NOT FOUND								
31	63	NOT FOUND								
32	174	NOT FOUND								
33	83	NOT FOUND								
34	63	NOT FOUND								
35	78	NOT FOUND								
36	43	NOT FOUND								
37	92	NOT FOUND								
38	75	NOT FOUND								
39	97	NOT FOUND								
40	69	NOT FOUND								
41	164	NOT FOUND								

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	NOT FOUND								
43	129	NOT FOUND								
44	107	NOT FOUND								
45	112	NOT FOUND								
46	131	NOT FOUND								
47	106	NOT FOUND								
48	106	NOT FOUND								
49	106	NOT FOUND								
50	104	NOT FOUND								
51	173	NOT FOUND								
52	88	NOT FOUND								
53	110	NOT FOUND								
54	83	NOT FOUND								
55	53	NOT FOUND								
56	157	NOT FOUND								
57	65	316	3:57	1	1.274	A BB	55333.	48.425	UG/L	15.95
58	95	935	11:41	29	1.245	A BB	73199.	51.588	UG/L	16.99
59	98	555	6:56	29	0.739	A BB	185494.	51.702	UG/L	17.03

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:26		10.000			50.00		0.333	
3	0:30		10.000			50.00		0.469	
4	0:37		10.000			50.00		1.152	
5	0:39		10.000			50.00		0.751	
6	0:45		10.000			50.00		3.819	
7	1:03		90.000			500.00		0.069	
8	1:03		5.000			50.00		1.389	
9	1:07		5.000			50.00		3.616	
10	1:06		10.000			50.00		3.615	
11	1:05		10.000			50.00		1.351	
12	1:06		10.000			50.00		1.339	
13	1:11		10.000			50.00		0.259	
14	4:45	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:19		15.000			50.00		0.376	
16	1:27	0.99	5.000	0.09	2.08	50.00	0.034	0.876	0.04
17	1:40		5.000			50.00		0.941	
18	1:45		120.000			500.00		0.129	
19	2:05		5.000			50.00		1.103	
20	2:19		10.000			50.00		0.255	
21	2:49		5.000			50.00		0.937	
22	3:00		10.000			50.00		0.039	
23	3:21		5.000			50.00		1.748	
24	3:22		5.000			50.00		0.472	
25	3:36		5.000			50.00		0.960	
26	3:55		5.000			50.00		0.499	
27	4:04		5.000			50.00		1.236	
28	4:41		100.000			500.00		0.012	
29	9:24	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:58		5.000			50.00		0.495	
31	5:19		5.000			50.00		0.207	
32	5:30		5.000			50.00		1.865	
33	5:55		5.000			50.00		0.602	
34	6:37		10.000			50.00		0.155	
35	6:39		5.000			50.00		0.596	
36	7:06		15.000			50.00		0.362	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
37	7:03		5.000			50.00		0.918	
38	7:42		5.000			50.00		0.389	
39	7:57		5.000			50.00		0.388	
40	8:04		10.000			50.00		0.583	
41	7:52		5.000			50.00		0.710	
42	8:36		15.000			50.00		0.116	
43	8:31		5.000			50.00		0.465	
44	8:31		5.000			50.00		0.312	
45	9:26		5.000			50.00		0.746	
46	9:44		5.000			50.00		0.277	
47	9:46		5.000			50.00		0.357	
48	10:01		5.000			50.00		0.483	
49	10:42		5.000			50.00		0.493	
50	10:47		5.000			50.00		0.826	
51	11:02		5.000			50.00		0.477	
52	11:49		15.000			50.00		0.083	
53	12:13		15.000			50.00		0.158	
54	12:20		5.000			50.00		0.321	
55	12:24		15.000			50.00		0.069	
56	16:13		10.000			100.00		0.183	
57	3:58	0.99	5.000	0.25	48.43	50.00	1.213	1.253	0.97
58	11:42	1.00	5.000	0.25	51.59	50.00	0.607	0.588	1.03
59	6:57	1.00	5.000	0.15	51.70	50.00	1.939	1.488	1.03

INTERNAL STANDARD MONITOR

METHOD: WELL FILENAME: CS900515C19 DATE: 05/15/90
SHIFT STD: CS900515C19 TIME: 4:15

COMPOUND	PEAK AREA SAMPLE	PEAK AREA SHIFT STD	%DIFF	P/F
*234 BROMOCHLOROMETHANE (IS)	45613.	49353.	-8.	PASS
*248 1,4-DIFLUOROBENZENE (IS)	179630.	199174.	-10.	PASS
*270 D5-CHLOROBENZENE (IS)	120564.	134111.	-10.	PASS

C/C

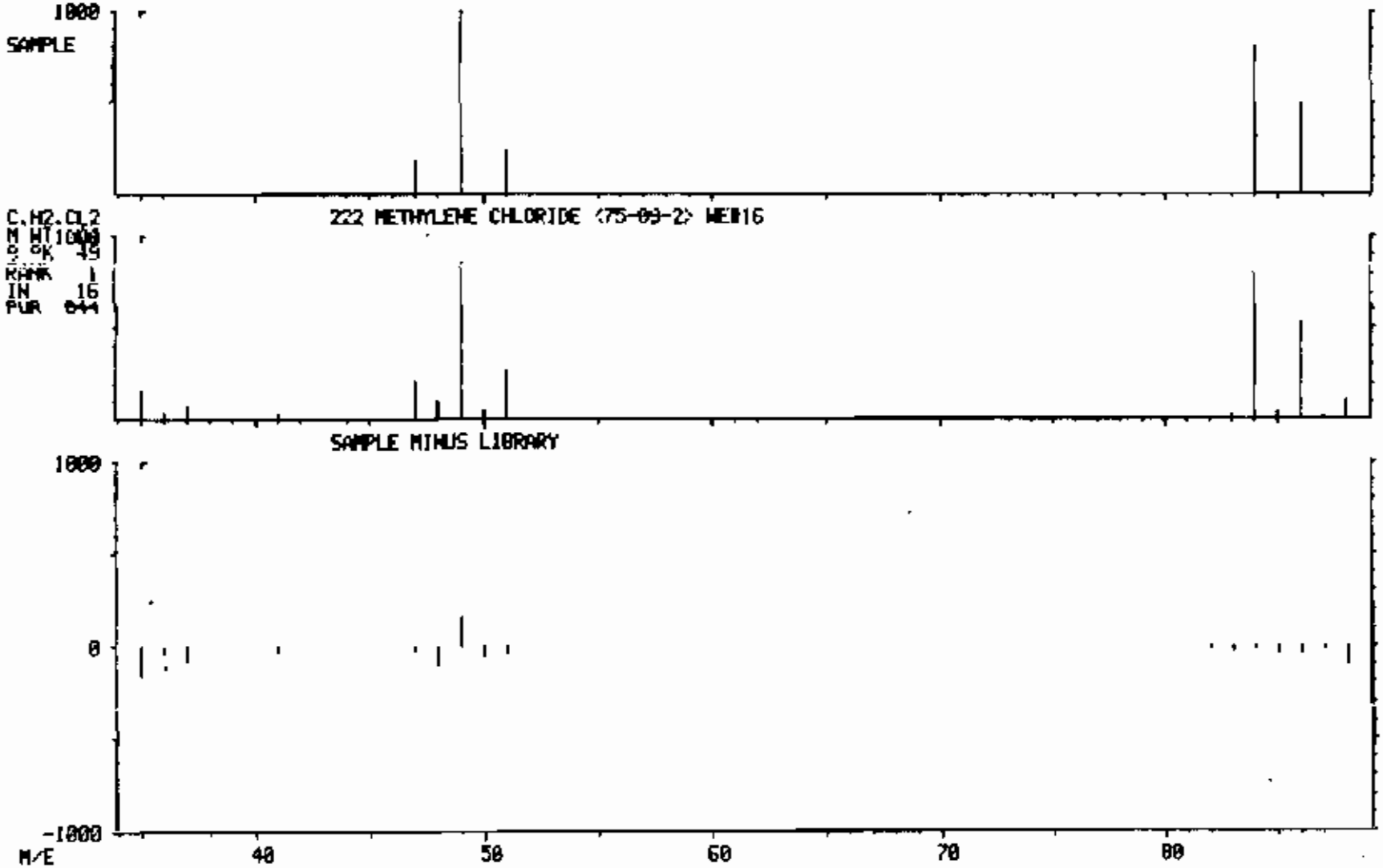
COMPOUND	RET. TIME SAMPLE	RET. TIME SHIFT STD	DIFF	P/F
*234 BROMOCHLOROMETHANE (IS)	3:06	3:07	- 0:01	PASS
*248 1,4-DIFLUOROBENZENE (IS)	4:44	4:45	- 0:01	PASS
*270 D5-CHLOROBENZENE (IS)	9:23	9:24	- 0:01	PASS

C/C

COMPUCHEM LABS

LIBRARY SEARCH
05/15/90 4:15:00 + 1:25
SAMPLE: 5ML VBLK PQ ON 0MA019
ENHANCED (S 15B 2N 0T)

DATA: CB900515C19 @ 115 BASE M/E: 49
RIC: 1141.



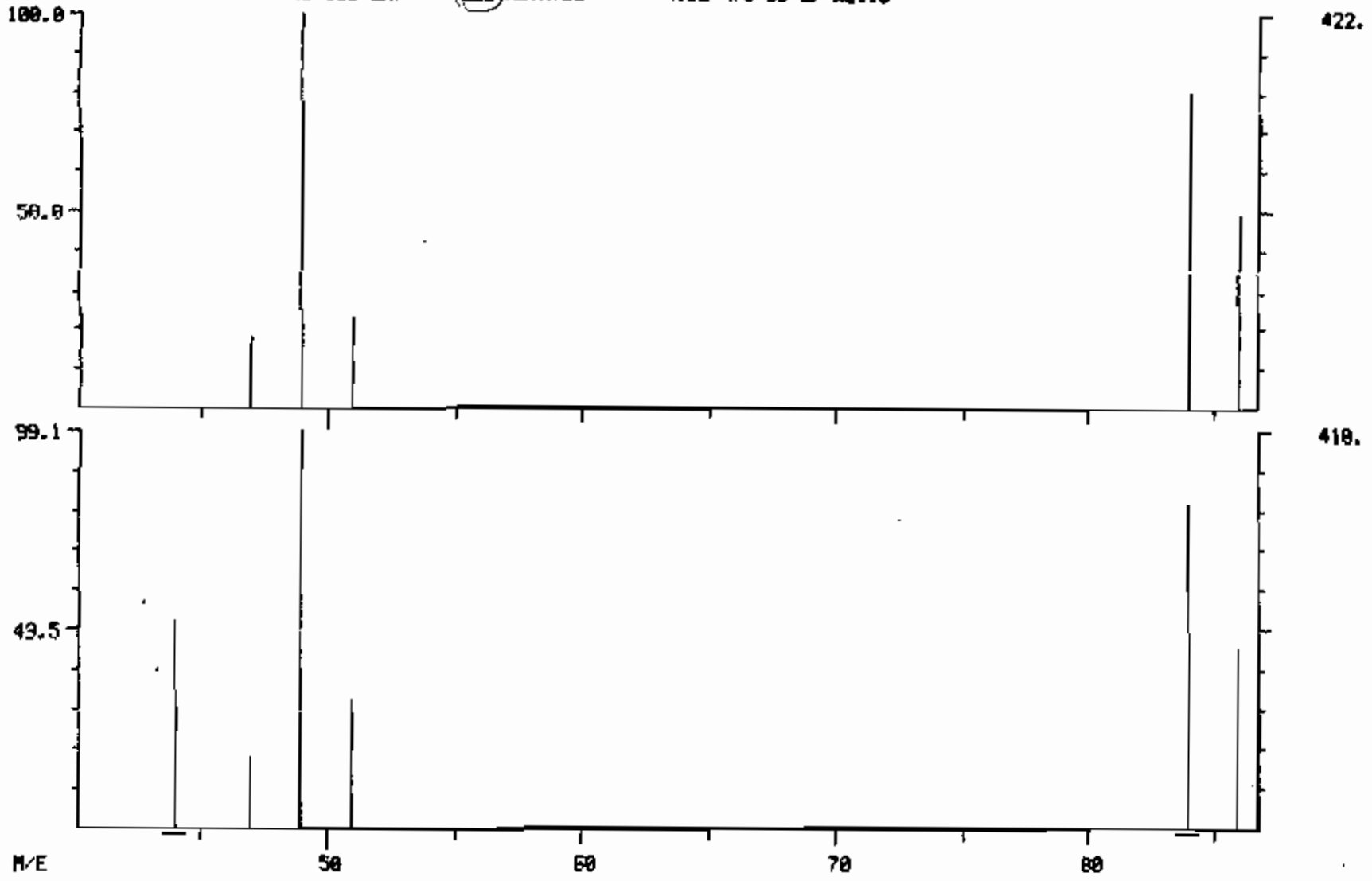
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 4:15:00 + 1:26
SAMPLE: 5ML VBLK PQ ON DA0019
ENHANCED (S 15B 2H)

DATA: CB900515C19 #115 BASE M/E: 49/ 49
RIC: 1141./ 1379.

222 METHYLENE CHLORIDE (75-09-2) WE#16



VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	248	45600	50.0		
221	50		CHLOROMETHANE				BDL	10
231	62		VINYL CHLORIDE				BDL	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE				BDL	10
230	101		TRICHLOROFLUOROMETHANE				BDL	10
201	56		ACROLEIN				BDL	90
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE				BDL	5
285	142		IODOMETHANE				BDL	10
297	117		1,1,1-TRICHLORO-2,2,2-TRIFL				BDL	10
266	85		1,1,2-TRICHLORO-1,2,2-TRIFL				BDL	10
252	43		ACETONE (2-PROPANONE)				BDL	10
248	114	I	1,4-DIFLUOROBENZENE (I8)	379	180000	50.0		
298	76		3-CHLOROPROPENE				BDL	15
222	84		METHYLENE CHLORIDE			2.1	2J	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
202	53		ACRYLONITRILE				BDL	120
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				BDL	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
272	70		CROTONALDEHYDE				BDL	100
270	117	I	D5-CHLOROBENZENE (I8)	751	121000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROPANE				BDL	5
286	174		DIBROMOMETHANE				BDL	5
212	83		BROMODICHLOROMETHANE				BDL	5
210	63		2-CHLOROETHYL VINYL ETHER				BDL	10
218	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE				BDL	15
225	92		TOLUENE				BDL	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
228	97		1,1,2-TRICHLOROETHANE				BDL	5
287	69		ETHYLMETHACRYLATE				BDL	10
224	164		TETRACHLOROETHENE				BDL	5
255	43		2-HEXANONE				BDL	15
208	129		DIBROMOCHLOROMETHANE , 124-4				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5/16/91

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
245	107		1,2-DIBROMOETHANE				BDL	5
207	112		CHLOROBENZENE				BDL	5
273	131		1,1,1,2-TETRACHLOROETHANE				BDL	5
219	106		ETHYLBENZENE				BDL	5
330	106		M,P-XYLENE				BDL	5
239	106		O-XYLENE				BDL	5
251	104		STYRENE				BDL	5
205	173		BROMOFORM				BDL	5
274	88		CIS-1,4-DICHLORO-2-BUTENE				BDL	15
275	110		1,2,3-TRICHLOROPROPANE				BDL	15
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	5
290	53		TRANS-1,4-DICHLORO-2-BUTENE				BDL	15
262	157		1,2-DIBROMO-3-CHLOROPROPANE				BDL	10
258	65	S	D4-1,2-DICHLOROETHANE WE#57			48.4	97. %	
247	99	S	BROMOFLUOROBENZENE			51.6	103. %	
233	98	S	D8-TOLUENE WE#59 SB#2			51.7	103. %	
289	106		XYLENES (TOTAL)				BDL	5
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS:								
	5601.			1378	344600.	303.8	2.	

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-16-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
57	258	D4-1,2-DICHLOROETHANE WE#57	48.4	50.0	97.	76-114	X	
58	247	BROMOFLUOROBENZENE	51.6	50.0	103.	86-115	X	
59	233	D8-TOLUENE WE#59 SS#2	51.7	50.0	103.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ UL}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000.\ (UL)}{5.000\ (ML)} = 1.00 = \frac{5.000\ ML}{\text{QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:}}$$

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-12-90

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKOH

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: VBLKOH

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900518A19

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

% Moisture: not dec. ____ Date Analyzed: 05/18/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	10	U
74-83-9	Bromomethane	5	U
75-01-4	Vinyl Chloride	10	U
75-00-3	Chloroethane	10	U
75-09-2	Methylene Chloride	2	J
67-64-1	Acetone	12	
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	10	U
108-10-1	4-Methyl-2-Pentanone	15	U
591-78-6	2-Hexanone	15	U
127-18-4	Tetrachloroethene	5	U
79-34-5	1,1,2,2-Tetrachloroethane	10	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.

VBLKOH

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: VBLKOH

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: CB900518A19

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

% Moisture: not dec. ____ Date Analyzed: 05/18/90

Column (pack/cap) CAP Dilution Factor: 1.0

Number TICs found: 0

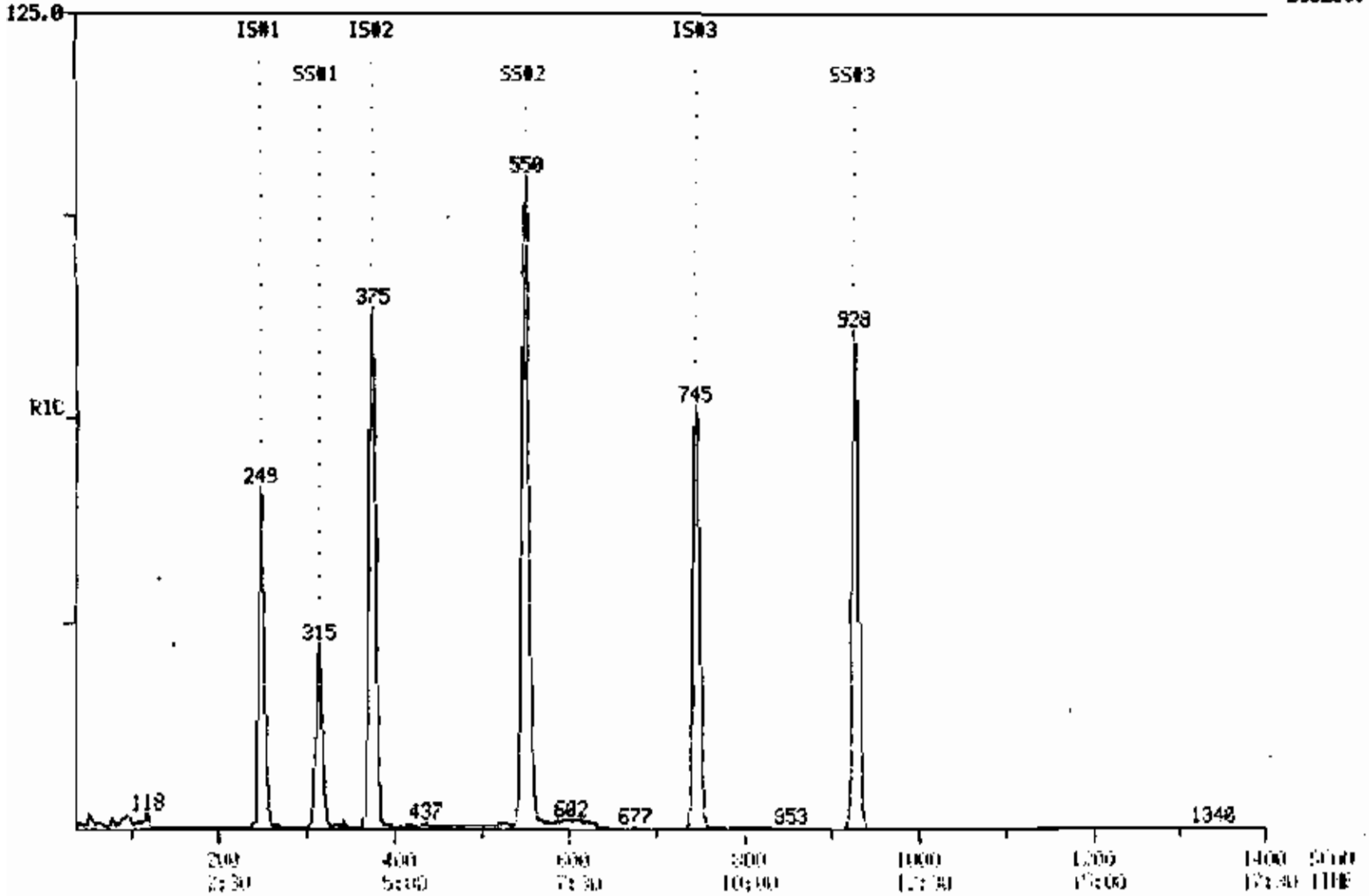
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

COMPUCHEM LABS

RIC
05/10/90 19:30:00
SAMPLE: SWL VBLK 0H 0N #13
CONDS.:

COMPUCHEM DATA: CB900510#19 SCANS 37 TO 1400



NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CB900518A19
DATA: CB900518A19.TI
05/18/90 19:30:00
SAMPLE: 5ML VBLK DH 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> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-3> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	249	3:07	1	1.000	A BB	116898.	50.000 UG/L	17.14
2	50	NOT FOUND							
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	NOT FOUND							
6	101	NOT FOUND							
7	56	NOT FOUND							
8	96	NOT FOUND							
9	76	NOT FOUND							
10	142	NOT FOUND							
11	117	NOT FOUND							
12	85	NOT FOUND							
13	43	96	1:12	1	0.386	A BV	11185.	12.119 UG/L	4.15
14	114	375	4:41	14	1.000	A BB	540335.	50.000 UG/L	17.14
15	76	NOT FOUND							
16	84	118	1:28	1	0.474	A BB	4405.	1.633 UG/L	0.56
17	96	NOT FOUND							
18	53	NOT FOUND							
19	63	NOT FOUND							
20	43	NOT FOUND							
21	96	NOT FOUND							
22	72	NOT FOUND							
23	83	NOT FOUND							
24	97	NOT FOUND							
25	117	NOT FOUND							
26	78	NOT FOUND							
27	62	NOT FOUND							
28	70	NOT FOUND							
29	117	745	9:19	29	1.000	A BB	341607.	50.000 UG/L	17.14
30	130	NOT FOUND							
31	63	NOT FOUND							
32	174	NOT FOUND							
33	83	NOT FOUND							
34	63	NOT FOUND							
35	75	NOT FOUND							
36	43	NOT FOUND							
37	92	NOT FOUND							
38	75	NOT FOUND							
39	97	NOT FOUND							
40	69	NOT FOUND							
41	164	NOT FOUND							

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	NOT FOUND								
43	129	NOT FOUND								
44	107	NOT FOUND								
45	112	NOT FOUND								
46	131	NOT FOUND								
47	106	NOT FOUND								
48	106	NOT FOUND								
49	106	NOT FOUND								
50	104	NOT FOUND								
51	173	NOT FOUND								
52	88	NOT FOUND								
53	110	NOT FOUND								
54	83	NOT FOUND								
55	93	NOT FOUND								
56	157	NOT FOUND								
57	65	315	3:56	1	1.265	A BB	166955.	39.070	UG/L	13.39
58	93	928	11:36	29	1.246	A BB	212718.	43.410	UG/L	14.88
59	98	550	6:52	29	0.738	A BB	939952.	45.559	UG/L	15.62

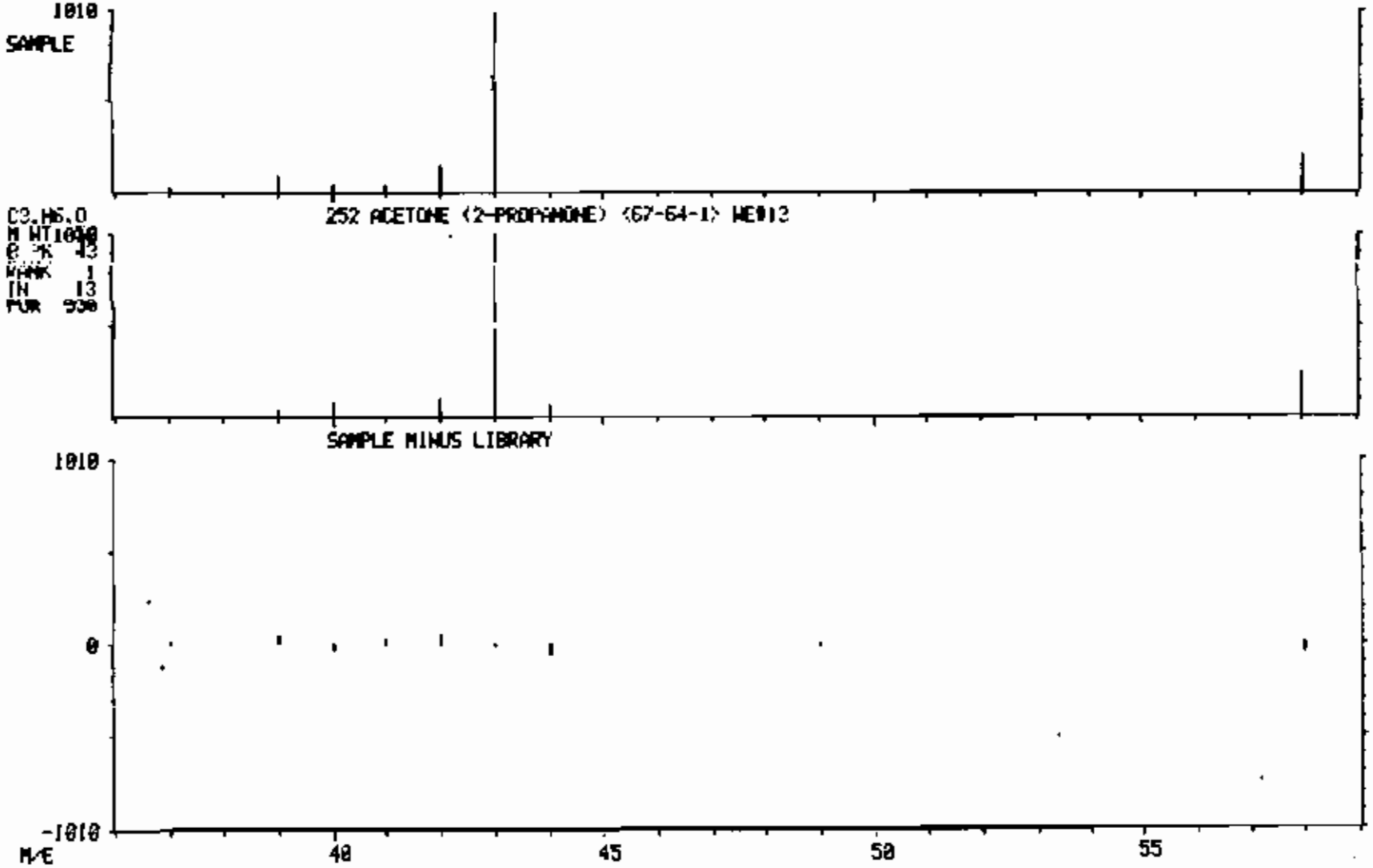
NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:09	1.01	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:31		10.000			50.00		0.485	
3	0:34		10.000			50.00		0.624	
4	0:38		10.000			50.00		1.306	
5	0:42		10.000			50.00		0.899	
6	0:47		10.000			50.00		2.749	
7	1:04		90.000			500.00		0.083	
8	1:04		5.000			50.00		1.407	
9	1:08		5.000			50.00		3.508	
10	1:08		10.000			50.00		4.544	
11	1:08		10.000			50.00		1.383	
12	1:08		10.000			50.00		1.514	
13	1:12	1.00	10.000	0.04	12.12	50.00	0.096	0.395	0.24
14	4:38	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:22		15.000			50.00		0.462	
16	1:28	1.00	5.000	0.09	1.63	50.00	0.038	1.154	0.03
17	1:41		5.000			50.00		1.195	
18	1:46		120.000			500.00		0.156	
19	2:07		5.000			50.00		1.738	
20	2:19		10.000			50.00		0.305	
21	2:49		5.000			50.00		1.171	
22	2:58		10.000			50.00		0.061	
23	3:20		5.000			50.00		2.644	
24	3:21		5.000			50.00		0.589	
25	3:32		5.000			50.00		0.619	
26	3:52		5.000			50.00		0.575	
27	4:01		5.000			50.00		1.975	
28	4:34		100.000			500.00		0.015	
29	9:15	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:52		5.000			50.00		0.461	
31	5:12		5.000			50.00		0.273	
32	5:23		5.000			50.00		2.024	
33	5:48		5.000			50.00		0.701	
34	6:29		10.000			50.00		0.203	
35	6:31		5.000			50.00		0.707	
36	6:58		15.000			50.00		0.533	

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R. FAC	R. FAC(L)	RATIO
37	6:55		5.000			50.00		1.061	
38	7:34		5.000			50.00		0.325	
39	7:46		5.000			50.00		0.218	
40	7:55		10.000			50.00		0.312	
41	7:43		5.000			50.00		0.615	
42	8:27		15.000			50.00		0.128	
43	8:22		5.000			50.00		0.422	
44	8:22		5.000			50.00		0.358	
45	9:17		5.000			50.00		0.685	
46	9:34		5.000			50.00		0.429	
47	9:37		5.000			50.00		0.408	
48	9:52		5.000			50.00		0.578	
49	10:32		5.000			50.00		0.576	
50	10:37		5.000			50.00		1.005	
51	10:52		5.000			50.00		0.250	
52	11:38		15.000			50.00		0.093	
53	12:01		15.000			50.00		0.187	
54	12:10		5.000			50.00		0.347	
55	12:13		15.000			50.00		0.112	
56	16:02		10.000			100.00		0.147	
57	3:54	1.01	5.000	0.29	39.07	50.00	1.402	1.628	0.78
58	11:31	1.01	5.000	0.25	43.41	50.00	0.623	0.717	0.87
59	6:49	1.01	5.000	0.15	49.56	50.00	1.591	1.739	0.91

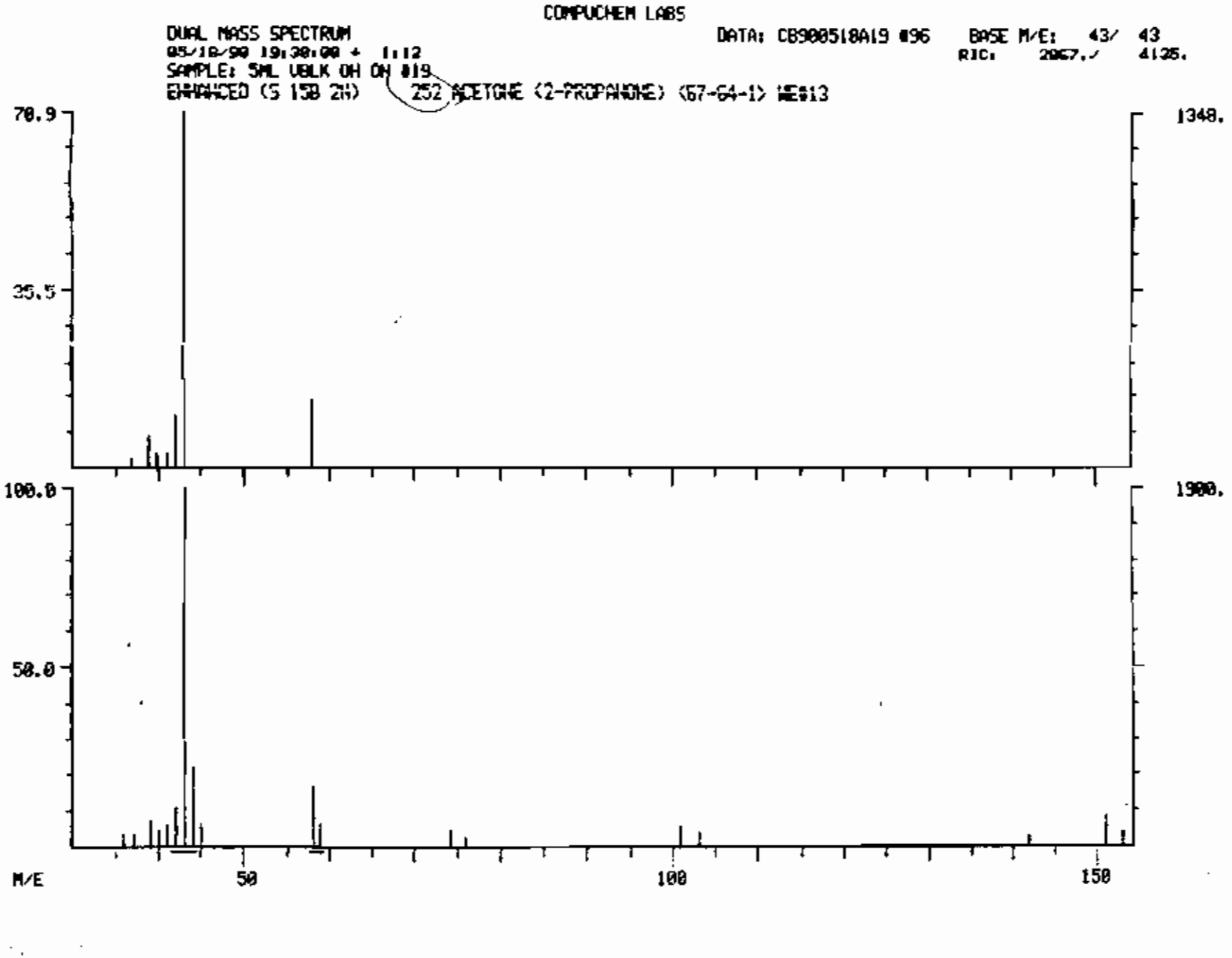
COMPUCHEM LABS

LIBRARY SEARCH
05/10/90 19:30:90 + 1.12
SAMPLE: 5ML VBLK OH ON #19
ENHANCED (S 15B 2N 8T)

DATA: CB900510A19 # 96 BASE M/E: 43
RIC: 2067.

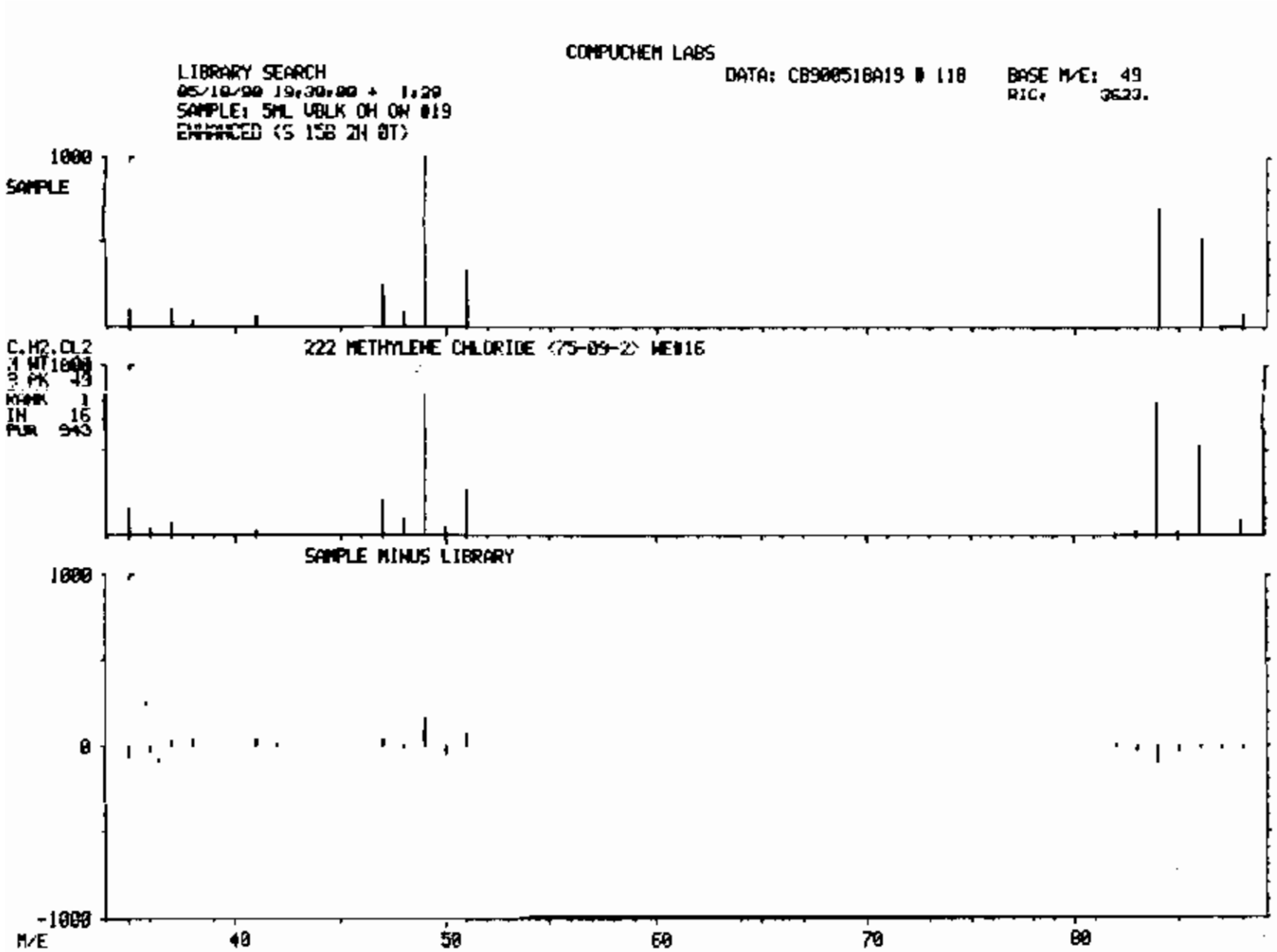


NYDEC RA090 0507 ORGANIC



1321

NYDEC RA090 0507 ORGANIC



1320

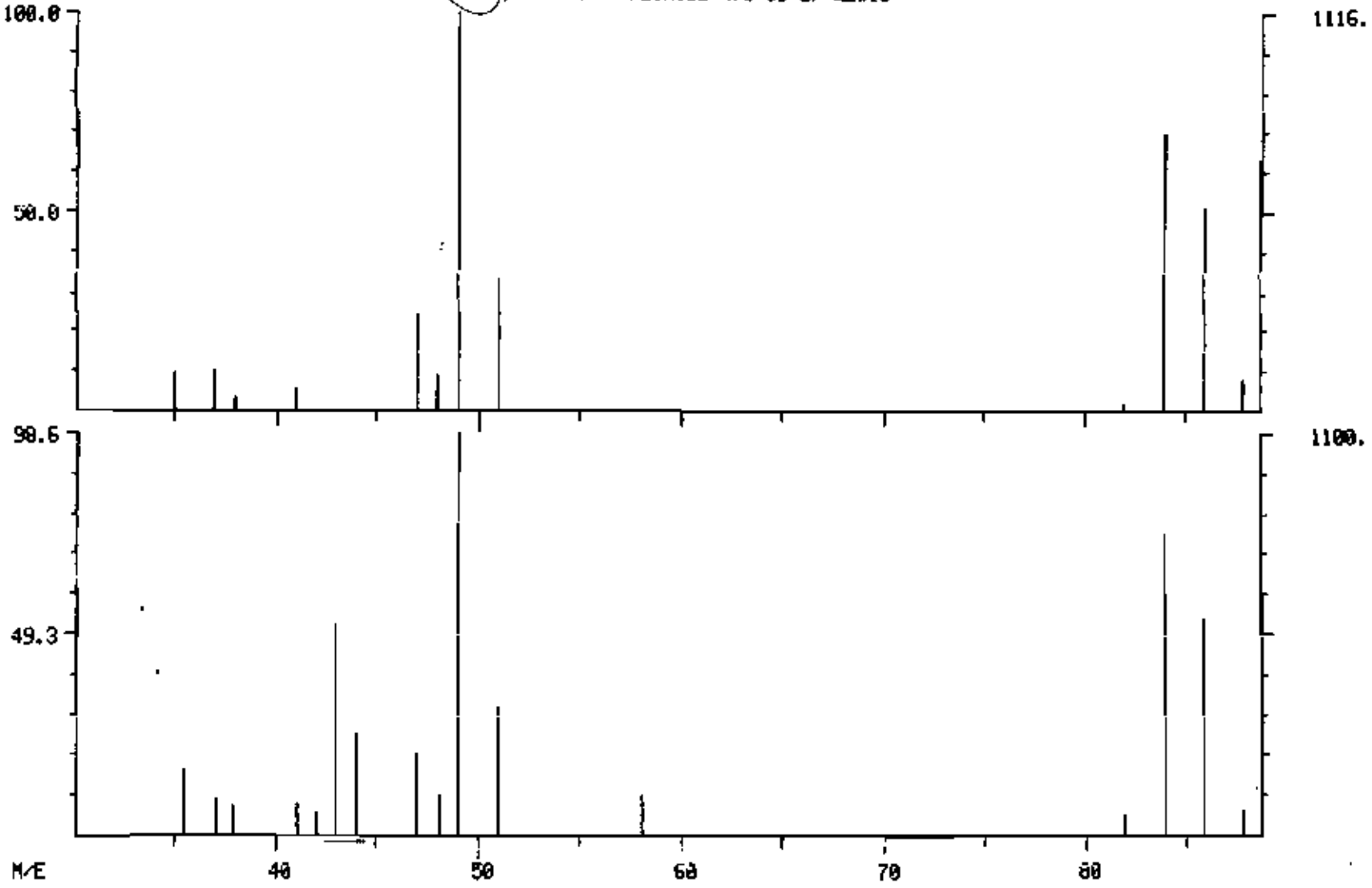
NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/10/90 10:30:00 + 1:20
SAMPLE: 5ML UBLK ON ON #19
ENHANCED (S 150 2N)

DATA: CB900510A19 #110 BASE M/E: 49/ 49
RIC: 3622./ 4799.

222) METHYLENE CHLORIDE (75-09-2) ME#16



NYDEC RA090 0507 ORGANIC

COMPUCHEM # 900518 FILE: CB900518A19 COMPOUND LIST 382 PAGE 1
VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMF #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	249	117000	50.0		
281	50		CHLOROMETHANE				BDL	10
231	62		VINYL CHLORIDE				BDL	10
220	94		BROMOMETHANE				BDL	10
209	64		CHLOROETHANE				BDL	10
230	101		TRICHLOROFLUOROMETHANE				BDL	10
201	56		ACROLEIN				BDL	90
216	96		1,1-DICHLOROETHENE				BDL	5
254	76		CARBON DISULFIDE				BDL	5
285	142		IODOMETHANE				BDL	10
297	117		1,1,1-TRICHLORO-2,2,2-TRIFL				BDL	10
266	85		1,1,2-TRICHLORO-1,2,2-TRIFL				BDL	10
252	43		ACETONE (2-PROPANONE)			12.1	12	10
248	114	I	1,4-DIFLUOROBENZENE (IS)	375	540000	50.0		
296	76		3-CHLOROPROPENE				BDL	15
222	84		METHYLENE CHLORIDE			1.6	2J	5
226	96		TRANS-1,2-DICHLOROETHENE				BDL	5
202	53		ACRYLONITRILE				BDL	120
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				BDL	10
211	83		CHLOROFORM				BDL	5
227	97		1,1,1-TRICHLOROETHANE				BDL	5
206	117		CARBON TETRACHLORIDE				BDL	5
208	78		BENZENE				BDL	5
219	62		1,2-DICHLOROETHANE				BDL	5
272	70		CROTONALDEHYDE				BDL	100
270	117	I	D5-CHLOROBENZENE (IS)	745	342000	50.0		
229	130		TRICHLOROETHENE				BDL	5
217	63		1,2-DICHLOROPROPANE				BDL	5
286	174		DIBROMOMETHANE				BDL	5
212	83		BROMODICHLOROMETHANE				BDL	5
210	63		2-CHLOROETHYL VINYL ETHER				BDL	10
218	75		CIS-1,3-DICHLOROPROPENE				BDL	5
256	43		4-METHYL-2-PENTANONE				BDL	15
225	92		TOLUENE				BDL	5
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	5
228	97		1,1,2-TRICHLOROETHANE				BDL	5
287	69		ETHYLMETHACRYLATE				BDL	10
224	164		TETRACHLOROETHENE				BDL	5
255	43		2-HEXANONE				BDL	15
238	129		DIBROMOCHLOROMETHANE ,124-4				BDL	5

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5.9.90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMF #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
245	107		1,2-DIBROMOETHANE				BDL	5
267	112		CHLOROBENZENE				BDL	5
273	131		1,1,1,2-TETRACHLOROETHANE				BDL	5
219	106		ETHYLBENZENE				BDL	5
300	106		M,P-XYLENE				BDL	5
289	106		O-XYLENE				BDL	5
251	104		STYRENE				BDL	5
305	173		BROMOFORM				BDL	5
274	88		CIS-1,4-DICHLORO-2-BUTENE				BDL	15
275	110		1,2,3-TRICHLOROPROPANE				BDL	15
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	5
290	53		TRANS-1,4-DICHLORO-2-BUTENE				BDL	15
262	157		1,2-DIBROMO-3-CHLOROPROPANE				BDL	10
258	65	S	D4-1,2-DICHLOROETHANE WE#57			39.1	78. %	
247	95	S	BROMOFLUOROBENZENE			43.4	87. %	
233	98	S	D8-TOLUENE WE#59 SS#2			45.6	91. %	
289	106		XYLENES (TOTAL)				BDL	5
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	10
CHECKSUMS:								
	5631.			1369	999000.	291.8		14.

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5-19-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
57	258	D4-1,2-DICHLORDETHANE WE#57	39.1	50.0	78.	76-114	X	
58	247	BROMOFLUOROBENZENE	43.4	50.0	87.	86-115	X	
59	233	D8-TOLUENE WE459 SS42	45.6	50.0	91.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{5000.\ \text{(UL)}} = 1.00 = \frac{5.000\ \text{ML}}{5.000\ \text{(ML)}}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY _____
(GC/MS DATA REVIEWER)

DATE 5.19.92

(3) Matrix Spike Data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA – TIC not required.

(b) Reconstructed ion chromatogram (s) and quantitation report (s) or legible facsimile (GC/MS). Spectra not required.

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800112MS

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337378

Sample wt/vol: 2.0 (g/mL) ML Lab File ID: CN037378C19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. _____ Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	25	U
75-00-3	Chloroethane	26	
75-09-2	Methylene Chloride	29	B
67-64-1	Acetone	25	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
108-05-4	Vinyl Acetate	25	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	Trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	38	U
591-78-6	2-Hexanone	38	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	160	
100-42-5	Styrene	13	U
1330-20-7	Total Xylenes	470	

COMPUCHEM LABS

RIC

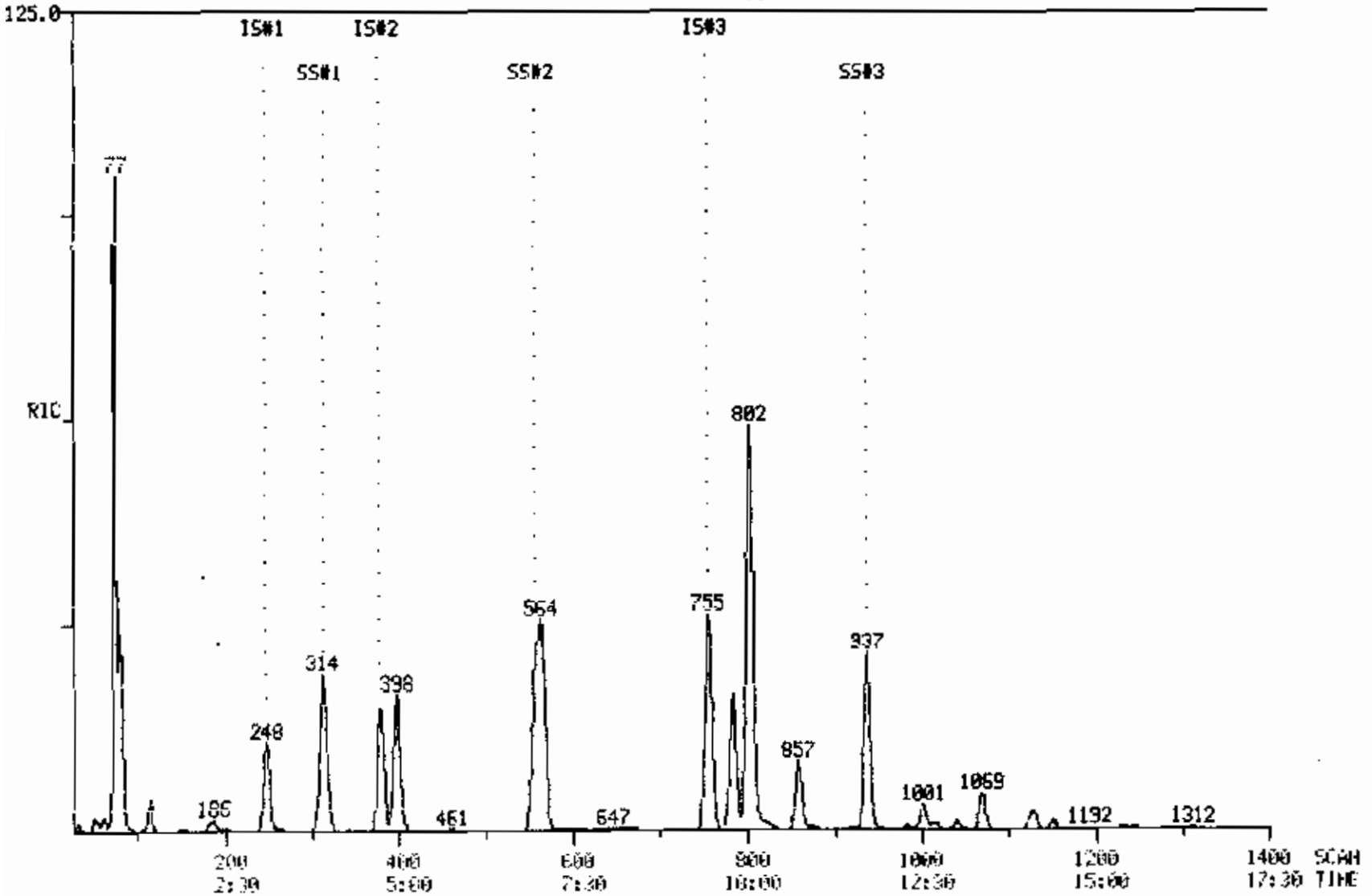
COMPUCHEM DATA: CN0073780C19 SCANS 29 TO 1400

05/16/90 1:51:00

SAMPLE: 2000UL CASE# 20124 CC# 337378 EPA# 73000112 RE MS ON 19

COMDS.:

326400.



HYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN03737BC19
DATA: CN03737BC19.T1
05/16/90 1:51:00
SAMPLE: 2000UL CASE# 20124 CC# 337378 EPA# 73B00112 RE NS ON 19
CONDS. :
SUBMITTED BY: 19 ANALYST: 1171 5-17-90

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 BE#3
59	#233 D8-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT	%TOT
1	128	247	3:05	1	1.000	A BB	47684.	50.000 UG/L	5.84
2	50	NOT FOUND							
3	62	NOT FOUND							
4	94	NOT FOUND							
5	64	52	0:39	1	0.211	A BB	8953.	10.225 UG/L	1.19 ugs
6	101	NOT FOUND							
7	56	NOT FOUND							
8	96	83	1:02	1	0.336	A BB	62467.	39.368 UG/L	4.60 ugs
9	76	NOT FOUND							
10	142	NOT FOUND							
11	117	NOT FOUND							
12	89	NOT FOUND							
13	43	96	1:12	1	0.389	A VB	1387.	4.333 UG/L	0.51 ND
14	114	379	4:44	14	1.000	A BB	189729.	50.000 UG/L	5.84
15	76	NOT FOUND							
16	84	115	1:26	1	0.466	A BB	12882.	11.621 UG/L	1.36 ugs
17	96	NOT FOUND							
18	53	NOT FOUND							
19	63	NOT FOUND							
20	43	186	2:19	14	0.491	A BB	10285.	8.156 UG/L	0.95 ND
21	96	NOT FOUND							
22	72	NOT FOUND							
23	83	NOT FOUND							
24	97	NOT FOUND							
25	117	NOT FOUND							
26	78	313	3:55	14	0.826	A BB	172353.	76.682 UG/L	8.95 ugs
27	62	NOT FOUND							
28	70	NOT FOUND							
29	117	753	9:25	29	1.000	A BB	140464.	50.000 UG/L	5.84
30	130	398	4:58	14	1.050	A BB	94444.	48.331 UG/L	5.64 ugs
31	63	NOT FOUND							
32	174	NOT FOUND							
33	83	NOT FOUND							
34	63	NOT FOUND							
35	75	NOT FOUND							
36	43	568	7:06	29	0.754	A VV	1379.	1.185 UG/L	0.14 ND
37	92	564	7:03	29	0.749	A BB	194314.	35.700 UG/L	4.50 ugs
38	75	NOT FOUND							
39	97	NOT FOUND							
40	69	NOT FOUND							
41	164	NOT FOUND							

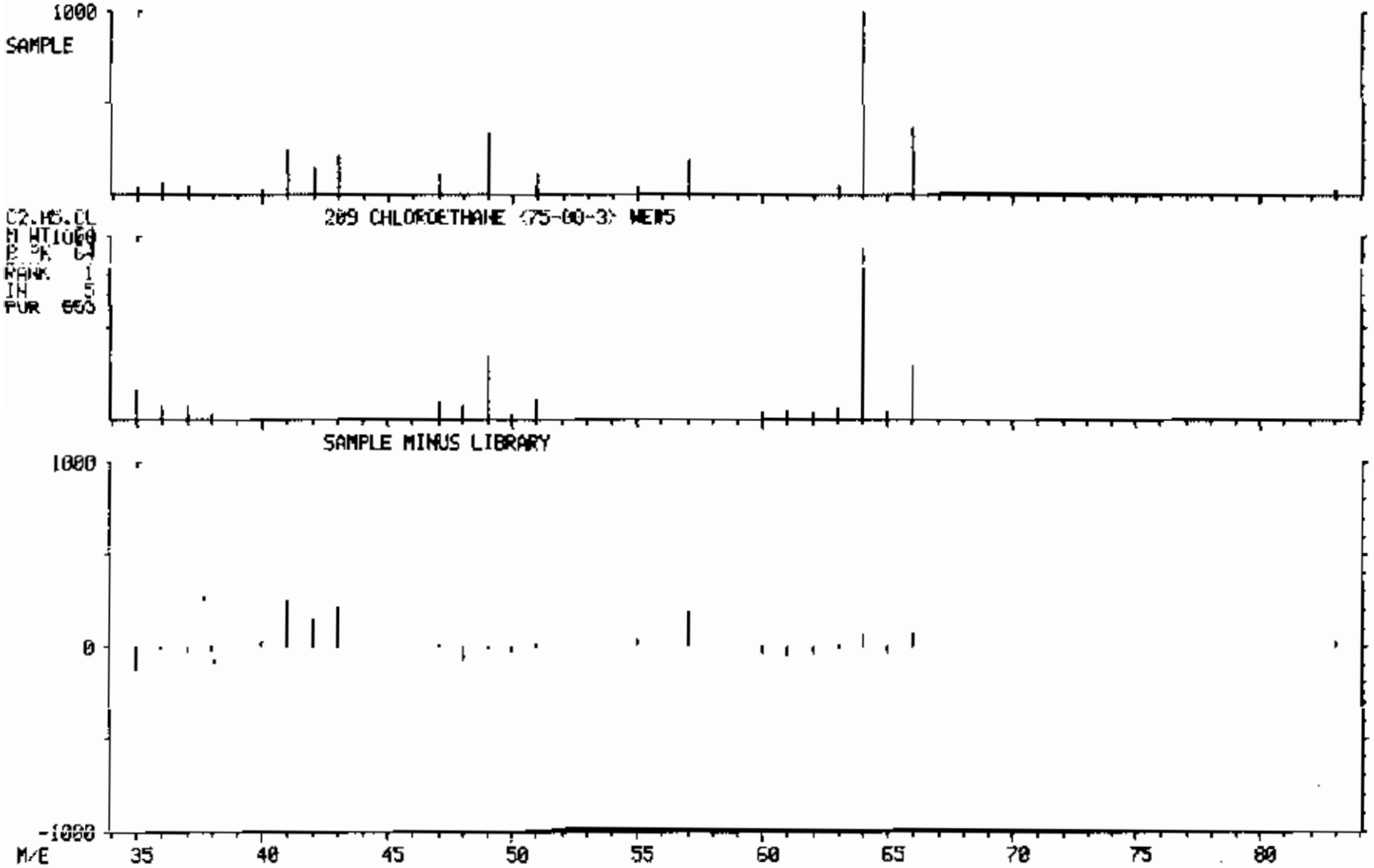
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	NOT FOUND								
43	129	NOT FOUND								
44	107	NOT FOUND								
45	112	756	9:27	29	1.004	A BB	133954.	57.520	UG/L	6.71
46	131	NOT FOUND								
47	106	783	9:47	29	1.040	A BV	71838.	65.453	UG/L	7.64
48	106	802	10:01	29	1.065	A VB	239932.	153.639	UG/L	17.94
49	106	857	10:43	29	1.138	A BV	46924.	32.066	UG/L	3.74
50	104	NOT FOUND								
51	173	NOT FOUND								
52	88	NOT FOUND								
53	110	NOT FOUND								
54	83	NOT FOUND								
55	53	NOT FOUND								
56	157	NOT FOUND								
57	65	316	3:57	1	1.279	A BB	61726.	49.137	UG/L	5.74
58	95	937	11:43	29	1.244	A BB	79247.	47.318	UG/L	5.52
59	98	557	6:58	29	0.740	A BB	197909.	45.982	UG/L	5.37

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	0.99	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27		10.000			50.00		0.400	
3	0:33		10.000			50.00		0.503	
4	0:37		10.000			50.00		0.813	
5	0:40	0.98	10.000	0.02	10.22	50.00	0.183	0.918	0.20
6	0:46		10.000			50.00		3.951	
7	1:04		90.000			500.00		0.095	
8	1:03	0.99	5.000	0.07	39.37	50.00	1.310	1.664	0.79
9	1:07		5.000			50.00		4.561	
10	1:07		10.000			50.00		4.572	
11	1:06		10.000			50.00		1.658	
12	1:07		10.000			50.00		1.641	
13	1:12	1.00	10.000	0.04	4.33	50.00	0.034	0.336	0.09
14	4:43	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:21		15.000			50.00		0.491	
16	1:28	0.98	5.000	0.09	11.62	50.00	0.270	1.162	0.23
17	1:40		5.000			50.00		1.149	
18	1:45		120.000			500.00		0.154	
19	2:07		5.000			50.00		1.329	
20	2:20	0.99	10.000	0.05	8.16	50.00	0.054	0.332	0.16
21	2:49		5.000			50.00		1.128	
22	3:01		10.000			50.00		0.067	
23	3:21		5.000			50.00		2.050	
24	3:22		5.000			50.00		0.546	
25	3:34		5.000			50.00		0.634	
26	3:55	1.00	5.000	0.17	76.68	50.00	0.908	0.592	1.53
27	4:04		5.000			50.00		1.415	
28	4:38		100.000			500.00		0.016	
29	9:22	1.00	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:58	1.00	5.000	0.21	48.33	50.00	0.498	0.515	0.97
31	5:18		5.000			50.00		0.228	
32	5:29		5.000			50.00		2.312	
33	5:55		5.000			50.00		0.767	
34	6:37		10.000			50.00		0.198	
35	6:38		5.000			50.00		0.698	
36	7:04	1.00	15.000	0.05	1.18	50.00	0.010	0.414	0.02

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
37	7:01	1.00	5.000	0.15	55.70	50.00	1.099	0.986	1.11
38	7:41		5.000			50.00		0.427	
39	7:55		5.000			50.00		0.450	
40	8:04		10.000			50.00		0.821	
41	7:51		5.000			50.00		0.814	
42	8:34		15.000			50.00		0.200	
43	8:29		5.000			50.00		0.749	
44	8:29		5.000			50.00		0.560	
45	9:25	1.00	5.000	0.20	57.52	50.00	0.954	0.829	1.15
46	9:43		5.000			50.00		0.348	
47	9:45	1.00	5.000	0.21	65.45	50.00	0.511	0.391	1.31
48	10:00	1.00	5.000	0.21	153.64	50.00	1.708	0.556	3.07
49	10:41	1.00	5.000	0.23	32.07	50.00	0.334	0.521	0.64
50	10:46		5.000			50.00		0.961	
51	11:01		5.000			50.00		0.618	
52	11:48		15.000			50.00		0.108	
53	12:12		15.000			50.00		0.195	
54	12:18		5.000			50.00		0.384	
55	12:23		15.000			50.00		0.095	
56	16:12		10.000			100.00		0.245	
57	3:57	1.00	5.000	0.26	49.14	50.00	1.294	1.317	0.98
58	11:40	1.00	5.000	0.25	47.32	50.00	0.564	0.596	0.95
59	6:55	1.01	5.000	0.15	45.98	50.00	1.409	1.532	0.92

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037378C19 # 52 BASE M/E: 64
05/16/90 1:51:00 + 0:39 RIC: 3436.
SAMPLE: 2000UL CASE# 20124 CC# 337378 EPA# 73000112 RE MS ON 19
ENHANCED (5 150 2N 0T)

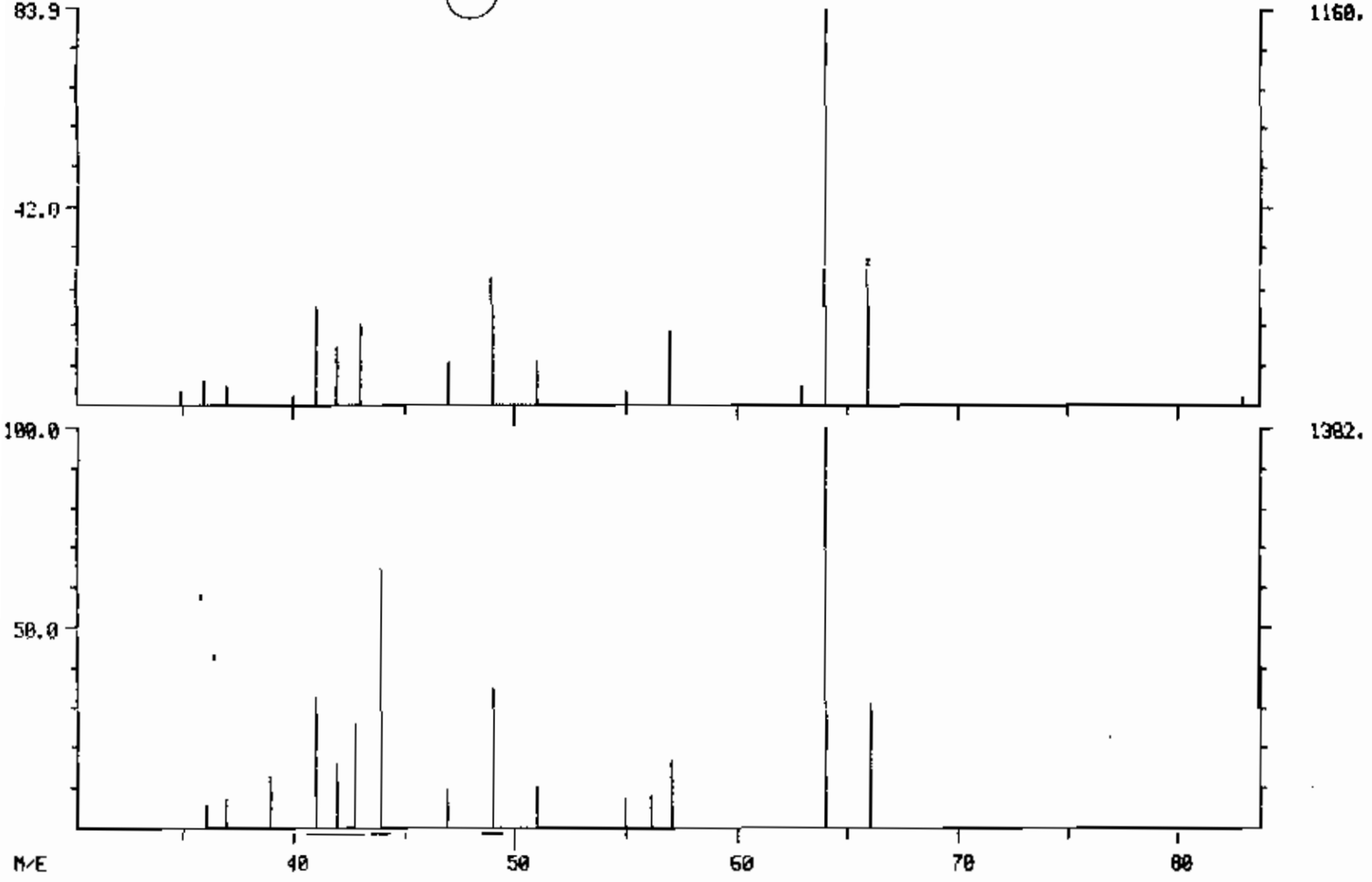


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:51:00 + 0:39
SAMPLE: 2000UL CASE# 20124 CC# 337370 EPA# 73800112 RE MS ON 19
ENHANCED (5 150 2N)

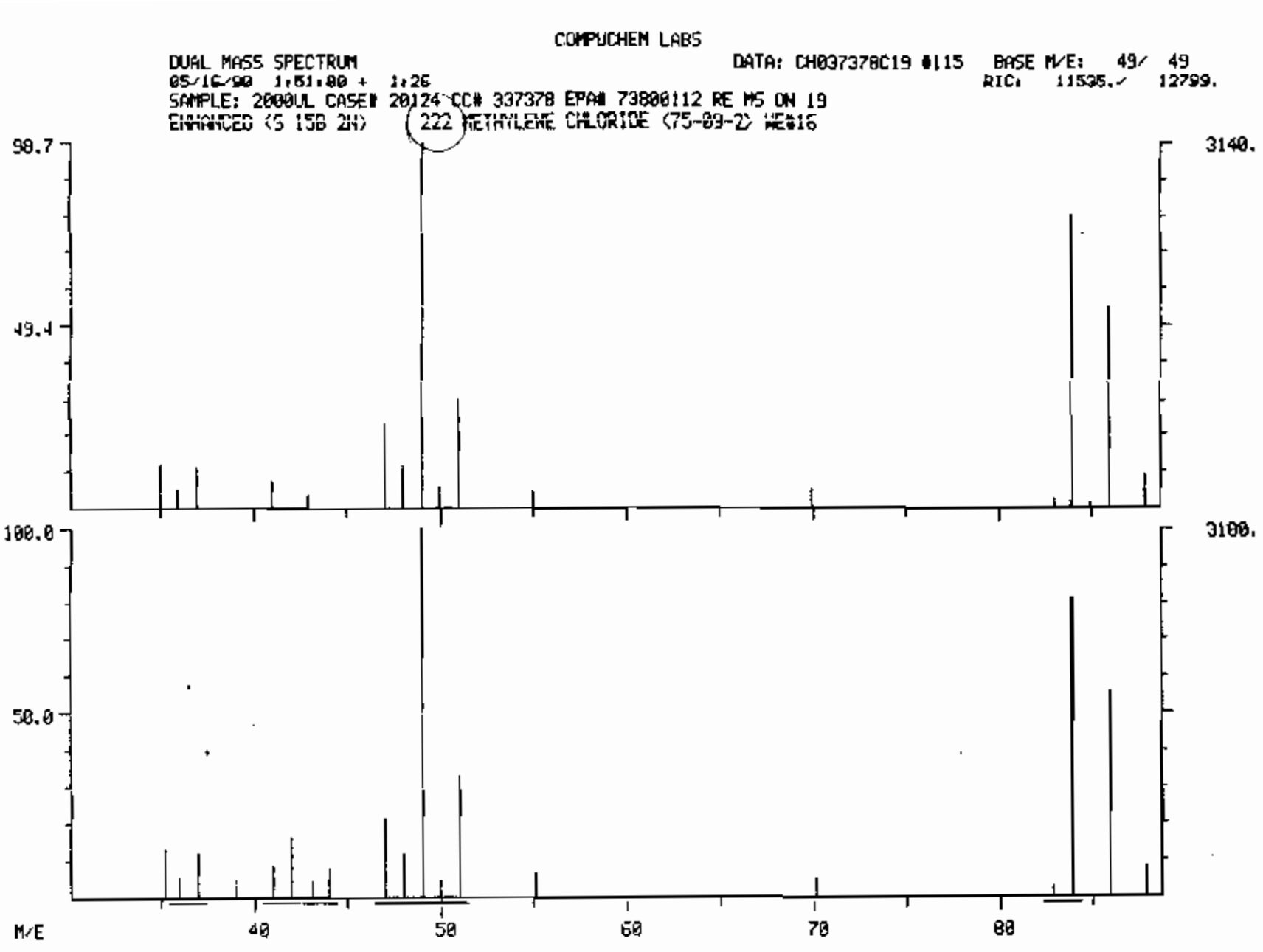
DATA: CN037370C19 #52 BASE M/E: 64/ 64
RIC: 3435./ 8207.

203 CHLOROETHANE (75-00-3) WE#5



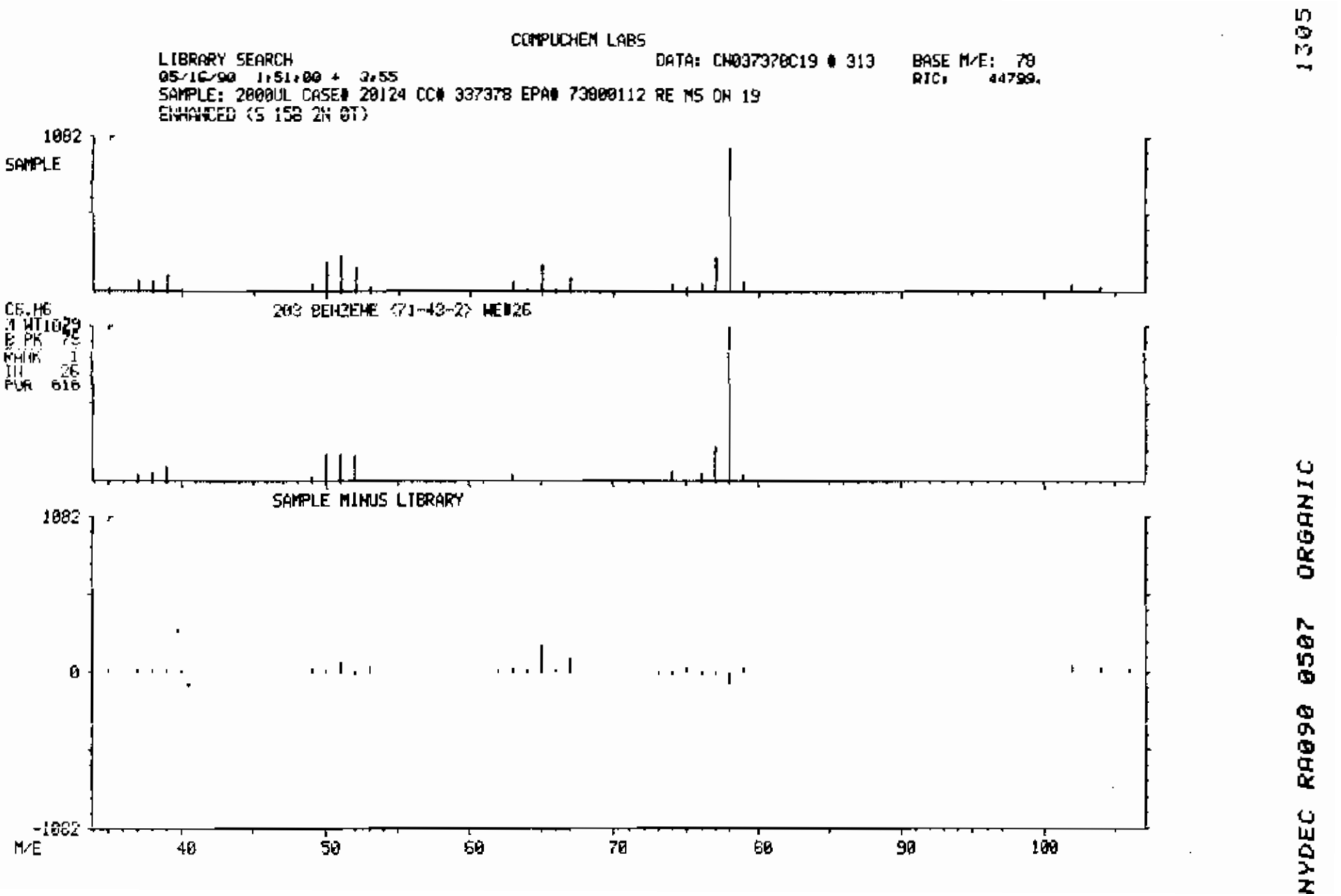
1307

HYDEC RA090 0507 ORGANIC



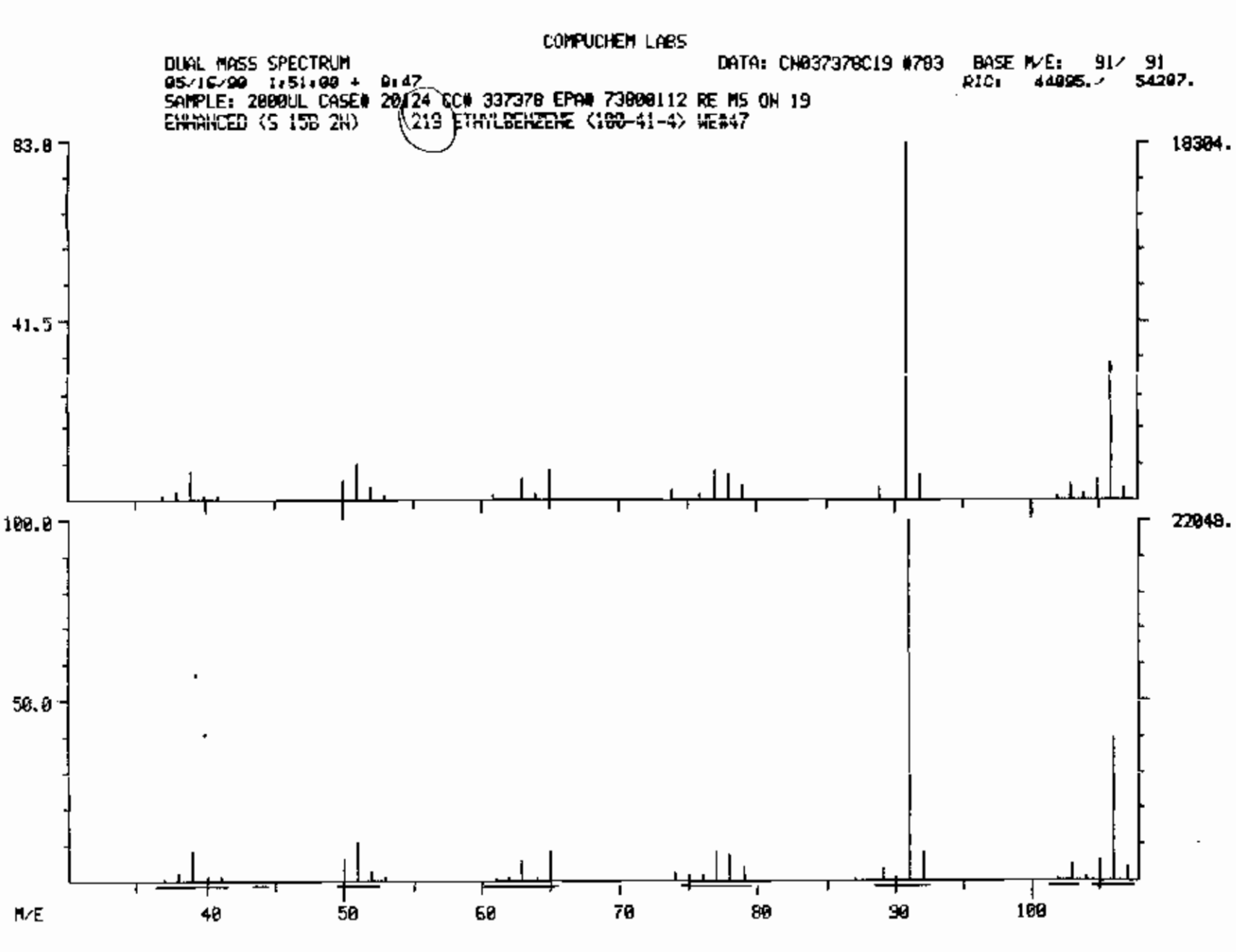
1306

HYDEC RA090 0507 ORGANIC



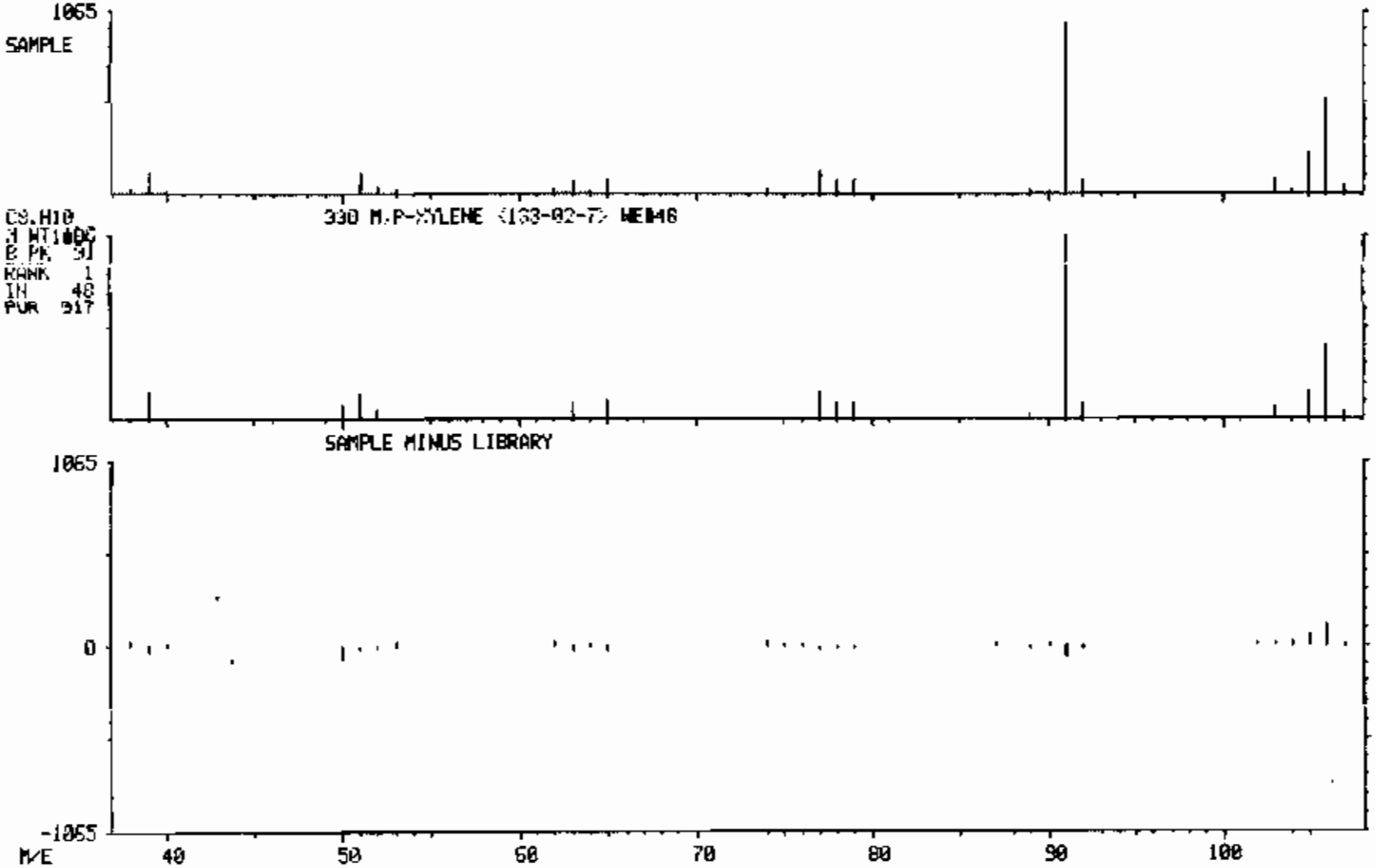
1305

NYDEC RA090 0507 ORGANIC



COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037378C19 # 002 BASE M/E: 91
05/16/90 1:51:00 + 10:01 RIC: 132951.
SAMPLE: 2000UL CASE# 20124 CC# 337378 EPA# 73000112 RE MS ON 19
ENHANCED (S 15B 2N 0T)

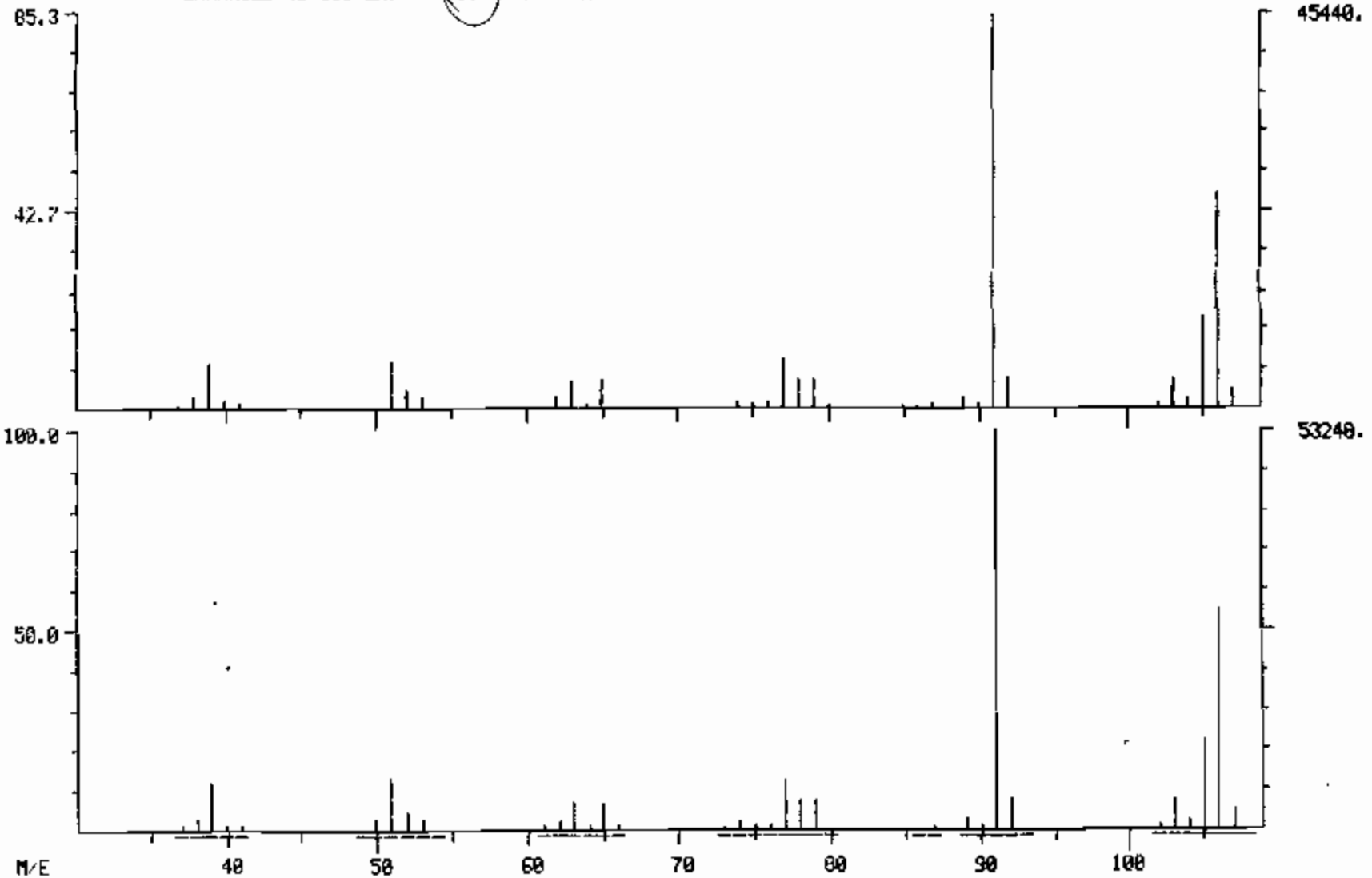


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:51:00 + 10:01
SAMPLE: 2000UL CASE# 20124 GC# 337378 EPA# 73000112 RE MS ON 19
ENHANCED (S 15B 2N)

DATA: CN037378C19 0002 BASE M/E: 91/ 91
RIC: 13491./ 160757.

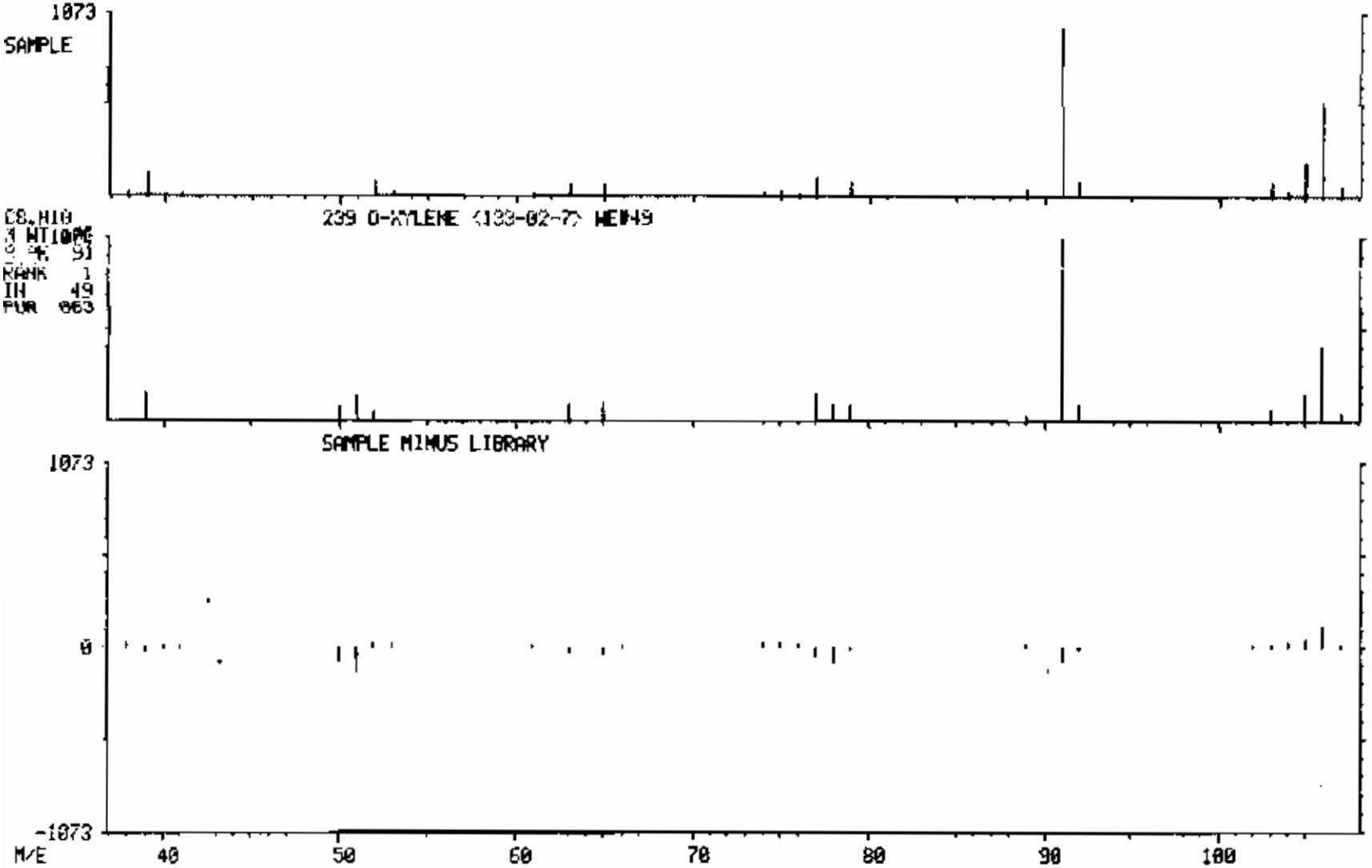
330 M,P-XYLENE (133-02-7) WE#48



NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH
05/16/90 1:51:00 + 10:43
DATA: CN037378C19 # 857
BASE M/E: 91
RIC: 20697.
SAMPLE: 2000UL CASE# 20124 CC# 337378 EPA# 73000112 RE MS ON 19
ENHANCED (5 15B 2N 0T)

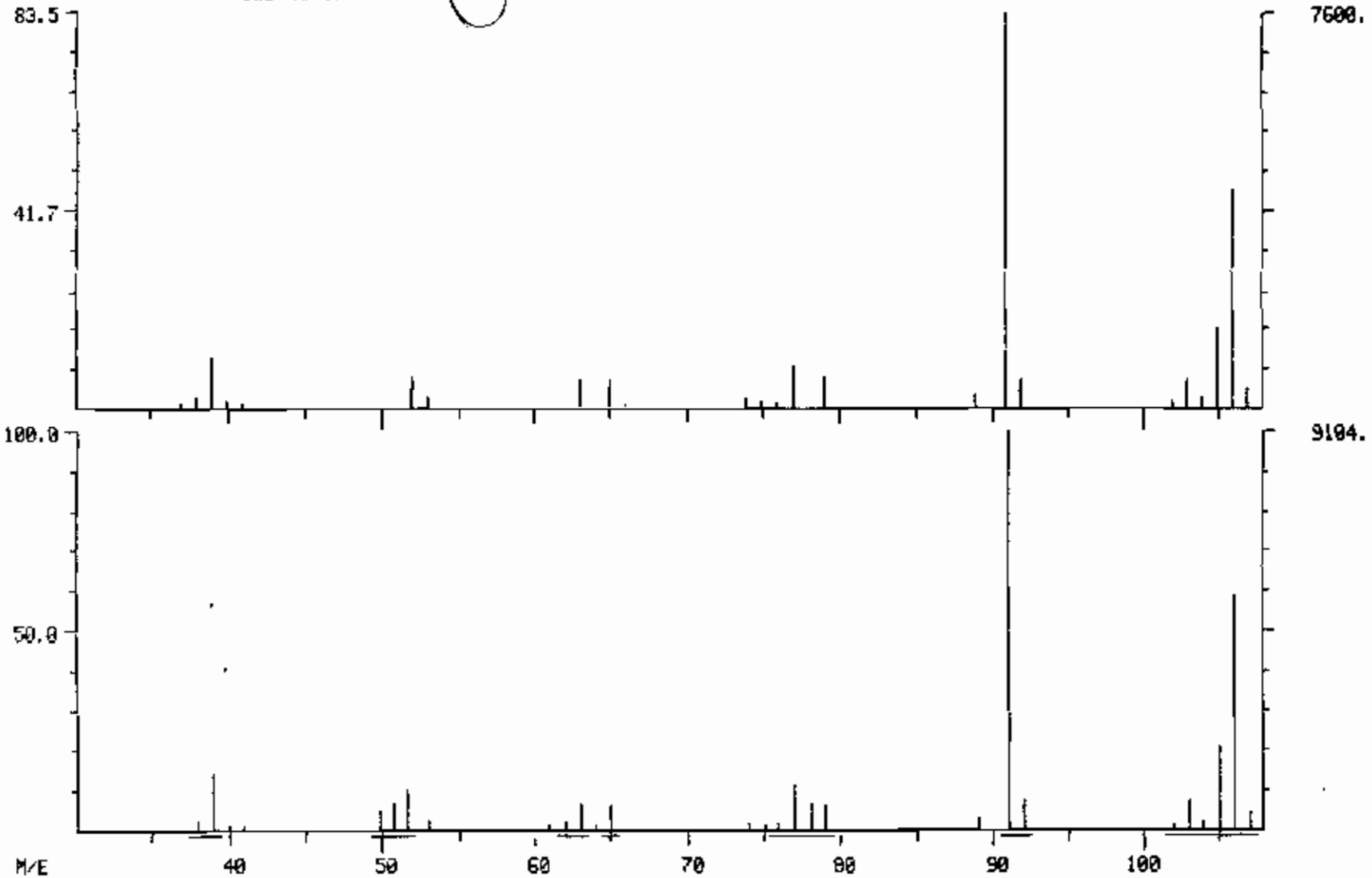


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 1:51:00 + 10:43
SAMPLE: 2000UL CASE# 20124 CC# 337378 EPA# 73000112 RE MS ON 19
ENHANCED (S 15B 2N)

DATA: CN037378C19 #857 BASE M/E: 91 91
RIC: 20703. 26629.

239 O-XYLENE (133-02-7) WE#49



1300

HYDEC RA090 0507 ORGANIC

Lab Instructions:

Receipt Date: Case#: 20124 SAS#

CompuChem#: 337378

GC/MS; VOA; WATER; ~~EPA SOW 2/88~~ TCL 3rd Ed. 8240

Sample Prep Code---000
Instrument Code----~~412289~~
Compound List------~~493457~~
Surrogate Std------394
Internal Std-------036

SDG# EPA ID# 73800112 BK KS 507/607

GC/MS Analysis WELL1

Amount Purged: [ ] 5.0 mL or [ ] Dilution 2000 uL / 5.0 mL

Internal Standard Volume Added 5 uL
Surrogate Standard Volume Added 5 uL
BFB Filename: BF900515A19
Blank Filename: CB900515A19
Standard Filename: CT900515A19
Sample Filename: CN037378C19

RECEIVED
MAY 17 1990

Analyst(s) Injection: [illegible] Work-up [illegible]

GC/MS Review

Condition Codes: DA

Entry Codes: OK,EA,ES,SM,JS,SL,SH,,JA,DA

Non-entry Codes: IM,IL,SW,CT,CS,VC,VO,UP PC,NR,IF,LA,DI,OT,SF,SI CO,RN,DW

Extraneous Peak Search Results:

Number of Peaks Found: 16

Disposition

[✓] Complete

[ ] Reinject Neat

[ ] Dilute

_____ uL / 5 mL

Quality Assurance Notice(s):

Number of Notices Required: 1

Comments: 54/337837

GC/MS Review [illegible] Date 5/17/90 Auditor _____ Date __/__/__

Report Integration Total # of Injections 1

Final Reportable Package(s): CN - 019 /

QA Comments:

Initials _____ Date __/__/__

Final Review Initials _____ Date __/__/__

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMF #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
254	128	I	BROMOCHLOROMETHANE (IS)	247	47700	50.0		
231	50		CHLOROMETHANE				BDL	25
231	62		VINYL CHLORIDE				BDL	25
220	94		BROMOMETHANE				BDL	25
209	64		CHLOROETHANE			10.2	26	25
230	101		TRICHLOROFLUOROMETHANE				BDL	25
201	56		ACROLEIN				BDL	220
216	96		1,1-DICHLOROETHENE			09.4	98	12
254	76		CARBON DISULFIDE				BDL	12
225	142		IODOMETHANE				BDL	25
297	117		1,1,1-TRICHLORO-2,2,2-TRIFL				BDL	25
266	85		1,1,2-TRICHLORO-1,2,2-TRIFL				BDL	25
252	43		ACETONE (2-PROPANONE)			~~1.3~~	~~110~~BDL	25
248	114	I	1,4-DIFLUOROBENZENE (IS)	379	190000	50.0		
298	76		3-CHLOROPROPENE				BDL	38
222	84		METHYLENE CHLORIDE			11.6	29 B	12
226	96		TRANS-1,2-DICHLOROETHENE				BDL	12
202	53		ACRYLONITRILE				BDL	300
214	63		1,1-DICHLOROETHANE				BDL	12
257	43		VINYL ACETATE			~~8.2~~	~~208~~BDL	25
227	96		CIS-1,2-DICHLOROETHENE				BDL	12
253	72		2-BUTANONE				BDL	25
211	83		CHLOROFORM				BDL	12
227	97		1,1,1-TRICHLOROETHANE				BDL	12
206	117		CARBON TETRACHLORIDE				BDL	12
203	78		BENZENE			76.7	190	12
215	62		1,2-DICHLOROETHANE				BDL	12
272	70		CROTONALDEHYDE				BDL	250
270	117	I	D5-CHLORODENZENE (IS)	753	140000	50.0		
229	130		TRICHLOROETHENE			~~48.3~~	120	12
217	63		1,2-DICHLOROPROPANE				BDL	12
286	174		DIBROMOMETHANE				BDL	12
212	83		BROMODICHLOROMETHANE				BDL	12
210	63		2-CHLOROETHYL VINYL ETHER				BDL	25
218	75		CIS-1,3-DICHLOROPROPENE				BDL	12
256	43		4-METHYL-2-PENTANONE			~~1.8~~	~~BDL~~ BJ	38
225	92		TOLUENE			55.7	140	12
250	75		TRANS-1,3-DICHLOROPROPENE				BDL	12
228	97		1,1,2-TRICHLOROETHANE				BDL	12
267	69		ETHYLMETHACRYLATE				BDL	25
224	164		TETRACHLOROETHENE				BDL	12
255	43		2-HEXANONE				BDL	38
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL	12

CORRECTED/REVIEWED BY SDWagner
(GC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
245	107		1,2-DIBROMOETHANE				BDL	12
207	112		CHLOROBENZENE			57.5	140	12
273	131		1,1,1,2-TETRACHLOROETHANE				BDL	12
219	106		ETHYLBENZENE			65.5	160	12
339	106		M,P-XYLENE			154.0	380	12
215	106		O-XYLENE			32.1	80	12
251	104		STYRENE				BDL	12
205	173		BROMOFORM				BDL	12
274	88		CIS-1,4-DICHLORO-2-BUTENE				BDL	38
275	110		1,2,3-TRICHLOROPROPANE				BDL	38
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	12
290	53		TRANS-1,4-DICHLORO-2-BUTENE				BDL	38
262	157		1,2-DIBROMO-3-CHLOROPROPANE				BDL	25
258	65	S	D4-1,2-DICHLOROETHANE WE#57			49.1	98.%	
247	95	S	BROMOFLUOROBENZENE			47.3	95.%	
233	98	S	D8-TOLUENE WE#59 GS#2			46.0	92.%	
289	106		XYLENES (TOTAL)			186.0	460	12
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	25
CHECKSUMS:								
	5631.			1379	377700.	1043.1	1857.	

CORRECTED/REVIEWED BY SDWagner
(GC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	F
57	258	D4-1,2-DICHLOROETHANE WE#57	49.1	50.0	98.	76-114	X	
58	247	BROMOFLUOROBENZENE	47.3	50.0	95.	86-115	X	
59	233	D8-TOLUENE WE#59 SS#2	46.0	50.0	92.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{2000.\ (\text{UL})} = 2.50 = \frac{5.000\ \text{ML}}{2.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY SDWagner
(GC/MS DATA REVIEWER)

DATE 5-17-90

QUALITY ASSURANCE NOTICE

CC = 557379

BLANK ID = CB900515B19

CASE = 20124

CompuChem offers various types of analytical services, one of which is characterized as "Commercial Target Compound List (TCL)". This service exactly mimics the analytical requirements of the EPA's Contract Laboratory Program (CLP).

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The only exception to our policy is made when the volatile analysis or extraction holding times are in jeopardy of being exceeded, then the CLP requirements must be met.

Analysis of the Method Blank (and /or Instrument Blank) associated with the above sample indicated the following common laboratory solvents or phthalates were present at the indicated levels:

common laboratory artifact	blank concentration	units
methylene chloride	3	µg/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

This notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact is greater that ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comparable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance

(4) Matrix Spike Duplicate Data

(a) Tabulated results (Form I VOA) of nonspiked TCL compounds. Form I VOA - TIC not required.

(b) Reconstructed ion chromatogram (s) and quantitation report (s) or legible facsimile (GC/MS). Spectra not required.

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

73800112MSD

Lab Name: COMPUCHEM LABS Contract: 255501

Lab Code: COMPU Case No.: 20124 SAS No.: _____ SDG No.: 01

Matrix: (soil/water) WATER Lab Sample ID: 337379

Sample wt/vol: 2.0 (g/mL) ML Lab File ID: CN037379C19

Level: (low/med) LOW Date Received: 05/08/90

% Moisture: not dec. ____ Date Analyzed: 05/16/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
74-87-3	Chloromethane	25	U
74-83-9	Bromomethane	13	U
75-01-4	Vinyl Chloride	25	U
75-00-3	Chloroethane	27	
75-09-2	Methylene Chloride	36	B
67-64-1	Acetone	25	U
75-15-0	Carbon Disulfide	13	U
75-35-4	1,1-Dichloroethene	13	U
75-34-3	1,1-Dichloroethane	13	U
540-59-0	1,2-Dichloroethene (total)	13	U
67-66-3	Chloroform	13	U
107-06-2	1,2-Dichloroethane	13	U
78-93-3	2-Butanone	25	U
71-55-6	1,1,1-Trichloroethane	13	U
56-23-5	Carbon Tetrachloride	13	U
108-05-4	Vinyl Acetate	25	U
75-27-4	Bromodichloromethane	13	U
78-87-5	1,2-Dichloropropane	13	U
10061-01-5	cis-1,3-Dichloropropene	13	U
79-01-6	Trichloroethene	13	U
124-48-1	Dibromochloromethane	13	U
79-00-5	1,1,2-Trichloroethane	13	U
71-43-2	Benzene	13	U
10061-02-6	Trans-1,3-Dichloropropene	13	U
75-25-2	Bromoform	25	U
108-10-1	4-Methyl-2-Pentanone	38	U
591-78-6	2-Hexanone	38	U
127-18-4	Tetrachloroethene	13	U
79-34-5	1,1,2,2-Tetrachloroethane	25	U
108-88-3	Toluene	13	U
108-90-7	Chlorobenzene	13	U
100-41-4	Ethylbenzene	150	
100-42-5	Styrene	13	U
1330-20-7	Total Xylenes	430	

COMPUCHEM LABS

RIC
05/16/90 2:37:00
COMPUCHEM DATA: CN0373792C19 SCANS 30 TO 1400
SAMPLE: 2000UL CASE# 20124 CC# 337373 EPA# 73000112 RE MSD CH 19
CONDS.1
375040.

125.0

IS#1 IS#2 IS#3
SS#1 SS#2 SS#3

77
167
250
316
400
463
564
755
803
858
937
1002
1068
1247

RIC

200 2:30
400 5:00
600 7:30
800 10:00
1000 12:30
1200 15:00
1400 17:30 SCAN TIME

NYDEC RA090 0507 ORGANIC

QUANTITATION REPORT FILE: CN037379C19
DATA: CN037379C19.TI
05/16/90 2:37:00
SAMPLE: 2000UL/CASE# 20124/CC# 337379/EPA# 73800112 BNL MSD ON 19
CONDS.:
SUBMITTED BY: 19 ANALYST: 1171 5-17-90

AMOUNT=AREA * REF.AMNT/(REF.AREA)* RESP.FACT)
RESP. FAC. FROM LIBRARY ENTRY

NO	NAME
1	*234 BROMOCHLOROMETHANE (IS) <75-97-5> WE#1
2	221 CHLOROMETHANE <74-87-3> WE#2
3	231 VINYL CHLORIDE <75-01-4> WE#3
4	220 BROMOMETHANE <78-83-9> WE#4
5	209 CHLOROETHANE <75-00-3> WE#5
6	230 TRICHLOROFLUOROMETHANE <75-69-4> WE#6
7	201 ACROLEIN <107-02-8> WE#7
8	216 1,1-DICHLOROETHENE <75-35-4> WE#8
9	254 CARBON DISULFIDE <75-15-0> WE#9
10	285 IODOMETHANE <74-88-4> WE#10
11	297 1,1,1-TRICHLORO-2,2,2-TRIFLUOROETHANE <354-58-5> WE#11
12	266 1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE <76-13-1> WE#12
13	252 ACETONE (2-PROPANONE) <67-64-1> WE#13
14	*248 1,4-DIFLUOROBENZENE (IS) <540-36-3> WE#14
15	298 3-CHLOROPROPENE <107-05-1> WE#15
16	222 METHYLENE CHLORIDE <75-09-2> WE#16
17	226 TRANS-1,2-DICHLOROETHENE <156-60-5> WE#17
18	202 ACRYLONITRILE <107-13-1> WE#18
19	214 1,1-DICHLOROETHANE <75-34-3> WE#19
20	257 VINYL ACETATE <108-05-4> WE#20
21	237 CIS-1,2-DICHLOROETHENE <156-59-2> WE#21
22	253 2-BUTANONE <78-93-3> WE#22
23	211 CHLOROFORM <67-66-2> WE#23
24	227 1,1,1-TRICHLOROETHANE <71-55-6> WE#24
25	206 CARBON TETRACHLORIDE <56-23-5> WE#25
26	203 BENZENE <71-43-2> WE#26
27	215 1,2-DICHLOROETHANE <107-06-2> WE#27
28	272 CROTONALDEHYDE <4170-30-3> WE#28
29	*270 D5-CHLOROBENZENE (IS) <XXX-XX-X> WE#29
30	229 TRICHLOROETHENE <79-01-6> WE#30
31	217 1,2-DICHLOROPROPANE <78-87-5> WE#31
32	286 DIBROMOMETHANE <74-95-3> WE#32
33	212 BROMODICHLOROMETHANE <75-27-4> WE#33
34	210 2-CHLOROETHYL VINYL ETHER <110-75-8> WE#34
35	218 CIS-1,3-DICHLOROPROPENE <10061-1-5> WE#35
36	256 4-METHYL-2-PENTANONE <108-01-1> WE#36
37	225 TOLUENE <108-88-3> WE#37
38	250 TRANS-1,3-DICHLOROPROPENE <10061-02-6> WE#38
39	228 1,1,2-TRICHLOROETHANE <79-00-5> WE#39
40	287 ETHYLMETHACRYLATE <96-18-4> WE#40
41	224 TETRACHLOROETHENE <127-18-4> WE#41
42	255 2-HEXANONE <591-78-6> WE#42
43	208 DIBROMOCHLOROMETHANE ,124-48-1> WE#43
44	245 1,2-DIBROMOETHANE <1060-93-4> WE#44
45	207 CHLOROBENZENE <108-90-7> WE#45
46	273 1,1,1,2-TETRACHLOROETHANE <630-20-6> WE#46

NO	NAME
47	219 ETHYLBENZENE <100-41-4> WE#47
48	330 M,P-XYLENE <133-02-7> WE#48
49	239 O-XYLENE <133-02-7> WE#49
50	251 STYRENE <100-42-5> WE#50
51	205 BROMOFORM <75-25-2> WE#51
52	274 CIS-1,4-DICHLORO-2-BUTENE <764-71-0> WE#52
53	275 1,2,3-TRICHLOROPROPANE <96-18-4> WE#53
54	223 1,1,2,2-TETRACHLOROETHANE <79-34-5> WE#54
55	290 TRANS-1,4-DICHLORO-2-BUTENE <110-57-6> WE#55
56	262 1,2-DIBROMO-3-CHLOROPROPANE <96-12-8> WE#56
57	#258 D4-1,2-DICHLOROETHANE WE#57 SS#1
58	#247 BROMOFLUOROBENZENE <460-00-4> WE#58 SS#3
59	#233 DB-TOLUENE WE#59 SS#2

NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
1	128	249	3:07	1	1.000	A BB	30980.	50.000	UG/L	5.82
2	50	NOT FOUND								
3	62	NOT FOUND								
4	94	NOT FOUND								
5	64	52	0:39	1	0.209	A BB	9892.	10.566	UG/L	1.23 yes
6	101	NOT FOUND								
7	56	77	0:58	1	0.309	A BB	166.	1.721	UG/L	0.20 NO
8	96	83	1:02	1	0.333	A BB	69812.	41.152	UG/L	4.79 yes
9	76	NOT FOUND								
10	142	NOT FOUND								
11	117	NOT FOUND								
12	85	NOT FOUND								
13	43	94	1:10	1	0.378	A BV	1136.	3.319	UG/L	0.39 NO
14	114	381	4:46	14	1.000	A BB	206319.	50.000	UG/L	5.82
15	76	NOT FOUND								
16	84	116	1:27	1	0.466	A BB	17202.	14.515	UG/L	1.69 yes
17	96	NOT FOUND								
18	53	NOT FOUND								
19	63	NOT FOUND								
20	43	187	2:20	14	0.491	A BB	11554.	8.425	UG/L	0.98 NO
21	96	NOT FOUND								
22	72	NOT FOUND								
23	83	NOT FOUND								
24	97	NOT FOUND								
25	117	NOT FOUND								
26	78	315	3:56	14	0.827	A BB	202594.	82.889	UG/L	9.64 yes
27	62	NOT FOUND								
28	70	NOT FOUND								
29	117	754	9:25	29	1.000	A BB	146132.	50.000	UG/L	5.82
30	130	400	5:00	14	1.050	A BB	101036.	47.547	UG/L	5.53 yes
31	63	NOT FOUND								
32	174	NOT FOUND								
33	83	NOT FOUND								
34	63	NOT FOUND								
35	75	NOT FOUND								
36	43	569	7:07	29	0.755	A VV	2193.	1.811	UG/L	0.21 NO
37	92	866	7:04	29	0.751	A BB	169460.	58.795	UG/L	6.84 yes
38	75	NOT FOUND								
39	97	NOT FOUND								
40	69	NOT FOUND								
41	164	NOT FOUND								

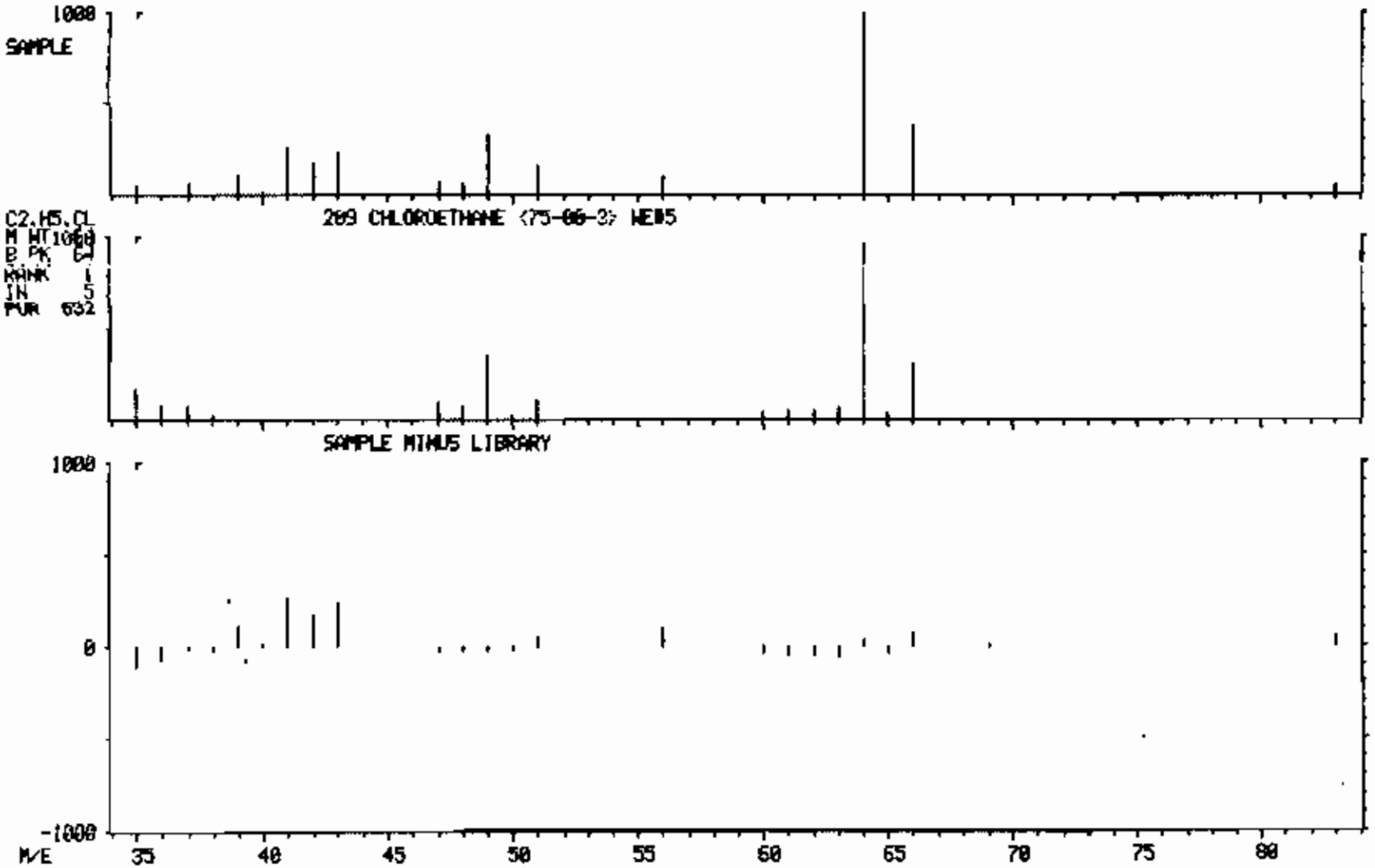
NO	M/E	SCAN	TIME	REF	RRT	METH	AREA(HGHT)	AMOUNT		%TOT
42	43	NOT FOUND								
43	129	NOT FOUND								
44	107	NOT FOUND								
45	112	757	9:28	29	1.004	A BB	134823.	55.648	UG/L	6.47 ugs
46	131	NOT FOUND								
47	106	783	9:47	29	1.038	A BV	68427.	59.927	UG/L	6.97 ugs
48	106	803	10:02	29	1.065	A VB	231826.	142.691	UG/L	16.60 ugs
49	106	858	10:43	29	1.138	A BV	44619.	29.309	UG/L	3.41 ugs
50	104	NOT FOUND								
51	173	NOT FOUND								
52	88	NOT FOUND								
53	110	NOT FOUND								
54	83	NOT FOUND								
55	53	NOT FOUND								
56	157	NOT FOUND								
57	65	318	3:58	1	1.277	A BB	72988.	54.346	UG/L	6.32
58	95	937	11:40	29	1.240	A BB	84037.	48.232	UG/L	5.61
59	98	558	6:58	29	0.740	A BB	218416.	46.778	UG/L	5.67

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
1	3:07	1.00	10.000	0.10	50.00	50.00	1.000	1.000	1.00
2	0:27		10.000			50.00		0.400	
3	0:33		10.000			50.00		0.503	
4	0:37		10.000			50.00		0.813	
5	0:40	0.98	10.000	0.02	10.57	50.00	0.194	0.918	0.21
6	0:46		10.000			50.00		3.951	
7	1:04	0.91	90.000	0.00	1.72	500.00	0.000	0.095	0.00
8	1:03	0.99	5.000	0.07	41.15	50.00	1.049	1.664	0.82
9	1:07		5.000			50.00		4.561	
10	1:07		10.000			50.00		4.572	
11	1:06		10.000			50.00		1.658	
12	1:07		10.000			50.00		1.641	
13	1:12	0.98	10.000	0.04	3.32	50.00	0.022	0.336	0.07
14	4:43	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
15	1:21		15.000			50.00		0.491	
16	1:28	0.99	5.000	0.09	14.52	50.00	0.337	1.162	0.29
17	1:40		5.000			50.00		1.149	
18	1:45		120.000			500.00		0.154	
19	2:07		5.000			50.00		1.329	
20	2:20	1.00	10.000	0.05	8.43	50.00	0.056	0.332	0.17
21	2:49		5.000			50.00		1.128	
22	3:01		10.000			50.00		0.067	
23	3:21		5.000			50.00		2.050	
24	3:22		5.000			50.00		0.546	
25	3:34		5.000			50.00		0.634	
26	3:55	1.00	5.000	0.17	82.89	50.00	0.982	0.392	1.66
27	4:04		5.000			50.00		1.415	
28	4:38		100.000			500.00		0.016	
29	9:22	1.01	5.000	0.20	50.00	50.00	1.000	1.000	1.00
30	4:58	1.01	5.000	0.21	47.55	50.00	0.490	0.519	0.95
31	5:18		5.000			50.00		0.228	
32	5:29		5.000			50.00		2.312	
33	5:55		5.000			50.00		0.767	
34	6:37		10.000			50.00		0.198	
35	6:38		5.000			50.00		0.698	
36	7:04	1.01	15.000	0.05	1.81	50.00	0.015	0.414	0.04

NO	RET(L)	RATIO	RRT(L)	RATIO	AMNT	AMNT(L)	R.FAC	R.FAC(L)	RATIO
37	7:01	1.01	5.000	0.15	58.79	50.00	1.160	0.986	1.18
38	7:41		5.000			50.00		0.427	
39	7:55		5.000			50.00		0.450	
40	8:04		10.000			50.00		0.821	
41	7:51		5.000			50.00		0.814	
42	8:34		15.000			50.00		0.200	
43	8:29		5.000			50.00		0.749	
44	8:29		5.000			50.00		0.560	
45	9:25	1.01	5.000	0.20	55.65	50.00	0.923	0.829	1.11
46	9:43		5.000			50.00		0.348	
47	9:45	1.00	5.000	0.21	59.93	50.00	0.468	0.391	1.20
48	10:00	1.00	5.000	0.21	142.69	50.00	1.586	0.556	2.85
49	10:41	1.00	5.000	0.23	29.31	50.00	0.309	0.521	0.59
50	10:46		5.000			50.00		0.961	
51	11:01		5.000			50.00		0.618	
52	11:48		15.000			50.00		0.108	
53	12:12		15.000			50.00		0.195	
54	12:18		5.000			50.00		0.384	
55	12:23		15.000			50.00		0.095	
56	16:12		10.000			100.00		0.245	
57	3:57	1.01	5.000	0.26	54.35	50.00	1.432	1.317	1.09
58	11:40	1.00	5.000	0.25	48.23	50.00	0.575	0.596	0.96
59	6:55	1.01	5.000	0.15	48.78	50.00	1.495	1.532	0.98

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037379C19 @ 52 BASE M/E: 64
05/16/90 2:37:00 + 0:39 RIC: 3919.
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD ON 19
ENHANCED (S 15B 2H 0T)

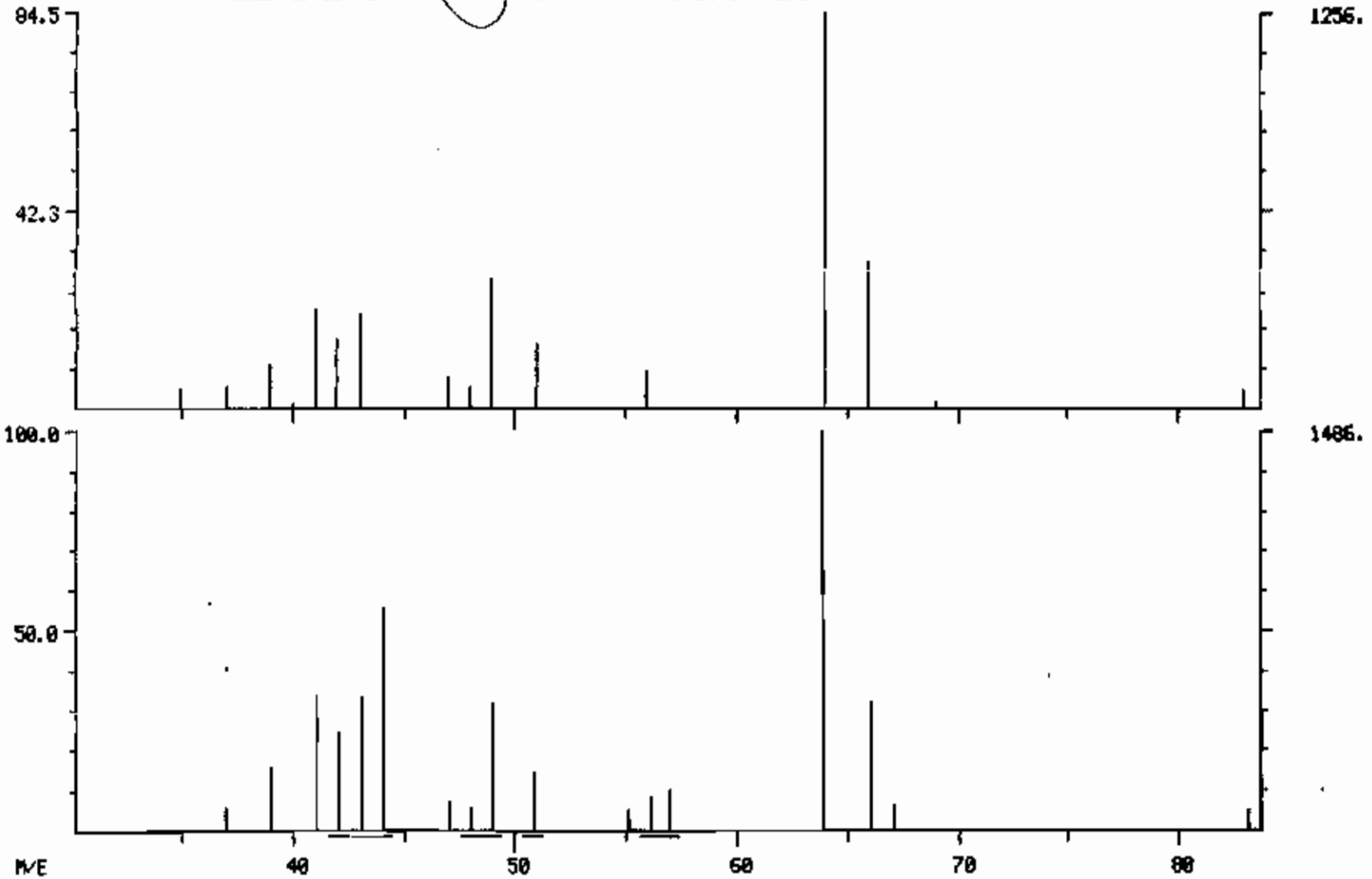


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 2:27:00 + 0:39
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD ON 19
ENHANCED (S 15B 2N)

DATA: CN037379C19 #52 BASE M/E: 64 / 64
RIC: 2919. / 5079.

(289 CHLOROETHANE (75-00-3) WE#5

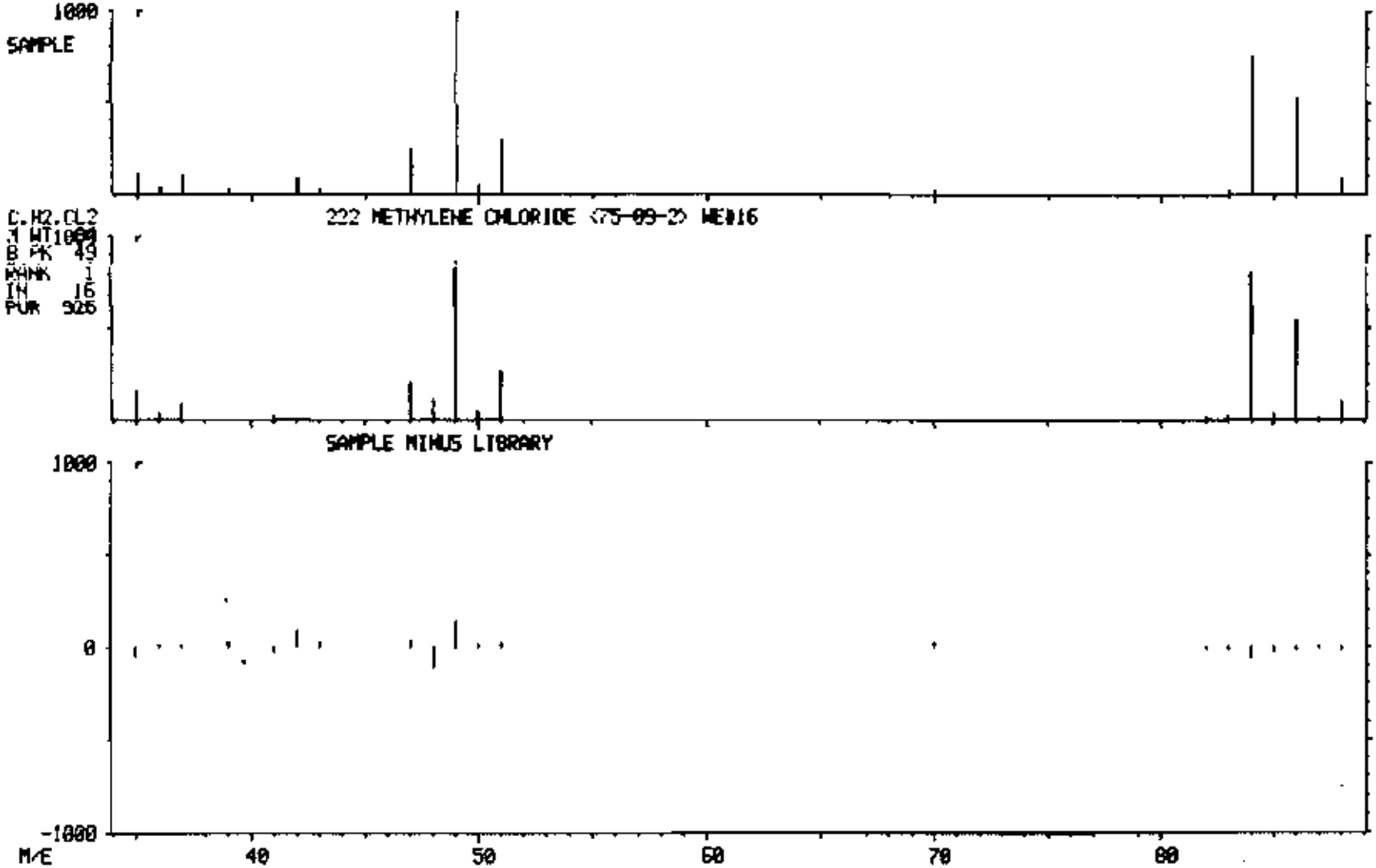


COMPUCHEM LABS

LIBRARY SEARCH
05/16/90 2:37:90 + 1:27

DATA: CN037379C19 @ 116
BASE M/E: 49
RIC: 15167.

SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD CH 19
ENHANCED (S 15B 2N 0T)



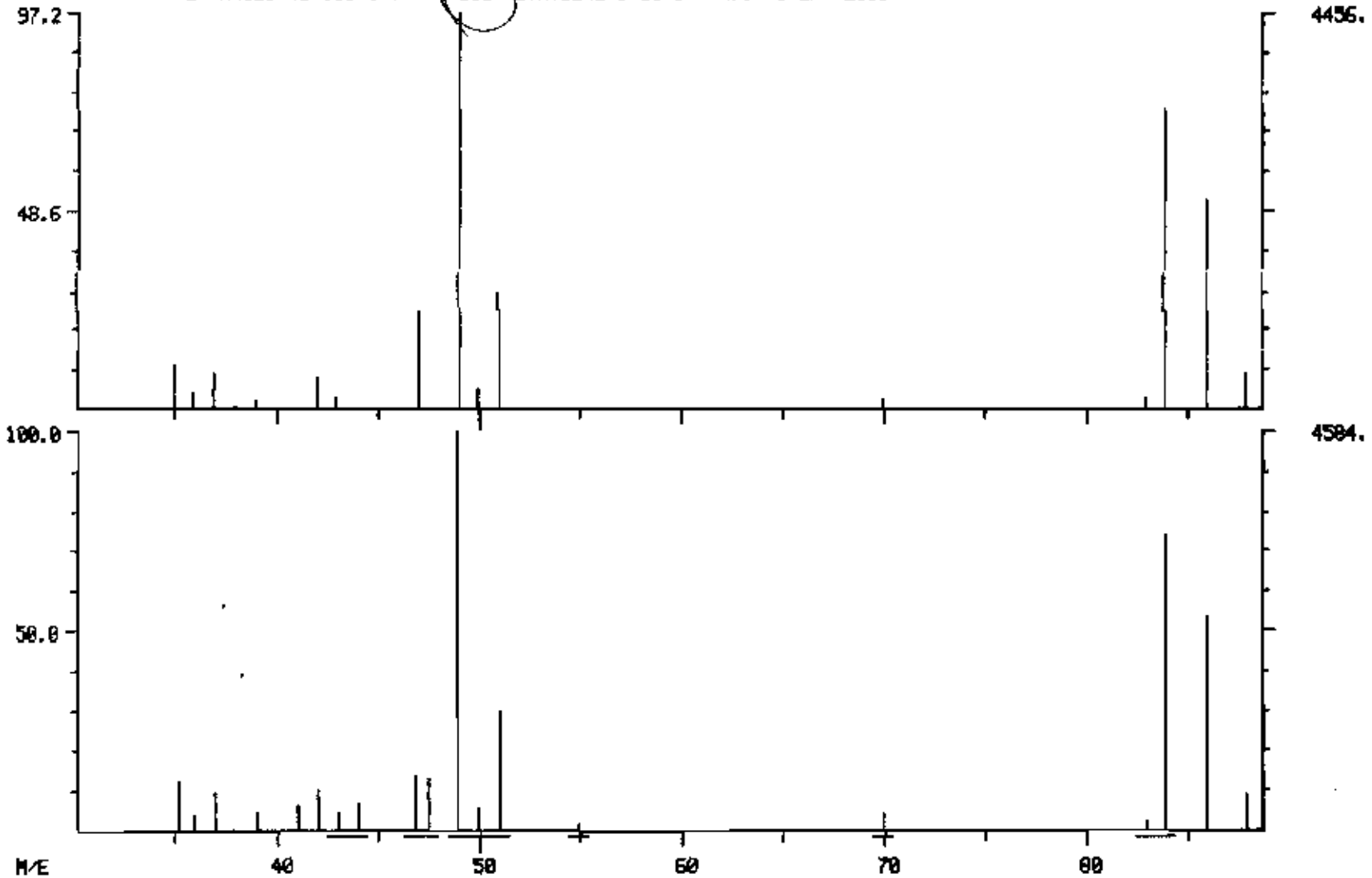
SAMPLE MINUS LIBRARY

COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 2:37:00 + 1:27
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD ON 19
ENHANCED (S 15G 2N)

DATA: CN037379C19 #116 BASE M/E: 49/ 49
RIC: 15199./ 16571.

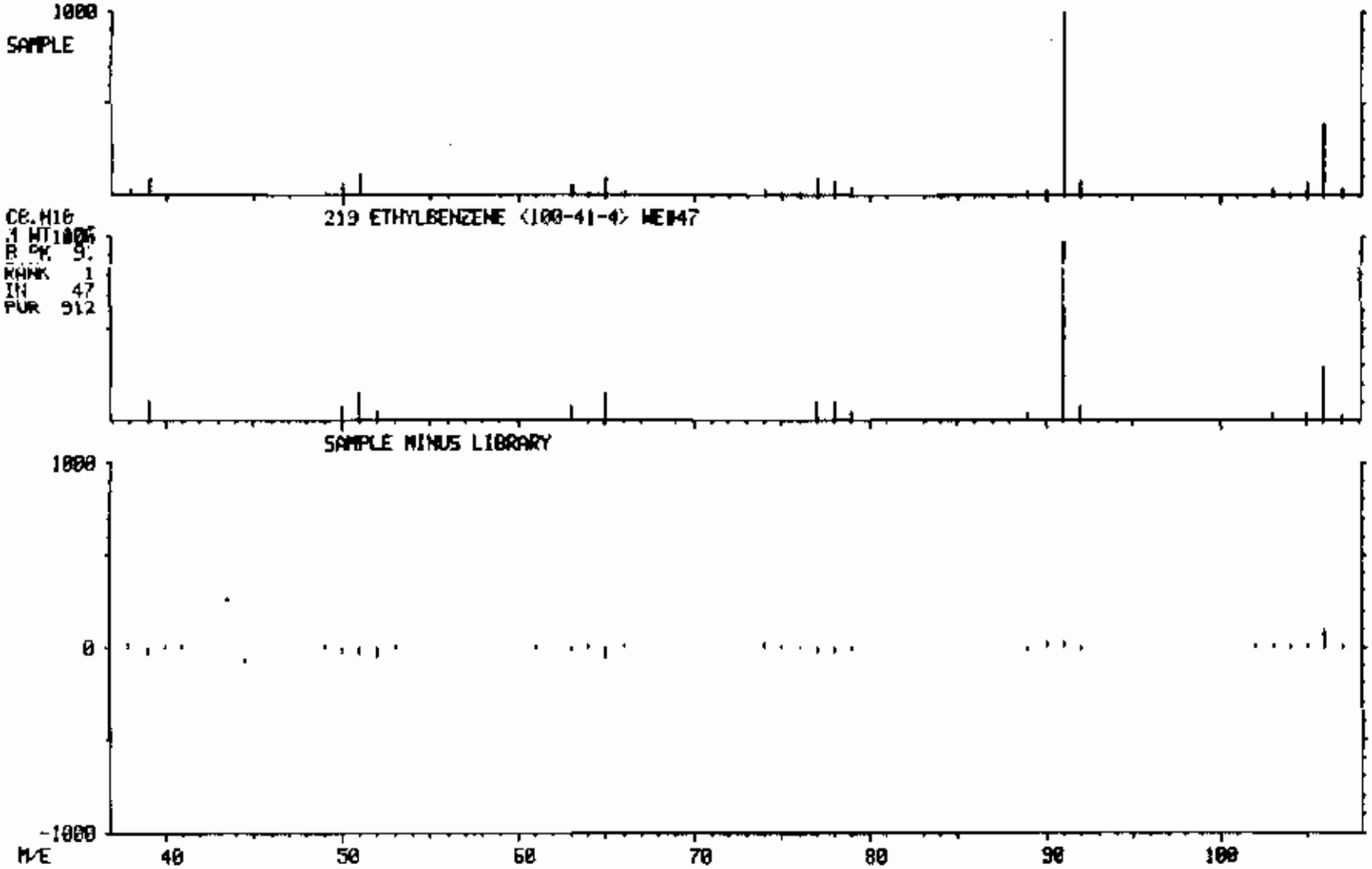
222 METHYLENE CHLORIDE (75-09-2) WE#16



NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

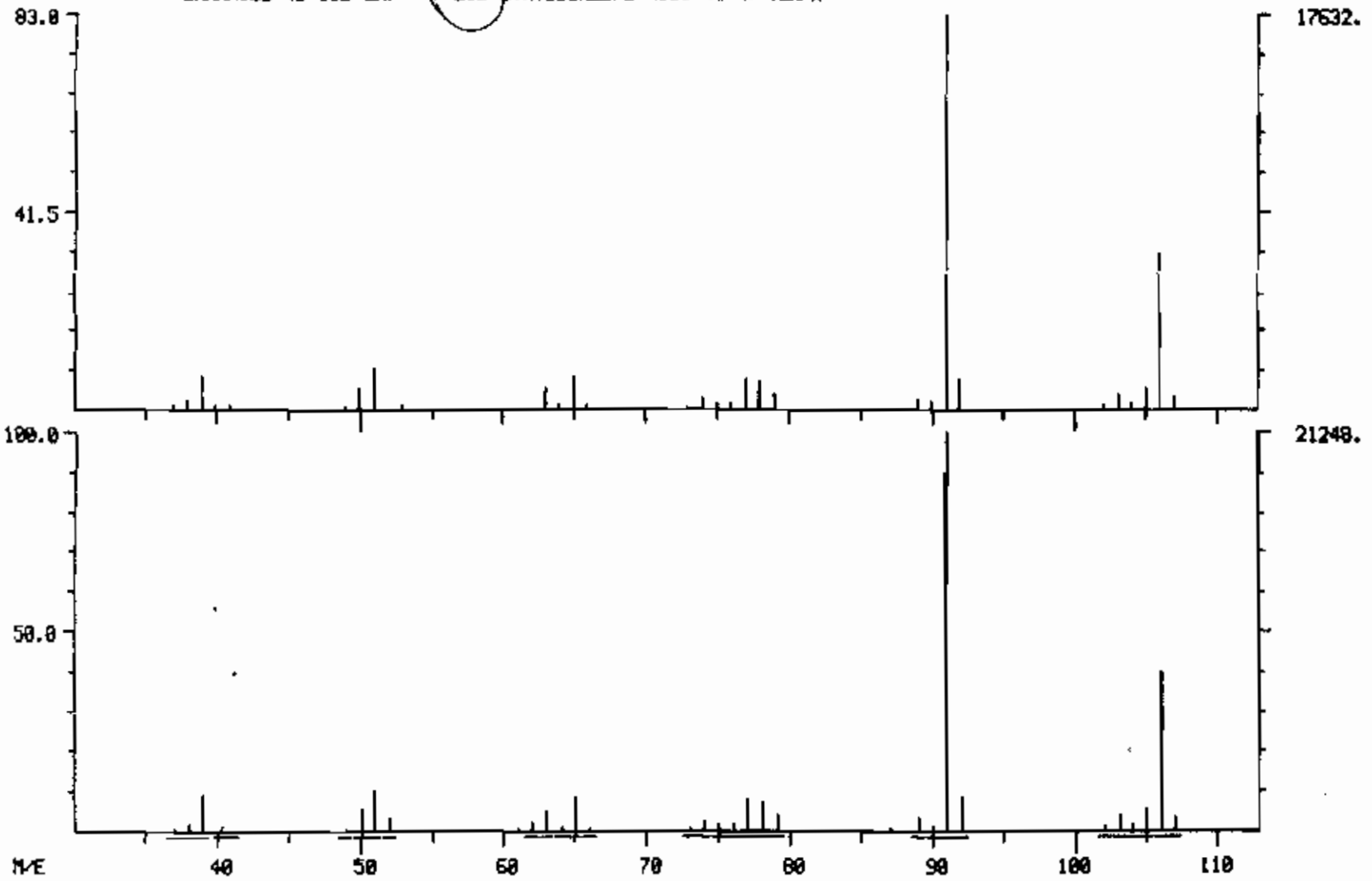
LIBRARY SEARCH DATA: CN037379C19 # 703 BASE M/E: 91
05/16/90 2:37:00 + 9.47 RIC: 42498.
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD ON 19
ENHANCED (5 15B 2N 0T)



COMPUCHEM LABS

DUAL MASS SPECTRUM
05/15/90 2:37:00 + 9.47
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD ON 19
ENHANCED (S 15B 2N) 213 ETHYLBENZENE (100-41-4) WE#47

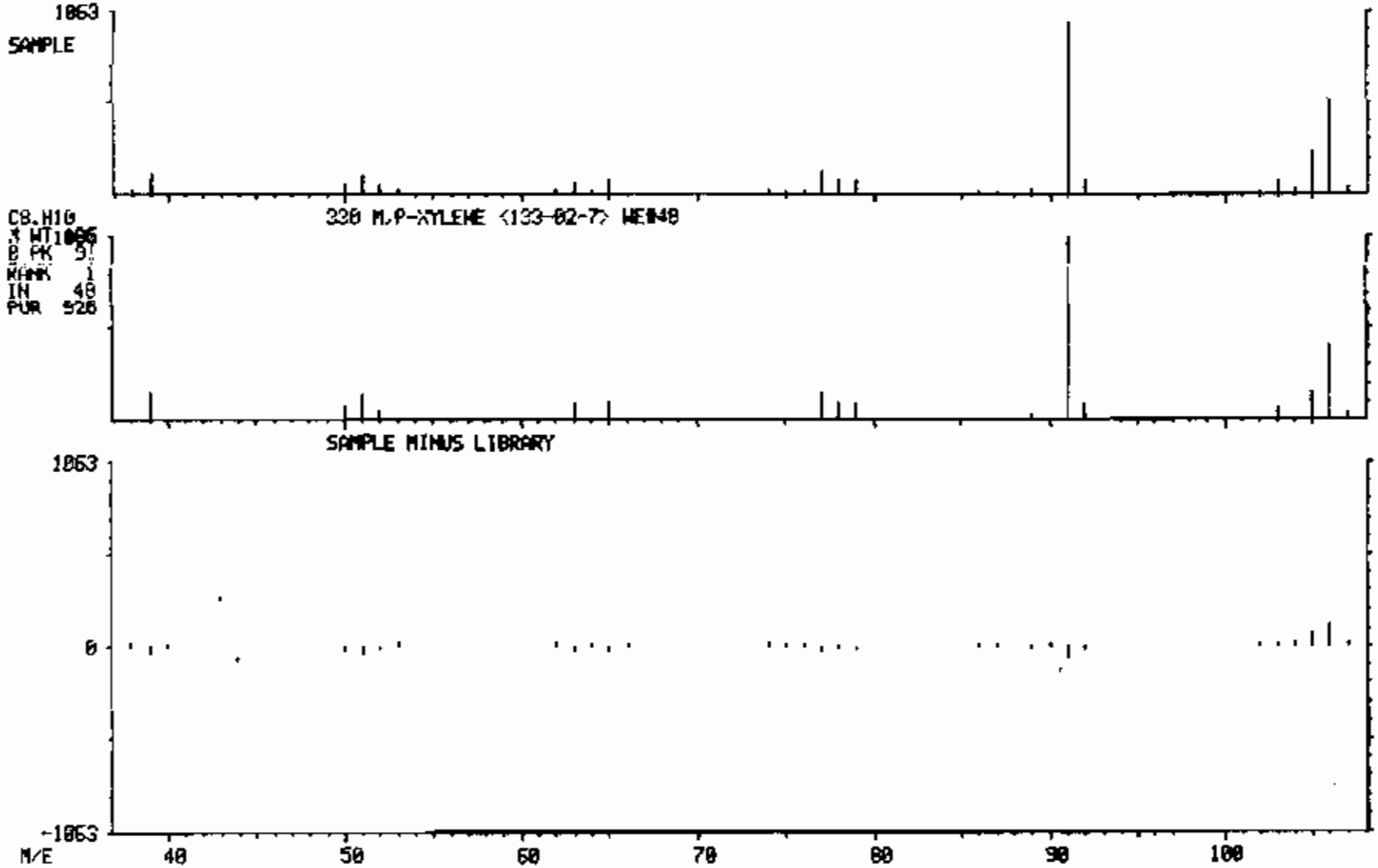
DATA: CN037379C19 #703 BASE M/E: 91/ 91
RIC: 42979./ 82207.



NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH
05/16/90 2:37:00 + 10:02
DATA: CN037379C19 # 003
BASE M/E: 91
RIC: 123119.
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD ON 19
ENHANCED (S 150 2: 0T)

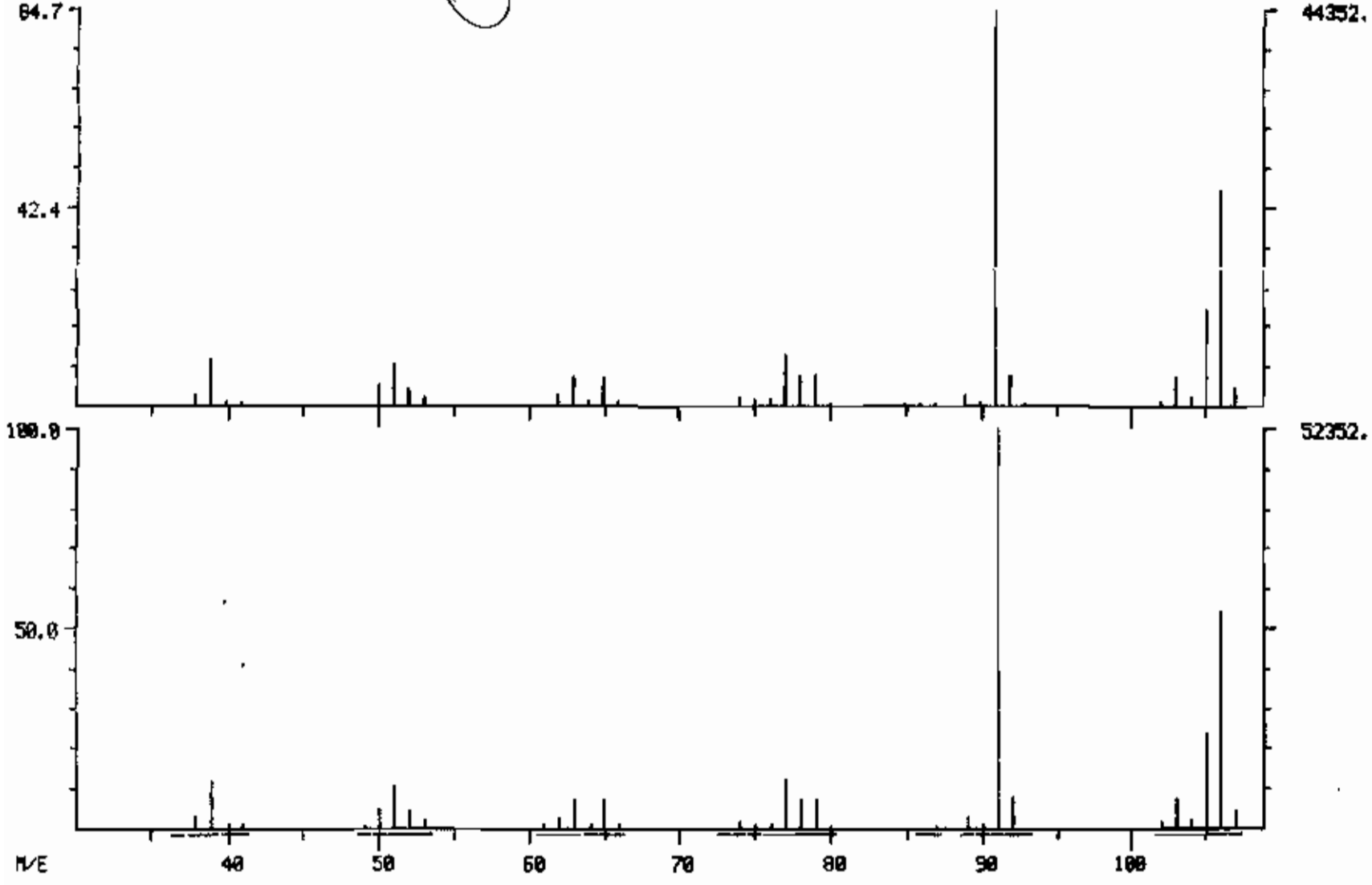


COMPUCHEM LABS

DUAL MASS SPECTRUM
05/16/90 2:37:00 + 10:02
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD ON 19
ENHANCED (S 150 2H)

DATA: CM037379C19 0003 BASE M/E: 91/ 91
RIC: 124656./ 157695.

338 M,P-XYLENE (133-02-7) WEB48

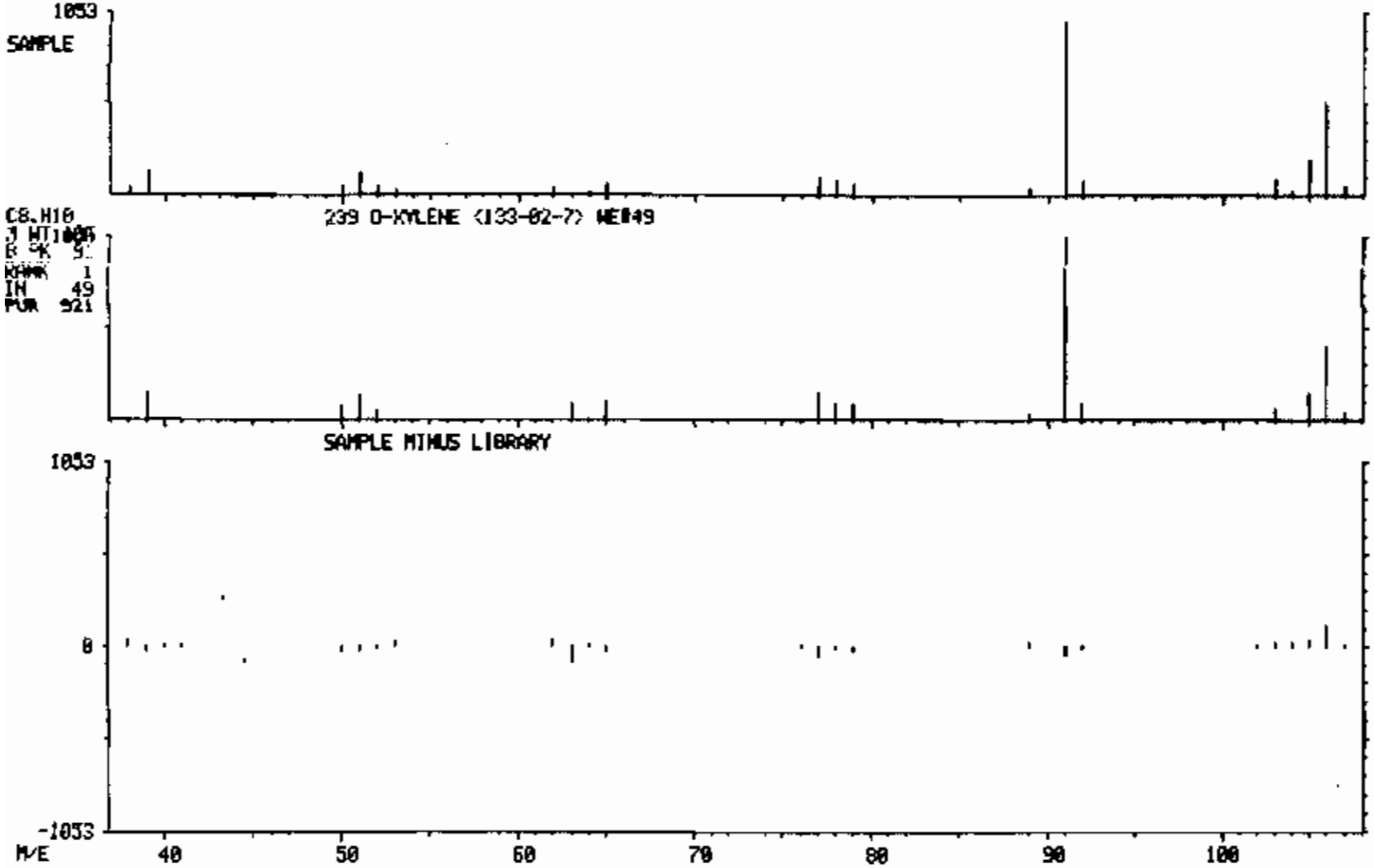


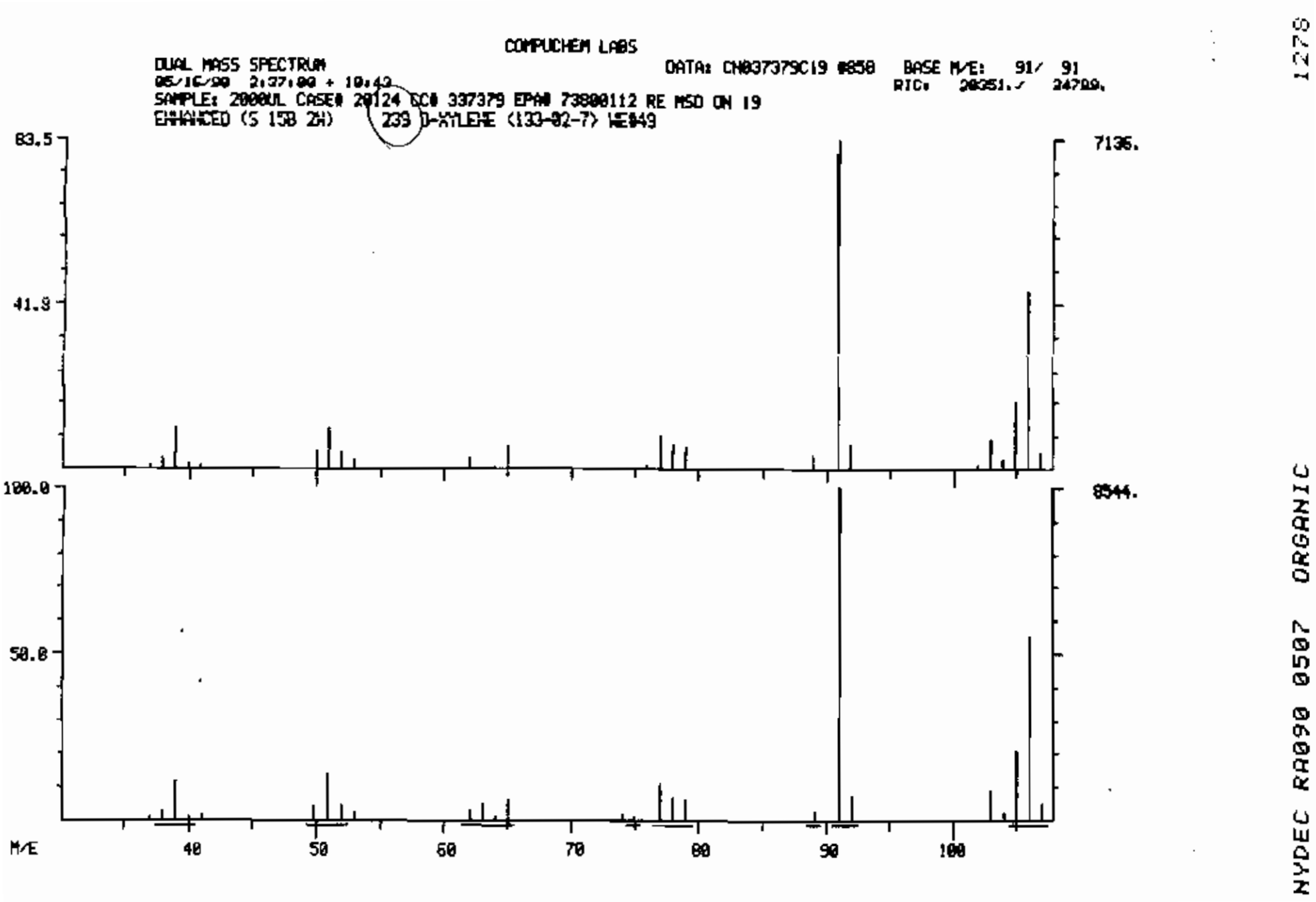
1280

NYDEC RA090 0507 ORGANIC

COMPUCHEM LABS

LIBRARY SEARCH DATA: CN037379C19 @ 858 BASE M/E: 91
05/16/90 2:37:00 + 10:43 RIC: 20255.
SAMPLE: 2000UL CASE# 20124 CC# 337379 EPA# 73000112 RE MSD CH 19
ENHANCED (S 1SB 2H GT)





1278

NYDEC RA090 0507 ORGANIC

Lab Instructions:

Receipt Date: Case#: 20124 SAS#

CompuChem#: 337379

GC/MS; VOA; WATER; ~~EPA SOW 2/88~~ TCL 3rd Ed 8240

Sample Prep Code---000
Instrument Code----~~41229~~
Compound List------~~49345~~9
Surrogate Std------394
Internal Std-------036

SDG# EPA ID# 73B00112 BE MSD

GC/MS Analysis WELL1 EDD 6-4-90

Amount Purged: [ ] 5.0 mL or [ ] Dilution 2000 uL / 5.0 mL

Internal Standard Volume Added 5 uL
Surrogate Standard Volume Added 5 uL
BFB Filename: BF90051SA19
Blank Filename: CB90051SB19
Standard Filename: CI90051SB19
Sample Filename: CN37379C19

RECEIVED
MAY 17 1990

Analyst(s) Injection: WA Work-up WA

GC/MS Review

Condition Codes: DA

Entry Codes: OK,EA,ES,SM,JS,SL,SH,,JA,DA

Non-entry Codes: IM,IL,SW,CT,CS,VC,VO,UP PC,NR,IF,LA,DI,OT,SF,SI CO,RN,DW

Extraneous Peak Search Results:

Number of Peaks Found: 4

Disposition

[✓] Complete

[ ] Reinject Nest

[ ] Dilute

_____ uL / 5 mL

Quality Assurance Notice(s):

Number of Notices Required: 1

Comments: SS/337837

GC/MS Review ~~Reviewer~~ Date 5/17/90 Auditor _____ Date __/__/__

Report Integration Total # of Injections 1

Final Reportable Package(s): CN - C19 /

QA Comments:

Initials _____ Date __/__/__

Final Review Initials _____ Date __/__/__

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)		DETECT. LIMIT (UG/L)
234	128	I	BROMOCHLOROMETHANE (IS)	249	51000	50.0			
221	50		CHLOROMETHANE				BDL		25
231	62		VINYL CHLORIDE				BDL		25
220	94		BROMOMETHANE				BDL		25
209	64		CHLOROETHANE			10.6	26		25
230	101		TRICHLOROFLUOROMETHANE				BDL		25
201	56		ACROLEIN			~~1.7~~	~~BDL 4J~~		220
216	96		1,1-DICHLOROETHENE			41.2	100		12
254	76		CARBON DISULFIDE				BDL		12
285	142		IODOMETHANE				BDL		25
297	117		1,1,1-TRICHLORO-2,2,2-TRIFL				BDL		25
266	85		1,1,2-TRICHLORO-1,2,2-TRIFL				BDL		25
252	43		ACETONE (2-PROPANONE)			~~3.3~~	~~BDL 8J~~		25
248	114	I	1,4-DIFLUOROBENZENE (IS)	381	206000	50.0			
298	76		3-CHLOROPROPENE				BDL		38
222	84		METHYLENE CHLORIDE			14.5	36	B	12
226	96		TRANS-1,2-DICHLOROETHENE				BDL		12
202	53		ACRYLONITRILE				BDL		300
214	63		1,1-DICHLOROETHANE				BDL		12
257	43		VINYL ACETATE			8.4	21J		25
237	96		CIS-1,2-DICHLOROETHENE				BDL		12
253	72		2-BUTANONE				BDL		25
211	83		CHLOROFORM				BDL		12
227	97		1,1,1-TRICHLOROETHANE				BDL		12
206	117		CARBON TETRACHLORIDE				BDL		12
203	78		BENZENE			82.9	210		12
215	62		1,2-DICHLOROETHANE				BDL		12
272	70		CROTONALDEHYDE				BDL		250
270	117	I	D5-CHLOROBENZENE (IS)	754	146000	50.0			
229	130		TRICHLOROETHENE			47.5	120		12
217	63		1,2-DICHLOROPROPANE				BDL		12
286	174		DIBROMOMETHANE				BDL		12
212	83		BROMODICHLOROMETHANE				BDL		12
210	63		2-CHLOROETHYL VINYL ETHER				BDL		25
218	75		CIS-1,3-DICHLOROPROPENE				BDL		12
256	43		4-METHYL-2-PENTANONE			~~1.8~~	~~BDL 4J~~		38
225	92		TOLUENE			38.8	150		12
250	75		TRANS-1,3-DICHLOROPROPENE				BDL		12
228	97		1,1,2-TRICHLOROETHANE				BDL		12
287	69		ETHYLMETHACRYLATE				BDL		25
224	164		TETRACHLOROETHENE				BDL		12
255	43		2-HEXANONE				BDL		38
208	129		DIBROMOCHLOROMETHANE ,124-4				BDL		12

CORRECTED/REVIEWED BY SDW Zgner
(QC/MS DATA REVIEWER)

DATE 5-17-90

VOLATILE - MEDIUM OR LOW LEVEL LIQUID

CMP #	M/E	F	COMPOUND NAME	SCAN	AREA	QUANT REPORT VALUE	REPORTED AMOUNT (UG/L)	DETECT. LIMIT (UG/L)
245	107		1,2-DIBROMOETHANE				BDL	12
207	112		CHLOROBENZENE			99.6	140	12
273	131		1,1,1,2-TETRACHLOROETHANE				BDL	12
219	106		ETHYLBENZENE			99.9	150	12
330	106		M,P-XYLENE			143.0	360	12
239	106		O-XYLENE			29.3	73	12
251	104		STYRENE				BDL	12
205	173		BROMOFORM				BDL	12
274	88		CIS-1,4-DICHLORO-2-BUTENE				BDL	38
275	110		1,2,3-TRICHLOROPROPANE				BDL	38
223	83		1,1,2,2-TETRACHLOROETHANE				BDL	12
290	53		TRANS-1,4-DICHLORO-2-BUTENE				BDL	38
262	157		1,2-DIBROMO-3-CHLOROPROPANE				BDL	25
258	65	S	D4-1,2-DICHLOROETHANE WE#97			54.3	109. %	
247	95	S	BROMOFLUOROBENZENE			48.2	96. %	
233	98	S	D8-TOLUENE WE#99 BS#2			48.8	98. %	
289	106		XYLENES (TOTAL)			172.0	430	12
299	96		1,2-DICHLOROETHENE (TOTAL)				BDL	25
CHECKSUMS:								
	5631.			1384	403000.	1031.8	1832.	

CORRECTED/REVIEWED BY SDWagner
(QC/MS DATA REVIEWER)

DATE 5-17-90

NO	CC ID#	SURROGATE COMPOUND	QUANT REPORT VALUE	QUANT REPORT AMOUNT SPIKED	% ++ RECOVERY	CONTROL RANGE	P	P
57	258	D4-1,2-DICHLOROETHANE WE#57	54.3	50.0	109.	76-114	X	
58	247	BROMOFLUOROBENZENE	48.2	50.0	96.	86-115	X	
59	233	D8-TOLUENE WE#59 SS#2	48.8	50.0	98.	88-110	X	

* ADVISORY SURROGATE ONLY
++ % RECOVERY = QUANT REPORT VALUE / QUANT REPORT AMOUNT SPIKED X 100 %

CORRECTION FACTOR CALCULATION:

$$\frac{5000\ \text{UL}}{\text{VOLUME OF SAMPLE PURGED (UL)}} =$$

$$\frac{5000\ \text{UL}}{2000.\ (\text{UL})} = 2.50 = \frac{5.000\ \text{ML}}{2.000\ (\text{ML})}$$

QUANT REPORT AMOUNT SPIKED CONVERSION FACTOR:

THE SURROGATES ARE ADDED TO THE SAMPLE PRIOR TO SPARGING.
SURROGATE SPIKE CONVERSION FACTOR = 1.

VERSION 9

CORRECTED/REVIEWED BY SDWdave
(QC/MS DATA REVIEWER)

DATE 5-17-90

QUALITY ASSURANCE NOTICE
CC # 387379
BLANK ID # CB90A618B9
CASE # 20124

CompuChem offers various types of analytical services, one of which is characterized as "Commercial Target Compound List (TCL)". This service exactly mimics the analytical requirements of the EPA's Contract Laboratory Program (CLP).

The CLP protocols allow certain levels of common laboratory solvents (acetone, methylene chloride, and toluene) and phthalates to be present in blanks, up to five times the Contract Required Detection Limit (CRDL). CompuChem has a more stringent policy for liquid samples, which allows up to a maximum of twice the CRDL for the common solvents and phthalates. The only exception to our policy is made when the volatile analysis or extraction holding times are in jeopardy of being exceeded, then the CLP requirements must be met.

Analysis of the Method Blank (and /or Instrument Blank) associated with the above sample indicated the following common laboratory solvents or phthalates were present at the indicated levels:

common laboratory artifact	blank concentration	units
methylene chloride	3	ug/L

The reporting convention used in the CLP is to "flag" with a "B" all allowable analytes present in the sample and its associated Method Blank (and/or Instrument Blank). No adjustments are made to the analytical results.

This notice serves to explain the use of the "B" flag in reporting analytical results, while presenting the actual levels of the common laboratory solvents or phthalates seen in the associated blank.

Data Interpretation: General EPA Guidelines

In evaluating data usability, the EPA uses certain general guidelines for assessing the presence of common laboratory artifacts in samples. If the concentration of an artifact is greater that ten times that in the blank, the blank contribution is considered negligible. If blank and sample concentrations are comperable (sample level not greater than twice the blank level), the presence of that compound in the sample is considered suspect.

Robert J. Whitehead
Manager, Quality Assurance