Versar INC.

ENVIRONMENTAL RISK MANAGEMENT

Versar INC.

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(Red)

441593

VOLATILE ANALYSIS - TCLP
ANALYTICAL DATA PACKAGE

CLIENT : VERSAR DIV 31
SITE : CDM
PROJECT: 420.1 B#2&4
CONTROL: 2536/2565
DATE : 06/04/90

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DELIVERABLES INDEX -- VOA ANALYSES ONLY

I. CASE NARRATIVE

A. The narrative contains: case and contract numbers, summary of QC analyses, discussion of any analytical problems, and documentation of all corrective actions.
B. Copy of Sample Traffic Reports.

II. QC SUMMARY

A. Surrogate Percent Recovery Summary (Form II)
B. Matrix Spike/Matrix Spike Duplicate Summary (Form III)
C. Method Blank Summary (Form IV)
D. GC/MS Tuning and Calibration Standard (Form V)

III. SAMPLE DATA

A. Organic Analysis Data Sheet (Form I)
B. Tentatively Identified Compounds (TIC)
C. Raw Data for the Volatile Sample Fraction
   1. Reconstructed Ion Chromatogram (s)
   2. Quantitation Report
   3. Raw HSL mass spectra and background subtract HSL mass spectra with lab generated HSL standard spectra
   4. GC/MS library search spectra for each TIC

Note: Samples arranged in alpha-numeric sequence.

IV. STANDARDS DATA

A. Initial Calibration Data (Form VI) in order if more than one instrument is used.
B. VOA standard(s) reconstructed ion chromatograms and quantitation reports for the initial calibration(s).
C. Continuing Calibration (Form VII) in order by instrument.
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E. Internal Standard Data (Form VIII).

V. RAW QC DATA

A. BFB (For each 12-hour period, for each GC/MS system)
   1. Bar graph spectrum
   2. Mass listing

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V. RAW QC DATA (CONT'D)

B. Reagent Blank Data
   1. Organic Analysis Data Sheet (Form I)
   2. Tentatively Identified Compounds (TIC)
   3. Raw Data
      a. Reconstructed ion chromatogram(s) and quantitation report(s).
      b. HSL spectra with lab generated standard
         i. Raw HSL compound spectra
         ii. Enhanced or background subtracted spectra
         iii. Laboratory generated HSL standard spectra
         iv. GC/MS library search spectra for each TIC
         v. Quantitation/calculation of each TIC concentration

C. Matrix Spike/Matrix Spike Duplicate Data
   1. Tabulated results (Form I) of non-spiked HSL compounds.
   2. Reconstructed ion chromatograms and quantitation reports.

VI. SAMPLE PREPARATION

A. Parameter Request Sheet
B. Sample Receiving Log-In Information
C. VOA Sample Comments
D. Instrument Injection Logs
E. Field Chain of Custody
F. Copy(s) of Federal Express Airbills

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I. NARRATIVE

II. QC SUMMARY

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June 4, 1990

Narrative
Versar Division 31 - CDM
Volatile and Semivolatile Organic Analysis
Toxicity Characteristic Leaching Procedure (TCLP)
Versar Project 420.1 - Batches 2 and 4
Control 2536/2565

This report contains the analytical data for the volatile and semivolatile organic analysis of two (2) soil samples. The samples were analyzed following EPA CLP protocol modified for Toxicity Characteristic Leaching Procedure (TCLP). The samples listed below arrived intact at Versar in two batch shipments on April 19 and 23, 1990. Although results for volatiles (VOA) and semivolatiles (BNA) are reported individually, this one narrative applies to both fractions. Results for other requested parameters are provided separately.

SAMPLE LIST

1 11

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It should be noted that 3-methylphenol and 4-methylphenol (m- and p- creosol) coelute and cannot be separated by the GC/MS system.

GC/MS instrument calibrations using BFB and DFTPP met requirements for volatile and semivolatile analyses, respectively. SPCC and CCC criteria were met for the volatile and semivolatile initial calibration curves and the continuing calibration standards.

Extractions and analyses for volatile and semivolatile organic compounds occurred within specified sample holding times. All GC/MS analyses occurred during the twelve hour period following daily instrument calibration. The TCLP leachates were analyzed following procedures developed for the water matrix.

Volatile surrogate standard recovery values for the leachate samples met requirements specified for the water matrix. Internal standard area abundances and associated relative retention times met established limits for all analyses. No matrix spike and matrix spike duplicate (MS/MSD) QC analyses for volatile organic compounds were performed for these batch shipments of samples. The samples were analyzed without dilution.

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Semivolatile surrogate compounds did not meet specified QC requirements for the initial sample analyses. Reextraction has been requested for the two samples and the results will be reported as soon as they become available. The QC analyses, the extraction blank and the TCLP blank all met specified surrogate recovery requirements. One set of semivolatile matrix spike/matrix spike duplicate analyses was performed using the TCLP target compounds as matrix spike compounds. All internal standard area abundances and associated relative retention times were within the specified limits.

No field sample required dilution prior to instrumental analysis in order to quantify semivolatile organic compounds within the range of the calibration curve.

Definitions of data qualifier flags used on the individual data summary pages are provided in the listing which immediately follows this case narrative.

Please contact Janet Beckman, Laboratory Project Coordinator, should you have any questions or require additional information pertaining to these analyses.

Data Release Approved By:

Linda E. Bock
GC/MS Data Quality Manager
Laboratory Operations

Narrative Reviewed By:

Lawrence P. Pollack
GC/MS Quality Assurance Manager

10CCC3B

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Data Qualifier Flags

J For Target Compounds: This flag is used when mass spectral data indicates the presence of a compound but the result is less than the specified detection limit but still greater than zero.

For Non Target Compounds: This flag indicates that the concentration is an estimated value, assuming a 1 to 1 response with the internal standard.

B This flag is used when the analyte is found in the blank as well as in the sample. It indicates possible/probable contamination and warns the data user to take appropriate action.

u This flag states that the compound was analyzed for but was not detected. The number is the minimum attainable detection limit for the sample.

X or T This flag states that the mass spectrum does not meet EPA CLP criteria for confirmation, but compound presence is strongly suspected.

E This flag is used to indicate that the quantitation of the analyte is outside the linear calibration of the curve and that dilution was required in order to properly quantitate.

D This flag is used to indicate the value for the target analyte was calculated from a dilution (see "E" flag above).

Y This flag is used when a matrix spike compound is also confirmed present in the unspiked sample.

Flags excerpted from and established by the US EPA Contract Lab Program (CLP) protocol.

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2A
WATER VOLATILE SURROGATE RECOVERY

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

	EPA SAMPLE NO.	S1 (TOL) #	S2 (BFB) #	S3 (DCE) #	OTHER	TOT OUT
01	1	99	101	97	0	0
02	11	100	101	97	0	0
03	EXTBLK	101	102	95	0	0
04	VBLK74	100	102	96	0	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

4A
VOLATILE METHOD BLANK SUMMARY

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Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Lab File ID: W2274 Lab Sample ID: VBLK74

Date Analyzed: 05/02/90 Time Analyzed: 2345

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

Instrument ID: W

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	1	16425	W2277	0229
02	11	16961	W2280	0448
03	EXTBLK	EXTBLK	W2276	0144

COMMENTS: CLP,,,VBLK74,L,W,VBLK74,V,BLANK,,,5ML,
INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN

FORM IV VOA

1/87 Rev.

5A

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

ORIGINAL (Red)

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Lab File ID: W2259 BFB Injection Date: 04/30/90

Instrument ID: W BFB Injection Time: 0937

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	21.4
75	30.0 - 60.0% of mass 95	47.4
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	70.2
175	5.0 - 9.0% of mass 174	6.1 (8.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	70.2 (100.0)1
177	5.0 - 9.0% of mass 176	5.6 (8.0)2

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

T S 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	22566	W2261	04/30/90	1141
02	VSTD200	22567	W2262	04/30/90	1311
03	VSTD150	22568	W2263	04/30/90	1354
04	VSTD100	22569	W2264	04/30/90	1535
05	VSTD020	22572	W2265	04/30/90	1638

5A

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

ORIGINAL (Red)

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Lab File ID: W2271 BFB Injection Date: 05/03/90

Instrument ID: W BFB Injection Time: 0902

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

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	20.0
75	30.0 - 60.0% of mass 95	48.1
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.1
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	Greater than 50.0% of mass 95	70.1
175	5.0 - 9.0% of mass 174	6.0 (8.6)1
176	Greater than 95.0%, but less than 101.0% of mass 174	69.0 (98.4)1
177	5.0 - 9.0% of mass 176	6.1 (8.9)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	22607	W2272	05/02/90	2142
02	VBLK74	VBLK74	W2274	05/02/90	2345
03	EXTBLK	EXTBLK	W2276	05/03/90	0144
04	1	16425	W2277	05/03/90	0229
05	11	16961	W2280	05/03/90	0448

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III. SAMPLE DATA PACKAGE

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

1 ORIGINAL (Red)

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16425

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2277

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	14	
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

1 ORIGINAL (Red)

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: 16425

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2277

Level: (low/med) LOW Date Received: 04/19/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

Column (pack/cap) PACK 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

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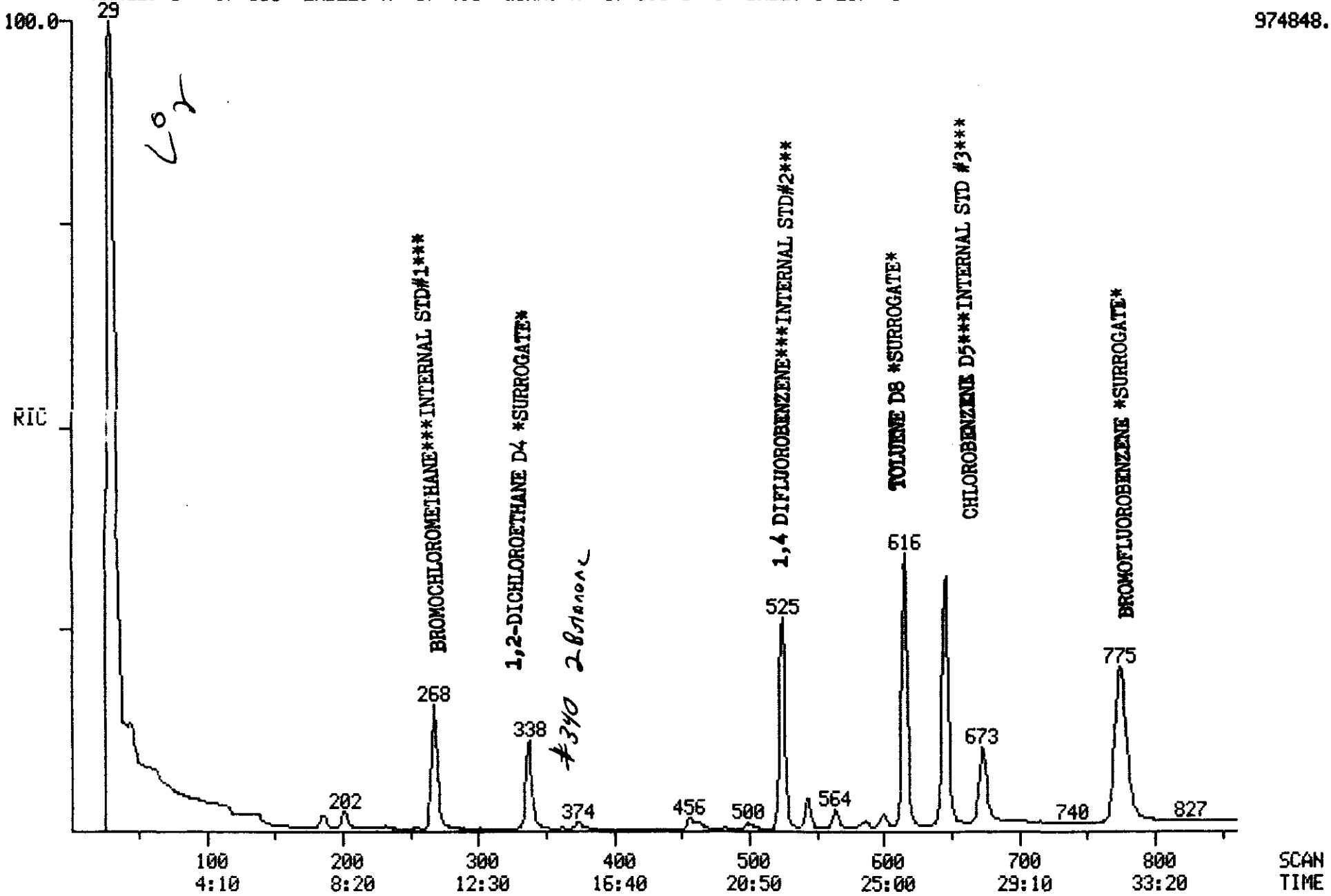
RIC 14:29 SVS DATA: W2277 #1 SCANS 1 TO 860
05/03/90 ~~2:29:00~~ CALI: W2277 #2
SAMPLE: CLP,VERSCOM,2536,1,L,W,16425,V,TCLV,420.1,2,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: W2277

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Data: W2277.TI 14:29
05/03/90 ~~2:29:00~~ 5/15
Sample: CLP,VERSCDM,2536,1,L,W,16425,V,TCLV,420.1,2,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: 2536

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

5/17/90
Reply for Forms
1 Hit 50
5/15/90

Run Comp

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE
43	C032 PYRIDINE

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No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	267	11:07	1	1.000	A BB	110893.	50.000 UG/L*	10.30
2	114	525	21:52	2	1.000	A BB	509450.	50.000 UG/L*	10.30
3	117	645	26:52	3	1.000	A BB	506369.	50.000 UG/L*	10.30
4	65	338	14:05	1	1.266	A BB	165455.	97 48.312 UG/L*	9.95
5	98	616	25:40	3	0.955	A BB	585218.	99 49.488 UG/L*	10.19
6	95	775	32:17	3	1.202	A BB	380465.	101 50.611 UG/L*	10.42
7	50	46	1:55	1	0.172	A VV	168.	0.049 UG/L	0.01
8	NOT FOUND								
9	NOT FOUND								
10	NOT FOUND								
11	84	186	7:45	1	0.697	A BB	18378.	~~5.719~~ UG/L	1.18
12	43	201	8:22	1	0.753	A BB	71191. VK	13~~9.437~~ UG/L	28.71
13	76	228	9:30	1	0.854	A BB	3036.	~~0.493~~ UG/L	0.10
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	83	321	13:22	1	1.202	A BB	188.	BAL ~~0.037~~ UG/L	0.01
18	NOT FOUND								
19	72	340	14:10	1	1.273	A BB	2762.	14.044 UG/L	2.89
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	78	463	19:17	2	0.882	A BB	4499.	BAL ~~0.488~~ UG/L	0.10
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	97	373	15:32	2	0.710	A BB	5094.	~~1.547~~ UG/L	0.32
33	43	544	22:40	3	0.843	A BB	66373. NTC	~~22.769~~ UG/L	4.73
34	43	587	24:27	3	0.910	A BB	2508.	~~0.999~~ UG/L	0.21
35	164	586	24:25	3	0.909	A BB	2362.	BAL ~~0.664~~ UG/L	0.14
36	NOT FOUND								
37	92	620	25:50	3	0.961	A BB	5434.	NTC ~~0.802~~ UG/L	0.17
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:10	0.99	1.250	1.01	48.31	50.00	1.492	1.544	0.97
5	25:40	1.00	0.954	1.00	49.49	50.00	1.156	1.168	0.99
6	32:17	1.00	1.200	1.00	50.61	50.00	0.751	0.742	1.01
7	2:15	0.85	0.199	0.87	0.05	50.00	0.002	1.535	0.00
8	3:35		0.316						
9	4:27		0.393						
10	5:42		0.504						
11	8:05	0.96	0.713	0.98	5.72	50.00	0.166	1.449	0.11

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No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	8:45	0.96	0.772	0.98	139.44	50.00	0.642	0.230	2.79
13	9:45	0.97	0.860	0.99	0.49	50.00	0.027	2.779	0.01
14	10:57		0.967						
15	12:15		1.081						
16	12:57		1.143						
17	13:30	0.99	1.191	1.01	0.04	50.00	0.002	2.264	0.00
18	14:17		1.261						
19	14:17	0.99	1.261	1.01	14.04	50.00	0.025	0.089	0.28
20	16:10		0.739						
21	16:02		0.733						
22	16:27		0.752						
23	17:57		0.821						
24	18:10		0.830						
25	18:42		0.855						
26	19:17	1.00	0.882	1.00	0.49	50.00	0.009	0.905	0.01
27	19:17		0.882						
28	19:25		0.888						
29	19:27		0.890						
30	20:35		0.941						
31	22:00		1.006						
32	15:37	0.99	0.714	0.99	1.55	50.00	0.010	0.323	0.03
33	22:40	1.00	0.842	1.00	22.97	50.00	0.131	0.285	0.46
34	24:12	1.01	0.899	1.01	1.00	50.00	0.005	0.248	0.02
35	24:25	1.00	0.907	1.00	0.66	50.00	0.005	0.351	0.01
36	24:22		0.906						
37	25:50	1.00	0.960	1.00	0.80	50.00	0.011	0.669	0.02
38	27:02		1.005						
39	29:20		1.090						
40	34:10		1.269						
41	35:37		1.324						
42	34:27		1.280						
43	19:57		0.914						

Quantitation Report File: ISREF

ORIGINAL (Red)

Data: W2272.TI
05/02/90 21:42:00
Sample: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

Data: W2277.TI
05/03/90 2:29:00
Sample: CLP,VERSCDM,2536,1,L,W,16425,V,TCLV,420.1,2,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: 2536

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CI01 BROMOCHLOROMETHANE **IS#1**
5	CI10 1,4-DIFLUOROBENZENE **IS#2**
6	CI20 CHLOROBENZENE-D5 **IS#3**

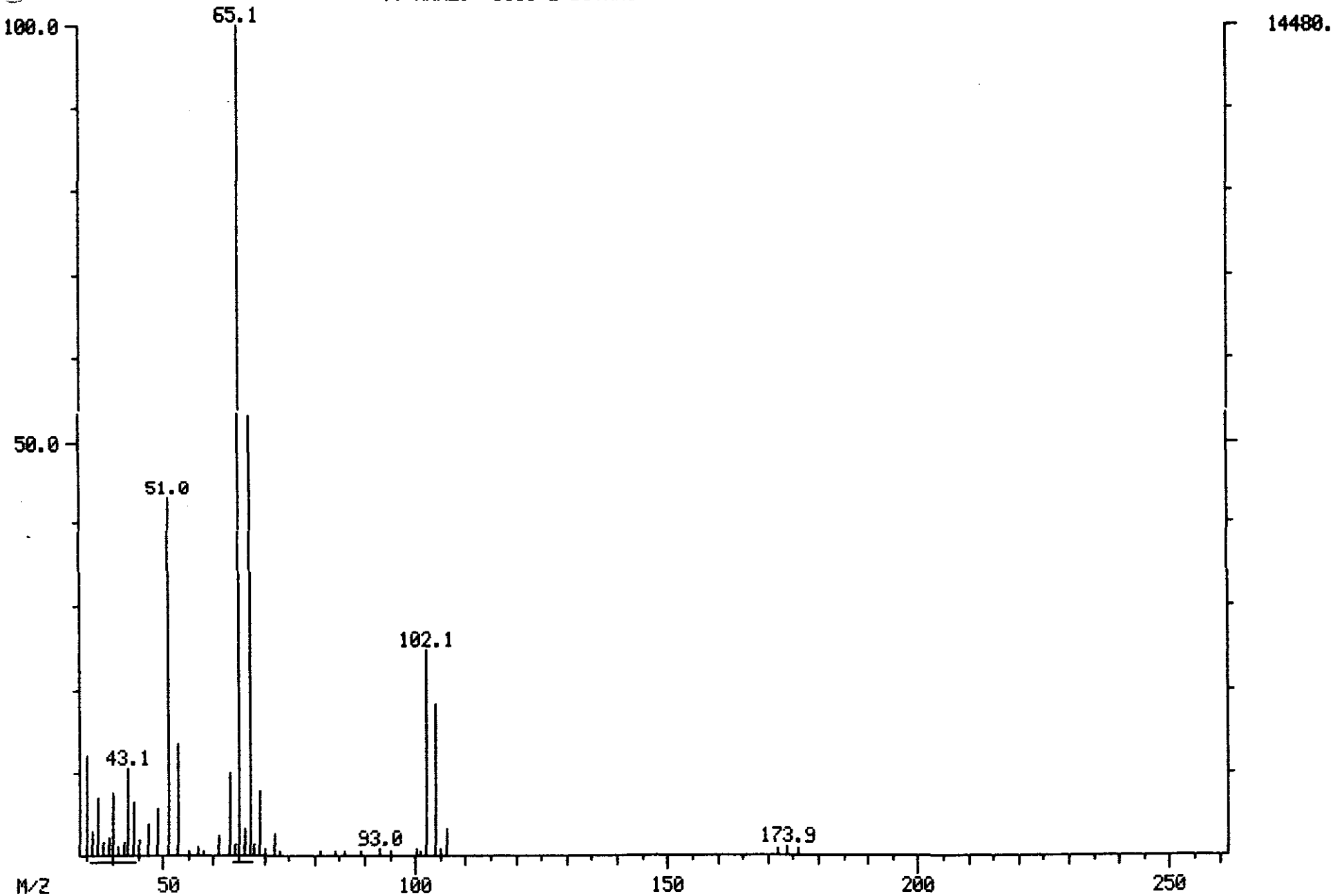
Scan	Time	Area(Hght)	Amount	Name
272	11:20	100378.	50.000 UG/L*	CI01 BROMOCHLOROMETHANE **IS
525	21:52	473952.	50.000 UG/L*	CI10 1,4-DIFLUOROBENZENE **I
646	26:55	461153.	50.000 UG/L*	CI20 CHLOROBENZENE-D5 **IS#3
267	11:07	110893.	55.238 UG/L*	CI01 BROMOCHLOROMETHANE **IS
525	21:52	509450.	53.745 UG/L*	CI10 1,4-DIFLUOROBENZENE **I
645	26:52	506369.	54.902 UG/L*	CI20 CHLOROBENZENE-D5 **IS#3

ORIGINAL (Red)

MASS SPECTRUM
05/03/90 2:29:00 + 14:10
SAMPLE: CLP,VERSCOM,2536,1,L,W,16425,V,TCLV,420.1,2,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE

DATA: W2277 #340
CALI: W2277 #2

BASE M/Z: 65
RIC: 52608.

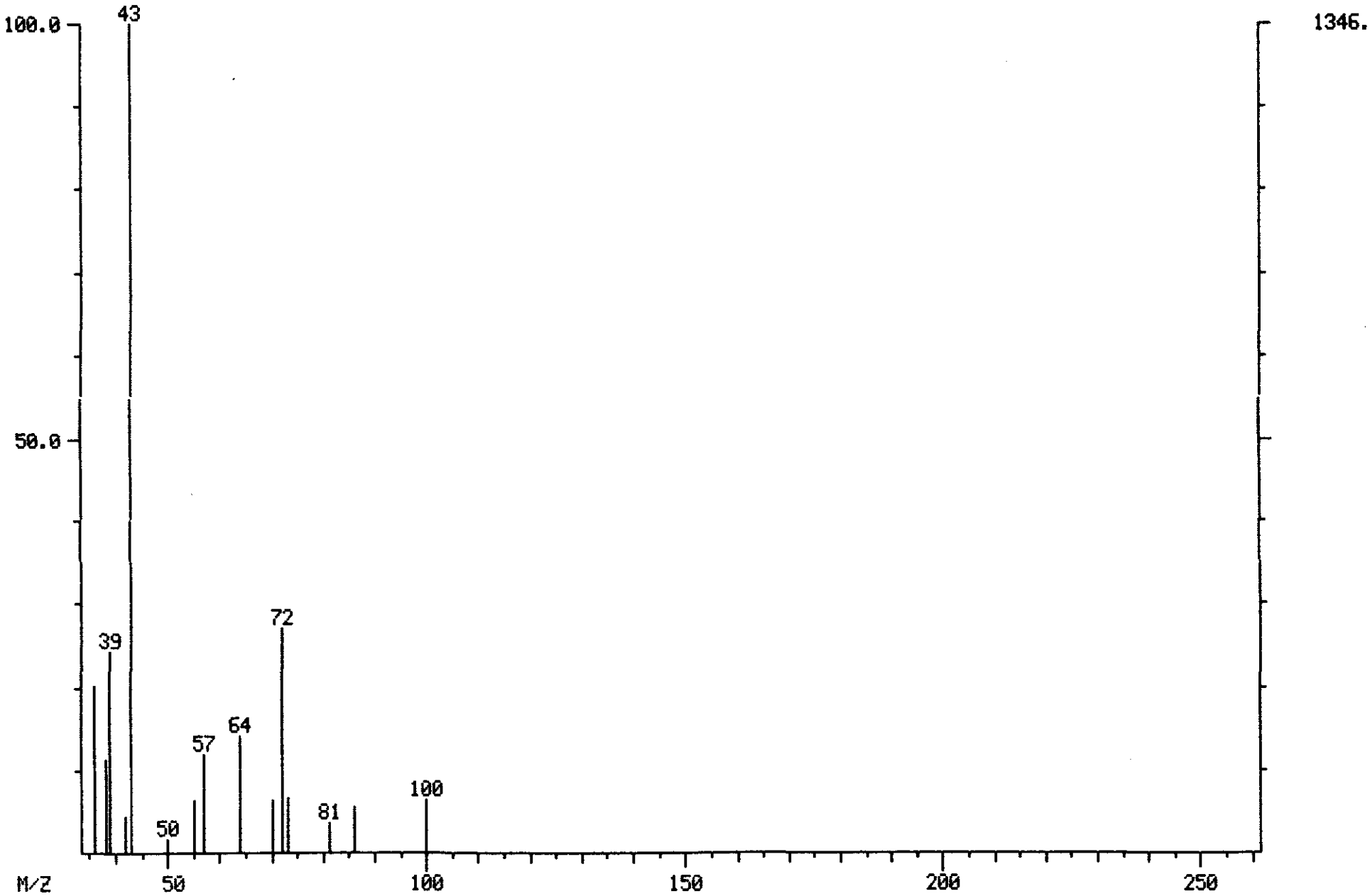


ORIGINAL (Red)

MASS SPECTRUM
05/03/90 2:29:00 + 14:10
SAMPLE: CLP,VERSCOM,2536,1,L,W,16425,V,TCLV,420.1,2,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE
ENHANCED (S 15B 2N 0T)

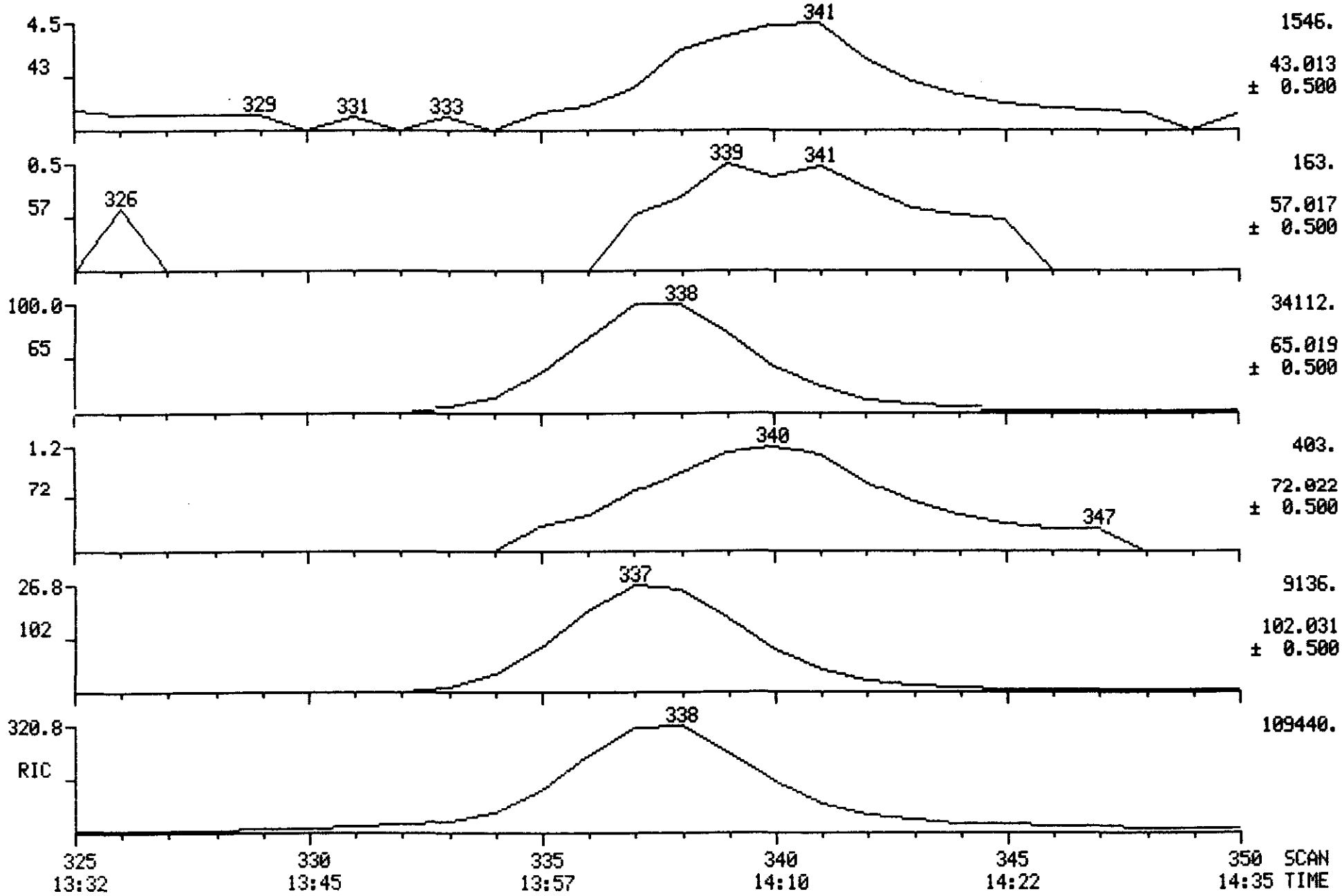
DATA: W2277 #340
CALI: W2277 #2

BASE M/Z: 43
RIC: 3360.



ORIGINAL (Red)

RIC+MASS CHROMATOGRAMS DATA: W2277 #673 SCANS 325 TO 350
05/03/90 2:29:00 CALI: W2277 #2
SAMPLE: CLP,VERSCDM,2536,1,L,W,16425,V,TCLV,420.1,2,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

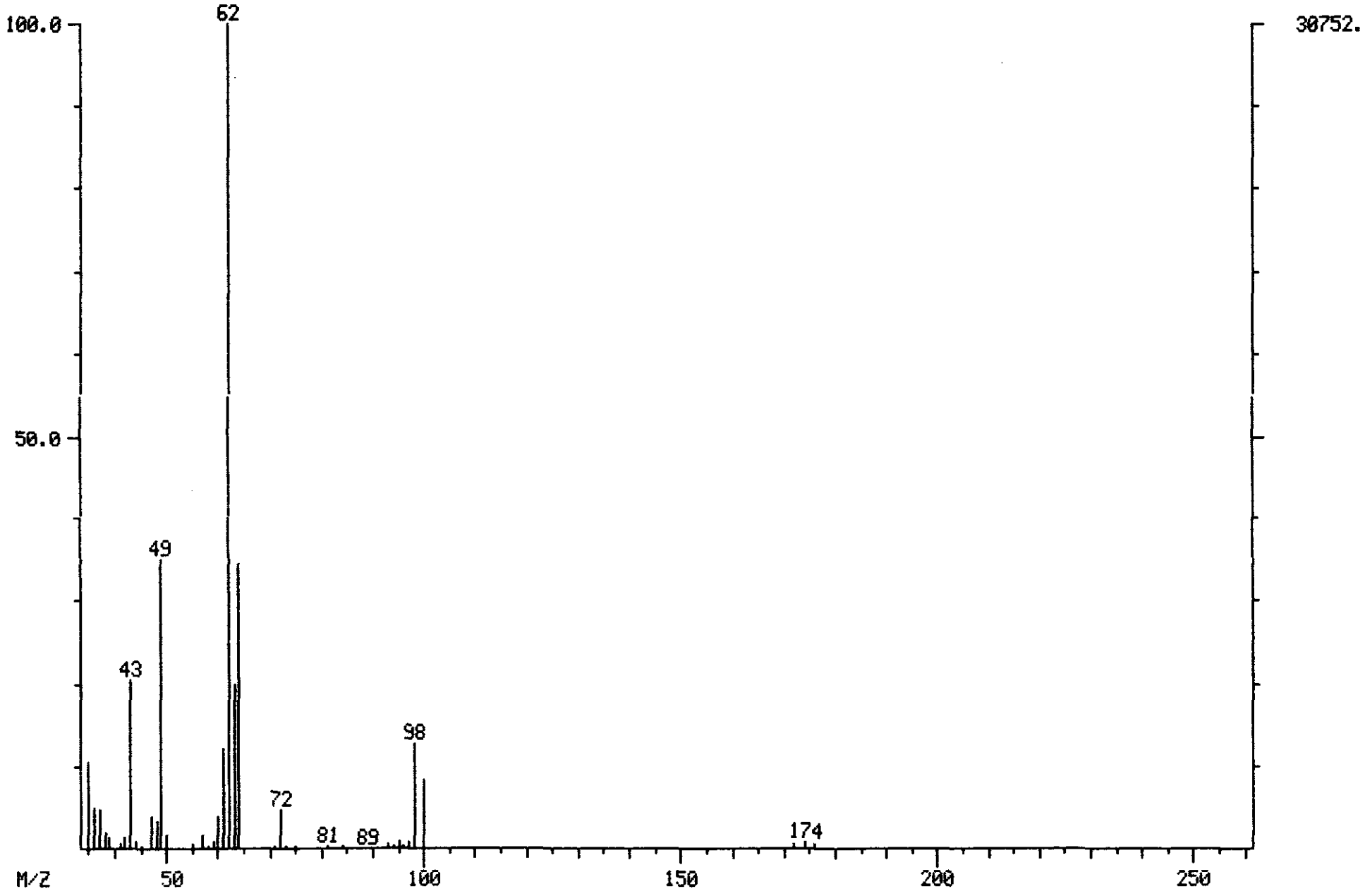


ORIGINAL (Red)

MASS SPECTRUM
05/02/90 21:42:00 + 14:17
SAMPLE: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE
ENHANCED (S 15B 2N 0T)

DATA: W2272 #343
CALI: W2272 #2

BASE M/Z: 62
RIC: 91520.



0200

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

11 ORIGINAL (Red)

L Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16961

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2280

Level: (low/med) LOW Date Received: 04/23/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	9	J
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

11 ORIGINAL (Red)

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Matrix: (soil/water) WATER Lab Sample ID: 16961

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2280

Level: (low/med) LOW Date Received: 04/23/90

% Moisture: not dec. ____ Date Analyzed: 05/03/90

Column (pack/cap) PACK Dilution Factor: 1.0

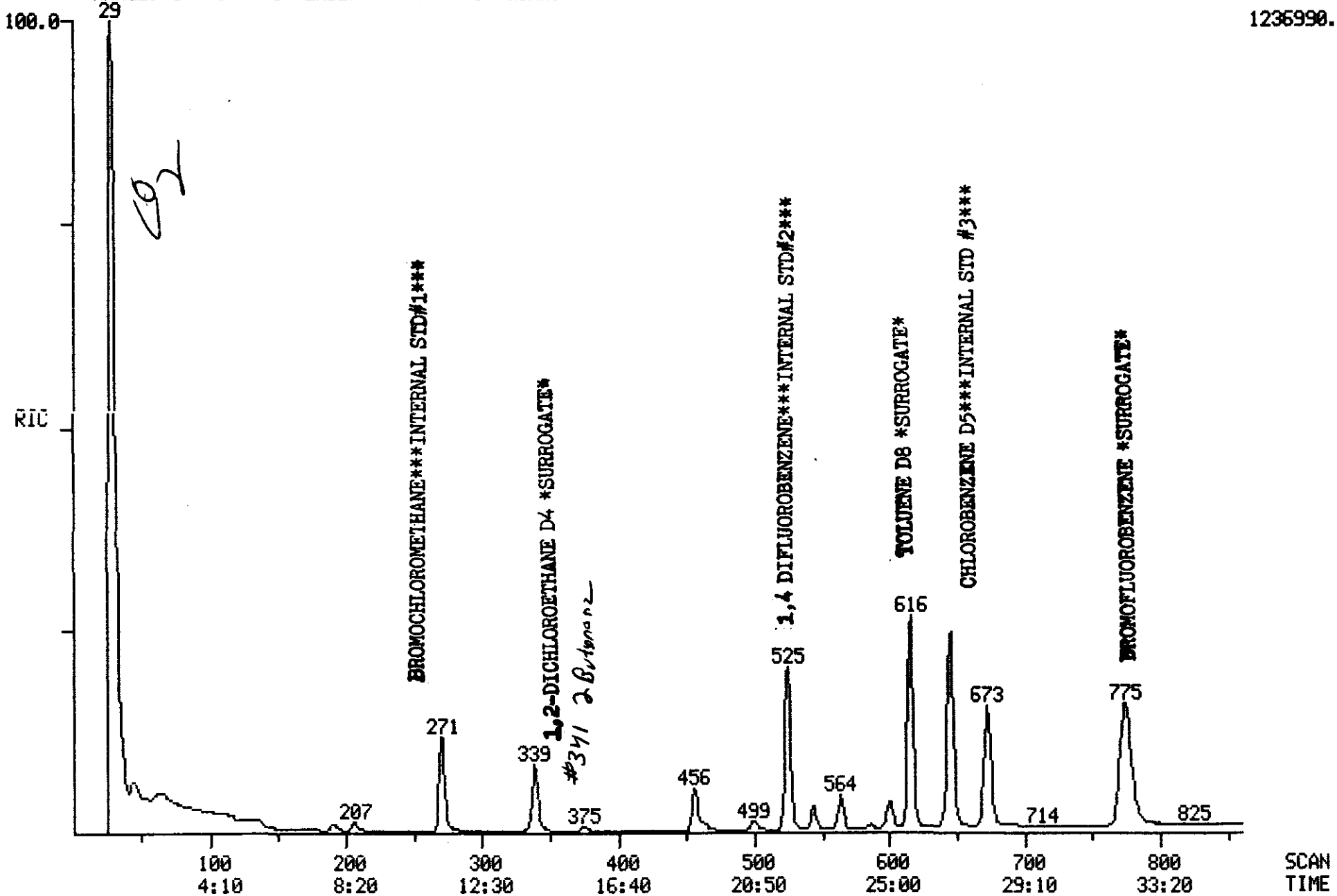
Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

ORIGINAL (Red)

RIC 16:48 SKS DATA: W2280 #1 SCANS 1 TO 860
05/03/90 ~~4:48:00~~ CALI: W2280 #2
SAMPLE: CLP,VERSCOM,2565,11,L,W,16961,V,TCLV,420.1,4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: W2280

ORIGINAL (Red)

Data: W2280.TI 16:48
05/03/90 ~~4:48:00~~ SKS
Sample: CLP,VERSCDM,2565,11,L,W,16961,V,TCLV,420.1,4,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: 2565

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

QB 5/17/90
Ready for Firms
1 HH
SB
5/13/90

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE
43	C032 PYRIDINE

Run Comp

ORIGINAL (Red)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)		Amount		%Tot
1	128	270	11:15	1	1.000	A BB	106509.		50.000	UG/L*	11.47
2	114	525	21:52	2	1.000	A BB	493280.		50.000	UG/L*	11.47
3	117	645	26:52	3	1.000	A BB	497837.		50.000	UG/L*	11.47
4	65	339	14:07	1	1.256	A BB	159029.	97	48.347	UG/L*	11.09
5	98	616	25:40	3	0.955	A BB	579312.	100	49.828	UG/L*	11.43
6	95	775	32:17	3	1.202	A BB	374259.	101	50.639	UG/L*	11.61
7	NOT FOUND										
8	NOT FOUND										
9	NOT FOUND										
10	64	135	5:37	1	0.500	A BB	367.		~~0.173~~	UG/L	0.04
11	84	191	7:57	1	0.707	A BB	11628.		~~3.767~~	UG/L	0.86
12	43	207	8:37	1	0.767	A BB	46849.	NK	~~93.537~~	UG/L	21.91
13	76	232	9:40	1	0.859	A VB	1790.		~~0.202~~	UG/L	0.07
14	NOT FOUND										
15	NOT FOUND										
16	NOT FOUND										
17	83	322	13:25	1	1.193	A BB	394.	BAL	~~0.082~~	UG/L	0.02
18	NOT FOUND										
19	72	341	14:12	1	1.263	A BB	1643.		8.698	UG/L	1.99
20	43	389	16:12	2	0.741	A VB	960.	NTC	~~0.234~~	UG/L	0.05
21	NOT FOUND										
22	NOT FOUND										
23	NOT FOUND										
24	NOT FOUND										
25	NOT FOUND										
26	78	463	19:17	2	0.882	A BB	9604.	BAL	~~1.075~~	UG/L	0.25
27	NOT FOUND										
28	NOT FOUND										
29	NOT FOUND										
30	NOT FOUND										
31	NOT FOUND										
32	97	375	15:37	2	0.714	A BB	5576.	NTC	~~1.749~~	UG/L	0.40
33	43	544	22:40	3	0.843	A BB	63718.	DTC	~~22.428~~	UG/L	5.14
34	43	587	24:27	3	0.910	A BB	2516.	NTC	~~1.019~~	UG/L	0.23
35	164	586	24:25	3	0.909	A BB	1527.	BAL	0.437	UG/L	0.10
36	NOT FOUND										
37	92	620	25:50	3	0.961	A BB	6448.		~~0.968~~	UG/L	0.22
38	NOT FOUND										
39	106	704	29:20	3	1.091	A BB	172.		~~0.040~~	UG/L	0.01
40	104	820	34:10	3	1.271	A BB	158.	NK	~~0.019~~	UG/L	0.00
41	106	855	35:37	3	1.326	A BB	2394.		~~0.485~~	UG/L	0.11
42	106	828	34:30	3	1.284	A BB	1587.		~~0.248~~	UG/L	0.06
43	NOT FOUND										

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:07	1.01	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:10	1.00	1.250	1.00	48.35	50.00	1.493	1.544	0.97
5	25:40	1.00	0.954	1.00	49.83	50.00	1.164	1.168	1.00
6	32:17	1.00	1.200	1.00	50.64	50.00	0.752	0.742	1.01
7	2:15		0.199						
8	3:35		0.316						
9	4:27		0.393						
10	5:42	0.99	0.504	0.99	0.17	50.00	0.003	0.996	0.00
11	8:05	0.98	0.713	0.99	3.77	50.00	0.109	1.449	0.08

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	8:45	0.99	0.772	0.99	95.54	50.00	0.440	0.230	1.91
13	9:45	0.99	0.860	1.00	0.30	50.00	0.017	2.779	0.01
14	10:57		0.967						
15	12:15		1.081						
16	12:57		1.143						
17	13:30	0.99	1.191	1.00	0.08	50.00	0.004	2.264	0.00
18	14:17		1.261						
19	14:17	0.99	1.261	1.00	8.70	50.00	0.015	0.089	0.17
20	16:10	1.00	0.739	1.00	0.23	50.00	0.002	0.415	0.00
21	16:02		0.733						
22	16:27		0.752						
23	17:57		0.821						
24	18:10		0.830						
25	18:42		0.855						
26	19:17	1.00	0.882	1.00	1.08	50.00	0.019	0.905	0.02
27	19:17		0.882						
28	19:25		0.888						
29	19:27		0.890						
30	20:35		0.941						
31	22:00		1.006						
32	15:37	1.00	0.714	1.00	1.75	50.00	0.011	0.323	0.03
33	22:40	1.00	0.842	1.00	22.43	50.00	0.128	0.285	0.45
34	24:12	1.01	0.899	1.01	1.02	50.00	0.005	0.248	0.02
35	24:25	1.00	0.907	1.00	0.44	50.00	0.003	0.351	0.01
36	24:22		0.906						
37	25:50	1.00	0.960	1.00	0.97	50.00	0.013	0.669	0.02
38	27:02		1.005						
39	29:20	1.00	1.090	1.00	0.04	50.00	0.000	0.436	0.00
40	34:10	1.00	1.269	1.00	0.02	50.00	0.000	0.840	0.00
41	35:37	1.00	1.324	1.00	0.48	50.00	0.005	0.496	0.01
42	34:27	1.00	1.280	1.00	0.25	50.00	0.003	0.642	0.00
43	19:57		0.914						

Quantitation Report File: ISREF

ORIGINAL
(Red)

Data: W2272.TI
05/02/90 21:42:00
Sample: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

Data: W2280.TI
05/03/90 4:48:00
Sample: CLP,VERSCDM,2565,11,L,W,16961,V,TCLV,420.1,4,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: 2565

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CI01 BROMOCHLOROMETHANE **IS#1**
5	CI10 1,4-DIFLUOROBENZENE **IS#2**
6	CI20 CHLOROBENZENE-D5 **IS#3**

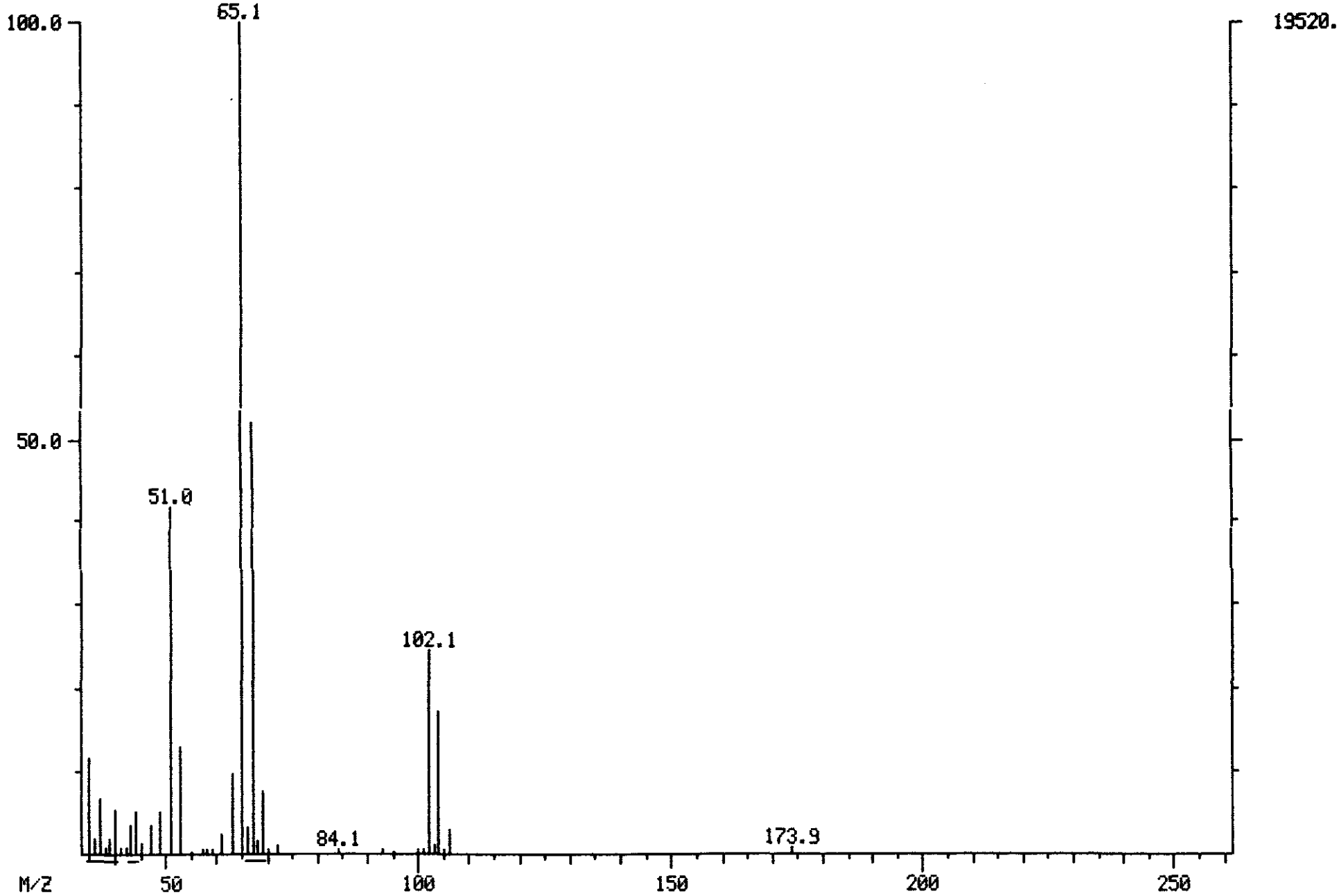
Scan	Time	Area(Hght)	Amount		Name
272	11:20	100378.	50.000	UG/L*	CI01 BROMOCHLOROMETHANE **IS
525	21:52	473952.	50.000	UG/L*	CI10 1,4-DIFLUOROBENZENE **I
646	26:55	461153.	50.000	UG/L*	CI20 CHLOROBENZENE-D5 **IS#3
270	11:15	106509.	53.054	UG/L*	CI01 BROMOCHLOROMETHANE **IS
525	21:52	493280.	52.039	UG/L*	CI10 1,4-DIFLUOROBENZENE **I
645	26:52	497837.	53.977	UG/L*	CI20 CHLOROBENZENE-D5 **IS#3

ORIGINAL (Red)

MASS SPECTRUM
05/03/90 4:48:00 + 14:12
SAMPLE: CLP,VERSCDM,2565,11,L,W,16961,V,TCLV,420.1,4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE

DATA: W2280 #341
CALI: W2280 #2

BASE M/Z: 65
RIC: 65152.

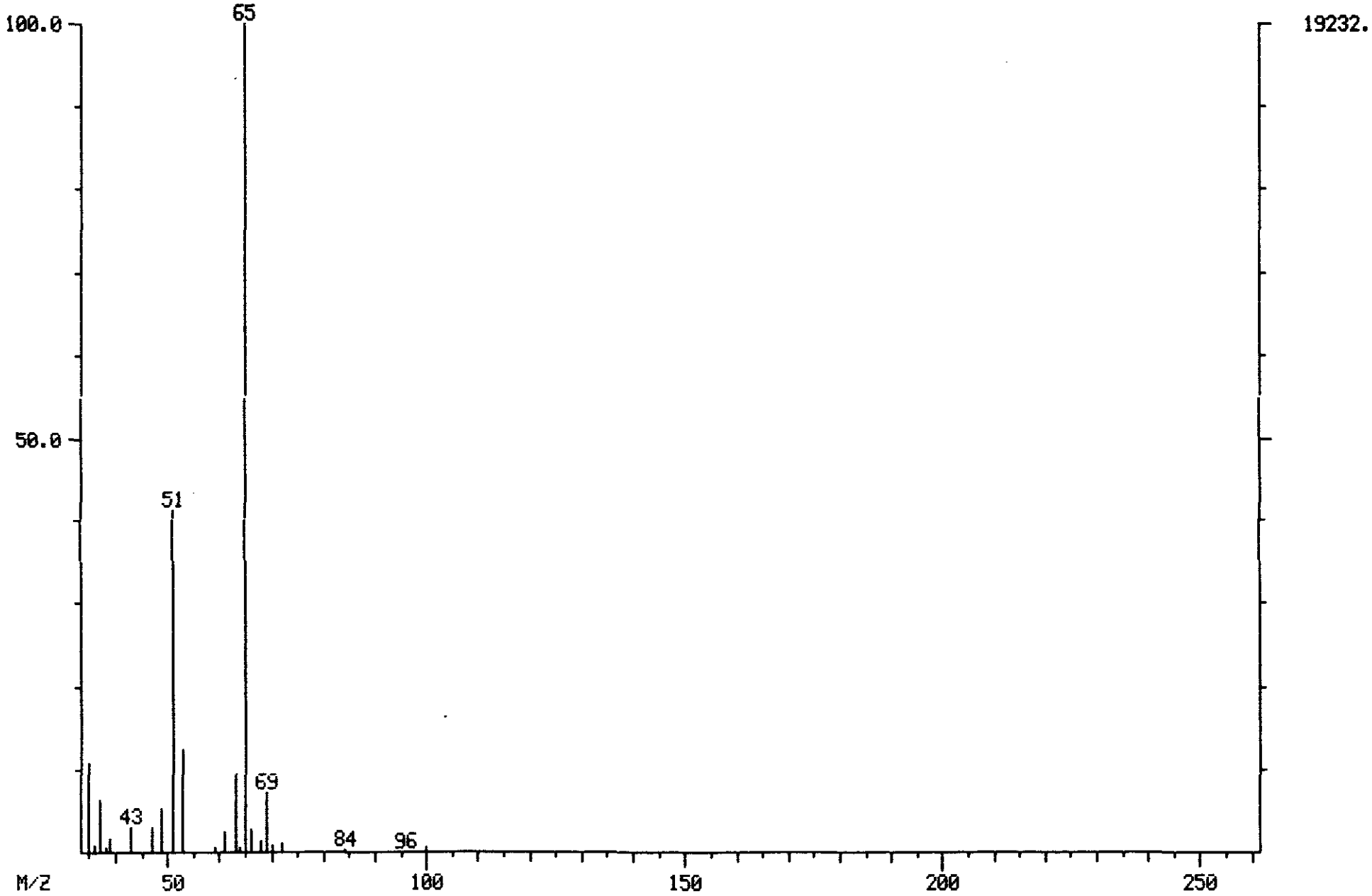


ORIGINAL (Red)

MASS SPECTRUM
05/03/90 4:48:00 + 14:12
SAMPLE: CLP,VERSCOM,2565,11,L,W,16961,V,TCLV,420.1,4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE
ENHANCED (S 15B 2N 0T)

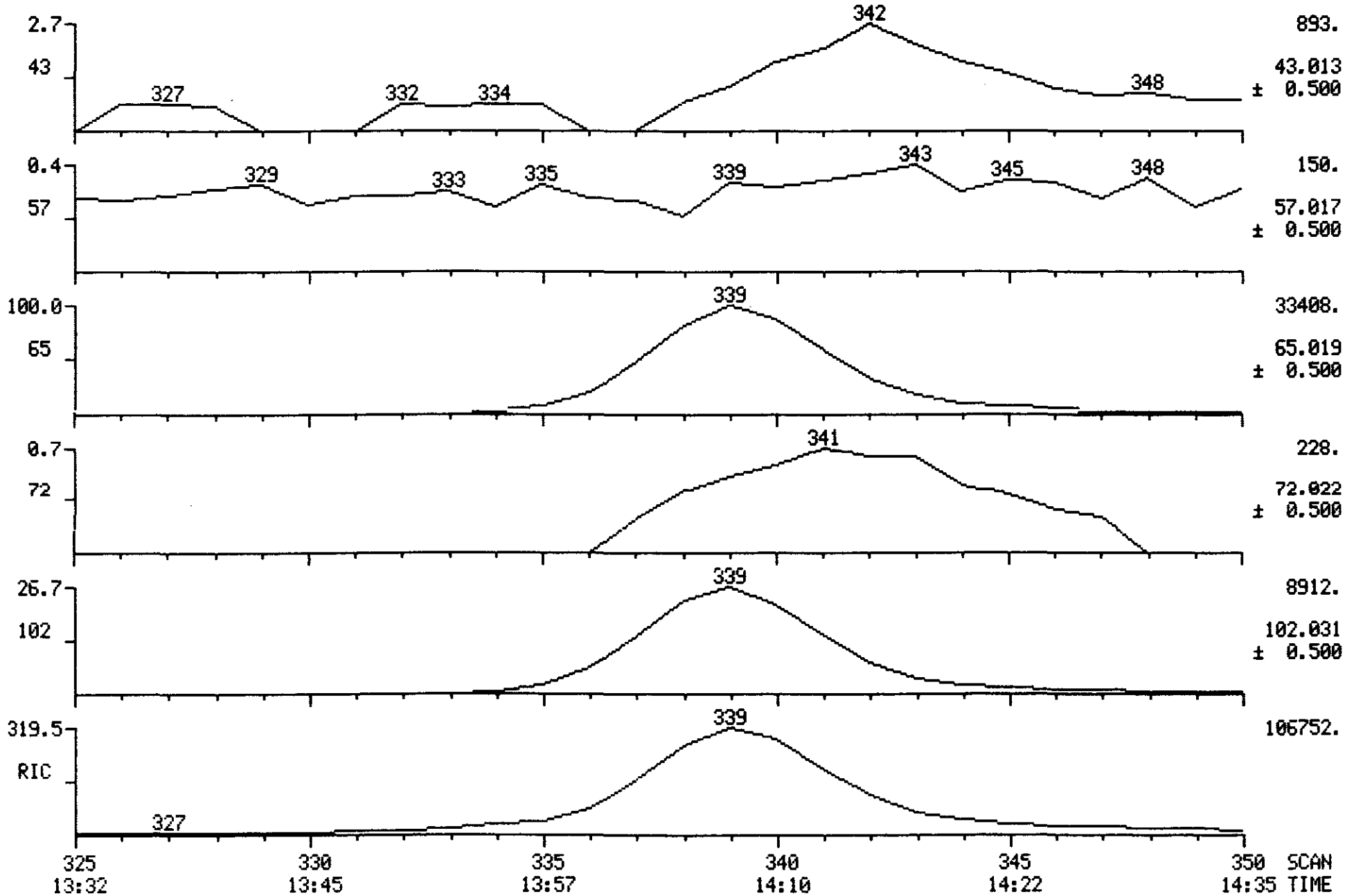
DATA: W2280 #341
CALI: W2280 #2

BASE M/Z: 65
RIC: 40768.



ORIGINAL (Red)

RIC+MASS CHROMATOGRAMS DATA: W2280 #673 SCANS 325 TO 350
05/03/90 4:48:00 CALI: W2280 #2
SAMPLE: CLP,VERSCOM,2565,11,L,W,16961,V,TCLV,420.1,4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



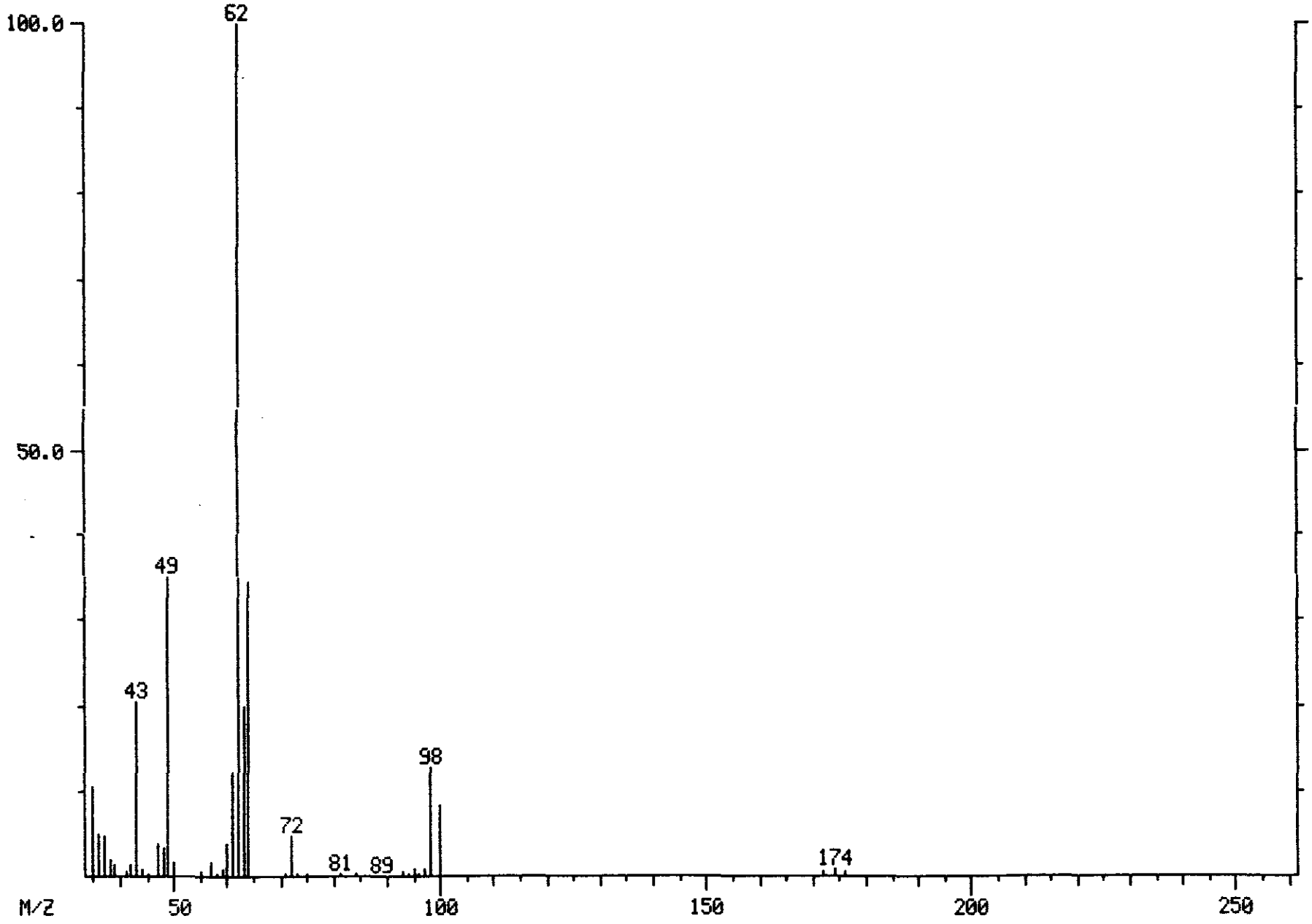
0030

ORIGINAL (Red)

MASS SPECTRUM
05/02/90 21:42:00 + 14:17
SAMPLE: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE
ENHANCED (S 15B 2N 0T)

DATA: W2272 #343
CALI: W2272 #2

BASE M/Z: 62
RIC: 91520.



1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

EXTBLK ORIGINAL (Red)

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2276

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

% Moisture: not dec. ____ Date Analyzed: 05/03/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	8	J
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E

VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

ORIGINAL (Red)

EXTBLK

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

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

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2276

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

% Moisture: not dec. ____ Date Analyzed: 05/03/90

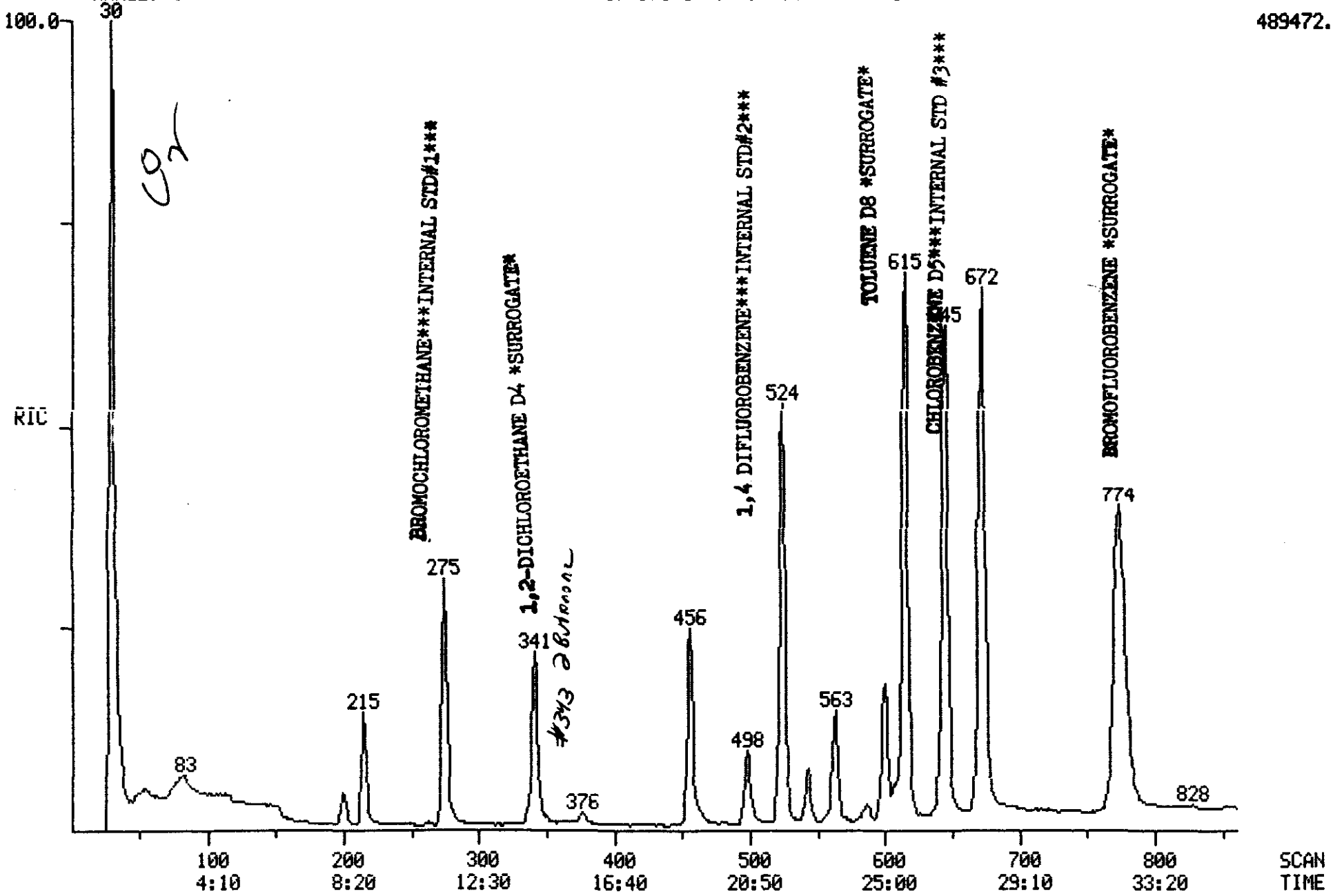
Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC 13:44 SVS DATA: W2276 #1 SCANS 1 TO 860
05/03/90 ~~1:44:00~~ CALI: W2276 #2
SAMPLE: CLP,VERSCOM,,EXTBLK,L,W,EXTBLK,V,TCLV,420.1,2./4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



0034

Quantitation Report File: W2276

ORIGINAL
(Red)

Data: W2276.TI 13:44
05/03/90 1~~:44:00~~ SKS
Sample: CLP,VERSCDM,,EXTBLK,L,W,EXTBLK,V,TCLV,420.1,2./4,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: 420.1

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE
43	C032 PYRIDINE

✓ GB 5/17/90

~~Acton~~ D 1/5
Run Comp

Ready for Forms
1 HH
SB
5/15/90

ORIGINAL (Red)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)		Amount	%Tot
1	128	274	11:25	1	1.000	A BB	105818.		50.000 UG/L*	6.79
2	114	524	21:50	2	1.000	A BB	493214.		50.000 UG/L*	6.79
3	117	644	26:50	3	1.000	A BB	493930.		50.000 UG/L*	6.79
4	65	341	14:12	1	1.245	A BB	154534.	95	47.287 UG/L*	6.42
5	98	615	25:37	3	0.955	A BB	583362.	101	50.573 UG/L*	6.87
6	95	773	32:12	3	1.200	A BB	375173.	102	51.164 UG/L*	6.95
7	50	64	2:40	1	0.234	A VB	167.		0 ~~.051 UG~~/L	0.01
8	NOT FOUND									
9	NOT FOUND									
10	64	145	6:02	1	0.529	A VV	601.		~~0.285~~ UG/L	0.04
11	84	200	8:20	1	0.730	A BB	20745.	NTC	~~6.765~~ UG/L	0.92
12	43	215	8:57	1	0.785	A BB	191334.		~~392.727~~ UG/L	53.34
13	76	239	9:57	1	0.872	A BB	2448.		~~0.418~~ UG/L	0.06
14	NOT FOUND									
15	NOT FOUND									
16	NOT FOUND									
17	NOT FOUND									
18	NOT FOUND									
19	72	343	14:17	1	1.252	A VB	1418.		7.556 UG/L	1.03
20	NOT FOUND									
21	NOT FOUND									
22	NOT FOUND									
23	NOT FOUND									
24	NOT FOUND									
25	NOT FOUND									
26	78	462	19:15	2	0.882	A BB	4883.	NTC	~~0.547 UG~~/L	0.07
27	NOT FOUND									
28	NOT FOUND									
29	75	470	19:35	2	0.897	A VV	554.	NTC	0 ~~.218 UG~~/L	0.03
30	NOT FOUND									
31	NOT FOUND									
32	97	376	15:40	2	0.718	A BB	4428.	NTC	~~1.389~~ UG/L	0.19
33	43	543	22:37	3	0.843	A BB	56973.	NTC	~~20.218~~ UG/L	2.75
34	43	588	24:30	3	0.913	A BB	11564.	NTC	~~4.721~~ UG/L	0.64
35	164	585	24:22	3	0.908	A BB	1673.	PQL	~~0.482 UG/L~~	0.07
36	83	586	24:25	3	0.910	A BB	271.		~~0.049~~ UG/L	0.01
37	92	619	25:47	3	0.961	A BB	10184.		~~1.541~~ UG/L	0.21
38	112	646	26:55	3	1.003	A BB	940.		~~0.107~~ UG/L	0.01
39	106	702	29:15	3	1.090	A BB	629.	NTC	~~0.146~~ UG/L	0.02
40	104	818	34:05	3	1.270	A BB	788.		~~0.095~~ UG/L	0.01
41	NOT FOUND									
42	NOT FOUND									
43	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:07	1.03	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:10	1.00	1.250	1.00	47.29	50.00	1.460	1.544	0.95
5	25:40	1.00	0.954	1.00	50.57	50.00	1.181	1.168	1.01
6	32:17	1.00	1.200	1.00	51.16	50.00	0.760	0.742	1.02
7	2:15	1.19	0.199	1.18	0.05	50.00	0.002	1.535	0.00
8	3:35		0.316						
9	4:27		0.393						
10	5:42	1.06	0.504	1.05	0.29	50.00	0.006	0.996	0.01
11	8:05	1.03	0.713	1.02	6.76	50.00	0.196	1.449	0.14

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	8:45	1.02	0.772	1.02	392.73	50.00	1.808	0.230	7.85
13	9:45	1.02	0.860	1.01	0.42	50.00	0.023	2.779	0.01
14	10:57		0.967						
15	12:15		1.081						
16	12:57		1.143						
17	13:30		1.191						
18	14:17		1.261						
19	14:17	1.00	1.261	0.99	7.56	50.00	0.013	0.089	0.15
20	16:10		0.739						
21	16:02		0.733						
22	16:27		0.752						
23	17:57		0.821						
24	18:10		0.830						
25	18:42		0.855						
26	19:17	1.00	0.882	1.00	0.55	50.00	0.010	0.905	0.01
27	19:17		0.882						
28	19:25		0.888						
29	19:27	1.01	0.890	1.01	0.22	50.00	0.001	0.257	0.00
30	20:35		0.941						
31	22:00		1.006						
32	15:37	1.00	0.714	1.00	1.39	50.00	0.009	0.323	0.03
33	22:40	1.00	0.842	1.00	20.21	50.00	0.115	0.285	0.40
34	24:12	1.01	0.899	1.02	4.72	50.00	0.023	0.248	0.09
35	24:25	1.00	0.907	1.00	0.48	50.00	0.003	0.351	0.01
36	24:22	1.00	0.906	1.00	0.05	50.00	0.001	0.564	0.00
37	25:50	1.00	0.960	1.00	1.54	50.00	0.021	0.669	0.03
38	27:02	1.00	1.005	1.00	0.11	50.00	0.002	0.885	0.00
39	29:20	1.00	1.090	1.00	0.15	50.00	0.001	0.436	0.00
40	34:10	1.00	1.269	1.00	0.09	50.00	0.002	0.840	0.00
41	35:37		1.324						
42	34:27		1.280						
43	19:57		0.914						

Quantitation Report File: ISREF

ORIGINAL
(Red)

Data: W2272.TI
05/02/90 21:42:00
Sample: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

Data: W2276.TI
05/03/90 1:44:00
Sample: CLP,VERSCDM,,EXTBLK,L,W,EXTBLK,V,TCLV,420.1,2./4,5ML,
Conds.: INS1 W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: 420.1

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CI01 BROMOCHLOROMETHANE **IS#1**
5	CI10 1,4-DIFLUOROBENZENE **IS#2**
6	CI20 CHLOROBENZENE-D5 **IS#3**

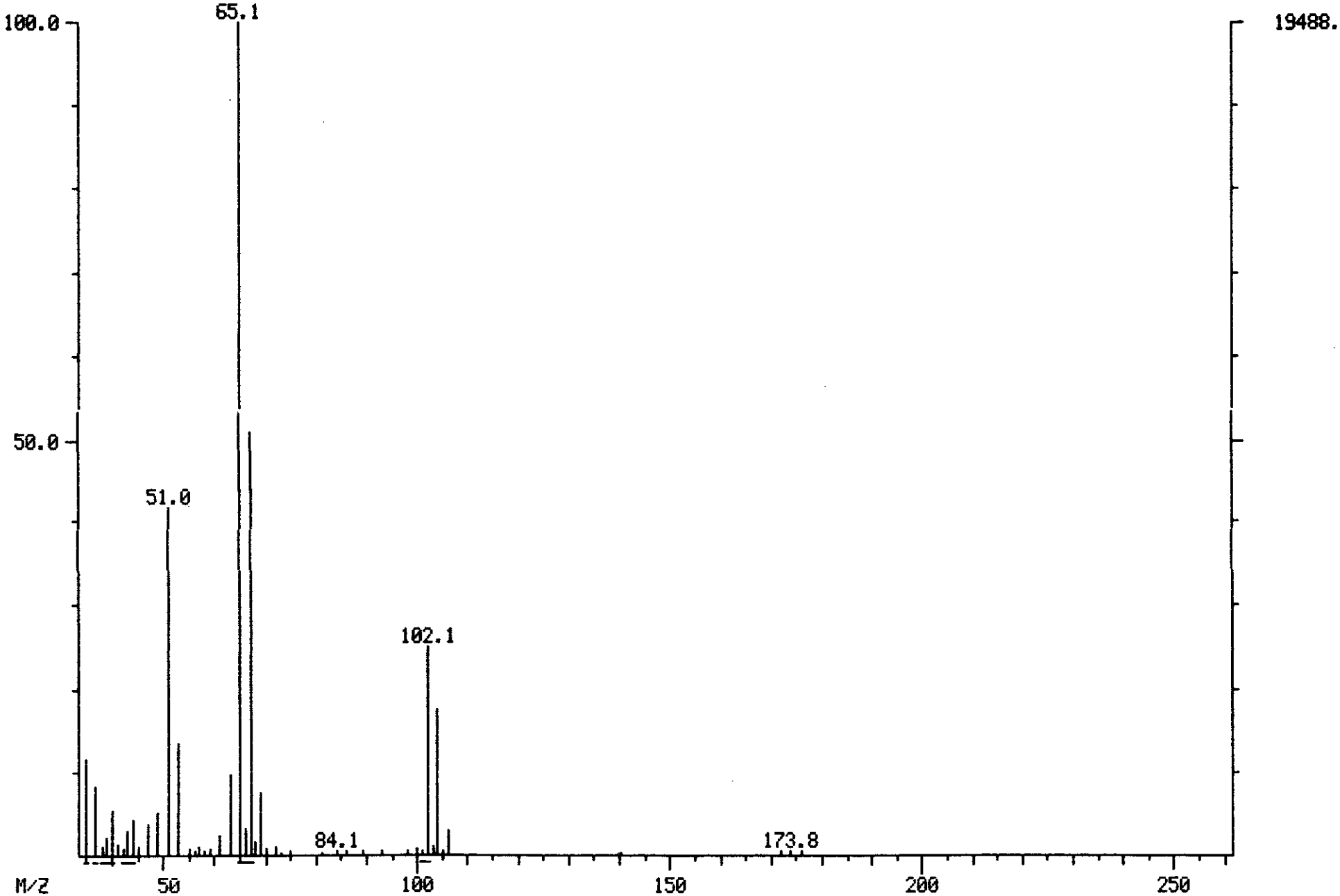
Scan	Time	Area(Hght)	Amount	Name
272	11:20	100378.	50.000 UG/L*	CI01 BROMOCHLOROMETHANE **IS
525	21:52	473952.	50.000 UG/L*	CI10 1,4-DIFLUOROBENZENE **I
646	26:55	461153.	50.000 UG/L*	CI20 CHLOROBENZENE-D5 **IS#3
274	11:25	105818.	52.710 UG/L*	CI01 BROMOCHLOROMETHANE **IS
524	21:50	493214.	52.032 UG/L*	CI10 1,4-DIFLUOROBENZENE **I
644	26:50	493930.	53.554 UG/L*	CI20 CHLOROBENZENE-D5 **IS#3

ORIGINAL (Red)

MASS SPECTRUM
05/03/90 1:44:00 + 14:17
SAMPLE: CLP,VERSCOM,,EXTBLK,L,W,EXTBLK,V,TCLV,420.1,2./4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE

DATA: W2276 #343
CALI: W2276 #2

BASE M/Z: 65
RIC: 66048.



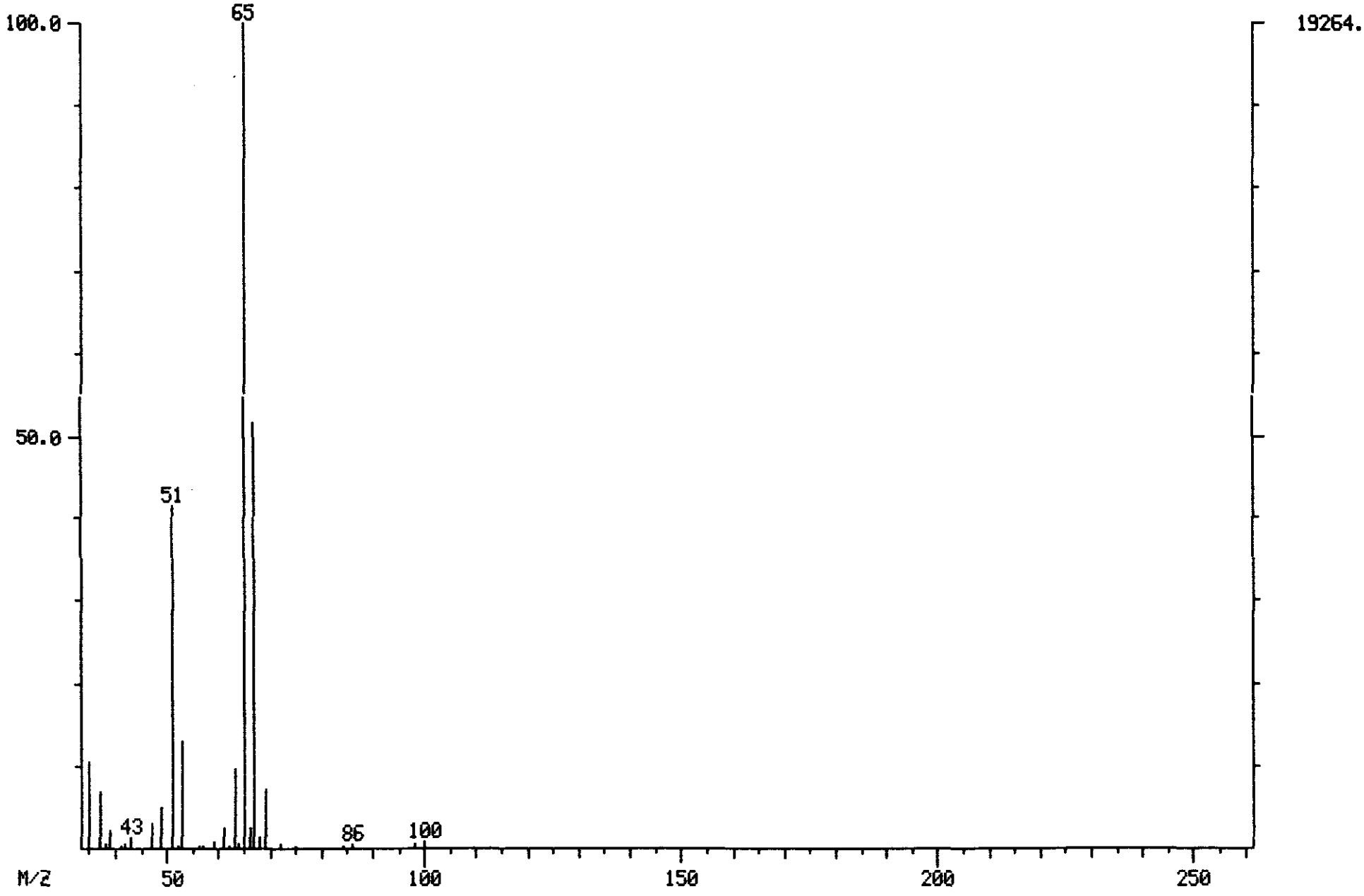
-0039

ORIGINAL (Red)

MASS SPECTRUM
05/03/90 1:44:00 + 14:17
SAMPLE: CLP,VERSCDM,,EXTBLK,L,W,EXTBLK,V,TCLV,420.1,2./4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE
ENHANCED (S 15B 2N 0T)

DATA: W2276 #343
CALI: W2276 #2

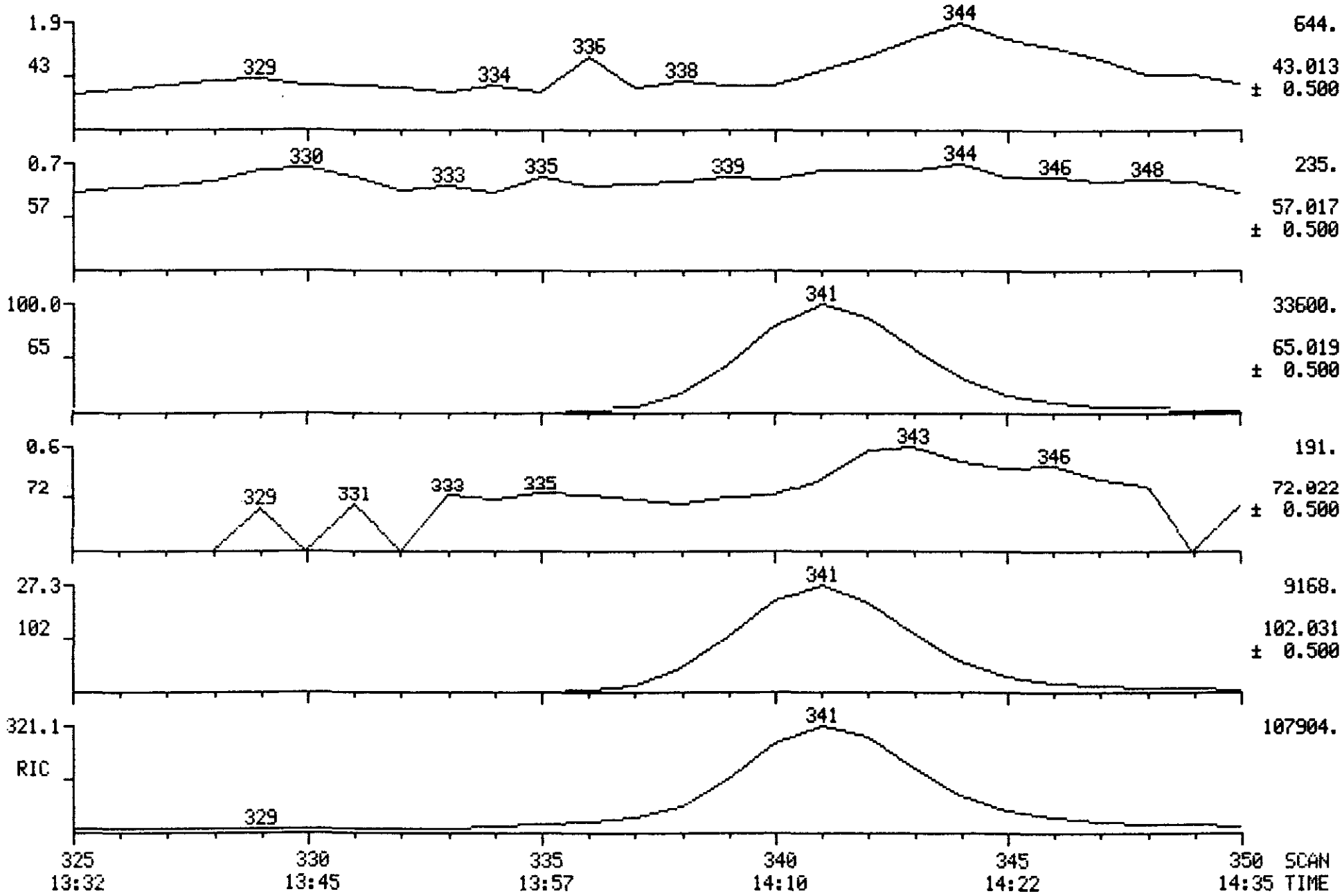
BASE M/Z: 65
RIC: 51072.



0040

ORIGINAL (Red)

RIC+MASS CHROMATOGRAMS DATA: W2276 #1 SCANS 325 TO 350
05/03/90 1:44:00 CALI: W2276 #2
SAMPLE: CLP,VERSCDM,,EXTBLK,L,W,EXTBLK,V,TCLV,420.1,2./4,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



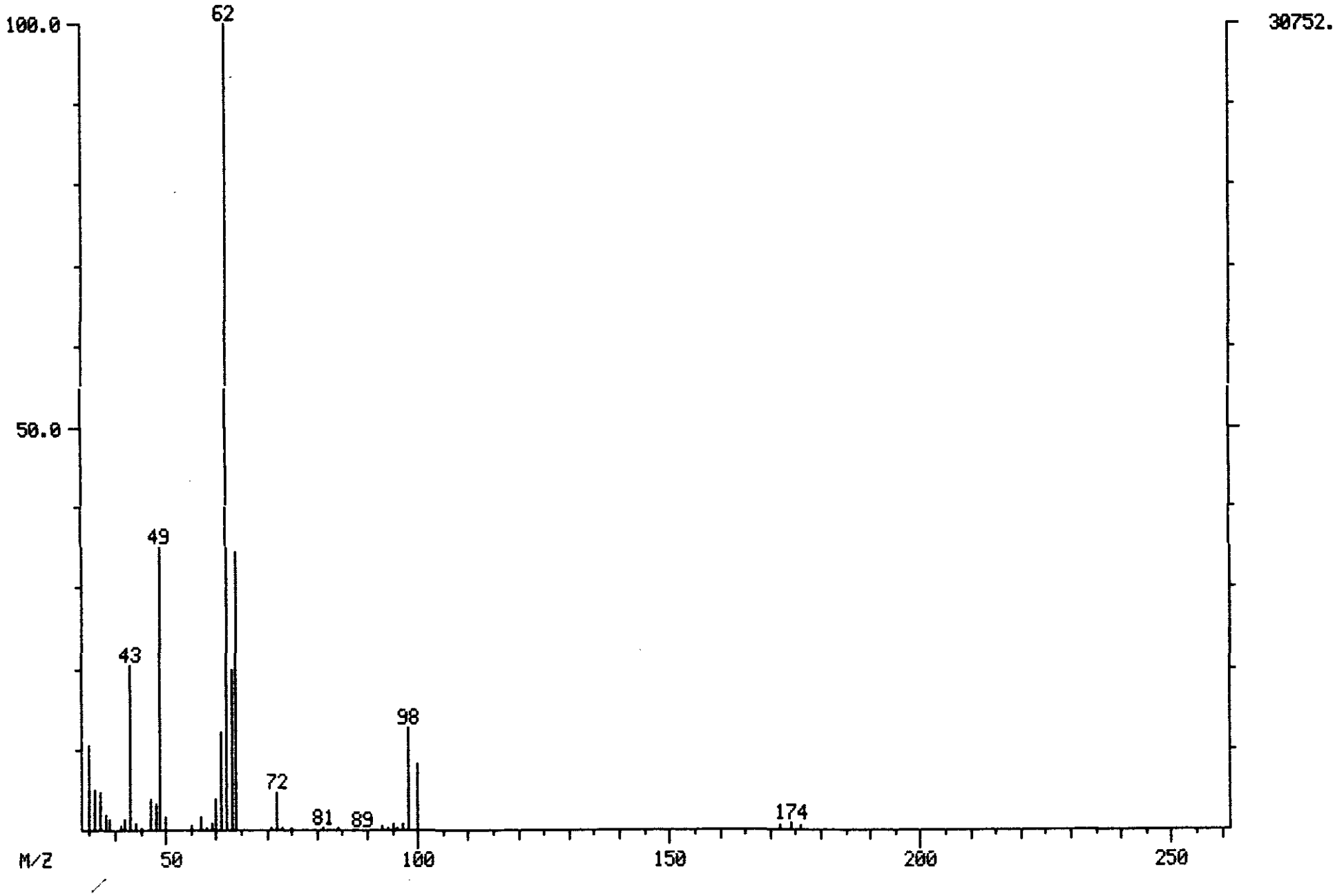
100041

ORIGINAL (Red)

MASS SPECTRUM
05/02/90 21:42:00 + 14:17
SAMPLE: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C110 2-BUTANONE
ENHANCED (S 15B 2N 0T)

DATA: W2272 #343
CALI: W2272 #2

BASE M/Z: 62
RIC: 91520.



240042

ORIGINAL
(Red)

Versar INC.

IV. STANDARDS DATA

ORIGINAL (Red)

INITIAL CALIBRATION DATA - VOLATILE HSL COMPOUNDS

CASE NO. : CONTRACT LAB: VERSAR INC.
CONTRACT NO. : INSTRUMENT IDENTIFIER: W
CALIBRATION DATE: 4/30/90
MINIMUM MEAN RF FOR SPCC IS 0.300, BROMOFORM > .250
MAXIMUM %RSD FOR CCC IS 30%

LABORATORY ID

COMPOUND	W2265 RF RF20	W2261 RF RF50	W2264 RF RF100	W2263 RF RF150	W2262 RF RF200	MEAN RF	%RSD
C020 VINYL CHLORIDE	2.041	2.461	2.264	2.131	2.754	2.330	12.2
C045 1,1-DICHLOROETHENE	1.250	1.240	1.404	1.334	1.515	1.349	8.4
C060 CHLOROFORM	2.231	2.294	2.612	2.550	2.850	2.508	10.0
C140 1,2-DICHLOROPROPANE	0.284	0.283	0.351	0.333	0.369	0.324	11.9
C230 TOLUENE	0.735	0.706	0.782	0.705	0.831	0.752	7.2
C240 ETHYLBENZENE	0.477	0.445	0.483	0.438	0.510	0.470	6.2
C010 CHLOROMETHANE	1.992	1.534	2.021	1.978	1.623	1.830	12.6
C050 1,1-DICHLOROETHANE	1.979	1.976	2.422	2.315	2.560	2.250	11.7
C180 BROMOFORM	0.206	0.269	0.240	0.232	0.288	0.247	12.9
C225 1,1,2,2-TETRACHLOROETHA	0.504	0.527	0.607	0.563	0.650	0.570	10.3
C235 CHLOROBENZENE	0.930	0.907	0.928	0.867	0.959	0.918	3.7
C015 BROMOMETHANE	2.136	2.422	2.293	2.175	2.657	2.337	9.0
C025 CHLOROETHANE	1.284	1.396	1.386	1.214	1.628	1.382	11.3
C030 METHYLENE CHLORIDE	1.588	1.537	1.693	1.668	1.781	1.653	5.7
C035 ACETONE	0.401	0.256	0.267	0.200	0.194	0.263	31.5
C040 CARBON DISULFIDE	0.468	0.547	0.537	0.478	0.558	0.517	8.0
C053 1,2-DICHLOROETHENE (TOT	1.349	1.339	1.489	1.407	1.681	1.453	9.6
C065 1,2-DICHLOROETHANE	1.649	1.700	1.891	1.909	2.224	1.874	12.0
C110 2-BUTANONE	0.127	0.115	0.128	0.105	0.120	0.119	7.7
C125 VINYL ACETATE	0.285	0.294	0.260	0.322	0.364	0.305	12.9
C120 CARBON TETRACHLORIDE	0.265	0.294	0.321	0.302	0.361	0.309	11.4
C130 BROMODICHLOROMETHANE	0.435	0.450	0.490	0.461	0.535	0.474	8.3
C145 CIS-1,3-DICHLOROPROPENE	0.482	0.501	0.591	0.564	0.667	0.561	13.2
C150 TRICHLOROETHENE	0.385	0.395	0.424	0.377	0.443	0.405	6.9
C165 BENZENE	0.962	0.974	1.111	1.026	1.215	1.058	9.9
C155 DIBROMOCHLOROMETHANE	0.345	0.425	0.417	0.424	0.499	0.422	12.8
C160 1,1,2-TRICHLOROETHANE	0.294	0.317	0.360	0.338	0.384	0.338	10.3
C170 TRANS-1,3-DICHLOROPROPE	0.231	0.257	0.320	0.311	0.380	0.300	19.2
C175 2-CHLOROETHYLVINYLETHER	0.138	0.158	0.211	0.194	0.211	0.183	18.1
C115 1,1,1-TRICHLOROETHANE	0.349	0.342	0.380	0.341	0.411	0.364	8.3
C205 4-METHYL-2-PENTANONE	0.302	0.312	0.414	0.307	0.340	0.335	13.8
C210 2-HEXANONE	0.234	0.244	0.351	0.259	0.285	0.274	17.0
C220 TETRACHLOROETHENE	0.351	0.359	0.367	0.337	0.404	0.364	6.8
C245 STYRENE	0.885	0.831	0.889	0.810	0.918	0.867	5.1
C250 ORTHO & PARA XYLENE	0.510	0.475	0.505	0.444	0.504	0.488	5.7
C251 META XYLENE	0.583	0.551	0.598	0.534	0.614	0.576	5.7

ORIGINAL
(Red)

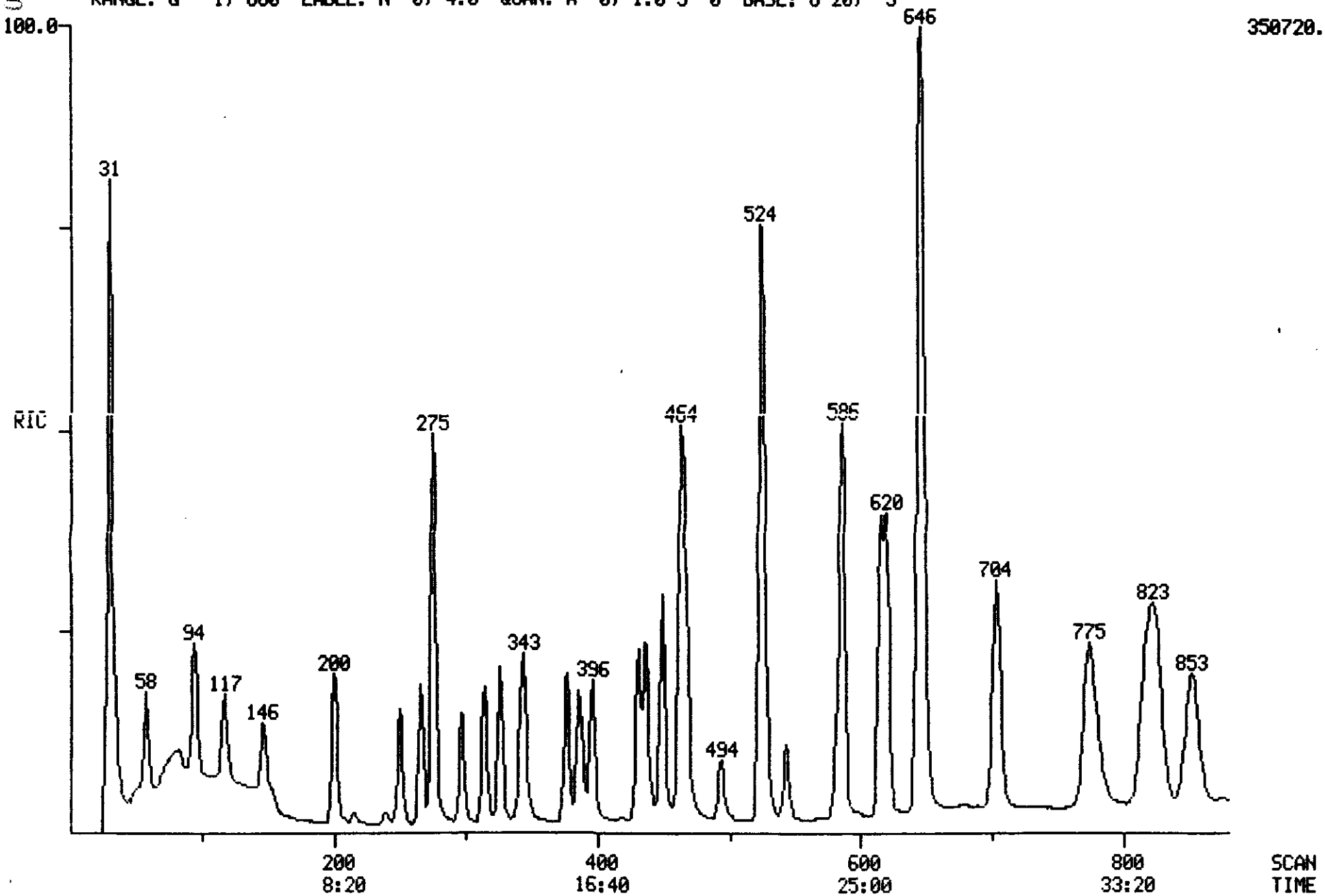
CALIBRATION CHECK - VOLATILE HSL COMPOUNDS

CASE NO. : CONTRACT LAB: VERSAR INC.
CONTRACT NO. : INSTRUMENT IDENTIFIER: W
CALIBRATION DATE: 4/30/90
STANDARD FILE: W2272
DATE: 5/3/90 TIME: 21:52
MINIMUM MEAN RF FOR SPCC IS 0.300, BROMOFORM > .250
MAXIMUM %RSD FOR CCC IS 30%

COMPOUND	MEAN RF(I)	RF(O)	% D
C020 VINYL CHLORIDE	2.330	1.775	23.845
C045 1,1-DICHLOROETHENE	1.349	1.165	13.607
C060 CHLOROFORM	2.508	2.264	9.692
C140 1,2-DICHLOROPROPANE	0.324	0.280	13.607
C230 TOLUENE	0.752	0.669	11.004
C240 ETHYLBENZENE	0.470	0.436	7.365
C010 CHLOROMETHANE	1.830	1.535	16.109
C050 1,1-DICHLOROETHANE	2.250	1.894	15.832
C180 BROMOFORM	0.247	0.274	-10.803
C225 1,1,2,2-TETRACHLOROETHA	0.570	0.564	1.143
C235 CHLOROBENZENE	0.918	0.885	3.592
C015 BROMOMETHANE	2.337	1.733	25.842
C025 CHLOROETHANE	1.382	0.996	27.892
C030 METHYLENE CHLORIDE	1.653	1.449	12.363
C035 ACETONE	0.263	0.230	12.611
C040 CARBON DISULFIDE	0.517	2.779	*-436.5
C053 1,2-DICHLOROETHENE (TOT	1.453	1.244	14.404
C065 1,2-DICHLOROETHANE	1.874	1.552	17.217
C110 2-BUTANONE	0.119	0.089	25.314
C125 VINYL ACETATE	0.305	0.415	-36.195
C120 CARBON TETRACHLORIDE	0.309	0.293	5.080
C130 BROMODICHLOROMETHANE	0.474	0.456	3.785
C145 CIS-1,3-DICHLOROPROPENE	0.561	0.512	8.766
C150 TRICHLOROETHENE	0.405	0.388	4.155
C165 BENZENE	1.058	0.905	14.390
C155 DIBROMOCHLOROMETHANE	0.422	0.414	1.934
C160 1,1,2-TRICHLOROETHANE	0.338	0.305	9.909
C170 TRANS-1,3-DICHLOROPROPE	0.300	0.257	14.140
C175 2-CHLOROETHYLVINYLETHER	0.183	0.176	3.690
C115 1,1,1-TRICHLOROETHANE	0.364	0.323	11.304
C205 4-METHYL-2-PENTANONE	0.335	0.285	14.731
C210 2-HEXANONE	0.274	0.248	9.635
C220 TETRACHLOROETHENE	0.364	0.351	3.413
C245 STYRENE	0.867	0.840	3.073
C250 ORTHO & PARA XYLENE	0.488	0.496	-1.677
C251 META XYLENE	0.576	0.642	-11.440

RIC DATA: W2265 #1 SCANS 1 TO 880
04/30/90 16:38:00 CALI: W2265 #2
SAMPLE: CLP,,,VSTD-20,L,W,22572,V,IC-20,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

ORIGINAL (Red)



Quantitation Report File: W2265

(Red)

Data: W2265.TI
04/30/90 16:38:00
Sample: CLP,,,VSTD-20,L,W,22572,V,IC-20,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.009
Submitted by: VERSAR Analyst: SKS Acct. No.: 2416

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE

ORIGINAL (Red)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	275	11:27	1	1.000	A BB	114690.	50.000	UG/L*	5.38
2	114	524	21:50	2	1.000	A BB	522812.	50.000	UG/L*	5.38
3	117	645	26:52	3	1.000	A BB	490361.	50.000	UG/L*	5.38
4	65	342	14:15	1	1.244	A BB	68928.	20.000	UG/L*	2.15
5	98	615	25:37	3	0.953	A BB	217390.	20.000	UG/L*	2.15
6	95	774	32:15	3	1.200	A BB	134659.	20.000	UG/L*	2.15
7	50	58	2:25	1	0.211	A BB	91388.	20.000	UG/L	2.15
8	94	94	3:55	1	0.342	A BB	97981.	20.000	UG/L	2.15
9	62	117	4:52	1	0.425	A BB	93642.	20.000	UG/L	2.15
10	64	146	6:05	1	0.531	A BB	58914.	20.000	UG/L	2.15
11	84	200	8:20	1	0.727	A BB	72873.	20.000	UG/L	2.15
12	43	216	9:00	1	0.785	A BB	18382.	20.000	UG/L	2.15
13	76	239	9:57	1	0.869	A BB	21453.	20.000	UG/L	2.15
14	96	266	11:05	1	0.967	A BB	57337.	20.000	UG/L	2.15
15	63	296	12:20	1	1.076	A BB	90798.	20.000	UG/L	2.15
16	96	314	13:05	1	1.142	A BB	61899.	20.000	UG/L	2.15
17	83	326	13:35	1	1.185	A BB	102349.	20.000	UG/L	2.15
18	62	344	14:20	1	1.251	A BB	75634.	20.000	UG/L	2.15
19	72	344	14:20	1	1.251	A BB	5808.	20.000	UG/L	2.15
20	43	389	16:12	2	0.742	A BB	59702.	20.000	UG/L	2.15
21	117	386	16:05	2	0.737	A VB	55499.	20.000	UG/L	2.15
22	83	396	16:30	2	0.756	A BB	90933.	20.000	UG/L	2.15
23	63	431	17:57	2	0.823	A VB	59493.	20.000	UG/L	2.15
24	75	436	18:10	2	0.832	A BB	100706.	20.000	UG/L	2.15
25	130	449	18:42	2	0.857	A BV	80423.	20.000	UG/L	2.15
26	78	463	19:17	2	0.884	A BB	201197.	20.000	UG/L	2.15
27	129	463	19:17	2	0.884	A BB	72249.	20.000	UG/L	2.15
28	97	466	19:25	2	0.889	A BB	61481.	20.000	UG/L	2.15
29	75	467	19:27	2	0.891	A BB	48357.	20.000	UG/L	2.15
30	63	494	20:35	2	0.943	A BV	28784.	20.000	UG/L	2.15
31	173	528	22:00	2	1.008	A BB	43045.	20.000	UG/L	2.15
32	97	377	15:42	2	0.719	A BB	73065.	20.000	UG/L	2.15
33	43	543	22:37	3	0.842	A BB	59221.	20.000	UG/L	2.15
34	43	581	24:12	3	0.901	A BB	45822.	20.000	UG/L	2.15
35	164	586	24:25	3	0.909	A BB	68850.	20.000	UG/L	2.15
36	83	585	24:22	3	0.907	A BB	98858.	20.000	UG/L	2.15
37	92	620	25:50	3	0.961	A BB	144201.	20.000	UG/L	2.15
38	112	648	27:00	3	1.005	A BB	182409.	20.000	UG/L	2.15
39	106	704	29:20	3	1.091	A BB	93502.	20.000	UG/L	2.15
40	104	818	34:05	3	1.268	A BB	173505.	20.000	UG/L	2.15
41	106	853	35:32	3	1.322	A BB	99985.	20.000	UG/L	2.15
42	106	825	34:22	3	1.279	A BB	114447.	20.000	UG/L	2.15

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:15	1.00	1.244	1.00	20.00	20.00	1.502	1.502	1.00
5	25:37	1.00	0.953	1.00	20.00	20.00	1.108	1.108	1.00
6	32:15	1.00	1.200	1.00	20.00	20.00	0.687	0.687	1.00
7	2:25	1.00	0.211	1.00	20.00	20.00	1.992	1.992	1.00
8	3:55	1.00	0.342	1.00	20.00	20.00	2.136	2.136	1.00
9	4:52	1.00	0.425	1.00	20.00	20.00	2.041	2.041	1.00
10	6:05	1.00	0.531	1.00	20.00	20.00	1.284	1.284	1.00
11	8:20	1.00	0.727	1.00	20.00	20.00	1.588	1.588	1.00
12	9:00	1.00	0.785	1.00	20.00	20.00	0.401	0.401	1.00

ORIGINAL
(Red)

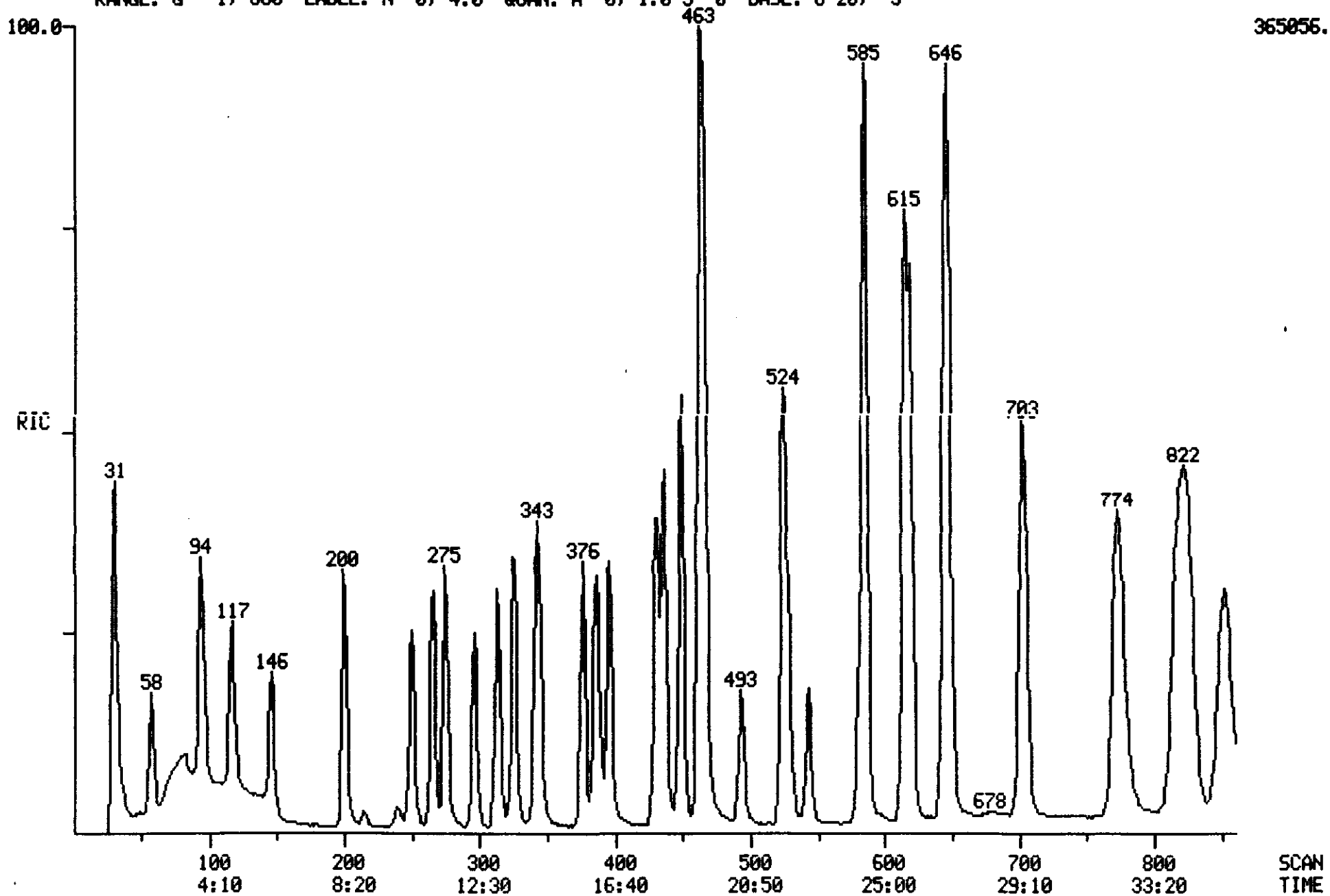
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
13	9:57	1.00	0.869	1.00	20.00	20.00	0.468	0.468	1.00
14	11:05	1.00	0.967	1.00	20.00	20.00	1.250	1.250	1.00
15	12:20	1.00	1.076	1.00	20.00	20.00	1.979	1.979	1.00
16	13:05	1.00	1.142	1.00	20.00	20.00	1.349	1.349	1.00
17	13:35	1.00	1.185	1.00	20.00	20.00	2.231	2.231	1.00
18	14:20	1.00	1.251	1.00	20.00	20.00	1.649	1.649	1.00
19	14:20	1.00	1.251	1.00	20.00	20.00	0.127	0.127	1.00
20	16:12	1.00	0.742	1.00	20.00	20.00	0.285	0.285	1.00
21	16:05	1.00	0.737	1.00	20.00	20.00	0.265	0.265	1.00
22	16:30	1.00	0.756	1.00	20.00	20.00	0.435	0.435	1.00
23	17:57	1.00	0.823	1.00	20.00	20.00	0.284	0.284	1.00
24	18:10	1.00	0.832	1.00	20.00	20.00	0.482	0.482	1.00
25	18:42	1.00	0.857	1.00	20.00	20.00	0.385	0.385	1.00
26	19:17	1.00	0.884	1.00	20.00	20.00	0.962	0.962	1.00
27	19:17	1.00	0.884	1.00	20.00	20.00	0.345	0.345	1.00
28	19:25	1.00	0.889	1.00	20.00	20.00	0.294	0.294	1.00
29	19:27	1.00	0.891	1.00	20.00	20.00	0.231	0.231	1.00
30	20:35	1.00	0.943	1.00	20.00	20.00	0.138	0.138	1.00
31	22:00	1.00	1.008	1.00	20.00	20.00	0.206	0.206	1.00
32	15:42	1.00	0.719	1.00	20.00	20.00	0.349	0.349	1.00
33	22:37	1.00	0.842	1.00	20.00	20.00	0.302	0.302	1.00
34	24:12	1.00	0.901	1.00	20.00	20.00	0.234	0.234	1.00
35	24:25	1.00	0.909	1.00	20.00	20.00	0.351	0.351	1.00
36	24:22	1.00	0.907	1.00	20.00	20.00	0.504	0.504	1.00
37	25:50	1.00	0.961	1.00	20.00	20.00	0.735	0.735	1.00
38	27:00	1.00	1.005	1.00	20.00	20.00	0.930	0.930	1.00
39	29:20	1.00	1.091	1.00	20.00	20.00	0.477	0.477	1.00
40	34:05	1.00	1.268	1.00	20.00	20.00	0.885	0.885	1.00
41	35:32	1.00	1.322	1.00	20.00	20.00	0.510	0.510	1.00
42	34:22	1.00	1.279	1.00	20.00	20.00	0.583	0.583	1.00

ORIGINAL (Red)

RIC
04/30/90 11:41:00
SAMPLE: CLP,,,VSTD-50,L,W,22566,V,CC-50,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: W2261 #1
CALI: W2261 #2

SCANS 1 TO 860



Quantitation Report File: W2261

ORIGINAL
(Red)

Data: W2261.TI
04/30/90 11:41:00
Sample: CLP,,,VSTD-50,L,W,22566,V,CC-50,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE

ORIGINAL (Red)

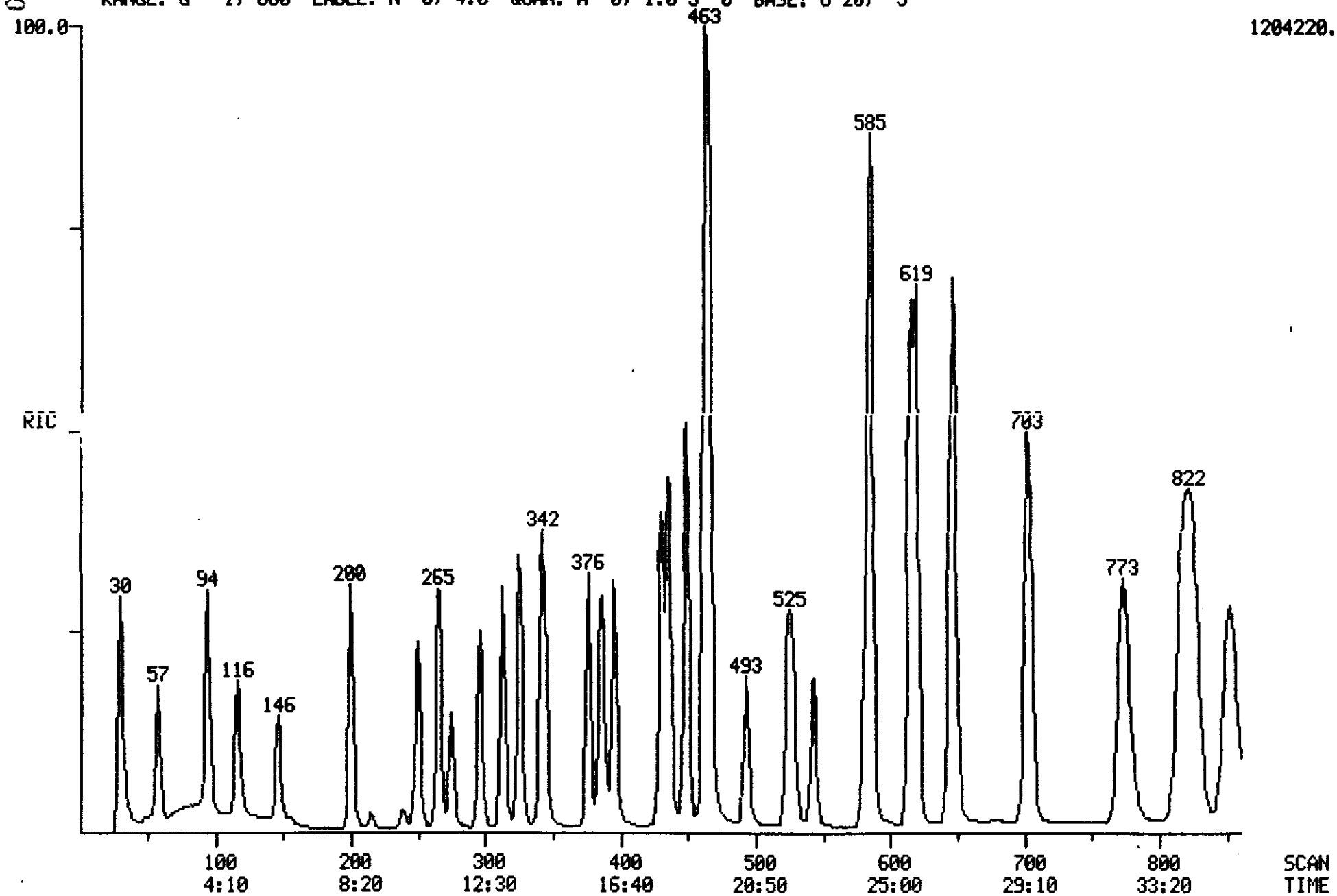
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	275	11:27	1	1.000	A BB	79253.	50.000	UG/L*	2.38
2	114	524	21:50	2	1.000	A BB	378985.	50.000	UG/L*	2.38
3	117	645	26:52	3	1.000	A BB	376976.	50.000	UG/L*	2.38
4	65	341	14:12	1	1.240	A BB	124872.	50.000	UG/L*	2.38
5	98	615	25:37	3	0.953	A BB	449086.	50.000	UG/L*	2.38
6	95	774	32:15	3	1.200	A BB	277260.	50.000	UG/L*	2.38
7	50	58	2:25	1	0.211	A BB	121569.	50.000	UG/L	2.38
8	94	94	3:55	1	0.342	A BB	191971.	50.000	UG/L	2.38
9	62	117	4:52	1	0.425	A BB	195078.	50.000	UG/L	2.38
10	64	146	6:05	1	0.531	A BV	110640.	50.000	UG/L	2.38
11	84	200	8:20	1	0.727	A BB	121849.	50.000	UG/L	2.38
12	43	215	8:57	1	0.782	A BB	20250.	50.000	UG/L	2.38
13	76	239	9:57	1	0.869	A BB	43329.	50.000	UG/L	2.38
14	96	266	11:05	1	0.967	A BB	98259.	50.000	UG/L	2.38
15	63	296	12:20	1	1.076	A BB	156575.	50.000	UG/L	2.38
16	96	313	13:02	1	1.138	A BB	106156.	50.000	UG/L	2.38
17	83	325	13:32	1	1.182	A BV	181786.	50.000	UG/L	2.38
18	62	344	14:20	1	1.251	A BB	134703.	50.000	UG/L	2.38
19	72	344	14:20	1	1.251	A BB	9112.	50.000	UG/L	2.38
20	43	388	16:10	2	0.740	A BB	111368.	50.000	UG/L	2.38
21	117	385	16:02	2	0.735	A VB	111517.	50.000	UG/L	2.38
22	83	396	16:30	2	0.756	A VB	170400.	50.000	UG/L	2.38
23	63	430	17:55	2	0.821	A BB	107410.	50.000	UG/L	2.38
24	75	436	18:10	2	0.832	A BB	189771.	50.000	UG/L	2.38
25	130	449	18:42	2	0.857	A BV	149706.	50.000	UG/L	2.38
26	78	463	19:17	2	0.884	A BB	369181.	50.000	UG/L	2.38
27	129	463	19:17	2	0.884	A BB	161128.	50.000	UG/L	2.38
28	97	466	19:25	2	0.889	A BB	120090.	50.000	UG/L	2.38
29	75	467	19:27	2	0.891	A BB	97579.	50.000	UG/L	2.38
30	63	493	20:32	2	0.941	A BB	59932.	50.000	UG/L	2.38
31	173	528	22:00	2	1.008	A BB	101789.	50.000	UG/L	2.38
32	97	376	15:40	2	0.718	A BB	129440.	50.000	UG/L	2.38
33	43	543	22:37	3	0.842	A VB	117468.	50.000	UG/L	2.38
34	43	580	24:10	3	0.899	A BB	91997.	50.000	UG/L	2.38
35	164	586	24:25	3	0.909	A BB	135504.	50.000	UG/L	2.38
36	83	584	24:20	3	0.905	A BB	198842.	50.000	UG/L	2.38
37	92	619	25:47	3	0.960	A BB	266227.	50.000	UG/L	2.38
38	112	648	27:00	3	1.005	A BB	341874.	50.000	UG/L	2.38
39	106	703	29:17	3	1.090	A BB	167639.	50.000	UG/L	2.38
40	104	817	34:02	3	1.267	A BB	313367.	50.000	UG/L	2.38
41	106	852	35:30	3	1.321	A BB	178972.	50.000	UG/L	2.38
42	106	825	34:22	3	1.279	A BB	207686.	50.000	UG/L	2.38

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:27	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:12	1.00	1.240	1.00	50.00	50.00	1.576	1.576	1.00
5	25:37	1.00	0.953	1.00	50.00	50.00	1.191	1.191	1.00
6	32:15	1.00	1.200	1.00	50.00	50.00	0.735	0.735	1.00
7	2:25	1.00	0.211	1.00	50.00	50.00	1.534	1.534	1.00
8	3:55	1.00	0.342	1.00	50.00	50.00	2.422	2.422	1.00
9	4:52	1.00	0.425	1.00	50.00	50.00	2.461	2.461	1.00
10	6:05	1.00	0.531	1.00	50.00	50.00	1.396	1.396	1.00
11	8:20	1.00	0.727	1.00	50.00	50.00	1.537	1.537	1.00
12	8:57	1.00	0.782	1.00	50.00	50.00	0.256	0.256	1.00

ORIGINAL
(Red)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
13	9:57	1.00	0.869	1.00	50.00	50.00	0.547	0.547	1.00
14	11:05	1.00	0.967	1.00	50.00	50.00	1.240	1.240	1.00
15	12:20	1.00	1.076	1.00	50.00	50.00	1.976	1.976	1.00
16	13:02	1.00	1.138	1.00	50.00	50.00	1.339	1.339	1.00
17	13:32	1.00	1.182	1.00	50.00	50.00	2.294	2.294	1.00
18	14:20	1.00	1.251	1.00	50.00	50.00	1.700	1.700	1.00
19	14:20	1.00	1.251	1.00	50.00	50.00	0.115	0.115	1.00
20	16:10	1.00	0.740	1.00	50.00	50.00	0.294	0.294	1.00
21	16:02	1.00	0.735	1.00	50.00	50.00	0.294	0.294	1.00
22	16:30	1.00	0.756	1.00	50.00	50.00	0.450	0.450	1.00
23	17:55	1.00	0.821	1.00	50.00	50.00	0.283	0.283	1.00
24	18:10	1.00	0.832	1.00	50.00	50.00	0.501	0.501	1.00
25	18:42	1.00	0.857	1.00	50.00	50.00	0.395	0.395	1.00
26	19:17	1.00	0.884	1.00	50.00	50.00	0.974	0.974	1.00
27	19:17	1.00	0.884	1.00	50.00	50.00	0.425	0.425	1.00
28	19:25	1.00	0.889	1.00	50.00	50.00	0.317	0.317	1.00
29	19:27	1.00	0.891	1.00	50.00	50.00	0.257	0.257	1.00
30	20:32	1.00	0.941	1.00	50.00	50.00	0.158	0.158	1.00
31	22:00	1.00	1.008	1.00	50.00	50.00	0.269	0.269	1.00
32	15:40	1.00	0.718	1.00	50.00	50.00	0.342	0.342	1.00
33	22:37	1.00	0.842	1.00	50.00	50.00	0.312	0.312	1.00
34	24:10	1.00	0.899	1.00	50.00	50.00	0.244	0.244	1.00
35	24:25	1.00	0.909	1.00	50.00	50.00	0.359	0.359	1.00
36	24:20	1.00	0.905	1.00	50.00	50.00	0.527	0.527	1.00
37	25:47	1.00	0.960	1.00	50.00	50.00	0.706	0.706	1.00
38	27:00	1.00	1.005	1.00	50.00	50.00	0.907	0.907	1.00
39	29:17	1.00	1.090	1.00	50.00	50.00	0.445	0.445	1.00
40	34:02	1.00	1.267	1.00	50.00	50.00	0.831	0.831	1.00
41	35:30	1.00	1.321	1.00	50.00	50.00	0.475	0.475	1.00
42	34:22	1.00	1.279	1.00	50.00	50.00	0.551	0.551	1.00

RIC DATA: W2264 #1 SCANS 1 TO 860
04/30/90 15:35:00 CALI: W2264 #2
SAMPLE: CLP,,,VSTD-100,L,W,22569,V,IC-100,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: W2264

ORIGINAL (Red)

Data: W2264.TI
04/30/90 15:35:00
Sample: CLP,,,VSTD-100,L,W,22569,V,IC-100,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE

ORIGINAL (Red)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	274	11:25	1	1.000	A BB	113302.	50.000 UG/L*	1.23
2	114	524	21:50	2	1.000	A BB	540182.	50.000 UG/L*	1.23
3	117	645	26:52	3	1.000	A BB	520401.	50.000 UG/L*	1.23
4	65	341	14:12	1	1.245	A BB	380625.	100.000 UG/L*	2.47
5	98	615	25:37	3	0.953	A BB	1188940.	100.000 UG/L*	2.47
6	95	773	32:12	3	1.198	A BB	736297.	100.000 UG/L*	2.47
7	50	57	2:22	1	0.208	A BB	458066.	100.000 UG/L	2.47
8	94	94	3:55	1	0.343	A BB	519674.	100.000 UG/L	2.47
9	62	116	4:50	1	0.423	A BB	513131.	100.000 UG/L	2.47
10	64	146	6:05	1	0.533	A BB	313979.	100.000 UG/L	2.47
11	84	200	8:20	1	0.730	A BB	383602.	100.000 UG/L	2.47
12	43	215	8:57	1	0.785	A BB	60417.	100.000 UG/L	2.47
13	76	238	9:55	1	0.869	A BB	121638.	100.000 UG/L	2.47
14	96	265	11:02	1	0.967	A BB	318184.	100.000 UG/L	2.47
15	63	296	12:20	1	1.080	A BB	548912.	100.000 UG/L	2.47
16	96	313	13:02	1	1.142	A BB	337320.	100.000 UG/L	2.47
17	83	325	13:32	1	1.186	A BV	591958.	100.000 UG/L	2.47
18	62	343	14:17	1	1.252	A BB	428460.	100.000 UG/L	2.47
19	72	343	14:17	1	1.252	A BB	28954.	100.000 UG/L	2.47
20	43	388	16:10	2	0.740	A BB	280373.	100.000 UG/L	2.47
21	117	385	16:02	2	0.735	A VB	346661.	100.000 UG/L	2.47
22	83	395	16:27	2	0.754	A VB	529104.	100.000 UG/L	2.47
23	63	430	17:55	2	0.821	A BB	378942.	100.000 UG/L	2.47
24	75	435	18:07	2	0.830	A BB	638196.	100.000 UG/L	2.47
25	130	448	18:40	2	0.855	A BV	458488.	100.000 UG/L	2.47
26	78	462	19:15	2	0.882	A BB	1200090.	100.000 UG/L	2.47
27	129	462	19:15	2	0.882	A BB	451043.	100.000 UG/L	2.47
28	97	466	19:25	2	0.889	A BB	388556.	100.000 UG/L	2.47
29	75	466	19:25	2	0.889	A BB	346254.	100.000 UG/L	2.47
30	63	493	20:32	2	0.941	A BB	228371.	100.000 UG/L	2.47
31	173	528	22:00	2	1.008	A BB	259290.	100.000 UG/L	2.47
32	97	376	15:40	2	0.718	A BB	410428.	100.000 UG/L	2.47
33	43	543	22:37	3	0.842	A BB	430456.	100.000 UG/L	2.47
34	43	580	24:10	3	0.899	A BV	365046.	100.000 UG/L	2.47
35	164	585	24:22	3	0.907	A BB	381998.	100.000 UG/L	2.47
36	83	584	24:20	3	0.905	A BB	632193.	100.000 UG/L	2.47
37	92	619	25:47	3	0.960	A BB	814223.	100.000 UG/L	2.47
38	112	647	26:57	3	1.003	A BB	965925.	100.000 UG/L	2.47
39	106	703	29:17	3	1.090	A BB	502348.	100.000 UG/L	2.47
40	104	817	34:02	3	1.267	A BB	925572.	100.000 UG/L	2.47
41	106	852	35:30	3	1.321	A BB	525743.	100.000 UG/L	2.47
42	106	825	34:22	3	1.279	A BB	621883.	100.000 UG/L	2.47

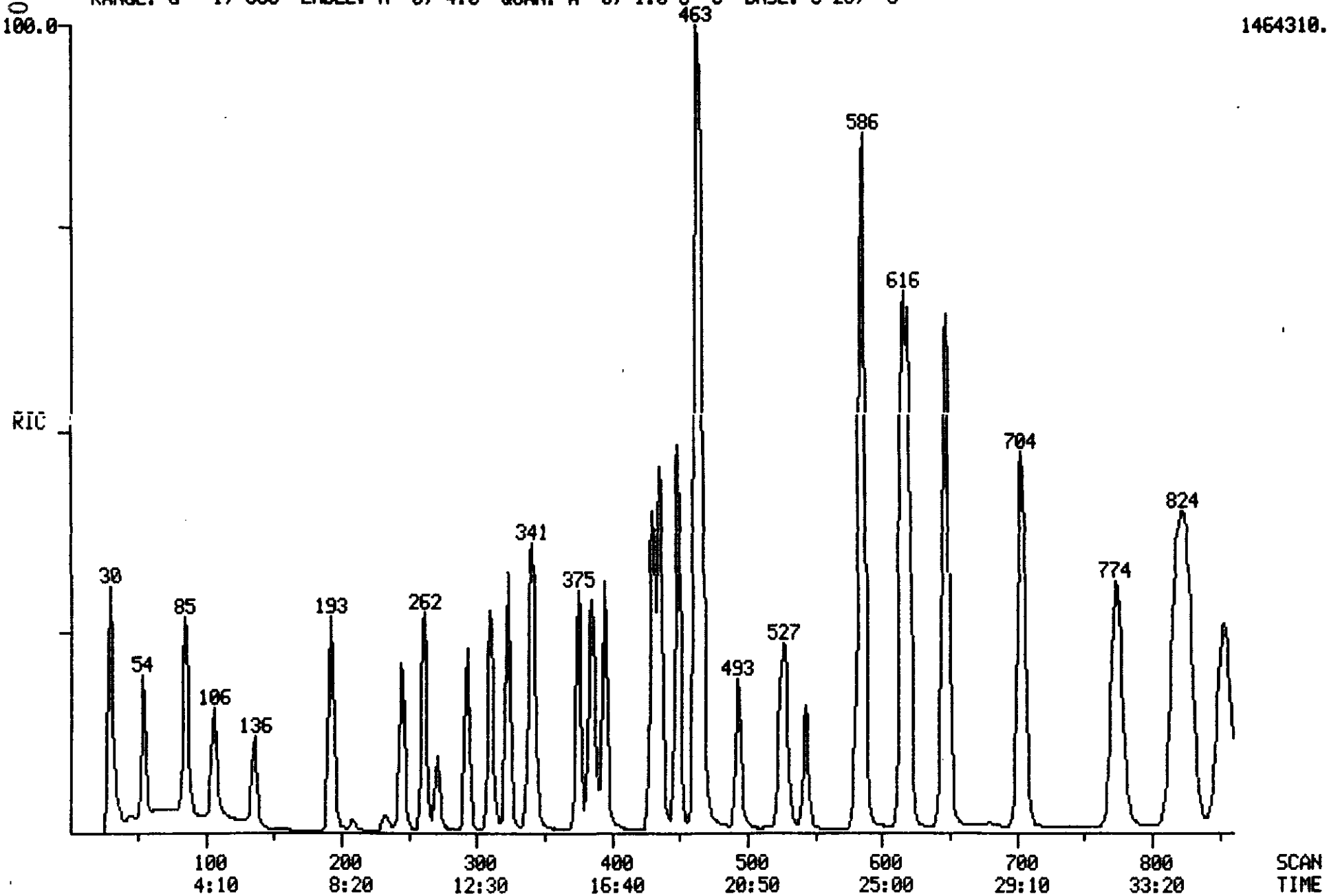
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:25	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:12	1.00	1.245	1.00	100.00	100.00	1.680	1.680	1.00
5	25:37	1.00	0.953	1.00	100.00	100.00	1.142	1.142	1.00
6	32:12	1.00	1.198	1.00	100.00	100.00	0.707	0.707	1.00
7	2:22	1.00	0.208	1.00	100.00	100.00	2.021	2.021	1.00
8	3:55	1.00	0.343	1.00	100.00	100.00	2.293	2.293	1.00
9	4:50	1.00	0.423	1.00	100.00	100.00	2.264	2.264	1.00
10	6:05	1.00	0.533	1.00	100.00	100.00	1.386	1.386	1.00
11	8:20	1.00	0.730	1.00	100.00	100.00	1.693	1.693	1.00
12	8:57	1.00	0.785	1.00	100.00	100.00	0.267	0.267	1.00

ORIGINAL (Red)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
13	9:55	1.00	0.869	1.00	100.00	100.00	0.537	0.537	1.00
14	11:02	1.00	0.967	1.00	100.00	100.00	1.404	1.404	1.00
15	12:20	1.00	1.080	1.00	100.00	100.00	2.422	2.422	1.00
16	13:02	1.00	1.142	1.00	100.00	100.00	1.489	1.489	1.00
17	13:32	1.00	1.186	1.00	100.00	100.00	2.612	2.612	1.00
18	14:17	1.00	1.252	1.00	100.00	100.00	1.891	1.891	1.00
19	14:17	1.00	1.252	1.00	100.00	100.00	0.128	0.128	1.00
20	16:10	1.00	0.740	1.00	100.00	100.00	0.260	0.260	1.00
21	16:02	1.00	0.735	1.00	100.00	100.00	0.321	0.321	1.00
22	16:27	1.00	0.754	1.00	100.00	100.00	0.490	0.490	1.00
23	17:55	1.00	0.821	1.00	100.00	100.00	0.351	0.351	1.00
24	18:07	1.00	0.830	1.00	100.00	100.00	0.591	0.591	1.00
25	18:40	1.00	0.855	1.00	100.00	100.00	0.424	0.424	1.00
26	19:15	1.00	0.882	1.00	100.00	100.00	1.111	1.111	1.00
27	19:15	1.00	0.882	1.00	100.00	100.00	0.417	0.417	1.00
28	19:25	1.00	0.889	1.00	100.00	100.00	0.360	0.360	1.00
29	19:25	1.00	0.889	1.00	100.00	100.00	0.320	0.320	1.00
30	20:32	1.00	0.941	1.00	100.00	100.00	0.211	0.211	1.00
31	22:00	1.00	1.008	1.00	100.00	100.00	0.240	0.240	1.00
32	15:40	1.00	0.718	1.00	100.00	100.00	0.380	0.380	1.00
33	22:37	1.00	0.842	1.00	100.00	100.00	0.414	0.414	1.00
34	24:10	1.00	0.899	1.00	100.00	100.00	0.351	0.351	1.00
35	24:22	1.00	0.907	1.00	100.00	100.00	0.367	0.367	1.00
36	24:20	1.00	0.905	1.00	100.00	100.00	0.607	0.607	1.00
37	25:47	1.00	0.960	1.00	100.00	100.00	0.782	0.782	1.00
38	26:57	1.00	1.003	1.00	100.00	100.00	0.928	0.928	1.00
39	29:17	1.00	1.090	1.00	100.00	100.00	0.483	0.483	1.00
40	34:02	1.00	1.267	1.00	100.00	100.00	0.889	0.889	1.00
41	35:30	1.00	1.321	1.00	100.00	100.00	0.505	0.505	1.00
42	34:22	1.00	1.279	1.00	100.00	100.00	0.598	0.598	1.00

RIC DATA: W2263 #1 SCANS 1 TO 860
04/30/90 13:54:00 CALI: W2263 #2
SAMPLE: CLP,,,VSTD-150,L,W,22568,V,IC-150,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

ORIGINAL (Red)



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Quantitation Report File: W2263

ORIGINAL (Red)

Data: W2263.TI
04/30/90 13:54:00
Sample: CLP,,,VSTD-150,L,W,22568,V,IC-150,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE

ORIGINAL (Red)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	271	11:17	1	1.000	A BB	88217.	50.000 UG/L*	0.83
2	114	524	21:50	2	1.000	A BB	460859.	50.000 UG/L*	0.83
3	117	645	26:52	3	1.000	A BB	456470.	50.000 UG/L*	0.83
4	65	339	14:07	1	1.251	A BB	466137.	150.000 UG/L*	2.50
5	98	615	25:37	3	0.953	A BB	1496810.	150.000 UG/L*	2.50
6	95	774	32:15	3	1.200	A BB	925342.	150.000 UG/L*	2.50
7	50	54	2:15	1	0.199	A BB	523347.	150.000 UG/L	2.50
8	94	85	3:32	1	0.314	A BB	575597.	150.000 UG/L	2.50
9	62	106	4:25	1	0.391	A BB	563950.	150.000 UG/L	2.50
10	64	136	5:40	1	0.502	A BB	321386.	150.000 UG/L	2.50
11	84	192	8:00	1	0.708	A BB	441314.	150.000 UG/L	2.50
12	43	209	8:42	1	0.771	A VB	53033.	150.000 UG/L	2.50
13	76	233	9:42	1	0.860	A BB	126569.	150.000 UG/L	2.50
14	96	262	10:55	1	0.967	A BB	353029.	150.000 UG/L	2.50
15	63	293	12:12	1	1.081	A BB	612637.	150.000 UG/L	2.50
16	96	310	12:55	1	1.144	A BB	372430.	150.000 UG/L	2.50
17	83	323	13:27	1	1.192	A BB	674915.	150.000 UG/L	2.50
18	62	342	14:15	1	1.262	A BB	505222.	150.000 UG/L	2.50
19	72	341	14:12	1	1.258	A BB	27842.	150.000 UG/L	2.50
20	43	387	16:07	2	0.739	A BB	444769.	150.000 UG/L	2.50
21	117	384	16:00	2	0.733	A VB	417897.	150.000 UG/L	2.50
22	83	395	16:27	2	0.754	A VB	637311.	150.000 UG/L	2.50
23	63	430	17:55	2	0.821	A BB	460593.	150.000 UG/L	2.50
24	75	435	18:07	2	0.830	A BB	780374.	150.000 UG/L	2.50
25	130	449	18:42	2	0.857	A BV	520660.	150.000 UG/L	2.50
26	78	463	19:17	2	0.884	A BB	1418680.	150.000 UG/L	2.50
27	129	462	19:15	2	0.882	A BB	586704.	150.000 UG/L	2.50
28	97	466	19:25	2	0.889	A BB	467171.	150.000 UG/L	2.50
29	75	466	19:25	2	0.889	A BB	429823.	150.000 UG/L	2.50
30	63	493	20:32	2	0.941	A BB	268819.	150.000 UG/L	2.50
31	173	528	22:00	2	1.008	A BB	321129.	150.000 UG/L	2.50
32	97	375	15:37	2	0.716	A BB	470873.	150.000 UG/L	2.50
33	43	543	22:37	3	0.842	A BB	419962.	150.000 UG/L	2.50
34	43	581	24:12	3	0.901	A BB	354432.	150.000 UG/L	2.50
35	164	586	24:25	3	0.909	A BB	461862.	150.000 UG/L	2.50
36	83	585	24:22	3	0.907	A BB	770669.	150.000 UG/L	2.50
37	92	620	25:50	3	0.961	A BB	965458.	150.000 UG/L	2.50
38	112	648	27:00	3	1.005	A BB	1187540.	150.000 UG/L	2.50
39	106	704	29:20	3	1.091	A BB	599889.	150.000 UG/L	2.50
40	104	818	34:05	3	1.268	A BB	1108960.	150.000 UG/L	2.50
41	106	854	35:35	3	1.324	A BB	608276.	150.000 UG/L	2.50
42	106	826	34:25	3	1.281	A BB	731580.	150.000 UG/L	2.50

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:17	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:07	1.00	1.251	1.00	150.00	150.00	1.761	1.761	1.00
5	25:37	1.00	0.953	1.00	150.00	150.00	1.093	1.093	1.00
6	32:15	1.00	1.200	1.00	150.00	150.00	0.676	0.676	1.00
7	2:15	1.00	0.199	1.00	150.00	150.00	1.978	1.978	1.00
8	3:32	1.00	0.314	1.00	150.00	150.00	2.175	2.175	1.00
9	4:25	1.00	0.391	1.00	150.00	150.00	2.131	2.131	1.00
10	5:40	1.00	0.502	1.00	150.00	150.00	1.214	1.214	1.00
11	8:00	1.00	0.708	1.00	150.00	150.00	1.668	1.668	1.00
12	8:42	1.00	0.771	1.00	150.00	150.00	0.200	0.200	1.00

ORIGINAL (Red)

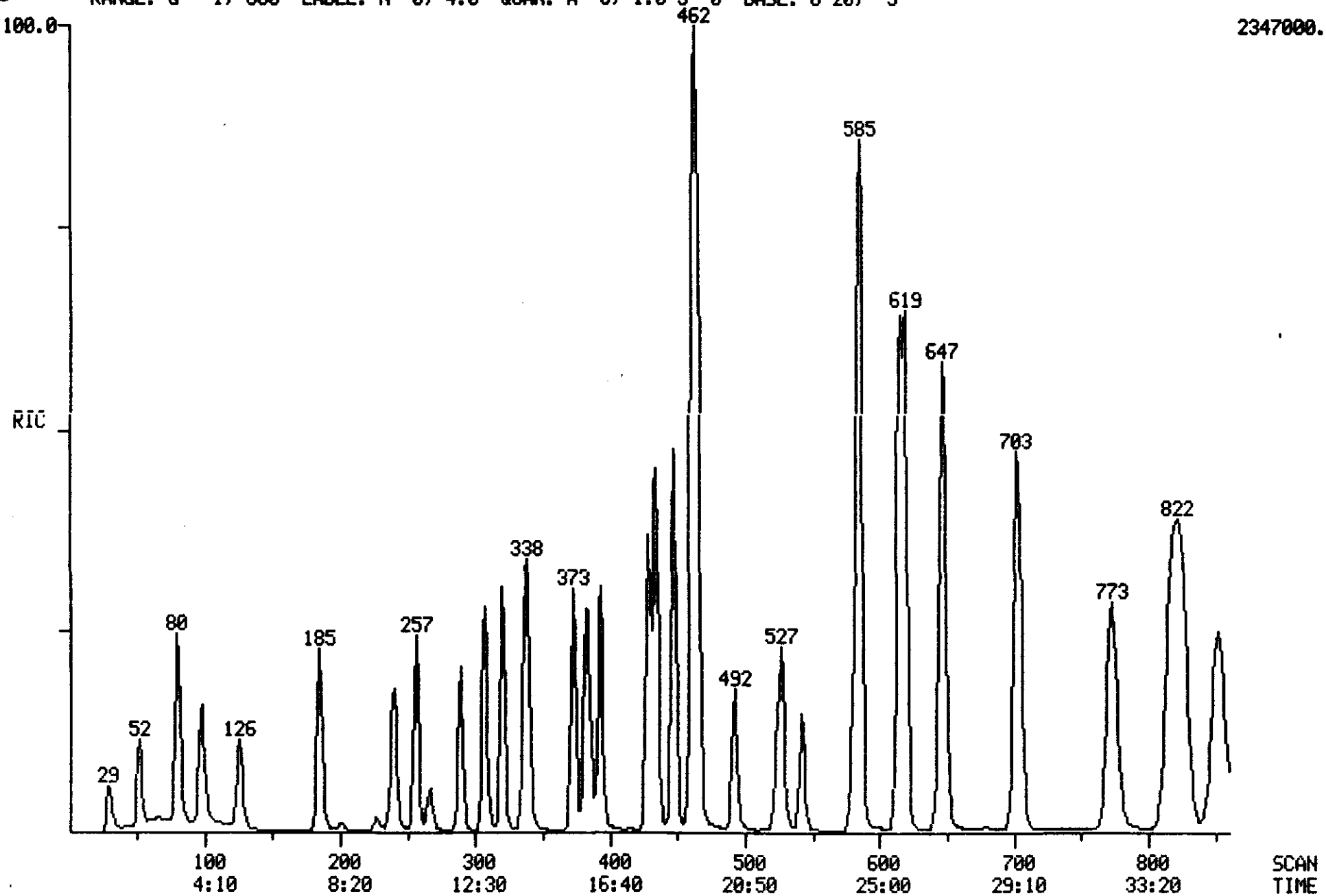
No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
13	9:42	1.00	0.860	1.00	150.00	150.00	0.478	0.478	1.00
14	10:55	1.00	0.967	1.00	150.00	150.00	1.334	1.334	1.00
15	12:12	1.00	1.081	1.00	150.00	150.00	2.315	2.315	1.00
16	12:55	1.00	1.144	1.00	150.00	150.00	1.407	1.407	1.00
17	13:27	1.00	1.192	1.00	150.00	150.00	2.550	2.550	1.00
18	14:15	1.00	1.262	1.00	150.00	150.00	1.909	1.909	1.00
19	14:12	1.00	1.258	1.00	150.00	150.00	0.105	0.105	1.00
20	16:07	1.00	0.739	1.00	150.00	150.00	0.322	0.322	1.00
21	16:00	1.00	0.733	1.00	150.00	150.00	0.302	0.302	1.00
22	16:27	1.00	0.754	1.00	150.00	150.00	0.461	0.461	1.00
23	17:55	1.00	0.821	1.00	150.00	150.00	0.333	0.333	1.00
24	18:07	1.00	0.830	1.00	150.00	150.00	0.564	0.564	1.00
25	18:42	1.00	0.857	1.00	150.00	150.00	0.377	0.377	1.00
26	19:17	1.00	0.884	1.00	150.00	150.00	1.026	1.026	1.00
27	19:15	1.00	0.882	1.00	150.00	150.00	0.424	0.424	1.00
28	19:25	1.00	0.889	1.00	150.00	150.00	0.338	0.338	1.00
29	19:25	1.00	0.889	1.00	150.00	150.00	0.311	0.311	1.00
30	20:32	1.00	0.941	1.00	150.00	150.00	0.194	0.194	1.00
31	22:00	1.00	1.008	1.00	150.00	150.00	0.232	0.232	1.00
32	15:37	1.00	0.716	1.00	150.00	150.00	0.341	0.341	1.00
33	22:37	1.00	0.842	1.00	150.00	150.00	0.307	0.307	1.00
34	24:12	1.00	0.901	1.00	150.00	150.00	0.259	0.259	1.00
35	24:25	1.00	0.909	1.00	150.00	150.00	0.337	0.337	1.00
36	24:22	1.00	0.907	1.00	150.00	150.00	0.563	0.563	1.00
37	25:50	1.00	0.961	1.00	150.00	150.00	0.705	0.705	1.00
38	27:00	1.00	1.005	1.00	150.00	150.00	0.867	0.867	1.00
39	29:20	1.00	1.091	1.00	150.00	150.00	0.438	0.438	1.00
40	34:05	1.00	1.268	1.00	150.00	150.00	0.810	0.810	1.00
41	35:35	1.00	1.324	1.00	150.00	150.00	0.444	0.444	1.00
42	34:25	1.00	1.281	1.00	150.00	150.00	0.534	0.534	1.00

ORIGINAL (Red)

RIC
04/30/90 13:11:00
SAMPLE: CLP,,,VSTD-200,L,W,22567,V,IC-200,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3

DATA: W2262 #1
CALI: W2262 #2

SCANS 1 TO 860



Quantitation Report File: W2262

Data: W2262.TI
04/30/90 13:11:00
Sample: CLP,,,VSTD-200,L,W,22567,V,IC-200,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE

ORIGINAL (Red)

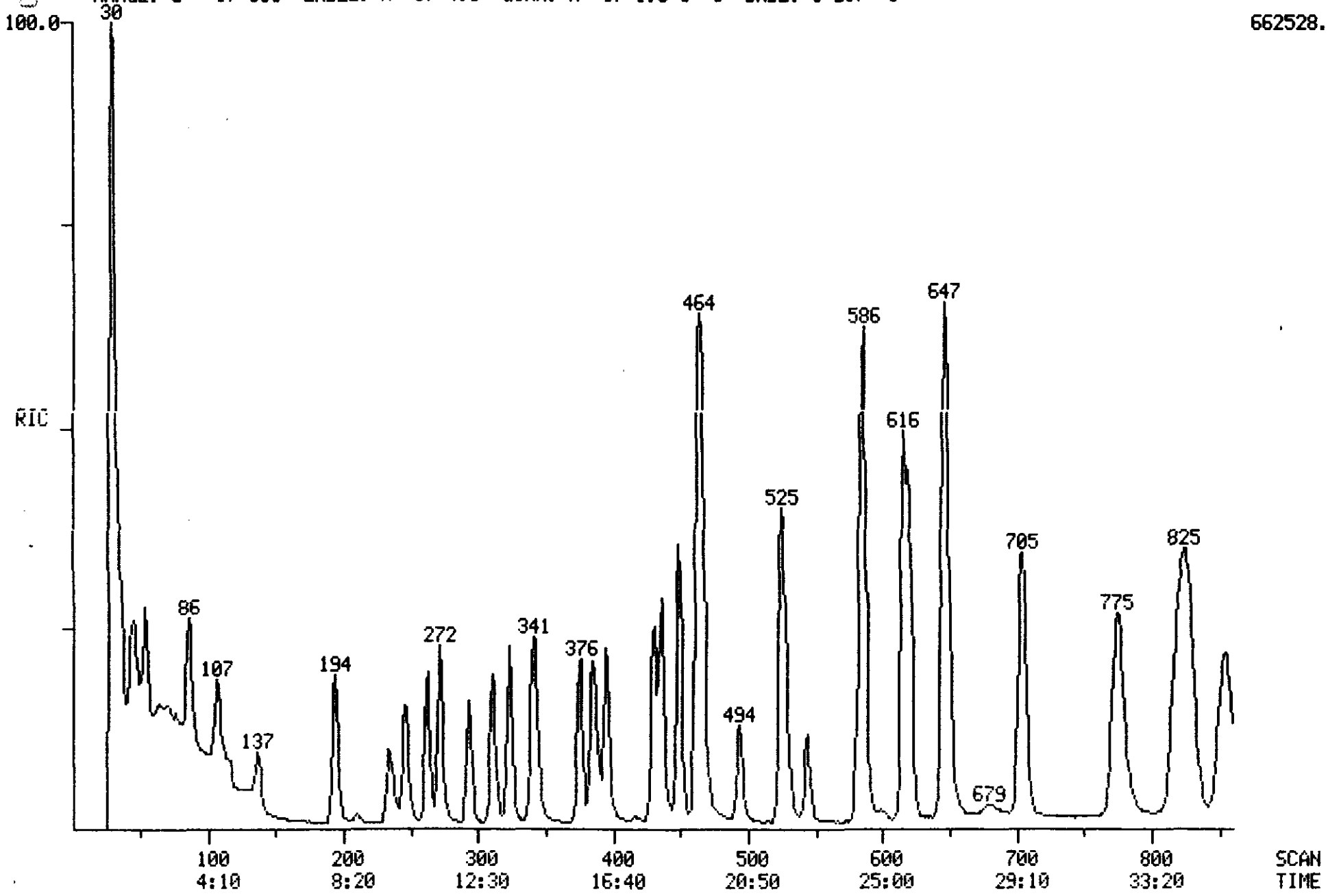
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount		%Tot
1	128	267	11:07	1	1.000	A BB	86558.	50.000	UG/L*	0.63
2	114	524	21:50	2	1.000	A BB	459360.	50.000	UG/L*	0.63
3	117	645	26:52	3	1.000	A BB	460656.	50.000	UG/L*	0.63
4	65	336	14:00	1	1.258	A BB	674148.	200.000	UG/L*	2.52
5	98	615	25:37	3	0.953	A BB	2210420.	200.000	UG/L*	2.52
6	95	773	32:12	3	1.198	A BB	1323260.	200.000	UG/L*	2.52
7	50	52	2:10	1	0.195	A BB	561908.	200.000	UG/L	2.52
8	94	80	3:20	1	0.300	A BB	919821.	200.000	UG/L	2.52
9	62	98	4:05	1	0.367	A BB	953560.	200.000	UG/L	2.52
10	64	126	5:15	1	0.472	A BB	563798.	200.000	UG/L	2.52
11	84	185	7:42	1	0.693	A BB	616643.	200.000	UG/L	2.52
12	43	201	8:22	1	0.753	A BB	67262.	200.000	UG/L	2.52
13	76	227	9:27	1	0.850	A BB	193135.	200.000	UG/L	2.52
14	96	256	10:40	1	0.959	A BB	524544.	200.000	UG/L	2.52
15	63	289	12:02	1	1.082	A BB	886489.	200.000	UG/L	2.52
16	96	307	12:47	1	1.150	A BB	582031.	200.000	UG/L	2.52
17	83	320	13:20	1	1.199	A BV	986925.	200.000	UG/L	2.52
18	62	339	14:07	1	1.270	A BB	770114.	200.000	UG/L	2.52
19	72	338	14:05	1	1.266	A BB	41530.	200.000	UG/L	2.52
20	43	385	16:02	2	0.735	A BB	668079.	200.000	UG/L	2.52
21	117	382	15:55	2	0.729	A VB	664102.	200.000	UG/L	2.52
22	83	393	16:22	2	0.750	A BB	982723.	200.000	UG/L	2.52
23	63	428	17:50	2	0.817	A BB	678733.	200.000	UG/L	2.52
24	75	434	18:05	2	0.828	A BB	1225140.	200.000	UG/L	2.52
25	130	447	18:37	2	0.853	A BV	814510.	200.000	UG/L	2.52
26	78	461	19:12	2	0.880	A BB	2232210.	200.000	UG/L	2.52
27	129	461	19:12	2	0.880	A BB	916026.	200.000	UG/L	2.52
28	97	464	19:20	2	0.885	A BB	705469.	200.000	UG/L	2.52
29	75	465	19:22	2	0.887	A BB	697419.	200.000	UG/L	2.52
30	63	492	20:30	2	0.939	A BB	387905.	200.000	UG/L	2.52
31	173	527	21:57	2	1.006	A BB	529089.	200.000	UG/L	2.52
32	97	373	15:32	2	0.712	A BB	754982.	200.000	UG/L	2.52
33	43	542	22:35	3	0.840	A BB	626125.	200.000	UG/L	2.52
34	43	580	24:10	3	0.899	A BV	525248.	200.000	UG/L	2.52
35	164	585	24:22	3	0.907	A BB	743919.	200.000	UG/L	2.52
36	83	584	24:20	3	0.905	A BB	1198590.	200.000	UG/L	2.52
37	92	619	25:47	3	0.960	A BB	1531390.	200.000	UG/L	2.52
38	112	647	26:57	3	1.003	A BB	1767980.	200.000	UG/L	2.52
39	106	703	29:17	3	1.090	A BB	939161.	200.000	UG/L	2.52
40	104	817	34:02	3	1.267	A BB	1692370.	200.000	UG/L	2.52
41	106	852	35:30	3	1.321	A BB	928827.	200.000	UG/L	2.52
42	106	825	34:22	3	1.279	A BB	1131640.	200.000	UG/L	2.52

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:00	1.00	1.258	1.00	200.00	200.00	1.947	1.947	1.00
5	25:37	1.00	0.953	1.00	200.00	200.00	1.200	1.200	1.00
6	32:12	1.00	1.198	1.00	200.00	200.00	0.718	0.718	1.00
7	2:10	1.00	0.195	1.00	200.00	200.00	1.623	1.623	1.00
8	3:20	1.00	0.300	1.00	200.00	200.00	2.657	2.657	1.00
9	4:05	1.00	0.367	1.00	200.00	200.00	2.754	2.754	1.00
10	5:15	1.00	0.472	1.00	200.00	200.00	1.628	1.628	1.00
11	7:42	1.00	0.693	1.00	200.00	200.00	1.781	1.781	1.00
12	8:22	1.00	0.753	1.00	200.00	200.00	0.194	0.194	1.00

ORIGINAL (Red)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
13	9:27	1.00	0.850	1.00	200.00	200.00	0.558	0.558	1.00
14	10:40	1.00	0.959	1.00	200.00	200.00	1.515	1.515	1.00
15	12:02	1.00	1.082	1.00	200.00	200.00	2.560	2.560	1.00
16	12:47	1.00	1.150	1.00	200.00	200.00	1.681	1.681	1.00
17	13:20	1.00	1.199	1.00	200.00	200.00	2.850	2.850	1.00
18	14:07	1.00	1.270	1.00	200.00	200.00	2.224	2.224	1.00
19	14:05	1.00	1.266	1.00	200.00	200.00	0.120	0.120	1.00
20	16:02	1.00	0.735	1.00	200.00	200.00	0.364	0.364	1.00
21	15:55	1.00	0.729	1.00	200.00	200.00	0.361	0.361	1.00
22	16:22	1.00	0.750	1.00	200.00	200.00	0.535	0.535	1.00
23	17:50	1.00	0.817	1.00	200.00	200.00	0.369	0.369	1.00
24	18:05	1.00	0.828	1.00	200.00	200.00	0.667	0.667	1.00
25	18:37	1.00	0.853	1.00	200.00	200.00	0.443	0.443	1.00
26	19:12	1.00	0.880	1.00	200.00	200.00	1.215	1.215	1.00
27	19:12	1.00	0.880	1.00	200.00	200.00	0.499	0.499	1.00
28	19:20	1.00	0.885	1.00	200.00	200.00	0.384	0.384	1.00
29	19:22	1.00	0.887	1.00	200.00	200.00	0.380	0.380	1.00
30	20:30	1.00	0.939	1.00	200.00	200.00	0.211	0.211	1.00
31	21:57	1.00	1.006	1.00	200.00	200.00	0.288	0.288	1.00
32	15:32	1.00	0.712	1.00	200.00	200.00	0.411	0.411	1.00
33	22:35	1.00	0.840	1.00	200.00	200.00	0.340	0.340	1.00
34	24:10	1.00	0.899	1.00	200.00	200.00	0.285	0.285	1.00
35	24:22	1.00	0.907	1.00	200.00	200.00	0.404	0.404	1.00
36	24:20	1.00	0.905	1.00	200.00	200.00	0.650	0.650	1.00
37	25:47	1.00	0.960	1.00	200.00	200.00	0.831	0.831	1.00
38	26:57	1.00	1.003	1.00	200.00	200.00	0.959	0.959	1.00
39	29:17	1.00	1.090	1.00	200.00	200.00	0.510	0.510	1.00
40	34:02	1.00	1.267	1.00	200.00	200.00	0.918	0.918	1.00
41	35:30	1.00	1.321	1.00	200.00	200.00	0.504	0.504	1.00
42	34:22	1.00	1.279	1.00	200.00	200.00	0.614	0.614	1.00

RIC DATA: W2272 #1 SCANS 1 TO 860
05/02/90 21:42:00 CALI: W2272 #2
SAMPLE: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



ORIGINAL (Red)

Quantitation Report File: W2272

Data: W2272.TI 5/5
~~05/02/90 21:42:00~~ 5/3/90 9:42
Sample: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE

ORIGINAL (Red)

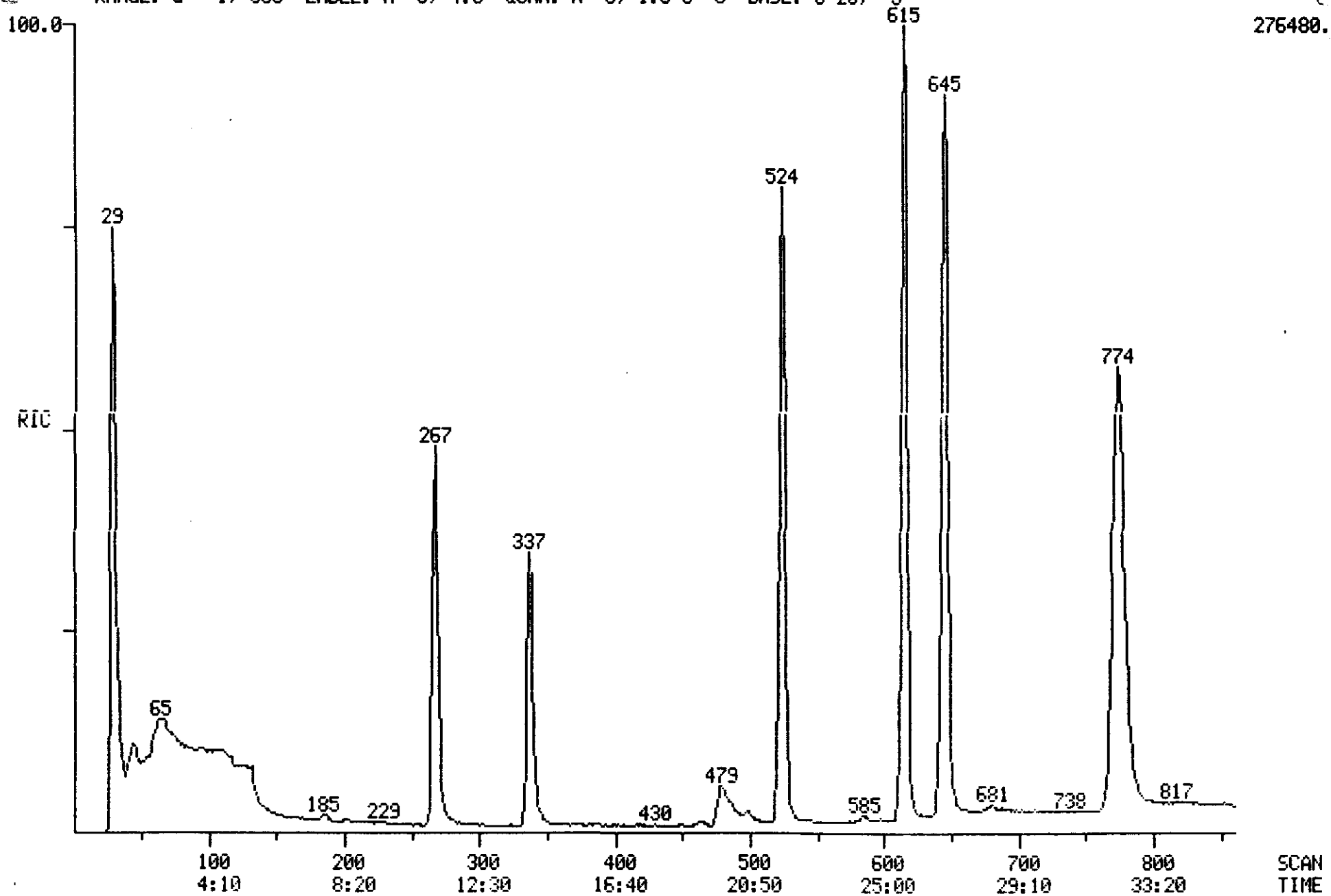
No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	272	11:20	1	1.000	A BB	100378.	50.000 UG/L*	2.38
2	114	525	21:52	2	1.000	A BB	473952.	50.000 UG/L*	2.38
3	117	646	26:55	3	1.000	A BB	461153.	50.000 UG/L*	2.38
4	65	340	14:10	1	1.250	A BB	155000.	50.000 UG/L*	2.38
5	98	616	25:40	3	0.954	A BB	538478.	50.000 UG/L*	2.38
6	95	775	32:17	3	1.200	A BB	342308.	50.000 UG/L*	2.38
7	50	54	2:15	1	0.199	A BB	154056.	50.000 UG/L	2.38
8	94	86	3:35	1	0.316	A BB	173917.	50.000 UG/L	2.38
9	62	107	4:27	1	0.393	A BB	178130.	50.000 UG/L	2.38
10	64	137	5:42	1	0.504	A BB	99994.	50.000 UG/L	2.38
11	84	194	8:05	1	0.713	A BB	145446.	50.000 UG/L	2.38
12	43	210	8:45	1	0.772	A VB	23107.	50.000 UG/L	2.38
13	76	234	9:45	1	0.860	A BB	278908.	50.000 UG/L	2.38
14	96	263	10:57	1	0.967	A BB	116938.	50.000 UG/L	2.38
15	63	294	12:15	1	1.081	A BB	190127.	50.000 UG/L	2.38
16	96	311	12:57	1	1.143	A BB	124843.	50.000 UG/L	2.38
17	83	324	13:30	1	1.191	A BB	227301.	50.000 UG/L	2.38
18	62	343	14:17	1	1.261	A BB	155752.	50.000 UG/L	2.38
19	72	343	14:17	1	1.261	A BB	8901.	50.000 UG/L	2.38
20	43	388	16:10	2	0.739	A VB	196854.	50.000 UG/L	2.38
21	117	385	16:02	2	0.733	A VB	138926.	50.000 UG/L	2.38
22	83	395	16:27	2	0.752	A BB	216139.	50.000 UG/L	2.38
23	63	431	17:57	2	0.821	A BB	132729.	50.000 UG/L	2.38
24	75	436	18:10	2	0.830	A BB	242489.	50.000 UG/L	2.38
25	130	449	18:42	2	0.855	A BV	183859.	50.000 UG/L	2.38
26	78	463	19:17	2	0.882	A BB	429088.	50.000 UG/L	2.38
27	129	463	19:17	2	0.882	A BB	196229.	50.000 UG/L	2.38
28	97	466	19:25	2	0.888	A BB	144499.	50.000 UG/L	2.38
29	75	467	19:27	2	0.890	A BB	122018.	50.000 UG/L	2.38
30	63	494	20:35	2	0.941	A BB	83315.	50.000 UG/L	2.38
31	173	528	22:00	2	1.006	A BB	129700.	50.000 UG/L	2.38
32	97	375	15:37	2	0.714	A BB	153181.	50.000 UG/L	2.38
33	43	544	22:40	3	0.842	A BB	131583.	50.000 UG/L	2.38
34	43	581	24:12	3	0.899	A BB	114347.	50.000 UG/L	2.38
35	164	586	24:25	3	0.907	A BB	161988.	50.000 UG/L	2.38
36	83	585	24:22	3	0.906	A BB	260044.	50.000 UG/L	2.38
37	92	620	25:50	3	0.960	A BB	308585.	50.000 UG/L	2.38
38	112	649	27:02	3	1.005	A BB	408266.	50.000 UG/L	2.38
39	106	704	29:20	3	1.090	A BB	200915.	50.000 UG/L	2.38
40	104	820	34:10	3	1.269	A BB	387382.	50.000 UG/L	2.38
41	106	855	35:37	3	1.324	A BB	228625.	50.000 UG/L	2.38
42	106	827	34:27	3	1.280	A BB	296069.	50.000 UG/L	2.38

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:20	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:55	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:10	1.00	1.250	1.00	50.00	50.00	1.544	1.544	1.00
5	25:40	1.00	0.954	1.00	50.00	50.00	1.168	1.168	1.00
6	32:17	1.00	1.200	1.00	50.00	50.00	0.742	0.742	1.00
7	2:15	1.00	0.199	1.00	50.00	50.00	1.535	1.535	1.00
8	3:35	1.00	0.316	1.00	50.00	50.00	1.733	1.733	1.00
9	4:27	1.00	0.393	1.00	50.00	50.00	1.775	1.775	1.00
10	5:42	1.00	0.504	1.00	50.00	50.00	0.996	0.996	1.00
11	8:05	1.00	0.713	1.00	50.00	50.00	1.449	1.449	1.00
12	8:45	1.00	0.772	1.00	50.00	50.00	0.230	0.230	1.00

ORIGINAL

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
13	9:45	1.00	0.860	1.00	50.00	50.00	2.779	2.779	1.00
14	10:57	1.00	0.967	1.00	50.00	50.00	1.165	1.165	1.00
15	12:15	1.00	1.081	1.00	50.00	50.00	1.894	1.894	1.00
16	12:57	1.00	1.143	1.00	50.00	50.00	1.244	1.244	1.00
17	13:30	1.00	1.191	1.00	50.00	50.00	2.264	2.264	1.00
18	14:17	1.00	1.261	1.00	50.00	50.00	1.552	1.552	1.00
19	14:17	1.00	1.261	1.00	50.00	50.00	0.089	0.089	1.00
20	16:10	1.00	0.739	1.00	50.00	50.00	0.415	0.415	1.00
21	16:02	1.00	0.733	1.00	50.00	50.00	0.293	0.293	1.00
22	16:27	1.00	0.752	1.00	50.00	50.00	0.456	0.456	1.00
23	17:57	1.00	0.821	1.00	50.00	50.00	0.280	0.280	1.00
24	18:10	1.00	0.830	1.00	50.00	50.00	0.512	0.512	1.00
25	18:42	1.00	0.855	1.00	50.00	50.00	0.388	0.388	1.00
26	19:17	1.00	0.882	1.00	50.00	50.00	0.905	0.905	1.00
27	19:17	1.00	0.882	1.00	50.00	50.00	0.414	0.414	1.00
28	19:25	1.00	0.888	1.00	50.00	50.00	0.305	0.305	1.00
29	19:27	1.00	0.890	1.00	50.00	50.00	0.257	0.257	1.00
30	20:35	1.00	0.941	1.00	50.00	50.00	0.176	0.176	1.00
31	22:00	1.00	1.006	1.00	50.00	50.00	0.274	0.274	1.00
32	15:37	1.00	0.714	1.00	50.00	50.00	0.323	0.323	1.00
33	22:40	1.00	0.842	1.00	50.00	50.00	0.285	0.285	1.00
34	24:12	1.00	0.899	1.00	50.00	50.00	0.248	0.248	1.00
35	24:25	1.00	0.907	1.00	50.00	50.00	0.351	0.351	1.00
36	24:22	1.00	0.906	1.00	50.00	50.00	0.564	0.564	1.00
37	25:50	1.00	0.960	1.00	50.00	50.00	0.669	0.669	1.00
38	27:02	1.00	1.005	1.00	50.00	50.00	0.885	0.885	1.00
39	29:20	1.00	1.090	1.00	50.00	50.00	0.436	0.436	1.00
40	34:10	1.00	1.269	1.00	50.00	50.00	0.840	0.840	1.00
41	35:37	1.00	1.324	1.00	50.00	50.00	0.496	0.496	1.00
42	34:27	1.00	1.280	1.00	50.00	50.00	0.642	0.642	1.00

RIC DATA: W2273 #1 SCANS 1 TO 860
05/02/90 22:46:00 CALI: W2273 #2
SAMPLE: CLP,,,PYRIDINE-1000,L,W,PYRIDINE-1000,V,,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: W2273

ORIGINAL (Red)

Data: W2273.TI
05/02/90 22:46:00
Sample: CLP,,,PYRIDINE-1000,L,W,PYRIDINE-1000,V,,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CO32 PYRIDINE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	128	267	11:07	1	1.000	A BB	95954.	50.000 UG/L*	4.35
2	114	524	21:50	2	1.000	A BB	430342.	50.000 UG/L*	4.35
3	117	645	26:52	3	1.000	A BB	407732.	50.000 UG/L*	4.35
4	52	479	19:57	2	0.914	A BB	28478.	1000.000 UG/L	86.96

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:07	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	19:57	1.00	0.914	1.00	1000.00	1000.00	0.003	0.003	1.00

8A
VOLATILE INTERNAL STANDARD AREA SUMMARY

ORIGINAL (Red)

Lab Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2 4

Lab File ID (Standard): W2272 Date Analyzed: 05/02/90

Instrument ID: W Time Analyzed: 2142

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

		IS1(BCM) AREA #	RT	IS2(DFB) AREA #	RT	IS3(CBZ) AREA #	RT
	12 HOUR STD	100000	11.34	474000	21.87	461000	26.92
	UPPER LIMIT	200000		948000		922000	
	LOWER LIMIT	50000		237000		230500	
	EPA SAMPLE NO.						
01	1	111000	11.12	509000	21.87	506000	26.87
02	11	107000	11.25	493000	21.87	498000	26.87
03	EXTBLK	106000	11.42	493000	21.84	494000	26.84
04	VBLK74	91600	11.42	431000	21.84	413000	26.84

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

FORM VIII VOA

1/87 Rev.

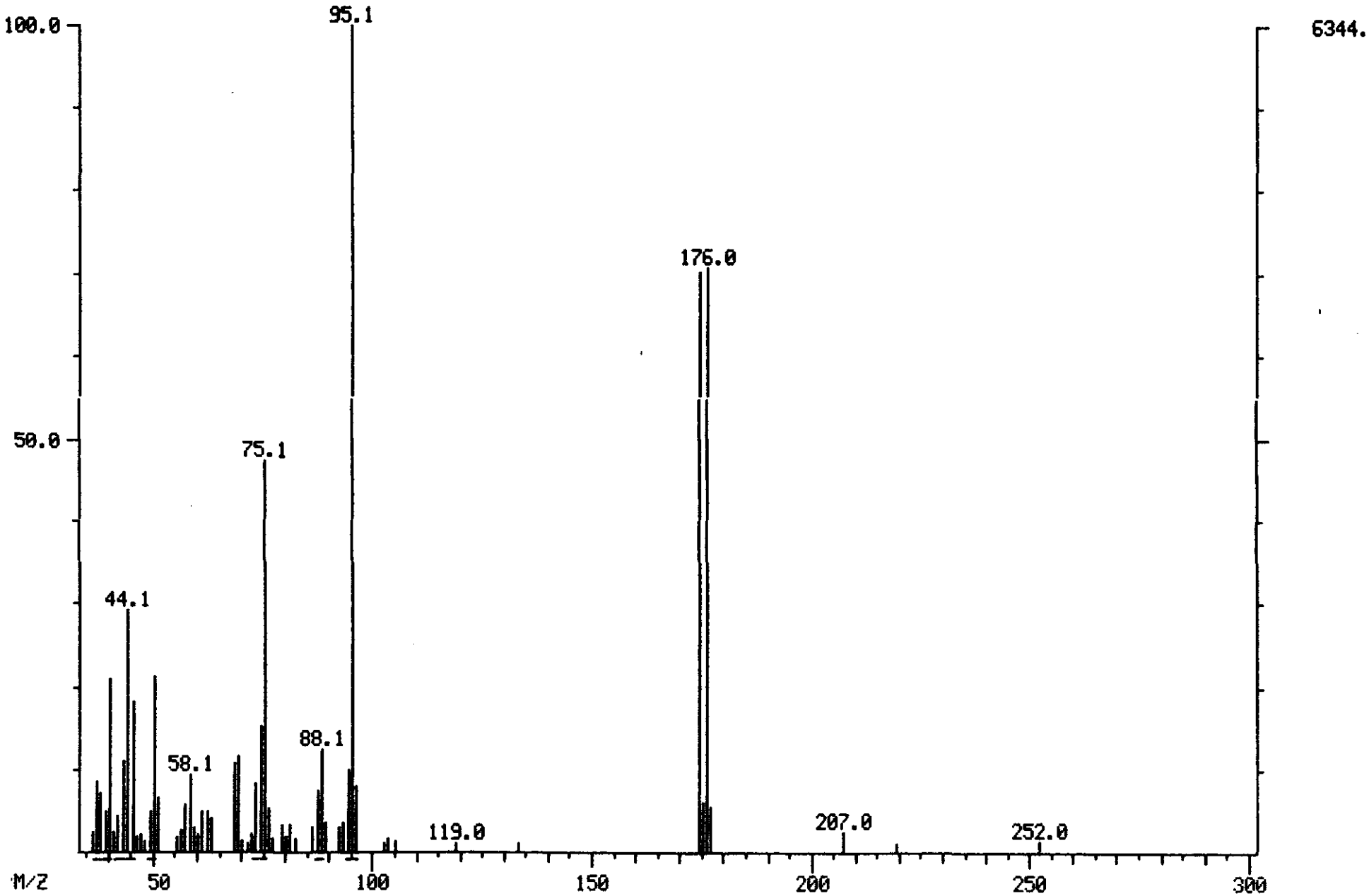
ORIGINAL
(Red)

V. RAW QC DATA

MASS SPECTRUM
04/30/90 9:37:00 + 10:02
SAMPLE: VOA BFB 50NG 2UL
CONDS.: INSTRUMENT W,COLUMN:SP-1000 ISOTHERMO @225C

DATA: W2259 #241
CALI: W2259 #2

BASE M/Z: 95
RIC: 39168.



Mass List Data: W2259 # 241 Base m/z: 95
04/30/90 9:37:00 + 10:02 Cali: W2259 # 2 RIC: 39168.
Sample: VOA BFB 50NG 2UL
Conds.: INSTRUMENT W/COLUMN: SP-1000 ISOTHERMO @225C

ORIGINAL (Red)

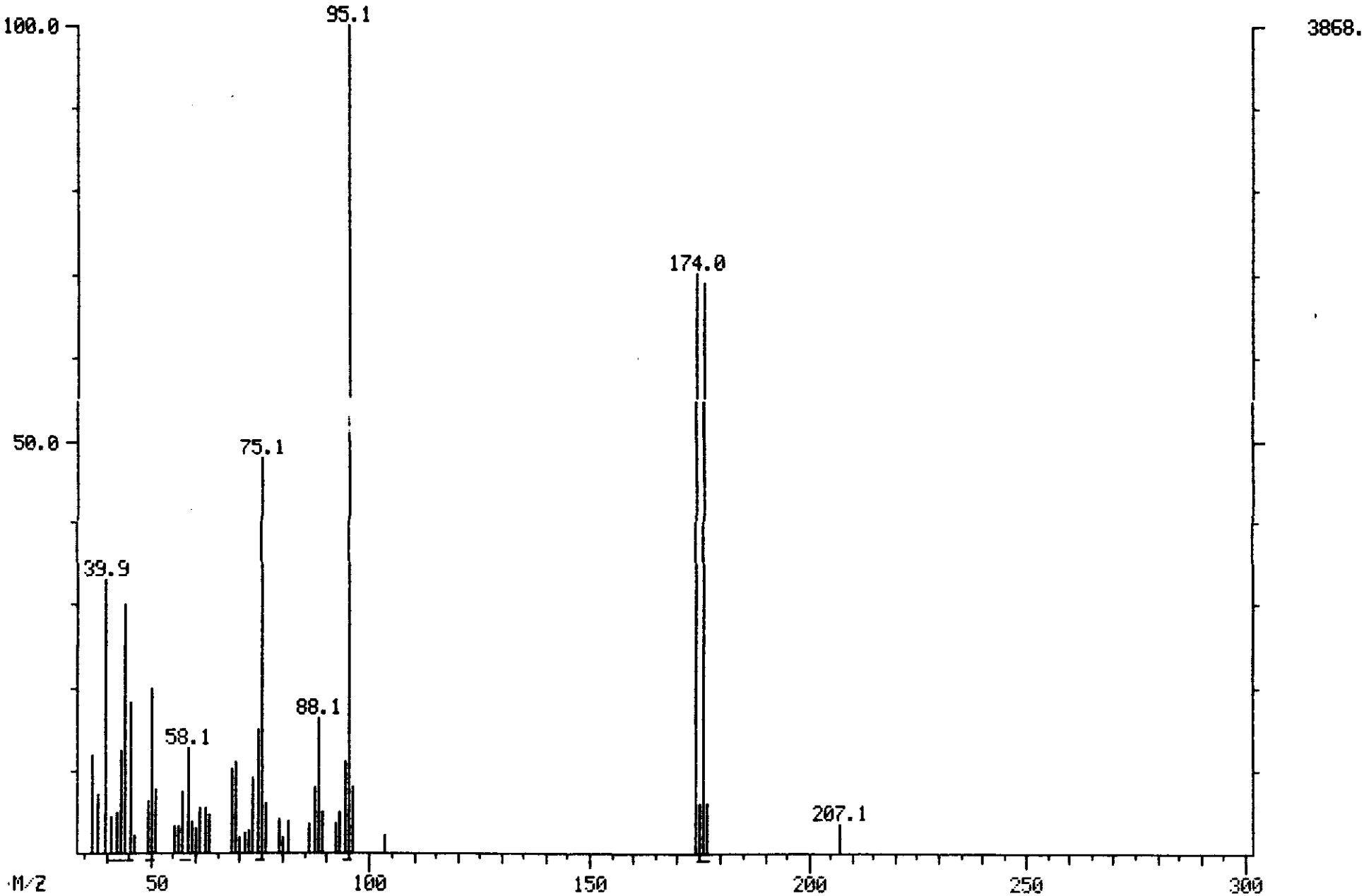
36 0.00 0.00 0. Minima Min inten: 0.
252 # 0 Maxima

Mass	% RA	% RIC	Inten.	Mass	% RA	% RIC	Inten.
36.05?	2.35	0.38	149.	119.05	1.15	0.19	73.
37.06?F	8.54	1.38	542.	133.11	1.13	0.18	72.
38.07?F	7.12	1.15	452.	173.98	70.24	11.38	4456.
39.05?F	4.84	0.78	307.	174.98	6.08	0.99	386.
40.02?F	21.09	3.42	1338.	175.98	70.62	11.44	4480.
41.12?	2.51	0.41	159.	176.98	5.61	0.91	356.
42.04?F	4.37	0.71	277.	207.05	2.59	0.42	164.
43.08?F	10.97	1.78	696.	219.00	1.17	0.19	74.
44.07?F	29.26	4.74	1856.	251.97	1.40	0.23	89.
45.08?F	18.28	2.96	1160.				
46.10?	1.86	0.30	118.				
47.06?	2.14	0.35	136.				
48.06?	1.36	0.22	86.				
49.07?F	5.03	0.81	319.				
50.07?F	21.37	3.46	1356.				
51.07?	6.76	1.10	429.				
55.12?	2.05	0.33	130.				
56.04?	2.77	0.45	176.				
57.08?	5.77	0.93	366.				
58.11?	9.49	1.54	602.				
59.11?	2.93	0.47	186.				
60.07?	2.08	0.34	132.				
61.05?	4.95	0.80	314.				
62.08?	4.84	0.78	307.				
63.06?	4.15	0.67	263.				
68.06?	10.73	1.74	681.				
69.08	11.48	1.86	728.				
70.15	1.43	0.23	91.				
71.16	1.21	0.20	77.				
72.12	2.22	0.36	141.				
73.08 F	8.23	1.33	522.				
74.07 F	15.13	2.45	960.				
75.09 F	47.41	7.68	3008.				
76.09	5.28	0.86	335.				
77.13	1.75	0.28	111.				
78.93	3.25	0.53	206.				
80.00	1.88	0.30	119.				
80.93	3.34	0.54	212.				
82.03	1.72	0.28	109.				
86.10	2.95	0.48	187.				
87.10 F	7.46	1.21	473.				
88.12 F	12.45	2.02	790.				
89.05	3.66	0.59	232.				
92.04	3.01	0.49	191.				
93.08	3.69	0.60	234.				
94.08 F	9.90	1.60	628.				
95.12 F	100.00	16.20	6344.				
96.10 F	8.10	1.31	514.				
102.16	1.18	0.19	75.				
103.15	1.53	0.25	97.				
105.17	1.39	0.22	88.				

MASS SPECTRUM 5/13/90 9:02
~~05/02/90 21:02:00~~ + 10:27
SAMPLE: VOA BFB 50NG 2UL
CONDS.: INSTRUMENT W.COLUMN:SP-1000 ISOTHERMO @225C

DATA: W2271 #251
CALI: W2271 #2

BASE M/Z: 95
RIC: 24864.



Mass List Data: W2271 # 251 Base m/z: 95
05/02/90 21:02:00 + 10:27 Cali: W2271 # 2 RIC: 24864.
Sample: VOA BFB 50NG 2UL
Conds.: INSTRUMENT W,COLUMN:SP-1000 ISOTHERMO @225C

ORIGINAL (Red)

37 0.00 0.00 0. Minima Min inten: 0.
207 # 0 Maxima

Mass	% RA	% RIC	Inten.
36.84?	11.76	1.83	455.
38.06?	7.26	1.13	281.
39.91?	33.09	5.15	1280.
41.13?F	4.37	0.68	169.
42.08?F	4.96	0.77	192.
43.08?F	12.54	1.95	485.
44.08?F	30.04	4.67	1162.
45.08?F	18.28	2.84	707.
46.15?	2.33	0.36	90.
49.10?F	6.36	0.99	246.
50.09?F	20.01	3.11	774.
51.09?	7.60	1.18	294.
55.15?	3.18	0.49	123.
56.07?	3.31	0.51	128.
57.09?F	7.34	1.14	284.
58.11?F	12.80	1.99	495.
59.09?	3.80	0.59	147.
60.07?	3.05	0.47	118.
61.06?	5.64	0.88	218.
62.08?	5.61	0.87	217.
63.07?	4.68	0.73	181.
68.06?	10.34	1.61	400.
69.07	10.99	1.71	425.
70.12	2.07	0.32	80.
71.13	2.48	0.39	96.
72.13	2.69	0.42	104.
73.07	9.05	1.41	350.
74.08 F	14.81	2.30	573.
75.11 F	48.09	7.48	1860.
76.08	5.97	0.93	231.
78.95	4.24	0.66	164.
80.12	1.89	0.29	73.
81.00	3.83	0.60	148.
86.14	3.70	0.58	143.
87.12	8.07	1.25	312.
88.13	16.37	2.55	633.
89.08	4.91	0.76	190.
92.07	3.70	0.58	143.
93.06	4.99	0.78	193.
94.08 F	11.14	1.73	431.
95.13 F	100.00	15.56	3868.
96.12	8.07	1.25	312.
103.13	2.30	0.36	89.
174.00	70.11	10.91	2712.
175.00 F	6.05	0.94	234.
176.00 F	68.98	10.73	2668.
176.98 F	6.15	0.96	238.
207.06	3.49	0.54	135.

Versar INC.

ORIGINAL
(Red)

REAGENT BLANK DATA

1A
VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLK74 ORIGINAL (Red)

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: VBLK74

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2274

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

% Moisture: not dec. ____ Date Analyzed: 05/02/90

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
75-01-4	Vinyl Chloride	10	U
110-86-1	Pyridine	5	U
75-35-4	1,1-Dichloroethene	5	U
67-66-3	Chloroform	5	U
107-06-2	1,2-Dichloroethane	5	U
78-93-3	2-Butanone	10	U
56-23-5	Carbon Tetrachloride	5	U
79-01-6	Trichloroethene	5	U
71-43-2	Benzene	5	U
127-18-4	Tetrachloroethene	5	U
108-90-7	Chlorobenzene	5	U

1E
VOLATILE ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

EPA SAMPLE NO.

VBLK74

I Name: VERSAR INC Contract: _____

Lab Code: VERSAR Case No.: 2536 SAS No.: _____ SDG No.: 2_4

Matrix: (soil/water) WATER Lab Sample ID: VBLK74

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: W2274

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

% Moisture: not dec. ____ Date Analyzed: 05/02/90

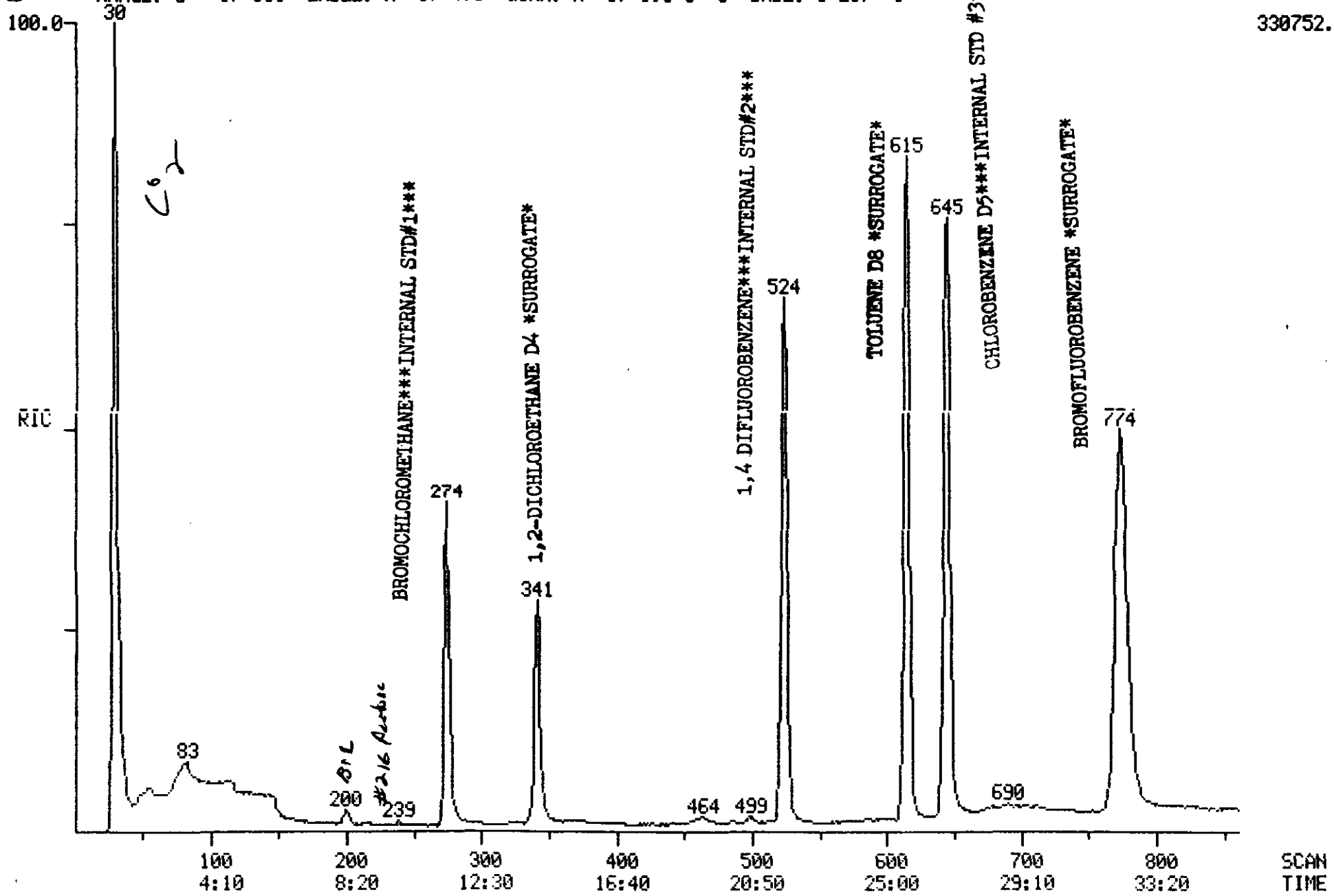
Column (pack/cap) PACK Dilution Factor: 1.0

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q

RIC 5/3/90 11:45 DATA: W2274 #1 SCANS 1 TO 860
~~06/02/90 23:45:00~~ 16:5 CALI: W2274 #2
SAMPLE: CLP,,,VBLK74,L,W,VBLK74,V,BLANK,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
RANGE: G 1, 880 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



Quantitation Report File: W2274

ORIGINAL

Data: W2274.TI 5/3/90 11:45
~~05/02/90 23:45~~ 00 JKS
Sample: CLP,,,VBLK74,L,W,VBLK74,V,BLANK,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CS15 1,2-DICHLOROETHANE-D4 **SS#1**
5	CS05 TOLUENE-D8 **SS#2**
6	CS10 BROMOFLUOROBENZENE **SS#3**
7	C010 CHLOROMETHANE
8	C015 BROMOMETHANE
9	C020 VINYL CHLORIDE
10	C025 CHLOROETHANE
11	C030 METHYLENE CHLORIDE
12	C035 ACETONE
13	C040 CARBON DISULFIDE
14	C045 1,1-DICHLOROETHENE
15	C050 1,1-DICHLOROETHANE
16	C053 1,2-DICHLOROETHENE (TOTAL)
17	C060 CHLOROFORM
18	C065 1,2-DICHLOROETHANE
19	C110 2-BUTANONE
20	C125 VINYL ACETATE
21	C120 CARBON TETRACHLORIDE
22	C130 BROMODICHLOROMETHANE
23	C140 1,2-DICHLOROPROPANE
24	C145 CIS-1,3-DICHLOROPROPENE
25	C150 TRICHLOROETHENE
26	C165 BENZENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C170 TRANS-1,3-DICHLOROPROPENE
30	C175 2-CHLOROETHYLVINYLETHER
31	C180 BROMOFORM
32	C115 1,1,1-TRICHLOROETHANE
33	C205 4-METHYL-2-PENTANONE
34	C210 2-HEXANONE
35	C220 TETRACHLOROETHENE
36	C225 1,1,2,2-TETRACHLOROETHANE
37	C230 TOLUENE
38	C235 CHLOROBENZENE
39	C240 ETHYLBENZENE
40	C245 STYRENE
41	C250 ORTHO & PARA XYLENE
42	C251 META XYLENE
43	C032 PYRIDINE

GB 5/17/90

W2274

ORIGINAL (Red)

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)		Amount	%Tot
1	128	274	11:25	1	1.000	A BB	91638.		50.000 UG/L*	15.46
2	114	524	21:50	2	1.000	A BB	431041.		50.000 UG/L*	15.46
3	117	644	26:50	3	1.000	A BB	413297.		50.000 UG/L*	15.46
4	65	341	14:12	1	1.245	A BB	135415.	96	47.849 UG/L*	14.80
5	98	615	25:37	3	0.955	A BB	483741.	100	50.119 UG/L*	15.50
6	95	774	32:15	3	1.202	A BB	314093.	102	51.191 UG/L*	15.83
7	NOT FOUND									
8	NOT FOUND									
9	NOT FOUND									
10	NOT FOUND									
11	84	200	8:20	1	0.730	A BB	6230.	BV	~~2.346 UG/L~~	0.73
12	43	216	9:00	1	0.788	A BB	5510.		13.061 UG/L	4.04
13	76	239	9:57	1	0.872	A BB	2745.	BM	~~0.539 UG/L~~	0.17
14	NOT FOUND									
15	NOT FOUND									
16	NOT FOUND									
17	83	325	13:32	1	1.186	A BV	1837.		~~0.443 UG/L~~	0.14
18	NOT FOUND									
19	72	342	14:15	1	1.248	A BB	844.		~~5.193 UG/L~~	1.61
20	NOT FOUND									
21	117	385	16:02	2	0.735	A BB	316.		~~0.125 UG/L~~	0.04
22	83	395	16:27	2	0.754	A BB	1089.		~~0.277 UG/L~~	0.09
23	NOT FOUND									
24	NOT FOUND									
25	130	450	18:45	2	0.859	A BB	156.		~~0.047 UG/L~~	0.01
26	78	462	19:15	2	0.882	A BB	4224.		~~0.541 UG/L~~	0.17
27	129	462	19:15	2	0.882	A BB	528.		~~0.148 UG/L~~	0.05
28	NOT FOUND									
29	75	467	19:27	2	0.891	A BV	434.		~~0.196 UG/L~~	0.06
30	NOT FOUND									
31	173	528	22:00	2	1.008	A BB	626.	BM	~~0.265 UG/L~~	0.08
32	97	376	15:40	2	0.718	A BB	461.		~~0.165 UG/L~~	0.05
33	NOT FOUND									
34	NOT FOUND									
35	164	585	24:22	3	0.908	A BB	414.		~~0.143 UG/L~~	0.04
36	83	584	24:20	3	0.907	A BB	155.		~~0.033 UG/L~~	0.01
37	92	619	25:47	3	0.961	A BB	1933.		~~0.349 UG/L~~	0.11
38	112	647	26:57	3	1.005	A BB	1215.		~~0.166 UG/L~~	0.05
39	106	703	29:17	3	1.092	A BB	374.		~~0.104 UG/L~~	0.03
40	NOT FOUND									
41	106	851	35:27	3	1.321	A BV	348.		~~0.085 UG/L~~	0.03
42	NOT FOUND									
43	NOT FOUND									

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
1	11:07	1.03	1.000	1.00	50.00	50.00	1.000	1.000	1.00
2	21:50	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
3	26:52	1.00	1.000	1.00	50.00	50.00	1.000	1.000	1.00
4	14:10	1.00	1.250	1.00	47.85	50.00	1.478	1.544	0.96
5	25:40	1.00	0.954	1.00	50.12	50.00	1.170	1.168	1.00
6	32:17	1.00	1.200	1.00	51.19	50.00	0.760	0.742	1.02
7	2:15		0.199						
8	3:35		0.316						
9	4:27		0.393						
10	5:42		0.504						
11	8:05	1.03	0.713	1.02	2.35	50.00	0.068	1.449	0.05

W2274

ORIGINAL (Red)

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
12	8:45	1.03	0.772	1.02	13.06	50.00	0.060	0.230	0.26
13	9:45	1.02	0.860	1.01	0.54	50.00	0.030	2.779	0.01
14	10:57		0.967						
15	12:15		1.081						
16	12:57		1.143						
17	13:30	1.00	1.191	1.00	0.44	50.00	0.020	2.264	0.01
18	14:17		1.261						
19	14:17	1.00	1.261	0.99	5.19	50.00	0.009	0.089	0.10
20	16:10		0.739						
21	16:02	1.00	0.733	1.00	0.13	50.00	0.001	0.293	0.00
22	16:27	1.00	0.752	1.00	0.28	50.00	0.003	0.456	0.01
23	17:57		0.821						
24	18:10		0.830						
25	18:42	1.00	0.855	1.00	0.05	50.00	0.000	0.388	0.00
26	19:17	1.00	0.882	1.00	0.54	50.00	0.010	0.905	0.01
27	19:17	1.00	0.882	1.00	0.15	50.00	0.001	0.414	0.00
28	19:25		0.888						
29	19:27	1.00	0.890	1.00	0.20	50.00	0.001	0.257	0.00
30	20:35		0.941						
31	22:00	1.00	1.006	1.00	0.27	50.00	0.001	0.274	0.01
32	15:37	1.00	0.714	1.00	0.17	50.00	0.001	0.323	0.00
33	22:40		0.842						
34	24:12		0.899						
35	24:25	1.00	0.907	1.00	0.14	50.00	0.001	0.351	0.00
36	24:22	1.00	0.906	1.00	0.03	50.00	0.000	0.564	0.00
37	25:50	1.00	0.960	1.00	0.35	50.00	0.005	0.669	0.01
38	27:02	1.00	1.005	1.00	0.17	50.00	0.003	0.885	0.00
39	29:20	1.00	1.090	1.00	0.10	50.00	0.001	0.436	0.00
40	34:10		1.269						
41	35:37	1.00	1.324	1.00	0.08	50.00	0.001	0.496	0.00
42	34:27		1.280						
43	19:57		0.914						

Quantitation Report File: ISREF

ORIGINAL

Data: W2272.TI
05/02/90 21:42:00
Sample: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

Data: W2274.TI
05/02/90 23:45:00
Sample: CLP,,,VBLK74,L,W,VBLK74,V,BLANK,,,5ML,
Conds.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
Formula: Instrument: W Weight: 5.008
Submitted by: VERSAR Analyst: SKS Acct. No.: -

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

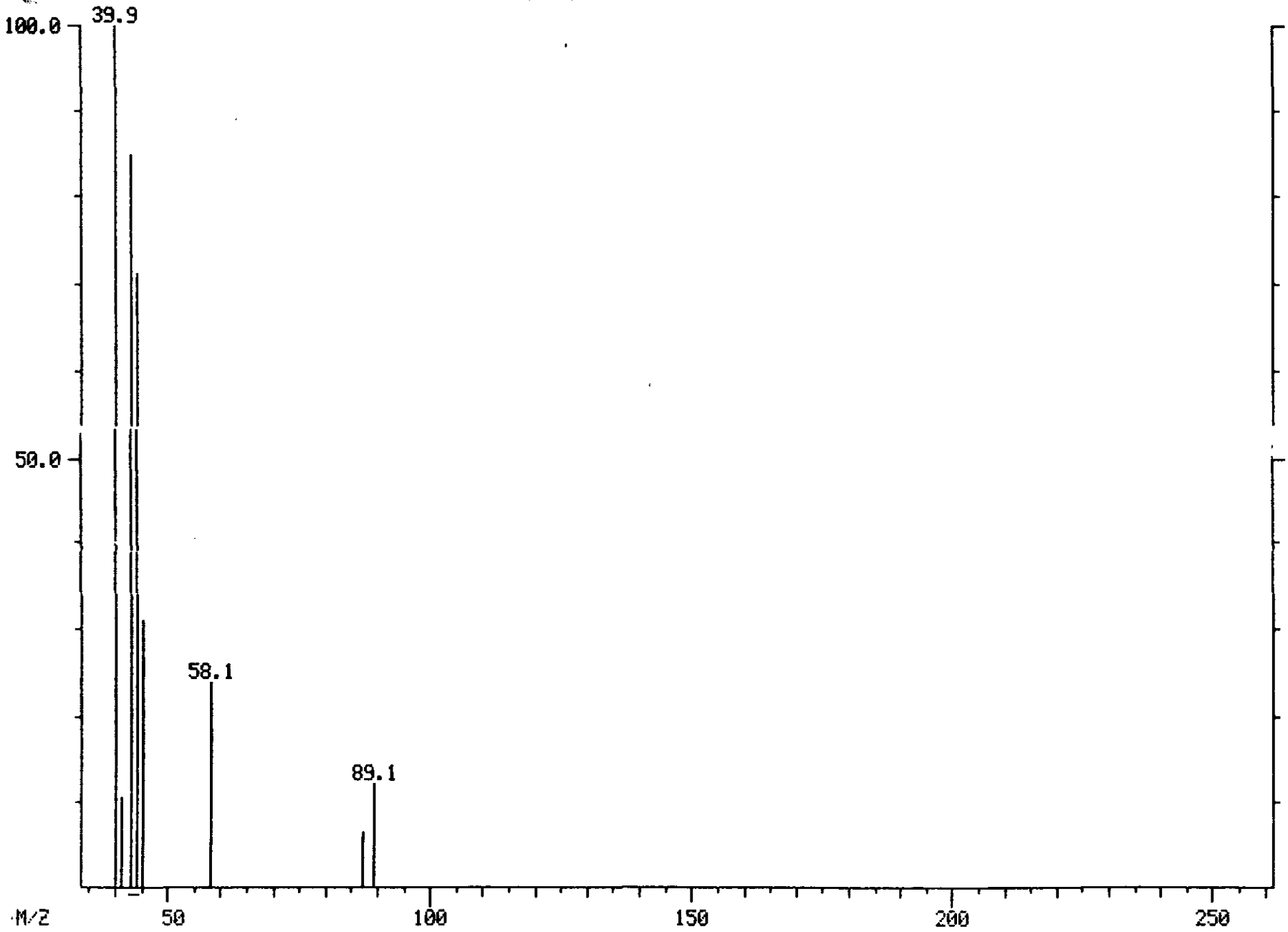
No	Name
1	CI01 BROMOCHLOROMETHANE **IS#1**
2	CI10 1,4-DIFLUOROBENZENE **IS#2**
3	CI20 CHLOROBENZENE-D5 **IS#3**
4	CI01 BROMOCHLOROMETHANE **IS#1**
5	CI10 1,4-DIFLUOROBENZENE **IS#2**
6	CI20 CHLOROBENZENE-D5 **IS#3**

Scan	Time	Area(Hght)	Amount		Name
272	11:20	100378.	50.000	UG/L*	CI01 BROMOCHLOROMETHANE **IS
525	21:52	473952.	50.000	UG/L*	CI10 1,4-DIFLUOROBENZENE **I
646	26:55	461153.	50.000	UG/L*	CI20 CHLOROBENZENE-D5 **IS#3
274	11:25	91638.	45.646	UG/L*	CI01 BROMOCHLOROMETHANE **IS
524	21:50	431041.	45.473	UG/L*	CI10 1,4-DIFLUOROBENZENE **I
644	26:50	413297.	44.811	UG/L*	CI20 CHLOROBENZENE-D5 **IS#3

MASS SPECTRUM
05/02/90 23:45:00 + 9:00
SAMPLE: CLP,,,VBLK74,L,W,VBLK74,V,BLANK,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C035 ACETONE

DATA: W2274 #216
CALI: W2274 #2

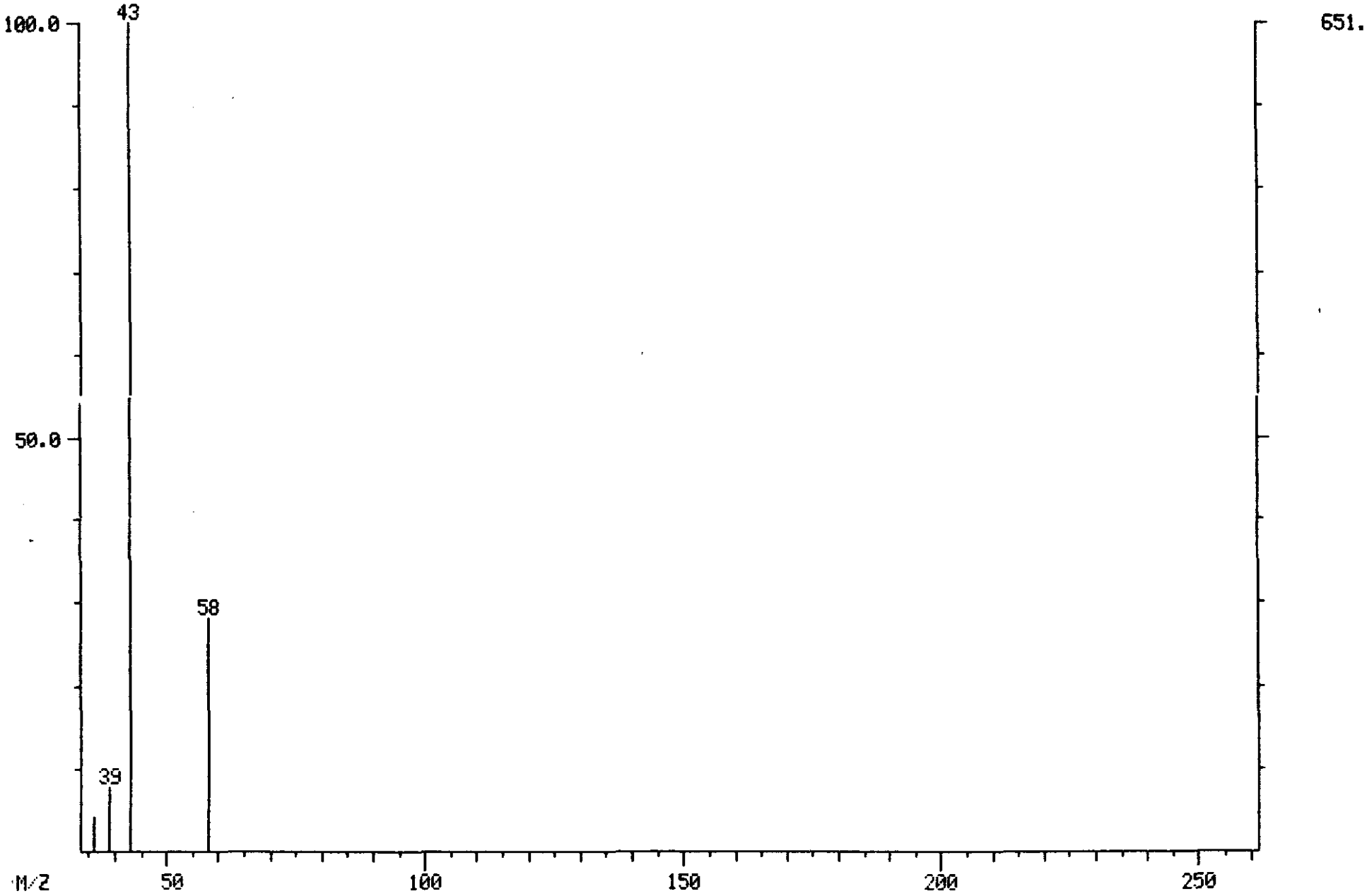
BASE M/Z: 40
RIC: 3900.



MASS SPECTRUM
05/02/90 23:45:00 + 9:00
SAMPLE: CLP,,,VBLK74,L,W,VBLK74,V,BLANK,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C035 ACETONE
ENHANCED (S 15B 2N 0T)

DATA: W2274 #216
CALI: W2274 #2

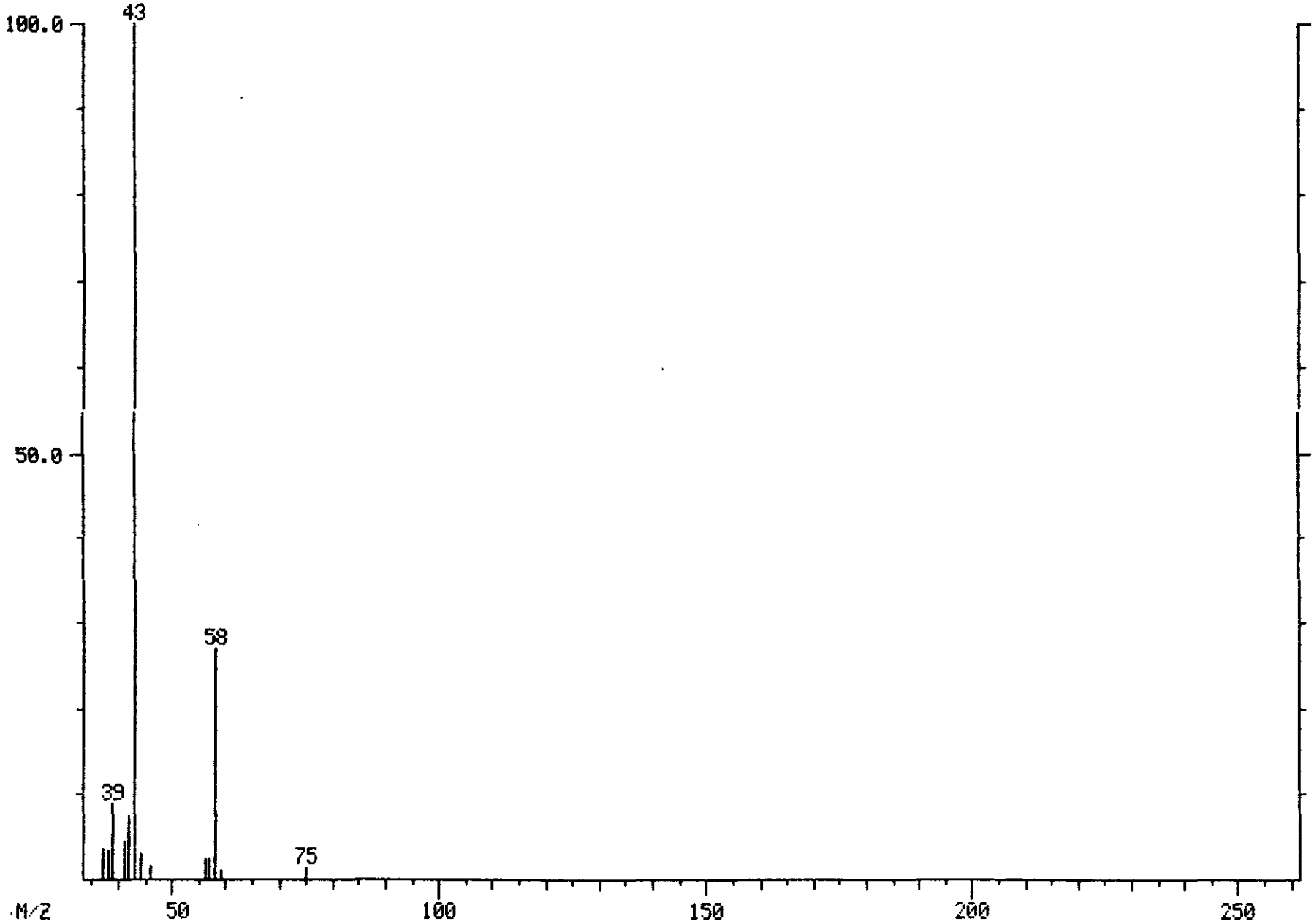
BASE M/Z: 43
RIC: 912.



MASS SPECTRUM
05/02/90 21:42:00 + 8:45
SAMPLE: CLP,,,VSTD-50,L,W,22607,V,CC-50,,,5ML,
CONDS.: INST W:SP1000 COLUMN : 45C (3MIN) TO 225C @8C/MIN
** NAME: C035 ACETONE
ENHANCED (S 15B 2N 0T)

DATA: W2272 #210
CALI: W2272 #2

BASE M/Z: 43
RIC: 5944.



Versar INC.

VI. SAMPLE PREPARATION PACKAGE

1. Parameter Request Sheet
2. Screening Data Summary (soils only)
3. Comments
   a. Extraction
   b. Volatiles
   c. Semivolatiles
   d. Pesticides
4. Extraction Worksheets
   a. Chronicle
   b. Dry Weight Factor (soils only)
   c. Dilution Factor (B) Worksheets
5. Injection Sequence Logs
6. Chain of Custody

VERSAR LABORATORY OPERATIONS
*** [redacted] PARAMETER REQUEST SHEET ***

ORIGINAL (Red)

Deliver To: 48

Control: 2536
Code: VERSCDM
Batch: 2
Job Number: 420.1.0

Case: R3-7
SDG: 1
Quote: 9000194 - 90
Charge:

Manager: BECKMAN
Company: VERSAR DIV 31

Site: CDM

Received: 19-APR-90
Due: 17-MAY-90

Sampled: 18-APR-90
Report: 17-MAY-90

Comments: Protocols-Organic SOW 2/88; Inorganic Metals SOW 787 and CN SOW 788; TCLP by the new reg. Do sample QC on field # 1.

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
BNAL - 48									
	16419	A	1		SLUDGE	C-82	XBNA		
	16420	A	2		SLUDGE	C-82	XBNA		
	16421	A	3		SLUDGE	C-82	XBNA		
	16422	A	5		SLUDGE	C-82	XBNA		
	16423	B	6		SLUDGE	C-82	XBNA		
	16424	B	7		SLUDGE	C-82	XBNA		
CLPM - 43									
	16401	A	1		SLUDGE	C-82			
	16402	A	2		SLUDGE	C-82			
	16403	A	3		SLUDGE	C-82			
	16404	A	5		SLUDGE	C-82			
	16405	B	6		SLUDGE	C-82			
	16432	B	7		SLUDGE	C-82			
CNM - 44									
	16406	A	1		SLUDGE	C-82	TS		
	16407	A	2		SLUDGE	C-82	TS		
	16408	A	3		SLUDGE	C-82	TS		
	16409	A	5		SLUDGE	C-82	TS		
	16410	B	6		SLUDGE	C-82	TS		
	16411	B	7		SLUDGE	C-82	TS		
PEST - 47									
	16412	A	1		SLUDGE	C-82	XPES		
	16413	A	2		SLUDGE	C-82	XPES		
	16414	A	3		SLUDGE	C-82	XPES		
	16415	A	5		SLUDGE	C-82	XPES		
	16416	B	6		SLUDGE	C-82	XPES		
	16417	B	7		SLUDGE	C-82	XPES		
TCBN - 48									
	16418	B	1		SLUDGE	C-82	TCLM	TCLX	XTCB
							TCPS	XTCP	TCHB
							XTCH		
[redacted] - 47									
	16418	B	1		SLUDGE	C-82	TCLM	TCLX	TCBN
							XTCB	TCPS	XTCP
							XTCH		
TCLM - 43									

Continued ->

Control #: 2536

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
	16418	B		1	SLUDGE	C-82	TCLX	TCBN	XTCB
							TCPS	XTCP	TCHB
							XTCH		
TCLV - 48									
	16425	B		1	SLUDGE	GCMS	ZHE		
TCLX - 43									
	16418	B		1	SLUDGE	C-82	TCLM	TCBN	XTCB
							TCPS	XTCP	TCHB
							XTCH		
TCPS - 47									
	16418	B		1	SLUDGE	C-82	TCLM	TCLX	TCBN
							XTCB	XTCP	TCHB
							XTCH		
TS - 44									
	16406	A		1	SLUDGE	C-82	CNM		
	16407	A		2	SLUDGE	C-82	CNM		
	16408	A		3	SLUDGE	C-82	CNM		
	16409	A		5	SLUDGE	C-82	CNM		
	16410	B		6	SLUDGE	C-82	CNM		
	16411	B		7	SLUDGE	C-82	CNM		
VOAL - 48									
	16426	B		1	SLUDGE	GCMS			
	16427	B		2	SLUDGE	GCMS			
	16428	B		3	SLUDGE	GCMS			
	16429	B		5	SLUDGE	GCMS			
	16430	B		6	SLUDGE	GCMS			
	16431	B		7	SLUDGE	GCMS			
XBNA - 46									
	16419	A		1	SLUDGE	C-82	BNAL		
	16420	A		2	SLUDGE	C-82	BNAL		
	16421	A		3	SLUDGE	C-82	BNAL		
	16422	A		5	SLUDGE	C-82	BNAL		
	16423	B		6	SLUDGE	C-82	BNAL		
	16424	B		7	SLUDGE	C-82	BNAL		
XPES - 46									
	16412	A		1	SLUDGE	C-82	PEST		
	16413	A		2	SLUDGE	C-82	PEST		
	16414	A		3	SLUDGE	C-82	PEST		
	16415	A		5	SLUDGE	C-82	PEST		
	16416	B		6	SLUDGE	C-82	PEST		
	16417	B		7	SLUDGE	C-82	PEST		
XTCB - 46									
	16418	B		1	SLUDGE	C-82	TCLM	TCLX	TCBN
							TCPS	XTCP	TCHB
							XTCH		
[redacted] - 46									
	16418	B		1	SLUDGE	C-82	TCLM	TCLX	TCBN
							XTCB	TCPS	XTCP
							TCHB		
XTCP - 46									
	16418	B		1	SLUDGE	C-82	TCLM	TCLX	TCBN
							XTCB	TCPS	TCHB
							XTCH		
ZHE - 43									
	16425	B		1	SLUDGE	GCMS	TCLV		

VERSAR LIMS 04/26/90

VERSAR LABORATORY OPERATIONS
PARAMETER REQUEST SHEET

ORIGINAL (Red)

Deliver To: 48

Control: 2565
Code: VERSCDM
Batch: 4
Job Number: 420.1.0

Case: R3-7
SDG: 4
Quote: 9000194 - 90
Charge:

Manager: BECKMAN
Company: VERSAR DIV 31

Site: CDM

Received: 23-APR-90
Due [redacted]

[redacted]
Rep [redacted]
Disposal: 30-AUG-90

QC Level:
Deliver:

Rep Type:
Required: 1 Full, 1 Summary

Comments: Protocols - See VERSCDM-2(2536); Do 1 set of water QC for METALS ONLY. No sample QC for soils.

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
BNAL - 48									
	16909	A	4		SOIL	A-34	XBNA		
	16910	A	5		SOIL	A-34	XBNA		
	16911	A	9		SOIL	A-34	XBNA		
	16912	A	10		SOIL	A-34	XBNA		
	16913	A	11		SOIL	A-34	XBNA		
	16914	A	12		SOIL	A-34	XBNA		
	16915	A	13		SOIL	A-34	XBNA		
	16916	A	14		SOIL	A-34	XBNA		
	16917	A	15		SOIL	A-34	XBNA		
	16918	A	GW-1		HOH	A-34	XACD	XBN	PEST
							XPES		
CLPM - 43									
	16928	A	4		SOIL	A-34			
	16929	A	5		SOIL	A-34			
	16930	A	9		SOIL	A-34			
	16931	A	10		SOIL	A-34			
	16932	A	11		SOIL	A-34			
	16933	A	12		SOIL	A-34			
	16934	A	13		SOIL	A-34			
	16935	A	14		SOIL	A-34			
	16936	A	15		SOIL	A-34			
	16937	A	GW-1		HOH	A-34			
	16948	A	GW-1		DHOH	A-34			
CNM - 44									
	16938	A	4		SOIL	A-34	TS		
	16939	A	5		SOIL	A-34	TS		
	16940	A	9		SOIL	A-34	TS		
	16941	A	10		SOIL	A-34	TS		
	16942	A	11		SOIL	A-34	TS		
	16943	A	12		SOIL	A-34	TS		
	16944	A	13		SOIL	A-34	TS		
	16945	A	14		SOIL	A-34	TS		
	16946	A	16		SOIL	A-34	TS		

Continued ->

ORIGINAL (Red)

Control #: 2565

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
	16947	A		GW-1	HOH	A-34			
PEST - 47									
	16918	A		GW-1	HOH	A-34	XACD	XBN	XPES
							BNAL		
	16919	A		4	SOIL	A-34	XPES		
	16920	A		8	SOIL	A-34	XPES		
	16921	A		9	SOIL	A-34	XPES		
	16922	A		10	SOIL	A-34	XPES		
	16923	A		11	SOIL	A-34	XPES		
	16924	A		12	SOIL	A-34	XPES		
	16925	A		13	SOIL	A-34	XPES		
	16926	A		14	SOIL	A-34	XPES		
	16927	A		15	SOIL	A-34	XPES		
TCBN - 48									
	16960	B		11	SOIL	A-34	TCLX	TCLM	XTCB
							TCPS	XTCP	TCHB
							XTCH		
TCHB - 47									
	16960	B		11	SOIL	A-34	TCLX	TCLM	TCBN
							XTCB	TCPS	XTCP
							XTCH		
TCLM - 43									
	16960	B		11	SOIL	A-34	TCLX	TCBN	XTCB
							TCPS	XTCP	TCHB
							XTCH		
[redacted]									
	[redacted]	B		11	SOIL	GC/MS	ZHE		
TCLX - 43									
	16960	B		11	SOIL	A-34	TCLM	TCBN	XTCB
							TCPS	XTCP	TCHB
							XTCH		
TCPS - 47									
	16960	B		11	SOIL	A-34	TCLX	TCLM	TCBN
							XTCB	XTCP	TCHB
							XTCH		
TS - 14									
	16938	A		4	SOIL	A-34	CNM		
	16939	A		8	SOIL	A-34	CNM		
	16940	A		9	SOIL	A-34	CNM		
	16941	A		10	SOIL	A-34	CNM		
	16942	A		11	SOIL	A-34	CNM		
	16943	A		12	SOIL	A-34	CNM		
	16944	A		13	SOIL	A-34	CNM		
	16945	A		14	SOIL	A-34	CNM		
	16946	A		15	SOIL	A-34	CNM		
	16949	B		4	SOIL	GC/MS	VOAL		
	16950	B		8	SOIL	GC/MS	VOAL		
	16951	B		9	SOIL	GC/MS	VOAL		
	16952	B		10	SOIL	GC/MS	VOAL		
	16953	B		11	SOIL	GC/MS	VOAL		
	16954	B		12	SOIL	GC/MS	VOAL		
	16955	B		13	SOIL	GC/MS	VOAL		
	16956	B		14	SOIL	GC/MS	VOAL		
	16957	B		15	SOIL	GC/MS	VOAL		
VOAL - 48									
	16949	B		4	SOIL	GC/MS	TS		

Continued ->

Control #: 2565

Test	Sample	X	C	Field Number	Matrix	Location	Other Tests		
	16950	B		8	SOIL	GC/MS	TS		
	16951	B		9	SOIL	GC/MS	TS		
	16952	B		10	SOIL	GC/MS	TS		
	16953	B		11	SOIL	GC/MS	TS		
	16954	B		12	SOIL	GC/MS	TS		
	16955	B		13	SOIL	GC/MS	TS		
	16956	B		14	SOIL	GC/MS	TS		
	16957	B		15	SOIL	GC/MS	TS		
	16958	B		GW-1	HOH	GC/MS			
	16959	B		TB-2	HOH	GC/MS			
XACD - 46									
	16918	A		GW-1	HOH	A-34	XBN	PEST	XPES
							BNAL		
XBN - 46									
	16918	A		GW-1	HOH	A-34	XACD	PEST	XPES
							BNAL		
XBNA - 46									
	16909	A		4	SOIL	A-34	BNAL		
	16910	A		5	SOIL	A-34	BNAL		
	16911	A		6	SOIL	A-34	BNAL		
	16912	A		10	SOIL	A-34	BNAL		
	16913	A		11	SOIL	A-34	BNAL		
	16914	A		12	SOIL	A-34	BNAL		
	16915	A		13	SOIL	A-34	BNAL		
	16916	A		14	SOIL	A-34	BNAL		
	16917	A		15	SOIL	A-34	BNAL		
XPES - 46									
	16918	A		GW-1	HOH	A-34	XACD	XBN	PEST
							BNAL		
	16919	A		1	SOIL	A-34	PEST		
	16920	A		2	SOIL	A-34	PEST		
	16921	A		9	SOIL	A-34	PEST		
	16922	A		10	SOIL	A-34	PEST		
	16923	A		11	SOIL	A-34	PEST		
	16924	A		12	SOIL	A-34	PEST		
	16925	A		13	SOIL	A-34	PEST		
	16926	A		14	SOIL	A-34	PEST		
	16927	A		15	SOIL	A-34	PEST		
XTCB - 46									
	16960	B		11	SOIL	GC/MS	TCLX	TCLM	TCBN
							TCPS	XTCP	TCHB
							XTCH		
XTCH - 46									
	16960	B		9	SOIL	GC/MS	TCLX	TCLM	TCBN
							XTCB	TCPS	XTCP
							TCHB		
XTCP - 46									
	16960	B		11	SOIL	GC/MS	TCLX	TCLM	TCBN
							XTCB	TCPS	TCHB
							XTCH		
[illegible]	[illegible]	[illegible]		[illegible]	SOIL	GC/MS	TCLV		

VOA COMMENT SHEET
VERSAR INC. GC/MS LABORATORY
INSTRUMENT W

CONTROL: 2536/2565

PROJECT: VERSCDM

BATCH: 2/4

PARAMETER: TCLV 5/16/90

MATRIX: HOH

==========

The following samples have the run time set incorrectly. The time is 12hrs earlier than the actual time.

W2276	EXTBLANK
W2277	16425
W2280	16961

Reviewed by Hoang M. Nguyen 5/16/90

VERSAR, INC.
GCMS INSTRUMENT ID W
DATE 5/3/90

INJECTION LOG

Filename	ASCII Filename	Stream ID	Method	Case	SDG	Field Sample ID	Level	Matrix	Versar Sample No.	Frac.	Type	Project	Batch	Dil. F/T	Dil. F/T	Dil. F/T	Ext. Purged	Vol. Purged	Final Dil.	IS No.
W2271		149				BFB 50ng				@	2102									
W2272	A					VSTD50	L	W	22607											
W2273						Prydlnc	L	W	22610											
W2274						VBIK74	L	W	VBIK74											
W2275			CIP	ECSWC	2400	Drilling water	L	W	13714	V		430.31	1					5ml		B
W2276			CIP	VERSCDM		Ext Blk	L	W	Ext Blk	V	TCLV	420.1	2/4					5ml		~~0.5~~ B
W2277					2536	1	L	W	16425	V	TCLV	420.1	2					5ml		B
W2278					2565	11	L	W	16961	V	TCLV	420.1	4					5ml		Bad Run
W2279				ENGH HARL	2542	HVSW2	L	W	16621 RE	V		420.52	5					5ml		B
W2280				VERSCDM	2565	11	L	W	16961	V	TCLV	420.1	4					5ml		B
W2281				ECMMR	2461	2AEHA8xxxx	L	W	14742	V		430.3	63					5ml		B
W2282						2AEHA7xxxx			14743											B
W2283						2AEHA6xxxx			14744											B
W2284						28MW4xxxx			14745											B ✓
W2285						28MW4xxxxxMS			14745MS		MS									C
W2286						28MW4xxxxxMSD			14745MSD		MSD									C

* NOTE Time is off By 12 hrs earlier than real Time

Analyst Signature [signature] Date

ENVIRONMENTAL PROTECTION AGENCY
Office of Enforcement

251.5

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.: R3-7
PROJECT NAME: R3-7
SAMPLERS: (Signature) Sharon E. Schaeffer

STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION	NO. OF CONTAINERS	TCLP VOA	TCLP BNA/Metals					REMARKS Tag #S
11	4/19/90	0940		X	Location 11	4	2	2					3-106 8464, 67, 68, 69

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sharon E. Schaeffer	4/20/90 1200				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)

Relinquished by: (Signature)	Date / Time	Received for Laboratory by: (Signature)	Date / Time	Remarks
		Donald A. Sulp	4/23/90 13.30	Shipped via Federal Express Airbill No. 4026936060

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

Office of Enforcement

REGION 3
Curtis Bldg., 6th & Walnut Sts.
Philadelphia, Pennsylvania 19106

CHAIN OF CUSTODY RECORD

PROJ. NO.: R3-7
PROJECT NAME: R3-7
SAMPLERS: (Signature) Sharon E. Schaffer, Laurie B. Wigl

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	TCLP VOA	TCLP BNA/Metals	VOA	BNA	Pest./PCB	REMARKS
1	4/18/90	1000		X	Location 1 (Sludge)	10	2	2	2	1/2	1/2	Tag #'s 3-10683352, 53, 54, 55, 56, 57, 58, 60
					~~Location 2~~ SES 4/18/90					SES 4/18/90	SES 4/18/90	
					~~Location 3~~ SES 4/18/90							
					~~Location 5~~ SES 4/18/90							
					~~Location 6~~ SES 4/18/90							

Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Sharon E. Schaffer	4/18/90 2000				
Relinquished by: (Signature)	Date / Time	Received by: (Signature)	Relinquished by: (Signature)	Date / Time	Received by: (Signature)
Relinquished by: (Signature)	Date / Time	Received for Laboratory by (Signature): J. J. Monson	Date / Time: 4/19/90 0900	Remarks: Shipped via Federal Express Airbill # 2294123705	

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files