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July 1, 1993

Carolyn Kwan
Project Officer, Eastern Division
New York/ Caribbean Compliance Section
U.S. Environmental Protection Agency
Region II 26 Federal Plaza
New York, New York 10278

Re: Tutu Wells Contamination Litigation

Dear Carolyn:

Enclosed is the complete analytical package, including chain of custody records, volatile data, sample data, standards data, blank data and run logs for ground water samples collected in March 1993.

Please feel free to call me should you wish to discuss the enclosed information.

Sincerely,

Nancy D'Anna, Esq.

ND/sr
Encl.

CERTIFICATE OF ANALYSIS

IT Corporation
312 Directors Drive
Knoxville, TN 37923
Attn: Belinda Price

April 2, 1993

Job Number: ITEK 53554

P.O. Number: 409440

This is the Certificate of Analysis for the following samples:

Client Project ID: L'Henri
Date Received by Lab: 03/08/93
Number of Samples: Seven (7)
Sample Type: Water - six (6), Trip Blank - one (1)

I. Introduction

On 03/08/93, six (6) water samples and one (1) trip blank arrived at the ITAS-Knoxville, Tennessee, laboratory from IT Corporation, Knoxville, Tennessee, in support of the L'Henri project. The list of analytical tests performed, as well as date of receipt and analysis, can be found in the attached report.

II. Analytical Results/Methodology

The analytical results for this report are presented by analytical test. Each set of data will include sample identification information and the analytical results. Please note that the data are not blank corrected.

The samples were analyzed for Target Compound List (TCL) volatiles by gas chromatography/mass spectroscopy (GC/MS) in accordance with the EPA CLP 3/90 Statement of Work.

The samples were analyzed for halogenated and aromatic volatile organic compounds by gas chromatography based on EPA methods 601 and 602.

Reviewed and Approved:



Alyce R. Moore
Laboratory Manager

IT Corporation
April 2, 1993

IT ANALYTICAL SERVICES
5815 MIDDLEBROOK PIKE
KNOXVILLE, TN

Client Project ID: L'Henri

Job Number: ITEK 53554

III. Quality Control

The samples were analyzed for halogenated and aromatic volatile organics by gas chromatography/photoionization and electrolytic conductivity (Hall) detection in series using an RTX-502.2 column on a Varian 3400 GC. No major problems were encountered.

A five point linearity was run for the primary analyses. If the relative standard deviation (RSD) of the response factor (Rf) for each analyte was less than 20%, the response of the analyte was assumed to be linear for that detector, and the average Rf was used for quantification. If the RSD exceeded 20%, a five point quadratic curve was plotted mathematically by the computer and used for quantification.

A continuing standard (C mix) was analyzed with every ten samples. This check standard was compared to the original linearity. If the sensitivity for any analyte deviated more than 15%, a detection limit standard (A mix) was run to demonstrate that the analytes could be detected if present; the A mix contained all the analytes at a concentration of 1 ppb (except for the first six eluting compounds which were at 3 ppb). Samples with positive results were rerun if the continuing calibration standard (C mix) analyzed prior to the samples exceeded the 15% criteria. Samples with nondetected analytes were not rerun if the detection limit standard (A mix) was analyzed with detectable peaks.

Daily response factors were used for quantification. For the analytes that used a quadratic curve for quantification, the original quadratic curve was used in the continuing standard check calibration. All retention times were updated from the continuing standard check.

An A mix was run as a confirmation standard; response factors and analyte retention times were updated on a daily basis.

The surrogates that were used in the analysis were bromochloromethane, ortho-chlorofluorobenzene, and fluorobenzene. All of these surrogates were spiked into each matrix at a final concentration of 30 ppb in the sample, but entered into the computer as 100 ppb. This modification allows the results for each surrogate to be reported in percent, not ppb, as the header indicates. Bromochloromethane and ortho-chlorofluorobenzene were reported from the Hall detector. Fluorobenzene was reported from the photoionization detector.

The volatiles analyses were performed by purge and trap with a J&W DB-624 megabore column on a Finnigan INCOS GC/MS/DS. The sample analyses went well. Several analyses required dilution for chlorinated ethenes. MW01 had cis-1,2-dichloroethene at 28 ppb. This exceeds the method stated linear limit. Our experience has shown this compound to be linear beyond the method stated limit and, although no dilution was performed, the value was considered reliable. MW02 and MW04 required two dilutions each to quantify chlorinated ethene target compounds. MS/MSD analysis was performed using sample MW030R. All results were within acceptable limits. There were no problems seen in final data review.

IT Corporation
April 2, 1993

0003
IT ANALYTICAL SERVICES
5815 MIDDLEBROOK PIKE
KNOXVILLE, TN

Client Project ID: L'Henri

Job Number: ITEK 53554

III. Quality Control (continued)

Data were reported with qualifiers as follows:

- U - Compound analyzed for but not detected; value given is quantitation limit.
- E - Compound exceeded calibration range.
- D - Compound analyzed at a secondary dilution factor.
- J - Compound detected but below quantitation limit; value estimated.
- N - Presumptive evidence of compound presence.
- B - Compound found in method blank.
- Y - Indistinguishable isomer in tentatively identified compounds.

III VOLATILES DATA

a. QC SUMMARY

2A

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

b Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

	EPA SAMPLE NO.	SMC (BFB) #	OTHER	TOT OUT
	=====	=====	=====	=====
01	MW01	106	0	0
02	MW02DL2	94	0	0
03	MW02	108	0	0
04	MW02DL	115	0	0
05	MW03FD	101	0	0
06	MW03OR	92	0	0
07	MW04	86	0	0
08	MW04DL2	99	0	0
09	MW04DL	99	0	0
10	TRIPBLANK	105	0	0
11	VLCS1	101	0	0
12	MW03ORMS	105	0	0
13	MW03ORMSD	110	0	0
14	VLK1	105	0	0
15	VLK2	98	0	0

QC LIMITS

SMC (BFB) = Bromofluorobenzene (80-120)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

3A

WATER LABORATORY CONTROL SAMPLE DUPLICATE RECOVERY

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01LCS - EPA Sample No.: VLCS1

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC LIMITS REC.
Vinyl Chloride	5.00	0	4.64	93	60-140
1,2-Dichloroethane	5.00	0	5.97	119	60-140
Carbon Tetrachloride	5.00	0	4.70	94	60-140
1,2-Dichloropropane	5.00	0	4.66	93	60-140
Trichloroethene	5.00	0	4.54	91	60-140
1,1,2-Trichloroethane	5.00	0	5.09	102	60-140
Benzene	5.00	0	4.54	91	60-140
cis-1,3-Dichloropropene	5.00	0	5.44	109	60-140
Bromoform	5.00	0	4.97	99	60-140
Tetrachloroethene	5.00	0	4.67	93	60-140
1,2-Dibromoethane	5.00	0	6.83	137	60-140
1,4-Dichlorobenzene	5.00	0	4.57	91	60-140

* Values outside of QC limits

Spike Recovery: ____ out of 10 outside limits

COMMENTS:

L0001443

3A

WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix Spike - EPA Sample No.: MW03OR

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC LIMITS REC.
1,1-Dichloroethene_____	5.00	0	4.580	92	61-145
Trichloroethene_____	5.00	2.900	7.220	86	71-120
Benzene_____	5.00	0	3.830	77	76-127
Toluene_____	5.00	0	4.470	89	76-125
Chlorobenzene_____	5.00	0	4.400	88	75-130

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS	
					RPD	REC.
1,1-Dichloroethene_____	5.00	4.670	93	1	14	61-145
Trichloroethene_____	5.00	6.910	80	7	14	71-120
Benzene_____	5.00	3.880	78	1	11	76-127
Toluene_____	5.00	4.170	83	7	13	76-125
Chlorobenzene_____	5.00	4.620	92	4	13	75-130

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

* Values outside of QC limits

RPD: 0 out of 5 outside limitsSpike Recovery: out of 10 outside limitsCOMMENTS: CLP,53554,MW01,MW03OR,LOW,WATER,VV7321,VOA,EPA,
I500A:25ML OLV01 PURGE W/ 5PPB IS & SS

L0001444

4A
VOLATILE METHOD BLANK SUMMARY

0011
EPA SAMPLE NO.

VBLK1

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Lab File ID: WB0317 Lab Sample ID: WB0317

Date Analyzed: 03/17/93 Time Analyzed: 1139

GC Column: I500A:25ML ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: I500A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW01	VV7325	VV7325	1450
02	MW02	VV7326	VV7326	1523
03	MW02DL	VV7326	VV7326D	1559
04	MW03FD	VV7324	VV7324	1417
05	MW03OR	VV7321	VV7321	1224
06	MW03ORMS	VV7322	VV7322	1253
07	MW03ORMSD	VV7323	VV7323	1323

COMMENTS: CLP,,,VBLK1,LOW,WATER,WB0317,VOA,BLANK,
I500A:25ML OLV01 PURGE W/ 5PPB IS & SS

L0001445

0012

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

VBLK2

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Lab File ID: WB0318 Lab Sample ID: WB0318

Date Analyzed: 03/18/93 Time Analyzed: 0920

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

Instrument ID: I500A

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	MW02DL2	VV7326	VV7326D2	1052
02	MW04	VV7327	VV7327	1003
03	MW04DL	VV7327	VV7327D	1124
04	MW04DL2	VV7327	VV7327D2	1156
05	TRIPBLANK	VV7328	VV7328	1304
06	VLCS1	LCS0318	LCS0318	1404

COMMENTS: CLP,,,VBLK2,LOW,WATER,WB0318,VOA,BLANK,
I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS

L 0001446

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ITAS-KNOXVILLE Contract: _____
 Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01
 Lab File ID: WBFB0316 BFB Injection Date: 03/16/93
 Instrument ID: I500A BFB Injection Time: 1203
 GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	27.2
75	30.0 - 66.0% of mass 95	54.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.5
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	56.0
175	4.0 - 9.0% of mass 174	4.6 (8.3)1
176	93.0 - 101.0% of mass 174	54.4 (97.1)1
177	5.0 - 9.0% of mass 176	4.0 (7.3)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD025	WI0316E	WI0316E	03/16/93	1701
02	VSTD010	WI0316D	WI0316D	03/16/93	1727
03	VSTD005	WI0316C	WI0316C	03/16/93	1757
04	VSTD002	WI0316B	WI0316B	03/16/93	1827
05	VSTD001	WI0316A	WI0316A	03/16/93	1857

L 0001447

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ITAS-KNOXVILLE Contract: _____
 Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01
 Lab File ID: WBFB0317 BFB Injection Date: 03/17/93
 Instrument ID: I500A BFB Injection Time: 0934
 GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	28.2
75	30.0 - 66.0% of mass 95	56.1
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	50.0 - 120.0% of mass 95	55.6
175	4.0 - 9.0% of mass 174	4.3 (7.8)1
176	93.0 - 101.0% of mass 174	54.2 (97.4)1
177	5.0 - 9.0% of mass 176	3.9 (7.2)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005	WS0317	WS0317	03/17/93	1048
02	VBLK1	WB0317	WB0317	03/17/93	1139
03	MW03OR	VV7321	VV7321	03/17/93	1224
04	MW03ORMS	VV7322	VV7322	03/17/93	1253
05	MW03ORMSD	VV7323	VV7323	03/17/93	1323
06	MW03FD	VV7324	VV7324	03/17/93	1417
07	MW01	VV7325	VV7325	03/17/93	1450
08	MW02	VV7326	VV7326	03/17/93	1523
09	MW02DL	VV7326	VV7326D	03/17/93	1559

L 0001443

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Lab File ID: WBFB0318 BFB Injection Date: 03/18/93

Instrument ID: I500A BFB Injection Time: 0820

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	8.0 - 40.0% of mass 95	29.7
75	30.0 - 66.0% of mass 95	56.8
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	8.3
173	Less than 2.0% of mass 174	0.0 (0.0)1
174	50.0 - 120.0% of mass 95	57.4
175	4.0 - 9.0% of mass 174	4.5 (7.9)1
176	93.0 - 101.0% of mass 174	55.6 (96.8)1
177	5.0 - 9.0% of mass 176	3.9 (7.1)2

1-Value is % mass 174

2-Value is % mass 176

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD005	WS0318	WS0318	03/18/93	0829
02	VBLK2	WB0318	WB0318	03/18/93	0920
03	MW04	VV7327	VV7327	03/18/93	1003
04	MW02DL2	VV7326	VV7326D2	03/18/93	1052
05	MW04DL	VV7327	VV7327D	03/18/93	1124
06	MW04DL2	VV7327	VV7327D2	03/18/93	1156
07	TRIPBLANK	VV7328	VV7328	03/18/93	1304
08	VLCS1	LCS0318	LCS0318	03/18/93	1404

L 0001449

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Lab File ID (Standard): WS0317 Date Analyzed: 03/17/93

Instrument ID: I500A Time Analyzed: 1048

GC Column: DB-624 ID: 0.530(mm) Heated Purge: (Y/N) N

	IS1(DCB)	RT #	IS2(DFB)	RT #	IS3(CBZ)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	4017	17.27	9856	6.13	6374	12.44
UPPER LIMIT	5624	17.60	13798	6.46	8924	12.77
LOWER LIMIT	2410	16.94	5914	5.80	3824	12.11
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 MW01	5177	17.27	11736	6.10	8287	12.44
02 MW02	5445	17.27	12192	6.13	8635	12.44
03 MW02DL	5347	17.33	11555	6.17	8292	12.47
04 MW03FD	5228	17.30	12529	6.17	8361	12.47
05 MW03OR	3029	17.27	8587	6.10	5182	12.44
06 MW03ORMS	4302	17.30	10133	6.13	7156	12.47
07 MW03ORMSD	5242	17.30	11110	6.13	8482	12.47
08 VBLK1	3569	17.30	9262	6.17	6283	12.47

IS3 (DFC) = 1,4-Dichlorobenzene

IS1 (DFB) = 1,4-Difluorobenzene

IS2 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = +0.33 minutes of internal standard RT.

RT LOWER LIMIT = -0.33 minutes of internal standard RT.

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

L 0001450

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Lab File ID (Standard): WS0318Date Analyzed: 03/18/93Instrument ID: I500ATime Analyzed: 0829GC Column: DB-624 ID: 0.530(mm)Heated Purge: (Y/N) N

PMS 3/26/93

	IS3 (DCB)	RT #	IS1 (DFB)	RT #	IS2 (CBZ)	RT #
	AREA #		AREA #		AREA #	
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	5477	17.27	11210	6.13	7723	12.44
UPPER LIMIT	7668	17.60	15694	6.46	10812	12.77
LOWER LIMIT	3286	~~17.94~~ 16.94	6726	~~5.90~~ 5.80	4634	12.11
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 MW02DL2	4762	17.27	11523	6.13	7781	12.44
02 MW04	3569	17.27	9668	6.13	6443	12.44
03 MW04DL2	5157	17.27	11063	6.10	8536	12.44
04 MW04DL	4854	17.23	10855	6.07	7616	12.40
05 TRIPBLANK	4883	17.30	10114	6.13	7854	12.44
06 VLCS1	5663	17.30	11078	6.17	8235	12.47
07 VBLK2	4611	17.27	11089	6.10	7843	12.40

IS3 (BCM) = 1,4-Dichlorobenzene-d4

IS1 (DFB) = 1,4-Difluorobenzene

IS2 (CBZ) = Chlorobenzene-d5

AREA UPPER LIMIT = + 40% of internal standard area.

AREA LOWER LIMIT = - 40% of internal standard area.

RT UPPER LIMIT = +0.33 minutes of internal standard RT.

RT LOWER LIMIT = -0.33 minutes of internal standard RT.

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

CHAIN OF CUSTODY

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Project Name/No. ¹ *ITEK/409440*

Sample Team Members ² *K. Loy*

Profit Center No. ³ *3521*

Project Manager ⁴ *Belinda Price*

Purchase Order No. ⁶

Required Report Date ¹¹

Samples Shipment Date ⁷ *3/8/93*

Lab Destination ⁸ *ITAS Middlebrook*

Lab Contact ⁹ *John Baur*

Project Contact/Phone ¹² *Belinda Price*

Carrier/Waybill No. ¹³ *Hand Delivered*

Bill to ⁵ *IT Corporation*
Belinda Price
312 Directors Drive
Knoxville, TN 37923

Report to: ¹⁰ *IT Corporation*
Belinda Price
312 Directors Drive
Knoxville, TN 37923

ONE CONTAINER PER LINE

Sample Number ¹⁴	Sample Description/Type ¹⁵	Date/Time Collected ¹⁶	Container Type ¹⁷	Sample Volume ¹⁸	Pre-servative ¹⁹	Requested Testing Program ²⁰	Condition on Receipt ²¹	Disposal Record No. ²²
<i>MS/MSD</i>		<i>3/5/93,</i>				<i>MS/MSD</i>		
<i>MW03 - OR</i>	<i>water</i>	<i>10:45,</i>	<i>glass</i>	<i>6x40ml</i>	<i>HCl</i> <i>40C</i>	<i>CLP VOL</i>	<i>Emp 40</i>	<i>OK</i>
<i>MW03 - FD</i>	<i>water</i>	<i>3/5/93,</i>	<i>glass</i>	<i>3x40ml</i>	<i>HCl,</i> <i>40C</i>	<i>CLP VOL</i>		
<i>MW01</i>	<i>water</i>	<i>3/5/93,</i>	<i>glass</i>	<i>3x40ml</i>	<i>HCl,</i> <i>40C</i>	<i>CLP VOL</i>		
<i>MW02</i>	<i>water</i>	<i>3/5/93,</i>	<i>glass</i>	<i>3x40ml</i>	<i>HCl,</i> <i>40C</i>	<i>CLP VOL</i>		
<i>MW04</i>	<i>water</i>	<i>3/5/93,</i>	<i>glass</i>	<i>3x40ml</i>	<i>HCl,</i> <i>40C</i>	<i>CLP VOL</i>		
<i>DRM01</i>	<i>water</i>	<i>3/5/93</i>	<i>glass</i>	<i>2x40ml</i>	<i>HCl,</i> <i>40C</i>	<i>601/602</i>		

Special Instructions: ²³

Possible Hazard Identification: ²⁴

Non-hazard ☒ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐

Sample Disposal: ²⁵

Return to Client ☐ Disposal by Lab ☒ Archive ☐ (mos)

Turnaround Time Required: ²⁶

Normal ☒ Rush ☐

QC Level: ²⁷

I. ☐ II. ☐ III. ☐

Project Specific (specify): *CLP*

1. Relinquished by ²⁸

(Signature/Affiliation) *Kenneth L. Loy*

Date: *3/8/93*

Time: *9:00*

1. Received by ²⁸

(Signature/Affiliation) *[Signature]*

Date: *3/8/93*

Time: *9:00*

2. Relinquished by

(Signature/Affiliation)

Date:

Time:

2. Received by

(Signature/Affiliation)

Date:

Time:

3. Relinquished by

(Signature/Affiliation)

Date:

Time:

3. Received by

(Signature/Affiliation)

Date:

Time:

Comments: ²⁹

ITEK 53554) MCA 311



**INTERNATIONAL
TECHNOLOGY
CORPORATION**

ORGANICS ANALYSIS

DATA PACKAGE

L0001454

III VOLATILES DATA, continued**b. SAMPLE DATA**

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW01

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7325

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7325

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	Chloromethane	1	U
74-83-9	Bromomethane	1	U
75-01-4	Vinyl Chloride	1	U
75-00-3	Chloroethane	1	U
75-09-2	Methylene Chloride	1	U
67-64-1	Acetone	5	U
74-97-5	Bromochloromethane	1	U
75-15-0	Carbon Disulfide	1	U
75-35-4	1,1-Dichloroethene	1	U
75-34-3	1,1-Dichloroethane	1	U
540-59-0	trans-1,2-Dichloroethene	1	U
540-59-0	cis-1,2-Dichloroethene	28	E
67-66-3	Chloroform	1	U
107-06-2	1,2-Dichloroethane	1	U
78-93-3	2-Butanone	5	U
71-55-6	1,1,1-Trichloroethane	1	U
56-23-5	Carbon Tetrachloride	1	U
75-27-4	Bromodichloromethane	1	U
78-87-5	1,2-Dichloropropane	1	U
10061-01-5	cis-1,3-Dichloropropene	1	U
79-01-6	Trichloroethene	7	
124-48-1	Dibromochloromethane	1	U
79-00-5	1,1,2-Trichloroethane	1	U
71-43-2	Benzene	1	U
10061-02-6	trans-1,3-Dichloropropene	1	U
106-93-4	1,2-Dibromoethane	1	U
75-25-2	Bromoform	1	U
108-10-1	4-Methyl-2-Pentanone	5	U
591-78-6	2-Hexanone	5	U
127-18-4	Tetrachloroethene	18	
79-34-5	1,1,2,2-Tetrachloroethane	1	U
108-88-3	Toluene	1	U
108-90-7	Chlorobenzene	1	U

0020

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW01

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7325Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7325Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----	Ethylbenzene	1	U
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	1	U
541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	1	U

L 0001457

0021

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

MW01

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7325

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VV7325

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
00-000-00	Unknown Hydrocarbon	2.67	2	XJ

Page 3/26/93

L0001453

0022

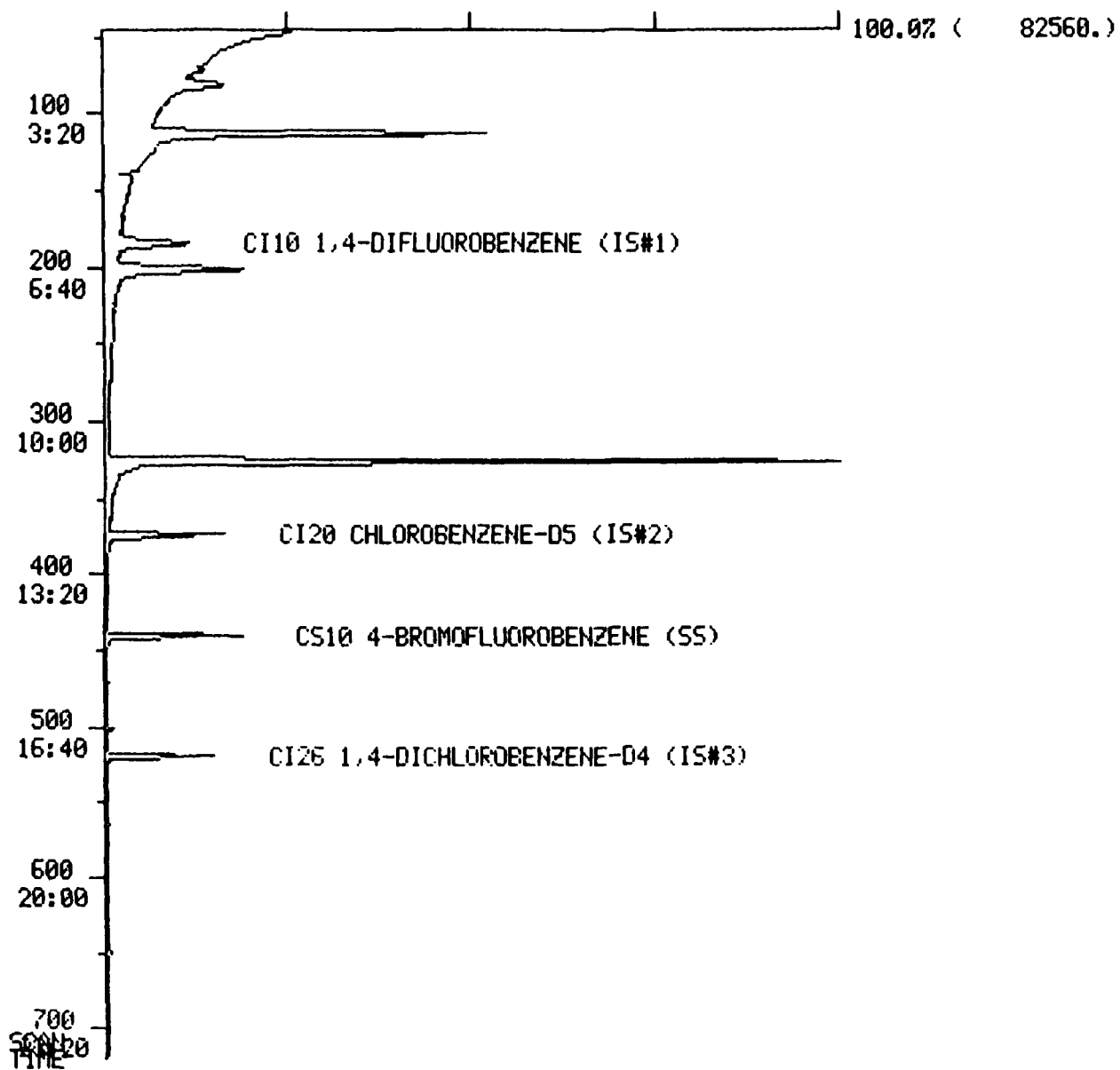
DATA FROM FILE: UU7325

SCANS 45 TO 720 ACQUIRED: 03/17/93 14:50:00

CALI: UU7325 #3

SAMPLE: CLP,53554,MN01,MN01,LOW,WATER,UU7325,UOA,EPA,

COND.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS



L 0001450

Data: VV7325.T1

03/17/93 14:50:00

Sample: CLP, 53554, MW01, MW01, LOW, WATER, VV7325, VOA, EPA,

Vials: 1500A: 25ML DLV01 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: 1500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

L 0001460

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	183	6:06	1	1.000	A BB	11736.	5.000 UG/L	6.52
2	117	373	12:26	2	1.000	A BV	8287.	5.000 UG/L	6.52
3	150	518	17:16	3	1.000	A BB	5177.	5.000 UG/L	6.52
4	95	439	14:38	1	2.399	A BB	6809.	5.323 UG/L	6.95
5	50	38	1:16	1	0.208	A BB	81.	0.036 UG/L	0.05
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	71	2:22	1	0.388	A BB	574.	0.704 UG/L	0.92
10	43	61	2:02	1	0.333	A BB	37.	1.251 UG/L	1.63
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	64	2:08	1	0.350	A BB	701.	0.184 UG/L	0.24
16	NOT FOUND								
17	NOT FOUND								
18	96	78	2:36	1	0.426	A BB	749.	0.661 UG/L	0.86
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	200	6:40	2	0.536	A BB	11647.	7.135 UG/L	9.31
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	325	10:50	2	0.871	A BB	35013.	18.037 UG/L	23.54
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	112	3:44	1	0.612	A BB	24709.	28.387 UG/L	37.04
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	0.99	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.01	5.32	5.00	0.580	0.545	1.06
5	1:16	1.00	0.207	1.01	0.04	5.00	0.007	0.953	0.01
6	1:28		0.239						
7	1:18		0.212						
8	1:32		0.250						
9	2:24	0.99	0.391	0.99	0.70	5.00	0.049	0.348	0.14

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	0.98	0.337	0.99	1.25	25.00	0.001	0.013	0.05
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	0.98	0.353	0.99	0.18	5.00	0.060	1.624	0.04
16	2:00		0.326						
17	3:02		0.495						
18	2:36	1.00	0.424	1.01	0.66	5.00	0.064	0.483	0.13
19	4:14		0.690						
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.00	0.539	1.00	7.14	5.00	1.405	0.985	1.43
27	11:22		0.914						
28	10:42		0.861						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	18.04	5.00	4.225	1.171	3.61
34	15:02		1.209						
35	9:46		0.786						
36	12:30		1.005						
37	12:48		1.029						
38	13:46		1.107						
39	13:02		1.048						
40	13:44		1.105						
41	3:44	1.00	0.609	1.01	28.39	5.00	2.105	0.371	5.68
42	16:32		0.958						
43	16:42		0.967						
44	17:18		1.002						
45	18:42		1.083						

3/17/93 14:50:39
Acquisition started

3/17/93 14:50:46
Acquire Run 0: VV7325 Starting
3/17/93 14:50:00 + 0:00 Free sectors: 13266 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW01, LOW, WATER, VV7325, VOA, EPA,
Conds.: I500A:25ML DLV01 PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being equilibrated ***

GC Desc.: V1 Elapsed time : 0.0 Min
Seq. Temp Rate Time (minutes)
(DegC) (C/min) period total Injector A : 150 Deg C
1 35-35 - 6.6 6.6 GC oven : 38 Deg C
2 35-150 8.0 14.3 20.9 Transfer-line: 216 Deg C
3 150-150 - 3.0 23.9 Ion source : 181 Deg C
Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number 0
Instrument type G
Full scale mass 1177 u
Zero scale mass 1 u
Intensity/ion 2
Peak width 1000. mmu
Offset at low mass 0 mmu
Offset at high mass 0 mmu
Voltage settling time(ms) 20

L0001463

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\times 10^{-7}$
Electrometer zero:		126.0

Analyzer Fore Pressure: 0.009 Torr
 Separator/Source Pressure: 0.351 Torr

3/17/93 15:19:45

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.3	1440.0	0.0	4596.	6. 3.

QUALITY CONTROL/QUALITY ASSURANCE DATA

0028

METHOD: CLP 3'90 OLV01 25ML PURGE

DATAFILE: VV7325	ANALYSIS TIME: 03/17/93	14:50
STANDARD: WS0317	ANALYSIS TIME: 03/17/93	10:48
TUNEFILE: WBF0317	ANALYSIS TIME: 03/17/93	9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
0110 1,4-DIFLUOROBENZEN	11736.	9856.	119%	60% - 140%	
0120 CHLOROBENZENE-D5 (	8287.	6374.	130%	60% - 140%	
0126 1,4-DICHLOROBENZEN	5177.	4017.	129%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
0110 1,4-DIFLUOROBENZEN	183	184	2	+/- 20 SECS	
0120 CHLOROBENZENE-D5 (	373	373	0	+/- 20 SECS	
0126 1,4-DICHLOROBENZEN	518	518	0	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
0110 4-BROMOFLUORODENZE	5.3	5.0	106	80% - 120%	
0115 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
0120 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

L0001465

PROCEDURE: TCA
 DATA FILE: VV7325
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V11S

DIAGNOSTIC REPORT

3/17/93 15:43:15

0029

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	5	1	33	V11S/V1UNKS1	
3	3	1	11	16	5	1	13	V11S/V1UNKS2	
3	3	1	11	15	4	1	67	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 7 FOUND

COMPOUND			SEARCH					SAT		CHRD			
NO	LID	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	183	183	.	1	981	.	114	183	.	1
2	V1	2	-373	373	373	.	1	975	.	117	373	.	1
3	V1	3	-518	519	.	.	.	.	.	150	518	.	1
4	V1	4	-439	439	439	.	1	950	.	95	439	.	1
5	V1	5	-38	37	.	.	.	.	.	50	38	.	1
6	V1	6	-44	43	.	.	.	.	.	94	.	.	.
7	V1	7	-39	38	.	.	.	.	.	62	.	.	.
8	V1	8	-46	45	.	.	.	.	.	64	.	.	.
9	V1	9	-72	71	71	.	1	880	.	84	71	.	1
10	V1	10	-62	61	.	.	.	.	.	43	61	.	1
11	V1	11	-115	114	.	.	.	.	.	43	.	.	.
12	V1	12	-289	289	.	.	.	.	.	43	.	.	.
13	V1	13	-341	341	.	.	.	.	.	43	.	.	.
14	V1	14	-122	121	.	.	.	.	.	128	.	.	.
15	V1	15	-65	64	.	.	.	.	.	76	64	.	1
16	V1	16	-60	59	.	.	.	.	.	96	.	.	.
17	V1	17	-91	90	.	.	.	.	.	63	.	.	.
18	V1	18	-78	77	.	.	.	.	.	96	78	.	1
19	V1	19	-127	126	.	.	.	.	.	83	.	.	.
20	V1	20	-155	154	.	.	.	.	.	62	.	.	.
21	V1	21	-135	134	.	.	.	.	.	97	.	.	.
22	V1	22	-143	142	.	.	.	.	.	117	.	.	.
23	V1	23	-242	241	.	.	.	.	.	83	.	.	.
24	V1	24	-218	217	.	.	.	.	.	63	.	.	.
25	V1	25	-274	274	.	.	.	.	.	75	.	.	.
26	V1	26	-201	200	200	.	1	975	.	95	200	.	1
27	V1	27	-341	341	.	.	.	.	.	129	.	.	.
28	V1	28	-321	321	.	.	.	.	.	97	.	.	.
29	V1	29	-153	152	.	.	.	.	.	78	.	.	.
30	V1	30	-311	311	.	.	.	.	.	75	.	.	.
31	V1	31	-344	344	.	.	.	.	.	107	.	.	.
32	V1	32	-420	420	.	.	.	.	.	173	.	.	.
33	V1	33	-325	325	325	.	1	953	.	166	325	.	1
34	V1	34	-451	452	.	.	.	.	.	83	.	.	.
35	V1	35	-293	293	.	.	.	.	.	91	.	.	.
36	V1	36	-375	375	.	.	.	.	.	112	.	.	.
37	V1	37	-384	384	.	.	.	.	.	91	.	.	.
38	V1	38	-413	413	.	.	.	.	.	104	.	.	.
39	V1	39	-391	391	.	.	.	.	.	106	.	.	.
40	V1	40	-412	412	.	.	.	.	.	106	.	.	.
41	V1	41	-112	111	112	1	1	913	.	96	112	.	1
42	V1	42	-496	497	.	.	.	.	.	146	.	.	.
43	V1	43	-501	502	.	.	.	.	.	146	.	.	.
44	V1	44	-519	520	.	.	.	.	.	146	.	.	.
45	V1	45	-561	562	.	.	.	.	.	75	.	.	.

L0001466

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0030

DATA FILE: VV7325

ACQUIRED: 03/17/93 14:50:00

ANALYST: RJL

CONDS.: I500A:25ML OLVO1 PURGE W/ SPPB IS & SS

SUBMITTED BY: ITEK

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?	
0110 1,4-DIFLUOROBENZENE (IS#1)	183	0	5.000	981	0
0120 CHLOROBENZENE-D5 (IS#2)	373	0	5.000	975	0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	518	-1	5.000	0	0
0310 4-BROMOFLUOROBENZENE (SS)	439	0	4.748	950	0
0150 TRICHLOROETHENE	200	0	7.051	975	0
0220 TETRACHLOROETHENE	325	0	17.910	953	0
0054 CIS-1,2-DICHLOROETHENE	112	1	26.106	913	0

L0001467

TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE

RAW DATA: UU7325 #61

BASE M/Z: 44

RIC: 12416.

03/17/93 14:50

SAMPLE: CLP, 53554, MW01, MW01, LOW, WATER, UU7325, UOA, EPA,

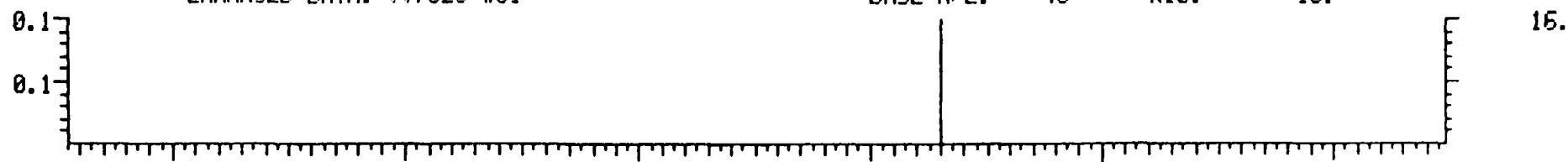
COND.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7325 #61

BASE M/Z: 43

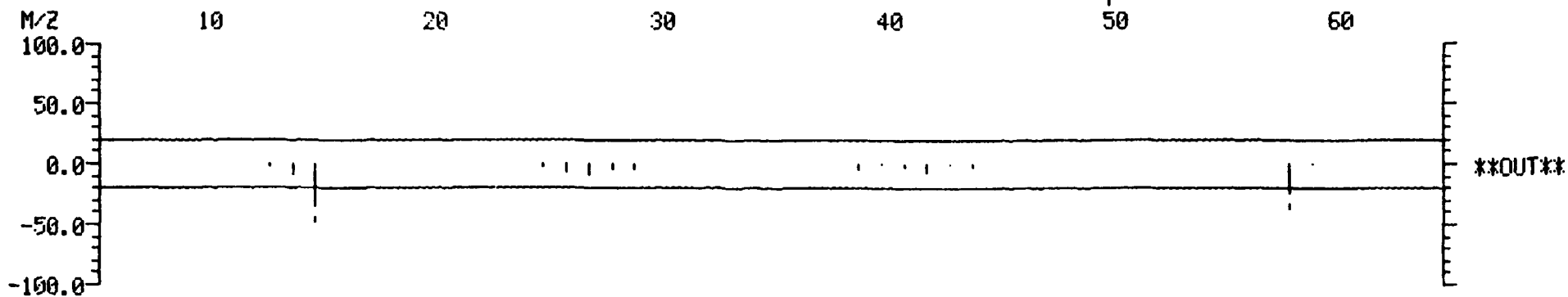
RIC: 16.



LIBRARY FILE: U1 #10

BASE M/Z: 43

RIC: 2135.



0032

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7325 #200

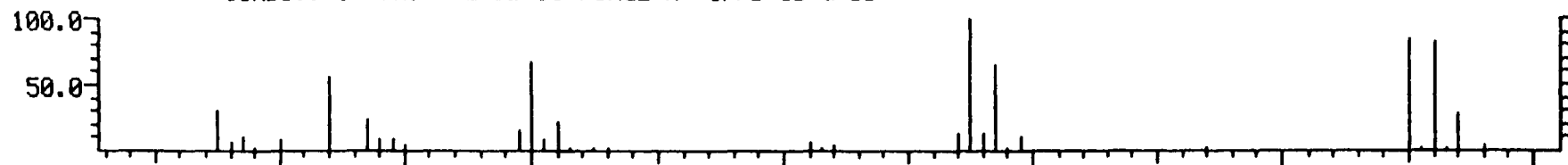
BASE M/Z: 95

RIC: 15776.

03/17/93 14:50

SAMPLE: CLP, 53554, MW01, MW01, LOW, WATER, UU7325, UOA, EPA,

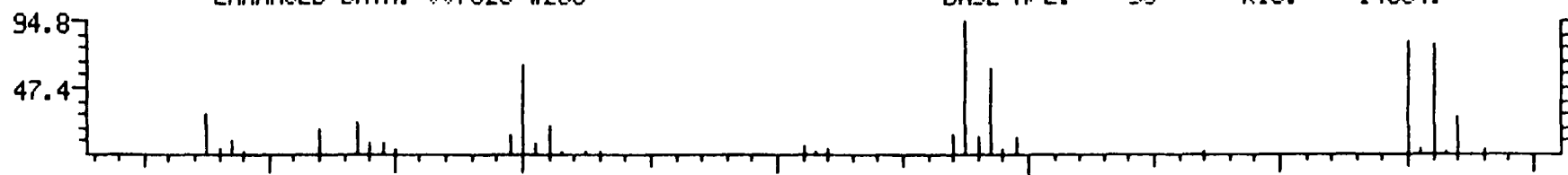
CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7325 #200

BASE M/Z: 95

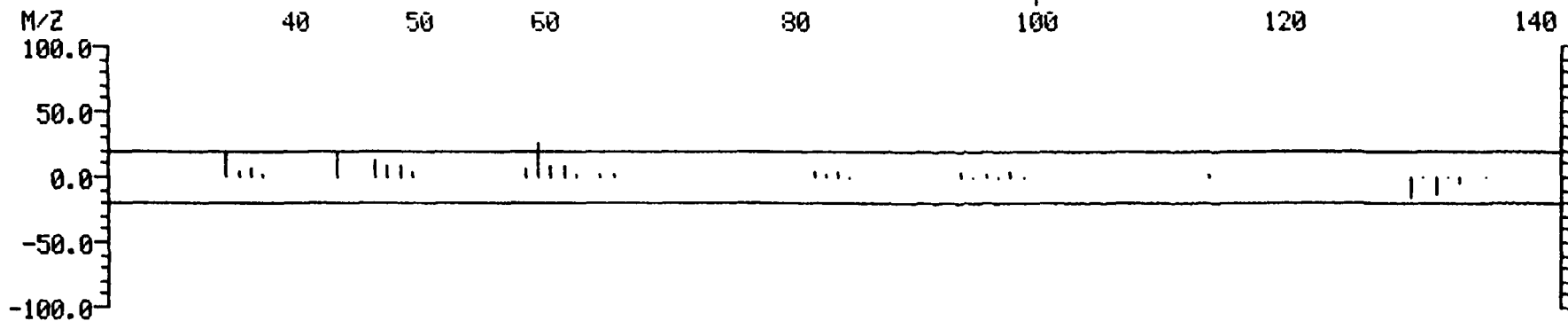
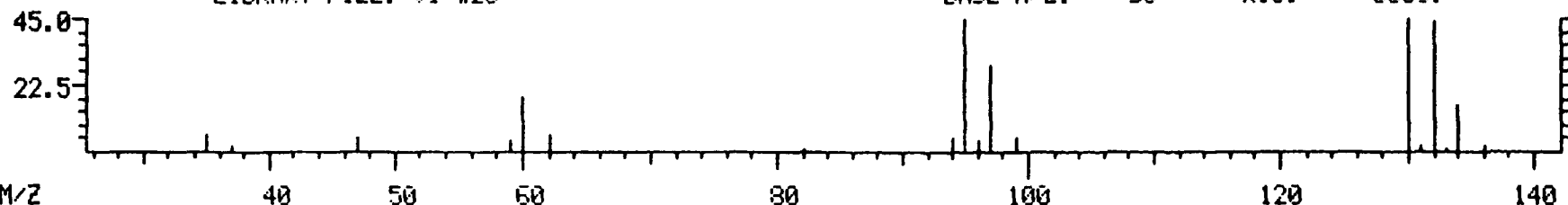
RIC: 14064.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



OUT

L0001460

0033

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7325 #325

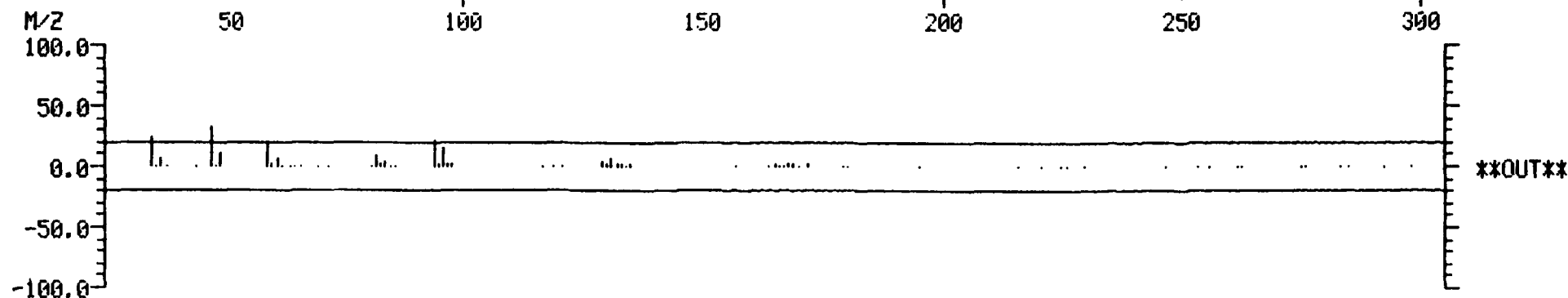
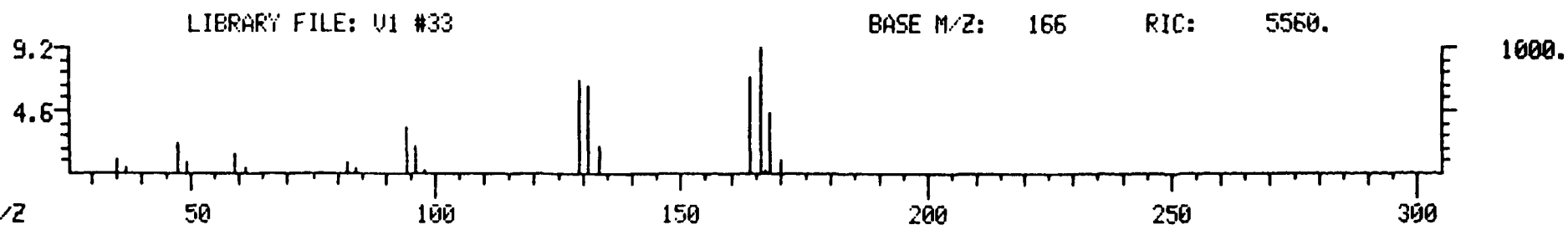
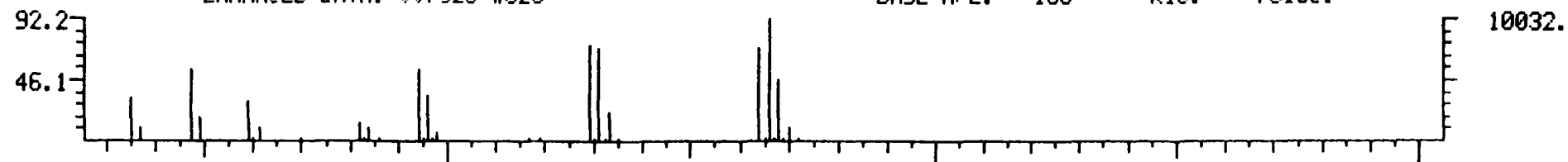
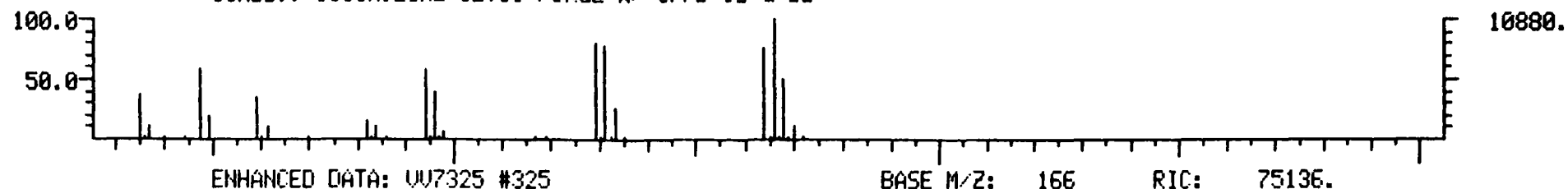
BASE M/Z: 166

RIC: 82560.

03/17/93 14:50

SAMPLE: CLP, 53554, MW01, MW01, LOW, WATER, UU7325, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UU7325 #112

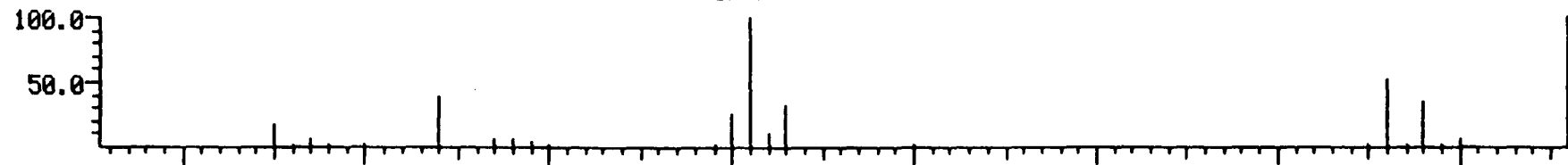
BASE M/Z: 61

RIC: 43136.

03/17/93 14:50

SAMPLE: CLP, 53554, MW01, MW01, LOW, WATER, UU7325, VOA, EPA,

CONDS.: 1500A:25ML QLV01 PURGE W/ 5PPB IS & SS

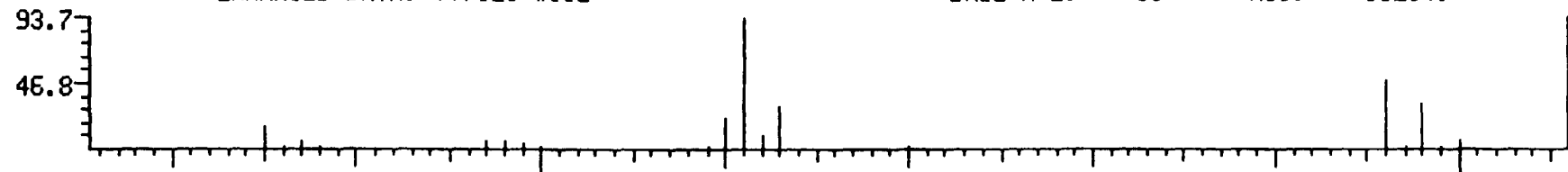


11872.

ENHANCED DATA: UU7325 #112

BASE M/Z: 61

RIC: 35264.

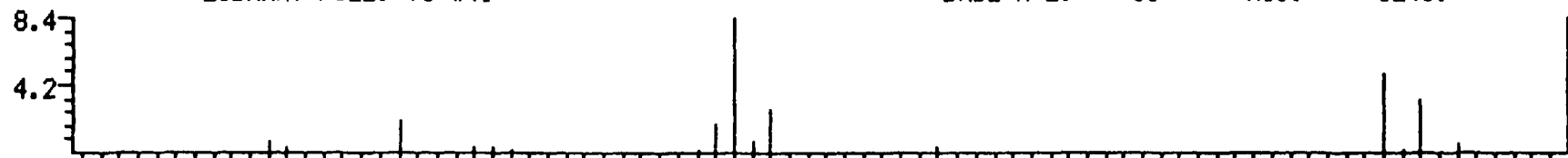


11120.

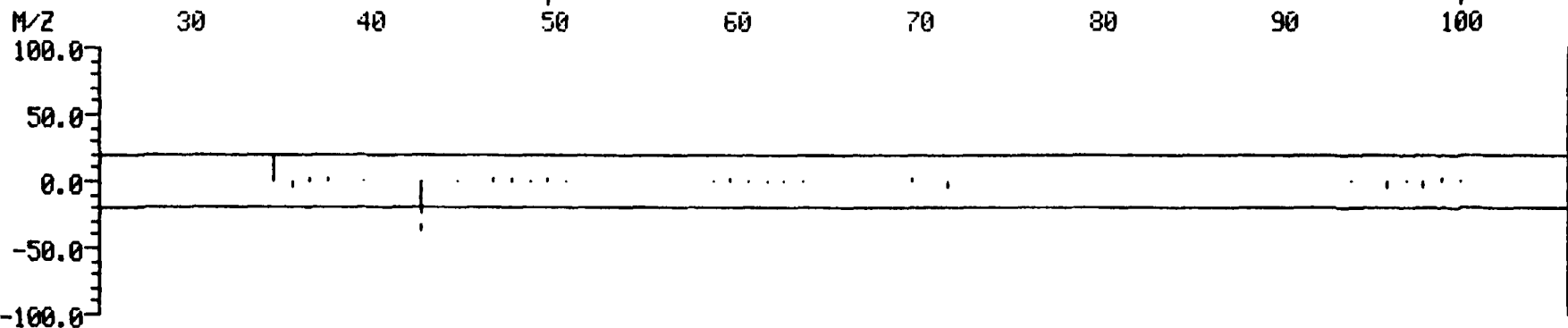
LIBRARY FILE: U1 #41

BASE M/Z: 61

RIC: 3240.



1000.



OUT

Data: VV7325.TI

03/17/93 14:50:00

Sample: CLP, 53554, MW01, MW01, LOW, WATER, VV7325, VDA, EPA,

Tends.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	0-00-0	UNKNOWN
5	0-00-0	UNKNOWN
6	7440-37-1	ARGON
7	0-00-0	UNKNOWN

NOT TRUE HITS

RJL
3/22/93

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	183	6:06	1	1.000	A BB	7701.*	50.000 UG/L	24.99
2	RIC	373	12:26	2	1.000	A BB	12952.*	50.000 UG/L	24.99
3	RIC	518	17:16	3	1.000	A BB	11888.*	50.000 UG/L	24.99
4	RIC	129	4:18	1	0.705	A VV	1993.*	12.940	6.47
5	RIC	131	4:22	1	0.716	A VV	2017.*	13.094	6.54
6	RIC	136	4:32	1	0.743	A VB	2244.*	14.569	7.28
7	RIC	140	4:40	1	0.765	A BV	1466.*	9.516	4.76

DATA FILE: VV7325

FILTER SCAN PARAMETERS

AX. NUMBER TICS: 10
11-TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I.S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
9	3	12

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
17	0	0	4	10	0	14	3

TIC PROCESSING:

Q.	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	131	324	996	40	ARGON
2	136	566	996	40	ARGON
3	140	428	484	84	ACETAMIDE, 2-CYANO-

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7325 # 131

BASE M 2: 40

03/17/93 14:50:00 + 4:22

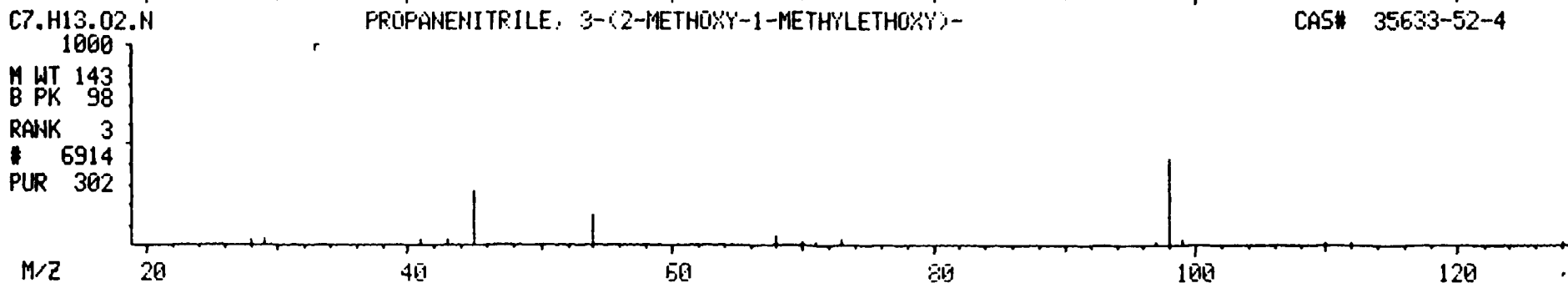
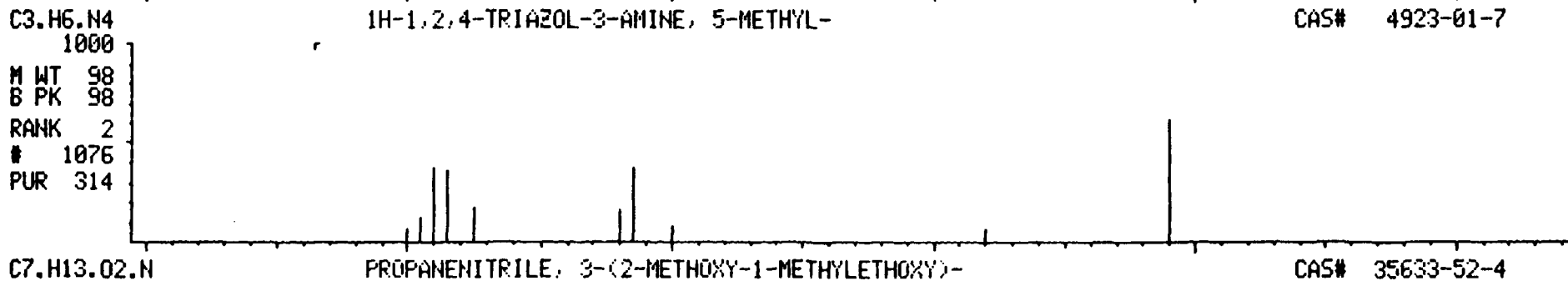
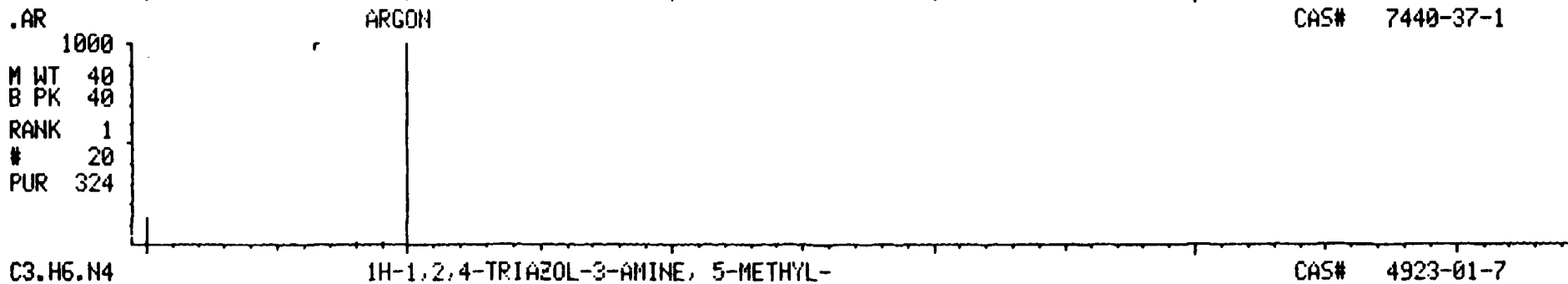
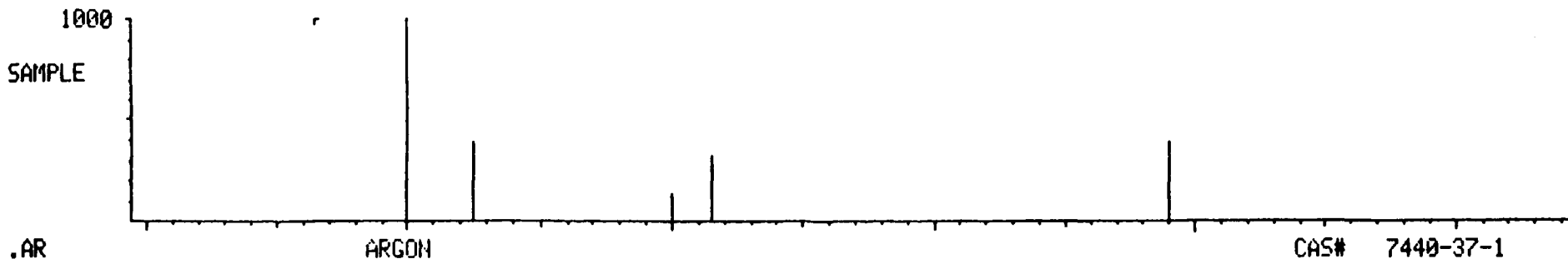
CALI: UU7325 # 3

RIC: 180.

SAMPLE: CLP, 53554, MW01, MW01, LOW, WATER, UU7325, UOA, EPA,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2N 0T)

TUT 004 1453
L0001474

0038

MID LIBRARY SEARCH (LIBRARYNB)

03/17/93 14:50:00 + 4:32

SAMPLE: CLP, 53554, MW01, MW01, LOW, WATER, UU7325, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB 15 & 55

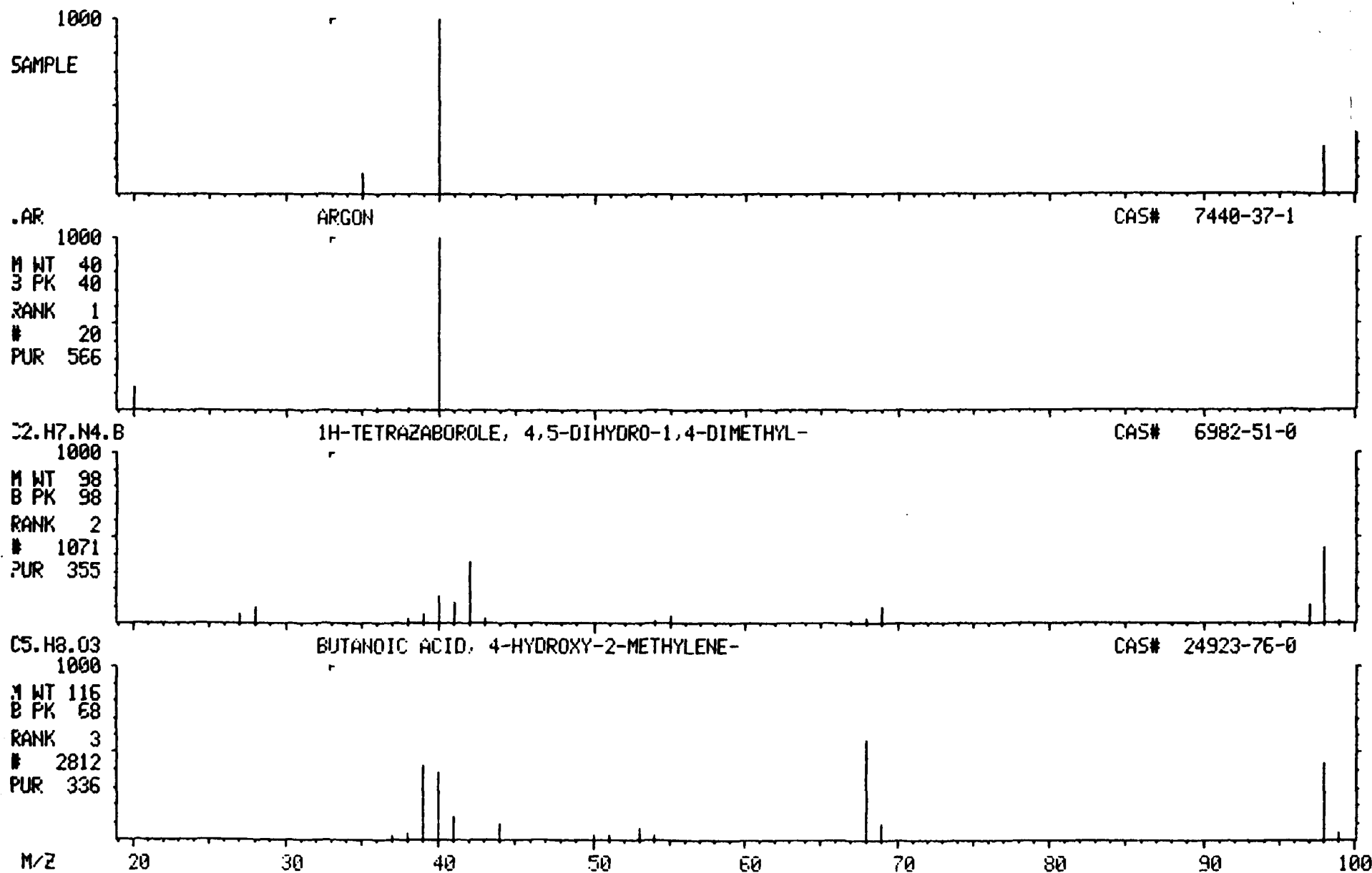
ENHANCED (S 15B 2N 0T)

DATA: UU7325 # 136

CALI: UU7325 # 3

BASE M/Z: 40

RIC: 121.



TUT 004 1454

L0001475

0039

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7325 # 140

BASE M/Z: 44

03/17/93 14:50:00 + 4:40

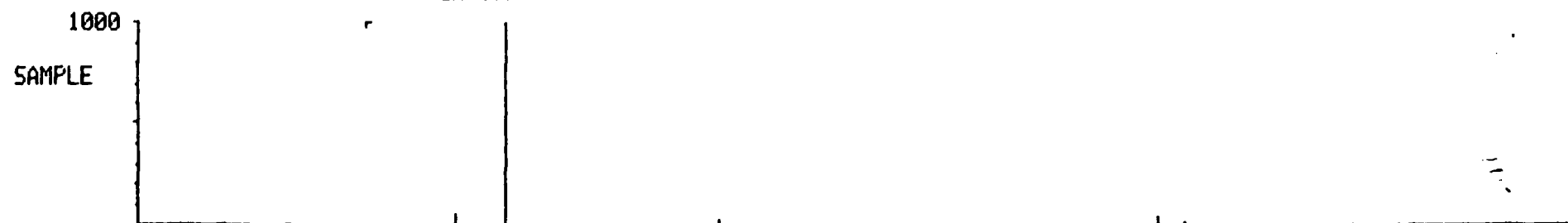
CALI: UU7325 # 3

RIC: 1014.

SAMPLE: CLP, 53554, MW01, MW01, LOW, WATER, UU7325, UOA, EPA,

COND5.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2N 0T)



C3.H4.O.N2

ACETAMIDE, 2-CYANO-

CAS# 107-91-5

1000

M WT 84

3 PK 44

RANK 1

491

PUR 428



C3.H3.O2.N

ACETIC ACID, CYANO-

CAS# 372-09-8

1000

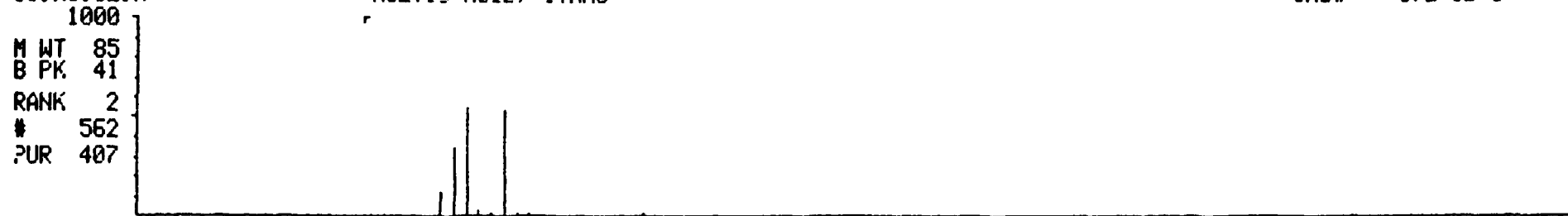
M WT 85

B PK 41

RANK 2

562

PUR 407



C2.H2.O.N.CL3

ACETAMIDE, 2,2,2-TRICHLORO-

CAS# 594-65-0

1000

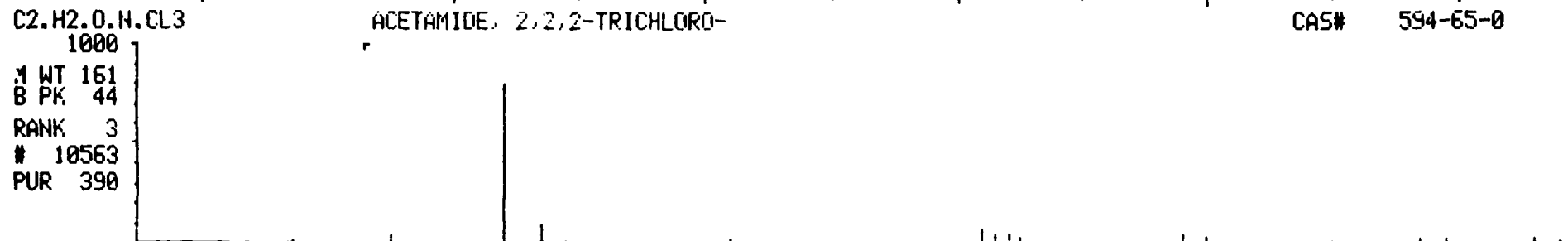
M WT 161

B PK 44

RANK 3

10563

PUR 390



M/Z

20

40

60

80

100

120

L0001473

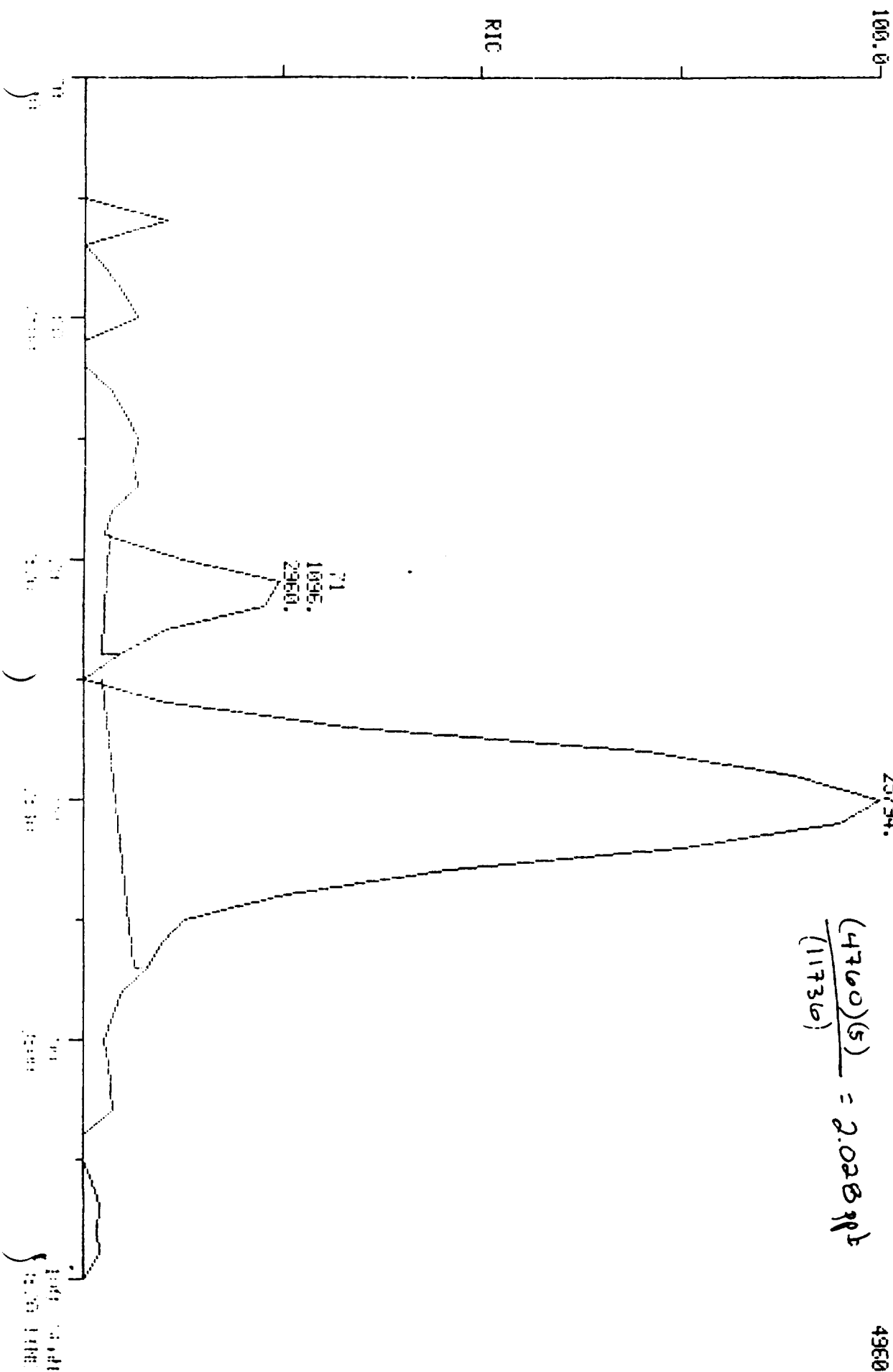
TUT 004 1455

RIC
 03/17/93 14:50:00
 SAMPLE: CLP, 53554, MW01, MW01, LOM, WATER, U07325, U0A, EPA,
 CONDOS.: 1500A: 25ML OL U01 PURGE W/ SPFB 15 & 55
 RANGE: G 1, 720 LABEL: N 2, 3.0 QUANT: A 2, 2.0 J 0 BASE: U 20, 3

SCANS 50 TO 100

$$\frac{(4760)(5)}{(11736)} = 2.02899$$

4360.



MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7325 # 80

BASE M/Z: 73

03/17/93 14:50:00 + 2:40

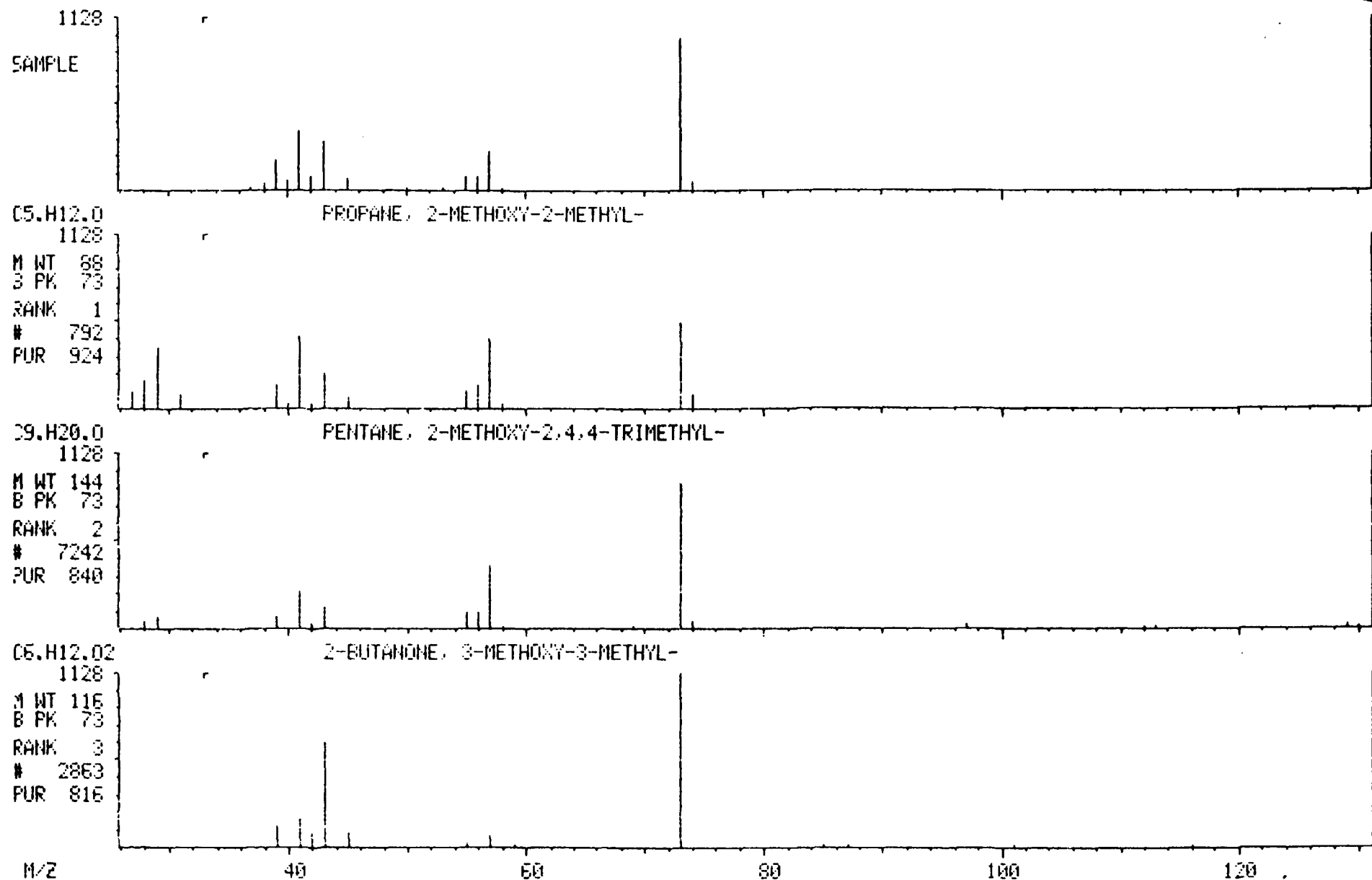
CALI: UU7325 # 3

R10: 4272.

SAMPLE: CLP/53554/MW01/MW01,LOW,WATER,UU7325,UOA,EPA,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS

ENHANCED (S 158 2N 0T)



1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW02

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7326Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7326Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

74-87-3-----	Chloromethane	1	U
74-83-9-----	Bromomethane	1	U
75-01-4-----	Vinyl Chloride	1	U
75-00-3-----	Chloroethane	1	U
75-09-2-----	Methylene Chloride	1	U
67-64-1-----	Acetone	5	U
74-97-5-----	Bromochloromethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
540-59-0-----	trans-1,2-Dichloroethene	1	U
540-59-0-----	cis-1,2-Dichloroethene	32	E
67-66-3-----	Chloroform	1	U
107-06-2-----	1,2-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
75-27-4-----	Bromodichloromethane	1	U
78-87-5-----	1,2-Dichloropropane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
79-01-6-----	Trichloroethene	51	E
124-48-1-----	Dibromochloromethane	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
71-43-2-----	Benzene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
106-93-4-----	1,2-Dibromoethane	1	U
75-25-2-----	Bromoform	1	U
108-10-1-----	4-Methyl-2-Pentanone	5	U
591-78-6-----	Hexanone	5	U
127-18-4-----	Tetrachloroethene	310	E
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-88-3-----	Toluene	1	U
108-90-7-----	Chlorobenzene	1	U

1X
ORGANICS ANALYSIS DATA SHEET

0043
SAMPLE NO.

MW02

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7326

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7326

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND		
100-41-4-----	Ethylbenzene_____	1	U
100-42-5-----	Styrene_____	1	U
1330-20-7-----	Xylene (total)_____	1	U
541-73-1-----	1,3-Dichlorobenzene_____	1	U
106-46-7-----	1,4-Dichlorobenzene_____	1	U
95-50-1-----	1,2-Dichlorobenzene_____	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane_____	1	U

LCC01480

0044

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW02

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 53554

SAS No.: _____

SDG No.: MW01Matrix: (soil/water) WATERLab Sample ID: VV7326Sample wt/vol: 25.0 (g/mL) MLLab File ID: VV7326Level: (low/med) LOWDate Received: 03/08/93

% Moisture: not dec. _____

Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm)Dilution Factor: 1.0

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

LOCC1481

0045

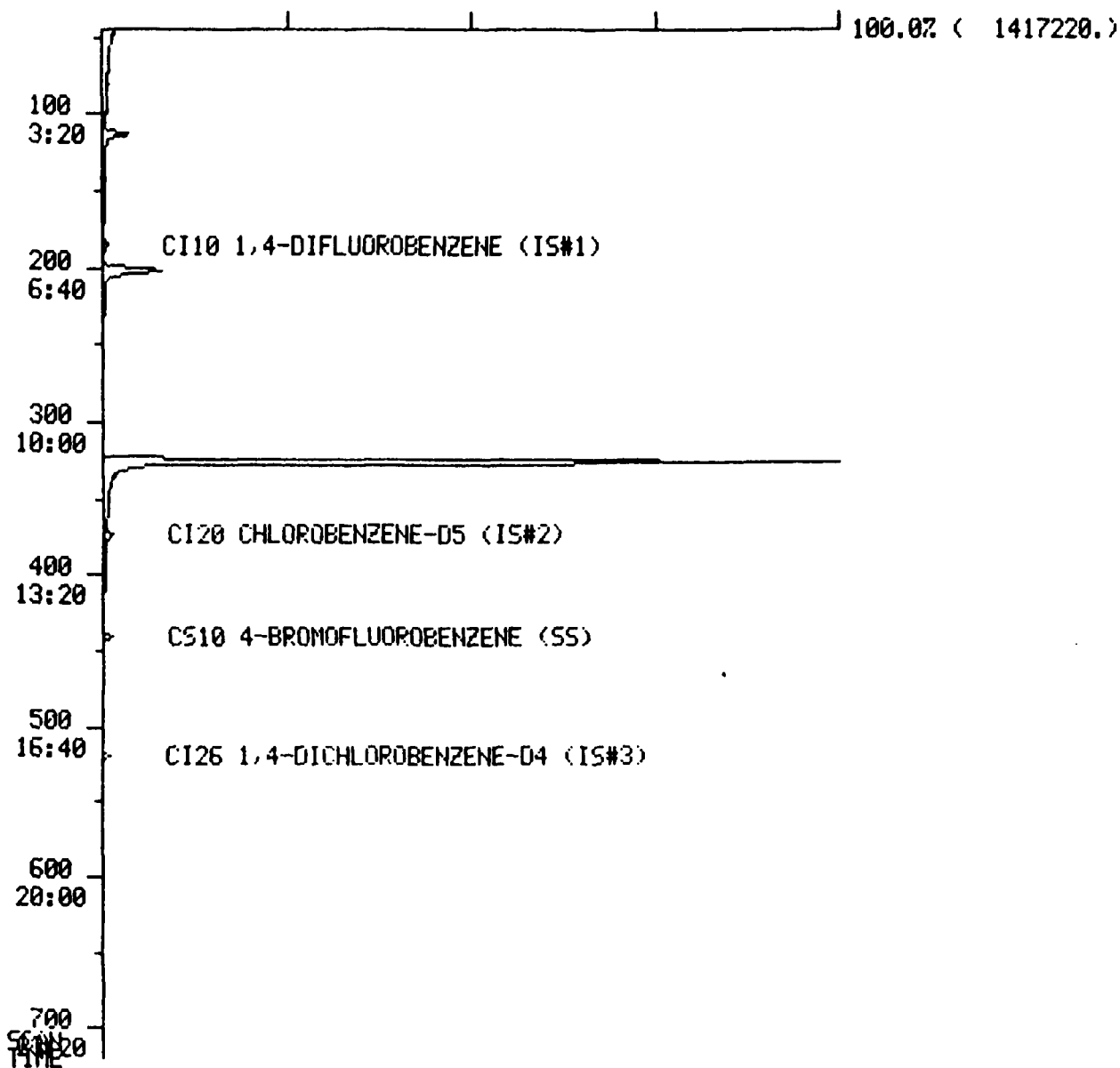
DATA FROM FILE: UU7326

SCANS 45 TO 720 ACQUIRED: 03/17/93 15:23:00

CALI: UU7326 #3

SAMPLE: CLP,53554,MW01,MW02,LOW,WATER,UU7326,UOA,EPA,

CONDS.: I500A:25ML OLV01 PURGE W/ SFPB IS & SS



L0001482

TUT 004 1461

Data: VV7326.TI

03/17/93 15:23:00

Sample: CLP, 53554, MW01, MW02, LOW, WATER, VV7326, VOA, EPA,

Conditions: I500A: 25ML OLVO1 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

L 0001483

0047

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	12192.	5.000 UG/L	1.20
2	117	373	12:26	2	1.000	A BB	8635.	5.000 UG/L	1.20
3	150	518	17:16	3	1.000	A BB	5445.	5.000 UG/L	1.20
4	95	439	14:38	1	2.386	A BB	7208.	5.425 UG/L	1.30
5	NOT FOUND								
6	NOT FOUND								
7	62	41	1:22	1	0.223	A BB	1046.	0.649 UG/L	0.16
8	NOT FOUND								
9	84	72	2:24	1	0.391	A BB	570.	0.673 UG/L	0.16
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	65	2:10	1	0.353	A BB	306.	0.077 UG/L	0.02
16	96	60	2:00	1	0.326	A BB	218.	0.168 UG/L	0.04
17	NOT FOUND								
18	96	79	2:38	1	0.429	A BB	719.	0.611 UG/L	0.15
19	83	127	4:14	1	0.690	A BB	155.	0.072 UG/L	0.02
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	201	6:42	2	0.539	A BB	86789.	51.026 UG/L	12.20
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	325	10:50	2	0.871	A BB	633654.	313.268 UG/L	74.87
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	112	3:44	1	0.609	A BB	28538.	31.559 UG/L	7.54
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.42	5.00	0.591	0.545	1.08
5	1:16		0.207						
6	1:28		0.239						
7	1:18	1.05	0.212	1.05	0.65	5.00	0.086	0.661	0.13
8	1:32		0.250						
9	2:24	1.00	0.391	1.00	0.67	5.00	0.047	0.348	0.13

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	1.00	0.353	1.00	0.08	5.00	0.025	1.624	0.02
16	2:00	1.00	0.326	1.00	0.17	5.00	0.018	0.532	0.03
17	3:02		0.495						
18	2:36	1.01	0.424	1.01	0.61	5.00	0.059	0.483	0.12
19	4:14	1.00	0.690	1.00	0.07	5.00	0.013	0.886	0.01
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.00	0.539	1.00	51.03	5.00	10.051	0.985	10.21
27	11:22		0.914						
28	10:42		0.861						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	313.27	5.00	73.382	1.171	62.65
34	15:02		1.209						
35	9:46		0.786						
36	12:30		1.005						
37	12:48		1.029						
38	13:46		1.107						
39	13:02		1.048						
40	13:44		1.105						
41	3:44	1.00	0.609	1.00	31.56	5.00	2.341	0.371	6.31
42	16:32		0.958						
43	16:42		0.967						
44	17:18		1.002						
45	18:42		1.083						

3/17/93 15:23:21
Acquisition started

3/17/93 15:23:25

Acquire Run 0: VV7326 Starting
03/17/93 15:23:00 + 0:00 Free sectors: 13098 Scan: 0 of 720
Sample: CLP, 53554, MWO1, MWO2, LOW, WATER, VV7326, VOA, EPA,
Conds.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being equilibrated ***

GC Desc.: V1 Elapsed time : 0.0 Min

Seq.	Temp (DegC)	Rate (C/min)	Time (minutes) period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 42 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 216 Deg C
					Ion source : 181 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1

Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

NPW:	3	MFW:	80	MA:	15	TH:	1	DL:	0
Int #	Lo mass	Hi mass	Time						
1	33.510	300.590	2.000						

Sequence Window # 2

Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

NPW:	3	MFW:	80	MA:	15	TH:	1	DL:	0
Int #	Lo mass	Hi mass	Time						
1	33.510	300.590	2.000						

Calibration table: D:CAL021992

Interface number	0
Instrument type	Q
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 ⁻⁷
Electrometer zero:		126.0

Analyzer Fore Pressure 0.009 Torr
 Separator/Source Pressure 0.356 Torr

3/17/93 15:50:25

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.6	1440.0	0.0	11854.	16.8

QUALITY CONTROL/QUALITY ASSURANCE DATA

0051

METHOD: MEDIUM-LEVEL VOLATILE SOIL SAMPLE

DATAFILE: VV7326 ANALYSIS TIME: 03/17/93 15:23
STANDARD: WS0317 ANALYSIS TIME: 03/17/93 10:48
TUNEFIL: WBF00317 ANALYSIS TIME: 03/17/93 9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
0110 1,4-DIFLUOROBENZEN	12192.	9856.	124%	50% - 200%	
0120 CHLOROBENZENE-D5 (	8635.	6374.	135%	50% - 200%	
0126 1,4-DICHLOROBENZEN	5445.	4017.	136%	50% - 200%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
0110 1,4-DIFLUOROBENZEN	184	184	0	+/- 30 SECS	
0120 CHLOROBENZENE-D5 (	373	373	0	+/- 30 SECS	
0126 1,4-DICHLOROBENZEN	518	518	0	+/- 30 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
0310 4-BROMOFLUOROBENZE	5.4	50.0	11	86% - 119%	~~failed~~
0010 CHLOROMETHANE **	-0.0	50.0	0	85% - 121%	failed
0015 BROMOMETHANE	-0.0	50.0	0	77% - 120%	failed

TUT 004 1467

L0001486

PROCEDURE: TCA
DATA FILE: VV7326
REFERENCE: V111

DIAGNOSTIC REPORT

3/17/93 16:00:19

NAME LIST: V1 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3
REPORT: V11S

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	7	1	101	V11S/V1UNKS1	
3	3	1	0	16	5	1	0	V11S/V1UNKS2	
3	3	1	0	15	4	1	0	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 9 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	184	184	.	1	980	.	114	184	.	1
2	V1	2	-373	373	373	.	1	977	.	117	373	.	1
3	V1	3	-518	518	.	.	.	.	.	150	518	.	1
4	V1	4	-439	439	439	.	1	967	.	95	439	.	1
5	V1	5	-38	39	.	.	.	.	.	50	.	.	.
6	V1	6	-44	45	.	.	.	.	.	94	.	.	.
7	V1	7	-39	40	42	2	1	787	.	62	41	-1	1
8	V1	8	-46	47	.	.	.	.	.	64	.	.	.
9	V1	9	-72	73	72	-1	1	902	.	84	72	.	1
10	V1	10	-62	63	.	.	.	.	.	43	.	.	.
11	V1	11	-115	116	.	.	.	.	.	43	.	.	.
12	V1	12	-289	289	.	.	.	.	.	43	.	.	.
13	V1	13	-341	341	.	.	.	.	.	43	.	.	.
14	V1	14	-122	123	.	.	.	.	.	128	.	.	.
15	V1	15	-65	66	.	.	.	.	.	76	65	.	1
16	V1	16	-60	61	61	.	1	844	.	96	60	-1	1
17	V1	17	-91	92	.	.	.	.	.	63	.	.	.
18	V1	18	-78	79	.	.	.	.	.	96	79	.	1
19	V1	19	-127	128	.	.	.	.	.	83	127	.	1
20	V1	20	-155	156	.	.	.	.	.	62	.	.	.
21	V1	21	-135	135	.	.	.	.	.	97	.	.	.
22	V1	22	-143	143	.	.	.	.	.	117	.	.	.
23	V1	23	-242	242	.	.	.	.	.	83	.	.	.
24	V1	24	-218	218	.	.	.	.	.	63	.	.	.
25	V1	25	-274	274	.	.	.	.	.	75	.	.	.
26	V1	26	-201	201	201	.	1	977	.	95	201	.	1
27	V1	27	-341	341	.	.	.	.	.	129	.	.	.
28	V1	28	-321	321	.	.	.	.	.	97	.	.	.
29	V1	29	-153	153	.	.	.	.	.	78	.	.	.
30	V1	30	-311	311	.	.	.	.	.	75	.	.	.
31	V1	31	-344	344	.	.	.	.	.	107	.	.	.
32	V1	32	-420	420	.	.	.	.	.	173	.	.	.
33	V1	33	-325	325	325	.	1	978	.	166	325	.	1
34	V1	34	-451	451	.	.	.	.	.	83	.	.	.
35	V1	35	-293	293	.	.	.	.	.	91	.	.	.
36	V1	36	-375	375	.	.	.	.	.	112	.	.	.
37	V1	37	-384	384	.	.	.	.	.	91	.	.	.
39	V1	38	-413	413	.	.	.	.	.	104	.	.	.
39	V1	39	-391	391	.	.	.	.	.	106	.	.	.
40	V1	40	-412	412	.	.	.	.	.	106	.	.	.
41	V1	41	-112	112	112	.	1	919	.	96	112	.	1
42	V1	42	-496	496	.	.	.	.	.	146	.	.	.
43	V1	43	-501	501	.	.	.	.	.	146	.	.	.
44	V1	44	-519	519	.	.	.	.	.	146	.	.	.
45	V1	45	-561	561	.	.	.	.	.	75	.	.	.

L0001489

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0053

DATA FILE: VV7326

ACQUIRED: 03/17/93 15:23:00

CONDNS.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

SUBMITTED BY: ITEK

ANALYST: RJL

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
0110 1,4-DIFLUOROBENZENE (IS#1)	184	0 5.000	980	0
0120 CHLOROBENZENE-D5 (IS#2)	373	0 5.000	977	0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	518	0 5.000	0	0
0310 4-BROMOFLUOROBENZENE (SS)	439	0 5.425	967	0
0150 TRICHLOROETHENE	201	0 51.026	977	0
0220 TETRACHLOROETHENE	325	0 313.268	978	0
0054 CIS-1,2-DICHLOROETHENE	112	0 31.559	919	0

THIT 004 1469

L 0001490

0054

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7326 #201

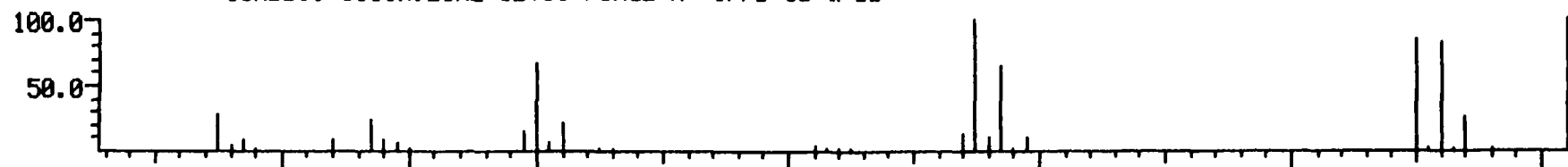
BASE M/Z: 95

RIC: 111744.

03/17/93 15:23

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UU7326, UOA, EPA,

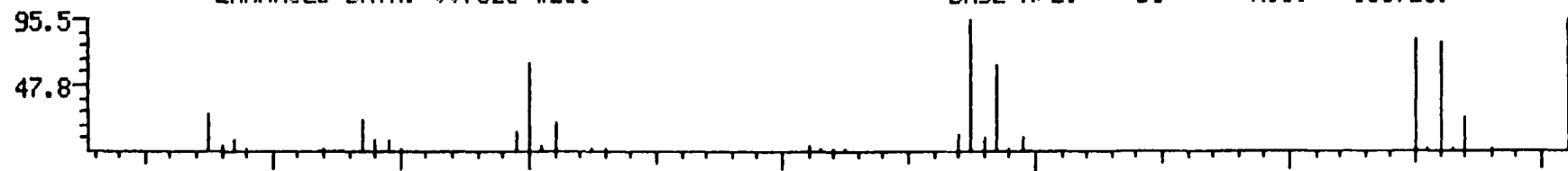
CONDS.: 1500A:25ML OLV01 PURGE W/ SPPB 15 & 55



ENHANCED DATA: UU7326 #201

BASE M/Z: 95

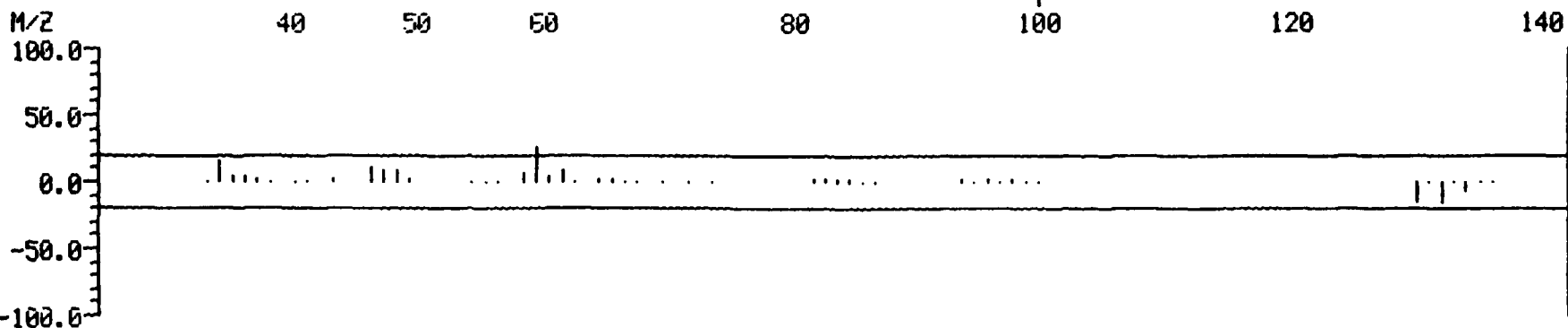
RIC: 105728.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



L-000149i

TUT 004 1470

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UV7326 #325

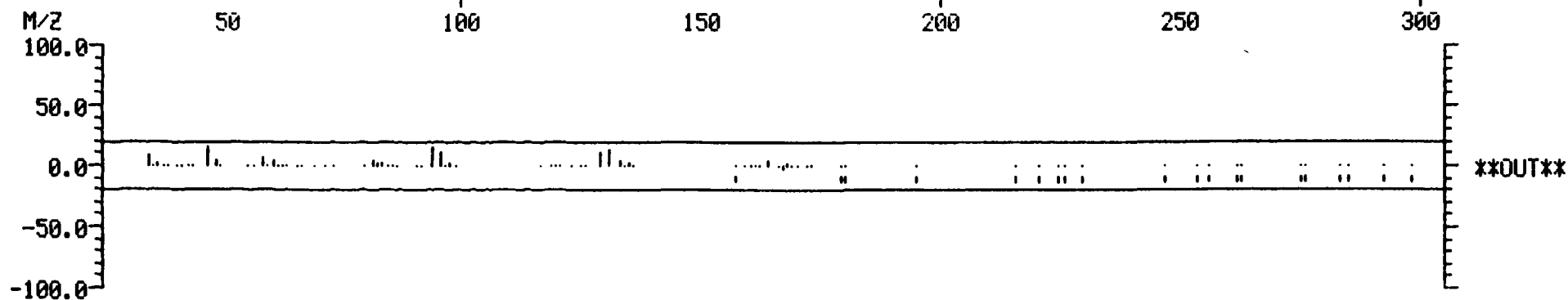
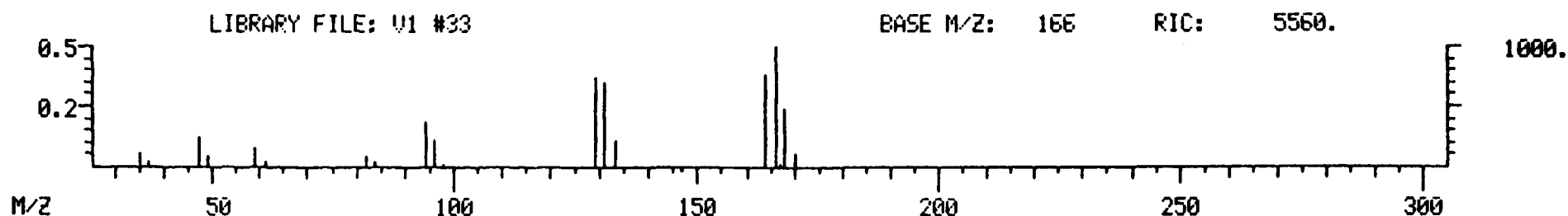
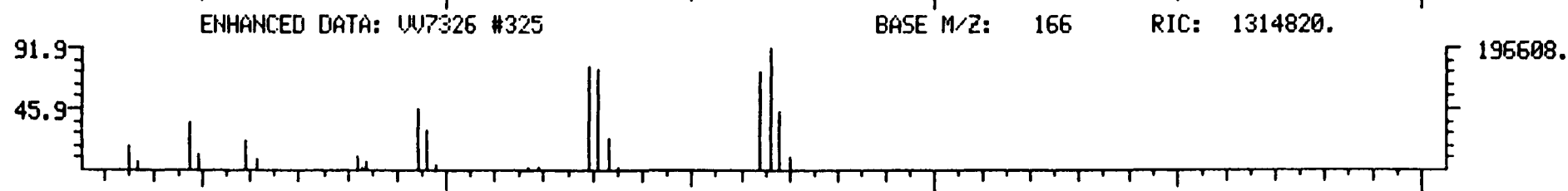
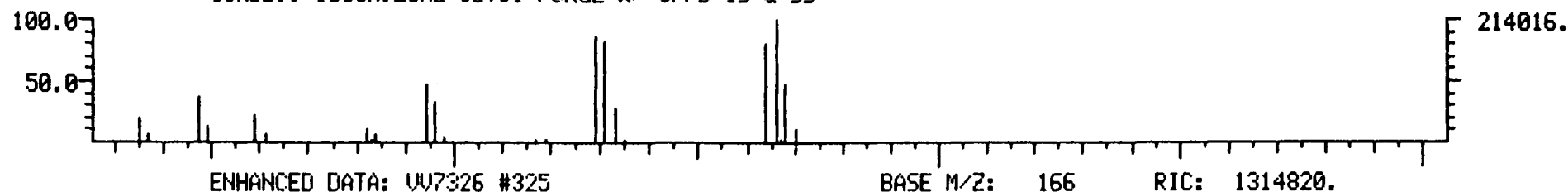
BASE M/Z: 166

RIC: 1419260.

03/17/93 15:23

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UV7326, VOA, EPA,

CONDS.: 1500A:25ML 0LV01 PURGE W/ 5PPB IS & SS



0056

TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UU7326 #112

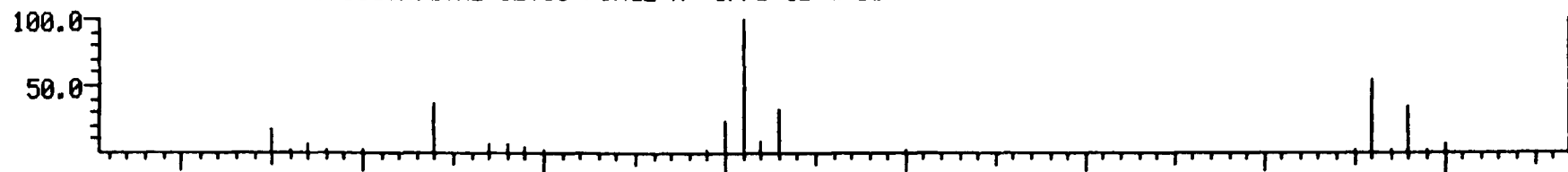
BASE M/Z: 61

RIC: 49536.

03/17/93 15:23

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UU7326, UOA, EPA,

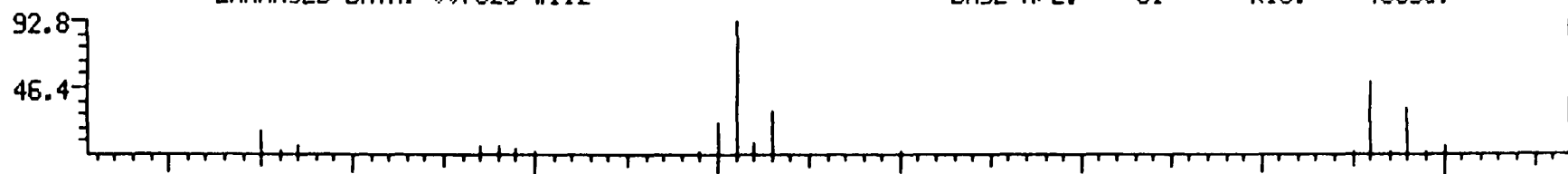
COND5.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7326 #112

BASE M/Z: 61

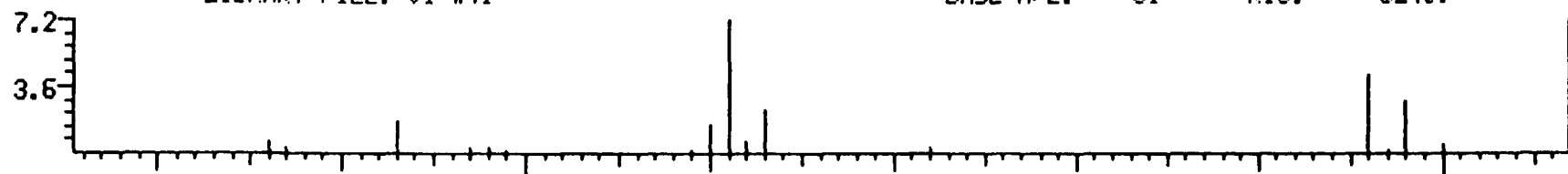
RIC: 40896.



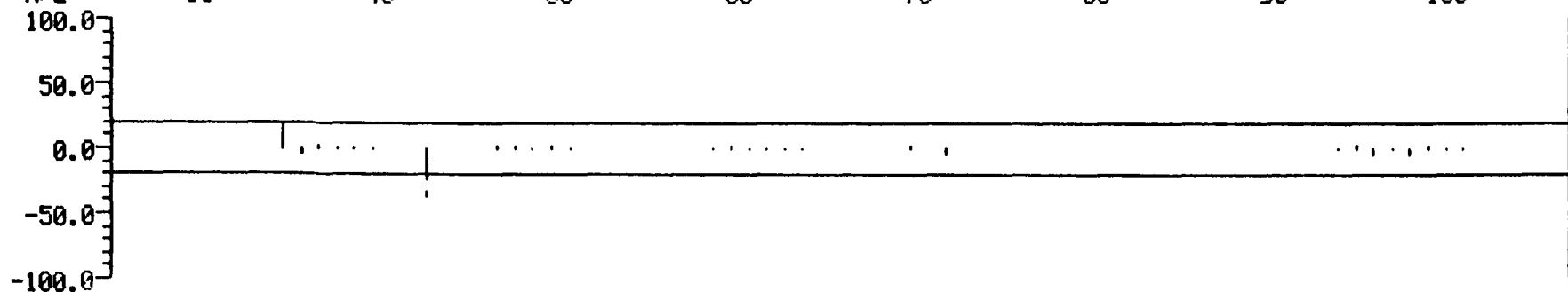
LIBRARY FILE: U1 #41

BASE M/Z: 61

RIC: 3240.



M/Z 30 40 50 60 70 80 90 100



OUT

L 0001493

TUT 004 1472

Data: VV7326.TI

03/17/93 15:23:00

Sample: CLP, 53554, MW01, MW02, LOW, WATER, VV7326, VOA, EPA,

Vials: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	124-38-9	CARBON DIOXIDE
5	28292-43-5	2-HEXANAMINE, 5-METHYL-
6	28292-43-5	2-HEXANAMINE, 5-METHYL-
7	28292-43-5	2-HEXANAMINE, 5-METHYL-
8	28292-43-5	2-HEXANAMINE, 5-METHYL-

NO FRUG
HITS
RJL
5/22/93

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	184	6:08	1	1.000	A BB	7528.*	50.000 UG/L	24.92
2	RIC	373	12:26	2	1.000	A BB	13293.*	50.000 UG/L	24.92
3	RIC	518	17:16	3	1.000	A BB	12607.*	50.000 UG/L	24.92
4	RIC	122	4:04	1	0.663	A VV	2408.*	15.994	7.97
5	RIC	131	4:22	1	0.712	A VV	1296.*	8.608	4.29
6	RIC	134	4:28	1	0.728	A VV	1256.*	8.342	4.16
7	RIC	134	4:28	1	0.728	A VV	1224.*	8.130	4.05
8	RIC	137	4:34	1	0.745	A VB	1440.*	9.565	4.77

L 0001494

DATA FILE: VV7326

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
DATA TABLE ENTRIES: 495
SCAN TOLERANCE: 3
MIN. RIC HT. [%]: 10
FIRST SCAN: 35
LAST SCAN: 1000
TIC THRESHOLD: 500

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY: LIBRARYIS
NBS SEARCH PROC: SERLIB
PEAK FINDER PROC: VOME5
TCA I.S. LL: IS
FILE NAME LIST: TCAREF2

TARGET COMPOUND ANALYSIS:

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

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
19	0	0	6	9	0	15	4

TIC PROCESSING:

NO.	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	35	791	791	74	1,2-PROPANEDIAMINE
2	122	720	998	44	CARBON DIOXIDE
3	131	622	654	115	2-HEXANAMINE, 5-METHYL-
4	137	607	662	115	2-HEXANAMINE, 5-METHYL-

0059

MID LIBRARY SEARCH (LIBRARYNB)

03/17/93 15:23:00 + 1:10

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UU7326, UOA, EPA,

CONDS.: I500A:25ML OL001 PURGE W/ 5PPB 15 & 55

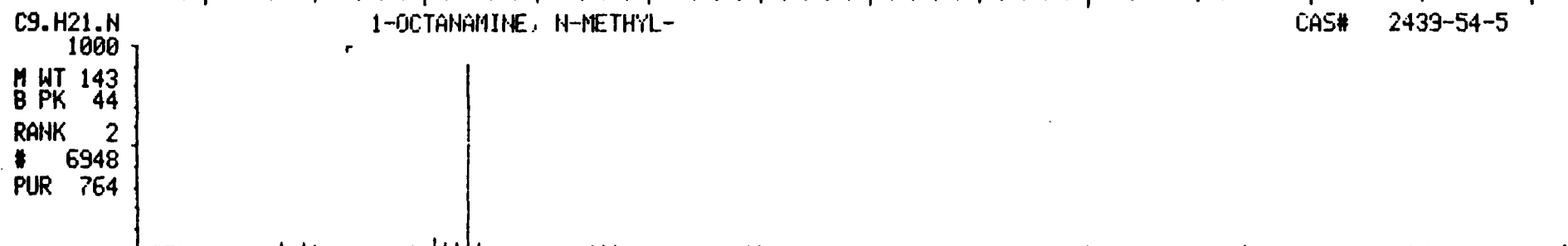
ENHANCED (S 15B 2N 0T)

DATA: UU7326 # 35

CALI: UU7326 # 3

BASE M/Z: 44

RIC: 429056.



M/Z

20

40

60

80

100

120

140

TUT 004 1475

0060

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7326 # 122

BASE M/Z: 44

03/17/93 15:23:00 + 4:04

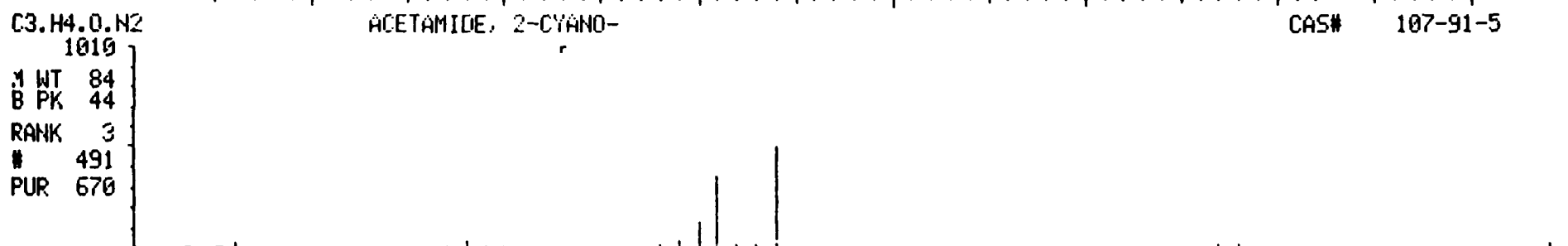
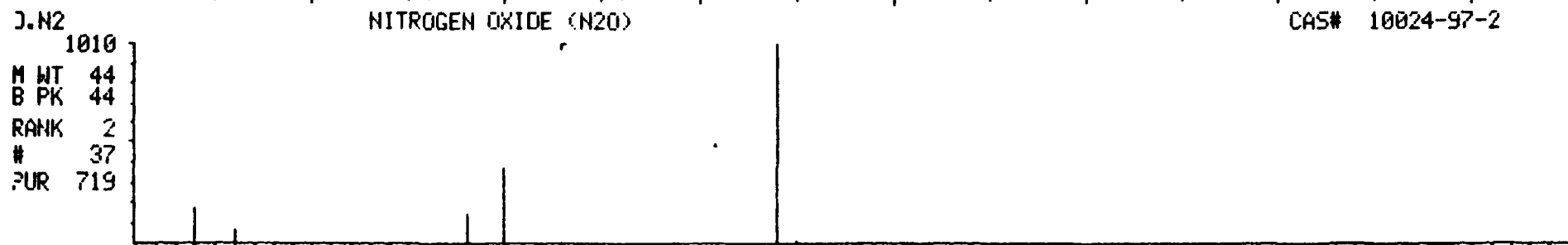
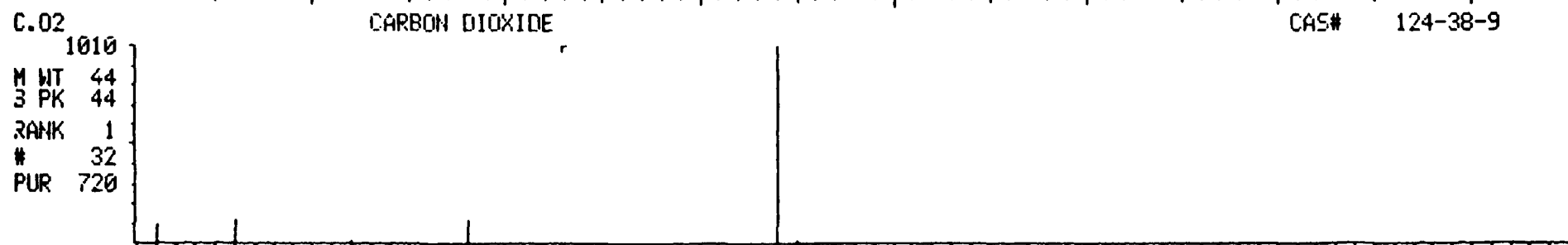
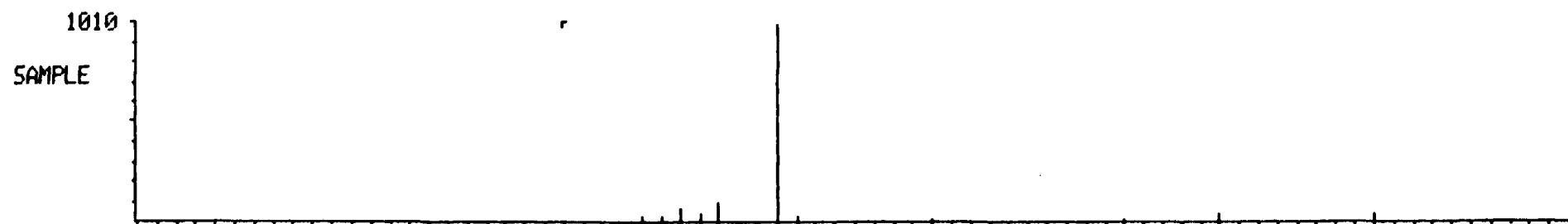
CALI: UU7326 # 3

RIC: 2228.

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UU7326, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2N 0T)



M/Z

20

30

40

50

60

70

80

L0001497

TUT 004 1476

0061

MID LIBRARY SEARCH (LIBRARYNE)

03/17/93 15:23:00 + 4:22

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UU7326, UOA: EPA,

CONDS.: 1500A:25ML OL001 PURGE W/ SPPB IS & SS

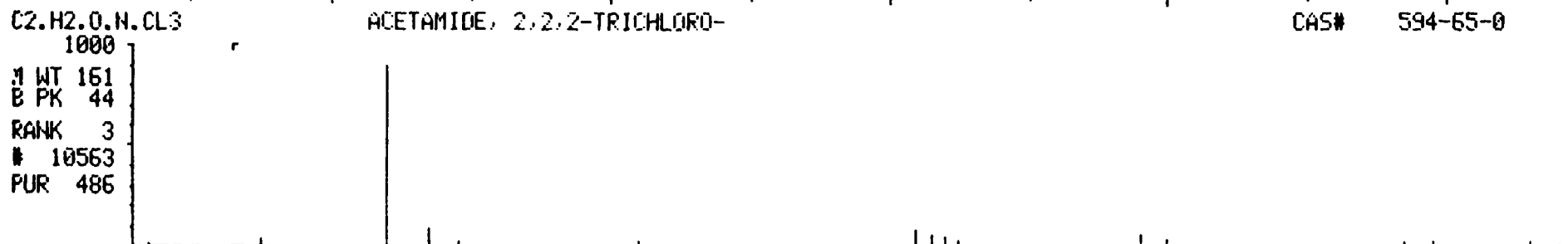
ENHANCED (S 15B 2N 0T)

DATA: UU7326 # 131

CALI: UU7326 # 3

BASE M/Z: 44

RIC: 1688.



M/Z

40

60

80

100

120

TUT 004 1477

L 0001490

0062

MID LIBRARY SEARCH (LIBRARYNE)

03/17/93 15:23:00 + 4:34

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UU7326, VOA, EPA,

CONDS.: 1500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

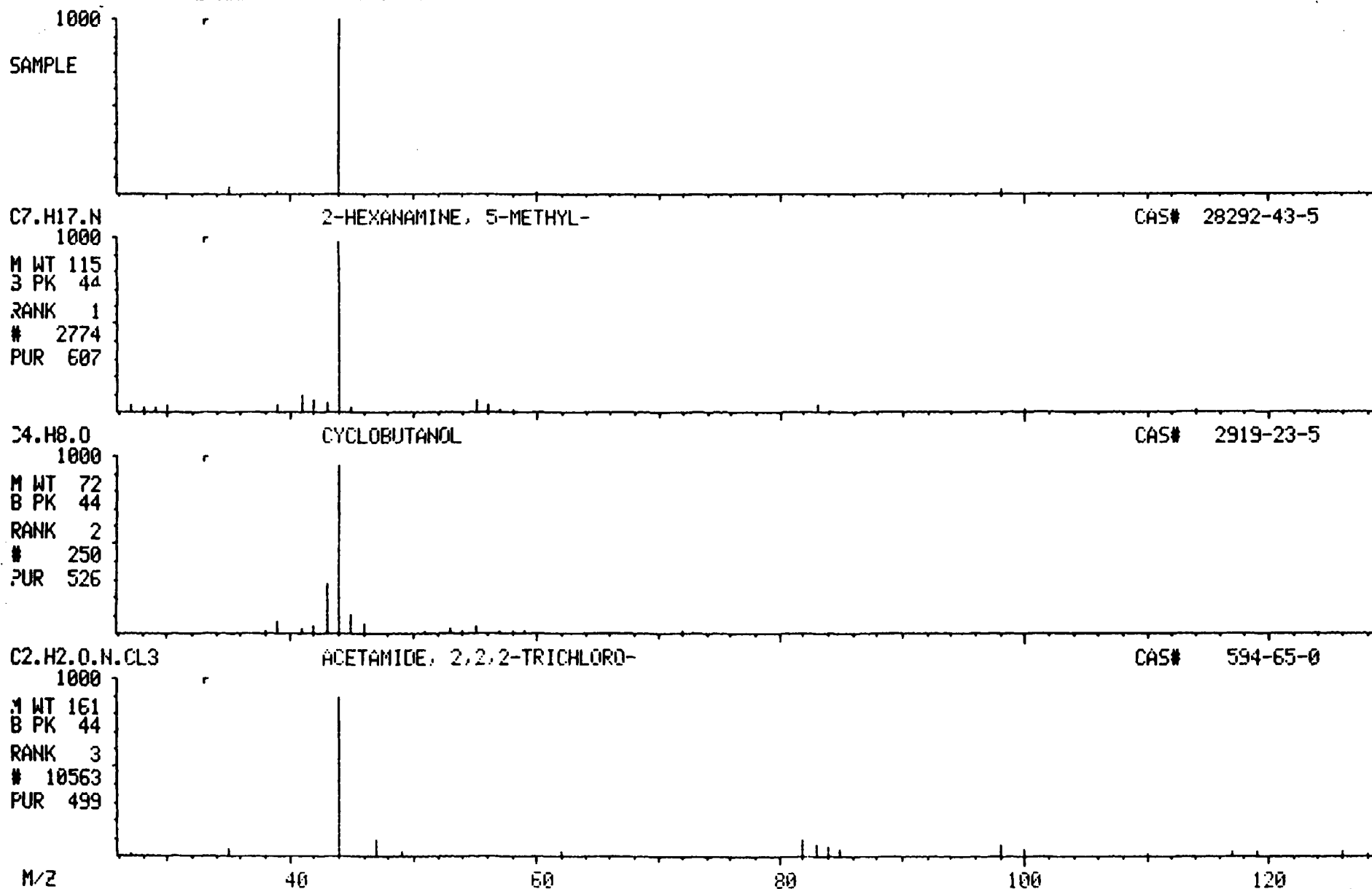
ENHANCED (S 15B 2N 0T)

DATA: UU7326 # 137

CALI: UU7326 # 3

BASE M Z: 44

RIC: 707.



L 0001499

TUT 004 147B

ORGANICS ANALYSIS DATA SHEET

MW02DL2

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 53554

SAS No.: _____

SDG No.: MW01Matrix: (soil/water) WATERLab Sample ID: VV7326Sample wt/vol: 25.0 (g/mL) MLLab File ID: VV7326D2Level: (low/med) LOWDate Received: 03/08/93% Moisture: not dec. _____ Heated Purge: NDate Analyzed: 03/18/93GC Column: DB-624 ID: 0.53(mm)Dilution Factor: 3.3

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	-----Chloromethane	3	U
74-83-9	-----Bromomethane	3	U
75-01-4	-----Vinyl Chloride	3	U
75-00-3	-----Chloroethane	3	U
75-09-2	-----Methylene Chloride	4	BJD
67-64-1	-----Acetone	16	U
74-97-5	-----Bromochloromethane	3	U
75-15-0	-----Carbon Disulfide	3	U
75-35-4	-----1,1-Dichloroethene	3	U
75-34-3	-----1,1-Dichloroethane	3	U
540-59-0	-----trans-1,2-Dichloroethene	3	U
540-59-0	-----cis-1,2-Dichloroethene	29	D
67-66-3	-----Chloroform	3	U
107-06-2	-----1,2-Dichloroethane	3	U
78-93-3	-----2-Butanone	16	U
71-55-6	-----1,1,1-Trichloroethane	3	U
56-23-5	-----Carbon Tetrachloride	3	U
75-27-4	-----Bromodichloromethane	3	U
78-87-5	-----1,2-Dichloropropane	3	U
10061-01-5	-----cis-1,3-Dichloropropene	3	U
79-01-6	-----Trichloroethene	48	D
124-48-1	-----Dibromochloromethane	3	U
79-00-5	-----1,1,2-Trichloroethane	3	U
71-43-2	-----Benzene	3	U
10061-02-6	-----trans-1,3-Dichloropropene	3	U
106-93-4	-----1,2-Dibromoethane	3	U
75-25-2	-----Bromoform	3	U
108-10-1	-----4-Methyl-2-Pentanone	16	U
591-78-6	-----2-Hexanone	16	U
127-18-4	-----Tetrachloroethene	250	ED
79-34-5	-----1,1,2,2-Tetrachloroethane	3	U
108-88-3	-----Toluene	3	U
108-90-7	-----Chlorobenzene	3	U

1X
ORGANICS ANALYSIS DATA SHEET

0064
SAMPLE NO.

Lab Name: ITAS-KNOXVILLE Contract: 7/25/92 MW02B2 D2

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7326

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7326D2

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53 (mm) Dilution Factor: 3.3

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		Q
100-41-4-----	Ethylbenzene	3	U	
100-42-5-----	Styrene	3	U	
1 30-20-7-----	Xylene (total)	3	U	
541-73-1-----	1,3-Dichlorobenzene	3	U	
106-46-7-----	1,4-Dichlorobenzene	3	U	
95-50-1-----	1,2-Dichlorobenzene	3	U	
96-12-8-----	1,2-Dibromo-3-Chloropropane	3	U	

TUT 004 1480
L 0001501

0065

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

26 3/26/93

MW02D2 DL2

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 53554

SAS No.: _____

SDG No.: MW01Matrix: (soil/water) WATERLab Sample ID: VV7326Sample wt/vol: 5.0 (g/mL) MLLab File ID: VV7326D2Level: (low/med) LOWDate Received: 03/08/93

% Moisture: not dec. _____

Date Analyzed: 03/18/93GC Column: DB-624 ID: 0.53(mm)Dilution Factor: 3.3

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

L 0001502

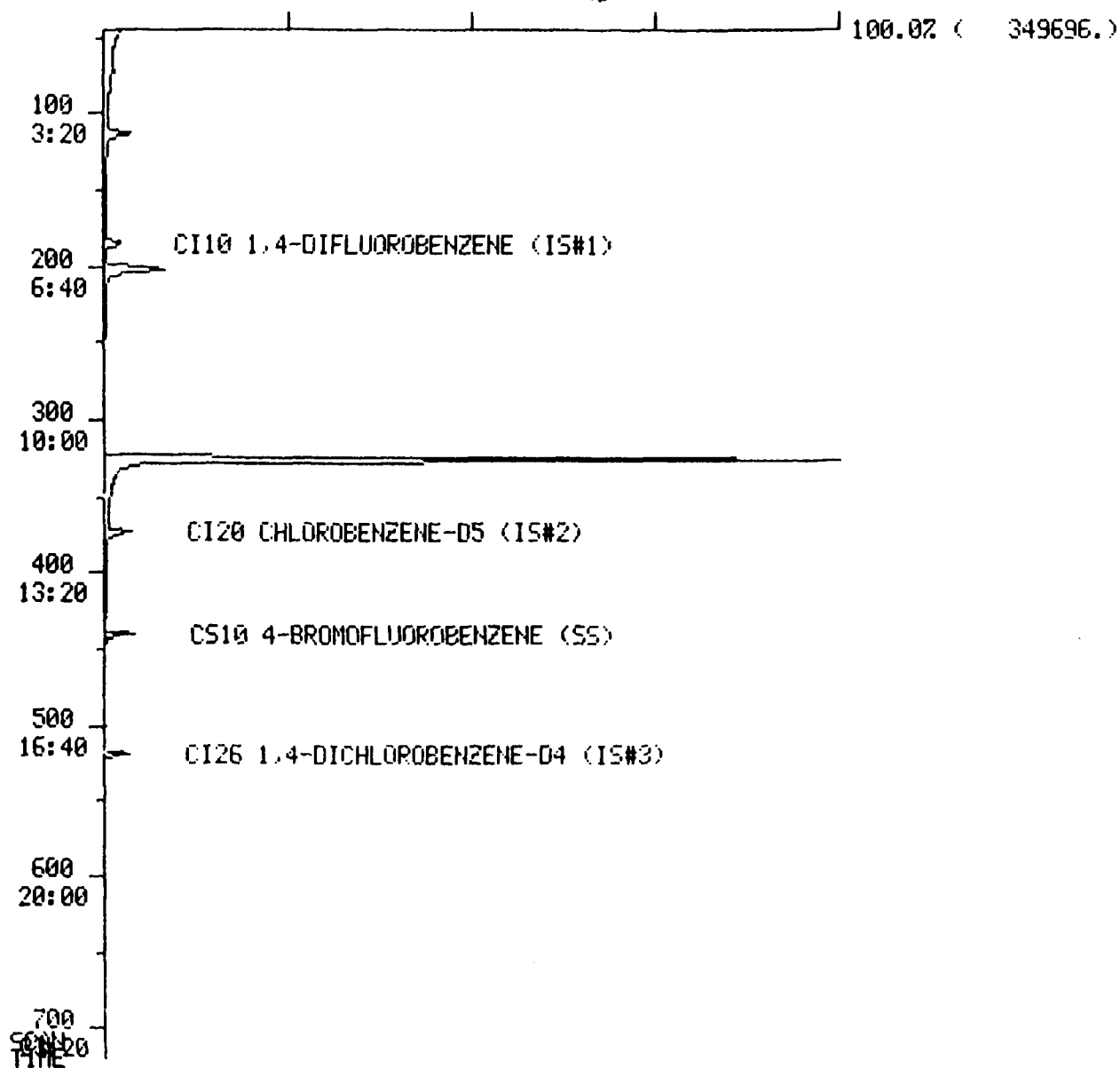
0066

DATA FROM FILE: UU732602 SCANS 45 TO 720 ACQUIRED: 03/18/93 10:52:00

MW020L2 CALI: UU732602 #3
SAMPLE: CLP, 53554, MW01, MW01B2, LOW, WATER, UU7326, UOA, EPA,
CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB 15 & 55

25-3/25/93

100.0% (349696.)



TUT 004 1482

L0001503

Quantitation Report File: VV7326D2

Data: VV7326D2.TI

13/18/93 10:52:00

R2
2/25/93Sample: CLP, 53554, MW01, ~~MW01D2~~ MW02 0L2, LOW WATER, VV7326, VOA, EPA,

Conds.: I500A:25ML DI V01 AMBIENT PURGE W/ SPPB IS & SS

Formula: 15ML->50ML: 1->3.33 Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RUL

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI24 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI10 2-BUTANONE
12	CE05 4-METHYL-2-PENTANONE
13	CE10 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO55 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI15 1,1,1-TRICHLOROETHANE
22	CI20 CARBON TETRACHLORIDE
23	CI30 BROMODICHLOROMETHANE
24	CI40 1,2-DICHLOROPROPANE *
25	CI43 CIS-1,3-DICHLOROPROPENE
26	CI50 TRICHLOROETHENE
27	CI55 DIBROMOCHLOROMETHANE
28	CI60 1,1,2-TRICHLOROETHANE
29	CI65 BENZENE
30	CI72 TRANS-1,3-DICHLOROPROPENE
31	CI75 1,2-DIBROMOETHANE
32	CI80 BROMOFORM **
33	CE20 TETRACHLOROETHENE
34	CE25 1,1,2,2-TETRACHLOROETHANE **
35	CE30 TOLUENE *
36	CE35 CHLOROBENZENE
37	CE40 ETHYL BENZENE *
38	CE45 STYRENE
39	CE50 M/P XYLENE
40	CE52 O-XYLENE
41	CE54 CIS-1,2-DICHLOROETHENE
42	CE55 1,3-DICHLOROBENZENE
43	CE56 1,4-DICHLOROBENZENE
44	CE55 1,2-DICHLOROBENZENE
45	CE61 1,2-DIBROMO-3-CHLOROPROPANE

1 0001504

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	11523.	5.000 UG/L	4.17
2	117	373	12:26	2	1.000	A BB	7781.	5.000 UG/L	4.17
3	150	518	17:16	3	1.000	A BB	4762.	5.000 UG/L	4.17
4	95	439	14:38	1	2.386	A BB	6596.	4.685 UG/L	3.91
5	NOT FOUND								
6	NOT FOUND								
7	82	40	1:20	1	0.217	A BB	175.	0.111 UG/L	0.09
8	NOT FOUND								
9	81	71	2:22	1	0.386	A BB	1163.	1.331 UG/L	1.11
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	96	78	2:36	1	0.424	A BB	104.	0.090 UG/L	0.08
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	201	6:42	2	0.539	A BB	22274.	14.361 UG/L	11.98
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	325	10:50	2	0.871	A BB	139046.	75.752 UG/L	63.19
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	112	3:44	1	0.609	A BB	8057.	8.670 UG/L	7.23
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	4.68	5.00	0.572	0.611	0.94
5	1:18		0.212						
6	1:28		0.239						
7	1:20	1.00	0.217	1.00	0.11	5.00	0.015	0.685	0.02
8	1:32		0.250						
9	2:24	0.99	0.391	0.99	1.33	5.00	0.101	0.379	0.27

L0001505

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10		0.353						
16	2:00		0.326						
17	3:02		0.495						
18	2:36	1.00	0.424	1.00	0.09	5.00	0.009	0.501	0.02
19	4:14		0.690						
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	2:02		0.646						
24	7:14		0.582						
25	9:06		0.732						
26	6:42	1.00	0.539	1.00	14.36	5.00	2.863	0.997	2.87
27	11:22		0.914						
28	10:40		0.858						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	13:58		0.809						
33	10:50	1.00	0.871	1.00	75.75	5.00	17.870	1.180	15.15
34	15:02		1.209						
35	9:44		0.783						
36	12:28		1.003						
37	12:46		1.027						
38	13:46		1.107						
39	13:02		1.048						
40	13:42		1.102						
41	3:44	1.00	0.609	1.00	8.67	5.00	0.699	0.403	1.73
42	16:30		0.956						
43	16:42		0.967						
44	17:18		1.002						
45	18:40		1.081						

3/18/93 10:52:59
Acquisition started

0070

PJ
3/25/93

3/18/93 10:53:02

Acquire Run 0: VV7326D2 Starting
3/18/93 10:53:00 + 0:00 Free sectors: 12044 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW01D2, LOW, WATER, VV7326, VOA, EPA,
Ions: I500A:25ML DLV01 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 15ML->50ML: 1->3.33 Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RUL Acct. No: 53554

*** GC not ready and being stabilized ***

Seq Desc: RR Elapsed time: 0.0 Min
Seq. Temp Rate Time (minutes)
* (DegC) (C/min) period total Injector A : 150 Deg C
1 35- 35 - 6.6 6.6 GC oven : 35 Deg C
2 35-150 8.0 14.3 20.9 Transfer-line: 215 Deg C
3 150-150 - 3.0 23.9 Ion source : 180 Deg C
Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number 0
Instrument type G
Full scale mass 1177 u
Zero scale mass 1 u
Intensity/ion 2
Peak width 1000. mmu
Offset at low mass 0 mmu
Offset at high mass 0 mmu
Voltage settling time(ms) 20

L0001507

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 ⁻⁷
Electrometer zero:		126.0

Analyzer Fore Pressure: 0.010 Torr
 Separator/Source Pressure: 0.356 Torr

3/18/93 11:21:20
 ACQUISITION COMPLETED
 Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.5	1440.0	0.0	5865.	8.4.

L0001503

QUALITY CONTROL/QUALITY ASSURANCE DATA

0072

METHOD: CLP 3'90 OLVO1 25ML PURGE

DATAFILE: VV7326D2 ANALYSIS TIME: 03/18/93 10:52
STANDARD: WS0318 ANALYSIS TIME: 03/18/93 8:29
TUNEFIL: WBF0318 ANALYSIS TIME: 03/18/93 8:20

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
10 1,4-DIFLUOROBENZEN	11523.	11210.	103%	60% - 140%	
120 CHLOROBENZENE-D5 (	7781.	7723.	101%	60% - 140%	
126 1,4-DICHLOROBENZEN	4762.	5477.	87%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
10 1,4-DIFLUOROBENZEN	184	184	0	+/- 20 SECS	
120 CHLOROBENZENE-D5 (	373	373	0	+/- 20 SECS	
126 1,4-DICHLOROBENZEN	518	518	0	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
10 4-BROMOFLUOROBENZE	4.7	5.0	94	80% - 120%	
15 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
20 VINYL CHLORIDE *	0.1	50.0	0	86% - 115%	failed

TUT 004 1488

L0001509

PROCEDURE: TCA
 DATA FILE: VV7326D2
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V1IS

DIAGNOSTIC REPORT

3/18/93 11:24:00

007

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

STANDARDS				PLUS UNKNOWN				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	2	1	0	20	5	1	0	V1IS/V1UNKS1
3	3	1	0	16	5	1	0	V1IS/V1UNKS2
3	3	1	0	15	4	1	0	V1IS/V1UNKS3

45 COMPOUNDS PROCESSED, 7 FOUND

COMPOUND		SEARCH							SAT		CHRO		
LID	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS	
1	V1	1	-184	184	184	1	981		114	184		1	
2	V1	2	-373	373	373	1	972		117	373		1	
3	V1	3	-518	518					150	518		1	
4	V1	4	-439	439	439	1	949		95	439		1	
5	V1	5	-38	38					50				
6	V1	6	-44	44					94				
7	V1	7	-39	39					62	40		1	
8	V1	8	-46	46					64				
9	V1	9	-72	72	72	1	938		84	71	-1	1	
10	V1	10	-62	62					43				
11	V1	11	-115	115					43				
12	V1	12	-289	289					43				
13	V1	13	-341	341					43				
14	V1	14	-122	122					128				
15	V1	15	-65	65					76				
16	V1	16	-60	60					96				
17	V1	17	-91	91					63				
18	V1	18	-78	78					96	78		1	
19	V1	19	-127	127					83				
20	V1	20	-155	155					62				
21	V1	21	-135	135					97				
22	V1	22	-143	143					117				
23	V1	23	-242	242					83				
24	V1	24	-218	218					63				
25	V1	25	-274	274					75				
26	V1	26	-201	201	201	1	973		95	201		1	
27	V1	27	-341	341					129				
28	V1	28	-321	321					97				
29	V1	29	-153	153					78				
30	V1	30	-311	311					75				
31	V1	31	-344	344					107				
32	V1	32	-420	420					173				
33	V1	33	-325	325	325	1	947		166	325		1	
34	V1	34	-451	451					83				
35	V1	35	-293	293					91				
36	V1	36	-375	375					112				
37	V1	37	-384	384					91				
38	V1	38	-413	413					104				
39	V1	39	-391	391					106				
40	V1	40	-412	412					106				
41	V1	41	-112	112	112	1	910		96	112		1	
42	V1	42	-496	496					146				
43	V1	43	-501	501					146				
44	V1	44	-519	519					146				
45	V1	45	-561	561					75				

L 0001510

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0074

DATA FILE: VV7326D2

ACQUIRED: 03/18/93 10:52:00

ANALYST: RJL

COND: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

SUBMITTED BY: ITEK

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
0110 1,4-DIFLUOROBENZENE (IS#1)	184	0	5.000	981 0
0120 CHLOROBENZENE-D5 (IS#2)	373	0	5.000	972 0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	518	0	5.000	0 0
0310 4-BROMOFLUOROBENZENE (SS)	439	0	4.685	949 0
0330 METHYLENE CHLORIDE	71	-1	1.331	938 0
0150 TRICHLOROETHENE	201	0	14.361	973 0
0220 TETRACHLOROETHENE	325	0	75.752	947 0
0254 CIS-1,2-DICHLOROETHENE	112	0	8.670	910 0

L0C01511

0075

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

RJZ
5/25/93

RAW DATA: UU732602 #71

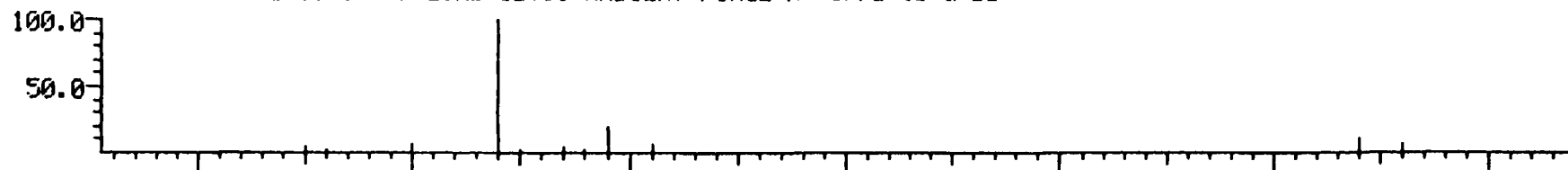
BASE M/Z: 44

RIC: 5448.

03/18/93 10:52

SAMPLE: CLP, 53554, MW01, ~~MW01B2~~ ^{MW02DL2}, LOW, WATER, UU7326, UOA, EPA,

CONDS.: I500A:25ML QLV01 AMBIENT PURGE W/ 5PPB IS & SS

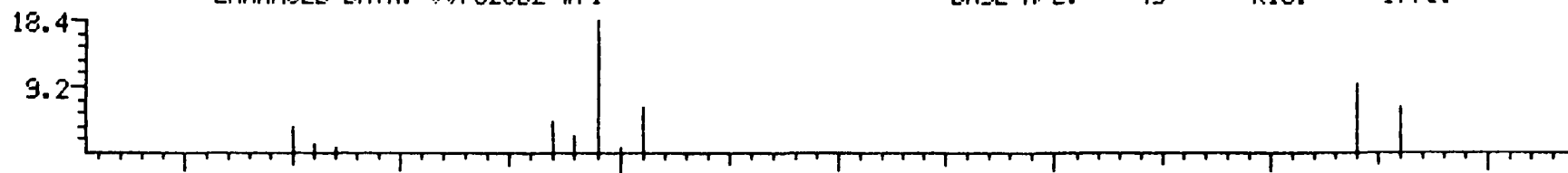


3296.

ENHANCED DATA: UU732602 #71

BASE M/Z: 49

RIC: 1776.

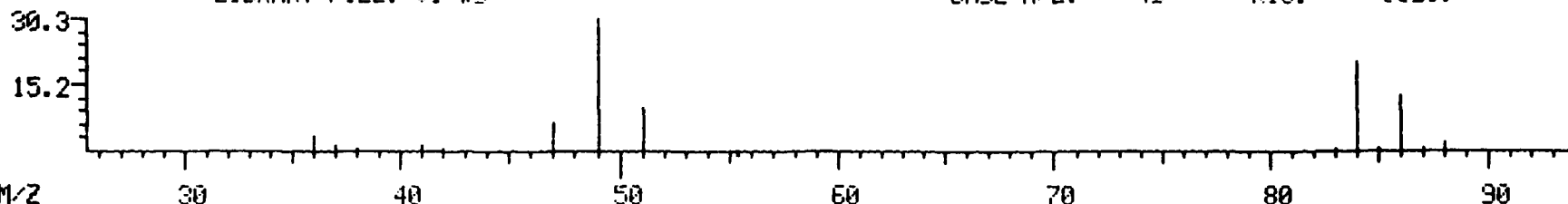


606.

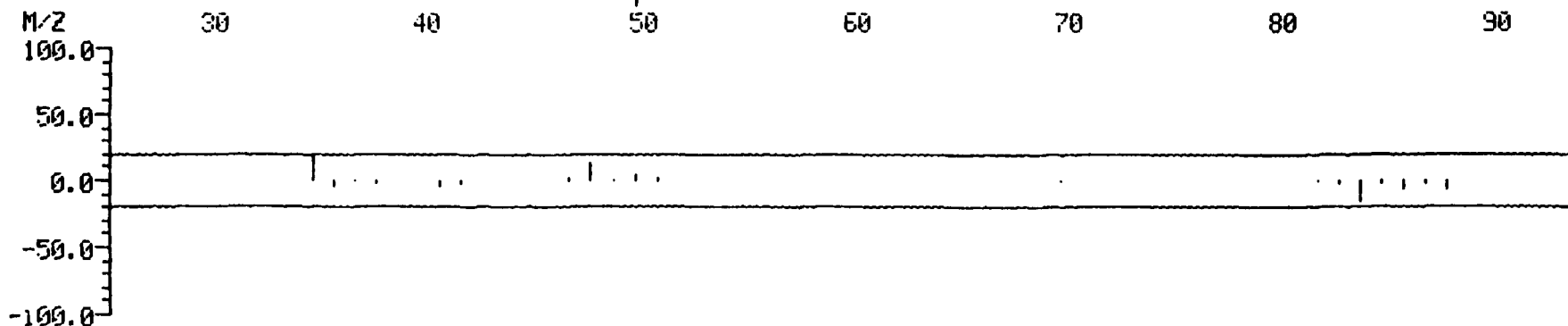
LIBRARY FILE: U1 #9

BASE M/Z: 49

RIC: 3028.



1000.



L 0001512

TUT 004 1491

0076

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

PJT
2/25/93

RAW DATA: VU7326D2 #201

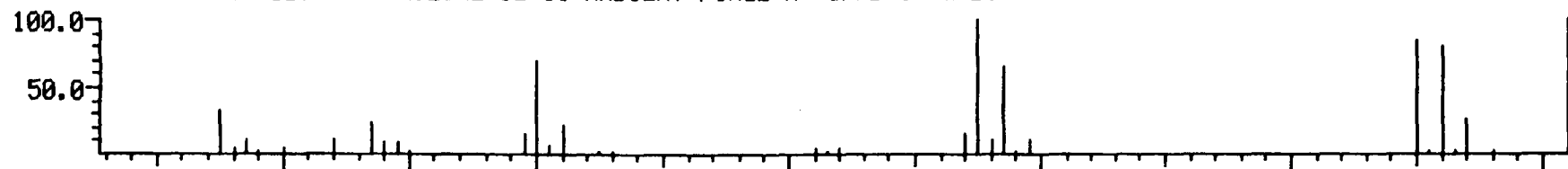
BASE M/Z: 95

RIC: 28768.

03/18/93 10:52

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, VU7326, UOA, EPA,

CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ SPPB IS & SS

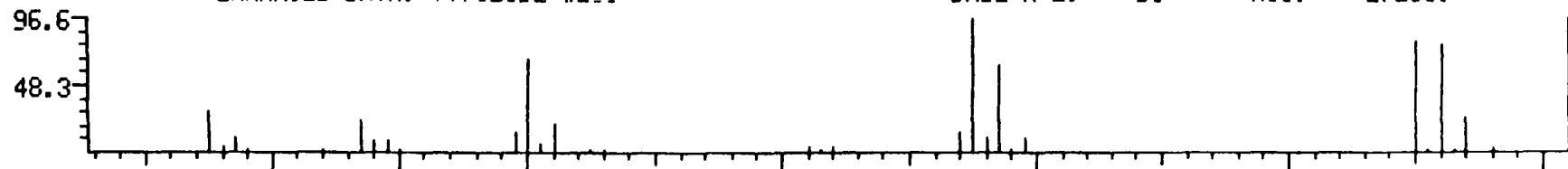


4448.

ENHANCED DATA: VU7326D2 #201

BASE M/Z: 95

RIC: 27200.

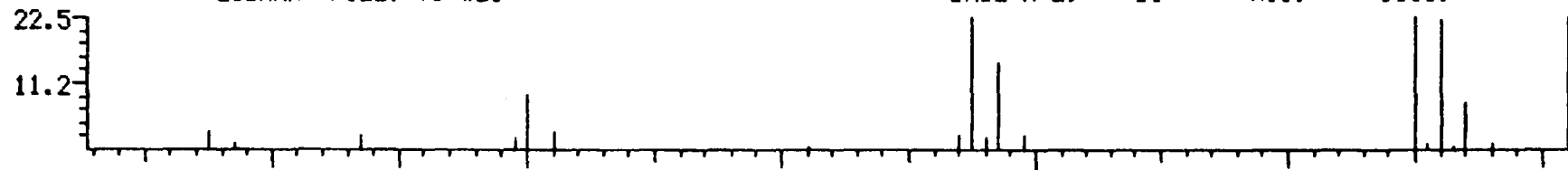


4296.

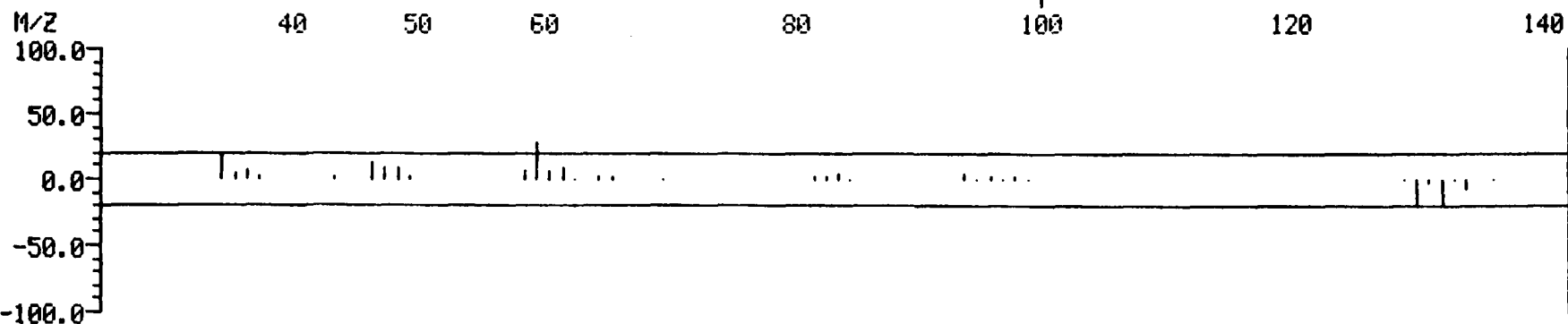
LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



1000.



OUT

TUT 004 1492

70001513

0077

264T 400 INT 1493

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7326D2 #325

BASE M/Z: 166

RIC: 350208.

03/18/93 10:52

MW02 DLZ

SAMPLE: CLP, 53554, MW01, MW02, LOW, WATER, UU7326, VOA, EPA,

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS

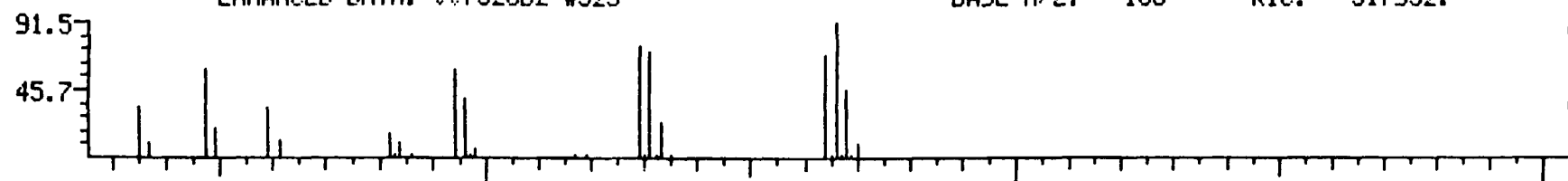


44288.

ENHANCED DATA: UU7326D2 #325

BASE M/Z: 166

RIC: 317952.

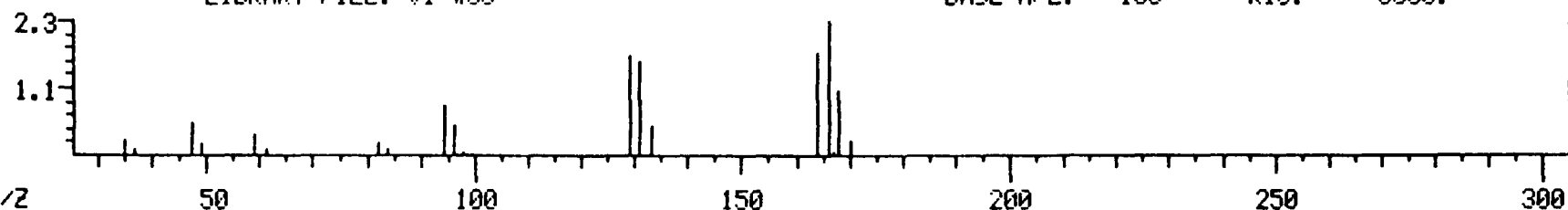


40512.

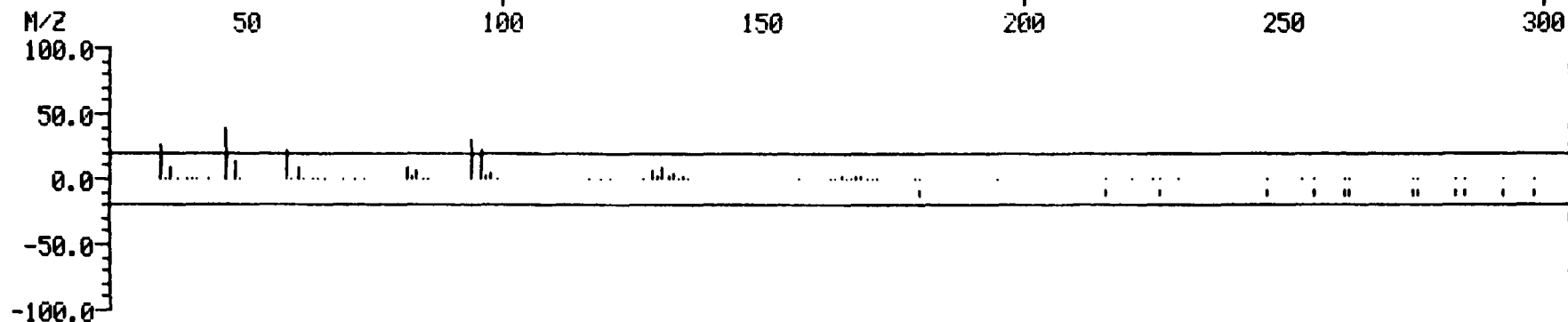
LIBRARY FILE: U1 #33

BASE M/Z: 166

RIC: 5560.



1000.



OUT

L0001514

TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

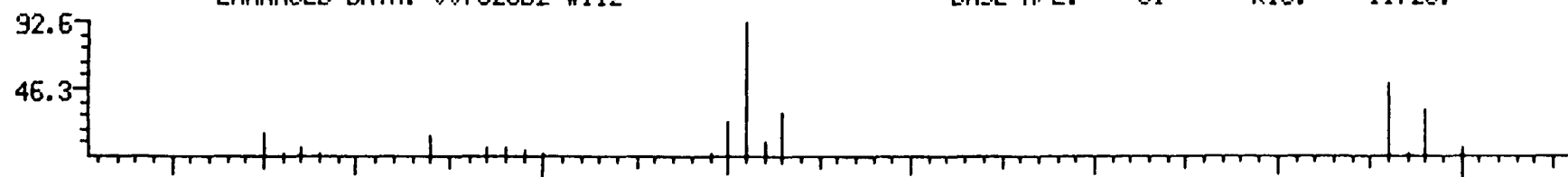
RAW DATA: UU7326D2 #112 *RS 2/25/93* BASE M/Z: 61 RIC: 13824.
03/18/93 10:52 *MW02DLZ*
SAMPLE: CLP, 53554, MW01, ~~MW0102~~, LOW, WATER, UU7326, UOA, EPA,
CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



3764.

ENHANCED DATA: UU7326D2 #112

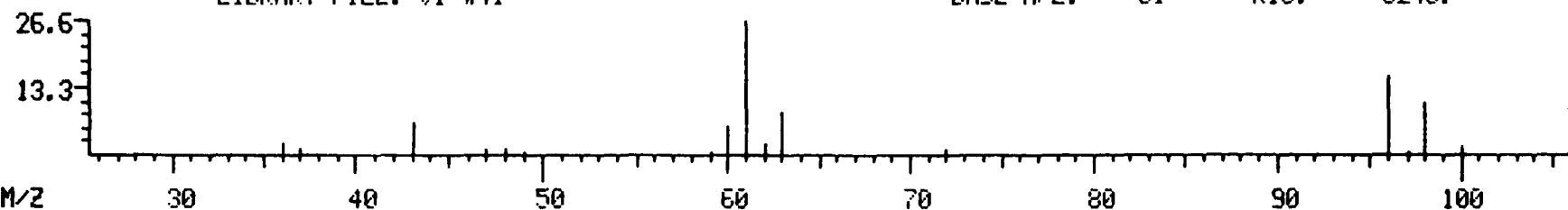
BASE M/Z: 61 RIC: 11728.



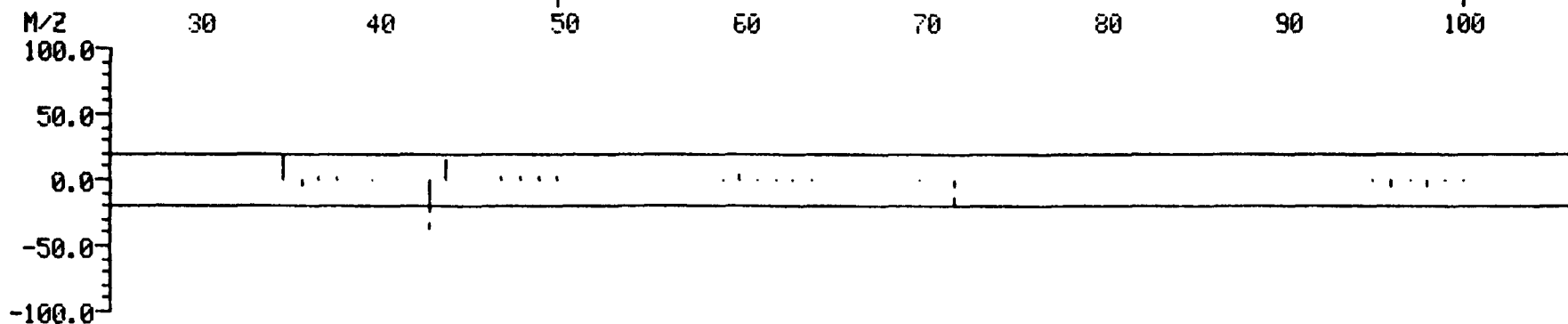
3484.

LIBRARY FILE: U1 #41

BASE M/Z: 61 RIC: 3240.



1000.



OUT

DATA FILE: VV7326D2

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I.S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
7	3	10

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
20	1	0	9	10	0	20	0

0 TICS FOUND.

0080

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET

MW02DL

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 53554

SAS No.: _____

SDG No.: MW01Matrix: (soil/water) WATERLab Sample ID: VV7326Sample wt/vol: 25.0 (g/mL) MLLab File ID: VV7326DLevel: (low/med) LOWDate Received: 03/08/93% Moisture: not dec. _____ Heated Purge: NDate Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm)Dilution Factor: 20.0

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	20	U
74-83-9-----	Bromomethane	20	U
75-01-4-----	Vinyl Chloride	20	U
75-00-3-----	Chloroethane	20	U
75-09-2-----	Methylene Chloride	62	B ₁
67-64-1-----	Acetone	100	U
74-97-5-----	Bromochloromethane	20	U
75-15-0-----	Carbon Disulfide	20	U
75-35-4-----	1,1-Dichloroethene	20	U
75-34-3-----	1,1-Dichloroethane	20	U
540-59-0-----	trans-1,2-Dichloroethene	20	U
540-59-0-----	cis-1,2-Dichloroethene	37	D
67-66-3-----	Chloroform	20	U
107-06-2-----	1,2-Dichloroethane	20	U
78-93-3-----	2-Butanone	100	U
71-55-6-----	1,1,1-Trichloroethane	20	U
56-23-5-----	Carbon Tetrachloride	20	U
75-27-4-----	Bromodichloromethane	20	U
78-87-5-----	1,2-Dichloropropane	20	U
10061-01-5-----	cis-1,3-Dichloropropene	20	U
79-01-6-----	Trichloroethene	57	D
124-48-1-----	Dibromochloromethane	20	U
79-00-5-----	1,1,2-Trichloroethane	20	U
71-43-2-----	Benzene	20	U
10061-02-6-----	trans-1,3-Dichloropropene	20	U
106-93-4-----	1,2-Dibromoethane	20	U
75-25-2-----	Bromoform	20	U
108-10-1-----	4-Methyl-2-Pentanone	100	U
591-78-6-----	2-Hexanone	100	U
127-18-4-----	Tetrachloroethene	300	D
79-34-5-----	1,1,2,2-Tetrachloroethane	20	U
108-88-3-----	Toluene	20	U
108-90-7-----	Chlorobenzene	20	U

Pgs 3/25/93

TUT 004 1496

1X
ORGANICS ANALYSIS DATA SHEET

0081
SAMPLE NO.

MW02DL

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7326

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7326D

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 20.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
100-41-4-----	Ethylbenzene	20	U
100-42-5-----	Styrene	20	U
1330-20-7-----	Xylene (total)	20	U
541-73-1-----	1,3-Dichlorobenzene	20	U
106-46-7-----	1,4-Dichlorobenzene	20	U
95-50-1-----	1,2-Dichlorobenzene	20	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	20	U

L 0001513

0082

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW02DL

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7326Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7326DLevel: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 20.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

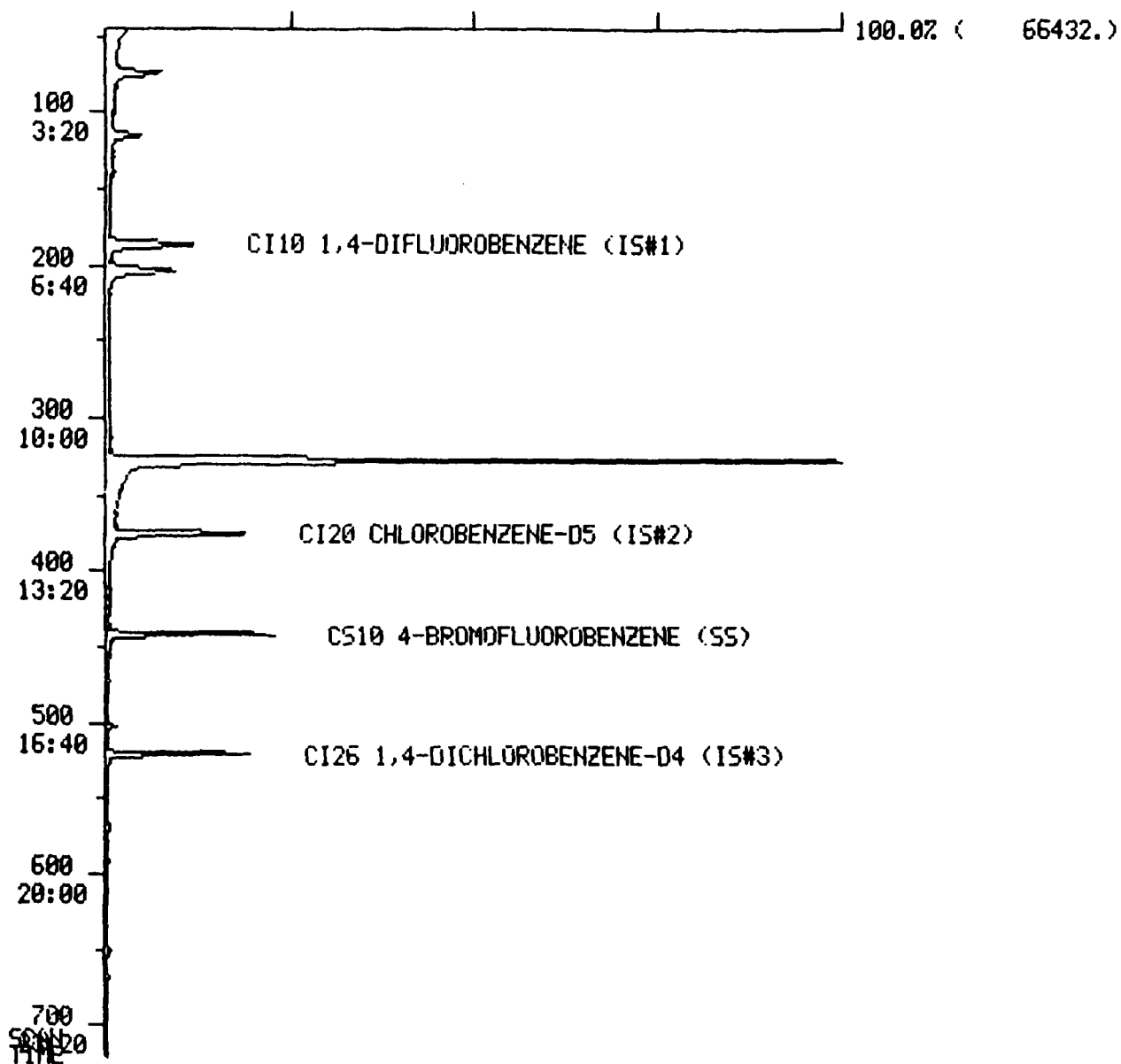
Number TICs found: 0CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 1498

0083

DATA FROM FILE: UU7326D SCANS 45 TO 720 ACQUIRED: 03/17/93 15:59:00
CALI: UU7326D #3
SAMPLE: CLP, 53554, MW01, MW02DL, LOW, WATER, UU7326, UOA, EPA,
CONDS.: 1500A: 25ML OLV01 PURGE W/ 5FPB IS & SS



L 0001520

TUT 004 1499

Data: VV7326D.TI

03/17/93 15:59:00

Sample: CLP, 53554, MW01, MW02DL, LOW, WATER, VV7326, VOA, EPA,

Vials: 1500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

Formula: 5ML->100ML: 1->20 DI Instrument: 1500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUORODENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	CI20 CARBON TETRACHLORIDE
23	CI30 BROMODICHLOROMETHANE
24	CI40 1,2-DICHLOROPROPANE *
25	CI43 CIS-1,3-DICHLOROPROPENE
26	CI50 TRICHLOROETHENE
27	CI55 DIBROMOCHLOROMETHANE
28	CI60 1,1,2-TRICHLOROETHANE
29	CI65 BENZENE
30	CI72 TRANS-1,3-DICHLOROPROPENE
31	CI76 DIBROMOETHANE
32	CI80 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

L 0001521

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	185	6:10	1	1.000	A BB	11555.	5.000 UG/L	10.63
2	117	374	12:28	2	1.000	A BB	8292.	5.000 UG/L	10.63
3	150	520	17:20	3	1.000	A BB	5347.	5.000 UG/L	10.63
4	95	441	14:42	1	2.384	A BB	7215.	5.729 UG/L	12.18
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	73	2:26	1	0.395	A BB	2510.	3.125 UG/L	6.64
10	43	64	2:08	1	0.346	A BB	101.	3.468 UG/L	7.37
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	203	6:46	2	0.543	A BB	4682.	2.867 UG/L	6.09
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	165	326	10:52	2	0.872	A BB	29301.	15.085 UG/L	32.07
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	114	3:48	1	0.616	A BB	1593.	1.859 UG/L	3.95
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.01	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.73	5.00	0.624	0.545	1.15
5	1:16		0.207						
6	1:28		0.239						
7	1:18		0.212						
8	1:32		0.250						
9	2:24	1.01	0.391	1.01	3.13	5.00	0.217	0.348	0.63

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	1.03	0.337	1.03	3.47	25.00	0.002	0.013	0.14
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10		0.353						
16	2:00		0.326						
17	3:02		0.495						
18	2:36		0.424						
19	4:14		0.690						
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.01	0.539	1.01	2.87	5.00	0.565	0.985	0.57
27	11:22		0.914						
28	10:42		0.861						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	15.09	5.00	3.534	1.171	3.02
34	15:02		1.209						
35	9:46		0.786						
36	12:30		1.005						
37	12:48		1.029						
38	13:46		1.107						
39	13:02		1.048						
40	13:44		1.105						
41	3:44	1.02	0.609	1.01	1.86	5.00	0.138	0.371	0.37
42	16:32		0.958						
43	16:42		0.967						
44	17:18		1.002						
45	18:42		1.083						

3/17/93 15:59:51
Acquisition started

3/17/93 15:59:55

Acquire Run 0: VV7326D Starting
03/17/93 15:59:00 + 0:00 Free sectors: 13002 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW02DL, LDW, WATER, VV7326, VDA, EPA,
Conds.: I500A:25ML DLV01 PURGE W/ 5PPB IS & SS
Formula: 5ML->100ML: 1->20 DIInstrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp (DegC)	Rate (C/min)	Time (minutes) period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 35 Deg C
3	150 150	-	3.0	23.9	Transfer-line: 215 Deg C
					Ion source : 181 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1

Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0

Int #	Lo mass	Hi mass	Time
1	33.510	300.590	2.000

Sequence Window # 2

Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0

Int #	Lo mass	Hi mass	Time
1	33.510	300.590	2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	Q
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1503

L 0001524

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 ⁻⁷
Electrometer zero:		126.0

Analyzer Fore Pressure: 0.010 Torr
 Separator/Source Pressure: 0.349 Torr

3/17/93 16:28:03

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.4	1440.0	0.0	5287.	7.4

L 0001525

METHOD: CLP 3'90 OLV01 25ML PURGE

DATAFILE: VV7326D
STANDARD: WS0317
TUNEFILE: WBF0317ANALYSIS TIME: 03/17/93 15:59
ANALYSIS TIME: 03/17/93 10:48
ANALYSIS TIME: 03/17/93 9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
0110 1,4-DIFLUOROBENZEN	11555.	9856.	117%	60% - 140%	
0120 CHLOROBENZENE-D5 (	8292.	6374.	130%	60% - 140%	
0126 1,4-DICHLOROBENZEN	5347.	4017.	133%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
0110 1,4-DIFLUOROBENZEN	185	184	2	+/- 20 SECS	
0120 CHLOROBENZENE-D5 (	374	373	2	+/- 20 SECS	
0126 1,4-DICHLOROBENZEN	520	518	4	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
0110 4-BROMOFLUOROBENZE	5.7	5.0	115	80% - 120%	
0015 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
0020 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

TUT 004 1505

L0001526

PROCEDURE: TCA
 DATA FILE: VV7326D
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V1IS

DIAGNOSTIC REPORT

0090
 3/17/93 17:26:07

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	5	1	91	V1IS/V1UNKS1	
3	3	1	11	16	5	2	13	V1IS/V1UNKS2	
3	3	1	11	15	4	1	23	V1IS/V1UNKS3	

45 COMPOUNDS PROCESSED, 7 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	186	186	.	1	979	.	114	185	-1	1
2	V1	2	-373	374	374	.	1	977	.	117	374	.	1
3	V1	3	-518	518	.	.	.	.	.	150	520	.	1
4	V1	4	-439	440	441	1	1	946	.	95	441	.	1
5	V1	5	-38	40	.	.	.	.	.	50	.	.	.
6	V1	6	-44	46	.	.	.	.	.	94	.	.	.
7	V1	7	-39	41	.	.	.	.	.	62	.	.	.
8	V1	8	-46	48	.	.	.	.	.	64	.	.	.
9	V1	9	-72	74	73	-1	1	979	.	84	73	.	1
10	V1	10	-62	64	.	.	.	.	.	43	64	.	1
11	V1	11	-115	117	.	.	.	.	.	43	.	.	.
12	V1	12	-289	290	.	.	.	.	.	43	.	.	.
13	V1	13	-341	342	.	.	.	.	.	43	.	.	.
14	V1	14	-122	124	.	.	.	.	.	128	.	.	.
15	V1	15	-65	67	.	.	.	.	.	76	.	.	.
16	V1	16	-60	62	.	.	.	.	.	96	.	.	.
17	V1	17	-91	93	.	.	.	.	.	63	.	.	.
18	V1	18	-78	80	.	.	.	.	.	96	.	.	.
19	V1	19	-127	128	.	.	.	.	.	83	.	.	.
20	V1	20	-155	156	.	.	.	.	.	62	.	.	.
21	V1	21	-135	137	.	.	.	.	.	97	.	.	.
22	V1	22	-143	145	.	.	.	.	.	117	.	.	.
23	V1	23	-242	244	.	.	.	.	.	83	.	.	.
24	V1	24	-218	220	.	.	.	.	.	63	.	.	.
25	V1	25	-274	275	.	.	.	.	.	75	.	.	.
26	V1	26	-201	203	203	.	1	966	.	95	203	.	1
27	V1	27	-341	342	.	.	.	.	.	129	.	.	.
28	V1	28	-321	322	.	.	.	.	.	97	.	.	.
29	V1	29	-153	155	.	.	.	.	.	78	.	.	.
30	V1	30	-311	312	.	.	.	.	.	75	.	.	.
31	V1	31	-344	345	.	.	.	.	.	107	.	.	.
32	V1	32	-420	421	.	.	.	.	.	173	.	.	.
33	V1	33	-325	326	326	.	2	963	.	166	326	.	1
34	V1	34	-451	451	.	.	.	.	.	83	.	.	.
35	V1	35	-293	294	.	.	.	.	.	91	.	.	.
36	V1	36	-375	376	.	.	.	.	.	112	.	.	.
37	V1	37	-384	385	.	.	.	.	.	91	.	.	.
38	V1	38	-413	414	.	.	.	.	.	104	.	.	.
39	V1	39	-391	392	.	.	.	.	.	106	.	.	.
40	V1	40	-412	413	.	.	.	.	.	106	.	.	.
41	V1	41	-112	114	114	.	1	887	.	96	114	.	1
42	V1	42	-496	496	.	.	.	.	.	146	.	.	.
43	V1	43	-501	501	.	.	.	.	.	146	.	.	.
44	V1	44	-519	519	.	.	.	.	.	146	.	.	.
45	V1	45	-561	561	.	.	.	.	.	75	.	.	.

L0001527

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0091

DATA FILE: VV7326D

ACQUIRED: 03/17/93 15:59:00

CONDS.: I500A:25ML OLVO1 PURGE W/ SPPB IS & SS

SUBMITTED BY: ITEK

ANALYST: RJL

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?	
0110 1,4-DIFLUOROBENZENE (IS#1)	185	-1	5.000	979	0
0120 CHLOROBENZENE-D5 (IS#2)	374	0	5.000	977	0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	520	2	5.000	0	0
0510 4-BROMOFLUOROBENZENE (SS)	441	1	5.110	946	0
0030 METHYLENE CHLORIDE	73	-1	2.864	979	0
0035 ACETONE	64	0	2.660	0	0
0150 TRICHLOROETHENE	203	0	2.833	966	0
0220 TETRACHLOROETHENE	326	0	14.979	963	0
0054 CIS-1,2-DICHLOROETHENE	114	0	1.709	887	0

L 0001523

TUT 004 1507

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

RAW DATA: UU7326D #73

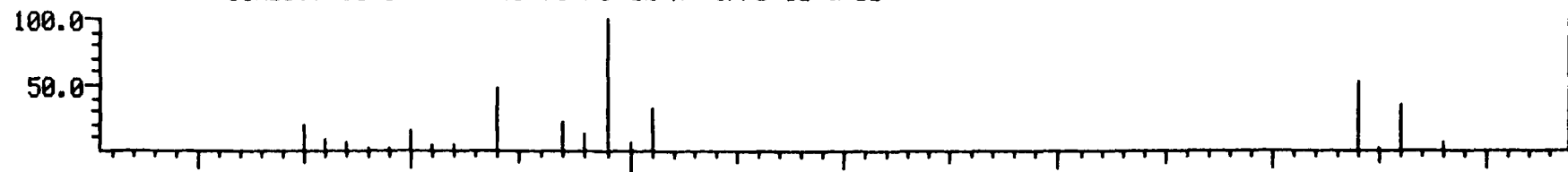
BASE M/Z: 49

RIC: 5088.

03/17/93 15:59

SAMPLE: CLP, 53554, MW01, MW02DL, LOW, WATER, UU7326, UOA, EPA,

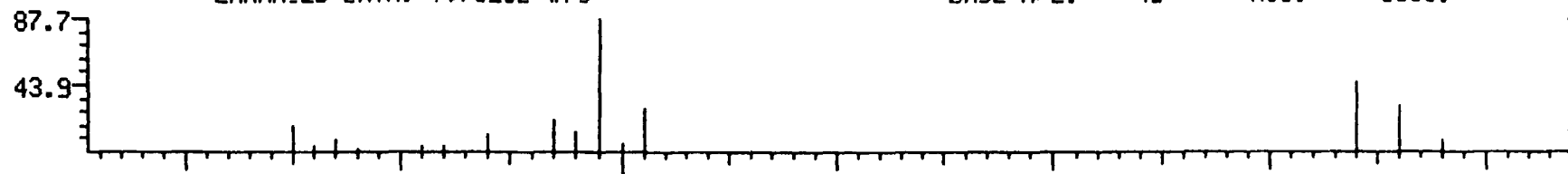
CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7326D #73

BASE M/Z: 49

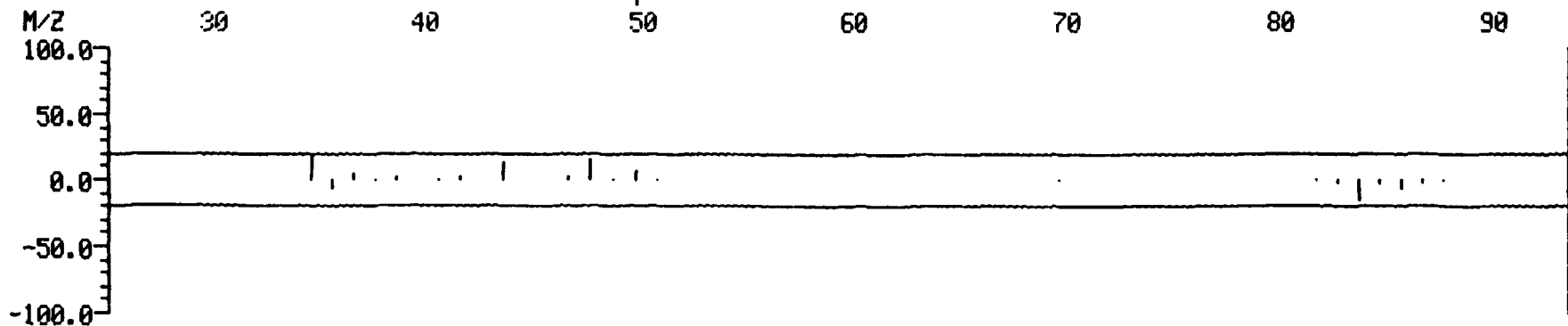
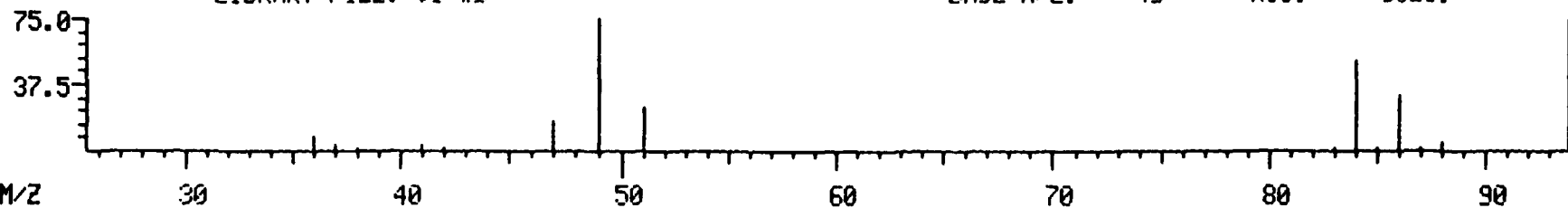
RIC: 3856.



LIBRARY FILE: U1 #9

BASE M/Z: 49

RIC: 3028.



L0C01520

1334.

1170.

1000.

TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE

RAW DATA: UV7326D #64

BASE M/Z: 44

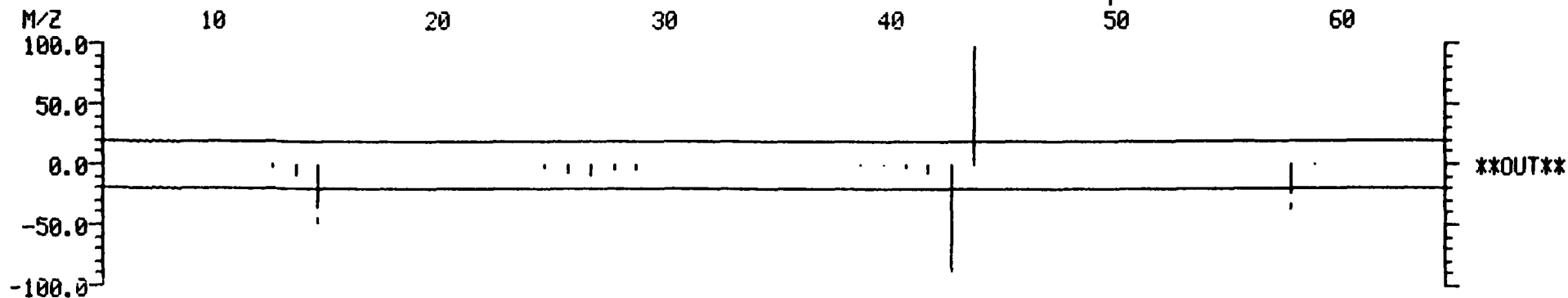
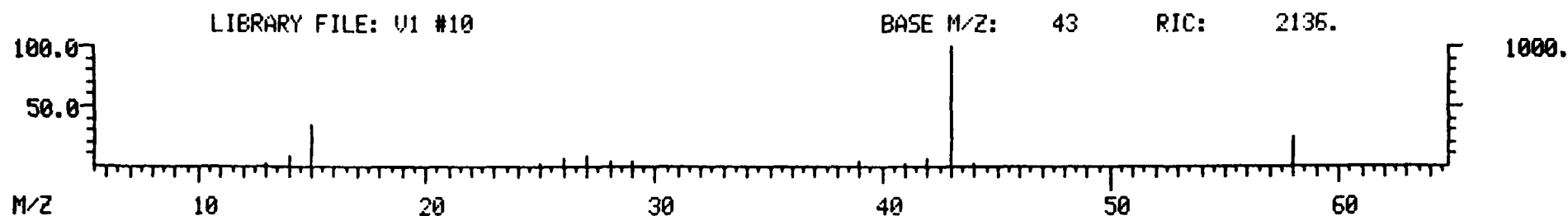
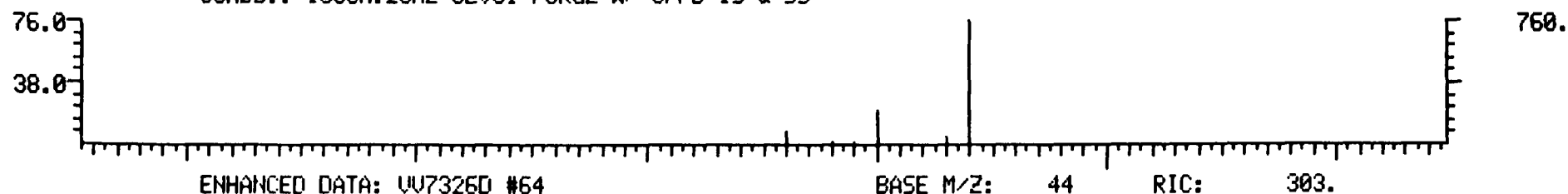
RIC: 1140.

03/17/93 15:59

SAMPLE: CLP, 53554, MW01, MW02DL, LOW, WATER, UV7326, UOA, EPA,

CONDS.: I500A:25ML OL001 PURGE W/ 5PPB IS & SS

L0001530



TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7326D #203

BASE M/Z: 95

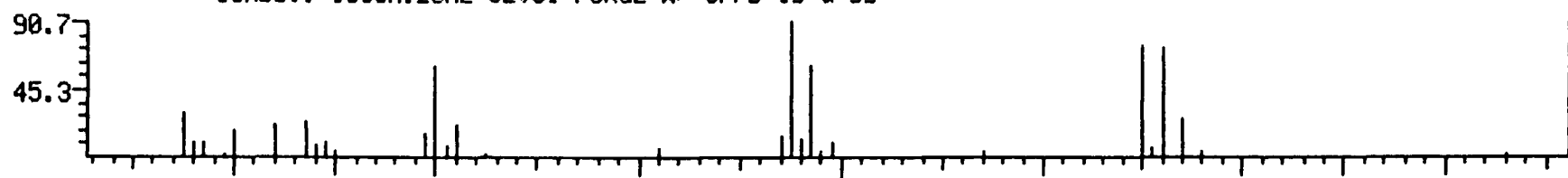
RIC: 6352.

03/17/93 15:59

SAMPLE: CLP, 53554, MW01, MW02DL, LOW, WATER, UU7326, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS

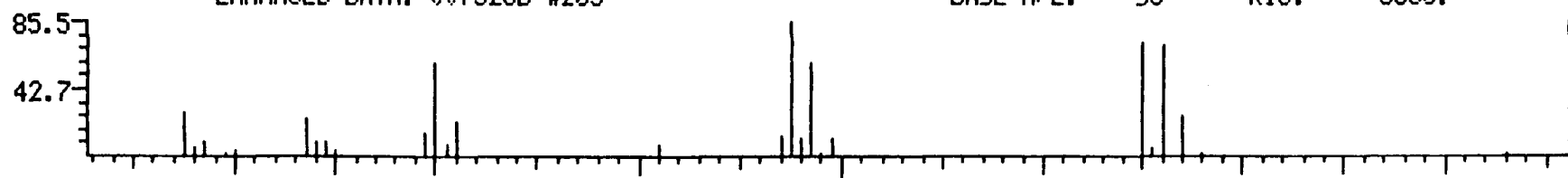
L0001531



ENHANCED DATA: UU7326D #203

BASE M/Z: 95

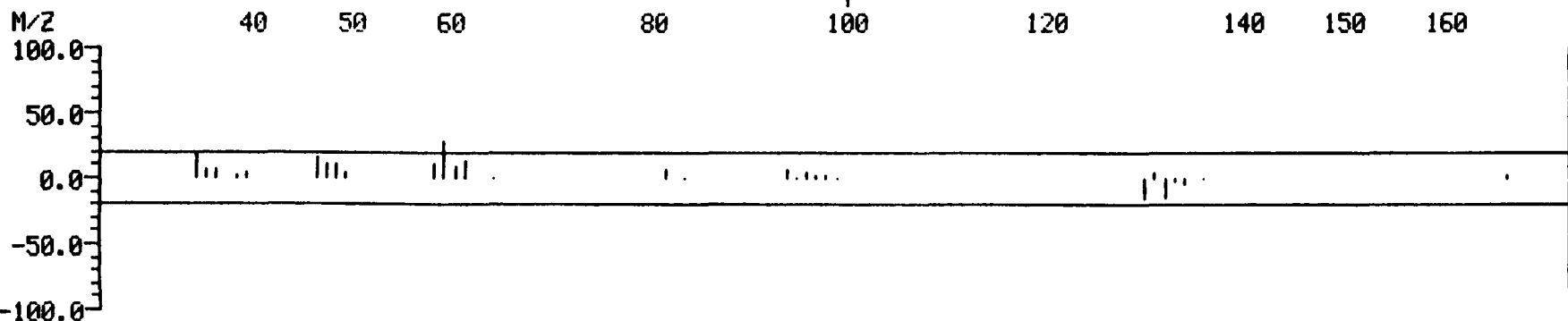
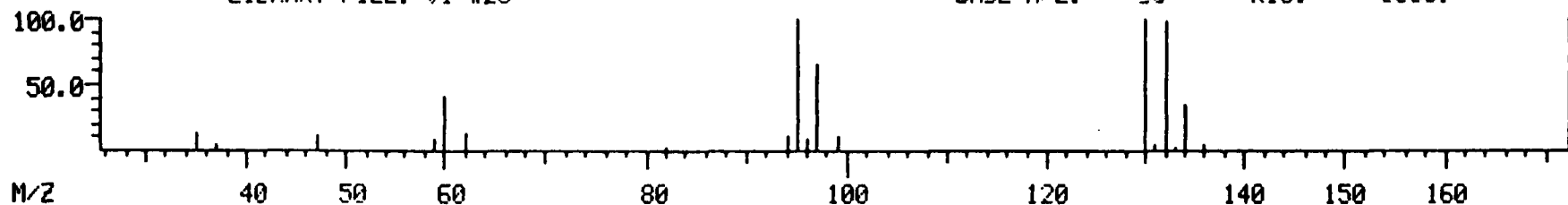
RIC: 5680.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



OUT

0095

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: VU7326D #326

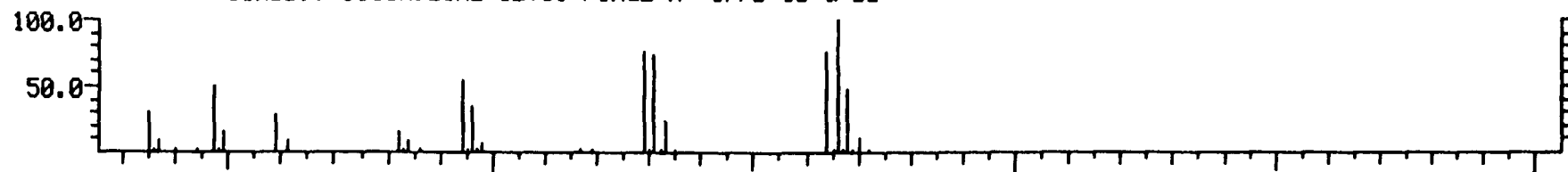
BASE M/Z: 166

RIC: 65536.

03/17/93 15:59

SAMPLE: CLP, 53554, MW01, MW02DL, LOW, WATER, VU7326, VOA, EPA,

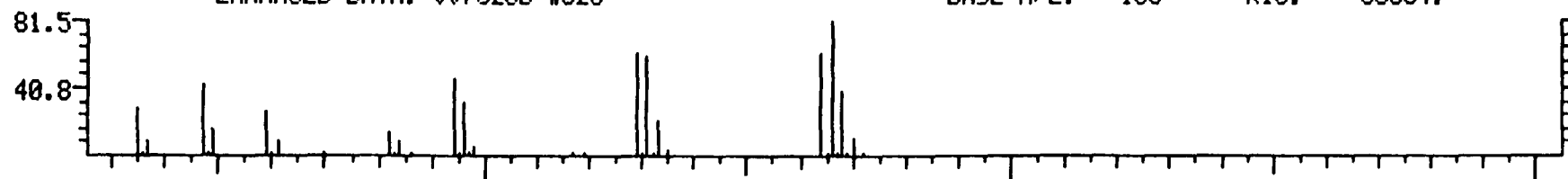
CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: VU7326D #326

BASE M/Z: 166

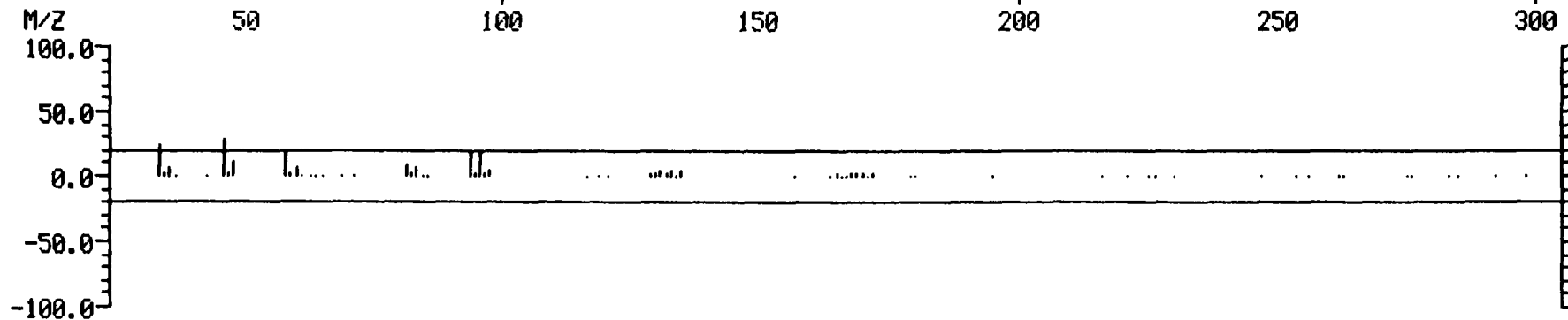
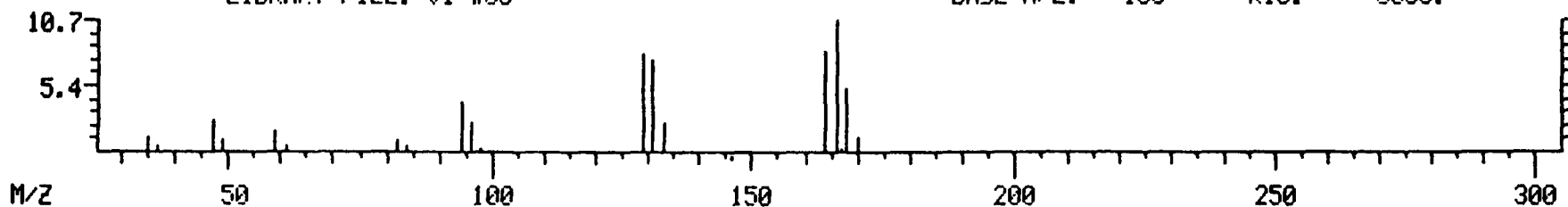
RIC: 56384.



LIBRARY FILE: V1 #33

BASE M/Z: 166

RIC: 5560.



OUT

L 0001532

TUT 004 1511

TARGET COMPOUND C PARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UV7326D #114

BASE M/Z: 61

RIC: 3244.

03/17/93 15:59

SAMPLE: CLP, 53554, MW01, MW02DL, LOW, WATER, UV7326, VOA, EPA,

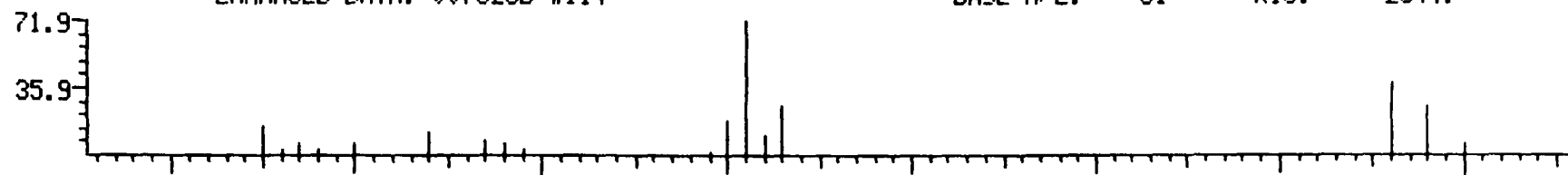
CONDS.: 1500A: 25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UV7326D #114

BASE M/Z: 61

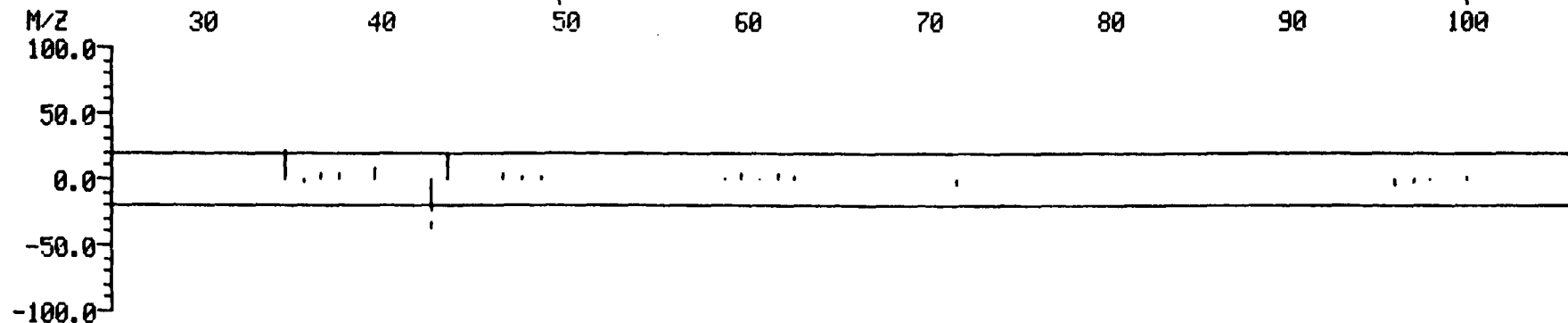
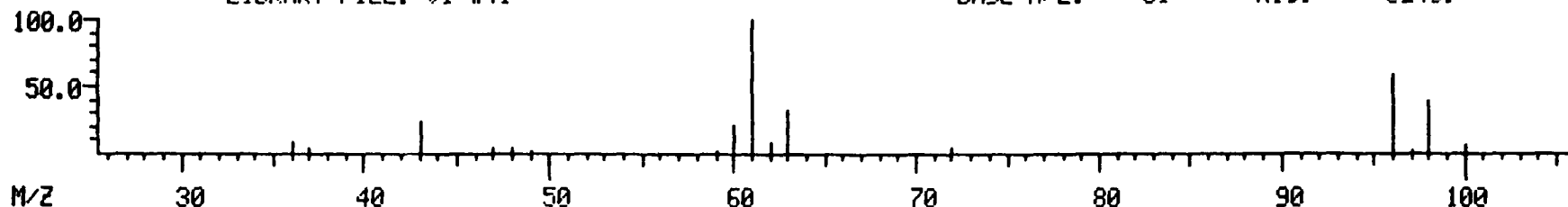
RIC: 2644.



LIBRARY FILE: U1 #41

BASE M/Z: 61

RIC: 3240.



OUT

DATA FILE: VV7326D

0097

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I.S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
6	3	9

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
13	1	0	4	8	0	13	0

NO TIC'S FOUND.

L 0001534

1X
ORGANICS ANALYSIS DATA SHEET

0098
SAMPLE NO.

MW03FD

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7324

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7324

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	1	U
67-64-1	-----Acetone	5	U
74-97-5	-----Bromochloromethane	1	U
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	1	U
75-34-3	-----1,1-Dichloroethane	1	U
540-59-0	-----trans-1,2-Dichloroethene	1	U
540-59-0	-----cis-1,2-Dichloroethene	12	
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	4	
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	1	U
10061-02-6	-----trans-1,3-Dichloropropene	1	U
106-93-4	-----1,2-Dibromoethane	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	7	
79-34-5	-----1,1,2,2-Tetrachloroethane	1.	U
108-88-3	-----Toluene	1	U
108-90-7	-----Chlorobenzene	1	U

FORM I X-1

L 0001535

3/90

TUT 004 1514

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW03FD

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7324

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7324

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS:	
		(ug/L or ug/Kg) <u>UG/L</u>	<u>Q</u>
100-41-4-----	Ethylbenzene	1	U
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	1	U
541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	1	U

TUT 004 1515

L0001536

0100

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW03FD

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7324

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7324

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

L 0001537

0101

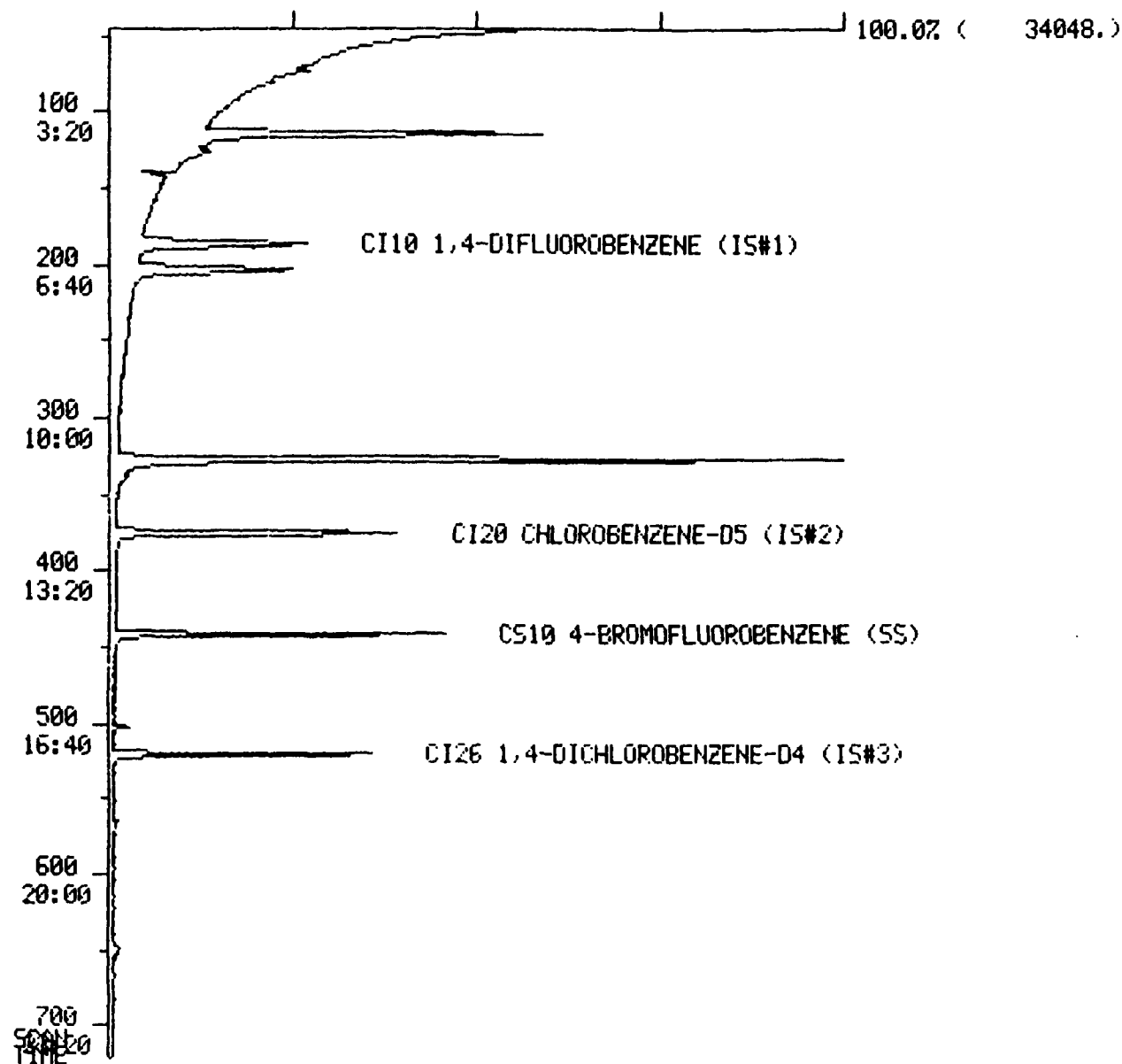
DATA FROM FILE: UU7324

SCANS 45 TO 720 ACQUIRED: 03/17/93 14:17:00

CALI: UU7324 #3

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ SPPB IS & SS



TUT 004 1517

L0001533

Data: VV/324.TI

03/17/93 14:17:00

Sample: CLP, 53554, MW01, MW03FD, LOW, WATER, VV7324, VOA, EPA,

Vials: 1500A: 25ML OLVO1 PURGE W/ SPPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: 1500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	185	6:10	1	1.000	A BB	12529.	5.000 UG/L	11.43
2	117	374	12:28	2	1.000	A BB	8361.	5.000 UG/L	11.43
3	150	519	17:18	3	1.000	A BB	5228.	5.000 UG/L	11.43
4	95	440	14:40	1	2.378	A BB	6885.	5.042 UG/L	11.52
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	72	2:24	1	0.389	A BB	598.	0.687 UG/L	1.57
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	65	2:10	1	0.351	A BB	638.	0.157 UG/L	0.36
16	NOT FOUND								
17	NOT FOUND								
18	96	79	2:38	1	0.427	A BB	262.	0.217 UG/L	0.49
19	83	128	4:16	1	0.692	A BB	356.	0.160 UG/L	0.37
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	202	6:44	2	0.540	A BB	6036.	3.665 UG/L	8.38
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	326	10:52	2	0.872	A BB	14314.	7.308 UG/L	16.70
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	113	3:46	1	0.611	A BB	10811.	11.633 UG/L	26.59
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.01	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.04	5.00	0.550	0.545	1.01
5	1:16		0.207						
6	1:28		0.239						
7	1:18		0.212						
8	1:32		0.250						
9	2:24	1.00	0.391	0.99	0.69	5.00	0.048	0.348	0.14

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	1.00	0.353	0.99	0.16	5.00	0.051	1.624	0.03
16	2:00		0.326						
17	3:02		0.495						
18	2:36	1.01	0.424	1.01	0.22	5.00	0.021	0.483	0.04
19	4:14	1.01	0.690	1.00	0.16	5.00	0.028	0.886	0.03
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.00	0.539	1.00	3.67	5.00	0.722	0.985	0.73
27	11:22		0.914						
28	10:42		0.861						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	7.31	5.00	1.712	1.171	1.46
34	15:02		1.209						
35	9:46		0.786						
36	12:30		1.005						
37	12:48		1.029						
38	13:46		1.107						
39	13:02		1.048						
40	13:44		1.105						
41	3:44	1.01	0.609	1.00	11.63	5.00	0.863	0.371	2.33
42	16:32		0.958						
43	16:42		0.967						
44	17:18		1.002						
45	18:42		1.083						

3/17/93 14:17:08
Acquisition started

3/17/93 14:17:12

Acquire Run 0: VV7324 Starting
3/17/93 14:17:00 + 0:00 Free sectors: 13359 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW03FD, LOW, WATER, VV7324, VOA, EPA,
Cands.: I500A: 25ML DLV01 PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

GC Desc.: V1 Elapsed time: 0.0 Min
Seq. Temp Rate Time (minutes)
* (DegC) (C/min) period total
1 35-35 - 6.6 6.6 Injector A : 150 Deg C
2 35-150 8.0 14.3 20.9 GC oven : 36 Deg C
3 150-150 - 3.0 23.9 Transfer-line: 215 Deg C
Ion source : 181 Deg C
Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1

Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2

Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D: CAL021992

Interface number 0
Instrument type G
Full scale mass 1177 u
Zero scale mass 1 u
Intensity/ion 2
Peak width 1000. mmu
Offset at low mass 0 mmu
Offset at high mass 0 mmu
Voltage settling time(ms) 20

L 0001542

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\sim$ -7
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.353 Torr

3/17/93 14:45:53

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

de	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.3	1440.0	0.0	3370.	5. 2.

METHOD: CLP 3'90 QLV01 25ML PURGE

DATAFILE: VV7324
STANDARD: WS0317
TUNEFILE: W8FB0317ANALYSIS TIME: 03/17/93 14:17
ANALYSIS TIME: 03/17/93 10:48
ANALYSIS TIME: 03/17/93 9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
0110 1,4-DIFLUOROBENZEN	12529.	9856.	127%	60% - 140%	
0120 CHLOROBENZENE-D5 (	8361.	6374.	131%	60% - 140%	
0126 1,4-DICHLOROBENZEN	5228.	4017.	130%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
0110 1,4-DIFLUOROBENZEN	185	184	2	+/- 20 SECS	
0120 CHLOROBENZENE-D5 (	374	373	2	+/- 20 SECS	
0126 1,4-DICHLOROBENZEN	519	518	2	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
0310 4-BROMOFLUOROBENZE	5.0	5.0	101	80% - 120%	
0315 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
0320 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

L 0001544

PROCEDURE: TCA
DATA FILE: VV7324
REFERENCE: V111
NAME LIST: V1
REPORT: V11S

DIAGNOSTIC REPORT

3/17/93 14:52:40

0108

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

TUT 004 1524

STANDARDS				PLUS UNKNOWNNS				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	5	1	35	V11S/V1UNKS1	
3	3	1	0	16	5	1	0	V11S/V1UNKS2	
3	3	1	0	15	4	1	0	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 7 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	185	185	.	1	982	.	114	185	.	1
2	V1	2	-373	374	374	.	1	974	.	117	374	.	1
3	V1	3	-518	519	.	.	.	.	.	150	519	.	1
4	V1	4	-439	440	440	.	1	948	.	95	440	.	1
5	V1	5	-38	38	.	.	.	.	.	50	.	.	.
6	V1	6	-44	44	.	.	.	.	.	94	.	.	.
7	V1	7	-39	39	.	.	.	.	.	62	.	.	.
8	V1	8	-46	46	.	.	.	.	.	64	.	.	.
9	V1	9	-72	72	72	.	1	867	.	84	72	.	1
10	V1	10	-62	62	.	.	.	.	.	43	.	.	.
11	V1	11	-115	115	.	.	.	.	.	43	.	.	.
12	V1	12	-289	290	.	.	.	.	.	43	.	.	.
13	V1	13	-341	342	.	.	.	.	.	43	.	.	.
14	V1	14	-122	122	.	.	.	.	.	128	.	.	.
15	V1	15	-65	65	.	.	.	.	.	76	65	.	1
16	V1	16	-60	60	.	.	.	.	.	96	.	.	.
17	V1	17	-91	91	.	.	.	.	.	63	.	.	.
18	V1	18	-78	78	.	.	.	.	.	96	79	.	1
19	V1	19	-127	127	.	.	.	.	.	83	128	.	1
20	V1	20	-155	156	.	.	.	.	.	62	.	.	.
21	V1	21	-135	136	.	.	.	.	.	97	.	.	.
22	V1	22	-143	144	.	.	.	.	.	117	.	.	.
23	V1	23	-242	243	.	.	.	.	.	83	.	.	.
24	V1	24	-218	219	.	.	.	.	.	63	.	.	.
25	V1	25	-274	275	.	.	.	.	.	75	.	.	.
26	V1	26	-201	202	202	.	1	969	.	95	202	.	1
27	V1	27	-341	342	.	.	.	.	.	129	.	.	.
28	V1	28	-321	322	.	.	.	.	.	97	.	.	.
29	V1	29	-153	154	.	.	.	.	.	78	.	.	.
30	V1	30	-311	312	.	.	.	.	.	75	.	.	.
31	V1	31	-344	345	.	.	.	.	.	107	.	.	.
32	V1	32	-420	421	.	.	.	.	.	173	.	.	.
33	V1	33	-325	326	326	.	1	954	.	166	326	.	1
34	V1	34	-451	452	.	.	.	.	.	83	.	.	.
35	V1	35	-293	294	.	.	.	.	.	91	.	.	.
36	V1	36	-375	376	.	.	.	.	.	112	.	.	.
37	V1	37	-384	385	.	.	.	.	.	91	.	.	.
38	V1	38	-413	414	.	.	.	.	.	104	.	.	.
39	V1	39	-391	392	.	.	.	.	.	106	.	.	.
40	V1	40	-412	413	.	.	.	.	.	106	.	.	.
41	V1	41	-112	113	113	.	1	914	.	96	113	.	1
42	V1	42	-496	497	.	.	.	.	.	146	.	.	.
43	V1	43	-501	502	.	.	.	.	.	146	.	.	.
44	V1	44	-519	520	.	.	.	.	.	146	.	.	.
45	V1	45	-561	562	.	.	.	.	.	75	.	.	.

L 0001545

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0109

DATA FILE: VV7324

ACQUIRED: 03/17/93 14:17:00

CONDS.: I500A:25ML DLV01 PURGE W/ SPPB IS & SS

SUBMITTED BY: ITEK

ANALYST: RJL

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?	
C110 1,4-DIFLUOROBENZENE (IS#1)	185	0	5.000	982	0
C120 CHLOROBENZENE-D5 (IS#2)	374	0	5.000	974	0
C126 1,4-DICHLOROBENZENE-D4 (IS#3)	519	0	5.000	0	0
C510 4-BROMOFLUOROBENZENE (SS)	440	0	4.497	948	0
C150 TRICHLOROETHENE	202	0	3.622	969	0
C220 TETRACHLOROETHENE	326	0	7.257	954	0
C054 CIS-1,2-DICHLOROETHENE	113	0	10.699	914	0

TUT 004 1525

L0001546

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7324 #202

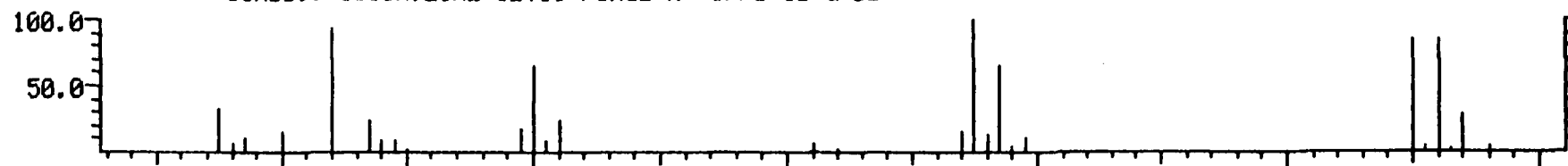
BASE M/Z: 95

RIC: 8512.

03/17/93 14:17

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,

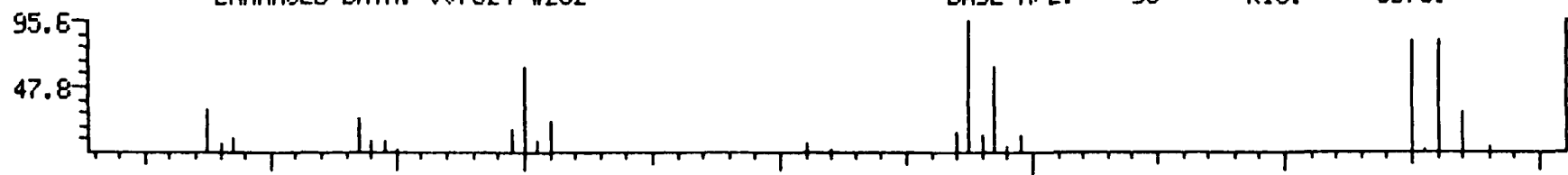
CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7324 #202

BASE M/Z: 95

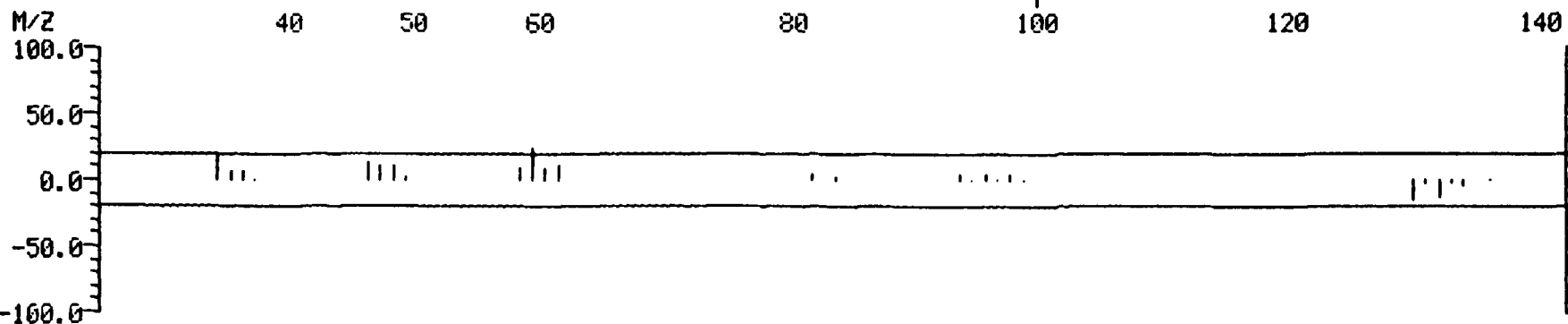
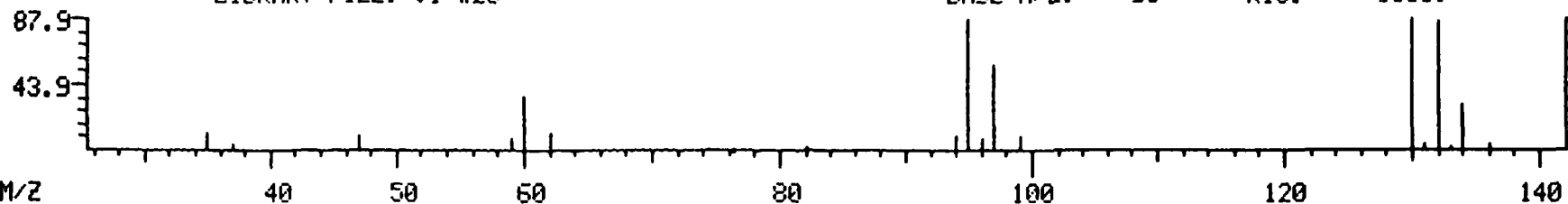
RIC: 6976.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



OUT

L0001547

TUT 004 1526

0111

ZST 400 101

L 0001543

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7324 #326

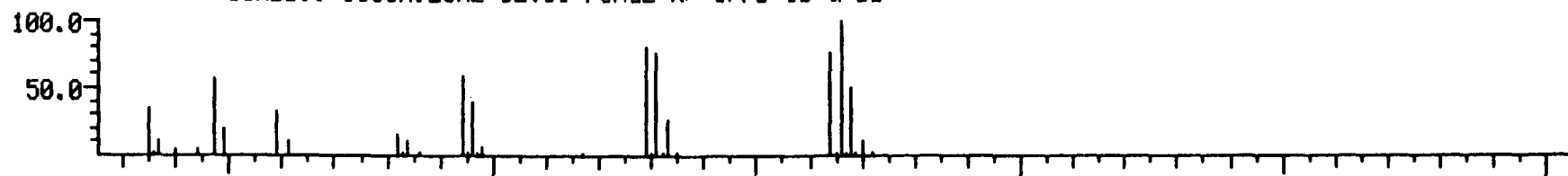
BASE M/Z: 166

RIC: 34048.

03/17/93 14:17

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UDA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB 15 & 55

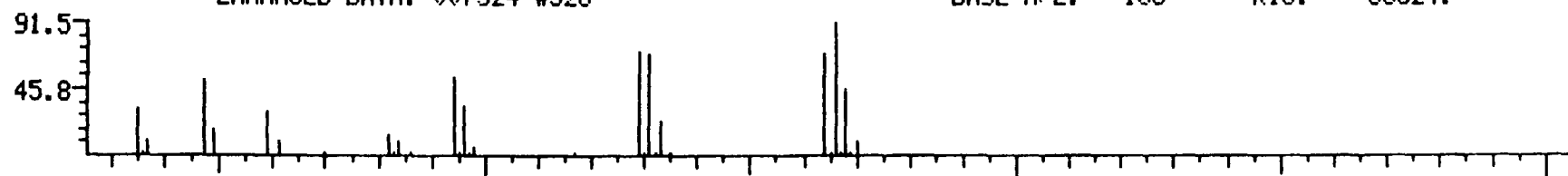


4520.

ENHANCED DATA: UU7324 #326

BASE M/Z: 166

RIC: 30624.

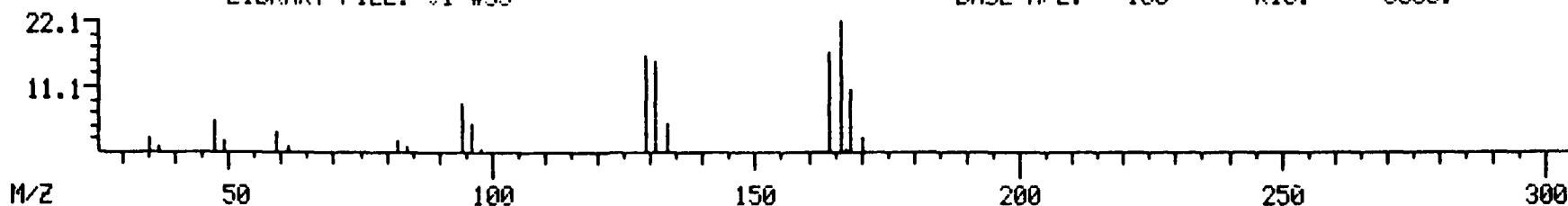


4136.

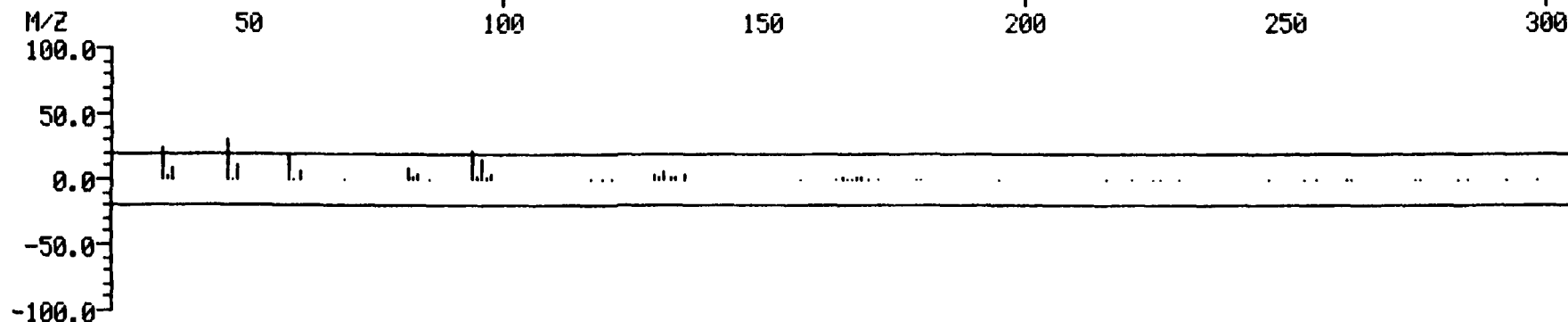
LIBRARY FILE: U1 #33

BASE M/Z: 166

RIC: 5560.



1000.



OUT

TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UU7324 #113

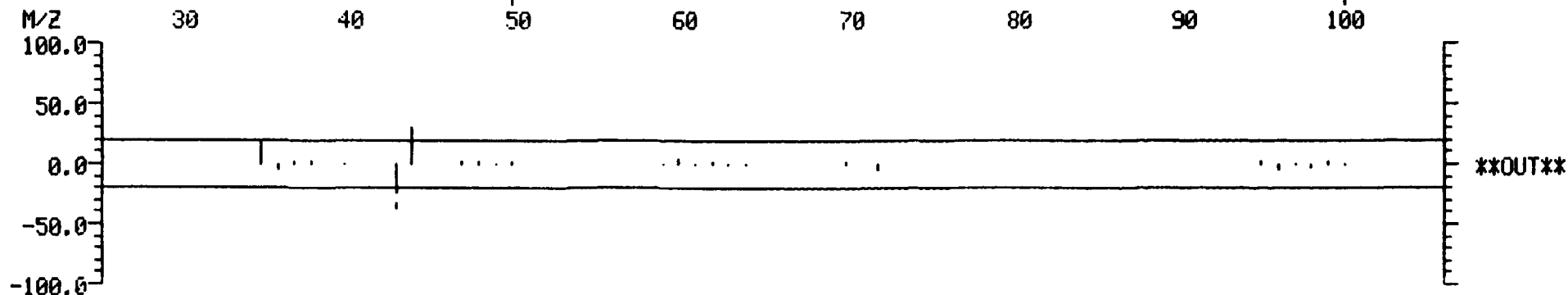
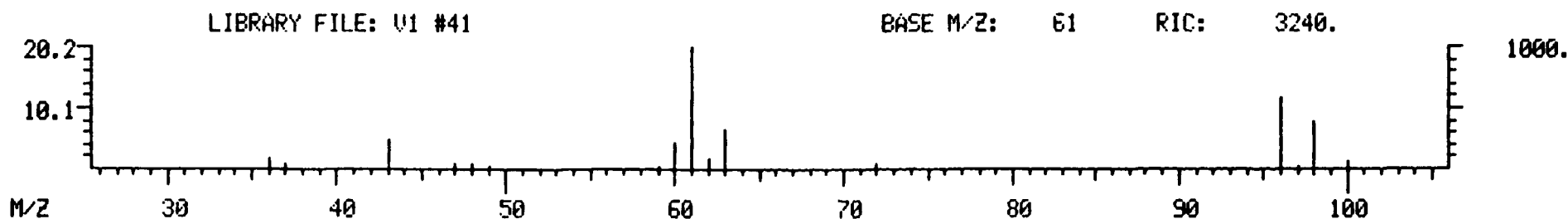
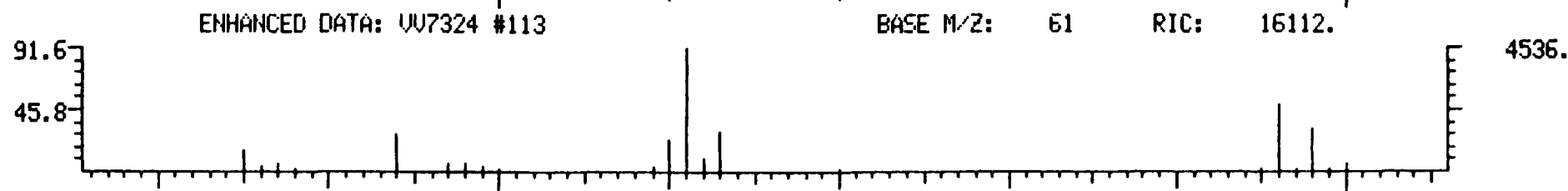
BASE M/Z: 61

RIC: 20128.

03/17/93 14:17

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, VOA, EPA,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & 55



Data: VV/324.TI

03/17/93 14:17:00

Sample: CLP, 53554, MW01, MW03FD, LOW, WATER, VV7324, VOA, EPA,

Conds.: I500A:25ML DLV01 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT-HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	124-38-9	CARBON DIOXIDE
5	107-91-5	ACETAMIDE, 2-CYANO-
6	7440-37-1	ARGON

} NOT TRUE ^{AREAS} HITS, see printout

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	185	6:10	1	1.000	A BB	7599.*	50.000 UG/L	1.24
2	RIC	374	12:28	2	1.000	A BB	13027.*	50.000 UG/L	1.24
3	RIC	519	17:18	3	1.000	A BB	11796.*	50.000 UG/L	1.24
4	RIC	32	1:04	1	0.173	A BB	586752.*	3860.640	95.73
5	RIC	124	4:08	1	0.670	A VV	1787.*	11.759	0.29
6	RIC	137	4:34	1	0.741	A VB	1618.*	10.646	0.26

DATA FILE: VV7324

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
11-TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I. S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I. S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
8	3	11

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
20	0	0	5	12	0	17	3

TIC PROCESSING:

	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	35	989	989	44	CARBON DIOXIDE
2	124	649	754	84	ACETAMIDE, 2-CYANO-
3	137	715	996	40	ARGON

0115

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7324 # 35

BASE M/Z: 44

03/17/93 14:17:00 + 1:10

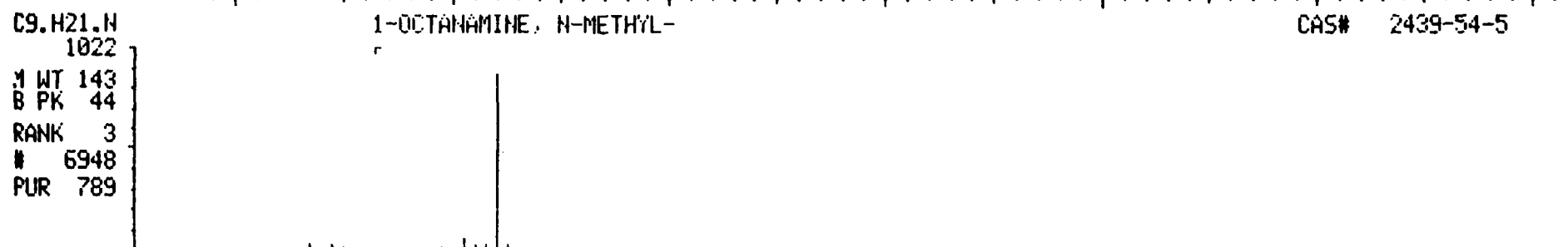
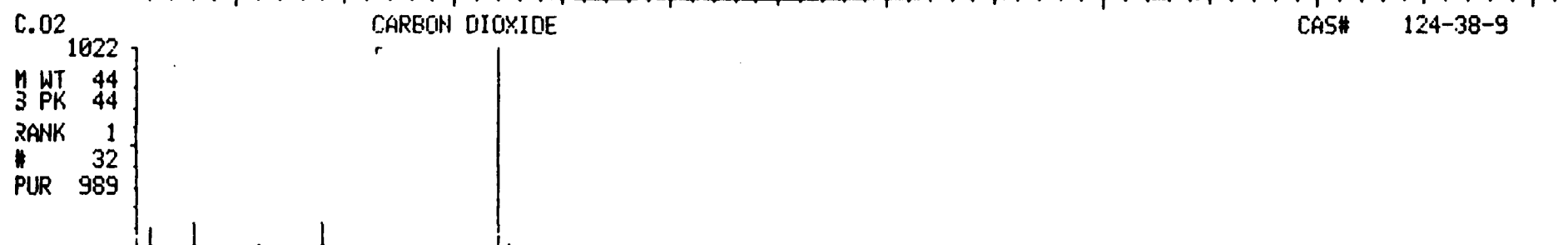
CALI: UU7324 # 3

RIC: 493056.

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, VOA, EPA,

COND.: I500A:25ML OLV01 PURGE W/ SPPB IS & SS

ENHANCED (S 15B 2N 0T)



M/Z 20 40 60 80 100 120 140

29310007

0116

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7324 # 124

BASE M/Z: 44

03/17/93 14:17:00 + 4:08

CALI: UU7324 # 3

RIC: 1842.

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,

COND5.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2N 0T)

00010007



C3.H4.O.N2

ACETAMIDE, 2-CYANO-

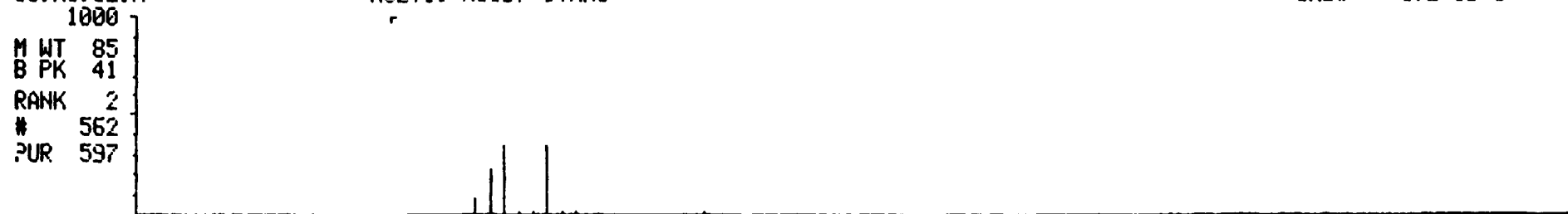
CAS# 107-91-5



C3.H3.O2.N

ACETIC ACID, CYANO-

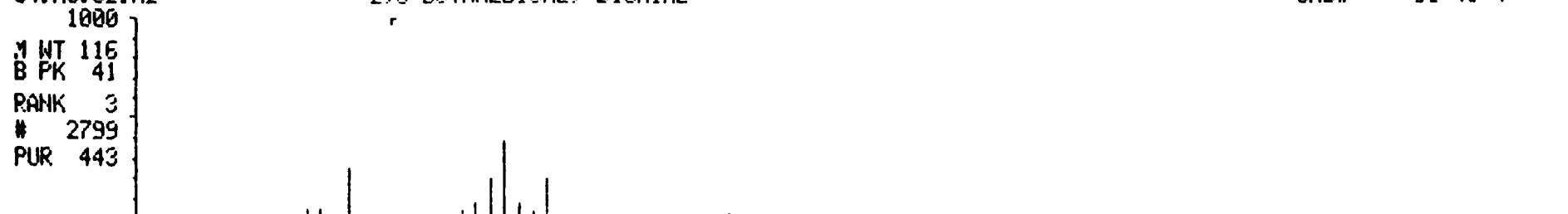
CAS# 372-09-8



C4.H8.O2.N2

2,3-BUTANEDIONE, DIOXIME

CAS# 95-45-4



M/Z

20 30 40 50 60 70 80 90 100 110

0117

TUT 004 1533

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7324 # 137

BASE M Z: 40

03/17/93 14:17:00 + 4:34

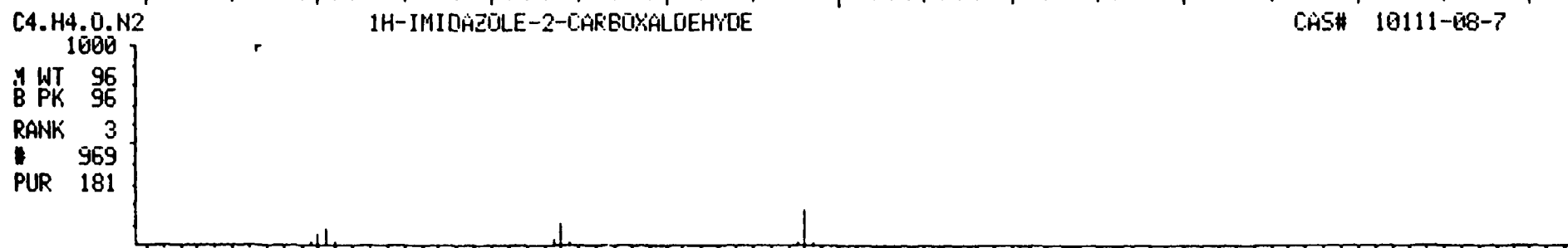
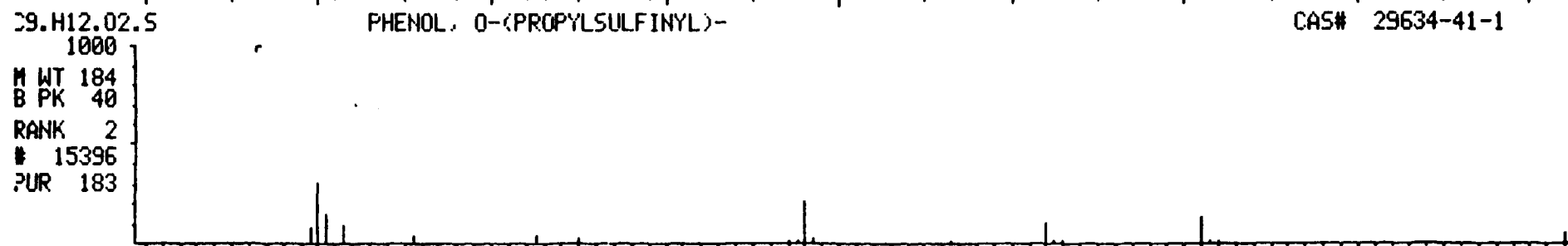
CALI: UU7324 # 3

RIC: 99.

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UGA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ SPPB IS & SS

ENHANCED (S 15B 2N 0T)



M/Z 20 40 60 80 100 120 140 160 180

L 0001554

0118

RIC

DATA: UV7324 #113

SCANS 100 TO 200

03/17/93 14:17:00

CALI: UV7324 #3

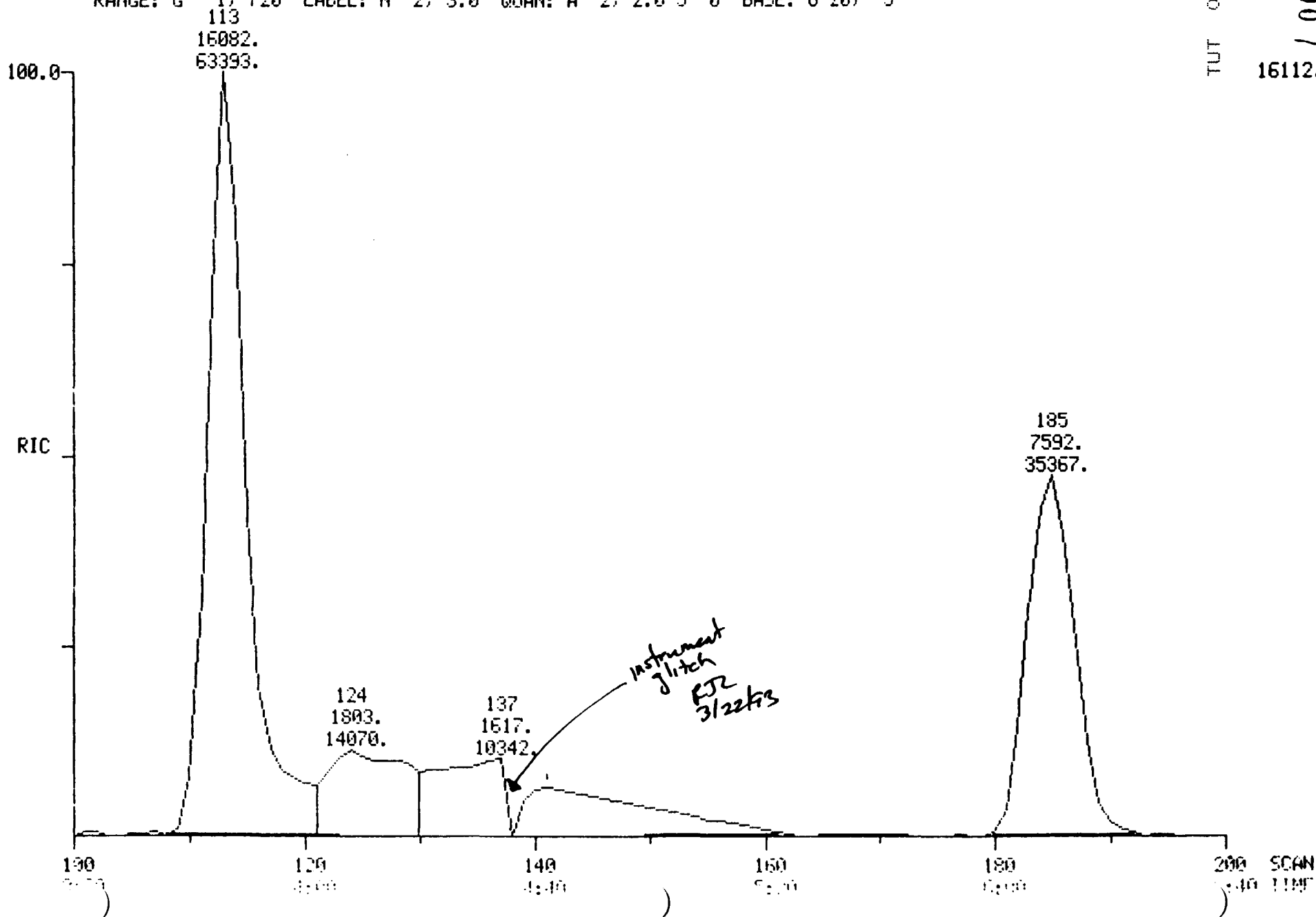
SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UV7324, VOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS

RANGE: G 1, 720 LABEL: N 2, 3.0 QUAN: A 2, 2.0 J 0 BASE: U 20, 3

TUT 004 1534

16112. 0001555



ORGANICS ANALYSIS DATA SHEET

MW03OR

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7321

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7321

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	1	U
74-83-9-----	Bromomethane	1	U
75-01-4-----	Vinyl Chloride	1	U
75-00-3-----	Chloroethane	1	U
75-09-2-----	Methylene Chloride	2	Bx
67-64-1-----	Acetone	5	U
74-97-5-----	Bromochloromethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
540-59-0-----	trans-1,2-Dichloroethene	1	U
540-59-0-----	cis-1,2-Dichloroethene	11	U
67-66-3-----	Chloroform	1	U
107-06-2-----	1,2-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
75-27-4-----	Bromodichloromethane	1	U
78-87-5-----	1,2-Dichloropropane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
79-01-6-----	Trichloroethene	3	U
124-48-1-----	Dibromochloromethane	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
71-43-2-----	Benzene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
106-93-4-----	1,2-Dibromoethane	1	U
75-25-2-----	Bromoform	1	U
108-10-1-----	4-Methyl-2-Pentanone	5	U
591-78-6-----	2-Hexanone	5	U
127-18-4-----	Tetrachloroethene	9	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-88-3-----	Toluene	1	U
108-90-7-----	Chlorobenzene	1	U

0120

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW03OR

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7321Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7321Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----	Ethylbenzene		
100-42-5-----	Styrene		
1330-20-7-----	Xylene (total)		
541-73-1-----	1,3-Dichlorobenzene		
106-46-7-----	1,4-Dichlorobenzene		
95-50-1-----	1,2-Dichlorobenzene		
96-12-8-----	1,2-Dibromo-3-Chloropropane		

1	U
1	U
1	U
1	U
1	U
1	U
1	U

TUT 004 1536

L 0001557

0121

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW030R

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7321Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7321Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 1537

L 0001553

0122

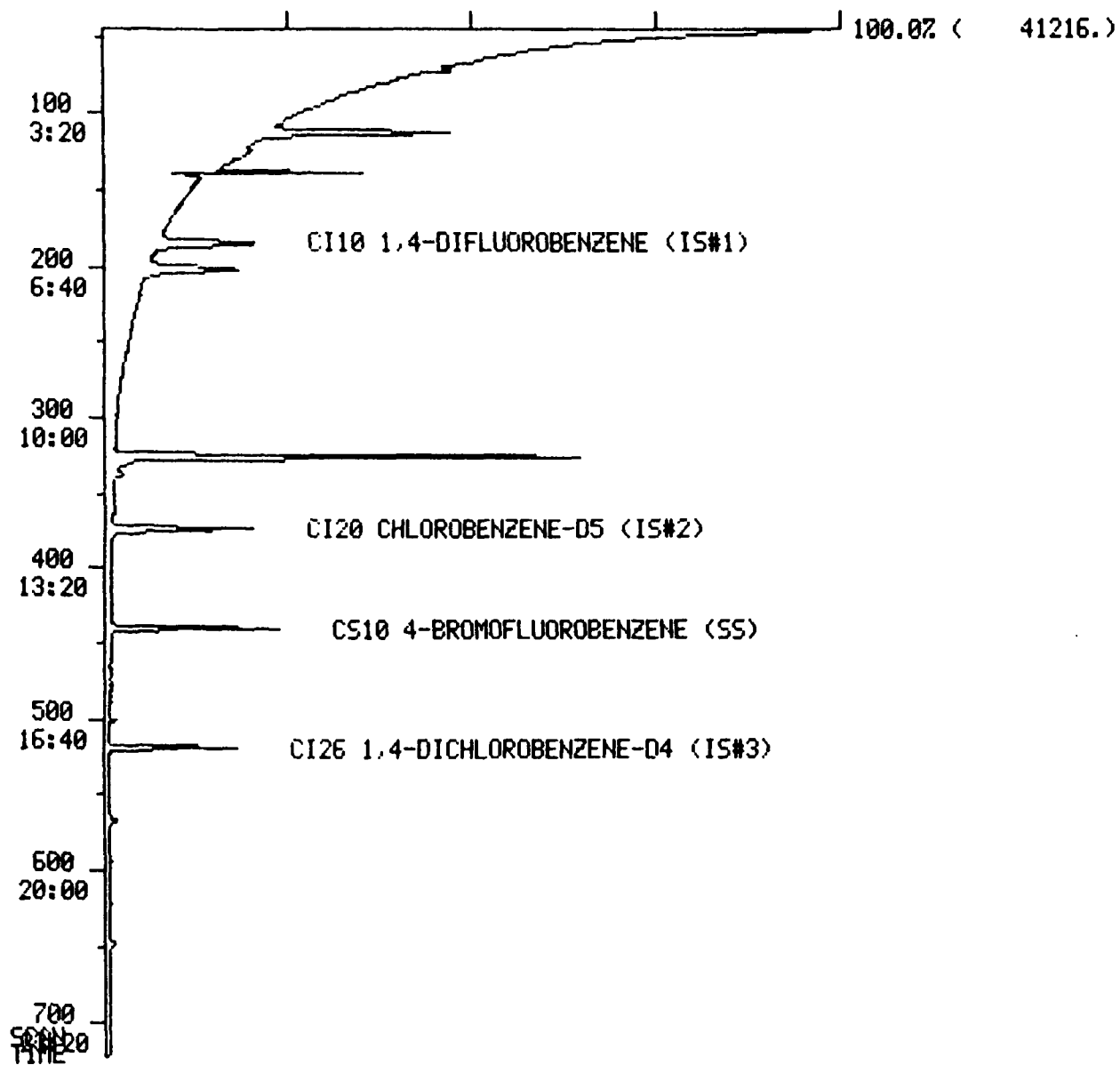
DATA FROM FILE: UU7321

SCANS 45 TO 720 ACQUIRED: 03/17/93 12:24:00

CALI: UU7321 #3

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



TUT 004 1538

L 0001559

Quantitation Report File: VV7321

ta: VV7321.TI

3/17/93 12:24:00

Sample: CLP, 53554, MW01, MW030R, LOW, WATER, VV7321, VOA, EPA,

Loads: 1500A:25ML DLV01 PURGE W/ SPPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: 1500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI10 2-BUTANONE
12	CO25 4-METHYL-2-PENTANONE
13	CO210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI115 1,1,1-TRICHLOROETHANE
22	CI120 CARBON TETRACHLORIDE
23	CI130 BROMODICHLOROMETHANE
24	CI140 1,2-DICHLOROPROPANE *
25	CI143 CIS-1,3-DICHLOROPROPENE
26	CI150 TRICHLOROETHENE
27	CI155 DIBROMOCHLOROMETHANE
28	CI160 1,1,2-TRICHLOROETHANE
29	CI165 BENZENE
30	CI172 TRANS-1,3-DICHLOROPROPENE
31	CI176 1,2-DIBROMOETHANE
32	CI180 BROMOFORM **
33	CI220 TETRACHLOROETHENE
34	CI225 1,1,2,2-TETRACHLOROETHANE **
35	CI230 TOLUENE *
36	CI235 CHLOROBENZENE
37	CI240 ETHYL BENZENE *
38	CI245 STYRENE
39	CI250 M/P XYLENE
40	CI252 O-XYLENE
41	CI254 CIS-1,2-DICHLOROETHENE
42	CI253 1,3-DICHLOROBENZENE
43	CI254 1,4-DICHLOROBENZENE
44	CI255 1,2-DICHLOROBENZENE
45	CI261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1539

L 0001560

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	183	6:06	1	1.000	A BB	8587.	5.000 UG/L	11.24
2	117	373	12:26	2	1.000	A BB	5182.	5.000 UG/L	11.24
3	150	518	17:16	3	1.000	A BB	3029.	5.000 UG/L	11.24
4	95	439	14:38	1	2.399	A BB	4306.	4.601 UG/L	10.35
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	72	2:24	1	0.393	A BB	914.	1.531 UG/L	3.44
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	64	2:08	1	0.350	A BB	504.	0.181 UG/L	0.41
16	NOT FOUND								
17	NOT FOUND								
18	96	78	2:36	1	0.426	A BB	201.	0.242 UG/L	0.55
19	83	127	4:14	1	0.694	A BB	201.	0.132 UG/L	0.30
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	201	6:42	2	0.539	A BB	2962.	2.902 UG/L	6.53
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	325	10:50	2	0.871	A BB	11255.	9.272 UG/L	20.85
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	112	3:44	1	0.612	A BB	6871.	10.788 UG/L	24.26
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	0.99	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.01	4.60	5.00	0.501	0.545	0.92
5	1:16		0.207						
6	1:28		0.239						
7	1:18		0.212						
8	1:32		0.250						
9	2:24	1.00	0.391	1.01	1.53	5.00	0.106	0.348	0.31

L 0001561

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	0.98	0.353	0.99	0.18	5.00	0.059	1.624	0.04
16	2:00		0.326						
17	3:02		0.495						
18	2:36	1.00	0.424	1.01	0.24	5.00	0.023	0.483	0.05
19	4:14	1.00	0.690	1.01	0.13	5.00	0.023	0.886	0.03
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.00	0.539	1.00	2.90	5.00	0.572	0.985	0.58
27	11:22		0.914						
28	10:42		0.861						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	9.27	5.00	2.172	1.171	1.85
34	15:02		1.209						
35	9:46		0.786						
36	12:30		1.005						
37	12:48		1.029						
38	13:46		1.107						
39	13:02		1.048						
40	13:44		1.105						
41	3:44	1.00	0.609	1.01	10.79	5.00	0.800	0.371	2.16
42	16:32		0.958						
43	16:42		0.967						
44	17:18		1.002						
45	18:42		1.083						

3/17/93 12:24:30
Acquisition started

3/17/93 12:24:33

Acquire Run 0: VV7321 Starting
03/17/93 12:24:00 + 0:00 Free sectors: 13638 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW03DR, LOW, WATER, VV7321, VOA, EPA,
Conds.: I500A: 25ML OLVO1 PURGE W/ 5PPD IS & SS
Formula: 25ML AMBIEN1 PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp	Rate	Time (minutes)		
#	(DegC)	(C/min)	period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 35 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 215 Deg C
					Ion source : 181 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW:	3	MFW:	80	MA:	15	TH:	1	BL:	0
Int #	Lo mass	Hi mass	Time						
1	33.510	300.590	2.000						

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW:	3	MFW:	80	MA:	15	TH:	1	BL:	0
Int #	Lo mass	Hi mass	Time						
1	33.510	300.590	2.000						

Calibration table: D: CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1542

L 0001563

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 ⁻⁷
Electrometer zero:		126.0

Analyzer Fore Pressure: 0.010 Torr
 Separator/Source Pressure: 0.356 Torr

3/17/93 12:52:22
 ACQUISITION COMPLETED
 Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.4	1440.0	0.0	3051.	4. 2.

QUALITY CONTROL/QUALITY ASSURANCE DATA

0128

METHOD: CLP 3'90 OLV01 25ML PURGE

DATAFILE: VV7321 ANALYSIS TIME: 03/17/93 12:24
STANDARD: WS0317 ANALYSIS TIME: 03/17/93 10:48
TUNEFILE: WBFB0317 ANALYSIS TIME: 03/17/93 9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
C110 1,4-DIFLUOROBENZEN	8587.	9856.	87%	60% - 140%	
C120 CHLOROBENZENE-D5 (	5182.	6374.	81%	60% - 140%	
C126 1,4-DICHLOROBENZEN	3029.	4017.	75%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
C110 1,4-DIFLUOROBENZEN	183	184	2	+/- 20 SECS	
C120 CHLOROBENZENE-D5 (	373	373	0	+/- 20 SECS	
C126 1,4-DICHLOROBENZEN	518	518	0	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
CS10 4-BROMOFLUOROBENZE	4.6	5.0	92	80% - 120%	
CO15 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
CO20 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

TUT 004 1544

L 0001565

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0109

DATA FILE: VV7324

ACQUIRED: 03/17/93 14:17:00

CONDS.: I500A:25ML OLV01 PURGE W/ SPPB IS & SS

SUBMITTED BY: ITEK

ANALYST: RJL

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
0110 1,4-DIFLUOROBENZENE (IS#1)	185	0	5.000	982 0
0120 CHLOROBENZENE-D5 (IS#2)	374	0	5.000	974 0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	519	0	5.000	0 0
0510 4-BROMOFLUOROBENZENE (SS)	440	0	4.497	948 0
0150 TRICHLOROETHENE	202	0	3.622	969 0
0220 TETRACHLOROETHENE	326	0	7.257	954 0
0054 CIS-1,2-DICHLOROETHENE	113	0	10.699	914 0

TUT 004 1545

LOC01546

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7324 #202

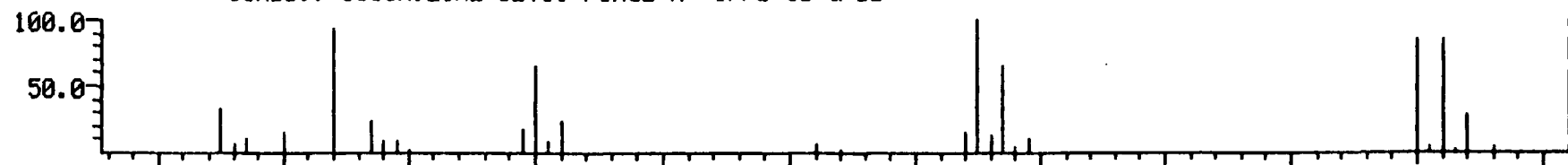
BASE M/Z: 95

RIC: 8512.

03/17/93 14:17

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,

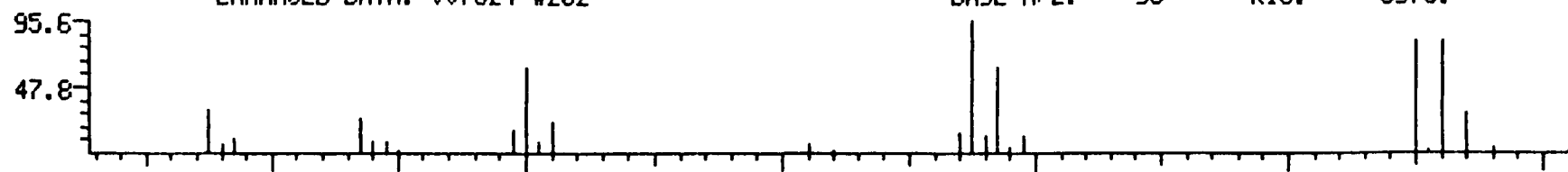
CONDS.: I500A:25ML DLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7324 #202

BASE M/Z: 95

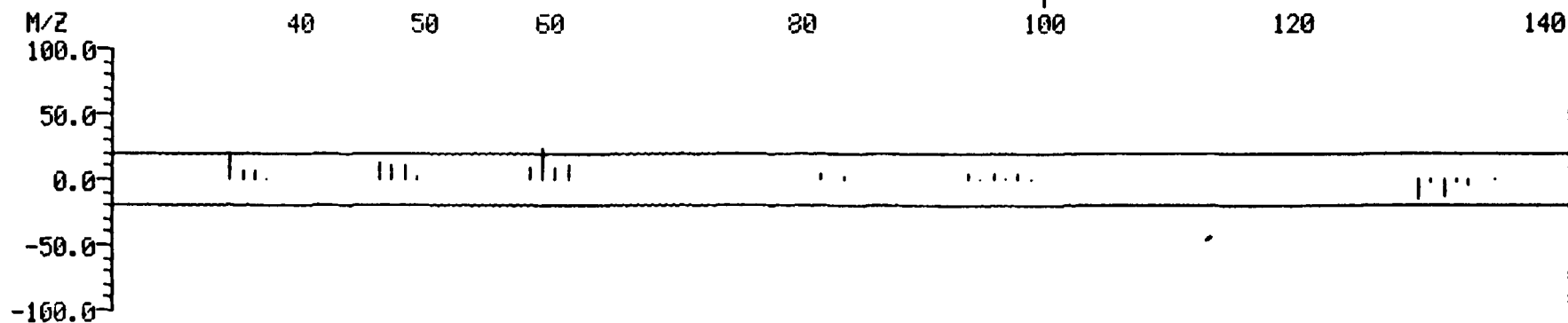
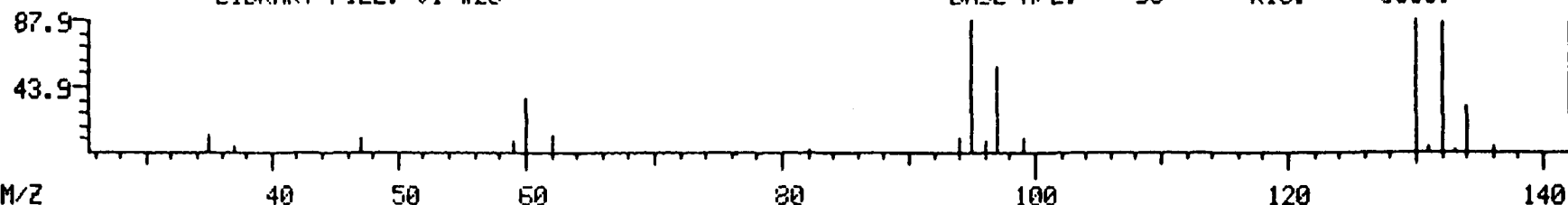
RIC: 6976.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



OUT

L0001547

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7324 #326

BASE M/Z: 166

RIC: 34048.

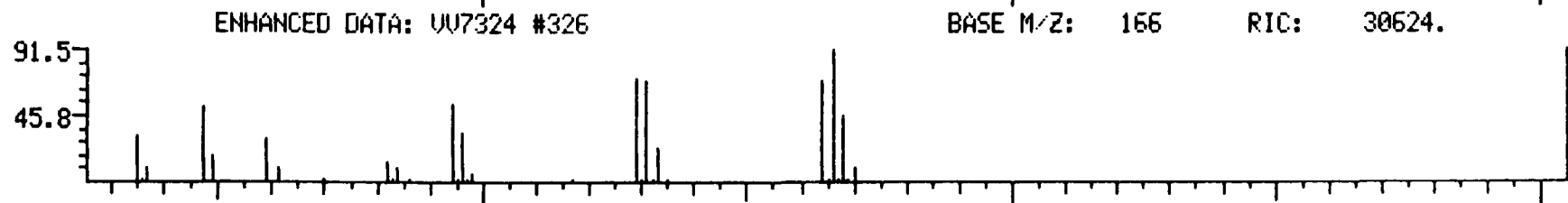
03/17/93 14:17

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,

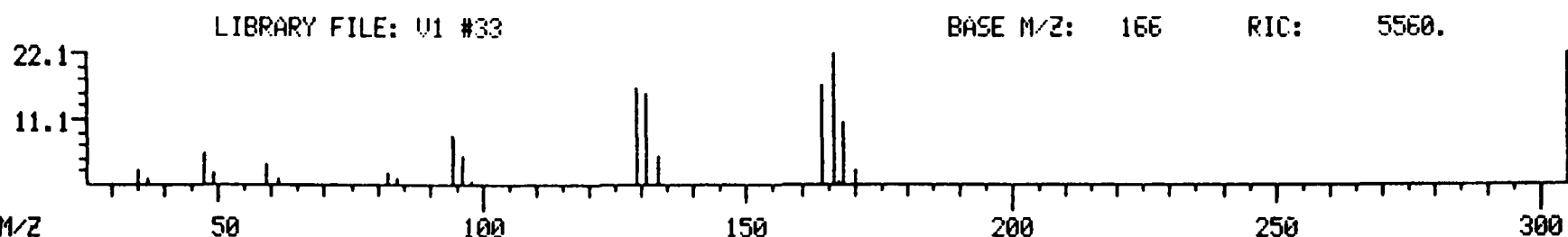
CONDS.: I500A:25ML OLV01 PURGE W/ SPPB 15 & 55



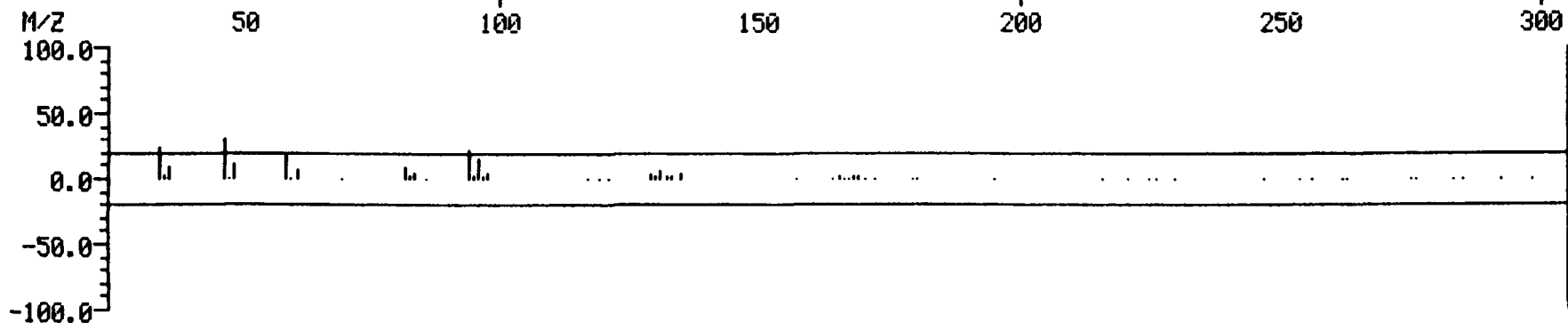
4520.



4136.



1000.



OUT

TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UU7324 #113

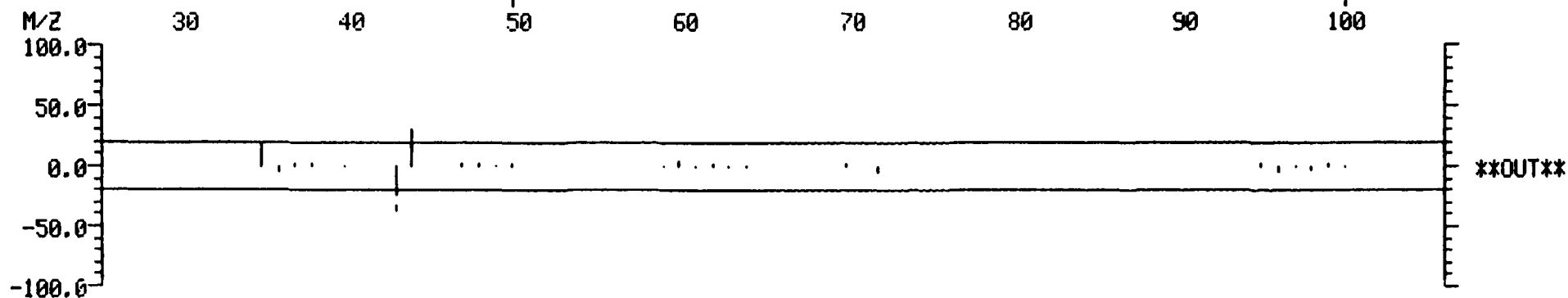
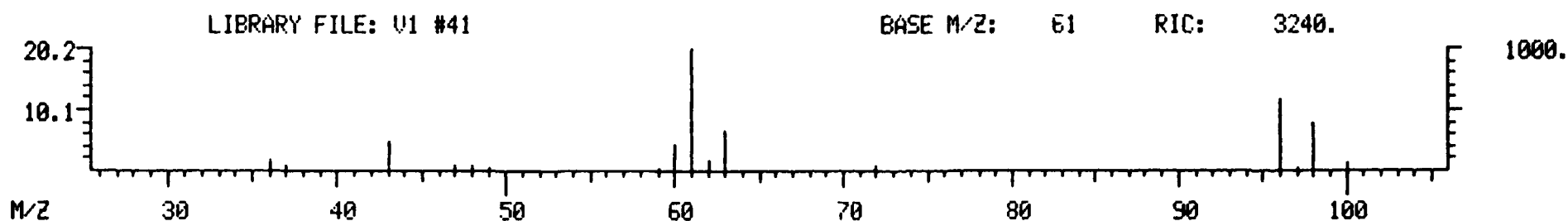
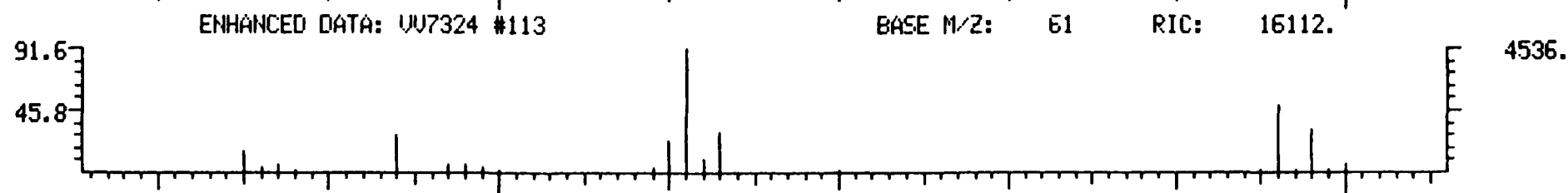
BASE M/Z: 61

RIC: 20128.

03/17/93 14:17

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB 15 & 55



Data: VV/324.TI

03/17/93 14:17:00

Sample: CLP, 53554, MW01, MW03FD, LOW, WATER, VV7324, VOA, EPA,

Vials: 1500A:25ML DLV01 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: 1500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT-HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	124-38-9	CARBON DIOXIDE
5	107-91-5	ACETAMIDE, 2-CYANO-
6	7440-37-1	ARGON

} NOT TRUE ^{AREAS} HITS, see printout

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	185	6:10	1	1.000	A IB	7599.*	50.000 UG/L	1.24
2	RIC	374	12:28	2	1.000	A IB	13027.*	50.000 UG/L	1.24
3	RIC	519	17:18	3	1.000	A BB	11796.*	50.000 UG/L	1.24
4	RIC	32	1:04	1	0.173	A BB	586752.*	3860.640	95.73
5	RIC	124	4:08	1	0.670	A VV	1787.*	11.759	0.29
6	RIC	137	4:34	1	0.741	A VB	1618.*	10.646	0.26

DATA FILE: VV7324

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
POINT-TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I. S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I. S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS
(QUAN LIST)
8

IS
PEAKS
3

TOTAL TARGET
PEAKS
11

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
20	0	0	5	12	0	17	3

TIC PROCESSING:

	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	35	989	989	44	CARBON DIOXIDE
2	124	649	754	84	ACETAMIDE, 2-CYANO-
3	137	715	996	40	ARGON

0115

MID LIBRARY SEARCH (LIBRARYNB)

03/17/93 14:17:00 + 1:10

DATA: UU7324 # 35

BASE M/Z: 44

CALI: UU7324 # 3

RIC: 493056.

SAMPLE: CLP, 53554, MN01, MN03FD, LOW, WATER, UU7324, UOA, EPA,

CONDS.: I500A:25ML OL001 PURGE W/ SPPB IS & SS

ENHANCED (S 15B 2N 0T)



M/Z 20 40 60 80 100 120 140

0001552
7

0116

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7324 # 124

BASE M/Z: 44

03/17/93 14:17:00 + 4:08

CALI: UU7324 # 3

RIC: 1842.

SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & 55

ENHANCED (S 15B 2N 0T)



C3.H4.O.N2

ACETAMIDE, 2-CYANO-

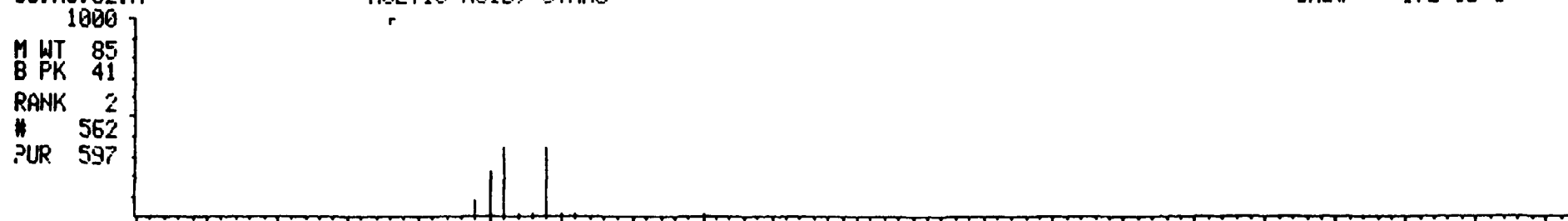
CAS# 107-91-5



C3.H3.O2.N

ACETIC ACID, CYANO-

CAS# 372-09-8



C4.H8.O2.N2

2,3-BUTANEDIONE, DIOXIME

CAS# 95-45-4



M/Z

20

30

40

50

60

70

80

90

100

110

00010007

MID LIBRARY SEARCH (LIBRARYNB)

DATA: UU7324 # 137

BASE M Z: 40

03/17/93 14:17:00 + 4:34

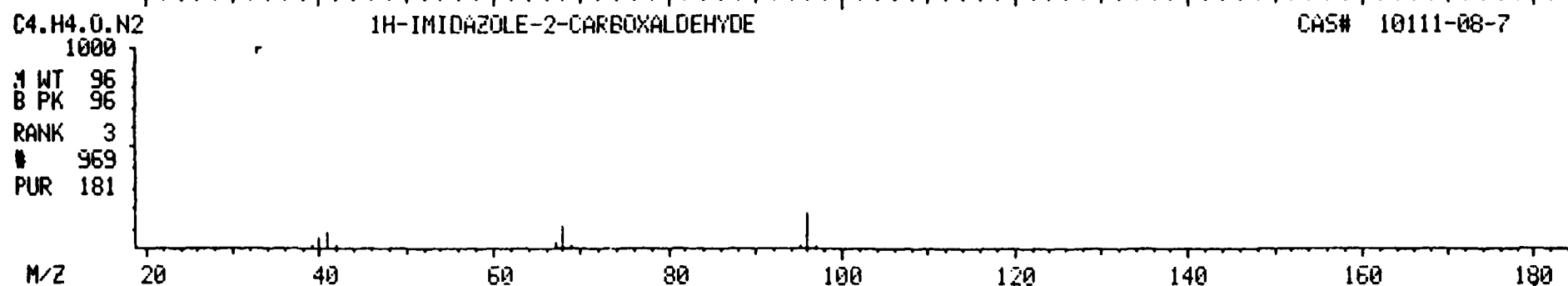
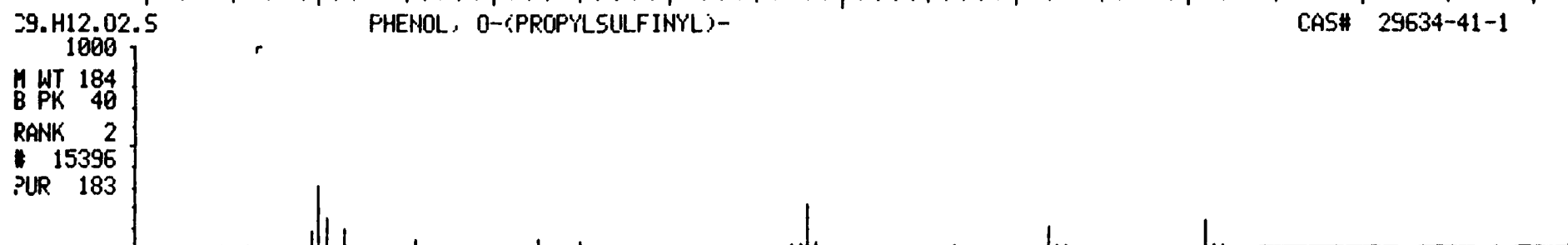
CALI: UU7324 # 3

RIC: 99.

SAMPLE: CLP.53554.MW01.MW03FD,LOW,WATER,UU7324,UOA,EPA,

CONDS.: I500A:25ML OLV01 PURGE W/ SPPB IS & SS

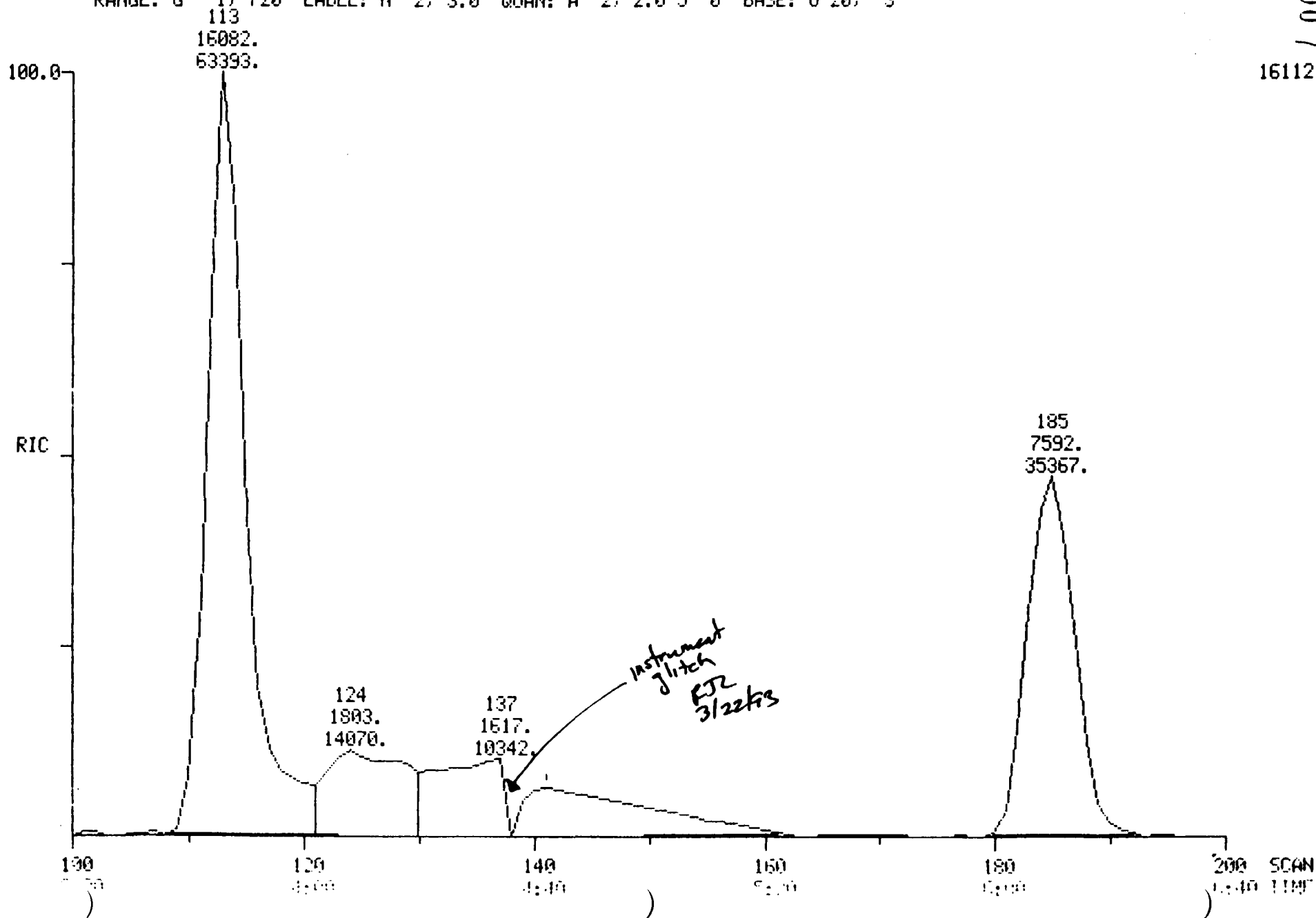
ENHANCED (S 15B 2N 0T)



0118

RIC DATA: UU7324 #113 SCANS 100 TO 200
 03/17/93 14:17:00 CALI: UU7324 #3
 SAMPLE: CLP, 53554, MW01, MW03FD, LOW, WATER, UU7324, UOA, EPA,
 CONDS.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS
 RANGE: G 1, 720 LABEL: N 2, 3.0 QUAN: A 2, 2.0 J 0 BASE: U 20, 3

7 0001555



16112.

ORGANICS ANALYSIS DATA SHEET

MW030R

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7321

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7321

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

74-87-3-----	Chloromethane	1	U
74-83-9-----	Bromomethane	1	U
75-01-4-----	Vinyl Chloride	1	U
75-00-3-----	Chloroethane	1	U
75-09-2-----	Methylene Chloride	2	Bx
67-64-1-----	Acetone	5	U
74-97-5-----	Bromochloromethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
540-59-0-----	trans-1,2-Dichloroethene	1	U
540-59-0-----	cis-1,2-Dichloroethene	11	U
67-66-3-----	Chloroform	1	U
107-06-2-----	1,2-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
75-27-4-----	Bromodichloromethane	1	U
78-87-5-----	1,2-Dichloropropane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
79-01-6-----	Trichloroethene	3	U
124-48-1-----	Dibromochloromethane	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
71-43-2-----	Benzene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
106-93-4-----	1,2-Dibromoethane	1	U
75-25-2-----	Bromoform	1	U
108-10-1-----	4-Methyl-2-Pentanone	5	U
591-78-6-----	2-Hexanone	5	U
127-18-4-----	Tetrachloroethene	9	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-88-3-----	Toluene	1	U
108-90-7-----	Chlorobenzene	1	U

2 mls

0120

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW030R

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7321Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7321Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----	Ethylbenzene	1	U
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	1	U
541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	1	U

TUT 004 1556

L 0001557

0121

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW030R

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7321Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7321Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 1557

L 0001553

0122

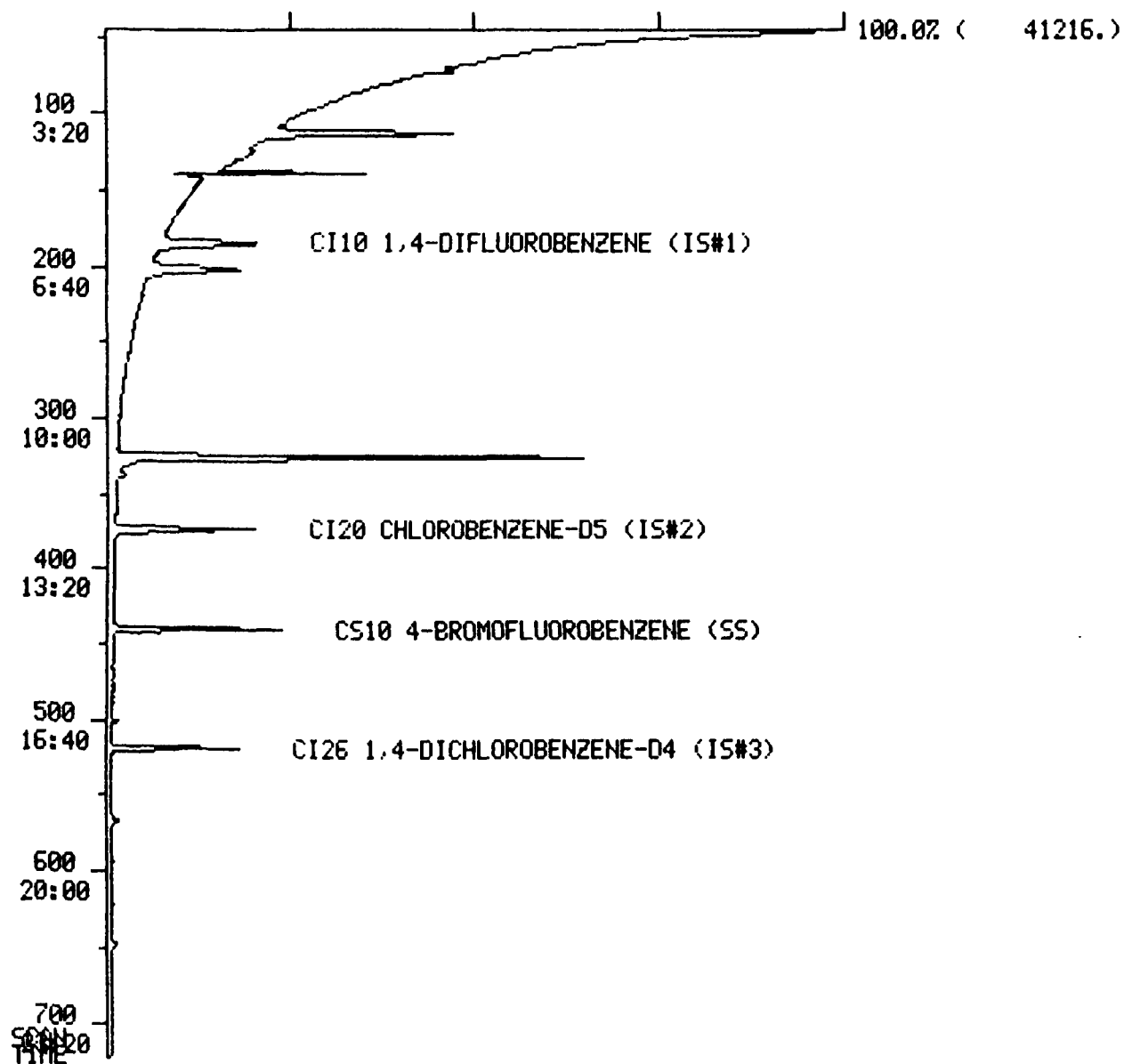
DATA FROM FILE: UU7321

SCANS 45 TO 720 ACQUIRED: 03/17/93 12:24:00

CALI: UU7321 #3

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



TUT 004 1558

L 0001559

Quantitation Report File: VV7321

sta: VV7321.TI

3/17/93 12:24:00

Sample: CLP, 53554, MW01, MW03OR, LOW, WATER, VV7321, VOA, EPA,

Stand.: I500A:25ML DLV01 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI10 2-BUTANONE
12	CO20 4-METHYL-2-PENTANONE
13	CI10 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI15 1,1,1-TRICHLOROETHANE
22	CI20 CARBON TETRACHLORIDE
23	CI30 BROMODICHLOROMETHANE
24	CI40 1,2-DICHLOROPROPANE *
25	CI43 CIS-1,3-DICHLOROPROPENE
26	CI50 TRICHLOROETHENE
27	CI55 DIBROMOCHLOROMETHANE
28	CI60 1,1,2-TRICHLOROETHANE
29	CI65 BENZENE
30	CI72 TRANS-1,3-DICHLOROPROPENE
31	CI76 1,2-DIBROMOETHANE
32	CI80 BROMOFORM **
33	CI20 TETRACHLOROETHENE
34	CI25 1,1,2,2-TETRACHLOROETHANE **
35	CI30 TOLUENE *
36	CI35 CHLOROBENZENE
37	CI40 ETHYL BENZENE *
38	CI45 STYRENE
39	CI50 M/P XYLENE
40	CI52 O-XYLENE
41	CI54 CIS-1,2-DICHLOROETHENE
42	CI53 1,3-DICHLOROBENZENE
43	CI54 1,4-DICHLOROBENZENE
44	CI55 1,2-DICHLOROBENZENE
45	CI61 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1559

L 0001560

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	183	6:06	1	1.000	A BB	8587.	5.000 UG/L	11.24
2	117	373	12:26	2	1.000	A BB	5182.	5.000 UG/L	11.24
3	150	518	17:16	3	1.000	A BB	3029.	5.000 UG/L	11.24
4	95	439	14:38	1	2.399	A BB	4306.	4.601 UG/L	10.35
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	72	2:24	1	0.393	A BB	914.	1.531 UG/L	3.44
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	64	2:08	1	0.350	A BB	504.	0.181 UG/L	0.41
16	NOT FOUND								
17	NOT FOUND								
18	96	78	2:36	1	0.426	A BB	201.	0.242 UG/L	0.55
19	83	127	4:14	1	0.694	A BB	201.	0.132 UG/L	0.30
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	201	6:42	2	0.539	A BB	2962.	2.902 UG/L	6.53
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	325	10:50	2	0.871	A BB	11255.	9.272 UG/L	20.85
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	112	3:44	1	0.612	A BB	6871.	10.788 UG/L	24.26
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	0.99	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.01	4.60	5.00	0.501	0.545	0.92
5	1:16		0.207						
6	1:28		0.239						
7	1:18		0.212						
8	1:32		0.250						
9	2:24	1.00	0.391	1.01	1.53	5.00	0.106	0.348	0.31

L0001561

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	0.98	0.353	0.99	0.18	5.00	0.059	1.624	0.04
16	2:00		0.326						
17	3:02		0.495						
18	2:36	1.00	0.424	1.01	0.24	5.00	0.023	0.483	0.05
19	4:14	1.00	0.690	1.01	0.13	5.00	0.023	0.886	0.03
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.00	0.539	1.00	2.90	5.00	0.572	0.985	0.58
27	11:22		0.914						
28	10:42		0.861						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	9.27	5.00	2.172	1.171	1.85
34	15:02		1.209						
35	9:46		0.786						
36	12:30		1.005						
37	12:48		1.029						
38	13:46		1.107						
39	13:02		1.048						
40	13:44		1.105						
41	3:44	1.00	0.609	1.01	10.79	5.00	0.800	0.371	2.16
42	16:32		0.958						
43	16:42		0.967						
44	17:18		1.002						
45	18:42		1.083						

3/17/93 12:24:30
Acquisition started

3/17/93 12:24:33

Acquire Run 0: VV7321 Starting
03/17/93 12:24:00 + 0:00 Free sectors: 13638 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW030R, LOW, WATER, VV7321, VDA, EPA,
Cands.: I500A: 25ML OLVO1 PURGE W/ 5PPD IS & SS
Formula: 25ML AMBIEN1 PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp	Rate	Time (minutes)		
#	(DegC)	(C/min)	period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 35 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 215 Deg C
					Ion source : 181 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW:	3	MFW:	80	MA:	15	TH:	1	BL:	0
Int #	Lo mass	Hi mass	Time						
1	33.510	300.590	2.000						

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW:	3	MFW:	80	MA:	15	TH:	1	BL:	0
Int #	Lo mass	Hi mass	Time						
1	33.510	300.590	2.000						

Calibration table: D:CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1562

L 0001563

0127

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\sim$ 7
Electrometer zero:		126.0

Analyzer Fore Pressure: 0.010 Torr
 Separator/Source Pressure: 0.356 Torr

3/17/93 12:52:22

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.4	1440.0	0.0	3051.	4. 2.

METHOD: CLP 3'90 DLV01 25ML PURGE

DATAFILE: VV7321 ANALYSIS TIME: 03/17/93 12:24
STANDARD: WS0317 ANALYSIS TIME: 03/17/93 10:48
TUNEFILE: WBFD0317 ANALYSIS TIME: 03/17/93 9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
C110 1,4-DIFLUOROBENZEN	8587.	9856.	87%	60% - 140%	
C120 CHLOROBENZENE-D5 (	5182.	6374.	81%	60% - 140%	
C126 1,4-DICHLOROBENZEN	3029.	4017.	75%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
C110 1,4-DIFLUOROBENZEN	183	184	2	+/- 20 SECS	
C120 CHLOROBENZENE-D5 (	373	373	0	+/- 20 SECS	
C126 1,4-DICHLOROBENZEN	518	518	0	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
C810 4-BROMOFLUOROBENZE	4.6	5.0	92	80% - 120%	
C015 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
C020 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

PROCEDURE: TCA
 DATA FILE: VV7321
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V11S

DIAGNOSTIC REPORT

3/17/93 12:54:56

0129

STANDARDS				PLUS UNKNOWN				LIST NAMES			
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN			
3	2	1	0	20	5	1	63	V11S/V1UNKS1			
3	3	1	11	16	5	1	41	V11S/V1UNKS2			
3	3	1	11	15	4	1	67	V11S/V1UNKS3			

45 COMPOUNDS PROCESSED, 7 FOUND

COMPOUND				SEARCH				SAT		CHRD			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	183	183		1	981		114	183		1
2	V1	2	-373	373	373		1	961		117	373		1
3	V1	3	-518	519						150	518		1
4	V1	4	-439	439	439		1	949		95	439		1
5	V1	5	-38	37						50			
6	V1	6	-44	43						94			
7	V1	7	-39	38						62			
8	V1	8	-46	45						64			
9	V1	9	-72	71	72	1	1	913		84	72		1
10	V1	10	-62	61						43			
11	V1	11	-115	115						43			
12	V1	12	-289	289						43			
13	V1	13	-341	341						43			
14	V1	14	-122	122						128			
15	V1	15	-65	64						76	64		1
16	V1	16	-60	59						96			
17	V1	17	-91	90						63			
18	V1	18	-78	77						96	78		1
19	V1	19	-127	127						83	127		1
20	V1	20	-155	155						62			
21	V1	21	-135	134						97			
22	V1	22	-143	142						117			
23	V1	23	-242	242						83			
24	V1	24	-218	218						63			
25	V1	25	-274	274						75			
26	V1	26	-201	200	201	1	1	951		95	201		1
27	V1	27	-341	341						129			
28	V1	28	-321	321						97			
29	V1	29	-153	152						78			
30	V1	30	-311	311						75			
31	V1	31	-344	344						107			
32	V1	32	-420	420						173			
33	V1	33	-325	325	325		1	956		166	325		1
34	V1	34	-451	452						83			
35	V1	35	-293	293						91			
36	V1	36	-375	375						112			
37	V1	37	-384	384						91			
38	V1	38	-413	413						104			
39	V1	39	-391	391						106			
40	V1	40	-412	412						106			
41	V1	41	-112	111	112	1	1	905		96	112		1
42	V1	42	-496	497						146			
43	V1	43	-501	502						146			
44	V1	44	-519	520						146			
45	V1	45	-561	562						75			

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

DATA FILE: VV7321

ACQUIRED: 03/17/93 12:24:00

INSTR: I500A125ML OLVO1 PURGE W/ SPPB IS & SS

EMITTED BY: ITEK

ANALYST: RUL

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
1110 1,4-DIFLUOROBENZENE (IS#1)	183	0	5.000	981 0
1120 CHLOROBENZENE-D5 (IS#2)	373	0	5.000	961 0
1126 1,4-DICHLOROBENZENE-D4 (IS#3)	518	-1	5.000	0 0
1110 4-BROMOFLUOROBENZENE (SS)	439	0	4.601	949 0
1130 METHYLENE CHLORIDE	72	1	1.531	913 0
1130 TRICHLOROETHENE	201	1	2.902	951 0
1120 TETRACHLOROETHENE	325	0	9.272	956 0
1154 CIS-1,2-DICHLOROETHENE	112	1	10.788	905 0

0131

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

RAW DATA: UU7321 #72

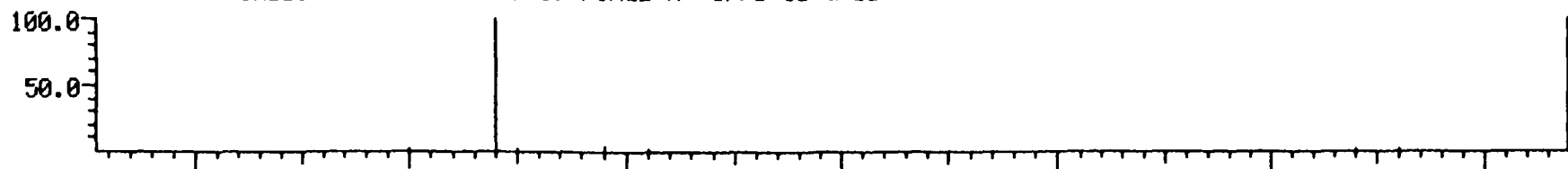
BASE M/Z: 44

RIC: 19424.

03/17/93 12:24

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

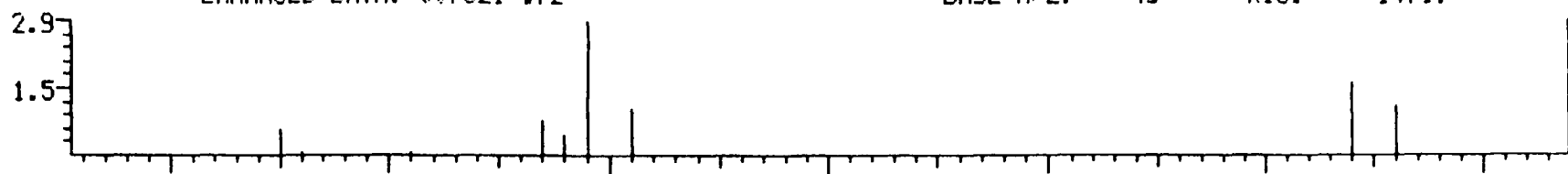
CONDS.: 1500A:25ML OL001 PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7321 #72

BASE M/Z: 49

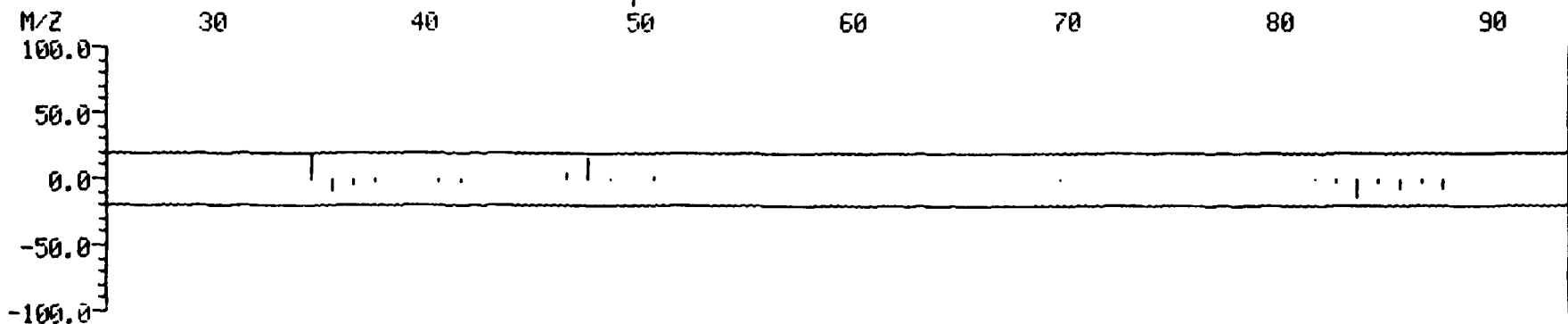
RIC: 1478.



LIBRARY FILE: U1 #9

BASE M/Z: 49

RIC: 3028.



Z95T 400 INT 004 1567

17216.

507.

1000.

0001568

0001568

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7321 #201

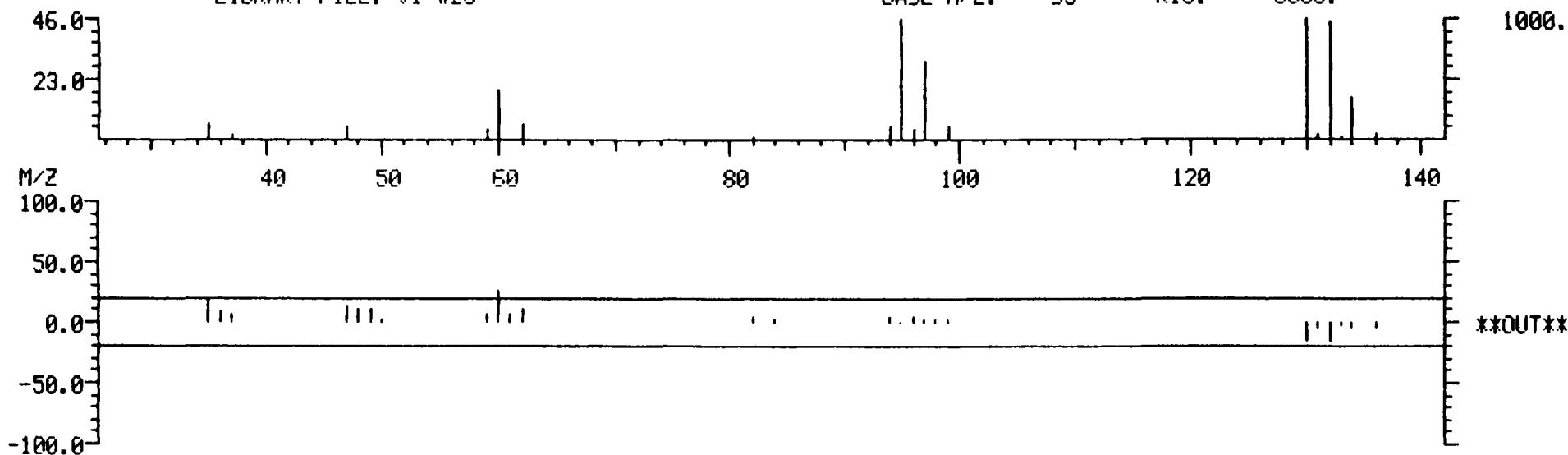
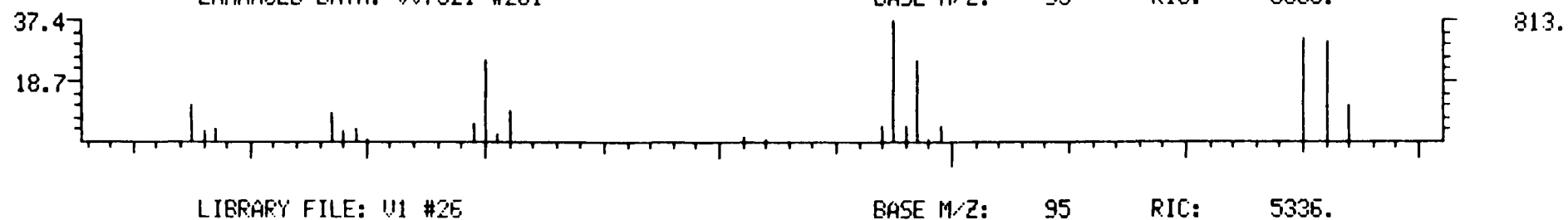
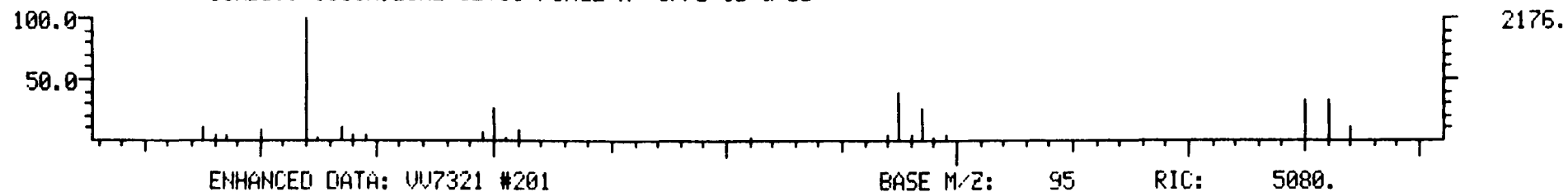
BASE M/Z: 44

RIC: 7592.

03/17/93 12:24

SAMPLE: CLP, 53554, MW01, MW03DR, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A; 25ML OLV01 PURGE W/ 5PPB 15 & 55



0133

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7321 #325

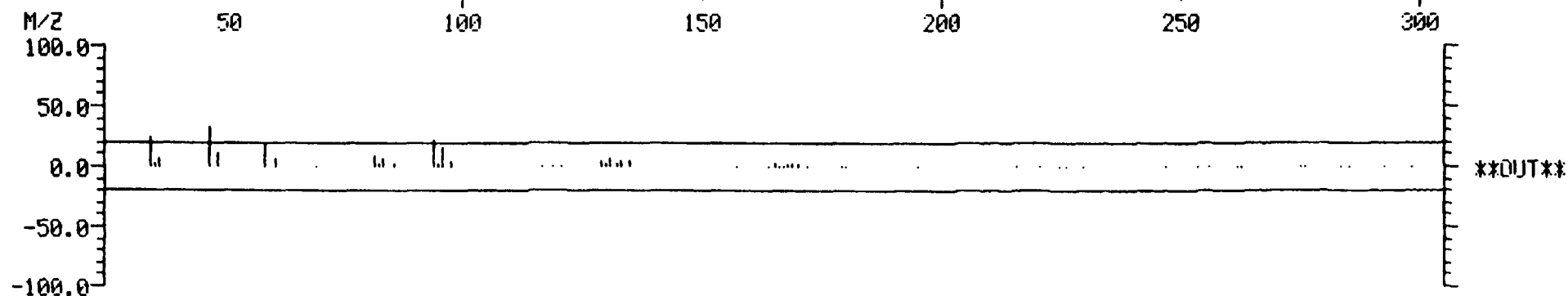
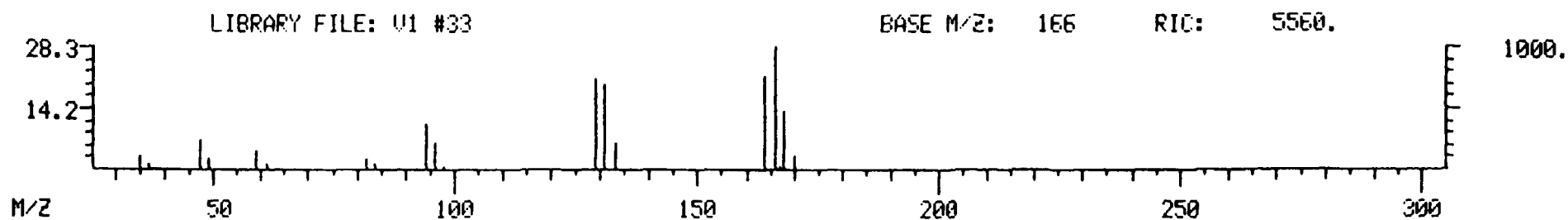
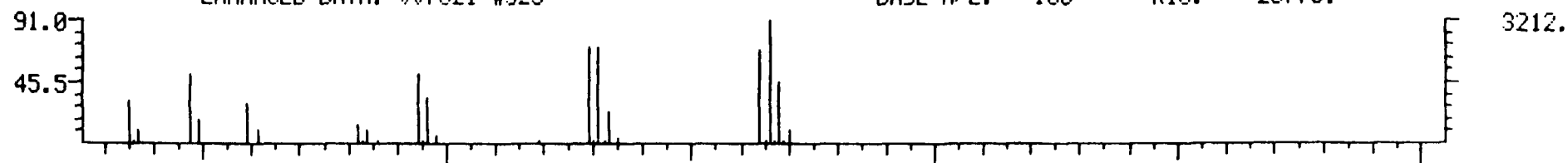
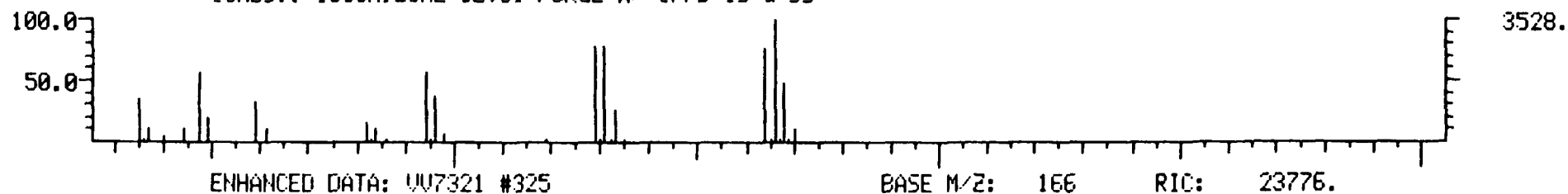
BASE M/Z: 166

RIC: 26688.

03/17/93 12:24

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS



TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UU7321 #112

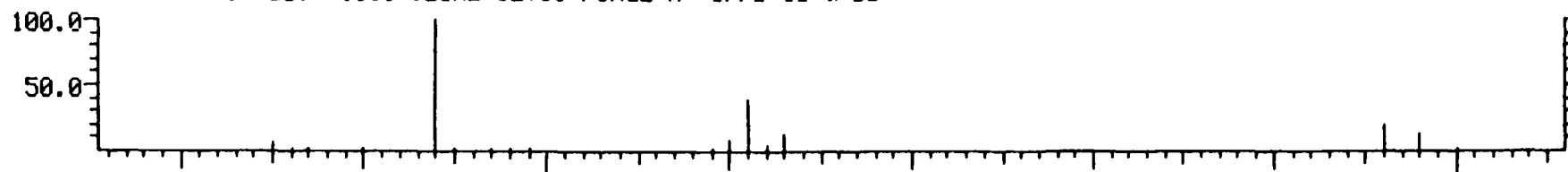
BASE M/Z: 44

RIC: 19360.

03/17/93 12:24

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ 5PPB IS & SS

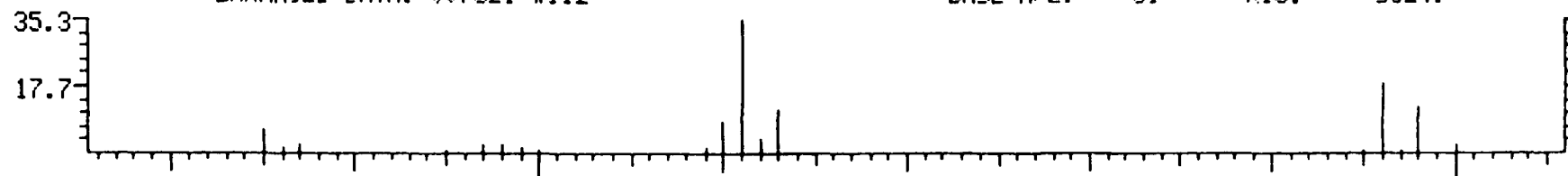


8560.

ENHANCED DATA: UU7321 #112

BASE M/Z: 61

RIC: 9824.

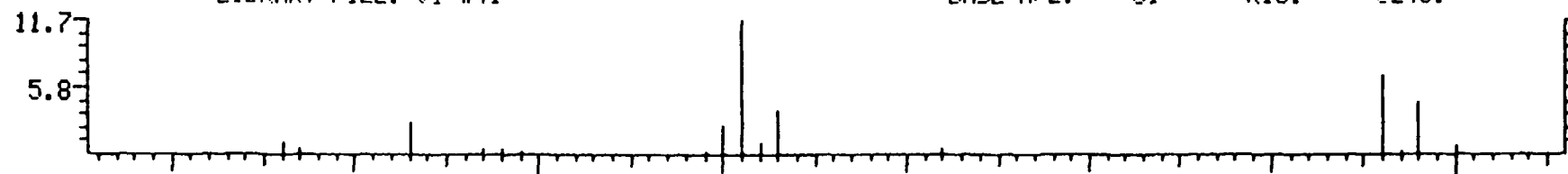


3024.

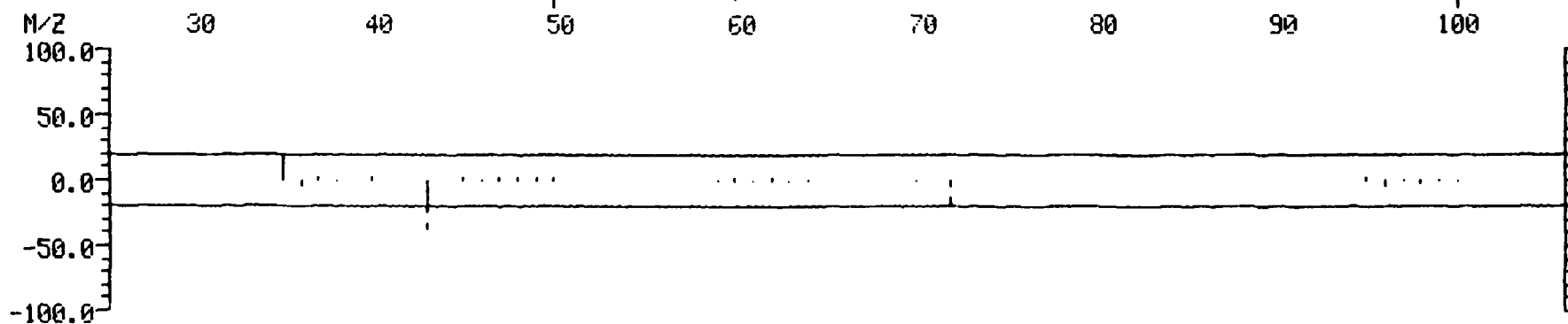
LIBRARY FILE: U1 #41

BASE M/Z: 61

RIC: 3240.



1000.



OUT

Data: VV/321.TI

13/17/93 12:24:00

Sample: CLP, 53554, MW01, MW03DR, LOW, WATER, VV7321, VOA, EPA,

Ends.: I500A:25ML DLV01 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BRONCHLOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	0-00-0	UNKNOWN
5	1111-78-0	CARBAMIC ACID, MONOAMMONIUM SALT
6	124-38-9	CARBON DIOXIDE INSTRUMENT GLITCH

NO TIC's found
R2
3/22/93

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	183	6:06	1	1.000	A BB	5360.*	50.000 UG/L	17.60
2	RIC	373	12:26	2	1.000	A BB	7900.*	50.000 UG/L	17.60
3	RIC	518	17:16	3	1.000	A BB	7099.*	50.000 UG/L	17.60
4	RIC	132	4:24	1	0.721	A VV	2136.*	19.925	7.01
5	RIC	137	4:34	1	0.749	A VB	10704.*	99.851	35.15
6	RIC	141	4:42	1	0.770	A BB	1532.*	14.291	5.03

DATA FILE: VV7321

FILTER SCAN PARAMETERS

4X. NUMBER TICS: 10
11-TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I. S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I. S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
8	3	11

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
20	0	0	2	11	0	13	7

TIC PROCESSING:

SCN	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	36	790	791	74	1,2-PROPANEDIAMINE
2	53	529	529	165	ETHANE, 1,1,1-TRINITRO-
3	56	812	812	60	2-PROPANOL
4	59	996	996	40	ARGON
5	132	480	480	84	ACETAMIDE, 2-CYANO-
6	137	992	993	78	CARBAMIC ACID, MONOAMMONIUM SA
7	141	1000	1000	44	CARBON DIOXIDE

0137

MID LIBRARY SEARCH (LIBRARYNB)

03/17/93 12:24:00 + 1:12

DATA: 007321 # 36

BASE M Z: 44

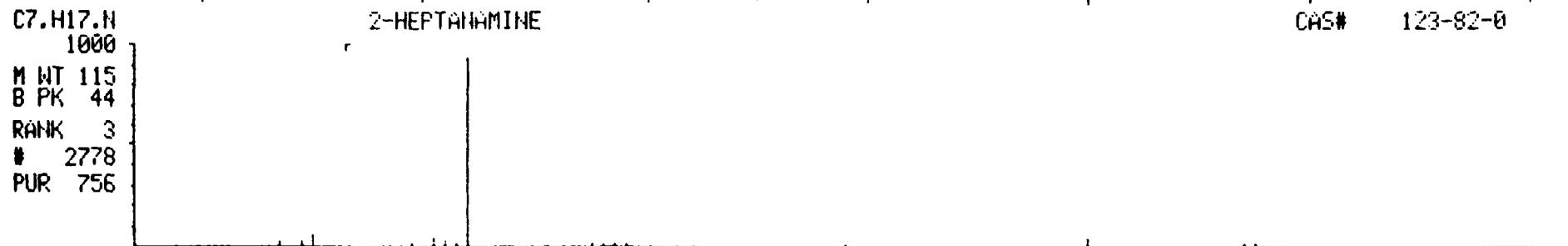
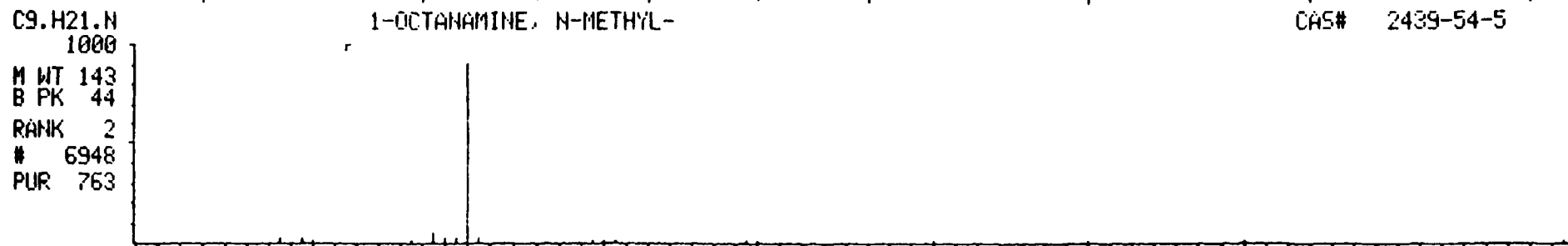
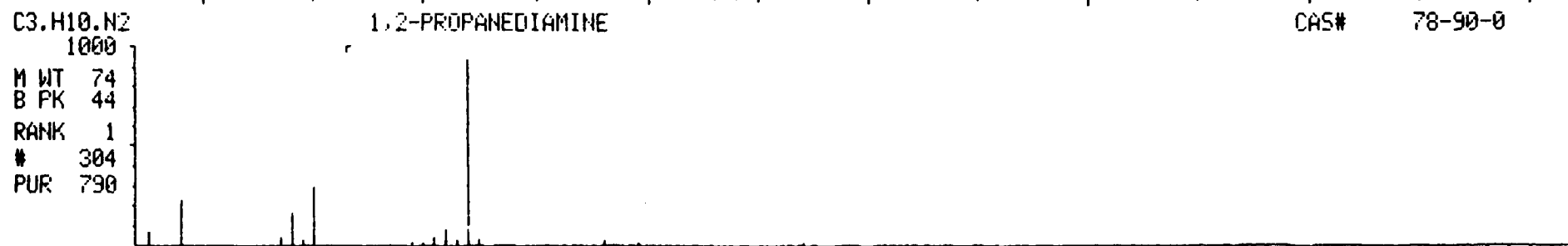
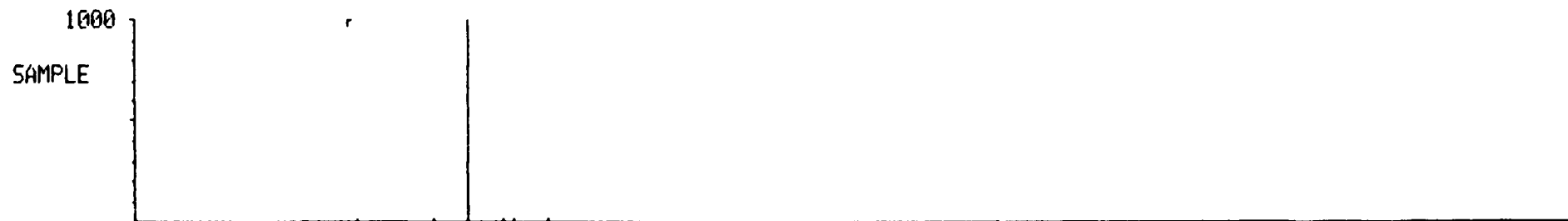
CALI: 007321 # 3

RIC: 286208.

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, 007321, 00A, EPA,

CONDS.: 1500A: 25ML 0L001 PURGE W/ 5PPB IS & 55

ENHANCED (S 15B 2N 0T)



M/Z 20 40 60 80 100 120 140

00010007

MID LIBRARY SEARCH (LIBRARYNB)

03/17/93 12:24:00 + 1:46

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A:25ML OL001 PURGE W/ 5PPB IS & SS

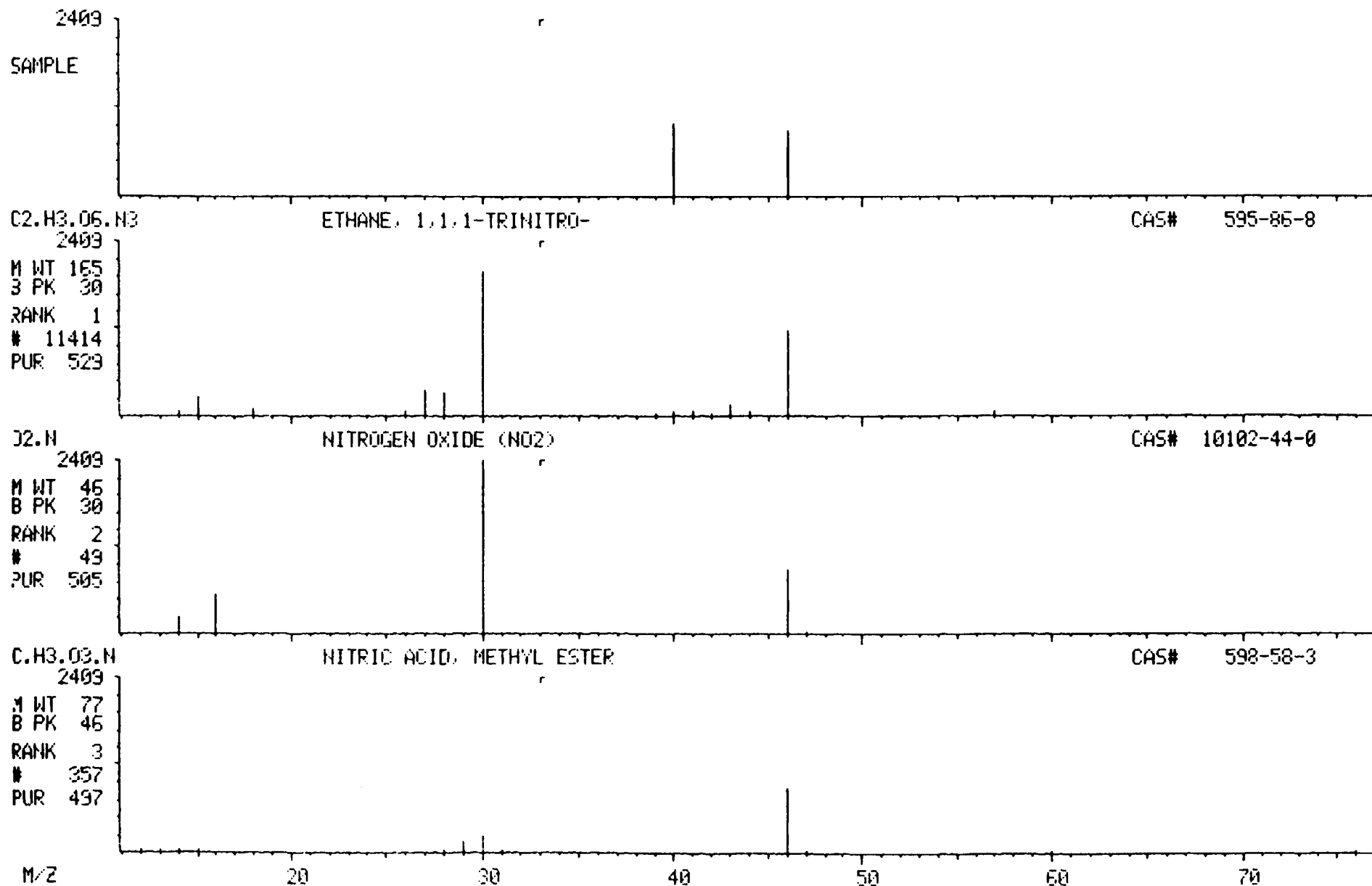
ENHANCED (S 15B 2N 0T)

DATA: UU7321 # 53

CALI: UU7321 # 3

BASE M/Z: 40

RIC: 104.



MID LIBRARY SEARCH (LIBRARYNE)

DATA: 007321 # 56

BASE M 2: 45

03/17/93 12:24:00 + 1:52

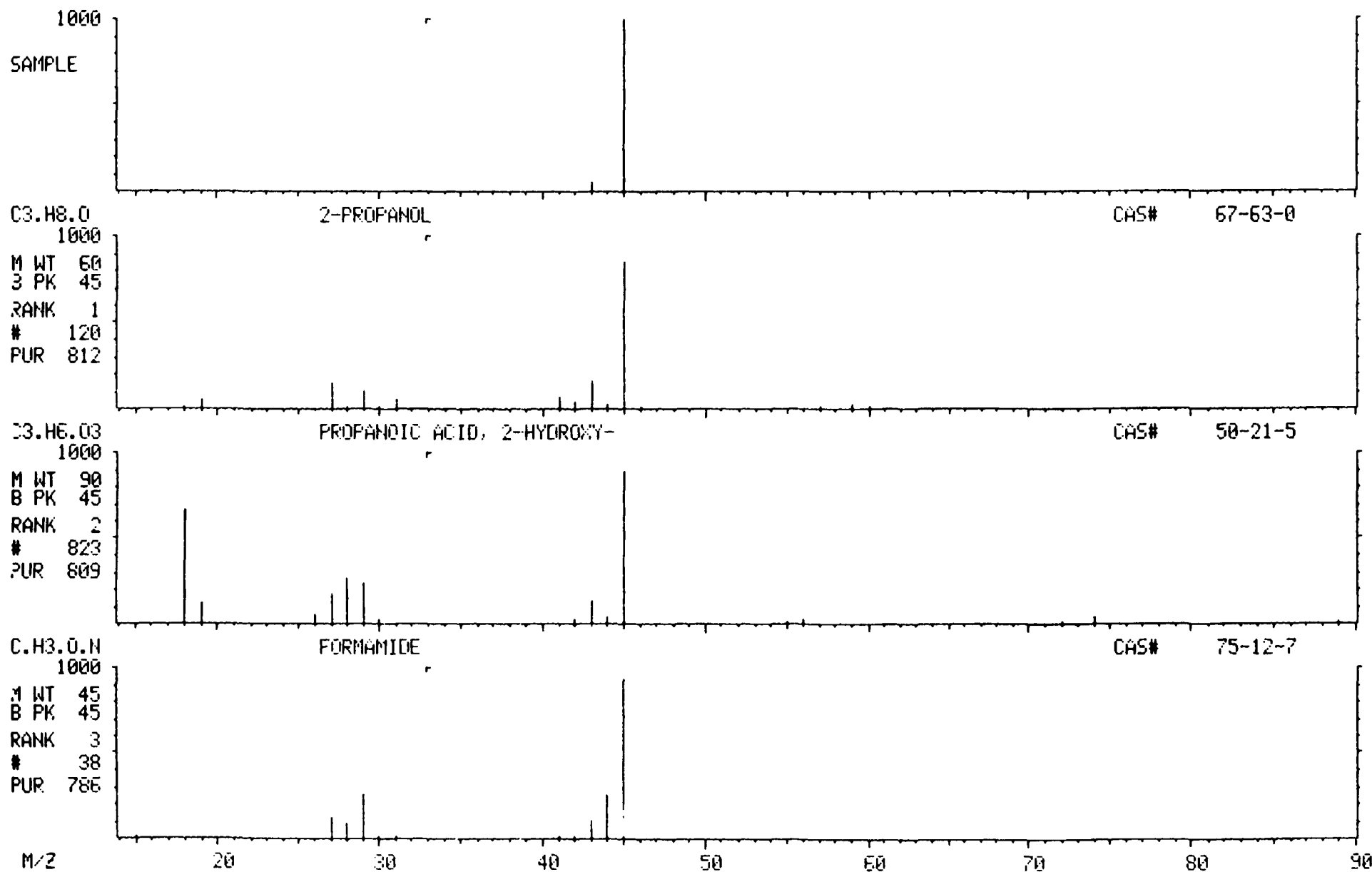
CALI: 007321 # 3

RIC: 128.

SAMPLE: CLP, 53554, MN01, MN030R, LOW, WATER, 007321, UOA, EPA.

CONDOS.: 1500A:25ML OL001 PURGE W/ SPFB 15 & 55

ENHANCED (S 15B 2N 0T)



0140

MID LIBRARY SEARCH (LIBRARYNE)

DATA: UU7321 # 59

BASE M/2: 40

03/17/93 12:24:00 + 1:58

CALI: UU7321 # 3

RIC: 67.

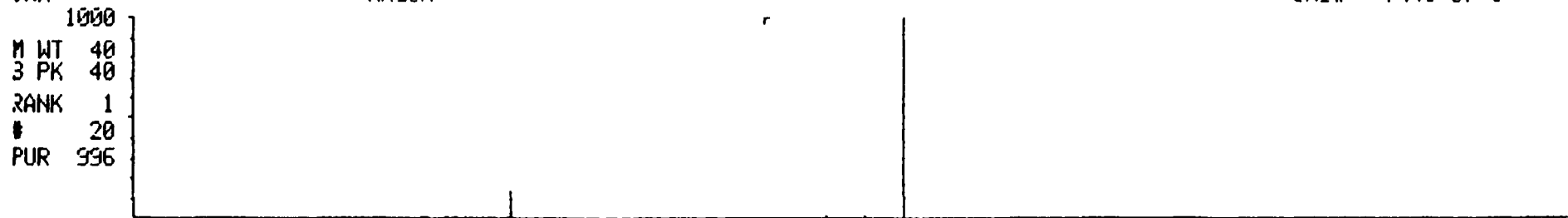
SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A:25ML OL001 PURGE W/ SPPB IS & SS

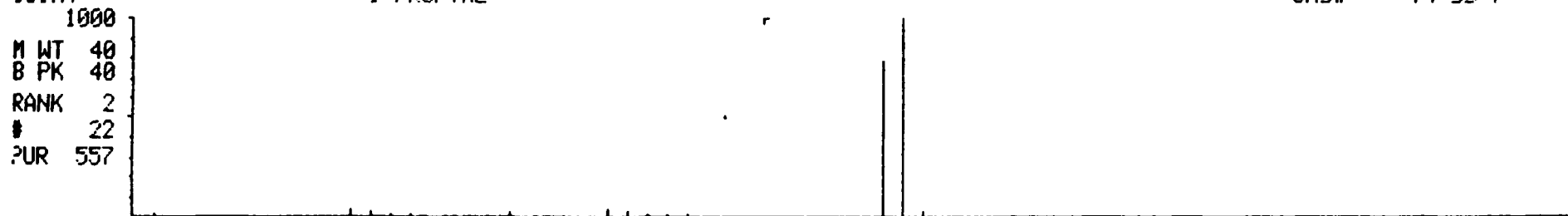
ENHANCED (S 15B 2N 0T)



.AR ARGON CAS# 7440-37-1



C3.H4 1-PROPYLE CAS# 74-99-7



C.H3.O.B BORON, CARBONYLTRIHYDRO-, (T-4)- CAS# 13205-44-2



M/Z

10

20

30

40

50

60

70

L0001577

MID LIBRARY SEARCH (LIBRARY.NB)

03/17/93 12:24:00 + 4:24

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: 1500A:25ML OLV01 PURGE W/ SPPB 15 & 55

ENHANCED (S 15B 2N 0T)

DATA: UU7321 # 132

CALI: UU7321 # 3

BASE M/Z: 44

RIC: 1696.



C3.H4.O.N2

ACETAMIDE, 2-CYANO-

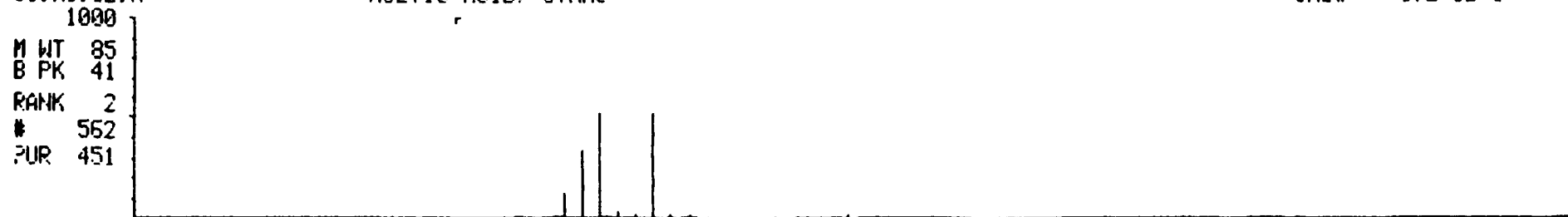
CAS# 107-91-5



C3.H3.O2.N

ACETIC ACID, CYANO-

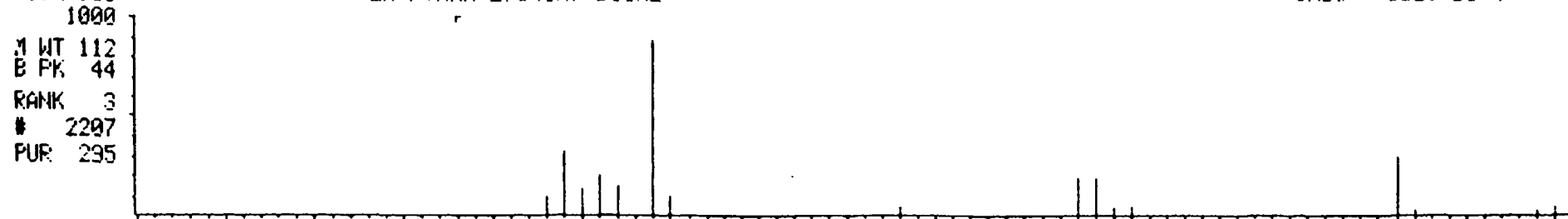
CAS# 372-09-8



C5.H4.O3

2H-PYRAN-2,5(3H)-DIONE

CAS# 5926-95-4



M/Z

20

30

40

50

60

70

80

90

MID LIBRARY SEARCH (LIBRARYNE)

DATA: 007321 # 137

BASE M 2: 44

03/17/93 12:24:00 + 4:34

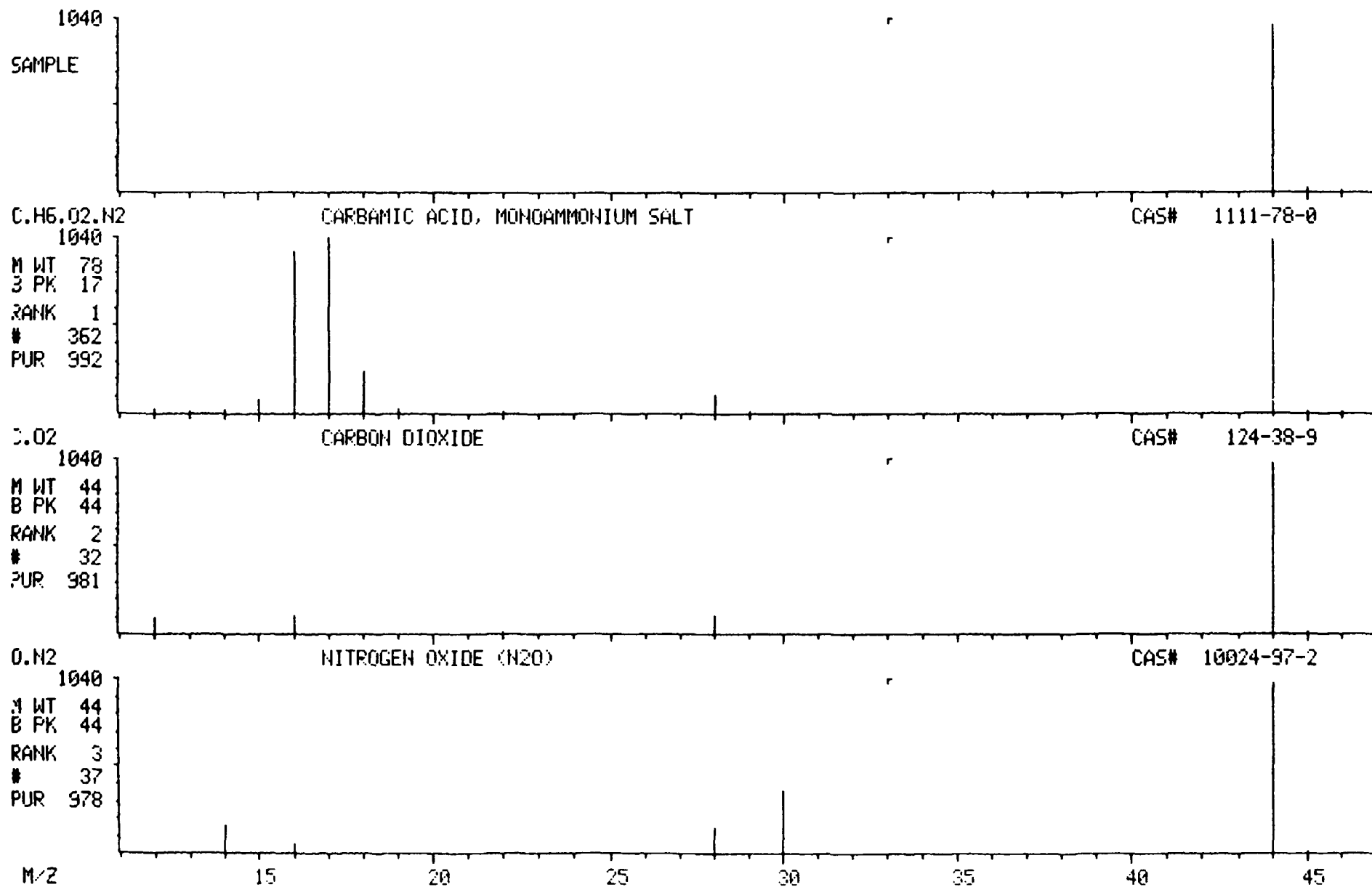
CALI: 007321 # 3

R10: 3032.

SAMPLE: CLP, 53554, MW01, MW030R, LOW, WATER, 007321, 00A, EPA,

CONDS.: 1500A:25ML 0LV01 PURGE W/ 5PPB 15 & 55

ENHANCED (S 15B 2N 0T)



MID LIBRARY SEARCH (LIBRARYNE)

DATA: UU7321 # 141

BASE M/Z: 44

03/17/93 12:24:00 + 4:42

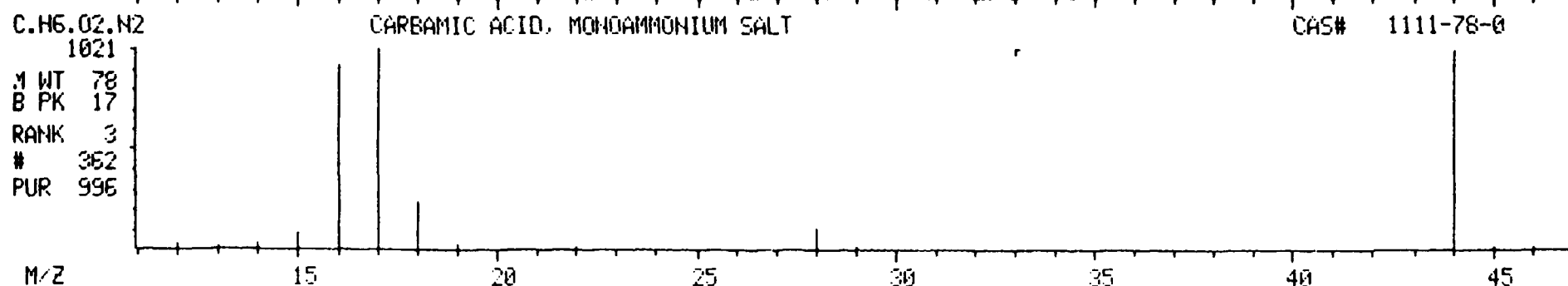
CALI: UU7321 # 3

RIC: 1656.

SAMPLE: CLP, 53554, MN01, MN030R, LOW, WATER, UU7321, UOA, EPA,

CONDS.: I500A:25ML OL001 PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2N 0T)



1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW04

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7327

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VV7327

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____ (uL) Soil Aliquot Volume: _____ (uL)

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

CAS NO. COMPOUND Q

74-87-3-----	Chloromethane	1	U
74-83-9-----	Bromomethane	1	U
75-01-4-----	Vinyl Chloride	1	U
75-00-3-----	Chloroethane	1	U
75-09-2-----	Methylene Chloride	1	U
67-64-1-----	Acetone	5	U
74-97-5-----	Bromochloromethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
540-59-0-----	1,2-Dichloroethene (total)	1	U
540-59-0-----	cis-1,2-Dichloroethene	28	E
67-66-3-----	Chloroform	1	U
107-06-2-----	1,2-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
75-27-4-----	Bromodichloromethane	1	U
78-87-5-----	1,2-Dichloropropane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
79-01-6-----	Trichloroethene	30	E
124-48-1-----	Dibromochloromethane	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
71-43-2-----	Benzene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
106-93-4-----	1,2-Dibromoethane	1	U
75-25-2-----	Bromoform	1	U
108-10-1-----	4-Methyl-2-Pentanone	5	U
591-78-6-----	2-Hexanone	5	U
127-18-4-----	Tetrachloroethene	300	E
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-88-3-----	Toluene	1	U
108-90-7-----	Chlorobenzene	1	U

0145

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET

MW04

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7327

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VV7327

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND		
100-41-4-----	Ethylbenzene	1	U
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	1	U
541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	1	U

TUT 004 1581

L000158E

0146

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

MW04

Lab Name: ITAS-KNOXVILLE Contract: _____
Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01
Matrix: (soil/water) WATER Lab Sample ID: VV7327
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7327
Level: (low/med) LOW Date Received: 03/08/93
% Moisture: not dec. _____ Date Analyzed: 03/18/93
GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0
Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 1582

0147

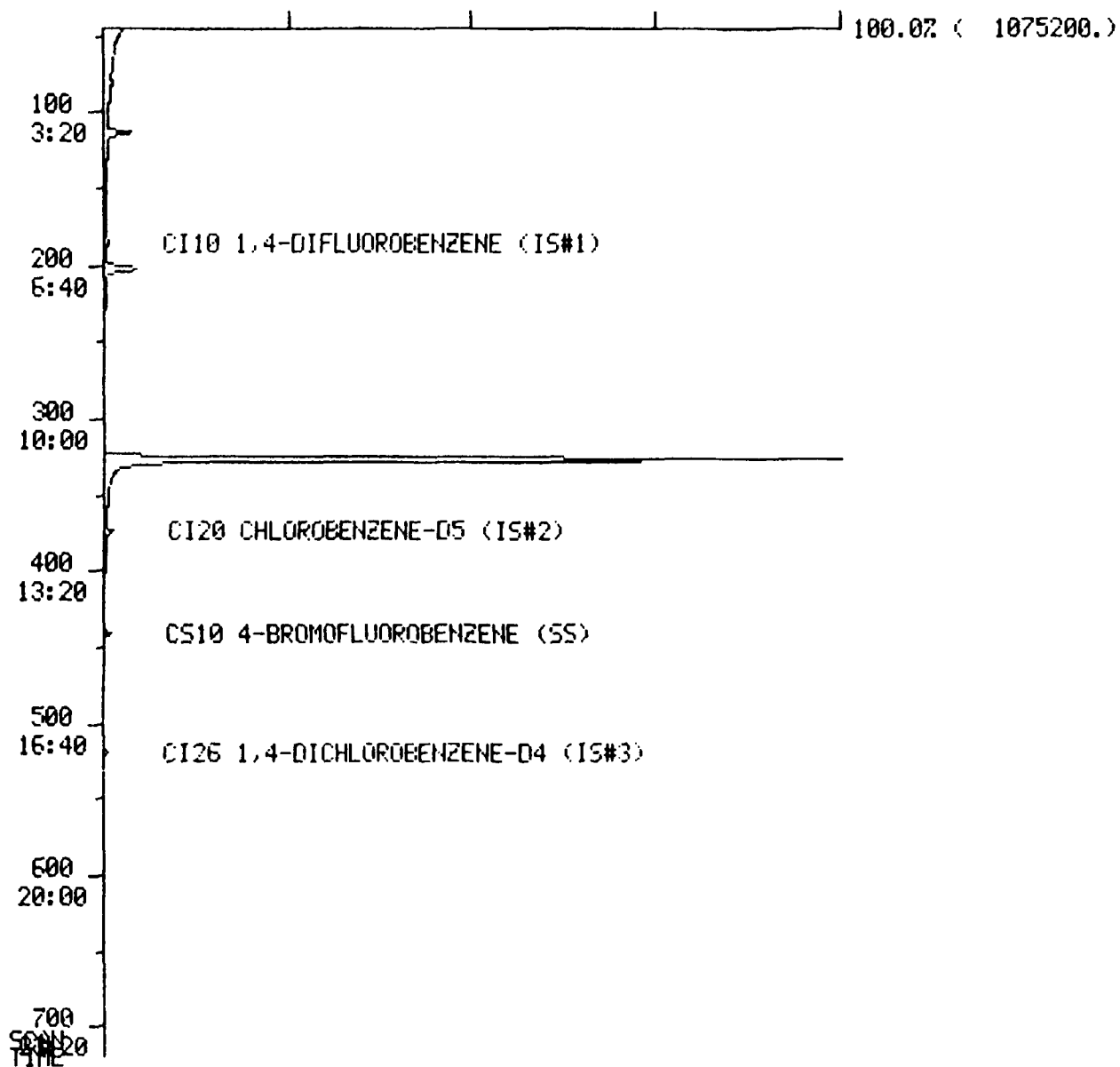
DATA FROM FILE: U07327

SCANS 45 TO 720 ACQUIRED: 03/18/93 10:03:00

CALI: CAL021992 #3

SAMPLE: CLP, 53554, MW01, MW04, LOW, WATER, U07327, U0A, EPA,

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ SPPB IS & SS



TUT 004 1583

L0001584

Data: VV7327.TI

3/18/93 10:03:00

Sample: CLP, 53554, MW01, MW04, LOW, WATER, VV7327, VOA, EPA,

Stand: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RUL

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUOROBENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CC10 CHLOROMETHANE **
6	CC15 BROMOMETHANE
7	CC20 VINYL CHLORIDE *
8	CC25 CHLOROETHANE
9	CC30 METHYLENE CHLORIDE
10	CC35 ACETONE
11	C110 2-BUTANONE
12	CC05 4-METHYL-2-PENTANONE
13	CC10 2-HEXANONE
14	CC37 BROMOCHLOROMETHANE
15	CC40 CARBON DISULFIDE
16	CC45 1,1-DICHLOROETHENE *
17	CC50 1,1-DICHLOROETHANE **
18	CC53 TRANS-1,2-DICHLOROETHENE
19	CC50 CHLOROFORM *
20	CC55 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 1,2-DIBROMOETHANE
32	C180 BROMOFORM **
33	CC20 TETRACHLOROETHENE
34	CC25 1,1,2,2-TETRACHLOROETHANE **
35	CC30 TOLUENE *
36	CC35 CHLOROBENZENE
37	CC40 ETHYL BENZENE *
38	CC45 STYRENE
39	CC50 M/P XYLENE
40	CC52 O-XYLENE
41	CC54 CIS-1,2-DICHLOROETHENE
42	CC53 1,3-DICHLOROBENZENE
43	CC54 1,4-DICHLOROBENZENE
44	CC55 1,2-DICHLOROBENZENE
45	CC61 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1584

L 000158

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	9668.	5.000 UG/L	1.32
2	117	373	12:26	2	1.000	A BB	6443.	5.000 UG/L	1.32
3	150	518	17:16	3	1.000	A BB	3569.	5.000 UG/L	1.32
4	95	439	14:38	1	2.386	A BB	5058.	4.281 UG/L	1.13
5	NOT FOUND								
6	NOT FOUND								
7	62	42	1:24	1	0.228	A BB	981.	0.740 UG/L	0.20
8	NOT FOUND								
9	84	72	2:24	1	0.391	A BB	342.	0.466 UG/L	0.12
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	65	2:10	1	0.353	A BB	434.	0.144 UG/L	0.04
16	96	60	2:00	1	0.326	A BB	52.	0.052 UG/L	0.01
17	NOT FOUND								
18	90	79	2:38	1	0.429	A BB	498.	0.514 UG/L	0.14
19	83	127	4:14	1	0.690	A BB	677.	0.345 UG/L	0.09
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	201	6:42	2	0.539	A BB	38884.	30.277 UG/L	8.00
27	NOT FOUND								
28	NOT FOUND								
29	78	153	5:06	2	0.410	A BB	540.	0.249 UG/L	0.07
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	326	10:52	2	0.874	A BB	453367	298.283 UG/L	78.79
34	NOT FOUND								
35	91	292	9:44	2	0.783	A BB	60.	0.026 UG/L	0.01
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	112	3:44	1	0.609	A BB	22090.	28.331 UG/L	7.48
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	4.28	5.00	0.523	0.611	0.86
5	1:18		0.212						
6	1:28		0.239						
7	1:20	1.05	0.217	1.05	0.74	5.00	0.101	0.685	0.15
8	1:32		0.250						
9	2:24	1.00	0.391	1.00	0.47	5.00	0.035	0.379	0.09

	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	1.00	0.353	1.00	0.14	5.00	0.045	1.558	0.03
16	2:00	1.00	0.326	1.00	0.05	5.00	0.005	0.513	0.01
17	3:02		0.495						
18	2:36	1.01	0.424	1.01	0.51	5.00	0.052	0.501	0.10
19	4:14	1.00	0.690	1.00	0.35	5.00	0.070	1.015	0.07
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:02		0.646						
24	7:14		0.582						
25	9:06		0.732						
26	6:42	1.00	0.539	1.00	30.28	5.00	6.035	0.997	6.06
27	11:22		0.914						
28	10:40		0.858						
29	5:06	1.00	0.410	1.00	0.25	5.00	0.084	1.685	0.05
30	10:22		0.834						
31	11:28		0.922						
32	13:58		0.809						
33	10:50	1.00	0.871	1.00	298.28	5.00	70.366	1.180	59.66
34	15:02		1.209						
35	9:44	1.00	0.783	1.00	0.03	5.00	0.009	1.773	0.01
36	12:28		1.003						
37	12:46		1.027						
38	13:46		1.107						
39	13:02		1.048						
40	13:42		1.102						
41	3:44	1.00	0.609	1.00	28.33	5.00	2.285	0.403	5.67
42	15:30		0.956						
43	16:42		0.967						
44	17:18		1.002						
45	18:40		1.081						

3/18/93 10:03:22
Acquisition started

0151

3/18/93 10:03:26
Acquire Run 0: VV7327 Starting
3/18/93 10:03:00 + 0:00 Free sectors: 12176 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW04, LOW, WATER, VV7327, VOA, EPA,
Ions.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

GC Desc.: RR Elapsed time: 0.0 Min
Seq. Temp Rate Time (minutes)
(DegC) (C/min) period total Injector A : 150 Deg C
1 35-35 - 6.6 6.6 GC oven : 36 Deg C
2 35-150 8.0 14.3 20.9 Transfer-line: 215 Deg C
3 150-150 - 3.0 23.9 Ion source : 180 Deg C
Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON
Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON
Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D: CAL021992

Interface number 0
Instrument type G
Full scale mass 1177 u
Zero scale mass 1 u
Intensity/ion 2
Peak width 1000. mmu
Offset at low mass 0 mmu
Offset at high mass 0 mmu
Voltage settling time(ms) 20

TUT 004 1587

L000158.

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\times 10^{-7}$
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.361 Torr

3/18/93 10:32:00

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.8	1440.0	0.1	8222.	11.6

METHOD: CLP 3'90 DLV01 25ML PURGE

DATAFILE: VV7327
STANDARD: WS0318
TUNEFILE: WBF0318

ANALYSIS TIME: 03/18/93 10:03
ANALYSIS TIME: 03/18/93 8:29
ANALYSIS TIME: 03/18/93 8:20

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
0110 1,4-DIFLUOROBENZEN	9668.	11210.	86%	60% - 140%	
0120 CHLOROBENZENE-D5 (	6443.	7723.	83%	60% - 140%	
0126 1,4-DICHLOROBENZEN	3569.	5477.	65%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
0110 1,4-DIFLUOROBENZEN	184	184	0	+/- 20 SECS	
0120 CHLOROBENZENE-D5 (	373	373	0	+/- 20 SECS	
0126 1,4-DICHLOROBENZEN	518	518	0	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
0110 4-BROMOFLUOROBENZE	4.3	5.0	86	80% - 120%	
0115 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
0120 VINYL CHLORIDE *	0.7	50.0	1	86% - 115%	failed

TUT 004 1589

L 0001590

STANDARDS				PLUS UNKNOWN				LIST NAMES	
ROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	7	1	108	V11S/V1UNKS1	
3	3	1	0	16	5	1	52	V11S/V1UNKS2	
3	3	1	0	15	4	1	0	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 9 FOUND

COMPOUND		SEARCH						SAT		CHRO			
NO	LIB ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS	
1	V1	1	-184	184	184	1	981		114	184		1	
2	V1	2	-373	373	373	1	971		117	373		1	
3	V1	3	-518	518					150	518		1	
4	V1	4	-439	439	439	1	953		95	439		1	
5	V1	5	-38	39					50				
6	V1	6	-44	45					94				
7	V1	7	-39	40	42	2	726		62	42		1	
8	V1	8	-46	47					64				
9	V1	9	-72	73	72	-1	864		84	72		1	
10	V1	10	-62	63					43				
11	V1	11	-115	116					43				
12	V1	12	-289	289					43				
13	V1	13	-341	341					43				
14	V1	14	-122	123					128				
15	V1	15	-65	66					76	65		1	
16	V1	16	-60	61					96	60		1	
17	V1	17	-91	92					63				
18	V1	18	-78	79					96	79		1	
19	V1	19	-127	128	127	-1	818		83	127		1	
20	V1	20	-155	156					62				
21	V1	21	-135	135					97				
22	V1	22	-143	143					117				
23	V1	23	-242	242					83				
24	V1	24	-218	218					63				
25	V1	25	-274	274					75				
26	V1	26	-201	201	201	1	974		95	201		1	
27	V1	27	-341	341					129				
28	V1	28	-321	321					97				
29	V1	29	-153	153					78	153		1	
30	V1	30	-311	311					75				
31	V1	31	-344	344					107				
32	V1	32	-420	420					173				
33	V1	33	-325	325	326	1	966		166	326		1	
34	V1	34	-451	451					83				
35	V1	35	-293	293					91	292		1	
36	V1	36	-375	375					112				
37	V1	37	-384	384					91				
38	V1	38	-413	413					104				
39	V1	39	-391	391					106				
40	V1	40	-412	412					106				
41	V1	41	-112	112	112	1	915		96	112		1	
42	V1	42	-496	496					146				
43	V1	43	-501	501					146				
44	V1	44	-519	519					146				
45	V1	45	-561	561					75				

L0001591

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0155

DATA FILE: VV7327

ACQUIRED: 03/18/93 10:03:00

ANALYST: RJL

CONDITIONS: 1500A:25ML DLV01 AMBIENT PURGE W/ 5PPB IS & SS

SUBMITTED BY: ITEK

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
0110 1,4-DIFLUOROBENZENE (IS#1)	184	0 5.000	981	0
0120 CHLOROBENZENE-D5 (IS#2)	373	0 5.000	971	0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	518	0 5.000	0	0
0310 4-BROMOFLUOROBENZENE (SS)	439	0 4.281	953	0
0150 TRICHLOROETHENE	201	0 30.277	974	0
0220 TETRACHLOROETHENE	326	1 298.285	966	0
0054 CIS-1,2-DICHLOROETHENE	112	0 28.331	915	0

TUT 004 1591

L 0001592

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7327 #201

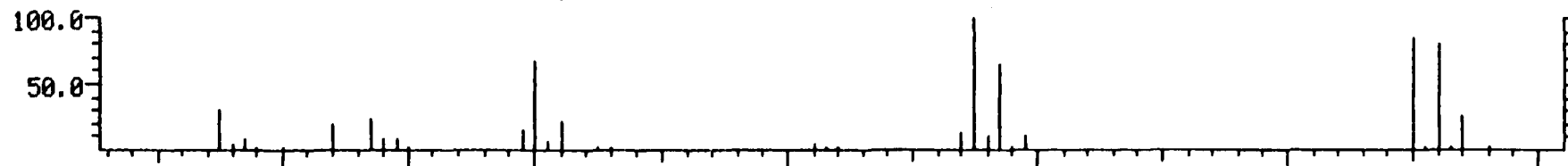
BASE M/Z: 95

RIC: 49856.

03/18/93 10:03

SAMPLE: CLP, 53554, MW01, MW04, LON, WATER, UU7327, UOA, EPA,

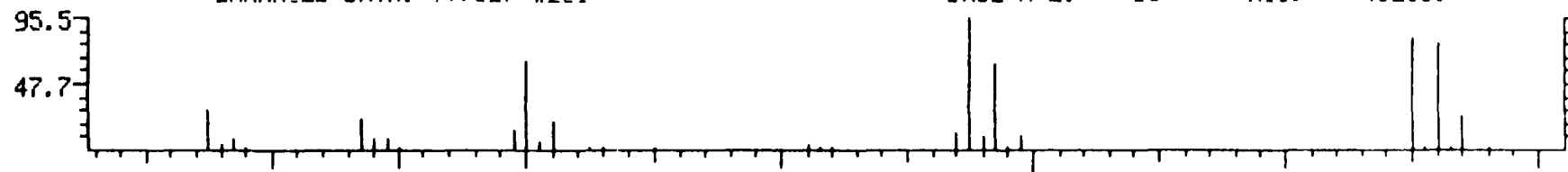
CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7327 #201

BASE M/Z: 95

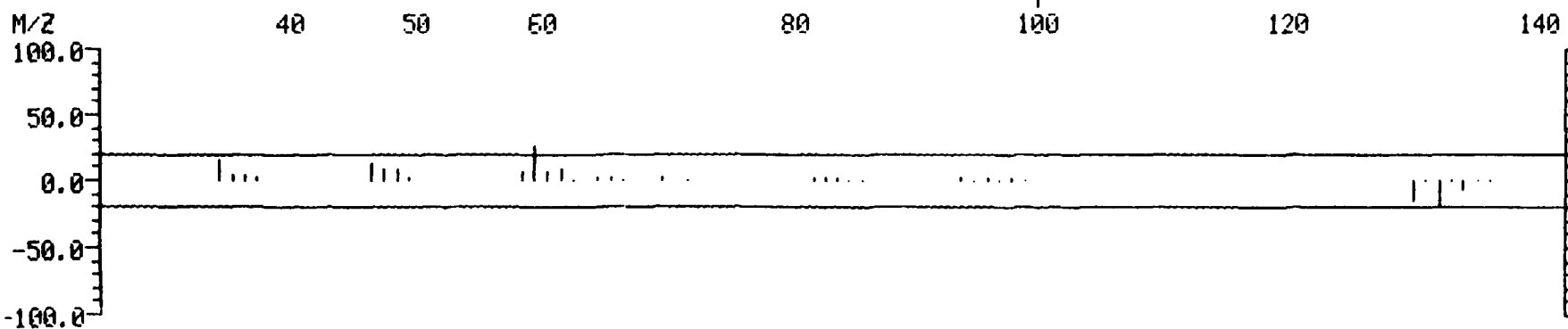
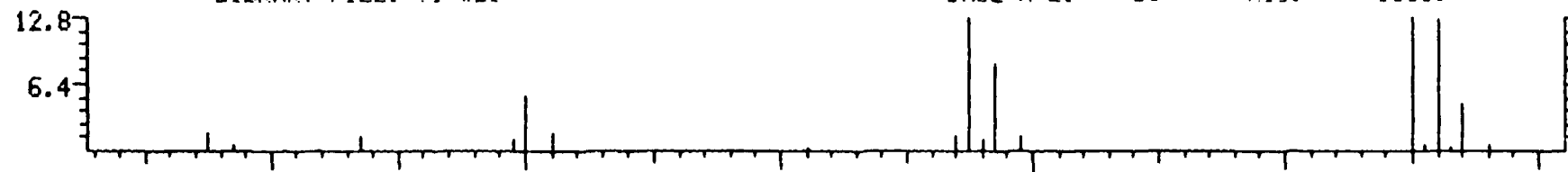
RIC: 46208.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5335.



7316.

7464.

1000.

OUT

L 0001593

TUT 004 1592

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7327 #326

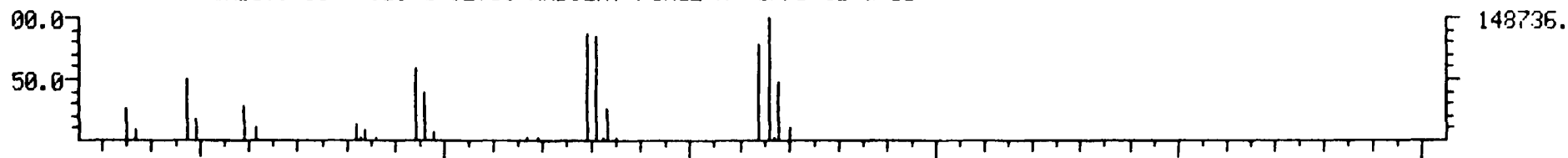
BASE M/Z: 166

RIC: 1075200.

03/18/93 10:03

SAMPLE: CLP,53554,MW01,MW04,LOW,WATER,UU7327,VOA,EPA,

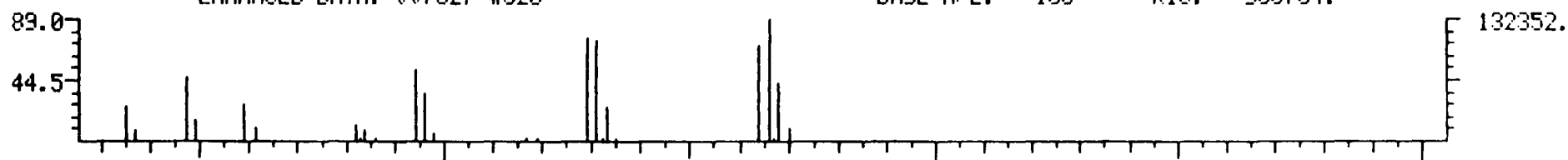
CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7327 #326

BASE M/Z: 166

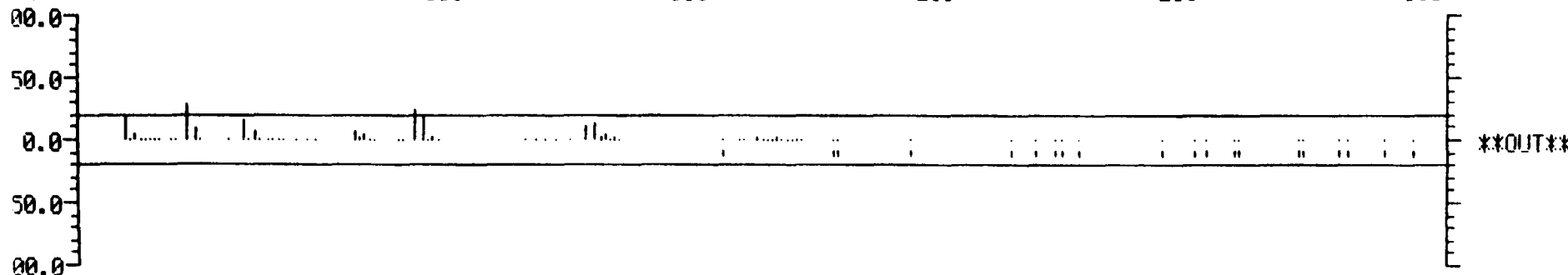
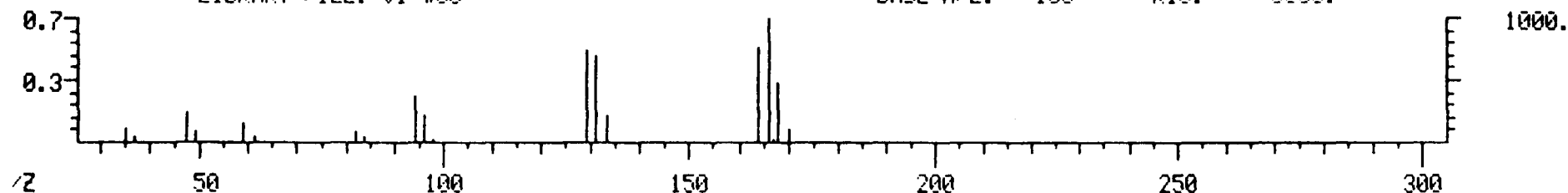
RIC: 968704.



LIBRARY FILE: U1 #33

BASE M/Z: 166

RIC: 5560.



OUT

L 0001594

TUT 004 1593

TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UU7327 #112

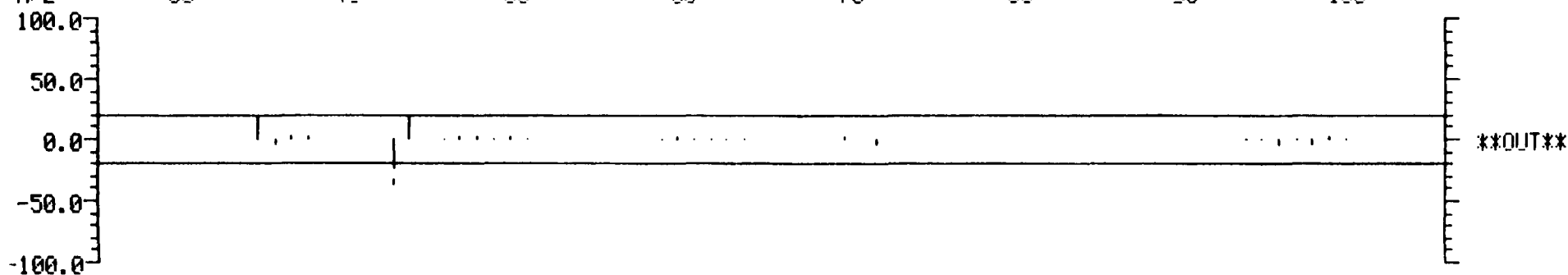
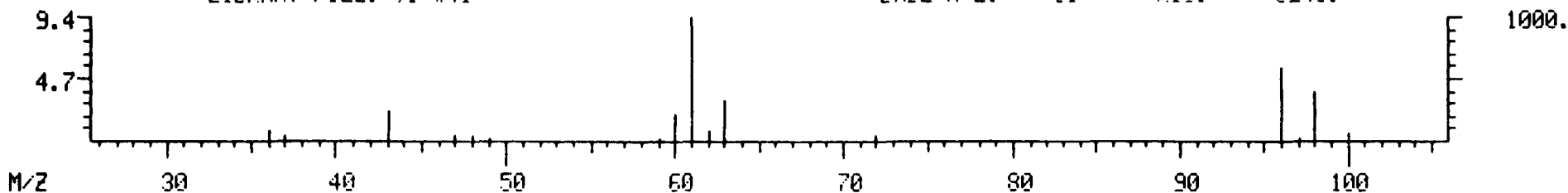
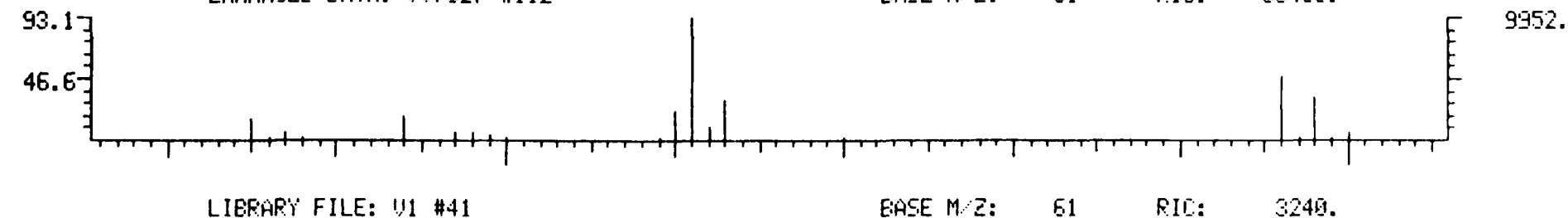
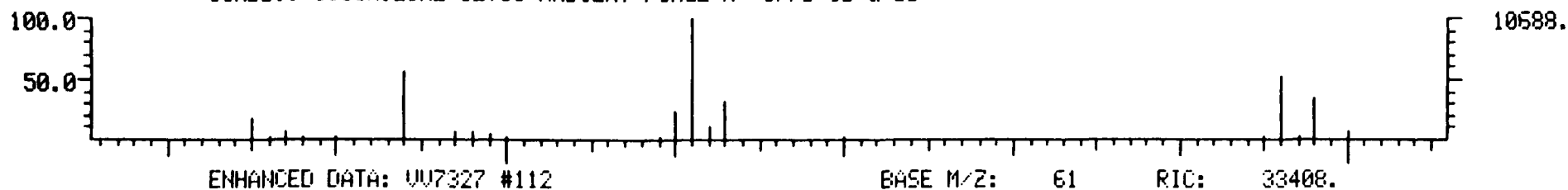
BASE M/Z: 61

RIC: 40000.

03/18/93 10:03

SAMPLE: CLP, 53554, MW01, MW04, LOW, WATER, UU7327, UOA, EPA,

CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



Data: VV7327.TI

03/18/93 10:03:00

Sample: CLP, 53554, MW01, MW04, LOW, WATER, VV7327, VOA, EPA,

Conds.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RJL

Acct. No.: 53554

AMOUNT=HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	7440-37-1	ARGON
5	124-38-9	CARBON DIOXIDE

> FALSE

HITS,

~~SEE CHEMICALS ROOM~~2JL
3/22/93

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	184	6:08	1	1.000	A BB	6090.*	50.000 UG/L	26.81
2	RIC	373	12:26	2	1.000	A BB	10108.*	50.000 UG/L	26.81
3	RIC	518	17:16	3	1.000	A BB	7609.*	50.000 UG/L	26.81
4	RIC	137	4:34	1	0.745	A VD	2656.*	21.807	11.69
5	RIC	141	4:42	1	0.766	A BV	1790.*	14.694	7.88

TUT 004 1595

L 0001596

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I.S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
12	3	15

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
14	0	0	0	11	0	11	3

TIC PROCESSING:

NO.	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	36	437	437	161	ACETAMIDE, 2,2,2-TRICHLORO-
2	137	765	996	40	ARGON
3	141	961	999	44	CARBON DIOXIDE

MID LIBRARY SEARCH (LIBRARYNE)

DATA: UU7327 # 36

BASE M/Z: 44

03/18/93 10:03:00 + 1:12

CALI: CAL021992 # 3

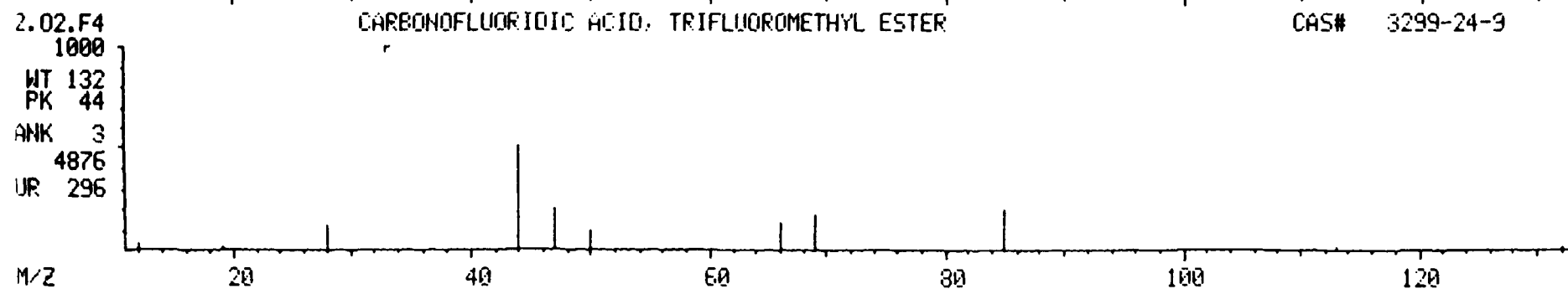
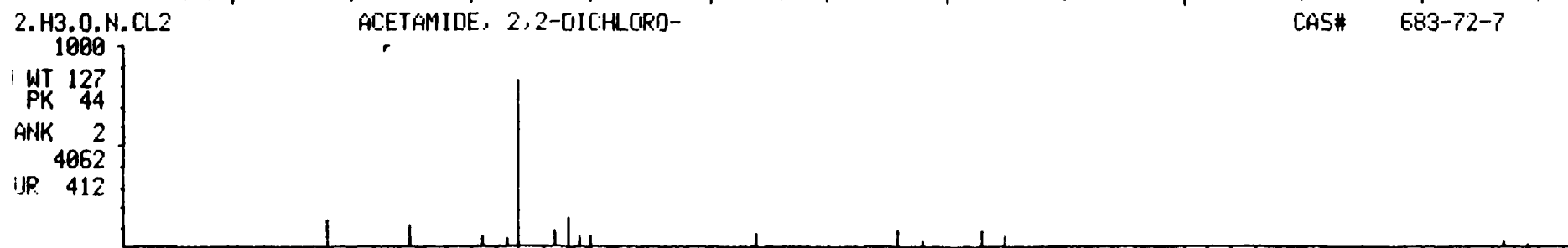
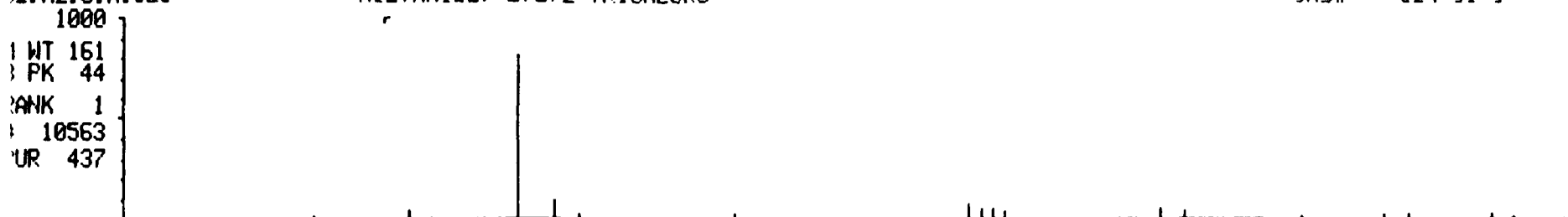
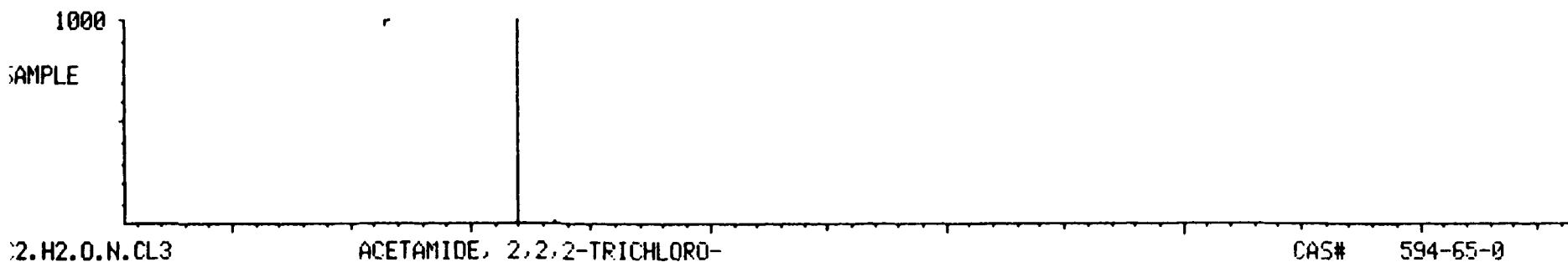
RIC: 296448.

SAMPLE: CLP, 53554, MW01, MW04, LOW WATER, UU7327, UOA, EPA.

CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2N 0T)

L0001590



MID LIBRARY SEARCH (LIBRARYNB)

DATA: 007327 # 137

BASE M 2: 40

03/18/93 10:03:00 + 4:34

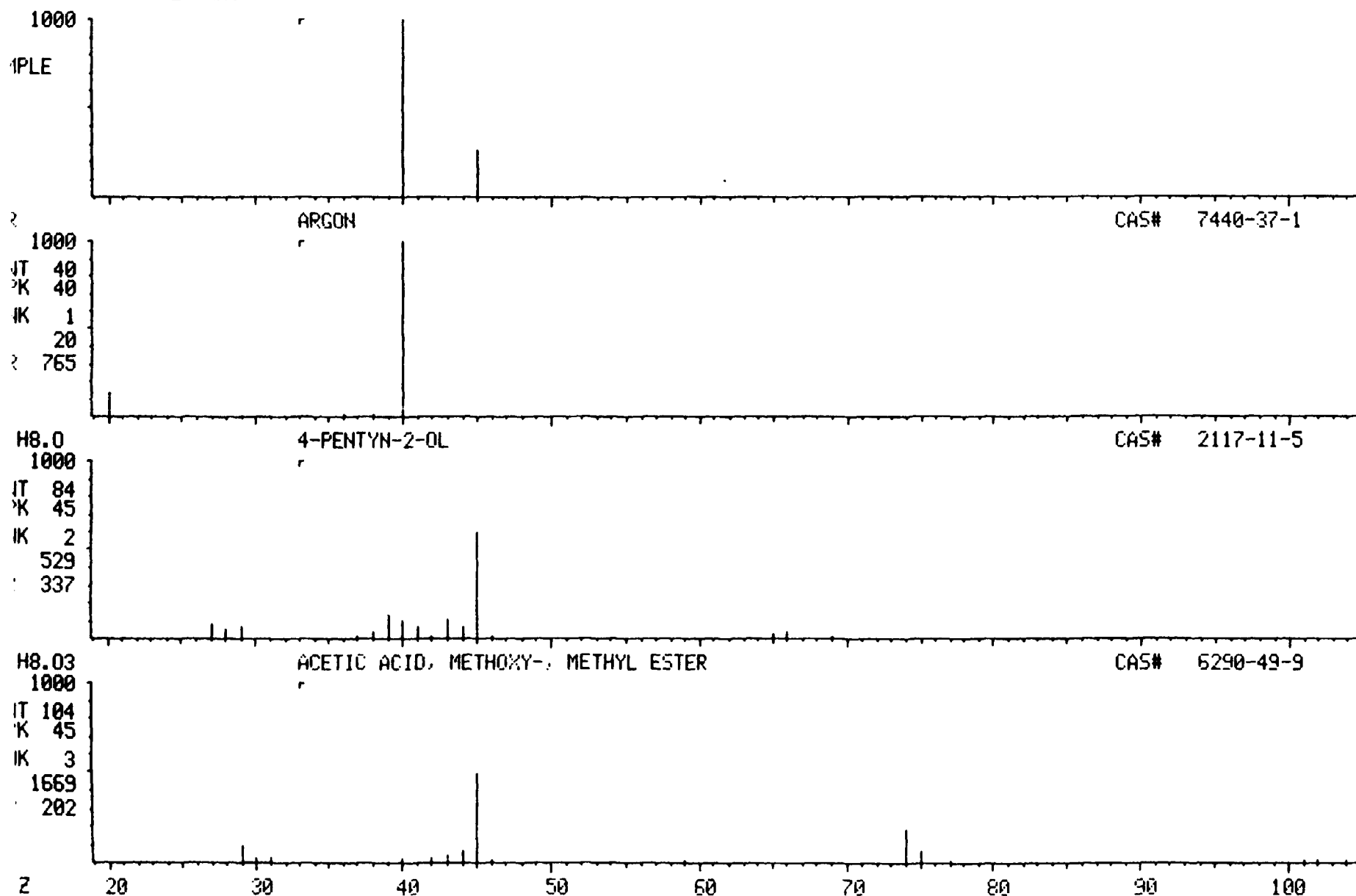
CALI: CAL021992 # 3

PIC: 109.

SAMPLE: CLP, 53554, MW01, MW04, LOW, WATER, 007327, UOA, EPA,

CONDS.: 1500A:25ML OL001 AMBIENT PURGE W/ 5PPB 15 & 55

ENHANCED (S 15B 2H 0T)



L0001595

MID LIBRARY SEARCH (LIBRARYNB)

03/18/93 10:03:00 + 4:42

DATA: UU7327 # 141

CALI: CAL021992 # 3

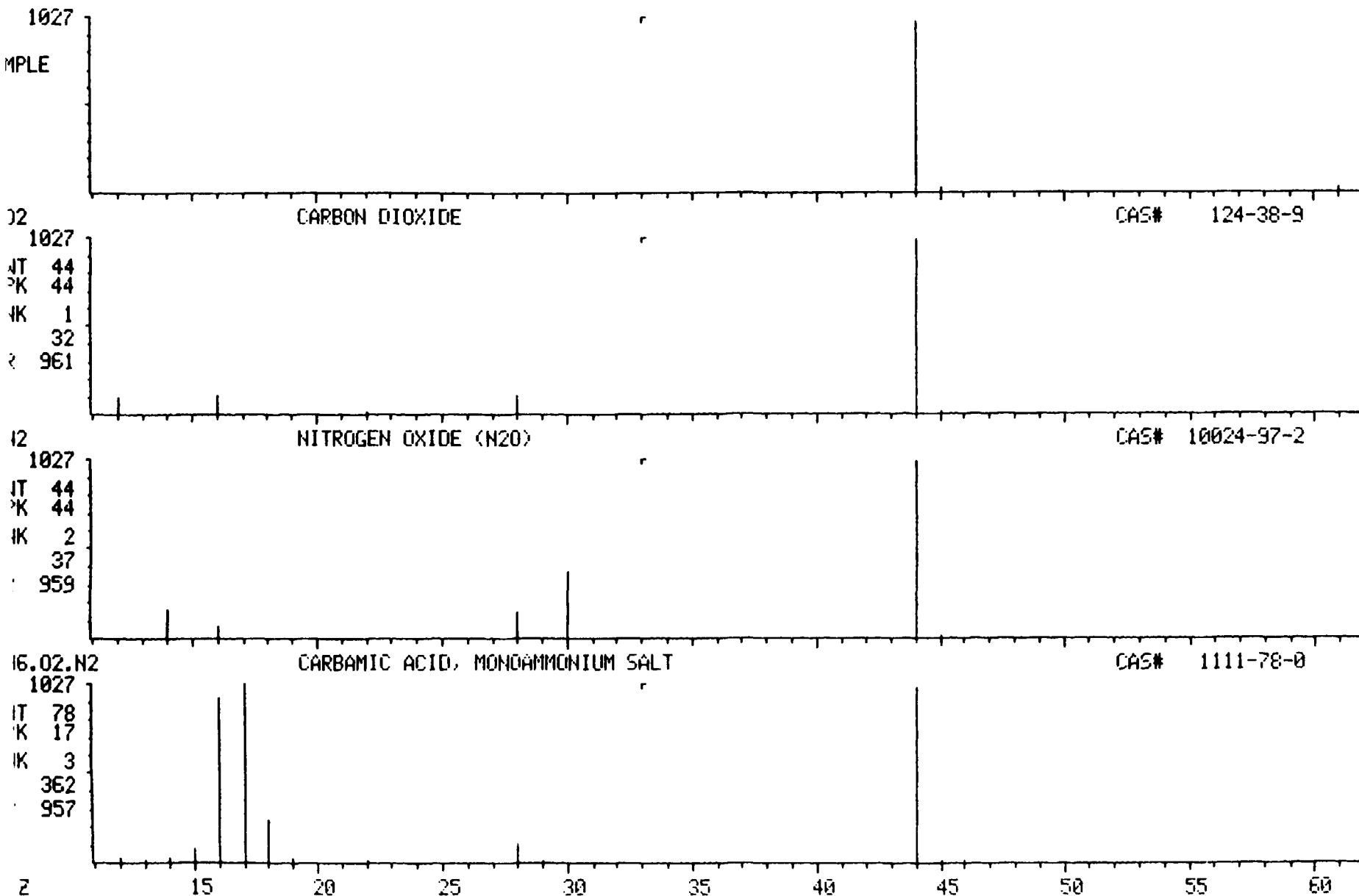
BASE M/Z: 44

RIC: 1160.

SAMPLE: CLP,53554,MW01,MW04,LOW,WATER,UU7327,UOA,EPA,

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2H 0T)



00010007

1X
ORGANICS ANALYSIS DATA SHEET

0164
SAMPLE NO.

MW04DL

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7327

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7327D

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 13.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	-----Chloromethane	13	U
74-83-9	-----Bromomethane	13	U
75-01-4	-----Vinyl Chloride	13	U
75-00-3	-----Chloroethane	13	U
75-09-2	-----Methylene Chloride	24	BJ
67-64-1	-----Acetone	65	U
74-97-5	-----Bromochloromethane	13	U
75-15-0	-----Carbon Disulfide	13	U
75-35-4	-----1,1-Dichloroethene	13	U
75-34-3	-----1,1-Dichloroethane	13	U
540-59-0	-----trans-1,2-Dichloroethene	13	U
540-59-0	-----cis-1,2-Dichloroethene	30	DJ
67-66-3	-----Chloroform	13	U
107-06-2	-----1,2-Dichloroethane	13	U
78-93-3	-----2-Butanone	65	U
71-55-6	-----1,1,1-Trichloroethane	13	U
56-23-5	-----Carbon Tetrachloride	13	U
75-27-4	-----Bromodichloromethane	13	U
78-87-5	-----1,2-Dichloropropane	13	U
10061-01-5	-----cis-1,3-Dichloropropene	13	U
79-01-6	-----Trichloroethene	29	DJ
124-48-1	-----Dibromochloromethane	13	U
79-00-5	-----1,1,2-Trichloroethane	13	U
71-43-2	-----Benzene	13	U
10061-02-6	-----trans-1,3-Dichloropropene	13	U
106-93-4	-----1,2-Dibromoethane	13	U
75-25-2	-----Bromoform	13	U
108-10-1	-----4-Methyl-2-Pentanone	65	U
591-78-6	-----2-Hexanone	65	U
127-18-4	-----Tetrachloroethene	250	D
79-34-5	-----1,1,2,2-Tetrachloroethane	13	U
108-88-3	-----Toluene	13	U
108-90-7	-----Chlorobenzene	13	U

Boyle

TUT 004 1600

1X
ORGANICS ANALYSIS DATA SHEET

0165
SAMPLE NO.

MW04DL

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7327

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7327D

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 13.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>		Q
100-41-4-----	Ethylbenzene_____	13	U	
100-42-5-----	Styrene_____	13	U	
1330-20-7-----	Xylene (total)_____	13	U	
541-73-1-----	1,3-Dichlorobenzene_____	13	U	
106-46-7-----	1,4-Dichlorobenzene_____	13	U	
95-50-1-----	1,2-Dichlorobenzene_____	13	U	
96-12-8-----	1,2-Dibromo-3-Chloropropane_____	13	U	

TUT 004 1601

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

MW04DL

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER

Lab Sample ID: VV7327

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: VV7327D

Level: (low/med) LOW

Date Received: 03/08/93

% Moisture: not dec. _____

Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm)

Dilution Factor: 13.3

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

Number TICs found: 0

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

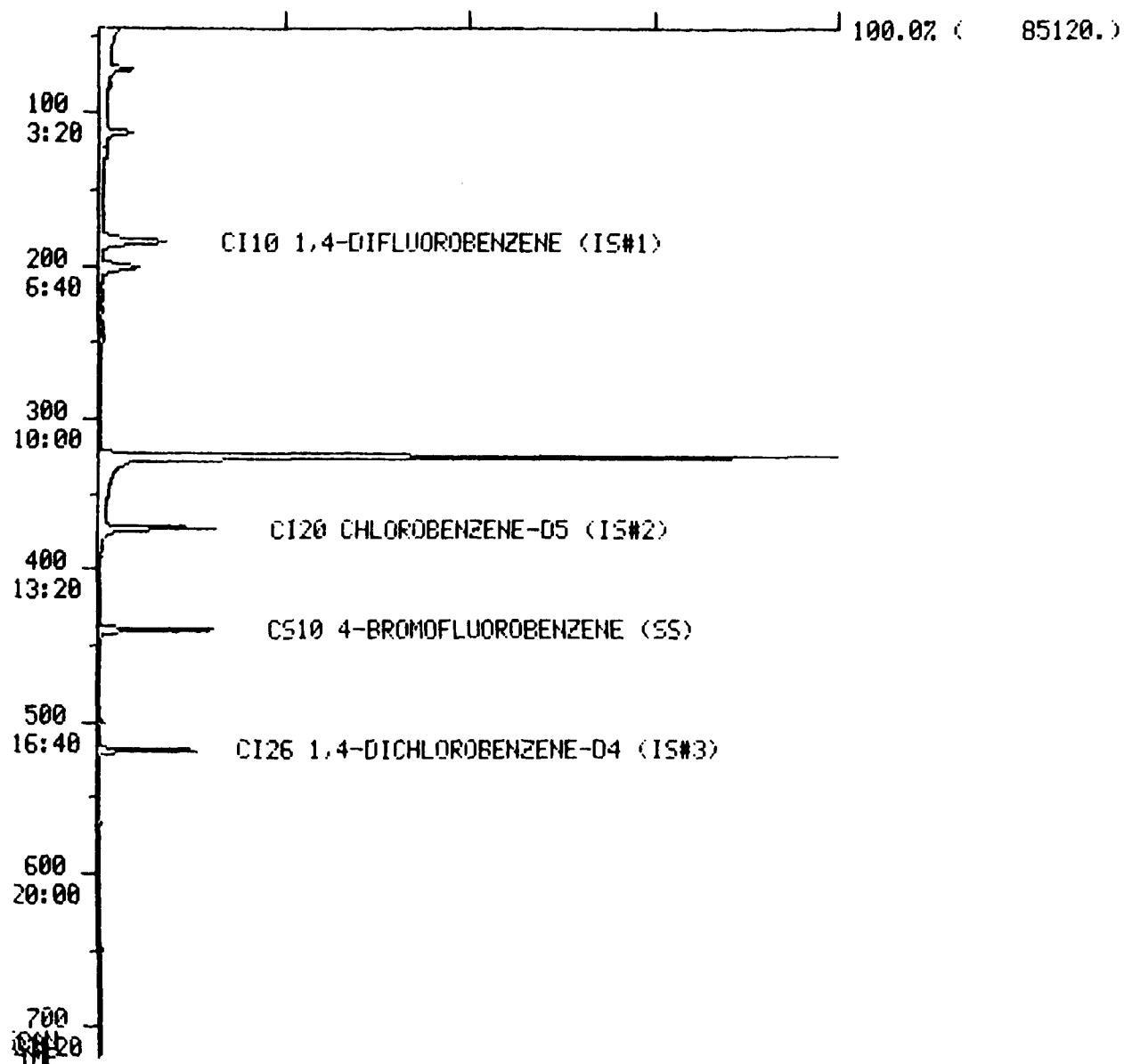
TUT 004 1602

DATA FROM FILE: UU7327D SCANS 45 TO 720 ACQUIRED: 03/18/93 11:24:00

CALI: UU7327D #3

SAMPLE: CLP_53554, MW01, MW04DL, LOW, WATER, UU7327, UOA, EPA,

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB 15 & 55



TUT 004 1603

L0001604

Data: VV7327D.T1

12/18/93 11:24:00

Sample: CLP_53554, MW01, MW04DL, LOW, WATER, VV7327, VOA, EPA,

Conds.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 7.5ML->100ML:1->13.3 Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RJL

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	0110 1,4-DIFLUOROBENZENE (IS#1)
2	0120 CHLOROBENZENE-D5 (IS#2)
3	0134 1,4-DICHLOROBENZENE-D4 (IS#3)
4	0510 4-BROMOFLUOROBENZENE (SS)
5	0010 CHLOROMETHANE **
6	0015 BROMOMETHANE
7	0020 VINYL CHLORIDE *
8	0025 CHLOROETHANE
9	0030 METHYLENE CHLORIDE
10	0035 ACETONE
11	0110 2-BUTANONE
12	0205 4-METHYL-2-PENTANONE
13	0210 2-HEXANONE
14	0037 BROMOCHLOROMETHANE
15	0040 CARBON DISULFIDE
16	0045 1,1-DICHLOROETHENE *
17	0050 1,1-DICHLOROETHANE **
18	0052 TRANS-1,2-DICHLOROETHENE
19	0060 CHLOROFORM *
20	0065 1,2-DICHLOROETHANE
21	0115 1,1,1-TRICHLOROETHANE
22	0120 CARBON TETRACHLORIDE
23	0130 BROMODICHLOROMETHANE
24	0140 1,2-DICHLOROPROPANE *
25	0143 CIS-1,3-DICHLOROPROPENE
26	0150 TRICHLOROETHENE
27	0155 DIDROMOCHLOROMETHANE
28	0160 1,1,2-TRICHLOROETHANE
29	0165 BENZENE
30	0172 TRANS-1,3-DICHLOROPROPENE
31	0176 1,2-DIBROMOETHANE
32	0180 BROMOFORM **
33	0220 TETRACHLOROETHENE
34	0225 1,1,2,2-TETRACHLOROETHANE **
35	0230 TOLUENE *
36	0235 CHLOROBENZENE
37	0240 ETHYL BENZENE *
38	0245 STYRENE
39	0250 M/P XYLENE
40	0252 O-XYLENE
41	0054 CIS-1,2-DICHLOROETHENE
42	0253 1,3-DICHLOROBENZENE
43	0254 1,4-DICHLOROBENZENE
44	0255 1,2-DICHLOROBENZENE
45	0261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1604

L 0001603

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	182	6:04	1	1.000	A BB	10855.	5.000 UG/L	10.52
2	117	372	12:24	2	1.000	A BV	7616.	5.000 UG/L	10.52
3	150	517	17:14	3	1.000	A BB	4854.	5.000 UG/L	10.52
4	95	438	14:36	1	2.407	A BB	6553.	4.940 UG/L	10.40
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	71	2:22	1	0.390	A BB	1477.	1.794 UG/L	3.78
10	43	61	2:02	1	0.335	A BB	83.	2.327 UG/L	4.90
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	83	127	4:14	1	0.698	A BB	131.	0.059 UG/L	0.13
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	200	6:40	2	0.538	A BB	3311.	2.181 UG/L	4.59
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	324	10:48	2	0.871	A BB	34160.	19.014 UG/L	40.01
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	86	111	3:42	1	0.610	A BB	2008.	2.294 UG/L	4.83
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	0.99	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.01	4.94	5.00	0.604	0.611	0.99
5	1:18		0.212						
6	1:28		0.239						
7	1:20		0.217						
8	1:32		0.250						
9	2:24	0.99	0.391	1.00	1.79	5.00	0.136	0.379	0.36

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R.Fac	R.Fac(L)	Ratio
10	2:04	0.98	0.337	0.99	2.33	25.00	0.002	0.016	0.09
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10		0.353						
16	2:00		0.326						
17	3:02		0.495						
18	2:36		0.424						
19	4:14	1.00	0.690	1.01	0.06	5.00	0.012	1.015	0.01
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:02		0.646						
24	7:14		0.582						
25	9:06		0.732						
26	6:42	1.00	0.539	1.00	2.18	5.00	0.435	0.997	0.44
27	11:22		0.914						
28	10:40		0.858						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	13:58		0.809						
33	10:50	1.00	0.871	1.00	19.01	5.00	4.485	1.180	3.80
34	15:02		1.209						
35	9:44		0.783						
36	12:28		1.003						
37	12:46		1.027						
38	13:46		1.107						
39	13:02		1.048						
40	13:42		1.102						
41	3:44	0.99	0.609	1.00	2.29	5.00	0.185	0.403	0.46
42	16:30		0.956						
43	16:42		0.967						
44	17:18		1.002						
45	18:40		1.081						

3/18/93 11:24:13
Acquisition started

0171

3/18/93 11:24:19

Require Run 0: VV7327D Starting
3/18/93 11:24:00 + 0:00 Free sectors: 11960 Scan: 0 of 720
Sample: CLP_53554, MW01, MW04DL, LOW, WATER, VV7327, VOA, EPA,
Ions: 1500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 7.5ML->100ML: 1->13.3 Instrument: 1500A Weight: 0.000
Submitted by: ITEK Analyst: RUL Acct. No: 53554

*** GC not ready and being equilibrated ***

GC Desc: RR Elapsed time: 0.0 Min
Seq. Temp Rate Time (minutes)
(DegC) (C/min) period total
1 35-35 - 6.6 6.6
2 35-150 8.0 14.3 20.9
3 150-150 - 3.0 23.9
Valve A: closed Valve B: open
Injector A : 150 Deg C
GC oven : 45 Deg C
Transfer-line: 216 Deg C
Ion source : 181 Deg C

*** Instrument parameters ***

Post acquisition state -> Filament: Off Multiplier: Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

FW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

FW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D: CAL021992

Interface number 0
Instrument type G
Full scale mass 1177 u
Zero scale mass 1 u
Intensity/ion 2
Peak width 1000. mmu
Offset at low mass 0 mmu
Offset at high mass 0 mmu
Voltage settling time(ms) 20

TUT 004 1607

L0001600

Current instrument parameters.

U L L A

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\wedge$ -7
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.361 Torr

3/18/93 11:51:28
 ACQUISITION COMPLETED
 Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.4	1440.0	0.0	4129.	6. 3.

TUT 004 1608

L 0001003

METHOD: CLP 3'90 DLV01 25ML PURGE

DATAFILE: VV7327D ANALYSIS TIME: 03/18/93 11:24
STANDARD: WS0318 ANALYSIS TIME: 03/18/93 8:29
TUNEFILE: WBF0318 ANALYSIS TIME: 03/18/93 8:20

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
0110 1,4-DIFLUOROBENZEN	10855.	11210.	97%	60% - 140%	
0120 CHLOROBENZENE-D5 (	7616.	7723.	99%	60% - 140%	
0126 1,4-DICHLOROBENZEN	4854.	5477.	89%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
0110 1,4-DIFLUOROBENZEN	182	184	4	+/- 20 SECS	
0120 CHLOROBENZENE-D5 (	372	373	2	+/- 20 SECS	
0126 1,4-DICHLOROBENZEN	517	518	2	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
0310 4-BROMOFLUOROBENZE	4.9	5.0	99	80% - 120%	
0315 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
0320 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

TUT 004 1609

L 0001610

PROCEDURE: FOR
 DATA FILE: VV7327D
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V1IS

DIAGNOSTIC REPORT

3/18/73 12.26.17

0174

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	5	1	0	V1IS/V1UNKS1	
3	3	1	0	16	5	1	0	V1IS/V1UNKS2	
3	3	1	0	15	4	1	0	V1IS/V1UNKS3	

45 COMPOUNDS PROCESSED, 7 FOUND

COMPOUND				SEARCH				SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	183	183		1	978		114	182	-1	1
2	V1	2	-373	372	372		1	973		117	372		1
3	V1	3	-518	517						150	517		1
4	V1	4	-439	438	438		1	947		95	438		1
5	V1	5	-38	37						50			
6	V1	6	-44	43						94			
7	V1	7	-39	38						62			
8	V1	8	-46	45						64			
9	V1	9	-72	71	71		1	963		84	71		1
10	V1	10	-62	61						43	61		1
11	V1	11	-115	114						43			
12	V1	12	-289	288						43			
13	V1	13	-341	340						43			
14	V1	14	-122	121						128			
15	V1	15	-65	64						76			
16	V1	16	-60	59						96			
17	V1	17	-91	90						63			
18	V1	18	-78	77						96			
19	V1	19	-127	126						83	127		1
20	V1	20	-155	154						62			
21	V1	21	-135	134						97			
22	V1	22	-143	142						117			
23	V1	23	-242	241						83			
24	V1	24	-218	217						63			
25	V1	25	-274	273						75			
26	V1	26	-201	200	200		1	949		95	200		1
27	V1	27	-341	340						129			
28	V1	28	-321	320						97			
29	V1	29	-153	152						78			
30	V1	30	-311	310						75			
31	V1	31	-344	343						107			
32	V1	32	-420	419						173			
33	V1	33	-325	324	324		1	955		166	324		1
34	V1	34	-451	450						83			
35	V1	35	-293	292						91			
36	V1	36	-375	374						112			
37	V1	37	-384	383						91			
38	V1	38	-413	412						104			
39	V1	39	-391	390						106			
40	V1	40	-412	411						106			
41	V1	41	-112	111	111		1	886		96	111		1
42	V1	42	-496	495						146			
43	V1	43	-501	500						146			
44	V1	44	-519	518						146			
45	V1	45	-561	560						75			

L 0001611

LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0175

DATA FILE: VV7327D

ACQUIRED: 03/18/93 11:24:00

ANALYST: RJL

COND: I500A:25ML OLVO1 AMBIENT PURGE W/ SPP3 IS & SS

SUBMITTED BY: ITEK

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA	(UG/ML)	FIT	SAT'D?
1110 1,4-DIFLUOROBENZENE (IS#1)	182	-1	5.000	978	0
1120 CHLOROBENZENE-D5 (IS#2)	372	0	5.000	973	0
1126 1,4-DICHLOROBENZENE-D4 (IS#3)	517	0	5.000	0	0
1310 4-BROMOFLUOROBENZENE (SS)	438	0	4.940	947	0
1330 METHYLENE CHLORIDE	71	0	1.794	963	0
1335 ACETONE	61	0	2.327	0	0
1350 TRICHLOROETHENE	200	0	2.181	949	0
1320 TETRACHLOROETHENE	324	0	19.014	955	0
1354 CIS-1,2-DICHLOROETHENE	111	0	2.294	886	0

TUT 004 1611

L 0001612

0110

2191 400 101

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

RAW DATA: UU73270 #71

BASE M/Z: 44

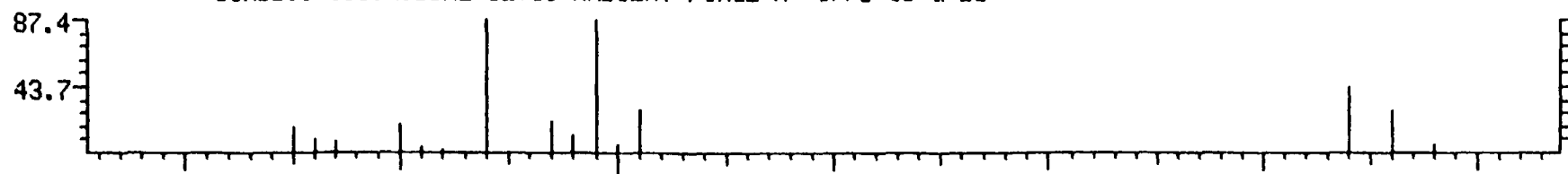
RIC: 3776.

03/18/93 11:24

SAMPLE: CLP_53554, MW01, MW04DL, LOW, WATER, UU7327, VOA, EPA,

CONDS.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

0001613

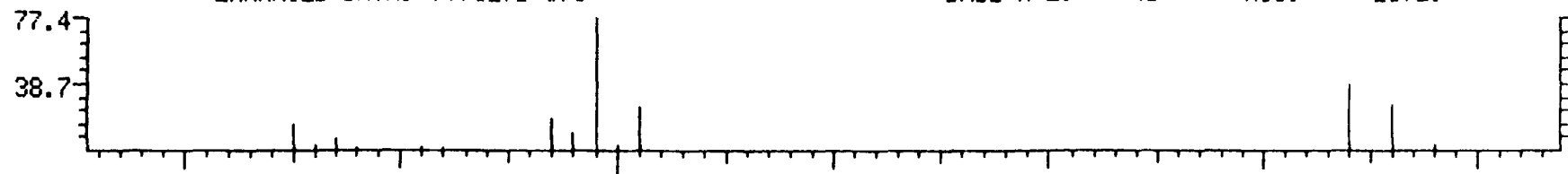


874.

ENHANCED DATA: UU73270 #71

BASE M/Z: 49

RIC: 2372.

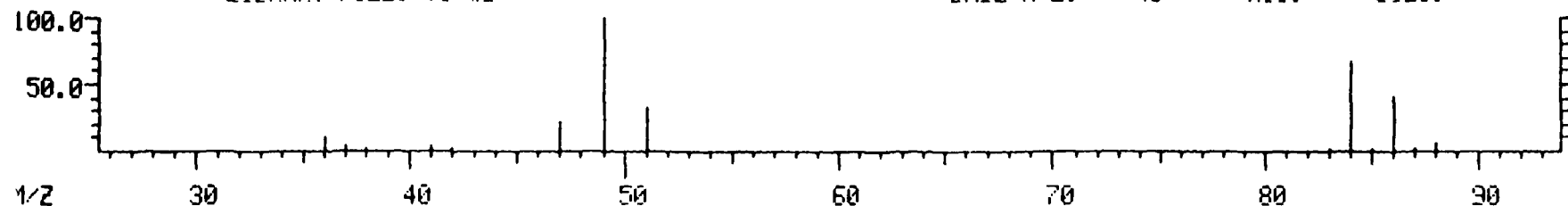


774.

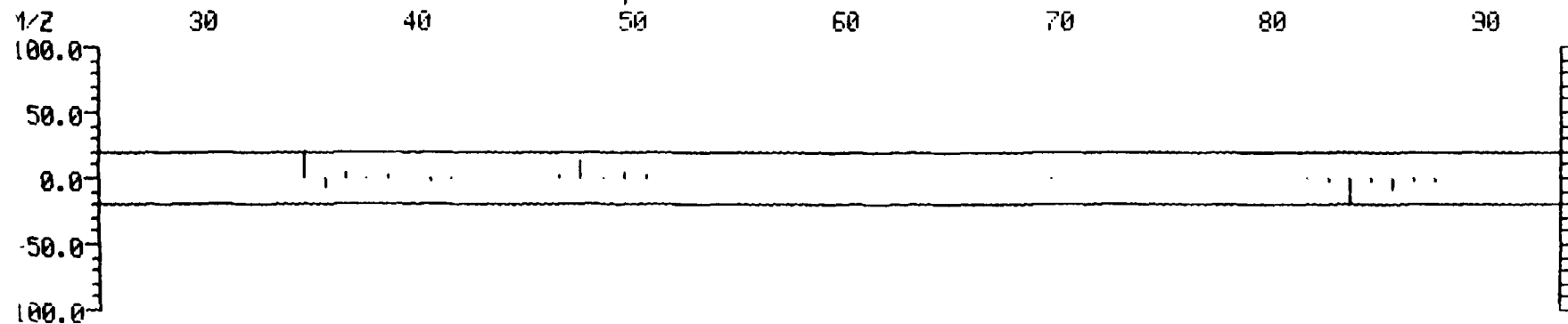
LIBRARY FILE: U1 #9

BASE M/Z: 49

RIC: 3028.



1000.



0177

TUT 004 1613

TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE

RAW DATA: UU7327D #61

BASE M/Z: 44

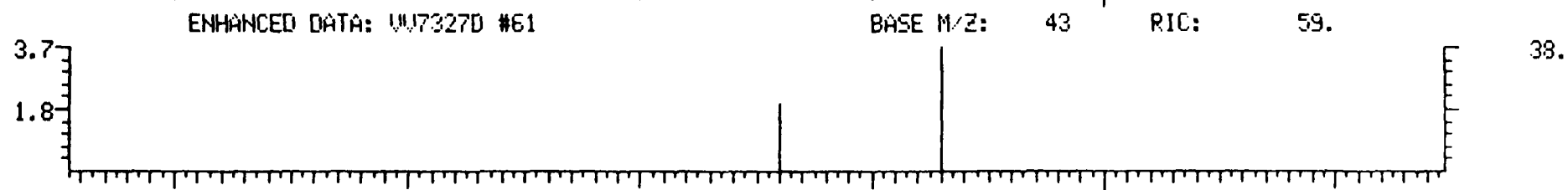
RIC: 1358.

03/18/93 11:24

SAMPLE: CLP_53554, MW01, MW04DL, LOW, WATER, UU7327, VOA, EPA,

CONDS.: 1500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

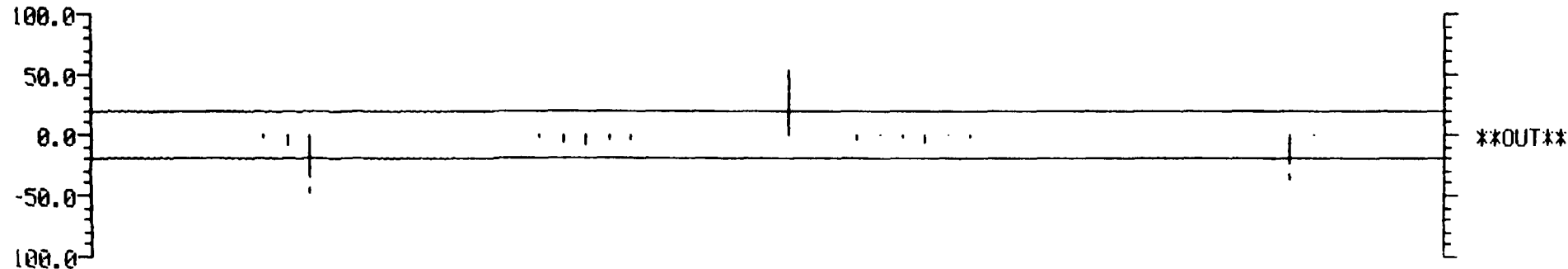
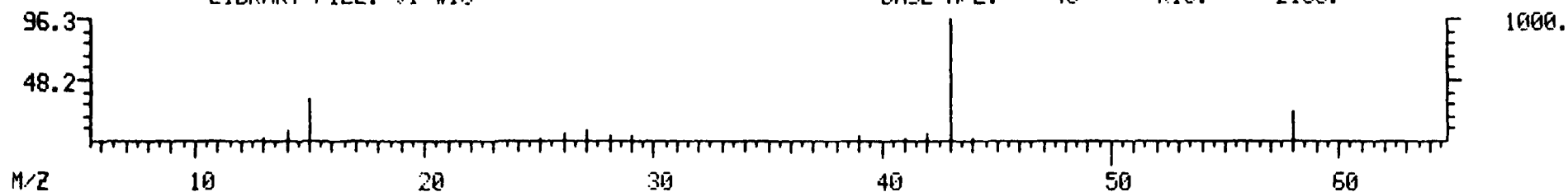
1000161



LIBRARY FILE: U1 #10

BASE M/Z: 43

RIC: 2136.



TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7327D #200

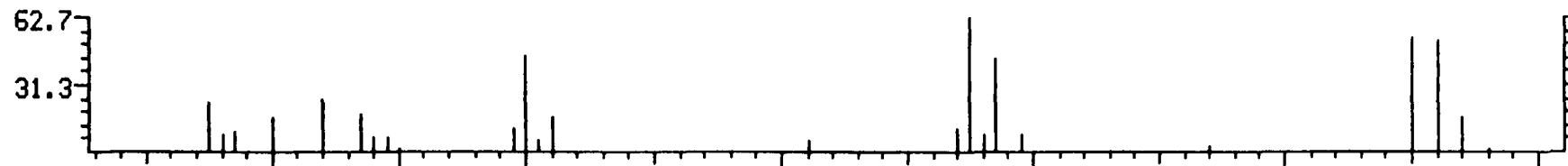
BASE M/Z: 95

RIC: 4576.

03/18/93 11:24

SAMPLE: CLP_53554, MW01, MW04DL, LOW, WATER, UU7327, VOA, EPA,

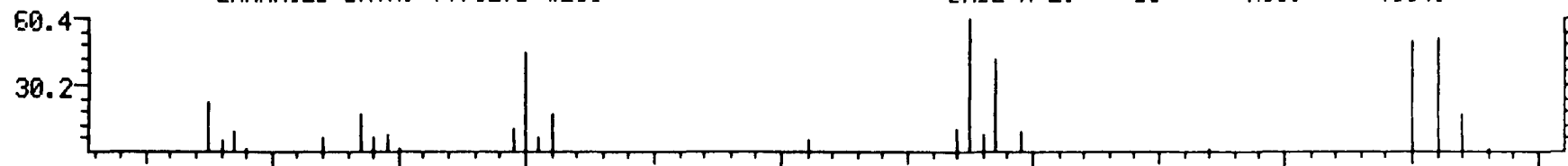
CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7327D #200

BASE M/Z: 95

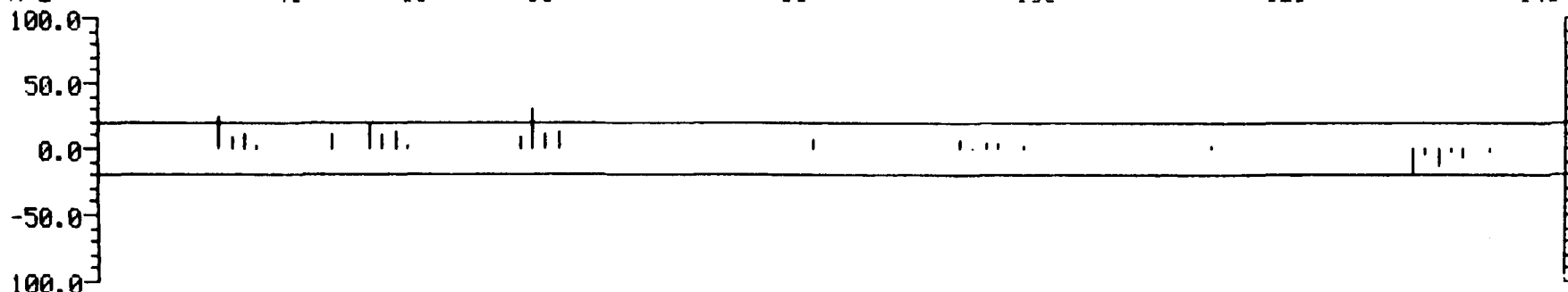
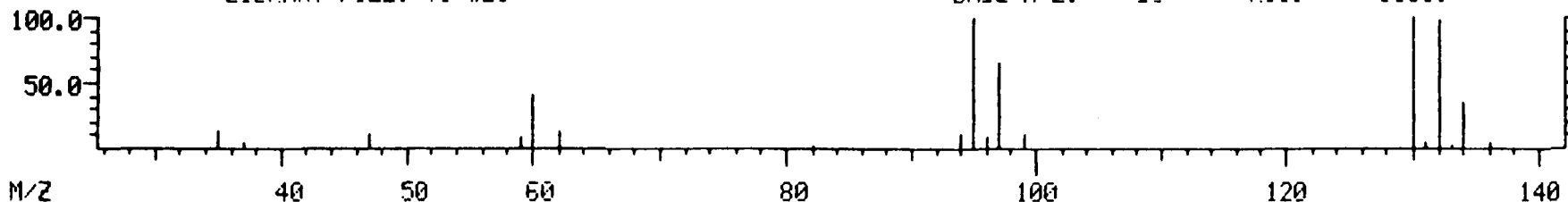
RIC: 4104.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



OUT

010101010

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7327D #324

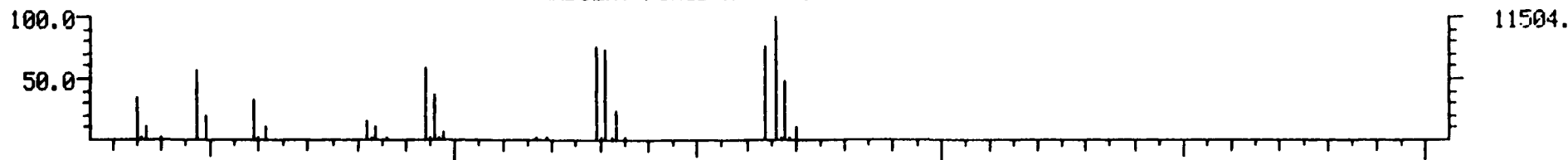
BASE M/Z: 166

RIC: 85120.

03/18/93 11:24

SAMPLE: CLP_53554.MW01.MW04DL,LOW,WATER,UU7327,VOA,EPA,

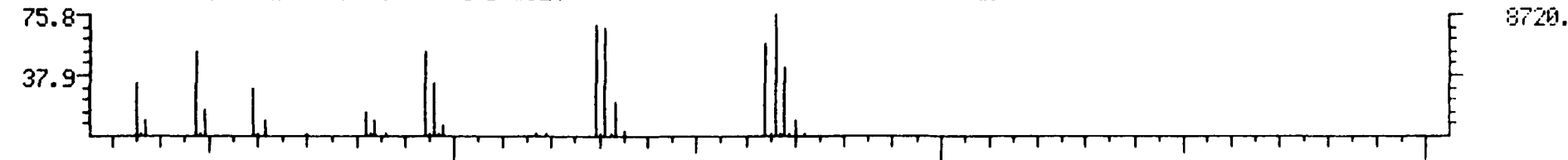
CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7327D #324

BASE M/Z: 166

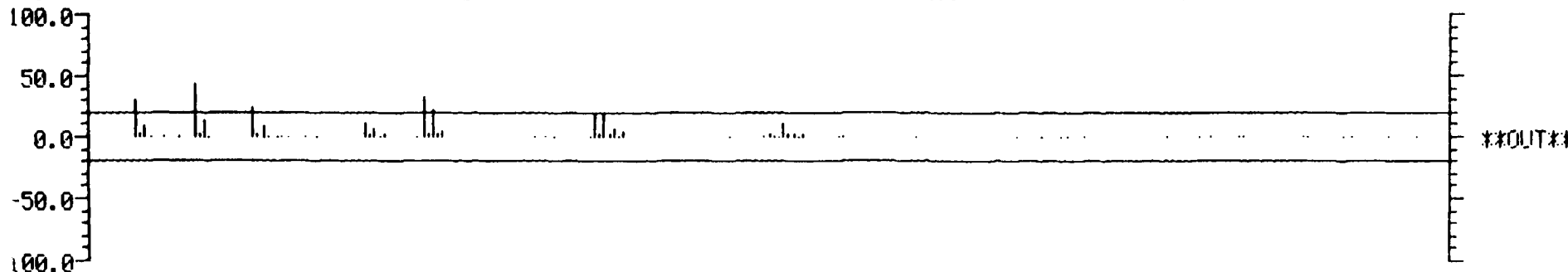
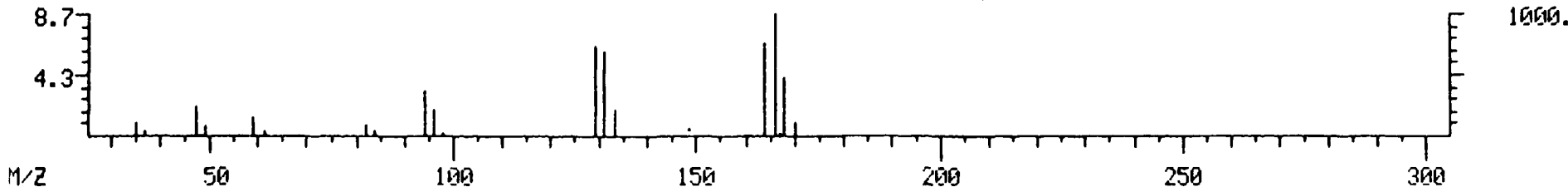
RIC: 74112.



LIBRARY FILE: U1 #33

BASE M/Z: 166

RIC: 5560.



TARGET COMPOUND COMPARISON

COMPOUND: 0054 CIS-1,2-DICHLOROETHENE

RAW DATA: UU7327D #111

BASE M/Z: 61

RIC: 3824.

03/18/93 11:24

SAMPLE: CLP_53554, MW01, MW04DL, LOW, WATER, UU7327, UOA, EPA,

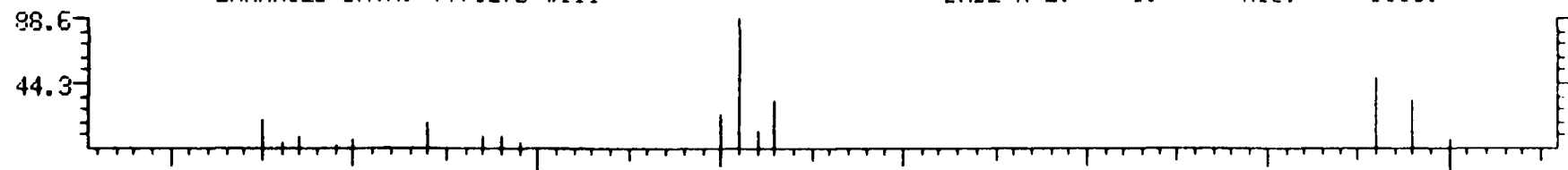
CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB 15 & 55



ENHANCED DATA: UU7327D #111

BASE M/Z: 61

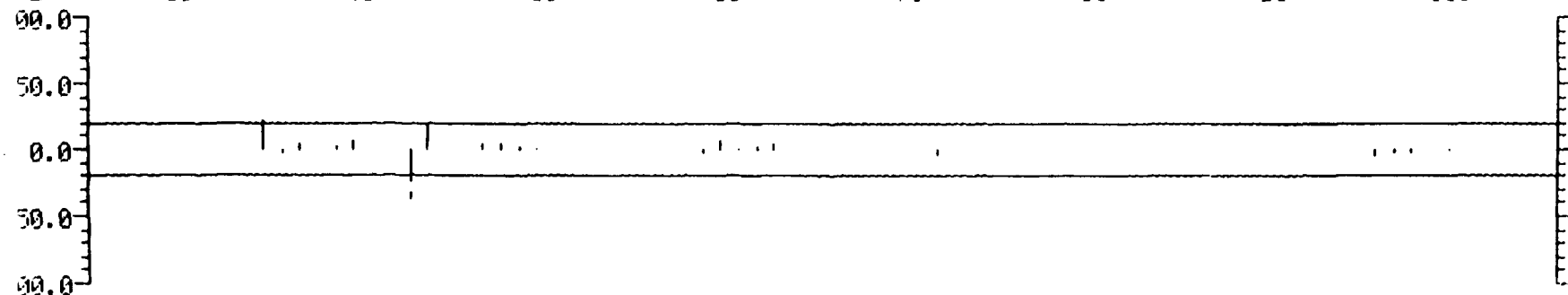
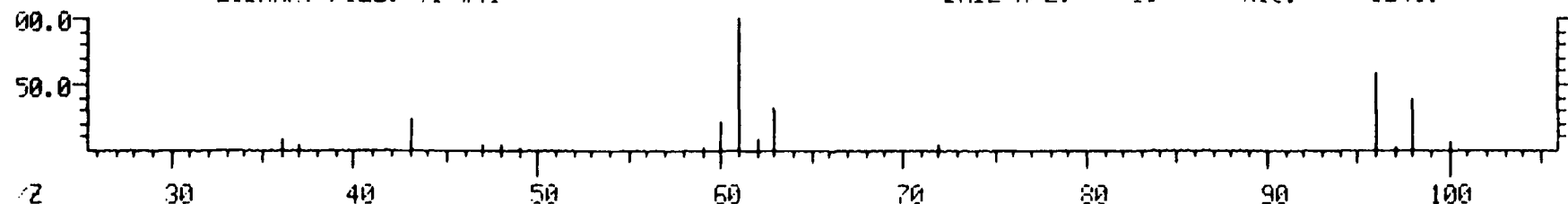
RIC: 3180.



LIBRARY FILE: U1 #41

BASE M/Z: 61

RIC: 3240.



956.

886.

1000.

OUT

L0001617

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I. S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I. S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
7	3	10

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
17	1	0	7	9	0	17	0

NO TICS FOUND.

TUT 004 1617

L00001610

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW04DL2

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 53554

SAS No.: _____

SDG No.: MW01Matrix: (soil/water) WATERLab Sample ID: VV7327Sample wt/vol: 5.0 (g/mL) MLLab File ID: VV7327D2Level: (low/med) LOWDate Received: 03/08/93% Moisture: not dec. _____ Heated Purge: NDate Analyzed: 03/18/93GC Column: DB-624 ID: 0.53(mm)Dilution Factor: 2.0

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

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

CAS NO. COMPOUND Q

74-87-3-----	Chloromethane	2	U
74-83-9-----	Bromomethane	2	U
75-01-4-----	Vinyl Chloride	2	U
75-00-3-----	Chloroethane	2	U
75-09-2-----	Methylene Chloride	3	B
67-64-1-----	Acetone	10	U
74-97-5-----	Bromochloromethane	2	U
75-15-0-----	Carbon Disulfide	2	U
75-35-4-----	1,1-Dichloroethene	2	U
75-34-3-----	1,1-Dichloroethane	2	U
540-59-0-----	1,2-Dichloroethene (total)	2	U
540-59-0-----	cis-1,2-Dichloroethene	28	D
67-66-3-----	Chloroform	2	U
107-06-2-----	1,2-Dichloroethane	2	U
78-93-3-----	2-Butanone	10	U
71-55-6-----	1,1,1-Trichloroethane	2	U
56-23-5-----	Carbon Tetrachloride	2	U
75-27-4-----	Bromodichloromethane	2	U
78-87-5-----	1,2-Dichloropropane	2	U
10061-01-5-----	cis-1,3-Dichloropropene	2	U
79-01-6-----	Trichloroethene	22	D
124-48-1-----	Dibromochloromethane	2	U
79-00-5-----	1,1,2-Trichloroethane	2	U
71-43-2-----	Benzene	2	U
10061-02-6-----	trans-1,3-Dichloropropene	2	U
106-93-4-----	1,2-Dibromoethane	2	U
75-25-2-----	Bromoform	2	U
108-10-1-----	4-Methyl-2-Pentanone	10	U
591-78-6-----	2-Hexanone	10	U
127-18-4-----	Tetrachloroethene	180	DE
79-34-5-----	1,1,2,2-Tetrachloroethane	2	U
108-88-3-----	Toluene	2	U
108-90-7-----	Chlorobenzene	2	U

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW04DL2

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7327Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VV7327D2Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 2.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----	Ethylbenzene	2	U
100-42-5-----	Styrene	2	U
1330-20-7-----	Xylene (total)	2	U
541-73-1-----	1,3-Dichlorobenzene	2	U
106-46-7-----	1,4-Dichlorobenzene	2	U
95-50-1-----	1,2-Dichlorobenzene	2	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	2	U

TUT 004 1619

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

MW04D2

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER

Lab Sample ID: VV7327

Sample wt/vol: 25.0 (g/mL) ML

Lab File ID: VV7327D2

Level: (low/med) LOW

Date Received: 03/08/93

% Moisture: not dec. _____

Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53 (mm)

Dilution Factor: 2.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

Number TICs found: 0

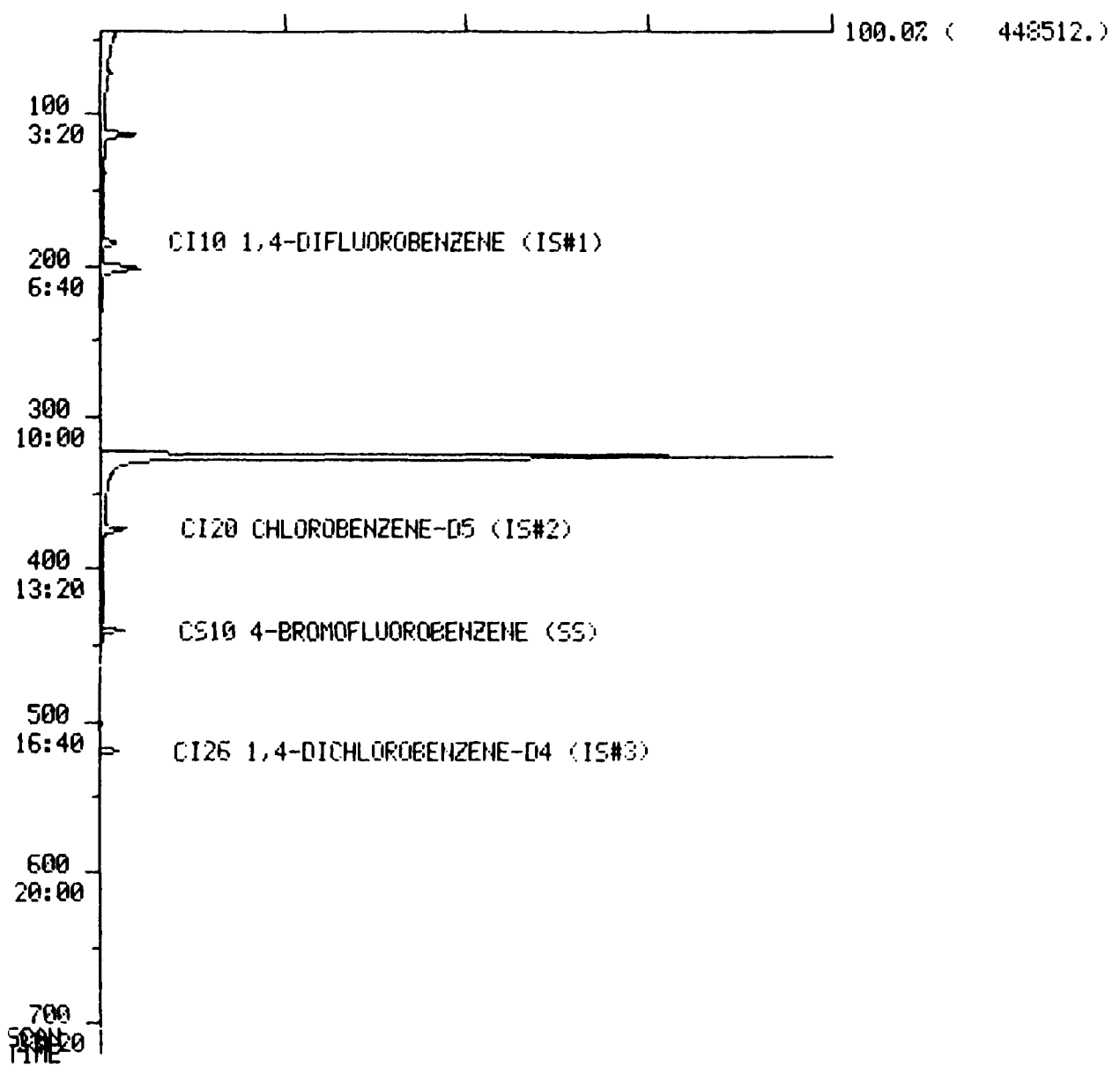
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 1620

0185

DATA FROM FILE: UU7327D2 SCANS 45 TO 720 ACQUIRED: 03/18/93 11:56:00
CALI: UU7327D2 #3
SAMPLE: CLP,53554,MW01,MW04D2,LOW,WATER,UU7327,UOA,EPA,
CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



TUT 004 1621

L-0001622

Quantitation Report File: VV7327D2

Data: VV/327D2.TI

03/18/93 11:56:00

Sample: CLP, 53554, MW01, MW04D2, LOW, WATER, VV7327, VOA, EPA,

Conds.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML->50ML: 1->2 DIL Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RJL

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI10 2-BUTANONE
12	CE05 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI115 1,1,1-TRICHLOROETHANE
22	CI20 CARBON TETRACHLORIDE
23	CI30 BROMODICHLOROMETHANE
24	CI40 1,2-DICHLOROPROPANE *
25	CI43 CIS-1,3-DICHLOROPROPENE
26	CI50 TRICHLOROETHENE
27	CI55 DIBROMOCHLOROMETHANE
28	CI60 1,1,2-TRICHLOROETHANE
29	CI65 BENZENE
30	CI72 TRANS-1,3-DICHLOROPROPENE
31	CI76 1,2-DIBROMOETHANE
32	CI80 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C253 1,3-DICHLOROBENZENE
43	C254 1,4-DICHLOROBENZENE
44	C255 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1622

L 0001623

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	183	6:06	1	1.000	A BB	11063.	5.000 UG/L	3.70
2	117	373	12:26	2	1.000	A BB	8536.	5.000 UG/L	3.70
3	150	518	17:16	3	1.000	A BB	5157.	5.000 UG/L	3.70
4	95	439	14:38	1	2.399	A BB	6724.	4.974 UG/L	3.65
5	NOT FOUND								
6	NOT FOUND								
7	62	41	1:22	1	0.224	A BB	431.	0.284 UG/L	0.21
8	NOT FOUND								
9	84	72	2:24	1	0.393	A BB	1309.	1.560 UG/L	1.15
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	65	2:10	1	0.355	A BB	164.	0.048 UG/L	0.04
16	NOT FOUND								
17	NOT FOUND								
18	96	79	2:38	1	0.432	A BB	194.	0.175 UG/L	0.13
19	83	127	4:14	1	0.694	A BB	437.	0.195 UG/L	0.14
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	201	6:42	2	0.539	A BB	18301.	10.756 UG/L	7.95
27	NOT FOUND								
28	NOT FOUND								
29	79	153	5:06	2	0.410	A BB	297.	0.103 UG/L	0.08
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	325	10:50	2	0.871	A BB	178212.	88.502 UG/L	65.44
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	96	112	3:44	1	0.612	A BB	12273.	13.755 UG/L	10.17
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	0.99	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.01	4.97	5.00	0.608	0.611	0.99
5	1:18		0.212						
6	1:28		0.239						
7	1:20	1.02	0.217	1.03	0.28	5.00	0.039	0.685	0.06
8	1:32		0.250						
9	2:24	1.00	0.391	1.01	1.56	5.00	0.118	0.379	0.31

L 0001624

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	1.00	0.353	1.01	0.05	5.00	0.015	1.558	0.01
16	2:00		0.326						
17	3:02		0.495						
18	2:36	1.01	0.424	1.02	0.18	5.00	0.018	0.501	0.04
19	4:14	1.00	0.690	1.01	0.19	5.00	0.040	1.015	0.04
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:02		0.646						
24	7:14		0.582						
25	9:06		0.732						
26	6:42	1.00	0.539	1.00	10.76	5.00	2.144	0.997	2.15
27	11:22		0.914						
28	10:40		0.858						
29	5:06	1.00	0.410	1.00	0.10	5.00	0.035	1.685	0.02
30	10:22		0.834						
31	11:28		0.922						
32	13:58		0.809						
33	10:50	1.00	0.871	1.00	88.50	5.00	20.878	1.180	17.70
34	15:02		1.209						
35	9:44		0.783						
36	12:28		1.003						
37	12:46		1.027						
38	13:46		1.107						
39	13:02		1.048						
40	13:42		1.102						
41	3:44	1.00	0.609	1.01	13.76	5.00	1.109	0.403	2.75
42	16:30		0.956						
43	16:42		0.967						
44	17:18		1.002						
45	18:40		1.081						

TUT 004 1624

L 0001625

3/18/93 11:56:44
Acquisition started

0189

3/18/93 11:56:48
Acquire Run 0: VV7327D2 Starting
3/18/93 11:56:00 + 0:00 Free sectors: 11860 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW04D2, LOW, WATER, VV7327, VOA, EPA,
Conds.: I500A:25ML DLV01 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 25ML-250ML: 1-2 DIL Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

3 Desc: RR Elapsed time: 0.0 Min

Seq	Temp	Rate	Time (minutes)	
*	(DegC)	(C/min)	period	total
1	35-35	-	6.6	6.6
2	35-150	8.0	14.3	20.9
3	150-150	-	3.0	23.9

Injector A : 150 Deg C
GC oven : 36 Deg C
Transfer-line: 216 Deg C
Ion source : 181 Deg C
Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament: Off Multiplier: Off
MODE: E1 (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

PMW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

PMW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	Q
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1625

L 0001626

Current instrument parameters.

0190

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 ⁻⁷
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.356 Torr

3/18/93 12:24:58

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.5	1440.0	0.0	6915.	10. 5.

TUT 004 1626

L0001627

METHOD: CLP 3'90 OLVO1 25ML PURGE

DATAFILE: VV7327D2
 STANDARD: WS0318
 TUNEFILE: W8FB0318

ANALYSIS TIME: 03/18/93 11:56
 ANALYSIS TIME: 03/18/93 8:29
 ANALYSIS TIME: 03/18/93 8:20

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
010 1,4-DIFLUOROBENZEN	11063.	11210.	99%	60% - 140%	
0120 CHLOROBENZENE-D5 (	8536.	7723.	111%	60% - 140%	
0126 1,4-DICHLOROBENZEN	5157.	5477.	94%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
010 1,4-DIFLUOROBENZEN	183	184	2	+/- 20 SECS	
0120 CHLOROBENZENE-D5 (	373	373	0	+/- 20 SECS	
0126 1,4-DICHLOROBENZEN	518	518	0	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
010 4-BROMOFLUOROBENZE	5.0	5.0	99	80% - 120%	
015 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
020 VINYL CHLORIDE *	0.3	50.0	1	86% - 115%	failed

TUT 004 1627

L0001620

REFERENCE: V111

NAME LIST: V1 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

REPORT: V1IS

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	6	1	115	V1IS/V1UNKS1	
3	3	1	11	16	5	1	41	V1IS/V1UNKS2	
3	3	1	11	15	4	1	67	V1IS/V1UNKS3	

45 COMPOUNDS PROCESSED, 8 FOUND

COMPOUND		SEARCH					SAT		CHRO			
ID	LIB ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	183	183	1	980		114	183		1
2	V1	2	-373	373	373	1	972		117	373		1
3	V1	3	-518	519					150	518		1
4	V1	4	-439	439	439	1	947		95	439		1
5	V1	5	-38	38					50			
6	V1	6	-44	44					94			
7	V1	7	-39	39	41	2	701		62	41		1
8	V1	8	-46	46					64			
9	V1	9	-72	72	72	1	950		84	72		1
10	V1	10	-62	62					43			
11	V1	11	-115	115					43			
12	V1	12	-289	289					43			
13	V1	13	-341	341					43			
14	V1	14	-122	122					128			
15	V1	15	-65	65					76	65		1
16	V1	16	-60	60					96			
17	V1	17	-91	91					63			
18	V1	18	-78	78					96	79		1
19	V1	19	-127	127					83	127		1
20	V1	20	-155	155					62			
21	V1	21	-135	134					97			
22	V1	22	-143	142					117			
23	V1	23	-242	242					83			
24	V1	24	-218	218					63			
25	V1	25	-274	274					75			
26	V1	26	-201	200	201	1	965		95	201		1
27	V1	27	-341	341					129			
28	V1	28	-321	321					97			
29	V1	29	-153	152					78	153		1
30	V1	30	-311	311					75			
31	V1	31	-344	344					107			
32	V1	32	-420	420					173			
33	V1	33	-325	325	325	1	953		166	325		1
34	V1	34	-451	452					83			
35	V1	35	-293	293					91			
36	V1	36	-375	375					112			
37	V1	37	-384	384					91			
38	V1	38	-413	413					104			
39	V1	39	-391	391					106			
40	V1	40	-412	412					106			
41	V1	41	-112	111	112	1	912		96	112		1
42	V1	42	-496	497					146			
43	V1	43	-501	502					146			
44	V1	44	-519	520					146			
45	V1	45	-561	562					75			

L 0001623

TUT 004 1628

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0193

DATA FILE: VV7327D2

ACQUIRED: 03/18/93 11:56:00

ANALYST: RJL

COND: 1500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

EMITTED BY: ITEK

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?	
1110 1,4-DIFLUOROBENZENE (IS#1)	183	0	5.000	980	0
1120 CHLOROBENZENE-D5 (IS#2)	373	0	5.000	972	0
1126 1,4-DICHLOROBENZENE-D4 (IS#3)	518	-1	5.000	0	0
1110 4-BROMOFLUOROBENZENE (SS)	439	0	4.974	947	0
1130 METHYLENE CHLORIDE	72	0	1.560	950	0
1150 TRICHLOROETHENE	201	1	10.756	965	0
1220 TETRACHLOROETHENE	325	0	88.502	953	0
1154 CIS-1,2-DICHLOROETHENE	112	1	13.755	912	0

TUT 004 1629

L0001630

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

RAW DATA: UU7327D2 #72

BASE M/Z: 44

RIC: 6528.

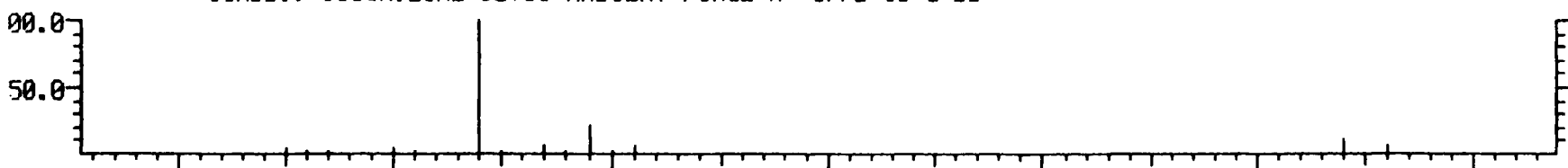
03/18/93 11:56

SAMPLE: CLP,53554,MW01,MW04D2,LOW,WATER,UU7327,VOA,EPA.

COND.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS

L000163.

TUT 004 1630

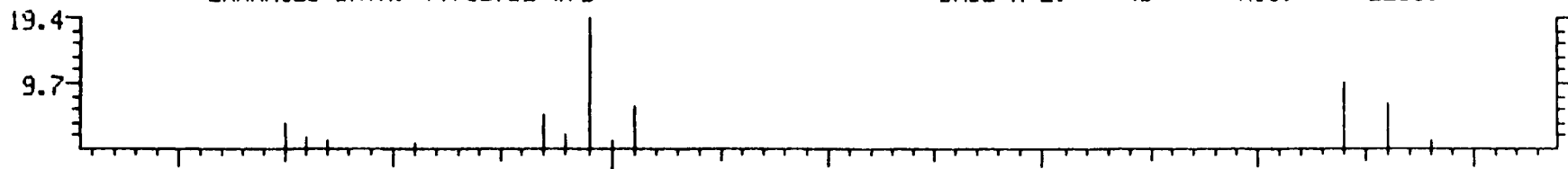


3724.

ENHANCED DATA: UU7327D2 #72

BASE M/Z: 49

RIC: 2208.



722.

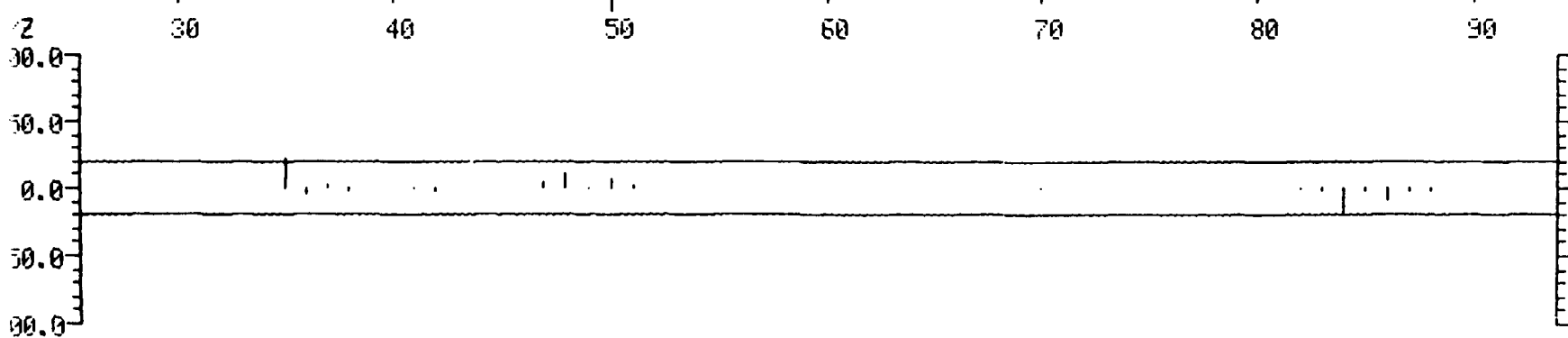
LIBRARY FILE: U1 #9

BASE M/Z: 49

RIC: 3028.



1000.



OUT

TARGET COMPOUND COMPARISON

COMPOUND: C150 TRICHLOROETHENE

RAW DATA: UU7327D2 #201

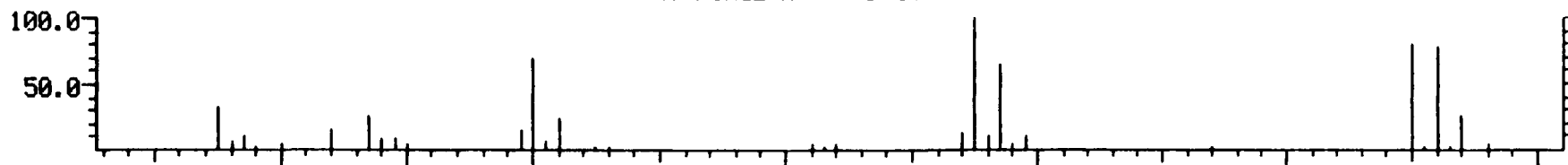
BASE M/Z: 95

RIC: 23712.

03/18/93 11:56

SAMPLE: CLP, 53554, MW01, MW04D2, LOW, WATER, UU7327, UOA, EPA,

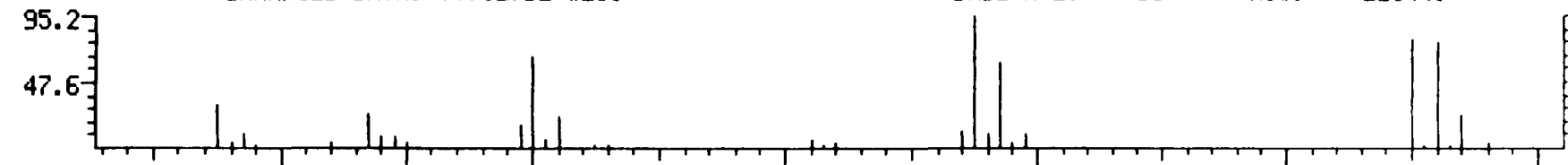
COND5.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & S5



ENHANCED DATA: UU7327D2 #201

BASE M/Z: 95

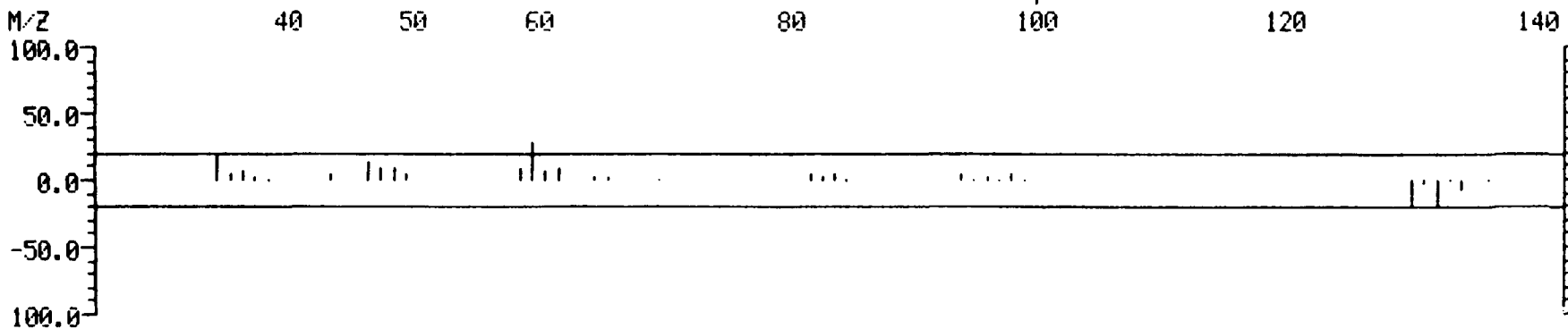
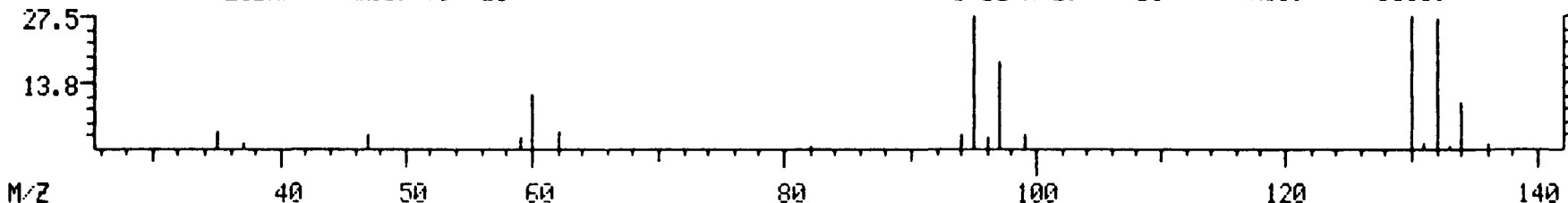
RIC: 22144.



LIBRARY FILE: U1 #26

BASE M/Z: 95

RIC: 5336.



3636.

3450.

1000.

OUT

L0001632

TUT 004 1631

TARGET COMPOUND COMPARISON

COMPOUND: C220 TETRACHLOROETHENE

RAW DATA: UU7327D2 #325

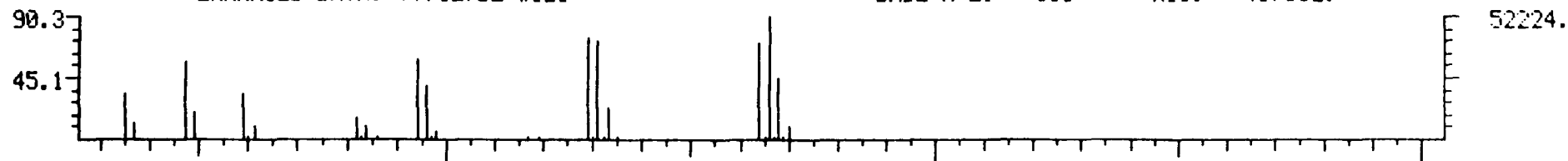
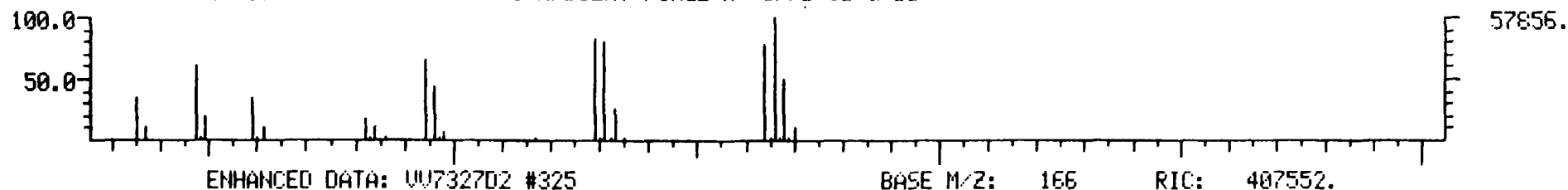
BASE M/Z: 166

RIC: 448512.

03/18/93 11:56

SAMPLE: CLP, 53554, MW01, MW04D2, LOW, WATER, UU7327, UOA, EPA,

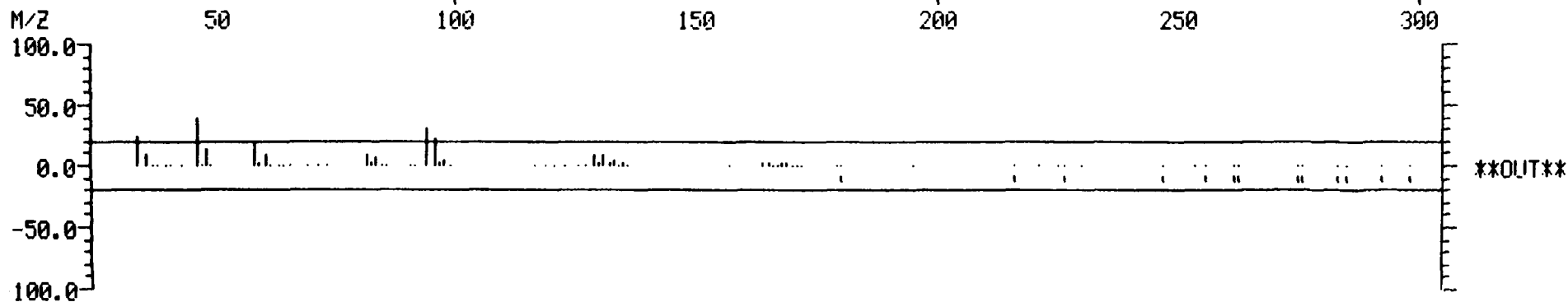
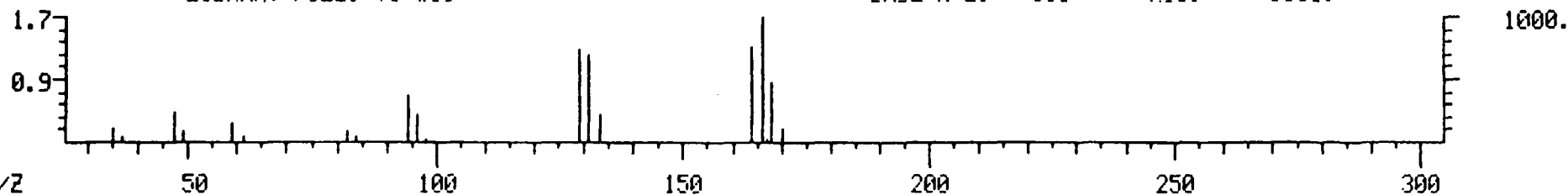
CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & 55



LIBRARY FILE: U1 #33

BASE M/Z: 166

RIC: 5560.



TARGET COMPOUND COMPARISON

COMPOUND: C054 CIS-1,2-DICHLOROETHENE

RAW DATA: UV7327D2 #112

BASE M/Z: 61

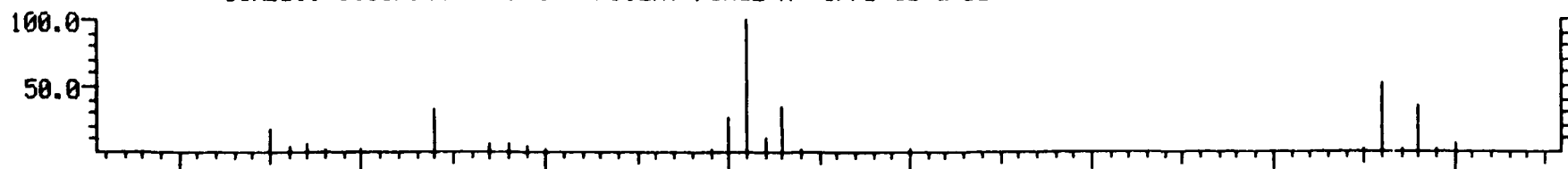
RIC: 20950.

03/18/93 11:56

SAMPLE: CLP, 53554, MW01, MW04D2, LOW, WATER, UV7327, VOA, EPA,

CONDS.: 1500A:25ML OL001 AMBIENT PURGE W/ 5PPB IS & SS

L000163.

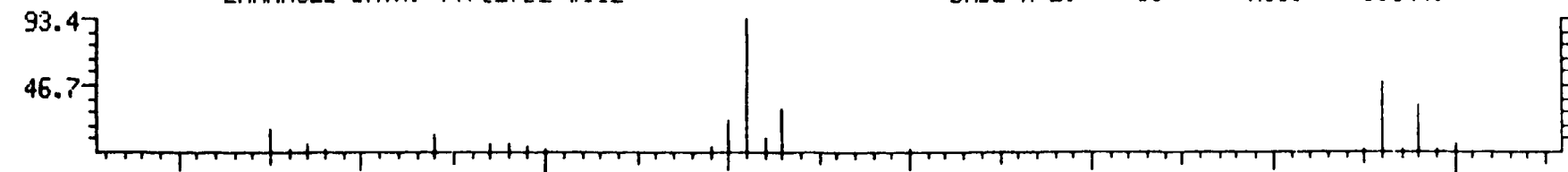


5808.

ENHANCED DATA: UV7327D2 #112

BASE M/Z: 61

RIC: 18144.

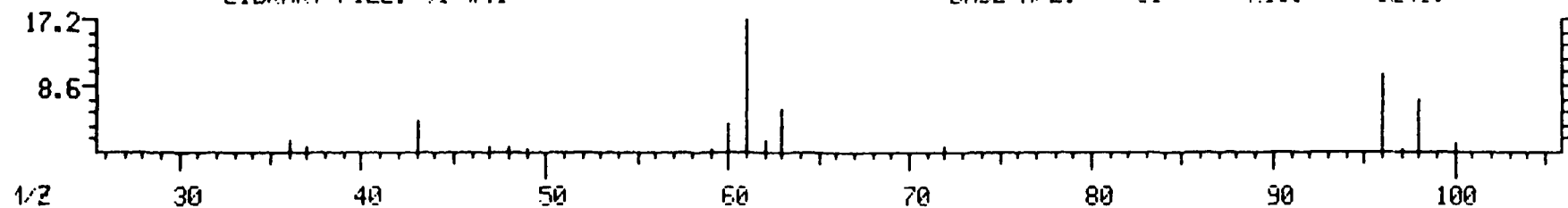


5424.

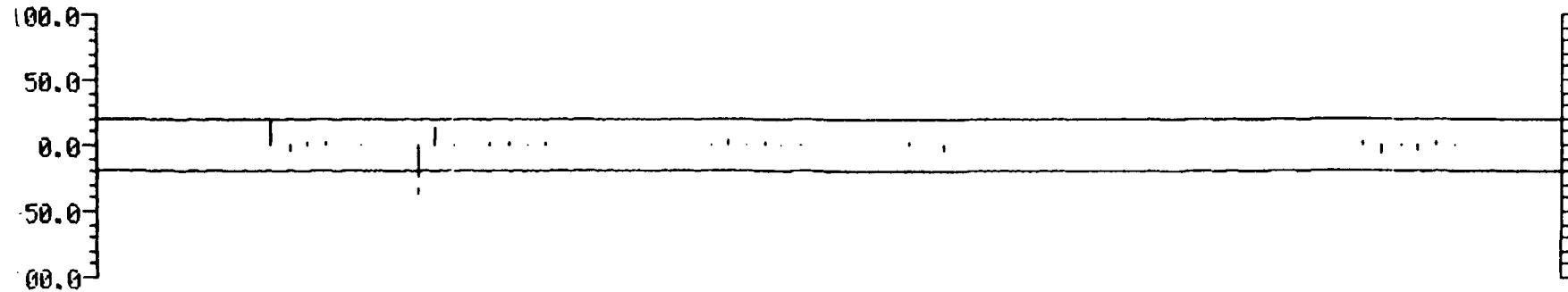
LIBRARY FILE: V1 #41

BASE M/Z: 61

RIC: 3240.



1000.



OUT

Data: VV7327D2.TI

03/18/93 11:56:00

Sample: CLP, 53554, MW01, MW04D2, LOW, WATER, VV7327, VOA, EPA,

Conds.: I500A:25ML DLV01 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML->50ML: 1->2 DIL Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RJL

Acct. No.: 53554

AMOUNT=HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	124-38-9	CARBON DIOXIDE
5	124-38-9	CARBON DIOXIDE

> FALSE HTS, ~~SEE COMMENTS 2-2-93~~

RJL
3/22/93

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	184	6:08	1	1.000	A BB	7317.*	50.000 UG/L	29.69
2	RIC	373	12:26	2	1.000	A BB	13366.*	50.000 UG/L	29.69
3	RIC	519	17:19	3	1.000	A BB	11312.*	50.000 UG/L	29.69
4	RIC	135	4:30	1	0.734	A VV	552.*	3.772	2.24
5	RIC	137	4:34	1	0.745	A VB	2140.*	14.623	8.68

TUT 004 1634

L 0001635

DATA FILE: VV7327D2

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
 TABLE ENTRIES: 495
 SCAN TOLERANCE : 3
 MIN. RIC HT. [%]: 10
 FIRST SCAN : 35
 LAST SCAN : 1000
 TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I. S. LIBRARY: LIBRARYIS
 NBS SEARCH PROC : SERLIB
 PEAK FINDER PROC: VOME5
 TCA I. S. LL : IS
 FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

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

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
15	1	0	3	10	0	14	1

TIC PROCESSING:

SC	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	137	949	996	44	CARBON DIOXIDE

TUT 004 1635

L 0001630

MID LIBRARY SEARCH (LIBRARY.NB)

03/18/93 11:56:00 + 4:34

SAMPLE: CLP:53554,MW01,MW04D2,LOW,WATER,UU7327,UOA,EPA,

CONDS.: 1500A:25ML OL001 AMBIENT PURGE W/ 5PPB IS & SS

ENHANCED (S 15B 2N 0T)

DATA: UU7327D2 # 137

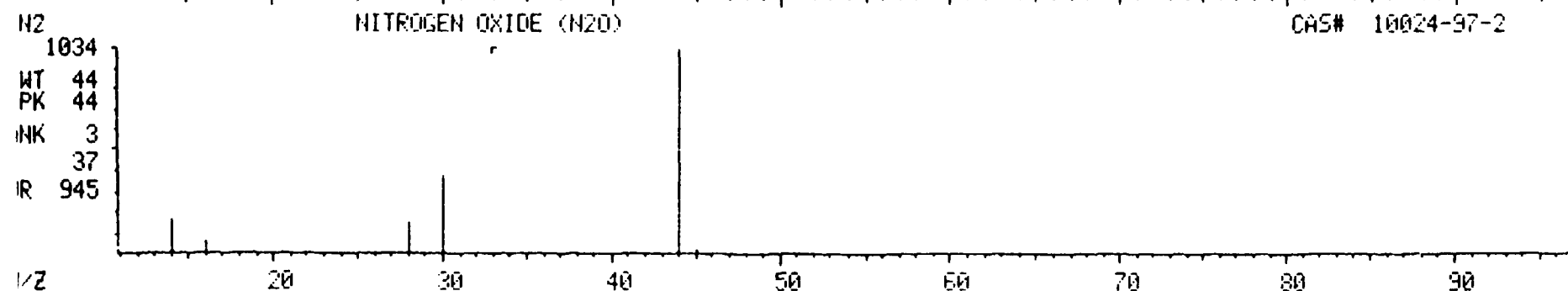
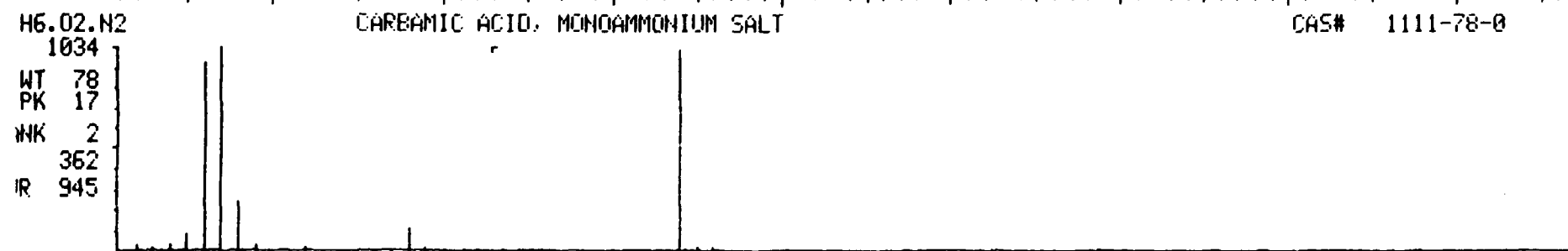
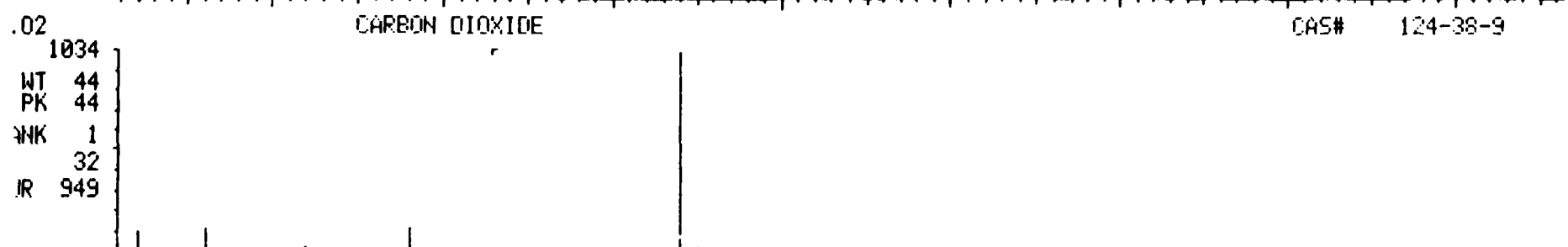
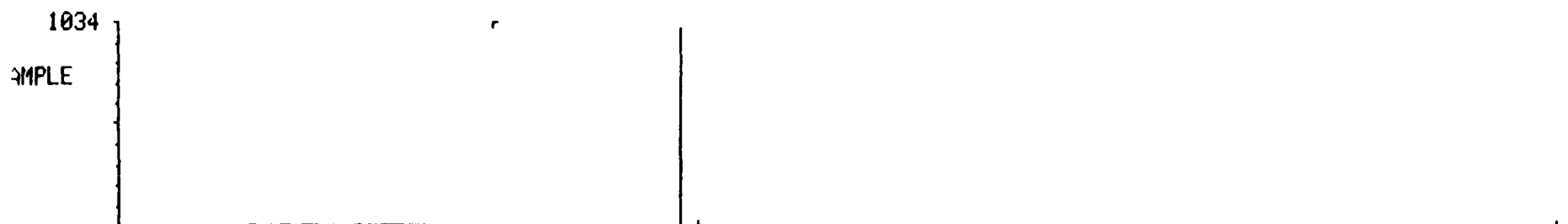
CALI: UU7327D2 # 3

BASE M/Z: 44

RIC: 631.

L0001637

TUT 004 1636



1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIPBLANK

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7328

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: VV7328

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	3	B
67-64-1	-----Acetone	5	U
74-97-5	-----Bromochloromethane	1	U
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	1	U
75-34-3	-----1,1-Dichloroethane	1	U
540-59-0	-----1,2-Dichloroethene (total)	1	U
540-59-0	-----cis-1,2-Dichloroethene	1	U
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	1	U
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	1	U
10061-02-6	-----trans-1,3-Dichloropropene	1	U
106-93-4	-----1,2-Dibromoethane	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	1	U
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	1	U
108-90-7	-----Chlorobenzene	1	U

FORM I X-1

3/90

L0001630

TUT 004 1637

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

TRIPBLANK

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTU

Case No.: 53554

SAS No.: _____

SDG No.: MW01

Matrix: (soil/water) WATER

Lab Sample ID: VV7328

Sample wt/vol: 5.0 (g/mL) ML

Lab File ID: VV7328

Level: (low/med) LOW

Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N

Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm)

Dilution Factor: 1.0

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----Ethylbenzene_____		1	U
100-42-5-----Styrene_____		1	U
1330-20-7-----Xylene (total)_____		1	U
541-73-1-----1,3-Dichlorobenzene_____		1	U
106-46-7-----1,4-Dichlorobenzene_____		1	U
95-50-1-----1,2-Dichlorobenzene_____		1	U
96-12-8-----1,2-Dibromo-3-Chloropropane_____		1	U

TUT 004 1638

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

SAMPLE NO.

TRIPBLANK

Lab Name: ITAS-KNOXVILLE Contract: _____
Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01
Matrix: (soil/water) WATER Lab Sample ID: VV7328
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7328
Level: (low/med) LOW Date Received: 03/08/93
% Moisture: not dec. _____ Date Analyzed: 03/18/93
GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0
Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 1639

DATA FROM FILE: UU7328

SCANS 45 TO 720 ACQUIRED: 03/18/93 13:04:00

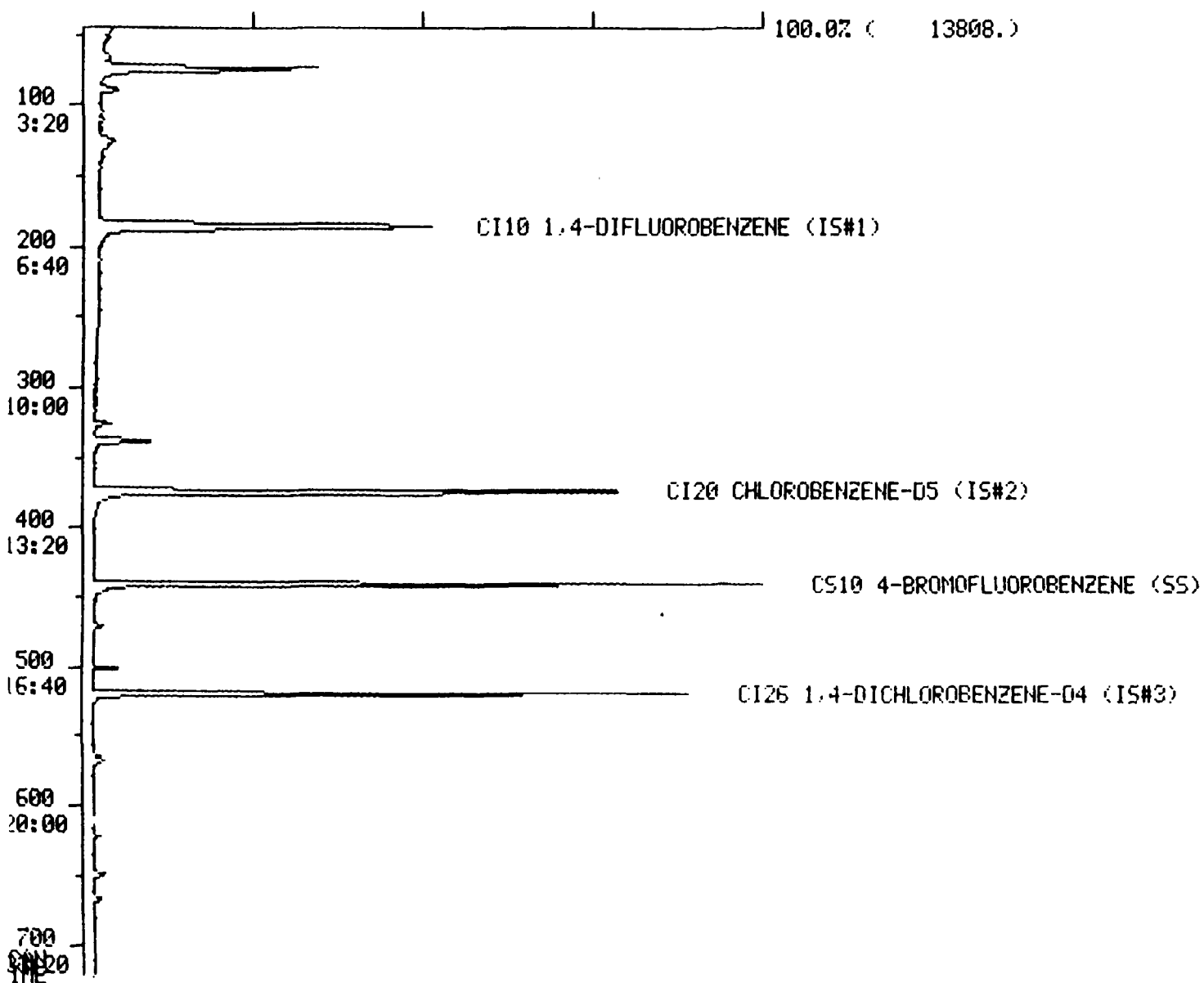
CALI: UU7328 #3

SAMPLE: CLP, 53554, MW01, TRIPLEBLANK, LOW, WATER, UU7328, UOA, EPA,

CONDS.: 1500A:25ML OL001 AMBIENT PURGE W/ 5PPB IS & SS

TUT 004 1640

L0001641



Data: VV7328.TI

13/18/93 13:04:00

Sample: CLP, 53554, MW01, TRIPBLANK, LOW, WATER, VV7328, VOA, EPA,

Stand.: 1500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: 1500A

Weight: 0.000

Submitted by: ITEK

Analyst: RUL

Acct. No: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI110 2-BUTANONE
12	CE05 4-METHYL-2-PENTANONE
13	CE10 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI115 1,1,1-TRICHLOROETHANE
22	CI120 CARBON TETRACHLORIDE
23	CI130 BROMODICHLOROMETHANE
24	CI140 1,2-DICHLOROPROPANE *
25	CI143 CIS-1,3-DICHLOROPROPENE
26	CI150 TRICHLOROETHENE
27	CI155 DIBROMOCHLOROMETHANE
28	CI160 1,1,2-TRICHLOROETHANE
29	CI165 BENZENE
30	CI172 TRANS-1,3-DICHLOROPROPENE
31	CI175 1,2-DIBROMOETHANE
32	CI180 BROMOFORM **
33	CE20 TETRACHLOROETHENE
34	CE25 1,1,2,2-TETRACHLOROETHANE **
35	CE30 TOLUENE *
36	CE35 CHLOROBENZENE
37	CE40 ETHYL BENZENE *
38	CE45 STYRENE
39	CE50 M/P XYLENE
40	CE52 O-XYLENE
41	CE54 CIS-1,2-DICHLOROETHENE
42	CE53 1,3-DICHLOROBENZENE
43	CE54 1,4-DICHLOROBENZENE
44	CE55 1,2-DICHLOROBENZENE
45	CE61 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1641

L0001642

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	10114.	5.000 UG/L	15.08
2	117	373	12:26	2	1.000	A BB	7854.	5.000 UG/L	15.03
3	150	519	17:18	3	1.000	A BB	4883.	5.000 UG/L	15.08
4	95	440	14:40	1	2.391	A BB	6500.	5.259 UG/L	15.86
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	73	2:26	1	0.397	A BB	2405.	3.135 UG/L	9.46
10	43	64	2:08	1	0.348	A BB	319.	9.597 UG/L	28.95
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	66	2:12	1	0.359	A BB	353.	0.112 UG/L	0.34
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	83	128	4:16	1	0.696	A BB	117.	0.057 UG/L	0.17
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	326	10:52	2	0.874	A BB	167.	0.090 UG/L	0.27
34	NOT FOUND								
35	NOT FOUND								
36	NOT FOUND								
37	NOT FOUND								
38	NOT FOUND								
39	NOT FOUND								
40	NOT FOUND								
41	NOT FOUND								
42	NOT FOUND								
43	NOT FOUND								
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.26	5.00	0.643	0.611	1.05
5	1:18		0.212						
6	1:28		0.239						
7	1:20		0.217						
8	1:32		0.250						
9	2:24	1.01	0.391	1.01	3.14	5.00	0.238	0.379	0.63

L0001640

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	1.03	0.337	1.03	9.60	25.00	0.006	0.016	0.38
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	1.02	0.353	1.02	0.11	5.00	0.035	1.558	0.02
16	2:00		0.326						
17	3:02		0.495						
18	2:36		0.424						
19	4:14	1.01	0.690	1.01	0.06	5.00	0.012	1.015	0.01
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:02		0.646						
24	7:14		0.582						
25	9:06		0.732						
26	6:42		0.539						
27	11:22		0.914						
28	10:40		0.858						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	13:58		0.809						
33	10:50	1.00	0.871	1.00	0.09	5.00	0.021	1.180	0.02
34	15:02		1.209						
35	9:44		0.783						
36	12:28		1.003						
37	12:46		1.027						
38	13:46		1.107						
39	13:02		1.048						
40	13:42		1.102						
41	3:44		0.609						
42	16:30		0.956						
43	16:42		0.967						
44	17:18		1.002						
45	18:40		1.081						

TUT 004 1643

L0001644

3/18/93 13:04:43
Acquisition started

3/18/93 13:04:46

Acquire Run 0: VV7328 Starting
3/18/93 13:04:00 + 0:00 Free sectors: 11582 Scan: 0 of 720
Sample: CLP, 53554, MW01, TRIPBLANK, LOW, WATER, VV7328, VDA, EPA,
Conditions: 1500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: 1500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

20 Desc.: RR Elapsed time : 0.0 Min

Seq.	Temp (DegC)	Rate (C/min)	Time (minutes) period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 36 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 215 Deg C
					Ion source : 182 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MFW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MFW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1644

L 0001645

Current instrument parameters.

0209

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 ⁻⁷
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.354 Torr

3/18/93 13:33:40
 ACQUISITION COMPLETED
 Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.4	1440.0	0.0	2605.	4. 2.

TUT 004 1645

L 0001640

QUALITY CONTROL/QUALITY ASSURANCE DATA

0210

METHOD: CLP 3'90 OLV01 25ML PURGE

DATAFILE: VV7328 ANALYSIS TIME: 03/18/93 13:04
STANDARD: WS0318 ANALYSIS TIME: 03/18/93 8:29
TUNEFIL: WBF0318 ANALYSIS TIME: 03/18/93 8:20

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
1110 1,4-DIFLUOROBENZEN	10114.	11210.	90%	60% - 140%	
1120 CHLOROBENZENE-D5 (	7854.	7723.	102%	60% - 140%	
1126 1,4-DICHLOROBENZEN	4883.	5477.	89%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
1110 1,4-DIFLUOROBENZEN	184	184	0	+/- 20 SECS	
1120 CHLOROBENZENE-D5 (	373	373	0	+/- 20 SECS	
1126 1,4-DICHLOROBENZEN	519	518	2	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
1510 4-BROMOFLUOROBENZE	5.3	5.0	105	80% - 120%	
1515 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
1520 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

TUT 004 1646

L0001647

PROCEDURE: TCA
 DATA FILE: VV7328
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V11S

DIAGNOSTIC REPORT

3/18/93 13:56:34

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

0211

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	5	1	60	V11S/V1UNKS1	
3	3	1	0	16	3	1	0	V11S/V1UNKS2	
3	3	1	0	15	3	1	0	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 4 FOUND

COMPOUND		SEARCH					SAT		CHRO			
NO	LIB ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	184	184	1	981	114	184			1
2	V1	2	-373	373	373	1	967	117	373			1
3	V1	3	-518	518				150	519			1
4	V1	4	-439	439	440	1	948	95	440			1
5	V1	5	-38	39				50				
6	V1	6	-44	45				94				
7	V1	7	-39	40				62				
8	V1	8	-46	47				64				
9	V1	9	-72	73	73	1	978	84	73			1
10	V1	10	-62	63				43	64			1
11	V1	11	-115	116				43				
12	V1	12	-289	289				43				
13	V1	13	-341	341				43				
14	V1	14	-122	123				128				
15	V1	15	-65	66				76	66			1
16	V1	16	-60	61				96				
17	V1	17	-91	92				63				
18	V1	18	-78	79				96				
19	V1	19	-127	128				83	128			1
20	V1	20	-155	156				62				
21	V1	21	-135	135				97				
22	V1	22	-143	143				117				
23	V1	23	-242	242				83				
24	V1	24	-218	218				63				
25	V1	25	-274	274				75				
26	V1	26	-201	201				95				
27	V1	27	-341	341				129				
28	V1	28	-321	321				97				
29	V1	29	-153	153				78				
30	V1	30	-311	311				75				
31	V1	31	-344	344				107				
32	V1	32	-420	420				173				
33	V1	33	-325	325				166	326			
34	V1	34	-451	451				83				
35	V1	35	-293	293				91				
36	V1	36	-375	375				112				
37	V1	37	-384	384				91				
38	V1	38	-413	413				104				
39	V1	39	-391	391				106				
40	V1	40	-412	412				106				
41	V1	41	-112	112				96				
42	V1	42	-496	496				146				
43	V1	43	-501	501				146				
44	V1	44	-519	519				146				
45	V1	45	-561	561				75				

TUT 004 1647

0001640

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0212

DATA FILE: VV7328

ACQUIRED: 03/18/93 13:04:00

ANALYST: RJL

COND: 1500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

SUBMITTED BY: ITEK

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
1110 1,4-DIFLUOROBENZENE (IS#1)	184	0	5.000	981 0
1120 CHLOROBENZENE-D5 (IS#2)	373	0	5.000	967 0
1126 1,4-DICHLOROBENZENE-D4 (IS#3)	519	1	5.000	0 0
1310 4-BROMOFLUOROBENZENE (SS)	440	1	5.259	948 0
1330 METHYLENE CHLORIDE	73	0	3.135	978 0
1335 ACETONE	64	1	9.597	0 0

TUT 004 1648

L 0001649

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

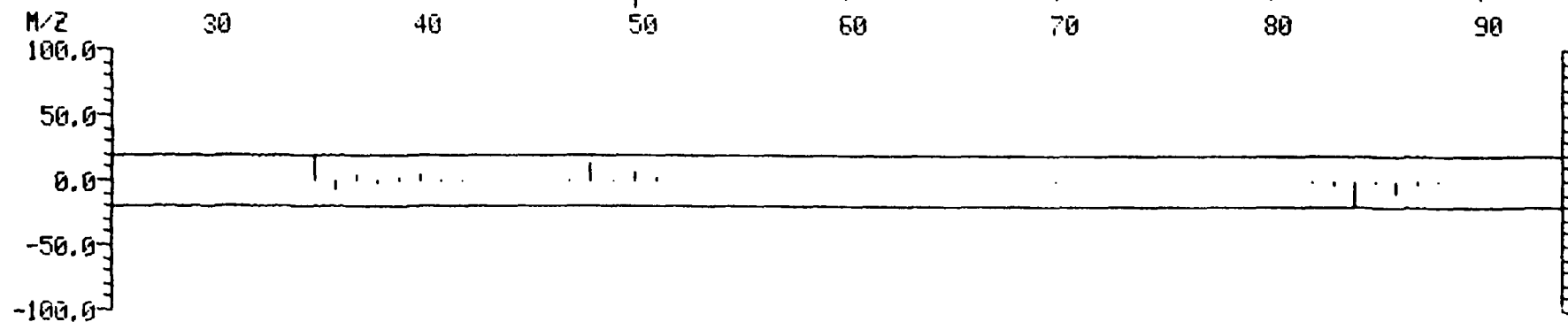
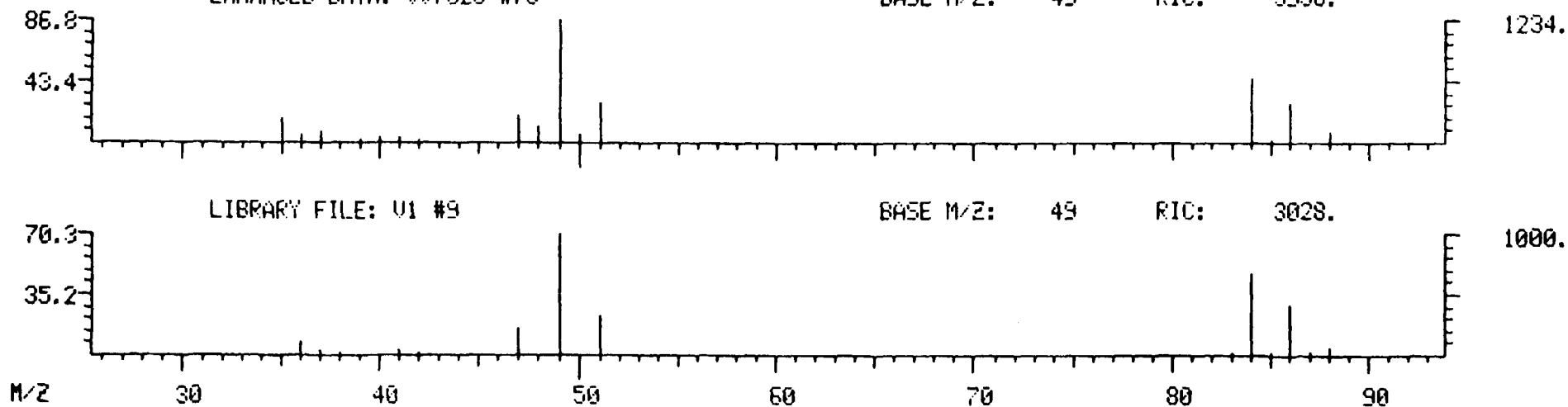
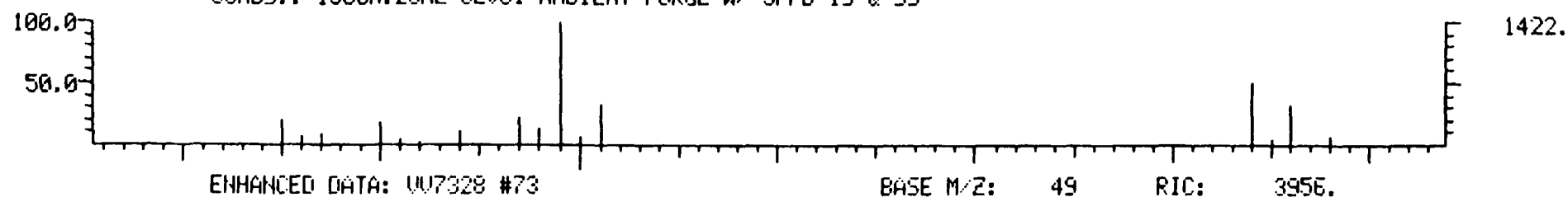
RAW DATA: UU7328 #73

BASE M/Z: 49 RIC: 4784.

03/18/93 13:04

SAMPLE: CLP, 53554, MW01, TRIPBLANK, LOW, WATER, UU7328, UOA, EPA,

CONDS.: 1500A: 25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE

RAW DATA: UU7328 #64

BASE M/Z: 40

RIC: 525.

03/18/93 13:04

SAMPLE: CLP, 53554, MW01, TRIPBLANK, LOW, WATER, UU7328, UOA, EPA,

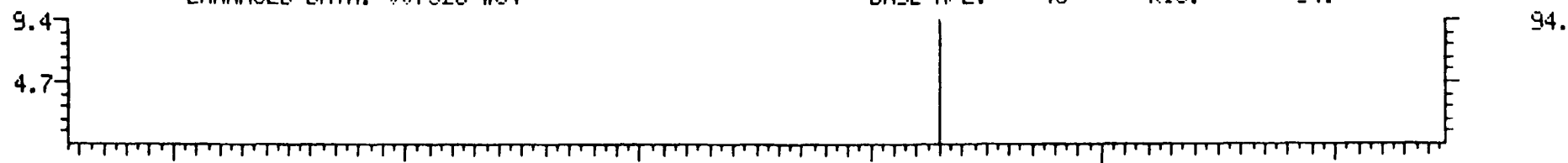
CONDS.: 1500A: 25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



ENHANCED DATA: UU7328 #64

BASE M/Z: 43

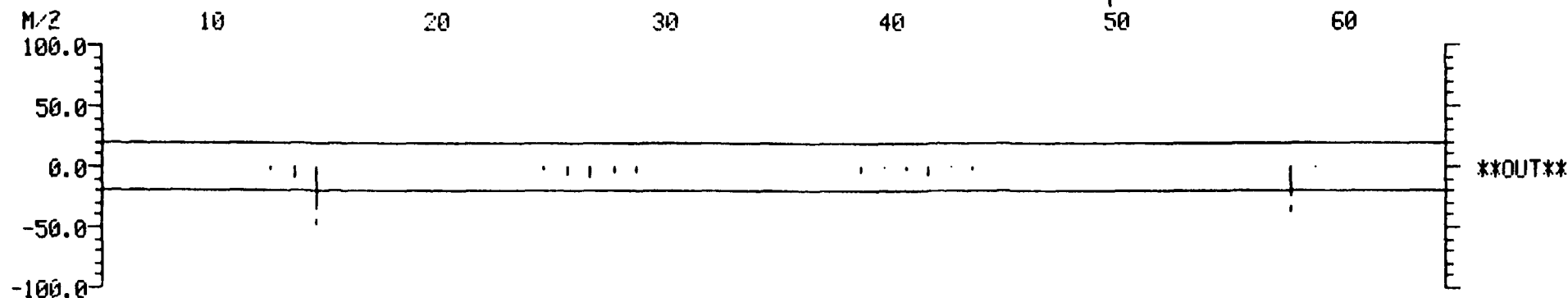
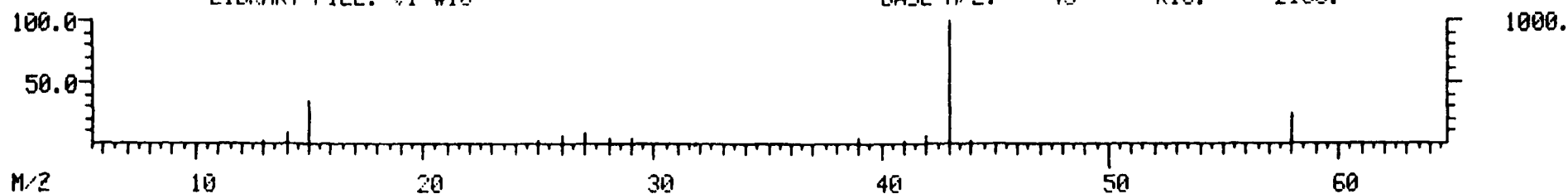
RIC: 94.



LIBRARY FILE: V1 #10

BASE M/Z: 43

RIC: 2136.



Data: VV7328.T1

13/18/93 13:04:00

Sample: CLP, 53554, MWO1, TRIPBLANK, LOW, WATER, VV7328, VOA, EPA,

Ends.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RUL

Acct. No.: 53554

AMOUNT=HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I.S.#1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I.S.#2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I.S.#3)
4	541-05-9	CYCLOTRISILOXANE, HEXAMETHYL-

COLUMN
BLEED

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	185	6:10	1	1.000	A BD	6764.*	50.000 UG/L	32.18
2	RIC	374	12:28	2	1.000	A BB	10663.*	50.000 UG/L	32.18
3	RIC	519	17:18	3	1.000	A BB	12068.*	50.000 UG/L	32.18
4	RIC	338	11:16	2	0.904	A BD	1151.*	5.399	3.47

DATA FILE: VV7328

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [%]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I.S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
6	3	9

FILTER PROCESSING:

<-----REJECT PEAKS----->							
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS	TOTAL TICS
17	1	0	7	8	0	16	1

TIC PROCESSING:

3.	SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	338	882	886	222	CYCLOTRISILOXANE, HEXAMETHYL-

0217

2591 400 101

MID LIBRARY SEARCH (LIBRARYNE)

DATA: UU7328 # 338

BASE M/Z: 207

03/18/93 13:04:00 + 11:16

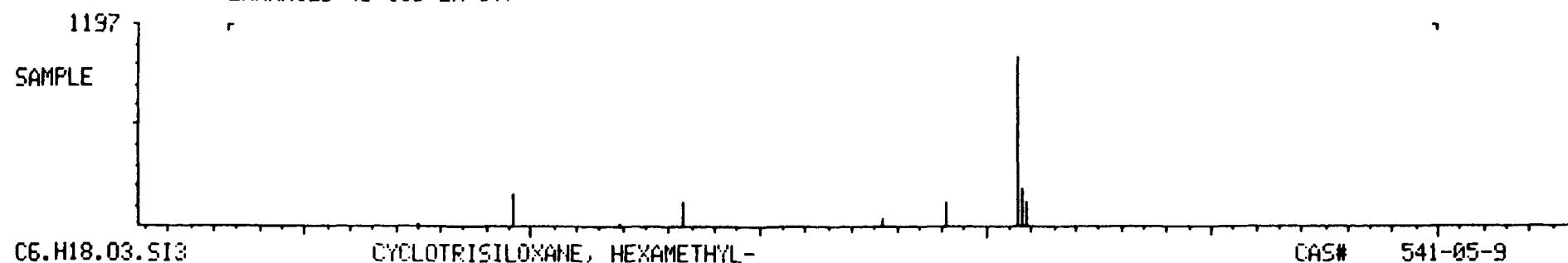
CALI: UU7328 # 3

RIC: 1104.

SAMPLE: CLP, 53554, MW01, TRIPBLANK, LOW, WATER, UU7328, UOA, EPA,

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS

ENHANCED (S 158 2N 0T)



L 000165.

III VOLATILES DATA, continued

c. STANDARDS DATA

TUT 004 1654

L0001654

OLV01 INITIAL CALIBRATION DATA
VOLATILE HSL COMPOUNDS

se No: 53554 Region: _____ Instrument ID: 1500A
Contractor: ITAS-KNOXVILLE Calibration Date: 03/16/93
Contract No: _____

Laboratory ID	W10316A	W10316C	W10316E							
	1	5	25							
	W10316B	W10316D	25							
Compound	RF(20)	RF(50)	RF(100)	RF(150)	RF(200)	AVE RF	% RSD	SPCC**		
Chloromethane	1.185	1.090	0.904	0.954	0.943	1.015	11.6			
Bromomethane	0.669	0.594	0.514	0.494	0.451	0.544	16.0	*		
Vinyl Chloride	0.844	0.729	0.696	0.647	0.675	0.718	10.6	*		
Chloroethane	0.542	0.465	0.369	0.352	0.338	0.413	21.2			
Methylene Chloride	1.277	0.516	0.384	0.316	0.331	0.565	71.9			
Acetone	0.026	0.019	0.016	0.015	0.014	0.018	26.9			
Bromochloromethane	0.142	0.139	0.134	0.125	0.110	0.130	9.9			
Carbon Disulfide	1.656	1.615	1.511	1.541	1.552	1.575	3.7			
1,1-Dichloroethene	0.627	0.562	0.495	0.484	0.478	0.529	12.1	*		
1,1-Dichloroethane	1.282	1.058	0.925	0.915	0.890	1.014	16.1	*		
1,2-Dichloroethene (total)	0.649	0.567	0.532	0.447	0.433	0.526	16.9			
cis-1,2-Dichloroethene	0.496	0.490	0.392	0.348	0.350	0.415	17.6			
Chloroform	1.179	1.044	0.932	0.905	1.400	1.092	18.6	*		
1,2-Dichloroethane	0.454	0.368	0.320	0.305	0.283	0.346	19.6	*		
2-Butanone	0.063	0.045	0.033	0.026	0.023	0.038	43.0			
1,1,1-Trichloroethane	1.781	1.753	1.467	1.534	1.554	1.618	8.7	*		
Carbon Tetrachloride	1.540	1.525	1.365	1.460	1.453	1.469	4.7	*		
1,1-Dichloroethane	0.841	0.812	0.793	0.830	0.951	0.845	7.3	*		
1,2-Dichloropropane	0.836	0.634	0.528	0.535	0.523	0.611	21.9			
cis-1,3-Dichloropropene	0.589	0.553	0.573	0.569	0.570	0.571	2.2	*		
Trichloroethene	1.191	1.055	0.913	0.914	0.894	0.993	12.9	*		
Dibromochloromethane	0.450	0.472	0.499	0.458	0.419	0.460	6.4	*		
1,1,2-Trichloroethane	0.274	0.270	0.289	0.246	0.206	0.257	12.6	*		
Benzene	1.890	1.811	1.532	1.560	1.530	1.665	10.4	*		
trans-1,3-Dichloropropene	0.348	0.340	0.370	0.358	0.347	0.353	3.3	*		
1,2-Dibromoethane	0.354	0.338	0.327	0.343	0.298	0.332	6.4			
Bromoform	0.221	0.243	0.243	0.268	0.202	0.235	10.6	*		
4-Methyl-2-Pentanone	0.122	0.107	0.102	0.100	0.088	0.104	11.9			
2-Hexanone	0.068	0.069	0.069	0.060	0.055	0.064	9.9			
Tetrachloroethene	1.321	1.329	1.216	1.118	1.033	1.203	10.7	*		
1,1,2,2-Tetrachloroethane	0.322	0.314	0.298	0.319	0.278	0.306	6.0	*		
Toluene	2.134	1.885	1.752	1.754	1.671	1.839	9.9	*		
Chlorobenzene	1.411	1.373	1.230	1.180	1.063	1.251	11.4	*		
Ethylbenzene	2.408	2.366	2.246	2.273	2.254	2.309	3.2	*		
Styrene	1.153	1.092	0.973	0.993	0.916	1.025	9.3	*		
Xylene (total)	0.890	0.728	0.641	0.658	0.619	0.707	15.6	*		
1,3-Dichlorobenzene	1.776	1.651	1.311	1.174	0.899	1.362	26.1			

Up to two compounds with %RSD criteria may exceed the maximum, but none of these may exceed 40.0%.

All compounds with no %RSD or RRF criteria specified must meet a minimum 0.010 RRF criteria.

Refer to method for RRF criteria.

L 0001056

OLVD1 INITIAL CALIBRATION DATA
VOLATILE HSL COMPOUNDS

e No: 53554 Region: _____ Instrument ID: 1500A
 Contractor: ITAS-KNOXVILLE Calibration Date: 03/16/93
 Contract No: _____

Laboratory ID	W10316A	W10316B	W10316C	W10316D	W10316E			
Compound	RF(20)	RF(50)	RF(100)	RF(150)	RF(200)	Ave RF	% RSD	SPCC**
1,4-Dichlorobenzene	1.776	1.548	1.316	1.169	0.866	1.335	26.2	
1,2-Dichlorobenzene	1.172	1.227	0.964	0.831	0.628	0.964	25.6	
1,2-Dibromo-3-Chloropropane	0.111	0.101	0.094	0.086	0.062	0.091	20.4	
Bromofluorobenzene	1.266	0.799	0.698	0.668	0.586	0.803	33.6	*

*BeP
3-29-93*

CCC*

Up to two compounds with %RSD criteria may exceed the maximum, but none of these may exceed 40.0%.

All compounds with no %RSD or RRF criteria specified must meet a minimum 0.010 RRF criteria.

Refer to method for RRF criteria. .

TUT 004 1656

L 0001657

0221

DATA FROM FILE: WI0316A

SCANS 45 TO 720 ACQUIRED: 03/16/93 18:57:00

CALI: WI0316A #3

SAMPLE: CLP,,,USTD001,LOW,WATER,WI0316A,VOA,IC-001,

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS

100.0% (14864.)

100
3:20200
6:40

CI10 1,4-DIFLUOROBENZENE (IS#1)

300
10:00400
13:20

CI20 CHLOROBENZENE-D5 (IS#2)

CS10 4-BROMOFLUOROBENZENE (SS)

500
16:40600
20:00700
24:00
TIME

TUT 004 1657

L0001650

Data: W10316A.TI

03/16/93 18:57:00

Sample: CLP,,, VSTD001, LOW, WATER, W10316A, VOA, IC-001,

Conds.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by:

Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUORODENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLOROBENZENE-D4 (IS#3)
4	C510 4-BROMOFLUOROBENZENE (SS)
5	C010 CHLOROMETHANE **
6	C015 BROMOMETHANE
7	C020 VINYL CHLORIDE *
8	C025 CHLOROETHANE
9	C030 METHYLENE CHLORIDE
10	C035 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	C037 BROMOCHLOROMETHANE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C053 TRANS-1,2-DICHLOROETHENE
19	C060 CHLOROFORM *
20	C065 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	C054 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLORODENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1658

L0001653

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	183	6:06	1	1.000	A BB	11143.	5.000 UG/L	6.76
2	117	372	12:24	2	1.000	A BV	7851.	5.000 UG/L	6.76
3	150	518	17:16	3	1.000	A BB	5435.	5.000 UG/L	6.76
4	95	439	14:38	1	2.399	A BB	2820.	1.000 UG/L	1.35
5	50	39	1:18	1	0.213	A BB	2640.	1.000 UG/L	1.35
6	94	44	1:28	1	0.240	A BB	1491.	1.000 UG/L	1.35
7	62	40	1:20	1	0.219	A BB	1881.	1.000 UG/L	1.35
8	64	45	1:30	1	0.246	A VD	1209.	1.000 UG/L	1.35
9	84	72	2:24	1	0.393	A BB	2845.	1.000 UG/L	1.35
10	43	62	2:04	1	0.339	A BB	293.	5.000 UG/L	6.76
11	43	114	3:48	1	0.623	A BB	702.	5.000 UG/L	6.76
12	43	289	9:38	2	0.777	A BB	956.	5.000 UG/L	6.76
13	43	340	11:20	2	0.914	A BB	534.	5.000 UG/L	6.76
14	128	121	4:02	1	0.661	A BB	316.	1.000 UG/L	1.35
15	76	65	2:10	1	0.355	A BB	3690.	1.000 UG/L	1.35
16	96	60	2:00	1	0.328	A BB	1398.	1.000 UG/L	1.35
17	63	91	3:02	1	0.497	A BB	2857.	1.000 UG/L	1.35
18	96	78	2:36	1	0.426	A BB	1447.	1.000 UG/L	1.35
19	83	127	4:14	1	0.694	A BB	2627.	1.000 UG/L	1.35
20	62	155	5:10	1	0.847	A BB	1012.	1.000 UG/L	1.35
21	97	134	4:28	2	0.360	A BB	2796.	1.000 UG/L	1.35
22	117	142	4:44	2	0.382	A VB	2418.	1.000 UG/L	1.35
23	83	241	8:02	2	0.648	A BB	1320.	1.000 UG/L	1.35
24	63	217	7:14	2	0.583	A BB	1313.	1.000 UG/L	1.35
25	75	273	9:06	2	0.734	A BB	925.	1.000 UG/L	1.35
26	95	200	6:40	2	0.538	A BB	1870.	1.000 UG/L	1.35
27	129	341	11:22	2	0.917	A BB	706.	1.000 UG/L	1.35
28	97	320	10:40	2	0.860	A BB	430.	1.000 UG/L	1.35
29	78	152	5:04	2	0.409	A BB	2967.	1.000 UG/L	1.35
30	75	310	10:20	2	0.833	A BB	546.	1.000 UG/L	1.35
31	107	344	11:28	2	0.925	A BB	556.	1.000 UG/L	1.35
32	173	419	13:58	3	0.809	A BB	240.	1.000 UG/L	1.35
33	166	324	10:48	2	0.871	A BB	2074.	1.000 UG/L	1.35
34	83	451	15:02	2	1.212	A BB	505.	1.000 UG/L	1.35
35	91	292	9:44	2	0.785	A BV	3350.	1.000 UG/L	1.35
36	112	374	12:28	2	1.005	A BB	2215.	1.000 UG/L	1.35
37	91	383	12:46	2	1.030	A BV	3781.	1.000 UG/L	1.35
38	104	412	13:44	2	1.108	A BB	1811.	1.000 UG/L	1.35
39	106	390	13:00	2	1.048	A VB	3455.	2.000 UG/L	2.70
40	106	411	13:42	2	1.105	A BB	1398.	1.000 UG/L	1.35
41	96	112	3:44	1	0.612	A BB	1105.	1.000 UG/L	1.35
42	146	495	16:30	3	0.956	A BV	1931.	1.000 UG/L	1.35
43	146	495	16:30	3	0.956	A BV	1931.	1.000 UG/L	1.35
44	146	519	17:18	3	1.002	A BB	1274.	1.000 UG/L	1.35
45	75	560	18:40	3	1.081	A BB	121.	1.000 UG/L	1.35

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:06	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:24	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.399	1.00	1.00	1.00	1.266	1.266	1.00
5	1:18	1.00	0.213	1.00	1.00	1.00	1.185	1.185	1.00
6	1:28	1.00	0.240	1.00	1.00	1.00	0.669	0.669	1.00
7	1:20	1.00	0.219	1.00	1.00	1.00	0.844	0.844	1.00
8	1:30	1.00	0.246	1.00	1.00	1.00	0.542	0.542	1.00
9	2:24	1.00	0.393	1.00	1.00	1.00	1.277	1.277	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	1.00	0.339	1.00	5.00	5.00	0.026	0.026	1.00
11	3:48	1.00	0.623	1.00	5.00	5.00	0.063	0.063	1.00
12	9:38	1.00	0.777	1.00	5.00	5.00	0.122	0.122	1.00
13	11:20	1.00	0.914	1.00	5.00	5.00	0.068	0.068	1.00
14	4:02	1.00	0.661	1.00	1.00	1.00	0.142	0.142	1.00
15	2:10	1.00	0.355	1.00	1.00	1.00	1.656	1.656	1.00
16	2:00	1.00	0.328	1.00	1.00	1.00	0.627	0.627	1.00
17	3:02	1.00	0.497	1.00	1.00	1.00	1.282	1.282	1.00
18	2:36	1.00	0.426	1.00	1.00	1.00	0.649	0.649	1.00
19	4:14	1.00	0.694	1.00	1.00	1.00	1.179	1.179	1.00
20	5:10	1.00	0.847	1.00	1.00	1.00	0.454	0.454	1.00
21	4:28	1.00	0.360	1.00	1.00	1.00	1.781	1.781	1.00
22	4:44	1.00	0.382	1.00	1.00	1.00	1.540	1.540	1.00
23	8:02	1.00	0.648	1.00	1.00	1.00	0.841	0.841	1.00
24	7:14	1.00	0.583	1.00	1.00	1.00	0.836	0.836	1.00
25	9:06	1.00	0.734	1.00	1.00	1.00	0.589	0.589	1.00
26	6:40	1.00	0.538	1.00	1.00	1.00	1.191	1.191	1.00
27	11:22	1.00	0.917	1.00	1.00	1.00	0.450	0.450	1.00
28	10:40	1.00	0.860	1.00	1.00	1.00	0.274	0.274	1.00
29	5:04	1.00	0.409	1.00	1.00	1.00	1.890	1.890	1.00
30	10:20	1.00	0.833	1.00	1.00	1.00	0.348	0.348	1.00
31	11:28	1.00	0.925	1.00	1.00	1.00	0.354	0.354	1.00
32	13:58	1.00	0.809	1.00	1.00	1.00	0.221	0.221	1.00
33	10:48	1.00	0.871	1.00	1.00	1.00	1.321	1.321	1.00
34	15:02	1.00	1.212	1.00	1.00	1.00	0.322	0.322	1.00
35	9:44	1.00	0.785	1.00	1.00	1.00	2.134	2.134	1.00
36	12:28	1.00	1.005	1.00	1.00	1.00	1.411	1.411	1.00
37	12:46	1.00	1.030	1.00	1.00	1.00	2.408	2.408	1.00
38	13:44	1.00	1.108	1.00	1.00	1.00	1.153	1.153	1.00
39	13:00	1.00	1.048	1.00	2.00	2.00	1.100	1.100	1.00
40	13:42	1.00	1.105	1.00	1.00	1.00	0.890	0.890	1.00
41	3:44	1.00	0.612	1.00	1.00	1.00	0.496	0.496	1.00
42	16:30	1.00	0.956	1.00	1.00	1.00	1.776	1.776	1.00
43	16:30	1.00	0.956	1.00	1.00	1.00	1.776	1.776	1.00
44	17:18	1.00	1.002	1.00	1.00	1.00	1.172	1.172	1.00
45	18:40	1.00	1.081	1.00	1.00	1.00	0.111	0.111	1.00

3/16/93 18:57:29
Acquisition started

3/16/93 18:57:32

Acquire Run 0: W10316A Starting
03/16/93 18:57:00 + 0:00 Free sectors: 14496 Scan: 0 of 720
Sample: CLP,,, VSTD001, LOW, WATER, W10316A, VOA, IC-001,
Conds.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: Analyst: RJL Acct. No:

*** GC not ready and being equilibrated ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp	Rate	Time (minutes)		
#	(DegC)	(C/min)	period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 111 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 216 Deg C
					Ion source : 184 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1661

L 000166L

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal

Electron multiplier voltage: 984.

Filament emission current: 750.

Electrometer range: 10 ⁻⁷

Electrometer zero: 126.0

Analyzer Fore Pressure: 0.009 Torr

Separator/Source Pressure: 0.389 Torr

3/16/93 19:27:10

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

ode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.8	1440.0	0.1	8169.	11. 6.

PROCEDURE: TCA
DATA FILE: W10316A
REFERENCE: V111
NAME LIST: V1
REPORT: V11S

DIAGNOSTIC REPORT

3/17/93 8:53:48
0227

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	16	4	197	V11S/V1UNKS1	
3	3	1	23	16	14	1	176	V11S/V1UNKS2	
3	3	1	23	15	14	24	462	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 37 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LID	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-170	183	183	.	1	979	.	114	183	.	1
2	V1	2	-361	372	372	.	1	976	.	117	372	.	1
3	V1	3	-504	314	.	.	.	.	.	150	.	.	.
4	V1	4	-427	439	439	.	1	943	.	95	439	.	1
5	V1	5	-34	40	39	-1	1	752	.	50	39	.	1
6	V1	6	-39	45	44	-1	1	738	.	94	44	.	1
7	V1	7	-36	42	40	-2	2	826	.	62	40	.	1
8	V1	8	-41	47	46	-1	1	718	.	64	45	-1	1
9	V1	9	-66	72	72	.	1	984	.	84	72	.	1
10	V1	10	-56	62	.	.	.	.	.	43	62	.	1
11	V1	11	-106	113	.	.	.	.	.	43	114	.	1
12	V1	12	-277	287	288	1	1	870	.	43	289	1	1
13	V1	13	-329	339	.	.	.	.	.	43	340	.	1
14	V1	14	-113	120	122	2	1	937	.	128	121	-1	1
15	V1	15	-59	65	65	.	1	870	.	76	65	.	1
16	V1	16	-55	61	60	-1	2	945	.	96	60	.	1
17	V1	17	-84	91	90	-1	1	943	.	63	91	1	1
18	V1	18	-73	79	78	-1	1	919	.	96	78	.	1
19	V1	19	-118	125	127	2	1	953	.	83	127	.	1
20	V1	20	-144	151	.	.	.	.	.	62	.	.	.
21	V1	21	-125	137	134	-3	1	947	.	97	134	.	1
22	V1	22	-133	145	142	-3	1	903	.	117	142	.	1
23	V1	23	-228	239	241	2	1	865	.	83	241	.	1
24	V1	24	-203	214	217	3	1	956	.	63	217	.	1
25	V1	25	-261	272	273	1	1	899	.	75	273	.	1
26	V1	26	-186	198	200	2	1	945	.	95	200	.	1
27	V1	27	-329	340	341	1	1	901	.	129	341	.	1
28	V1	28	-308	319	320	1	1	886	.	97	320	.	1
29	V1	29	-142	154	152	-2	1	936	.	78	152	.	1
30	V1	30	-299	310	.	.	.	.	.	75	310	.	1
31	V1	31	-332	343	343	.	1	876	.	107	344	1	1
32	V1	32	-407	418	.	.	.	.	.	173	419	.	1
33	V1	33	-314	325	324	-1	1	943	.	166	324	.	1
34	V1	34	-438	447	451	4	1	816	.	83	451	.	1
35	V1	35	-281	292	292	.	1	960	.	91	292	.	1
36	V1	36	-363	373	374	1	1	972	.	112	374	.	1
37	V1	37	-372	382	383	1	2	983	.	91	383	.	1
38	V1	38	-400	410	412	2	1	948	.	104	412	.	1
39	V1	39	-379	389	390	1	1	986	.	106	390	.	1
40	V1	40	-399	409	411	2	1	932	.	106	411	.	1
41	V1	41	-104	116	112	-4	1	912	.	96	112	.	1
42	V1	42	-482	491	495	4	2	979	.	146	495	.	1
43	V1	43	-487	496	495	-1	3	975	.	146	495	.	1
44	V1	44	-505	514	500	-14	2	980	.	146	500	.	1
45	V1	45	-544	552	.	.	.	.	.	75	.	.	.

0228

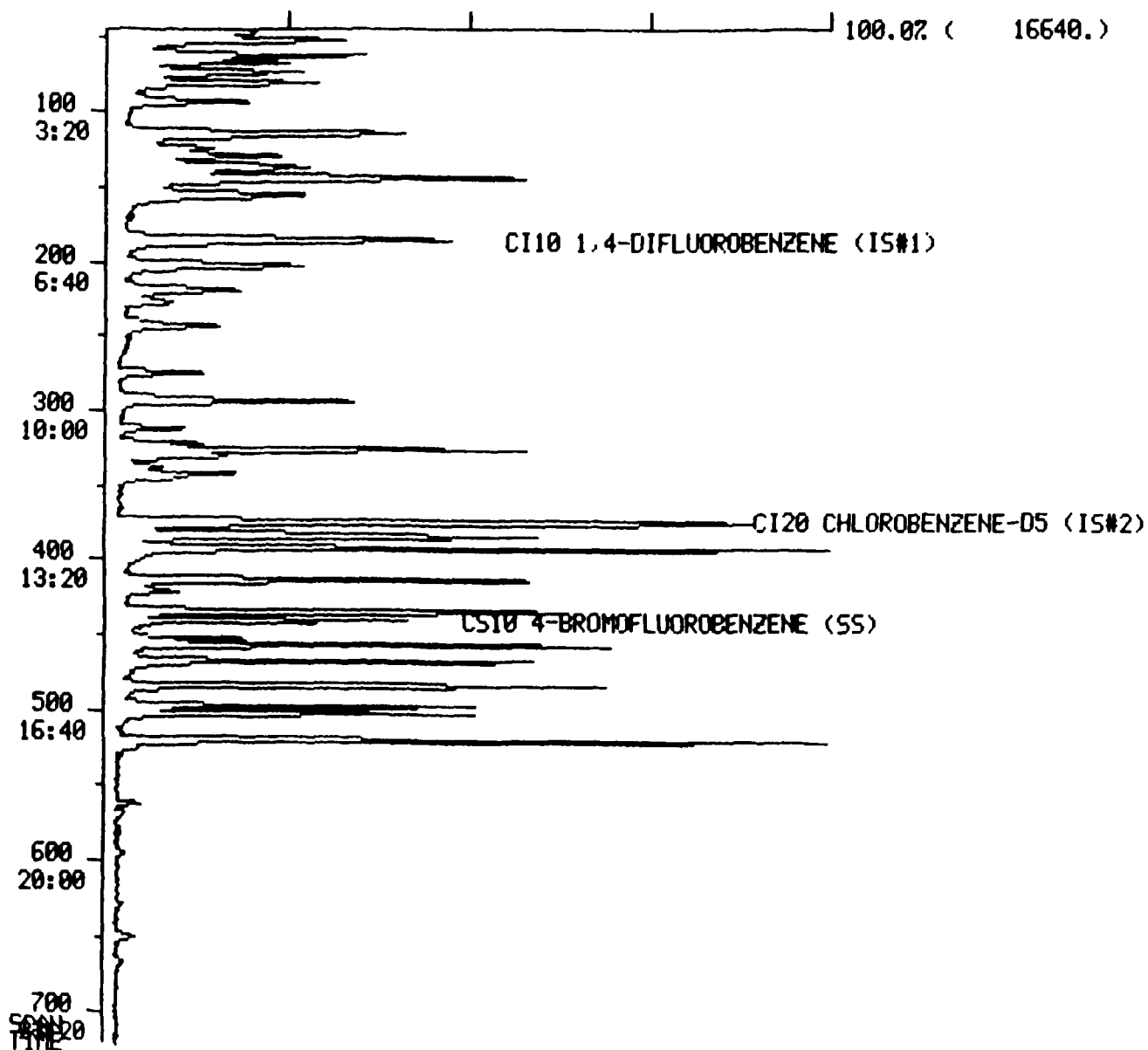
DATA FROM FILE: W10316B

SCANS 45 TO 720 ACQUIRED: 03/16/93 18:27:00

CALI: W10316B #3

SAMPLE: CLP,,,VST0002,LOW,WATER,W10316B,VOA,IC-002.

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ SPPB IS



TUT 004 1664

Date: W10316B.TI
03/16/93 18:27:00

Sample: CLP, , VSTD002, LOW, WATER, W10316B, VOA, IC-002,

Conds.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by:

Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUORODENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLORODENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	C010 CHLOROMETHANE **
6	C015 BROMOMETHANE
7	C020 VINYL CHLORIDE *
8	C025 CHLOROETHANE
9	C030 METHYLENE CHLORIDE
10	C035 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	C037 BROMOCHLOROMETHANE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C053 TRANS-1,2-DICHLOROETHENE
19	C060 CHLOROFORM *
20	C065 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	C054 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	11115.	5.000 UG/L	3.76
2	117	373	12:26	2	1.000	A BV	7785.	5.000 UG/L	3.76
3	150	519	17:18	3	1.000	A BB	5306.	5.000 UG/L	3.76
4	95	440	14:40	1	2.391	A BV	3554.	2.000 UG/L	1.50
5	50	40	1:20	1	0.217	A BB	4847.	2.000 UG/L	1.50
6	94	45	1:30	1	0.245	A BB	2641.	2.000 UG/L	1.50
7	62	41	1:22	1	0.223	A BB	3241.	2.000 UG/L	1.50
8	64	47	1:34	1	0.255	A VB	2068.	2.000 UG/L	1.50
9	84	73	2:26	1	0.397	A BD	2295.	2.000 UG/L	1.50
10	43	63	2:06	1	0.342	A BB	414.	10.000 UG/L	7.52
11	43	115	3:50	1	0.625	A BB	1008.	10.000 UG/L	7.52
12	43	289	9:38	2	0.775	A BB	1666.	10.000 UG/L	7.52
13	43	341	11:22	2	0.914	A BB	1074.	10.000 UG/L	7.52
14	128	122	4:04	1	0.663	A BB	616.	2.000 UG/L	1.50
15	76	66	2:12	1	0.359	A BB	7178.	2.000 UG/L	1.50
16	96	61	2:02	1	0.332	A BD	2500.	2.000 UG/L	1.50
17	63	92	3:04	1	0.500	A BB	4705.	2.000 UG/L	1.50
18	96	79	2:38	1	0.429	A BB	2520.	2.000 UG/L	1.50
19	83	128	4:16	1	0.696	A BV	4643.	2.000 UG/L	1.50
20	62	155	5:10	1	0.842	A BB	1638.	2.000 UG/L	1.50
21	97	135	4:30	2	0.362	A BB	5460.	2.000 UG/L	1.50
22	117	143	4:46	2	0.383	A VB	4750.	2.000 UG/L	1.50
23	83	242	8:04	2	0.649	A BB	2530.	2.000 UG/L	1.50
24	63	218	7:16	2	0.584	A BB	1975.	2.000 UG/L	1.50
25	75	274	9:08	2	0.735	A BB	1722.	2.000 UG/L	1.50
26	95	201	6:42	2	0.539	A BB	3286.	2.000 UG/L	1.50
27	129	342	11:24	2	0.917	A VB	1471.	2.000 UG/L	1.50
28	97	321	10:42	2	0.861	A BB	840.	2.000 UG/L	1.50
29	78	153	5:06	2	0.410	A BV	5640.	2.000 UG/L	1.50
30	75	311	10:22	2	0.834	A BB	1058.	2.000 UG/L	1.50
31	107	344	11:28	2	0.922	A BB	1052.	2.000 UG/L	1.50
32	173	420	14:00	3	0.809	A BB	515.	2.000 UG/L	1.50
33	166	325	10:50	2	0.871	A BB	4138.	2.000 UG/L	1.50
34	83	452	15:04	2	1.212	A BB	977.	2.000 UG/L	1.50
35	91	293	9:46	2	0.786	A BB	5869.	2.000 UG/L	1.50
36	112	375	12:30	2	1.005	A BB	4275.	2.000 UG/L	1.50
37	91	384	12:48	2	1.029	A BV	7366.	2.000 UG/L	1.50
38	104	413	13:46	2	1.107	A BB	3400.	2.000 UG/L	1.50
39	106	391	13:02	2	1.048	A VB	5603.	4.000 UG/L	3.01
40	106	412	13:44	2	1.105	A BB	2267.	2.000 UG/L	1.50
41	96	113	3:46	1	0.614	A BB	2178.	2.000 UG/L	1.50
42	146	496	16:32	3	0.956	A BV	3504.	2.000 UG/L	1.50
43	146	501	16:42	3	0.965	A VB	3286.	2.000 UG/L	1.50
44	166	520	17:20	3	1.002	A BB	2605.	2.000 UG/L	1.50
45	75	561	18:42	3	1.081	A BB	214.	2.000 UG/L	1.50

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:18	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:40	1.00	2.391	1.00	2.00	2.00	0.799	0.799	1.00
5	1:20	1.00	0.217	1.00	2.00	2.00	1.090	1.090	1.00
6	1:30	1.00	0.245	1.00	2.00	2.00	0.594	0.594	1.00
7	1:22	1.00	0.223	1.00	2.00	2.00	0.729	0.729	1.00
8	1:34	1.00	0.255	1.00	2.00	2.00	0.465	0.465	1.00
9	2:26	1.00	0.397	1.00	2.00	2.00	0.516	0.516	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:06	1.00	0.342	1.00	10.00	10.00	0.019	0.019	1.00
11	3:50	1.00	0.625	1.00	10.00	10.00	0.045	0.045	1.00
12	9:38	1.00	0.775	1.00	10.00	10.00	0.107	0.107	1.00
13	11:22	1.00	0.914	1.00	10.00	10.00	0.069	0.069	1.00
14	4:04	1.00	0.663	1.00	2.00	2.00	0.139	0.139	1.00
15	2:12	1.00	0.359	1.00	2.00	2.00	1.615	1.615	1.00
16	2:02	1.00	0.332	1.00	2.00	2.00	0.562	0.562	1.00
17	3:04	1.00	0.500	1.00	2.00	2.00	1.058	1.058	1.00
18	2:38	1.00	0.429	1.00	2.00	2.00	0.567	0.567	1.00
19	4:16	1.00	0.696	1.00	2.00	2.00	1.044	1.044	1.00
20	5:10	1.00	0.842	1.00	2.00	2.00	0.368	0.368	1.00
21	4:30	1.00	0.362	1.00	2.00	2.00	1.753	1.753	1.00
22	4:46	1.00	0.383	1.00	2.00	2.00	1.525	1.525	1.00
23	8:04	1.00	0.649	1.00	2.00	2.00	0.812	0.812	1.00
24	7:16	1.00	0.584	1.00	2.00	2.00	0.634	0.634	1.00
25	9:08	1.00	0.735	1.00	2.00	2.00	0.553	0.553	1.00
26	6:42	1.00	0.539	1.00	2.00	2.00	1.055	1.055	1.00
27	11:24	1.00	0.917	1.00	2.00	2.00	0.472	0.472	1.00
28	10:42	1.00	0.861	1.00	2.00	2.00	0.270	0.270	1.00
29	5:06	1.00	0.410	1.00	2.00	2.00	1.811	1.811	1.00
30	10:22	1.00	0.834	1.00	2.00	2.00	0.340	0.340	1.00
31	11:28	1.00	0.922	1.00	2.00	2.00	0.338	0.338	1.00
32	14:00	1.00	0.809	1.00	2.00	2.00	0.243	0.243	1.00
33	10:50	1.00	0.871	1.00	2.00	2.00	1.329	1.329	1.00
34	15:04	1.00	1.212	1.00	2.00	2.00	0.314	0.314	1.00
35	9:46	1.00	0.786	1.00	2.00	2.00	1.885	1.885	1.00
36	12:30	1.00	1.005	1.00	2.00	2.00	1.373	1.373	1.00
37	12:48	1.00	1.029	1.00	2.00	2.00	2.366	2.366	1.00
38	13:46	1.00	1.107	1.00	2.00	2.00	1.092	1.092	1.00
39	13:02	1.00	1.048	1.00	4.00	4.00	0.900	0.900	1.00
40	13:44	1.00	1.105	1.00	2.00	2.00	0.728	0.728	1.00
41	3:46	1.00	0.614	1.00	2.00	2.00	0.490	0.490	1.00
42	16:32	1.00	0.956	1.00	2.00	2.00	1.651	1.651	1.00
43	16:42	1.00	0.965	1.00	2.00	2.00	1.548	1.548	1.00
44	17:20	1.00	1.002	1.00	2.00	2.00	1.227	1.227	1.00
45	18:42	1.00	1.081	1.00	2.00	2.00	0.101	0.101	1.00

3/16/93 18:27:27
Acquisition started

0232

3/16/93 18:27:30

Acquire Run 0: W10316B Starting
03/16/93 18:27:00 + 0:00 Free sectors: 14612 Scan: 0 of 720
Sample: CLP, , VSTD002, LOW, WATER, W10316B, VOA, IC-002,
Conds.: 1500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS
Formula: 25ML AMBIENT PURGE Instrument: 1500A Weight: 0.000
Submitted by: Analyst: RUL Acct. No:

*** GC not ready and being equilibrated ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp	Rate	Time (minutes)		
#	(DegC)	(C/min)	period	total	
1	35- 35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 106 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 216 Deg C
					Ion source : 184 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1668

L0001669

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 ⁻⁷
Electrometer zero:		126.0

Analyzer Fore Pressure : 0.009 Torr
 Separator/Source Pressure : 0.381 Torr

3/16/93 18:57:03

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.7	1440.0	0.1	9877.	14.7.

PROCEDURE: TCA
 DATA FILE: W103168
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V11S

DIAGNOSTIC REPORT

3/17/93 8:46:43

0234

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	17	4	191	V11S/V1UNKS1	
3	3	1	23	16	16	1	165	V11S/V1UNKS2	
3	3	1	23	15	14	72	130	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 40 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-170	184	184		1	978		114	184		1
2	V1	2	-361	373	373		1	972		117	373		1
3	V1	3	-504	515						150			
4	V1	4	-427	440	440		1	942		95	440		1
5	V1	5	-34	41	40	-1	1	847		50	40		1
6	V1	6	-39	46	45	-1	1	840		94	45		1
7	V1	7	-36	43	41	-2	2	867		62	41		1
8	V1	8	-41	48	47	-1	1	828		64	47		1
9	V1	9	-66	73	73		1	976		84	73		1
10	V1	10	-56	63						43	63		1
11	V1	11	-106	114						43	115		1
12	V1	12	-277	288	289	1	1	872		43	289		1
13	V1	13	-329	340	341	1	1	836		43	341		1
14	V1	14	-113	121	123	2	1	948		128	122	-1	1
15	V1	15	-59	66	66		1	941		76	66		1
16	V1	16	-55	62	61	-1	2	958		96	61		1
17	V1	17	-84	92	92		1	955		63	92		1
18	V1	18	-73	80	79	-1	1	962		96	79		1
19	V1	19	-118	126	128	2	1	959		83	128		1
20	V1	20	-144	153						62	155		1
21	V1	21	-125	138	135	-3	1	981		97	135		1
22	V1	22	-133	146	143	-3	1	932		117	143		1
23	V1	23	-228	240	242	2	1	926		83	242		1
24	V1	24	-203	215	218	3	1	972		63	218		1
25	V1	25	-261	273	274	1	1	941		75	274		1
26	V1	26	-186	198	201	3	1	949		95	201		1
27	V1	27	-329	341	342	1	1	926		129	342		1
28	V1	28	-308	320	321	1	1	961		97	321		1
29	V1	29	-142	155	153	-2	1	951		78	153		1
30	V1	30	-299	311	311		1	865		75	311		1
31	V1	31	-332	344	344		1	932		107	344		1
32	V1	32	-407	419	420	1	1	802		173	420		1
33	V1	33	-314	326	325	-1	1	952		166	325		1
34	V1	34	-438	451	452	1	1	902		83	452		1
35	V1	35	-281	293	293		1	975		91	293		1
36	V1	36	-363	375	375		1	980		112	375		1
37	V1	37	-372	385	384	-1	2	988		91	384		1
38	V1	38	-400	413	413		1	957		104	413		1
39	V1	39	-379	392	391	-1	1	988		106	391		1
40	V1	40	-399	412	412		2	935		106	412		1
41	V1	41	-104	115	113	-2	1	933		96	113		1
42	V1	42	-482	495	496	1	2	985		146	496		1
43	V1	43	-487	500	501	1	3	992		146	501		1
44	V1	44	-505	518	519	1	3	994		146	520		1
45	V1	45	-544	558						75			

0235

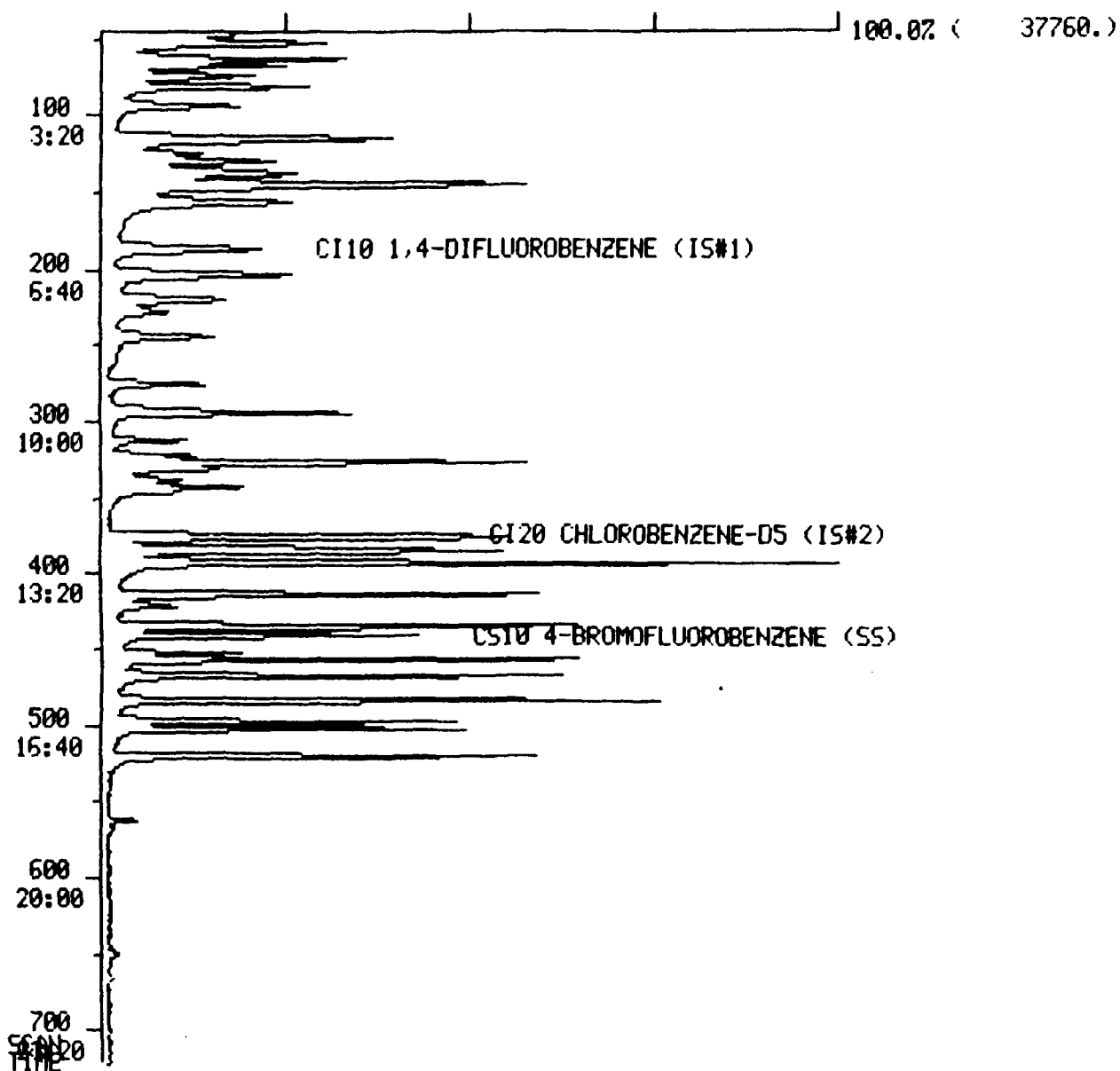
DATA FROM FILE: WI0316C

SCANS 45 TO 720 ACQUIRED: 03/16/93 17:57:00

CALI: WI0316C #3

SAMPLE: CLP,,,USTD005,LOW,WATER,WI0316C,VOA,IC-005,

CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS



TUT 004 1671

L 0001671

Data: W10316C.TI

03/16/93 17:57:00

Sample: CLP,,, VSTD005, LOW, WATER, W10316C, VOA, IC-005,

Conds.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by:

Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUOROBENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	C010 CHLOROMETHANE **
6	C015 BROMOMETHANE
7	C020 VINYL CHLORIDE *
8	C025 CHLOROETHANE
9	C030 METHYLENE CHLORIDE
10	C035 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	C037 BROMOCHLOROMETHANE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C053 TRANS-1,2-DICHLOROETHENE
19	C050 CHLOROFORM *
20	C065 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	C054 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1672

C0001075

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	185	6:10	1	1.000	A BB	11075.	5.000 UG/L	1.61
2	117	373	12:26	2	1.000	A BV	7769.	5.000 UG/L	1.61
3	150	518	17:16	3	1.000	A BB	5599.	5.000 UG/L	1.61
4	95	439	14:38	1	2.373	A BV	7727.	5.000 UG/L	1.61
5	50	40	1:20	1	0.216	A BB	10017.	5.000 UG/L	1.61
6	94	45	1:30	1	0.243	A BB	5688.	5.000 UG/L	1.61
7	62	41	1:22	1	0.222	A BB	7706.	5.000 UG/L	1.61
8	61	47	1:34	1	0.254	A VB	4082.	5.000 UG/L	1.61
9	84	73	2:26	1	0.395	A BB	4254.	5.000 UG/L	1.61
10	43	63	2:06	1	0.341	A BB	908.	25.000 UG/L	8.06
11	43	116	3:52	1	0.627	A BB	1809.	25.000 UG/L	8.06
12	43	289	9:38	2	0.775	A BB	3955.	25.000 UG/L	8.06
13	43	341	11:22	2	0.914	A BB	2679.	25.000 UG/L	8.06
14	128	123	4:06	1	0.665	A BB	1489.	5.000 UG/L	1.61
15	76	66	2:12	1	0.357	A BB	16729.	5.000 UG/L	1.61
16	96	61	2:02	1	0.330	A BB	5484.	5.000 UG/L	1.61
17	63	92	3:04	1	0.497	A BB	10246.	5.000 UG/L	1.61
18	96	80	2:40	1	0.432	A BV	5892.	5.000 UG/L	1.61
19	83	128	4:16	1	0.692	A BV	10319.	5.000 UG/L	1.61
20	62	156	5:12	1	0.843	A BB	3539.	5.000 UG/L	1.61
21	97	136	4:32	2	0.365	A BB	11399.	5.000 UG/L	1.61
22	117	144	4:48	2	0.386	A VB	10603.	5.000 UG/L	1.61
23	83	242	8:04	2	0.649	A BB	6164.	5.000 UG/L	1.61
24	63	219	7:18	2	0.587	A BB	4103.	5.000 UG/L	1.61
25	75	274	9:08	2	0.735	A BB	4454.	5.000 UG/L	1.61
26	95	202	6:44	2	0.542	A BB	7094.	5.000 UG/L	1.61
27	129	341	11:22	2	0.914	A VB	3878.	5.000 UG/L	1.61
28	97	321	10:42	2	0.861	A BB	2244.	5.000 UG/L	1.61
29	78	154	5:08	2	0.413	A BB	11899.	5.000 UG/L	1.61
30	75	311	10:22	2	0.834	A BB	2876.	5.000 UG/L	1.61
31	107	344	11:28	2	0.922	A BV	2541.	5.000 UG/L	1.61
32	173	420	14:00	3	0.811	A BB	1363.	5.000 UG/L	1.61
33	166	325	10:50	2	0.871	A BB	9451.	5.000 UG/L	1.61
34	83	451	15:02	2	1.209	A BB	2317.	5.000 UG/L	1.61
35	91	293	9:46	2	0.786	A BB	13614.	5.000 UG/L	1.61
36	112	374	12:28	2	1.003	A BB	9554.	5.000 UG/L	1.61
37	91	384	12:48	2	1.029	A BV	17450.	5.000 UG/L	1.61
38	104	413	13:46	2	1.107	A BB	7559.	5.000 UG/L	1.61
39	106	391	13:02	2	1.048	A VB	13112.	10.000 UG/L	3.23
40	106	412	13:44	2	1.105	A BB	4978.	5.000 UG/L	1.61
41	96	113	3:46	1	0.611	A BB	4338.	5.000 UG/L	1.61
42	146	496	16:32	3	0.958	A BV	7338.	5.000 UG/L	1.61
43	146	501	16:42	3	0.967	A VB	7369.	5.000 UG/L	1.61
44	146	519	17:18	3	1.002	A BB	5400.	5.000 UG/L	1.61
45	75	561	18:42	3	1.083	A BB	529.	5.000 UG/L	1.61

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:10	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.373	1.00	5.00	5.00	0.698	0.698	1.00
5	1:20	1.00	0.216	1.00	5.00	5.00	0.904	0.904	1.00
6	1:30	1.00	0.243	1.00	5.00	5.00	0.514	0.514	1.00
7	1:22	1.00	0.222	1.00	5.00	5.00	0.696	0.696	1.00
8	1:34	1.00	0.254	1.00	5.00	5.00	0.369	0.369	1.00
9	2:26	1.00	0.395	1.00	5.00	5.00	0.384	0.384	1.00

L0001071

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:06	1.00	0.341	1.00	25.00	25.00	0.016	0.016	1.00
11	3:52	1.00	0.627	1.00	25.00	25.00	0.033	0.033	1.00
12	9:38	1.00	0.775	1.00	25.00	25.00	0.102	0.102	1.00
13	11:22	1.00	0.914	1.00	25.00	25.00	0.069	0.069	1.00
14	4:06	1.00	0.665	1.00	5.00	5.00	0.134	0.134	1.00
15	2:12	1.00	0.357	1.00	5.00	5.00	1.511	1.511	1.00
16	2:02	1.00	0.330	1.00	5.00	5.00	0.495	0.495	1.00
17	3:04	1.00	0.497	1.00	5.00	5.00	0.925	0.925	1.00
18	2:40	1.00	0.432	1.00	5.00	5.00	0.532	0.532	1.00
19	4:16	1.00	0.692	1.00	5.00	5.00	0.932	0.932	1.00
20	5:12	1.00	0.843	1.00	5.00	5.00	0.320	0.320	1.00
21	4:32	1.00	0.365	1.00	5.00	5.00	1.467	1.467	1.00
22	4:48	1.00	0.386	1.00	5.00	5.00	1.365	1.365	1.00
23	8:04	1.00	0.649	1.00	5.00	5.00	0.793	0.793	1.00
24	7:18	1.00	0.587	1.00	5.00	5.00	0.528	0.528	1.00
25	9:08	1.00	0.735	1.00	5.00	5.00	0.573	0.573	1.00
26	6:44	1.00	0.542	1.00	5.00	5.00	0.913	0.913	1.00
27	11:22	1.00	0.914	1.00	5.00	5.00	0.499	0.499	1.00
28	10:42	1.00	0.861	1.00	5.00	5.00	0.289	0.289	1.00
29	5:08	1.00	0.413	1.00	5.00	5.00	1.532	1.532	1.00
30	10:22	1.00	0.834	1.00	5.00	5.00	0.370	0.370	1.00
31	11:28	1.00	0.922	1.00	5.00	5.00	0.327	0.327	1.00
32	14:00	1.00	0.811	1.00	5.00	5.00	0.243	0.243	1.00
33	10:50	1.00	0.871	1.00	5.00	5.00	1.216	1.216	1.00
34	15:02	1.00	1.209	1.00	5.00	5.00	0.298	0.298	1.00
35	9:46	1.00	0.786	1.00	5.00	5.00	1.752	1.752	1.00
36	12:28	1.00	1.003	1.00	5.00	5.00	1.230	1.230	1.00
37	12:48	1.00	1.029	1.00	5.00	5.00	2.246	2.246	1.00
38	13:46	1.00	1.107	1.00	5.00	5.00	0.973	0.973	1.00
39	13:02	1.00	1.048	1.00	10.00	10.00	0.844	0.844	1.00
40	13:44	1.00	1.105	1.00	5.00	5.00	0.641	0.641	1.00
41	3:46	1.00	0.611	1.00	5.00	5.00	0.392	0.392	1.00
42	16:32	1.00	0.958	1.00	5.00	5.00	1.311	1.311	1.00
43	16:42	1.00	0.967	1.00	5.00	5.00	1.316	1.316	1.00
44	17:18	1.00	1.002	1.00	5.00	5.00	0.964	0.964	1.00
45	18:42	1.00	1.083	1.00	5.00	5.00	0.094	0.094	1.00

3/16/93 17:57:24
Acquisition started

0239

3/16/93 17:57:27

Acquire Run 0: W10316C Starting
03/16/93 17:57:00 + 0:00 Free sectors: 14769 Scan: 0 of 720
Sample: CLP, VSTD005, LOW, WATER, W10316C, VDA, IC-005,
Conds.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: Analyst: RJL Acct. No:

*** GC not ready and being equilibrated ***

GC Desc : V1 Elapsed time : 0.0 Min

Seq. #	Temp (DegC)	Rate (C/min)	Time (minutes) period	total	Injector A	
1	35-35	-	6.6	6.6	GC oven	150 Deg C
2	35-150	8.0	14.3	20.9	Transfer-line	108 Deg C
3	150-150	-	3.0	23.9	Ion source	216 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

PPW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

PPW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

L 0001675

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\wedge$ -7
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.381 Torr

3/16/93 18:27:00

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.9	1440.0	0.1	15129.	21. 11.

TUT 004 1676

U0001677

PROCEDURE: TCA
DATA FILE: W10316C
REFERENCE: V111
NAME LIST: V1
REPORT: V11S

DIAGNOSTIC REPORT

3/17/93 8:39:26

0241

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	17	8	229	V11S/V1UNKS1	
3	3	1	11	16	16	2	161	V11S/V1UNKS2	
3	3	1	11	15	15	36	185	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 41 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-170	185	185		1	977		114	185		1
2	V1	2	-361	373	373		1	970		117	373		1
3	V1	3	-504	514						150			
4	V1	4	-427	440	439	-1	1	959		95	439		1
5	V1	5	-34	41	40	-1	1	871		50	40		1
6	V1	6	-39	46	45	-1	1	921		94	45		1
7	V1	7	-36	43	41	-2	2	917		62	41		1
8	V1	8	-41	48	47	-1	1	928		64	47		1
9	V1	9	-66	74	73	-1	2	981		84	73		1
10	V1	10	-56	64						43	63		1
11	V1	11	-106	114						43	116		1
12	V1	12	-277	288	289	1	1	876		43	289		1
13	V1	13	-329	340	341	1	1	953		43	341		1
14	V1	14	-113	121						128	123		1
15	V1	15	-59	67	66	-1	1	980		76	66		1
16	V1	16	-55	62	61	-1	2	963		96	61		1
17	V1	17	-84	92	92		1	966		63	92		1
18	V1	18	-73	81	80	-1	1	982		96	80		1
19	V1	19	-118	126	128	2	1	974		83	128		1
20	V1	20	-144	153	156	3	1	865		62	156		1
21	V1	21	-125	138	136	-2	1	990		97	136		1
22	V1	22	-133	146	144	-2	1	957		117	144		1
23	V1	23	-228	241	242	1	1	977		83	242		1
24	V1	24	-203	216	218	2	1	992		63	219	1	1
25	V1	25	-261	274	274		1	963		75	274		1
26	V1	26	-186	199	202	3	1	967		95	202		1
27	V1	27	-329	341	341		1	960		129	341		1
28	V1	28	-308	320	321	1	1	974		97	321		1
29	V1	29	-142	155	154	-1	1	962		78	154		1
30	V1	30	-299	311	311		1	920		75	311		1
31	V1	31	-332	344	344		1	984		107	344		1
32	V1	32	-407	419	420	1	1	898		173	420		1
33	V1	33	-314	326	325	-1	2	956		166	325		1
34	V1	34	-438	451	451		1	940		83	451		1
35	V1	35	-281	293	293		1	978		91	293		1
36	V1	36	-363	376	374	-2	1	984		112	374		1
37	V1	37	-372	385	384	-1	2	990		91	384		1
38	V1	38	-400	413	413		1	967		104	413		1
39	V1	39	-379	392	391	-1	1	990		106	391		1
40	V1	40	-399	412	412		1	915		106	412		1
41	V1	41	-104	115	113	-2	1	939		96	113		1
42	V1	42	-482	495	496	1	2	980		146	496		1
43	V1	43	-487	500	501	1	3	997		146	501		1
44	V1	44	-505	519	519		3	978		146	519		1
45	V1	45	-544	558	561	3	1	806		75	561		1

L0001670

0242

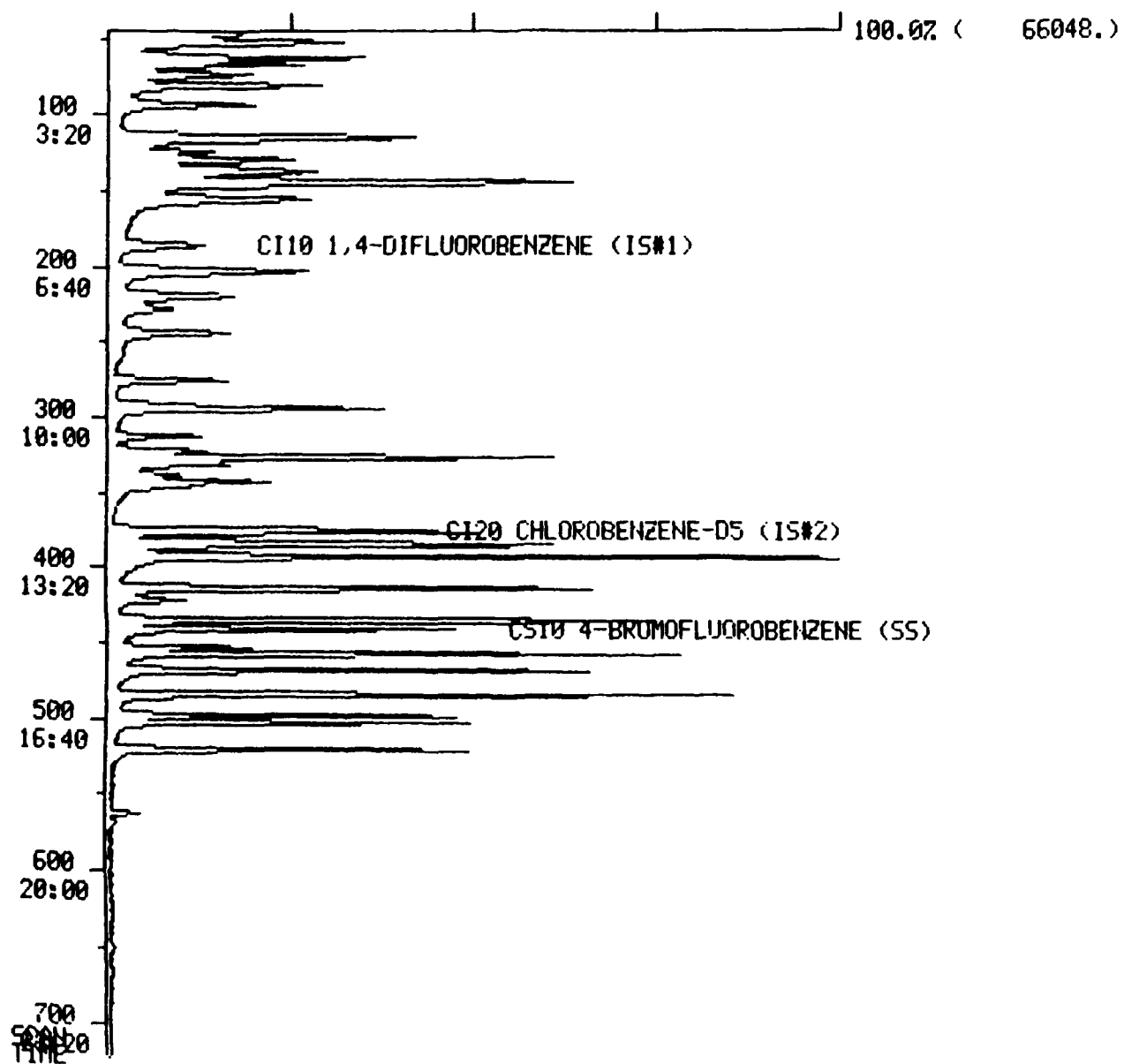
DATA FROM FILE: WI0316D

SCANS 45 TO 720 ACQUIRED: 03/16/93 17:27:00

CALI: WI0316D #3

SAMPLE: CLP,,,USTD010,LOW,WATER,WI0316D,VOA,IC-010,

COND.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS



TUT 004 1678

L0001679

Data: W10316D.TI

03/16/93 17:27:00

Sample: CLP,,,VSTD010,LOW,WATER,W10316D,VOA,IC-010,

Conds.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by:

Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUOROBENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUORODENZENE (SS)
5	C010 CHLOROMETHANE **
6	C015 BROMOMETHANE
7	C020 VINYL CHLORIDE *
8	C025 CHLOROETHANE
9	C030 METHYLENE CHLORIDE
10	C035 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	C037 BROMOCHLOROMETHANE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C053 TRANS-1,2-DICHLOROETHENE
19	C060 CHLOROFORM *
20	C065 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	C054 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1679

L 0001680

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	185	6:10	1	1.000	A BD	11105.	5.000 UG/L	0.83
2	117	374	12:28	2	1.000	A BV	7722.	5.000 UG/L	0.83
3	150	519	17:18	3	1.000	A BB	6154.	5.000 UG/L	0.83
4	95	440	14:40	1	2.378	A BV	14847.	10.000 UG/L	1.65
5	50	39	1:18	1	0.211	A BV	21183.	10.000 UG/L	1.65
6	94	45	1:30	1	0.243	A BV	10961.	10.000 UG/L	1.65
7	62	41	1:22	1	0.222	A BD	14360.	10.000 UG/L	1.65
8	64	47	1:34	1	0.254	A VB	7814.	10.000 UG/L	1.65
9	84	73	2:26	1	0.395	A BB	7010.	10.000 UG/L	1.65
10	43	63	2:06	1	0.341	A BV	1712.	50.000 UG/L	8.26
11	43	116	3:52	1	0.627	A BD	2925.	50.000 UG/L	8.26
12	43	290	9:40	2	0.775	A BB	7695.	50.000 UG/L	8.26
13	43	342	11:24	2	0.914	A BB	4615.	50.000 UG/L	8.26
14	128	123	4:06	1	0.665	A BB	2773.	10.000 UG/L	1.65
15	76	66	2:12	1	0.357	A BB	34236.	10.000 UG/L	1.65
16	96	61	2:02	1	0.330	A BB	10739.	10.000 UG/L	1.65
17	63	92	3:04	1	0.497	A BD	20332.	10.000 UG/L	1.65
18	96	80	2:40	1	0.432	A BB	9937.	10.000 UG/L	1.65
19	83	128	4:16	1	0.692	A BV	20103.	10.000 UG/L	1.65
20	62	156	5:12	1	0.843	A BB	6776.	10.000 UG/L	1.65
21	97	136	4:32	2	0.364	A BB	23692.	10.000 UG/L	1.65
22	117	144	4:48	2	0.385	A VB	22551.	10.000 UG/L	1.65
23	83	242	8:04	2	0.647	A BB	12812.	10.000 UG/L	1.65
24	63	219	7:18	2	0.586	A BB	8258.	10.000 UG/L	1.65
25	75	274	9:08	2	0.733	A BB	8781.	10.000 UG/L	1.65
26	95	202	6:44	2	0.540	A BB	14121.	10.000 UG/L	1.65
27	129	342	11:24	2	0.914	A VB	7067.	10.000 UG/L	1.65
28	97	321	10:42	2	0.858	A BB	3805.	10.000 UG/L	1.65
29	78	154	5:08	2	0.412	A BB	24099.	10.000 UG/L	1.65
30	75	312	10:24	2	0.834	A BV	5524.	10.000 UG/L	1.65
31	107	345	11:30	2	0.922	A BV	5300.	10.000 UG/L	1.65
32	173	420	14:00	3	0.809	A BB	3304.	10.000 UG/L	1.65
33	166	326	10:52	2	0.872	A BB	17263.	10.000 UG/L	1.65
34	83	452	15:04	2	1.209	A BB	4920.	10.000 UG/L	1.65
35	91	293	9:46	2	0.783	A BB	27087.	10.000 UG/L	1.65
36	112	375	12:30	2	1.003	A BB	18218.	10.000 UG/L	1.65
37	91	384	12:48	2	1.027	A BV	35106.	10.000 UG/L	1.65
38	104	414	13:48	2	1.107	A BD	15330.	10.000 UG/L	1.65
39	106	391	13:02	2	1.045	A VB	25887.	20.000 UG/L	3.31
40	106	412	13:44	2	1.102	A BD	10168.	10.000 UG/L	1.65
41	96	113	3:46	1	0.611	A BB	7739.	10.000 UG/L	1.65
42	146	496	16:32	3	0.956	A BV	14452.	10.000 UG/L	1.65
43	146	502	16:44	3	0.967	A VB	14386.	10.000 UG/L	1.65
44	146	520	17:20	3	1.002	A BB	10230.	10.000 UG/L	1.65
45	75	561	18:42	3	1.081	A BD	1058.	10.000 UG/L	1.65

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:10	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:28	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:18	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:40	1.00	2.378	1.00	10.00	10.00	0.668	0.668	1.00
5	1:18	1.00	0.211	1.00	10.00	10.00	0.954	0.954	1.00
6	1:30	1.00	0.243	1.00	10.00	10.00	0.494	0.494	1.00
7	1:22	1.00	0.222	1.00	10.00	10.00	0.647	0.647	1.00
8	1:34	1.00	0.254	1.00	10.00	10.00	0.352	0.352	1.00
9	2:26	1.00	0.395	1.00	10.00	10.00	0.316	0.316	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:06	1.00	0.341	1.00	50.00	50.00	0.015	0.015	1.00
11	3:52	1.00	0.627	1.00	50.00	50.00	0.026	0.026	1.00
12	9:40	1.00	0.775	1.00	50.00	50.00	0.100	0.100	1.00
13	11:24	1.00	0.914	1.00	50.00	50.00	0.060	0.060	1.00
14	4:06	1.00	0.665	1.00	10.00	10.00	0.125	0.125	1.00
15	2:12	1.00	0.357	1.00	10.00	10.00	1.541	1.541	1.00
16	2:02	1.00	0.330	1.00	10.00	10.00	0.484	0.484	1.00
17	3:04	1.00	0.497	1.00	10.00	10.00	0.915	0.915	1.00
18	2:40	1.00	0.432	1.00	10.00	10.00	0.447	0.447	1.00
19	4:16	1.00	0.692	1.00	10.00	10.00	0.905	0.905	1.00
20	5:12	1.00	0.843	1.00	10.00	10.00	0.305	0.305	1.00
21	4:32	1.00	0.364	1.00	10.00	10.00	1.534	1.534	1.00
22	4:48	1.00	0.385	1.00	10.00	10.00	1.460	1.460	1.00
23	8:04	1.00	0.647	1.00	10.00	10.00	0.830	0.830	1.00
24	7:18	1.00	0.586	1.00	10.00	10.00	0.535	0.535	1.00
25	9:08	1.00	0.733	1.00	10.00	10.00	0.569	0.569	1.00
26	6:44	1.00	0.540	1.00	10.00	10.00	0.914	0.914	1.00
27	11:24	1.00	0.914	1.00	10.00	10.00	0.458	0.458	1.00
28	10:42	1.00	0.858	1.00	10.00	10.00	0.246	0.246	1.00
29	5:08	1.00	0.412	1.00	10.00	10.00	1.560	1.560	1.00
30	10:24	1.00	0.834	1.00	10.00	10.00	0.358	0.358	1.00
31	11:30	1.00	0.922	1.00	10.00	10.00	0.343	0.343	1.00
32	14:00	1.00	0.809	1.00	10.00	10.00	0.268	0.268	1.00
33	10:52	1.00	0.872	1.00	10.00	10.00	1.118	1.118	1.00
34	15:04	1.00	1.209	1.00	10.00	10.00	0.319	0.319	1.00
35	9:46	1.00	0.783	1.00	10.00	10.00	1.754	1.754	1.00
36	12:30	1.00	1.003	1.00	10.00	10.00	1.180	1.180	1.00
37	12:48	1.00	1.027	1.00	10.00	10.00	2.273	2.273	1.00
38	13:48	1.00	1.107	1.00	10.00	10.00	0.993	0.993	1.00
39	13:02	1.00	1.045	1.00	20.00	20.00	0.838	0.838	1.00
40	13:44	1.00	1.102	1.00	10.00	10.00	0.658	0.658	1.00
41	3:46	1.00	0.611	1.00	10.00	10.00	0.348	0.348	1.00
42	16:32	1.00	0.956	1.00	10.00	10.00	1.174	1.174	1.00
43	16:44	1.00	0.967	1.00	10.00	10.00	1.169	1.169	1.00
44	17:20	1.00	1.002	1.00	10.00	10.00	0.831	0.831	1.00
45	18:42	1.00	1.081	1.00	10.00	10.00	0.086	0.086	1.00

3/16/93 17:27:10
Acquisition started

0246

3/16/93 17:27:13

Acquire

Run 0: W10316D

Starting

03/16/93 17:27:00 + 0:00

Free sectors: 14956

Scan: 0 of 720

Sample: CLP, , VSTD010, LOW, WATER, W10316D, VOA, IC-010,

Cond.: I500A:25ML DLV01 AMBIENT PURGE W/ 5PPB IS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Weight: 0.000

Submitted by:

Analyst: RJL

Acct. No:

*** GC not ready and being equilibrated ***

GC Desc.: V1

Elapsed time : 0.0 Min

Seq. Temp Rate Time (minutes)

*	(DegC)	(C/min)	period	total	Injector A	
1	35-35	-	6.6	6.6	150	Deg C
2	35-150	8.0	14.3	20.9	109	Deg C
3	150-150	-	3.0	23.9	216	Deg C

GC oven	154	Deg C
Transfer-line		
Ion source		

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off

MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1

Number of cycles: 28

Filament is OFF

Multiplier is ON

Scan descriptor: BF Mass intervals: 1

Positive ion mode.

Total scan time: 2.000 s

Master rate: 16

PW: 3 MFW: 80 MA: 15 TH: 1 BL: 0

Int # Lo mass Hi mass Time

1 33.510 300.590 2.000

Sequence Window # 2

Number of cycles: 1

Filament is ON

Multiplier is ON

Scan descriptor: BF Mass intervals: 1

Positive ion mode.

Total scan time: 2.000 s

Master rate: 16

PW: 3 MFW: 80 MA: 15 TH: 1 BL: 0

Int # Lo mass Hi mass Time

1 33.510 300.590 2.000

Calibration table: D: CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

L 0001685

TUT 004 1682

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal

Electron multiplier voltage: 984.
 Filament emission current: 750.
 Electrometer range: 10^{-7}
 Electrometer zero: 126.0

Analyzer Fore Pressure : 0.009 Torr
 Separator/Source Pressure : 0.368 Torr

3/16/93 17:56:57

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	1.1	1440.0	0.1	18934.	26. 13.

TUT 004 1683

L 0001684

REFERENCE: V111

0248

NAME LIST: V1 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

REPORT: V11S

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	18	24	217	V11S/V1UNKS1	
3	3	1	23	16	16	1	154	V11S/V1UNKS2	
3	3	1	23	15	15	72	157	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 42 FOUND

COMPOUND			SEARCH					SAT		CHRO			
ID	LID	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-170	185	185		1	979		114	185		1
2	V1	2	-361	374	374		1	918		117	374		1
3	V1	3	-504	516						150			
4	V1	4	-427	441	440	-1	1	953		95	440		1
5	V1	5	-34	42	39	-3	1	880		50	39		1
6	V1	6	-39	47	45	-2	1	958		94	45		1
7	V1	7	-36	44	46	2	2	909		62			
8	V1	8	-41	49	47	-2	1	963		64	47		1
9	V1	9	-66	74	73	-1	2	986		84	73		1
10	V1	10	-56	64						43	63		1
11	V1	11	-106	115						43	116		1
12	V1	12	-277	288	290	2	3	885		43	290		1
13	V1	13	-329	341	342	1	1	964		43	342		1
14	V1	14	-113	122	123	1	1	967		128	123		1
15	V1	15	-59	67	66	-1	1	992		76	66		1
16	V1	16	-55	63	61	-2	2	966		96	61		1
17	V1	17	-84	92	92		1	971		63	92		1
18	V1	18	-73	81	80	-1	1	984		96	80		1
19	V1	19	-118	127	128	1	1	986		83	128		1
20	V1	20	-144	153	156	3	1	869		62	156		1
21	V1	21	-125	138	136	-2	1	986		97	136		1
22	V1	22	-133	146	144	-2	1	962		117	144		1
23	V1	23	-228	241	242	1	1	990		83	242		1
24	V1	24	-203	216	219	3	1	997		63	219		1
25	V1	25	-261	274	274		1	972		75	274		1
26	V1	26	-186	199	202	3	1	971		95	202		1
27	V1	27	-329	342	342		1	972		129	342		1
28	V1	28	-308	321	321		1	985		97	321		1
29	V1	29	-142	155	154	-1	1	970		78	154		1
30	V1	30	-299	312	312		1	961		75	312		1
31	V1	31	-332	345	345		1	994		107	345		1
32	V1	32	-407	420	420		1	951		173	420		1
33	V1	33	-314	327	326	-1	1	953		166	326		1
34	V1	34	-438	452	452		1	960		83	452		1
35	V1	35	-281	293	293		1	985		91	293		1
36	V1	36	-363	376	375	-1	1	990		112	375		1
37	V1	37	-372	385	384	-1	2	992		91	384		1
38	V1	38	-400	413	413		1	947		104	414	1	1
39	V1	39	-379	392	392		1	987		106	391	-1	1
40	V1	40	-399	412	412		2	960		106	412		1
41	V1	41	-104	115	113	-2	1	940		96	113		1
42	V1	42	-482	496	497	1	2	980		146	496	-1	1
43	V1	43	-487	501	502	1	3	994		146	502		1
44	V1	44	-505	519	520	1	3	983		146	520		1
45	V1	45	-544	559	561	2	1	917		75	561		1

L0001685

0249

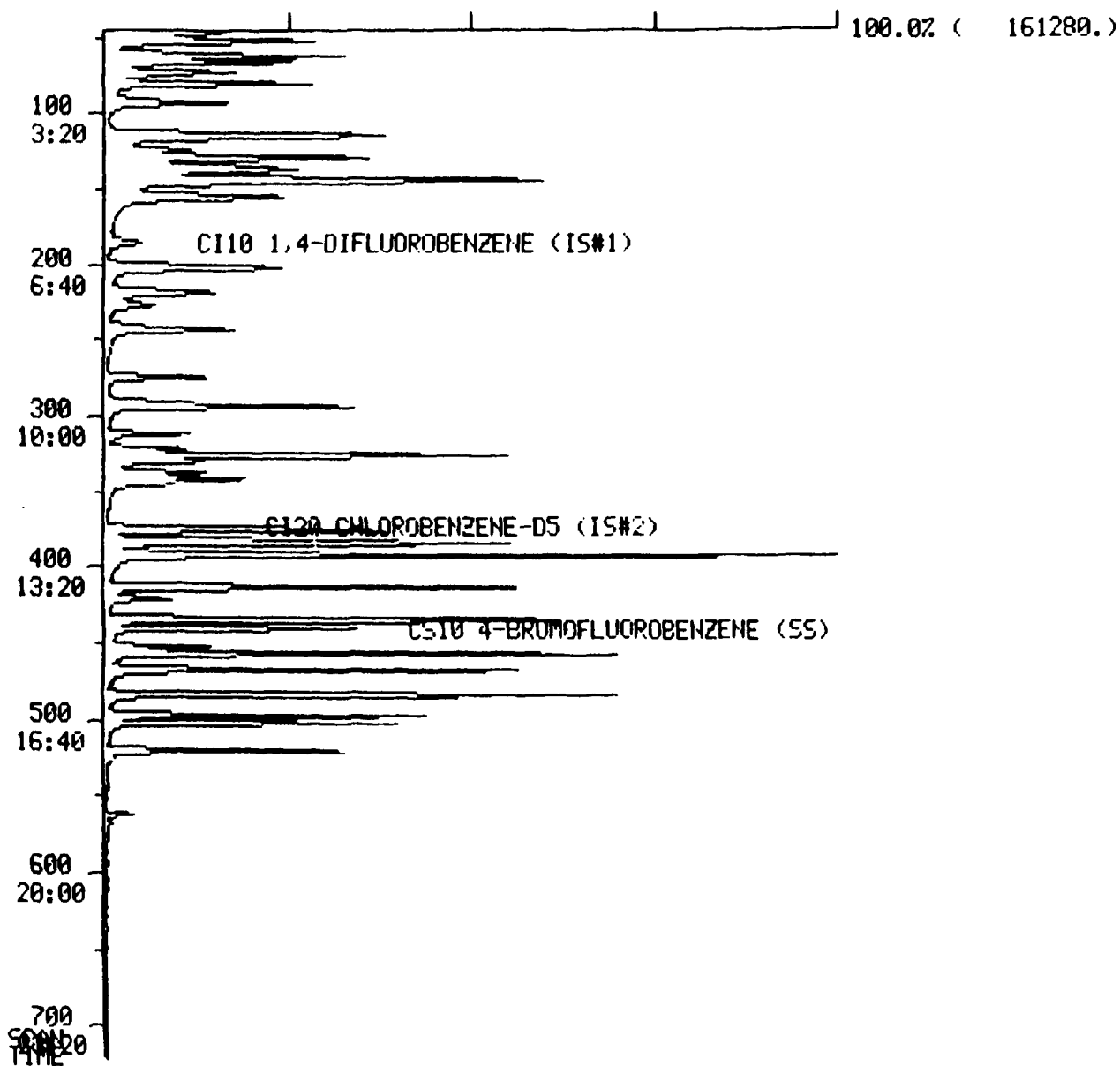
DATA FROM FILE: W10316E

SCANS 45 TO 720 ACQUIRED: 03/16/93 17:01:00

CALI: W10316E #3

SAMPLE: CP,,,USTD025,LOW,WATER,W10316E,VOA,IC-025,

CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS



TUT 004 1685

L 0001680

3/17/93 12:53:08
Acquisition started

0321

3/17/93 12:53:14

Require Run 0: VV7322 Starting
3/17/93 12:53:00 + 0:00 Free sectors: 13575 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW030RMS, LDW, WATER, VV7322, VOA, MS,
Conds.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being equilibrated ***

GC Desc.: V1 Elapsed time: 0.0 Min
Seq. Temp Rate Time (minutes)
(DegC) (C/min) period total
1 35-35 - 6.6 6.6
2 35-150 8.0 14.3 20.9
3 150-150 - 3.0 23.9
Valve A : closed Valve B : open
Injector A : 150 Deg C
GC oven : 90 Deg C
Transfer-line: 216 Deg C
Ion source : 184 Deg C

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

PH: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

PH: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number 0
Instrument type Q
Full scale mass 1177 u
Zero scale mass 1 u
Intensity/ion 2
Peak width 1000. mmu
Offset at low mass 0 mmu
Offset at high mass 0 mmu
Voltage settling time(ms) 20

TUT 004 1686

L 0001758

Data: W10316E.TI

03/16/93 17:01:00

Sample: CP, , VSTD025, LOW, WATER, W10316E, VOA, IC-025,

Conds.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by:

Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI10 2-BUTANONE
12	CO25 4-METHYL-2-PENTANONE
13	CO210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI115 1,1,1-TRICHLOROETHANE
22	CI20 CARBON TETRACHLORIDE
23	CI30 BROMODICHLOROMETHANE
24	CI40 1,2-DICHLOROPROPANE *
25	CI43 CIS-1,3-DICHLOROPROPENE
26	CI50 TRICHLOROETHENE
27	CI55 DIBROMOCHLOROMETHANE
28	CI60 1,1,2-TRICHLOROETHANE
29	CI65 BENZENE
30	CI72 TRANS-1,3-DICHLOROPROPENE
31	CI76 DIBROMOETHANE
32	CI80 BROMOFORM **
33	CI220 TETRACHLOROETHENE
34	CI225 1,1,2,2-TETRACHLOROETHANE **
35	CI230 TOLUENE *
36	CI235 CHLOROBENZENE
37	CI240 ETHYL BENZENE *
38	CI245 STYRENE
39	CI250 M/P XYLENE
40	CI252 O-XYLENE
41	CI54 CIS-1,2-DICHLOROETHENE
42	CI252 1,3-DICHLOROBENZENE
43	CI253 1,4-DICHLOROBENZENE
44	CI254 1,2-DICHLOROBENZENE
45	CI261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1687

L000168.

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	10318.	5.000 UG/L	0.34
2	117	373	12:26	2	1.000	A BV	7097.	5.000 UG/L	0.34
3	150	519	17:18	3	1.000	A BB	6840.	5.000 UG/L	0.34
4	95	440	14:40	1	2.391	A BV	30238.	25.000 UG/L	1.68
5	50	39	1:18	1	0.212	A BV	48632.	25.000 UG/L	1.68
6	94	44	1:28	1	0.239	A BV	23287.	25.000 UG/L	1.68
7	62	40	1:20	1	0.217	A BB	34840.	25.000 UG/L	1.68
8	64	46	1:32	1	0.250	A VB	17459.	25.000 UG/L	1.68
9	84	72	2:24	1	0.391	A BB	17068.	25.000 UG/L	1.68
10	43	63	2:06	1	0.342	A BV	3647.	125.000 UG/L	8.39
11	43	115	3:50	1	0.625	A BV	5902.	125.000 UG/L	8.39
12	43	289	9:38	2	0.775	A BB	15564.	125.000 UG/L	8.39
13	43	341	11:22	2	0.914	A BB	9714.	125.000 UG/L	8.39
14	128	123	4:06	1	0.668	A BB	5651.	25.000 UG/L	1.68
15	76	65	2:10	1	0.353	A BB	80081.	25.000 UG/L	1.68
16	96	61	2:02	1	0.332	A BB	24638.	25.000 UG/L	1.68
17	63	91	3:02	1	0.495	A VB	45928.	25.000 UG/L	1.68
18	96	79	2:38	1	0.429	A BB	22334.	25.000 UG/L	1.68
19	83	128	4:16	1	0.696	A BV	72226.	25.000 UG/L	1.68
20	62	156	5:12	1	0.848	A BB	14602.	25.000 UG/L	1.68
21	97	135	4:30	2	0.362	A BB	55145.	25.000 UG/L	1.68
22	117	143	4:46	2	0.383	A VD	51571.	25.000 UG/L	1.68
23	83	242	8:04	2	0.649	A BB	33750.	25.000 UG/L	1.68
24	63	218	7:16	2	0.584	A BB	18544.	25.000 UG/L	1.68
25	75	273	9:06	2	0.732	A BB	20219.	25.000 UG/L	1.68
26	95	201	6:42	2	0.539	A BB	31710.	25.000 UG/L	1.68
27	129	341	11:22	2	0.914	A BB	14865.	25.000 UG/L	1.68
28	97	321	10:42	2	0.861	A BB	7299.	25.000 UG/L	1.68
29	78	153	5:06	2	0.410	A BB	54294.	25.000 UG/L	1.68
30	75	311	10:22	2	0.834	A BV	12322.	25.000 UG/L	1.68
31	107	344	11:28	2	0.922	A BB	10578.	25.000 UG/L	1.68
32	173	420	14:00	3	0.809	A BB	6897.	25.000 UG/L	1.68
33	166	325	10:50	2	0.871	A BB	36643.	25.000 UG/L	1.68
34	83	452	15:04	2	1.212	A BV	9875.	25.000 UG/L	1.68
35	91	293	9:46	2	0.786	A BB	59299.	25.000 UG/L	1.68
36	112	375	12:30	2	1.005	A BB	37723.	25.000 UG/L	1.68
37	91	384	12:48	2	1.029	A BV	79981.	25.000 UG/L	1.68
38	104	413	13:46	2	1.107	A BB	32512.	25.000 UG/L	1.68
39	106	391	13:02	2	1.048	A VB	55341.	50.000 UG/L	3.36
40	106	412	13:44	2	1.105	A BB	21967.	25.000 UG/L	1.68
41	96	113	3:46	1	0.614	A BB	18034.	25.000 UG/L	1.68
42	166	496	16:32	3	0.956	A BV	30762.	25.000 UG/L	1.68
43	146	501	16:42	3	0.965	A VB	29626.	25.000 UG/L	1.68
44	146	520	17:20	3	1.002	A BB	21493.	25.000 UG/L	1.68
45	75	561	18:42	3	1.081	A BV	2104.	25.000 UG/L	1.68

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:18	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:40	1.00	2.391	1.00	25.00	25.00	0.586	0.586	1.00
5	1:18	1.00	0.212	1.00	25.00	25.00	0.943	0.943	1.00
6	1:28	1.00	0.239	1.00	25.00	25.00	0.451	0.451	1.00
7	1:20	1.00	0.217	1.00	25.00	25.00	0.675	0.675	1.00
8	1:32	1.00	0.250	1.00	25.00	25.00	0.338	0.338	1.00
9	2:24	1.00	0.391	1.00	25.00	25.00	0.331	0.331	1.00

	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:06	1.00	0.342	1.00	125.00	125.00	0.014	0.014	1.00
11	3:50	1.00	0.625	1.00	125.00	125.00	0.023	0.023	1.00
12	9:38	1.00	0.775	1.00	125.00	125.00	0.088	0.088	1.00
13	11:22	1.00	0.914	1.00	125.00	125.00	0.055	0.055	1.00
14	4:06	1.00	0.668	1.00	25.00	25.00	0.110	0.110	1.00
15	2:10	1.00	0.353	1.00	25.00	25.00	1.552	1.552	1.00
16	2:02	1.00	0.332	1.00	25.00	25.00	0.478	0.478	1.00
17	3:02	1.00	0.495	1.00	25.00	25.00	0.890	0.890	1.00
18	2:38	1.00	0.429	1.00	25.00	25.00	0.433	0.433	1.00
19	4:16	1.00	0.696	1.00	25.00	25.00	1.400	1.400	1.00
20	5:12	1.00	0.848	1.00	25.00	25.00	0.283	0.283	1.00
21	4:30	1.00	0.362	1.00	25.00	25.00	1.554	1.554	1.00
22	4:46	1.00	0.383	1.00	25.00	25.00	1.453	1.453	1.00
23	8:04	1.00	0.649	1.00	25.00	25.00	0.951	0.951	1.00
24	7:16	1.00	0.584	1.00	25.00	25.00	0.523	0.523	1.00
25	9:06	1.00	0.732	1.00	25.00	25.00	0.570	0.570	1.00
26	6:42	1.00	0.539	1.00	25.00	25.00	0.894	0.894	1.00
27	11:22	1.00	0.914	1.00	25.00	25.00	0.419	0.419	1.00
28	10:42	1.00	0.861	1.00	25.00	25.00	0.206	0.206	1.00
29	5:06	1.00	0.410	1.00	25.00	25.00	1.530	1.530	1.00
30	10:22	1.00	0.834	1.00	25.00	25.00	0.347	0.347	1.00
31	11:28	1.00	0.922	1.00	25.00	25.00	0.298	0.298	1.00
32	14:00	1.00	0.809	1.00	25.00	25.00	0.202	0.202	1.00
33	10:50	1.00	0.871	1.00	25.00	25.00	1.033	1.033	1.00
34	15:04	1.00	1.212	1.00	25.00	25.00	0.278	0.278	1.00
35	9:46	1.00	0.786	1.00	25.00	25.00	1.671	1.671	1.00
36	12:30	1.00	1.005	1.00	25.00	25.00	1.063	1.063	1.00
37	12:48	1.00	1.029	1.00	25.00	25.00	2.254	2.254	1.00
38	13:46	1.00	1.107	1.00	25.00	25.00	0.916	0.916	1.00
39	13:02	1.00	1.048	1.00	50.00	50.00	0.780	0.780	1.00
40	13:44	1.00	1.105	1.00	25.00	25.00	0.619	0.619	1.00
41	3:46	1.00	0.614	1.00	25.00	25.00	0.350	0.350	1.00
42	16:32	1.00	0.956	1.00	25.00	25.00	0.899	0.899	1.00
43	16:42	1.00	0.965	1.00	25.00	25.00	0.866	0.866	1.00
44	17:20	1.00	1.002	1.00	25.00	25.00	0.628	0.628	1.00
45	18:42	1.00	1.081	1.00	25.00	25.00	0.062	0.062	1.00

TUT 004 1689

L 0001683

3/16/93 17:01:26
Acquisition started

0253

3/16/93 17:01:30

Acquire Run 0: W10316E Starting
3/16/93 17:01:00 + 0:00 Free sectors: 15164 Scan: 0 of 720
Sample: CP,,, VSTD025, LDW, WATER, W10316E, VOA, IC-025,
Cond.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: Analyst: RJL Acct. No:

*** GC not ready and being stabilized ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp	Rate	Time (minutes)	
*	(DegC)	(C/min)	period	total
1	35-35	-	6.6	6.6
2	35-150	8.0	14.3	20.9
3	150-150	-	3.0	23.9

Injector A : 150 Deg C
GC oven : 36 Deg C
Transfer-line: 214 Deg C
Ion source : 180 Deg C
Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

L 0001690

TUT 004 1690

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\wedge$ -7
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.358 Torr

3/16/93 17:26:42

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	1.2	1440.0	0.1	21575.	30. 15.

TUT 004 1691

L 0001691

PROCEDURE: TCA
DATA FILE: W10316E
REFERENCE: V111
NAME LIST: V1
REPORT: V1IS

DIAGNOSTIC REPORT

3/17/93 8:24:27

0255

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

----- STANDARDS ----- >< --- PLUS UNKNOWN --- >< - LIST NAMES - >
PROC USED POSS RMS PROC USED POSS RMS STANDARD/UNKNOWN
3 2 1 0 20 19 24 212 V1IS/V1UNKS1
3 3 1 23 16 16 1 160 V1IS/V1UNKS2
3 3 1 23 15 15 36 154 V1IS/V1UNKS3

45 COMPOUNDS PROCESSED, 43 FOUND

COMPOUND >< ----- SEARCH ----- >< SAT >< ----- CHRO -----
ID LID ENTRY REF PRED SEL DELTA PEAKS FIT PEAKS M/Z TOP DELTA PEAKS
1 V1 1 -170 184 184 1 977 114 184 1
2 V1 2 -361 373 373 1 934 117 373 1
3 V1 3 -504 515 150
4 V1 4 -427 440 439 -1 1 955 95 440 1 1
5 V1 5 -34 40 39 -1 1 901 50 39 1
6 V1 6 -39 46 44 -2 1 979 94 44 1
7 V1 7 -36 42 40 -2 2 931 62 40 1
8 V1 8 -41 48 46 -2 1 979 64 46 1
9 V1 9 -66 73 72 -1 2 981 84 72 1
10 V1 10 -56 63 63 1 424 43 63 1
11 V1 11 -106 114 43 115 1
12 V1 12 -277 287 289 2 3 914 43 289 1
13 V1 13 -329 340 341 1 1 974 43 341 1
14 V1 14 -113 121 123 2 1 970 128 123 1
15 V1 15 -59 66 65 -1 1 998 76 65 1
16 V1 16 -55 62 61 -1 2 967 96 61 1
17 V1 17 -84 91 91 1 983 63 91 1
18 V1 18 -73 80 79 -1 1 990 96 79 1
19 V1 19 -118 126 128 2 1 986 83 128 1
20 V1 20 -144 152 155 3 1 836 62 156 1
21 V1 21 -125 138 135 -3 1 986 97 135 1
22 V1 22 -133 146 143 -3 1 961 117 143 1
23 V1 23 -228 241 242 1 1 994 83 242 1
24 V1 24 -203 216 218 2 1 995 63 218 1
25 V1 25 -261 274 274 1 986 75 273 -1 1
26 V1 26 -186 199 201 2 1 978 95 201 1
27 V1 27 -329 341 342 1 1 978 129 341 -1 1
28 V1 28 -308 320 321 1 1 987 97 321 1
29 V1 29 -142 155 154 -1 1 973 78 153 -1 1
30 V1 30 -299 311 311 1 961 75 311 1
31 V1 31 -332 344 344 1 998 107 344 1
32 V1 32 -407 419 420 1 1 978 173 420 1
33 V1 33 -314 326 325 -1 1 962 166 325 1
34 V1 34 -438 451 452 1 1 966 83 452 1
35 V1 35 -281 293 293 1 987 91 293 1
36 V1 36 -363 376 375 -1 1 984 112 375 1
37 V1 37 -372 385 384 -1 2 992 91 384 1
38 V1 38 -400 413 413 1 965 104 413 1
39 V1 39 -379 392 391 -1 1 989 106 391 1
40 V1 40 -399 412 412 1 940 106 412 1
41 V1 41 -104 114 113 -1 1 935 96 113 1
42 V1 42 -482 496 496 2 991 146 496 1
43 V1 43 -487 501 501 3 997 146 501 1
44 V1 44 -505 519 520 1 3 989 146 520 1
45 V1 45 -544 558 561 3 1 947 75 561 1

OLV01 CONTINUING CALIBRATION DATA
VOLATILE HSL COMPOUNDS

Case No: <u>53554</u>	Region: _____	Calibration Date: <u>03/17/93</u>
Contractor: <u>ITAS-KNOXVILLE</u>		Time: <u>10:48</u>
Contract No: _____		Laboratory ID: <u>WS0317</u>
Instrument ID: <u>I500A</u>		Initial Cali. Date: <u>03/16/93</u>

Compound	AVE RF	RF(50)	% D	CCC	SPCC
Chloromethane	1.015	0.953	6.1		
Bromomethane	0.544	0.491	9.7	*	
Vinyl Chloride	0.718	0.661	7.9	*	
Chloroethane	0.413	0.405	1.9		
Methylene Chloride	0.565	0.348	38.4		
Acetone	0.018	0.013	27.8		
Bromochloromethane	0.130	0.103	20.8		
Carbon Disulfide	1.575	1.624	-3.1		
1,1-Dichloroethene	0.529	0.532	-0.6	*	
1,1-Dichloroethane	1.014	0.968	4.5	*	
1,2-Dichloroethene (total)	0.526	0.483	8.2		
cis-1,2-Dichloroethene	0.415	0.371	10.6		
Chloroform	1.092	0.886	18.9	*	
1,2-Dichloroethane	0.346	0.302	12.7	*	
2-Butanone	0.038	0.027	28.9		
1,1,1-Trichloroethane	1.618	1.740	-7.5	*	
Carbon Tetrachloride	1.469	1.624	-10.6	*	
Bromodichloromethane	0.845	0.736	12.9	*	
1,2-Dichloropropane	0.611	0.584	4.4		
trans-1,3-Dichloropropene	0.571	0.500	12.4	*	
1,1,2-Trichloroethene	0.993	0.985	0.8	*	
Dibromochloromethane	0.460	0.391	15.0	*	
1,1,2-Trichloroethane	0.257	0.211	17.9	*	
Benzene	1.665	1.673	-0.5	*	
trans-1,3-Dichloropropene	0.353	0.302	14.4	*	
1,2-Dibromoethane	0.332	0.253	23.8		
Bromoform	0.235	0.213	9.4	*	
4-Methyl-2-Pentanone	0.104	0.076	26.9		
2-Hexanone	0.064	0.043	32.8		
Tetrachloroethene	1.203	1.171	2.7	*	
1,1,2,2-Tetrachloroethane	0.306	0.220	28.1	*	
Toluene	1.839	1.772	3.6	*	
Chlorobenzene	1.251	1.111	11.2	*	
Ethylbenzene	2.309	2.430	-5.2	*	
Styrene	1.025	0.919	10.3	*	
Xylene (total)	0.707	0.701	0.8	*	
1,3-Dichlorobenzene	1.362	1.496	-9.8		

Up to two compounds with %RSD criteria may exceed the maximum, but none of these may exceed 40.0%.

All compounds with no %RSD or RRF criteria specified must meet a minimum 0.010 RRF criteria.

Refer to method for RRF criteria.

TUT 004 1693

L0001693

OLV01 CONTINUING CALIBRATION DATA
VOLATILE HSL COMPOUNDS

0257

Case No: 53554 Region: _____ Calibration Date: 03/17/93
 Contractor: ITAS-KNOXVILLE Time: 10:48
 Contract No: _____ Laboratory ID: WS0317
 Instrument ID: I500A Initial Cali. Date: 03/16/93

Compound	AVE RF	RF(50)	% D	CCC	SPCC
1,4-Dichlorobenzene	1.335	1.444	-8.2		
1,2-Dichlorobenzene	0.964	1.034	-7.3		
1,2-Dibromo-3-Chloropropane .	0.091	0.063	30.8		
Bromofluorobenzene	0.803	0.545	32.1	*	

Up to two compounds with %RSD criteria may exceed the maximum, but none of these may exceed 40.0%.

All compounds with no %RSD or RRF criteria specified must meet a minimum 0.010 RRF criteria.

Refer to method for RRF criteria.

TUT 004 1694

40001694

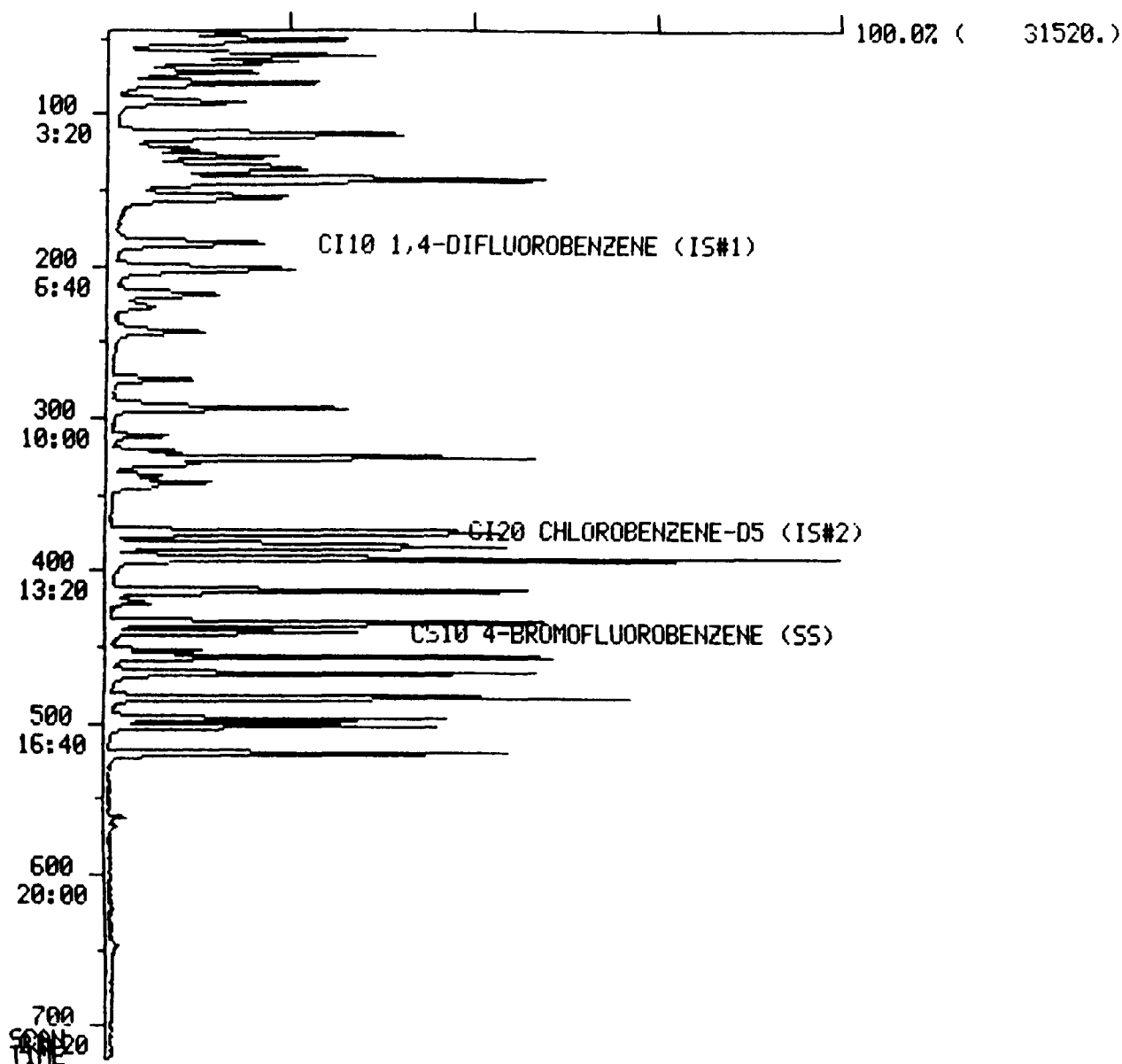
DATA FROM FILE: WS0317

SCANS 45 TO 720 ACQUIRED: 03-17-93 10:49:00

CALI: WS0317 #3

SAMPLE: CLP,,,USTD005,LOW,WATER,WS0317,VOA,CC-005,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS



L000169

Data: WS0317.T1

03/17/93 10:48:00

Sample: CLP,,,VSTD005, LOW, WATER, WS0317, VOA, CC-005,

Conds.: I500A:25ML OLVO1 PURGE W/ SPPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by:

Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUORODENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLORODENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUORODENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI10 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI115 1,1,1-TRICHLOROETHANE
22	CI20 CARBON TETRACHLORIDE
23	CI30 BROMODICHLOROMETHANE
24	CI40 1,2-DICHLOROPROPANE *
25	CI43 CIS-1,3-DICHLOROPROPENE
26	CI50 TRICHLOROETHENE
27	CI55 DIBROMOCHLOROMETHANE
28	CI60 1,1,2-TRICHLOROETHANE
29	CI65 BENZENE
30	CI72 TRANS-1,3-DICHLOROPROPENE
31	CI76 DIBROMOETHANE
32	CI80 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1696

L0001696

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BV	9856.	5.000 UG/L	1.61
2	117	373	12:26	2	1.000	A BV	6374.	5.000 UG/L	1.61
3	150	518	17:16	3	1.000	A BB	4017.	5.000 UG/L	1.61
4	95	439	14:38	1	2.386	A BV	5371.	5.000 UG/L	1.61
5	50	38	1:16	1	0.207	A BB	9390.	5.000 UG/L	1.61
6	94	44	1:28	1	0.239	A BB	4838.	5.000 UG/L	1.61
7	62	39	1:18	1	0.212	A BB	6510.	5.000 UG/L	1.61
8	64	46	1:32	1	0.250	A VB	3991.	5.000 UG/L	1.61
9	84	72	2:24	1	0.391	A BB	3425.	5.000 UG/L	1.61
10	43	62	2:04	1	0.337	A BV	621.	25.000 UG/L	8.06
11	43	115	3:50	1	0.625	A BB	1321.	25.000 UG/L	8.06
12	43	289	9:38	2	0.775	A BB	2411.	25.000 UG/L	8.06
13	43	341	11:22	2	0.914	A BB	1380.	25.000 UG/L	8.06
14	128	122	4:04	1	0.663	A BB	1020.	5.000 UG/L	1.61
15	76	65	2:10	1	0.353	A BB	16004.	5.000 UG/L	1.61
16	96	60	2:00	1	0.326	A BB	5239.	5.000 UG/L	1.61
17	63	91	3:02	1	0.495	A BB	9543.	5.000 UG/L	1.61
18	96	78	2:36	1	0.424	A BB	4759.	5.000 UG/L	1.61
19	83	127	4:14	1	0.690	A BV	8730.	5.000 UG/L	1.61
20	62	155	5:10	1	0.842	A BB	2974.	5.000 UG/L	1.61
21	97	135	4:30	2	0.362	A BB	11092.	5.000 UG/L	1.61
22	117	143	4:46	2	0.383	A VB	10351.	5.000 UG/L	1.61
23	83	242	8:04	2	0.649	A BB	4691.	5.000 UG/L	1.61
24	63	218	7:16	2	0.584	A BB	3720.	5.000 UG/L	1.61
25	75	274	9:08	2	0.735	A BB	3187.	5.000 UG/L	1.61
26	95	201	6:42	2	0.539	A BB	6277.	5.000 UG/L	1.61
27	129	341	11:22	2	0.914	A BB	2490.	5.000 UG/L	1.61
28	97	321	10:42	2	0.861	A BB	1342.	5.000 UG/L	1.61
29	78	153	5:06	2	0.410	A BB	10664.	5.000 UG/L	1.61
30	75	311	10:22	2	0.834	A BB	1926.	5.000 UG/L	1.61
31	107	344	11:28	2	0.922	A BB	1611.	5.000 UG/L	1.61
32	173	420	14:00	3	0.811	A BB	857.	5.000 UG/L	1.61
33	166	325	10:50	2	0.871	A BB	7465.	5.000 UG/L	1.61
34	83	451	15:02	2	1.209	A BB	1401.	5.000 UG/L	1.61
35	91	293	9:46	2	0.786	A BB	11295.	5.000 UG/L	1.61
36	112	375	12:30	2	1.005	A BB	7080.	5.000 UG/L	1.61
37	91	384	12:48	2	1.029	A BV	15490.	5.000 UG/L	1.61
38	104	413	13:46	2	1.107	A BB	5857.	5.000 UG/L	1.61
39	106	391	13:02	2	1.048	A VB	10940.	10.000 UG/L	3.23
40	106	412	13:44	2	1.105	A BB	4471.	5.000 UG/L	1.61
41	96	112	3:44	1	0.609	A BB	3655.	5.000 UG/L	1.61
42	146	496	16:32	3	0.958	A BV	6009.	5.000 UG/L	1.61
43	146	501	16:42	3	0.967	A VB	5802.	5.000 UG/L	1.61
44	146	519	17:18	3	1.002	A BB	4152.	5.000 UG/L	1.61
45	75	561	18:42	3	1.083	A BB	254.	5.000 UG/L	1.61

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.00	5.00	0.545	0.545	1.00
5	1:16	1.00	0.207	1.00	5.00	5.00	0.953	0.953	1.00
6	1:28	1.00	0.239	1.00	5.00	5.00	0.491	0.491	1.00
7	1:18	1.00	0.212	1.00	5.00	5.00	0.661	0.661	1.00
8	1:32	1.00	0.250	1.00	5.00	5.00	0.405	0.405	1.00
9	2:24	1.00	0.391	1.00	5.00	5.00	0.348	0.348	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	1.00	0.337	1.00	25.00	25.00	0.013	0.013	1.00
11	3:50	1.00	0.625	1.00	25.00	25.00	0.027	0.027	1.00
12	9:38	1.00	0.775	1.00	25.00	25.00	0.076	0.076	1.00
13	11:22	1.00	0.914	1.00	25.00	25.00	0.043	0.043	1.00
14	4:04	1.00	0.663	1.00	5.00	5.00	0.103	0.103	1.00
15	2:10	1.00	0.353	1.00	5.00	5.00	1.624	1.624	1.00
16	2:00	1.00	0.326	1.00	5.00	5.00	0.532	0.532	1.00
17	3:02	1.00	0.495	1.00	5.00	5.00	0.968	0.968	1.00
18	2:36	1.00	0.424	1.00	5.00	5.00	0.483	0.483	1.00
19	4:14	1.00	0.690	1.00	5.00	5.00	0.886	0.886	1.00
20	5:10	1.00	0.842	1.00	5.00	5.00	0.302	0.302	1.00
21	4:30	1.00	0.362	1.00	5.00	5.00	1.740	1.740	1.00
22	4:46	1.00	0.383	1.00	5.00	5.00	1.624	1.624	1.00
23	8:04	1.00	0.649	1.00	5.00	5.00	0.736	0.736	1.00
24	7:16	1.00	0.584	1.00	5.00	5.00	0.584	0.584	1.00
25	9:08	1.00	0.735	1.00	5.00	5.00	0.500	0.500	1.00
26	6:42	1.00	0.539	1.00	5.00	5.00	0.985	0.985	1.00
27	11:22	1.00	0.914	1.00	5.00	5.00	0.391	0.391	1.00
28	10:42	1.00	0.861	1.00	5.00	5.00	0.211	0.211	1.00
29	5:06	1.00	0.410	1.00	5.00	5.00	1.673	1.673	1.00
30	10:22	1.00	0.834	1.00	5.00	5.00	0.302	0.302	1.00
31	11:28	1.00	0.922	1.00	5.00	5.00	0.253	0.253	1.00
32	14:00	1.00	0.811	1.00	5.00	5.00	0.213	0.213	1.00
33	10:50	1.00	0.871	1.00	5.00	5.00	1.171	1.171	1.00
34	15:02	1.00	1.209	1.00	5.00	5.00	0.220	0.220	1.00
35	9:46	1.00	0.786	1.00	5.00	5.00	1.772	1.772	1.00
36	12:30	1.00	1.005	1.00	5.00	5.00	1.111	1.111	1.00
37	12:48	1.00	1.029	1.00	5.00	5.00	2.430	2.430	1.00
38	13:46	1.00	1.107	1.00	5.00	5.00	0.919	0.919	1.00
39	13:02	1.00	1.048	1.00	10.00	10.00	0.858	0.858	1.00
40	13:44	1.00	1.105	1.00	5.00	5.00	0.701	0.701	1.00
41	3:44	1.00	0.609	1.00	5.00	5.00	0.371	0.371	1.00
42	16:32	1.00	0.958	1.00	5.00	5.00	1.496	1.496	1.00
43	16:42	1.00	0.967	1.00	5.00	5.00	1.444	1.444	1.00
44	17:18	1.00	1.002	1.00	5.00	5.00	1.034	1.034	1.00
45	18:42	1.00	1.083	1.00	5.00	5.00	0.063	0.063	1.00

3/17/93 10:48:27
Acquisition started

0262

3/17/93 10:48:34

Acquire Run 0:WS0317 Starting
03/17/93 10:48:00 + 0:00 Free sectors: 13866 Scan: 0 of 720
Sample: CLP,,, VSTD005, LOW, WATER, WS0317, VOA, CC-005,
Conds.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: Analyst: RJL Acct. No:

*** GC not ready and being stabilized ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp (DegC)	Rate (C/min)	Time (minutes) period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 35 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 215 Deg C
					Ion source : 180 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

RPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

RPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	Q
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1699

L 0001693

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal

Electron multiplier voltage: 984.
 Filament emission current: 750.
 Electrometer range: 10 $\sim$ 7
 Electrometer zero: 126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.356 Torr

3/17/93 11:17:21

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.6	1440.0	0.0	8699.	12. 6.

TUT 004 1700

L0001700

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	18	4	222	V11S/V1UNKS1	
3	3	1	23	16	16	1	163	V11S/V1UNKS2	
3	3	1	23	15	14	36	140	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 41 FOUND

COMPOUND		SEARCH						SAT		CHRO		
NO	LID ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-170	184	184	1	980	114	184	1		
2	V1	2	-361	373	373	1	970	117	373	1		
3	V1	3	-504	515				150				
4	V1	4	-427	440	439	-1	947	95	439	1		
5	V1	5	-34	40	38	-2	873	50	38	1		
6	V1	6	-39	46	44	-2	932	94	44	1		
7	V1	7	-36	43	45	2	896	62				
8	V1	8	-41	48	46	-2	908	64	46	1		
9	V1	9	-66	73	72	-1	981	84	72	1		
10	V1	10	-56	63				43	62	1		
11	V1	11	-106	114				43	115	1		
12	V1	12	-277	287	289	2	872	43	289	1		
13	V1	13	-329	340	341	1	882	43	341	1		
14	V1	14	-113	121	122	1	948	128	122	1		
15	V1	15	-59	66	65	-1	976	76	65	1		
16	V1	16	-55	62	60	-2	958	96	60	1		
17	V1	17	-84	91	91	1	971	63	91	1		
18	V1	18	-73	80	78	-2	980	96	78	1		
19	V1	19	-118	126	127	1	976	83	127	1		
20	V1	20	-144	152	155	3	838	62	155	1		
21	V1	21	-125	137	135	-2	989	97	135	1		
22	V1	22	-133	145	143	-2	957	117	143	1		
23	V1	23	-228	240	242	2	967	83	242	1		
24	V1	24	-203	215	218	3	985	63	218	1		
25	V1	25	-261	273	273	1	970	75	274	1		
26	V1	26	-186	198	201	3	961	95	201	1		
27	V1	27	-329	341	341	1	950	129	341	1		
28	V1	28	-308	320	321	1	971	97	321	1		
29	V1	29	-142	154	153	-1	966	78	153	1		
30	V1	30	-299	311	311	1	900	75	311	1		
31	V1	31	-332	344	344	1	960	107	344	1		
32	V1	32	-407	419	420	1	871	173	420	1		
33	V1	33	-314	326	325	-1	954	166	325	1		
34	V1	34	-438	451	451	1	916	83	451	1		
35	V1	35	-281	293	293	1	979	91	293	1		
36	V1	36	-363	375	375	1	984	112	375	1		
37	V1	37	-372	384	384	2	992	91	384	1		
38	V1	38	-400	413	413	1	966	104	413	1		
39	V1	39	-379	391	391	1	992	106	391	1		
40	V1	40	-399	412	412	1	929	106	412	1		
41	V1	41	-104	114	112	-2	932	96	112	1		
42	V1	42	-482	495	496	1	986	146	496	1		
43	V1	43	-487	500	501	1	991	146	501	1		
44	V1	44	-505	518	519	1	979	146	519	1		
45	V1	45	-544	558				75				

OLV01 CONTINUING CALIBRATION DATA
VOLATILE HSL COMPOUNDS

0265

Case No: 53554 Region: _____ Calibration Date: 03/18/93
 Contractor: ITAS-KNOXVILLE Time: 08:29
 Contract No: _____ Laboratory ID: WS0318
 Instrument ID: I500A Initial Cali. Date: 03/16/93

Compound	AVE RF	RF(50)	% D	CCC	SPCC
Chloromethane	1.015	0.973	4.1		
Bromomethane	0.544	0.526	3.3	*	
Vinyl Chloride	0.718	0.685	4.6	*	
Chloroethane	0.413	0.382	7.5		
Methylene Chloride	0.565	0.379	32.9		
Acetone	0.018	0.016	11.1		
Bromochloromethane	0.130	0.120	7.7		
Carbon Disulfide	1.575	1.558	1.1		
1,1-Dichloroethene	0.529	0.513	3.0	*	
1,1-Dichloroethane	1.014	1.045	-3.1	*	
1,2-Dichloroethene (total)	0.526	0.501	4.8		
cis-1,2-Dichloroethene	0.415	0.403	2.9		
Chloroform	1.092	1.015	7.1	*	
1,2-Dichloroethane	0.346	0.334	3.5	*	
2-Butanone	0.038	0.031	18.4		
1,1,1-Trichloroethane	1.618	1.668	-3.1	*	
Carbon Tetrachloride	1.469	1.544	-5.1	*	
Bromodichloromethane	0.845	0.827	2.1	*	
2-Dichloropropane	0.611	0.601	1.6		
trans-1,3-Dichloropropene	0.571	0.500	12.4	*	
Trichloroethene	0.993	0.997	-0.4	*	
Dibromochloromethane	0.460	0.427	7.2	*	
1,1,2-Trichloroethane	0.257	0.227	11.7	*	
Benzene	1.665	1.685	-1.2	*	
trans-1,3-Dichloropropene	0.353	0.296	16.1	*	
1,2-Dibromoethane	0.332	0.280	15.7		
Bromoform	0.235	0.205	12.8	*	
4-Methyl-2-Pentanone	0.104	0.081	22.1		
2-Hexanone	0.064	0.049	23.4		
Tetrachloroethene	1.203	1.180	1.9	*	
1,1,2,2-Tetrachloroethane	0.306	0.228	25.5	*	
Toluene	1.839	1.773	3.6	*	
Chlorobenzene	1.251	1.167	6.7	*	
Ethylbenzene	2.309	2.419	-4.8	*	
Styrene	1.025	0.961	6.2	*	
Xylene (total)	0.707	0.727	-2.8	*	
1,3-Dichlorobenzene	1.362	1.395	-2.4		

Up to two compounds with %RSD criteria may exceed the maximum, but none of these may exceed 40.0%.

All compounds with no %RSD or RRF criteria specified must meet a minimum 0.010 RRF criteria.

Refer to method for RRF criteria.

TUT 004 1702

L0001702

OLV01 CONTINUING CALIBRATION DATA
VOLATILE HSL COMPOUNDS

0266

Case No: 53554 Region: _____ Calibration Date: 03/18/93
 Contractor: ITAS-KNOXVILLE Time: 08:29
 Contract No: _____ Laboratory ID: WS0318
 Instrument ID: I500A Initial Cali. Date: 03/16/93

Compound	AVE RF	RF(50)	% D	CCC	SPCC
1,4-Dichlorobenzene	1.335	1.409	-5.5		
1,2-Dichlorobenzene	0.964	1.011	-4.9		
1,2-Dibromo-3-Chloropropane .	0.091	0.061	33.0		
Bromofluorobenzene	0.803	0.611	23.9	*	

Up to two compounds with %RSD criteria may exceed the maximum, but none of these may exceed 40.0%.

All compounds with no %RSD or RRF criteria specified must meet a minimum 0.010 RRF criteria.

Refer to method for RRF criteria.

TUT 004 1703

L0001703

0267

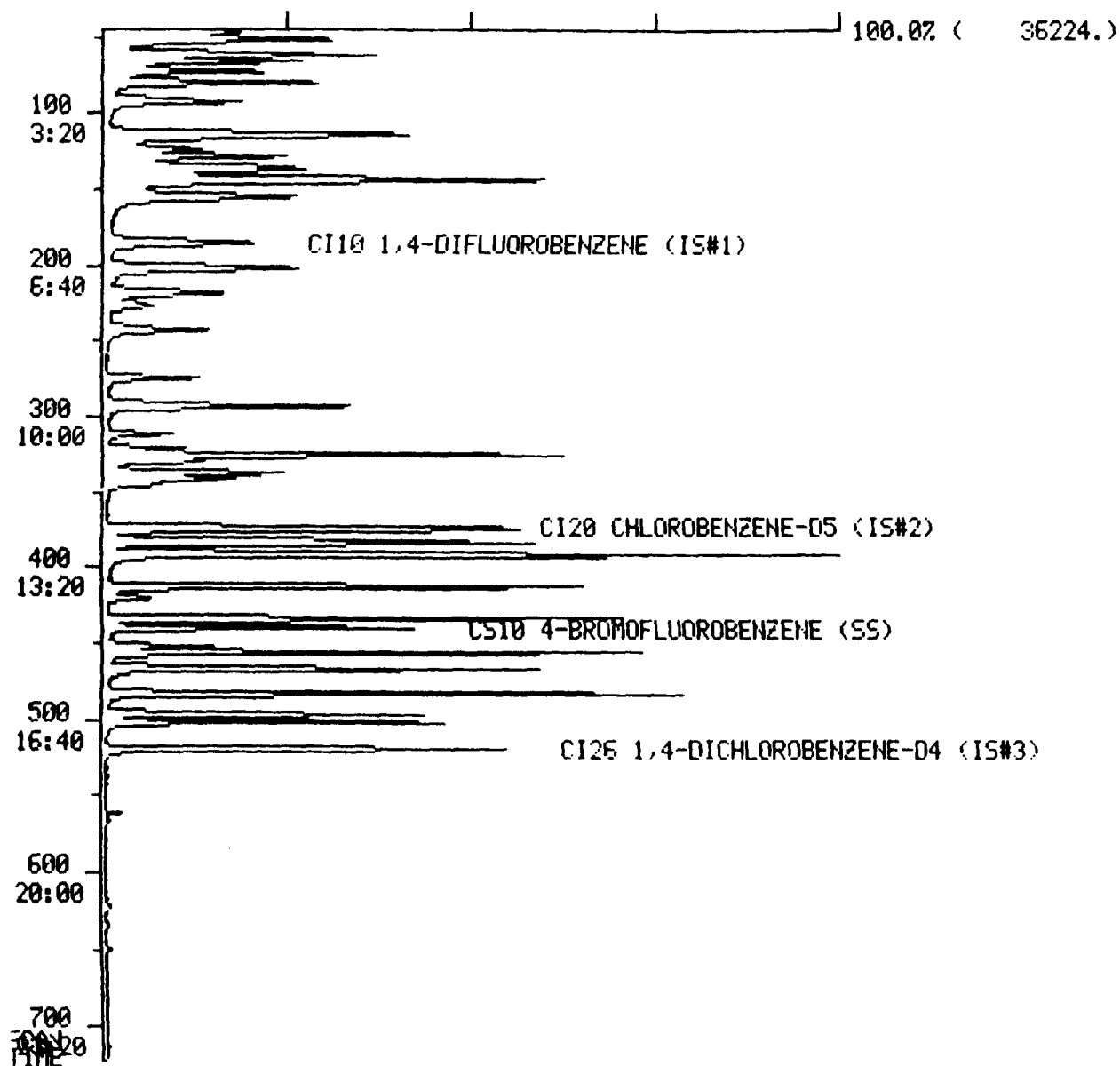
DATA FROM FILE: W50318

SCANS 45 TO 720 ACQUIRED: 03/18/93 8:29:00

CALI: W50318 #3

SAMPLE: CLP...USTD005, LOW, WATER, W50318, VOA, CC-005,

CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB 15 & 55



TUT 004 1704

L0001704

Data: WS0318.T1

03/18/93 8:29:00

Sample: CLP,,,VSTD005,LOW,WATER,WS0318,VOA,CC-005,

Conds.: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Weight: 0.000

Submitted by:

Analyst: RUL

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUORODENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLORODENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUORODENZENE (SS)
5	C010 CHLOROMETHANE **
6	C015 BROMOMETHANE
7	C020 VINYL CHLORIDE *
8	C025 CHLOROETHANE
9	C030 METHYLENE CHLORIDE
10	C035 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	C037 BROMOCHLOROMETHANE
15	C040 CARBON DISULFIDE
16	C045 1,1-DICHLOROETHENE *
17	C050 1,1-DICHLOROETHANE **
18	C053 TRANS-1,2-DICHLOROETHENE
19	C060 CHLOROFORM *
20	C065 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 1,2-DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	C054 CIS-1,2-DICHLOROETHENE
42	C253 1,3-DICHLOROBENZENE
43	C254 1,4-DICHLORODENZENE
44	C255 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1705

L 0001705

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	11210.	5.000 UG/L	1.61
2	117	373	12:26	2	1.000	A BV	7723.	5.000 UG/L	1.61
3	150	518	17:16	3	1.000	A BB	5477.	5.000 UG/L	1.61
4	95	439	14:38	1	2.386	A BB	6849.	5.000 UG/L	1.61
5	50	39	1:18	1	0.212	A BV	10911.	5.000 UG/L	1.61
6	94	44	1:28	1	0.239	A BB	5900.	5.000 UG/L	1.61
7	62	40	1:20	1	0.217	A BB	7682.	5.000 UG/L	1.61
8	64	46	1:32	1	0.250	A VB	4277.	5.000 UG/L	1.61
9	84	72	2:24	1	0.391	A BB	4251.	5.000 UG/L	1.61
10	43	62	2:04	1	0.337	A BV	921.	25.000 UG/L	8.06
11	43	115	3:50	1	0.625	A BB	1723.	25.000 UG/L	8.06
12	43	289	9:38	2	0.775	A BB	3134.	25.000 UG/L	8.06
13	43	341	11:22	2	0.914	A BB	1874.	25.000 UG/L	8.06
14	128	122	4:04	1	0.663	A BB	1347.	5.000 UG/L	1.61
15	76	65	2:10	1	0.353	A BB	17465.	5.000 UG/L	1.61
16	96	60	2:00	1	0.326	A BB	5751.	5.000 UG/L	1.61
17	63	91	3:02	1	0.495	A VB	11718.	5.000 UG/L	1.61
18	96	78	2:36	1	0.424	A BB	5615.	5.000 UG/L	1.61
19	83	127	4:14	1	0.690	A BV	11374.	5.000 UG/L	1.61
20	62	155	5:10	1	0.842	A BB	3746.	5.000 UG/L	1.61
21	97	135	4:30	2	0.362	A BV	12884.	5.000 UG/L	1.61
22	117	143	4:46	2	0.383	A VB	11922.	5.000 UG/L	1.61
23	83	241	8:02	2	0.646	A BB	6386.	5.000 UG/L	1.61
24	63	217	7:14	2	0.582	A BB	4644.	5.000 UG/L	1.61
25	75	273	9:06	2	0.732	A BB	3862.	5.000 UG/L	1.61
26	95	201	6:42	2	0.539	A BB	7697.	5.000 UG/L	1.61
27	129	341	11:22	2	0.914	A VB	3298.	5.000 UG/L	1.61
28	97	320	10:40	2	0.858	A BB	1752.	5.000 UG/L	1.61
29	78	153	5:06	2	0.410	A BB	13016.	5.000 UG/L	1.61
30	75	311	10:22	2	0.834	A BB	2283.	5.000 UG/L	1.61
31	107	344	11:28	2	0.922	A BB	2161.	5.000 UG/L	1.61
32	173	419	13:58	3	0.809	A BB	1124.	5.000 UG/L	1.61
33	165	325	10:50	2	0.871	A BB	9109.	5.000 UG/L	1.61
34	83	451	15:02	2	1.209	A BB	1760.	5.000 UG/L	1.61
35	91	292	9:44	2	0.783	A BB	13692.	5.000 UG/L	1.61
36	112	374	12:28	2	1.003	A BB	9016.	5.000 UG/L	1.61
37	91	383	12:46	2	1.027	A BV	18682.	5.000 UG/L	1.61
38	104	413	13:46	2	1.107	A BB	7424.	5.000 UG/L	1.61
39	106	391	13:02	2	1.048	A VB	13760.	10.000 UG/L	3.23
40	106	411	13:42	2	1.102	A BB	5618.	5.000 UG/L	1.61
41	96	112	3:44	1	0.609	A BB	4520.	5.000 UG/L	1.61
42	146	495	16:30	3	0.956	A BV	7641.	5.000 UG/L	1.61
43	146	501	16:42	3	0.967	A VB	7715.	5.000 UG/L	1.61
44	146	519	17:18	3	1.002	A BB	5535.	5.000 UG/L	1.61
45	75	560	18:40	3	1.081	A BB	334.	5.000 UG/L	1.61

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.00	5.00	0.611	0.611	1.00
5	1:18	1.00	0.212	1.00	5.00	5.00	0.973	0.973	1.00
6	1:28	1.00	0.239	1.00	5.00	5.00	0.526	0.526	1.00
7	1:20	1.00	0.217	1.00	5.00	5.00	0.685	0.685	1.00
8	1:32	1.00	0.250	1.00	5.00	5.00	0.382	0.382	1.00
9	2:24	1.00	0.391	1.00	5.00	5.00	0.379	0.379	1.00

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	1.00	0.337	1.00	25.00	25.00	0.016	0.016	1.00
11	3:50	1.00	0.625	1.00	25.00	25.00	0.031	0.031	1.00
12	9:38	1.00	0.775	1.00	25.00	25.00	0.081	0.081	1.00
13	11:22	1.00	0.914	1.00	25.00	25.00	0.049	0.049	1.00
14	4:04	1.00	0.663	1.00	5.00	5.00	0.120	0.120	1.00
15	2:10	1.00	0.353	1.00	5.00	5.00	1.558	1.558	1.00
16	2:00	1.00	0.326	1.00	5.00	5.00	0.513	0.513	1.00
17	3:02	1.00	0.495	1.00	5.00	5.00	1.045	1.045	1.00
18	2:36	1.00	0.424	1.00	5.00	5.00	0.501	0.501	1.00
19	4:14	1.00	0.690	1.00	5.00	5.00	1.015	1.015	1.00
20	5:10	1.00	0.842	1.00	5.00	5.00	0.334	0.334	1.00
21	4:30	1.00	0.362	1.00	5.00	5.00	1.668	1.668	1.00
22	4:46	1.00	0.383	1.00	5.00	5.00	1.544	1.544	1.00
23	8:02	1.00	0.646	1.00	5.00	5.00	0.827	0.827	1.00
24	7:14	1.00	0.582	1.00	5.00	5.00	0.601	0.601	1.00
25	9:06	1.00	0.732	1.00	5.00	5.00	0.500	0.500	1.00
26	6:42	1.00	0.539	1.00	5.00	5.00	0.997	0.997	1.00
27	11:22	1.00	0.914	1.00	5.00	5.00	0.427	0.427	1.00
28	10:40	1.00	0.858	1.00	5.00	5.00	0.227	0.227	1.00
29	5:06	1.00	0.410	1.00	5.00	5.00	1.685	1.685	1.00
30	10:22	1.00	0.834	1.00	5.00	5.00	0.296	0.296	1.00
31	11:28	1.00	0.922	1.00	5.00	5.00	0.280	0.280	1.00
32	13:58	1.00	0.809	1.00	5.00	5.00	0.205	0.205	1.00
33	10:50	1.00	0.871	1.00	5.00	5.00	1.180	1.180	1.00
34	15:02	1.00	1.209	1.00	5.00	5.00	0.228	0.228	1.00
35	9:44	1.00	0.783	1.00	5.00	5.00	1.773	1.773	1.00
36	12:28	1.00	1.003	1.00	5.00	5.00	1.167	1.167	1.00
37	12:46	1.00	1.027	1.00	5.00	5.00	2.419	2.419	1.00
38	13:46	1.00	1.107	1.00	5.00	5.00	0.961	0.961	1.00
39	13:02	1.00	1.048	1.00	10.00	10.00	0.891	0.891	1.00
40	13:42	1.00	1.102	1.00	5.00	5.00	0.727	0.727	1.00
41	3:44	1.00	0.609	1.00	5.00	5.00	0.403	0.403	1.00
42	16:30	1.00	0.956	1.00	5.00	5.00	1.395	1.395	1.00
43	16:42	1.00	0.967	1.00	5.00	5.00	1.409	1.409	1.00
44	17:18	1.00	1.002	1.00	5.00	5.00	1.011	1.011	1.00
45	18:40	1.00	1.081	1.00	5.00	5.00	0.061	0.061	1.00

TUT 004 1707

L 0001707

3/18/93 8:29:18
Acquisition started

0271

3/18/93 8:29:21

Require
3/18/93 8:29:00 + 0:00 Run 0: WS0318 Starting
Free sectors: 12406 Scan: 0 of 720
Sample: CLP,,, VSTD005, LOW, WATER, WS0318, VOA, CC-005,
Conditions: 1500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: 1500A Weight: 0.000
Submitted by: Analyst: RUL Acct. No:

*** GC not ready and being stabilized ***

GC Desc : RR Elapsed time : 0.0 Min

Seq.	Temp	Rate	Time (minutes)	
*	(DegC)	(C/min)	period	total
1	35- 35	-	6.6	6.6
2	35-150	8.0	14.3	20.9
3	150-150	-	3.0	23.9

Injector A : 150 Deg C
GC oven : 35 Deg C
Transfer-line: 215 Deg C
Ion source : 180 Deg C
Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MFW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MFW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D: CAL021992

Interface number	0
Instrument type	Q
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1708

L 0001700

Current instrument parameters.

0272

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\sim$ -7
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.361 Torr

3/18/93 8:57:56

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.5	1440.0	0.0	9107.	13.6.

L 0001703

DATA FILE: WS0318

REFERENCE: V111

NAME LIST: V1 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

REPORT: V11S

0273

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	18	2	37	V11S/V1UNKS1	
3	3	1	0	16	16	1	49	V11S/V1UNKS2	
3	3	1	0	15	14	54	53	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 41 FOUND

COMPOUND			SEARCH					SAT		CHRO			
NO	LID	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	184	184		1	981		114	184		1
2	V1	2	-373	373	373		1	954		117	373		1
3	V1	3	-518	518						150	518		1
4	V1	4	-439	439	439		1	947		95	439		1
5	V1	5	-38	38	39	1	1	893		50	39		1
6	V1	6	-44	44	44		1	932		94	44		1
7	V1	7	-39	39	40	1	2	905		62	40		1
8	V1	8	-46	46	46		1	936		64	46		1
9	V1	9	-72	72	72		1	981		84	72		1
10	V1	10	-62	62						43	62		1
11	V1	11	-115	115						43	115		1
12	V1	12	-289	289	289		1	873		43	289		1
13	V1	13	-341	341	341		1	911		43	341		1
14	V1	14	-122	122	122		1	948		128	122		1
15	V1	15	-65	65	65		1	984		76	65		1
16	V1	16	-60	60	60		1	957		96	60		1
17	V1	17	-91	91	91		1	973		63	91		1
18	V1	18	-78	78	79	1	1	983		96	78	-1	1
19	V1	19	-127	127	127		1	976		83	127		1
20	V1	20	-155	155	155		1	867		62	155		1
21	V1	21	-135	135	135		1	987		97	135		1
22	V1	22	-143	143	143		1	956		117	143		1
23	V1	23	-242	242	241	-1	1	959		83	241		1
24	V1	24	-218	218	217	-1	1	984		63	217		1
25	V1	25	-274	274	273	-1	1	951		75	273		1
26	V1	26	-201	201	201		1	955		95	201		1
27	V1	27	-341	341	341		1	960		129	341		1
28	V1	28	-321	321	320	-1	1	980		97	320		1
29	V1	29	-153	153	153		1	963		78	153		1
30	V1	30	-311	311	311		1	915		75	311		1
31	V1	31	-344	344	344		1	964		107	344		1
32	V1	32	-420	420	419	-1	1	894		173	419		1
33	V1	33	-325	325	325		1	951		166	325		1
34	V1	34	-451	451	451		1	940		83	451		1
35	V1	35	-293	293	292	-1	1	982		91	292		1
36	V1	36	-375	375	374	-1	1	984		112	374		1
37	V1	37	-384	384	383	-1	2	992		91	383		1
38	V1	38	-413	413	412	-1	1	938		104	413	1	1
39	V1	39	-391	391	391		1	985		106	391		1
40	V1	40	-412	412	411	-1	1	955		106	411		1
41	V1	41	-112	112	112		1	936		96	112		1
42	V1	42	-496	496	495	-1	3	993		146	495		1
43	V1	43	-501	501	501		3	993		146	501		1
44	V1	44	-519	519	519		3	964		146	519		1
45	V1	45	-561	561						75	560		1

L0001710

III VOLATILES DATA, continued

d. RAW QC DATA

L0001711

0275

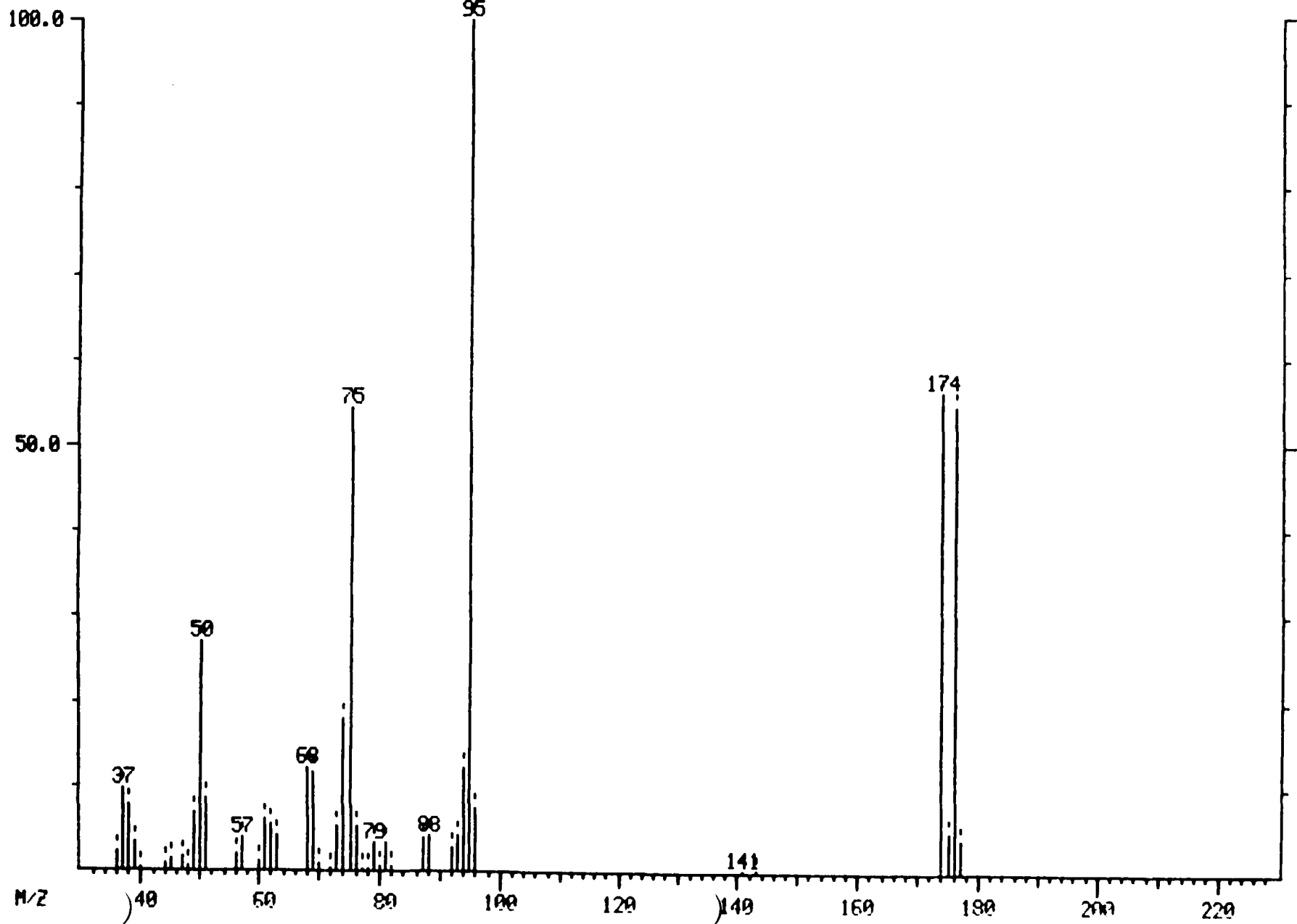
MASS SPECTRUM
03/16/93 12:03:00 + 2:12
SAMPLE: 1UL (50NG) BFB TUNE STD
CONDS.: 1500A:DIRECT INJECTION:120C ISOTHERMAL
TEMP: 120 DEG. C
#65 TO #67 AVERAGED - #60

DATA: WBFB0316 #66
CALI: CAL021992 #3

BASE M/Z: 95
RIC: 15904.

Z1Z1 400 101

L0001712

3436.
0.

Mass List

03/16/93 12:03:00 + 2:12

Date: WSP00316 # 66

Base m/z: 95

Cal: CAL021992 # 3

RIC: 15904.

Sample: 1UL (50NG) 8FB TUNE STD

Conds.: I500A:DIRECT INJECTION:120C ISOTHERMAL

#65 to #67 averaged - #60

Mass	% RA	Inten.	Minima	Min Inten:	0.
			Maxima	#	0
36	0.00	0.			
177					
36?	S	2.21	76.		
37?	S	9.55	328.		
38?	S	7.83	269.		
39?	S	3.23	111.		
40?	S	0.35	12.		
44?	S	0.76	26.		
45?	S	1.40	48.		
47?	S	1.75	60.		
48?	S	0.49	17.		
49?	S	6.90	237.		
50?	S	27.15	933.		
51?	S	8.64	297.		
56?	S	1.95	67.		
57?	S	3.75	129.		
60?	S	1.19	41.		
61?	S	6.05	208.		
62?	S	5.65	194.		
63?	S	4.22	145.		
68?	S	12.02	413.		
69	S	11.64	400.		
70	S	0.79	27.		
72	S	0.20	7.		
73	S	5.30	182.		
74	S	17.93	616.		
75	S	54.31	1866.		
76	S	5.27	181.		
77	S	0.15	5.		
78	S	0.15	5.		
79	S	3.38	116.		
80	S	0.55	19.		
81	S	3.26	112.		
82	S	0.52	18.		
87	S	3.96	136.		
88	S	4.13	142.		
92	S	2.68	92.		
93	S	4.28	147.		
94	S	12.11	416.		
95	S	100.00	3436.		
96	S	7.48	257.		
141	S	0.35	12.		
143	S	0.17	6.		
174	S	56.05	1926.		
175	S	4.66	160.		
176	S	54.42	1870.		
177	S	3.96	136.		

TUT 004 1713

L 0001713

0277

TUT 004 1714

RIC

DATA: WBFB0316 #65

SCANS 1 TO 90

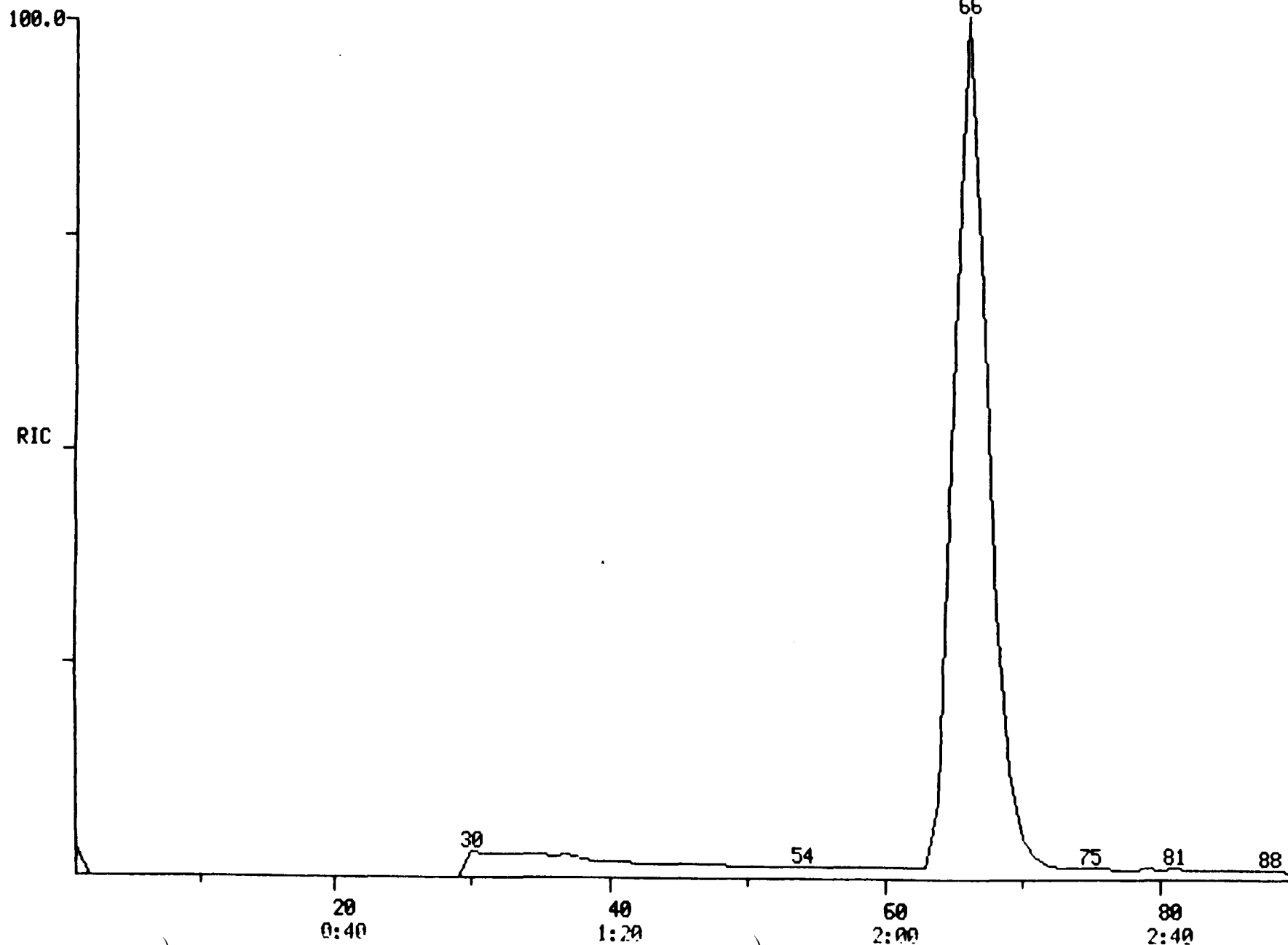
03/16/93 12:03:00

CALI: CAL021992 #3

SAMPLE: 1UL (50NG) BFB TUNE STD

COND.: 1500A:DIRECT INJECTION:120C ISOTHERMAL

RANGE: G 1, 90 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



21056.

L0001714

SCAN
TIME

0278

STAT 400 101

MASS SPECTRUM

03/17/93 9:34:00 + 2:18

SAMPLE: 1UL (50NG) BFB TUNE STD

CONDS.: 1500A:DIRECT INJECTION:120C ISOTHERMAL

TEMP: 120 DEG. C

#68 TO #70 AVERAGED - #65

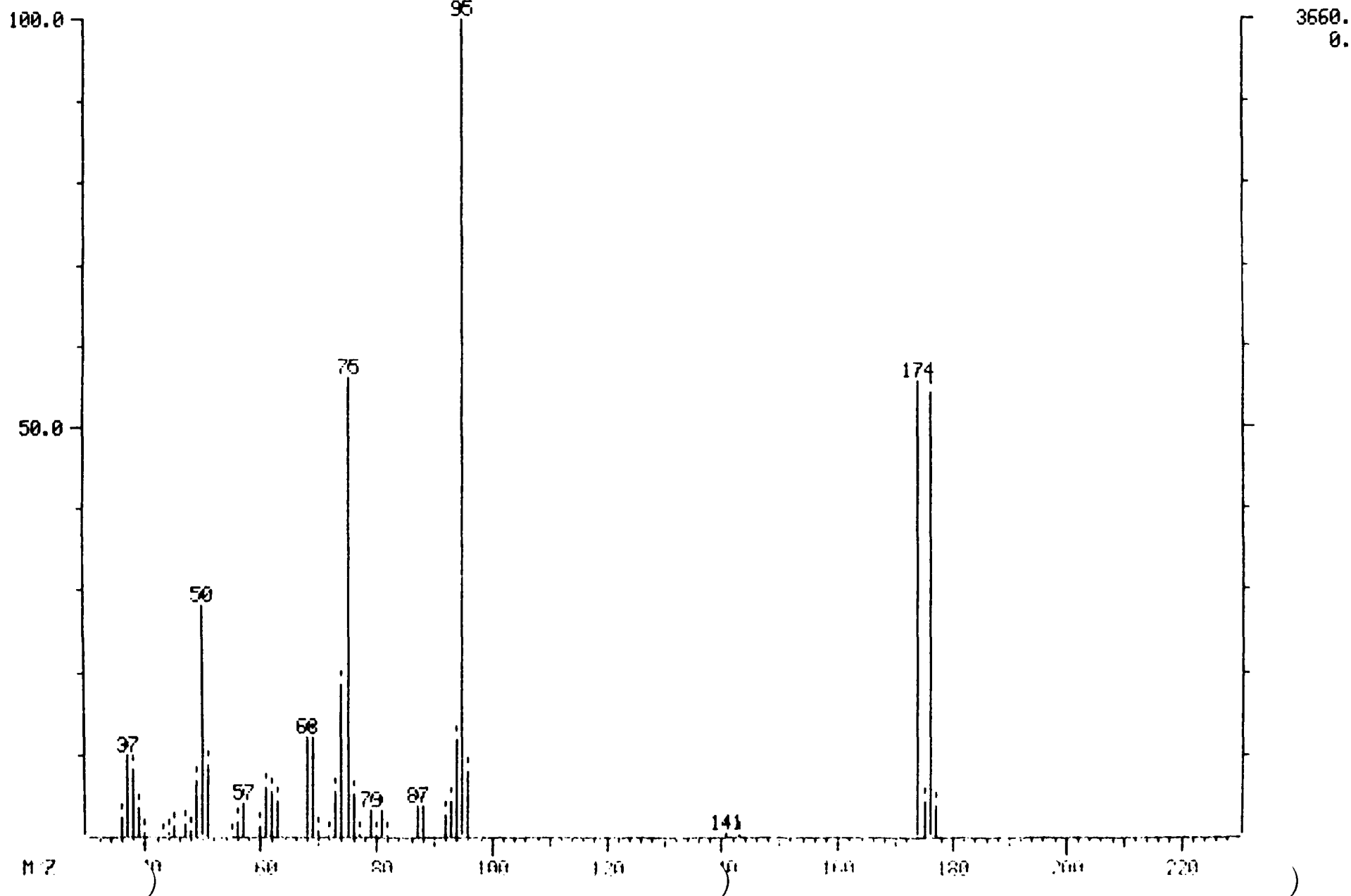
DATA: WBFB0317 #69

CALI: CAL021992 #3

BASE M/Z: 95

RIC: 17152.

L0001715



03/17/93 9:34:00 + 2:18

Cali: CAL021992 # 3

RIC: 17152.

0213

Sample: 1UL (50NG) BFB TUNE STD

Conds.: 1500A:DIRECT INJECTION:120C ISOTHERMAL

#68 to #70 averaged - #65

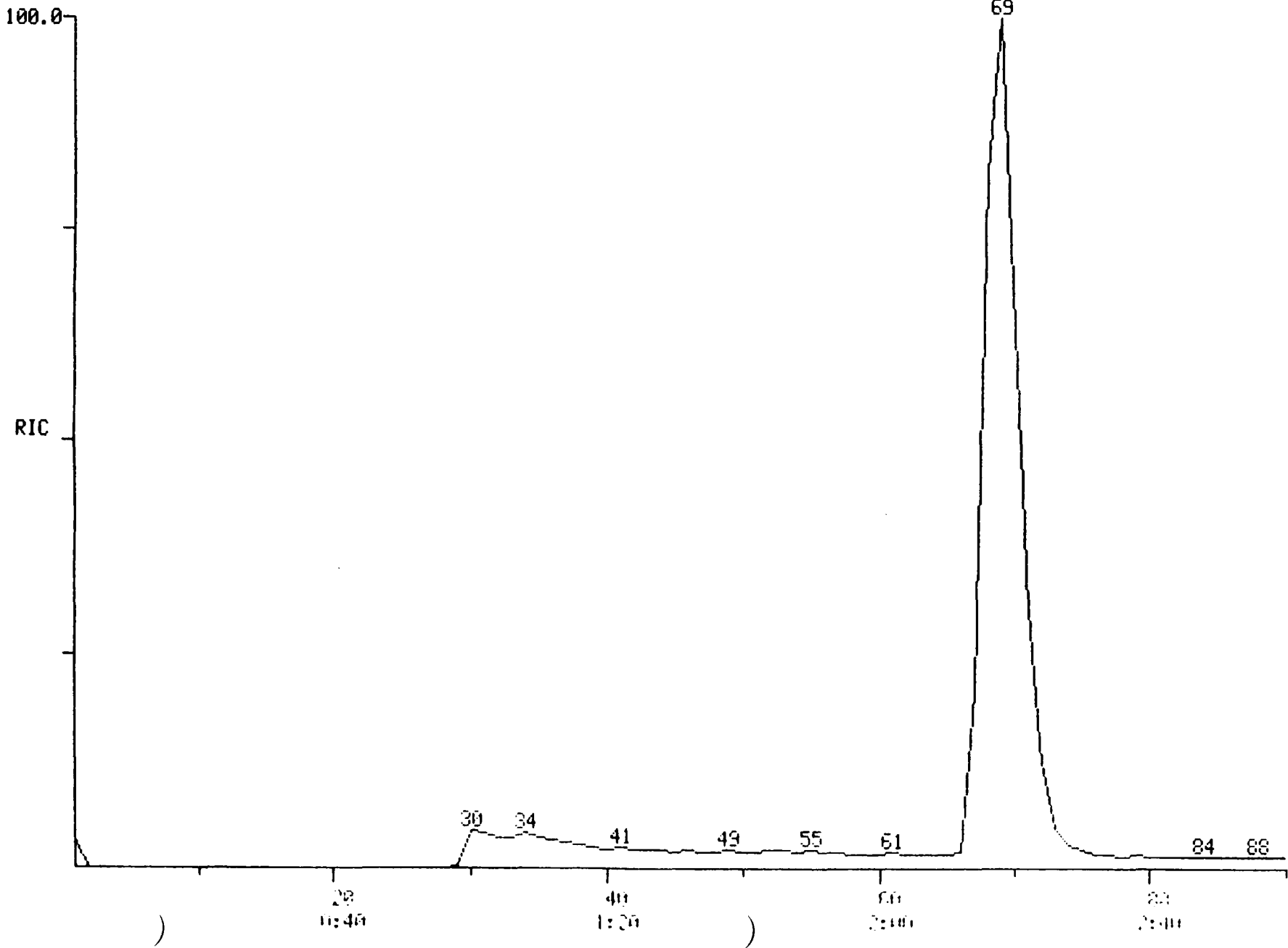
36	0.00	0.	Minima	Min Inten:	0.
177			Maxima	#	0
Mass	% RA	Inten.			
36?	S	2.35	86.		
37?	S	9.97	365.		
38?	S	8.33	305.		
39?	S	3.61	132.		
40?	S	0.44	16.		
43?	S	0.14	5.		
44?	S	0.52	19.		
45?	S	1.50	55.		
47?	S	1.69	62.		
48?	S	0.79	29.		
49?	S	6.94	254.		
50?	S	28.20	1032.		
51?	S	8.93	327.		
55?	S	0.14	5.		
56?	S	1.97	72.		
57?	S	4.18	153.		
60?	S	1.31	48.		
61?	S	6.09	223.		
62?	S	5.63	206.		
63?	S	4.51	165.		
68?	S	12.21	447.		
69	S	12.05	441.		
70	S	0.96	35.		
72	S	0.27	10.		
73	S	5.52	202.		
74	S	18.39	673.		
75	S	56.07	2052.		
76	S	5.27	193.		
77	S	0.36	13.		
79	S	3.42	125.		
80	S	0.22	8.		
81	S	3.39	124.		
82	S	0.22	8.		
87	S	3.99	146.		
88	S	3.88	142.		
92	S	2.76	101.		
93	S	4.34	159.		
94	S	11.97	438.		
95	S	100.00	3660.		
96	S	8.11	297.		
141	S	0.55	20.		
143	S	0.19	7.		
174	S	55.57	2034.		
175	S	4.34	159.		
176	S	54.15	1982.		
177	S	3.91	143.		

TUT 004 1716

L0001713

110007

RIC
 03/17/93 9:34:00
 SAMPLE: 1UL (50NG) BFB TUNE STD
 DATA: WBFB0317 #68
 CALI: CAL021992 #3
 COND.: 1500A:DIRECT INJECTION:120C ISOTHERMAL
 SCANS 1 TO 90
 RANGE: G 1, 90 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



21472.

TIME

MASS SPECTRUM

03/18/93 8:20:00 + 2:14

SAMPLE: 1UL (50NG) BFB TUNE STD

CONDS.: 1500A:DIRECT INJECTION:120C ISOTHERMAL

TEMP: 120 DEG. C

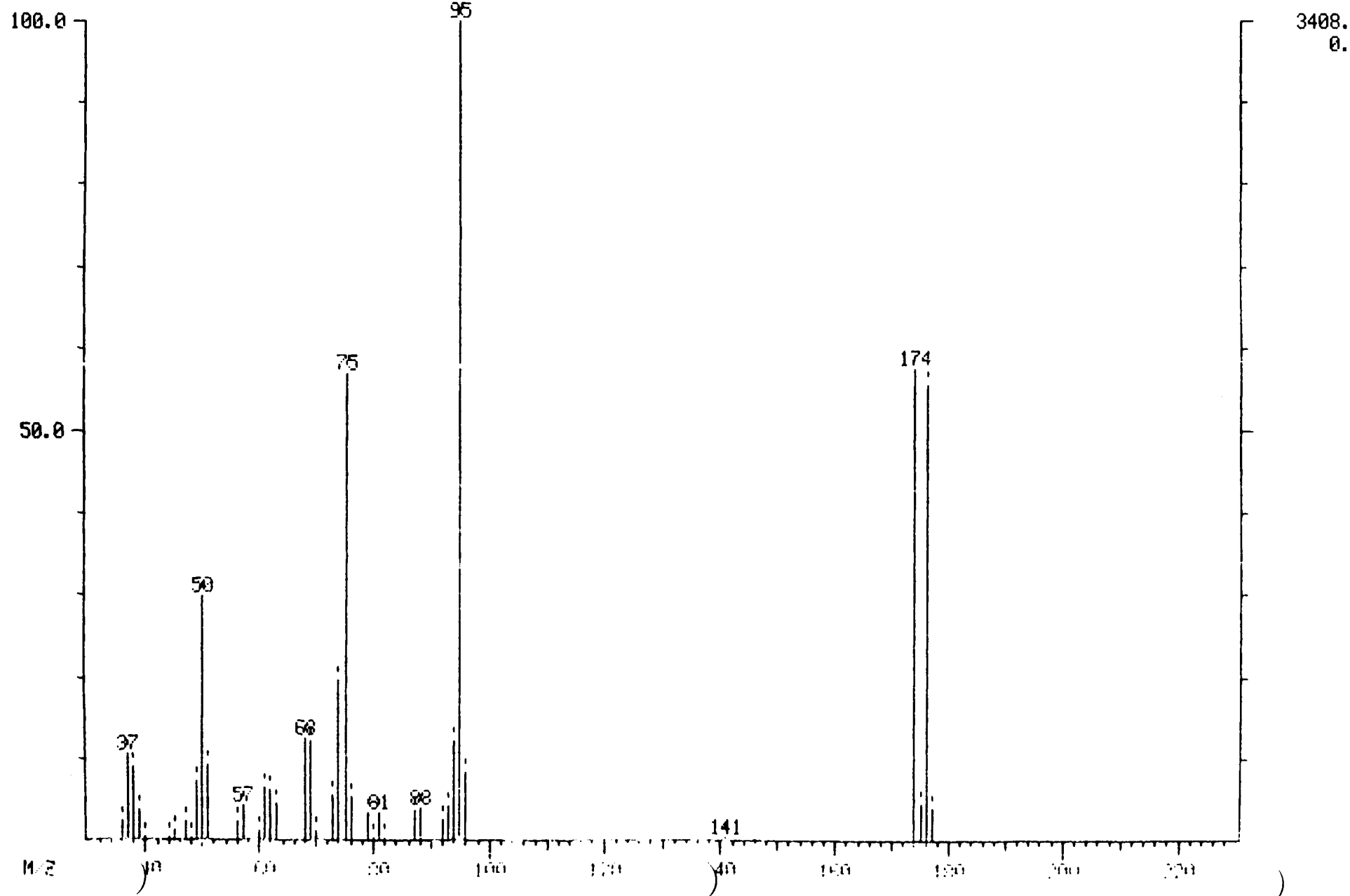
#66 TO #68 AVERAGED - #60

DATA: MBFB0318 #67

CALI: CAL021992 #3

BASE M Z: 95

R10: 16240.



Data: WBF80318 # 67
 03/18/93 8:20:00 + 2:14 Cali: CAL021992 # 3
 Sample: 1UL (50NG) BFB TUNE STD
 Cond.: 1500A:DIRECT INJECTION:120C ISOTHERMAL
 #66 to #68 averaged - #60

Base m/z: 95
 RIC: 16240.

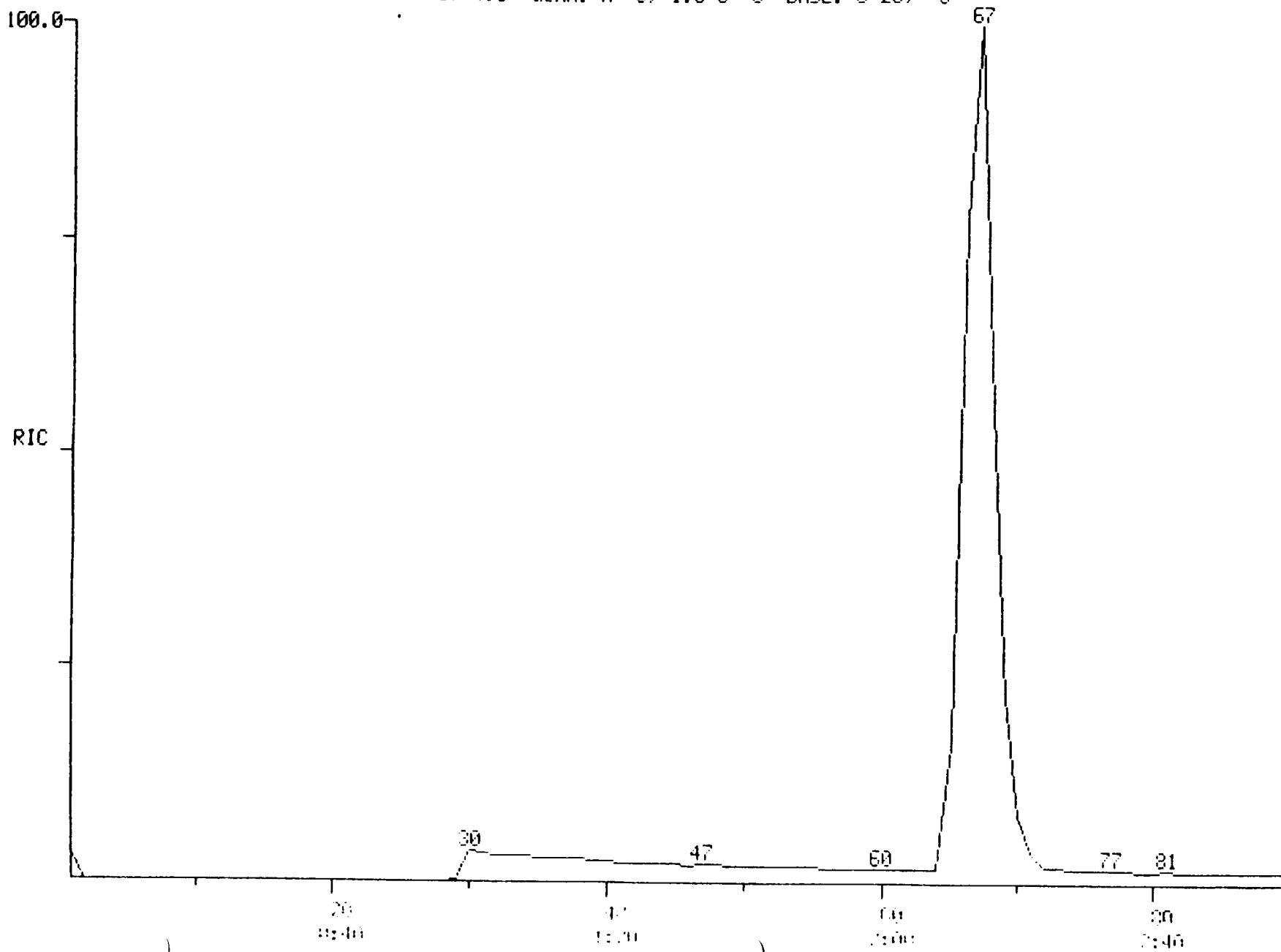
0282

Mass	% RA	Inten.	Minima	Min Inten:	Maxima	#	0
36	0.00	0.					
177							
36?	S	2.35	80.				
37?	S	10.56	360.				
38?	S	8.80	300.				
39?	S	3.70	126.				
40?	S	0.21	7.				
44?	S	0.18	6.				
45?	S	1.09	37.				
47?	S	2.11	72.				
48?	S	0.26	9.				
49?	S	7.22	246.				
50?	S	29.72	1013.				
51?	S	9.04	308.				
56?	S	2.23	76.				
57?	S	4.08	139.				
60?	S	0.97	33.				
61?	S	6.22	212.				
62?	S	6.02	205.				
63?	S	4.46	152.				
68?	S	12.47	425.				
69	S	12.15	414.				
70	S	1.14	39.				
73	S	5.63	192.				
74	S	19.48	664.				
75	S	56.81	1936.				
76	S	5.37	183.				
79	S	3.40	116.				
80	S	0.38	13.				
81	S	3.43	117.				
82	S	0.32	11.				
87	S	3.70	126.				
88	S	3.81	130.				
92	S	2.61	89.				
93	S	4.14	141.				
94	S	12.18	415.				
95	S	100.00	3408.				
96	S	8.27	282.				
141	S	0.15	5.				
174	S	57.45	1958.				
175	S	4.55	155.				
176	S	55.63	1896.				
177	S	3.96	135.				

TUT 004 1719

L 0001713

RIC DATA: WBFB0318 #66 SCANS 1 TO 90
 03/18/93 8:20:00 CALI: CAL021992 #3
 SAMPLE: 1UL (50NG) BFB TUNE STD
 CONDS.: I500A:DIRECT INJECTION:120C ISOTHERMAL
 RANGE: G 1, 90 LABEL: N 0, 4.0 QUAN: A 0, 1.0 J 0 BASE: U 20, 3



21344.

022110007

1X
ORGANICS ANALYSIS DATA SHEET

0284
SAMPLE NO.

VBLK1

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: WB0317

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: WB0317

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

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3-----	Chloromethane	1	U
74-83-9-----	Bromomethane	1	U
75-01-4-----	Vinyl Chloride	1	U
75-00-3-----	Chloroethane	1	U
75-09-2-----	Methylene Chloride	1	
67-64-1-----	Acetone	5	U
74-97-5-----	Bromochloromethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
540-59-0-----	trans-1,2-Dichloroethene	1	U
540-59-0-----	cis-1,2-Dichloroethene	1	U
67-66-3-----	Chloroform	1	U
107-06-2-----	1,2-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
75-27-4-----	Bromodichloromethane	1	U
78-87-5-----	1,2-Dichloropropane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
79-01-6-----	Trichloroethene	1	U
124-48-1-----	Dibromochloromethane	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
71-43-2-----	Benzene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
106-93-4-----	1,2-Dibromoethane	1	U
75-25-2-----	Bromoform	1	U
108-10-1-----	4-Methyl-2-Pentanone	5	U
591-78-6-----	2-Hexanone	5	U
127-18-4-----	Tetrachloroethene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-88-3-----	Toluene	1	U
108-90-7-----	Chlorobenzene	1	U

1X
ORGANICS ANALYSIS DATA SHEET

0285
SAMPLE NO.

VBK1

Lab Name: ITAS-KNOXVILLE Contract: _____
Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01
Matrix: (soil/water) WATER Lab Sample ID: WB0317
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: WB0317
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93
GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0
Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

100-41-4-----	Ethylbenzene	1	U
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	1	U
541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	1	U

TUT 004 1722

0286
SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBK1

Lab Name: ITAS-KNOXVILLE Contract: _____
Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01
Matrix: (soil/water) WATER Lab Sample ID: WB0317
Sample wt/vol: 25.0 (g/mL) ML Lab File ID: WB0317
Level: (low/med) LOW Date Received: _____
% Moisture: not dec. _____ Date Analyzed: 03/17/93
GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0
Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

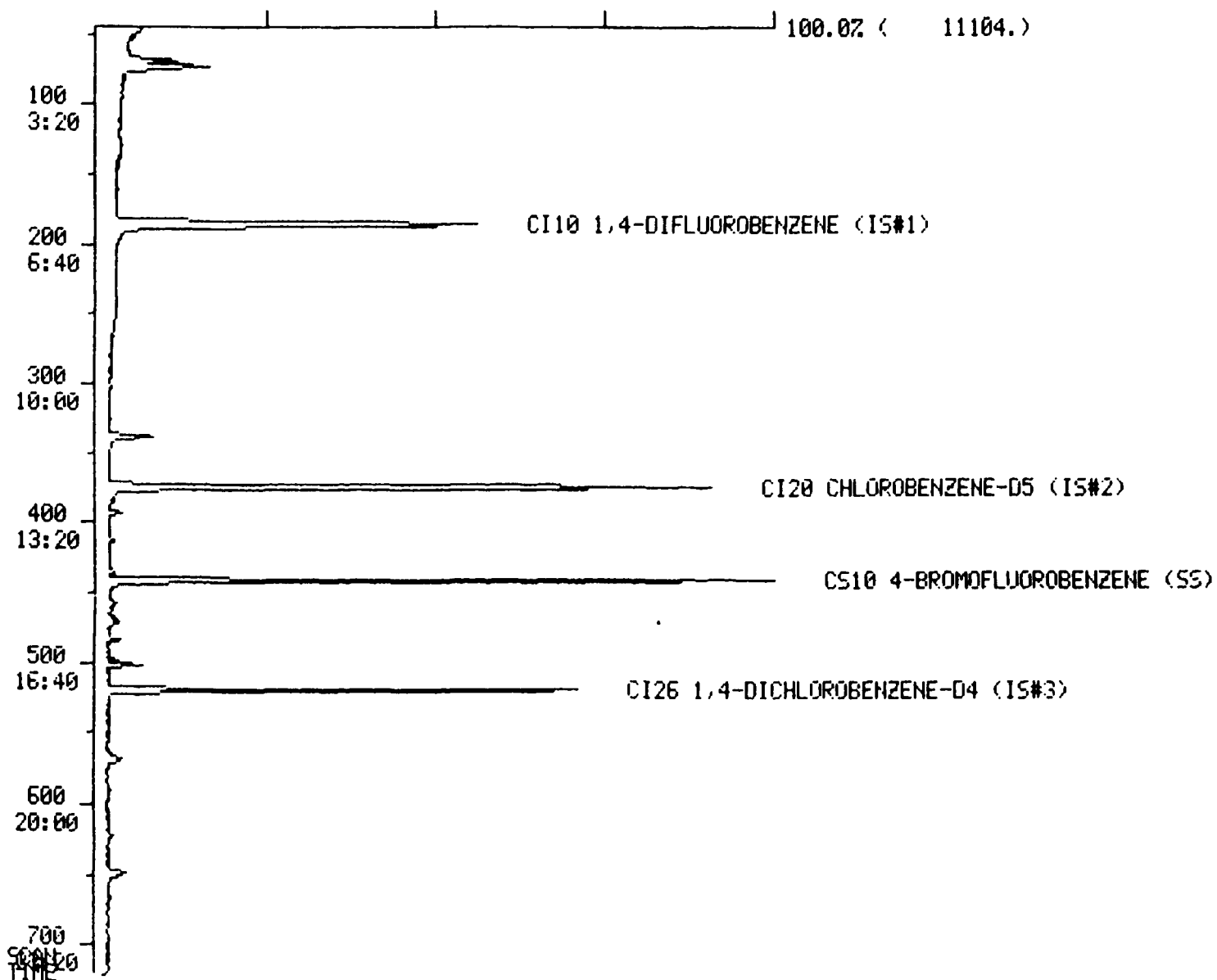
CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L

Number TICs found: 1

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====
	UNKNOWN	2.27	7	J

TUT 004 1723

DATA FROM FILE: WB0317 SCANS 45 TO 720 ACQUIRED: 03/17/93 11:39:00
CALI: WB0317 #3
SAMPLE: CLP,,,VELK1,LOW,WATER,WB0317,VOA,BLANK,
CONDS.: 1500A:25ML OL/01 PURGE N/ 5PPB IS & SS



Data: WBO317.T1

03/17/93 11:39:00

Sample: CLP,,,VBLK1,LOW,WATER,WBO317,VOA,BLANK,

Conds.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by:

Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUOROBENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	185	6:10	1	1.000	A BB	9262.	5.000 UG/L	22.83
2	117	374	12:28	2	1.000	A BB	6283.	5.000 UG/L	22.83
3	150	519	17:18	3	1.000	A BB	3569.	5.000 UG/L	22.83
4	95	440	14:40	1	2.378	A BB	5319.	5.269 UG/L	24.06
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	72	2:24	1	0.389	A BB	784.	1.218 UG/L	5.56
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	NOT FOUND								
17	NOT FOUND								
18	NOT FOUND								
19	NOT FOUND								
20	NOT FOUND								
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	NOT FOUND								
27	NOT FOUND								
28	NOT FOUND								
29	NOT FOUND								
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	NOT FOUND								
34	NOT FOUND								
35	91	294	9:48	2	0.786	A BB	55.	0.025 UG/L	0.11
36	NOT FOUND								
37	91	385	12:50	2	1.029	A BB	221.	0.072 UG/L	0.33
38	NOT FOUND								
39	106	392	13:04	2	1.048	A BB	98.	0.091 UG/L	0.41
40	NOT FOUND								
41	NOT FOUND								
42	156	497	16:34	3	0.958	A BB	147.	0.138 UG/L	0.63
43	156	502	16:44	3	0.967	A BB	162.	0.157 UG/L	0.72
44	156	520	17:20	3	1.002	A BB	67.	0.091 UG/L	0.41
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.01	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.27	5.00	0.574	0.545	1.05
5	1:16		0.207						
6	1:28		0.239						
7	1:18		0.212						
8	1:32		0.250						
9	2:24	1.00	0.391	0.99	1.22	5.00	0.085	0.348	0.24

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10		0.353						
16	2:00		0.326						
17	3:02		0.495						
18	2:36		0.424						
19	4:14		0.690						
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42		0.539						
27	11:22		0.914						
28	10:42		0.861						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50		0.871						
34	15:02		1.209						
35	9:46	1.00	0.786	1.00	0.02	5.00	0.009	1.772	0.00
36	12:30		1.005						
37	12:48	1.00	1.029	1.00	0.07	5.00	0.035	2.430	0.01
38	13:46		1.107						
39	13:02	1.00	1.048	1.00	0.09	10.00	0.008	0.858	0.01
40	13:44		1.105						
41	3:44		0.609						
42	16:32	1.00	0.958	1.00	0.14	5.00	0.041	1.496	0.03
43	16:42	1.00	0.967	1.00	0.16	5.00	0.045	1.444	0.03
44	17:18	1.00	1.002	1.00	0.09	5.00	0.019	1.034	0.02
45	18:42		1.083						

3/17/93 11:39:08
Acquisition started

0291

3/17/93 11:39:12

Acquire Run 0:WB0317 Starting
03/17/93 11:39:00 + 0:00 Free sectors: 13724 Scan: 0 of 720
Sample: CLP, VBLK1, LOW, WATER, WB0317, VOA, BLANK,
Cond: 1500A:25ML OLVO1 PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: 1500A Weight: 0.000
Submitted by: Analyst: RJL Acct. No:

*** GC not ready and being stabilized ***

GC Desc: V1 Elapsed time: 0.0 Min

Seq.	Temp	Rate	Time (minutes)		
#	(DegC)	(C/min)	period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 35 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 215 Deg C
					Ion source : 180 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number 0
Instrument type G
Full scale mass 1177 u
Zero scale mass 1 u
Intensity/ion 2
Peak width 1000. mmu
Offset at low mass 0 mmu
Offset at high mass 0 mmu
Voltage settling time(ms) 20

TUT 004 1728

L0001720

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal
Electron multiplier voltage:		984.
Filament emission current:		750.
Electrometer range:		10 $\sim$ 7
Electrometer zero:		126.0

Analyzer Fore Pressure 0.010 Torr
 Separator/Source Pressure 0.356 Torr

3/17/93 12:08:24

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.2	1440 0	0.0	2348.	3. 2.

METHOD: CLP 3'90 QLV01 25ML PURGE

DATAFILE: W80317
STANDARD: W80317
TUNEFILE: WDFD0317ANALYSIS TIME: 03/17/93 11:39
ANALYSIS TIME: 03/17/93 10:48
ANALYSIS TIME: 03/17/93 9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
C110 1,4-DIFLUOROBENZEN	9262.	9856.	94%	60% - 140%	
C120 CHLOROBEZENE-D5 (	6283.	6374.	99%	60% - 140%	
C126 1,4-DICHLOROBEZEN	3569.	4017.	89%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
C110 1,4-DIFLUOROBENZEN	185	184	2	+/- 20 SECS	
C120 CHLOROBEZENE-D5 (	374	373	2	+/- 20 SECS	
C126 1,4-DICHLOROBEZEN	519	518	2	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
C510 4-BROMOFLUOROBENZE	5.3	5.0	105	80% - 120%	
C015 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
C020 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

TUT 004 1730

L 0001730

PROCEDURE: TCA
 DATA FILE: WB0317
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V11S

DIAGNOSTIC REPORT

3/17/93 12:44:20

0294

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

STANDARDS				PLUS UNKNOWN				LIST NAMES
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN
3	2	1	0	20	5	1	35	V11S/V1UNKS1
3	3	1	0	16	3	1	0	V11S/V1UNKS2
3	3	1	0	15	3	1	0	V11S/V1UNKS3

45 COMPOUNDS PROCESSED, 4 FOUND

COMPOUND			SEARCH				SAT		CHRO			
LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	185	185	1	982	114	185	1		
2	V1	2	-373	374	374	1	973	117	374	1		
3	V1	3	-518	519				150	519	1		
4	V1	4	-439	440	440	1	952	95	440	1		
5	V1	5	-38	38				50				
6	V1	6	-44	44				94				
7	V1	7	-39	39				62				
8	V1	8	-46	46				64				
9	V1	9	-72	72	72	1	935	84	72	1		
10	V1	10	-62	62				43				
11	V1	11	-115	115				43				
12	V1	12	-289	290				43				
13	V1	13	-341	342				43				
14	V1	14	-122	122				128				
15	V1	15	-65	65				76				
16	V1	16	-60	60				96				
17	V1	17	-91	91				63				
18	V1	18	-78	78				96				
19	V1	19	-127	127				83				
20	V1	20	-155	156				62				
21	V1	21	-135	136				97				
22	V1	22	-143	144				117				
23	V1	23	-242	243				83				
24	V1	24	-218	219				63				
25	V1	25	-274	275				75				
26	V1	26	-201	202				95				
27	V1	27	-341	342				129				
28	V1	28	-321	322				97				
29	V1	29	-153	154				78				
30	V1	30	-311	312				75				
31	V1	31	-344	345				107				
32	V1	32	-420	421				173				
33	V1	33	-325	326				166				
34	V1	34	-451	452				83				
35	V1	35	-293	294				91	294			
36	V1	36	-375	376				112				
37	V1	37	-384	385				91	385			
38	V1	38	-413	414				104				
39	V1	39	-391	392				106	392			
40	V1	40	-412	413				106				
41	V1	41	-112	113				96				
42	V1	42	-496	497				146	497			
43	V1	43	-501	502				146	502			
44	V1	44	-519	520				146	520			
45	V1	45	-561	562				75				

TUT 004 1731

L 0001731

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0295

DATA FILE: WB0317

ACQUIRED: 03/17/93 11:39:00

ANALYST: RJL

COND.: I500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

SUBMITTED BY:

ACCOUNT NO.

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
110 1,4-DIFLUOROBENZENE (IS#1)	185	0	5.000	982 0
120 CHLOROBENZENE-D5 (IS#2)	374	0	5.000	973 0
126 1,4-DICHLOROBENZENE-D4 (IS#3)	519	0	5.000	0 0
1310 4-BROMOFLUOROBENZENE (SS)	440	0	5.269	952 0
130 METHYLENE CHLORIDE	72	0	1.218	935 0

TUT 004 1732

L0001732

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

RAW DATA: WB0317 #72

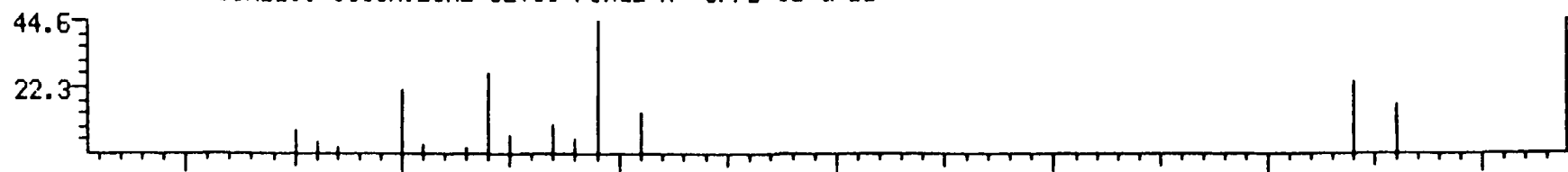
BASE M/Z: 49

RIC: 1856.

03/17/93 11:39

SAMPLE: CLP,,,UBLK1,LOW,WATER,WB0317,VOA,BLANK,

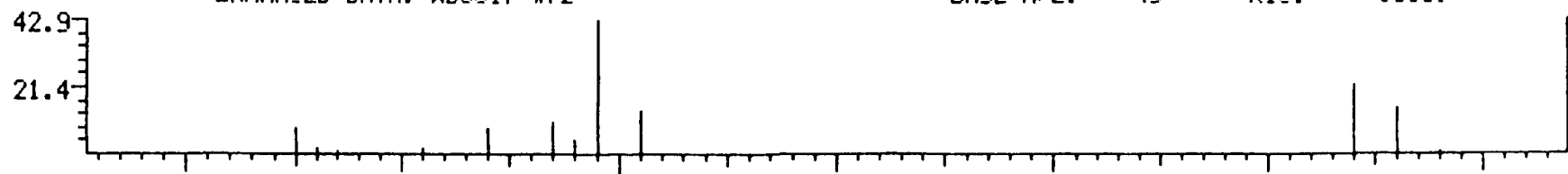
CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS



ENHANCED DATA: WB0317 #72

BASE M/Z: 49

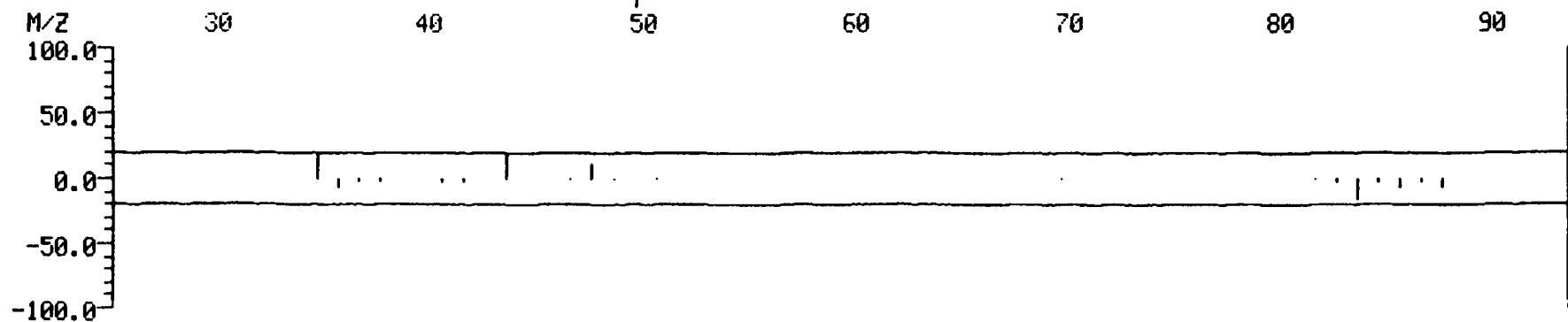
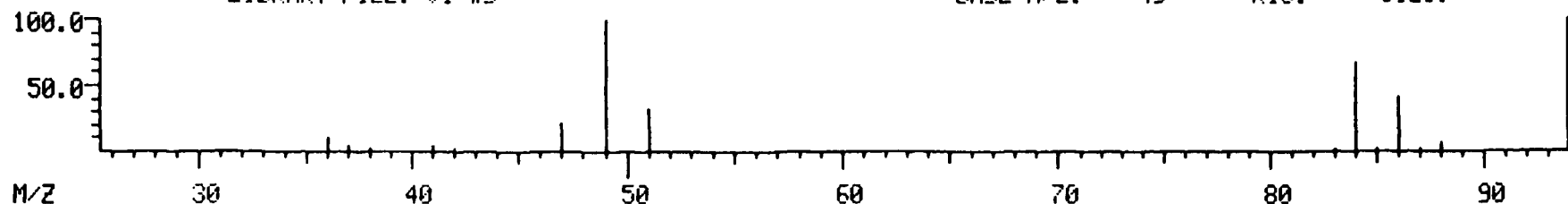
RIC: 1306.



LIBRARY FILE: V1 #9

BASE M/Z: 49

RIC: 3028.



L0001733

446.

429.

1000.

Data: WB0317.TI

03/17/93 11:39:00

Sample: CLP, VBLK1, LOW, WATER, WB0317, VOA, BLANK,

Conditions: I500A:25ML DLVO1 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Submitted by: Analyst: RJL

Weight: 0.000

Acct. No.:

AMOUNT=HEIGHT * REF AMNT/(REF HEIGHT * RESP FACT)

Resp. fac. from Library Entry

No	CAS #	Name
1	0-00-0	CI01 BROMOCHLOROMETHANE (I. S. #1)
2	0-00-0	CI10 1,4-DIFLUOROBENZENE (I. S. #2)
3	0-00-0	CI20 CHLOROBENZENE-D5 (I. S. #3)
4	~~525-31-0~~	~~4-PENTEN-2-OL~~ UNKNOWN ALCOHOL

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	RIC	185	6:10	1	1.000	A BB	5860.*	50.000 UG/L	31.94
2	RIC	374	12:28	2	1.000	A BB	9825.*	50.000 UG/L	31.94
3	RIC	519	17:18	3	1.000	A BB	7641.*	50.000 UG/L	31.94
4	RIC	68	2:16	1	0.368	A BV	765.*	6.525	4.17

DATA FILE: W80317

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
TABLE ENTRIES: 495
SCAN TOLERANCE : 3
MIN. RIC HT. [X]: 10
FIRST SCAN : 35
LAST SCAN : 1000
TIC THRESHOLD : 500

METHOD LIBRARY & LISTS

TIC I. S. LIBRARY: LIBRARYIS
NBS SEARCH PROC : SERLIB
PEAK FINDER PROC: VOME5
TCA I. S. LL : IS
FILE NAME LIST : TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
8	3	11

FILTER PROCESSING:

<-----REJECT PEAKS----->						
TOTAL PEAKS	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS	TOTAL REJECTS
15	1	0	6	7	0	14

TOTAL TICS 1

TIC PROCESSING:

SCAN#	PURITY	FIT	MW	COMPOUND NAME [BEFORE TIC THRESHOLD]
1	68	844	858	86 4-PENTEN-2-OL

0299

MID LIBRARY SEARCH (LIBRARYNE)

03/17/93 11:39:00 + 2:15

SAMPLE: CLP, UBLK1, LOW, WATER, WB0317, UOA, BLANK,

CONDS.: I500A:25ML OLU01 PURGE W/ SPPB IS & SS

ENHANCED (S 158 2N 0T)

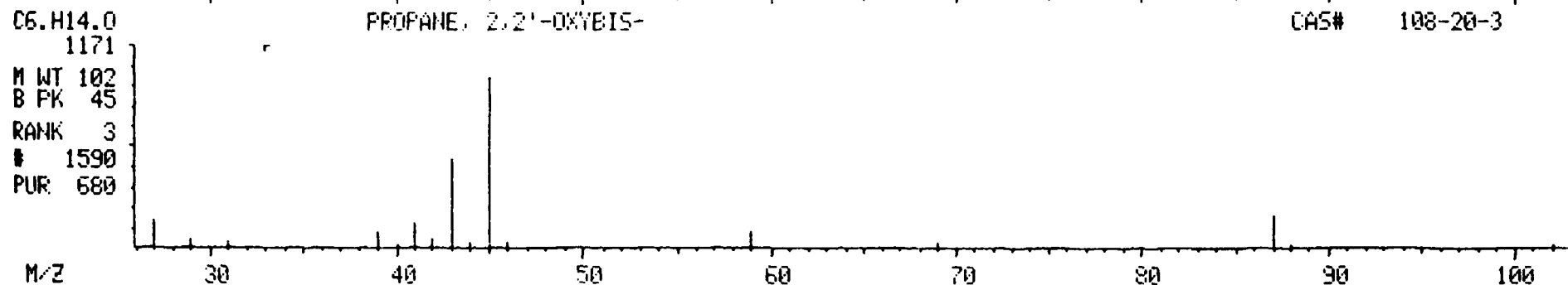
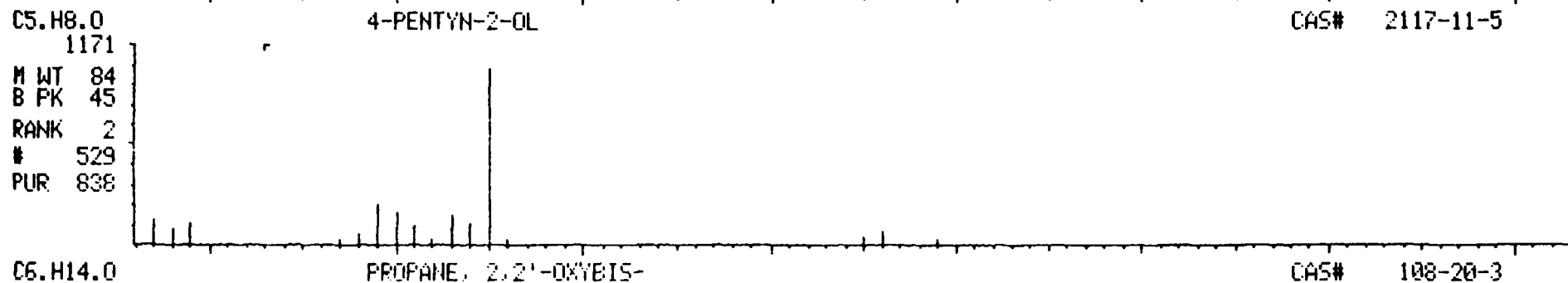
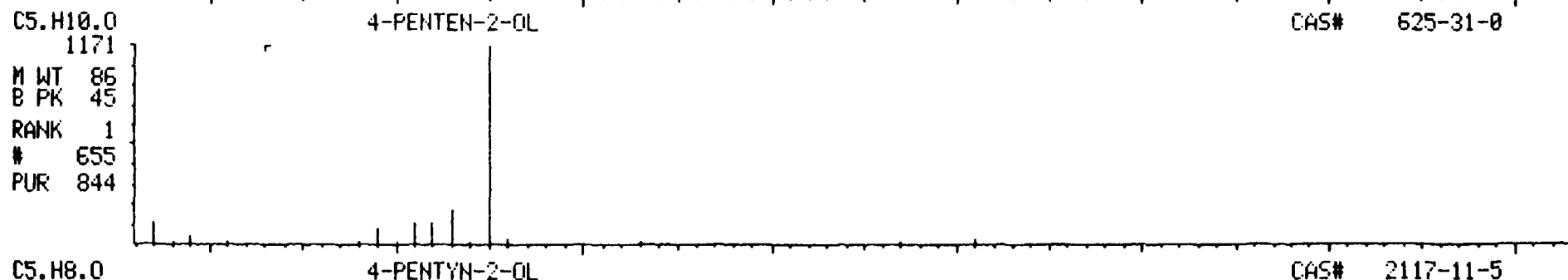
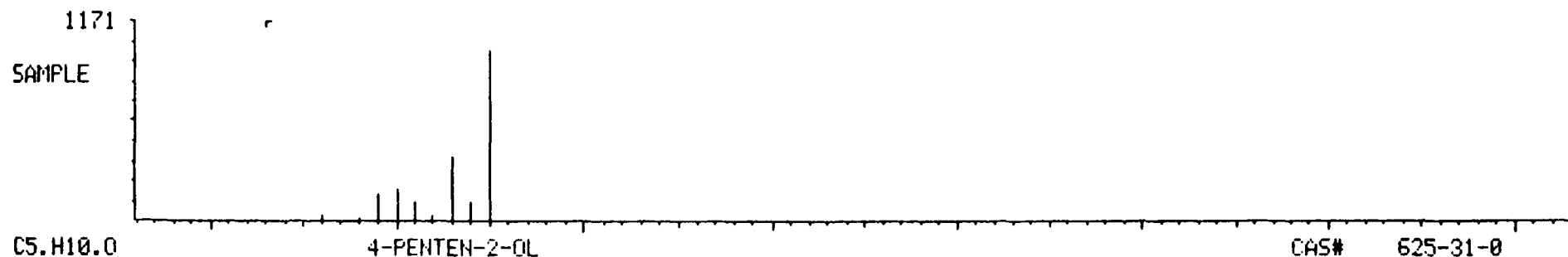
DATA: WB0317 # 68

CALI: WB0317 # 3

EWGE M 2: 45

PIO: 833.

L000173



M/Z

30

40

50

60

70

80

90

100

1X
ORGANICS ANALYSIS DATA SHEET

0300
SAMPLE NO.

VBLK2

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: WB0318

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: WB0318

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

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO. COMPOUND Q

74-87-3-----	Chloromethane	1	U
74-83-9-----	Bromomethane	1	U
75-01-4-----	Vinyl Chloride	1	U
75-00-3-----	Chloroethane	1	U
75-09-2-----	Methylene Chloride	1	X
67-64-1-----	Acetone	5	U
74-97-5-----	Bromochloromethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	1	U
75-34-3-----	1,1-Dichloroethane	1	U
540-59-0-----	1,2-Dichloroethene (total)	1	U
540-59-0-----	cis-1,2-Dichloroethene	1	U
67-66-3-----	Chloroform	1	U
107-06-2-----	1,2-Dichloroethane	1	U
78-93-3-----	2-Butanone	5	U
71-55-6-----	1,1,1-Trichloroethane	1	U
56-23-5-----	Carbon Tetrachloride	1	U
75-27-4-----	Bromodichloromethane	1	U
78-87-5-----	1,2-Dichloropropane	1	U
10061-01-5-----	cis-1,3-Dichloropropene	1	U
79-01-6-----	Trichloroethene	1	U
124-48-1-----	Dibromochloromethane	1	U
79-00-5-----	1,1,2-Trichloroethane	1	U
71-43-2-----	Benzene	1	U
10061-02-6-----	trans-1,3-Dichloropropene	1	U
106-93-4-----	1,2-Dibromoethane	1	U
75-25-2-----	Bromoform	1	U
108-10-1-----	4-Methyl-2-Pentanone	5	U
591-78-6-----	2-Hexanone	5	U
127-18-4-----	Tetrachloroethene	1	U
79-34-5-----	1,1,2,2-Tetrachloroethane	1	U
108-88-3-----	Toluene	1	U
108-90-7-----	Chlorobenzene	1	U

3/18/93

TUT 004 1737

1X
ORGANICS ANALYSIS DATA SHEET

0301
SAMPLE NO.

VBLK2

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: WB0318

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: WB0318

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

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----	Ethylbenzene_____	1	U
100-42-5-----	Styrene_____	1	U
1330-20-7-----	Xylene (total)_____	1	U
541-73-1-----	1,3-Dichlorobenzene_____	1	U
106-46-7-----	1,4-Dichlorobenzene_____	1	U
95-50-1-----	1,2-Dichlorobenzene_____	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane__	1	U

TUT 004 1738

L 0001730

0302

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET
TENTATIVELY IDENTIFIED COMPOUNDS

VBLK2

Lab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATERLab Sample ID: WB0318Sample wt/vol: 25.0 (g/mL) MLLab File ID: WB0318Level: (low/med) LOW

Date Received: _____

% Moisture: not dec. _____

Date Analyzed: 03/18/93GC Column: DB-624 ID: 0.53(mm)Dilution Factor: 1.0

Soil Extract Volume: _____(uL)

Soil Aliquot Volume: _____(uL)

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

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
=====	=====	=====	=====	=====

TUT 004 1739

L0001735

0303

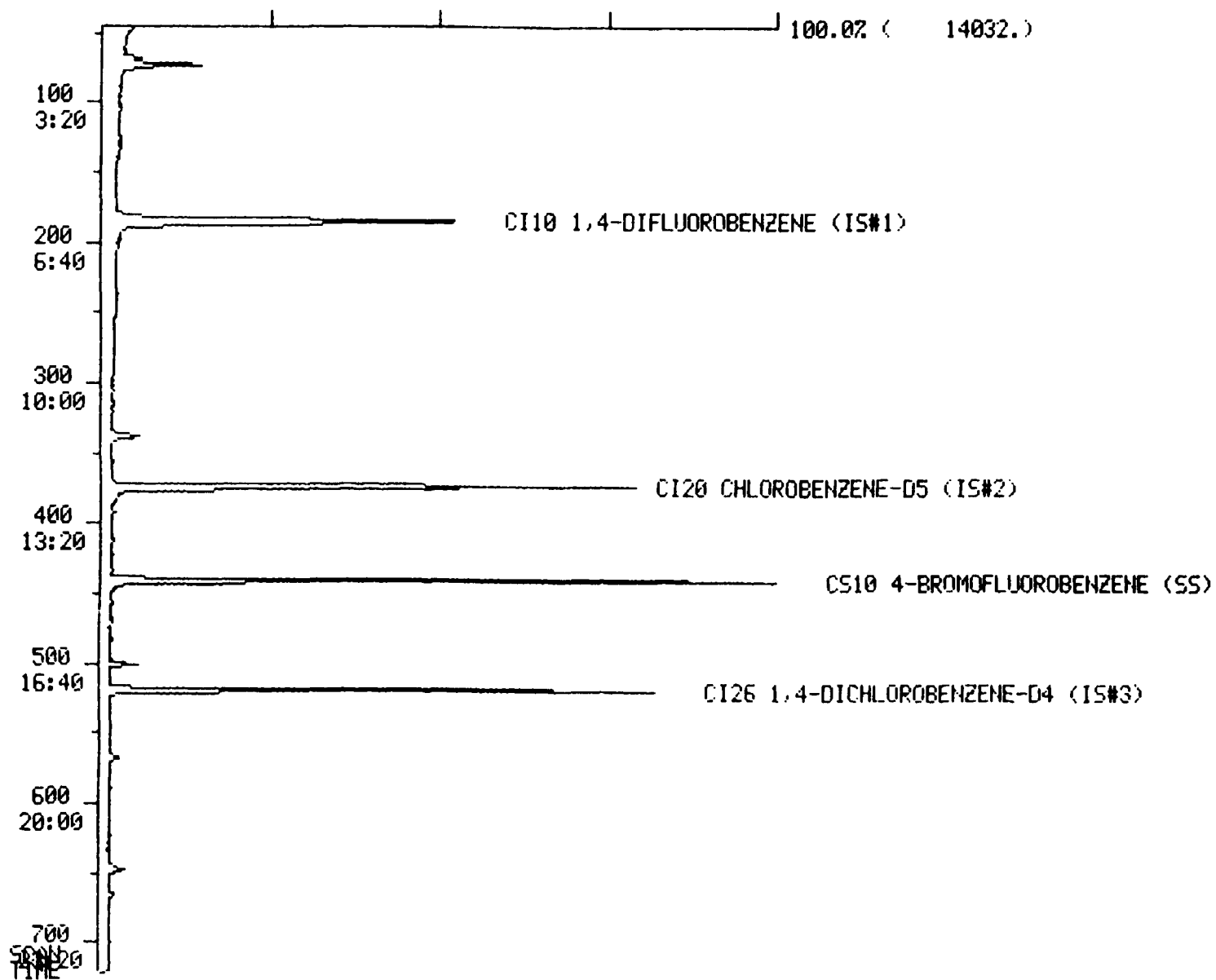
DATA FROM FILE: WB0318

SCANS 45 TO 720 ACQUIRED: 03/18/93 9:20:00

CALI: WB0318 #3

SAMPLE: CLP, , , UBLK2, LOW, WATER, WB0318, UOA, BLANK,

CONDS.: 1500A:25ML OLV01 AMBIENT PURGE W/ SPPB IS & SS



TUT 004 1740

10001740

Data: WB0318.TI

3/18/93 9:20:00

Sample: CLP, , VBLK2, LOW, WATER, WB0318, VOA, BLANK,

Instds.: I500A: 25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Weight: 0.000

Submitted by:

Analyst: RUL

Acct. No.:

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	CE05 4-METHYL-2-PENTANONE
13	CE10 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO55 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	CI20 CARBON TETRACHLORIDE
23	CI30 BROMODICHLOROMETHANE
24	CI40 1,2-DICHLOROPROPANE *
25	CI43 CIS-1,3-DICHLOROPROPENE
26	CI50 TRICHLOROETHENE
27	CI55 DIBROMOCHLOROMETHANE
28	CI60 1,1,2-TRICHLOROETHANE
29	CI65 BENZENE
30	CI72 TRANS-1,3-DICHLOROPROPENE
31	CI76 1,2-DIBROMOETHANE
32	CI80 BROMOFORM **
33	CE20 TETRACHLOROETHENE
34	CE25 1,1,2,2-TETRACHLOROETHANE **
35	CE30 TOLUENE *
36	CE35 CHLOROBENZENE
37	CE40 ETHYL BENZENE *
38	CE45 STYRENE
39	CE50 M/P XYLENE
40	CE52 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	CE53 1,3-DICHLOROBENZENE
43	CE54 1,4-DICHLOROBENZENE
44	CE55 1,2-DICHLOROBENZENE
45	CE61 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1741

L000174.

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	183	6:06	1	1.000	A BB	11089.	5.000 UG/L	21.33
2	117	372	12:24	2	1.000	A BB	7843.	5.000 UG/L	21.33
3	150	518	17:16	3	1.000	A BB	4611.	5.000 UG/L	21.33
4	95	439	14:38	1	2.399	A BB	6671.	4.923 UG/L	21.00
5	NOT	FOUND							
6	NOT	FOUND							
7	NOT	FOUND							
8	NOT	FOUND							
9	84	72	2:24	1	0.393	A BB	947.	1.126 UG/L	4.80
10	43	63	2:06	1	0.344	A BB	86.	2.360 UG/L	10.07
11	NOT	FOUND							
12	NOT	FOUND							
13	NOT	FOUND							
14	NOT	FOUND							
15	NOT	FOUND							
16	NOT	FOUND							
17	NOT	FOUND							
18	NOT	FOUND							
19	NOT	FOUND							
20	NOT	FOUND							
21	NOT	FOUND							
22	NOT	FOUND							
23	NOT	FOUND							
24	NOT	FOUND							
25	NOT	FOUND							
26	NOT	FOUND							
27	NOT	FOUND							
28	NOT	FOUND							
29	NOT	FOUND							
30	NOT	FOUND							
31	NOT	FOUND							
32	NOT	FOUND							
33	NOT	FOUND							
34	NOT	FOUND							
35	NOT	FOUND							
36	NOT	FOUND							
37	91	384	12:48	2	1.032	A BB	46.	0.012 UG/L	0.05
38	NOT	FOUND							
39	NOT	FOUND							
40	NOT	FOUND							
41	NOT	FOUND							
42	NOT	FOUND							
43	146	500	16:40	3	0.965	A BB	80.	0.062 UG/L	0.26
44	146	518	17:16	3	1.000	A BB	47.	0.053 UG/L	0.22
45	NOT	FOUND							

	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	0.99	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.01	4.92	5.00	0.602	0.611	0.98
5	1:18		0.212						
6	1:28		0.239						
7	1:20		0.217						
8	1:32		0.250						
9	2:24	1.00	0.391	1.01	1.13	5.00	0.085	0.379	0.23

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	1.02	0.337	1.02	2.36	25.00	0.002	0.016	0.09
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10		0.353						
16	2:00		0.326						
17	3:02		0.495						
18	2:36		0.424						
19	4:14		0.690						
20	5:10		0.842						
21	4:30		0.362						
22	4:46		0.383						
23	8:02		0.646						
24	7:14		0.582						
25	9:06		0.732						
26	6:42		0.539						
27	11:22		0.914						
28	10:40		0.858						
29	5:06		0.410						
30	10:22		0.834						
31	11:28		0.922						
32	13:58		0.809						
33	10:50		0.871						
34	15:02		1.209						
35	9:44		0.783						
36	12:28		1.003						
37	12:46	1.00	1.027	1.01	0.01	5.00	0.006	2.419	0.00
38	13:46		1.107						
39	13:02		1.048						
40	13:42		1.102						
41	3:44		0.609						
42	16:30		0.956						
43	16:42	1.00	0.967	1.00	0.06	5.00	0.017	1.409	0.01
44	17:18	1.00	1.002	1.00	0.05	5.00	0.011	1.011	0.01
45	18:40		1.081						

3/18/93 9:20:56
Acquisition started

0307

3/18/93 9:21:00

Acquire Run 0: WBO318 Starting
03/18/93 9:21:00 + 0:00 Free sectors: 12261 Scan: 0 of 720
Sample: CLP, VBLK2, LOW, WATER, WBO318, VOA, BLANK,
Conds.: I500A: 25ML DLV01 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: Analyst: RJL Acct. No:

*** GC not ready and being stabilized ***

GC Desc.: RR Elapsed time: 0.0 Min

Seq.	Temp	Rate	Time (minutes)	
*	(DegC)	(C/min)	period	total
1	35-35	-	6.6	6.6
2	35-150	8.0	14.3	20.9
3	150-150	-	3.0	23.9

Injector A : 150 Deg C
GC oven : 36 Deg C
Transfer-line: 214 Deg C
Ion source : 180 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 DL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	Q
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1744

L 000174.

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal

Electron multiplier voltage: 984.
 Filament emission current: 750.
 Electrometer range: 10^{-7}
 Electrometer zero: 126.0

Analyzer Fore Pressure 0.011 Torr
 Separator/Source Pressure 0.361 Torr

3/18/93 9:50:17

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Side	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.3	1440.0	0.0	2330.	3. 2.

TUT 004 1745

L 0001745

METHOD: CLP 3'90 OLV01 25ML PURGE

DATAFILE: WD0318 ANALYSIS TIME: 03/18/93 9:20
STANDARD: WS0318 ANALYSIS TIME: 03/18/93 8:29
TUNEFILE: WBF0318 ANALYSIS TIME: 03/18/93 8:20

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
110 1,4-DIFLUOROBENZEN	11089.	11210.	99%	60% - 140%	
120 CHLOROBENZENE-D5 (	7843.	7723.	102%	60% - 140%	
126 1,4-DICHLOROBENZEN	4611.	5477.	84%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
110 1,4-DIFLUOROBENZEN	183	184	2	+/- 20 SECS	
120 CHLOROBENZENE-D5 (	372	373	2	+/- 20 SECS	
126 1,4-DICHLOROBENZEN	518	518	0	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
110 4-BROMOFLUOROBENZE	4.9	5.0	98	80% - 120%	
115 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
120 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

PROCEDURE: TCA
 DATA FILE: W80318
 REFERENCE: V111
 NAME LIST: V1
 REPORT: V11S

DIAGNOSTIC REPORT

3/18/93 9:53:19

0310

INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

STANDARDS				PLUS UNKNOWN				LIST NAMES			
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN			
3	2	1	0	20	5	1	63	V11S/V1UNKS1			
3	3	1	11	16	3	1	11	V11S/V1UNKS2			
3	3	1	11	15	3	1	11	V11S/V1UNKS3			

45 COMPOUNDS PROCESSED, 4 FOUND

COMPOUND					SEARCH					SAT		CHRO				
ID	LID	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS			
1	V1	1	-184	183	183		1	982		114	183		1			
2	V1	2	-373	373	373		1	974		117	372	-1	1			
3	V1	3	-518	519						150	518		1			
4	V1	4	-439	439	439		1	948		95	439		1			
5	V1	5	-38	37						50						
6	V1	6	-44	43						94						
7	V1	7	-39	38						62						
8	V1	8	-46	45						64						
9	V1	9	-72	71	72	1	1	946		84	72		1			
10	V1	10	-62	61						43	63		1			
11	V1	11	-115	115						43						
12	V1	12	-289	289						43						
13	V1	13	-341	341						43						
14	V1	14	-122	122						128						
15	V1	15	-65	64						76						
16	V1	16	-60	59						96						
17	V1	17	-91	90						63						
18	V1	18	-78	77						96						
19	V1	19	-127	127						83						
20	V1	20	-155	155						62						
21	V1	21	-135	134						97						
22	V1	22	-143	142						117						
23	V1	23	-242	241						83						
24	V1	24	-218	217						63						
25	V1	25	-274	273						75						
26	V1	26	-201	200						95						
27	V1	27	-341	341						129						
28	V1	28	-321	321						97						
29	V1	29	-153	152						78						
30	V1	30	-311	311						75						
31	V1	31	-344	344						107						
32	V1	32	-420	420						173						
33	V1	33	-325	325						166						
34	V1	34	-451	452						83						
35	V1	35	-293	293						91						
36	V1	36	-375	375						112						
37	V1	37	-384	384						91	384		1			
38	V1	38	-413	413						104						
39	V1	39	-391	391						106						
40	V1	40	-412	412						106						
41	V1	41	-112	111						96						
42	V1	42	-496	497						146						
43	V1	43	-501	502						146	500		1			
44	V1	44	-519	520						146	518		1			
45	V1	45	-561	562						75						

TUT 004 1747

L 0001747

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0311

DATA FILE: WB0318

ACQUIRED: 03/18/93 9:20:00

ANALYST: RUL

COND: I500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

SUBMITTED BY:

ACCOUNT NO.

COMPOUND	SCAN	DELTA (UG/ML)	FIT	SAT'D?
0110 1,4-DIFLUOROBENZENE (IS#1)	183	0	5.000	982 0
0120 CHLOROBENZENE-D5 (IS#2)	372	-1	5.000	974 0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	518	-1	5.000	0 0
0310 4-BROMOFLUOROBENZENE (SS)	439	0	4.923	948 0
0030 METHYLENE CHLORIDE	72	1	1.126	946 0
0035 ACETONE	63	2	2.360	0 0

TUT 004 1748

L000174

TARGET COMPOUND COMPARISON

COMPOUND: C030 METHYLENE CHLORIDE

RAW DATA: WB0318 #72

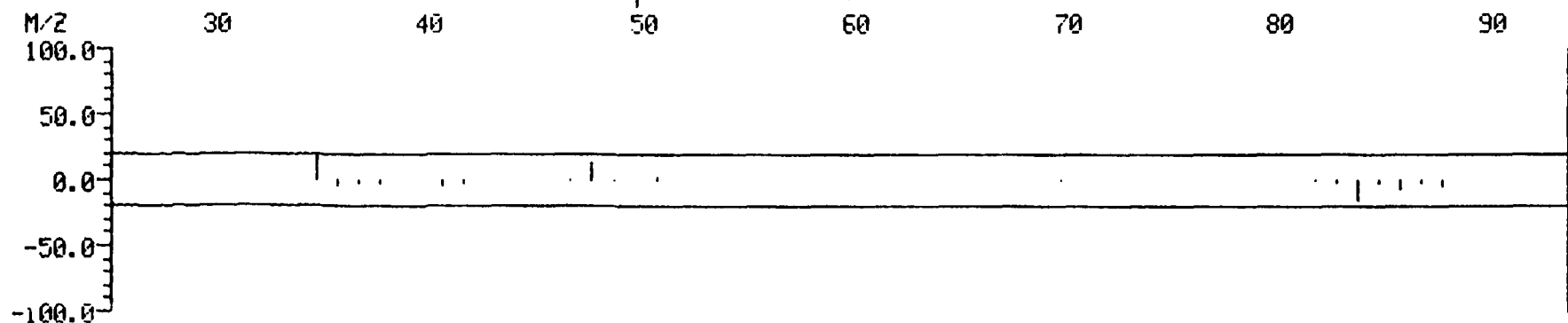
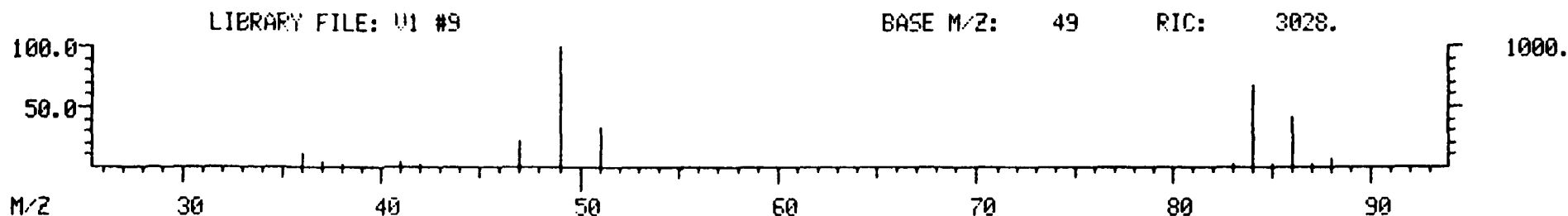
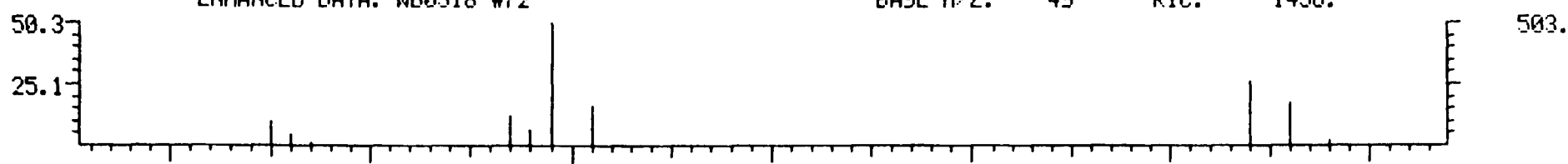
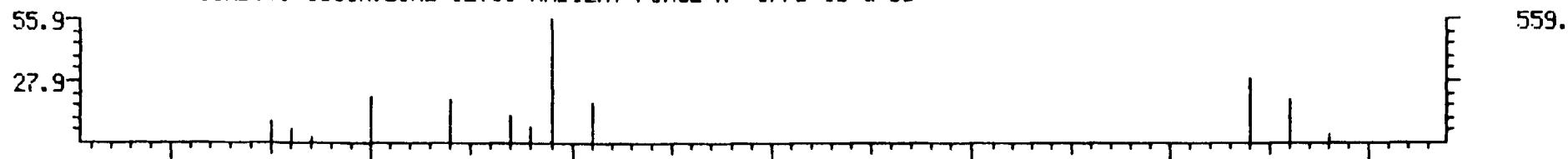
BASE M/Z: 49

RIC: 2072.

03/18/93 9:20

SAMPLE: CLP,,,UBLK2,LOW,WATER,WB0318,VOA,BLANK.

COND.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



0313

TARGET COMPOUND COMPARISON

COMPOUND: C035 ACETONE

RAW DATA: WB0318 #63

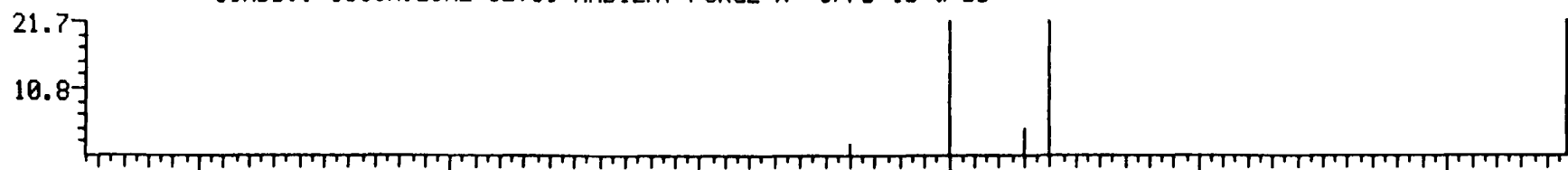
BASE M/Z: 44

RIC: 494.

03/18/93 9:20

SAMPLE: CLP,,,UBLK2,LOW,WATER,WB0318,VOA,BLANK,

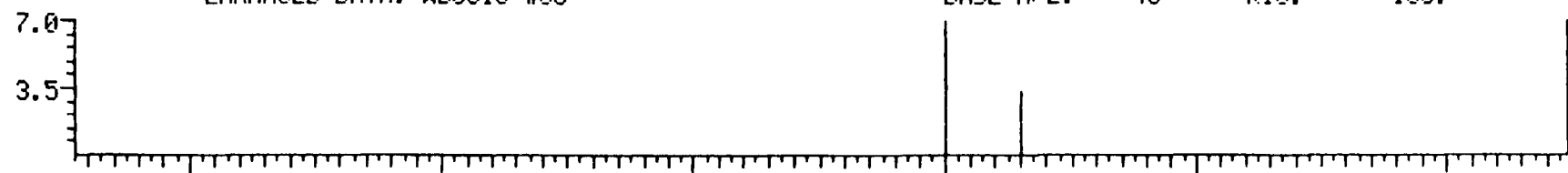
CONDS.: I500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



ENHANCED DATA: WB0318 #63

BASE M/Z: 40

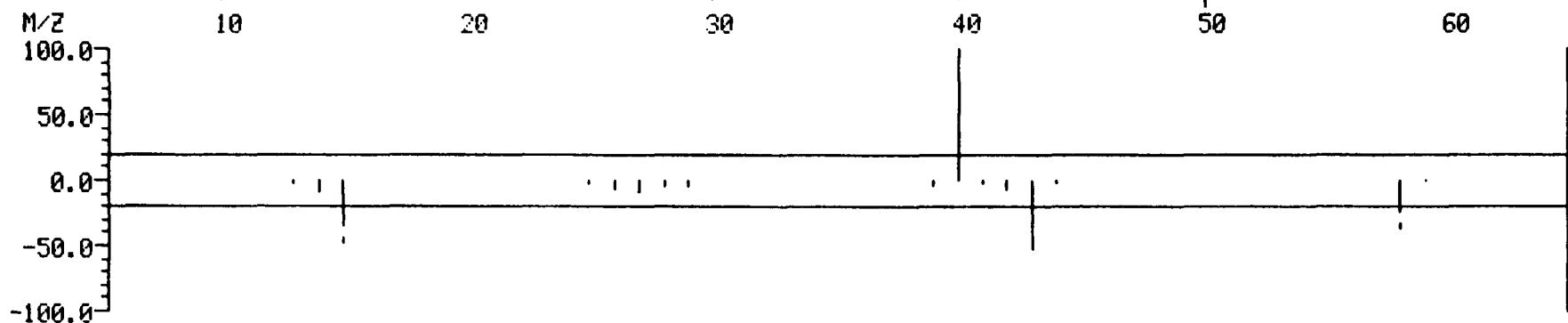
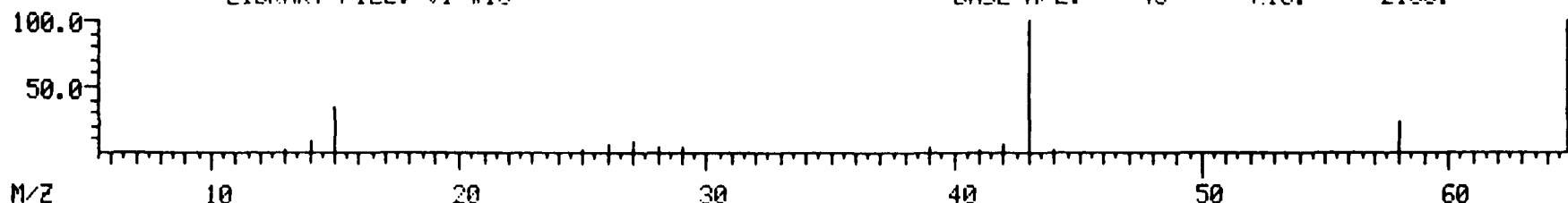
RIC: 103.



LIBRARY FILE: V1 #10

BASE M/Z: 43

RIC: 2136.



OUT

L 0001750

PROCEDURE: FILTER/TIC

DIAGNOSTIC REPORT

3/22/93 15:29:58

DATA FILE: WB0318

FILTER SCAN PARAMETERS

MAX. NUMBER TICS: 10
 TABLE ENTRIES: 495
 SCAN TOLERANCE: 3
 MIN. RIC HT. [%]: 10
 FIRST SCAN: 35
 LAST SCAN: 1000
 IS THRESHOLD: 500

METHOD LIBRARY & LISTS

TIC I.S. LIBRARY: LIBRARYIS
 NBS SEARCH PROC: SERLIB
 PEAK FINDER PROC: VOME5
 TCA I.S. LL: IS
 FILE NAME LIST: TCAREF2

TARGET COMPOUND ANALYSIS:

TARGETS (QUAN LIST)	IS PEAKS	TOTAL TARGET PEAKS
6	3	9

FILTER PROCESSING:

TOTAL PEAKS	<-----REJECT PEAKS----->					TOTAL REJECTS	TOTAL TICS
	< 1ST SCAN	> LAST SCAN	< MIN RIC HT	< SCAN TOL	> MAX # PEAKS		
19	1	0	12	6	0	19	0

NO TIC'S FOUND.

TUT 004 1751

L0001751

0315

SAMPLE NO.

1X
ORGANICS ANALYSIS DATA SHEET

MW03ORMS

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7322

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7322

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	2	B✓
67-64-1	-----Acetone	5	U
74-97-5	-----Bromochloromethane	1	U
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	5	S
75-34-3	-----1,1-Dichloroethane	1	U
540-59-0	-----trans-1,2-Dichloroethene	1	U
540-59-0	-----cis-1,2-Dichloroethene	11	U
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	7	S
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	4	S
10061-02-6	-----trans-1,3-Dichloropropene	1	U
106-93-4	-----1,2-Dibromoethane	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	8	
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	4	S
108-90-7	-----Chlorobenzene	4	S

FORM I X-1

3/90

L 0001752

25/3/25/6

TUT 004 1752

1X
ORGANICS ANALYSIS DATA SHEET

0316
SAMPLE NO.

MW03ORMS

Lab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7322

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7322

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: _____ 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) UG/L Q

100-41-4-----Ethylbenzene_____	1	U
100-42-5-----Styrene_____	1	U
1330-20-7-----Xylene (total)_____	1	U
541-73-1-----1,3-Dichlorobenzene_____	1	U
106-46-7-----1,4-Dichlorobenzene_____	1	U
95-50-1-----1,2-Dichlorobenzene_____	1	U
96-12-8-----1,2-Dibromo-3-Chloropropane_____	1	U

TUT 004 1753

L 0001753
L0001753

0317

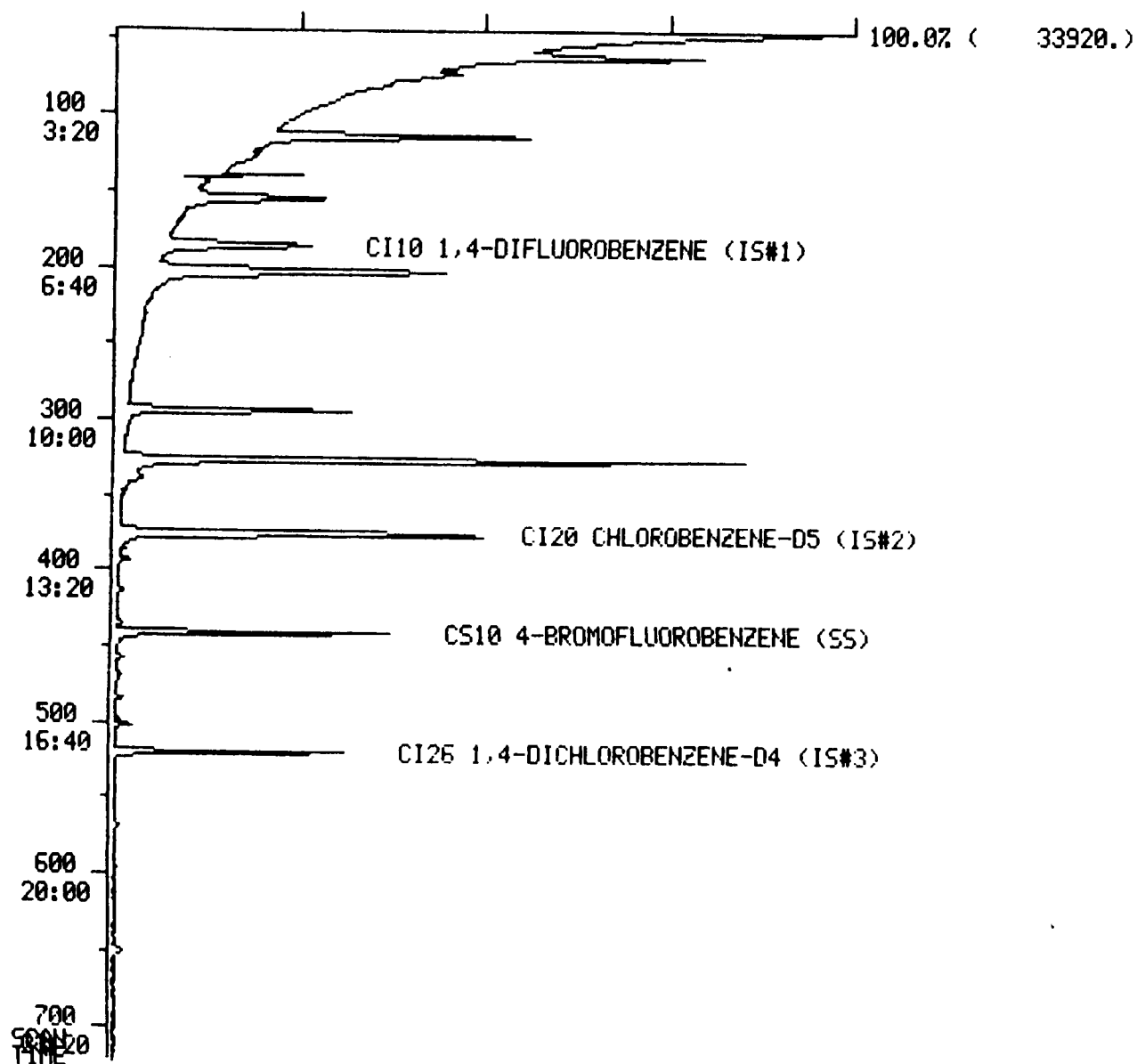
DATA FROM FILE: UU7322

SCANS 45 TO 720 ACQUIRED: 03/17/93 12:53:00

CALI: CAL021992 #3

SAMPLE: CLP, 53554, MW01, MW03ORMS, LOW, WATER, UU7322, UOA, MS,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS



TUT 004 1754

L000175:

Quantitation Report File: VV7322

Data: VV7322.TI

10/17/93 12:53:00

Sample: CLP, 53554, MW01, MW030RMS, LOW, WATER, VV7322, VOA, MS,

Vials: 1500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: 1500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	C110 1,4-DIFLUORODENZENE (IS#1)
2	C120 CHLOROBENZENE-D5 (IS#2)
3	C126 1,4-DICHLORODENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUORODENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	CO35 4-METHYL-2-PENTANONE
13	CO210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 1,2-DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C230 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C253 1,3-DICHLOROBENZENE
43	C254 1,4-DICHLOROBENZENE
44	C255 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1755

L 0001755

m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
114	184	6:08	1	1.000	A BB	10133.	5.000 UG/L	7.32
117	374	12:28	2	1.000	A BB	7156.	5.000 UG/L	7.32
150	519	17:18	3	1.000	A BB	4302.	5.000 UG/L	7.32
95	440	14:40	1	2.391	A BB	5787.	5.240 UG/L	7.67
NOT FOUND								
NOT FOUND								
NOT FOUND								
NOT FOUND								
84	73	2:26	1	0.397	A BB	1314.	1.866 UG/L	2.73
NOT FOUND								
NOT FOUND								
43	293	9:46	2	0.783	A BB	206.	1.902 UG/L	2.79
NOT FOUND								
NOT FOUND								
76	66	2:12	1	0.359	A BB	742.	0.225 UG/L	0.33
96	61	2:02	1	0.332	A BB	4932.	4.578 UG/L	6.70
63	92	3:04	1	0.500	A BB	50.	0.025 UG/L	0.04
96	79	2:38	1	0.429	A BB	314.	0.321 UG/L	0.47
83	128	4:16	1	0.696	A BB	376.	0.209 UG/L	0.31
62	156	5:12	1	0.848	A BB	35.	0.057 UG/L	0.08
97	136	4:32	2	0.364	A BB	72.	0.029 UG/L	0.04
NOT FOUND								
NOT FOUND								
NOT FOUND								
NOT FOUND								
95	201	6:42	2	0.537	A BB	10179.	7.222 UG/L	10.57
NOT FOUND								
NOT FOUND								
78	153	5:06	2	0.409	A BB	9175.	3.832 UG/L	5.61
NOT FOUND								
NOT FOUND								
NOT FOUND								
166	326	10:52	2	0.872	A BB	12918.	7.706 UG/L	11.28
NOT FOUND								
91	293	9:46	2	0.783	A BB	11346.	4.473 UG/L	6.55
112	375	12:30	2	1.003	A BB	7001.	4.404 UG/L	6.45
91	384	12:48	2	1.027	A BB	221.	0.064 UG/L	0.09
NOT FOUND								
106	392	13:04	2	1.048	A BB	187.	0.152 UG/L	0.22
106	412	13:44	2	1.102	A BB	51.	0.051 UG/L	0.07
96	113	3:46	1	0.614	A BB	8024.	10.677 UG/L	15.63
146	497	16:34	3	0.958	A BB	140.	0.109 UG/L	0.16
166	502	16:44	3	0.967	A BB	174.	0.140 UG/L	0.21
166	520	17:20	3	1.002	A BB	119.	0.134 UG/L	0.20
NOT FOUND								

Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
14:38	1.00	2.386	1.00	5.24	5.00	0.571	0.545	1.05
1:16		0.207						
1:28		0.239						
1:18		0.212						
1:32		0.250						
2:24	1.01	0.391	1.01	1.87	5.00	0.130	0.348	0.37

L0001756

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38	1.01	0.775	1.01	1.90	25.00	0.006	0.076	0.08
13	11:22		0.914						
14	4:04		0.663						
15	2:10	1.02	0.353	1.02	0.23	5.00	0.073	1.624	0.05
16	2:00	1.02	0.326	1.02	4.58	5.00	0.487	0.532	0.92
17	3:02	1.01	0.495	1.01	0.03	5.00	0.005	0.968	0.01
18	2:36	1.01	0.424	1.01	0.32	5.00	0.031	0.483	0.06
19	4:14	1.01	0.690	1.01	0.21	5.00	0.037	0.886	0.04
20	5:10	1.01	0.842	1.01	0.06	5.00	0.003	0.302	0.01
21	4:30	1.01	0.362	1.00	0.03	5.00	0.010	1.740	0.01
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.00	0.539	1.00	7.22	5.00	1.423	0.985	1.44
27	11:22		0.914						
28	10:42		0.861						
29	5:06	1.00	0.410	1.00	3.83	5.00	1.282	1.673	0.77
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	7.71	5.00	1.805	1.171	1.54
34	15:02		1.209						
35	9:46	1.00	0.786	1.00	4.47	5.00	1.586	1.772	0.89
36	12:30	1.00	1.005	1.00	4.40	5.00	0.978	1.111	0.88
37	12:48	1.00	1.029	1.00	0.06	5.00	0.031	2.430	0.01
38	13:46		1.107						
39	13:02	1.00	1.048	1.00	0.15	10.00	0.013	0.858	0.02
40	13:44	1.00	1.105	1.00	0.05	5.00	0.007	0.701	0.01
41	3:44	1.01	0.609	1.01	10.68	5.00	0.792	0.371	2.14
42	16:32	1.00	0.958	1.00	0.11	5.00	0.033	1.496	0.02
43	16:42	1.00	0.967	1.00	0.14	5.00	0.040	1.444	0.03
44	17:18	1.00	1.002	1.00	0.13	5.00	0.028	1.034	0.03
45	18:42		1.083						

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal

Electron multiplier voltage: 984.
 Filament emission current: 750.
 Electrometer range: 10 ⁻⁷
 Electrometer zero: 126.0

Analyzer Fore Pressure 0.009 Torr
 Separator/Source Pressure 0.372 Torr

3/17/93 13:22:23

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.4	1440 0	0.0	4762.	7. 3.

L 0001753

METHOD: CLP 3'90 OLV01 25ML PURGE

DATAFILE: VV7322
STANDARD: WS0317
TUNEFIL: W3FB0317ANALYSIS TIME: 03/17/93 12:53
ANALYSIS TIME: 03/17/93 10:48
ANALYSIS TIME: 03/17/93 9:34

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
0110 1,4-DIFLUOROBENZEN	10133.	9856.	103%	60% - 140%	
0120 CHLOROBENZENE-D5 (	7156.	6374.	112%	60% - 140%	
0126 1,4-DICHLOROBENZEN	4302.	4017.	107%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SECS]	CLP ACCEPT DIFF	STATUS
0110 1,4-DIFLUOROBENZEN	184	184	0	+/- 20 SECS	
0120 CHLOROBENZENE-D5 (	374	373	2	+/- 20 SECS	
0126 1,4-DICHLOROBENZEN	519	518	2	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
0010 4-BROMOFLUORODENZE	5.2	5.0	105	80% - 120%	
0015 BROMOMETHANE	-0.0	50.0	0	88% - 110%	failed
0020 VINYL CHLORIDE *	-0.0	50.0	0	86% - 115%	failed

TUT 004 1759

L 0001760

DATA FILE: VV7322

REFERENCE: V111

NAME LIST: V1 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

REPORT: V11S

0324

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	7	1	173	V11S/V1UNKS1	
3	3	1	11	16	6	1	14	V11S/V1UNKS2	
3	3	1	11	15	6	1	80	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 12 FOUND

COMPOUND			SEARCH					SAT		CHRD			
ID	LIB	ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	184	184	.	1	981	.	114	184	.	1
2	V1	2	-373	374	374	.	1	946	.	117	374	.	1
3	V1	3	-518	520	.	.	.	.	.	150	519	.	1
4	V1	4	-439	441	440	-1	1	949	.	95	440	.	1
5	V1	5	-38	39	.	.	.	.	.	50	.	.	.
6	V1	6	-44	45	.	.	.	.	.	94	.	.	.
7	V1	7	-39	40	.	.	.	.	.	62	.	.	.
8	V1	8	-46	47	.	.	.	.	.	64	.	.	.
9	V1	9	-72	73	73	.	1	965	.	84	73	.	1
10	V1	10	-62	63	.	.	.	.	.	43	.	.	.
11	V1	11	-115	116	.	.	.	.	.	43	.	.	.
12	V1	12	-289	291	294	3	1	506	.	43	293	-1	1
13	V1	13	-341	343	.	.	.	.	.	43	.	.	.
14	V1	14	-122	123	.	.	.	.	.	128	.	.	.
15	V1	15	-65	66	.	.	.	.	.	76	66	.	1
16	V1	16	-60	61	61	.	1	963	.	96	61	.	1
17	V1	17	-91	92	.	.	.	.	.	63	92	.	1
18	V1	18	-78	79	.	.	.	.	.	96	79	.	1
19	V1	19	-127	128	.	.	.	.	.	83	128	.	1
20	V1	20	-155	156	.	.	.	.	.	62	156	.	1
21	V1	21	-135	135	.	.	.	.	.	97	136	.	1
22	V1	22	-143	143	.	.	.	.	.	117	.	.	.
23	V1	23	-242	242	.	.	.	.	.	83	.	.	.
24	V1	24	-218	218	.	.	.	.	.	63	.	.	.
25	V1	25	-274	275	.	.	.	.	.	75	.	.	.
26	V1	26	-201	201	201	.	1	975	.	95	201	.	1
27	V1	27	-341	342	.	.	.	.	.	129	.	.	.
28	V1	28	-321	322	.	.	.	.	.	97	.	.	.
29	V1	29	-153	153	153	.	1	973	.	78	153	.	1
30	V1	30	-311	312	.	.	.	.	.	75	.	.	.
31	V1	31	-344	345	.	.	.	.	.	107	.	.	.
32	V1	32	-420	421	.	.	.	.	.	173	.	.	.
33	V1	33	-325	326	326	.	1	951	.	166	326	.	1
34	V1	34	-451	452	.	.	.	.	.	83	.	.	.
35	V1	35	-293	294	293	-1	1	978	.	91	293	.	1
36	V1	36	-375	376	375	-1	1	984	.	112	375	.	1
37	V1	37	-384	385	.	.	.	.	.	91	384	.	1
38	V1	38	-413	414	.	.	.	.	.	104	.	.	.
39	V1	39	-391	392	.	.	.	.	.	106	392	.	1
40	V1	40	-412	413	.	.	.	.	.	106	412	.	1
41	V1	41	-112	112	113	1	1	914	.	96	113	.	1
42	V1	42	-496	497	.	.	.	.	.	146	497	.	1
43	V1	43	-501	502	.	.	.	.	.	146	502	.	1
44	V1	44	-519	520	.	.	.	.	.	146	520	.	1
45	V1	45	-561	562	.	.	.	.	.	75	.	.	1

TUT 004 1760

L0001761

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

DATA FILE: VV7322

ACQUIRED: 03/17/93 12:53:00

INSTR: 1500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

SUBMITTED BY: ITEK

ANALYST: RJL

ACCOUNT NO. 53554

	COMPOUND	SCAN	DELTA	(UG/ML)	FIT	SAT'D?
110	1,4-DIFLUOROBENZENE (IS#1)	184	0	5.000	981	0
120	CHLOROBENZENE-D5 (IS#2)	374	0	5.000	946	0
126	1,4-DICHLOROBENZENE-D4 (IS#3)	519	-1	5.000	0	0
130	4-BROMOFLUOROBENZENE (SS)	440	-1	5.240	949	0
130	METHYLENE CHLORIDE	73	0	1.866	965	0
135	4-METHYL-2-PENTANONE	293	2	1.902	506	0
145	1,1-DICHLOROETHENE *	61	0	4.578	963	0
150	TRICHLOROETHENE	201	0	7.222	975	0
155	BENZENE	153	0	3.832	973	0
160	TETRACHLOROETHENE	326	0	7.706	951	0
160	TOLUENE *	293	-1	4.473	978	0
165	CHLOROBENZENE	375	-1	4.404	984	0
154	CIS-1,2-DICHLOROETHENE	113	1	10.677	914	0

TUT 004 1761

L 0001762

1X
ORGANICS ANALYSIS DATA SHEET

0326
SAMPLE NO.

MW030RMSD

ab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: VV7323

Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7323

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

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

CAS NO.	COMPOUND		
74-87-3	-----Chloromethane	1	U
74-83-9	-----Bromomethane	1	U
75-01-4	-----Vinyl Chloride	1	U
75-00-3	-----Chloroethane	1	U
75-09-2	-----Methylene Chloride	2	B ₂
67-64-1	-----Acetone	5	U
74-97-5	-----Bromochloromethane	1	U
75-15-0	-----Carbon Disulfide	1	U
75-35-4	-----1,1-Dichloroethene	5	S
75-34-3	-----1,1-Dichloroethane	1	U
540-59-0	-----trans-1,2-Dichloroethene	1	U
540-59-0	-----cis-1,2-Dichloroethene	12	
67-66-3	-----Chloroform	1	U
107-06-2	-----1,2-Dichloroethane	1	U
78-93-3	-----2-Butanone	5	U
71-55-6	-----1,1,1-Trichloroethane	1	U
56-23-5	-----Carbon Tetrachloride	1	U
75-27-4	-----Bromodichloromethane	1	U
78-87-5	-----1,2-Dichloropropane	1	U
10061-01-5	-----cis-1,3-Dichloropropene	1	U
79-01-6	-----Trichloroethene	7	S
124-48-1	-----Dibromochloromethane	1	U
79-00-5	-----1,1,2-Trichloroethane	1	U
71-43-2	-----Benzene	4	S
10061-02-6	-----trans-1,3-Dichloropropene	1	U
106-93-4	-----1,2-Dibromoethane	1	U
75-25-2	-----Bromoform	1	U
108-10-1	-----4-Methyl-2-Pentanone	5	U
591-78-6	-----2-Hexanone	5	U
127-18-4	-----Tetrachloroethene	7	
79-34-5	-----1,1,2,2-Tetrachloroethane	1	U
108-88-3	-----Toluene	4	S
108-90-7	-----Chlorobenzene	5	S

2-4/13/93

TUT 004 1762

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

MW03ORMSD

ab Name: ITAS-KNOXVILLE Contract: _____Lab Code: ITSTU Case No.: 53554 SAS No.: _____ SDG No.: MW01Matrix: (soil/water) WATER Lab Sample ID: VV7323Sample wt/vol: 25.0 (g/mL) ML Lab File ID: VV7323Level: (low/med) LOW Date Received: 03/08/93% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/17/93GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----	Ethylbenzene	1	U
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	1	U
541-73-1-----	1,3-Dichlorobenzene	1	U
106-46-7-----	1,4-Dichlorobenzene	1	U
95-50-1-----	1,2-Dichlorobenzene	1	U
96-12-8-----	1,2-Dibromo-3-Chloropropane	1	U

TUT 004 1763

L 0001764

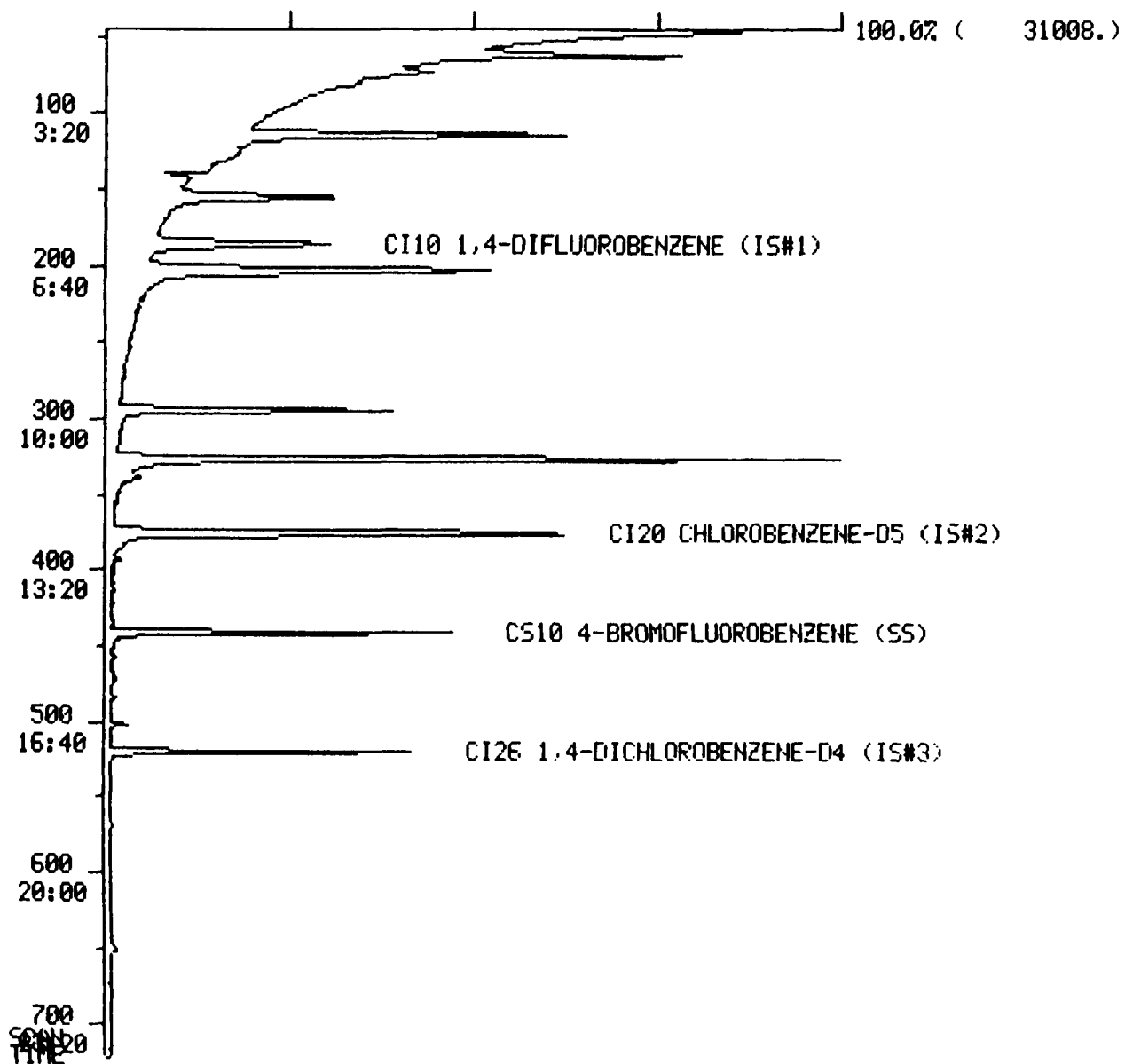
DATA FROM FILE: UU7323

SCANS 45 TO 720 ACQUIRED: 03/17/93 13:23:00

CALI: UU7323 #3

SAMPLE: CLP,53554,MW01,MW030RMSD,LOW,WATER,UU7323,UOA,MSD,

CONDS.: I500A:25ML OLV01 PURGE W/ 5PPB IS & SS



Data: VV/323.TI

03/17/93 13:23:00

Sample: CLP, 53554, MW01, MW030RMSD, LOW, WATER, VV7323, VOA, MSD,

Vials: 1500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: 1500A

Submitted by: ITEK

Analyst: RJL

Weight: 0.000

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLOROMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	C110 2-BUTANONE
12	C205 4-METHYL-2-PENTANONE
13	C210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	C115 1,1,1-TRICHLOROETHANE
22	C120 CARBON TETRACHLORIDE
23	C130 BROMODICHLOROMETHANE
24	C140 1,2-DICHLOROPROPANE *
25	C143 CIS-1,3-DICHLOROPROPENE
26	C150 TRICHLOROETHENE
27	C155 DIBROMOCHLOROMETHANE
28	C160 1,1,2-TRICHLOROETHANE
29	C165 BENZENE
30	C172 TRANS-1,3-DICHLOROPROPENE
31	C176 DIBROMOETHANE
32	C180 BROMOFORM **
33	C220 TETRACHLOROETHENE
34	C225 1,1,2,2-TETRACHLOROETHANE **
35	C230 TOLUENE *
36	C235 CHLOROBENZENE
37	C240 ETHYL BENZENE *
38	C245 STYRENE
39	C250 M/P XYLENE
40	C252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	C252 1,3-DICHLOROBENZENE
43	C253 1,4-DICHLOROBENZENE
44	C254 1,2-DICHLOROBENZENE
45	C261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1765

L 0001760

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	184	6:08	1	1.000	A BB	11110.	5.000 UG/L	7.52
2	117	374	12:29	2	1.000	A BB	8482.	5.000 UG/L	7.52
3	150	519	17:18	3	1.000	A BB	5242.	5.000 UG/L	7.52
4	95	440	14:40	1	2.391	A BB	6640.	5.483 UG/L	8.25
5	NOT FOUND								
6	NOT FOUND								
7	NOT FOUND								
8	NOT FOUND								
9	84	73	2:26	1	0.397	A BB	1425.	1.845 UG/L	2.78
10	NOT FOUND								
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	76	66	2:12	1	0.359	A BB	520.	0.144 UG/L	0.22
16	96	61	2:02	1	0.332	A BB	5519.	4.672 UG/L	7.03
17	63	93	3:06	1	0.505	A BB	38.	0.018 UG/L	0.03
18	96	80	2:40	1	0.435	A BB	454.	0.423 UG/L	0.64
19	83	128	4:16	1	0.696	A BB	409.	0.208 UG/L	0.31
20	62	154	5:08	1	0.837	A BB	197.	0.294 UG/L	0.44
21	NOT FOUND								
22	NOT FOUND								
23	NOT FOUND								
24	NOT FOUND								
25	NOT FOUND								
26	95	202	6:44	2	0.540	A BB	11546.	6.910 UG/L	10.40
27	NOT FOUND								
28	NOT FOUND								
29	78	154	5:08	2	0.412	A BB	11025.	3.884 UG/L	5.84
30	NOT FOUND								
31	NOT FOUND								
32	NOT FOUND								
33	166	326	10:52	2	0.872	A BB	13583.	6.837 UG/L	10.28
34	NOT FOUND								
35	91	293	9:46	2	0.783	A BB	12527.	4.167 UG/L	6.27
36	112	375	12:30	2	1.003	A BB	8698.	4.616 UG/L	6.94
37	91	384	12:48	2	1.027	A BB	210.	0.051 UG/L	0.08
38	NOT FOUND								
39	106	391	13:02	2	1.045	A BB	119.	0.082 UG/L	0.12
40	NOT FOUND								
41	96	113	3:46	1	0.614	A BB	9786.	11.875 UG/L	17.87
42	146	497	16:34	3	0.958	A BB	63.	0.040 UG/L	0.06
43	146	501	16:42	3	0.965	A BB	62.	0.041 UG/L	0.06
44	NOT FOUND								
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.48	5.00	0.598	0.545	1.10
5	1:16		0.207						
6	1:28		0.239						
7	1:18		0.212						
8	1:32		0.250						
9	2:24	1.01	0.391	1.01	1.85	5.00	0.128	0.348	0.37

TUT 004 1766

L 0001767

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04		0.337						
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10	1.02	0.353	1.02	0.14	5.00	0.047	1.624	0.03
16	2:00	1.02	0.326	1.02	4.67	5.00	0.497	0.532	0.93
17	3:02	1.02	0.495	1.02	0.02	5.00	0.003	0.968	0.00
18	2:36	1.03	0.424	1.03	0.42	5.00	0.041	0.483	0.08
19	4:14	1.01	0.690	1.01	0.21	5.00	0.037	0.886	0.04
20	5:10	0.99	0.842	0.99	0.29	5.00	0.018	0.302	0.06
21	4:30		0.362						
22	4:46		0.383						
23	8:04		0.649						
24	7:16		0.584						
25	9:08		0.735						
26	6:42	1.00	0.539	1.00	6.91	5.00	1.361	0.985	1.38
27	11:22		0.914						
28	10:42		0.861						
29	5:06	1.01	0.410	1.00	3.88	5.00	1.300	1.673	0.78
30	10:22		0.834						
31	11:28		0.922						
32	14:00		0.811						
33	10:50	1.00	0.871	1.00	6.84	5.00	1.601	1.171	1.37
34	15:02		1.209						
35	9:46	1.00	0.786	1.00	4.17	5.00	1.477	1.772	0.83
36	12:30	1.00	1.005	1.00	4.62	5.00	1.025	1.111	0.92
37	12:48	1.00	1.029	1.00	0.05	5.00	0.025	2.430	0.01
38	13:46		1.107						
39	13:02	1.00	1.048	1.00	0.08	10.00	0.007	0.858	0.01
40	13:44		1.105						
41	3:44	1.01	0.609	1.01	11.88	5.00	0.881	0.371	2.38
42	16:32	1.00	0.958	1.00	0.04	5.00	0.012	1.496	0.01
43	16:42	1.00	0.967	1.00	0.04	5.00	0.012	1.444	0.01
44	17:18		1.002						
45	18:42		1.083						

3/17/93 13:23:01
Acquisition started

0332

3/17/93 13:23:07

Require Run 0: VV7323 Starting
3/17/93 13:23:00 + 0:00 Free sectors: 13463 Scan: 0 of 720
Sample: CLP, 53554, MW01, MW030RMSD, LOW, WATER, VV7323, VOA, MSD,
Conds.: I500A: 25ML OLVO1 PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: I500A Weight: 0.000
Submitted by: ITEK Analyst: RUL Acct. No: 53554

*** GC not ready and being equilibrated ***

GC Desc.: V1 Elapsed time: 0.0 Min

Seq.	Temp (DegC)	Rate (C/min)	Time (minutes) period	total	
1	35-35	-	6.6	6.6	Injector A : 150 Deg C
2	35-150	8.0	14.3	20.9	GC oven : 97 Deg C
3	150-150	-	3.0	23.9	Transfer-line: 216 Deg C
					Ion source : 184 Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament : Off Multiplier : Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

MPW: 3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D:CAL021992

Interface number	0
Instrument type	G
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1768

L 0001769

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal

Electron multiplier voltage: 984.

Filament emission current: 750.

Electrometer range: 10 ⁻⁷

Electrometer zero: 126.0

Analyzer Fore Pressure: 0.010 Torr
 Separator/Source Pressure: 0.375 Torr

3/17/93 13:52:34

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.6	1440.0	0.0	5177.	7.4

DATA FILE: VV7323

REFERENCE: V111

NAME LIST: V1 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

REPORT: V1IS

3/17/73 14:41:59

0334

STANDARDS				PLUS UNKNOWN				LIST NAMES	
PROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	6	1	60	V1IS/V1UNKS1	
3	3	1	11	16	6	2	46	V1IS/V1UNKS2	
3	3	1	11	15	6	1	80	V1IS/V1UNKS3	

45 COMPOUNDS PROCESSED, 11 FOUND

COMPOUND		SEARCH					SAT		CHRO			
ID	LID ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	184	184	1	980		114	184		1
2	V1	2	-373	374	374	1	952		117	374		1
3	V1	3	-518	520					150	519		1
4	V1	4	-439	440	440	1	953		95	440		1
5	V1	5	-38	39					50			
6	V1	6	-44	45					94			
7	V1	7	-39	40					62			
8	V1	8	-46	47					64			
9	V1	9	-72	73	73	1	952		84	73		1
10	V1	10	-62	63					43			
11	V1	11	-115	116					43			
12	V1	12	-289	290					43			
13	V1	13	-341	342					43			
14	V1	14	-122	123					128			
15	V1	15	-65	66					76	66		1
16	V1	16	-60	61	61	1	958		96	61		1
17	V1	17	-91	92					63	93		1
18	V1	18	-78	79					96	80		1
19	V1	19	-127	128					83	128		1
20	V1	20	-155	156					62	154		1
21	V1	21	-135	135					97			
22	V1	22	-143	143					117			
23	V1	23	-242	243					83			
24	V1	24	-218	219					63			
25	V1	25	-274	275					75			
26	V1	26	-201	202	202	1	976		95	202		1
27	V1	27	-341	342					129			
28	V1	28	-321	322					97			
29	V1	29	-153	154	154	1	975		78	154		1
30	V1	30	-311	312					75			
31	V1	31	-344	345					107			
32	V1	32	-420	421					173			
33	V1	33	-325	326	326	2	954		166	326		1
34	V1	34	-451	452					83			
35	V1	35	-293	294	293	-1	980		91	293		1
36	V1	36	-375	376	375	-1	989		112	375		1
37	V1	37	-384	385					91	384		1
38	V1	38	-413	414					104			
39	V1	39	-391	392					106	391		1
40	V1	40	-412	413					106			
41	V1	41	-112	112	113	1	915		96	113		1
42	V1	42	-496	497					146	497		1
43	V1	43	-501	502					146	501		1
44	V1	44	-519	520					146			
45	V1	45	-561	562					75			

TUT 004 1770

L 0001771

I. T. ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0335

DATA FILE: VV7323

ACQUIRED: 03/17/93 13:23:00

COND: 1500A:25ML OLVO1 PURGE W/ 5PPB IS & SS

SUBMITTED BY: ITEK

ANALYST: RJL

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA	(UG/ML)	FIT	SAT'D?
0110 1,4-DIFLUOROBENZENE (IS#1)	184	0	5.000	980	0
0120 CHLOROBENZENE-D5 (IS#2)	374	0	5.000	952	0
0126 1,4-DICHLOROBENZENE-D4 (IS#3)	519	-1	5.000	0	0
0310 4-BROMOFLUOROBENZENE (SS)	440	0	4.891	953	0
0030 METHYLENE CHLORIDE	73	0	1.691	952	0
0045 1,1-DICHLOROETHENE *	61	0	4.841	958	0
0150 TRICHLOROETHENE	202	0	6.829	976	0
0165 BENZENE	154	0	3.856	975	0
0220 TETRACHLOROETHENE	326	0	6.789	954	0
0230 TOLUENE *	293	-1	4.165	980	0
0235 CHLOROBENZENE	375	-1	4.392	989	0
0054 CIS-1,2-DICHLOROETHENE	113	1	10.921	915	0

TUT 004 1771

0001772

1X
ORGANICS ANALYSIS DATA SHEET

SAMPLE NO.

VLCS1

Lab Name: ITAS-KNOXVILLE

Contract: _____

Lab Code: ITSTUCase No.: 53554

SAS No.: _____

SDG No.: MW01Matrix: (soil/water) WATERLab Sample ID: LCS0318Sample wt/vol: 25.0 (g/mL) MLLab File ID: LCS0318Level: (low/med) LOWDate Received: 03/08/93% Moisture: not dec. _____ Heated Purge: NDate Analyzed: 03/18/93GC Column: DB-624 ID: 0.53 (mm)Dilution Factor: 1.0

Soil Extract Volume: _____ (uL)

Soil Aliquot Volume: _____ (uL)

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

74-87-3-----	Chloromethane	3	S
74-83-9-----	Bromomethane	5	S
75-01-4-----	Vinyl Chloride	5	S
75-00-3-----	Chloroethane	8	S
75-09-2-----	Methylene Chloride	5	BS
67-64-1-----	Acetone	5	U
74-97-5-----	Bromochloromethane	1	U
75-15-0-----	Carbon Disulfide	1	U
75-35-4-----	1,1-Dichloroethene	5	S
75-34-3-----	1,1-Dichloroethane	5	S
540-59-0-----	1,2-Dichloroethene (total)	5	S
540-59-0-----	cis-1,2-Dichloroethene	1	U
67-66-3-----	Chloroform	5	S
107-06-2-----	1,2-Dichloroethane	6	S
78-93-3-----	2-Butanone	5	U
71-55-6-----	1,1,1-Trichloroethane	5	S
56-23-5-----	Carbon Tetrachloride	5	S
75-27-4-----	Bromodichloromethane	5	S
78-87-5-----	1,2-Dichloropropane	5	S
10061-01-5-----	cis-1,3-Dichloropropene	5	S
79-01-6-----	Trichloroethene	5	S
124-48-1-----	Dibromochloromethane	5	S
79-00-5-----	1,1,2-Trichloroethane	5	S
71-43-2-----	Benzene	5	S
10061-02-6-----	trans-1,3-Dichloropropene	4	S
106-93-4-----	1,2-Dibromoethane	7	S
75-25-2-----	Bromoform	5	S
108-10-1-----	4-Methyl-2-Pentanone	5	U
591-78-6-----	2-Hexanone	5	U
127-18-4-----	Tetrachloroethene	5	S
79-34-5-----	1,1,2,2-Tetrachloroethane	5	S
108-88-3-----	Toluene	4	S
108-90-7-----	Chlorobenzene	5	S

1X
ORGANICS ANALYSIS DATA SHEET

0337
SAMPLE NO.

VLCS1

ab Name: ITAS-KNOXVILLE Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: MW01

Matrix: (soil/water) WATER Lab Sample ID: LCS0318

Sample wt/vol: 5.0 (g/mL) ML Lab File ID: LCS0318

Level: (low/med) LOW Date Received: 03/08/93

% Moisture: not dec. _____ Heated Purge: N Date Analyzed: 03/18/93

GC Column: DB-624 ID: 0.53(mm) Dilution Factor: 1.0

Soil Extract Volume: _____(uL) Soil Aliquot Volume: _____(uL)

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) <u>UG/L</u>	Q

100-41-4-----	Ethylbenzene	4	S
100-42-5-----	Styrene	1	U
1330-20-7-----	Xylene (total)	4	S
541-73-1-----	1,3-Dichlorobenzene	4	S
106-46-7-----	1,4-Dichlorobenzene	5	S
95-50-1-----	1,2-Dichlorobenzene	5	S
96-12-8-----	1,2-Dibromo-3-Chloropropane	1	U

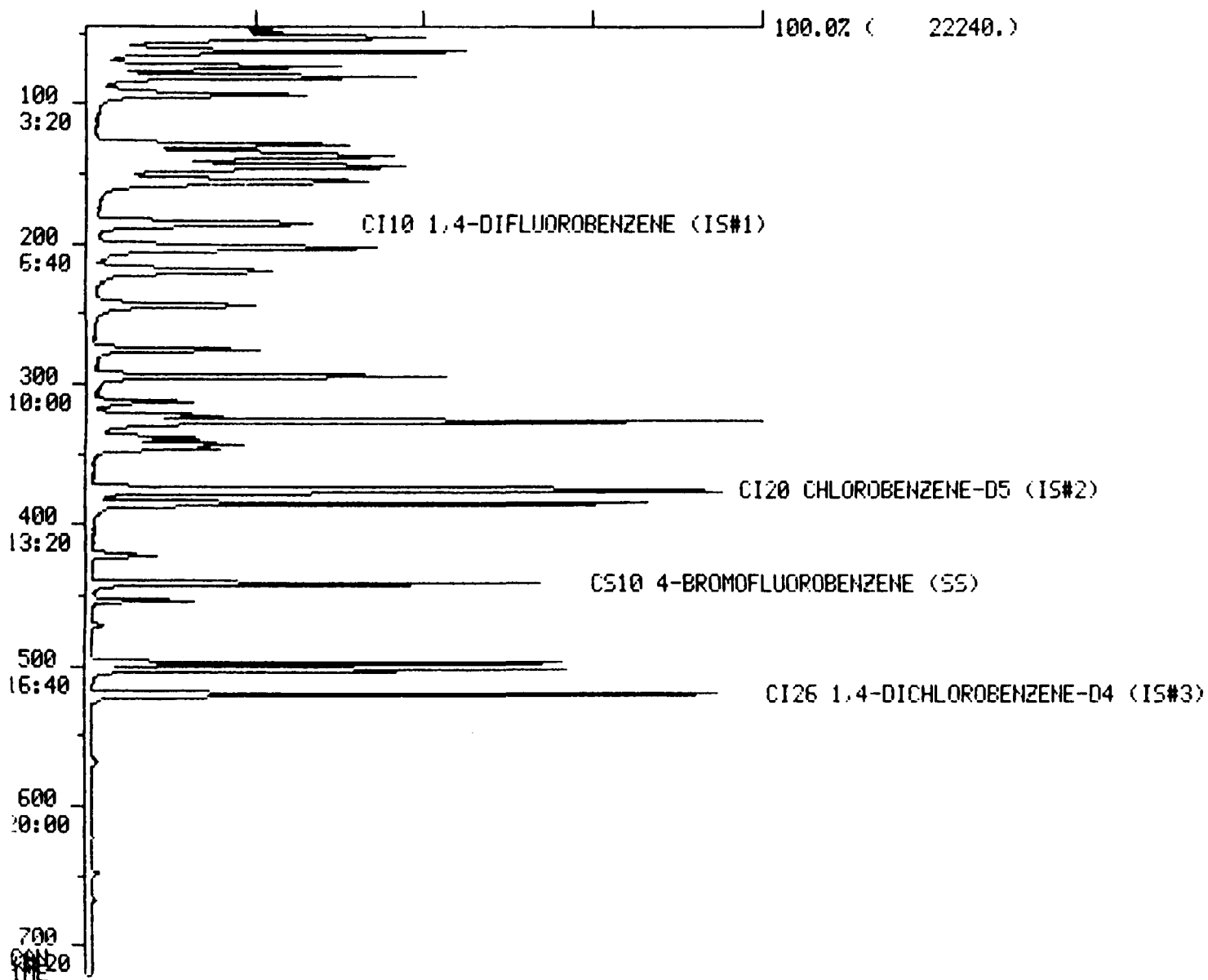
TUT 004 1773

DATA FROM FILE: LC50318 SCANS 45 TO 720 ACQUIRED: 03/18/93 14:04:00

CALI: LC50318 #3

SAMPLE: CLP,53544,MW01,ULCS0318,LOW,WATER,LC50318,UOA,EPA,

COND.: 1500A:25ML OLV01 AMBIENT PURGE W/ 5PPB IS & SS



7 0001775

LCS0318

Data: LCS0318.TI

03/18/93 14:04:00

Sample: CLP, 53544, MW01, VLCS0318, LDW, WATER, LCS0318, VOA, EPA,

Conds.: I500A:25ML DIV01 AMBIENT PURGE W/ 5PPB IS & SS

Formula: 25ML AMBIENT PURGE Instrument: I500A

Weight: 0.000

Submitted by: ITEK

Analyst: RJL

Acct. No.: 53554

AMOUNT=AREA * REF AMNT/(REF AREA * RESP FACT)

Resp. fac. from Library Entry

No	Name
1	CI10 1,4-DIFLUOROBENZENE (IS#1)
2	CI20 CHLOROBENZENE-D5 (IS#2)
3	CI26 1,4-DICHLOROBENZENE-D4 (IS#3)
4	CS10 4-BROMOFLUOROBENZENE (SS)
5	CO10 CHLORDMETHANE **
6	CO15 BROMOMETHANE
7	CO20 VINYL CHLORIDE *
8	CO25 CHLOROETHANE
9	CO30 METHYLENE CHLORIDE
10	CO35 ACETONE
11	CI10 2-BUTANONE
12	CO205 4-METHYL-2-PENTANONE
13	CO210 2-HEXANONE
14	CO37 BROMOCHLOROMETHANE
15	CO40 CARBON DISULFIDE
16	CO45 1,1-DICHLOROETHENE *
17	CO50 1,1-DICHLOROETHANE **
18	CO53 TRANS-1,2-DICHLOROETHENE
19	CO60 CHLOROFORM *
20	CO65 1,2-DICHLOROETHANE
21	CI115 1,1,1-TRICHLOROETHANE
22	CI120 CARBON TETRACHLORIDE
23	CI130 BROMODICHLOROMETHANE
24	CI140 1,2-DICHLOROPROPANE *
25	CI143 CIS-1,3-DICHLOROPROPENE
26	CI150 TRICHLOROETHENE
27	CI155 DIBROMOCHLOROMETHANE
28	CI160 1,1,2-TRICHLOROETHANE
29	CI165 BENZENE
30	CI172 TRANS-1,3-DICHLOROPROPENE
31	CI176 1,2-DIBROMOETHANE
32	CI180 BROMOFORM **
33	CO220 TETRACHLOROETHENE
34	CO225 1,1,2,2-TETRACHLOROETHANE **
35	CO230 TOLUENE *
36	CO235 CHLOROBENZENE
37	CO240 ETHYL BENZENE *
38	CO245 STYRENE
39	CO250 M/P XYLENE
40	CO252 O-XYLENE
41	CO54 CIS-1,2-DICHLOROETHENE
42	CO253 1,3-DICHLOROBENZENE
43	CO254 1,4-DICHLOROBENZENE
44	CO255 1,2-DICHLOROBENZENE
45	CO261 1,2-DIBROMO-3-CHLOROPROPANE

TUT 004 1775

L 0001773

No	m/z	Scan	Time	Ref	RRT	Meth	Area(Hght)	Amount	%Tot
1	114	185	6:10	1	1.000	A BB	11078.	5.000 UG/L	2.95
2	117	374	12:28	2	1.000	A BB	8235.	5.000 UG/L	2.95
3	150	519	17:18	3	1.000	A BB	5663.	5.000 UG/L	2.95
4	93	440	14:40	1	2.378	A BV	6826.	5.043 UG/L	2.98
5	50	41	1:22	1	0.222	A BB	5639.	2.615 UG/L	1.54
6	94	47	1:34	1	0.254	A BB	5439.	4.664 UG/L	2.75
7	62	42	1:24	1	0.227	A BB	7040.	4.637 UG/L	2.74
8	64	47	1:34	1	0.254	A BB	6507.	7.697 UG/L	4.55
9	84	73	2:26	1	0.395	A BB	4484.	5.337 UG/L	3.15
10	43	64	2:08	1	0.346	A BB	31.	0.852 UG/L	0.50
11	NOT FOUND								
12	NOT FOUND								
13	NOT FOUND								
14	NOT FOUND								
15	NOT FOUND								
16	96	61	2:02	1	0.330	A BB	5534.	4.869 UG/L	2.88
17	63	92	3:04	1	0.497	A VB	12393.	5.351 UG/L	3.16
18	96	80	2:40	1	0.432	A BB	5431.	4.893 UG/L	2.89
19	83	128	4:16	1	0.692	A BB	11545.	5.136 UG/L	3.03
20	62	156	5:12	1	0.843	A BB	4418.	5.967 UG/L	3.52
21	97	136	4:32	2	0.364	A BB	13508.	4.916 UG/L	2.90
22	117	144	4:48	2	0.385	A VB	11963.	4.705 UG/L	2.78
23	83	242	8:04	2	0.647	A BB	6864.	5.040 UG/L	2.98
24	63	218	7:16	2	0.583	A BB	4614.	4.659 UG/L	2.75
25	75	274	9:08	2	0.733	A BB	4481.	5.440 UG/L	3.21
26	95	202	6:44	2	0.540	A BB	7447.	4.537 UG/L	2.68
27	129	342	11:24	2	0.914	A BB	3461.	4.921 UG/L	2.91
28	97	321	10:42	2	0.858	A BB	1903.	5.093 UG/L	3.01
29	78	154	5:08	2	0.412	A BB	12610.	4.543 UG/L	2.68
30	75	312	10:24	2	0.834	A BB	2162.	4.440 UG/L	2.62
31	107	345	11:30	2	0.922	A BB	3148.	6.831 UG/L	4.03
32	173	420	14:00	3	0.809	A BB	1155.	4.969 UG/L	2.93
33	166	326	10:52	2	0.872	A BB	9073.	4.670 UG/L	2.76
34	83	452	15:04	2	1.209	A BB	1907.	5.081 UG/L	3.00
35	91	293	9:46	2	0.783	A BB	13149.	4.503 UG/L	2.66
36	112	375	12:30	2	1.003	A BB	8963.	4.661 UG/L	2.75
37	91	384	12:48	2	1.027	A BB	17935.	4.502 UG/L	2.66
38	NOT FOUND								
39	106	391	13:02	2	1.045	A BB	67.	0.046 UG/L	0.03
40	NOT FOUND								
41	NOT FOUND								
42	166	496	16:32	3	0.956	A BV	7074.	4.477 UG/L	2.64
43	166	501	16:42	3	0.965	A VB	7295.	4.573 UG/L	2.70
44	166	520	17:20	3	1.002	A BB	5378.	4.699 UG/L	2.78
45	NOT FOUND								

No	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
1	6:08	1.01	1.000	1.00	5.00	5.00	1.000	1.000	1.00
2	12:26	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
3	17:16	1.00	1.000	1.00	5.00	5.00	1.000	1.000	1.00
4	14:38	1.00	2.386	1.00	5.04	5.00	0.616	0.611	1.01
5	1:18	1.05	0.212	1.05	2.61	5.00	0.509	0.973	0.52
6	1:28	1.07	0.239	1.06	4.66	5.00	0.491	0.526	0.93
7	1:20	1.05	0.217	1.04	4.64	5.00	0.636	0.685	0.93
8	1:32	1.02	0.250	1.02	7.70	5.00	0.587	0.382	1.54
9	2:24	1.01	0.391	1.01	5.34	5.00	0.405	0.379	1.07

L 000177.

PID LINEARITY CALCULATIONS FOR V3400A USING A RESTEK 502.2 COLUMN 105m* 0.53mm
I.D., 3.0um Df COLUMN.

File Name	SAMPLE NAME Number	Date Of Injection	Air			VCI		
			Ret. Time	STD CON	Height (PPB)	Ret. Time	STD CON	Height (PPB)
tc10002.	A MIX	3/10/93	---	---	---	9.01	1.5000	996.72
tc10009.	B MIX	3/10/93	---	---	---	9.00	7.5000	4956.13
tc10010.	C MIX	3/10/93	---	---	---	9.00	15.0000	10584.16
tc10005.	D MIX	3/10/93	---	---	---	9.01	22.5000	15877.48
tc10006.	E MIX	3/10/93	---	---	---	9.01	30.0000	24596.74
Averages			---	---	---	9.00	15.3000	11401.85
%RSD			---	---	---	0.07	74.47	81.40

File Name	SAMPLE NAME Number	Date Of Injection	11DCIE			T-12DCIE		
			Ret. Time	STD CON	Height (PPB)	Ret. Time	STD CON	Height (PPB)
tc10002.	A MIX	3/10/93	16.98	1.0000	3745.34	20.19	1.0000	11601.63
tc10009.	B MIX	3/10/93	16.98	7.5000	24000.19	20.18	7.5000	95207.35
tc10010.	C MIX	3/10/93	16.97	15.0000	51105.85	20.18	15.0000	192704.78
tc10005.	D MIX	3/10/93	16.98	22.5000	85666.02	20.18	22.5000	315832.19
tc10006.	E MIX	3/10/93	16.96	30.0000	124801.84	20.17	30.0000	477796.25
Averages			16.97	15.2000	57863.85	20.18	15.2000	218628.44
%RSD			0.05	75.97	83.67	0.04	75.97	84.15

File Name	SAMPLE NAME Number	Date Of Injection	C-12DCIE			Bz		
			Ret. Time	STD CON	Height (PPB)	Ret. Time	STD CON	Height (PPB)
tc10002.	A MIX	3/10/93	24.13	1.0000	4524.67	28.43	1.0000	12253.49
tc10009.	B MIX	3/10/93	24.11	7.5000	34520.40	28.41	7.5000	78078.69
tc10010.	C MIX	3/10/93	24.12	15.0000	77275.16	28.43	15.0000	154269.83
tc10005.	D MIX	3/10/93	24.13	22.5000	118232.27	28.43	22.5000	248681.70
tc10006.	E MIX	3/10/93	24.10	30.0000	177435.11	28.41	30.0000	377316.41
Averages			24.12	15.2000	82397.52	28.42	15.2000	174120.02
%RSD			0.05	75.97	82.98	0.04	75.97	82.56

File Name	SAMPLE NAME Number	Date Of Injection	FBz			TCIE		
			Ret. Time	STD CON	Height (PPB)	Ret. Time	STD CON	Height (PPB)
tc10002.	A MIX	3/10/93	29.36	100.0000	183585.84	31.06	1.0000	5106.00
tc10009.	B MIX	3/10/93	29.35	100.0000	205257.63	31.05	7.5000	43599.41
tc10010.	C MIX	3/10/93	29.36	100.0000	209136.34	31.06	15.0000	98041.21
tc10005.	D MIX	3/10/93	29.36	100.0000	201588.97	31.07	22.5000	152276.05
tc10006.	E MIX	3/10/93	29.34	100.0000	229757.59	31.04	30.0000	237990.09
Averages			29.35	100.0000	205865.28	31.06	15.2000	107402.56
%RSD			0.04	0.00	8.04	0.03	75.97	85.45

File Name	SAMPLE NAME Number	Date Of Injection	2ClEthylVO			C-13DCIpe		
			Ret. Time	STD CON	Height (PPB)	Ret. Time	STD CON	Height (PPB)
tc10002.	A MIX	3/10/93	34.04	1.0000	1004.75	35.05	1.0000	3123.09
tc10009.	B MIX	3/10/93	34.02	5.0000	7534.33	35.04	7.5000	16686.59
tc10010.	C MIX	3/10/93	34.05	10.0000	18194.46	35.06	15.0000	34385.94
tc10005.	D MIX	3/10/93	34.04	15.0000	25993.42	35.06	22.5000	54483.83
tc10006.	E MIX	3/10/93	34.03	20.0000	40913.00	35.04	30.0000	86171.56
Averages			34.04	10.2000	18727.99	35.05	15.2000	38970.20
%RSD			0.03	74.47	83.78	0.03	75.97	83.85

File Name	SAMPLE NAME Number	Date Of Injection	Toluene			T-13DCIpe		
			Ret. Time	STD CON	Height (PPB)	Ret. Time	STD CON	Height (PPB)
tc10002.	A MIX	3/10/93	36.58	1.0000	9715.21	37.42	1.0000	903.37
tc10009.	B MIX	3/10/93	36.57	7.5000	73372.82	37.40	7.5000	15938.55

L 0001817

Rs	Ret(L)	Ratio	RRT(L)	Ratio	Amnt	Amnt(L)	R. Fac	R. Fac(L)	Ratio
10	2:04	1.03	0.337	1.03	0.85	25.00	0.001	0.016	0.03
11	3:50		0.625						
12	9:38		0.775						
13	11:22		0.914						
14	4:04		0.663						
15	2:10		0.353						
16	2:00	1.02	0.326	1.01	4.87	5.00	0.500	0.513	0.97
17	3:02	1.01	0.495	1.01	5.35	5.00	1.119	1.045	1.07
18	2:36	1.03	0.424	1.02	4.89	5.00	0.490	0.501	0.98
19	4:14	1.01	0.690	1.00	5.14	5.00	1.042	1.015	1.03
20	5:10	1.01	0.842	1.00	5.97	5.00	0.399	0.334	1.19
21	4:30	1.01	0.362	1.00	4.92	5.00	1.640	1.668	0.98
22	4:46	1.01	0.383	1.00	4.70	5.00	1.453	1.544	0.94
23	8:02	1.00	0.646	1.00	5.04	5.00	0.834	0.827	1.01
24	7:14	1.00	0.582	1.00	4.66	5.00	0.560	0.601	0.93
25	9:06	1.00	0.732	1.00	5.44	5.00	0.544	0.500	1.09
26	6:42	1.00	0.539	1.00	4.54	5.00	0.904	0.997	0.91
27	11:22	1.00	0.914	1.00	4.92	5.00	0.420	0.427	0.98
28	10:40	1.00	0.858	1.00	5.09	5.00	0.231	0.227	1.02
29	5:06	1.01	0.410	1.00	4.54	5.00	1.531	1.685	0.91
30	10:22	1.00	0.834	1.00	4.44	5.00	0.263	0.296	0.89
31	11:28	1.00	0.922	1.00	6.83	5.00	0.382	0.280	1.37
32	13:58	1.00	0.809	1.00	4.97	5.00	0.204	0.205	0.99
33	10:50	1.00	0.871	1.00	4.67	5.00	1.102	1.180	0.93
34	15:02	1.00	1.209	1.00	5.08	5.00	0.232	0.228	1.02
35	9:44	1.00	0.783	1.00	4.50	5.00	1.597	1.773	0.90
36	12:28	1.00	1.003	1.00	4.66	5.00	1.088	1.167	0.93
37	12:46	1.00	1.027	1.00	4.50	5.00	2.178	2.419	0.90
38	13:46		1.107						
39	13:02	1.00	1.048	1.00	0.05	10.00	0.004	0.891	0.00
40	13:42		1.102						
41	3:44		0.609						
42	16:30	1.00	0.956	1.00	4.48	5.00	1.249	1.395	0.90
43	16:42	1.00	0.967	1.00	4.57	5.00	1.288	1.409	0.91
44	17:18	1.00	1.002	1.00	4.70	5.00	0.950	1.011	0.94
45	18:40		1.081						

TUT 004 1778

L 0001778

3/18/93 14:04:45
Acquisition started

0342

3/18/93 14:04:48

Quire Run 0: LCS0318 Starting
3/18/93 14:04:00 + 0:00 Free sectors: 11533 Scan: 0 of 720
Sample: CLP, 53544, MW01, VLCS0318, LOW, WATER, LCS0318, VOA, EPA,
Loads: 1500A: 25ML DLV01 AMBIENT PURGE W/ 5PPB IS & SS
Formula: 25ML AMBIENT PURGE Instrument: 1500A Weight: 0.000
Submitted by: ITEK Analyst: RJL Acct. No: 53554

*** GC not ready and being stabilized ***

GC Desc: RR Elapsed time: 0.0 Min

Seq.	Temp (DegC)	Rate (C/min)	Time (minutes) period total	Injector A	
1	35	35	- 6.6 6.6	150	Deg C
2	35-150	8.0	14.3 20.9	35	Deg C
3	150-150	-	3.0 23.9	215	Deg C

Valve A : closed Valve B : open

*** Instrument parameters ***

Post acquisition state -> Filament: Off Multiplier: Off
MODE: EI (+) Centroid + Temp - Sequence: BF (2 time windows.)

Sequence Window # 1
Number of cycles: 28
Filament is OFF
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Sequence Window # 2
Number of cycles: 1
Filament is ON
Multiplier is ON

Scan descriptor: BF Mass intervals: 1 Positive ion mode.
Total scan time: 2.000 s Master rate: 16

3 MFW: 80 MA: 15 TH: 1 BL: 0
Int # Lo mass Hi mass Time
1 33.510 300.590 2.000

Calibration table: D: CAL021992

Interface number	0
Instrument type	Q
Full scale mass	1177 u
Zero scale mass	1 u
Intensity/ion	2
Peak width	1000. mmu
Offset at low mass	0 mmu
Offset at high mass	0 mmu
Voltage settling time(ms)	20

TUT 004 1779

L0001773

Current instrument parameters.

	Positive ion mode	Negative ion mode
Resolution (high)	128.00	128.00
Resolution (low)	128.00	128.00
Quad offset	0.00	0.00
Quad programming	0.00	0.00
Lens offset	-50.00	50.00
Lens programming	0.00	0.00
Ext offset	0.00	0.00
Ext programming	0.00	0.00
Collector	30.00	30.00
Ion offset	7.00	-3.00
Ion programming	5.00	-5.00
Rod polarity	Reverse	Normal

Electron multiplier voltage: 984.
 Filament emission current: 750.
 Electrometer range: 10 $\sim$ 7
 Electrometer zero: 126.0

Analyzer Fore Pressure: 0.010 Torr
 Separator/Source Pressure: 0.356 Torr

3/18/93 14:33:00

ACQUISITION COMPLETED

Scans 1 to 720 Centroid

Mode	Scans	Secs	Out of	%	Peaks per scan	per sec
Centroid	720	0.5	1440.0	0.0	6643.	9. 5.

TUT 004 1780

L 0001780

METHOD: CLP 3'90 OLV01 25ML PURGE

DATAFILE: LCS0318
STANDARD: WS0318
TUNEFILE: WBF00318

ANALYSIS TIME: 03/18/93 14:04
ANALYSIS TIME: 03/18/93 8:29
ANALYSIS TIME: 03/18/93 8:20

***** INTERNAL STANDARD AREA CHECK *****

INTERNAL STANDARD	DATA AREA	STD AREA	RATIO	CLP ACCEPT RATIO	STATUS
110 1,4-DIFLUOROBENZEN	11078.	11210.	99%	60% - 140%	
120 C18 OROBENZENE-D5 (	8235.	7723.	107%	60% - 140%	
136 1,4-DICHLOROBENZEN	5663.	5477.	103%	60% - 140%	

***** INTERNAL STANDARD RT CHECK *****

INTERNAL STANDARD	DATA SCAN	STD SCAN	DIFF [IN SEC]	CLP ACCEPT DIFF	STATUS
110 1,4-DIFLUOROBENZEN	185	184	2	+/- 20 SECS	
120 C18 OROBENZENE-D5 (	374	373	2	+/- 20 SECS	
136 1,4-DICHLOROBENZEN	519	518	2	+/- 20 SECS	

***** SURROGATE RECOVERIES *****

SURROGATE	AMT FOUND	AMT ADDED	PERCENT RECOVERY	RECOV LIMITS	STATUS
110 4-BROMOFLUOROBENZE	5.0	5.0	101	80% - 120%	
115 BROMOMETHANE	4.7	50.0	9	88% - 110%	failed
120 VINYL CHLORIDE *	4.6	50.0	9	86% - 115%	failed

TUT 004 1781

(000178)

DATA FILE: LCS0318

REFERENCE: V111

NAME LIST: V1 INITIALIZATION OPTION: 2 PROCESSING OPTION: 3

0345

REPORT: V11S

STANDARDS				PLUS UNKNOWN				LIST NAMES	
ROC	USED	POSS	RMS	PROC	USED	POSS	RMS	STANDARD/UNKNOWN	
3	2	1	0	20	14	4	79	V11S/V1UNKS1	
3	3	1	0	16	16	1	49	V11S/V1UNKS2	
3	3	1	0	15	10	27	54	V11S/V1UNKS3	

45 COMPOUNDS PROCESSED, 33 FOUND

COMPOUND		SEARCH						SAT		CHRO		
NO	LIB ENTRY	REF	PRED	SEL	DELTA	PEAKS	FIT	PEAKS	M/Z	TOP	DELTA	PEAKS
1	V1	1	-184	185	185	1	981		114	185		1
2	V1	2	-373	374	374	1	940		117	374		1
3	V1	3	-518	519					150	519		1
4	V1	4	-439	440	440	1	944		95	440		1
5	V1	5	-38	40	41	1	883		50	41		1
6	V1	6	-44	46	47	1	914		94	47		1
7	V1	7	-39	41	42	1	948		62	42		1
8	V1	8	-46	48	47	-1	945		64	47		1
9	V1	9	-72	74	73	-1	984		84	73		1
10	V1	10	-62	64					43	64		1
11	V1	11	-115	117					43			
12	V1	12	-289	290					43			
13	V1	13	-341	342					43			
14	V1	14	-122	124					128			
15	V1	15	-65	67					76			
16	V1	16	-60	62	61	-1	957		96	61		1
17	V1	17	-91	93	92	-1	972		63	92		1
18	V1	18	-78	80	80	1	982		96	80		1
19	V1	19	-127	129	128	-1	964		83	128		1
20	V1	20	-155	157	156	-1	894		62	156		1
21	V1	21	-135	136	136	1	986		97	136		1
22	V1	22	-143	144	144	1	976		117	144		1
23	V1	23	-242	243	242	-1	981		83	242		1
24	V1	24	-218	219	218	-1	978		63	218		1
25	V1	25	-274	275	274	-1	962		75	274		1
26	V1	26	-201	202	202	1	956		95	202		1
27	V1	27	-341	342	342	1	961		129	342		1
28	V1	28	-321	322	321	-1	973		97	321		1
29	V1	29	-153	154	154	1	966		78	154		1
30	V1	30	-311	312	312	1	913		75	312		1
31	V1	31	-344	345	345	1	982		107	345		1
32	V1	32	-420	421	420	-1	919		173	420		1
33	V1	33	-325	326	326	1	948		166	326		1
34	V1	34	-451	452	452	1	963		83	452		1
35	V1	35	-293	294	293	-1	983		91	293		1
36	V1	36	-375	376	375	-1	985		112	375		1
37	V1	37	-384	385	384	-1	989		91	384		1
38	V1	38	-413	414					104			
39	V1	39	-391	392					106	391		1
40	V1	40	-412	413					106			
41	V1	41	-112	112					96			
42	V1	42	-496	497	496	-1	989		146	496		1
43	V1	43	-501	502	502	3	992		146	501	-1	1
44	V1	44	-519	520	520	3	960		146	520		1
45	V1	45	-561	562					75			

L 0001782

TUT 004 1782

ANALYTICAL SERVICES
LIBRARY SEARCH REPORT
PURGEABLE VOLATILE ORGANICS ANALYSIS

0346

DATA FILE: LCS0318

GUIRED: 03/18/93 14:04:00

ANALYST: RJL

COND: 1500A:25ML OLVO1 AMBIENT PURGE W/ 5PPB IS & SS

SUBMITTED BY: ITEK

ACCOUNT NO. 53554

COMPOUND	SCAN	DELTA	(UG/ML)	FIT	SAT'D?
1110 1,4-DIFLUOROBENZENE (IS#1)	185	0	5.000	981	0
1120 CHLOROBENZENE-D5 (IS#2)	374	0	5.000	940	0
1126 1,4-DICHLOROBENZENE-D4 (IS#3)	519	0	5.000	0	0
1110 4-BROMOFLUOROBENZENE (SS)	440	0	5.043	944	0
1110 CHLOROMETHANE **	41	1	2.615	883	0
1115 BROMOMETHANE	47	1	4.664	914	0
1120 VINYL CHLORIDE *	42	1	4.637	948	0
1125 CHLOROETHANE	47	-1	7.697	945	0
1130 METHYLENE CHLORIDE	73	-1	5.337	984	0
1145 1,1-DICHLOROETHENE *	61	-1	4.869	957	0
1150 1,1-DICHLOROETHANE **	92	-1	5.351	972	0
1133 TRANS-1,2-DICHLOROETHENE	80	0	4.893	982	0
1150 CHLOROFORM *	128	-1	5.136	964	0
1155 1,2-DICHLOROETHANE	156	-1	5.967	894	0
1115 1,1,1-TRICHLOROETHANE	136	0	4.916	986	0
1130 CARBON TETRACHLORIDE	144	0	4.705	976	0
1130 BROMODICHLOROMETHANE	242	-1	5.040	981	0
1110 1,2-DICHLOROPROPANE *	218	-1	4.659	978	0
1143 CIS-1,3-DICHLOROPROPENE	274	-1	5.440	962	0
1150 TRICHLOROETHENE	202	0	4.537	956	0
1155 DIBROMOCHLOROMETHANE	342	0	4.921	961	0
1160 1,1,2-TRICHLOROETHANE	321	-1	5.093	973	0
1165 BENZENE	154	0	4.543	966	0
1172 TRANS-1,3-DICHLOROPROPENE	312	0	4.440	913	0
1176 DIBROMOETHANE	345	0	6.831	982	0
1180 BROMOFORM **	420	-1	4.969	919	0
1120 TETRACHLOROETHENE	326	0	4.670	948	0
1125 1,1,2,2-TETRACHLOROETHANE **	452	0	5.081	963	0
1130 TOLUENE *	293	-1	4.503	983	0
1135 CHLOROBENZENE	375	-1	4.661	985	0
1140 ETHYL BENZENE *	384	-1	4.502	989	0
1132 1,3-DICHLOROBENZENE	496	-1	4.477	989	0
1153 1,4-DICHLOROBENZENE	501	-1	4.573	992	0
1154 1,2-DICHLOROBENZENE	520	0	4.699	960	0

TUT 004 1783

L 0001783



**INTERNATIONAL
TECHNOLOGY
CORPORATION**

VOLATILE ORGANIC COMPOUNDS

ANALYSIS BY 8010/8020

TUT 004 1784

RESPONSIVE TO THE NEEDS OF ENVIRONMENTAL MANAGEMENT

L0001784

QC SUMMARIES

TUT 004 1785

L0001785

SAMPLE DATA

TUT 004 1786

L0001786

HALOGENATED AND AROMATIC VOLATILE ORGANIC ANALYSIS

Laboratory Name : ITAS-KNOXVILLE
 Contract Name : L'HENRI
 Client Sample I.D. : TRIP BLANK
 Sample I.D. : VV7328
 Sample Matrix : WATER
 Concentration Units: ug/l

SDG Number : NA
 Job Number : ITEK 53554
 Collection Date : 03/05/93
 Confirmation Date: NA
 Analysis Date(s) : 03/11/93
 Dryness Factor : NA

COMPOUND	CAS No.	RESULTS	QUALIFIERS	DETECTION LIMITS
dichlorodifluoromethane	75-71-8	1.8	U	1.8
chloromethane	74-87-3	0.8	U	0.8
vinyl chloride	75-01-4	1.8	U	1.8
bromomethane	74-83-9	1.2	U	1.2
chloroethane	75-00-3	5.2	U	5.2
trichlorofluoromethane	75-69-4	2.0	U	2.0
1,1-dichloroethene	75-35-4	1.3	U	1.3
methylene chloride	75-09-2	15	U	15
trans-1,2-dichloroethene	156-60-5	1.0	U	1.0
1,1-dichloroethane	75-34-3	0.7	U	0.7
cis-1,2-dichloroethene	156-59-2	1.0	U	1.0
trichloromethane	67-66-3	0.5	U	0.5
1,1,1-trichloroethane	71-55-6	0.3	U	0.3
carbon tetrachloride	56-23-5	1.2	U	1.2
benzene	71-43-2	2.0	U	2.0
1,2-dichloroethane	107-06-2	0.3	U	0.3
trichloroethene	79-01-6	1.2	U	1.2
1,2-dichloropropane	78-87-5	0.4	U	0.4
bromodichloromethane	75-27-4	1.0	U	1.0
dibromomethane	74-95-3	-	-	-
2-chloroethylvinyl ether	110-75-8	1.3	U	1.3
trans-1,3-dichloropropene	10061-01-5	3.4	U	3.4
toluene	108-88-3	2.0	U	2.0
trans-1,3-dichloropropene	10061-02-6	3.4	U	3.4
1,1,2-trichloroethane	79-00-5	0.2	U	0.2
tetrachloroethene	127-18-4	0.3	U	0.3
dibromochloromethane	124-48-1	0.9	U	0.9
n-hexyl chloride	544-10-8	-	-	-
chlorobenzene	108-90-7	2.0	U	2.0
ethyl benzene	100-41-4	2.0	U	2.0
1,1,1,2-tetrachloroethane	630-20-6	-	-	-
xylenes (total)	1330-20-7	1.0	U	1.0
bromoform	75-25-2	2.0	U	2.0
1,1,2,2-tetrachloroethane	79-34-5	0.3	U	0.3
1,2,3-trichloropropane	96-18-4	-	-	-
phenyl bromide (bromobenzene)	108-86-1	-	-	-
2-chlorotoluene	108-41-8	-	-	-
1,3-dichlorobenzene	541-73-1	3.2	U	3.2
1,4-dichlorobenzene	106-46-7	2.4	U	2.4
1,2-dichlorobenzene	95-50-1	1.5	U	1.5
bis(2-chloroisopropyl) ether	108-60-1	-	-	-

SURROGATE RECOVERY	BCM	OCFB	FB	OFCB
ACCEPTANCE LIMITS SOIL	(31-112)	(34-113)	(23-113)	(21-108)
WATER	(53-150)	(64-121)	(70-128)	(72-122)
LAB I.D.				
VV7328	82	91	92	91

10001787

=====

Software Version: 3.2 <16C20>

Sample Name : VV737828 ¹⁷⁷₃ 1993

Time : 3/11/93 10:41 AM

Sample Number: TRIP BLANK

Study : ITEK53554

Operator :

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 3:21 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC10015.raw

Result File : n:\v3400s\SC10015.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 24

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

=====

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt (IS%)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	4.954	0.0	BB	52922.7148	1256.00	67.21	0.02			0.02
2	5.775	0.0	BV	74767.6484	79350.28	3094.11	1.06			1.06
3	7.185	2.4	VV DCIDFMe	1.1632e5	25702.00	629.21	0.22	-	DCIDFMe	0.22
4	8.542	2.6	VV CLME	8.0159e5	39129.25	322.82	0.05	-	CLME	0.05
5	12.796	2.6	VV ClEa	3.9167e5	8787.81	272.22	0.02		ClEa	0.02
6	14.210	1.5	VV TClFMe	2.6068e5	2338.00	117.87	0.01	-	TClFMe	0.01
7	19.136	0.2	BB CH2Cl2	3.8221e5	748830.25	61139.69	1.96		CH2Cl2	1.96
8	24.909	0.3	BV CHCl3	5.5756e5	36355.77	2307.13	0.07		CHCl3	0.07
9	25.535	0.1	VV BrClMe	63635.5469	5239877.00	414427.19	82.34		BrClMe	82.34
10	26.702	0.3	VV 111TClEa	1.4911e6	289410.34	5743.67	0.19		111TClEa	0.19
11	28.494	0.4	VV 12DClEa	9.1729e5	75583.22	1956.95	0.08		12DClEa	0.08
12	29.435	0.0	VV	8.2802e5	141568.19	4060.57	0.17			0.17
13	33.101	0.9	VV BrDClMe	9.5573e5	35180.63	826.60	0.04		BrDClMe	0.04
14	34.879	-0.7	VB C-13DClPe	1.2969e6	68071.50	1322.73	0.05		C-13DClPe	0.05
5	45.914	0.4	BB ClBz	4.1366e5	13972.50	314.33	0.03		ClBz	0.03
15	47.805	0.1	BV o-Cl,F-Ben	41292.1719	3743664.00	220310.61	90.66		o-Cl,F-Ben	90.66
17	56.054	0.0	VV 123TriClPr	2.9503e5	5002.84	153.58	0.02		123TriClPr	0.02
18	56.631	0.0	VV	1.0722e5	8868.56	749.09	0.08			0.08
19	57.483	0.0	VV	5.6791e5	12136.06	193.54	0.02			0.02
20	63.150	0.3	BV 14DClBz	6.0998e5	4101.50	129.90	0.01		14DClBz	0.01
21	63.645	0.0	VV	3.0321e5	44622.66	2843.10	0.15			0.15
22	64.993	0.1	VV 12DClBz	2.8327e5	31545.28	2006.44	0.11		12DClBz	0.11

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L 0001785

23	66.527	0.0 88	3.5799e5	3084.00	155.22	0.01	0352
24	68.668	0.0 88	2.7808e5	44890.00	2908.58	0.16	

	11.3		1.1448e7	10703328.00	726052.31	177.54	177.54

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845
VCl	9.074
BrMe	11.919
11DClE	17.038
T-12DClE	20.238
2756111DClEa	21.838
C-12DClE	24.188
CCl4	27.774
TClE	31.131
12DClPa	31.870
2ClEthylVO	34.116
T-13DClPe	37.487
112TClEa	38.300
TetClE	40.147
DBrClMe	41.272
CHBr3	53.534
1122TetClEa	54.996
13DClBz	62.384

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

TUT 004 1789

L 0001789

Sample Name : VV7378

FileName : n:\v3400a\SC10015.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: TRIP BLANK

Date : 3/11/93 10:41 AM

Time of Injection: 3/11/93 3:21 AM

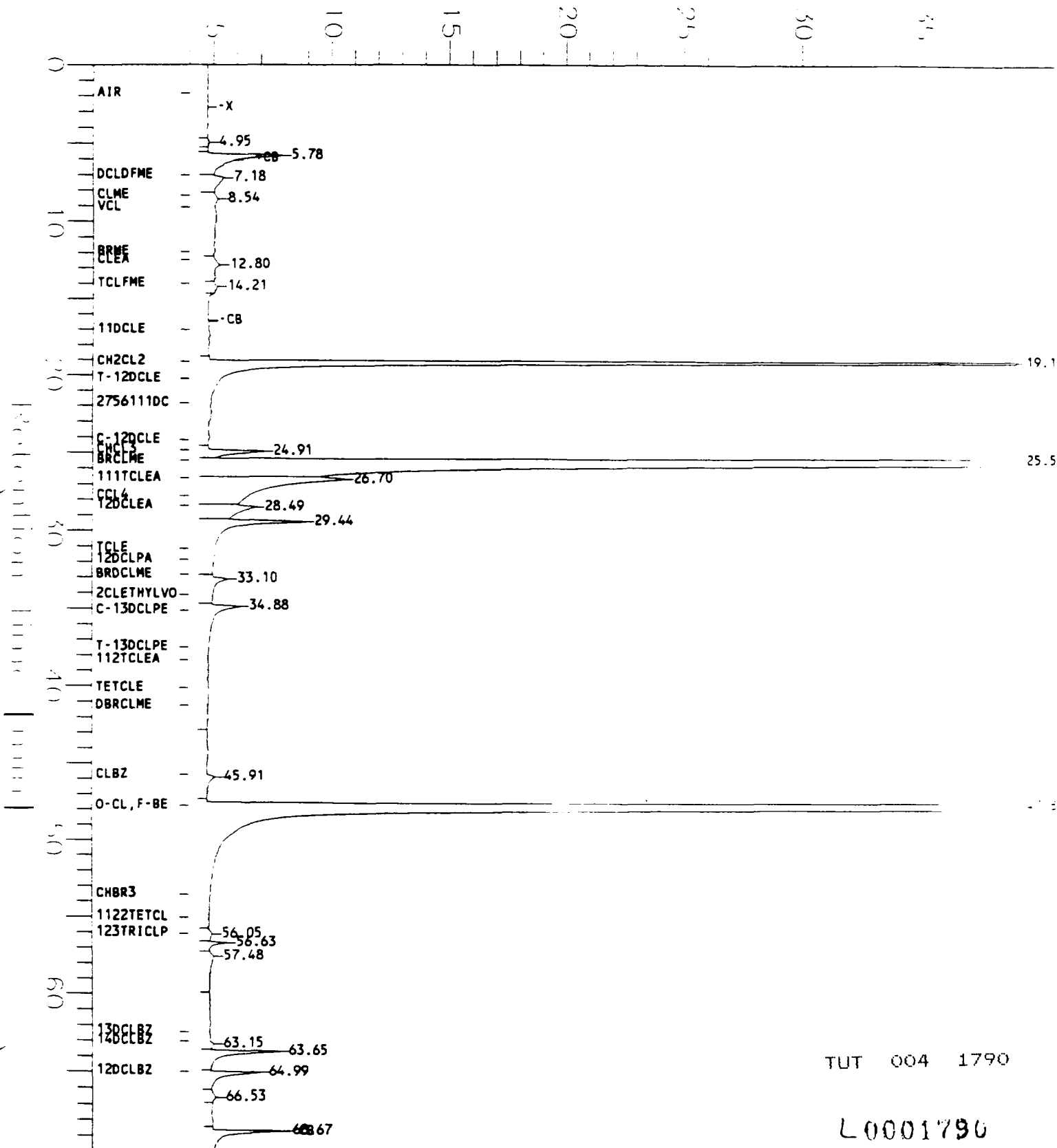
Low Point : 4.00 mV

Plot Scale: 35 mV

Page 1 of 1

High Point : 39.00 mV

Response [mV]



TUT 004 1790

L0001790

=====

Software Version: 3.2 <16C20>

Sample Name : VV7378 28 319 213

Sample Number: TRIP BLANK

Operator :

Time : 3/11/93 10:42 AM

Study : ITEK53554

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 3:21 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC10015.raw

Result File : n:\v3400s\TC10015.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 66

=====

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

=====

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (1S%)	Component Range	Component Name	SAMPLE CON (PPB)
1	5.698	0.0	BB	-----	56961.25	8981.30	0.00			0.00
2	6.627	0.0	BB	627.9530	1281.50	175.31	2.04			2.04
3	7.083	0.0	BB	4578.9741	631.50	98.10	0.14			0.14
5	8.679	-3.5	VV VCI	13053.2940	3248.94	177.04	0.25		VCI	0.25
6	9.417	0.0	VV	10016.1523	31569.19	2241.90	3.15			3.15
7	10.203	0.0	V8	9744.4297	8931.55	651.96	0.92			0.92
9	13.810	0.0	BB	61821.5313	6374.78	377.82	0.10			0.10
10	15.086	0.0	BB	34597.9219	92513.75	9797.42	2.67			2.67
11	15.678	0.0	BV	37521.1797	19852.70	1938.65	0.53			0.53
12	15.941	0.0	V8	37311.5391	11428.78	1122.31	0.31			0.31
13	16.596	-2.2	BV 11DCIE	48794.6172	7553.59	567.20	0.16		11DCIE	0.16
14	19.070	0.0	VV	1.6318e5	5474.44	450.25	0.03			0.03
15	19.736	0.0	VE	1.6335e5	15244.09	1252.46	0.09			0.09
16	20.202	0.1	EV T-12DCIE	1.3509e5	1400.00	139.08	0.01		T-12DCIE	0.01
17	20.463	0.0	VV	2.4270e5	3668.23	202.95	0.02			0.02
18	21.483	0.0	VV	1.9324e5	5084.08	353.10	0.03			0.03
19	21.989	0.0	VV	1.2155e5	1700.42	187.74	0.01			0.01
20	22.233	0.0	VV	53562.6211	1295.28	123.09	0.02			0.02
21	23.078	0.0	VV	1.2659e5	3052.59	122.73	0.02			0.02
22	23.485	0.0	VV	78925.3594	2673.59	172.42	0.03			0.03
23	25.500	0.0	VV	83661.3203	8919.31	542.66	0.11			0.11
24	28.007	0.0	VV	1.7668e5	2284.56	146.31	0.01			0.01

0.01 L0001791

TUT 004 1791

25	28.451	0.1 VB Bz	1.0187e5	31432.83	3491.24	0.31	Bz	0.31
26	29.379	0.1 BV FBz	16974.1797	1553998.63	191432.59	91.55	FBz	91.55
27	31.094	0.1 VV TCLE	2.1275e5	13761.88	415.98	0.07	TCLE	0.07
28	31.385	0.0 VV	5.7025e5	71717.44	808.79	0.13		0.13
29	34.735	-0.9 VV C-13DClPe	74258.3672	5632.13	196.21	0.08	C-13DClPe	0.08
30	35.568	0.0 VV	28415.2871	10301.31	937.86	0.36		0.36
31	36.103	0.0 VV	2.0211e5	10416.05	539.48	0.05		0.05
2	36.601	0.0 VV Toluene	1.4213e5	21579.25	1589.24	0.15	Toluene	0.15
33	39.355	-1.8 VV TetCLE	51822.0469	21873.94	1665.17	0.42	TetCLE	0.42
34	44.900	0.0 VV	1.9495e5	14296.50	544.49	0.07		0.07
35	45.716	0.1 VV ClBz	88228.8047	11063.02	931.02	0.13	ClBz	0.13
36	46.281	0.1 VV EthylBz	78500.7266	15244.98	1200.56	0.19	EthylBz	0.19
37	46.957	0.1 VB m-Xylene	83085.9922	6194.66	473.74	0.08	m-Xylene	0.08
38	47.725	0.1 BV o-Cl,F-Ben	15780.9004	1443300.75	119719.45	91.46	o-Cl,F-Ben	91.46
39	50.893	0.2 VB o-Xylene	71958.7500	17597.19	1313.94	0.25	o-Xylene	0.25
40	52.871	0.0 BV	1.2120e5	8254.94	365.93	0.07		0.07
41	57.386	0.0 VV	2.4650e5	15471.38	642.38	0.06		0.06
42	58.599	0.0 VB	1.9172e5	2632.63	140.54	0.01		0.01
43	60.277	0.0 BV	1.0299e5	39229.13	3898.28	0.38		0.38
44	61.706	0.0 VV	95375.4375	2198.03	235.88	0.02		0.02
45	61.896	0.0 VV	1.5594e5	3829.16	251.32	0.03		0.03
46	62.360	0.1 VV 13DClBz	75012.9766	2091.59	285.38	0.03	13DClBz	0.03
47	62.627	0.0 VV	92462.5156	1504.78	166.57	0.02		0.02
48	62.970	0.1 VB 14DClBz	85485.2188	3276.56	392.91	0.04	14DClBz	0.04
49	63.543	0.0 BV	71909.3828	726.49	103.57	0.01		0.01
50	63.715	0.0 VV	78248.8516	945.73	123.90	0.01		0.01
51	63.959	0.0 VV	67847.1719	6269.73	799.99	0.09		0.09
52	64.137	0.0 VV	93257.1406	8033.83	745.78	0.09		0.09
53	64.426	0.0 VV	62161.9492	2106.53	293.37	0.03		0.03
54	64.565	0.0 VV	68555.6172	4052.55	511.74	0.06		0.06
55	64.892	0.1 VB 12DClBz	54679.9219	10370.39	1641.85	0.19	12DClBz	0.19
56	65.495	0.0 BB	92529.8281	6032.50	564.40	0.07		0.07
57	65.867	0.0 BB	44896.2891	228.75	44.11	0.01		0.01
58	66.232	0.0 BB	49472.8906	298.00	52.15	0.01		0.01
59	66.530	0.0 BB	47093.2500	114157.00	20985.11	2.42		2.42
60	66.953	0.0 BB	40236.5664	225.50	48.52	0.01		0.01
61	68.031	0.0 BV	1.7427e5	1690.47	83.98	0.01		0.01
62	68.256	0.0 VB	55898.9531	471.54	73.03	0.01		0.01
63	68.585	0.0 BB	58978.1875	1337.50	196.32	0.02		0.02
64	68.936	0.0 BB	61923.8594	1127.01	157.56	0.02		0.02
65	69.160	0.0 BB	48276.4219	2699.00	483.99	0.06		0.06
6	69.533	0.0 BB	40483.6250	645.75	138.09	0.02		0.02

	-7.3		6.1071e6	3779460.75	388508.09	199.72		199.72

Missing Component Report

Component	Expected Retention (Sample File)

Air	5.000
C-12DClE	24.122
2ClEthylVO	34.045
T-13DClPe	37.423

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

Sample Name : VV737B

FileName : n:\v3400a\TC10015.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: TRIP BLANK

Date : 3/11/93 10:42 AM

Time of Injection: 3/11/93 3:21 AM

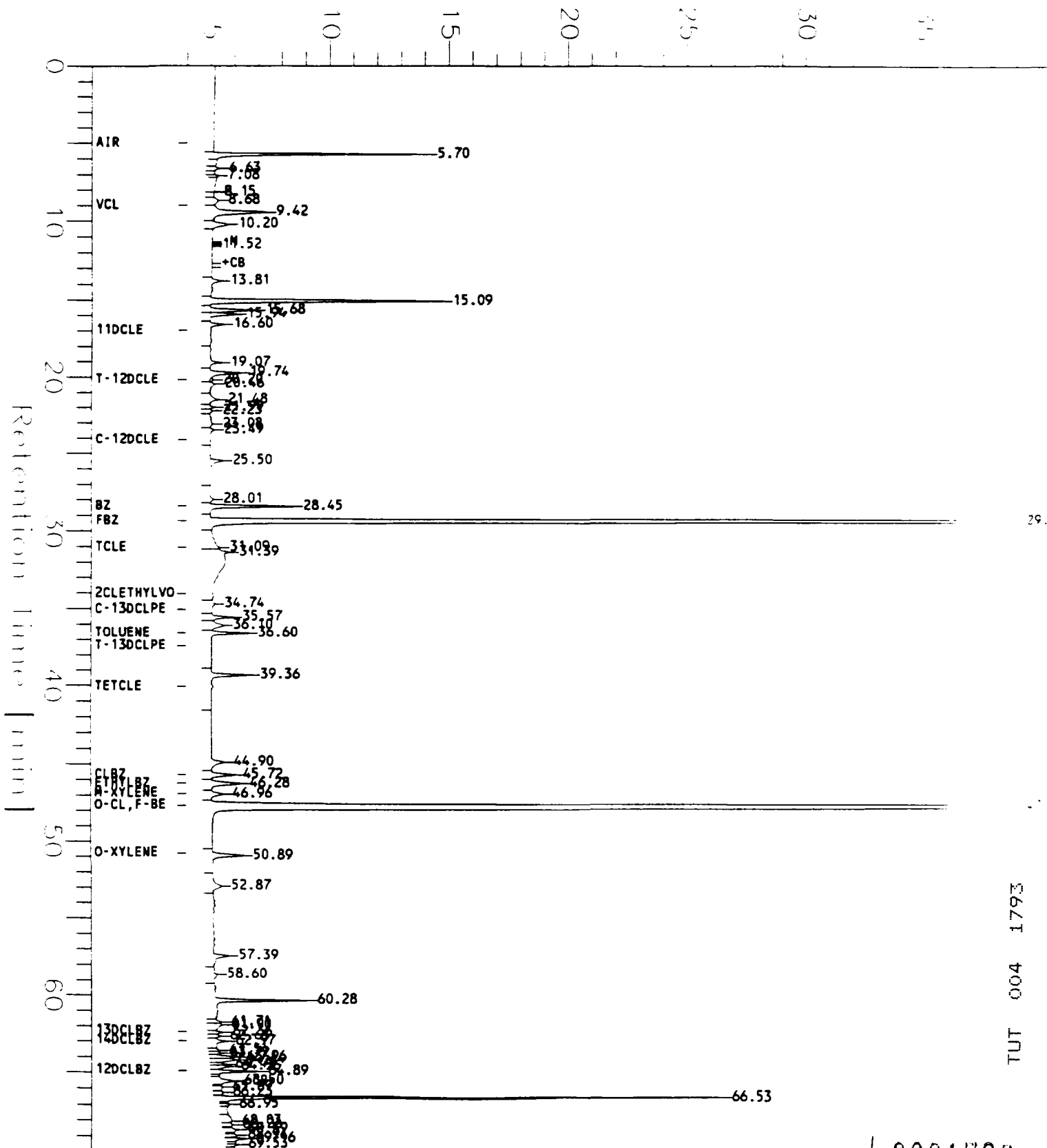
Low Point : 4.00 mV

Plot Scale: 35 mV

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High Point : 39.00 mV

Response [mV]



TUT 004 1793

L0001793

HALOGENATED AND AROMATIC VOLATILE ORGANIC ANALYSIS 0357

Laboratory Name : ITAS-KNOXVILLE	SDG Number : NA
Contract Name : L'HENRI	Job Number : ITEK 53554
Client Sample I.D. : DRM01	Collection Date : 03/05/93
Lab Sample I.D. : VV7329	Confirmation Date: NA
Sample Matrix : WATER	Analysis Date(s) : 03/11/93
Concentration Units: ug/l	Dryness Factor : NA

COMPOUND	CAS No.	RESULTS	QUALIFIERS	DETECTION LIMITS
dichlorodifluoromethane	75-71-8	1.8	U	1.8
chloromethane	74-87-3	0.8	U	0.8
vinyl chloride	75-01-4	1.8	U	1.8
bromomethane	74-83-9	1.2	U	1.2
chloroethane	75-00-3	5.2	U	5.2
trichlorofluoromethane	75-69-4	2.0	U	2.0
1,1-dichloroethene	75-35-4	1.3	U	1.3
methylene chloride	75-09-2	15	U	15
trans-1,2-dichloroethene	156-60-5	1.0	U	1.0
1,1-dichloroethane	75-34-3	0.7	U	0.7
cis-1,2-dichloroethene	156-59-2	23.0		1.0
trichloromethane	67-66-3	0.5	U	0.5
1,1,1-trichloroethane	71-55-6	0.3	U	0.3
carbon tetrachloride	56-23-5	1.2	U	1.2
benzene	71-43-2	2.0	U	2.0
1,2-dichloroethane	107-06-2	0.3	U	0.3
trichloroethene	79-01-6	22.0		1.2
1,2-dichloropropane	78-87-5	0.4	U	0.4
bromodichloromethane	75-27-4	1.0	U	1.0
dibromomethane	74-95-3	-	-	-
2-chloroethylvinyl ether	110-75-8	1.3	U	1.3
cis-1,3-dichloropropene	10061-01-5	3.4	U	3.4
toluene	108-88-3	2.0	U	2.0
trans-1,3-dichloropropene	10061-02-6	3.4	U	3.4
1,1,2-trichloroethane	79-00-5	0.2	U	0.2
tetrachloroethene	127-18-4	130.0	D1:20	6.0
dibromochloromethane	124-48-1	0.9	U	0.9
n-hexyl chloride	544-10-8	-	-	-
chlorobenzene	108-90-7	2.0	U	2.0
ethyl benzene	100-41-4	2.0	U	2.0
1,1,1,2-tetrachloroethane	630-20-6	-	-	-
xylene (total)	1330-20-7	1.0	U	1.0
bromoform	75-25-2	2.0	U	2.0
1,1,2,2-tetrachloroethane	79-34-5	0.3	U	0.3
1,2,3-trichloropropane	96-18-4	-	-	-
phenyl bromide (bromobenzene)	108-86-1	-	-	-
2-chlorotoluene	108-41-8	-	-	-
1,3-dichlorobenzene	541-73-1	3.2	U	3.2
1,4-dichlorobenzene	106-46-7	2.4	U	2.4
1,2-dichlorobenzene	95-50-1	1.5	U	1.5
bis(2-chloroisopropyl) ether	108-60-1	-	-	-

SURROGATE RECOVERY	BCM	OCFB	FB	OFCB
ACCEPTANCE LIMITS SOIL	(31-112)	(34-113)	(23-113)	(21-108)
WATER	(53-150)	(64-121)	(70-128)	(72-122)
LAB I.D.				
VV7329	83	88	84	83
VV7329 D1:20	61	59	-	-

L000179.

Software Version: 3.2 <16C20>

Sample Name : DRM01

Sample Number: VV7329/20

Operator :

Time : 3/12/93 10:08 AM

Study : ITEK53554

Instrument : V3400A/SALLY

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/12/93 8:18 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11014.raw

Result File : n:\v3400s\SC11014.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 32

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	1.101	0.0	BB	295.8840	804.01	70.62	2.72		2.72
2	5.814	0.0	BV	99148.6641	109660.69	3716.41	1.11		1.11
3	7.319	3.9	VV DCIDFMe	94243.4609	24411.92	857.79	0.26	- DCIDFMe	0.26
4	8.098	-3.0	VV CLME	3.0945e5	17969.52	439.95	0.06	- CLME	0.06
5	9.367	3.1	VV VCl	5.1433e5	67272.81	1087.73	0.13	- VCl	0.13
6	11.416	-4.3	VV BrMe	1.6236e5	13955.34	325.00	0.09	- BrMe	0.09
7	12.579	0.8	VB ClEa	3.2061e5	3583.22	116.51	0.01	- ClEa	0.01
8	13.690	-2.3	BB TClFMe	1.5513e5	799.00	79.16	0.01	- TClFMe	0.01
9	17.143	0.7	BV 11DCIE	9.3839e5	73859.09	1837.60	0.08	11DCIE	0.08
10	19.145	0.3	VE CH2Cl2	4.8425e5	358790.31	27317.22	0.74	CH2Cl2	0.74
11	20.344	0.6	EB T-12DCIE	1.6136e6	15975.50	289.02	0.01	T-12DCIE	0.01
12	24.239	0.4	BV C-12DCIE	3.2149e5	268779.25	20990.11	0.84	C-12DCIE	0.84
13	24.919	0.5	VV CHCl3	7.0731e5	148556.09	7016.95	0.21	CHCl3	0.21
14	25.555	0.4	VE BrClMe	65147.4180	3956644.50	309134.59	60.73	BrClMe	60.73
15	26.723	0.5	EV 111TClEa	1.1198e6	213739.00	5294.30	0.19	111TClEa	0.19
16	27.882	0.5	VV CCl4	8.3124e5	114471.19	4327.01	0.14	CCl4	0.14
17	28.494	0.5	VV 12DCIEa	6.5914e5	157711.00	5462.22	0.24	12DCIEa	0.24
18	29.457	0.0	VV	6.9577e5	120449.50	3952.08	0.17		0.17
19	31.188	0.3	VV TClE	4.9720e5	515875.84	31438.98	1.04	TClE	1.04
20	32.936	0.5	VV BrDClMe	7.8314e5	156972.13	4325.77	0.20	- BrDClMe	0.20
21	35.223	0.4	VB C-13DClPe	2.0383e6	40730.50	495.39	0.02	C-13DClPe	0.02
22	40.202	0.3	BE TetClE	4.2189e5	2661157.25	185109.84	6.31	TetClE	6.31 * 20 = 12.62

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23	41.373	0.4 EV DBrClMe	4.9675e5	130167.50	2961.19	0.26	- DBrClMe	0.26
24	45.960	0.6 VV ClBz	4.2165e5	21991.63	464.65	0.05	ClBz	0.05
25	47.289	0.0 VV	1.0263e5	15872.16	387.22	0.16		0.16
26	47.830	0.3 VV o-Cl,F-Ben	44340.2813	2629248.00	148479.83	59.30	o-Cl,F-Ben	59.30
27	53.652	0.3 VB CHBr3	2.0196e5	41562.25	1142.93	0.21	- CHBr3	0.21
28	58.083	3.8 BB 123TriClPr	1.2364e6	11668.25	92.45	0.01	- 123TriClPr	0.01
29	62.542	0.3 BV 130ClBz	4.2480e5	4017.13	137.21	0.01	- 130ClBz	0.01
30	63.062	0.2 VB 140ClBz	2.7251e5	79009.38	5082.80	0.29	- 140ClBz	0.29
31	65.001	0.2 BB 120ClBz	2.7107e5	25895.50	1675.41	0.10	120ClBz	0.10
32	68.717	0.0 BB	2.7440e5	3735.50	238.75	0.01		0.01

	10.0		1.6579e7	12005334.00	774346.50	135.68		135.68

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845
TCLTFEa	16.467
111DClEa	21.813
12DClPa	31.839
2ClEthylVO	34.083
T-13DClPe	37.446
112TClEa	38.257
1122TetClEa	54.941

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

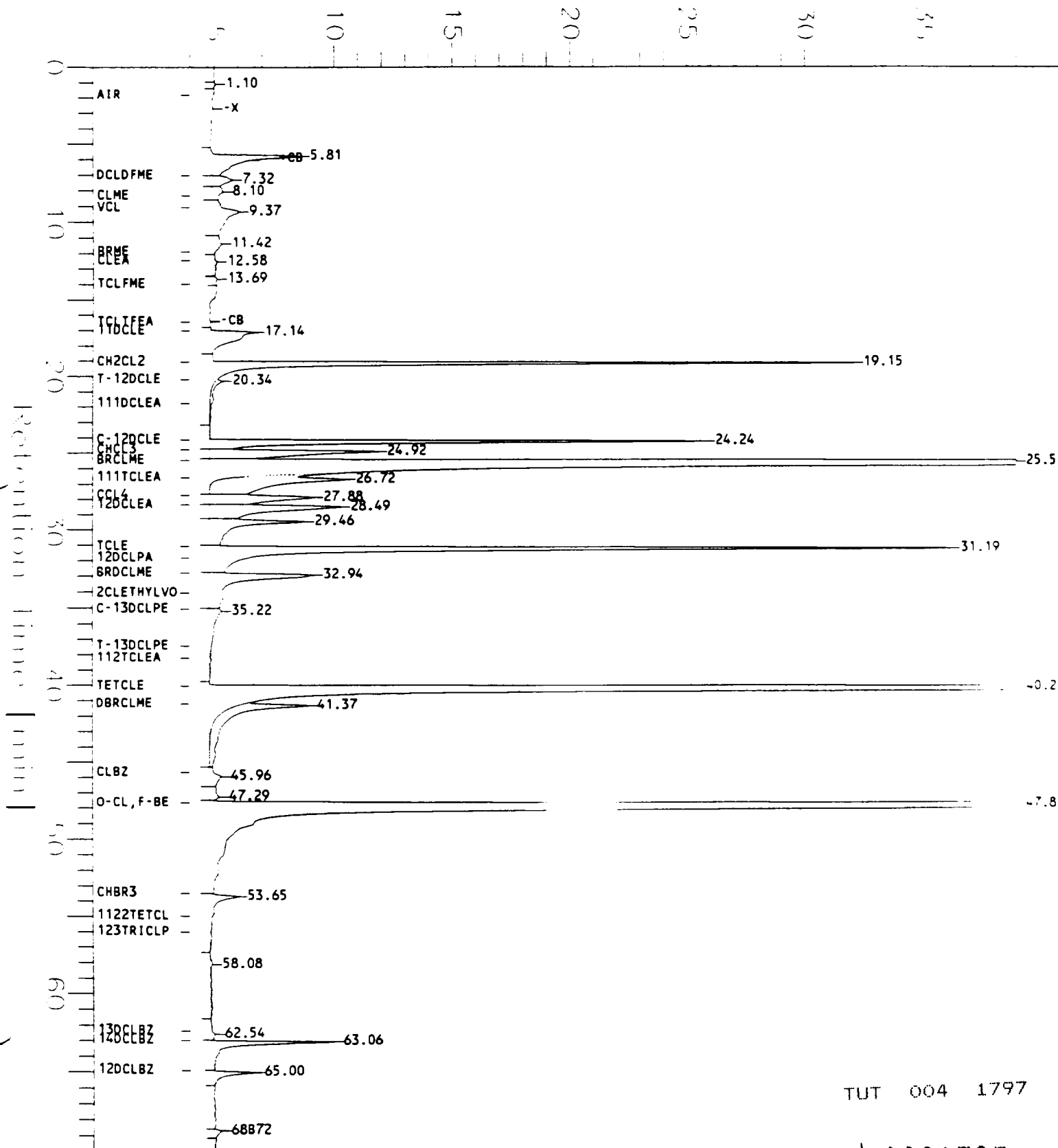
=====

Sample Name : DRM01
FileName : n:\v3400a\SC11014.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: VV7329/20
Date : 3/12/93 10:09 AM
Time of Injection: 3/12/93 8:18 AM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

Response [mV]



TUT 004 1797

L0001797

Software Version: 3.2 <16C20>

Sample Name : VV7329

Sample Number: DRM01

Operator :

Time : 3/20/93 10:24 AM

Study : ITEK53554

Instrument : V3400A/SALLY

AutoSampler : NONE

Rack/Vial : 0/0

Channel : A

A/D mV Range : 1000

Interface Serial # : 0159572256

Data Acquisition Time: 3/11/93 4:37 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC10016.raw

Result File : n:\v3400s\SC10016.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 31

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt (IS%)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.880	0.0 BV		1.1152e5	321505.25	8827.35	2.88			2.88
2	6.941	-1.1 VV	DC1DFMe	1.1091e5	90048.48	2350.58	0.81	-	DC1DFMe	0.81
3	7.632	0.0 VV		73518.8125	52237.67	2051.43	0.71			0.71
4	8.602	3.3 VV	CLME	1.9564e5	16176.97	547.27	0.08	-	CLME	0.08
5	9.196	1.3 VV	VCL	2.7394e5	74274.38	2083.04	0.27	-	VCL	0.27
6	10.749	0.0 VV		2.0025e5	19602.19	327.15	0.10			0.10
7	12.469	-0.0 VV	CLEa	9.6087e5	19135.34	241.62	0.02		CLEa	0.02
8	14.213	1.5 VB	TC1FMe	6.7606e5	14211.91	276.31	0.02	-	TC1FMe	0.02
9	17.146	0.6 BV	11DCLE	8.3258e5	10235.00	305.13	0.01		11DCLE	0.01
10	19.153	0.3 VV	CH2Cl2	4.3792e5	134198.50	9563.16	0.31		CH2Cl2	0.31
11	20.294	0.3 VB	T-12DCLE	4.8083e5	129111.50	8191.25	0.27		T-12DCLE	0.27
12	24.237	0.2 BE	C-12DCLE	3.0101e5	6911825.50	614922.31	22.96		C-12DCLE	22.96
13	24.900	0.2 EV	CHCl3	7.6709e5	245999.00	11346.97	0.32		CHCl3	0.32
14	25.560	0.2 VE	BrClMe	64711.4023	5382547.00	418633.47	83.18		BrClMe	83.18
15	26.726	0.4 EV	111TCLEa	1.8569e6	306408.00	4882.90	0.17		111TCLEa	0.17
16	28.557	0.6 VV	12DCLEa	9.9073e5	67042.05	1607.14	0.07		12DCLEa	0.07
17	29.467	0.0 VV		6.8401e5	120826.91	4195.29	0.18			0.18
18	31.175	0.1 VV	TCLE	3.7358e5	8278370.00	700534.50	22.16		TCLE	22.16
19	33.125	0.9 VV	BrDClMe	1.0907e6	146400.06	3014.08	0.13		BrDClMe	0.13
20	34.935	-0.5 VV	C-13DClPe	1.6851e6	53601.25	801.60	0.03		C-13DClPe	0.03
21	36.644	0.0 VV		1.3735e6	40077.56	405.83	0.03			0.03
22	39.796	0.0 VV		3.8052e5	8614.34	695.56	0.02			0.02

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000179S

23	40.204	0.1 VE TetClE	6.9033e5	22359504.00	995169.19	32.39	TetClE	32.39
24	45.908	0.3 EV ClBz	9.0207e5	190626.00	1966.55	0.21	ClBz	0.21
25	47.839	0.2 VV o-Cl,F-Ben	43029.2852	3778050.25	213358.45	87.80	o-Cl,F-Ben	87.80
26	56.099	0.1 VV 123TriClPr	7.6078e5	15052.38	179.20	0.02	123TriClPr	0.02
27	62.582	0.3 VV 130ClBz	1.2071e6	5341.19	77.06	0.00	130ClBz	0.00
28	63.109	0.2 VV 140ClBz	3.5825e5	7801.05	420.67	0.02	140ClBz	0.02
29	63.660	0.0 VB	3.6716e5	23596.75	1241.58	0.06		0.06
1	64.990	0.1 BB 120ClBz	2.7731e5	35259.50	2290.94	0.13	120ClBz	0.13
	68.669	0.0 BB	2.2267e5	18327.00	1482.97	0.08		0.08
			9.8	1.8750e7	48876004.00	3.01e6	255.45	255.45

0362

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845
BrMe	11.919
2756111DClEa	21.838
CCl4	27.774
12DClPa	31.870
2ClEthylVO	34.116
T-13DClPe	37.487
112TClEa	38.300
DBrClMe	41.272
CHBr3	53.534
1122TetClEa	54.996

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

TUT 004 1799

L0001799

Sample Name : VV7329

File Name : n:\v3400s\SC10016.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: DRM01

Date : 3/20/93 10:24 AM

Time of Injection: 3/11/93 4:37 AM

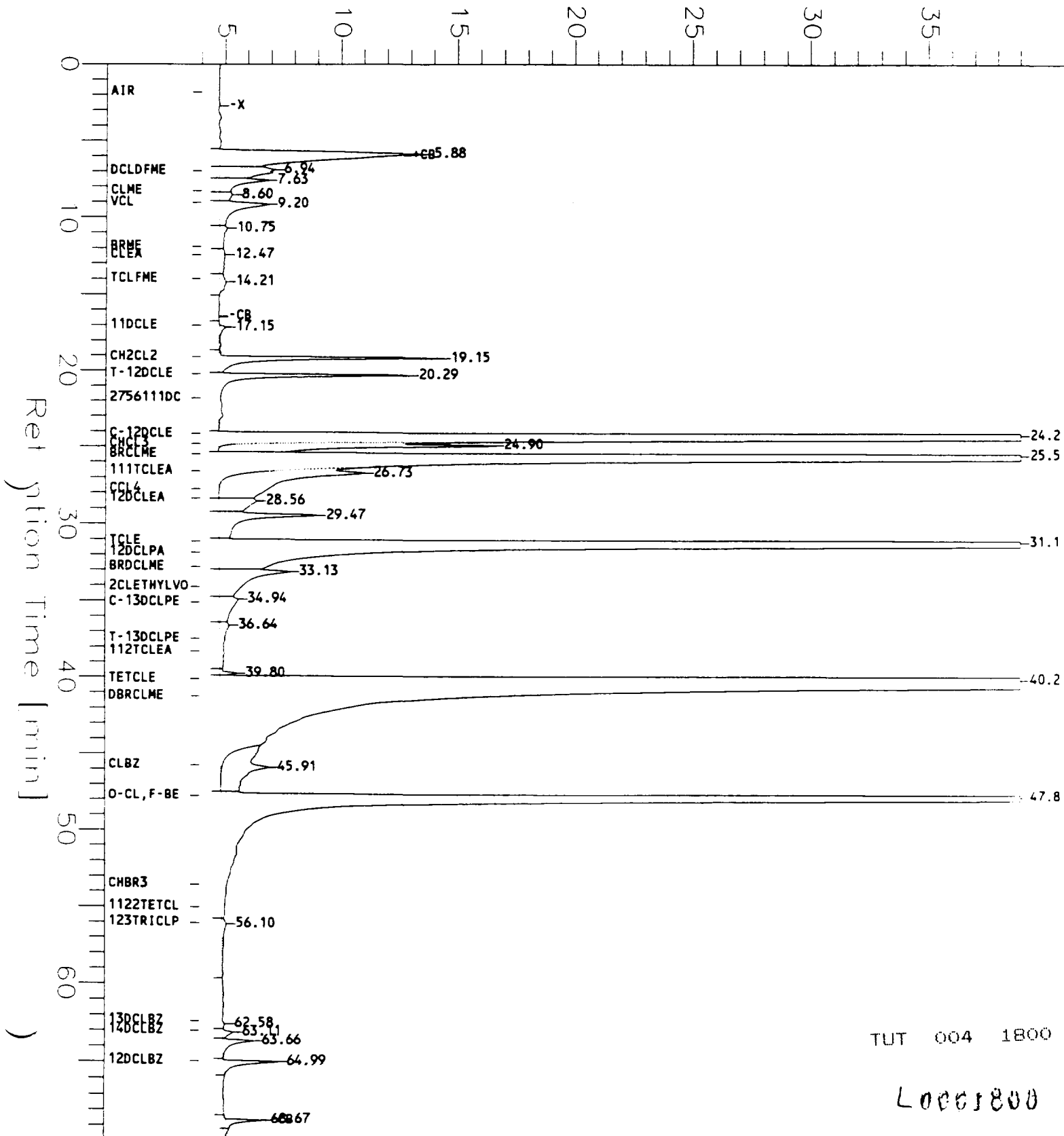
Low Point : 4.00 mV

Plot Scale : 35 mV

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High Point : 39.00 mV

Response [mV]



TUT 004 1800

L0001800

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Software Version: 3.2 <16C20>

Sample Name : VV7329

Time : 3/20/93 1:15 PM

Sample Number: DRM01

Study : ITEK53554

Operator :

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 4:37 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC10016.raw

Result File : n:\v3400s\TC10016.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 78

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

=====

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt (ISX)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.709	0.0	BV	-----	431082.44	47631.45	0.00			0.00
2	6.636	0.0	VV	-----	9562.80	675.80	0.00			0.00
3	7.067	0.0	VB	5933.1348	1215.02	145.66	0.21			0.21
5	8.967	-0.3	VV VCI	14419.1719	21097.83	1040.76	1.46		VCI	1.46
6	9.412	0.0	VV	9637.6660	25292.89	1866.72	2.62			2.62
7	10.222	0.0	VB	10188.4199	8319.92	580.85	0.82			0.82
9	13.813	0.0	BB	69206.7656	5321.97	281.76	0.08			0.08
10	15.088	0.0	BB	34731.0000	94553.25	9975.04	2.72			2.72
11	15.680	0.0	BV	36901.5234	19355.98	1921.88	0.53			0.53
12	15.946	0.0	VV	37048.3789	11600.23	1147.24	0.31			0.31
13	16.596	0.0	VV	33678.2344	10320.09	1122.77	0.31			0.31
14	17.013	0.2	VV 11DCIE	42645.2227	2785.39	239.32	0.07		11DCIE	0.07
15	17.694	0.0	VV	63352.8906	1671.02	96.64	0.03			0.03
16	18.195	0.0	VV	31727.3359	1150.27	132.84	0.04			0.04
7	18.903	0.0	VV	1.5953e5	1465.38	123.28	0.01			0.01
18	19.076	0.0	VV	1.2837e5	2122.96	221.95	0.02			0.02
19	19.821	0.0	VV	1.5829e5	157938.36	13390.72	1.00			1.00
20	20.217	0.2	VV T-12DCIE	81804.2422	23745.42	3895.73	0.29		T-12DCIE	0.29
21	20.614	0.0	VV	2.1123e5	2675.41	169.99	0.01			0.01
22	21.495	0.0	VV	2.0484e5	5249.59	343.94	0.03			0.03
23	22.264	0.0	VV	49819.9922	1129.22	115.37	0.02			0.02
24	22.725	0.0	VV	63753.7695	1149.62	91.78	0.02			0.02

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L0001801

25	23.113	0.0 VV	64590.2266	2873.77	226.47	0.04	0.04
26	23.494	0.0 VV	58019.1094	3235.89	283.88	0.06	0.06
27	24.170	0.2 VB C-12DCIE	36008.2578	791013.25	111814.83	21.97	21.97
28	25.533	0.0 BB	79746.0156	7918.75	505.44	0.10	0.10
29	28.008	0.0 BV	1.9437e5	2568.56	149.52	0.01	0.01
30	28.484	0.2 VV Bz	1.0362e5	37520.48	4097.00	0.36	0.36
31	29.411	0.2 VV FBz	16962.6836	1416634.63	174629.39	83.52	83.52
32	30.618	0.0 VV	1.4174e5	2938.05	133.30	0.02	0.02
33	31.112	0.2 VE TCIE	46427.3047	950606.69	131675.78	20.48	20.48
34	31.403	0.0 EV	8.1368e5	76565.00	605.13	0.09	0.09
35	34.773	-0.8 VV C-13DCI Pe	83951.2422	6277.91	193.46	0.08	0.08
36	35.602	0.0 VV	31567.7461	6912.77	566.51	0.22	0.22
37	36.125	0.0 VV	2.2056e5	11654.02	553.11	0.05	0.05
38	36.634	0.1 VV Toluene	95240.2891	19283.89	2119.52	0.20	0.20
39	37.118	-0.3 VV T-13DCI Pe	35369.1484	9879.19	454.66	0.28	0.28
40	39.395	0.0 VV	40202.9570	12254.84	1202.53	0.31	0.31
41	40.133	0.1 VV TetCIE	37074.3711	6542217.00	696142.56	176.46	176.46
42	44.940	0.0 VV	1.4111e5	8415.19	442.77	0.06	0.06
43	45.751	0.2 VV ClBz	89509.0781	11922.75	989.02	0.13	0.13
44	46.315	0.2 VV EthylBz	78645.7500	13040.55	1025.06	0.17	0.17
45	46.992	0.2 VV m-Xylene	82047.3125	10015.52	775.63	0.12	0.12
46	47.758	0.2 VV o-Cl, F-Ben	15716.5889	1299820.13	108259.15	82.70	82.70
47	50.915	0.3 VB o-Xylene	73508.0313	18508.63	1352.87	0.25	0.25
48	52.915	0.0 BV	1.1652e5	13397.38	617.78	0.12	0.12
49	53.842	0.0 VB	1.7582e5	3625.63	110.79	0.02	0.02
50	56.300	0.0 BV	78029.3984	6043.13	416.12	0.08	0.08
51	56.682	0.0 VB	1.0151e5	1556.63	156.95	0.02	0.02
52	57.394	0.0 BV	1.2994e5	9506.45	748.77	0.07	0.07
53	57.798	0.0 VB	1.1125e5	2684.56	246.97	0.02	0.02
54	59.336	0.0 BB	3.2805e5	4171.50	130.15	0.01	0.01
55	60.280	0.0 BV	1.0878e5	41237.44	3879.81	0.38	0.38
56	61.898	0.0 VV	2.2541e5	5547.00	251.86	0.03	0.03
57	62.363	0.1 VV 13DCIBz	75247.5156	2308.63	314.01	0.03	0.03
58	62.648	0.0 VV	85181.3125	1385.95	166.53	0.02	0.02
59	62.971	0.1 VB 14DCIBz	84354.0313	5815.47	706.72	0.07	0.07
60	63.700	0.0 BV	1.5076e5	1142.28	77.67	0.01	0.01
61	63.966	0.0 VV	59053.3906	6440.59	944.17	0.11	0.11
62	64.136	0.0 VV	1.0324e5	18684.09	1566.66	0.18	0.18
63	64.413	0.0 VV	63627.2969	2667.14	362.89	0.04	0.04
64	64.559	0.0 VV	72333.4766	4461.91	534.01	0.06	0.06
65	64.889	0.1 VB 12DCIBz	56942.1133	12441.99	1891.58	0.22	0.22
66	65.504	0.0 BB	85045.0156	5657.25	575.87	0.07	0.07
67	65.867	0.0 BB	40886.3164	547.00	115.82	0.01	0.01
68	66.226	0.0 BB	50650.5977	850.50	145.36	0.02	0.02
69	66.524	0.0 BB	47025.9453	103700.48	19090.21	2.21	2.21
70	66.961	0.0 BB	1.0527e5	1210.01	99.50	0.01	0.01
71	67.745	0.0 BB	42528.8203	322.50	65.65	0.01	0.01
72	68.016	0.0 BB	52307.8047	894.00	147.96	0.02	0.02
73	68.246	0.0 BV	48959.9336	793.26	140.26	0.02	0.02
74	68.575	0.0 VV	1.2085e5	2671.64	191.37	0.02	0.02
75	68.931	0.0 VV	1.0149e5	2891.44	246.63	0.03	0.03
76	69.151	0.0 VV	58007.4727	5124.23	764.74	0.09	0.09
77	69.404	0.0 VV	63175.8633	1311.73	179.75	0.02	0.02
78	69.521	0.0 VB	51845.2656	1203.68	200.99	0.02	0.02
		0.6	7.0209e6	12371178.00	1.35e6	402.27	402.27

Missing Component Report

Component	Expected Retention (Sample File)

Air	5.000
2ClEthylVO	34.045

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

=====

TUT 004 1802

L0001802

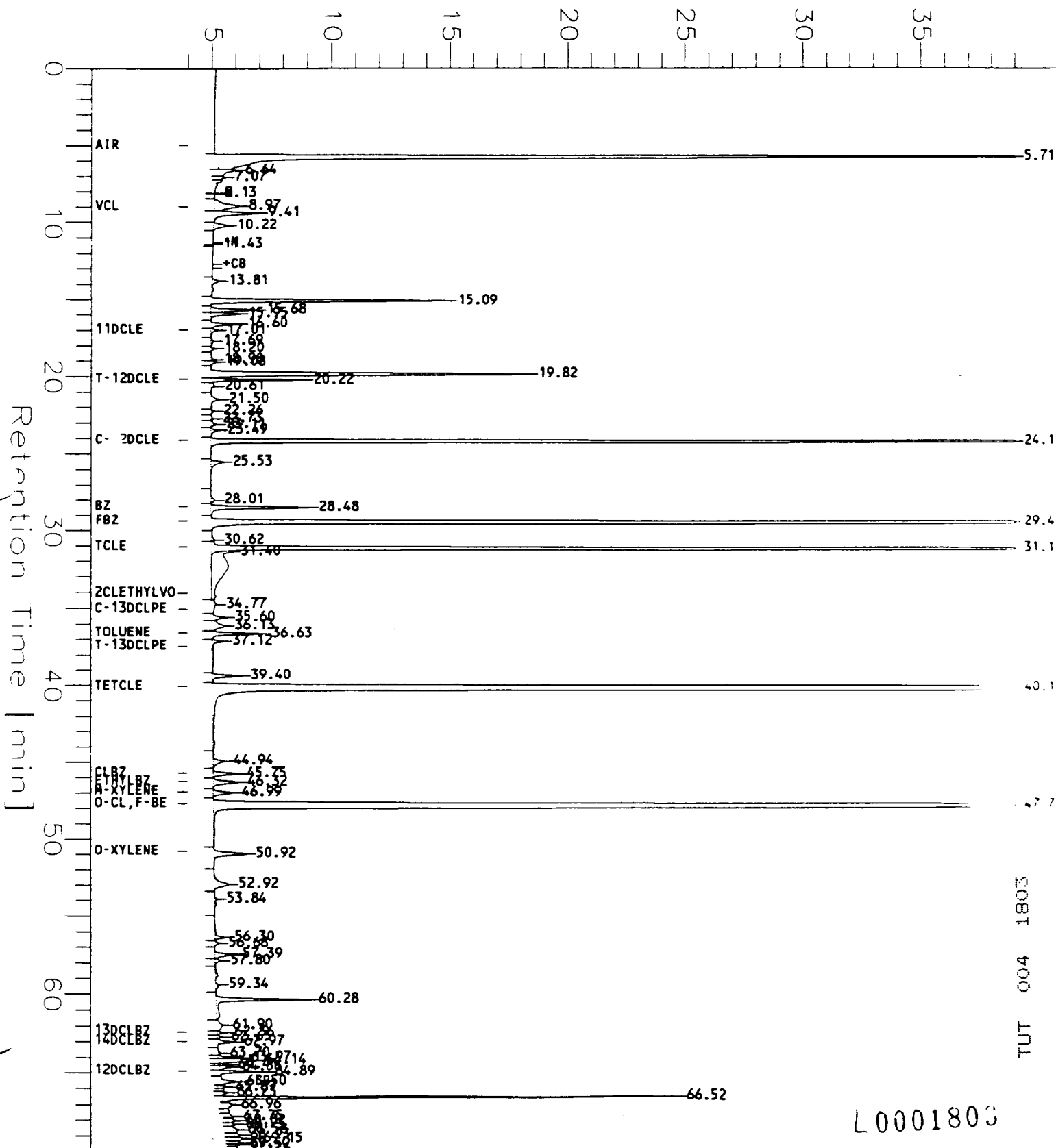
Sample Name : VV7329
FileName : n:\v3400a\TC10016.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: DRM01
Date : 3/20/93 1:15 PM
Time of Injection: 3/11/93 4:37 AM
Low Point : 4.00 mV
Plot Scale: 35 mV

Page 1 of 1

Response [mV]



L0001803

STANDARDS DATA

TUT 004 1804

L0001804

Created by : on : 5/12/89 2:54 PM
 Edited by : on : 3/11/93 9:43 AM
 Number Of Times Edited : 395

Sample Description :

Default Injection Volume = 5.0000 mL
 An External Standard Calibration Will Be Used
 Unknown Peaks Will Use The Response Factor Of The Nearest Component

Component Information :

Air

Retention Time : 1.845 min Search Window: 5.00 sec, 5.00 %
 Reference Component: (Find Closest Peak)
 Group Name :
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	3603.22	125.35	-----	-----	1
B	7.5000	1313.50	111.82	-----	-----	1
C	15.0000	5577.00	264.70	-----	-----	1
D	22.5000	1417.25	192.82	-----	-----	1
E	30.0000	1445.00	82.59	-----	-----	1

Calibration Curve : $y = (0.000000) + (28.308945)x + (-0.853783)x^2 + (0.000000)x^3$
 R-squared : 0.481345

DC1DFMe

Retention Time : 7.015 min Search Window: 14.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	77980.75	3087.47	-----	-----	1
B	7.5000	680150.75	28988.35	-----	-----	1
C	15.0000	1531688.38	65191.56	-----	-----	1
D	22.5000	2259152.50	95403.59	-----	-----	1
E	30.0000	3679228.00	161134.89	-----	-----	1

Calibration Curve : $y = (0.000000) + (2829.930664)x + (80.554604)x^2 + (0.000000)x^3$
 R-squared : 0.991444

CLME

Retention Time : 8.324 min Search Window: 19.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	156657.11	8156.97	-----	-----	1
B	7.5000	1276222.50	64754.24	-----	-----	1
C	15.0000	2786940.00	141951.77	-----	-----	1
D	22.5000	4212800.00	218257.77	-----	-----	1

Calibration Curve : $y = (0.000000) + (6605.184570)x + (164.040314)x^2 + (0.000000)x^3$
 R-squared : 0.996027

VC1

Retention Time : 9.074 min Search Window: 25.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	221183.44	9092.31	-----	-----	1
B	7.5000	1580973.75	71710.14	-----	-----	1
C	15.0000	3273454.75	155780.55	-----	-----	1
D	22.5000	4919993.00	242520.41	-----	-----	1
E	30.0000	7401744.00	379235.38	-----	-----	1

Calibration Curve : $y = (0.000000) + (7639.020020)x + (161.501953)x^2 + (0.000000)x^3$
 R-squared : 0.997578

BrMe

Retention Time : 11.919 min Search Window: 26.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	32430.66	1505.09	-----	-----	1
B	7.5000	586421.75	30582.75	-----	-----	1
C	15.0000	1505482.50	80779.73	-----	-----	1
D	22.5000	2306786.00	125658.02	-----	-----	1
E	30.0000	3639522.25	202527.45	-----	-----	1

Calibration Curve : $y = (0.000000) + (3331.114502)x + (111.818085)x^2 + (0.000000)x^3$
 R-squared : 0.996645

ClEa

Retention Time : 12.473 min Search Window: 17.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 12133.000000

TC1FMe

Retention Time : 14.003 min Search Window: 21.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	285387.19	14478.36	-----	-----	1
B	7.5000	2183675.75	116826.66	-----	-----	1
C	15.0000	4734355.00	260066.45	-----	-----	1
D	22.5000	7083384.00	398174.75	-----	-----	1
E	30.0000	11122182.00	613013.94	-----	-----	1

L 0001800

11DC1E

Retention Time : 17.038 min Search Window: 17.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 24821.000000

CH2C12

Retention Time : 19.100 min Search Window: 16.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = ~~31207.000000~~ 34259.94

T-12DC1E

Retention Time : 20.238 min Search Window: 13.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 30506.000000

2756111DC1Ea

Retention Time : 21.838 min Search Window: 16.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 27561.000000

C-12DC1E

Retention Time : 24.188 min Search Window: 16.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name :
Quantitation Will Be Done Using Response Factor = 26780.000000

CHC13

Retention Time : 24.840 min Search Window: 16.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 35383.000000

BrClMe

Retention Time : 25.506 min Search Window: 20.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : QC
Quantitation Will Be Done Using Response Factor = 5033.000000

111TC1Ea

Retention Time : 26.633 min Search Window: 16.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 29593.000000

CC14

Retention Time : 27.774 min Search Window: 19.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 33861.000000

12DC1Ea

Retention Time : 28.393 min Search Window: 16.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 23750.000000

L0001807

TC1E

0371

Retention Time : 31.131 min Search Window: 14.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 31614.000000

12DC1Pa

Retention Time : 31.870 min Search Window: 17.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 23155.000000

BrDC1Me

Retention Time : 32.822 min Search Window: 18.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 22456.000000

2C1EthylVO

Retention Time : 34.116 min Search Window: 14.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	43117.59	1348.24	-----	-----	1
B	5.0000	282304.09	15246.46	-----	-----	1
C	10.0000	624574.13	40786.82	-----	-----	1
D	15.0000	820462.81	59349.77	-----	-----	1
E	20.0000	1279951.50	95309.36	-----	-----	1

Calibration Curve : $y = (0.000000) + (2714.443848)x + (99.458855)x^2 + (0.000000)x^3$
R-squared : 0.994189

C-13DC1Pe

Retention Time : 35.123 min Search Window: 15.00 sec, 1.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 25201.000000

T-13DC1Pe

Retention Time : 37.487 min Search Window: 19.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	65164.70	3645.34	-----	-----	1
B	7.5000	1416133.13	115713.91	-----	-----	1
C	15.0000	2957330.50	251537.23	-----	-----	1
D	22.5000	4431510.50	390888.28	-----	-----	1
E	30.0000	6447718.50	570986.06	-----	-----	1

Calibration Curve : $y = (0.000000) + (13904.012695)x + (168.107452)x^2 + (0.000000)x^3$
R-squared : 0.999023

112TC1Ea

Retention Time : 38.300 min Search Window: 19.00 sec, 1.00 %

TUT 004 1808

L0001806

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 20172.000000

0372

TetClE

Retention Time : 40.147 min Search Window: 24.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 30725.000000

DBrClMe

Retention Time : 41.272 min Search Window: 22.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	164155.50	7282.99	-----	-----	1
B	7.5000	1589133.50	85531.35	-----	-----	1
C	15.0000	3182569.00	185668.83	-----	-----	1
D	22.5000	4491806.00	284382.38	-----	-----	1
E	30.0000	6531249.00	423579.47	-----	-----	1

Calibration Curve : $y = (0.000000) + (10087.946289)x + (130.516403)x^2 + (0.000000)x^3$
R-squared : 0.998818

ClBz

Retention Time : 45.755 min Search Window: 28.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 9306.000000

o-Cl,F-Benzene

Retention Time : 47.755 min Search Window: 29.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : QC
Quantitation Will Be Done Using Response Factor = 2430.000000

CHBr3

Retention Time : 53.534 min Search Window: 21.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	53742.91	2436.02	-----	-----	1
B	7.5000	722927.75	38313.16	-----	-----	1
C	15.0000	1540370.63	91502.36	-----	-----	1
D	22.5000	2431820.75	152685.14	-----	-----	1
E	30.0000	3334930.00	212757.58	-----	-----	1

Calibration Curve : $y = (0.000000) + (5028.152344)x + (70.882538)x^2 + (0.000000)x^3$
R-squared : 0.998769

L 0001800

1122TetClEa

Retention Time : 54.996 min Search Window: 23.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601

TUT 004 1809

~~123711-13 Propane~~ *26/7/95*

Retention Time : 56.030 min Search Window: 5.00 sec, 5.00 %

Reference Component: (Find Closest Peak)

Group Name :

Quantitation Will Be Done Using Response Factor = 9057.000000 *Not an analyte. 3/11/95*

13DC1Bz

Retention Time : 62.384 min Search Window: 17.00 sec, 1.00 %

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)

Group Name : 601

Quantitation Will Be Done Using Response Factor = 17417.000000

14DC1Bz

Retention Time : 62.992 min Search Window: 16.00 sec, 1.00 %

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)

Group Name : 601

Quantitation Will Be Done Using Response Factor = 19319.000000

12DC1Bz

Retention Time : 64.918 min Search Window: 16.00 sec, 1.00 %

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)

Group Name : 601

Quantitation Will Be Done Using Response Factor = 18018.000000

L 0001810

Sample File : N:\V3400S\LINPTC10.smp
 Created by : on : 5/12/89 2:54 PM
 Edited by : on : 3/11/93 9:49 AM
 Number Of Times Edited : 409

Sample Description :

Default Injection Volume = 5.0000 ml
 An External Standard Calibration Will Be Used
 Unknown Peaks Will Use The Response Factor Of The Nearest Component

Component Information :

Air

Retention Time : 5.000 min Search Window: 5.00 sec, 5.00 %
 Reference Component: (Find Closest Peak)
 Group Name :
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	0.00	331.00	-----	-----	0
B	2.5000	0.00	331.00	-----	-----	0
C	5.0000	0.00	331.00	-----	-----	0
D	7.5000	0.00	331.00	-----	-----	0
E	15.0000	0.00	331.00	-----	-----	0

Calibration Curve : $y = (0.000000) + (96.218834)x + (-5.053600)x^2 + (0.000000)x^3$
 R-squared : 1.000000

VC1

Retention Time : 8.996 min Search Window: 25.00 sec, 2.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 711.299988

11DC1E

Retention Time : 16.974 min Search Window: 18.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 3664.000000

T-12DC1E

Retention Time : 20.179 min Search Window: 52.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 13421.000000

C-12DC1E

Retention Time : 24.122 min Search Window: 18.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name :
 Quantitation Will Be Done Using Response Factor = 5090.000000

Bz

Retention Time : 28.430 min Search Window: 19.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 602
 Quantitation Will Be Done Using Response Factor = 11315.000000

FBz

L 0001811

Retention Time : 29.361 min Search Window: 20.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : QC
Quantitation Will Be Done Using Response Factor = 2091.000000

TC1E

Retention Time : 31.064 min Search Window: 17.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 6431.000000

2ClEthylVO

Retention Time : 34.045 min Search Window: 47.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 602
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	11665.13	1004.75	-----	-----	1
B	5.0000	55438.88	7534.33	-----	-----	1
C	10.0000	124864.45	18194.46	-----	-----	1
D	15.0000	175885.84	25993.42	-----	-----	1
E	20.0000	273369.59	40913.00	-----	-----	1

Calibration Curve : $y = (0.000000) + (1346.925049)x + (33.376652)x^2 + (0.000000)x^3$
R-squared : 0.994500

C-13DC1Pe

Retention Time : 35.060 min Search Window: 17.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 2587.000000

Toluene

Retention Time : 36.590 min Search Window: 18.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 10468.000000

T-13DC1Pe

Retention Time : 37.423 min Search Window: 19.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	9051.25	903.37	-----	-----	1
B	7.5000	118416.59	15938.55	-----	-----	1
C	15.0000	239999.52	33591.41	-----	-----	1
D	22.5000	372292.34	53752.12	-----	-----	1
E	30.0000	575729.88	84508.34	-----	-----	1

Calibration Curve : $y = (0.000000) + (1616.920532)x + (38.845093)x^2 + (0.000000)x^3$
R-squared : 0.997691

TetClE

Retention Time : 40.081 min Search Window: 22.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)

Group Name : 601
Quantitation Will Be Done Using Response Factor = 3945.000000

0376

ClBz

Retention Time : 45.677 min Search Window: 29.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 7425.000000

EthylBz

Retention Time : 46.242 min Search Window: 29.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name :
Quantitation Will Be Done Using Response Factor = 6182.000000

m-Xylene

Retention Time : 46.910 min Search Window: 30.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 8000 additional comp
Quantitation Will Be Done Using Response Factor = 6354.000000

o-Cl,F-Benzene

Retention Time : 47.677 min Search Window: 31.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : QC
Quantitation Will Be Done Using Response Factor = 1309.000000

o-Xylene

Retention Time : 50.780 min Search Window: 28.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 8000 additional comp
Quantitation Will Be Done Using Response Factor = 5373.000000

13DClBz

Retention Time : 62.317 min Search Window: 16.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 10235.000000

14DClBz

Retention Time : 62.929 min Search Window: 16.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 10251.000000

12DClBz

Retention Time : 64.854 min Search Window: 18.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 8657.000000

L 0001813

HALL LINEARITY CALCULATIONS FOR V3400A USING A RESTEK 502.2 COLUMN 105m* 0.53mm
 I.D., 3.0um Df COLUMN.

File Name	SAMPLE NAME Number	Date Of Injection	Air			DCIDFMe		
			Ret. Time	STD CON	Height	Ret. Time	STD CON	Height
sc10002.	A MIX	3/10/93	----	----	----	7.06	1.5000	3087.47
sc10009.	B MIX	3/10/93	----	----	----	7.02	7.5000	28988.35
sc10010.	C MIX	3/10/93	----	----	----	7.02	15.0000	65191.56
sc10005.	D MIX	3/10/93	----	----	----	7.03	22.5000	95403.59
sc10006.	E MIX	3/10/93	----	----	----	7.02	30.0000	161134.89
Averages			----	----	----	7.03	15.3000	70761.17
%RSD			----	----	----	0.29	74.47	86.92

File Name	SAMPLE NAME Number	Date Of Injection	CLME			VCI		
			Ret. Time	STD CON	Height	Ret. Time	STD CON	Height
sc10002.	A MIX	3/10/93	8.35	1.5000	8156.97	9.10	1.5000	9092.31
sc10009.	B MIX	3/10/93	8.33	7.5000	64754.24	9.09	7.5000	71710.14
sc10010.	C MIX	3/10/93	8.32	15.0000	141951.77	9.07	15.0000	155780.55
sc10005.	D MIX	3/10/93	8.34	22.5000	218257.77	9.09	22.5000	242520.41
sc10006.	E MIX	3/10/93	8.32	30.0000	351471.53	9.07	30.0000	379235.38
Averages			8.33	15.3000	156918.45	9.09	15.3000	171667.75
%RSD			0.16	74.47	85.77	0.14	74.47	84.81

File Name	SAMPLE NAME Number	Date Of Injection	BrMe			ClEa		
			Ret. Time	STD CON	Height	Ret. Time	STD CON	Height
sc10002.	A MIX	3/10/93	11.92	1.5000	1505.09	12.49	1.5000	11513.79
sc10009.	B MIX	3/10/93	11.95	7.5000	30582.75	12.49	7.5000	88934.09
sc10010.	C MIX	3/10/93	11.92	15.0000	80779.73	12.47	15.0000	196671.45
sc10005.	D MIX	3/10/93	11.94	22.5000	125658.02	12.49	22.5000	296858.63
sc10006.	E MIX	3/10/93	11.91	30.0000	202527.45	12.47	30.0000	444924.28
Averages			11.93	15.3000	88210.61	12.48	15.3000	207780.45
%RSD			0.15	74.47	90.27	0.09	74.47	82.29

File Name	SAMPLE NAME Number	Date Of Injection	TCLFMe			11DCLE		
			Ret. Time	STD CON	Height	Ret. Time	STD CON	Height
sc10002.	A MIX	3/10/93	14.04	1.5000	14478.36	17.06	1.0000	23495.80
sc10009.	B MIX	3/10/93	14.03	7.5000	116826.66	17.05	7.5000	175895.22
sc10010.	C MIX	3/10/93	14.00	15.0000	260066.45	17.04	15.0000	355928.03
sc10005.	D MIX	3/10/93	14.02	22.5000	398174.75	17.04	22.5000	586214.06
sc10006.	E MIX	3/10/93	14.00	30.0000	613013.94	17.03	30.0000	821308.63
Averages			14.02	15.3000	280512.03	17.04	15.2000	392568.34
%RSD			0.12	74.47	84.06	0.07	75.97	81.14

File Name	SAMPLE NAME Number	Date Of Injection	CH2Cl2			T-12DCLE		
			Ret. Time	STD CON	Height	Ret. Time	STD CON	Height
sc10002.	A MIX	3/10/93	19.11	1.0000	101089.73	20.26	1.0000	28530.31
sc10009.	B MIX	3/10/93	19.10	7.5000	258724.17	20.24	7.5000	231189.63
sc10010.	C MIX	3/10/93	19.10	15.0000	510043.34	20.24	15.0000	485207.22
sc10005.	D MIX	3/10/93	19.11	22.5000	760199.56	20.24	22.5000	736518.69
sc10006.	E MIX	3/10/93	19.10	30.0000	854405.44	20.24	30.0000	842804.25
Averages			19.10	15.8000	496892.44	20.24	15.2000	464850.03
%RSD			0.03	67.53	64.49	0.05	75.97	73.11

File Name	SAMPLE NAME Number	Date Of Injection	11DCLEa			C-12DCLE		
			Ret. Time	STD CON	Height	Ret. Time	STD CON	Height
sc10002.	A MIX	3/10/93	21.86	1.0000	22159.17	24.21	1.0000	21939.74
sc10009.	B MIX	3/10/93	21.84	7.5000	208065.25	24.18	7.5000	199678.52

sc10010.	C MIX	3/10/93	21.84	15.0000	432635.22	2.8842e4	24.19	15.0000	419508.97	2.7967e4
sc10005.	D MIX	3/10/93	21.84	22.5000	677325.94	3.0103e4	24.19	22.5000	657874.81	2.9238e4
sc10006.	E MIX	3/10/93	21.83	30.0000	868859.31	2.8961e4	24.17	30.0000	844058.13	2.8135e4
Averages			21.84	15.2000	441808.97	2.7561e4	24.19	15.2000	428612.03	2.6780e4
%RSD			0.06	75.97	77.48	11.37	0.06	75.97	77.65	10.68

CHCl3							BrClMe			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
sc10002.	A MIX	3/10/93	24.86	1.0000	32642.86	3.2642e4	25.52	100.0000	420198.66	4.2019e3
sc10009.	B MIX	3/10/93	24.83	7.5000	282593.56	3.7679e4	25.49	100.0000	475520.28	4.7552e3
sc10010.	C MIX	3/10/93	24.84	15.0000	581353.63	3.8756e4	25.51	100.0000	503319.94	5.0331e3
sc10005.	D MIX	3/10/93	24.85	22.5000	831054.56	3.6935e4	25.51	100.0000	485520.03	4.8552e3
sc10006.	E MIX	3/10/93	24.84	30.0000	927063.13	3.0902e4	25.48	100.0000	547283.81	5.4728e3
Averages			24.84	15.2000	530941.56	3.5383e4	25.50	100.0000	486368.53	4.8636e3
%RSD			0.04	75.97	70.44	9.65	0.05	0.00	9.48	9.48

111TClEa							CCl4			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
sc10002.	A MIX	3/10/93	26.65	1.0000	29185.45	2.9185e4	27.79	1.0000	31613.37	3.1613e4
sc10009.	B MIX	3/10/93	26.62	7.5000	220623.47	2.9416e4	27.76	7.5000	261334.22	3.4844e4
sc10010.	C MIX	3/10/93	26.63	15.0000	442669.88	2.9511e4	27.77	15.0000	530665.50	3.5377e4
sc10005.	D MIX	3/10/93	26.63	22.5000	664379.56	2.9527e4	27.77	22.5000	805049.69	3.5779e4
sc10006.	E MIX	3/10/93	26.61	30.0000	909753.56	3.0325e4	27.77	30.0000	950729.88	3.1690e4
Averages			26.63	15.2000	453322.38	2.9593e4	27.77	15.2000	515878.53	3.3861e4
%RSD			0.06	75.97	76.97	1.46	0.04	75.97	73.32	6.04

120ClEa							TCIE			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
sc10002.	A MIX	3/10/93	28.41	1.0000	19989.11	1.9989e4	31.14	1.0000	25978.54	2.5978e4
sc10009.	B MIX	3/10/93	28.38	7.5000	177472.16	2.3662e4	31.11	7.5000	253475.56	3.3796e4
sc10010.	C MIX	3/10/93	28.39	15.0000	364573.44	2.4304e4	31.13	15.0000	510178.63	3.4011e4
sc10005.	D MIX	3/10/93	28.39	22.5000	553234.00	2.4588e4	31.13	22.5000	776961.63	3.4531e4
sc10006.	E MIX	3/10/93	28.37	30.0000	786230.50	2.6207e4	31.12	30.0000	892566.69	2.9752e4
Averages			28.39	15.2000	380299.84	2.3750e4	31.13	15.2000	491832.22	3.1614e4
%RSD			0.05	75.97	79.53	9.69	0.03	75.97	73.03	11.65

120ClPa							BrDCI Me			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
sc10002.	A MIX	3/10/93	31.88	1.0000	17995.00	1.7995e4	32.83	1.0000	15768.00	1.5767e4
sc10009.	B MIX	3/10/93	31.85	7.5000	176401.23	2.3520e4	32.80	7.5000	168720.89	2.2496e4
sc10010.	C MIX	3/10/93	31.87	15.0000	356032.22	2.3735e4	32.82	15.0000	361673.19	2.4111e4
sc10005.	D MIX	3/10/93	31.87	22.5000	547291.56	2.4324e4	32.82	22.5000	538511.06	2.3933e4
sc10006.	E MIX	3/10/93	31.85	30.0000	786011.19	2.6200e4	32.80	30.0000	779189.25	2.5972e4
Averages			31.86	15.2000	376746.25	2.3155e4	32.82	15.2000	372772.47	2.2456e4
%RSD			0.04	75.97	80.27	13.27	0.04	75.97	80.69	17.54

2ClEthylVO							C-130ClPe			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
sc10002.	A MIX	3/10/93	34.19	1.0000	1348.24	1.3482e3	35.13	1.0000	26962.42	2.6962e4
sc10009.	B MIX	3/10/93	34.11	5.0000	15246.46	3.0492e3	35.11	7.5000	172998.06	2.3066e4
sc10010.	C MIX	3/10/93	34.12	10.0000	40786.82	4.0786e3	35.12	15.0000	369824.69	2.4654e4
sc10005.	D MIX	3/10/93	34.11	15.0000	59349.77	3.9566e3	35.12	22.5000	560590.88	2.4915e4
sc10006.	E MIX	3/10/93	34.09	20.0000	95309.36	4.7654e3	35.10	30.0000	792303.88	2.6410e4
Averages			34.12	10.2000	42408.13	3.4396e3	35.12	15.2000	384535.97	2.5201e4
%RSD			0.11	74.47	87.53	38.35	0.03	75.97	79.10	6.12

T-130ClPe							112TClEa			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
sc10002.	A MIX	3/10/93	37.52	1.0000	3645.34	3.6453e3	38.31	1.0000	14364.21	1.4364e4
sc10009.	B MIX	3/10/93	37.47	7.5000	115713.91	1.5428e4	38.28	7.5000	153723.75	2.0496e4
sc10010.	C MIX	3/10/93	37.49	15.0000	251537.23	1.6769e4	38.30	15.0000	319574.31	2.1304e4
sc10005.	D MIX	3/10/93	37.49	22.5000	390888.28	1.7372e4	38.30	22.5000	491486.84	2.1843e4
sc10006.	E MIX	3/10/93	37.47	30.0000	570986.06	1.9032e4	38.28	30.0000	685554.81	2.2851e4

Averages 37.49 15.2000 266554.16 1.4442e4 38.29 15.2000 332940.78 2.0172e4
 %RSD 0.06 75.97 83.94 42.75 0.04 75.97 79.93 16.65

File Name	SAMPLE NAME Number	Date Of Injection	TetClE			DBrClMe		
			Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON
sc10002.	A MIX	3/10/93	40.16	1.0000	26053.02	2.6053e4	41.29	1.0000
sc10009.	B MIX	3/10/93	40.12	7.5000	233064.84	3.1075e4	41.25	7.5000
sc10010.	C MIX	3/10/93	40.15	15.0000	482463.19	3.2164e4	41.27	15.0000
sc10005.	D MIX	3/10/93	40.15	22.5000	756137.38	3.3606e4	41.28	22.5000
sc10006.	E MIX	3/10/93	40.15	30.0000	921831.38	3.0727e4	41.25	30.0000
Averages			40.15	15.2000	483909.97	3.0725e4	41.27	15.2000
%RSD			0.04	75.97	75.82	9.25	0.04	75.97

File Name	SAMPLE NAME Number	Date Of Injection	ClBz			o-Cl,F-Benzene		
			Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON
sc10002.	A MIX	3/10/93	45.79	1.0000	6996.22	6.9962e3	47.77	100.0000
sc10009.	B MIX	3/10/93	45.74	7.5000	67958.99	9.0611e3	47.74	100.0000
sc10010.	C MIX	3/10/93	45.76	15.0000	144141.81	9.6094e3	47.76	100.0000
sc10005.	D MIX	3/10/93	45.77	22.5000	218491.72	9.7107e3	47.77	100.0000
sc10006.	E MIX	3/10/93	45.73	30.0000	334543.22	1.1151e4	47.73	100.0000
Averages			45.76	15.2000	154426.39	9.3058e3	47.75	100.0000
%RSD			0.05	75.97	83.10	16.17	0.04	0.00

File Name	SAMPLE NAME Number	Date Of Injection	CHBr3			1122TetClEa		
			Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON
sc10002.	A MIX	3/10/93	53.60	1.0000	2436.02	2.4360e3	55.05	1.0000
sc10009.	B MIX	3/10/93	53.53	7.5000	38313.16	5.1084e3	54.99	7.5000
sc10010.	C MIX	3/10/93	53.53	15.0000	91502.36	6.1001e3	55.00	15.0000
sc10005.	D MIX	3/10/93	53.53	22.5000	152685.14	6.7860e3	55.00	22.5000
sc10006.	E MIX	3/10/93	53.51	30.0000	212757.58	7.0919e3	54.98	30.0000
Averages			53.54	15.2000	99538.85	5.5045e3	55.00	15.2000
%RSD			0.07	75.97	85.37	34.10	0.05	75.97

File Name	SAMPLE NAME Number	Date Of Injection	1231-1,1,1-Trichloroethane			13DCIBz		
			Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON
sc10002.	A MIX	3/10/93	57.75	1.0000	6132.71	6.1327e3	62.42	1.0000
sc10009.	B MIX	3/10/93	56.02	7.5000	69155.37	9.2207e3	62.38	7.5000
sc10010.	C MIX	3/10/93	56.03	15.0000	147744.20	9.8496e3	62.38	15.0000
sc10005.	D MIX	3/10/93	56.03	22.5000	218201.98	9.6978e3	62.40	22.5000
sc10006.	E MIX	3/10/93	56.02	30.0000	311531.03	1.0384e4	62.38	30.0000
Averages			56.37	15.2000	150553.06	9.0570e3	62.39	15.2000
%RSD			1.37	75.97	79.97	18.62	0.03	75.97

File Name	SAMPLE NAME Number	Date Of Injection	14DCIBz			12DCIBz		
			Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON
sc10002.	A MIX	3/10/93	63.03	1.0000	14050.87	1.4050e4	64.94	1.0000
sc10009.	B MIX	3/10/93	62.99	7.5000	145219.77	1.9362e4	64.91	7.5000
sc10010.	C MIX	3/10/93	62.99	15.0000	309535.06	2.0635e4	64.92	15.0000
sc10005.	D MIX	3/10/93	63.01	22.5000	447390.56	1.9884e4	64.94	22.5000
sc10006.	E MIX	3/10/93	62.99	30.0000	679890.75	2.2663e4	64.92	30.0000
Averages			63.00	15.2000	319217.41	1.9319e4	64.93	15.2000
%RSD			0.03	75.97	81.39	16.57	0.02	75.97

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tc10005.	D MIX	3/10/93	36.59	22.5000	237645.61	1.0562e4	37.42	15.0000	33591.41	2.2394e3
tc10006.	E MIX	3/10/93	36.58	30.0000	368032.91	1.2267e4	37.41	30.0000	84508.34	2.8169e3
Averages			36.58	15.2000	167799.14	1.0468e4	37.41	15.2000	37738.76	2.0947e3
%RSD			0.03	75.97	83.85	10.12	0.03	75.97	86.81	34.17

TetCIE							ClBz			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON	Height	CF
tc10002.	A MIX	3/10/93	40.08	1.0000	3370.82	3.3708e3	45.68	1.0000	6656.84	6.6568e3
tc10009.	B MIX	3/10/93	40.05	7.5000	25825.96	3.4434e3	45.66	7.5000	52726.80	7.0302e3
tc10010.	C MIX	3/10/93	40.08	15.0000	59294.62	3.9529e3	45.68	15.0000	110428.04	7.3618e3
tc10005.	D MIX	3/10/93	40.08	22.5000	93199.95	4.1422e3	45.69	22.5000	165874.27	7.3721e3
tc10006.	E MIX	3/10/93	40.06	30.0000	144395.91	4.8131e3	45.66	30.0000	261096.59	8.7032e3
Averages			40.07	15.2000	65217.45	3.9445e3	45.67	15.2000	119356.51	7.4248e3
%RSD			0.03	75.97	85.59	14.86	0.03	75.97	83.23	10.40

EthylBz							m-Xylene			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON	Height	CF
tc10002.	A MIX	3/10/93	46.25	1.0000	5566.69	5.5666e3	46.92	1.0000	5937.43	5.9374e3
tc10009.	B MIX	3/10/93	46.22	7.5000	41631.67	5.5508e3	46.89	7.5000	41773.02	5.5697e3
tc10010.	C MIX	3/10/93	46.24	15.0000	91326.90	6.0884e3	46.91	15.0000	94832.10	6.3221e3
tc10005.	D MIX	3/10/93	46.25	22.5000	143399.38	6.3733e3	46.93	22.5000	143462.70	6.3761e3
tc10006.	E MIX	3/10/93	46.22	30.0000	219956.98	7.3318e3	46.89	30.0000	226905.36	7.5635e3
Averages			46.24	15.2000	100376.33	6.1822e3	46.91	15.2000	102582.13	6.3537e3
%RSD			0.03	75.97	84.35	11.84	0.04	75.97	84.74	11.81

o-Cl,F-Benzene							o-Xylene			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON	Height	CF
tc10002.	A MIX	3/10/93	47.69	100.0000	114605.26	1.1460e3	50.80	1.0000	4983.35	4.9833e3
tc10009.	B MIX	3/10/93	47.65	100.0000	128852.53	1.2885e3	50.76	7.5000	36094.68	4.8126e3
tc10010.	C MIX	3/10/93	47.68	100.0000	130910.22	1.3091e3	50.78	15.0000	81220.63	5.4147e3
tc10005.	D MIX	3/10/93	47.69	100.0000	124051.13	1.2405e3	50.79	22.5000	120726.61	5.3656e3
tc10006.	E MIX	3/10/93	47.66	100.0000	140537.03	1.4053e3	50.76	30.0000	188641.86	6.2880e3
Averages			47.67	100.0000	127791.24	1.2779e3	50.78	15.2000	86333.43	5.3728e3
%RSD			0.04	0.00	7.44	7.44	0.03	75.97	83.56	10.63

130ClBz							140ClBz			
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON	Height	CF
tc10002.	A MIX	3/10/93	62.33	1.0000	8313.67	8.3136e3	62.94	1.0000	8124.11	8.1241e3
tc10009.	B MIX	3/10/93	62.31	7.5000	73708.74	9.8278e3	62.92	7.5000	73706.47	9.8275e3
tc10010.	C MIX	3/10/93	62.32	15.0000	155730.00	1.0382e4	62.93	15.0000	156476.55	1.0431e4
tc10005.	D MIX	3/10/93	62.34	22.5000	229426.23	1.0196e4	62.95	22.5000	231874.56	1.0305e4
tc10006.	E MIX	3/10/93	62.32	30.0000	373780.59	1.2459e4	62.93	30.0000	377080.75	1.2569e4
Averages			62.32	15.2000	168191.84	1.0235e4	62.94	15.2000	169452.48	1.0251e4
%RSD			0.02	75.97	84.43	14.51	0.02	75.97	84.68	15.51

120ClBz										
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF				
tc10002.	A MIX	3/10/93	64.86	1.0000	8132.34	8.1323e3				
tc10009.	B MIX	3/10/93	64.85	7.5000	60212.65	8.0283e3				
tc10010.	C MIX	3/10/93	64.85	15.0000	130160.87	8.6773e3				
tc10005.	D MIX	3/10/93	64.87	22.5000	189547.84	8.4243e3				
tc10006.	E MIX	3/10/93	64.86	30.0000	300725.13	1.0024e4				
Averages			64.86	15.2000	137755.77	8.6573e3				
%RSD			0.02	75.97	82.86	9.30				

L 0001818

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Software Version: 3.2 <16C20>

Sample Name : 1 PPB 8010/8020 STD

Sample Number: A MIX

Operator :

Time : 3/11/93 8:52 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 10:57 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\SC10002.raw

Result File : n:\v3400s\SC10002.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 37

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ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (15X) Range	Component Name	SAMPLE CON (PPB)
1	5.761	0.0	BV	39584.8633	21490.75	1117.47	0.54		0.54
2	7.064	0.4	VV DCIDFMe	51987.1680	77980.75	3087.47	1.50	DCIDFMe	1.50
3	8.353	0.1	VV CLME	1.0443e5	156657.11	8156.97	1.50	CLME	1.50
4	9.102	0.1	VV VCl	1.4745e5	221183.44	9092.31	1.50	VCl	1.50
5	11.923	-0.2	VV BrMe	21620.4375	32430.66	1505.09	1.50	BrMe	1.50
6	12.493	-0.0	VV ClEa	1.5243e5	228648.50	11513.79	1.50	ClEa	1.50
7	14.037	0.1	VV TCIFMe	1.9025e5	285387.19	14478.36	1.50	TCIFMe	1.50
8	16.510	0.0	BV	4.5559e5	124269.31	6408.74	0.27		0.27
9	17.058	0.1	VV 11DCIE	3.5646e5	356467.69	23495.80	1.00	11DCIE	1.00
10	19.113	0.1	VV CH2Cl2	2.8675e5	1147032.00	101089.73	4.00	CH2Cl2	4.00
11	20.260	0.1	VV T-12DCIE	3.8316e5	383165.22	28530.31	1.00	T-12DCIE	1.00
12	21.864	0.2	VV 11DCIEa	3.3275e5	332755.56	22159.17	1.00	11DCIEa	1.00
13	24.210	0.2	VV C-12DCIE	2.7819e5	278198.25	21939.74	1.00	C-12DCIE	1.00
14	24.859	0.2	VV CHCl3	4.3870e5	438707.97	32642.86	1.00	CHCl3	1.00
15	25.518	0.1	VV BrClMe	53451.4063	5345140.50	420198.66	100.00	BrClMe	100.00
16	26.654	0.2	VV 111TCIEa	6.5949e5	659492.38	29185.45	1.00	111TCIEa	1.00
17	27.792	0.1	VV CCl4	5.3735e5	537358.69	31613.37	1.00	CCl4	1.00
18	28.410	0.1	VV 12DCIEa	3.5887e5	358871.50	19989.11	1.00	12DCIEa	1.00
19	29.409	0.0	VV	5.6972e5	154771.53	5430.29	0.27		0.27
20	31.139	0.1	VV TCIE	3.6361e5	363614.19	25978.54	1.00	TCIE	1.00
21	31.879	0.1	VV 12DCIPa	2.9449e5	294497.56	17995.00	1.00	12DCIPa	1.00
22	32.831	0.1	VV BrDCI Me	2.8274e5	282741.44	15768.00	1.00	BrDCI Me	1.00

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L 0001813

0383

23	34.186	0.3	VV	2ClEthylVO	43117.5938	43117.59	1348.24	1.00	2ClEthylVO	1.00
24	35.127	0.1	VV	C-130ClPe	4.1232e5	412326.63	26962.42	1.00	C-130ClPe	1.00
25	37.518	0.1	VV	T-130ClPe	65164.7031	65164.70	3645.34	1.00	T-130ClPe	1.00
26	38.314	0.1	VV	112TClEa	2.4481e5	244810.50	14364.21	1.00	112TClEa	1.00
27	40.160	0.1	VV	TetClE	4.0935e5	409355.22	26053.02	1.00	TetClE	1.00
28	41.294	0.1	VV	DBrClMe	1.6415e5	164155.50	7282.99	1.00	DBrClMe	1.00
29	45.790	0.1	VV	ClBz	1.3609e5	136099.19	6996.22	1.00	ClBz	1.00
30	47.317	0.0	VV		27098.9199	3413.88	256.75	0.13		0.13
31	47.772	0.0	VV	o-Cl,F-Ben	34966.6289	3496662.75	205752.50	100.00	o-Cl,F-Ben	100.00
32	53.601	0.1	VV	CHBr3	53742.9063	53742.91	2436.02	1.00	CHBr3	1.00
33	55.045	0.1	VV	1122TetClE	1.8338e5	183385.06	9536.18	1.00	1122TetClE	1.00
34	57.752	3.1	VB	123TriClPr	1.2239e5	122394.63	6132.71	1.00	123TriClPr	1.00
35	62.419	0.1	BV	130ClBz	1.5387e5	153870.13	11948.33	1.00	130ClBz	1.00
36	63.025	0.1	VB	140ClBz	2.0428e5	204288.13	14050.87	1.00	140ClBz	1.00
37	64.942	0.0	BB	120ClBz	1.9275e5	192753.50	15111.93	1.00	120ClBz	1.00

6.2

8.8067e6 17966404.00 1.20e6 238.21

238.21

Missing Component Report

Component

Expected Retention (Sample File)

Air

1.845

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

L 0001820

Sample Name : 1 PPB 8010/8020 STD
FileName : N:\V3400S\SC10002.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: A MIX

Page 1 of 1

Date : 3/11/93 8:52 AM

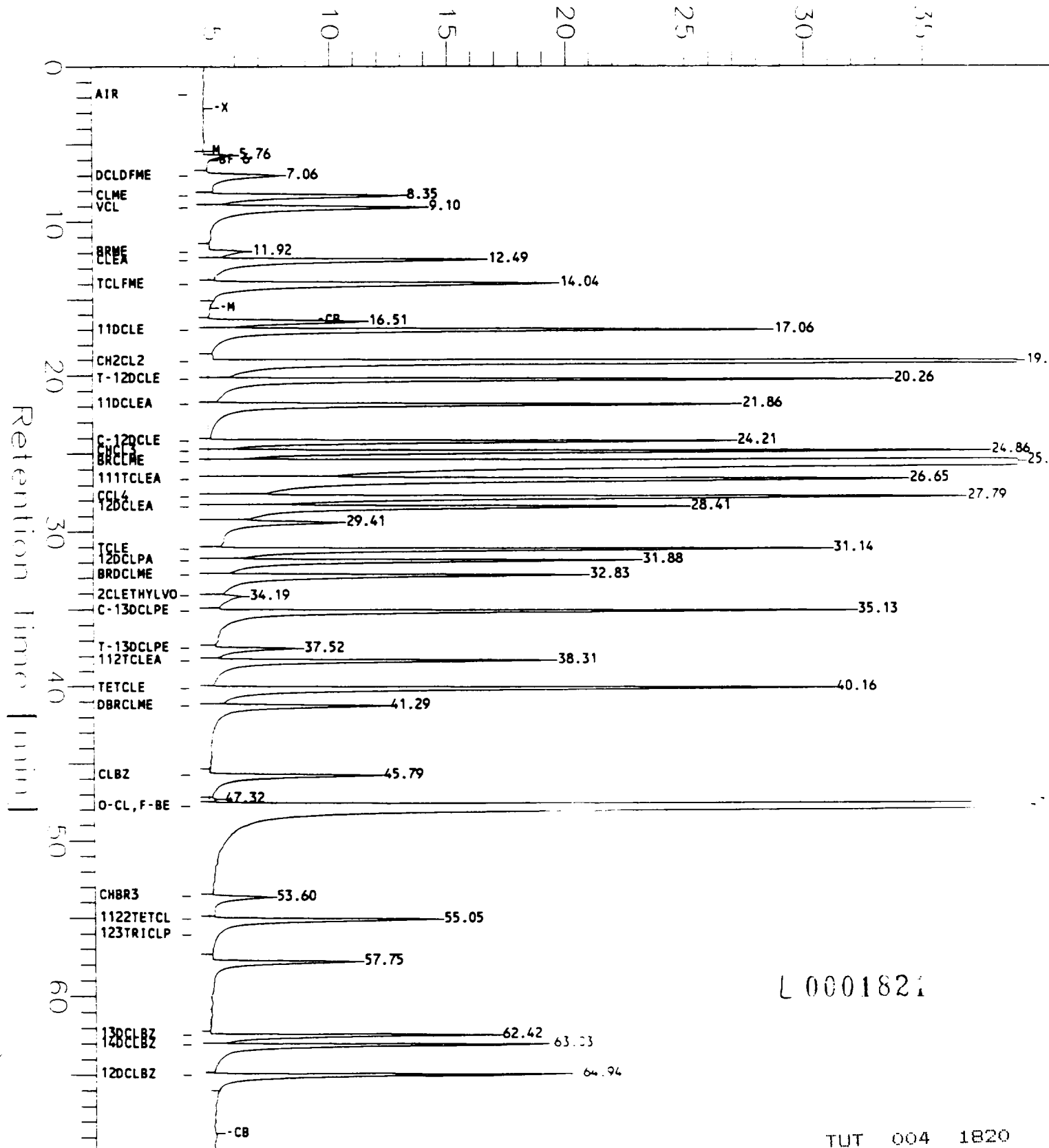
Time of Injection: 3/10/93 10:57 AM

Low Point : 4.00 mV

High Point : 39.00 mV

Plot Scale: 35 mV

Response [mV]



L 0001821

TUT 004 1820

Software Version: 3.2 <16C20>

Sample Name : 1 PPB 8010/8020 STD

Time : 3/11/93 8:53 AM

Sample Number: A MIX

Study : LINEARITY

Operator :

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 10:57 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\TC10002.raw

Result File : n:\v3400s\TC10002.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 60

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt (1S%)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.689	0.0	BV	808.7000	9097.88	1937.26	11.25			11.25
2	6.627	0.0	VV	4186.7622	1781.81	140.87	0.43			0.43
3	8.668	0.0	VV	24299.6992	11723.19	320.57	0.48			0.48
4	9.007	-0.0	VV VCI	10093.8857	15140.83	996.72	1.50		VCI	1.50
5	9.384	0.0	VV	8775.8545	46140.41	3397.89	5.26			5.26
6	10.186	0.0	VV	12573.8848	20987.50	1104.80	1.67			1.67
7	11.802	0.0	VV	32525.4336	6371.09	130.16	0.20			0.20
8	13.790	0.0	VV	71928.9219	5796.09	301.80	0.08			0.08
9	14.283	0.0	VV	77212.9844	2831.23	137.33	0.04			0.04
10	15.058	0.0	VB	29655.5371	113685.30	11956.72	3.83			3.83
11	15.649	0.0	BV	38007.5977	25445.73	2507.47	0.67			0.67
12	15.918	0.0	VB	37562.5352	13335.28	1329.65	0.36			0.36
13	16.577	0.0	BV	35711.1094	3084.11	323.46	0.09			0.09
14	16.977	-0.0	VB 11DCIE	33086.3750	33086.38	3745.34	1.00		11DCIE	1.00
15	19.050	0.0	BV	1.2068e5	6667.19	640.94	0.06			0.06
16	19.747	0.0	VV	1.4686e5	6729.59	531.61	0.05			0.05
17	20.189	0.1	VV T-12DCIE	71434.5625	71434.56	11601.63	1.00		T-12DCIE	1.00
18	21.471	0.0	VV	1.6945e5	4987.09	341.44	0.03			0.03
19	22.233	0.0	VV	1.1364e5	3265.66	130.01	0.03			0.03
20	23.458	0.0	VV	42221.2305	5700.25	610.87	0.14			0.14
21	24.132	0.1	VB C-12DCIE	33465.6094	33465.61	4524.67	1.00		C-12DCIE	1.00
22	25.481	0.0	BV	68750.0625	8443.50	555.69	0.12			0.12

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L0001822

23	28.433	0.1 VB Bz	1.1002e5	110021.50	12253.49	1.00	Bz	1.00
24	29.360	0.0 BV FBz	14844.1875	1484418.75	183585.84	100.00	FBz	100.00
25	31.060	0.0 VV TCLE	42094.0625	42094.06	5106.00	1.00	TCLE	1.00
26	34.038	0.0 VV 2ClEthylVO	11665.1250	11665.13	1004.75	1.00	2ClEthylVO	1.00
27	34.713	0.0 VV	48800.9414	1904.16	121.86	0.04		0.04
28	35.050	0.0 VV C-13DClPe	22875.5469	22875.55	3123.09	1.00	C-13DClPe	1.00
29	35.560	0.0 VV	31705.0918	955.63	94.13	0.03		0.03
30	35.842	0.0 VV	87386.1563	11684.21	1299.00	0.13		0.13
31	36.085	0.0 VV	1.4005e5	8434.06	585.04	0.06		0.06
32	36.583	0.0 VV Toluene	82075.9531	82075.95	9715.21	1.00	Toluene	1.00
33	37.415	0.0 VV T-13DClPe	9051.2500	9051.25	903.37	1.00	T-13DClPe	1.00
34	39.343	0.0 VV	70873.0313	7386.19	351.30	0.10		0.10
35	40.076	0.0 VV TetCLE	34092.3438	34092.34	3370.82	1.00	TetCLE	1.00
36	44.421	0.0 VB	2.7243e5	7445.75	181.94	0.03		0.03
37	45.684	0.0 BV ClBz	75250.2031	75250.20	6656.84	1.00	ClBz	1.00
38	46.247	0.0 VV EthylBz	69262.0938	69262.09	5566.69	1.00	EthylBz	1.00
39	46.919	0.0 VV m-Xylene	75892.2188	75892.22	5937.43	1.00	m-Xylene	1.00
40	47.690	0.0 VV o-Cl, F-Ben	13759.2949	1375929.50	114605.26	100.00	o-Cl, F-Ben	100.00
41	50.801	0.0 VV o-Xylene	64677.5625	64677.56	4983.35	1.00	o-Xylene	1.00
42	52.859	0.0 VV	1.1679e5	9902.28	422.51	0.09		0.09
43	53.833	0.0 VV	1.9109e5	10092.75	263.20	0.05		0.05
44	56.667	0.0 VV	1.9006e5	1988.75	86.99	0.01		0.01
45	57.370	0.0 VV	87020.1172	4841.50	462.54	0.06		0.06
46	57.654	0.0 VB	77548.4766	64739.63	6940.48	0.84		0.84
47	59.518	0.0 BV	1.9310e5	2568.44	110.58	0.01		0.01
48	60.206	0.0 VV	1.1282e5	10494.22	773.31	0.09		0.09
49	60.992	0.0 VB	89569.2500	3221.84	299.05	0.04		0.04
50	62.334	0.0 BV 13DClBz	59859.3750	59859.38	8313.67	1.00	13DClBz	1.00
51	62.944	0.0 VB 14DClBz	54676.1250	54676.13	8124.11	1.00	14DClBz	1.00
52	64.111	0.0 BV	1.1579e5	50665.13	3558.30	0.44		0.44
53	64.864	0.0 VB 12DClBz	52132.3750	52132.38	8132.34	1.00	12DClBz	1.00
54	65.838	0.0 BV	1.8099e5	2607.28	117.15	0.01		0.01
55	66.208	0.0 VB	48595.2070	783.96	131.20	0.02		0.02
56	66.503	0.0 BV	54726.8359	24469.33	3636.11	0.45		0.45
57	67.712	0.0 VV	42510.9883	782.56	149.70	0.02		0.02
58	68.000	0.0 VB	45801.9063	1054.16	187.17	0.02		0.02
59	68.654	0.0 BV	75768.3047	1812.67	194.56	0.02		0.02
60	68.868	0.0 VB	61049.5820	10084.57	1343.35	0.17		0.17
		0.5	4.3096e6	4311093.00	449958.56	245.98		245.98

Missing Component Report

Component	Expected Retention (Sample File)

Air	5.000

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

=====

L 0001823

Sample Name : 1 PPB 8010/8020 STD

FileName : N:\V3400S\TC10002.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: A MIX

Date : 3/11/93 8:53 AM

Time of Injection: 3/10/93 10:57 AM

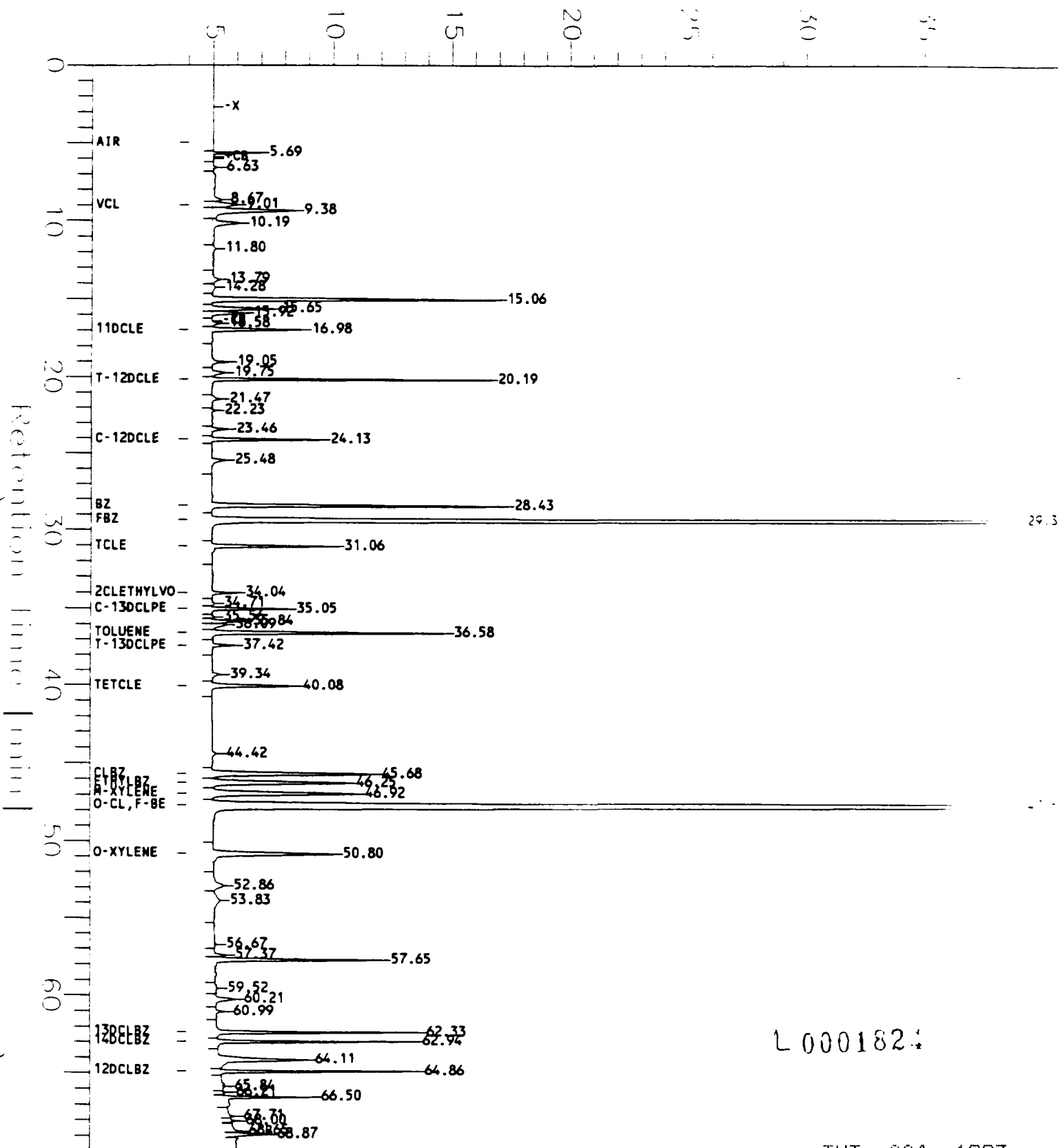
Low Point : 4.00 mV

Plot Scale: 35 mV

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High Point : 39.00 mV

Response [mV]



L 0001824

Software Version: 3.2 <16C20>

Sample Name :

Sample Number: B MIX

Operator :

Time : 3/11/93 8:54 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 7:47 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\SC10009.raw

Result File : n:\v3400s\SC10009.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 40

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	5.749	0.0	BB	26529.5879	17802.00	1381.18	0.67		0.67
2	7.017	-0.3	BV DCIDFMe	90686.7656	680150.75	28988.35	7.50	DCIDFMe	7.50
3	8.334	-0.1	VV CLME	1.7016e5	1276222.50	64754.24	7.50	CLME	7.50
4	9.089	-0.1	VV VCl	2.1079e5	1580973.75	71710.14	7.50	VCl	7.50
5	11.951	0.1	VV BrMe	78189.5703	586421.75	30582.75	7.50	BrMe	7.50
6	12.488	-0.0	VV ClEa	2.2920e5	1719029.25	88934.09	7.50	ClEa	7.50
7	14.026	-0.0	VV TClFMe	2.9115e5	2183675.75	116826.66	7.50	TClFMe	7.50
8	16.326	0.0	VB	6.2428e5	7736.16	291.16	0.01		0.01
9	17.050	0.0	BV 11DCIE	3.0354e5	2276551.00	175895.22	7.50	11DCIE	7.50
10	19.104	0.0	VV CH2Cl2	3.7125e5	2784394.50	258724.17	7.50	CH2Cl2	7.50
11	20.243	0.0	VV T-12DCIE	3.3586e5	2519021.50	231189.63	7.50	T-12DCIE	7.50
12	21.839	0.1	VV 11DCIEa	3.5151e5	2636326.00	208065.25	7.50	11DCIEa	7.50
13	24.180	0.0	VV C-12DCIE	3.0465e5	2284895.50	199678.52	7.50	C-12DCIE	7.50
14	24.832	0.0	VV CHCl3	4.6205e5	3465440.00	282593.56	7.50	CHCl3	7.50
15	25.494	0.0	VV BrClMe	59725.4648	5972546.50	475520.28	100.00	BrClMe	100.00
16	26.624	0.0	VV 111TClEa	4.7605e5	3570401.25	220623.47	7.50	111TClEa	7.50
17	27.762	0.0	VV CCl4	5.0909e5	3818239.00	261334.22	7.50	CCl4	7.50
18	28.379	0.0	VE 12DCIEa	3.1121e5	2334113.50	177472.16	7.50	12DCIEa	7.50
19	29.390	0.0	EV	6.7968e5	291341.00	8568.19	0.43		0.43
20	31.114	-0.0	VV TClE	3.9669e5	2975196.50	253475.56	7.50	TClE	7.50
21	31.853	-0.0	VV 12DCIPa	3.0542e5	2290694.00	176401.23	7.50	12DCIPa	7.50
22	32.804	-0.0	VV BrDClMe	3.0665e5	2299909.25	168720.89	7.50	BrDClMe	7.50

TUT 004 1824

0001825

24	35.105	-0.0	VV	C-130ClPe	2.8245e5	2118415.75	172998.06	7.50	C-130ClPe	7.50
25	36.545	0.0	VV		1.3705e5	80500.63	2141.07	0.59		0.59
26	37.465	-0.0	VV	T-130ClPe	1.8881e5	1416133.13	115713.91	7.50	T-130ClPe	7.50
27	38.276	-0.0	VV	112TClEa	2.8280e5	2121045.00	153723.75	7.50	112TClEa	7.50
28	40.121	-0.0	VV	TetClE	4.3529e5	3264716.50	233064.84	7.50	TetClE	7.50
29	41.254	-0.0	VV	D8rClMe	2.1188e5	1589133.50	85531.35	7.50	D8rClMe	7.50
30	45.737	-0.0	VV	ClBz	1.5353e5	1151522.25	67958.99	7.50	ClBz	7.50
31	47.735	-0.1	VE	o-Cl,F-Ben	40028.3789	4002837.75	238984.73	100.00	o-Cl,F-Ben	100.00
32	50.733	0.0	EB		1.9679e5	37642.00	465.95	0.19		0.19
33	53.530	-0.0	BV	CHBr3	96390.3672	722927.75	38313.16	7.50	CHBr3	7.50
34	54.987	-0.0	VV	1122TetClE	1.9598e5	1469881.00	100020.92	7.50	1122TetClE	7.50
35	56.021	-0.0	VV	123TriClPr	1.5225e5	1141944.75	69155.37	7.50	123TriClPr	7.50
36	60.201	0.0	VB		3.1125e5	32071.00	1231.12	0.10		0.10
37	62.376	-0.0	BV	130ClBz	1.9890e5	1491766.00	129612.23	7.50	130ClBz	7.50
38	62.985	-0.0	VV	140ClBz	2.4047e5	1803542.75	145219.77	7.50	140ClBz	7.50
39	64.912	-0.0	VB	120ClBz	2.0707e5	1553083.25	133073.33	7.50	120ClBz	7.50
40	68.655	0.0	88		2.7785e5	17076.75	928.78	0.06		0.06

		-0.4			1.0559e7	71867616.00	5.20e6	432.06		432.06

0389

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

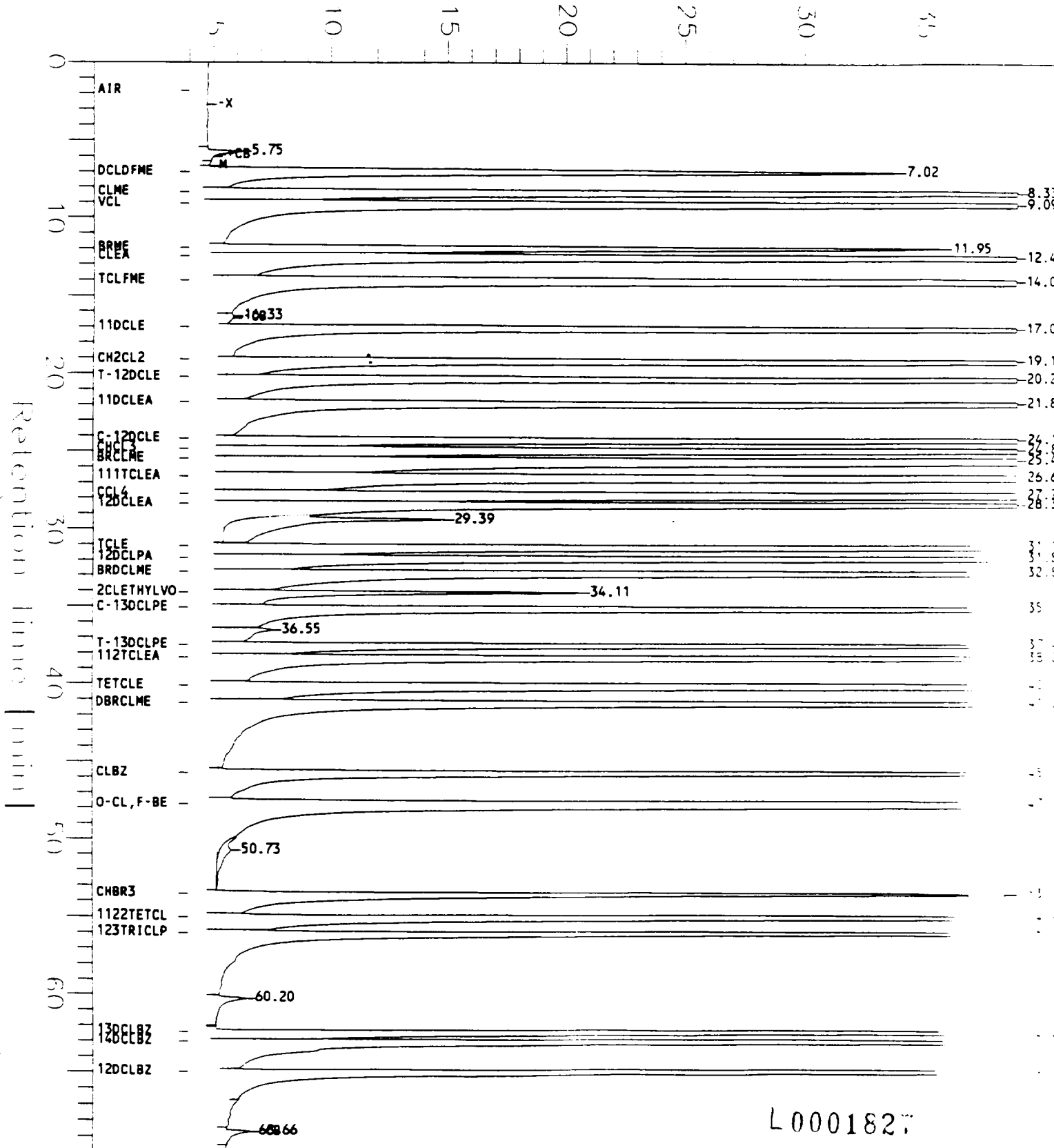
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L0001825

Sample Name :
FileName : N:\V3400S\SC10009.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor: 0
End Time : 70.00 min
Plot Offset: 4 mV

Sample #: 8 MIX
Date : 3/11/93 8:54 AM
Time of Injection: 3/10/93 7:47 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
Page 1 of 1
High Point : 39.00 mV

Response [mV]



L0001827

TUT 004 1826

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Software Version: 3.2 <16C20>

Sample Name :
Sample Number: B MIX
Operator :

Time : 3/11/93 8:55 AM
Study : LINEARITY

Instrument : V3400A/SALLY
AutoSampler : NONE
Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 7:47 PM
Delay Time : 0.00 min.
End Time : 70.00 min.
Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\TC10009.raw
Result File : n:\v3400s\TC10009.rst
Instrument File: N:\V3400S\8000SUE.ins
Process File : N:\V3400S\PID.prc
Sample File : N:\V3400S\LINPTC10.smp
Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml Area Reject : 100.00
Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 10 Area Threshold : 49 Bunch Factor: 2
Multiplier : 1.0000 Divisor : 1.0000 Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 80

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (IS%)	Range	Component Name	SAMPLE CON (PPB)
1	5.677	0.0	BB	884.9556	9955.75	2332.38	11.25			11.25
2	6.624	0.0	BB	2199.8477	628.50	94.57	0.29			0.29
3	7.090	0.0	BB	4166.7734	527.00	84.04	0.13			0.13
4	8.275	0.0	BV	7944.4727	593.91	49.68	0.08			0.08
5	8.641	0.0	VV	8209.4053	1525.83	123.50	0.19			0.19
6	9.000	-0.1	VV VCI	9880.2148	74101.61	4956.13	7.50		VCI	7.50
7	9.388	0.0	VV	9354.6514	31246.41	2211.08	3.34			3.34
8	10.185	0.0	VB	10005.9981	8675.23	576.11	0.87			0.87
10	11.809	0.0	VV	9774.2725	6197.14	421.50	0.63			0.63
11	12.484	0.0	VB	9010.0625	1232.97	90.93	0.14			0.14
12	13.796	0.0	BB	96730.1016	5902.00	228.52	0.06			0.06
13	15.063	0.0	BV	31812.8223	82948.28	8754.16	2.61			2.61
14	15.654	0.0	VV	38389.5898	17312.01	1688.78	0.45			0.45
15	15.922	0.0	VV	38668.6133	10015.73	970.10	0.26			0.26
16	16.576	0.0	VV	35298.4922	3838.18	407.25	0.11			0.11
17	16.979	-0.0	VB 11DCIE	27105.5762	203291.83	24000.19	7.50		11DCIE	7.50
18	18.860	0.0	BV	2.2597e5	2432.41	124.88	0.01			0.01
19	19.047	0.0	VV	95477.5000	9731.30	1182.47	0.10			0.10
20	19.754	0.0	VV	1.7785e5	4799.14	313.05	0.03			0.03
21	20.179	0.0	VV T-12DCIE	71826.2813	538697.13	95207.35	7.50		T-12DCIE	7.50
22	21.453	0.0	VV	1.5763e5	4319.08	317.88	0.03			0.03
23	21.833	0.0	VV	1.6621e5	3673.36	256.40	0.02			0.02

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24	22.201	0.0 VV	1.0873e5	4786.63	128.35	0.03		0.03
25	23.442	0.0 VV	45755.8164	4865.75	481.16	0.11		0.11
26	24.114	0.0 VB C-12DCIE	33240.9336	249306.98	34520.40	7.50	C-12DCIE	7.50
27	24.832	0.0 BV	59418.4492	3725.22	283.67	0.06		0.06
28	25.461	0.0 VV	64361.6992	8593.69	604.14	0.13		0.13
29	26.621	0.0 VV	2.7970e5	5289.84	231.74	0.02		0.02
30	27.786	0.0 VV	2.4031e5	5750.97	293.23	0.02		0.02
31	28.414	-0.0 VB Bz	86242.8438	646821.31	78078.69	7.50	Bz	7.50
32	29.345	-0.0 BE FBz	16485.7500	1648575.00	205257.63	100.00	FBz	100.00
33	30.767	0.0 EV	1.7140e5	14810.50	441.20	0.09		0.09
34	31.050	-0.0 VE TCIE	44287.8086	332158.56	43599.41	7.50	TCIE	7.50
35	31.336	0.0 EV	1.0213e5	14645.00	732.15	0.14		0.14
36	31.835	0.0 VV	1.8645e5	24535.16	671.88	0.13		0.13
37	32.801	0.0 VV	21708.4492	7935.98	367.31	0.37		0.37
38	33.251	0.0 VV	16802.9902	6470.09	386.88	0.39		0.39
39	34.024	-0.0 VV 2ClEthylVO	11087.7754	55438.88	7534.33	5.00	2ClEthylVO	5.00
40	34.834	0.0 VV	37171.3242	3778.11	317.43	0.10		0.10
41	35.036	-0.0 VV C-13DCIpe	15963.2207	119724.16	16686.59	7.50	C-13DCIpe	7.50
42	35.535	0.0 VV	37066.5078	3787.66	319.13	0.10		0.10
43	36.071	0.0 VV	1.9292e5	10084.47	507.82	0.05		0.05
44	36.569	-0.0 VV Toluene	75963.7969	569728.50	73372.82	7.50	Toluene	7.50
45	37.397	-0.0 VV T-13DCIpe	15788.8799	118416.59	15938.55	7.50	T-13DCIpe	7.50
46	38.190	0.0 VV	17458.7773	5728.97	296.44	0.33		0.33
47	39.318	0.0 VV	37262.3086	11779.75	1065.62	0.32		0.32
48	40.051	-0.0 VV TetClE	33161.6211	248712.16	25825.96	7.50	TetClE	7.50
49	41.185	0.0 VV	53725.0078	2307.84	144.80	0.04		0.04
50	44.837	0.0 VB	2.2273e5	7588.13	226.79	0.03		0.03
51	45.658	-0.0 BV ClBz	75649.9141	567374.38	52726.80	7.50	ClBz	7.50
52	46.221	-0.1 VV EthylBz	65270.9570	489532.19	41631.67	7.50	EthylBz	7.50
53	46.892	-0.1 VV m-Xylene	67570.8672	506781.50	41773.02	7.50	m-Xylene	7.50
54	47.653	-0.1 VV o-Cl, F-Ben	15382.4912	1538249.13	128852.53	100.00	o-Cl, F-Ben	100.00
55	50.764	-0.0 VV o-Xylene	58448.4648	438363.50	36094.68	7.50	o-Xylene	7.50
56	52.834	0.0 VV	1.1878e5	10072.91	422.58	0.09		0.09
57	53.411	0.0 VV	63424.0547	2482.16	195.03	0.04		0.04
58	53.765	0.0 VV	1.3286e5	3880.38	145.54	0.03		0.03
59	54.974	0.0 VV	65972.5859	1550.41	117.11	0.02		0.02
60	56.626	0.0 VB	1.9844e5	3887.94	162.88	0.02		0.02
61	57.327	0.0 BV	98953.3203	7249.08	609.04	0.07		0.07
62	57.729	0.0 VB	1.8299e5	3318.88	150.78	0.02		0.02
63	59.442	0.0 BV	1.3571e5	2024.28	124.01	0.02		0.02
64	60.227	0.0 VB	79266.2109	31420.69	3295.49	0.40		0.40
65	61.661	0.0 BV	1.7300e5	4758.50	228.66	0.03		0.03
66	62.310	-0.0 VV 13DCIBz	65427.2930	490704.69	73708.74	7.50	13DCIBz	7.50
67	62.923	-0.0 VB 14DCIBz	60673.9727	455054.81	73706.47	7.50	14DCIBz	7.50
68	64.093	0.0 BE	1.1257e5	50696.51	3662.25	0.45		0.45
69	64.521	0.0 EB	62401.1523	2575.50	335.65	0.04		0.04
70	64.850	-0.0 BB 12DCIBz	49540.8008	371556.00	60212.65	7.50	12DCIBz	7.50
71	65.434	0.0 BB	84734.3438	5707.50	547.78	0.07		0.07
72	65.824	0.0 BB	40319.6641	197.50	39.84	0.01		0.01
73	66.185	0.0 BB	51030.7930	381.00	60.72	0.01		0.01
74	66.491	0.0 BB	44340.4336	83975.02	15294.34	1.89		1.89
75	66.932	0.0 BB	78906.4219	914.25	94.23	0.01		0.01
76	67.849	0.0 BB	1.0558e5	829.00	63.85	0.01		0.01
77	68.650	0.0 BV	99585.1406	2548.90	208.15	0.03		0.03
78	68.882	0.0 VV	66817.9375	3881.99	472.47	0.06		0.06
79	69.121	0.0 VV	66685.7813	4099.34	499.92	0.06		0.06
80	69.488	0.0 VB	52027.4063	1023.77	160.03	0.02		0.02

	-0.5		6.0941e6	10242083.00	1.18e6	358.92		358.92

Missing Component Report

Component Expected Retention (Sample File)

Air 5.000

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

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L 0001829

Sample Name :
FileName : N:\V3400S\TC10009.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor: 0

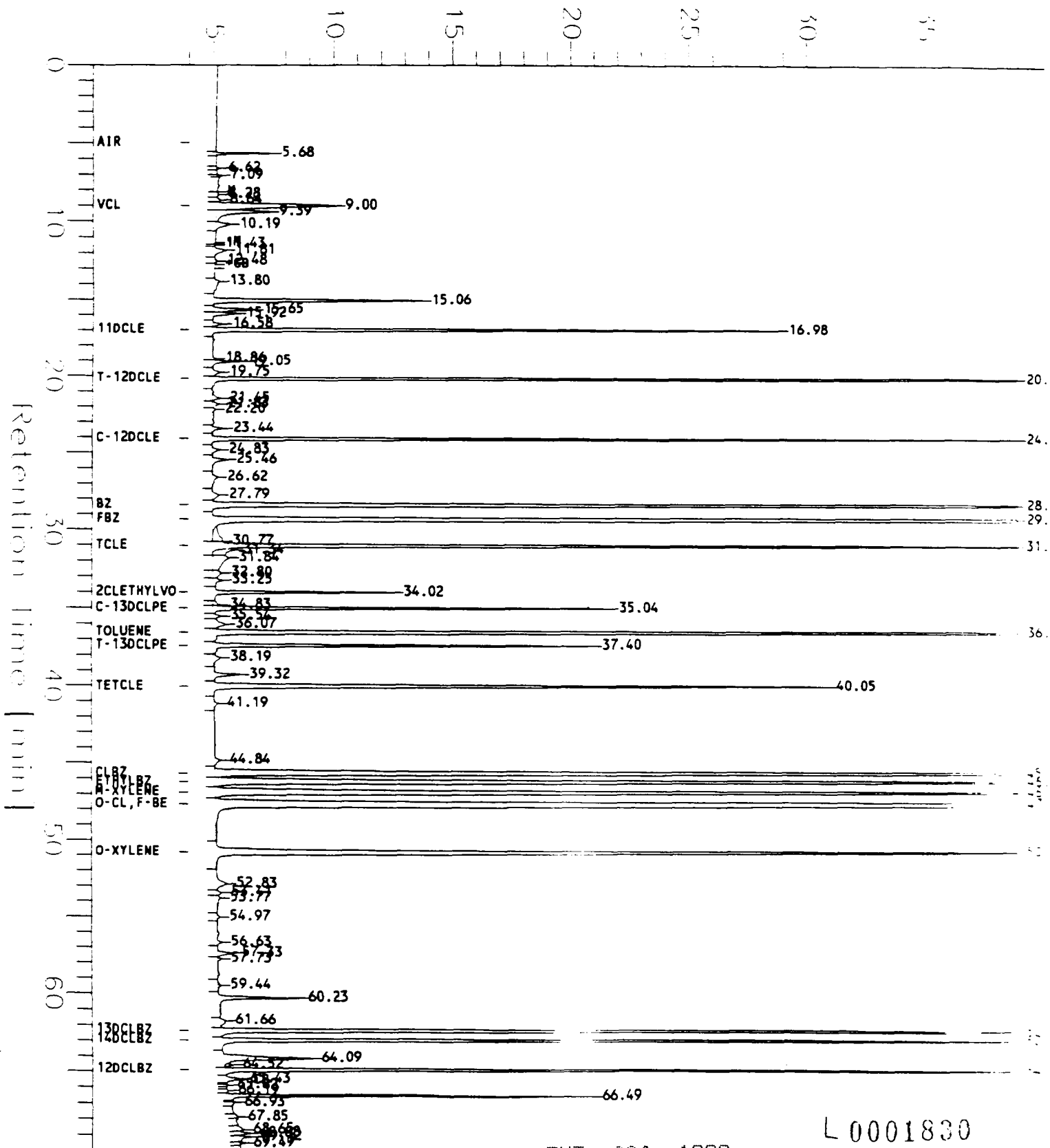
End Time : 70.00 min
Plot Offset: 4 mV

Sample #: 8 MIX
Date : 3/11/93 8:55 AM
Time of Injection: 3/10/93 7:47 PM
Low Point : 4.00 mV
Plot Scale: 35 mV

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0393

Response [mV]



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Software Version: 3.2 <16C20>

Sample Name : Time : 3/11/93 8:56 AM
 Sample Number: C MIX Study : LINEARITY
 Operator :

Instrument : V3400A/SALLY Channel : A A/D mV Range : 1000
 AutoSampler : NONE
 Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 9:03 PM
 Delay Time : 0.00 min.
 End Time : 70.00 min.
 Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\SC10010.raw
 Result File : n:\v3400s\SC10010.rst
 Instrument File: N:\V3400S\8000SUE.ins
 Process File : N:\V3400S\HALL.prc
 Sample File : N:\V3400S\LINHSC10.smp
 Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL Area Reject : 100.00
 Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 15 Area Threshold : 73 Bunch Factor: 2
 Multiplier : 1.0000 Divisor : 1.0000 Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 41

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ITAS-KNOXVILLE V-3400B J+ W DB-624 75m*0.53mm ID, 3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (IS%) Range	Component Name	SAMPLE CON (PPB)
1	5.739	0.0	BB	31583.1934	20158.50	1313.76	0.64		0.64
2	7.015	-0.3	BV DCIDFMe	1.0211e5	1531688.38	65191.56	15.00	DCIDFMe	15.00
3	8.324	-0.2	VV CLME	1.8579e5	2786940.00	141951.77	15.00	CLME	15.00
4	9.074	-0.2	VV VCl	2.1823e5	3273454.75	155780.55	15.00	VCl	15.00
5	11.919	-0.2	VV BrMe	1.0036e5	1505482.50	80779.73	15.00	BrMe	15.00
6	12.473	-0.2	VV ClEa	2.4628e5	3694337.75	196671.45	15.00	ClEa	15.00
7	14.003	-0.2	V8 TCIFMe	3.1562e5	4734355.00	260066.45	15.00	TCIFMe	15.00
8	16.233	0.0	BB	3.8694e5	3699.00	224.61	0.01		0.01
9	17.038	-0.0	BV 11DCIE	3.0514e5	4577157.50	355928.33	15.00	11DCIE	15.00
10	19.100	0.0	VV CH2Cl2	3.6077e5	5411564.00	510043.34	15.00	CH2Cl2	15.00
11	20.238	0.0	VV T-12DCIE	3.4231e5	5134712.50	485207.22	15.00	T-12DCIE	15.00
12	21.838	0.0	VE 11DCIEa	3.4944e5	5241743.00	432635.22	15.00	11DCIEa	15.00
13	23.342	0.0	EV	8.5620e5	53653.00	1374.83	0.06		0.06
14	24.188	0.1	VV C-12DCIE	3.1675e5	4751375.00	419508.97	15.00	C-12DCIE	15.00
15	24.840	0.1	VV CHCl3	4.7526e5	7129046.50	581353.63	15.00	CHCl3	15.00
16	25.506	0.1	VV BrClMe	63167.7109	6316771.00	503319.94	100.00	BrClMe	100.00
17	26.633	0.1	VV 111TCIEa	4.6112e5	6916942.00	442669.88	15.00	111TCIEa	15.00
18	27.774	0.1	VV CCl4	5.0630e5	7594554.00	530665.50	15.00	CCl4	15.00
19	28.393	0.1	VV 12DCIEa	3.0147e5	4522108.50	364573.44	15.00	12DCIEa	15.00
20	29.399	0.0	VV	7.1828e5	399060.25	11105.49	0.56		0.56
21	31.131	0.1	VV TCIE	3.9339e5	5900875.00	510178.63	15.00	TCIE	15.00
22	31.870	0.0	VV 12DCIPa	2.9914e5	4487245.50	356032.22	15.00	12DCIPa	15.00

TUT 004 1830

(0001831

23	32.822	0.0 VV BrDClMe	3.0809e5	4621476.50	361673.19	15.00	BrDClMe	15.00
24	34.116	0.0 VV 2ClEthylVO	62457.4141	624574.13	40786.82	10.00	2ClEthylVO	10.00
25	35.123	0.1 VE C-13DClPe	2.8819e5	4322954.50	369824.69	15.00	C-13DClPe	15.00
26	36.549	0.0 EV	1.4806e5	149608.00	3825.25	1.01		1.01
27	37.487	0.0 VV T-13DClPe	1.9715e5	2957330.50	251537.23	15.00	T-13DClPe	15.00
28	38.300	0.0 VV 112TClEa	2.8189e5	4228413.00	319574.31	15.00	112TClEa	15.00
29	40.147	0.0 VV TetClE	4.3817e5	6572678.00	482463.19	15.00	TetClE	15.00
30	41.272	0.0 VV DBrClMe	2.1217e5	3182569.00	185668.83	15.00	DBrClMe	15.00
31	45.755	-0.0 VV ClBz	1.5650e5	2347582.00	144141.81	15.00	ClBz	15.00
32	47.755	-0.0 VE o-Cl,F-Ben	40919.6250	4091962.50	243010.77	100.00	o-Cl,F-Ben	100.00
33	50.768	0.0 EB	1.6925e5	64477.50	927.99	0.38		0.38
34	53.534	-0.0 BV CHBr3	1.0269e5	1540370.63	91502.36	15.00	CHBr3	15.00
35	54.996	-0.0 VV 1122TetClE	1.9661e5	2949158.50	210529.58	15.00	1122TetClE	15.00
36	56.030	0.0 VV 123TriClPr	1.4976e5	2246466.00	147744.20	15.00	123TriClPr	15.00
37	60.187	0.0 VB	3.1032e5	84405.19	3249.84	0.27		0.27
38	62.384	0.0 BV 13DClBz	2.0728e5	3109311.00	278241.03	15.00	13DClBz	15.00
39	62.992	0.0 VV 14DClBz	2.4485e5	3672750.50	309535.06	15.00	14DClBz	15.00
40	64.918	-0.0 VB 12DClBz	2.1674e5	3251194.50	282515.47	15.00	12DClBz	15.00
41	68.660	0.0 BB	3.3200e5	17635.50	802.72	0.05		0.05

	-0.5		1.1398e7	136021856.00	1.01e7	662.98		662.98

Missing Component Report
Component

Expected Retention (Sample File)

Air 1.845

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

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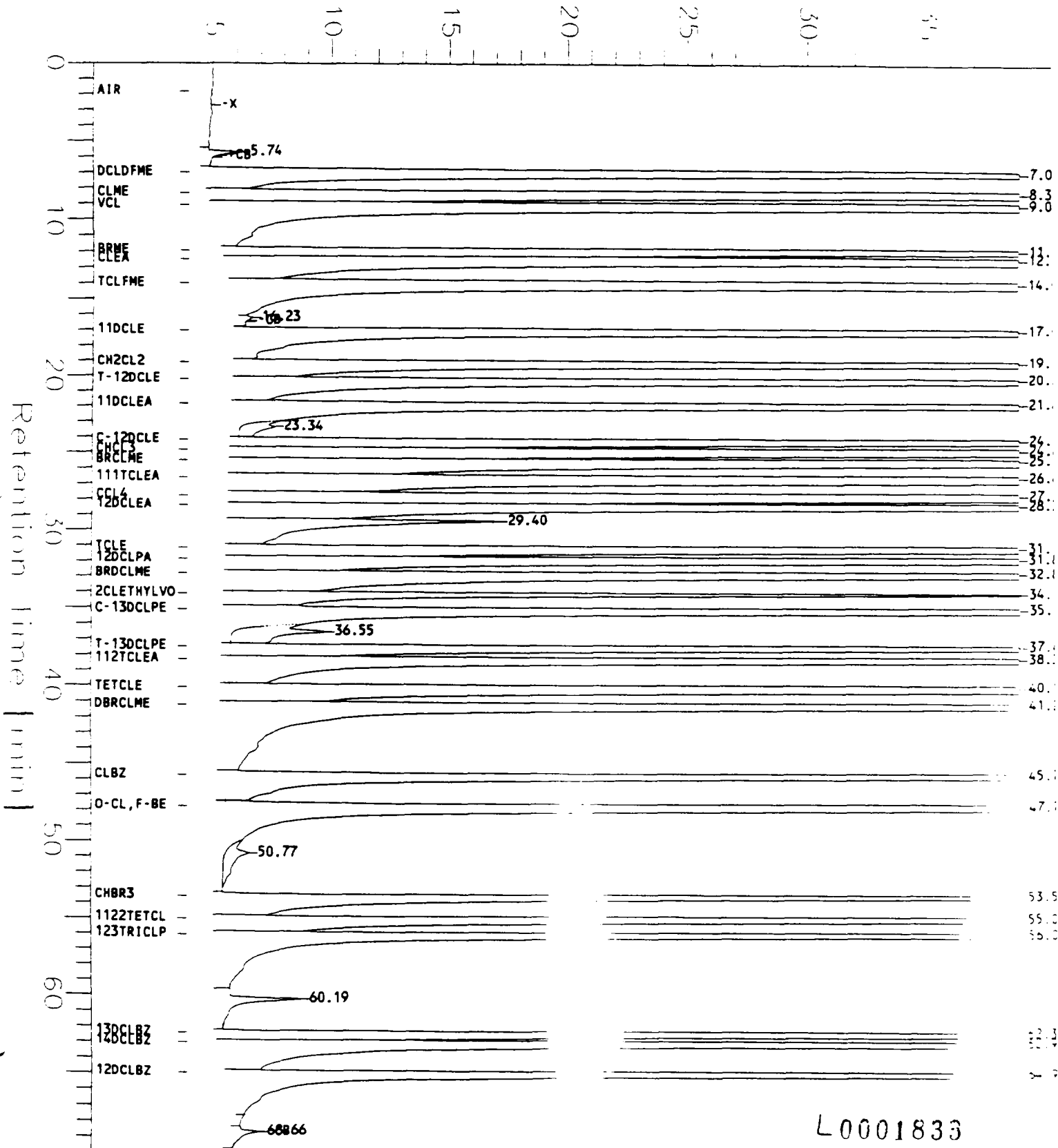
L0001832

Sample Name :
FileName : N:\V3400S\SC10010.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0
End Time : 70.00 min
Plot Offset : 4 mV

Sample #: C MIX
Date : 3/11/93 8:56 AM
Time of Injection: 3/10/93 9:03 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

Page 1 of 1

Response [mV]



L0001833

TUT 004 1832

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Software Version: 3.2 <16C20>

Sample Name : Time : 3/11/93 8:57 AM
 Sample Number: C MIX Study : LINEARITY
 Operator :

Instrument : V3400A/SALLY Channel : B A/D mV Range : 1000
 AutoSampler : NONE
 Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 9:03 PM
 Delay Time : 0.00 min.
 End Time : 70.00 min.
 Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\TC10010.raw
 Result File : n:\v3400s\TC10010.rst
 Instrument File: N:\V3400S\8000SUE.ins
 Process File : N:\V3400S\PID.prc
 Sample File : N:\V3400S\LINPTC10.smp
 Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml Area Reject : 100.00
 Sample Amount : 1.0000 Dilution Factor : 1.00

Noise Threshold: 10 Area Threshold : 49 Bunch Factor: 2
 Multiplier : 1.0000 Divisor : 1.0000 Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 85

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX)	Range	Component Name	SAMPLE CON (PPB)
1	5.667	0.0	BB	738.0889	8303.50	2003.32	11.25			11.25
2	6.619	0.0	BB	2307.1956	555.00	79.62	0.24			0.24
3	7.071	0.0	BB	5256.8530	1055.00	133.36	0.20			0.20
4	7.716	0.0	BB	5466.0981	1090.50	132.57	0.20			0.20
5	8.306	0.0	BV	9118.5400	1620.23	118.07	0.18			0.18
6	8.996	-0.2	VV VCI	10660.7451	159911.17	10584.16	15.00		VCI	15.00
7	9.343	0.0	VV	10169.4551	33450.83	2177.52	3.29			3.29
8	10.149	0.0	VB	10563.0313	9067.14	570.38	0.86			0.86
9	11.790	0.0	BV	10373.8916	13790.98	883.36	1.33			1.33
10	12.442	0.0	VB	10348.5801	3297.50	211.73	0.32			0.32
11	13.792	0.0	BV	39403.8672	2450.22	232.89	0.06			0.06
12	13.998	0.0	VB	75346.0234	5414.28	269.14	0.07			0.07
13	15.050	0.0	BB	32004.9082	79756.50	8394.63	2.49			2.49
14	15.646	0.0	BV	39063.4531	17207.80	1649.85	0.44			0.44
15	15.908	0.0	VV	38667.5508	9796.84	948.92	0.25			0.25
16	16.569	0.0	VB	36064.3008	4709.05	489.04	0.13			0.13
17	16.974	-0.1	VV 11DCLE	28307.0234	424605.34	51105.85	15.00		11DCLE	15.00
18	19.044	0.0	BV	1.0028e5	18415.47	2130.38	0.18			0.18
19	19.756	0.0	VV	1.6664e5	4635.28	322.71	0.03			0.03
20	20.179	0.0	VV T-12DCLE	74498.5703	1117478.50	192704.78	15.00		T-12DCLE	15.00
21	21.039	0.0	VV	1.0458e5	971.36	107.76	0.01			0.01
22	21.454	0.0	VV	1.4518e5	3874.14	309.59	0.03			0.03

23	21.826	0.0 VV	1.9095e5	8307.42	504.72	0.04	0.04
24	22.479	0.0 VV	1.2224e5	4160.03	153.98	0.03	0.03
25	23.448	0.0 VV	42232.4570	7246.75	776.40	0.17	0.17
26	24.122	0.1 VB C-12DCIE	35820.0391	537300.56	77275.16	15.00	C-12DCIE 15.00
27	24.839	0.0 BV	55759.9688	6740.84	546.99	0.12	0.12
28	25.476	0.0 VV	58597.3906	7805.75	602.73	0.13	0.13
29	26.638	0.0 VV	2.4925e5	8808.41	433.02	0.04	0.04
30	27.780	0.0 VV	2.0027e5	8510.73	520.72	0.04	0.04
31	28.430	0.1 VV Bz	87061.5000	1305922.50	154269.83	15.00	Bz 15.00
32	29.361	0.1 VE FBz	16753.9492	1675394.88	209136.36	100.00	FBz 100.00
33	30.583	0.0 EV	1.3489e5	10861.50	411.14	0.08	0.08
34	31.064	0.0 VE TCIE	48708.2148	730623.25	98041.21	15.00	TCIE 15.00
35	31.858	0.0 EV	1.7355e5	24683.50	726.19	0.14	0.14
36	32.822	0.0 VV	18209.1055	9684.66	534.38	0.53	0.53
37	33.276	0.0 VV	13821.7090	8373.95	608.73	0.61	0.61
38	34.045	0.0 VV 2CIEthylVO	12486.4453	124864.45	18194.46	10.00	2CIEthylVO 10.00
39	34.859	0.0 VV	29438.7402	4823.37	511.70	0.16	0.16
40	35.060	0.0 VV C-13DCIpe	16029.9473	240449.20	34385.94	15.00	C-13DCIpe 15.00
41	35.563	0.0 VV	35736.9023	3346.77	292.48	0.09	0.09
42	36.093	0.0 VV	1.8150e5	8779.19	469.92	0.05	0.05
43	36.590	0.0 VE Toluene	79261.5859	1188923.75	150229.17	15.00	Toluene 15.00
44	36.977	0.0 EV	1.2426e5	3516.00	274.88	0.03	0.03
45	37.423	0.0 VE T-13DCIpe	15999.9678	239999.52	33591.41	15.00	T-13DCIpe 15.00
46	37.734	0.0 EV	9910.9541	3260.50	297.19	0.33	0.33
47	38.210	0.0 VV	18447.9258	11024.66	539.86	0.60	0.60
48	39.344	0.0 VV	36613.3672	9342.77	860.15	0.26	0.26
49	40.081	0.0 VV TetCIE	36064.1523	540962.31	59294.62	15.00	TetCIE 15.00
50	41.222	0.0 VV	52718.2422	4894.78	312.97	0.09	0.09
51	44.868	0.0 VB	2.2493e5	8507.38	251.77	0.04	0.04
52	45.677	0.0 BV ClBz	79804.4688	1197067.00	110428.04	15.00	ClBz 15.00
53	46.242	-0.0 VV EthylBz	70880.0859	1063201.25	91326.90	15.00	EthylBz 15.00
54	46.910	-0.0 VV m-Xylene	75571.2031	1133568.00	94832.10	15.00	m-Xylene 15.00
55	47.677	-0.0 VV o-Cl, F-Ben	15639.4990	1563949.88	130910.27	100.00	o-Cl, F-Ben 100.00
56	50.780	-0.0 VV o-Xylene	62833.2344	942498.50	81220.63	15.00	o-Xylene 15.00
57	52.844	0.0 VV	1.3183e5	11647.09	440.25	0.09	0.09
58	53.451	0.0 VV	66945.7344	5024.78	374.04	0.08	0.08
59	53.783	0.0 VV	1.2270e5	4744.13	192.67	0.04	0.04
60	54.988	0.0 VV	98164.5078	4686.69	237.92	0.05	0.05
61	56.025	0.0 VV	93738.3047	3260.52	173.34	0.04	0.04
62	56.642	0.0 VV	86790.9141	2173.53	208.20	0.03	0.03
63	57.336	0.0 VV	99225.5859	5264.09	441.06	0.05	0.05
64	57.747	0.0 VB	82375.5781	2179.73	219.99	0.03	0.03
65	60.236	0.0 BB	98940.0938	34346.50	2886.04	0.35	0.35
66	61.807	0.0 BV	1.4668e5	3219.92	182.50	0.02	0.02
67	62.317	0.0 VV 13DCIBz	69771.4219	1046571.38	155730.00	15.00	13DCIBz 15.00
68	62.929	0.0 VB 14DCIBz	65634.9141	984523.75	156476.55	15.00	14DCIBz 15.00
69	63.720	0.0 BV	53442.8555	529.66	80.52	0.01	0.01
70	64.106	0.0 VE	1.1213e5	14637.74	1061.57	0.13	0.13
71	64.372	0.0 EV	48842.8438	873.00	145.36	0.02	0.02
72	64.528	0.0 VB	60447.8516	2949.59	396.82	0.05	0.05
73	64.854	-0.0 BB 12DCIBz	53031.5156	795472.75	130160.87	15.00	12DCIBz 15.00
74	65.442	0.0 BB	82829.5078	4750.50	466.41	0.06	0.06
75	66.208	0.0 BB	48638.3711	354.50	59.27	0.01	0.01
76	66.499	0.0 BV	44685.4727	67014.52	12136.06	1.50	1.50
77	66.926	0.0 VB	53593.1328	439.51	66.69	0.01	0.01
78	67.842	0.0 BB	84924.9141	1170.51	112.09	0.01	0.01
79	68.232	0.0 BV	41722.1875	264.58	51.57	0.01	0.01
80	68.333	0.0 VV	37207.6445	491.54	107.44	0.01	0.01
81	68.577	0.0 VV	1.1160e5	2885.76	210.28	0.03	0.03
82	68.890	0.0 VV	71617.0078	2673.74	303.61	0.04	0.04
83	69.129	0.0 VV	50435.0938	4099.29	660.98	0.08	0.08
84	69.343	0.0 VV	85146.0469	3000.73	286.60	0.04	0.04
85	69.494	0.0 VB	45536.7617	1192.36	212.94	0.03	0.03
		0.2	5.8299e6	17579302.00	2.09e6	492.93	492.93

Missing Component Report

Component Expected Retention (Sample File)

Air 5.000

L 0001835

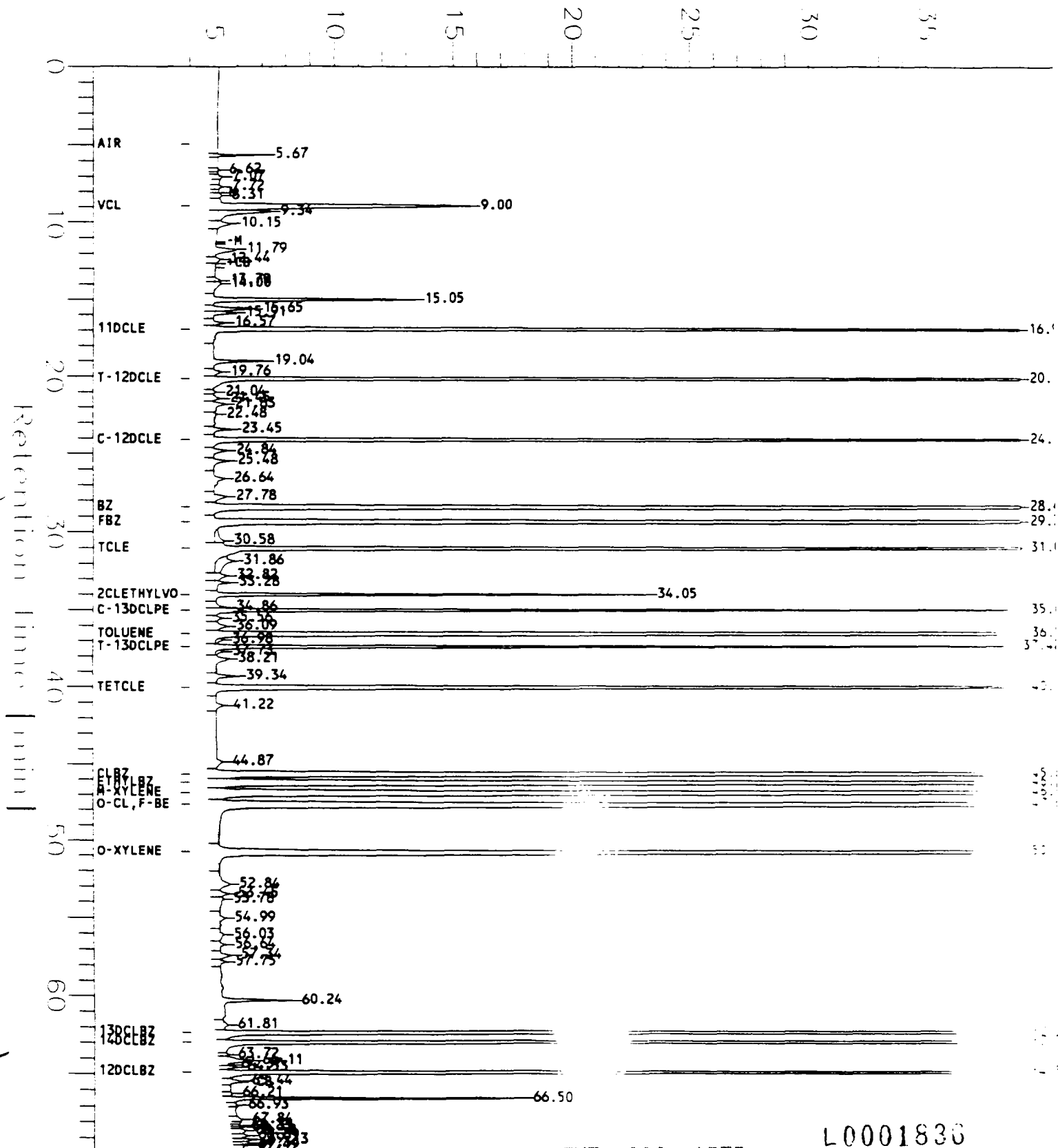
Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

Sample Name :
FileName : N:\V3400S\TC10010.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor: 0
End Time : 70.00 min
Plot Offset: 4 mV

Sample #: C MIX
Date : 3/11/93 8:58 AM
Time of Injection: 3/10/93 9:03 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

Page 1 of 1

Response [mV]



Software Version: 3.2 <16C20>

Sample Name : 22.5PPB 8010/8020 STD

Time : 3/11/93 8:58 AM

Sample Number: D MIX

Study : LINEARITY

Operator :

Instrument : V3400A/SALLY

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 2:44 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\sc10005.raw

Result File : n:\v3400s\SC10005.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 48

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt (ISX)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.752	0.0	BB	33580.4219	50963.25	3163.66	1.52			1.52
2	7.034	0.3	BV DCIDFMe	1.0040e5	2259152.50	95403.59	22.50		DCIDFMe	22.50
3	8.341	0.2	VV CLME	1.8723e5	4212800.00	218257.77	22.50		CLME	22.50
4	9.092	0.2	VV VCl	2.1866e5	4919993.00	242520.41	22.50		VCl	22.50
5	11.941	0.2	VV BrMe	1.0252e5	2306786.00	125658.02	22.50		BrMe	22.50
6	12.490	0.1	VV ClEa	2.3929e5	5384198.00	296858.63	22.50		ClEa	22.50
7	14.023	0.1	VB TCIFMe	3.1481e5	7083384.00	398174.75	22.50		TCIFMe	22.50
8	16.227	0.0	BB	4.4073e5	3442.00	183.49	0.01			0.01
9	17.043	0.0	BV 11DCIE	3.2538e5	7321098.00	586214.06	22.50		11DCIE	22.50
10	18.725	0.0	VV	3.8839e5	17425.20	1133.84	0.05			0.05
11	19.105	0.0	VV CH2Cl2	3.5519e5	7991992.00	760199.56	22.50		CH2Cl2	22.50
12	20.241	0.0	VV T-12DCIE	3.4350e5	7728971.00	736518.69	22.50		T-12DCIE	22.50
13	21.840	0.0	VE 11DCIEa	3.5719e5	8036918.50	677325.94	22.50		11DCIEa	22.50
14	23.347	0.0	EV	7.8681e5	76621.50	2136.53	0.10			0.10
15	24.189	0.0	VV C-12DCIE	3.2410e5	7292251.50	657874.81	22.50		C-12DCIE	22.50
16	24.847	0.0	VV CHCl3	4.5117e5	10151340.00	831054.56	22.50		CHCl3	22.50
17	25.510	0.0	VV BrClMe	60688.6641	6068866.50	485520.03	100.00		BrClMe	100.00
18	26.634	0.0	VV 111TCIEa	4.4464e5	10004544.00	664379.56	22.50		111TCIEa	22.50
19	27.774	0.0	VV CCl4	5.0309e5	11319571.00	805049.69	22.50		CCl4	22.50
20	28.393	-0.0	VV 12DCIEa	2.9623e5	6665254.00	553234.00	22.50		12DCIEa	22.50
21	29.398	0.0	VV	7.5607e5	474820.81	12553.37	0.63			0.63
22	31.127	-0.0	VV TCIE	3.9664e5	8924546.00	776961.63	22.50		TCIE	22.50

TUT 004 1836

L0001837

23	31.866	-0.0 VV	12DCIPa	2.9862e5	6719135.00	547291.56	22.50	12DCIPa	22.50
24	32.819	-0.0 VV	BrDCI Me	2.9464e5	6629437.50	538511.06	22.50	BrDCI Me	22.50
25	34.112	-0.0 VV	2ClEthylVO	54697.5195	820462.81	59349.77	15.00	2ClEthylVO	15.00
26	35.120	-0.0 VE	C-13DCIPe	2.8305e5	6368756.50	560590.88	22.50	C-13DCIPe	22.50
27	36.516	0.0 EV		1.6112e5	183333.50	6021.68	1.14		1.14
28	37.101	0.0 VV		57111.2695	35381.84	2258.38	0.62		0.62
29	37.486	-0.0 VV	T-13DCIPe	1.9695e5	4431510.50	390888.28	22.50	T-13DCIPe	22.50
30	38.299	-0.0 VV	112TClEa	2.8285e5	6364230.00	491486.84	22.50	112TClEa	22.50
31	40.151	0.0 VV	TetClE	4.4929e5	10109113.00	756137.38	22.50	TetClE	22.50
32	41.277	0.0 VV	DBrClMe	1.9963e5	4491806.00	284382.38	22.50	DBrClMe	22.50
33	44.242	0.0 VV		5.3186e5	105666.88	1389.95	0.20		0.20
34	45.769	0.0 VV	ClBz	1.5475e5	3481924.25	218491.72	22.50	ClBz	22.50
35	47.768	0.0 VE	o-Cl, F-Ben	39817.7852	3981778.50	234100.64	100.00	o-Cl, F-Ben	100.00
36	50.824	0.0 EV		1.1798e5	97651.00	2016.20	0.83		0.83
37	51.501	0.0 VV		1.3820e5	117863.00	2077.42	0.85		0.85
38	53.534	0.0 VV	CHBr3	1.0808e5	2431820.75	152685.14	22.50	CHBr3	22.50
39	54.999	0.0 VV	1122TetClE	1.8995e5	4274057.00	314176.91	22.50	1122TetClE	22.50
40	56.034	0.0 VV	123TriClPr	1.3753e5	3094640.25	218201.98	22.50	123TriClPr	22.50
41	58.809	0.0 VV		3.1079e5	46558.69	918.73	0.15		0.15
42	59.721	0.0 VV		2.4196e5	11598.24	572.72	0.05		0.05
43	60.194	0.0 VB		2.5394e5	111079.50	5226.29	0.44		0.44
44	62.401	0.0 BV	13DClBz	1.9784e5	4451487.50	406665.09	22.50	13DClBz	22.50
45	63.010	0.0 VV	14DClBz	2.2770e5	5123379.50	447390.56	22.50	14DClBz	22.50
46	64.936	0.0 VV	12DClBz	2.0131e5	4529533.50	411280.72	22.50	12DClBz	22.50
47	66.603	0.0 VB		6.2191e5	54566.38	1325.92	0.09		0.09
48	68.682	0.0 BB		2.5201e5	5999.50	359.76	0.02		0.02
		1.4	1.3430e7 196367680.00		1.49e7	896.68	896.68		

Missing Component Report

Component	Expected Retention (Sample File)
Air	1.845

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

Sample Name : 22.5PP8 8010/8020 STD

FileName : n:\v3400a\sc10005.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: D MIX

Date : 3/11/93 8:59 AM

Time of Injection: 3/10/93 2:44 PM

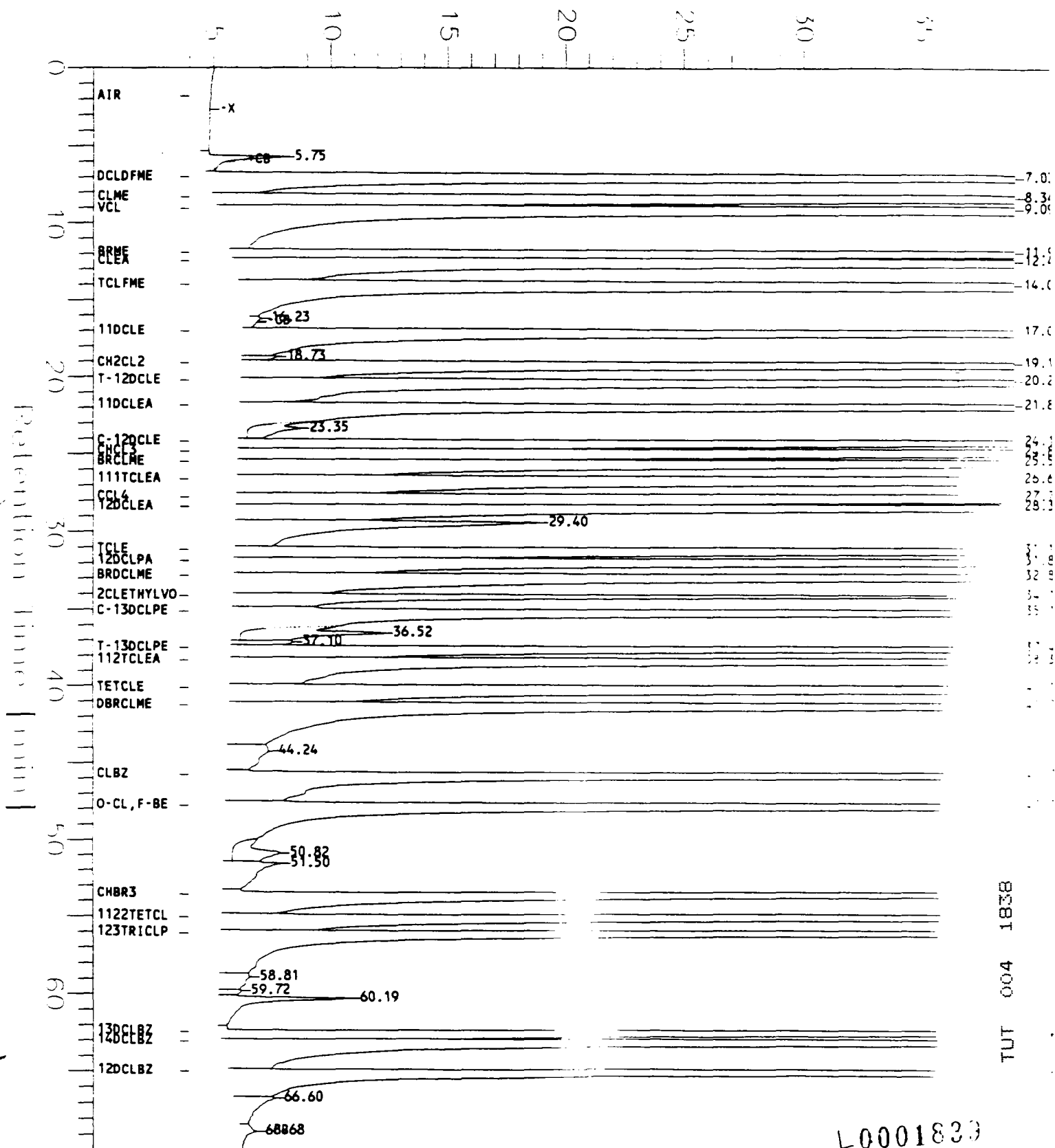
Low Point : 4.00 mV

Plot Scale: 35 mV

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High Point : 39.00 mV

Response [mV]



TUT 004 1838

L0001833

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Software Version: 3.2 <16C20>

Sample Name : 22.5PPB 8010/8020 STD

Time : 3/11/93 8:59 AM

Sample Number: D MIX

Study : LINEARITY

Operator :

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 2:44 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\tc10005.raw

Result File : n:\v3400s\TC10005.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 95

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBZ ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (1SX) Range	Component Name	SAMPLE CON (PPB)
1	5.696	0.0	BB	3216.2666	36183.00	6383.70	11.25		11.25
2	6.638	0.0	BB	2013.7808	687.00	112.92	0.34		0.34
3	7.090	0.0	BB	5030.4795	916.50	121.06	0.18		0.18
4	7.733	0.0	BB	6006.2720	1744.75	193.02	0.29		0.29
5	8.317	0.0	BV	10041.7520	3020.21	199.85	0.30		0.30
6	8.684	0.0	VV	7650.4443	3123.32	271.28	0.41		0.41
7	9.011	0.2	VV VCI	10050.4844	226135.89	15877.48	22.50	VCI	22.50
8	9.399	0.0	VV	9157.7236	65794.84	4748.02	7.19		7.19
9	10.177	0.0	VB	10270.4951	22417.78	1447.26	2.18		2.18
11	11.823	0.0	VV	10314.6484	17937.58	1154.47	1.74		1.74
12	12.473	0.0	VB	10490.0938	5065.19	320.85	0.48		0.48
13	13.804	0.0	BV	41398.3789	3863.31	349.52	0.09		0.09
14	14.001	0.0	VV	75683.6953	8306.86	411.08	0.11		0.11
15	15.063	0.0	VB	30684.7832	136738.08	14515.36	4.46		4.46
16	15.655	0.0	BV	38789.6367	33620.16	3246.20	0.87		0.87
17	15.922	0.0	VV	37665.8477	15930.88	1584.10	0.42		0.42
18	16.579	0.0	VV	37744.0938	4614.09	457.86	0.12		0.12
19	16.977	0.0	VV 110CLE	31212.6504	702284.63	85666.02	22.50	110CLE	22.50
20	18.173	0.0	VB	30424.0215	627.78	77.28	0.02		0.02
21	18.862	0.0	BV	86943.5938	2695.50	359.68	0.03		0.03
22	19.047	0.0	VV	91858.2500	25924.20	3274.21	0.28		0.28
23	19.758	0.0	VV	1.5770e5	4786.29	352.11	0.03		0.03

TUT 004 1839

L 0001840

24	20.100	0.0	VV	T-12DCIE	80890.1016	1815527.25	315832.19	22.50	T-12DCIE	22.50
25	21.056	0.0	VV		1.1287e5	1554.94	159.82	0.01		0.01
26	21.460	0.0	VV		1.3350e5	5870.13	510.12	0.04		0.04
27	21.828	0.0	VV		1.5256e5	10165.00	772.97	0.07		0.07
28	22.210	0.0	VV		51729.5313	2642.84	231.16	0.05		0.05
29	22.488	0.0	VV		92065.3203	4440.38	218.23	0.05		0.05
30	23.451	0.0	VV		41634.0430	9355.72	1016.75	0.23		0.23
31	24.125	0.0	VV	C-12DCIE	37281.3281	838829.88	118232.27	22.50	C-12DCIE	22.50
32	24.846	0.0	VV		55585.3594	9544.86	776.96	0.17		0.17
33	25.485	0.0	VB		60608.0938	7797.97	582.15	0.13		0.13
34	26.632	0.0	BV		2.3601e5	12662.66	657.43	0.05		0.05
35	27.774	0.0	VV		1.8248e5	11469.03	770.11	0.06		0.06
36	28.434	0.0	VV	Bz	92498.7422	2081221.63	248681.70	22.50	Bz	22.50
37	29.362	0.0	VV	FBz	16168.8027	1616880.25	201588.97	100.00	FBz	100.00
38	30.558	0.0	VV		92276.5391	3770.14	208.62	0.04		0.04
39	31.065	0.0	VV	TCIE	49209.3164	1107209.63	152276.05	22.50	TCIE	22.50
40	31.860	0.0	VV		1.1629e5	16158.78	709.48	0.14		0.14
41	32.811	0.0	VV		16350.9629	10361.53	636.70	0.63		0.63
42	33.275	0.0	VV		11395.8115	8830.42	778.56	0.78		0.78
43	34.044	-0.0	VV	2CIEthylVO	11725.7227	175885.84	25993.42	15.00	2CIEthylVO	15.00
44	34.859	0.0	VV		23022.2422	4952.91	671.89	0.22		0.22
45	35.063	0.0	VV	C-13DCIPe	16431.4160	369706.88	54483.83	22.50	C-13DCIPe	22.50
46	35.563	0.0	VV		31314.9395	1338.78	133.52	0.04		0.04
47	35.850	0.0	VV		88052.7500	6990.61	771.30	0.08		0.08
48	36.088	0.0	VV		1.4826e5	7518.67	492.66	0.05		0.05
49	36.592	0.0	VE	Toluene	83181.0156	1871572.88	237645.61	22.50	Toluene	22.50
50	36.976	0.0	EV		1.1799e5	4835.00	398.11	0.04		0.04
51	37.427	0.0	VE	T-13DCIPe	16546.3262	372292.34	53752.12	22.50	T-13DCIPe	22.50
52	37.728	0.0	EV		9754.6748	4323.00	400.35	0.44		0.44
53	38.209	0.0	VV		15163.0342	13348.34	795.26	0.88		0.88
54	39.346	0.0	VV		49823.2734	7579.84	512.82	0.15		0.15
55	40.082	0.0	VV	TetCIE	37947.4336	853817.25	93199.95	22.50	TetCIE	22.50
56	41.229	0.0	VB		52115.3984	6808.75	440.39	0.13		0.13
57	45.692	0.0	BV	ClBz	80516.8594	1811629.25	165874.27	22.50	ClBz	22.50
58	46.254	0.0	VV	EthylBz	75051.9922	1688669.75	143399.38	22.50	EthylBz	22.50
59	46.927	0.0	VV	m-Xylene	76959.6797	1731592.75	143462.70	22.50	m-Xylene	22.50
60	47.693	0.0	VE	o-Cl,F-Ben	14771.8789	1477187.88	124051.13	100.00	o-Cl,F-Ben	100.00
61	48.582	0.0	EV		51054.6680	8315.00	186.65	0.16		0.16
62	50.792	0.0	VV	o-Xylene	63143.9375	1420738.63	120726.61	22.50	o-Xylene	22.50
63	52.841	0.0	VV		1.2966e5	13288.50	510.70	0.10		0.10
64	53.462	0.0	VV		63458.1211	6283.24	493.42	0.10		0.10
65	53.782	0.0	VV		1.0092e5	9067.06	447.72	0.09		0.09
66	54.991	0.0	VV		90923.3047	6333.50	347.13	0.07		0.07
67	56.023	0.0	VV		75189.6016	3868.80	256.41	0.05		0.05
68	56.648	0.0	VV		86460.0234	4396.33	422.73	0.05		0.05
69	57.354	0.0	VV		92163.9688	20931.91	1888.17	0.23		0.23
70	57.756	0.0	VB		80390.9297	3396.58	351.26	0.04		0.04
71	59.310	0.0	BB		2.1696e5	3163.50	121.22	0.02		0.02
72	60.237	0.0	BV		98138.2109	14253.23	1207.45	0.15		0.15
73	60.999	0.0	VV		1.5194e5	2197.56	120.24	0.01		0.01
74	61.266	0.0	VB		84863.8906	1548.20	151.67	0.02		0.02
75	61.856	0.0	BV		89696.7578	1258.17	116.62	0.01		0.01
76	62.090	0.0	VV		52119.1563	865.70	138.09	0.02		0.02
77	62.339	0.0	VV	13DCIBz	68481.9688	1540844.38	229426.23	22.50	13DCIBz	22.50
78	62.950	0.0	VV	14DCIBz	64807.2930	1458164.13	231874.56	22.50	14DCIBz	22.50
79	63.745	0.0	VV		60812.4102	833.73	111.38	0.01		0.01
80	64.118	0.0	VE		1.1277e5	113426.39	8178.84	1.01		1.01
81	64.395	0.0	EB		62151.6836	4420.00	578.34	0.07		0.07
82	64.874	0.0	BB	12DCIBz	51691.6211	1163061.50	189547.84	22.50	12DCIBz	22.50
83	65.480	0.0	BB		65270.5117	1155.75	144.00	0.02		0.02
84	65.856	0.0	BB		59458.7305	593.00	81.11	0.01		0.01
85	66.223	0.0	BB		45232.9414	738.50	132.77	0.02		0.02
86	66.517	0.0	BV		45515.3555	28323.50	5060.63	0.62		0.62
87	67.027	0.0	VB		1.5583e5	3293.50	171.88	0.02		0.02
88	67.738	0.0	BB		40649.5234	324.27	64.87	0.01		0.01
89	68.015	0.0	BB		35939.8242	536.00	121.28	0.02		0.02
90	68.353	0.0	BV		43314.7227	654.77	122.93	0.02		0.02
91	68.679	0.0	VV		1.0545e5	3556.94	274.30	0.03		0.03
92	68.916	0.0	VV		71148.8203	3556.66	406.53	0.05		0.05
93	69.151	0.0	VV		51880.7500	1047.77	164.24	0.02		0.02
94	69.404	0.0	VB		46198.8320	409.38	72.36	0.01		0.01
95	69.732	0.0	BB		34354.8945	220.75	52.26	0.01		0.01
0.5		6.0722e6		25151828.00		3.02e6	635.84	635.84		

Missing Component Report
Component

Expected Retention (Sample File)

Air

5.000

L 0001841

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

TUT 004 1841

L 0001842

Sample Name : 22.5PPB 8010/8020 STD
FileName : n:\v3400a\tc10005.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: D MIX

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Date : 3/11/93 9:00 AM

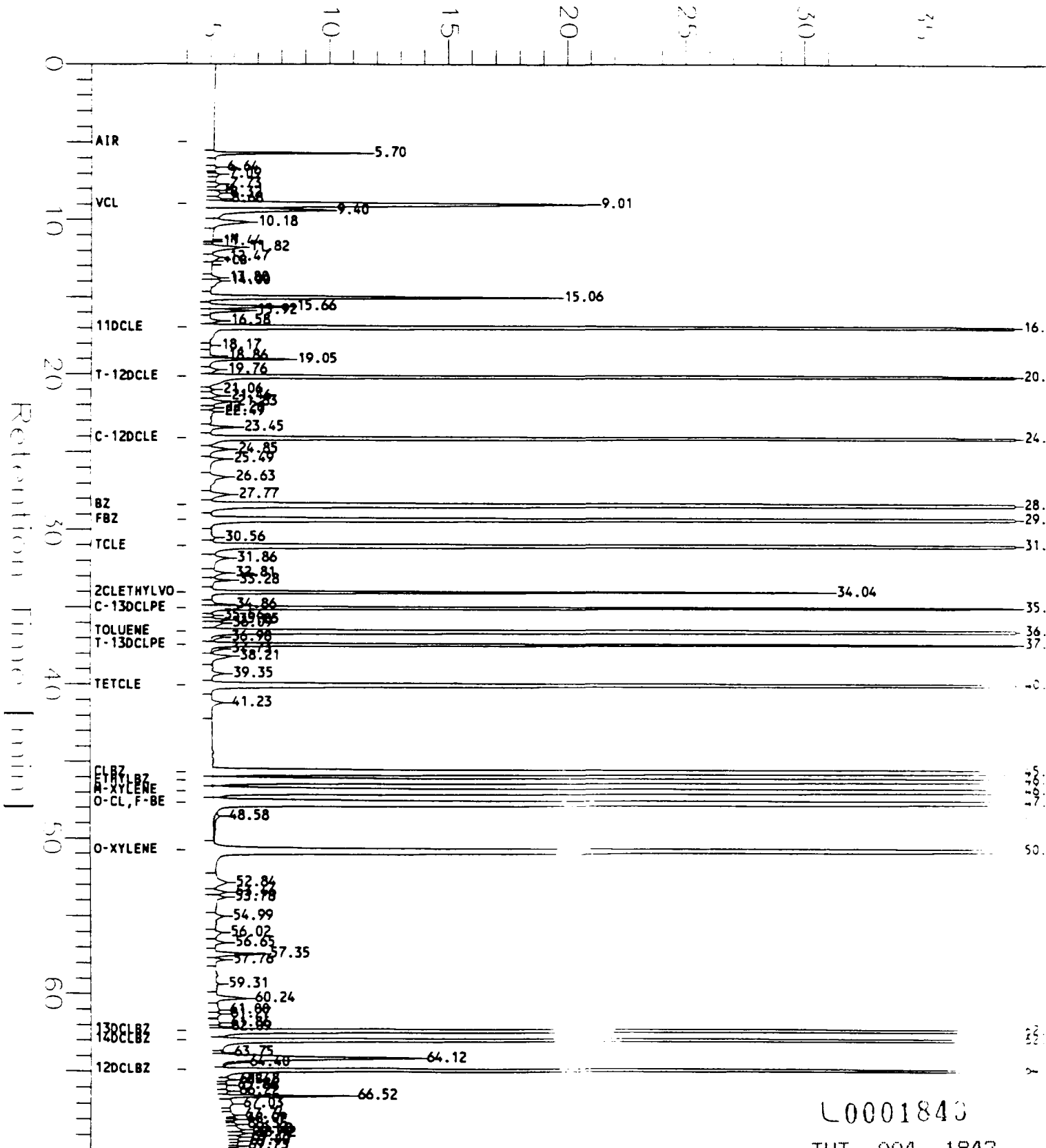
Time of Injection: 3/10/93 2:44 PM

Low Point : 4.00 mV

High Point : 39.00 mV

Plot Scale: 35 mV

Response [mV]



L0001843

TUT 004 1842

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Software Version: 3.2 <16C20>

Sample Name : 30 PPB 8010/8020 STD

Time : 3/11/93 9:01 AM

Sample Number: E MIX

Study : LINEARITY

Operator :

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 4:00 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\SC10006.raw

Result File : n:\v3400s\SC10006.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 47

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ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt (1SX)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.754	0.0	BB	35319.0156	34927.00	2035.47	0.99			0.99
2	7.023	0.1	BV DCIDFMe	1.2264e5	3679228.00	161134.89	30.00	+	DCIDFMe	30.00
3	8.320	-0.0	VV CLME	2.2006e5	6602099.50	351471.53	30.00	+	CLME	30.00
4	9.073	-0.0	VV VCl	2.4672e5	7401744.00	379235.38	30.00	+	VCl	30.00
5	11.907	-0.1	VV BrMe	1.2131e5	3639522.25	202527.45	30.00	+	BrMe	30.00
6	12.467	-0.1	VV ClEa	2.6930e5	8079197.00	444924.28	30.00	+	ClEa	30.00
7	13.998	-0.0	VV TClFMe	3.7073e5	11122182.00	613013.94	30.00	+	TClFMe	30.00
8	16.620	0.0	VB	2.1620e5	2268.57	246.53	0.01			0.01
9	17.028	-0.1	BE 11DCIE	3.4490e5	10347056.00	821308.63	30.00	+	11DCIE	30.00
10	18.721	0.0	EV	6.4565e5	48782.50	1909.46	0.08			0.08
11	19.100	-0.0	VV CH2Cl2	3.2463e5	9739129.00	854405.44	30.00	+	CH2Cl2	30.00
12	20.238	-0.0	VV T-12DCIE	3.1703e5	9511167.00	842804.25	30.00	+	T-12DCIE	30.00
13	21.833	-0.0	VE 11DCIEa	3.5931e5	10779524.00	868859.31	30.00	+	11DCIEa	30.00
14	23.311	0.0	EV	6.5463e5	103738.00	3476.74	0.16			0.16
15	24.172	-0.1	VV C-12DCIE	3.2515e5	9754534.00	844058.13	30.00	+	C-12DCIE	30.00
16	24.837	-0.0	VV CHCl3	4.1908e5	12572440.00	927063.13	30.00	+	CHCl3	30.00
17	25.483	-0.1	VV BrClMe	68345.5938	6834559.00	547283.81	100.00	+	BrClMe	100.00
18	26.614	-0.1	VV 111TCIEa	4.7345e5	14203508.00	909753.56	30.00	+	111TCIEa	30.00
19	27.769	-0.0	VV CCl4	4.9146e5	14744001.00	950729.88	30.00	+	CCl4	30.00
20	28.369	-0.1	VV 12DCIEa	3.1805e5	9541769.00	786230.50	30.00	+	12DCIEa	30.00
21	29.486	0.0	VV	7.8117e5	654322.38	16743.06	0.84			0.84
22	31.121	-0.0	VV TCIE	3.7077e5	11123226.00	892566.69	30.00	+	TCIE	30.00

TUT 004 1843

L0001844

23	31.846	-0.1 VV 12DCIPa	3.2181e5	9654532.00	786011.19	30.00	+	12DCIPa	30.00
24	32.799	-0.1 VV BrDCI Me	3.1922e5	9576640.00	779189.25	30.00	+	BrDCI Me	30.00
25	34.092	-0.1 VV 2CIEthylVO	63997.5742	1279951.50	95309.36	20.00	+	2CIEthylVO	20.00
26	35.104	-0.1 VE C-13DCIPe	3.0453e5	9136192.00	792303.88	30.00	+	C-13DCIPe	30.00
27	36.497	0.0 EV	1.9573e5	259501.50	9262.23	1.33			1.33
28	37.073	0.0 VV	60856.4258	53536.85	3206.89	0.88			0.88
29	37.468	-0.1 VV T-13DCIPe	2.1492e5	6447718.50	570986.06	30.00	+	T-13DCIPe	30.00
30	38.282	-0.1 VV 112TCIEa	2.9396e5	8819005.00	685554.81	30.00	+	112TCIEa	30.00
31	40.146	-0.0 VV TetCIE	4.4063e5	13219104.00	921831.38	30.00	+	TetCIE	30.00
32	41.253	-0.0 VV DBrCIE	2.1770e5	6531249.00	423579.47	30.00	+	DBrCIE	30.00
33	44.025	0.0 VV	4.3165e5	121373.44	1967.20	0.28			0.28
34	45.730	-0.1 VV ClBz	1.7245e5	5173737.00	334543.22	30.00	+	ClBz	30.00
35	47.730	-0.1 VV o-Cl,F-Ben	44659.6992	4465970.00	267903.63	100.00	+	o-Cl,F-Ben	100.00
36	50.699	0.0 VB	93732.0313	87230.81	2267.06	0.93			0.93
37	53.508	-0.1 BV CHBr3	1.1116e5	3334930.00	212757.58	30.00	+	CHBr3	30.00
38	54.983	-0.0 VV 1122TetCIE	1.9776e5	5932973.00	434918.50	30.00	+	1122TetCIE	30.00
39	56.017	-0.0 VV 123TriClPr	1.4958e5	4487505.50	311531.03	30.00	+	123TriClPr	30.00
40	59.708	0.0 VV	2.9708e5	23010.80	925.48	0.08			0.08
41	60.164	0.0 VB	2.2239e5	158831.00	8533.30	0.71			0.71
42	62.377	-0.0 BV 13DCIBz	2.3040e5	6912066.50	637054.06	30.00	+	13DCIBz	30.00
43	62.987	-0.0 VV 14DCIBz	2.5798e5	7739659.00	679890.75	30.00	+	14DCIBz	30.00
44	64.916	-0.0 VE 12DCIBz	2.2335e5	6700599.50	603674.00	30.00	+	12DCIBz	30.00
45	66.569	0.0 EV	7.5996e5	78913.50	1569.19	0.10			0.10
46	67.922	0.0 VB	3.7792e5	7611.25	304.35	0.02			0.02
47	68.660	0.0 BB	2.1444e5	11679.53	823.05	0.05			0.05

-1.2

1.3713e7 270732448.00 1.99e7 1126.46

1126.46

Missing Component Report

Component

Expected Retention (Sample File)

Air

1.845

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

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TUT 004 1844

L0001845

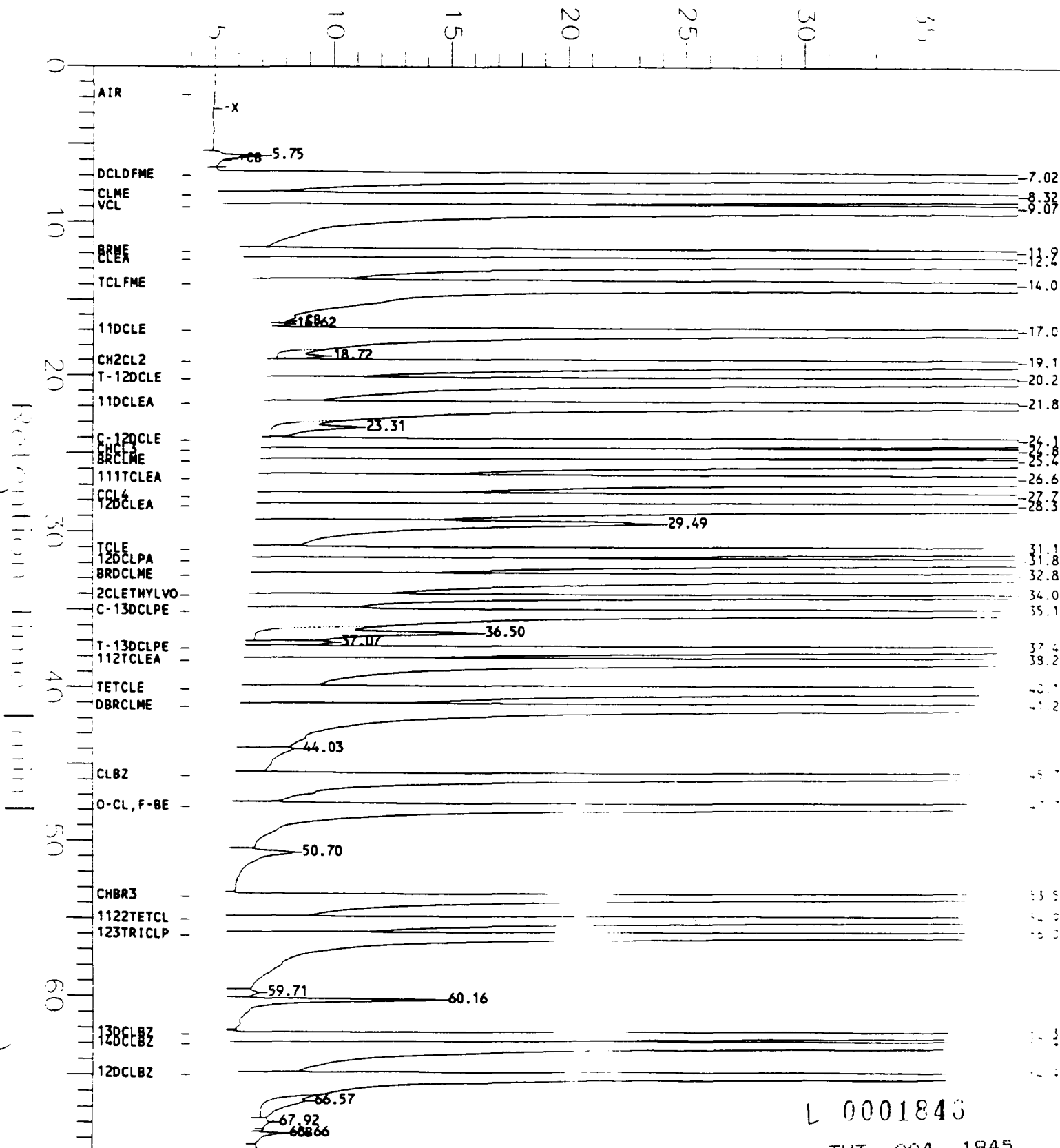
Sample Name : 30 PPS 8010/8020 STD
FileName : M:\V3400S\SC10006.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: E MIX
Date : 3/11/93 9:01 AM
Time of Injection: 3/10/93 4:00 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

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Response [mV]



L 0001843

TUT 004 1845

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Software Version: 3.2 <16C20>

Sample Name : 30 PPB 8010/8020 STD

Time : 3/11/93 9:02 AM

Sample Number: E MIX

Study : LINEARITY

Operator :

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 4:00 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\tc10006.raw

Result File : n:\v3400s\TC10006.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 93

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (1%) Range	Component Name	SAMPLE CON (PPB)
1	5.681	0.0	BB	1190.4445	13392.50	2842.00	11.25		11.25
2	6.624	0.0	BB	2337.2358	758.25	107.38	0.32		0.32
3	7.069	0.0	BB	6364.4473	1550.50	161.88	0.24		0.24
4	7.730	0.0	BB	6196.1318	2652.50	284.46	0.43		0.43
5	8.294	0.0	BV	9852.6523	4513.94	304.43	0.46		0.46
6	8.653	0.0	VV	7058.6426	2394.39	225.40	0.34		0.34
7	9.006	0.1	VE VCI	11867.6250	356028.75	24594.74	30.00	+ VCI	30.00
8	9.353	0.0	EV	9744.5918	52468.00	3559.99	5.38		5.38
9	10.147	0.0	VB	10596.5166	20805.19	1302.52	1.96		1.96
10	11.805	0.0	BV	10348.9111	28217.00	1806.14	2.73		2.73
11	12.450	0.0	VB	11098.0332	8026.31	480.57	0.72		0.72
12	13.988	0.0	BV	96559.7500	15494.84	601.01	0.16		0.16
13	15.041	0.0	VB	31139.4082	122674.67	12905.30	3.94		3.94
14	15.637	0.0	BV	39484.1953	31365.90	2975.26	0.79		0.79
15	15.899	0.0	VV	38861.9063	15133.70	1458.52	0.39		0.39
16	16.561	0.0	VV	36036.2344	5531.27	574.88	0.15		0.15
17	16.959	-0.1	VV 11DCIE	34698.8984	1040967.00	124801.84	30.00	+ 11DCIE	30.00
18	18.150	0.0	VB	32449.6250	666.64	76.94	0.02		0.02
19	18.851	0.0	BV	1.1905e5	1486.17	144.83	0.01		0.01
20	19.031	0.0	VV	88463.4531	34292.58	4497.33	0.39		0.39
21	19.743	0.0	VV	1.6331e5	4984.31	354.09	0.03		0.03
22	20.168	-0.1	VV T-12DCIE	91284.5469	2738536.50	477796.25	30.00	+ T-12DCIE	30.00

TUT 004 1846

L 0001847

23	21.024	0.0 VV	1.1432e5	2283.27	231.71	0.02	0.02
24	21.447	0.0 VV	1.3324e5	4707.11	403.80	0.04	0.04
25	21.804	0.0 VV	1.9224e5	16214.86	978.54	0.08	0.08
26	22.464	0.0 VV	56091.4063	3842.75	309.98	0.07	0.07
27	23.042	0.0 VV	60782.4063	1572.83	117.08	0.03	0.03
28	23.426	0.0 VV	40584.0000	12000.89	1337.97	0.30	0.30
29	24.102	-0.1 VV C-12DCIE	42160.3750	1264811.25	177435.11	30.00	+ C-12DCIE 30.00
30	24.833	0.0 VV	62691.4492	12288.20	886.88	0.20	0.20
31	25.453	0.0 VB	60239.8750	8758.03	657.82	0.15	0.15
32	26.611	0.0 BV	2.5106e5	18107.91	883.78	0.07	0.07
33	27.772	0.0 VV	2.0487e5	15182.53	908.06	0.07	0.07
34	28.409	-0.1 VV Bz	1.0502e5	3150636.00	377316.41	30.00	+ Bz 30.00
35	29.339	-0.1 VV FBz	18386.2637	1838626.38	229757.59	100.00	+ FBz 100.00
36	30.547	0.0 VV	55745.2266	2373.17	217.37	0.04	0.04
37	31.044	-0.1 VV TCIE	57406.8086	1722204.25	237990.09	30.00	+ TCIE 30.00
38	31.842	0.0 VV	98142.3281	17367.41	903.57	0.18	0.18
39	32.795	0.0 VV	16141.8984	14079.25	876.36	0.87	0.87
40	33.256	0.0 VV	10142.2842	10662.50	1088.48	1.05	1.05
41	34.027	-0.1 VV 2CIEthylVO	13668.4795	273369.59	40913.00	20.00	+ 2CIEthylVO 20.00
42	34.843	0.0 VV	21087.9316	6082.17	900.76	0.29	0.29
43	35.040	-0.1 VV C-13DCIPe	19118.8984	573566.94	86171.56	30.00	+ C-13DCIPe 30.00
44	35.548	0.0 VV	37698.8047	2752.59	228.03	0.07	0.07
45	36.074	0.0 VV	1.8016e5	8502.72	458.51	0.05	0.05
46	36.575	-0.0 VE Toluene	96016.3516	2880490.50	368032.91	30.00	+ Toluene 30.00
47	36.954	0.0 EV	1.1460e5	7157.00	606.72	0.06	0.06
48	37.406	-0.1 VE T-13DCIPe	19190.9961	575729.88	84508.34	30.00	+ T-13DCIPe 30.00
49	37.718	0.0 EV	9173.5547	5822.50	573.37	0.64	0.64
50	38.194	0.0 VV	16795.9121	18658.41	1159.87	1.11	1.11
51	39.332	0.0 VV	43419.1523	12381.28	961.21	0.29	0.29
52	40.063	-0.1 VV TetCIE	44392.6758	1331780.25	144395.91	30.00	+ TetCIE 30.00
53	41.208	0.0 VV	50926.7266	10186.84	674.26	0.20	0.20
54	44.864	0.0 VB	1.8650e5	6213.31	221.77	0.03	0.03
55	45.660	-0.0 BV ClBz	93156.7734	2794703.25	261096.59	30.00	+ ClBz 30.00
56	46.222	-0.0 VV EthylBz	85483.2734	2564498.25	219956.98	30.00	+ EthylBz 30.00
57	46.890	-0.0 VV m-Xylene	90736.5938	2722097.75	226905.36	30.00	+ m-Xylene 30.00
58	47.656	-0.0 VV o-Cl, F-Ben	16944.3301	1694433.00	140537.03	100.00	+ o-Cl, F-Ben 100.00
59	50.761	-0.0 VV o-Xylene	73810.7422	2214322.25	188641.86	30.00	+ o-Xylene 30.00
60	52.817	0.0 VV	1.4352e5	14875.66	516.48	0.10	0.10
61	53.440	0.0 VV	62921.7148	9944.54	787.60	0.16	0.16
62	53.769	0.0 VV	1.2104e5	9886.91	407.05	0.08	0.08
63	54.974	0.0 VV	76418.4375	7388.88	481.84	0.10	0.10
64	55.420	0.0 VV	60115.9688	1601.99	132.80	0.03	0.03
65	56.019	0.0 VV	87450.0781	6237.84	355.46	0.07	0.07
66	56.636	0.0 VV	89425.4375	4871.81	452.92	0.05	0.05
67	57.340	0.0 VV	95206.9766	14228.38	1242.45	0.15	0.15
68	57.734	0.0 VB	1.2520e5	6628.66	440.15	0.05	0.05
69	60.229	0.0 BV	81400.7031	33675.69	3439.39	0.41	0.41
70	61.240	0.0 VB	1.8350e5	4209.81	190.72	0.02	0.02
71	61.833	0.0 BV	73819.9844	668.56	75.29	0.01	0.01
72	62.063	0.0 VV	47820.3711	412.15	71.65	0.01	0.01
73	62.315	-0.0 VV 13DCIBz	82773.7813	2483213.50	373780.59	30.00	+ 13DCIBz 30.00
74	62.927	-0.0 VV 14DCIBz	78334.9141	2350047.50	377080.75	30.00	+ 14DCIBz 30.00
75	63.724	0.0 VV	67699.0234	1802.72	216.33	0.03	0.03
76	64.099	0.0 VE	1.0930e5	102127.65	7598.55	0.93	0.93
77	64.370	0.0 EV	59227.2070	4109.00	564.20	0.07	0.07
78	64.524	0.0 VB	53631.7813	2375.94	360.27	0.04	0.04
79	64.856	0.0 BB 12DCIBz	60866.4844	1825994.50	300725.13	30.00	+ 12DCIBz 30.00
80	65.834	0.0 BB	43591.9336	309.50	57.74	0.01	0.01
81	66.203	0.0 BB	50650.5508	824.50	132.38	0.02	0.02
82	66.499	0.0 BB	44304.7617	70511.23	12871.69	1.59	1.59
83	67.033	0.0 BB	75622.0156	1030.50	110.82	0.01	0.01
84	67.723	0.0 BV	51801.0352	829.96	130.30	0.02	0.02
85	67.993	0.0 VV	94256.3750	2427.85	209.47	0.03	0.03
86	68.231	0.0 VV	56767.5313	973.36	139.44	0.02	0.02
87	68.333	0.0 VV	46333.9023	1424.28	249.98	0.03	0.03
88	68.650	0.0 VV	1.2158e5	2893.78	193.55	0.02	0.02
89	68.916	0.0 VV	83235.7500	3650.88	356.70	0.04	0.04
90	69.133	0.0 VV	57590.2617	3802.68	536.98	0.07	0.07
91	69.378	0.0 VV	58304.2305	1255.48	175.12	0.02	0.02
92	69.506	0.0 VB	52669.8477	1418.25	218.98	0.03	0.03
93	69.707	0.0 BB	35675.6211	250.50	57.10	0.01	0.01
		-0.8	6.2842e6	37296312.00	4.54e6	769.86	769.86

Missing Component Report
Component

Expected Retention (Sample File)

Air

5.000

L 0001846

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

0412

TUT 004 1848

L 0001849

Sample Name : 30 PPB 8010/8020 STD
FileName : n:\v3400a\tc10006.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: E MIX

Page 1 of 1

Date : 3/11/93 9:02 AM

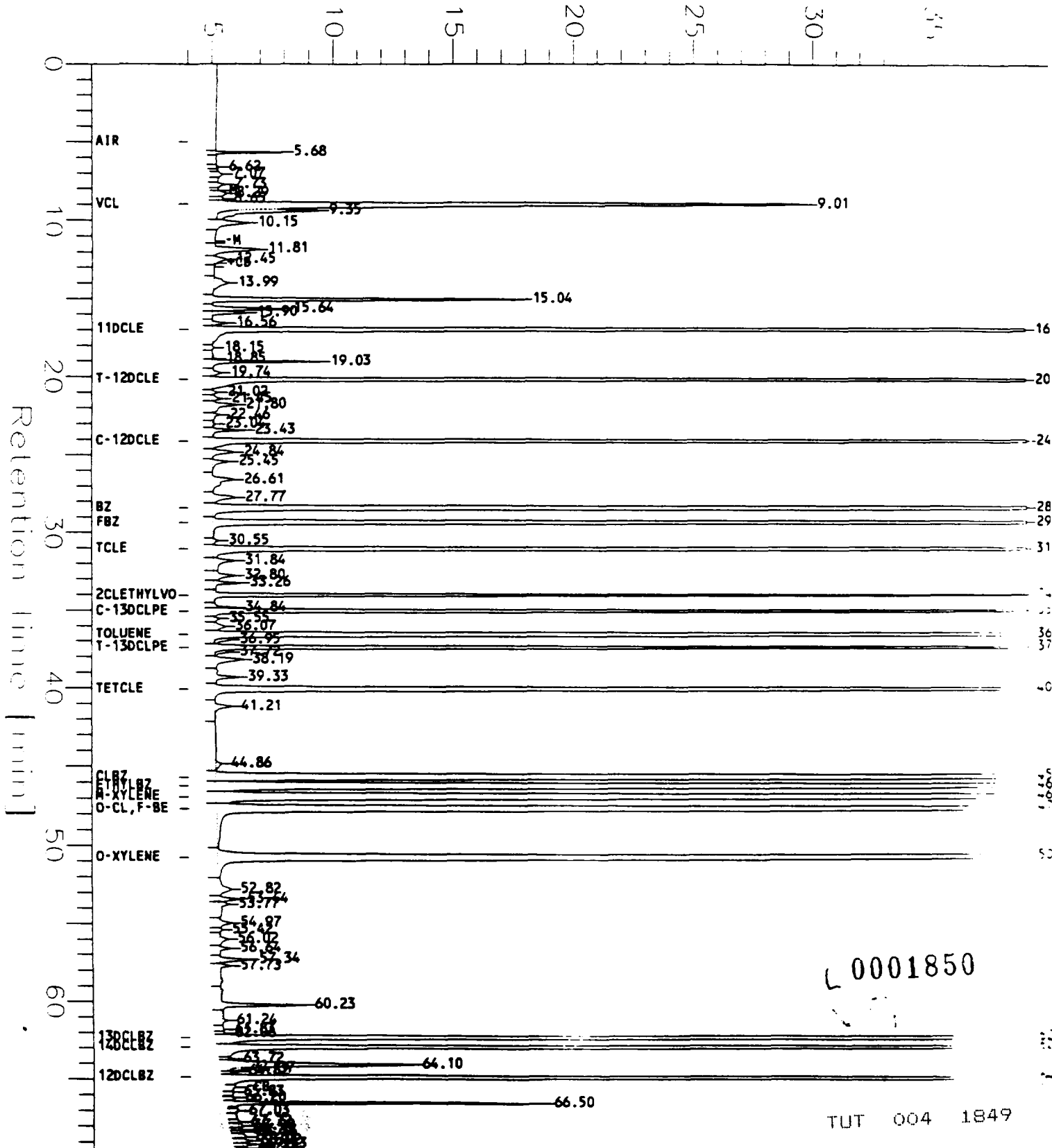
Time of Injection: 3/10/93 4:00 PM

Low Point : 4.00 mV

High Point : 39.00 mV

Plot Scale: 35 mV

Response [mV]



0001850

TUT 004 1849

Software Version: 3.2 <16C20>

Sample Name : c mix

Sample Number: 15ppb

Operator :

Time : 3/20/93 1:11 PM

Study : check standard

0414

Instrument : V3400A/SALLY

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 2:44 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : N:\V3400S\SC10024.raw

Result File : n:\v3400s\SC10024.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

ITAS-KNOXVILLE V3400B J+W DB-624 75m*0.53mm ID,3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR: Percent differences, standard concentrations, and Cfs

for BrClMe, o-Cl,F-Benzene, and B2ClIsopO are incorrect due to the compounds having a

concentration different than the other compounds in the mix. The percent differences for

these compounds and Cfs must be done manually. The computer could only calculate percent

differences and Cfs from only one standard concentration.

Standard check compared to 3 110/92 linearity 2-3/3/91

Peak #	Ret Time [min]	Component Name	Height [UV]	BL Cal. Range	CONCENTRATION [PPB]	STANDARD CON. [PPB]	PERCENT DIFFERENCE	Component Name	DAILY Cf
0	1.845	Air	0.00	0.00	15.000	-1.000e2		Air	0.0000
2	7.040	DCIDFMe	66149.01	BV	16.05	15.000	6.972	DCIDFMe	4.4099e3
3	8.349	CLME	147726.86	VV	16.00	15.000	6.695	CLME	9.8484e3
4	9.105	VCl	162390.61	VV	15.91	15.000	6.053	VCl	1.0826e4
5	11.957	BrMe	77711.88	VV	15.38	15.000	2.562	BrMe	5.1807e3
6	12.509	ClEa	197558.30	VV	16.28	15.000	8.552	ClEa	1.3170e4
7	14.041	TCIFMe	268092.50	VB	15.88	15.000	5.864	TCIFMe	1.7872e4
8	17.066	11DCIE	359473.78	BV	14.48	15.000	-3.449	11DCIE	2.3964e4
10	19.119	CH2Cl2	545554.50	VV	17.48	15.000	16.545	CH2Cl2	3.6370e4
11	20.255	T-12DCIE	488009.53	VV	16.00	15.000	6.648	T-12DCIE	3.2533e4
12	21.855	2756111DCIEa	438380.69	VV	15.91	15.000	56.039	2756111DCIEa	2.9225e4
14	24.200	C-12DCIE	429453.03	VV	16.04	15.000	6.909	C-12DCIE	2.8630e4
15	24.853	CHCl3	595053.94	VV	16.82	15.000	12.117	CHCl3	3.9670e4
16	25.517	BrClMe	489914.38	VV	97.34	15.000	540.938	BrClMe	3.2660e4
17	26.647	111TCIEa	444754.19	VV	15.03	15.000	0.194	111TCIEa	2.9650e4
18	27.785	CCl4	536980.44	VV	15.86	15.000	5.723	CCl4	3.5798e4
19	28.403	12DCIEa	376545.38	VV	15.86	15.000	5.697	12DCIEa	2.5103e4
21	31.139	TCIE	537164.81	VV	16.99	15.000	13.276	TCIE	3.5810e4
22	31.877	12DCIPa	376959.72	VV	16.28	15.000	8.532	12DCIPa	2.5130e4
23	32.827	BrDCI Me	373150.56	VV	16.62	15.000	10.780	BrDCI Me	2.4876e4

TUT 004 1850

0001851

24	34.123	2ClEthylVO	40179.27	VV	10.65	10 35.000	6.5 = 20.014	2ClEthylVO	2.6786e3
25	35.129	C-130ClPe	389795.16	VV	15.47	15.000	3.116	C-130ClPe	2.5986e4
27	37.496	T-130ClPe	262500.56	VV	15.84	15.000	5.628	T-130ClPe	1.7500e4
28	38.310	112TClEa	332695.91	VV	16.49	15.000	9.953	112TClEa	2.2179e4
29	40.160	TetClE	497043.66	VV	16.18	15.000	7.848	TetClE	3.3136e4
30	41.288	DBrClMe	192591.03	VV	15.84	15.000	5.624	DBrClMe	1.2839e4
31	45.783	ClBz	149983.92	VV	16.12	15.000	7.446	ClBz	9.9989e3
32	47.790	o-Cl,F-Benzene	255190.89	VV	105.02	100 15.000	105 600.442	o-Cl,F-Benzene	1.7012e4
34	53.558	CHBr3	96999.79	BV	15.78	15.000	5.205	CHBr3	6.4666e3
35	55.023	1122TetClEa	221239.92	VV	16.92	15.000	12.823	1122TetClEa	1.4749e4
36	56.054	123TriClPropane	154710.27	VV	17.08	15.000	13.879	123TriClPropane	1.0314e4
38	62.403	130ClBz	292140.81	BV	16.77	15.000	11.822	130ClBz	1.9476e4
39	63.011	140ClBz	319050.47	VV	16.52	15.000	10.099	140ClBz	2.1270e4
40	64.932	120ClBz	285926.97	VE	15.87	15.000	5.793	120ClBz	1.9061e4
					1.04e7	696.75	510.000	1.244e3	6.9340e5

0415

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	5.762	0.0	BB	46731.8008	23176.00	1423.28	0.50		0.50
2	7.040	0.4	BV DCIDFMe	97093.4922	1557948.00	66149.01	16.05	DCIDFMe	16.05
3	8.349	0.3	VV CLME	1.8333e5	2934118.00	147726.86	16.00	CLME	16.00
4	9.105	0.3	VV VCl	2.1253e5	3381047.50	162390.61	15.91	VCl	15.91
5	11.957	0.3	VV BrMe	94944.3594	1460656.50	77711.88	15.38	BrMe	15.38
6	12.509	0.3	VV ClEa	2.3082e5	3758499.00	197558.30	16.28	ClEa	16.28
7	14.041	0.3	VV TClFMe	3.1281e5	4967332.50	268092.50	15.88	TClFMe	15.88
8	17.066	0.2	BV 110ClE	3.1278e5	4529905.50	359473.78	14.48	110ClE	14.48
9	18.763	0.0	VV	4.7694e5	9620.84	629.50	0.02		0.02
10	19.119	0.1	VV CH2Cl2	3.3025e5	5773528.50	545554.50	17.48	CH2Cl2	17.48
11	20.255	0.1	VV T-120ClE	3.2075e5	5131116.50	488009.53	16.00	T-120ClE	16.00
12	21.855	0.1	VV 27561110Cl	3.3605e5	5345174.50	438380.69	15.91	27561110Cl	15.91
13	23.374	0.0	VV	8.3596e5	51467.28	1648.75	0.06		0.06
14	24.200	0.1	VV C-120ClE	3.0148e5	4834691.00	429453.03	16.04	C-120ClE	16.04
15	24.853	0.1	VV CHCl3	4.3218e5	7268351.00	595053.94	16.82	CHCl3	16.82
16	25.517	0.0	VV BrClMe	63776.5664	6208038.50	489914.38	97.34	BrClMe	97.34
17	26.647	0.1	VV 111TClEa	4.6014e5	6915470.00	444754.19	15.03	111TClEa	15.03
18	27.785	0.0	VV CCl4	4.8258e5	7652954.50	536980.44	15.86	CCl4	15.86
19	28.403	0.0	VV 120ClEa	2.9378e5	4657894.50	376545.38	15.86	120ClEa	15.86
20	29.410	0.0	VV	9.3184e5	453443.25	11556.91	0.49		0.49
21	31.139	0.0	VV TClE	3.6372e5	6180255.00	537164.81	16.99	TClE	16.99
22	31.877	0.0	VV 120ClPa	2.8929e5	4709645.50	376959.72	16.28	120ClPa	16.28
23	32.827	0.0	VV BrOClMe	2.8660e5	4762576.50	373150.56	16.62	BrOClMe	16.62
24	34.123	0.0	VV 2ClEthylVO	58356.3867	621369.63	40179.27	10.65	2ClEthylVO	10.65
25	35.129	0.0	VV C-130ClPe	2.9379e5	4544327.50	389795.16	15.47	C-130ClPe	15.47
26	36.550	0.0	VV	4.4770e5	135253.78	4215.80	0.30		0.30
27	37.496	0.0	VV T-130ClPe	1.9522e5	3093219.75	262500.56	15.84	T-130ClPe	15.84
28	38.310	0.0	VV 112TClEa	2.6690e5	4402133.50	332695.91	16.49	112TClEa	16.49
29	40.160	0.0	VV TetClE	4.1903e5	6778756.00	497043.66	16.18	TetClE	16.18
30	41.288	0.0	VV DBrClMe	2.0668e5	3274575.00	192591.03	15.84	DBrClMe	15.84
31	45.783	0.1	VV ClBz	1.4974e5	2413459.50	149983.92	16.12	ClBz	16.12
32	47.790	0.1	VV o-Cl,F-Ben	40781.6602	4282760.50	255190.89	105.02	o-Cl,F-Ben	105.02
33	50.801	0.0	VV	2.4094e5	41371.50	865.47	0.17		0.17
34	53.558	0.1	BV CHBr3	1.0480e5	1653878.75	96999.79	15.78	CHBr3	15.78
35	55.023	0.1	VV 1122TetClE	1.8283e5	3094146.00	221239.92	16.92	1122TetClE	16.92
36	56.054	0.0	VV 123TriClPr	1.3681e5	2337050.50	154710.27	17.08	123TriClPr	17.08
37	60.210	0.0	VV	3.9540e5	75685.44	3333.79	0.19		0.19
38	62.403	0.0	BV 130ClBz	1.9423e5	3257918.00	292140.81	16.77	130ClBz	16.77
39	63.011	0.0	VV 140ClBz	2.2633e5	3737969.00	319050.47	16.52	140ClBz	16.52

TUT 004 1851

L 0001852

40	64.932	0.0 VE 120C1Bz	2.0576e5	3265302.50	285926.97	15.87	120C1Bz	15.87	0416
41	67.363	0.0 EB	6.3787e5	12230.00	345.46	0.02		0.02	

	3.1		1.2099e7	139588304.00	1.04e7	698.50		698.50

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

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TUT 004 1852

L0001853

Sample Name : c mix

FileName : N:\V3400S\SC10024.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: 15ppb

Date : 3/20/93 1:11 PM

Time of Injection: 3/11/93 2:44 PM

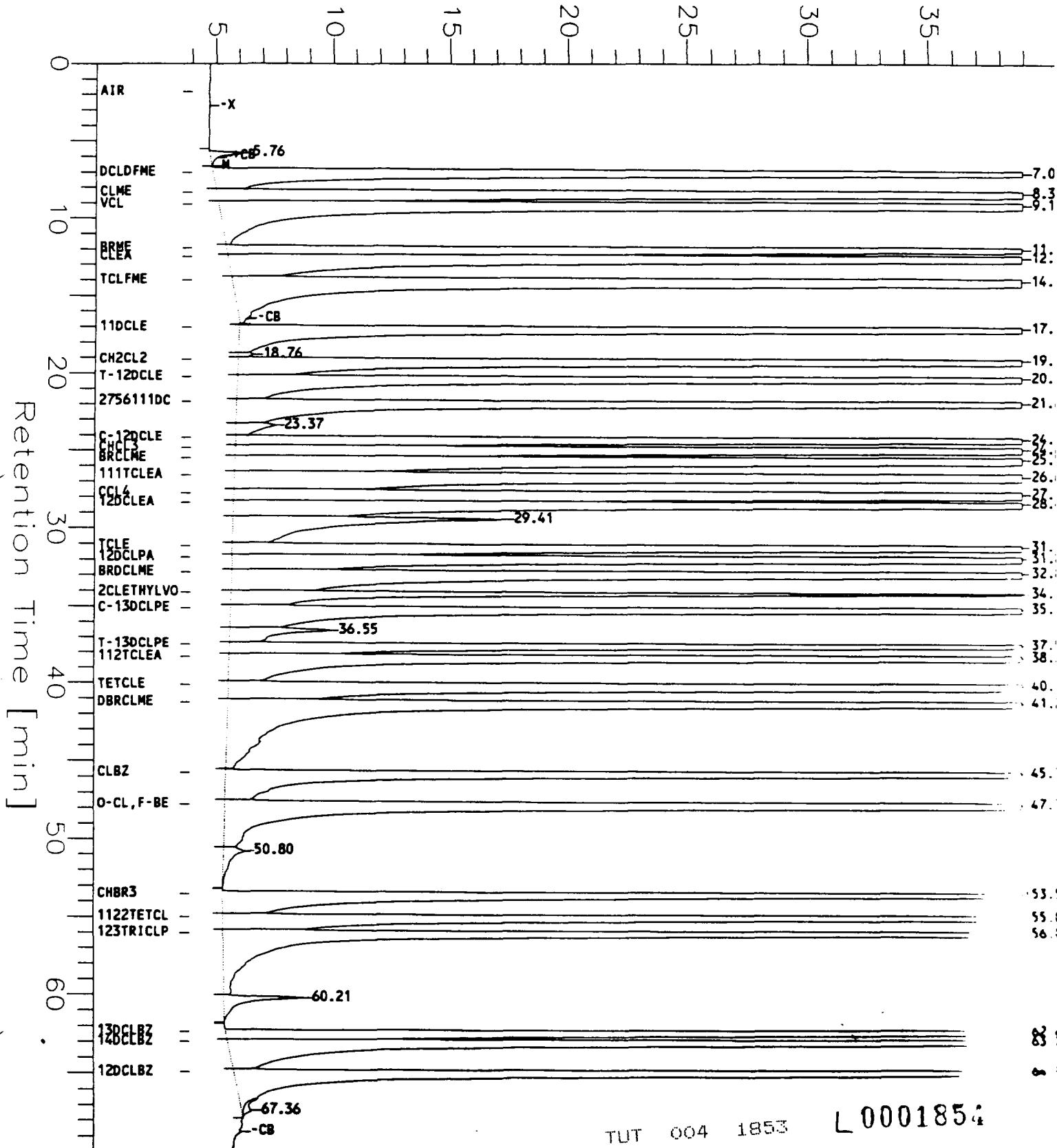
Low Point : 4.00 mV

Plot Scale: 35 mV

Page 1 of 1

High Point : 39.00 mV

Response [mV]



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Software Version: 3.2 <16C20>

Sample Name : c mix
Sample Number: 15ppb
Operator :

Time : 3/20/93 1:11 PM 0418
Study : check standard

Instrument : V3400A/SALLY
AutoSampler : NONE
Rack/Vial : 0/0

Channel : B A/D mV Range : 1000

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 2:44 PM
Delay Time : 0.00 min.
End Time : 70.00 min.
Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC10024.raw
Result File : n:\v3400s\TC10024.rst
Instrument File: N:\V3400S\8000SUE.ins
Process File : N:\V3400S\PID.prc
Sample File : N:\V3400S\LINPTC10.smp
Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml Area Reject : 100.00
Sample Amount : 1.0000 Dilution Factor : 1.00

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ITAS-KNOXVILLE V3400B J+W DB-624 75m*0.53mm ID,3.00um df

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PHOTOIONIZATION DETECTOR: Percent differences, standard concentrations, and Cfs for FBz, o-Cl,F-Benzene, and B2ClIsopO are incorrect due to the compounds having a concentration different than the other compounds in the mix. The percent differences for these compounds and Cfs must be done manually. The computer could only calculate percent differences and Cfs from only one standard concentration.

Standard check compared to 3/10/93 linearity

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Peak #	Ret Time [min]	Component Name	Height [uV]	BL Cal. Range	CONCENTRATION [PPB]	STANDARD CON. (PPB)	PERCENT DIFFERENCE	Component Name	DAILY Cf
0	5.000	Air	0.00	WV	0.00	15.000	-1.000e2	Air	0.0000
6	9.010	VCl	10187.95	WV	14.32	15.000	-4.513	VCl	679.1965
17	17.000	110ClE	49914.06	WV	13.62	15.000	-9.181	110ClE	3.3276e3
21	20.195	T-120ClE	193730.13	VE	14.44	15.000	-3.768	T-120ClE	1.2915e4
27	24.134	C-120ClE	77726.74	WV	15.27	15.000	1.803	C-120ClE	5.1817e3
32	28.439	Bz	155165.33	WV	13.71	15.000	-8.578	Bz	1.0344e4
33	29.368	FBz	206762.77	VE	98.88	100 15.000	49 559.245	FBz	1.3784e4
35	31.071	TCIE	98319.03	WV	15.29	15.000	1.922	TCIE	6.5546e3
39	34.050	2ClEthylVO	17863.85	WV	10.52	10 15.000	5 2-29.865	2ClEthylVO	1.1909e3
41	35.066	C-130ClPe	34593.82	WV	13.37	15.000	-10.852	C-130ClPe	2.3062e3
43	36.598	Toluene	151049.02	VE	14.43	15.000	and -3.803	Toluene	1.0069e4
45	37.431	T-130ClPe	34100.20	VE	15.40	15.000	and 2.636	T-130ClPe	2.2733e3
49	40.094	TetClE	59819.13	WV	15.16	15.000	1.089	TetClE	3.9879e3
51	45.703	ClBz	110490.91	BV	14.88	15.000	-0.794	ClBz	6.1738e3
52	46.268	EthylBz	92607.48	WV	14.98	15.000	-0.132	EthylBz	6.1738e3
53	46.941	m-Xylene	94979.45	WV	14.95	15.000	-0.347	m-Xylene	6.3319e3
54	47.712	o-Cl,F-Benzene	130791.18	WV	99.92	100 15.000	100 566.443	o-Cl,F-Benzene	8.7194e3
55	50.813	o-Xylene	80875.27	WV	15.05	15.000	0.348	o-Xylene	5.3916e3
69	62.337	130ClBz	155216.16	BV	15.17	15.000	1.102	130ClBz	1.0347e4
70	62.947	140ClBz	156189.28	VB	15.24	15.000	1.577	140ClBz	1.0412e4
75	64.869	120ClBz	130010.22	BB	15.02	15.000	0.120	120ClBz	8.6673e3

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TUT 004 1854

L000185

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt (1SX)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.687	0.0	BB	-----	10351.75	2322.76	0.00			0.00
2	6.648	0.0	BB	690.7003	816.25	106.65	1.18			1.18
3	7.078	0.0	BB	4684.6953	698.50	106.06	0.15			0.15
4	7.734	0.0	BB	6039.0337	980.75	115.52	0.16			0.16
5	8.319	0.0	BV	10896.6787	2020.52	131.89	0.19			0.19
6	9.010	0.2	VV VCl	10742.6309	153866.69	10187.95	14.32		VCl	14.32
7	9.395	0.0	VV	10833.0440	33651.58	2209.57	3.11			3.11
8	10.198	0.0	VB	11649.4453	8023.47	489.90	0.69			0.69
10	11.829	0.0	VV	10754.8242	13448.28	889.44	1.25			1.25
11	12.497	0.0	VB	11008.9990	3103.47	200.52	0.28			0.28
12	14.033	0.0	BB	1.0048e5	7581.50	276.45	0.08			0.08
13	15.079	0.0	BB	34717.9844	91725.00	9680.30	2.64			2.64
14	15.674	0.0	BV	38189.0586	17453.38	1674.54	0.46			0.46
15	15.938	0.0	VV	37916.5273	11167.80	1079.18	0.30			0.30
16	16.598	0.0	VV	37266.8750	5552.89	545.95	0.15			0.15
17	17.000	0.2	VV 11DCIE	30159.0000	410851.00	49914.06	13.62		11DCIE	13.62
18	18.879	0.0	VV	2.5701e5	2870.81	149.91	0.01			0.01
19	19.064	0.0	VV	1.1396e5	19247.92	2266.81	0.17			0.17
20	19.771	0.0	VV	2.1823e5	6636.22	408.12	0.03			0.03
21	20.195	0.1	VE T-12DCIE	77419.5781	1117540.00	193730.13	14.44		T-12DCIE	14.44
22	21.049	0.0	EV	2.0222e5	2446.50	162.37	0.01			0.01
23	21.471	0.0	VV	1.9029e5	6273.80	442.47	0.03			0.03
24	21.840	0.0	VV	2.6237e5	11541.52	590.37	0.04			0.04
25	22.498	0.0	VV	1.0645e5	4663.09	222.95	0.04			0.04
26	23.460	0.0	VV	70447.2188	14878.31	1075.00	0.21			0.21
27	24.134	0.1	VV C-12DCIE	35339.4063	539649.69	77726.74	15.27		C-12DCIE	15.27
28	24.851	0.0	VV	65328.0977	7501.20	584.45	0.12			0.12
29	25.486	0.0	VB	71086.0469	8514.16	609.64	0.12			0.12
30	26.647	0.0	BV	2.2122e5	8583.88	439.04	0.04			0.04
31	27.785	0.0	VV	1.7486e5	8290.48	536.45	0.05			0.05
32	28.439	0.0	VV Bz	95664.9844	1311877.00	155165.33	13.71		Bz	13.71
33	29.368	0.0	VE FBz	16791.4336	1660374.63	206762.77	98.88		FBz	98.88
34	30.576	0.0	EV	1.2689e5	3682.00	186.60	0.03			0.03
35	31.071	0.0	VV TCIE	46153.8828	705614.19	98319.03	15.29		TCIE	15.29
36	31.872	0.0	VV	1.4128e5	10497.63	477.83	0.07			0.07
37	32.823	0.0	VV	24544.6641	8667.02	479.78	0.35			0.35
38	33.282	0.0	VV	16030.7607	7198.06	611.52	0.45			0.45
39	34.050	0.0	VV 2ClEthylVO	12006.4766	126310.44	17863.85	10.52		2ClEthylVO	10.52
40	34.866	0.0	VV	30361.8965	6690.92	570.10	0.22			0.22
41	35.066	0.0	VV C-13DCIPe	18214.9883	243574.02	34593.82	13.37		C-13DCIPe	13.37
42	36.095	0.0	VV	2.5150e5	11889.91	494.87	0.05			0.05
43	36.598	0.0	VE Toluene	82853.4844	1195542.38	151049.02	14.43		Toluene	14.43
44	36.986	0.0	EV	1.3359e5	3723.00	291.73	0.03			0.03
45	37.431	0.0	VE T-13DCIPe	15918.9121	245078.39	34100.20	15.40		T-13DCIPe	15.40
46	37.744	0.0	EV	22178.6387	4054.50	296.89	0.18			0.18
47	38.222	0.0	VV	34323.9688	13097.63	622.65	0.38			0.38
48	39.358	0.0	VV	94959.4844	9800.69	407.16	0.10			0.10
49	40.094	0.0	VV TetClE	36438.9414	552533.75	59819.13	15.16		TetClE	15.16
50	41.238	0.0	VB	1.8176e5	20623.25	447.60	0.11			0.11
51	45.703	0.1	BV ClBz	80555.1953	1198736.25	110490.91	14.88		ClBz	14.88
52	46.268	0.1	VV EthylBz	72290.7813	1082929.00	92607.48	14.98		EthylBz	14.98
53	46.941	0.1	VV m-Xylene	76081.4844	1137264.38	94979.45	14.95		m-Xylene	14.95
54	47.712	0.1	VV o-Cl,F-Ben	15890.7783	1587756.88	130791.18	99.92		o-Cl,F-Ben	99.92
55	50.813	0.1	VV o-Xylene	62279.7813	937445.38	80875.27	15.05		o-Xylene	15.05

56	52.891	0.0 VV	1.4412e5	11892.44	443.36	0.08	0.08
57	53.476	0.0 VV	78082.9375	6705.97	461.45	0.09	0.09
58	53.805	0.0 VV	75191.5469	3894.04	278.26	0.05	0.05
59	55.013	0.0 VV	2.1649e5	14483.16	359.45	0.07	0.07
60	55.438	0.0 VV	1.0995e5	5043.28	246.45	0.05	0.05
61	56.041	0.0 VB	98876.3438	3779.86	205.40	0.04	0.04
62	56.667	0.0 BV	79711.4375	1365.05	175.27	0.02	0.02
63	57.369	0.0 VV	1.3390e5	14899.42	1138.79	0.11	0.11
64	57.765	0.0 VV	1.0975e5	2968.38	276.82	0.03	0.03
65	59.951	0.0 VV	6.0359e5	11608.50	196.84	0.02	0.02
66	60.249	0.0 VV	1.1594e5	12840.84	1133.51	0.11	0.11
67	61.284	0.0 VV	2.7190e5	7221.09	271.82	0.03	0.03
68	61.857	0.0 VB	1.4411e5	1855.72	131.79	0.01	0.01
69	62.337	0.0 BV 130CLBz	68538.6172	1039404.13	155216.16	15.17	130CLBz 15.17
70	62.947	0.0 VB 140CLBz	64848.3828	988061.88	156189.28	15.24	140CLBz 15.24
71	63.742	0.0 BV	54979.5352	363.82	67.83	0.01	0.01
72	63.937	0.0 VV	65434.3984	9849.69	1303.12	0.15	0.15
73	64.119	0.0 VV	93807.0938	12944.97	1194.63	0.14	0.14
74	64.395	0.0 VB	78721.0156	5987.53	658.45	0.08	0.08
75	64.869	0.0 BB 120CLBz	52703.2031	791493.00	130010.22	15.02	120CLBz 15.02
76	66.213	0.0 BV	44438.9414	272.82	53.15	0.01	0.01
77	66.506	0.0 VV	52475.3242	25768.78	4251.15	0.49	0.49
78	66.788	0.0 VV	93849.2031	3081.98	284.29	0.03	0.03
79	67.002	0.0 VV	90600.6953	3739.73	357.34	0.04	0.04
80	67.250	0.0 VB	80321.4922	2062.42	222.29	0.03	0.03
81	67.722	0.0 BV	69905.3516	2255.16	279.28	0.03	0.03
82	67.935	0.0 VV	1.0419e5	4243.63	352.59	0.04	0.04
83	68.240	0.0 VV	68105.6484	1374.76	174.75	0.02	0.02
84	68.340	0.0 VV	51005.9219	1343.41	228.01	0.03	0.03
85	68.911	0.0 VV	1.6447e5	11807.36	621.47	0.07	0.07
86	69.144	0.0 VV	70013.6719	2886.37	356.89	0.04	0.04
87	69.304	0.0 VV	81319.1328	2960.35	315.15	0.04	0.04
88	69.600	0.0 VB	1.0604e5	2212.97	180.65	0.02	0.02

		1.0	7.8483e6	17625560.00	2.08e6	475.05	475.05

0420

Missing Component Report

Component

Expected Retention (Sample File)

Air

5.000

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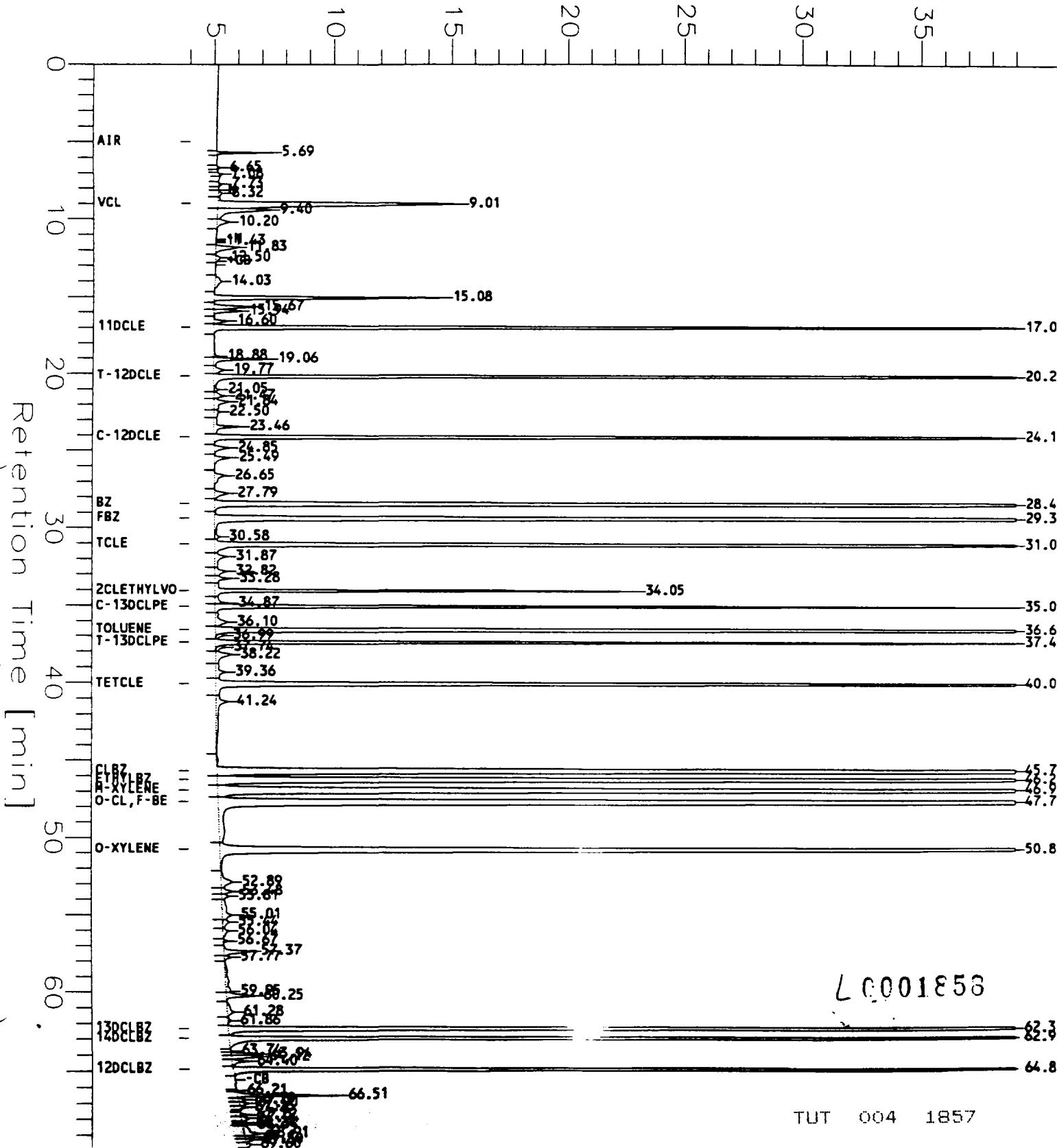
Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

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TUT 004 1856

L0001857

Sample #: 15ppb
Date : 3/20/93 1:12 PM
Time of Injection: 3/11/93 2:44 PM
Low Point : 4.00 mV
Plot Scale: 35 mV



TUT 004 1857

Sample File : N:\V3400S\LINHSC11.SMP
Created by : on : 5/12/89 2:54 PM
Edited by : on : 3/12/93 9:28 AM
Number Of Times Edited : 400

Sample Description :
Default Injection Volume = 5.0000 mL
An External Standard Calibration Will Be Used
Unknown Peaks Will Use The Response Factor Of The Nearest Component

Component Information :

Air
Retention Time : 1.845 min Search Window: 5.00 sec, 5.00 %
Reference Component: (Find Closest Peak)
Group Name :
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	3603.22	125.35	-----	-----	1
B	7.5000	1313.50	111.82	-----	-----	1
C	15.0000	5577.00	264.70	-----	-----	1
D	22.5000	1417.25	192.82	-----	-----	1
E	30.0000	1445.00	82.59	-----	-----	1

Calibration Curve : $y = (0.000000) + (28.308945)x + (-0.853783)x^2 + (0.000000)x^3$
R-squared : 0.481345

DC1DFMe

Retention Time : 7.047 min Search Window: 14.00 sec, 2.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	96225.78	3797.29	-----	-----	1
B	7.5000	617696.69	26418.94	-----	-----	1
C	15.0000	1896523.00	72850.52	-----	-----	1
D	22.5000	2422463.00	93128.16	-----	-----	1
E	30.0000	3961747.00	153871.89	-----	-----	1

Calibration Curve : $y = (0.000000) + (3296.647217)x + (57.420628)x^2 + (0.000000)x^3$
R-squared : 0.983105

CLME

Retention Time : 8.348 min Search Window: 19.00 sec, 2.00 %
Reference Component: BrClMe (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	195584.27	9146.95	-----	-----	1
B	7.5000	1180926.25	56969.63	-----	-----	1
C	15.0000	3395038.50	162483.38	-----	-----	1
D	22.5000	4285816.00	207107.95	-----	-----	1

0001853

Calibration Curve : $y = (0.000000) + (7569.535645)x + (117.819054)x^2 + (0.000000)x^3$
 R-squared : 0.983402

VC1

Retention Time : 9.088 min Search Window: 25.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	286835.94	9999.06	-----	-----	1
B	7.5000	1392966.00	61647.11	-----	-----	1
C	15.0000	3818275.75	173474.39	-----	-----	1
D	22.5000	4862742.00	220461.88	-----	-----	1
E	30.0000	7520008.50	358807.00	-----	-----	1

Calibration Curve : $y = (0.000000) + (8301.489258)x + (113.214714)x^2 + (0.000000)x^3$
 R-squared : 0.983718

BrMe

Retention Time : 11.932 min Search Window: 26.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	54836.83	2399.90	-----	-----	1
B	7.5000	547172.00	27863.09	-----	-----	1
C	15.0000	1668494.75	85494.73	-----	-----	1
D	22.5000	2009282.00	104895.74	-----	-----	1
E	30.0000	3423247.75	177274.92	-----	-----	1

Calibration Curve : $y = (0.000000) + (3775.522705)x + (66.215889)x^2 + (0.000000)x^3$
 R-squared : 0.977304

ClEa

Retention Time : 12.479 min Search Window: 17.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	265358.59	12345.12	-----	-----	1
B	7.5000	1556815.38	77675.88	-----	-----	1
C	15.0000	4227939.50	211455.73	-----	-----	1
D	22.5000	5105608.50	254202.69	-----	-----	1
E	30.0000	8160945.00	420294.88	-----	-----	1

Calibration Curve : $y = (0.000000) + (10423.410156)x + (106.382530)x^2 + (0.000000)x^3$
 R-squared : 0.977035

TClFMe

Retention Time : 14.007 min Search Window: 21.00 sec, 2.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601

Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.5000	300277.41	15313.05	-----	-----	1
B	7.5000	2058770.38	109092.84	-----	-----	1
C	15.0000	5528990.50	292625.53	-----	-----	1
D	22.5000	7207512.50	378156.66	-----	-----	1
E	30.0000	10674525.00	582110.81	-----	-----	1

Calibration Curve : $y = (0.000000) + (15366.825195)x + (124.109917)x^2 + (0.000000)x^3$
 R-squared : 0.987910

TCLTFEa

Retention Time : 16.467 min Search Window: 5.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name :
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	99693.56	5142.36	-----	-----	1
B	7.5500	1908914.50	100427.60	-----	-----	1
C	15.1000	4869714.50	252108.47	-----	-----	1
D	22.6500	6734908.00	356342.28	-----	-----	1
e	30.2000	9942378.00	521869.47	-----	-----	1

Calibration Curve : $y = (0.000000) + (13772.041992)x + (112.385193)x^2 + (0.000000)x^3$
 R-squared : 0.995784

11DC1E

Retention Time : 17.025 min Search Window: 17.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 23347.000000

CH2C12

Retention Time : 19.085 min Search Window: 16.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 36870.000000

T-12DC1E

Retention Time : 20.219 min Search Window: 13.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 29194.000000

111DC1Ea

Retention Time : 21.813 min Search Window: 16.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 26521.000000

C-12DC1E

Retention Time : 24.149 min Search Window: 16.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name :
 Quantitation Will Be Done Using Response Factor = 25107.000000

CHCl3

Retention Time : 24.802 min Search Window: 16.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 33409.000000

BrClMe

Retention Time : 25.465 min Search Window: 20.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : QC
 Quantitation Will Be Done Using Response Factor = 5090.000000

111TC1Ea

Retention Time : 26.593 min Search Window: 16.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 27738.000000

CCl4

Retention Time : 27.735 min Search Window: 19.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 31421.000000

12DC1Ea

Retention Time : 28.355 min Search Window: 16.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 22829.000000

TC1E

Retention Time : 31.098 min Search Window: 14.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 30301.000000

12DC1Pa

Retention Time : 31.839 min Search Window: 17.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 22297.000000

BrDC1Me

Retention Time : 32.790 min Search Window: 18.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	263238.56	14155.95	-----	-----	1
B	7.5000	2308901.00	168091.09	-----	-----	1
C	15.0000	4667531.00	363604.06	-----	-----	1
D	22.5000	6683643.50	533252.63	-----	-----	1
E	30.0000	9430002.00	763542.75	-----	-----	1

Calibration Curve : $y = (0.000000) + (21556.656250)x + (124.084793)x^2 + (0.000000)x^3$
 R-squared : 0.998714

2ClEthylVO

Retention Time : 34.083 min Search Window: 14.00 sec, 1.00 %

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

0426

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	47432.91	1359.65	-----	-----	1
B	5.0000	299311.41	16449.71	-----	-----	1
C	10.0000	684318.75	47110.29	-----	-----	1
D	15.0000	905068.75	62957.81	-----	-----	1
E	20.0000	1246370.00	94508.63	-----	-----	1

Calibration Curve : $y = (0.000000) + (3658.319336)x + (51.344132)x^2 + (0.000000)x^3$
 R-squared : 0.989619

C-13DC1Pe

Retention Time : 35.088 min Search Window: 15.00 sec, 1.00 %
 Reference Component: BrClMe (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 24791.000000

T-13DC1Pe

Retention Time : 37.446 min Search Window: 19.00 sec, 1.00 %
 Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	59781.80	3274.82	-----	-----	1
B	7.5000	1510641.50	123831.81	-----	-----	1
C	15.0000	3077066.75	263198.44	-----	-----	1
D	22.5000	3848705.25	330098.88	-----	-----	1
E	30.0000	6145076.50	539054.94	-----	-----	1

Calibration Curve : $y = (0.000000) + (14259.061523)x + (104.351585)x^2 + (0.000000)x^3$
 R-squared : 0.981364

112TC1Ea

Retention Time : 38.257 min Search Window: 19.00 sec, 1.00 %
 Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	222943.13	12481.29	-----	-----	1
B	7.5000	2249683.50	162610.23	-----	-----	1
C	15.0000	4377795.00	331990.75	-----	-----	1
D	22.5000	5224082.00	401296.81	-----	-----	1
E	30.0000	8675488.00	675969.13	-----	-----	1

Calibration Curve : $y = (0.000000) + (18049.36944)x + (119.554146)x^2 + (0.000000)x^3$
 R-squared : 0.973788

TetClE

Retention Time : 40.097 min Search Window: 24.00 sec, 1.00 %
 Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
 Group Name : 601

L0001863

Quantitation Will Be Done Using Response Factor = 29347.000000

0427

DBrClMe

Retention Time : 41.217 min Search Window: 22.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	146284.50	6495.31	-----	-----	1
B	7.5000	1573421.88	86752.33	-----	-----	1
C	15.0000	3153807.25	191105.80	-----	-----	1
D	22.5000	4244856.50	273058.94	-----	-----	1
E	30.0000	6187621.50	393659.16	-----	-----	1

Calibration Curve : $y = (0.000000) + (11285.537109)x + (57.401787)x^2 + (0.000000)x^3$
R-squared : 0.997688

ClBz

Retention Time : 45.688 min Search Window: 28.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 8909.000000

o-Cl,F-Benzene

Retention Time : 47.680 min Search Window: 29.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : QC
Quantitation Will Be Done Using Response Factor = 2504.000000

CHBr3

Retention Time : 53.470 min Search Window: 21.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	58180.25	2457.38	-----	-----	1
B	7.5000	793270.00	41801.03	-----	-----	1
C	15.0000	1658044.88	96899.52	-----	-----	1
D	22.5000	2269719.75	137679.98	-----	-----	1
E	30.0000	3233773.50	200180.30	-----	-----	1

Calibration Curve : $y = (0.000000) + (5546.571289)x + (35.727295)x^2 + (0.000000)x^3$
R-squared : 0.996918

1122TetClEa

Retention Time : 54.941 min Search Window: 23.00 sec, 1.00 %
Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	152762.94	7599.34	-----	-----	1
B	7.5000	1582306.00	108817.80	-----	-----	1

L0001864

C	15.0000	3123126.75	221128.89	-----	-----	1
D	22.5000	4232650.00	300217.91	-----	-----	1
E	30.0000	5892756.00	426301.06	-----	-----	1

0428

Calibration Curve : $y = (0.000000) + (14117.722656)x + (-3.630693)x^2 + (0.000000)x^3$
R-squared : 0.995900

123TriClPropane

Retention Time : 55.974 min Search Window: 5.00 sec, 5.00 %

Reference Component: (Find Closest Peak)

Group Name :

Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin

Amounts Will Not Be Scaled Prior To The Regression

Weighting Factor For the Regression: 1

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	98625.88	5263.68	-----	-----	1
B	7.5000	1210210.88	75532.08	-----	-----	1
C	15.0000	2280214.25	153380.25	-----	-----	1
D	22.5000	3197833.25	213119.44	-----	-----	1
E	30.0000	4362502.50	300088.91	-----	-----	1

Calibration Curve : $y = (0.000000) + (9791.280273)x + (3.264774)x^2 + (0.000000)x^3$
R-squared : 0.997222

13DC1Bz

Retention Time : 62.336 min Search Window: 17.00 sec, 1.00 %

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)

Group Name : 601

Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin

Amounts Will Not Be Scaled Prior To The Regression

Weighting Factor For the Regression: 1

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	137477.94	10232.27	-----	-----	1
B	7.5000	1501514.00	130027.92	-----	-----	1
C	15.0000	2888832.50	254268.83	-----	-----	1
D	22.5000	4675941.00	420493.09	-----	-----	1
E	30.0000	6686206.00	607578.88	-----	-----	1

Calibration Curve : $y = (0.000000) + (14508.477539)x + (189.396881)x^2 + (0.000000)x^3$
R-squared : 0.999219

14DC1Bz

Retention Time : 62.946 min Search Window: 16.00 sec, 1.00 %

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)

Group Name : 601

Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin

Amounts Will Not Be Scaled Prior To The Regression

Weighting Factor For the Regression: 1

Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	184584.56	11963.81	-----	-----	1
B	7.5000	1761681.13	142211.52	-----	-----	1
C	15.0000	3547949.25	297688.47	-----	-----	1
D	22.5000	5208034.00	450424.16	-----	-----	1
E	30.0000	7421459.50	647703.81	-----	-----	1

Calibration Curve : $y = (0.000000) + (17493.294922)x + (132.076401)x^2 + (0.000000)x^3$
R-squared : 0.999231

12DC1Bz

Retention Time : 64.877 min Search Window: 16.00 sec, 1.00 %

L 0001865

TUT 004 1864

Reference Component: o-Cl,F-BENZENE (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 17538.000000

/0429

TUT 004 1865

L0001866

Sample File : N:\V3400S\LINPTC11.smp
Created by : on : 5/12/89 2:54 PM
Edited by : on : 3/12/93 9:34 AM
Number Of Times Edited : 412

0430

Sample Description :

Default Injection Volume = 5.0000 ml
An External Standard Calibration Will Be Used
Unknown Peaks Will Use The Response Factor Of The Nearest Component

Component Information :

Air

Retention Time : 5.000 min Search Window: 5.00 sec, 5.00 %
Reference Component: (Find Closest Peak)
Group Name :
Calibrating Height versus Amount Using a 2nd Order Fit
Curve Will Be Forced Through The Origin
Amounts Will Not Be Scaled Prior To The Regression
Weighting Factor For the Regression: 1
Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	0.00	331.00	.....	.....	0
B	2.5000	0.00	331.00	.....	.....	0
C	5.0000	0.00	331.00	.....	.....	0
D	7.5000	0.00	331.00	.....	.....	0
E	15.0000	0.00	331.00	.....	.....	0

Calibration Curve : $y = (0.000000) + (96.218834)x + (-5.053600)x^2 + (0.000000)x^3$
R-squared : 1.000000

VC1

Retention Time : 8.997 min Search Window: 25.00 sec, 2.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 668.647766

11DC1E

Retention Time : 16.963 min Search Window: 18.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 3232.000000

T-12DC1E

Retention Time : 20.159 min Search Window: 52.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 601
Quantitation Will Be Done Using Response Factor = 12456.000000

C-12DC1E

Retention Time : 24.084 min Search Window: 18.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name :
Quantitation Will Be Done Using Response Factor = 4850.000000

Bz

Retention Time : 28.392 min Search Window: 19.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 10664.000000

FBz

Retention Time : 29.325 min Search Window: 20.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : QC
 Quantitation Will Be Done Using Response Factor = 2093.000000

TC1E

Retention Time : 31.033 min Search Window: 17.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 6125.000000

2C1EthylVO

Retention Time : 34.012 min Search Window: 47.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 602
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	9519.66	1004.47	-----	-----	1
B	5.0000	55206.42	7810.77	-----	-----	1
C	10.0000	140723.73	20905.94	-----	-----	1
D	15.0000	187528.97	27944.84	-----	-----	1
E	20.0000	273074.94	41034.49	-----	-----	1

Calibration Curve : $y = (0.000000) + (1725.954468)x + (15.421828)x^2 + (0.000000)x^3$
 R-squared : 0.991588

C-13DC1Pe

Retention Time : 35.025 min Search Window: 17.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 601
 Quantitation Will Be Done Using Response Factor = 2506.000000

Toluene

Retention Time : 36.550 min Search Window: 18.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 602
 Quantitation Will Be Done Using Response Factor = 9873.000000

T-13DC1Pe

Retention Time : 37.382 min Search Window: 19.00 sec, 1.00 %
 Reference Component: FBz (Find Closest Peak)
 Group Name : 601
 Calibrating Height versus Amount Using a 2nd Order Fit
 Curve Will Be Forced Through The Origin
 Amounts Will Not Be Scaled Prior To The Regression
 Weighting Factor For the Regression: 1
 Calibration Levels:

Level Name	Amount	Area	Height	ISTD Resp.	ISTD Amt.	# Replicates
A	1.0000	9381.38	778.92	-----	-----	1
B	7.5000	118496.33	16005.56	-----	-----	1
C	15.0000	248285.41	34939.13	-----	-----	1
D	22.5000	380630.63	55615.57	-----	-----	1
E	30.0000	551886.00	81243.89	-----	-----	1

Calibration Curve : $y = (0.000000) + (1900.080322)x + (26.672886)x^2 + (0.000000)x^3$
 R-squared : 0.999498

TetC1E

Retention Time : 40.029 min Search Window: 22.00 sec, 1.00 %
 Reference Component: o-Cl,F-Benzene (Find Closest Peak)

L 0001868

Group Name : 601
Quantitation Will Be Done Using Response Factor = 3762.000000

0432

ClBz

Retention Time : 45.607 min Search Window: 29.00 sec, 1.00 %
Reference Component: FBz (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 7164.000000

EthylBz

Retention Time : 46.169 min Search Window: 29.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name :
Quantitation Will Be Done Using Response Factor = 5838.000000

m-Xylene

Retention Time : 46.837 min Search Window: 30.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 8000 additional comp
Quantitation Will Be Done Using Response Factor = 6057.000000

o-Cl,F-Benzene

Retention Time : 47.601 min Search Window: 31.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : QC
Quantitation Will Be Done Using Response Factor = 1349.000000

o-Xylene

Retention Time : 50.708 min Search Window: 28.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 8000 additional comp
Quantitation Will Be Done Using Response Factor = 5088.000000

13DClBz

Retention Time : 62.268 min Search Window: 16.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 9934.000000

14DClBz

Retention Time : 62.881 min Search Window: 16.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 9960.000000

12DClBz

Retention Time : 64.812 min Search Window: 18.00 sec, 1.00 %
Reference Component: o-Cl,F-Benzene (Find Closest Peak)
Group Name : 602
Quantitation Will Be Done Using Response Factor = 8409.000000

L 0001863

***** SUMMARY REPORT *****

0433

HALL LINEARITY CALCULATIONS FOR V3400A USING A RESTEK 502.2 COLUMN 105m* 0.53mm
I.D., 3.0um Df COLUMN.

File Name	SAMPLE NAME Number	Date Of Injection	Air			DCIDFMe		
			Ret. Time	STD CON (PPB)	Height	CF	Ret. Time (PPB)	Height	CF
SC11002.	A MIX	3/11/93	----	-----	-----	----	-----	-----
SC11003.	B MIX	3/11/93	----	-----	-----	----	-----	-----
SC11004.	C MIX	3/11/93	----	-----	-----	----	-----	-----
SC11005.	D MIX	3/11/93	----	-----	-----	----	-----	-----
SC11006.	E MIX	3/11/93	----	-----	-----	----	-----	-----
Averages			7.04	15.3000	69613.36	3.9824e3		
%RSD			0.16	74.47	85.10	27.33		

File Name	SAMPLE NAME Number	Date Of Injection	CLME			VCL				
			Ret. Time	STD CON (PPB)	Height	CF	Ret. Time (PPB)	Height	CF	
SC11002.	A MIX	3/11/93	8.36	1.5000	9146.95	6.0979e3	9.12	1.5000	9999.06	6.6660e3
SC11003.	B MIX	3/11/93	8.34	7.5000	56969.63	7.5959e3	9.08	7.5000	61647.11	8.2196e3
SC11004.	C MIX	3/11/93	8.35	15.0000	162483.38	1.0832e4	9.09	15.0000	173474.39	1.1564e4
SC11005.	D MIX	3/11/93	8.35	22.5000	207107.95	9.2047e3	9.10	22.5000	220461.88	9.7983e3
SC11006.	E MIX	3/11/93	8.32	30.0000	340778.00	1.1359e4	9.06	30.0000	358807.00	1.1960e4
Averages			8.34	15.3000	155297.19	9.0180e3	9.09	15.3000	164877.89	9.6418e3
%RSD			0.17	74.47	84.06	24.39	0.23	74.47	83.28	23.18

File Name	SAMPLE NAME Number	Date Of Injection	BrMe			CLEa				
			Ret. Time	STD CON (PPB)	Height	CF	Ret. Time (PPB)	Height	CF	
SC11002.	A MIX	3/11/93	11.93	1.5000	2399.90	1.5999e3	12.52	1.5000	12345.12	8.2300e3
SC11003.	B MIX	3/11/93	11.93	7.5000	27863.09	3.7150e3	12.47	7.5000	77675.88	1.0356e4
SC11004.	C MIX	3/11/93	11.93	15.0000	85494.73	5.6996e3	12.48	15.0000	211455.73	1.4097e4
SC11005.	D MIX	3/11/93	11.93	22.5000	104895.74	4.6620e3	12.49	22.5000	254202.69	1.1297e4
SC11006.	E MIX	3/11/93	11.89	30.0000	177274.92	5.9091e3	12.45	30.0000	420294.88	1.4009e4
Averages			11.92	15.3000	79585.68	4.3171e3	12.48	15.3000	195194.86	1.1598e4
%RSD			0.16	74.47	86.26	40.64	0.23	74.47	81.67	21.57

File Name	SAMPLE NAME Number	Date Of Injection	TCLFMe			TCLTFEa				
			Ret. Time	STD CON (PPB)	Height	CF	Ret. Time (PPB)	Height	CF	
SC11002.	A MIX	3/11/93	14.06	1.5000	15313.05	1.0208e4	16.53	1.0000	5142.36	5.1423e3
SC11003.	B MIX	3/11/93	14.00	7.5000	109092.84	1.4545e4	16.45	7.5000	100427.60	1.3301e4
SC11004.	C MIX	3/11/93	14.01	15.0000	292625.53	1.9508e4	16.47	15.0000	252108.47	1.6695e4
SC11005.	D MIX	3/11/93	14.02	22.5000	378156.66	1.6806e4	16.47	22.5000	356342.28	1.5732e4
SC11006.	E MIX	3/11/93	13.97	30.0000	582110.81	1.9403e4	16.43	30.0000	521869.47	1.7280e4
Averages			14.01	15.3000	275459.78	1.6094e4	16.47	15.3000	247178.03	1.3630e4
%RSD			0.24	74.47	81.22	24.10	0.24	75.99	82.79	36.55

File Name	SAMPLE NAME Number	Date Of Injection	11DCLE			CH2C12				
			Ret. Time	STD CON (PPB)	Height	CF	Ret. Time (PPB)	Height	CF	
SC11002.	A MIX	3/11/93	17.09	1.0000	7840.00	1.0000e3	19.07	1.0000	11726.90	4.7090e4
SC11003.	B MIX	3/11/93	17.02	7.5000	146870.13	3.8774e3	19.07	7.5000	283008.50	3.7734e4
SC11004.	C MIX	3/11/93	17.03	15.0000	387950.34	2.5863e4	19.09	15.0000	562600.31	3.7506e4
SC11005.	D MIX	3/11/93	17.04	22.5000	556247.25	2.4722e4	19.10	22.5000	759313.19	3.3747e4
SC11006.	E MIX	3/11/93	17.00	30.0000	782021.56	2.6067e4	19.07	30.0000	848186.19	2.8272e4
Averages			17.03	15.2000	382177.25	2.3347e4	19.09	15.5000	514167.03	3.6870e4
%RSD			0.20	75.97	79.51	14.71	0.14	71.59	60.31	18.66

File Name	SAMPLE NAME Number	Date Of Injection	11DCLE			111DCLEa				
			Ret. Time	STD CON (PPB)	Height	CF	Ret. Time (PPB)	Height	CF	
SC11002.	A MIX	3/11/93	20.28	1.0000	23763.97	2.3763e4	21.88	1.0000	18344.43	1.8344e4
SC11003.	B MIX	3/11/93	20.21	7.5000	226404.14	3.0187e4	21.80	7.5000	201568.77	2.6875e4

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SC11004.	C MIX	3/11/93	20.22	15.0000	488286.66	3.2552e4	21.81	15.0000	443175.88	2.9545e4
SC11005.	D MIX	3/11/93	20.23	22.5000	720212.94	3.2009e4	21.83	22.5000	667927.63	2.9685e4
SC11006.	E MIX	3/11/93	20.21	30.0000	823804.75	2.7460e4	21.80	30.0000	844684.25	2.8156e4
Averages			20.23	15.2000	456494.50	2.9194e4	21.82	15.2000	435140.19	2.6521e4
XRSD			0.14	75.97	73.12	12.43	0.14	75.97	77.10	17.77

File Name	SAMPLE NAME Number	Date Of Injection	C-12DCIE			CF	CHCl3			CF
			Ret. Time (PPB)	STD CON	Height		Ret. Time (PPB)	STD CON	Height	
SC11002.	A MIX	3/11/93	24.22	1.0000	17948.65	1.7948e4	24.86	1.0000	27414.00	2.7414e4
SC11003.	B MIX	3/11/93	24.14	7.5000	172878.22	2.3050e4	24.79	7.5000	239840.11	3.1978e4
SC11004.	C MIX	3/11/93	24.15	15.0000	429817.81	2.8654e4	24.80	15.0000	602602.13	4.0173e4
SC11005.	D MIX	3/11/93	24.17	22.5000	638994.69	2.8399e4	24.82	22.5000	829109.19	3.6849e4
SC11006.	E MIX	3/11/93	24.15	30.0000	824574.69	2.7485e4	24.81	30.0000	918901.50	3.0630e4
Averages			24.16	15.2000	416842.81	2.5107e4	24.82	15.2000	523573.38	3.3409e4
XRSD			0.13	75.97	79.06	18.31	0.11	75.97	72.89	15.21

File Name	SAMPLE NAME Number	Date Of Injection	BrClMe			CF	111TCIEa			CF
			Ret. Time (PPB)	STD CON	Height		Ret. Time (PPB)	STD CON	Height	
SC11002.	A MIX	3/11/93	25.52	100.0000	429816.88	4.2981e3	26.65	1.0000	26520.63	2.6520e4
SC11003.	B MIX	3/11/93	25.45	100.0000	417217.38	4.1721e3	26.59	7.5000	184770.41	2.4636e4
SC11004.	C MIX	3/11/93	25.47	100.0000	509033.84	5.0903e3	26.59	15.0000	440199.69	2.9346e4
SC11005.	D MIX	3/11/93	25.48	100.0000	481214.22	4.8121e3	26.61	22.5000	654708.25	2.9098e4
SC11006.	E MIX	3/11/93	25.46	100.0000	495485.16	4.9548e3	26.59	30.0000	872737.19	2.9091e4
Averages			25.48	100.0000	466553.50	4.6655e3	26.61	15.2000	435787.22	2.7738e4
XRSD			0.10	0.00	8.73	8.73	0.11	75.97	78.61	7.51

File Name	SAMPLE NAME Number	Date Of Injection	CCl4			CF	120CIEa			CF
			Ret. Time (PPB)	STD CON	Height		Ret. Time (PPB)	STD CON	Height	
SC11002.	A MIX	3/11/93	27.79	1.0000	26779.45	2.6779e4	28.41	1.0000	17164.99	1.7164e4
SC11003.	B MIX	3/11/93	27.73	7.5000	221552.16	2.9540e4	28.35	7.5000	171264.39	2.2835e4
SC11004.	C MIX	3/11/93	27.74	15.0000	527444.56	3.5162e4	28.36	15.0000	377432.41	2.5162e4
SC11005.	D MIX	3/11/93	27.75	22.5000	778785.75	3.4612e4	28.36	22.5000	536681.94	2.3852e4
SC11006.	E MIX	3/11/93	27.74	30.0000	930343.56	3.1011e4	28.35	30.0000	753949.63	2.5131e4
Averages			27.75	15.2000	496981.09	3.1421e4	28.37	15.2000	371298.66	2.2829e4
XRSD			0.09	75.97	75.63	11.19	0.08	75.97	78.63	14.51

File Name	SAMPLE NAME Number	Date Of Injection	TCIE			CF	120CIPa			CF
			Ret. Time (PPB)	STD CON	Height		Ret. Time (PPB)	STD CON	Height	
SC11002.	A MIX	3/11/93	31.14	1.0000	22544.08	2.2544e4	31.87	1.0000	16037.44	1.6037e4
SC11003.	B MIX	3/11/93	31.09	7.5000	245904.38	3.2787e4	31.83	7.5000	173817.41	2.3175e4
SC11004.	C MIX	3/11/93	31.10	15.0000	522953.50	3.4863e4	31.84	15.0000	373656.69	2.4910e4
SC11005.	D MIX	3/11/93	31.10	22.5000	716323.31	3.1836e4	31.84	22.5000	491558.41	2.1847e4
SC11006.	E MIX	3/11/93	31.10	30.0000	884211.88	2.9473e4	31.83	30.0000	765492.19	2.5516e4
Averages			31.11	15.2000	478387.44	3.0301e4	31.84	15.2000	364112.44	2.2297e4
XRSD			0.06	75.97	72.80	15.67	0.06	75.97	79.46	16.98

File Name	SAMPLE NAME Number	Date Of Injection	BrDCI Me			CF	2CIEthylVO			CF
			Ret. Time (PPB)	STD CON	Height		Ret. Time (PPB)	STD CON	Height	
SC11002.	A MIX	3/11/93	32.82	1.0000	14155.95	1.4155e4	34.17	1.0000	1359.65	1.3596e3
SC11003.	B MIX	3/11/93	32.79	7.5000	168091.09	2.2412e4	34.09	5.0000	16449.71	3.2899e3
SC11004.	C MIX	3/11/93	32.79	15.0000	363604.06	2.4240e4	34.08	10.0000	47110.29	4.7110e3
SC11005.	D MIX	3/11/93	32.79	22.5000	533252.63	2.3700e4	34.08	15.0000	62957.81	4.1971e3
SC11006.	E MIX	3/11/93	32.78	30.0000	763542.75	2.5451e4	34.08	20.0000	94508.63	4.7254e3
Averages			32.79	15.2000	368529.28	2.1991e4	34.10	10.2000	44477.22	3.6566e3
XRSD			0.05	75.97	80.15	20.53	0.12	74.47	83.34	38.57

File Name	SAMPLE NAME Number	Date Of Injection	C-13DCI Pe			CF	T-13DCI Pe			CF
			Ret. Time (PPB)	STD CON	Height		Ret. Time (PPB)	STD CON	Height	
SC11002.	A MIX	3/11/93	35.11	1.0000	24104.91	2.4104e4	37.50	1.0000	3274.82	3.2748e3
SC11003.	B MIX	3/11/93	35.09	7.5000	181029.34	2.4137e4	37.45	7.5000	123831.81	1.6510e4
SC11004.	C MIX	3/11/93	35.09	15.0000	380476.03	2.5365e4	37.45	15.0000	263198.44	1.7546e4
SC11005.	D MIX	3/11/93	35.09	22.5000	559108.19	2.4849e4	37.44	22.5000	330098.88	1.4671e4
SC11006.	E MIX	3/11/93	35.09	30.0000	765045.56	2.5501e4	37.45	30.0000	539054.94	1.7968e4

Averages	35.09	15.2000	381952.81	2.4791e4	37.46	15.2000	251891.78	1.3994e4
%RSD	0.04	75.97	77.07	2.66	0.06	75.97	81.10	43.78

		112TClEa				TetClE				
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON (PPB)	Height	CF
SC11002.	A MIX	3/11/93	38.29	1.0000	12481.29	1.2481e4	40.13	1.0000	21226.45	2.1226e4
SC11003.	B MIX	3/11/93	38.26	7.5000	162610.23	2.1681e4	40.10	7.5000	236332.06	3.1510e4
SC11004.	C MIX	3/11/93	38.26	15.0000	331990.75	2.2132e4	40.10	15.0000	495358.72	3.3023e4
SC11005.	D MIX	3/11/93	38.25	22.5000	401296.81	1.7835e4	40.10	22.5000	690469.38	3.0687e4
SC11006.	E MIX	3/11/93	38.26	30.0000	675969.13	2.2532e4	40.12	30.0000	908708.69	3.0290e4

Averages	38.26	15.2000	316869.66	1.9332e4	40.11	15.2000	470419.06	2.9347e4
%RSD	0.04	75.97	79.33	22.06	0.03	75.97	74.99	15.88

		DBrClMe				ClBz				
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON (PPB)	Height	CF
SC11002.	A MIX	3/11/93	41.25	1.0000	6495.31	6.4953e3	45.73	1.0000	6160.21	6.1602e3
SC11003.	B MIX	3/11/93	41.23	7.5000	86752.33	1.1566e4	45.70	7.5000	68340.27	9.1120e3
SC11004.	C MIX	3/11/93	41.22	15.0000	191105.80	1.2740e4	45.69	15.0000	145023.06	9.6682e3
SC11005.	D MIX	3/11/93	41.22	22.5000	273058.94	1.2135e4	45.70	22.5000	225280.31	1.0012e4
SC11006.	E MIX	3/11/93	41.23	30.0000	393659.16	1.3121e4	45.71	30.0000	287762.63	9.5920e3

Averages	41.23	15.2000	190214.31	1.1212e4	45.71	15.2000	146513.30	8.9089e3
%RSD	0.04	75.97	80.04	24.10	0.04	75.97	77.80	17.62

		o-Cl,F-Benzene				CHBr3				
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON (PPB)	Height	CF
SC11002.	A MIX	3/11/93	47.70	100.0000	218530.64	2.1853e3	53.52	1.0000	2457.38	2.4573e3
SC11003.	B MIX	3/11/93	47.69	100.0000	249540.30	2.4954e3	53.48	7.5000	41801.03	5.5734e3
SC11004.	C MIX	3/11/93	47.68	100.0000	250435.38	2.5043e3	53.47	15.0000	96899.52	6.4599e3
SC11005.	D MIX	3/11/93	47.69	100.0000	250891.95	2.5089e3	53.48	22.5000	137679.98	6.1191e3
SC11006.	E MIX	3/11/93	47.71	100.0000	248112.16	2.4811e3	53.49	30.0000	200180.30	6.6726e3

Averages	47.70	100.0000	243502.08	2.4350e3	53.49	15.2000	95803.64	5.4565e3
%RSD	0.02	0.00	5.75	5.75	0.04	75.97	81.32	31.66

		1122TetClEa				123TriClPropane				
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON (PPB)	Height	CF
SC11002.	A MIX	3/11/93	54.98	1.0000	7599.34	7.5993e3	57.68	1.0000	5263.68	5.2636e3
SC11003.	B MIX	3/11/93	54.94	7.5000	108817.80	1.4509e4	55.98	7.5000	75532.08	1.0070e4
SC11004.	C MIX	3/11/93	54.94	15.0000	221128.89	1.4741e4	55.97	15.0000	153380.25	1.0225e4
SC11005.	D MIX	3/11/93	54.95	22.5000	300217.91	1.3343e4	55.99	22.5000	213119.44	9.4719e3
SC11006.	E MIX	3/11/93	54.97	30.0000	426301.06	1.4210e4	56.01	30.0000	300088.91	1.0002e4

Averages	54.96	15.2000	212813.00	1.2880e4	56.33	15.2000	149476.88	9.0069e3
%RSD	0.03	75.97	76.57	23.29	1.35	75.97	77.02	23.45

		13DClBz				14DClBz				
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF	Ret. Time	STD CON (PPB)	Height	CF
SC11002.	A MIX	3/11/93	62.36	1.0000	10232.27	1.0232e4	62.97	1.0000	11963.81	1.1963e4
SC11003.	B MIX	3/11/93	62.33	7.5000	130027.92	1.7337e4	62.94	7.5000	142211.52	1.8961e4
SC11004.	C MIX	3/11/93	62.34	15.0000	254268.83	1.6951e4	62.95	15.0000	297688.47	1.9845e4
SC11005.	D MIX	3/11/93	62.35	22.5000	420493.09	1.8688e4	62.96	22.5000	450424.16	2.0018e4
SC11006.	E MIX	3/11/93	62.38	30.0000	607578.88	2.0252e4	62.99	30.0000	647703.81	2.1590e4

Averages	62.35	15.2000	284520.19	1.6692e4	62.96	15.2000	309998.34	1.8476e4
%RSD	0.03	75.97	82.96	22.98	0.03	75.97	80.79	20.36

		12DClBz				
File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time	STD CON (PPB)	Height	CF
SC11002.	A MIX	3/11/93	64.89	1.0000	12930.41	1.2930e4
SC11003.	B MIX	3/11/93	64.86	7.5000	131578.59	1.7543e4
SC11004.	C MIX	3/11/93	64.88	15.0000	286022.72	1.9068e4
SC14005.	D MIX	3/11/93	64.88	22.5000	411166.97	1.8274e4
SC11006.	E MIX	3/11/93	64.91	30.0000	596207.19	1.9873e4

Averages	64.89	15.2000	287581.19	1.7538e4		
%RSD	0.03	75.97	79.73	15.50		

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***** SUMMARY REPORT *****

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PID LINEARITY CALCULATIONS FOR V3400A USING A RESTEK 502.2 COLUMN 105m* 0.53mm I.D., 3.0um Df COLUMN.

File Name	SAMPLE NAME Number	Date Of Injection	Air			VCL			
			Ret. Time	STD CON	Height	CF	Ret. Time	STD CON	Height
			(PPB)				(PPB)		
TC11002.	A MIX	3/11/93	----	-----	-----	-----	9.00	1.5000	821.09
TC11003.	B MIX	3/11/93	----	-----	-----	-----	8.98	7.5000	4669.67
TC11004.	C MIX	3/11/93	----	-----	-----	-----	9.00	15.0000	10917.83
TC11005.	D MIX	3/11/93	----	-----	-----	-----	9.01	22.5000	15779.51
TC11006.	E MIX	3/11/93	----	-----	-----	-----	8.97	30.0000	22321.58
Averages			----	-----	-----	-----	8.99	15.3000	10901.94
XRSD			----	-----	-----	-----	0.18	74.47	78.73

File Name	SAMPLE NAME Number	Date Of Injection	11DCLE			T-12DCLE			
			Ret. Time	STD CON	Height	CF	Ret. Time	STD CON	Height
			(PPB)				(PPB)		
TC11002.	A MIX	3/11/93	17.01	1.0000	3045.34	3.0453e3	20.21	1.0000	9455.26
TC11003.	B MIX	3/11/93	16.95	7.5000	22105.58	2.9474e3	20.15	7.5000	90709.31
TC11004.	C MIX	3/11/93	16.96	15.0000	48436.09	3.2290e3	20.16	15.0000	193174.39
TC11005.	D MIX	3/11/93	16.97	22.5000	77564.56	3.4473e3	20.17	22.5000	304052.16
TC11006.	E MIX	3/11/93	16.93	30.0000	104795.52	3.4931e3	20.14	30.0000	430248.53
Averages			16.96	15.2000	51189.42	3.2324e3	20.16	15.2000	205527.92
XRSD			0.17	75.97	80.19	7.43	0.13	75.97	81.41

File Name	SAMPLE NAME Number	Date Of Injection	C-12DCLE			Bz			
			Ret. Time	STD CON	Height	CF	Ret. Time	STD CON	Height
			(PPB)				(PPB)		
TC11002.	A MIX	3/11/93	24.14	1.0000	3767.23	3.7672e3	28.43	1.0000	10859.64
TC11003.	B MIX	3/11/93	24.07	7.5000	33330.04	4.4440e3	28.38	7.5000	74364.31
TC11004.	C MIX	3/11/93	24.08	15.0000	79164.63	5.2776e3	28.39	15.0000	154806.39
TC11005.	D MIX	3/11/93	24.10	22.5000	118690.73	5.2751e3	28.40	22.5000	241699.34
TC11006.	E MIX	3/11/93	24.08	30.0000	164505.09	5.4835e3	28.39	30.0000	344573.31
Averages			24.09	15.2000	79891.55	4.8495e3	28.40	15.2000	165260.59
XRSD			0.11	75.97	80.70	14.95	0.07	75.97	80.17

File Name	SAMPLE NAME Number	Date Of Injection	FBz			TCLE			
			Ret. Time	STD CON	Height	CF	Ret. Time	STD CON	Height
			(PPB)				(PPB)		
TC11002.	A MIX	3/11/93	29.36	100.0000	186916.70	1.8691e3	31.06	1.0000	4318.56
TC11003.	B MIX	3/11/93	29.32	100.0000	200310.64	2.0031e3	31.03	7.5000	41300.73
TC11004.	C MIX	3/11/93	29.33	100.0000	209265.84	2.0926e3	31.03	15.0000	98611.63
TC11005.	D MIX	3/11/93	29.33	100.0000	212601.94	2.1260e3	31.03	22.5000	155185.02
TC11006.	E MIX	3/11/93	29.32	100.0000	212234.02	2.1223e3	31.03	30.0000	219813.63
Averages			29.33	100.0000	204265.84	2.0426e3	31.03	15.2000	103845.91
XRSD			0.05	0.00	5.33	5.33	0.04	75.97	83.30

File Name	SAMPLE NAME Number	Date Of Injection	2CLEthylVO			C-13DClPe			
			Ret. Time	STD CON	Height	CF	Ret. Time	STD CON	Height
			(PPB)				(PPB)		
TC11002.	A MIX	3/11/93	34.03	1.0000	1004.47	1.0044e3	35.04	1.0000	2723.17
TC11003.	B MIX	3/11/93	34.01	5.0000	7810.77	1.5621e3	35.02	7.5000	16677.63
TC11004.	C MIX	3/11/93	34.01	10.0000	20905.94	2.0905e3	35.03	15.0000	35252.30
TC11005.	D MIX	3/11/93	34.01	15.0000	27944.84	1.8629e3	35.03	22.5000	56635.70
TC11006.	E MIX	3/11/93	34.01	20.0000	41034.49	2.0517e3	35.02	30.0000	81506.79
Averages			34.01	10.2000	19740.10	1.7143e3	35.03	15.2000	38559.12
XRSD			0.02	74.47	80.72	26.16	0.02	75.97	81.45

File Name	SAMPLE NAME Number	Date Of Injection	Toluene			T-13DClPe			
			Ret. Time	STD CON	Height	CF	Ret. Time	STD CON	Height
			(PPB)				(PPB)		
TC11002.	A MIX	3/11/93	36.56	1.0000	8025.10	8.0251e3	37.39	1.0000	778.92
TC11003.	B MIX	3/11/93	36.55	7.5000	70678.99	9.4238e3	37.38	7.5000	16005.56

TUT 004 1872

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File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
TC11004.	C MIX	3/11/93	36.55	15.0000	150242.22	1.0016e4	37.38	15.0000	34939.13	2.3292e3
TC11005.	D MIX	3/11/93	36.55	22.5000	236442.02	1.0508e4	37.38	22.5000	55615.57	2.4718e3
TC11006.	E MIX	3/11/93	36.55	30.0000	341809.44	1.1393e4	37.38	30.0000	81263.89	2.7081e3

Averages	Ret. Time (PPB)	STD CON	Height	CF	Averages	Ret. Time (PPB)	STD CON	Height	CF
XRSD	0.02	75.97	81.98	12.76	0.01	75.97	84.45	36.43	

File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
TC11002.	A MIX	3/11/93	40.04	1.0000	2789.51	2.7895e3	45.62	1.0000	5714.78	5.7147e3
TC11003.	B MIX	3/11/93	40.03	7.5000	25166.09	3.3554e3	45.62	7.5000	51592.15	6.8789e3
TC11004.	C MIX	3/11/93	40.03	15.0000	59665.95	3.9777e3	45.61	15.0000	111340.77	7.4227e3
TC11005.	D MIX	3/11/93	40.02	22.5000	94940.77	4.2195e3	45.62	22.5000	170220.03	7.5653e3
TC11006.	E MIX	3/11/93	40.04	30.0000	133962.47	4.4654e3	45.63	30.0000	247082.64	8.2360e3
Averages			40.03	15.2000	63304.96	3.7615e3	45.62	15.2000	117190.08	7.1635e3
XRSD			0.02	75.97	83.30	18.14	0.02	75.97	81.46	13.17

File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
TC11002.	A MIX	3/11/93	46.19	1.0000	4683.53	4.6835e3	46.85	1.0000	4871.77	4.8717e3
TC11003.	B MIX	3/11/93	46.18	7.5000	39911.34	5.3215e3	46.85	7.5000	40650.30	5.4200e3
TC11004.	C MIX	3/11/93	46.17	15.0000	91235.54	6.0823e3	46.84	15.0000	94624.71	6.3083e3
TC11005.	D MIX	3/11/93	46.18	22.5000	141866.73	6.3051e3	46.85	22.5000	147656.02	6.5624e3
TC11006.	E MIX	3/11/93	46.20	30.0000	203870.11	6.7956e3	46.87	30.0000	213658.45	7.1219e3
Averages			46.18	15.2000	96313.45	5.8376e3	46.85	15.2000	100292.25	6.0569e3
XRSD			0.02	75.97	82.49	14.32	0.02	75.97	83.11	14.91

File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
TC11002.	A MIX	3/11/93	47.62	100.0000	116917.85	1.1691e3	50.73	1.0000	4204.21	4.2042e3
TC11003.	B MIX	3/11/93	47.61	100.0000	131701.67	1.3170e3	50.72	7.5000	34419.75	4.5893e3
TC11004.	C MIX	3/11/93	47.60	100.0000	134927.91	1.3492e3	50.71	15.0000	80090.87	5.3393e3
TC11005.	D MIX	3/11/93	47.62	100.0000	134189.28	1.3418e3	50.73	22.5000	122719.75	5.4542e3
TC11006.	E MIX	3/11/93	47.63	100.0000	134652.47	1.3465e3	50.74	30.0000	175636.78	5.8545e3
Averages			47.62	100.0000	130477.84	1.3047e3	50.73	15.2000	83414.27	5.0883e3
XRSD			0.02	0.00	5.89	5.89	0.03	75.97	82.05	13.24

File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF	Ret. Time (PPB)	STD CON	Height	CF
TC11002.	A MIX	3/11/93	62.28	1.0000	6954.18	6.9541e3	62.89	1.0000	6932.00	6.9319e3
TC11003.	B MIX	3/11/93	62.26	7.5000	73354.26	9.7805e3	62.87	7.5000	72826.47	9.7101e3
TC11004.	C MIX	3/11/93	62.27	15.0000	156241.63	1.0416e4	62.88	15.0000	157160.53	1.0477e4
TC11005.	D MIX	3/11/93	62.28	22.5000	239977.52	1.0665e4	62.89	22.5000	241699.25	1.0742e4
TC11006.	E MIX	3/11/93	62.31	30.0000	355665.00	1.1855e4	62.92	30.0000	358086.84	1.1936e4
Averages			62.28	15.2000	166438.52	9.9344e3	62.89	15.2000	167341.02	9.9595e3
XRSD			0.03	75.97	82.50	18.40	0.03	75.97	82.74	18.80

File Name	SAMPLE NAME Number	Date Of Injection	Ret. Time (PPB)	STD CON	Height	CF
TC11002.	A MIX	3/11/93	64.82	1.0000	7019.45	7.0194e3
TC11003.	B MIX	3/11/93	64.80	7.5000	60220.91	8.0294e3
TC11004.	C MIX	3/11/93	64.81	15.0000	131783.09	8.7855e3
TC11005.	D MIX	3/11/93	64.82	22.5000	194436.27	8.6416e3
TC11006.	E MIX	3/11/93	64.85	30.0000	287134.03	9.5711e3
Averages			64.82	15.2000	136118.75	8.4094e3
XRSD			0.03	75.97	81.02	11.32

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Software Version: 3.2 <16C20>

Sample Name : 1 PPB 8010/8020 STD

Sample Number: A MIX

Operator :

Time : 3/12/93 8:44 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 5:15 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC11002.raw

Result File : n:\v3400s\TC11002.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 59

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	5.679	0.0	BB	363.4000	4088.25	1034.58	11.25		11.25
2	6.635	0.0	BB	2493.6582	473.50	62.85	0.19		0.19
3	7.088	0.0	BB	4064.0723	652.75	87.92	0.16		0.16
5	8.710	0.0	VV	6748.5703	983.31	79.76	0.15		0.15
6	9.001	0.0	VV VCI	9368.2295	14052.34	821.09	1.50	VCI	1.50
7	9.381	0.0	VV	9416.7940	19936.03	1246.36	2.12		2.12
8	10.201	0.0	VB	8647.6963	5019.53	317.74	0.58		0.58
10	13.829	0.0	BB	74696.7266	3002.50	122.41	0.04		0.04
11	15.089	0.0	BB	29881.4492	63739.50	6698.19	2.13		2.13
12	15.679	0.0	BV	30549.8047	10727.80	1069.40	0.35		0.35
13	15.949	0.0	VB	31454.2402	7760.20	751.33	0.25		0.25
14	16.601	0.0	BV	29568.7559	3135.34	322.92	0.11		0.11
15	17.006	0.3	VB 110CIE	27952.1250	27952.13	3045.34	1.00	110CIE	1.00
16	19.074	0.0	BV	88234.3594	5718.78	612.83	0.07		0.07
17	19.782	0.0	VV	1.3642e5	4721.14	327.20	0.04		0.04
18	20.206	0.2	VV T-12DCIE	58490.9375	58490.94	9455.26	1.00	T-12DCIE	1.00
19	21.488	0.0	VV	1.4859e5	5555.97	353.52	0.04		0.04
20	22.229	0.0	VV	36077.0781	943.56	98.53	0.03		0.03
21	23.464	0.0	VV	45664.2734	7541.28	622.14	0.17		0.17
22	24.135	0.2	VV C-12DCIE	29165.5625	29165.56	3767.23	1.00	C-12DCIE	1.00
23	25.481	0.0	VV	61432.2852	9260.31	567.87	0.15		0.15
24	28.429	0.1	VB Bz	97387.9375	97387.94	10859.64	1.00	Bz	1.00

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25	29.356	0.1 BV FBz	15007.6699	1500767.00	186916.70	100.00	FBz	100.00
26	31.055	0.1 VE TCLE	34298.9688	34298.97	4318.56	1.00	TCLE	1.00
27	31.335	0.0 EV	1.6846e5	12168.00	311.92	0.07		0.07
28	34.027	0.0 VV 2ClEthylVO	9519.6563	9519.66	1004.47	1.00	2ClEthylVO	1.00
29	34.703	0.0 VV	50061.7227	2534.30	137.86	0.05		0.05
30	35.037	0.0 VV C-13DClPe	20254.4844	20254.48	2723.17	1.00	C-13DClPe	1.00
31	35.542	0.0 VV	50058.0820	2641.11	143.68	0.05		0.05
32	36.058	0.0 VV	1.4835e5	8785.22	475.22	0.06		0.06
33	36.564	0.0 VV Toluene	67171.5938	67171.59	8025.10	1.00	Toluene	1.00
34	37.392	0.0 VV T-13DClPe	9381.3750	9381.38	778.92	1.00	T-13DClPe	1.00
35	39.310	0.0 VV	31527.0059	4816.00	426.12	0.15		0.15
36	40.041	0.0 VB TetCLE	27918.7188	27918.72	2789.51	1.00	TetCLE	1.00
37	45.624	0.0 BV ClBz	67268.2500	67268.25	5714.78	1.00	ClBz	1.00
38	46.186	0.0 VV EthylBz	57261.5000	57261.50	4683.53	1.00	EthylBz	1.00
39	46.853	0.0 VV m-Xylene	61086.2813	61086.28	4871.77	1.00	m-Xylene	1.00
40	47.619	0.0 VV o-Cl,F-Ben	14032.3750	1403237.63	116917.85	100.00	o-Cl,F-Ben	100.00
41	50.730	0.0 VV o-Xylene	54552.3125	54552.31	4204.21	1.00	o-Xylene	1.00
42	52.788	0.0 VB	1.3277e5	12237.38	387.49	0.09		0.09
43	57.301	0.0 BV	1.2590e5	4916.00	271.53	0.04		0.04
44	57.583	0.0 VB	62539.7227	52990.00	5892.28	0.85		0.85
45	60.194	0.0 BV	72711.2656	12697.03	1214.36	0.18		0.18
46	61.262	0.0 VV	1.0852e5	9694.72	621.21	0.09		0.09
47	62.277	0.0 VV 13DClBz	49565.8281	49565.83	6954.18	1.00	13DClBz	1.00
48	62.889	0.0 VB 14DClBz	46985.4063	46985.41	6932.00	1.00	14DClBz	1.00
49	64.067	0.0 BB	94500.0547	32951.00	2447.59	0.35		0.35
50	64.816	0.0 BB 12DClBz	45195.0000	45195.00	7019.45	1.00	12DClBz	1.00
51	65.440	0.0 BB	68348.3750	738.50	75.85	0.01		0.01
52	65.939	0.0 BB	78629.4688	550.00	49.10	0.01		0.01
53	66.467	0.0 BV	39520.2891	29759.00	5285.68	0.75		0.75
54	67.543	0.0 VB	9.5089e5	1092.50	8.07	0.00		0.00
55	67.965	0.0 BB	1.2267e5	1960.52	112.18	0.02		0.02
56	68.643	0.0 BV	49856.1133	585.70	82.46	0.01		0.01
57	68.883	0.0 VB	54438.6523	2200.29	283.71	0.04		0.04
58	69.098	0.0 BV	35867.3711	376.12	73.61	0.01		0.01
59	69.523	0.0 VB	1.0303e5	4715.38	321.25	0.05		0.05
		1.4	4.0948e6	4033181.50	424799.47	239.18		239.18

Missing Component Report

Component	Expected Retention (Sample File)

Air	5.000

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Y. NOT DETECTED ON PRIMARY RUN:	Z. NOT DETECTED ON HALL

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Sample Name : 1 PPS 8010/8020 STD
FileName : n:\v3400a\TC11002.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: A MIX

Page 1 of 1

Date : 3/12/93 8:44 AM

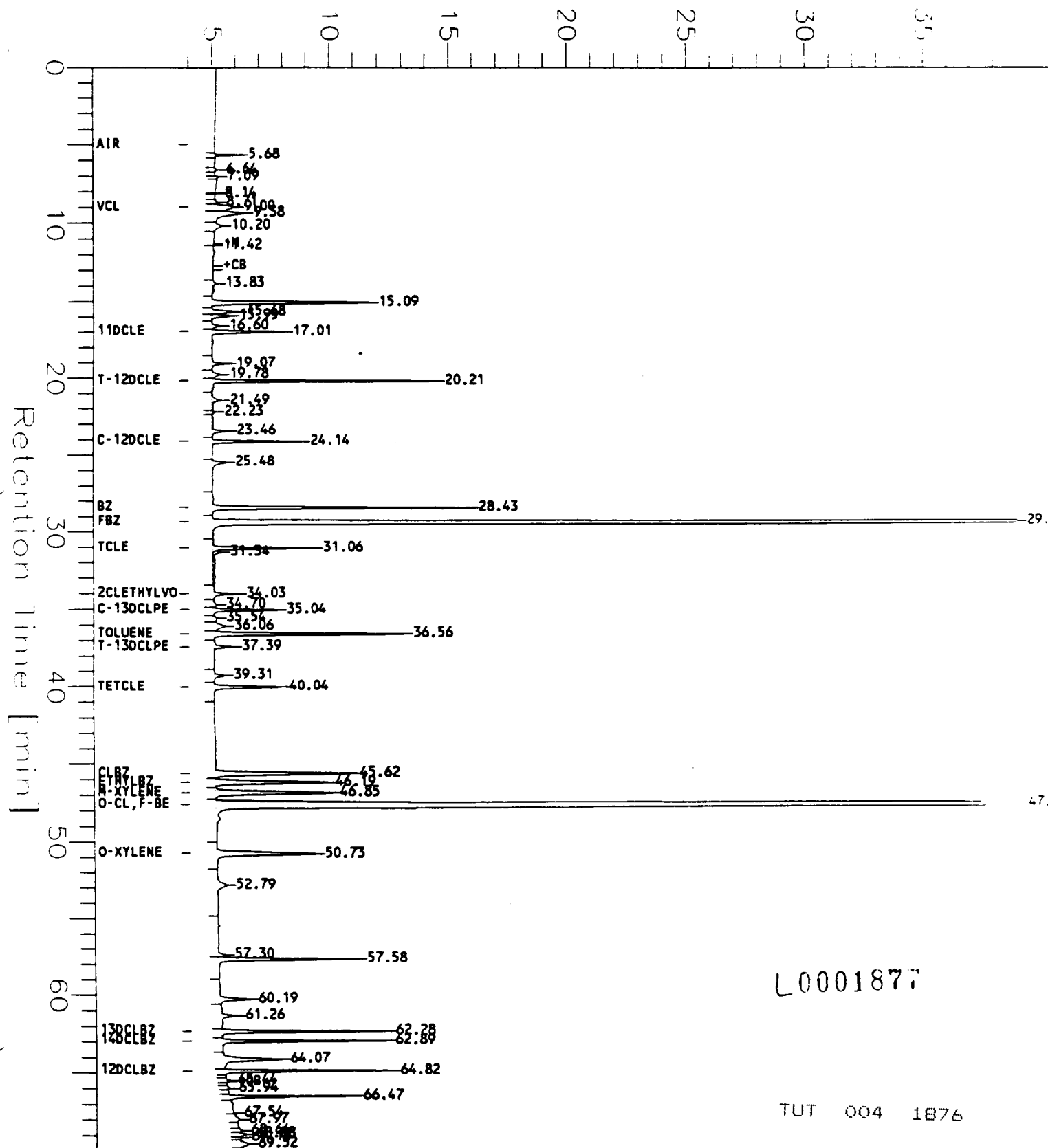
Time of Injection: 3/11/93 5:15 PM

Low Point : 4.00 mV

High Point : 39.00 mV

Plot Scale: 35 mV

Response [mV]



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TUT 004 1876

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Software Version: 3.2 <16C20>

Sample Name : 7.5PPB 8010/8020 STD

Sample Number: B MIX

Operator :

Time : 3/12/93 8:49 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 6:30 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC11003.raw

Result File : n:\v3400s\TC11003.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 72

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uv*sec]	Height [uv]	INST. Amt Cal. (IS%) Range	Component Name	SAMPLE CON (PPB)
1	5.670	0.0	BB	527.7333	5937.00	1445.43	11.25		11.25
2	7.071	0.0	BB	3607.0889	717.75	108.92	0.20		0.20
3	7.695	0.0	BB	3235.3994	284.00	48.05	0.09		0.09
4	8.304	0.0	BV	7604.4805	704.91	50.74	0.09		0.09
5	8.981	-0.2	VV VCI	10133.9209	76004.41	4669.67	7.50	VCI	7.50
6	9.374	0.0	VV	10766.8418	29026.78	1588.21	2.70		2.70
7	10.158	0.0	VB	9602.4541	6035.89	344.08	0.63		0.63
8	11.788	0.0	BV	8477.7461	7196.80	464.69	0.85		0.85
9	12.458	0.0	VB	5691.9492	825.41	79.38	0.15		0.15
10	13.990	0.0	BB	1.0036e5	4507.25	136.76	0.05		0.05
11	15.033	0.0	BB	28526.2461	57522.00	6025.95	2.02		2.02
12	15.625	0.0	BV	31457.8340	10677.38	1033.65	0.34		0.34
13	15.890	0.0	VV	32298.3652	7474.31	704.74	0.23		0.23
14	16.538	0.0	VV	36631.3828	5898.19	490.34	0.16		0.16
15	16.946	-0.1	VB 11DCIE	25183.8789	188879.09	22105.58	7.50	11DCIE	7.50
16	18.821	0.0	BV	1.3177e5	1397.94	100.31	0.01		0.01
17	19.013	0.0	VV	80138.7266	10389.59	1225.83	0.13		0.13
18	19.722	0.0	VV	1.3222e5	4679.48	334.63	0.04		0.04
19	20.145	-0.1	VB T-12DCIE	68158.3281	511187.47	90709.31	7.50	T-12DCIE	7.50
20	21.421	0.0	BV	1.2476e5	3929.00	297.75	0.03		0.03
21	21.783	0.0	VV	2.8145e5	7352.50	247.00	0.03		0.03
22	23.398	0.0	VV	36804.4922	6012.00	615.38	0.16		0.16

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23	24.070	-0.1 VB	C-12DCIE	32275.9336	242069.50	33330.04	7.50	C-12DCIE	7.50
24	24.786	0.0 BV		53466.9102	3347.75	235.88	0.06		0.06
25	25.417	0.0 VV		55000.5273	8141.25	557.63	0.15		0.15
26	26.579	0.0 VV		2.8768e5	5436.25	205.21	0.02		0.02
27	27.735	0.0 VV		1.9896e5	4561.55	248.98	0.02		0.02
28	28.381	-0.0 VB	Bz	82542.3594	619067.69	74364.31	7.50	Bz	7.50
29	29.318	-0.0 BE	FBz	16249.2315	1624923.13	200310.64	100.00	FBz	100.00
30	30.525	0.0 EV		72301.2891	2306.00	137.74	0.03		0.03
31	31.029	-0.0 VE	TCIE	41373.8789	310304.13	41300.73	7.50	TCIE	7.50
32	31.832	0.0 EV		1.4008e5	9219.00	284.20	0.07		0.07
33	32.785	0.0 VV		20914.0254	5406.59	259.67	0.26		0.26
34	33.240	0.0 VV		13965.5186	4641.34	333.83	0.33		0.33
35	34.007	-0.0 VV	2CIEthylVO	11041.2842	55206.42	7810.77	5.00	2CIEthylVO	5.00
36	34.820	0.0 VV		32262.3652	3661.38	309.05	0.11		0.11
37	35.019	-0.0 VV	C-130ClPe	15929.0752	119468.06	16677.63	7.50	C-130ClPe	7.50
38	36.058	0.0 VV		1.8220e5	10515.25	463.14	0.06		0.06
39	36.551	0.0 VV	Toluene	73270.9922	549532.44	70678.99	7.50	Toluene	7.50
40	37.379	-0.0 VV	T-130ClPe	15799.5117	118496.33	16005.56	7.50	T-130ClPe	7.50
41	38.175	0.0 VV		15504.2979	5688.50	285.78	0.37		0.37
42	39.293	0.0 VV		49143.4141	4332.03	245.90	0.09		0.09
43	40.029	0.0 VB	TetCIE	32279.7754	242098.31	25166.09	7.50	TetCIE	7.50
44	41.171	0.0 BV		41958.2891	2594.72	172.50	0.06		0.06
45	45.622	0.0 VV	ClBz	74647.0313	559852.75	51592.15	7.50	ClBz	7.50
46	46.183	0.0 VV	EthylBz	62288.5742	467164.31	39911.34	7.50	EthylBz	7.50
47	46.851	0.0 VV	m-Xylene	65701.3125	492759.81	40650.30	7.50	m-Xylene	7.50
48	47.612	0.0 VE	o-Cl,F-Ben	15656.1387	1565613.88	131701.67	100.00	o-Cl,F-Ben	100.00
49	48.501	0.0 EV		46373.0938	8791.00	221.64	0.19		0.19
50	50.718	0.0 VV	o-Xylene	55949.7852	419623.38	34419.75	7.50	o-Xylene	7.50
51	52.774	0.0 VV		1.1005e5	12066.34	460.94	0.11		0.11
52	53.393	0.0 VV		1.1672e5	6958.59	250.63	0.06		0.06
53	54.919	0.0 VV		66436.8203	2238.45	141.65	0.03		0.03
54	55.365	0.0 VV		49016.4766	953.55	81.79	0.02		0.02
55	55.942	0.0 VV		68578.8594	2100.45	128.77	0.03		0.03
56	56.590	0.0 VV		78419.1172	1413.45	125.34	0.02		0.02
57	57.287	0.0 VV		85444.9844	3794.36	308.81	0.04		0.04
58	57.599	0.0 VB		1.0119e5	2787.84	191.59	0.03		0.03
59	60.172	0.0 BB		85461.6094	8970.50	729.95	0.11		0.11
60	61.238	0.0 BV		77078.5781	2751.28	248.23	0.04		0.04
61	62.261	-0.0 VV	130ClBz	64952.3320	487142.50	73354.26	7.50	130ClBz	7.50
62	62.872	-0.0 VB	140ClBz	60117.0898	450878.19	72826.47	7.50	140ClBz	7.50
63	64.044	0.0 BB		94203.3672	37533.00	2796.72	0.40		0.40
64	64.800	-0.0 BB	120ClBz	49475.2656	371064.50	60220.91	7.50	120ClBz	7.50
65	65.400	0.0 BB		72302.5859	1258.00	122.13	0.02		0.02
66	66.145	0.0 BB		38420.9766	271.00	49.51	0.01		0.01
67	66.448	0.0 BB		39090.2266	16599.50	2980.78	0.43		0.43
68	66.983	0.0 BB		81422.6250	749.50	64.61	0.01		0.01
69	67.943	0.0 BB		1.4737e5	1645.50	78.37	0.01		0.01
70	68.907	0.0 BV		57207.4727	1558.79	191.27	0.03		0.03
71	69.083	0.0 VB		38799.7344	402.96	72.90	0.01		0.01
72	69.325	0.0 BB		35472.0469	173.50	34.33	0.01		0.01

-0.4		4.5915e6		9824774.00	1.13e6	354.85	354.85		

Missing Component Report

Component Expected Retention (Sample File)

Air 5.000

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

TUT 004 1878

L 0001873

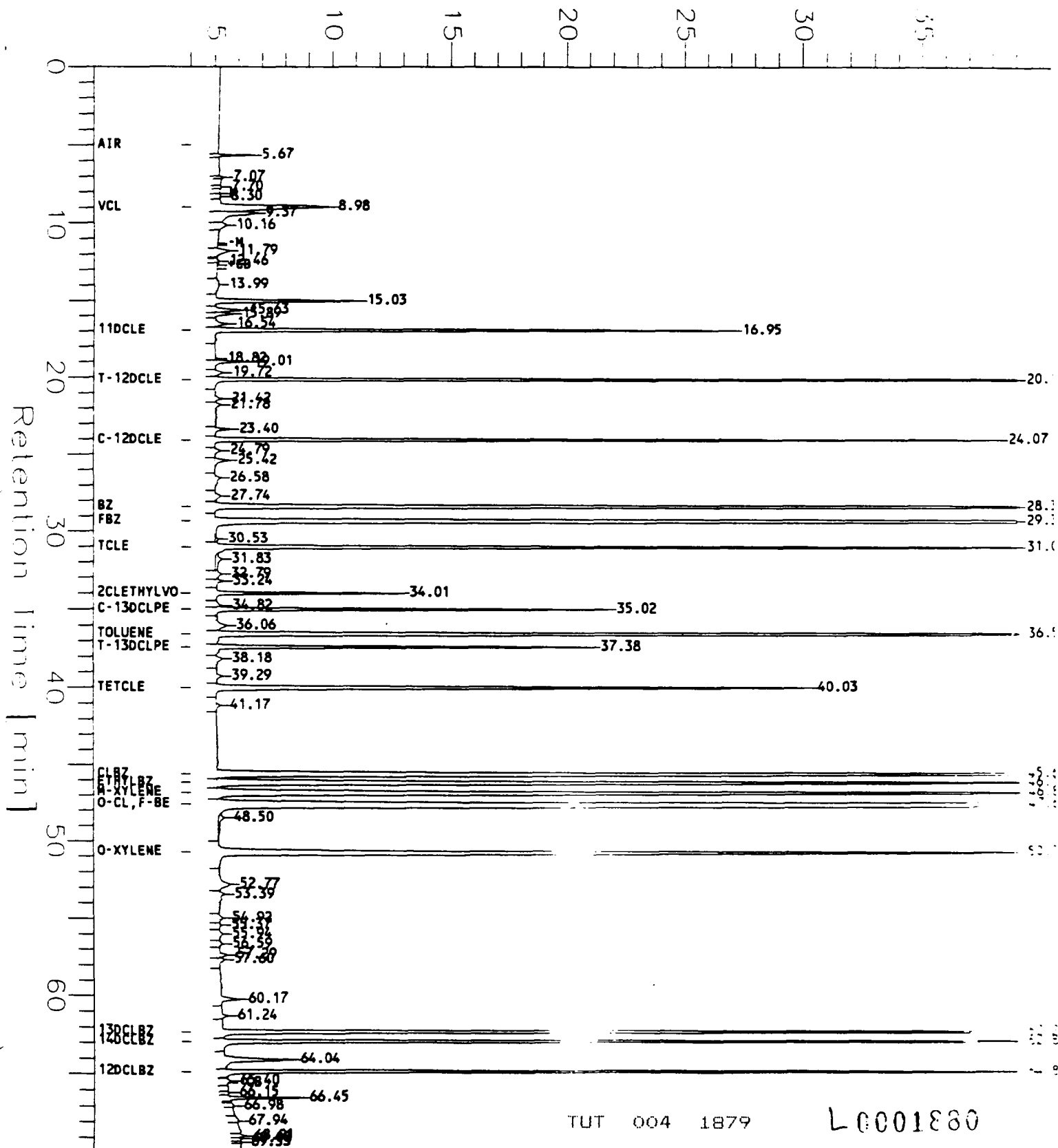
Sample Name : 7.5PPB 8010/8020 STD
FileName : n:\v3400a\TC11003.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor: 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: 8 MIX
Date : 3/12/93 8:49 AM
Time of Injection: 3/11/93 6:30 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

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Response [mV]



Software Version: 3.2 <16C20>

Sample Name : 15 PPB 8010/8020 STD

Sample Number: C MIX

Operator :

Time : 3/12/93 8:28 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 7:46 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC11004.raw

Result File : n:\v3400s\TC11004.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 77

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	5.673	0.0	BB	633.5111	7127.00	1695.92	11.25		11.25
2	7.067	0.0	BB	3889.6548	600.00	102.50	0.15		0.15
3	7.715	0.0	BB	5483.3325	1205.50	146.09	0.22		0.22
4	8.317	0.0	BV	14906.6182	3182.14	141.85	0.21		0.21
5	8.997	0.0	VV VCI	13992.9356	209894.03	10917.83	15.00	VCI	15.00
6	10.139	0.0	BV	12340.2773	7610.38	409.79	0.62		0.62
8	11.802	0.0	VV	11118.8789	16893.98	1009.52	1.52		1.52
9	12.463	0.0	BV	10098.6260	3354.33	220.71	0.33		0.33
10	14.001	0.0	BB	95430.9688	7552.00	296.39	0.08		0.08
11	15.042	0.0	BB	32997.4961	57935.50	6100.37	1.76		1.76
12	15.640	0.0	BV	40213.3555	11317.77	1054.10	0.28		0.28
13	15.900	0.0	VV	39098.9180	7390.22	707.92	0.19		0.19
14	16.555	0.0	VV	52519.2578	8897.09	634.48	0.17		0.17
15	16.963	-0.1	BV 11DCIE	27053.9629	405809.44	48436.09	15.00	11DCIE	15.00
16	19.028	0.0	BV	1.0293e5	19494.59	2197.18	0.19		0.19
17	19.756	0.0	VV	1.6087e5	4481.32	323.18	0.03		0.03
18	20.159	-0.1	VV T-12DCIE	74073.1797	1111097.75	193174.39	15.00	T-12DCIE	15.00
19	21.007	0.0	VV	1.0761e5	925.39	99.76	0.01		0.01
20	21.434	0.0	VV	1.3645e5	3654.31	310.69	0.03		0.03
21	21.800	0.0	VV	1.8326e5	8035.19	508.68	0.04		0.04
22	22.443	0.0	VV	76596.3438	2443.28	144.33	0.03		0.03
23	23.413	0.0	VV	44564.4922	10276.81	1043.41	0.23		0.23

TUT 004 1880

LC001881

24	24.084	-0.2 VB C-12DCIE	36576.3672	548645.50	79164.63	15.00	C-12DCIE	15.00
25	24.799	0.0 BV	54949.5859	6778.13	558.13	0.12		0.12
26	25.436	0.0 VV	59187.5703	8132.16	621.67	0.14		0.14
27	26.591	0.0 VV	2.4956e5	8907.13	437.34	0.04		0.04
28	27.739	0.0 VV	1.9399e5	8221.48	519.30	0.04		0.04
29	28.392	-0.1 VV Bz	87777.0156	1316655.25	154806.39	15.00	Bz	15.00
30	29.325	-0.1 VE FBz	16931.7500	1693175.00	209265.89	100.00	FBz	100.00
31	30.529	0.0 EV	1.0544e5	4354.00	210.84	0.04		0.04
32	31.033	-0.1 VV TCIE	47410.4570	711156.88	98611.63	15.00	TCIE	15.00
33	31.825	0.0 VV	1.0250e5	8916.94	444.17	0.09		0.09
34	32.785	0.0 VV	16615.3242	6905.23	417.57	0.42		0.42
35	33.247	0.0 VV	11492.1436	6276.06	548.71	0.55		0.55
36	34.012	-0.1 VV 2CIEthylVO	14072.3731	140723.73	20905.94	10.00	2CIEthylVO	10.00
37	34.825	0.0 VV	24783.9668	3996.90	503.66	0.16		0.16
38	35.025	-0.1 VV C-13DCIPe	16384.1309	245761.97	35252.30	15.00	C-13DCIPe	15.00
39	36.053	0.0 VV	2.0087e5	9039.31	437.18	0.05		0.05
40	36.550	-0.1 VE Toluene	79314.5313	1189718.00	150242.22	15.00	Toluene	15.00
41	36.944	0.0 EV	1.1371e5	3082.00	263.30	0.03		0.03
42	37.382	-0.1 VE T-13DCIPe	16552.3613	248285.41	34939.13	15.00	T-13DCIPe	15.00
43	37.690	0.0 EV	9066.1094	2538.50	252.94	0.28		0.28
44	38.163	0.0 VV	15102.7481	8898.00	532.23	0.59		0.59
45	39.298	0.0 VV	59451.2344	5057.50	286.76	0.09		0.09
46	40.029	-0.1 VB TetCIE	36075.8242	541137.38	59665.95	15.00	TetCIE	15.00
47	41.164	0.0 BB	1.4421e5	14695.00	343.48	0.10		0.10
48	45.607	-0.2 BV ClBz	80390.5313	1205858.00	111340.77	15.00	ClBz	15.00
49	46.169	-0.2 VV EthylBz	70828.9297	1062434.00	91235.54	15.00	EthylBz	15.00
50	46.837	-0.2 VV m-Xylene	75521.6250	1132824.38	94624.71	15.00	m-Xylene	15.00
51	47.601	-0.2 VE o-Cl,F-Ben	16034.1104	1603411.00	134927.91	100.00	o-Cl,F-Ben	100.00
52	48.500	0.0 EV	56702.7852	8930.50	180.50	0.16		0.16
53	50.708	-0.1 VV o-Xylene	62661.9727	939929.56	80090.87	15.00	o-Xylene	15.00
54	52.776	0.0 VV	1.3227e5	14423.50	543.38	0.11		0.11
55	53.389	0.0 VV	65870.6719	5447.55	412.13	0.08		0.08
56	53.708	0.0 VV	1.2888e5	5087.84	196.72	0.04		0.04
57	54.926	0.0 VV	95793.3750	5198.91	270.46	0.05		0.05
58	55.952	0.0 VV	82506.3828	3296.31	199.10	0.04		0.04
59	56.586	0.0 VB	81920.3359	1747.97	177.39	0.02		0.02
60	57.285	0.0 BV	97918.7344	3272.11	277.81	0.03		0.03
61	57.688	0.0 VB	76554.0313	1640.38	178.14	0.02		0.02
62	60.184	0.0 BV	1.1273e5	14199.81	1047.15	0.13		0.13
63	61.229	0.0 VB	94015.9141	1295.22	114.53	0.01		0.01
64	62.268	-0.1 BV 13DCIBz	70580.7344	1058711.00	156241.63	15.00	13DCIBz	15.00
65	62.881	-0.1 VV 14DCIBz	66460.6719	996910.13	157160.53	15.00	14DCIBz	15.00
66	63.682	0.0 VV	58949.0156	664.45	91.57	0.01		0.01
67	64.062	0.0 VE	1.0973e5	22552.36	1671.40	0.21		0.21
68	64.477	0.0 EB	55895.9609	858.50	124.90	0.02		0.02
69	64.812	-0.1 BB 12DCIBz	53917.4844	808762.25	131783.09	15.00	12DCIBz	15.00
70	65.375	0.0 BB	75432.3828	937.99	101.13	0.01		0.01
71	66.467	0.0 BV	45840.2930	22996.39	4079.70	0.50		0.50
72	67.000	0.0 VB	1.3500e5	1433.13	86.33	0.01		0.01
73	67.823	0.0 BB	1.0811e5	557.75	41.95	0.01		0.01
74	68.304	0.0 BV	59764.9258	668.53	90.97	0.01		0.01
75	68.599	0.0 VV	74724.7031	920.86	100.22	0.01		0.01
76	68.856	0.0 VB	71382.7734	1272.36	144.96	0.02		0.02
77	69.103	0.0 BB	40257.1953	1065.00	215.14	0.03		0.03

	-2.2		5.3148e6	17577544.00	2.08e6	486.59		486.59

Missing Component Report

Component Expected Retention (Sample File)

Air 5.000

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

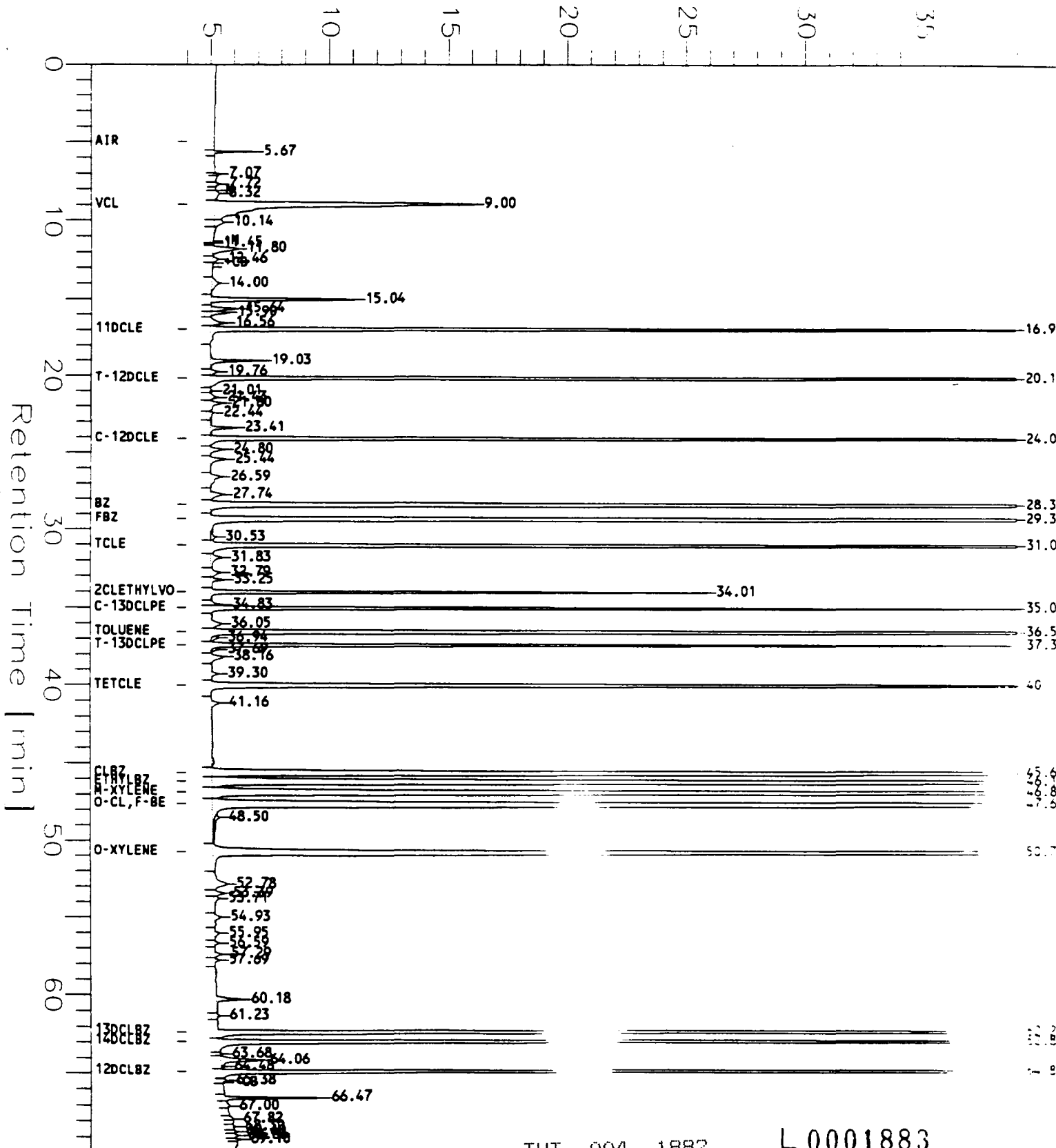
L 0001882

Sample Name : 15 PPM 8010/8020 STD
FileName : n:\v3400a\TC11004.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: C MIX
Date : 3/12/93 8:29 AM
Time of Injection: 3/11/93 7:46 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
Page 1 of 1
High Point : 39.00 mV

Response [mV]



Software Version: 3.2 <16C20>

Sample Name : 22.5PPB 8010/8020 STD

Sample Number: D MIX

Operator :

Time : 3/12/93 8:34 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 9:01 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC11005.raw

Result File : n:\v3400s\TC11005.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 79

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt (1S%)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.676	0.0	BB	1226.4667	13797.75	2825.70	11.25			11.25
2	7.067	0.0	BB	6560.5698	1493.50	151.27	0.23			0.23
3	7.730	0.0	BB	5135.2363	1409.50	182.39	0.27			0.27
4	8.320	0.0	BV	13753.2285	3715.23	179.50	0.27			0.27
5	9.012	0.2	VE VCI	11975.4766	269448.22	15779.51	22.50		VCI	22.50
6	9.716	0.0	EV	12482.2383	17945.00	955.29	1.44			1.44
7	10.143	0.0	VB	12640.6660	7997.72	420.42	0.63			0.63
9	11.809	0.0	VV	10923.3838	23603.36	1432.79	2.16			2.16
10	12.458	0.0	VB	11274.0957	4717.20	278.03	0.42			0.42
11	14.024	0.0	BV	92121.6016	9202.66	374.15	0.10			0.10
12	15.054	0.0	VB	32951.2383	57307.33	6048.64	1.74			1.74
13	15.656	0.0	BV	40920.7109	11801.77	1080.18	0.29			0.29
14	15.910	0.0	VV	39279.9336	7409.70	706.51	0.19			0.19
15	16.566	0.0	VV	56050.2813	10693.38	714.54	0.19			0.19
16	16.971	0.1	VB 11DCIE	28307.7832	636925.13	77564.56	22.50		11DCIE	22.50
17	19.040	0.0	BV	96466.3828	26140.66	3143.83	0.27			0.27
18	19.764	0.0	VV	1.6294e5	4105.72	292.33	0.03			0.03
19	20.171	0.1	VV T-12DCIE	77591.0391	1745798.38	304052.16	22.50		T-12DCIE	22.50
20	21.033	0.0	VV	1.1178e5	1302.57	135.18	0.01			0.01
21	21.444	0.0	VV	1.3679e5	3752.63	318.26	0.03			0.03
22	21.813	0.0	VV	1.7437e5	11494.78	764.79	0.07			0.07
23	22.463	0.0	VV	66953.1094	3072.58	207.64	0.05			0.05

TUT 004 1883

L 0001884

0448

24	23.428	0.0 VV	43087.8516	11587.47	1216.80	0.27		0.27
25	24.100	0.1 VV C-12DCIE	37339.2461	840133.06	118690.73	22.50	C-12DCIE	22.50
26	24.817	0.0 VV	56184.6055	9605.81	773.56	0.17		0.17
27	25.453	0.0 VB	58424.8711	7553.50	584.98	0.13		0.13
28	26.603	0.0 BV	2.4402e5	12786.72	642.08	0.05		0.05
29	27.748	0.0 VV	1.8145e5	11094.53	749.21	0.06		0.06
30	28.402	0.0 VV Bz	90139.4766	2028138.25	241699.34	22.50	Bz	22.50
31	29.329	0.0 VV FBz	16998.1309	1699813.00	212601.94	100.00	FBz	100.00
32	30.521	0.0 VV	1.0057e5	4267.48	216.65	0.04		0.04
33	31.030	-0.0 VV TCIE	50105.2656	1127368.50	155185.02	22.50	TCIE	22.50
34	31.829	0.0 VV	1.2317e5	16225.00	672.55	0.13		0.13
35	32.783	0.0 VV	16774.6934	10600.23	634.92	0.63		0.63
36	33.242	0.0 VV	10478.5674	8100.53	776.73	0.77		0.77
37	34.010	-0.0 VV 2ClEthylVO	12501.9316	187528.97	27944.84	15.00	2ClEthylVO	15.00
38	34.825	0.0 VV	23159.0684	4791.92	646.21	0.21		0.21
39	35.025	0.0 VV C-13DCIPe	16906.1504	380388.38	56635.70	22.50	C-13DCIPe	22.50
40	36.044	0.0 VV	1.8888e5	7732.81	397.73	0.04		0.04
41	36.550	-0.0 VE Toluene	82787.0391	1862708.38	236442.02	22.50	Toluene	22.50
42	36.935	0.0 EV	1.0970e5	4459.50	394.92	0.04		0.04
43	37.381	-0.0 VE T-13DCIPe	16916.9160	380630.63	55615.57	22.50	T-13DCIPe	22.50
44	37.689	0.0 EV	8632.2813	3592.50	375.96	0.42		0.42
45	38.159	0.0 VV	14167.0215	11830.14	754.36	0.84		0.84
46	39.304	0.0 VV	81899.7344	3793.34	156.13	0.05		0.05
47	40.024	-0.0 VB TetClE	38662.6406	869909.38	94940.77	22.50	TetClE	22.50
48	41.161	0.0 BV	48746.4531	6454.06	446.30	0.13		0.13
49	45.619	0.0 VV ClBz	82567.4141	1857766.88	170220.03	22.50	ClBz	22.50
50	46.181	0.0 VV EthylBz	74090.1641	1667028.75	141866.73	22.50	EthylBz	22.50
51	46.850	0.0 VV m-Xylene	79010.0781	1777726.75	147656.02	22.50	m-Xylene	22.50
52	47.619	0.0 VV o-Cl, F-Ben	16040.6729	1604067.25	134189.28	100.00	o-Cl, F-Ben	100.00
53	50.728	0.0 VV o-Xylene	64397.6016	1448946.00	122719.75	22.50	o-Xylene	22.50
54	52.788	0.0 VV	1.2769e5	15037.31	586.83	0.12		0.12
55	53.404	0.0 VV	62765.3945	7007.65	556.38	0.11		0.11
56	53.731	0.0 VV	1.2036e5	5482.34	226.98	0.05		0.05
57	54.944	0.0 VV	95257.8672	6561.13	343.24	0.07		0.07
58	55.989	0.0 VV	80115.0547	3889.88	241.96	0.05		0.05
59	56.611	0.0 VV	87791.8047	2618.66	247.98	0.03		0.03
60	57.306	0.0 VV	98237.2969	4127.42	349.30	0.04		0.04
61	57.703	0.0 VB	88912.8125	2892.11	270.42	0.03		0.03
62	60.148	0.0 BV	1.2824e5	7014.69	454.72	0.06		0.06
63	61.199	0.0 VB	2.1829e5	2527.34	96.25	0.01		0.01
64	62.281	0.0 BV 13DCIBz	71780.5078	1615061.38	239977.52	22.50	13DCIBz	22.50
65	62.894	0.0 VV 14DCIBz	67723.8125	1523785.75	241699.25	22.50	14DCIBz	22.50
66	63.695	0.0 VV	67107.2266	1171.72	141.85	0.02		0.02
67	64.069	0.0 VE	1.1367e5	20633.29	1476.13	0.18		0.18
68	64.336	0.0 EB	66938.2813	1431.00	173.85	0.02		0.02
69	64.819	0.0 BB 12DCIBz	53338.8125	1200123.25	194436.27	22.50	12DCIBz	22.50
70	65.435	0.0 BB	74247.2344	1504.00	164.73	0.02		0.02
71	66.174	0.0 BB	47877.0391	375.50	63.78	0.01		0.01
72	66.469	0.0 BB	45783.3750	8658.25	1537.93	0.19		0.19
73	66.997	0.0 BB	1.0141e5	1065.50	85.44	0.01		0.01
74	67.826	0.0 BV	1.1389e5	1333.99	95.25	0.01		0.01
75	67.977	0.0 VB	50120.8867	535.75	86.93	0.01		0.01
76	68.303	0.0 BV	35514.3086	568.85	130.26	0.02		0.02
77	68.614	0.0 VB	32484.9199	107.41	26.89	0.00		0.00
78	69.101	0.0 BV	40827.1016	345.36	68.79	0.01		0.01
79	69.315	0.0 VB	84216.4453	1274.65	123.09	0.02		0.02
	0.6		5.3649e6	25174902.00	3.02e6	622.18		622.18

Missing Component Report

Component Expected Retention (Sample File)

Air 5.000

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

L0001885

TUT 004 1884

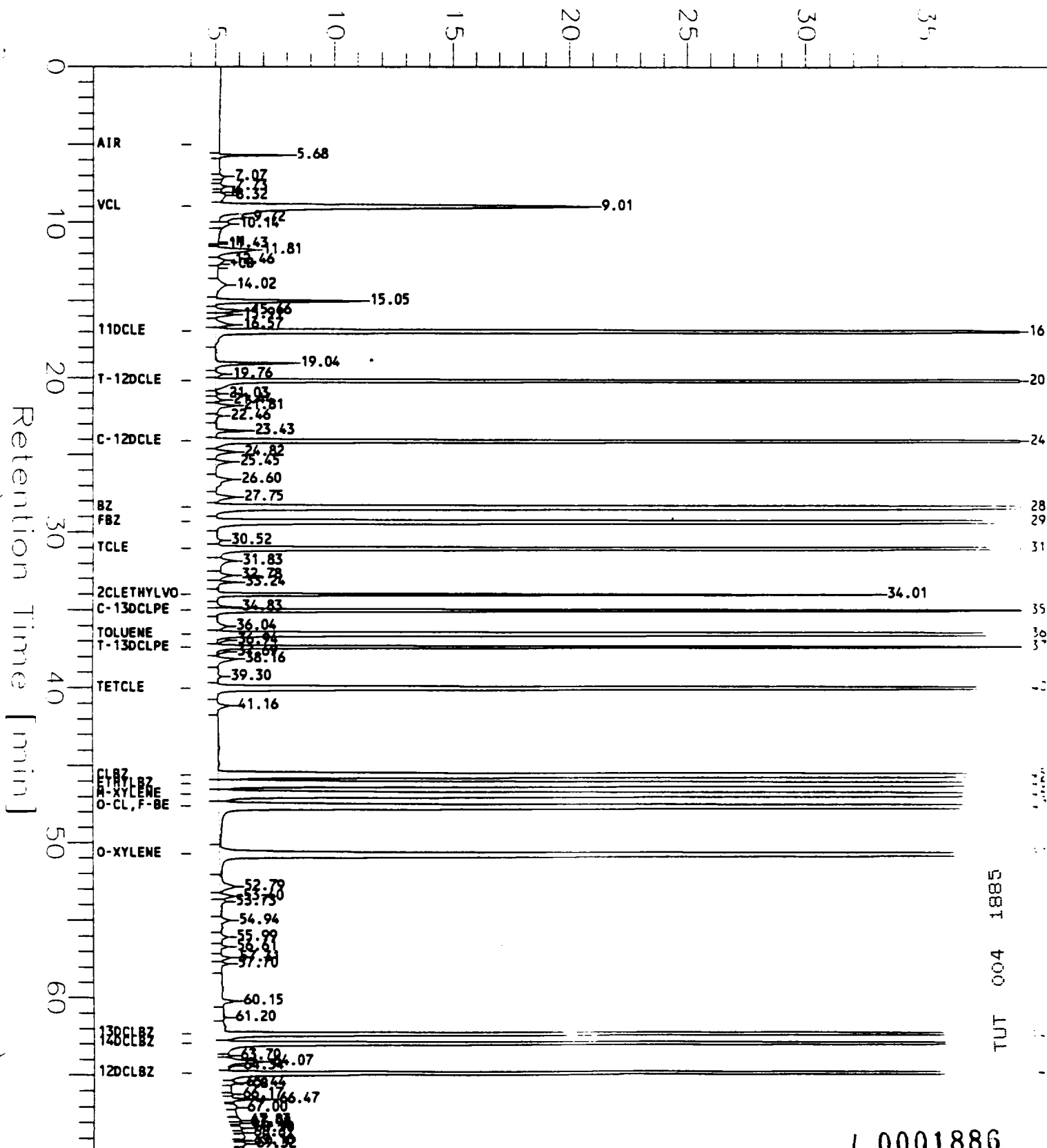
Sample Name : 22.5PPH 8010/8020 STD
FileName : ns\v3400a\TC11005.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: D MIX
Date : 3/12/93 8:34 AM
Time of Injection: 3/11/93 9:01 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

Page 1 of 1

Response [mV]



TUT 004 1885

L 0001886

Software Version: 3.2 <16C20>

Sample Name : 30 PPB 8010/8020 STD

Time : 3/12/93 8:39 AM

Sample Number: E MIX

Study : LINEARITY

Operator :

Instrument : V3400A/SALLY

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 10:16 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC11006.raw

Result File : n:\v3400s\TC11006.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 86

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (15%)	Range	Component Name	SAMPLE CON (PPB)
1	5.661	0.0	BB	1227.2889	13807.00	2918.05	11.25			11.25
2	6.619	0.0	BB	2687.2651	844.00	103.96	0.31			0.31
3	7.031	0.0	BB	9235.2490	2831.75	203.75	0.31			0.31
4	7.704	0.0	BB	5617.4199	2255.00	266.74	0.40			0.40
5	8.293	0.0	BV	11525.6133	4751.63	273.94	0.41			0.41
6	8.971	-0.3	VE VCl	12272.3936	368171.81	22321.58	30.00	+	VCl	30.00
7	9.804	0.0	EV	14724.2959	23533.00	1061.56	1.60			1.60
8	10.065	0.0	VB	12024.6856	11468.98	633.78	0.95			0.95
10	11.774	0.0	VV	10909.9316	32898.64	1996.79	3.02			3.02
11	12.424	0.0	VB	11501.3154	7611.91	439.77	0.66			0.66
12	13.974	0.0	BV	89196.6484	13687.56	574.74	0.15			0.15
13	15.008	0.0	VB	32212.5117	79668.66	8336.09	2.47			2.47
14	15.608	0.0	BV	42496.0469	16832.31	1483.50	0.40			0.40
15	15.867	0.0	VV	38390.0195	10238.41	998.86	0.27			0.27
16	16.528	0.0	VV	60878.4727	14847.38	913.43	0.24			0.24
17	16.929	-0.2	VB 11DCIE	29297.8125	878934.38	104795.52	30.00	+	11DCIE	30.00
18	19.004	0.0	BV	95097.5938	34500.91	4209.01	0.36			0.36
19	19.747	0.0	VV	1.5844e5	4447.38	325.64	0.03			0.03
20	20.141	-0.1	VV T-12DCIE	82266.0000	2467980.00	430248.53	30.00	+	T-12DCIE	30.00
21	20.999	0.0	VV	1.0791e5	1834.76	197.25	0.02			0.02
22	21.418	0.0	VV	1.3953e5	4397.71	365.64	0.03			0.03
23	21.794	0.0	VV	1.7901e5	14839.25	961.68	0.08			0.08

TUT 004 1886

L0001887

24	22.439	0.0 VV	68605.9688	4238.39	279.53	0.06	0.06
25	23.407	0.0 VV	41525.2891	15006.53	1635.14	0.36	0.36
26	24.079	-0.0 VV C-12DCIE	39285.2617	1178557.88	164505.09	30.00	+ C-12DCIE 30.00
27	24.813	0.0 VV	61510.8047	11632.59	855.68	0.19	0.19
28	25.434	0.0 VB	66088.5625	8780.53	601.15	0.13	0.13
29	26.588	0.0 BV	2.5349e5	17992.47	869.74	0.07	0.07
30	27.744	0.0 VV	1.9222e5	13886.16	885.18	0.07	0.07
31	28.388	-0.0 VV Bz	95973.6797	2879210.50	344573.31	30.00	+ Bz 30.00
32	29.319	-0.0 VV FBz	17047.0879	1704708.75	212234.02	100.00	+ FBz 100.00
33	30.525	0.0 VV	58362.1523	2633.67	230.42	0.05	0.05
34	31.026	-0.0 VV TCIE	53079.3906	1592381.75	219813.63	30.00	+ TCIE 30.00
35	31.826	0.0 VV	85400.2109	13634.06	815.17	0.16	0.16
36	32.778	0.0 VV	14448.0820	11449.92	796.25	0.79	0.79
37	33.239	0.0 VV	9010.7139	9075.31	1016.45	1.01	1.01
38	34.009	-0.0 VB 2CIEthylVO	13653.7471	273074.94	41034.49	20.00	+ 2CIEthylVO 20.00
39	34.824	0.0 BV	20278.2481	5614.63	864.72	0.28	0.28
40	35.020	-0.0 VV C-13DCIPe	18056.0020	541680.06	81506.79	30.00	+ C-13DCIPe 30.00
41	36.048	0.0 VV	1.9200e5	7734.66	391.37	0.04	0.04
42	36.554	0.0 VE Toluene	89047.9297	2671438.00	341809.44	30.00	+ Toluene 30.00
43	36.941	0.0 EV	1.1499e5	6607.50	558.20	0.06	0.06
44	37.384	0.0 VE T-13DCIPe	18396.1992	551886.00	81243.89	30.00	+ T-13DCIPe 30.00
45	37.693	0.0 EV	8764.4775	5171.50	533.04	0.59	0.59
46	38.173	0.0 VV	15817.2168	16975.75	1072.80	1.07	1.07
47	39.308	0.0 VV	71167.4063	4024.31	190.61	0.06	0.06
48	40.036	0.0 VB TetCIE	41399.4102	1241982.25	133962.47	30.00	+ TetCIE 30.00
49	41.181	0.0 BB	49434.8945	8793.72	599.62	0.18	0.18
50	45.633	0.1 BV ClBz	88380.0078	2651400.25	247082.64	30.00	+ ClBz 30.00
51	46.197	0.1 VV EthylBz	79511.7266	2385351.75	203870.11	30.00	+ EthylBz 30.00
52	46.867	0.1 VV m-Xylene	85296.1328	2558884.00	213658.45	30.00	+ m-Xylene 30.00
53	47.633	0.1 VV o-Cl,F-Ben	16221.9121	1622191.25	134652.47	100.00	+ o-Cl,F-Ben 100.00
54	50.743	0.1 VV o-Xylene	68998.0313	2069941.00	175636.78	30.00	+ o-Xylene 30.00
55	52.810	0.0 VV	1.3427e5	18978.81	704.39	0.14	0.14
56	53.419	0.0 VV	65612.6328	9239.30	701.73	0.14	0.14
57	53.750	0.0 VV	1.1454e5	7464.47	324.75	0.07	0.07
58	54.964	0.0 VV	91928.0938	8838.31	479.12	0.10	0.10
59	56.004	0.0 VV	79292.3750	5602.33	352.09	0.07	0.07
60	56.630	0.0 VV	86110.3906	4715.75	455.29	0.06	0.06
61	57.331	0.0 VV	97598.1406	10060.13	856.95	0.10	0.10
62	57.727	0.0 VB	93612.4766	7308.31	649.05	0.08	0.08
63	59.278	0.0 BB	1.2162e5	2448.00	167.33	0.02	0.02
64	60.140	0.0 BV	87187.6406	14136.75	1347.99	0.16	0.16
65	61.238	0.0 VB	1.9267e5	3218.75	138.89	0.02	0.02
66	62.054	0.0 BV	1.1295e5	896.67	66.00	0.01	0.01
67	62.311	0.1 VV 13DCIBz	78713.1484	2361394.50	355665.00	30.00	+ 13DCIBz 30.00
68	62.923	0.1 VE 14DCIBz	74596.7578	2237902.75	358086.84	30.00	+ 14DCIBz 30.00
69	63.721	0.0 EV	72294.1328	1691.50	190.08	0.02	0.02
70	64.097	0.0 VE	1.1586e5	34671.34	2433.43	0.30	0.30
71	64.355	0.0 EB	72009.2031	3353.00	378.67	0.05	0.05
72	64.850	0.1 BE 12DCIBz	58449.9922	1753499.75	287134.03	30.00	+ 12DCIBz 30.00
73	65.674	0.0 EV	70899.9453	1017.00	116.65	0.01	0.01
74	65.829	0.0 VB	55934.1758	895.65	130.22	0.02	0.02
75	66.197	0.0 BB	48406.0039	1470.00	246.96	0.03	0.03
76	66.495	0.0 BV	46757.2344	11667.23	2029.24	0.25	0.25
77	67.001	0.0 VB	1.0998e5	1866.03	137.98	0.02	0.02
78	67.713	0.0 BV	53420.9805	1195.66	182.02	0.02	0.02
79	67.992	0.0 VB	52770.2422	1765.84	272.13	0.03	0.03
80	68.326	0.0 BV	44448.3281	1037.55	189.83	0.02	0.02
81	68.466	0.0 VV	49113.5859	505.57	83.71	0.01	0.01
82	68.625	0.0 VV	71845.4609	774.44	87.66	0.01	0.01
83	68.907	0.0 VB	92785.0313	2448.95	214.64	0.03	0.03
84	69.117	0.0 BV	33855.5156	250.09	60.07	0.01	0.01
85	69.372	0.0 VB	60320.9258	1821.91	245.63	0.03	0.03
86	69.696	0.0 BB	41534.5859	376.00	73.62	0.01	0.01
-0.1			5.7753e6	34608828.00	4.20e6	759.96	759.96

Missing Component Report

Component	Expected Retention (Sample File)
Air	5.000

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

L0001883

Sample Name : 30 PPS 8010/8020 STD

FileName : n:\v3400a\TC11006.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: E MIX

Date : 3/12/93 8:39 AM

Time of Injection: 3/11/93

Low Point : 4.00 mV

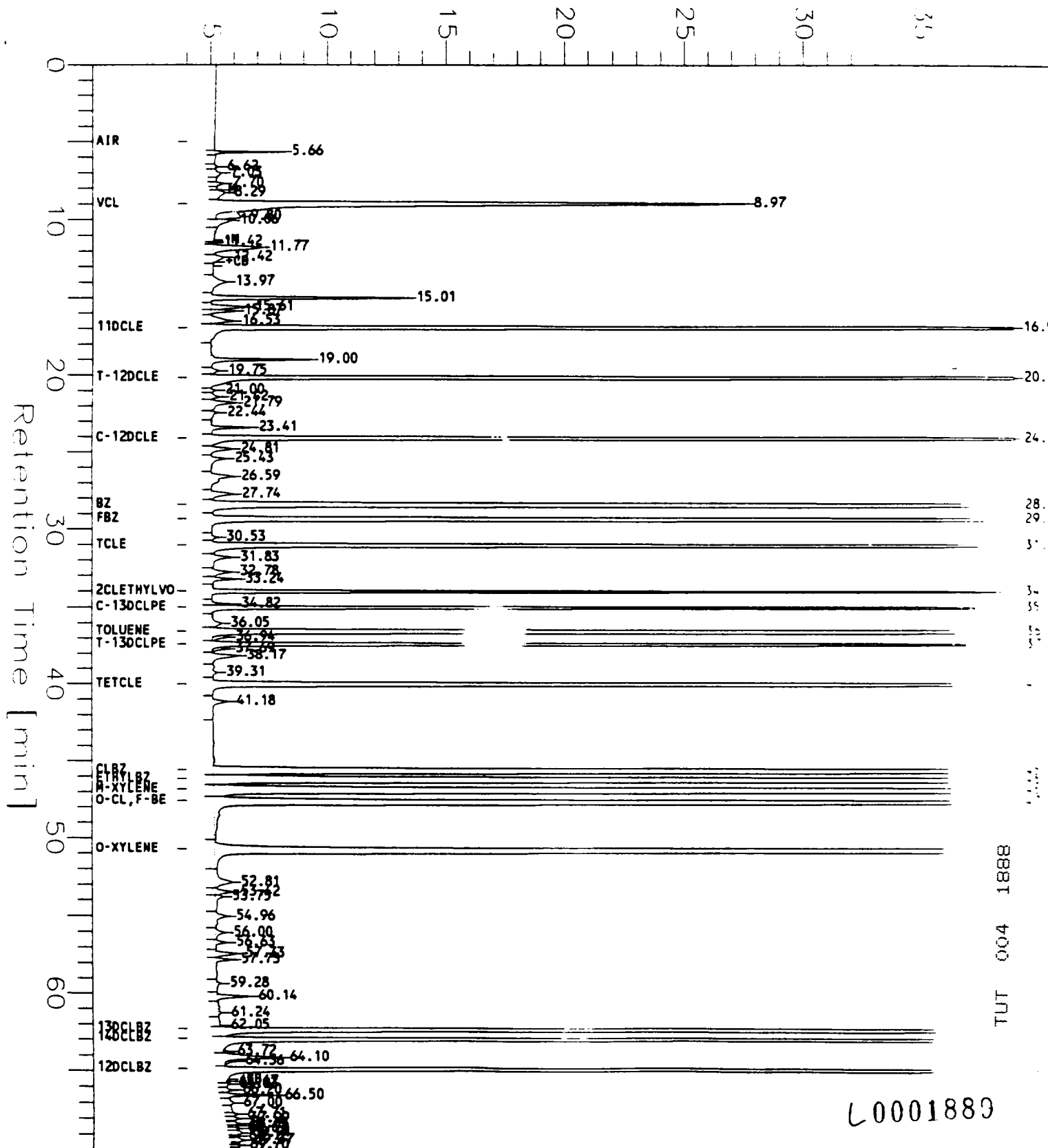
Plot Scale: 35 mV

Page 1 of 1

10:16 PM

High Point : 39.00 mV

Response [mV]



TUT 004 1888

L0001889

Software Version: 3.2 <16C20>

Sample Name : 1 PPB 8010/8020 STD

Sample Number: A MIX

Operator :

Time : 3/12/93 9:05 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 5:15 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11002.raw

Result File : n:\v3400s\SC11002.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 39

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX)	Range	Component Name	SAMPLE CON (PPB)
1	5.756	0.0	BV	44850.8281	15940.09	899.71	0.36			0.36
2	7.053	0.1	VV DCIDFMe	64150.5195	96225.78	3797.29	1.50		DCIDFMe	1.50
3	8.001	0.0	VV	84024.4297	11124.20	807.32	0.13			0.13
4	8.360	0.2	VV CLME	1.3038e5	195584.27	9146.95	1.50		CLME	1.50
5	9.115	0.3	VV VCl	1.9122e5	286835.94	9999.06	1.50		VCl	1.50
6	11.927	-0.0	VV BrMe	36557.8867	54836.83	2399.90	1.50		BrMe	1.50
7	12.523	0.4	VE ClEa	1.7690e5	265358.59	12345.12	1.50		ClEa	1.50
8	13.453	0.0	EV	1.7065e5	16847.00	1007.81	0.10			0.10
9	14.063	0.4	VB TCLFMe	2.0018e5	300277.41	15313.05	1.50		TCLFMe	1.50
10	16.534	0.4	BV TCLTFEa	99693.4297	99693.56	5142.36	1.00		TCLTFEa	1.00
11	17.085	0.4	VV 11DCIE	2.8016e5	280162.00	17840.00	1.00		11DCIE	1.00
12	19.135	0.3	VV CH2Cl2	5.3388e5	1334711.50	117726.90	2.50		CH2Cl2	2.50
13	20.276	0.3	VV T-12DCIE	3.4243e5	342433.53	23763.97	1.00		T-12DCIE	1.00
14	21.875	0.3	VV 111DCIEa	2.9144e5	291443.94	18344.43	1.00		111DCIEa	1.00
15	24.215	0.3	VV C-12DCIE	2.3809e5	238094.97	17948.65	1.00		C-12DCIE	1.00
16	24.863	0.3	VV CHCl3	3.8284e5	382845.00	27414.00	1.00		CHCl3	1.00
17	25.517	0.2	VV BrClMe	53854.0391	5385404.00	429816.88	100.00		BrClMe	100.00
18	26.654	0.2	VV 111TClEa	6.0386e5	603866.63	26520.63	1.00		111TClEa	1.00
19	27.792	0.2	VV CCl4	4.6756e5	467564.81	26779.45	1.00		CCl4	1.00
20	28.406	0.2	VV 12DCIEa	3.1616e5	316168.50	17164.99	1.00		12DCIEa	1.00
21	29.408	0.0	VV	4.8125e5	159185.28	5677.64	0.33			0.33
22	31.135	0.1	VV TClE	3.2628e5	326282.50	22544.08	1.00		TClE	1.00

TUT 004 1889

00001890

24	32.822	0.1 VV BrOCMe	2.6323e5	263238.56	14155.95	1.00	BrOCMe	1.00
25	34.172	0.3 VV 2ClEthylVO	47432.9063	47432.91	1359.65	1.00	2ClEthylVO	1.00
26	35.114	0.1 VV C-13DCIPe	3.7658e5	376584.31	24104.91	1.00	C-13DCIPe	1.00
27	37.495	0.1 VV T-13DCIPe	59781.7969	59781.80	3274.82	1.00	T-13DCIPe	1.00
28	38.287	0.1 VV 112TCIEa	2.2294e5	222943.13	12481.29	1.00	112TCIEa	1.00
29	40.129	0.1 VV TetClE	3.4202e5	342023.28	21226.45	1.00	TetClE	1.00
30	41.253	0.1 VB DBrClMe	1.4628e5	146284.50	6495.31	1.00	DBrClMe	1.00
31	45.732	0.1 BV ClBz	1.2373e5	123735.88	6160.21	1.00	ClBz	1.00
32	47.698	0.0 VV o-Cl,F-Ben	37208.0117	3720801.00	218530.64	100.00	o-Cl,F-Ben	100.00
33	53.520	0.1 VV CHBr3	58180.2500	58180.25	2457.38	1.00	CHBr3	1.00
34	54.978	0.1 VV 1122TetClE	1.5276e5	152762.94	7599.34	1.00	1122TetClE	1.00
35	57.683	3.1 VB 123TriClPr	98625.8750	98625.88	5263.68	1.00	123TriClPr	1.00
36	62.362	0.0 BV 13DClBz	1.3747e5	137477.94	10232.27	1.00	13DClBz	1.00
37	62.970	0.0 VB 14DClBz	1.8458e5	184584.56	11963.81	1.00	14DClBz	1.00
38	64.893	0.0 BB 12DClBz	1.7173e5	171733.25	12930.41	1.00	12DClBz	1.00
39	69.772	0.0 BB	2.1786e5	2503.00	148.56	0.01		0.01

8.7

8.4295e6 17852168.00 1.18e6 237.43

237.43

Missing Component Report

Component

Expected Retention (Sample File)

Air

1.845

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

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TUT 004 1890

L 0001891

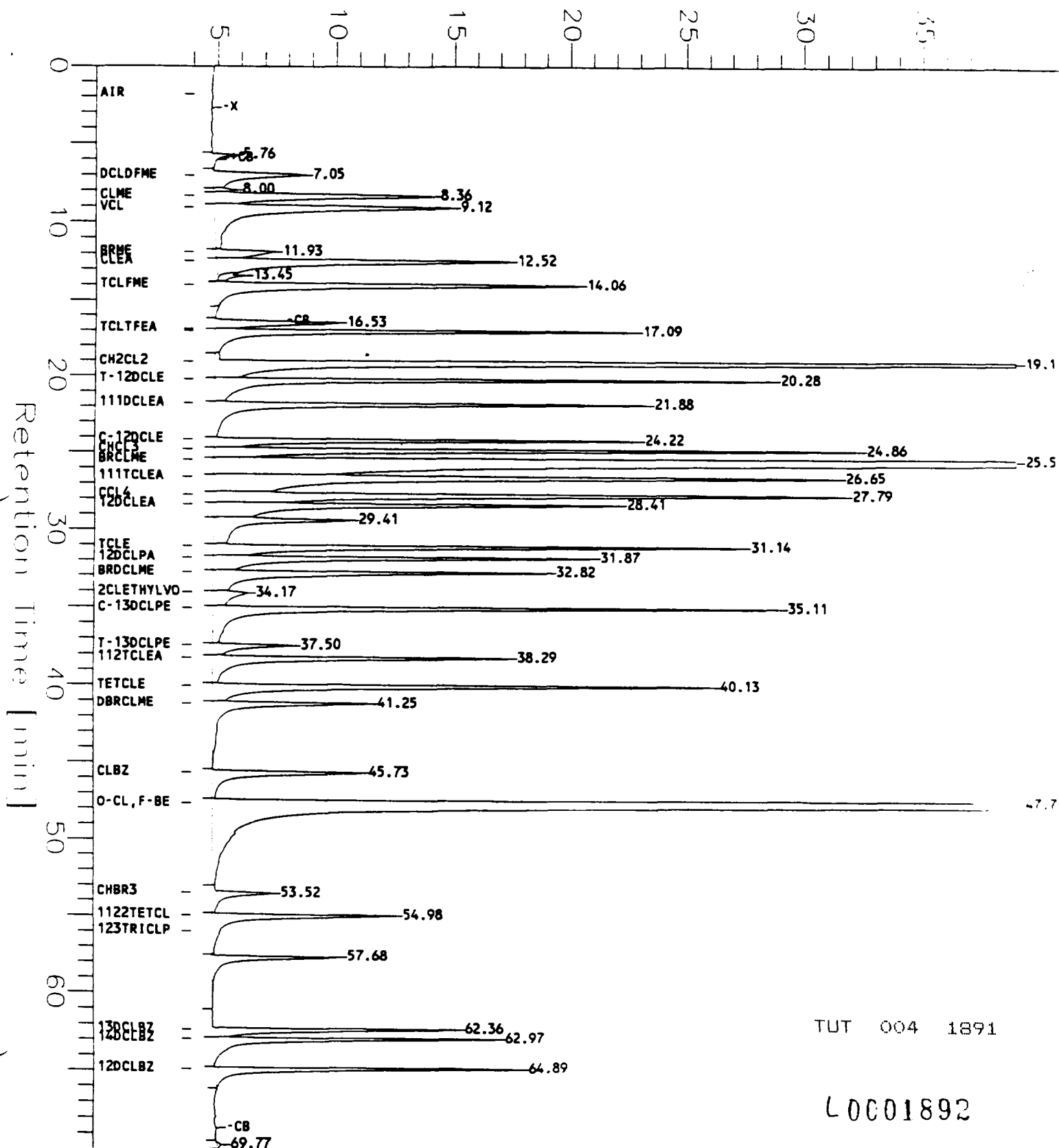
Sample Name : 1 PPS 8010/8020 STD
FileName : ns\v3400a\SC11002.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: A MIX
Date : 3/12/93 8:41 AM
Time of Injection: 3/11/93 5:15 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

Page 1 of 1

Response [mV]



TUT 004 1891

L0C01892

=====

Software Version: 3.2 <16C20>

Sample Name : 7.5PPB 8010/8020 STD

Sample Number: B MIX

Operator :

Time : 3/12/93 9:05 AM

Study : LINEARITY

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 6:30 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11003.raw

Result File : n:\v3400s\SC11003.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 46

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ITAS-KNOXVILLE V-3400B J+ W DB-624 75m*0.53mm ID, 3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt (ISX)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	3.379	0.0	BB	191.5337	2992.50	170.73	15.62			15.62
2	3.792	0.0	BB	129.0289	791.00	91.40	6.13			6.13
3	4.504	0.0	BB	34276.6953	2001.00	147.79	0.06			0.06
4	5.157	0.0	BB	58890.4023	2866.98	123.24	0.05			0.05
5	5.750	0.0	BV	42271.4492	21789.09	1304.89	0.52			0.52
6	6.176	0.0	VV	44239.0078	13114.25	750.45	0.30			0.30
7	7.031	-0.2	VV DCIDFMe	82359.5547	617696.69	24418.94	7.50		DCIDFMe	7.50
8	8.337	-0.1	VV CLME	1.5745e5	1180926.25	56969.63	7.50		CLME	7.50
9	9.077	-0.1	VV VCl	1.8572e5	1392966.00	61647.11	7.50		VCl	7.50
10	11.932	0.0	VV BrMe	72956.2656	547172.00	27863.09	7.50		BrMe	7.50
11	12.468	-0.1	VV ClEa	2.0757e5	1556815.38	77675.38	7.50		ClEa	7.50
12	14.002	-0.0	VB TCLFMe	2.7450e5	2058770.38	109092.84	7.50		TCLFMe	7.50
13	16.451	-0.1	BV TCLTFEa	2.5283e5	1908914.50	100427.60	7.55		TCLTFEa	7.55
14	17.015	-0.1	VV 11DCLE	3.0390e5	2279291.50	166827.13	7.50		11DCLE	7.50
15	18.750	0.0	VV	8.0267e5	11618.72	681.64	0.01			0.01
16	19.070	-0.1	VV CH2Cl2	4.1388e5	3104124.50	283008.50	7.50		CH2Cl2	7.50
17	20.207	-0.1	VV T-12DCLE	3.3234e5	2492589.50	226404.14	7.50		T-12DCLE	7.50
18	21.800	-0.1	VV 111DCLEa	3.3713e5	2528494.50	201568.77	7.50		111DCLEa	7.50
19	24.137	-0.1	VV C-12DCLE	2.6737e5	2005335.50	172878.22	7.50		C-12DCLE	7.50
20	24.789	-0.1	VV CHCl3	3.9993e5	2999482.25	239840.11	7.50		CHCl3	7.50
21	25.453	-0.1	VV BrClMe	53496.3789	5349638.00	417217.38	100.00		BrClMe	100.00
22	26.585	-0.0	VV 111TCLLEa	4.0895e5	3067135.00	184770.41	7.50		111TCLLEa	7.50

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00001893

24	28.349	-0.0 VE 12DCIEa	3.0455e5	2284171.50	171264.39	7.50	12DCIEa	7.50
25	29.361	0.0 EV	5.3686e5	267120.50	8540.61	0.50		0.50
26	31.092	-0.0 VV TCIE	3.8759e5	2906968.00	245904.38	7.50	TCIE	7.50
27	31.834	-0.0 VV 12DCIPa	3.0200e5	2265004.00	173817.41	7.50	12DCIPa	7.50
28	32.787	-0.0 VV BrDCIMe	3.0785e5	2308901.00	168091.09	7.50	BrDCIMe	7.50
29	34.088	0.0 VV 2CIEthylVO	59862.2813	299311.41	16449.71	5.00	2CIEthylVO	5.00
30	35.085	-0.0 VV C-13DCIPe	2.9718e5	2228900.00	181029.34	7.50	C-13DCIPe	7.50
1	36.531	0.0 VV	1.1813e5	83683.16	2319.88	0.71		0.71
2	37.447	0.0 VV T-13DCIPe	2.0141e5	1510641.50	123831.81	7.50	T-13DCIPe	7.50
33	38.259	0.0 VV 112TCIEa	2.9995e5	2249683.50	162610.23	7.50	112TCIEa	7.50
34	40.104	0.0 VV TetCIE	4.3985e5	3298935.00	236332.06	7.50	TetCIE	7.50
35	41.227	0.0 VV DBrCIME	2.0978e5	1573421.88	86752.33	7.50	DBrCIME	7.50
36	44.119	0.0 VV	3.7706e5	41783.88	682.63	0.11		0.11
37	45.699	0.0 VV ClBz	1.5541e5	1165580.50	68340.27	7.50	ClBz	7.50
38	47.693	0.0 VE o-Cl, F-Ben	41837.0703	4183707.00	249540.30	100.00	o-Cl, F-Ben	100.00
39	50.721	0.0 EV	2.6468e5	44382.50	412.06	0.17		0.17
40	53.484	0.0 VV CHBr3	1.0576e5	793270.00	41801.03	7.50	CHBr3	7.50
41	54.944	0.0 VV 1122TetCIE	2.1097e5	1582306.00	108817.80	7.50	1122TetCIE	7.50
42	55.975	0.0 VV 123TriClPr	1.6136e5	1210210.88	75532.08	7.50	123TriClPr	7.50
43	60.154	0.0 VB	3.0616e5	37465.75	1252.14	0.12		0.12
44	62.327	-0.0 BV 13DCIBz	2.0020e5	1501514.00	130027.92	7.50	13DCIBz	7.50
45	62.935	-0.0 VV 14DCIBz	2.3489e5	1761681.13	142211.52	7.50	14DCIBz	7.50
46	64.863	-0.0 VB 12DCIBz	2.0668e5	1550151.00	131578.59	7.50	12DCIBz	7.50

	-1.1		1.0902e7	71589736.00	5.10e6	461.85		461.85

Missing Component Report

Component

Expected Retention (Sample File)

Air

1.845

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

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TUT 004 1893

L 0001894

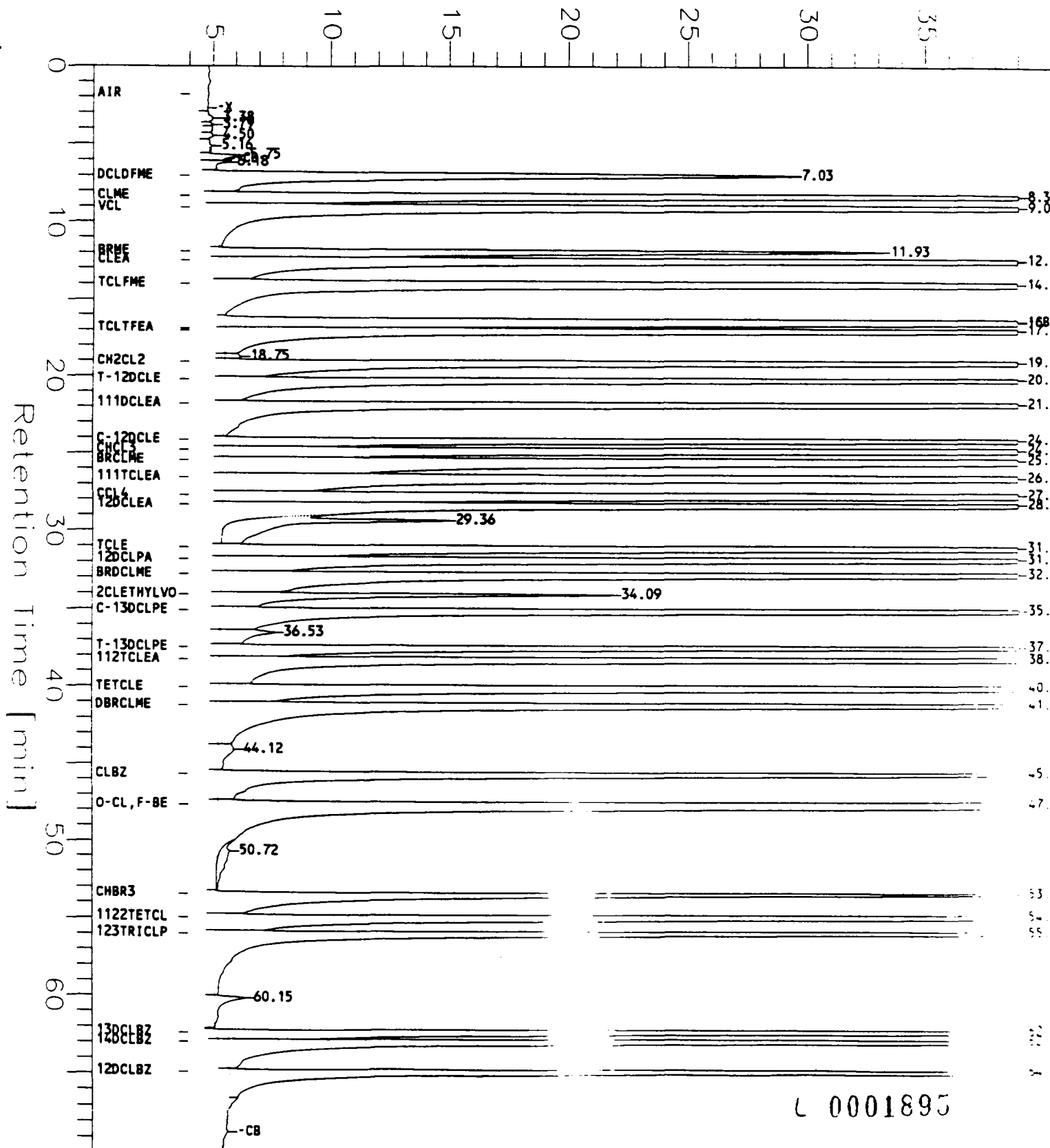
Sample Name : 7.5PPB 8010/8020 STD
FileName : n:\v3400a\SC11003.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor: 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: 8 NIX
Date : 3/12/93 8:46 AM
Time of Injection: 3/11/93 6:30 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

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Response [mV]



L 0001895

TUT 004 1894

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Software Version: 3.2 <16C20>

Sample Name : 15 PPB 8010/8020 STD

Sample Number: C MIX

Operator :

Time : 3/12/93 9:21 AM

Study : LINEARITY

0459

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 7:46 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11004.raw

Result File : n:\v3400s\SC11004.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 44

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ITAS-KNOXVILLE V-3400B J+ W DB-624 75m*0.53mm ID, 3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	4.725	0.0	BB	32211.0176	721.50	56.70	0.02		0.02
2	5.746	0.0	BB	38619.6094	19572.75	1283.00	0.51		0.51
3	7.047	0.5	BV DCIDFMe	1.2643e5	1896523.00	72850.52	15.00	DCIDFMe	15.00
4	8.348	0.3	VV CLME	2.2633e5	3395038.50	162483.38	15.00	CLME	15.00
5	9.088	0.2	VV VCl	2.5455e5	3818275.75	173474.39	15.00	VCl	15.00
6	11.932	0.1	VV BrMe	1.1123e5	1668494.75	85494.73	15.00	BrMe	15.00
7	12.479	0.1	VV ClEa	2.8186e5	4227939.50	211455.73	15.00	ClEa	15.00
8	14.007	0.0	VV TCLFMe	3.6859e5	5528990.50	292625.53	15.00	TCLFMe	15.00
9	16.467	0.0	BV TCLTFEa	3.2249e5	4869714.50	252108.47	15.10	TCLTFEa	15.10
10	17.025	-0.1	VV 11DCIE	3.4439e5	5165952.00	387950.34	15.00	11DCIE	15.00
11	19.085	-0.1	VV CH2Cl2	4.0000e5	6000081.00	562600.31	15.00	CH2Cl2	15.00
12	20.219	-0.1	VV T-12DCIE	3.4570e5	5185625.00	488286.66	15.00	T-12DCIE	15.00
13	21.813	-0.1	VV 111DCIEa	3.5873e5	5381037.50	443175.88	15.00	111DCIEa	15.00
14	23.335	0.0	VV	4.9990e5	44070.75	1582.32	0.09		0.09
15	24.149	-0.2	VV C-12DCIE	3.2599e5	4889900.00	429817.81	15.00	C-12DCIE	15.00
16	24.802	-0.2	VV CHCl3	4.9067e5	7360196.50	602602.13	15.00	CHCl3	15.00
17	25.465	-0.2	VV BrClMe	64086.8750	6408687.50	509033.84	100.00	BrClMe	100.00
18	26.593	-0.2	VV 111TCIEa	4.5838e5	6875769.50	440199.69	15.00	111TCIEa	15.00
19	27.735	-0.1	VV CCl4	5.0586e5	7587903.50	527444.56	15.00	CCl4	15.00
20	28.355	-0.1	VV 12DCIEa	3.1410e5	4711504.00	377432.41	15.00	12DCIEa	15.00
21	29.367	0.0	VV	5.7474e5	383055.25	11440.09	0.67		0.67
22	31.098	-0.1	VV TCIE	4.0500e5	6075007.50	522953.50	15.00	TCIE	15.00

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0001890

23	31.839	-0.1 VV 12DCIPa	3.1184e5	4677711.00	373656.69	15.00	12DCIPa	15.00
24	32.790	-0.1 VV BrDCIMe	3.1116e5	4667531.00	363604.06	15.00	BrDCIMe	15.00
25	34.083	-0.1 VV 2ClEthylVO	68431.8750	684318.75	47110.29	10.00	2ClEthylVO	10.00
26	35.088	-0.1 VV C-13DCIPe	2.9621e5	4443230.50	380476.03	15.00	C-13DCIPe	15.00
27	36.483	0.0 VV	1.3008e5	135024.34	3979.70	1.04		1.04
28	37.446	-0.1 VV T-13DCIPe	2.0513e5	3077066.75	263198.44	15.00	T-13DCIPe	15.00
29	38.257	-0.1 VV 112TCIEa	2.9185e5	4377795.00	331990.75	15.00	112TCIEa	15.00
30	40.097	-0.1 VV TetCLE	4.5071e5	6760751.00	495358.72	15.00	TetCLE	15.00
31	41.217	-0.1 VE DBrCIME	2.1025e5	3153807.25	191105.80	15.00	DBrCIME	15.00
32	44.013	0.0 EV	3.4343e5	67573.50	1212.07	0.20		0.20
33	45.688	-0.2 VV ClBz	1.5545e5	2331887.50	145023.06	15.00	ClBz	15.00
34	47.680	-0.2 VV o-Cl, F-Ben	41967.0391	4196704.00	250435.38	100.00	o-Cl, F-Ben	100.00
35	50.699	0.0 VB	1.1663e5	44176.56	930.72	0.38		0.38
36	53.470	-0.1 BV CHBr3	1.1053e5	1658044.88	96899.52	15.00	CHBr3	15.00
37	54.941	-0.1 VV 1122TetCLE	2.0820e5	3123126.75	221128.89	15.00	1122TetCLE	15.00
38	55.974	-0.1 VV 123TricIPr	1.5201e5	2280214.25	153380.25	15.00	123TricIPr	15.00
39	59.718	0.0 VV	2.4892e5	8475.55	348.39	0.03		0.03
40	60.130	0.0 VB	2.1622e5	68793.38	3255.52	0.32		0.32
41	62.336	-0.1 BV 13DCIBz	1.9258e5	2888832.50	254268.83	15.00	13DCIBz	15.00
42	62.946	-0.1 VV 14DCIBz	2.3652e5	3547949.25	297688.47	15.00	14DCIBz	15.00
43	64.877	-0.1 VB 12DCIBz	2.2181e5	3327278.00	286022.72	15.00	12DCIBz	15.00
44	68.673	0.0 BB	2.5482e5	1941.22	98.50	0.01		0.01
	-2.0		1.1624e7	147016304.00	1.07e7	678.36		678.36

Missing Component Report

Component	Expected Retention (Sample File)
Air	1.845

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

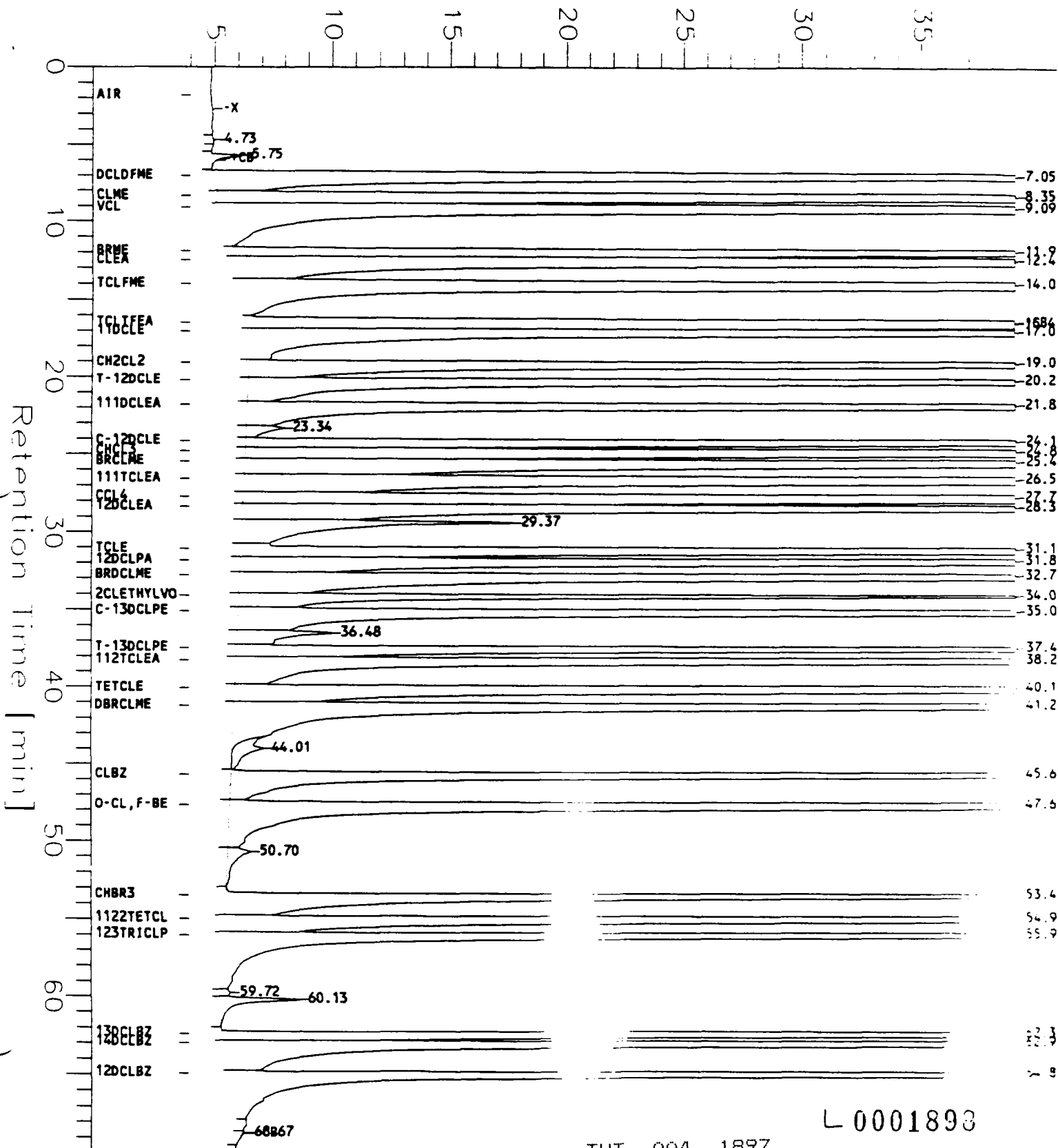
Sample Name : 15 PPB 8010/8020 STD
FileName : n:\v3400a\SC11004.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor: 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: C MIX
Date : 3/12/93 9:21 AM
Time of Injection: 3/11/93 7:46 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

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Response [mV]



Software Version: 3.2 <16C20>

Sample Name : 22.5PPB 8010/8020 STD

Time : 3/12/93 9:05 AM

Sample Number: D MIX

Study : LINEARITY

Operator :

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 9:01 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11005.raw

Result File : n:\v3400s\SC11005.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 46

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	5.757	0.0	BB	45304.5469	31316.00	1749.88	0.69		0.69
2	7.045	-0.0	BV DClDFMe	1.0766e5	2422463.00	93128.16	22.50	DClDFMe	22.50
3	8.353	0.1	VV CLME	1.9048e5	4285816.00	207107.95	22.50	CLME	22.50
4	9.099	0.1	VB VCl	2.1612e5	4862742.00	220461.88	22.50	VCl	22.50
5	11.934	0.0	BV BrMe	89301.4219	2009282.00	104895.74	22.50	BrMe	22.50
6	12.489	0.1	VV ClEa	2.2691e5	5105608.50	254202.69	22.50	ClEa	22.50
7	14.020	0.1	VB TClFMe	3.2033e5	7207512.50	378156.66	22.50	TClFMe	22.50
8	16.474	0.0	BV TClTFEa	2.9734e5	6734908.00	356342.28	22.65	TClTFEa	22.65
9	17.038	0.1	VE 11DCIE	3.2249e5	7256027.50	556247.25	22.50	11DCIE	22.50
10	18.740	0.0	EV	1.1478e6	16915.50	693.97	0.02		0.02
11	19.098	0.1	VV CH2Cl2	3.6039e5	8108787.50	759313.19	22.50	CH2Cl2	22.50
12	20.232	0.1	VV T-12DCIE	3.3591e5	7558181.50	720212.94	22.50	T-12DCIE	22.50
13	21.826	0.1	VE 111DCIEa	3.5261e5	7933920.00	667927.63	22.50	111DCIEa	22.50
14	23.315	0.0	EB	4.9151e5	50392.50	1840.19	0.10		0.10
15	24.166	0.1	BV C-12DCIE	3.1860e5	7168534.50	638994.69	22.50	C-12DCIE	22.50
16	24.821	0.1	VV CHCl3	4.5834e5	10312834.00	829109.19	22.50	CHCl3	22.50
17	25.482	0.1	VV BrClMe	61056.0117	6105601.00	481214.22	100.00	BrClMe	100.00
18	26.608	0.1	VV 111TClEa	4.4775e5	10074438.00	654708.25	22.50	111TClEa	22.50
19	27.745	0.0	VV CCl4	4.9410e5	11117460.00	778785.75	22.50	CCl4	22.50
20	28.364	0.0	VE 12DCIEa	2.9391e5	6613058.50	536681.94	22.50	12DCIEa	22.50
21	29.367	0.0	EV	6.1349e5	373708.50	10455.92	0.61		0.61
22	31.095	-0.0	VV TClE	3.6621e5	8239794.00	716323.31	22.50	TClE	22.50

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00001890

24	32.787	-0.0 VV BrDClMe	2.9705e5	6683643.50	533252.63	22.50	BrDClMe	22.50
25	34.080	-0.0 VV 2ClEthylVO	60337.9180	905068.75	62957.81	15.00	2ClEthylVO	15.00
26	35.085	-0.0 VE C-13DClPe	2.8511e5	6415034.50	559108.19	22.50	C-13DClPe	22.50
27	36.480	0.0 EV	1.4264e5	156742.00	5107.74	1.10		1.10
28	37.442	-0.0 VV T-13DClPe	1.7105e5	3848705.25	330098.88	22.50	T-13DClPe	22.50
29	38.254	-0.0 VV 112TClEa	2.3218e5	5224082.00	401296.81	22.50	112TClEa	22.50
30	40.097	0.0 VV TetClE	4.1768e5	9397824.00	690469.38	22.50	TetClE	22.50
31	41.217	-0.0 VE DBrClMe	1.8866e5	4244856.50	273058.94	22.50	DBrClMe	22.50
32	43.103	0.0 EV	3.4090e5	154140.50	2936.90	0.45		0.45
33	43.979	0.0 VV	3.3131e5	145662.38	2708.33	0.44		0.44
34	45.698	0.0 VV ClBz	1.5829e5	3561572.75	225280.31	22.50	ClBz	22.50
35	47.694	0.0 VV o-Cl,F-Ben	42327.3906	4232739.00	250891.95	100.00	o-Cl,F-Ben	100.00
36	50.678	0.0 VB	1.3100e5	109167.31	2047.69	0.83		0.83
37	53.479	0.0 BV CHBr3	1.0087e5	2269719.75	137679.98	22.50	CHBr3	22.50
38	54.954	0.0 VV 1122TetClE	1.8811e5	4232650.00	300217.91	22.50	1122TetClE	22.50
39	55.989	0.0 VE 123TriClPr	1.4212e5	3197833.25	213119.44	22.50	123TriClPr	22.50
40	59.671	0.0 EV	5.5648e5	37883.50	696.57	0.07		0.07
41	60.137	0.0 VB	2.0993e5	113001.50	5507.79	0.54		0.54
42	62.345	0.0 BV 13DClBz	2.0781e5	4675941.00	420493.09	22.50	13DClBz	22.50
43	62.956	0.0 VV 14DClBz	2.3146e5	5208034.00	450424.16	22.50	14DClBz	22.50
44	64.881	0.0 VV 12DClBz	2.0367e5	4582774.00	411166.97	22.50	12DClBz	22.50
45	66.573	0.0 VV	6.2939e5	70335.13	1444.98	0.11		0.11
46	68.443	0.0 VB	1.8848e5	1386.16	95.09	0.01		0.01
	1.1		1.3291e7	199292544.00	1.47e7	917.62		917.62

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

Sample Name : 22.5PPB 8010/8020 STD
FileName : n:\v3400a\SC11005.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: D MIX

Page 1 of 1

Date : 3/12/93 8:31 AM

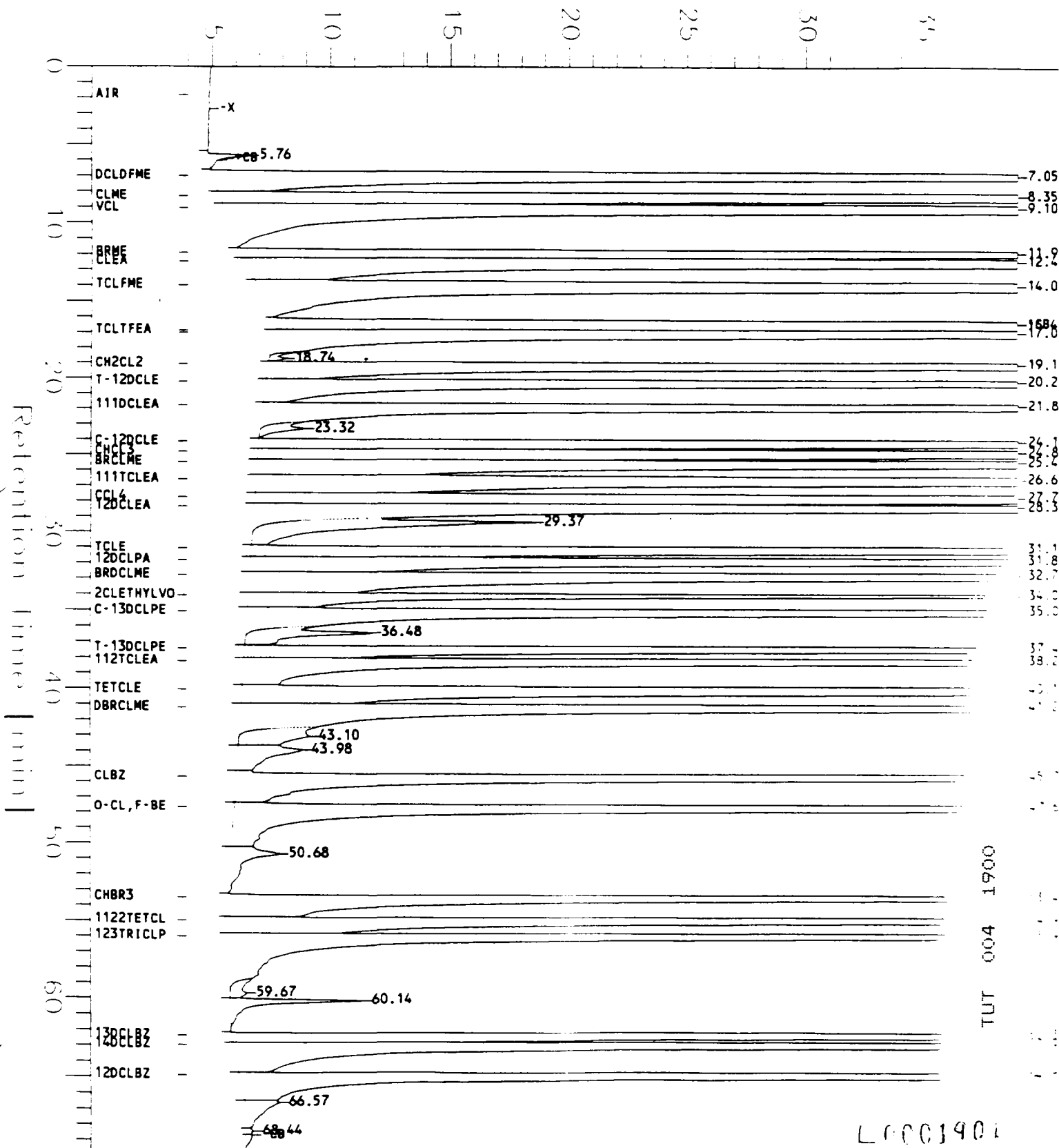
Time of Injection: 3/11/93 9:01 PM

Low Point : 4.00 mV

High Point : 39.00 mV

Plot Scale: 35 mV

Response [mV]



TUT 004 1900

L0001901

Software Version: 3.2 <16C20>

Sample Name : 30 PPB 8010/8020 STD

Sample Number: E MIX

Operator :

Time : 3/12/93 9:05 AM

Study : LINEARITY

0465

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/11/93 10:16 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11006.raw

Result File : n:\v3400s\SC11006.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 46

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt (ISX)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.740	0.0	BB	39754.4375	28747.75	1830.63	0.72			0.72
2	7.026	-0.3	BV DCIDFMe	1.3205e5	3961747.00	153871.89	30.00	+	DCIDFMe	30.00
3	8.324	-0.3	VV CLME	2.3087e5	6926150.00	340778.00	30.00	+	CLME	30.00
4	9.061	-0.3	VB VCI	2.5066e5	7520008.50	358807.00	30.00	+	VCI	30.00
5	11.888	-0.4	BV BrMe	1.1410e5	3423247.75	177274.92	30.00	+	BrMe	30.00
6	12.447	-0.3	VV ClEa	2.7203e5	8160945.00	420294.88	30.00	+	ClEa	30.00
7	13.971	-0.3	VE TClFMe	3.5581e5	10674525.00	582110.81	30.00	+	TClFMe	30.00
8	15.582	0.0	EB	1.1960e5	18145.00	780.11	0.15			0.15
9	16.427	-0.2	BV TClTFEa	3.2921e5	9942378.00	521869.47	30.20	+	TClTFEa	30.20
10	16.996	-0.2	VE 11DCIE	3.3529e5	10058709.00	782021.56	30.00	+	11DCIE	30.00
11	18.688	0.0	EV	1.1751e6	33239.00	1331.90	0.03			0.03
12	19.072	-0.1	VV CH2Cl2	3.2144e5	9643248.00	848186.19	30.00	+	CH2Cl2	30.00
13	20.209	-0.1	VV T-12DCIE	3.0547e5	9164268.00	823804.75	30.00	+	T-12DCIE	30.00
14	21.803	-0.0	VV 111DCIEa	3.4547e5	10364236.00	844684.25	30.00	+	111DCIEa	30.00
15	23.298	0.0	VV	4.0925e5	65975.81	2893.50	0.16			0.16
16	24.149	-0.0	VV C-12DCIE	3.1411e5	9423496.00	824574.69	30.00	+	C-12DCIE	30.00
17	24.814	0.1	VV CHCl3	4.0885e5	12265661.00	918901.50	30.00	+	CHCl3	30.00
18	25.461	-0.0	VV BrClMe	62620.2383	6262024.00	495485.16	100.00		BrClMe	100.00
19	26.589	-0.0	VV 111TClEa	4.4738e5	13421693.00	872737.19	30.00	+	111TClEa	30.00
20	27.744	0.0	VV CCl4	4.6805e5	14041762.00	930343.56	30.00	+	CCl4	30.00
21	28.350	-0.0	VV 12DCIEa	3.0433e5	9130100.00	753949.63	30.00	+	12DCIEa	30.00
22	29.356	0.0	EV	6.8124e5	467523.50	11779.93	0.69			0.69

TUT 004 1901

L0001902

24	31.831	-0.0	VV	12DCIPe	3.1243e5	9373162.00	765492.19	30.00	+	12DCIPe	30.00
25	32.782	-0.0	VV	BrDCI Me	3.1433e5	9430002.00	763542.75	30.00	+	BrDCI Me	30.00
26	34.076	-0.0	VV	2ClEthylVO	62318.5000	1246370.00	94508.63	20.00	+	2ClEthylVO	20.00
27	35.085	-0.0	VE	C-13DCIPe	2.9027e5	8708170.00	765045.56	30.00	+	C-13DCIPe	30.00
28	36.473	0.0	EV		1.7609e5	224340.00	8356.62	1.27			1.27
29	37.058	0.0	VV		57208.2539	51108.41	2925.64	0.89			0.89
30	37.448	0.0	VV	T-13DCIPe	2.0483e5	6145076.50	539054.94	30.00	+	T-13DCIPe	30.00
31	38.261	0.0	VV	112TCIEa	2.8918e5	8675488.00	675969.13	30.00	+	112TCIEa	30.00
32	40.117	0.1	VV	TetClE	4.2730e5	12819005.00	908708.69	30.00	+	TetClE	30.00
33	41.227	0.0	VV	DBrClMe	2.0625e5	6187621.50	393659.16	30.00	+	DBrClMe	30.00
34	44.000	0.0	VV		2.3444e5	112257.88	2949.62	0.48			0.48
35	45.708	0.0	VV	ClBz	1.5139e5	4541923.00	287762.63	30.00	+	ClBz	30.00
36	47.710	0.1	VV	o-Cl,F-Ben	42122.0352	4212203.50	248112.16	100.00		o-Cl,F-Ben	100.00
37	50.700	0.0	VB		1.0683e5	86987.56	2000.82	0.81			0.81
38	53.492	0.0	BV	CHBr3	1.0779e5	3233773.50	200180.30	30.00	+	CHBr3	30.00
39	54.970	0.1	VV	1122TetClE	1.9642e5	5892756.00	426301.06	30.00	+	1122TetClE	30.00
40	56.008	0.1	VV	123TriClPr	1.4541e5	4362502.50	300088.91	30.00	+	123TriClPr	30.00
41	59.695	0.0	VV		2.1674e5	20060.23	947.01	0.09			0.09
42	60.159	0.0	VB		2.1678e5	172381.06	8136.44	0.80			0.80
43	62.376	0.1	BV	13DCIBz	2.2287e5	6686206.00	607578.88	30.00	+	13DCIBz	30.00
44	62.985	0.1	VV	14DCIBz	2.4738e5	7421459.50	647703.81	30.00	+	14DCIBz	30.00
45	64.910	0.1	VE	12DCIBz	2.1876e5	6562910.50	596207.19	30.00	+	12DCIBz	30.00
46	66.543	0.0	EB		4.3720e5	37293.00	1102.96	0.09			0.09
		-1.8			1.2671e7	272131424.00	1.97e7	1156.38			

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

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TUT 004 1902

L 000190.

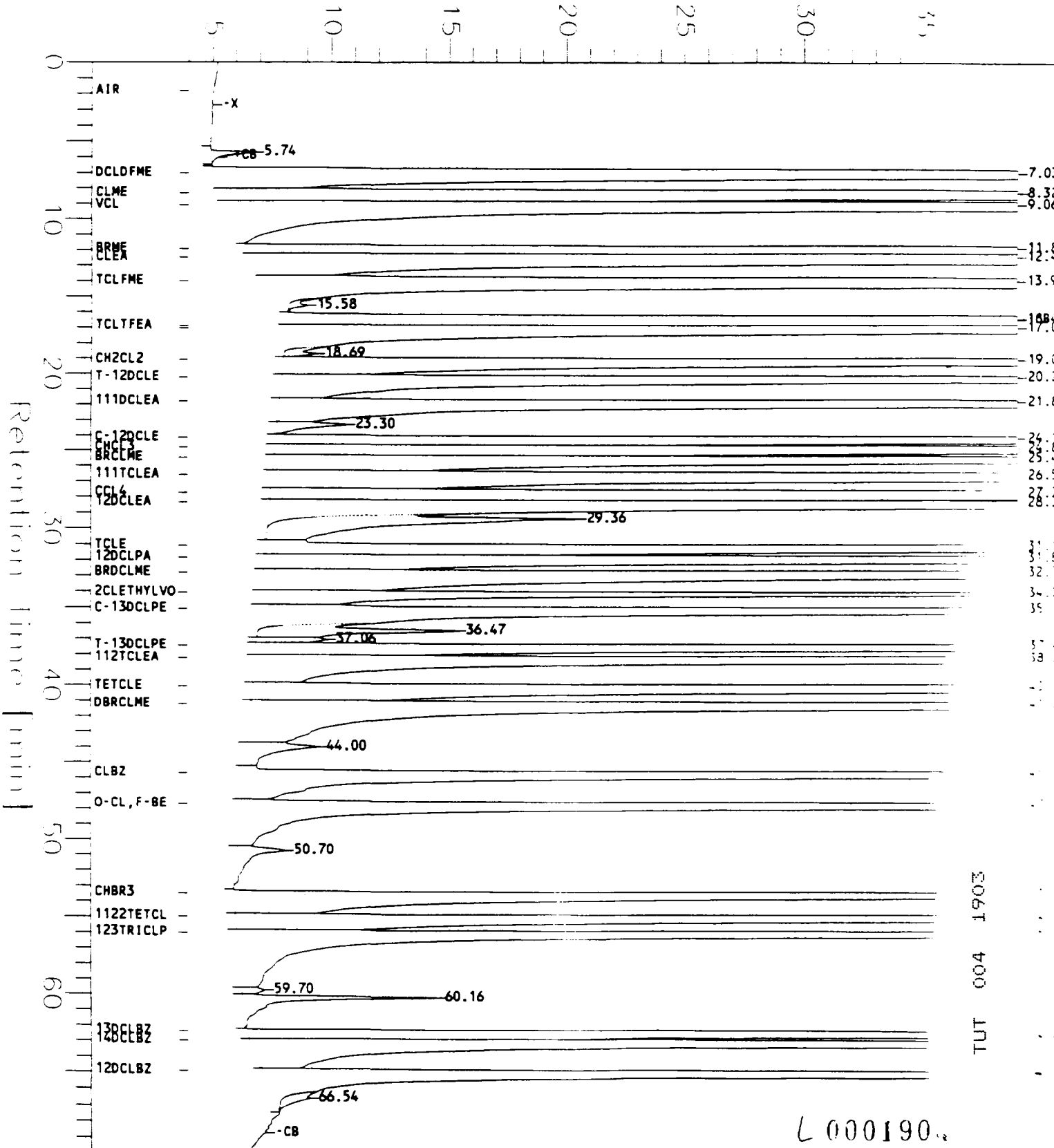
Sample Name : 30 PPB 8010/8020 STD
FileName : n:\v3400a\SC11006.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: E MIX
Date : 3/12/93 8:36 AM
Time of Injection: 3/11/93 10:16 PM
Low Point : 4.00 mV
Plot Scale: 35 mV
High Point : 39.00 mV

Page 1 of 1

Response [mV]



TUT 004 1903

L 000190.

=====

Software Version: 3.2 <16C20>

Sample Name : 15 PPB

Sample Number: C MIX

Operator :

Time : 3/20/93 1:13 PM

Study : STD CHECK

Instrument : V3400A/SALLY

Channel : A A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/12/93 5:13 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11021.raw

Result File : n:\v3400s\SC11021.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

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ITAS-KNOXVILLE V3400B J+ W DB-624 75m*0.53mm ID,3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR: Percent differences, standard

concentrations, and Cfs

for BrClMe, o-Cl,F-Benzene, and B2ClIsopO are incorrect due to the compounds having a

concentration different than the other compounds in the mix. The percent differences for

these compounds and Cfs must be done manually. The computer could only calculate percent

differences and Cfs from only one standard concentration.

Standard check compared to 3/10/92³ linearity 3/23/93

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Peak #	Ret Time [min]	Component Name	Height [uV]	BL Cal. Range	CONCENTRATION [PPB]	STANDARD CON. (PPB)	PERCENT DIFFERENCE	Component Name	DAILY Cf
0	1.845	Air	0.00	VV	0.00	15.000	-1.000e2	Air	0.0000
2	7.038	DC1DFMe	63575.46	BV	15.24	15.000	1.598	DC1DFMe	4.2383e3
3	8.345	CLME	159592.55	VV	16.73	15.000	11.520	CLME	1.0639e4
4	9.079	VCl	172261.00	VV	16.87	15.000	12.464	VCl	1.1484e4
5	11.911	BrMe	85839.91	VV	17.42	15.000	16.108	BrMe	5.7226e3
6	12.467	ClEa	212329.23	VV	17.31	15.000	15.411	ClEa	1.4155e4
7	13.995	TCLFMe	277584.16	VB	16.00	15.000	6.647	TCLFMe	1.8505e4
8	16.457	TCLTFEa	228320.89	BV	14.79	15.000	-1.381	TCLTFEa	1.5221e4
9	17.018	11DCIE	348466.69	VV	14.93	15.000	-0.496	11DCIE	2.3231e4
10	19.082	CH2Cl2	499835.03	VV	13.56	15.000	-9.622	CH2Cl2	3.3322e4
11	20.221	T-12DCIE	445718.78	VV	15.27	15.000	1.783	T-12DCIE	2.9714e4
12	21.819	111DCIEa	407942.34	VV	15.38	15.000	2.546	111DCIEa	2.7196e4
14	24.160	C-12DCIE	398528.31	VV	15.87	15.000	35.821	C-12DCIE	2.6568e4
5	24.812	CHCl3	552556.75	VV	16.54	15.000	10.261	CHCl3	3.6837e4
16	25.475	BrClMe	471090.41	VV	92.55	100 15.000	517.014	BrClMe	3.1406e4
17	26.600	111TClEa	417895.78	VV	15.07	15.000	0.439	111TClEa	2.7859e4
18	27.737	CCl4	478204.78	VV	15.22	15.000	1.462	CCl4	3.1880e4
19	28.355	12DCIEa	346708.59	VV	15.19	15.000	1.248	12DCIEa	2.3113e4
21	31.089	TClE	417410.06	VV	13.78	15.000	-8.164	TClE	2.7827e4
22	31.831	12DCIPa	288211.06	VV	12.93	15.000	-13.827	12DCIPa	1.9214e4

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TUT 004 1904

LO001900

23	32.780	BrClMe	282161.28	VV	12.23	15.000	-18.477	BrClMe	1.8810e4
24	34.074	2ClEthylVO	38058.57	VV	9.21	15.000	-38.585	2ClEthylVO	2.5372e3
25	35.077	C-13DClPe	294925.66	VE	11.90	15.000	-20.690	C-13DClPe	1.9661e4
27	37.436	T-13DClPe	190257.63	VV	12.25	15.000	-18.363	T-13DClPe	1.2683e4
28	38.243	112TClEa	249893.30	VV	12.77	15.000	-14.896	112TClEa	1.6659e4
29	40.086	TetClE	375727.78	VV	12.80	15.000	-14.647	TetClE	2.5048e4
30	41.207	DBrClMe	141804.34	VV	11.85	15.000	-20.995	DBrClMe	9.4536e3
33	45.685	ClBz	112566.88	VV	12.64	15.000	-15.765	ClBz	7.5044e3
34	47.687	o-Cl,F-Benzene	210093.50	VE	83.90	15.000	-14.363	o-Cl,F-Benzene	1.4006e4
36	53.484	CHBr3	77144.07	BV	12.85	15.000	-15.983	CHBr3	5.1429e3
37	54.961	1122TetClEa	177343.27	VV	12.60	15.000	-16.149	1122TetClEa	1.1822e4
38	55.998	123TriClPropane	123668.38	VV	12.58	15.000	-6.637	123TriClPropane	8.2445e3
40	62.368	13DClBz	240329.47	BV	14.00	15.000	-12.947	13DClBz	1.6021e4
41	62.975	14DClBz	250945.80	VV	13.06	15.000	-10.773	14DClBz	1.6729e4
42	64.906	12DClBz	234730.56	VB	13.38	15.000		12DClBz	1.5648e4
					9.27e6	628.64	525.000	690.917	6.1811e5

0469

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (1SX) Range	Component Name	SAMPLE CON (PPB)
1	5.748	0.0	BB	52995.5508	24005.00	1505.04	0.45		0.45
2	7.038	-0.1	BV DCIDFMe	1.1040e5	1682524.13	63575.46	15.24	DCIDFMe	15.24
3	8.345	-0.0	VV CLME	1.9384e5	3242689.50	159592.55	16.73	CLME	16.73
4	9.079	-0.1	VV VCl	2.2472e5	3791070.75	172261.00	16.87	VCl	16.87
5	11.911	-0.2	VV BrMe	91488.0234	1593370.50	85839.91	17.42	BrMe	17.42
6	12.467	-0.1	VV ClEa	2.4022e5	4158783.00	212329.23	17.31	ClEa	17.31
7	13.995	-0.1	VB TClFMe	3.3490e5	5357439.00	277584.16	16.00	TClFMe	16.00
8	16.457	-0.1	BV TClTFEa	2.9964e5	4432674.50	228320.89	14.79	TClTFEa	14.79
9	17.018	-0.0	VV 11DCIE	3.2662e5	4875108.50	348466.69	14.93	11DCIE	14.93
10	19.082	-0.0	VV CH2Cl2	4.0378e5	5474027.50	499835.03	13.56	CH2Cl2	13.56
11	20.221	0.0	VV T-12DCIE	3.2016e5	4888156.00	445718.78	15.27	T-12DCIE	15.27
12	21.819	0.0	VV 111DCIEa	3.2595e5	5013782.00	407942.34	15.38	111DCIEa	15.38
13	23.350	0.0	VV	6.9257e5	42989.97	1558.47	0.06		0.06
14	24.160	0.1	VV C-12DCIE	2.8999e5	4603148.00	398528.31	15.87	C-12DCIE	15.87
15	24.812	0.0	VV CHCl3	4.1475e5	6859744.00	552556.75	16.54	CHCl3	16.54
16	25.475	0.0	VV BrClMe	65176.5391	6032228.00	471090.41	92.55	BrClMe	92.55
17	26.600	0.0	VV 111TClEa	4.3111e5	6495079.50	417895.78	15.07	111TClEa	15.07
18	27.737	0.0	VV CCl4	4.5324e5	6898121.50	478204.78	15.22	CCl4	15.22
19	28.355	-0.0	VV 12DCIEa	2.8554e5	4336615.00	346708.59	15.19	12DCIEa	15.19
20	29.364	0.0	VV	7.2730e5	309616.13	9718.34	0.43		0.43
21	31.089	-0.0	VV TClE	3.5916e5	4947716.50	417410.06	13.78	TClE	13.78
22	31.831	-0.0	VV 12DCIPa	2.8744e5	3715570.25	288211.06	12.93	12DCIPa	12.93
23	32.780	-0.0	VV BrClMe	3.0472e5	3726337.50	282161.28	12.23	BrClMe	12.23
24	34.074	-0.0	VV 2ClEthylVO	63062.9453	580949.88	38058.57	9.21	2ClEthylVO	9.21
25	35.077	-0.0	VE C-13DClPe	2.9624e5	3524257.25	294925.66	11.90	C-13DClPe	11.90
26	36.496	0.0	EV	4.8087e5	96357.50	2861.39	0.20		0.20
27	37.436	-0.0	VV T-13DClPe	1.8780e5	2299818.25	190257.63	12.25	T-13DClPe	12.25
28	38.243	-0.0	VV 112TClEa	2.6407e5	3371042.50	249893.30	12.77	112TClEa	12.77
29	40.086	-0.0	VV TetClE	4.0391e5	5171238.50	375727.78	12.80	TetClE	12.80
30	41.207	-0.0	VV DBrClMe	2.0083e5	2380083.75	141804.34	11.85	DBrClMe	11.85
31	44.029	0.0	VV	3.4614e5	31354.66	806.99	0.09		0.09
32	45.275	0.0	VV	1.2409e5	3150.25	226.17	0.03		0.03
33	45.685	-0.0	VV ClBz	1.4787e5	1868445.50	112566.88	12.64	ClBz	12.64
34	47.687	0.0	VE o-Cl,F-Ben	42857.3750	3595869.00	210093.50	83.90	o-Cl,F-Ben	83.90
35	50.729	0.0	EB	2.5680e5	34618.50	748.35	0.14		0.14
36	53.484	0.0	BV CHBr3	1.0623e5	1364595.25	77144.07	12.85	CHBr3	12.85
37	54.961	0.0	VV 1122TetClE	2.0282e5	2556170.00	177343.27	12.60	1122TetClE	12.60
38	55.998	0.0	VV 123TriClPr	1.5559e5	1956969.63	123668.38	12.58	123TriClPr	12.58

TUT 004 1905

L0001905

39	60.171	0.0 VB	3.3351e5	66495.50	2900.20	0.20		0.20
40	62.368	0.1 BV 13DC1Bz	1.9871e5	2782853.25	240329.47	14.00	13DC1Bz	14.00
41	62.975	0.1 VV 14DC1Bz	2.3873e5	3117319.75	250945.80	13.06	14DC1Bz	13.06
42	64.906	0.0 VB 12DC1Bz	2.1126e5	2827660.00	234730.56	13.38	12DC1Bz	13.38
43	68.735	0.0 BB	4.0013e5	3518.00	154.19	0.01		0.01

	-0.6		1.1897e7	130133552.00	9.29e6	630.24		630.24

0470

Missing Component Report

Component	Expected Retention (Sample File)

Air	1.845

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

TUT 004 1906

000130.

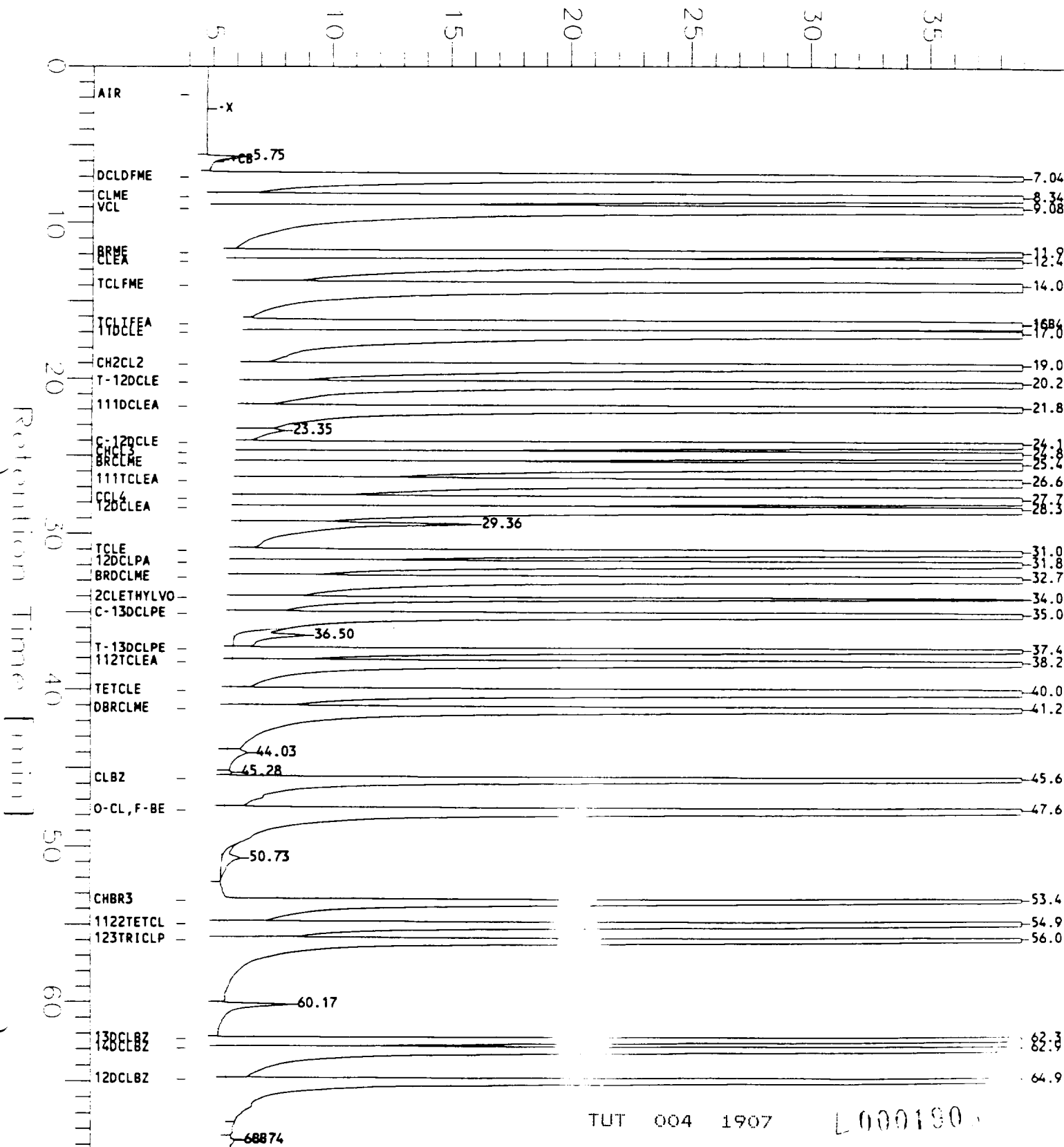
Sample Name : 15 PPB
FileName : n:\v3400s\SC11021.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor: 0

End Time : 70.00 min
Plot Offset: 4 mV

Sample #: C MIX
Date : 3/20/93 1:14 PM
Time of Injection: 3/12/93 5:13 PM
Low Point : 4.00 mV
High Point : 39.00 mV
Plot Scale: 35 mV

Page 1 of 1

Response [mV]



=====

Software Version: 3.2 <16C20>

Sample Name : 15 PPB

Sample Number: C MIX

Operator :

Time : 3/22/93 4:33 PM

Study : STD CHECK

0472

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/12/93 5:13 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC11021.raw

Result File : n:\v3400s\TC11021.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC11.smp

Sequence File : N:\V3400S\SC11.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

=====

ITAS-KNOXVILLE V3400B J+W DB-624 75m*0.53mm ID,3.00um df

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HOTOIONIZATION DETECTOR: Percent differences, standard concentrations, and Cfs for FBz, o-Cl,F-Benzene, and B2ClIsopO are incorrect due to the compounds having a

concentration different than the other compounds in the mix. The percent differences for

these compounds and Cfs must be done manually. The computer could only calculate percent

differences and Cfs from only one standard concentration.

Standard check compared to 3 10 192 linearity

=====

Peak #	Ret Time [min]	Component Name	Height [uV]	BL Cal. Range	CONCENTRATION [PPB]	STANDARD CON. [PPB]	PERCENT DIFFERENCE	Component Name	DAILY Cf
0	5.000	Air	0.00	VV	0.00	15.000	-1.000e2	Air	0.0000
6	8.987	VCl	10969.20	VE	16.41	15.000	9.367	VCl	731.2800
17	16.955	11DCIE	41829.33	VB	12.94	15.000	-13.718	11DCIE	2.7886e3
21	20.159	T-12DCIE	171883.89	VV	13.80	15.000	-8.005	T-12DCIE	1.1458e4
27	24.094	C-12DCIE	71139.49	VV	14.67	15.000	-32.214	C-12DCIE	4.7426e3
32	28.391	Bz	139879.88	VB	13.12	15.000	-12.553	Bz	9.3253e3
33	29.320	FBz	189250.80	BV	90.42	15.000	-502.806	FBz	1.2616e4
35	31.023	TCIE	89579.20	VV	14.63	15.000	-2.499	TCIE	5.9719e3
39	34.000	2ClEthylVO	19748.22	VV	10.46	15.000	-30.243	2ClEthylVO	1.3165e3
41	35.012	C-13DClPe	31603.05	VV	12.61	15.000	-15.927	C-13DClPe	2.1068e3
44	36.537	Toluene	137155.78	VE	13.89	15.000	-7.387	Toluene	9.1437e3
46	37.368	T-13DClPe	31433.12	VE	13.85	15.000	-7.665	T-13DClPe	2.0955e3
50	40.017	TetClE	54096.44	VB	14.38	15.000	-4.135	TetClE	3.6064e3
3	45.603	ClBz	102292.76	VV	14.28	15.000	-4.809	ClBz	6.8195e3
54	46.168	EthylBz	83877.30	VV	14.37	15.000	-4.217	EthylBz	5.5918e3
55	46.840	m-Xylene	87206.75	VV	14.40	15.000	-4.016	m-Xylene	5.8137e3
56	47.607	o-Cl,F-Benzene	126768.50	VV	93.97	15.000	-526.481	o-Cl,F-Benzene	8.4512e3
57	50.722	o-Xylene	73622.53	VV	14.47	15.000	-3.534	o-Xylene	4.9081e3
70	62.293	13DClBz	143020.95	BV	14.40	15.000	-4.019	13DClBz	9.5347e3
71	62.907	14DClBz	146188.77	VB	14.68	15.000	-2.149	14DClBz	9.7459e3
74	64.835	12DClBz	120663.04	BB	14.35	15.000	-4.338	12DClBz	8.0442e3

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TUT 004 1908

L 0001900

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt (1SX)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.666	0.0	BB	-----	9229.00	2134.94	0.00			-15.00
2	6.603	0.0	BB	603.6285	717.00	107.16	1.19			-13.81
3	7.066	0.0	BB	4225.5464	642.00	101.59	0.15			-14.85
4	7.701	0.0	BB	5414.3481	1434.50	177.15	0.27			-14.74
5	8.299	0.0	BV	12286.4199	2642.08	143.79	0.22			-14.79
6	8.987	-0.1	VE VCl	10764.9531	176599.59	10969.20	16.41		VCl	1.41
7	9.516	0.0	EV	7025.2632	9505.00	904.66	1.35			-13.65
8	9.615	0.0	VB	7254.9370	9748.40	898.46	1.34			-13.66
10	11.808	0.0	VV	10503.9707	15140.41	963.79	1.44			-13.56
11	12.451	0.0	VB	11031.5967	3651.31	221.31	0.33			-14.67
12	13.985	0.0	BV	78237.8750	6764.38	279.44	0.09			-14.91
13	15.031	0.0	VB	31306.5078	43226.34	4462.57	1.38			-13.62
14	15.628	0.0	BV	36078.0508	8202.42	734.80	0.23			-14.77
15	15.885	0.0	VV	33986.6328	5793.86	550.97	0.17			-14.83
16	16.547	0.0	VV	44360.7305	9336.70	680.25	0.21			-14.79
17	16.955	-0.1	VB 11DCIE	28189.2793	364832.50	41829.33	12.94		11DCIE	-2.06
18	18.838	0.0	BV	92311.0234	2502.14	337.63	0.03			-14.97
19	19.026	0.0	VV	1.0265e5	15740.36	1909.89	0.15			-14.85
20	19.736	0.0	VV	1.6315e5	6130.69	468.05	0.04			-14.96
21	20.159	-0.0	VV T-12DCIE	73072.0469	1008342.00	171883.89	13.80		T-12DCIE	-1.20
22	21.024	0.0	VV	1.2471e5	852.34	85.13	0.01			-14.99
23	21.439	0.0	VV	1.4705e5	3383.64	286.61	0.02			-14.98
24	21.806	0.0	VV	1.9446e5	7357.94	471.29	0.04			-14.96
25	22.458	0.0	VV	1.1259e5	3000.88	129.27	0.03			-14.97
26	23.422	0.0	VV	45890.8242	9409.83	994.48	0.21			-14.80
27	24.094	0.0	VV C-12DCIE	33937.2852	497789.94	71139.49	14.67		C-12DCIE	-0.33
28	24.803	0.0	VV	60307.2148	6370.39	512.32	0.11			-14.89
29	25.447	0.0	VV	64560.1367	7589.59	570.16	0.12			-14.88
30	26.599	0.0	VV	2.0321e5	7684.00	403.23	0.04			-14.96
31	27.736	0.0	VV	1.6587e5	7363.08	473.35	0.04			-14.96
32	28.391	-0.0	VB Bz	90861.5938	1191833.13	139879.88	13.12		Bz	-1.88
33	29.320	-0.0	BV FBz	16945.6445	1532239.25	189250.80	90.42		FBz	75.42
34	30.521	0.0	VV	79063.8047	1911.81	148.11	0.02			-14.98
35	31.023	-0.0	VV TCIE	44160.5234	645855.38	89579.20	14.63		TCIE	-0.38
36	31.824	0.0	VV	1.2419e5	7238.59	357.00	0.06			-14.94
37	32.780	0.0	VV	36123.0195	7264.66	347.73	0.20			-14.80
38	33.232	0.0	VV	19566.0996	5702.88	504.37	0.29			-14.71
39	34.000	-0.0	VV 2ClEthylVO	12715.3281	133048.33	19748.22	10.46		2ClEthylVO	-4.54
40	34.814	0.0	VV	23373.9434	4359.98	467.45	0.19			-14.81
41	35.012	-0.0	VV C-13DCIPe	17459.3652	220179.25	31603.05	12.61		C-13DCIPe	-2.39
42	35.797	0.0	VE	84905.6172	30536.56	3550.85	0.36			-14.64
43	36.048	0.0	EV	1.2803e5	4914.50	378.97	0.04			-14.96
44	36.537	-0.0	VE Toluene	78373.5469	1088765.88	137155.78	13.89		Toluene	-1.11
45	36.927	0.0	EV	1.1107e5	2583.00	229.60	0.02			-14.98
46	37.368	-0.0	VE T-13DCIPe	16091.6250	222872.36	31433.12	13.85		T-13DCIPe	-1.15
47	37.669	0.0	EV	20468.1406	2638.50	245.38	0.13			-14.87
48	38.144	0.0	VV	36383.3828	9051.56	474.36	0.25			-14.75
49	39.285	0.0	VV	54958.7969	2882.80	197.33	0.05			-14.95
50	40.017	-0.0	VB TetClE	34539.8828	496673.19	54096.44	14.38		TetClE	-0.62
51	41.145	0.0	BV	55153.0117	3714.78	253.39	0.07			-14.93
52	44.348	0.0	VV	1.6830e5	13035.00	554.84	0.08			-14.92
53	45.603	-0.0	VV ClBz	77728.0234	1109856.75	102292.76	14.28		ClBz	-0.72
54	46.168	-0.0	VV EthylBz	68119.5859	978706.13	83877.30	14.37		EthylBz	-0.63
55	46.840	0.0	VV m-Xylene	72544.9375	1044478.81	87206.75	14.40		m-Xylene	-0.60

56	47.607	0.0 VV	o-Cl,F-Ben	16165.0869	1519068.75	126768.50	93.97	o-Cl,F-Ben	78.97
57	50.722	0.0 VV	o-Xylene	59722.9648	864181.56	73622.53	14.47	o-Xylene	-0.53
58	52.785	0.0 VV		1.3064e5	14601.88	568.67	0.11		-14.89
59	53.404	0.0 VV		1.4593e5	10284.88	358.58	0.07		-14.93
60	54.954	0.0 VV		1.1593e5	4957.44	217.57	0.04		-14.96
61	55.990	0.0 VV		1.0594e5	3408.75	163.71	0.03		-14.97
62	56.619	0.0 VB		1.1173e5	2349.63	208.90	0.02		-14.98
63	57.323	0.0 BV		1.1919e5	4767.39	397.32	0.04		-14.96
64	57.710	0.0 VV		95620.2266	2425.16	251.95	0.03		-14.98
65	58.623	0.0 VV		2.9823e5	5047.06	168.12	0.02		-14.98
66	59.442	0.0 VB		1.0630e5	1007.37	94.13	0.01		-14.99
67	60.142	0.0 BV		1.1736e5	7238.42	612.69	0.06		-14.94
68	60.948	0.0 VV		91256.7578	3469.08	377.64	0.04		-14.96
69	61.238	0.0 VB		98589.7578	779.99	78.59	0.01		-14.99
70	62.293	0.0 BV	13DC1Bz	67075.0547	965687.38	143020.95	14.40	13DC1Bz	-0.60
71	62.907	0.0 VB	14DC1Bz	62848.8984	922470.13	146188.77	14.68	14DC1Bz	-0.32
72	63.717	0.0 BV		61379.4180	364.28	59.11	0.01		-14.99
73	64.084	0.0 VB		1.1296e5	44891.22	3341.79	0.40		-14.60
74	64.835	0.0 BB	12DC1Bz	51561.3906	739868.50	120663.04	14.35	12DC1Bz	-0.65
75	65.832	0.0 BB		41948.4766	235.50	47.21	0.01		-14.99
76	66.190	0.0 BB		52167.3242	651.75	105.06	0.01		-14.99
77	66.486	0.0 BV		49077.8594	10831.81	1855.92	0.22		-14.78
78	67.024	0.0 VB		1.0308e5	1192.17	97.25	0.01		-14.99
79	67.710	0.0 BV		81694.4453	1093.91	112.60	0.01		-14.99
80	67.990	0.0 VB		61433.5703	1073.59	146.95	0.02		-14.98
81	68.328	0.0 BV		42414.8672	369.43	73.24	0.01		-14.99
82	68.473	0.0 VV		53084.8359	429.26	68.00	0.01		-14.99
83	68.685	0.0 VV		80577.5547	989.38	103.25	0.01		-14.99
84	68.910	0.0 VV		76145.8516	2248.56	248.32	0.03		-14.97
85	69.121	0.0 VB		38969.0508	315.88	68.16	0.01		-14.99
86	69.379	0.0 BB		59765.8320	635.50	89.41	0.01		-14.99

0474

-0.2 6.0850e6 16148262.00 1.90e6 448.27 -826.73

Missing Component Report

Component Expected Retention (Sample File)

Air 5.000

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

TUT 004 1910

L 000191.

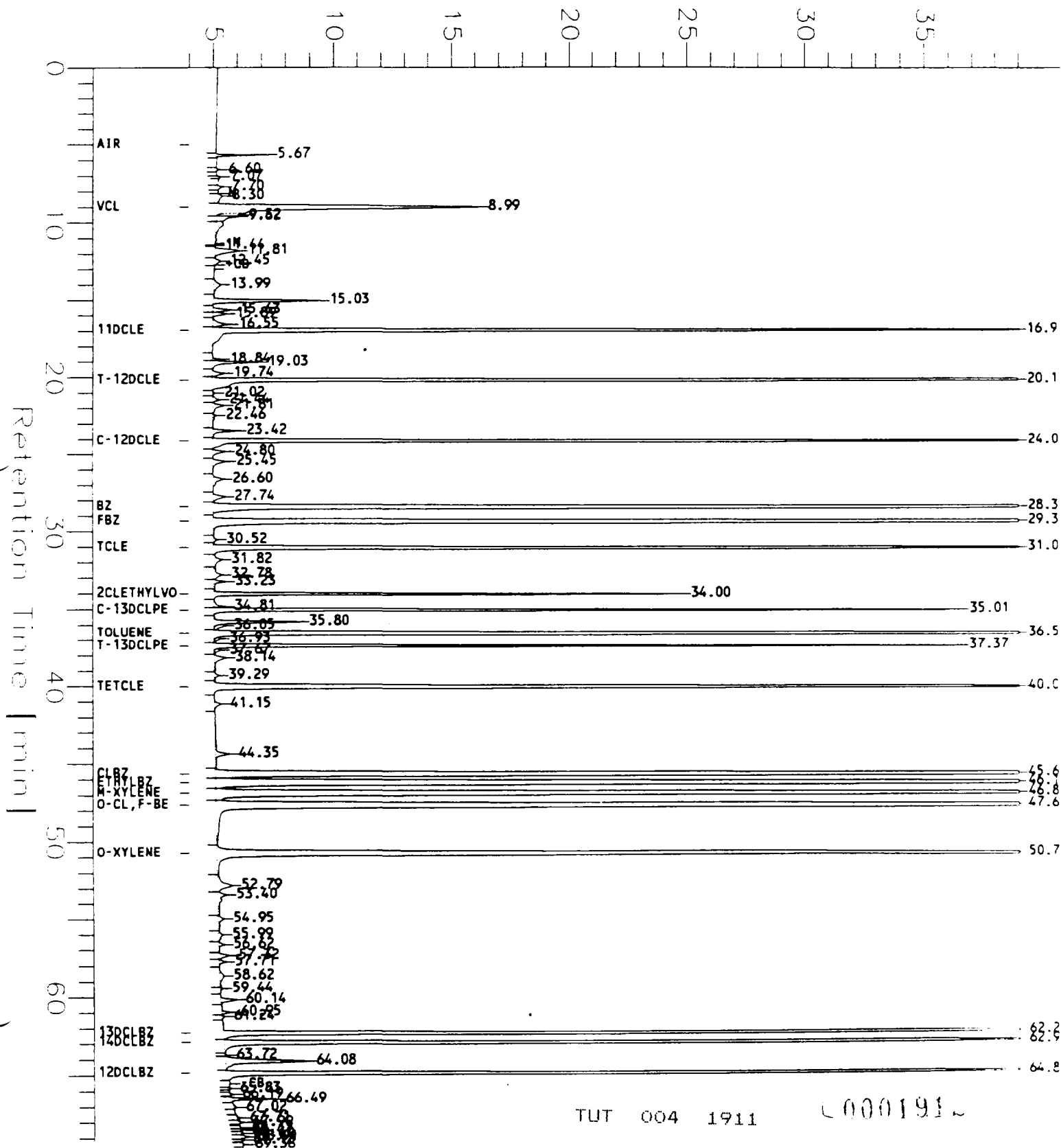
Sample Name : 15 PPB
FileName : n:\v3400s\TC11021.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

End Time : 70.00 min
Plot Offset : 4 mV

Sample #: C MIX
Date : 3/20/93 1:14 PM
Time of Injection: 3/12/93 5:13 PM
Low Point : 4.00 mV
Plot Scale: 35 mV

Page 1 of 1

Response [mV]



BLANK DATA

TUT 004 1912

L 0001913

HALOGENATED AND AROMATIC VOLATILE ORGANIC ANALYSIS

Laboratory Name : ITAS-KNOXVILLE
 Contract Name : L'HENRI
 Client Sample I.D. : METHOD BLANK
 Lab Sample I.D. : B2880
 Sample Matrix : WATER
 Concentration Units: ug/l

SDG Number : NA
 Job Number : ITEK 53554
 Collection Date : NA
 Confirmation Date: NA
 Analysis Date(s) : 03/10/93
 Dryness Factor : NA

COMPOUND	CAS No.	RESULTS	QUALIFIERS	DETECTION LIMITS
dichlorodifluoromethane	75-71-8	1.8	U	1.8
chloromethane	74-87-3	0.8	U	0.8
vinyl chloride	75-01-4	1.8	U	1.8
bromomethane	74-83-9	1.2	U	1.2
chloroethane	75-00-3	5.2	U	5.2
trichlorofluoromethane	75-69-4	2.0	U	2.0
1,1-dichloroethene	75-35-4	1.3	U	1.3
methylene chloride	75-09-2	15	U	15
trans-1,2-dichloroethene	156-60-5	1.0	U	1.0
1,1-dichloroethane	75-34-3	0.7	U	0.7
cis-1,2-dichloroethene	156-59-2	1.0	U	1.0
trichloromethane	67-66-3	0.5	U	0.5
1,1,1-trichloroethane	71-55-6	0.3	U	0.3
carbon tetrachloride	56-23-5	1.2	U	1.2
benzene	71-43-2	2.0	U	2.0
1,2-dichloroethane	107-06-2	0.3	U	0.3
trichloroethene	79-01-6	1.2	U	1.2
1,2-dichloropropane	78-87-5	0.4	U	0.4
bromodichloromethane	75-27-4	1.0	U	1.0
tribromomethane	74-95-3	-	-	-
1-chloroethylvinyl ether	110-75-8	1.3	U	1.3
cis-1,3-dichloropropene	10061-01-5	3.4	U	3.4
toluene	108-88-3	2.0	U	2.0
trans-1,3-dichloropropene	10061-02-6	3.4	U	3.4
1,1,2-trichloroethane	79-00-5	0.2	U	0.2
tetrachloroethene	127-18-4	0.3	U	0.3
dibromochloromethane	124-48-1	0.9	U	0.9
n-hexyl chloride	544-10-8	-	-	-
chlorobenzene	108-90-7	2.0	U	2.0
ethyl benzene	100-41-4	2.0	U	2.0
1,1,1,2-tetrachloroethane	630-20-6	-	-	-
xylenes (total)	1330-20-7	1.0	U	1.0
bromoform	75-25-2	2.0	U	2.0
1,1,2,2-tetrachloroethane	79-34-5	0.3	U	0.3
1,2,3-trichloropropane	96-18-4	-	-	-
phenyl bromide (bromobenzene)	108-86-1	-	-	-
2-chlorotoluene	108-41-8	-	-	-
1,3-dichlorobenzene	541-73-1	3.2	U	3.2
1,4-dichlorobenzene	106-46-7	2.4	U	2.4
1,2-dichlorobenzene	95-50-1	1.5	U	1.5
bis(2-chloroisopropyl) ether	108-60-1	-	-	-

SURROGATE RECOVERY	BCM	OCFB	FB	OFCB
ACCEPTANCE LIMITS SOIL	(31-112)	(34-113)	(23-113)	(21-108)
WATER	(53-150)	(64-121)	(70-128)	(72-122)
LAB I.D.				
B2880	89	98	103	100

BLANK APPLIES TO:
 TRIP BLANK
 DRM01
 DRM01MS
 DRM01 MSD

000191.

=====

Software Version: 3.2 <16C20>

Sample Name : BLANK

Time : 3/11/93 10:35 AM

Sample Number: BLANK

Study : BLANK

Operator :

B2880

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256

Data Acquisition Time: 3/10/93 11:34 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC10012.raw

Result File : n:\v3400s\SC10012.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 18

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ITAS-KNOXVILLE V-3400B J+ W DB-624 75m*0.53mm ID, 3.00um df

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ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/ Amount	Area [uV*sec]	Height [uV]	INST. Amt (15%)	Cal. Range	Component Name	SAMPLE CON (PPB)
1	5.764	0.0 BV		61485.7070	52649.38	2482.30	0.86			0.86
2	7.192	2.5 VV DCIDFMe		1.0903e5	21499.03	561.15	0.20	-	DCIDFMe	0.20
3	8.453	1.6 VV CLME		2.6469e5	11450.08	286.04	0.04	-	CLME	0.04
4	9.492	4.6 VB VCl		7.8527e5	25534.25	248.56	0.03	-	VCl	0.03
5	12.623	1.2 BB ClEa		1.6287e5	804.25	59.91	0.01		ClEa	0.01
6	18.817	0.0 BV		6.6937e5	2321.38	108.23	0.00			0.00
7	19.120	0.1 VB CH2Cl2		4.8702e5	120740.13	7736.71	0.25		CH2Cl2	0.25
8	24.884	0.2 BV CHCl3		6.0693e5	15814.56	921.96	0.03		CHCl3	0.03
9	25.495	-0.0 VV BrClMe		66503.6953	589552.50	446175.44	88.65		BrClMe	88.65
10	29.398	0.0 VV		7.4439e5	132667.50	4232.77	0.18			0.18
11	31.350	0.7 VV TCIE		2.3834e6	44481.13	589.99	0.02		TCIE	0.02
12	33.069	0.8 VV BrDClMe		1.9205e6	67729.00	791.91	0.04		BrDClMe	0.04
13	40.267	0.3 VB TetClE		4.2711e6	18032.88	129.72	0.00		TetClE	0.00
14	45.854	0.2 BV ClBz		2.8009e5	10132.53	336.64	0.04		ClBz	0.04
15	47.744	-0.0 VB o-Cl,F-Ben		41287.4961	4065507.75	239277.86	98.47		o-Cl,F-Ben	98.47
16	63.093	0.2 BB 14DClBz		1.9398e6	11813.00	117.64	0.01		14DClBz	0.01
17	64.954	0.1 BB 12DClBz		2.5427e5	28125.00	1992.94	0.11		12DClBz	0.11
18	68.708	0.0 BB		2.5033e5	1199.50	86.33	0.01			0.01

12.3

1.5298e7 10526054.00 706136.06 188.92

188.92

Missing Component Report

0479

Component	Expected Retention (Sample File)

Air	1.845
BrMe	11.919
FClFMe	14.003
11DClE	17.038
T-12DClE	20.238
2756111DClEa	21.838
C-12DClE	24.188
111TClEa	26.633
CCl4	27.774
12DClEa	28.393
12DClPa	31.870
2ClEthylVO	34.116
C-13DClPe	35.123
T-13DClPe	37.487
112TClEa	38.300
DBrClMe	41.272
CHBr3	53.534
1122TetClEa	54.996
123TriClPropane	56.030
13DClBz	62.384

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

L0001913

TUT 004 1915

Sample Name : BLANK
FileName : n:\v3400a\SC10012.raw
Method : 8000SUE.ins
Start Time : 0.00 min
Scale Factor : 0

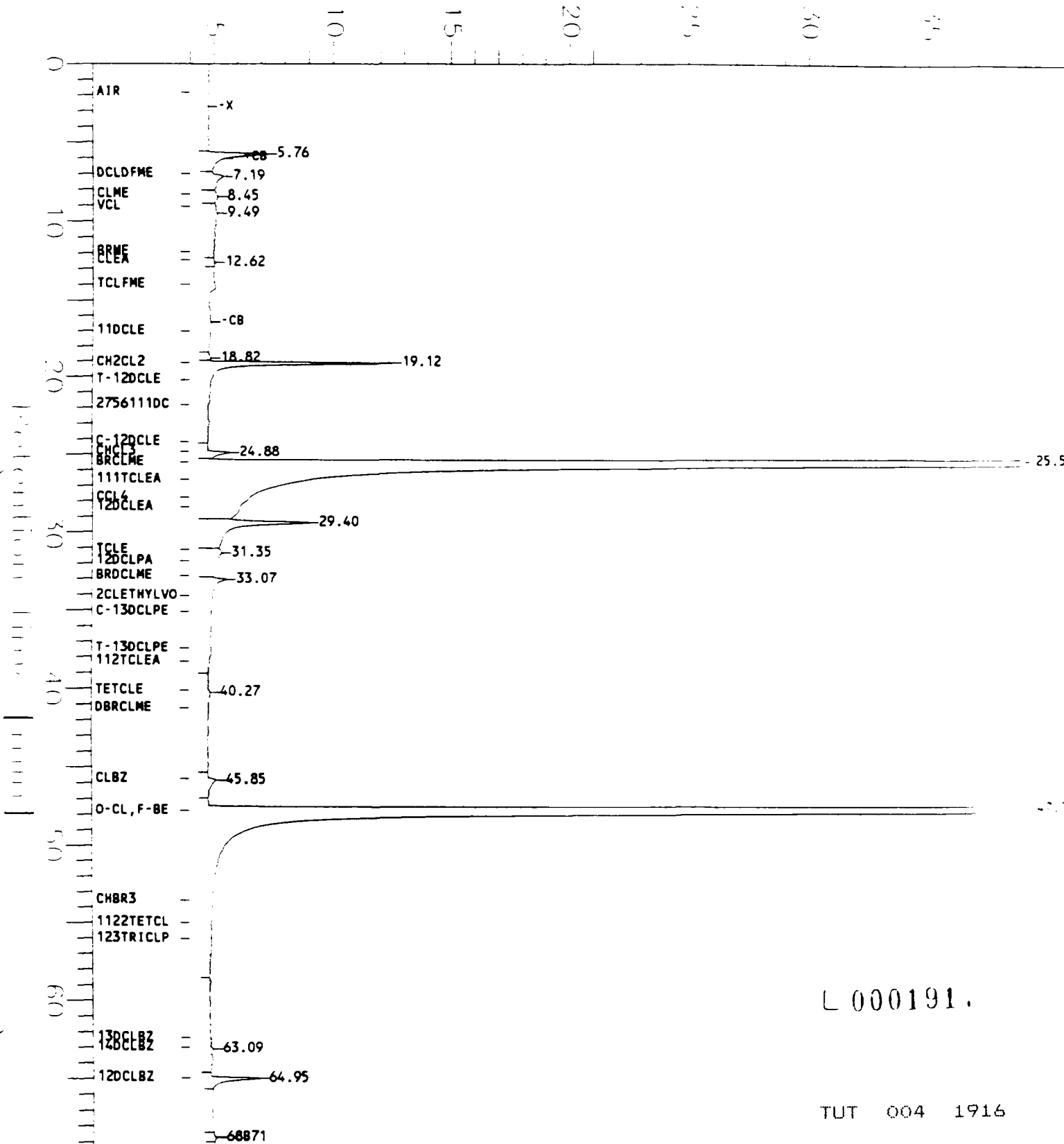
End Time : 70.00 min
Plot Offset : 4 mV

Sample #: BLANK
Date : 3/11/93 10:36 AM
Time of Injection: 3/10/93 11:34 PM
Low Point : 4.00 mV
Plot Scale: 35 mV

Page 1 of 1

High Point : 39.00 mV

Response [mV]



L 000191.

TUT 004 1916

=====

Software Version: 3.2 <16C20>

Sample Name : BLANK

Time : 3/11/93 10:37 AM

Sample Number: BLANK

Study : BLANK

Operator :

B2880

Instrument : V3400A/SALLY

Channel : B

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/10/93 11:34 PM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC10012.raw

Result File : n:\v3400s\TC10012.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC10.smp

Sequence File : n:\v3400s\sc10.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 63

=====

ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

=====

PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

=====

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	5.683	0.0	BB	-----	35146.00	6092.42	0.00		0.00
2	6.612	0.0	BB	611.5607	1211.00	170.72	1.98		1.98
3	7.100	0.0	BB	6141.6201	784.00	90.80	0.13		0.13
5	8.677	-3.6	VV VCI	12349.4971	2937.78	169.21	0.24	VCI	0.24
6	9.391	0.0	VV	9824.0264	40527.09	2934.33	4.13		4.13
7	10.183	0.0	VB	9878.4971	11665.45	839.97	1.18		1.18
9	13.785	0.0	BB	66561.0234	4591.00	252.72	0.07		0.07
10	15.061	0.0	BB	34741.3633	113444.52	11964.43	3.27		3.27
11	15.650	0.0	BV	36921.2031	23800.52	2361.93	0.65		0.65
12	15.921	0.0	VV	37290.6523	137.67	1347.05	0.37		0.37
13	16.578	-2.3	VB 11DCIE	72530.3047	3644.53	184.11	0.05	11DCIE	0.05
14	19.036	0.0	BV	2.1764e5	4059.03	250.30	0.02		0.02
15	19.744	0.0	VV	2.1029e5	4808.44	306.87	0.02		0.02
16	20.182	0.0	VV T-12DCIE	2.5243e5	3079.39	163.72	0.01	T-12DCIE	0.01
17	21.458	0.0	VV	2.1357e5	5841.22	367.06	0.03		0.03
18	22.207	0.0	VV	53998.6641	1470.11	138.58	0.03		0.03
19	23.451	0.0	VV	1.3824e5	3505.09	129.06	0.03		0.03
20	25.460	0.0	VV	97251.9219	11274.88	590.11	0.12		0.12
21	28.414	-0.1	VB Bz	1.0521e5	33285.78	3579.65	0.32	Bz	0.32
22	29.343	-0.1	BV FBz	16968.2891	1749967.50	215648.25	103.13	FBz	103.13
23	31.046	-0.1	VV TCIE	1.6284e5	6430.47	253.95	0.04	TCIE	0.04
24	31.375	0.0	VV	7.0149e5	32176.50	294.98	0.05		0.05

TUT 004 1917

L 0001916

25	34.715	-1.0 VV C-13DCIpe	71915.3594	4291.16	154.37	0.06	C-13DCIpe	0.06
26	35.550	0.0 VV	43968.3359	2870.78	168.91	0.07		0.07
27	36.074	0.0 VV	1.9703e5	9558.11	507.81	0.05		0.05
28	36.568	-0.1 VV Toluene	1.2445e5	21151.19	1779.01	0.17	Toluene	0.17
29	39.325	0.0 VV	45303.4648	3783.61	329.48	0.08		0.08
30	40.048	-0.1 VV TetClE	81633.3516	2084.13	100.72	0.03	TetClE	0.03
31	45.659	-0.0 VV ClBz	1.2628e5	17136.88	1007.61	0.14	ClBz	0.14
32	46.223	-0.0 VB EthylBz	76035.2656	11518.05	936.47	0.15	EthylBz	0.15
33	46.898	-0.0 BV m-Xylene	80283.6563	19253.84	1523.83	0.24	m-Xylene	0.24
34	47.664	-0.0 VV o-Cl, F-Ben	15806.5596	1585086.63	131266.92	100.28	o-Cl, F-Ben	100.28
35	50.794	-0.0 VV o-Xylene	81587.8672	9070.72	597.36	0.11	o-Xylene	0.11
36	52.833	0.0 VV	1.2448e5	10377.78	447.93	0.08		0.08
37	56.650	0.0 VB	4.0041e5	8067.63	206.22	0.02		0.02
38	57.351	0.0 BV	1.1812e5	12066.89	1045.52	0.10		0.10
39	57.744	0.0 VB	1.0000e5	5629.61	576.14	0.06		0.06
40	59.297	0.0 BV	1.5420e5	3216.91	213.51	0.02		0.02
41	60.159	0.0 VV	1.4245e5	25203.81	1810.79	0.18		0.18
42	61.833	0.0 VV	2.0335e5	2535.14	127.60	0.01		0.01
43	62.323	0.0 VB 13DCIbz	76693.9219	2183.64	291.41	0.03	13DCIbz	0.03
44	62.918	-0.0 BB 14DCIbz	1.1848e5	4493.00	388.74	0.04	14DCIbz	0.04
45	64.106	0.0 BE	1.3092e5	36597.14	2419.84	0.28		0.28
46	64.356	0.0 EV	1.0020e5	3969.00	342.88	0.04		0.04
47	64.854	0.0 VB 12DCIbz	56832.8672	11497.11	1751.28	0.20	12DCIbz	0.20
48	65.218	0.0 BB	44820.4102	251.00	48.48	0.01		0.01
49	65.463	0.0 BV	84111.3906	2349.27	241.79	0.03		0.03
50	65.679	0.0 VV	54358.2813	941.08	149.88	0.02		0.02
51	65.835	0.0 VB	54873.4961	1024.15	161.57	0.02		0.02
52	66.203	0.0 BB	50548.2344	1876.50	321.37	0.04		0.04
53	66.500	0.0 BB	48399.9883	24116.49	4313.56	0.50		0.50
54	66.988	0.0 BB	82278.1172	1404.25	147.75	0.02		0.02
55	67.579	0.0 BV	47687.6602	367.67	66.75	0.01		0.01
56	67.716	0.0 VV	67023.3516	2237.71	289.03	0.03		0.03
57	67.998	0.0 VV	58264.4258	2831.20	420.66	0.05		0.05
58	68.238	0.0 VV	64344.9063	784.94	105.61	0.01		0.01
59	68.471	0.0 VV	1.0556e5	1844.54	151.26	0.02		0.02
60	68.898	0.0 VV	1.2271e5	4644.92	327.68	0.04		0.04
61	69.130	0.0 VV	49700.1484	1068.02	186.03	0.02		0.02
62	69.369	0.0 VV	92506.5469	4818.02	450.88	0.05		0.05
63	69.709	0.0 VB	49382.9961	452.98	79.41	0.01		0.01

	-7.3		6.2038e6	3970016.00	403586.19	219.13		219.13

Missing Component Report

Component	Expected Retention (Sample File)
Air	5.000
C-12DCIe	24.122
2ClEthylVO	34.045
T-13DCIpe	37.423

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

=====

TUT 004 1918

C0001919

Sample Name : BLANK

FileName : n:\v3400a\TC10012.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: BLANK

Date : 3/11/93 10:37 AM

Time of Injection: 3/10/93 11:34 PM

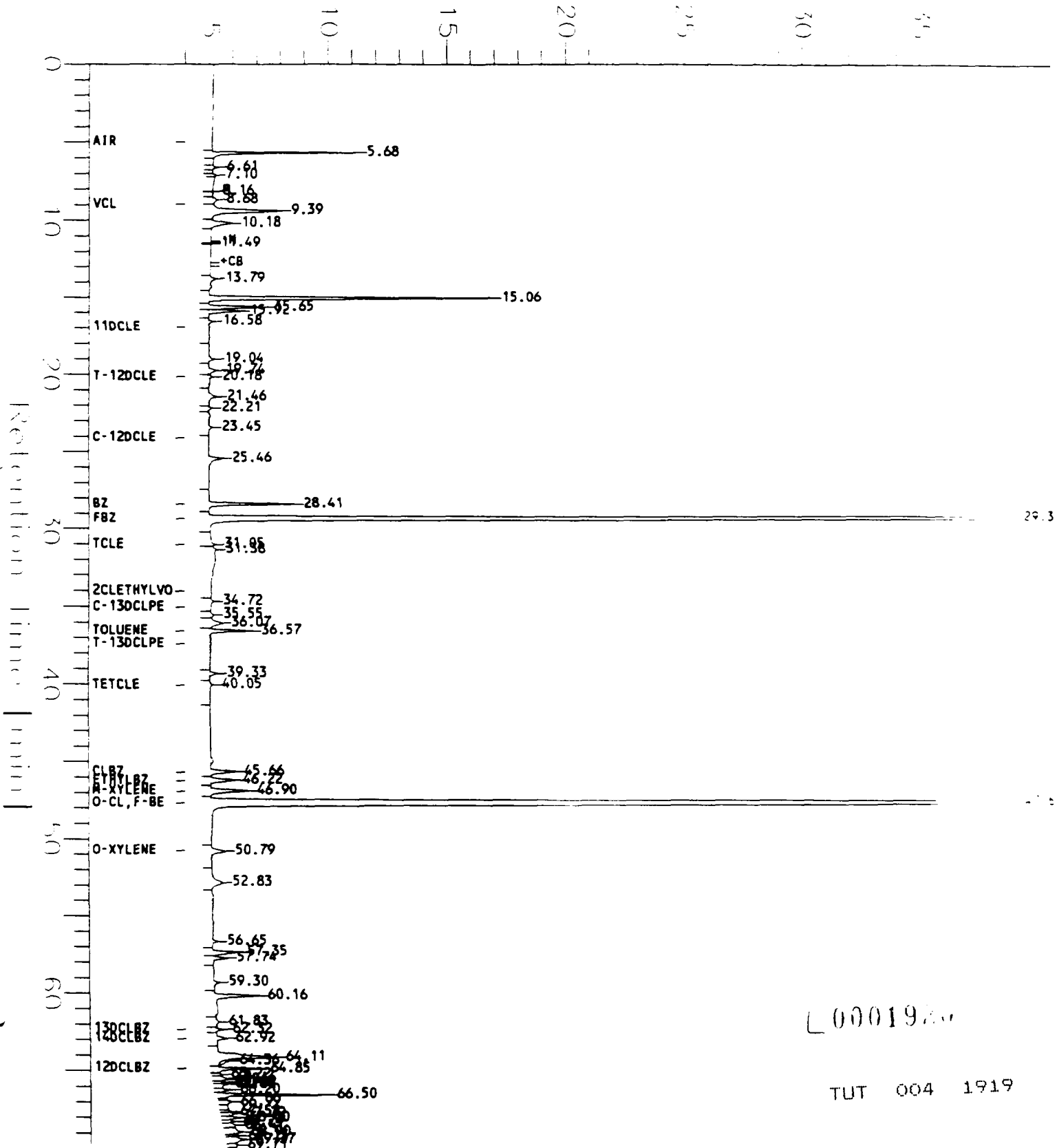
Low Point : 4.00 mV

Plot Scale: 35 mV

Page 1 of 1

High Point : 39.00 mV

Response [mV]



L 0001920

TUT 004 1919

Errors and Warnings From Data Processing

Data File: n:\v3400s\TC10012.raw

Date/Time: 3/11/93 10:37 AM

0484

QUANT: Response Is Outside Calibration Curve Domain For: Air

QUANT: Calibration Curve Has Two Solutions For: Air (17.0595)

L 000192.

HALOGENATED AND AROMATIC VOLATILE ORGANIC ANALYSIS 0485

Laboratory Name : ITAS-KNOXVILLE	SDG Number : NA
Contract Name : L'HENRI	Job Number : ITEK 53554
Client Sample I.D. : METHOD BLANK	Collection Date : NA
Lab Sample I.D. : B2881	Confirmation Date: NA
Sample Matrix : WATER	Analysis Date(s) : 03/12/93
Concentration Units: ug/l	Dryness Factor : NA

COMPOUND	CAS No.	RESULTS	QUALIFIERS	DETECTION LIMITS
dichlorodifluoromethane	75-71-8	1.8	U	1.8
chloromethane	74-87-3	0.8	U	0.8
vinyl chloride	75-01-4	1.8	U	1.8
bromomethane	74-83-9	1.2	U	1.2
chloroethane	75-00-3	5.2	U	5.2
trichlorofluoromethane	75-69-4	2.0	U	2.0
1,1-dichloroethene	75-35-4	1.3	U	1.3
methylene chloride	75-09-2	15	U	15
trans-1,2-dichloroethene	156-60-5	1.0	U	1.0
1,1-dichloroethane	75-34-3	0.7	U	0.7
cis-1,2-dichloroethene	156-59-2	1.0	U	1.0
trichloromethane	67-66-3	0.5	U	0.5
1,1,1-trichloroethane	71-55-6	0.3	U	0.3
carbon tetrachloride	56-23-5	1.2	U	1.2
benzene	71-43-2	2.0	U	2.0
1,2-dichloroethane	107-06-2	0.3	U	0.3
trichloroethene	79-01-6	1.2	U	1.2
1,2-dichloropropane	78-87-5	0.4	U	0.4
bromodichloromethane	75-27-4	1.0	U	1.0
dibromomethane	74-95-3	-	-	-
-chloroethylvinyl ether	110-75-8	1.3	U	1.3
cis-1,3-dichloropropene	10061-01-5	3.4	U	3.4
toluene	108-88-3	2.0	U	2.0
trans-1,3-dichloropropene	10061-02-6	3.4	U	3.4
1,1,2-trichloroethane	79-00-5	0.2	U	0.2
tetrachloroethene	127-18-4	0.3	U	0.3
dibromochloromethane	124-48-1	0.9	U	0.9
n-hexyl chloride	544-10-8	-	-	-
chlorobenzene	108-90-7	2.0	U	2.0
ethyl benzene	100-41-4	2.0	U	2.0
1,1,1,2-tetrachloroethane	630-20-6	0.3	U	0.3
xylene (total)	1330-20-7	1.0	U	1.0
bromoform	75-25-2	2.0	U	2.0
1,1,2,2-tetrachloroethane	79-34-5	0.3	U	0.3
1,2,3-trichloropropane	96-18-4	-	-	-
phenyl bromide (bromobenzene)	108-86-1	-	-	-
2-chlorotoluene	108-41-8	-	-	-
1,3-dichlorobenzene	541-73-1	3.2	U	3.2
1,4-dichlorobenzene	106-46-7	2.4	U	2.4
1,2-dichlorobenzene	95-50-1	1.5	U	1.5
bis(2-chloroisopropyl) ether	108-60-1	-	-	-

SURROGATE RECOVERY	BCM	OCFB	FB	OFCB
ACCEPTANCE LIMITS SOIL	(31-112)	(34-113)	(23-113)	(21-108)
WATER	(53-150)	(64-121)	(70-128)	(72-122)
LAB I.D.				
B2881	69	83	-	-

BLANK APPLIES TO:
DRM01 D1:20

L 000192

=====

Software Version: 3.2 <16C20>

Sample Name : METHOD BLANK

Sample Number: B2881

Operator :

Time : 3/12/93 9:55 AM

Study : METHOD BLANK

0486

Instrument : V3400A/SALLY

Channel : A

A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/12/93 12:46 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\SC11008.raw

Result File : n:\v3400s\SC11008.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\HALL.prc

Sample File : N:\V3400S\LINHSC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 mL

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 15

Area Threshold : 73

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 19

=====

ITAS-KNOXVILLE V-3400B J+W DB-624 75m*0.53mm ID, 3.00um df

=====

ELECTROLYTIC CONDUCTIVITY DETECTOR-BrClMe AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

=====

Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (ISX) Range	Component Name	SAMPLE CON (PPB)
1	5.773	0.0	BV	54809.8164	21044.00	1274.20	0.38		0.38
2	7.210	2.3	VV DCIDFMe	1.4657e5	21797.16	491.51	0.15	- DCIDFMe	0.15
3	9.494	4.5	VV VCl	9.1437e5	36328.50	330.00	0.04	- VCl	0.04
4	12.366	-0.9	VV ClEa	2.6257e5	2438.38	96.80	0.01	- ClEa	0.01
5	14.199	1.4	VV TCIFMe	1.2347e6	8798.88	109.52	0.01	- TCIFMe	0.01
6	19.103	0.1	BB CH2Cl2	4.7694e5	343910.50	26585.93	0.72	CH2Cl2	0.72
7	24.874	0.3	BV CHCl3	5.2844e5	11232.59	710.14	0.02	CHCl3	0.02
8	25.486	0.1	VE BrClMe	65168.3125	4474901.00	349514.13	68.67	BrClMe	68.67
9	26.640	0.2	EV 111TCIEa	1.3973e6	320589.50	6363.70	0.23	111TCIEa	0.23
10	29.397	0.0	VV	7.2474e5	115743.56	3645.85	0.16		0.16
11	31.251	0.5	VV TCIE	2.1125e6	41135.91	590.02	0.02	TCIE	0.02
12	33.076	0.9	VV BrDCI Me	2.7093e6	118660.63	944.32	0.04	- BrDCI Me	0.04
13	40.346	0.6	VV TetClE	2.9759e6	24956.25	246.10	0.01	TetClE	0.01
14	45.883	0.4	BV ClBz	3.1320e5	10973.25	312.13	0.04	ClBz	0.04
15	47.795	0.2	VV o-Cl, F-Ben	43079.2031	3572165.25	207633.98	82.92	o-Cl, F-Ben	82.92
16	62.461	0.2	BV 13DCIBz	4.5235e5	2952.38	94.70	0.01	- 13DCIBz	0.01
17	63.056	0.2	BV 14DCIBz	4.8223e5	6078.63	220.52	0.01	- 14DCIBz	0.01
18	64.936	0.1	BB 12DCIBz	2.3216e5	23671.25	1788.13	0.10	12DCIBz	0.10
19	68.675	0.0	BB	2.4397e5	1175.00	84.46	0.01		0.01
				11.0	1.5370e7	9158552.00	601035.94	153.54	153.54

TUT 004 1922

L0001920

Missing Component Report

0487

Component	Expected Retention (Sample File)

Air	1.845
2LME	8.348
BrMe	11.932
TCLTFEa	16.467
11DC1E	17.025
T-12DC1E	20.219
111DC1Ea	21.813
C-12DC1E	24.149
CC14	27.735
12DC1Ea	28.355
12DC1Pa	31.839
2ClEthylVO	34.083
C-13DC1Pe	35.088
T-13DC1Pe	37.446
112TC1Ea	38.257
DBrClMe	41.217
CHBr3	53.470
1122TetClEa	54.941
123TriClPropane	55.974

=====

Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON PID

=====

TUT 004 1923

C 000192.

V3400A HALL

Sample Name : METHOD BLANK

FileName : n:\v3400s\SC11008.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: B2881

Date : 3/12/93 9:56 AM

Time of Injection: 3/12/93 12:46 AM

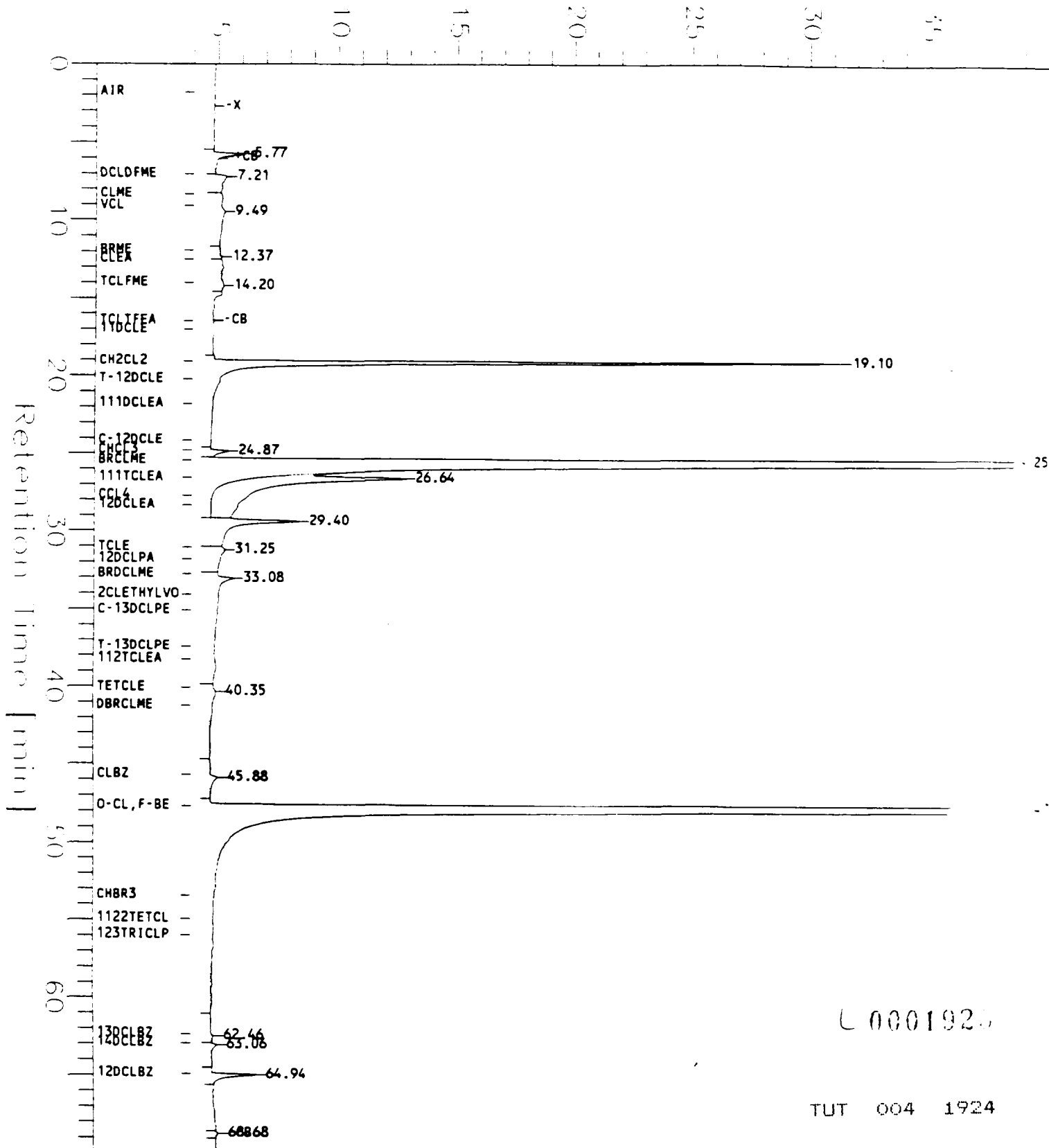
Low Point : 4.00 mV

Plot Scale: 35 mV

Page 1 of 1

High Point : 39.00 mV

Response [mV]



L 0001920

TUT 004 1924

=====

Software Version: 3.2 <16C20>

Sample Name : METHOD BLANK

Sample Number: B2881

Operator :

Time : 3/12/93 9:56 AM

Study : METHOD BLANK

Instrument : V3400A/SALLY

Channel : B A/D mV Range : 1000

AutoSampler : NONE

Rack/Vial : 0/0

Interface Serial # : 0159572256 Data Acquisition Time: 3/12/93 12:46 AM

Delay Time : 0.00 min.

End Time : 70.00 min.

Sampling Rate : 2.0000 pts/sec

Raw Data File : n:\v3400s\TC11008.raw

Result File : n:\v3400s\TC11008.rst

Instrument File: N:\V3400S\8000SUE.ins

Process File : N:\V3400S\PID.prc

Sample File : N:\V3400S\LINPTC11.smp

Sequence File : n:\v3400s\sc11.seq

Inj. Volume : 5 ml

Area Reject : 100.00

Sample Amount : 1.0000

Dilution Factor : 1.00

Noise Threshold: 10

Area Threshold : 49

Bunch Factor: 2

Multiplier : 1.0000

Divisor : 1.0000

Adder : 0.0000

Instrument Conditions:

Total Number of Peaks Detected: 47

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ITAS-KNOXVILLE V3400A RTX 502.2 105m*0.53mm ID,3.00um df

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PID DETECTOR-FBZ AND O-ClFBz ARE SURROGATES SPIKED AT 30PPB BUT ARE ENTERED INTO THE COMPUTER AT 100 TO GIVE RESULTS AS PERCENT. ALL OTHER ANALYTES ARE REPORTED IN TERMS OF PPB. ALL SAMPLES AND STANDARDS HAVE A FINAL PURGE VOLUME OF 5.0 ML.

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Peak #	Ret Time [min]	RT DIFF. %	BL Component Name	Area/Amount	Area [uV*sec]	Height [uV]	INST. Amt Cal. (1SX) Range	Component Name	SAMPLE CON (PPB)
1	5.694	0.0	BB	-----	6761.00	1592.06	0.00		0.00
2	6.642	0.0	BB	600.9934	722.50	108.37	1.20		1.20
3	7.091	0.0	BB	4271.5820	588.50	92.12	0.14		0.14
5	8.689	-3.4	VV VCI	10739.7715	1140.31	71.00	0.11	VCI	0.11
6	9.407	0.0	VV	11883.6270	22312.56	1255.45	1.88		1.88
7	10.208	0.0	VV	10420.6094	4954.92	317.94	0.48		0.48
9	13.802	0.0	BV	84995.4844	3469.63	131.93	0.04		0.04
10	15.060	0.0	VV	30442.1270	70349.39	7468.90	2.31		2.31
11	15.648	0.0	BV	32249.2910	12013.33	1203.97	0.37		0.37
12	15.915	0.0	VV	34088.3086	8905.67	844.37	0.26		0.26
13	16.579	-2.3	VV 11DCIE	93478.8281	4473.72	154.68	0.05	11DCIE	0.05
14	19.029	0.0	VV	2.1522e5	4639.84	268.52	0.02		0.02
15	19.728	0.0	VV	1.8775e5	5685.83	377.21	0.03		0.03
16	20.165	0.0	VV T-12DCIE	2.2690e5	4025.66	220.99	0.02	T-12DCIE	0.02
17	21.443	0.0	VV	1.8424e5	5080.09	343.44	0.03		0.03
18	22.202	0.0	VV	1.4103e5	2813.53	96.75	0.02		0.02
19	23.426	0.0	VV	94769.1094	2387.75	122.20	0.03		0.03
20	25.450	0.0	VV	70771.2500	7190.22	492.75	0.10		0.10
21	28.409	0.1	VV Bz	1.0240e5	31524.13	3282.75	0.31	Bz	0.31
22	29.341	0.1	VV FBz	17028.7559	1503886.25	184842.28	88.32	FBz	88.32
23	31.045	0.0	VV TCIE	55667.7422	1220.80	134.32	0.02	TCIE	0.02
24	31.342	0.0	VV	66127.8828	1244.23	115.25	0.02		0.02

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25	35.561	1.5	VV	C-13DClPe	3.3488e5	19995.38	149.63	0.06	C-13DClPe	0.06
26	36.094	0.0	VV		1.9831e5	9611.44	478.50	0.05		0.05
27	36.594	0.1	VV	Toluene	1.1834e5	14783.06	1233.33	0.13	Toluene	0.13
28	39.364	-1.7	VB	TetClE	65993.1016	3555.41	202.68	0.05	TetClE	0.05
29	45.708	0.2	BV	ClBz	1.2806e5	17520.13	980.08	0.14	ClBz	0.14
30	46.273	0.2	VV	EthylBz	76366.8672	8191.83	626.24	0.11	EthylBz	0.11
31	46.949	0.2	VB	m-Xylene	77260.6094	5580.44	437.49	0.07	m-Xylene	0.07
32	47.714	0.2	BV	o-Cl,F-Ben	16220.2022	1403988.25	116766.74	86.56	o-Cl,F-Ben	86.56
33	50.858	0.3	VB	o-Xylene	88964.8438	6256.31	357.81	0.07	o-Xylene	0.07
34	52.867	0.0	BV		1.1980e5	9658.66	410.20	0.08		0.08
35	57.352	0.0	VB		2.9327e5	6769.25	229.29	0.02		0.02
36	60.229	0.0	BV		1.1428e5	7545.00	655.83	0.07		0.07
37	62.312	0.1	VV	13DClBz	1.3666e5	5315.38	386.38	0.04	13DClBz	0.04
38	62.920	0.1	VB	14DClBz	75313.6797	3909.38	517.00	0.05	14DClBz	0.05
39	64.087	0.0	BB		1.1977e5	16595.50	1165.07	0.14		0.14
40	64.841	0.0	BB	12DClBz	53220.7422	10708.00	1691.89	0.20	12DClBz	0.20
41	65.501	0.0	BB		81409.3672	851.75	87.98	0.01		0.01
42	66.481	0.0	BV		47474.3125	18768.86	3324.48	0.40		0.40
43	66.920	0.0	VB		79889.8203	1109.89	116.82	0.01		0.01
44	67.963	0.0	BB		82510.6406	992.00	101.10	0.01		0.01
45	68.929	0.0	BB		63237.1641	1173.50	156.05	0.02		0.02
46	69.106	0.0	BB		38099.8125	313.50	69.19	0.01		0.01
47	69.390	0.0	BB		89542.6484	1484.25	139.39	0.02		0.02

	-4.1			4.1740e6	3280067.25	333820.25	184.05		184.05	

Missing Component Report

Component	Expected Retention (Sample File)

Air	5.000
C-12DClE	24.084
2ClEthylVO	34.012
T-13DClPe	37.382

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Y. NOT DETECTED ON PRIMARY RUN: Z. NOT DETECTED ON HALL

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Sample Name : METHOD BLANK

FileName : n:\v3400s\TC11008.raw

Method : 8000SUE.ins

Start Time : 0.00 min

Scale Factor : 0

End Time : 70.00 min

Plot Offset : 4 mV

Sample #: 82881

Date : 3/12/93 9:56 AM

Time of Injection: 3/12/93 12:46 AM

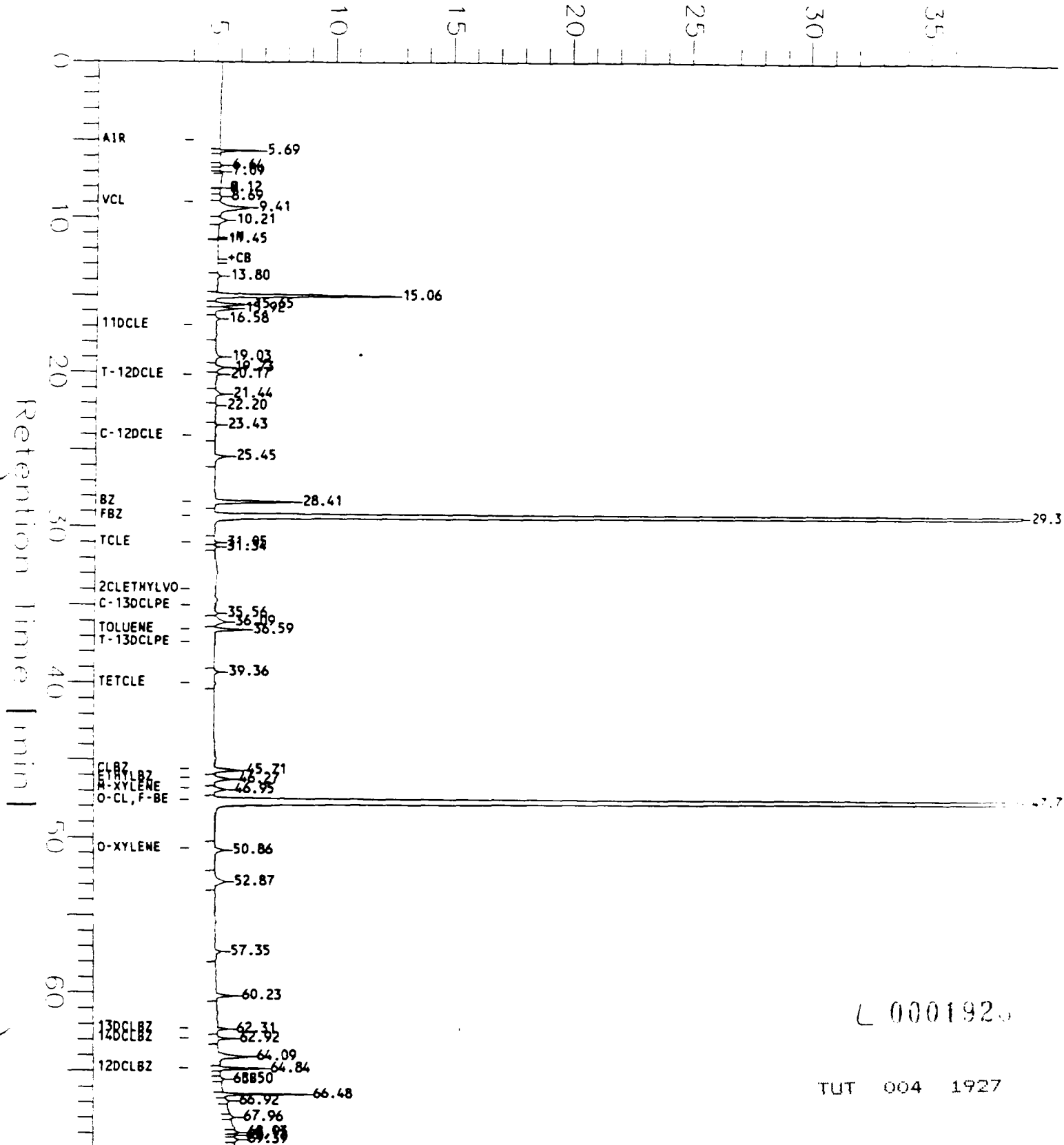
Low Point : 4.00 mV

Plot Scale: 35 mV

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High Point : 39.00 mV

Response [mV]



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Errors and Warnings From Data Processing

Data File: n:\v3400s\TC11008.raw

Date/Time: 3/12/93 9:56 AM

0492

QUANT: Response Is Outside Calibration Curve Domain For: Air

QUANT: Calibration Curve Has Two Solutions For: Air (17.8375)

0001920

0493

RUN LOGS

TUT 004 1929

L 0001930

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G.C. ANALYSIS LOG FOR VARIAN 3400 EQUIPPED WITH A PHOTOIONIZATION AND ELECTROLYTIC CONDUCTIVITY DETECTORS USING VARIAN 3400 GAS CHROMATAGRAPH WITH A RESTEK 502.2 105m*0.53mm I.D., 3.0um Df COLUMN. ALL WATER SAMPLES ARE SPIKED WITH 5.0 uL EW-2043(SURROGATE SPIKE SOLUTION) AND HAVE A FINAL PURGE VOLUME OF 5.0 ml.

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CLIENT I.D.	Sample Name	File Name	Study Name	Date Of Injection	Time Of Injection	BrClMe Surrogate Recovery	o-Cl,F-Benzene Surrogate Recovery
A MIX	1 PPB 801	SC11002.rs	LINEARITY	3/11/93	5:15 PM	100.0000	100.0000
B MIX	7.5PPB 80	SC11003.rs	LINEARITY	3/11/93	6:30 PM	100.0000	100.0000
C MIX	15 PPB 80	SC11004.rs	LINEARITY	3/11/93	7:46 PM	100.0000	100.0000
D MIX	22.5PPB 8	SC11005.rs	LINEARITY	3/11/93	9:01 PM	100.0000	100.0000
E MIX	30 PPB 80	SC11006.rs	LINEARITY	3/11/93	10:16 PM	100.0000	100.0000
BLANK	BLANK	SC11007.rs	BLANK	3/11/93	11:31 PM	86.9262	110.6537
B2881	METHOD BL	SC11008.rs	METHOD BL	3/12/93	12:46 AM	68.6668	82.9209
B2882	BLANK SPI	SC11009.rs	BLANK SPI	3/12/93	2:02 AM	98.7764	109.5754
BLANK	BLANK	SC11010.rs	BLANK	3/12/93	3:17 AM	77.1331	76.4023
VV7534	FT-160310	SC11011.rs	ITEM53583	3/12/93	4:32 AM	86.4225	80.7123
VV7535	FT-160310	SC11012.rs	ITEM53583	3/12/93	5:47 AM	85.4391	91.1070
VV7536	FT-160310	SC11013.rs	ITEM53583	3/12/93	7:03 AM	90.3001	85.4873
VV7329/20	DRM01	SC11014.rs	ITEM53554	3/12/93	8:18 AM	60.7337	59.2971
VV7537	FT-160310	SC11015.rs	ITEM53583	3/12/93	9:33 AM	83.7311	96.8933
VV7537	FT-160310	SC11016.rs	ITEM53583	3/12/93	10:56 AM	59.0368	63.3429
VV7538	FT-6A0310	SC11017.rs	ITEM53583	3/12/93	12:12 PM	67.8359	63.9316
VV7539/100	FT-4C0310	SC11018.rs	ITEM53583	3/12/93	1:27 PM	73.9270	82.4569
VV7542	TD 06	SC11019.rs	ITEM53583	3/12/93	2:42 PM	82.8895	88.8352
A MIX	1 PPB	SC11020.rs	LOD STD	3/12/93	3:57 PM	74.2434	90.2378
C MIX	15 PPB	SC11021.rs	STD CHECK	3/12/93	5:13 PM	92.5521	83.9032
E MIX	15 PPB	SC11022.rs	STD CHECK	3/12/93	6:28 PM	1.5491	2.1472
ANK	BLANK	SC11023.rs	BLANK	3/13/93	12:33 AM		
B883	METHOD BL	SC11024.rs	METHOD BL	3/13/93	4:10 AM		

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G.C. ANALYSIS LOG FOR VARIAN 3400 EQUIPPED WITH A PHOTOIONIZATION AND
ELECTROLYTIC CONDUCTIVITY DETECTORS USING VARIAN 3400 GAS CHROMATAGRAPHS WITH A
ESTEK 502.2 105m*0.53mm I.D., 3.0um Df COLUMN. ALL WATER SAMPLES ARE SPIKED
WITH 5.0 uL EW-2043(SURROGATE SPIKE SOLUTION) AND HAVE A FINAL PURGE VOLUME OF
5.0 ml.

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CLIENT I.D.	Sample Name	File Name	Study Name	Date Of Injection	Time Of Injection	BrClMe Surrogate Recovery	o-Cl,F-Benzene Surrogate Recovery
BLANK	BLANK	SC10001.rs	BLANK	3/10/93	9:11 AM	100.0000	100.0000
A MIX	1 PPB 801	SC10002.rs	LINEARITY	3/10/93	10:57 AM	100.0000	100.0000
B MIX	7.5PPB 80	SC10003.rs	LINEARITY	3/10/93	12:13 PM	100.0000	100.0000
C MIX	15 PPB 80	SC10004.rs	LINEARITY	3/10/93	1:28 PM	100.0000	100.0000
D MIX	22.5PPB 8	SC10005.rs	LINEARITY	3/10/93	2:44 PM	100.0000	100.0000
E MIX	30 PPB 80	SC10006.rs	LINEARITY	3/10/93	4:00 PM	100.0000	100.0000
BLANK	BLANK	SC10007.rs	BLANK	3/10/93	5:15 PM	81.5690	83.7005
BLANK	BLANK	SC10008.rs	BLANK	3/10/93	6:31 PM	80.8144	89.2960
B MIX	25, 50, 100	SC10009.rs	LINEARITY	3/10/93	7:47 PM	100.0000	100.0000
C MIX	15, 30, 60	SC10010.rs	LINEARITY	3/10/93	9:03 PM	100.0000	100.0000
BLANK	BLANK	SC10011.rs	BLANK	3/10/93	10:18 PM	90.6665	98.8519
BLANK (5.2450)	BLANK	SC10012.rs	BLANK	3/10/93	11:34 PM	88.6500	98.4683
B2079	BLANK SPI	SC10013.rs		3/11/93	12:50 AM	100.5143	110.8783
	BLANK 100% EW	SC10014.rs	BLANK	3/11/93	2:05 AM	81.5590	86.4932
TRIP BLANK	VV7320 28	SC10015.rs	ITEK53554	3/11/93	3:21 AM	82.3420	90.6628
DRM01	VV7329	SC10016.rs	ITEK53554	3/11/93	4:37 AM	83.1777	87.8018
	BLANK	SC10017.rs	ITEK53554	3/11/93	5:53 AM	0.8986	1.1231
	VV7329/MS	SC10018.rs	ITEK53554	3/11/93	7:09 AM	100.8315	102.8350
	VV7329/MSD	SC10019.rs	ITEK53554	3/11/93	8:25 AM	101.6044	105.6920
	A MIX	SC10020.rs	ITEK53554	3/11/93	9:41 AM	100.8751	112.7364
	BLANK	SC10021.rs	ITEK53554	3/11/93	10:57 AM	67.1181	72.2082
	VV7529	SC10022.rs	ITEK53554	3/11/93	12:12 PM	67.8994	76.9002
	VV7520	SC10023.rs	ITEK53554	3/11/93	1:28 PM	70.1664	74.9623
5ppb	c mix	SC10024.rs	check sta	3/11/93	2:44 PM	97.3404	105.0168

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