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Office of Air Quality
Planning and Standards
Research Triangle Park, NC 27711

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AIR

EPA

Final Report

Hot Mix Asphalt Plants
Truck Loading and Silo Filling
Manual Methods Testing

Asphalt Plant C
Los Angeles, California

Volume 8 of 8

Office of Air Quality
Clean Air
OAQPS
Planning and Standards

FINAL REPORT

HOT MIX ASPHALT PLANTS
TRUCK LOADING AND SILO FILLING
MANUAL METHODS TESTING
ASPHALT PLANT C, LOS ANGELES, CALIFORNIA

VOLUME 8 OF 8
APPENDICES G.4 (CONCLUDED) AND G.5

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May 2000

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GLOSSARY OF TERMS

ASTM – American Society for Testing and Materials
CEMS – Continuous Emissions Monitoring System
CTS – Calibration Transfer Standard
EMC – Emissions Measurement Center
EMAD – Emission Monitoring and Analysis Division
ESP – Electrostatic Precipitator
FID – Flame Ionization Detector
FTIR – Fourier Transform Infrared Spectroscopy
HAP – Hazardous Air Pollutant
MCEM – Methylene Chloride Extractable Matter
MRI – Midwest Research Institute
PES – Pacific Environmental Services
PM – Particulate Matter
PTE – Permanent Total Enclosure
RAP – Recycled Asphalt
RTFOT – Rolling Thin Film Oven Test
SED – Silo Exhaust Duct

GLOSSARY OF TERMS (CONTINUED)

SMTG – Source Measurement Technology Group
SVOHAP – Semi-Volatile Organic Hazardous Air Pollutant
TED – Tunnel Emissions Duct
TFOT – Thin Film Oven Test
THC – Total Hydrocarbons
VOHAP – Volatile Organic Hazardous Air Pollutant
VOST – Volatile Organic Sampling Train

VOLUME 8

APPENDIX G

ANALYTICAL DATA (CONCLUDED)

G.4 VOHAPS DATA (CONCLUDED)
G.5 EPA METHOD 18 REPORT AND DATA

APPENDIX G.4

VOHAPS DATA (CONCLUDED)

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TRIANGLE LABS

CASE NARRATIVE

Analysis of Samples for the Presence of

Volatile Analytes by

High-Resolution Gas Chromatography / Low-Resolution Mass Spectrometry

METHOD 8260

Date : September 7, 1998

Client ID : Pacific Environmental Services

TLI Project Number : 46297

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1e

Triangle Laboratories, Inc.
Case Narrative

September 7, 1998
46297

Objective: Analysis of three VOST tube pairs (S-V-1-1-A&B, S-V-1-2-A&B, S-V-1-4-A&B) for a client specified list of volatile compounds, using Method 8260.

Method:

Eight VOST tube pairs were received at Triangle Laboratories, Inc. on July 25, 1998 on ice at 6°C in good condition. The samples were stored in a refrigerator at 4°C prior to analysis. The VOST tube sample pairs were analyzed according to the guidelines of Methods 8260 and 5040. Per client request, the compounds 1,3-butadiene, vinyl bromide, methyl-t-butylether (MTBE), n-hexane, 1,2-epoxybutane, iso-octane, and ethyl acrylate were additional target compounds. A one point calibration was analyzed for these additional compounds and the resulting response factors used for quantitation. The internal standards and surrogate standards were added in the amount of 0.25 micrograms (ug) immediately prior to analysis by GC/MS. The internal standards are pentafluorobenzene, 1,4-difluorobenzene, chlorobenzene-d_5 and 1,4-dichlorobenzene-d_4. The surrogate standards reported are dibromofluoromethane, toluene-d_8, and 4-bromofluorobenzene. The results reported relate only to the items tested.

The GC/MS analysis conditions are listed below:

Purge and trap:	Tekmar LSC-2000
Purge:	11 min.
Desorb Temperature:	250 C
Desorb Time:	4 min.
GC Conditions:	
Column:	30 m x .53 mm x 0.3*u* J&W DB624 0 C hold .5 min, 10 C/min to 45C, 6 C/min to 90C, hold 1.5 min, 50 C/min to 200C.
MS Conditions:	
Instrument:	VG-TRIO-1 Lab Base data system
Scan:	35-350 amu at .6s/scan
Interface:	Jet Separator, 200 C

Report:

Enclosed with the case narrative are copies of the sample identification index, the project summary sheets, client paperwork, sample log-in sheets, and log book pages. A sample identification index summarizes the client sample name, TLI sample number, and analytical file name for each sample and blank. The project summary lists the amounts for detected analytes in gray. The estimated detection limits will be listed in parentheses when the target analytes are not detected.

The data are reported as quantitation reports, chromatograms, interim reports, and spectra of the detected target spectra. The quantitation report header lists the TLI project number, analysis method, instrument sample file name, client sample name, client project number, TLI sample number, calibration file, date received, and analysis date. The response factors used for all calculations are from the calibration file listed in the header. All initial and continuing calibration

data are located in the back of the data package. The amount is reported in total ug for the VOST tubes. The retention time (RT) will be listed for all internal standards and analytes which are detected. If a target analyte is not detected, it will be flagged with a "U" and a detection limit will be listed. Estimated detection limits are calculated for all analytes which were not found in the samples by using an area of 2000. The estimated detection limits reported are the average detection limits achievable over time on an instrument type. The actual detection limit for a given compound on a given day may vary from the estimate reported. The quantitation limit for all analytes is half of the low point of the initial calibration. Below this point the calibration cannot be considered to be linear. Any amount reported at a level below the quantitation limit will be flagged with a "J" and should be considered estimated. If any compounds are found at a level above the upper calibration range, the analyte will be flagged with an "E" and the amounts reported should be considered estimated. If any target analytes found in the laboratory blanks are detected in the associated samples, they will be flagged with a "B" on each sample topsheet. All analytes are quantitated against the internal standard preceding them on the target analyte list. Surrogate standards are quantitated against the internal standard with the matching internal standard reference number. For example, toluene-d_8 has 2 in the IS Ref column and would be quantitated against the internal standard which has IS2 listed in the flag column. If an internal standard area is above or below the quality control limits as defined by the continuing calibration, it will be flagged with "High" or "Low" in the flag column.

Results:

The VOST tube pairs were analyzed twenty-six days outside the fourteen day sampling to analysis holding time. The VOST tubes were analyzed separately per client request.

The internal standard area and surrogate standard percent recoveries were outside quality control criteria for samples S-V-1-1A and S-V-1-2-A.

Several target compound were detected at amounts above the instrument calibration range. These compounds are flagged with "E" and the amounts reported should be considered estimated.

No data was collected for sample S-V-1-1-B, due to a computer data acquisition failure.

The laboratory blank contained several target analytes at amounts below the quantitation limit. The target analytes in the laboratory blank should not be considered as truly present in the native samples unless found at a level at least five times the amount found in the associated blank. In the event that the amount of a target analyte found in the samples is twenty times the amount found in the associated blank, the contribution from the blank can be considered negligible.

Each sample was processed twice, once against the calibrations containing 8260 compounds and once against the calibrations containing the additional client-specified compounds. Therefore, each sample reported contains topsheets and interim reports for both the 8260 and client-specified analyses as well as a chromatogram and spectra for all analytes. Please note that the surrogate standards have been reported from the 8260 analyses only.

Moisture from the VOST tube was detected during most of the analyses.

Due to the absence of MTBE in the standard, that compound was not included on the quantitation reports.

Sample Calculations:

Response Factor (RF) = $\frac{\text{(area analyte) x (amt IS)}}{\text{(area IS) x (amt analyte)}}$

Amount (ug) = $\frac{\text{(area analyte in sample) x (amt IS)}}{\text{(area IS) x (avg ical RF)}}$

Where:

amt IS = amount of internal standard = 0.25 ug
ical = initial calibration
avg ical RF = average response factor from the associated initial calibration

The data in this package has been judged to be valid according to the guidelines of Methods 8260 and 5040 except as noted above. Should you have any questions, please feel free to contact our Project Scientist, Deb. Smith, at (919) 544-5729, ext. 267.

For Triangle Laboratories, Inc.,

Released by:

Sarah A. Hubbard

Sarah A. Hubbard
Report Preparation Chemist

The total number of pages in this data package is 135.

Triangle Laboratories, Inc.
Sample Identification Index for Project: 46297

Client Id:	TLI Id:	File Name:
S-V-1-1-A	214-1-1A	HW905
S-V-1-2-A	214-1-2A	HW906
S-V-1-2-B	214-1-2B	HW901
S-V-1-4-A	214-1-4A	HW907
S-V-1-4-B	214-1-4B	HW902
VOSTBLK090498	VOSTBLK09049	HW897

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Triangle Laboratories, Inc.
Project Summary for Project 46297

Client ID:	S-V-1-1-A	S-V-1-2-A	S-V-1-2-B	S-V-1-4-A	S-V-1-4-B
Filename :	HW905	HW906	HW901	HW907	HW902
TLI Id :	214-1-1A	214-1-2A	214-1-2B	214-1-4A	214-1-4B
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
Chloromethane	0.363	0.160	0.299	0.098	0.157
Vinyl Chloride	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Bromomethane	0.116	0.033	0.091	0.022	0.042
Chloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Trichlorofluoromethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1-Dichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Methylene chloride	(0.001)	(0.001)	0.004	(0.001)	0.002
trans-1,2-Dichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1-Dichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
cis-1,2-Dichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Chloroform	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1,1-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Iodomethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Carbon disulfide	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Acetone	0.670	0.653	0.007	0.349	0.006
Allyl chloride	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Acrylonitrile	(0.008)	(0.006)	(0.005)	(0.005)	(0.005)
Vinyl acetate	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
2-Butanone	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Carbon tetrachloride	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Benzene	1.206	0.728	0.043	1.043	0.011
1,2-Dichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Trichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,2-Dichloropropane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Bromodichloromethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
cis-1,3-Dichloropropene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Toluene	3.278	2.010	0.005	1.376	0.004
trans-1,3-Dichloropropene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1,2-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Methyl methacrylate	(0.003)	(0.002)	(0.002)	(0.002)	(0.001)
4-Methyl-2-pentanone	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Tetrachloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Dibromochloromethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,2-Dibromoethane	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

( )-Estimated Detection Limit

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

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Triangle Laboratories, Inc.
Project Summary for Project 46297

Client ID:	S-V-1-1-A	S-V-1-2-A	S-V-1-2-B	S-V-1-4-A	S-V-1-4-B
Filename :	HW905	HW906	HW901	HW907	HW902
TLI Id :	214-1-1A	214-1-2A	214-1-2B	214-1-4A	214-1-4B
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
Ethylbenzene	1.752	1.292	(0.001)	0.808	(0.001)
m-/p-Xylene	10.364	7.039	0.001	4.068	(0.001)
o-Xylene	2.951	2.084	(0.001)	1.203	(0.001)
Styrene	(0.001)	(0.001)	0.002	(0.001)	0.001
Bromoform	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)
2-Hexanone	(0.003)	(0.002)	(0.001)	(0.001)	(0.001)
Cumene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1,2,2-Tetrachloroethane	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)

( )-Estimated Detection Limit

Triangle Laboratories, Inc.
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Phone: (919) 544-5729 • Fax: (919) 544-5491

Client ID: VOSTBLK090
498

Filename : HW897
TLI Id : VOSTBLK09049
Matrix : VOST
Units : ug

Chloromethane	0.025
Vinyl Chloride	(0.001)
Bromomethane	0.022
Chloroethane	(0.001)
Trichlorofluoromethane	(0.001)
1,1-Dichloroethene	(0.001)
Methylene chloride	0.004
trans-1,2-Dichloroethene	(0.001)
1,1-Dichloroethane	(0.001)
cis-1,2-Dichloroethene	(0.001)
Chloroform	0.001
1,1,1-Trichloroethane	(0.001)
Iodomethane	0.002
Carbon disulfide	(0.001)
Acetone	0.005
Allyl chloride	(0.001)
Acrylonitrile	(0.004)
Vinyl acetate	(0.001)
2-Butanone	0.003
Carbon tetrachloride	(0.001)
Benzene	0.027
1,2-Dichloroethane	(0.001)
Trichloroethene	(0.001)
1,2-Dichloropropane	(0.001)
Bromodichloromethane	(0.001)
cis-1,3-Dichloropropene	(0.001)
Toluene	0.004
trans-1,3-Dichloropropene	(0.001)
1,1,2-Trichloroethane	(0.001)
Methyl methacrylate	(0.001)
4-Methyl-2-pentanone	(0.001)
Tetrachloroethene	0.001
Dibromochloromethane	(0.001)
1,2-Dibromoethane	(0.001)
Chlorobenzene	(0.001)

( )-Estimated Detection Limit

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Triangle Laboratories, Inc.
Project Summary for Project 46297

Client ID:	VOSTBLK090
	498
Filename :	HW897
TLI Id :	VOSTBLK09049
Matrix :	VOST
Units :	ug

Ethylbenzene	0.001
m-/p-Xylene	0.001
o-Xylene	0.001
Styrene	0.002
Bromoform	(0.001)
2-Hexanone	(0.001)
Cumene	0.001
1,1,2,2-Tetrachloroethane	(0.001)

( )-Estimated Detection Limit

Triangle Laboratories, Inc.
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Triangle Laboratories, Inc.
Project Summary for Project 46297

Client ID:	S-V-1-1-A	S-V-1-2-A	S-V-1-2-B	S-V-1-4-A	S-V-1-4-B
Filename :	HW905	HW906	HW901	HW907	HW902
TLI Id :	214-1-1A	214-1-2A	214-1-2B	214-1-4A	214-1-4B
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,3-Butadiene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Vinyl bromide	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
n-Hexane	7.610	3.320	0.001	2.661	0.001
1,2-Epoxybutane	(0.065)	(0.049)	(0.039)	(0.036)	(0.038)
Iso-Octane	(0.001)	(0.001)	(0.001)	0.085	(0.001)
Ethyl acrylate	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

( )-Estimated Detection Limit

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Client ID:	VOSTBLK090
	498
Filename :	HW897
TLI Id :	VOSTBLK09049
Matrix :	VOST
Units :	ug

1,3-Butadiene	(0.001)
Vinyl bromide	(0.001)
n-Hexane	0.001
1,2-Epoxybutane	(0.034)
Iso-Octane	(0.001)
Ethyl acrylate	(0.001)

( )-Estimated Detection Limit

Triangle Laboratories, Inc.
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TRIANGLE LABS

DOCUMENT CONTROL

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729

P.O. Box 13485
Research Triangle Park, NC 277
Fax # 919-544-5491

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PACIFIC ENVIRONMENTAL SERVICES, INC.

Central Park West
5001 South Miami Boulevard, P.O. Box 12077
Research Triangle Park, North Carolina 27709-2077
(919) 941-0333 FAX: (919) 941-0234

Sample Chain of Custody Record

Sample Identification	Collection Date	Collection Time	Sample Name	Number of Containers	Analytical Request: Volatile Organics per FP					Comments
S-V-1-1-A	7/24/98		Silo 2 Run 1 Set1	1	X					Tenax
S-V-1-1-B	7/24/98		Silo 2 Run 1 Set1	1	X					Tenax/Charcoal
S-V-1-2-A	7/24/98		Silo 2 Run 1 Set2	1	X					Tenax
S-V-1-2-B	7/24/98		Silo 2 Run 1 Set2	1	X					Tenax/Charcoal
S-V-1-3-A	7/24/98		Silo 2 Run 1 Set3	1	X					Tenax
S-V-1-3-B	7/24/98		Silo 2 Run 1 Set3	1	X					Tenax/Charcoal
S-V-1-4-A	7/24/98		Silo 2 Run 1 Set4	1	X					Tenax
S-V-1-4-B	7/24/98		Silo 2 Run 1 Set4	1	X					Tenax/Charcoal
T-V-1-1-A	7/24/98		Tunnel Run 1 Set 1	1	X					Tenax
T-V-1-1-B	7/24/98		Tunnel Run 1 Set 1	1	X					Tenax/Charcoal
T-V-1-2-A	7/24/98		Tunnel Run 1 Set 2	1	X					Tenax
T-V-1-2-B	7/24/98		Tunnel Run 1 Set 2	1	X					Tenax/Charcoal
T-V-1-3-A	7/24/98		Tunnel Run 1 Set 3	1	X					Tenax
T-V-1-3-B	7/24/98		Tunnel Run 1 Set 3	1	X					Tenax/Charcoal
T-V-1-4-A	7/24/98		Tunnel Run 1 Set 4	1	X					Tenax
T-V-1-4-B	7/24/98		Tunnel Run 1 Set 4	1	X					Tenax/Charcoal

Relinquished by:	Date	Time	Received by:
[signature]	7/24/98	4:37	
Relinquished by:	**Date**	**Time**	**Received for Lab by:**
	7/25/98	10:10	[signature]

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

Sample Seals: Absent
Container...: Intact

COPY

TLI Project Number 46297
Client: PES03 - Pacific Environmental Services

Book 214

Date Received 07/25/98 By

Page 1 1

Ice Chest ICE/ICE PACKS Temp 6.0 C

Carrier and Number FedEx/

TLI Number.. mR/H:CPM.	....Client Sample ID..... .....Client COC ID.....*	Location.....	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
214-1-1A	S-V-1-1-A S-V-1-1-A	 R03	TENAX									
214-1-1B	S-V-1-1-B S-V-1-1-B	 R03	TNX/CHAR									
214-1-2A	S-V-1-2-A S-V-1-2-A	 R03	TENAX									
214-1-2B	S-V-1-2-B S-V-1-2-B	 R03	TNX/CHAR									
214-1-3A	S-V-1-3-A S-V-1-3-A	 R03	TENAX									
214-1-3B	S-V-1-3-B S-V-1-3-B	 R03	TNX/CHAR									
214-1-4A	S-V-1-4-A S-V-1-4-A	 R03	TENAX									
214-1-4B	S-V-1-4-B S-V-1-4-B	 R03	TNX/CHAR									
214-1-5A	S-V-1-3-A (Typed label) S-V-1-3-A (Typed label)	 R03	TENAX									
214-1-5B	S-V-1-3-B (Typed label) S-V-1-3-B (Typed label)	 R03	TNX/CHAR									
214-1-6A	T-V-1-1-A T-V-1-1-A	 R03	TENAX									
214-1-6B	T-V-1-1-B T-V-1-1-B	 R03	TNX/CHAR									
214-1-7A	T-V-1-2-A T-V-1-2-A	 R03	TENAX									
214-1-7B	T-V-1-2-B T-V-1-2-B	 R03	TNX/CHAR									

Receiving Remarks: 2 set of samples labelled S-V-1-3-A & S-V-1-3-B arrived.ID'S were hand printed on 1 set and Typed on the other.

Archive Remarks:

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

Sample Seals: Absent
Container...: Intact

TLI Project Number 46297
Client: PES03 - Pacific Environmental Services

Date Received 07/25/98 By

Carrier and Number FedEx/

Book 214

Page 1

Ice Chest ICE/ICE PACKS Temp 6.0 C

TLI Number.. mR/H:CPM.	Client Sample ID..... Client COC ID.....*	Location.....	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
214-1-8A	T-V-1-3-A T-V-1-3-A	R03	TENAX									
214-1-8B	T-V-1-3-B T-V-1-3-B	R03	TNX/CHAR									
214-1-9A	T-V-1-4-A T-V-1-4-A	R03	TENAX									
214-1-9B	T-V-1-4-B T-V-1-4-B	R03	TNX/CHAR									

Receiving Remarks: 2 set of samples labelled S-V-1-3-A & S-V-1-3-B arrived. ID'S were hand printed on 1 set and Typed on the other.

Archive Remarks:

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA3	8260B	

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VS9-96-2 exp 9/7/98 @ 25ug/ml	VS9-100-1 exp 9/16/98 @ 25ug/ml	

Extract / Sample volume _____ Circle unit µL mL

Signature: Lorney C. [signature] Date: 9/3/98

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/3/98	17:48	—	10ul VS9-99-2 exp 9/14/98	VOSTD0.50 T/TC	HW883	N/A	[initials] 9/3/98		[initials]	
9/3/98	18:30	—	10ul VS9-99-3 exp 9/14/98	VOSTD0.75 T/TC	HW884	N/A	[initials] 9/3/98		[initials]	
9/4/98	05:18	—	10ul VS9-96-2 exp 9/7/98	BFB	HW885	N/A	[initials] 9/4/98		[initials]	
9/4/98	05:46	—	10ul VS9-100-1 exp 9/16/98	VOSTB1K T/TC	HW886	N/A	[initials] 9/4/98		[initials]	
9/4/98	08:29	—	10ul VS9-98-4 exp 9/14/98	VOSTD0.10 T/TC	HW887	N/A	[initials] 9/4/98		[initials]	
9/4/98	09:17	—	10ul VS9-99-1 exp 9/14/98	VOSTD0.25 T/TC	HW888	N/A	[initials] 9/4/98		[initials]	
9/4/98	10:06	—	10ul VS9-99-2 exp 9/14/98	VOSTD0.50 T/TC	HW889	N/A	[initials] 9/4/98		[initials]	Ical [initials] 9/4/98
9/4/98	10:51	—	10ul VS9-99-3 exp 9/14/98	VOSTD0.75 T/TC	HW890	N/A	[initials] 9/4/98		[initials]	
9/4/98	11:36	—	10ul VS9-99-4 exp 9/14/98	VOSTD1.00 T/TC	HW891	N/A	[initials] 9/4/98		[initials]	
9/4/98	12:32	—	20ul VS9-96-2 exp 9/7/98	BFB	HW892	N/A	[initials] 9/4/98		[initials]	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

SRVR4\\AP\MSRL\LRRUNLOG.DOC (10/16/97)

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA3	8260B	8260X

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSG-96-L exp. 9/2/98 @ 25ug/ml	VSG-100-1 exp. 9/16/98 @ 25ug/ml	

Extract / Sample volume _____ µL mL (Circle unit)

Tony C. Hamell 9/4/98
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/4/98	12:48	10ml VSG-100-3 exp 9/16/98	10ml VSG-100-1 exp. 9/16/98	Additionals VOSTD0.50 T/TC	HW893	N/A	Jcl 9/4/98		Jcl	
9/4/98	13:41	—	10ml VSG-99-1 exp. 9/14/98	VOSTD0.25 T/TC	HW894	N/A	Jcl 9/4/98		Jcl	
9/4/98	14:24	—	10ml VSG-100-1 exp. 9/16/98	VOST BLK T/TC	HW895	N/A	Jcl 9/4/98		Jcl	
9/4/98	15:14	—	10ml VSG-100-1 exp. 9/16/98	VOST BLK T/TC	HW896	N/A	Jcl 9/4/98		Jcl	
9/4/98	15:53	—	10ml VSG-100-1 exp. 9/16/98	VOST BLK T/TC	HW897	N/A	Jcl 9/4/98		Jcl	
9/4/98	16:34	46323	214-27-4B	S-V-2-4-B T/C	HW898	N/A	Jcl 9/4/98		Jcl	moisture from tube Jcl 9/4/98
9/4/98	17:12	46323	214-27-12B	S-V-3-3-B T/C	HW899	N/A	Jcl 9/4/98		Jcl	moisture from tube Jcl 9/4/98
9/4/98	No Time 9/4/98	46297	214-1-1B	S-V-1-1-B T/C	HW900	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98 Last File No data collected No scans acquired
9/4/98	18:28	46297	214-1-2B	S-V-1-2-B T/C	HW901	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98
9/4/98	19:04	46297	214-1-4B	S-V-1-4-B T/C	HW902	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98

MFT - Moisture from Tube
Jcl 9/4/98

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

SRVR4\\AP\MSRL\LRRUNLOG.DOC (10/16/97)

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA3	8260B	826BX

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSG-96-2 exp. 9/7/98 @ 25ug/ml	VSG-100- exp. 9/16/98 @ 25ug/ml	

Extract / Sample volume _____ Circle unit µL mL

Signature: Tancy C. [signature] Date: 9/4/98

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/4/98	19:38	46323	214-27-4A ~~46323~~	(E) S-V-2-4-A T	HW903	N/A	[initials] 9/4/98		[initials]	Moisture From tube MFT [initials] 9/4/98
9/4/98	20:21	46323	214-27-12A	S-V-3-3-A T	HW904	N/A	[initials] 9/4/98		[initials]	Lots of MFT Flow reduced/stopped [initials] 9/4/98 extended Purge Cycle
9/4/98	20:57	46297	214-1-1A	S-V-1-1-A T	HW905	N/A	[initials] 9/4/98		[initials]	MFT [initials] 9/4/98
9/4/98	21:26	46297	214-1-2A	S-V-1-2-A T	HW906	N/A	[initials] 9/4/98		[initials]	MFT [initials] 9/4/98
9/4/98	22:01	46297	214-1-4A	S-V-1-4-A T	HW907	N/A	[initials] 9/4/98		[initials]	

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

MFT-moisture from tube [initials] 9/4/98

SRVR4\\AP\MSRL\LRRUNLOG.DOC (10/16/97)

TRIANGLE LABS

SAMPLE DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729
P.O. Box 13485
Research Triangle Park, NC 27709-3
Fax # 919-544-5491

Pacific Environmental Services

Project Number: 46297
Sample File: HW897

Method 8260 VOST
Sample ID: VOSTBLK090498

Client Project: Hotmix
TLI ID: VOSTBLK090498

Date Received: / /

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
Chloromethane	0.025	J	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.022	J	1.46		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane	0.002	J	2.56		0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.005	J	2.64		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride	0.004	J	3.04		0.05
Acrylonitrile		U		0.004	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone	0.003	J	4.50		0.05
Chloroform	0.001	J	4.75		0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.77		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.027	J	5.24		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

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Pacific Environmental Services

Project Number: 46297
Sample File: HW897

Method 8260 VOST
Sample ID: VOSTBLK090498

Client Project: Hotmix
TLI ID: VOSTBLK090498

Date Received: / /

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.001	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.004	J	7.74		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.94		
Tetrachloroethene	0.001	J	8.55		0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.001	J	10.29		0.05
m-/p-Xylene	0.001	J	10.53		0.10
o-Xylene	0.001	J	11.24		0.05
Styrene	0.002	J	11.28		0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.05		
Cumene	0.001	J	12.01		0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.7
Printed: 13:41 09/07/1998

21

Pacific Environmental Services

Project Number: 46297
Sample File: HW897

Method 8260 VOST
Sample ID: VOSTBLK090498

Client Project: Hotmix
TLI ID: VOSTBLK090498

Date Received: / /

Response File: ICALH904

Date Analyzed : 09/04/98

Surrogate Summary	Amount (ng)	RT	IS Ref	%REC
Dibromofluoromethane	0.280	4.91	1	112
Toluene-d_8	0.273	7.64	2	109
4-Bromofluorobenzene	0.314	12.22	2	126

Reviewed by YR Date 9/7/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46297
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Method 8260 VOST
Sample ID: VOSTBLK090498

Client Project: Hotmix
TLI ID: VOSTBLK090498

Date Received: / /

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	0.001	J	3.64		0.25
1,2-Epoxybutane		U		0.034	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.77		
Ethyl acrylate		U		0.001	0.25

Reviewed by SAH Date 9/5/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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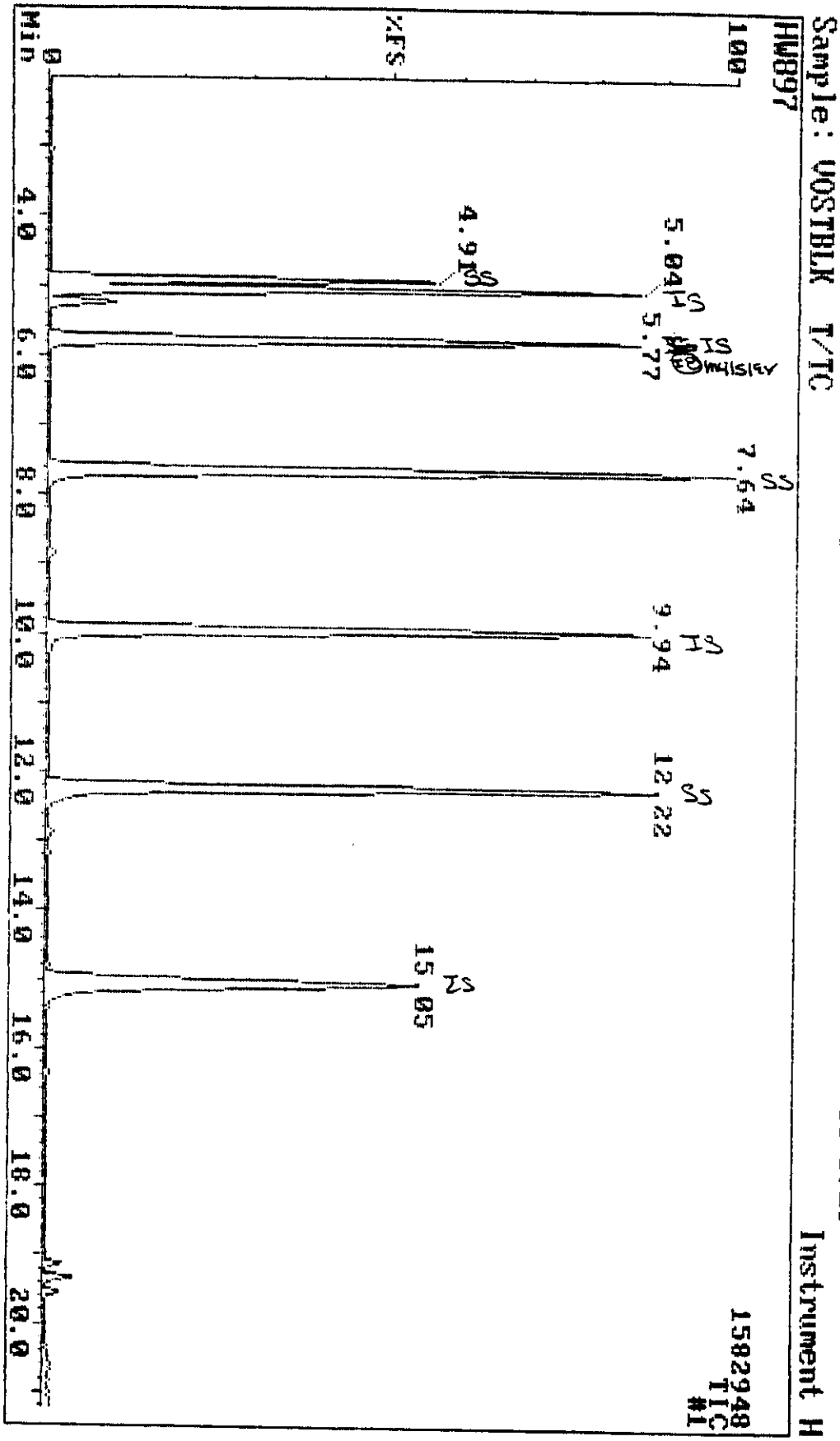
Savar v3.7
Printed: 14:51 09/08/1998



Data Review: YL
Date: 9/8/98

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	85	99	-2	3670831	bv	5.04	168	Pentafluorobenzene
2	100	96	98	0	4037552	bv	5.77	114	1,4-Difluorobenzene
3	100	95	96	-1	3878054	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	0	1886261	bv	15.05	152	1,4-Dichlorobenzene-d4
5	100	97	99	1	1823460	bv	4.91	113	Dibromofluoromethane
6	100	92	97	0	4689891	bv	7.64	98	Toluene-d8
7	100	89	93	0	2576768	bv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	98	74	82	0	92252	bv	0.96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	100	91	96	0	105020	bv	1.46	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	92	70	84	2	19672	bb	2.56	142	Iodomethane
16	73	40	77	0	~~9020~~	~~bb~~	~~2.56~~ FP	76	Carbon disulfide
17	79	41	86	0	10200	A	2.64	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	100	77	90	0	18424	bb	3.04	84	Methylene chloride
20	0	0	0	0	0		0.00	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	71	49	68	1	7204	bb	4.50	43	2-Butanone
27	70	48	67	1	3844	bv	4.75	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	99	99	1	495836	bv	5.24	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	0	0	0	0	0		0.00	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	43	3	66	0	~~23288~~	~~bb~~	~~7.63~~ FP	43	4-Methyl-2-pentanone
41	89	62	88	1	47340	bb	7.74	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloroproper
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	77	58	68	0	3636	bb	8.55	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	0	0	0	0	0		0.00	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: YR
Date: 9/5/98

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroetha
52	43	21	52	2	2740	bb	10.29	106	Ethylbenzene
53	72	55	66	2	11892	bv	10.53	106	m-/p-Xylene
54	62	53	55	4	6024	A	11.24	106	o-Xylene
55	69	64	64	5	23120	A	11.28	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	74	62	62	3	15420	bv	12.01	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroetha
59	65	33	73	1	13000	A	12.42	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	79	66	73	3	5764	A	12.84	120	n-Propylbenzene
62	15	10	37	-31	1393252	A	12.22	75	trans-1,4-Dichloro-2-bu
63	84	67	78	3	10632	A	12.90	126	2-Chlorotoluene
64	79	68	71	4	14408	bv	13.18	126	4-Chlorotoluene
65	56	39	55	2	18488	bv	13.31	105	1,3,5-Trimethylbenzene
66	72	59	59	0	15250	A	14.06	119	tert-Butylbenzene
67	85	70	70	1	43296	A	14.22	105	1,2,4-Trimethylbenzene
68	74	56	66	0	24988	A	14.71	105	sec-Butylbenzene
69	0	0	0	0	0		0.00	119	p-Cymene
70	92	70	81	1	37788	A	14.82	146	1,3-Dichlorobenzene
71	0	0	0	0	67324 ~~0~~	m	15.13 ~~0.00~~ ✓	146	1,4-Dichlorobenzene
72	0	0	0	0	0		MA 5/98 0.00	91	Benzyl chloride
73	68	52	60	2	29716	A	16.84	91	n-Butylbenzene
74	81	63	75	3	53176	A	16.39	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloropro
76	96	91	92	6	55508	bv	19.12	180	1,2,4-Trichlorobenzene
77	62	23	90	6	14016	bb	19.33	225	Hexachlorobutadiene
78	96	88	91	6	120696	A	19.32	128	Naphthalene
79	88	77	87	6	41368	bv	19.53	180	1,2,3-Trichlorobenzene

QUAN DB : HW897 LAB-BASE QUAN 09-04-98 16:56

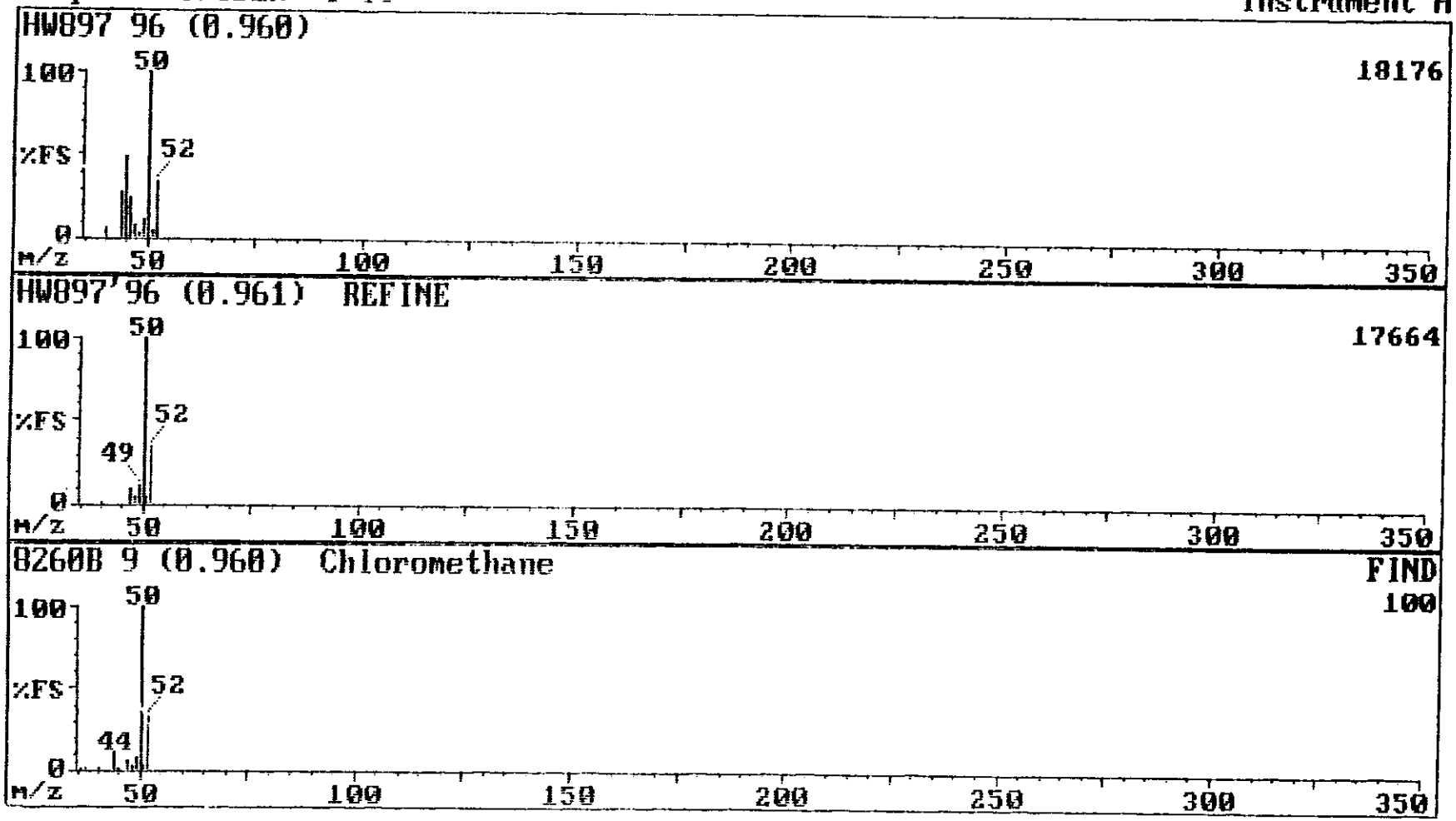
No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	85	99	0	3670831	bv	5.04	168	Pentafluorobenzene
2	100	96	98	1	4037552	bv	5.77	114	1,4-Difluorobenzene
3	100	95	96	-2	3878054	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	3	1886261	bv	15.05	152	1,4-Dichlorobenzene-d4
5	100	97	99	1	1823460	bv	4.91	113	Dibromofluoromethane
6	100	92	97	-1	4689891	bv	7.64	98	Toluene-d8
7	100	89	93	-1	2576768	bv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	0	0	0	0	0		0.00	73	MTBE
11	64	52	52	1	5940	A	3.64	57	n-Hexane
12	0	0	0	0	0		0.00	42	1,2-Epoxybutane
13	0	0	0	0	0		0.00	57	Iso-Octane
14	0	0	0	0	0		0.00	55	Ethyl acrylate

Data Review: YK
Date: 9/5/98

09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC

Instrument H

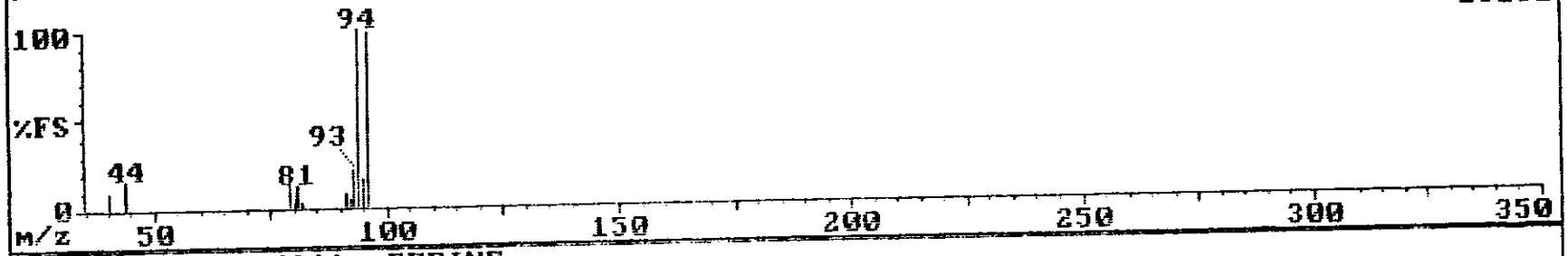


09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

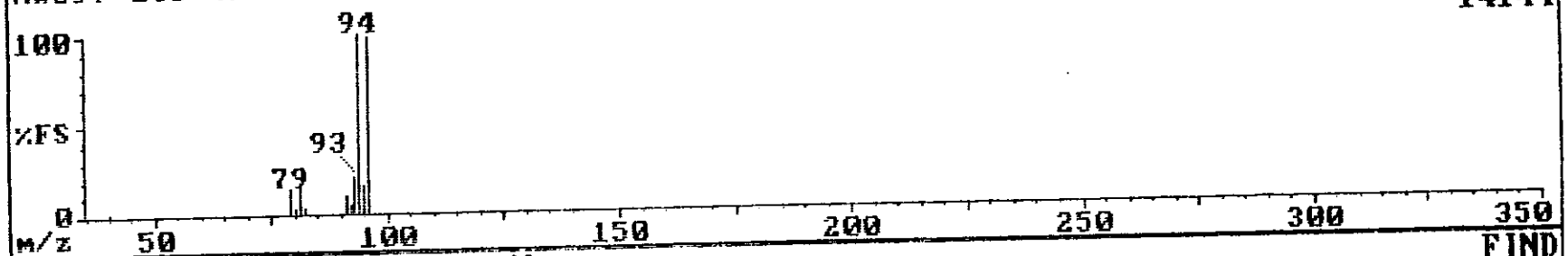
Instrument H

Sample: VOSTBLK T/TC

HW897 146 (1.460) 15232

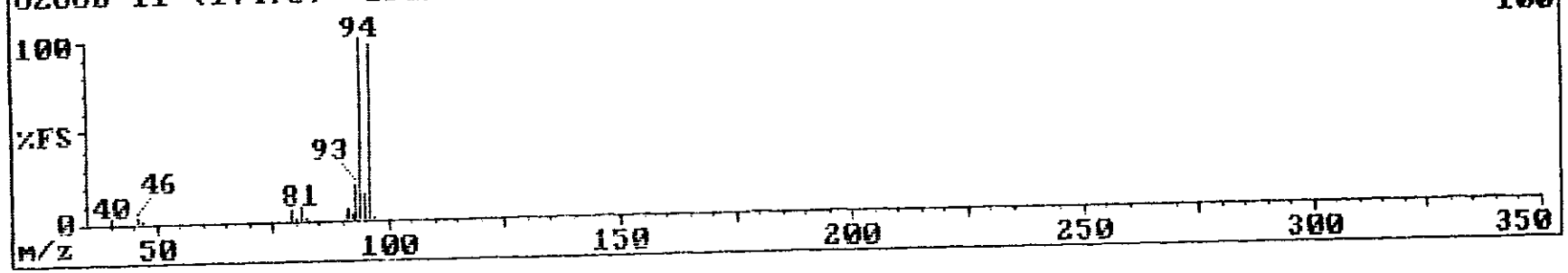


HW897 146 (1.461) REFINE 14144



FIND

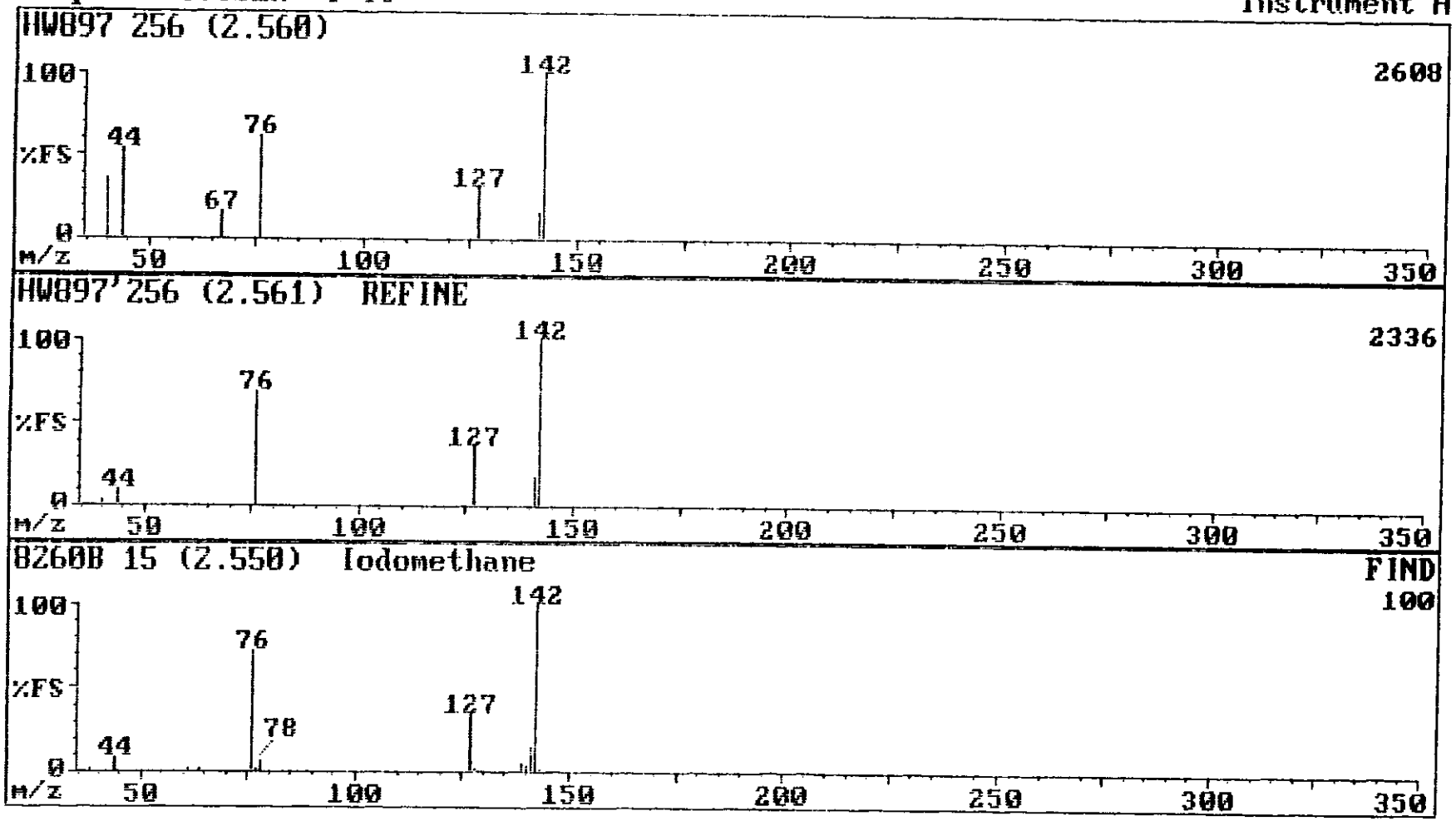
8260B 11 (1.470) Bromomethane 100



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC

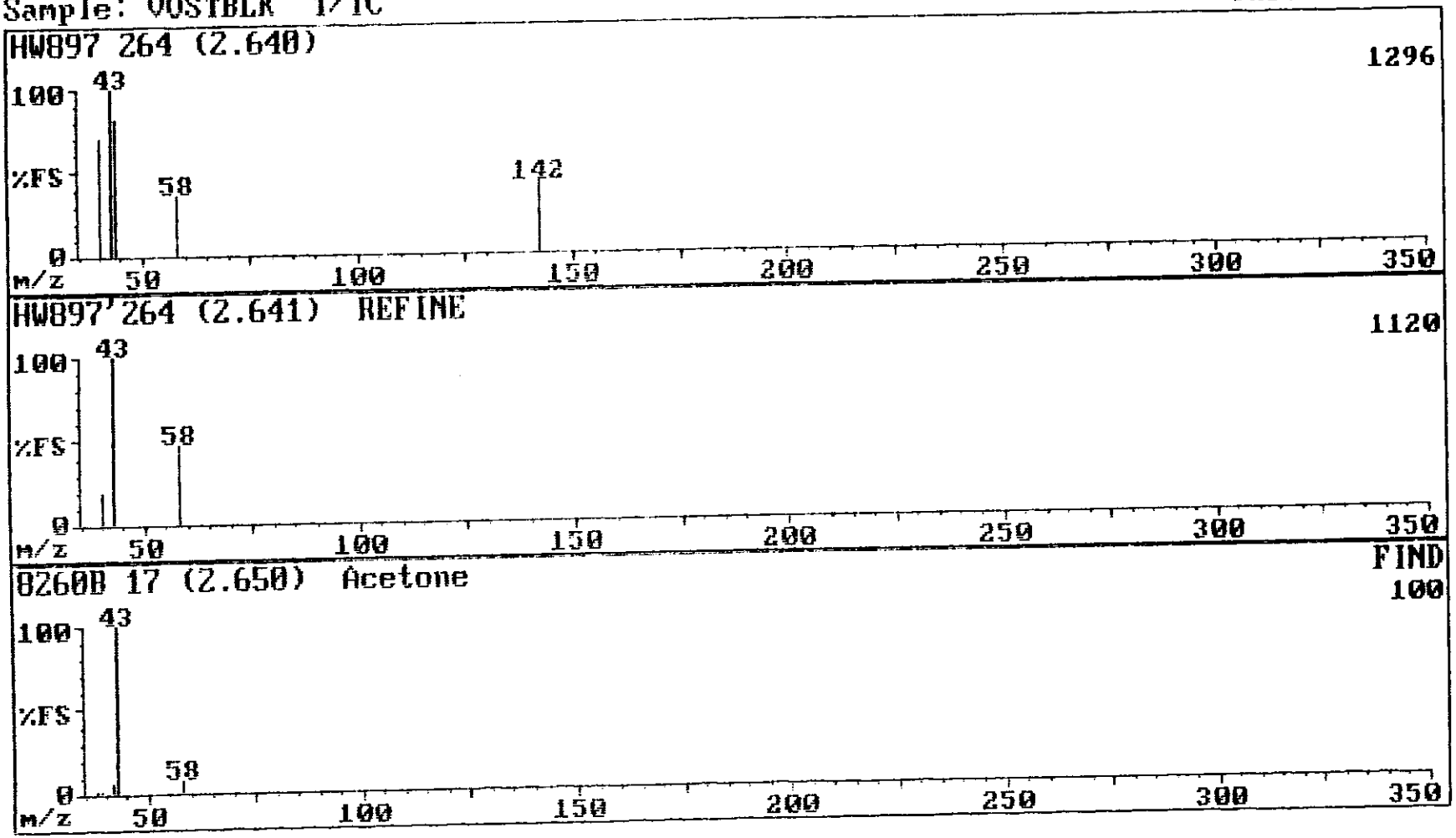
Instrument H



30

09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



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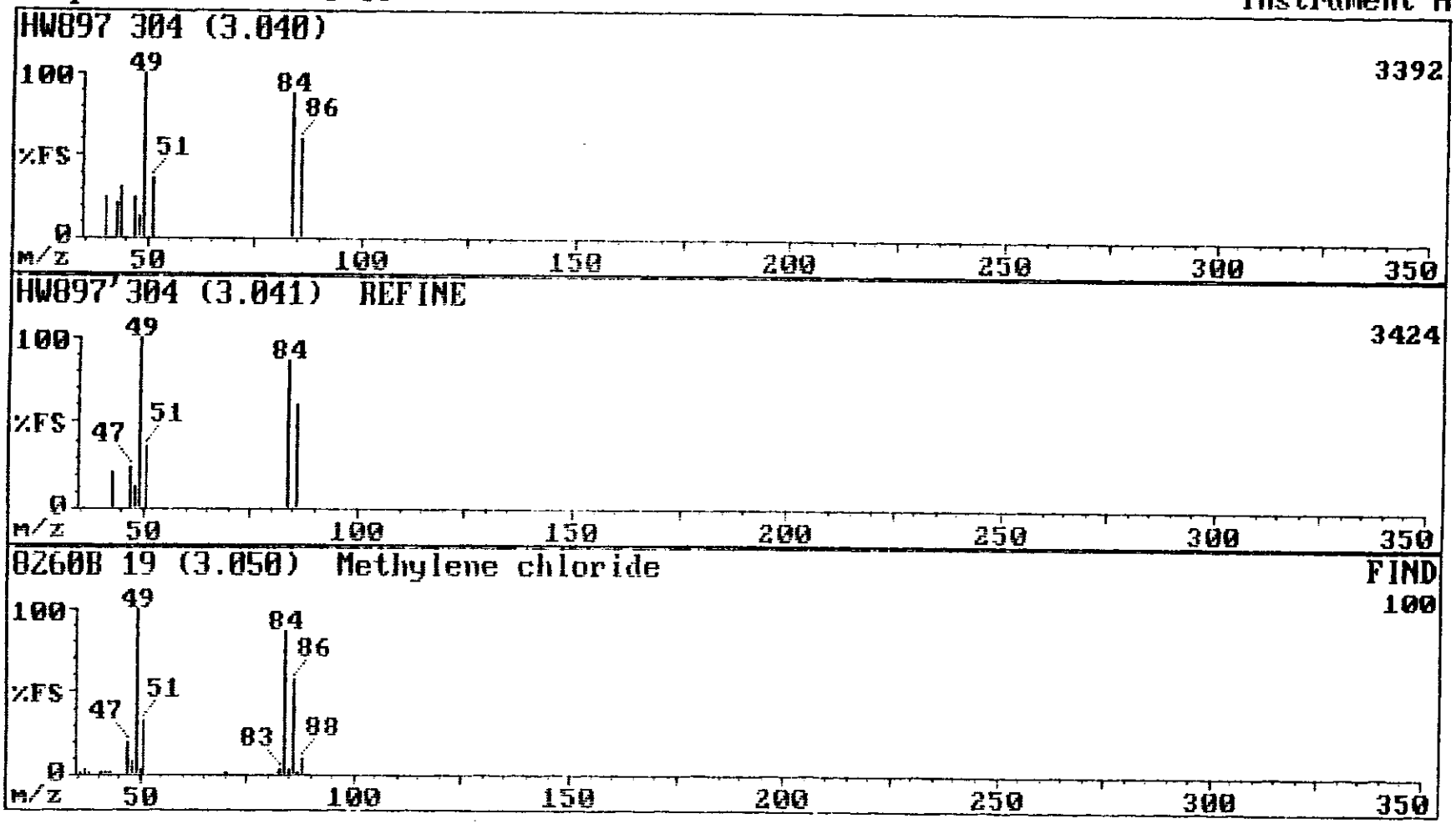
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC

Instrument H



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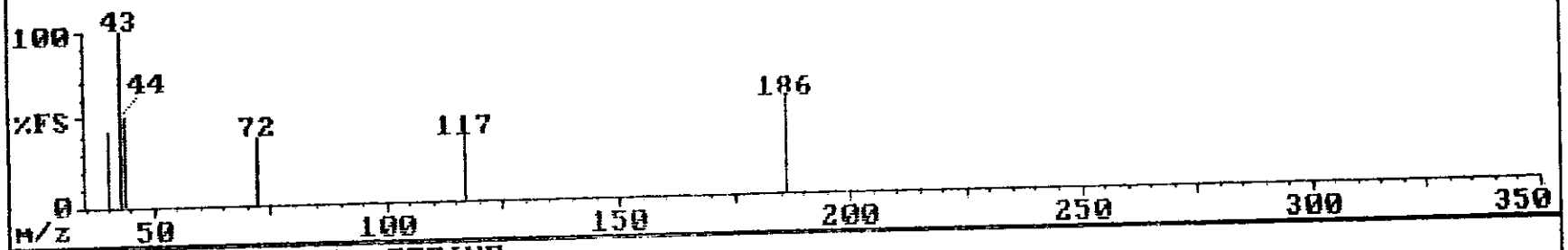
52

09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

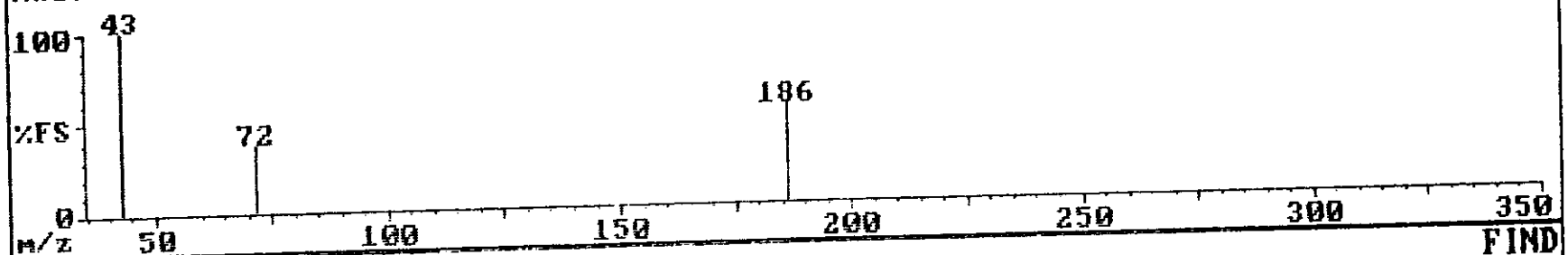
Instrument H

Sample: VOSTBLK T/TC

HW897 450 (4.501) 1008

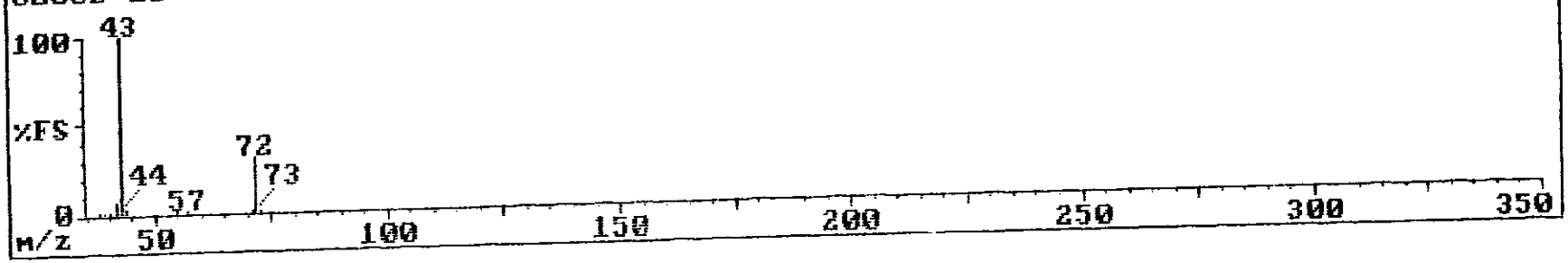


HW897 450 (4.501) REFINE 1008



FIND

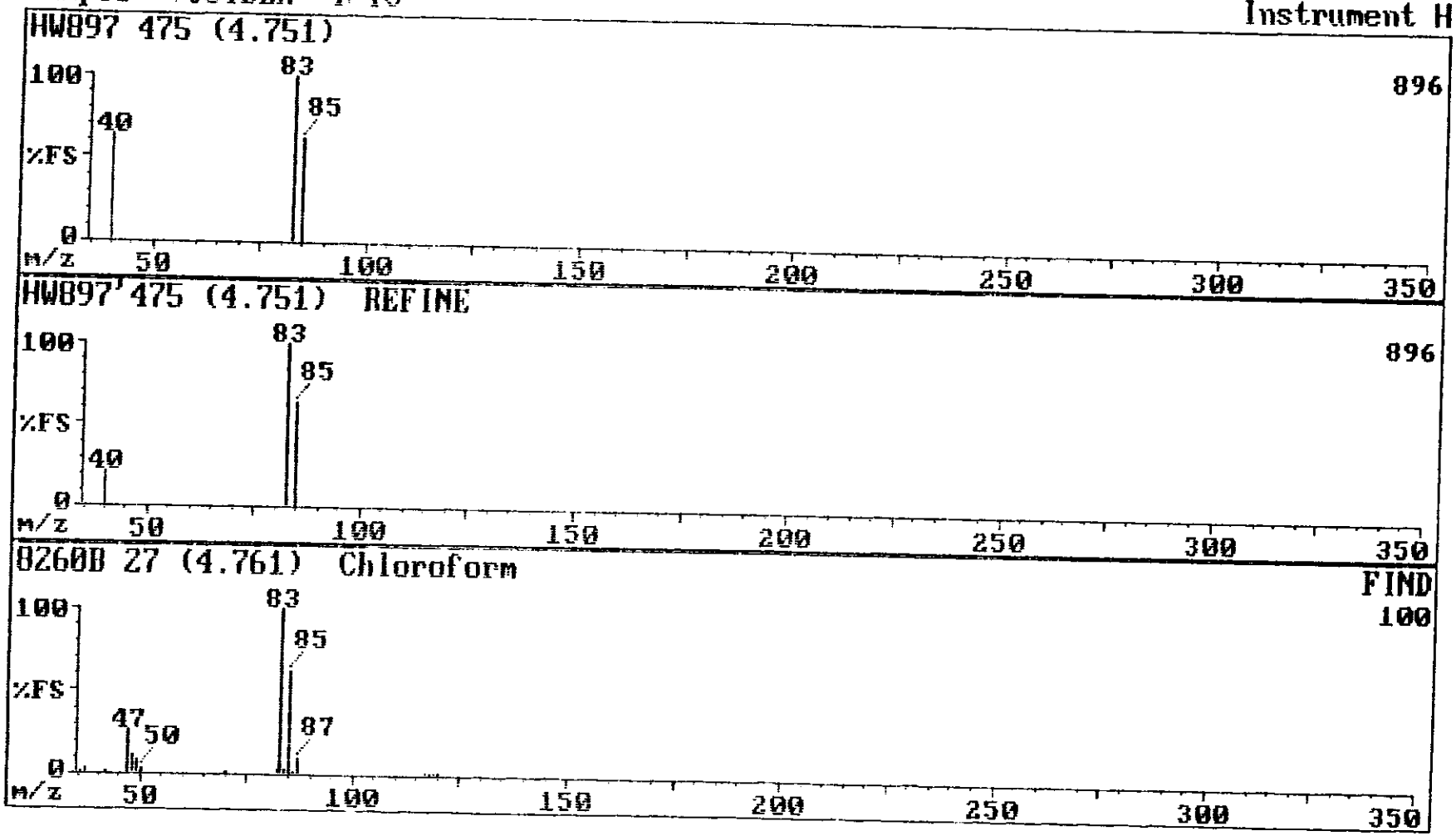
8260B Z6 (4.511) 2-Butanone 100



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC

Instrument H

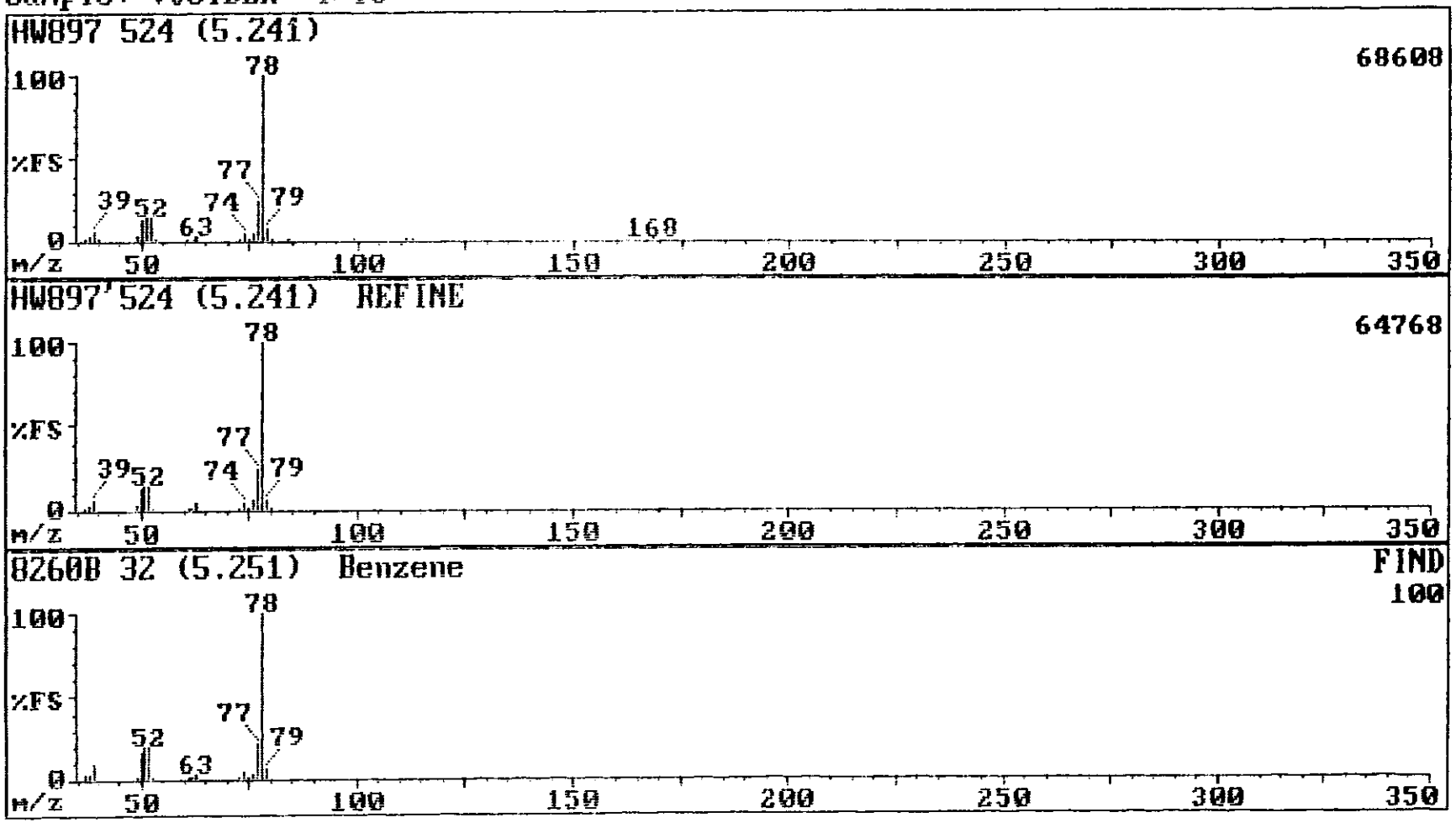


-34

34

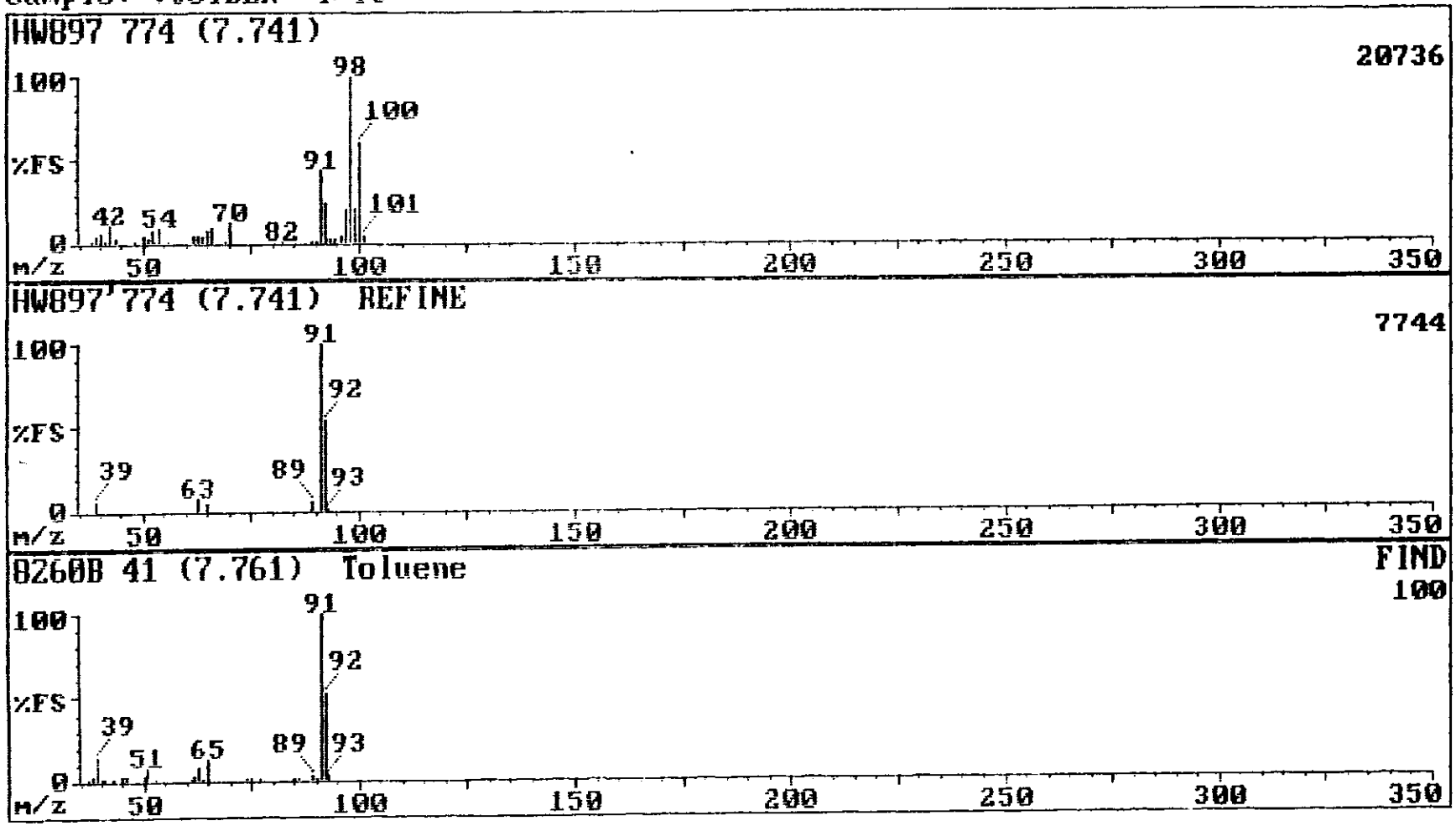
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



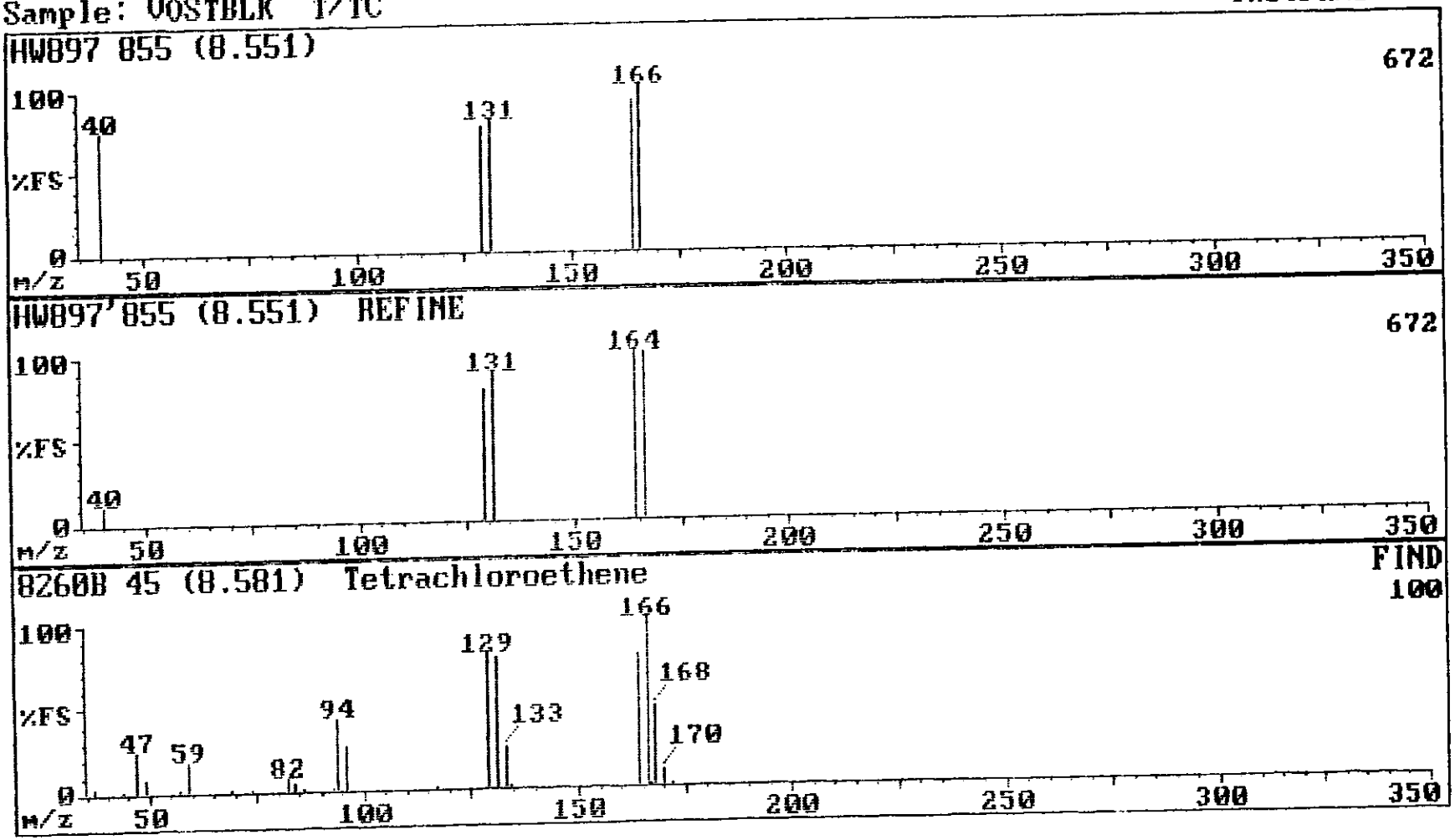
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



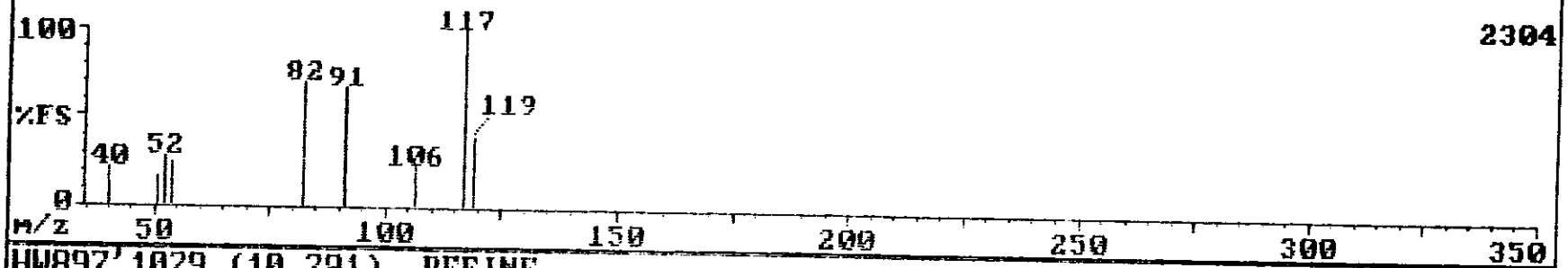
37

09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

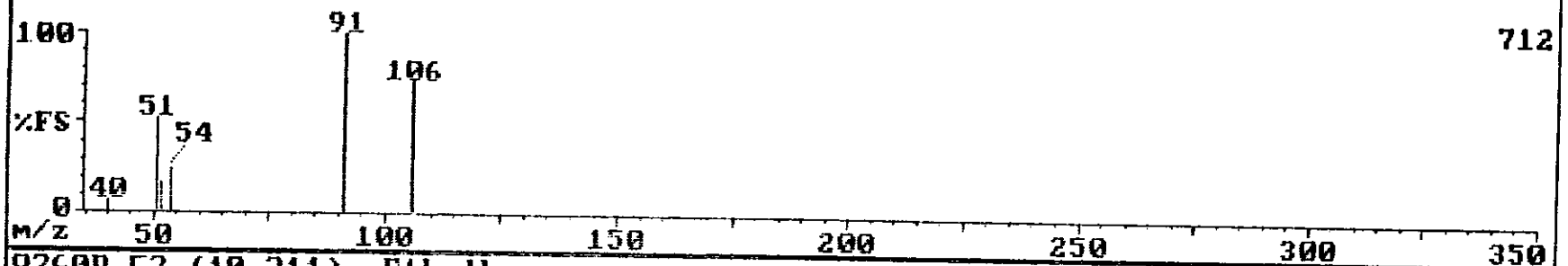
Sample: VOSTBLK T/TC

Instrument H

HW897 1029 (10.291)

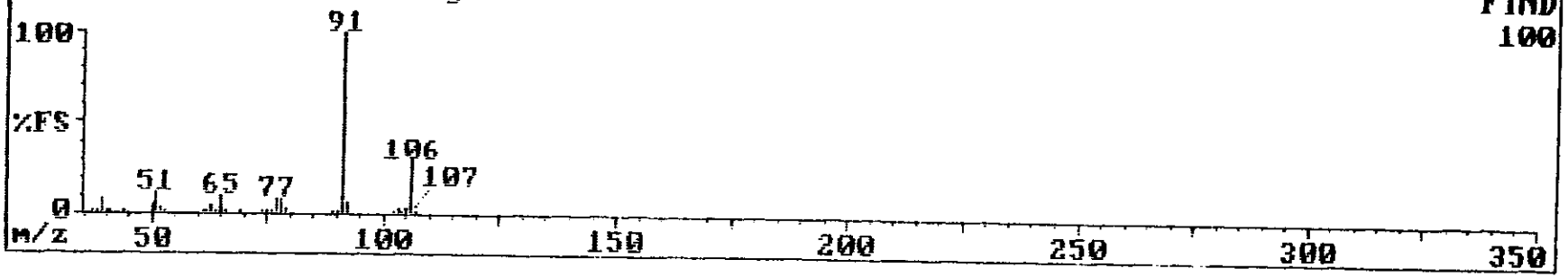


HW897 1029 (10.291) REFINE



8260B 52 (10.311) Ethylbenzene

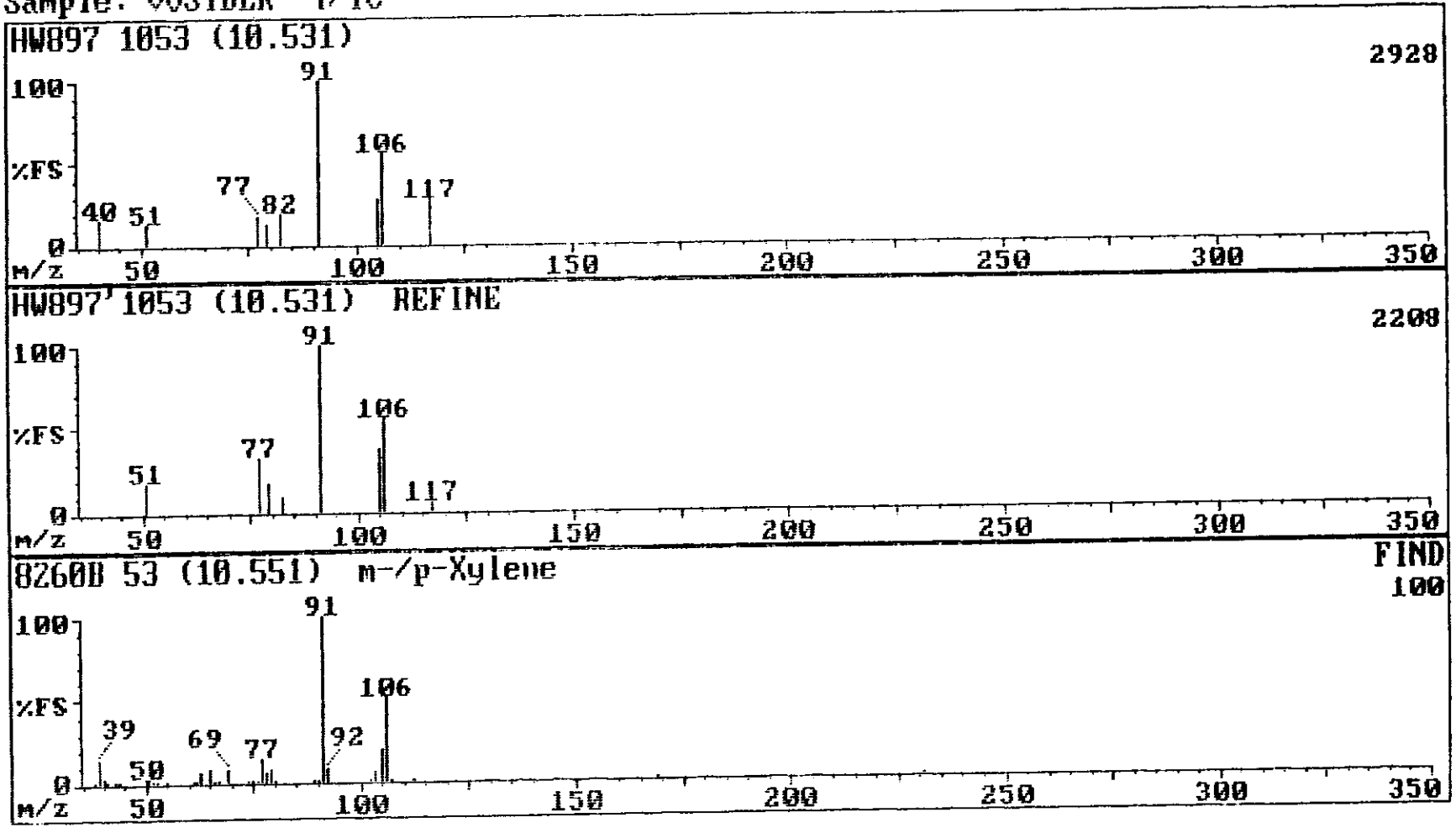
FIND 100



38

09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

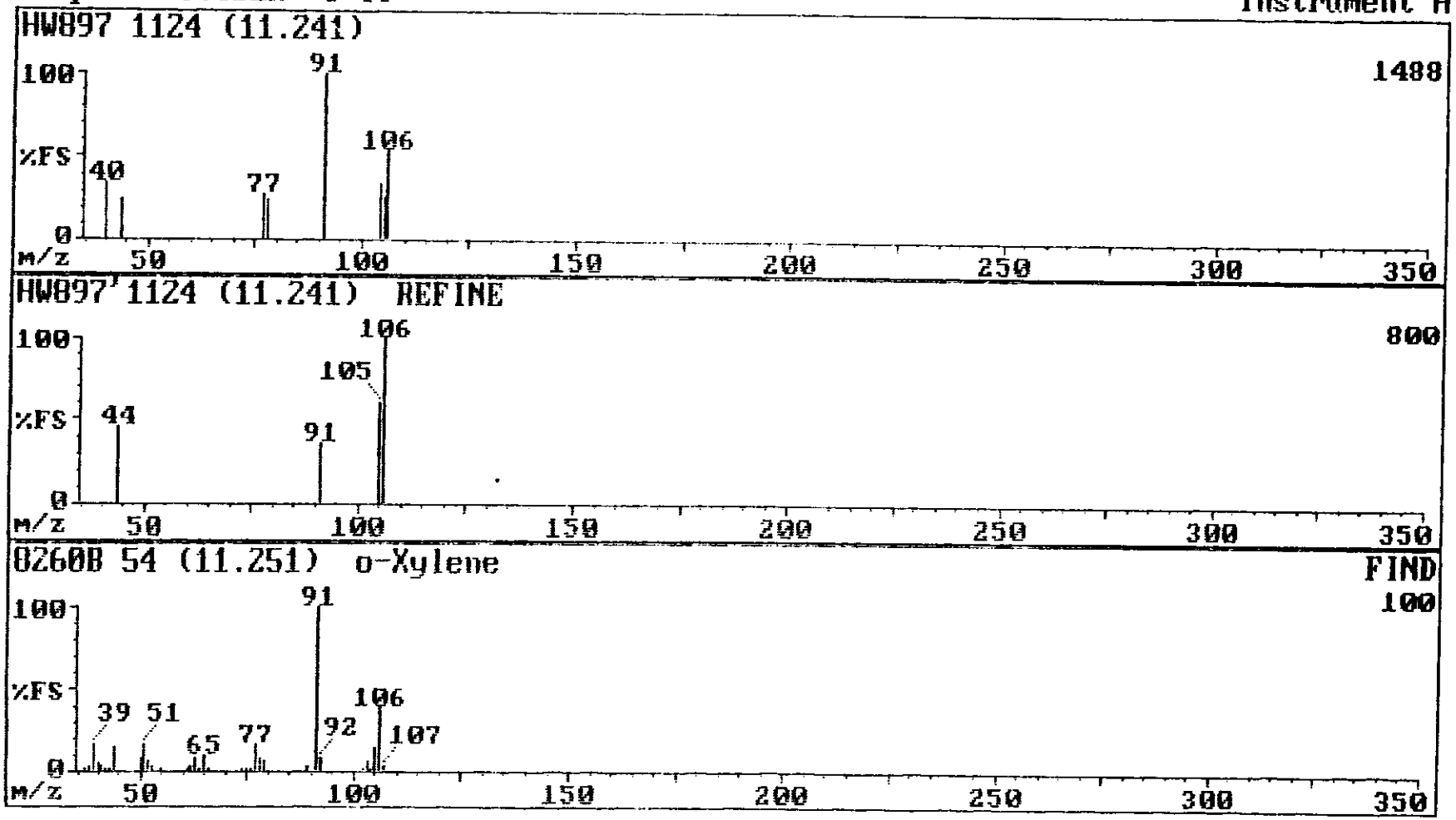
Sample: VOSTBLK T/TC Instrument H



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

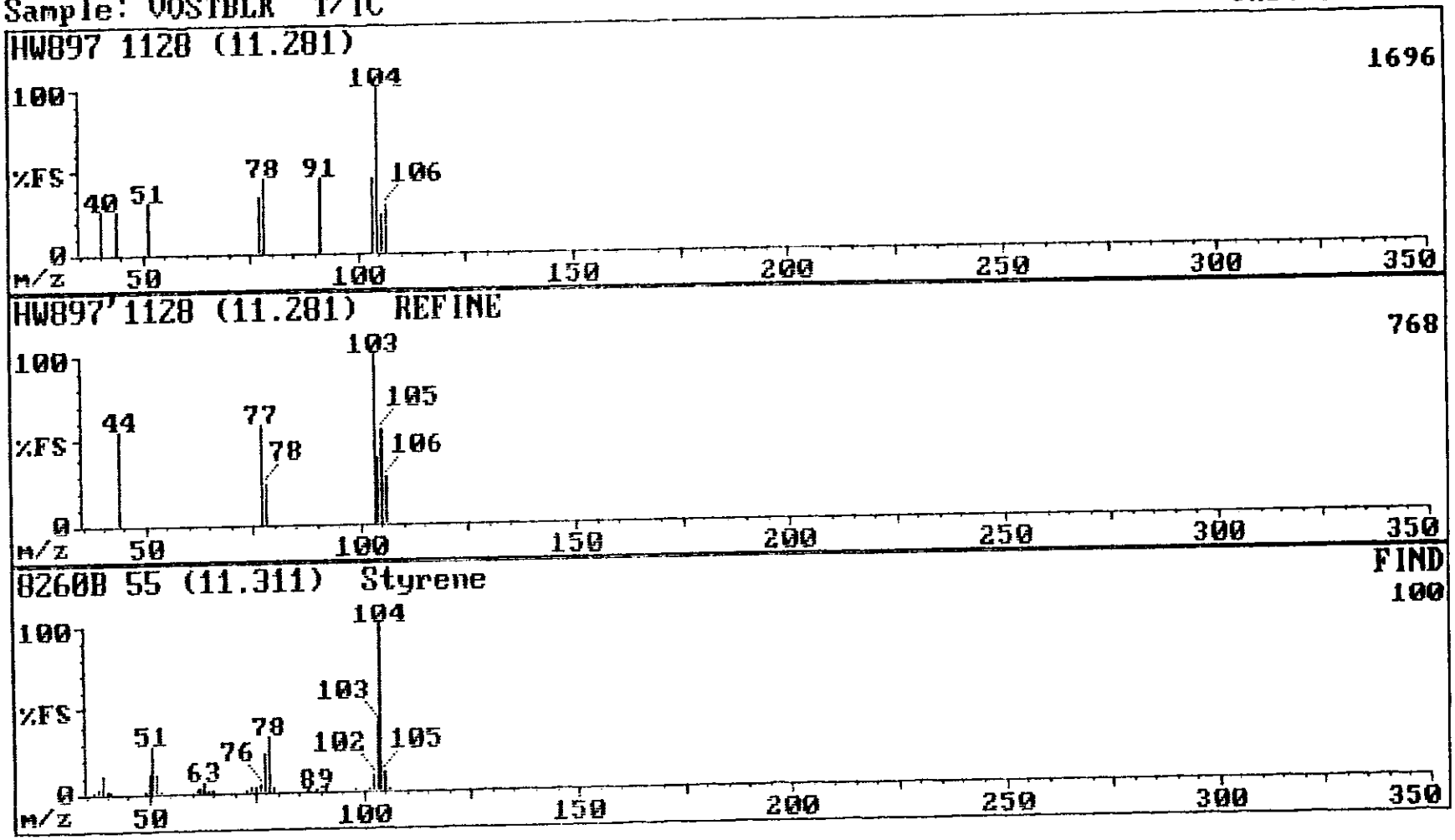
Sample: VOSTBLK T/TC

Instrument H



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

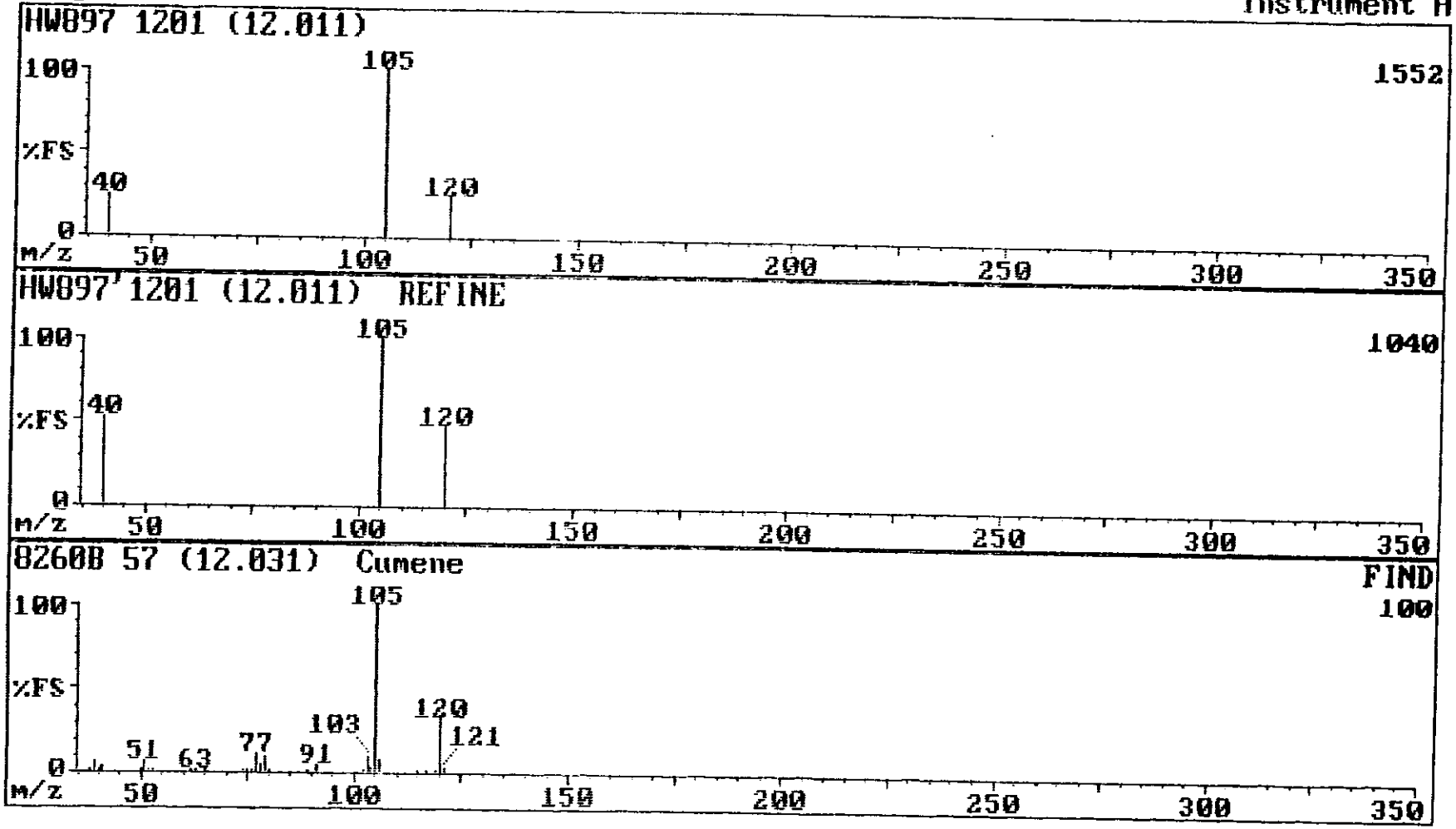
Sample: VOSTBLK T/TC Instrument H



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

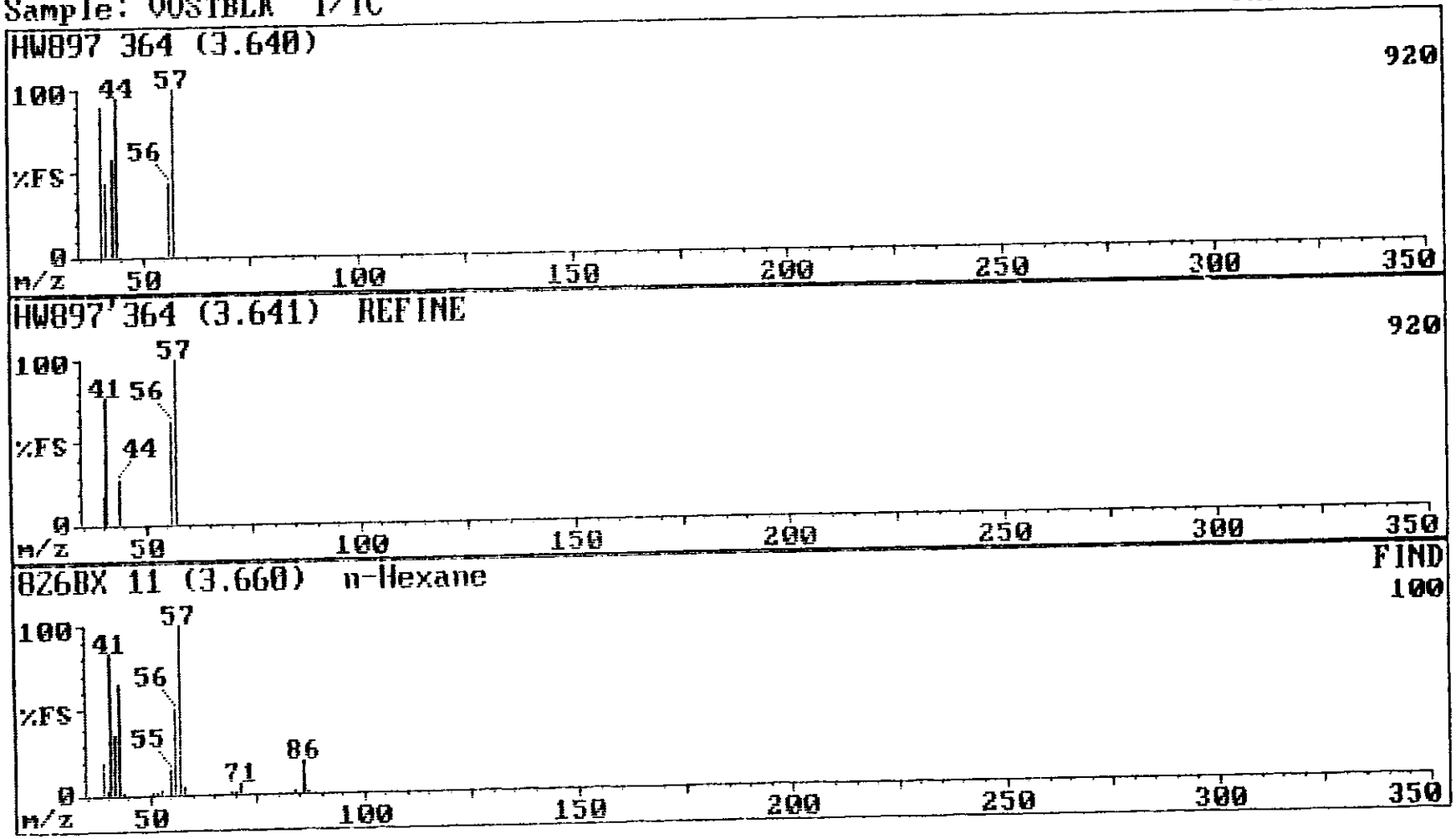
Sample: VOSTBLK T/TC

Instrument H



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



Pacific Environmental Services

Project Number: 46297
Sample File: HW905

Method 8260 VOST
Sample ID: S-V-1-1-A

Client Project: Hotmix
TLI ID: 214-1-1A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1 Low	5.05		
Chloromethane	0.363	B	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.116	B	1.46		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.670	B	2.62		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride		U		0.001	0.05
Acrylonitrile		U		0.008	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone		U		0.002	0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2 Low	5.79		
Carbon tetrachloride		U		0.001	0.05
Benzene	1.206	BE	5.25		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
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Phone: (919) 544-5729 • Fax: (919) 544-5491

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Pacific Environmental Services

Project Number: 46297
Sample File: HW905

Method 8260 VOST
Sample ID: S-V-1-1-A

Client Project: Hotmix
TLI ID: 214-1-1A

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.003	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.002	0.05
Toluene	3.278	BE	7.78		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3 Low	9.99		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.003	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.002	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	1.752	BE	10.35		0.05
m-/p-Xylene	10.364	BE	10.61		0.10
o-Xylene	2.951	BE	11.31		0.05
Styrene		U		0.001	0.05
Bromoform		U		0.002	0.05
1,4-Dichlorobenzene-d_4		IS 4 Low	15.11		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.003	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46297
Sample File: HW905

Method 8260 VOST
Sample ID: S-V-1-1-A

Client Project: Hotmix
TLI ID: 214-1-1A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.391	4.91	1	156
Toluene-d_8	0.435	7.68	2	174
4-Bromofluorobenzene	1.969	12.32	2	788

Reviewed by YR Date 9/7/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Savar v3.7
Printed: 13:41 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW905

Method 8260 VOST
Sample ID: S-V-1-1-A

Client Project: Hotmix
TLI ID: 214-1-1A

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1 Low	5.05		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	7.610	BE	3.67		0.25
1,2-Epoxybutane		U		0.065	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2 Low	5.79		
Ethyl acrylate		U		0.001	0.25

Reviewed by Sah Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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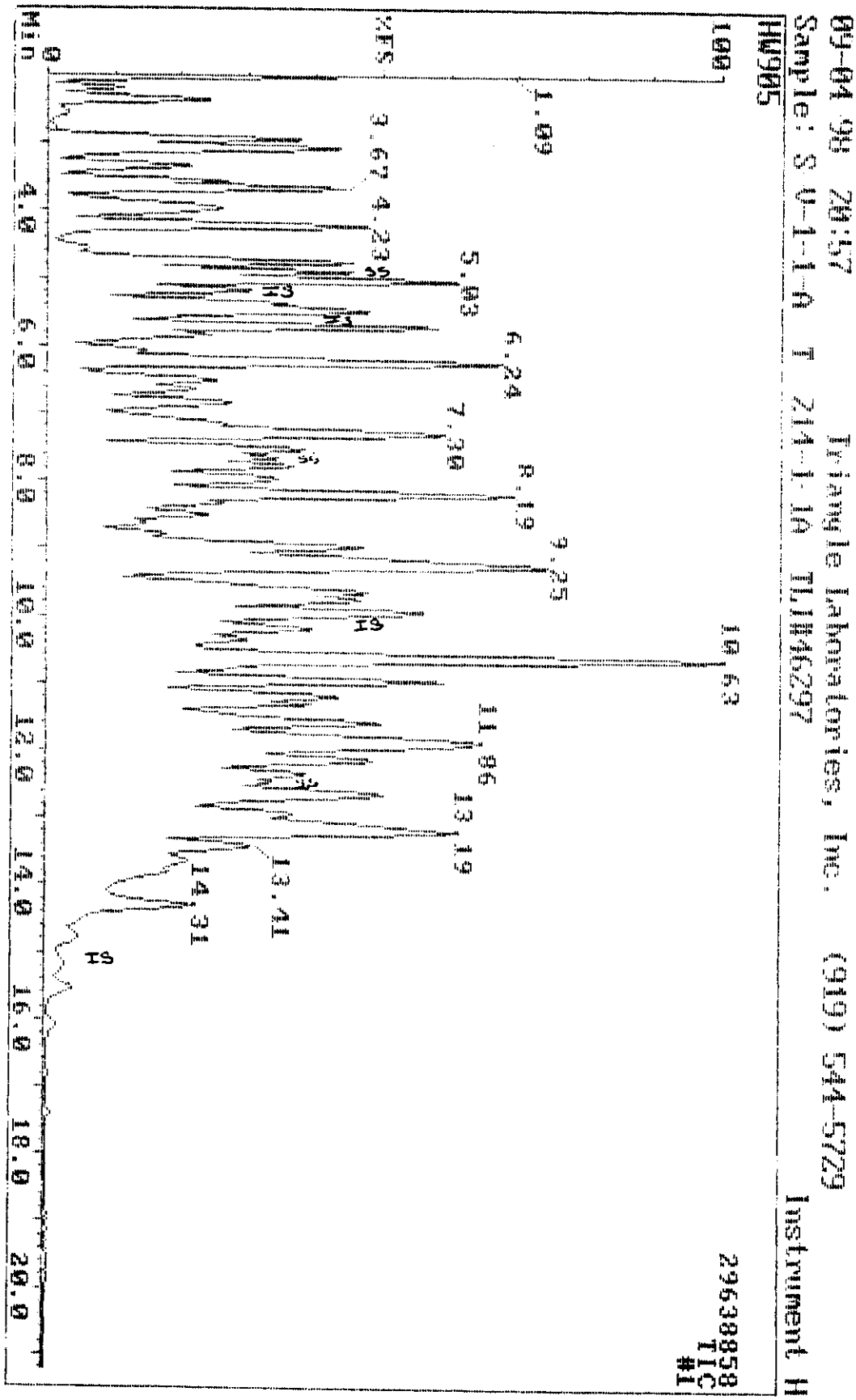
Printed: 14:51 09/08/1998



Data Review: YRU
Date: 9/7/98

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48

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	0	0	0	0	1932344	A	5.05	168	Pentafluorobenzene
2	0	0	0	0	1313364	A	5.72	114	1,4-Difluorobenzene
3	33	20	34	1	1024240	bv	9.99	117	Chlorobenzene-d5
4	65	21	84	-2	333526	vv	15.11	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	1337984	A	4.91	113	Dibromofluoromethane
6	37	24	37	1	7367072	bv	7.68	98	Toluene-d8
7	0	0	0	0	7264060	A	12.32	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	0	0	0	0	~~0~~ 717344	m	~~0.00~~ .96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	91	50	99	-1	296992	bv	1.46	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	0	0	0	0	0		0.00	76	Carbon disulfide
17	94	71	86	-3	766402	vv	2.62	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	0		0.00 ✓	84	Methylene chloride
20	29	10	42	-4	~~475066~~	~~vb~~	~~3.34~~ FP	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	0	0	0	0	0		0.00	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	73	99	0	10144020	bv	5.25	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	45	47	56	-13	~~17904520~~	~~A~~	~~6.56~~ FP	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	39	31	63	-16	~~2923097~~	~~vv~~	~~7.50~~ FP	43	4-Methyl-2-pentanone
41	100	78	96	2	17922450	vv	7.78	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropen
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	52	41	64	9	~~1371560~~	~~A~~	~~3.47~~ FP	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	48	25	64	-6	~~1687490~~	~~vv~~	~~8.97~~ FP	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: YR
Date: 9/7/98

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No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	72	44	80	3	3444998	vv	10.35	106	Ethylbenzene
53	77	56	83	5	25052920	vv	10.61	106	m-/p-Xylene
54	73	53	83	5	6672621	bv	11.31	106	o-Xylene
55	0	0	0	0	0		0.00	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	0	0	0	0	0		0.00	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	61	44	91	-13	31266880	vv	13.21	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	94	72	98	4	19109240	vv	14.31	105	1,2,4-Trimethylbenzene
68	66	30	83	3	2033408	bv	14.80	105	sec-Butylbenzene
69	78	45	80	-1	1072076	A	15.36	119	p-Cymene
70	0	0	0	0	0		0.00	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	0	0	0	0	0		0.00	91	n-Butylbenzene
74	0	0	0	0	0		0.00	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	0	0	0	0	0		0.00	180	1,2,4-Trichlorobenzene
77	0	0	0	0	0		0.00	225	Hexachlorobutadiene
78	0	0	0	0	0		0.00	128	Naphthalene
79	0	0	0	0	0		0.00	180	1,2,3-Trichlorobenzene

QUAN DB : HW905 LAB-BASE QUAN 09-04-98 21:59

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	0	0	0	0	1932344	A	5.05	168	Pentafluorobenzene
2	0	0	0	0	1815364	A	5.79	114	1,4-Difluorobenzene
3	33	20	34	5	1024240	bv	9.99	117	Chlorobenzene-d5
4	65	21	84	1	333526	vv	15.11	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	1337984	A	4.91	113	Dibromofluoromethane
6	35	24	37	4	3367072	bv	7.68	98	Toluene-d8
7	0	0	0	0	7264060	A	12.32	95	4-Bromofluorobenzene
8	62	36	68	-2	~~20308810~~	~~vv~~	~~1.09~~ FP	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	59	47	50	-2	~~318904~~	~~vv~~	~~3.38~~ FP	73	MTBE
11	100	97	99	1	26997230	vv	3.67	57	n-Hexane
12	67	46	64	-2	~~7518496~~	~~bb~~	~~4.23~~ FP	42	1,2-Epoxybutane
13	53	60	65	-21	~~8715289~~ 4899344 m	~~vb~~ ~~8715289~~ 5.48 m 9/7/98	~~5.18~~ FP ‡	57	Iso-Octane
14	47	28	67	-9	~~28495870~~	~~bb~~	~~6.24~~ FP	55	Ethyl acrylate

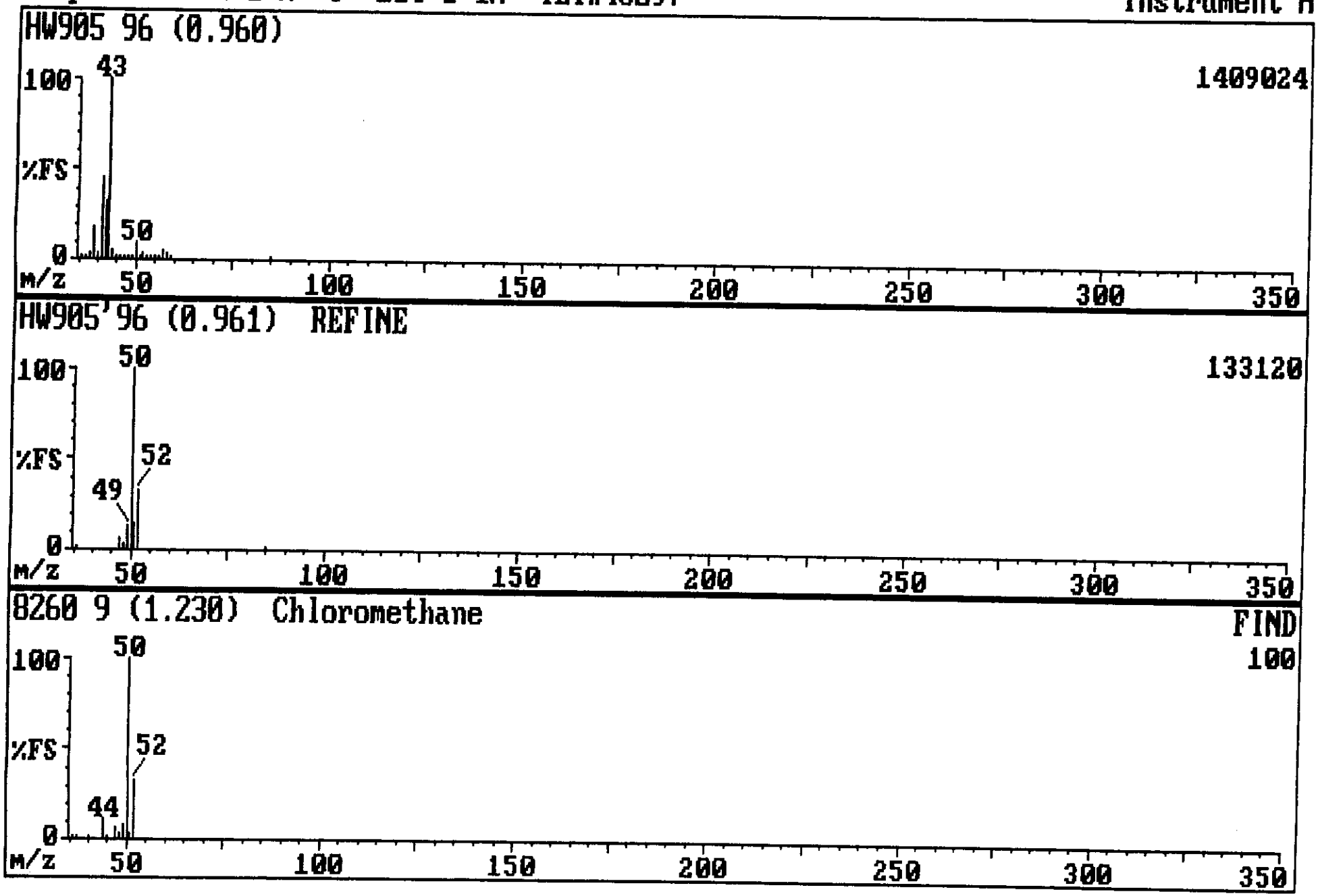
‡ Isooctane is FP
SAH
9/8/98

Data Review: YR
Date: 9/7/98

51

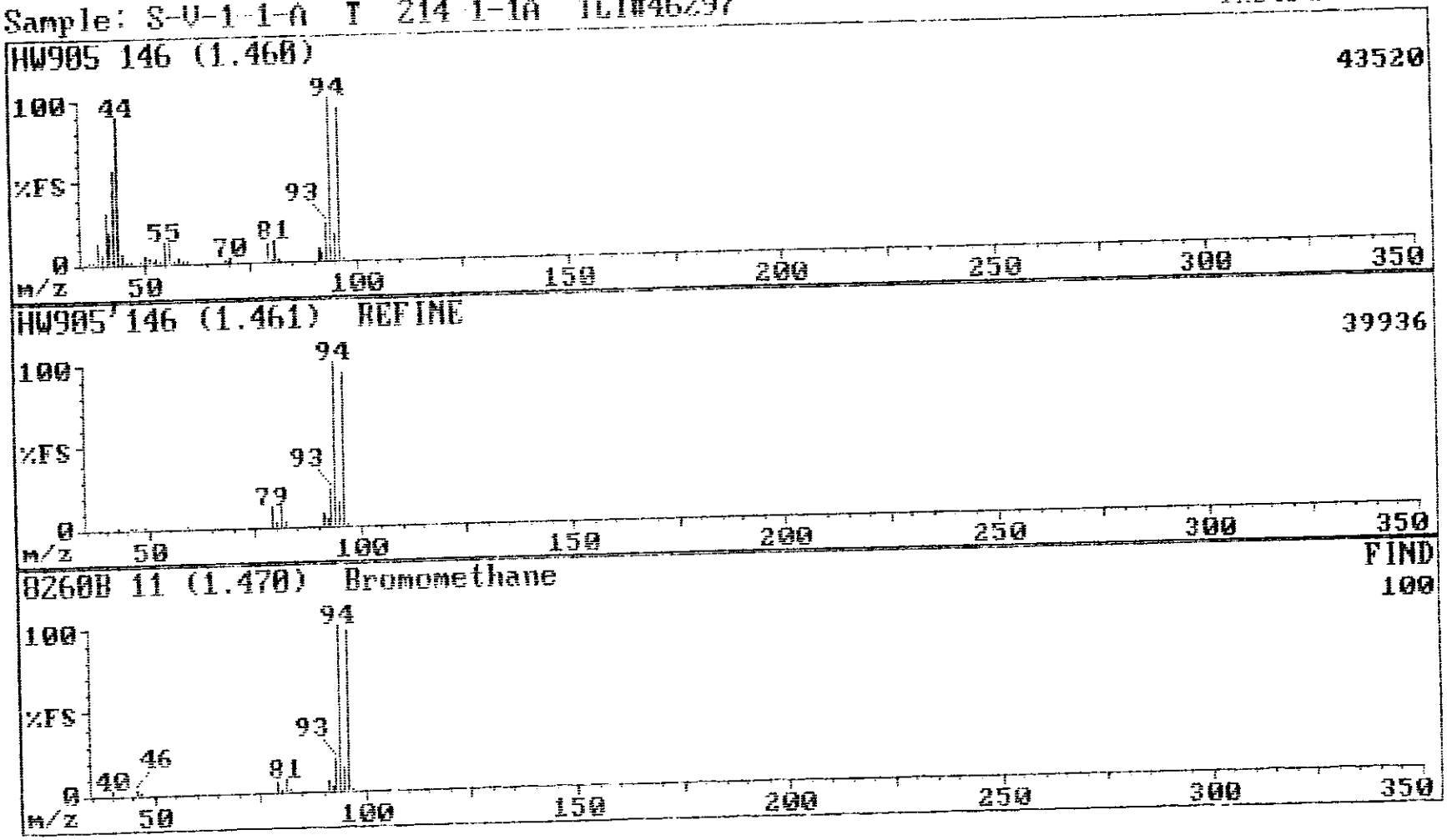
04-Sep-98 20:57 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-1-A T 214-1-1A TLI#46297 Instrument H



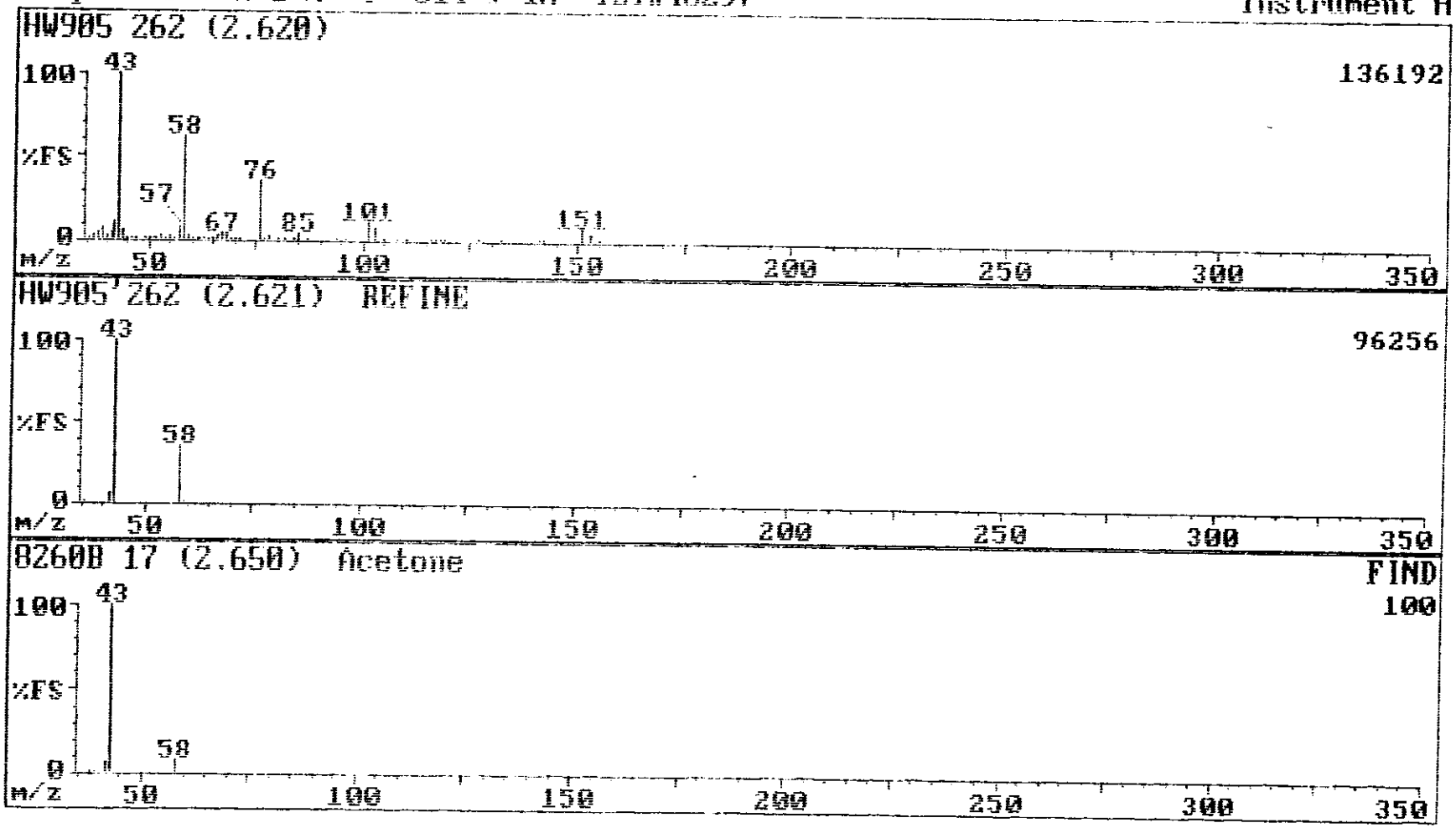
09-04-98 20:57 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-1-A T 214 1-1A TLI#46297 Instrument H



09-04-98 20:57 Triangle Laboratories, Inc. (919) 544-5729

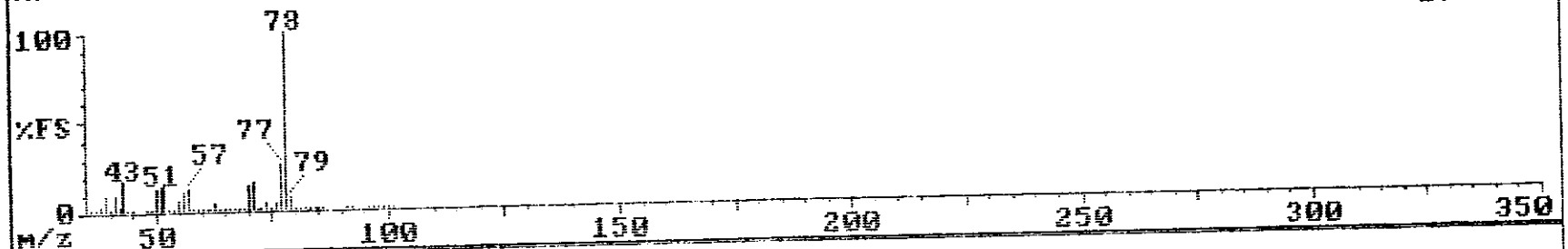
Sample: S-V-1-1-A T 214-1-1A TLI#46297 Instrument H



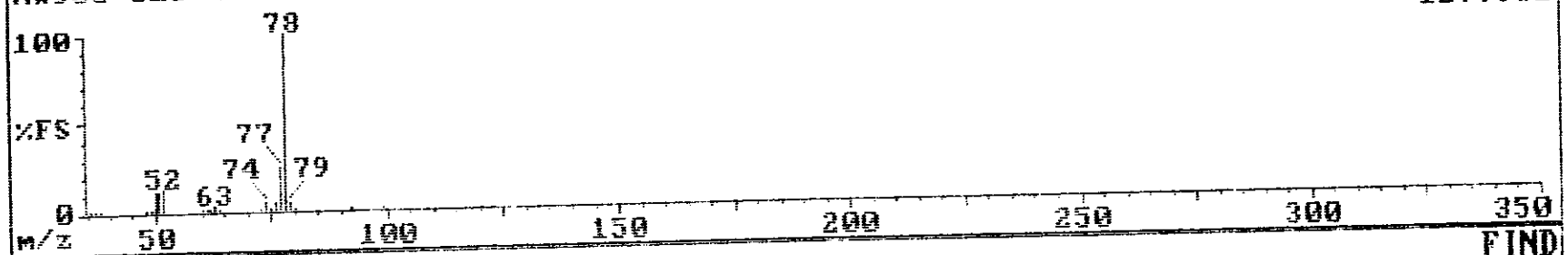
09-04-98 20:57 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-1-A T 214-1-1A TLI#46297 Instrument H

HW905 525 (5.251) 1376256

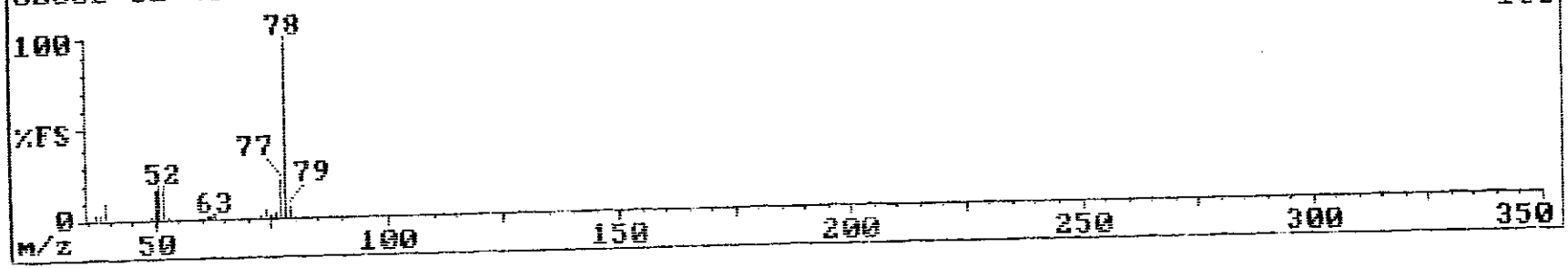


HW905 525 (5.251) REFINE 1277952



FIND 100

82608 32 (5.251) Benzene



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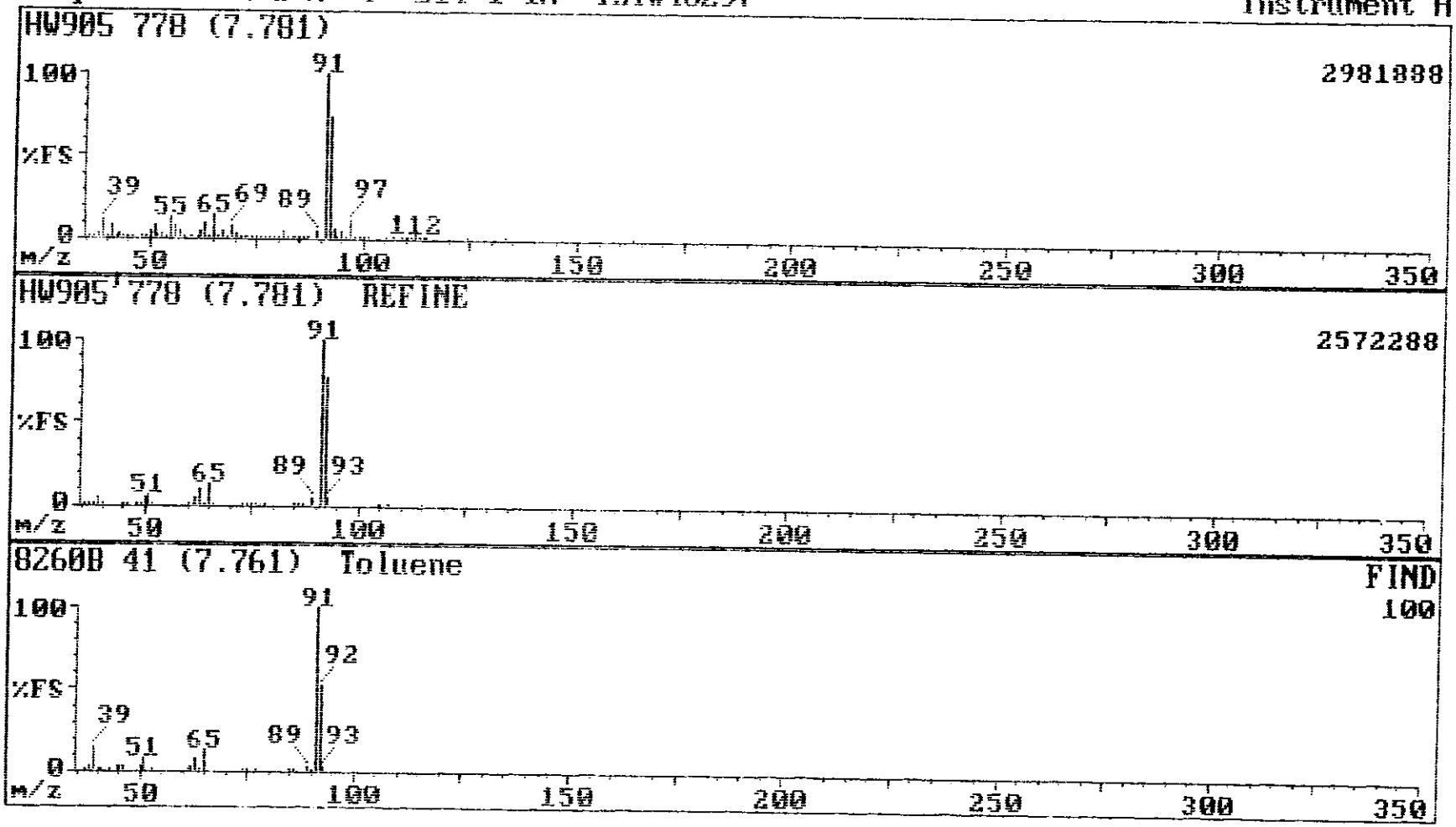
Sample: S-V-1-1-A T 214-1-1A TLI#46297 Instrument H



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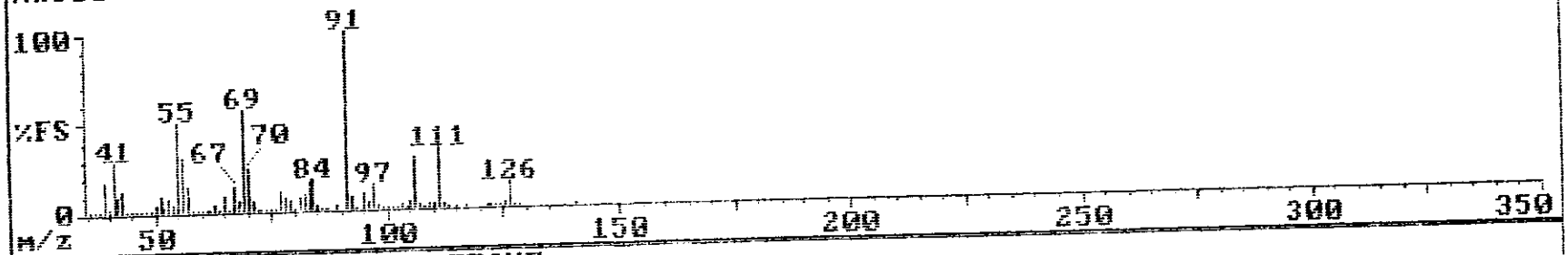
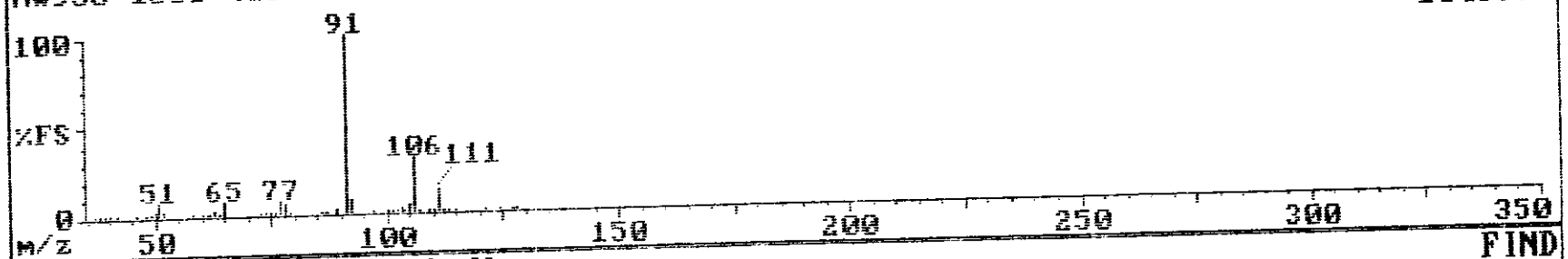
Instrument H

Sample: S-V-1-1-A T Z14-1-1A TL1#46297

HW905 1035 (10.351) 1294336

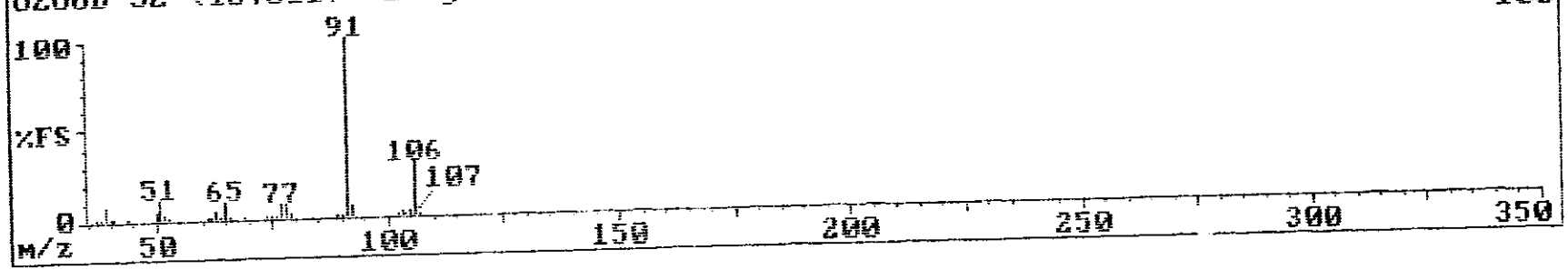


HW905 1035 (10.351) REFINE 1048576



FIND

8260B 52 (10.311) Ethylbenzene 100



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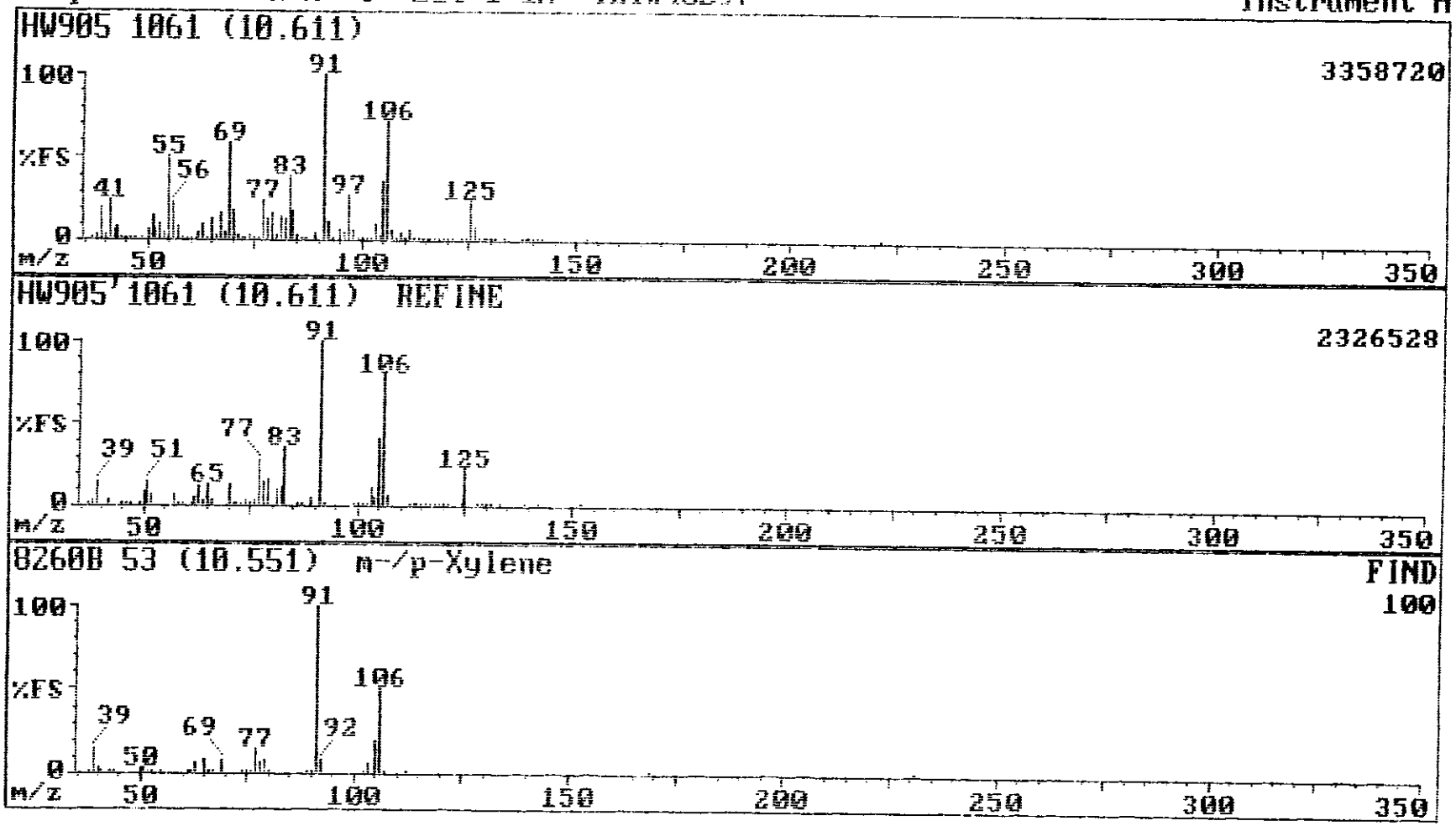
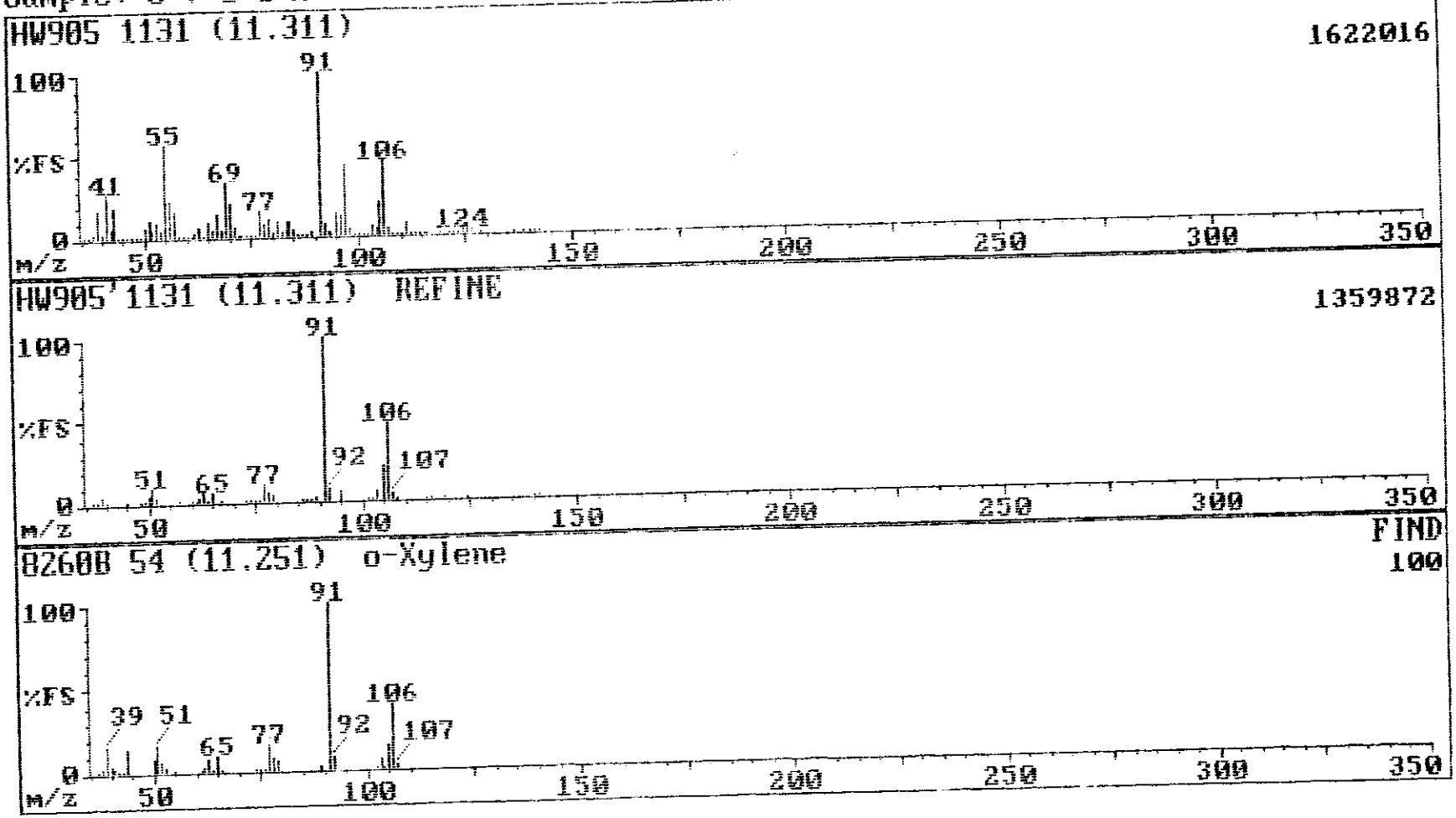
Sample: S-V-1-1-A T 214-1-1A TL1#46297 Instrument H



09-04-98 20:57 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-1-A T Z14-1-1A TLI#46297 Instrument H



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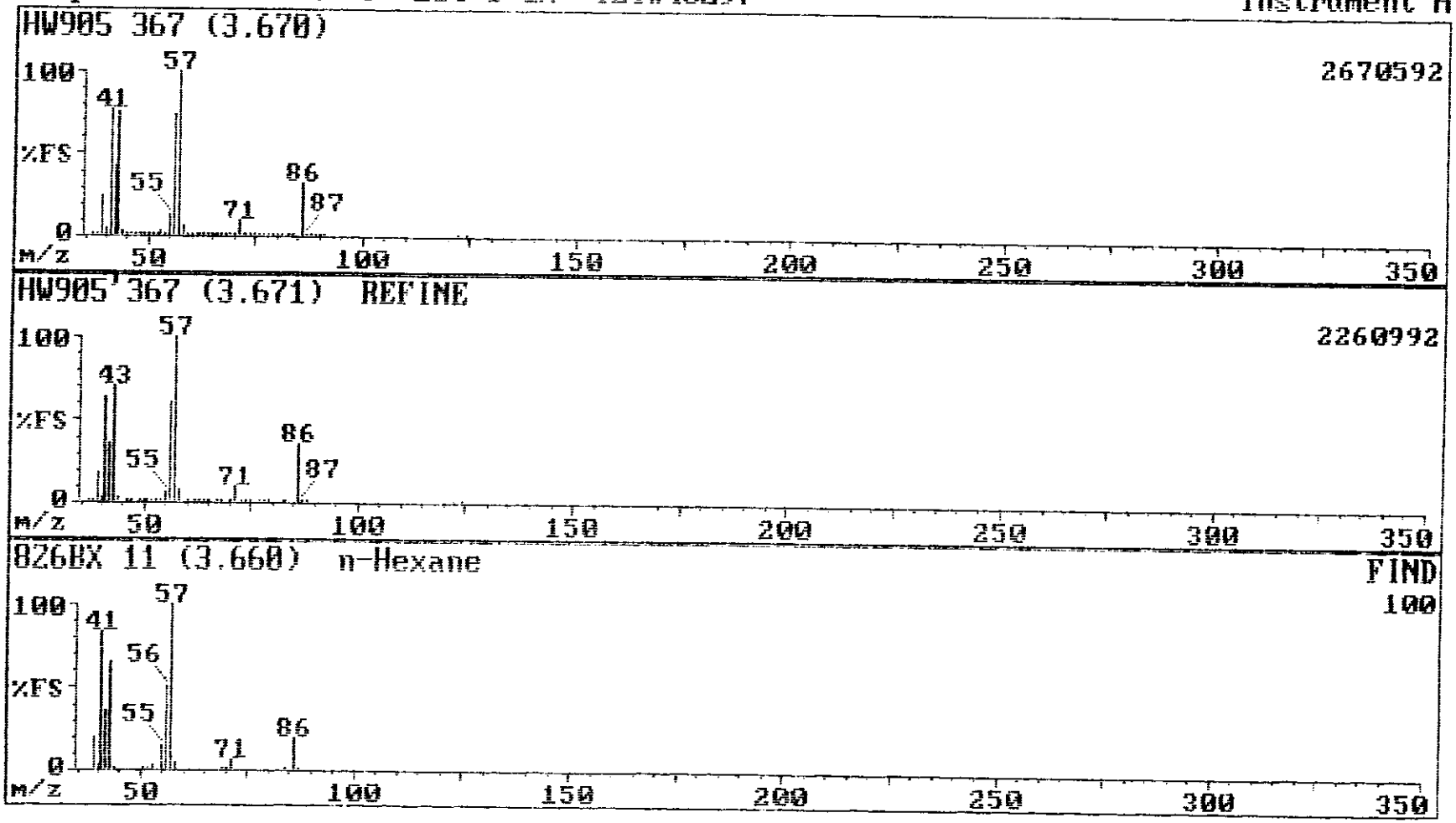
Sample: S-V-1-1-A T 214-1-1A TLI#46297 Instrument H



60

Pacific Environmental Services

Project Number: 46297
Sample File: HW906

Method 8260 VOST
Sample ID: S-V-1-2-A

Client Project: Hotmix
TLI ID: 214-1-2A

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
Chloromethane	0.160	B	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.033	BJ	1.47		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.653	B	2.66		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride		U		0.001	0.05
Acrylonitrile		U		0.006	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone		U		0.001	0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.78		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.728	B	5.24		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Savar v3.7
Printed: 13:41 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW906

Method 8260 VOST
Sample ID: S-V-1-2-A

Client Project: Hotmix
TLI ID: 214-1-2A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.002	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	2.010	BE	7.76		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3 Low	9.98		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.002	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	1.292	BE	10.33		0.05
m-/p-Xylene	7.039	BE	10.59		0.10
o-Xylene	2.084	BE	11.29		0.05
Styrene		U		0.001	0.05
Bromoform		U		0.002	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.14		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
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Printed: 13:41 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW906

Method 8260 VOST
Sample ID: S-V-1-2-A

Client Project: Hotmix
TLI ID: 214-1-2A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.332	4.91	1	133
Toluene-d_8	0.360	7.66	2	144
4-Bromofluorobenzene	1.036	12.30	2	414

Reviewed by YR Date 9/7/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Savar v3.7
Printed: 13:41 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW906

Method 8260 VOST
Sample ID: S-V-1-2-A

Client Project: Hotmix
TLI ID: 214-1-2A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	3.320	BE	3.65		0.25
1,2-Epoxybutane		U		0.049	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.78		
Ethyl acrylate		U		0.001	0.25

Reviewed by Sath Date 9/6/98

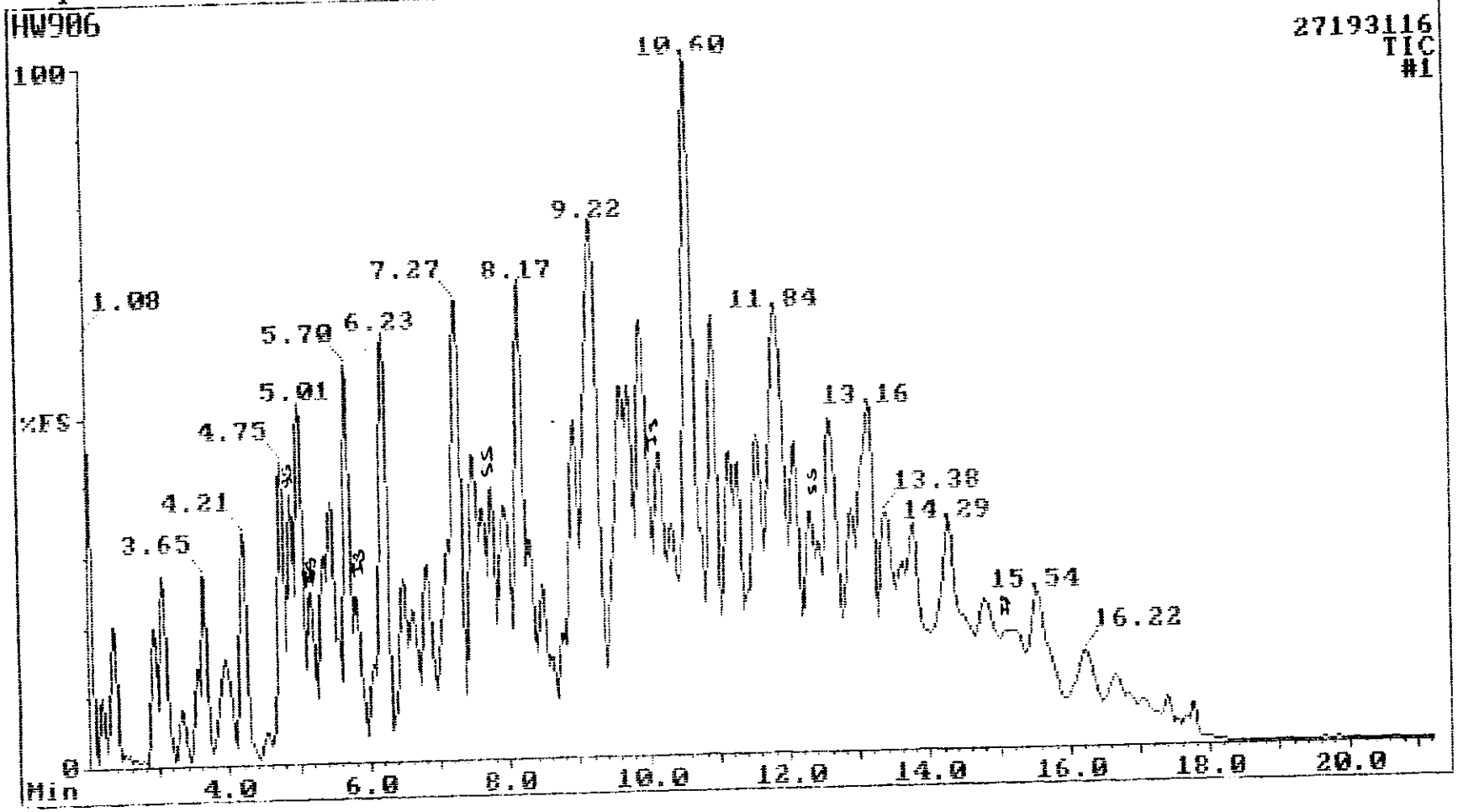
NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.7
Printed: 14:51 09/08/1998

Data Review: YR
Date: 9/17/98

09-04 98 21:26 Triangle Laboratories, Inc. (919) 544-5729
Sample: S V 1-2-A T 214-1-2A TL1#46297 Instrument H



QUAN DB : HW906 LAB-BASE QUAN 09-05-98 21:30

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	40	14	51	-2	2564508	bv	5.04	168	Pentafluorobenzene
2	57	34	57	1	2745284	bv	5.78	114	1,4-Difluorobenzene
3	37	22	38	2	1483892	bv	9.98	117	Chlorobenzene-d5
4	0	0	0	0	1082912	A	15.14	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	1509688	A	4.91	113	Dibromofluoromethane
6	45	29	45	0	4212693	bv	7.66	98	Toluene-d8
7	0	0	0	0	5776848	A	12.30	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	0	0	0	0	418980	~~0~~ m	~~0.00~~ 0.96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	0	0	0	0	112533	~~0~~ m	~~0.00~~ 1.47	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	0	0	0	0	0		0.00	76	Carbon disulfide
17	98	77	88	2	990787	vb	2.66	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	0		0.00	84	Methylene chloride
20	28	9	41	-4	~~178163~~ ~~vb~~		~~3.55~~ FP	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	0	0	0	0	0		0.00	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	77	99	0	9262927	bv	5.24	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	46	48	55	-13	~~6923973~~ ~~bv~~		~~6.49~~ FP	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	37	29	66	-16	~~8796023~~ ~~vv~~		~~7.49~~ FP	43	4-Methyl-2-pentanone
41	100	78	97	1	16621800	vv	7.76	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropen
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	47	24	63	-7	~~13448700~~ ~~vv~~		~~8.75~~ FP	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: YR
Date: 9/7/98

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	75	47	82	2	3680059	vv	10.33	106	Ethylbenzene
53	80	57	84	4	24651810	vv	10.59	106	m-/p-Xylene
54	77	55	85	4	6829438	bv	11.29	106	o-Xylene
55	0	0	0	0	0		0.00	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	0	0	0	0	0		0.00	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	55	48	92	-16	26444870	vv	13.18	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	85	52	95	3	16700410	bv	14.30	105	1,2,4-Trimethylbenzene
68	42	11	59	2	~~1359976~~	~~bv~~	~~14.79~~ FD	105	sec-Butylbenzene
69	62	32	74	3	6252059	bv	15.40	119	p-Cymene
70	0	0	0	0	0		0.00	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	77	43	83	-1	2042602	vv	16.88	91	n-Butylbenzene
74	0	0	0	0	0		0.00	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	0	0	0	0	0		0.00	180	1,2,4-Trichlorobenzene
77	0	0	0	0	0		0.00	225	Hexachlorobutadiene
78	0	0	0	0	0		0.00	128	Naphthalene
79	0	0	0	0	0		0.00	180	1,2,3-Trichlorobenzene

VR917198

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QUAN DB : HW906 LAB-BASE QUAN 09-07-98 09:34

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	40	14	51	0	2564508	bv	5.04	168	Pentafluorobenzene
2	57	34	57	2	2745284	bv	5.78	114	1,4-Difluorobenzene
3	37	22	38	1	1483892	bv	9.98	117	Chlorobenzene-d5
4	0	0	0	0	1082912	A	15.14	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	0		0.00	113	Dibromofluoromethane
6	46	29	45	-1	4212693	bv	7.66	98	Toluene-d8
7	0	0	0	0	0		0.00	95	4-Bromofluorobenzene
8	63	40	73	7	~~3183327~~	~~lv~~	~~1.18~~ FP	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	70	54	60	1	~~55776~~	~~A~~	~~3.38~~ FP	73	MTBE
11	100	96	99	-1	15633420	vv	3.65	57	n-Hexane
12	64	46	62	-4	~~4335936~~	~~bb~~	~~4.21~~ FP	42	1,2-Epoxybutane
13	51	61	65	-23	~~6748348~~	~~vb~~ ~~4178608 m~~ FP	~~5.16~~ 5.47	57	Iso-Octane
14	43	28	68	-12	2~~4289280~~	~~bb~~	~~6.23~~ F	55	Ethyl acrylate

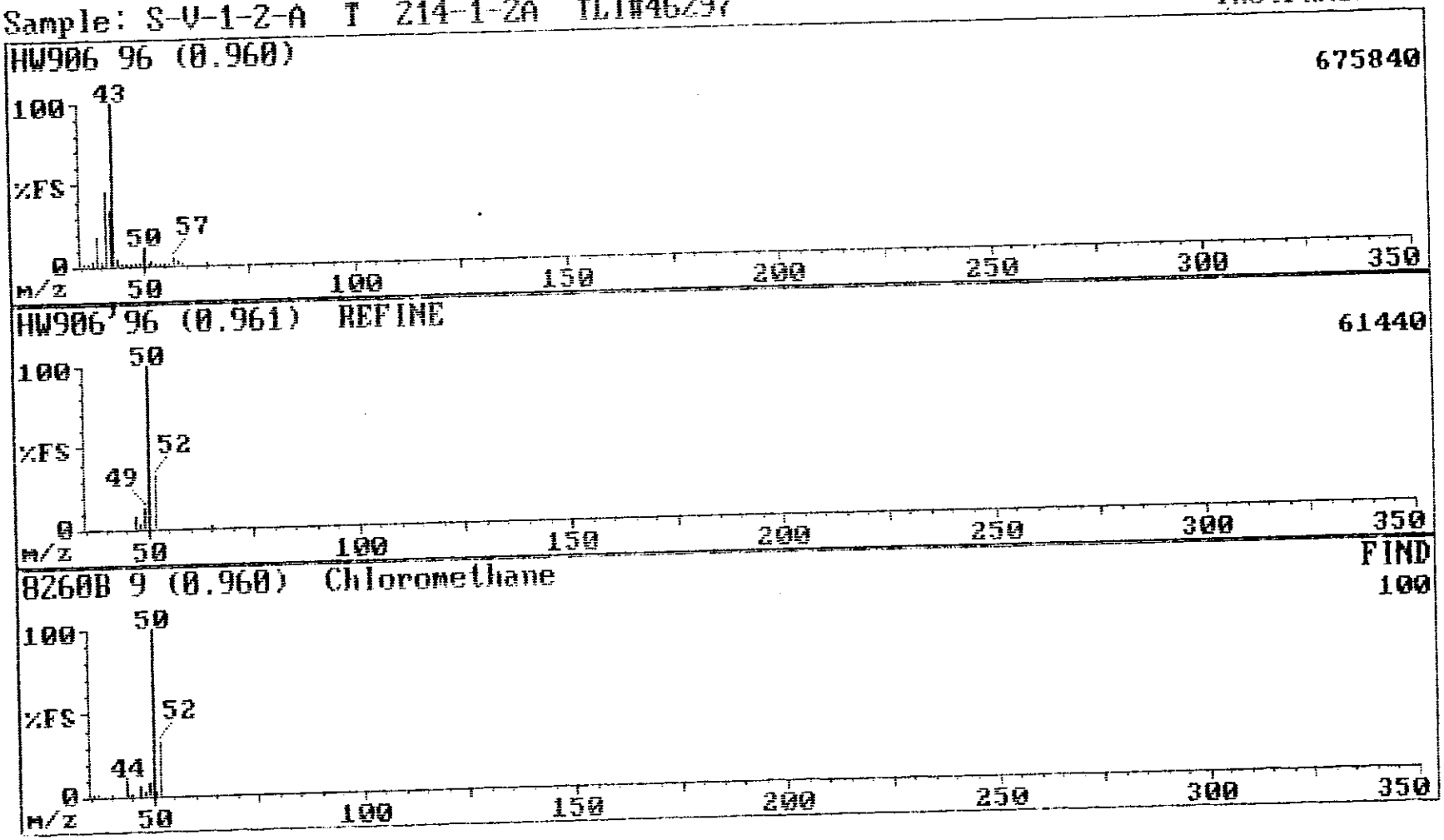
SGH 9/8/98

68

Data Review: YR
Date: 9/7/98

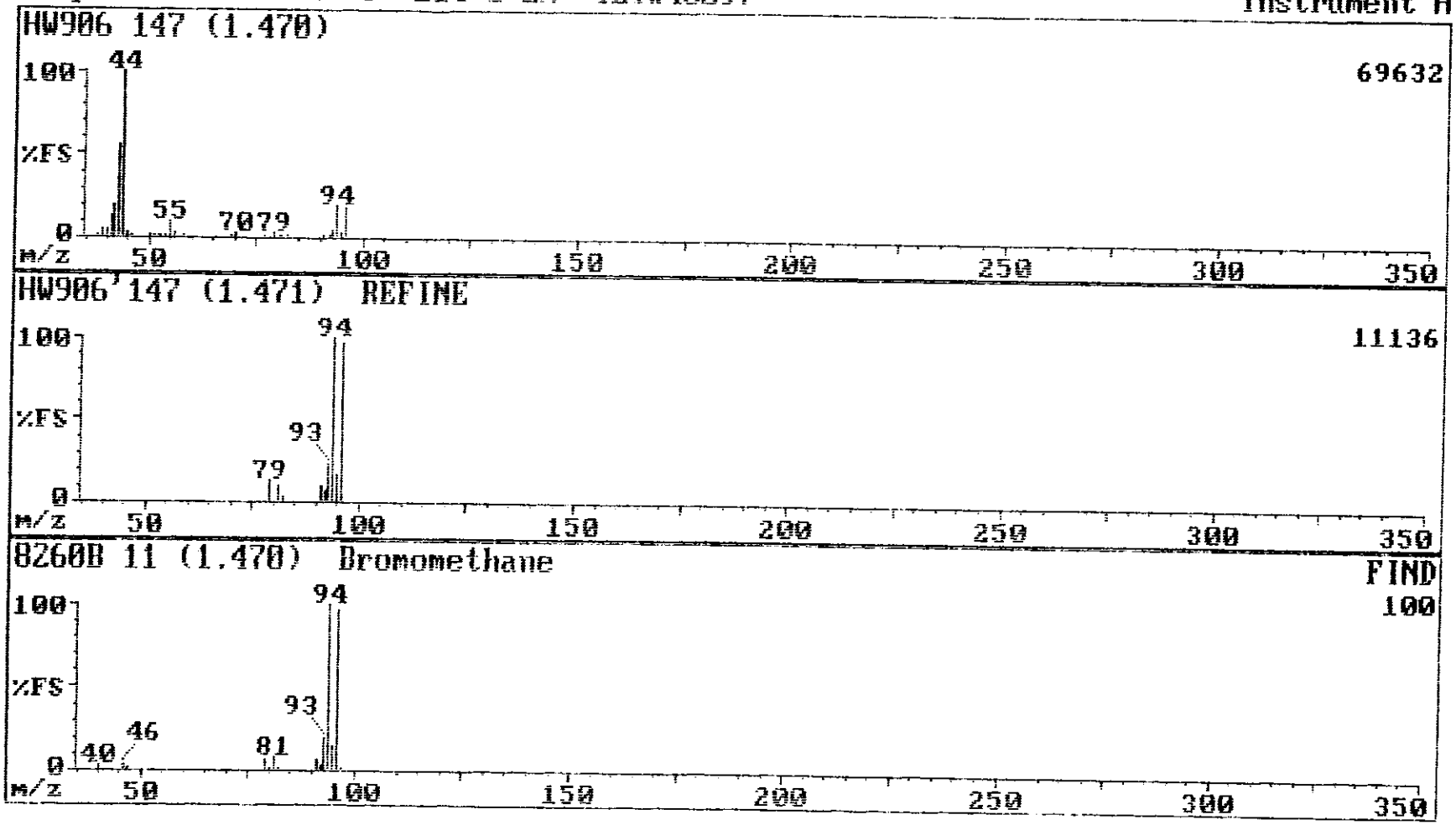
09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-A T 214-1-2A TLI#46297 Instrument H



09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-A T 214-1-2A TLI#46297 Instrument H



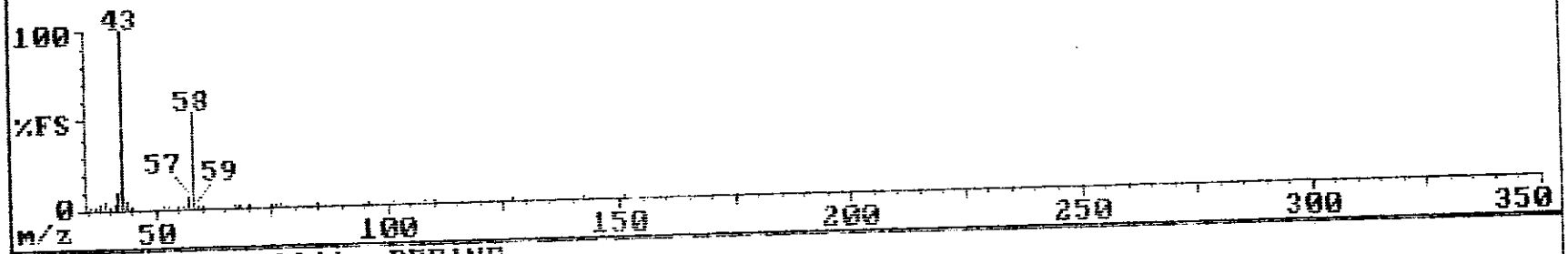
70

09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

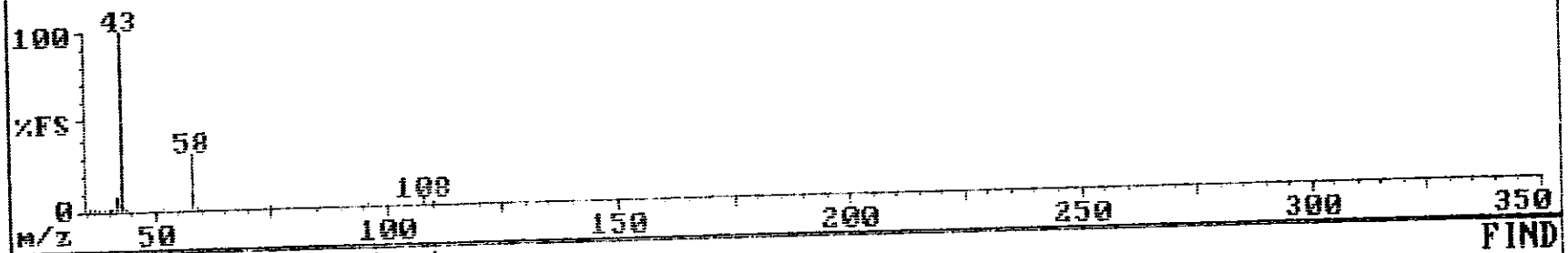
Instrument H

Sample: S-V-1-2-A T 214-1-2A TLI#46297

HW906 266 (2.660) 146432

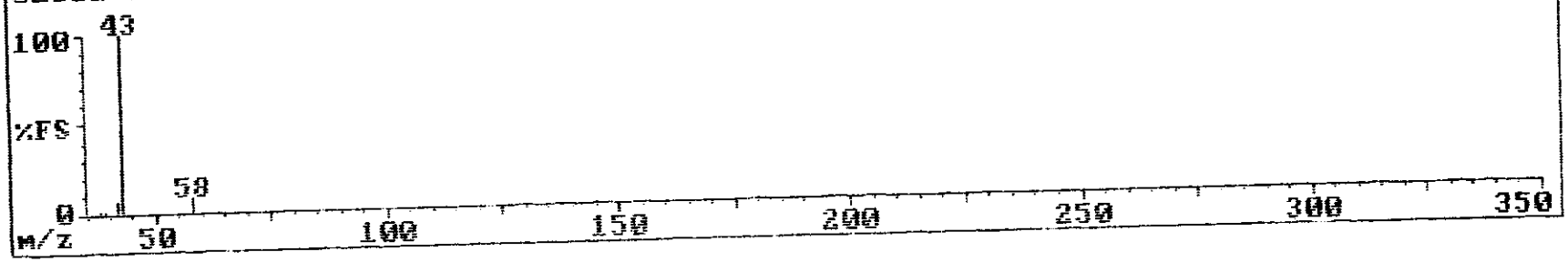


HW906 266 (2.661) REFINE 99328



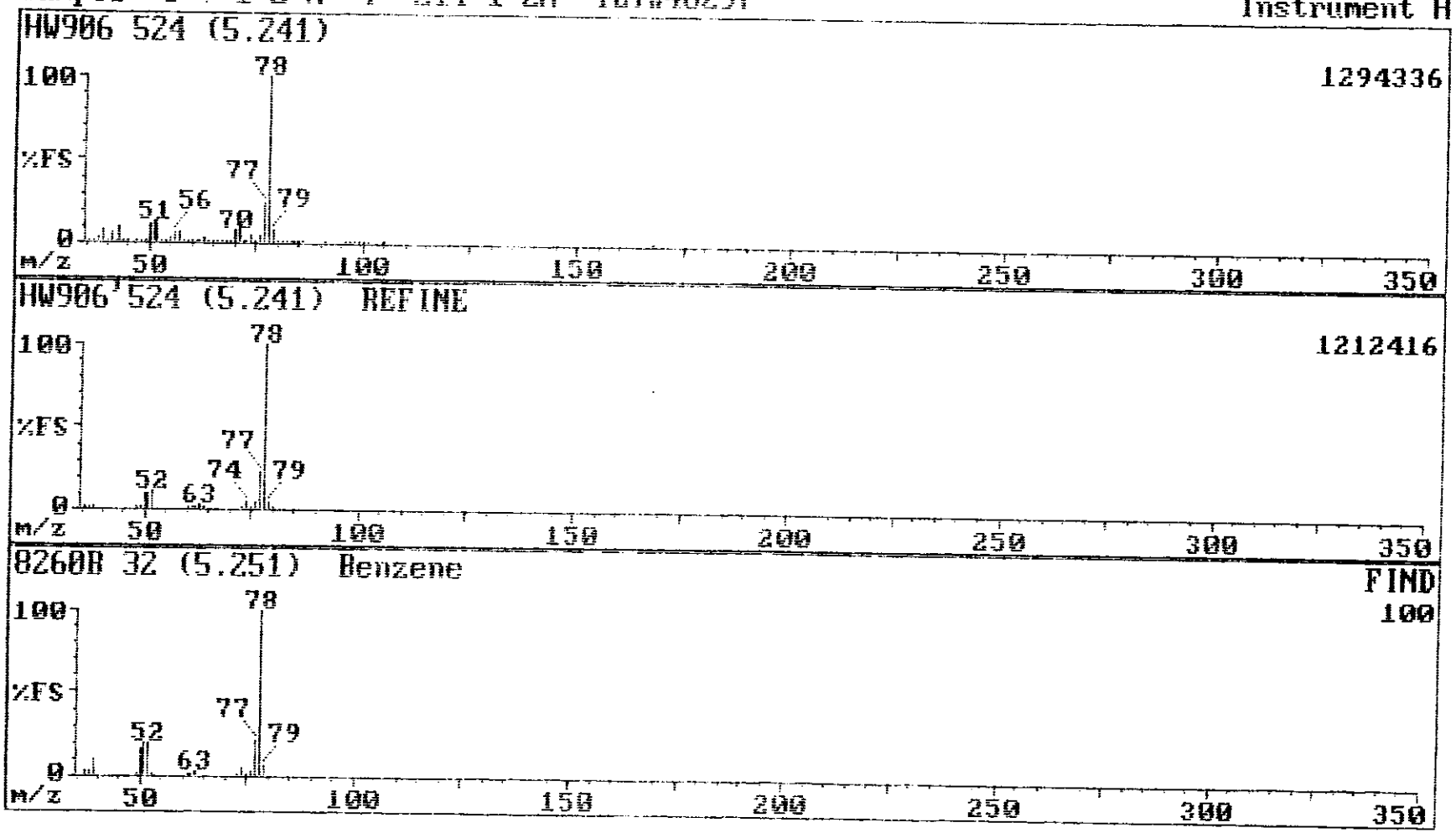
FIND

8260B 17 (2.650) Acetone 100



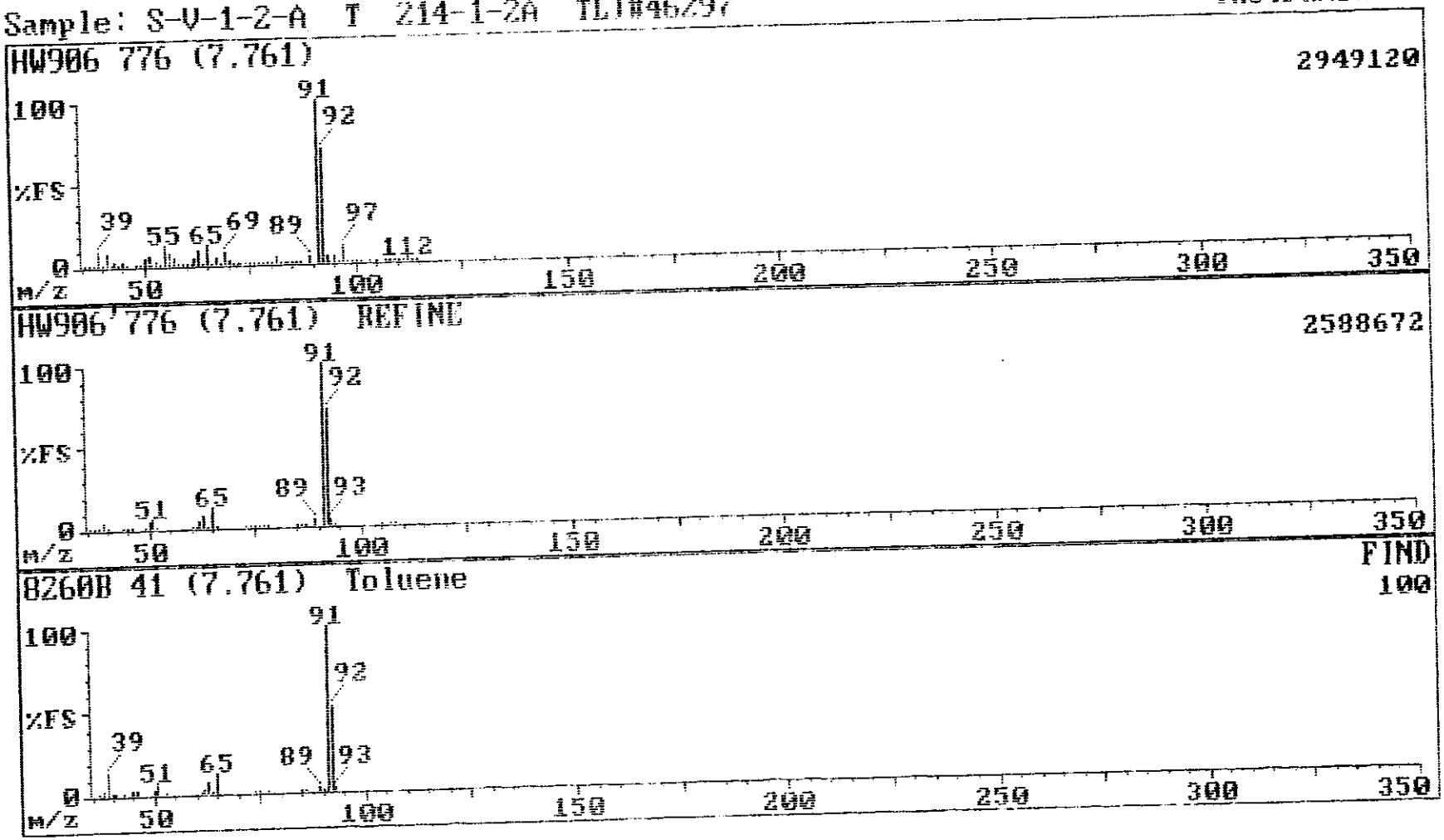
09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-A T Z14-1-2A TLI#46297 Instrument H



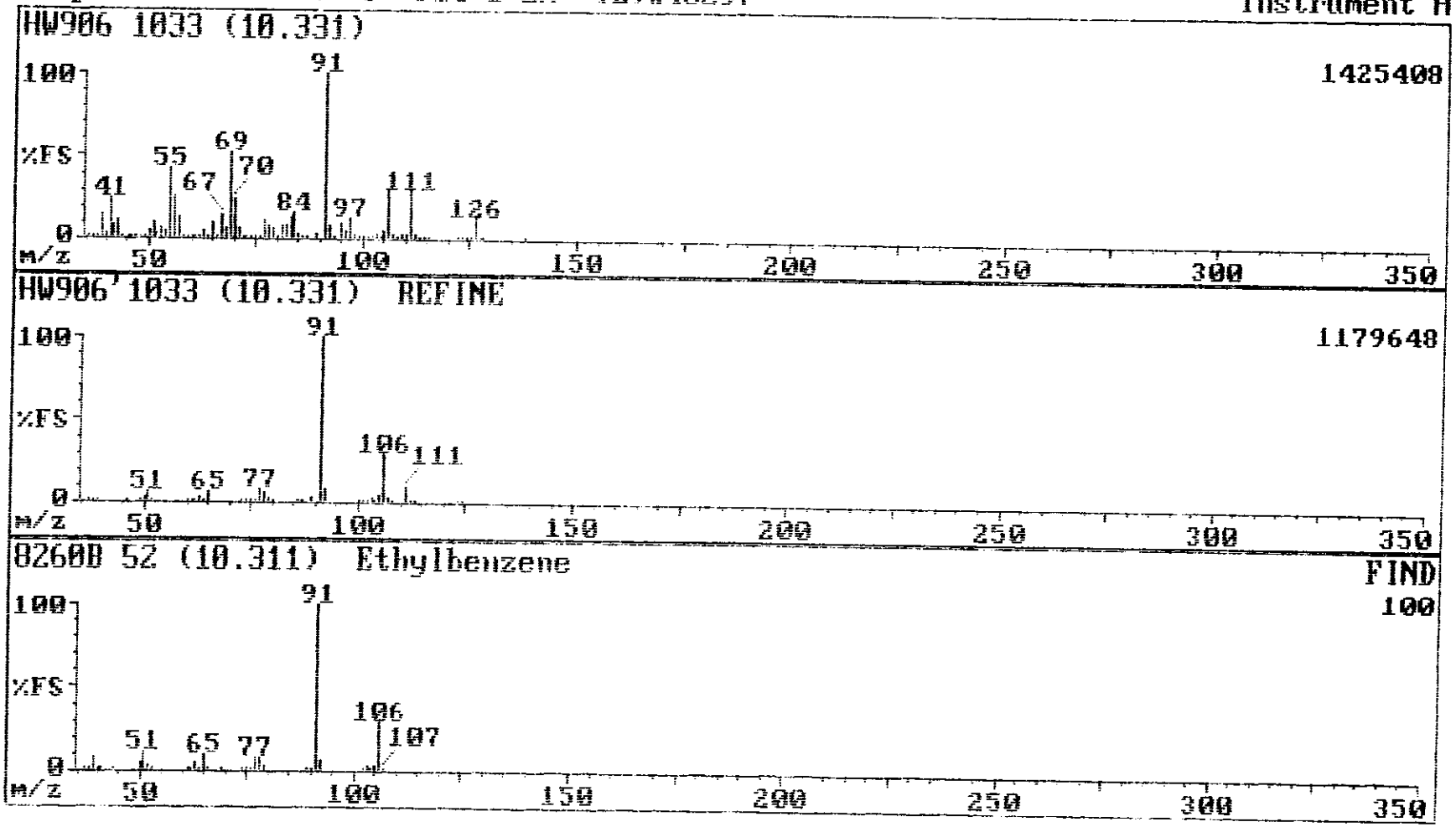
09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-A T 214-1-2A TLI#46297 Instrument H



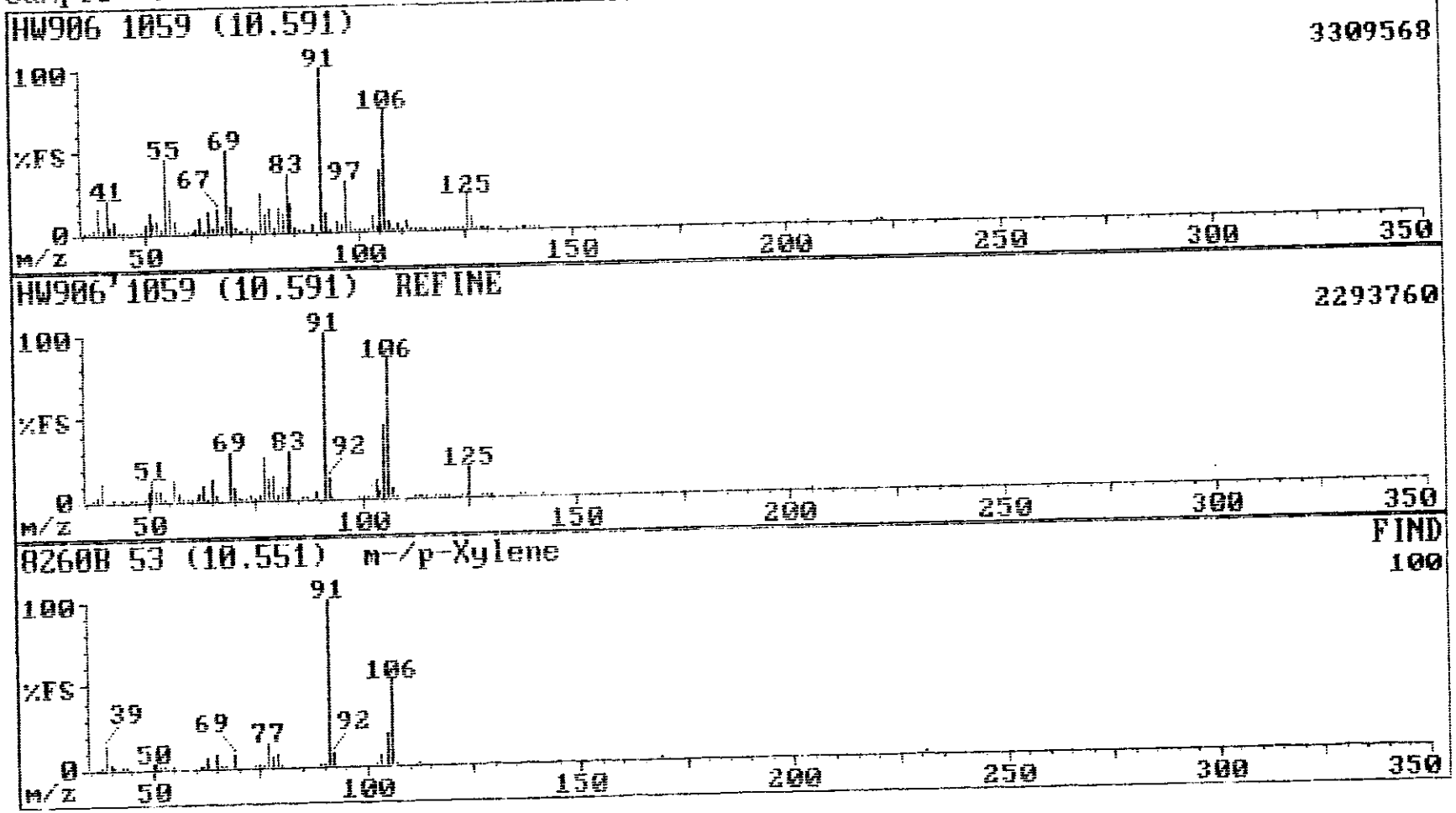
09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-A T 214-1-2A TLI#46297 Instrument H



09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

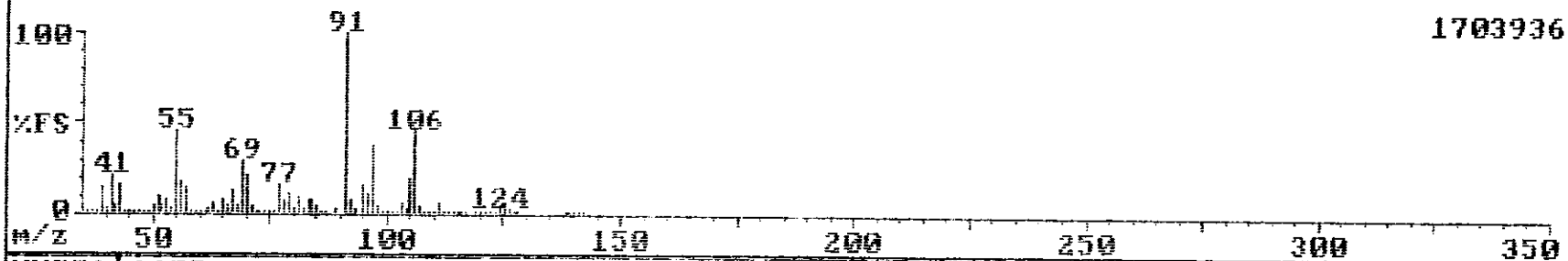
Sample: S-V-1-2-A T Z14-1-2A TLI#46297 Instrument H



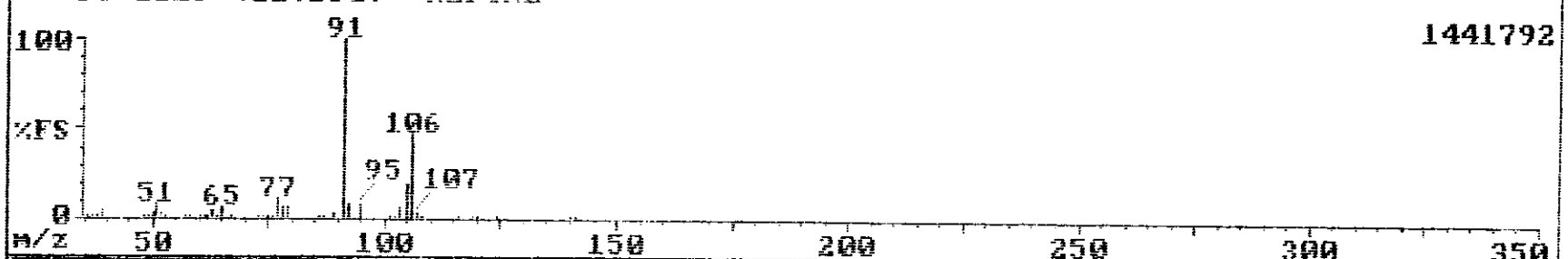
09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-A T 214-1-2A TLI#46297 Instrument H

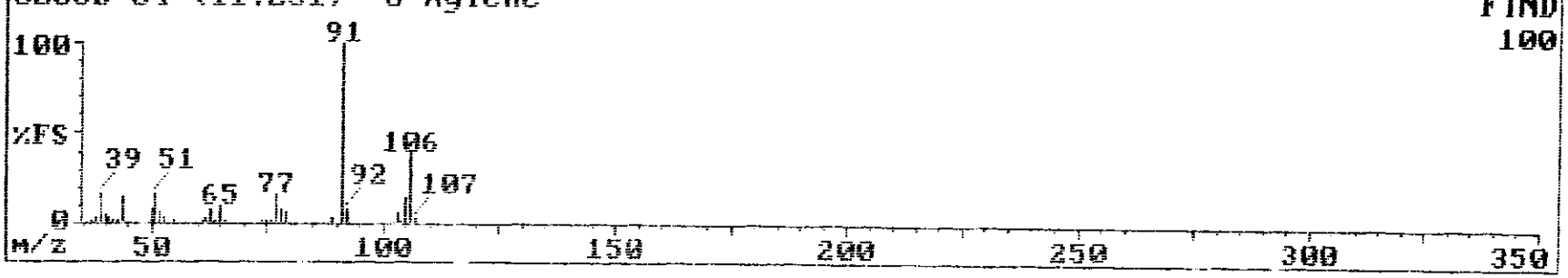
HW906 1129 (11.291)



HW906 1129 (11.291) REFINE



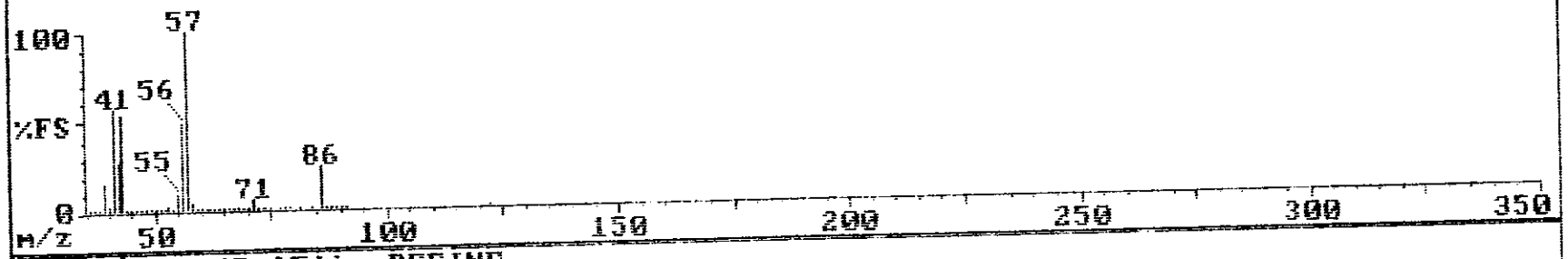
8260B 54 (11.251) o-Xylene



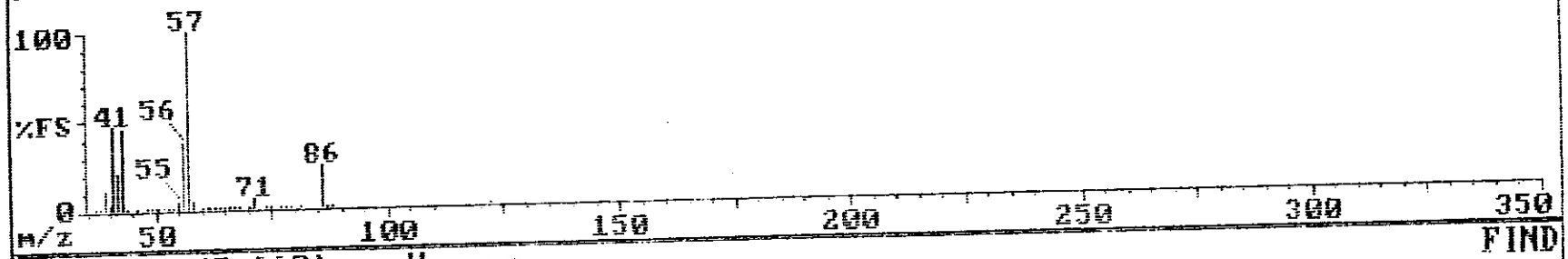
09-04-98 21:26 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-A T Z14-1-2A TL1#46297 Instrument H

HW906 365 (3.650) 1966080

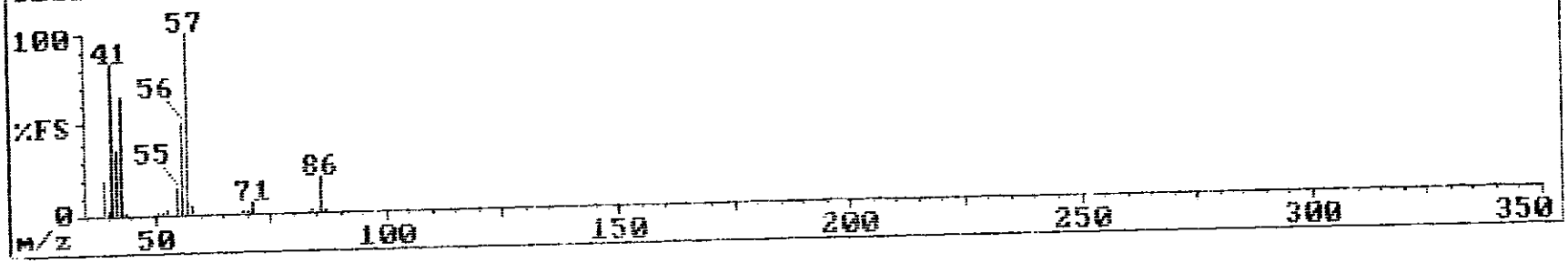


HW906 365 (3.651) REFINE 1785856



FIND

826BX 11 (3.660) n-Hexane 100



Pacific Environmental Services

Project Number: 46297
Sample File: HW901

Method 8260 VOST
Sample ID: S-V-1-2-B

Client Project: Hotmix
TLI ID: 214-1-2B

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
Chloromethane	0.299	B	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.091	B	1.48		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.007	BJ	2.67		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride	0.004	BJ	3.05		0.05
Acrylonitrile		U		0.005	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone		U		0.001	0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.77		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.043	BJ	5.24		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Printed: 13:53 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW901

Method 8260 VOST
Sample ID: S-V-1-2-B

Client Project: Hotmix
TLI ID: 214-1-2B

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.002	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.005	BJ	7.74		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.94		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene		U		0.001	0.05
m-/p-Xylene	0.001	BJ	10.54		0.10
o-Xylene		U		0.001	0.05
Styrene	0.002	BJ	11.29		0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.04		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Printed: 13:53 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW901

Method 8260 VOST
Sample ID: S-V-1-2-B

Client Project: Hotmix
TLI ID: 214-1-2B

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.286	4.91	1	114
Toluene-d_8	0.285	7.64	2	114
4-Bromofluorobenzene	0.331	12.22	2	132

Reviewed by YR Date 9/7/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
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Phone: (919) 544-5729 • Fax: (919) 544-5491

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Printed: 13:53 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW901

Method 8260 VOST
Sample ID: S-V-1-2-B

Client Project: Hotmix
TLI ID: 214-1-2B

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	0.001	BJ	3.65		0.25
1,2-Epoxybutane		U		0.039	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.77		
Ethyl acrylate		U		0.001	0.25

Reviewed by _____ Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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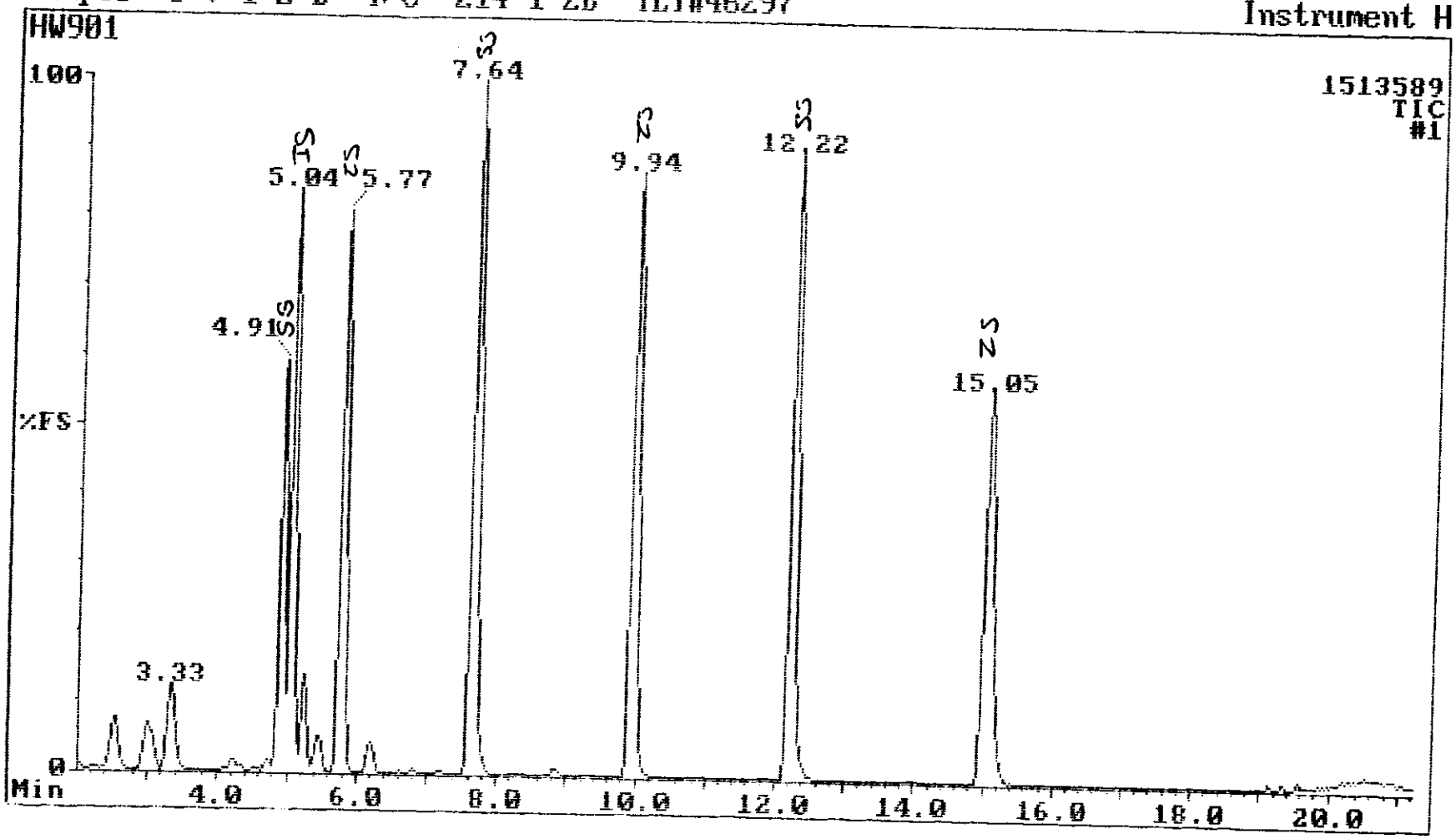
Printed: 14:51 09/08/1998

09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C 214-1-2B TLI#46297

Instrument H



Data Review: YR
Date: 9/24/98

QUAN DB : HW901 LAB-BASE QUAN 09-04-98 19:06

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	81	99	-2	3214290	bv	5.04	168	Pentafluorobenzene
2	100	96	98	0	3692276	bv	5.77	114	1,4-Difluorobenzene
3	100	95	95	-1	3588320	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	-1	1892685	bv	15.04	152	1,4-Dichlorobenzene-d4
5	100	88	99	1	1626872	bv	4.91	113	Dibromofluoromethane
6	100	92	97	0	4475694	bv	7.64	98	Toluene-d8
7	100	89	93	0	2479848	bv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	100	89	100	0	985143	bv	0.96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	100	76	99	2	387988	bv	1.48	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	0	0	0	0	0		0.00	76	Carbon disulfide
17	63	20	88	3	12552	vv	2.67	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	17136 ~~0~~ m		~~0.00~~ 3.05	84	Methylene chloride
20	35	9	53	-3	~~2556 A~~		~~3.34~~ FP	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	22	19	33	-14	~~62286 A~~		~~4.21~~ FP	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	98	99	1	728896	bv	5.24	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	51	41	41	1	~~12028 A~~		~~6.62~~ FP	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	43	3	69	2	~~22920 bv~~		~~7.65~~ FP	43	4-Methyl-2-pentanone
41	91	60	89	1	58456	bv	7.74	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloroproper
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	0	0	0	0	0		0.00	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: YR
Date: 9/7/98

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethar
52	0	0	0	0	0		0.00	106	Ethylbenzene
53	0	0	0	0	3199 ~~a~~m		~~0.00~~ 10.54	106	m-/p-Xylene
54	0	0	0	0	0		0.00	106	o-Xylene
55	92	79	79	3	21660	bv	11.29	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	47	44	44	6	~~768~~	~~bb~~	~~12.03~~ FP	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethar
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	0	0	0	0	0		0.00	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	60	52	52	4	~~11694~~	~~A~~	~~14.24~~ FP	105	1,2,4-Trimethylbenzene
68	54	35	54	-1	~~7584~~	~~A~~	~~14.62~~ FP	105	sec-Butylbenzene
69	0	0	0	0	0		0.00	119	p-Cymene
70	63	42	64	2	8732	A	14.82	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00 ✓	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	0	0	0	0	0		0.00	91	n-Butylbenzene
74	0	0	0	0	0		0.00	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	60	50	69	8	16496	bv	19.13	180	1,2,4-Trichlorobenzene
77	51	24	73	7	5896	bb	19.33	225	Hexachlorobutadiene
78	50	36	65	10	23396	bv	19.35	128	Naphthalene
79	61	47	73	8	14240	bv	19.54	180	1,2,3-Trichlorobenzene

VR917H9

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QUAN DB : HW901 LAB-BASE QUAN 09-04-98 19:11

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	81	99	0	3214290	bv	5.04	168	Pentafluorobenzene
2	100	96	98	1	3692276	bv	5.77	114	1,4-Difluorobenzene
3	100	95	95	-2	3588320	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	2	1892685	bv	15.04	152	1,4-Dichlorobenzene-d4
5	100	88	99	1	1626872	bv	4.91	113	Dibromofluoromethane
6	100	92	97	-1	4475694	bv	7.64	98	Toluene-d8
7	100	89	93	-1	2479848	bv	12.22	95	4-Bromofluorobenzene
8	62	37	71	5	~~1265738~~	~~A~~	~~1.05~~ FP	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	44	36	41	-5	~~23564~~	~~bv~~	~~3.35~~ FP	73	MTBE
11	62	47	56	-1	6016	A	3.65	57	n-Hexane
12	76	56	67	-1	~~16509~~	~~A~~	~~4.22~~ FP	42	1,2-Epoxybutane
13	56	43	52	4	~~31888~~	~~bb~~	~~5.43~~ FP ‡	57	Iso-Octane
14	43	32	66	-14	~~108748~~	~~bv~~	~~6.20~~ FP	55	Ethyl acrylate

M9/7/98

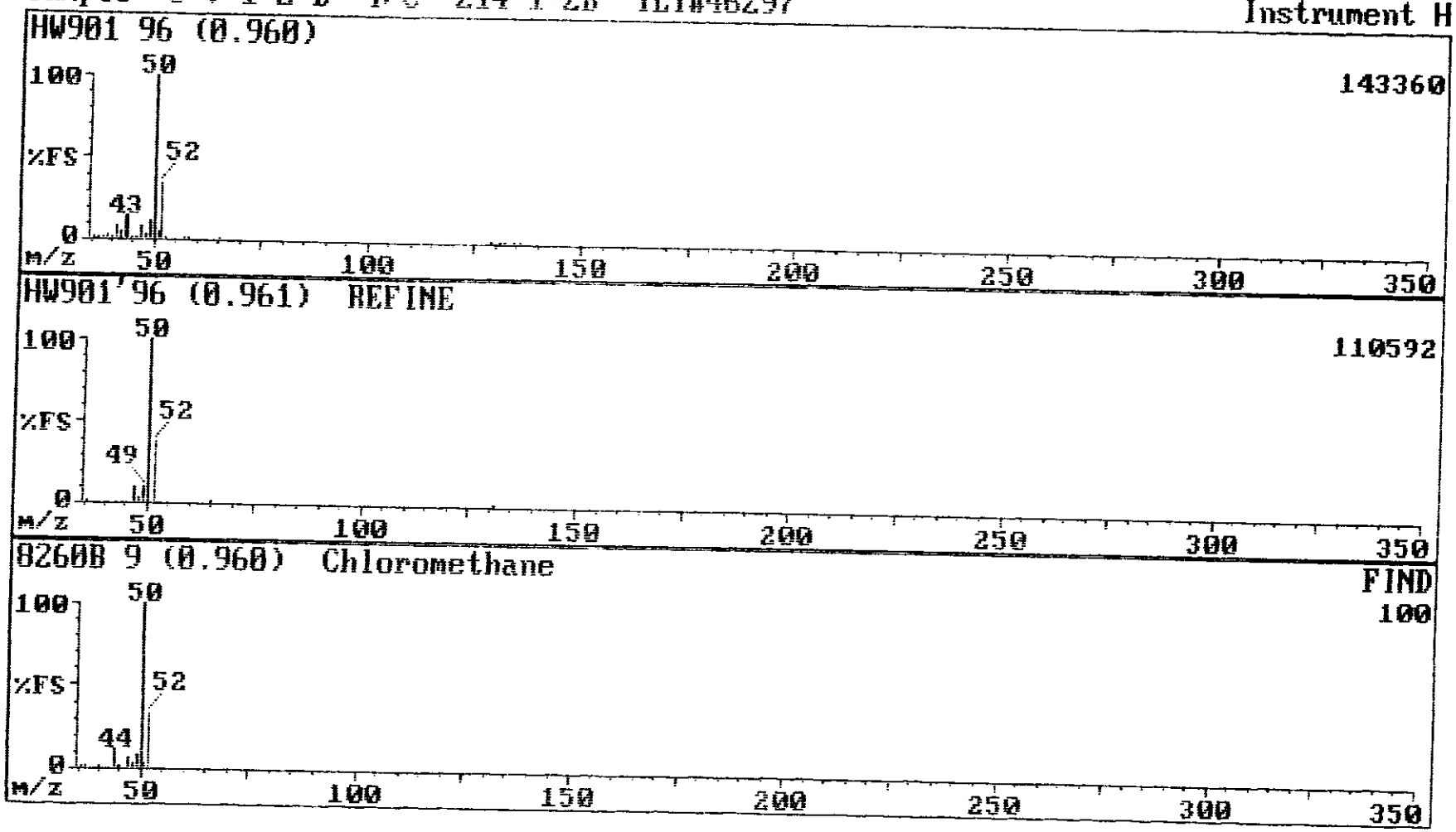
‡ Isooctane is FP
scott 9/8/98

Data Review: M
Date: 9/8/98
(28) M 9/7/98

85

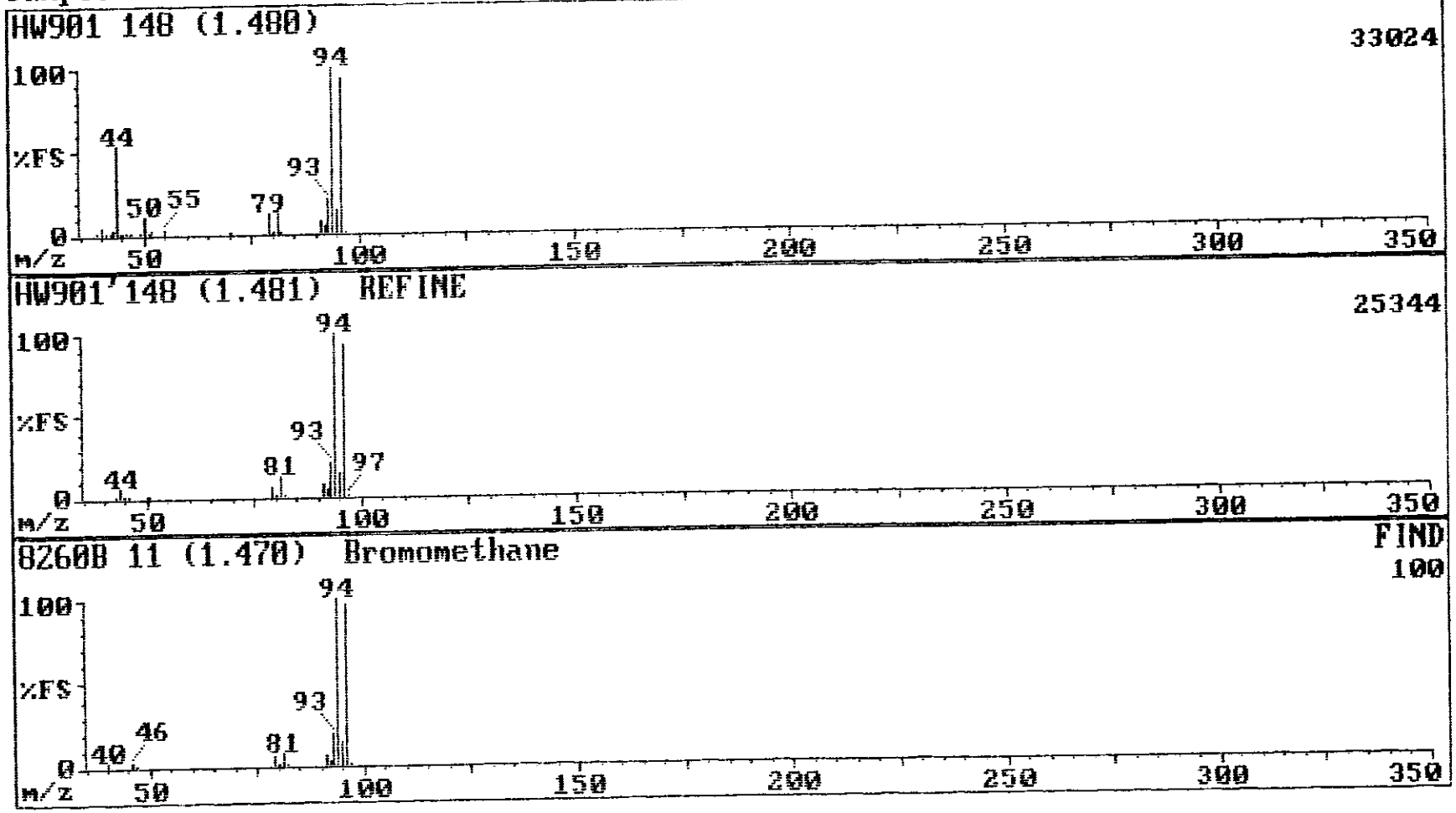
09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C Z14-1-2B TLI#46297 Instrument H



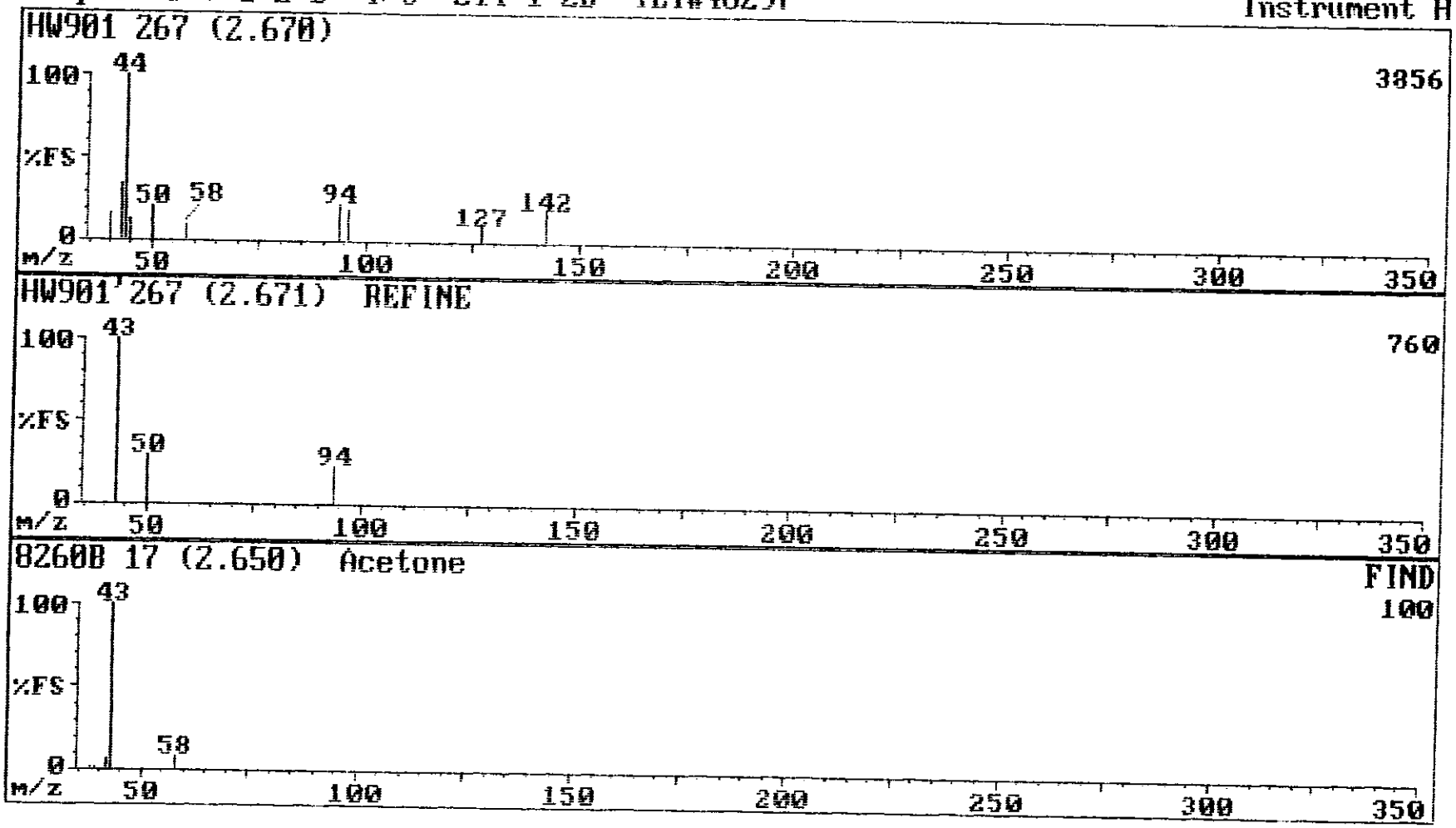
09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C Z14-1-2B TLI#46297 Instrument H



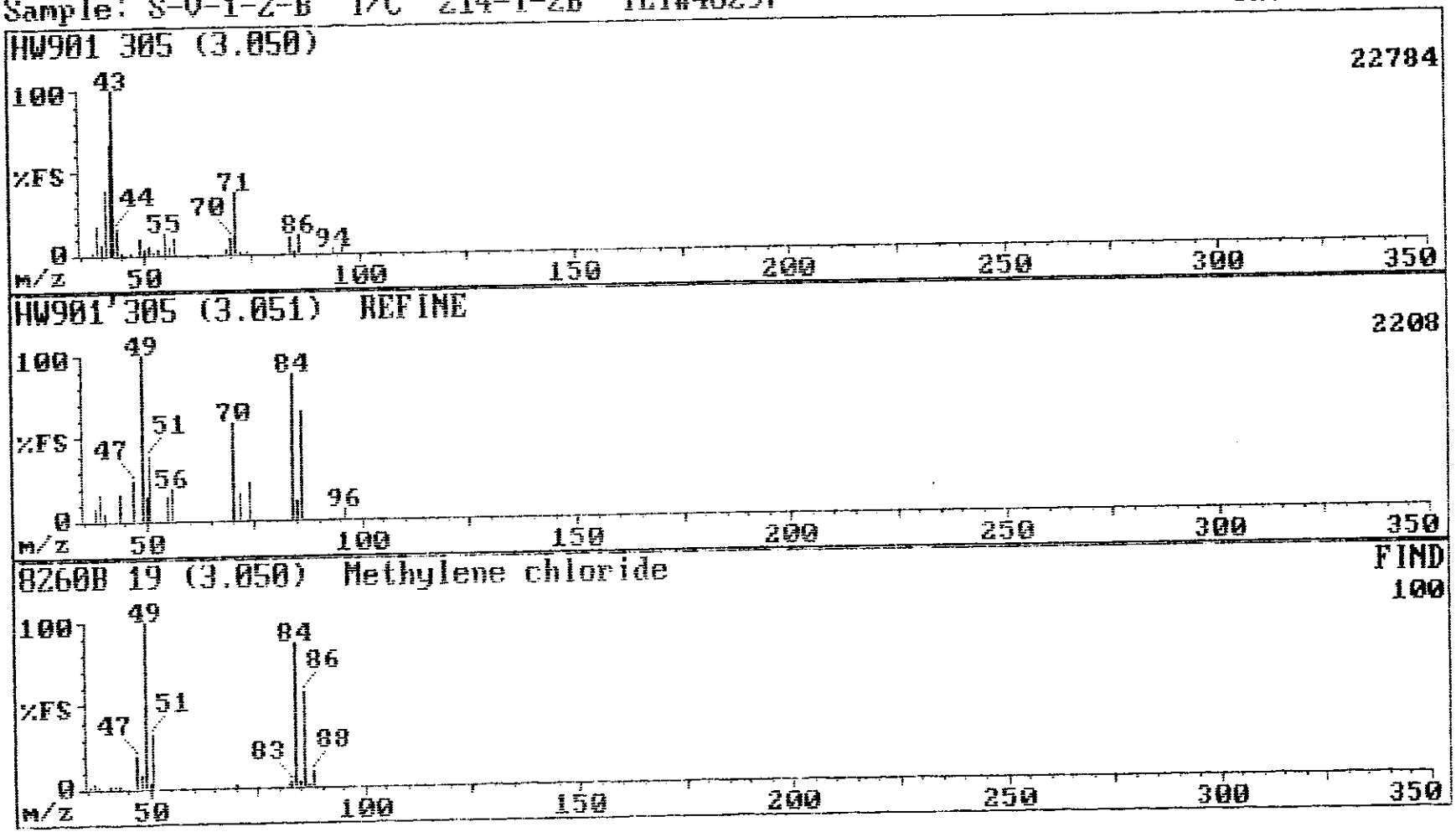
09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C 214-1-2B TLI#46297 Instrument H



09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C 214-1-2B TLI#46297 Instrument H



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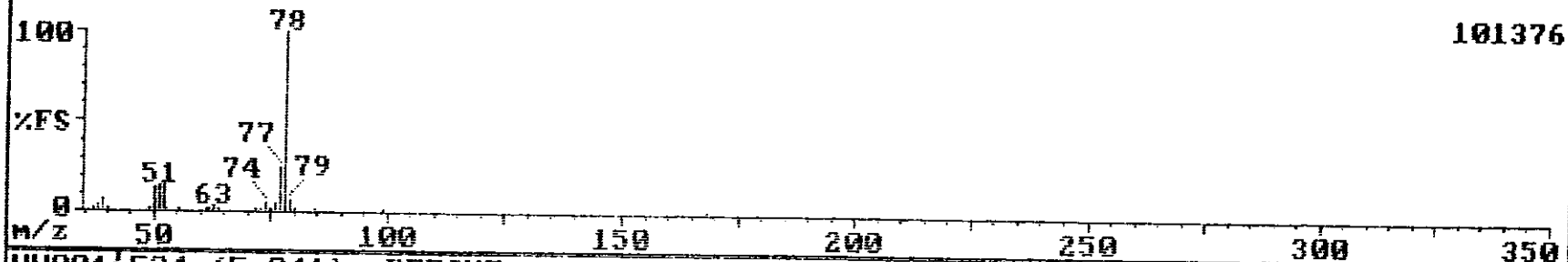
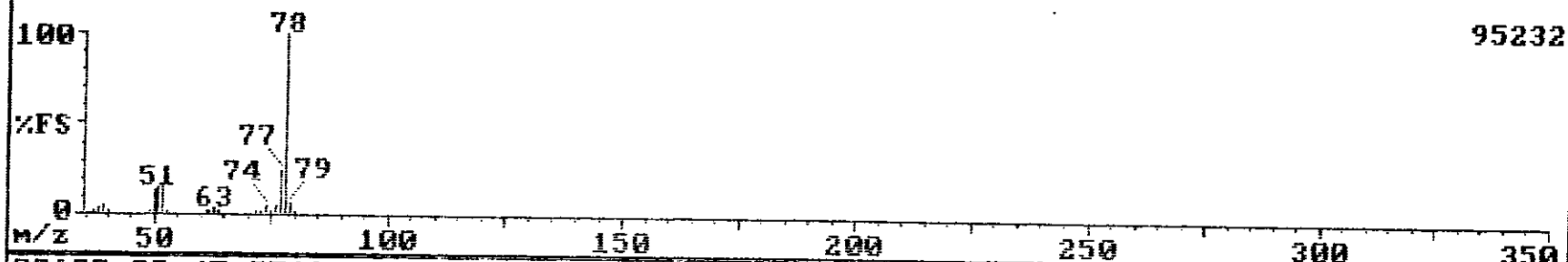
Sample: S-V-1-2-B T/C 214-1-2B TLI#46297 Instrument H

HW901 524 (5.241)

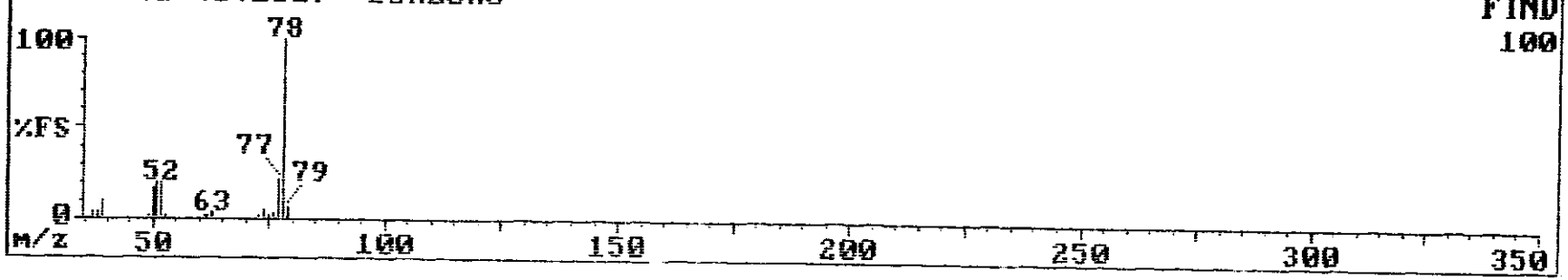


HW901'524 (5.241) REFINE



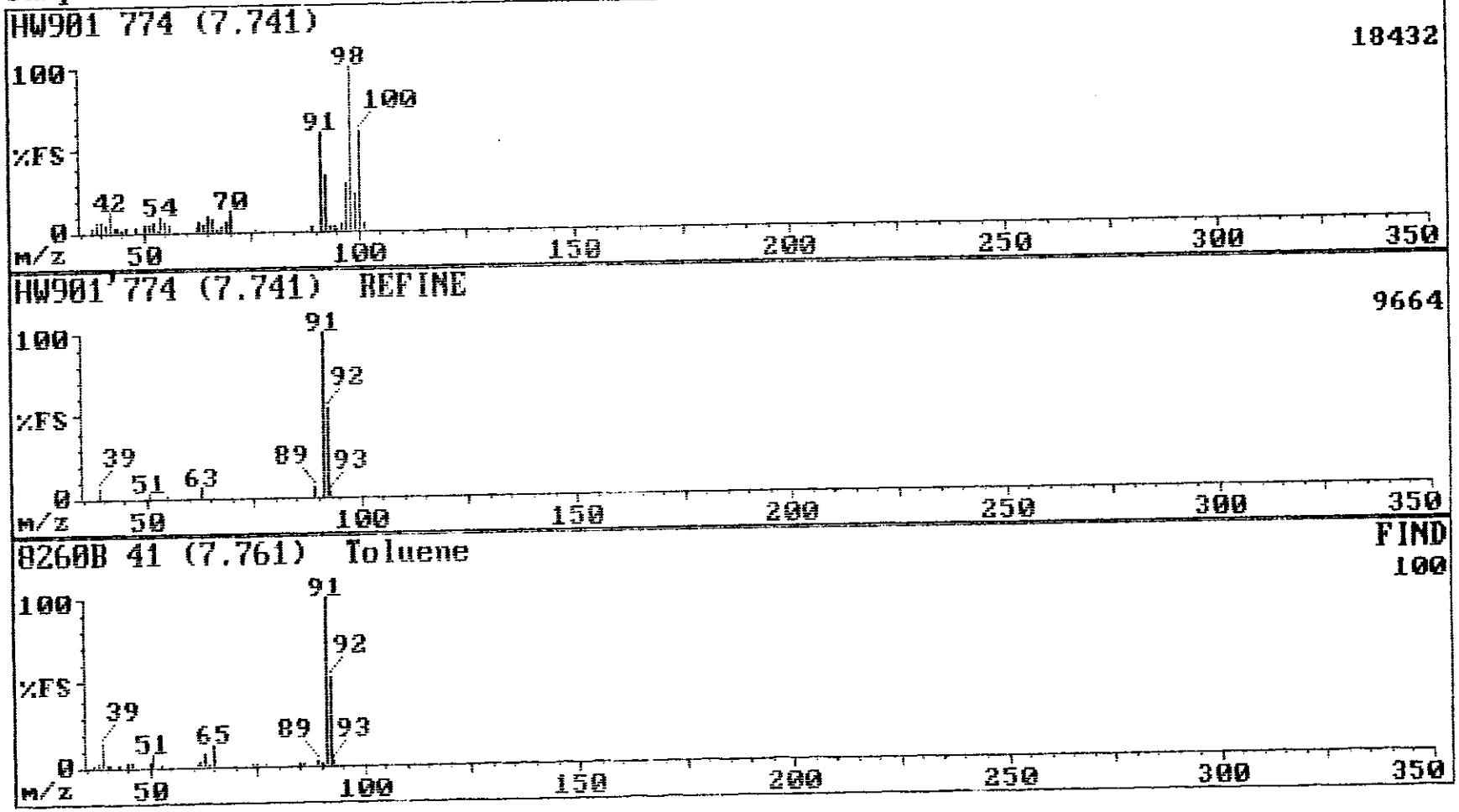
8260B 32 (5.251) Benzene

FIND 100



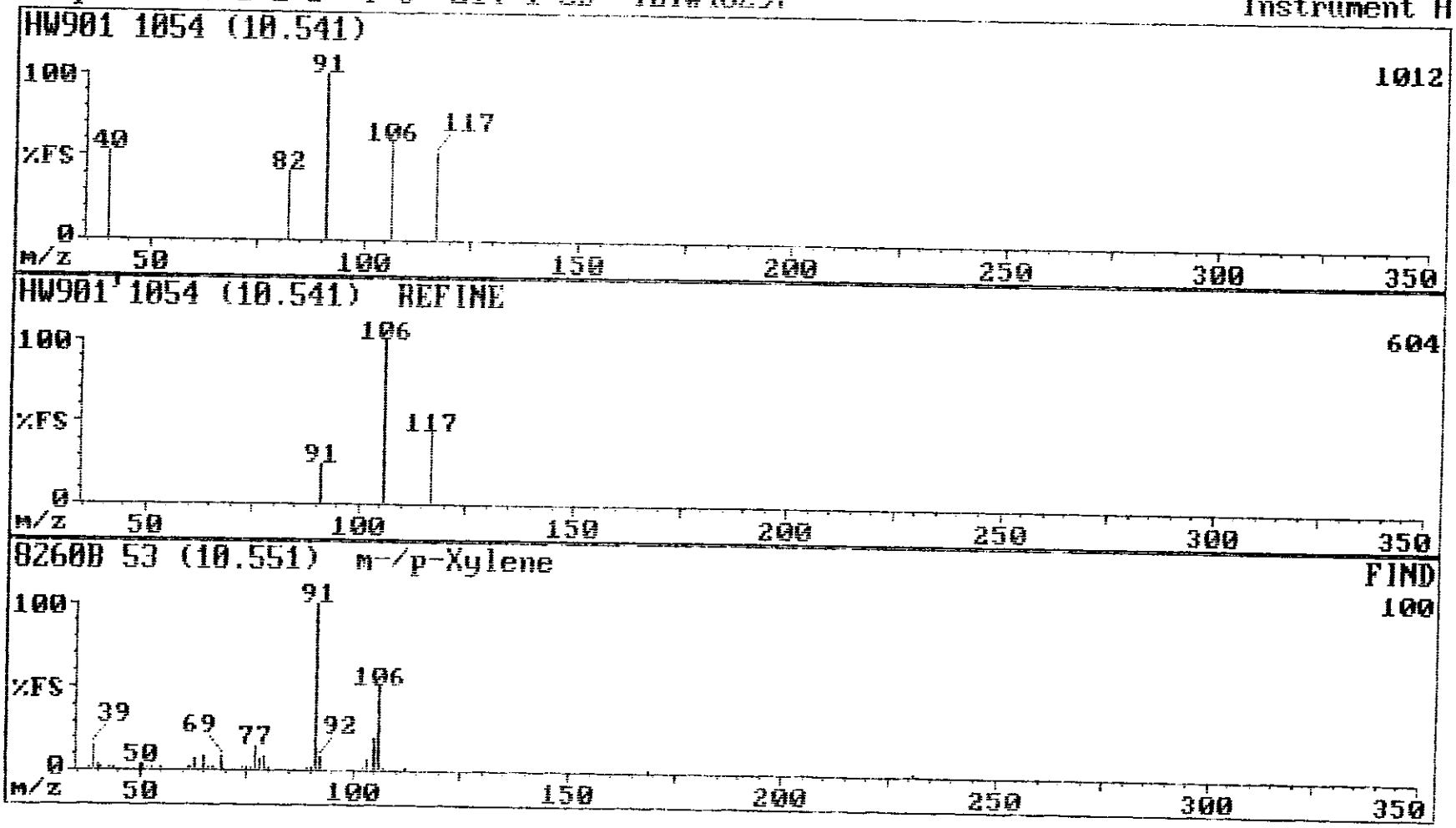
09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C 214-1-2B TLI#46297 Instrument H



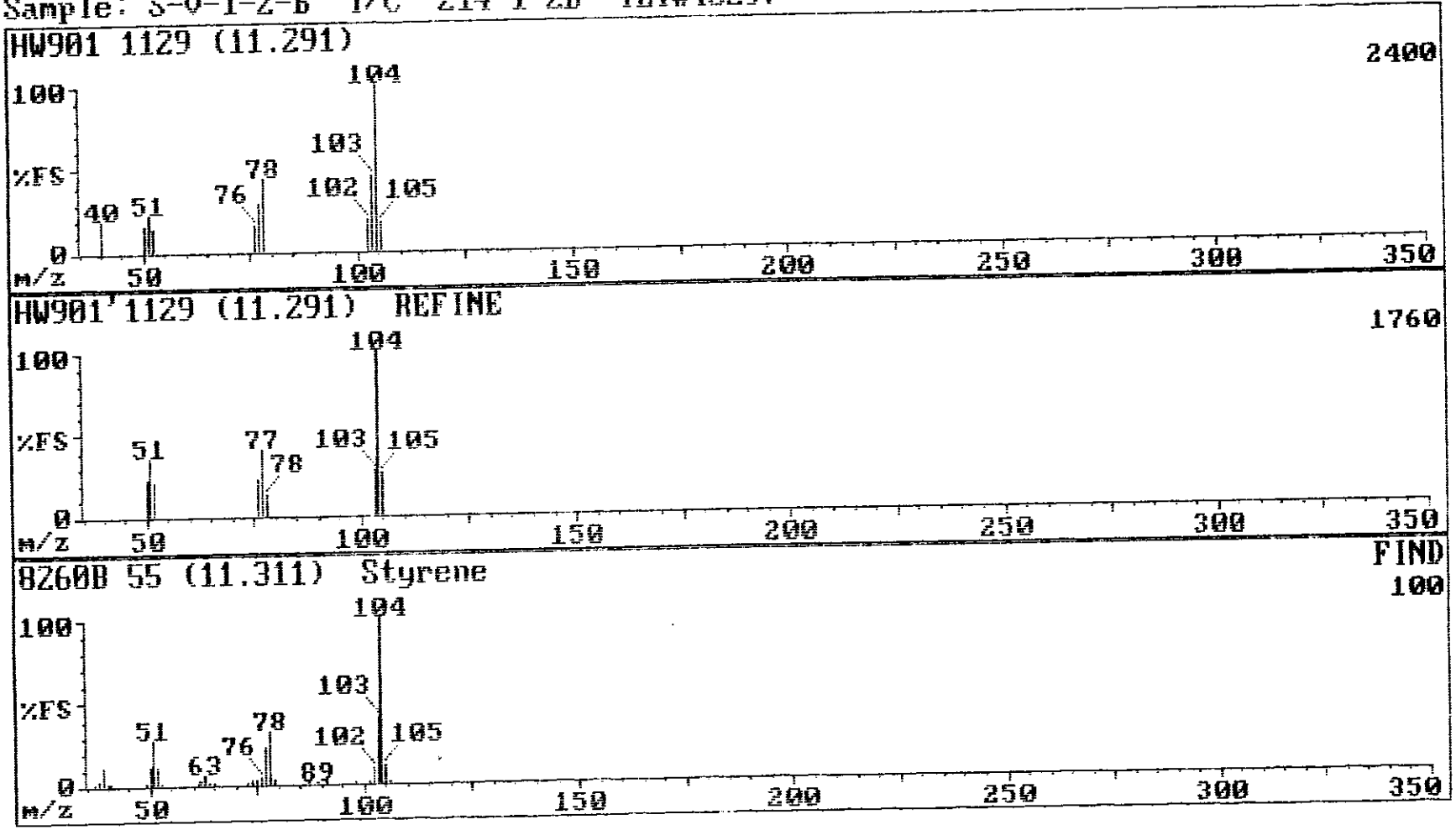
09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C 214-1-2B TLI#46297 Instrument H



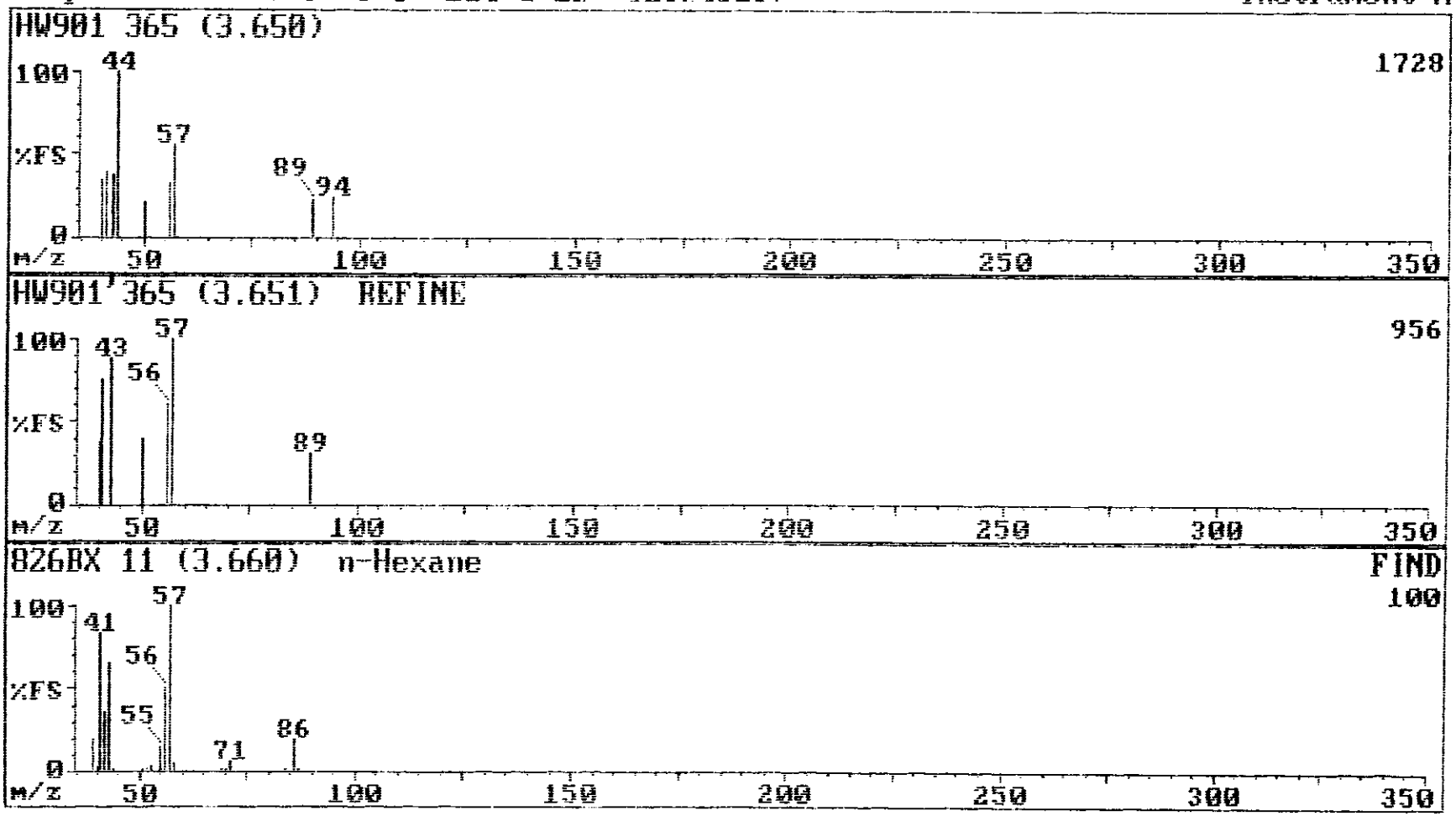
09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C 214-1-2B TLI#46297 Instrument H



09-04-98 18:28 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-2-B T/C Z14-1-2B TLI#46297 Instrument H



Pacific Environmental Services

Project Number: 46297
Sample File: HW907

Method 8260 VOST
Sample ID: S-V-1-4-A

Client Project: Hotmix
TLI ID: 214-1-4A

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.05		
Chloromethane	0.098	B	0.97		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.022	BJ	1.48		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.349	B	2.65		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride		U		0.001	0.05
Acrylonitrile		U		0.005	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone		U		0.001	0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.78		
Carbon tetrachloride		U		0.001	0.05
Benzene	1.043	BE	5.25		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

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Pacific Environmental Services

Project Number: 46297
Sample File: HW907

Method 8260 VOST
Sample ID: S-V-1-4-A

Client Project: Hotmix
TLI ID: 214-1-4A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.002	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	1.376	BE	7.76		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.97		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.808	B	10.32		0.05
m-/p-Xylene	4.068	BE	10.57		0.10
o-Xylene	1.203	BE	11.27		0.05
Styrene		U		0.001	0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.12		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Printed: 13:41 09/07/1998

Pacific Environmental Services

Project Number: 46297
S mple File: HW907

Method 8260 VOST
Sample ID: S-V-1-4-A

Client Project: Hotmix
TLI ID: 214-1-4A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.319	4.92	1	128
Toluene-d_8	0.333	7.66	2	133
4-Bromofluorobenzene	0.299	12.26	2	120

Reviewed by YR Date 9/7/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Savar v3.7
Printed: 13:41 09/07/1998

Pacific Environmental Services

Project Number: 46297
Sample File: HW907

Method 8260 VOST
Sample ID: S-V-1-4-A

Client Project: Hotmix
TLI ID: 214-1-4A

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.05		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	2.661	BE	3.67		0.25
1,2-Epoxybutane		U		0.036	0.25
Iso-Octane	0.085	J	5.47		0.25
1,4-Difluorobenzene		IS 2	5.78		
Ethyl acrylate		U		0.001	0.25

Reviewed by _____ Date 9 / 8 / 98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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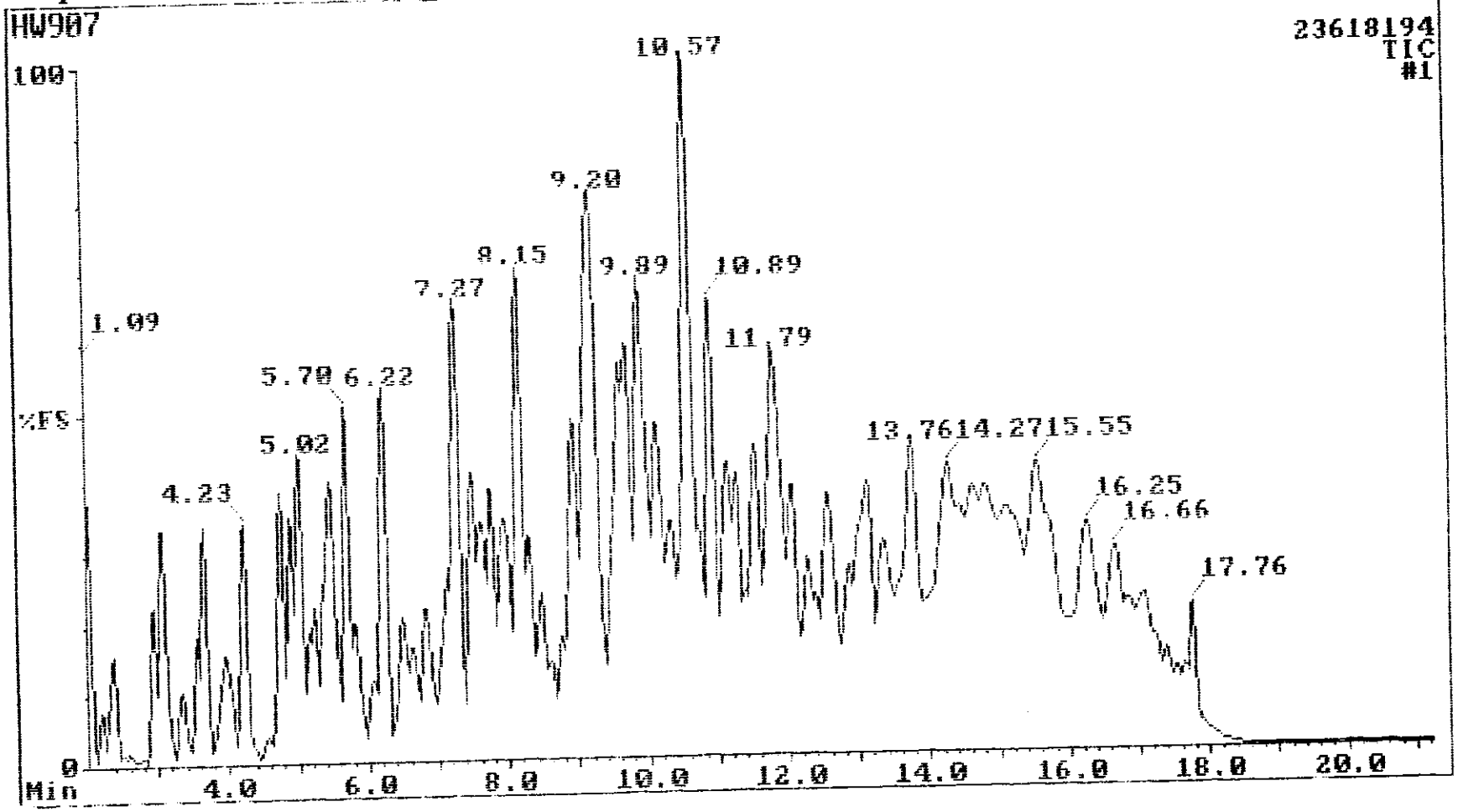
Savar v3.7
Printed: 14:51 09/08/1998

09-04 98 22:01 Triangle Laboratories, Inc. (919) 544-5729

Sample: S V-1-4-A T 214-1-4A TLI#46297 Instrument H



Data Review: YL
Date: 9/17/98

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	54	21	66	-1	3509064	bv	5.05	168	Pentafluorobenzene
2	68	44	65	0	3400036	bv	5.78	114	1,4-Difluorobenzene
3	45	27	45	1	2213572	bv	9.97	117	Chlorobenzene-d5
4	0	0	0	0	1462560	A	15.12	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	1986252	A	4.92	113	Dibromofluoromethane
6	56	36	54	0	4826672	bv	7.66	98	Toluene-d8
7	43	25	47	2	2062421	vv	12.26	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	0	0	0	0	350681 ~~A~~ m		~~0.00~~ 097	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	78	33	95	1	103776	bv	1.48	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	0	0	0	0	0		0.00	76	Carbon disulfide
17	97	75	88	1	725179	vb	2.65	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	0		0.00	84	Methylene chloride
20	28	9	40	-3	~~177473~~ ~~vb~~		~~3.34~~ FP	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	0	0	0	0	0		0.00	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	90	98	1	16427150	vv	5.25	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	47	48	56	-12	~~4766819~~ ~~bv~~		~~6.50~~ FP	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	34	30	68	-18	~~6837175~~ ~~vv~~		~~7.47~~ FP	43	4-Methyl-2-pentanone
41	100	80	97	1	14093560	vv	7.76	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropei
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	44	23	63	-8	~~11278480~~ ~~vv~~		~~8.93~~ FP	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: YR
Date: 9/07/98

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No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	78	48	83	2	3432497	vv	10.32	106	Ethylbenzene
53	84	59	85	3	21252240	vv	10.57	106	m-/p-Xylene
54	82	56	86	3	5881031	vv	11.27	106	o-Xylene
55	0	0	0	0	0		0.00	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	0	0	0	0	0		0.00	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	47	46	91	-20	16403070	vv	13.14	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	78	39	89	1	12901730	bv	14.28	105	1,2,4-Trimethylbenzene
68	0	0	0	0	0		0.00	105	sec-Butylbenzene
69	0	0	0	0	0		0.00	119	p-Cymene
70	0	0	0	0	0		0.00	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	69	34	79	0	4002304	vv	15.39	91	n-Butylbenzene
74	0	0	0	0	0		0.00	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	0	0	0	0	0		0.00	180	1,2,4-Trichlorobenzene
77	0	0	0	0	0		0.00	225	Hexachlorobutadiene
78	0	0	0	0	0		0.00	128	Naphthalene
79	0	0	0	0	0		0.00	180	1,2,3-Trichlorobenzene

Data Review: YC
Date: 9/7/98

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QUAN DB : HW907 LAB-BASE QUAN 09-07-98 09:41

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	54	21	66	1	3509064	bv	5.05	168	Pentafluorobenzene
2	68	44	65	1	3400036	bv	5.78	114	1,4-Difluorobenzene
3	45	27	45	0	2213572	bv	9.97	117	Chlorobenzene-d5
4	0	0	0	0	1462560	A	15.12	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	0		0.00	113	Dibromofluoromethane
6	55	36	54	-1	4826672	bv	7.66	98	Toluene-d8
7	44	25	47	1	2062421	vv	12.26	95	4-Bromofluorobenzene
8	63	41	74	8	~~2021655~~	~~lv~~	~~1.19~~ FP	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	64	50	54	-1	~~126950~~	~~bv~~	~~3.40~~ FP	73	MTBE
11	100	97	99	0	17146230	vv	3.67	57	n-Hexane
12	65	47	62	-3	~~3515968~~	~~bb~~	~~4.23~~ FP	42	1,2-Epoxybutane
13	55	43	55	7	~~2692792~~	~~bv~~	~~5.47~~ FP	57	Iso-Octane
14	42	28	69	-13	~~16875520~~	~~bb~~	~~6.22~~ FP	55	Ethyl acrylate

Data Review: VM
Date: 9/7/98

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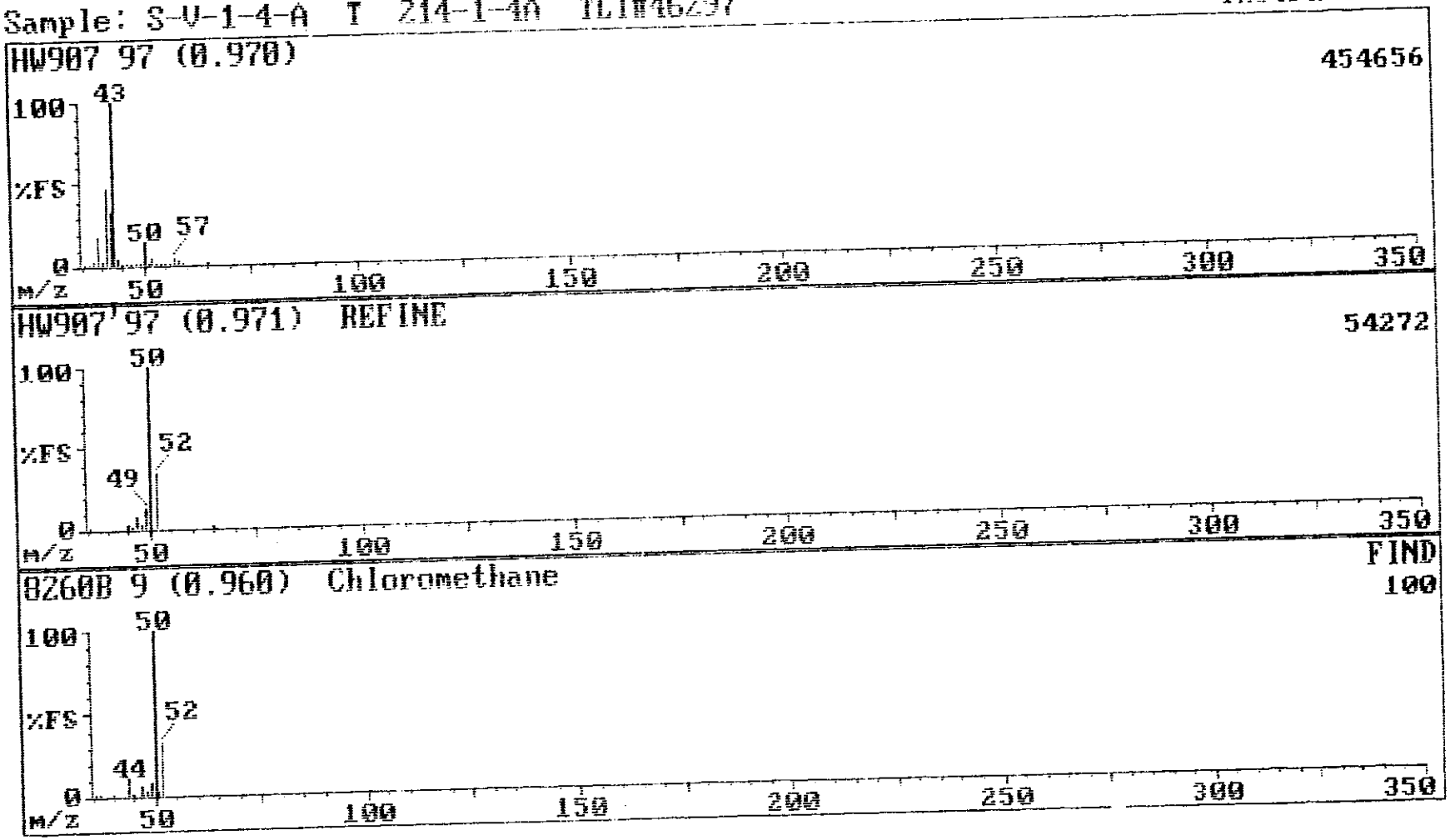
09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

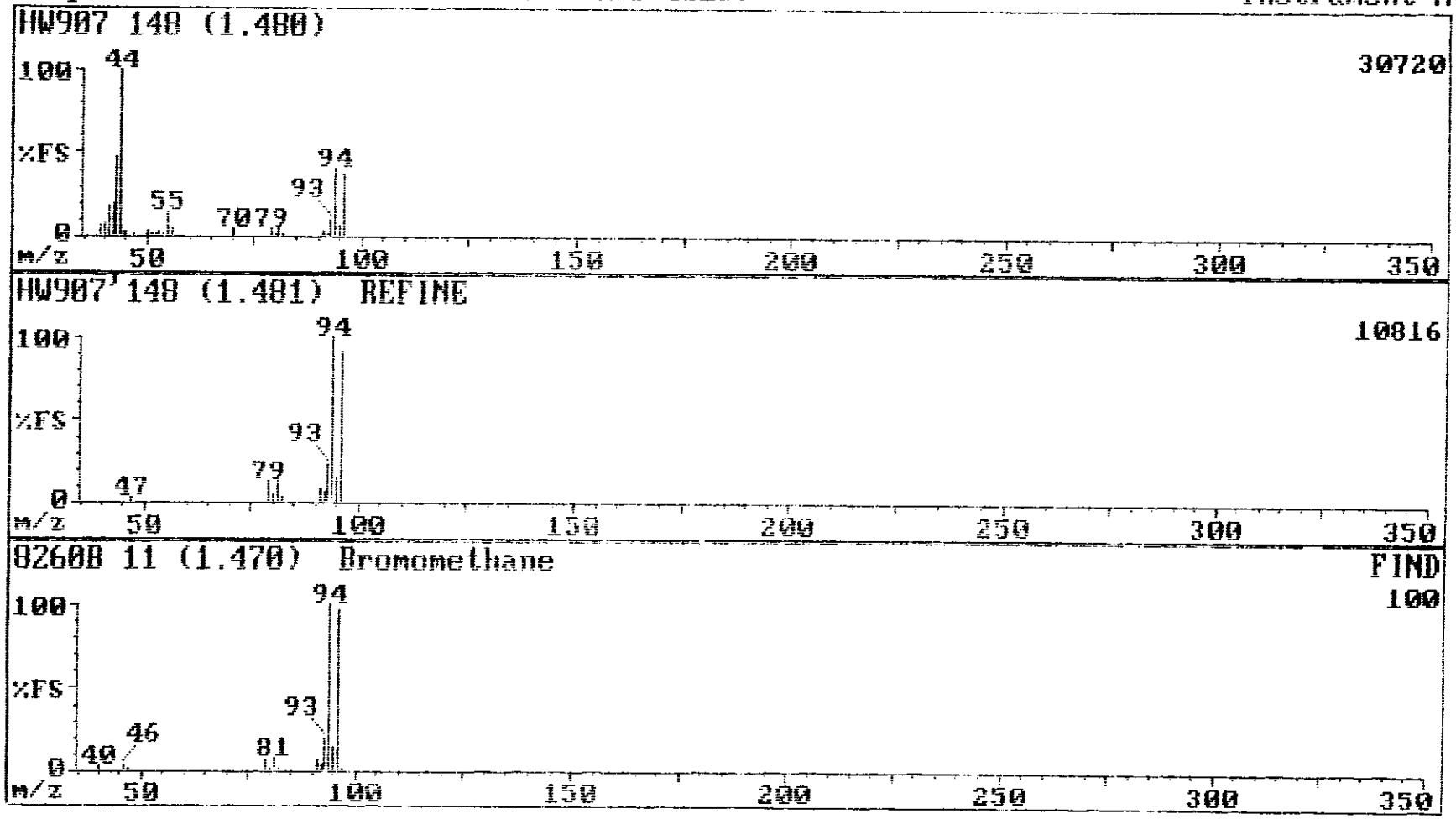
Sample: S-V-1-4-A T 214-1-4A TLI#46297 Instrument H



103

09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

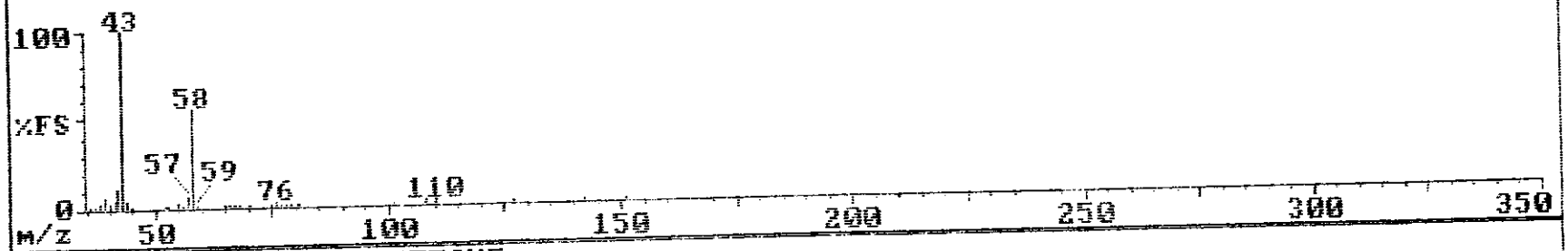
Sample: S-V-1-4-A T 214-1-4A TLI#46297 Instrument H



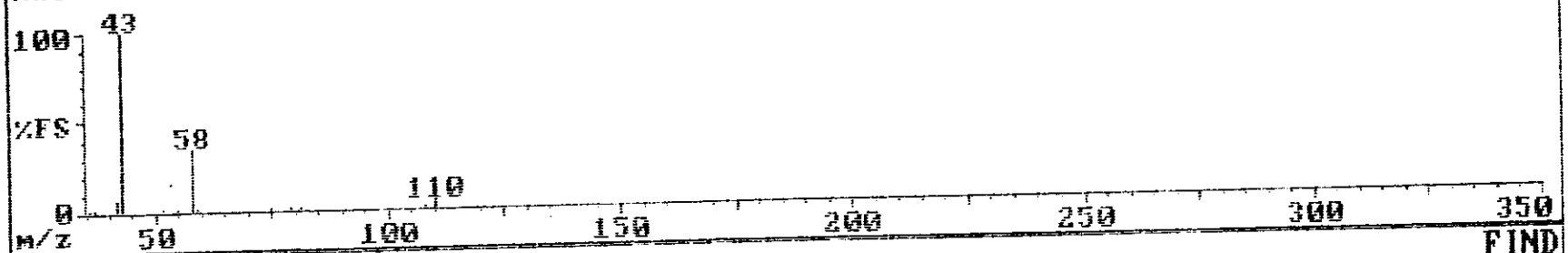
09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-4-A T Z14-1-4A TLI#46297 Instrument H

HW907 Z65 (2.650) 98304

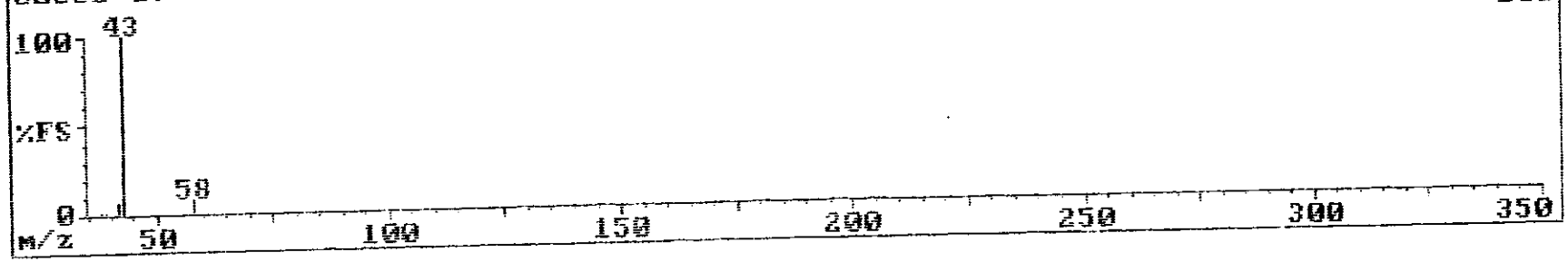


HW907 Z65 (2.651) REFINE 65536



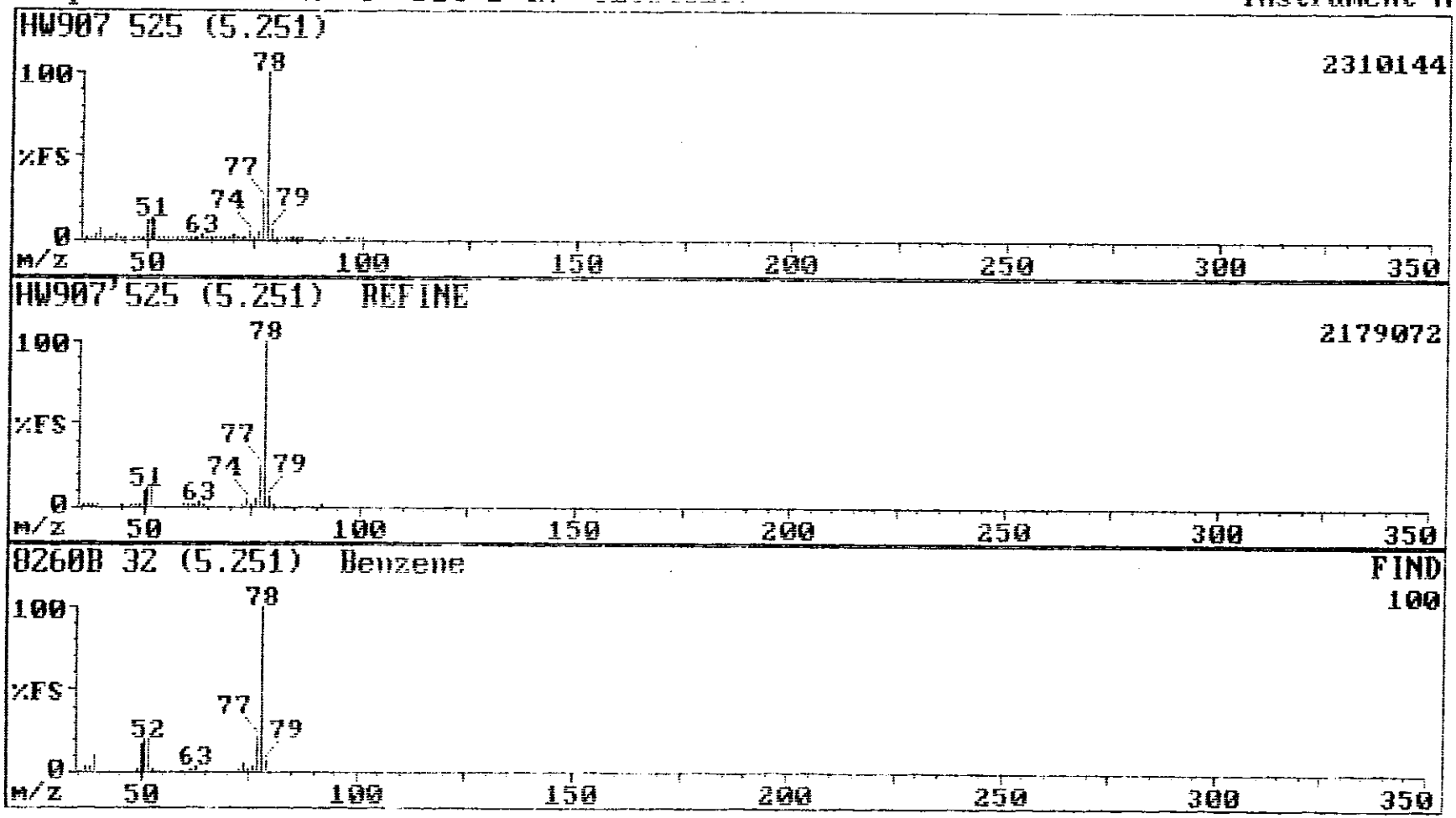
FIND 100

8260B 17 (2.650) Acetone



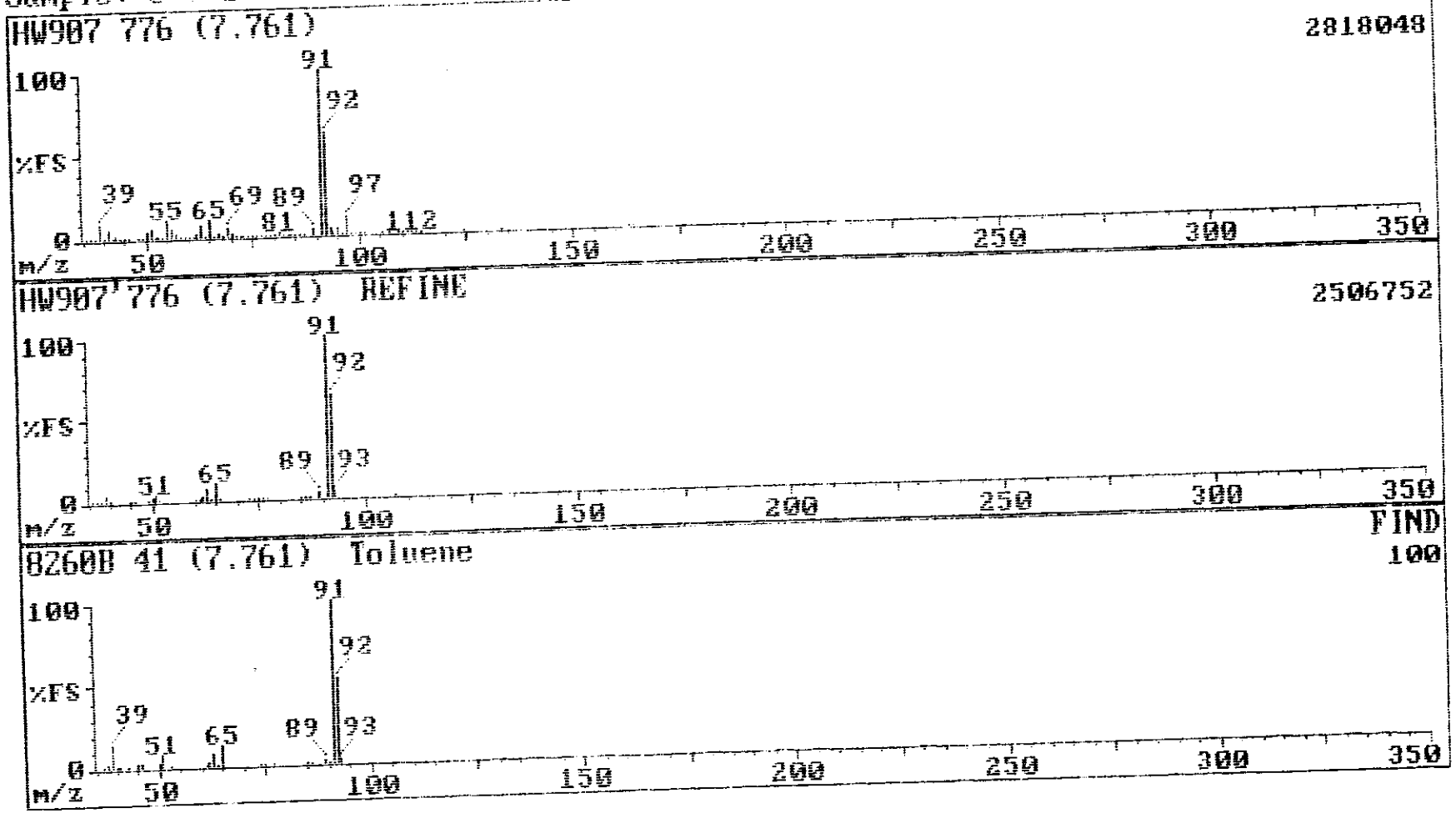
09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-4-A T 214-1-4A TLI#46297 Instrument H



09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729 Instrument H

Sample: S-V-1-4 A T 214-1-40 TLI#46297



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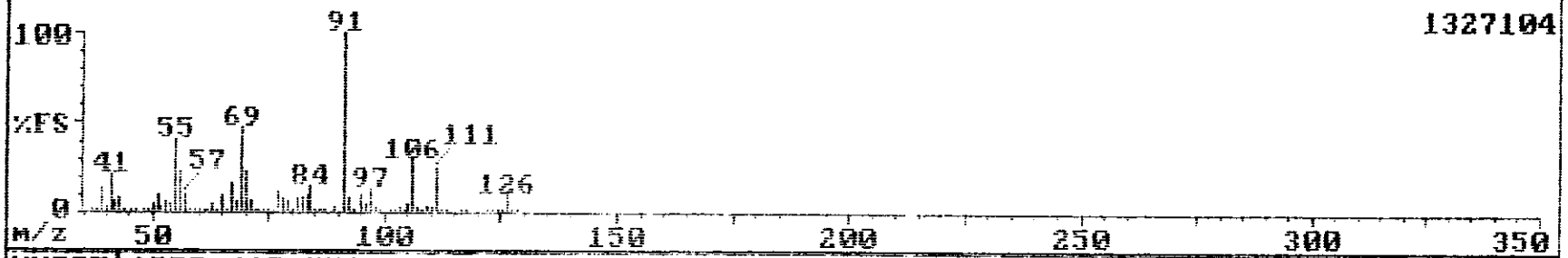
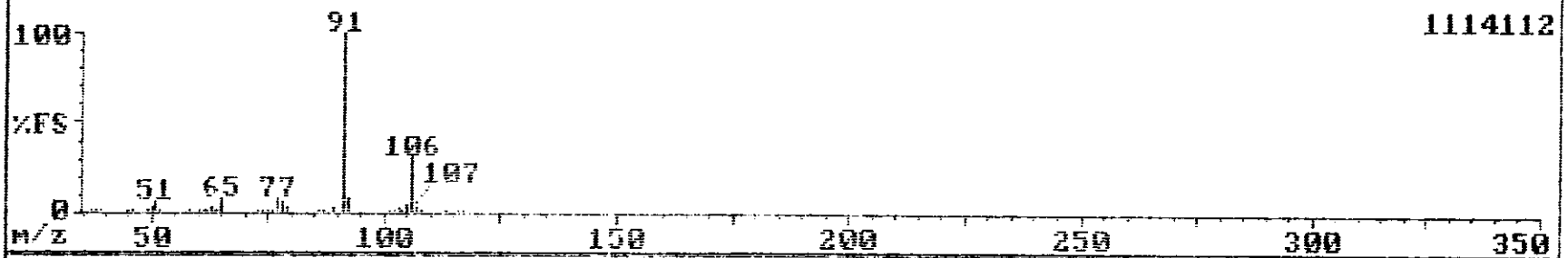
09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-4-A T Z14-1-4A TLI#46297 Instrument H

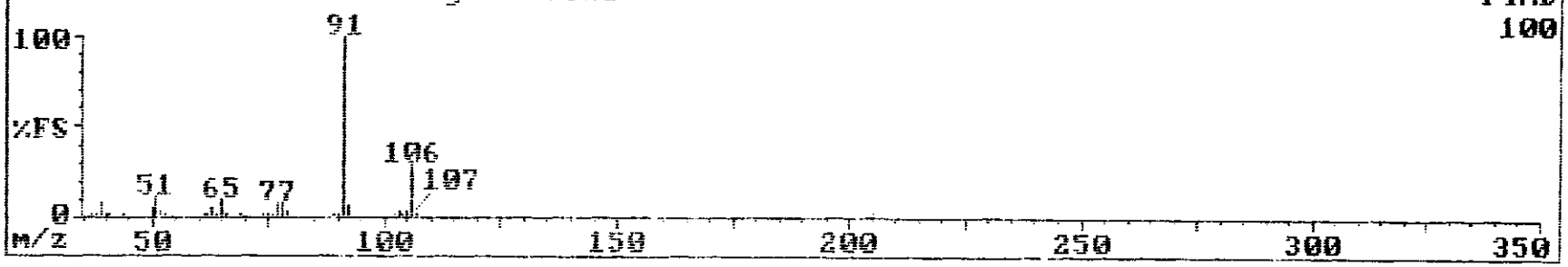
HW907 1032 (10.321) 1327104



HW907' 1032 (10.321) REFINE 1114112

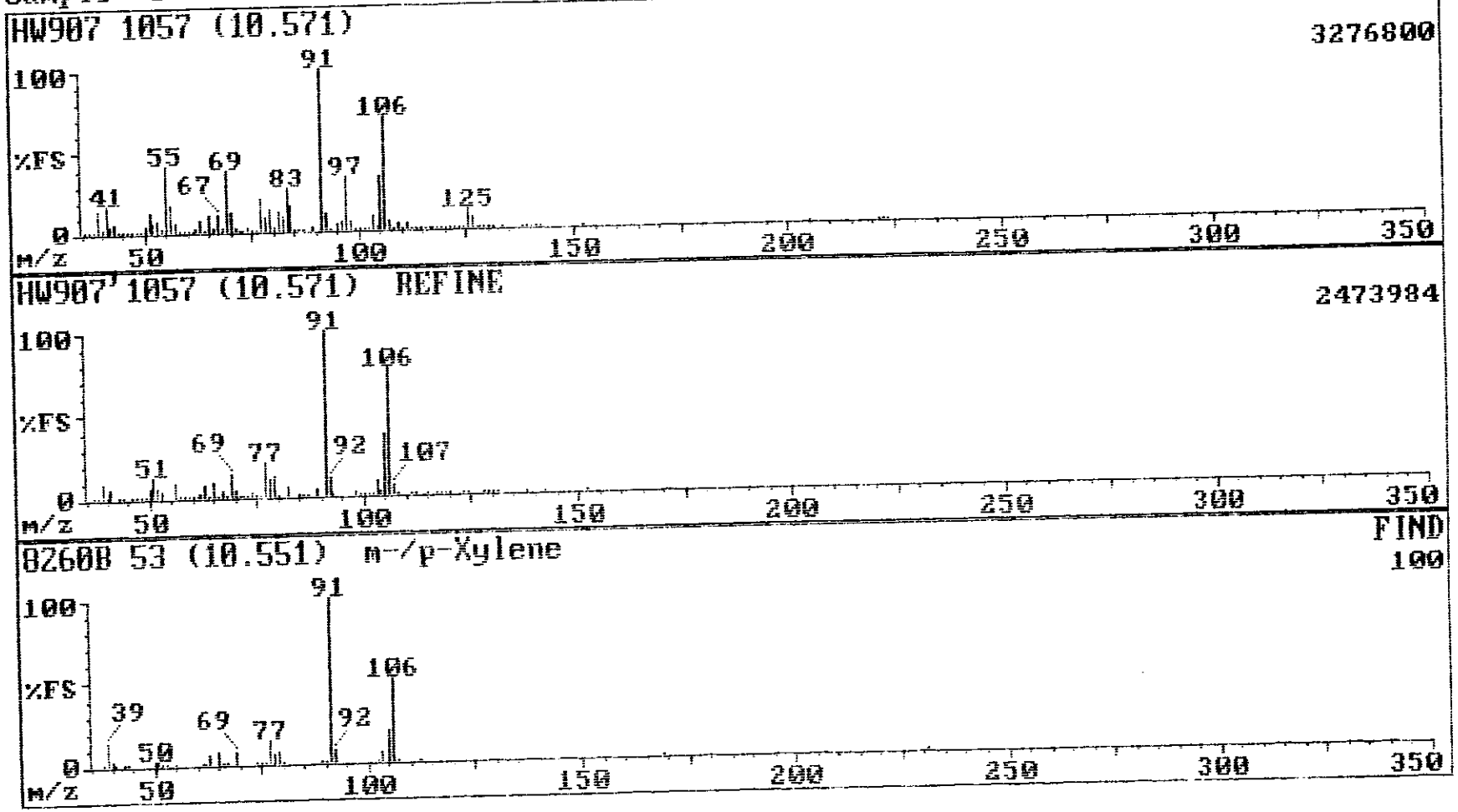


8260B 52 (10.311) Ethylbenzene FIND 100



09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

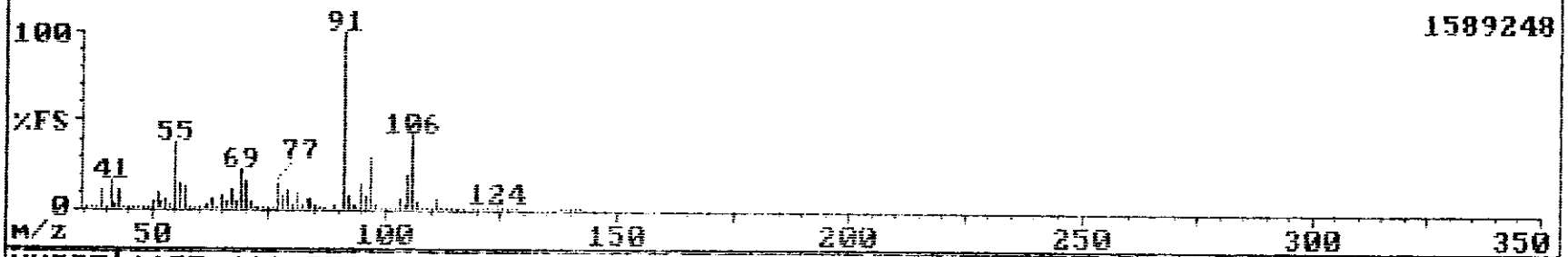
Sample: S-V-1-4-A T 214-1-4A TLI#46297 Instrument H



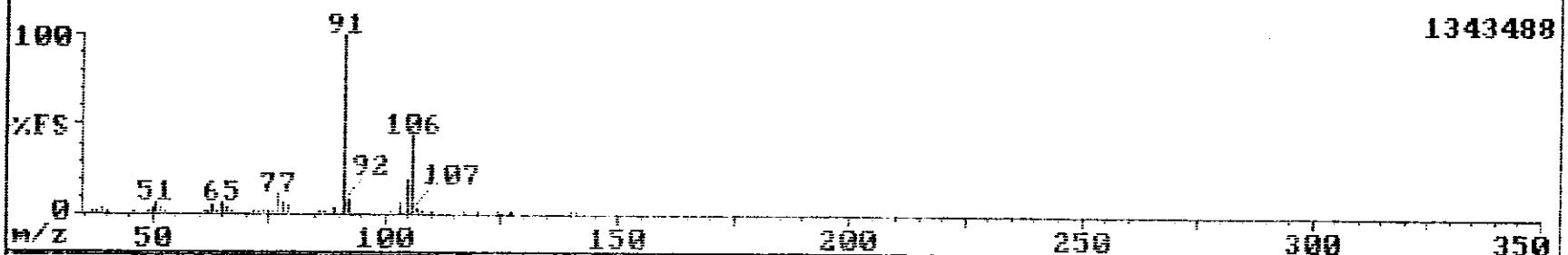
09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-4-A T Z14-1-4A TLI#46297 Instrument H

HW907 1127 (11.271)

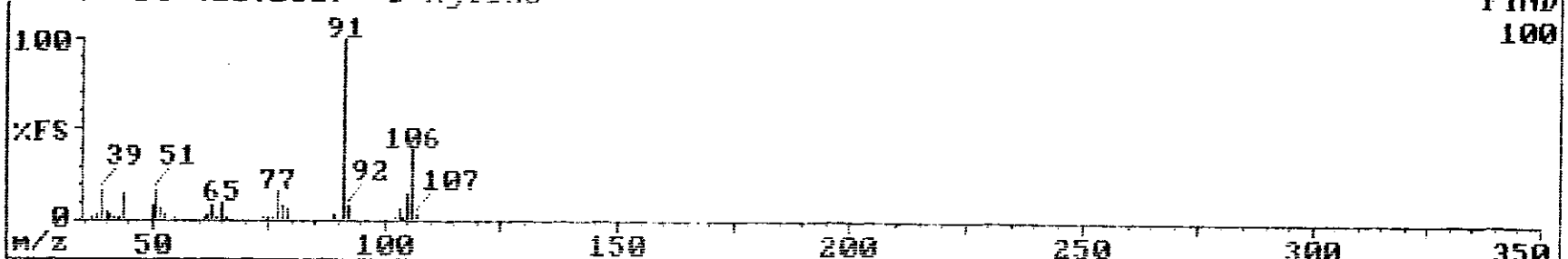


HW907 1127 (11.271) REFINE



8260B 54 (11.251) o-Xylene

FIND 100



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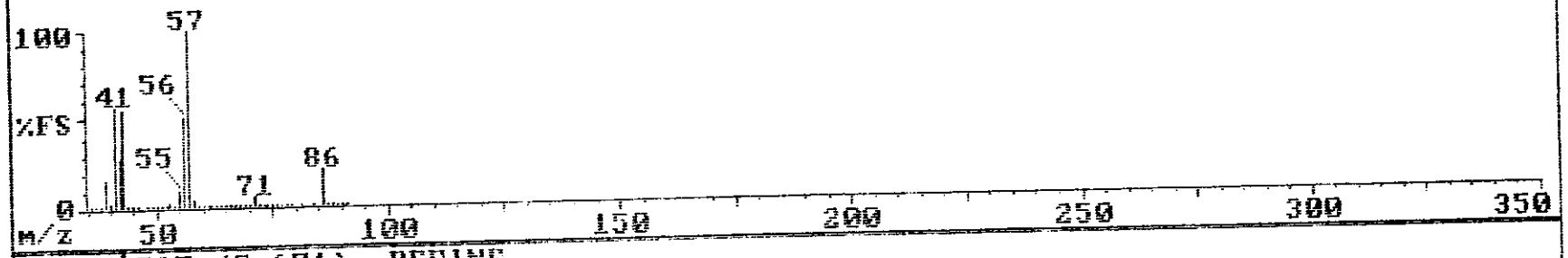
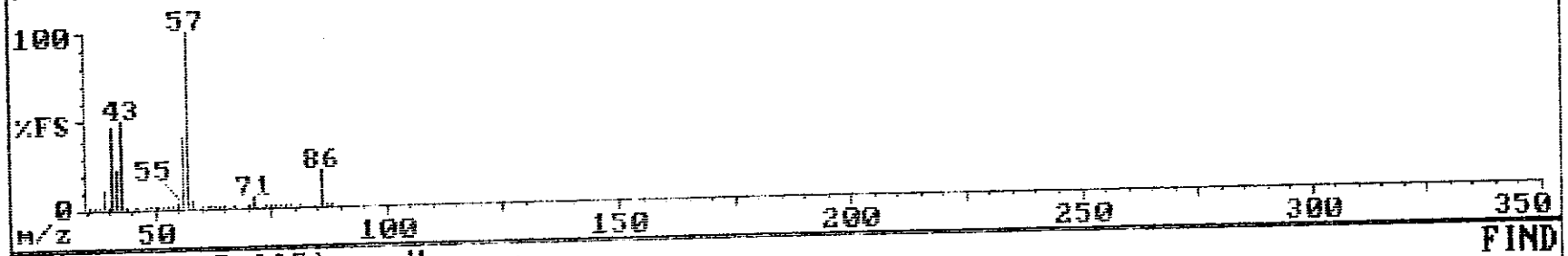
09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-4-A T 214-1-4A TLI#46297 Instrument H

HW907 367 (3.670) 2129920

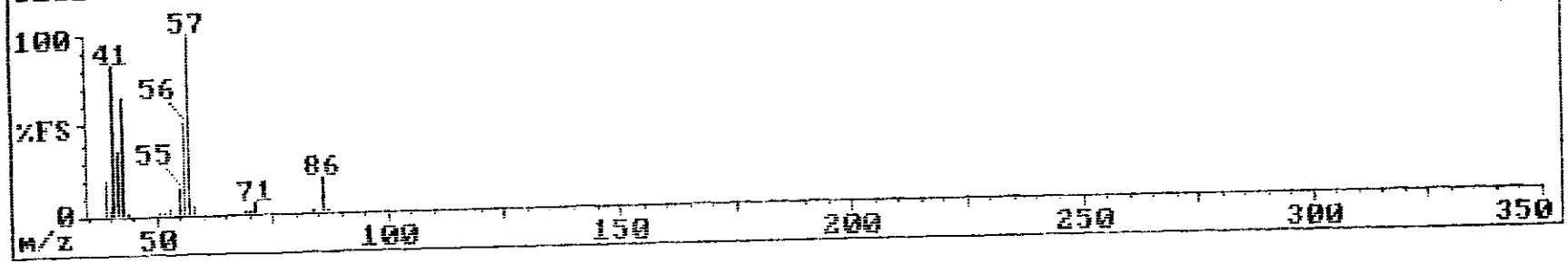


HW907 367 (3.671) REFINE 1949696



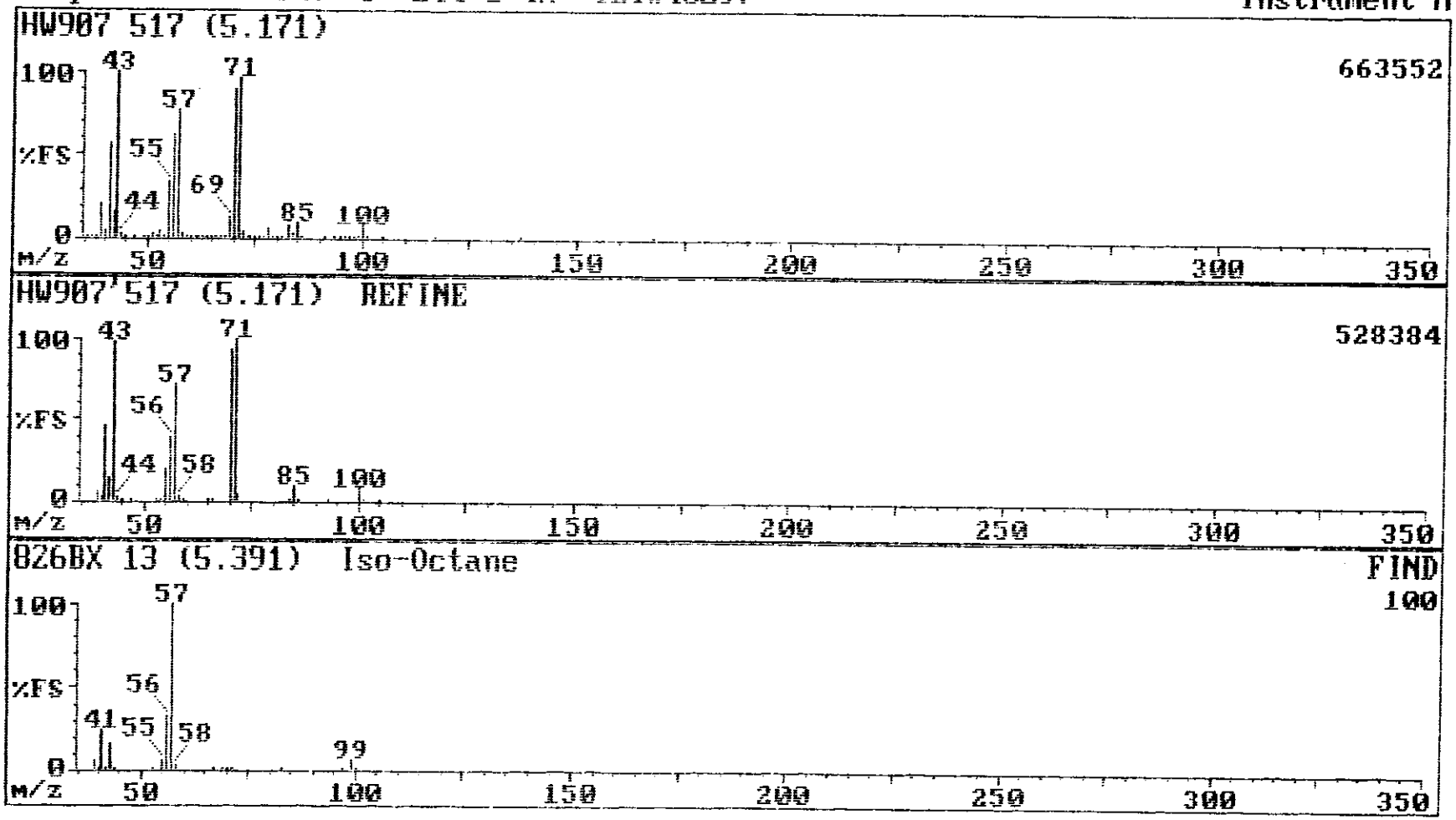
FIND 100

826BX 11 (3.660) n-Hexane



09-04-98 22:01 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-4-A T 214-1-4A TLI#46297 Instrument H



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Pacific Environmental Services

Project Number: 46297
Sample File: HW902

Method 8260 VOST
Sample ID: S-V-1-4-B

Client Project: Hotmix
TLI ID: 214-1-4B

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
Chloromethane	0.157	B	0.97		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.042	BJ	1.48		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.006	BJ	2.67		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride	0.002	BJ	3.06		0.05
Acrylonitrile		U		0.005	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone		U		0.001	0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.78		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.011	BJ	5.24		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46297
Sample File: HW902

Method 8260 VOST
Sample ID: S-V-1-4-B

Client Project: Hotmix
TLI ID: 214-1-4B

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.001	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.004	BJ	7.74		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.94		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene		U		0.001	0.05
m-/p-Xylene		U		0.001	0.10
o-Xylene		U		0.001	0.05
Styrene	0.001	BJ	11.31		0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.06		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46297
Sample File: HW902

Method 8260 VOST
Sample ID: S-V-1-4-B

Client Project: Hotmix
TLI ID: 214-1-4B

Date Received: 07/25/98
Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.287	4.91	1	115
Toluene-d_8	0.285	7.64	2	114
4-Bromofluorobenzene	0.329	12.22	2	132

Reviewed by YR Date 9/7/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46297
Sample File: HW902

Method 8260 VOST
Sample ID: S-V-1-4-B

Client Project: Hotmix
TLI ID: 214-1-4B

Date Received: 07/25/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	0.001	BJ	3.66		0.25
1,2-Epoxybutane		U		0.038	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.78		
Ethyl acrylate		U		0.001	0.25

Reviewed by _____ Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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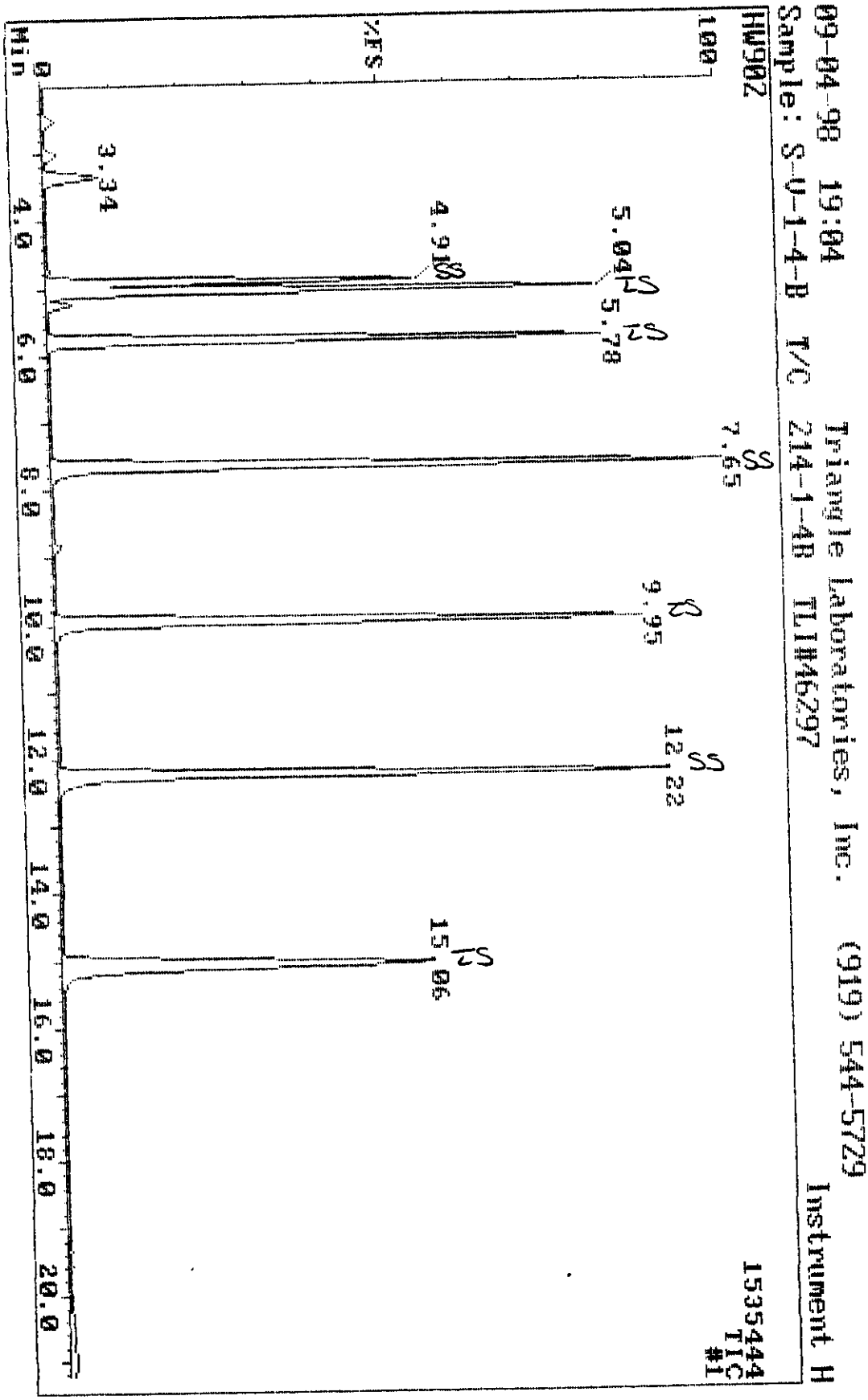
Printed: 14:51 09/08/1998



Data Review: YR
Date: 9/2/98

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QUAN DB : HW902 LAB-BASE QUAN 09-04-98 19:41

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	84	99	-2	3304903	bv	5.04	168	Pentafluorobenzene
2	100	96	98	1	3804952	bv	5.78	114	1,4-Difluorobenzene
3	100	95	95	-2	3721945	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	1	1911209	bv	15.06	152	1,4-Dichlorobenzene-d4
5	100	96	99	1	1683240	bv	4.91	113	Dibromofluoromethane
6	100	92	97	-2	4626886	bv	7.64	98	Toluene-d8
7	100	89	93	-2	2540335	bv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	100	91	99	1	530920	bv	0.97	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	100	75	97	2	182477	bv	1.48	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	0	0	0	0	0		0.00	76	Carbon disulfide
17	70	33	87	3	12712	vv	2.67	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	8472 ~~0~~ m		~~0.00~~ 3.46	84	Methylene chloride
20	0	0	0	0	0		0.00	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	58	51	51	3	~~3612~~ A		~~4.52~~ FP	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	98	99	0	192399	bv	5.24	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	0	0	0	0	0		0.00	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	42	3	66	1	~~21092~~ A		~~7.64~~ FP	43	4-Methyl-2-pentanone
41	95	63	89	-1	50484	bv	7.74	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropen
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	0	0	0	0	0		0.00	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

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Data Review: JK
Date: 9/7/98

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	0	0	0	0	0		0.00	106	Ethylbenzene
53	0	0	0	0	0		0.00	106	m-/p-Xylene
54	0	0	0	0	0		0.00	106	o-Xylene
55	56	52	52	5	8708	A	11.31	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	50	44	44	4	~~936~~	~~bb~~	~~12.03~~ FP	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	0	0	0	0	0		0.00	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	65	52	52	-1	~~19532~~	~~A~~	~~14.21~~ FP	105	1,2,4-Trimethylbenzene
68	66	54	54	1	~~6848~~	~~A~~	~~14.73~~ FP	105	sec-Butylbenzene
69	0	0	0	0	0		0.00	119	p-Cymene
70	59	44	53	1	8220	A	14.83	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00 ✓	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	0	0	0	0	0		0.00	91	n-Butylbenzene
74	0	0	0	0	0		0.00	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	68	60	71	7	9772	bv	19.15	180	1,2,4-Trichlorobenzene
77	63	43	69	4	5796	bb	19.33	225	Hexachlorobutadiene
78	31	33	33	11	~~25032~~	~~A~~	~~19.36~~ FP	128	Naphthalene
79	56	46	58	7	10724	bv	19.56	180	1,2,3-Trichlorobenzene

YR 9/7/94

QUAN DB : HW902 LAB-BASE QUAN 09-04-98 19:44

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	84	99	0	3304903	bv	5.04	168	Pentafluorobenzene
2	100	96	98	2	3804952	bv	5.78	114	1,4-Difluorobenzene
3	100	95	95	-3	3721945	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	4	1911209	bv	15.06	152	1,4-Dichlorobenzene-d4
5	100	96	99	1	1683240	bv	4.91	113	Dibromofluoromethane
6	100	92	97	-3	4626886	bv	7.64	98	Toluene-d8
7	100	89	93	-3	2540335	bv	12.22	95	4-Bromofluorobenzene
8	58	30	69	4	~~444426~~	~~A~~	~~1.05~~ FP	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	25	12	30	-4	~~13160~~	~~bb~~	~~3.36~~ FP	73	MTBE
11	64	53	53	1	5800	A	3.66	57	n-Hexane
12	0	0	0	0	0		0.00	42	1,2-Epoxybutane
13	23	25	35	-25	~~756~~	~~bb~~	~~5.14~~ FP	57	Iso-Octane
14	27	13	53	-15	~~1340~~	~~bb~~	~~6.20~~ FO	55	Ethyl acrylate

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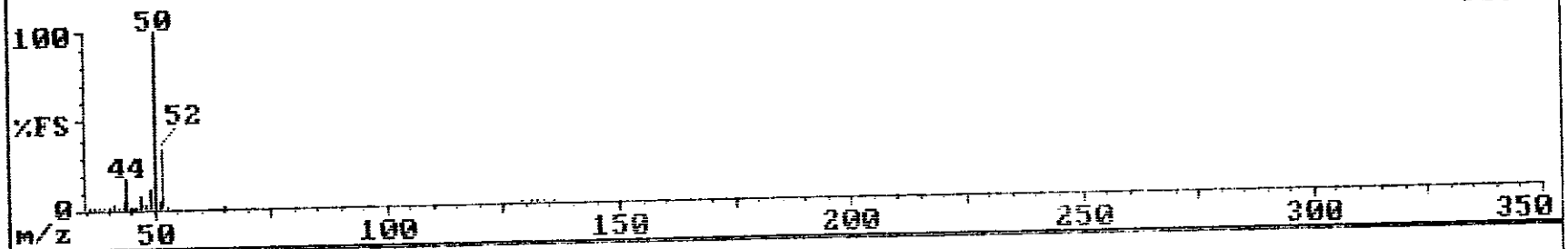
Data Review: YM
Date: YM 9/7/98

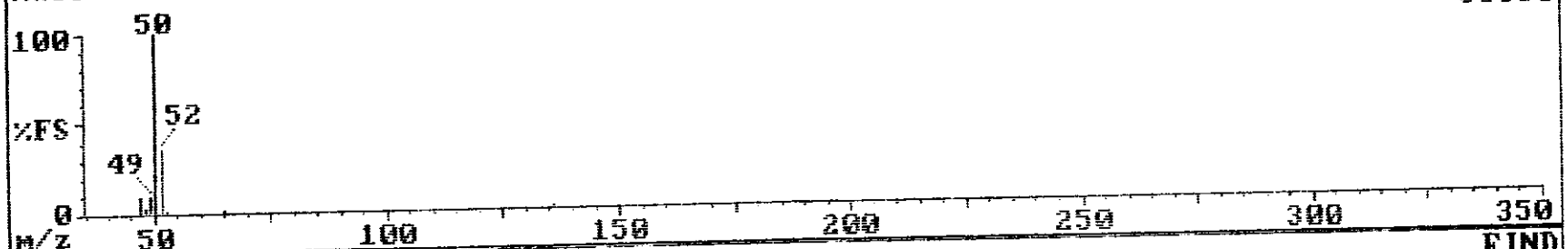
09-04-98 19:04 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-1-4-B T/C 214-1-4B TLI#46297 Instrument H

HW902 97 (0.970) 80896

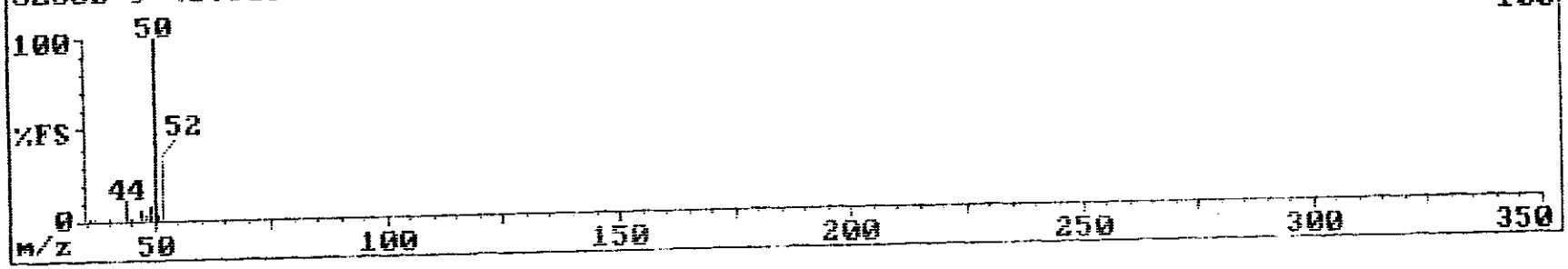


HW902'97 (0.971) REFINE 66560



FIND 100

8260B 9 (0.960) Chloromethane



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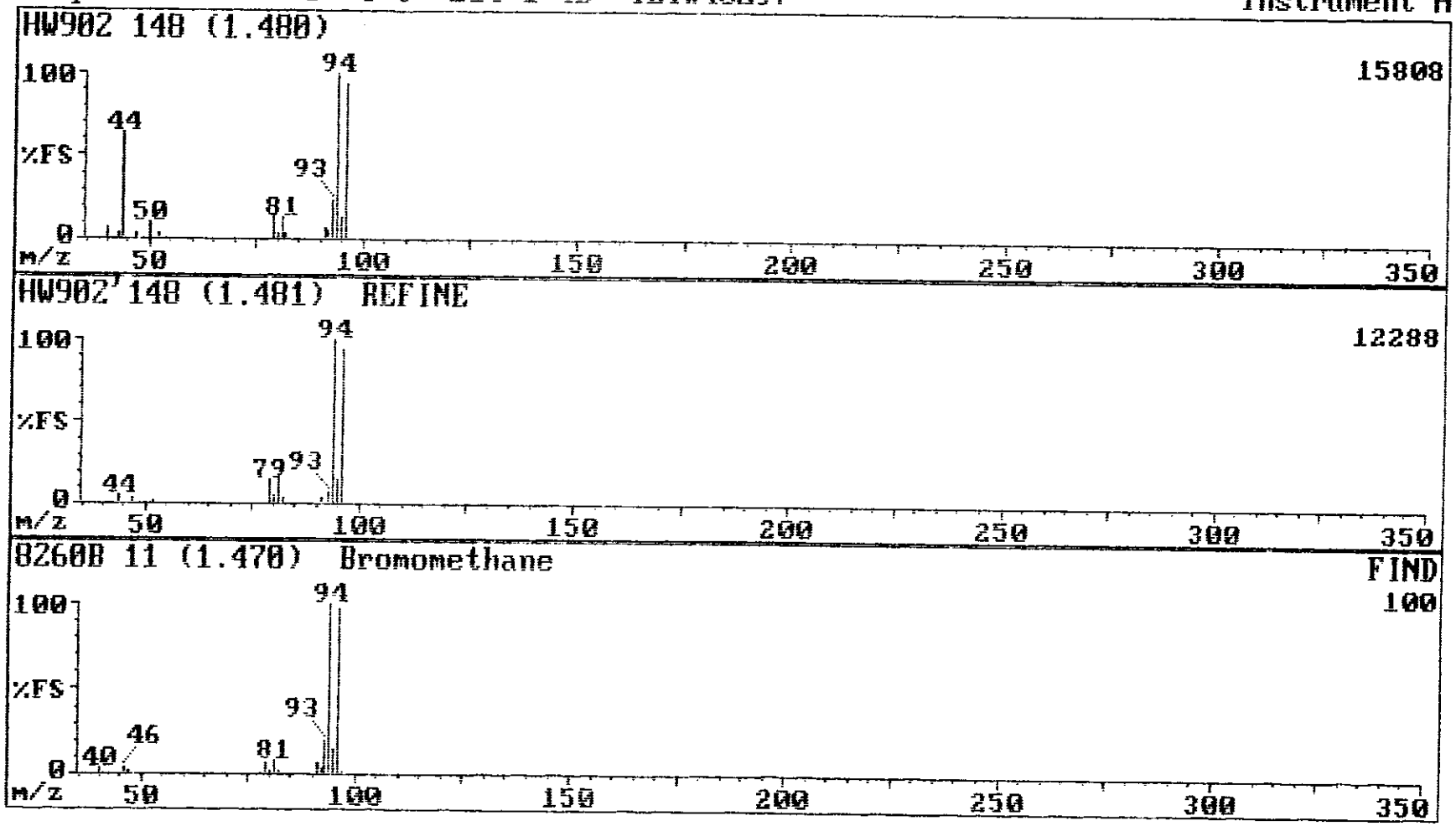
Sample: S-V-1-4-B T/C 214-1-4B TLI#46297 Instrument H



122

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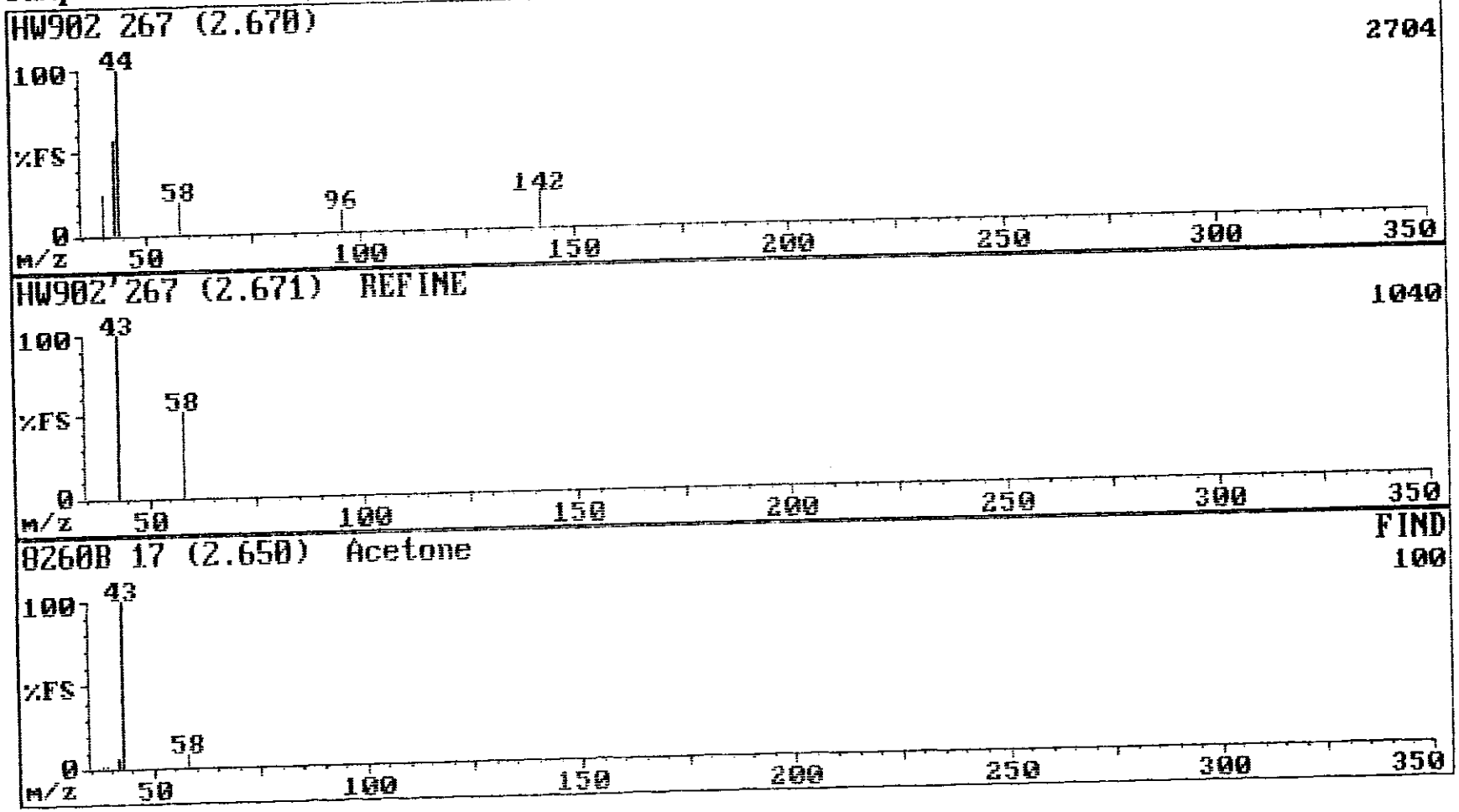

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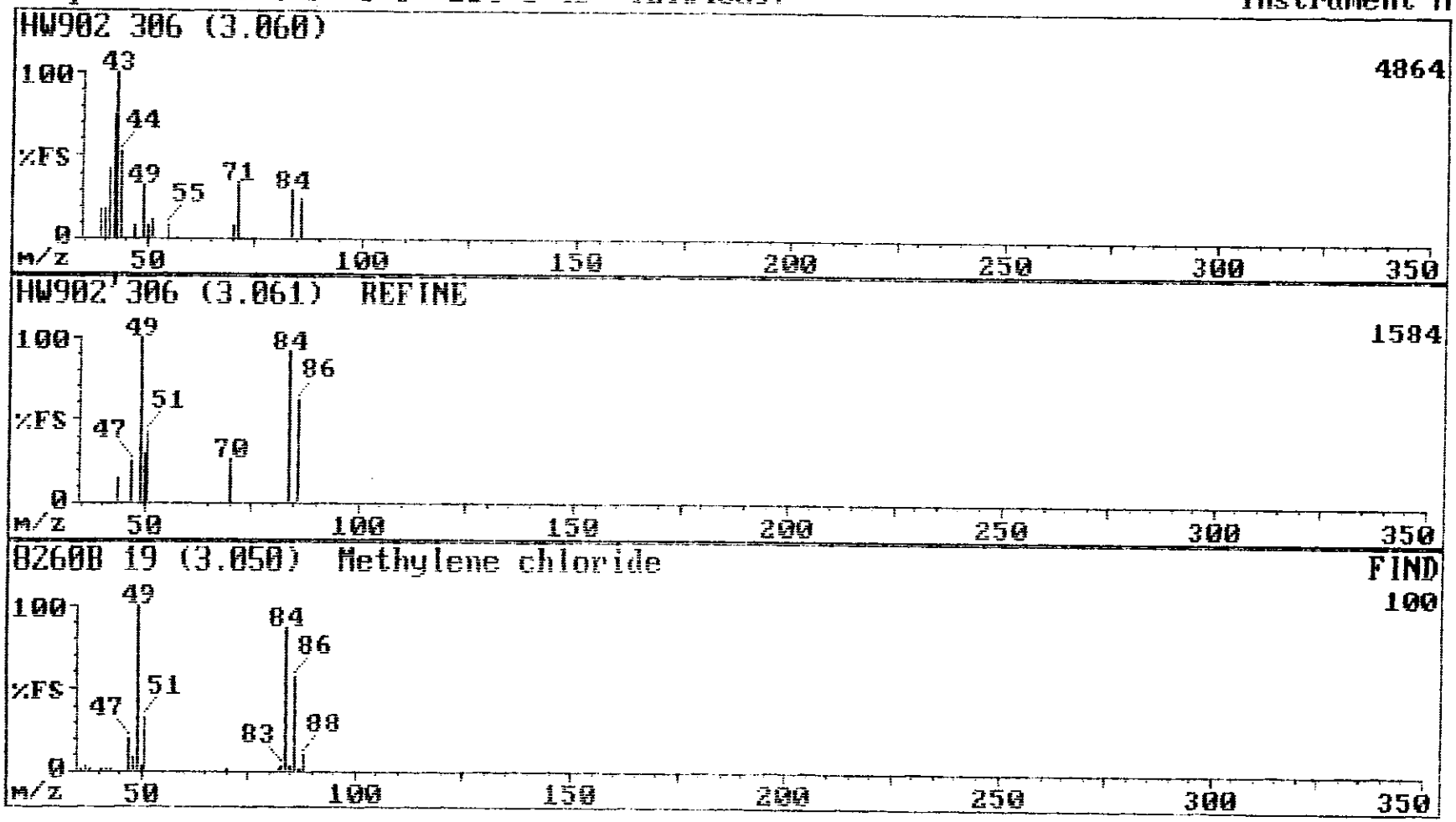
Sample: S-V-1-4-B T/C 214-1-4B TLI#46297 Instrument H



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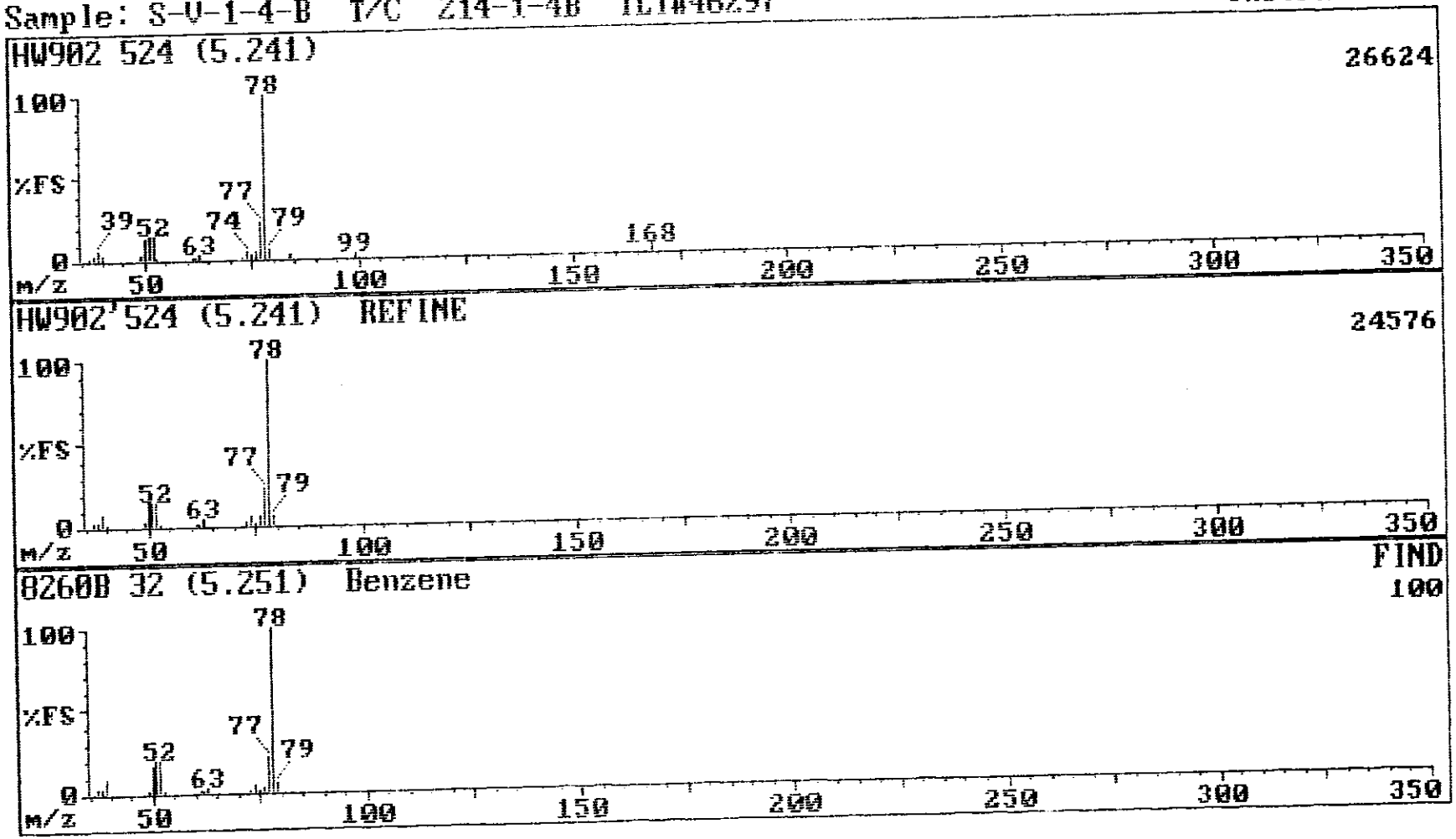
Sample: S-V-1-4-B T/C Z14-1-4B TLI#46297 Instrument H



125

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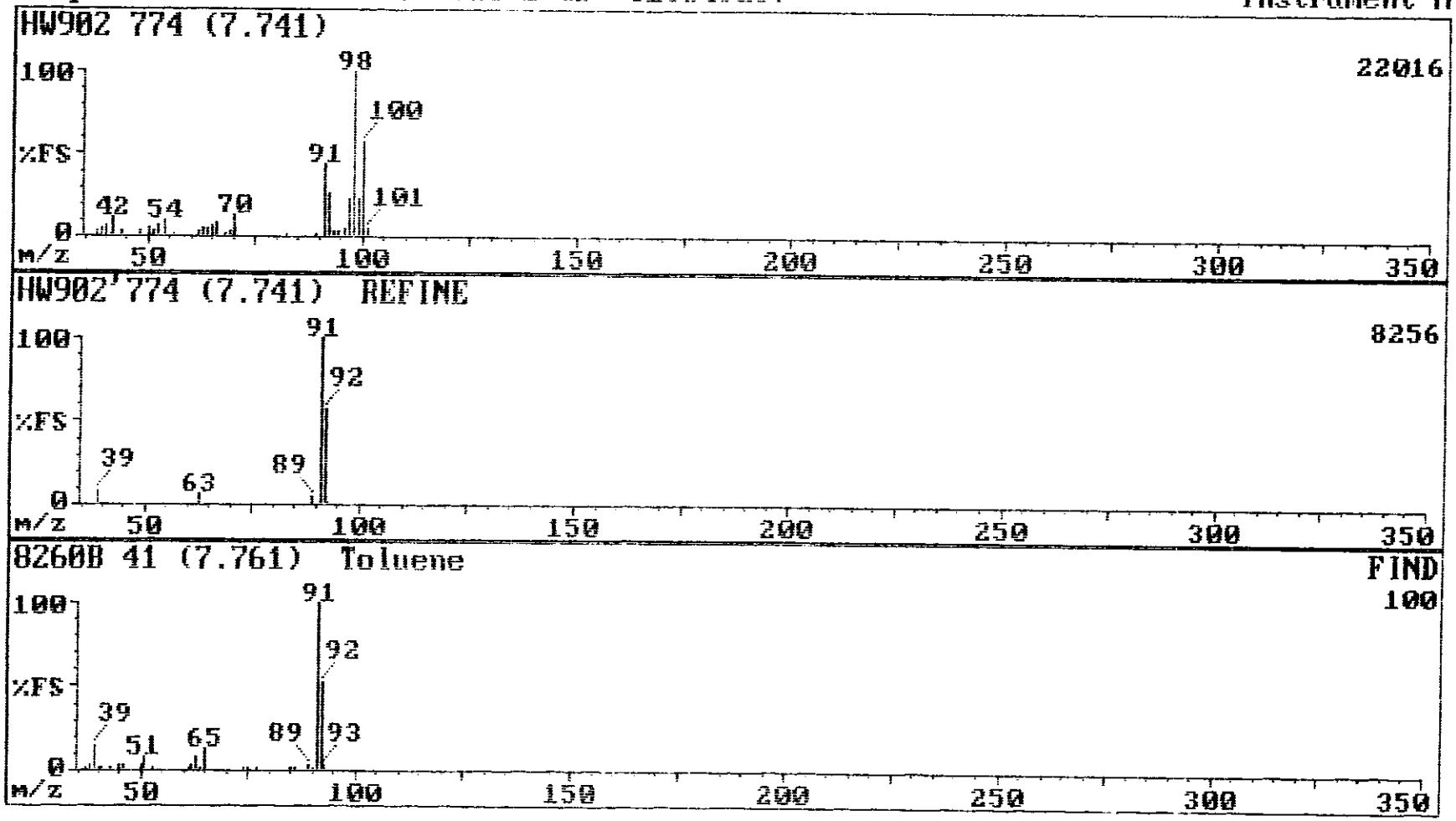

126

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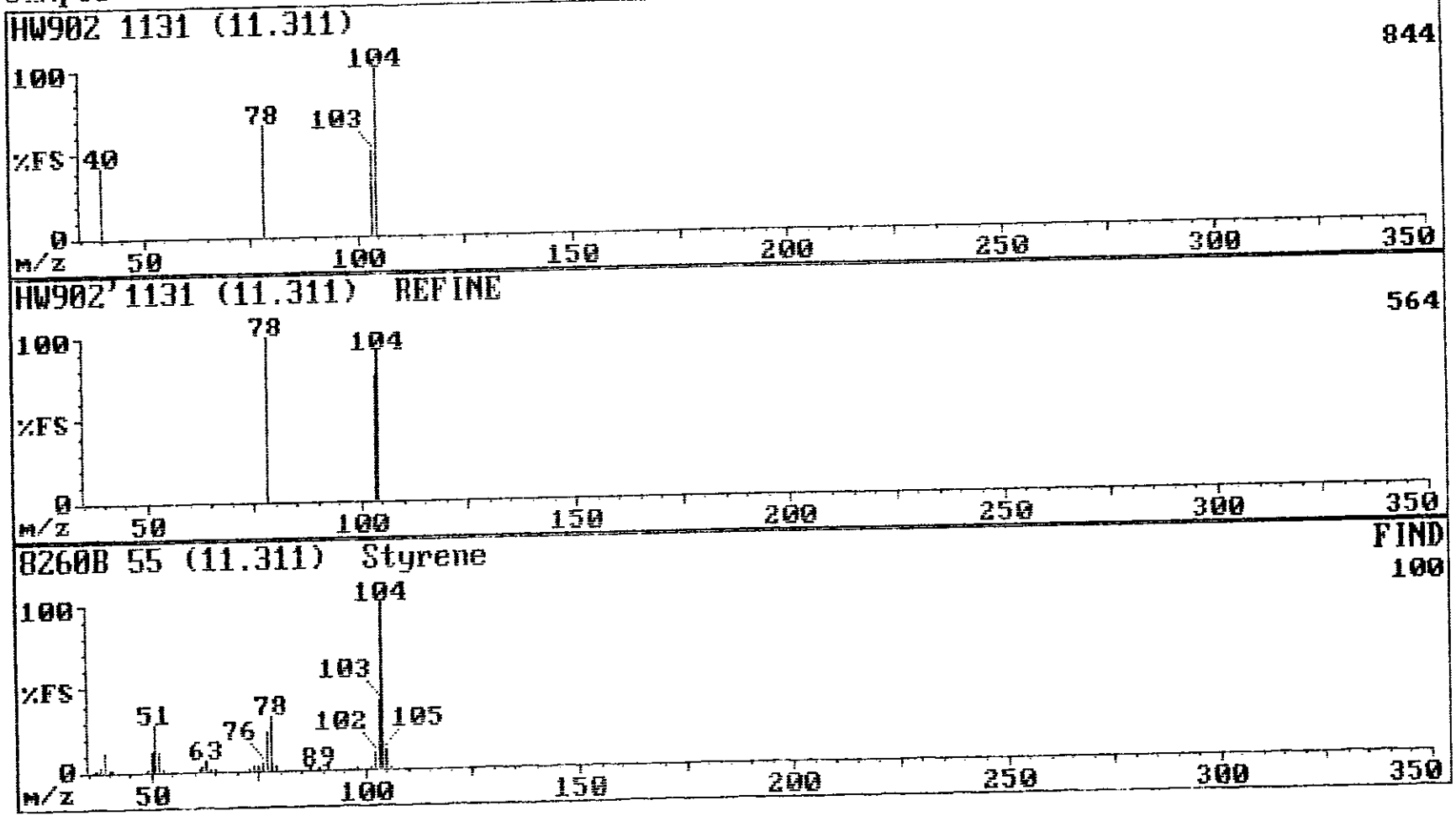

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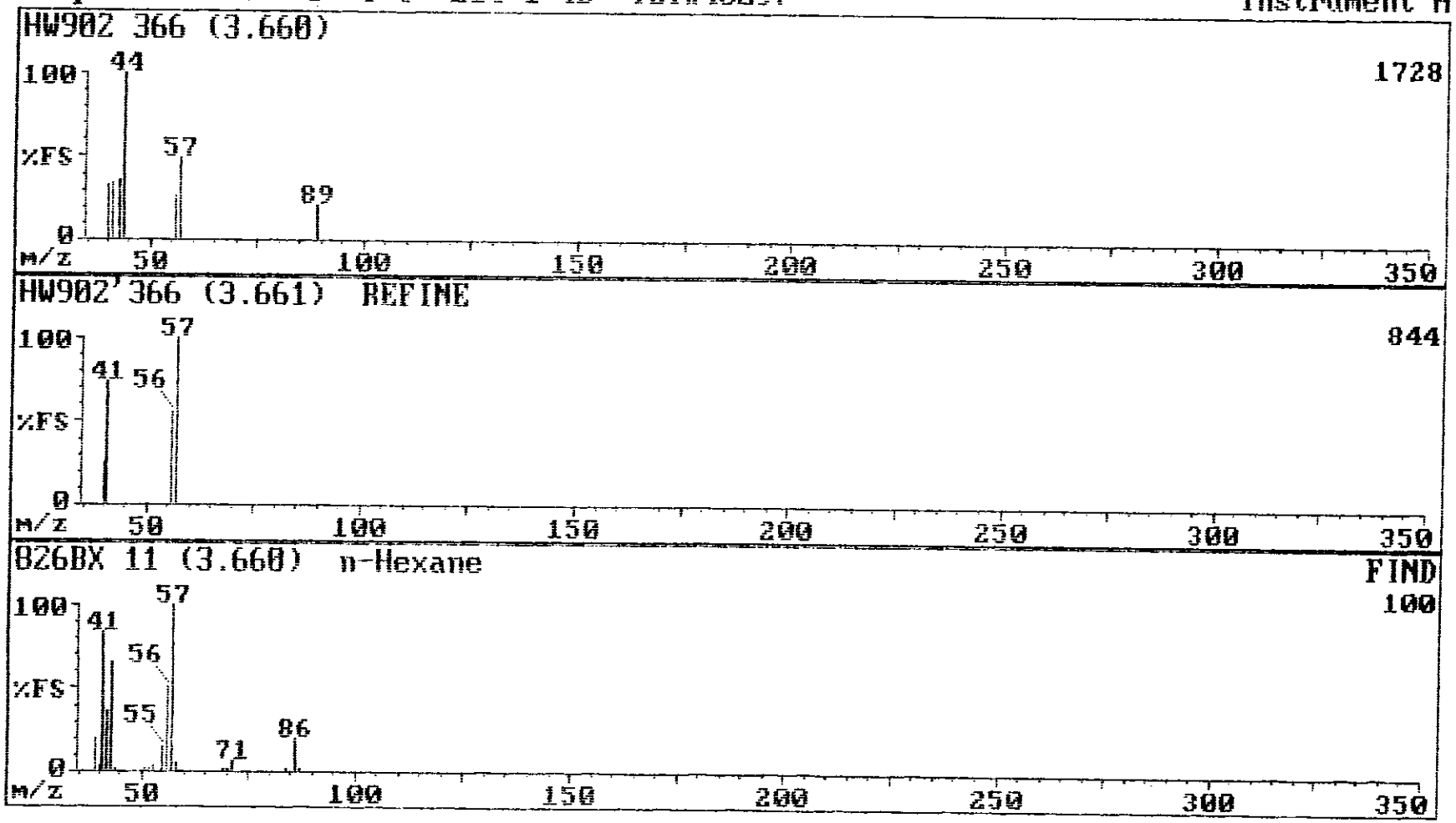
Sample: S-V-1-4-B T/C Z14-1-4B TLI#46297 Instrument H



TRIANGLE LABS

CALIBRATION DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729

P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

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Triangle Laboratories, Inc.
Initial Calibration Curve

ICAL File: ICALH904	Date of Analysis :09/04/98	Analyte List: 8260
RF.1 HW887	RF.25 HW888	RF.50 HW889
RF.75 HW890	RF1.00 HW891	

VOST Calibration.

Analyte	Flag	RF.1	RF.25	RF.50	RF.75	RF1.00	MEAN	%RSD
Pentafluorobenzene	I							
Chloromethane	P	0.236	0.271	0.220	0.267	0.287	0.256	10.6
Vinyl Chloride	C	0.303	0.367	0.338	0.360	0.380	0.350	8.6
Bromomethane		0.305	0.354	0.312	0.334	0.353	0.332	6.9
Chloroethane		0.199	0.213	0.207	0.216	0.241	0.215	7.4
Trichlorofluoromethane		0.599	0.643	0.644	0.642	0.761	0.658	9.3
1,1-Dichloroethene	C	0.301	0.324	0.330	0.247	0.382	0.317	15.4
Iodomethane		0.633	0.633	0.674	0.500	0.742	0.636	13.9
Carbon disulfide		0.903	0.921	0.957	0.754	0.966	0.900	9.5
Acetone		0.043	0.186	0.177	0.136	0.199	0.148	42.9
Allyl chloride		0.338	0.349	0.377	0.296	0.401	0.352	11.3
Methylene chloride		0.302	0.312	0.322	0.231	0.381	0.310	17.3
Acrylonitrile		0.029	0.028	0.031	0.029	0.037	0.031	11.2
trans-1,2-Dichloroethene		0.324	0.350	0.363	0.307	0.406	0.350	10.9
1,1-Dichloroethane	P	0.651	0.675	0.691	0.657	0.586	0.652	6.1
Vinyl acetate		0.090	0.214	0.231	0.249	0.183	0.193	32.5
cis-1,2-Dichloroethene		0.339	0.360	0.378	0.386	0.387	0.370	5.6
2-Butanone		0.050	0.234	0.201	0.220	0.136	0.168	45.0
Chloroform	C	0.714	0.767	0.817	0.763	0.760	0.764	4.8
1,1,1-Trichloroethane		0.630	0.702	0.683	0.650	0.647	0.662	4.4
1,4-Difluorobenzene	I							
Carbon tetrachloride		0.688	0.601	0.554	0.521	0.532	0.579	11.8
Benzene		1.281	1.138	1.235	1.083	1.051	1.158	8.5
1,2-Dichloroethane		0.357	0.368	0.363	0.356	0.331	0.355	4.1
Trichloroethene		0.469	0.414	0.422	0.423	0.427	0.431	5.0
1,2-Dichloropropane	C	0.406	0.419	0.413	0.405	0.402	0.409	1.8
Methyl methacrylate		0.082	0.082	0.090	0.092	0.093	0.088	6.1
Bromodichloromethane		0.575	0.573	0.589	0.585	0.573	0.579	1.3
cis-1,3-Dichloropropene		0.507	0.561	0.579	0.587	0.579	0.563	5.7
4-Methyl-2-pentanone		0.115	0.155	0.149	0.152	0.146	0.143	11.3
Toluene	C	0.738	0.770	0.770	0.756	0.730	0.753	2.5
trans-1,3-Dichloropropene		0.337	0.404	0.428	0.442	0.432	0.409	10.4
1,1,2-Trichloroethane		0.255	0.248	0.255	0.264	0.257	0.256	2.3
Chlorobenzene-d5	I							
Tetrachloroethene		0.418	0.411	0.427	0.427	0.430	0.423	1.9
2-Hexanone	1	0.060	0.198	0.180	0.190	0.174	0.160	35.5
Dibromochloromethane		0.407	0.385	0.414	0.419	0.418	0.408	3.4
1,2-Dibromoethane		0.318	0.298	0.312	0.314	0.313	0.311	2.5

*- Fails QC Criteria for %RSD; << - RF less than minimum QC RF; >> - RF greater than maximum QC RF

Triangle Laboratories, Inc.
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Savar v3.7

Triangle Laboratories, Inc.
Initial Calibration Curve

ICAL File: ICALH904	Date of Analysis :09/04/98	Analyte List: 8260
RF.1 HW887	RF.25 HW888	RF.50 HW889
RF.75 HW890	RF1.00 HW891	

VOST Calibration.

Analyte	Flag	RF.1	RF.25	RF.50	RF.75	RF1.00	MEAN	%RSD
Chlorobenzene	P	0.923	0.954	0.987	0.956	0.954	0.955	2.4
Ethylbenzene	C	0.467	0.496	0.502	0.467	0.468	0.480	3.7
m-/p-Xylene		0.589	0.608	0.613	0.574	0.567	0.590	3.4
o-Xylene		0.547	0.569	0.569	0.530	0.543	0.552	3.1
Styrene		0.868	0.929	0.946	0.894	0.907	0.909	3.3
Bromoform	P	0.174	0.203	0.233	0.244	0.251	0.221	14.6
1,4-Dichlorobenzene-d4	I							
Cumene		3.940	3.920	4.136	2.927	2.740	3.532	18.3
1,1,2,2-Tetrachloroethane	P	0.463	0.618	0.674	0.559	0.504	0.564	15.1
Average %RSD								10.5

Surrogate	Flag	RF.1	RF.25	RF.50	RF.75	RF1.00	Mean	%RSD
Dibromofluoromethane	S	0.423	0.489	0.436	0.438	0.427	0.443	6.0
Toluene-d8	S	1.024	1.072	1.078	1.087	1.062	1.065	2.3
4-Bromofluorobenzene	S	0.498	0.524	0.516	0.502	0.500	0.508	2.3

Approved by: YR Date 9/7/98

***- Fails QC Criteria for %RSD; << - RF less than minimum QC RF; >> - RF greater than maximum QC RF**

Savar v3.7

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
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Triangle Laboratories, Inc.
Continuing Calibration Curve

CCAL File: HW894 Date of Analysis :09/04/98 Analyte List: 8260
ICAL File: ICALH904

VOST Calibration.

Analyte	Flag	RF0.25	RFMEAN	%D
Pentafluorobenzene	I			
Chloromethane	P	0.195	0.256	23.8
Vinyl Chloride	C	0.272	0.350	22.3
Bromomethane		0.217	0.332	34.6
Chloroethane		0.133	0.215	38.1
Trichlorofluoromethane		0.398	0.658	39.5
1,1-Dichloroethene	C	0.238	0.317	24.9
Iodomethane		0.528	0.636	17.0
Carbon disulfide		0.761	0.900	15.4
Acetone		0.103	0.148	30.4
Allyl chloride		0.355	0.352	-0.9
Methylene chloride		0.309	0.310	0.3
Acrylonitrile		0.032	0.031	-3.2
trans-1,2-Dichloroethene		0.351	0.350	-0.3
1,1-Dichloroethane	P	0.659	0.652	-1.1
Vinyl acetate		0.190	0.193	1.6
cis-1,2-Dichloroethene		0.366	0.370	1.1
2-Butanone		0.160	0.168	4.8
Chloroform	C	0.764	0.764	0.0
1,1,1-Trichloroethane		0.731	0.662	-10.4
1,4-Difluorobenzene	I			
Carbon tetrachloride		0.592	0.579	-2.2
Benzene		1.599	1.158	-38.1
1,2-Dichloroethane		0.366	0.355	-3.1
Trichloroethene		0.487	0.431	-13.0
1,2-Dichloropropane	C	0.415	0.409	-1.5
Methyl methacrylate		0.097	0.088	-10.2
Bromodichloromethane		0.580	0.579	-0.2
cis-1,3-Dichloropropene		0.563	0.563	0.0
4-Methyl-2-pentanone		0.172	0.143	-20.3
Toluene	C	0.771	0.753	-2.4
trans-1,3-Dichloropropene		0.417	0.409	-2.0
1,1,2-Trichloroethane		0.261	0.256	-2.0
Chlorobenzene-d5	I			
Tetrachloroethene		0.432	0.423	-2.1
2-Hexanone	1	0.197	0.160	-23.1
Dibromochloromethane		0.416	0.408	-2.0
1,2-Dibromoethane		0.321	0.311	-3.2

*- Fails QC Criteria for %D; << - Rf less than minimum QC RF; >>- RF greater than maximum QC RF

Triangle Laboratories, Inc.
Continuing Calibration Curve

CCAL File: HW894	Date of Analysis :09/04/98	Analyte List: 8260
ICAL File: ICALH904		

VOST Calibration.

Analyte	Flag	RF0.25	RFMEAN	%D
Chlorobenzene	P	0.967	0.955	-1.3
Ethylbenzene	C	0.496	0.480	-3.3
m-/p-Xylene		0.611	0.590	-3.6
o-Xylene		0.588	0.552	-6.5
Styrene		0.976	0.909	-7.4
Bromoform	P	0.242	0.221	-9.5
1,4-Dichlorobenzene-d4	I			
Cumene		3.901	3.532	-10.4
1,1,2,2-Tetrachloroethane	P	0.491	0.564	12.9

Surrogate	Flag	RF0.25	RFMEAN	%D
Dibromofluoromethane	S	0.492	0.443	-11.1
Toluene-d8	S	1.060	1.065	0.5
4-Bromofluorobenzene	S	0.562	0.508	-10.6

Approved by: VR Date 9/7/98

*- Fails QC Criteria for %D; << - Rf less than minimum QC RF; >>- RF greater than maximum QC RF

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Phone: (919) 544-5729 • Fax: (919) 544-5491

Triangle Laboratories, Inc.
Initial Calibration Curve

ICAL File: ICALH904 Date of Analysis :09/04/98 Analyte List: 8260
RF.5 HW893

VOST Calibration.

Analyte	Flag	RF.5	MEAN	%RSD	
Pentafluorobenzene	I				
1,3-Butadiene		0.455	0.455	0.0	
Vinyl bromide		0.375	0.375	0.0	
n-Hexane		0.459	0.459	0.0	
1,2-Epoxybutane		0.004	0.004	0.0	<<
Iso-Octane		1.767	1.767	0.0	
1,4-Difluorobenzene	I				
Ethyl acrylate		0.194	0.194	0.0	
Average %RSD				0.0	

Approved by: _____ Date ___/___/___

*- Fails QC Criteria for %RSD; << - RF less than minimum QC RF; >> - RF greater than maximum QC RF

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Triangle Laboratories, Inc.
Continuing Calibration Curve

CCAL File: HW893	Date of Analysis :09/04/98	Analyte List: 8260
ICAL File: ICALH904		

VOST Calibration.

Analyte	Flag	RF0.50	RFMEAN	%D	
Pentafluorobenzene	I				
1,3-Butadiene		0.455	0.455	0.0	
Vinyl bromide		0.375	0.375	0.0	
n-Hexane		0.459	0.459	0.0	
1,2-Epoxybutane		0.004	0.004	0.0	<<
Iso-Octane		1.767	1.767	0.0	
1,4-Difluorobenzene	I				
Ethyl acrylate		0.194	0.194	0.0	

Approved by: Batt Date 9/8/98

***- Fails QC Criteria for %D; << - Rf less than minimum QC RF; >>- RF greater than maximum QC RF**

TRIANGLE LABS

CASE NARRATIVE

Analysis of Samples for the Presence of Volatile Analytes by High-Resolution Gas Chromatography / Low-Resolution Mass Spectrometry

METHOD 8260 (7/92)

Date :	September 8, 1998
Client ID :	Pacific Environmental Services
TLI Project Number :	46323

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Fax # 919-544-5491

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Triangle Laboratories, Inc.
Case Narrative

September 8, 1998
46323

Objective: Analysis of two VOST tube pairs for a client-specified list of volatile compounds, using Method 8260.

Method:

Twenty three VOST tube pairs were received at Triangle Laboratories, Inc. on July 29, 1998 at 6°C. Analytical results reported in this data package pertain to the analysis of two "S" samples. The VOST tube pairs were analyzed according to the guidelines of Methods 8260 and 5040. The internal standards and surrogate standards were added in the amount of 0.25 micrograms (ug) immediately prior to analysis by GC/MS. The internal standards are pentafluorobenzene, 1,4-difluorobenzene, chlorobenzene-d_5 , and 1,4-dichlorobenzene-d_4, and the surrogate standards reported are dibromofluoromethane, toluene-d_8, and 4-bromofluorobenzene. The results reported relate only to the items tested.

The GC/MS analysis conditions are listed below:

Purge and trap:	Tekmar LSC-2000
Purge:	11 min.
Desorb Temperature:	250 C
Desorb Time:	4 min.
GC Conditions:	
Column:	30 m x .53 mm x 0.3*u* J&W DB624 0 C hold .5 min, 10 C/min to 45C, 6 C/min to 90C, hold 1.5 min, 50 C/min to 200C.
MS Conditions:	
Instrument:	VG-TRIO-1 Lab Base data system
Scan:	35-350 amu at .6s/scan
Interface:	Jet Separator, 200 C

Report:

Enclosed with the case narrative are copies of the sample identification index, the project summary sheets, client paperwork, sample log-in sheets, and log book pages. A sample identification index summarizes the client sample name, TLI sample number, and analytical file name for each sample and blank. The project summary lists the amounts for detected analytes in gray. The estimated detection limits will be listed in parentheses when the target analytes are not detected.

The data are reported as quantitation reports, chromatograms, interim reports, and spectra of detected target analytes. The quantitation report header lists the TLI project number, analysis method, instrument sample file name, client sample name, client project number, TLI sample number, calibration file, date received, and analysis date. The response factors used for all calculations are from the calibration file listed in the header. All initial and continuing calibration

data are located in the back of the data package. The amount is reported in total ug for the VOST tubes. The retention time (RT) will be listed for all internal standards and analytes which are detected. If a target analyte is not detected, it will be flagged with a "U" and a detection limit will be listed. Estimated detection limits are calculated for all analytes which were not found in the samples by using an area of 2000. The estimated detection limits reported are the average detection limits achievable over time on an instrument type. The actual detection limit for a given compound on a given day may vary from the estimate reported. The quantitation limit for all analytes is half of the low point of the initial calibration. Below this point the calibration cannot be considered to be linear. Any amount reported at a level below the quantitation limit will be flagged with a "J" and should be considered estimated. If any compounds are found at a level above the upper calibration range, the analyte will be flagged with an "E" and the amounts reported should be considered estimated. If any target analytes found in the laboratory blanks are detected in the associated samples, they will be flagged with a "B" on each sample topsheet. All analytes are quantitated against the internal standard preceding them on the target analyte list. Surrogate standards are quantitated against the internal standard with the matching internal standard reference number. For example, toluene-d_8 has 2 in the IS Ref column and would be quantitated against the internal standard which has IS2 listed in the flag column. If an internal standard area is above or below the quality control limits as defined by the continuing calibration, it will be flagged with "High" or "Low" in the flag column.

Results:

The samples were analyzed outside of the holding time. As per client request, the VOST tube pairs were analyzed separately.

The analyst observed the presence of moisture in each of the VOST tubes during analysis. For Tenax sample S-V-3-3-A, the level of moisture was sufficient to reduce the purge flow.

Each sample was processed twice, once against the calibrations containing compounds that are normally found in our Method 8260 standard solutions, and once against special single point calibrations containing six compounds. Therefore, each sample reported contains two sets of topsheets and interim reports, as well as a chromatogram and spectra for all analytes. Please note that the surrogate standards have been reported only on the first target analyte list. Results for the six analytes processed against a single point calibration should be considered estimates. The client requested analyte, Methyl-tert-butyl-ether (MTBE) was not present in the calibration standard. A manual search for this compound was performed. It was not identified in any of the samples.

Several analytes were found at amounts above the upper calibration limit of one microgram in the Tenax tube samples. These compounds are flagged with "E" and the amounts reported should be considered estimated. The field samples also contained very high levels of hydrocarbons.

All internal standard areas were within quality control limits for all samples and blanks, with the exception of low areas for 1,4-difluorobenzene, chlorobenzene-d_5 , and 1,4-dichlorobenzene-d_4 in Tenax tube sample S-V-3-3-A.

Surrogate standard percent recoveries were within quality control limits, with the exception of high recoveries for 4-bromofluorobenzene in both Tenax tube samples.

The laboratory blanks contained several analytes at amounts below the quantitation limit. The target analytes in a laboratory blank should not be considered as truly present in the native samples unless found at a level at least five times the amount found in the associated blank. In the event that the amount of a target analyte found in the samples is twenty times the amount found in the associated blank, the contribution from the blank can be considered negligible.

Sample Calculations:

Response Factor (RF) = $\frac{\text{(area analyte) x (amt IS)}}{\text{(area IS) x (amt analyte)}}$

Amount (ug) = $\frac{\text{(area analyte in sample) x (amt IS)}}{\text{(area IS) x (avg ical RF)}}$

Where:

amt IS = amount of internal standard = 0.25 ug
ical = initial calibration
avg ical RF = average response factor from the associated initial calibration

The data in this package has been judged to be valid according to the guidelines of Methods 8260 and 5040 except as noted above. Should you have any questions, please feel free to contact our Client Services Representative at (919) 544-5729.

For Triangle Laboratories, Inc.,

Report Preparation:

Penny A. Brock

Penny A. Brock
Report Preparation Chemist

Quality Control:

Sarah A. Hubbard

Sarah A. Hubbard
Report Preparation Chemist

The total number of pages in this data package is 124.

Triangle Laboratories, Inc.
Sample Identification Index for Project: 46323

Client Id:	TLI Id:	File Name:
S-V-2-4-A T	214-27-4A	HW903
S-V-2-4-B TC	214-27-4B	HW898
S-V-3-3-A T	214-27-12A	HW904
S-V-3-3-B TC	214-27-12B	HW899
VOSTBLK 090498 T/TC	VOSTBLK 0904 98	HW897

Triangle Laboratories, Inc.

Project Summary for Project 46323

Client ID:	S-V-2-4-A T	S-V-2-4-B TC	S-V-3-3-A T	S-V-3-3-B TC	VOSTBLK 09 0498 T/TC
Filename :	HW903	HW898	HW904	HW899	HW897
TLI Id :	214-27-4A	214-27-4B	214-27-12A	214-27-12B	VOSTBLK 0904
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
Chloromethane	0.390	0.766	0.253	0.353	0.025
Vinyl Chloride	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Bromomethane	0.086	0.141	0.059	0.071	0.022
Chloroethane	0.311	(0.001)	(0.001)	(0.001)	(0.001)
Trichlorofluoromethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1-Dichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Methylene chloride	(0.001)	0.020	(0.001)	(0.001)	0.004
trans-1,2-Dichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1-Dichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
cis-1,2-Dichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Chloroform	(0.001)	(0.001)	(0.001)	(0.001)	0.001
1,1,1-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Iodomethane	(0.001)	(0.001)	(0.001)	(0.001)	0.002
Carbon disulfide	0.943	(0.001)	0.571	(0.001)	(0.001)
Acetone	2.048	0.006	3.124	0.075	0.005
Allyl chloride	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Acrylonitrile	(0.006)	(0.005)	(0.007)	(0.005)	(0.004)
Vinyl acetate	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
2-Butanone	1.402	(0.001)	2.881	0.050	0.003
Carbon tetrachloride	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Benzene	0.711	0.006	1.627	0.037	0.027
1,2-Dichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Trichloroethene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,2-Dichloropropane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Bromodichloromethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
cis-1,3-Dichloropropene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Toluene	0.820	0.009	3.898	0.005	0.004
trans-1,3-Dichloropropene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,1,2-Trichloroethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Methyl methacrylate	(0.002)	(0.001)	(0.003)	(0.001)	(0.001)
4-Methyl-2-pentanone	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
Tetrachloroethene	(0.001)	(0.001)	(0.001)	(0.001)	0.001
Dibromochloromethane	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
1,2-Dibromoethane	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
Chlorobenzene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

( )-Estimated Detection Limit

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Triangle Laboratories, Inc.
Project Summary for Project 46323

Client ID:	S-V-2-4-A T	S-V-2-4-B TC	S-V-3-3-A T	S-V-3-3-B TC	VOSTBLK 09 0498 T/TC
Filename :	HW903	HW898	HW904	HW899	HW897
TLI Id :	214-27-4A	214-27-4B	214-27-12A	214-27-12B	VOSTBLK 0904
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
Ethylbenzene	0.385	0.001	2.716	(0.001)	0.001
m-/p-Xylene	2.108	0.001	12.924	(0.001)	0.001
o-Xylene	0.784	(0.001)	3.540	(0.001)	0.001
Styrene	0.145	0.001	0.490	(0.001)	0.002
Bromoform	(0.001)	(0.001)	(0.002)	(0.001)	(0.001)
2-Hexanone	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)
Cumene	(0.001)	(0.001)	(0.001)	(0.001)	0.001
1,1,2,2-Tetrachloroethane	(0.001)	(0.001)	(0.003)	(0.001)	(0.001)

( )-Estimated Detection Limit

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Triangle Laboratories, Inc.

Project Summary for Project 46323

Client ID:	S-V-2-4-A T	S-V-2-4-B TC	S-V-3-3-A T	S-V-3-3-B TC	VOSTBLK 09 0498 T/TC
Filename :	HW903	HW898	HW904	HW899	HW897
TLI Id :	214-27-4A	214-27-4B	214-27-12A	214-27-12B	VOSTBLK 0904
Matrix :	VOST	VOST	VOST	VOST	VOST
Units :	ug	ug	ug	ug	ug
1,3-Butadiene	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Vinyl bromide	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
n-Hexane	1.423	0.002	5.008	0.003	0.001
1,2-Epoxybutane	(0.046)	(0.035)	(0.055)	(0.036)	(0.034)
Iso-Octane	(0.001)	0.001	(0.001)	(0.001)	(0.001)
Ethyl acrylate	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)

( )-Estimated Detection Limit

Triangle Laboratories, Inc.
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PACIFIC ENVIRONMENTAL SERVICES, INC.

Central Park West
5001 South Miami Boulevard, P.O. Box 12077
Research Triangle Park, North Carolina 27709-2077
(919) 941-0333 FAX: (919) 941-0234

Sample Chain of Custody Record

PLANT: US EPA HOT MIX ASPHALT PLANT C
RECOVERY PERSON: Abernathy, Maret
PROJECT NO.: R012.001
SAMPLERS: Abernathy, Maret

Sample Identification	Collection Date	Collection Time	Sample Name	Number of Containers	Analytical Request					Comments
T-V-3-1-B	7/27/98		Tunnel Run 3 Set 1	1						Tenax/Charcoal
T-V-3-2-A	7/27/98		Tunnel Run 3 Set 2	1						Tenax
T-V-3-2-B	7/27/98		Tunnel Run 3 Set 2	1						Tenax/Charcoal
T-V-3-3-A	7/27/98		Tunnel Run 3 Set 3	1						Tenax
T-V-3-3-B	7/27/98		Tunnel Run 3 Set 3	1						Tenax/Charcoal
S-V-FB-A	7/26/98		Silo Field Blank	1						Tenax
S-V-FB-B	7/26/98		Silo Field Blank	1						Tenax/Charcoal
T-V-4-1-A	7/26/98		Tunnel Run 4 Set 1	1						Tenax
T-V-4-1-B	7/26/98		Tunnel Run 4 Set 1	1						Tenax/Charcoal
T-V-4-2-A	7/26/98		Tunnel Run 4 Set 2	1						Tenax
T-V-4-2-B	7/26/98		Tunnel Run 4 Set 2	1						Tenax/Charcoal
T-V-4-3-A	7/26/98		Tunnel Run 4 Set 3	1						Tenax
T-V-4-3-B	7/26/98		Tunnel Run 4 Set 3	1						Tenax/Charcoal
T-V-4-4-A	7/26/98		Tunnel Run 4 Set 4	1						Tenax
T-V-4-4-B	7/26/98		Tunnel Run 4 Set 4	1						Tenax/Charcoal

Relinquished by:	Date	Time	Received by:
Michael D. Maret	7/28/98	1020	
Relinquished by:	**Date**	**Time**	**Received for Lab by:**
	7/29/98	1000	Bill Hurst

PACIFIC ENVIRONMENTAL SERVICES, INC.

Central Park West
5001 South Miami Boulevard, P.O. Box 12077
Research Triangle Park, North Carolina 27709-2077
(919) 941-0333 FAX: (919) 941-0234

Sample Chain of Custody Record

PLANT: US EPA HOT MIX ASPHALT PLANT C
RECOVERY PERSON: Abernathy, Maret

PROJECT NO.: R012.001
SAMPLERS: Abernathy, Maret

Sample Identification	Collection Date	Collection Time	Sample Name	Number of Containers	Analytical Request					Comments
S-V-2-1-A	7/25/98		Silo 2 Run 2 Set 1	1						Tenax
S-V-2-1-B	7/25/98		Silo 2 Run 2 Set 1	1						Tenax/Charcoal
S-V-2-2-A	7/25/98		Silo 2 Run 2 Set 2	1						Tenax
S-V-2-2-B	7/25/98		Silo 2 Run 2 Set 2	1						Tenax/Charcoal
S-V-2-3-A	7/25/98		Silo 2 Run 2 Set 3	1						Tenax
S-V-2-3-B	7/25/98		Silo 2 Run 2 Set 3	1						Tenax/Charcoal
S-V-2-4-A	7/25/98		Silo 2 Run 2 Set 4	1						Tenax
S-V-2-4-B	7/25/98		Silo 2 Run 2 Set 4	1						Tenax/Charcoal
T-V-2-1-A	7/25/98		Tunnel Run 2 Set 1	1						Tenax
T-V-2-1-B	7/25/98		Tunnel Run 2 Set 1	1						Tenax/Charcoal
T-V-2-2-A	7/25/98		Tunnel Run 2 Set 2	1						Tenax
T-V-2-2-B	7/25/98		Tunnel Run 2 Set 2	1						Tenax/Charcoal
T-V-2-3-A	7/25/98		Tunnel Run 2 Set 3	1						Tenax
T-V-2-3-B	7/25/98		Tunnel Run 2 Set 3	1						Tenax/Charcoal
T-V-2-4-A	7/25/98		Tunnel Run 2 Set 4	1						Tenax
T-V-2-4-B	7/25/98		Tunnel Run 2 Set 4	1						Tenax/Charcoal
T-V-FB-A	7/25/98		Tunnel Field Blank	1						Tenax
T-V-FB-B	7/25/98		Tunnel Field Blank	1						Tenax/Charcoal
S-V-3-1-A	7/27/98		Silo 2 Run 3 Set 1	1						Tenax
S-V-3-1-B	7/27/98		Silo 2 Run 3 Set 1	1						Tenax/Charcoal
S-V-3-2-A	7/27/98		Silo 2 Run 3 Set 2	1						Tenax
S-V-3-2-B	7/27/98		Silo 2 Run 3 Set 2	1						Tenax/Charcoal
S-V-3-3-A	7/27/98		Silo 2 Run 3 Set 3	1						Tenax
S-V-3-3-B	7/27/98		Silo 2 Run 3 Set 3	1						Tenax/Charcoal
S-V-3-4-A	7/27/98		Silo 2 Run 3 Set 4	1						Tenax
S-V-3-4-B	7/27/98		Silo 2 Run 3 Set 4	1						Tenax/Charcoal
S-V-3-5-A	7/27/98		Silo 2 Run 3 Set 5	1						Tenax
S-V-3-5-B	7/27/98		Silo 2 Run 3 Set 5	1						Tenax/Charcoal
S-V-3-6-A	7/27/98		Silo 2 Run 3 Set 6	1						Tenax
S-V-3-6-B	7/27/98		Silo 2 Run 3 Set 6	1						Tenax/Charcoal
T-V-3-1-A	7/27/98		Tunnel Run 3 Set 1	1						Tenax

TRIANGLE LABS

DOCUMENT CONTROL

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Durham, NC 27713-4411
919-544-5729

P.O. Box 13485
Research Triangle Park, NC 2770
Fax # 919-544-5491

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TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

Sample Seals: Absent
Container...: Intact

COPY

TLI Project Number 46323
Client: PES03 - Pacific Environmental Services

Date Received 07/29/98 By
Carrier and Number FedEx/

Book 214
Page 27

Ice Chest ICE PACKS Temp 6.0 C

TLI Number.. mR/H:CPM.	Client Sample ID..... Client COC ID.....*	Location.....	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
214-27-1A	S-V-2-1-A S-V-2-1-A	R026	TENAX									
214-27-1B	S-V-2-1-B S-V-2-1-B	R026	TNX/CHAR									
214-27-2A	S-V-2-2-A S-V-2-2-A	R026	TENAX									
214-27-2B	S-V-2-2-B S-V-2-2-B	R026	TNX/CHAR									
214-27-3A	S-V-2-3-A S-V-2-3-A	R026	TENAX									
214-27-3B	S-V-2-3-B S-V-2-3-B	R026	TNX/CHAR									
214-27-4A	S-V-2-4-A S-V-2-4-A	R026	TENAX									
214-27-4B	S-V-2-4-B S-V-2-4-B	R026	TNX/CHAR									
214-27-5A	T-V-2-1-A T-V-2-1-A	R026	TENAX									
214-27-5B	T-V-2-1-B T-V-2-1-B	R026	TNX/CHAR									
214-27-6A	T-V-2-2-A T-V-2-2-A	R026	TENAX									
214-27-6B	T-V-2-2-B T-V-2-2-B	R026	TNX/CHAR									
214-27-7A	T-V-2-3-A T-V-2-3-A	R026	TENAX									
214-27-7B	T-V-2-3-B T-V-2-3-B	R026	TNX/CHAR									

Receiving Remarks:

Archive Remarks:

TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

Sample Seals: Absent
Container...: Intact

TLI Project Number 46323
Client: PES03 - Pacific Environmental Services

Date Received 07/29/98 By

Carrier and Number FedEx/

Book 214 Page 27

Ice Chest ICE PACKS Temp 6.0 C

TLI Number.. mR/H:CPM.	Client Sample ID..... Client COC ID.....*	Location.....	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
214-27-8A	T-V-2-4-A T-V-2-4-A	R026	TENAX									
214-27-8B	T-V-2-4-B T-V-2-4-B	R026	TNX/CHAR									
214-27-9A	T-V-FB-A T-V-FB-A	R026	TENAX									
214-27-9B	T-V-FB-B T-V-FB-B	R026	TNX/CHAR									
214-27-10A	S-V-3-1-A S-V-3-1-A	R026	TENAX									
214-27-10B	S-V-3-1-B S-V-3-1-B	R026	TNX/CHAR									
214-27-11A	S-V-3-2-A S-V-3-2-A	R026	TENAX									
214-27-11B	S-V-3-2-B S-V-3-2-B	R026	TNX/CHAR									
214-27-12A	S-V-3-3-A S-V-3-3-A	R026	TENAX									
214-27-12B	S-V-3-3-B S-V-3-3-B	R026	TNX/CHAR									
214-27-13A	S-V-3-4-A S-V-3-4-A	R026	TENAX									
214-27-13B	S-V-3-4-B S-V-3-4-B	R026	TNX/CHAR									
214-27-14A	S-V-3-5-A S-V-3-5-A	R026	TENAX									
214-27-14B	S-V-3-5-B S-V-3-5-B	R026	TNX/CHAR									

Receiving Remarks:

Archive Remarks:

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TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

Sample Seals: Absent
Container...: Intact

TLI Project Number 46323
Client: PES03 - Pacific Environmental Services

Date Received 07/29/98 By

Carrier and Number FedEx/

Book 214 Page 27

Ice Chest ICE PACKS Temp 6.0 C

TLI Number.. mR/H:CPM.	Client Sample ID..... Client COC ID.....*	Location.....	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
214-27-15A	S-V-3-6-A S-V-3-6-A	R026	TENAX									
214-27-15B	S-V-3-6-B S-V-3-6-B	R026	TNX/CHAR									
214-27-16A	T-V-3-1-A T-V-3-1-A	R026	TENAX									
214-27-16B	T-V-3-1-B T-V-3-1-B	R026	TNX/CHAR									
214-27-17A	T-V-3-2-A T-V-3-2-A	R026	TENAX									
214-27-17B	T-V-3-2-B T-V-3-2-B	R026	TNX/CHAR									
214-27-18A	T-V-3-3-A T-V-3-3-A	R026	TENAX									
214-27-18B	T-V-3-3-B T-V-3-3-B	R026	TNX/CHAR									
214-27-19A	S-V-FB-A S-V-FB-A	R026	TENAX									
214-27-19B	S-V-FB-B S-V-FB-B	R026	TNX/CHAR									
214-27-20A	T-V-4-1-A T-V-4-1-A	R026	TENAX									
214-27-20B	T-V-4-1-B T-V-4-1-B	R026	TNX/CHAR									
214-27-21A	T-V-4-2-A T-V-4-2-A	R026	TENAX									
214-27-21B	T-V-4-2-B T-V-4-2-B	R026	TNX/CHAR									

Receiving Remarks:

Archive Remarks:

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TRIANGLE LABORATORIES, INC. -- LOG IN RECORD/CHAIN OF CUSTODY

Custody Seal : Absent
Chain of Custody : Present
Sample Tags : Absent
Sample Tag Numbers: Not Listed on Chain of Custody
SMO Forms : N/A

Sample Seals: Absent
Container...: Intact

TLI Project Number 46323
Client: PES03 - Pacific Environmental Services

Date Received 07/29/98 By

Carrier and Number FedEx/

Book 214

Page 27

Ice Chest ICE PACKS Temp 6.0 C

TLI Number.. mR/H:CPM.	Client Sample ID..... Client COC ID.....*	Location.....	Matrix	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	To LAB Date/Init	To STORAGE Date/Init	DISPOSED Date/Init
214-27-22A	T-V-4-3-A T-V-4-3-A	R026	TENAX									
214-27-22B	T-V-4-3-B T-V-4-3-B	R026	TNX/CHAR									
214-27-23A	T-V-4-4-A T-V-4-4-A	R026	TENAX									
214-27-23B	T-V-4-4-B T-V-4-4-B	R026	TNX/CHAR									

Receiving Remarks:

Archive Remarks:

Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA3	8260B	

Extract / Sample volume _____ Circle unit µL mL

Lorney C. [signature] 9/3/98
Signature Date

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VS9-96-2 exp. 9/7/98 @ 25ug/ml	VS9-100-1 exp. 9/16/98 @ 25ug/ml	

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/3/98	17:48	—	10ul VS9-99-2 exp. 9/14/98	VOSTD0.50 T/TC	HW883	N/A	[initials] 9/3/98		[initials]	
9/3/98	18:30	—	10ul VS9-99-3 exp. 9/14/98	VOSTD0.75 T/TC	HW884	N/A	[initials] 9/3/98		[initials]	
9/4/98	05:18	—	10ul VS9-96-2 exp. 9/7/98	BFB	HW885	N/A	[initials] 9/4/98		[initials]	
9/4/98	05:46	—	10ul VS9-100-1 exp. 9/16/98	VOSTBIK T/TC	HW886	N/A	[initials] 9/4/98		[initials]	
9/4/98	08:29	—	10ul VS9-98-4 exp. 9/14/98	VOSTD0.10 T/TC	HW887	N/A	[initials] 9/4/98		[initials]	
9/4/98	09:17	—	10ul VS9-99-1 exp. 9/14/98	VOSTD0.25 T/TC	HW888	N/A	[initials] 9/4/98		[initials]	Ical [initials] 9/4/98
9/4/98	10:06	—	10ul VS9-99-2 exp. 9/14/98	VOSTD0.50 T/TC	HW889	N/A	[initials] 9/4/98		[initials]	
9/4/98	10:51	—	10ul VS9-99-3 exp. 9/14/98	VOSTD0.75 T/TC	HW890	N/A	[initials] 9/4/98		[initials]	
9/4/98	11:36	—	10ul VS9-99-4 exp. 9/14/98	VOSTD1.00 T/TC	HW891	N/A	[initials] 9/4/98		[initials]	
9/4/98	12:32	—	20ul VS9-96-2 exp. 9/7/98	BFB	HW892	N/A	[initials] 9/4/98		[initials]	

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* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA3	8260B	8260X

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSG-96-L exp. 9/21/98 @ 25ug/ml	VSG-100-1 exp. 9/16/98 @ 25ug/ml	

Extract / Sample volume _____ µL mL (Circle unit)

Tony C. Spinell 9/4/98
Signature Date

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/4/98	12:48	10ul VSG-100-3 exp 9/16/98	10ul VSG-100-1 exp. 9/16/98	Additionals VOSTD0.50 TITC	HW893	N/A	Jcl 9/4/98		Jcl	
9/4/98	13:41	—	10ul VSG-99-1 exp. 9/14/98	VOSTD0.25 TITC	HW894	N/A	Jcl 9/4/98		Jcl	
9/4/98	14:24	—	10ul VSG-100-1 exp. 9/16/98	VOSTB1K TITC	HW895	N/A	Jcl 9/4/98		Jcl	
9/4/98	15:14	—	10ul VSG-100-1 exp. 9/16/98	VOSTB1K TITC	HW896	N/A	Jcl 9/4/98		Jcl	
9/4/98	15:57	—	10ul VSG-100-1 exp. 9/16/98	VOSTB1K TITC	HW897	N/A	Jcl 9/4/98		Jcl	
9/4/98	16:34	46323	214-27-4B	S-V-2-4-B TIC	HW898	N/A	Jcl 9/4/98		Jcl	moisture from tube Jcl 9/4/98
9/4/98	17:12	46323	214-27-12B	S-V-3-3-B TIC	HW899	N/A	Jcl 9/4/98		Jcl	moisture from tube Jcl 9/4/98
9/4/98	no time 9/4/98	46297	214-1-1B	S-V-1-1-B TIC	HW900	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98 Computer failure Last File No data collected No scans acquired
9/4/98	18:28	46297	214-1-2B	S-V-1-2-B TIC	HW901	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98
9/4/98	19:04	46297	214-1-4B	S-V-1-4-B TIC	HW902	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

MFT = Moisture from Tube
Jcl 9/4/98

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Triangle Laboratories, Inc.
Run Log

Column Type	Column #	Analysis*	Acquisition Method	GC Method*	Find DBs*	Other*
DB624	3274056	8260	VOA	VOA3	8260B	826BX

Standards		
Internal / Surrogate / Recovery	Internal / Surrogate / Recovery	Analyte
VSG-96-2 exp. 9/7/98 @ 25ug/ml	VSG-100-2 exp. 9/16/98 @ 25ug/ml	

Extract / Sample volume _____ Circle unit µL mL

Signature: James C. [illegible] Date: 9/4/98

Date**	Time**	Project	Sample#	Client ID	Filename	pH*	Operator/Date	Backup*	Proc	Comments***
9/4/98	19:38	46323	214-27-4A ~~46323~~	(E) S-V-2-4-A T	HW903	N/A	Jcl 9/4/98		Jcl	Moisture From tube MFT Jcl 9/4/98
9/4/98	20:21	46323	214-27-12A	S-V-3-3-A T	HW904	N/A	Jcl 9/4/98		Jcl	Lots of MFT Jcl Flow 9/4/98 reduced/stopped extended purge cycle
9/4/98	20:57	46297	214-1-1A	S-V-1-1-A T	HW905	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98
9/4/98	21:26	46297	214-1-2A	S-V-1-2-A T	HW906	N/A	Jcl 9/4/98		Jcl	MFT Jcl 9/4/98
9/4/98	22:01	46297	214-1-4A	S-V-1-4-A T	HW907	N/A	Jcl 9/4/98		Jcl	

MFT-Moisture from tube Jcl 9/4/98

* Volatile Data Only ** Transcribed Data *** Dated Signature/Initials Required

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TRIANGLE LABS

SAMPLE DATA

Triangle Laboratories, Inc.
801 Capitola Drive
Durham, NC 27713-4411
919-544-5729

P.O. Box 13485
Research Triangle Park, NC 2770
Fax # 919-544-5491

Pacific Environmental Services

Project Number: 46323
Sample File: HW897

Method 8260 VOST
Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001 | **Date Received: / /** | **Response File: ICALH904**
TLI ID: VOSTBLK090498
Date Analyzed : 09/04/98

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
Chloromethane	0.025	J	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.022	J	1.46		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane	0.002	J	2.56		0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.005	J	2.64		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride	0.004	J	3.04		0.05
Acrylonitrile		U		0.004	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone	0.003	J	4.50		0.05
Chloroform	0.001	J	4.75		0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.77		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.027	J	5.24		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.7
Printed: 16:29 09/08/1998

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Pacific Environmental Services

Project Number: 46323
Sample File: HW897

Method 8260 VOST
Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001
TLI ID: VOSTBLK090498

Date Received: / /

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.001	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.004	J	7.74		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.94		
Tetrachloroethene	0.001	J	8.55		0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.001	J	10.29		0.05
m-/p-Xylene	0.001	J	10.53		0.10
o-Xylene	0.001	J	11.24		0.05
Styrene	0.002	J	11.28		0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.05		
Cumene	0.001	J	12.01		0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Printed: 16:29 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW897

Method 8260 VOST
Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001
TLI ID: VOSTBLK090498

Date Received: / /

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.280	4.91	1	112
Toluene-d_8	0.273	7.64	2	109
4-Bromofluorobenzene	0.314	12.22	2	126

Reviewed by RaB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.7
Printed: 16:29 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW897

Method 8260 VOST
Sample ID: VOSTBLK 090498 T/TC

Client Project: R012.001
TLI ID: VOSTBLK090498

Date Received: / /

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	0.001	J	3.64		0.25
1,2-Epoxybutane		U		0.034	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.77		
Ethyl acrylate		U		0.001	0.25

Reviewed by BAB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.7
Printed: 16:54 09/08/1998

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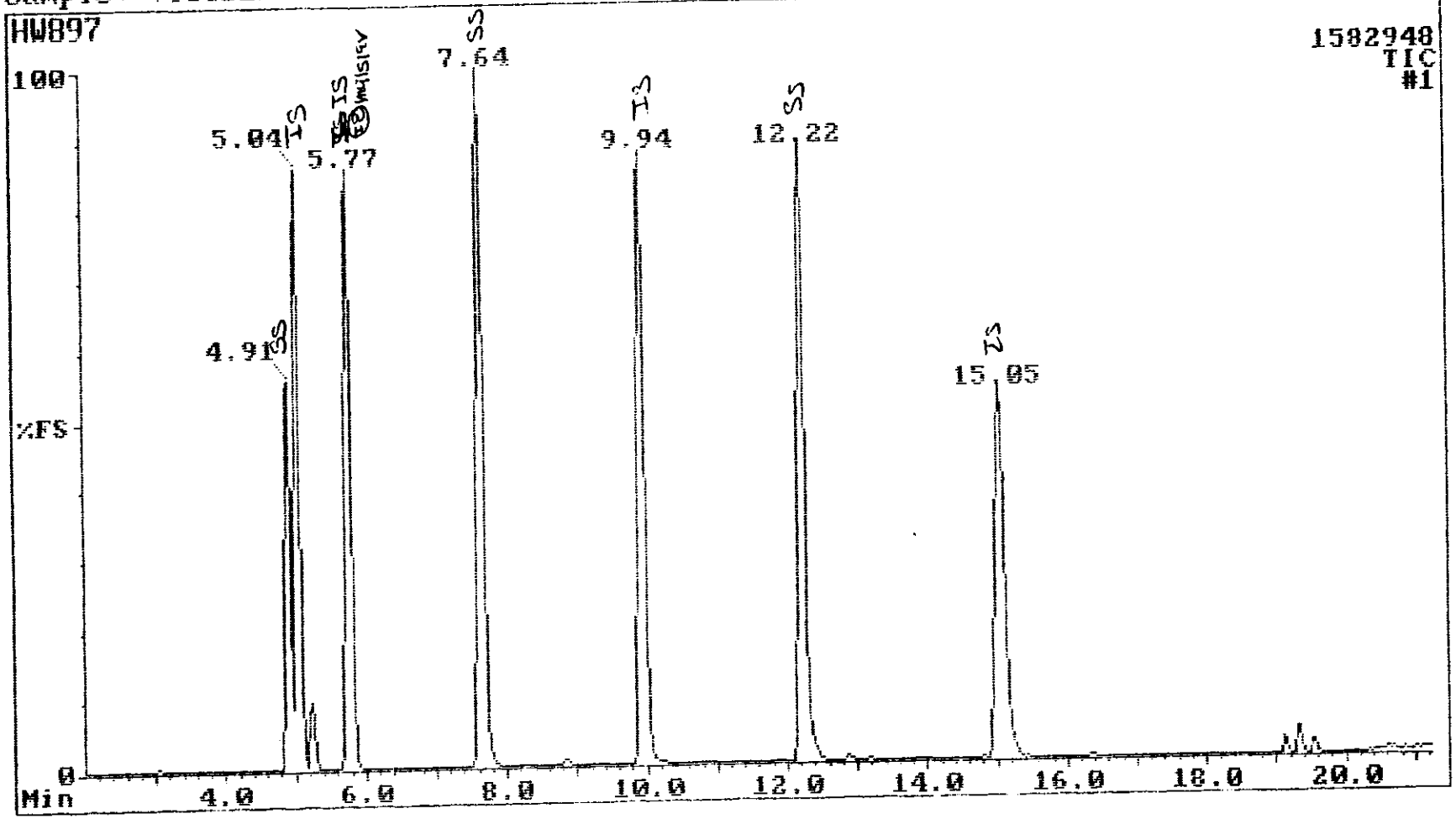
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



Data Review: WL
Date: 9/8/98

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QUAN DB : HW897 LAB-BASE QUAN 09-04-98 16:45

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	85	99	-2	3670831	bv	5.04	168	Pentafluorobenzene
2	100	96	98	0	4037552	bv	5.77	114	1,4-Difluorobenzene
3	100	95	96	-1	3878054	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	0	1886261	bv	15.05	152	1,4-Dichlorobenzene-d4
5	100	97	99	1	1823460	bv	4.91	113	Dibromofluoromethane
6	100	92	97	0	4689891	bv	7.64	98	Toluene-d8
7	100	89	93	0	2576768	bv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	98	74	82	0	92252	bv	0.96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	100	91	96	0	105020	bv	1.46	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	92	70	84	2	19672	bb	2.56	142	Iodomethane
16	73	40	77	0	~~9020~~	~~bb~~	~~2.56~~ FP	76	Carbon disulfide
17	79	41	86	0	10200	A	2.64	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	100	77	90	0	18424	bb	3.04	84	Methylene chloride
20	0	0	0	0	0		0.00	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	71	49	68	1	7204	bb	4.50	43	2-Butanone
27	70	48	67	1	3844	bv	4.75	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	99	99	1	495836	bv	5.24	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	0	0	0	0	0		0.00	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	43	3	66	0	~~23280~~	~~bb~~	~~7.63~~ FP	43	4-Methyl-2-pentanone
41	89	62	88	1	47340	bb	7.74	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloroproper
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	77	58	68	0	3636	bb	8.55	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	0	0	0	0	0		0.00	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

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Data Review: YR
Date: 9/5/98

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	43	21	52	2	2740	bb	10.29	106	Ethylbenzene
53	72	55	66	2	11892	bv	10.53	106	m-/p-Xylene
54	62	55	55	4	6024	A	11.24	106	o-Xylene
55	69	64	64	5	23120	A	11.28	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	74	62	62	3	15420	bv	12.01	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	65	33	73	1	13000	A	12.42	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	79	66	73	3	5764	A	12.84	120	n-Propylbenzene
62	15	10	37	-31	1393252	A	12.22	75	trans-1,4-Dichloro-2-but
63	84	67	78	3	10632	A	12.90	126	2-Chlorotoluene
64	79	68	71	4	14408	bv	13.18	126	4-Chlorotoluene
65	56	39	55	2	18488	bv	13.31	105	1,3,5-Trimethylbenzene
66	72	59	59	0	15250	A	14.06	119	tert-Butylbenzene
67	85	70	70	1	43296	A	14.22	105	1,2,4-Trimethylbenzene
68	74	56	66	0	24988	A	14.71	105	sec-Butylbenzene
69	0	0	0	0	0		0.00	119	p-Cymene
70	92	70	81	1	37788	A	14.82	146	1,3-Dichlorobenzene
71	0	0	0	0	67324 ~~9~~ m		15.13 ~~0.00~~ ✓	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	68	52	60	2	29716	A	16.84	91	n-Butylbenzene
74	81	68	75	3	53176	A	16.39	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	96	91	92	6	55508	bv	19.12	180	1,2,4-Trichlorobenzene
77	62	23	90	6	14016	bb	19.33	225	Hexachlorobutadiene
78	96	88	91	6	120696	A	19.32	128	Naphthalene
79	88	77	87	6	41368	bv	19.53	180	1,2,3-Trichlorobenzene

MQ15/98

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QUAN DB : HW897 LAB-BASE QUAN 09-04-98 16:56

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	85	99	0	3670831	bv	5.04	168	Pentafluorobenzene
2	100	96	98	1	4037552	bv	5.77	114	1,4-Difluorobenzene
3	100	95	96	-2	3878054	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	3	1886261	bv	15.05	152	1,4-Dichlorobenzene-d4
5	100	97	99	1	1823460	bv	4.91	113	Dibromofluoromethane
6	100	92	97	-1	4689891	bv	7.64	98	Toluene-d8
7	100	89	93	-1	2576768	bv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	0	0	0	0	0		0.00	73	MTBE
11	64	52	52	1	5940	A	3.64	57	n-Hexane
12	0	0	0	0	0		0.00	42	1,2-Epoxybutane
13	0	0	0	0	0		0.00	57	Iso-Octane
14	0	0	0	0	0		0.00	55	Ethyl acrylate

Data Review: YK
Date: 9/5/98

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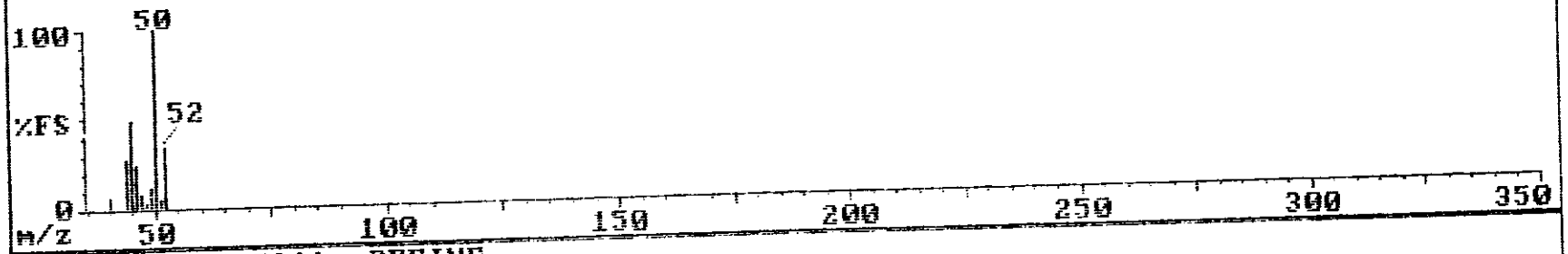
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

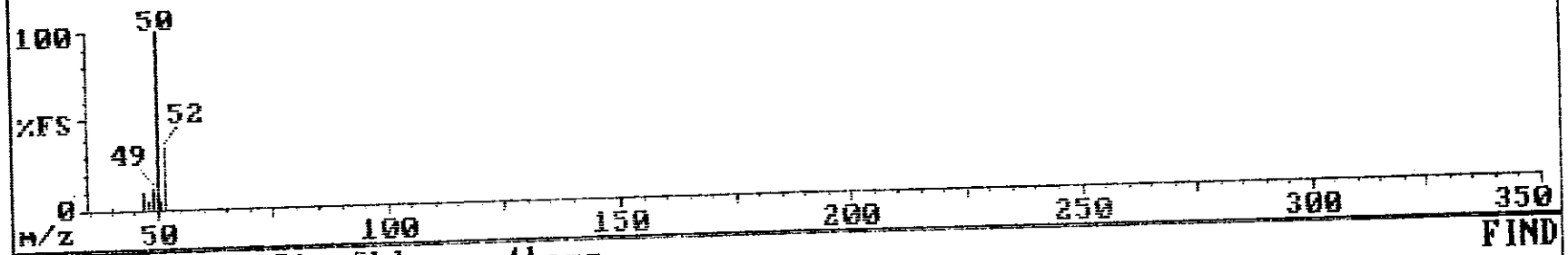
Instrument H

Sample: VOSTBLK T/TC

HW897 96 (0.960) 18176

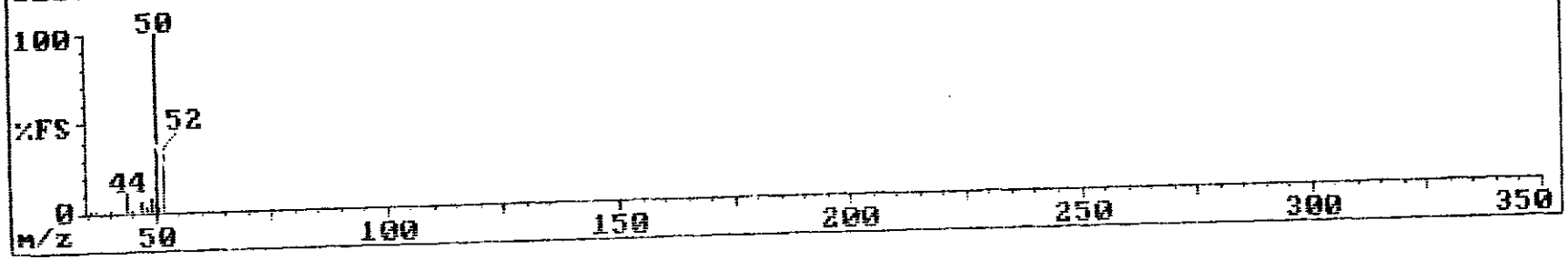


HW897 96 (0.961) REFINE 17664



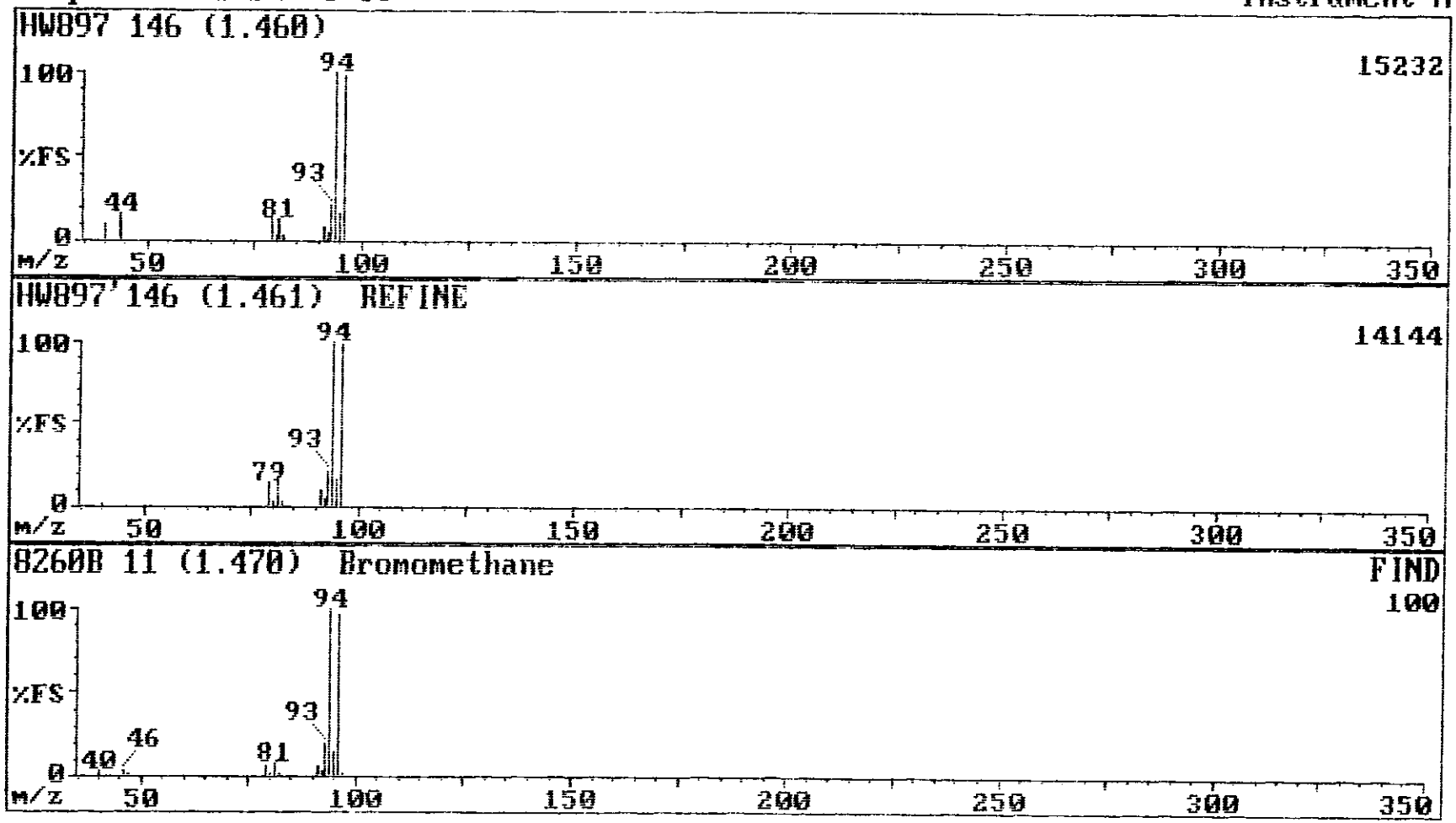
FIND

8260B 9 (0.960) Chloromethane 100



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

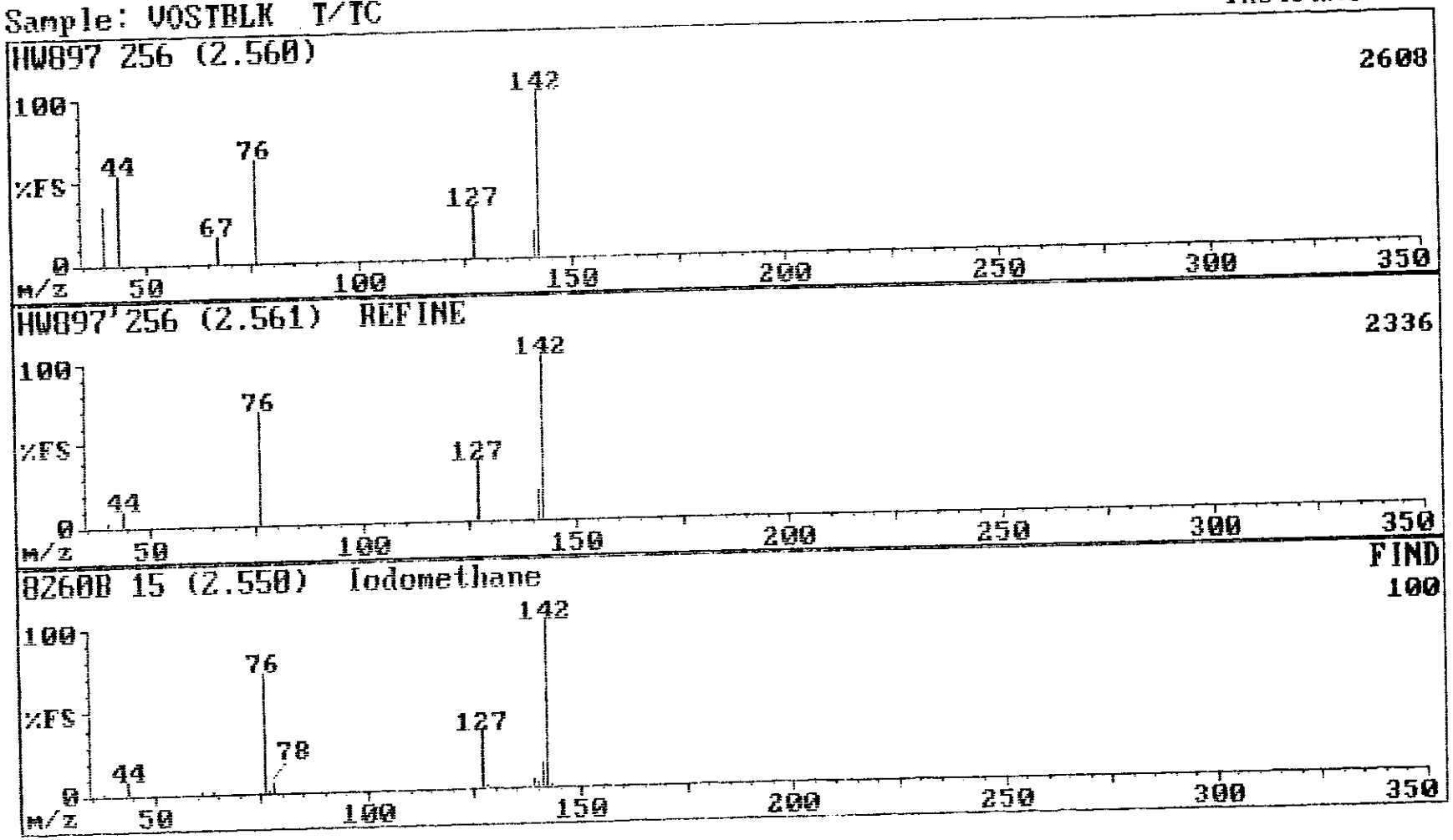
Sample: VOSTBLK T/TC Instrument H



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Instrument H

Sample: VOSTBLK T/TC



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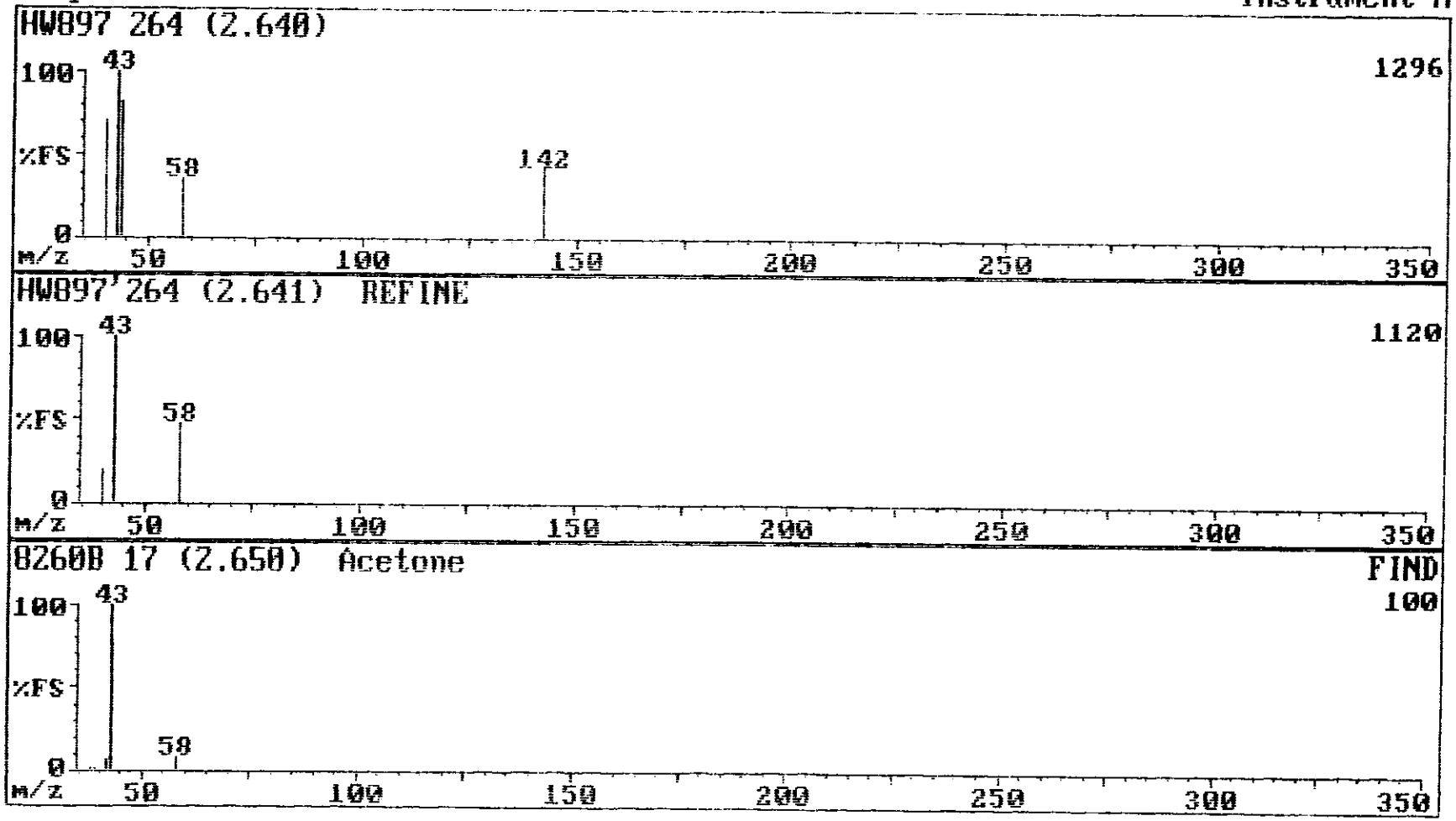
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H

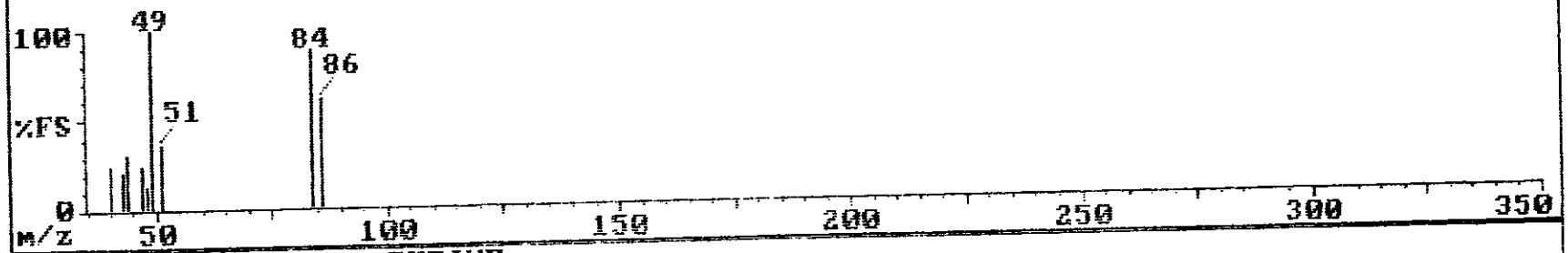


09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

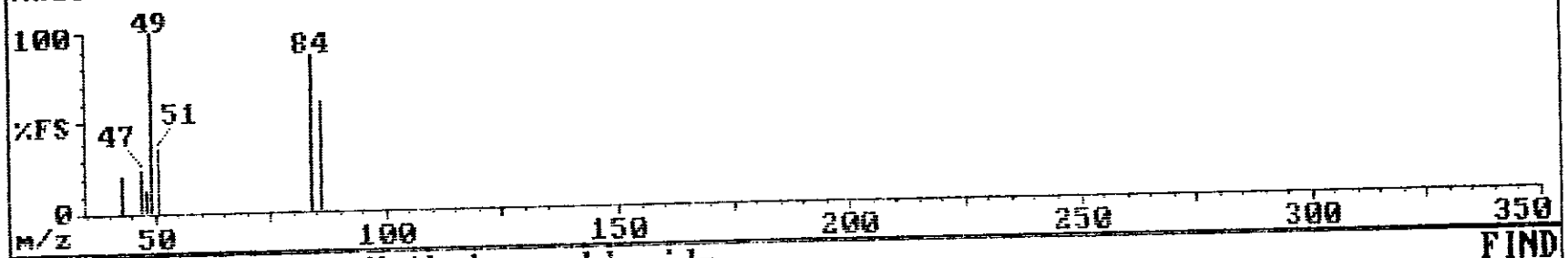
Instrument H

Sample: VOSTBLK T/TC

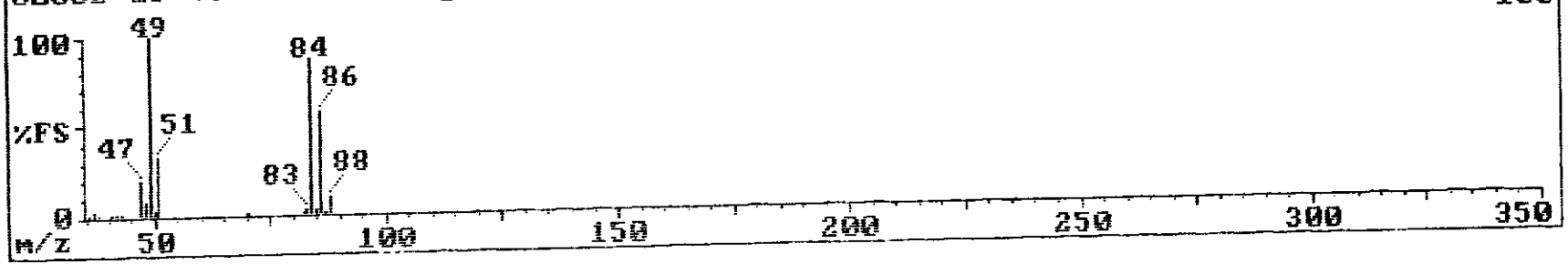
HW897 304 (3.040) 3392



HW897 304 (3.041) REFINE 3424

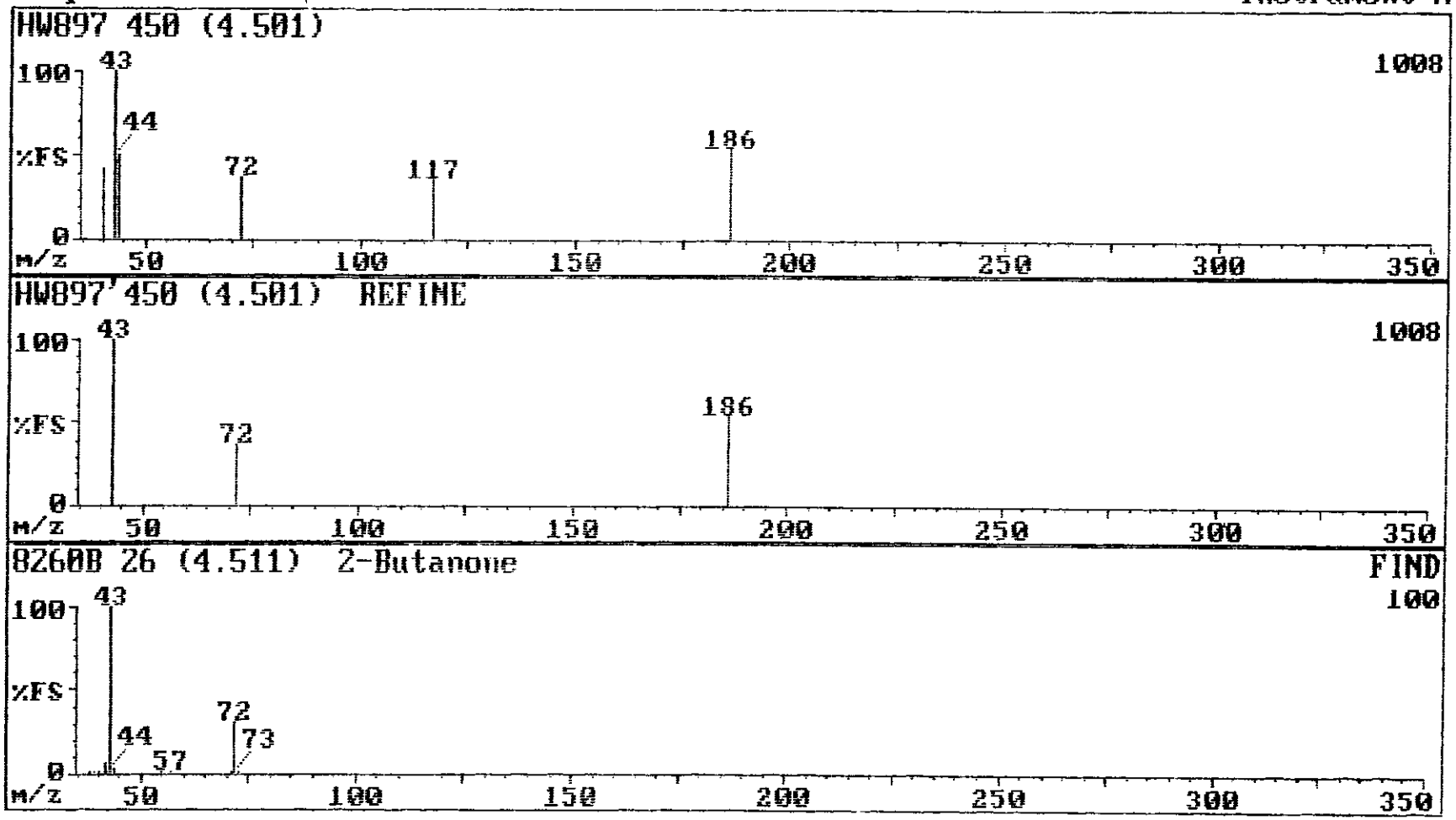


8260B 19 (3.050) Methylene chloride FIND 100



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

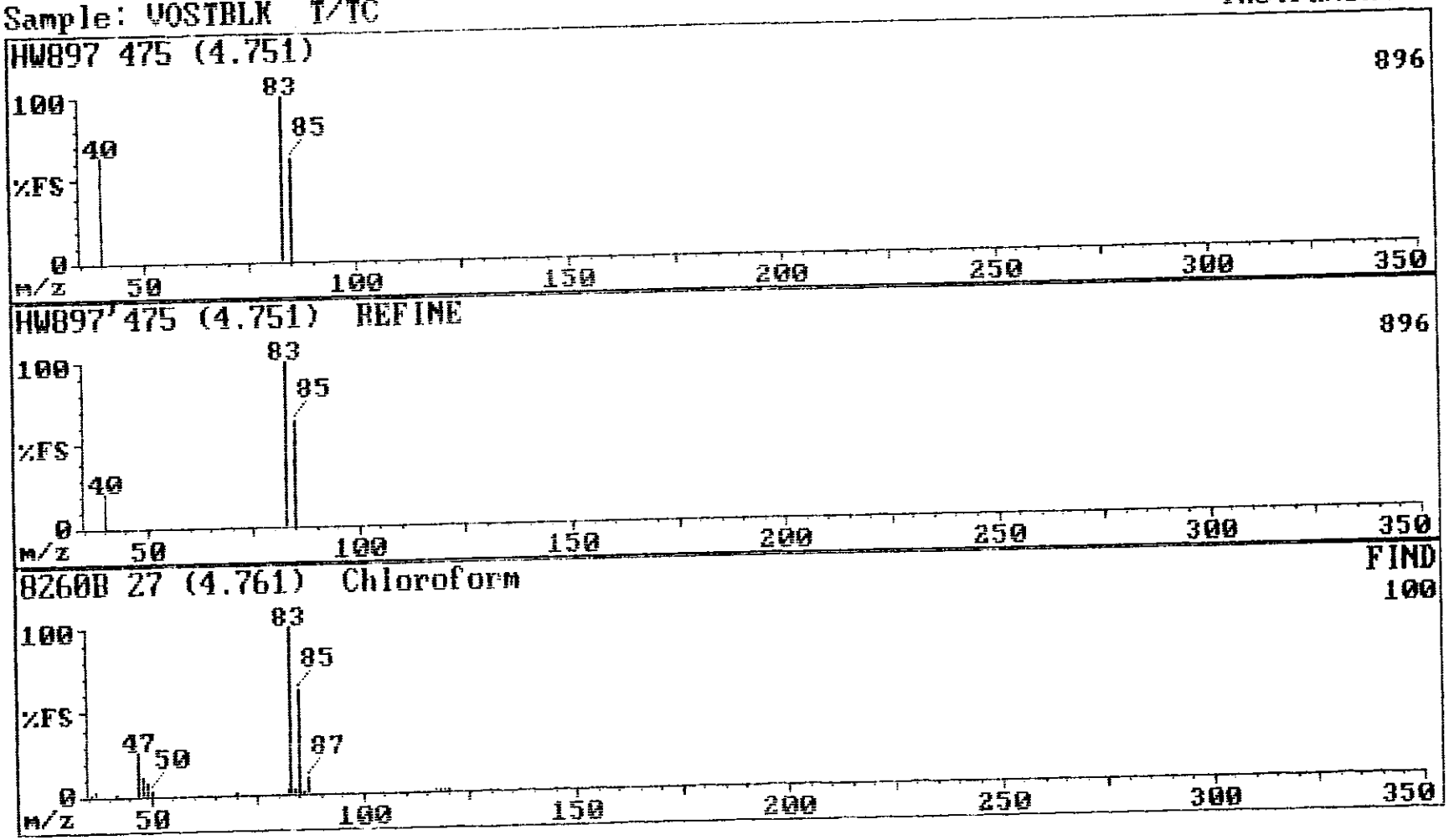
Sample: VOSTBLK T/TC Instrument H



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Instrument H

Sample: VOSTBLK T/TC



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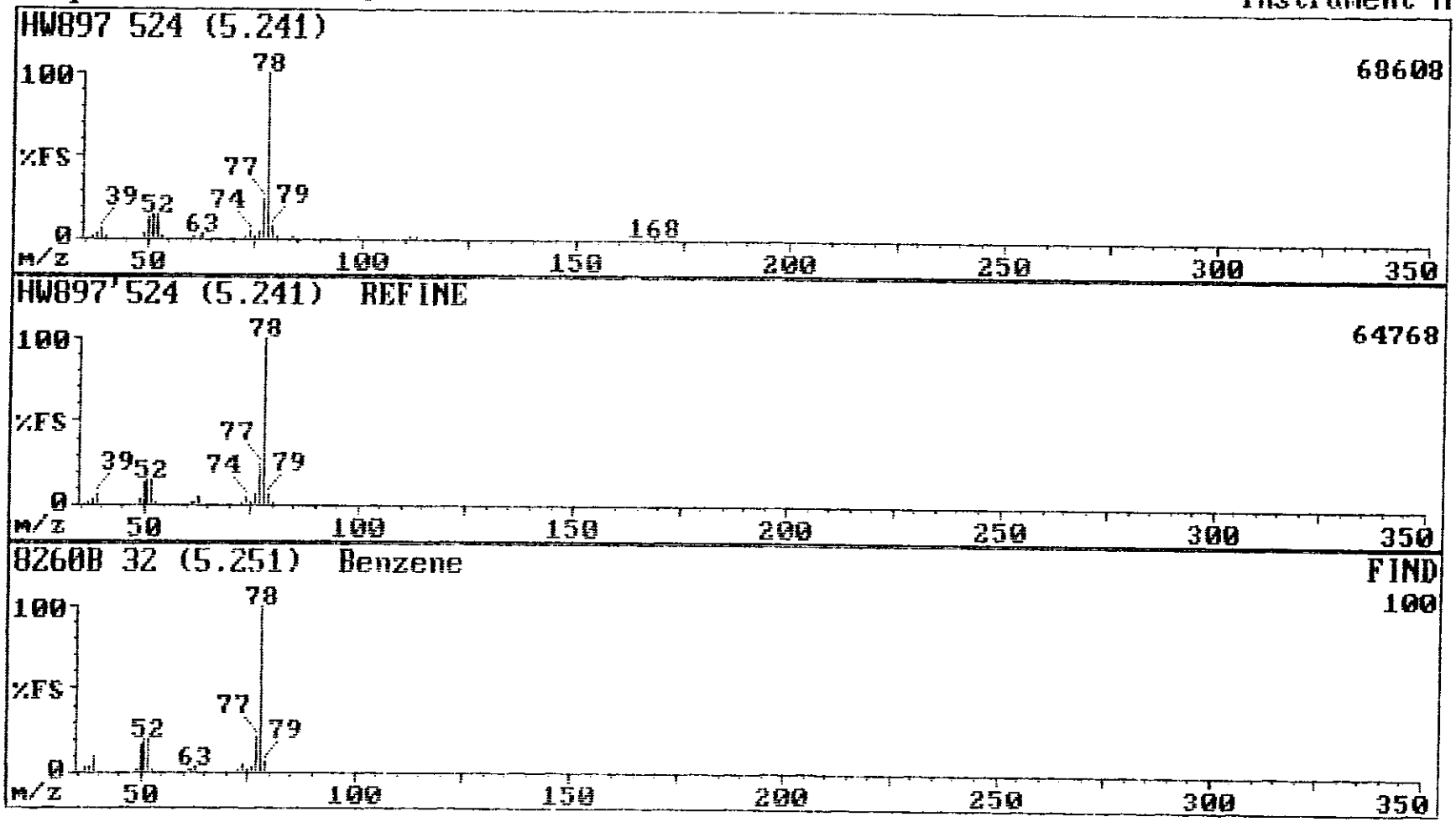
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



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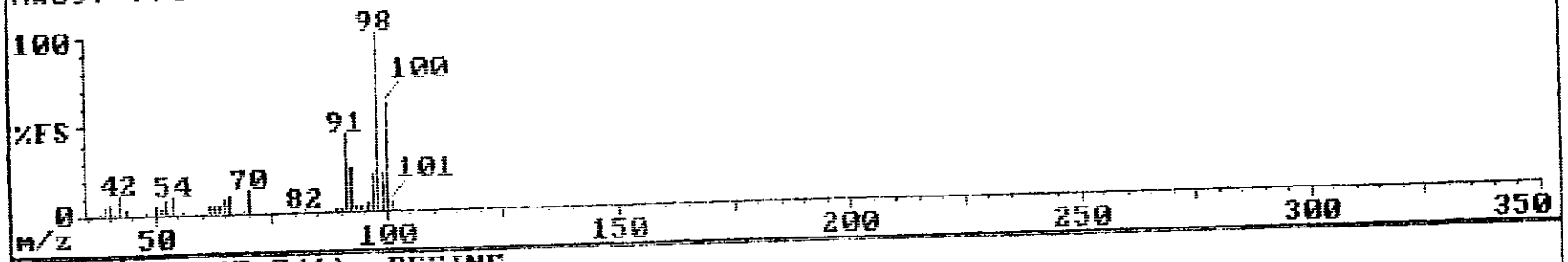
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

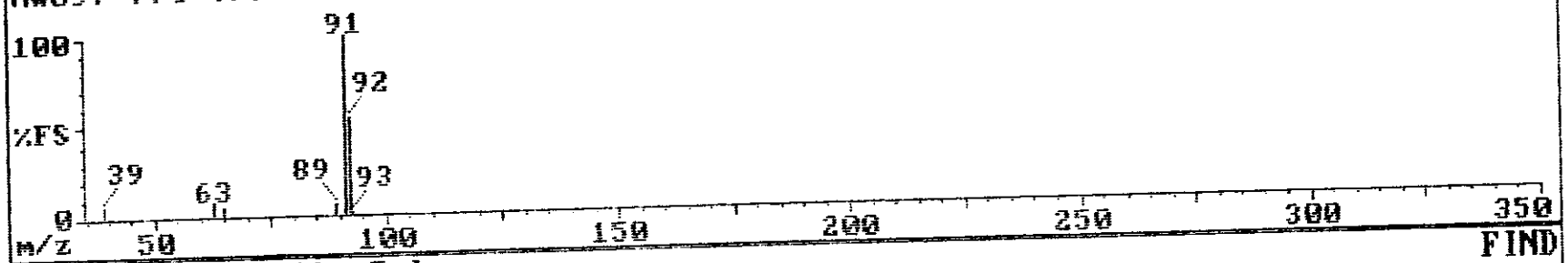
Instrument H

Sample: VOSTBLK T/TC

HW897 774 (7.741) 20736

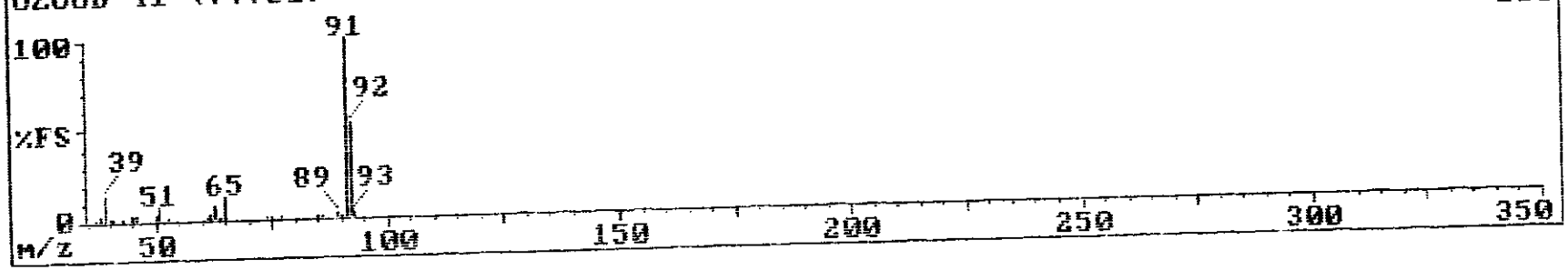


HW897 774 (7.741) REFINE 7744



FIND

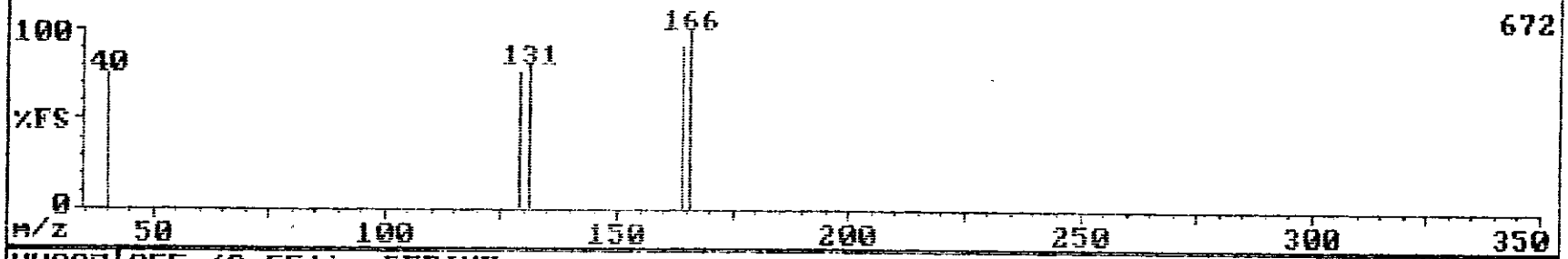
8260B 41 (7.761) Toluene 100



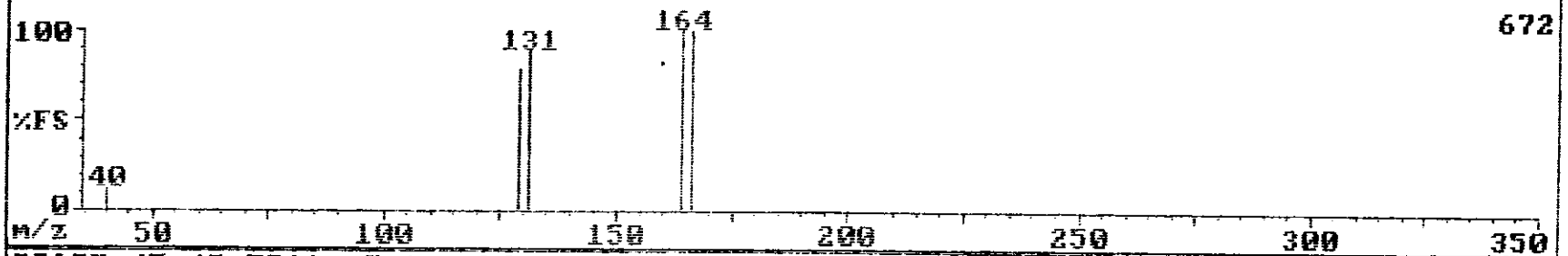
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H

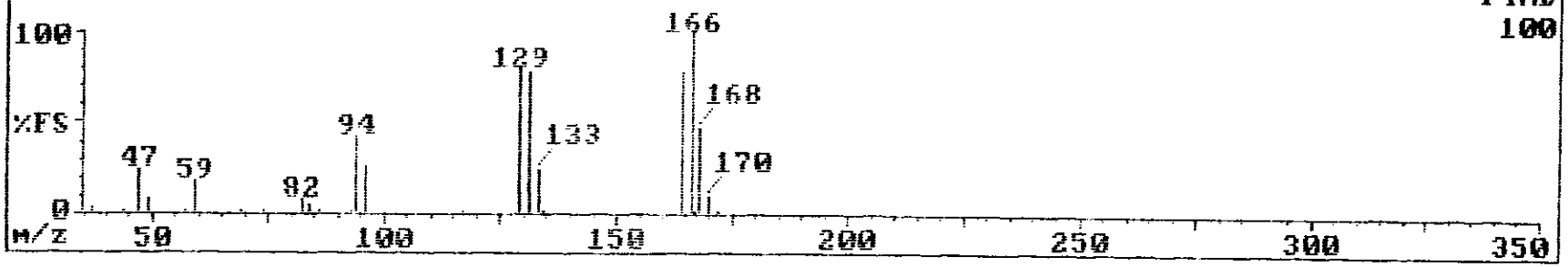
HW897 855 (8.551)



HW897 855 (8.551) REFINE



8260B 45 (8.581) Tetrachloroethene FIND 100



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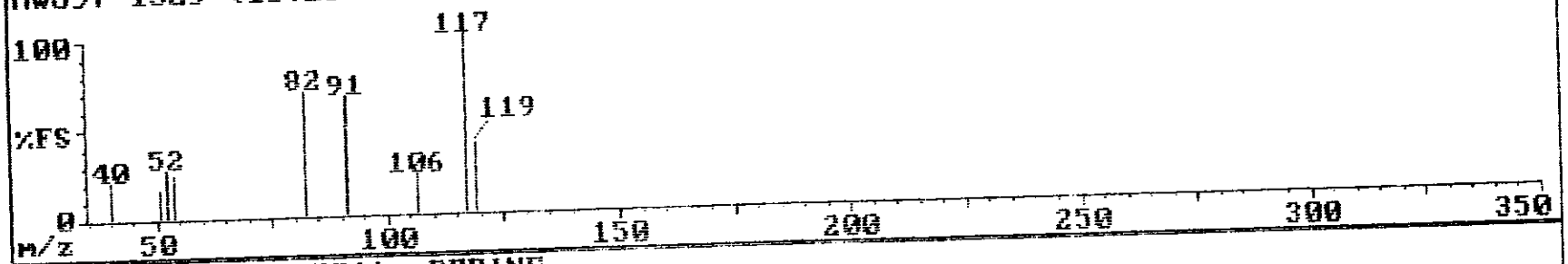
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

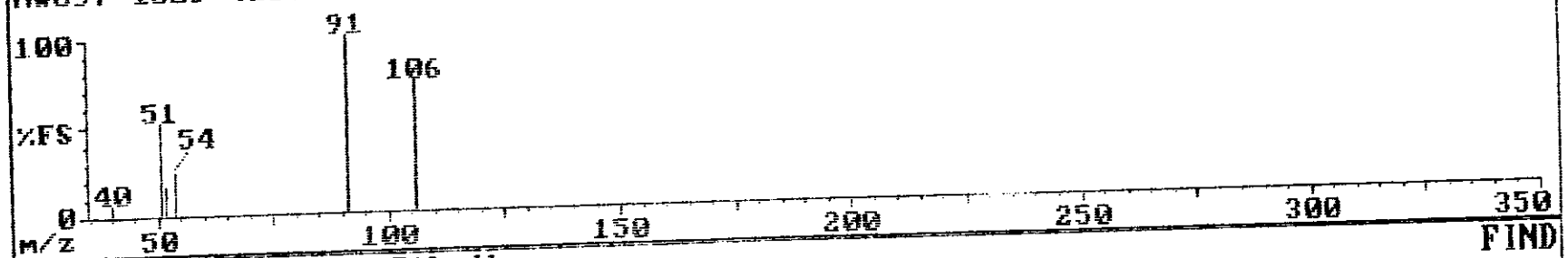
Instrument H

Sample: VOSTBLK T/TC

HW897 1029 (10.291) 2304

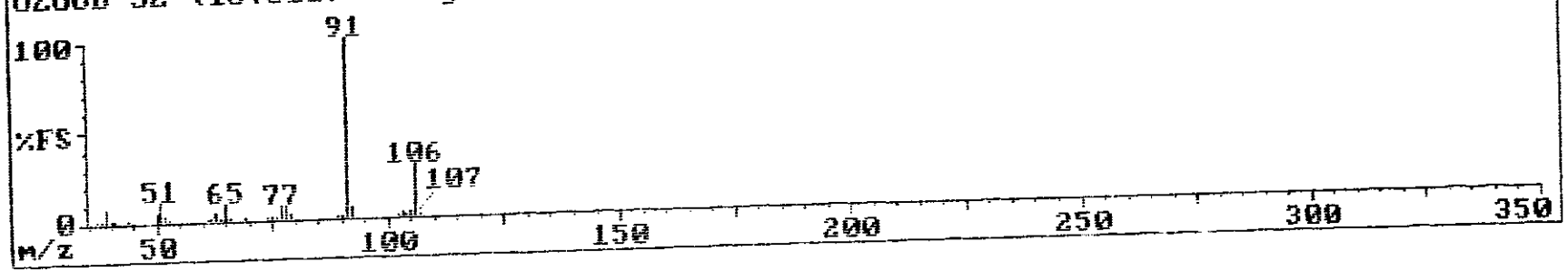


HW897' 1029 (10.291) REFINE 712



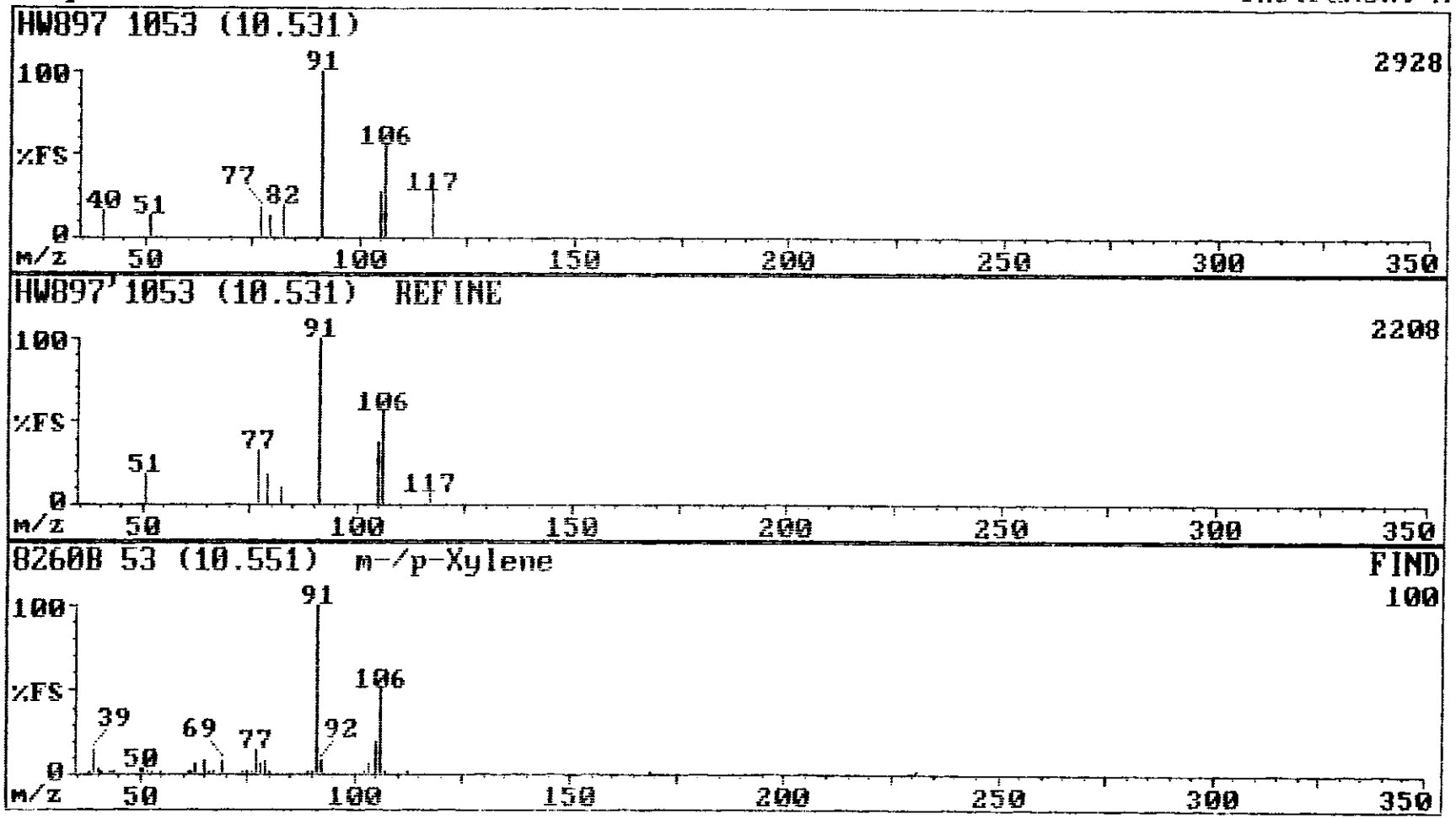
FIND

8260B 52 (10.311) Ethylbenzene 100



09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



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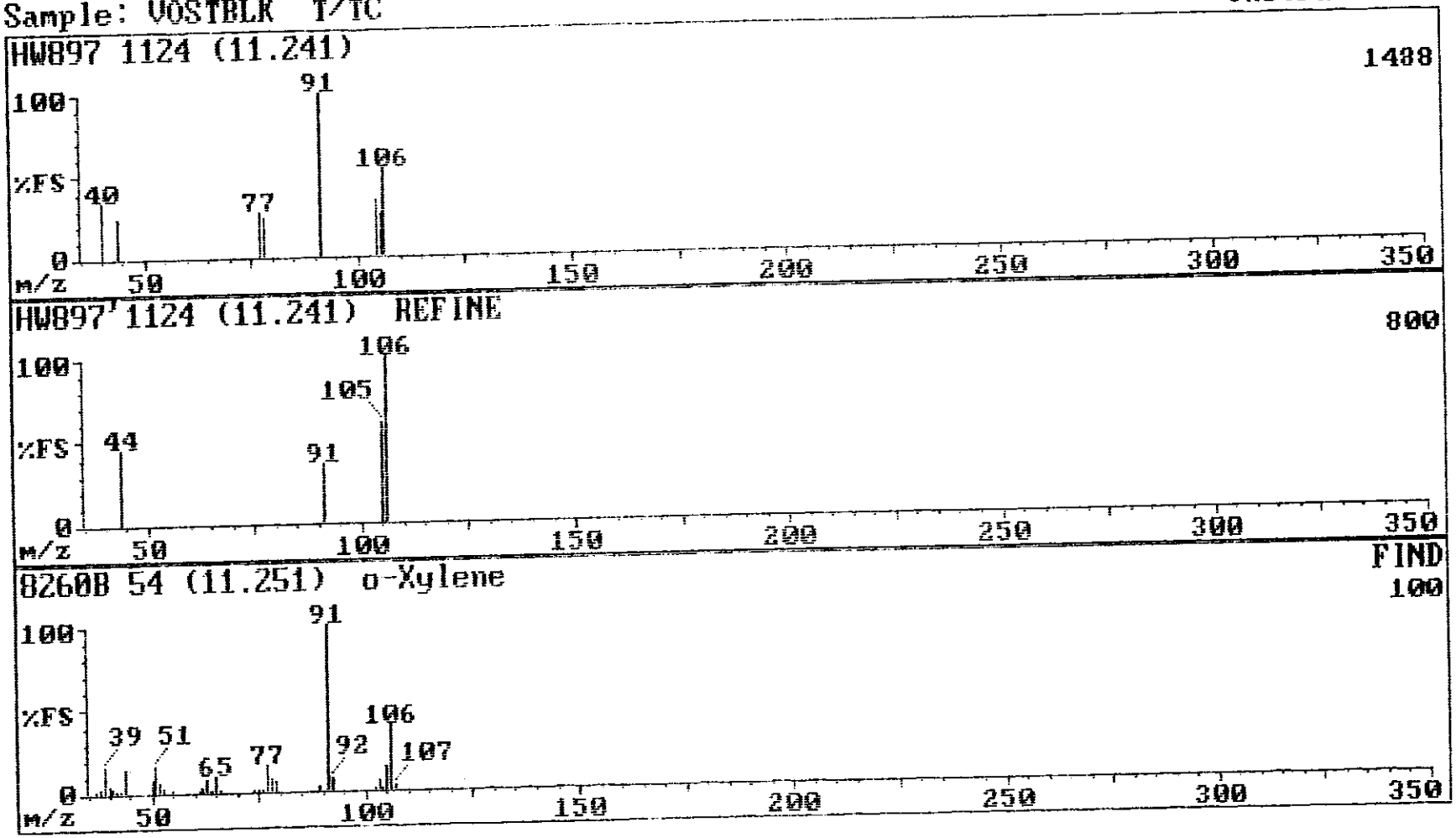
Instrument H

Sample: VOSTBLK T/TC



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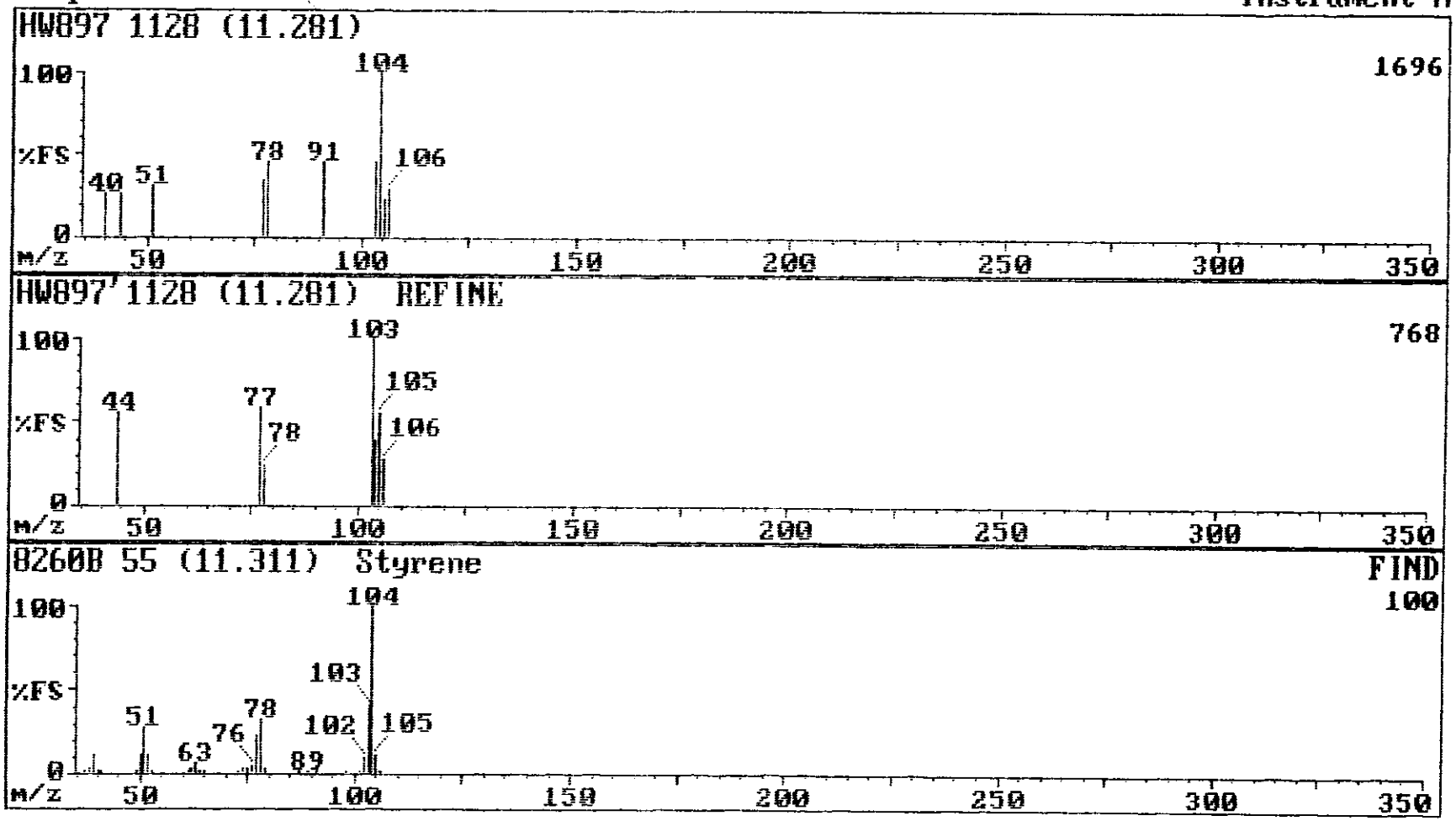
09-04-98 15:53 Triangle Laboratories, Inc. (919) 544-5729

Sample: VOSTBLK T/TC Instrument H



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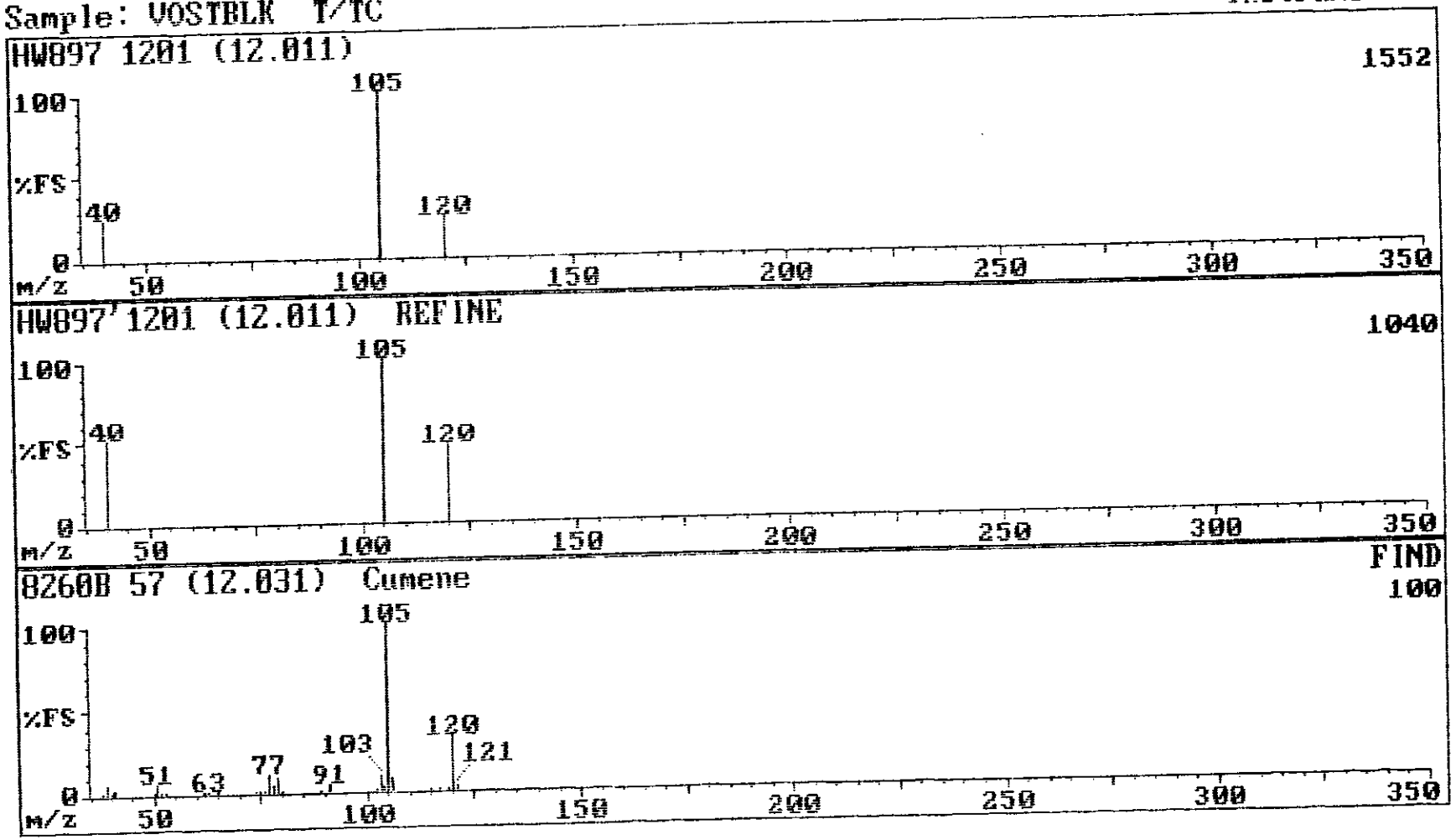
Sample: VOSTBLK T/TC Instrument H



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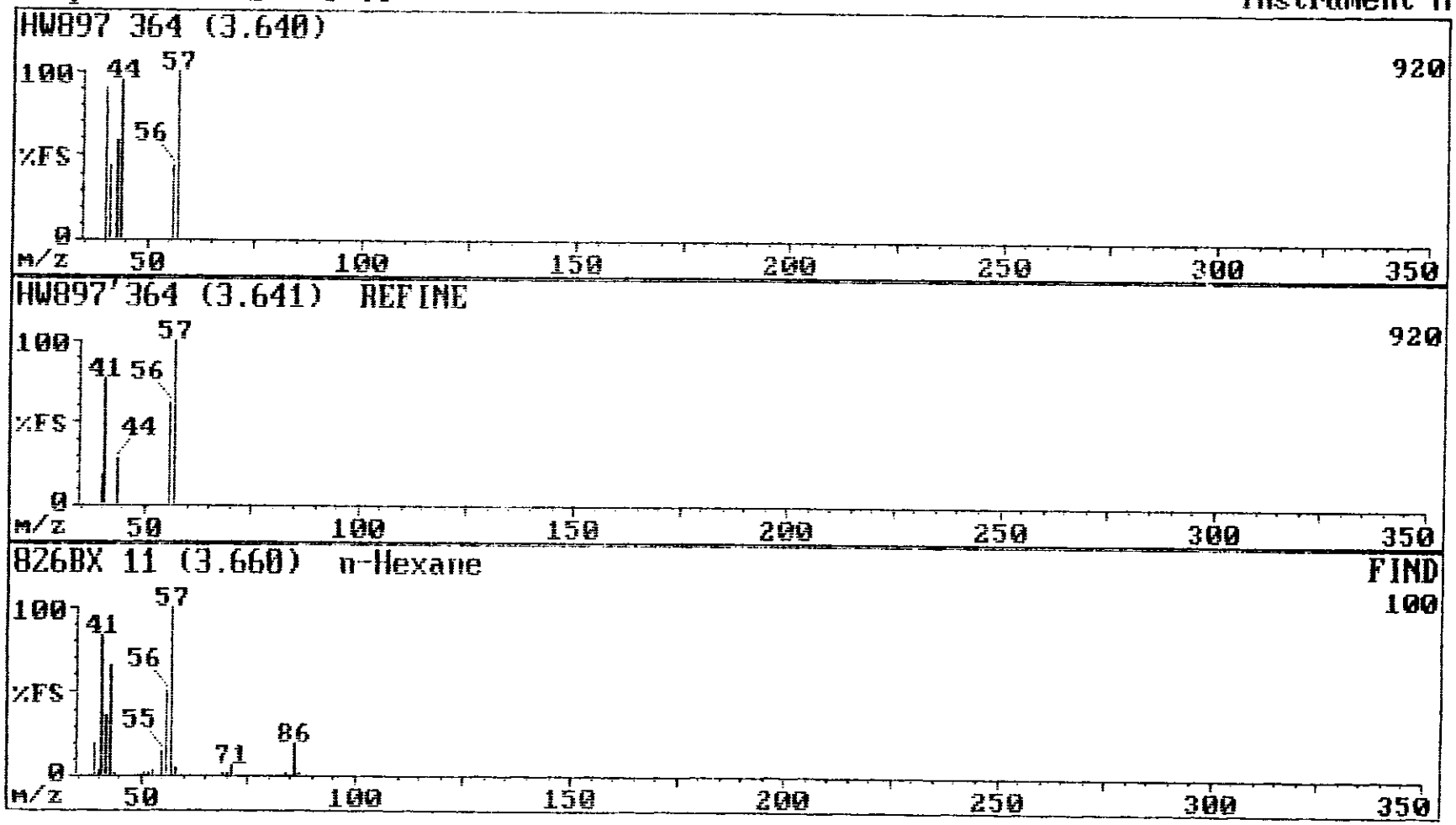
Sample: VOSTBLK T/TC Instrument H



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Pacific Environmental Services

Project Number: 46323
Sample File: HW903

Method 8260 VOST
Sample ID: S-V-2-4-A T

Client Project: R012.001
TLI ID: 214-27-4A

Date Received: 07/29/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.05		
Chloromethane	0.390	B	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.086	B	1.47		0.05
Chloroethane	0.311		1.61		0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide	0.943		2.57		0.05
Acetone	2.048	BE	2.67		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride		U		0.001	0.05
Acrylonitrile		U		0.006	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone	1.402	BE	4.48		0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.78		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.711	B	5.24		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
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Printed: 17:09 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW903

Method 8260 VOST
Sample ID: S-V-2-4-A T

Client Project: R012.001
TLI ID: 214-27-4A

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.002	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.820	B	7.74		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.96		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.385	B	10.30		0.05
m-/p-Xylene	2.108	BE	10.54		0.10
o-Xylene	0.784	B	11.25		0.05
Styrene	0.145	B	11.29		0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.14		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Printed: 17:09 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW903

Method 8260 VOST
Sample ID: S-V-2-4-A T

Client Project: R012.001
TLI ID: 214-27-4A

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.271	4.92	1	108
Toluene-d_8	0.317	7.65	2	127
4-Bromofluorobenzene	1.454	12.27	2	582

Reviewed by BaB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Savar v3.7
Printed: 17:09 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW903

Method 8260 VOST
Sample ID: S-V-2-4-A T

Client Project: R012.001
TLI ID: 214-27-4A

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.05		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	1.423	BE	3.66		0.25
1,2-Epoxybutane		U		0.046	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.78		
Ethyl acrylate		U		0.001	0.25

Reviewed by BAB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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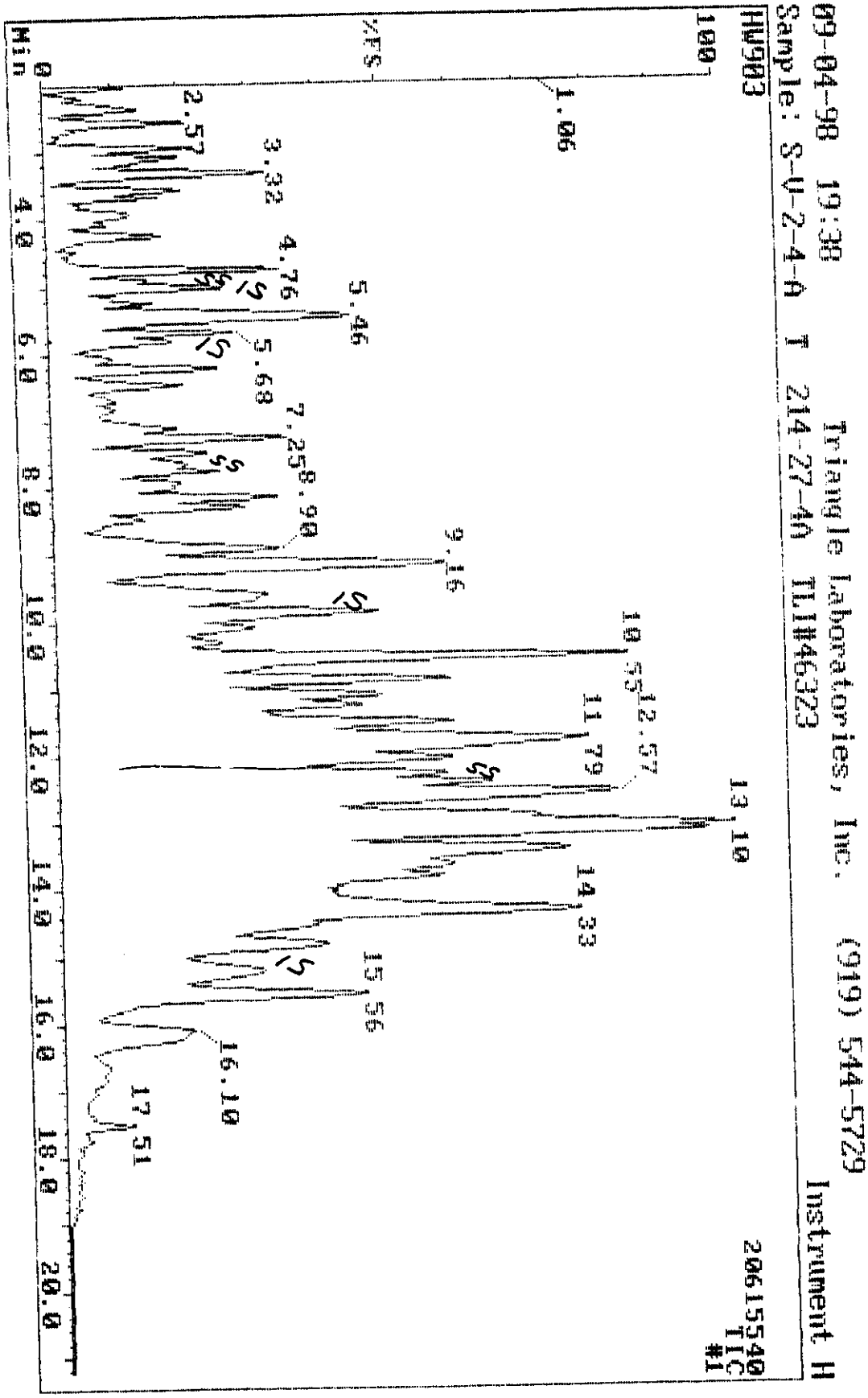
Savar v3.7
Printed: 16:55 09/08/1998



Data Review: BAB
Date: 9/8/98

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QUAN DB : HW903 LAB-BASE QUAN 09-04-98 20:28

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	68	30	78	-1	2725964	bv	5.05	168	Pentafluorobenzene
2	75	49	72	0	2928352	bb	5.78	114	1,4-Difluorobenzene
3	58	35	57	0	2800662	bv	9.96	117	Chlorobenzene-d5
4	53	14	73	6	1303168	bb	15.14	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	1309212	A	4.92	113	Dibromofluoromethane
6	70	44	71	-1	3957952	bb	7.65	98	Toluene-d8
7	37	21	41	3	8650504	A	12.27	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	0	0	0	0	1088378 → (12) PaB		~~0.00~~ 0.96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	100	82	99	0	310936	bv	1.47	94	Bromomethane
12	85	39	97	0	729776	bb	1.61	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	77	47	82	1	9251184	bv	2.57	76	Carbon disulfide
17	98	80	88	3	3305712	bb	2.67	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	0		0.00	84	Methylene chloride
20	~~36~~	~~8~~	~~57~~	~~-5~~	~~735113~~	~~vb~~ (5) PaB	~~3.32~~	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	100	81	94	-2	2567383	vv	4.48	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	91	99	0	9643147	vv	5.24	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	~~62~~	~~47~~	~~57~~	~~-1~~	~~6435218~~	~~A~~ (5) PaB	~~6.46~~	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	~~67~~	~~36~~	~~73~~	~~-2~~	~~3022896~~	~~A~~ (5) PaB	~~7.61~~	43	4-Methyl-2-pentanone
41	100	80	97	-1	7236337	vv	7.74	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropen
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	~~43~~	~~22~~	~~65~~	~~-3~~	~~3536872~~	~~vv~~ (5) PaB	~~8.91~~	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review:
Date:

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No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	81	48	85	1	2071240	bv	10.30	106	Ethylbenzene
53	88	59	85	1	13932320	vv	10.54	106	m-/p-Xylene
54	78	51	83	2	4850131	bv	11.25	106	o-Xylene
55	0	0	0	0	1479579	(M) PAB 4/8/98	~~11.30~~ 11.29	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	0	0	0	0	0		0.00	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	0	0	0	0	0		0.00	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	84	57	96	4	35039970	bb	14.34	105	1,2,4-Trimethylbenzene
68	57	19	77	2	6131470	bv	14.82	105	sec-Butylbenzene
69	76	46	82	1	11143340	A	15.40	119	p-Cymene
70	0	0	0	0	0		0.00	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00	146	1,4-Dichlorobenzene
72	22	14	68	25	2254592	vb	16.09	91	Benzyl chloride
73	71	44	81	-4	1245216	vv	16.88	91	n-Butylbenzene
74	0	0	0	0	0		0.00	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	0	0	0	0	0		0.00	180	1,2,4-Trichlorobenzene
77	0	0	0	0	0		0.00	225	Hexachlorobutadiene
78	0	0	0	0	0		0.00	128	Naphthalene
79	0	0	0	0	0		0.00	180	1,2,3-Trichlorobenzene

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	67	30	78	1	2725964	bv	5.05	168	Pentafluorobenzene
2	76	49	72	1	2928352	bb	5.78	114	1,4-Difluorobenzene
3	57	35	57	-1	2800662	bv	9.96	117	Chlorobenzene-d5
4	53	14	73	9	1303168	bb	15.14	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	1309212	A	4.92	113	Dibromofluoromethane
6	68	44	71	-2	3957952	bb	7.65	98	Toluene-d8
7	38	21	41	2	8650504	A	12.27	95	4-Bromofluorobenzene
8	~~63~~	~~41~~	~~73~~	~~7~~	~~2441517~~	~~vv~~ PAB	~~1.18~~	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	~~45~~	~~44~~	~~54~~	~~16~~	~~117508~~	~~vv~~ PAB	~~3.57~~	73	MTBE
11	100	95	99	-1	7119674	bv	3.66	57	n-Hexane
12	~~98~~	~~71~~	~~88~~	~~5~~	~~1492542~~	~~bv~~ PAB	~~4.23~~	42	1,2-Epoxybutane
13	~~56~~	~~45~~	~~62~~	~~9~~	~~4012832~~	~~A~~ PAB	~~5.48~~	57	Iso-Octane
14	~~41~~	~~28~~	~~70~~	~~14~~	~~6854656~~	~~bb~~ PAB	~~6.21~~	55	Ethyl acrylate

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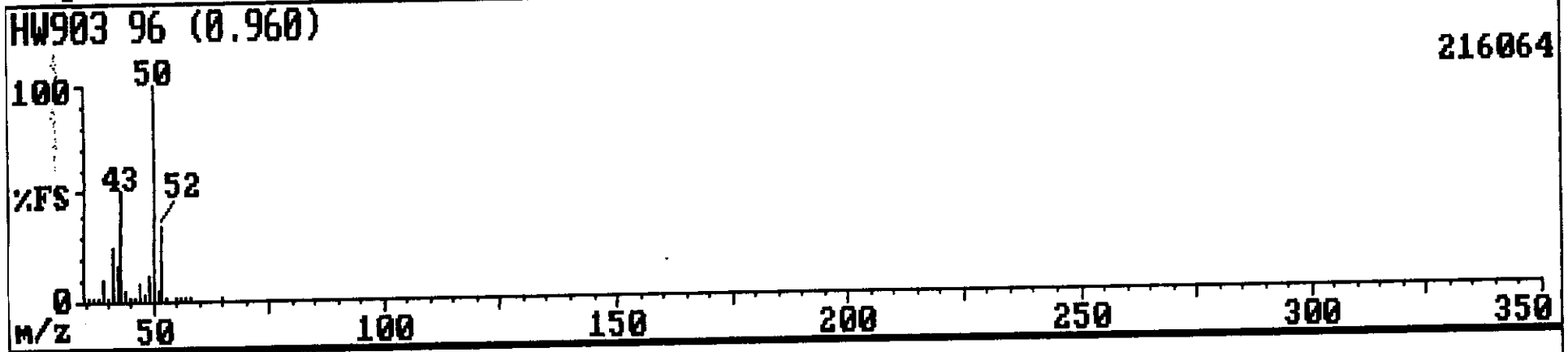
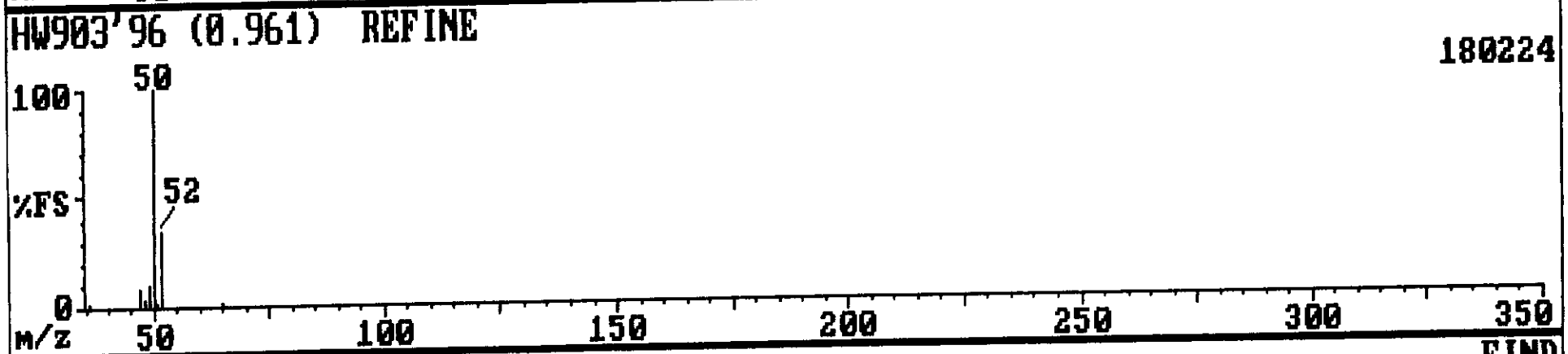
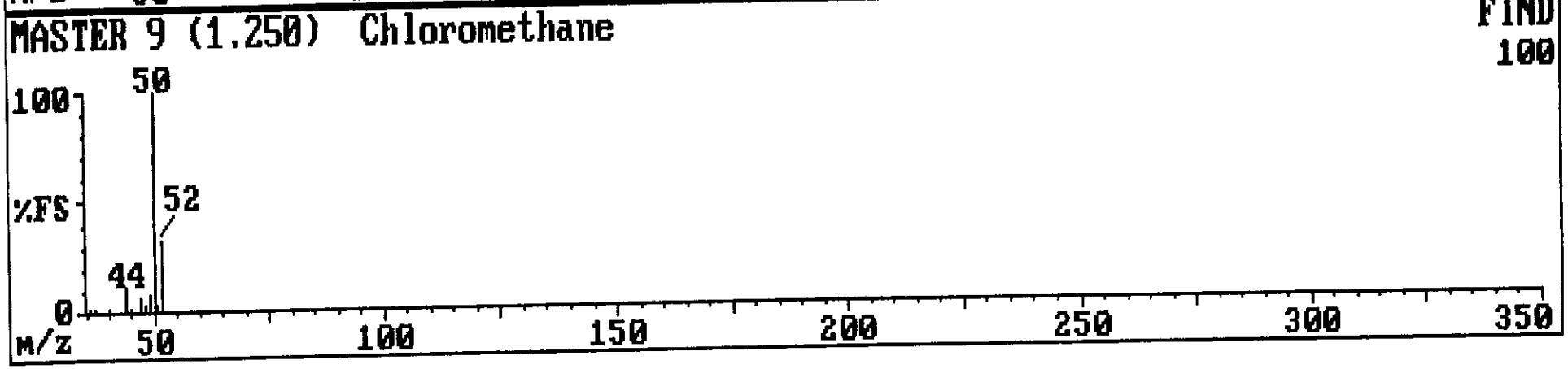
04-Sep-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-A T 214-27-4A TLI#46323 Instrument H







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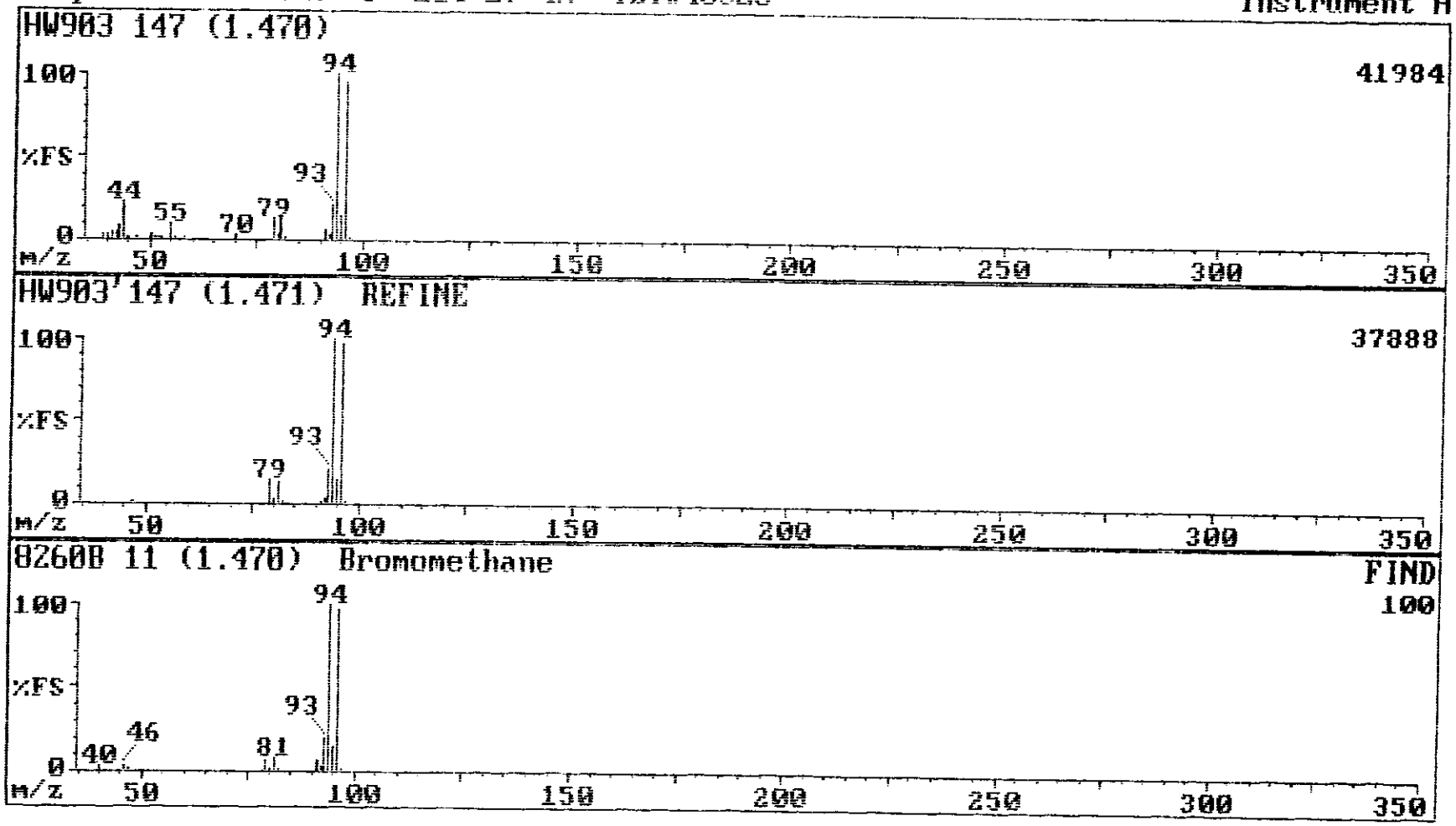
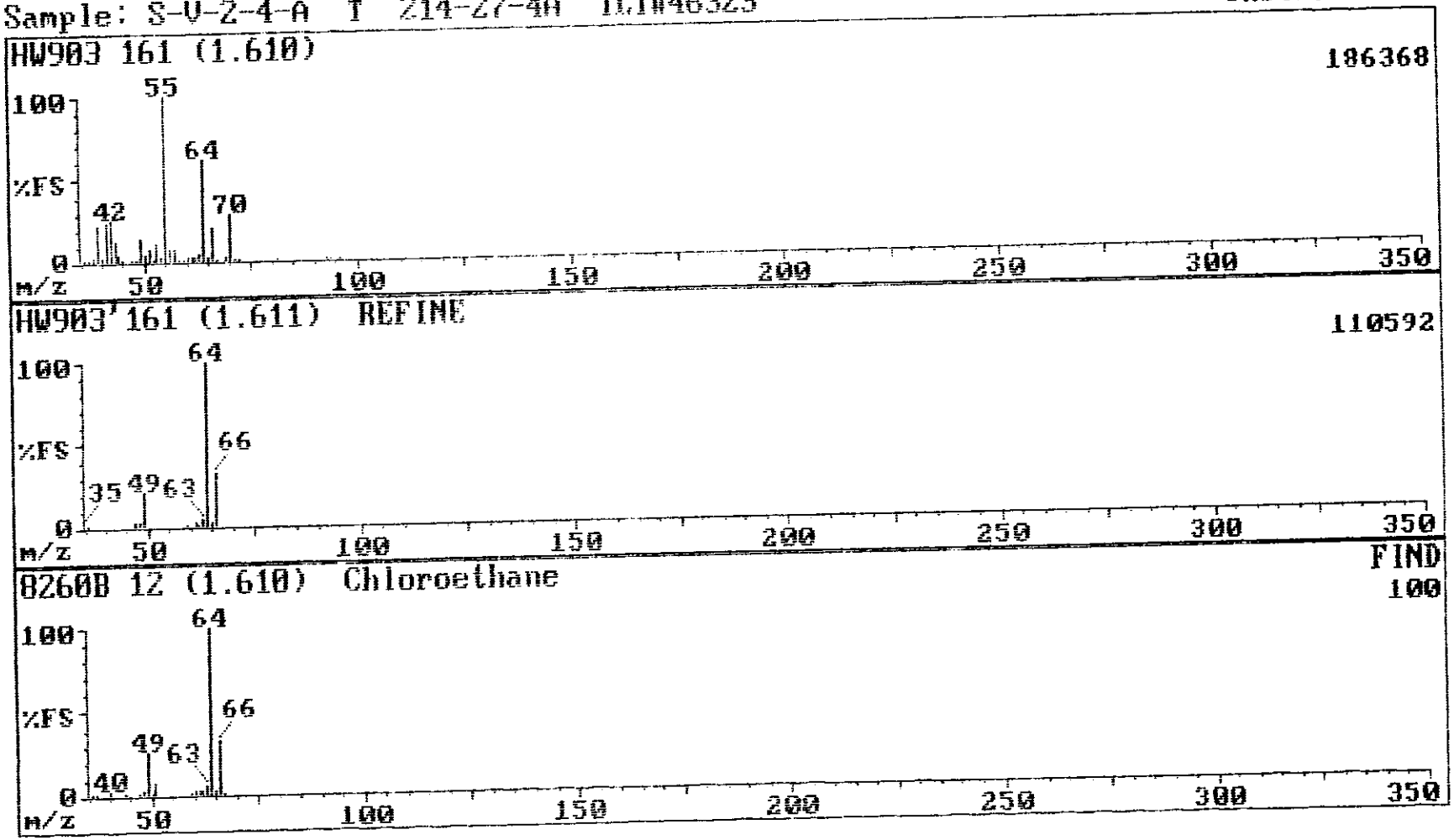
09-04-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-A T 214-27-4A TLI#46323 Instrument H



09-04-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-Z-4-A T 214-27-4A TLI#46323 Instrument H



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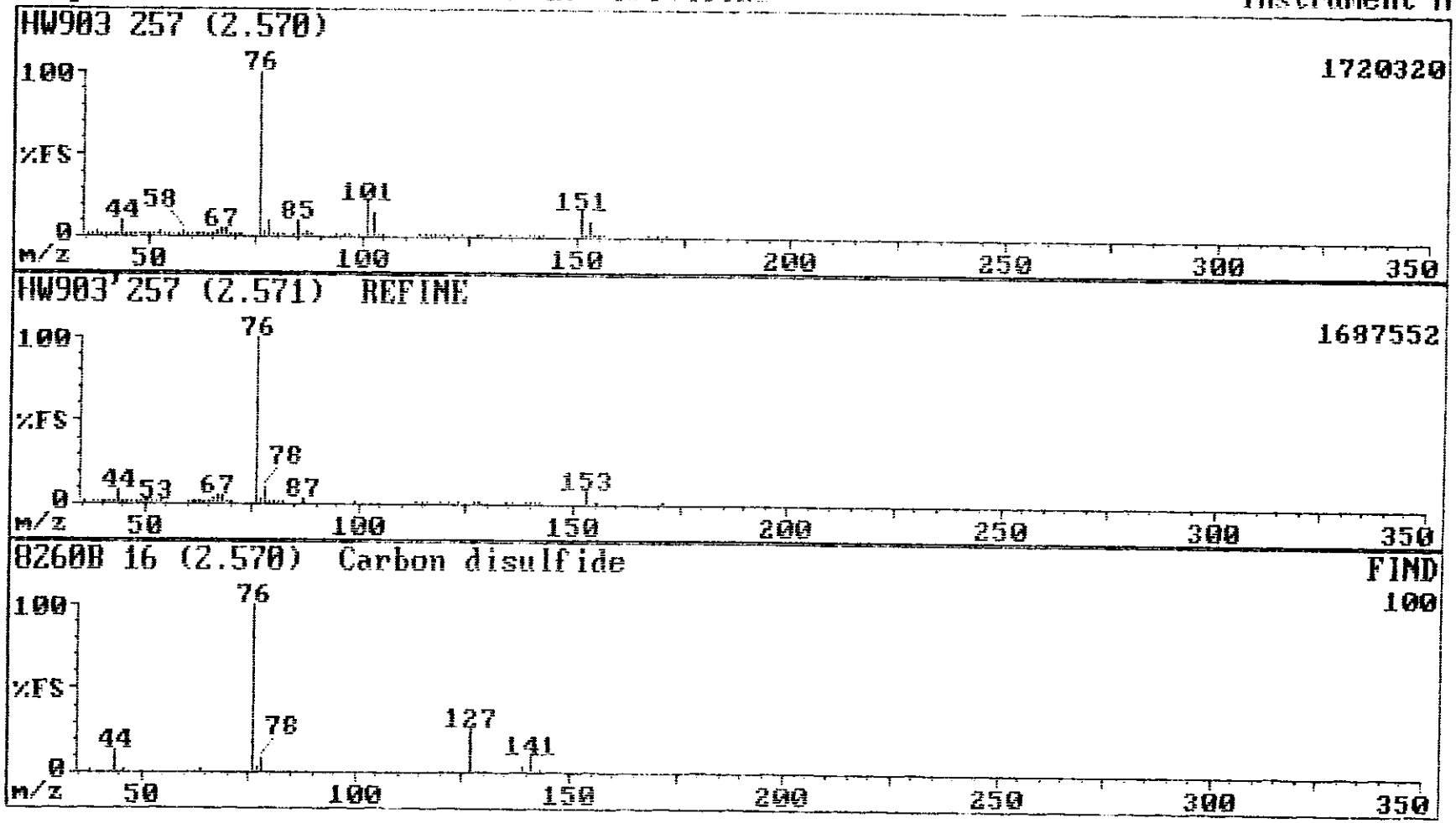
Sample: S-V-2-4-A T 214-27-40 TLI#46323 Instrument H



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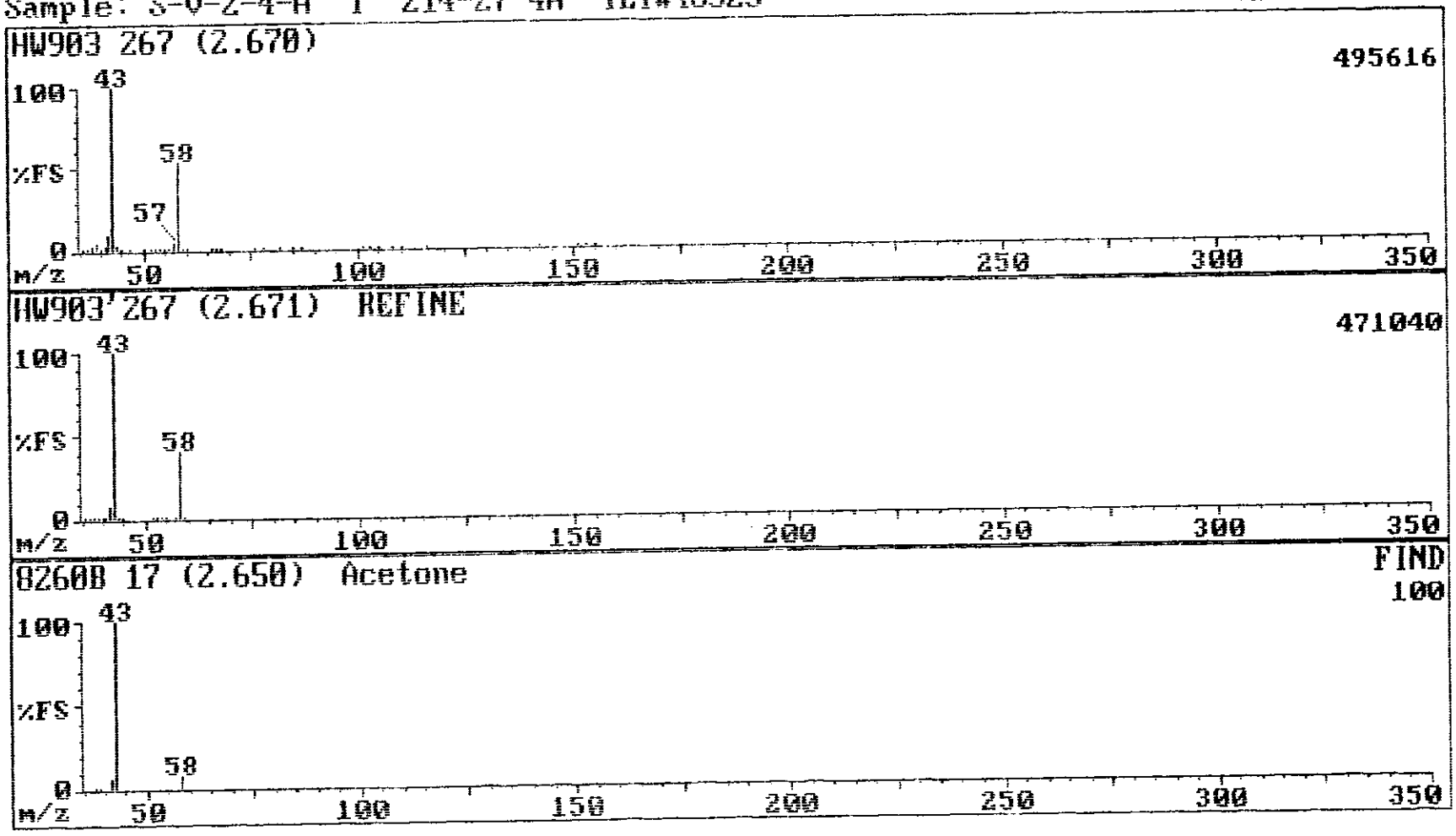

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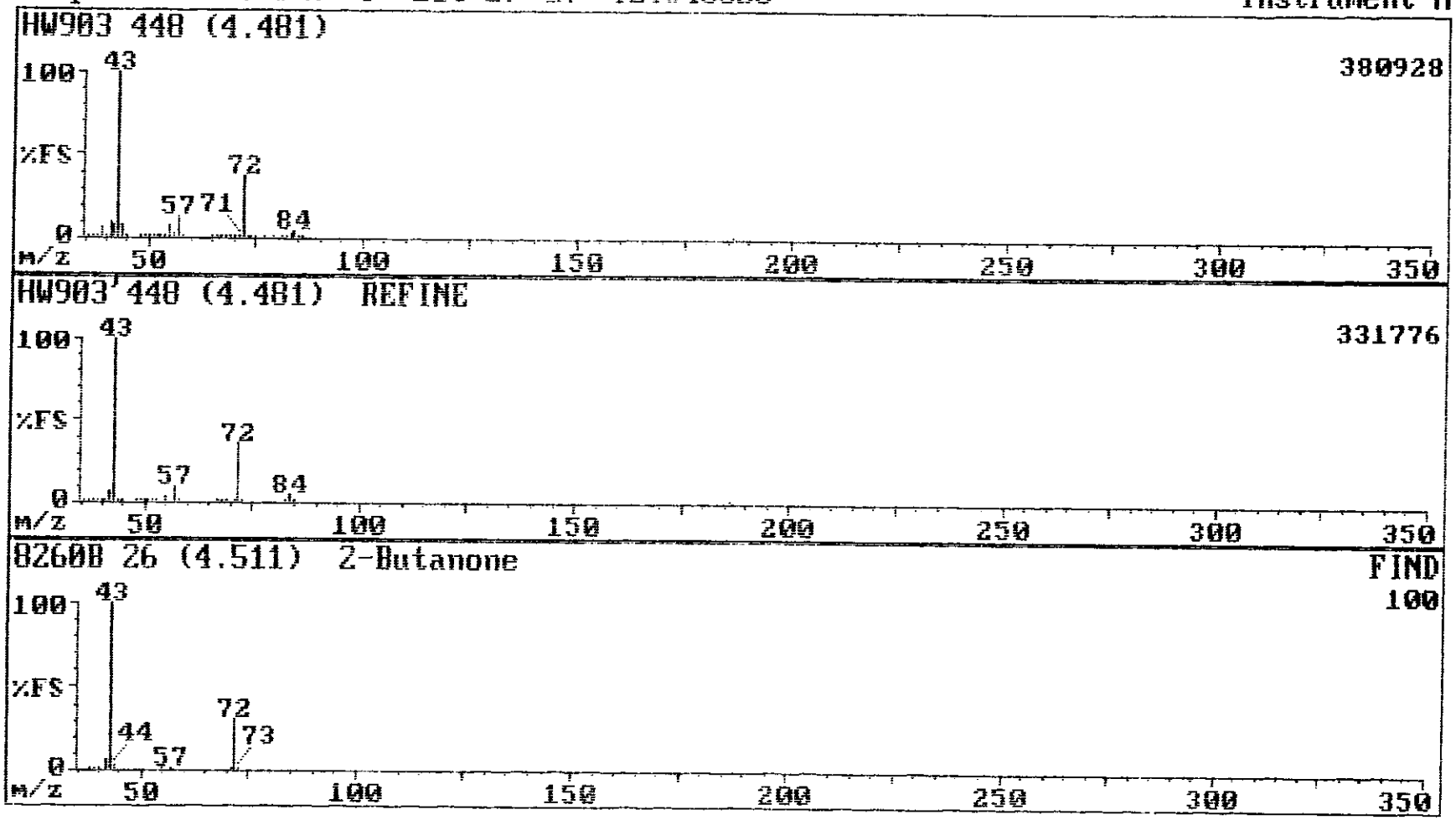
Sample: S-V-Z-4-A T Z14-Z7-4A TLI#46323 Instrument H



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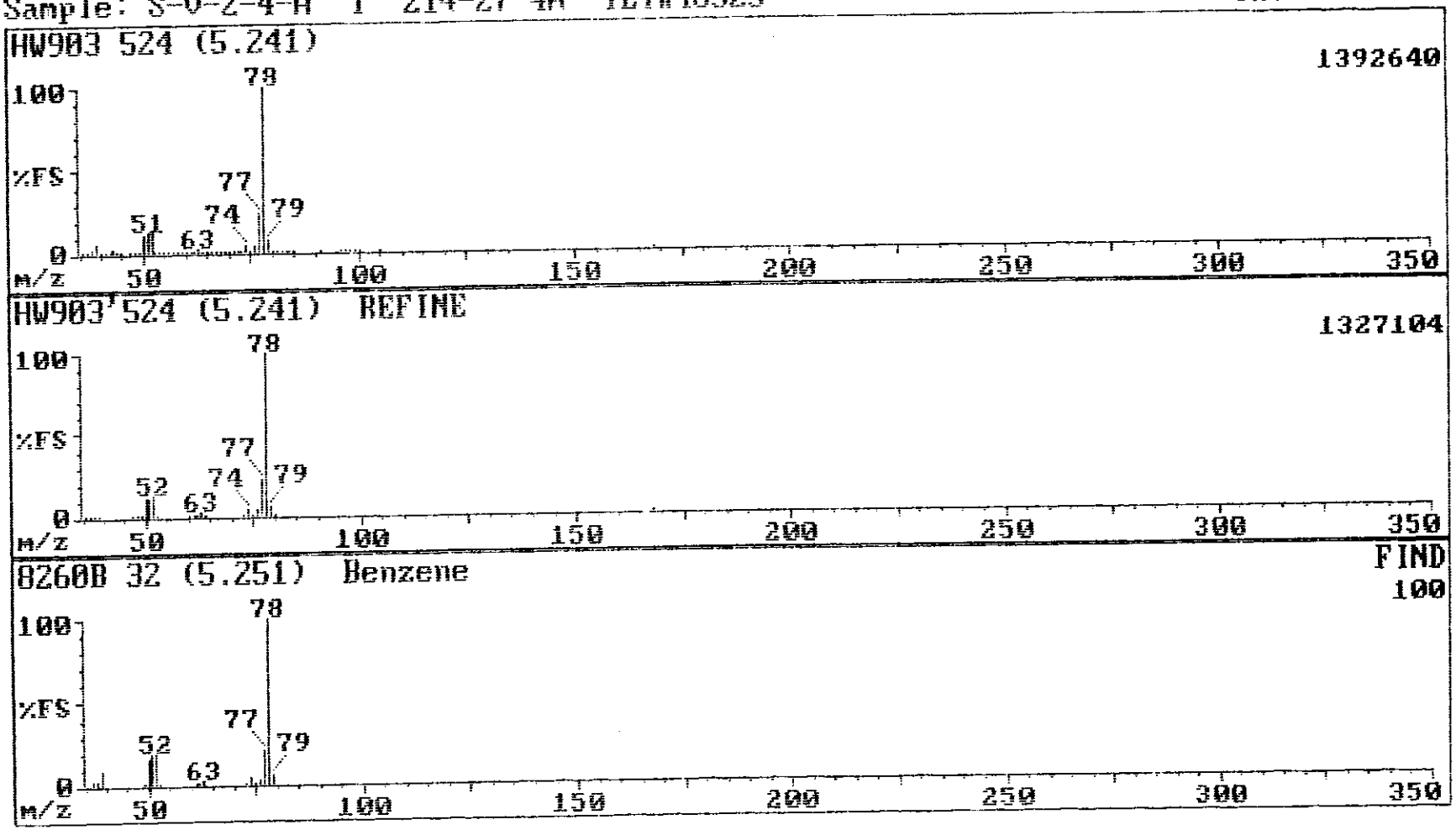
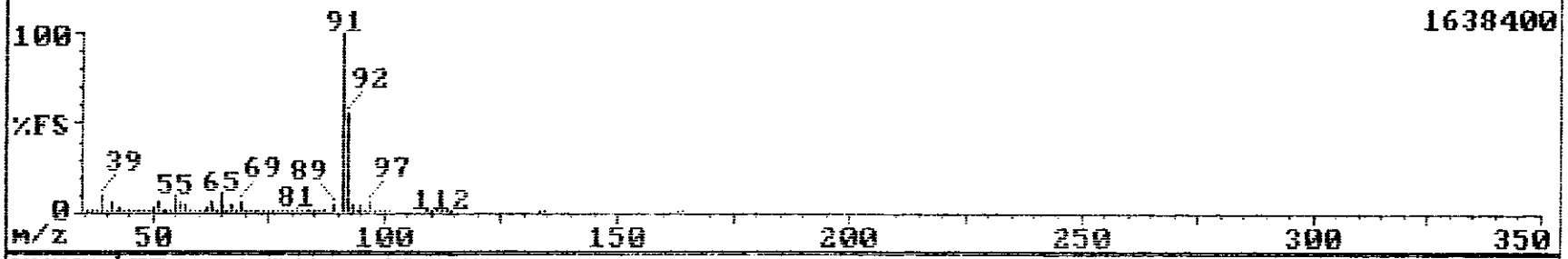


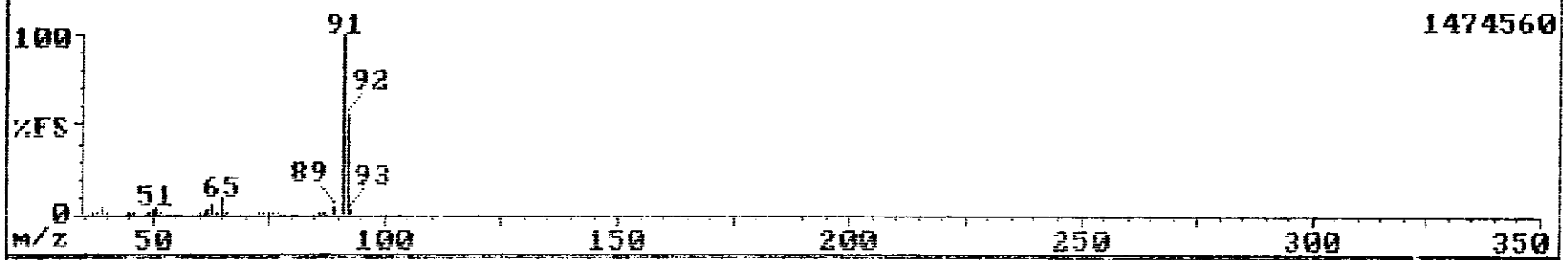
09-04-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-A T 214-27-4A TLI#46323 Instrument H

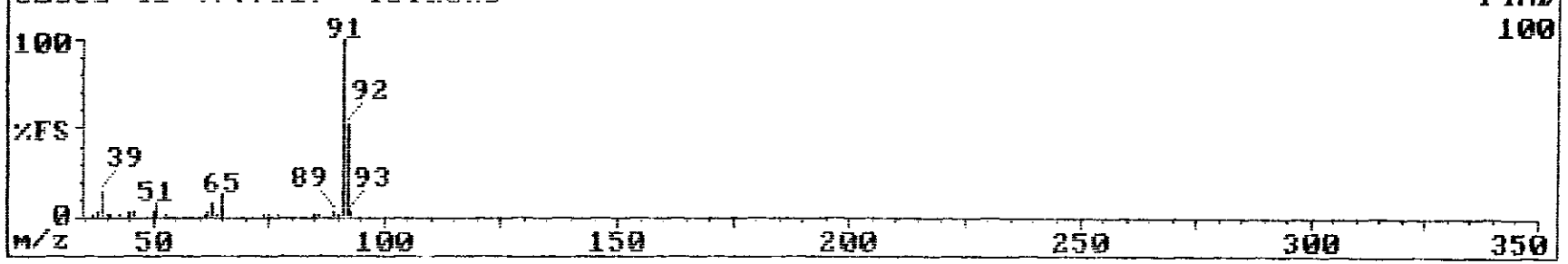
HW903 774 (7.741)



HW903 774 (7.741) REFINE



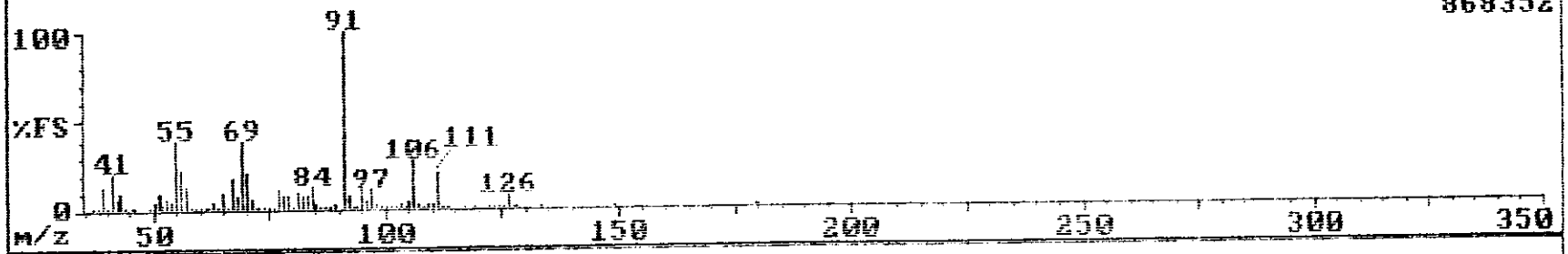
8260B 41 (7.761) Toluene FIND 100



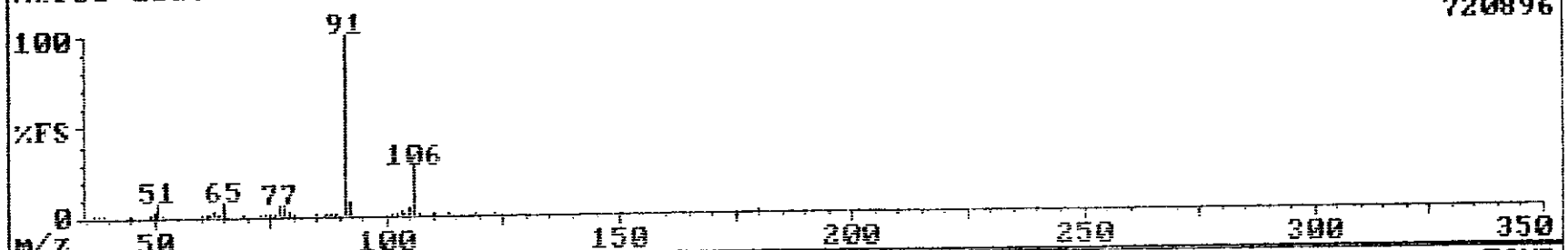
09-04-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-Z-4-A T Z14-Z7-4A TLI#46323 Instrument H

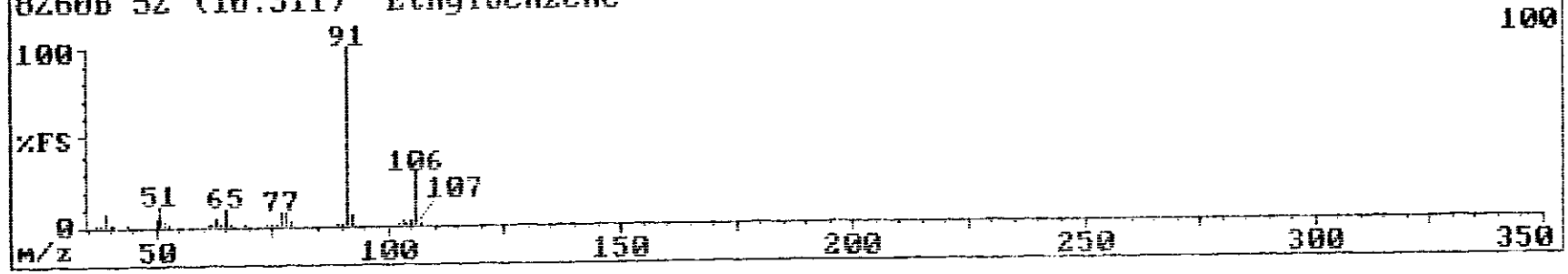
HW903 1030 (10.301) 868352



HW903' 1030 (10.301) REFINE 720896

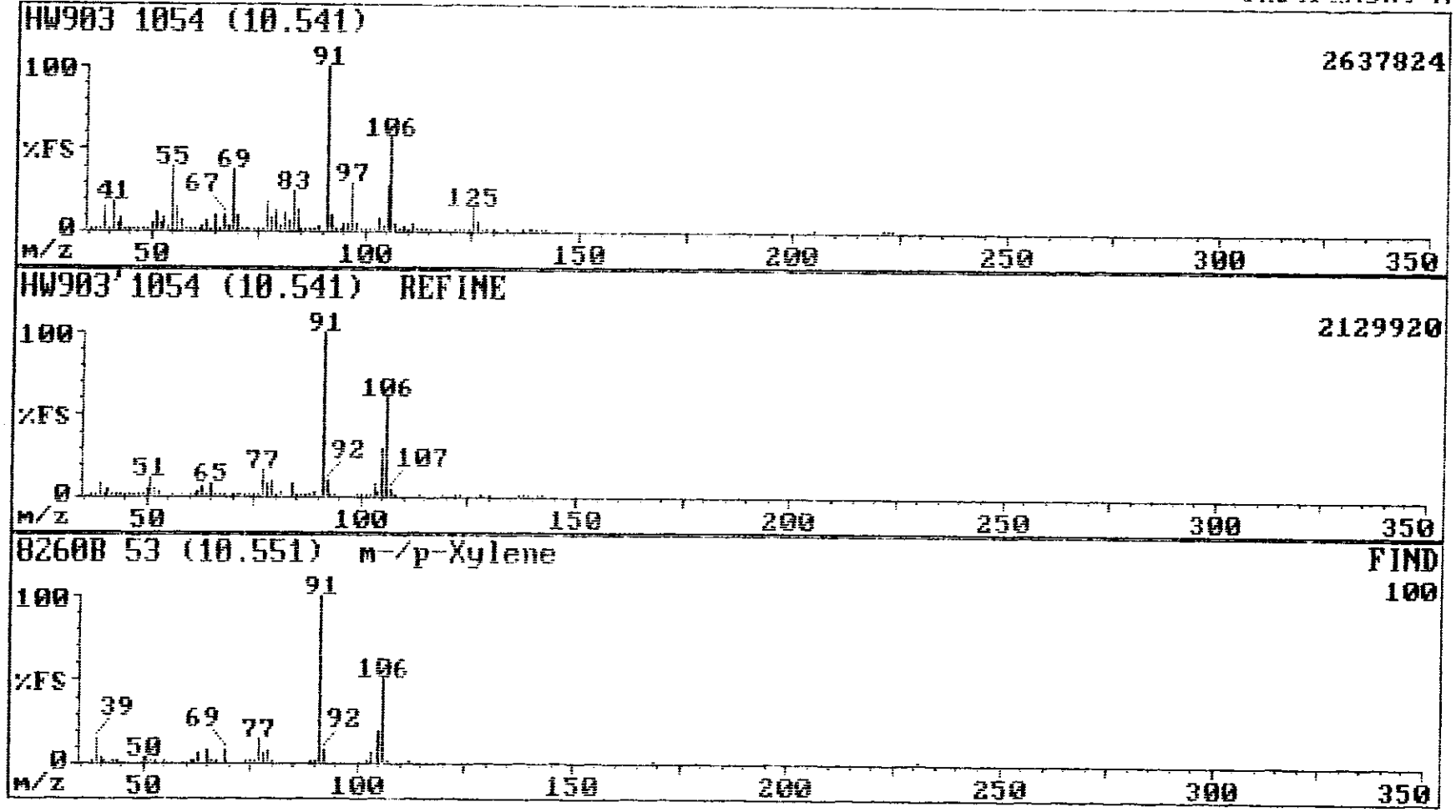


8260B 52 (10.311) Ethylbenzene FIND 100



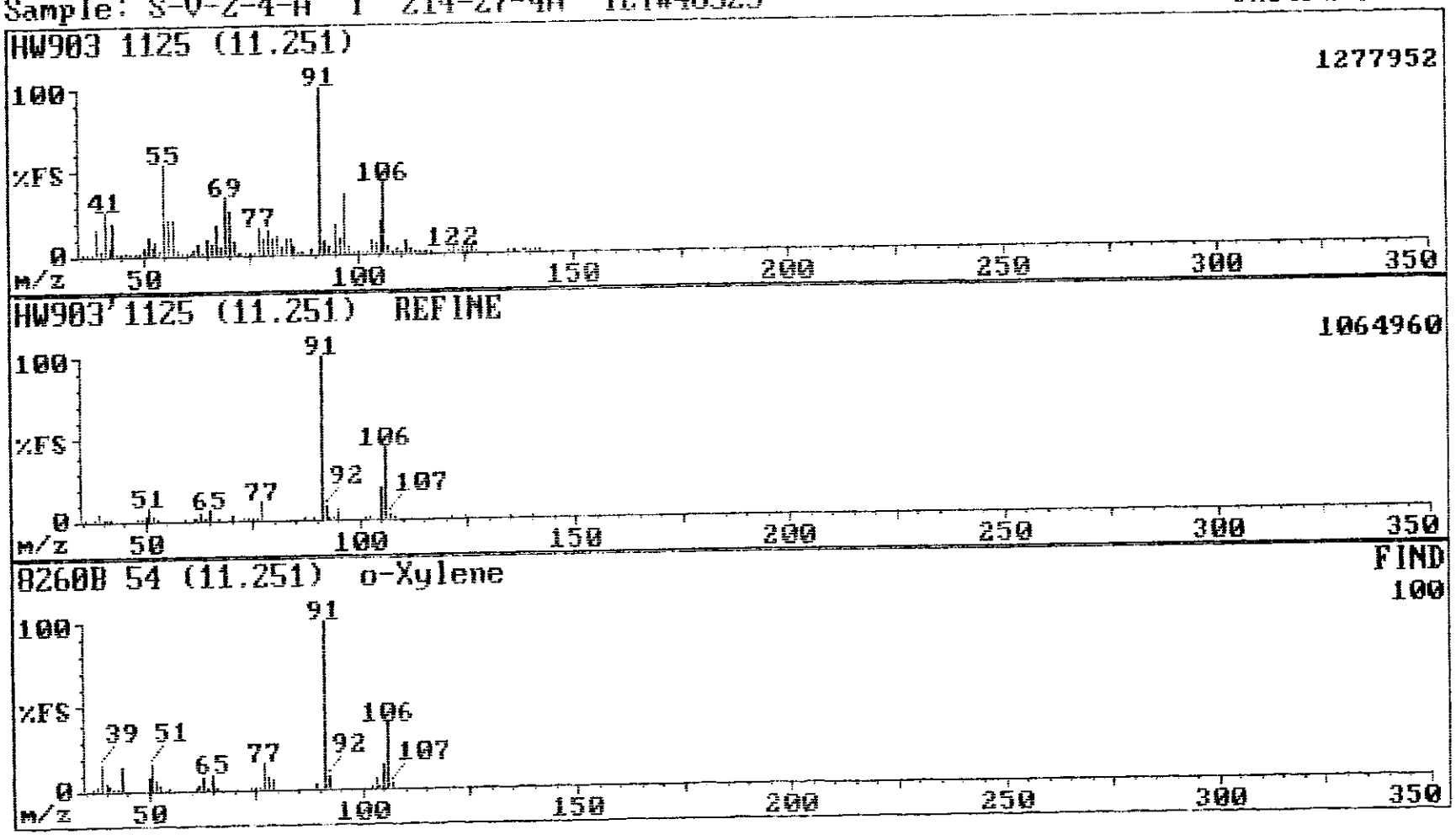
09-04-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-A T 214-27-4A TLI#46323 Instrument H



09-04-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

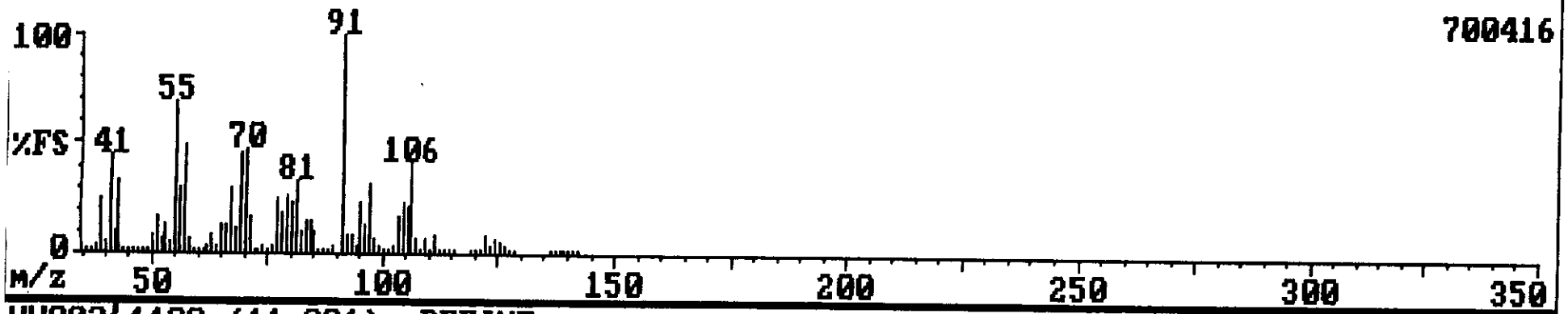
Sample: S-V-2-4-A T Z14-27-4A TLI#46323 Instrument H



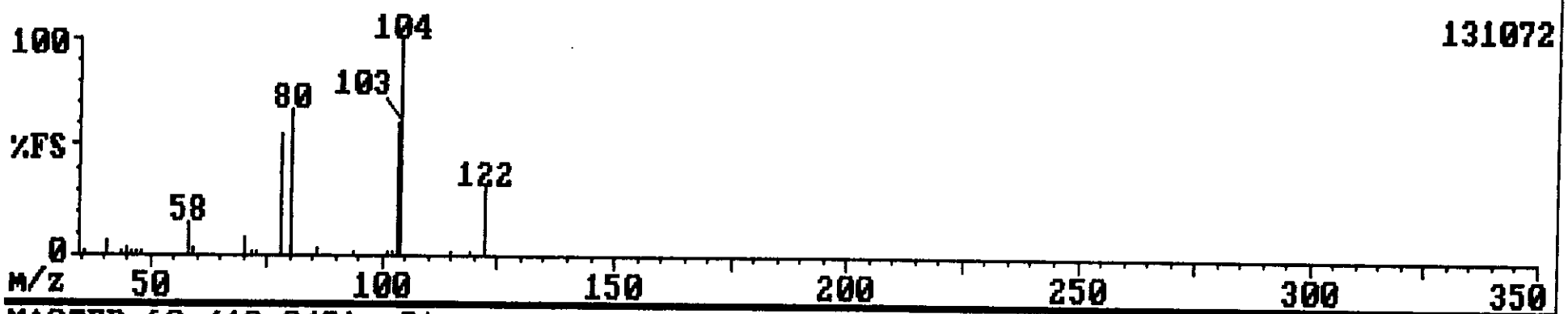
04-Sep-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-A T 214-27-4A TLI#46323 Instrument H

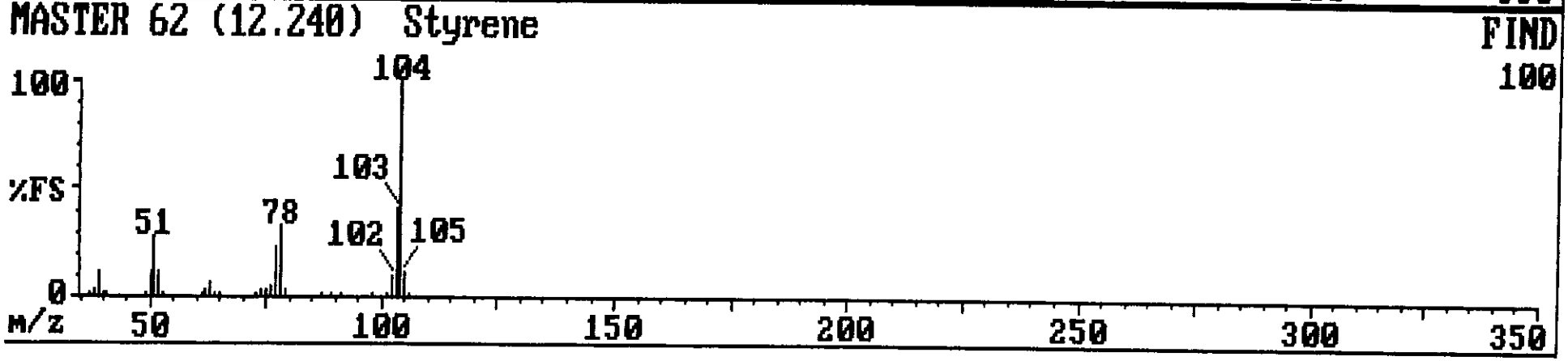
HW903 1129 (11.291)



HW903 1129 (11.291) REFINE

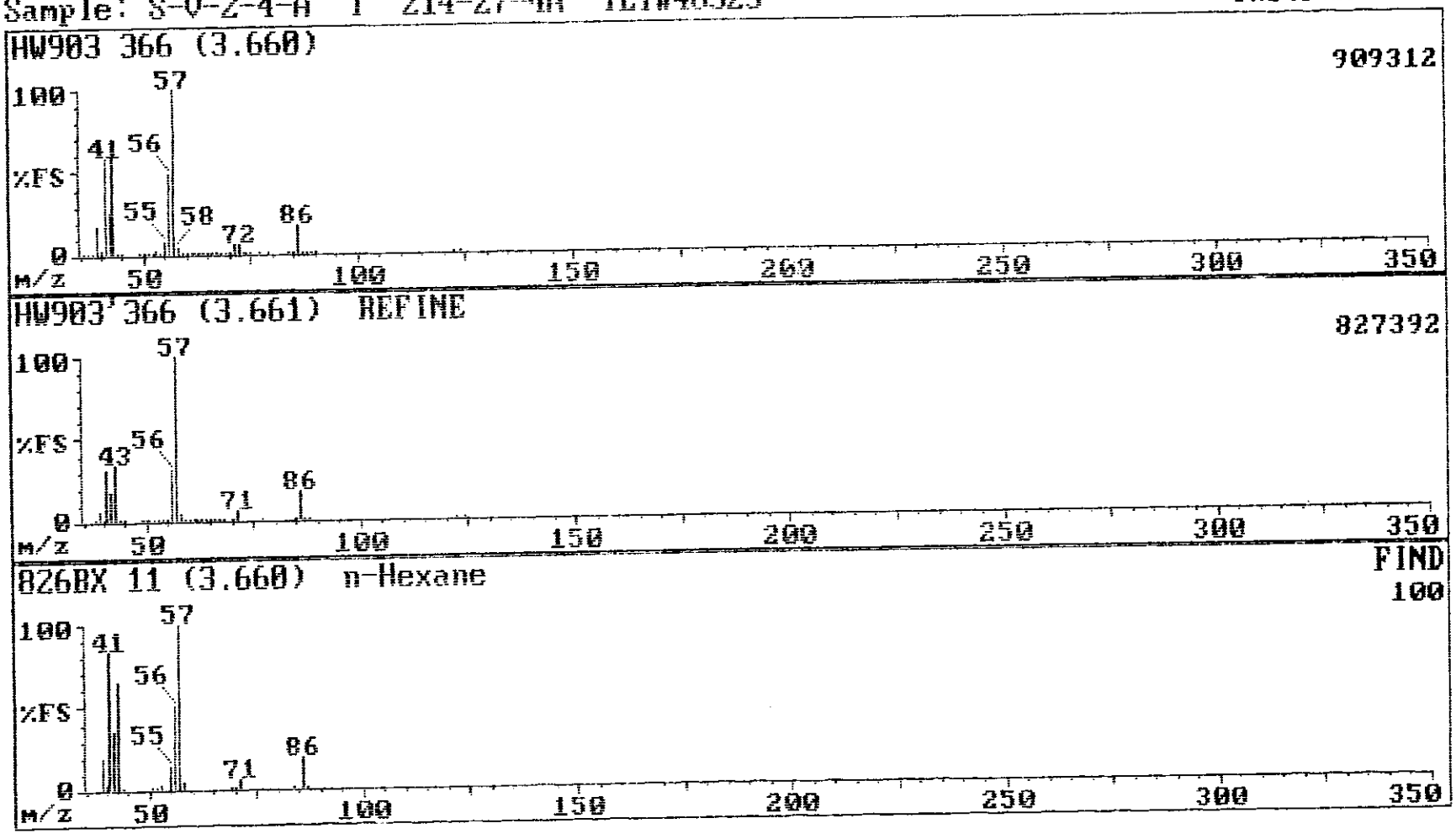


MASTER 62 (12.240) Styrene



09-04-98 19:38 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-A T 214-27-4A TLI#46323 Instrument H



Pacific Environmental Services

Project Number: 46323
Sample File: HW898

Method 8260 VOST
Sample ID: S-V-2-4-B TC

Client Project: R012.001
TLI ID: 214-27-4B

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.03		
Chloromethane	0.766	B	0.95		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.141	B	1.47		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.006	BJ	2.67		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride	0.020	BJ	3.03		0.05
Acrylonitrile		U		0.005	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone		U		0.001	0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.77		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.006	BJ	5.23		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
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Savar v3.7
Printed: 16:29 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW898

Method 8260 VOST
Sample ID: S-V-2-4-B TC

Client Project: R012.001
TLI ID: 214-27-4B

Date Received: 07/29/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.001	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.009	BJ	7.73		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.94		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	0.001	BJ	10.29		0.05
m-/p-Xylene	0.001	BJ	10.53		0.10
o-Xylene		U		0.001	0.05
Styrene	0.001	BJ	11.29		0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.05		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Printed: 16:29 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW898

Method 8260 VOST
Sample ID: S-V-2-4-B TC

Client Project: R012.001
TLI ID: 214-27-4B

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.284	4.90	1	114
Toluene-d_8	0.283	7.64	2	113
4-Bromofluorobenzene	0.324	12.22	2	130

Reviewed by PAB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46323
Sample File: HW898

Method 8260 VOST
Sample ID: S-V-2-4-B TC

Client Project: R012.001
TLI ID: 214-27-4B

Date Received: 07/29/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.03		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	0.002	BJ	3.64		0.25
1,2-Epoxybutane		U		0.035	0.25
Iso-Octane	0.001	J	5.40		0.25
1,4-Difluorobenzene		IS 2	5.77		
Ethyl acrylate		U		0.001	0.25

Reviewed by PAB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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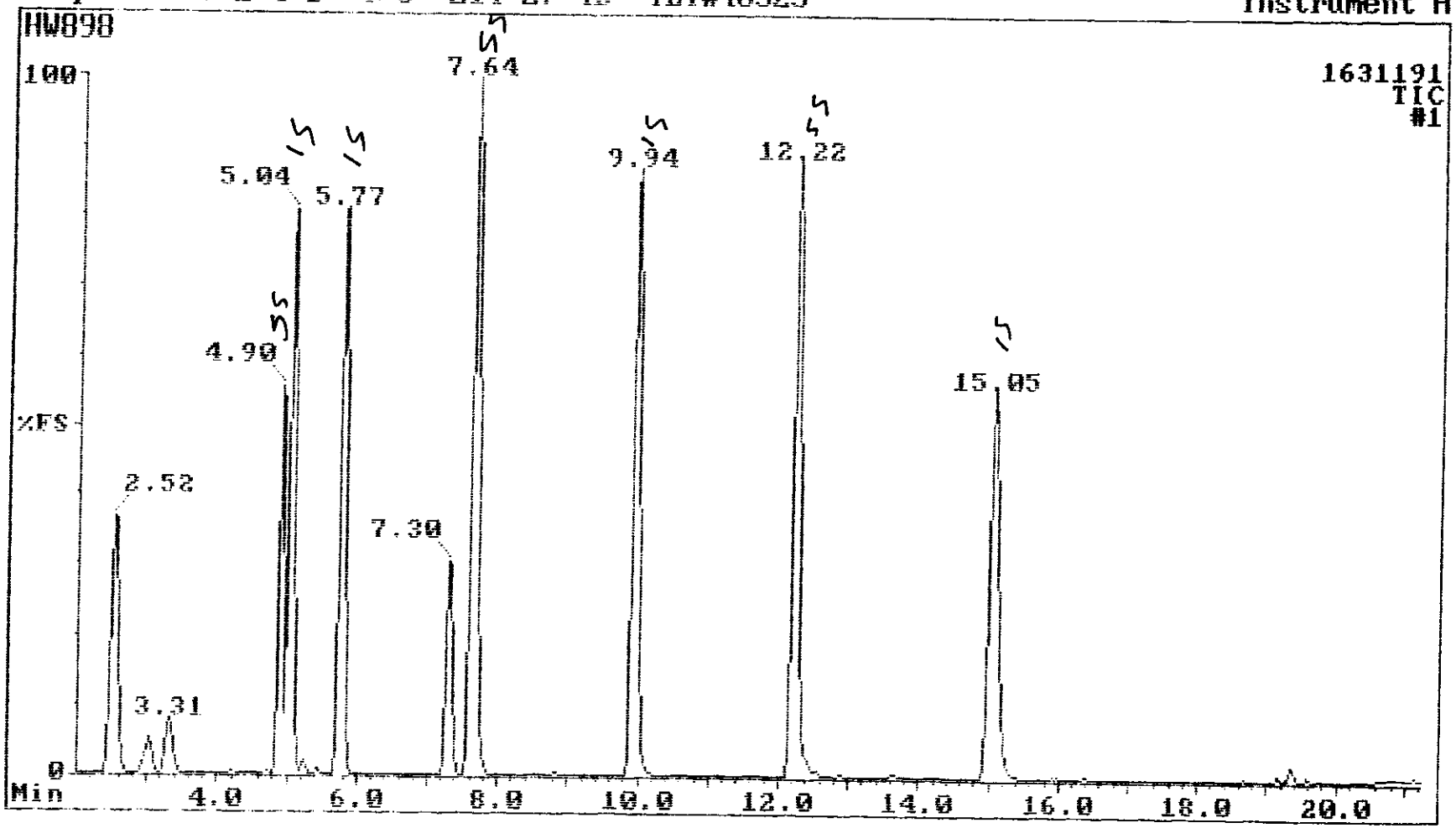
09-04-98 16:34 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



Data Review: PaB
Date: 9/8/98

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QUAN DB : HW898 LAB-BASE QUAN 09-04-98 17:15

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	84	99	-3	3528238	bv	5.03	168	Pentafluorobenzene
2	100	96	98	1	3984048	bv	5.77	114	1,4-Difluorobenzene
3	100	96	96	-1	3876915	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	0	1989388	bv	15.05	152	1,4-Dichlorobenzene-d4
5	100	95	99	1	1775368	bv	4.90	113	Dibromofluoromethane
6	100	91	97	0	4809862	bv	7.64	98	Toluene-d8
7	100	89	93	0	2620116	bv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	100	93	98	0	2767137	vv	0.95	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	100	92	99	1	662062	bv	1.47	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	0	0	0	0	0		0.00	76	Carbon disulfide
17	66	32	84	4	12332	vv	2.67	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	92	68	79	0	85608	bv	3.03	84	Methylene chloride
20	0	0	0	0	0		0.00	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	~~48~~	~~29~~	~~54~~	~~1~~	~~9024~~	~~a~~ (FP) PAB	~~4.52~~	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	94	97	0	112648	bv	5.23	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	0	0	0	0	0		0.00	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	~~41~~	~~3~~	~~84~~	~~1~~	~~23316~~	~~a~~ (FP) PAB	~~7.64~~	43	4-Methyl-2-pentanone
41	100	76	94	0	107360	bv	7.73	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropen
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	~~84~~	~~62~~	~~75~~	~~0~~	~~2212~~	~~a~~ (FP) PAB	~~8.57~~	164	Tetrachloroethene
46	0	0	0	0	0	(FP) PAB	0.00	76	1,3-Dichloropropane
47	~~19~~	~~16~~	~~28~~	~~13~~	~~384~~	~~bb~~	~~7.11~~	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: PAB
Date: 9/8/98

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No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	39	21	45	2	1316	bb	10.29	106	Ethylbenzene
53	72	56	65	2	12924	A	10.53	106	m-/p-Xylene
54	0	0	0	0	0		0.00	106	o-Xylene
55	71	64	64	4	17552	A	11.29	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	~~54~~	~~44~~	~~44~~	~~2~~	~~7636~~	~~bv~~ (7p) PAB	~~12.00~~	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	54	39	56	3	2280	A	12.84	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	58	38	59	2	3856	bb	12.89	126	2-Chlorotoluene
64	60	42	62	3	7780	A	13.15	126	4-Chlorotoluene
65	0	0	0	0	0		0.00	105	1,3,5-Trimethylbenzene
66	74	59	59	1	7876	A	14.07	119	tert-Butylbenzene
67	66	57	57	4	28832	A	14.22	105	1,2,4-Trimethylbenzene
68	73	51	69	1	19628	A	14.72	105	sec-Butylbenzene
69	0	0	0	0	0		0.00	119	p-Cymene
70	78	55	70	1	21200	A	14.82	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	45	31	53	5	21820	A	16.87	91	n-Butylbenzene
74	63	39	64	-1	23408	A	16.35	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	77	70	78	7	29336	bv	19.13	180	1,2,4-Trichlorobenzene
77	65	33	84	6	11224	bb	19.33	225	Hexachlorobutadiene
78	73	59	85	8	64549	bv	19.34	128	Naphthalene
79	70	60	78	7	23412	bv	19.54	180	1,2,3-Trichlorobenzene

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No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	84	99	-1	3528238	bv	5.03	168	Pentafluorobenzene
2	100	96	98	2	3984048	bv	5.77	114	1,4-Difluorobenzene
3	100	96	96	-2	3876915	bv	9.94	117	Chlorobenzene-d5
4	100	79	98	3	1989388	bv	15.05	152	1,4-Dichlorobenzene-d4
5	100	95	99	1	1775368	bv	4.90	113	Dibromofluoromethane
6	100	91	97	-1	4809862	bv	7.64	98	Toluene-d8
7	100	89	93	-1	2620116	bv	12.22	95	4-Bromofluorobenzene
8	~~66~~	~~38~~	~~74~~	~~4~~	~~1421880~~	~~A~~	~~1.03~~	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	~~37~~	~~31~~	~~36~~	~~-8~~	~~20736~~	~~A~~	~~3.31~~	73	MTBE
11	86	69	69	-1	13336	A	3.64	57	n-Hexane
12	~~82~~	~~64~~	~~72~~	~~-2~~	~~4908~~	~~bb~~	~~1.22~~	42	1,2-Epoxybutane
13	70	49	67	2	16436	bb	5.40	57	Iso-Octane
14	~~41~~	~~26~~	~~53~~	~~-7~~	~~409~~	~~bb~~	~~5.27~~	55	Ethyl acrylate

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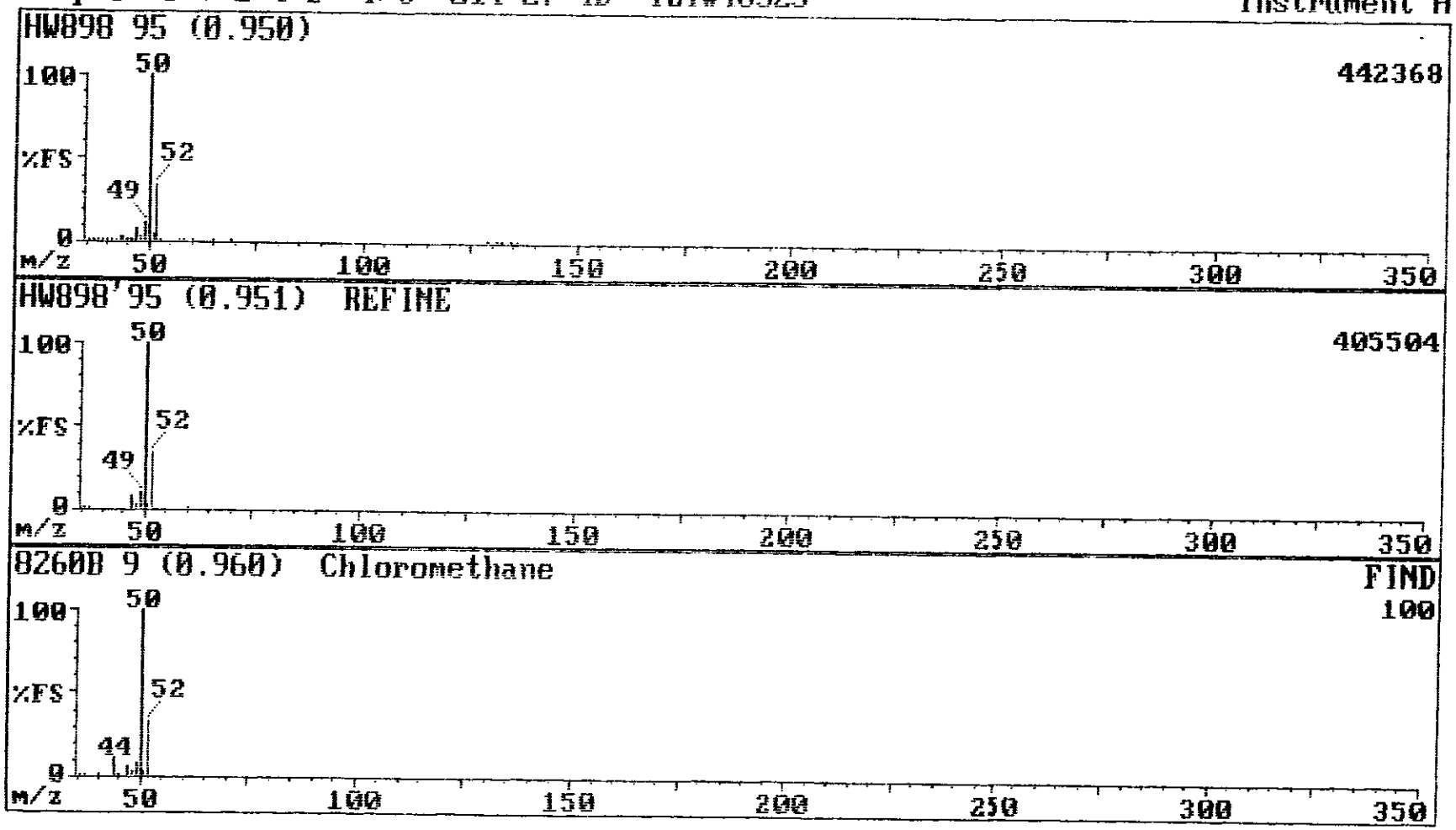
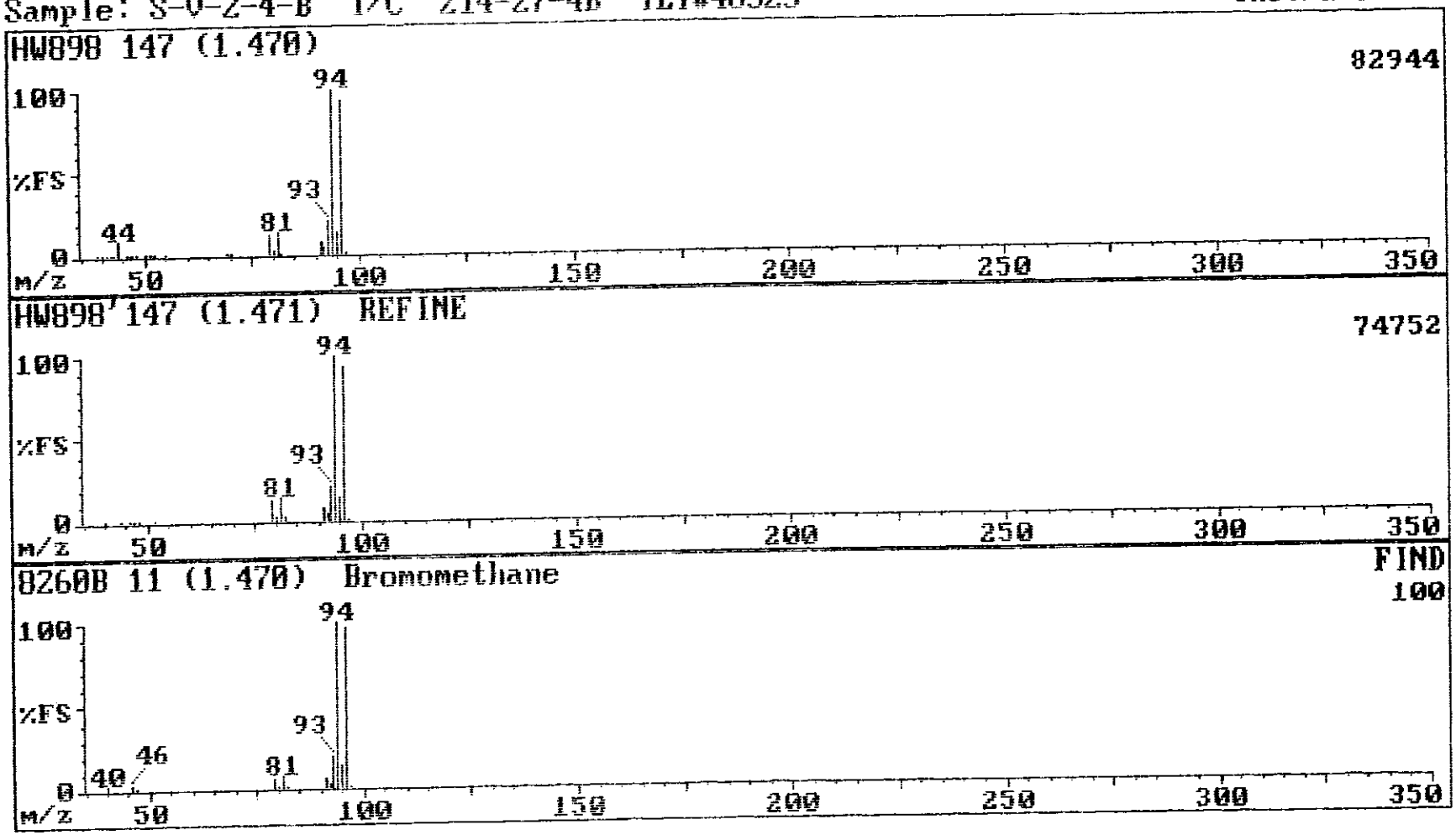
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



09-04-98 16:34 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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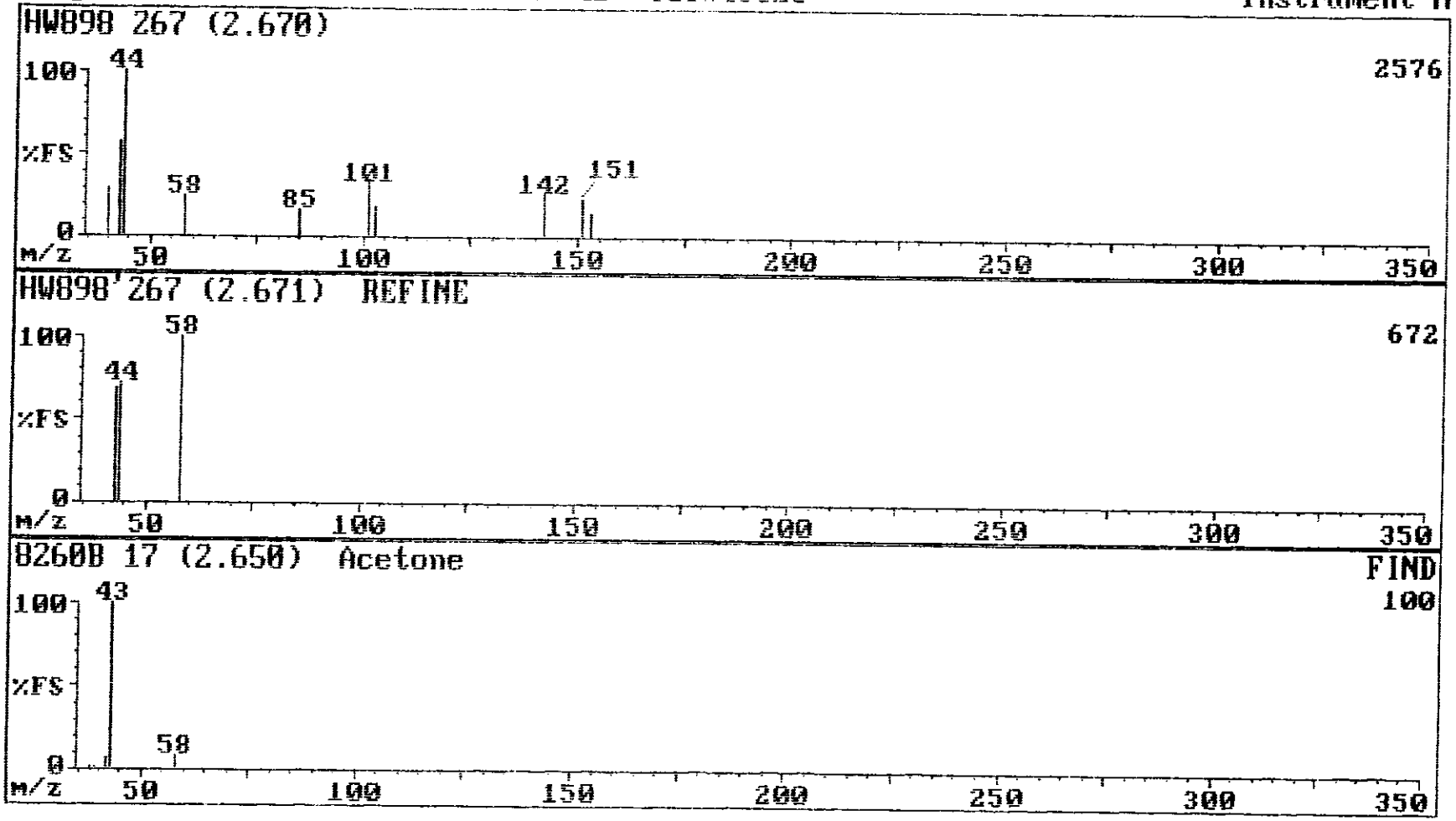
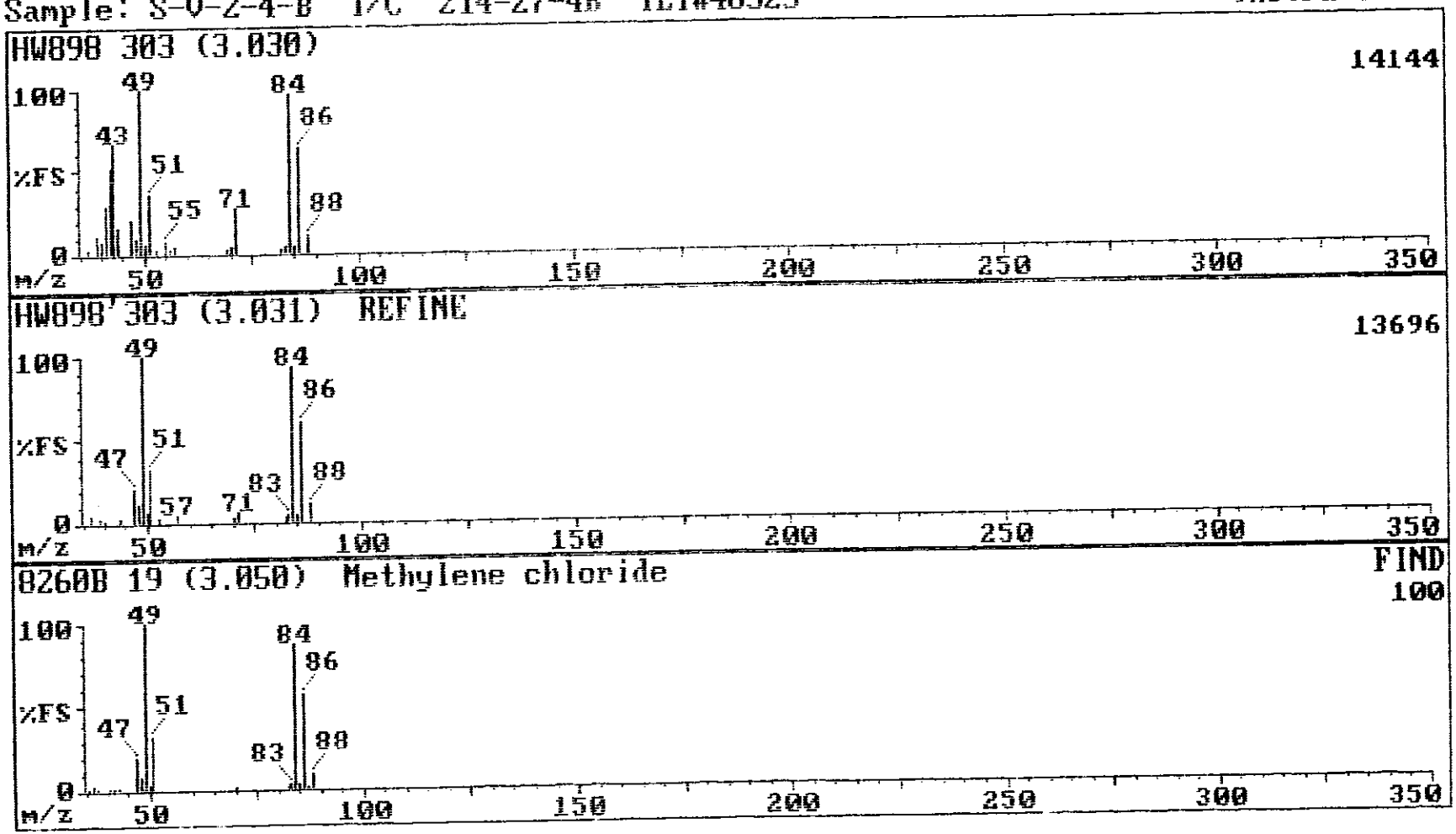
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



09-04-98 16:34 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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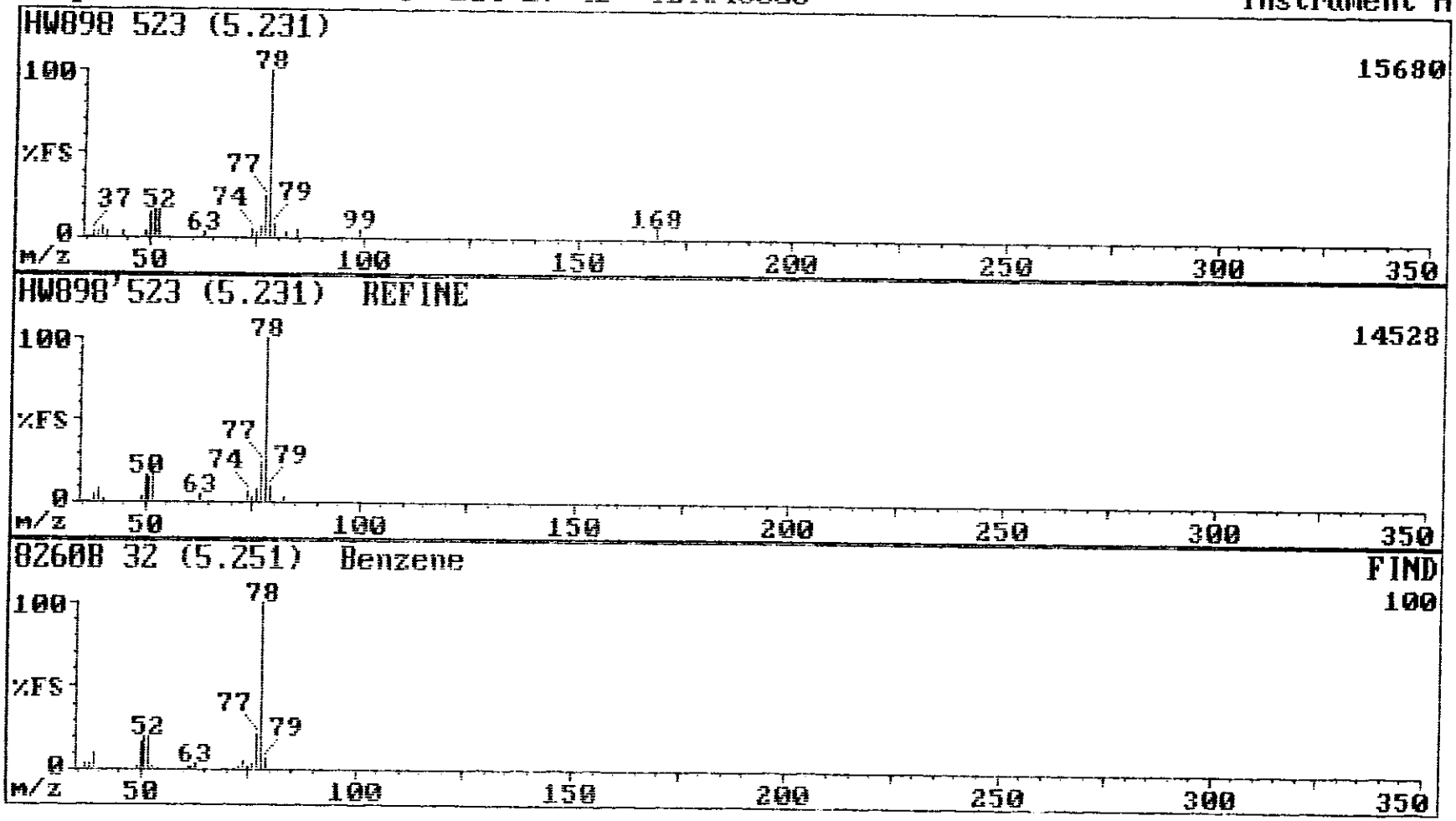
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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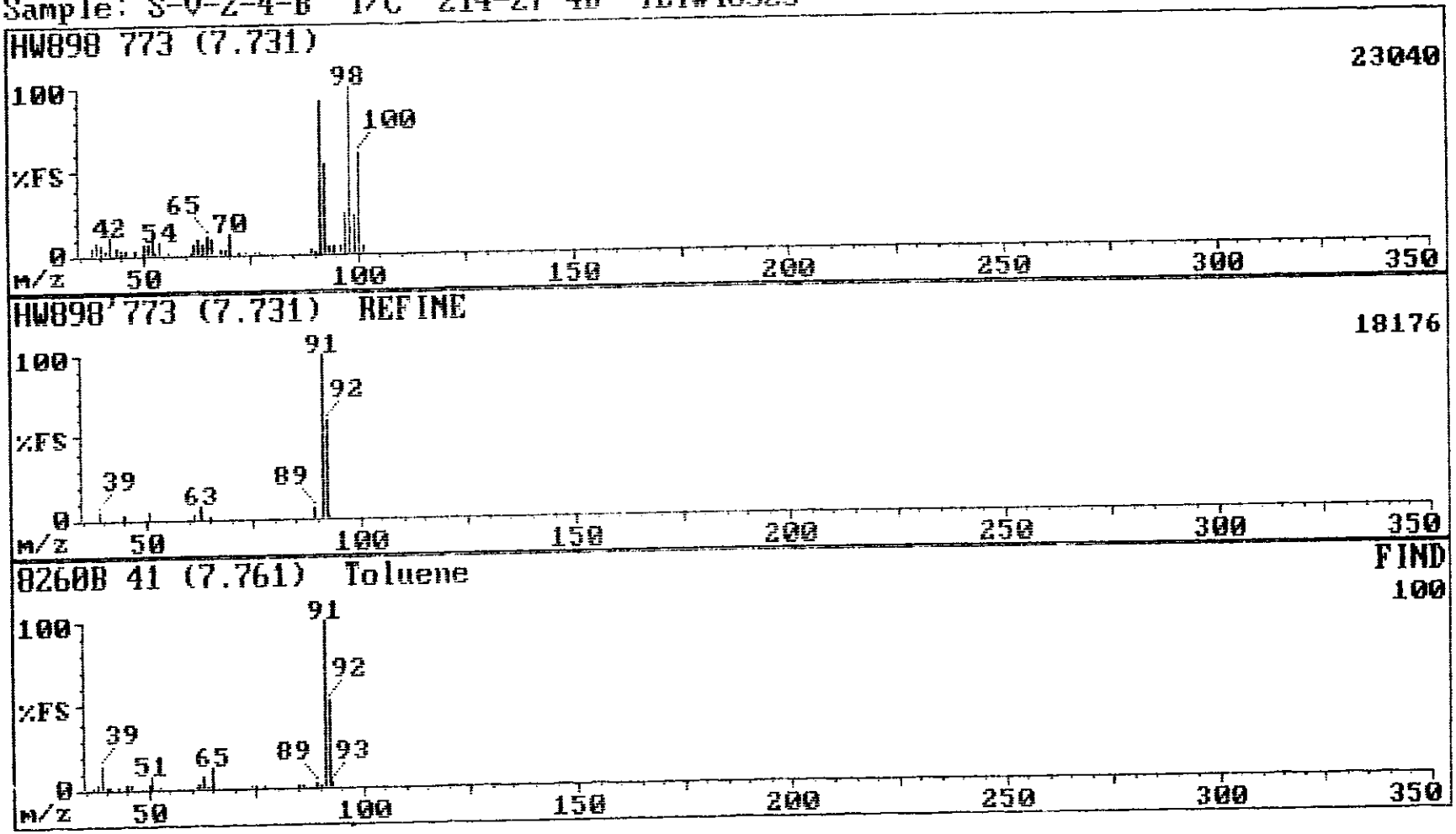
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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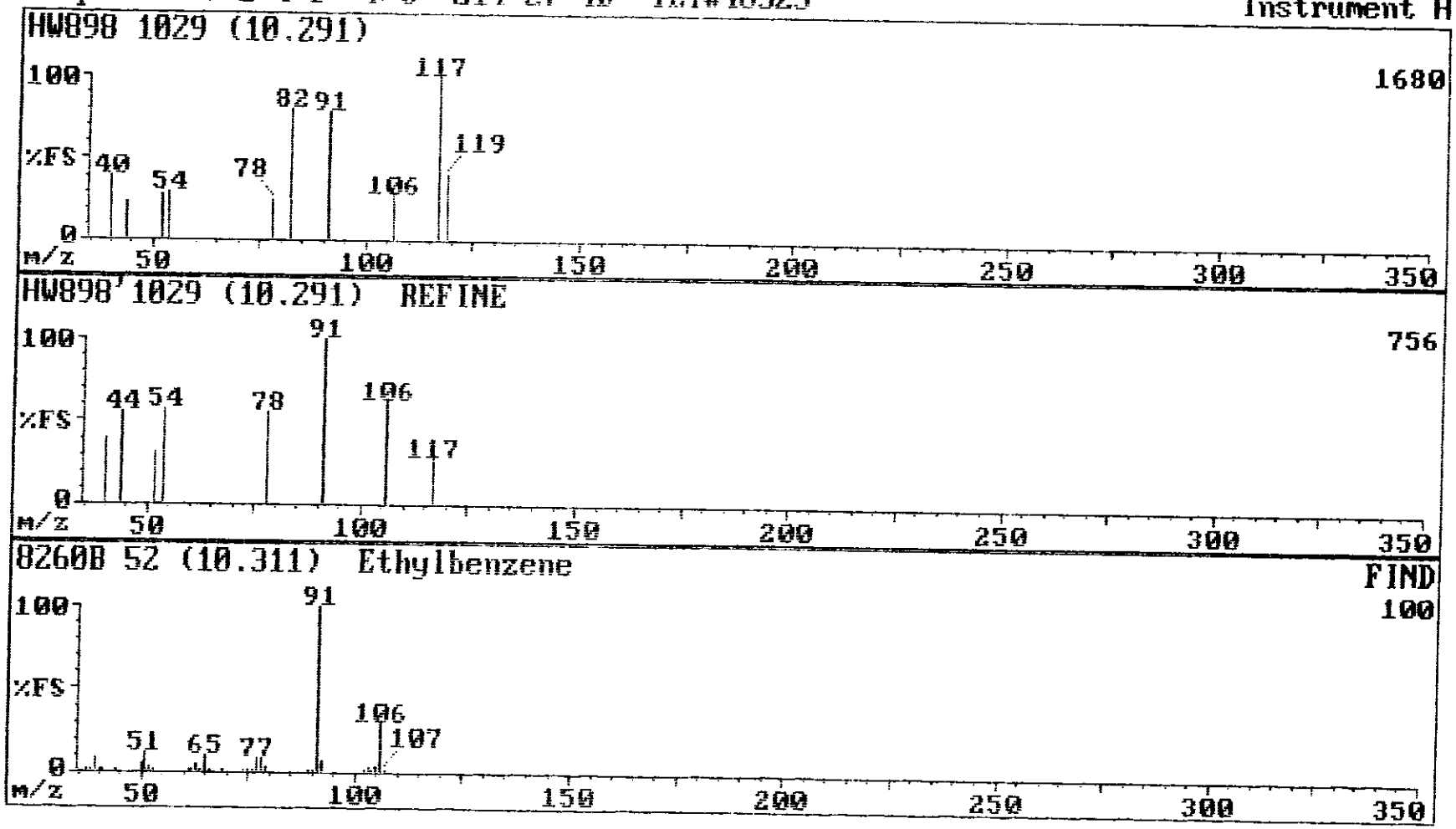
09-04-98 16:34 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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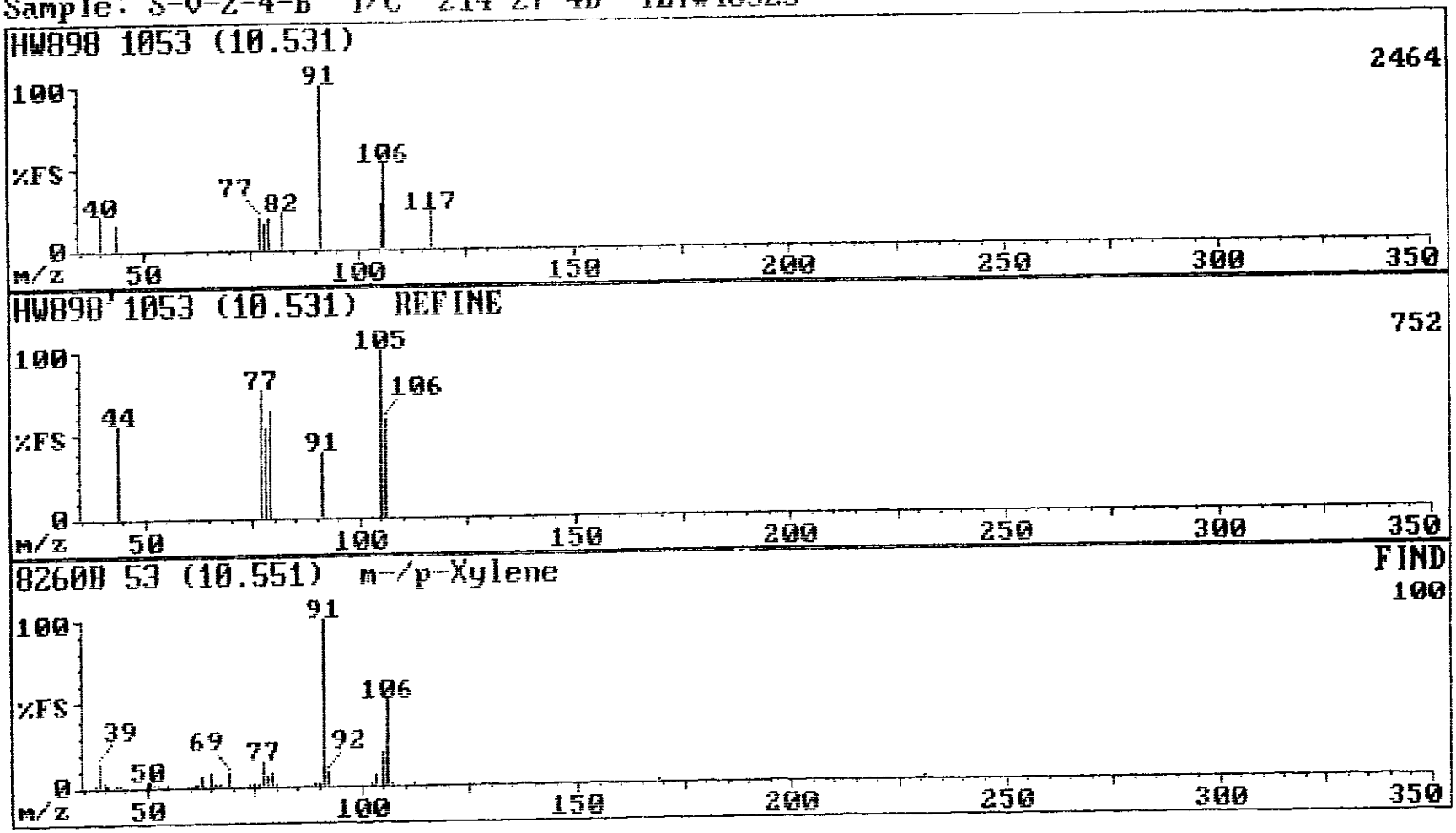
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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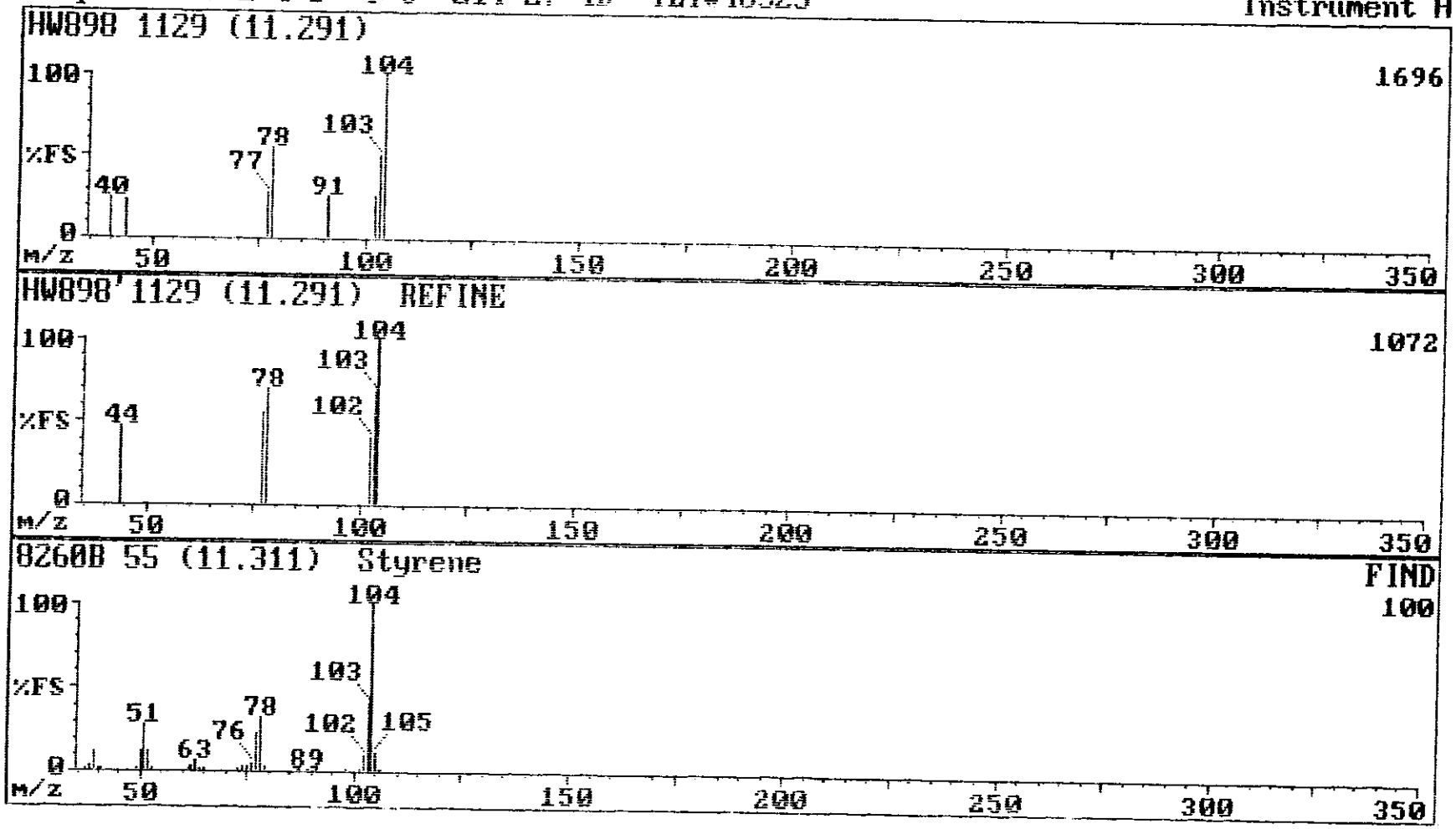
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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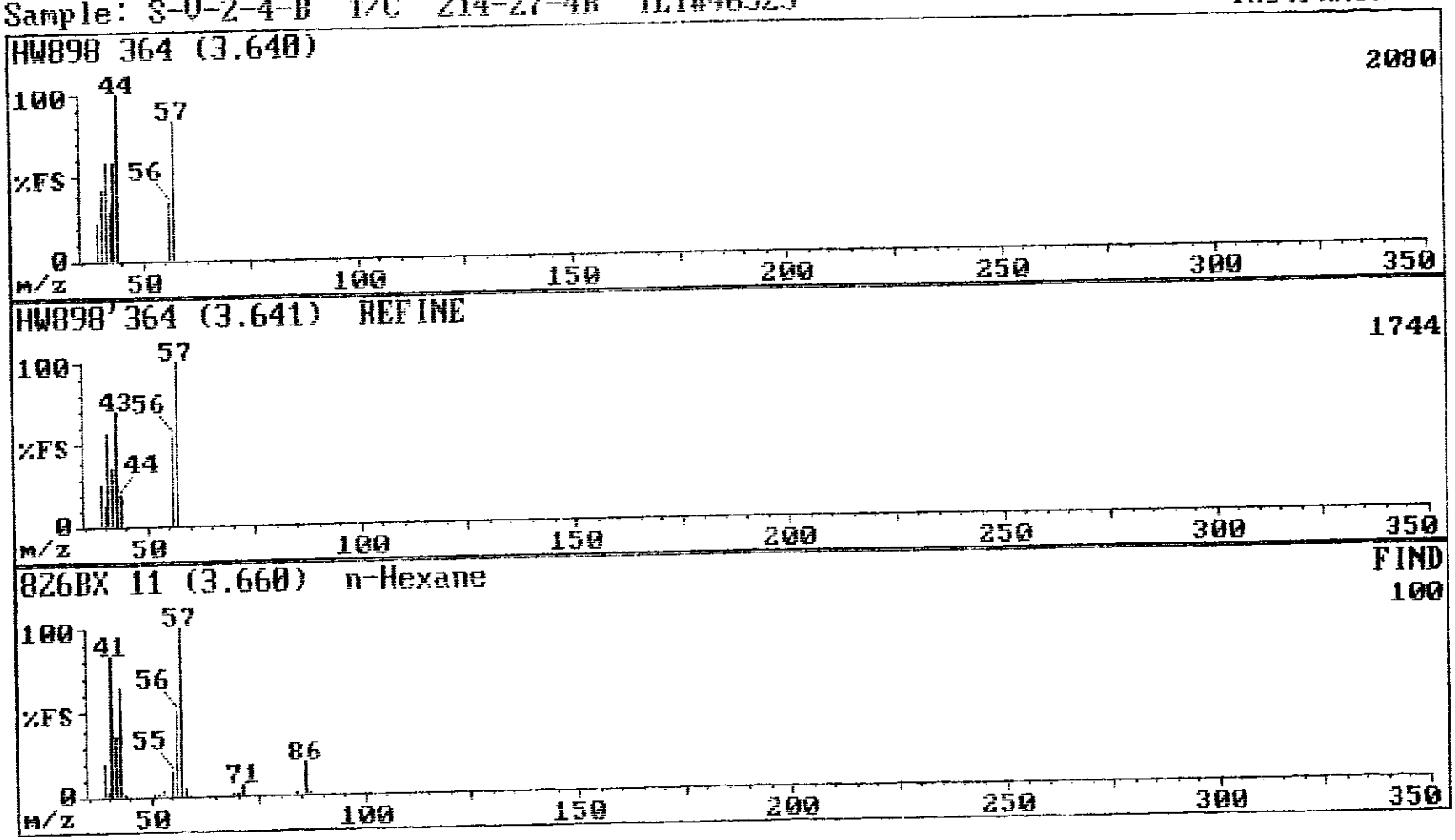
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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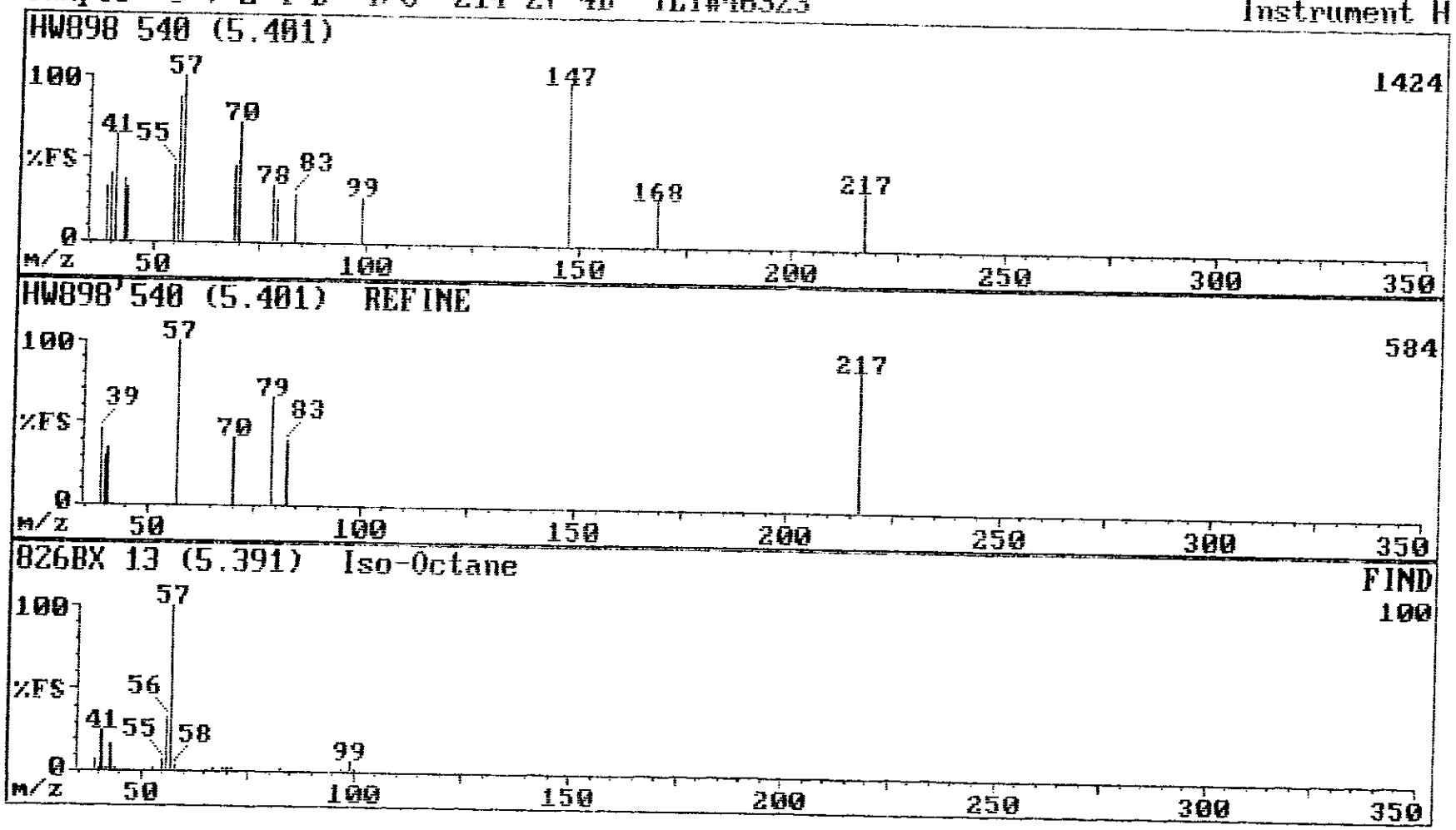
Sample: S-V-2-4-B T/C 214-27-4B TLI#46323 Instrument H



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Pacific Environmental Services

Project Number: 46323
Sample File: HW904

Method 8260 VOST
Sample ID: S-V-3-3-A T

Client Project: R012.001
TLI ID: 214-27-12A

Date Received: 07/29/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.05		
Chloromethane	0.253	B	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.059	B	1.46		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide	0.571		2.57		0.05
Acetone	3.124	BE	2.63		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride		U		0.001	0.05
Acrylonitrile		U		0.007	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone	2.881	BE	4.47		0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2 Low	5.79		
Carbon tetrachloride		U		0.001	0.05
Benzene	1.627	BE	5.25		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46323
Sample File: HW904

Method 8260 VOST
Sample ID: S-V-3-3-A T

Client Project: R012.001
TLI ID: 214-27-12A

Date Received: 07/29/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.003	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.002	0.05
Toluene	3.898	BE	7.79		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3 Low	9.99		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.003	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.002	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene	2.716	BE	10.36		0.05
m-/p-Xylene	12.924	BE	10.62		0.10
o-Xylene	3.540	BE	11.32		0.05
Styrene	0.490	B	11.35		0.05
Bromoform		U		0.002	0.05
1,4-Dichlorobenzene-d_4		IS 4 Low	15.17		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.003	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
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Pacific Environmental Services

Project Number: 46323
Sample File: HW904

Method 8260 VOST
Sample ID: S-V-3-3-A T

Client Project: R012.001
TLI ID: 214-27-12A

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.292	4.92	1	117
Toluene-d_8	0.401	7.68	2	160
4-Bromofluorobenzene	1.737	12.36	2	695

Reviewed by PAB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46323
Sample File: HW904

Method 8260 VOST
Sample ID: S-V-3-3-A T

Client Project: R012.001
TLI ID: 214-27-12A

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.05		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	5.008	BE	3.66		0.25
1,2-Epoxybutane		U		0.055	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.79		
Ethyl acrylate		U		0.001	0.25

Reviewed by PaB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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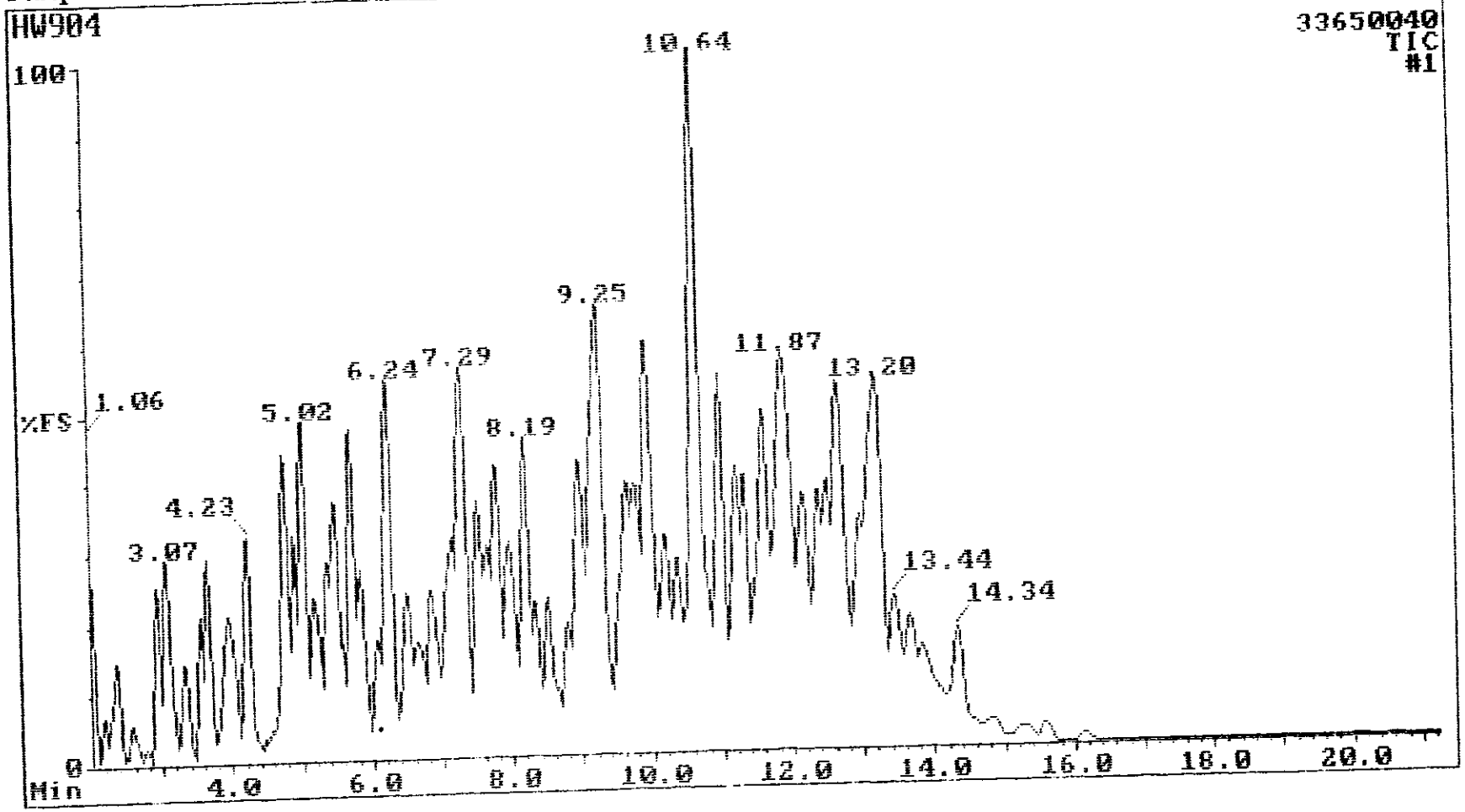
09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Instrument H

Sample: S-V-3-3-A T Z14-Z7-12A TLI#46323



Data Review: PAB
Date: 9/8/98

QUAN DB : HW904 LAB-BASE QUAN 09-04-98 [illegible]

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	35	11	45	-1	2280136	bv	5.05	168	Pentafluorobenzene
2	0	0	0	0	2186296	A	5.79	114	1,4-Difluorobenzene
3	32	19	33	1	922468	bv	9.99	117	Chlorobenzene-d5
4	63	20	82	4	351408	A	15.17	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	1178340	A	4.92	113	Dibromofluoromethane
6	40	25	40	1	3730528	bv	7.68	98	Toluene-d8
7	0	0	0	0	7716096	A	12.36	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	0	0	0	0	590752 → (AD) PAB		~~0.00~~ 0.96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	96	60	98	-1	178016	bv	1.46	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	82	48	86	1	4688861	bv	2.57	76	Carbon disulfide
17	100	82	91	-1	4217088	vb	2.63	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	0		0.00	84	Methylene chloride
20	~~31~~	~~[illegible]~~	~~[illegible]~~	~~4~~	~~325367~~	~~vv~~ (AD) PAB	~~3.33~~	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	100	82	96	-3	4414066	vv	4.47	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	85	99	0	16474820	bv	5.25	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	~~44~~	~~46~~	~~55~~	~~13~~	~~2151488~~	~~bb~~ (AD) PAB	~~6.50~~	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	~~49~~	~~30~~	~~70~~	~~15~~	~~19926660~~	~~vv~~ (AD) PAB	~~7.51~~	43	4-Methyl-2-pentanone
41	100	30	97	3	25665920	bv	7.79	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloroproper
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	0	0	0	0	0		0.00	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	~~51~~	~~26~~	~~67~~	~~-5~~	~~16311960~~	~~vv~~ (AD) PAB	~~8.98~~	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: PAB
Date: 9/8/98

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C 83

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	80	54	87	4	4810060	bv	10.36	106	Ethylbenzene
53	77	57	83	6	28135070	vv	10.62	106	m-/p-Xylene
54	71	51	82	6	7210048	vv	11.32	106	o-Xylene
55	0	0	0	0	1642668 ~~0~~	(M) PAB 9/8/98	~~0.00~~ 11.35	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	0	0	0	0	0		0.00	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	56	43	90	-15	28678120	vv	13.24	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	100	74	98	1	17466980	bb	14.34	105	1,2,4-Trimethylbenzene
68	74	36	86	1	2247308	bv	14.84	105	sec-Butylbenzene
69	39	40	50	13	413178	A	15.56	119	p-Cymene
70	0	0	0	0	0		0.00	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00	146	1,4-Dichlorobenzene
72	35	10	51	-3	552398	A	15.57	91	Benzyl chloride
73	0	0	0	0	0		0.00	91	n-Butylbenzene
74	0	0	0	0	0		0.00	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	0	0	0	0	0		0.00	180	1,2,4-Trichlorobenzene
77	0	0	0	0	0		0.00	225	Hexachlorobutadiene
78	0	0	0	0	0		0.00	128	Naphthalene
79	0	0	0	0	0		0.00	180	1,2,3-Trichlorobenzene

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QUAN DB : HW904 LAB-BASE QUAN 09-04-98 21:16

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	35	11	45	1	2280136	bv	5.05	168	Pentafluorobenzene
2	0	0	0	0	2186296	A	5.79	114	1,4-Difluorobenzene
3	32	19	33	5	922468	bv	9.99	117	Chlorobenzene-d5
4	62	20	82	7	351408	A	15.17	152	1,4-Dichlorobenzene-d4
5	0	0	0	0	139076	A	15.24	113	Dibromofluoromethane
6	37	25	40	4	3730528	bv	7.68	98	Toluene-d8
7	0	0	0	0	7716096	A	12.36	95	4-Bromofluorobenzene
8	~~80~~	~~39~~	~~67~~	~~5~~	~~15775498~~	~~vv~~ SP PAB	~~1.96~~	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	~~43~~	~~37~~	~~48~~	~~14~~	~~96941~~	~~vb~~ SP PAB	~~3.55~~	73	MTBE
11	100	97	99	-1	20964340	vv	3.66	57	n-Hexane
12	~~70~~	~~50~~	~~67~~	~~-3~~	~~5255044~~	~~bv~~ SP PAB	~~4.23~~	42	1,2-Epoxybutane
13	~~52~~	~~60~~	~~66~~	~~-22~~	~~7972252~~	~~vb~~ SP PAB	~~5.18~~	57	Iso-Octane
14	~~47~~	~~28~~	~~68~~	~~-9~~	~~26951200~~	~~bb~~ SP PAB	~~6.24~~	55	Ethyl acrylate

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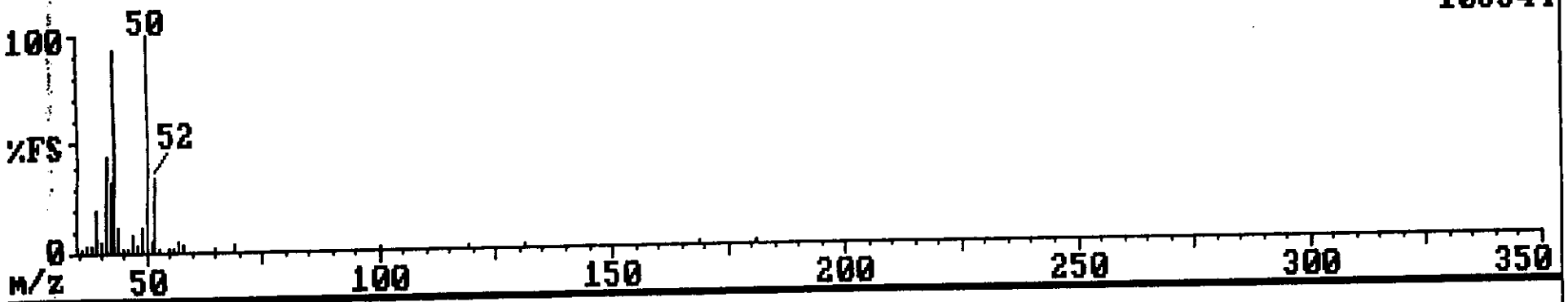
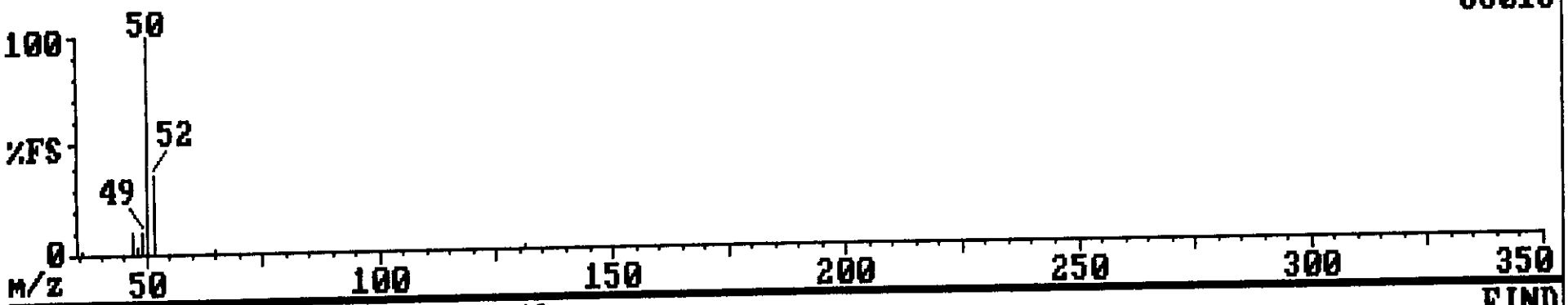
04-Sep-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H

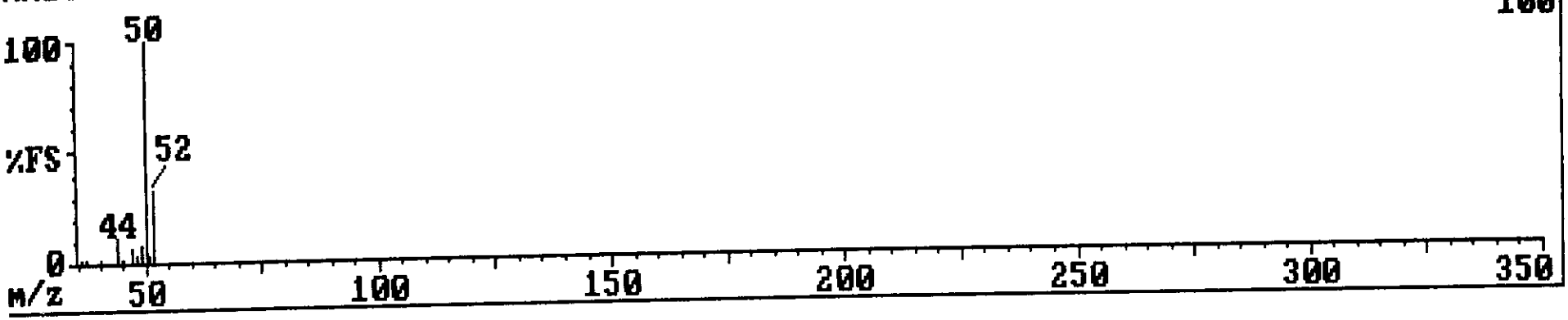
HW904 96 (0.960) 108544



HW904 96 (0.961) REFINE 86016

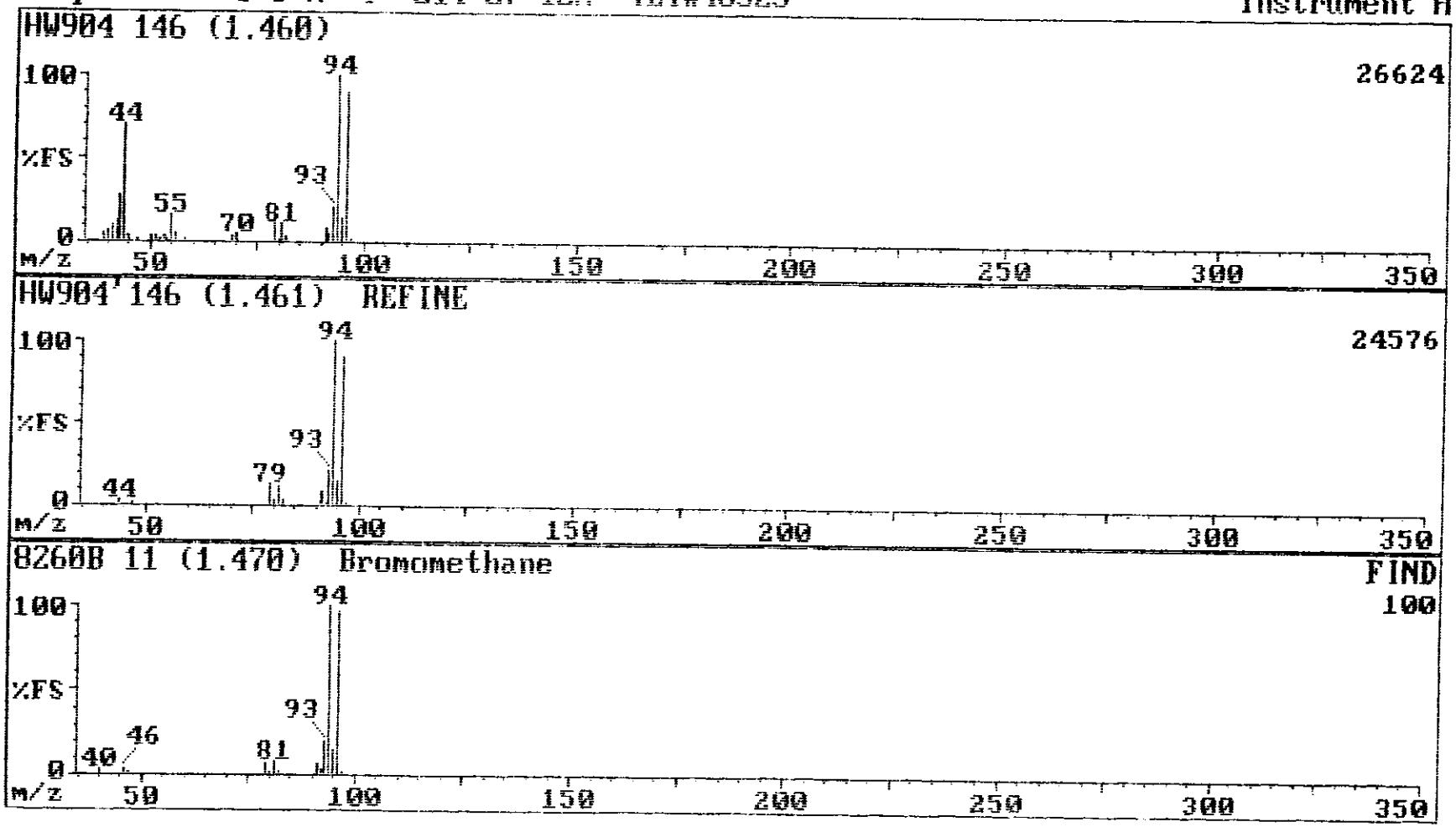


MASTER 9 (1.250) Chloromethane FIND 100



09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

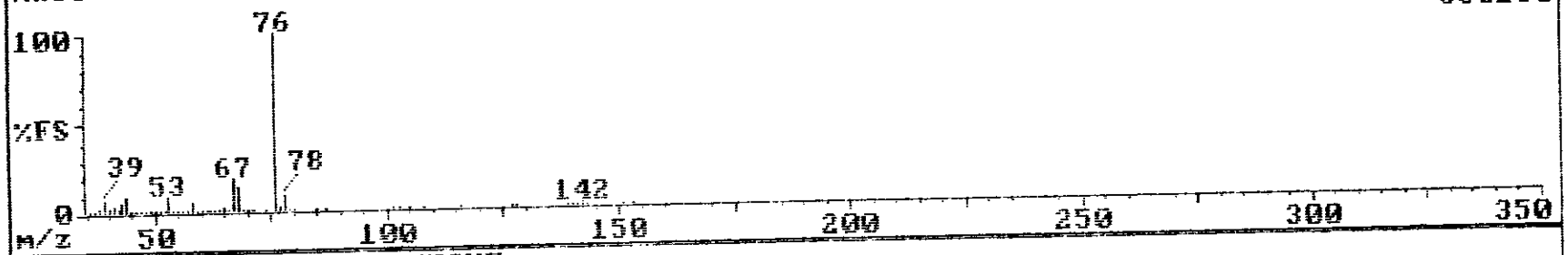
Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H



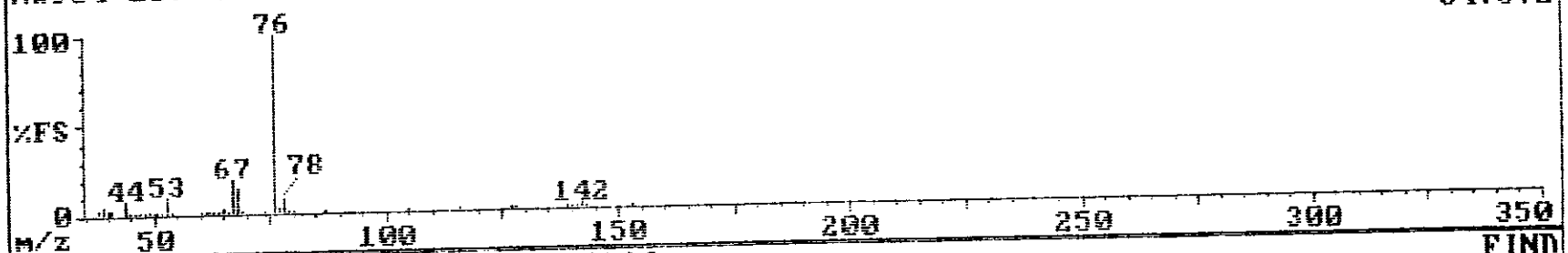
09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T Z14-27-12A TLI#46323 Instrument H

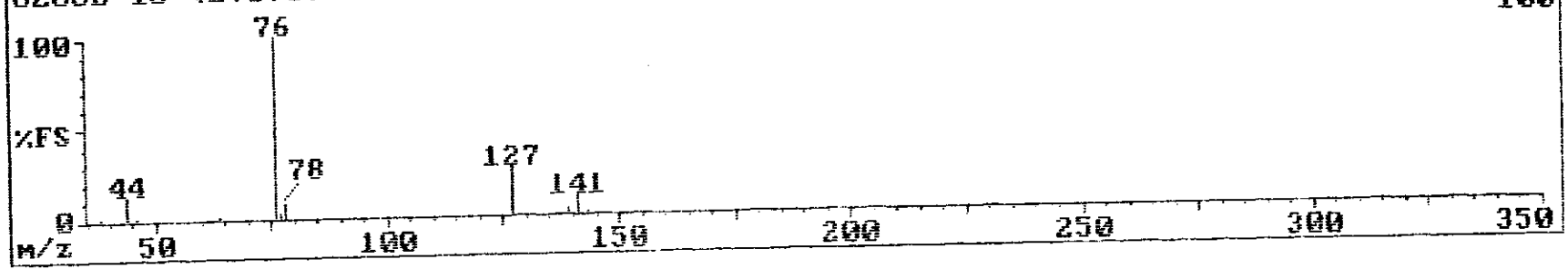
HW904 257 (2.570) 860160



HW904 257 (2.571) REFINE 847872



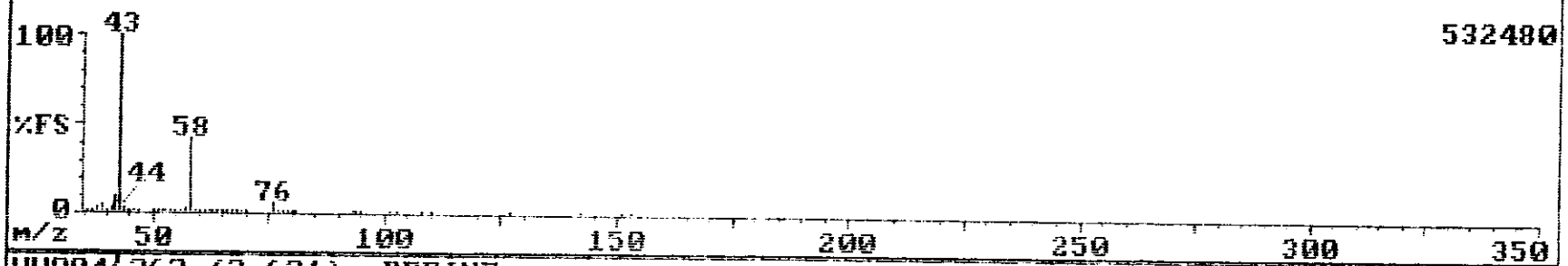
8260B 16 (2.570) Carbon disulfide FIND 100



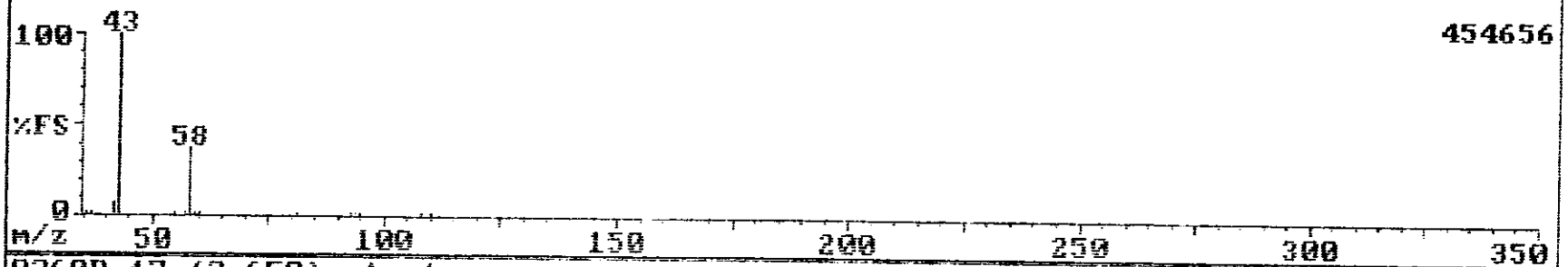
09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H

HW904 263 (2.630)

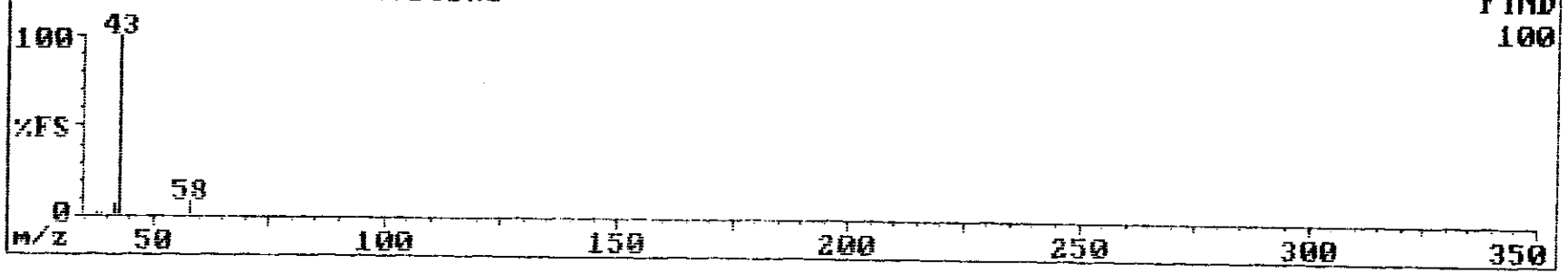


HW904 263 (2.631) REFINE



8260B 17 (2.650) Acetone

FIND 100



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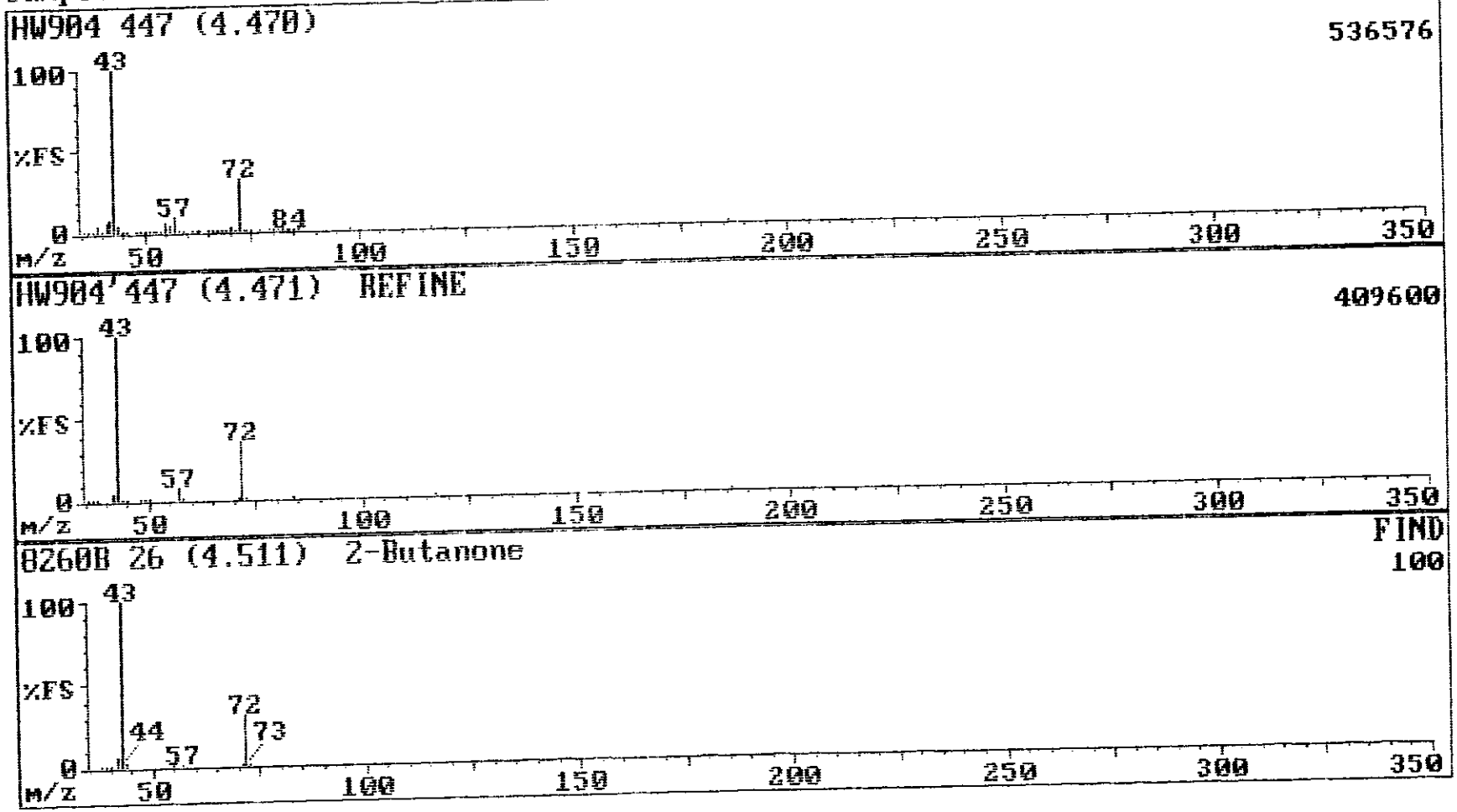
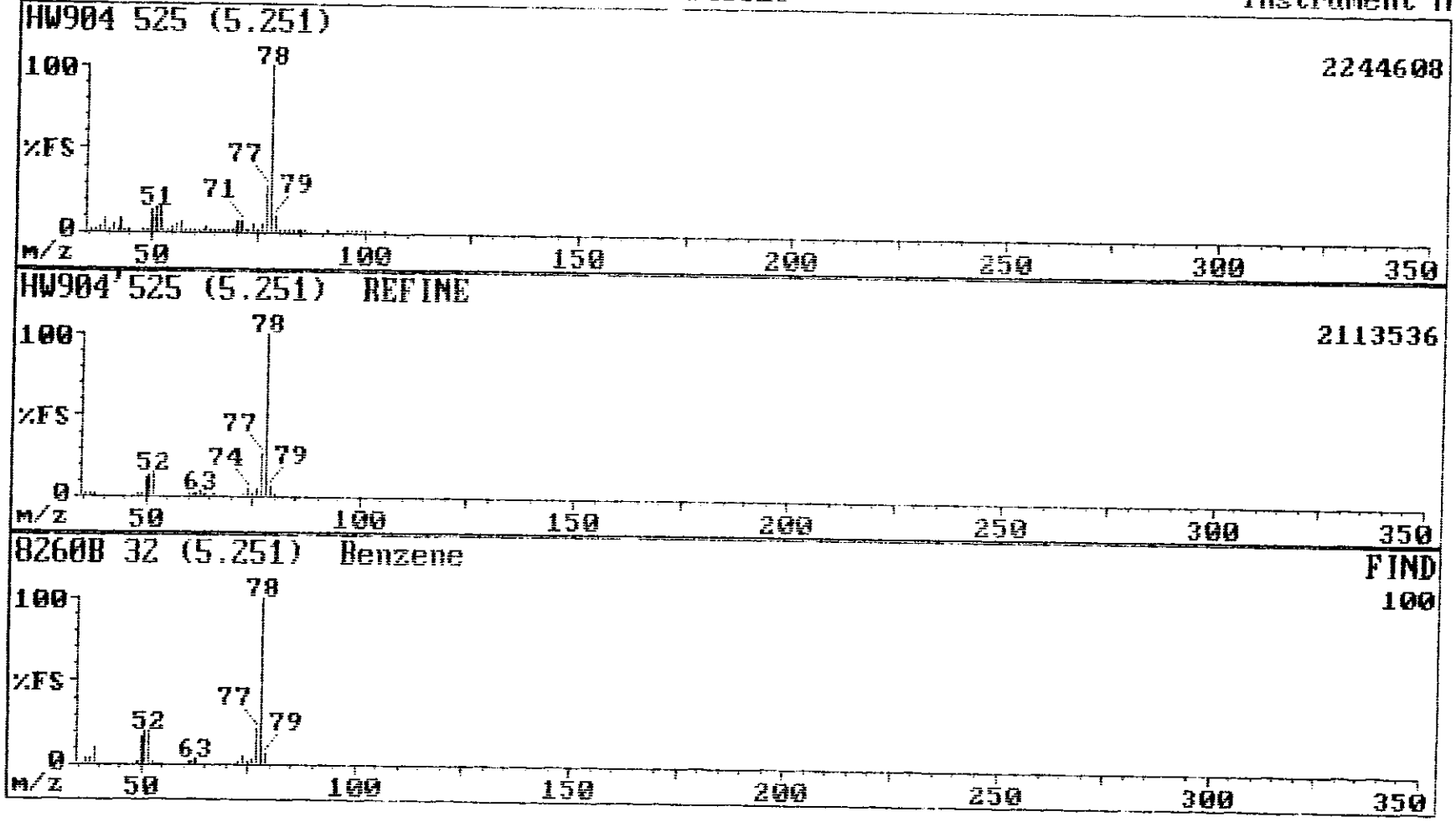
09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H



09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

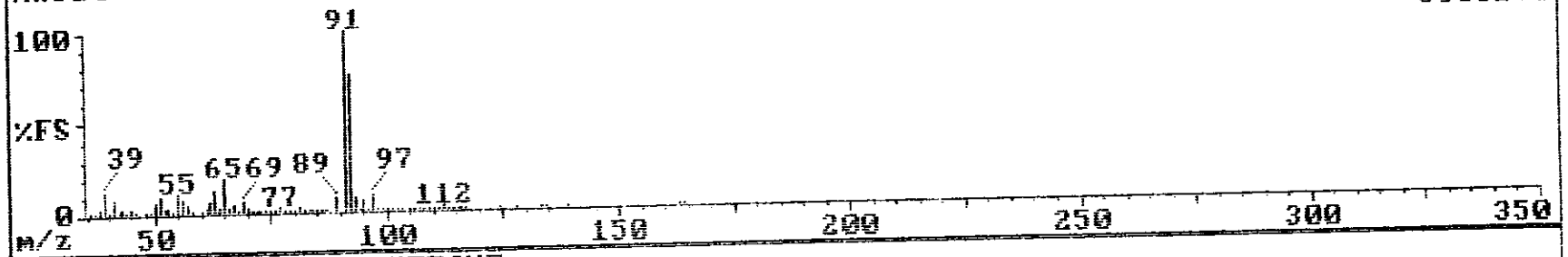
Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H



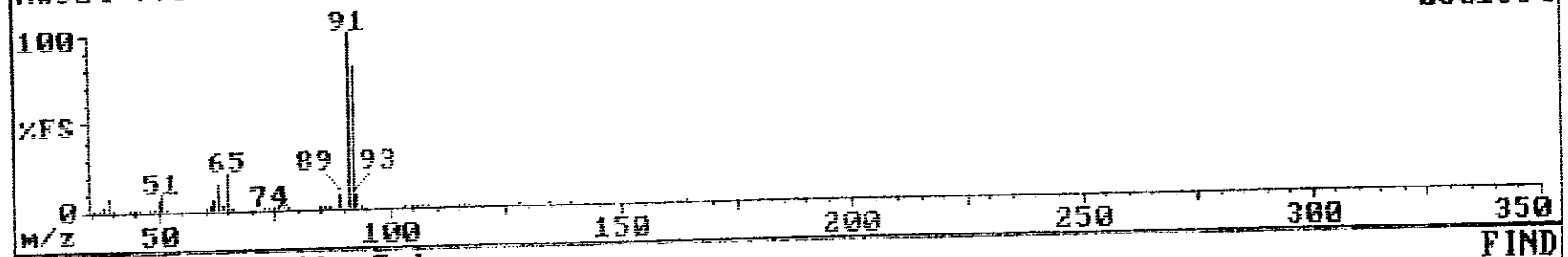
09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H

HW904 779 (7.791) 3506176

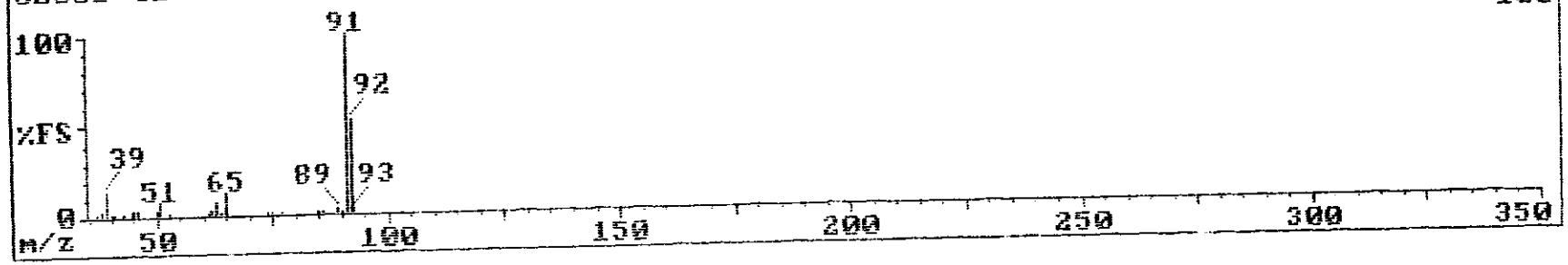


HW904 779 (7.791) REFINE 2801664



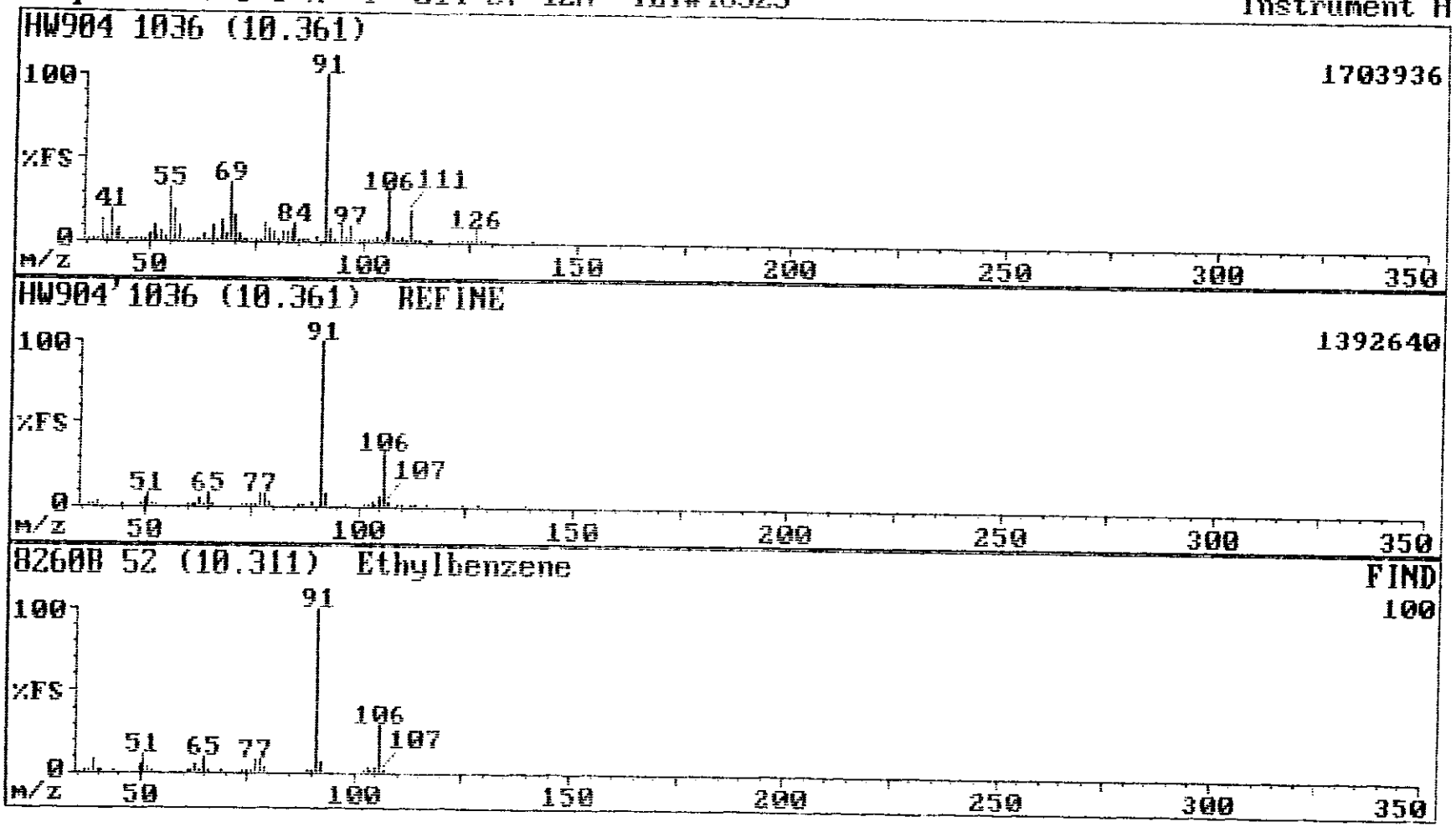
FIND

8260B 41 (7.761) Toluene 100



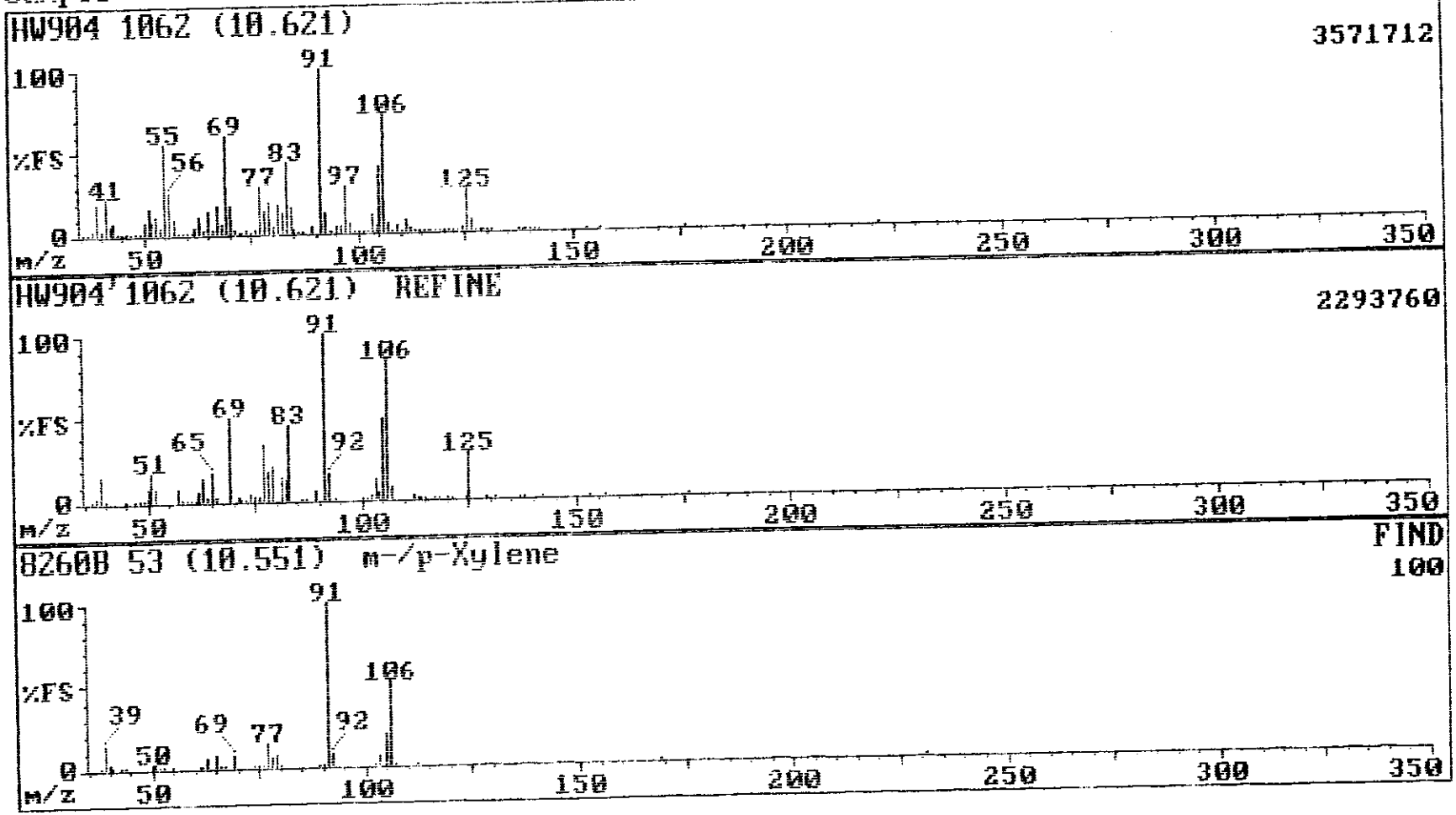
09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H



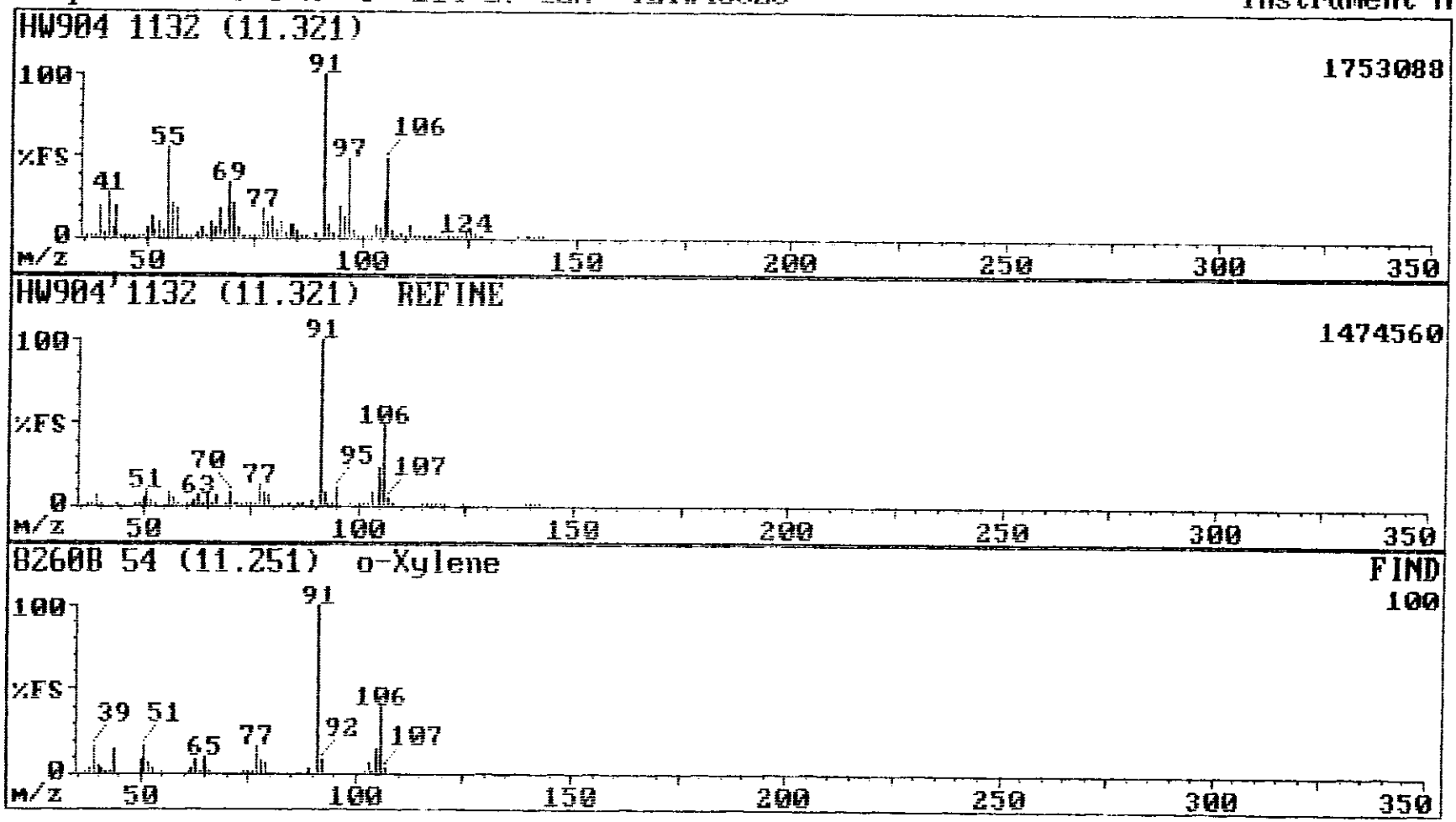
09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T Z14-Z7-12A TL1#46323 Instrument H



09-04-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H



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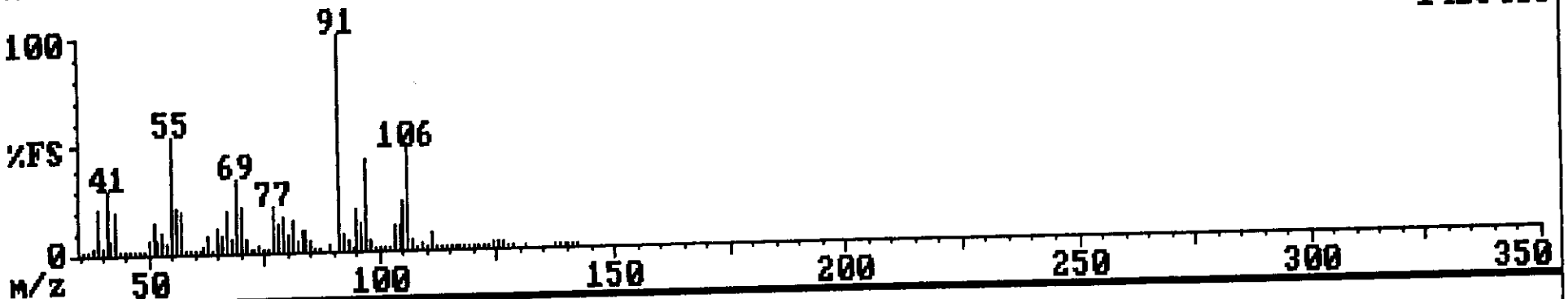
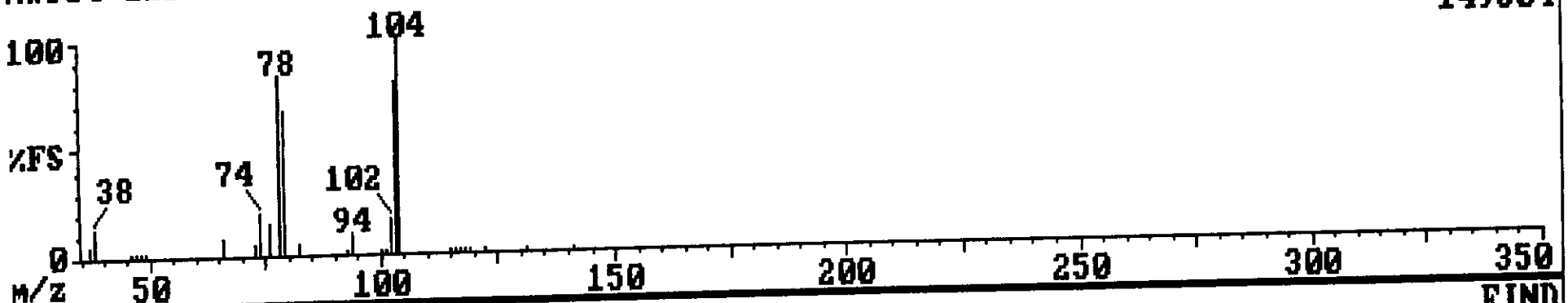
04-Sep-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H

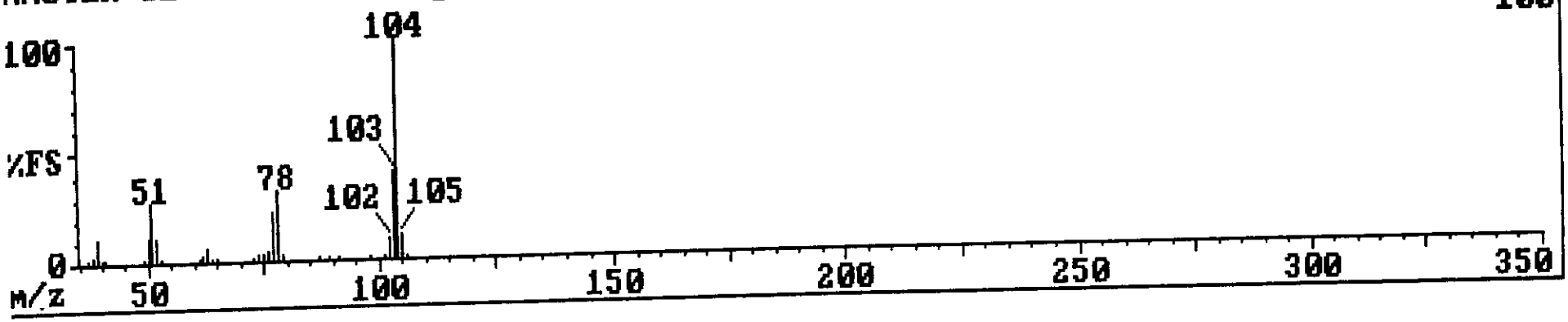
HW904 1134 (11.341) 1425408



HW904 1134 (11.341) REFINE 149504



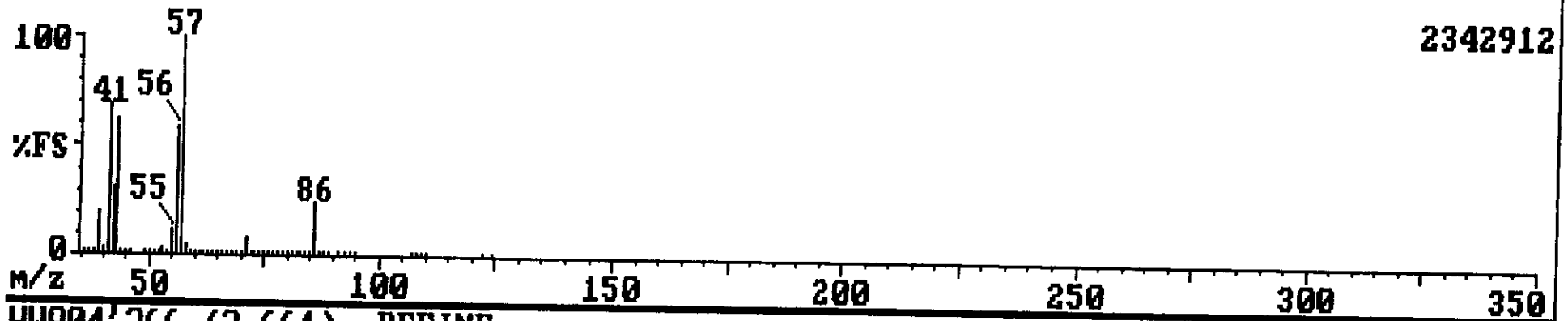
MASTER 62 (12.240) Styrene FIND 100



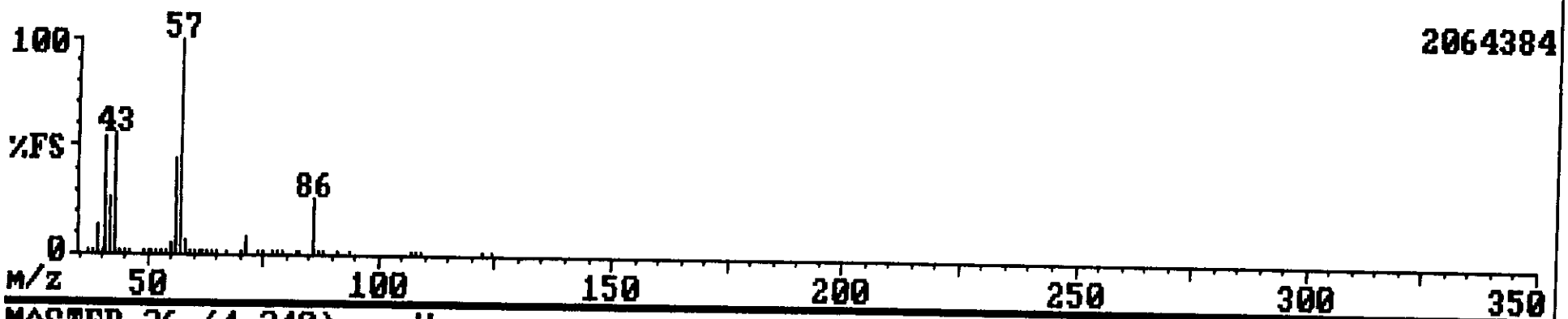
04-Sep-98 20:21 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-A T 214-27-12A TLI#46323 Instrument H

HW904 366 (3.660)

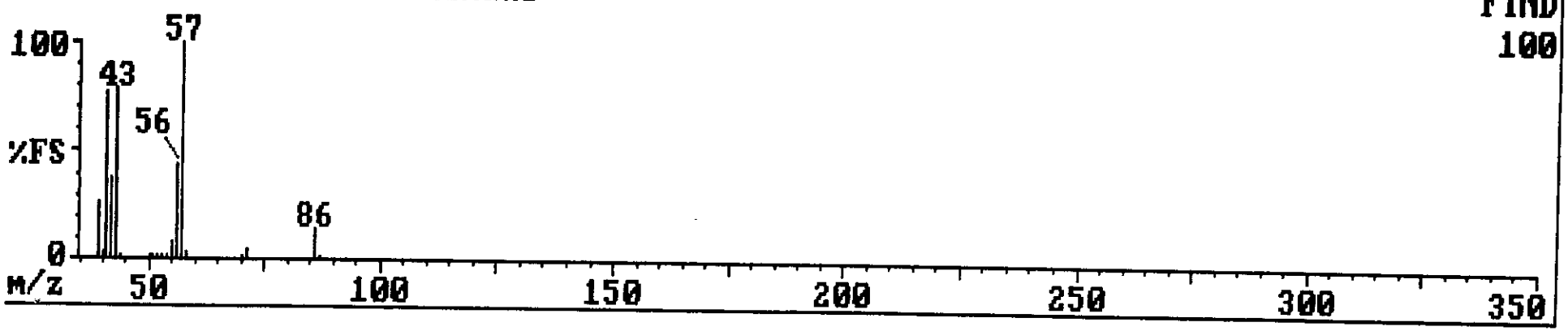


HW904 366 (3.661) REFINE



MASTER 26 (4.240) n-Hexane

FIND 100



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Pacific Environmental Services

Project Number: 46323
Sample File: HW899

Method 8260 VOST
Sample ID: S-V-3-3-B TC

Client Project: R012.001
TLI ID: 214-27-12B

Date Received: 07/29/98
Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
Chloromethane	0.353	B	0.96		0.05
Vinyl Chloride		U		0.001	0.05
Bromomethane	0.071	B	1.48		0.05
Chloroethane		U		0.001	0.05
Trichlorofluoromethane		U		0.001	0.05
1,1-Dichloroethene		U		0.001	0.05
Iodomethane		U		0.001	0.05
Carbon disulfide		U		0.001	0.05
Acetone	0.075	B	2.65		0.05
Allyl chloride		U		0.001	0.05
Methylene chloride		U		0.001	0.05
Acrylonitrile		U		0.005	0.05
trans-1,2-Dichloroethene		U		0.001	0.05
1,1-Dichloroethane		U		0.001	0.05
Vinyl acetate		U		0.001	0.05
cis-1,2-Dichloroethene		U		0.001	0.05
2-Butanone	0.050	B	4.49		0.05
Chloroform		U		0.001	0.05
1,1,1-Trichloroethane		U		0.001	0.05
1,4-Difluorobenzene		IS 2	5.77		
Carbon tetrachloride		U		0.001	0.05
Benzene	0.037	BJ	5.24		0.05
1,2-Dichloroethane		U		0.001	0.05
Trichloroethene		U		0.001	0.05
1,2-Dichloropropane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

Triangle Laboratories, Inc.
801 Capitola Drive • Durham, North Carolina 27713
Phone: (919) 544-5729 • Fax: (919) 544-5491

Savar v3.7
Printed: 16:29 09/08/1998

Pacific Environmental Services

Project Number: 46323
Sample File: HW899

Method 8260 VOST
Sample ID: S-V-3-3-B TC

Client Project: R012.001
TLI ID: 214-27-12B

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Methyl methacrylate		U		0.001	0.05
Bromodichloromethane		U		0.001	0.05
cis-1,3-Dichloropropene		U		0.001	0.05
4-Methyl-2-pentanone		U		0.001	0.05
Toluene	0.005	BJ	7.74		0.05
trans-1,3-Dichloropropene		U		0.001	0.05
1,1,2-Trichloroethane		U		0.001	0.05
Chlorobenzene-d_5		IS 3	9.94		
Tetrachloroethene		U		0.001	0.05
2-Hexanone		U		0.001	0.05
Dibromochloromethane		U		0.001	0.05
1,2-Dibromoethane		U		0.001	0.05
Chlorobenzene		U		0.001	0.05
Ethylbenzene		U		0.001	0.05
m-/p-Xylene		U		0.001	0.10
o-Xylene		U		0.001	0.05
Styrene		U		0.001	0.05
Bromoform		U		0.001	0.05
1,4-Dichlorobenzene-d_4		IS 4	15.04		
Cumene		U		0.001	0.05
1,1,2,2-Tetrachloroethane		U		0.001	0.05

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46323
Sample File: HW899

Method 8260 VOST
Sample ID: S-V-3-3-B TC

Client Project: R012.001
TLI ID: 214-27-12B

Date Received: 07/29/98
Date Analyzed : 09/04/98

Response File: ICALH904

Surrogate Summary	Amount (ug)	RT	IS Ref	%REC
Dibromofluoromethane	0.298	4.91	1	119
Toluene-d_8	0.282	7.64	2	113
4-Bromofluorobenzene	0.318	12.22	2	127

Reviewed by PAB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit

IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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Pacific Environmental Services

Project Number: 46323
Sample File: HW899

Method 8260 VOST
Sample ID: S-V-3-3-B TC

Client Project: R012.001
TLI ID: 214-27-12B

Date Received: 07/29/98

Date Analyzed : 09/04/98

Response File: ICALH904

Analyte	Amount ug	FLAG	RT	Det. Limit ug	Quan. Limit ug
Pentafluorobenzene		IS 1	5.04		
1,3-Butadiene		U		0.001	0.25
Vinyl bromide		U		0.001	0.25
n-Hexane	0.003	BJ	3.66		0.25
1,2-Epoxybutane		U		0.036	0.25
Iso-Octane		U		0.001	0.25
1,4-Difluorobenzene		IS 2	5.77		
Ethyl acrylate		U		0.001	0.25

Reviewed by BAB Date 9/8/98

NA- Not Applicable; Det. Limit: Detection Limit; Quan. Limit: Quantitation Limit
IS: Internal Standard; U: Undetected; B: Present In Blank; J: Estimated- Below Quantitation Limit; E: Estimated- Above Calibration Range

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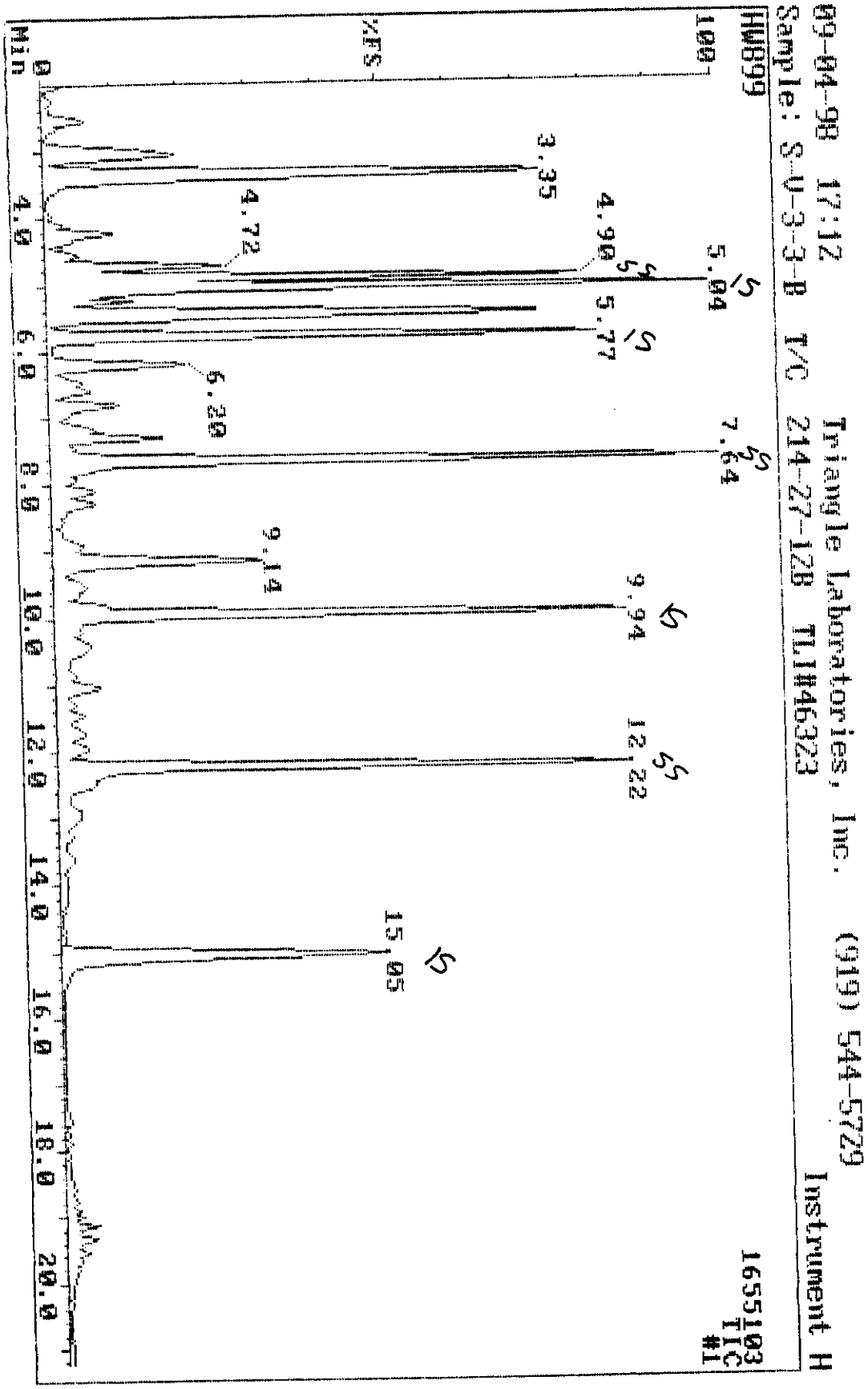

Data Review: PAB
Date: 9/8/98

QUAN DB : HW899 LAB-BASE QUAN 09-04-98 18:31

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	71	97	-2	3509648	bv	5.04	168	Pentafluorobenzene
2	100	96	98	0	3951552	bv	5.77	114	1,4-Difluorobenzene
3	100	94	95	-1	3804949	bv	9.94	117	Chlorobenzene-d5
4	100	78	98	-1	1782907	bv	15.04	152	1,4-Dichlorobenzene-d4
5	100	68	99	1	1854164	bv	4.91	113	Dibromofluoromethane
6	100	90	97	0	4750834	vv	7.64	98	Toluene-d8
7	100	88	94	0	2557094	vv	12.22	95	4-Bromofluorobenzene
8	0	0	0	0	0		0.00	85	Dichlorodifluoromethane
9	100	90	100	0	1267996	vv	0.96	50	Chloromethane
10	0	0	0	0	0		0.00	62	Vinyl Chloride
11	100	83	99	2	331364	bv	1.48	94	Bromomethane
12	0	0	0	0	0		0.00	64	Chloroethane
13	0	0	0	0	0		0.00	101	Trichlorofluoromethane
14	0	0	0	0	0		0.00	96	1,1-Dichloroethene
15	0	0	0	0	0		0.00	142	Iodomethane
16	0	0	0	0	0		0.00	76	Carbon disulfide
17	100	74	92	1	155650	vv	2.65	43	Acetone
18	0	0	0	0	0		0.00	41	Allyl chloride
19	0	0	0	0	0		0.00	84	Methylene chloride
20	~~38~~	~~3~~	~~57~~	~~3~~	~~73820~~	~~bb~~ FP PAB	~~7.34~~	53	Acrylonitrile
21	0	0	0	0	0		0.00	96	trans-1,2-Dichloroethene
22	0	0	0	0	0		0.00	63	1,1-Dichloroethane
23	0	0	0	0	0		0.00	43	Vinyl acetate
24	0	0	0	0	0		0.00	77	2,2-Dichloropropane
25	0	0	0	0	0		0.00	96	cis-1,2-Dichloroethene
26	91	62	87	0	117927	vb	4.49	43	2-Butanone
27	0	0	0	0	0		0.00	83	Chloroform
28	0	0	0	0	0		0.00	128	Bromochloromethane
29	0	0	0	0	0		0.00	97	1,1,1-Trichloroethane
30	0	0	0	0	0		0.00	117	Carbon tetrachloride
31	0	0	0	0	0		0.00	75	1,1-Dichloropropene
32	100	95	99	1	683080	bv	5.24	78	Benzene
33	0	0	0	0	0		0.00	62	1,2-Dichloroethane
34	0	0	0	0	0		0.00	130	Trichloroethene
35	0	0	0	0	0		0.00	63	1,2-Dichloropropane
36	0	0	0	0	0		0.00	93	Dibromomethane
37	~~48~~	~~40~~	~~51~~	~~-7~~	~~193603~~	~~A~~ FP PAB	~~6.47~~	41	Methyl methacrylate
38	0	0	0	0	0		0.00	83	Bromodichloromethane
39	0	0	0	0	0		0.00	75	cis-1,3-Dichloropropene
40	~~45~~	~~7~~	~~65~~	~~1~~	~~52862~~	~~vv~~ FP PAB	~~7.64~~	43	4-Methyl-2-pentanone
41	71	37	79	1	56472	A	7.74	92	Toluene
42	0	0	0	0	0		0.00	75	trans-1,3-Dichloropropen
43	0	0	0	0	0		0.00	97	1,1,2-Trichloroethane
44	~~50~~	~~43~~	~~58~~	~~3~~	~~132292~~	~~A~~ FP PAB	~~8.41~~	69	Ethyl methacrylate
45	0	0	0	0	0		0.00	164	Tetrachloroethene
46	0	0	0	0	0		0.00	76	1,3-Dichloropropane
47	~~33~~	~~15~~	~~55~~	~~-9~~	~~53358~~	~~A~~ FP PAB	~~8.89~~	43	2-Hexanone
48	0	0	0	0	0		0.00	129	Dibromochloromethane
49	0	0	0	0	0		0.00	107	1,2-Dibromoethane
50	0	0	0	0	0		0.00	112	Chlorobenzene

Data Review: PAB
Date: 9/8/98

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No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
51	0	0	0	0	0		0.00	131	1,1,1,2-Tetrachloroethan
52	0	0	0	0	0		0.00	106	Ethylbenzene
53	0	0	0	0	0		0.00	106	m-/p-Xylene
54	0	0	0	0	0		0.00	106	o-Xylene
55	0	0	0	0	0		0.00	104	Styrene
56	0	0	0	0	0		0.00	173	Bromoform
57	0	0	0	0	0		0.00	105	Cumene
58	0	0	0	0	0		0.00	83	1,1,2,2-Tetrachloroethan
59	0	0	0	0	0		0.00	156	Bromobenzene
60	0	0	0	0	0		0.00	75	1,2,3-Trichloropropane
61	0	0	0	0	0		0.00	120	n-Propylbenzene
62	0	0	0	0	0		0.00	75	trans-1,4-Dichloro-2-but
63	0	0	0	0	0		0.00	126	2-Chlorotoluene
64	0	0	0	0	0		0.00	126	4-Chlorotoluene
65	0	0	0	0	0		0.00	105	1,3,5-Trimethylbenzene
66	0	0	0	0	0		0.00	119	tert-Butylbenzene
67	64	36	69	1	40676	A	14.21	105	1,2,4-Trimethylbenzene
68	42	13	51	1	14992	A	14.71	105	sec-Butylbenzene
69	0	0	0	0	0		0.00	119	p-Cymene
70	0	0	0	0	0		0.00	146	1,3-Dichlorobenzene
71	0	0	0	0	0		0.00	146	1,4-Dichlorobenzene
72	0	0	0	0	0		0.00	91	Benzyl chloride
73	54	34	59	2	18780	A	16.83	91	n-Butylbenzene
74	53	34	59	4	14412	A	16.39	146	1,2-Dichlorobenzene
75	0	0	0	0	0		0.00	75	1,2-Dibromo-3-chloroprop
76	55	34	72	7	30016	bv	19.12	180	1,2,4-Trichlorobenzene
77	47	10	80	7	6816	bb	19.33	225	Hexachlorobutadiene
78	69	49	83	7	92048	bv	19.32	128	Naphthalene
79	61	41	76	7	25052	bv	19.53	180	1,2,3-Trichlorobenzene

Pat 9/8/98

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QUAN DB : HW899 LAB-BASE QUAN 09-04-98 17:58

No.	MAT	FOR	REV	Delta	Area	P.Flags	RT	QM	Name
1	100	71	97	0	3509648	bv	5.04	168	Pentafluorobenzene
2	100	96	98	1	3951552	bv	5.77	114	1,4-Difluorobenzene
3	100	94	95	-2	3804949	bv	9.94	117	Chlorobenzene-d5
4	100	78	98	2	1782907	bv	15.04	152	1,4-Dichlorobenzene-d4
5	100	68	99	1	1854164	bv	4.91	113	Dibromofluoromethane
6	100	90	97	-1	4750834	vv	7.64	98	Toluene-d8
7	100	88	94	-1	2557094	vv	12.22	95	4-Bromofluorobenzene
8	~~64~~	~~39~~	~~74~~	~~-6~~	~~4065320~~	~~A~~	~~1.05~~	39	1,3-Butadiene
9	0	0	0	0	0		0.00	106	Vinyl bromide
10	~~41~~	~~34~~	~~38~~	~~-5~~	~~206728~~	~~bv~~	~~3.35~~	73	MTBE
11	77	53	70	0	18148	A	3.66	57	n-Hexane
12	~~92~~	~~68~~	~~81~~	~~-2~~	~~81656~~	~~bv~~	~~4.23~~	42	1,2-Epoxybutane
13	~~55~~	~~34~~	~~60~~	~~4~~	~~234306~~	~~A~~	~~5.43~~	57	Iso-Octane
14	~~39~~	~~30~~	~~66~~	~~-14~~	~~486656~~	~~bb~~	~~6.20~~	55	Ethyl acrylate

PAB PAB PAB PAB

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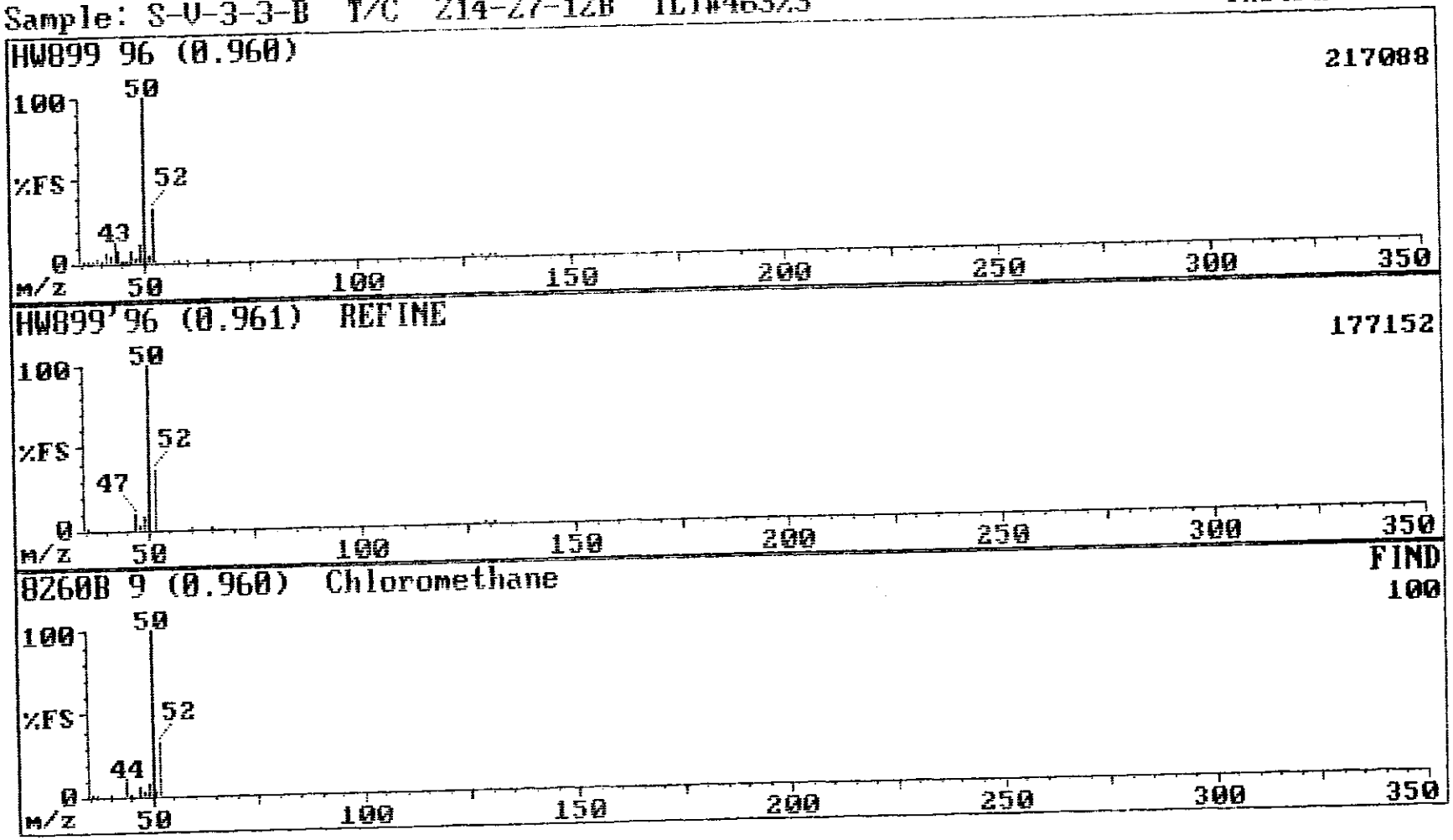
09-04-98 17:12 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-B T/C 214-27-12B TLI#46323 Instrument H



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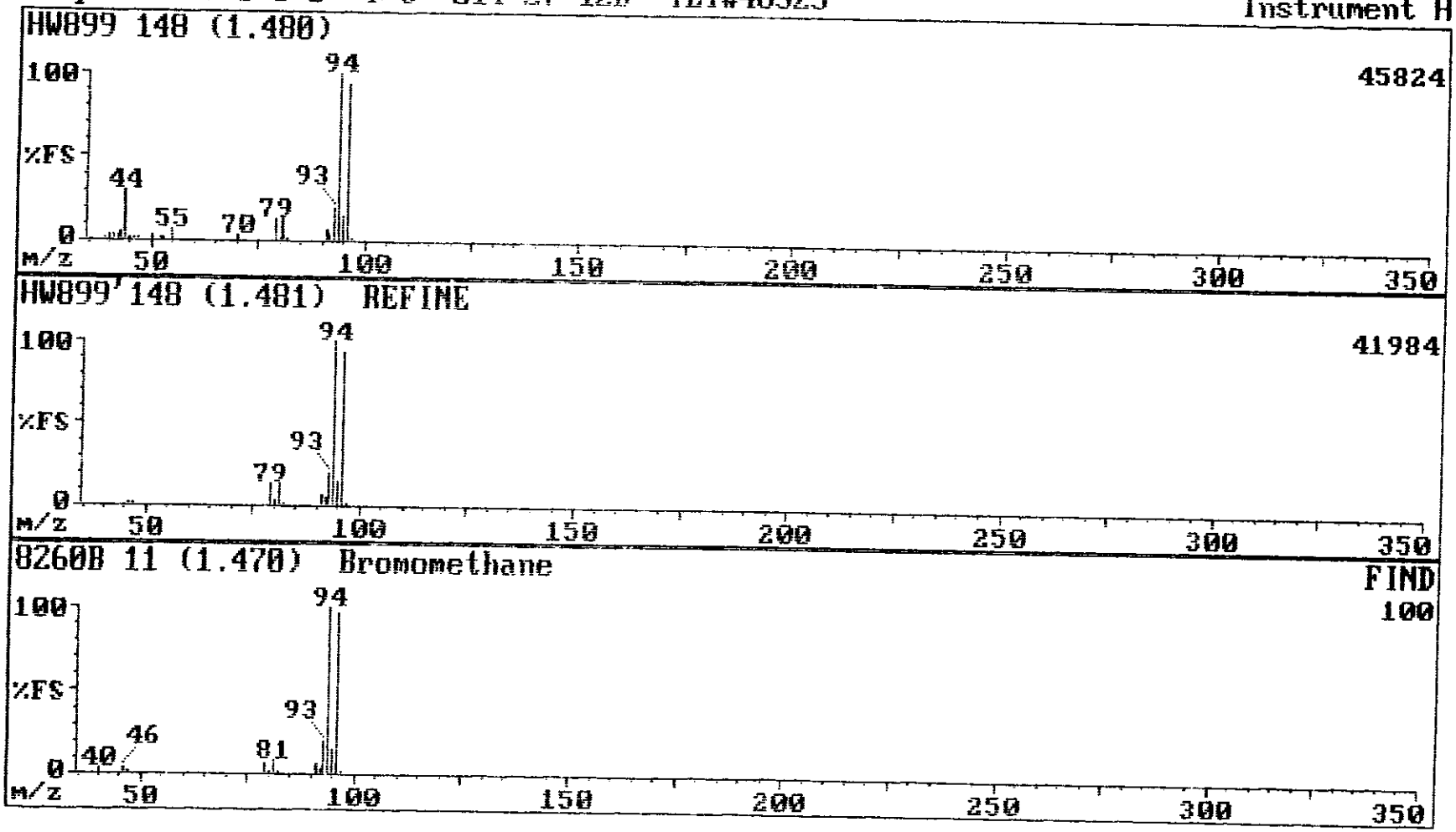
Sample: S-V-3-3-B T/C 214-27-12B TLI#46323 Instrument H



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248

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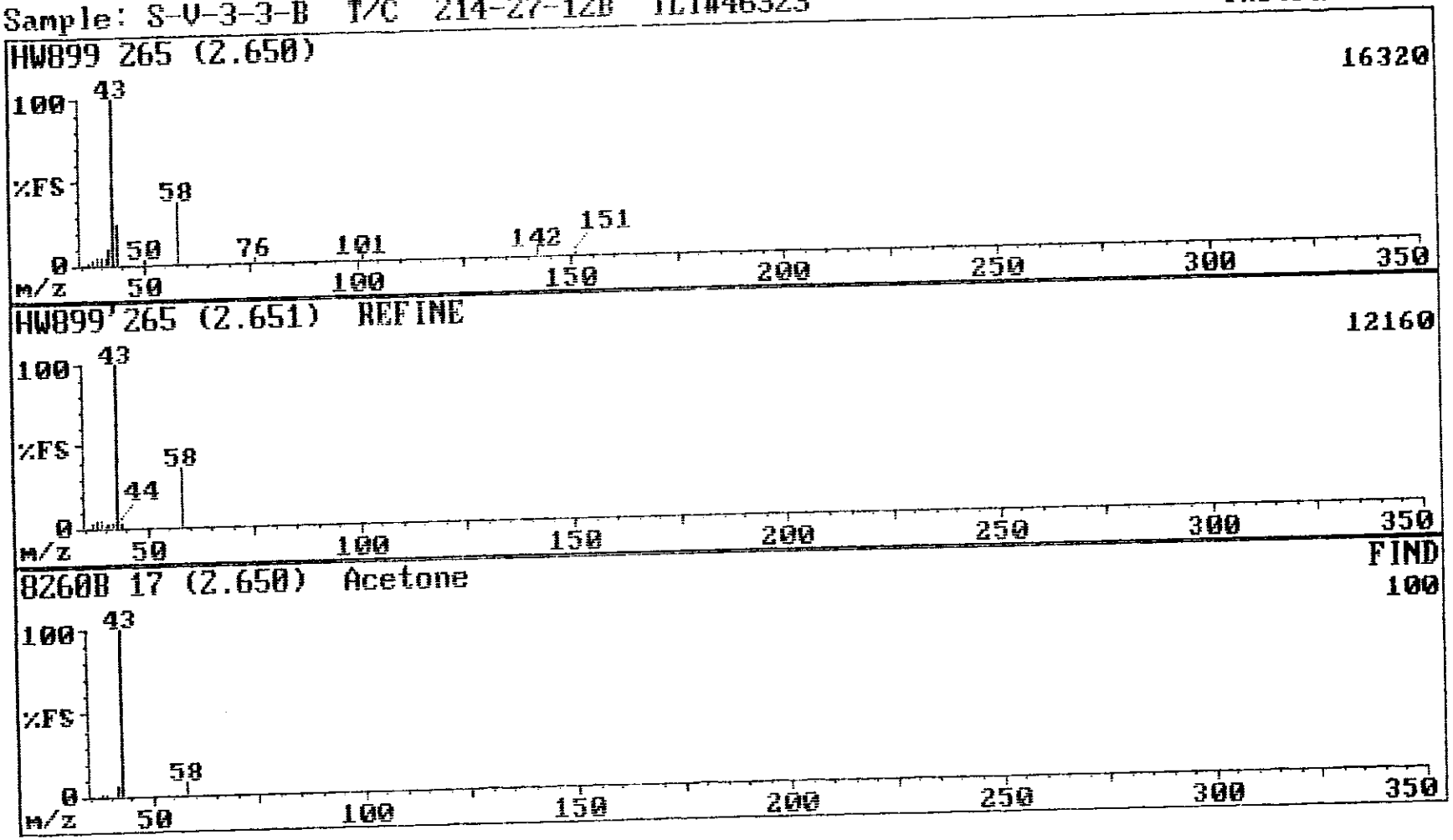
Sample: S-V-3-3-B T/C 214-27-12B TLI#46323 Instrument H



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249

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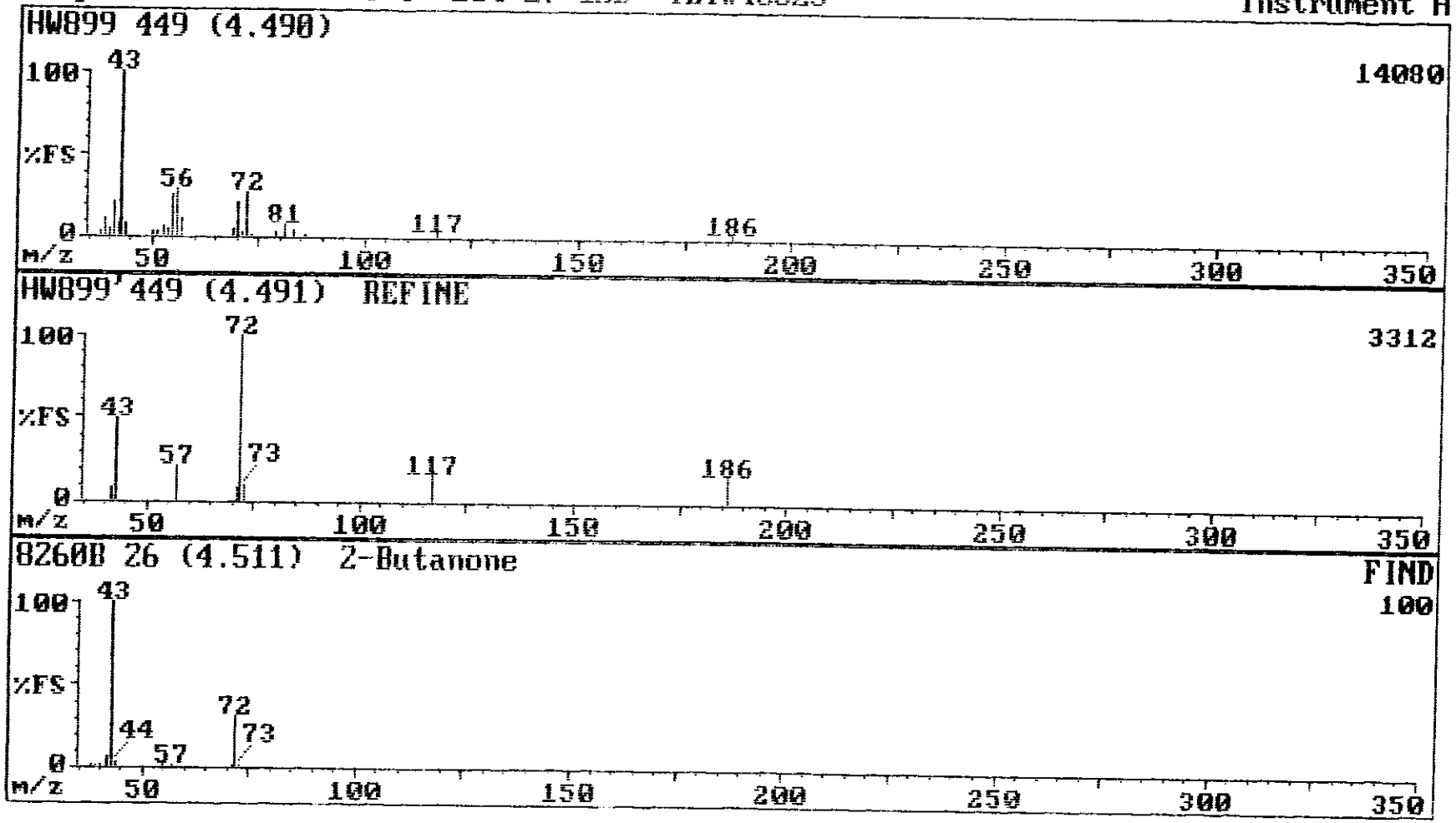

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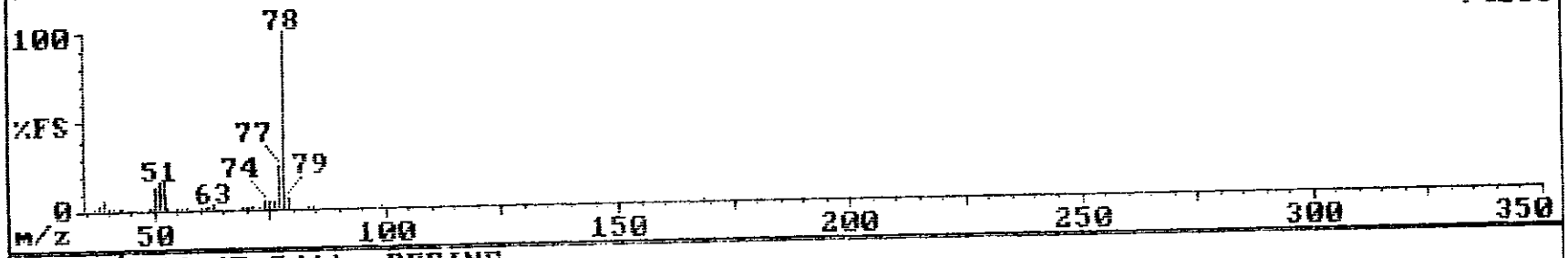
052

09-04-98 17:12 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-B T/C 214-27-12B TLI#46323 Instrument H

HW899 524 (5.241) 94208



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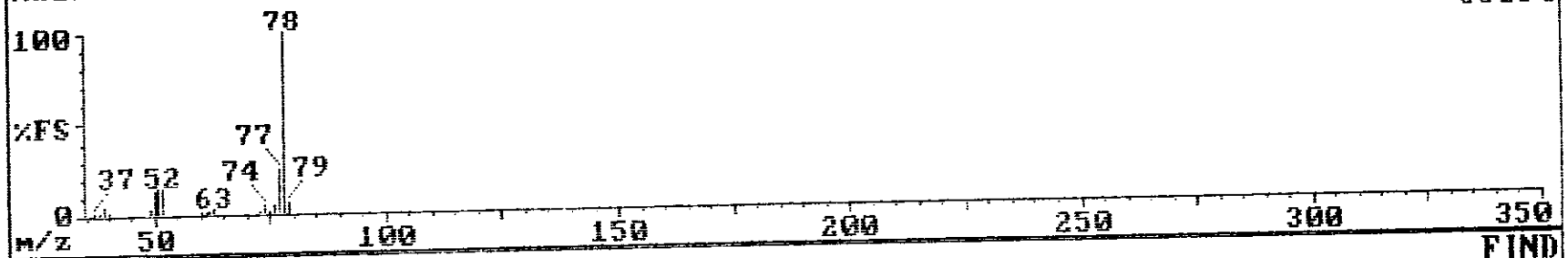
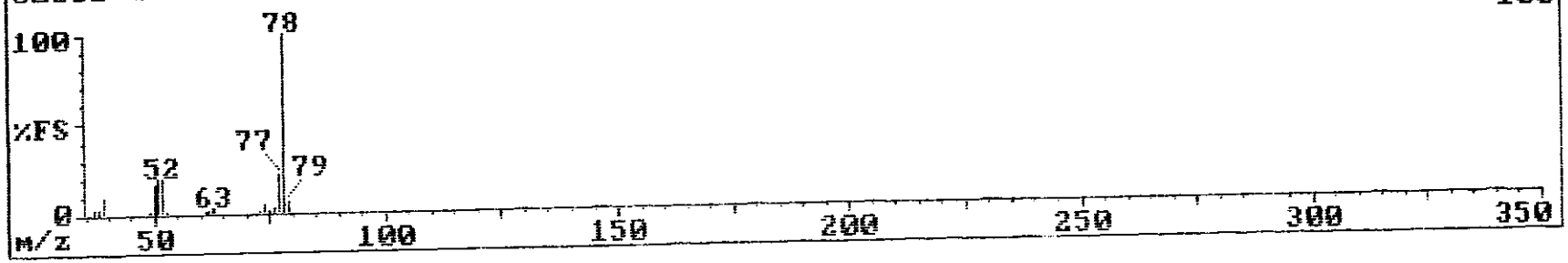


FIND

8260B 32 (5.251) Benzene 100



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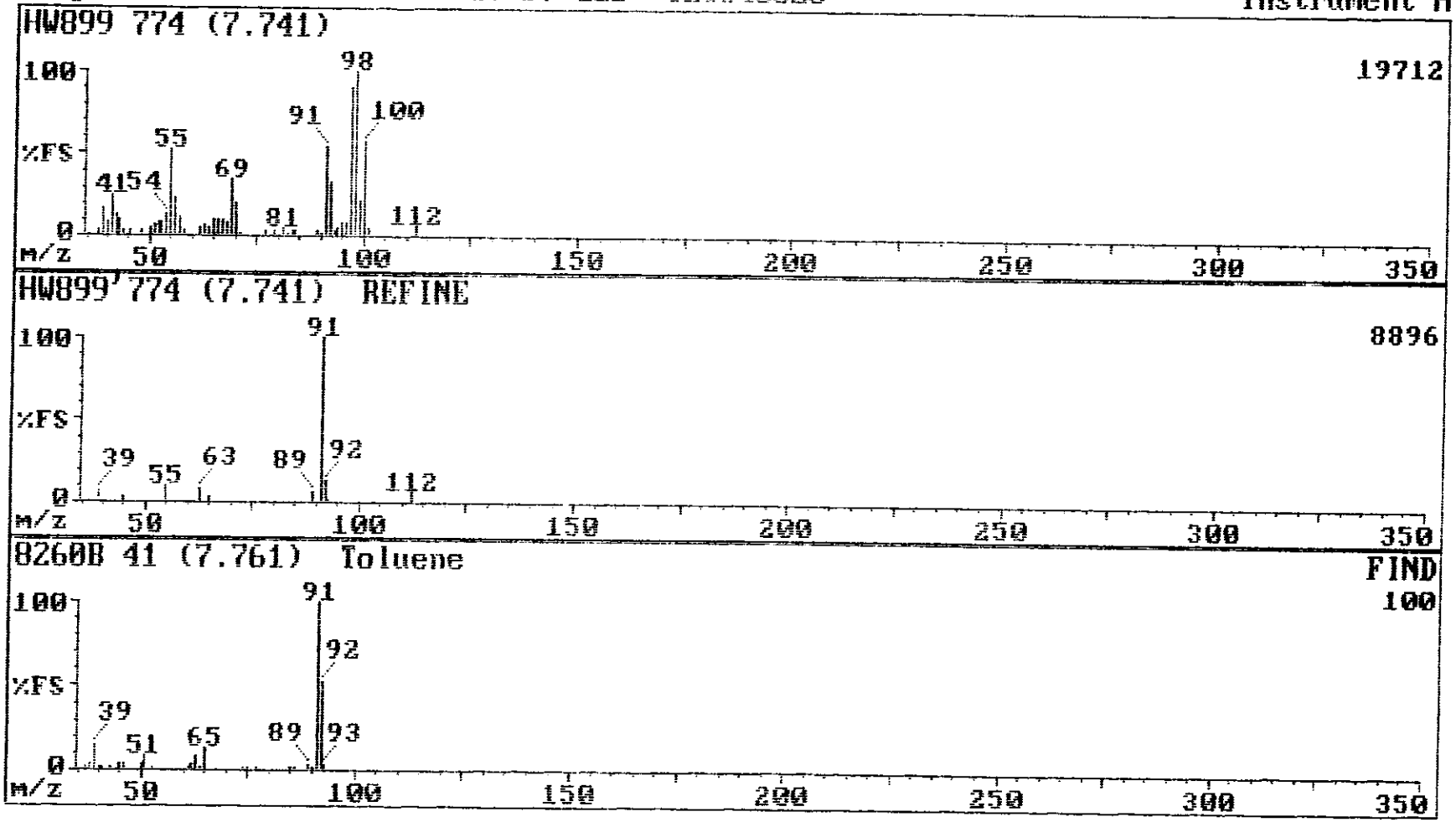
Sample: S-V-3-3-B T/C 214-27-12B TLI#46323 Instrument H



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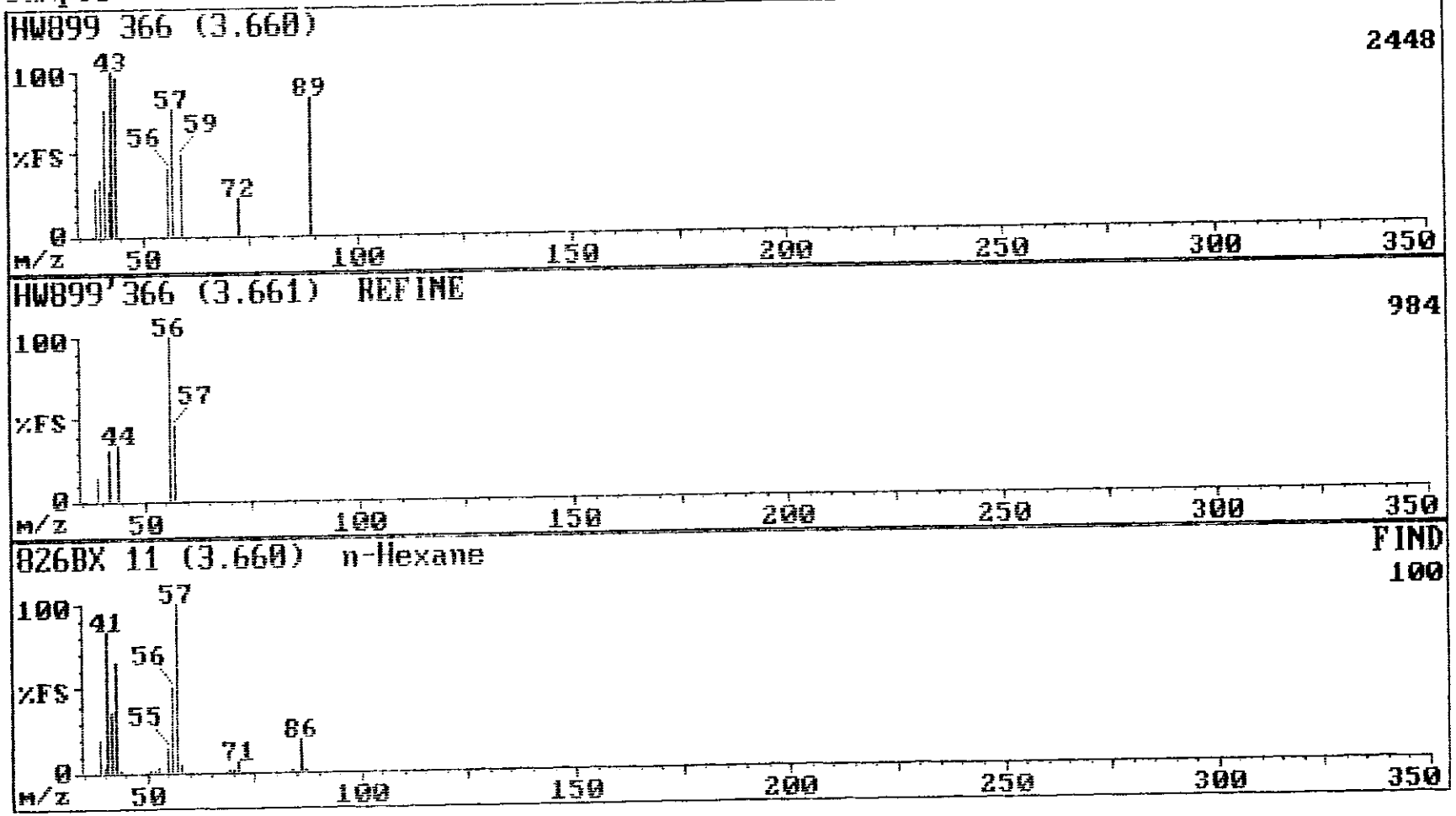
252

09-04-98 17:12 Triangle Laboratories, Inc. (919) 544-5729

Sample: S-V-3-3-B T/C 214-27-12B TLI#46323 Instrument H



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CALIBRATION DATA

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919-544-5729

P.O. Box 13485
Research Triangle Park, NC 27709-3485
Fax # 919-544-5491

254

Triangle Laboratories, Inc.
Initial Calibration Curve

ICAL File: ICALH904	Date of Analysis :09/04/98	Analyte List: 8260
RF0.10 HW887	RF0.25 HW888	RF0.50 HW889
RF0.75 HW890	RF1.00 HW891	

VOST Calibration.

Analyte	Flag	RF0.10	RF0.25	RF0.50	RF0.75	RF1.00	MEAN	%RSD
Pentafluorobenzene	I							
Chloromethane	P	0.236	0.271	0.220	0.267	0.287	0.256	10.6
Vinyl Chloride	C	0.303	0.367	0.338	0.360	0.380	0.350	8.6
Bromomethane		0.305	0.354	0.312	0.334	0.353	0.332	6.9
Chloroethane		0.199	0.213	0.207	0.216	0.241	0.215	7.4
Trichlorofluoromethane		0.599	0.643	0.644	0.642	0.761	0.658	9.3
1,1-Dichloroethene	C	0.301	0.324	0.330	0.247	0.382	0.317	15.4
Iodomethane		0.633	0.633	0.674	0.500	0.742	0.636	13.9
Carbon disulfide		0.903	0.921	0.957	0.754	0.966	0.900	9.5
Acetone		0.043	0.186	0.177	0.136	0.199	0.148	42.9
Allyl chloride		0.338	0.349	0.377	0.296	0.401	0.352	11.3
Methylene chloride		0.302	0.312	0.322	0.231	0.381	0.310	17.3
Acrylonitrile		0.029	0.028	0.031	0.029	0.037	0.031	11.2
trans-1,2-Dichloroethene		0.324	0.350	0.363	0.307	0.406	0.350	10.9
1,1-Dichloroethane	P	0.651	0.675	0.691	0.657	0.586	0.652	6.1
Vinyl acetate		0.090	0.214	0.231	0.249	0.183	0.193	32.5
cis-1,2-Dichloroethene		0.339	0.360	0.378	0.386	0.387	0.370	5.6
2-Butanone		0.050	0.234	0.201	0.220	0.136	0.168	45.0
Chloroform	C	0.714	0.767	0.817	0.763	0.760	0.764	4.8
1,1,1-Trichloroethane		0.630	0.702	0.683	0.650	0.647	0.662	4.4
1,4-Difluorobenzene	I							
Carbon tetrachloride		0.688	0.601	0.554	0.521	0.532	0.579	11.8
Benzene		1.281	1.138	1.235	1.083	1.051	1.158	8.5
1,2-Dichloroethane		0.357	0.368	0.363	0.356	0.331	0.355	4.1
Trichloroethene		0.469	0.414	0.422	0.423	0.427	0.431	5.0
1,2-Dichloropropane	C	0.406	0.419	0.413	0.405	0.402	0.409	1.8
Methyl methacrylate		0.082	0.082	0.090	0.092	0.093	0.088	6.1
Bromodichloromethane		0.575	0.573	0.589	0.585	0.573	0.579	1.3
cis-1,3-Dichloropropene		0.507	0.561	0.579	0.587	0.579	0.563	5.7
4-Methyl-2-pentanone		0.115	0.155	0.149	0.152	0.146	0.143	11.3
Toluene	C	0.738	0.770	0.770	0.756	0.730	0.753	2.5
trans-1,3-Dichloropropene		0.337	0.404	0.428	0.442	0.432	0.409	10.4
1,1,2-Trichloroethane		0.255	0.248	0.255	0.264	0.257	0.256	2.3
Chlorobenzene-d5	I							
Tetrachloroethene		0.418	0.411	0.427	0.427	0.430	0.423	1.9
2-Hexanone	1	0.060	0.198	0.180	0.190	0.174	0.160	35.5
Dibromochloromethane		0.407	0.385	0.414	0.419	0.418	0.408	3.4
1,2-Dibromoethane		0.318	0.298	0.312	0.314	0.313	0.311	2.5

***- Fails QC Criteria for %RSD; << - RF less than minimum QC RF; >> - RF greater than maximum QC RF**

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Savar v3.7

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Triangle Laboratories, Inc.
Initial Calibration Curve

ICAL File: ICALH904	Date of Analysis :09/04/98	Analyte List: 8260
RF0.10 HW887	RF0.25 HW888	RF0.50 HW889
RF0.75 HW890	RF1.00 HW891	

VOST Calibration.

Analyte	Flag	RF0.10	RF0.25	RF0.50	RF0.75	RF1.00	MEAN	%RSD
Chlorobenzene	P	0.923	0.954	0.987	0.956	0.954	0.955	2.4
Ethylbenzene	C	0.467	0.496	0.502	0.467	0.468	0.480	3.7
m-/p-Xylene		0.589	0.608	0.613	0.574	0.567	0.590	3.4
o-Xylene		0.547	0.569	0.569	0.530	0.543	0.552	3.1
Styrene		0.868	0.929	0.946	0.894	0.907	0.909	3.3
Bromoform	P	0.174	0.203	0.233	0.244	0.251	0.221	14.6
1,4-Dichlorobenzene-d4	I							
Cumene		3.940	3.920	4.136	2.927	2.740	3.532	18.3
1,1,2,2-Tetrachloroethane	P	0.463	0.618	0.674	0.559	0.504	0.564	15.1
Average %RSD								10.5

Surrogate	Flag	RF0.10	RF0.25	RF0.50	RF0.75	RF1.00	Mean	%RSD
Dibromofluoromethane	S	0.423	0.489	0.436	0.438	0.427	0.443	6.0
Toluene-d8	S	1.024	1.072	1.078	1.087	1.062	1.065	2.3
4-Bromofluorobenzene	S	0.498	0.524	0.516	0.502	0.500	0.508	2.3

Approved by: PaB Date 9/8/98

*- Fails QC Criteria for %RSD; << - RF less than minimum QC RF; >> - RF greater than maximum QC RF

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Triangle Laboratories, Inc.
Continuing Calibration Curve

CCAL File: HW894	Date of Analysis :09/04/98	Analyte List: 8260
ICAL File: ICALH904		

VOST Calibration.

Analyte	Flag	RF0.25	RFMEAN	%D
Pentafluorobenzene	I			
Chloromethane	P	0.195	0.256	23.8
Vinyl Chloride	C	0.272	0.350	22.3
Bromomethane		0.217	0.332	34.6
Chloroethane		0.133	0.215	38.1
Trichlorofluoromethane		0.398	0.658	39.5
1,1-Dichloroethene	C	0.238	0.317	24.9
Iodomethane		0.528	0.636	17.0
Carbon disulfide		0.761	0.900	15.4
Acetone		0.103	0.148	30.4
Allyl chloride		0.355	0.352	-0.9
Methylene chloride		0.309	0.310	0.3
Acrylonitrile		0.032	0.031	-3.2
trans-1,2-Dichloroethene		0.351	0.350	-0.3
1,1-Dichloroethane	P	0.659	0.652	-1.1
Vinyl acetate		0.190	0.193	1.6
cis-1,2-Dichloroethene		0.366	0.370	1.1
2-Butanone		0.160	0.168	4.8
Chloroform	C	0.764	0.764	0.0
1,1,1-Trichloroethane		0.731	0.662	-10.4
1,4-Difluorobenzene	I			
Carbon tetrachloride		0.592	0.579	-2.2
Benzene		1.599	1.158	-38.1
1,2-Dichloroethane		0.366	0.355	-3.1
Trichloroethene		0.487	0.431	-13.0
1,2-Dichloropropane	C	0.415	0.409	-1.5
Methyl methacrylate		0.097	0.088	-10.2
Bromodichloromethane		0.580	0.579	-0.2
cis-1,3-Dichloropropene		0.563	0.563	0.0
4-Methyl-2-pentanone		0.172	0.143	-20.3
Toluene	C	0.771	0.753	-2.4
trans-1,3-Dichloropropene		0.417	0.409	-2.0
1,1,2-Trichloroethane		0.261	0.256	-2.0
Chlorobenzene-d5	I			
Tetrachloroethene		0.432	0.423	-2.1
2-Hexanone	1	0.197	0.160	-23.1
Dibromochloromethane		0.416	0.408	-2.0
1,2-Dibromoethane		0.321	0.311	-3.2

***- Fails QC Criteria for %D; << - Rf less than minimum QC RF; >>- RF greater than maximum QC RF**

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Triangle Laboratories, Inc.
Continuing Calibration Curve

CCAL File: HW894 Date of Analysis :09/04/98 Analyte List: 8260
ICAL File: ICALH904
VOST Calibration.

Analyte	Flag	RF0.25	RFMEAN	%D
Chlorobenzene	P	0.967	0.955	-1.3
Ethylbenzene	C	0.496	0.480	-3.3
m-/p-Xylene		0.611	0.590	-3.6
o-Xylene		0.588	0.552	-6.5
Styrene		0.976	0.909	-7.4
Bromoform	P	0.242	0.221	-9.5
1,4-Dichlorobenzene-d4	I			
Cumene		3.901	3.532	-10.4
1,1,2,2-Tetrachloroethane	P	0.491	0.564	12.9

Surrogate	Flag	RF0.25	RFMEAN	%D
Dibromofluoromethane	S	0.492	0.443	-11.1
Toluene-d8	S	1.060	1.065	0.5
4-Bromofluorobenzene	S	0.562	0.508	-10.6

Approved by: GaB Date 9/8/98

*- Fails QC Criteria for %D; << - Rf less than minimum QC RF; >>- RF greater than maximum QC RF

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Triangle Laboratories, Inc.
Initial Calibration Curve

ICAL File: ICALH904 RF0.50 HW893	Date of Analysis :09/04/98	Analyte List: short

VOST Calibration.

Analyte	Flag	RF0.50	MEAN	%RSD	
Pentafluorobenzene	I				
1,3-Butadiene		0.455	0.455	0.0	
Vinyl bromide		0.375	0.375	0.0	
n-Hexane		0.459	0.459	0.0	
1,2-Epoxybutane		0.004	0.004	0.0	<<
Iso-Octane		1.767	1.767	0.0	
1,4-Difluorobenzene	I				
Ethyl acrylate		0.194	0.194	0.0	
Average %RSD				0.0	

Approved by: Gab Date 9/8/98

*- Fails QC Criteria for %RSD; << - RF less than minimum QC RF; >> - RF greater than maximum QC RF

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APPENDIX G.5

EPA METHOD 18 REPORT AND DATA

Pacific Environmental Services, Inc.

5001 South Miami Blvd, Suite 300
Research Triangle Park, NC 27709

Analytical Report
(0798-19)

EPA Method 18 (Tubes)

Hexane
Benzene
Toluene
Ethylbenzene
p-Xylene
m-Xylene
Cumene
o-Xylene

SW-846 Method 8260

GC/MS Scan

Enthalpy Analytical, Inc.
3211 Bramer Drive
Raleigh, NC 27604
919/850-4392

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Sample Custody

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ENTHALPY analytical, inc.

PACIFIC ENVIRONMENTAL SERVICES, INC.

Central Park West
5001 South Miami Boulevard, P.O. Box 12077
Research Triangle Park, North Carolina 27709-2077
(919) 941-0333 FAX: (919) 941-0234

Sample Chain of Custody Record

PLANT: US EPA HOT MIX ASPHALT PLANT C
RECOVERY PERSON: B. Purser

PROJECT NO.: R012.001
SAMPLERS: B. Purser, T Abernathy

Sample Identification	Collection Date	Collection Time	Sample Name	Number of Containers	Analytical Request					Comments
T-M18-1-Aa	7/24/98		Leg A Tube a	1						
T-M18-1-Ab	7/24/98		Leg A Tube b	1						
T-M18-1-Ba	7/24/98		Leg B Tube a	1						Spike Tube
T-M18-1-Bb	7/24/98		Leg B Tube b	1						
T-M18-2-Aa	7/25/98		Leg A Tube a	1						
T-M18-2-Ab	7/25/98		Leg A Tube b	1						
T-M18-2-Ba	7/25/98		Leg B Tube a	1						Spike Tube
T-M18-2-Bb	7/25/98		Leg B Tube b	1						
T-M18-FB-Aa	7/25/98		Leg A Tube a	1						Field Blank
T-M18-FB-Ab	7/25/98		Leg A Tube b	1						Field Blank - Spike Tube
T-M18-FB-Ba	7/25/98		Leg B Tube a	1						Field Blank
T-M18-FB-Bb	7/25/98		Leg B Tube b	1						Field Blank
T-M18-3-Aa	7/27/98		Leg A Tube a	1						
T-M18-3-Ab	7/27/98		Leg A Tube b	1						Spike Tube
T-M18-3-Ba	7/27/98		Leg B Tube a	1						
T-M18-3-Bb	7/27/98		Leg B Tube b	1						
T-M18-4-Aa	7/26/98		Leg A Tube a	1						
T-M18-4-Ab	7/26/98		Leg A Tube b	1						
T-M18-4-Ba	7/26/98		Leg B Tube a	1						Spike Tube
T-M18-4-Bb	7/26/98		Leg B Tube b	1						
S-M18-1-Aa	7/24/98		Leg A Tube a	1						
S-M18-1-Ab	7/24/98		Leg A Tube b	1						
S-M18-1-AKO	7/24/98		Leg A Knock-out Imp	1						
S-M18-1-Ba	7/24/98		Leg B Tube a	1						
S-M18-1-Bb	7/24/98		Leg B Tube b	1						Spike Tube
S-M18-1-BKO	7/24/98		Leg B Knock-out Imp	1						
S-M18-2-Aa	7/25/98		Leg A Tube a	1						
S-M18-2-Ab	7/25/98		Leg A Tube b	1						
S-M18-2-AKO	7/25/98		Leg A Knock-out Imp	1						
S-M18-2-Ba	7/25/98		Leg B Tube a	1						Spike Tube
S-M18-2-Bb	7/25/98		Leg B Tube b	1						
S-M18-2-BKO	7/25/98		Leg B Knock-out Imp	1						
S-M18-3-Aa	7/24/98		Leg A Tube a	1						

PACIFIC ENVIRONMENTAL SERVICES, INC.

Central Park West
5001 South Miami Boulevard, P.O. Box 12077
Research Triangle Park, North Carolina 27709-2077
(919) 941-0333 FAX: (919) 941-0234

Sample Chain of Custody Record

PLANT: US EPA HOT MIX ASPHALT PLANT C
RECOVERY PERSON: B. Purser

PROJECT NO.: R012.001
SAMPLERS: B. Purser, T Abernathy

Sample Identification	Collection Date	Collection Time	Sample Name	Number of Containers	Analytical Request					Comments
S-M18-3-Ab	7/24/98		Leg A Tube b	1						
S-M18-3-AKO	7/24/98		Leg A Knock-out Imp	1						
S-M18-3-Ba	7/24/98		Leg B Tube a	1						Spike Tube
S-M18-3-Bb	7/24/98		Leg B Tube b	1						
S-M18-3-BKO	7/24/98		Leg B Knock-out Imp	1						
S-M18-4-Aa	7/25/98		Leg A Tube a	1						
S-M18-4-Ab	7/25/98		Leg A Tube b	1						
S-M18-4-AKO	7/25/98		Leg A Knock-out Imp	1						
S-M18-4-Ba	7/25/98		Leg B Tube a	1						Spike Tube
S-M18-4-Bb	7/25/98		Leg B Tube b	1						
S-M18-4-BKO	7/25/98		Leg B Knock-out Imp	1						

Relinquished by:	Date	Time	Received by:
Michael D. Maier	7/28/98	1558	

Relinquished by:	Date	Time	Received for Lab by:
			Brian Purser 7/29/98 1030 am

Narrative Summary

Enthalpy Analytical Narrative Summary

Company:	PES
Client #:	R012.001
PO #	104980229

Enthalpy#:	0798-19
Analyst:	BGP
Parameters	Organics

Custody

Brian Purser of Enthalpy Analytical, Inc. received the samples on 07/29/98 after being relinquished by Pacific Environmental Services, Inc. No apparent container problems were noted upon receipt. Prior to and during analysis, the sample was kept under lock with access only to authorized personnel of Enthalpy Analytical, Inc.

Analysis

The samples were analyzed for organics using the analytical procedures in EPA Method 18 (40 CFR, Part 60, Appendix A). All charcoal tubes were desorbed using 5.0 mL of a 2% DMF in carbon disulfide solution.

The analyzer was a Hewlett-Packard 5890 Series II Gas Chromatograph equipped with a flame ionization detector using hydrogen as the carrier gas.

Separation

The samples were separated using a J&W DB-5 30m x 0.53mm ID capillary column. All calibration curve(s) and quality assurance point(s) are located in the "Curves" section of the report and referenced in the "Cal. Curve" section on the Results page.

The following table shows approximate retention times for each analyte.

Analyte	Retention Time
Hexane	1.46
Benzene	5.40
Toluene	7.40
Ethylbenzene	9.19
p-Xylene	9.34
m-Xylene	9.49
Cumene	9.99
o-Xylene	10.40

Chromatographic Conditions

Initial temperature:	45°C, hold for 2.00 minutes
Ramp:	7.5°C per minute to 125°C
Net Run Time	12.67 minutes
Pressure Constant:	2.1 psi at 45°C
Injector temperature:	195°C
Detector temperature:	225°C

Reporting Notes

The symbols MDL and LOQ represent the Minimum Detection Limit and the Limit of Quantification. The values that are between the MDL and the LOQ are indicated by a tilde (~).

Narrative Summary (Cont.)

Tunnel Spike & Recovery

To demonstrate the train collection efficiency, spike and recoveries were operated simultaneously for four test runs at the Tunnel test location. The adsorbents from the two trains were analyzed using the same analytical procedure and instrumentation. The fraction of spiked compound recovered (R) is determined using the following equations.

where
Mv = mass per volume of spiked compound measured (μg/L).
Ms = total mass of compound measured on adsorbent with spiked train (μg).
Vs = volume of stack gas sampled with spiked train (L).
Mu = total mass of compound measured on adsorbent with unspiked train (μg).
Vu = volume of stack gas sampled with unspiked train (L).

where S = theoretical mass of compound spiked onto adsorbent in spiked train (μg).

$$Mv = \frac{Ms}{Vs} - \frac{Mu}{Vu} \qquad R = \frac{Mv * Vs}{S}$$

$$\text{Reported Results} = \frac{\text{Measured Concentration (ppm)}}{R}$$

Example Calculation

The following is the spike and recovery example calculation for this test program.

For run T-M18-1 (unspiked) ~12.8 ug, Hexane
For run T-M18-1 (spiked) 263 ug, Hexane

$$Mv = \frac{263}{233.2} - \frac{12.8}{231.9} \qquad R = \frac{1.0726 * 233.2}{204}$$

Mv = 1.0726 ug/L R = 122%

The unspiked sample trains were corrected for the collection efficiency determined for each analyte.

Enthalpy Analytical Narrative Summary

Company:	PES
Client #:	R012.001
PO #	104980229

Enthalpy#:	0798-19
Analyst:	TAB
Parameters	SW-846 8260

Custody

Brian Purser of Enthalpy Analytical, Inc. received the samples on 07/29/98 after being relinquished by Pacific Environmental Services, Inc. No apparent container problems were noted upon receipt. Prior to and during analysis, the sample was kept under lock with access only to authorized personnel of Enthalpy Analytical, Inc.

Analysis

The Silo charcoal tube samples were extracted and analyzed in the same fashion as the tunnel samples. However, the large number of peaks made quantitation impossible. There were literally hundreds of peaks. The flame ionization detector was unable to differentiate the target peaks from the crowd. The chromatograms from the FID analysis are included at the back of this report. Realize that there is a significant possibility that the concentration presented on those chromatograms includes extraneous peaks that have co-eluted with the target peaks.

At PES's request, the Silo charcoal tube extracts were qualitatively characterized using the analytical procedures in SW-846 Method 8260. The Silo charcoal tubes were desorbed using 5.0 mL of a 2% DMF in carbon disulfide solution.

The scope of the task was to identify as many compounds as possible and give the best tentative identification (TICs) using the NBS 44,000 compound library. The TICs were semi-quantitated using the internal standard 4 bromofluorobenzene and a response factor of 1.00. Some compounds may appear more than once on the summary sheets which indicates the presence of isomers. The thirty peaks with the highest peak height are reported for each sample.

*The compound NN dimethyl formamide appears in all samples. This was added to the samples to facilitate efficient desorption from the charcoal media.

1 uL of the sample was injected with 1 uL of an internal standard mixture. The sample was injected directly into the gas chromatograph.

The analysis was performed using a HP 5890 Gas Chromatograph (GC) and a HP 5970 Mass Spectrometer (MS) detector.

Separation

The samples were separated using a Supelco DB-1 60m x 0.32mm capillary column.

Chromatographic Conditions

Initial Temperature:	40°C, hold for 5.00 minutes
Initial Ramp:	8°C per minute to 210°C
Injector Temperature:	190°C
Separator Oven Temp:	300°C
MS Scan Range:	35- 350 AMU

Reporting Notes

The estimated concentration of the reported compounds has an estimated error of +100% to –50%.

Example Calculation

The concentrations calculated for all compounds were based on internal standard 4- bromofluorobenzene.

Where:

$$\text{ug/mL} = \frac{(\text{Area of compound}) \times (\text{Volume of Extract}) \times (\text{Amt of Int. Std.})}{(\text{Area of Int. Std.})}$$

Tunnel Results

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Organics	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Compound	Sample ID/Catch weight (ug)				
	T-M18-1A	T-M18-2A	T-M18-3A	T-M18-4A	T-M18-FB-A
Hexane	~ 9.80	~ 18.4	< 3.82	< 3.82	~ 11.3
Benzene	< 4.39	~ 5.13	< 4.39	< 4.39	< 4.39
Toluene	~ 15.2	~ 25.7	~ 10.1	~ 9.05	~ 24.5
Ethylbenzene	32.9	41.1	~ 12.3	~ 15.4	39.0
p-Xylene	~ 21.3	~ 13.4	< 4.35	< 4.35	~ 9.83
m-Xylene	~ 7.13	~ 6.87	< 4.35	< 4.35	~ 4.39
Cumene	~ 16.1	~ 11.3	< 3.91	< 3.91	24.5
o-Xylene	~ 7.98	~ 5.66	< 4.76	< 4.76	~ 16.0

Reviewed by:

QA: _____ Date: 9/23/98
Steven J. Eckard

Analyst: _____ Date: _____
Brian G. Purser

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.34 - 388 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Hexane	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	1.462	1.464	0.14	~ 1.76	~ 3.37	> 5 %	~ 2.57	0798-19.M	5	1	~ 12.8	% Rec 131
T-M18-1A	BH	010F1001.D	010F1001.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 12.8	~ 9.80
T-M18-2A	FH	011F1101.D	011F1102.D	1.461	1.477	1.10	~ 4.69	~ 4.96	2.79	~ 4.82	0798-19.M	5	1	~ 24.1	% Rec 131
T-M18-2A	BH	012F1201.D	012F1202.D	1.477	1.476	0.07	< 0.72	< 0.70	1.68	< 0.71	0798-19.M	5	1	< 5.00	
														~ 24.1	~ 18.4
T-M18-3A	FH	013F1301.D	013F1302.D	1.470	1.476	0.41	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 131
T-M18-3A	BH	014F1401.D	014F1402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 3.82
T-M18-4A	FH	015F1501.D	015F1502.D	1.473	1.476	0.20	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 131
T-M18-4A	BH	016F1601.D	016F1602.D	1.472	1.474	0.14	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 3.82
T-M18-FB-A	FH	025F2701.D	025F2702.D	1.471	1.469	0.14	~ 2.55	~ 3.37	> 5 %	~ 2.96	0798-19.M	5	1	~ 14.8	% Rec 131
T-M18-FB-A	BH	026F2801.D	026F2802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 14.8	~ 11.3
T-M18-1B	FH	017F1701.D	017F1702.D	1.470	1.469	0.07	52.6	52.5	0.11	52.5	0798-19.M	5	1	263	
T-M18-1B	BH	018F1801.D	018F1802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														263	263
T-M18-2B	FH	019F2101.D	019F2102.D	1.429	1.442	0.91	67.0	59.9	> 5 %	63.4	0798-19.M	5	1	317	
T-M18-2B	BH	020F2201.D	020F2202.D	1.458	1.467	0.62	~ 1.02	< 1.00	0.84	~ 1.01	0798-19.M	5	1	~ 5	
														322	322
T-M18-3B	FH	021F5501.D	021F5502.D	1.455	1.460	0.34	51.7	50.6	1.06	51.2	0798-19D.	5	1	256	
T-M18-3B	BH	022F2401.D	022F2402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														256	256
T-M18-4B	FH	023F5601.D	023F5602.D	1.463	1.467	0.27	53.6	53.2	0.39	53.4	0798-19D.	5	1	267	
T-M18-4B	BH	024F2601.D	024F2602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														267	267
T-M18-FB-B	FH	027F1101.D	027F1102.D	1.466	1.466	0.00	37.9	37.7	0.28	37.8	0798-19D.	5	1	189	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														189	189

ENTHALPY analytical, inc.

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.85 - 416 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Benzene	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 114
T-M18-1A	BH	010F1001.D	010F1001.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.39
T-M18-2A	FH	011F1101.D	011F1102.D	5.420	5.429	0.17	~ 1.16	~ 1.18	0.55	~ 1.17	0798-19.M	5	1	~ 5.852	% Rec 114
T-M18-2A	BH	012F1201.D	012F1202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 5.85	~ 5.13
T-M18-3A	FH	013F1301.D	013F1302.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 114
T-M18-3A	BH	014F1401.D	014F1402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.39
T-M18-4A	FH	015F1501.D	015F1502.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 114
T-M18-4A	BH	016F1601.D	016F1602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.39
T-M18-FB-A	FH	025F2701.D	025F2702.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 114
T-M18-FB-A	BH	026F2801.D	026F2802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.39
T-M18-1B	FH	017F1701.D	017F1702.D	5.417	5.416	0.02	44.6	45.1	0.59	44.9	0798-19.M	5	1	224	
T-M18-1B	BH	018F1801.D	018F1802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														224	224
T-M18-2B	FH	019F2101.D	019F2102.D	5.317	5.365	0.90	58.1	51.7	> 5 %	54.9	0798-19.M	5	1	274	
T-M18-2B	BH	020F2201.D	020F2202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														274	274
T-M18-3B	FH	021F5501.D	021F5502.D	5.378	5.395	0.32	49.8	48.7	1.17	49.2	0798-19D.	5	1	246	
T-M18-3B	BH	022F2401.D	022F2402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														246	246
T-M18-4B	FH	023F5601.D	023F5602.D	5.400	5.407	0.13	50.9	50.4	0.49	50.6	0798-19D.	5	1	253	
T-M18-4B	BH	024F2601.D	024F2602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														253	253
T-M18-FB-B	FH	027F1101.D	027F1102.D	5.407	5.407	0.00	30.2	29.9	0.42	30.0	0798-19D.	5	1	150	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														150	150

ENTHALPY analytical, inc.

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MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.77 - 411 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Toluene	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	7.388	7.403	0.20	~ 2.02	~ 2.91	> 5 %	~ 2.47	0798-19.M	5	1	~ 12.3	% Rec 117
T-M18-1A	BH	010F1001.D	010F1001.D	7.409	7.409	0.00	~ 1.10	~ 1.10	0.00	~ 1.10	0798-19.M	5	1	~ 5.51	
														~ 17.8	~ 15.2
T-M18-2A	FH	011F1101.D	011F1102.D	7.413	7.416	0.04	~ 4.62	~ 4.74	1.23	~ 4.68	0798-19.M	5	1	~ 23.4	% Rec 117
T-M18-2A	BH	012F1201.D	012F1202.D	7.418	7.413	0.07	~ 1.36	~ 1.31	1.81	~ 1.34	0798-19.M	5	1	~ 6.69	
														~ 30.1	~ 25.7
T-M18-3A	FH	013F1301.D	013F1302.D	7.411	7.410	0.01	~ 1.26	~ 1.32	2.41	~ 1.29	0798-19.M	5	1	~ 6.46	% Rec 117
T-M18-3A	BH	014F1401.D	014F1402.D	7.408	7.406	0.03	~ 1.08	~ 1.04	2.34	~ 1.06	0798-19.M	5	1	~ 5.30	
														~ 11.8	~ 10.1
T-M18-4A	FH	015F1501.D	015F1502.D	7.407	7.404	0.04	~ 1.02	~ 1.00	0.94	~ 1.01	0798-19.M	5	1	~ 5.05	% Rec 117
T-M18-4A	BH	016F1601.D	016F1602.D	7.402	7.403	0.01	~ 1.10	~ 1.11	0.61	~ 1.11	0798-19.M	5	1	~ 5.54	
														~ 10.6	~ 9.05
T-M18-FB-A	FH	025F2701.D	025F2702.D	7.404	7.403	0.01	~ 4.35	~ 4.51	1.79	~ 4.43	0798-19.M	5	1	~ 22.1	% Rec 117
T-M18-FB-A	BH	026F2801.D	026F2802.D	7.403	7.404	0.01	~ 1.31	~ 1.30	0.46	~ 1.30	0798-19.M	5	1	~ 6.52	
														~ 28.7	~ 24.5
T-M18-1B	FH	017F1701.D	017F1702.D	7.399	7.400	0.01	45.9	46.1	0.22	46.0	0798-19.M	5	1	230	
T-M18-1B	BH	018F1801.D	018F1802.D	7.400	7.400	0.00	~ 1.03	~ 1.01	1.02	~ 1.02	0798-19.M	5	1	~ 5.12	
														235	235
T-M18-2B	FH	019F2101.D	019F2102.D	7.298	7.347	0.67	61.7	57.1	3.82	59.4	0798-19.M	5	1	297	
T-M18-2B	BH	020F2201.D	020F2202.D	7.377	7.393	0.22	~ 2.30	~ 2.22	1.64	~ 2.26	0798-19.M	5	1	~ 11.3	
														308	308
T-M18-3B	FH	021F5501.D	021F5502.D	7.361	7.378	0.23	52.7	51.5	1.15	52.1	0798-19D.	5	1	260	
T-M18-3B	BH	022F2401.D	022F2402.D	7.406	7.406	0.00	~ 1.13	~ 1.13	0.22	~ 1.13	0798-19.M	5	1	~ 5.64	
														266	266
T-M18-4B	FH	023F5601.D	023F5602.D	7.385	7.391	0.08	53.2	52.5	0.65	52.9	0798-19D.	5	1	264	
T-M18-4B	BH	024F2601.D	024F2602.D	7.403	7.407	0.05	~ 1.06	~ 1.04	0.84	~ 1.05	0798-19.M	5	1	~ 5.26	
														270	270
T-M18-FB-B	FH	027F1101.D	027F1102.D	7.390	7.390	0.00	33.2	32.9	0.54	33.1	0798-19D.	5	1	165	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														165	165

ENTHALPY analytical, inc.

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274

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.73 - 409 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Ethylbenzene	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	9.177	9.193	0.17	5.41	5.52	0.95	5.47	0798-19.M	5	1	27.3	% Rec 125
T-M18-1A	BH	010F1001.D	010F1001.D	9.200	9.200	0.00	- 2.76	- 2.76	0.00	- 2.76	0798-19.M	5	1	- 13.8	
														41.2	32.9
T-M18-2A	FH	011F1101.D	011F1102.D	9.203	9.205	0.02	8.46	7.83	3.91	8.15	0798-19.M	5	1	40.7	% Rec 125
T-M18-2A	BH	012F1201.D	012F1202.D	9.205	9.201	0.04	- 2.13	- 2.10	0.75	- 2.12	0798-19.M	5	1	- 10.6	
														51.3	41.1
T-M18-3A	FH	013F1301.D	013F1302.D	9.199	9.199	0.00	- 1.64	- 1.69	1.50	- 1.67	0798-19.M	5	1	- 8.33	% Rec 125
T-M18-3A	BH	014F1401.D	014F1402.D	9.198	9.194	0.04	- 1.42	- 1.41	0.27	- 1.42	0798-19.M	5	1	- 7.08	
														- 15.4	- 12.3
T-M18-4A	FH	015F1501.D	015F1502.D	9.194	9.192	0.02	- 1.95	- 2.00	1.25	- 1.98	0798-19.M	5	1	- 9.90	% Rec 125
T-M18-4A	BH	016F1601.D	016F1602.D	9.189	9.191	0.02	- 1.88	- 1.88	0.13	- 1.88	0798-19.M	5	1	- 9.40	
														- 19.3	- 15.4
T-M18-FB-A	FH	025F2701.D	025F2702.D	9.191	9.191	0.00	8.17	8.26	0.56	8.22	0798-19.M	5	1	41.1	% Rec 125
T-M18-FB-A	BH	026F2801.D	026F2802.D	9.192	9.190	0.02	- 1.52	- 1.54	0.75	- 1.53	0798-19.M	5	1	- 7.65	
														48.7	39.0
T-M18-1B	FH	017F1701.D	017F1702.D	9.187	9.188	0.01	52.8	53.2	0.38	53.0	0798-19.M	5	1	265	
T-M18-1B	BH	018F1801.D	018F1802.D	9.188	9.186	0.02	- 2.44	- 2.43	0.15	- 2.43	0798-19.M	5	1	- 12.2	
														277	277
T-M18-2B	FH	019F2101.D	019F2102.D	9.088	9.136	- 0.53	68.9	61.0	> 5 %	65.0	0798-19.M	5	1	325	
T-M18-2B	BH	020F2201.D	020F2202.D	9.167	9.181	0.15	- 3.08	- 2.98	1.69	- 3.03	0798-19.M	5	1	- 15.2	
														340	340
T-M18-3B	FH	021F5501.D	021F5502.D	9.149	9.167	0.20	57.5	56.2	1.16	56.9	0798-19D.	5	1	284	
T-M18-3B	BH	022F2401.D	022F2402.D	9.192	9.193	0.01	- 1.49	- 1.47	0.73	- 1.48	0798-19.M	5	1	- 7.41	
														292	292
T-M18-4B	FH	023F5601.D	023F5602.D	9.173	9.179	0.07	56.6	55.8	0.72	56.2	0798-19D.	5	1	281	
T-M18-4B	BH	024F2601.D	024F2602.D	9.191	9.192	0.01	- 2.21	- 2.23	0.27	- 2.22	0798-19.M	5	1	- 11.1	
														292	292
T-M18-FB-B	FH	027F1101.D	027F1102.D	9.177	9.178	0.01	39.2	38.6	0.68	38.9	0798-19D.	5	1	195	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														195	195

ENTHALPY analytical, inc.

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MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.79 - 412 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	p-Xylene	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	9.334	9.347	0.14	~ 3.00	~ 3.04	0.66	~ 3.02	0798-19.M	5	1	~ 15.1	% Rec 115
T-M18-1A	BH	010F1001.D	010F1001.D	9.358	9.358	0.00	~ 1.89	~ 1.89	0.00	~ 1.89	0798-19.M	5	1	~ 9.43	
														~ 24.5	~ 21.3
T-M18-2A	FH	011F1101.D	011F1102.D	9.361	9.363	0.02	~ 3.09	~ 3.07	0.28	~ 3.08	0798-19.M	5	1	~ 15.4	% Rec 115
T-M18-2A	BH	012F1201.D	012F1202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 15.4	~ 13.4
T-M18-3A	FH	013F1301.D	013F1302.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 115
T-M18-3A	BH	014F1401.D	014F1402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.35
T-M18-4A	FH	015F1501.D	015F1502.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 115
T-M18-4A	BH	016F1601.D	016F1602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.35
T-M18-FB-A	FH	025F2701.D	025F2702.D	9.343	9.343	0.00	~ 2.26	~ 2.26	0.07	~ 2.26	0798-19.M	5	1	~ 11.3	% Rec 115
T-M18-FB-A	BH	026F2801.D	026F2802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 11.3	~ 9.83
T-M18-1B	FH	017F1701.D	017F1702.D	9.348	9.349	0.01	46.3	46.7	0.35	46.5	0798-19.M	5	1	232	
T-M18-1B	BH	018F1801.D	018F1802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														232	232
T-M18-2B	FH	019F2101.D	019F2102.D	9.250	9.297	0.51	58.9	52.2	> 5 %	55.5	0798-19.M	5	1	278	
T-M18-2B	BH	020F2201.D	020F2202.D	9.328	9.343	0.16	~ 1.11	~ 1.07	2.16	~ 1.09	0798-19.M	5	1	~ 5	
														283	283
T-M18-3B	FH	021F5501.D	021F5502.D	9.311	9.330	0.20	51.8	50.7	1.04	51.3	0798-19D.	5	1	256	
T-M18-3B	BH	022F2401.D	022F2402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														256	256
T-M18-4B	FH	023F5601.D	023F5602.D	9.336	9.342	0.06	52.3	51.6	0.64	52.0	0798-19D.	5	1	260	
T-M18-4B	BH	024F2601.D	024F2602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														260	260
T-M18-FB-B	FH	027F1101.D	027F1102.D	9.339	9.340	0.01	32.6	32.1	0.76	32.3	0798-19D.	5	1	162	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														162	162

ENTHALPY analytical, inc.

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MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.74 - 409 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	m-Xylene	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	9.476	9.492	0.17	~ 1.62	~ 1.66	0.99	~ 1.64	0798-19.M	5	1	~ 8.20	% Rec 115
T-M18-1A	BH	010F1001.D	010F1001.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 8.20	~ 7.13
T-M18-2A	FH	011F1101.D	011F1102.D	9.502	9.504	0.02	~ 1.57	~ 1.59	0.42	~ 1.58	0798-19.M	5	1	~ 7.91	% Rec 115
T-M18-2A	BH	012F1201.D	012F1202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 7.91	~ 6.87
T-M18-3A	FH	013F1301.D	013F1302.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 115
T-M18-3A	BH	014F1401.D	014F1402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.35
T-M18-4A	FH	015F1501.D	015F1502.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 115
T-M18-4A	BH	016F1601.D	016F1602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.35
T-M18-FB-A	FH	025F2701.D	025F2702.D	9.492	9.491	0.01	< 1.00	~ 1.02	0.89	~ 1.01	0798-19.M	5	1	~ 5.05	% Rec 115
T-M18-FB-A	BH	026F2801.D	026F2802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 5.05	~ 4.39
T-M18-1B	FH	017F1701.D	017F1702.D	9.485	9.486	0.01	44.9	45.2	0.34	45.1	0798-19.M	5	1	225	
T-M18-1B	BH	018F1801.D	018F1802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														225	225
T-M18-2B	FH	019F2101.D	019F2102.D	9.386	9.435	0.52	57.4	50.8	> 5 %	54.1	0798-19.M	5	1	271	
T-M18-2B	BH	020F2201.D	020F2202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														271	271
T-M18-3B	FH	021F5501.D	021F5502.D	9.448	9.467	0.20	51.3	50.0	1.23	50.6	0798-19D.	5	1	253	
T-M18-3B	BH	022F2401.D	022F2402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														253	253
T-M18-4B	FH	023F5601.D	023F5602.D	9.472	9.478	0.06	52.2	51.4	0.81	51.8	0798-19D.	5	1	259	
T-M18-4B	BH	024F2601.D	024F2602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														259	259
T-M18-FB-B	FH	027F1101.D	027F1102.D	9.476	9.476	0.00	32.0	31.5	0.81	31.7	0798-19D.	5	1	159	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														159	159

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J:\OBS98\007\0798-19\0798-19A.WB2 10:00 AM 09/23

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.70 - 407 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Cumene	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	9.984	9.998	0.14	5.58	~ 2.68	> 5 %	~ 4.13	0798-19.M	5	1	~ 20.6	% Rec 128
T-M18-1A	BH	010F1001.D	010F1001.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 20.6	~ 16.1
T-M18-2A	FH	011F1101.D	011F1102.D	10.008	10.009	0.01	~ 2.70	~ 3.06	> 5 %	~ 2.88	0798-19.M	5	1	~ 14.4	% Rec 128
T-M18-2A	BH	012F1201.D	012F1202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 14.4	~ 11.3
T-M18-3A	FH	013F1301.D	013F1302.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 128
T-M18-3A	BH	014F1401.D	014F1402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 3.91
T-M18-4A	FH	015F1501.D	015F1502.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 128
T-M18-4A	BH	016F1601.D	016F1602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 3.91
T-M18-FB-A	FH	025F2701.D	025F2702.D	9.997	9.998	0.01	6.28	6.26	0.15	6.27	0798-19.M	5	1	31.3	% Rec 128
T-M18-FB-A	BH	026F2801.D	026F2802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														31.3	24.5
T-M18-1B	FH	017F1701.D	017F1702.D	10.108	10.110	0.02	51.7	53.3	1.53	52.5	0798-19.M	5	1	262	
T-M18-1B	BH	018F1801.D	018F1802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														262	262
T-M18-2B	FH	019F2101.D	019F2102.D	10.014	10.060	0.46	65.8	56.9	> 5 %	61.3	0798-19.M	5	1	307	
T-M18-2B	BH	020F2201.D	020F2202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														307	307
T-M18-3B	FH	021F5501.D	021F5502.D	10.072	10.090	0.18	57.0	55.7	1.13	56.3	0798-19D.	5	1	282	
T-M18-3B	BH	022F2401.D	022F2402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														282	282
T-M18-4B	FH	023F5601.D	023F5602.D	10.096	10.102	0.06	56.3	55.5	0.76	55.9	0798-19D.	5	1	279	
T-M18-4B	BH	024F2601.D	024F2602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														279	279
T-M18-FB-B	FH	027F1101.D	027F1102.D	10.099	10.099	0.00	40.9	40.1	1.01	40.5	0798-19D.	5	1	203	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														203	203

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278

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.67 - 406 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	o-Xylene	PO #:	104980229
# Samples:	20 CT tubes	Report Date:	09/23/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
T-M18-1A	FH	009F0901.D	009F0902.D	10.393	10.407	0.13	~ 2.35	< 1.00	> 5 %	~ 1.68	0798-19.M	5	1	~ 8.38	% Rec 105
T-M18-1A	BH	010F1001.D	010F1001.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 8.38	~ 7.98
T-M18-2A	FH	011F1101.D	011F1102.D	10.593	10.424	1.60	~ 1.38	< 1.00	> 5 %	~ 1.19	0798-19.M	5	1	~ 5.95	% Rec 105
T-M18-2A	BH	012F1201.D	012F1202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 5.95	~ 5.66
T-M18-3A	FH	013F1301.D	013F1302.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 105
T-M18-3A	BH	014F1401.D	014F1402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.76
T-M18-4A	FH	015F1501.D	015F1502.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	% Rec 105
T-M18-4A	BH	016F1601.D	016F1602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 4.76
T-M18-FB-A	FH	025F2701.D	025F2702.D	10.581	10.576	0.05	~ 3.32	~ 3.41	1.37	~ 3.37	0798-19.M	5	1	~ 16.8	% Rec 105
T-M18-FB-A	BH	026F2801.D	026F2802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 16.8	~ 16.0
T-M18-1B	FH	017F1701.D	017F1702.D	10.404	10.405	0.01	38.9	41.3	3.02	40.1	0798-19.M	5	1	200	
T-M18-1B	BH	018F1801.D	018F1802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														200	200
T-M18-2B	FH	019F2101.D	019F2102.D	10.309	10.355	0.45	53.0	44.2	> 5 %	48.6	0798-19.M	5	1	243	
T-M18-2B	BH	020F2201.D	020F2202.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														243	243
T-M18-3B	FH	021F5501.D	021F5502.D	10.368	10.386	0.17	46.7	45.6	1.17	46.1	0798-19D.	5	1	231	
T-M18-3B	BH	022F2401.D	022F2402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														231	231
T-M18-4B	FH	023F5601.D	023F5602.D	10.392	10.398	0.06	47.8	47.0	0.75	47.4	0798-19D.	5	1	237	
T-M18-4B	BH	024F2601.D	024F2602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														237	237
T-M18-FB-B	FH	027F1101.D	027F1102.D	10.395	10.396	0.01	29.1	28.6	1.02	28.9	0798-19D.	5	1	144	
T-M18-FB-B	BH	028F3001.D	028F3002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														144	144

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Tunnel
Spike & Recovery

Spike and Recovery Calculations

	Hexane	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	204	263	233.2	122
	Un-spiked Train		- 12.8	231.9	
	Volume Adjusted Spike Catch		250	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-2A	Spiked Train	204	322	229.7	146
	Un-spiked Train		- 24.1	230.3	
	Volume Adjusted Spike Catch		298	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-3A	Spiked Train	204	256	229.3	125
	Un-spiked Train		< 5.00	230.7	
	Volume Adjusted Spike Catch		256	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-4A	Spiked Train	204	267	229.0	131
	Un-spiked Train		< 5.00	225.8	
	Volume Adjusted Spike Catch		267	NA	

Avg: 131

	Benzene	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	218	224	233.2	103
	Un-spiked Train		< 5.00	231.9	
	Volume Adjusted Spike Catch		224	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-2A	Spiked Train	218	274	229.7	123
	Un-spiked Train		- 5.85	230.3	
	Volume Adjusted Spike Catch		268	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-3A	Spiked Train	218	246	229.3	113
	Un-spiked Train		< 5.00	230.7	
	Volume Adjusted Spike Catch		246	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-4A	Spiked Train	218	253	229.0	116
	Un-spiked Train		< 5.00	225.8	
	Volume Adjusted Spike Catch		253	NA	

Avg: 114

Spike and Recovery Calculations

Toluene

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	216	235	233.2	101
	Un-spiked Train		- 17.8	231.9	
	Volume Adjusted Spike Catch		217	NA	
T-M18-2A	Spiked Train	216	308	229.7	129
	Un-spiked Train		- 30.1	230.3	
	Volume Adjusted Spike Catch		278	NA	
T-M18-3A	Spiked Train	216	266	229.3	118
	Un-spiked Train		- 11.8	230.7	
	Volume Adjusted Spike Catch		254	NA	
T-M18-4A	Spiked Train	216	270	229.0	120
	Un-spiked Train		- 10.6	225.8	
	Volume Adjusted Spike Catch		259	NA	

Avg: 117

Ethylbenzene

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	215	277	233.2	110
	Un-spiked Train		41.2	231.9	
	Volume Adjusted Spike Catch		236	NA	
T-M18-2A	Spiked Train	215	340	229.7	134
	Un-spiked Train		51.3	230.3	
	Volume Adjusted Spike Catch		289	NA	
T-M18-3A	Spiked Train	215	292	229.3	129
	Un-spiked Train		- 15.4	230.7	
	Volume Adjusted Spike Catch		276	NA	
T-M18-4A	Spiked Train	215	292	229.0	127
	Un-spiked Train		- 19.3	225.8	
	Volume Adjusted Spike Catch		273	NA	

Avg: 125

Spike and Recovery Calculations

	p-Xylene	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	216	232	233.2	96.2
	Un-spiked Train		- 24.5	231.9	
	Volume Adjusted Spike Catch		208	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-2A	Spiked Train	216	283	229.7	124
	Un-spiked Train		- 15.4	230.3	
	Volume Adjusted Spike Catch		268	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-3A	Spiked Train	216	256	229.3	119
	Un-spiked Train		< 5.00	230.7	
	Volume Adjusted Spike Catch		256	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-4A	Spiked Train	216	260	229.0	120
	Un-spiked Train		< 5.00	225.8	
	Volume Adjusted Spike Catch		260	NA	

Avg: 115

	m-Xylene	Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	215	225	233.2	101
	Un-spiked Train		- 8.20	231.9	
	Volume Adjusted Spike Catch		217	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-2A	Spiked Train	215	271	229.7	122
	Un-spiked Train		- 7.91	230.3	
	Volume Adjusted Spike Catch		263	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-3A	Spiked Train	215	253	229.3	118
	Un-spiked Train		< 5.00	230.7	
	Volume Adjusted Spike Catch		253	NA	

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-4A	Spiked Train	215	259	229.0	121
	Un-spiked Train		< 5.00	225.8	
	Volume Adjusted Spike Catch		259	NA	

Avg: 115

Spike and Recovery Calculations

Cumene

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	214	262	233.2	113
	Un-spiked Train		- 20.6	231.9	
	Volume Adjusted Spike Catch		242	NA	
T-M18-2A	Spiked Train	214	307	229.7	137
	Un-spiked Train		- 14.4	230.3	
	Volume Adjusted Spike Catch		292	NA	
T-M18-3A	Spiked Train	214	282	229.3	132
	Un-spiked Train		< 5.00	230.7	
	Volume Adjusted Spike Catch		282	NA	
T-M18-4A	Spiked Train	214	279	229.0	131
	Un-spiked Train		< 5.00	225.8	
	Volume Adjusted Spike Catch		279	NA	

Avg: 128

o-Xylene

		Spike Amt.	Catch (ug)	Sample Volume	Recovery (%)
T-M18-1A	Spiked Train	213	200	233.2	90.1
	Un-spiked Train		- 8.38	231.9	
	Volume Adjusted Spike Catch		192	NA	
T-M18-2A	Spiked Train	213	243	229.7	111
	Un-spiked Train		- 5.95	230.3	
	Volume Adjusted Spike Catch		237	NA	
T-M18-3A	Spiked Train	213	231	229.3	108
	Un-spiked Train		< 5.00	230.7	
	Volume Adjusted Spike Catch		231	NA	
T-M18-4A	Spiked Train	213	237	229.0	111
	Un-spiked Train		< 5.00	225.8	
	Volume Adjusted Spike Catch		237	NA	

Avg: 105

Tunnel Sample & Curve Chromatograms

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\009F0901.D T-M18-R1 Aa+AbFH

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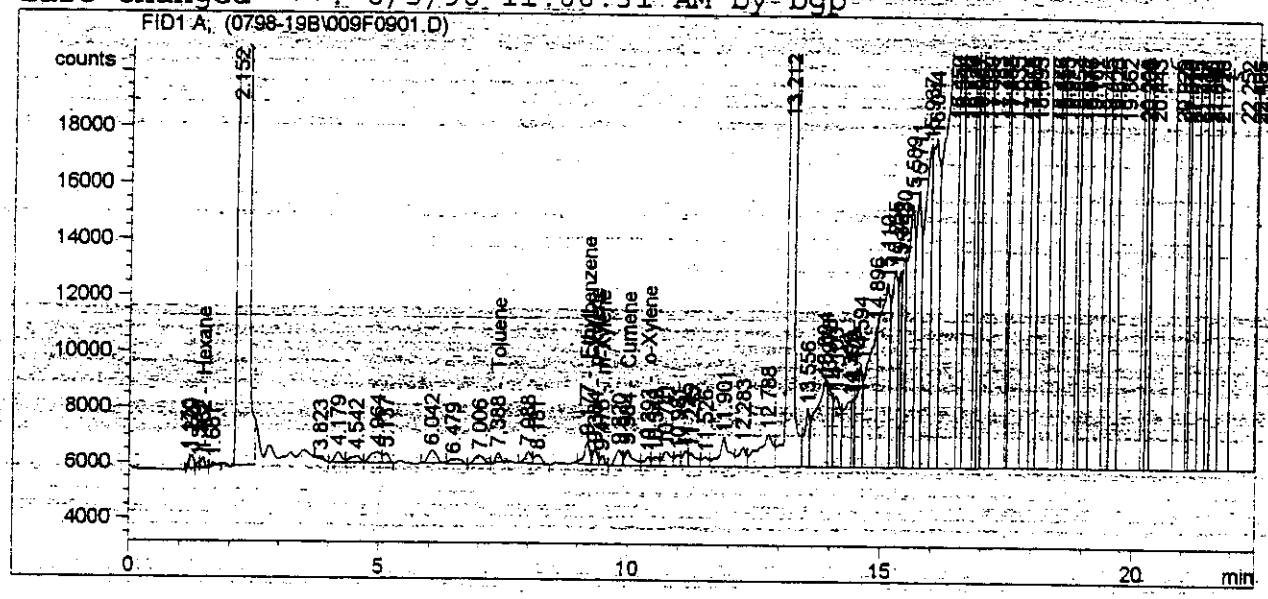
Injection Date : 7/31/98 6:28:50 PM Seq. Line : 9
Sample Name : T-M18-R1 Aa+AbFH Vial : 9
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	VP	1916.04797	9.19566e-4	1.76193		Hexane
5.409		-	-	-		Benzene
7.388	VB	2436.76343	8.30843e-4	2.02457		Toluene
9.177	BV	6532.23438	8.28951e-4	5.41490		Ethylbenzene
9.334	VV	3587.24121	8.36380e-4	3.00030		p-Xylene
9.476	VP	1943.70435	8.35032e-4	1.62305		m-Xylene
9.984	VB	6238.51465	8.93826e-4	5.57615		Cumene
10.393	BV	2900.57739	8.10200e-4	2.35005		o-Xylene

Totals : 21.75095

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

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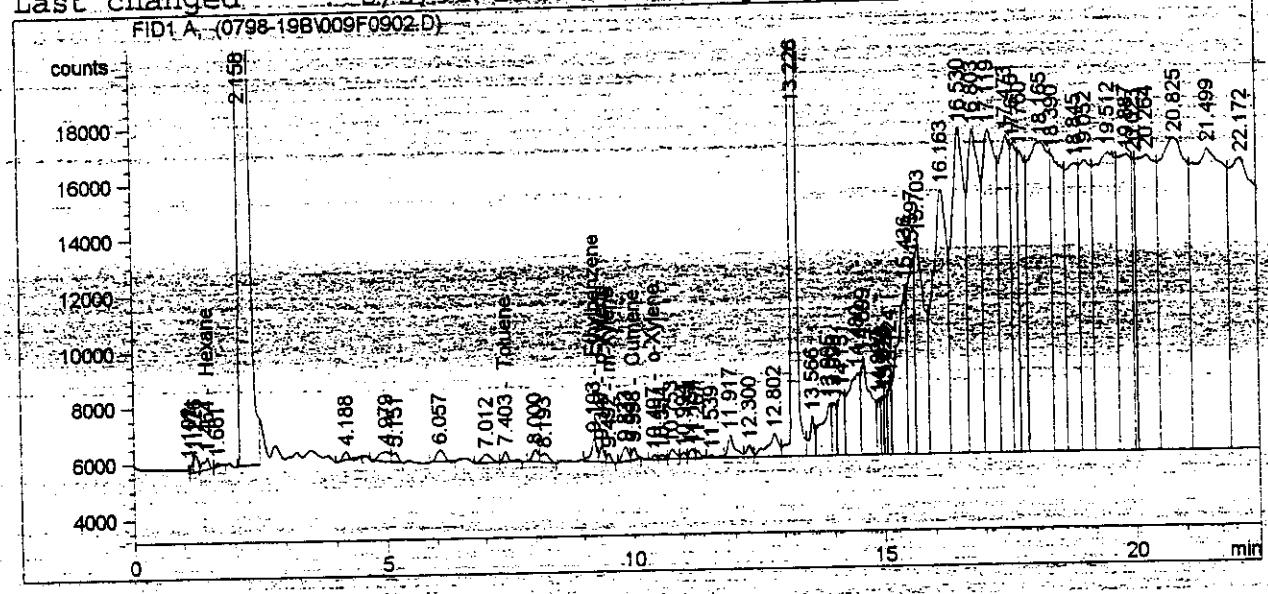
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\009F0902.D T-M18-R1 Aa+AbFH

==========

Injection Date : 7/31/98 6:59:11 PM
Sample Name : T-M18-R1 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 9
Vial : 9
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.464	VP	3669.80811	9.19566e-4	3.37463		Hexane
5.409		-		-		Benzene
7.403	VB	3499.96143	8.30843e-4	2.90792		Toluene
9.193	BV	6657.29395	8.28951e-4	5.51857		Ethylbenzene
9.347	VV	3634.88477	8.36380e-4	3.04014		p-Xylene
9.492	VP	1982.41602	8.35032e-4	1.65538		m-Xylene
9.998	VB	2993.55322	8.93826e-4	2.67572		Cumene
10.407	PV	968.17609	8.10200e-4	7.84416e-1		o-Xylene

Totals : 19.95678

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

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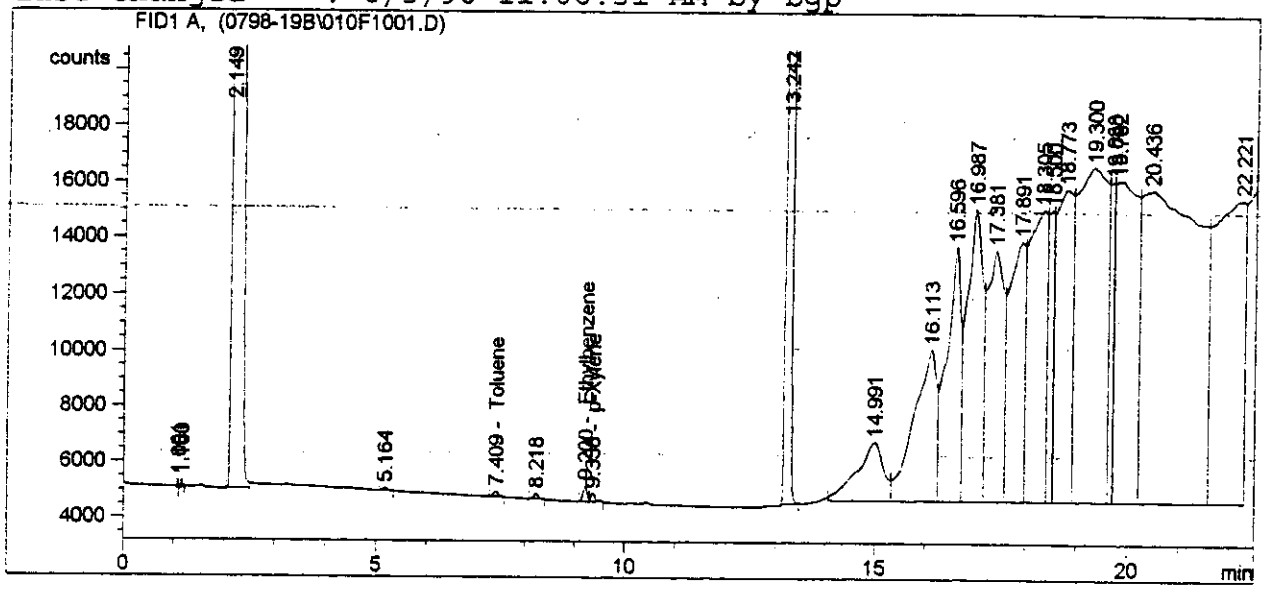
Injection Date : 7/31/98 7:29:45 PM Seq. Line : 10
Sample Name : T-M18-R1 AbBH Vial : 10
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.409	BP	1325.48633	8.30843e-4	1.10127		Toluene
9.200	BV	3333.27417	8.28951e-4	2.76312		Ethylbenzene
9.358	VB	2254.26270	8.36380e-4	1.88542		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 5.74981

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

287

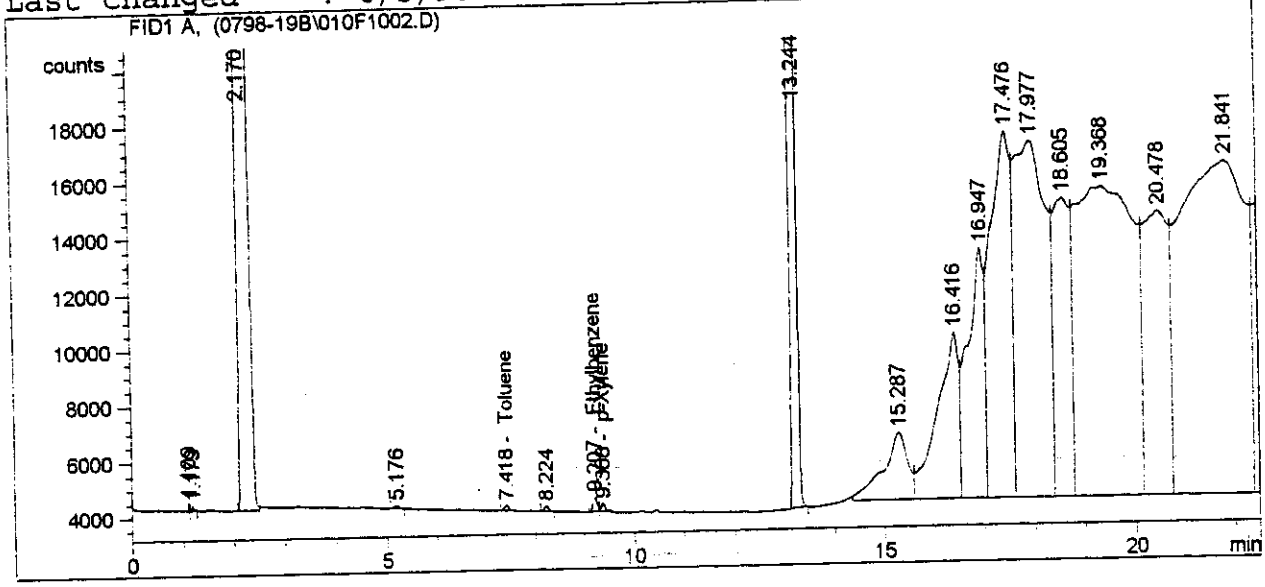
26

==========

Injection Date : 7/31/98 8:00:14 PM
Sample Name : T-M18-R1 AbBH
Acq. Operator : bgp

Seq. Line : 10
Vial : 10
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.418	BB	1226.44470	8.30843e-4	1.01898		Toluene
9.207	PV	3086.61060	8.28951e-4	2.55865		Ethylbenzene
9.368	VB	1803.37427	8.36380e-4	1.50831		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				5.08594		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

27

288

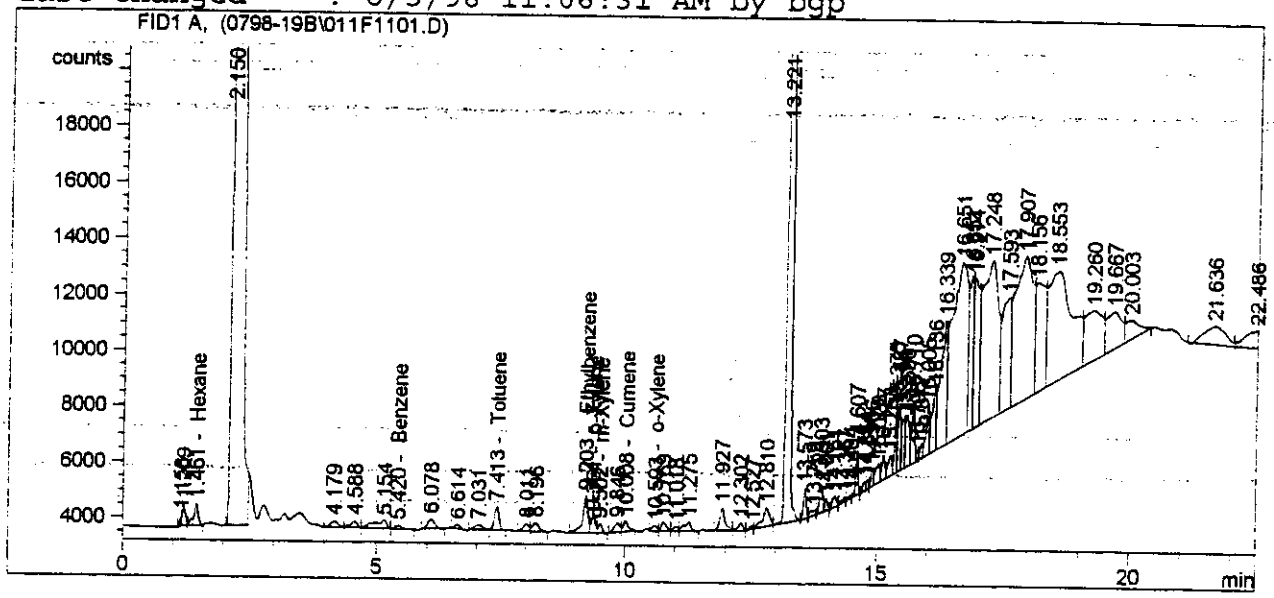
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\011F1101.D T-M18-R2 Aa+AbFH

==========

Injection Date : 7/31/98 8:30:47 PM
Sample Name : T-M18-R2 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 11
Vial : 11
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	VP	5098.51855	9.19566e-4	4.68842		Hexane
5.420	VP	1384.52429	8.40787e-4	1.16409		Benzene
7.413	VP	5563.34277	8.30843e-4	4.62227		Toluene
9.203	BV	1.02786e4	8.23488e-4	8.46432		Ethylbenzene
9.361	VV	3696.07959	8.36380e-4	3.09133		p-Xylene
9.502	VP	1885.59692	8.35032e-4	1.57453		m-Xylene
10.008	VB	3022.40161	8.93826e-4	2.70150		Cumene
10.593	VV	1702.03247	8.10200e-4	1.37899		o-Xylene

Totals : 27.68545

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

289

28

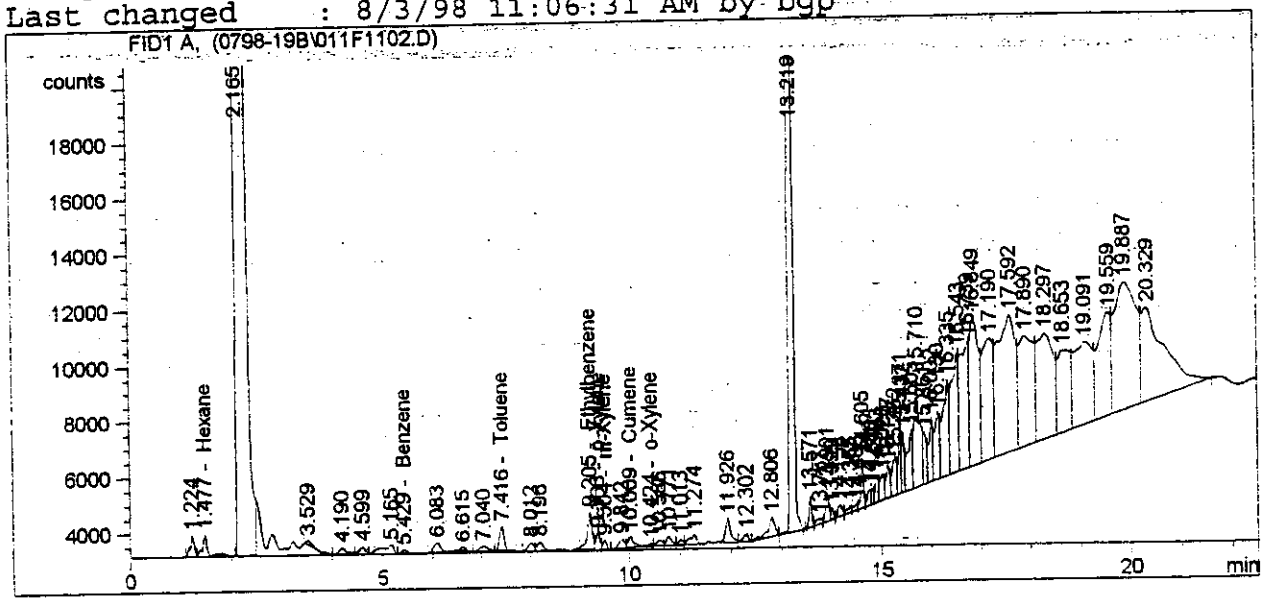
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\011F1102.D T-M18-R2 Aa+AbFH

==========

Injection Date : 7/31/98 9:01:16 PM
Sample Name : T-M18-R2 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 11
Vial : 11
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.477	VP	5391.19238	9.19566e-4	4.95756		Hexane
5.429	VP	1399.76355	8.40787e-4	1.17690		Benzene
7.416	VB	5702.16406	8.30843e-4	4.73761		Toluene
9.205	BV	9450.87891	8.28167e-4	7.82690		Ethylbenzene
9.363	VV	3675.78320	8.36380e-4	3.07435		p-Xylene
9.504	VP	1901.33069	8.35032e-4	1.58767		m-Xylene
10.009	VB	3423.97729	8.93826e-4	3.06044		Cumene
10.424	PV	481.06116	8.10200e-4	3.89756e-1		o-Xylene

Totals : 26.81119

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

29

290

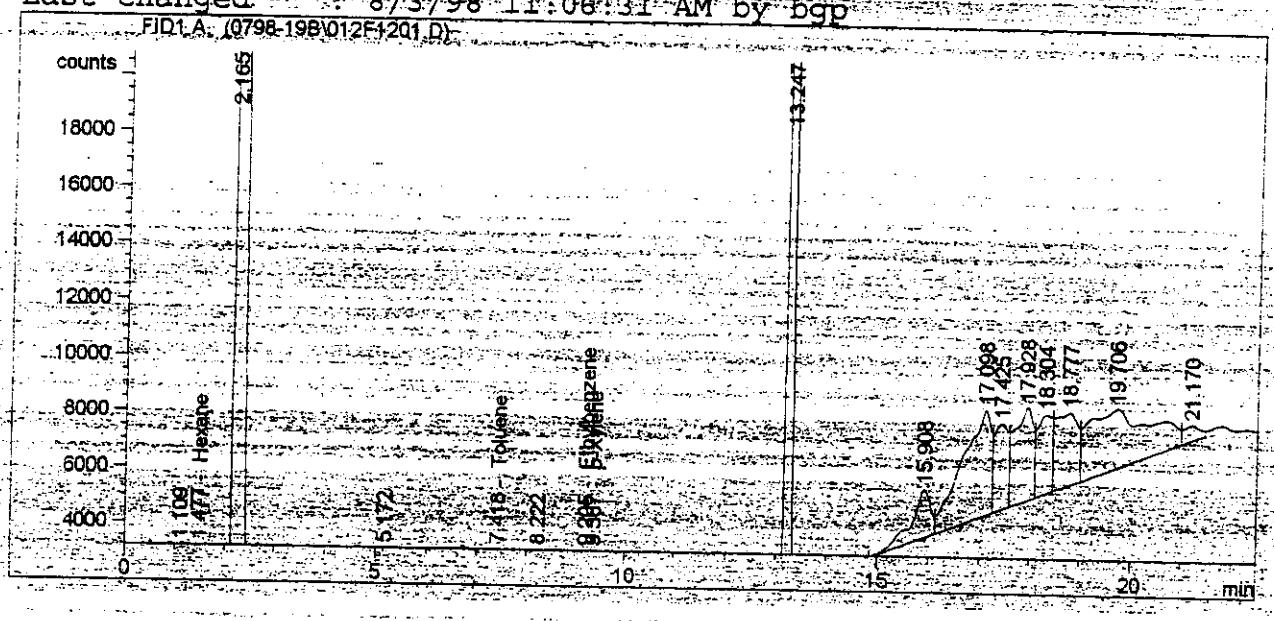
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\012F1201.D T-M18-R2 AbFH

==========

Injection Date : 7/31/98 9:31:43 PM
Sample Name : T-M18-R2 AbFH BH
Acq. Operator : bgp

Seq. Line : 12
Vial : 12
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.477	PB	781.83801	9.19566e-4	7.18951e-1		Hexane
5.409		-	-	-		Benzene
7.418	BP	1640.33398	8.30843e-4	1.36286		Toluene
9.205	PV	2573.99976	8.28951e-4	2.13372		Ethylbenzene
9.367	VB	950.45135	8.36380e-4	7.94938e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 5.01047

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

291

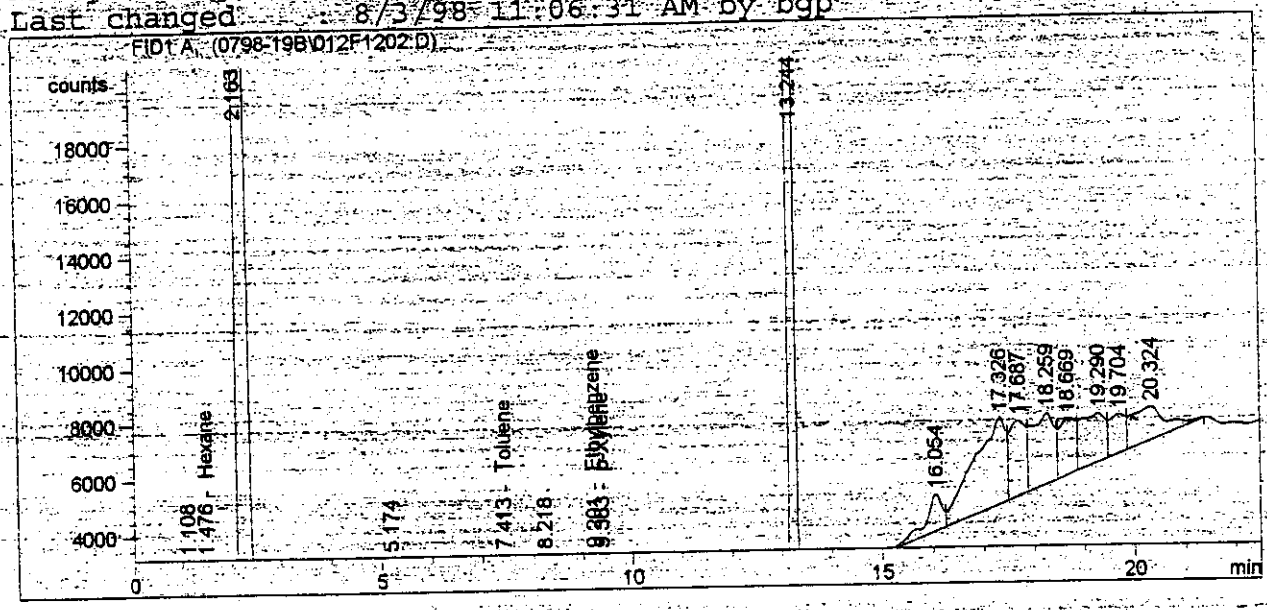
30

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\012F1202.D T-M18-R2 AbFH

==========

Injection Date : 7/31/98 10:02:06 PM Seq. Line : 12
Sample Name : T-M18-R2 AbFH BH Vial : 12
Acq. Operator : bgp Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.476	PB	755.99805	9.19566e-4	6.95190e-1		Hexane
5.409		-	-	-		Benzene
7.413	BB	1581.86780	8.30843e-4	1.31428		Toluene
9.201	BV	2535.65381	8.28951e-4	2.10193		Ethylbenzene
9.363	VB	917.88214	8.36380e-4	7.67698e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.87910

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

31

292

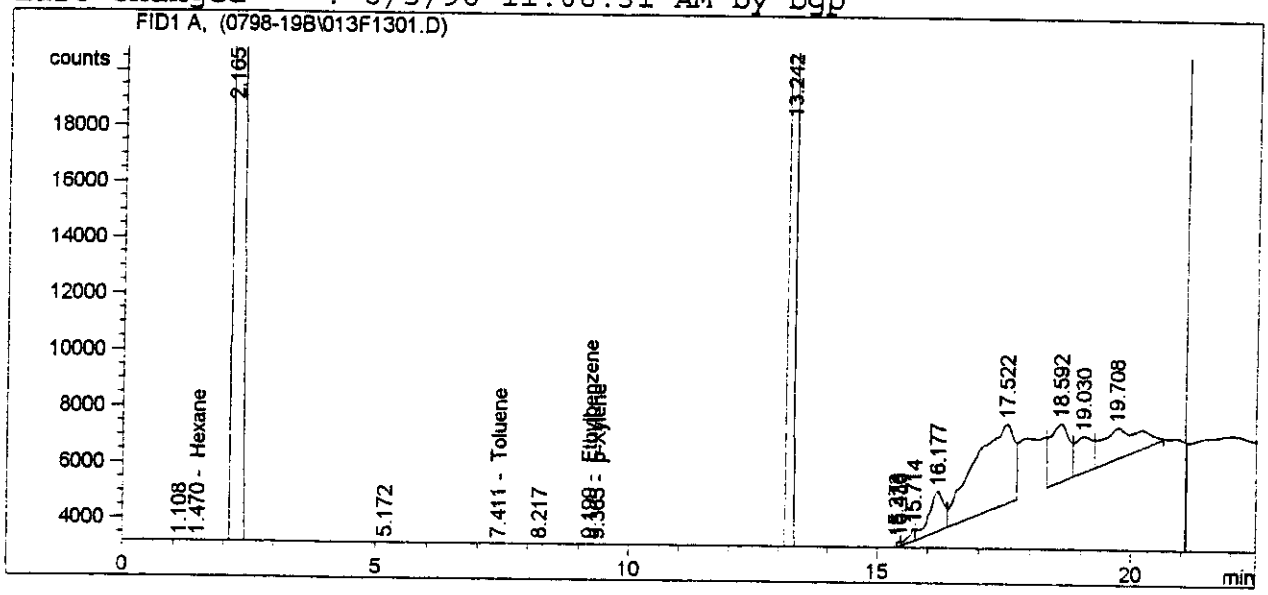
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\013F1301.D T-M18-R3 Aa+AbFH

==========

Injection Date : 7/31/98 10:32:24 PM
Sample Name : T-M18-R3 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 13
Vial : 13
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.470	BB	738.32959	9.19566e-4	6.78943e-1		Hexane
5.409		-	-	-		Benzene
7.411	BB	1517.63257	8.30843e-4	1.26092		Toluene
9.199	PV	1979.22876	8.28951e-4	1.64068		Ethylbenzene
9.365	VB	656.76697	8.36380e-4	5.49306e-1		p-Xylene
9.474						m-Xylene
10.097						Cumene
10.393						o-Xylene

Totals : 4.12985

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

293

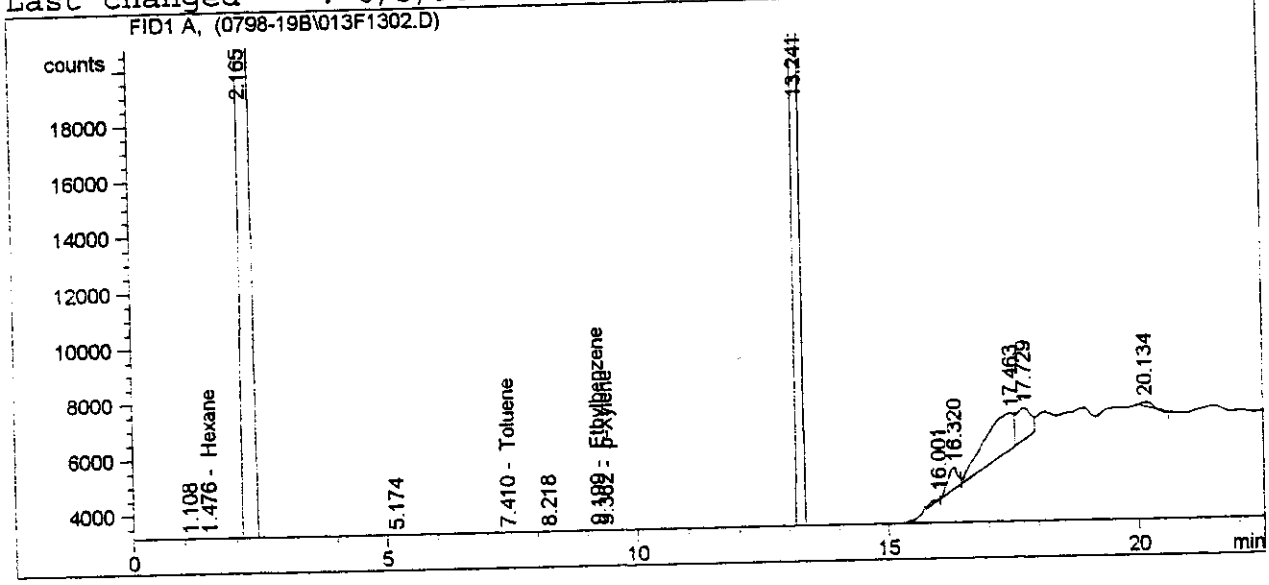
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\013F1302.D T-M18-R3 Aa+AbFH

==========

Injection Date : 7/31/98 11:02:42 PM
Sample Name : T-M18-R3 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 13
Vial : 13
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.476	BB	741.12000	9.19566e-4	6.81509e-1		Hexane
5.409		-	-	-		Benzene
7.410	BP	1592.62354	8.30843e-4	1.32322		Toluene
9.199	BV	2039.45740	8.28951e-4	1.69061		Ethylbenzene
9.362	VB	710.55457	8.36380e-4	5.94293e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.28963

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

33

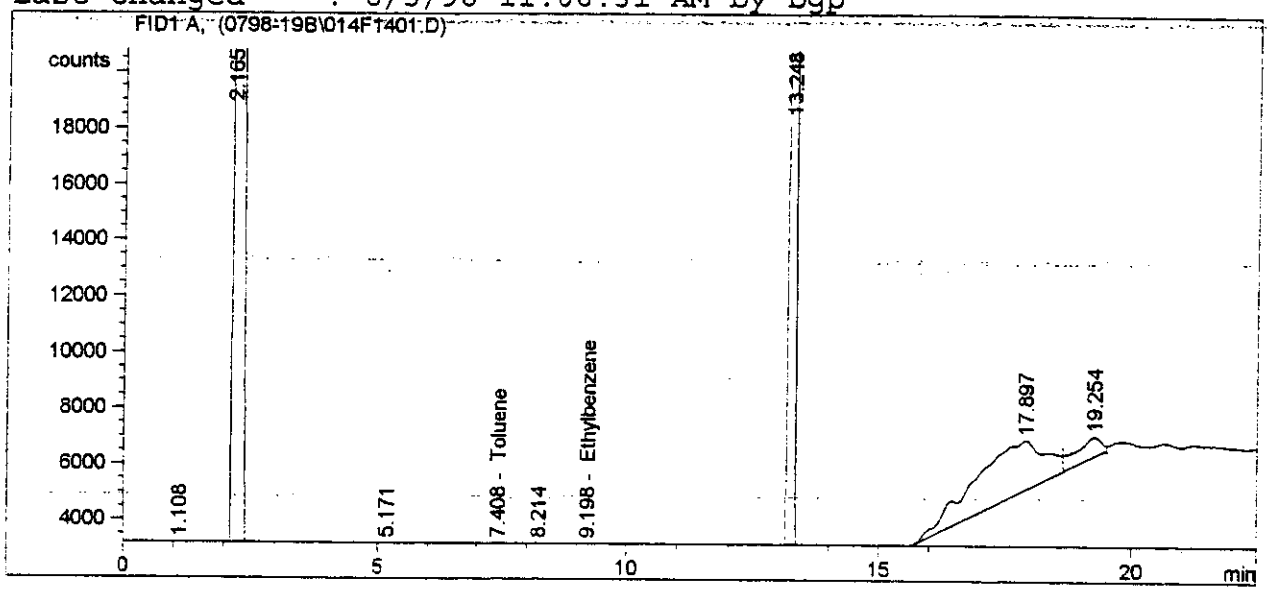
294

==========

Injection Date : 7/31/98 11:33:00 PM
Sample Name : T-M18-R3 AbBH
Acq. Operator : bgp

Seq. Line : 14
Vial : 14
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.408	BP	1305.75793	8.30843e-4	1.08488		Toluene
9.198	PV	1713.40027	8.28951e-4	1.42032		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 2.50521

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

295

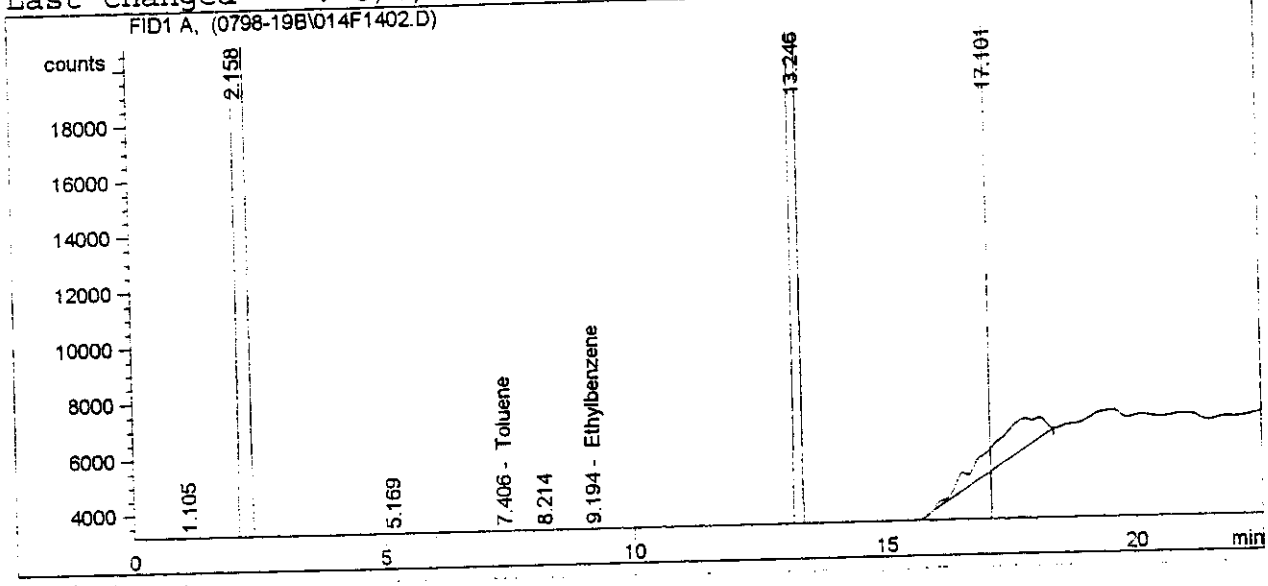
34

==========

Injection Date : 8/1/98 12:03:13 AM
Sample Name : T-M18-R3 AbBH
Acq. Operator : bgp

Seq. Line : 14
Vial : 14
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.406	BB	1245.97449	8.30843e-4	1.03521		Toluene
9.194	PV	1704.23376	8.28951e-4	1.41273		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				2.44794		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

35

296

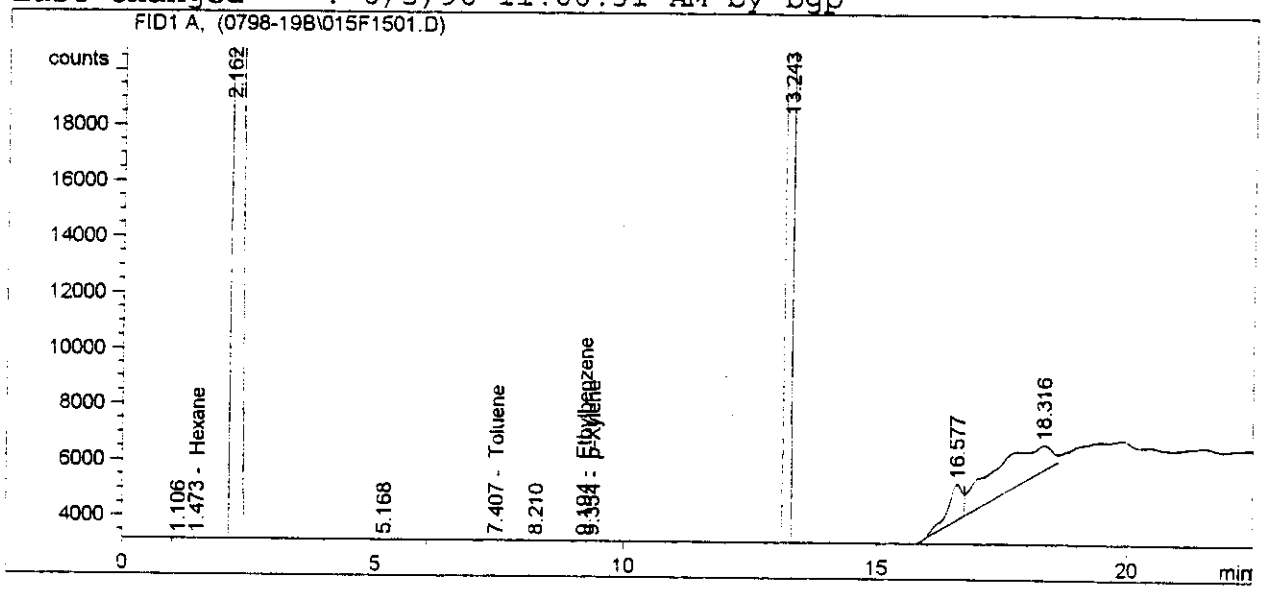
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\015F1501.D T-M18-R4 Aa+AbFH

==========

Injection Date : 8/1/98 12:33:31 AM
Sample Name : T-M18-R4 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 15
Vial : 15
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.473	PB	709.56940	9.19566e-4	6.52496e-1		Hexane
5.409		-	-	-		Benzene
7.407	PB	1227.05225	8.30843e-4	1.01949		Toluene
9.194	PV	2357.92407	8.28951e-4	1.95460		Ethylbenzene
9.354	VB	869.63312	8.36380e-4	7.27343e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.35393

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

297

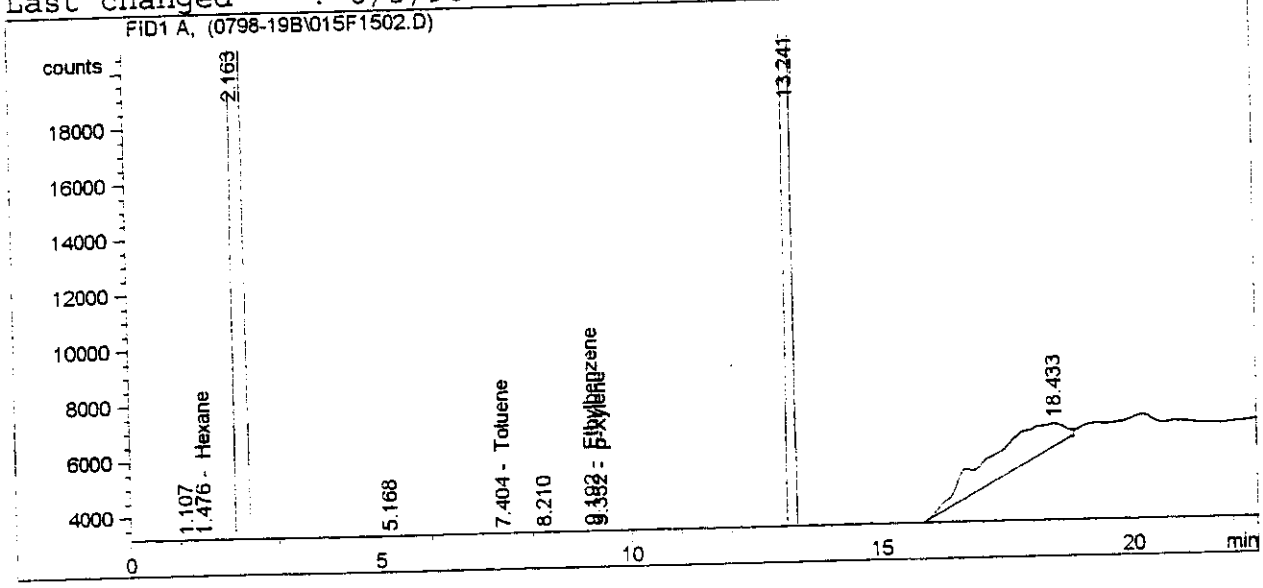
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\015F1502.D T-M18-R4 Aa+AbFH

==========

Injection Date : 8/1/98 1:03:42 AM
Sample Name : T-M18-R4 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 15
Vial : 15
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.476	PP	738.73901	9.19566e-4	6.79319e-1		Hexane
5.409		-	-	-		Benzene
7.404	BB	1204.21313	8.30843e-4	1.00051		Toluene
9.192	PV	2417.43262	8.28951e-4	2.00393		Ethylbenzene
9.352	VB	856.64038	8.36380e-4	7.16476e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				4.40024		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

37

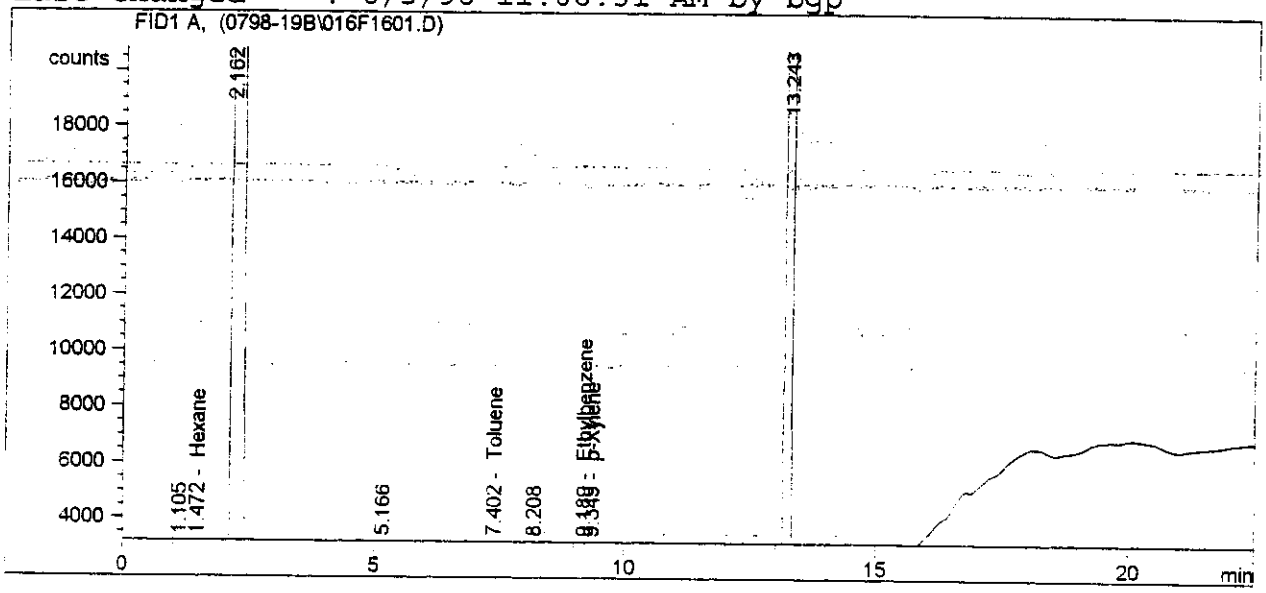
298

==========

Injection Date : 8/1/98 1:34:00 AM
Sample Name : T-M18-R4 AbBH
Acq. Operator : bgp

Seq. Line : 16
Vial : 16
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.472	PB	692.87274	9.19566e-4	6.37142e-1		Hexane
5.409		-	-	-		Benzene
7.402	PB	1324.84619	8.30843e-4	1.10074		Toluene
9.189	PV	2264.42529	8.28951e-4	1.87710		Ethylbenzene
9.349	VB	830.92621	8.36380e-4	6.94970e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.30995

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

299

38

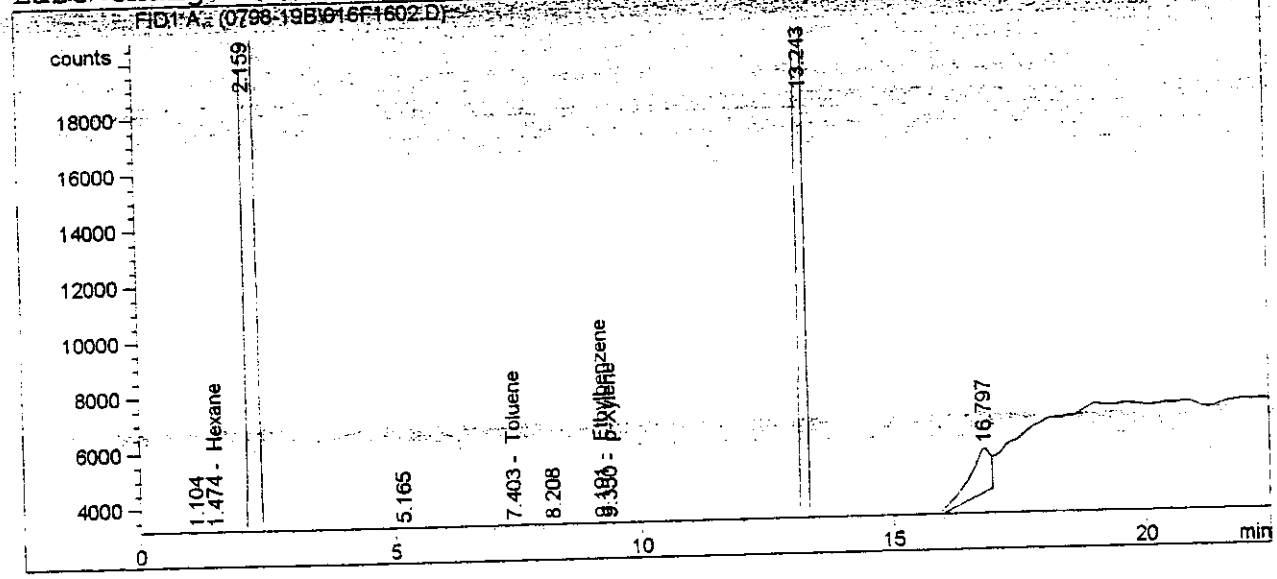
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\016F1602.D T-M18-R4 AbBH

==========

Injection Date : 8/1/98 2:04:14 AM
Sample Name : T-M18-R4 AbBH
Acq. Operator : bgp

Seq. Line : 16
Vial : 16
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.474	BB	728.30017	9.19566e-4	6.69720e-1		Hexane
5.409		-	-	-		Benzene
7.403	PB	1341.05078	8.30843e-4	1.11420		Toluene
9.191	PV	2270.17700	8.28951e-4	1.88187		Ethylbenzene
9.350	VB	879.62396	8.36380e-4	7.35699e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				4.40149		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

39

300

Teller 8/3/98 11:12:49 AM bgp

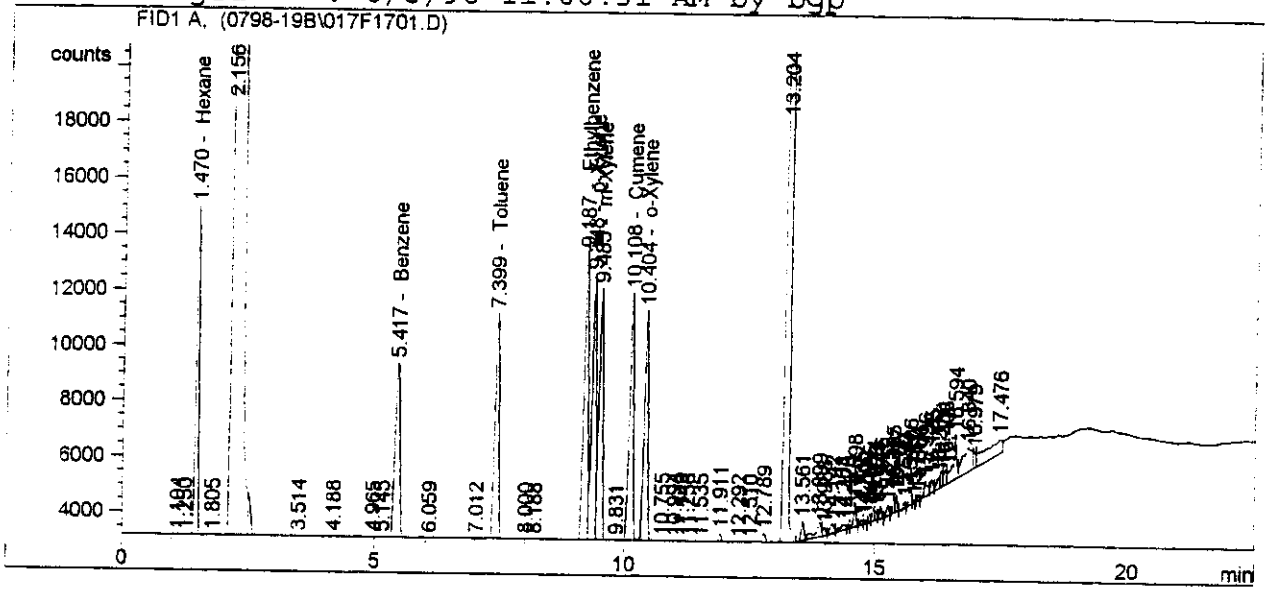
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\017F1701.D T-M18-R1 Ba+BbFH

==========

Injection Date : 8/1/98 2:34:28 AM
Sample Name : T-M18-R1 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 17
Vial : 17
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.470	VV	5.88468e4	8.93746e-4	52.59406		Hexane
5.417	VB	5.56530e4	8.01450e-4	44.60306		Benzene
7.399	VB	5.84696e4	7.85572e-4	45.93208		Toluene
9.187	BV	6.78597e4	7.78158e-4	52.80560		Ethylbenzene
9.348	VV	5.88443e4	7.87241e-4	46.32461		p-Xylene
9.485	VP	5.72491e4	7.84612e-4	44.91835		m-Xylene
10.108	VV	6.07160e4	8.50922e-4	51.66459		Cumene
10.404	VB	5.10703e4	7.61006e-4	38.86480		o-Xylene

Totals : 377.70714

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

301

40

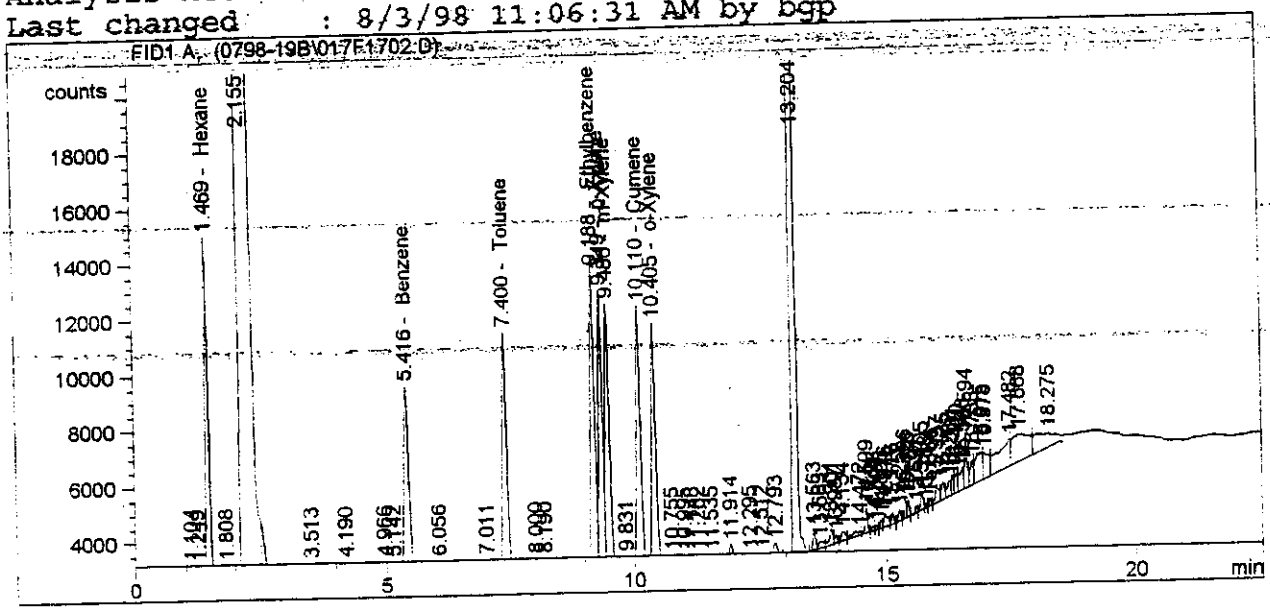
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\017F1702.D T-M18-R1 Ba+BbFH

==========

Injection Date : 8/1/98 3:04:35 AM
Sample Name : T-M18-R1 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 17
Vial : 17
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	VV	5.87134e4	8.93755e-4	52.47540		Hexane
5.416	VB	5.63163e4	8.01356e-4	45.12944		Benzene
7.400	VB	5.87247e4	7.85534e-4	46.13026		Toluene
9.188	BV	6.83843e4	7.78096e-4	53.20955		Ethylbenzene
9.349	VV	5.92682e4	7.87175e-4	46.65442		p-Xylene
9.486	VP	5.76456e4	7.84545e-4	45.22555		m-Xylene
10.110	VV	6.26236e4	8.50706e-4	53.27430		Cumene
10.405	VV	5.42974e4	7.60341e-4	41.28451		o-Xylene
Totals :				383.38342		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

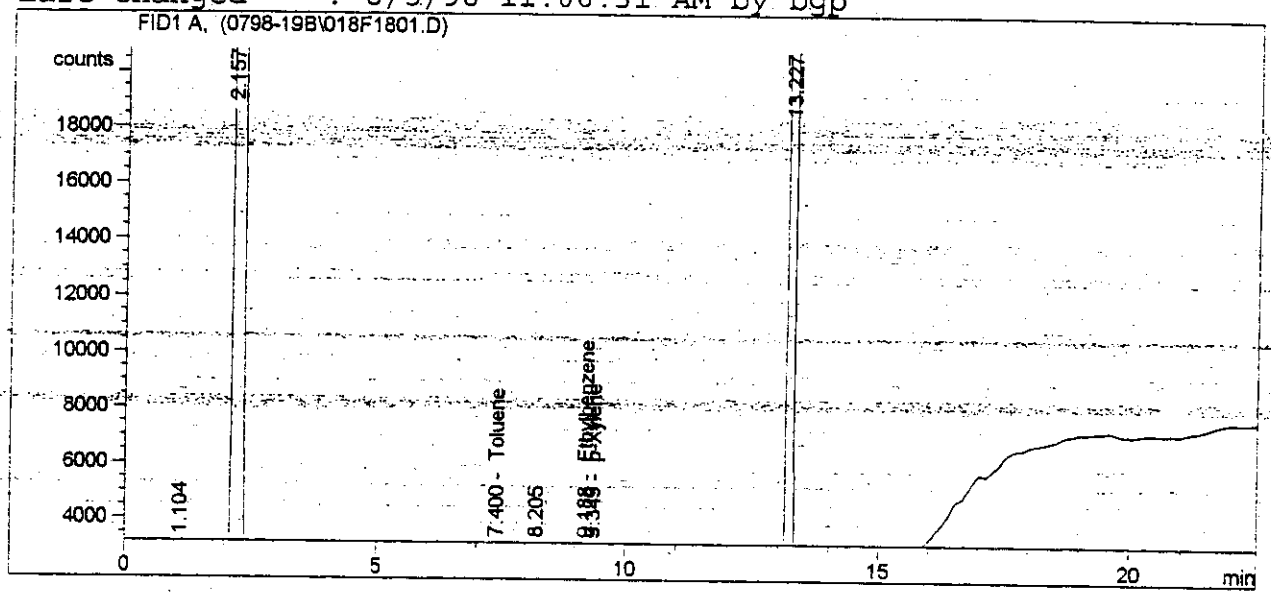
41

302

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\018F1801.D T-M18-R1 BbBH

==========

Injection Date : 8/1/98 3:34:40 AM Seq. Line : 18
Sample Name : T-M18-R1 BbBH Vial : 18
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl
Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.400	PP	1245.60657	8.30843e-4	1.03490		Toluene
9.188	PV	2939.87476	8.28951e-4	2.43701		Ethylbenzene
9.349	VB	1138.29846	8.36380e-4	9.52050e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.42397

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

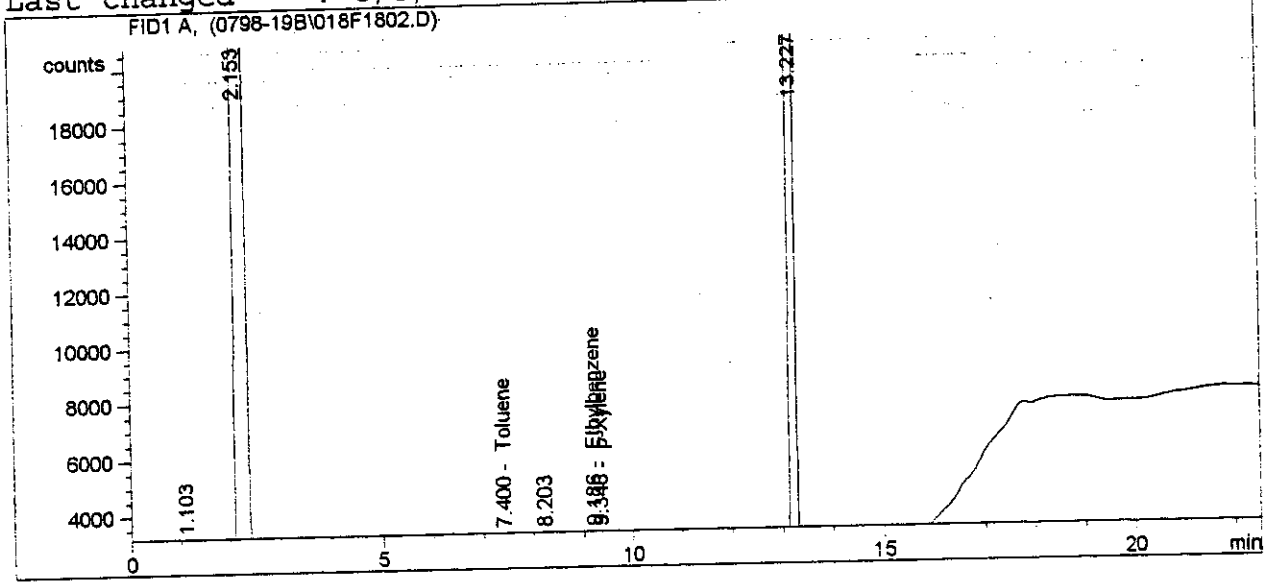
42

303

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\018F1802.D T-M18-R1 BbBH

Injection Date	: 8/1/98 4:04:48 AM	Seq. Line	: 18
Sample Name	: T-M18-R1 BbBH	Vial	: 18
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.400	PB	1220.44141	8.30843e-4	1.01400		Toluene
9.186	PV	2931.23804	8.28951e-4	2.42985		Ethylbenzene
9.346	VB	1124.07080	8.36380e-4	9.40150e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				4.38400		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

43

304

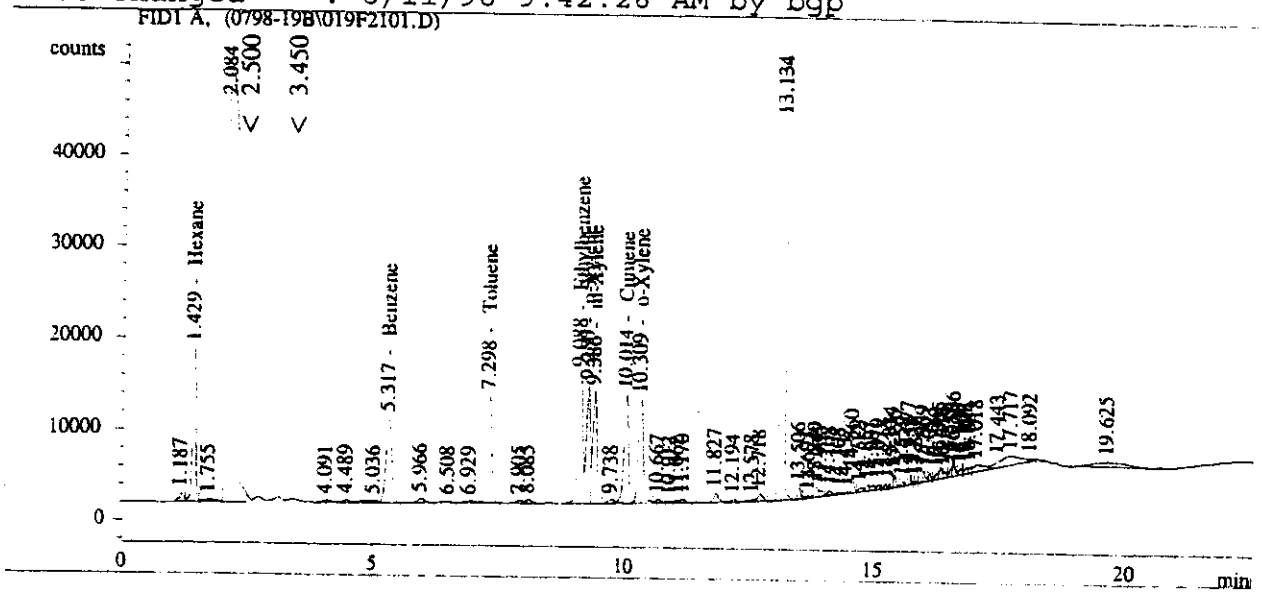
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\019F2101.D T-M18-R2 Ba+BbFH

==========

Injection Date : 8/2/98 10:24:30 AM
Sample Name : T-M18-R2 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 21
Vial : 19
Inj : 1
Inj Volume : 2 µl

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/11/98 9:42:26 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/11/98 9:38:54 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.429	VV	7.50164e4	8.92873e-4	66.98010		Hexane
5.317	VB	7.26226e4	7.99597e-4	58.06878		Benzene
7.298	VB	7.87055e4	7.83355e-4	61.65435		Toluene
9.088	BV	8.88007e4	7.76250e-4	68.93154		Ethylbenzene
9.250	VV	7.50438e4	7.85246e-4	58.92786		p-Xylene
9.386	VP	7.33562e4	7.82473e-4	57.39930		m-Xylene
10.014	VV	7.74209e4	8.49391e-4	65.76061		Cumene
10.309	VV	6.99144e4	7.57989e-4	52.99430		o-Xylene

Totals : 490.71684

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

==========

305

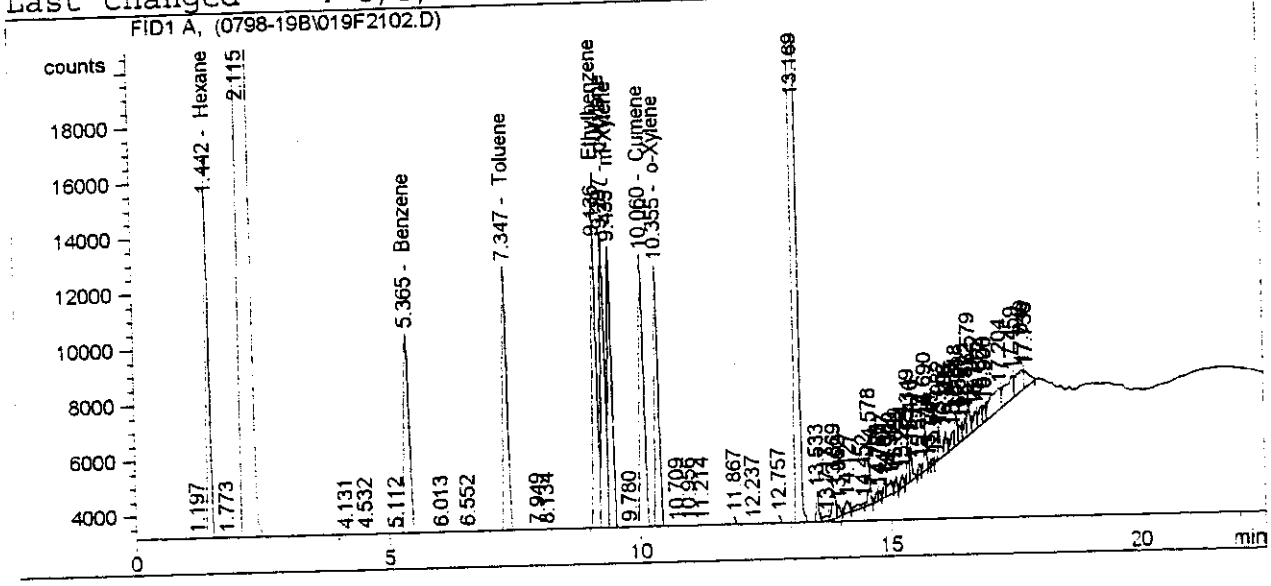
44

Teller 8/26/98 10:02:17 AM dmb

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\019F2102.D T-M18-R2 Ba+BbFH

Injection Date	: 8/2/98 10:54:06 AM	Seq. Line	: 21
Sample Name	: T-M18-R2 Ba+BbFH	Vial	: 19
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/3/98 11:04:16 AM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.442	VV	6.70176e4	8.93252e-4	59.86363		Hexane
5.365	VB	6.45477e4	8.00357e-4	51.66123		Benzene
7.347	VB	7.28601e4	7.83869e-4	57.11275		Toluene
9.136	BV	7.84683e4	7.77064e-4	60.97490		Ethylbenzene
9.297	VV	6.63411e4	7.86197e-4	52.15713		p-Xylene
9.435	VP	6.49026e4	7.83463e-4	50.84880		m-Xylene
10.060	VP	6.69182e4	8.50265e-4	56.89816		Cumene
10.355	VB	5.81525e4	7.59643e-4	44.17512		o-Xylene
Totals :				433.69173		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

45

306

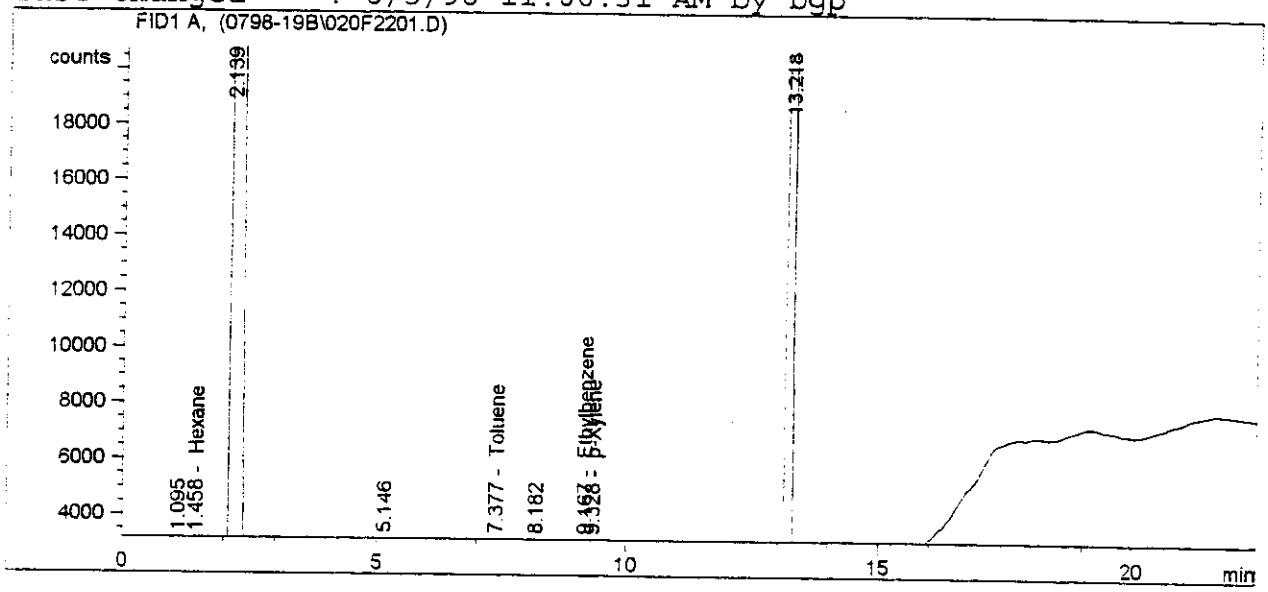
Teller 8/3/98 11:14:52 AM bgp

==========

Injection Date : 8/2/98 11:24:01 AM
Sample Name : T-M18-R2 BbBH
Acq. Operator : bgp

Seq. Line : 22
Vial : 20
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	PB	1105.82886	9.19566e-4	1.01688		Hexane
5.409		-	-	-		Benzene
7.377	BB	2765.96143	8.30843e-4	2.29808		Toluene
9.167	BV	3718.42993	8.28951e-4	3.08240		Ethylbenzene
9.328	VB	1331.17395	8.36380e-4	1.11337		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 7.51073

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

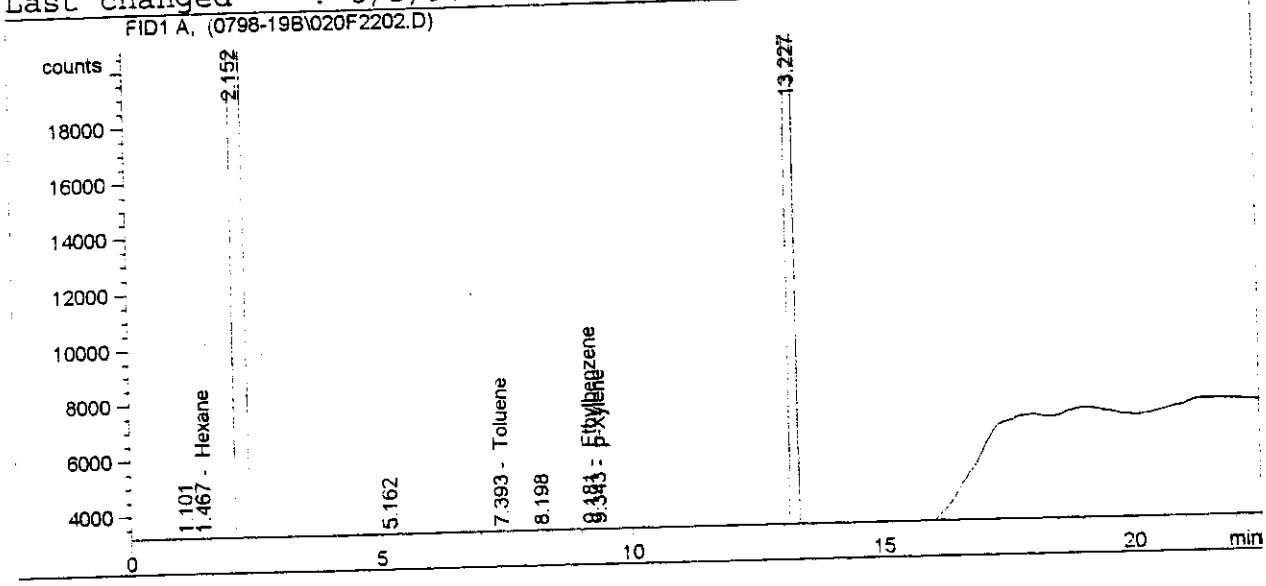
307

46

Injection Date : 8/2/98 11:54:02 AM
Sample Name : T-M18-R2 BbBH
Acq. Operator : bgp

Seq. Line : 22
Vial : 20
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467	PB	1047.90112	9.19566e-4	9.63614e-1		Hexane
5.409		-	-	-		Benzene
7.393	BB	2676.80029	8.30843e-4	2.22400		Toluene
9.181	PV	3594.99927	8.28951e-4	2.98008		Ethylbenzene
9.343	VB	1274.94312	8.36380e-4	1.06634		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				7.23403		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

47

308

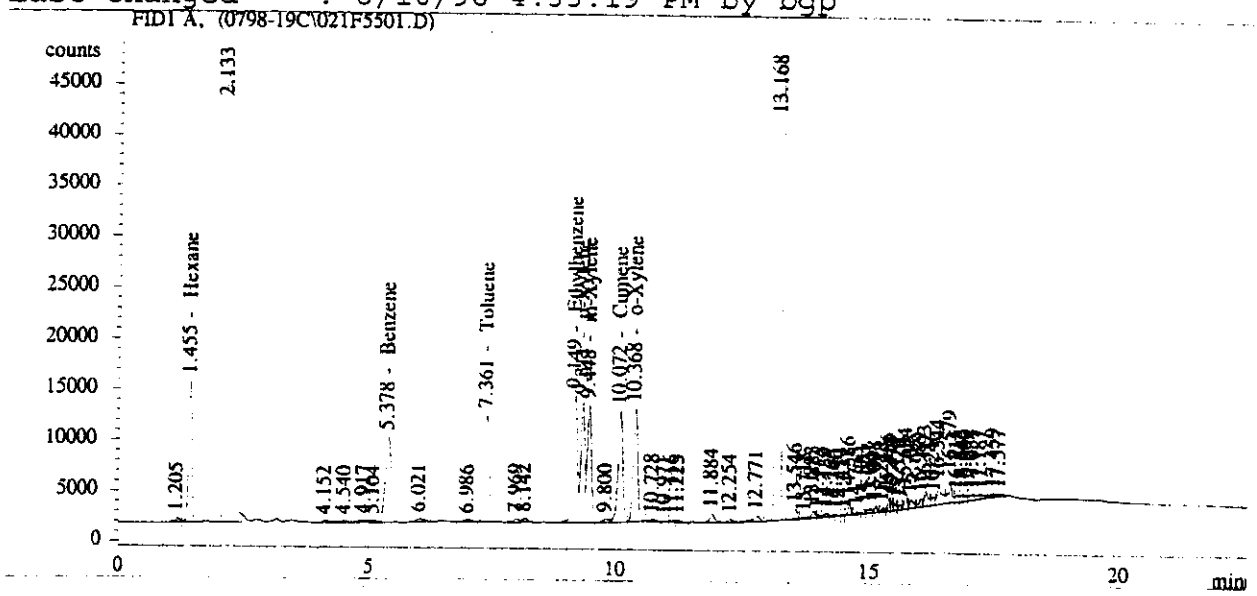
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\021F5501.D T-M18-R3 Ba+BbFH

==========

Injection Date : 8/6/98 12:31:42 PM
Sample Name : T-M18-R3 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 55
Vial : 21
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.455	VP	6.09983e4	8.47992e-4	51.72605		Hexane
5.378	VB	6.58453e4	7.56450e-4	49.80868		Benzene
7.361	VB	7.08737e4	7.43414e-4	52.68849		Toluene
9.149	BV	7.79383e4	7.37945e-4	57.51419		Ethylbenzene
9.311	VV	6.95989e4	7.44233e-4	51.79779		p-Xylene
9.448	VP	6.91366e4	7.41361e-4	51.25520		m-Xylene
10.072	VP	7.06465e4	8.06515e-4	56.97750		Cumene
10.368	VB	6.51023e4	7.16657e-4	46.65597		o-Xylene

Totals : 418.42386

Results obtained with enhanced integrator!
1 Warnings or Errors :

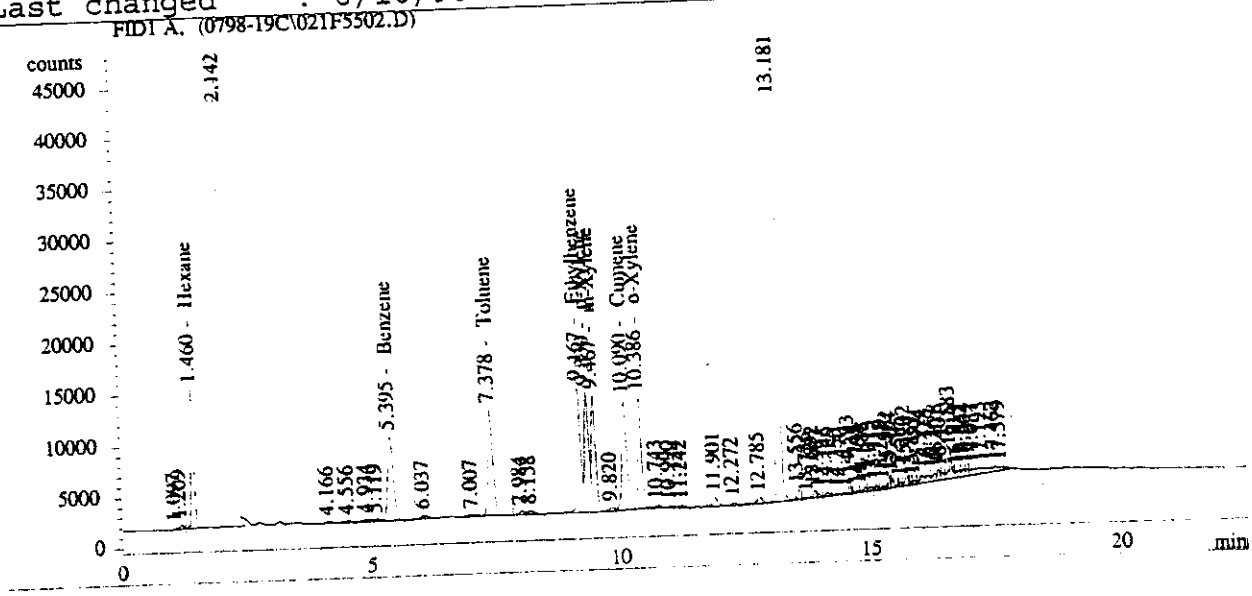
Warning : Calibration warnings (see calibration table listing)

309

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\021F5502.D T-M18-R3 Ba+BbFH

Injection Date	: 8/6/98 1:01:37 PM	Seq. Line	: 55
Sample Name	: T-M18-R3 Ba+BbFH	Vial	: 21
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	VP	5.97375e4	8.47735e-4	50.64158		Hexane
5.395	VB	6.43444e4	7.56251e-4	48.66051		Benzene
7.378	VB	6.92771e4	7.43247e-4	51.49000		Toluene
9.167	BV	7.61632e4	7.37815e-4	56.19438		Ethylbenzene
9.330	VV	6.81792e4	7.44095e-4	50.73180		p-Xylene
9.467	VP	6.74720e4	7.41196e-4	50.00997		m-Xylene
10.090	VP	6.90756e4	8.06360e-4	55.69978		Cumene
10.386	VB	6.36131e4	7.16492e-4	45.57822		o-Xylene
Totals :				409.00625		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

49

310

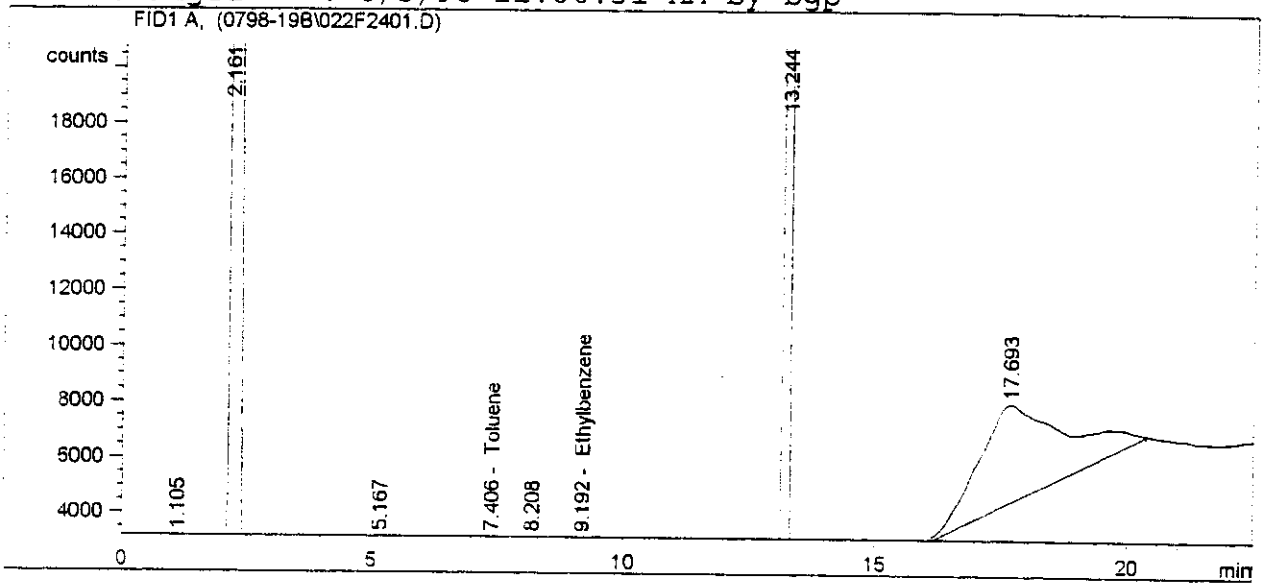
Teller 8/10/98 4:58:29 PM bgp

==========

Injection Date : 8/2/98 1:24:11 PM
Sample Name : T-M18-R3 BbBH
Acq. Operator : bgp

Seq. Line : 24
Vial : 22
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.406	BP	1354.67822	8.30843e-4	1.12553		Toluene
9.192	BV	1800.91504	8.28951e-4	1.49287		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 2.61840

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

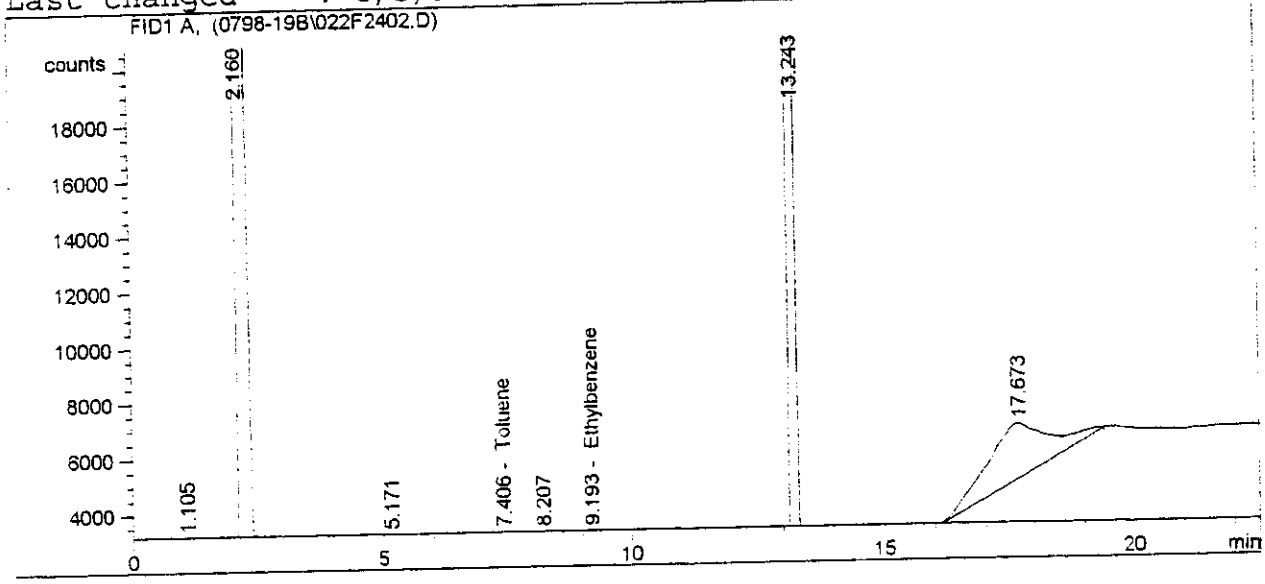
3/1

50

Injection Date : 8/2/98 1:54:11 PM
Sample Name : T-M18-R3 BbBH
Acq. Operator : bgp

Seq. Line : 24
Vial : 22
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.406	BP	1360.76868	8.30843e-4	1.13059		Toluene
9.193	PV	1774.91150	8.28951e-4	1.47131		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				2.60190		

Results obtained with enhanced integrator!
2 Warnings or Errors :

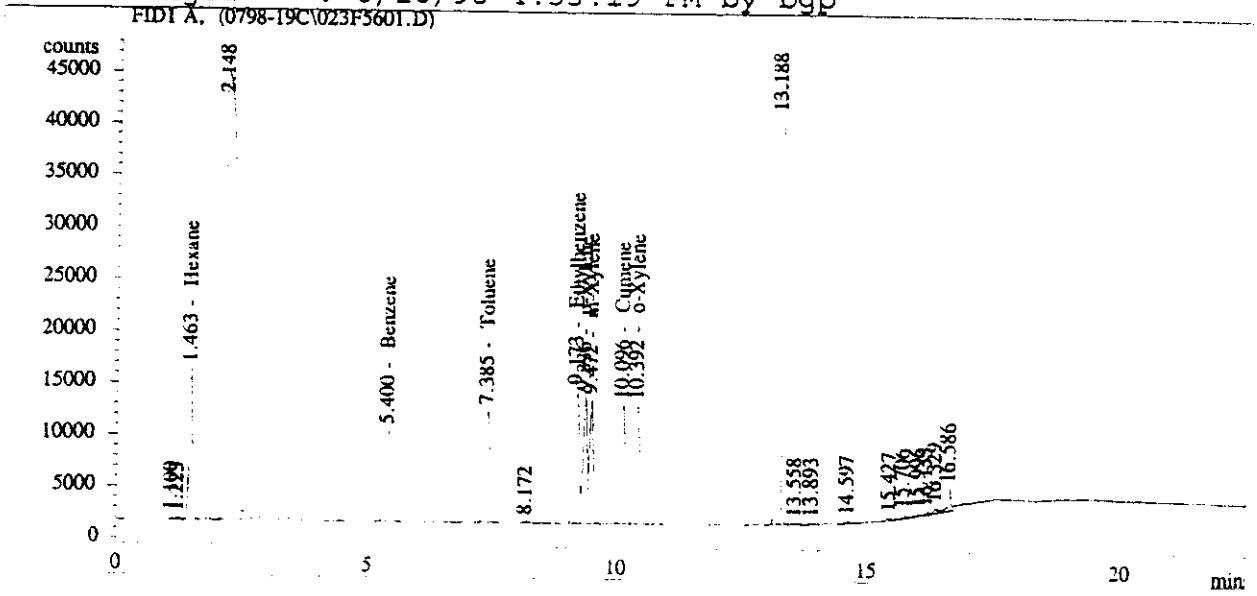
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

51

312

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\023F5601.D T-M18-R4 Ba+BbFH

Injection Date	: 8/6/98 1:31:32 PM	Seq. Line	: 56
Sample Name	: T-M18-R4 Ba+BbFH	Vial	: 23
Acq. Operator	: bgp	Inj	: 1
		Inj Volume	: 2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19A.M		
Last changed	: 8/3/98 3:07:34 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19D.M		
Last changed	: 8/10/98 4:33:19 PM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463	VP	6.31487e4	8.48407e-4	53.57579		Hexane
5.400	BB	6.72259e4	7.56625e-4	50.86477		Benzene
7.385	BB	7.15840e4	7.43486e-4	53.22172		Toluene
9.173	BV	7.67611e4	7.37860e-4	56.63891		Ethylbenzene
9.336	VV	7.02794e4	7.44297e-4	52.30871		p-Xylene
9.472	VP	7.04534e4	7.41486e-4	52.24024		m-Xylene
10.096	BV	6.98334e4	8.06436e-4	56.31616		Cumene
10.392	VB	6.66174e4	7.16817e-4	47.75247		o-Xylene
Totals :				422.91876		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

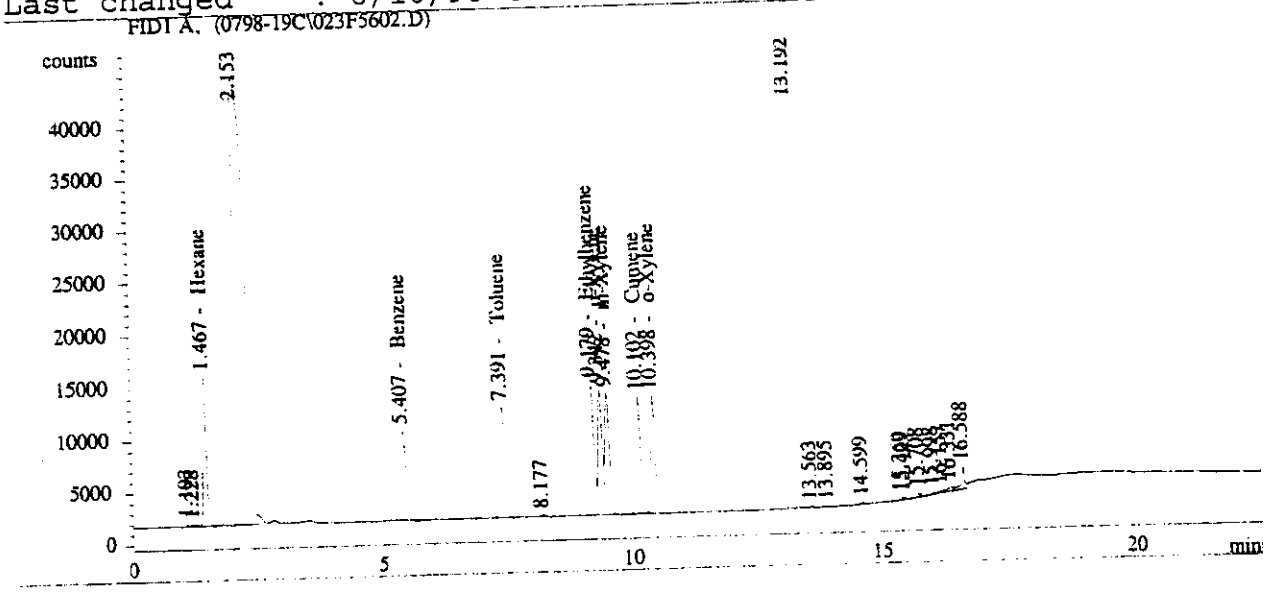
52

3/3

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\023F5602.D T-M18-R4 Ba+BbFH

Injection Date	: 8/6/98 2:01:34 PM	Seq. Line	: 56
Sample Name	: T-M18-R4 Ba+BbFH	Vial	: 23
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467	VP	6.26610e4	8.48315e-4	53.15629		Hexane
5.407	BB	6.65805e4	7.56544e-4	50.37111		Benzene
7.391	BB	7.06725e4	7.43394e-4	52.53748		Toluene
9.179	BV	7.56775e4	7.37779e-4	55.83328		Ethylbenzene
9.342	VV	6.93873e4	7.44213e-4	51.63894		p-Xylene
9.478	VB	6.93255e4	7.41379e-4	51.39647		m-Xylene
10.102	BV	6.87954e4	8.06331e-4	55.47188		Cumene
10.398	VB	6.56323e4	7.16714e-4	47.03956		o-Xylene
Totals :				417.44501		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

53

314

Teller 8/10/98 4:58:55 PM bgp

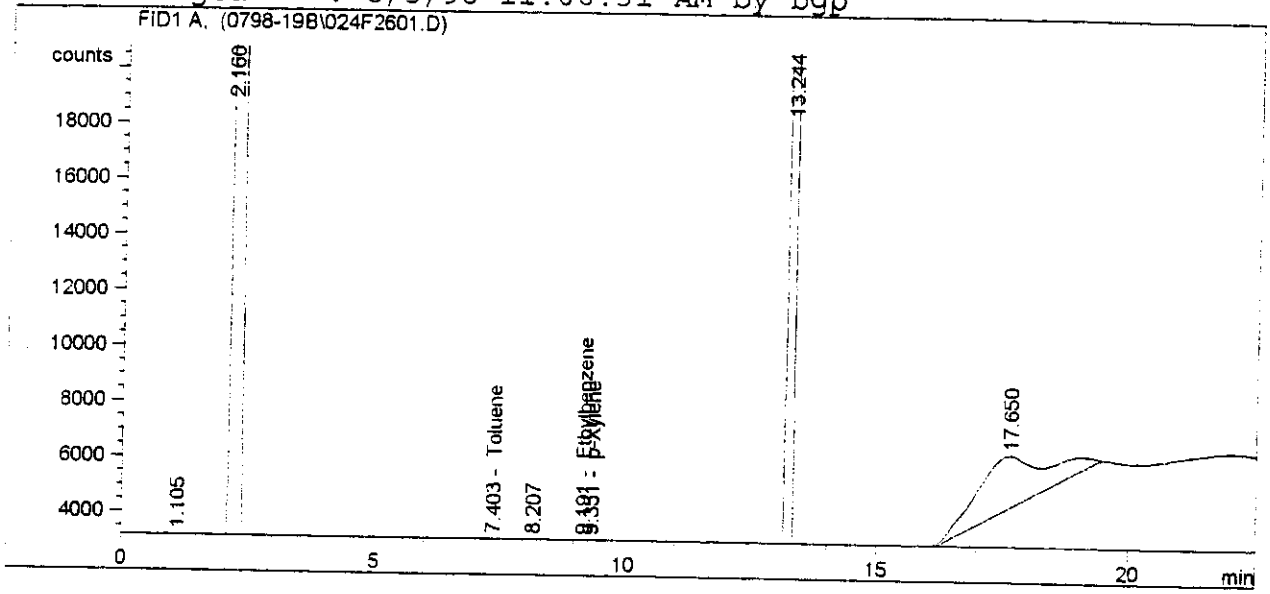
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\024F2601.D T-M18-R4 BbBH

==========

Injection Date : 8/2/98 3:24:19 PM
Sample Name : T-M18-R4 BbBH
Acq. Operator : bgp

Seq. Line : 26
Vial : 24
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.403	BB	1277.33398	8.30843e-4	1.06126		Toluene
9.191	PV	2670.78638	8.28951e-4	2.21395		Ethylbenzene
9.351	VB	1124.84509	8.36380e-4	9.40797e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.21601

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

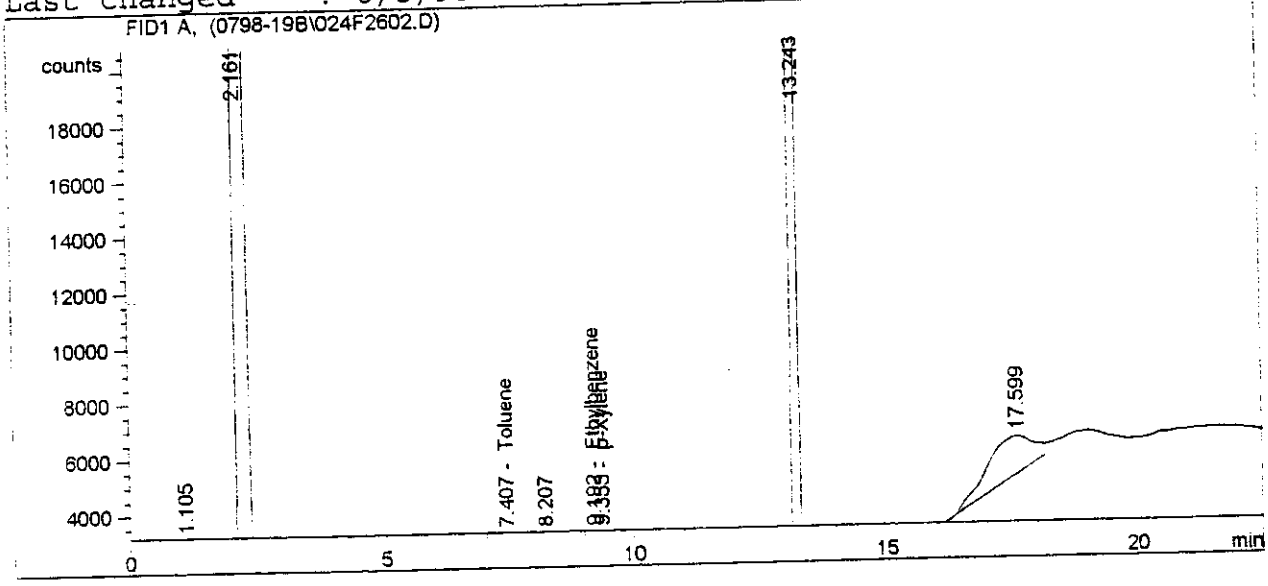
315

==========

Injection Date : 8/2/98 3:54:19 PM
Sample Name : T-M18-R4 BbBH
Acq. Operator : bgp

Seq. Line : 26
Vial : 24
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.407	BB	1256.14758	8.30843e-4	1.04366		Toluene
9.192	PV	2685.15796	8.28951e-4	2.22586		Ethylbenzene
9.353	VB	1185.61462	8.36380e-4	9.91624e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				4.26115		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

55

316

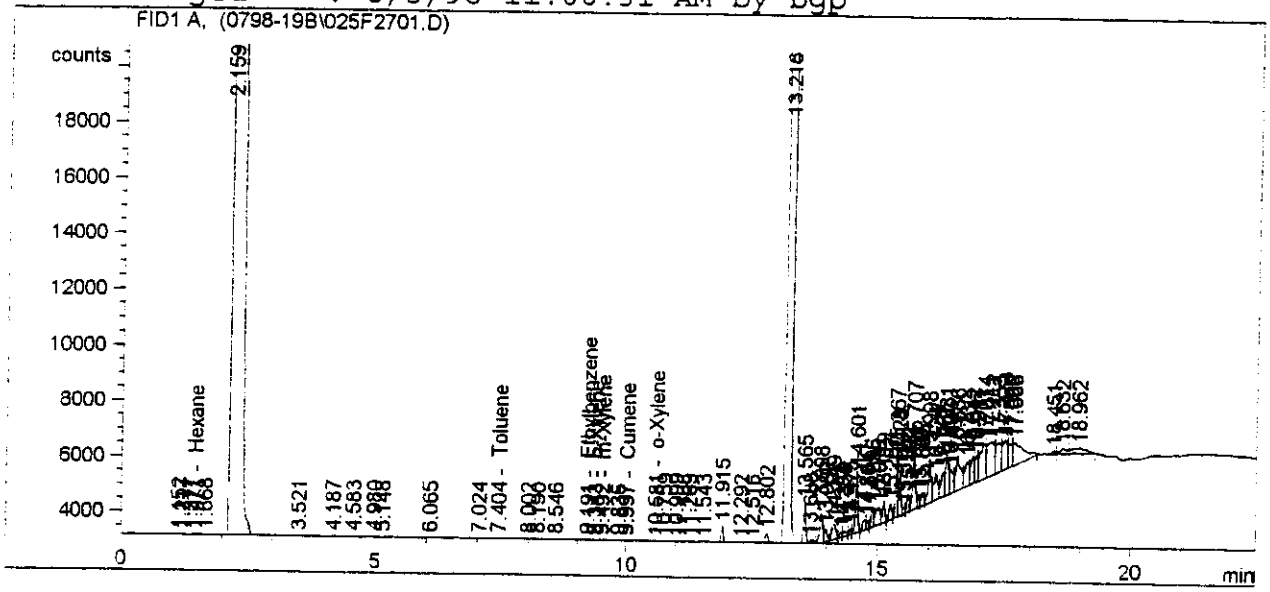
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\025F2701.D T-M18-FB Aa+AbFH

==========

Injection Date : 8/2/98 4:24:22 PM
Sample Name : T-M18-FB Aa+AbFH
Acq. Operator : bgp

Seq. Line : 27
Vial : 25
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.471	VP	2770.21680	9.19566e-4	2.54740		Hexane
5.409		-	-	-		Benzene
7.404	VB	5232.68848	8.30843e-4	4.34754		Toluene
9.191	VV	9896.30664	8.25552e-4	8.16991		Ethylbenzene
9.343	VV	2705.70215	8.36380e-4	2.26299		p-Xylene
9.492	VP	1177.06531	8.35032e-4	9.82887e-1		m-Xylene
9.997	VV	7023.66455	8.93826e-4	6.27794		Cumene
10.581	VV	4097.05811	8.10200e-4	3.31943		o-Xylene

Totals : 27.90811

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

3/9

Teller 8/3/98 11:17:06 AM bgp

56

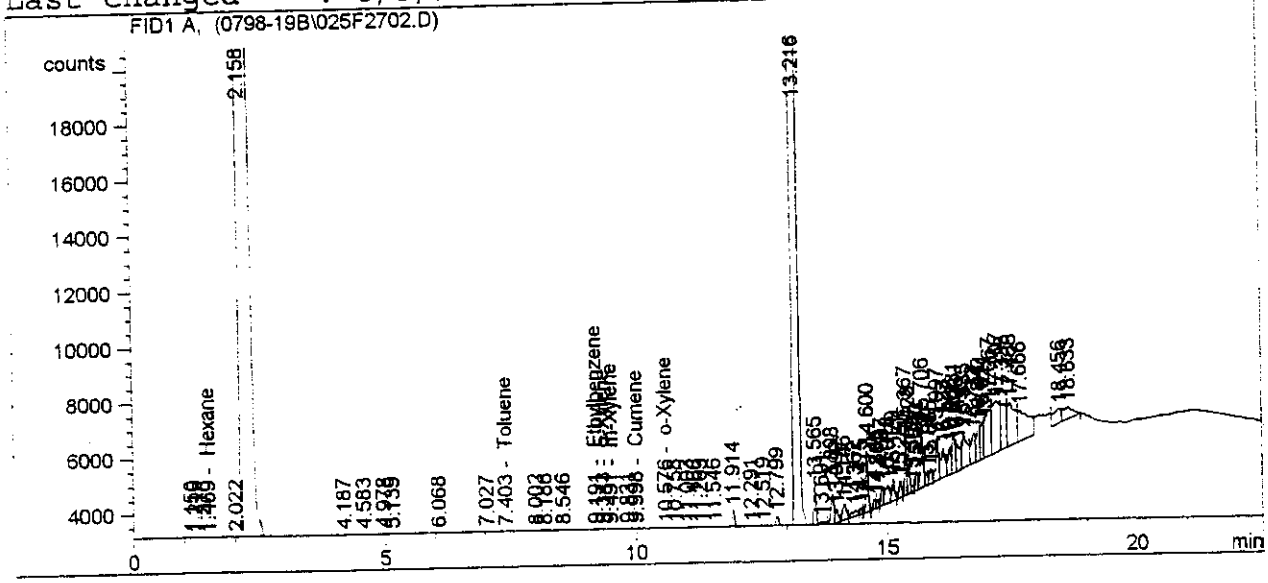
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\025F2702.D T-M18-FB Aa+AbFH

==========

Injection Date : 8/2/98 4:54:30 PM
Sample Name : T-M18-FB Aa+AbFH
Acq. Operator : bgp

Seq. Line : 27
Vial : 25
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	VV	3660.71289	9.19566e-4	3.36627		Hexane
5.409		-	-	-		Benzene
7.403	VB	5423.03467	8.30843e-4	4.50569		Toluene
9.191	VV	1.00167e4	8.24885e-4	8.26260		Ethylbenzene
9.343	VV	2701.98755	8.36380e-4	2.25989		p-Xylene
9.491	VP	1219.19104	8.35032e-4	1.01806		m-Xylene
9.998	VB	7002.34375	8.93826e-4	6.25888		Cumene
10.576	BV	4210.58203	8.10200e-4	3.41141		o-Xylene
Totals :				29.08280		

Results obtained with enhanced integrator!
2 Warnings or Errors :

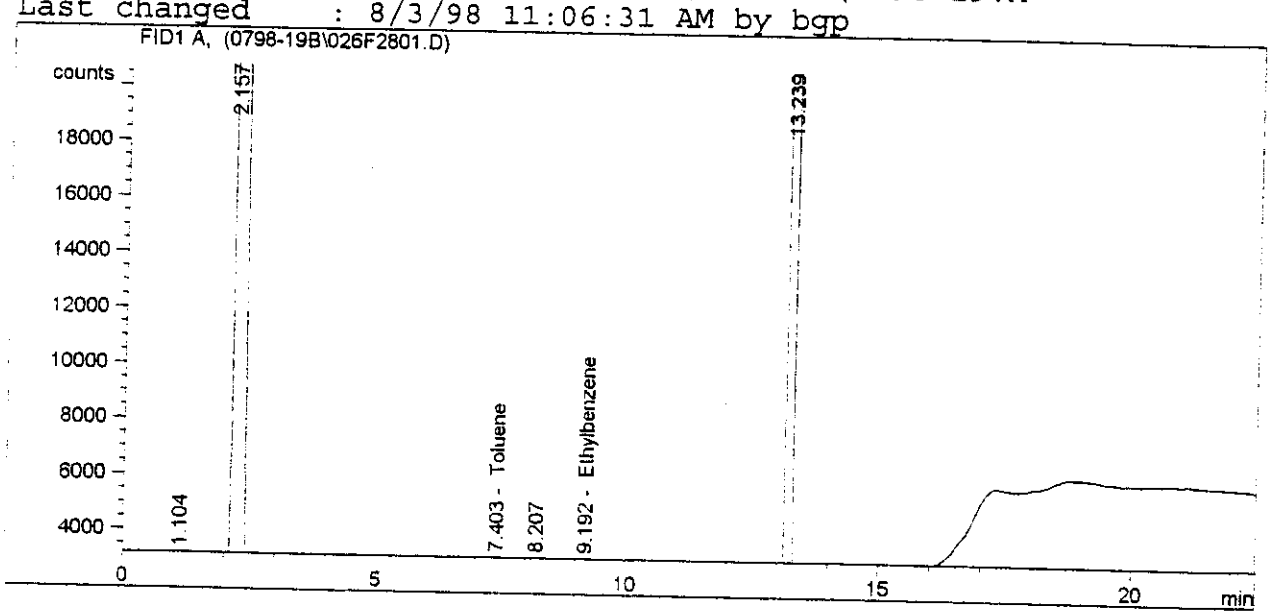
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

318
Teller 8/3/98 11:17:20 AM bgp

Injection Date : 8/2/98 5:24:36 PM
Sample Name : T-M18-FB AbBH
Acq. Operator : bgp

Seq. Line : 28
Vial : 26
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.403	BB	1576.58813	8.30843e-4	1.30990		Toluene
9.192	PV	1831.02161	8.28951e-4	1.51783		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				2.82772		

Results obtained with enhanced integrator!
2 Warnings or Errors :

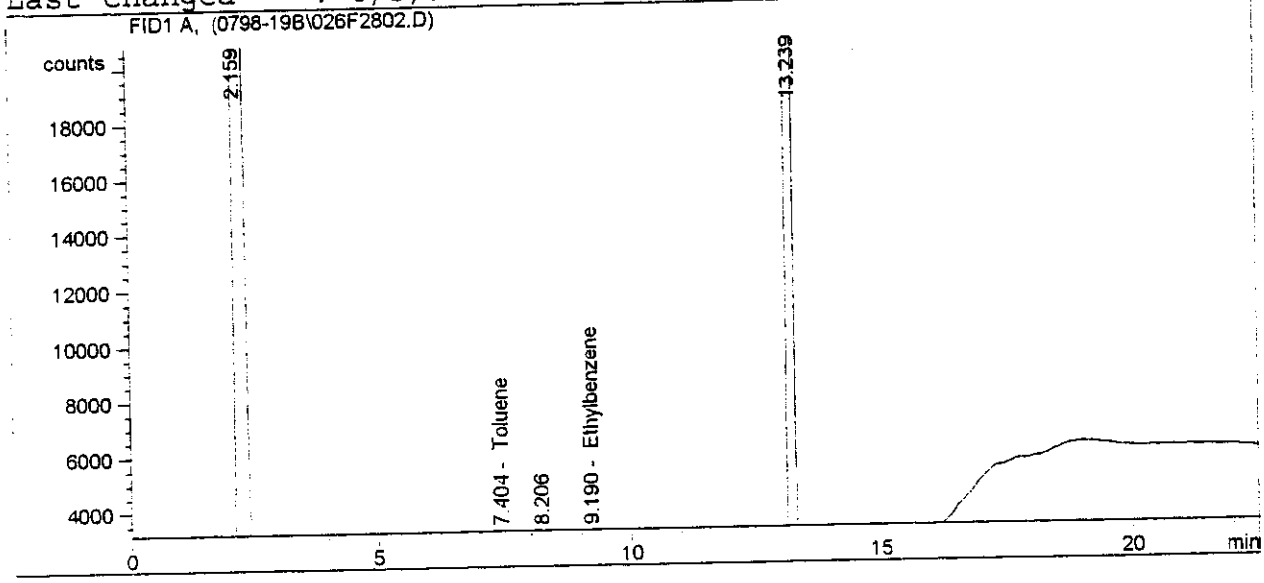
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

3/9

Injection Date : 8/2/98 5:54:41 PM
Sample Name : T-M18-FB AbBH
Acq. Operator : bgp

Seq. Line : 28
Vial : 26
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.404	PP	1562.13708	8.30843e-4	1.29789		Toluene
9.190	BV	1858.57507	8.28951e-4	1.54067		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				2.83856		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

59

320

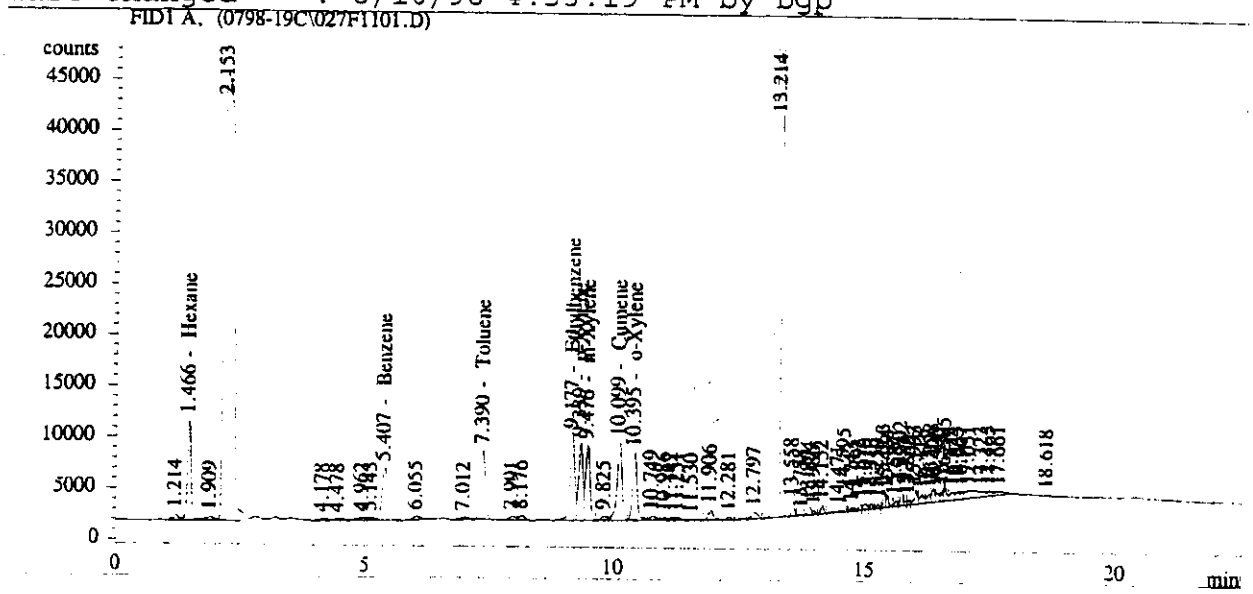
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\027F1101.D T-M18-FB Ba+BbFH

==========

Injection Date : 8/5/98 12:10:10 AM
Sample Name : T-M18-FB Ba+BbFH
Acq. Operator : bgp

Seq. Line : 11
Vial : 27
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.466	VV	4.49669e4	8.43649e-4	37.93631		Hexane
5.407	VB	4.01662e4	7.51006e-4	30.16502		Benzene
7.390	VB	4.49701e4	7.39248e-4	33.24408		Toluene
9.177	BV	5.32726e4	7.35371e-4	39.17516		Ethylbenzene
9.339	VV	4.39774e4	7.40377e-4	32.55988		p-Xylene
9.476	VP	4.33943e4	7.37399e-4	31.99887		m-Xylene
10.099	VV	5.09340e4	8.03869e-4	40.94422		Cumene
10.395	VV	4.09096e4	7.12489e-4	29.14760		o-Xylene

Totals : 275.17115

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

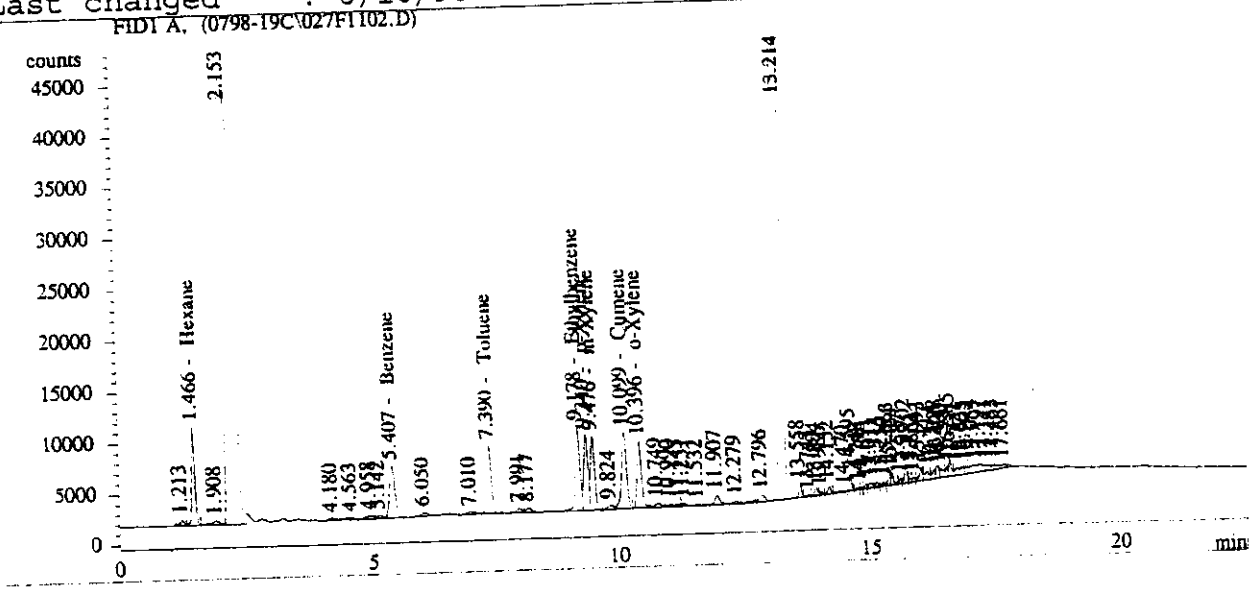
60

321

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\027F1102.D T-M18-FB Ba+BbFH

Injection Date	: 8/5/98 12:40:04 AM	Seq. Line	: 11
Sample Name	: T-M18-FB Ba+BbFH	Vial	: 27
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.466	VV	4.47164e4	8.43556e-4	37.72077		Hexane
5.407	VB	3.98394e4	7.50891e-4	29.91506		Benzene
7.390	VB	4.44921e4	7.39126e-4	32.88528		Toluene
9.178	BV	5.25585e4	7.35261e-4	38.64420		Ethylbenzene
9.340	VV	4.33198e4	7.40218e-4	32.06608		p-Xylene
9.476	VP	4.27056e4	7.37227e-4	31.48376		m-Xylene
10.099	VV	4.99227e4	8.03677e-4	40.12174		Cumene
10.396	VV	4.00927e4	7.12260e-4	28.55646		o-Xylene
Totals :				271.39334		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

61

322

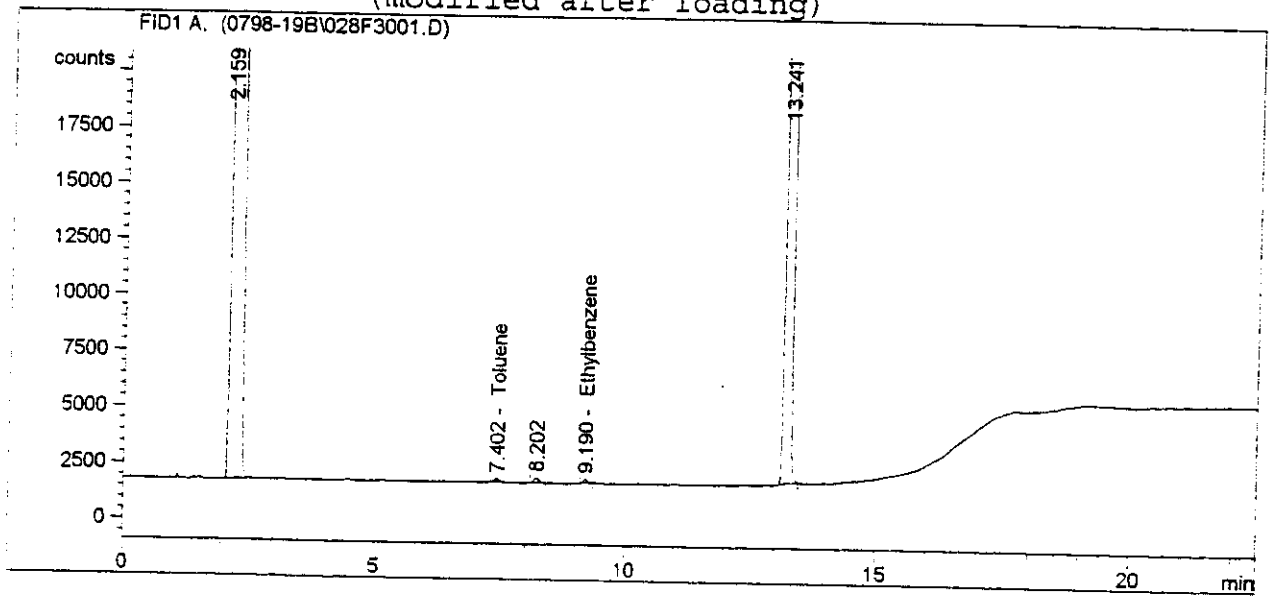
Teller 8/10/98 4:39:57 PM bgp

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\028F3001.D T-M18-FB BbBH

Injection Date : 8/2/98 7:24:59 PM
Sample Name : T-M18-FB BbBH
Acq. Operator : bgp

Seq. Line : 30
Vial : 28
Inj : 1
Inj Volume : 2 µl

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:19:03 PM by bgp
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.402	BP	1089.38684	8.30843e-4	9.05110e-1		Toluene
9.190	PB	1195.99377	8.28951e-4	9.91420e-1		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 1.89653

Results obtained with enhanced integrator!
2 Warnings or Errors :

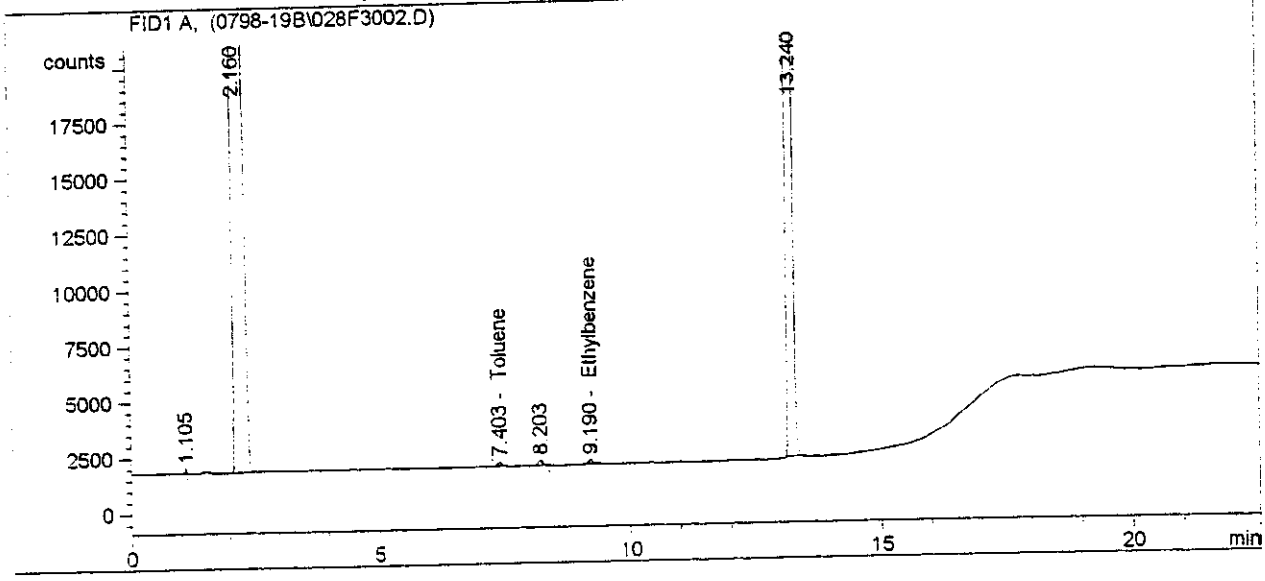
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

323

Injection Date : 8/2/98 7:55:00 PM
Sample Name : T-M18-FB BbBH
Acq. Operator : bgp

Seq. Line : 30
Vial : 28
Inj : 2
Inj Volume : 2 µl

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:19:34 PM by bgp
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.403	BB	1089.69263	8.30843e-4	9.05364e-1		Toluene
9.190	PB	1190.57117	8.28951e-4	9.86925e-1		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				1.89229		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

63

324

Method: E:\HPCHEM\TELLER\METHODS\0798-19.M of 8/3/98 12:59:48 PM

Calibration Table

Calib. Data Modified : 8/3/98 11:04:16 AM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 5.000 %
Abs. Reference Window : 0.080 min
Rel. Non-ref. Window : 5.000 %
Abs. Non-ref. Window : 0.080 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Connected
Weight : Linear

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,

RetTime [min]	Sig	Lvl	Amount [ug/kg]	Area	Amt/Area	Ref	Grp	Name
1.467	1	1	7.34000	8639.78955	8.49558e-4			Hexane
		2	16.28000	1.73696e4	9.37270e-4			
		3	40.60000	4.34487e4	9.34436e-4			
		4	80.70000	8.96983e4	8.99683e-4			
		5	198.90000	2.23496e5	8.89948e-4			
		6	388.00000	4.38292e5	8.85255e-4			
5.409	1	1	7.85000	1.00166e4	7.83699e-4			Benzene
		2	17.43000	2.06058e4	8.45876e-4			
		3	43.40000	5.24541e4	8.27391e-4			
		4	86.40000	1.07401e5	8.04462e-4			
		5	213.00000	2.68902e5	7.92111e-4			
		6	416.00000	5.25387e5	7.91797e-4			
7.390	1	1	7.77000	1.00433e4	7.73649e-4			Toluene
		2	17.23000	2.06467e4	8.34517e-4			
		3	42.90000	5.30103e4	8.09277e-4			
		4	85.50000	1.08566e5	7.87536e-4			
		5	210.60000	2.71226e5	7.76475e-4			
		6	411.00000	5.30103e5	7.75321e-4			
9.176	1	1	7.73000	1.00069e4	7.72470e-4			Ethylbenzene
		2	17.13000	2.06647e4	8.28948e-4			

325

Method: E:\HPCHEM\TELLER\METHODS\0798-19.M of 8/3/98 12:59:48 PM

RetTime [min]	Sig	Lvl	Amount [ug/kg]	Area	Amt/Area	Ref	Grp	Name
		3	42.70000	5.31914e4	8.02762e-4			
		4	85.00000	1.09014e5	7.79714e-4			
		5	209.30000	2.71276e5	7.71540e-4			
		6	409.00000	5.32599e5	7.67932e-4			
9.338	1	1	7.79000	9969.17383	7.81409e-4			p-Xylene
		2	17.27000	2.06642e4	8.35745e-4			
		3	43.00000	5.30487e4	8.10577e-4			
		4	85.70000	1.08863e5	7.87227e-4			
		5	211.00000	2.70931e5	7.78795e-4			
		6	412.00000	5.30736e5	7.76281e-4			
9.474	1	1	7.74000	9986.18457	7.75071e-4			m-Xylene
		2	17.15000	2.05831e4	8.33207e-4			
		3	42.80000	5.27025e4	8.12106e-4			
		4	85.10000	1.08440e5	7.84768e-4			
		5	209.60000	2.69599e5	7.77450e-4			
		6	409.00000	5.29878e5	7.71876e-4			
10.097	1	1	7.70000	9340.51563	8.24366e-4			Cumene
		2	17.07000	1.88207e4	9.06980e-4			
		3	42.60000	4.82708e4	8.82520e-4			
		4	84.70000	9.91906e4	8.53912e-4			
		5	208.60000	2.46706e5	8.45541e-4			
		6	407.00000	4.84356e5	8.40291e-4			
10.393	1	1	7.67000	1.01550e4	7.55295e-4			o-Xylene
		2	17.02000	2.10958e4	8.06795e-4			
		3	42.40000	5.41139e4	7.83533e-4			
		4	84.40000	1.11211e5	7.58919e-4			
		5	208.00000	2.76692e5	7.51737e-4			
		6	406.00000	5.43067e5	7.47606e-4			

3 Warnings or Errors :

Warning : Overlapping peak time windows at 9.176 min, signal 1
Warning : Overlapping peak time windows at 9.338 min, signal 1
Warning : Overlapping peak time windows at 10.097 min, signal 1

==========

Peak Sum Table

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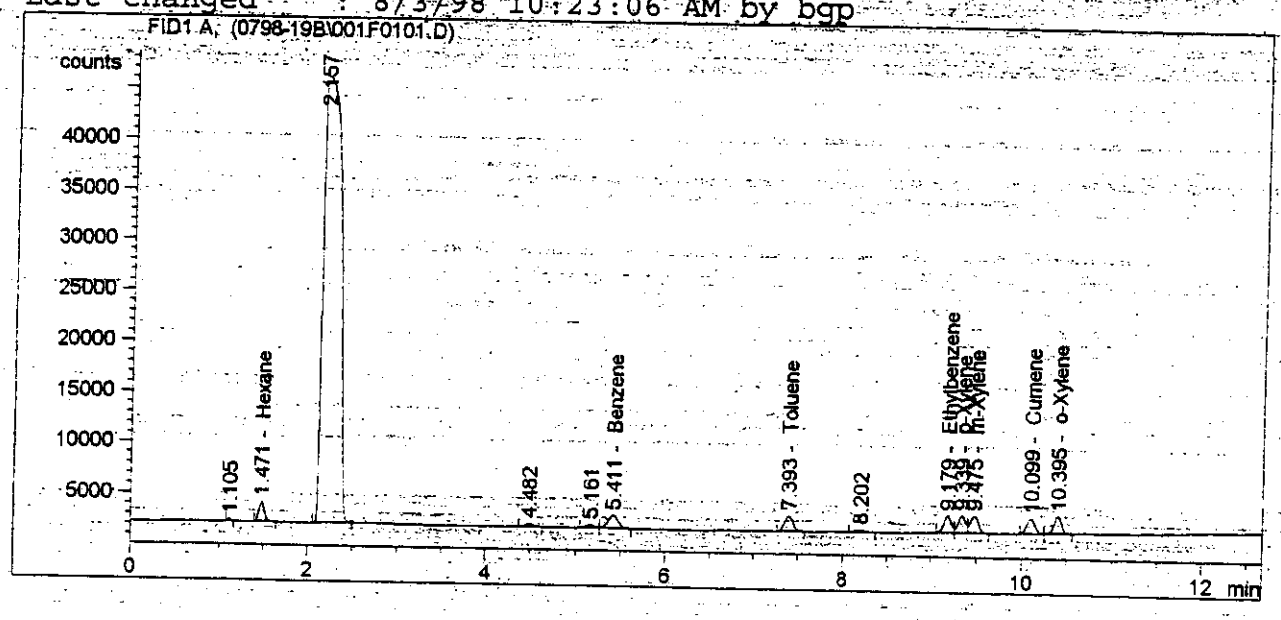
No Entries in table

==========

Injection Date : 7/31/98 1:16:52 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 1
Vial : 1
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.471	BP	8623.16504	9.17345e-4	7.91041		Hexane
5.411	VP	1.00033e4	8.37636e-4	8.37917		Benzene
7.393	BP	9968.09863	8.27512e-4	8.24872		Toluene
9.179	BV	9950.80371	8.25248e-4	8.21188		Ethylbenzene
9.339	VV	9940.78320	8.32698e-4	8.27767		p-Xylene
9.475	VB	9984.49902	8.30721e-4	8.29433		m-Xylene
10.099	BP	9146.92871	8.90917e-4	8.14915		Cumene
10.395	VB	1.01561e4	8.06101e-4	8.18685		o-Xylene

Totals : 65.65820

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

327

66

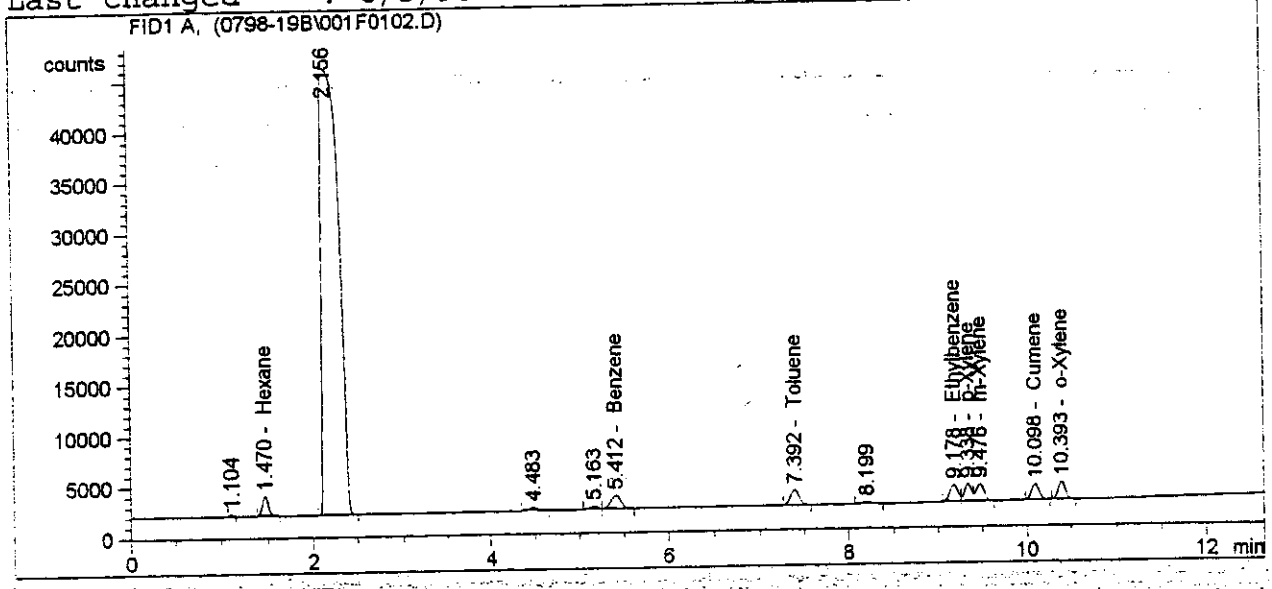
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\001F0102.D gc-14 pg 53 #1

==========

Injection Date : 7/31/98 1:34:08 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 1
Vial : 1
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.470	BB	8656.41406	9.17239e-4	7.94000		Hexane
5.412	VB	1.00299e4	8.37520e-4	8.40021		Benzene
7.392	BP	1.01185e4	8.26761e-4	8.36559		Toluene
9.178	BV	1.00629e4	8.24633e-4	8.29822		Ethylbenzene
9.338	VV	9997.56445	8.32388e-4	8.32185		p-Xylene
9.476	VP	9987.87012	8.30702e-4	8.29695		m-Xylene
10.098	BB	9534.10254	8.89005e-4	8.47586		Cumene
10.393	BB	1.01538e4	8.06114e-4	8.18515		o-Xylene

Totals : 66.28382

Results obtained with enhanced integrator!
1 Warnings or Errors :

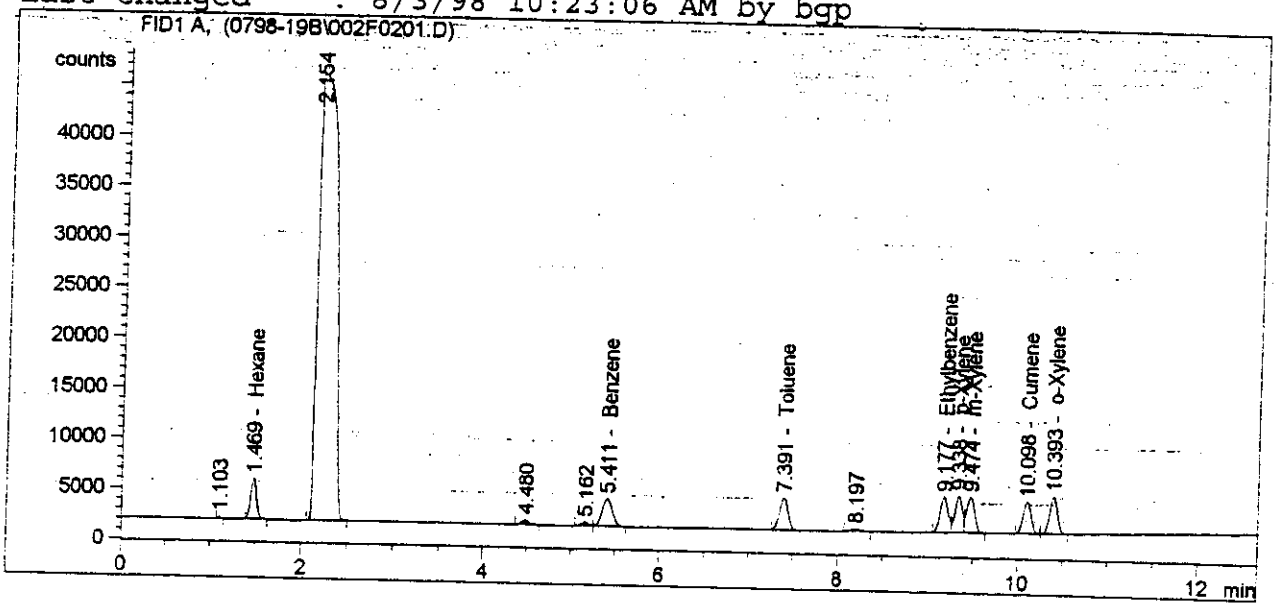
Warning : Calibration warnings (see calibration table listing)

67

328

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\002F0201.D gc-14 pg 53 #2

Injection Date	: 7/31/98 1:51:15 PM	Seq. Line :	2
Sample Name	: gc-14 pg 53 #2	Vial :	2
Acq. Operator	: bgp	Inj :	1
		Inj. Volume :	2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19B.M		
Last changed	: 7/31/98 1:13:37 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19.M		
Last changed	: 8/3/98 10:23:06 AM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/3/98 10:05:25 AM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	BB	1.74008e4	9.03397e-4	15.71980		Hexane
5.411	VB	2.06535e4	8.14888e-4	16.83026		Benzene
7.391	BP	2.07118e4	8.01285e-4	16.59603		Toluene
9.177	BV	2.07491e4	7.96530e-4	16.52731		Ethylbenzene
9.338	VV	2.07433e4	8.04213e-4	16.68206		p-Xylene
9.474	VB	2.06257e4	8.01907e-4	16.53988		m-Xylene
10.098	BV	1.89469e4	8.66561e-4	16.41868		Cumene
10.393	VB	2.12109e4	7.76764e-4	16.47584		o-Xylene
Totals :				131.78985		

Results obtained with enhanced integrator!
1 Warnings or Errors :

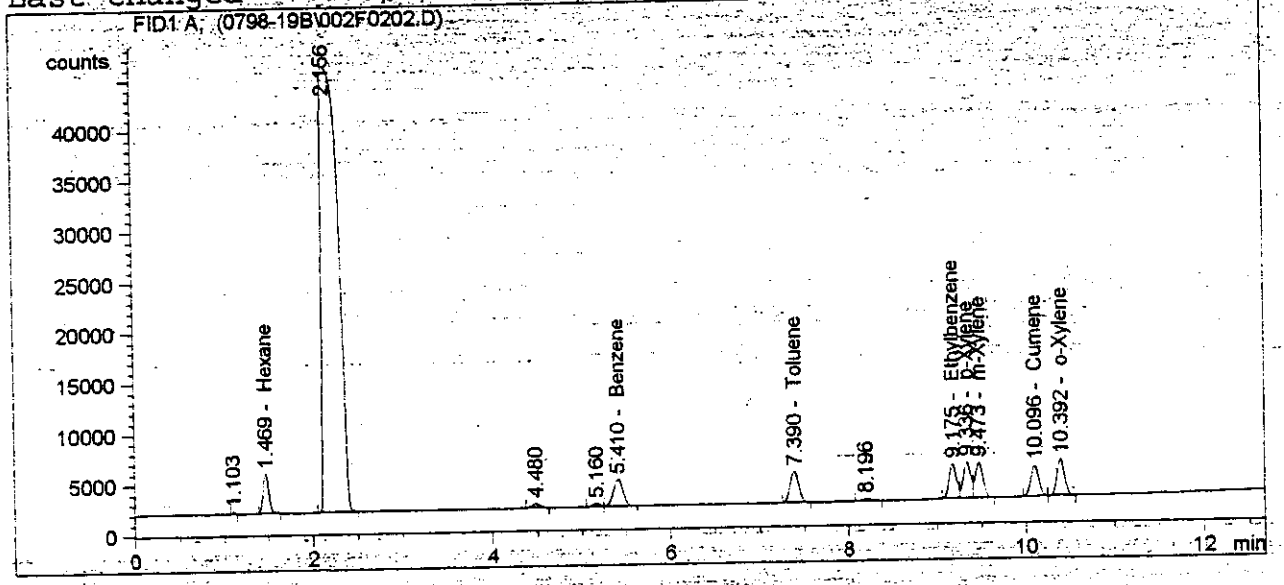
Warning : Calibration warnings (see calibration table listing)

329 68

Injection Date : 7/31/98 2:08:35 PM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 2
Vial : 2
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	BB	1.73384e4	9.03446e-4	15.66431		Hexane
5.410	VP	2.05582e4	8.14987e-4	16.75467		Benzene
7.390	BP	2.05816e4	8.01439e-4	16.49489		Toluene
9.175	BV	2.05803e4	7.96747e-4	16.39734		Ethylbenzene
9.336	VV	2.05850e4	8.04415e-4	16.55891		p-Xylene
9.473	VB	2.05406e4	8.02019e-4	16.47392		m-Xylene
10.096	BV	1.86945e4	8.66868e-4	16.20564		Cumene
10.392	VB	2.09807e4	7.77060e-4	16.30329		o-Xylene
Totals :				130.85297		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

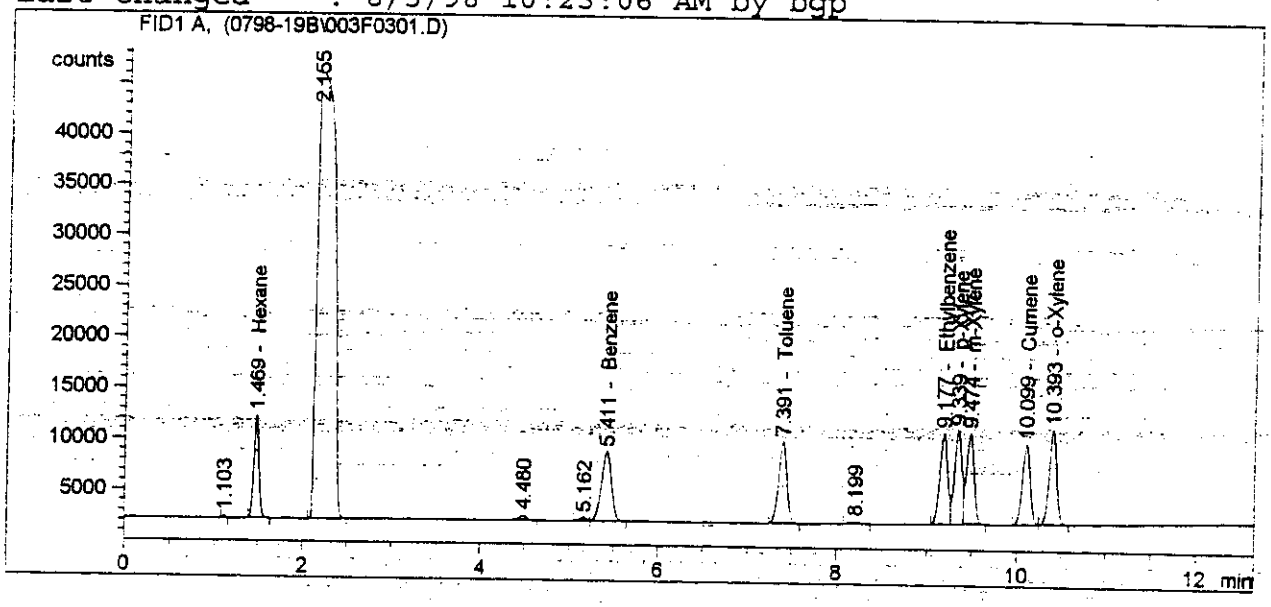
69

330

Injection Date : 7/31/98 2:25:44 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 3
Vial : 3
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	BB	4.34487e4	8.95182e-4	38.89447		Hexane
5.411	VB	5.24541e4	8.01933e-4	42.06467		Benzene
7.391	BB	5.30103e4	7.86459e-4	41.69041		Toluene
9.177	BV	5.31914e4	7.80390e-4	41.50999		Ethylbenzene
9.339	VV	5.30487e4	7.88250e-4	41.81562		p-Xylene
9.474	VP	5.27025e4	7.85452e-4	41.39529		m-Xylene
10.099	BV	4.82708e4	8.52751e-4	41.16300		Cumene
10.393	VP	5.41139e4	7.60376e-4	41.14692		o-Xylene

Totals : 329.68038

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

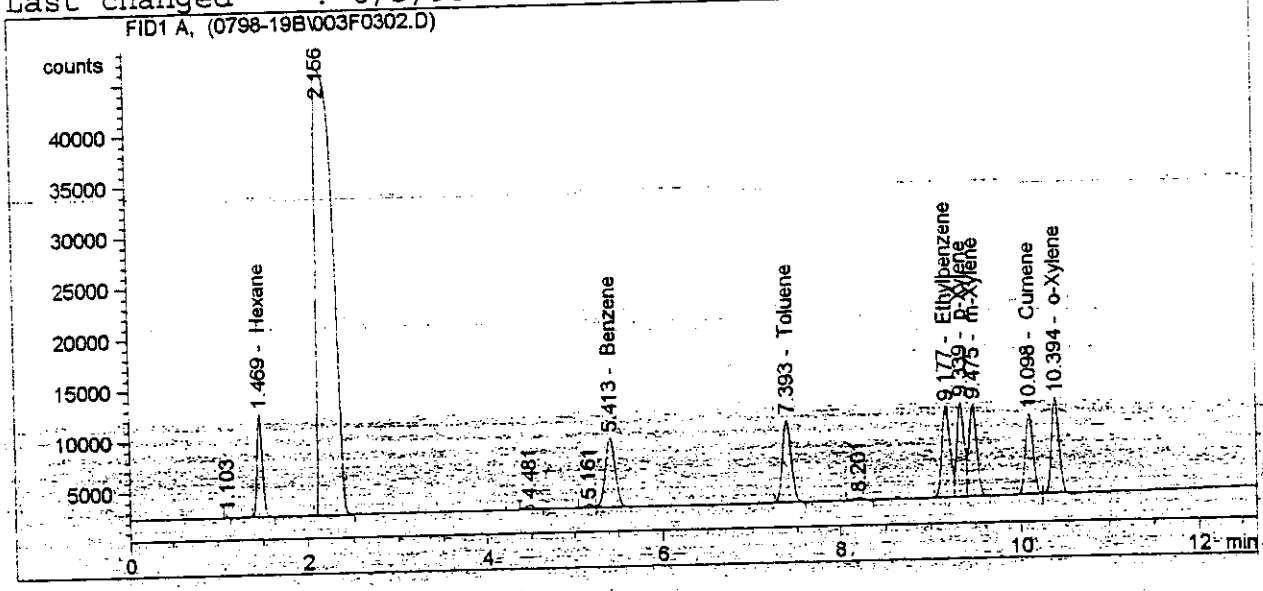
831

70

Injection Date : 7/31/98 2:42:56 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 3
Vial : 3
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	BP	4.34285e4	8.95184e-4	38.87648		Hexane
5.413	VP	5.24734e4	8.01930e-4	42.08000		Benzene
7.393	BB	5.32158e4	7.86423e-4	41.85013		Toluene
9.177	BV	5.32959e4	7.80369e-4	41.59047		Ethylbenzene
9.339	VV	5.31714e4	7.88227e-4	41.91110		p-Xylene
9.475	VP	5.29870e4	7.85396e-4	41.61579		m-Xylene
10.098	BV	4.83934e4	8.52728e-4	41.26639		Cumene
10.394	VB	5.43165e4	7.60337e-4	41.29883		o-Xylene
Totals :				330.48920		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

71

332

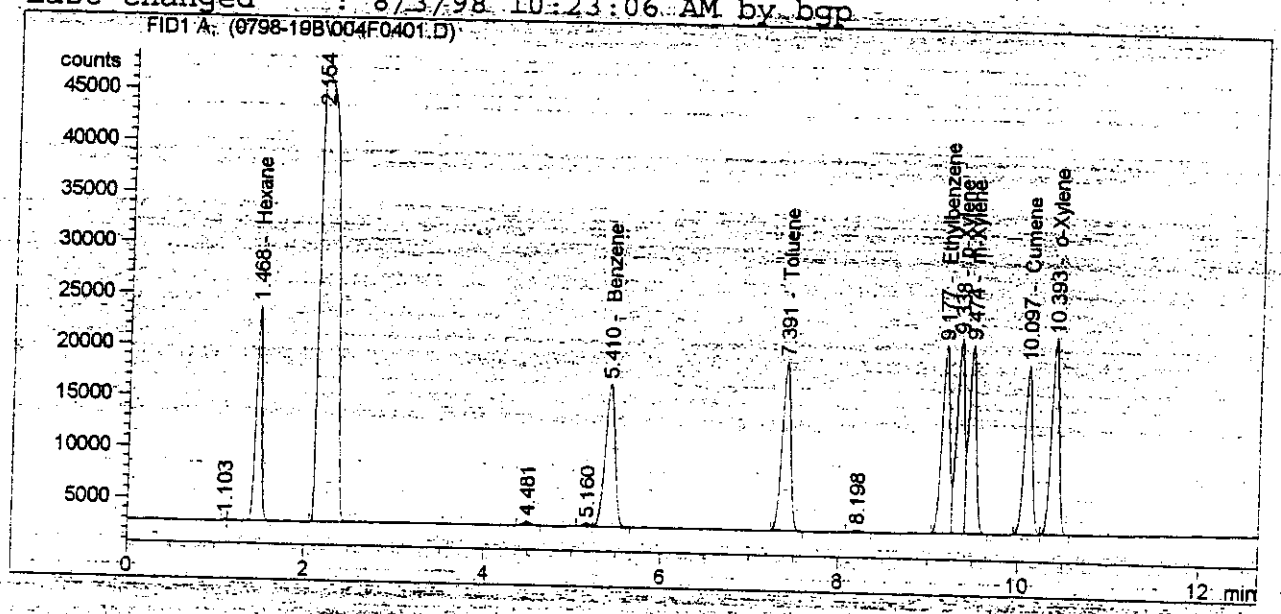
Teller 8/3/98 10:24:28 AM bgp

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\004F0401.D gc-14 pg 53 #4

Injection Date : 7/31/98 3:00:17 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 4
Vial : 4
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.468	VB	8.99227e4	8.92346e-4	80.24215		Hexane
5.410	VP	1.07524e5	7.97624e-4	85.76399		Benzene
7.391	BB	1.08752e5	7.81586e-4	84.99874		Toluene
9.177	BV	1.09267e5	7.75092e-4	84.69234		Ethylbenzene
9.338	VV	1.09178e5	7.82981e-4	85.48429		p-Xylene
9.474	VB	1.08643e5	7.80004e-4	84.74167		m-Xylene
10.097	BV	9.94233e4	8.48160e-4	84.32687		Cumene
10.393	VB	1.11486e5	7.54940e-4	84.16556		o-Xylene
Totals :				674.41561		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

333

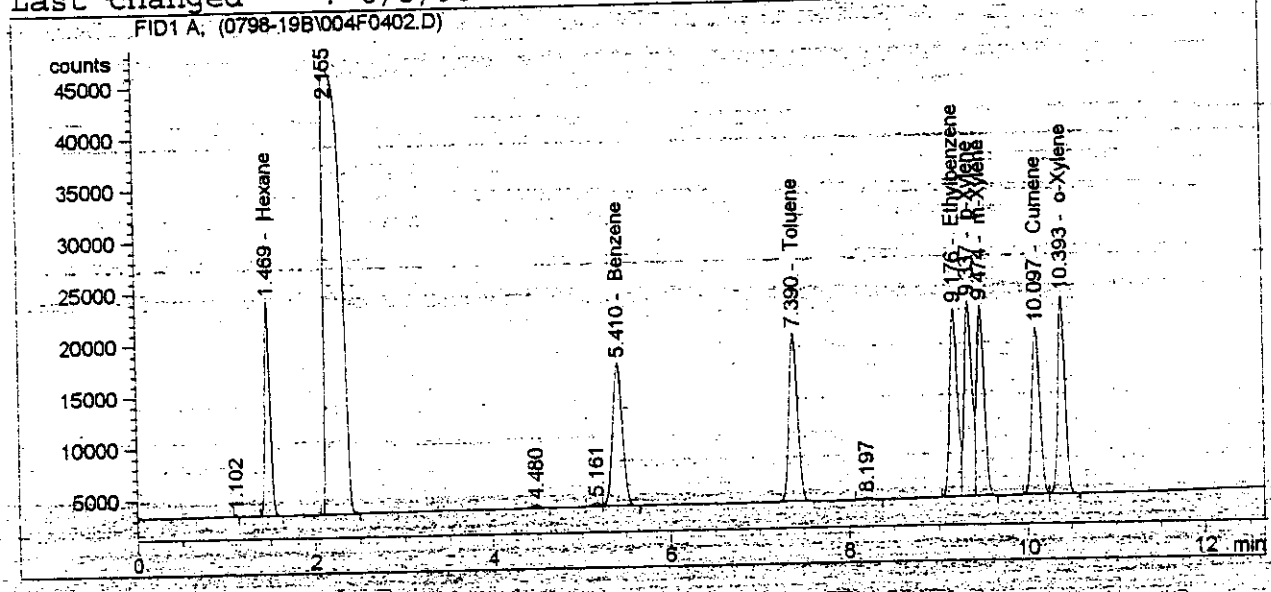
Teller 8/3/98 10:24:39 AM bgp

72

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\004F0402.D gc-14 pg 53 #4

Injection Date	: 7/31/98 3:17:32 PM	Seq. Line :	4
Sample Name	: gc-14 pg 53 #4	Vial :	4
Acq. Operator	: bgp	Inj :	2
		Inj Volume :	2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By :	Signal
Calib. Data Modified :	8/3/98 10:05:25 AM
Multiplier :	1.0000
Dilution :	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	BP	8.94738e4	8.92359e-4	79.84274		Hexane
5.410	VB	1.07278e5	7.97634e-4	85.56836		Benzene
7.390	BB	1.08381e5	7.81602e-4	84.71110		Toluene
9.176	BV	1.08761e5	7.75115e-4	84.30238		Ethylbenzene
9.337	VV	1.08548e5	7.83010e-4	84.99421		p-Xylene
9.474	VP	1.08237e5	7.80024e-4	84.42718		m-Xylene
10.097	BV	9.89578e4	8.48181e-4	83.93411		Cumene
10.393	VP	1.10935e5	7.54965e-4	83.75219		o-Xylene
Totals :				671.53228		

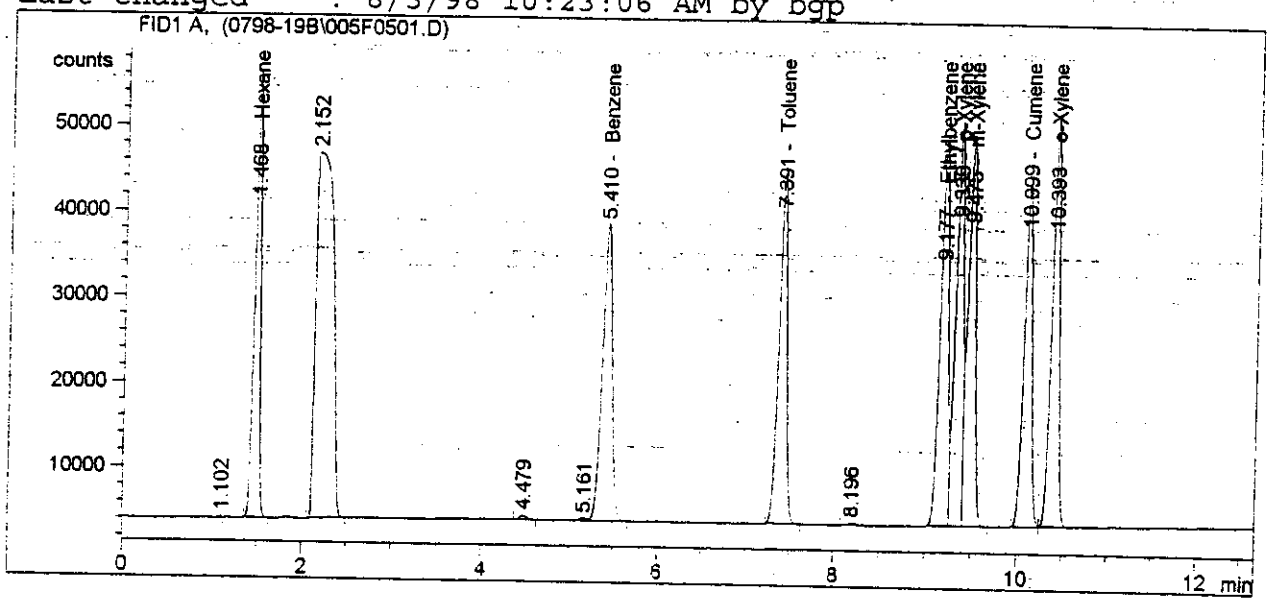
Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

73

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\005F0501.D gc-14 pg 53 #5

Injection Date	: 7/31/98 3:34:43 PM	Seq. Line	: 5
Sample Name	: gc-14 pg 53 #5	Vial	: 5
Acq. Operator	: bgp	Inj	: 1
		Inj Volume	: 2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19B.M		
Last changed	: 7/31/98 1:13:37 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19.M		
Last changed	: 8/3/98 10:23:06 AM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/3/98 10:05:25 AM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.468	BB	2.23528e5	8.90761e-4	199.11025		Hexane
5.410	VP	2.68940e5	7.95161e-4	213.85088		Benzene
7.391	BB	2.71297e5	7.78810e-4	211.28886		Toluene
9.177	BV	2.71088e5	7.72092e-4	209.30524		Ethylbenzene
9.339	VV	2.70852e5	7.80008e-4	211.26634		p-Xylene
9.475	VB	2.69438e5	7.76941e-4	209.33724		m-Xylene
10.099	BV	2.46472e5	8.45576e-4	208.41059		Cumene
10.393	VB	2.76436e5	7.51880e-4	207.84678		o-Xylene
Totals				1670.41617		

Results obtained with enhanced integrator!

1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

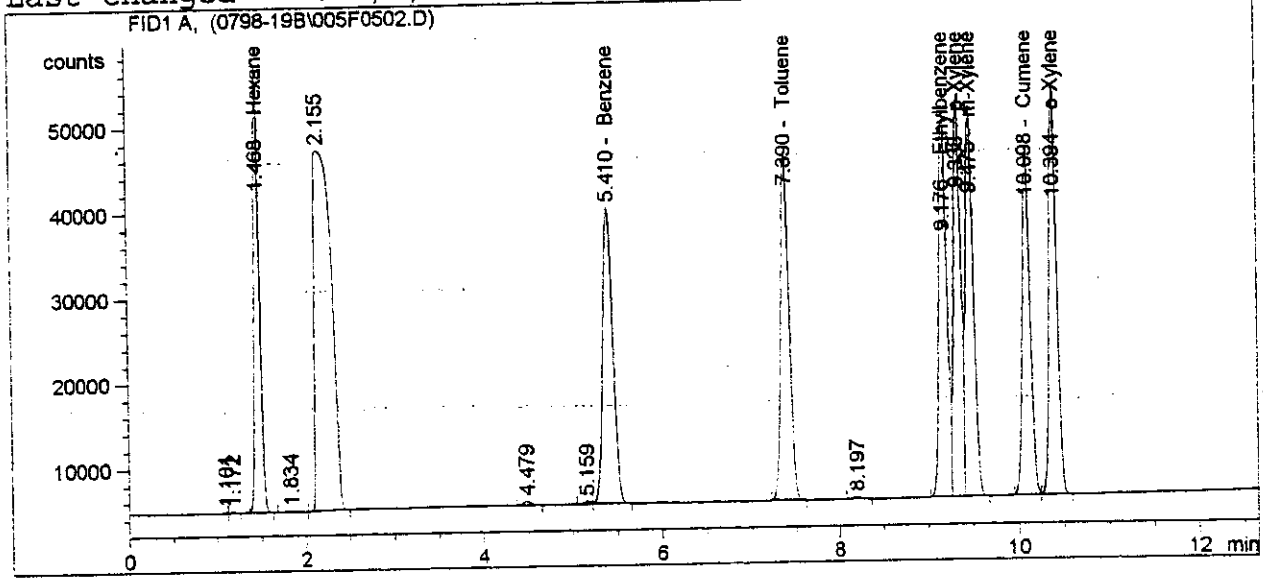
335

74

Injection Date : 7/31/98 3:52:06 PM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 5
Vial : 5
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.468	BP	2.23464e5	8.90761e-4	199.05297		Hexane
5.410	VB	2.68863e5	7.95162e-4	213.78961		Benzene
7.390	BP	2.71154e5	7.78811e-4	211.17770		Toluene
9.176	BV	2.71463e5	7.72089e-4	209.59365		Ethylbenzene
9.338	VV	2.71011e5	7.80007e-4	211.39048		p-Xylene
9.475	VB	2.69761e5	7.76939e-4	209.58779		m-Xylene
10.098	BV	2.46940e5	8.45572e-4	208.80548		Cumene
10.394	VP	2.76949e5	7.51876e-4	208.23117		o-Xylene
Totals :				1671.62885		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

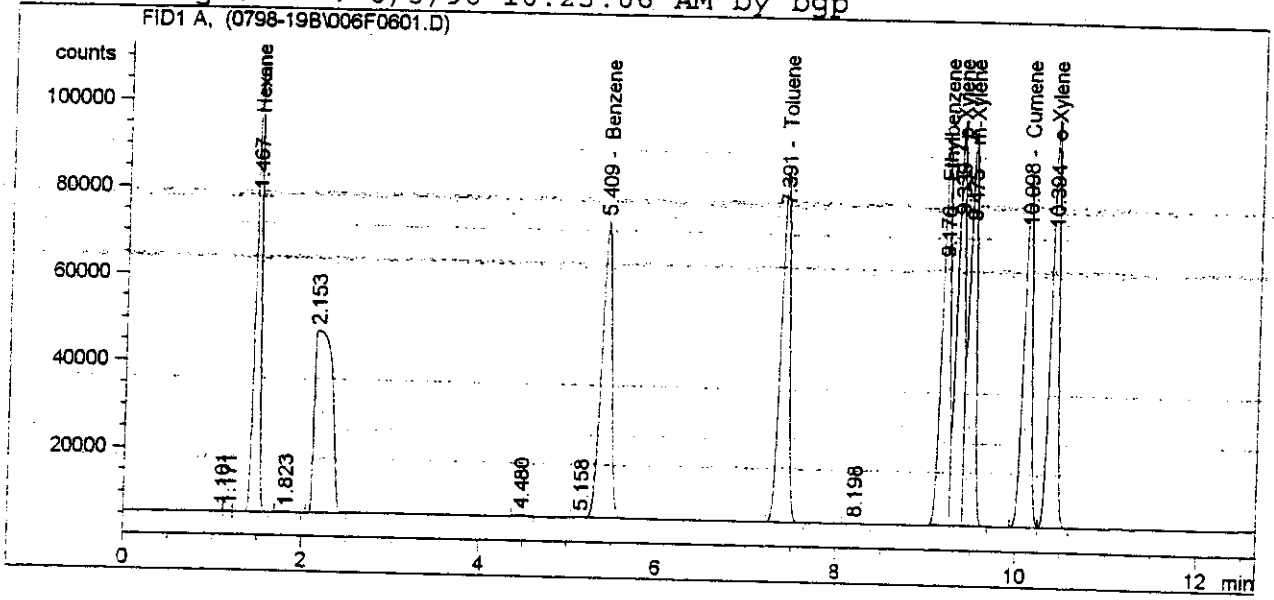
75

336

Injection Date : 7/31/98 4:09:19 PM
Sample Name : gc-14 pg 53 #6
Acq. Operator : bgp

Seq. Line : 6
Vial : 6
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467	VB	4.37921e5	8.90239e-4	389.85419		Hexane
5.409	VP	5.25828e5	7.94359e-4	417.69611		Benzene
7.391	BB	5.31198e5	7.77901e-4	413.21948		Toluene
9.176	BV	5.33786e5	7.71095e-4	411.60028		Ethylbenzene
9.339	VV	5.32204e5	7.79022e-4	414.59880		p-Xylene
9.475	VB	5.31087e5	7.75922e-4	412.08225		m-Xylene
10.098	BV	4.85568e5	8.44715e-4	410.16667		Cumene
10.394	VP	5.44398e5	7.50862e-4	408.76811		o-Xylene
Totals :				3277.98588		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

337

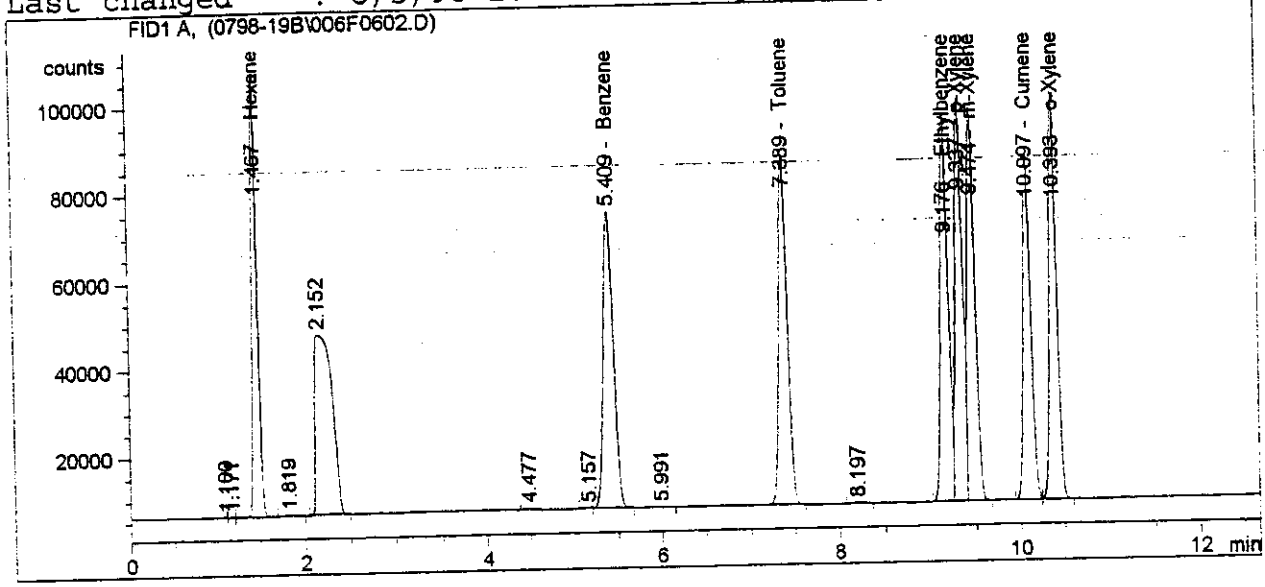
76

Teller 8/3/98 10:25:24 AM bgp

Injection Date : 7/31/98 4:26:32 PM
Sample Name : gc-14 pg 53 #6
Acq. Operator : bgp

Seq. Line : 6
Vial : 6
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467	VB	4.38663e5	8.90238e-4	390.51423		Hexane
5.409	VP	5.24947e5	7.94361e-4	416.99741		Benzene
7.389	BP	5.29008e5	7.77905e-4	411.51805		Toluene
9.176	BV	5.31411e5	7.71100e-4	409.77137		Ethylbenzene
9.337	VV	5.29268e5	7.79028e-4	412.31416		p-Xylene
9.474	VB	5.28669e5	7.75926e-4	410.20822		m-Xylene
10.097	BV	4.83144e5	8.44720e-4	408.12094		Cumene
10.393	VP	5.41735e5	7.50867e-4	406.77122		o-Xylene
Totals :				3266.21560		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

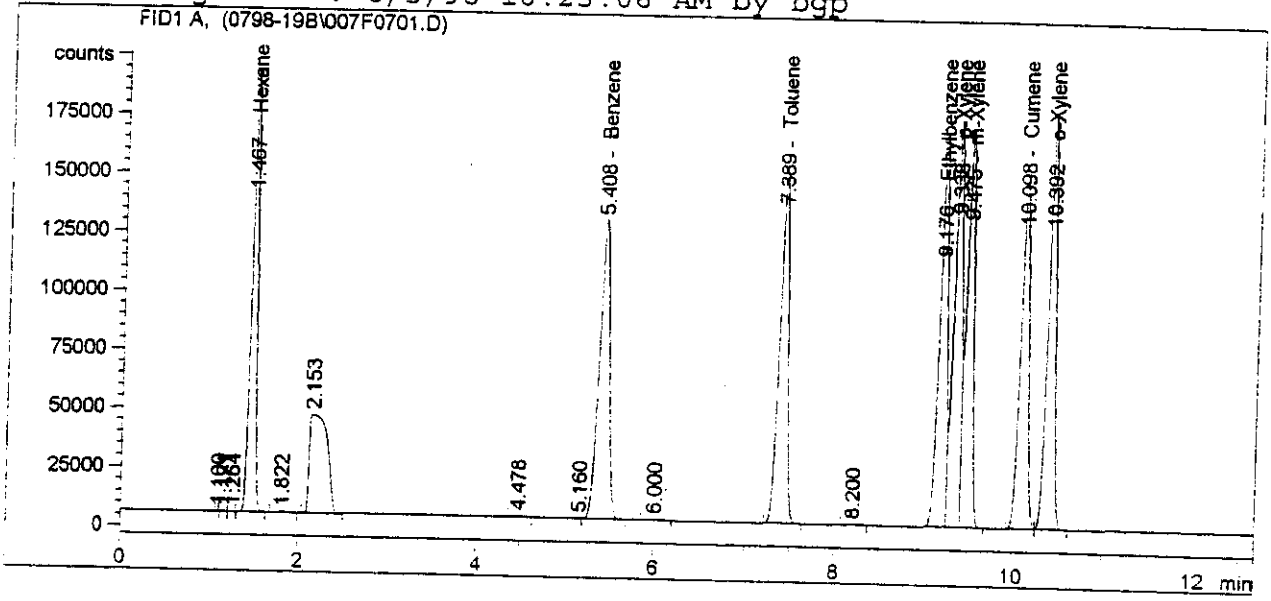
CU 77

338

Injection Date : 7/31/98 4:43:39 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 7
Vial : 7
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467	VB	8.12307e5	8.89988e-4	722.94323		Hexane
5.408	VB	9.77077e5	7.93972e-4	775.77160		Benzene
7.389	BB	9.86445e5	7.77463e-4	766.92436		Toluene
9.176	BV	9.92289e5	7.70620e-4	764.67767		Ethylbenzene
9.338	VV	9.91400e5	7.78549e-4	771.85356		p-Xylene
9.475	VB	9.83926e5	7.75438e-4	762.97398		m-Xylene
10.098	BV	9.03412e5	8.44305e-4	762.75526		Cumene
10.392	VB	1.01189e6	7.50377e-4	759.29978		o-Xylene
Totals :				6087.19944		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

339

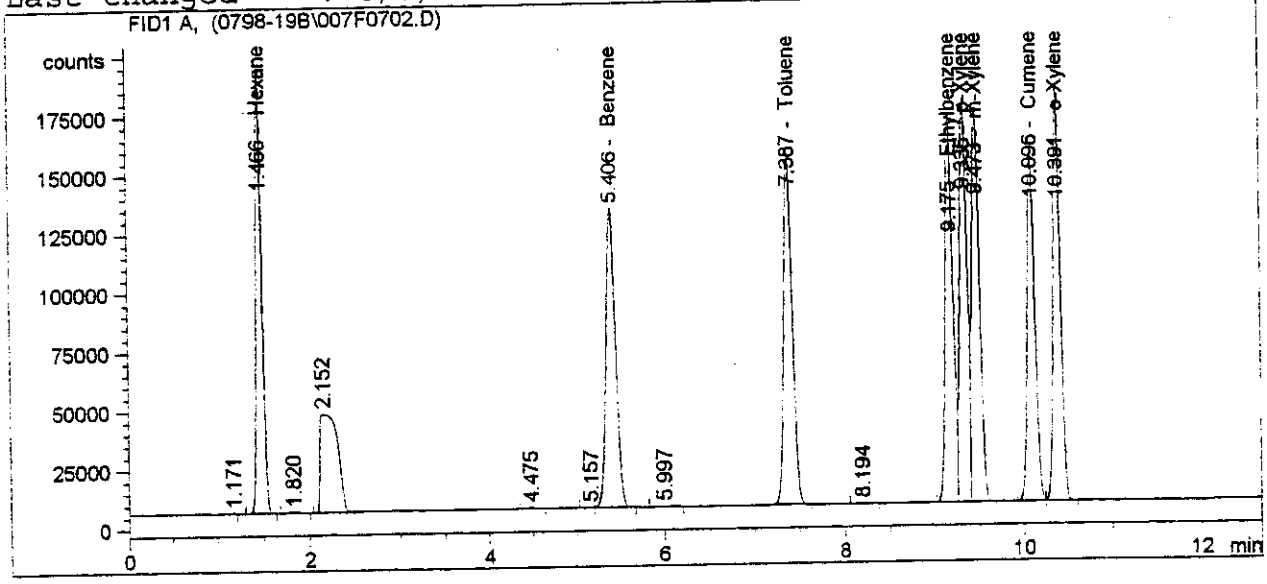
78

Teller 8/3/98 10:25:49 AM bgp

Injection Date : 7/31/98 5:01:16 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 7
Vial : 7
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 10:23:06 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 10:05:25 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.466	VB	8.12124e5	8.89988e-4	722.77997		Hexane
5.406	VB	9.77704e5	7.93972e-4	776.26904		Benzene
7.387	BB	9.85694e5	7.77463e-4	766.34121		Toluene
9.175	BV	9.89930e5	7.70621e-4	762.86099		Ethylbenzene
9.336	VV	9.86868e5	7.78551e-4	768.32757		p-Xylene
9.473	VB	9.82531e5	7.75439e-4	761.89327		m-Xylene
10.096	BV	9.00901e5	8.44306e-4	760.63672		Cumene
10.391	VP	1.00888e6	7.50379e-4	757.04196		o-Xylene

Totals : 6076.15073

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

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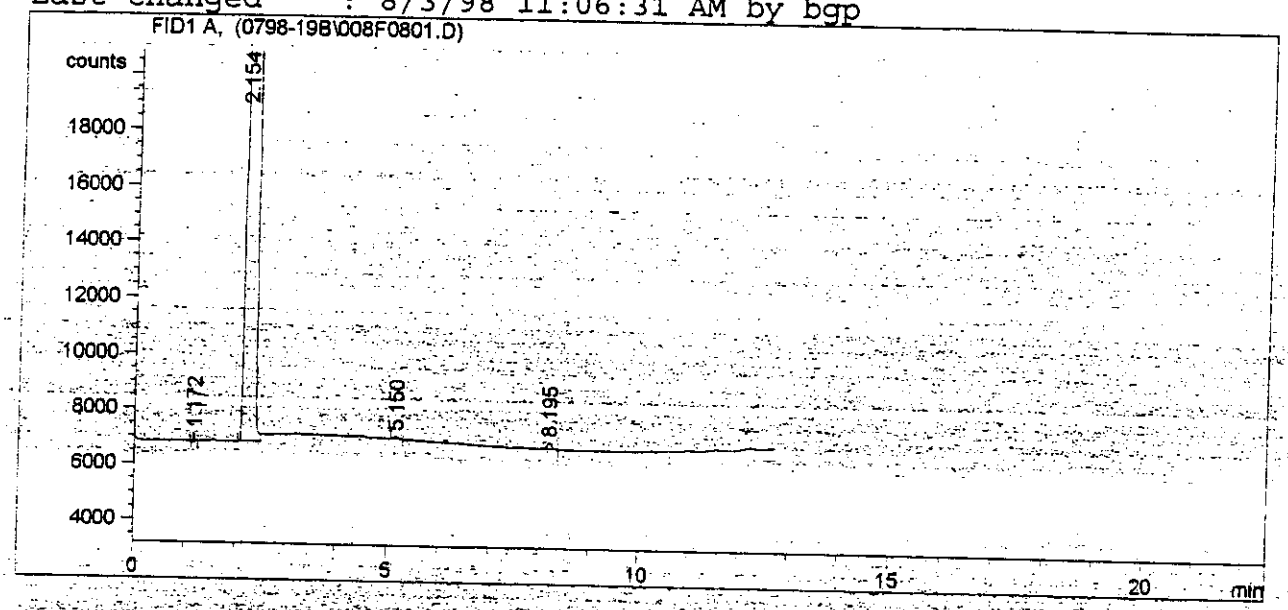
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\008F0801.D reagent blank

Injection Date : 7/31/98 5:18:30 PM
Sample Name : reagent blank
Acq. Operator : bgp

Seq. Line : 8
Vial : 8
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.390		-	-	-		Toluene
9.176		-	-	-		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

80

341

Teller 8/3/98 11:09:25 AM bgp

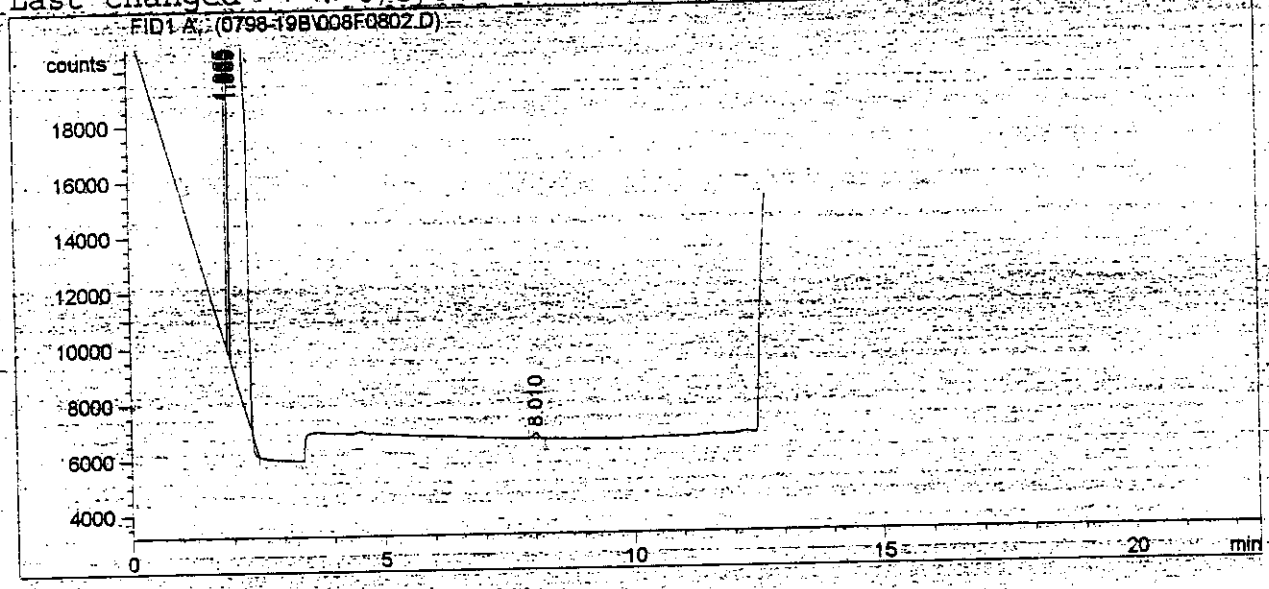
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\008F0802.D reagent blank

==========

Injection Date : 7/31/98 5:35:40 PM
Sample Name : reagent blank
Acq. Operator : bgp

Seq. Line : 8
Vial : 8
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.390		-	-	-		Toluene
9.176		-	-	-		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found.

81

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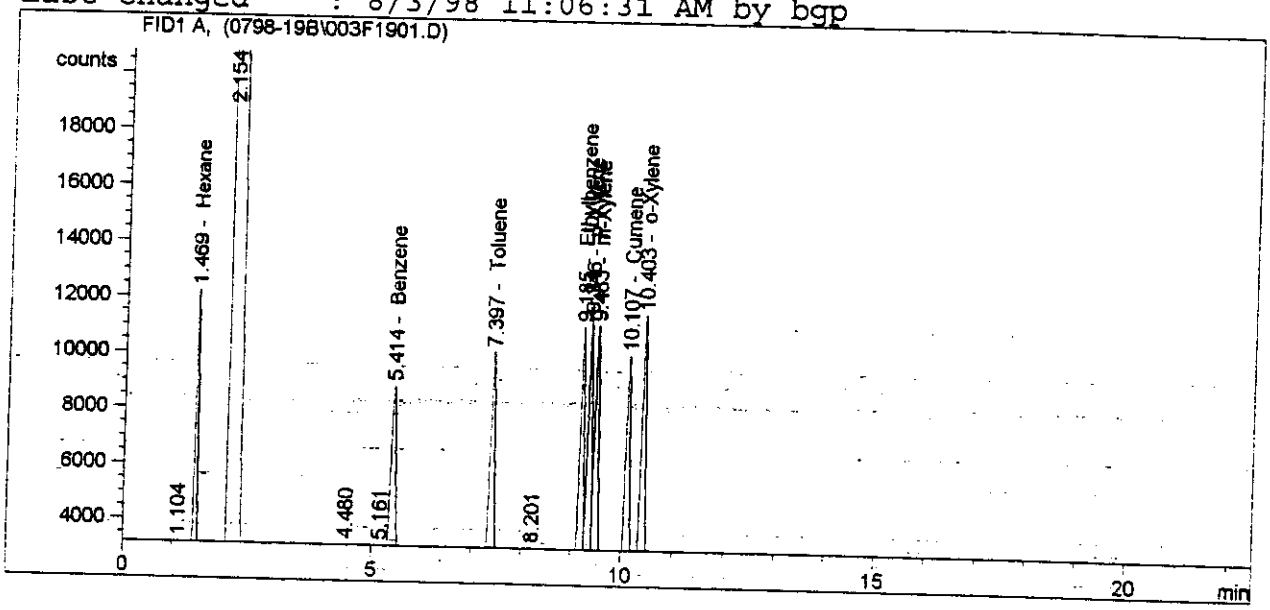
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\003F1901.D gc-14 pg 53 #3

Injection Date : 8/1/98 4:34:57 AM Seq. Line : 19
Sample Name : gc-14 pg 53 #3 Vial : 3
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl
Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.469	BP	4.45540e4	8.95046e-4	39.87785		Hexane
5.414	VB	5.36396e4	8.01748e-4	43.00538		Benzene
7.397	BB	5.45539e4	7.86190e-4	42.88974		Toluene
9.185	BV	5.48269e4	7.80082e-4	42.76950		Ethylbenzene
9.346	VV	5.46690e4	7.87946e-4	43.07628		p-Xylene
9.483	VB	5.46404e4	7.85077e-4	42.89690		m-Xylene
10.107	BV	4.99349e4	8.52454e-4	42.56717		Cumene
10.403	VB	5.59542e4	7.60029e-4	42.52682		o-Xylene
Totals :				339.60964		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

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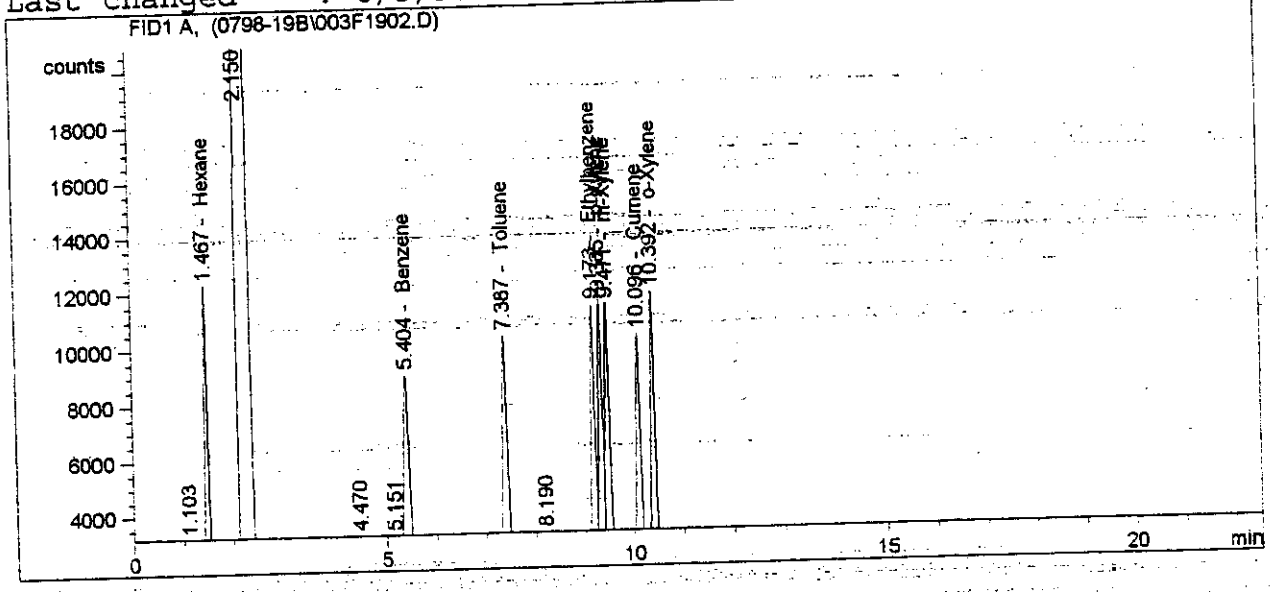
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\003F1902.D gc-14 pg 53 #3

==========

Injection Date : 8/1/98 4:52:02 AM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 19
Vial : 3
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467	BP	4.49065e4	8.95004e-4	40.19145		Hexane
5.404	VB	5.41206e4	8.01674e-4	43.38713		Benzene
7.387	BB	5.51148e4	7.86096e-4	43.32552		Toluene
9.173	BV	5.54378e4	7.79971e-4	43.23988		Ethylbenzene
9.335	VV	5.53478e4	7.87824e-4	43.60433		p-Xylene
9.471	VB	5.51434e4	7.84984e-4	43.28669		m-Xylene
10.096	BV	5.05195e4	8.52354e-4	43.06052		Cumene
10.392	VB	5.66026e4	7.59912e-4	43.01301		o-Xylene
Totals :				343.10853		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

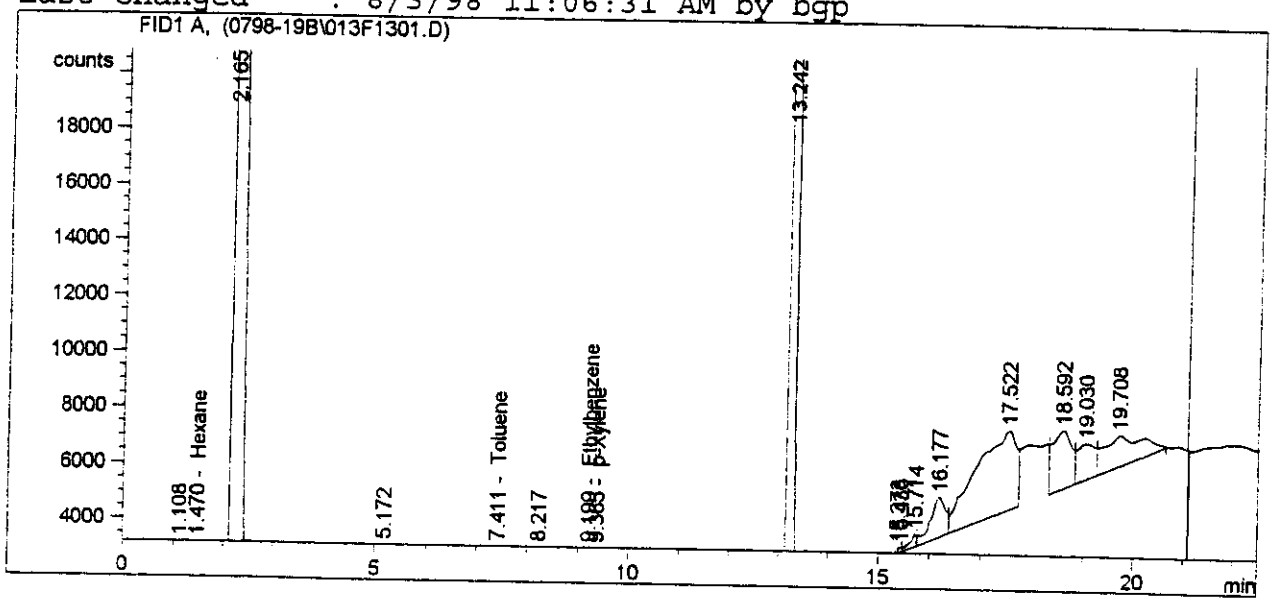
83

344

Teller 8/3/98 11:14:05 AM bgp

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\013F1301.D T-M18-R3 Aa+AbFH

Injection Date	: 7/31/98 10:32:24 PM	Seq. Line :	13
Sample Name	: T-M18-R3 Aa+AbFH	Vial :	13
Acq. Operator	: bgp	Inj :	1
		Inj Volume :	2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19A.M		
Last changed	: 7/31/98 6:22:19 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19.M		
Last changed	: 8/3/98 11:06:31 AM by bgp		



External Standard Report

Sorted By	: Signal
Calib. Data Modified	: 8/3/98 11:04:16 AM
Multiplier	: 1.0000
Dilution	: 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.470	BB	738.32959	9.19566e-4	6.78943e-1		Hexane
5.409		-	-	-		Benzene
7.411	BB	1517.63257	8.30843e-4	1.26092		Toluene
9.199	PV	1979.22876	8.28951e-4	1.64068		Ethylbenzene
9.365	VB	656.76697	8.36380e-4	5.49306e-1		p-Xylene
9.474						m-Xylene
10.097						Cumene
10.393						o-Xylene
Totals :				4.12985		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

293

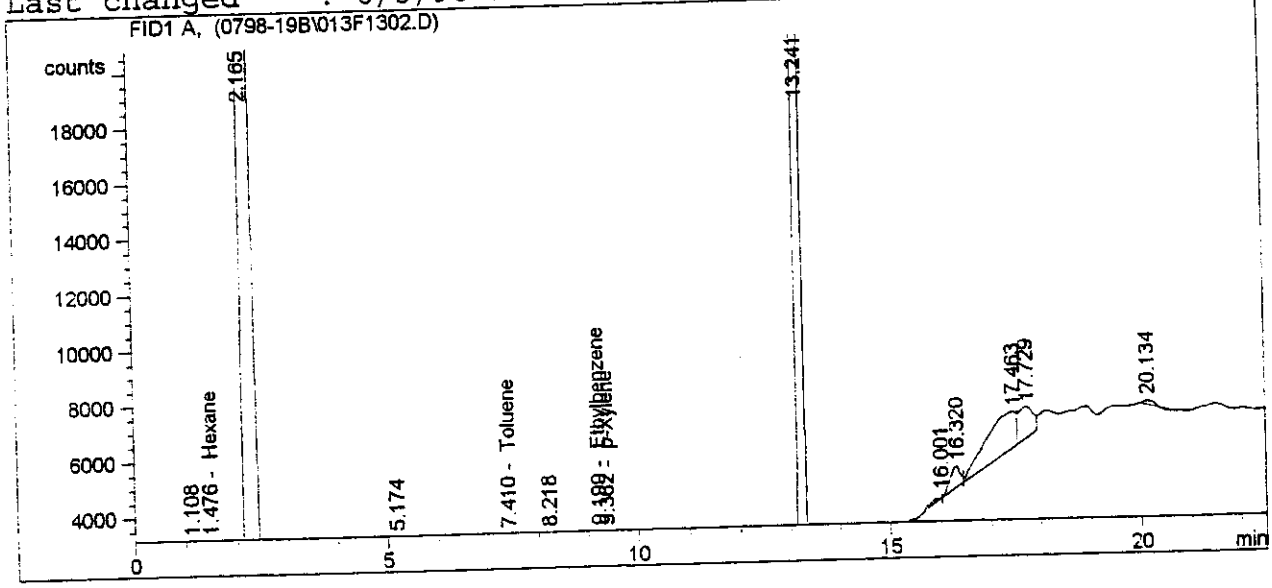
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\013F1302.D T-M18-R3 Aa+AbFH

==========

Injection Date : 7/31/98 11:02:42 PM
Sample Name : T-M18-R3 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 13
Vial : 13
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.476	BB	741.12000	9.19566e-4	6.81509e-1		Hexane
5.409		-	-	-		Benzene
7.410	BP	1592.62354	8.30843e-4	1.32322		Toluene
9.199	BV	2039.45740	8.28951e-4	1.69061		Ethylbenzene
9.362	VB	710.55457	8.36380e-4	5.94293e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				4.28963		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

33

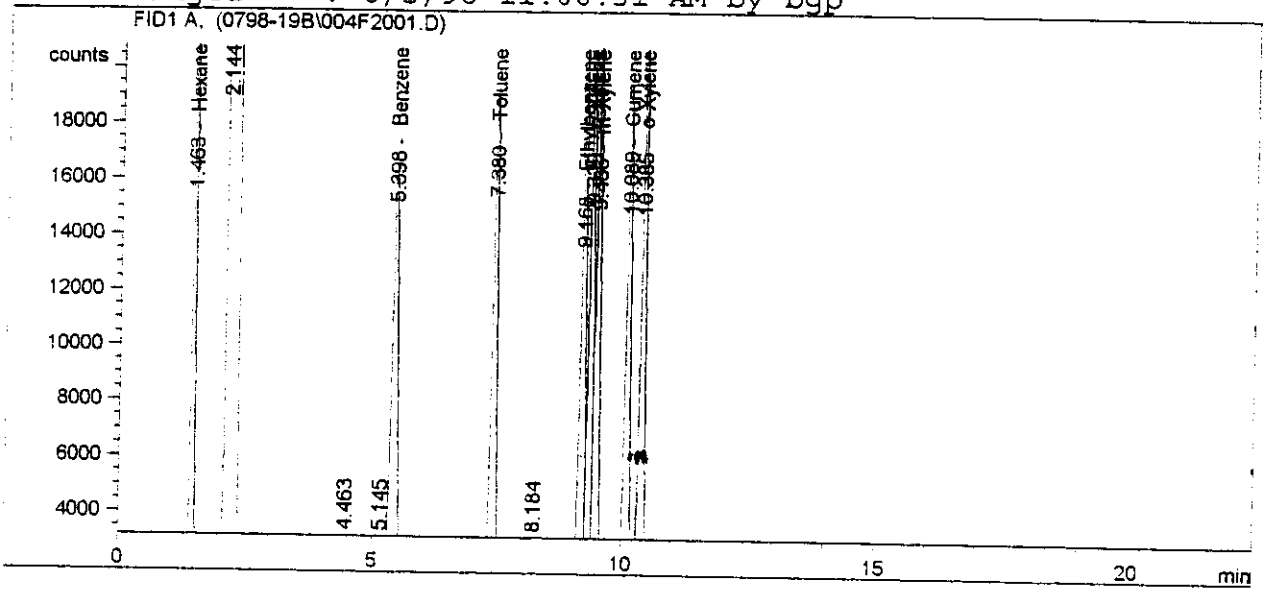
294

Teller 8/3/98 11:11:40 AM bgp

Injection Date : 8/1/98 5:09:05 AM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 20
Vial : 4
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463	BB	9.41514e4	8.92227e-4	84.00436		Hexane
5.398	VB	1.12904e5	7.97429e-4	90.03271		Benzene
7.380	BP	1.15428e5	7.81318e-4	90.18625		Toluene
9.168	BV	1.16960e5	7.74761e-4	90.61615		Ethylbenzene
9.329	VV	1.16531e5	7.82666e-4	91.20521		p-Xylene
9.466	VB	1.16662e5	7.79652e-4	90.95574		m-Xylene
10.089	BV	1.06802e5	8.47861e-4	90.55294		Cumene
10.385	VB	1.19525e5	7.54595e-4	90.19261		o-Xylene
Totals :				717.74597		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

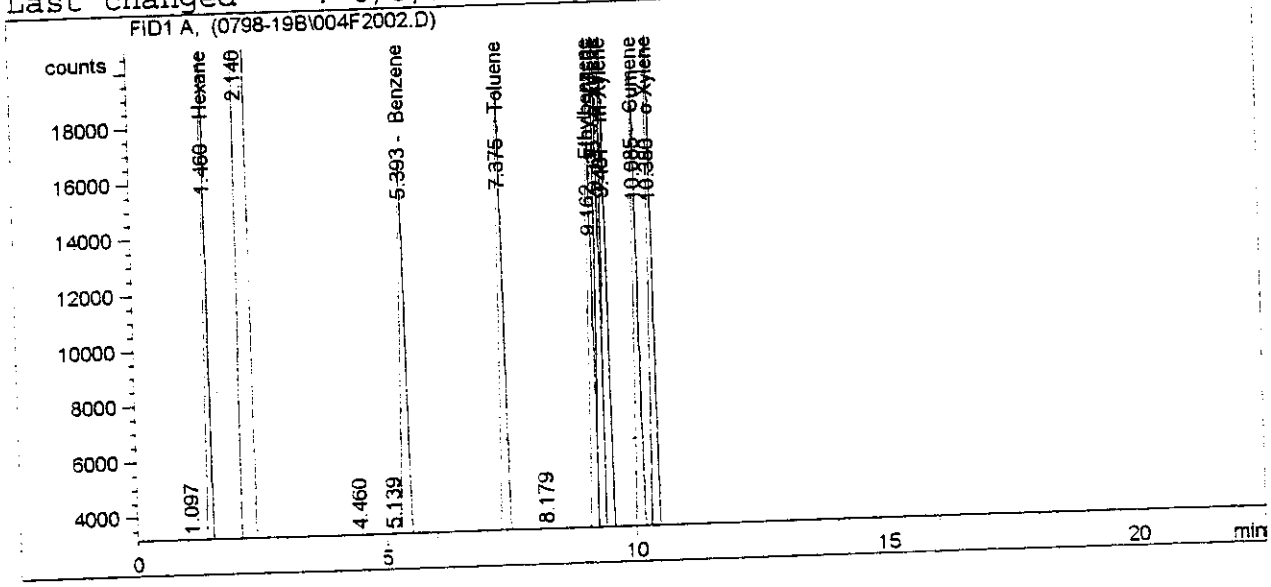
345

84

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\004F2002.D gc-14 pg 53 #4

Injection Date	: 8/1/98 5:26:07 AM	Seq. Line	: 20
Sample Name	: gc-14 pg 53 #4	Vial	: 4
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 11:06:31 AM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/3/98 11:04:16 AM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	BB	9.45197e4	8.92217e-4	84.33204		Hexane
5.393	VB	1.13242e5	7.97417e-4	90.30146		Benzene
7.375	BB	1.15861e5	7.81302e-4	90.52228		Toluene
9.162	BV	1.17556e5	7.74738e-4	91.07513		Ethylbenzene
9.325	VV	1.17438e5	7.82630e-4	91.91054		p-Xylene
9.461	VB	1.17081e5	7.79634e-4	91.28052		m-Xylene
10.085	BV	1.07353e5	8.47840e-4	91.01854		Cumene
10.380	VB	1.20128e5	7.54571e-4	90.64509		o-Xylene
Totals :				721.08560		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

85

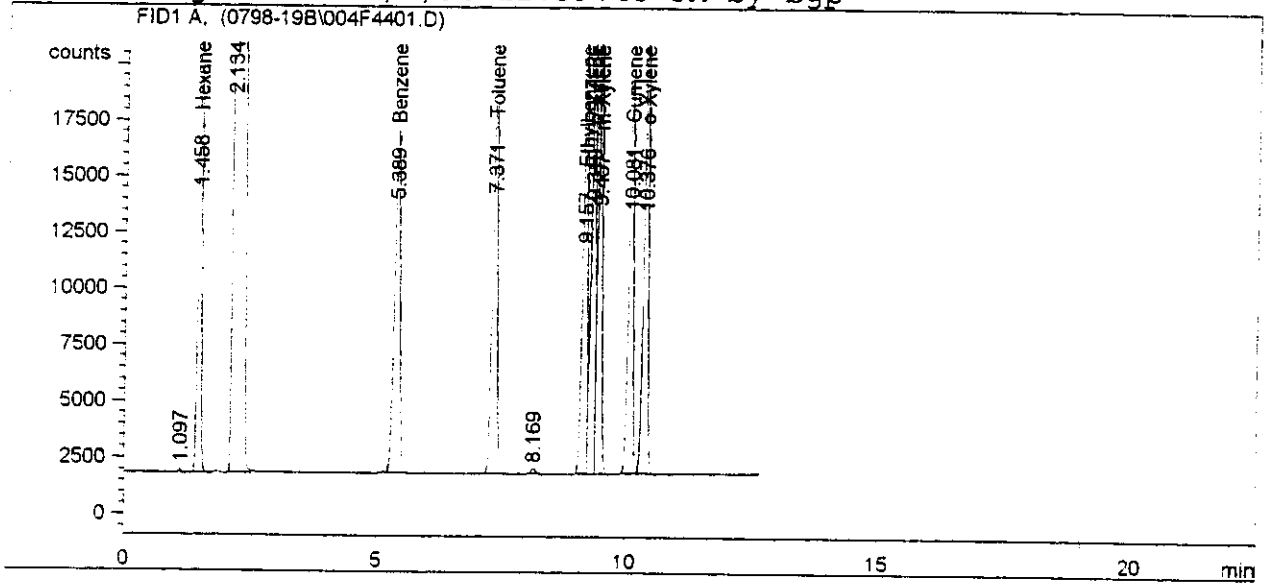
346

Teller 8/3/98 11:14:28 AM bgp

Injection Date : 8/3/98 8:46:21 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 44
Vial : 4
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	BB	9.77024e4	8.92135e-4	87.16372		Hexane
5.389	BP	1.17667e5	7.97271e-4	93.81246		Benzene
7.371	BB	1.18726e5	7.81197e-4	92.74812		Toluene
9.157	BV	1.18916e5	7.74684e-4	92.12230		Ethylbenzene
9.319	VV	1.18456e5	7.82591e-4	92.70269		p-Xylene
9.457	VP	1.18531e5	7.79576e-4	92.40364		m-Xylene
10.081	BV	1.08061e5	8.47814e-4	91.61544		Cumene
10.376	VB	1.21298e5	7.54525e-4	91.52250		o-Xylene

Totals : 734.09086

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

347

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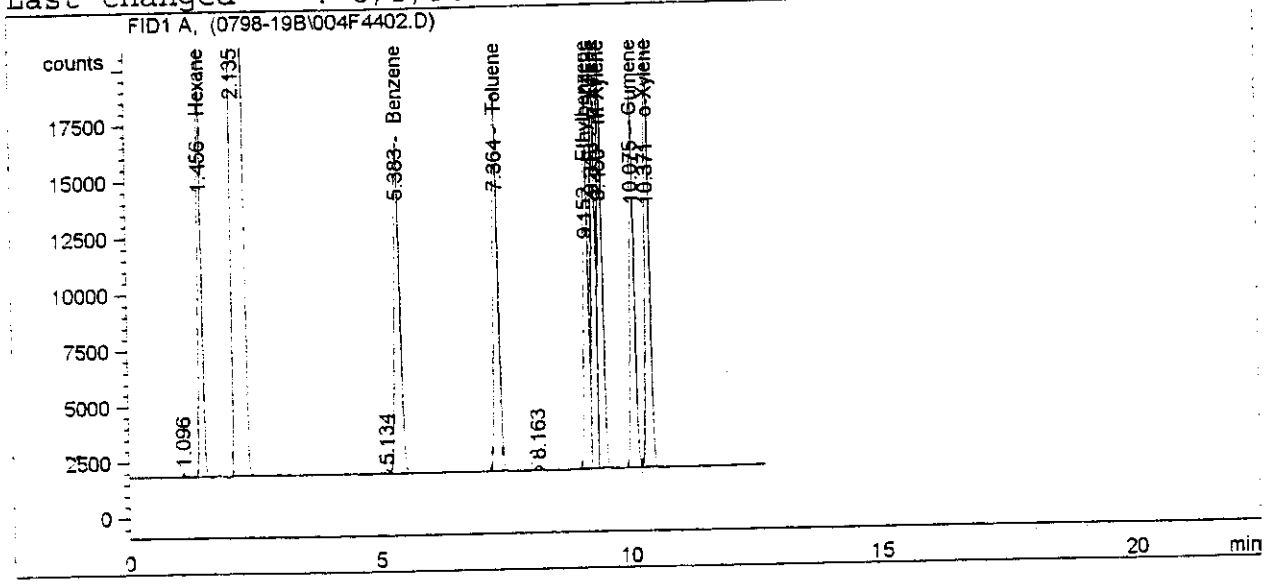
Injection Date : 8/3/98 9:03:48 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 44
Vial : 4
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.456	BP	9.52124e4	8.92198e-4	84.94831		Hexane
5.383	VB	1.13881e5	7.97395e-4	90.80822		Benzene
7.364	BB	1.13914e5	7.81376e-4	89.00937		Toluene
9.152	BV	1.13832e5	7.74890e-4	88.20727		Ethylbenzene
9.313	VV	1.13460e5	7.82793e-4	88.81540		p-Xylene
9.450	VB	1.13273e5	7.79795e-4	88.32969		m-Xylene
10.075	BV	1.03323e5	8.47997e-4	87.61785		Cumene
10.371	VB	1.15914e5	7.54744e-4	87.48507		o-Xylene
Totals :				705.22117		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

348

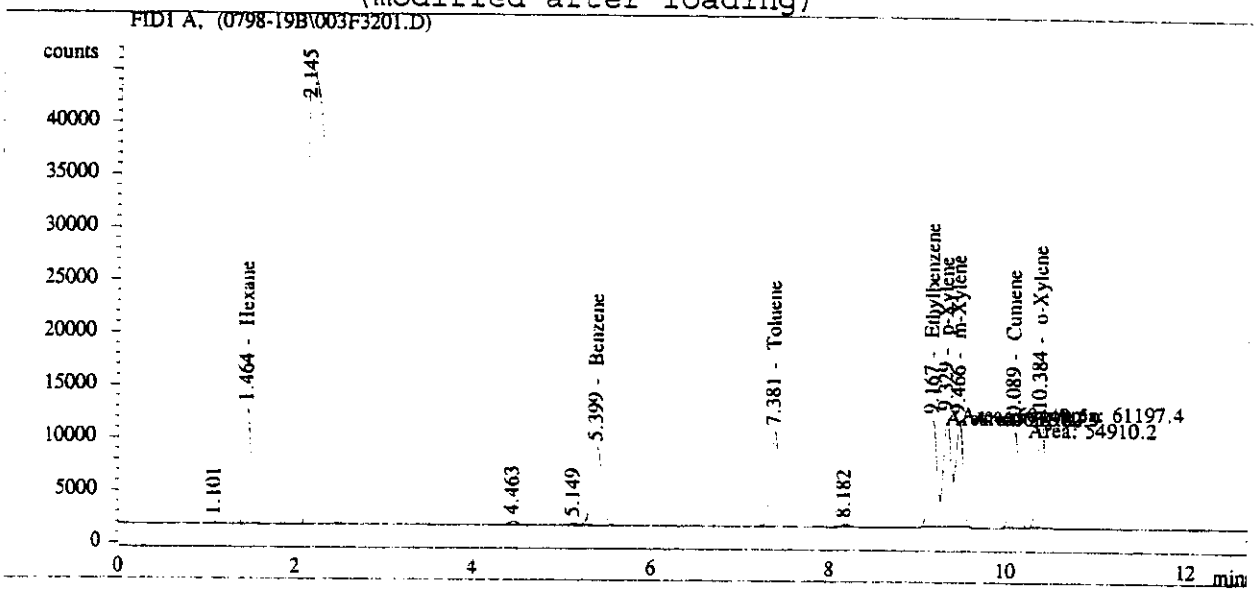
87

Teller 8/4/98 8:04:21 AM bgp

Injection Date : 8/2/98 8:59:11 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 32
Vial : 3
Inj : 1
Inj Volume : 2 µl

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/11/98 9:27:42 AM by bgp
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.464	BB	4.74541e4	8.94719e-4	42.45803		Hexane
5.399	VB	5.72762e4	8.01225e-4	45.89113		Benzene
7.381	BB	5.96777e4	7.85397e-4	46.87069		Toluene
9.167	MF	6.00312e4	7.79214e-4	46.77711		Ethylbenzene
9.329	MF	6.04495e4	7.86995e-4	47.57348		p-Xylene
9.466	FM	5.89629e4	7.84329e-4	46.24630		m-Xylene
10.089	MM	5.49102e4	8.51672e-4	46.76548		Cumene
10.384	MM	6.11974e4	7.59154e-4	46.45823		o-Xylene

Totals : 369.04045

Results obtained with enhanced integrator!
1 Warnings or Errors :

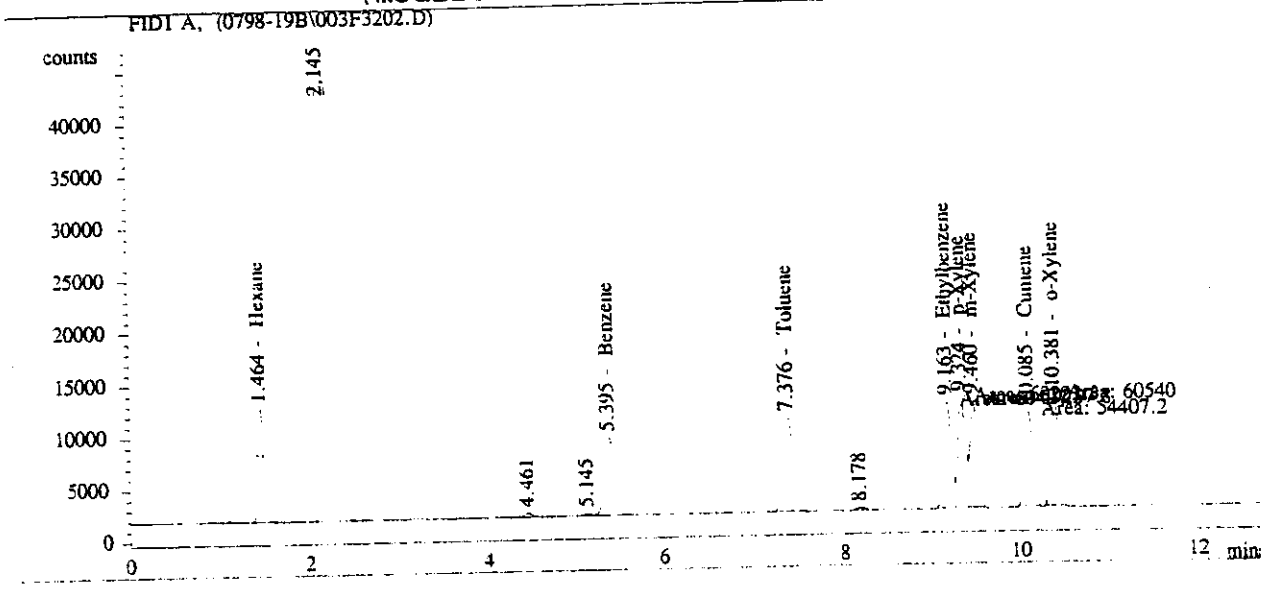
Warning : Calibration warnings (see calibration table listing)

349

Injection Date : 8/2/98 9:16:07 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 32
Vial : 3
Inj : 2
Inj Volume : 2 µl

Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 7/31/98 1:13:37 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/11/98 9:29:17 AM by bgp
(modified after loading)



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.464	BP	4.80388e4	8.94657e-4	42.97826		Hexane
5.395	VB	5.77994e4	8.01155e-4	46.30627		Benzene
7.376	BB	5.98757e4	7.85369e-4	47.02449		Toluene
9.163	MF	6.04979e4	7.79143e-4	47.13648		Ethylbenzene
9.324	MF	6.02223e4	7.87029e-4	47.39669		p-Xylene
9.460	FM	5.92578e4	7.84282e-4	46.47485		m-Xylene
10.085	MM	5.44072e4	8.51745e-4	46.34106		Cumene
10.381	MM	6.05400e4	7.59255e-4	45.96532		o-Xylene
Totals :				369.62342		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

89

350

Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M of 8/10/98 4:33:19 PM

Calibration Table

Calib. Data Modified : 8/10/98 4:32:29 PM

Calculate : External Standard
Based on : Peak Area

Rel. Reference Window : 5.000 %
Abs. Reference Window : 0.080 min
Rel. Non-ref. Window : 5.000 %
Abs. Non-ref. Window : 0.080 min
Uncalibrated Peaks : not reported
Partial Calibration : Yes, identified peaks are recalibrated
Correct All Ret. Times: No, only for identified peaks

Curve Type : Linear
Origin : Connected
Weight : Linear

Recalibration Settings:
Average Response : Average all calibrations
Average Retention Time: Floating Average New 75%

Calibration Report Options :
Printout of recalibrations within a sequence:
Calibration Table after Recalibration
Normal Report after Recalibration
If the sequence is done with bracketing:
Results of first cycle (ending previous bracket)

Signal 1: FID1 A,

RetTime [min]	Sig	Lvl	Amount [ug/kg]	Area	Amt/Area	Ref	Grp	Name
1.463	1	1	7.34000	9673.23975	7.58794e-4			Hexane
		2	16.28000	1.93840e4	8.39868e-4			
		3	40.60000	4.76743e4	8.51612e-4			
		4	80.70000	9.41487e4	8.57155e-4			
		5	198.90000	2.32427e5	8.55754e-4			
		6	388.00000	4.52658e5	8.57159e-4			
5.391	1	1	7.85000	1.12912e4	6.95232e-4			Benzene
		2	17.43000	2.29720e4	7.58751e-4			
		3	43.40000	5.71282e4	7.59695e-4			
		4	86.40000	1.13452e5	7.61554e-4			
		5	213.00000	2.80086e5	7.60481e-4			
		6	416.00000	5.44456e5	7.64066e-4			
7.373	1	1	7.77000	1.13265e4	6.86000e-4			Toluene
		2	17.23000	2.30572e4	7.47272e-4			
		3	42.90000	5.74320e4	7.46971e-4			
		4	85.50000	1.14587e5	7.46155e-4			
		5	210.60000	2.82801e5	7.44692e-4			
		6	411.00000	5.47336e5	7.50909e-4			
9.161	1	1	7.73000	1.12851e4	6.84973e-4			Ethylbenzene
		2	17.13000	2.30363e4	7.43609e-4			

351

90

Method: E:\HPCHEM\TELLER\METHODS\0798-19D.M of 8/10/98 4:33:19 PM

RetTime [min]	Sig	Lvl	Amount [ug/kg]	Area	Amt/Area	Ref	Grp	Name
		3	42.70000	5.74747e4	7.42936e-4			
		4	85.00000	1.14978e5	7.39275e-4			
		5	209.30000	2.84062e5	7.36810e-4			
		6	409.00000	5.49455e5	7.44375e-4			
9.323	1	1	7.79000	1.13100e4	6.88773e-4			p-Xylene
		2	17.27000	2.30210e4	7.50185e-4			
		3	43.00000	5.72964e4	7.50484e-4			
		4	85.70000	1.14837e5	7.46277e-4			
		5	211.00000	2.83267e5	7.44880e-4			
		6	412.00000	5.48456e5	7.51200e-4			
9.460	1	1	7.74000	1.12483e4	6.88105e-4			m-Xylene
		2	17.15000	2.29714e4	7.46582e-4			
		3	42.80000	5.73538e4	7.46246e-4			
		4	85.10000	1.14503e5	7.43214e-4			
		5	209.60000	2.82924e5	7.40834e-4			
		6	409.00000	5.45918e5	7.49197e-4			
10.084	1	1	7.70000	1.03730e4	7.42314e-4			Cumene
		2	17.07000	2.10490e4	8.10963e-4			
		3	42.60000	5.23159e4	8.14285e-4			
		4	84.70000	1.04737e5	8.08694e-4			
		5	208.60000	2.58683e5	8.06393e-4			
		6	407.00000	5.00240e5	8.13610e-4			
10.379	1	1	7.67000	1.15420e4	6.64528e-4			o-Xylene
		2	17.02000	2.35537e4	7.22604e-4			
		3	42.40000	5.86601e4	7.22808e-4			
		4	84.40000	1.17426e5	7.18752e-4			
		5	208.00000	2.89885e5	7.17527e-4			
		6	406.00000	5.60476e5	7.24384e-4			

3 Warnings or Errors :

Warning : Overlapping peak time windows at 9.161 min, signal 1
Warning : Overlapping peak time windows at 9.323 min, signal 1
Warning : Overlapping peak time windows at 10.084 min, signal 1

==========

Peak Sum Table

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No Entries in table

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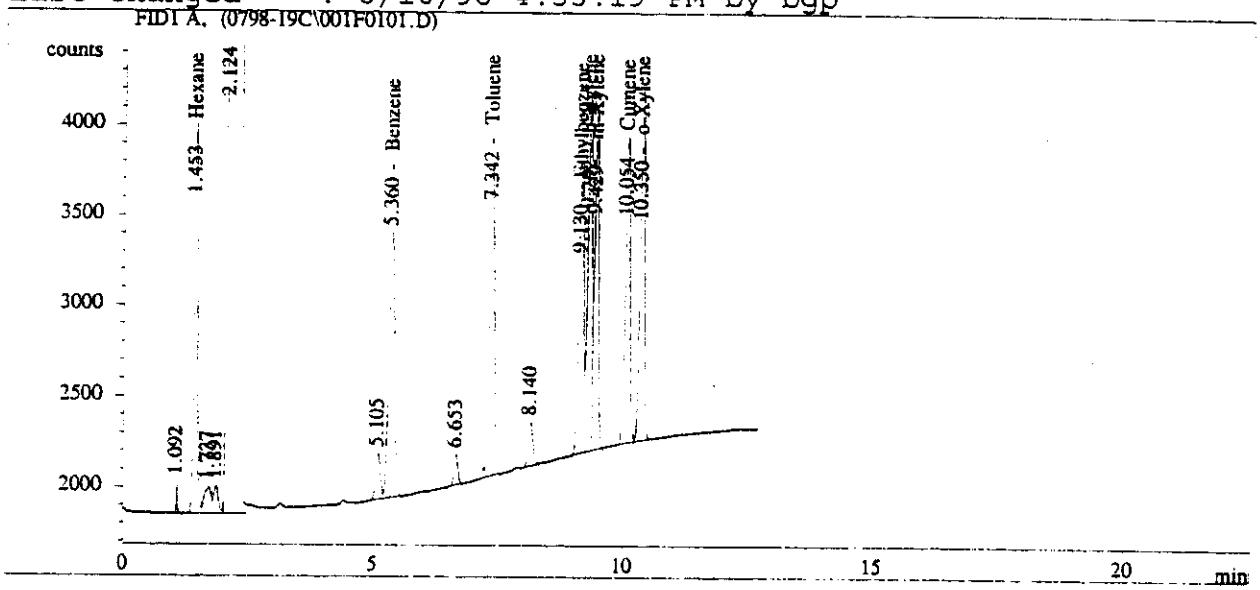
Injection Date : 8/4/98 5:10:41 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 1
Vial : 1
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.453	BB	9766.34668	7.84089e-4	7.65769		Hexane
5.360	VB	1.13277e4	7.15467e-4	8.10456		Benzene
7.342	BB	1.13748e4	7.05586e-4	8.02590		Toluene
9.130	BV	1.13538e4	7.05348e-4	8.00841		Ethylbenzene
9.292	VV	1.13914e4	7.10416e-4	8.09261		p-Xylene
9.429	VP	1.13131e4	7.07220e-4	8.00083		m-Xylene
10.054	BV	1.04436e4	7.67100e-4	8.01131		Cumene
10.350	VB	1.16209e4	6.84220e-4	7.95124		o-Xylene

Totals : 63.85254

Results obtained with enhanced integrator!
1 Warnings or Errors :

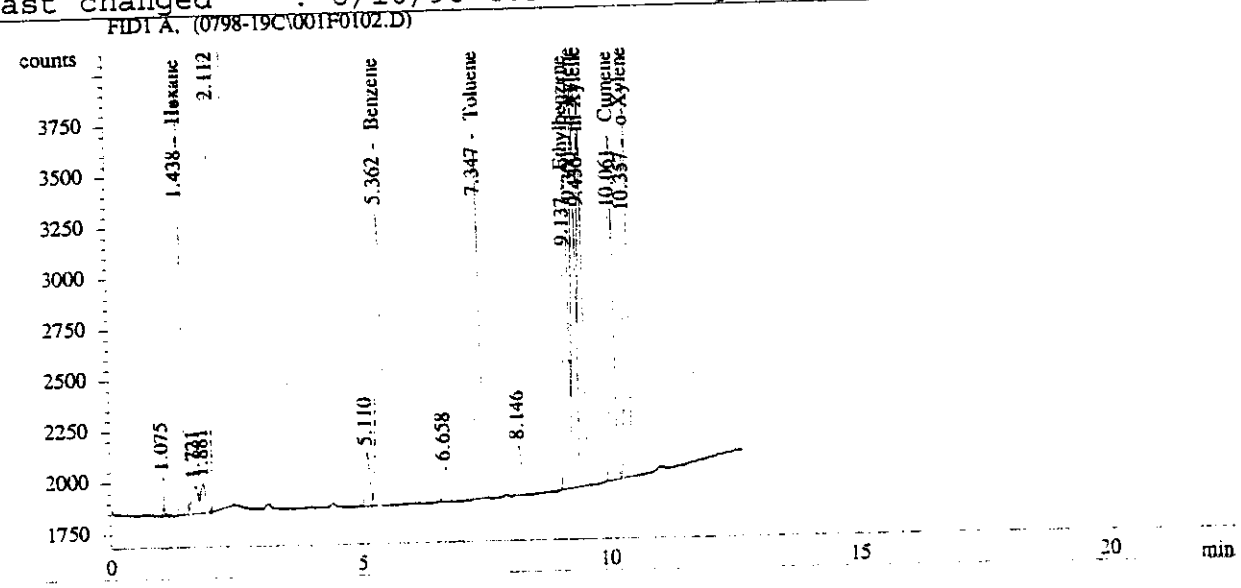
Warning : Calibration warnings (see calibration table listing)

353

Injection Date : 8/4/98 5:27:43 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 1
Vial : 1
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.438	BV	9580.13281	7.82610e-4	7.49751		Hexane
5.362	VP	1.12548e4	7.15146e-4	8.04879		Benzene
7.347	BP	1.12783e4	7.05200e-4	7.95345		Toluene
9.137	BV	1.12164e4	7.04880e-4	7.90621		Ethylbenzene
9.300	VV	1.12286e4	7.09830e-4	7.97038		p-Xylene
9.436	VB	1.11835e4	7.06747e-4	7.90391		m-Xylene
10.061	BV	1.03023e4	7.66465e-4	7.89635		Cumene
10.357	VB	1.14632e4	6.83677e-4	7.83710		o-Xylene
Totals :				63.01371		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

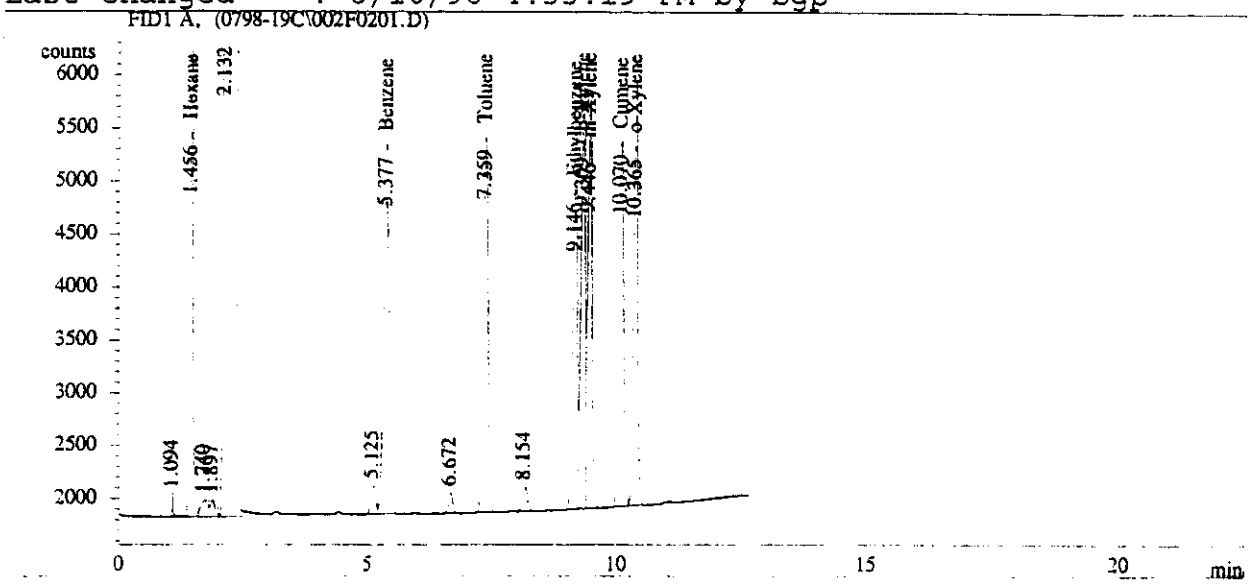
93

354

Injection Date : 8/4/98 5:44:45 PM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 2
Vial : 2
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.456	BB	1.94564e4	8.21982e-4	15.99285		Hexane
5.377	VB	2.30514e4	7.40642e-4	17.07283		Benzene
7.359	BP	2.31373e4	7.28494e-4	16.85538		Toluene
9.146	BV	2.31203e4	7.24766e-4	16.75680		Ethylbenzene
9.309	VV	2.30779e4	7.30892e-4	16.86745		p-Xylene
9.446	VB	2.30659e4	7.28020e-4	16.79241		m-Xylene
10.070	BV	2.11355e4	7.90498e-4	16.70755		Cumene
10.365	VB	2.36299e4	7.04287e-4	16.64220		o-Xylene

Totals : 133.68747

Results obtained with enhanced integrator!
1 Warnings or Errors :

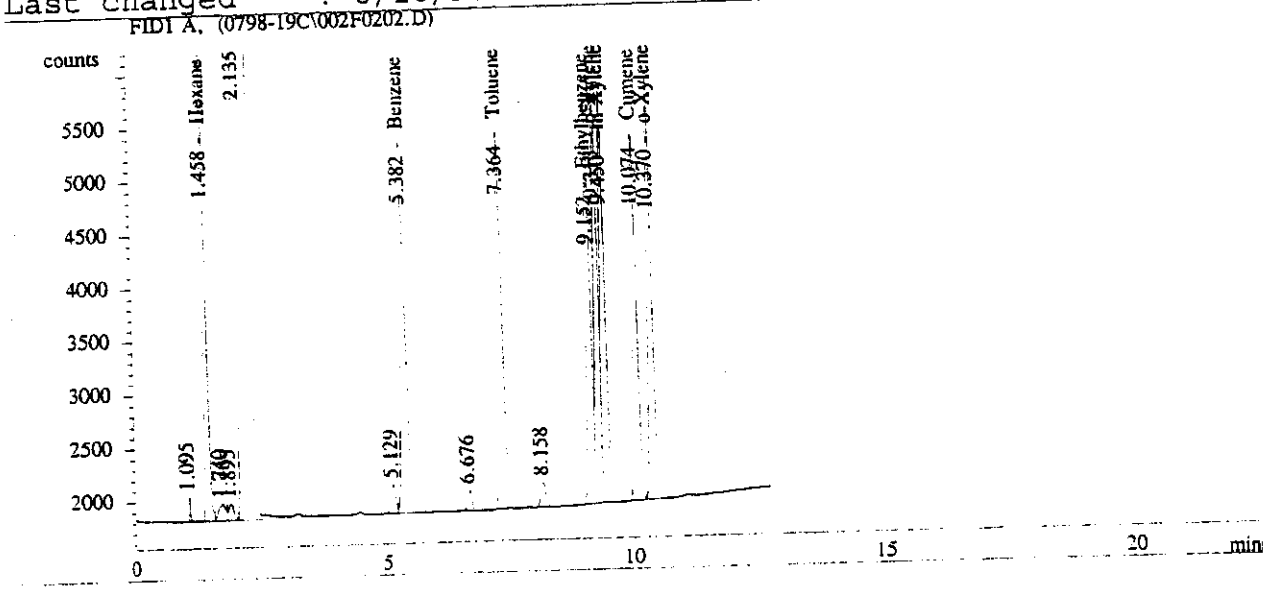
Warning : Calibration warnings (see calibration table listing)

355

94

Injection Date	: 8/4/98 6:01:48 PM	Seq. Line :	2
Sample Name	: gc-14 pg 53 #2	Vial :	2
Acq. Operator	: bgp	Inj :	2
		Inj Volume :	2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	BV	1.93115e4	8.21696e-4	15.86821		Hexane
5.382	VB	2.28925e4	7.40473e-4	16.95128		Benzene
7.364	BP	2.29771e4	7.28339e-4	16.73513		Toluene
9.152	BV	2.29523e4	7.24629e-4	16.63192		Ethylbenzene
9.313	VV	2.29641e4	7.30793e-4	16.78200		p-Xylene
9.450	VB	2.28769e4	7.27854e-4	16.65101		m-Xylene
10.074	BV	2.09626e4	7.90309e-4	16.56693		Cumene
10.370	VB	2.34776e4	7.04161e-4	16.53198		o-Xylene
Totals :				132.71846		

Results obtained with enhanced integrator!
1 Warnings or Errors :

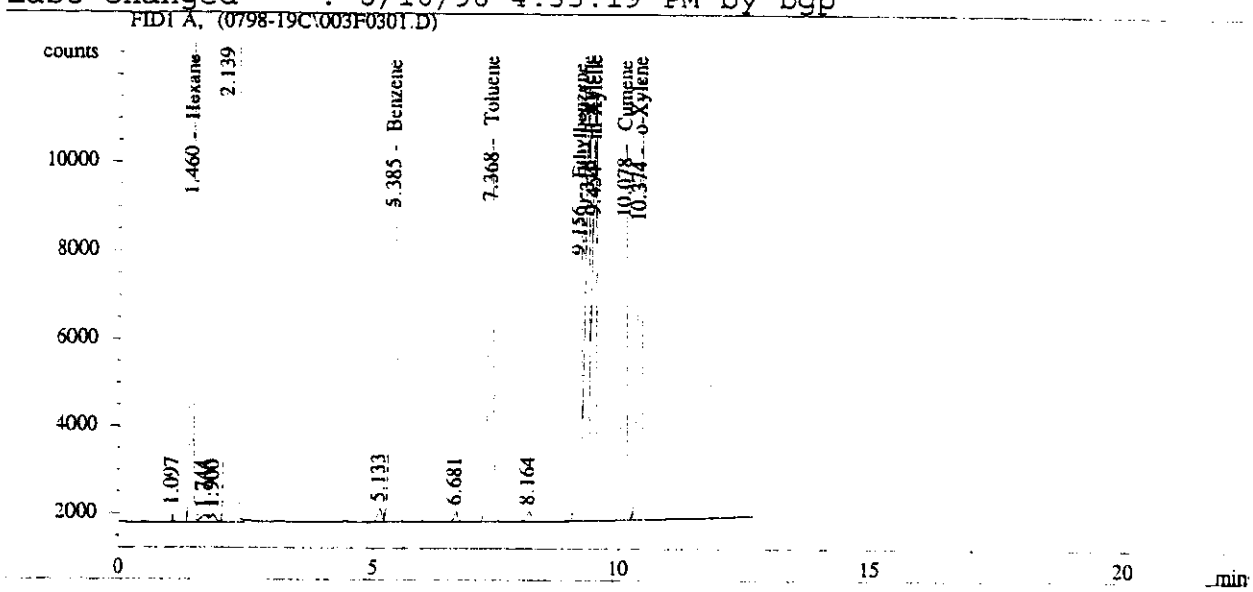
Warning : Calibration warnings (see calibration table listing)

95

356

Teller 8/10/98 4:36:11 PM bgp

Injection Date	: 8/4/98 6:19:01 PM	Seq. Line :	3
Sample Name	: gc-14 pg 53 #3	Vial :	3
Acq. Operator	: bgp	Inj :	1
		Inj Volume :	2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19B.M		
Last changed	: 8/3/98 3:08:36 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19D.M		
Last changed	: 8/10/98 4:33:19 PM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	BV	4.77891e4	8.44625e-4	40.36387		Hexane
5.385	VB	5.71940e4	7.55162e-4	43.19074		Benzene
7.368	BP	5.74193e4	7.41720e-4	42.58905		Toluene
9.156	BV	5.74099e4	7.35957e-4	42.25125		Ethylbenzene
9.318	VV	5.72619e4	7.42807e-4	42.53457		p-Xylene
9.454	VB	5.73043e4	7.39982e-4	42.40416		m-Xylene
10.078	BV	5.22604e4	8.04110e-4	42.02307		Cumene
10.374	VB	5.86130e4	7.15876e-4	41.95963		o-Xylene

Totals : 337.31634

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

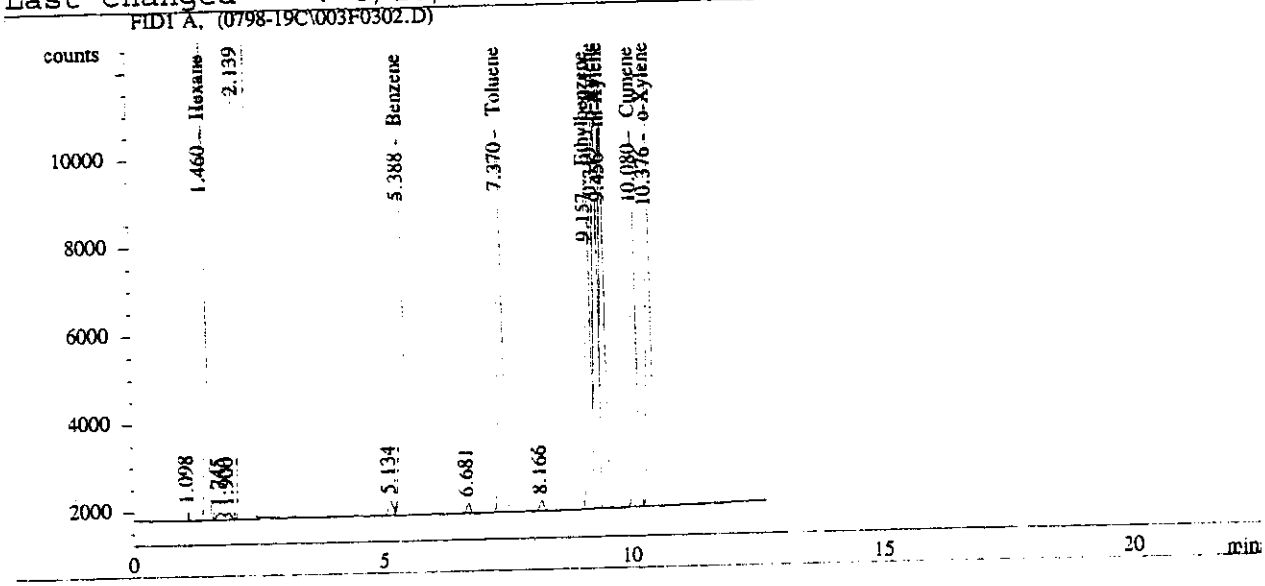
357

96

Injection Date : 8/4/98 6:36:09 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 3
Vial : 3
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	BV	4.75595e4	8.44550e-4	40.16637		Hexane
5.388	VB	5.70623e4	7.55139e-4	43.09000		Benzene
7.370	BB	5.74446e4	7.41724e-4	42.60799		Toluene
9.157	BV	5.75394e4	7.35974e-4	42.34755		Ethylbenzene
9.319	VV	5.73308e4	7.42817e-4	42.58630		p-Xylene
9.456	VB	5.74032e4	7.39996e-4	42.47814		m-Xylene
10.080	BV	5.23713e4	8.04129e-4	42.11333		Cumene
10.376	VB	5.87073e4	7.15889e-4	42.02791		o-Xylene
Totals :				337.41758		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

97

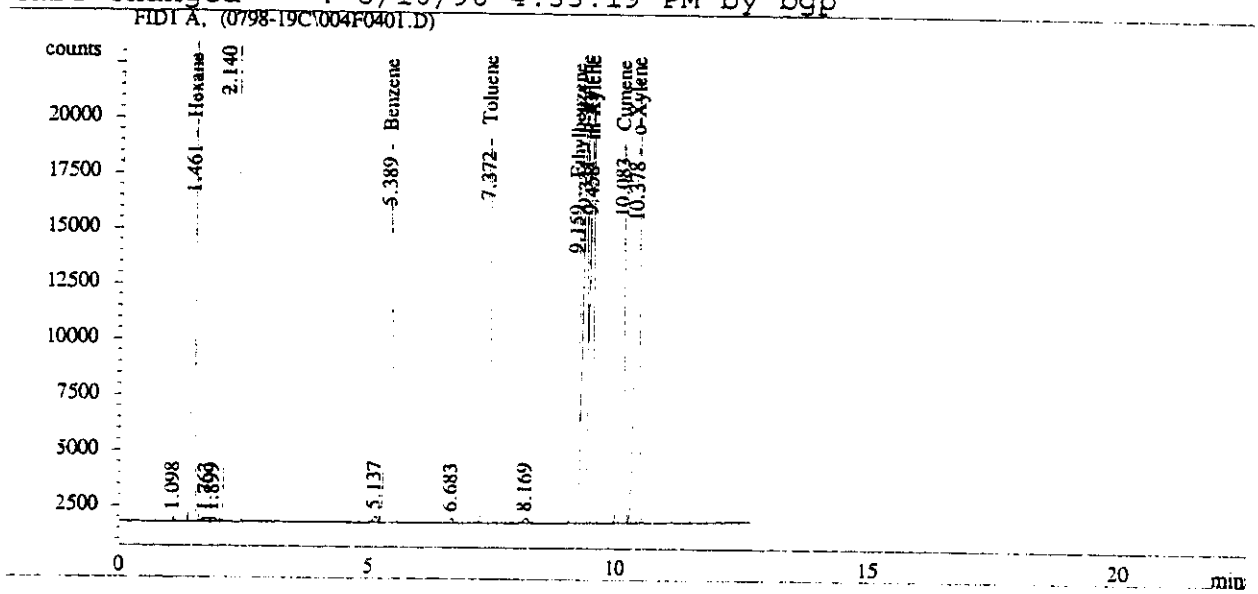
358

Teller 8/10/98 4:36:34 PM bgp

Injection Date : 8/4/98 6:53:16 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 4
Vial : 4
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BV	9.40295e4	8.52271e-4	80.13861		Hexane
5.389	VB	1.13221e5	7.60013e-4	86.04933		Benzene
7.372	BB	1.14201e5	7.46158e-4	85.21218		Toluene
9.159	BV	1.14469e5	7.39719e-4	84.67486		Ethylbenzene
9.321	VV	1.14312e5	7.46822e-4	85.37055		p-Xylene
9.458	VB	1.14059e5	7.43992e-4	84.85930		m-Xylene
10.083	BV	1.04220e5	8.08718e-4	84.28492		Cumene
10.378	VP	1.16834e5	7.19777e-4	84.09424		o-Xylene
Totals :				674.68398		

Results obtained with enhanced integrator!
1 Warnings or Errors :

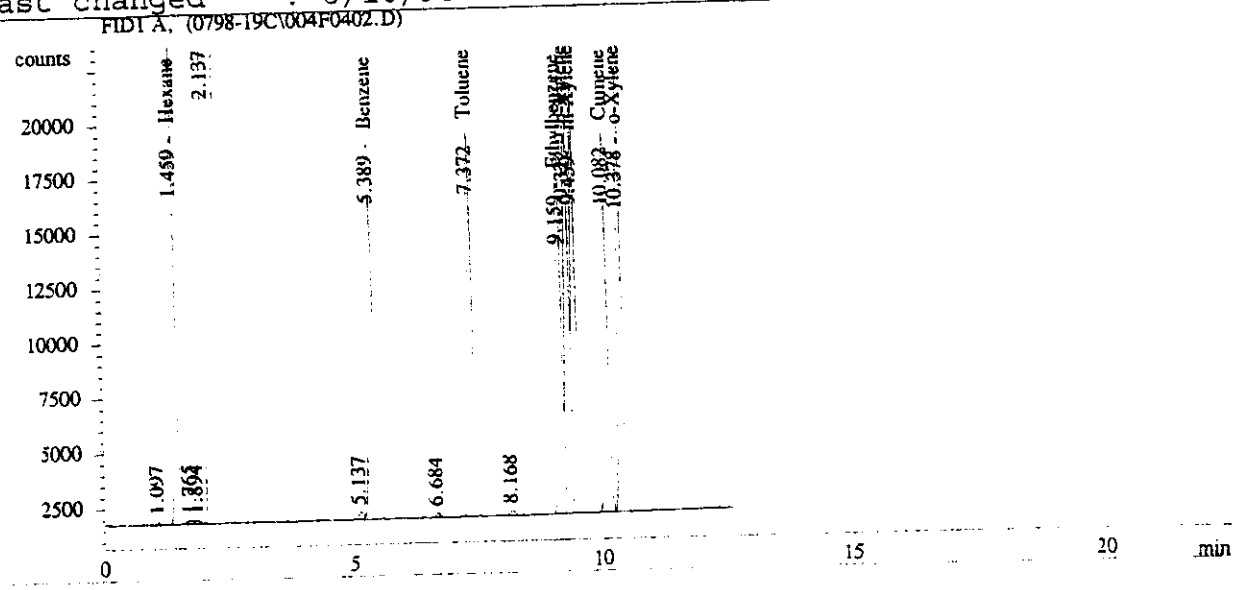
Warning : Calibration warnings (see calibration table listing)

359

Injection Date : 8/4/98 7:10:28 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 4
Vial : 4
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	BV	9.42678e4	8.52291e-4	80.34360		Hexane
5.389	VB	1.13684e5	7.60033e-4	86.40335		Benzene
7.372	BP	1.14974e5	7.46188e-4	85.79195		Toluene
9.159	BV	1.15486e5	7.39752e-4	85.43102		Ethylbenzene
9.322	VV	1.15362e5	7.46858e-4	86.15885		p-Xylene
9.459	VB	1.14946e5	7.44023e-4	85.52248		m-Xylene
10.082	BV	1.05253e5	8.08763e-4	85.12493		Cumene
10.378	VB	1.18018e5	7.19817e-4	84.95119		o-Xylene
Totals :				679.72735		

Results obtained with enhanced integrator!
1 Warnings or Errors :

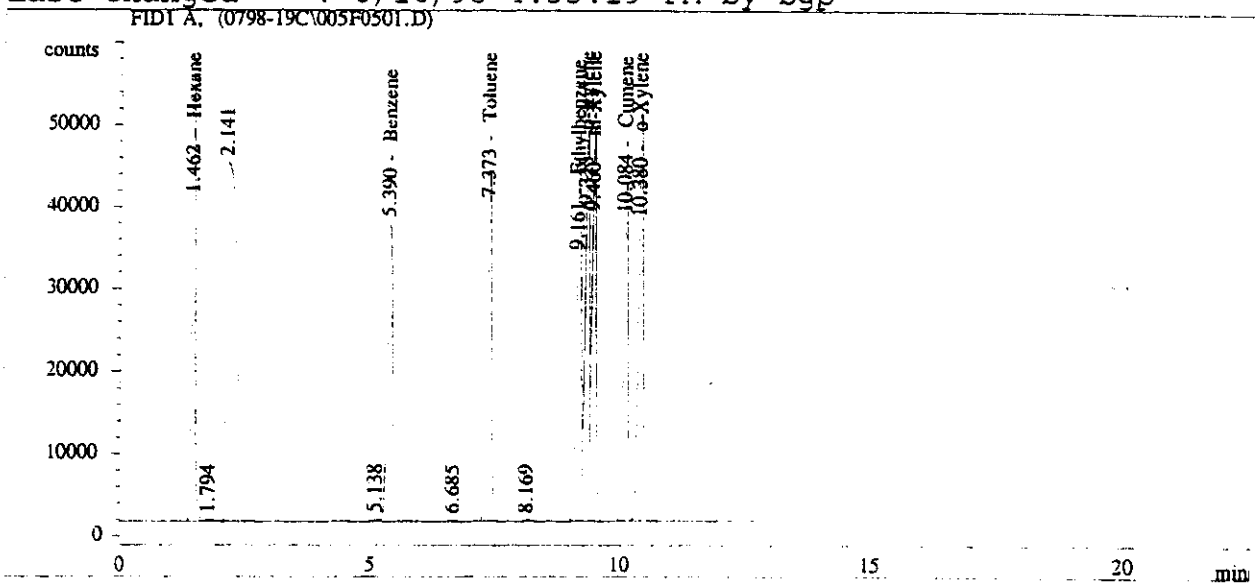
Warning : Calibration warnings (see calibration table listing)

99

360

Teller 8/10/98 4:36:57 PM bgp

Injection Date	: 8/4/98 7:27:34 PM	Seq. Line	: 5
Sample Name	: gc-14 pg 53 #5	Vial	: 5
Acq. Operator	: bgp	Inj	: 1
		Inj Volume	: 2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19B.M		
Last changed	: 8/3/98 3:08:36 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19D.M		
Last changed	: 8/10/98 4:33:19 PM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BV	2.32817e5	8.56982e-4	199.51974		Hexane
5.390	VB	2.80396e5	7.62966e-4	213.93234		Benzene
7.373	BB	2.82960e5	7.48835e-4	211.89053		Toluene
9.161	BV	2.84084e5	7.41978e-4	210.78420		Ethylbenzene
9.323	VV	2.83107e5	7.49224e-4	212.11038		p-Xylene
9.460	VB	2.82990e5	7.46409e-4	211.22596		m-Xylene
10.084	BV	2.58695e5	8.11486e-4	209.92757		Cumene
10.380	VB	2.89900e5	7.22122e-4	209.34334		o-Xylene
Totals :				1678.73407		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

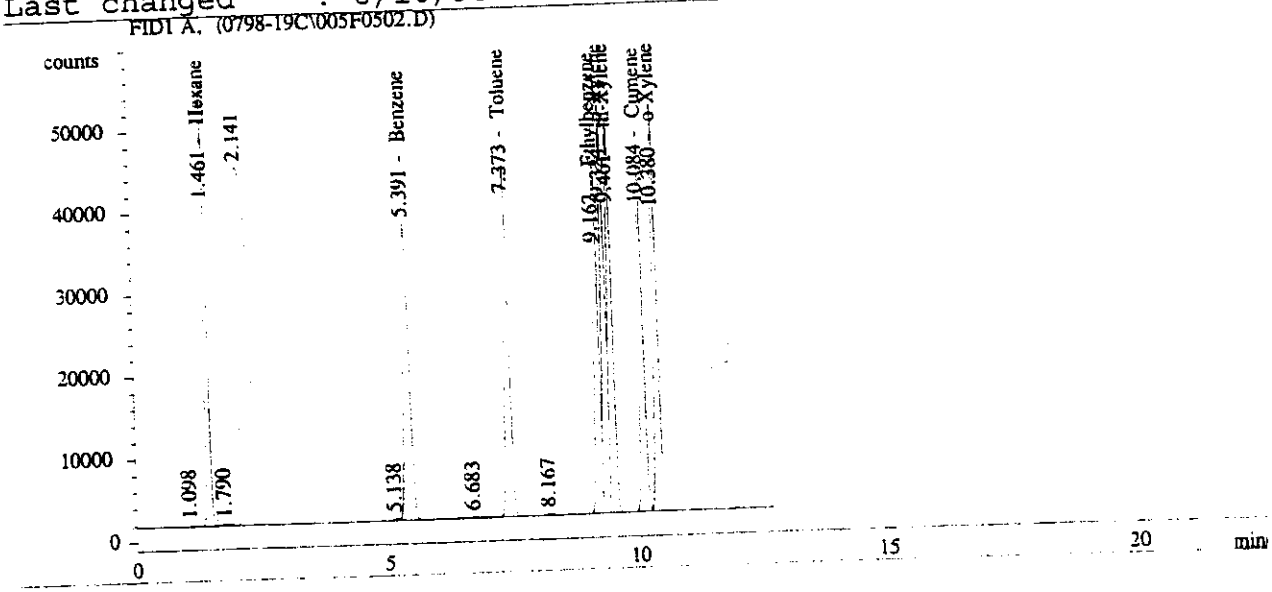
361

100

Injection Date : 8/4/98 7:44:40 PM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 5
Vial : 5
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BB	2.32037e5	8.56971e-4	198.84866		Hexane
5.391	VB	2.79776e5	7.62961e-4	213.45857		Benzene
7.373	BB	2.82642e5	7.48833e-4	211.65183		Toluene
9.162	BV	2.84041e5	7.41978e-4	210.75197		Ethylbenzene
9.324	VV	2.83427e5	7.49226e-4	212.35101		p-Xylene
9.461	VB	2.82859e5	7.46408e-4	211.12820		m-Xylene
10.084	BV	2.58670e5	8.11485e-4	209.90705		Cumene
10.380	VB	2.89869e5	7.22122e-4	209.32068		o-Xylene
Totals :				1677.41797		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

101

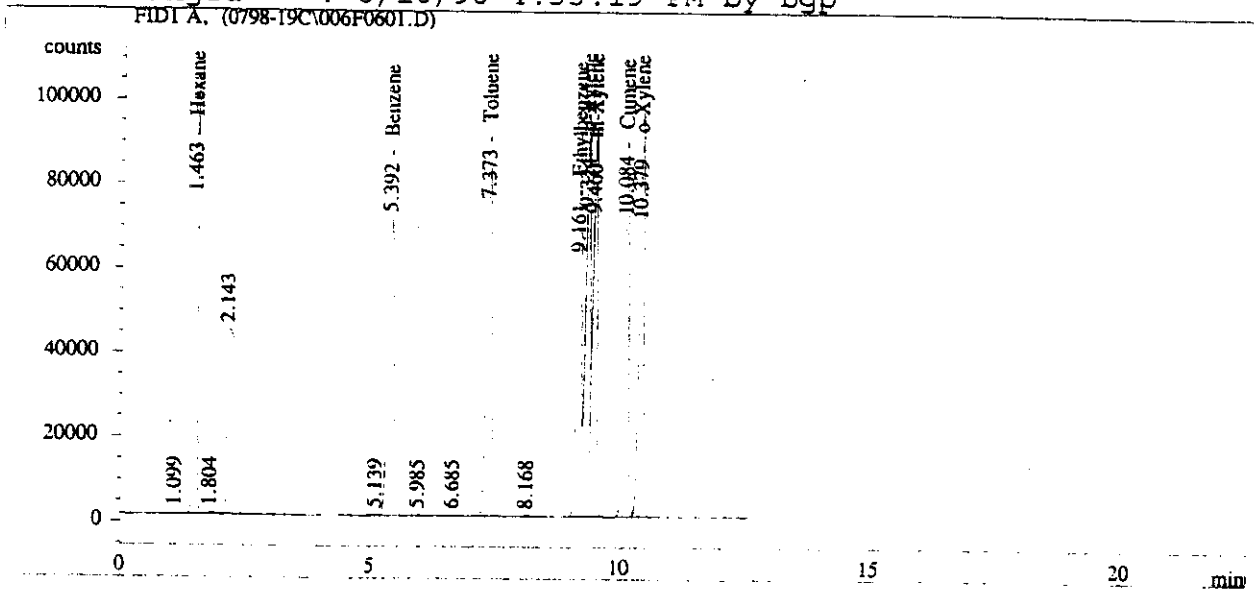
362

Teller 8/10/98 4:37:21 PM bgp

Injection Date : 8/4/98 8:01:47 PM
Sample Name : gc-14 pg 53 #6
Acq. Operator : bgp

Seq. Line : 6
Vial : 6
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463	BV	4.51702e5	8.58528e-4	387.79894		Hexane
5.392	VB	5.43694e5	7.63934e-4	415.34663		Benzene
7.373	BB	5.46499e5	7.49708e-4	409.71448		Toluene
9.161	BV	5.48540e5	7.42713e-4	407.40779		Ethylbenzene
9.324	VV	5.47295e5	7.50009e-4	410.47635		p-Xylene
9.460	VB	5.45232e5	7.47194e-4	407.39376		m-Xylene
10.084	BV	4.99417e5	8.12386e-4	405.71883		Cumene
10.379	VB	5.59526e5	7.22885e-4	404.47246		o-Xylene

Totals : 3248.32924

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

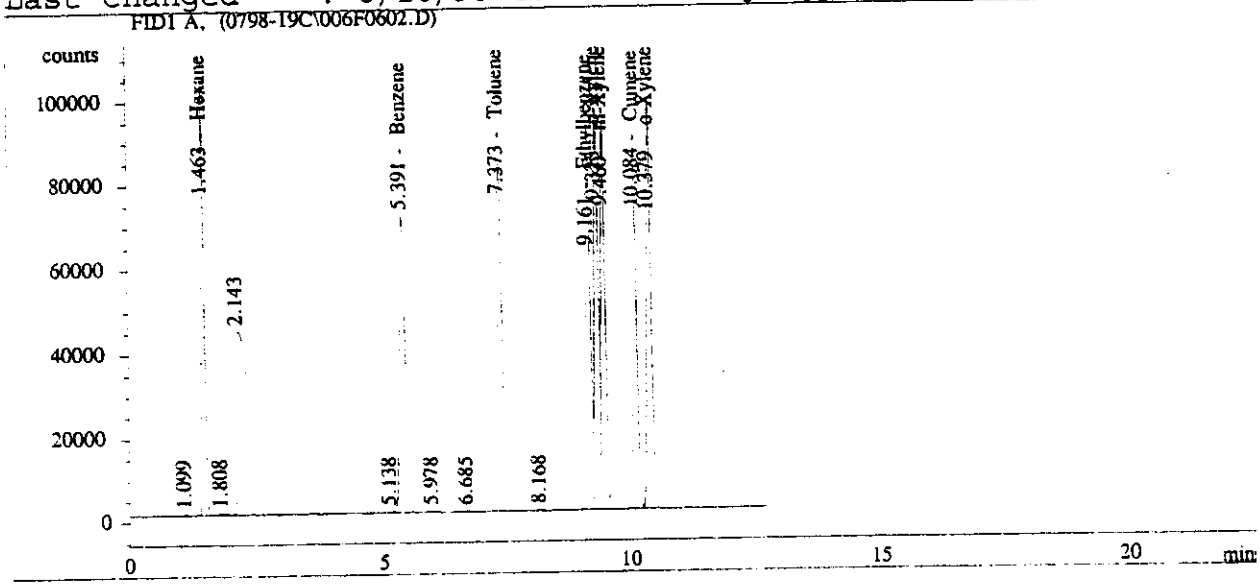
363

102

Injection Date : 8/4/98 8:18:58 PM
Sample Name : gc-14 pg 53 #6
Acq. Operator : bgp

Seq. Line : 6
Vial : 6
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463	BB	4.53614e5	8.58535e-4	389.44396		Hexane
5.391	VB	5.45217e5	7.63937e-4	416.51158		Benzene
7.373	BB	5.48174e5	7.49711e-4	410.97214		Toluene
9.161	BV	5.50369e5	7.42716e-4	408.76803		Ethylbenzene
9.323	VV	5.49617e5	7.50013e-4	412.21955		p-Xylene
9.460	VB	5.46603e5	7.47196e-4	408.41984		m-Xylene
10.084	BV	5.01063e5	8.12389e-4	407.05816		Cumene
10.379	VB	5.61426e5	7.22887e-4	405.84804		o-Xylene
Totals :				3259.24130		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

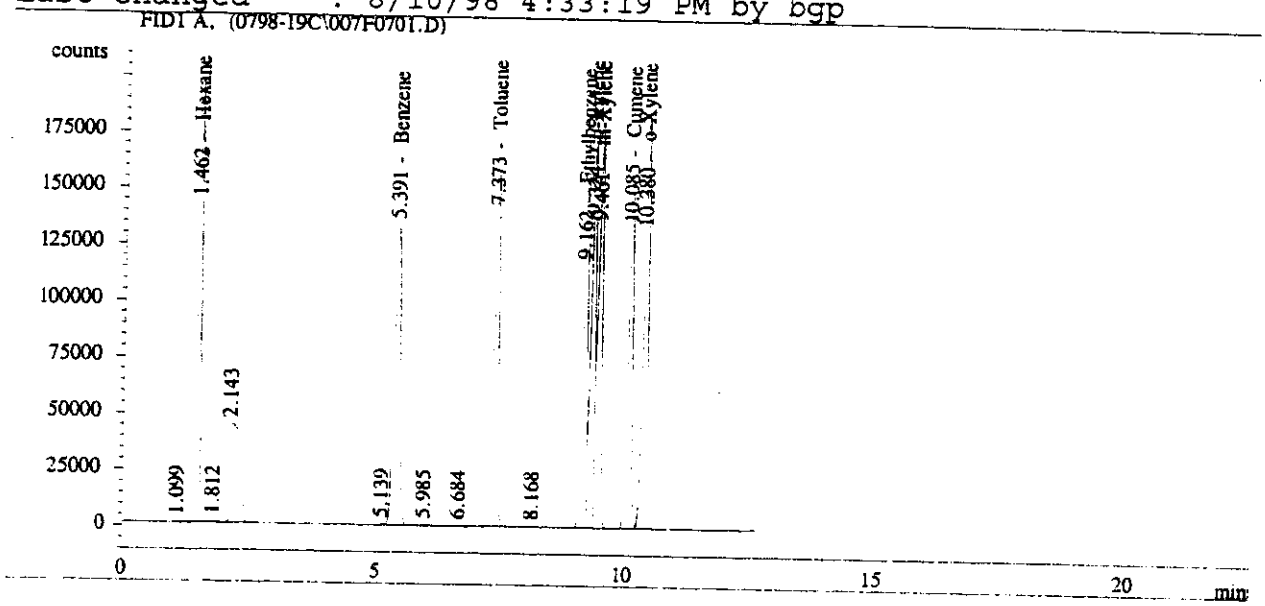
103

364

Injection Date : 8/4/98 8:36:06 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 7
Vial : 7
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	VB	8.58600e5	8.59308e-4	737.80146		Hexane
5.391	VB	1.03106e6	7.64422e-4	788.16460		Benzene
7.373	BB	1.03703e6	7.50152e-4	777.93240		Toluene
9.162	BV	1.04202e6	7.43087e-4	774.31072		Ethylbenzene
9.324	VV	1.03930e6	7.50408e-4	779.89849		p-Xylene
9.461	VB	1.03504e6	7.47595e-4	773.78753		m-Xylene
10.085	BV	9.48559e5	8.12844e-4	771.02980		Cumene
10.380	VB	1.06259e6	7.23273e-4	768.54032		o-Xylene
Totals :				6171.46531		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

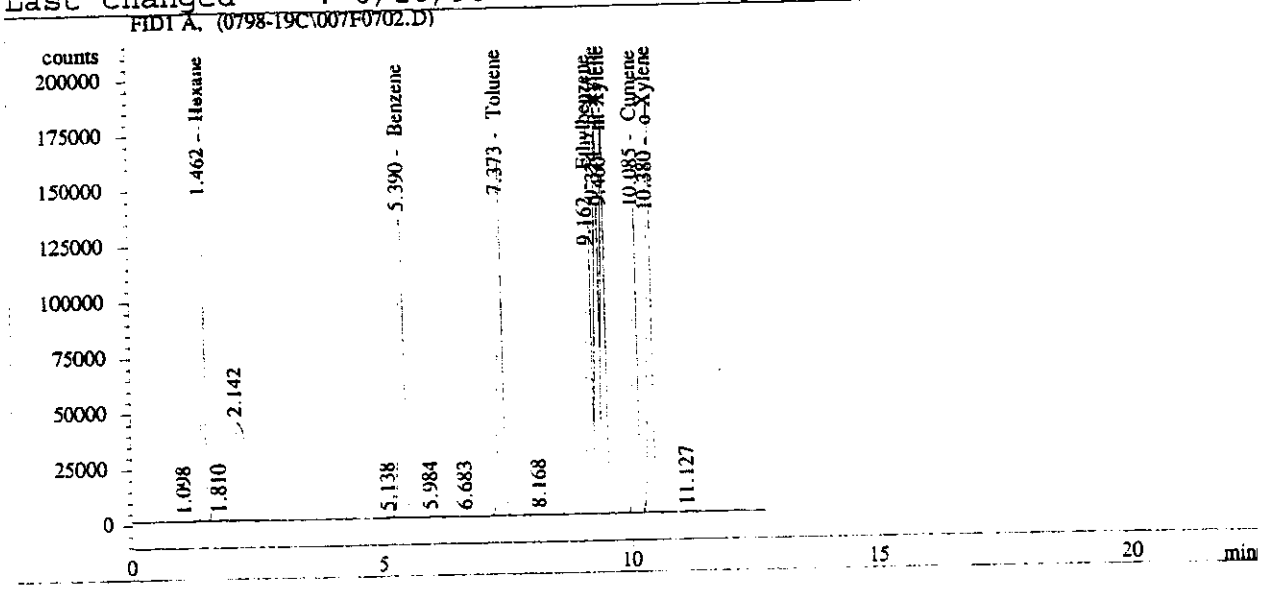
365

104

Injection Date : 8/4/98 8:53:17 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 7
Vial : 7
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	VV	8.67357e5	8.59317e-4	745.33410		Hexane
5.390	VB	1.04386e6	7.64428e-4	797.95392		Benzene
7.373	BB	1.05233e6	7.50159e-4	789.41583		Toluene
9.162	BV	1.05790e6	7.43094e-4	786.11965		Ethylbenzene
9.324	VV	1.05523e6	7.50414e-4	791.86273		p-Xylene
9.460	VB	1.05110e6	7.47601e-4	785.80522		m-Xylene
10.085	BV	9.63790e5	8.12852e-4	783.41833		Cumene
10.380	VB	1.07980e6	7.23280e-4	780.99682		o-Xylene
Totals :				6260.90659		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

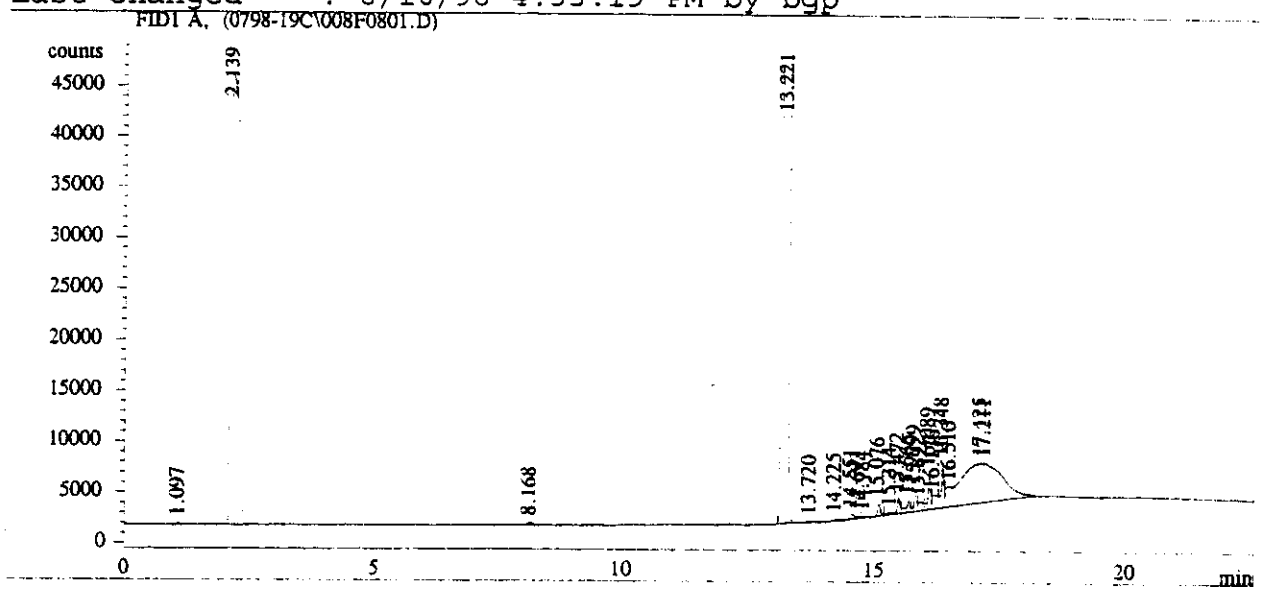
366

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\008F0801.D reagent blank

==========

Injection Date : 8/4/98 9:10:18 PM Seq. Line : 8
Sample Name : reagent blank Vial : 8
Acq. Operator : bgp Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

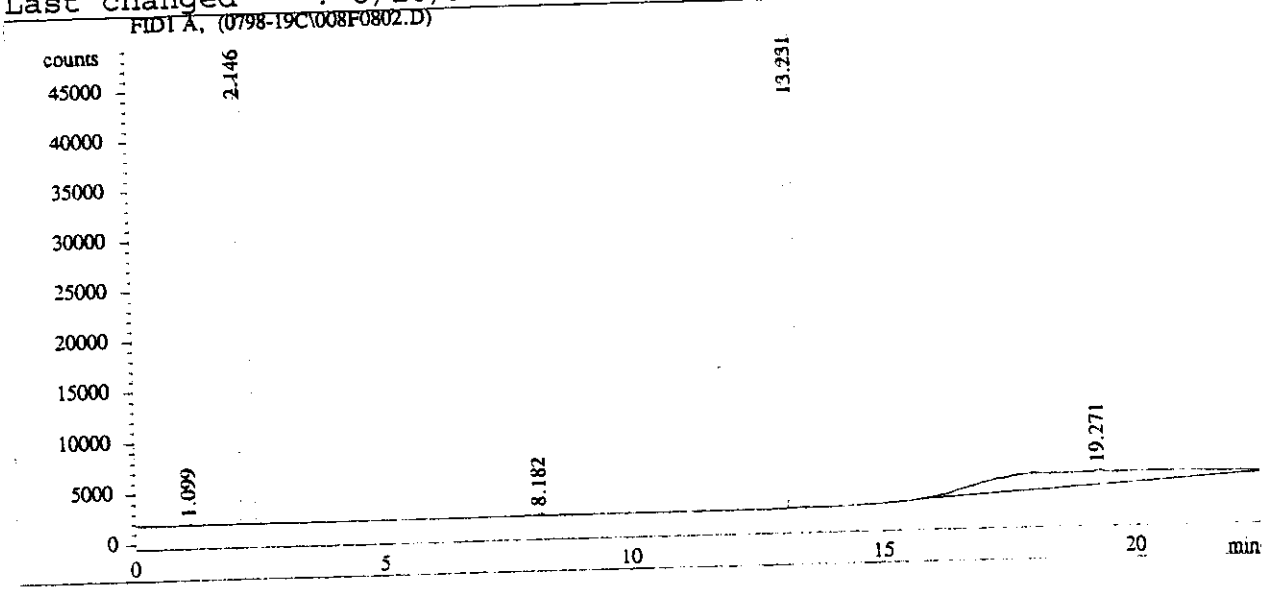
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found
367

106

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\008F0802.D reagent blank

Injection Date	: 8/4/98 9:40:22 PM	Seq. Line :	8
Sample Name	: reagent blank	Vial :	8
Acq. Operator	: bgp	Inj :	2
		Inj Volume :	2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

107

368

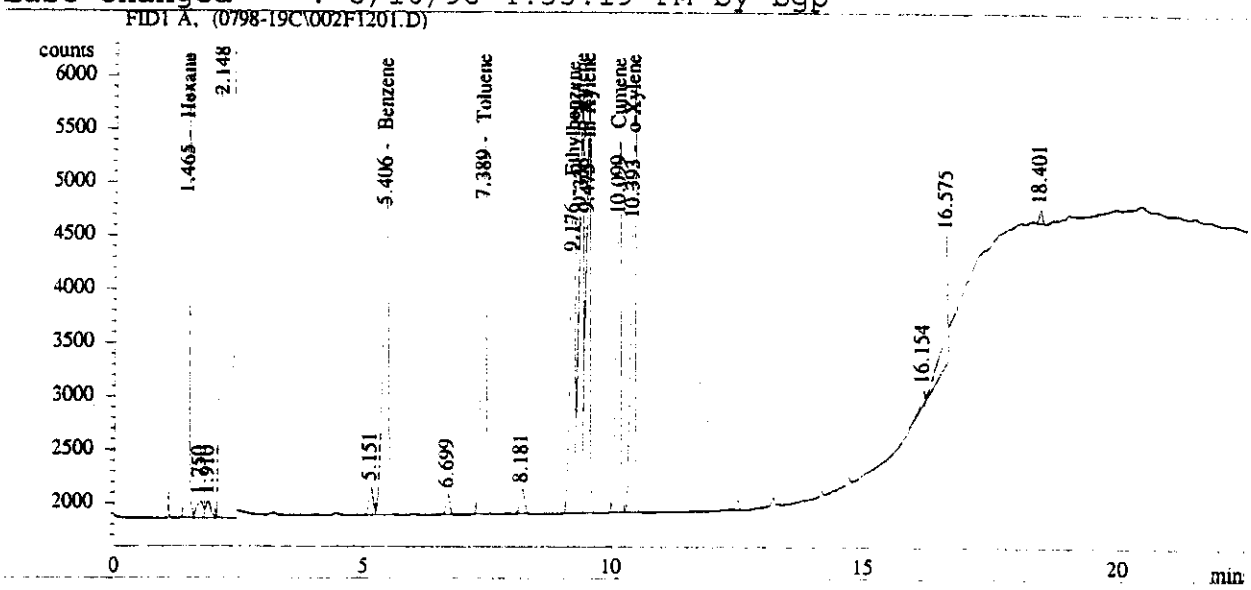
Teller 8/10/98 4:38:37 PM bgp

==========

Injection Date : 8/5/98 1:10:00 AM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 12
Vial : 2
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465	BV	1.92377e4	8.21548e-4	15.80466		Hexane
5.406	VP	2.27607e4	7.40331e-4	16.85048		Benzene
7.389	BP	2.29237e4	7.28287e-4	16.69503		Toluene
9.176	BV	2.30050e4	7.24672e-4	16.67105		Ethylbenzene
9.338	VV	2.29969e4	7.30822e-4	16.80664		p-Xylene
9.475	VB	2.29607e4	7.27928e-4	16.71375		m-Xylene
10.099	BV	2.10420e4	7.90396e-4	16.63152		Cumene
10.393	VB	2.35487e4	7.04220e-4	16.58347		o-Xylene

Totals : 132.75661

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

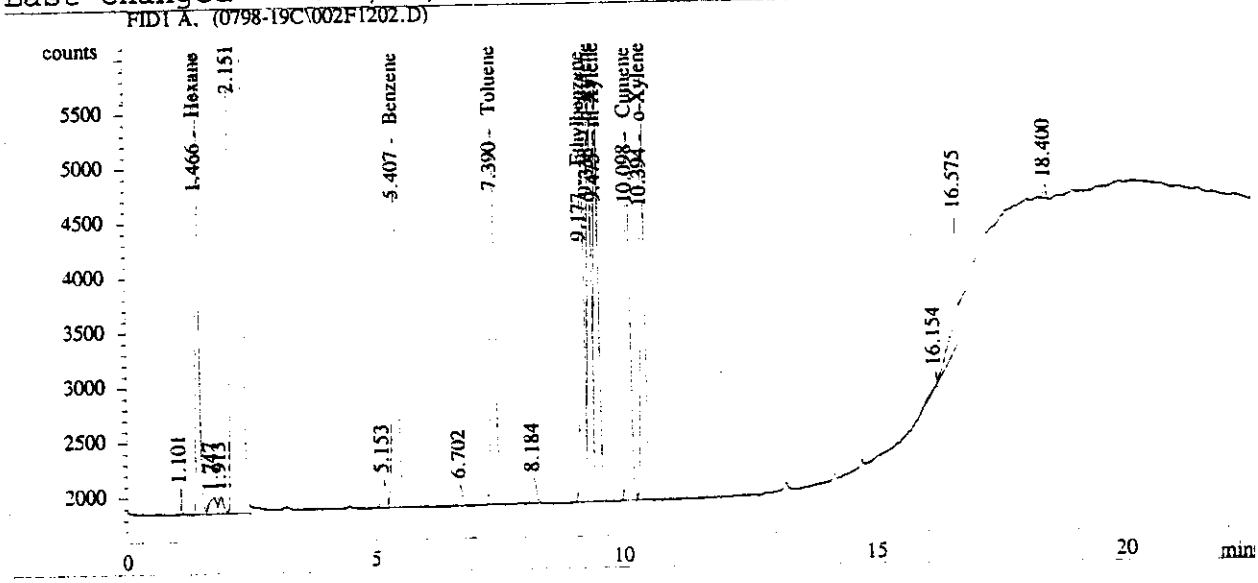
369

108

Injection Date : 8/5/98 1:40:02 AM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 12
Vial : 2
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.466	BB	1.87378e4	8.20518e-4	15.37473		Hexane
5.407	VP	2.21512e4	7.39653e-4	16.38417		Benzene
7.390	BB	2.23187e4	7.27681e-4	16.24088		Toluene
9.177	BV	2.24116e4	7.24174e-4	16.22990		Ethylbenzene
9.338	VV	2.23561e4	7.30248e-4	16.32547		p-Xylene
9.475	VB	2.23166e4	7.27347e-4	16.23189		m-Xylene
10.098	BV	2.04392e4	7.89719e-4	16.14127		Cumene
10.394	VB	2.28810e4	7.03651e-4	16.10023		o-Xylene
Totals :				129.02855		

Results obtained with enhanced integrator!
1 Warnings or Errors :

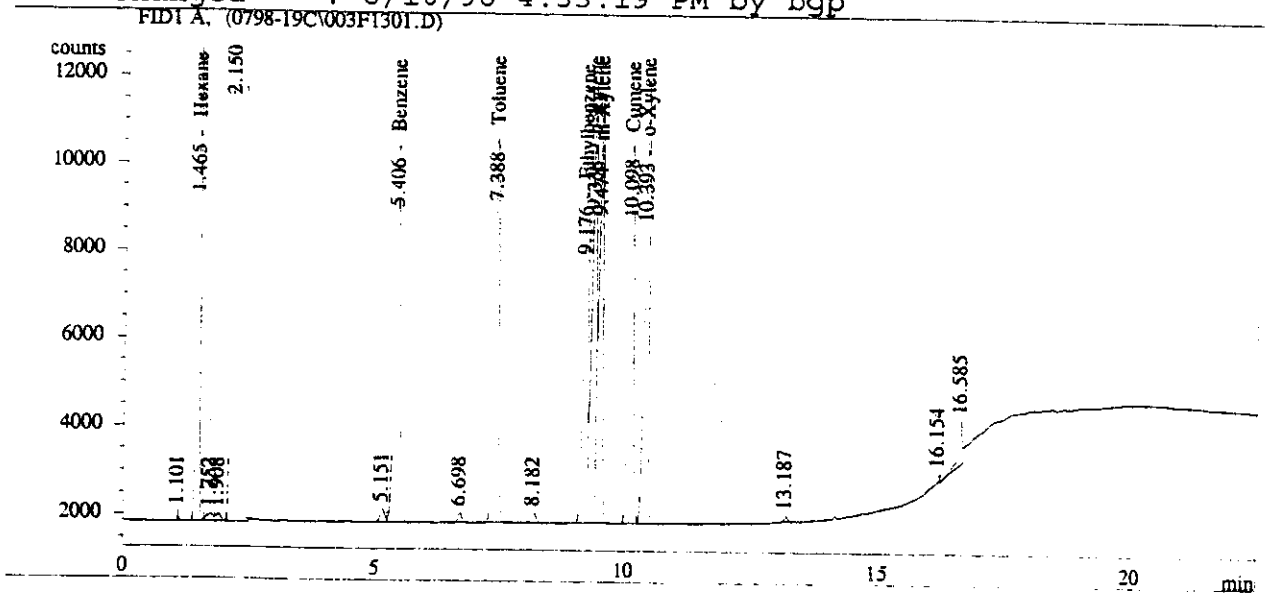
Warning : Calibration warnings (see calibration table listing)

370

Injection Date : 8/5/98 2:09:53 AM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 13
Vial : 3
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465	BB	4.73164e4	8.44469e-4	39.95728		Hexane
5.406	VB	5.66121e4	7.55061e-4	42.74560		Benzene
7.388	BB	5.73015e4	7.41701e-4	42.50061		Toluene
9.176	BV	5.76857e4	7.35993e-4	42.45628		Ethylbenzene
9.338	VV	5.75846e4	7.42852e-4	42.77683		p-Xylene
9.474	VB	5.74559e4	7.40003e-4	42.51755		m-Xylene
10.098	BV	5.25911e4	8.04168e-4	42.29204		Cumene
10.393	VB	5.88886e4	7.15913e-4	42.15913		o-Xylene
Totals :				337.40531		

Results obtained with enhanced integrator!
1 Warnings or Errors :

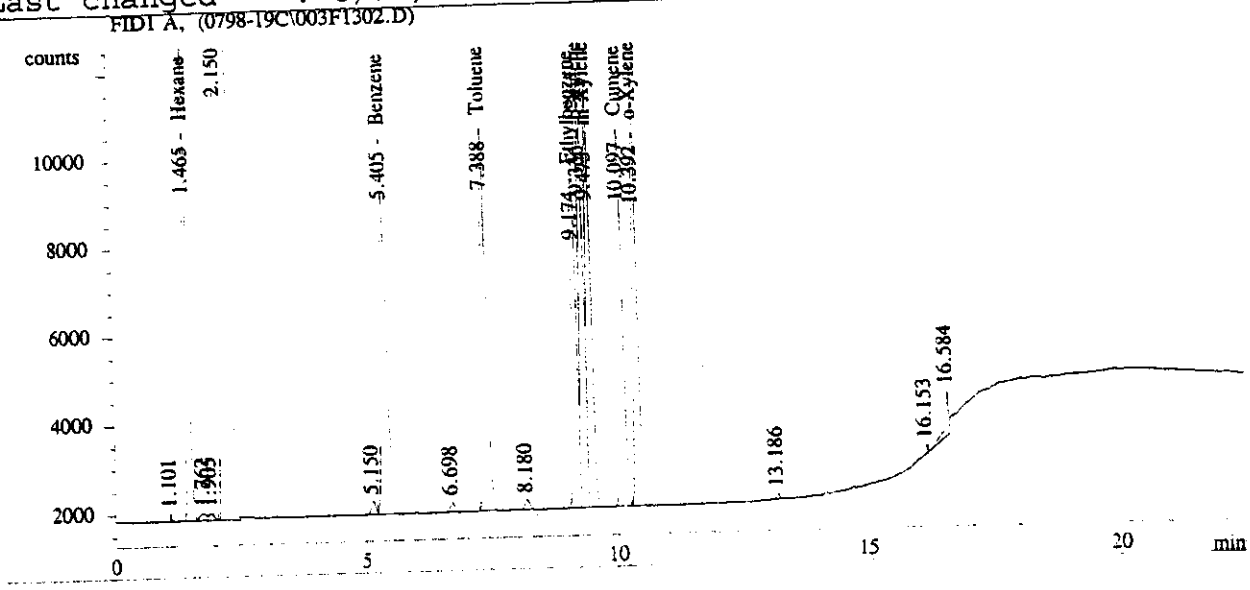
Warning : Calibration warnings (see calibration table listing)

371

110

Injection Date	: 8/5/98 2:39:49 AM	Seq. Line :	13
Sample Name	: gc-14 pg 53 #3	Vial :	3
Acq. Operator	: bgp	Inj :	2
		Inj Volume :	2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465	BV	4.69837e4	8.44358e-4	39.67107		Hexane
5.405	VB	5.61973e4	7.54988e-4	42.42826		Benzene
7.388	BB	5.68241e4	7.41626e-4	42.14223		Toluene
9.174	BV	5.71784e4	7.35927e-4	42.07912		Ethylbenzene
9.336	VV	5.70622e4	7.42779e-4	42.38461		p-Xylene
9.473	VB	5.69874e4	7.39937e-4	42.16712		m-Xylene
10.097	BV	5.21201e4	8.04085e-4	41.90899		Cumene
10.392	VB	5.83977e4	7.15847e-4	41.80383		o-Xylene
Totals :				334.58522		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

372

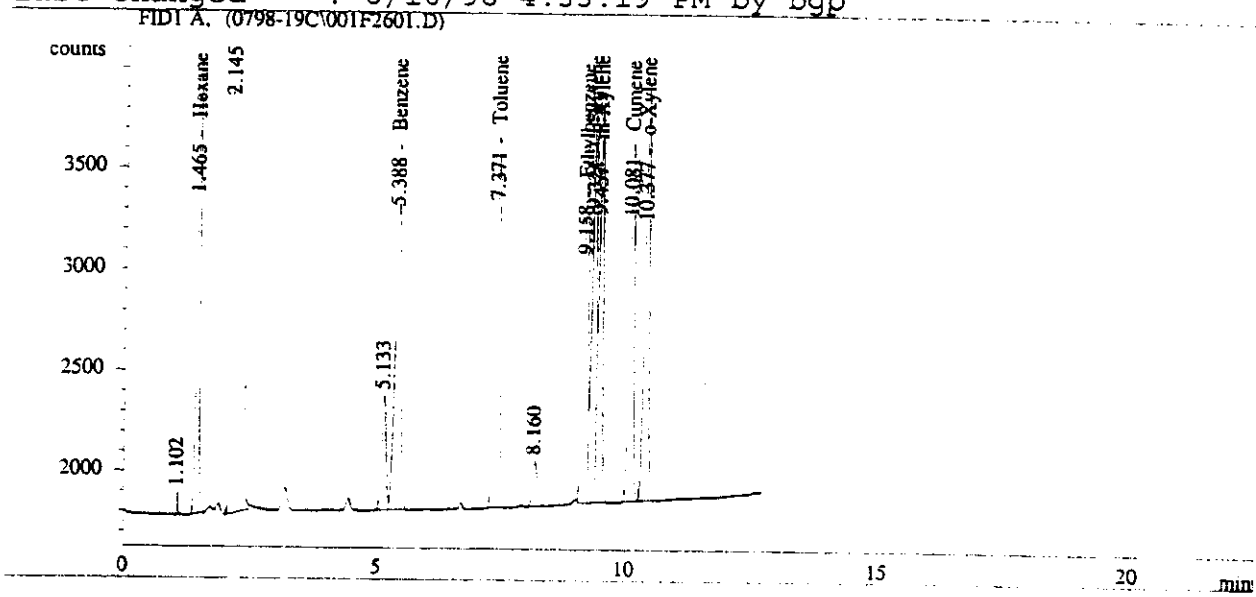
111

Teller 8/10/98 4:40:48 PM bgp

Injection Date : 8/5/98 3:36:53 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 26
Vial : 1
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465	PP	9892.75000	7.85061e-4	7.76642		Hexane
5.388	VB	1.17021e4	7.17051e-4	8.39096		Benzene
7.371	BB	1.17243e4	7.06929e-4	8.28823		Toluene
9.158	BV	1.18427e4	7.06923e-4	8.37186		Ethylbenzene
9.321	VV	1.17606e4	7.11686e-4	8.36987		p-Xylene
9.457	VB	1.17522e4	7.08745e-4	8.32933		m-Xylene
10.081	BB	1.08340e4	7.68766e-4	8.32882		Cumene
10.377	BB	1.20247e4	6.85546e-4	8.24348		o-Xylene

Totals : 66.08898

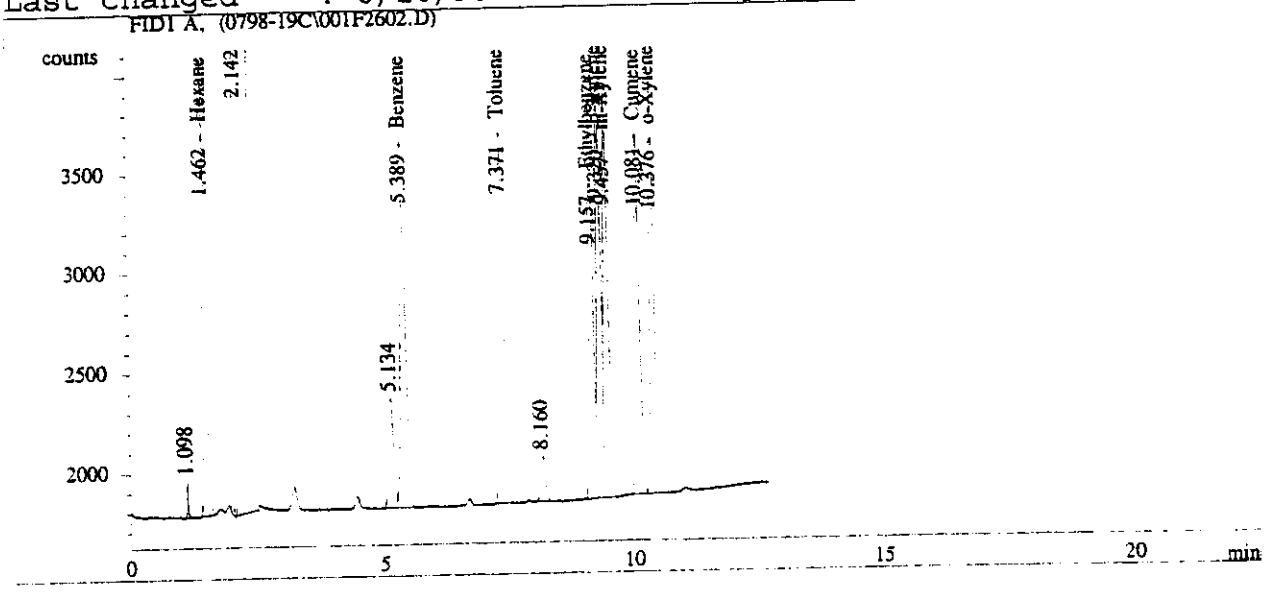
Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
373

Injection Date : 8/5/98 3:53:57 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 26
Vial : 1
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BP	1.01062e4	7.86648e-4	7.94999		Hexane
5.389	VB	1.19459e4	7.18029e-4	8.57749		Benzene
7.371	BB	1.19909e4	7.07901e-4	8.48834		Toluene
9.157	BV	1.20461e4	7.07541e-4	8.52309		Ethylbenzene
9.320	VV	1.20123e4	7.12506e-4	8.55882		p-Xylene
9.457	VB	1.20167e4	7.09610e-4	8.52717		m-Xylene
10.081	BV	1.10934e4	7.69809e-4	8.53981		Cumene
10.376	VB	1.23312e4	6.86495e-4	8.46530		o-Xylene
Totals :				67.63002		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

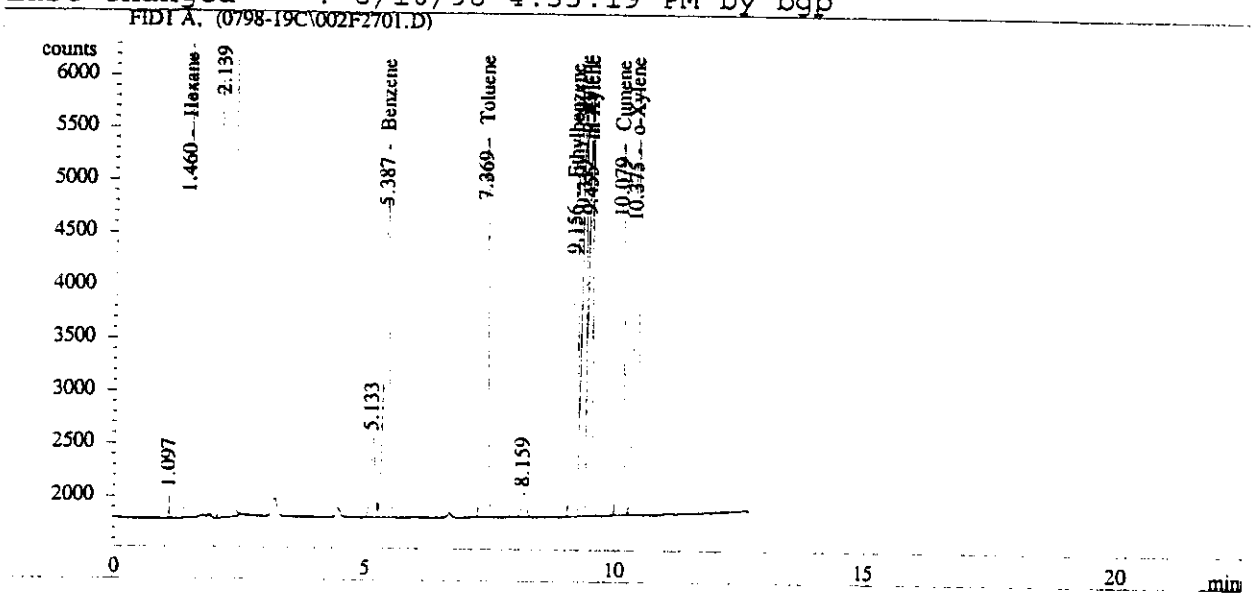
374

113

Injection Date : 8/5/98 4:10:57 PM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 27
Vial : 2
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	BP	1.96048e4	8.22271e-4	16.12050		Hexane
5.387	VB	2.34057e4	7.41010e-4	17.34382		Benzene
7.369	BB	2.35130e4	7.28848e-4	17.13742		Toluene
9.156	BV	2.35986e4	7.25146e-4	17.11246		Ethylbenzene
9.319	VV	2.36144e4	7.31345e-4	17.27028		p-Xylene
9.455	VB	2.35333e4	7.28417e-4	17.14207		m-Xylene
10.079	BV	2.15492e4	7.90937e-4	17.04408		Cumene
10.375	VP	2.41302e4	7.04689e-4	17.00432		o-Xylene

Totals : 136.17496

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

375

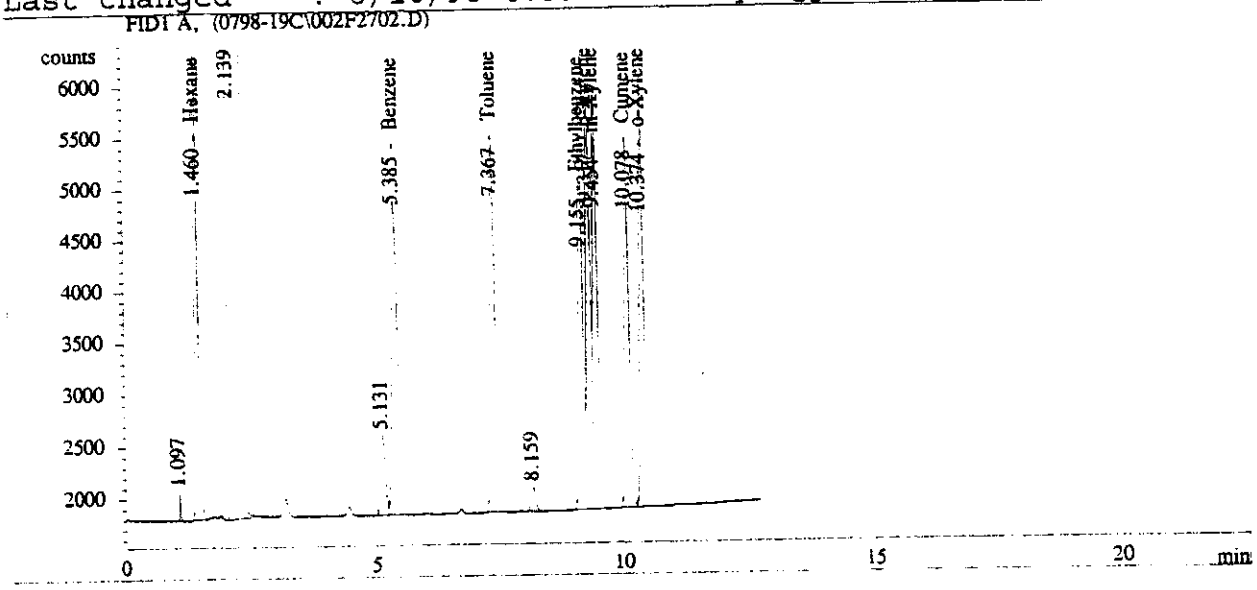
114

==========

Injection Date : 8/5/98 4:27:55 PM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 27
Vial : 2
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	BP	1.96589e4	8.22376e-4	16.16696		Hexane
5.385	VB	2.35329e4	7.41139e-4	17.44118		Benzene
7.367	BB	2.37342e4	7.29051e-4	17.30346		Toluene
9.155	BV	2.38620e4	7.25348e-4	17.30825		Ethylbenzene
9.317	VV	2.38921e4	7.31572e-4	17.47876		p-Xylene
9.454	VB	2.38308e4	7.28662e-4	17.36458		m-Xylene
10.078	BV	2.18431e4	7.91238e-4	17.28313		Cumene
10.374	VB	2.44331e4	7.04925e-4	17.22352		o-Xylene
Totals :				137.56984		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

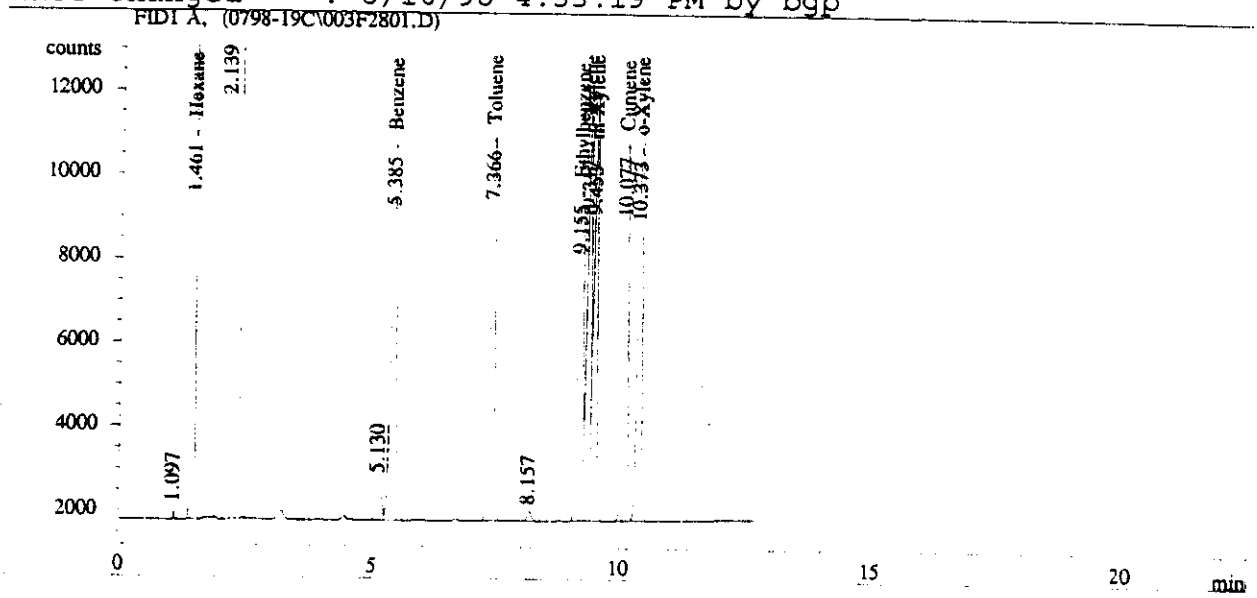
115

376

Injection Date : 8/5/98 4:45:27 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 28
Vial : 3
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BP	4.94909e4	8.45159e-4	41.82766		Hexane
5.385	VP	5.94979e4	7.55542e-4	44.95313		Benzene
7.366	BB	5.99434e4	7.42095e-4	44.48376		Toluene
9.155	BV	6.01167e4	7.36297e-4	44.26373		Ethylbenzene
9.317	VV	6.00323e4	7.43178e-4	44.61470		p-Xylene
9.453	VB	5.99071e4	7.40332e-4	44.35114		m-Xylene
10.077	BV	5.47831e4	8.04535e-4	44.07496		Cumene
10.373	VB	6.13553e4	7.16226e-4	43.94430		o-Xylene
Totals :				352.51337		

Results obtained with enhanced integrator!
1 Warnings or Errors :

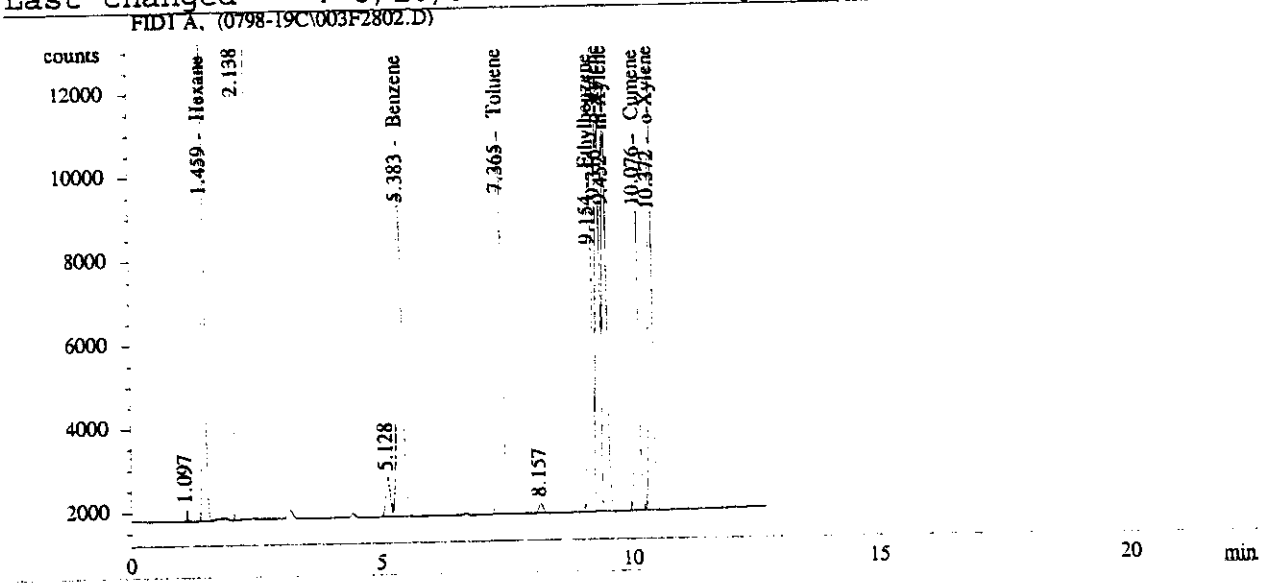
Warning : Calibration warnings (see calibration table listing)

377

Injection Date : 8/5/98 5:02:54 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 28
Vial : 3
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	BP	4.93526e4	8.45117e-4	41.70870		Hexane
5.383	VB	5.94520e4	7.55534e-4	44.91803		Benzene
7.365	BB	6.00325e4	7.42108e-4	44.55063		Toluene
9.154	BV	6.02789e4	7.36316e-4	44.38435		Ethylbenzene
9.316	VV	6.02093e4	7.43201e-4	44.74761		p-Xylene
9.452	VB	6.00765e4	7.40354e-4	44.47789		m-Xylene
10.076	BV	5.50062e4	8.04571e-4	44.25640		Cumene
10.372	VB	6.16074e4	7.16257e-4	44.12672		o-Xylene
Totals :				353.17033		

Results obtained with enhanced integrator!
1 Warnings or Errors :

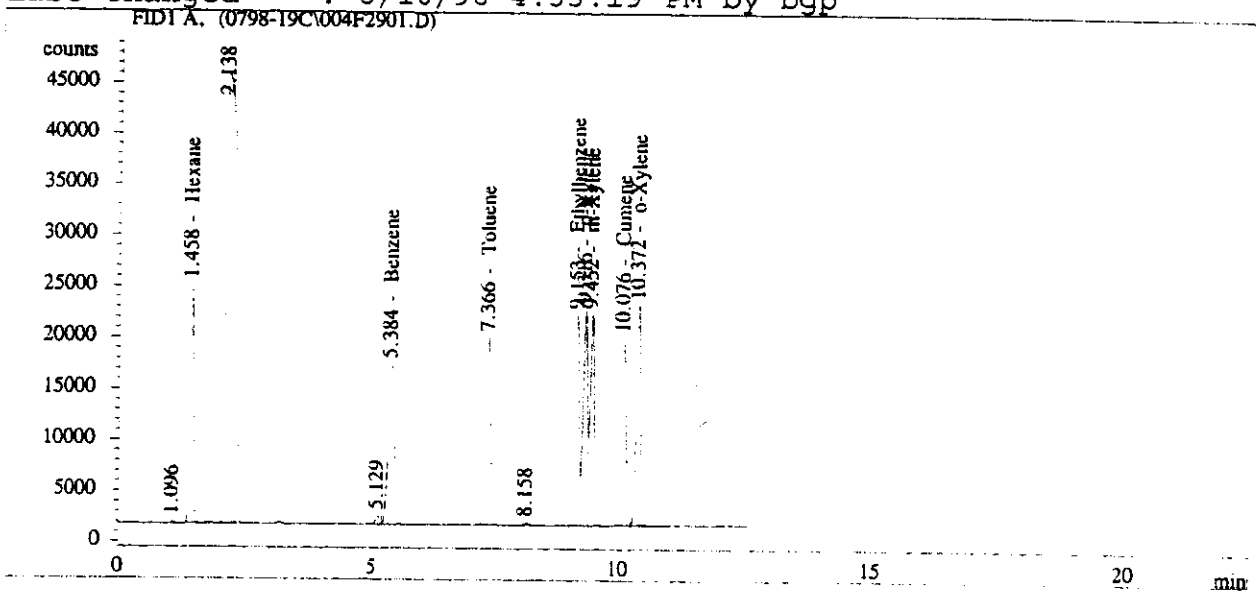
Warning : Calibration warnings (see calibration table listing)

378

Injection Date : 8/5/98 5:19:54 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 29
Vial : 4
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	BP	1.00341e5	8.52768e-4	85.56799		Hexane
5.384	VB	1.20798e5	7.60324e-4	91.84564		Benzene
7.366	BB	1.22055e5	7.46447e-4	91.10732		Toluene
9.153	BV	1.22763e5	7.39974e-4	90.84131		Ethylbenzene
9.316	VV	1.22584e5	7.47093e-4	91.58164		p-Xylene
9.452	VB	1.22184e5	7.44261e-4	90.93695		m-Xylene
10.076	BV	1.11941e5	8.09038e-4	90.56470		Cumene
10.372	VB	1.25361e5	7.20045e-4	90.26525		o-Xylene

Totals : 722.71081

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

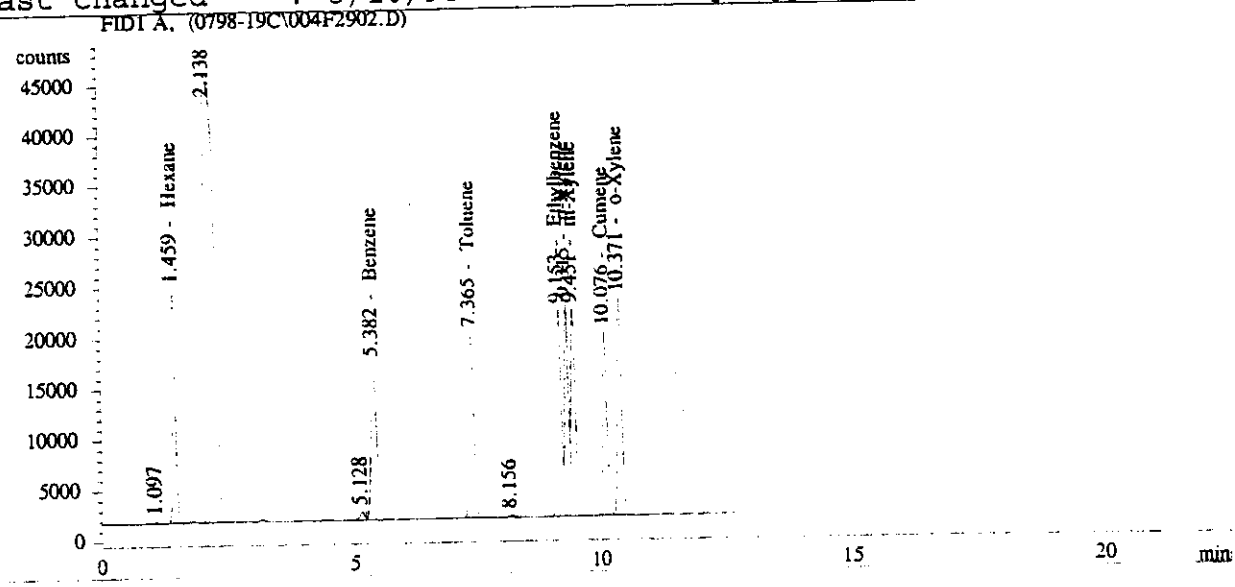
379

==========

Injection Date : 8/5/98 5:37:21 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 29
Vial : 4
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	BP	1.00275e5	8.52763e-4	85.51103		Hexane
5.382	VB	1.20464e5	7.60311e-4	91.58992		Benzene
7.365	BB	1.21396e5	7.46424e-4	90.61259		Toluene
9.153	BV	1.21982e5	7.39952e-4	90.26043		Ethylbenzene
9.315	VV	1.21783e5	7.47069e-4	90.98017		p-Xylene
9.451	VB	1.21523e5	7.44241e-4	90.44265		m-Xylene
10.076	BV	1.11223e5	8.09010e-4	89.98031		Cumene
10.371	VB	1.24561e5	7.20021e-4	89.68640		o-Xylene
Totals :				719.06352		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

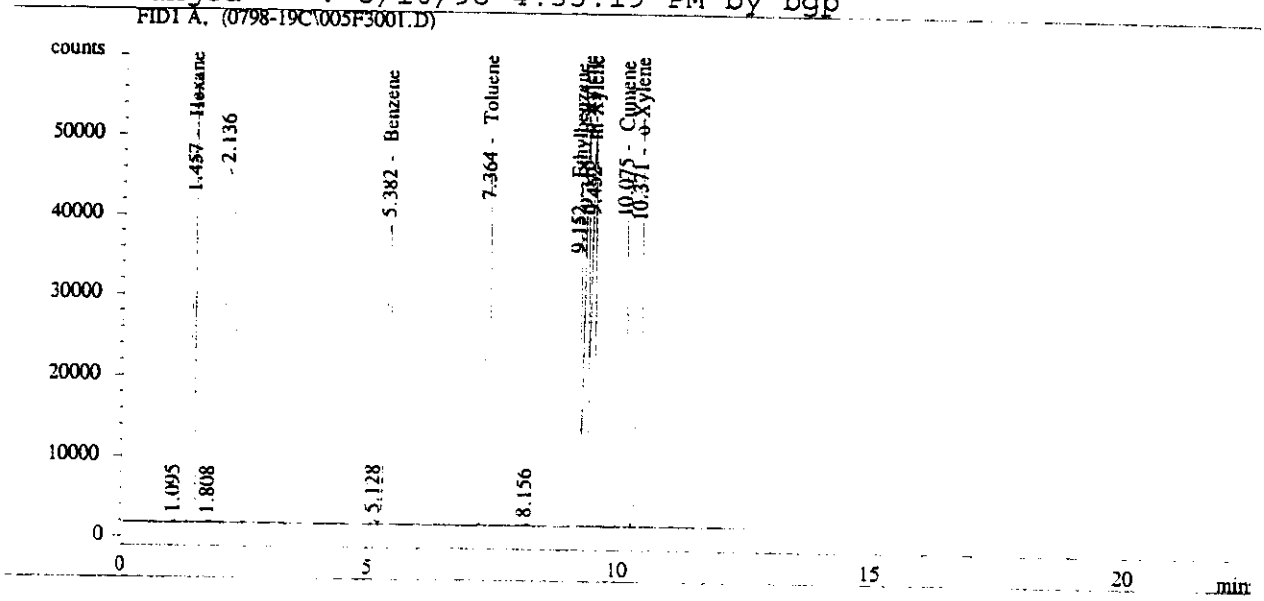
380

119

Injection Date : 8/5/98 5:54:26 PM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 30
Vial : 5
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.457	BP	2.40122e5	8.57079e-4	205.80309		Hexane
5.382	VB	2.89426e5	7.63028e-4	220.84041		Benzene
7.364	BB	2.92052e5	7.48891e-4	218.71496		Toluene
9.152	BV	2.93213e5	7.42026e-4	217.57124		Ethylbenzene
9.315	VV	2.92461e5	7.49276e-4	219.13377		p-Xylene
9.452	VB	2.92304e5	7.46461e-4	218.19350		m-Xylene
10.075	BV	2.67238e5	8.11545e-4	216.87590		Cumene
10.371	VB	2.99443e5	7.22172e-4	216.24938		o-Xylene

Totals : 1733.38226

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

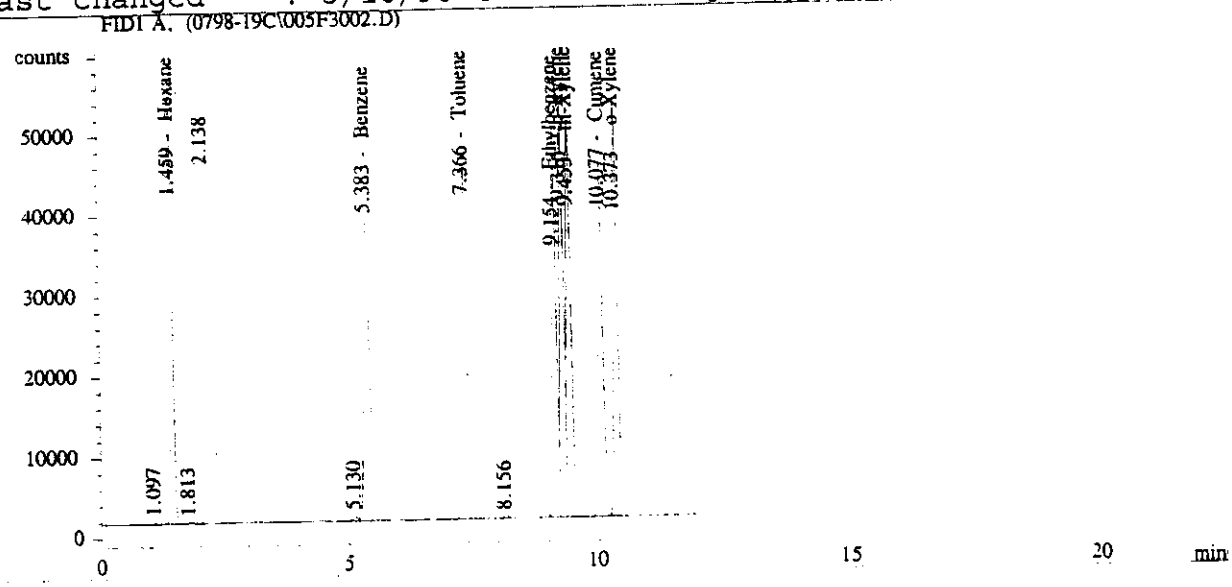
381

120

Injection Date : 8/5/98 6:11:30 PM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 30
Vial : 5
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	BP	2.40923e5	8.57089e-4	206.49285		Hexane
5.383	VB	2.90051e5	7.63032e-4	221.31830		Benzene
7.366	BB	2.92662e5	7.48895e-4	219.17269		Toluene
9.154	BV	2.94040e5	7.42030e-4	218.18651		Ethylbenzene
9.316	VV	2.93792e5	7.49283e-4	220.13320		p-Xylene
9.453	VB	2.92696e5	7.46463e-4	218.48663		m-Xylene
10.077	BV	2.68347e5	8.11553e-4	217.77803		Cumene
10.373	VB	3.00419e5	7.22177e-4	216.95601		o-Xylene
Totals :				1738.52424		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

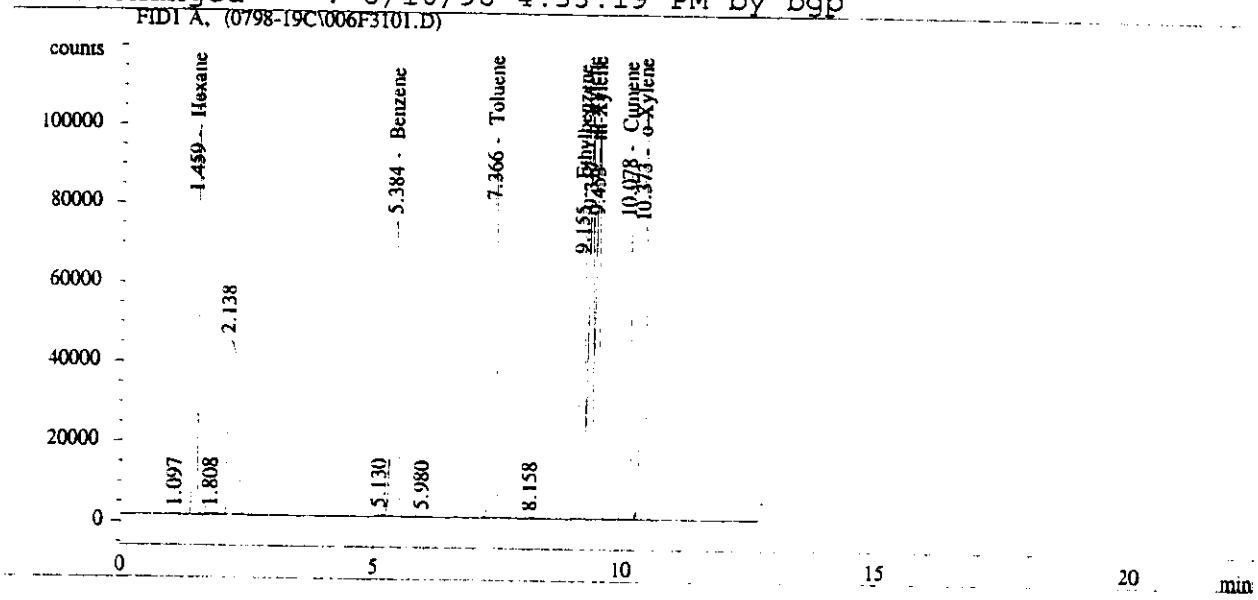
121

382

Injection Date : 8/5/98 6:28:36 PM
Sample Name : gc-14 pg 53 #6
Acq. Operator : bgp

Seq. Line : 31
Vial : 6
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	VP	4.78606e5	8.58621e-4	410.94134		Hexane
5.384	VB	5.76680e5	7.63993e-4	440.57945		Benzene
7.366	BB	5.82751e5	7.49767e-4	436.92713		Toluene
9.155	BV	5.86478e5	7.42764e-4	435.61528		Ethylbenzene
9.317	VV	5.85912e5	7.50065e-4	439.47168		p-Xylene
9.453	VB	5.83143e5	7.47249e-4	435.75264		m-Xylene
10.078	BV	5.35052e5	8.12450e-4	434.70288		Cumene
10.373	VB	5.98997e5	7.22939e-4	433.03813		o-Xylene
Totals :				3467.02853		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

383

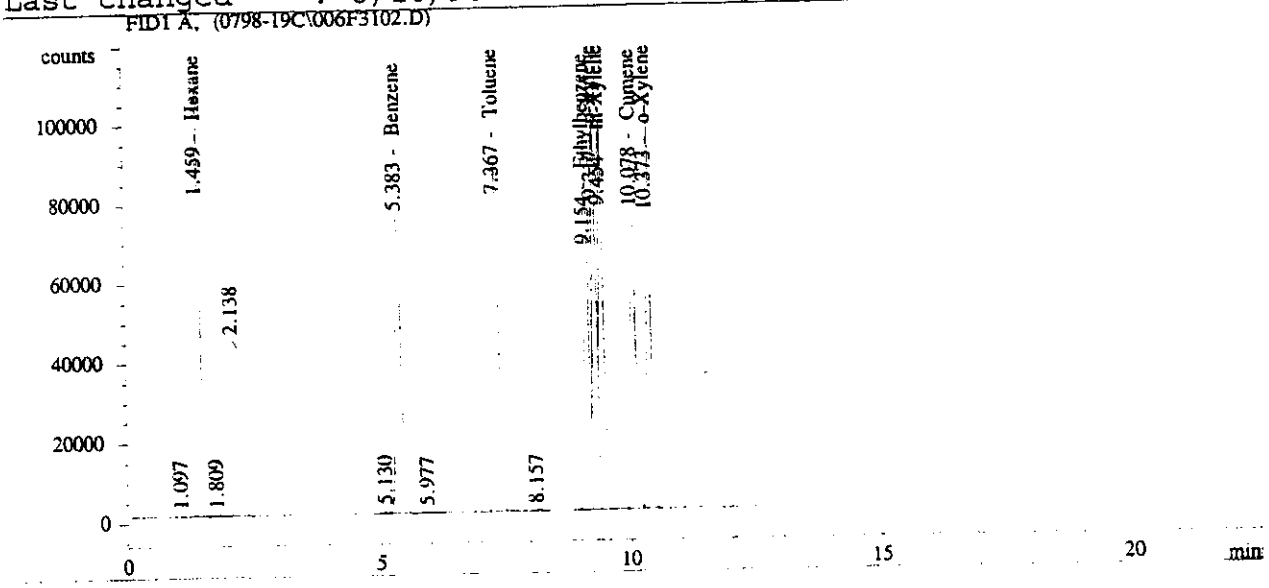
122

==========

Injection Date : 8/5/98 6:45:39 PM
Sample Name : gc-14 pg 53 #6
Acq. Operator : bgp

Seq. Line : 31
Vial : 6
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	BB	4.80723e5	8.58628e-4	412.76189		Hexane
5.383	VB	5.77425e5	7.63995e-4	441.14983		Benzene
7.367	BB	5.80793e5	7.49764e-4	435.45779		Toluene
9.154	BV	5.83186e5	7.42760e-4	433.16706		Ethylbenzene
9.317	VV	5.81349e5	7.50059e-4	436.04611		p-Xylene
9.454	VB	5.79740e5	7.47244e-4	433.20733		m-Xylene
10.078	BV	5.30790e5	8.12443e-4	431.23688		Cumene
10.373	VB	5.94669e5	7.22933e-4	429.90611		o-Xylene
Totals :				3452.93302		

Results obtained with enhanced integrator!
1 Warnings or Errors :

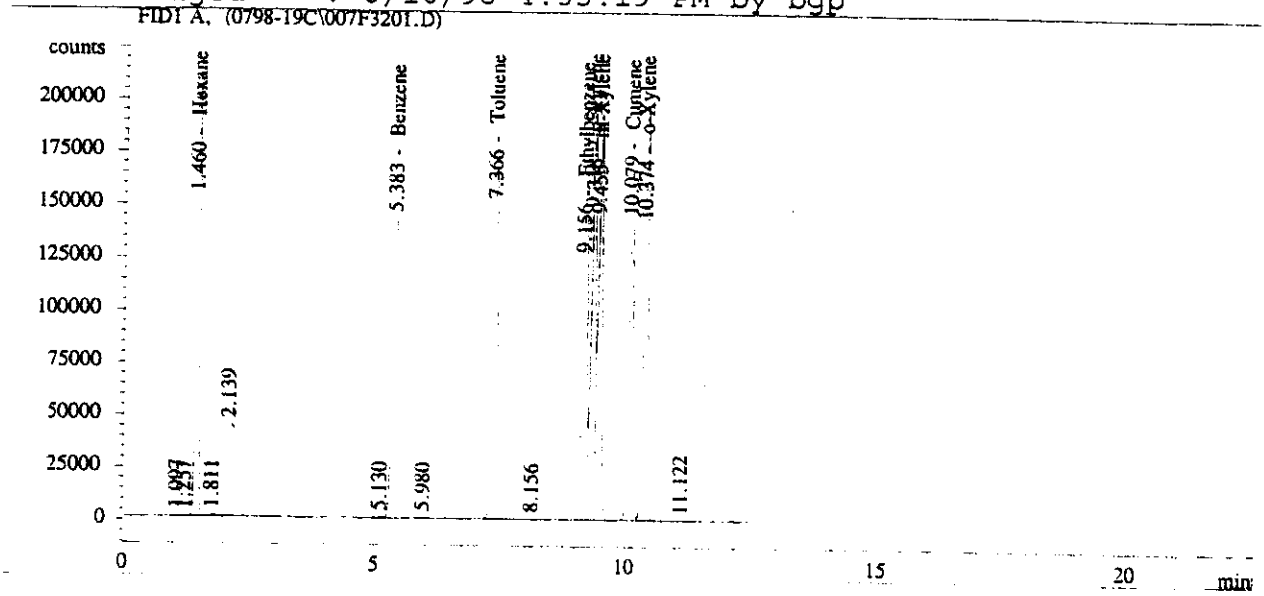
Warning : Calibration warnings (see calibration table listing)

384

Injection Date : 8/5/98 7:03:14 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 32
Vial : 7
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	VB	9.15150e5	8.59361e-4	786.44437		Hexane
5.383	VB	1.10075e6	7.64456e-4	841.47744		Benzene
7.366	BB	1.11061e6	7.50185e-4	833.16451		Toluene
9.156	BV	1.11818e6	7.43116e-4	830.93727		Ethylbenzene
9.318	VV	1.11521e6	7.50438e-4	836.89699		p-Xylene
9.455	VB	1.11194e6	7.47625e-4	831.31312		m-Xylene
10.079	BV	1.02031e6	8.12879e-4	829.38751		Cumene
10.374	VB	1.14142e6	7.23303e-4	825.59503		o-Xylene

Totals : 6615.21624

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

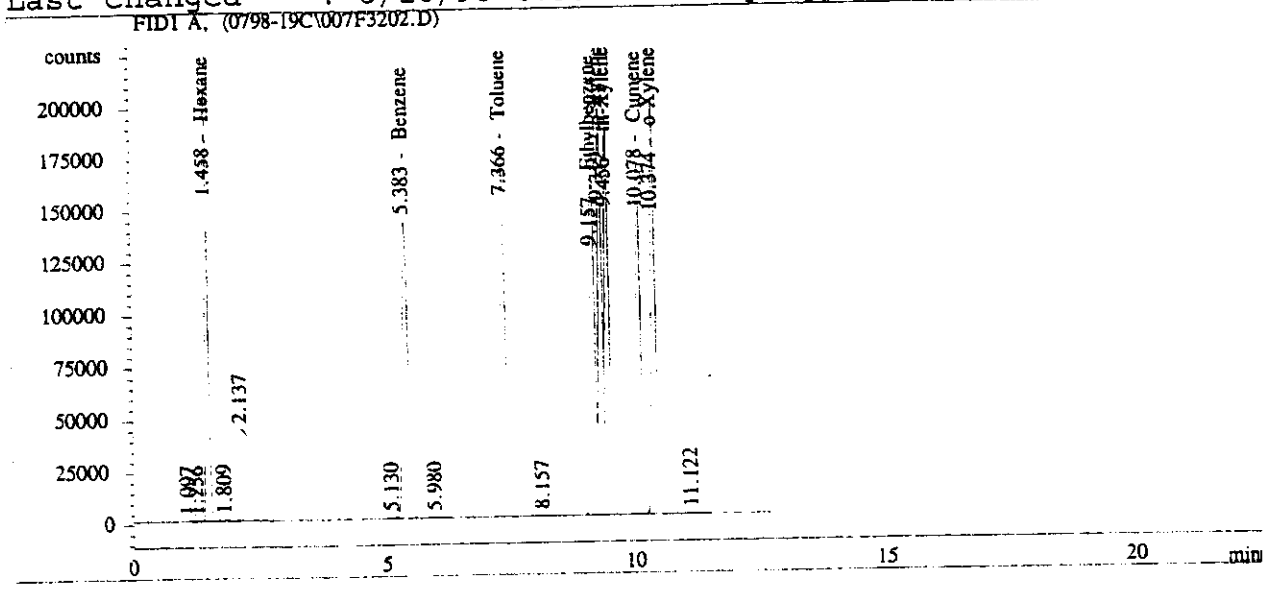
385

124

Injection Date : 8/5/98 7:20:16 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 32
Vial : 7
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	VB	9.16961e5	8.59363e-4	788.00214		Hexane
5.383	VB	1.10659e6	7.64459e-4	845.94169		Benzene
7.366	BB	1.12023e6	7.50188e-4	840.38516		Toluene
9.157	BV	1.13027e6	7.43120e-4	839.92771		Ethylbenzene
9.319	VV	1.12876e6	7.50443e-4	847.06971		p-Xylene
9.456	VB	1.12249e6	7.47629e-4	839.20411		m-Xylene
10.078	BV	1.03201e6	8.12885e-4	838.90201		Cumene
10.374	VB	1.15395e6	7.23307e-4	834.65808		o-Xylene

Totals : 6674.09060

Results obtained with enhanced integrator!
1 Warnings or Errors :

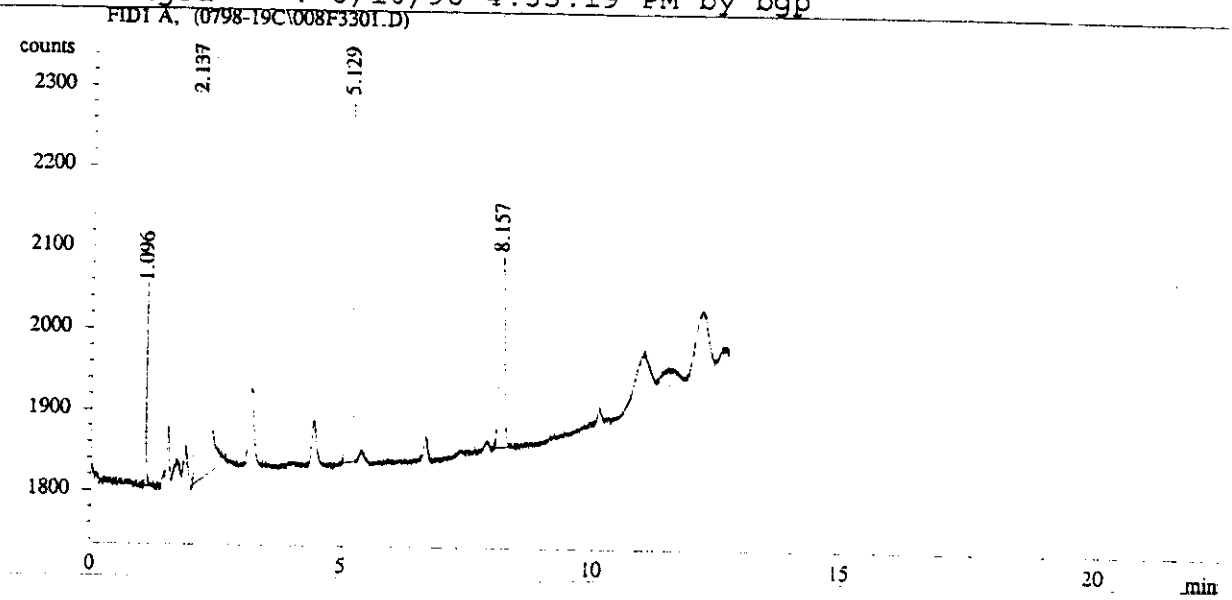
Warning : Calibration warnings (see calibration table listing)

386

125

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\008F3301.D reagent blank

Injection Date	: 8/5/98 7:37:22 PM	Seq. Line	: 33
Sample Name	: reagent blank	Vial	: 8
Acq. Operator	: bgp	Inj	: 1
		Inj Volume	: 2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19B.M		
Last changed	: 8/3/98 3:08:36 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19D.M		
Last changed	: 8/10/98 4:33:19 PM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing).
Warning : Calibrated compound(s) not found

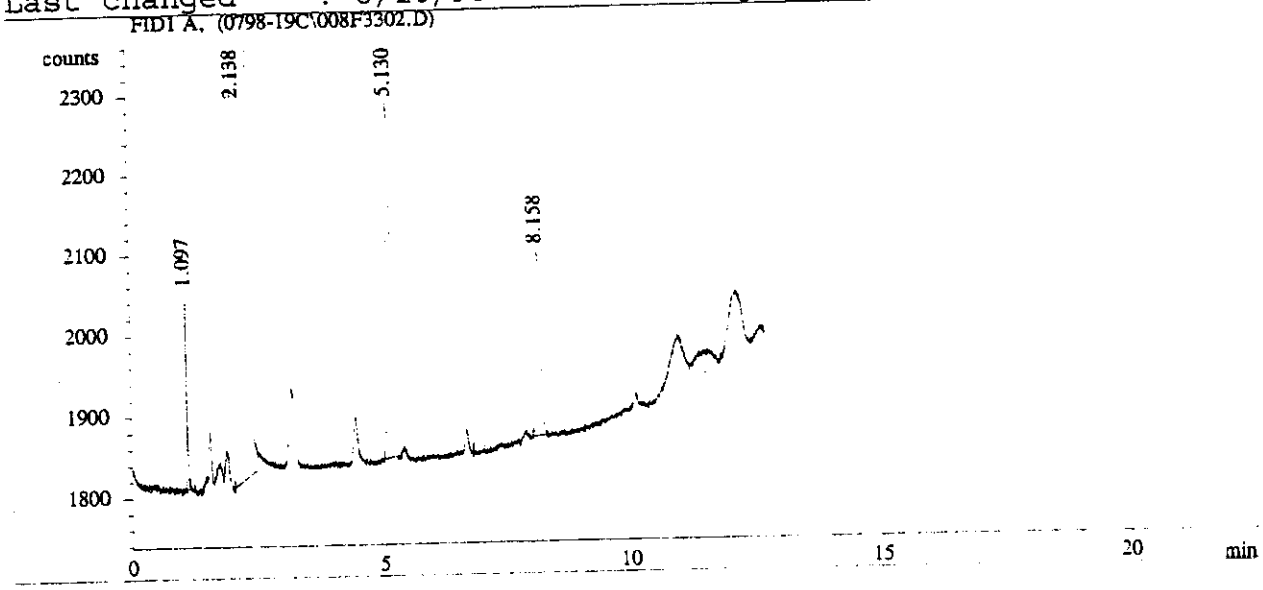
387

Teller 8/10/98 4:49:08 PM bgp

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\008F3302.D reagent blank

Injection Date	: 8/5/98 7:54:51 PM	Seq. Line :	33
Sample Name	: reagent blank	Vial :	8
Acq. Operator	: bgp	Inj :	2
		Inj Volume :	2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

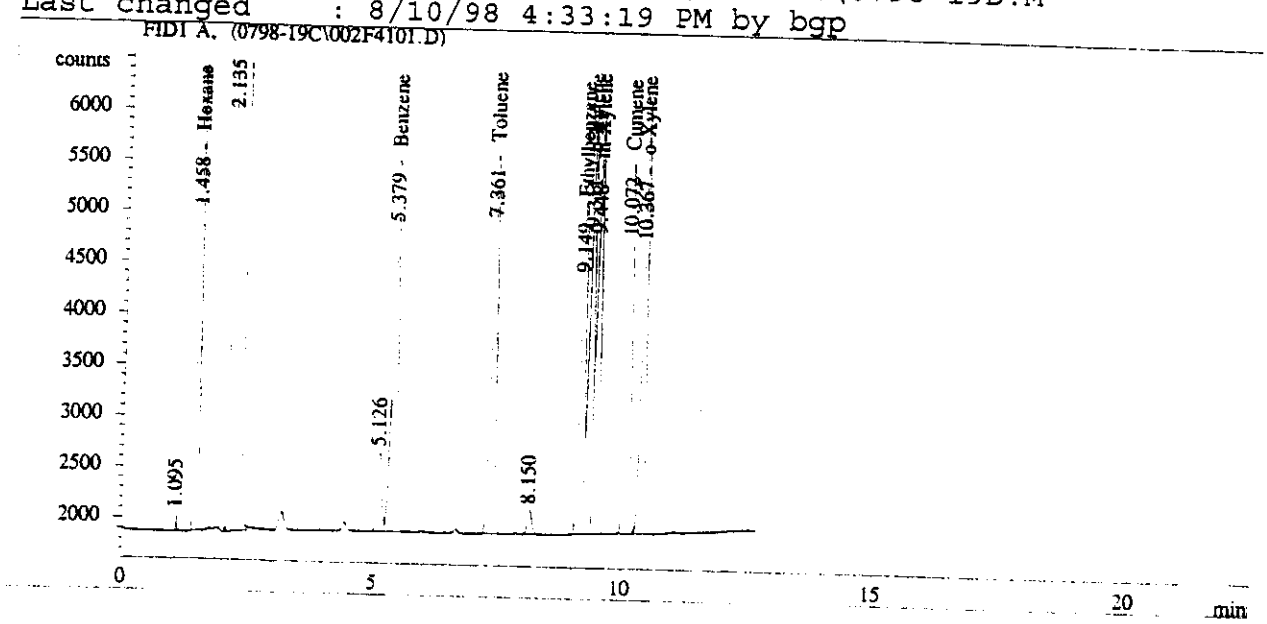
127

388

Injection Date : 8/6/98 2:46:09 AM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 41
Vial : 2
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	BP	1.98031e4	8.22651e-4	16.29107		Hexane
5.379	VP	2.36562e4	7.41263e-4	17.53549		Benzene
7.361	BB	2.39184e4	7.29217e-4	17.44174		Toluene
9.149	BV	2.41003e4	7.25528e-4	17.48546		Ethylbenzene
9.311	VV	2.41182e4	7.31753e-4	17.64856		p-Xylene
9.448	VB	2.40242e4	7.28818e-4	17.50927		m-Xylene
10.072	BV	2.20226e4	7.91418e-4	17.42909		Cumene
10.367	VB	2.46248e4	7.05071e-4	17.36227		o-Xylene
Totals :				138.70295		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

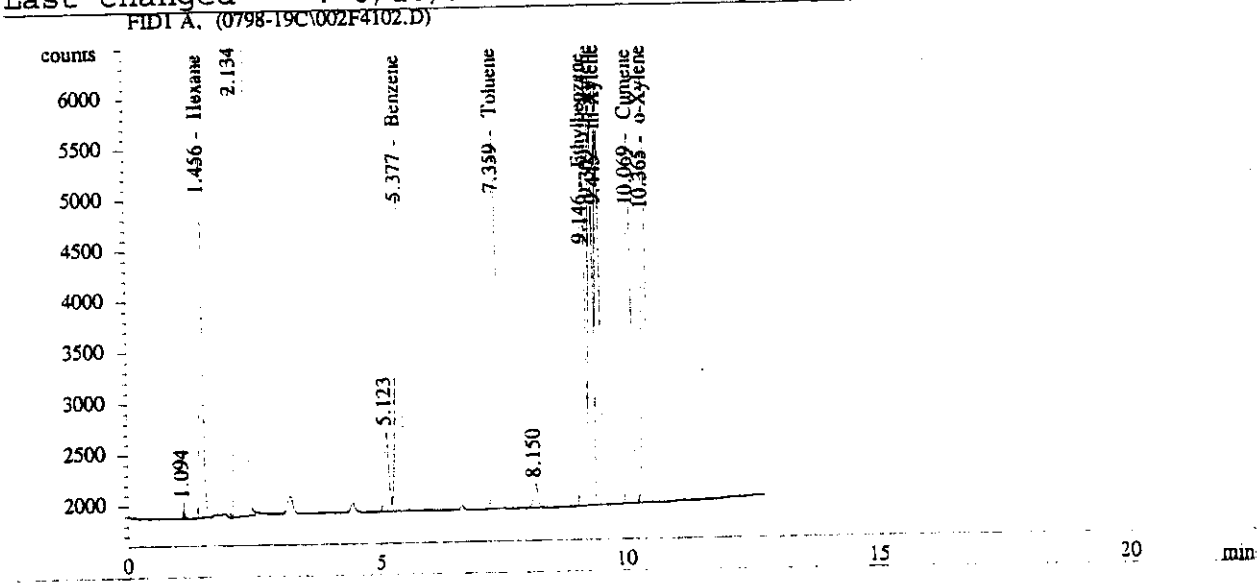
389 109

Teller 8/10/98 4:52:42 PM bgp

Injection Date : 8/6/98 3:02:56 AM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 41
Vial : 2
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.456	BP	2.00435e4	8.23101e-4	16.49779		Hexane
5.377	VP	2.39464e4	7.41551e-4	17.75746		Benzene
7.359	BB	2.41049e4	7.29383e-4	17.58170		Toluene
9.146	BV	2.42570e4	7.25644e-4	17.60196		Ethylbenzene
9.309	VV	2.42205e4	7.31834e-4	17.72541		p-Xylene
9.445	VB	2.42138e4	7.28969e-4	17.65107		m-Xylene
10.069	BV	2.21757e4	7.91570e-4	17.55365		Cumene
10.365	VB	2.47956e4	7.05200e-4	17.48588		o-Xylene
Totals :				139.85492		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

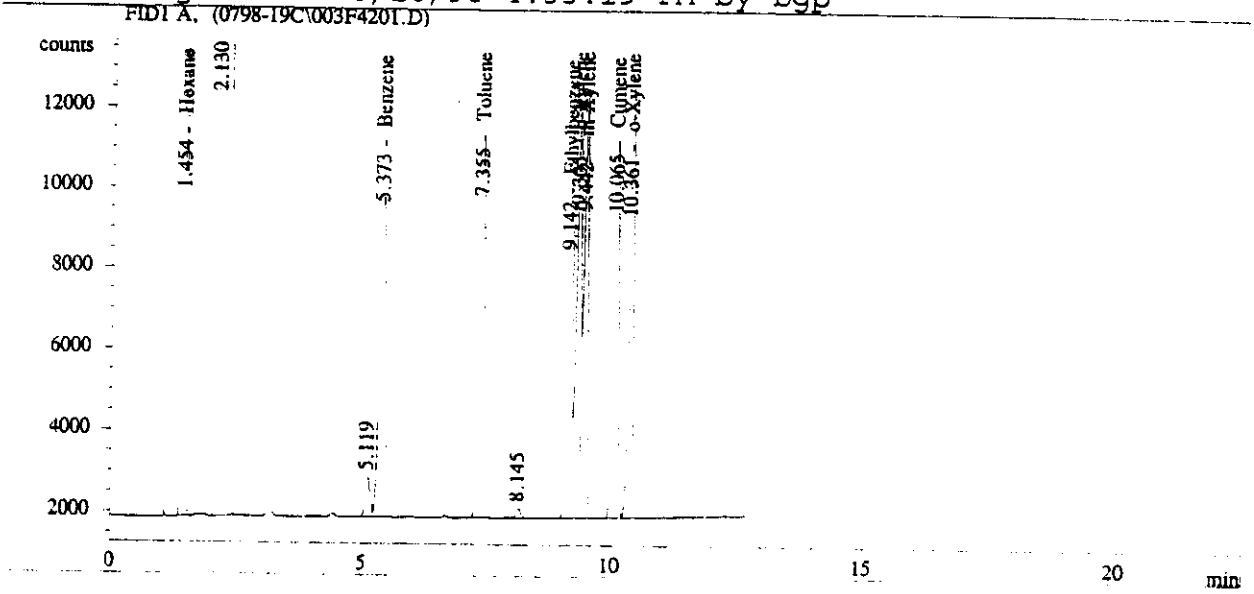
129

390

Injection Date : 8/6/98 3:20:15 AM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 42
Vial : 3
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.454	BP	5.07974e4	8.45545e-4	42.95150		Hexane
5.373	VB	6.11546e4	7.55797e-4	46.22047		Benzene
7.355	BB	6.20564e4	7.42387e-4	46.06985		Toluene
9.142	BV	6.25570e4	7.36578e-4	46.07809		Ethylbenzene
9.305	VV	6.24251e4	7.43472e-4	46.41135		p-Xylene
9.442	VB	6.23966e4	7.40640e-4	46.21342		m-Xylene
10.065	BV	5.70634e4	8.04888e-4	45.92965		Cumene
10.361	VB	6.39282e4	7.16527e-4	45.80631		o-Xylene

Totals : 365.68064

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

391

1~0

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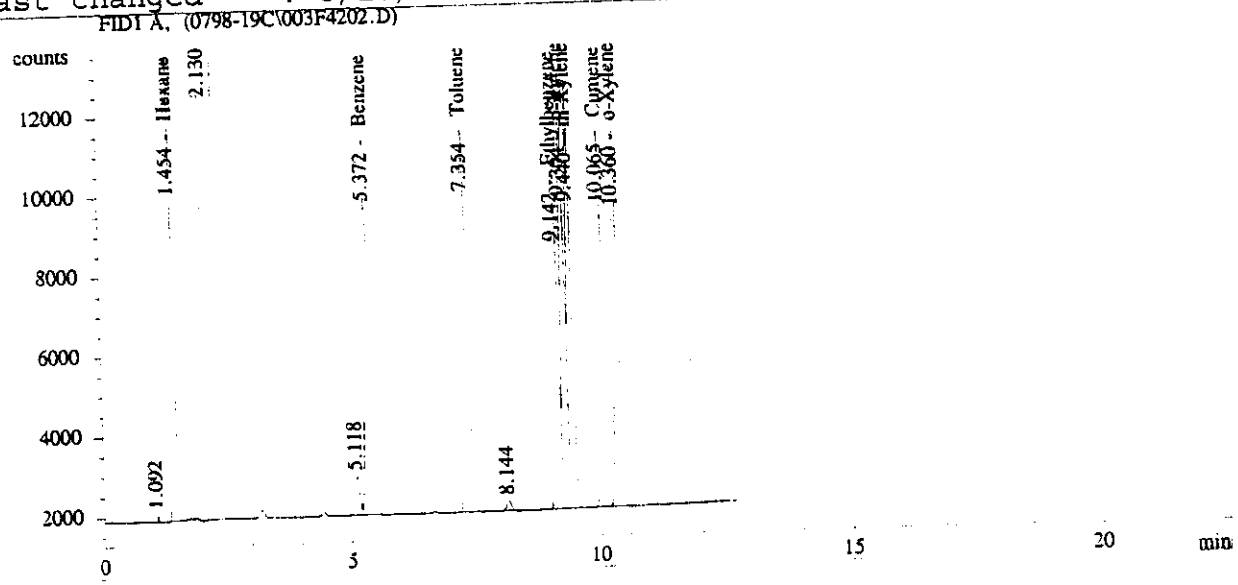
Injection Date : 8/6/98 3:37:03 AM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 42
Vial : 3
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.454	BP	5.09829e4	8.45599e-4	43.11106		Hexane
5.372	VB	6.14342e4	7.55839e-4	46.43431		Benzene
7.354	BB	6.24129e4	7.42434e-4	46.33747		Toluene
9.142	BV	6.29460e4	7.36621e-4	46.36732		Ethylbenzene
9.304	VV	6.29851e4	7.43538e-4	46.83184		p-Xylene
9.440	VB	6.27251e4	7.40678e-4	46.45915		m-Xylene
10.065	BV	5.75052e4	8.04953e-4	46.28893		Cumene
10.360	VB	6.43890e4	7.16579e-4	46.13977		o-Xylene
Totals :				367.96986		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

392

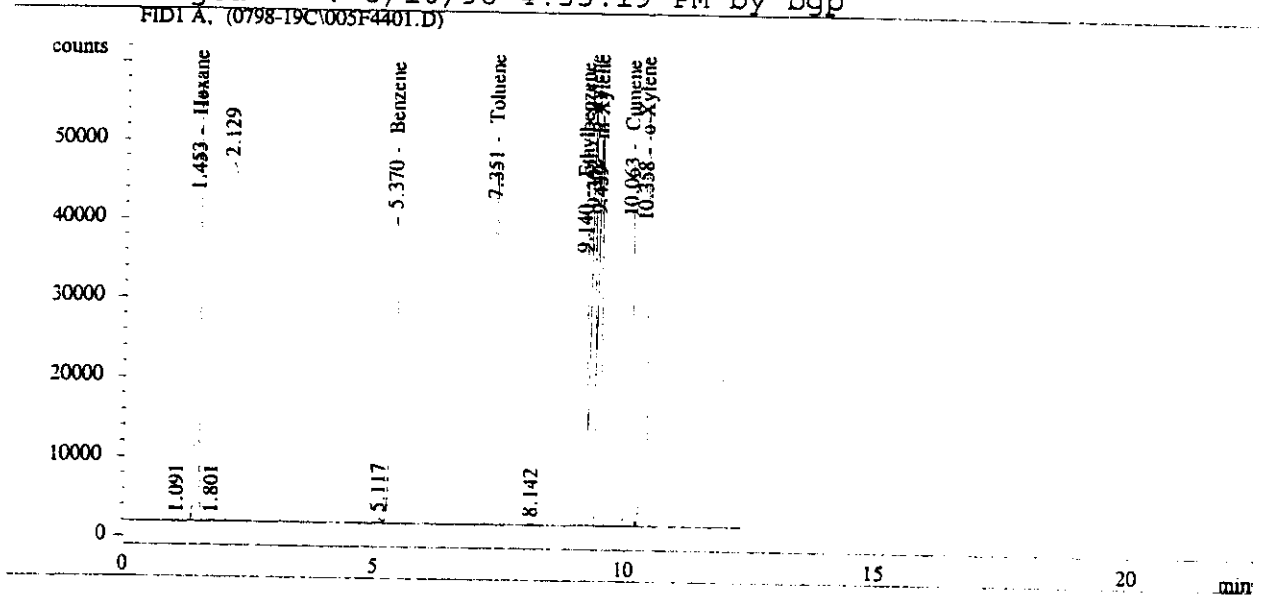
131

Teller 8/10/98 4:53:17 PM bgp

Injection Date : 8/6/98 4:27:29 AM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 44
Vial : 5
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.453	BP	2.50274e5	8.57204e-4	214.53571		Hexane
5.370	VB	3.00913e5	7.63102e-4	229.62719		Benzene
7.351	BB	3.04919e5	7.48965e-4	228.37346		Toluene
9.140	BV	3.07313e5	7.42093e-4	228.05477		Ethylbenzene
9.302	VV	3.06895e5	7.49350e-4	229.97146		p-Xylene
9.439	VB	3.05877e5	7.46531e-4	228.34691		m-Xylene
10.063	BV	2.80247e5	8.11629e-4	227.45668		Cumene
10.358	VB	3.14063e5	7.22244e-4	226.82992		o-Xylene

Totals : 1813.19610

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

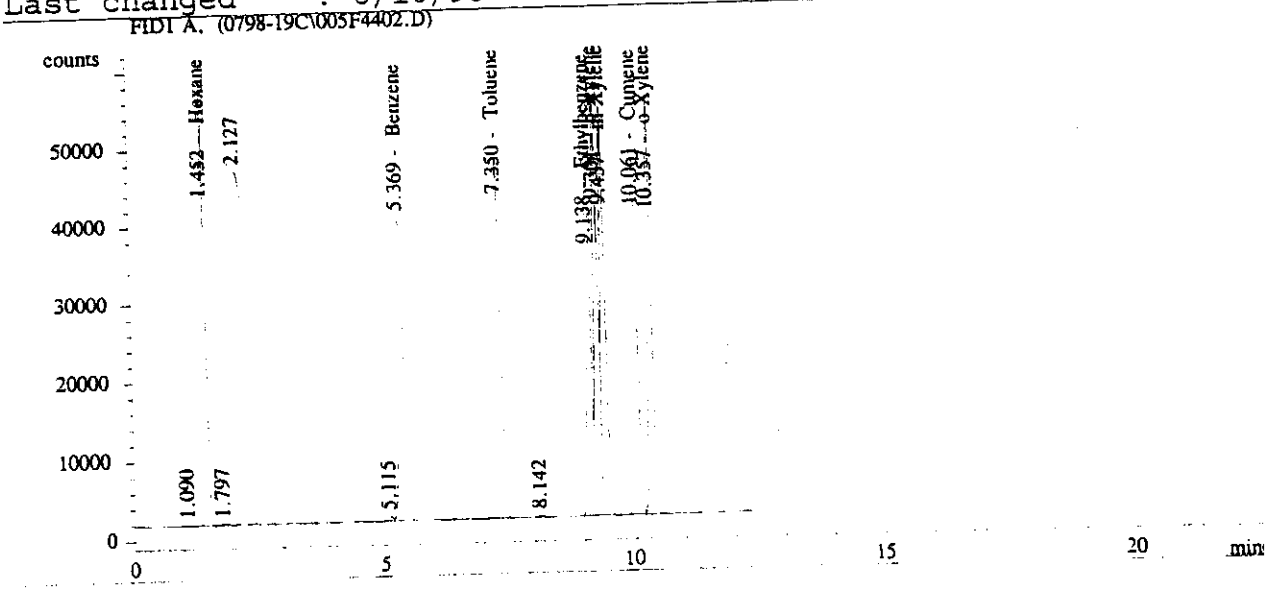
393

132

Injection Date : 8/6/98 4:44:17 AM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 44
Vial : 5
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.452	BP	2.50300e5	8.57205e-4	214.55852		Hexane
5.369	VB	3.01311e5	7.63105e-4	229.93167		Benzene
7.350	BB	3.05927e5	7.48971e-4	229.13046		Toluene
9.138	BV	3.08694e5	7.42100e-4	229.08185		Ethylbenzene
9.301	VV	3.08005e5	7.49355e-4	230.80493		p-Xylene
9.437	VB	3.07228e5	7.46538e-4	229.35758		m-Xylene
10.061	BV	2.81479e5	8.11637e-4	228.45903		Cumene
10.357	VB	3.15449e5	7.22250e-4	227.83289		o-Xylene
Totals :				1819.15693		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

133

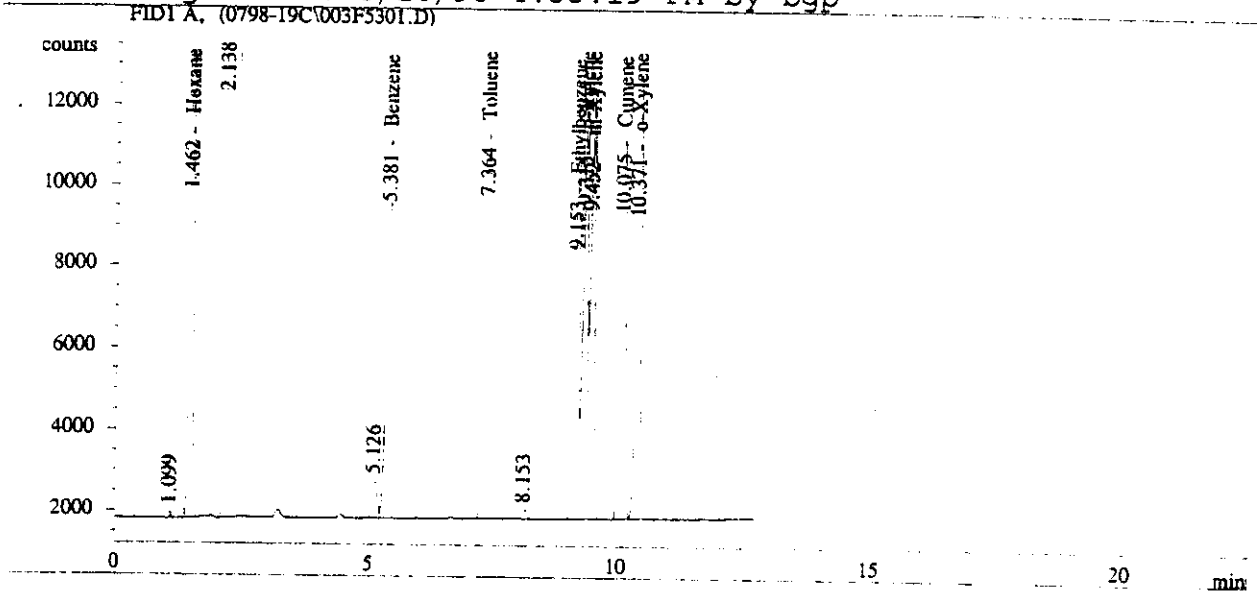
394

Teller 8/10/98 4:54:05 PM bgp

Injection Date : 8/6/98 11:23:44 AM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 53
Vial : 3
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BP	4.99256e4	8.45290e-4	42.20164		Hexane
5.381	VB	6.01662e4	7.55646e-4	45.46440		Benzene
7.364	BB	6.15714e4	7.42322e-4	45.70580		Toluene
9.153	BV	6.23263e4	7.36552e-4	45.90661		Ethylbenzene
9.315	VV	6.23330e4	7.43461e-4	46.34222		p-Xylene
9.452	VB	6.21256e4	7.40607e-4	46.01065		m-Xylene
10.075	BV	5.69599e4	8.04872e-4	45.84548		Cumene
10.371	VP	6.37333e4	7.16505e-4	45.66527		o-Xylene

Totals : 363.14206

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

395

174

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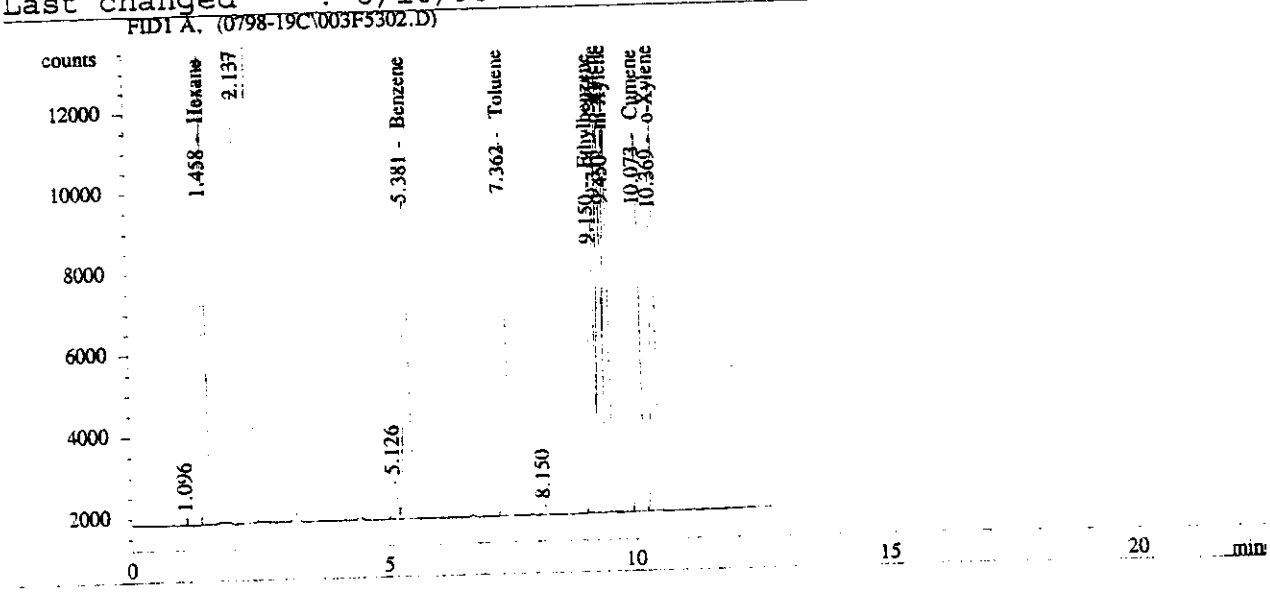
Injection Date : 8/6/98 11:40:59 AM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 53
Vial : 3
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	BP	5.04413e4	8.45442e-4	42.64523		Hexane
5.381	VP	6.07557e4	7.55737e-4	45.91533		Benzene
7.362	BB	6.19534e4	7.42373e-4	45.99251		Toluene
9.150	BV	6.25815e4	7.36581e-4	46.09634		Ethylbenzene
9.313	VV	6.25698e4	7.43489e-4	46.51998		p-Xylene
9.450	VB	6.23963e4	7.40640e-4	46.21318		m-Xylene
10.073	BV	5.71435e4	8.04899e-4	45.99478		Cumene
10.369	VB	6.39645e4	7.16531e-4	45.83257		o-Xylene
Totals :				365.20993		

Results obtained with enhanced integrator!
1 Warnings or Errors :

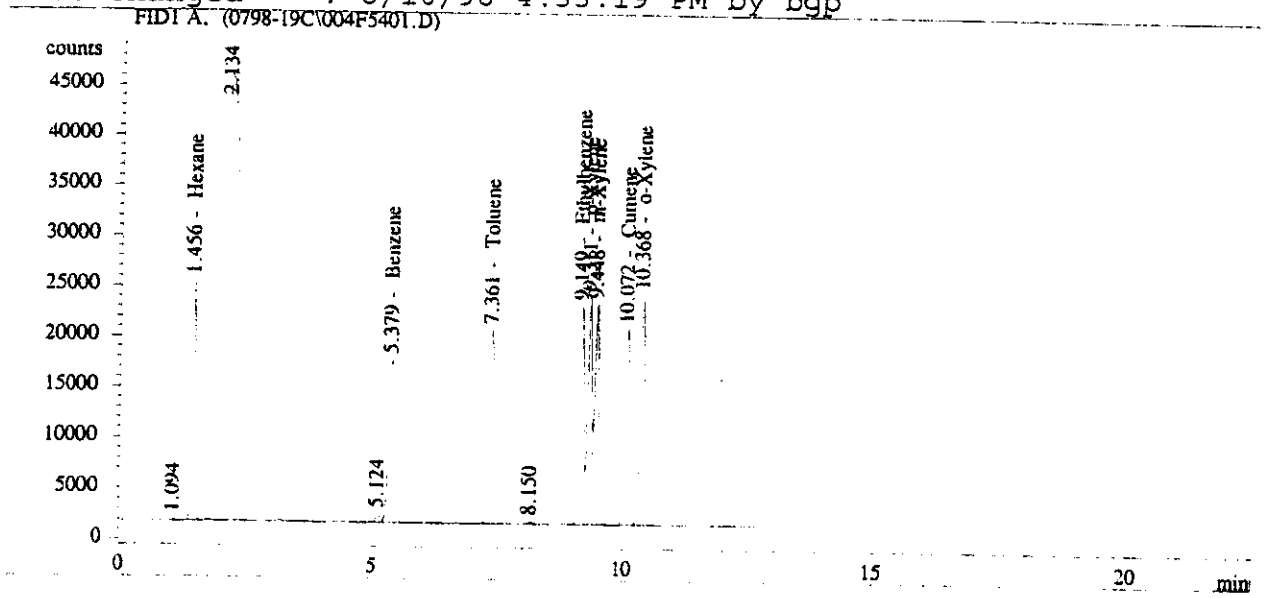
Warning : Calibration warnings (see calibration table listing)
396

135

Injection Date : 8/6/98 11:57:57 AM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 54
Vial : 4
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.456	BP	1.03187e5	8.52972e-4	88.01538		Hexane
5.379	VB	1.24076e5	7.60447e-4	94.35345		Benzene
7.361	BB	1.27499e5	7.46626e-4	95.19395		Toluene
9.149	BV	1.29652e5	7.40162e-4	95.96347		Ethylbenzene
9.311	VV	1.29775e5	7.47302e-4	96.98086		p-Xylene
9.448	VB	1.29420e5	7.44472e-4	96.34962		m-Xylene
10.072	BV	1.18734e5	8.09284e-4	96.08996		Cumene
10.368	VB	1.32749e5	7.20248e-4	95.61250		o-Xylene
Totals :				758.55918		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

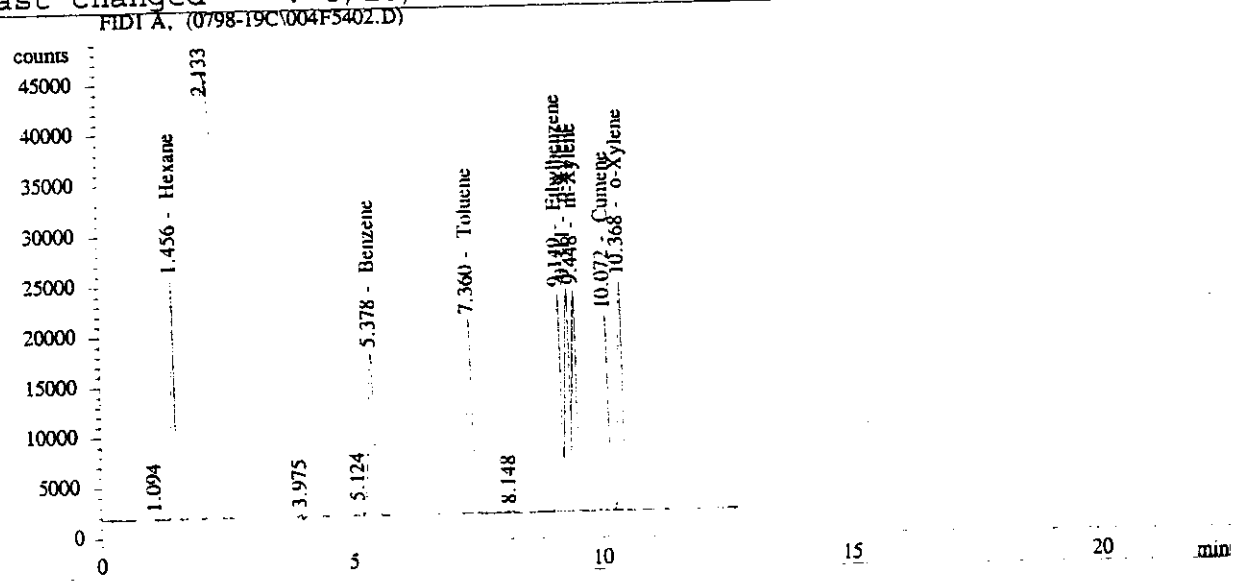
397

136

Injection Date : 8/6/98 12:14:49 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 54
Vial : 4
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.456	BP	1.03395e5	8.52987e-4	88.19448		Hexane
5.378	VB	1.24627e5	7.60467e-4	94.77463		Benzene
7.360	BB	1.28481e5	7.46657e-4	95.93112		Toluene
9.149	BV	1.30819e5	7.40192e-4	96.83092		Ethylbenzene
9.311	VV	1.30931e5	7.47333e-4	97.84923		p-Xylene
9.448	VB	1.30497e5	7.44502e-4	97.15542		m-Xylene
10.072	BV	1.19883e5	8.09323e-4	97.02372		Cumene
10.368	VB	1.33989e5	7.20280e-4	96.50965		o-Xylene
Totals :				764.26917		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

197

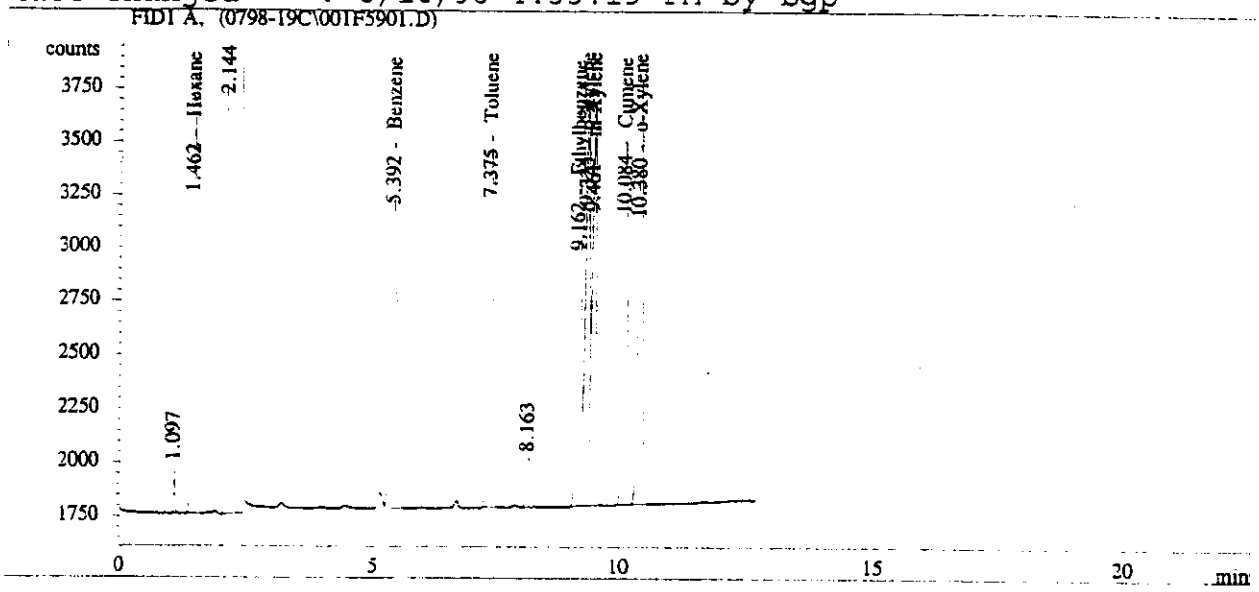
398

Teller 8/10/98 4:58:03 PM bgp

Injection Date : 8/6/98 5:00:57 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 59
Vial : 1
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BP	9538.49316	7.82272e-4	7.46169		Hexane
5.392	VP	1.11561e4	7.14706e-4	7.97335		Benzene
7.375	BB	1.11073e4	7.04501e-4	7.82513		Toluene
9.162	BV	1.12084e4	7.04853e-4	7.90025		Ethylbenzene
9.325	VV	1.12313e4	7.09840e-4	7.97241		p-Xylene
9.461	VB	1.11514e4	7.06628e-4	7.87989		m-Xylene
10.084	BB	1.03224e4	7.66556e-4	7.91267		Cumene
10.380	BB	1.14369e4	6.83585e-4	7.81809		o-Xylene

Totals : 62.74348

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

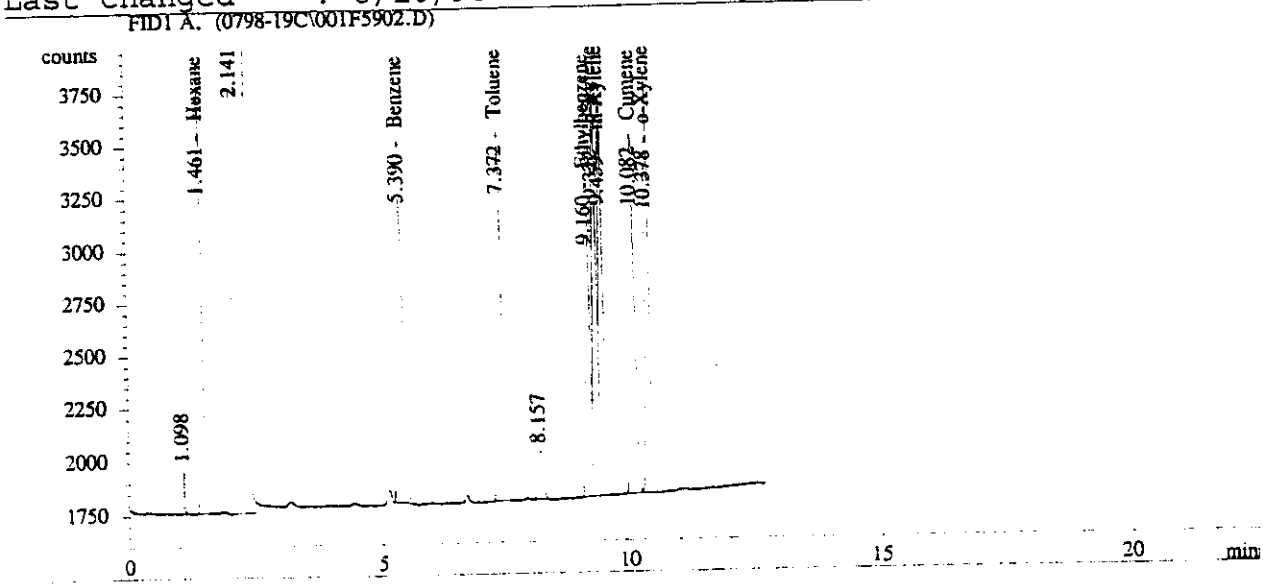
399

138

Injection Date : 8/6/98 5:17:59 PM
Sample Name : gc-14 pg 53 #1
Acq. Operator : bgp

Seq. Line : 59
Vial : 1
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BB	9555.06152	7.82407e-4	7.47595		Hexane
5.390	BB	1.10191e4	7.14081e-4	7.86851		Benzene
7.372	BB	1.11801e4	7.04801e-4	7.87977		Toluene
9.160	BV	1.12359e4	7.04947e-4	7.92068		Ethylbenzene
9.322	VV	1.12540e4	7.09922e-4	7.98944		p-Xylene
9.459	VB	1.12027e4	7.06818e-4	7.91828		m-Xylene
10.082	BV	1.03427e4	7.66648e-4	7.92919		Cumene
10.378	VB	1.15014e4	6.83810e-4	7.86480		o-Xylene
Totals :				62.84663		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

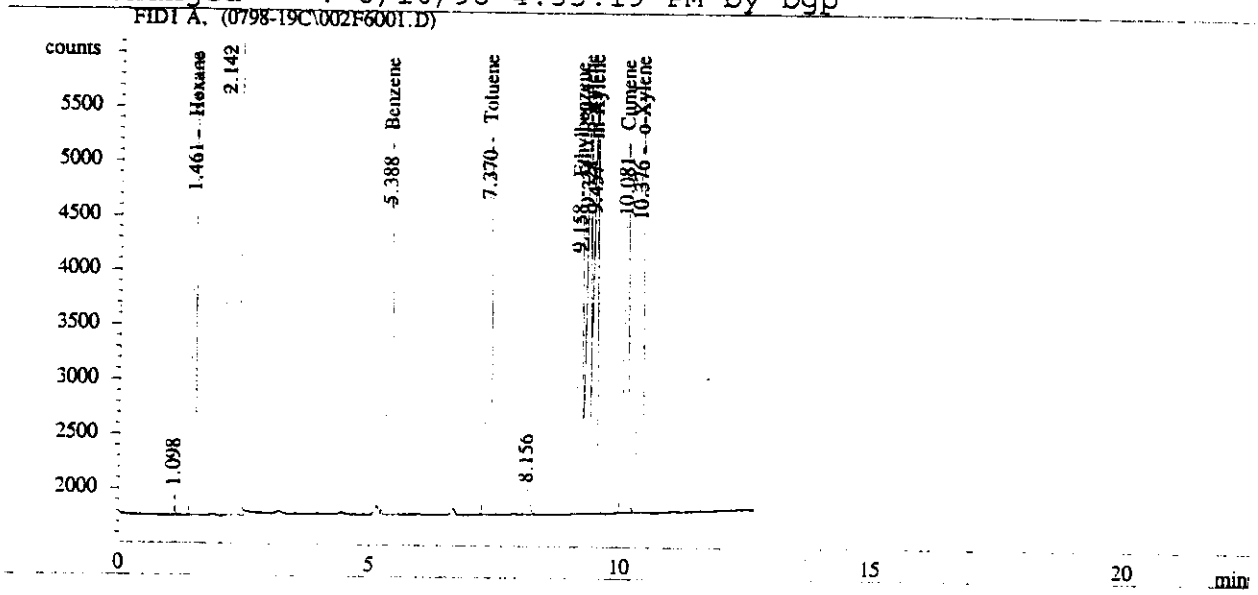
139

400

Injection Date : 8/6/98 5:34:58 PM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 60
Vial : 2
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BP	1.88349e4	8.20722e-4	15.45822		Hexane
5.388	VP	2.23942e4	7.39928e-4	16.57008		Benzene
7.370	BB	2.25022e4	7.27868e-4	16.37863		Toluene
9.158	BV	2.26119e4	7.24345e-4	16.37883		Ethylbenzene
9.321	VV	2.25918e4	7.30463e-4	16.50250		p-Xylene
9.457	VB	2.25585e4	7.27569e-4	16.41285		m-Xylene
10.081	BV	2.06700e4	7.89983e-4	16.32896		Cumene
10.376	VB	2.31152e4	7.03854e-4	16.26972		o-Xylene
Totals :				130.29980		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

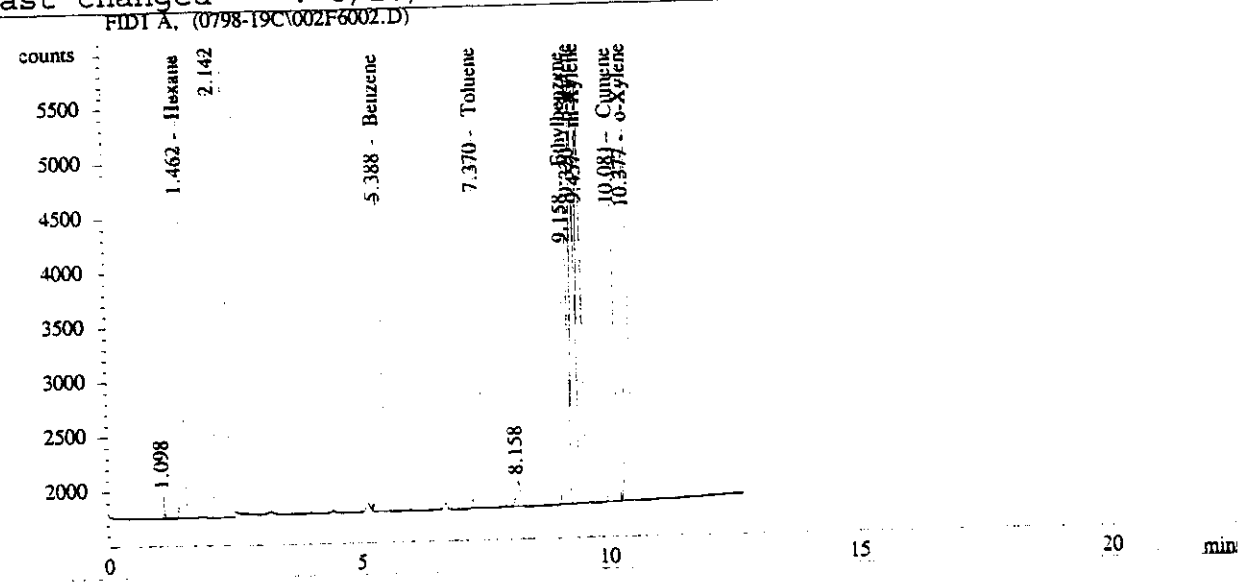
401

140

Injection Date : 8/6/98 5:52:03 PM
Sample Name : gc-14 pg 53 #2
Acq. Operator : bgp

Seq. Line : 60
Vial : 2
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BP	1.88527e4	8.20759e-4	15.47350		Hexane
5.388	VB	2.24067e4	7.39942e-4	16.57969		Benzene
7.370	BB	2.25652e4	7.27932e-4	16.42589		Toluene
9.158	BV	2.26749e4	7.24398e-4	16.42564		Ethylbenzene
9.320	VV	2.27059e4	7.30565e-4	16.58811		p-Xylene
9.457	VB	2.26387e4	7.27642e-4	16.47285		m-Xylene
10.081	BV	2.07404e4	7.90062e-4	16.38620		Cumene
10.377	VP	2.31923e4	7.03920e-4	16.32554		o-Xylene
Totals :				130.67741		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

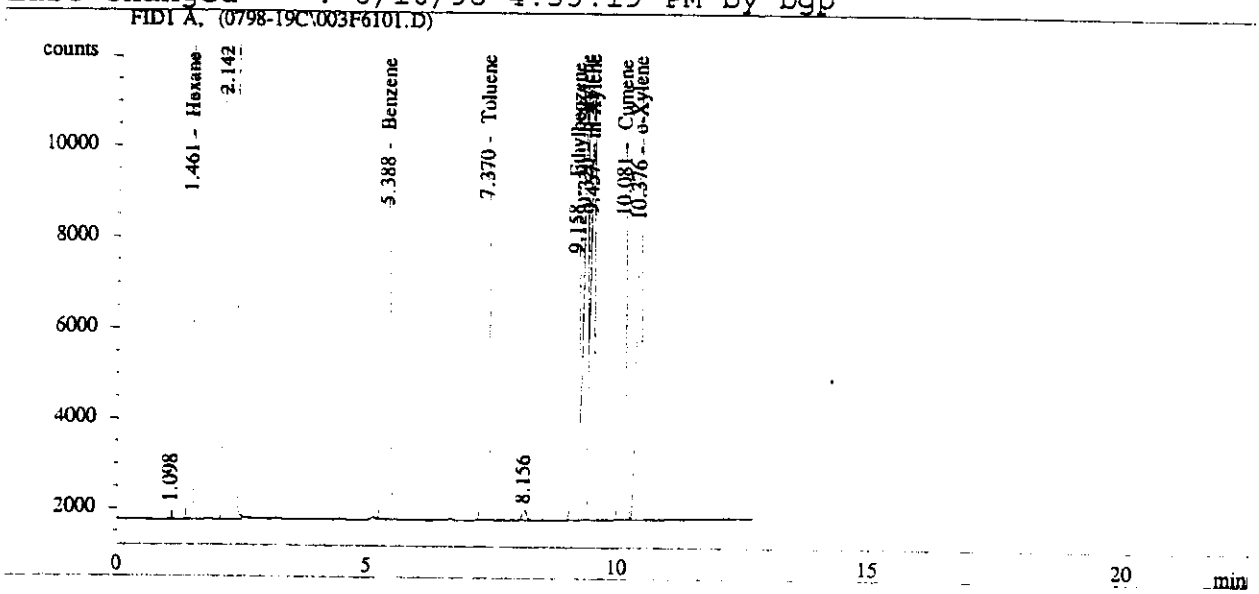
141

402

Injection Date : 8/6/98 6:09:05 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 61
Vial : 3
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BB	4.57835e4	8.43943e-4	38.63867		Hexane
5.388	BP	5.48417e4	7.54742e-4	41.39128		Benzene
7.370	BB	5.55141e4	7.41413e-4	41.15891		Toluene
9.158	BV	5.58189e4	7.35742e-4	41.06835		Ethylbenzene
9.320	VV	5.57529e4	7.42589e-4	41.40151		p-Xylene
9.457	VB	5.56544e4	7.39743e-4	41.16995		m-Xylene
10.081	BV	5.09452e4	8.03871e-4	40.95336		Cumene
10.376	VB	5.70346e4	7.15660e-4	40.81739		o-Xylene

Totals : 326.59941

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

403

142

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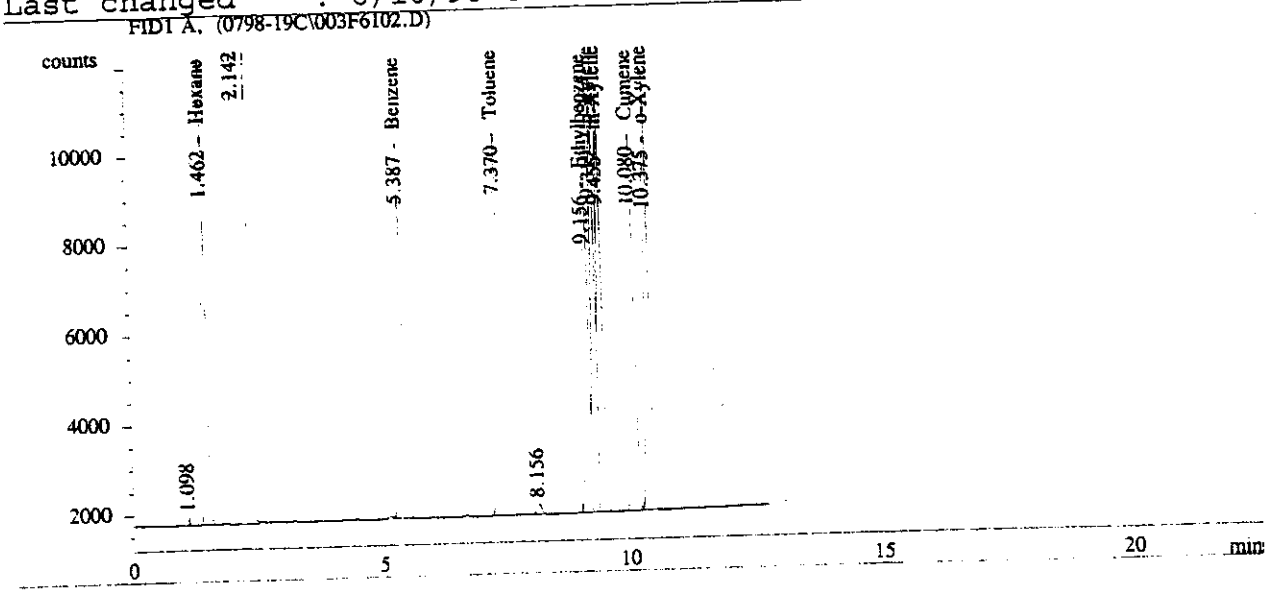
Injection Date : 8/6/98 6:26:06 PM
Sample Name : gc-14 pg 53 #3
Acq. Operator : bgp

Seq. Line : 61
Vial : 3
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BB	4.59909e4	8.44017e-4	38.81705		Hexane
5.387	BP	5.51822e4	7.54805e-4	41.65178		Benzene
7.370	BB	5.59330e4	7.41482e-4	41.47331		Toluene
9.156	BV	5.62218e4	7.35798e-4	41.36789		Ethylbenzene
9.319	VV	5.62132e4	7.42657e-4	41.74716		p-Xylene
9.455	VB	5.60984e4	7.39809e-4	41.50206		m-Xylene
10.080	BV	5.13419e4	8.03944e-4	41.27603		Cumene
10.375	VB	5.74893e4	7.15723e-4	41.14646		o-Xylene
Totals :				328.98172		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

404

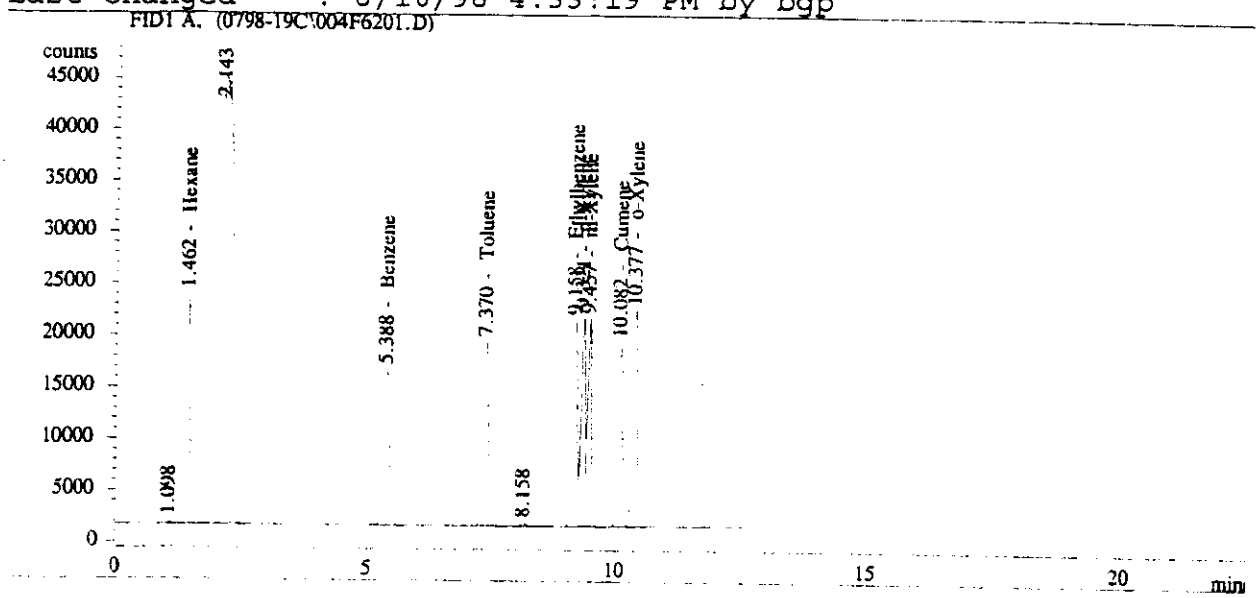
143

Teller 8/10/98 5:00:55 PM bgp

Injection Date : 8/6/98 6:43:12 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 62
Vial : 4
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BP	9.66502e4	8.52485e-4	82.39284		Hexane
5.388	BB	1.15994e5	7.60132e-4	88.17057		Benzene
7.370	BB	1.17522e5	7.46285e-4	87.70514		Toluene
9.158	BV	1.18329e5	7.39842e-4	87.54510		Ethylbenzene
9.321	VV	1.18088e5	7.46950e-4	88.20591		p-Xylene
9.457	VB	1.17925e5	7.44125e-4	87.75083		m-Xylene
10.082	BV	1.08058e5	8.08883e-4	87.40653		Cumene
10.377	VB	1.20951e5	7.19911e-4	87.07407		o-Xylene

Totals : 696.25100

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing).

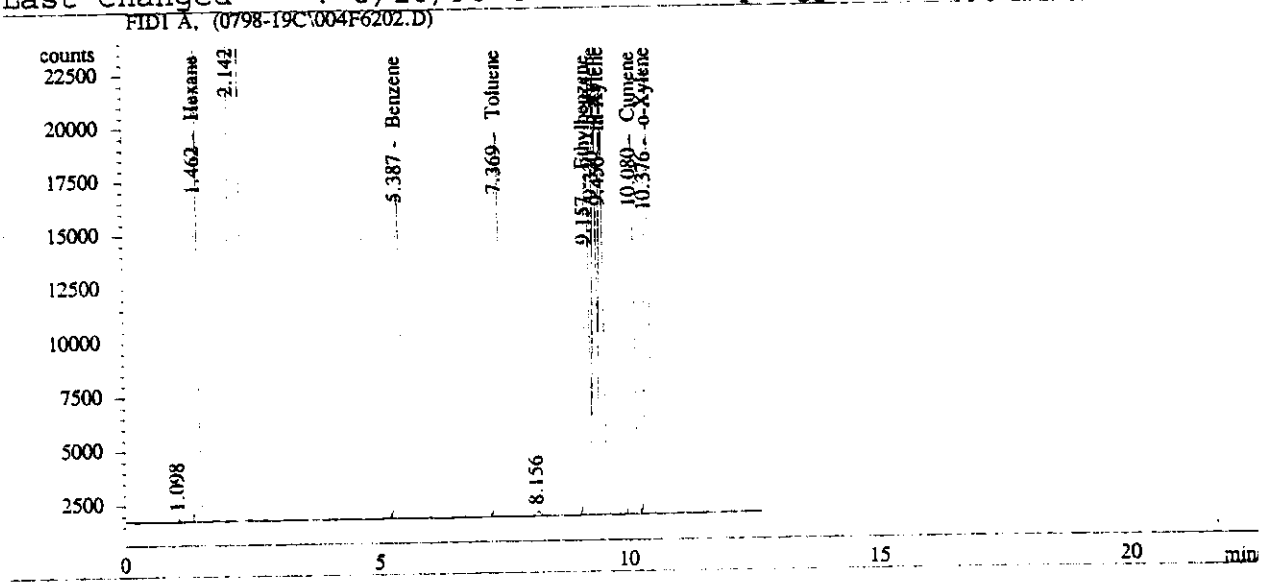
405

144

Injection Date : 8/6/98 7:00:18 PM
Sample Name : gc-14 pg 53 #4
Acq. Operator : bgp

Seq. Line : 62
Vial : 4
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BB	9.66746e4	8.52487e-4	82.41385		Hexane
5.387	BB	1.15979e5	7.60131e-4	88.15916		Benzene
7.369	BB	1.17484e5	7.46283e-4	87.67633		Toluene
9.157	BV	1.18250e5	7.39840e-4	87.48569		Ethylbenzene
9.320	VV	1.17995e5	7.46947e-4	88.13641		p-Xylene
9.456	VB	1.17879e5	7.44123e-4	87.71669		m-Xylene
10.080	BV	1.07944e5	8.08878e-4	87.31387		Cumene
10.376	VB	1.20804e5	7.19906e-4	86.96794		o-Xylene
Totals :				695.86994		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

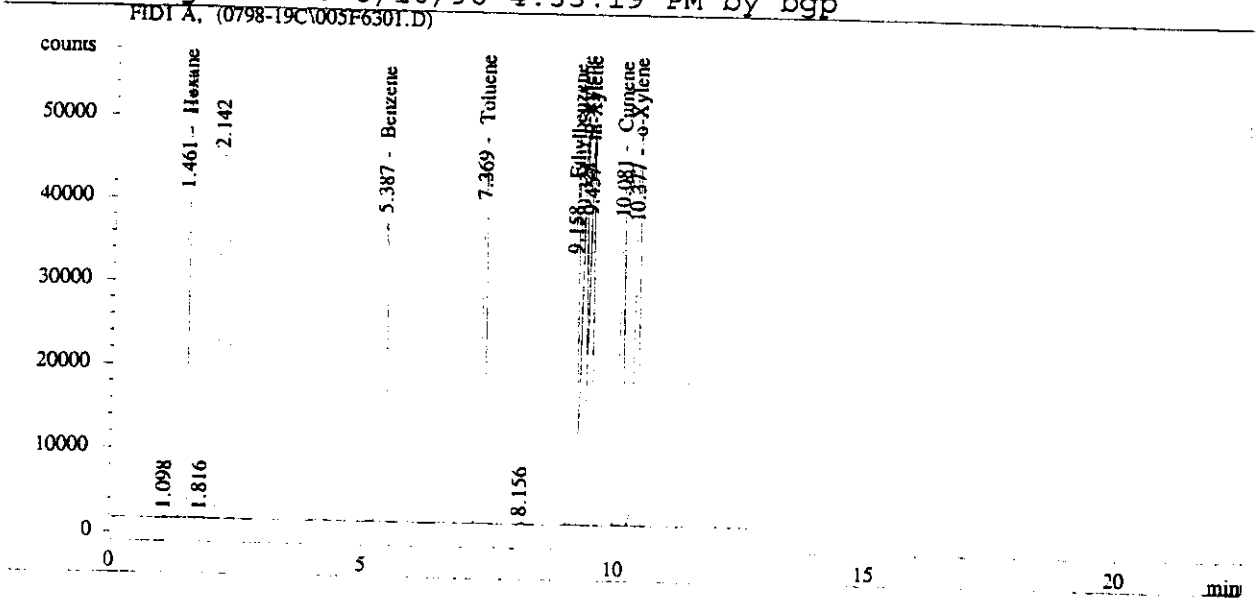
406

Teller 8/10/98 5:01:19 PM bgp

Injection Date : 8/6/98 7:17:15 PM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 63
Vial : 5
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BP	2.32051e5	8.56971e-4	198.86109		Hexane
5.387	BB	2.78876e5	7.62955e-4	212.77005		Benzene
7.369	BB	2.81348e5	7.48824e-4	210.68045		Toluene
9.158	BV	2.82791e5	7.41971e-4	209.82278		Ethylbenzene
9.321	VV	2.82024e5	7.49218e-4	211.29742		p-Xylene
9.457	VB	2.81554e5	7.46401e-4	210.15185		m-Xylene
10.081	BV	2.57835e5	8.11479e-4	209.22810		Cumene
10.377	VB	2.88700e5	7.22115e-4	208.47462		o-Xylene
Totals :				1671.28635		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

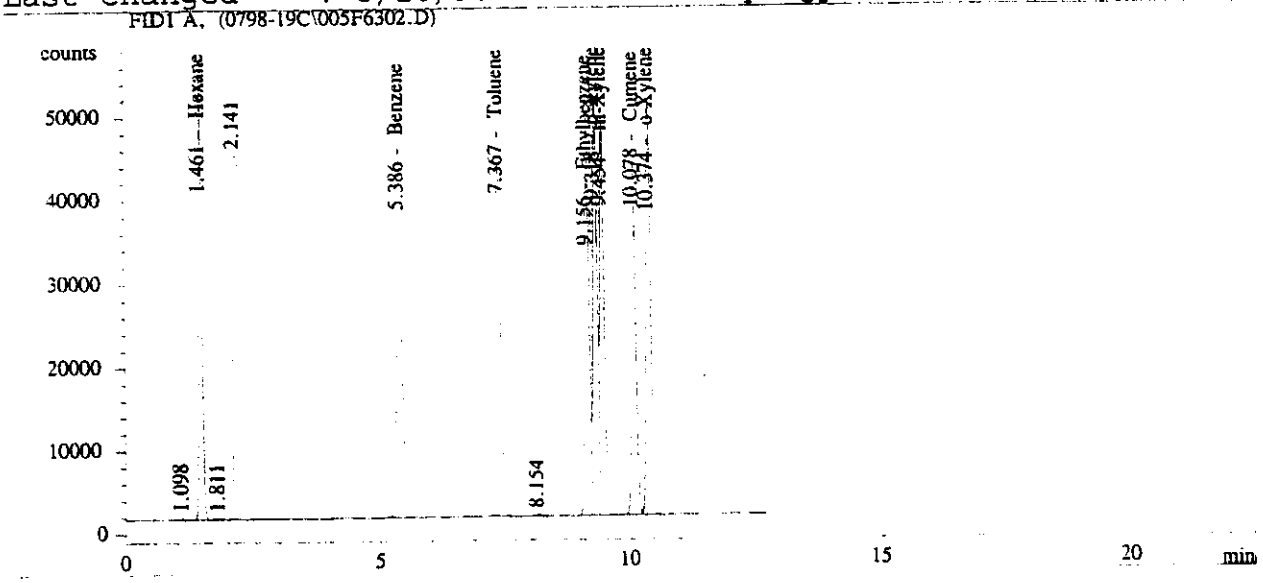
407

146

Injection Date : 8/6/98 7:34:14 PM
Sample Name : gc-14 pg 53 #5
Acq. Operator : bgp

Seq. Line : 63
Vial : 5
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BP	2.32557e5	8.56978e-4	199.29587		Hexane
5.386	BB	2.79938e5	7.62963e-4	213.58252		Benzene
7.367	BB	2.82953e5	7.48835e-4	211.88528		Toluene
9.156	BV	2.84730e5	7.41982e-4	211.26462		Ethylbenzene
9.318	VV	2.84202e5	7.49230e-4	212.93271		p-Xylene
9.454	VB	2.83418e5	7.46411e-4	211.54612		m-Xylene
10.078	BV	2.60010e5	8.11495e-4	210.99654		Cumene
10.374	VB	2.90922e5	7.22128e-4	210.08270		o-Xylene

Totals : 1681.58635

Results obtained with enhanced integrator!
1 Warnings or Errors :

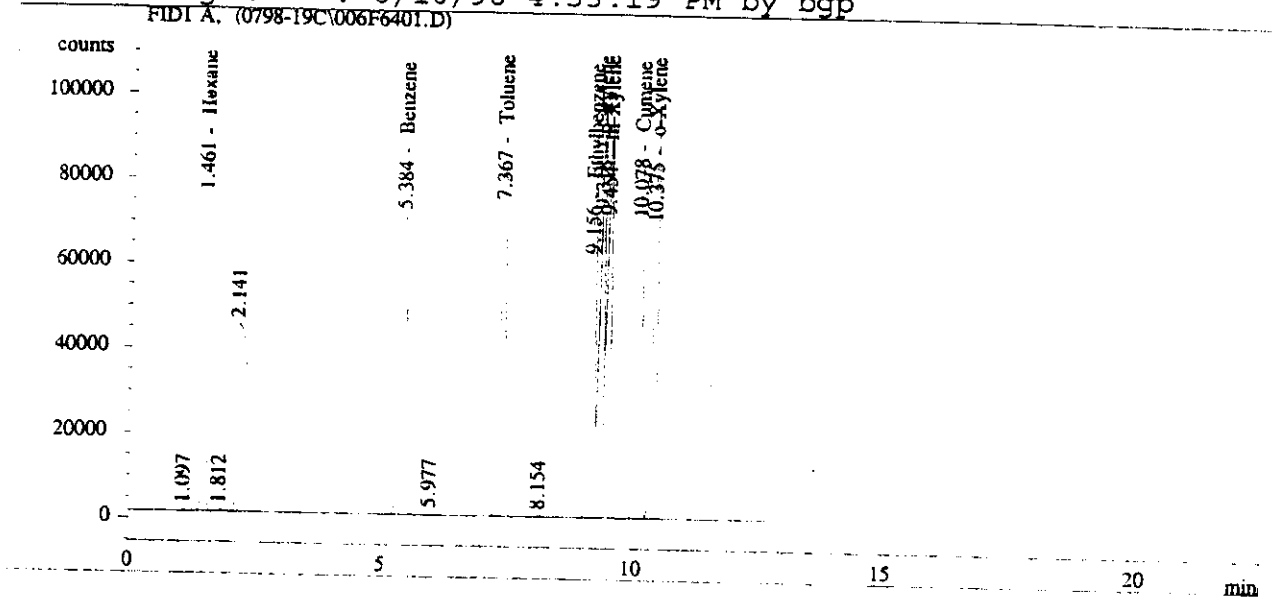
Warning : Calibration warnings (see calibration table listing)

147

408

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\006F6401.D gc-14 pg 53 #6

Injection Date	: 8/6/98 7:51:15 PM	Seq. Line :	64
Sample Name	: gc-14 pg 53 #6	Vial :	6
Acq. Operator	: bgp	Inj :	1
		Inj Volume :	2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19B.M		
Last changed	: 8/3/98 3:08:36 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19D.M		
Last changed	: 8/10/98 4:33:19 PM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BP	4.50567e5	8.58524e-4	386.82304		Hexane
5.384	BB	5.42683e5	7.63932e-4	414.57311		Benzene
7.367	BB	5.49425e5	7.49713e-4	411.91120		Toluene
9.156	BV	5.54107e5	7.42721e-4	411.54739		Ethylbenzene
9.318	VV	5.53794e5	7.50019e-4	415.35604		p-Xylene
9.454	VB	5.51352e5	7.47203e-4	411.97205		m-Xylene
10.078	BV	5.06372e5	8.12399e-4	411.37610		Cumene
10.375	VB	5.66429e5	7.22895e-4	409.46851		o-Xylene
Totals :				3273.02743		

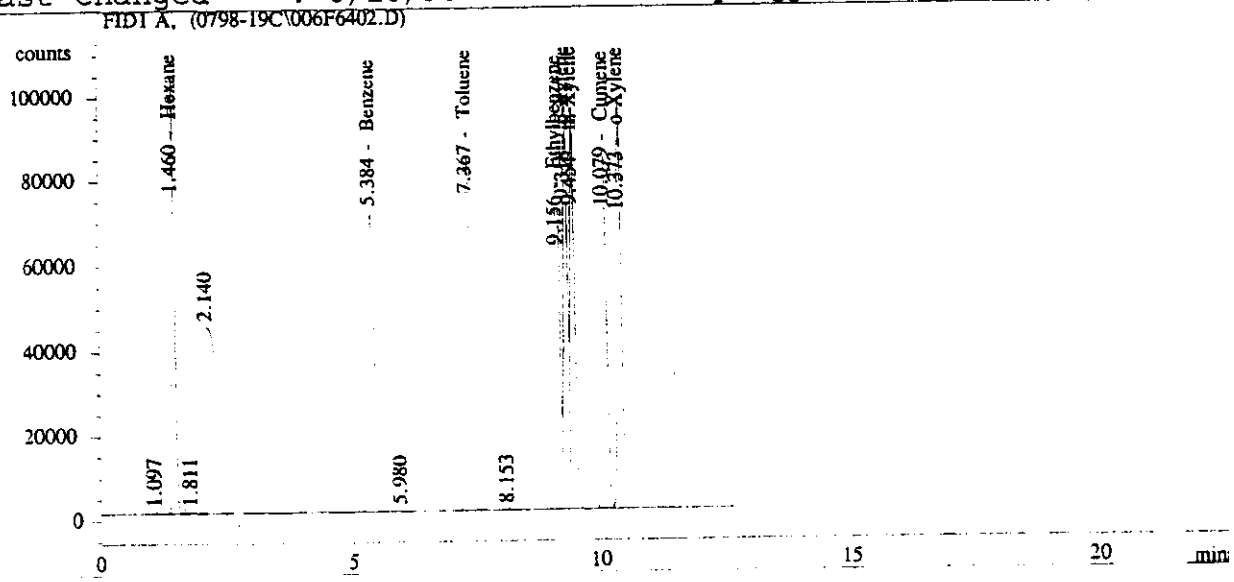
Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
409

Injection Date : 8/6/98 8:08:15 PM
Sample Name : gc-14 pg 53 #6
Acq. Operator : bgp

Seq. Line : 64
Vial : 6
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	BB	4.53507e5	8.58535e-4	389.35120		Hexane
5.384	BB	5.45976e5	7.63939e-4	417.09219		Benzene
7.367	BB	5.51595e5	7.49717e-4	413.53996		Toluene
9.156	BV	5.55808e5	7.42724e-4	412.81144		Ethylbenzene
9.318	VV	5.55121e5	7.50021e-4	416.35219		p-Xylene
9.454	VB	5.53005e5	7.47206e-4	413.20832		m-Xylene
10.079	BV	5.07604e5	8.12401e-4	412.37820		Cumene
10.373	VB	5.67888e5	7.22897e-4	410.52417		o-Xylene

Totals : 3285.25766

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

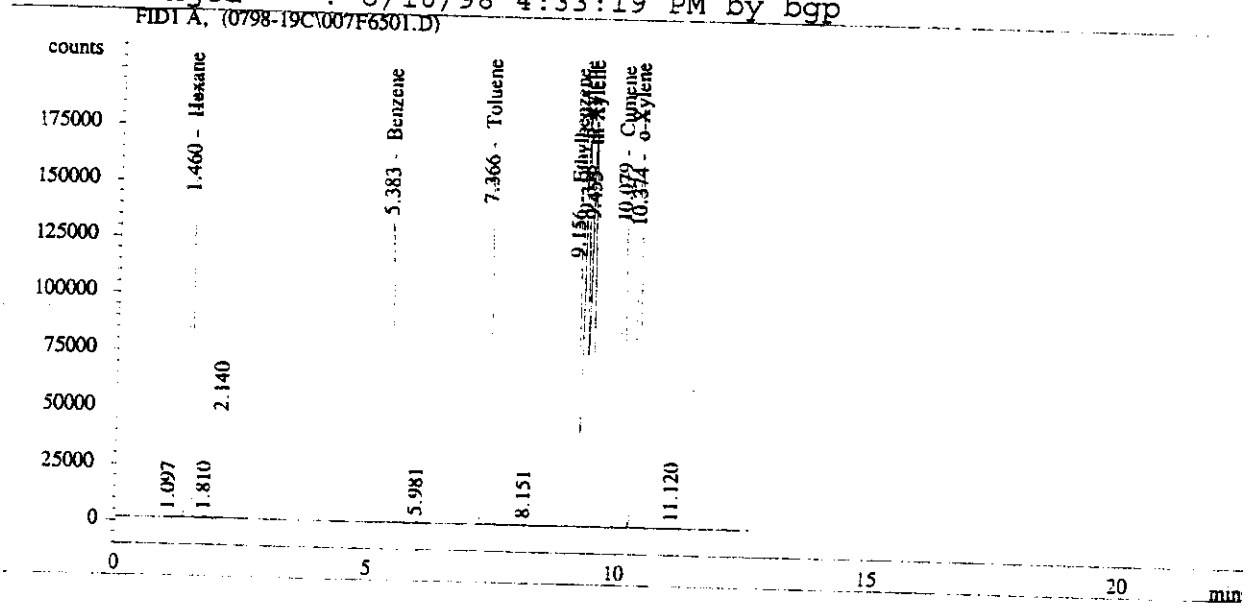
149

410

Injection Date : 8/6/98 8:25:11 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 65
Vial : 7
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	VB	8.51358e5	8.59301e-4	731.57272		Hexane
5.383	BB	1.02519e6	7.64419e-4	783.67731		Benzene
7.366	BB	1.03916e6	7.50153e-4	779.53165		Toluene
9.156	BV	1.05050e6	7.43091e-4	780.61967		Ethylbenzene
9.318	VV	1.05071e6	7.50413e-4	788.46711		p-Xylene
9.455	VB	1.04290e6	7.47598e-4	779.66834		m-Xylene
10.079	BV	9.61165e5	8.12850e-4	781.28303		Cumene
10.374	VB	1.07375e6	7.23277e-4	776.62184		o-Xylene
Totals :				6201.44168		

Results obtained with enhanced integrator!
1 Warnings or Errors :

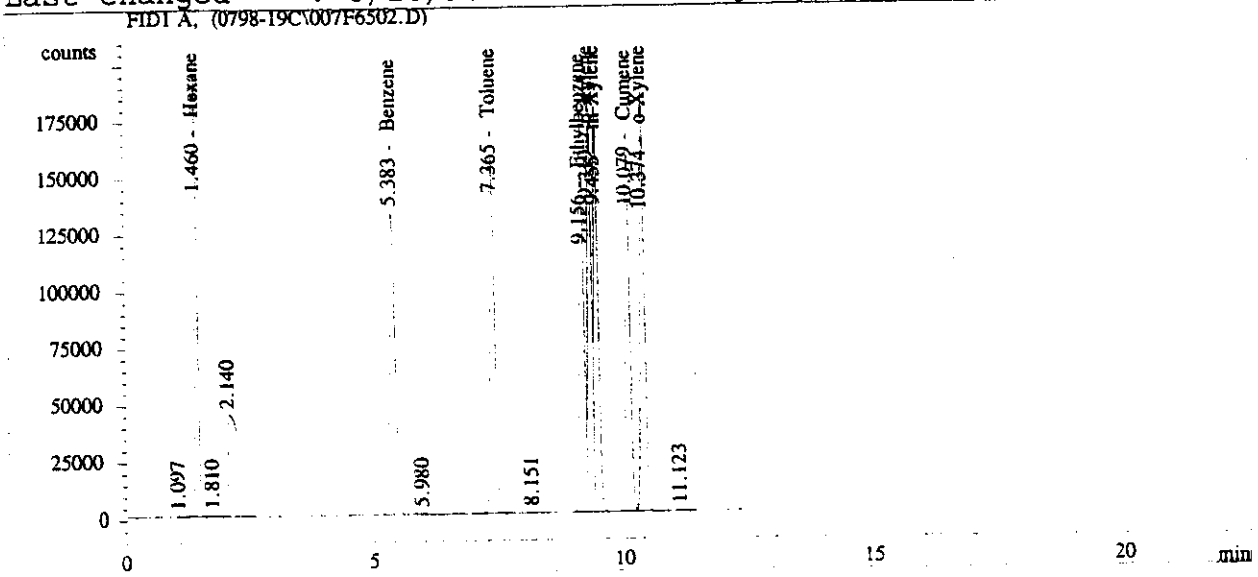
Warning : Calibration warnings (see calibration table listing)

411

Injection Date : 8/6/98 8:42:08 PM
Sample Name : gc-14 pg 53 #7
Acq. Operator : bgp

Seq. Line : 65
Vial : 7
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19B.M
Last changed : 8/3/98 3:08:36 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	VB	8.50354e5	8.59300e-4	730.70922		Hexane
5.383	BB	1.02494e6	7.64419e-4	783.48636		Benzene
7.365	BB	1.03935e6	7.50153e-4	779.67291		Toluene
9.156	BV	1.05134e6	7.43091e-4	781.23920		Ethylbenzene
9.319	VV	1.04964e6	7.50412e-4	787.66473		p-Xylene
9.455	VB	1.04662e6	7.47600e-4	782.44937		m-Xylene
10.079	BV	9.62492e5	8.12851e-4	782.36291		Cumene
10.374	VB	1.07506e6	7.23278e-4	777.56691		o-Xylene
Totals :				6205.15160		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

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Silo
GC/MS Results

Tentative Identification of Detected Compounds

Client ID : PES
Sample ID : S-M18-1
Enthalpy Project ID : 0798-19
Volume of Sample (mL) = 5

Peak#	Ret Time	Tentative Identification	Total Area	Catch (ug)	CAS	MW
1	6.934	Benzene	165,743	42.7	71-43-2	78.1
2	10.436	N,N-Dimethyl formamide *	21,937,208	5,653	68-12-2	73.0
3	10.552	Toluene	1,142,251	294	108-88-3	92.1
4	10.908	Trimethanolpentanol	826,952	213	123-44-4	130.0
5	11.523	Trimethylhexane	1,541,560	397	3522-94-9	128.2
6	13.198	Trimethylcyclohexane	886,566	228	3073-66-3	126.1
7	13.553	Ethylbenzene	488,654	126	100-41-4	106.2
8	13.772	Ethylhexane	2,397,148	618	619-99-8	114.1
9	13.821	m&p-Xylenes	2,214,485	571	108-38-3 & 106-42-3	106.2
10	14.492	o-Xylene	931,029	240	95-47-6	106.2
11	14.964	Nonane	916,690	236	111-84-2	128.2
12	15.567	Methylpentadiene	803,175	207	1118-58-7	82.1
13	15.929	Dimethyloctane	1,189,071	306	2051-30-1	142.2
14	16.155	Methyloctane	1,047,621	270	2216-33-3	128.2
15	17.274	Trimethylbenzene	823,130	212	526-73-8	120.1
16	17.582	Decane	1,465,245	378	124-18-5	142.2
17	17.981	Trimethylbenzene	1,636,194	422	95-36-3	120.1
18	18.187	Dimethylnonane	1,656,031	427	17302-28-2	156.2
19	18.928	Ethylmethylcyclopropane	1,203,166	310	53778-43-1	84.1
20	19.148	Methylmethylenecyclohexane	991,440	255	2808-75-5	110.1
21	19.561	Dipropylcyclopropene	813,093	210	10306-92-0	124.1
22	19.953	Tetradecane	1,723,934	444	629-59-4	198.2
23	20.496	Decahydromethylnaphthalene	960,004	247	2958-76-1	152.2
24	20.888	Octadecyne	1,217,570	314	35365-59-4	250.3
25	22.120	Methylundecane	1,908,125	492	7045-71-8	170.2
26	22.457	Dimethylundecane	2,086,560	538	17301-23-4	184.2
27	23.664	Trimethyldecane	955,196	246	62108-25-2	184.2
28	24.126	Tridecane	1,526,276	393	629-50-5	184.2
29	25.650	Trimethyldodecane	1,241,035	320	3891-98-3	212.2

	Internal Standard		ug/ml
15.176	4-Bromofluorobenzene	970,108	50

Reviewed by:

QA: Steven J. Eckard

Date: 9/23/98

ENTHALPY analytical, inc.

414

Tentative Identification of Detected Compounds

Client ID : PES
Sample ID : S-M18-2
Enthalpy Project ID : 0798-19

Volume of Sample (mL) = 5

Peak#	Ret Time	Tentative Identification	Total Area	Catch (ug)	CAS	MW
1	10.474	N,N-Dimethyl formamide ★	21,749,581	8,622	68-12-2	73.0
2	11.512	Trimethylheptane	702,688	279	14720-74-2	142.2
3	13.786	2-Heptyn-1-ol	513,034	203	1002-36-4	112.0
4	15.940	2,4-Dimethylheptane	726,063	288	2213-23-2	128.2
5	16.159	3-Ethyl-2-methylheptane	483,694	192	14676-29-0	142.2
6	16.652	Tetramethylcyclohexane	814,772	323	6783-92-2	140.2
7	17.578	2-methylnonane	953,947	378	871-83-0	142.2
8	17.989	Trimethylbenzene	821,522	326	95-36-3	120.1
9	18.181	2-Heptenal	1,103,064	437	57266-86-1	112.0
10	18.353	1-methyl-4-(1-methylethylidene)-Cyclohexane	472,118	187	1124-27-2	138.1
11	18.483	5-Methyl-3-undecene	1,063,219	421	NA	112.1
12	18.936	5-Methyl-1-decene	460,895	183	54244-79-0	154.2
13	19.156	Cyclodecene	668,305	265	3618-12-0	138.1
14	19.348	Methylbicyclohexane-3-one	759,510	301	1125-12-8	152.1
15	19.718	Dimethylnonadiene	983,674	390	20054-25-5	152.2
16	19.952	Dimethyloctane	1,146,137	454	1072-16-8	142.2
17	20.350	Tetradecyloxirane	552,319	219	7320-37-8	240.2
18	20.494	Decahydro-2-methylnaphthalene	1,133,399	449	2958-76-1	152.2
19	20.886	Decahydro-2-methylnaphthalene	878,578	348	2958-76-1	152.2
20	21.367	Bromotridecane	725,002	287	765-09-3	262.1
21	21.752	Undecyne	566,797	225	2294-72-6	152.2
22	22.117	Dodecane	1,046,226	415	112-40-3	170.2
23	22.949	Trimethylcyclohexane	2,076,158	823	1678-97-3	126.1
24	23.666	Dimethylundecane	1,264,257	501	17301-23-4	184.2
25	24.045	Dimethylcyclooctane	466,498	185	13151-98-9	140.2
26	24.128	Tridecane	2,080,059	825	629-50-5	184.2
27	24.535	Cetylpyridinium chloride	866,092	343	6004-24-6	357.0
28	25.652	Tetramethylheptadecane	1,007,238	399	18344-37-1	296.3
29	26.005	Tetracecane	3,558,428	1,411	629-59-4	198.2

	Internal Standard		ug/ml
15.19	4-Bromofluorobenzene	630,620	50

Tentative Identification of Detected Compounds

Client ID : PES
Sample ID : S-M18-3
Enthalpy Project ID : 0798-19
Volume of Sample (mL) = 5

Peak#	Ret Time	Tentative Identification	Total Area	Catch (ug)	CAS	MW
1	10.201	N,N-Dimethyl formamide *	2,565,563	1038	68-12-2	73
2	10.359	N,N-Dimethyl formamide *	11,277,526	4,562	68-12-2	73
3	11.513	Trimethylhexane	503,869	204	3522-94-9	128.2
4	13.775	m&p-Xylenes	903,615	366	108-38-3 & 106-42-3	106.17
5	14.952	Nonane	1,074,316	435	111-84-2	128.2
6	15.938	Methylnonane	711,888	288	5911-04-6	142.2
7	16.157	Dimethyloctane	1,203,289	487	2051-30-1	142.2
8	16.651	Dimethyloctene	915,416	370	4057-42-5	140.2
9	16.884	2-Ethylhexanal	531,066	215	645-62-5	126
10	17.577	Decane	1,218,396	493	124-18-5	142.2
11	17.989	Ethylmethylbenzene	1,876,924	759	611-14-3	120.1
12	18.18	Methylnonane	1,124,655	455	5911-04-6	142.2
13	18.352	Hexadecyne	2,427,532	982	74685-28-2	222.2
14	18.928	Undecene	807,099	326	764-97-6	154.2
15	19.148	Dodecenol	516,327	209	20056-92-2	184.2
16	19.306	Pentenal	792,549	321	2100-17-6	84.1
17	19.711	Methyloctyne	818,242	331	62108-34-3	124.1
18	19.944	Decane	1,530,864	619	124-18-5	142.2
19	20.885	Decahydromethylnaphthalene	998,790	404	2958-76-1	152.2
20	22.453	Dimethylundecane	519,648	210	17301-23-4	184.2
21	23.437	Hexyldecanol	1,392,597	563	2425-77-6	242.3
22	23.658	Dimethylheptadecane	850,090	344	54105-67-8	268.3
23	24.126	Tridecane	1,284,708	520	629-50-5	184.2
24	24.27	Tetradecene	571,984	231	1120-36-1	196.2
25	25.654	Trimethyldodecane	634,272	257	3891-98-3	212.2
- 26	26.005	Tetradecane	1,629,986	659	629-59-4	198.2
27	27.224	Tetramethylheptadecane	953,903	386	18344-37-1	296.3
28	27.905	Pentadecane	5,126,790	2,074	629-62-9	212.2
29	30.164	Hexadecane	1,699,568	687	544-76-3	226.3

	Internal Standard		ug/ml
15.185	4-Bromofluorobenzene	618,049	50

ENTHALPY analytical, inc.

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Tentative Identification of Detected Compounds

Client ID : PES
Sample ID : S-M18-4
Enthalpy Project ID : 0798-19
Volume of Sample (mL) = 5

Peak#	Ret Time	Tentative Identification	Total Area	Catch (ug)	CAS	MW
1	10.188	N,N-Dimethyl formamide *	100	0.0324	68-12-2	73.0
2	10.457	N,N-Dimethyl formamide *	100	0.0324	68-12-2	73.0

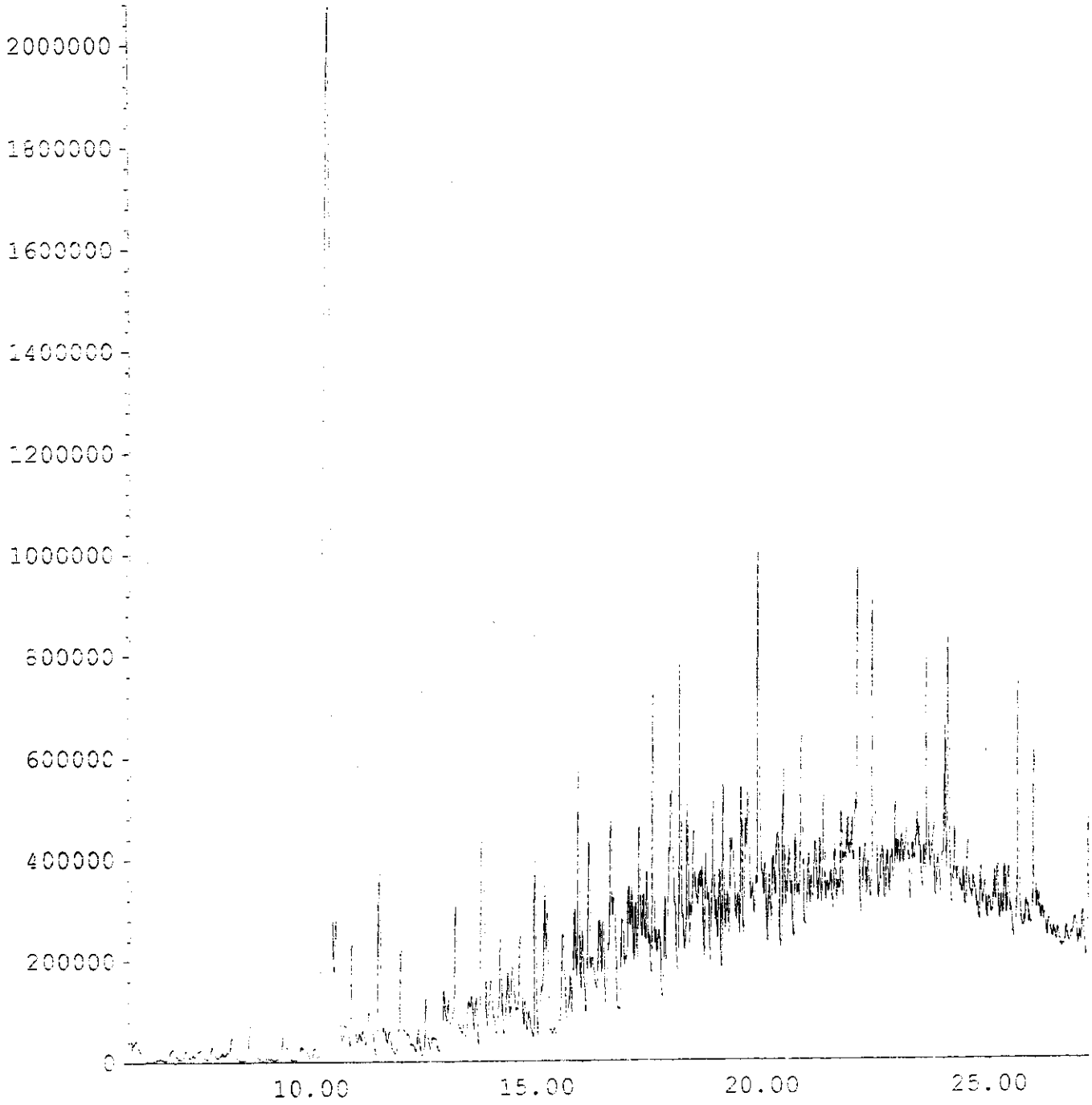
	Internal Standard		ug/ml
15.186	4-Bromofluorobenzene	772,573	50

Silo
GC/MS Data

ENTHALPY analytical, inc.

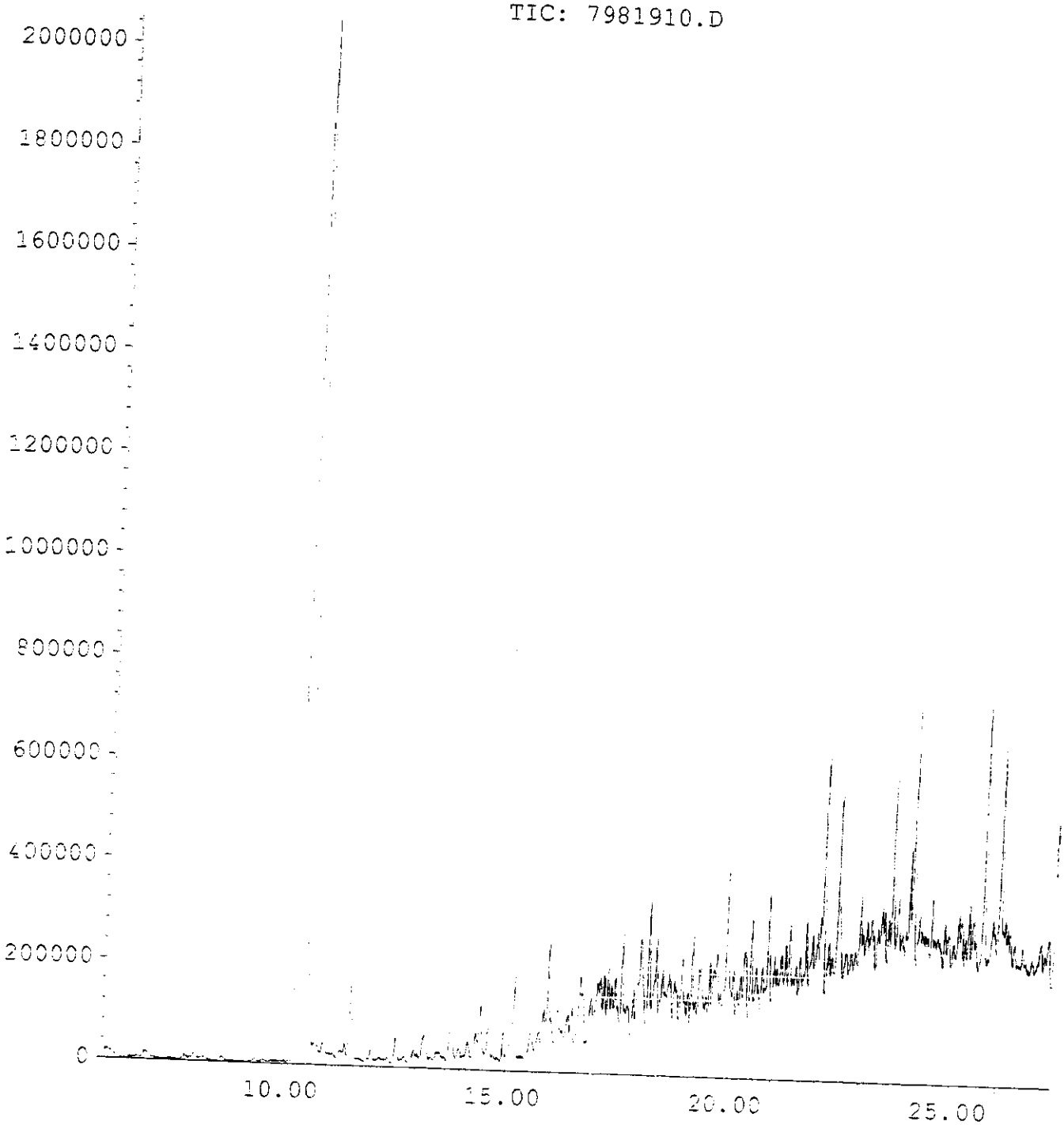
File : D:\HPCHEM\1\DATA\079819\798198.D
Operator : TAB
Acquired : 27 Aug 98 9:44 am using AcqMethod 079819
Instrument : 5970
Sample Name: S-M18-1
Misc Info :
Vial Number: 5

TIC: 798198.D

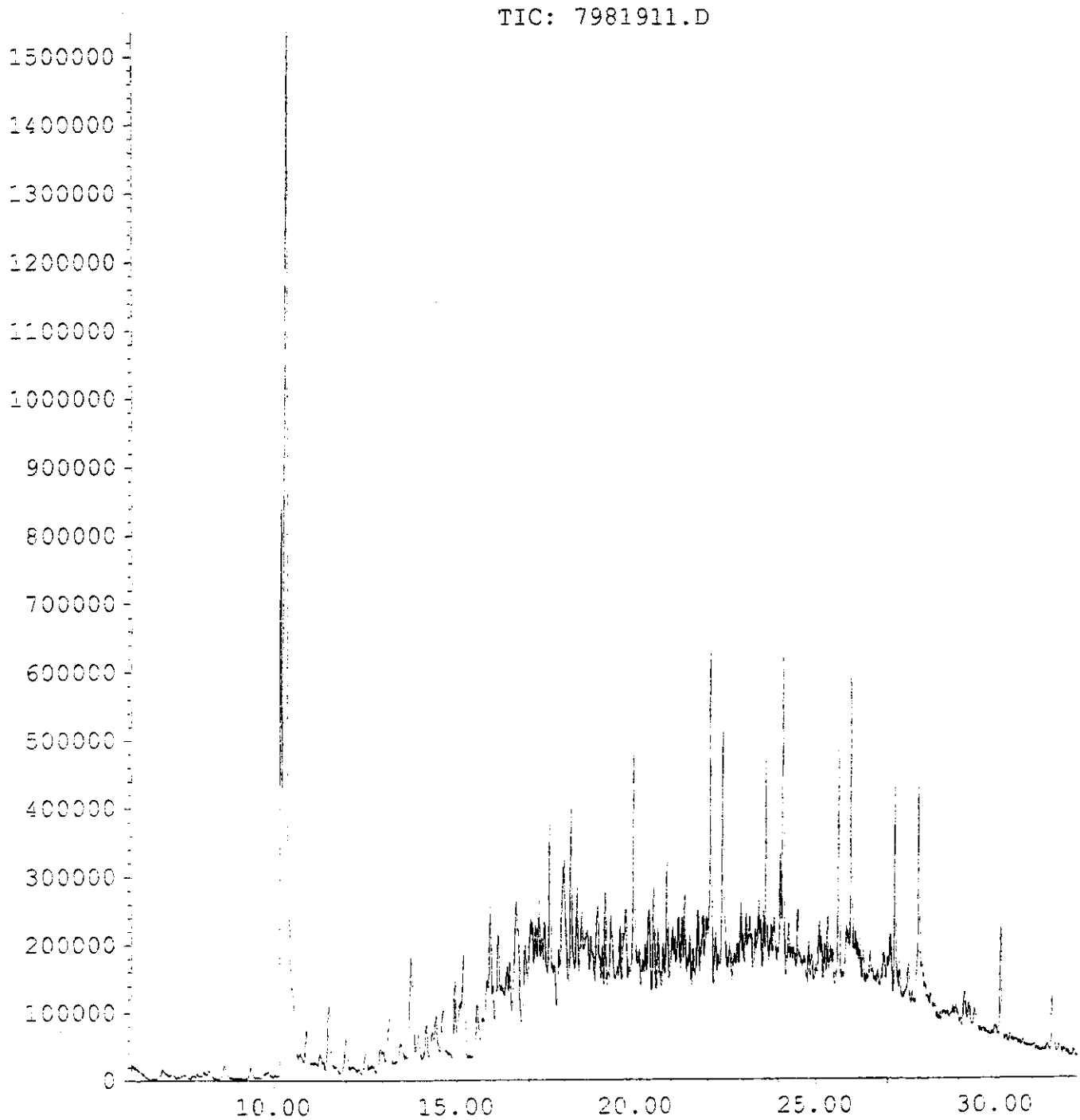


419

File : D:\HPCHEM\1\DATA\079819\7981910.D
Operator : TAB
Acquired : 27 Aug 98 12:10 pm using AcqMethod 079819
Instrument : 5970
Sample Name: S-M18-2
Misc Info :
Vial Number: 6

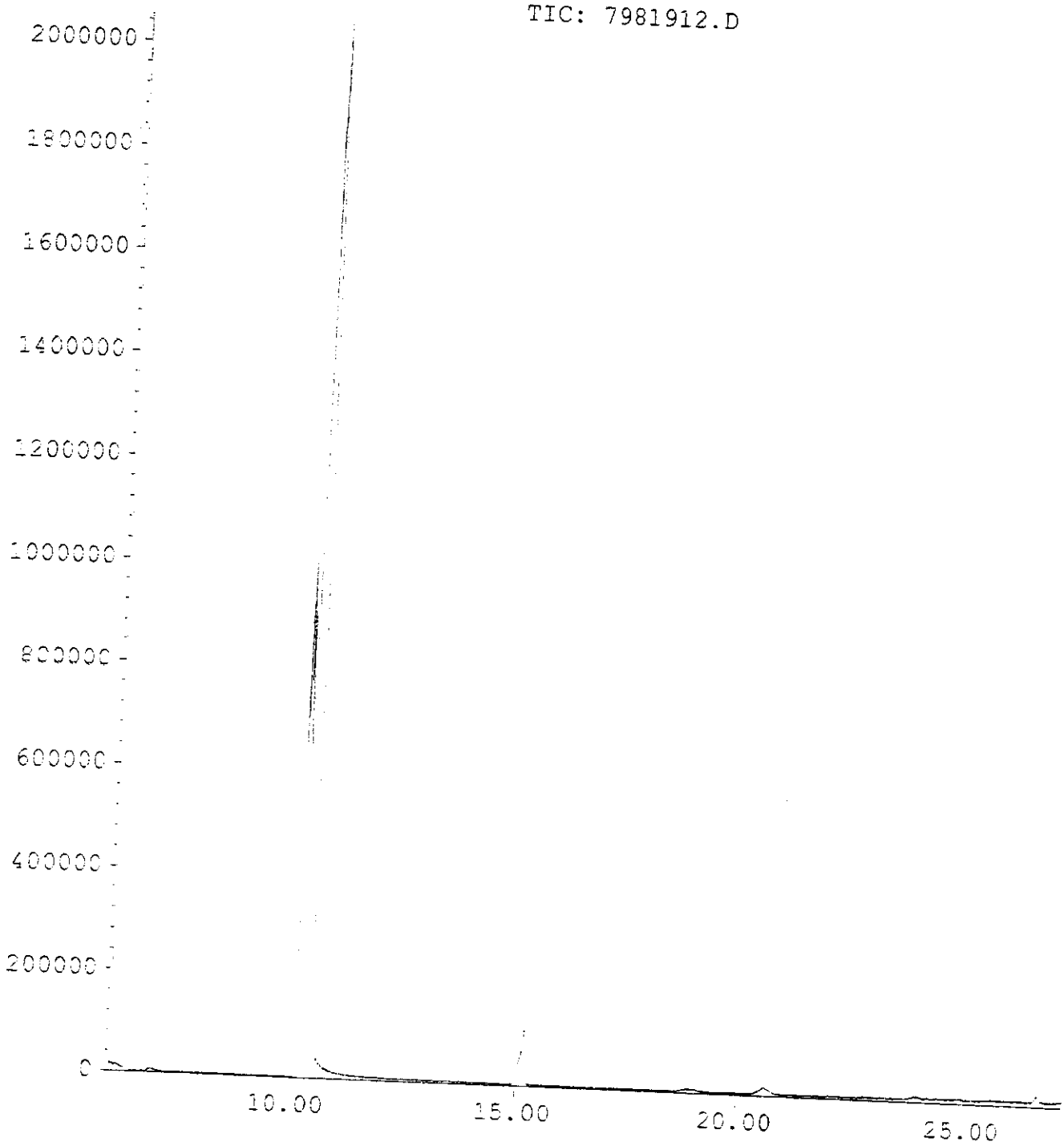


File : D:\HPCHEM\1\DATA\079819\7981911.D
Operator : TAB
Acquired : 27 Aug 98 12:46 pm using AcqMethod 079819
Instrument : 5970
Sample Name: S-M18-3
Misc Info :
Vial Number: 7



421

File : D:\HPCHEM\1\DATA\079819\7981912.D
Operator : TAB
Acquired : 27 Aug 98 1:46 pm using AcqMethod 079819
Instrument : 5970
Sample Name: S-M18-4
Misc Info :
Vial Number: 8



422

Information from Data File:
File : D:\HPCHEM\1\DATA\079819\798198.D
Operator : TAB
Acquired : 27 Aug 98 9:44 am using AcqMethod 079819
Sample Name: S-M18-1
Misc Info :
Vial Number: 5

Search Libraries: C:\DATABASE\NBS75K.L Minimum Quality: 10
C:\DATABASE\EXTRA.L Minimum Quality: 10
C:\DATABASE\TO14TAR.L

Unknown Spectrum: Apex
Integration Params: current RTEINT parameters

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
1	10.44	38.47	C:\DATABASE\NBS75K.L			
			Formamide, N,N-dimethyl-	62525	000068-12-2	86
			Formamide, N,N-dimethyl-	62526	000068-12-2	86
			2-Butanamine, (.+/-.)-	298	033966-50-6	86
2	10.55	2.00	C:\DATABASE\NBS75K.L			
			Pyrrolidine	62469	000123-75-1	43
			Hydroxylamine, O-pentyl-	1838	005963-74-6	43
			Pyrrolidine	62470	000123-75-1	43
3	10.91	1.45	C:\DATABASE\NBS75K.L			
			1-Pentanol, 2,2,4-trimethyl-	5514	000123-44-4	64
			Heptane, 1,1'-oxybis-	26421	000629-64-1	56
			Heptane, 2-methyl-	3092	000592-27-8	42
4	11.52	2.70	C:\DATABASE\NBS75K.L			
			Hexane, 2,2,5-trimethyl-	65126	003522-94-9	83
			Hexane, 2,2,5,5-tetramethyl-	66226	001071-81-4	72
			Heptane, 2,2-dimethyl-	65135	001071-26-7	72
5	13.20	1.55	C:\DATABASE\NBS75K.L			
			Cyclohexane, 1,1,3-trimethyl-	64941	003073-66-3	87
			Cyclohexane, 1,1,3-trimethyl-	64942	003073-66-3	72
			Cyclohexane, 1,1,3-trimethyl-	4647	003073-66-3	68
6	13.77	4.20	C:\DATABASE\NBS75K.L			
			Hexane, 3-ethyl-	64222	000619-99-8	38
			Hexane, 2,3,5-trimethyl-	5161	001069-53-0	38
			Heptane, 2,3-dimethyl-	5152	003074-71-3	38
7	14.19	1.34	C:\DATABASE\NBS75K.L			
			1-Hexanol, 2-ethyl-	65293	000104-76-7	78
			1-Hexanol, 2-ethyl-	65291	000104-76-7	74
			Ether, heptyl hexyl	23013	007289-40-9	56

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
8	14.64	1.32	C:\DATABASE\NBS75K.L			
			6-Oxabicyclo[3.1.0]hexane	575	000285-67-6	64
			3-Nonene, (E)-	4664	020063-92-7	59
			4-Pentenal	571	002100-17-6	53
9	14.96	1.61	C:\DATABASE\NBS75K.L			
			Nonane	65144	000111-84-2	91
			Nonane	65145	000111-84-2	83
			Nonane	65143	000111-84-2	78
10	15.18	1.70	C:\DATABASE\NBS75K.L			
			Benzene, 1-bromo-2-fluoro-	16035	001072-85-1	97
			Benzene, 1-bromo-3-fluoro-	16034	001073-06-9	93
			Benzene, 1-bromo-3-fluoro-	68407	001073-06-9	91
11	15.57	1.41	C:\DATABASE\NBS75K.L			
			1,3-Pentadiene, 2-methyl-	482	001118-58-7	49
			1,3-Pentadiene, 2-methyl-, (E)-	475	000926-54-5	47
			Bicyclo[4.1.0]heptane	63134	000286-08-8	43
12	15.93	2.09	C:\DATABASE\NBS75K.L			
			Octane, 2,6-dimethyl-	66227	002051-30-1	53
			Octane, 2,6-dimethyl-	66228	002051-30-1	53
			Oxirane, pentyl-	3071	005063-65-0	53
13	16.16	1.84	C:\DATABASE\NBS75K.L			
			Undecane, 5,6-dimethyl-	19004	017615-91-7	50
			Octane, 3-methyl-	5150	002216-33-3	50
			Decane, 2,5,6-trimethyl-	19019	062108-23-0	47
14	17.27	1.44	C:\DATABASE\NBS75K.L			
			Benzene, 1,2,3-trimethyl-	3773	000526-73-8	89
			1,2,4-Trimethylbenzene	3771	000095-36-3	87
			Benzene, 1,2,3-trimethyl-	64576	000526-73-8	64
15	17.58	2.57	C:\DATABASE\NBS75K.L			
			Decane	66206	000124-18-5	64
			Octane, 2,7-dimethyl-	8076	001072-16-8	53
			Nonane, 2-methyl-	8093	000871-83-0	52
16	17.94	1.47	C:\DATABASE\NBS75K.L			
			3-Octyne, 6-methyl-	4262	062108-34-3	43
			Cycloheptene, 1,2-dimethyl-	4250	020053-89-8	38
			17-Pentatriacontene	58705	006971-40-0	35
17	17.98	2.87	C:\DATABASE\NBS75K.L			
			1,2,4-Trimethylbenzene	3771	000095-36-3	49
			Cyclohexane, 1-methyl-4-(1-methyle	7092	001124-27-2	45
			5-Methyl-5-hexen-3-yn-2-ol	2307	068017-33-4	43

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
18	18.19	2.90	C:\DATABASE\NBS75K.L			
			Nonane, 2,6-dimethyl-	11598	017302-28-2	50
			Decane, 4-methyl-	67324	002847-72-5	47
			Nonane, 4-methyl-5-propyl-	19021	062185-55-1	47
19	18.35	1.40	C:\DATABASE\NBS75K.L			
			Naphthalene, decahydro-2-methyl-	10436	002958-76-1	58
			Cyclohexene, 3-methyl-6-(1-methyle	7099	005256-65-5	53
			3,5-Dimethylcyclohexene	2315	000000-00-0	49
20	18.93	2.11	C:\DATABASE\NBS75K.L			
			Cyclopropane, 1-ethyl-1-methyl-	609	053778-43-1	64
			5-Undecene, (E)-	67184	000764-97-6	64
			1-Decene, 5-methyl-	11073	054244-79-0	58
21	19.15	1.74	C:\DATABASE\NBS75K.L			
			1-Methyl-2-methylenecyclohexane	2368	002808-75-5	70
			Cycloheptene, methyl-	63885	055308-20-8	60
			cis-7-Dodecen-1-ol	18959	020056-92-2	59
22	19.56	1.43	C:\DATABASE\NBS75K.L			
			1,2-Dipropylcyclopropene	4240	010306-92-0	38
			1,4-Hexadiene, 2,3-dimethyl-	2380	018669-52-8	38
			(E)-1-Phenyl-1-butene	5878	001005-64-7	35
23	19.95	3.02	C:\DATABASE\NBS75K.L			
			Tetradecane	69661	000629-59-4	64
			Nonadecane	37469	000629-92-5	64
			Pentadecane	26001	000629-62-9	64
24	20.50	1.68	C:\DATABASE\NBS75K.L			
			Naphthalene, decahydro-2-methyl-	67009	002958-76-1	93
			Cyclohexanone, 2-methyl-5-(1-methy	10308	007764-50-3	93
			Cyclohexanone, 2-methyl-5-(1-methy	66974	005948-04-9	87
25	20.89	2.14	C:\DATABASE\NBS75K.L			
			9-Octadecyne	34017	035365-59-4	68
			Cyclohexanone, 2-methyl-5-(1-methy	10308	007764-50-3	60
			1-Dodecyne	68014	000765-03-7	53
26	22.12	3.35	C:\DATABASE\NBS75K.L			
			Undecane, 2-methyl-	15356	007045-71-8	64
			Decane	66204	000124-18-5	59
			Decane, 2-methyl-	67322	006975-98-0	59
27	22.46	3.66	C:\DATABASE\NBS75K.L			
			Undecane, 2,6-dimethyl-	19058	017301-23-4	59
			Heptane, 3-ethyl-2-methyl-	8080	014676-29-0	43
			3-Undecene, 6-methyl-, (E)-	14747	074630-52-7	43

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
28	23.66	1.68	C:\DATABASE\NBS75K.L			
			Decane, 2,6,7-trimethyl-	19027	062108-25-2	64
			Nonane, 3-methyl-	66201	005911-04-6	64
			Octane, 2,3,7-trimethyl-	11603	062016-34-6	53
29	24.13	2.68	C:\DATABASE\NBS75K.L			
			Tridecane	69019	000629-50-5	91
			Dodecane	68254	000112-40-3	72
			Tridecane	69020	000629-50-5	64
30	25.65	2.18	C:\DATABASE\NBS75K.L			
			Dodecane, 2,6,10-trimethyl-	70269	003891-98-3	72
			Dodecane, 2,6,11-trimethyl-	25998	031295-56-4	64
			Dodecane, 2,6,11-trimethyl-	70271	031295-56-4	59

TIC: 798198.D

S-M18-1

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.436	rBV	0.335	21937208	10.176	10.511
2	10.552	rVB	0.164	1142251	10.518	10.682
3	10.908	rBV	0.171	826952	10.853	11.024
4	11.523	rBV	0.157	1541560	11.448	11.605
5	13.198	rVB	0.130	886566	13.150	13.280
6	13.772	rBV	0.185	2397148	13.704	13.889
7	14.190	rBV	0.164	764616	14.094	14.259
8	14.642	rVB	0.130	753360	14.581	14.711
9	14.964	rBV	0.096	916690	14.909	15.005
10	15.176	rVV	0.082	970108	15.121	15.204
11	15.567	rVB	0.144	803175	15.512	15.656
12	15.929	rVV	0.096	1189071	15.882	15.977
13	16.155	rBV	0.096	1047621	16.100	16.196
14	17.274	rBV	0.096	823130	17.225	17.322
15	17.582	rBV	0.082	1465245	17.534	17.617
16	17.939	rVV	0.076	838366	17.878	17.953
17	17.981	rVB	0.165	1636194	17.960	18.125
18	18.187	rBV	0.096	1656031	18.132	18.228
19	18.352	rBV	0.096	796987	18.297	18.393
20	18.928	rBV	0.117	1203166	18.853	18.970
21	19.148	rBV	0.082	991440	19.107	19.189
22	19.561	rVB	0.096	813093	19.513	19.609
23	19.953	rBV	0.117	1723934	19.904	20.021
24	20.496	rBV	0.089	960004	20.454	20.544
25	20.886	rVB	0.110	1217570	20.840	20.950
26	22.120	rVB	0.096	1908125	22.086	22.182
[illegible]	22.457	rVB	0.158	2086560	22.409	22.568
28	23.664	rBV	0.097	955196	23.622	23.719
29	24.126	rVB	0.117	1526276	24.084	24.202
30	25.650	rVB	0.124	1241035	25.609	25.733

Ion 91.00 (90.70 to 91.70): 798198.D
S-M18-1

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1 Tol	10.566	rBV	0.062	22889	10.511	10.573
2 ET.	13.553	rBV	0.075	28121	13.492	13.567
3 m,p-X	13.821	rBB	0.199	196585	13.731	13.930
4 o-Xyl	14.492	rBB	0.151	67268	14.416	14.567
5	16.210	rBV	0.123	37806	16.128	16.251
6	16.402	rBV	0.103	16236	16.327	16.430
7	17.267	rVB	0.117	22235	17.205	17.322
8	17.651	rBV	0.096	12888	17.603	17.699
9	18.805	rBV	0.158	48615	18.709	18.867
10	19.347	rVB	0.069	10755	19.320	19.389
11	19.554	rVB	0.103	20233	19.519	19.623
12	20.269	rBV	0.069	12811	20.221	20.289
13	20.331	rVB	0.110	18169	20.317	20.427
14	20.661	rVB	0.110	12377	20.606	20.716
15	20.764	rBV	0.090	18842	20.716	20.805
16	20.888	rBV	0.083	15055	20.846	20.929
17	21.018	rBV	0.090	15057	20.963	21.053
18	21.087	rBV	0.055	15493	21.053	21.108
19	21.844	rBV	0.090	17903	21.789	21.879
20	22.072	rVB	0.076	14088	22.044	22.120

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Peak#	Ret Time	Type	Width	Total Area	Start Time	End Time
1	13.547	rm	0.082	488654	13.519	13.601
2	13.772	rm	0.165	2214485	13.718	13.882
3	14.450	rm	0.103	931029	14.402	14.505

1 = Ethylbenzene

2 = m&p-Xylene

3 = o-Xylene

429

TIC: 798198.D

S-M18-1

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	6.934	rm	0.253	165743	6.832	7.085

430

TIC: 798198.D

S-M18-1

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.552	rm	0.082	1142548	10.518	10.600

431

Ion 106.00 (105.70 to 106.70): 798198.D
S-M18-1

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	13.834	rBB	0.171	74588	13.745	13.916
2	14.498	rBB	0.117	25640	14.430	14.546
3	17.267	rBB	0.089	16737	17.212	17.301
4	17.988	rBB	0.089	13222	17.932	18.022
5	20.998	rBB	0.090	15042	20.963	21.053
6	23.098	rBB	0.090	11748	23.043	23.133

Ion 91.00 (90.70 to 91.70): 798198.D
S-M18-1

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	13.821	rBB	0.199	196585	13.731	13.930

433

Information from Data File:
File : D:\HPCHEM\1\DATA\079819\7981910.D
Operator : TAB
Acquired : 27 Aug 98 12:10 pm using AcqMethod 079819
Sample Name: S-M18-2
Misc Info :
Vial Number: 6

Search Libraries: C:\DATABASE\NBS75K.L Minimum Quality: 5
C:\DATABASE\EXTRA.L Minimum Quality: 5
C:\DATABASE\TO14TAR.L

Unknown Spectrum: Apex
Integration Params: current RTEINT parameters

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
1	10.47	43.26	C:\DATABASE\NBS75K.L			
			Formamide, N,N-dimethyl-	62525	000068-12-2	86
			Formamide, N,N-dimethyl-	62526	000068-12-2	86
			Formamide, N,N-dimethyl-	62527	000068-12-2	83
2	11.51	1.40	C:\DATABASE\NBS75K.L			
			Heptane, 2,2,4-trimethyl-	8105	014720-74-2	59
			Decane, 2,2,6-trimethyl-	18995	062237-97-2	59
			Hexane, 2,2,5-trimethyl-	65126	003522-94-9	56
3	13.79	1.02	C:\DATABASE\NBS75K.L			
			2-Heptyn-1-ol	2590	001002-36-4	50
			Furan, 2,3-dihydro-	62438	001191-99-7	38
			1-Heptene, 4-methyl-	2675	013151-05-8	25
4	15.19	1.25	C:\DATABASE\NBS75K.L			
			Benzene, 1-bromo-2-fluoro-	16035	001072-85-1	97
			Benzene, 1-bromo-3-fluoro-	16034	001073-06-9	96
			p-Bromofluorobenzene	16036	000460-00-4	91
5	15.94	1.44	C:\DATABASE\NBS75K.L			
			Heptane, 2,4-dimethyl-	65121	002213-23-2	43
			Heptane, 2,4-dimethyl-	5145	002213-23-2	43
			Heptane, 2,4-dimethyl-	65120	002213-23-2	37
6	16.16	0.96	C:\DATABASE\NBS75K.L			
			Heptane, 3-ethyl-2-methyl-	8080	014676-29-0	38
			(Z)-3-Heptene	1368	007642-10-6	27
			Cyclohexane, methyl-	63236	000108-87-2	27
7	16.65	1.62	C:\DATABASE\NBS75K.L			
			Cyclohexane, 1,1,2,3-tetramethyl-	7580	006783-92-2	76
			Cyclohexane, 1,2,3-trimethyl-, (1.	4680	001678-81-5	60
			Cyclohexane, 1,2,3-trimethyl-, (1.	4622	001839-88-9	47

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
8	17.58	1.90	C:\DATABASE\NBS75K.L			
			Nonane, 2-methyl-	8093	000871-83-0	53
			Hydroxylamine, O-decyl-	15973	029812-79-1	53
			Decane	66206	000124-18-5	52
9	17.99	1.63	C:\DATABASE\NBS75K.L			
			1,2,4-Trimethylbenzene	3771	000095-36-3	72
			Benzene, 1,2,3-trimethyl-	64576	000526-73-8	47
			Benzene, 1-ethyl-2-methyl-	3765	000611-14-3	38
10	18.18	2.19	C:\DATABASE\NBS75K.L			
			2-Heptenal, (Z)-	2610	057266-86-1	70
			2-Heptenal, (E)-	2632	018829-55-5	45
			Silane, trichloroeicosyl-	54853	018733-57-8	43
11	18.35	0.94	C:\DATABASE\NBS75K.L			
			Cyclohexane, 1-methyl-4-(1-methyle	65946	001124-27-2	46
			5-Bromo-1-hexene	12784	004558-27-4	43
			Bicyclo[4.1.0]heptane, 3,7,7-trime	7090	018968-23-5	43
12	18.48	2.11	C:\DATABASE\NBS75K.L			
			3-Undecene, 5-methyl-	14689	000000-00-0	47
			3-Heptene, 3-methyl-	64039	007300-03-0	46
			5-Methyl-3-heptene	2641	000000-00-0	43
13	18.94	0.92	C:\DATABASE\NBS75K.L			
			1-Decene, 5-methyl-	11073	054244-79-0	72
			6-Octenal, 3,7-dimethyl-	67174	000106-23-0	70
			3-Undecene, (E)-	11074	001002-68-2	64
14	19.16	1.33	C:\DATABASE\NBS75K.L			
			Cyclodecene	65941	003618-12-0	76
			1-Methyl-2-methylenecyclohexane	2368	002808-75-5	60
			cis-7-Dodecen-1-ol	18959	020056-92-2	59
15	19.35	1.51	C:\DATABASE\NBS75K.L			
			Bicyclo[3.1.0]hexan-3-one, 4-methy	10295	001125-12-8	60
			Bicyclo[4.1.0]heptane, 3-methyl-	2354	041977-47-3	49
			Cyclodecene, 3-bromo-	26651	056325-56-5	47
16	19.72	1.96	C:\DATABASE\NBS75K.L			
			1,8-Nonadiene, 2,8-dimethyl-	10445	020054-25-5	60
			trans-1,3-Diethylcyclopentane	4618	000000-00-0	47
			Cyclopentane, 1,2-dimethyl-3-(1-me	7606	000489-20-3	47
17	19.95	2.28	C:\DATABASE\NBS75K.L			
			Octane, 2,7-dimethyl-	66209	001072-16-8	64
			Undecane	67317	001120-21-4	53
			Heptane, 2,6-dimethyl-	65137	001072-05-5	53

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
18	20.35	1.10	C:\DATABASE\NBS75K.L			
			Oxirane, tetradecyl-	32056	007320-37-8	27
			Silane, trichloroeicosyl-	54853	018733-57-8	27
			1-Tetracosanol	49775	000506-51-4	27
19	20.49	2.25	C:\DATABASE\NBS75K.L			
			Naphthalene, decahydro-2-methyl-	67009	002958-76-1	90
			7-Hexadecyne	28265	074685-28-2	83
			Bicyclo[4.1.0]heptan-3-one, 4,7,7-	10380	004176-04-9	64
20	20.89	1.75	C:\DATABASE\NBS75K.L			
			Naphthalene, decahydro-2-methyl-	67009	002958-76-1	83
			Naphthalene, decahydro-2-methyl-	67008	002958-76-1	81
			Cyclohexanone, 2-methyl-5-(1-methy	10308	007764-50-3	60
21	21.37	1.44	C:\DATABASE\NBS75K.L			
			Tridecane, 1-bromo-	71786	000765-09-3	49
			Hexadecane, 1-bromo-	72867	000112-82-3	41
			Oxirane, [(tetradecyloxy)methyl]-	37802	038954-75-5	38
22	21.75	1.13	C:\DATABASE\NBS75K.L			
			5-Undecyne	67011	002294-72-6	55
			trans,cis-1,8-Dimethylspiro[4.5]de	14144	000000-00-0	53
			3-Octyne, 5-methyl-	4258	062108-33-2	50
23	22.12	2.08	C:\DATABASE\NBS75K.L			
			Dodecane	68250	000112-40-3	70
			Dodecane	68249	000112-40-3	70
			Dodecane	68252	000112-40-3	70
24	22.95	4.13	C:\DATABASE\NBS75K.L			
			Cyclohexane, 1,2,3-trimethyl-	4646	001678-97-3	68
			Cyclotridecane	18483	000295-02-3	62
			Cyclopentane, 1-pentyl-2-propyl-	18495	062199-51-3	62
25	23.67	2.51	C:\DATABASE\NBS75K.L			
			Undecane, 2,6-dimethyl-	19058	017301-23-4	72
			Octane, 2,3,7-trimethyl-	11603	062016-34-6	72
			Nonane, 4-methyl-5-propyl-	19021	062185-55-1	59
26	24.05	0.93	C:\DATABASE\NBS75K.L			
			Cyclooctane, 1,4-dimethyl-, trans-	7608	013151-98-9	70
			Cyclohexane, 1,2,3-trimethyl-, (1.	4622	001839-88-9	45
			6-Tridecene, 7-methyl-	69534	024949-42-6	43
27	24.13	4.14	C:\DATABASE\NBS75K.L			
			Tridecane	69019	000629-50-5	92
			Tridecane	18989	000629-50-5	70
			Tridecane	69020	000629-50-5	62

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
28	24.53	1.72	C:\DATABASE\NBS75K.L			
			Cetylpyridinium Chloride	50020	006004-24-6	49
			1-Dotriacontanol	57795	006624-79-9	30
			Silane, trichloroeicosyl-	54853	018733-57-8	27
29	25.65	2.00	C:\DATABASE\NBS75K.L			
			Heptadecane, 2,6,10,14-tetramethyl	42200	018344-37-1	80
			1-Iodo-2-methylundecane	41997	073105-67-6	72
			Dodecane, 2,6,11-trimethyl-	70271	031295-56-4	72
30	26.00	7.08	C:\DATABASE\NBS75K.L			
			Tetradecane	69661	000629-59-4	93
			Tetradecane	69658	000629-59-4	70
			Hydroxylamine, O-decyl-	15973	029812-79-1	70

TIC: 7981910.D

S-M18-2

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.474	rBV	0.636	21749581	10.221	10.857
2	11.512	rVB	0.225	702688	11.451	11.676
3	13.786	rBV	0.219	513034	13.704	13.922
4	15.194	rVB	0.164	630620	15.153	15.317
5	15.940	rVB	0.212	726063	15.892	16.104
6	16.159	rBV	0.336	483694	16.111	16.447
7	16.652	rBV	0.288	814772	16.556	16.844
8	17.578	rVB	0.261	953947	17.537	17.797
9	17.989	rVB	0.165	821522	17.962	18.126
10	18.181	rBV	0.192	1103064	18.126	18.318
11	18.353	rVV	0.089	472118	18.318	18.408
12	18.483	rVV	0.309	1063219	18.408	18.716
13	18.936	rVB	0.151	460895	18.874	19.025
14	19.156	rBV	0.172	668305	19.108	19.279
15	19.348	rVV	0.247	759510	19.279	19.526
16	19.718	rVV	0.302	983674	19.608	19.910
17	19.952	rVB	0.330	1146137	19.910	20.240
18	20.350	rVB	0.137	552319	20.316	20.453
19	20.494	rBV	0.275	1133399	20.453	20.728
20	20.886	rBV	0.413	878578	20.845	21.257
21	21.367	rVB	0.234	725002	21.340	21.573
22	21.752	rVV	0.303	566797	21.724	22.027
23	22.117	rVB	0.117	1046226	22.082	22.199
24	22.949	rVB	0.634	2076158	22.922	23.556
25	23.666	rBV	0.393	1264257	23.625	24.017
`6	24.045	rVV	0.062	466498	24.017	24.080
_7	24.128	rVV	0.421	2080059	24.080	24.500
28	24.535	rVB	0.290	866092	24.507	24.797
29	25.652	rBV	0.359	1007238	25.611	25.970
30	26.005	rVB	1.208	3558428	25.970	27.178

TIC: 7981911.D

S-M18-3

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.201	rBV	0.075	2565563	10.160	10.236
2	10.359	rVV	0.602	11277526	10.236	10.837
3	11.513	rBV	0.273	503869	11.425	11.698
4	13.775	rBV	0.219	903615	13.686	13.905
5	14.952	rBV	0.274	1074316	14.890	15.164
6	15.185	rVB	0.274	618049	15.164	15.438
7	15.938	rVB	0.192	711888	15.896	16.088
8	16.157	rBV	0.364	1203289	16.088	16.452
9	16.651	rVB	0.267	915416	16.575	16.843
10	16.884	rBV	0.158	531066	16.843	17.001
11	17.577	rVB	0.268	1218396	17.529	17.797
12	17.989	rBV	0.329	1876924	17.797	18.125
13	18.180	rVV	0.165	1124655	18.125	18.290
14	18.352	rVV	0.577	2427532	18.290	18.867
15	18.928	rVV	0.240	807099	18.867	19.107
16	19.148	rVV	0.171	516327	19.107	19.278
17	19.306	rVB	0.330	792549	19.278	19.608
18	19.711	rBV	0.288	818242	19.608	19.896
19	19.944	rVV	0.412	1530864	19.910	20.322
20	20.885	rVB	0.392	998790	20.851	21.243
21	22.453	rVB	0.509	519648	22.405	22.914
22	23.437	rVB	0.482	1392597	23.066	23.547
23	23.658	rVV	0.392	850090	23.616	24.009
24	24.126	rVB	0.124	1284708	24.084	24.208
25	24.270	rBV	0.282	571984	24.208	24.491
26	25.654	rBV	0.234	634272	25.606	25.840
27	26.005	rVB	0.324	1629986	25.964	26.288
28	27.224	rVB	0.653	953903	27.169	27.823
29	27.905	rVB	2.239	5126790	27.864	30.103
30	30.164	rVV	1.384	1699568	30.103	31.486

Information from Data File:
File : D:\HPCHEM\1\DATA\079819\7981911.D
Operator : TAB
Acquired : 27 Aug 98 12:46 pm using AcqMethod 079819
Sample Name: S-M18-3
Misc Info :
Vial Number: 7

Search Libraries: C:\DATABASE\NBS75K.L Minimum Quality: 5
C:\DATABASE\EXTRA.L Minimum Quality: 5
C:\DATABASE\TO14TAR.L

Unknown Spectrum: Apex
Integration Params: current RTEINT parameters

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
1	10.20	5.45	C:\DATABASE\NBS75K.L			
			Formamide, N,N-dimethyl-	62526	000068-12-2	90
			Formamide, N,N-dimethyl-	62525	000068-12-2	90
			2-Butanamine, (.+/-.)-	298	033966-50-6	86
2	10.36	23.95	C:\DATABASE\NBS75K.L			
			Formamide, N,N-dimethyl-	62526	000068-12-2	86
			Formamide, N,N-dimethyl-	62525	000068-12-2	86
			2-Butanamine, (.+/-.)-	298	033966-50-6	86
3	11.51	1.07	C:\DATABASE\NBS75K.L			
			Hexane, 2,2,3-trimethyl-	5165	016747-25-4	59
			Pentane, 3-ethyl-2,2-dimethyl-	65109	016747-32-3	59
			Pentane, 3-ethyl-2,2-dimethyl-	65110	016747-32-3	59
4	13.77	1.92	C:\DATABASE\NBS75K.L			
m&p-Xylene			Cyclopropane, 1,1-dimethyl-2-(1-me	4264	074779-84-3	16
			7-Oxabicyclo[4.1.0]heptane, 3-oxir	7391	000106-87-6	10
			Hydroxylamine, O-decyl-	15973	029812-79-1	10
5	14.95	2.38	C:\DATABASE\NBS75K.L			
			Nonane	5163	000111-84-2	78
			Nonane	65145	000111-84-2	78
			Nonane	65143	000111-84-2	78
6	15.18	1.31	C:\DATABASE\NBS75K.L			
			Benzene, 1-bromo-2-fluoro-	16035	001072-85-1	97
			Benzene, 1-bromo-3-fluoro-	16034	001073-06-9	96
			p-Bromofluorobenzene	16036	000460-00-4	91
7	15.94	1.51	C:\DATABASE\NBS75K.L			
			Oxirane, (3-methylbutyl)-	3027	053229-41-7	47
			1-Undecene, 6-methyl-	14702	074630-40-3	38
methyl Nonane			1-Pentanol, 2-methyl-	1775	000105-30-6	38

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Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
8	16.16	2.56	C:\DATABASE\NBS75K.L			
			Oxirane, [(dodecyloxy)methyl]-	32383	002461-18-9	47
			3-Undecene, 6-methyl-, (E)-	14747	074630-52-7	43
			Heptane, 3-ethyl-2-methyl-	8080	014676-29-0	38
9	16.65	1.94	C:\DATABASE\NBS75K.L			
			2-Octene, 2,6-dimethyl-	7538	004057-42-5	52
			Cyclopentane, ethyl-	1350	001640-89-7	49
			cis-3-Decene	7589	019398-86-8	49
10	16.88	1.13	C:\DATABASE\NBS75K.L			
			2-Hexenal, 2-ethyl-	64925	000645-62-5	43
			2-Heptenal, (Z)-	2610	057266-86-1	30
			2-Heptenal, (E)-	2632	018829-55-5	30
11	17.58	2.59	C:\DATABASE\NBS75K.L			
			Octane, 2,7-dimethyl-	8078	001072-16-8	59
			Decane	66204	000124-18-5	53
			Nonane, 2-methyl-	66220	000871-83-0	53
12	17.99	3.99	C:\DATABASE\NBS75K.L			
			4-Pyridinol, acetate (ester)	6735	014210-20-9	43
			Benzene, 1-ethyl-2-methyl-	64559	000611-14-3	35
			Benzene, 1,2,3-trimethyl-	64576	000526-73-8	35
13	18.18	2.39	C:\DATABASE\NBS75K.L			
			Octane, 1,1'-oxybis-	71250	000629-82-3	53
			Nonane, 2,6-dimethyl-	11598	017302-28-2	43
			Nonane, 3-methyl-	66201	005911-04-6	43
14	18.35	5.16	C:\DATABASE\NBS75K.L			
			7-Hexadecyne	28265	074685-28-2	58
			3-Hexadecyne	28271	061886-62-2	53
			Spiropentane, butyl-	4219	006191-90-8	52
15	18.93	1.71	C:\DATABASE\NBS75K.L			
			Cyclopropane, 1,2-dimethyl-1-penty	7541	062238-04-4	76
			5-Undecene, (E)-	67164	000764-97-6	72
			6-Octenal, 3,7-dimethyl-	11019	000106-23-0	62
16	19.15	1.10	C:\DATABASE\NBS75K.L			
			cis-7-Dodecen-1-ol	18959	020056-92-2	52
			2-Decen-1-ol, (Z)-	11570	004194-71-2	38
			1,10-Undecadiene	10429	013688-67-0	38
17	19.31	1.68	C:\DATABASE\NBS75K.L			
			6-Oxabicyclo[3.1.0]hexane	575	000285-67-6	25
			4-Pentenal	571	002100-17-6	25
			2,7-Octadiene, 4-methyl-	4209	000000-00-0	25

Dimethyl Octane

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
18	19.71	1.74	C:\DATABASE\NBS75K.L			
			3-Octyne, 6-methyl-	4262	062108-34-3	38
			Diphosphoric acid, diisooctyl este	54052	072101-07-6	35
			4-Undecene, (E)-	11061	000693-62-9	30
19	19.94	3.25	C:\DATABASE\NBS75K.L			
			Decane	66206	000124-18-5	72
			Tetradecane	69661	000629-59-4	64
			Decane	66205	000124-18-5	59
20	20.89	2.12	C:\DATABASE\NBS75K.L			
			Naphthalene, decahydro-2-methyl-	67008	002958-76-1	53
			7-Hexadecyne	28265	074685-28-2	46
			3-Cyclohexene-1-carboxaldehyde, 1,	66952	040702-26-9	46
21	22.45	1.10	C:\DATABASE\NBS75K.L			
			Undecane, 2,6-dimethyl-	19058	017301-23-4	64
			Undecane, 3,6-dimethyl-	19000	017301-28-9	50
			Eicosane	72326	000112-95-8	47
22	23.44	2.96	C:\DATABASE\NBS75K.L			
			2-Hexyl-1-decanol	32422	000000-00-0	58
			Ethanone, 1-(2,2-dimethylcyclopent	7482	003664-75-3	38
			1-Octadecanol	72028	000112-92-5	35
23	23.66	1.81	C:\DATABASE\NBS75K.L			
			Heptadecane, 2,6-dimethyl-	37466	054105-67-8	64
			Nonane, 3-methyl-	8075	005911-04-6	64
			Octane, 2,3,7-trimethyl-	11603	062016-34-6	59
24	24.13	2.73	C:\DATABASE\NBS75K.L			
			Tridecane	69019	000629-50-5	95
			Tridecane	18989	000629-50-5	87
			Pentacosane	73718	000629-99-2	80
25	24.27	1.21	C:\DATABASE\NBS75K.L			
			1-Tetradecene	69532	001120-36-1	46
			3-Tetradecene, (Z)-	21966	041446-67-7	45
			3-Tetradecene, (E)-	21967	041446-68-8	45
26	25.65	1.35	C:\DATABASE\NBS75K.L			
			Heptadecane, 2,6,10,14-tetramethyl	42200	018344-37-1	80
			Dodecane, 2,6,10-trimethyl-	25995	003891-98-3	72
			Dodecane, 2,6,10-trimethyl-	70269	003891-98-3	72
27	26.01	3.46	C:\DATABASE\NBS75K.L			
			Tetradecane	69658	000629-59-4	93
			Decane, 2-methyl-	67320	006975-98-0	83
			Tetradecane	69657	000629-59-4	81

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
28	27.22	2.03	C:\DATABASE\NBS75K.L			
			Heptadecane, 2,6,10,14-tetramethyl	42200	018344-37-1	90
			Tetradecane	69661	000629-59-4	80
			Dodecane	68254	000112-40-3	80
29	27.91	10.89	C:\DATABASE\NBS75K.L			
			Pentadecane	70276	000629-62-9	90
			10-Methylnonadecane	39858	000000-00-0	86
			Tridecane, 4,8-dimethyl-	26000	055030-62-1	80
30	30.16	3.61	C:\DATABASE\NBS75K.L			
			Hexadecane	70787	000544-76-3	96
			Triacontane	55461	000638-68-6	86
			Eicosane	72323	000112-95-8	83

Information from Data File:
File : D:\HPCHEM\1\DATA\079819\7981912.D
Operator : TAB
Acquired : 27 Aug 98 1:46 pm using AcqMethod 079819
Sample Name: S-M18-4
Misc Info :
Vial Number: 8

Search Libraries: C:\DATABASE\NBS75K.L Minimum Quality: 10
C:\DATABASE\EXTRA.L Minimum Quality: 10
C:\DATABASE\TO14TAR.L

Unknown Spectrum: Apex
Integration Params: current RTEINT parameters

Pk#	RT	Area%	Library/ID	Ref#	CAS#	Qual
1	10.19	42.53	C:\DATABASE\NBS75K.L			
			Formamide, N,N-dimethyl-	62526	000068-12-2	90
			Formamide, N,N-dimethyl-	62525	000068-12-2	90
			2-Butanamine, (.+/-.)-	298	033966-50-6	86
2	10.36	46.92	C:\DATABASE\NBS75K.L			
			Formamide, N,N-dimethyl-	62526	000068-12-2	86
			Formamide, N,N-dimethyl-	62525	000068-12-2	86
			2-Butanamine, (.+/-.)-	298	033966-50-6	86
3	15.13	4.84	C:\DATABASE\NBS75K.L			
			2-Hydroxypyridine	63081	000142-08-5	12
			1,2,4,5-Benzenetetracarboxylic anh	27070	000089-32-7	12
			2-Hydroxypyridine	63080	000142-08-5	10
4	15.19	5.71	C:\DATABASE\NBS75K.L			
			Benzene, 1-bromo-2-fluoro-	16035	001072-85-1	96
			Benzene, 1-bromo-3-fluoro-	16034	001073-06-9	96
			Benzene, 1-bromo-3-fluoro-	68407	001073-06-9	90

TIC: 7981912.D

S-M18-4

Peak#	Ret Time	Type	Width	Area	Start Time	End Time
1	10.457	rm	0.492	24450783	10.154	10.646
2	15.186	rm	0.253	772573	15.001	15.254
3	20.637	rm	0.659	219077	20.254	20.913

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Sequence Name: C:\HPCHEM\1\SEQUENCE\079819.S
Comment:
Operator:
Data Path: d:\HPCHEM\1\DATA\079819\
Pre-Seq Cmd:
Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

On A Barcode Mismatch
(X) Inject Anyway
( ) Don't Inject

Line Type	Vial	DataFile	Method	Sample Name
1) Blank	1	798196	079819	blank & is
2) Blank	2	796197	079819	blank & is
3) Sample	5	798198	079819	S-M18-1
4) Sample	6	798199	079819	S-M18-2
5) Sample	7	7981910	079819	S-M18-3
6) Sample	6	7981911	079819	S-M18-4
7) Blank	2	7981912	079819	blank & is

Last Modified: Thu Aug 27 08:12:36 1998

TOPLEVEL PARAMETERS

Method Information For: C:\HPCHEM\1\METHODS\079819.M

Method Sections To Run:

( ) Save Copy of Method With Data
( ) Pre-Run Cmd/Macro =
(X) Data Acquisition
(X) Data Analysis
( ) Post-Run Cmd/Macro =

Method Comments:
This is direct injection Volatile method.

END OF TOPLEVEL PARAMETERS

ACQUISITION PARAMETERS

General Information

Inlet : GC
Tune File : ATUNE.U
Acquisition Mode : Scan

MS Information

Solvent Delay : 6.00 min

EM Absolute : True
Resulting Voltage : 1600.0

[Scan Parameters]

Low Mass : 35
High Mass : 350
Threshold : 500
Sampling # : 2 A/D Samples 4

[Real Time Plot Parameters]

Time Window : 10 min
Iconize Real Time Display : False
Plot 1 type : Total ion
Scale minimum : 1
le maximum : 1500000
Plot 2 type : No plot

GC Temperature Information
-- ---------- ----------

[GC Zone Temperatures]

Inj. A : 250 C Off
Inj. B : 190 C
Det. A : 50 C Off
Det. B : 300 C

[Oven Parameters]

Oven Equib Time : 0.20 min
Oven Max : 325 C
Oven : On
Cryo : Off

[O n Program]

Initial Temp. : 40 C
Initial Time : 5.00 min

Level	Rate (C/min)	Final Temp. (C)	Final Time (min)
1	8.00	210	1.00
2	0.00		

Next Run Time : 27.25 min

Injector Information
-------- ----------

Injection Source : Manual

Purge Information]

urge A/B	Init. Value	On Time	Off Time
A	Off	0.00	0.00
B	Off	0.50	0.00

END OF ACQUISITION PARAMETERS

DATA ANALYSIS PARAMETERS

Method Name: C:\HPCHEM\1\METHODS\079819.M

Percent Report Settings

Sort By: Retention Time

Output Destination
Screen: Yes
Printer: No
File: No

Integration Events: AutoIntegrate

Generate Report During Run Method: No

Signal Correlation Window: 0.020

Qualitative Report Settings

Peak Location of Unknown: Apex

Library to Search	Minimum Quality
C:\DATABASE\NBS75K.L	0

Integration Events: AutoIntegrate

Report Type: Summary

Output Destination
Screen: No
Printer: Yes
File: No

Generate Report During Run Method: No

Report Type: Summary

Output Destination
Screen: No
Printer: Yes
File: No

Generate Report During Run Method: No

Calibration Last Updated:

Reference Window: 10.00 Percent
Non-Reference Window: 5.00 Percent
Correlation Window: 0.02 minutes
Default Multiplier: 1.00
Default Sample Concentration: 0.00

Compound Information

*** Empty Quantitation Database ***

END OF DATA ANALYSIS PARAMETERS

Silo
GC/FID Data

ENTHALPY analytical, inc.
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Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Organics	PO #:	104980229
# Samples:	11	Report Date:	09/23/98

Compound	Sample ID/Catch weight (ug)			
	S-M18-1A	S-M18-2A	S-M18-3A	S-M18-FB
Hexane	691	2,528	2,371	~ 7.35
Benzene	801	283	394	< 5.00
Toluene	1,092	921	944	~ 20.6
Ethylbenzene	809	1,635	955	~ 31.4
p-Xylene	967	771	654	~ 7.66
m-Xylene	1,524	526	494	< 5.00
Cumene	615	1,198	1,180	< 5.00
o-Xylene	754	349	340	< 5.00

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MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.34 - 388 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Hexane	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	10	1	< 10.0	
S-M18-1A	FH	029F3301.D	029F3302.D	1.427	1.444	1.19	145	131	> 5 %	138	0798-19.M	5	1	691	
S-M18-1A	BH	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														691	691
S-M18-2A	VOA	049F3601.D	049F3602.D	1.447	1.447	0.00	53.8	53.9	0.08	53.9	0798-19D.	42	1	2,262	
S-M18-2A	FH	031F1501.D	031F1502.D	1.464	1.462	0.14	53.2	53.0	0.24	53.1	0798-19D.	5	1	265	
S-M18-2A	BH	032F3601.D	032F3602.D	1.465	1.466	0.07	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														2,528	2,528
S-M18-3A	VOA	051F3801.D	051F3802.D	1.445	1.445	0.00	49.3	49.5	0.18	49.4	0798-19D.	42	1	2,073	
S-M18-3A	FH	033F1601.D	033F1602.D	1.460	1.460	0.00	59.8	59.3	0.41	59.5	0798-19D.	5	1	298	
S-M18-3A	BH	034F3801.D	034F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														2,371	2,371
S-M18-FB	FH	035F1701.D	035F1702.D	1.465	1.465	0.00	~ 1.46	~ 1.48	0.93	~ 1.47	0798-19D.	5	1	~ 7.35	
S-M18-FB	BH	036F4001.D	036F4002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 7.35	~ 7.35

ENTHALPY analytical, inc.

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MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.85 - 416 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Benzene	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	10	1	< 10.0	
S-M18-1A	FH	029F3301.D	029F3302.D	5.438	5.507	1.27	169	151	> 5 %	160	0798-19.M	5	1	801	
S-M18-1A	BH	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														801	801
S-M18-2A	VOA	049F3601.D	049F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-2A	FH	031F1501.D	031F1502.D	5.442	5.436	0.11	56.5	56.7	0.22	56.6	0798-19D.	5	1	283	
S-M18-2A	BH	032F3601.D	032F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														283	283
S-M18-3A	VOA	051F3801.D	051F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-3A	FH	033F1601.D	033F1602.D	5.412	5.415	0.06	77.6	80.1	1.60	78.8	0798-19D.	5	1	394	
S-M18-3A	BH	034F3801.D	034F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														394	394
S-M18-FB	FH	035F1701.D	035F1702.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	5	1	< 5.00	
S-M18-FB	BH	036F4001.D	036F4002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 5.00

ENTHALPY analytical, inc.

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MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.77 - 411 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Toluene	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	7.261	7.271	0.14	~ 2.46	~ 2.33	2.67	~ 2.40	0798-19D.	10	1	~ 24.0	
S-M18-1A	FH	029F3301.D	029F3302.D	7.303	7.362	0.81	224	203	> 5 %	214	0798-19.M	5	1	1,068	
S-M18-1A	BH	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														1,092	1,092
S-M18-2A	VOA	049F3601.D	049F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-2A	FH	031F1501.D	031F1502.D	7.367	7.363	0.05	182	185	0.82	183	0798-19D.	5	1	915	
S-M18-2A	BH	032F3601.D	032F3602.D	7.393	7.391	0.03	~ 1.21	~ 1.15	2.47	~ 1.18	0798-19.M	5	1	~ 5.88	
														921	921
S-M18-3A	VOA	051F3801.D	051F3802.D	7.424	7.427	0.04	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-3A	FH	033F1601.D	033F1602.D	7.382	7.383	0.01	188	187	0.21	187	0798-19D.	5	1	937	
S-M18-3A	BH	034F3801.D	034F3802.D	7.386	7.390	0.05	~ 1.25	~ 1.25	0.00	~ 1.25	0798-19.M	5	1	~ 6.25	
														944	944
S-M18-FB	FH	035F1701.D	035F1702.D	7.388	7.387	0.01	~ 3.01	~ 3.03	0.42	~ 3.02	0798-19D.	5	1	~ 15.1	
S-M18-FB	BH	036F4001.D	036F4002.D	7.393	7.392	0.01	~ 1.08	~ 1.10	0.96	~ 1.09	0798-19.M	5	1	~ 5.45	
														~ 20.6	~ 20.6

ENTHALPY analytical, inc.

454

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.73 - 409 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Ethylbenzene	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	8.981	8.991	0.11	~ 1.07	~ 1.09	0.90	~ 1.08	0798-19D.	10	1	~ 10.8	
S-M18-1A	FH	029F3301.D	029F3302.D	9.236	9.157	0.86	189	130	> 5 %	160	0798-19.M	5	1	798	
S-M18-1A	BH	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														809	809
S-M18-2A	VOA	049F3601.D	049F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-2A	FH	031F1501.D	031F1502.D	9.057	9.053	0.04	318	333	2.25	325	0798-19D.	5	1	1,626	
S-M18-2A	BH	032F3601.D	032F3602.D	9.179	9.180	0.01	~ 1.65	~ 1.67	0.45	~ 1.66	0798-19.M	5	1	~ 8.31	
														1,635	1,635
S-M18-3A	VOA	051F3801.D	051F3802.D	9.076	9.073	0.03	~ 2.56	~ 2.58	0.36	~ 2.57	0798-19D.	42	1	~ 108	
S-M18-3A	FH	033F1601.D	033F1602.D	9.048	9.181	1.47	284	52	> 5 %	168	0798-19D.	5	1	840	
S-M18-3A	BH	034F3801.D	034F3802.D	9.174	9.178	0.04	~ 1.50	~ 1.59	2.97	~ 1.55	0798-19.M	5	1	~ 7.73	
														955	955
S-M18-FB	FH	035F1701.D	035F1702.D	9.176	9.175	0.01	~ 4.73	~ 4.73	0.04	~ 4.73	0798-19D.	5	1	~ 23.6	
S-M18-FB	BH	036F4001.D	036F4002.D	9.179	9.178	0.01	~ 1.54	~ 1.55	0.55	~ 1.55	0798-19.M	5	1	~ 7.73	
														~ 31.4	~ 31.4

ENTHALPY analytical, inc.

454

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.79 - 412 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	p-Xylene	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	10	1	< 10.0	
S-M18-1A	FH	029F3301.D	029F3302.D	9.393	9.294	1.05	214	173	> 5 %	193	0798-19.M	5	1	967	
S-M18-1A	BH	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														967	967
S-M18-2A	VOA	049F3601.D	049F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-2A	FH	031F1501.D	031F1502.D	9.322	9.319	0.03	157	151	2.01	154	0798-19D.	5	1	771	
S-M18-2A	BH	032F3601.D	032F3602.D	9.341	9.340	0.01	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														771	771
S-M18-3A	VOA	051F3801.D	051F3802.D	9.284	9.284	0.00	~ 1.80	~ 1.83	0.85	~ 1.81	0798-19D.	42	1	~ 76.1	
S-M18-3A	FH	033F1601.D	033F1602.D	9.321	9.324	0.03	116	115	0.46	116	0798-19D.	5	1	578	
S-M18-3A	BH	034F3801.D	034F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														654	654
S-M18-FB	FH	035F1701.D	035F1702.D	9.338	9.337	0.01	~ 1.54	~ 1.53	0.33	~ 1.53	0798-19D.	5	1	~ 7.66	
S-M18-FB	BH	036F4001.D	036F4002.D	9.342	9.337	0.05	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														~ 7.66	~ 7.66

ENTHALPY analytical, inc.

J:\OBS98\0798\19\0798 19B WB2 10:06 AM 09/23

458

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.74 - 409 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	m-Xylene	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	9.538	9.545	0.07	1.47	1.44	1.02	1.46	0798-19D.	10	1	14.6	
S-M18-1A	FII	029F3301.D	029F3302.D	9.743	9.449	>3 %	412	192	> 5 %	302	0798-19.M	5	1	1,509	
S-M18-1A	BII	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														1,524	1,524
S-M18-2A	VOA	049F3601.D	049F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-2A	FII	031F1501.D	031F1502.D	9.480	9.479	0.01	104	106	1.07	105	0798-19D.	5	1	526	
S-M18-2A	BII	032F3601.D	032F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														526	526
S-M18-3A	VOA	051F3801.D	051F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-3A	FII	033F1601.D	033F1602.D	9.475	9.475	0.00	97.33	100	1.54	98.9	0798-19D.	5	1	494	
S-M18-3A	BII	034F3801.D	034F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														494	494
S-M18-FB	FII	035F1701.D	035F1702.D	9.474	9.475	0.01	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	5	1	< 5.00	
S-M18-FB	BII	036F4001.D	036F4002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 5.00

ENTHALPY analytical, inc.

454

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.70 - 407 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798-19
Parameters:	Cumene	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	10	1	< 10.0	
S-M18-1A	FH	029F3301.D	029F3302.D	10.169	10.223	0.53	129	117	4.84	123	0798-19.M	5	1	615	
S-M18-1A	BH	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														615	615
S-M18-2A	VOA	049F3601.D	049F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-2A	FH	031F1501.D	031F1502.D	9.994	9.991	0.03	240	239	0.09	240	0798-19D.	5	1	1,198	
S-M18-2A	BH	032F3601.D	032F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														1,198	1,198
S-M18-3A	VOA	051F3801.D	051F3802.D	9.994	9.993	0.01	5.32	5.35	0.21	5.33	0798-19D.	42	1	224	
S-M18-3A	FH	033F1601.D	033F1602.D	9.988	9.990	0.02	192	190	0.38	191	0798-19D.	5	1	956	
S-M18-3A	BH	034F3801.D	034F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														1,180	1,180
S-M18-FB	FH	035F1701.D	035F1702.D	10.102	10.101	0.01	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	5	1	< 5.00	
S-M18-FB	BH	036F4001.D	036F4002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 5.00

ENTHALPY analytical, inc.

MDL: 1.00 ppm
LOQ: 5.00 ppm

Curve range (7.67 - 406 ppm)

Company:	PES	Client #:	R012.001
Analyst:	BGP	Enthalpy #:	0798.19
Parameters:	o Xylene	PO #:	104980229
# Samples:	11	Report Date:	09/17/98

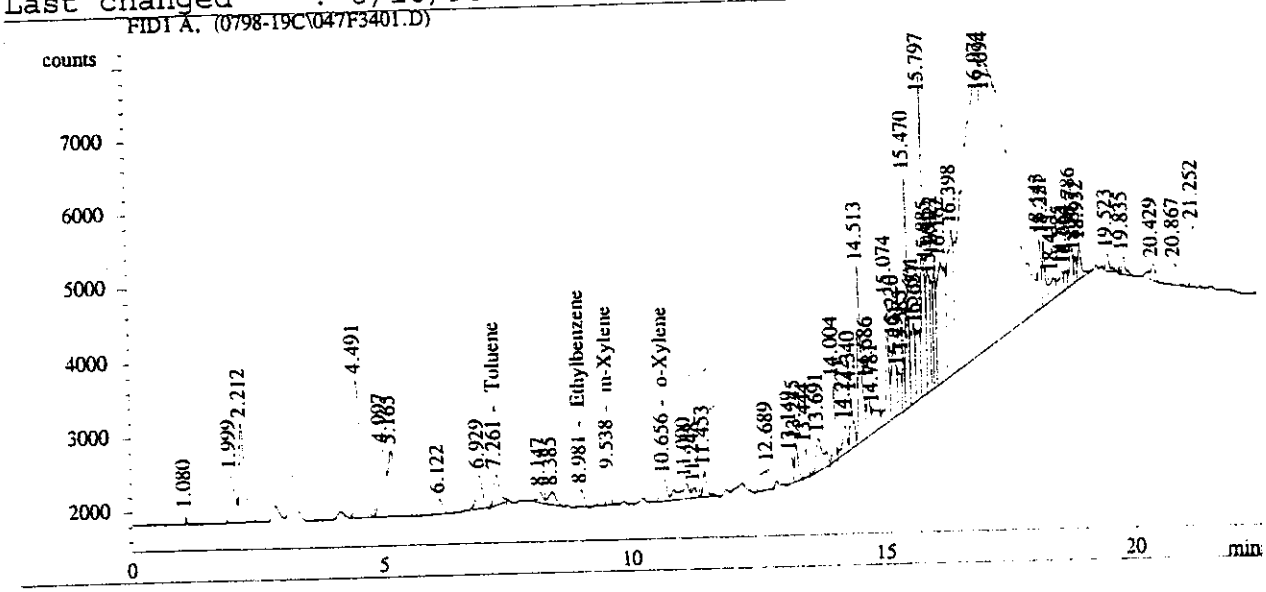
Sample Identification		Lab ID Inj. # 1	Lab ID Inj. # 2	Retention Time (min.) Inj. # 1	Retention Time (min.) Inj. # 2	Percent Difference	Concentration Inj. # 1	Concentration Inj. # 2	% Difference of Mean	Average Conc.	Cal. Curve	Volume (mL)	Dilution Ratio	Catch Weight (ug)	Total Catch Weight
S-M18-1A	VOA	047F3401.D	047F3402.D	10.656	10.664	0.08	1.56	1.48	2.80	1.52	0798-19D.	10	1	15.2	
S-M18-1A	FH	029F3301.D	029F3302.D	10.308	10.364	0.54	155	140	> 5 %	148	0798-19.M	5	1	738	
S-M18-1A	BH	030F3401.D	030F3402.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														754	754
S-M18-2A	VOA	049F3601.D	049F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-2A	FH	031F1501.D	031F1502.D	10.386	10.380	0.06	68.4	71.2	2.00	69.8	0798-19D.	5	1	349	
S-M18-2A	BH	032F3601.D	032F3602.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														349	349
S-M18-3A	VOA	051F3801.D	051F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	42	1	< 42.0	
S-M18-3A	FH	033F1601.D	033F1602.D	10.389	10.389	0.00	67.5	68.6	0.83	68.1	0798-19D.	5	1	340	
S-M18-3A	BH	034F3801.D	034F3802.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														340	340
S-M18-FB	FH	035F1701.D	035F1702.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19D.	5	1	< 5.00	
S-M18-FB	BH	036F4001.D	036F4002.D	NA	NA	NA	< 1.00	< 1.00	0.00	< 1.00	0798-19.M	5	1	< 5.00	
														< 5.00	< 5.00

ENTHALPY analytical, inc.

Injection Date : 8/5/98 8:12:24 PM
Sample Name : S-M18-R1 A VOA
Acq. Operator : bgp

Seq. Line : 34
Vial : 47
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.261	BB	3496.70679	7.04194e-4	2.46236		Toluene
8.981	PP	1523.99316	7.04047e-4	1.07296		Ethylbenzene
9.323		-	-	-		p-Xylene
9.538	PB	2083.59888	7.05922e-4	1.47086		m-Xylene
10.084		-	-	-		Cumene
10.656	PV	2287.66577	6.82854e-4	1.56214		o-Xylene
Totals :				6.56832		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

201

461

Teller 8/10/98 4:49:40 PM bgp

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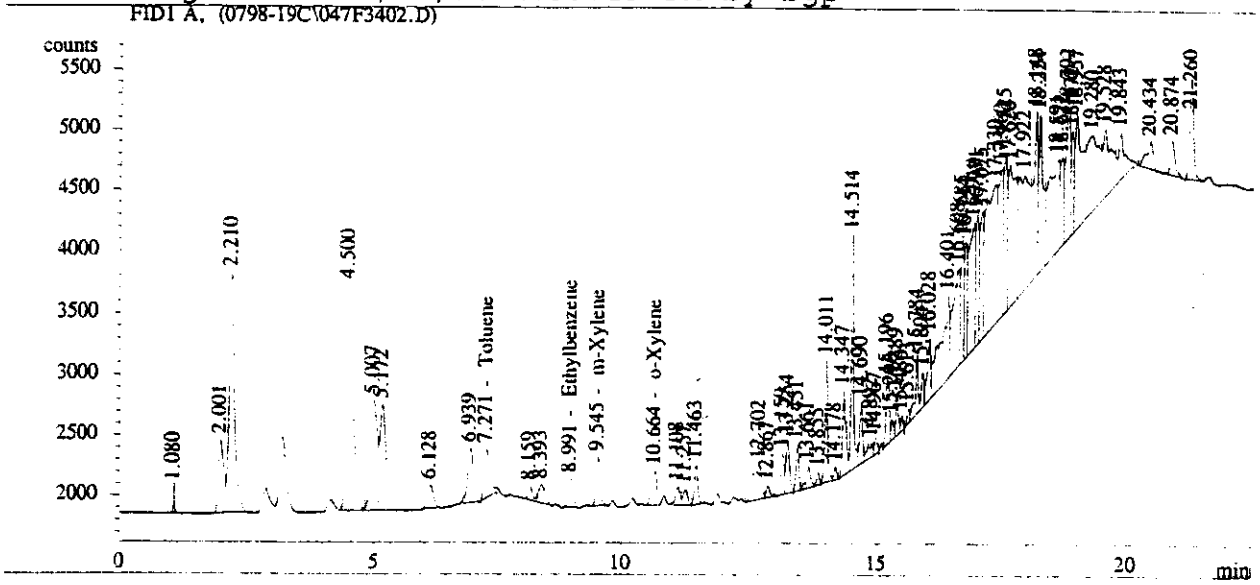
Injection Date : 8/5/98 8:42:19 PM
Sample Name : S-M18-R1 A VOA
Acq. Operator : bgp

Seq. Line : 34
Vial : 47
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.271	BB	3314.64355	7.04194e-4	2.33415		Toluene
8.991	PP	1551.56201	7.04047e-4	1.09237		Ethylbenzene
9.323		-	-	-		p-Xylene
9.545	PB	2041.66711	7.05922e-4	1.44126		m-Xylene
10.084		-	-	-		Cumene
10.664	PV	2163.11621	6.82854e-4	1.47709		o-Xylene

Totals : 6.34487

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

202

462

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\029F3301.D S-M18-R1 Aa+AbFH

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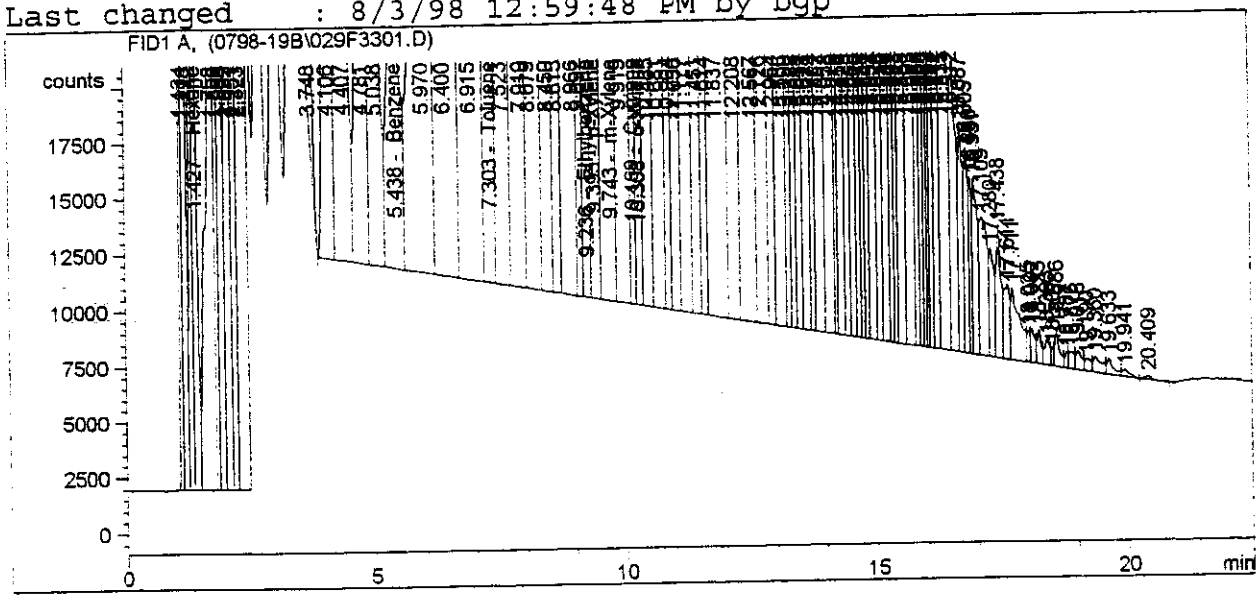
Injection Date : 8/3/98 10:13:14 AM
Sample Name : S-M18-R1 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 33
Vial : 29
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.427	VV	1.63214e5	8.91155e-4	145.44933		Hexane
5.438	VV	2.12879e5	7.95593e-4	169.36479		Benzene
7.303	VV	2.88281e5	7.78700e-4	224.48417		Toluene
9.236	VV	2.44732e5	7.72310e-4	189.00882		Ethylbenzene
9.393	VV	2.73796e5	7.79986e-4	213.55716		p-Xylene
9.743	VV	5.31077e5	7.75922e-4	412.07445		m-Xylene
10.169	VV	1.52252e5	8.46657e-4	128.90518		Cumene
10.308	VV	2.06328e5	7.52583e-4	155.27882		o-Xylene

Totals : 1638.12271

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

203

463

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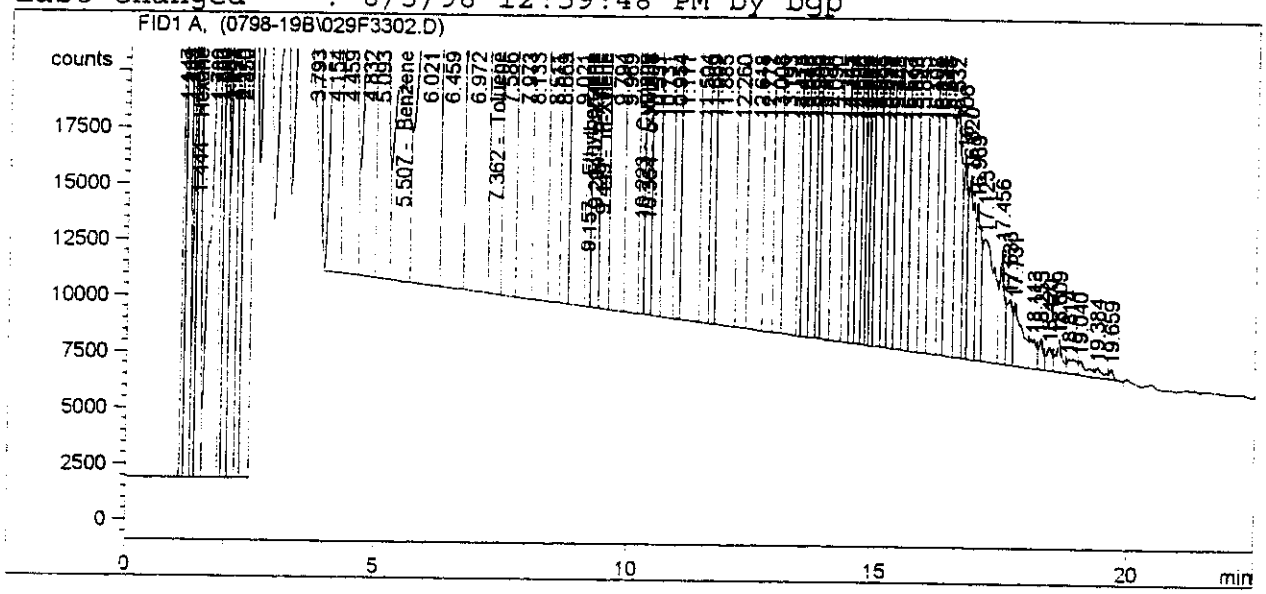
Injection Date : 8/3/98 10:43:09 AM
Sample Name : S-M18-R1 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 33
Vial : 29
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.444	VV	1.47009e5	8.91316e-4	131.03177		Hexane
5.507	VV	1.89691e5	7.95847e-4	150.96457		Benzene
7.362	VV	2.60230e5	7.78889e-4	202.69023		Toluene
9.157	VV	1.68426e5	7.73327e-4	130.24839		Ethylbenzene
9.294	VV	2.21887e5	7.80451e-4	173.17158		p-Xylene
9.449	VV	2.46637e5	7.77133e-4	191.66947		m-Xylene
10.223	VV	1.38139e5	8.46946e-4	116.99614		Cumene
10.364	VV	1.86071e5	7.52884e-4	140.08986		o-Xylene

Totals : 1236.86202

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

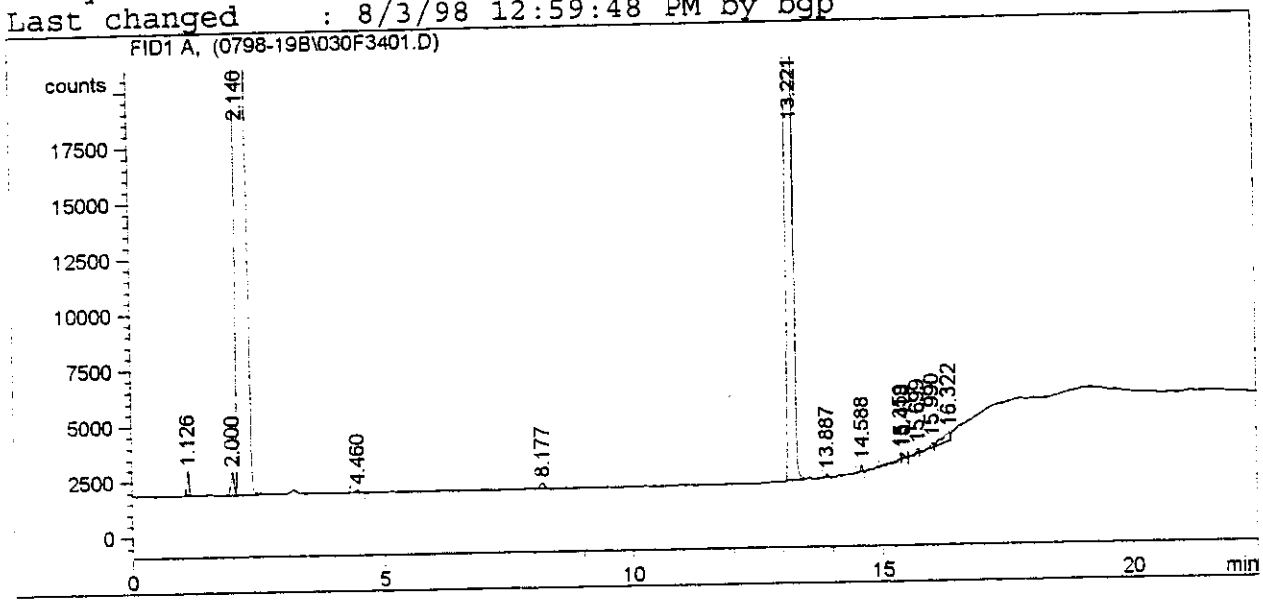
204

464

Injection Date : 8/3/98 11:12:49 AM
Sample Name : S-M18-R1 AbFH
Acq. Operator : bgp

Seq. Line : 34
Vial : 30
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.390		-	-	-		Toluene
9.176		-	-	-		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

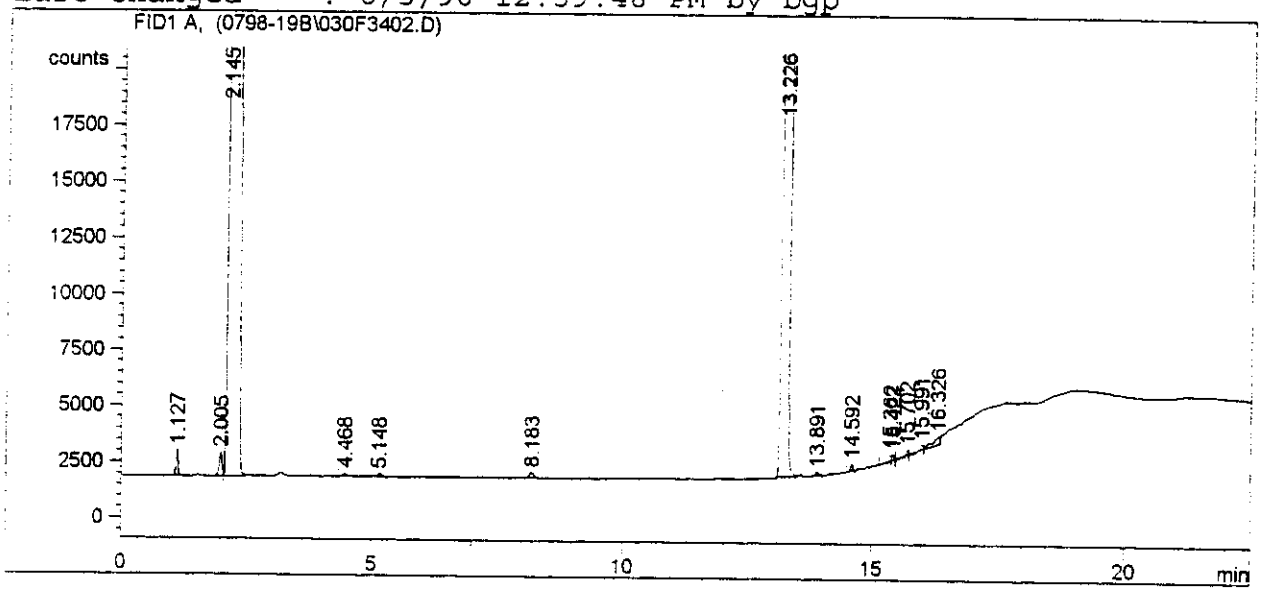
205

465

Injection Date : 8/3/98 11:42:35 AM
Sample Name : S-M18-R1 AbFH
Acq. Operator : bgp

Seq. Line : 34
Vial : 30
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 7/31/98 6:22:19 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.390		-	-	-		Toluene
9.176		-	-	-		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

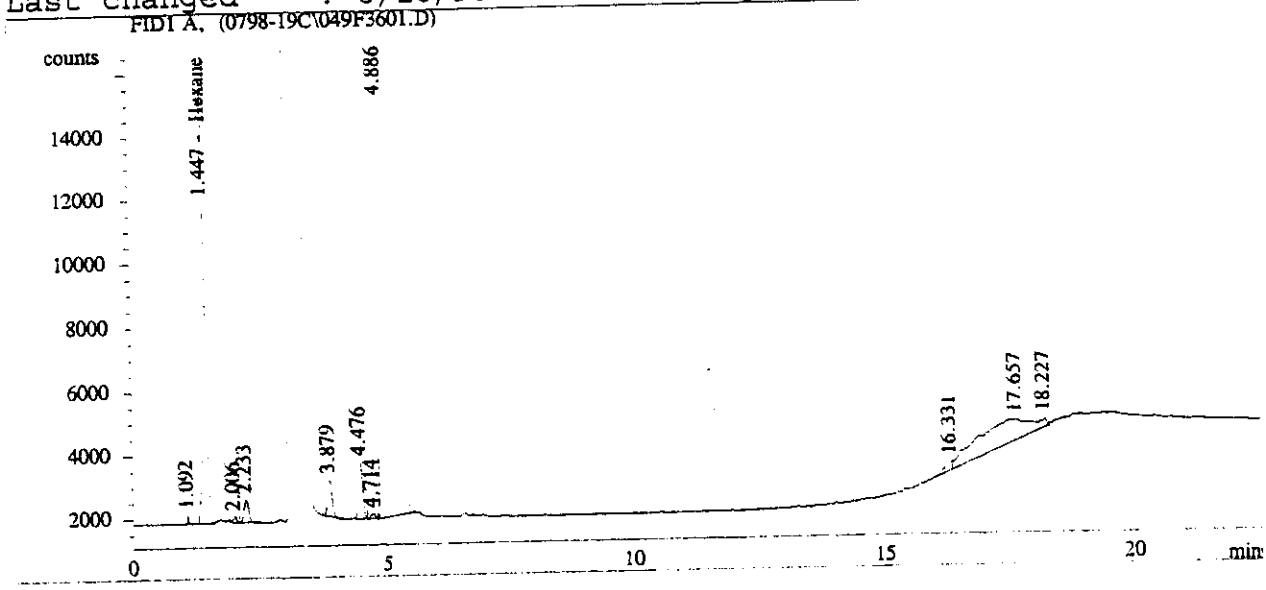
206

466
Teller 8/4/98 7:57:01 AM bgp

Injection Date : 8/5/98 10:12:14 PM
Sample Name : S-M18-R2 A VOA
Acq. Operator : bgp

Seq. Line : 36
Vial : 49
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.447	BB	6.34282e4	8.48458e-4	53.81621		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene
Totals :				53.81621		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

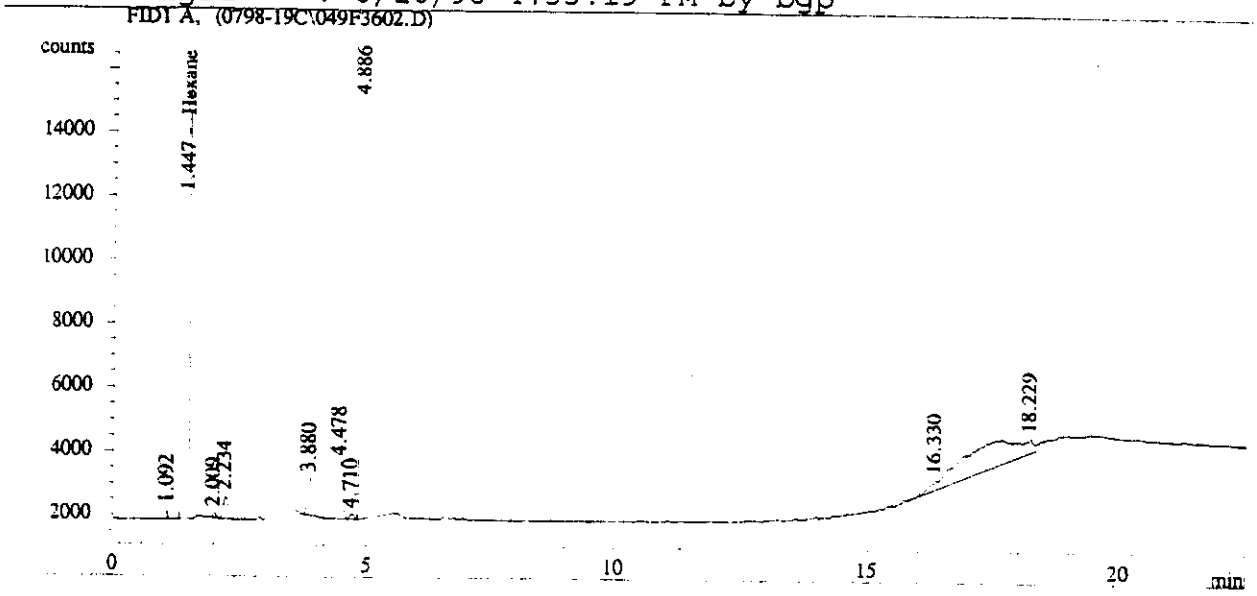
207

467

Injection Date : 8/5/98 10:42:10 PM
Sample Name : S-M18-R2 A VOA
Acq. Operator : bgp

Seq. Line : 36
Vial : 49
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.447	BP	6.35279e4	8.48477e-4	53.90196		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene

Totals : 53.90196

Results obtained with enhanced integrator!
2 Warnings or Errors :

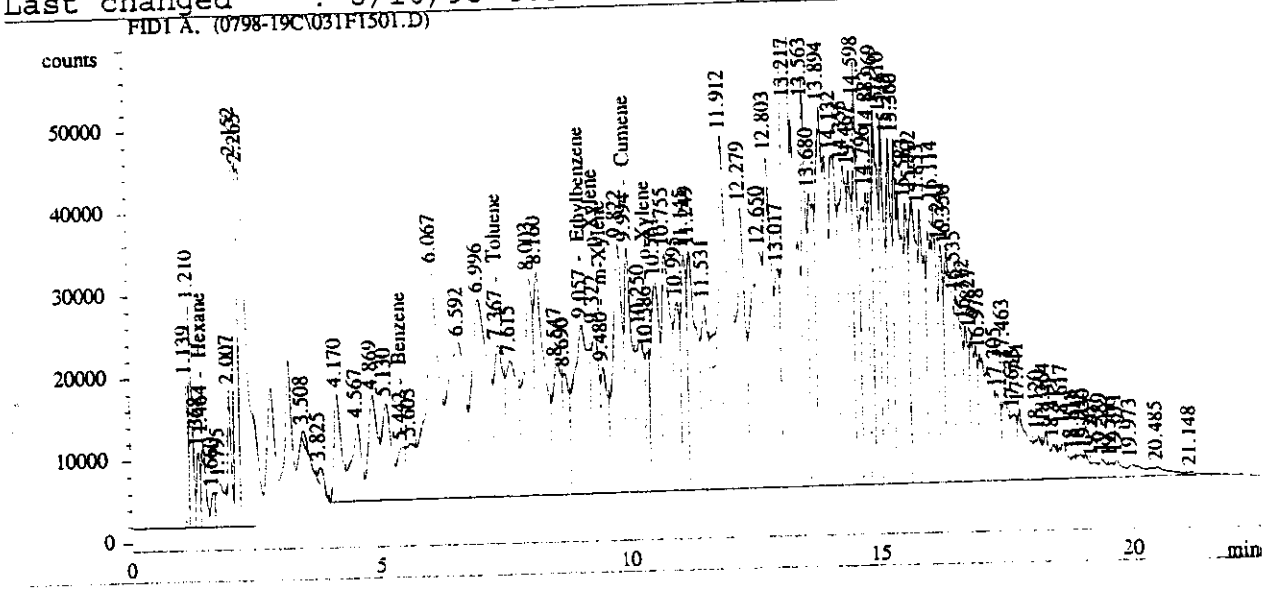
Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

468

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\031F1501.D S-M18-R2 Aa+AbFH

Injection Date	: 8/5/98 4:09:11 AM	Seq. Line	: 15
Sample Name	: S-M18-R2 Aa+AbFH	Vial	: 31
Acq. Operator	: bgp	Inj	: 1
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.464	VV	6.27407e4	8.48330e-4	53.22483		Hexane
5.442	VV	7.45377e4	7.57443e-4	56.45810		Benzene
7.367	VV	2.42525e5	7.48533e-4	181.53760		Toluene
9.057	VV	4.28229e5	7.42491e-4	317.95643		Ethylbenzene
9.322	VV	2.10223e5	7.48660e-4	157.38589		p-Xylene
9.480	VV	1.39680e5	7.44735e-4	104.02433		m-Xylene
9.994	VV	2.95555e5	8.11718e-4	239.90748		Cumene
10.386	VV	9.52145e4	7.18886e-4	68.44837		o-Xylene
Totals :				1178.94302		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

209

469

Teller 8/10/98 4:41:27 PM bgp

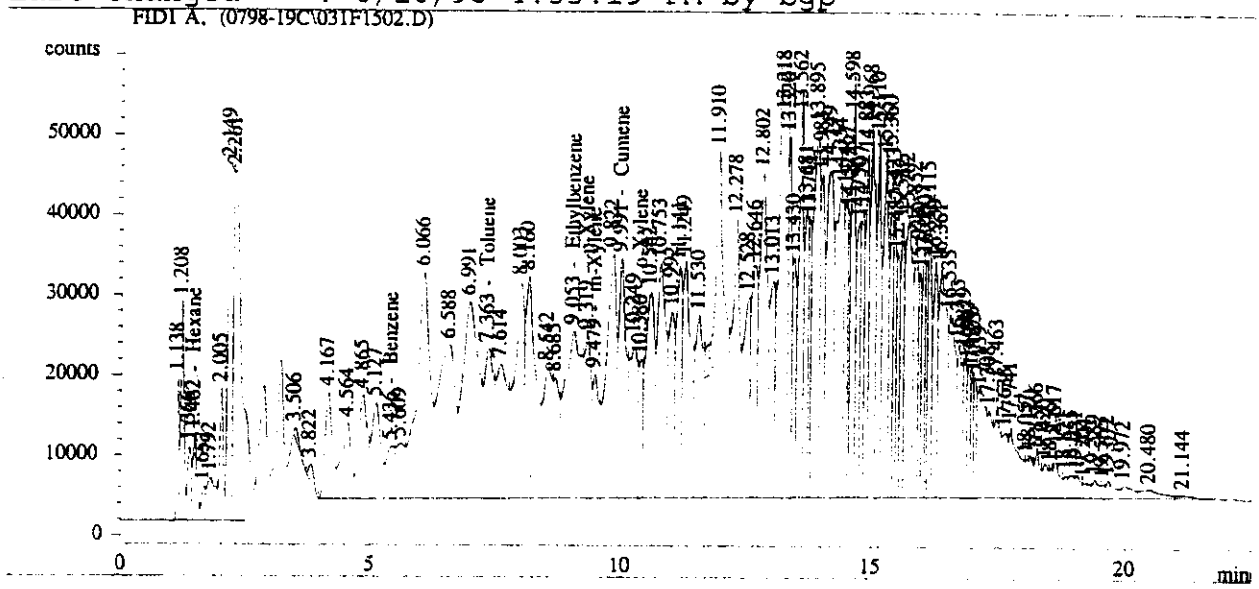
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\031F1502.D S-M18-R2 Aa+AbFH

==========

Injection Date : 8/5/98 4:39:04 AM
Sample Name : S-M18-R2 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 15
Vial : 31
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	VV	6.24492e4	8.48275e-4	52.97408		Hexane
5.436	VV	7.48563e4	7.57475e-4	56.70179		Benzene
7.363	VV	2.46545e5	7.48567e-4	184.55565		Toluene
9.053	VV	4.47935e5	7.42536e-4	332.60783		Ethylbenzene
9.319	VV	2.01966e5	7.48570e-4	151.18565		p-Xylene
9.479	VV	1.42681e5	7.44804e-4	106.26962		m-Xylene
9.991	VV	2.95025e5	8.11715e-4	239.47638		Cumene
10.380	VV	9.90839e4	7.19074e-4	71.24863		o-Xylene

Totals : 1195.01963

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

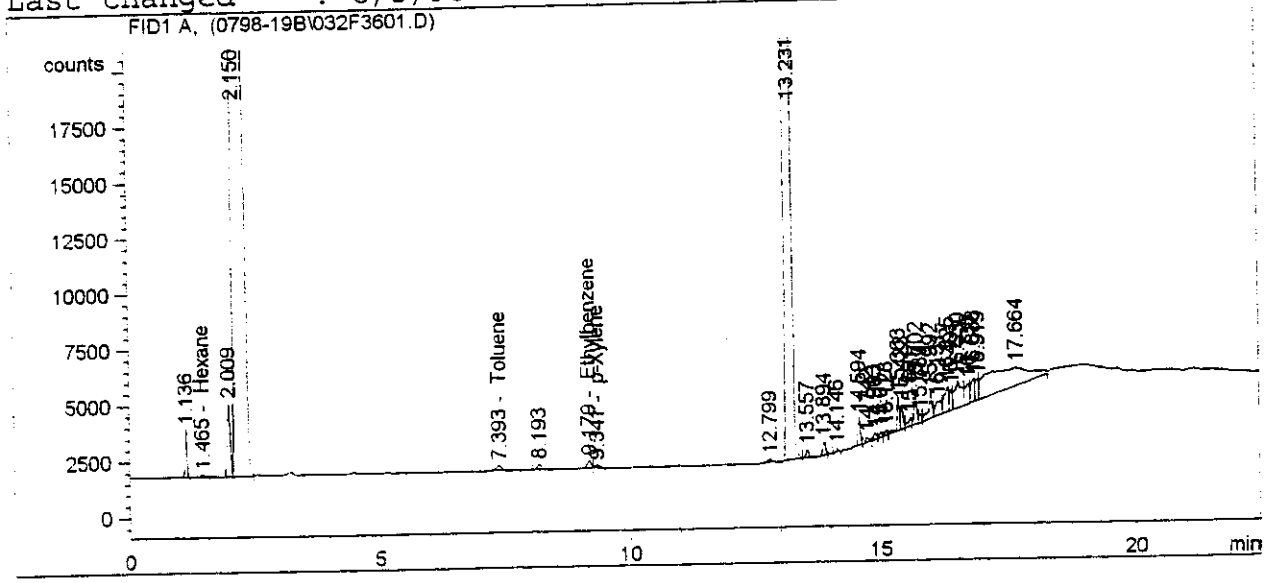
470

210

Injection Date : 8/3/98 1:12:14 PM
Sample Name : S-M18-R2 AbBH
Acq. Operator : bgp

Seq. Line : 36
Vial : 32
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 1:05:33 PM by bgp
(modified after loading)
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465	PB	781.63977	9.19566e-4	7.18769e-1		Hexane
5.409		-	-	-		Benzene
7.393	BP	1450.75732	8.30843e-4	1.20535		Toluene
9.179	BV	1994.65137	8.28951e-4	1.65347		Ethylbenzene
9.341	VB	874.27551	8.36380e-4	7.31226e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.30882

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

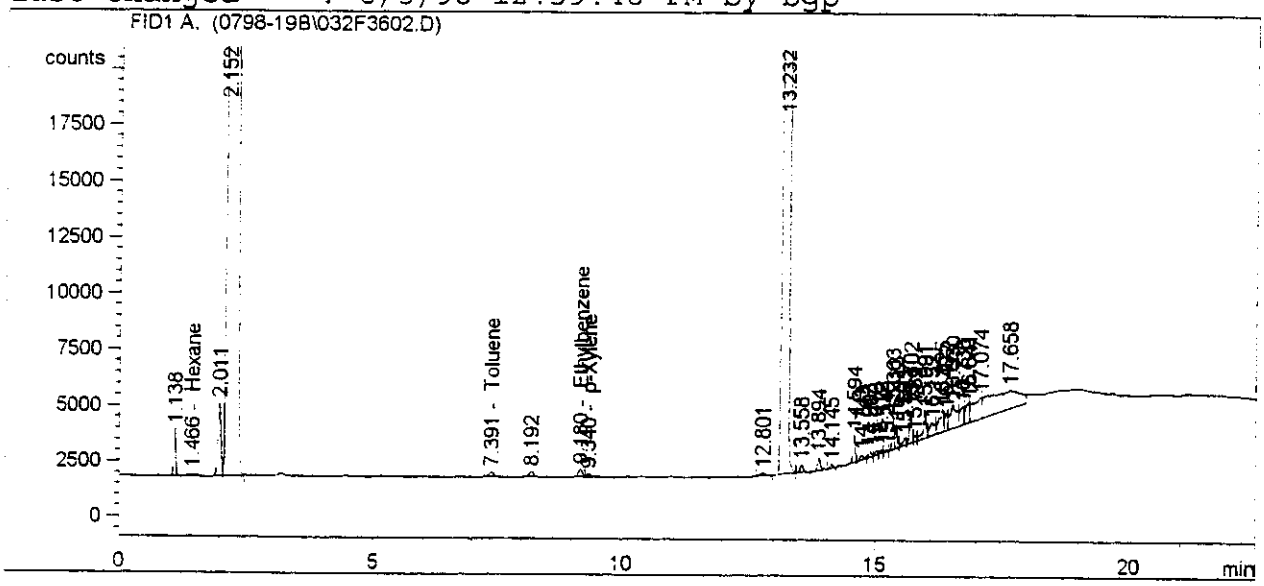
211

471

Injection Date : 8/3/98 1:42:06 PM
Sample Name : S-M18-R2 AbBH
Acq. Operator : bgp

Seq. Line : 36
Vial : 32
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 1:35:21 PM by bgp
(modified after loading)
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.466	BB	729.49854	9.19566e-4	6.70822e-1		Hexane
5.409		-	-	-		Benzene
7.391	BP	1380.82410	8.30843e-4	1.14725		Toluene
9.180	PV	2012.73389	8.28951e-4	1.66846		Ethylbenzene
9.340	VB	868.76587	8.36380e-4	7.26618e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 4.21315

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

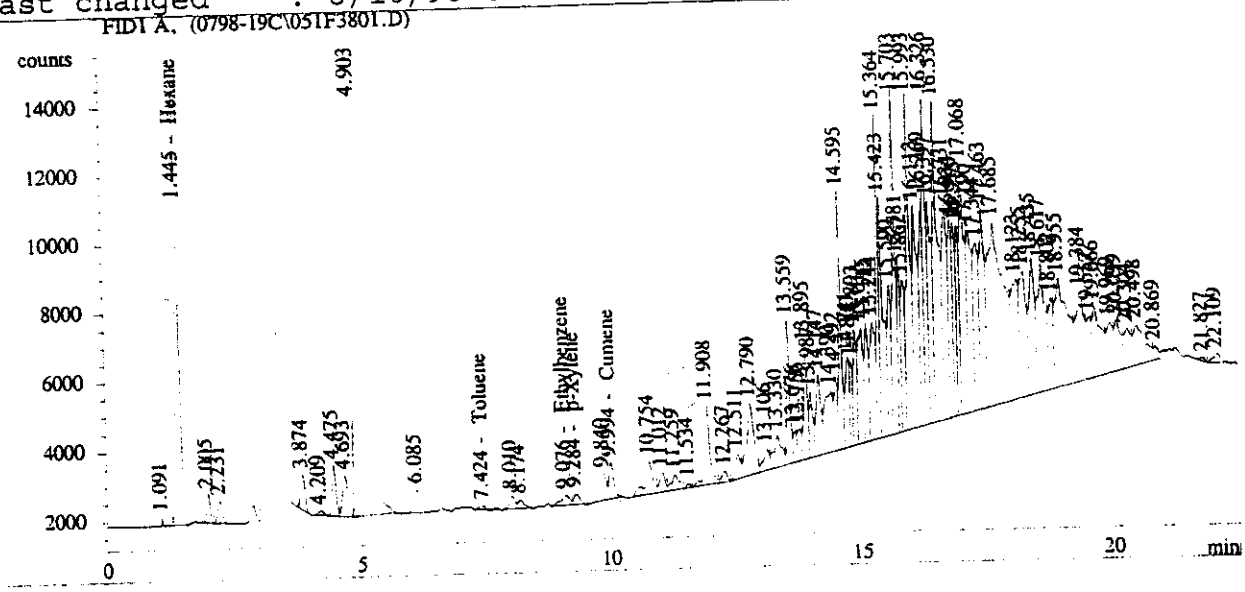
212

472

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\051F3801.D S-M18-R3 A VOA

Injection Date	: 8/6/98 12:12:00 AM	Seq. Line :	38
Sample Name	: S-M18-R3 A VOA	Vial :	51
Acq. Operator	: bgp	Inj :	1
		Inj Volume :	2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.445	BP	5.81485e4	8.47395e-4	49.27469		Hexane
5.391		-	-	-		Benzene
7.424	PB	717.28729	7.04194e-4	5.05109e-1		Toluene
9.076	VV	3637.93311	7.04047e-4	2.56128		Ethylbenzene
9.284	VP	2533.23242	7.08933e-4	1.79589		p-Xylene
9.460		-	-	-		m-Xylene
9.994	VB	6955.11768	7.65340e-4	5.32303		Cumene
10.379		-	-	-		o-Xylene
Totals :				59.46000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

213

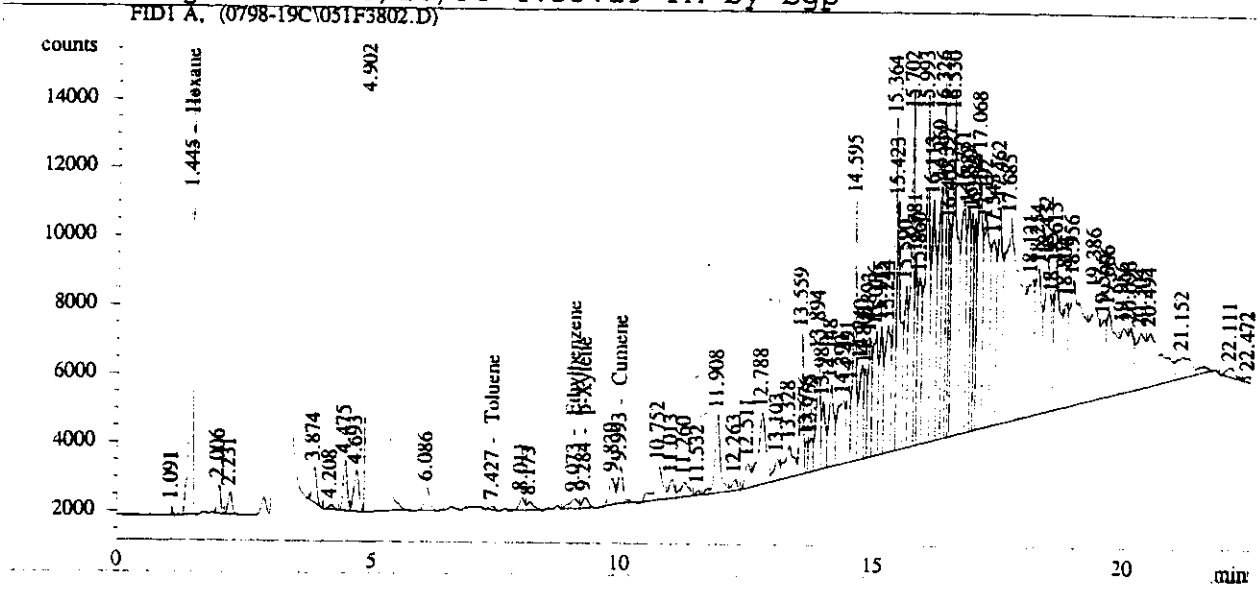
473

Teller 8/10/98 4:51:25 PM bgp

Injection Date : 8/6/98 12:41:52 AM
Sample Name : S-M18-R3 A VOA
Acq. Operator : bgp

Seq. Line : 38
Vial : 51
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.445	BP	5.83576e4	8.47440e-4	49.45461		Hexane
5.391		-	-	-		Benzene
7.427	PP	803.78278	7.04194e-4	5.66019e-1		Toluene
9.073	VV	3664.12817	7.04047e-4	2.57972		Ethylbenzene
9.284	VB	2576.88647	7.08933e-4	1.82684		p-Xylene
9.460		-	-	-		m-Xylene
9.993	VB	6984.73779	7.65340e-4	5.34570		Cumene
10.379		-	-	-		o-Xylene

Totals : 59.77289

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

214

474

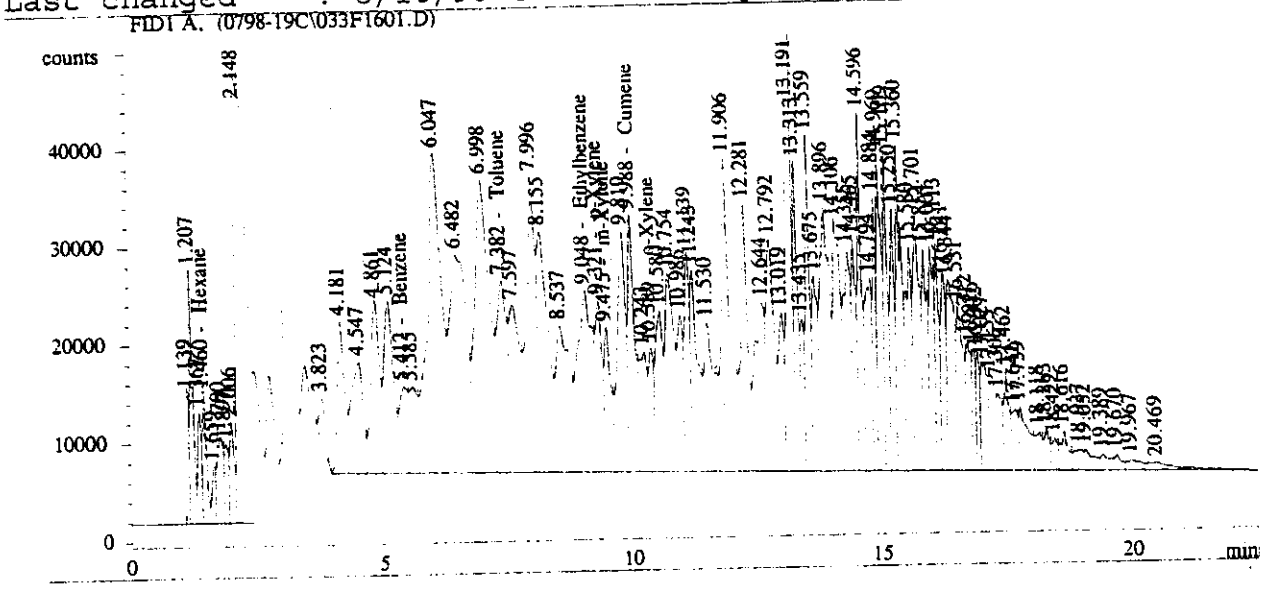
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\033F1601.D S-M18-R3 Aa+AbFH

==========

Injection Date : 8/5/98 5:08:49 AM
Sample Name : S-M18-R3 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 16
Vial : 33
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	VV	7.03650e4	8.49613e-4	59.78302		Hexane
5.412	VV	1.02148e5	7.59476e-4	77.57935		Benzene
7.382	VV	2.50915e5	7.48603e-4	187.83555		Toluene
9.048	VV	3.82630e5	7.42371e-4	284.05329		Ethylbenzene
9.321	VV	1.55327e5	7.47886e-4	116.16679		p-Xylene
9.475	VV	1.30735e5	7.44508e-4	97.33338		m-Xylene
9.988	VV	2.36540e5	8.11311e-4	191.90747		Cumene
10.389	VV	9.38973e4	7.18818e-4	67.49510		o-Xylene
Totals :				1082.15396		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

215

475

Teller 8/10/98 4:41:55 PM bgp

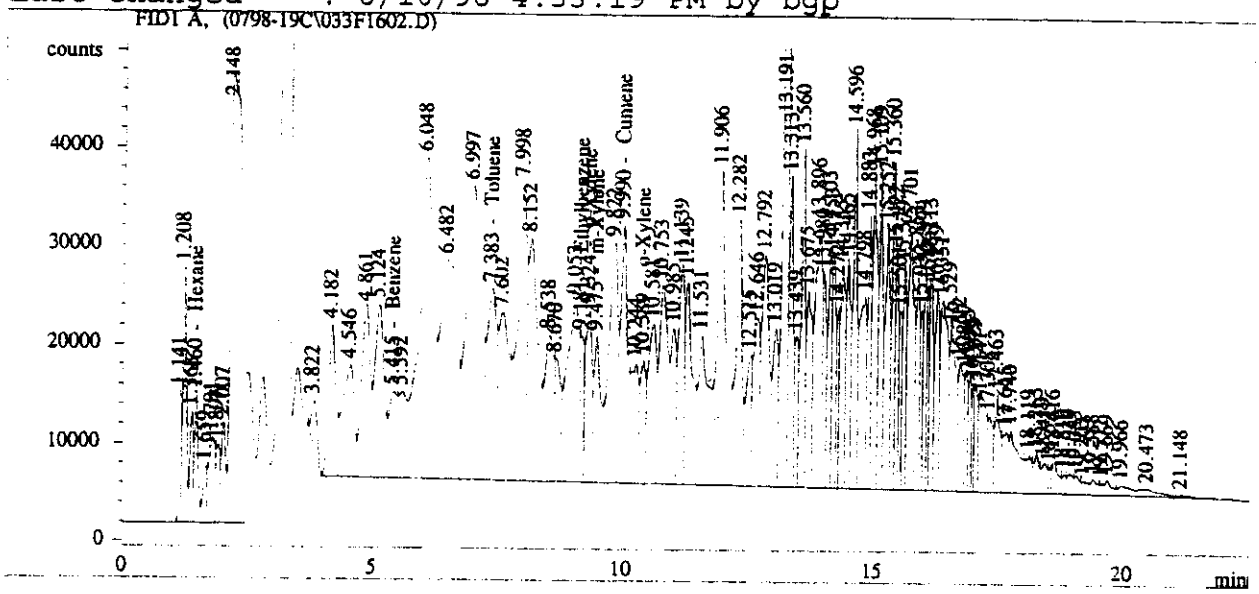
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\033F1602.D S-M18-R3 Aa+AbFH

==========

Injection Date : 8/5/98 5:38:54 AM
Sample Name : S-M18-R3 Aa+AbFH
Acq. Operator : bgp

Seq. Line : 16
Vial : 33
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	VV	6.97956e4	8.49527e-4	59.29322		Hexane
5.415	VV	1.05456e5	7.59649e-4	80.10916		Benzene
7.383	VV	2.49889e5	7.48595e-4	187.06587		Toluene
9.181	VV	7.03364e4	7.37344e-4	51.86212		Ethylbenzene
9.324	VV	1.53911e5	7.47858e-4	115.10395		p-Xylene
9.475	VV	1.34798e5	7.44615e-4	100.37223		m-Xylene
9.990	VV	2.34743e5	8.11295e-4	190.44548		Cumene
10.389	VV	9.54592e4	7.18898e-4	68.62545		o-Xylene

Totals : 852.87748

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

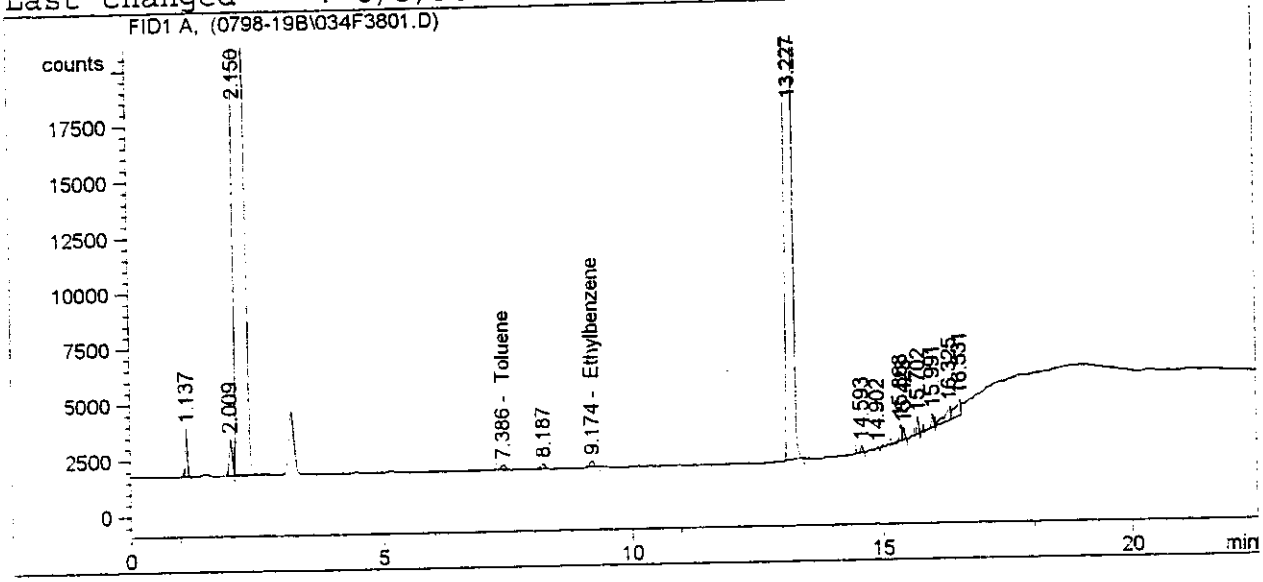
216

476

Injection Date : 8/3/98 3:13:40 PM
Sample Name : S-M18-R3 AbBH
Acq. Operator : bgp

Seq. Line : 38
Vial : 34
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.386	BP	1504.16638	8.30843e-4	1.24973		Toluene
9.174	PB	1809.70996	8.28951e-4	1.50016		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				2.74989		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

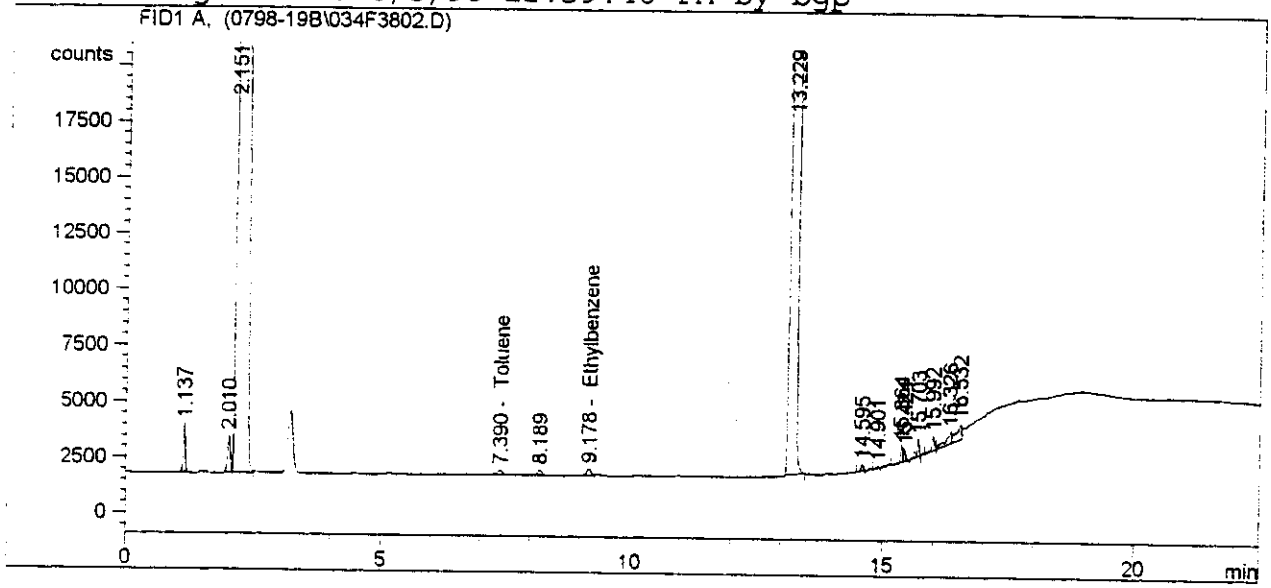
217

477

Injection Date : 8/3/98 3:43:29 PM
Sample Name : S-M18-R3 AbBH
Acq. Operator : bgp

Seq. Line : 38
Vial : 34
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.390	BP	1504.11279	8.30843e-4	1.24968		Toluene
9.178	BV	1920.49646	8.28951e-4	1.59200		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 2.84168

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

478

Teller 8/4/98 7:59:51 AM bgp

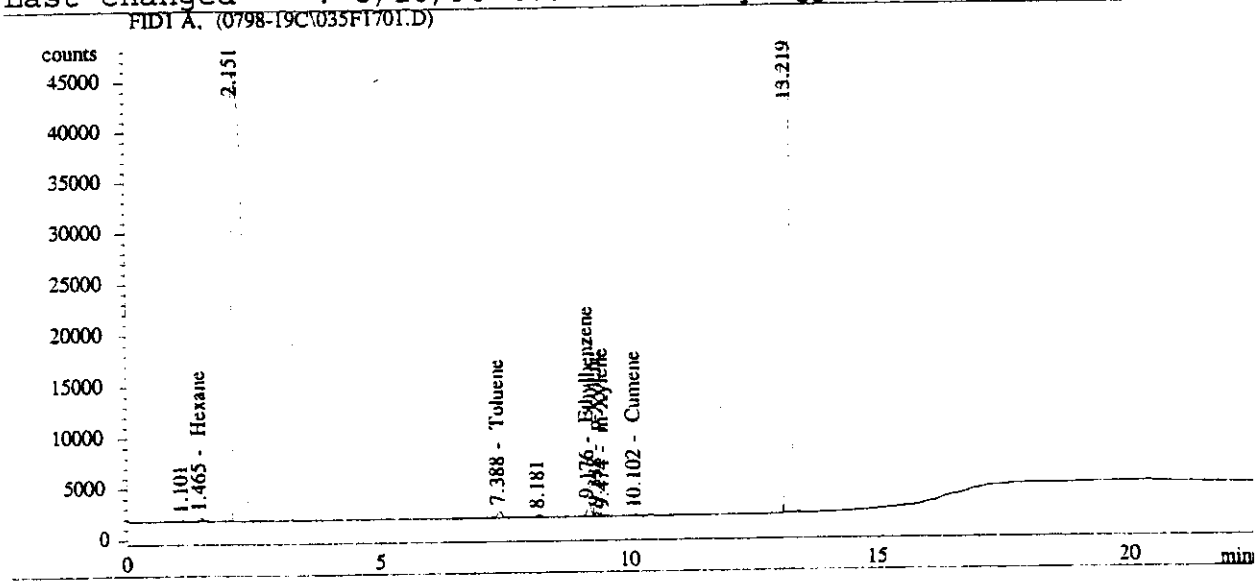
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\035F1701.D S-M18-FB Aa+AbFH

==========

Injection Date : 8/5/98 6:08:57 AM
Sample Name : S-M18-FB Aa+AbFH
Acq. Operator : bgp

Seq. Line : 17
Vial : 35
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465	PB	1864.04346	7.81099e-4	1.45600		Hexane
5.391		-	-	-		Benzene
7.388	BP	4273.76465	7.04194e-4	3.00956		Toluene
9.176	BV	6714.62695	7.04047e-4	4.72741		Ethylbenzene
9.338	VV	2168.54346	7.08933e-4	1.53735		p-Xylene
9.474	VP	770.28723	7.05922e-4	5.43763e-1		m-Xylene
10.102	BP	598.98212	7.65340e-4	4.58425e-1		Cumene
10.379		-	-	-		o-Xylene

Totals : 11.73251

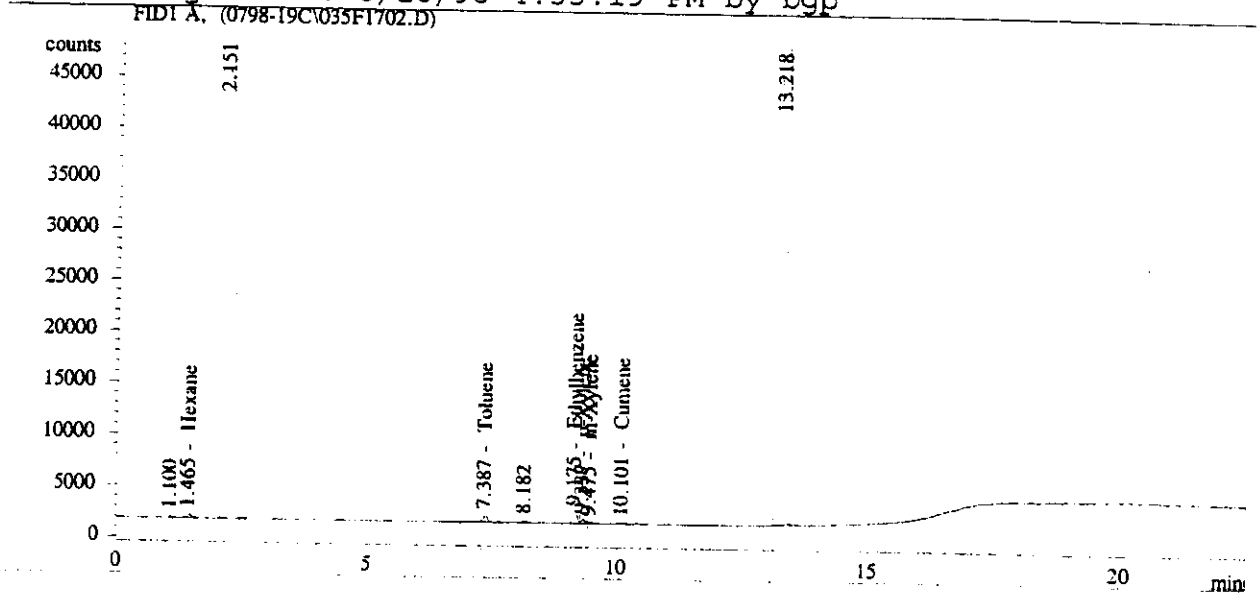
Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

479

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\035F1702.D S-M18-FB Aa+AbFH

Injection Date	: 8/5/98 6:38:46 AM	Seq. Line	: 17
Sample Name	: S-M18-FB Aa+AbFH	Vial	: 35
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19A.M		
Last changed	: 8/3/98 3:07:34 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19D.M		
Last changed	: 8/10/98 4:33:19 PM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.465	BB	1899.01147	7.81099e-4	1.48332		Hexane
5.391		-	-	-		Benzene
7.387	BP	4309.81299	7.04194e-4	3.03494		Toluene
9.175	BV	6719.50342	7.04047e-4	4.73084		Ethylbenzene
9.337	VV	2154.44360	7.08933e-4	1.52736		p-Xylene
9.475	VP	725.68115	7.05922e-4	5.12274e-1		m-Xylene
10.101	BP	604.85809	7.65340e-4	4.62922e-1		Cumene
10.379		-	-	-		o-Xylene
Totals :				11.75166		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

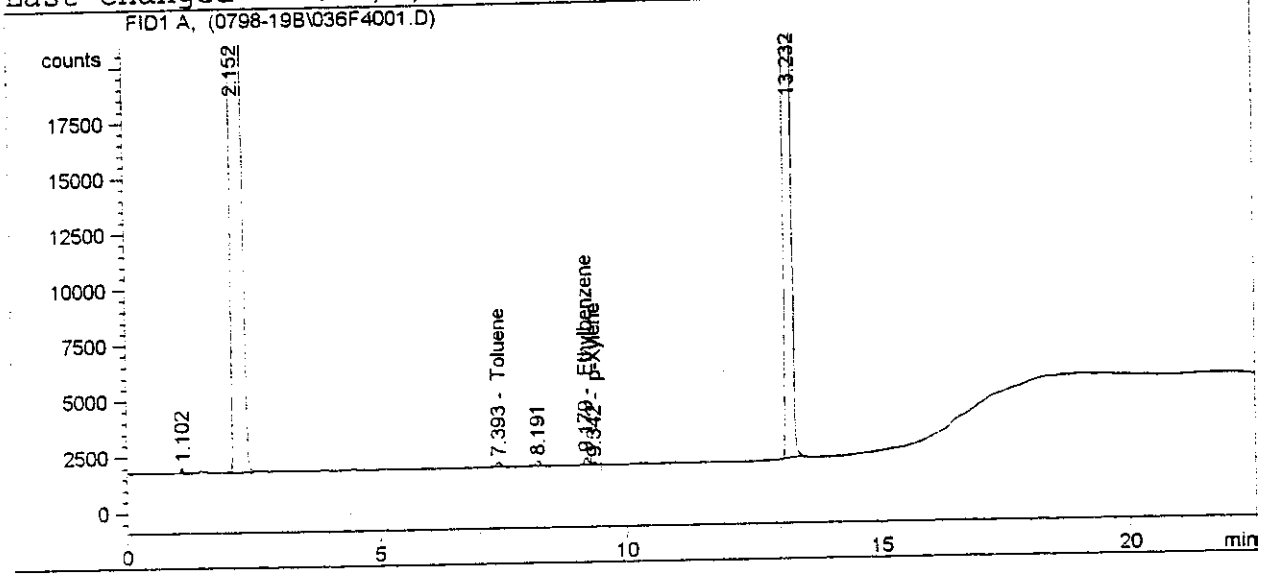
480

220

Injection Date : 8/3/98 5:13:02 PM
Sample Name : S-M18-FB AbBH
Acq. Operator : bgp

Seq. Line : 40
Vial : 36
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.393	BB	1299.58960	8.30843e-4	1.07976		Toluene
9.179	PV	1854.63794	8.28951e-4	1.53740		Ethylbenzene
9.342	VB	632.35193	8.36380e-4	5.28886e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				3.14605		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

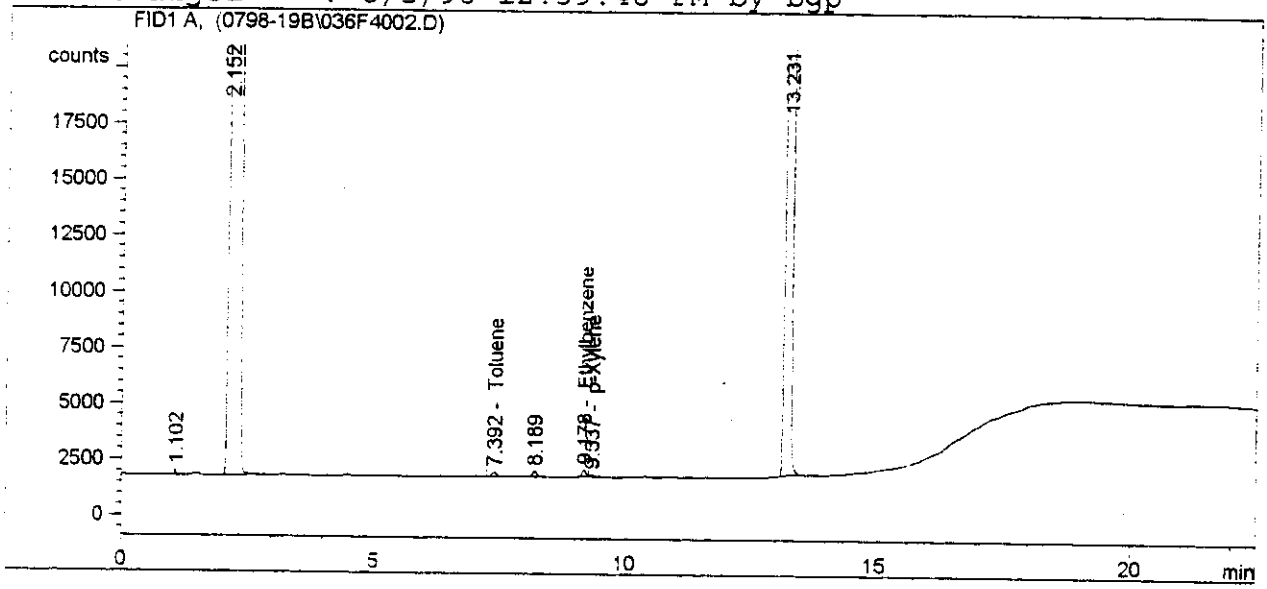
221

Teller 8/4/98 8:00:53 AM bgp
481

Injection Date : 8/3/98 5:42:58 PM
Sample Name : S-M18-FB AbBH
Acq. Operator : bgp

Seq. Line : 40
Vial : 36
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.392	BP	1324.87170	8.30843e-4	1.10076		Toluene
9.178	PV	1875.25574	8.28951e-4	1.55449		Ethylbenzene
9.337	VB	658.98865	8.36380e-4	5.51165e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 3.20642

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

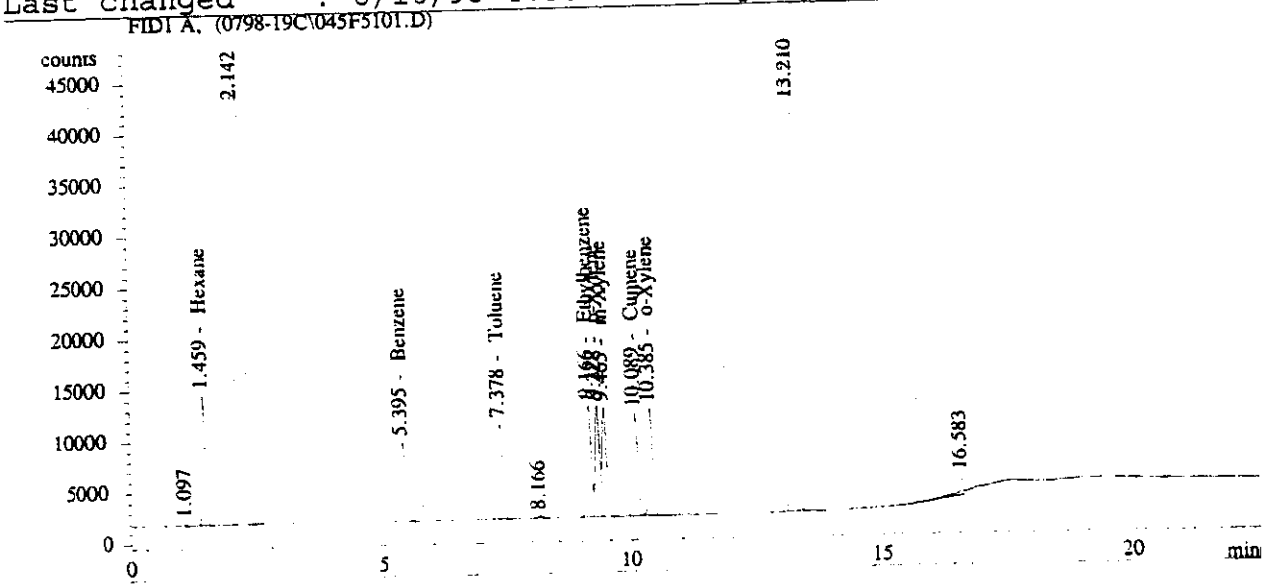
222

482

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\045F5101.D

Injection Date	: 8/6/98 10:07:31 AM	Seq. Line	: 51
Sample Name	: LCS #1	Vial	: 45
Acq. Operator	: bgp	Inj	: 1
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	BB	5.44922e4	8.46537e-4	46.12968		Hexane
5.395	BB	5.99673e4	7.55615e-4	45.31221		Benzene
7.378	BB	6.22264e4	7.42409e-4	46.19746		Toluene
9.166	BV	6.55951e4	7.36899e-4	48.33695		Ethylbenzene
9.328	VV	6.29597e4	7.43535e-4	46.81276		p-Xylene
9.465	VB	6.34409e4	7.40761e-4	46.99461		m-Xylene
10.089	BV	6.15578e4	8.05506e-4	49.58516		Cumene
10.385	VB	6.12353e4	7.16212e-4	43.85743		o-Xylene
Totals :				373.22626		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

223

483

Teller 8/10/98 4:56:58 PM bgp

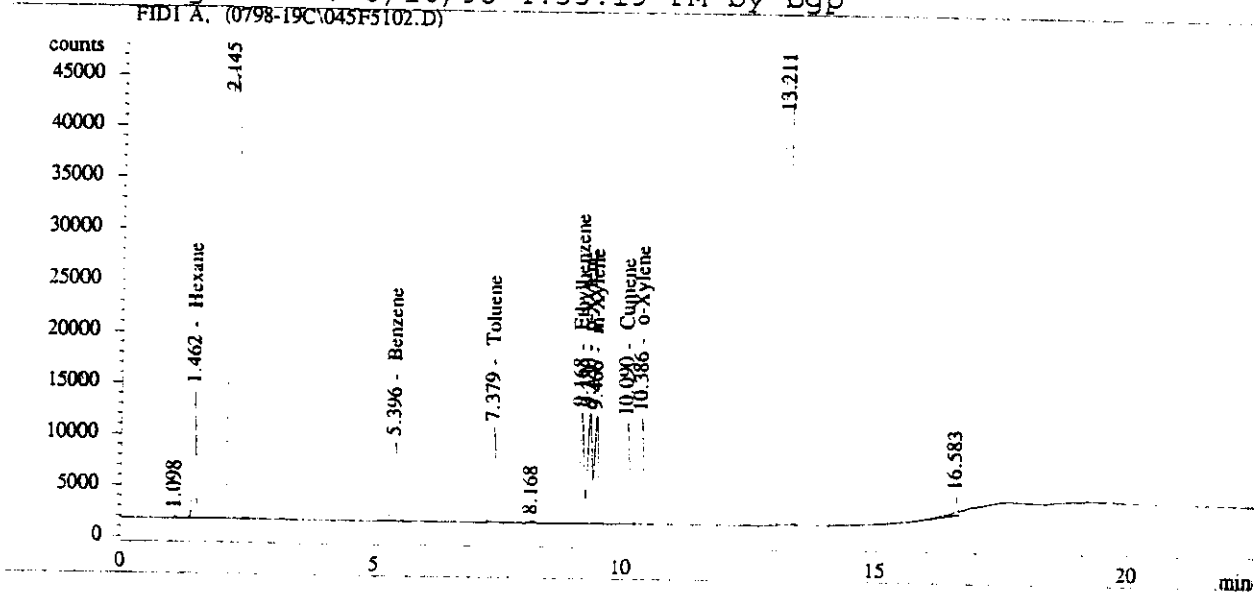
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\045F5102.D

LCS #1

Injection Date : 8/6/98 10:37:15 AM
Sample Name : LCS #1
Acq. Operator : bgp

Seq. Line : 51
Vial : 45
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	BB	5.45174e4	8.46544e-4	46.15134		Hexane
5.396	BP	5.96934e4	7.55573e-4	45.10269		Benzene
7.379	BB	6.16479e4	7.42332e-4	45.76324		Toluene
9.168	BV	6.48683e4	7.36825e-4	47.79659		Ethylbenzene
9.330	VV	6.23519e4	7.43464e-4	46.35637		p-Xylene
9.466	VB	6.26660e4	7.40671e-4	46.41492		m-Xylene
10.090	BV	6.09151e4	8.05423e-4	49.06245		Cumene
10.386	VB	6.05934e4	7.16132e-4	43.39288		o-Xylene

Totals : 370.04048

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

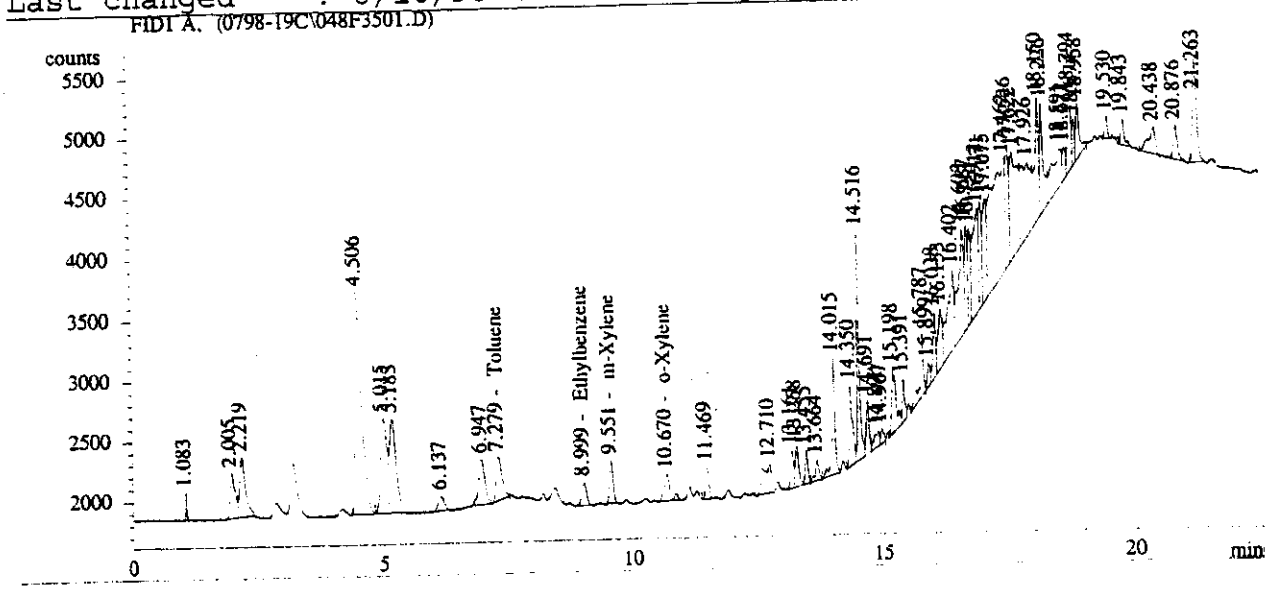
464

224

Injection Date : 8/5/98 9:12:21 PM
Sample Name : S-M18-R1 B VOA
Acq. Operator : bgp

Seq. Line : 35
Vial : 48
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.279	VB	2959.74780	7.04194e-4	2.08424		Toluene
8.999	PP	1229.61743	7.04047e-4	8.65708e-1		Ethylbenzene
9.323		-	-	-		p-Xylene
9.551	PB	1782.05444	7.05922e-4	1.25799		m-Xylene
10.084		-	-	-		Cumene
10.670	PB	1847.85669	6.82854e-4	1.26182		o-Xylene
Totals :				5.46975		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

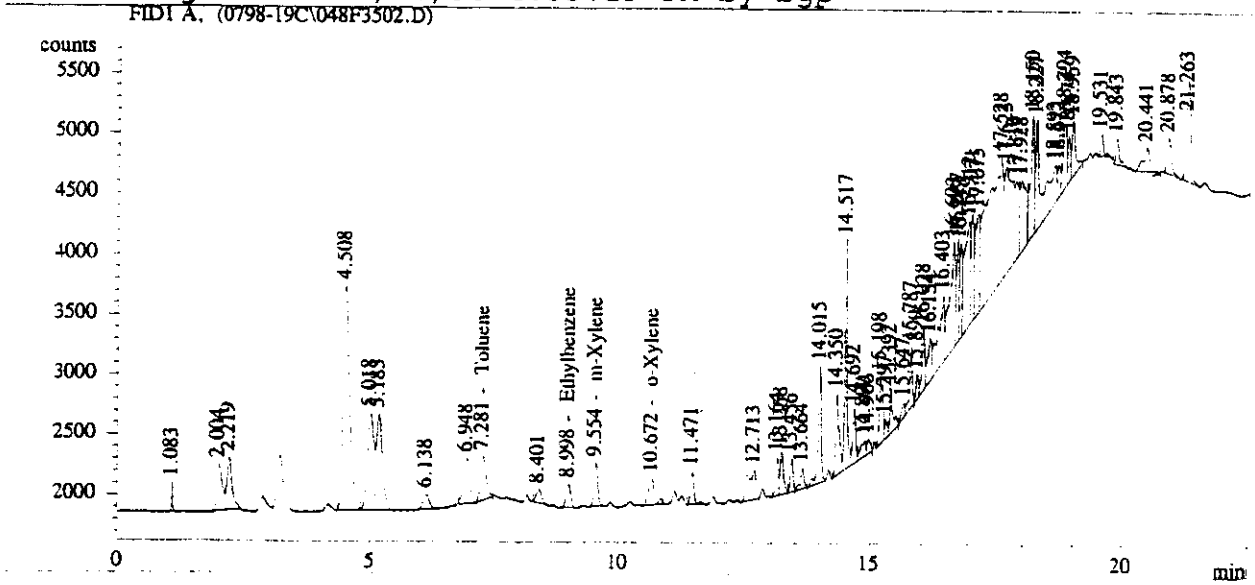
225

485

Injection Date : 8/5/98 9:42:17 PM
Sample Name : S-M18-R1 B VOA
Acq. Operator : bgp

Seq. Line : 35
Vial : 48
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.463		-	-	-		Hexane
5.391		-	-	-		Benzene
7.281	BB	2952.48633	7.04194e-4	2.07912		Toluene
8.998	PP	1248.16382	7.04047e-4	8.78766e-1		Ethylbenzene
9.323		-	-	-		p-Xylene
9.554	BB	1796.79407	7.05922e-4	1.26840		m-Xylene
10.084		-	-	-		Cumene
10.672	PB	1873.41663	6.82854e-4	1.27927		o-Xylene

Totals : 5.50555

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

486

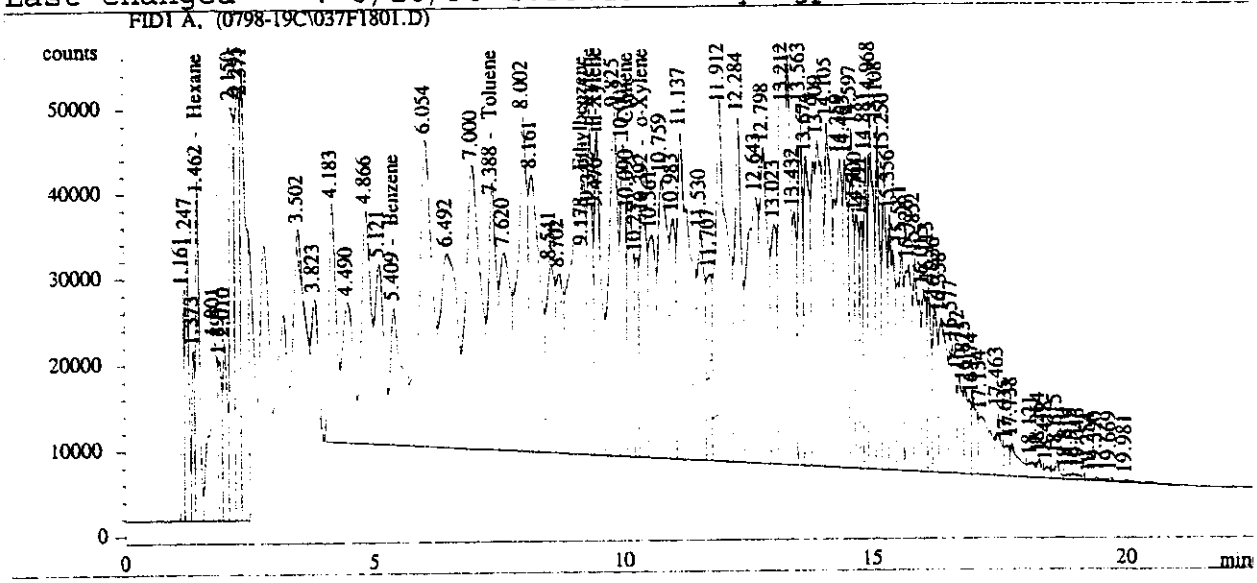
226

==========

Injection Date : 8/5/98 7:08:33 AM
Sample Name : S-M18-R1 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 18
Vial : 37
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.462	VV	2.04053e5	8.56532e-4	174.77828		Hexane
5.409	VV	2.60243e5	7.62811e-4	198.51585		Benzene
7.388	VV	3.50435e5	7.49183e-4	262.54019		Toluene
9.178	VV	7.01543e5	7.42886e-4	521.16618		Ethylbenzene
9.332	VV	2.91187e5	7.49269e-4	218.17726		p-Xylene
9.476	VV	3.30641e5	7.46644e-4	246.87097		m-Xylene
10.090	VV	2.73010e5	8.11583e-4	221.57052		Cumene
10.392	VV	3.17976e5	7.22262e-4	229.66208		o-Xylene

Totals : 2073.28132

Results obtained with enhanced integrator!
1 Warnings or Errors :

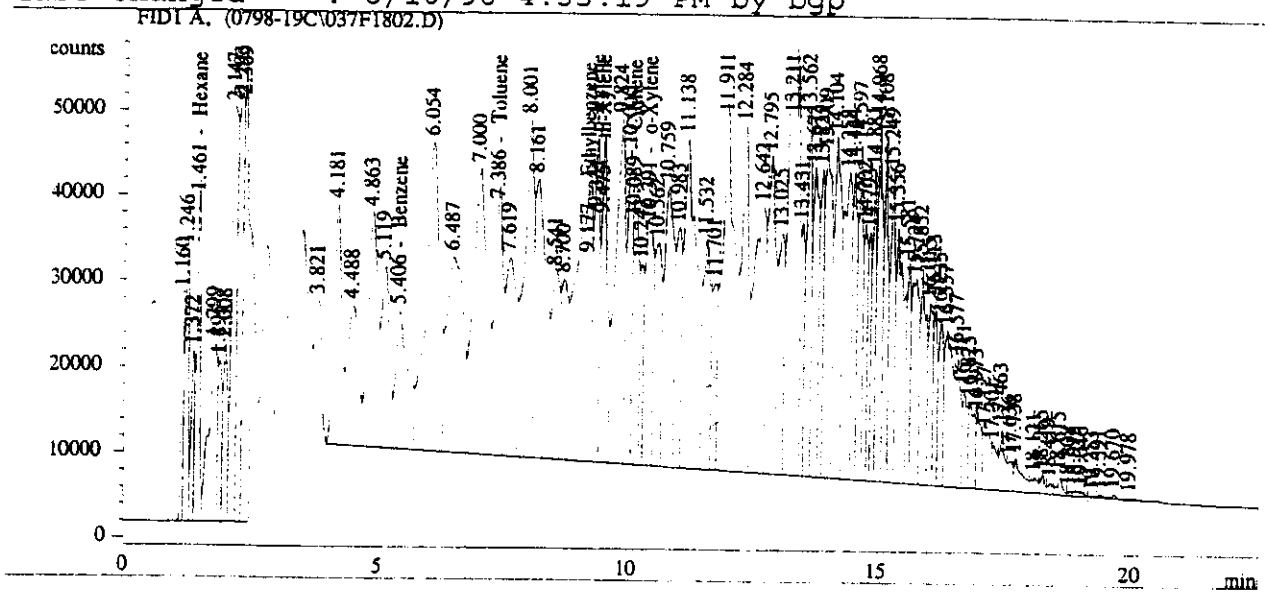
Warning : Calibration warnings (see calibration table listing)

227

487

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\037F1802.D S-M18-R1 Ba+BbFH

Injection Date	: 8/5/98 7:38:26 AM	Seq. Line	: 18
Sample Name	: S-M18-R1 Ba+BbFH	Vial	: 37
Acq. Operator	: bgp	Inj	: 2
		Inj Volume	: 2 µl
Sequence File	: E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S		
Acq. Method	: E:\HPCHEM\TELLER\METHODS\0798-19A.M		
Last changed	: 8/3/98 3:07:34 PM by bgp		
Analysis Method	: E:\HPCHEM\TELLER\METHODS\0798-19D.M		
Last changed	: 8/10/98 4:33:19 PM by bgp		



External Standard Report

Sorted By	:	Signal
Calib. Data Modified	:	8/10/98 4:32:29 PM
Multiplier	:	1.0000
Dilution	:	1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	VV	2.04814e5	8.56545e-4	175.43229		Hexane
5.406	VV	2.62453e5	7.62829e-4	200.20657		Benzene
7.386	VV	3.53094e5	7.49194e-4	264.53637		Toluene
9.177	VV	7.04914e5	7.42889e-4	523.67263		Ethylbenzene
9.331	VV	2.92837e5	7.49278e-4	219.41663		p-Xylene
9.475	VV	3.34004e5	7.46658e-4	249.38698		m-Xylene
10.089	VV	2.72573e5	8.11581e-4	221.21463		Cumene
10.391	VV	3.20068e5	7.22271e-4	231.17595		o-Xylene
Totals :				2085.04205		

Results obtained with enhanced integrator!
1 Warnings or Errors :

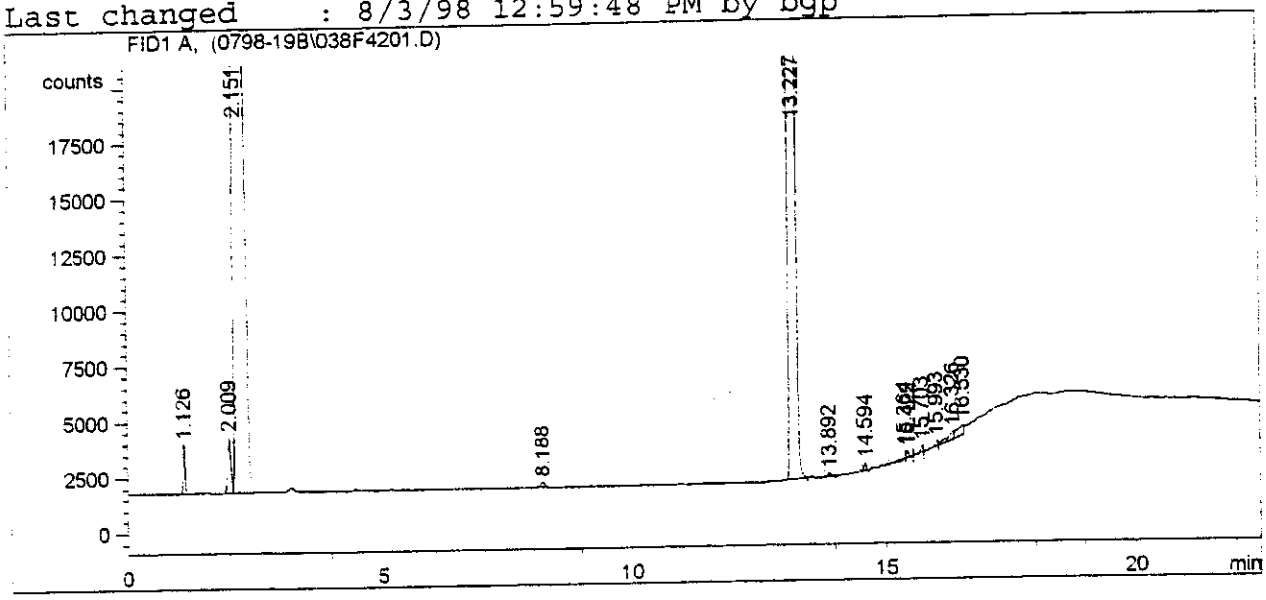
Warning : Calibration warnings (see calibration table listing)

488

Injection Date : 8/3/98 7:12:39 PM
Sample Name : S-M18-R1 BbBH
Acq. Operator : bgp

Seq. Line : 42
Vial : 38
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.390		-	-	-		Toluene
9.176		-	-	-		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				0.00000		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

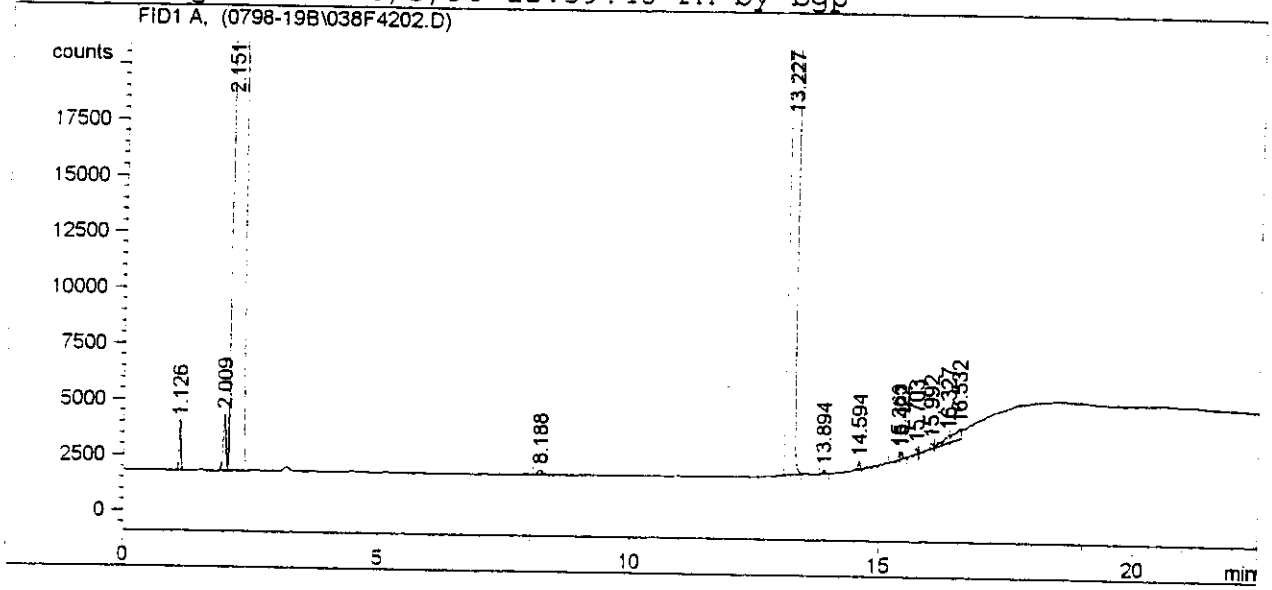
229

489

Injection Date : 8/3/98 7:42:33 PM
Sample Name : S-M18-R1 BbBH
Acq. Operator : bgp

Seq. Line : 42
Vial : 38
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.390		-	-	-		Toluene
9.176		-	-	-		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 0.00000

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

490

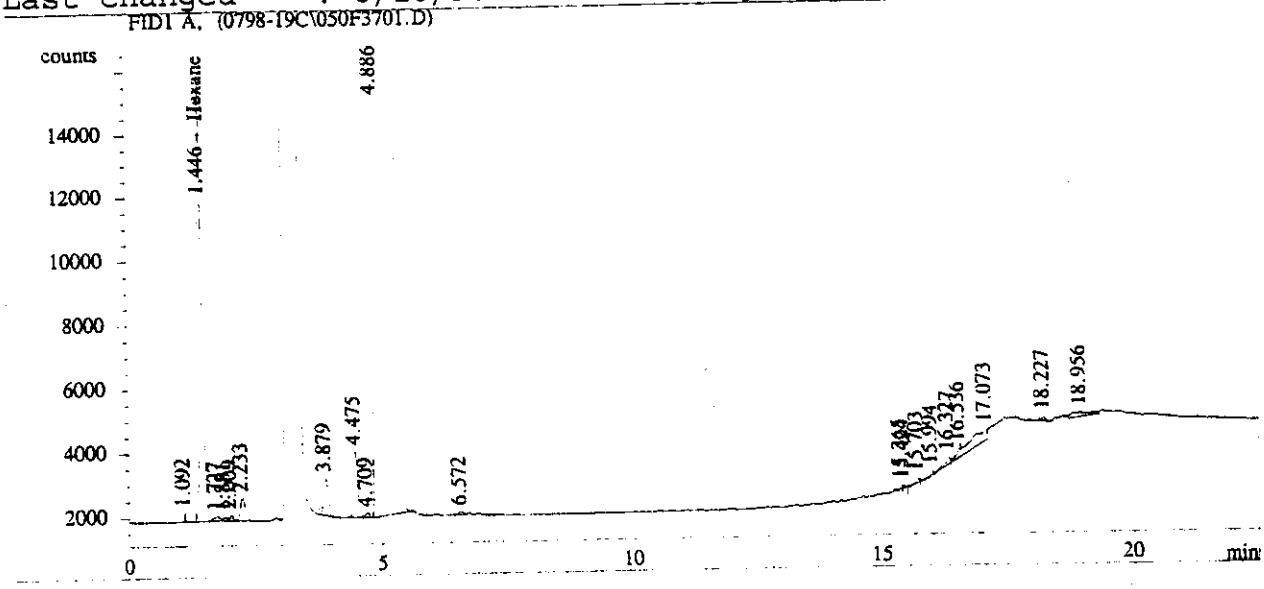
230

Teller 8/4/98 8:02:47 AM bgp

Injection Date : 8/5/98 11:12:05 PM
Sample Name : S-M18-R2 B VOA
Acq. Operator : bgp

Seq. Line : 37
Vial : 50
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.446	BB	6.33843e4	8.48450e-4	53.77840		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene

Totals : 53.77840

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

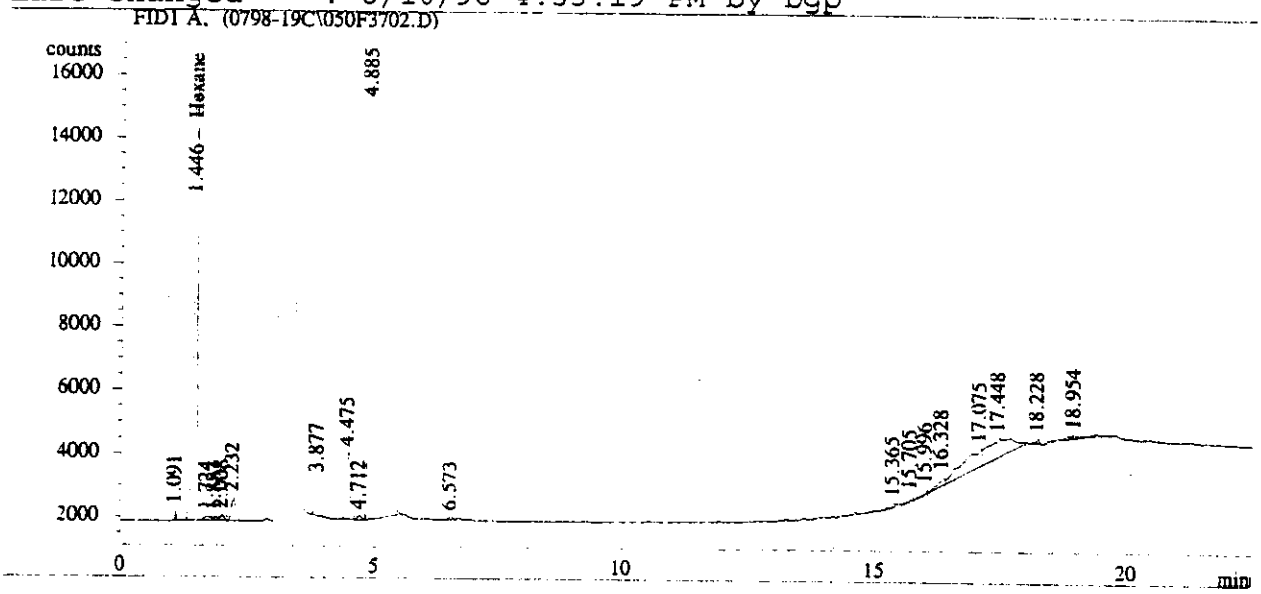
231

491

Injection Date : 8/5/98 11:42:02 PM
Sample Name : S-M18-R2 B VOA
Acq. Operator : bgp

Seq. Line : 37
Vial : 50
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.446	BV	6.41331e4	8.48587e-4	54.42251		Hexane
5.391		-	-	-		Benzene
7.373		-	-	-		Toluene
9.161		-	-	-		Ethylbenzene
9.323		-	-	-		p-Xylene
9.460		-	-	-		m-Xylene
10.084		-	-	-		Cumene
10.379		-	-	-		o-Xylene

Totals : 54.42251

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
492 Warning : Calibrated compound(s) not found

232

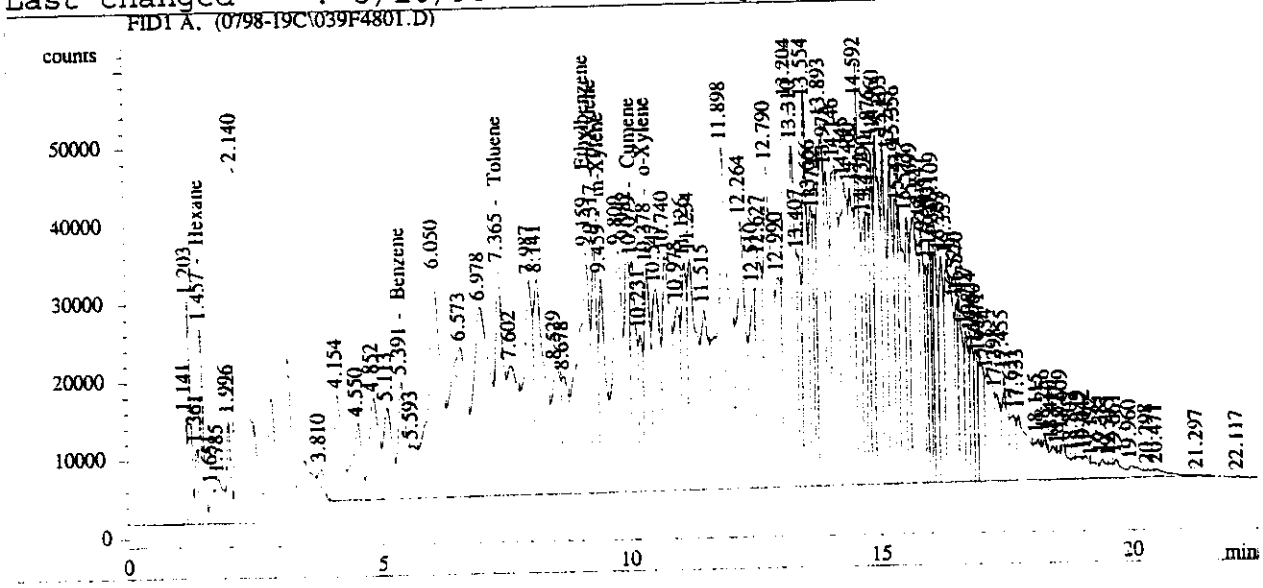
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\039F4801.D S-M18-R2 Ba+BbFH

==========

Injection Date : 8/6/98 7:09:13 AM
Sample Name : S-M18-R2 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 48
Vial : 39
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.457	VV	1.33993e5	8.54628e-4	114.51425		Hexane
5.391	VV	1.64116e5	7.61549e-4	124.98208		Benzene
7.365	VV	3.36246e5	7.49122e-4	251.88944		Toluene
9.159	VV	5.50828e5	7.42717e-4	409.10888		Ethylbenzene
9.317	VV	2.43226e5	7.48957e-4	182.16593		p-Xylene
9.459	VV	2.27467e5	7.46011e-4	169.69302		m-Xylene
10.079	VV	2.25841e5	8.11214e-4	183.20543		Cumene
10.378	VV	2.31108e5	7.21719e-4	166.79535		o-Xylene
Totals :				1602.35437		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

233

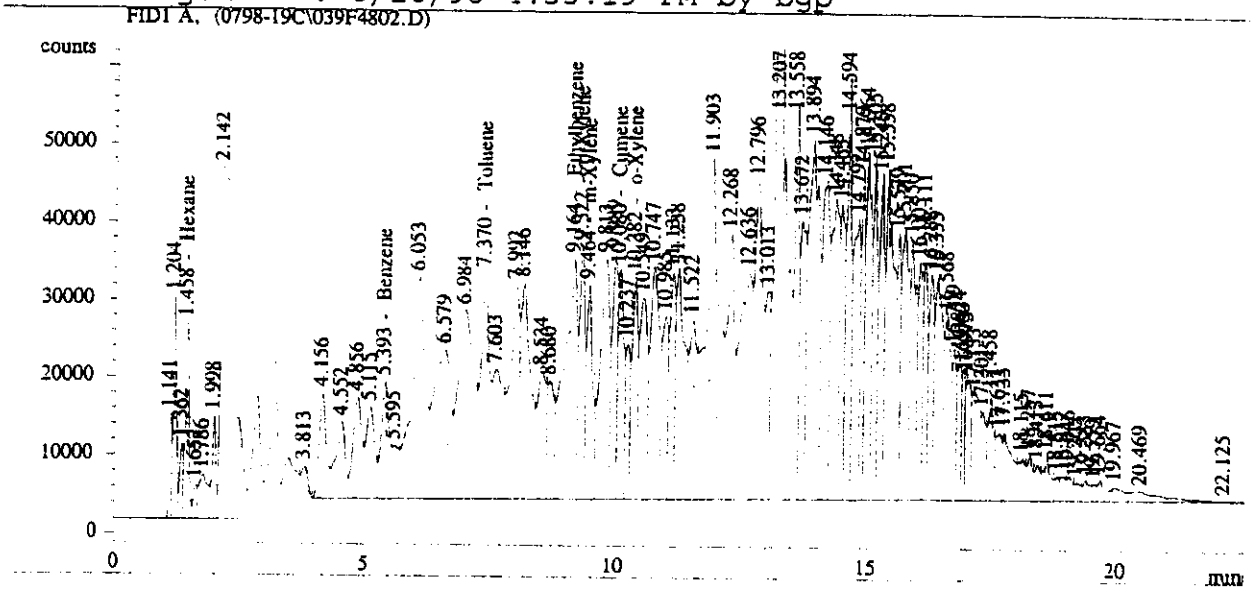
493

==========

Injection Date : 8/6/98 7:39:04 AM
Sample Name : S-M18-R2 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 48
Vial : 39
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	VV	1.31846e5	8.54538e-4	112.66767		Hexane
5.393	VV	1.63240e5	7.61531e-4	124.31253		Benzene
7.370	VV	3.35324e5	7.49118e-4	251.19720		Toluene
9.164	VV	5.53192e5	7.42720e-4	410.86671		Ethylbenzene
9.322	VV	2.44607e5	7.48968e-4	183.20304		p-Xylene
9.464	VV	2.28730e5	7.46022e-4	170.63781		m-Xylene
10.080	VV	2.25219e5	8.11208e-4	182.69960		Cumene
10.382	VV	2.33362e5	7.21739e-4	168.42663		o-Xylene

Totals : 1604.01120

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

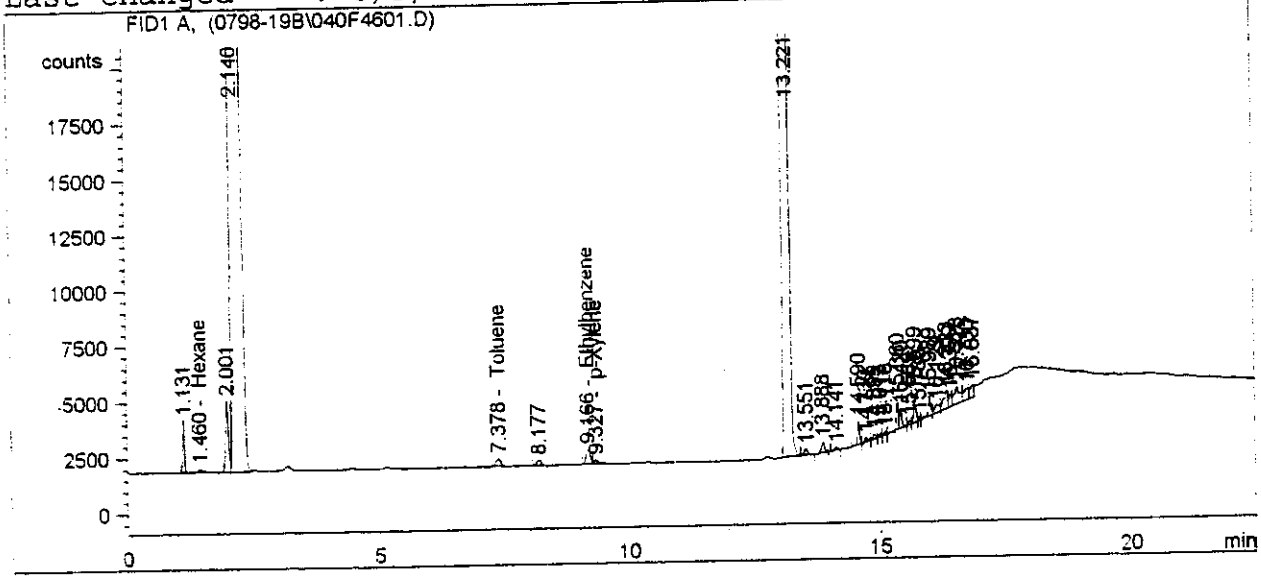
234

494

Injection Date : 8/3/98 10:20:01 PM
Sample Name : S-M18-R2 BbBH
Acq. Operator : bgp

Seq. Line : 46
Vial : 40
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.460	BB	964.68384	9.19566e-4	8.87090e-1		Hexane
5.409		-	-	-		Benzene
7.378	BB	2242.50830	8.30843e-4	1.86317		Toluene
9.166	BV	3906.80664	8.28951e-4	3.23855		Ethylbenzene
9.327	VB	1152.00232	8.36380e-4	9.63511e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 6.95233

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

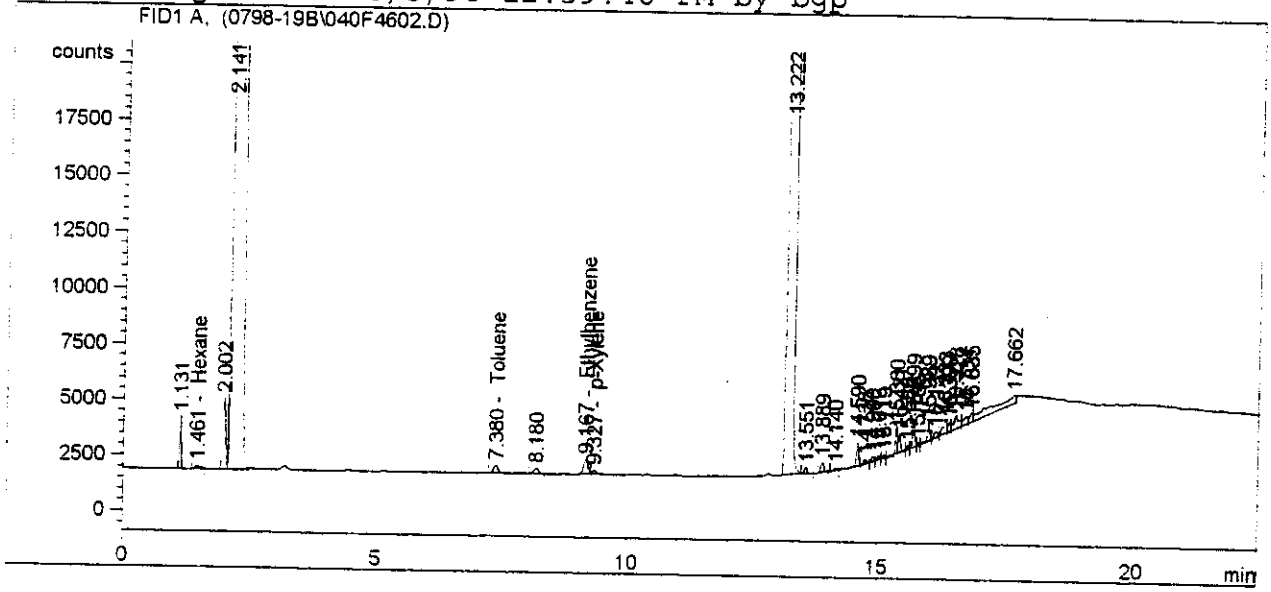
235

495

Injection Date : 8/3/98 10:49:45 PM
Sample Name : S-M18-R2 BbBH
Acq. Operator : bgp

Seq. Line : 46
Vial : 40
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.461	BB	961.89789	9.19566e-4	8.84528e-1		Hexane
5.409		-	-	-		Benzene
7.380	BB	2234.69775	8.30843e-4	1.85668		Toluene
9.167	BV	3934.68726	8.28951e-4	3.26166		Ethylbenzene
9.327	VB	1196.38647	8.36380e-4	1.00063		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 7.00351

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

496

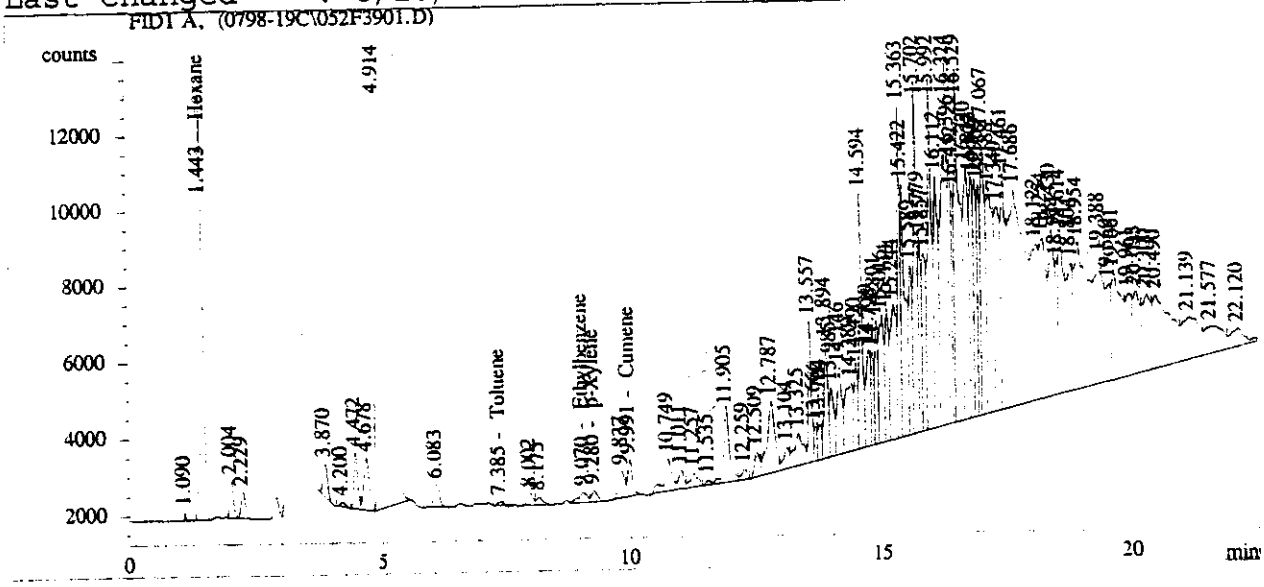
236

Teller 8/4/98 8:05:45 AM bgp

Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\052F3901.D S-M18-R3 B VOA

Injection Date	: 8/6/98 1:11:44 AM	Seq. Line	: 39
Sample Name	: S-M18-R3 B VOA	Vial	: 52
Acq. Operator	: bgp	Inj	: 1
		Inj Volume	: 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.443	BP	5.14604e4	8.45734e-4	43.52177		Hexane
5.391		-	-	-		Benzene
7.385	PB	559.48907	7.04194e-4	3.93989e-1		Toluene
9.070	VV	3223.32056	7.04047e-4	2.26937		Ethylbenzene
9.280	VP	2390.66724	7.08933e-4	1.69482		p-Xylene
9.460		-	-	-		m-Xylene
9.991	VB	6316.97852	7.65340e-4	4.83464		Cumene
10.379		-	-	-		o-Xylene
Totals :				52.71458		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

237

497

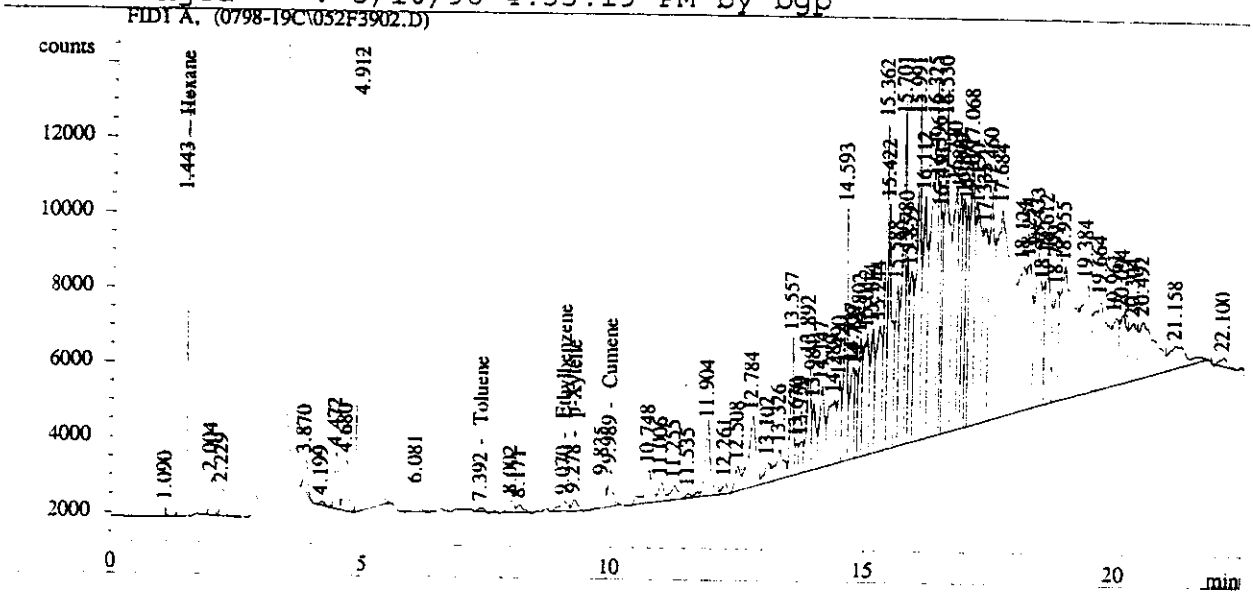
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\052F3902.D S-M18-R3 B VOA

==========

Injection Date : 8/6/98 1:41:30 AM
Sample Name : S-M18-R3 B VOA
Acq. Operator : bgp

Seq. Line : 39
Vial : 52
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.443	BP	5.23668e4	8.45984e-4	44.30143		Hexane
5.391		-	-	-		Benzene
7.392	PB	762.66333	7.04194e-4	5.37063e-1		Toluene
9.070	VV	3324.22925	7.04047e-4	2.34041		Ethylbenzene
9.278	VB	2424.00928	7.08933e-4	1.71846		p-Xylene
9.460		-	-	-		m-Xylene
9.989	VB	6414.71875	7.65340e-4	4.90944		Cumene
10.379		-	-	-		o-Xylene
Totals :				53.80680		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

498

238

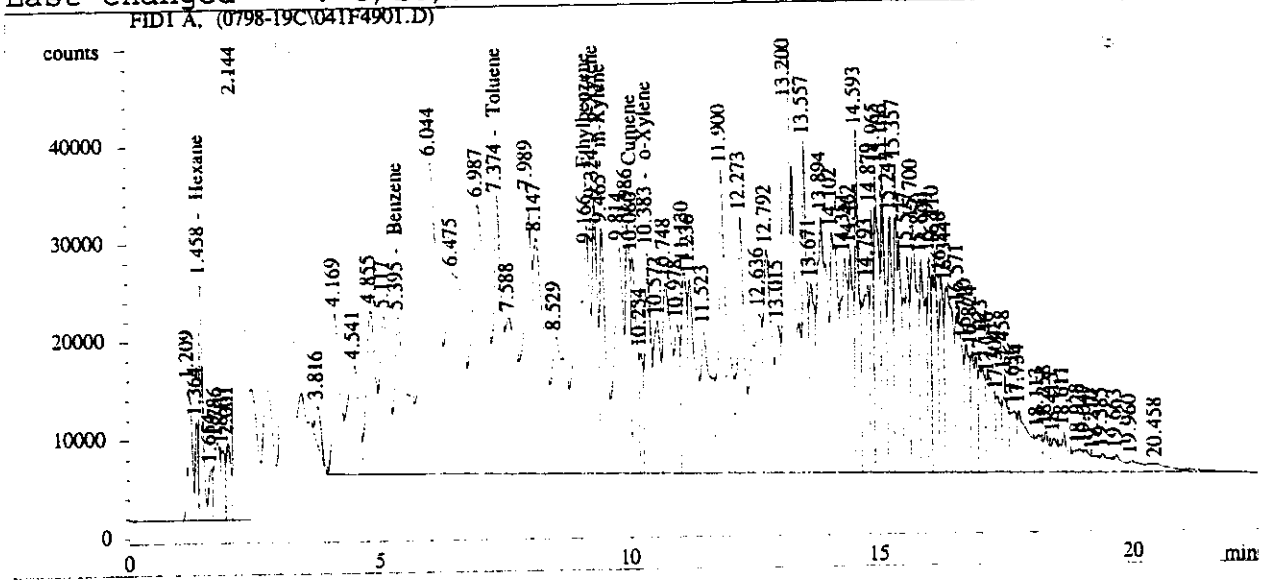
Teller 8/10/98 4:52:06 PM bgp

==========

Injection Date : 8/6/98 8:08:45 AM
Sample Name : S-M18-R3 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 49
Vial : 41
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



==========

External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	VV	1.23852e5	8.54174e-4	105.79078		Hexane
5.395	VV	2.52715e5	7.62747e-4	192.75763		Benzene
7.374	VV	3.24464e5	7.49066e-4	243.04486		Toluene
9.166	VV	4.43642e5	7.42527e-4	329.41613		Ethylbenzene
9.324	VV	1.99624e5	7.48544e-4	149.42733		p-Xylene
9.465	VV	1.93010e5	7.45648e-4	143.91771		m-Xylene
10.080	VV	1.57841e5	8.10292e-4	127.89743		Cumene
10.383	VV	1.79133e5	7.21143e-4	129.18056		o-Xylene

Totals : 1421.43242

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

239

499

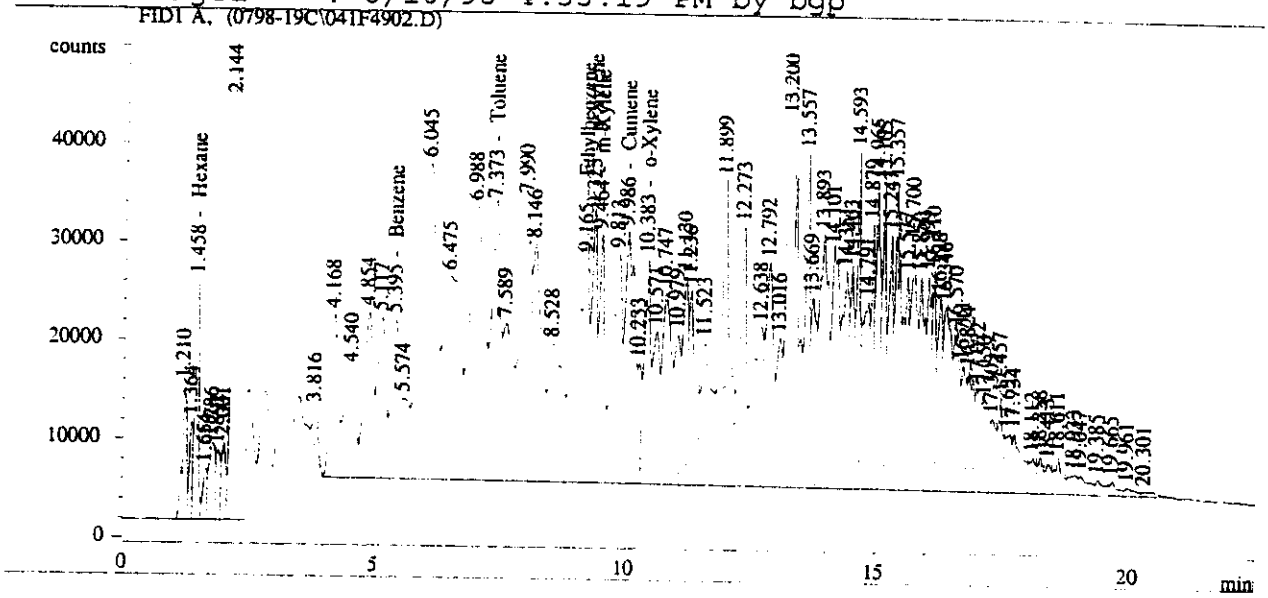
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19C\041F4902.D S-M18-R3 Ba+BbFH

==========

Injection Date : 8/6/98 8:38:24 AM
Sample Name : S-M18-R3 Ba+BbFH
Acq. Operator : bgp

Seq. Line : 49
Vial : 41
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19D.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19D.M
Last changed : 8/10/98 4:33:19 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/10/98 4:32:29 PM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	VV	1.22404e5	8.54103e-4	104.54529		Hexane
5.395	VV	1.85078e5	7.61936e-4	141.01749		Benzene
7.373	VV	3.23061e5	7.49059e-4	241.99175		Toluene
9.165	VV	4.41326e5	7.42521e-4	327.69432		Ethylbenzene
9.323	VV	2.00091e5	7.48549e-4	149.77806		p-Xylene
9.464	VV	1.91902e5	7.45634e-4	143.08881		m-Xylene
9.986	VV	3.41276e5	8.11937e-4	277.09443		Cumene
10.383	VV	1.78194e5	7.21130e-4	128.50119		o-Xylene
Totals :				1513.71134		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

500

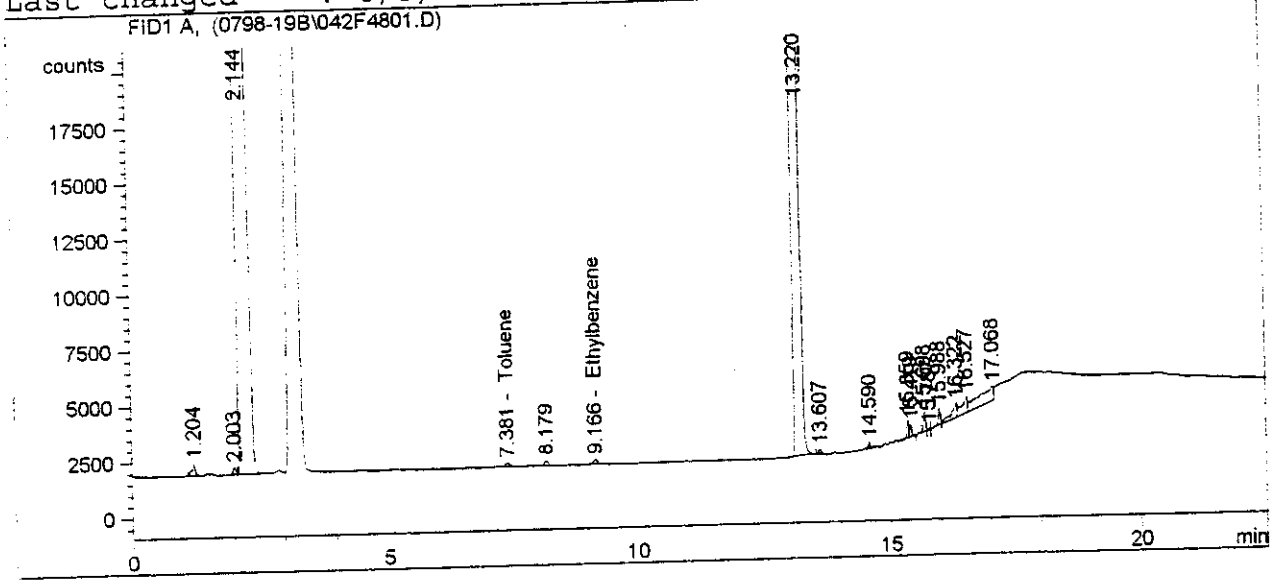
240

==========

Injection Date : 8/4/98 12:18:48 AM
Sample Name : S-M18-R3 BbBH
Acq. Operator : bgp

Seq. Line : 48
Vial : 42
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.381	PB	1162.16675	8.30843e-4	9.65579e-1		Toluene
9.166	PB	1205.91162	8.28951e-4	9.99642e-1		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				1.96522		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

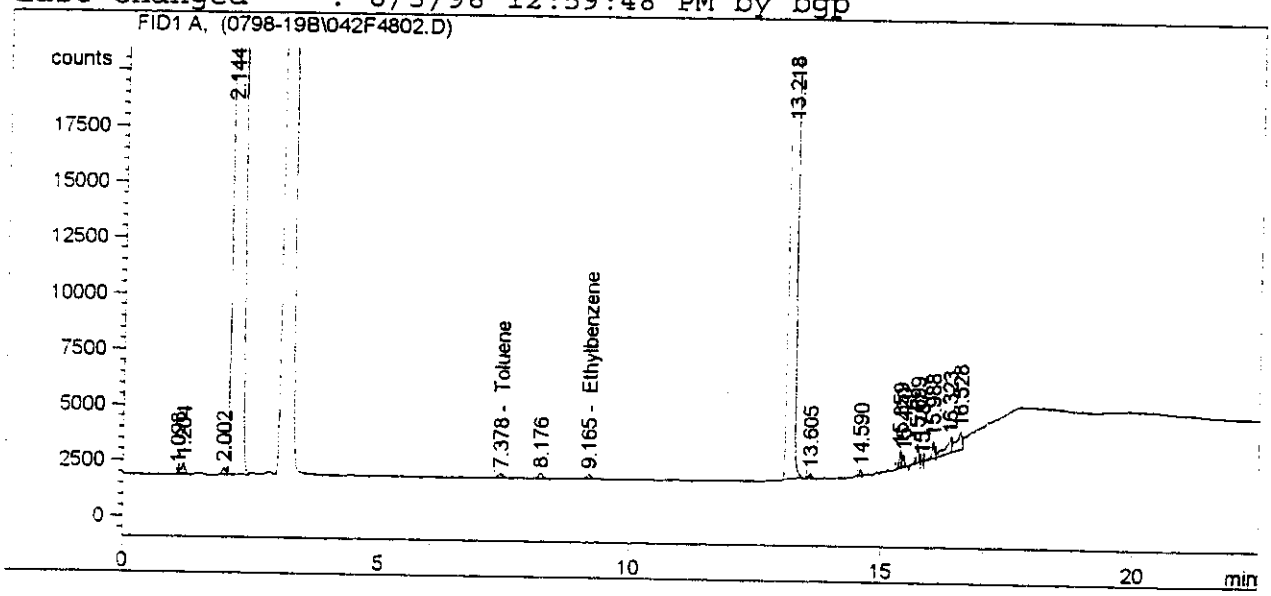
241

501

Injection Date : 8/4/98 12:48:31 AM
Sample Name : S-M18-R3 BbBH
Acq. Operator : bgp

Seq. Line : 48
Vial : 42
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.467		-	-	-		Hexane
5.409		-	-	-		Benzene
7.378	BB	1155.89404	8.30843e-4	9.60367e-1		Toluene
9.165	PB	1195.68872	8.28951e-4	9.91167e-1		Ethylbenzene
9.338		-	-	-		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene

Totals : 1.95153

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
502 Warning : Calibrated compound(s) not found

242

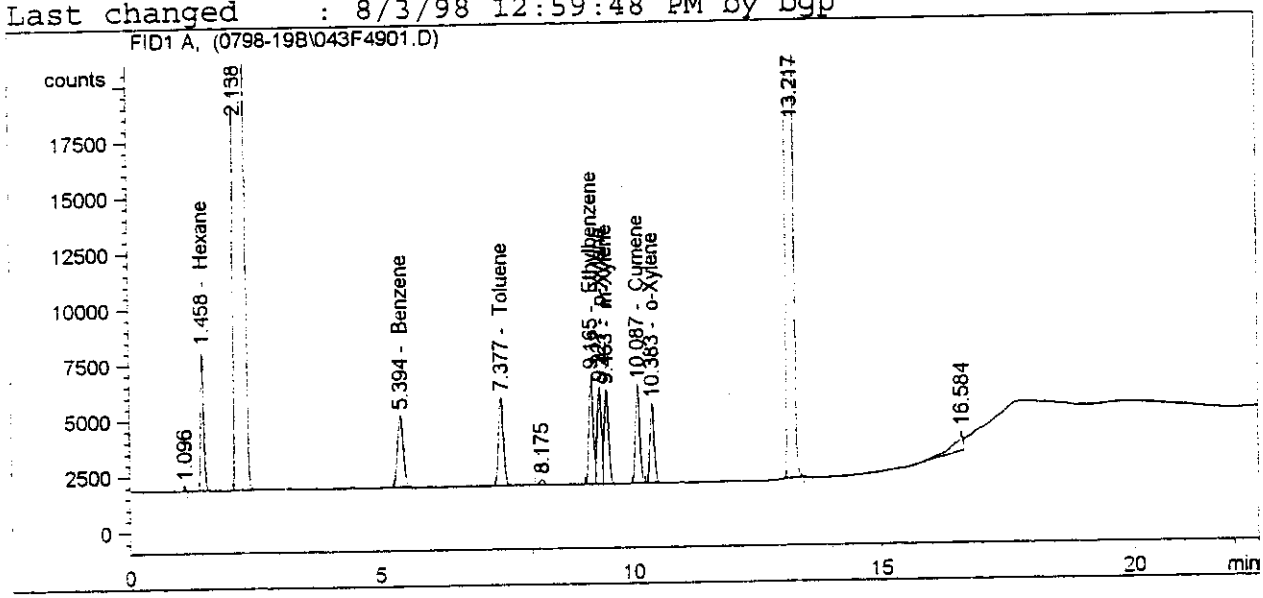
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\043F4901.D S-M18-FB Ba+BbFH

==========

Injection Date : 8/4/98 1:18:08 AM
Sample Name : S-M18-FB Ba+BbFH
Acq. Operator : bgp

Seq. Line : 49
Vial : 43
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



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External Standard Report

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Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	BB	2.74713e4	8.98374e-4	24.67946		Hexane
5.394	BP	2.50121e4	8.11164e-4	20.28893		Benzene
7.377	BB	2.64406e4	7.96013e-4	21.04710		Toluene
9.165	BV	2.93148e4	7.88798e-4	23.12342		Ethylbenzene
9.327	VV	2.49899e4	7.99759e-4	19.98587		p-Xylene
9.463	VB	2.49547e4	7.97217e-4	19.89431		m-Xylene
10.087	BV	2.72814e4	8.59616e-4	23.45154		Cumene
10.383	VB	2.09601e4	7.77087e-4	16.28778		o-Xylene
Totals :				168.75840		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

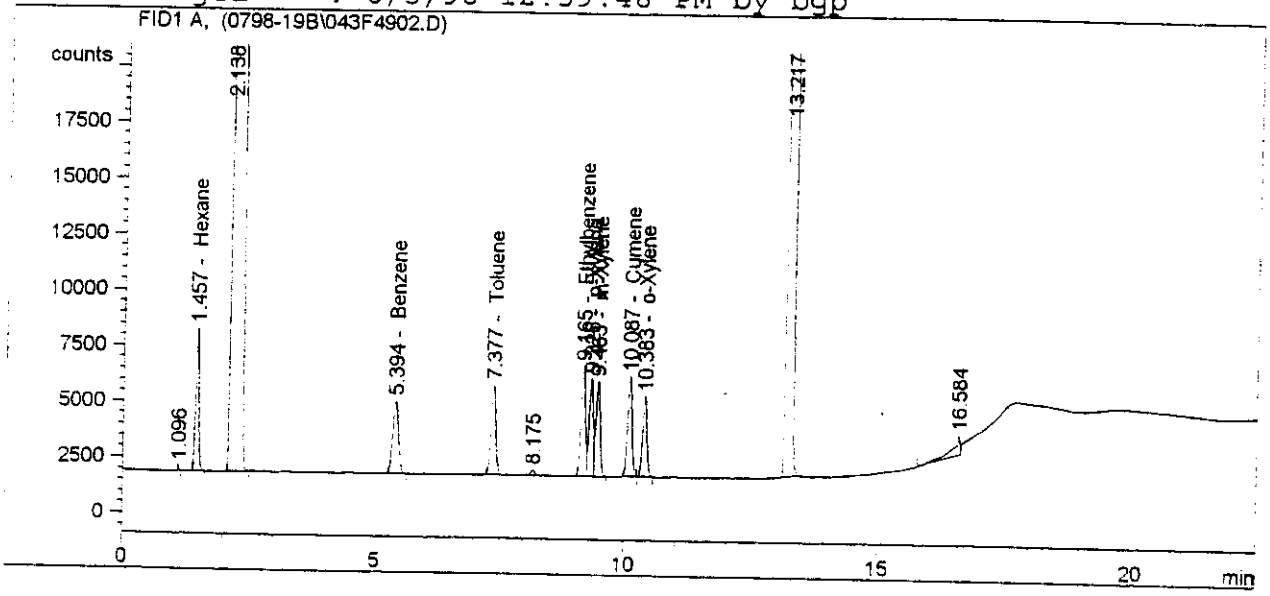
243

503

Injection Date : 8/4/98 1:47:47 AM
Sample Name : S-M18-FB Ba+BbFH
Acq. Operator : bgp

Seq. Line : 49
Vial : 43
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.457	BB	2.74519e4	8.98380e-4	24.66226		Hexane
5.394	BB	2.51910e4	8.11039e-4	20.43087		Benzene
7.377	BP	2.67628e4	7.95784e-4	21.29739		Toluene
9.165	BV	2.96570e4	7.88582e-4	23.38699		Ethylbenzene
9.326	VV	2.52716e4	7.99516e-4	20.20509		p-Xylene
9.463	VB	2.52819e4	7.96928e-4	20.14783		m-Xylene
10.087	BV	2.75940e4	8.59437e-4	23.71534		Cumene
10.383	VP	2.12135e4	7.76761e-4	16.47778		o-Xylene
Totals :				170.32356		

Results obtained with enhanced integrator!
1 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)

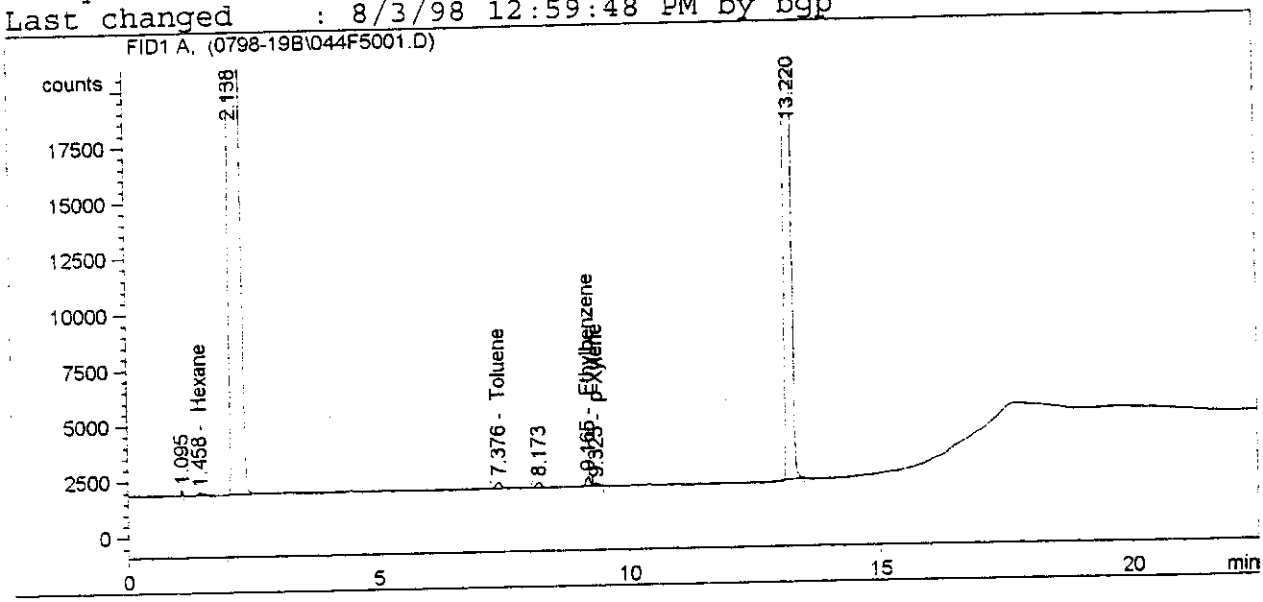
504

244

Injection Date : 8/4/98 2:17:22 AM
Sample Name : S-M18-FB BbBH
Acq. Operator : bgp

Seq. Line : 50
Vial : 44
Inj : 1
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



External Standard Report

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.458	PB	838.18164	9.19566e-4	7.70763e-1		Hexane
5.409		-	-	-		Benzene
7.376	BP	1931.41174	8.30843e-4	1.60470		Toluene
9.165	PV	2568.42358	8.28951e-4	2.12910		Ethylbenzene
9.325	VB	938.82379	8.36380e-4	7.85213e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				5.28977		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

245

505

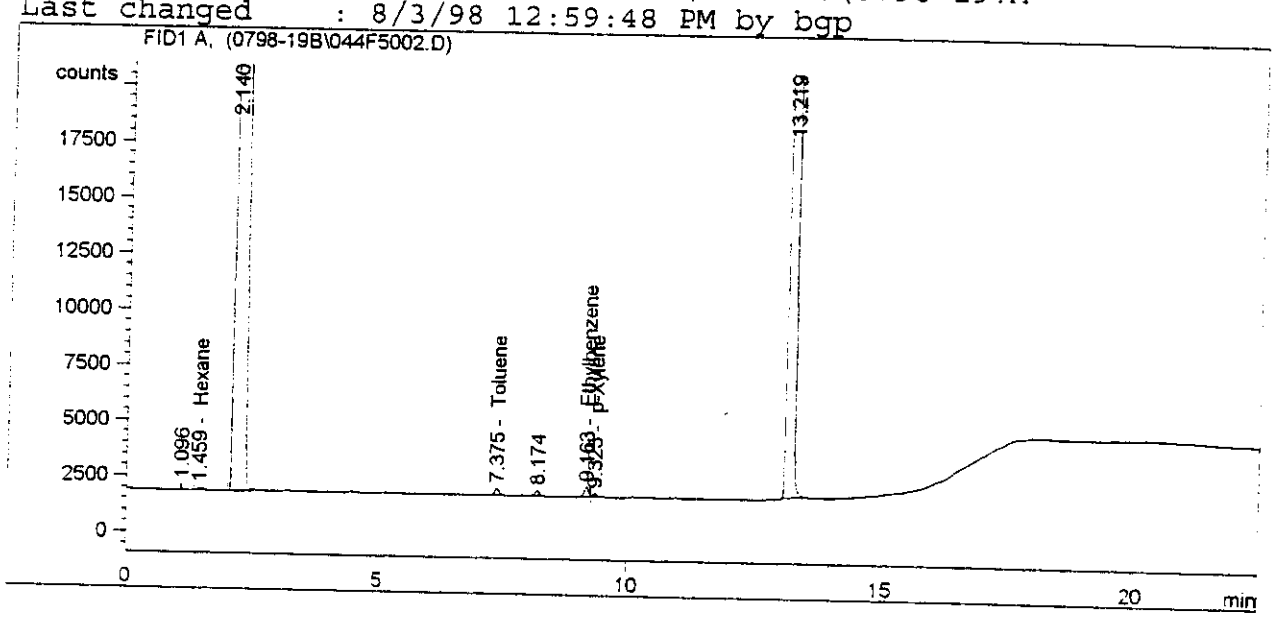
Data File E:\HPCHEM\TELLER\DATA\1998\JUL98\0798-19B\044F5002.D S-M18-FB BbBH

==========

Injection Date : 8/4/98 2:47:05 AM
Sample Name : S-M18-FB BbBH
Acq. Operator : bgp

Seq. Line : 50
Vial : 44
Inj : 2
Inj Volume : 2 µl

Sequence File : E:\HPCHEM\TELLER\SEQUENCE\0798-19A.S
Acq. Method : E:\HPCHEM\TELLER\METHODS\0798-19A.M
Last changed : 8/3/98 3:07:34 PM by bgp
Analysis Method : E:\HPCHEM\TELLER\METHODS\0798-19.M
Last changed : 8/3/98 12:59:48 PM by bgp



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External Standard Report

==========

Sorted By : Signal
Calib. Data Modified : 8/3/98 11:04:16 AM
Multiplier : 1.0000
Dilution : 1.0000

Signal 1: FID1 A,

RetTime [min]	Type	Area counts*s	Amt/Area	Amount [ug/kg]	Grp	Name
1.459	BB	813.76160	9.19566e-4	7.48307e-1		Hexane
5.409		-	-	-		Benzene
7.375	BB	1924.91589	8.30843e-4	1.59930		Toluene
9.163	PV	2517.97632	8.28951e-4	2.08728		Ethylbenzene
9.325	VB	909.71381	8.36380e-4	7.60866e-1		p-Xylene
9.474		-	-	-		m-Xylene
10.097		-	-	-		Cumene
10.393		-	-	-		o-Xylene
Totals :				5.19576		

Results obtained with enhanced integrator!
2 Warnings or Errors :

Warning : Calibration warnings (see calibration table listing)
Warning : Calibrated compound(s) not found

506

Teller 8/4/98 8:08:30 AM bgp

216

Sensidyne Flow Cell Calibration Certificate

ENTHALPY analytical, inc.

SENSIDYNE, INC.

CALIBRATION CERTIFICATE

CELL S/N: 16899-S DATE: 05 - 18 - 1998

This is to certify that the above referenced Gilibrator Flow Cell was calibrated using film flowmeter MCS-102-A, which has been calibrated by instruments directly traceable to the National Institute of Standards and Technology, NIST Report 836/804.

Results:

REFERENCE MCS-102-A cc/min	S/N 16899-S cc/min	RELATIVE DIFF. cc/min	PERCENT DIFF.
2009	2011	2	0.1
2012	2012	0	0.0
2011	2013	2	0.1
2011	2013	2	0.1
2012	2013	1	0.05
2015	2015	0	0.0
2013	2016	3	0.15
2009	2009	0	0.0
2016	2017	1	0.05
2019	2021	2	0.1
MAX		3	0.15
MEAN 2012.7	2014		

CALIBRATED BY Rafael Torres 205 DATE: 05 - 18 - 1998

CODE 300

508

TECHNICAL REPORT DATA

Please read instructions on the reverse before completing

1. REPORT NO. EPA-454/R-00-025H	2.	3. RECIPIENT'S ACCESSION NO.
4. TITLE AND SUBTITLE Final Report Hot Mix Asphalt Plants, Truck Loading and Silo Filling, Manual Methods Testing, Asphalt Plant C, Los Angeles, California Volume 8 of 8		5. REPORT DATE May 2000 6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S) Frank J. Phoenix		8. PERFORMING ORGANIZATION REPORT NO.
9. PERFORMING ORGANIZATION NAME AND ADDRESS Pacific Environmental Services, Inc. Post Office Box 12077 Research Triangle Park, North Carolina 27709-2077		10. PROGRAM ELEMENT NO. 11. CONTRACT/GRANT NO. 68-D-98004
12. SPONSORING AGENCY NAME AND ADDRESS U.S. Environmental Protection Agency Office of Air Quality Planning and Standards Emissions, Monitoring and Analysis Division Research Triangle Park, North Carolina 27711		13. TYPE OF REPORT AND PERIOD COVERED Final 14. SPONSORING AGENCY CODE EPA/200/04

15. SUPPLEMENTARY NOTES

16. ABSTRACT

The United States Environmental Protection Agency (EPA) Office of Air Quality Planning and Standards (OAQPS) is investigating hot mix asphalt plants to identify and quantify particulate matter (PM), methylene chloride extractable matter (MCEM), and organic hazardous air pollutant (HAP) emissions during asphalt concrete loading operations. In support of this investigation, the OAQPS issued Pacific Environmental Services, Inc. (PES) a series of work assignments to conduct emissions testing at a hot mix asphalt plant during load-out operations.

The primary objective of the emissions testing was to characterize the uncontrolled emissions of PM, MCEM, polynuclear aromatic hydrocarbons (PAHs), semi-volatile organic hazardous air pollutants (SVOHAPS), and volatile organic hazardous air pollutants (VOHAPS) from a hox mix production plant during loading operations. An asphalt plant south of Los Angeles, California was selected by EPA as the host facility. Testing was performed over five consecutive days beginning on July 24, 1998. Testing was performed under two conditions. Under normal operations, testing was performed to characterize load-out emissions from the tunnel exhaust and load-in emissions from the asphalt concrete storage silo. Under background conditions, testing was performed to characterize emissions from the combustion of diesel fuel in transport trucks.

The entire report consists of eight volumes totaling 4,234 pages, Vol. 1 (388 pages), Vol. 2 (308 pages), Vol. 3 (573 pages), Vol. 4 (694 pages), Vol. 5 (606 pages), Vol. 6 (564 pages), Vol. 7 (570 pages), and Vol. 8 (531 pages).

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTIONS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COASTI Field/Group
Hazardous Air Pollutants Methylene Chloride Extractable Matter Particulate Matter Polynuclear Aromatic Hydrocarbons Semi-volatile Organic Hazardous Air Pollutants Volatile Organic Hazardous Air Pollutants		

18. DISTRIBUTION STATEMENT Unlimited	19. SECURITY CLASS *(This Report)* Unclassified	21. NO. OF PAGES Vol. 8 - 531
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